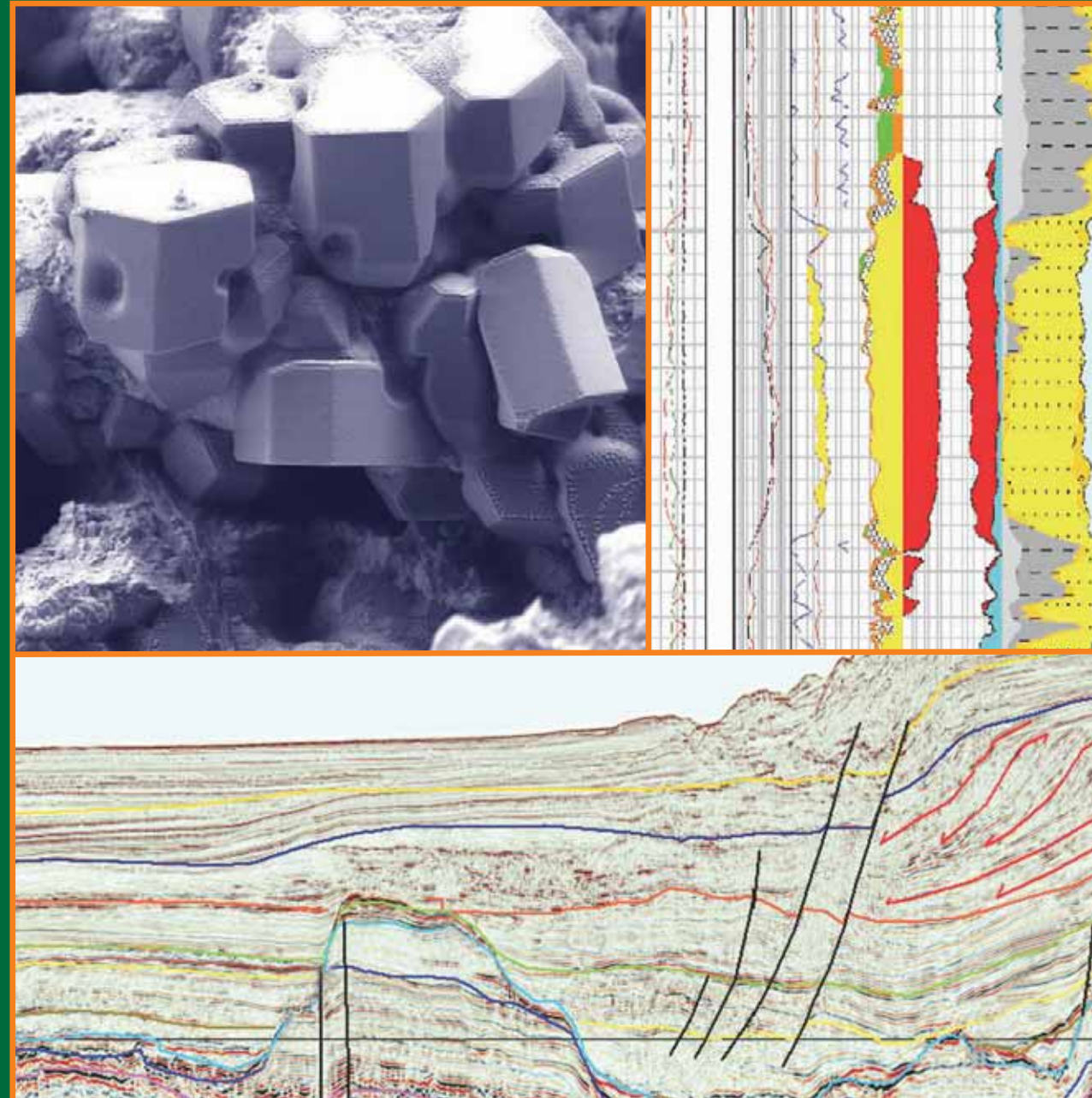


PETROLEUM EXPLORATION AND PRODUCTION ACTIVITIES



INDIA
2006-07



DIRECTORATE GENERAL OF HYDROCARBONS
(Under Ministry of Petroleum & Natural Gas)



Vision

*To be an upstream advisory & technical regulatory body
of international repute, creating value for society through
proliferation and dissemination of E&P knowledge,
optimal hydrocarbon resources management
and environment friendly practices*

- All boundaries shown in the maps are not authenticated.
- The statistics given in this report are pertaining to the period from 1st April, 2006 to 31st March, 2007.
- All rights are reserved. No part of this book may be reproduced or transmitted in any form or by any means without written permission from **Directorate General of Hydrocarbons, Noida, INDIA** (Address on back page).



मुरली देवरा
MURLI DEORA



मंत्री
पेट्रोलियम एवं प्राकृतिक गैस
भारत सरकार
नई दिल्ली-110 001
MINISTER
PETROLEUM & NATURAL GAS
GOVERNMENT OF INDIA
NEW DELHI-110 001

MESSAGE

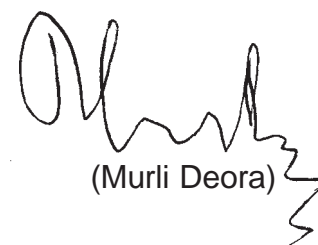
The International Energy Agency has projected that China and India will account for 45 percent of the increase in demand for oil between now and 2030. India imports 70% of its oil, which accounts for almost a quarter of the total import bill of the country. Although reserve accretion in India is increasing, the consumption of petroleum products is also increasing due to boom in Indian Economy, and, therefore, import is not likely to be reduced.

We are all aware of the importance and urgency of finding more oil and gas. Oil prices are close to the US\$100 mark per barrel. This could prove to be one of the major roadblocks for India's economic growth unless we find ways and means to increase domestic production and also strive for equity oil abroad. There are tremendous business opportunities in many countries along the entire hydrocarbon value chain of the petroleum industry. For instance, the recently concluded conference on India-Africa Trade and Investment brought out the tremendous opportunities that exist in the African region. We must make all efforts to tap these opportunities. Today, our National Oil Companies have presence in 19 countries spanning many continents. The Indian gas market is emerging as a matured market and the developments are taking place at a rapid pace. In recent years, the Indian gas sector has received a progressively growing attention from global companies and has made rapid strides on the upstream front. We are looking for large supplies of natural gas to meet the growing energy demand of the country keeping in mind environmental concerns, as well as efficiency of utilization.

With the introduction of the New Exploration Licensing Policy in the year 2000, the upstream hydrocarbon industry in the country has undergone a momentous change. Prior to the introduction of the NELP, there were only two National Oil Companies that were exploring for

hydrocarbons and producing them. However, the perception about India being a less favored destination has undergone a paradigm shift. Today, many companies view India as an attractive business destination for oil and gas. We are able to attract the best technology from across the globe in our search for hydrocarbons. The investment in the sector has also gone up substantially. Till date, six rounds of the New Exploration Licensing Policy (NELP) have been implemented. Till date, 190 Production Sharing Contracts have been signed of which 106 are in operation. In addition, we also have awarded 26 CBM blocks during the three rounds of CBM bidding. Another encouraging factor is that today we have 25 different private companies in the E & P business. And they are doing very well. There have been 113 discoveries since the year 2000. And in the year 2006-07, there have been 14 discoveries by Pvt./JV companies. The Government have offered 57 exploration blocks in 7th round of the NELP announced on 13th December, 2007.

I m happy that the Directorate General of Hydrocarbons, the technical arm of the Ministry of Petroleum & Natural Gas, is fulfilling its mandated task of increasing the exploration coverage in India and throwing open more and more acreages for exploration. This report on the “Petroleum Exploration and Production Activities India 2006-07” summarizes all the important events and achievements of India’s upstream sector in an informative manner.



(Murli Deora)

दिनशा पटेल
DINSHA PATEL



राज्य मंत्री
पेट्रोलियम एवं प्राकृतिक गैस मंत्रालय
भारत सरकार
नई दिल्ली-110001

MINISTER OF STATE FOR
PETROLEUM & NATURAL GAS
GOVERNMENT OF INDIA
NEW DELHI-110 001

MESSAGE

The Directorate General of Hydrocarbons, established in 1993 through Cabinet Resolution, functions under the aegis of the Ministry of Petroleum and Natural Gas as the technical arm of the Ministry. Since its inception, the DGH has played a key role in promoting and regulating the upstream activities with due regard for the environment, safety and technical aspects.

One of the principal responsibilities of the DGH is to delineate acreages for exploration and development of hydrocarbons. As a result of the efforts of the DGH through specialized geoscientific surveys, the area offered under the six rounds of the New Exploration Licensing Policy (NELP) has gone up considerably. The unexplored sedimentary area in the country has come down from 50 percent in the year 1995-96 to about 15 percent now. We are thus, well on our way to achieving the targets set forth in the "Hydrocarbon Vision 2025".

In addition to our efforts in finding more oil and gas through offer of acreages through the NELP route, we are making all efforts in enhancing our gas production through CBM exploration in the country. It is a matter of great pride and encouragement that commercial production of CBM has already commenced from one of the blocks in West Bengal. DGH is currently in the process of carving out blocks and preparation of data packages for the 4th round of CBM.

Production of gas from the D6 block in the Krishna-Godavari block is expected to commence during the coming year. It is anticipated that about 80 MMSCMD would be available from this field. In addition to this, there have been many significant gas discoveries in the east coast basins that await development. Therefore, in the coming few years, we can expect much

more gas flowing from the east coast basins. This will contribute a lot in bridging the gap between demand and supply, which is expected to grow. Further, there have been significant discoveries in the nomination blocks also. Some of these discoveries might eventually prove to be commercial and add to our inventory of oil and gas. Further, the expansion in the exploration and production activities in the country and building strategic storage to safeguard against supply disruption and price volatility will help us in bridging the gap between demand and supply.

Despite its enormous workload, the DGH has done an admirable job of addressing the issue of enhancing the pace and quality of exploration in the country. The report on the "Petroleum Exploration and Production Activities in India 2006-07" covers all these and related aspects in detail, and is an indispensable document for all those interested in participating in India's search for oil and gas.



(Dinsha Patel)



M.S. SRINIVASAN
Secretary



भारत सरकार
पेट्रोलियम एवं प्राकृतिक गैस मंत्रालय
शास्त्री भवन, नई दिल्ली-110001

Government of India
Ministry of Petroleum & Natural Gas
Shastri Bhawan, New Delhi-110 001

MESSAGE

India's GDP is growing at about 9% annually. Current projections are that this trend will continue. High growth demands enhanced energy inputs, particularly for a country like India where the per capita oil and gas consumption is almost one-fifth the global average. At the present rate of consumption, it is expected that India's crude oil reserves will exhaust in less than 20 years from now while its natural gas reserves will last for about 40 years. An additional strain is placed by the steadily increasing price of crude. Currently, we import over 70% of our crude oil requirements. Although this places a great burden on the Indian economy, it also enhances our resolve to improve upon our energy security by increasing domestic production, finding new oil and gas, venturing into overseas markets, developing alternatives and various other measures that the Government is actively pursuing.

We have 26 sedimentary basins of which only about 20% is moderately to well-explored. The remaining sedimentary area remains to be intensively explored. And judging by the spate of recent discoveries, the areas that are yet to be explored hold enormous promise.

DGH is the nodal agency for demarcating acreage and carving out blocks for exploration and serves as a facilitator for companies to understand and appreciate India's oil potential and production prospects and to decide on selection of blocks for oil and gas exploration in the country.


If we look at the E & P scenario in India, we can say with justifiable pride that the success of the sixth round of the New Exploration Licensing Policy (NELP-VI) and the third round of Coal Bed Methane (CBM-III) have been noteworthy achievements in the recent past. Under

NELP-VII, the Government plans to offer about 60 exploration blocks. Out of these, about 19 are in the deep-water sedimentary areas, which has been the focus of intense exploration efforts in recent years. DGH is in the process of establishing the National Data Repository (NDR) very soon and this is expected to add further impetus to our efforts in exploration. Another significant milestone will be the introduction of the Open Acreage Licensing Policy (OALP). The Government of India is actively pursuing the OALP. Once the policy is in place, it is expected that there will be a significant boost to the exploration activities in the country.

As far as alternative fuels are considered, an encouraging development has been the discovery of significant gas hydrate deposits in the Krishna-Godavari and Andaman basins. The gas hydrates recovered during the JOIDES resolution cruise are being studied in various prestigious laboratories around the world. Scientists from India are associated with these studies. Currently, efforts are on to delineate the gas hydrate deposits and evaluate the resources. We are also simultaneously exploring technology options for producing this clean and environment friendly fuel.

The growth in the E & P sector, while being very encouraging, has brought forth some problems too. The technology intensive hydrocarbon industry requires a committed, talented and skilled workforce. India has a vast resource of technical manpower. However, in recent years, due to spurt in E & P activities worldwide, there has been a high rate of attrition of qualified and trained technical manpower in our national oil companies. This has placed enormous constraints on the functioning of the operators. The other major stumbling block is the availability of drilling rigs. What is now needed is an effort on the part of companies to share their resources in this resource-constrained scenario.

This report summarizes all the important events that have happened during the past year in the petroleum industry and will certainly be welcomed by all the E & P companies who are currently active in India and all those who intend to participate in India's quest for oil and gas in the future.


(M.S. Srinivasan)

FROM THE DIRECTOR GENERAL'S DESK



The year 2006-07 has been one of challenges for the upstream oil sector. Daniel Yergin, Chairman of the Cambridge Energy Research Associates, and an expert on petroleum economics is of the opinion that *'people, equipment, and skills shortage have doubled upstream production costs in the last three years alone'*.

In terms of equipment, the single most significant shortage has been that of drilling rigs. DGH has proposed the concept of rig sharing to tide over the crisis and to reduce costs. Petroleum exploration requires domain experts and a technically skilled workforce. The high attrition rate from E & P companies is fast eroding this pool of human resources, which was considered abundant and inexhaustible in India. There is, therefore, a need to establish specialized training institutes and institutions of higher learning to bridge the gap between human resource demand and supply.

DGH is making all possible efforts in this direction. This year, DGH has recruited 42 trainee officers drawn from various disciplines. They are being given rigorous training in E & P related subjects to enable them to meet the requirements and challenges of the industry. I am happy to place on record that 16 trainee officers who were recruited in DGH in the first batch have already secured placement in reputed organizations and are doing extremely well for themselves as well as for their companies.

DGH is supporting various initiatives to replenish the dwindling pool of trained manpower such as setting up of (i) a drilling institute, (ii) institute for petroleum geology studies and (iii) providing guest faculty from DGH to those institutes and Universities that require it.

It is heartening to note that our efforts in urging Universities to adopt an industry-oriented curriculum are bearing fruit. Some of the Universities have evinced keen interest and have given serious consideration to the petroleum geoscience curriculum formulated by DGH. The initiative of the Government of India in setting up the Rajiv Gandhi Institute of Petroleum Technology at Rae Bareilly is expected to fulfill the requirements of the industry to a large extent. It is heartening to note that the Indian Institute of Technology, Kanpur is also planning to commence programs in petroleum technology.

I have always maintained that R & D should drive the business and not vice-versa. India's overall R & D expenditure is only about 0.7 % of its gross domestic product, of which the energy component is negligible. India's energy requirement is projected to soar five times by the year 2031-32 as compared to the 2003-04 levels. Coping with this demand will require a number of inventions and innovations on the supply side as well as on the management of demand. Therefore, what is needed today is that we shift our focus from conventional oil fields, and instead find innovative techniques to obtain the maximum resources

from as diverse sources as possible. This will become possible only through committed research and innovation through synergy between Government, industry and academia.

The year witnessed a satisfactory progress in the R & D collaborations with various international agencies, particularly with the Norwegian Petroleum Directorate (NPD) of Norway; JOGMEC, Japan and Energy Resource and Development Unit of the Department of Trade and Industries (DTI) of UK.

The efforts of DGH in the exploration and development of non-conventional fossil fuels have provided the desired results. The exploration awareness for CBM in India has shown a dramatic change in the scenario. While there was a lukewarm response to the first round of CBM bidding in the year 2001, there was an overwhelming response to the third CBM round in 2006, within a span of five years. Thus, there is a distinct change in the perception on commercial viability of CBM operations in the minds of national and international operators.

Commercial production of methane in India is now a dream come true after a decade of expectations. Important strides have been taken in the past 2 to 3 years to generate reservoir data by drilling about 200 wells, which have unfolded the attractiveness of some of the CBM plays. Significant data has been gathered on the thickness and continuity of CBM seams lying below a depth of 600m, the gassiness of seams, broad permeability parameters, stress regime and hydrogeology. These constitute the critical information on which future offer of CBM blocks will be decided.

Two operators have already embarked upon an ambitious production plan of 6.5 MMSCMD in next 5 years from 3 CBM blocks. A production projection of 38 MMSCMD from the 26 awarded blocks may not be over optimistic. It is heartening to note that Indian operators are making all efforts to bring CBM as an alternative fuel in India's energy portfolio.

Following the success of the first phase of investigations for gas hydrates in the offshore areas of India, and the realization that gas hydrates could indeed provide a viable alternate energy source, efforts are currently under way to delineate the gas hydrates and estimate their reserves, particularly in the Krishna-Godavari basin. DGH is mooted the idea of a separate Directorate / Research Institute for Gas Hydrate to give necessary fillip to the investigations for this possibly huge energy resource. The gas hydrate and sediment samples that were collected as a part of the JOIDES expedition 01, are being analyzed in various laboratories of the world. Scientists from various organizations and institutes constituting the National Gas Hydrate Program (NGHP) have participated in the cruise and also are currently involved in work association with the foreign agencies.

DGH has also taken up the investigations for estimation of the oil shale potential in north eastern part of India. As a part of our commitment to the cause of development of non-conventional fossil fuels in the country, DGH organized an international workshop on this subject early this year, with an extremely encouraging response and participation.

There has been an upswing in E & P activities over the past few years. As on 1.4.2007, operations are being carried out by national and private oil companies in 569 concessions, of which 232 are under Petroleum Exploration Licence (PEL) and 337 under Mining Lease (ML). As against 203 PEL and 163 ML concessions operational during 1996, there are 232 PEL and 337 ML concessions under exploration, showing an increase both in exploration and development efforts.

In order to give further impetus to the E & P activities in India, the DGH, under the aegis of the

Ministry of Petroleum & Natural Gas, has embarked on the Open Acreage Licensing Policy (OALP). Under this policy, E & P companies will be able to access geoscientific data throughout the year at the National Data Repository (NDR). The latter, which is being established will provide a common platform for E & P companies in India and abroad for knowledge sharing and technology development and also create a network between R & D institutes, academic institutions and industry. The OALP will provide a continuous window of opportunity for companies to bid for acreages at predetermined intervals of time, and invest in exploration activities. The OALP envisages demarcating the country into geodetic grids of a particular size. This will provide the basis for bidders to select the size and shape of the block they wish to explore.

Similar to the trend during the past few years, the main exploration thrust this year has been in the deep-water sedimentary basins resulting in significant discoveries of oil and gas. While this is the good news, the bad news is that serious resources constraint in terms of skilled and experienced human resources and drilling rigs has compelled operators to cut back on their exploration efforts. One of the consequences of the scarcity of drilling rigs is the delay in the launch of NELP-VII, which was initially planned for March, 2007, and had to be deferred to December, 2007.

During the year 2006-07, a total of eight significant oil and gas discoveries were made by Reliance Industries, Hardy Exploration and Focus Energy. In addition, the National Oil Companies have reported twelve discoveries of oil and gas. Details of the discoveries are discussed in a section devoted to new discoveries.


The Bhagyam field discovered by Cairn in Barmer-Sanchor basin of Rajasthan is expected to enter into the development phase very soon. The field was discovered in August 2004 and is planned to produce 'first oil' within five years from its discovery. A production of about 93 million stock tank barrel (MMSTB) of oil is expected from its 415 MMSTB in-place estimated under P70 category.

Proposals for development of some of the other oil and gas fields, discovered by Reliance Industries, namely, MA oil field (Dhirubhai#26) in the deep water area of Krishna-Godavari basin and NEC-25 gas in the north east coast are under consideration.

Under the 7th round of bidding (NELP-VII), 57 blocks are being offered covering an area of 0.17 million sq.km in the offshore and onland sedimentary basins of India. This will substantially increase the exploration coverage of the sedimentary basins of India. This is another important milestone in achieving the objectives of the Hydrocarbon Vision 2025.

The functions and responsibilities of DGH have been steadily growing in scope and volume. Nonetheless, despite the constraints of having limited manpower, we have managed to carry out the assigned mandate efficiently, effectively and in a time bound manner. The constant support and encouragement that we have received from the Ministry of Petroleum and Natural Gas has made this possible.

In concluding, I would like to thank all the officers of DGH, in particular Mr.Pramod Kumar and Ms. Gaganpreet, for their contribution in preparation of this report.



(V.K.Sibal)



Hon'ble Minister of Petroleum & Natural Gas Shri Murli Deora inaugurating NELP-VI CONTRACT AWARD CEREMONY



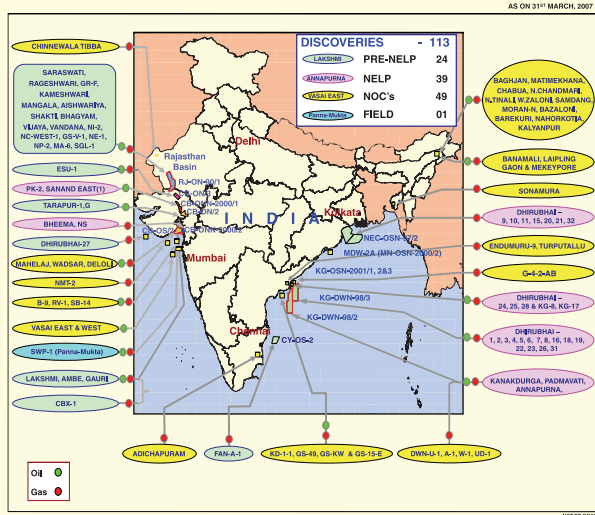
Shri V.K. Sibal DG, DGH in discussions with Shri Murli Deora Hon'ble Minister of MOPNG and Shri Dinsha Patel Minister of State MOPNG during PETROTECH-2007

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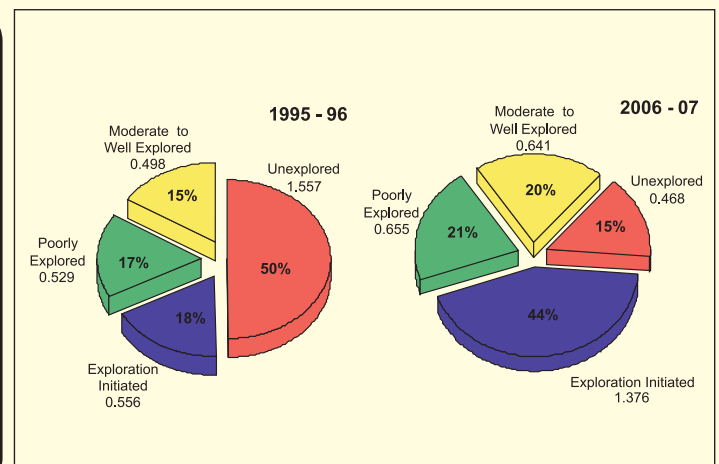
HIGHLIGHTS

NEW SIGNIFICANT DISCOVERIES BY NOCs AND PVT/JV COMPANIES (2000-2007)



- ◆ Two fields namely CB-X and Ingoli discovered by PVT/ JV companies, have been put on production.
- ◆ Inplace accretion figure reached 392.25 MMt for the first time in 2006-07.
- ◆ 25 New discoveries were made during the year; 14 by PVT / JV companies in NELP, Pre-NELP blocks / fields and 11 by NOCs in Nomination blocks.
- ◆ Total oil production during the year was 33.990 MMt and that of gas 31.746 BCM.

- ◆ Acquired, processed and interpreted long offshore 2D seismic lines under speculative survey programme to understand basin configuration, to create innovative ideas and to explore deeper prospects in Indian offshore.
- ◆ 7195 Sq.Km Onland and 45092 Sq.Km Offshore, 3D seismic data were acquired.
- ◆ Unexplored area of sedimentary Basins reduced to 15% which was 50% in 1995-96.



PEL AND ML AREAS UNDER OPERATION BY ONGC, OIL AND PVT/JV COMPANIES

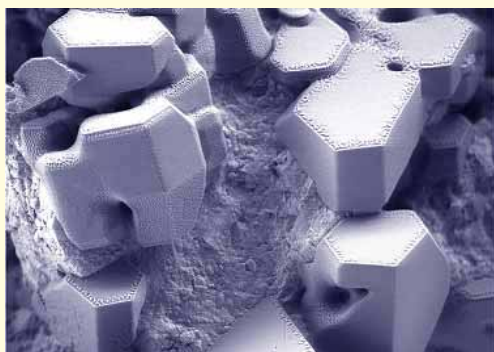


- ◆ PSCs signed for a total of 190 blocks till date in Pre-NELP and NELP rounds.
- ◆ A total of 35235.14 Sq.Km. area given on Petroleum Mining Lease as on 01.04.07; 81% is with NOCs and 19% is with PVT / JV companies.
- ◆ A total of 10,05,050 meters drilled which includes 4,06,960 meters exploratory and 5,98,090 meters development drilling.



- ◆ Cumulative Profit Petroleum: 2986.32 Crores.
- ◆ DGH issued Essentiality Certificates for import of goods in Petroleum operations for 11121 cases valued at Rs. 19687 crores.

- ◆ RIL has already started producing power from CBM gas from Sohagpur CBM block.



- ◆ National Gas Hydrate Program led to:
 - Discovery in KG basin of one of thickest marine gas hydrate accumulation in the world.
 - Discovery in Andaman Islands of one of the deepest gas hydrate occurrences yet known.
 - Establishing the existence of a fully developed gas hydrate system in the Mahanadi basin.

- ◆ Identified 57 blocks to be offered in seventh round of NELP with modified Bid Evaluation Criteria.
- ◆ Preparations for Open Acreage Licensing Policy are in progress.

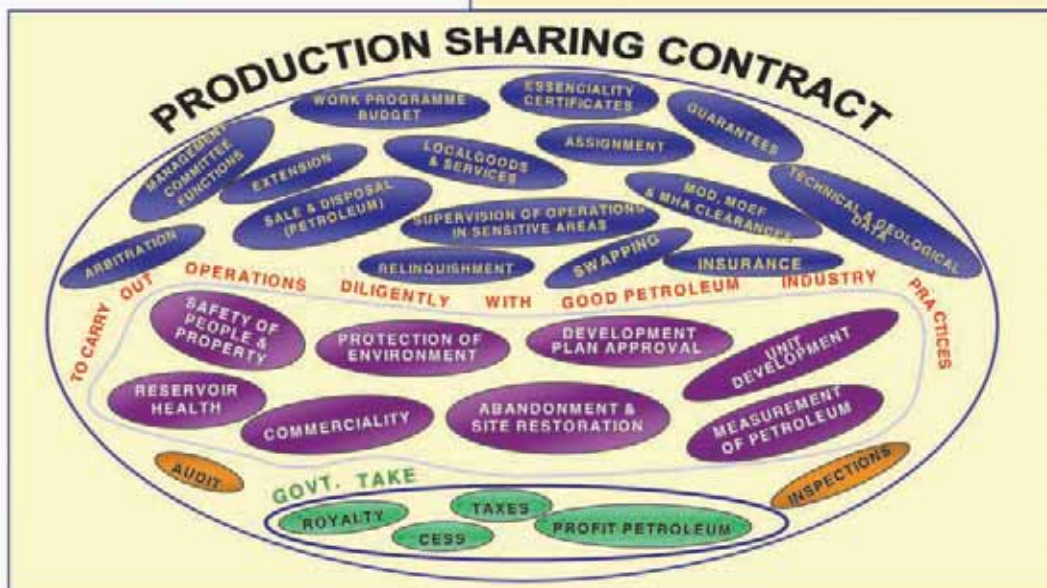
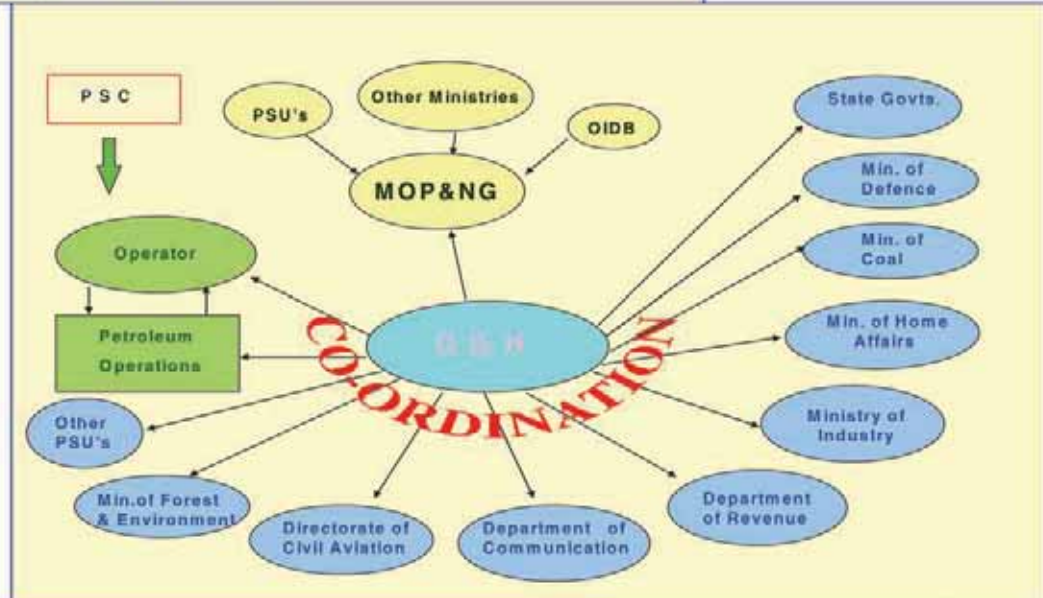


DGH'S FUNCTIONS AND RESPONSIBILITIES



DGH'S NODAL OFFICER SYSTEM

DGH AS A FACILITATOR



PRODUCTION SHARING CONTRACTS

DGH - At a Glance

OBJECTIVE

To promote sound management of the Indian petroleum and natural gas resources having a balanced regard to the environment, safety, technological and economic aspects of the petroleum activity.

FUNCTIONS AND RESPONSIBILITIES

● Review exploration programmes of companies for adequacy

- ✓ Half yearly review of work programmes in Petroleum Exploration Licence (PEL) areas of ONGC & OIL, awarded on Nomination Basis.
- ✓ Processing and review of all the PEL and ML cases for the Ministry.
- ✓ Review of work programme and budget of all exploration blocks and fields under PSCs.
- ✓ Monitoring of all CBM blocks awarded under CBM rounds I, II, III, on Nomination basis and through FIPB Route.

● Review development plans of commercial discoveries and advise Govt. of their adequacy

- ✓ Technical & financial evaluation of Development/ Additional Development Plans of fields like Lakshmi, Gauri, Hazira, Panna-Mukta, Tapti, Ravva, Kharsang, Dhirubhai-1 and 3 (Deepwaters), Mumbai High, Mangla, Aishwarya, Rageshwari, Saraswati fields etc. and new discoveries.
- ✓ Participate in MCMs as Govt. representative with a view to ensure optimal exploitation of these fields.

● To reassess the hydrocarbon reserves estimated by the operating companies

- ✓ Technical Review of Monitorable Action Plan of Mumbai High field on behalf of MOPNG.
- ✓ Concurrent review of reservoir performance of all the major fields under private/JV operators.

● Review and concurrently audit the management of petroleum reservoirs and advise mid-course correction.

● Advise Government on offering of acreage for exploration to companies, as well as, matters relating to relinquishment of acreage by companies

- ✓ Conduct Studies, Surveys, Information Drilling and Related Activities in Unexplored or Poorly Explored Areas. (2.039 Million Sq.km area covered by various types of survey).
- ✓ Upgrade information in these areas viz. reprocessing and reinterpretation of data.
- ✓ Advise on offering of blocks under NELP and CBM rounds.
- ✓ Advise matters related to relinquishments.

● Technical advice to MOPNG on issues relevant to exploration and optimal exploitation of oil and gas

- ✓ Technical evaluation of NELP and CBM round bids and recommendations to Ministry. Being done in a short time of few weeks.
- ✓ Assist MOPNG in contract negotiations & their finalization.
- ✓ Monitoring of Production Sharing Contracts (PSC) as Govt. representative to achieve exploration targets and optimal exploitation of hydrocarbons in the country.
- ✓ Technical advice on preparation of 5 year plans.
- ✓ Technical advice on Quarterly Progress Reports of ONGC and OIL.

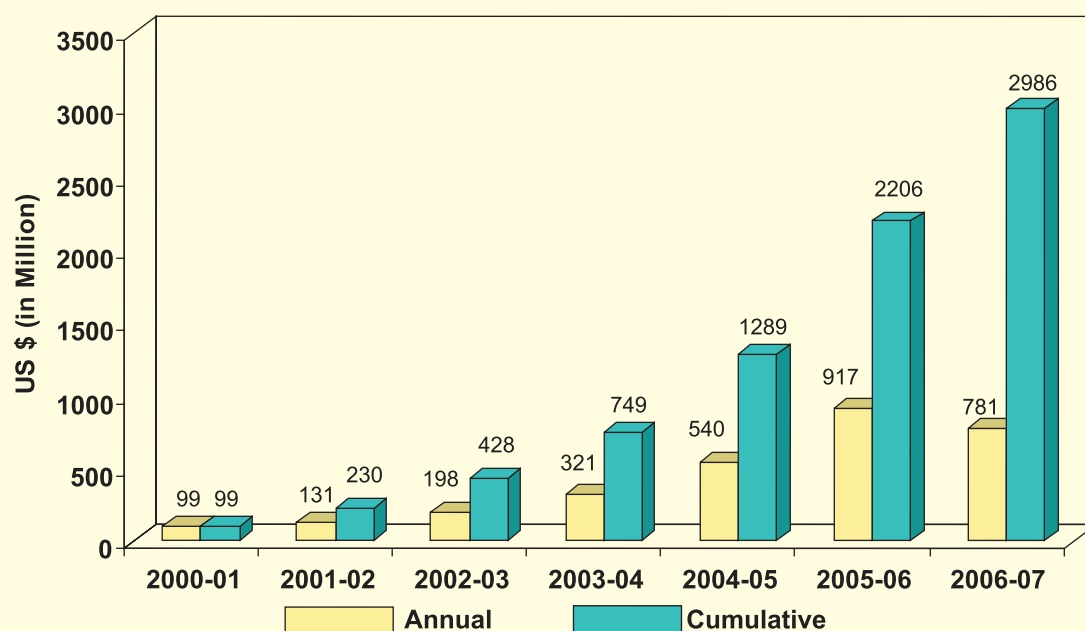
- **Preservation, upkeep and storage of data / samples pertaining to petroleum exploration, production etc. and the preparation of data packages for acreage on offer**
 - ✓ Creation and maintenance of National E&P Data Base and Archive System.
 - ✓ Storage of data acquired by DGH and private oil and gas companies.
 - ✓ Running of Seismic Data Processing and Interpretation Centre in DGH.
 - ✓ Identification of blocks, preparation of Data Packages, Basin Dockets and other related publications/ documents for road shows in the country and abroad for promotion of blocks and sales of data.
- **Field Surveillance of producing fields and blocks to monitor their performance**
- **Ministry of Defence (MOD) guidelines**
 - ✓ DGH scientists remain on board all the seismic vessels and deep water drilling rigs during operation.
 - ✓ DGH geophysicists have to accompany all raw / field seismic and G.M. data whenever it leaves the country for processing and interpretation.
- **All other matters incidental thereto and such other functions as may be assigned by Government**
 - ✓ Coordinate the technical activities of all projects under National Gas Hydrate Programme (NGHP).
 - ✓ To provide input material for Parliament Questions, Parliamentary Committees relating to DGH and Pvt/JV operations.
 - ✓ Issuance of Essentiality Certificates for import of goods used in petroleum operations.
 - ◆ Clearances issued during April 2006 to March 2007: 11121 cases valued at Rs. 19,687 crores.
 - ✓ Facilitating clearances from MOD for foreign rigs/vessels and from MOEF for all projects under Pvt/JV operations.

Contribution to Government Exchequer

Domestic production of hydrocarbons not only ensures Energy Security but also adds to the earnings of Government by way of sharing of production and also by way of taxes earned on sale of hydrocarbons.

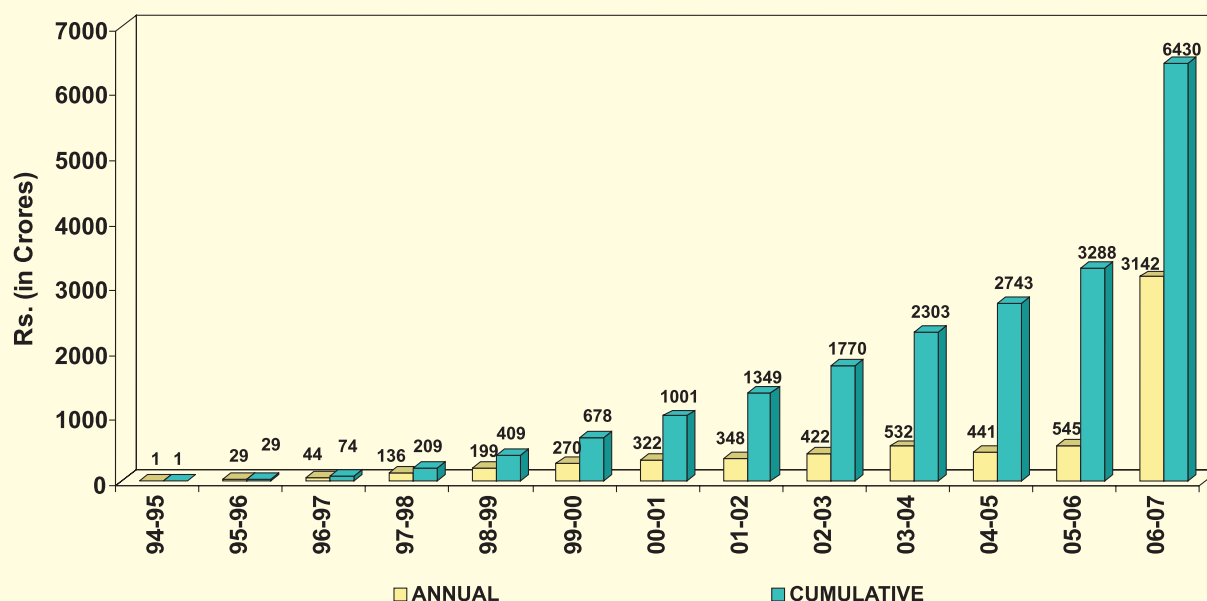
Profit Petroleum

During the Financial Year 2006-07, Profit Petroleum of US \$ 780.66 Million was contributed to Government Exchequer. The cumulative Profit Petroleum earned as on 31st March 2007 is US \$ 2986.32 Million.



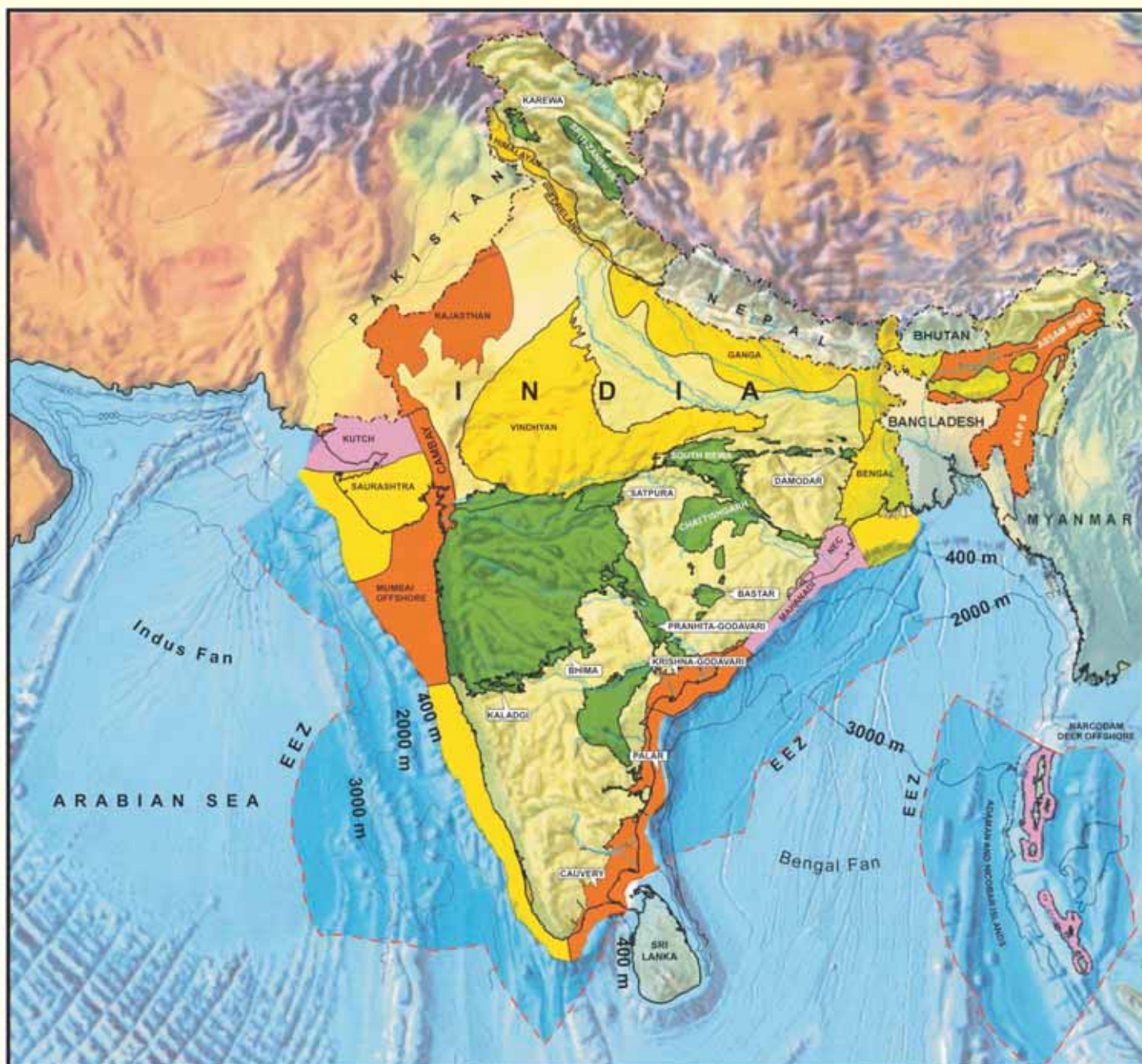
Royalty

During the Financial Year 2006-07, Royalty paid to Central Exchequer was Rs. 3141.92 crores. The cumulative Royalty contributed is Rs. 6430.15 crores.



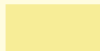




* **Note:** The royalty data of ONGC (nominated blocks) have been incorporated w.e.f. 2006-07.

SEDIMENTARY BASINS OF INDIA



LEGEND

	CATEGORY-I BASIN (Proven commercial productivity)		CATEGORY-IV BASIN (Potentially Prospective)
	CATEGORY-II BASIN (Identified prospectivity)		PRE-CAMBRIAN BASEMENT/ TECTONISED SEDIMENTS
	CATEGORY-III BASIN (Prospective Basins)		DEEP WATER AREAS WITHIN EEZ

Sedimentary Basins of India

SUMMARY

- The sedimentary basins of India, onland and offshore up to the 200m isobath, have an areal extent of about 1.79 million sq. km. So far, 26 basins have been recognized and these have been divided into four categories based on their degree of prospectivity as presently known. In the deep waters beyond the 200m isobath, the sedimentary area has been estimated to be about 1.35 million sq. km. The total, thus works out to be 3.14 million sq. km.
- Over the last eleven years, there have been significant forward steps in exploring the hydrocarbon potential of the sedimentary basins of India. The unexplored area has come down to 15% which was 50% in 1995-96.
- Credit for this achievement goes in large measure to surveys carried out by DGH in unexplored/poorly explored areas of the country including Deepwaters off west coast, east coast and in Andaman sea and acreages awarded for exploration under NELPs. Efforts are continuously being done to reduce the unexplored area further.
- Categorization based on the prospectivity of the basin as presently known and the relevant details are given on the following pages.

CATEGORIZATION OF SEDIMENTARY BASINS

Category*	Basin	Basinal Area (Sq. Km.)		Total
		Onland	Offshore	
UP TO 200M ISOBATH				
I	Cambay	51,000	2,500	53,500
	Assam Shelf	56,000	----	56,000
	Mumbai offshore	----	116,000	116,000
	Krishna Godavari	28,000	24,000	52,000
	Cauvery	25,000	30,000	55,000
	Assam-Arakan Fold Belt	60,000	----	60,000
	Rajasthan	126,000	----	126,000
	SUB. TOTAL		346,000	172,500
II	Kutch	35,000	13,000	48,000
	Mahanadi-NEC	55,000	14,000	69,000
	Andaman-Nicobar	6,000	41,000	47,000
	SUB. TOTAL		96,000	68,000
III	Himalayan Foreland	30,000	----	30,000
	Ganga	186,000	----	186,000
	Vindhyan	162,000	----	162,000
	Saurashtra	52,000	28,000	80,000
	Kerala-Konkan-Lakshadweep	----	94,000	94,000
	Bengal	57,000	32,000	89,000
	SUB. TOTAL		487,000	154,000
IV	Karewa	3,700	----	3,700
	Spiti-Zanskar	22,000	----	22,000
	Satpura-South Rewa-Damodar	46,000	----	46,000
	Narmada	17,000	----	17,000
	Decan Syneclise	273,000	----	273,000
	Bhima-Kaladgi	8,500	----	8,500
	Cuddapah	39,000	----	39,000
	Pranhita-Godavari	15,000	----	15,000
	Bastar	5,000	----	5,000
	Chhattisgarh	32,000	----	32,000
SUB. TOTAL		461,200	----	461,200
TOTAL		1,390,200	394,500	1,784,700
DEEP WATERS				
	Kori-Comorin 85° E Narcodam	----	----	1,350,000
GRAND TOTAL		----	----	3,134,700

* Categorization based on the prospectivity of the basin as presently known. The four recognized categories are basins which have :

I Established commercial production

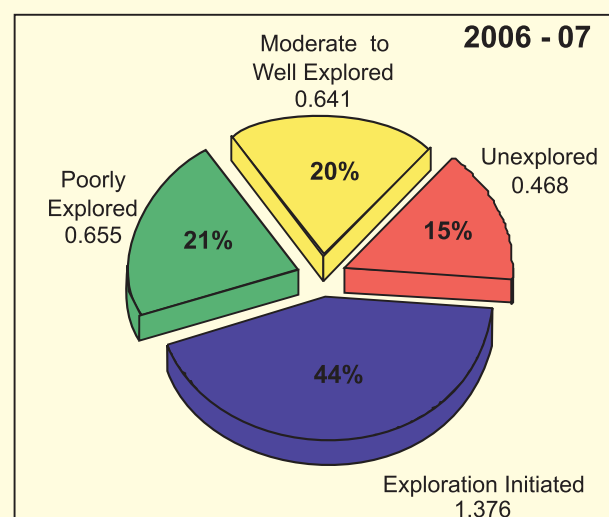
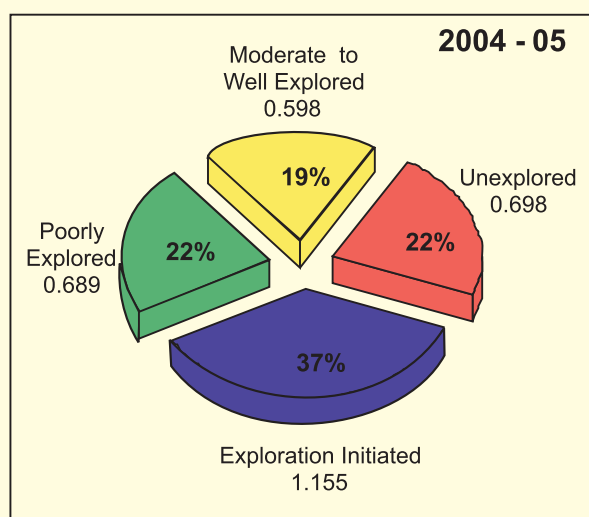
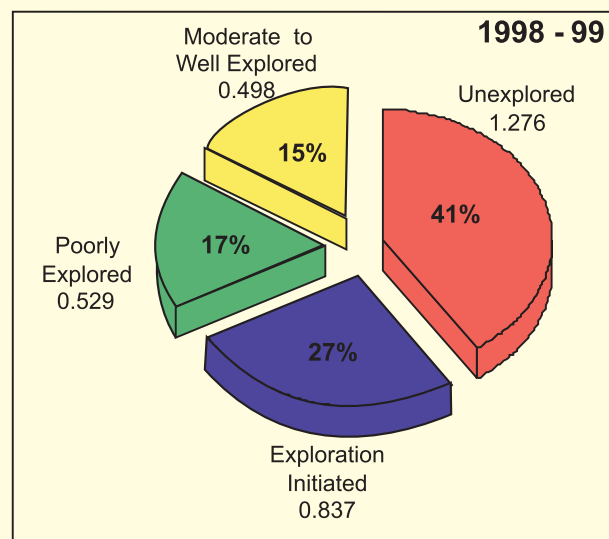
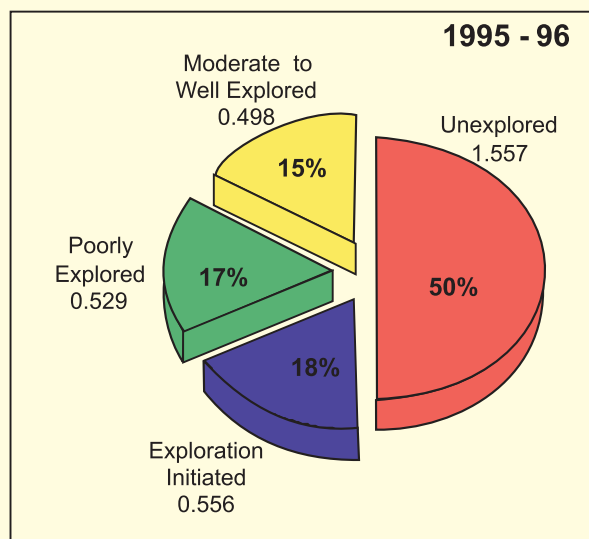
II Known accumulation of hydrocarbons but no commercial production as yet

III Indicated hydrocarbon shows that are considered geologically prospective

IV Uncertain potential which may be prospective by analogy with similar basins in the world.

This categorization will necessarily change with the results of further exploration.

SEDIMENTARY BASINAL AREAS

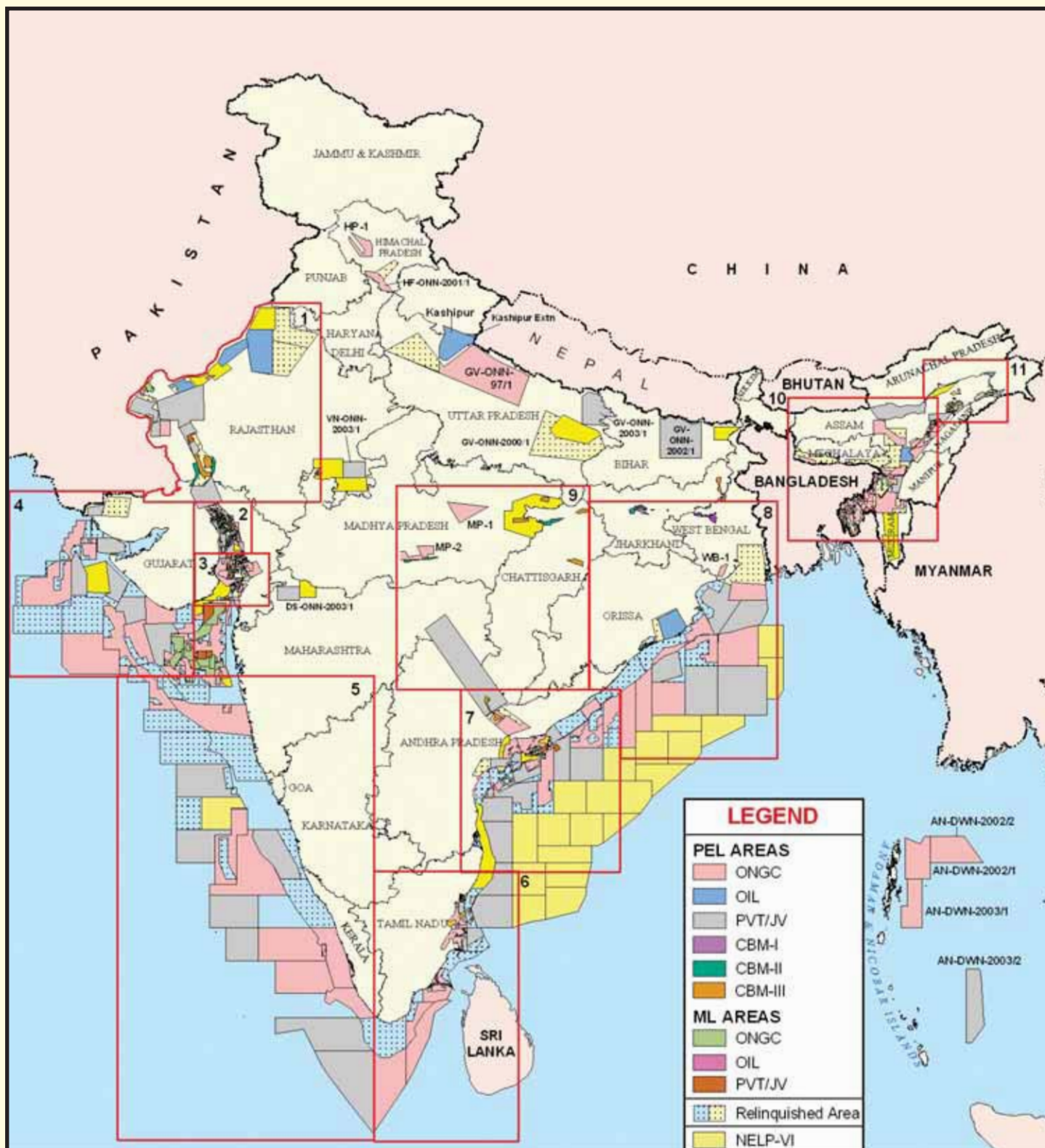


Total Sedimentary Area : 3.14 Million Sq. Km.

LEVEL OF EXPLORATION	AREA (Million Sq.Km.)			
	1995-96	1998-99	2004-05	2006-07
UNEXPLORED	1.557	1.276	0.698	0.468
EXPLORATION INITIATED	0.556	0.837	1.155	1.376
POORLY EXPLORED	0.529	0.529	0.689	0.655
MODERATE TO WELL EXPLORED	0.498	0.498	0.598	0.641

PEL AND ML AREAS UNDER OPERATION BY ONGC, OIL AND PVT/JV COMPANIES

(AS ON 01.04.2007)



Concession Activity

SUMMARY

A. CONCESSION AREAS

- As on 1.4.2007, operations are being carried out by national and private oil companies in 569 concessions, of which 232 are under Petroleum Exploration Licence (PEL) and 337 under Mining Lease (ML). The distribution pattern of PEL & ML areas are as follows:

PEL	Company-wise	:	NOC's 53% and Pvt/JV 47%
	Basin-wise	:	Onland 23% and Offshore 77%
ML	Company-wise	:	NOC's 81% and Pvt/JV 19%
	Basin-wise	:	Onland 47% and Offshore 53%

From the figures given above, it is evident that substantial headway has already been made to encourage private sector participation. Against 203 PEL & 163 ML concessions operational during 1996, there are 232 PEL & 337 ML concessions presently under operation, showing an increase both in exploration and development efforts. Over the years, some of the PEL areas have been converted into MLs in part or fully for production of oil and gas due to which there has been an appreciable increase in the area of ML concessions.

B. NEW EXPLORATION LICENSING POLICY (NELP)

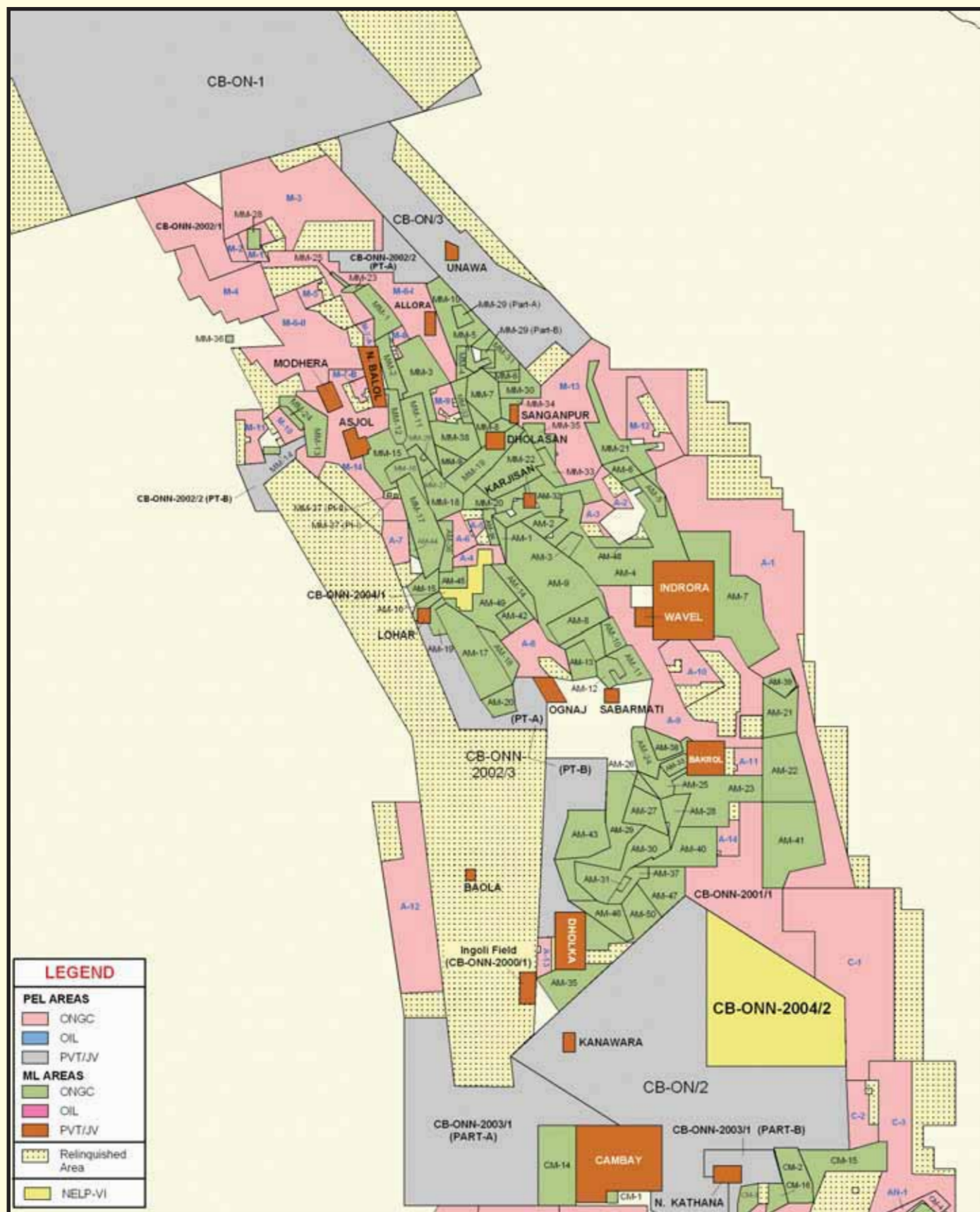
- In six rounds of bidding : NELP-I (1999), NELP-II (2000), NELP-III (2002), NELP-IV (2003), NELP-V (2005) and NELP-VI (2006), PSCs have been signed for 162 blocks in the last seven years, while in Pre-NELP regime only 28 blocks were signed. These blocks cover deep waters, shallow offshore and onland areas. Blocks awarded in NELP-VI were signed in March, 2007; these blocks were granted PELs in the year 2007-08. Hence blocks upto NELP-V have been considered operational in this report. As on 01.04.2007, 89 NELP blocks are operational.

C. PRODUCTION SHARING CONTRACTS (PSC)

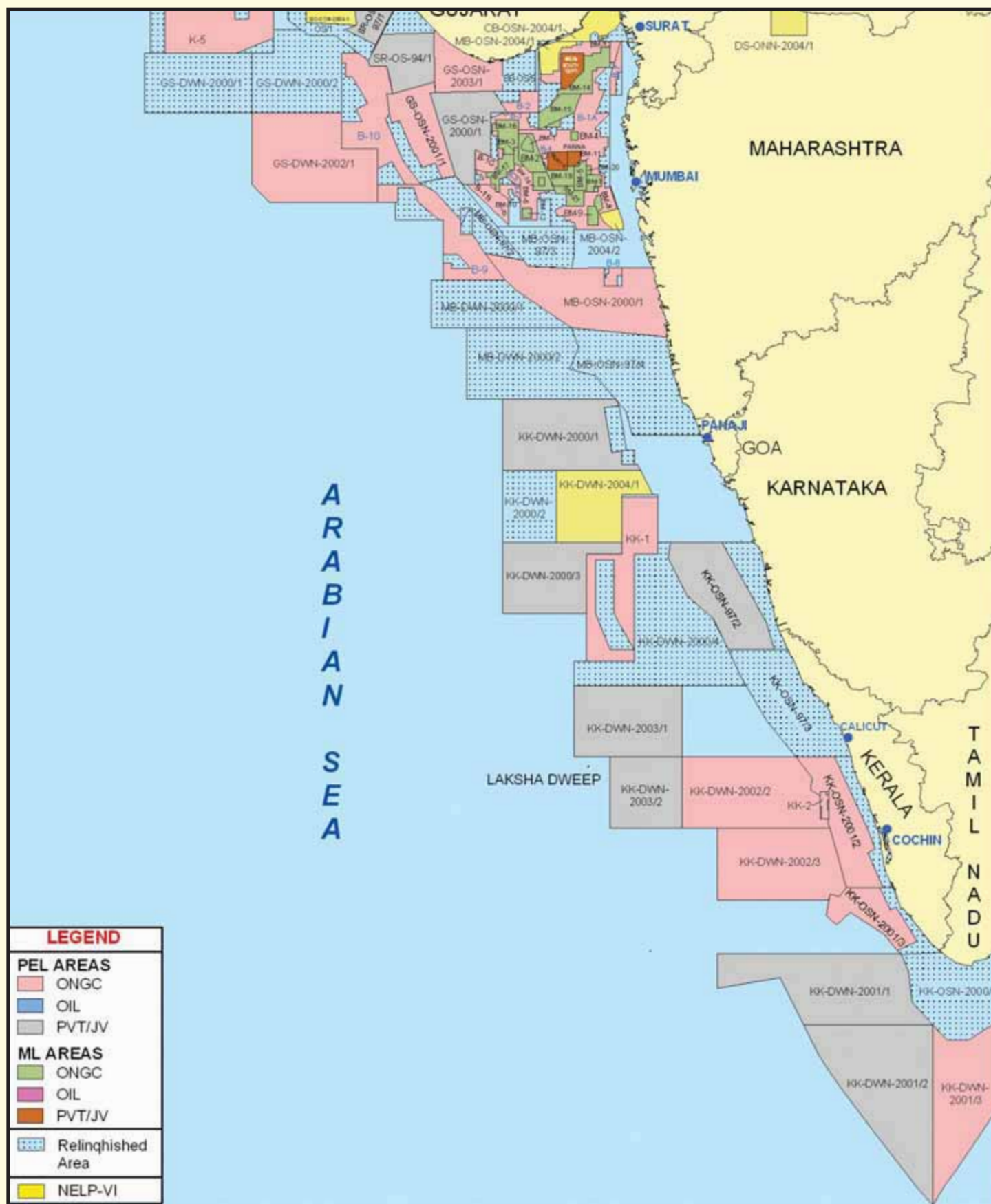
- PSCs have been signed with NOCs / private and joint venture companies for a total of 190 exploration blocks in both Pre-NELP and NELP rounds upto NELP-VI. After relinquishment / conversion to ML, the number of operational blocks as on 01.04.07 are 106. These cover an area of 7,56,741.72 sq.km.

PSCs were signed for 29 discovered small and medium sized fields awarded to PVT / JV companies under round I & II. One small sized field - Matar has been relinquished. Contract is yet to be signed for 1 medium-sized field - Ratna-R-Series. At present 36 producing fields are being monitored of which 8 fields - PY-3, Lakshmi, Gauri, CB-X, NS-A, Bheema, Palej-Promoda & Ingoli are discovered / developed in the exploration blocks by PVT / JV companies. CB-X and Ingoli are the two fields which have been put on production during 2006-07.

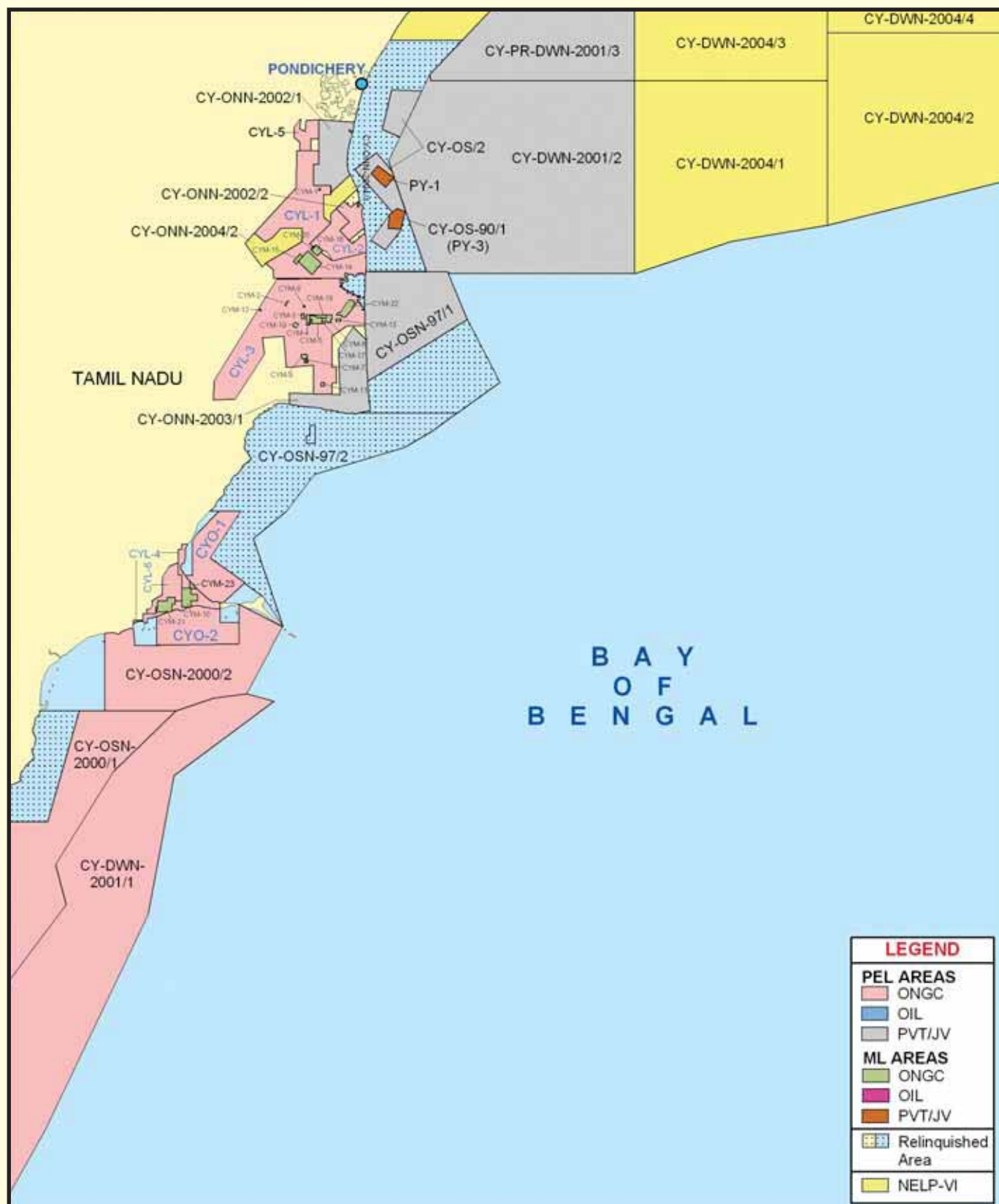
2. NORTH CAMBAY BASIN



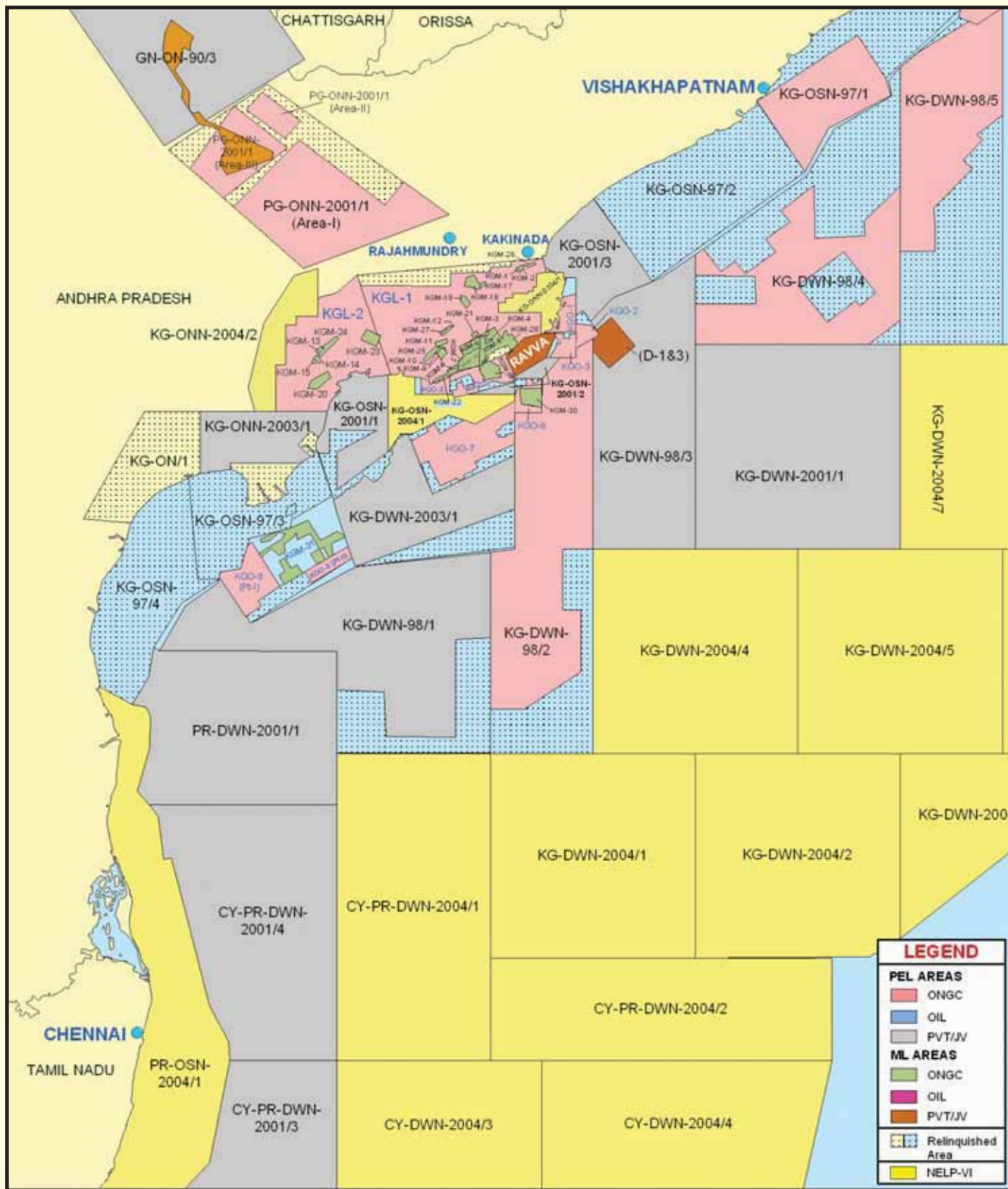
5. MUMBAI OFFSHORE & KERALA-KONKAN BASINS



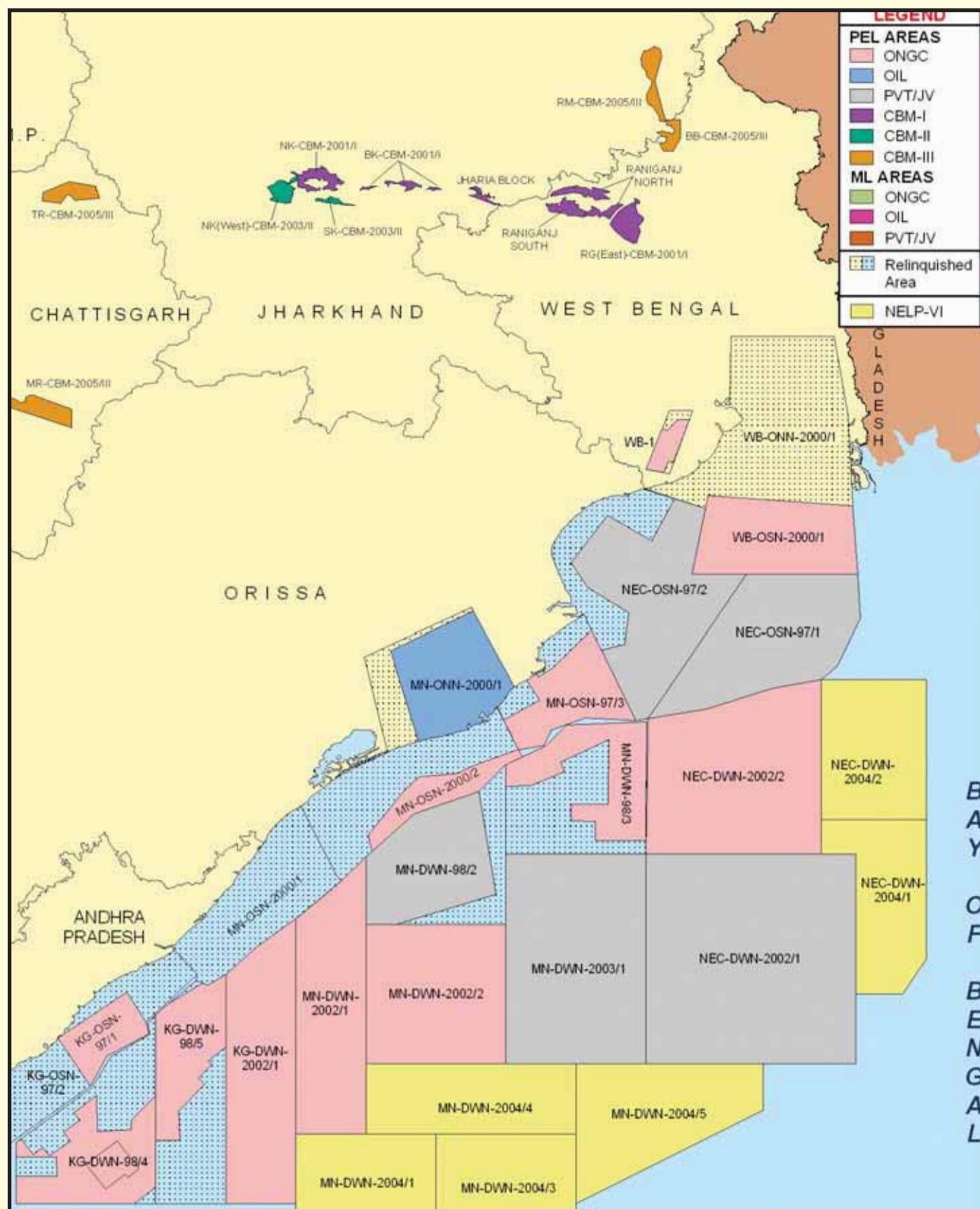
6. CAUVERY BASIN



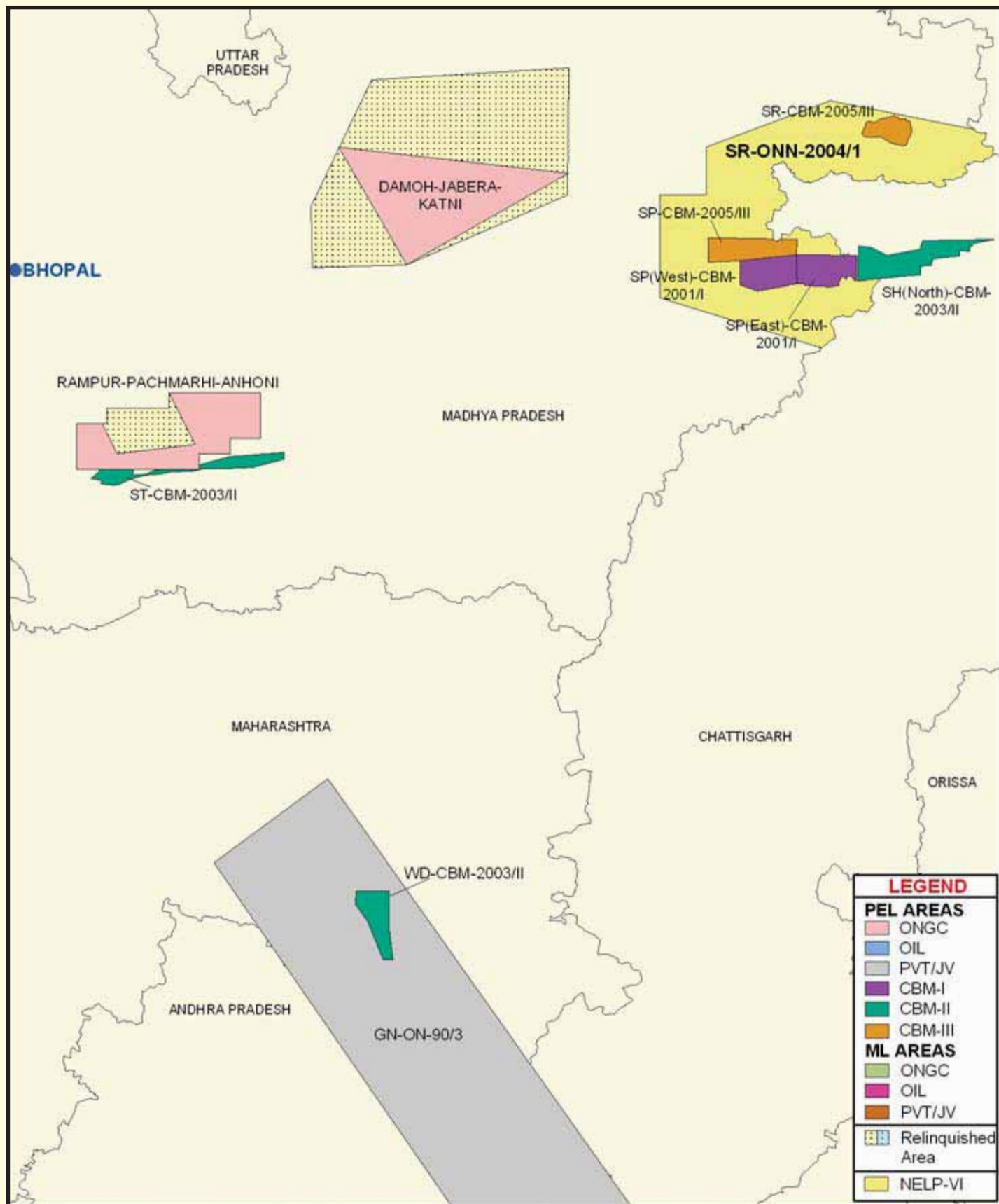
7. KRISHNA-GODAVARI BASIN



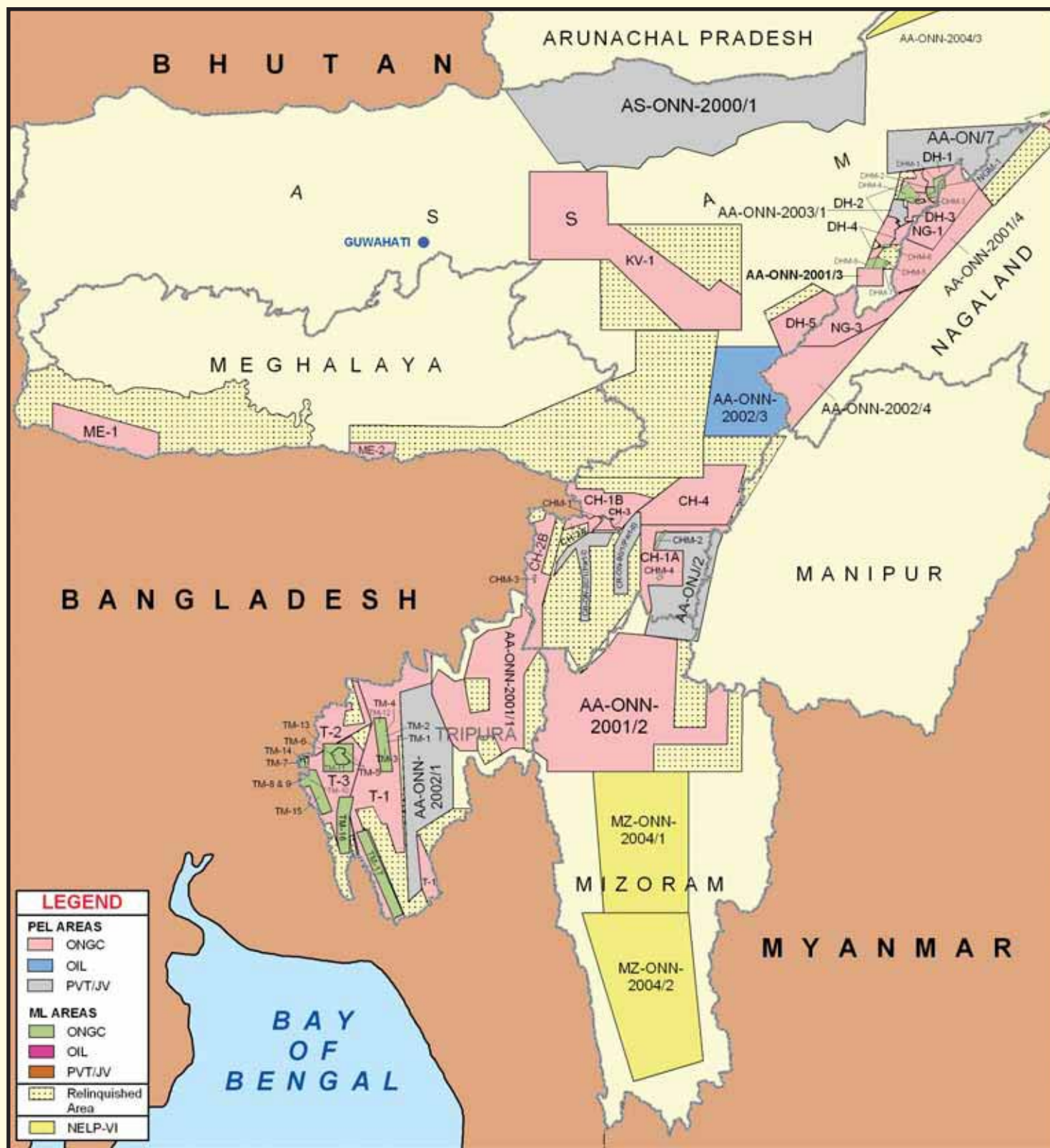
8. MAHANADI NEC BENGAL DAMODAR BASINS



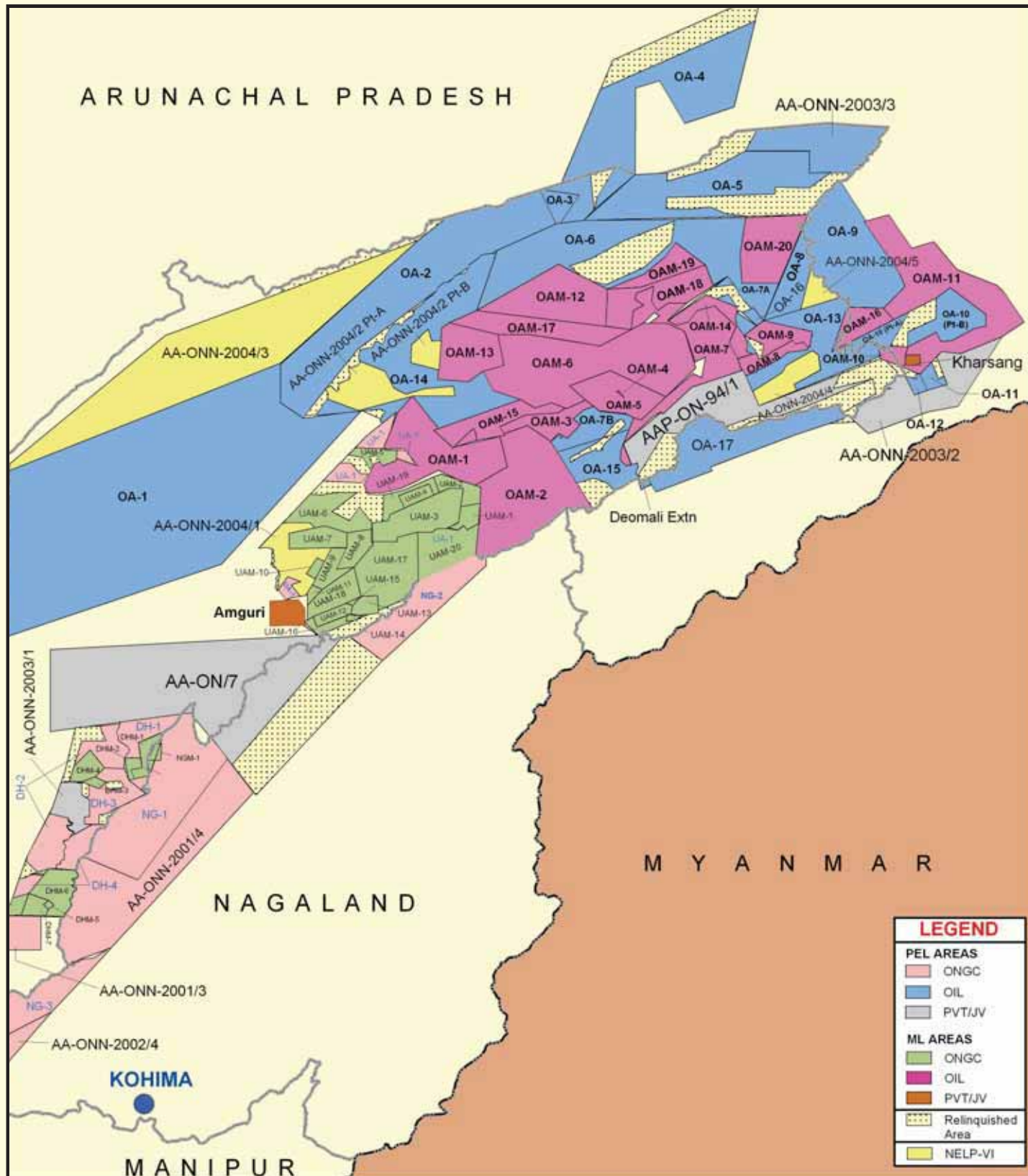
9. SATPURA PRANHITA GODAVARI BASINS



10. ASSAM-ARAKAN BASIN



11. ASSAM-ARAKAN BASIN



PEL AREAS UNDER OPERATION BY NOCs AND PVT/JV COMPANIES

As on 01.04.2007

Sl. No.	COMPANY / OPERATOR	BASIN	BLOCK NAME	REF. NO. ON MAP	EFFECTIVE DATE OF PEL	AREA (Sq. Km.)	TOTAL AREA (Sq. Km.)
NOMINATION BLOCKS (ONGC & OIL)							
1	ONGC	Rajasthan	South Kharatar	RJ-1	01.08.03	181.39	1771.39
2			Miajlar-East	RJ-2	27.08.02	1590.00	
3		Cambay	Patan-Tharad	M-1	04.09.05	18.16	
4			Patan -Tharad Extn. I	M-2	25.09.01	5.00	
5			N. Patan (Patan)	M-3	07.10.04	243.25	
6			Khambel	M-4	29.12.00	103.07	
7			Lanwa Extn. II	M-5	30.10.02	13.00	
8			Dhinoj - Chanasma	M-6	03.11.03	309.25	
9			North Balol Part(A & B)	M-7	27.12.05	17.00	
10			Jotana Extn.III	M-8	07.07.03	7.22	
11			Jotana South	M-9	10.03.04	17.30	
12			Dedana	M-10	15.09.01	11.44	
13			Hansalpur	M-11	07.07.03	27.96	
14			Charada	M-12	07.10.02	53.00	
15			Charada - Mansa Extn.I	M-13	03.11.03	282.75	
16			Kadi-Asjol	M-14	28.08.03	133.00	
17			Varsoda-Halisa	A-1	25.11.03	478.50	
18			Limbodra Extn.III	A-2	06.05.02	11.45	
19			Rupal Extn.I	A-3	13.09.05	15.54	
20			Wamaj North	A-4	11.09.01	11.60	
21			Wamaj North Extn. I	A-5	25.09.02	6.00	
22			Kadi Extn. III	A-6	25.11.03	19.50	
23			Balasar	A-7	23.09.02	25.30	
24			Kalol West	A-8	25.11.03	55.60	
25			Valod Extn.I	A-9	25.11.03	197.84	
26			Valod	A-10	10.12.05	45.41	
27			Ahmedabad East Extn.I	A-11	06.05.02	13.83	
28			West of Baola	A-12	04.05.04	195.00	
29			Dholka Extn.I	A-13	13.09.00	12.08	
30			Sajali	A-14	23.12.04	18.00	
31			Chaklasi-Rasnol	C-1	24.11.03	366.00	
32			Anklav	C-2	12.03.03	40.35	
33			Vasod-Kathol	C-3	24.11.03	307.56	
34			Padra Extn.V	AN-1	26.03.03	17.00	
35			Sarod-Jambusar	AN-2	27.11.03	330.32	
36			Malpur-Degam (CB-ON-6A)	AN-3	26.03.04	166.17	
37			Karjan Extn.I	AN-4	24.10.02	38.64	
38			Karjan Extn.II	AN-5	24.10.03	551.60	
39			Karjan	AN-6	06.12.01	6.32	
40			Raj-Pardi	AN-7	26.03.04	1251.00	
41			Tankari	AN-8	23.12.05	53.45	
42			Dabka-Sarbhan	AN-9	01.12.03	229.93	
43			Gandhar Extn.IX	AN-10	24.10.03	216.53	
44			South Dahej	AN-11	01.12.03	48.75	
45			Sisodra-Kosamba	AN-12	27.11.03	133.49	
46			Sayan	AN-13	24.10.03	283.56	
47			Olpad-Dandi	AN-14	27.11.03	165.20	
48			Tadkeshwar-Sachin	AN-15	27.11.03	529.45	
49			Navasari (West)	AN-16	30.11.04	312.00	7394.37
50		Cauvery Onland	L-I	CYL-1	01.04.04	1346.50	4697.80
51			L-I (Extn.)	CYL-2	01.08.03	444.00	
52			L-II	CYL-3	01.04.04	2233.00	
53			L-X	CYL-4	01.01.04	261.00	
54			L-XI	CYL-5	20.11.03	172.80	
55			L-XII	CYL-6	19.11.03	240.50	
56		K-G Onland	1A	KGL-1	28.12.03	2159.00	5095.90
57			1B	KGL-2	13.01.04	2936.90	
58		Bengal Onland	Contai	WB-1	22.08.03	611.00	611.00

PEL AREAS UNDER OPERATION BY NOCs AND PVT/JV COMPANIES

Sl. No.	COMPANY / OPERATOR	BASIN	BLOCK NAME	REF.NO. ON MAP	EFFECTIVE DATE OF PEL	AREA (Sq. Km.)	TOTAL AREA (Sq. Km.)
59	ONGC	Assam - Arakan	Sibsagar District	UA-1	01.04.02	737.00	14053.00
60			Titabar	DH-1	01.01.02	101.00	
61			Golaghat Extn. IIA	DH-2	01.01.03	233.00	
62			Merapani	DH-3	01.10.01	80.00	
63			Golaghat District	DH-4	20.01.01	84.00	
64			Karbi - Anglong (Daldali)	DH-5	01.10.03	465.00	
65			Kopili Valley	KV-1	18.11.03	3305.00	
66			Cachar District	CH-1 A&B	01.04.03	1100.00	
67			Karimganj District	CH-2	01.04.03	577.00	
68			Hailakandi District	CH-3	01.04.03	52.00	
69			Sector-V C (Assam)	CH-4	01.04.04	1116.00	
70			Sector-IX (Angartoli)	ME-1	01.04.04	785.00	
71			Sector-X (Meghalaya)	ME-2	01.04.04	150.00	
			AA-ON-4				
72			West Tripura	T-1	15.09.03	2361.00	
73			North Agartala	T-2	20.03.03	375.00	
74			Large Area	T-3	01.01.04	942.00	
75			Bhagty Bhandari	NG-1	28.04.06	620.00	
76			Singphan	NG-2	28.04.06	320.00	
77			Dimapur	NG-3	28.04.06	650.00	
78		Himalayan Foreland	Kangra-Mandi	HP-1	10.11.03	2850.00	2850.00
79		Vindhyan	Damoh-Jabera-Katni	MP-1	10.11.03	4208.00	4208.00
80		Satpura - South Rewa	Rampur-Pachmarhi-Anhon	MP-2	01.04.04	2457.00	2457.00
					TOTAL ONLAND		43138.46
81		Gujarat - Kutch - Saurashtra Off.	KD-GKH	K-1	01.04.04	4486.00	23598.00
82			Kutch A&B	K-2	06.06.04	279.00	
83			Kutch-H Block - I & II	K-3	27.06.00	158.00	
84			Kutch Off Block-I Extn.	K-4	01.01.05	2118.00	
85			GK-DW-1	K-5	01.10.04	16557.00	
86		Mumbai Off.	Bombay Off(BOFF1/ 2/3)	B-1 A,B&C	14.11.03	21589.00	43950.00
87			Saurashtra-Dahanu	B-2	20.07.05	1880.00	
88			Bombay Off Ext.III(Box III)	B-3	19.11.01	1290.00	
89			B-142	B-4	22.04.03	45.00	
90			WO-9	B-5	12.12.02	418.00	
91			SW of BH & DCS Area	B-6	01.01.04	939.00	
92			ED-A	B-7	18.11.02	757.00	
93			R-6 / R-28	B-8	01.11.02	544.00	
94			BB-OS-DW-I	B-9	28.12.04	7537.00	
95			BB-OS-DW-II	B-10	28.12.04	8951.00	
96		Kerala-Konkan Off.	KKDW-17&12	KK-1	01.04.03	12750.00	12988.00
97			KK Block	KK-2	25.04.00	238.00	
98		Cauvery Off.	C-OS-IX	CYO-1	01.01.04	803.00	1669.00
99			C-OS-X	CYO-2	01.01.04	866.00	
100		K-G Off.	Block - IE	KGO-1	16.12.04	201.00	2945.15
101			Block - IG	KGO-2	01.02.03	104.40	
102			Block - IB	KGO-3	16.12.04	122.75	
103			Block - IF	KGO-4	20.09.03	309.00	
104			Block - IA	KGO-5	22.10.04	110.00	
105			KG-OS-DW-IV	KGO-6	15.02.04	119.00	
106			KG-OS-DW-III	KGO-7	15.05.03	1193.00	
107			KG-OS-DW Extn.	KGO-8	01.02.03	786.00	
					TOTAL OFFSHORE		85150.15
					ONGC TOTAL		128288.61

PEL AREAS UNDER OPERATION BY NOCs AND PVT/JV COMPANIES

Sl. No.	COMPANY / OPERATOR	BASIN	BLOCK NAME	REF.NO. ON MAP	EFFECTIVE DATE OF PEL	AREA (Sq. Km.)	TOTAL AREA (Sq. Km.)	
108	OIL	Ganga Valley	Kashipur	OGV-1	04.08.05	6570.00	6850.00	
109			Kashipur Extn.	OGV-2	01.01.02	280.00		
110		Assam-Arakan	Lakhimpur	OA-1	20.12.01	3150.00	8416.15	
111			Murkongselek (NF)	OA-2	01.04.02	980.00		
112			Murkongselek (F)	OA-3	01.04.02	143.00		
113			Pasighat	OA-4	01.04.02	694.50		
114			Sadiya	OA-5	18.11.01	565.50		
115			Tinsukia	OA-6	01.04.02	791.00		
116			Dumduma Extn. (NF)	OA-7 A&B	01.08.03	133.00		
117			Dirak	OA-8	18.11.01	127.50		
118			Namsai	OA-9	25.11.04	370.00		
119			Namchik	OA-10	01.05.05	195.00		
120			Jairampur Extn.	OA-11	01.05.02	23.25		
121			Jairampur	OA-12	01.04.02	18.00		
122			Margherita	OA-13	01.04.02	275.90		
123			Dibrugarh	OA-14	01.04.02	641.00		
124			Borhat	OA-15	01.04.02	166.50		
125			Dumduma Extn. (F)	OA-16	01.04.02	28.50		
126			Deomali	OA-17	18.02.05	113.50		
					OIL TOTAL		15266.15	
					NOC'S TOTAL		143554.76	
Pre-NELP/NELP BLOCKS (ONGC & OIL)								
1	ONGC	Cambay	CB-OS/1*	-	19.11.06	846.00		
2			CB-ONN-2001/1	-	19.08.03	215.00		
3			CB-ONN-2002/1	-	18.10.04	135.00		
4		Gulf of Cambay	CB-OSN-2003/1	-	05.12.05	2394.00	3590.00	
5		Cauvery Onland	CY-ONN-2002/2	-	31.08.04	210.00	210.00	
6		Pranhita-Godavari	PG-ONN-2001/1	-	04.07.03	5190.00	5190.00	
7		Assam-Arakan	AA-ONN-2001/1	-	01.05.03	2257.00	8077.00	
8			AA-ONN-2001/2	-	29.07.03	4005.00		
9			AA-ONN-2001/3	-	19.12.03	110.00		
10			AA-ONN-2001/4	-	28.04.06	645.00		
11			AA-ONN-2002/4	-	28.04.06	1060.00		
12		Ganga Valley	GV-ONN-97/1	-	20.04.01	18375.00	18375.00	
13		Him. Foreland	HF-ONN-2001/1	-	10.06.03	1513.88	1513.88	
14		Gujarat - Kutch - Saurashtra Off.	GS-OSN-2001/1	-	12.03.03	7101.00	34521.00	
15			GS-DWN-2002/1	-	17.03.04	21450.00		
16			GS-OSN-2003/1	-	15.12.05	5970.00		
17		Mumbai Off.	MB-OSN-2000/1	-	16.08.01	18414.00	18414.00	
18		Kerala-Konkan	KK-OSN-2001/2	-	12.03.03	10588.00	82528.00	
19			KK-OSN-2001/3	-	12.03.03	6445.00		
20			KK-DWN-2001/3	-	12.03.03	21775.00		
21			KK-DWN-2002/2	-	17.03.04	22810.00		
22			KK-DWN-2002/3	-	17.03.04	20910.00		
23		Cauvery Off.	CY-OSN-2000/1	-	16.08.01	4440.00	20395.00	
24			CY-OSN-2000/2	-	16.08.01	3530.00		
25			CY-DWN-2001/1	-	12.03.03	12425.00		
26		K-G Off.	KG-OSN-97/1	-	19.05.00	2236.00	29590.60	
27			KG-DWN-98/2	-	12.04.00	7294.60		
28			KG-DWN-98/4	-	19.05.00	4970.00		
29			KG-DWN-98/5	-	19.05.00	4490.00		
30			KG-DWN-2002/1	-	17.03.04	10600.00		

*Pre-NELP Block

PEL AREAS UNDER OPERATION BY NOCs AND PVT/JV COMPANIES

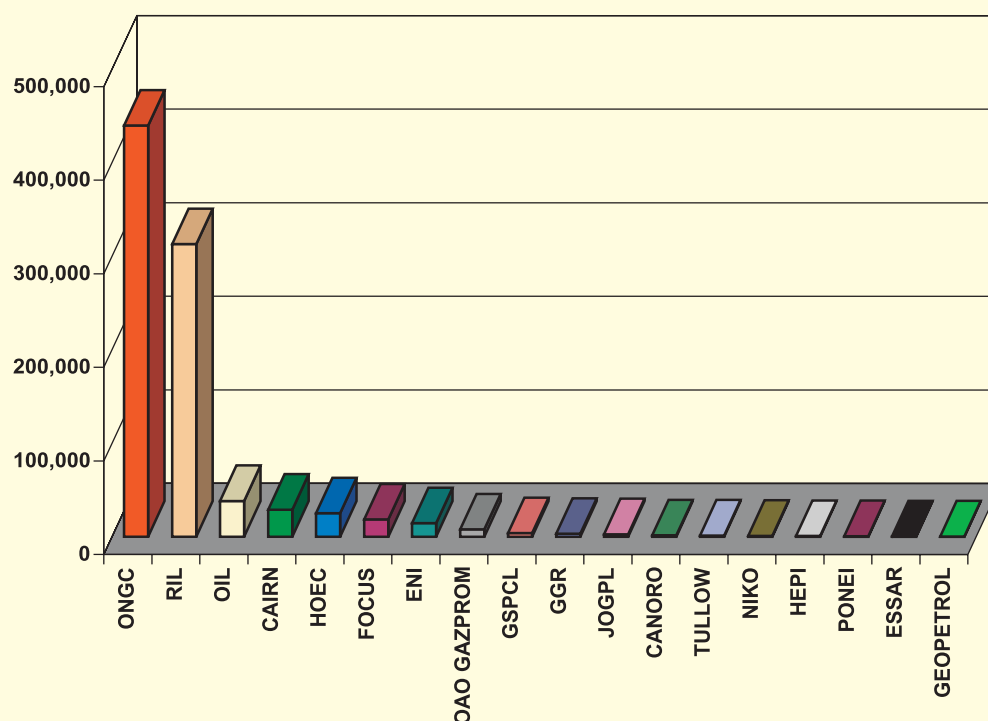
Sl. No.	COMPANY / OPERATOR	BASIN	BLOCK NAME	REF.NO. ON MAP	EFFECTIVE DATE OF PEL	AREA (Sq. Km.)	TOTAL AREA (Sq. Km.)	
31		Mahanadi - NEC Off.	MN-DWN-98/3	-	19.05.00	4988.00		
32			MN-OSN-97/3	-	19.05.00	2710.00		
33			MN-OSN-2000/2	-	16.08.01	4061.00		
34			MN-DWN-2002/1	-	17.03.04	9980.00		
35			MN-DWN-2002/2	-	17.03.04	11390.00		
36			NEC-DWN-2002/2	-	17.03.04	15465.00		
37		Bengal Off.	WB-OSN-2000/1	-	30.07.01	6700.00	6700.00	
38		Andaman-Nicobar	AN-DWN-2002/1	-	17.03.04	10990.00		
39			AN-DWN-2002/2	-	17.03.04	12495.00		
40			AN-DWN-2003/1	-	05.12.05	9970.00		
						ONGC TOTAL	311153.48	
41	OIL	Rajasthan	RJ-ONN-2000/1	-	18.01.02	1862.40		
42			RJ-ONN-2001/1	-	23.07.03	3425.00		
43			RJ-ONN-2002/1	-	22.06.04	9900.00		
44		Mahanadi Onland	MN-ONN-2000/1	-	24.04.02	5903.00	5903.00	
45		Assam-Arakan	AA-ONN-2002/3	-	05.02.05	1460.00		
46			AA-ONN-2003/3	-	30.11.06	275.00		
						OIL TOTAL	22825.40	
						NOC'S TOTAL	333978.88	
PRE-NELP & NELP BLOCKS (PVT. / JV)								
47	RELIANCE	K-G Off.	KG-DWN-98/1	-	07.06.00	8100.00		
48			KG-DWN-98/3	-	07.06.00	7645.00		
49			KG-OSN-2001/1	-	03.04.03	1100.00		
50			KG-OSN-2001/2	-	03.04.03	210.00		
51			KG-DWN-2001/1	-	03.04.03	11605.00		
52			KG-DWN-2003/1	-	05.12.05	3288.00		
53		Cauvery Off.	CY-DWN-2001/2	-	03.04.03	14325.00	14325.00	
54		Cauvery-Palar Off.	CY-PR-DWN-2001/3	-	03.04.03	8600.00		
55			CY-PR-DWN-2001/4	-	03.04.03	10590.00		
56		Palar Off.	PR-DWN-2001/1	-	03.04.03	8255.00	8255.00	
57		Mahanadi - NEC Off.	MN-DWN-98/2	-	07.06.00	7195.00		
58			NEC-OSN-97/2	-	07.06.00	10755.00		
59			NEC-DWN-2002/1	-	18.03.04	25565.00		
60			MN-DWN-2003/1	-	05.12.05	17050.00		
61		Kerala-Konkan Off.	KK-OSN-97/2	-	07.06.00	14395.00		
62			KK-DWN-2000/1	-	16.08.01	18113.00		
63			KK-DWN-2000/3	-	16.08.01	14889.00		
64			KK-DWN-2001/1	-	03.04.03	27315.00		
65			KK-DWN-2001/2	-	03.04.03	31515.00		
66			KK-DWN-2003/1	-	23.01.06	18245.00		
67			KK-DWN-2003/2	-	05.12.05	12285.00		
68		Gujarat-Kutch-Saurashtra Off.	GK-OSJ/3	-	05.10.01	5725.00		
69			GK-OS/5(Onland Part)	-	05.03.03	41.00		
			(Off. Part)	-	20.07.98	3709.00		
70			SR-OSN-97/1	-	07.06.00	5040.00		
71			SR-OS-94/1	-	12.04.00	6860.00		
72		GS-OSN-2000/1	-	16.08.01	8841.00	30216.00		
73		Assam-Arakan	AS-ONN-2000/1	-	--	6215.00	6215.00	
74		Cambay	CB-ON/1	-	05.09.03	4600.00		
75			CB-ONN-2003/1 (Pt.A&B)	-	05.06.06	635.00		
						RELIANCE TOTAL	312706.00	
76	CAIRN	Rajasthan Ganga Valley	RJ-ON-90/1	-	15.05.95	879.50		
77			GV-ONN-2002/1	-	08.06.05	15550.00		
78			GV-ONN-2003/1	-	06.02.07	7210.00		
79		Vindhyan	VN-ONN-2003/1	-	21.02.06	3585.00		
80		K-G Onland	KG-ONN-2003/1	-	08.02.07	1697.00		

PEL AREAS UNDER OPERATION BY NOCs AND PVT/JV COMPANIES

Sl. No.	COMPANY / OPERATOR	BASIN	BLOCKNAME	REF.NO. ON MAP	EFFECTIVE DATE OF PEL	AREA (Sq. Km.)	TOTAL AREA (Sq. Km.)
81	ESSAR	Cambay	CB-ON/3	-	11.02.03	430.50	430.50
82	HOEC	Pranhita-Godavari	GN-ON-90/3	-	29.03.93	21850.00	25124.00
83		Cambay	CB-ON/7	-	23.11.00	369.00	
84		Cauvery Off.	CY-OSN-97/1	-	16.03.01	2470.00	
85		Assam - Arakan	AAP-ON-94/1	-	28.11.00	435.00	
86	HEPI	Cauvery Off.	CY-OS/2	-	19.11.96	859.00	859.00
87	PREMIER OIL	Assam - Arakan	CR-ON-90/1	-	13.07.00	635.38	635.38
88	FOCUS	Rajasthan	RJ-ON/6	-	21.08.99	4026.16	18383.59
89			RJ-ONN-2003/2	-	28.01.06	13195.00	
90		G-K Onland	GK-ON/4	-	19.04.03	1162.43	
91	OAO GAZPROM	Mahanadi-NEC Off.	NEC-OSN-97/1	-	14.11.00	7779.00	7779.00
92	CANORO	Assam-Arakan	AA-ON/7 (Assam Part)	-	27.03.01	1126.00	1444.70
			(Nagaland Part)	-	09.08.06	318.70	
93	GSPC	Cambay	CB-ON/2	-	23.11.00	1201.17	3784.17
94			CB-ONN-2002/3	-	29.07.04	285.00	
95			CB-ONN-2003/2	-	01-04-06	448.00	
96		K.G. Off.	KG-OSN-2001/3	-	12.03.03	1850.00	
97	JOGPL	Assam-Arakan	AA-ONN-2002/1	-	07.04.04	1680.00	2566.00
98			AA-ONN-2003/1	-	-	81.00	
99		Cauvery Onland	CY-ONN-2002/1	-	22.11.04	680.00	
100		Cambay	CB-ONN-2002/2 (Part - A&B)	-	21.05.04	125.00	
101	TULLOW	Assam-Arakan	AA-ONJ/2	-	--	1277.00	1277.00
102	GEO-PETROL	Assam-Arakan	AA-ONN-2003/2	-	16.02.06	295.00	295.00
103	GEO-GLOBAL RESOURCES	Deccan Syncline	DS-ONN-2003/1	-	-	3155.00	3155.00
104	ENI	Andaman-Nicobar	AN-DWN-2003/2	-	05.12.05	13110.00	14445.00
105		Rajasthan	RJ-ONN-2003/1	-	04.01.06	1335.00	
106	NIKO	Cauvery Onland	CY-ONN-2003/1	-	28.07.06	957.00	957.00
					PVT. / JV TOTAL		422762.84

GRAND TOTAL 900296.48

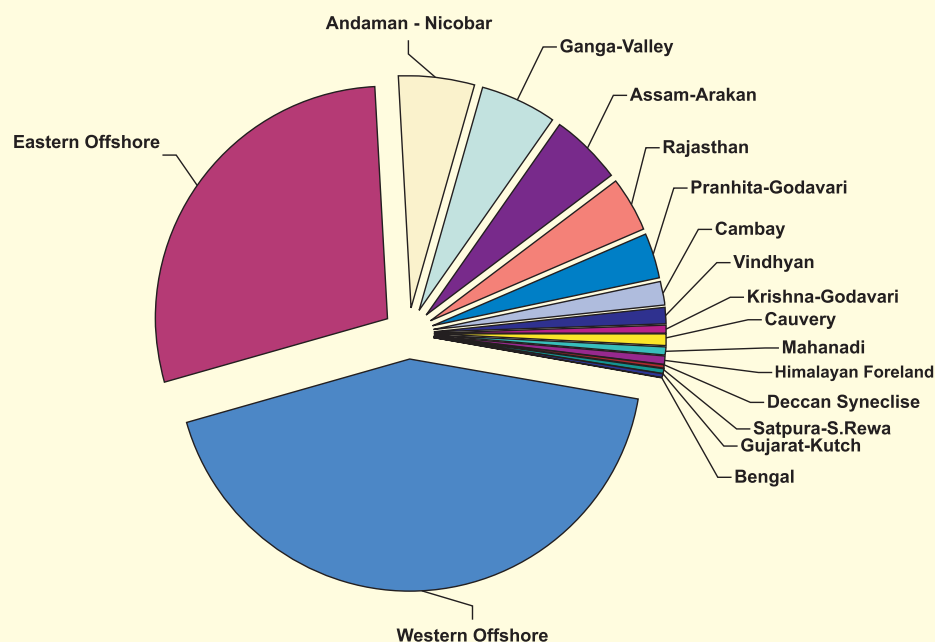
PEL AREAS UNDER OPERATION BY NOCs AND Pvt/JV COMPANIES



COMPANY / OPERATOR	PEL AREA	
	(Sq. Km.)	(%)
ONGC	439,442.09	48.81
RIL	312,706.00	34.73
OIL	38,091.55	4.23
CAIRN	28,921.50	3.21
HOEC	25,124.00	2.79
FOCUS	18,383.59	2.04
ENI	14,445.00	1.60
OAO GAZPROM	7,779.00	0.86
GSPCL	3,784.17	0.47
GGR	3,155.00	0.35
JOGPL	2,566.00	0.23
CANORO	1,444.70	0.16
TULLOW	1,277.00	0.14
NIKO	957.00	0.11
HEPI	859.00	0.10
PONEI	635.38	0.07
ESSAR	430.50	0.05
GEOPETROL	295.00	0.03
TOTAL	900,296.48	100.00

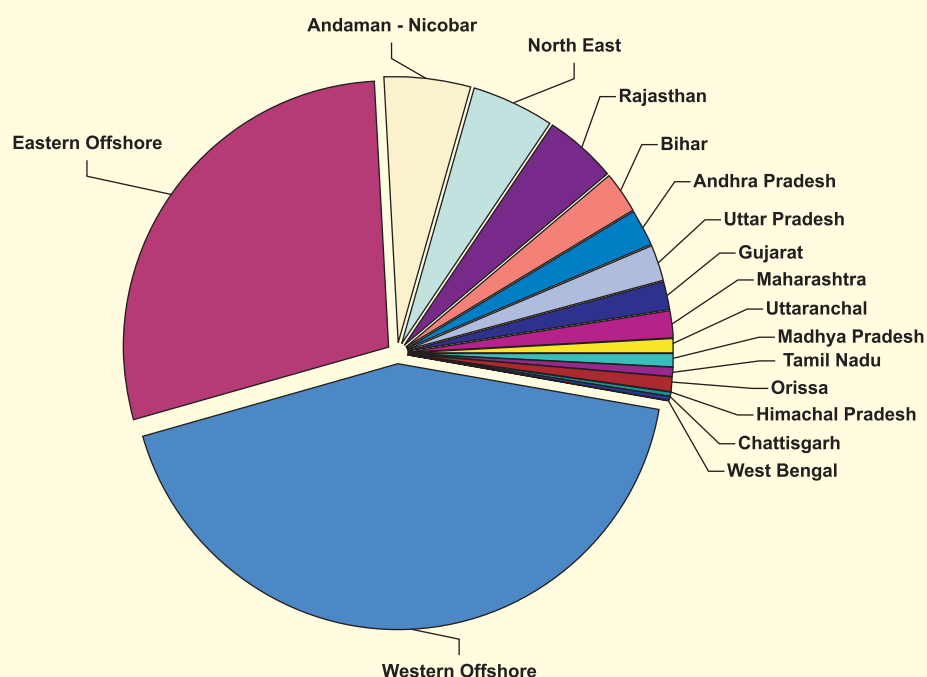
As on 01.04.07

BASIN WISE DISTRIBUTION OF PEL AREAS



OFFSHORE/BASIN	PEL AREA	
	(Sq. Km.)	(%)
OFFSHORE		
WESTERN PART	386,171.00	42.89
EASTERN PART	257,134.75	28.56
ANDAMAN - NICOBAR	46,565.00	5.17
TOTAL OFFSHORE	689,870.75	76.63
ONLAND		
GANGA VALLEY	47,985.00	5.33
ASSAM - ARAKAN	44,344.23	4.93
RAJASTHAN	36,394.45	4.04
PRANHITA - GODAVARI	27,040.00	3.00
CAMBAY	15,838.04	1.76
VINDHYAN	7,793.00	0.87
KRISHNA - GODAVARI	6,792.90	0.75
CAUVERY	6,544.80	0.73
MAHANADI	5,903.00	0.66
HIMALAYAN FORELAND	4,363.88	0.48
DECCAN SYNECLISE	3,155.00	0.35
SATPURA - S. REWA	2,457.00	0.27
GUJARAT - KUTCH	1,203.43	0.13
BENGAL	611.00	0.07
TOTAL ONLAND	210,425.73	23.37
GRAND TOTAL	900,296.48	100.00

STATE WISE DISTRIBUTION OF PEL AREAS



OFFSHORE/STATE	PEL AREA	
	(Sq. Km.)	(%)
OFFSHORE		
WESTERN PART	386,171.00	42.89
EASTERN PART	257,134.75	28.56
ANDAMAN - NICOBAR	46,565.00	5.17
TOTAL OFFSHORE	689,870.75	76.63
STATE		
NORTH-EAST	44,344.23	4.93
RAJASTHAN	39,979.45	4.44
BIHAR	22,760.00	2.53
ANDHRA PRADESH	21,332.90	2.37
UTTAR PRADESH	18,375.00	2.04
GUJARAT	17,041.47	1.89
MAHARASTRA	14,815.00	1.65
UTTARANCHAL	6,850.00	0.41
MADHYA PRADESH (MP)	6,665.00	0.74
TAMIL NADU (TN)	6,544.80	0.73
ORISSA	5,903.00	0.66
HIMACHAL PRADESH	4,363.88	0.48
CHATTISGARH	840.00	0.09
WEST BENGAL(WB)	611.00	0.07
TOTAL ONLAND	210,425.73	23.37
GRAND TOTAL	900,296.48	100.00

ML AREAS UNDER OPERATION BY NOCs AND PVT/JV COMPANIES

Sl. No.	COMPANY / OPERATOR	BASIN	BLOCK NAME	REF. NO. ON MAP	EFFECTIVE DATE OF ML	AREA (Sq. Km.)	TOTAL AREA (Sq. Km.)
1	ONGC	Rajasthan	Manherra Tibba	RJM-1	01.05.94	24.00	704.46
2			Bakriwala	RJM-2	10.01.01	1.00	
3			Ghotaru Ext. - I	RJM-3	10.01.01	564.60	
4			Chinnewala Tibba	RJM-4	15.10.03	114.86	
5		Cambay	Lanwa	MM-1	09.12.02	30.00	
6			Balol	MM-2	25.05.90	24.00	
7			Jotana Ext.-I	MM-3	28.11.86	57.70	
8			West Sobhasan	MM-4	23.04.03	9.60	
9			Mehsana City	MM-5	08.08.96	8.85	
10			Mehsana City Ext.-II	MM-6	18.07.95	7.58	
11			Sobhasan	MM-7	20.08.93	35.89	
12			Geratpur	MM-8	20.08.00	18.31	
13			Linch Ext.-II	MM-9	25.03.87	13.35	
14			North Sobhasan Ext.-I	MM-10	12.03.01	56.85	
15			Jotana	MM-11	26.07.00	39.50	
16			Santhal	MM-12	09.06.94	19.46	
17			Bechraji	MM-13	31.08.91	37.11	
18			Bechraji Ext.-I	MM-14	29.03.04	3.06	
19			N. Kadi Ext.-II	MM-15	08.12.95	41.01	
20			N. Kadi Ext.-I	MM-16	03.05.93	20.42	
21			North Kadi	MM-17	22.06.89	64.49	
22			Linch Ext. - I	MM-18	18.03.07	34.25	
23			Linch	MM-19	16.10.93	43.73	
24			Nandasan Ext.-I	MM-20	18.07.95	26.39	
25			Mansa	MM-21	26.07.95	58.72	
26			Nandasan	MM-22	27.04.06	61.90	
27			Chanasma	MM-23	28.09.96	2.81	
28			Dedana (ML)	MM-24	04.11.96	5.44	
29			Lanwa Ext.-I	MM-25	16.12.96	2.15	
30			Jotana Ext.-II	MM-26	16.06.97	0.87	
31			Jakasna(ML)	MM-27	02.06.01	9.80	
32			South Patan	MM-28	16.06.97	6.99	
33			N. Sobhasan Pt. A+B	MM-29	25.01.99	12.05	
34			East Sobhasan	MM-30	28.06.02	22.42	
35			North Sobhasan Ext.-II	MM-31	17.11.01	23.00	
36			West Mewad(ML)	MM-32	11.10.00	13.02	
37			Langhnaj-Wadasma	MM-33	05.02.01	13.84	
38			Sanganpur ML	MM-34	05.06.02	6.97	
39			Langhnaj ML	MM-35	23.07.02	17.92	
40			Chandror	MM-36	16.02.04	1.39	
41			Kadi Asjol	MM-37	28.08.03	0.72	
42			Jotana-Warosan	MM-38	24.06.05	38.05	
43			Rajpur	AM-1	26.06.95	6.76	
44			Wadu	AM-2	26.05.90	15.41	
45			Kalol North-East	AM-3	15.03.90	9.44	
46			Paliyad-Kalol-Limbodra	AM-4	26.06.95	161.48	
47			Limbodra	AM-5	21.12.05	15.75	
48			Limbodra Ext.-I	AM-6	25.03.98	14.96	
49			Halisa	AM-7	30.01.98	143.44	
50			Kalol (Main)	AM-8	13.05.04	35.84	
51			Kalol Ext.-I	AM-9	04.08.86	159.92	
52			Kalol Ext.-II	AM-10	11.04.89	15.50	
53			Motera Ext.-II	AM-11	25.03.98	26.02	
54			Motera	AM-12	14.08.96	15.69	
55			Motera Ext.-I	AM-13	25.03.97	23.65	
56			Wamaj	AM-14	30.09.95	19.44	
57			Viraj	AM-15	26.07.00	17.49	
58			Lohar	AM-16	16.11.04	8.29	
59			Sanand	AM-17	10.05.89	81.36	
60			Sanand Ext.-I	AM-18	30.04.93	18.51	
61			Sanand Ext.-II	AM-19	23.03.99	10.37	
62			Sanand Ext.-III	AM-20	30.04.89	19.30	
63			Gamij	AM-21	13.10.94	39.16	
64			Gamij Ext.-I	AM-22	25.03.97	81.22	
65			Hirapur	AM-23	24.10.97	87.92	
66			Ahmedabad-Bakrol	AM-24	05.08.89	30.16	

ML AREAS UNDER OPERATION BY NOCs AND PVT/JV COMPANIES

Sl. No.	COMPANY / OPERATOR	BASIN	BLOCK NAME	REF. NO. ON MAP	EFFECTIVE DATE OF ML	AREA (Sq. Km.)	TOTAL AREA (Sq. Km.)
67	ONGC	Cambay	Ahmedabad Ext.-I	AM-25	22.02.01	17.29	
68			Ahmedabad Ext.-II	AM-26	29.07.88	6.98	
69			Ahmedabad Ext.-III	AM-27	11.11.91	34.75	
70			Nandej East	AM-28	26.06.95	20.92	
71			Nandej	AM-29	25.03.97	90.18	
72			Nawagam Main	AM-30	28.03.07	72.23	
73			Nawagam Ext.-I	AM-31	21.03.03	2.77	
74			Wadu Ext.-I	AM-32	19.05.97	55.17	
75			Ahmedabad Ext.-IV	AM-33	08.10.98	10.21	
76			Rajpur Ext.-I	AM-34	02.02.99	8.70	
77			Asmali ML	AM-35	15.06.98	43.26	
78			Kadi Ext.-III	AM-36	02.02.99	16.07	
79			Nawagam Ext.-II	AM-37	26.11.99	14.66	
80			Ahmedabad Ext.-V	AM-38	08.05.00	17.75	
81			Gamij Ext.-III ML	AM-39	08.02.02	15.41	
82			Nandej Ext.-I	AM-40	08.02.02	56.18	
83			Gamij Ext. - II	AM-41	04.04.01	116.22	
84			South Wamaj ML	AM-42	28.06.02	18.29	
85			Nawagam Ext. - III	AM-43	31.08.00	56.00	
86			Kalol West Extn.-I*	AM-44	04.10.05	54.25	
87			Kalol West ML	AM-45	21.11.03	14.53	
88			Nawagam South Ext.-I	AM-46	21.11.03	30.88	
89			Nawagam South Ext.-II	AM-47	21.11.03	43.94	
90			Rupal	AM-48	29.10.04	14.06	
91			Kadi Extn.-IV	AM-49	13.11.03	5.28	
92			Nawagam South Ext.-III	AM-50	13.12.05	53.71	
93			Cambay	CM-1	14.12.04	2.60	
94			Siswa	CM-2	12.02.00	37.78	
95			Kathana	CM-3	22.11.88	16.95	
96			Padra Ext.-II	CM-4	03.09.93	14.50	
97			Padra Ext.-I	CM-5	12.04.91	8.42	
98			Padra	CM-6	18.09.06	1.25	
99			Padra Ext.-III	CM-7	12.05.94	0.38	
100			Padra Ext.-IV	CM-8	14.03.96	6.37	
101			Padra Ext.-V	CM-9	03.02.97	3.58	
102			Padra Ext.-VI	CM-10	28.01.99	83.95	
103			Padra Ext.-VII	CM-11	26.04.00	7.11	
104			Padra Ext.-VIII	CM-12	08.11.00	15.68	
105			Padra Ext.-IX	CM-13	10.03.04	21.00	
106			Akholjuni	CM-14	27.07.00	81.25	
107			Anklav Ext.-I	CM-15	15.02.02	61.00	
108			Kathana Ext.-I	CM-16	15.03.04	16.99	
109			Dabka Ext.-I	ANM-1	23.08.88	12.85	
110			Dabka Ext.-II	ANM-2	30.06.89	0.56	
111			Dabka	ANM-3	01.05.93	21.67	
112			Dabka Ext.-III	ANM-4	21.07.89	1.15	
113			Umera	ANM-5	10.08.87	8.44	
114			Umera Ext.-I	ANM-6	19.10.94	9.93	
115			Malpur (ML)	ANM-7	03.06.87	1.00	
116			Nada	ANM-8	19.02.89	9.85	
117			Gandhar Ext.-IV	ANM-9	30.08.94	36.75	
118			Gandhar Ext.-I	ANM-10	08.10.06	32.75	
119			Gandhar	ANM-11	07.01.05	11.78	
120			Gandhar Ext.-II (Denwa)	ANM-12	08.07.06	54.30	
121			Gandhar Ext.-III	ANM-13	24.02.87	235.38	
122			Gandhar Ext.-V	ANM-14	22.03.96	29.43	
123			Dahej Ext.-I	ANM-15	17.04.94	90.90	
124			Dahej	ANM-16	06.02.05	18.52	
125			Pakhajan(ML)	ANM-17	21.08.87	6.25	
126			Pakhajan Ext.-I	ANM-18	10.01.95	18.00	
127			Kasiyabet	ANM-19	12.09.89	5.06	
128			Ankleshwar Ext.-I	ANM-20	26.05.05	17.43	
129			Ankleshwar (Main)	ANM-21	15.08.01	38.98	
130			Motwan	ANM-22	04.07.99	42.20	
131			Sanaokhurd	ANM-23	30.12.96	23.29	
132			Kudara	ANM-24	28.06.02	2.60	
133			Elav	ANM-25	30.03.90	10.37	
134			Kharach	ANM-26	23.03.95	0.72	

ML AREAS UNDER OPERATION BY NOCs AND PVT/JV COMPANIES

Sl. No.	COMPANY / OPERATOR	BASIN	BLOCK NAME	REF. NO. ON MAP	EFFECTIVE DATE OF ML	AREA (Sq. Km.)	TOTAL AREA (Sq. Km.)
135	ONGC	Cambay	Kosamba	ANM-27	29.12.87	19.17	
136			Olpad (A)	ANM-28	24.11.02	2.75	
137			Dabka Ext.-IV (D#6)	ANM-29	20.02.97	1.00	
138			Kim(ML)	ANM-30	10.03.97	18.33	
139			Gandhar Ext.-VI (G#388)	ANM-31	22.01.97	44.47	
140			Nada Ext.-I	ANM-32	03.09.98	6.12	
141			Dabka Ext.-V (D#38)	ANM-33	29.06.99	2.00	
142			Gandhar Ext.-VII(G#155)	ANM-34	24.04.99	25.82	
143			Gandhar Ext.-VIII	ANM-35	16.08.00	7.23	
144			Kural (ML)	ANM-36	03.04.01	83.49	
145			Gandhar Ext. - IX	ANM-37	20.08.02	40.91	
146			Olpad - Dandi Ext. - I	ANM-38	01.01.04	94.40	
147			Pakhajan Extn. - II	ANM-39	16.09.02	38.50	
148			Kim Ext. - I	ANM-40	04.01.02	56.11	
149			Kosamba Extn.-I	ANM-41	01.03.03	39.00	
150			Umra Extn.-II*	ANM-42	20.09.05	34.43	4469.08
151		Cauvery Onland	Bhuvanagiri-2	CYM-1	15.12.87	1.00	
152			Mattur	CYM-2	04.05.94	3.00	
153			Nannilam-I	CYM-3	26.04.93	4.70	
154			Kamalapuram-II	CYM-4	04.05.94	3.50	
155			Kamalapuram-I	CYM-5	27.05.99	23.50	
156			Adiyakka Mangalam	CYM-6	27.05.99	17.80	
157			Kovilkalappal-I	CYM-7	15.05.87	1.50	
158			Nannilam-II	CYM-8	27.05.99	1.00	
159			Kovilkalappal-II	CYM-9	27.05.99	11.00	
160			Perungulam-Periyapattinam	CYM-10	15.07.97	75.00	
161			Tulsapatnam	CYM-11	27.05.99	3.70	
162			Pundi	CYM-12	27.05.99	1.00	
163			Kizhavalur	CYM-13	27.05.99	3.60	
164			Kuthalam	CYM-14	01.06.01	91.00	
165			Kuthalam-13	CYM-15	12.02.04	12.00	
166			Kali	CYM-16	01.06.01	19.00	
167			Vijayapuram #13	CYM-17	26.02.04	2.00	
168			Greater Kamalapuram	CYM-18	26.02.04	22.00	
169			Kuthanallur	CYM-19	26.02.04	6.25	
170			Kali-6	CYM-20	01.01.04	1.60	
171			Kanjirangudi	CYM-21	13.10.03	68.00	
172			Greater Narimanam	CYM-22	27.01.06	47.28	
173			PBS-1-1	CYM-23	01.10.03	9.00	428.43
174	ONGC	K-G Onland	Endamuru-I	KGM-1	03.04.92	3.00	
175			Endamuru-4	KGM-2	30.04.03	6.00	
176			Pasarlappudi-9	KGM-3	27.06.92	6.60	
177			Pasarlappudi-8	KGM-4	27.06.92	5.50	
178			Tatipaka-Pasarlappudi	KGM-5	14.02.94	62.00	
179			Kesanapalli-I	KGM-6	08.07.92	3.70	
180			Mori-5	KGM-7	02.06.94	1.56	
181			Mori-1	KGM-8	08.04.91	6.50	
182			Razole-1 & 2	KGM-9	23.01.93	18.85	
183			Elamanchali	KGM-10	21.12.91	8.00	
184			Medapadu-1	KGM-11	08.07.92	16.60	
185			Penumadam-1	KGM-12	03.04.02	9.60	
186			Lingala	KGM-13	21.12.99	7.60	
187			Kaikalur-3	KGM-14	10.09.86	9.00	
188			Vadali	KGM-15	20.04.90	4.00	
189			Mandapeta	KGM-16	22.08.95	40.00	
190			Mandapeta-19	KGM-17	01.05.98	6.00	
191			Mandepeta West	KGM-18	01.06.04	20.00	
192			Addvipalem-Ponnamanda	KGM-19	30.07.96	95.00	
193			Nandigama	KGM-20	31.01.00	55.00	
194			Enugupalli	KGM-21	06.07.00	7.00	
195			Kesavadasupalem	KGM-22	30.07.02	26.50	
196			Suryaraopeta	KGM-23	30.07.02	56.00	
197			Lingala Ext. & Kaikalur-12	KGM-24	30.07.02	30.00	
198			Lakshmaneswaram	KGM-25	30.07.02	23.50	
199			Endamuru-7&9	KGM-26	19.05.03	7.30	
200			Penumadam-2	KGM-27	01.07.04	3.20	
201			Srikatpalli	KGM-28	30.07.02	163.00	701.01

ML AREAS UNDER OPERATION BY NOCs AND PVT/JV COMPANIES

Sl. No.	COMPANY / OPERATOR	BASIN	BLOCK NAME	REF. NO. ON MAP	EFFECTIVE DATE OF ML	AREA (Sq. Km.)	TOTAL AREA (Sq. Km.)
202	ONGC	Assam-Arakan	Sonari	UAM-1	01.08.89	30.00	
203			Banamali	UAM-2	17.12.02	50.00	
204			Lakwa	UAM-3	29.09.88	172.49	
205			Laipling-Gaon	UAM-4	13.10.03	26.00	
206			Panidihing	UAM-5	19.05.04	34.00	
207			North Rudrasagar*	UAM-6	30.01.06	122.00	
208			Rudrasagar	UAM-7	30.05.89	70.50	
209			Charali	UAM-8	20.03.99	51.64	
210			Charali Ext.-I	UAM-9	20.05.98	45.00	
211			West Charali*	UAM-10	01.11.03	12.00	
212			Changmaigaon	UAM-11	07.02.04	10.00	
213			Namti	UAM-12	09.11.87	35.55	
214			Geleki	UAM-13	16.08.90	27.94	
215			Geleki Ext.-I	UAM-14	23.10.89	5.01	
216			Geleki Ext.- II	UAM-15	14.12.01	2.65	
217			SE Geleki*	UAM-16	30.01.06	55.00	
218			Mekeypore-Santak-Nazira*	UAM-17	01.08.01	225.00	
219			Changmaigaon East*	UAM-18	30.01.06	80.00	
220			Laiplingaon Extn.*	UAM-19	30.01.06	37.00	
221			Charaideo-Nahorhabi*	UAM-20	01.11.03	100.00	
222			Changpang ML	NGM-1	14.03.07	12.00	
223			Borholla	DHM-1	17.06.98	32.12	
224			Mekrang	DHM-2	19.09.97	16.00	
225			East Lakhibari	DHM-3	23.07.03	8.50	
226			East Lakhibari Extn.*	DHM-4	27.01.06	49.00	
227			Khoraghat	DHM-5	27.07.89	3.00	
228			Khoraghat Ext. - I	DHM-6	17.07.00	83.00	
229			Number	DHM-7	05.09.99	26.00	
230			Number Extn.*	DHM-8	27.01.06	20.00	
231			Badarpur	CHM-1	01.08.89	2.30	
232			Banaskandi	CHM-2	21.07.97	15.00	
233			Adamtila	CHM-3	24.11.89	4.00	
234			Bhubandar	CHM-4	22.12.02	6.00	
235			Baramura(BRM-1)	TM-1	18.07.04	4.71	
236			Baramura(BRM-10)	TM-2	15.03.87	2.22	
237			Baramura(BRM-11)	TM-3	27.07.91	1.41	
238			Baramura(BRM-12)	TM-4	01.10.93	2.41	
239			Agartala Dome (AD-1)	TM-5	01.05.89	15.75	
240			Agartala Dome (AD-4)	TM-6	01.01.98	32.58	
241			Konaban (RO-4)	TM-7	01.01.98	10.30	
242			Manikya Nagar (RO-15)	TM-8	01.01.98	0.80	
243			Rokhia (RO-2)	TM-9	14.11.88	5.04	
244			Rokhia (RO-19)	TM-10	26.02.92	0.58	
245			Agartala Dome Extn.*	TM-11	01.09.06	163.70	
246			Baramura Field Extn.*	TM-12	01.09.06	150.30	
247			Konaban Extn.*	TM-13	01.09.06	17.70	
248			Manikyanagar-Sonamura*	TM-15	01.09.06	138.60	
249			Konaban Field (Rokihia)	TM-14	01.08.04	0.81	
250			Tichna Field*	TM-16	01.09.06	176.00	
251			Gojalia Field*	TM-17	01.09.06	242.00	2433.61
252		Mumbai Off.	Bombay High	BM-1	20.05.96	303.69	
253			Bombay High-II	BM-2	14.10.00	1445.15	
254			Bombay High-West	BM-3	25.10.90	205.00	
255			B-55	BM-4	30.06.99	135.85	
256			South Bassein	BM-5	01.10.87	755.00	
257			B-119 / B-121	BM-6	15.05.97	113.40	
258			B-173A	BM-7	01.06.98	51.95	
259			Neelam	BM-8	14.11.89	213.00	
260			Heera	BM-9	20.11.04	448.05	
261			D-1 Field	BM-10	31.07.05	25.60	
262			Bassein Field Extn. (CB-II)	BM-11	15.06.05	22.55	
263			D-18	BM-12	01.01.05	194.00	
264			North Tapti Field*	BM-13	01.03.06	68.14	

ML AREAS UNDER OPERATION BY NOCs AND PVT/JV COMPANIES

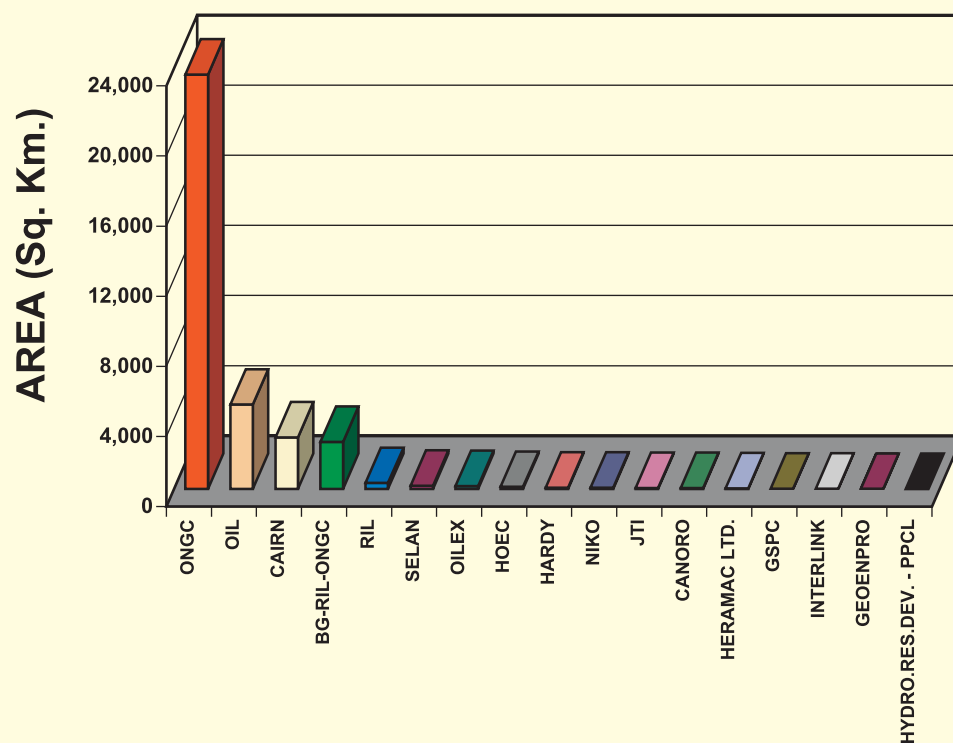
Sl. No.	COMPANY / OPERATOR	BASIN	BLOCK NAME	REF. NO. ON MAP	EFFECTIVE DATE OF ML	AREA (Sq. Km.)	TOTAL AREA (Sq. Km.)
265		Mumbai Off.	C-Series Fields*	BM-14	01.04.07	2573.95	14315.59
266			B-12/C-26 Fields*	BM-15	01.01.07	1815.90	
267			Mumbai High NW*	BM-16	01.04.06	1567.67	
268			Mumbai High-SW*	BM-17	01.04.06	1064.71	
269			Mumbai High-South*	BM-18	01.04.06	801.54	
270			West of Bassein*	BM-19	01.04.06	959.44	
271			Vasai East*	BM-20	18.03.05	103.69	
272			S&E of Bassein*	BM-21	01.04.06	1447.31	
273		K-G Off.	GS-15 & 23	KGM-29	04.09.98	80.00	585.00
274				G-1 Field	KGM-30	05.09.03	
275	KD-I*			KGM-31	02.03.07	400.00	
						ONGC TOTAL	23637.18
276	OIL	Rajasthan	Dandewala (Jaisalmer)	ORJM-1	01.01.86	250.00	460.00
277			Baghewala	ORJM-2	30.05.03	210.00	
278		Assam - Arakan	Moran	OAM-1	01.11.06	429.42	4351.01
279			Moran Extn.	OAM-2	10.01.91	560.00	
280			Dum-Duma BK-A	OAM-3	26.11.89	98.42	
281			Nahorkatiya	OAM-4	04.02.04	1.42	
282			Nahorkatiya Extn.	OAM-5	10.01.91	165.76	
283			Hugrijan	OAM-6	10.01.01	725.20	
284			Dum-Duma BK-B	OAM-7	26.11.89	311.96	
285			Digboi	OAM-8	14.10.01	49.33	
286			Dum-Duma BK-C	OAM-9	26.11.89	85.47	
287			Dum-Duma BK-D	OAM-10	26.11.89	10.36	
288			Ningru	OAM-11	27.11.03	540.67	
289			Tinsukia	OAM-12	02.08.01	250.00	
290			Dibrugarh	OAM-13	06.08.01	186.00	
291			Borhapijan	OAM-14	07.08.01	87.00	
292			Dholiya	OAM-15	02.08.01	131.00	
293			Ningru Extension	OAM-16	04.06.03	75.00	
294			Chabua	OAM-17	12.06.02	189.00	
295			Tinsukia Extension	OAM-18	17.05.03	185.00	
296			Baghjan	OAM-19	14.05.03	75.00	
297			Mechaki	OAM-20	19.05.03	195.00	
298	CAIRN	K-G Off. Gulf of Cambay	Ravva	--	28.10.94	331.26	2934.96
299			Lakshmi	--	07.07.98	121.06	
300			Gauri**	--	--	52.70	
301		Ambe*	--	--	107.47		
302		CBX*	--	--	33.30		
303	Rajasthan	Mangala (RJ-ON-90/1)	--	--	21.06.05	1859.00	2934.96
304			Bhagyam-Shakti*	--	--	14.11.06	
305	BG-RIL-ONGC	Mumbai Off.	Mid & South Tapti	--	22.12.94	1471.00	2678.00
306			Panna	--	22.12.94	430.00	
307			Mukta	--	22.12.94	777.00	
308	GEOENPRO	Assam-Arakan	Kharsang	--	21.10.97	11.00	11.00
309	CANORO	Assam-Arakan	Amguri	--	01.11.03	52.75	52.75
310	HOEC	Cambay	Asjol	--	09.04.96	15.00	120.84
311			N. Balol	--	21.03.02	27.30	
312		Cauvery Off.	Promoda	--	21.09.05	3.54	
313	PY-1		--	06.10.95	75.00		
314	INTERLINK	Cambay	Baola	--	12.12.96	4.00	16.70
315			Modhera*	--	-	12.70	
316	JTI	Cambay	Wavel	--	20.02.95	9.00	57.00
317			Dholka	--	20.02.95	48.00	
318	NIKO	Cambay	Hazira	--	23.09.94	50.00	74.25
319			NS-A	--	01.05.04	20.22	
320			Bheema	--	29.09.04	4.03	
321	SELAN	Cambay	Lohar	--	13.03.95	5.00	189.65
322			Indrora	--	13.03.95	130.00	
323			Bakrol	--	13.03.95	36.00	
324			Karjisan	-	23.11.05	5.00	
325			Ognaj*	-	-	13.65	

ML AREAS UNDER OPERATION BY NOCs AND PVT/JV COMPANIES

Sl. No.	COMPANY / OPERATOR	BASIN	BLOCK NAME	REF.NO. ON MAP	EFFECTIVE DATE OF ML	AREA (Sq. Km.)	TOTAL AREA (Sq. Km.)
326	HERAMEC	Cambay	Kanawara	-	04.02.03	6.30	34.15
327			Dholasan	-	27.02.03	8.80	
328			Allora	-	16.05.03	6.85	
329			N. Kathana	-	11.06.03	12.20	
330	HYDROCARBON RES. DEV.-PPCL	Cambay	Sanganpur	-	27.02.02	4.40	4.40
331	OILEX	Cambay	Cambay	--	23.09.94	161.00	172.80
332			Sabarmati	--	23.09.94	5.80	
333			Bhandut	--	23.09.94	6.00	
334	GSPCL	Cambay	Unawa	--	19.05.03	5.65	19.75
335			Ingoli Field (CB-ONN-2001/1)*	--	--	14.10	
336	HARDY	Cauvery Off.	CY-OS-90/1 (PY-3)	-	20.07.98	81.00	81.00
337	RIL	KG Off.	KG-DWN-98/3(D-1&3)	-	02.03.05	339.70	339.70
Pvt./JV TOTAL							6786.95
GRAND TOTAL							35235.14

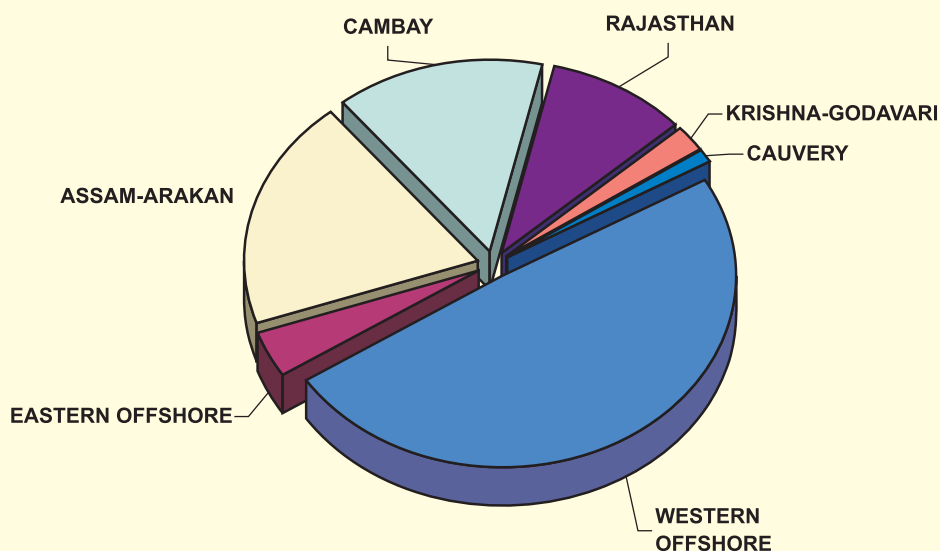
* Awaiting Grant ** Awaiting Regrant

ML AREAS UNDER OPERATION BY NOCs AND PVT/JV COMPANIES



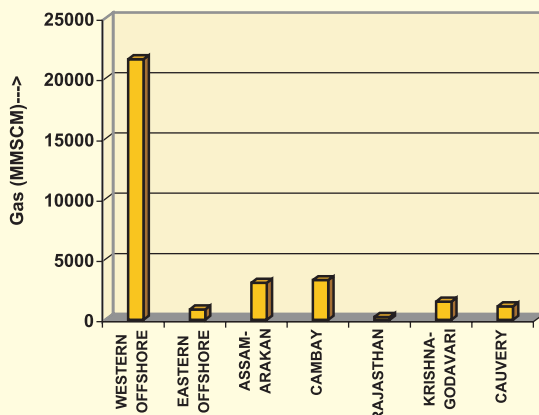
COMPANY / OPERATOR	ML AREA	
	(Sq. Km.)	(%)
ONGC	23,637.18	67.08
OIL	4,811.01	13.65
CAIRN	2,934.96	8.33
BG-RIL-ONGC	2,678.00	7.60
RIL	339.70	0.96
SELAN	189.65	0.54
OILEX	172.80	0.49
HOEC	120.84	0.34
HARDY	81.00	0.23
NIKO	74.25	0.21
JTI	57.00	0.16
CANORO	52.75	0.15
HERAMAC LTD.	34.15	0.10
GSPC	19.75	0.06
INTERLINK	16.70	0.05
GEOENPRO	11.00	0.03
HYDRO.RES.DEV. - PPCL	4.40	0.01
TOTAL	35,235.14	100.00

BASIN WISE DISTRIBUTION OF ML AREAS

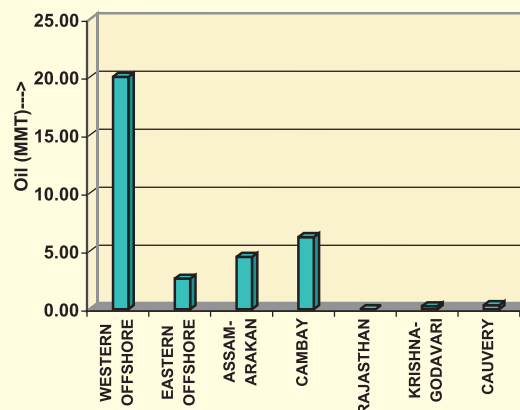


OFFSHORE/BASIN	ML AREA		PRODUCTION (2006-07)	
	(Sq.km)	(%)	Gas (MMSCM)	Oil (MMT)
OFFSHORE				
WESTERN PART	17,308.12	49.12	21617.995	20.03
EASTERN PART	1,411.96	4.01	857.113	2.631
TOTAL OFFSHORE	18,720.08	53.13	22,475.108	22.661
ONLAND				
ASSAM - ARAKAN	6,848.37	19.44	3080.850	4.511
CAMBAY	5,083.62	14.43	3293.638	6.213
RAJASTHAN	3,453.63	9.80	242.120	0.000
KRISHNA-GODAVARI	701.01	1.99	1525.070	0.251
CAUVERY	428.43	1.22	1130.130	0.354
TOTAL ONLAND	16,515.06	46.87	9271.808	11.329
GRAND TOTAL	35,235.14	100.00	31746.916	33.990

GAS PRODUCTION (2006-07)

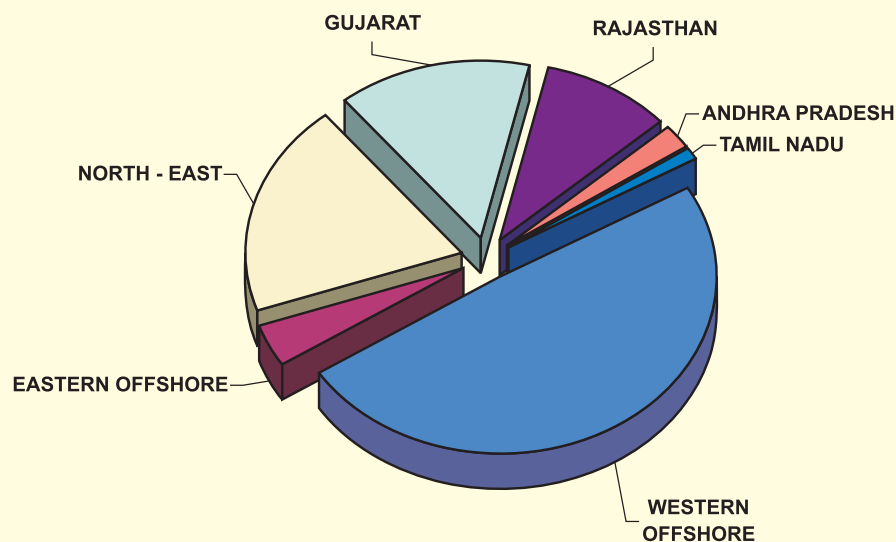


OIL PRODUCTION (2006-07)



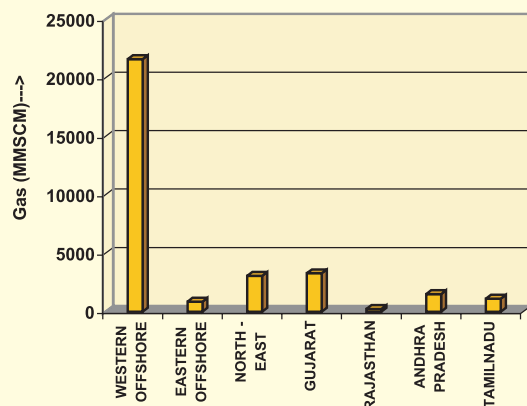
As on 01.04.07

STATE WISE DISTRIBUTION OF ML AREAS

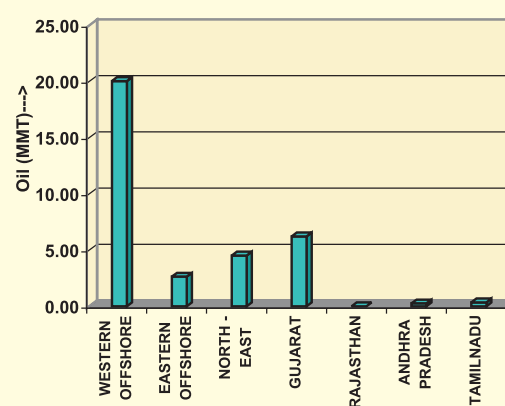


OFFSHORE/BASIN	ML AREA		PRODUCTION (2006-07)	
	(Sq.km)	(%)	Gas (MMSCM)	Oil (MMT)
OFFSHORE				
WESTERN PART	17,308.12	49.12	21617.995	20.030
EASTERN PART	1,411.96	4.01	857.113	2.631
TOTAL OFFSHORE	18,720.08	53.13	22,475.108	22.661
ONLAND				
NORTH - EAST	6,848.37	19.44	3080.850	4.511
GUJARAT	5,083.62	14.43	3293.638	6.213
RAJASTHAN	3,453.63	9.80	242.120	0.000
ANDHRA PRADESH	701.01	1.99	1525.070	0.251
TAMIL NADU	428.43	1.22	1130.130	0.354
TOTAL ONLAND	16,515.06	46.87	9271.808	11.329
GRAND TOTAL	35,235.14	100.00	31,746.916	33.990

GAS PRODUCTION (2006-07)



OIL PRODUCTION (2006-07)

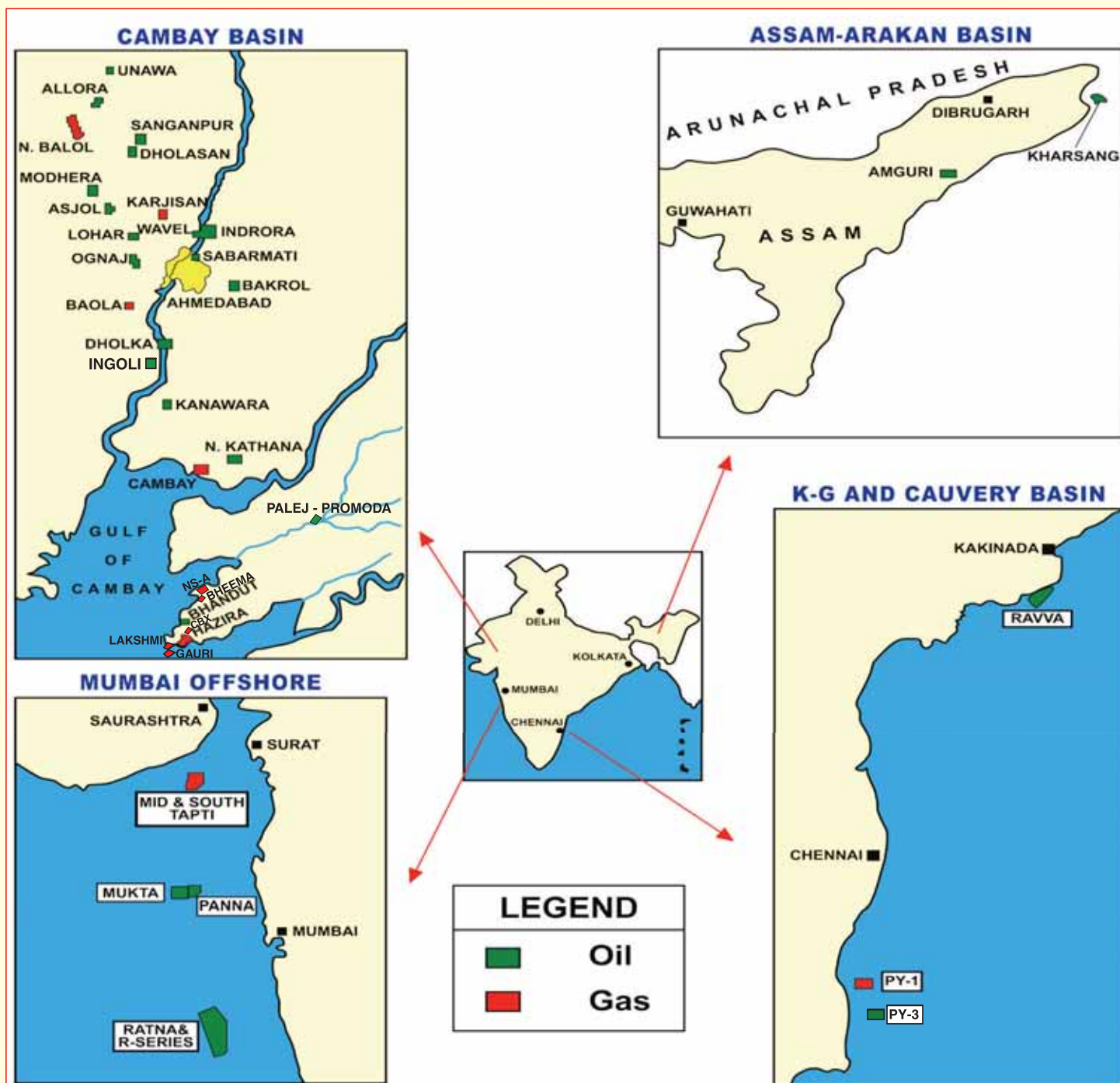


COMPANY / BASIN WISE OIL & GAS PRODUCTION FROM ML AREAS (01.04.2006 TO 31.03.2007)					
SI. No.	COMPANY / OPERATOR	BASIN	PRODUCTION		
			OIL (MMT)	GAS (MMSCM)	O+OEG (MMT)
NATIONAL OIL COMPANIES					
1	ONGC	Rajasthan	—	17.17	0.017
2		Cambay	6.123	2185.12	8.308
3		Cauvery Onland	0.354	1130.13	1.484
4		KG Onland	0.251	1525.07	1.776
5		Assam-Arakan	1.330	1018.62	2.349
6		Mumbai Offshore	17.993	16566.62	34.560
		TOTAL	26.051	22442.73	48.494
7	OIL	Rajasthan	—	224.95	0.225
8		Assam-Arakan	3.11	2039.62	5.150
		TOTAL	3.11	2264.57	5.375
		TOTAL FOR NOCs	29.161	24707.30	53.868
PVT / JV COMPANIES					
9	CAIRN	KG Offshore	2.378	788.161	3.166
10		Gulf of Cambay	0.159	1017.035	1.177
11	BG-RIL-ONGC	Mumbai Offshore	1.878	4034.340	5.912
12	GEO-ENPRO	Assam-Arakan	0.063	6.185	0.069
13	CANORO	Assam-Arakan	0.008	16.425	0.024
14	HOEC	Cambay	0.023	7.206	0.030
15		Cauvery Offshore	0.000	0	0.000
16	INTERLINK	Cambay	0.000	0	0.000
17	JTI	Cambay	0.019	9.984	0.029
18	NIKO	Cambay	0.029	1090.049	1.119
19	SELAN	Cambay	0.014	0.324	0.014
20	HERAMAC	Cambay	0.001	0.798	0.002
21	HRD - PPCL	Cambay	0.001	0.070	0.001
22	GSPCL	Cambay	0.001	0.087	0.001
23	HARDY	Cauvery Offshore	0.253	68.952	0.322
24	OILEX	Cambay	0.002	0	0.002
TOTAL FOR PVT/JV			4.829	7039.616	11.868
GRAND TOTAL			33.990	31746.916	65.736

SMALL & MEDIUM SIZED FIELDS AWARDED TO PVT/JV COMPANIES

SL. NO.	ROUND/BASIN	FIELD	CONSORTIUM (PARTICIPATING INTEREST)	DATE OF SIGNING CONTRACT	AREA (Sq. Km.)
A. FIELDS AWARDED					
MEDIUM- SIZED FIELDS					
1.	I	ASSAM-ARAKAN	KHARSANG	GEO-ENPRO (10), ENPRO COMMERCIALS PVT. LTD. (25), GEOPETROL (25) & OIL (40)	16.06.95 11.00
2.	I	K-G OFF.	RAVVA	CEIL (22.5), VIDEOCON (25), RAVVA OIL PTE. LTD. (12.5) & ONGC (40)	28.10.94 331.26
3.	I	MUMBAI OFF.	MID & SOUTH TAPTI	BRITISH GAS EXPLO. & PROD. INDIA LTD. (BGEPIL) (30), ONGC (40) & RELIANCE IND. LTD. (RIL) (30)	22.12.94 1,471.00
4.			PANNA	BGEPIL (30), RIL(30) & ONGC (40)	22.12.94 430.00
5.			MUKTA	BGEPIL (30), RIL(30) & ONGC (40)	22.12.94 777.00
TOTAL AREA : 3,020.26					
SMALL- SIZED FIELDS					
6.	I	CAMBAY	ASJOL	HOEC (50) & GSPCL (50)	03.02.95 15.00
7.			LOHAR	SELAN EXPL. TECH. LTD. (100)	13.03.95 5.00
8.			INDRORA	SELAN EXPL. TECH. LTD. (100)	13.03.95 130.00
9.			BAKROL	SELAN EXPL. TECH. LTD. (100)	13.03.95 36.00
10.			KARJISAN	SELAN EXPL. TECH. LTD. (100)	16.02.04 5.00
11.			WAVEL	JOSHI TECH. INC. (JTI) (100)	20.02.95 9.00
12.			DHOLKA	JOSHI TECH. INC. (JTI) (100)	20.02.95 48.00
13.			BAOLA	INTERLINK PETROLEUM LTD (100)	05.04.95 4.00
14.			MODHERA	INTERLINK PETROLEUM LTD. (100)	23.02.01 12.70
15.			SABARMATI	OILEX NL HOLDINGS(I) LTD. (40) & GSPCL (60)	23.09.94 5.80
16.			CAMBAY	OILEX NL (30), GSPC (55), & OILEX NL HOLDINGS (I) LTD. (15)	23.09.94 161.00
17.			BHANDUT	OILEX NL HOLDINGS(I) LTD. (40) & GSPCL (60)	23.09.94 6.00
18.			HAZIRA	NIKO (33.33) & GSPCL (66.67)	23.09.94 50.00
19.	I	CAUVERY OFF.	PY-1	HOEC (100)	06.10.95 75.00
20.	II	ASSAM-ARAKAN	AMGURI	CANORO (60) & ASSAM CO. LTD. (40)	23.02.01 52.75
21.	II	CAMBAY	N. BALOL	HOEC (25), GSPCL (45) & HERAMAC LTD. (30)	23.02.01 27.30
22.			KANAWARA	HERAMAC LTD. (30) & GSPCL (70)	23.02.01 6.30
23.			ALLORA	HERAMAC LTD. (30) & GSPCL (70)	23.02.01 6.85
24.			UNAWA	GSPCL (70) & HERAMEC LTD. (30)	23.02.01 5.65
25.			N. KATHANA	HERAMAC LTD. (30) & GSPCL (70)	23.02.01 12.20
26.			DHOLASAN	HERAMAC LTD. (30) & GSPCL (70)	23.02.01 8.80
27.			SANGANPUR	HYDROCARBON RES. DEV. CO. (P) LTD. (50) & PRIZE PETROLEUM CORP. LTD. (50)	23.02.01 4.40
28.			OGNAJ	SELAN EXPL. TECH. LTD. (100)	16.02.04 13.65
29.			MATAR	NIKO (65) & GSPC (35)	RELINQUISHED
TOTAL AREA : 700.40					
GRAND TOTAL : 3720.66 Sq.Km.					
B. AWARD OF FIELD AWAITING FINALIZATION OF CONTRACT					
1.	II	MUMBAI	RATNA-R-SERIES	POPL(10), ESSAR OIL LTD.(50) & ONGC(40)	57.60
C. PRODUCING FIELDS DISCOVERED/DEVELOPED IN EXPLORATION BLOCKS BY PVT/JV COMPANIES					
1.		CAUVERY OFF.	PY-3(CY-OS-90/1)	HARDY (18), ONGC (40), TPL (21) & HOEC (21)	81.00
2.		GULF OF CAMBAY	LAKSHMI (CB-OS/2)	CAIRN(40), ONGC(50) & TPL(10)	121.06
3.			GAURI (CB-OS/2)	CAIRN(40), ONGC(50) & TPL(10)	80.70
4.			CB-X	CAIRN(40), ONGC(50) & TPL(10)	33.30
5.		CAMBAY	NS-A (CB-ONN-2000/2)	NIKO(100)	20.22
6.			BHEEMA (CB-ONN-2000/2)	NIKO(100)	4.03
7.			PALEJ-PROMODA (CB-ON/7)	HOEC(50) & GSPC(50)	3.54
8.			INGOLI (CB-ONN-2000/1)	GSPC (50), GAIL (50)	14.10

DEVELOPMENT OF SMALL AND MEDIUM SIZE FIELDS BY PVT/JV COMPANIES



NOT TO SCALE

New Significant Discoveries

SUMMARY

● Discoveries by National Oil Companies in Nomination Blocks

In the last 7 years (**2000-07**), the NOCs viz., ONGC and OIL made **49** significant hydrocarbon discoveries of which 15 are in offshore and 34 in onland areas.

Out of 15 offshore discoveries, 9 were made in Kutch & Mumbai Basins - Western Offshore while 6 in KG basin - Eastern Offshore. All these offshore discoveries were made by ONGC. In 2006-07, 2 discoveries were made (i) *SB-14* - oil & gas in Panna formation; gas in Bassein formation in Western Offshore (ii) *KG-OS-DW-S1* - gas in Pliocene sands in KG Eastern offshore.

Out of 34 Onland discoveries, 17 were made by OIL in Upper Assam & 17 by ONGC in Rajasthan, Cambay, Cauvery, KG & Assam-Arakan Basins. In 2006-07, four discoveries made by OIL were (i) *Nahorkatiya-556* - oil within Lakadong + Therria Formation (ii) *Baghjan-4* -oil in Langpar formation (iii) *Barekuri-6* -oil within Lakadong + Therria Formation and (iv) *Baghjan-5* - gas within Langpar formation. ONGC made 3 discoveries in Cambay basin namely (i) *Deloli* - gas in Kalol sands (ii) *Mehlaj* - oil in Kalol sands (iii) *Wadsar* - oil from Chhatral horizon in Wamaj low; one in Cauvery namely *Adichapuram* -gas & condensate in Bhuvangiri formation and one in Assam-Arakan namely *Kalyanpur* - oil in Bokabil-Barail formation.

● Discoveries by Private / JV Companies in NELP, Pre-NELP Blocks / Fields

In the last 7 years, under PSC regime Pvt/JV companies have made **64** significant discoveries. These discoveries were made mainly in five major areas : Krishna-Godavari Offshore, Mahanadi-NEC Offshore, Gulf of Cambay, Rajasthan and Cambay Basins.

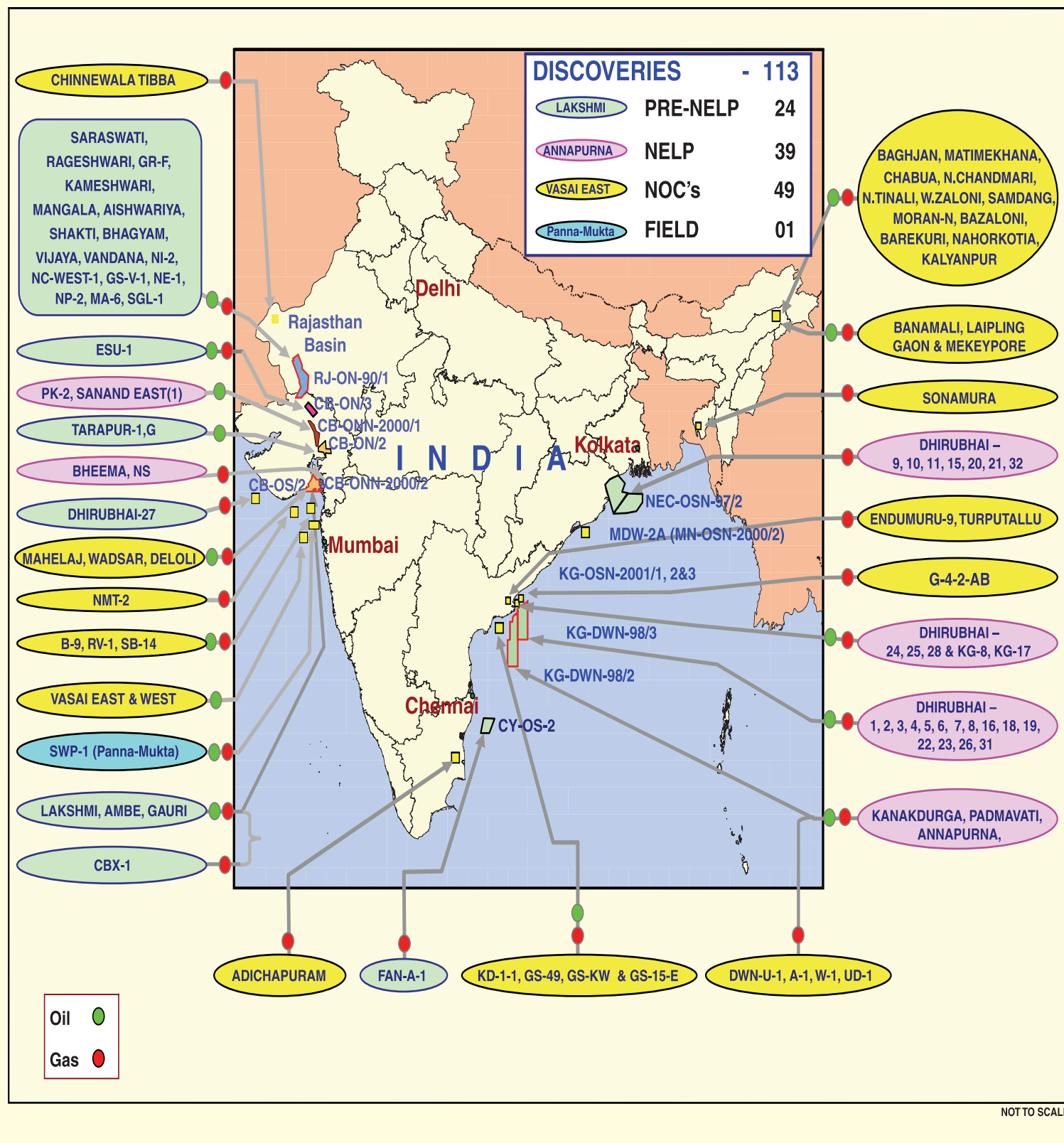
During 2006-07, RIL made Gas discoveries namely *Dhirubhai-27* in Pre-NELP block SR-OS-94/1, *Dhirubhai-28* in NELP-III block KG-OSN-2001/1, *Dhirubhai-31* in NELP-I block KG-DWN-98/3, *Dhirubhai-32* in NELP-I block NEC-OSN-97/2 and Oil discovery namely *Dhirubhai-26* in NELP-I block KG-DWN-98/3.

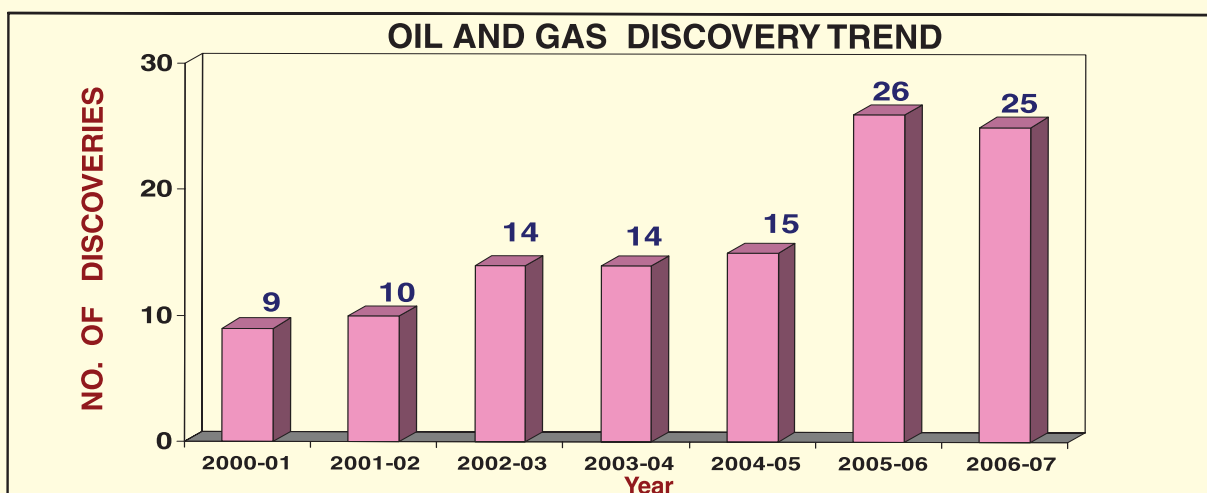
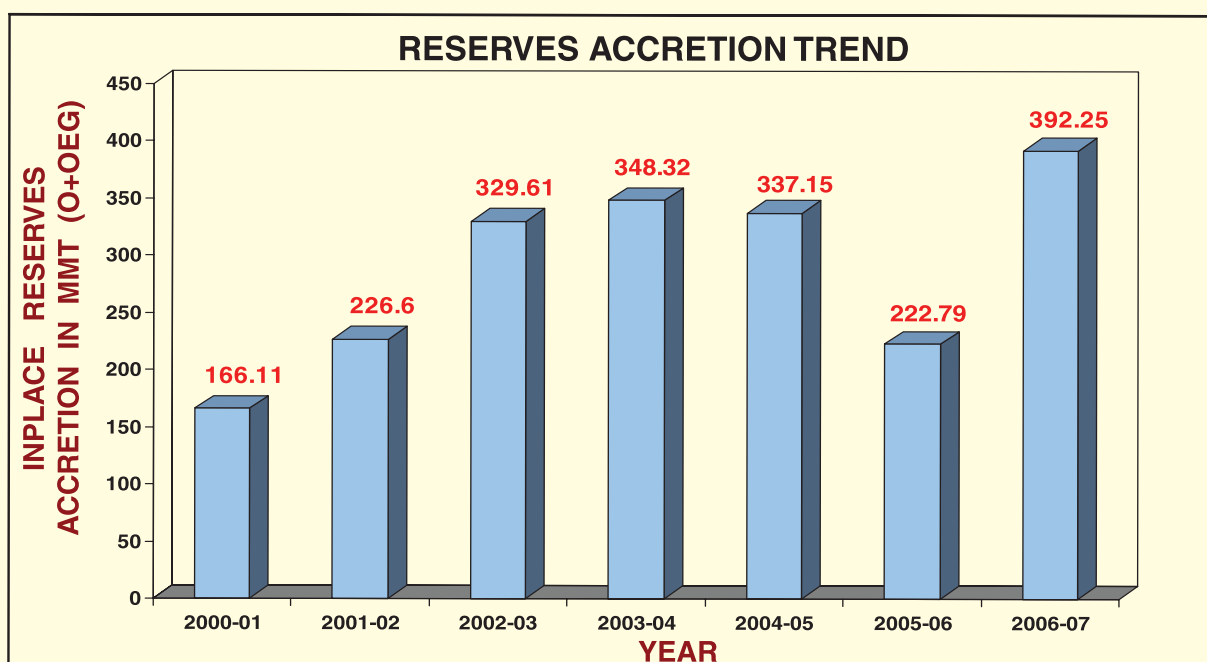
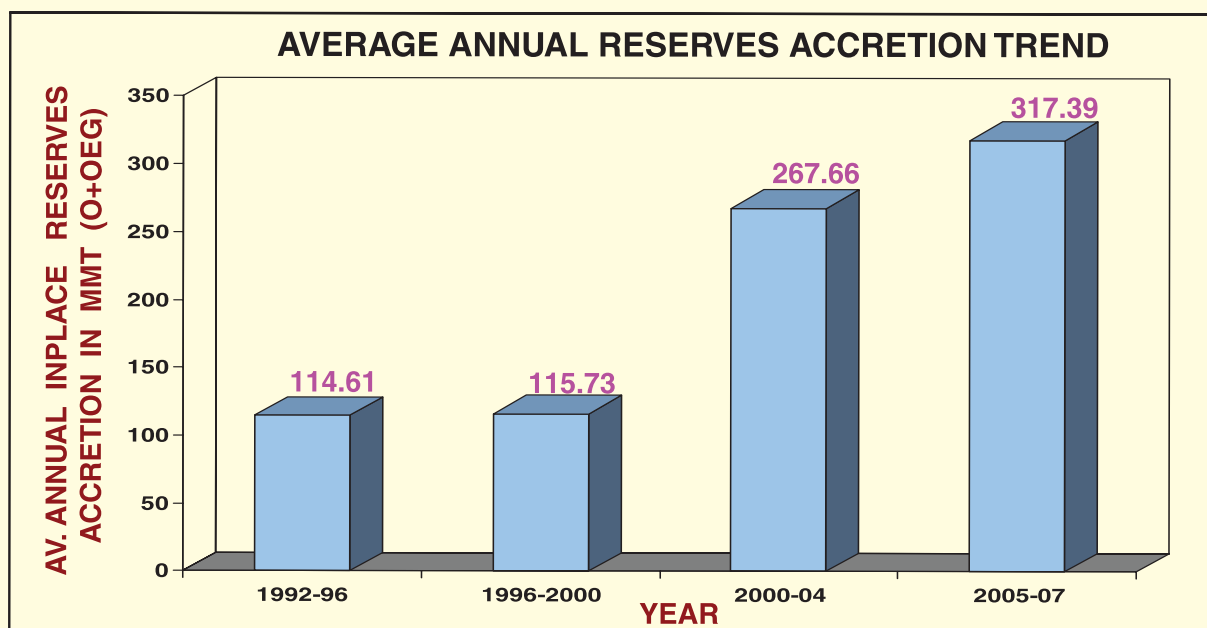
Hardy made gas discovery namely *FAN-A-1* in Pre-NELP block CY-OS-2. ONGC made gas discoveries namely *MDW-2A* in NELP-II block MN-OSN-2000/2, *DWN-UD-1* & *DWN-W-1* in NELP-I block KG-DWN-98/2. GSPC made gas discovery namely *Tarapur-G* in Pre-NELP block CB-ON/2, Oil & Gas discovery namely *Sanand East (I)* in NELP-II block CB-ONN-2000/1 and oil/gas discovery namely *KG-17* in NELP-II block KG-OSN-2001/3.

Focus Energy made gas discovery namely *SGL-1* in Pre-NELP block RJ-ON-90/6. BGEPIL made oil/gas discovery namely *SWP-1* in Panna-Mukta field.

NEW SIGNIFICANT DISCOVERIES BY NOCs AND PVT/JV COMPANIES (2000-2007)

AS ON 31ST MARCH, 2007

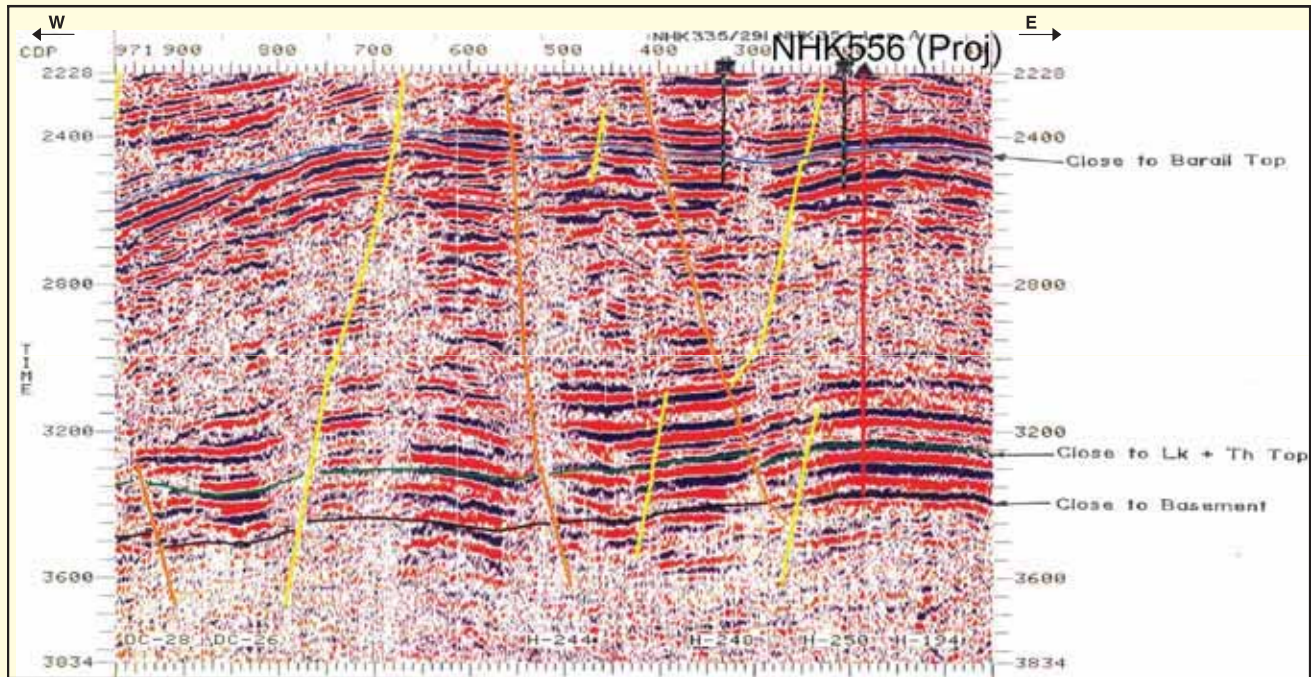




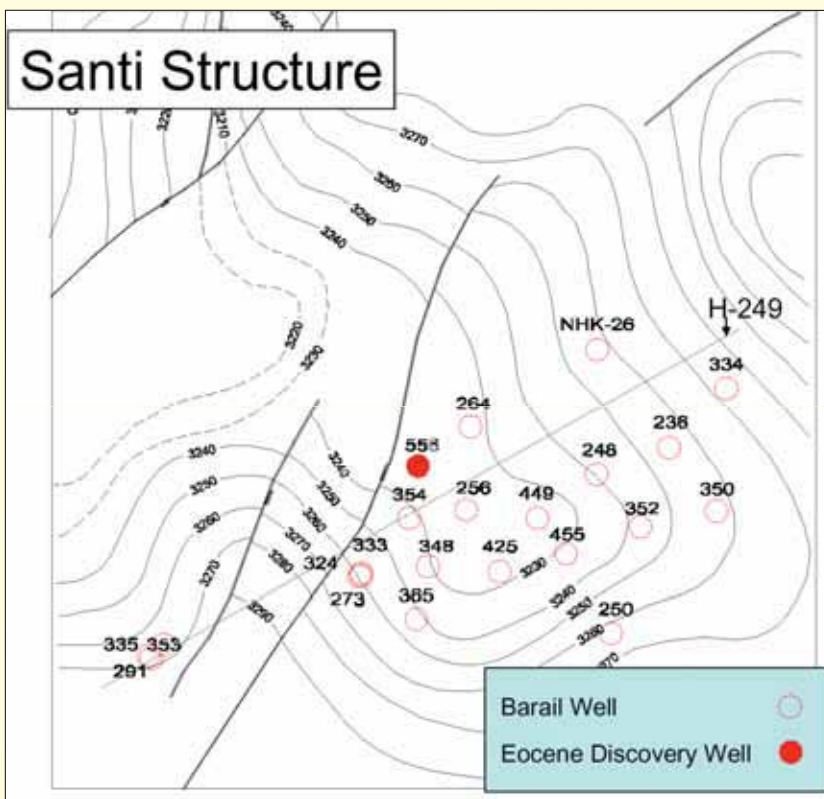
NEW DISCOVERIES : ASSAM-ARAKAN BASIN

NAHORKATIYA-556

OPERATOR : OIL



SEISMIC LINE H-249 PASSING CLOSE TO NHK- 556

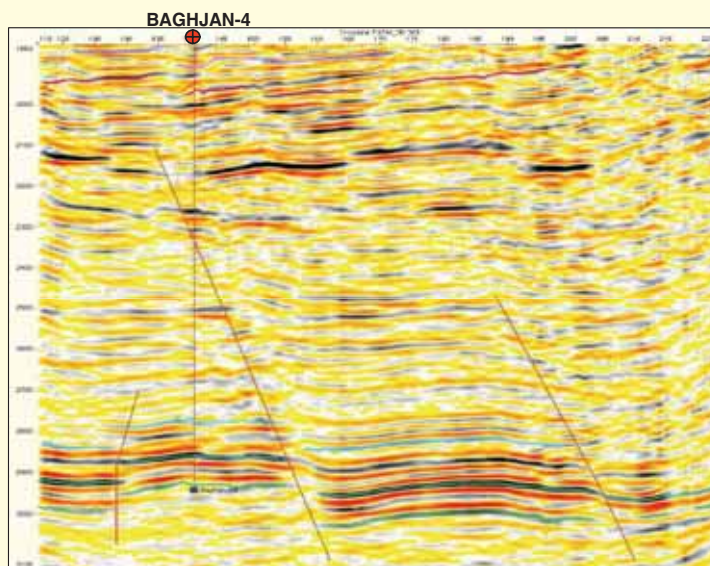
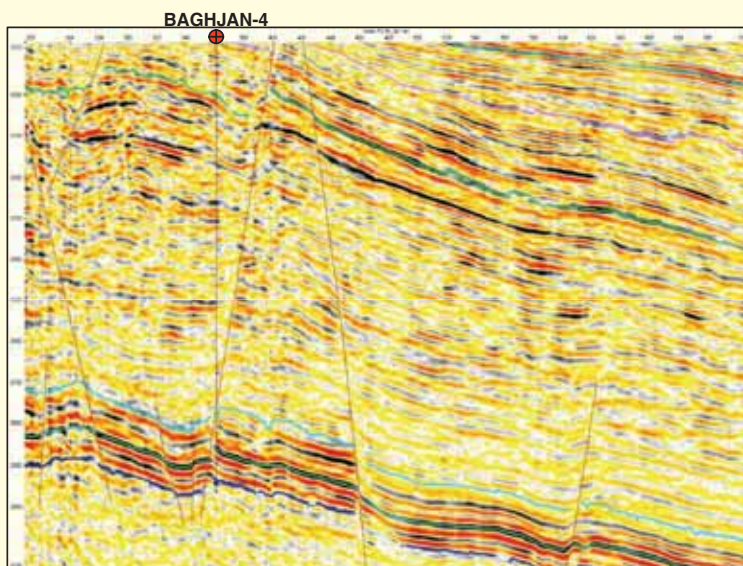


- ❖ THIS DISCOVERY HAS ESTABLISHED THE PRESENCE OF COMMERCIAL OIL WITHIN THE LAKADONG + THERRIA FM.
- ❖ IT HAS ENHANCED THE OVERALL PROSPECTIVITY OF OIL & GAS WITHIN PALEOCENE / LOWER EOCENE FM. IN THE AREA AND WILL BE A GUIDING FACTOR FOR FUTURE EXPLORATION

NEW DISCOVERIES : ASSAM-ARAKAN BASIN

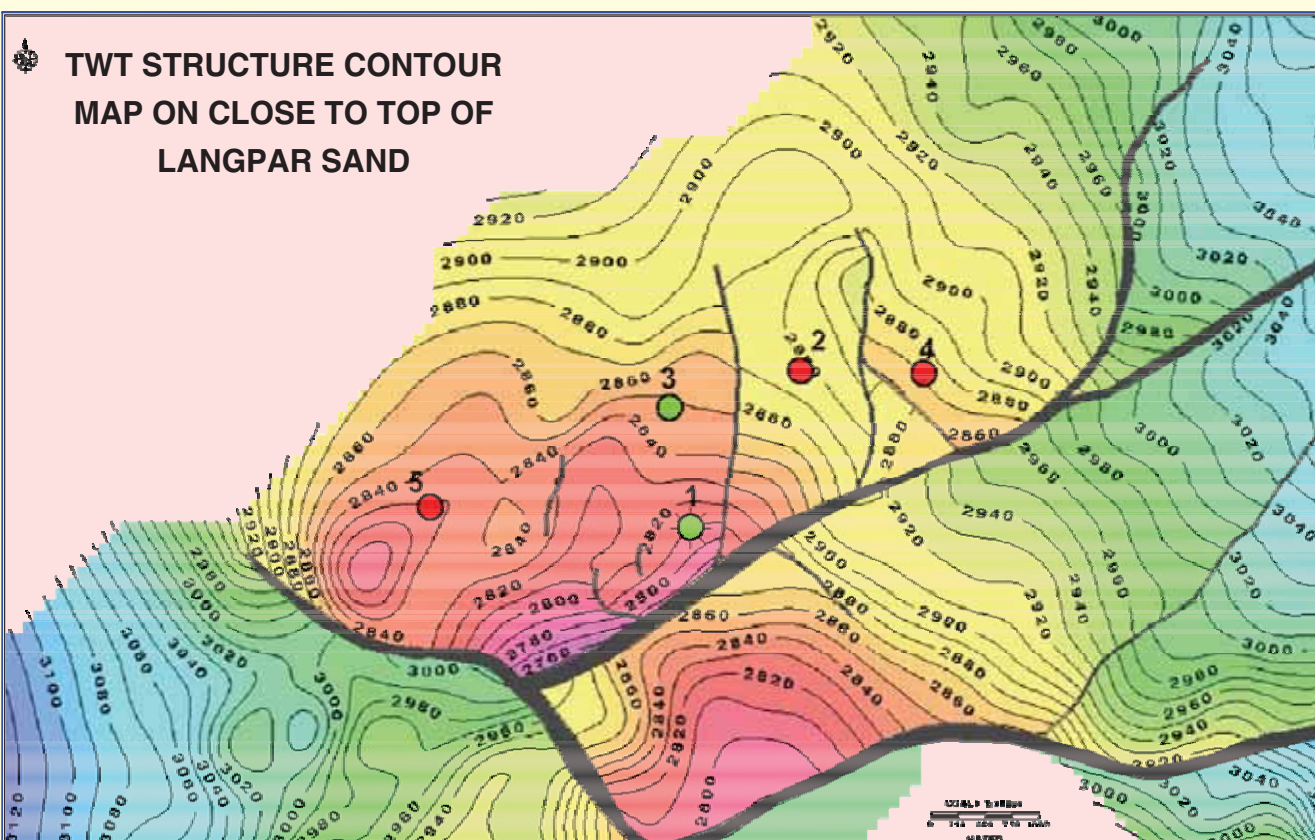
BAGHJAN-4

OPERATOR : OIL



SEISMIC LINE IL-141 PASSING THROUGH BAGHJAN-4

SEISMIC LINE XL-361 PASSING THROUGH BAGHJAN-4

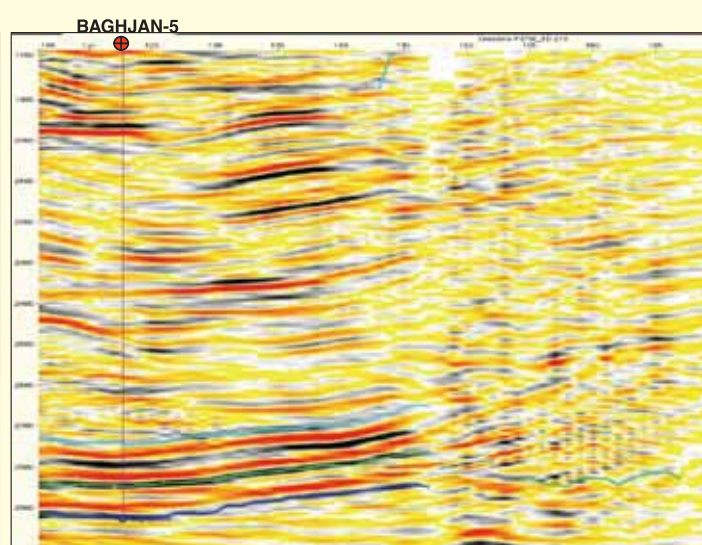
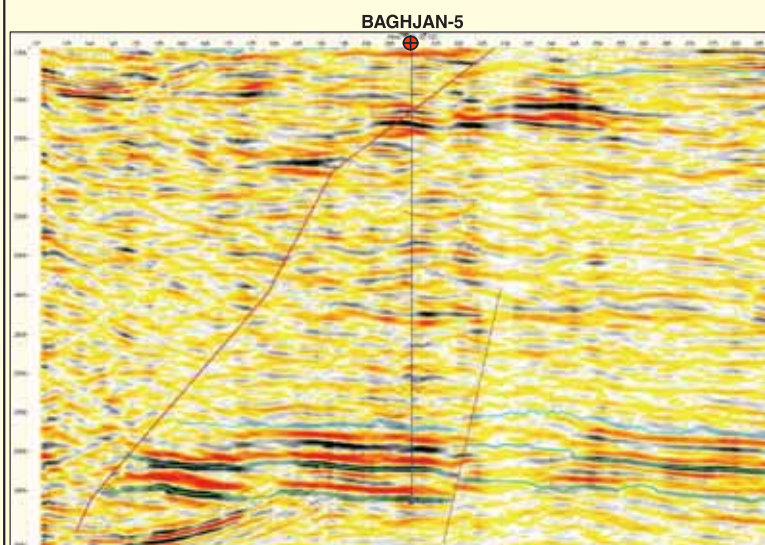


- ❖ DISCOVERY WELL BAGHJAN-4 HAS ESTABLISHED PRESENCE OF COMMERCIAL OIL IN THE LANGPAR FORMATIONS.
- ❖ IT IS CONSIDERED AS SIGNIFICANT DISCOVERY AS IT HAS WIDENED THE SCOPE FOR CARRYING OUT FURTHER EXPLORATORY / DEVELOPMENT ACTIVITIES FOR OIL AND GAS IN AND AROUND THE BAGHJAN STRUCTURE

NEW DISCOVERIES : ASSAM-ARAKAN BASIN

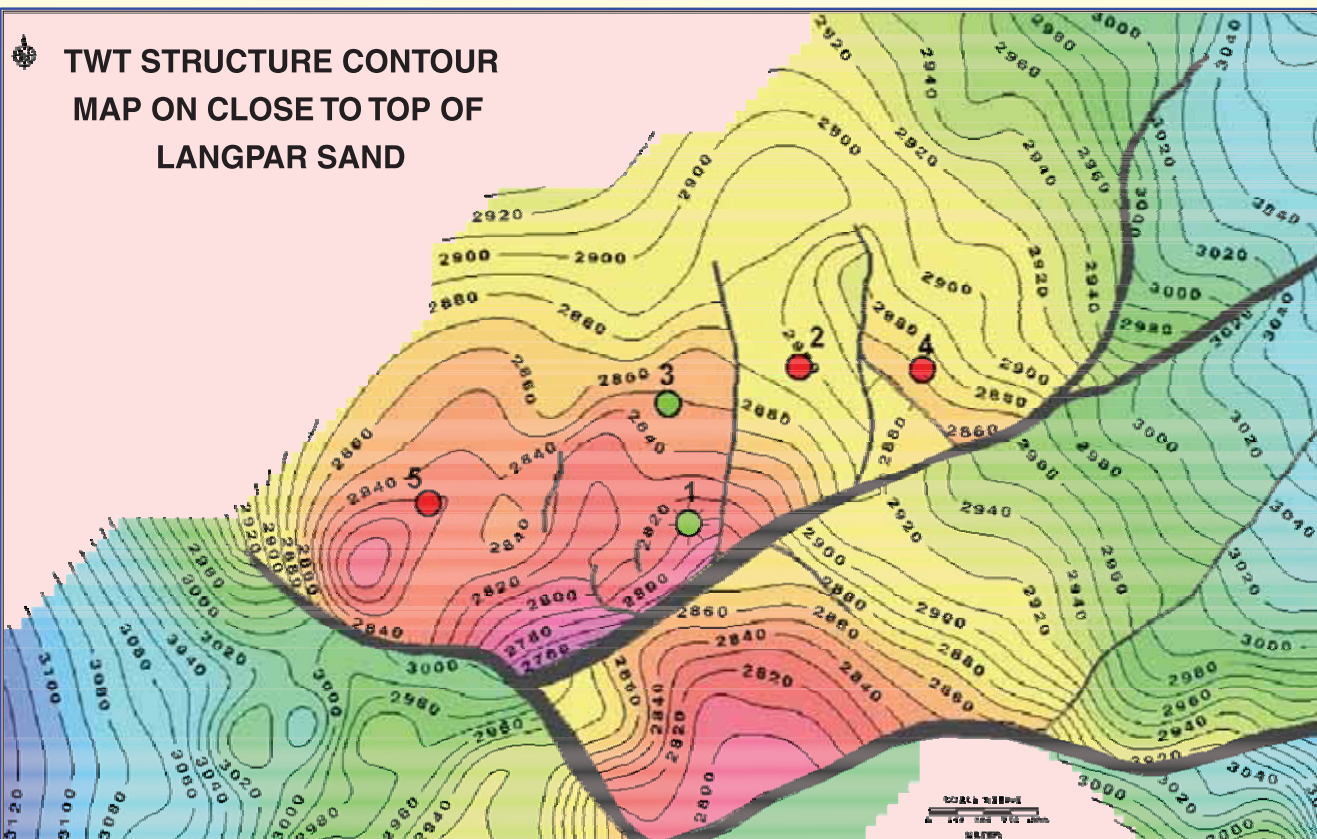
BAGHJAN-5

OPERATOR : OIL



SEISMIC LINE IL-123 PASSING THROUGH BAGHJAN-5

SEISMIC LINE XL-210 PASSING THROUGH BAGHJAN-5



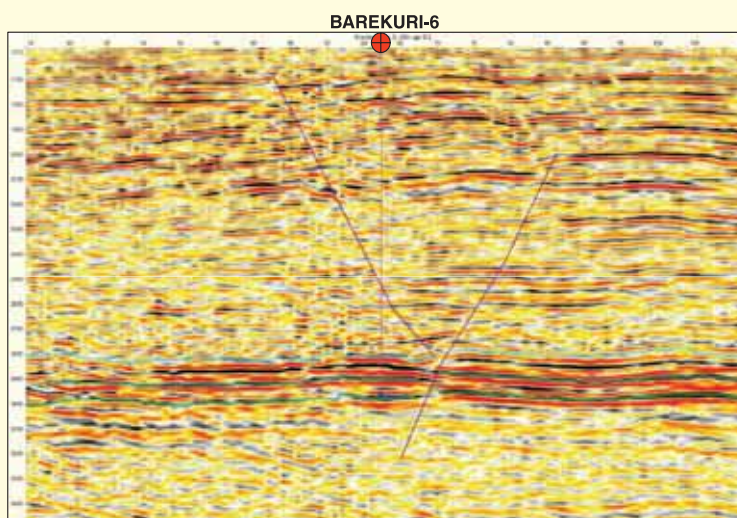
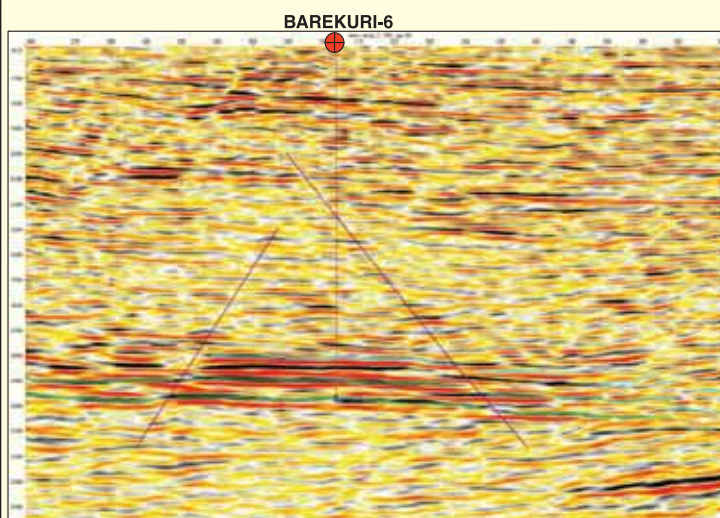
- ❖ THIS DISCOVERY HAS ESTABLISHED MAINLY GAS WITHIN THE LANGPAR FORMATIONS.
- ❖ IT WILL HELP IN CARRYING OUT DEVELOPMENT DRILLING ACTIVITIES IN THE AREA

NEW DISCOVERIES : ASSAM-ARAKAN BASIN

BAREKURI-6

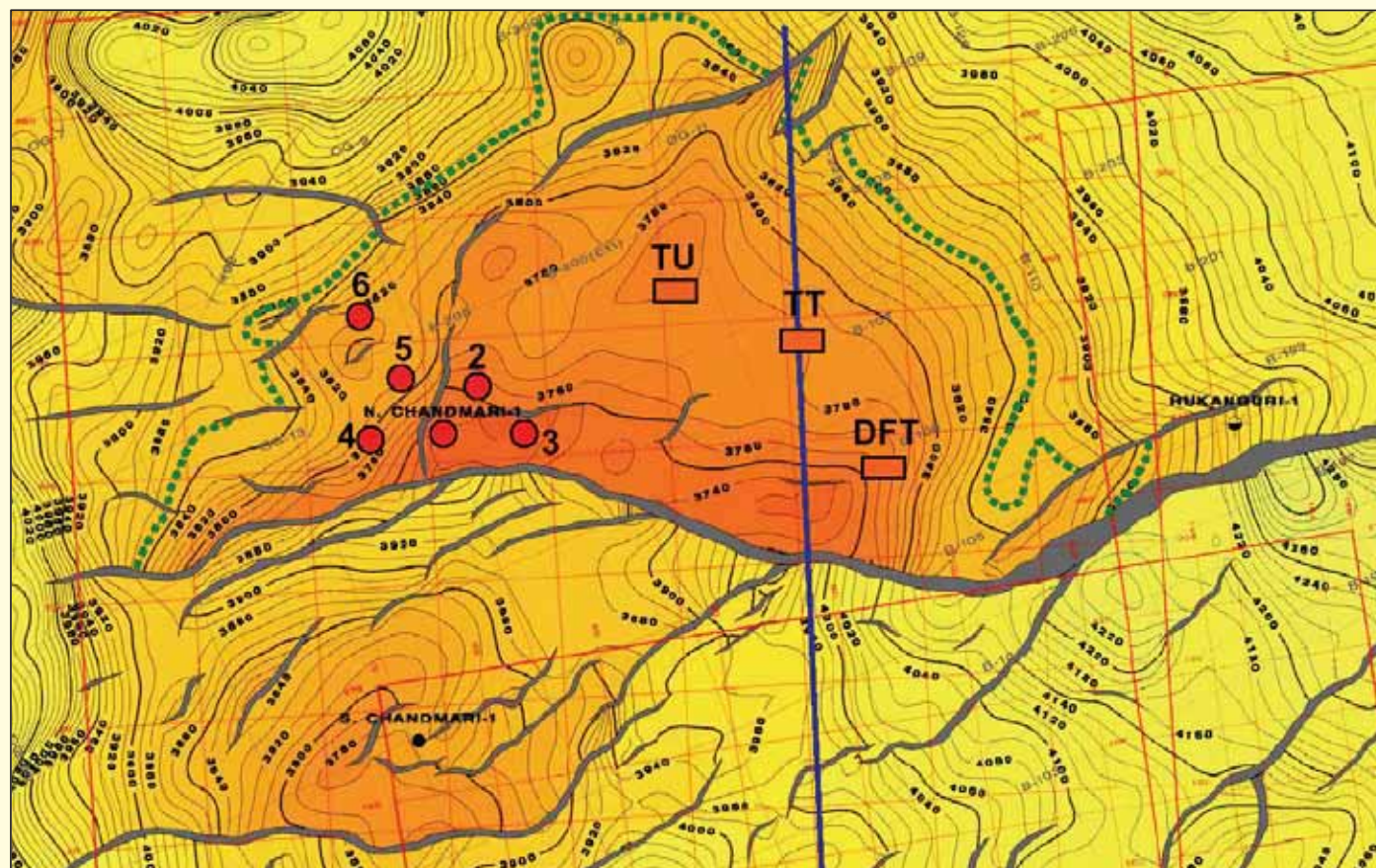
OPERATOR : OIL

- ❖ IT HAS ESTABLISHED COMMERCIAL OIL WITHIN THE LAKADONG + THERRIA FORMATION.
- ❖ THIS DISCOVERY WILL HELP IN CARRYING OUT DEVELOPMENT DRILLING ACTIVITIES IN THE AREA.



SEISMIC LINE IL-60 PASSING THROUGH BAREKURI-6

SEISMIC LINE XL-312 PASSING THROUGH BAREKURI-6



STRUCTURE CONTOUR MAP ON CLOSE TO TOP OF LANGPAR SAND

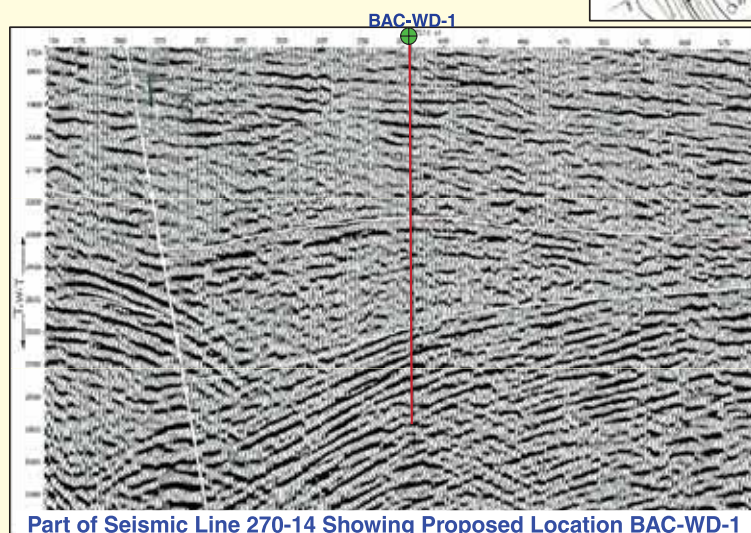
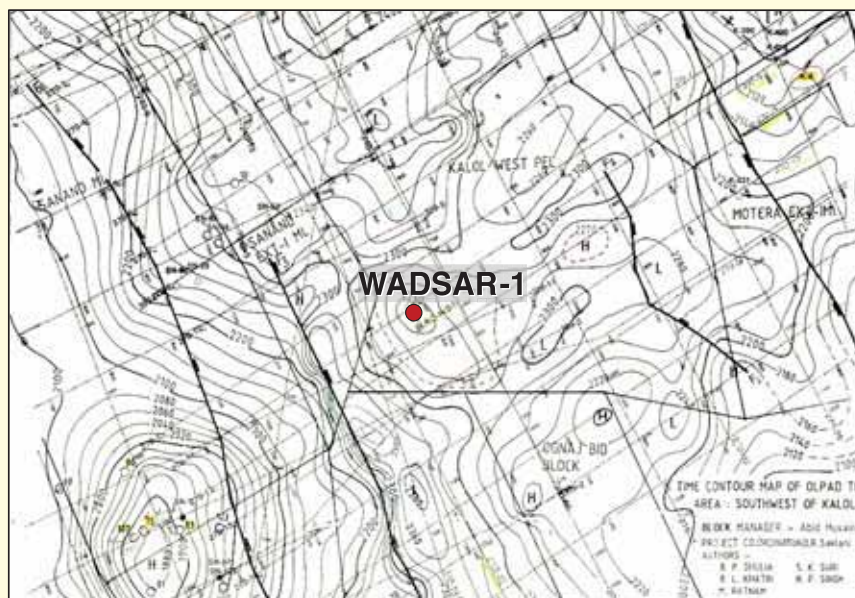
NEW DISCOVERIES : CAMBAY ONSHORE BASIN

WADSAR

OPERATOR : ONGC



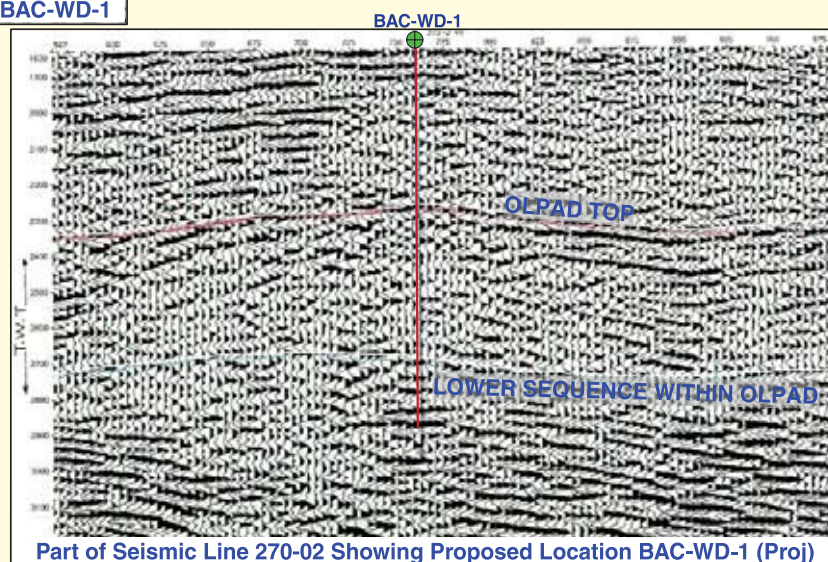
TIME MAP AT OLPAD TOP



Part of Seismic Line 270-14 Showing Proposed Location BAC-WD-1

- ❖ WELL NO. : WADSAR-1
 - ❖ TESTING RESULTS : Object-I (1515.5-1512.5 m) - Chhatral Horizon, flowed oil @22 m³/d on SRP.
- (Exploratory well, Wadsar-1 was drilled in the year 2005-06 in Kalol West PEL of Wamaj Low and tested recently by work-over rig in 2006-07)

- ❖ LEADS / EXPL. EFFICACY : This has opened up a large area for exploration of stratigraphic play in Wamaj Low.

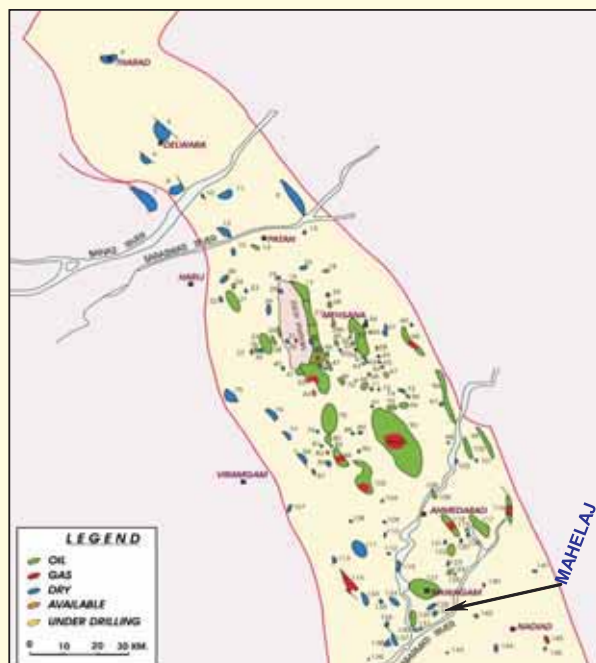


Part of Seismic Line 270-02 Showing Proposed Location BAC-WD-1 (Proj)

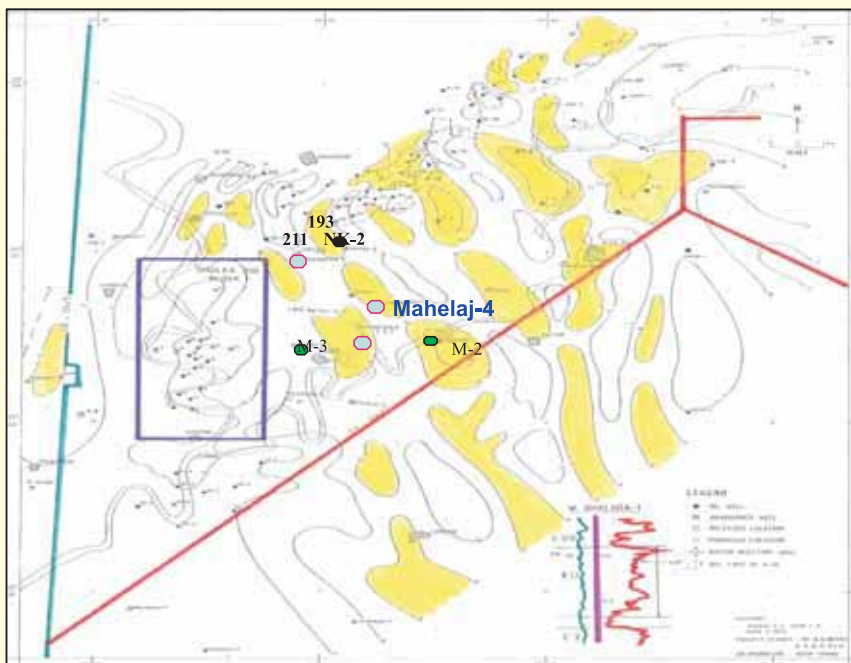
NEW DISCOVERIES : CAMBAY ONSHORE BASIN

MAHELAIJ

OPERATOR : ONGC

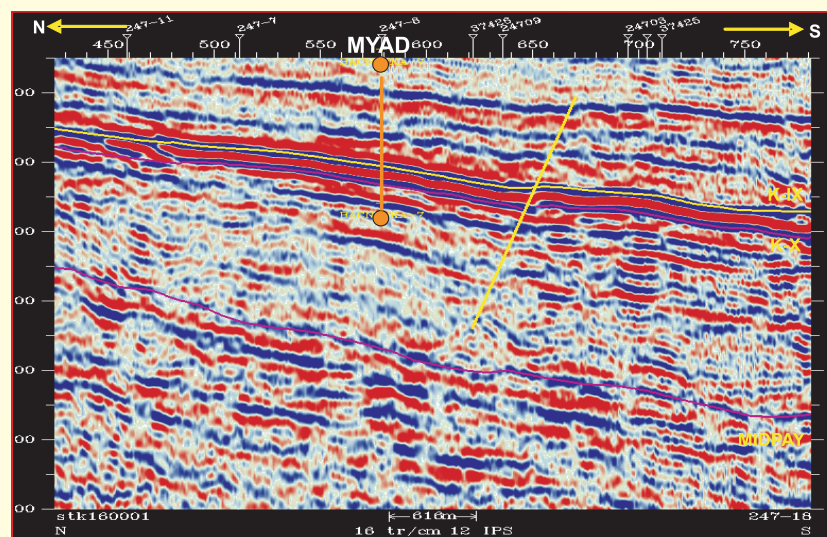
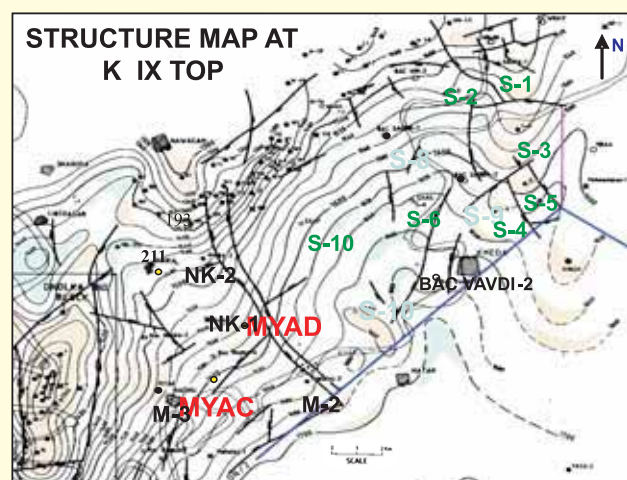


PROSPECT MAP OF NORTH CAMBAY BASIN



SAND / SILT ISOLITH MAP OF IX UNIT

- ❖ WELL NO. : MAHELAIJ-4
- ❖ TESTING RESULTS : Both the objects tested in the intervals 1627-1615 m.
 - ✓ (Obj-I) and 1604-1589 m &
 - ✓ (Obj-II) flowed oil.

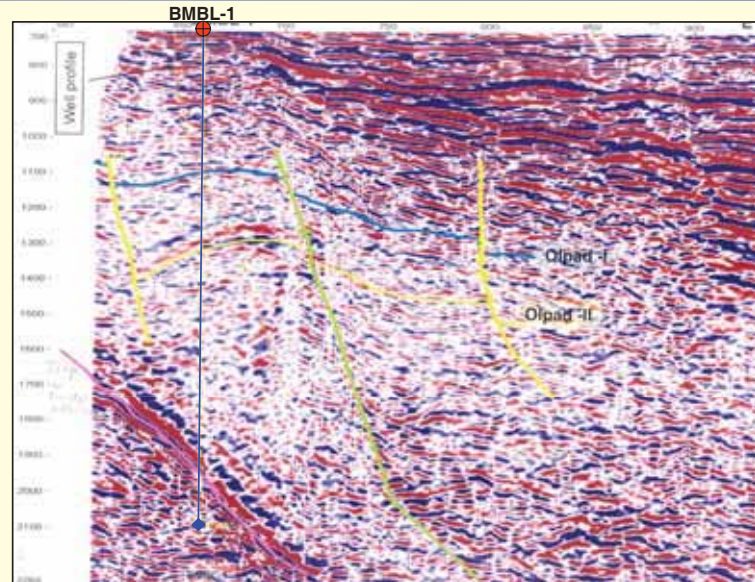
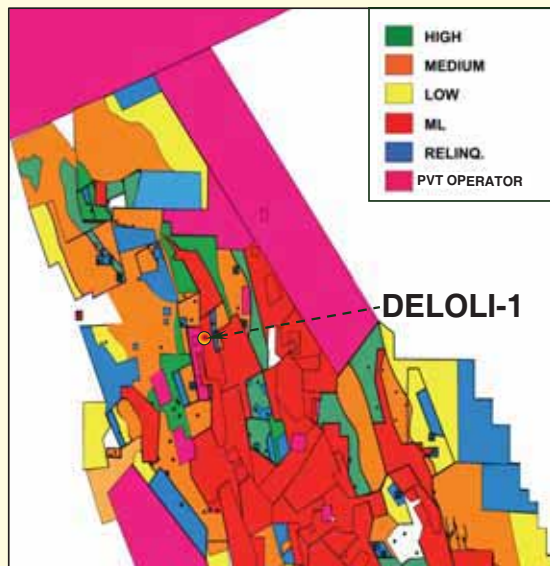


- ❖ LEADS / EXPL. EFFICACY : The successful testing of layers; K -IX & K -X has established the hydrocarbon potential of these zones in the area.

NEW DISCOVERIES : CAMBAY ONSHORE BASIN

DELOLI

OPERATOR : ONGC

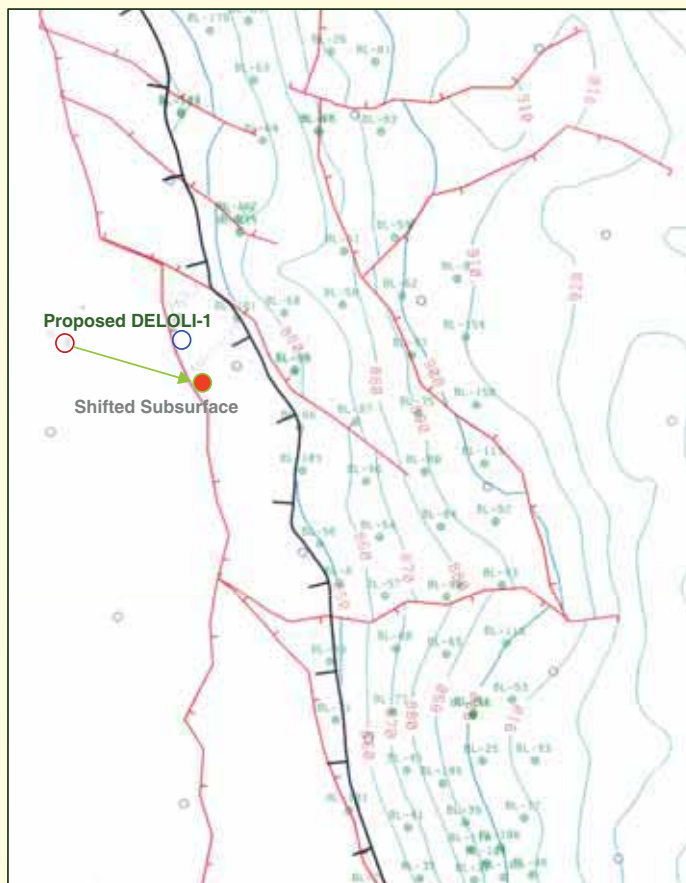


INLINE 1670 SHOWING PROPOSED LOCATION BMBL-1

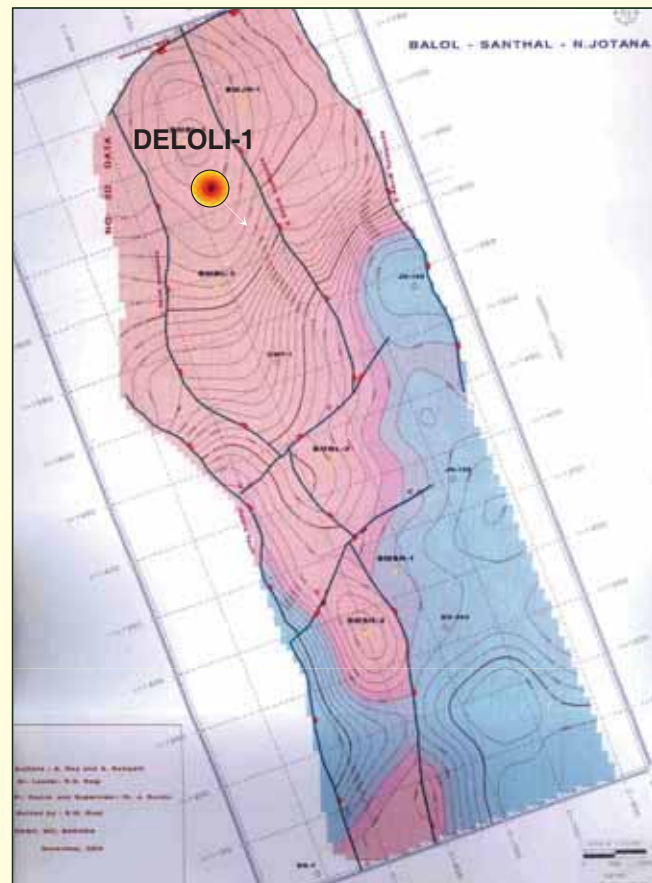
❖ WELL NO. : DELOLI-1

❖ TESTING RESULTS : Object-I (944-941 m) tested in Kalol sands, flowed gas @ 53,600 m3/d through 6 mm bean.

❖ LEADS / EXPL. EFFICACY : This has suggested the eastern part of Mehsana Horst to be prospective for exploration of Kalol Sands. This lead is on a new prospect.



TIME MAP CLOSE TO TOP OF KS-1 BALOL FIELD



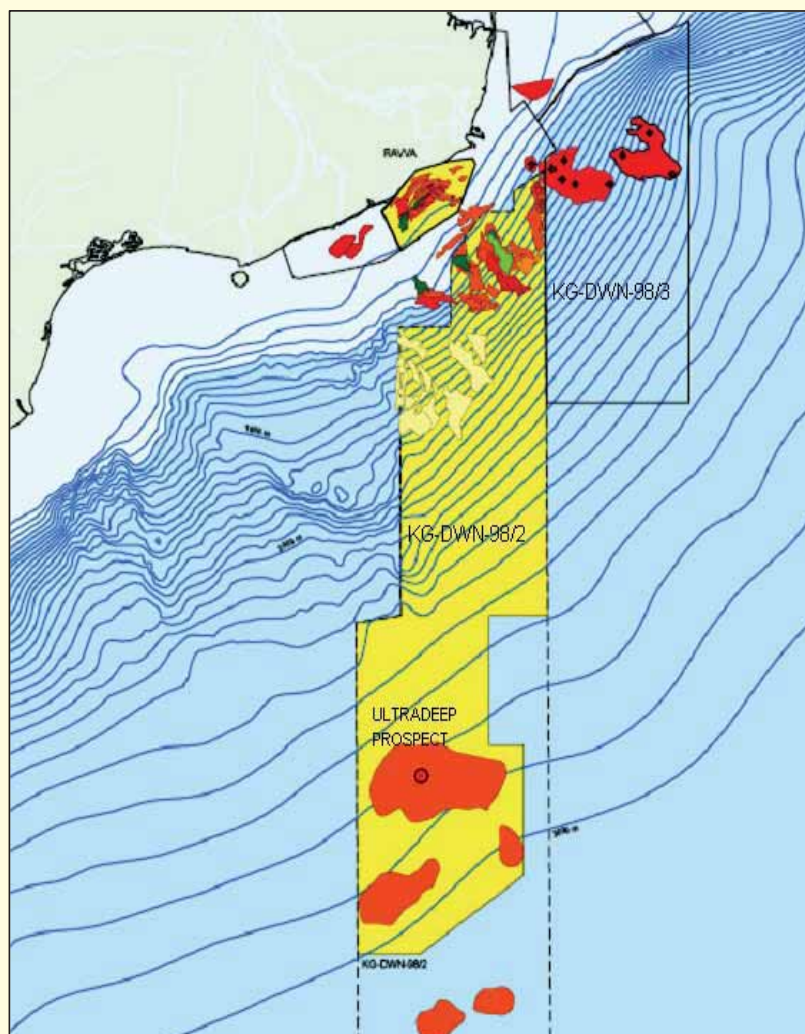
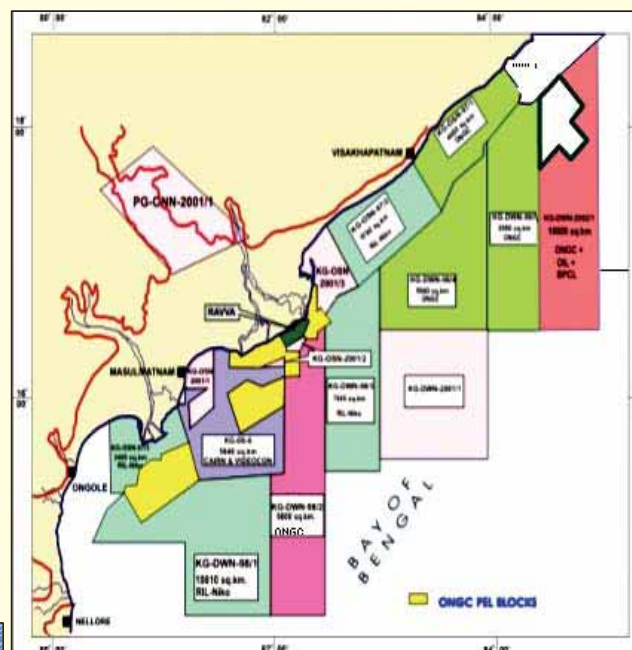
TIME STRUCTURE MAP ON TOP OF OLPAD UNIT-1

NEW DISCOVERIES : KRISHNA GODAVARI OFFSHORE BASIN

KG-DWN-98/2 – UD-AA (UD-1)

OPERATOR : ONGC

- ❖ WELL NO. : UD-AA (UD-1)
- ❖ TESTING RESULTS : MDT sample at 5243 m, and Straddle packer mini DST at 5304.8 m and 5295.3 m have confirmed the presence of gas with Absolute Open Flow Potential (AOF) of 2.34 MMm³/day .



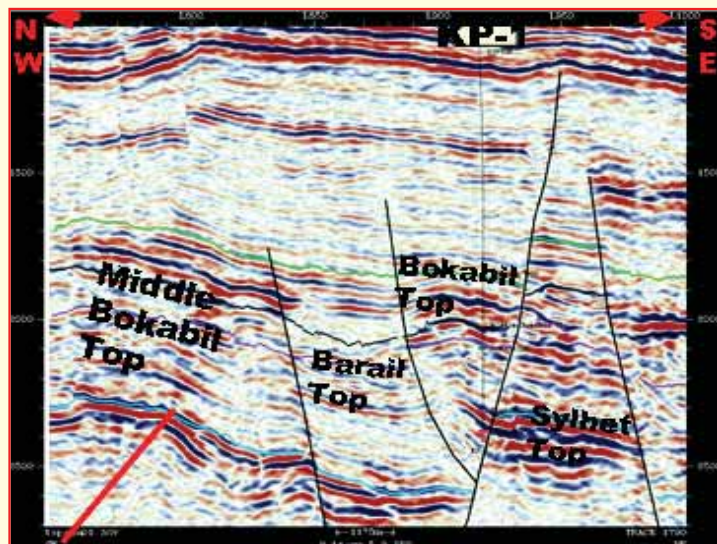
- ❖ LEADS / EXPL. EFFICACY : Exploratory well KG-DWN-UD-AA (UD-1), in Ultra –Deep water of NELP-I Block KG-DWN-98/2, KG Offshore was spudded on 19-09-2006 at a water depth of 2841 m at a distance of about 155 km from the coast. Preliminary evaluation of the log indicated likely presence of around 28 m of gas bearing sands between 5243 m to 5304 m. MDT sample at 5243 m, and Straddle packer mini DST at 5304.8 m and 5295.3 m have confirmed the presence of gas.

NEW DISCOVERIES : ASSAM - ARAKAN BASIN

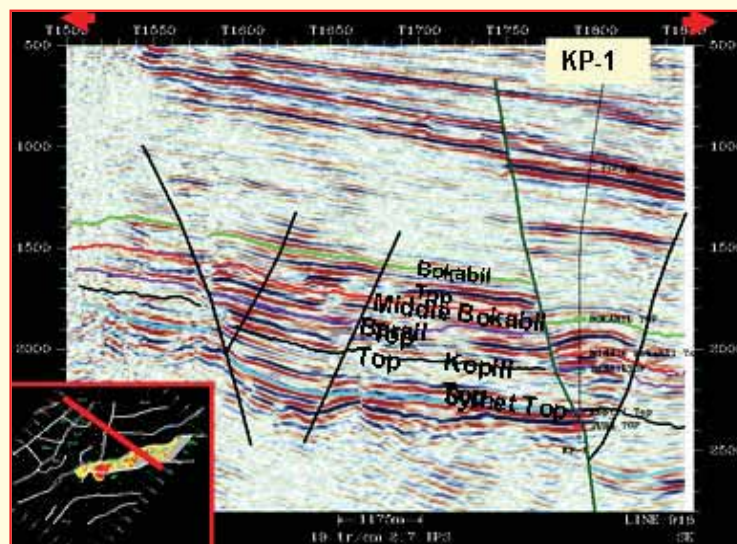
KALYANPUR

OPERATOR : ONGC

- ❖ WELL NO. : KALYANPUR-1 (KPAA)
- ❖ TESTING RESULTS : Object -IV (2521.78-2495.78 & 2493.78-2482.78 m (37m) Flowed oil @ 60 m3/d through 6mm bean
- ❖ LEADS / EXPL. EFFICACY : The success of this well has established a lead on a new prospect and a new exploration play breakthrough in the eastern part of Merapani PEL in South Assam Shelf.



TRACE-1790 SHOWING DRILLED WELL KP-1

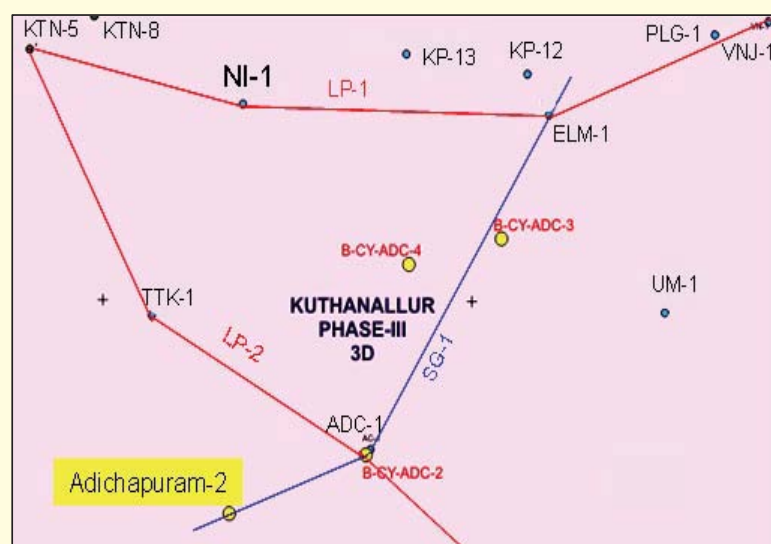


INLINE-918 SHOWING DRILLED WELL KP-1

CAUVERY ONLAND BASIN

ADICHAPURAM

OPERATOR : ONGC



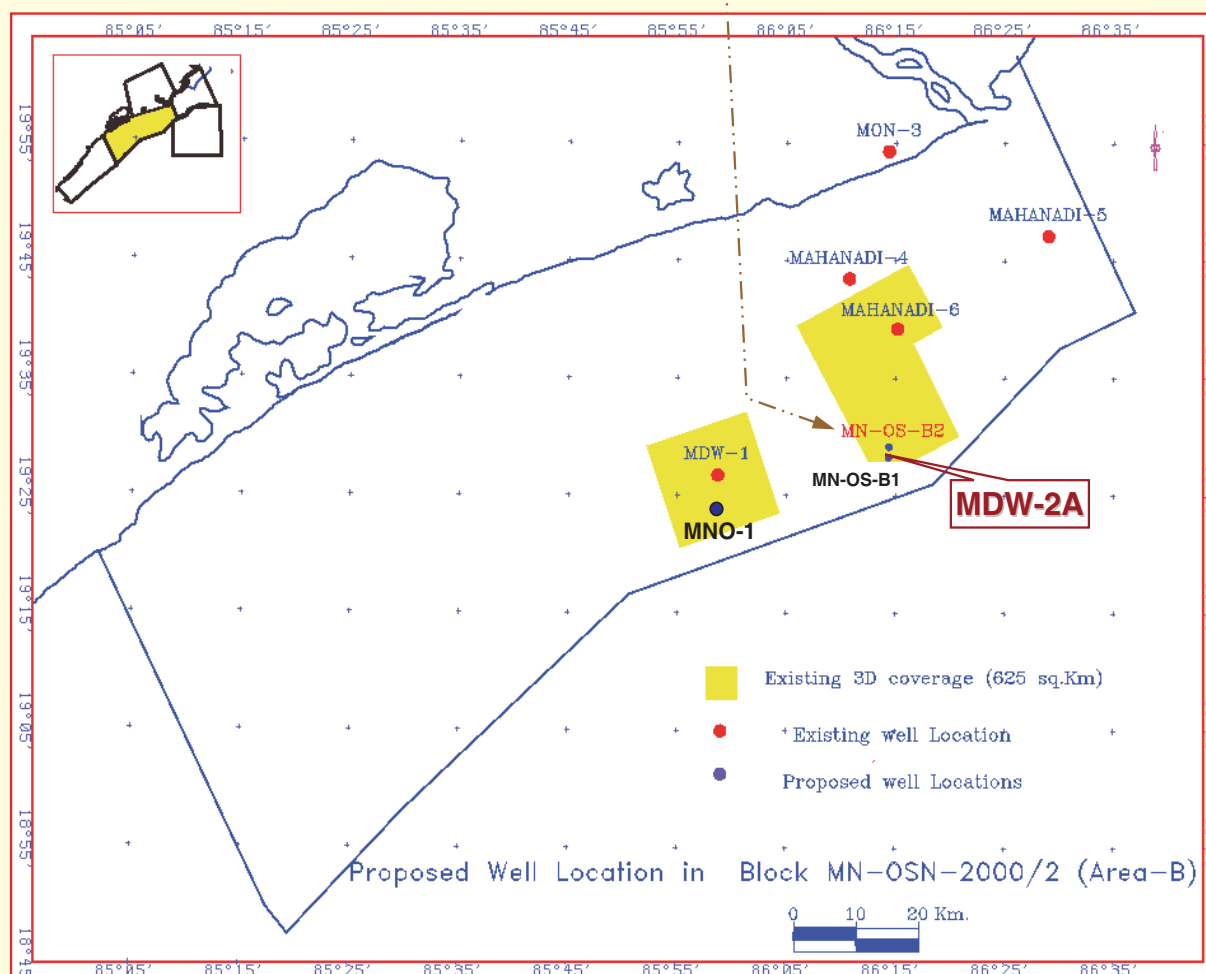
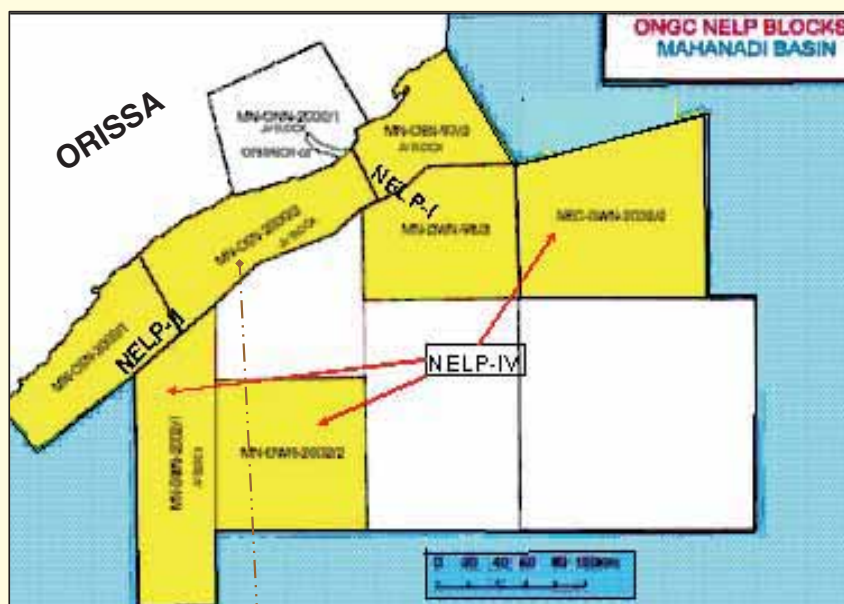
- ❖ WELL NO. : ADICHAPURAM-2
- ❖ TESTING RESULTS : Object-I (2420-2418, 2416-2408, 2405-2404, 2402-2399 m flowed H/C gas @80,000 m3/d & Condensate @20 m3/d (6mm bean). Object-II (2343-2346, 2338-2342, 2333.5-2335.5 m. Well flowed H/C gas @59,000 m3/d & condensate @40 m3/d (6mm bean).
- ❖ LEADS / EXPL. EFFICACY : The location Adichapuram#2 (ACAA) was drilled as an exploratory well with an objective to explore hydrocarbon potential of Bhuvanagiri Formation. The well was drilled to a depth of 2461 m Status: Gas producer. This is a lead on new prospect.

NEW DISCOVERIES : MAHANADI OFFSHORE BASIN

BLOCK : MN-OSN-2000/2 (MDW-2A)

OPERATOR : ONGC

- ❖ **TESTING RESULTS :** Object-I (1694.2-1690 m) flowed gas @41,000 m3/d (12/64" bean). Commingled production from Obj-I & Obj-II (1694.2-1690, 1659.5-1655.5 & 1645-1644 m) was @2,12,555 m3/d gas through 12/64" bean.
- ❖ **LEADS / EXPL. EFFICACY :** Discovery of gas in commercial quantities in this prospect has opened up a new basin in the deepwaters of Mahanadi.

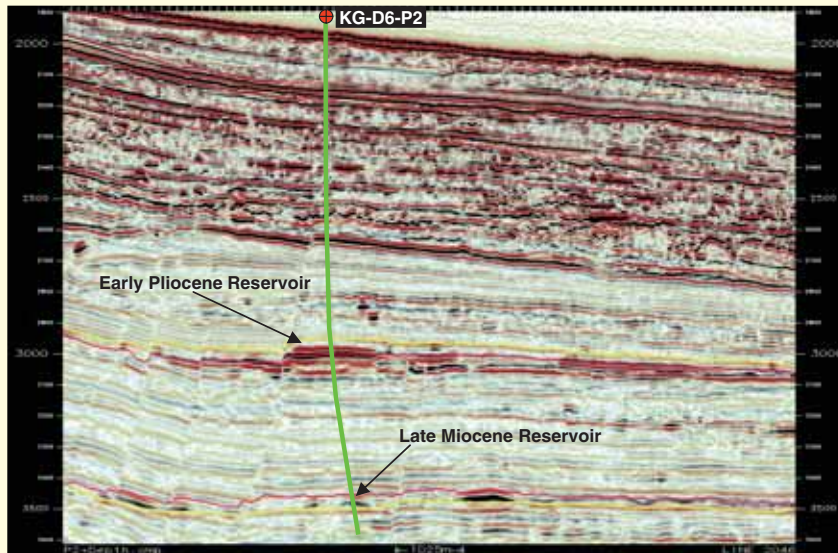


LOCATION MAP OF MDW-2 A

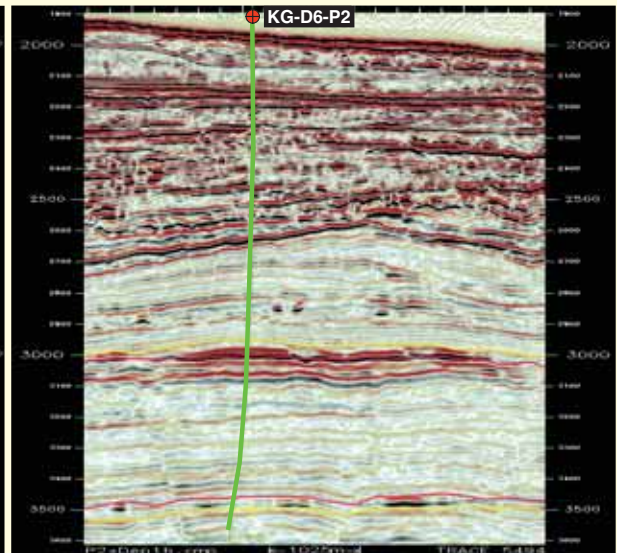
NEW DISCOVERIES : KRISHNA-GODAVARI OFFSHORE BASIN

BLOCK : KG-DWN-98/3 (KG-D6-P2)

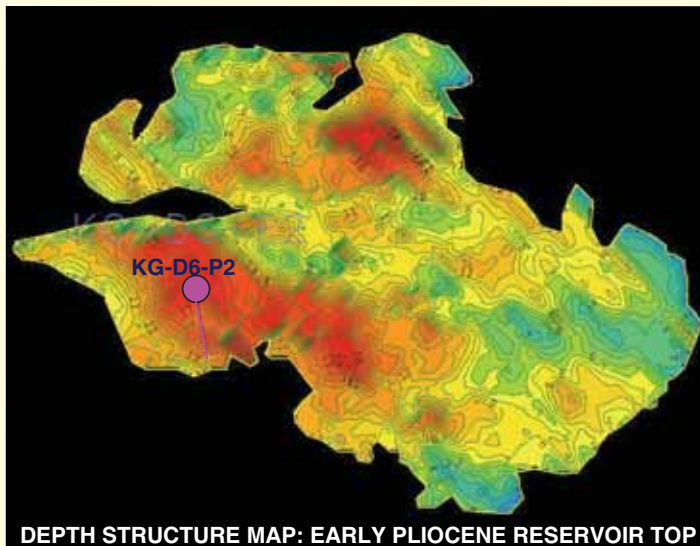
OPERATOR : RIL



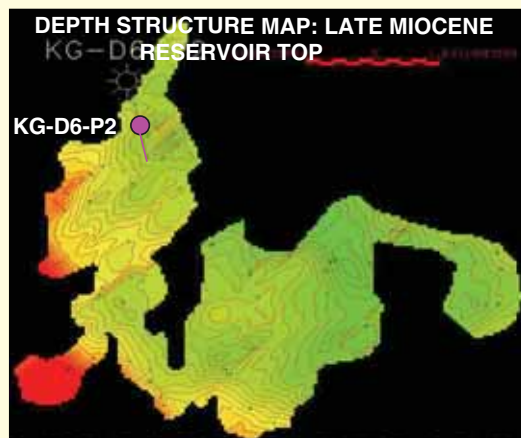
SEISMIC SECTION (DEPTH) ALONG INLINE



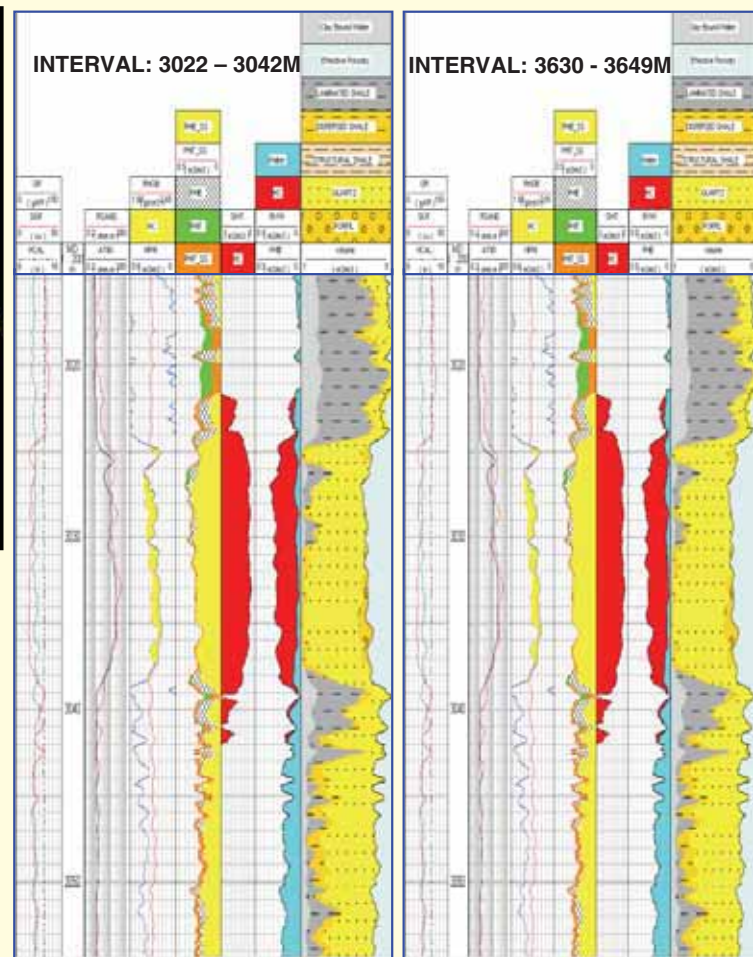
SEISMIC SECTION (DEPTH) ALONG CROSSLINE



DEPTH STRUCTURE MAP: EARLY PLIOCENE RESERVOIR TOP



DEPTH STRUCTURE MAP: LATE MIOCENE RESERVOIR TOP

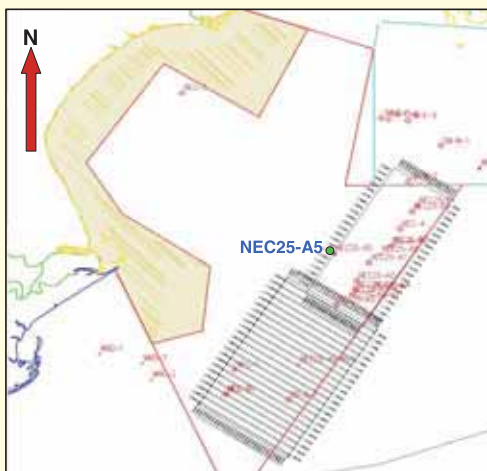


LAMINATED SHALY SAND ANALYSIS

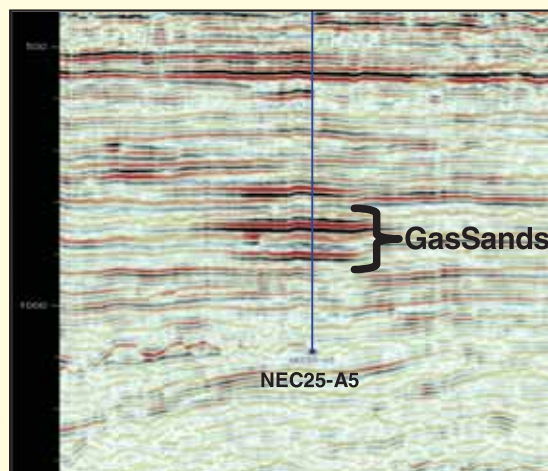
NEW DISCOVERIES : KRISHNA-GODAVARI OFFSHORE BASIN

BLOCK : NEC-OSN-97/2 (NEC 25-A5)

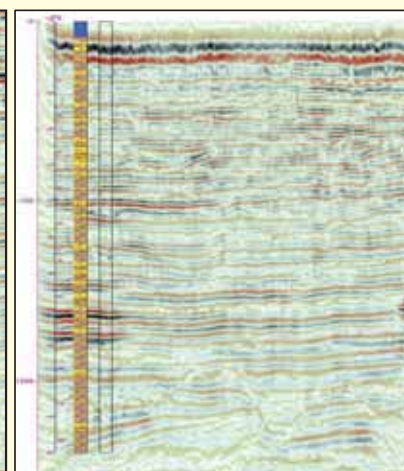
OPERATOR : RIL



LOCATION MAP SHOWING WELL NEC25-A5



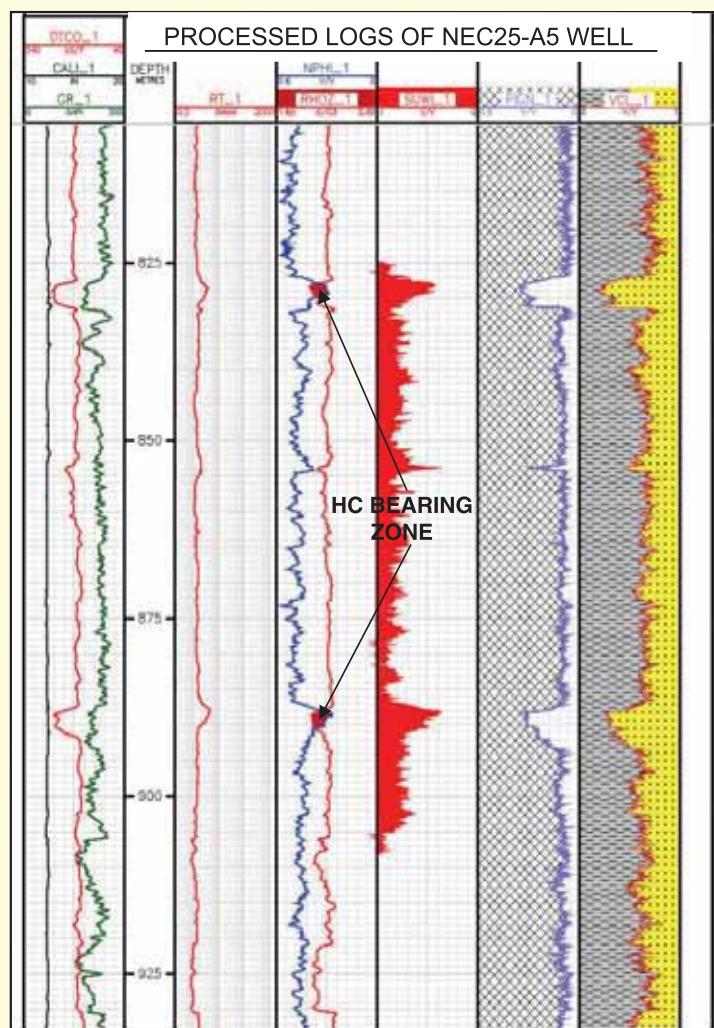
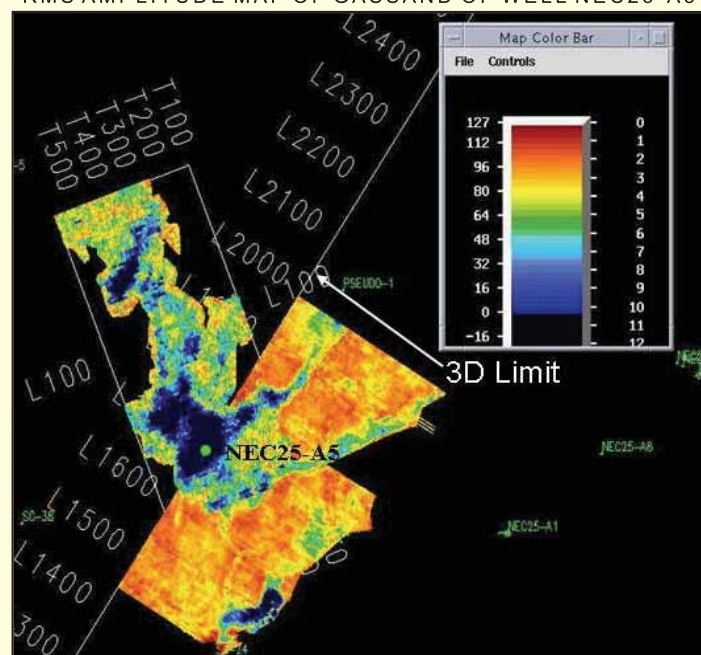
SEISMIC DEPTH SECTION (CROSSLINE)
PASSING THROUGH WELL NEC25-A5



SEISMIC DEPTH SECTION (INLINE)
PASSING THROUGH WELL NEC25-A5

- ❖ 80 M OF GROSS HC COLUMN. GWC AT 880 M TVDSS
- ❖ FLOWED GAS IN MDT FROM PLIOCENE SECTION

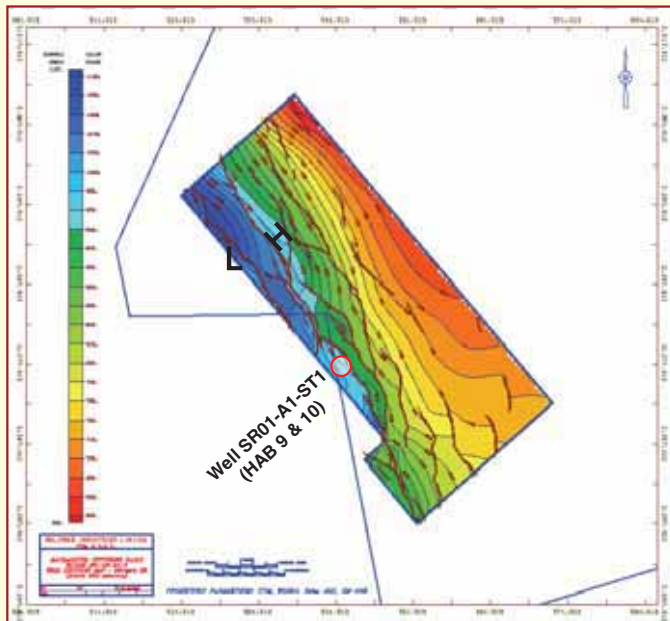
RMS AMPLITUDE MAP OF GASSAND OF WELL NEC25-A5



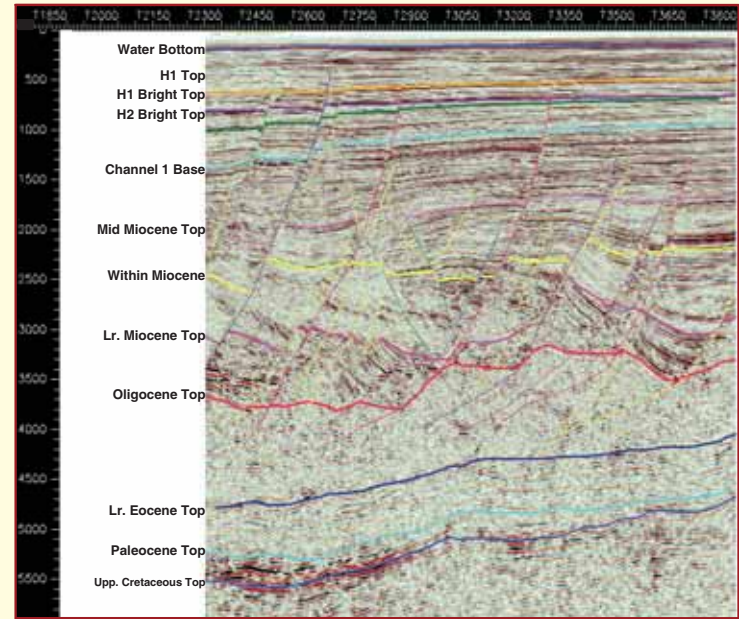
NEW DISCOVERIES : SAURASHTRA OFFSHORE BASIN

BLOCK : SR-OS-94/1 (SR01-A1)

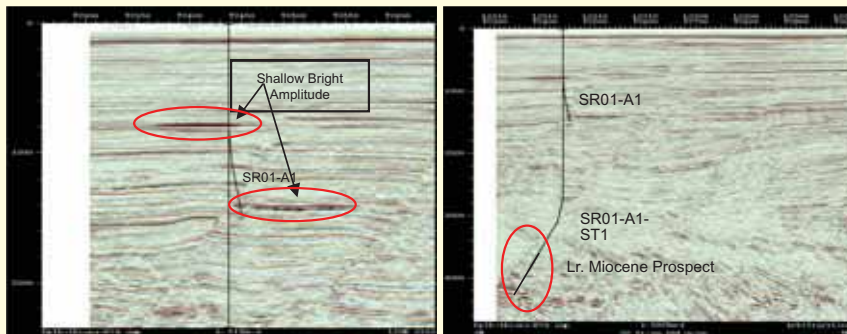
OPERATOR : RIL



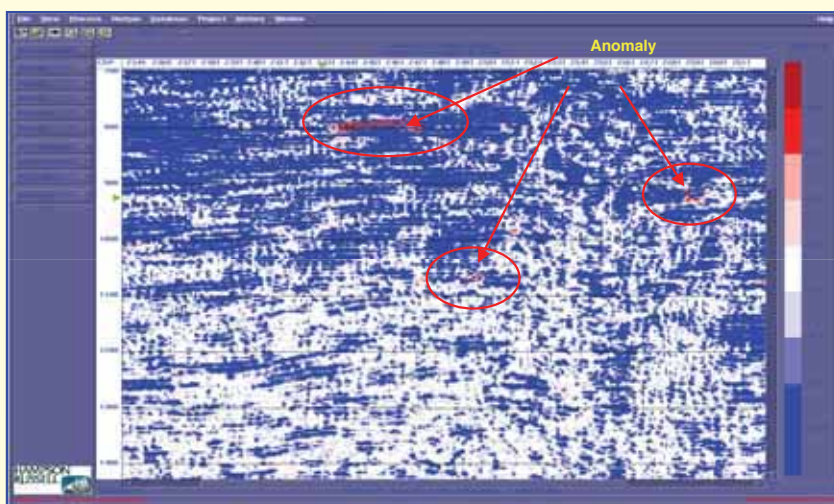
TIME STRUCTURE MAP: HORIZON H1_BRIGHT
(THROUGH SHALLOW AMPLITUDE)



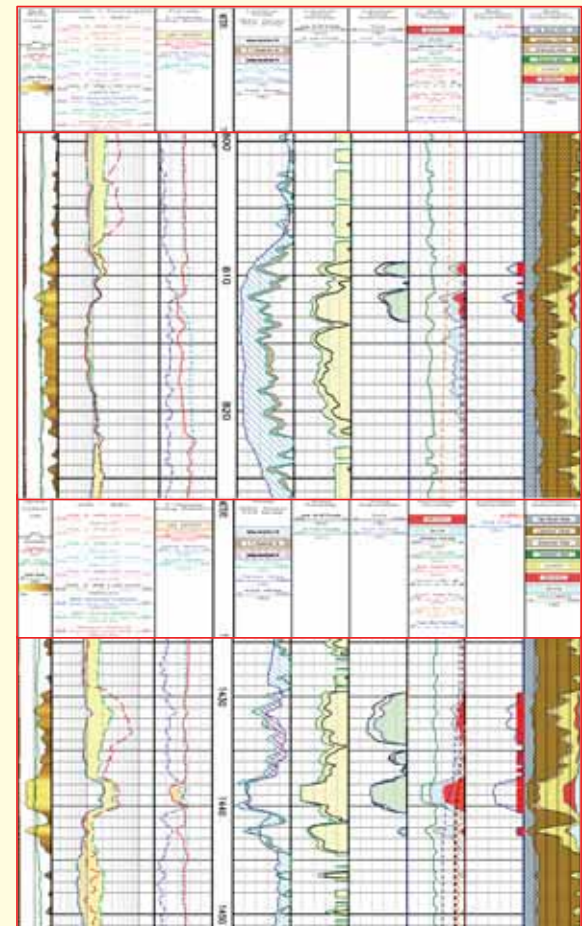
WELL SR01-A1-ST1 PASSING THROUGH SEISMIC SECTION (IL 2310)



SEISMIC SECTIONS THROUGH THE DRILLED LOCATION



PRODUCT STACK (P*G) SHOWING AVO RESPONSE

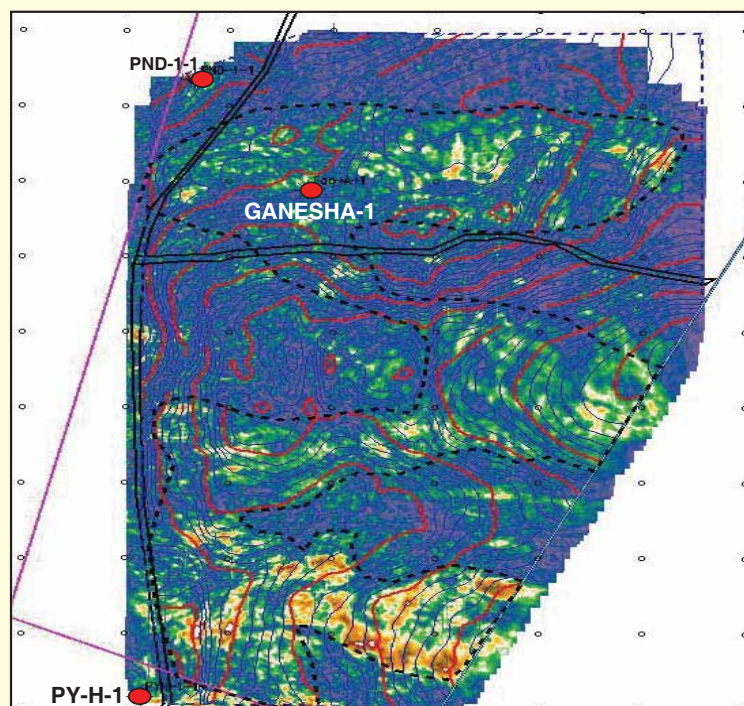
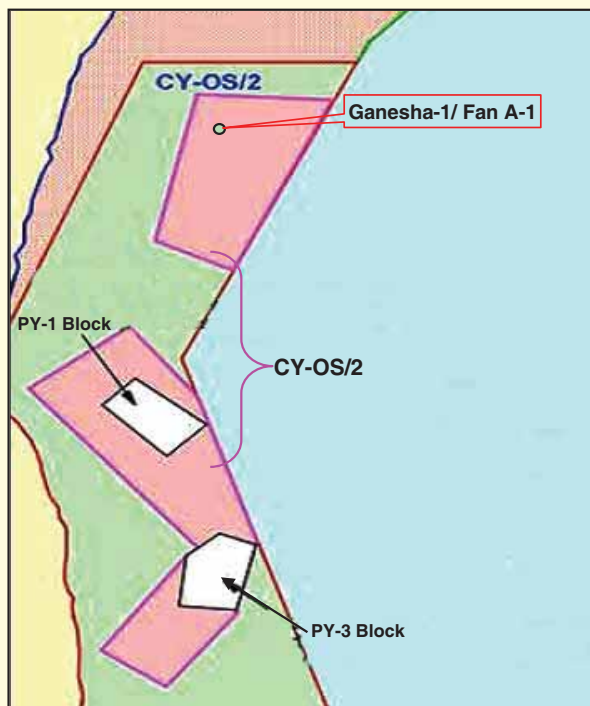


LAMINATED SAND-SHALE ANALYSIS : WELL SR01-A1

NEW DISCOVERIES : CAUVERY OFFSHORE BASIN

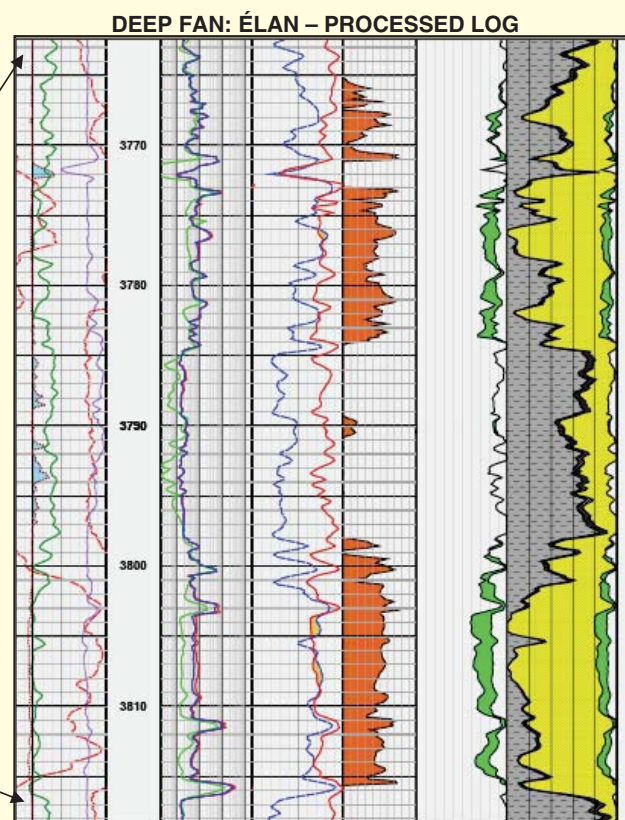
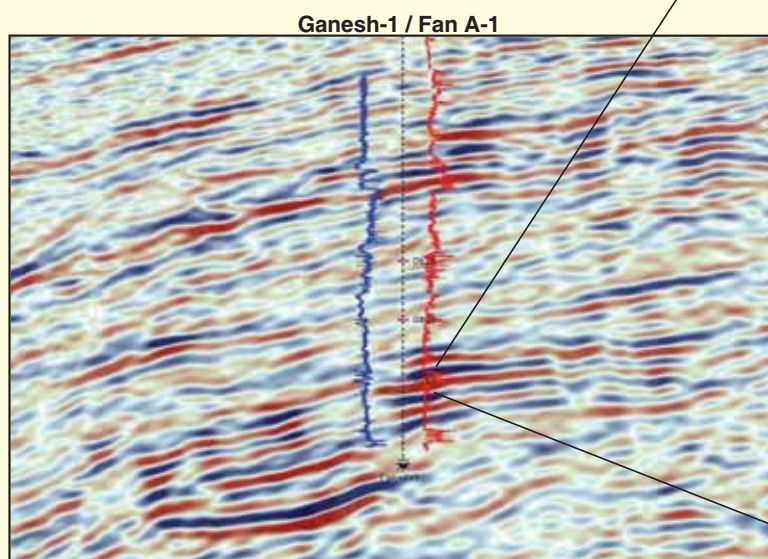
BLOCK : CY-OS/2 (FAN A-1)

OPERATOR : HARDY



STRUCTURE MAP- DEEP FAN WITH AN OVERLAY OF RMS AMP ATTRIBUTE

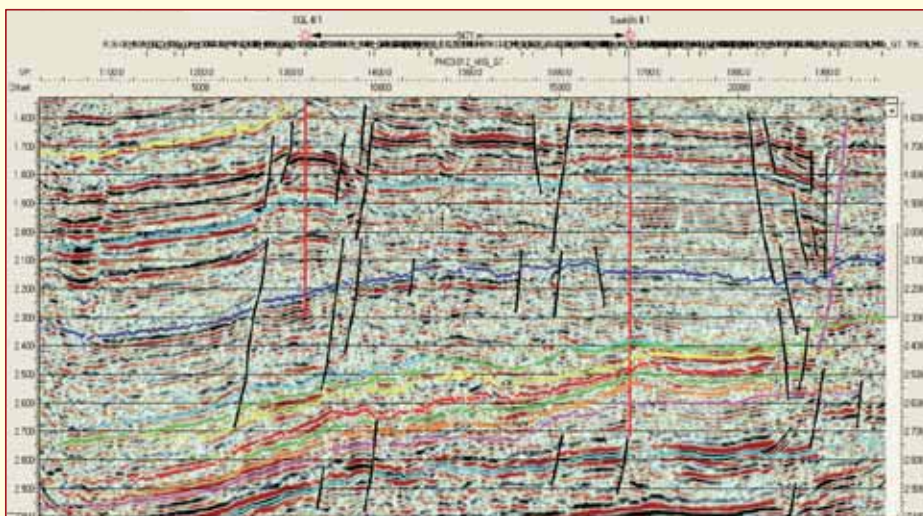
- ❖ Discovery well Ganesha-1/ Fan A-1 produced Oil & Gas from Cretaceous Reservoirs.



NEW DISCOVERIES : RAJASTHAN BASIN

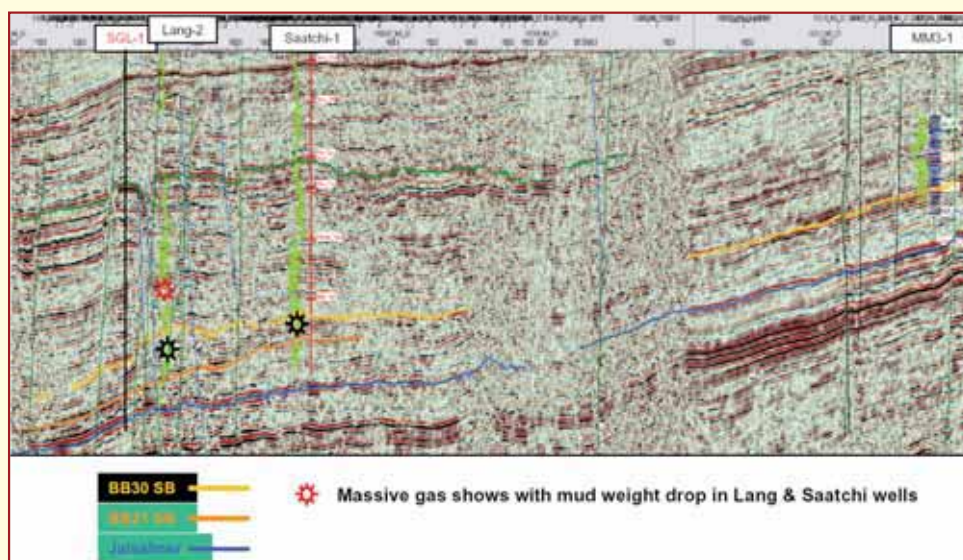
BLOCK : RJ-ON-90/6 (SGL#1)

OPERATOR : Focus Energy

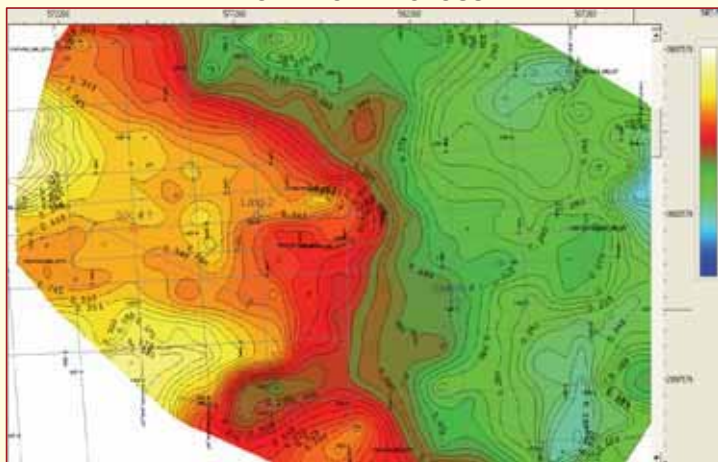


SEISMIC SECTION PASSING
THROUGH PROPOSED WELL SGL#1

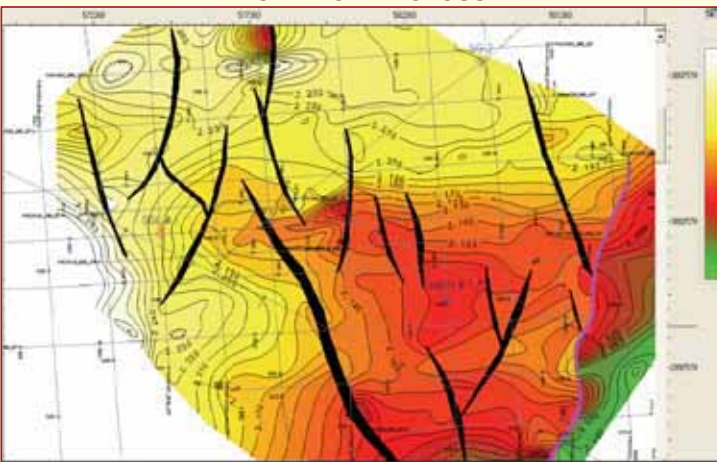
REGIONAL CORRELATION



ISOCHRON MAP OF TOP – BASE PARIWAR FORMATION –
LOWER CRETACEOUS



TIME STRUCTURE MAP ON TOP OF PARIWAR FORMATION –
LOWER CRETACEOUS

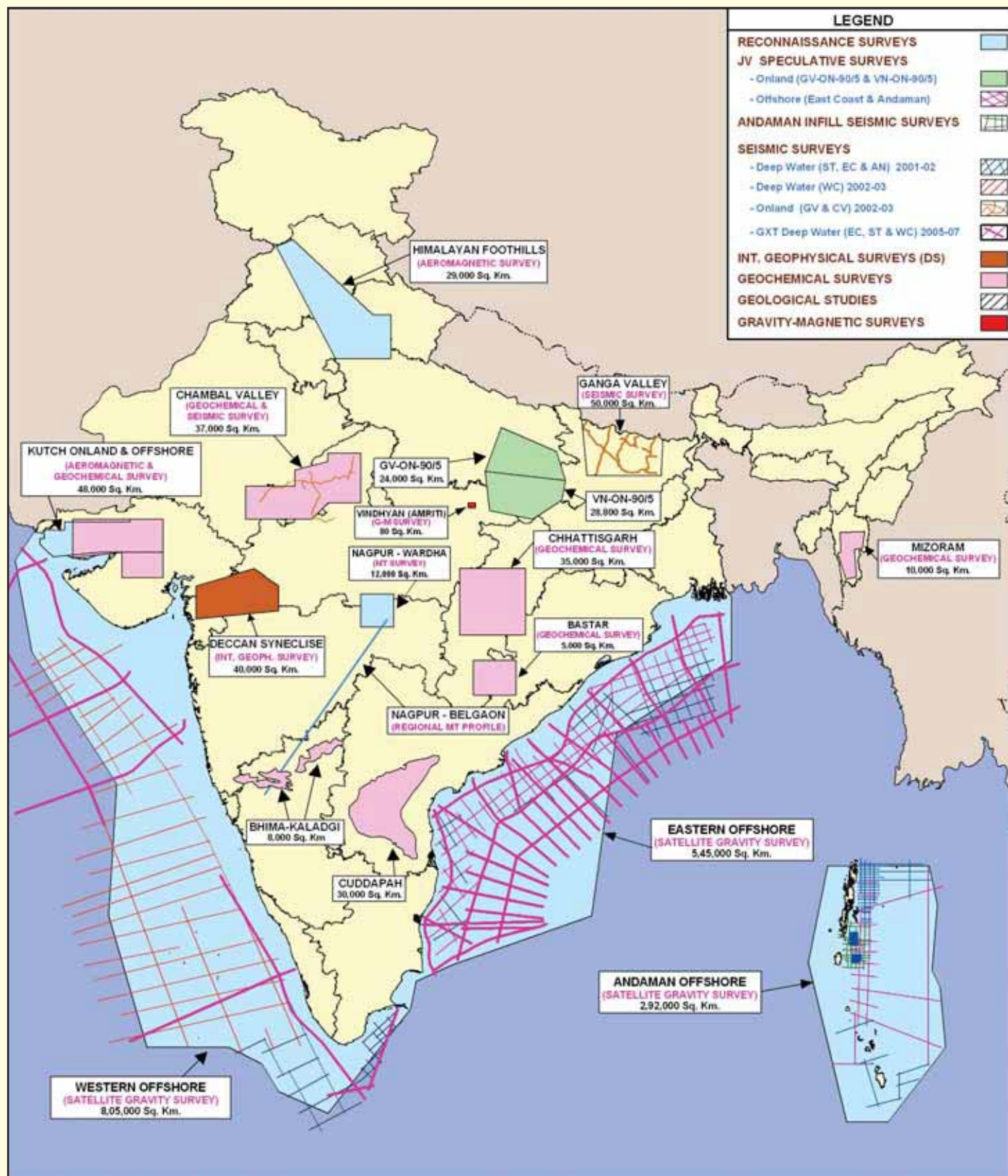


Projects Undertaken by DGH

SUMMARY

- The DGH has carried out, either alone or in collaboration with reputed companies, several projects to upgrade information in hitherto unexplored/poorly explored areas. These total to 2 million sq kms. and cover both offshore (82%) and onland (18%).
- Of this total, satellite gravity surveys over the eastern and western offshore areas and Andaman account for 1.642 million sq. kms. Joint venture offshore speculative geophysical surveys within the same area in eastern offshore and Andaman cover about 0.246 million sq. kms. These later surveys have given valuable clues to structure, tectonics, sedimentary thickness and play recognition in the deep waters, and have provided inputs for modelling studies and for the preparation of a hydrocarbon prospect map of the area.
- A 2D seismic coverage of 0.053 million sq. km. was achieved in 1997-98 in the onland areas of U.P., Bihar and M.P. 2D seismic survey was repeated in Bihar in 2002-03 over 0.05 million sq. km. These surveys were carried out to assess the hydrocarbon potential of Vindhyan and Ganga basins. A new lower Vindhyan paleo-embayment comprising of a number of high and low basement features has been mapped for the first time. These studies have led to the demarcation of certain prospective areas and 1 block each in Vindhyan basin and Ganga basin with new data were awarded under second round of NELP. One more block was awarded in NELP-IV round. In 2003-04, 805.0 GLK 2D seismic data have been acquired from Chambal Valley area to assess the prospectivity of the western part of the Vindhyan basin. Three Blocks have been awarded in NELP-V and VI in Vindhyan basin.
- In the deep waters of the Andamans, and of the east and west coasts of India including the southern tip, 2D seismic surveys were carried out between 1999 and 2003, acquiring a total of about 25,000 LKM of data.
- 16964 GLK 2D seismic data have been acquired, processed and interpreted through GX-Technology, USA in eastern & western offshore during 2005-07 under speculative survey programme. Based on this data good number of blocks were awarded in NELP-VI.
- 210.8 GLK 2D seismic data has been acquired through NGRI in poorly explored Kutch onland basin.
- Geochemical surveys were carried out in the Chambal Valley of the Vindhyan basin over 0.035 million sq. km. and over 0.043 million sq. km. of Kutch onland. Out of this 0.043 million sq.km. area, 0.033 million sq.km. falls within the Kutch reconnaissance (aero-magnetic) survey area of 0.038 million sq.km., and hence not included for purposes of totaling. The samples collected in these areas show maturity of sediments and have revealed the presence of C₂+ gases. During 2003-04, 350 soil samples were collected to carry out geochemical studies in Chattisgarh basin, covering an area of 0.035 million sq.km. During 2004-05 geochemical surveys have been carried out in Cuddapah and Bhima-Kaladgi basins. During 2005-06, regional surface geochemical surveys were carried out in Mizoram area of Assam-Arakan basin. 300 soil samples covering an area of about 10,000 sq.km. were collected along existing roads and analysed for light hydrocarbon gases.
- Geochemical survey was also carried out in Bastar basin covering an area of about 5000 km². 200 soil samples were collected & analysed for light hydrocarbon gases.
- DGH has initiated studies for estimation of oil shale resources in Assam and neighboring area of Arunachal Pradesh. The first phase of the investigations is likely to commence towards mid of 2007.
- Integrated geophysical surveys, carried out jointly by DGH and NGRI in the northwestern part of the Deccan Syneclise, revealed sub-trappean Mesozoic-Gondwana sediments with a maximum thickness of 3 Kms.
- Aero-magnetic surveys amounting to 24,723 LKM were carried out in Himalayan Foreland area during the year 2003-04, 2004-05 and 2005-06.
- DGH has planned to get 12000 LKM 2D seismic data of west coast of India to get reprocessed from M/s GGS-Spectrum, UK for improved images.

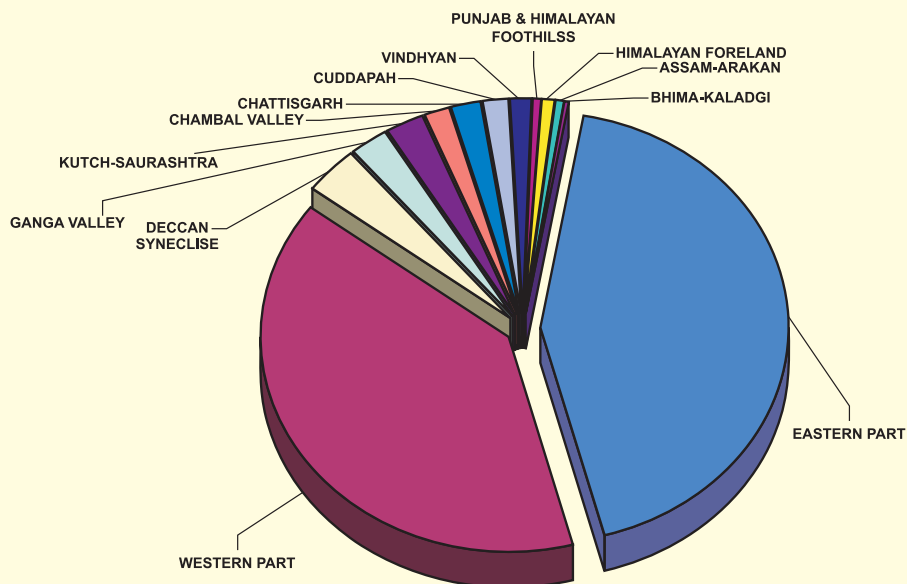
GEOPHYSICAL AND GEOCHEMICAL SURVEYS CARRIED OUT BY DGH



GEOPHYSICAL & GEOCHEMICAL SURVEYS CARRIED OUT BY DGH						
Sl. No.	AREA/BLOCK NAME	SURVEY TYPE	STATE/OFFSHORE	YEAR	ACHIEVEMENT (API)	AREA (Million Sq. Km.)
I. RECONNAISSANCE SURVEY						
1	Western & Eastern Offshore	Satellite Gravity	Western, Eastern & Andaman Off.	1995-98	1.642 Million Sq.Km.	1.642*
2	Kutch Off. & Onland	Aero-Magnetic	Gujarat	1995-96	23,730 LKM	0.038*
3	Nagpur-Wardha Belgaum	MT	MP, Maharashtra & Karnataka	1996-98	352 Stations	0.012*
4	Himalayan Foreland	Aero-Magnetic	Punjab & Haryana	2003-04 2004-05	11,958 LKM	0.014*
5	Punjab and Foot Hills of Himalayas	Aero Magnetic	HP,Punjab,Part of Haryana & Uttaranchal	2005-06	12,765 LKM	0.015*
II. JOINT VENTURE SPECULATIVE SURVEYS						
OFFSHORE						
1	East Coast	2D Seismic & GM	Deepwaters	1996-97	7428.685 LKM & RI of 4525 LKM of old data	0.169
2	Andaman - Nicobar	2D Seismic & GM	Andaman Sea	1996-97	3606.375 LKM & RI of 695 LKM of old data	0.077
ONLAND						
3	Ganga Valley (GV-ON-90/5)	2D Seismic	UP & Bihar	1997-98	634 GLK	0.024*
4	Vindhyan (VN-ON-90/5)	2D Seismic	UP, MP & Bihar	1997-98	566 GLK	0.029*
III. SPECULATIVE SURVEY						
1	Western & Eastern Offshore	2D Seismic	Shallow & deep water of west & east coast	2005-07	16964 LKM	--
IV. SEISMIC SURVEYS						
OFFSHORE						
1	Andaman Infill	2D Seismic	Andaman Off.	1999	1484.75 LKM	--
2	Southern Tip (ST)	2D Seismic	Deepwaters	2001-02	2835.925 LKM	0.029
3	East Coast (EC)	2D Seismic	Deepwaters	2001-02	4319.45 LKM	0.040*
4	Andaman-Nicobar (AN)	2D Seismic	Deepwaters	2001-02	4307.275 LKM	0.025
5	West Coast (WC)	2D Seismic	Deepwaters	2002-03	12,000.65 LKM	0.061
ONLAND						
6	Ganga Valley (GV)	2D Seismic	Bihar	2002-03	1135.05 GLK	0.050*
7	Chambal Valley (CV)	2D Seismic	MP & Rajasthan	2003-04	805.00 GLK	0.037*
V. INTEGRATED GEOPHYSICAL SURVEYS						
1	Deccan Syncline (DS) (Narmada-Tapti Area)	Gravity MT DRS 2D Seismic	Gujarat, MP & Maharashtra	2003-04	6000 Stations 600 Stations 50 Stations 700 LKM	0.040*
VI. GRAVITY - MAGNETIC SURVEYS						
1	Vindhyan (Amriti)	GM	MP	2003-04	303 Stations (80 Sq. Km.)	--
VII. GEOCHEMICAL SURVEYS						
1	Chambal Valley	Geochemical	MP & Rajasthan	2002-03	350 Samples	0.035
2	Kutch Onland	Geochemical	Gujarat	2002-03	300 Samples	0.043(0.01*)
3	Chattisgarh	Geochemical	Chattisgarh, MP, Orissa	2003-04	350 Samples	0.035*
4	Cuddapah	Geochemical	AP	2004-05	300 Samples	0.030*
5	Bhima-Kaladgi	Geochemical	Karnataka	2004-05	200 Samples	0.008*
6	Mizoram	Geochemical	Mizoram	2005-06	300 Samples	0.010*
7	Bastar	Geochemical	Chattisgarh	2005-07	200 Samples	0.005*
TOTAL :						2.039
* Considered for totaling API = Data Acquisition, Processing & Interpretation; RI = Reprocessing & Interpretation.						

GEOPHYSICAL & GEOCHEMICAL SURVEYS UNDER DGH SUPERVISION AND COLLABORATION

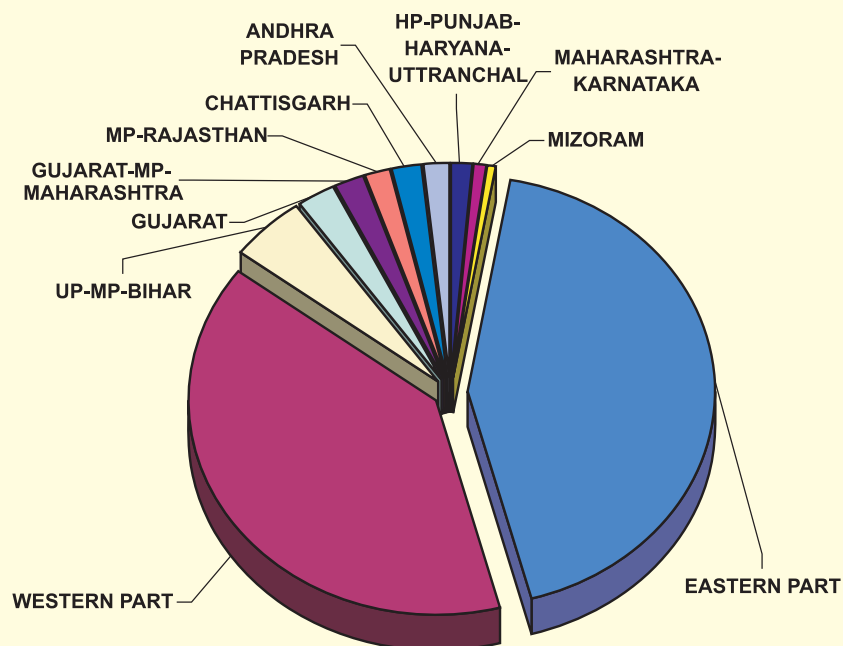
A. BASIN-WISE DISTRIBUTION



OFFSHORE / ONLAND	AREA	
	(Sq. Km.)	(%)
OFFSHORE		
EASTERN PART	877,000.00	43.01
WESTERN PART	805,000.00	39.48
TOTAL OFFSHORE	1,682,000.00	82.49
ONLAND		
GANGA VALLEY	74,000.00	3.63
DECCAN SYNECLISE	52,000.00	2.55
KUTCH-SAURASHTRA	48,000.00	2.35
CHAMBAL VALLEY	37,000.00	1.81
CHATTISGARH	40,000.00	1.96
CUDDAPAH	30,000.00	1.47
VINDHYAN	29,000.00	1.42
PUNJAB & HIMALAYAN FOOTHILLS	15,000.00	0.74
HIMALAYAN FORELAND	14,000.00	0.69
ASSAM-ARAKAN	10,000.00	0.49
BHIMA-KALADGI	8,000.00	0.39
TOTAL ONLAND	357,000.00	17.51
GRAND TOTAL	2,039,000.00	100.00

GEOPHYSICAL & GEOCHEMICAL SURVEYS UNDER DGH SUPERVISION AND COLLABORATION

B. STATE-WISE DISTRIBUTION

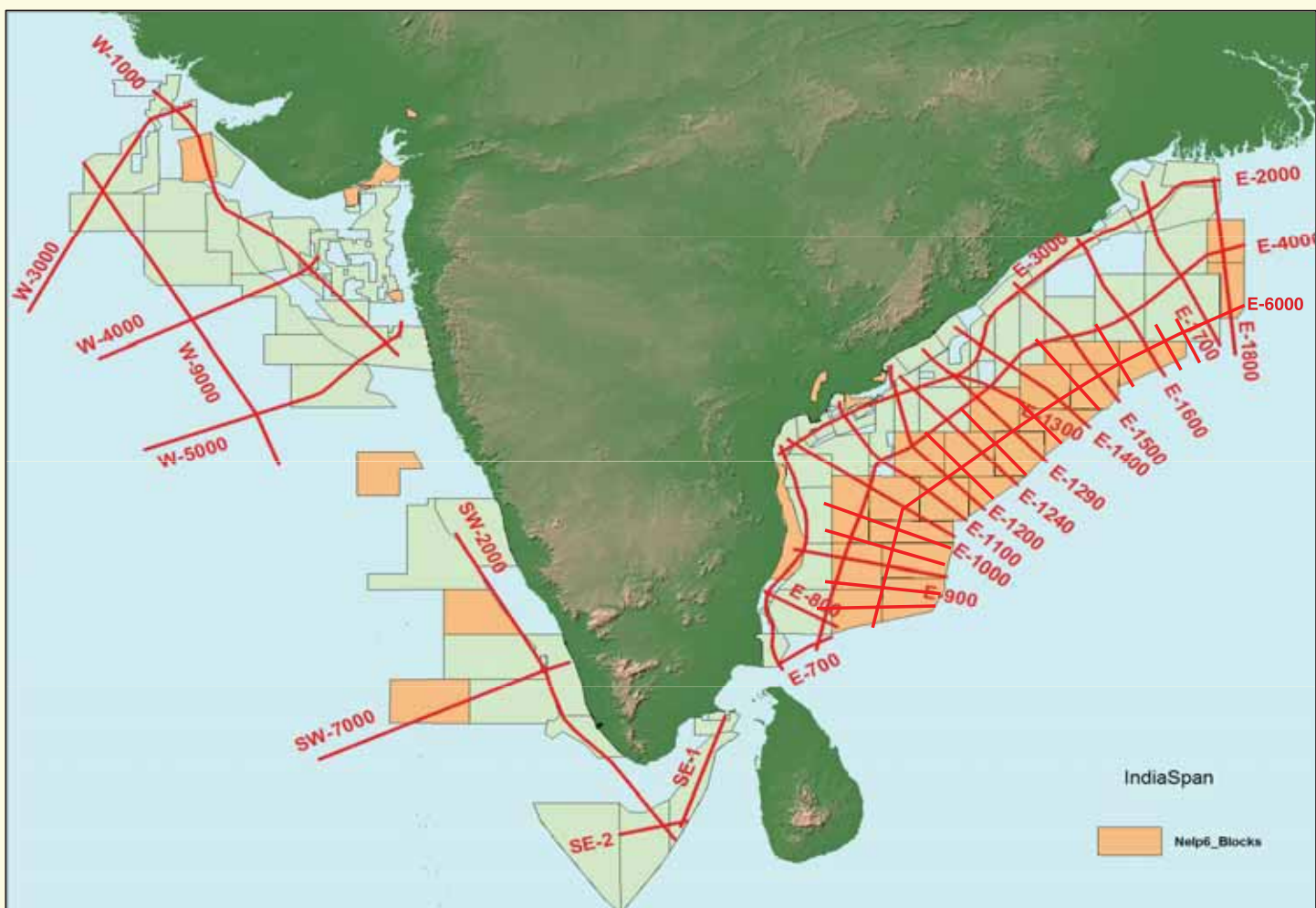


OFFSHORE / ONLAND	AREA	
	(Sq. Km.)	(%)
OFFSHORE		
EASTERN PART	877,000.00	43.01
WESTERN PART	805,000.00	39.48
TOTAL OFFSHORE	1,682,000.00	82.49
ONLAND		
UP-MP-BIHAR	103,000.00	5.05
GUJARAT	48,000.00	2.35
GUJARAT-MP-MAHARASHTRA	40,000.00	1.96
MP-RAJASTHAN	37,000.00	1.81
CHATTISGARH	40,000.00	1.96
ANDHRA PRADESH	30,000.00	1.47
HP-PUNJAB-HARYANA-UTTRANCHAL	29,000.00	1.42
MAHARASHTRA-KARNATAKA	20,000.00	0.98
MIZORAM	10,000.00	0.49
TOTAL ONLAND	357,000.00	17.51
GRAND TOTAL	2,039,000.00	100.00

SPECULATIVE SEISMIC SURVEY IN EAST COAST & WEST COAST OF INDIA

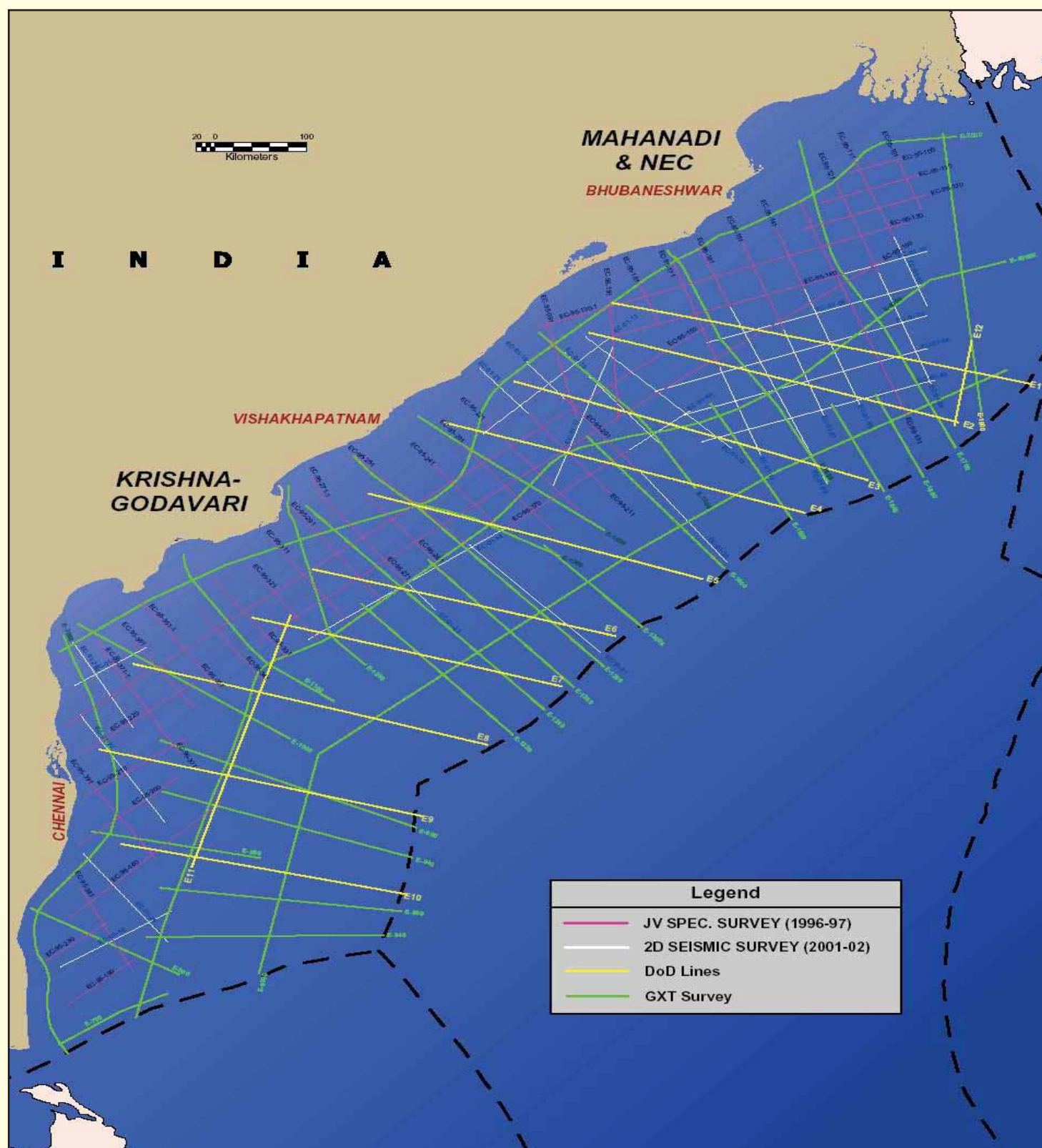
Agency	DGH & GX Technology, USA
Objective	To reveal deep features and architecture that shall aid in postulating new ideas about continental margins around India.
Volume of Work	16964 LKM API

INDIA SPAN : SURVEY LOCATION MAP

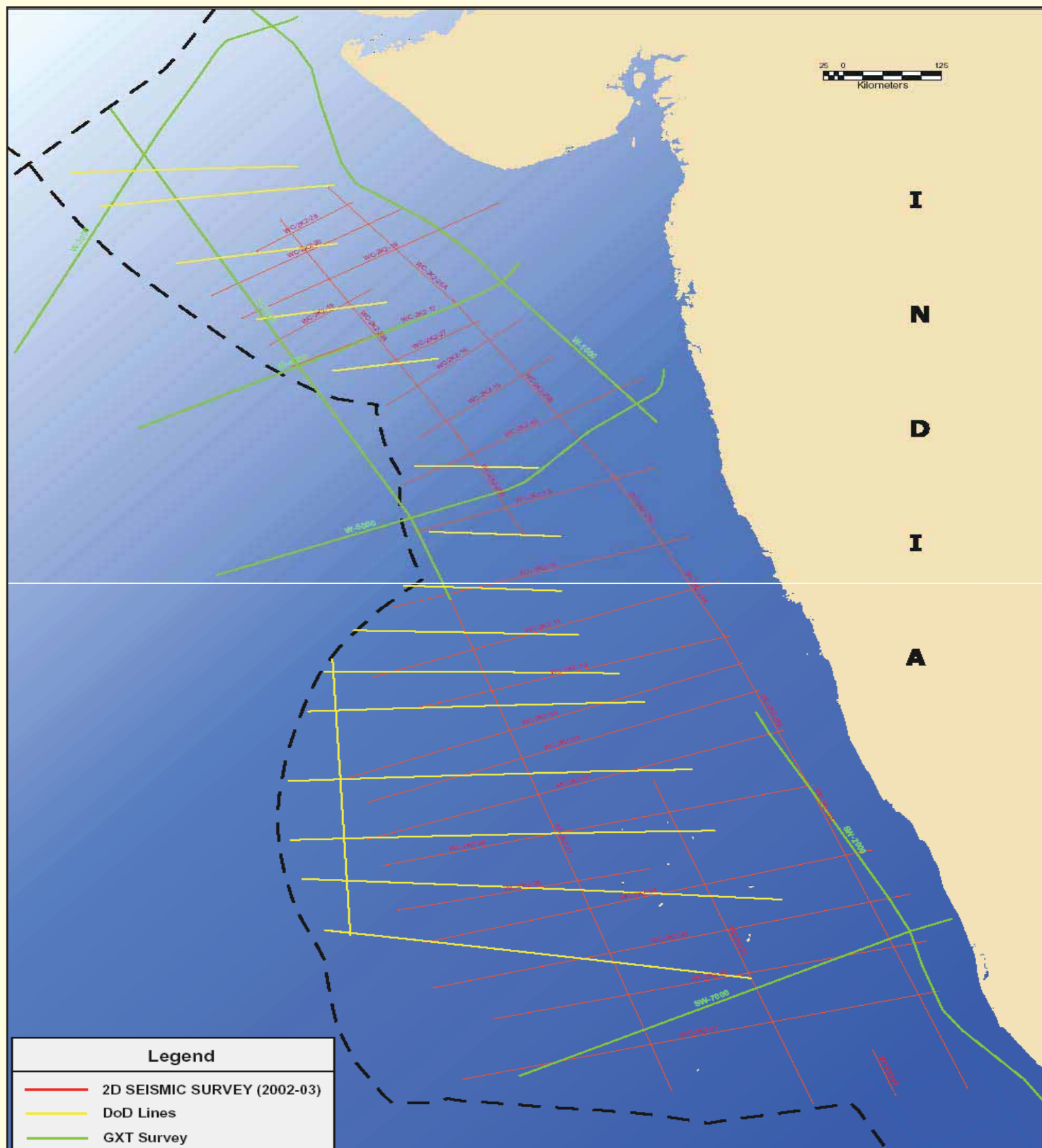


SPECULATIVE SEISMIC SURVEY IN EAST & WEST OFFSHORE BY GX TECHNOLOGY, USA

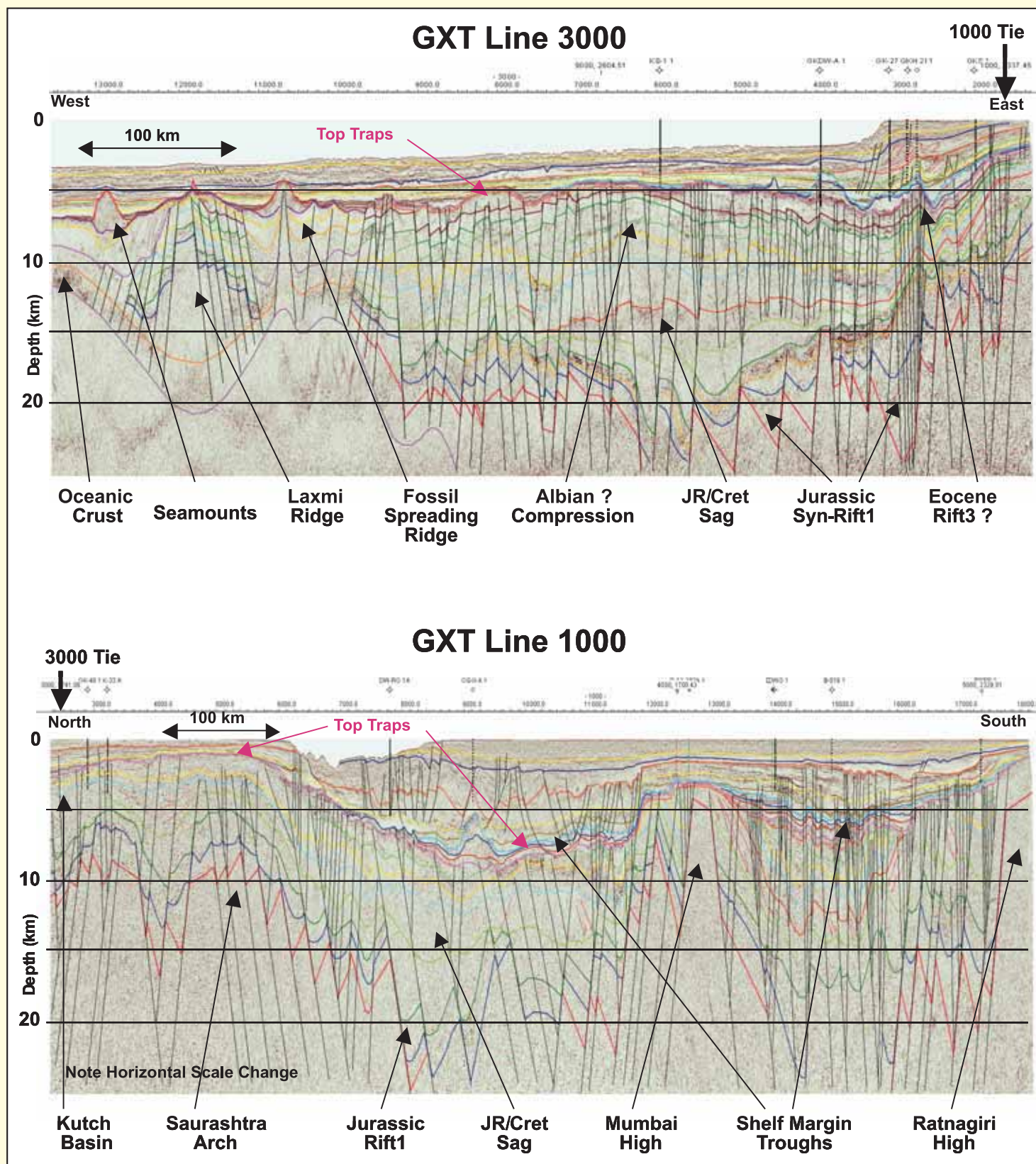
SEISMIC COVERAGE MAP – EAST COAST



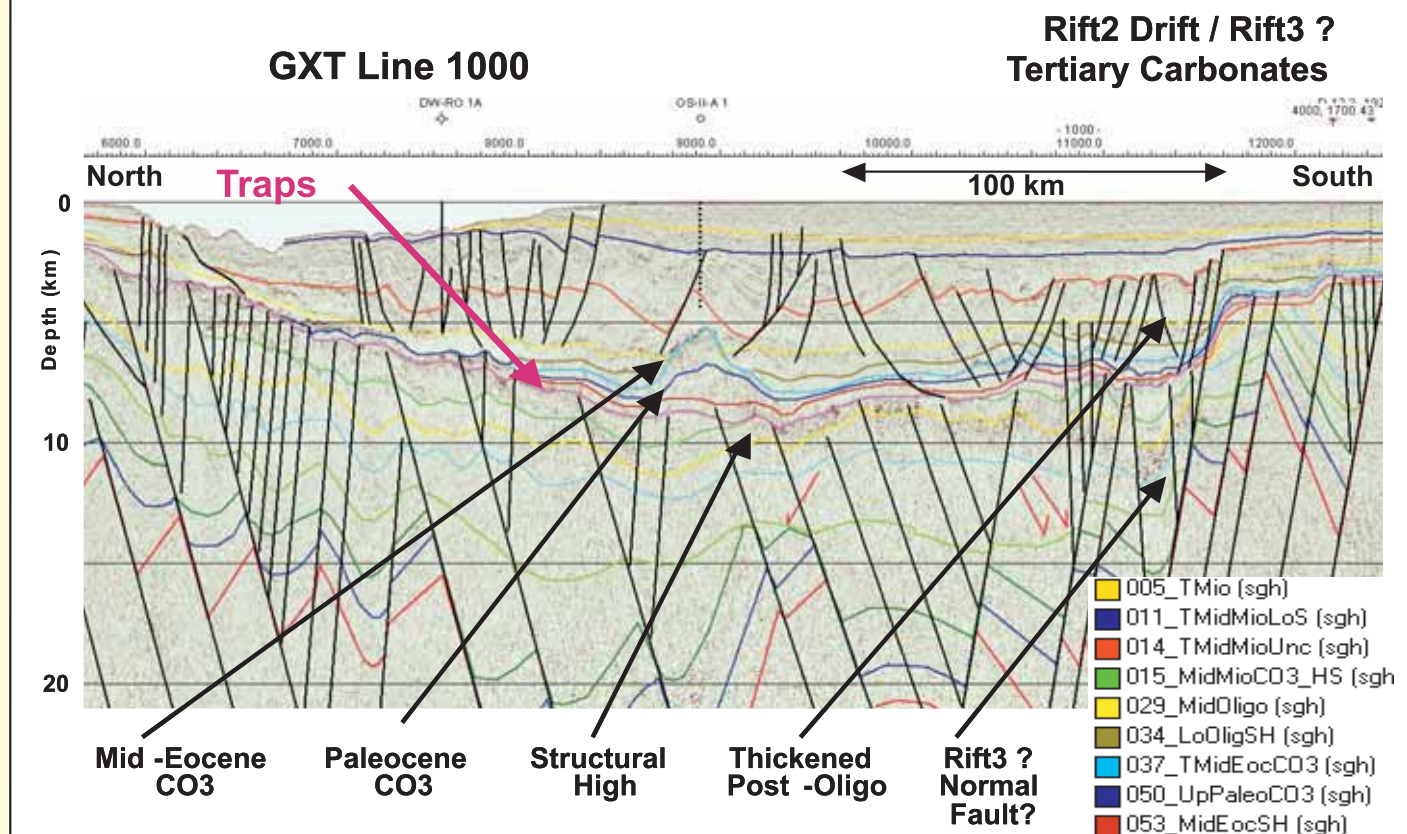
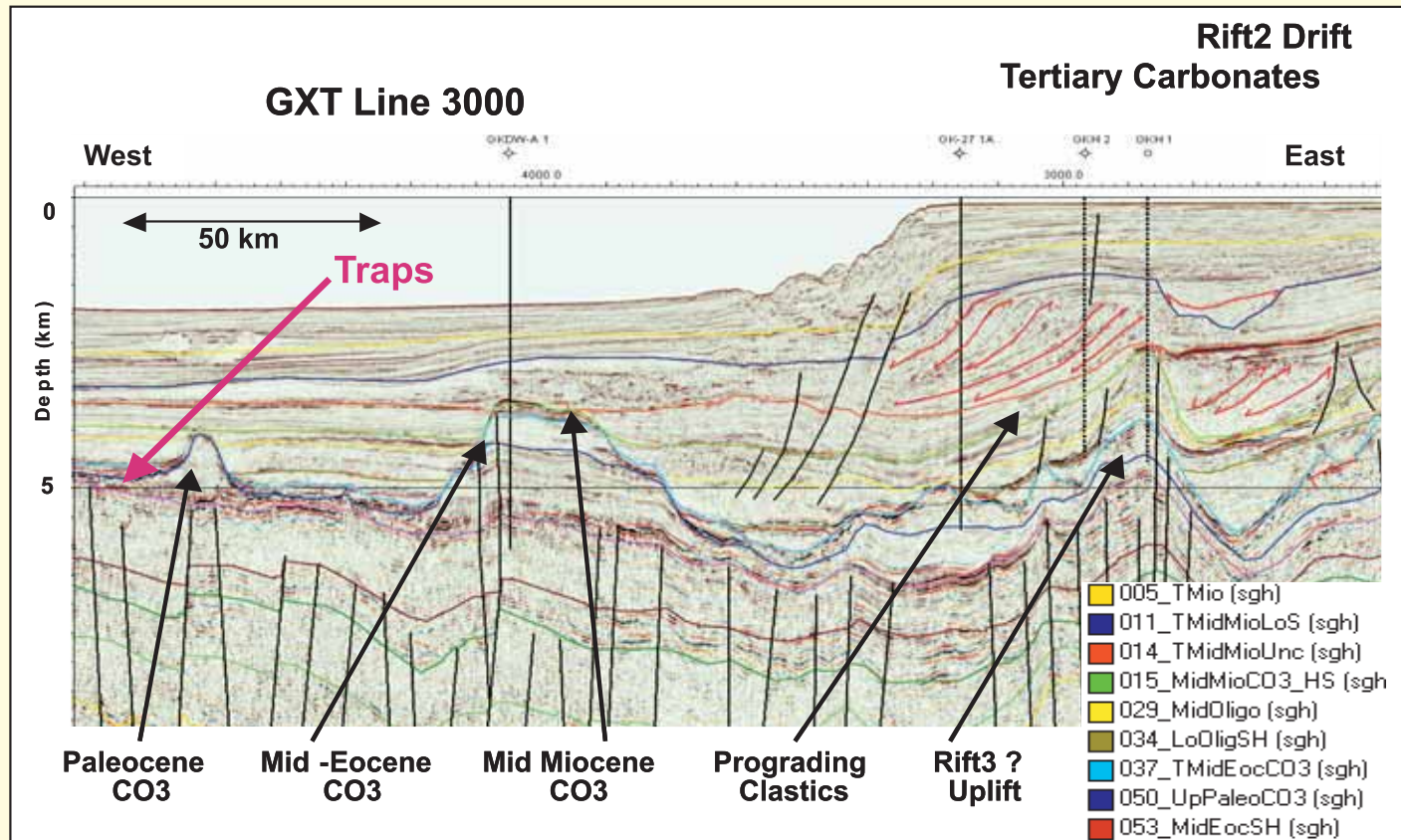
SEISMIC COVERAGE MAP – WEST COAST



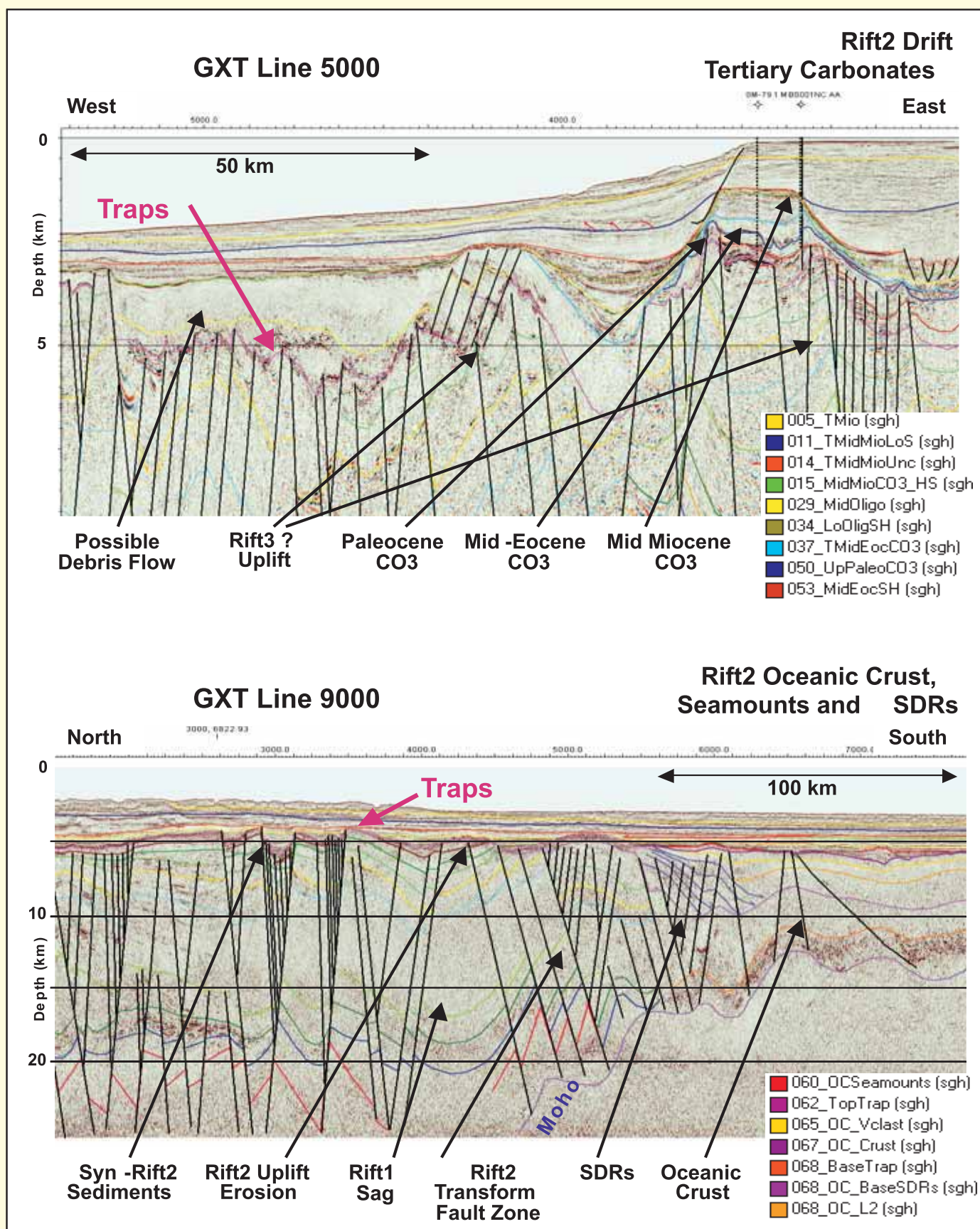
WESTERN OFFSHORE



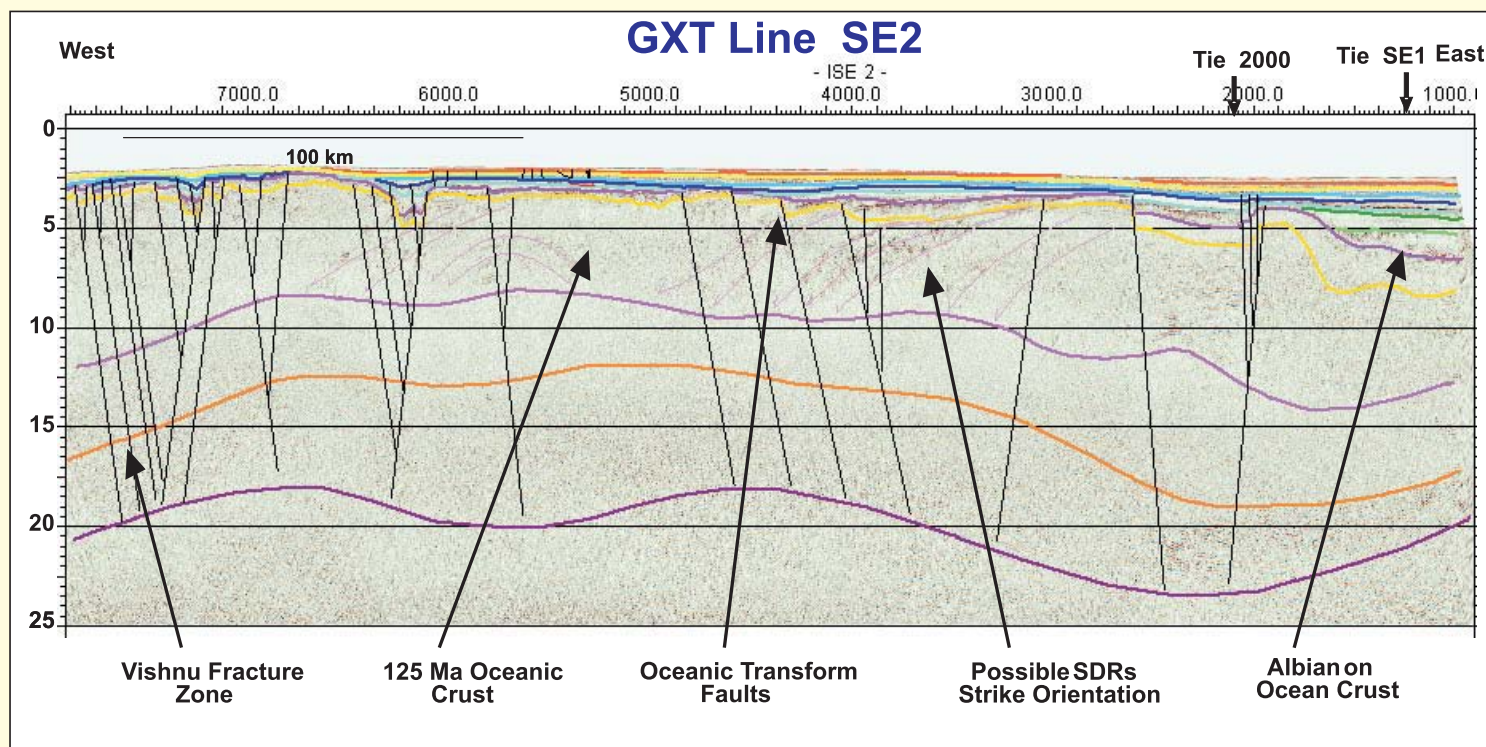
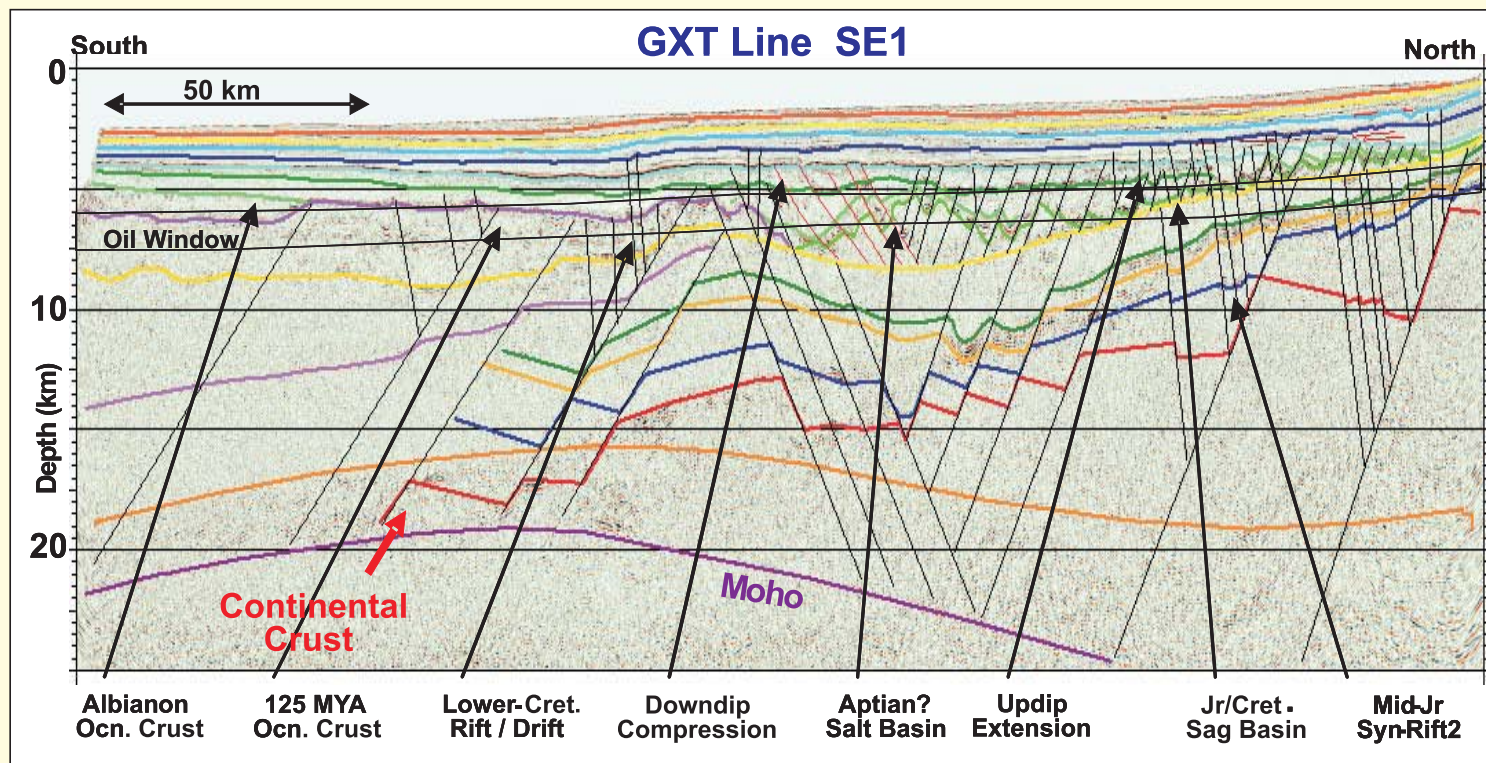
WESTERN OFFSHORE



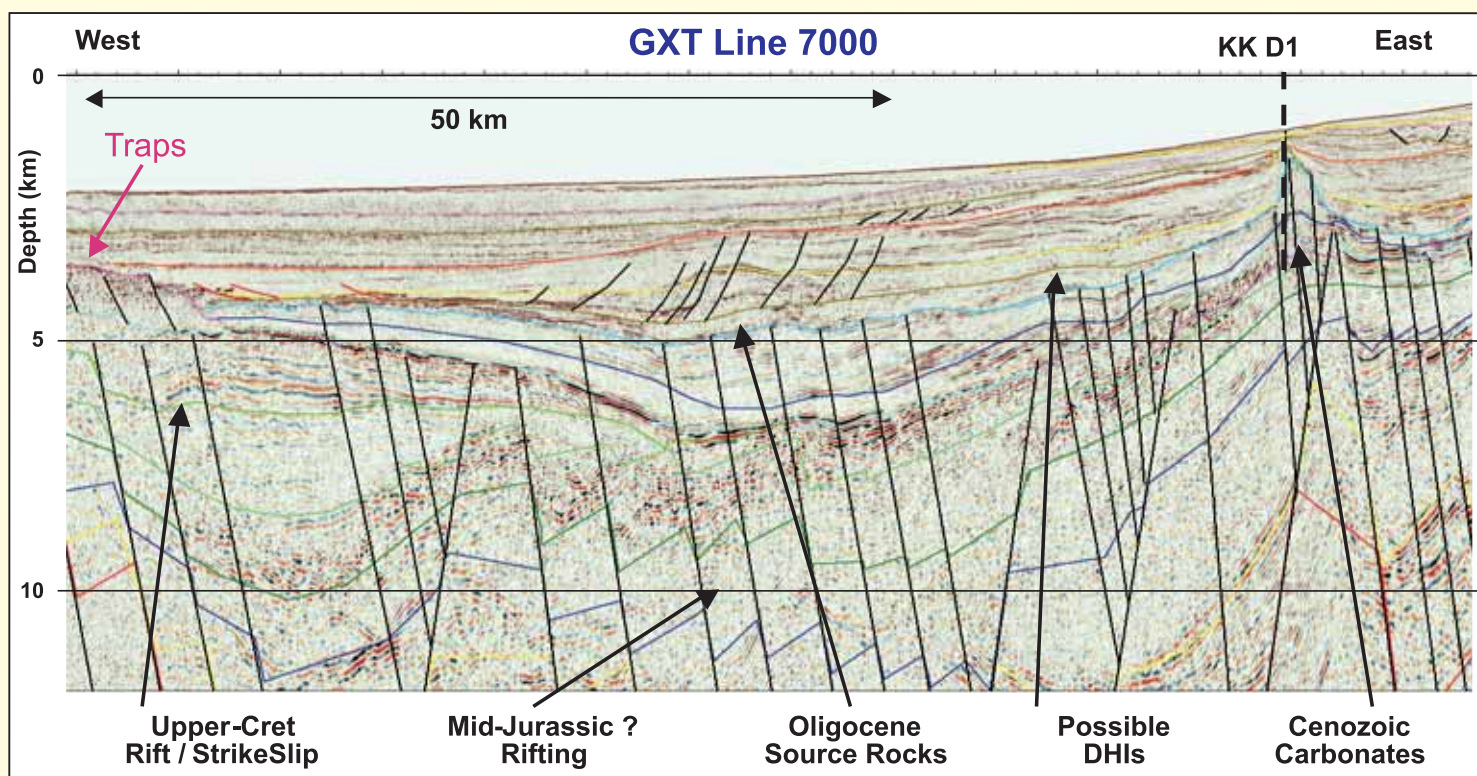
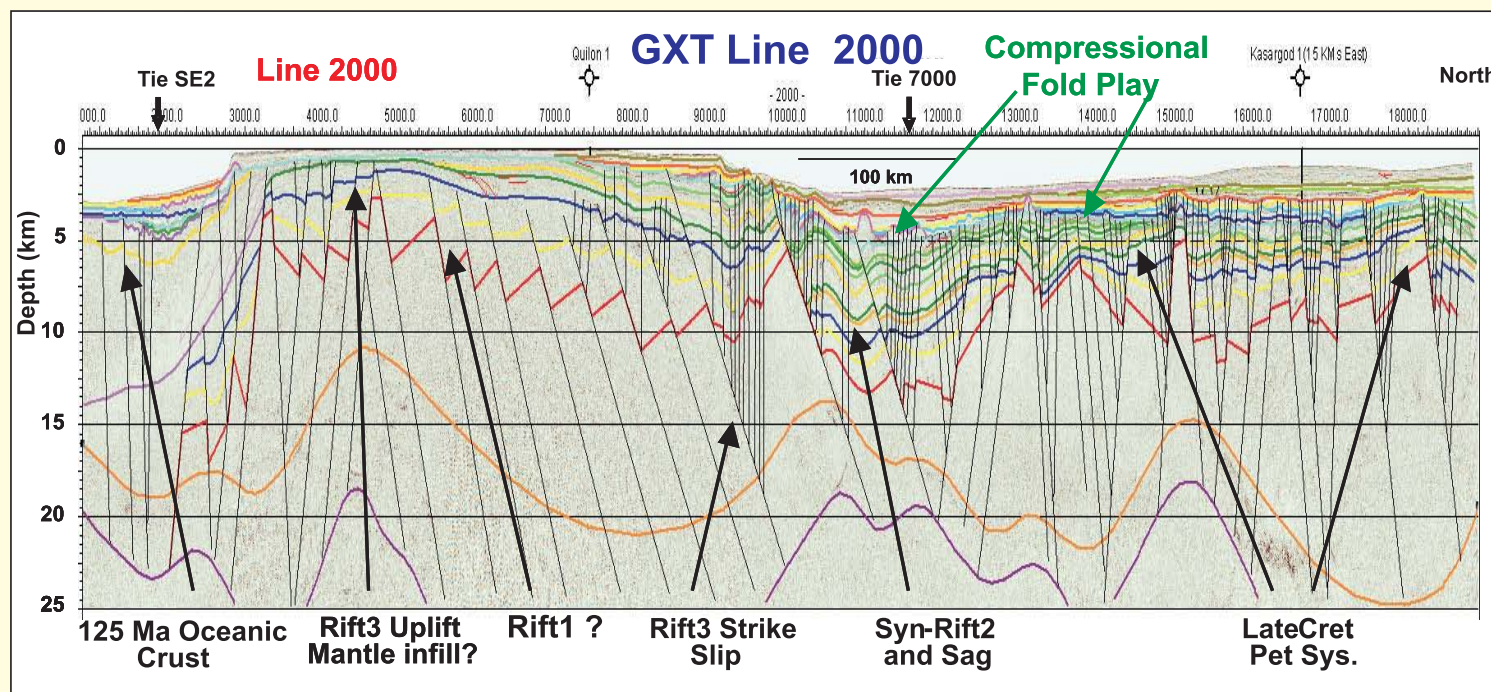
WESTERN OFFSHORE



SOUTH EASTERN OFFSHORE



WESTERN OFFSHORE



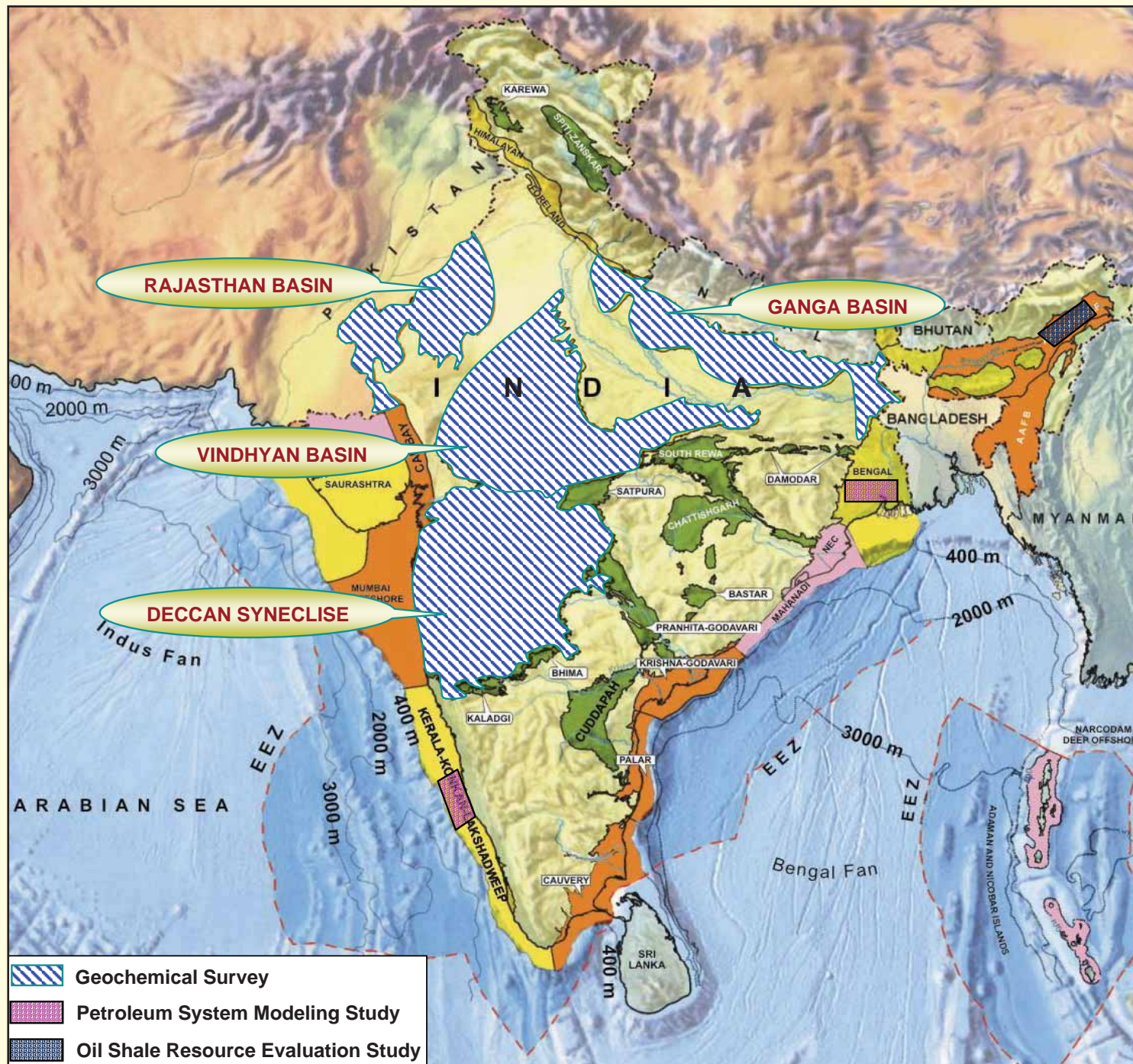
FUTURE SURVEYS / REPROCESSING / STUDIES BY DGH

SI. No.	AREA / BLOCK NAME	SURVEY TYPE	STATE/ OFFSHORE	AGENCY	TARGET
I. RECONNAISSANCE SURVEY					
1	Normada-Tapti Basin	MT	Madhya Pradesh & Maharashtra	NGRI	100 Stations
2	Analysis of Aerial / Remote Sensing data over Narmada-Cambay-Tapti / Deccan Syneclise	Study / Analysis	Madhya Pradesh, Maharashtra & Gujarat	NGRI	500 x 500 km
3	Block I, II, III & IV	Speculative Airborne Gravity & Magnetic	Bihar, Jharkhand, West Bengal, Manipur, Nagaland, Kutch, Cuddapah/A.P	Mc Phar	375226 LKM
II. 2D SEISMIC & GM SURVEYS					
OFFSHORE					
1	Gulf of Kutch	Marine Seismic & MT	Gujarat	NGRI	235 LKM & 32 Stations
ONLAND					
1	Kutch Basin	2D Seismic	Gujarat	NGRI	900 LKM
III. GEOCHEMICAL SURVEYS					
ONLAND					
1.	Ganga Basin	Geochemical	U.P., Bihar,	--	--
2.	Rajasthan Basin	Geochemical	Rajasthan, M.P.	--	3000 Samples
3.	Vindhyan Basin	Geochemical	--	--	--
4.	Deccan Syneclise	Geochemical	Maharastra	--	--
IV. OTHER STUDIES / REPROCESSING					
1.	Petroleum system modeling study of sedimentary basins	--	Kerala-Konkan Offshore Bengal Onland	--	--
2.	Oil shale Resource Evaluation in Assam	--	--	BRGM. France MECL India	--
3.	Reprocessing of Seismic data	--	West Coast of India	GGs-Spectrum, UK	12000 LKM

FUTURE GEOPHYSICAL SURVEYS / STUDIES BY DGH

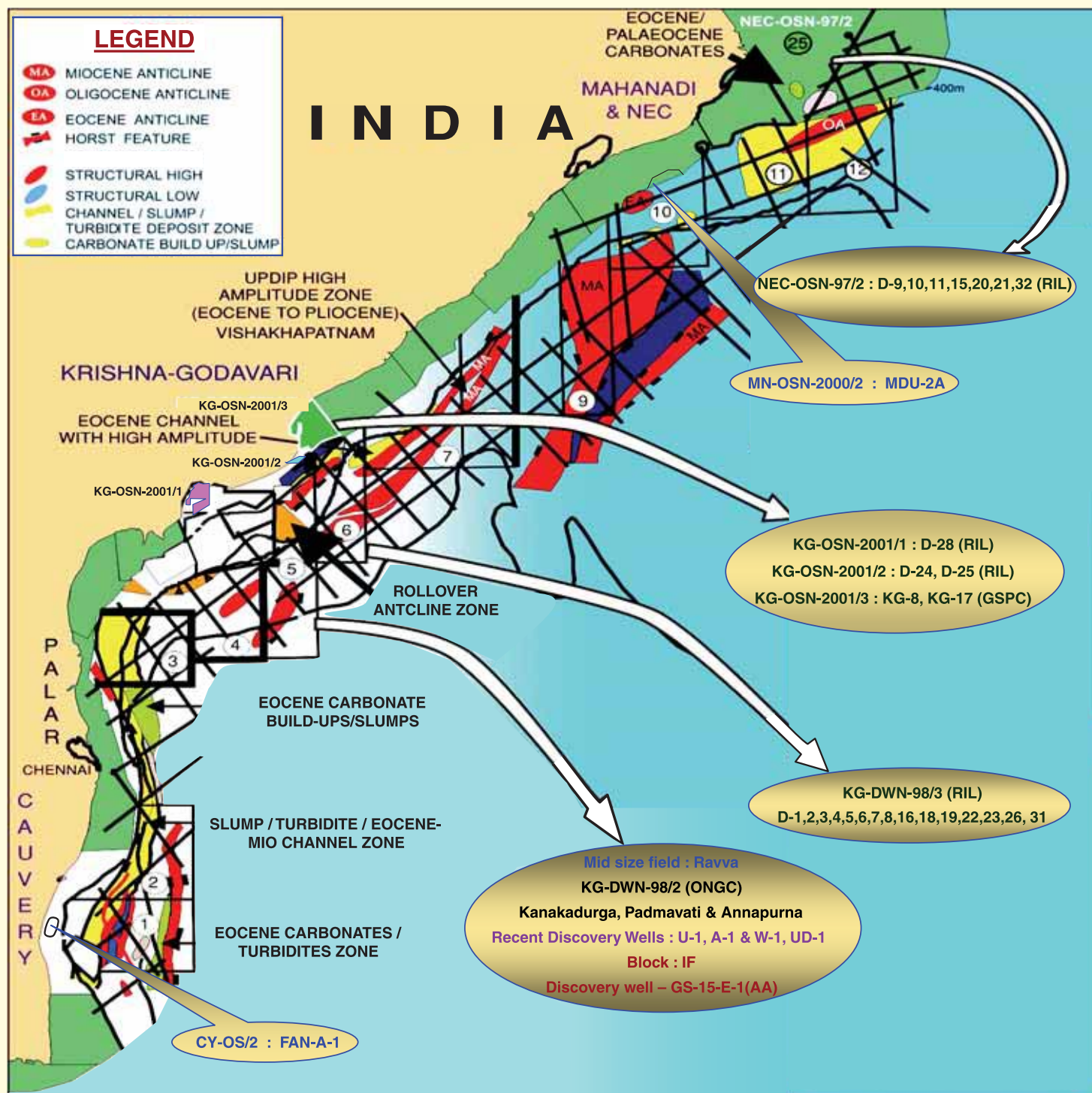


Future Geochemical Surveys / Studies By DGH

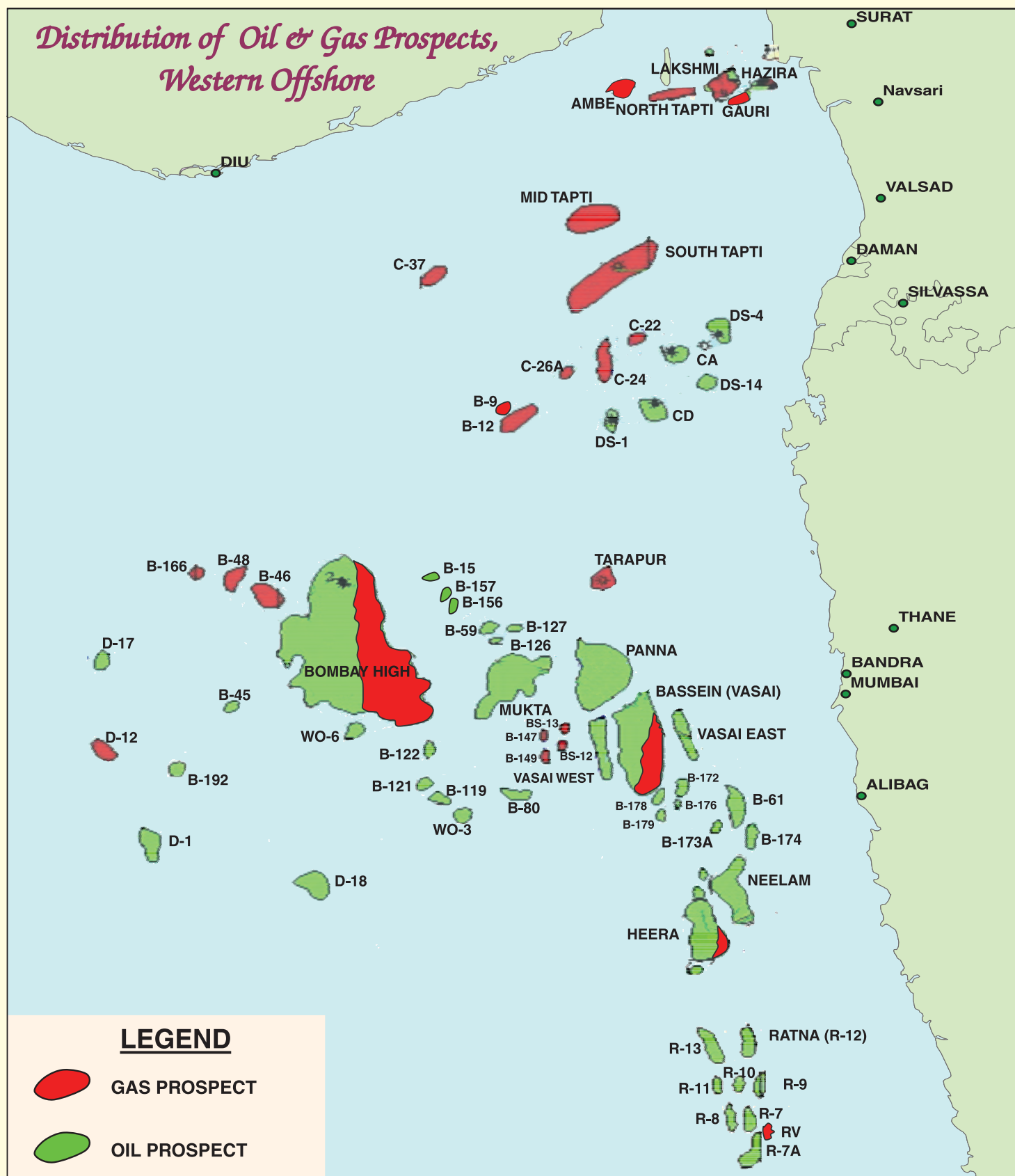


HYDROCARBON PROSPECTS/ GEOLOGICAL PLAYS

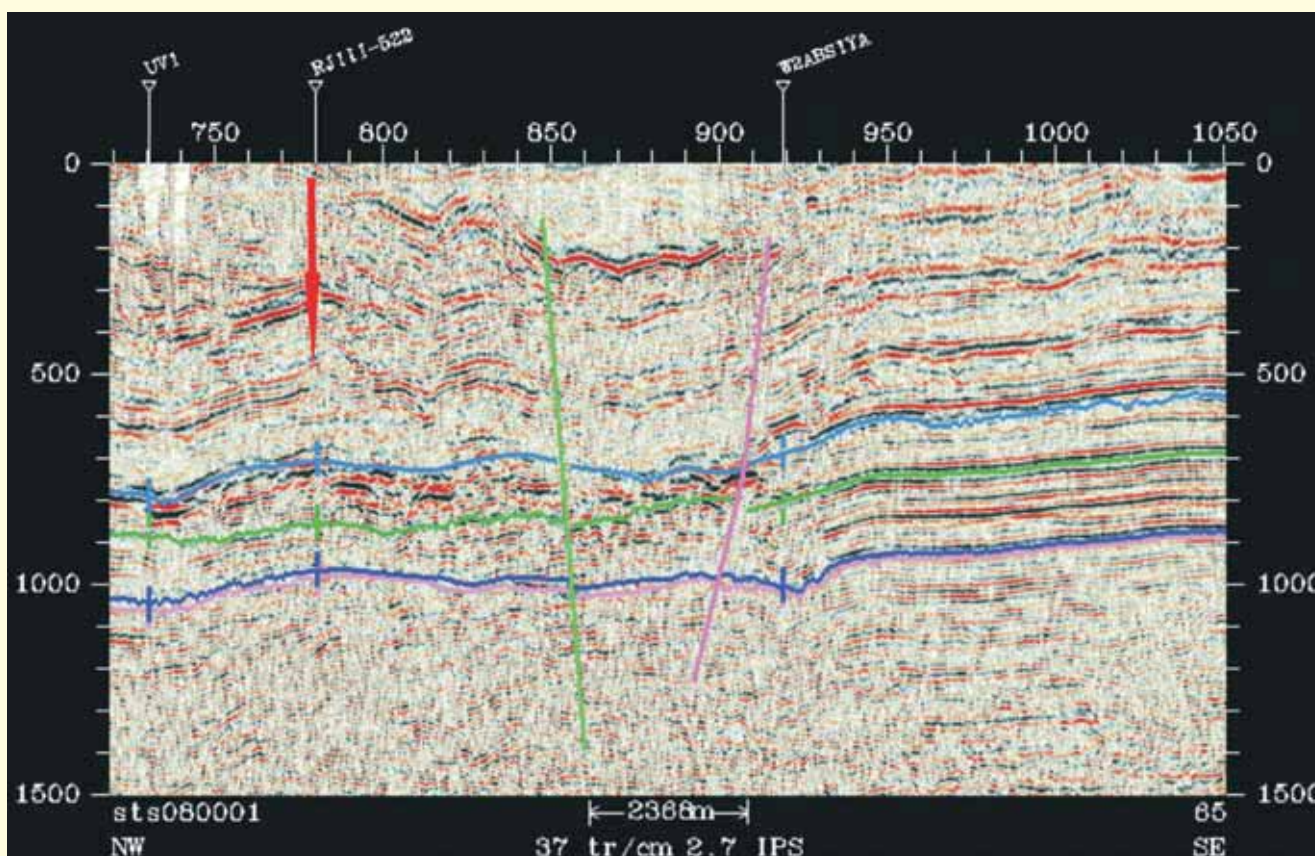
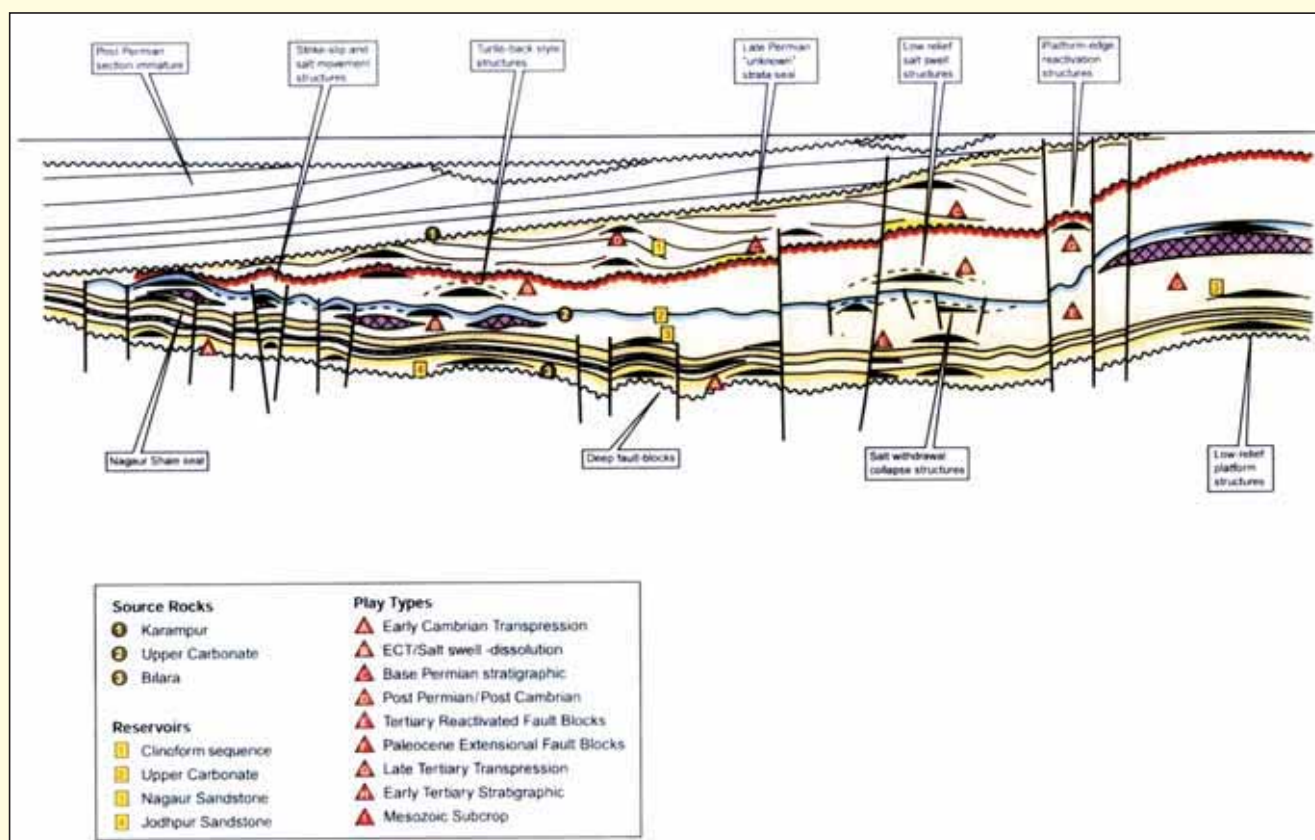
DISTRIBUTION OF HYDROCARBON PROSPECTS IN DEEP WATER AND OFFSHORE, EAST COAST



HYDROCARBON PROSPECT MAP – WEST COAST

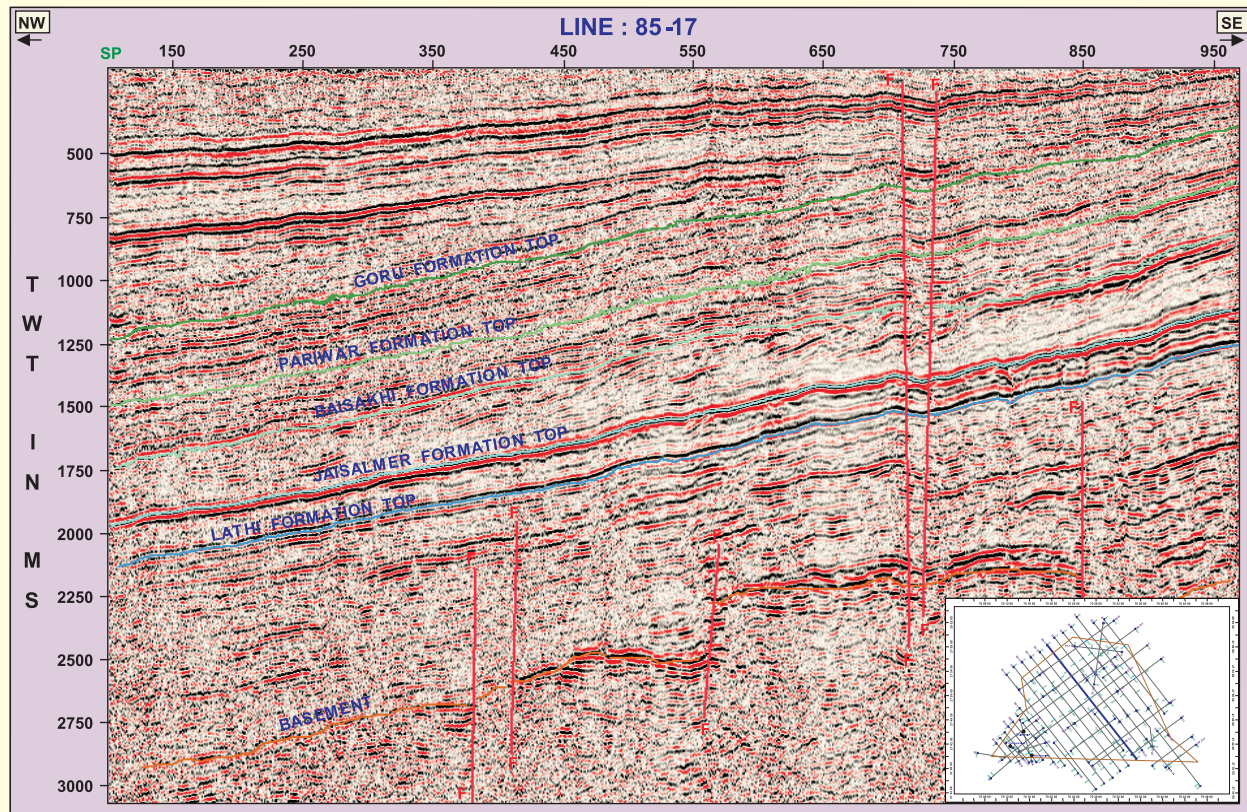


PLAY TYPES : BIKANER – NAGOUR BASIN



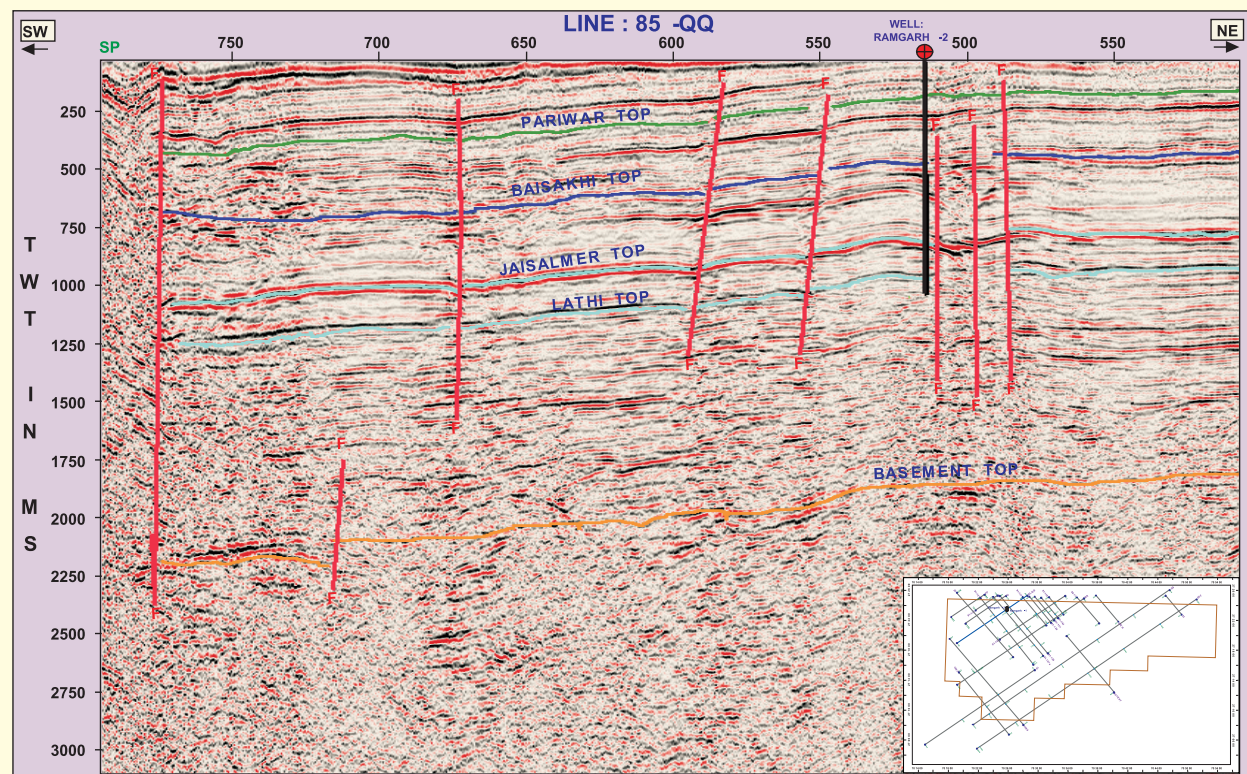
SEISMIC SECTION 65 SHOWING A PROSPECT

RAJASTHAN BASIN



INTERPRETED SEISMIC LINE 85-17

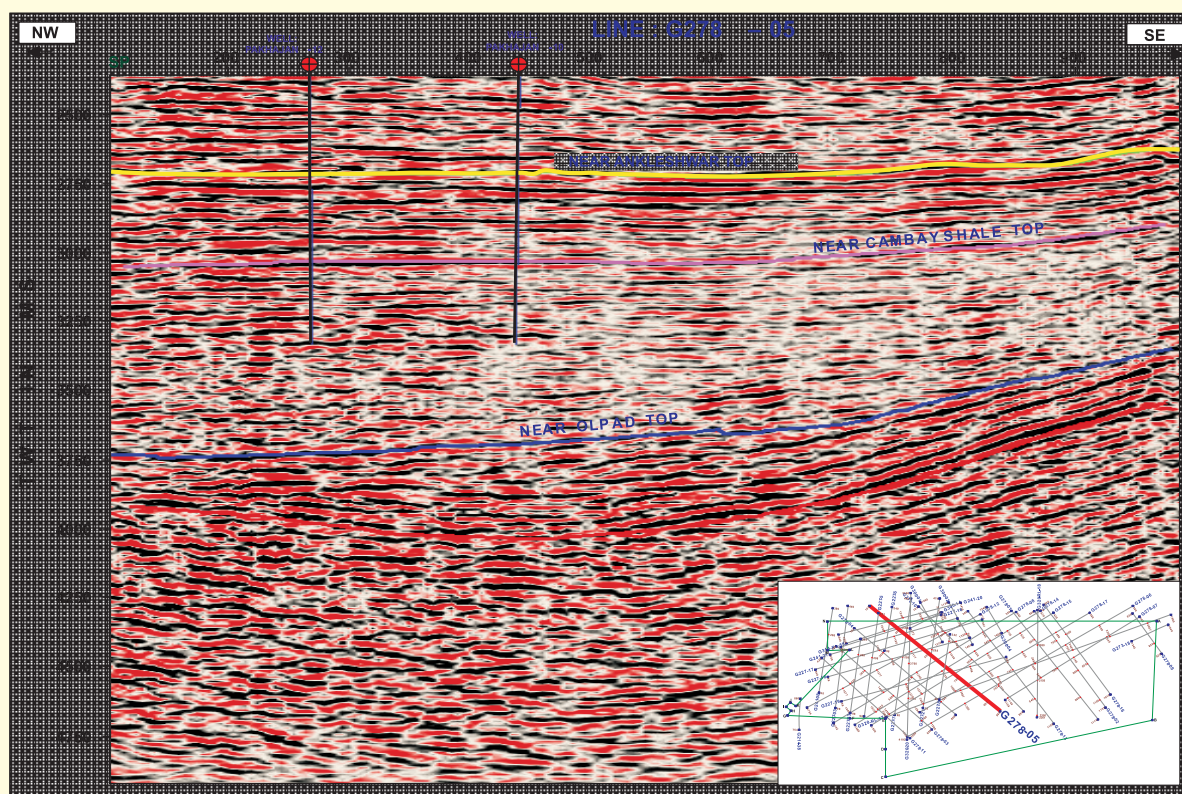
THE PROMINENT VERTICAL BASEMENT FAULT, AFFECTING THE OVERLYING STRATIGRAPHIC UNITS IS EXPECTED TO HAVE FORMED FAULT CLOSURES AT DIFFERENT STRATIGRAPHIC LEVELS



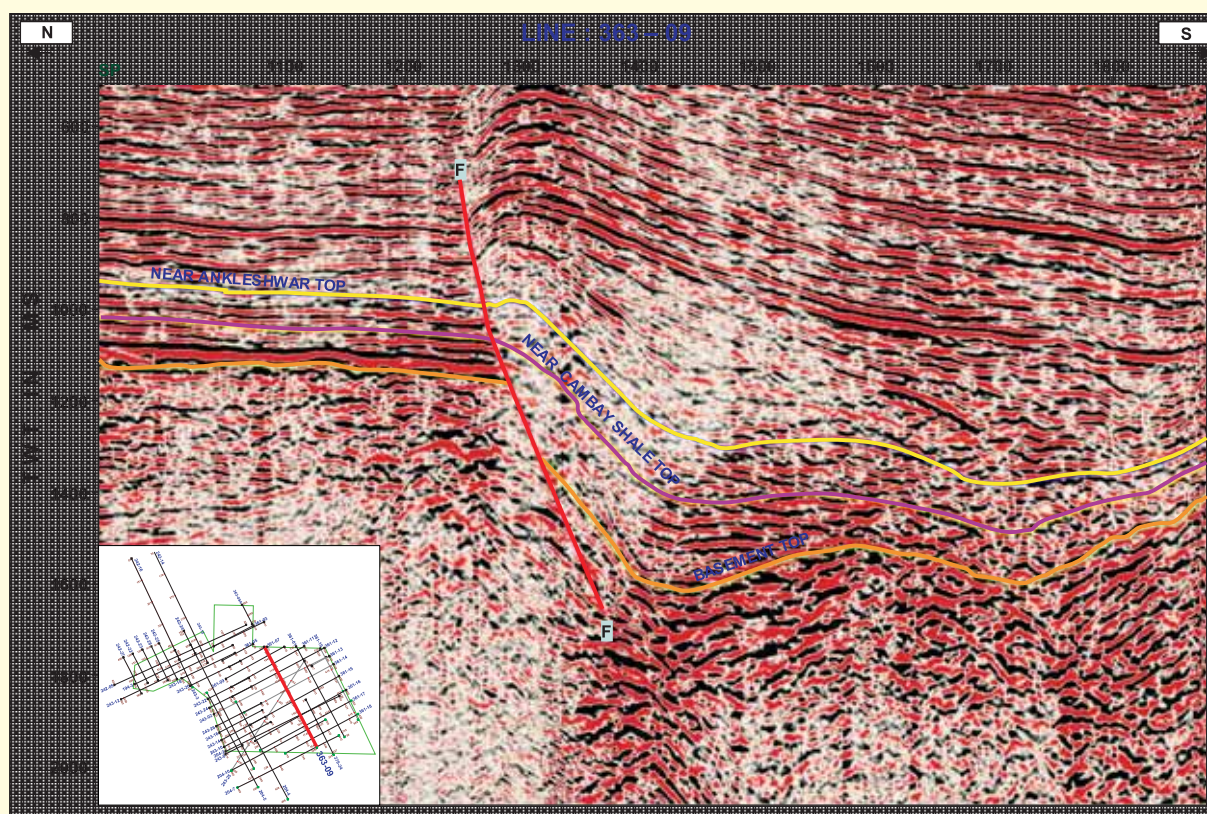
INTERPRETED SEISMIC LINE 85-QQ

SECTION THROUGH WELL RAMGARH-2 SHOWS A NUMBER OF FAULT RELATED STRUCTURAL FEATURES EXPECTED TO HAVE FORMED FAULT CLOSURES). WELL RAMGARH-2 AND 1 INDICATED GAS AT SEVERAL STRATIGRAPHIC LEVELS DURING DRILLING

CAMBAY ONLAND

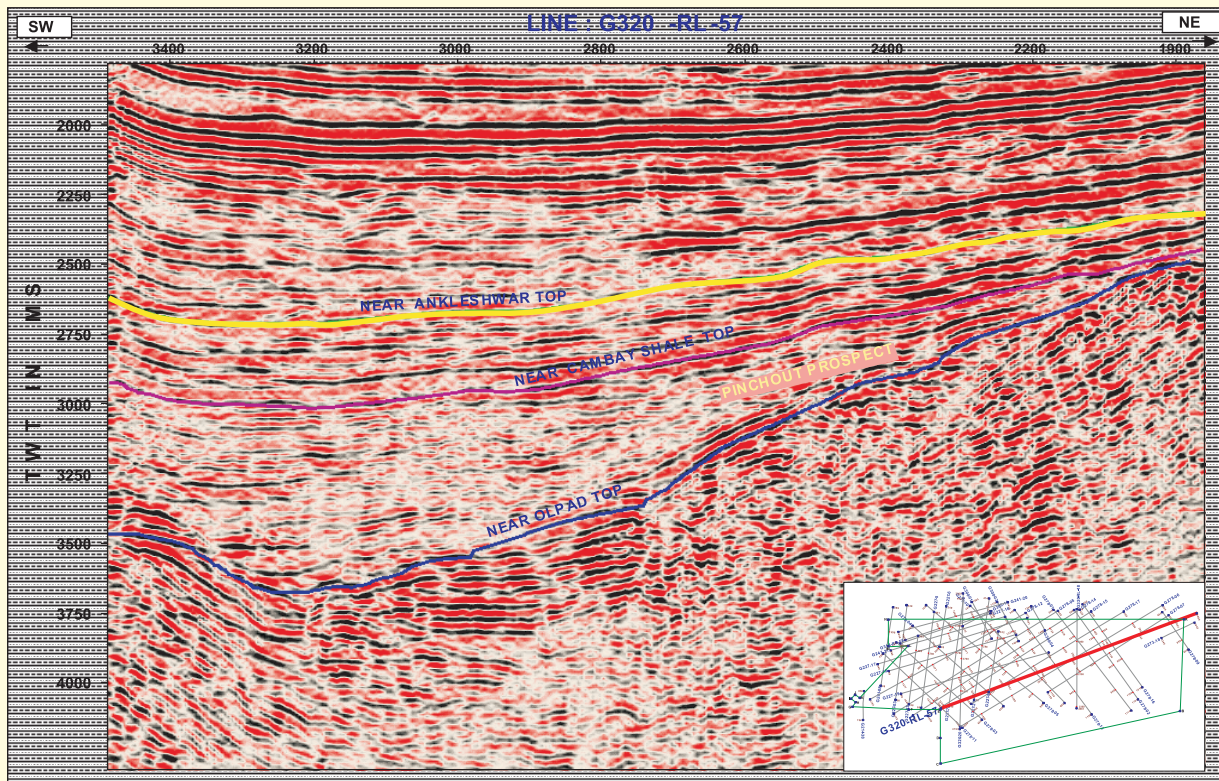


SECTION SHOWS THINNING AND SHALLOWING OF OLPAD AND CAMBAY SHALE FORMATIONS TOWARDS SE, i.e., AT SOUTHERN FLANK OF BROACH DEPRESSION.

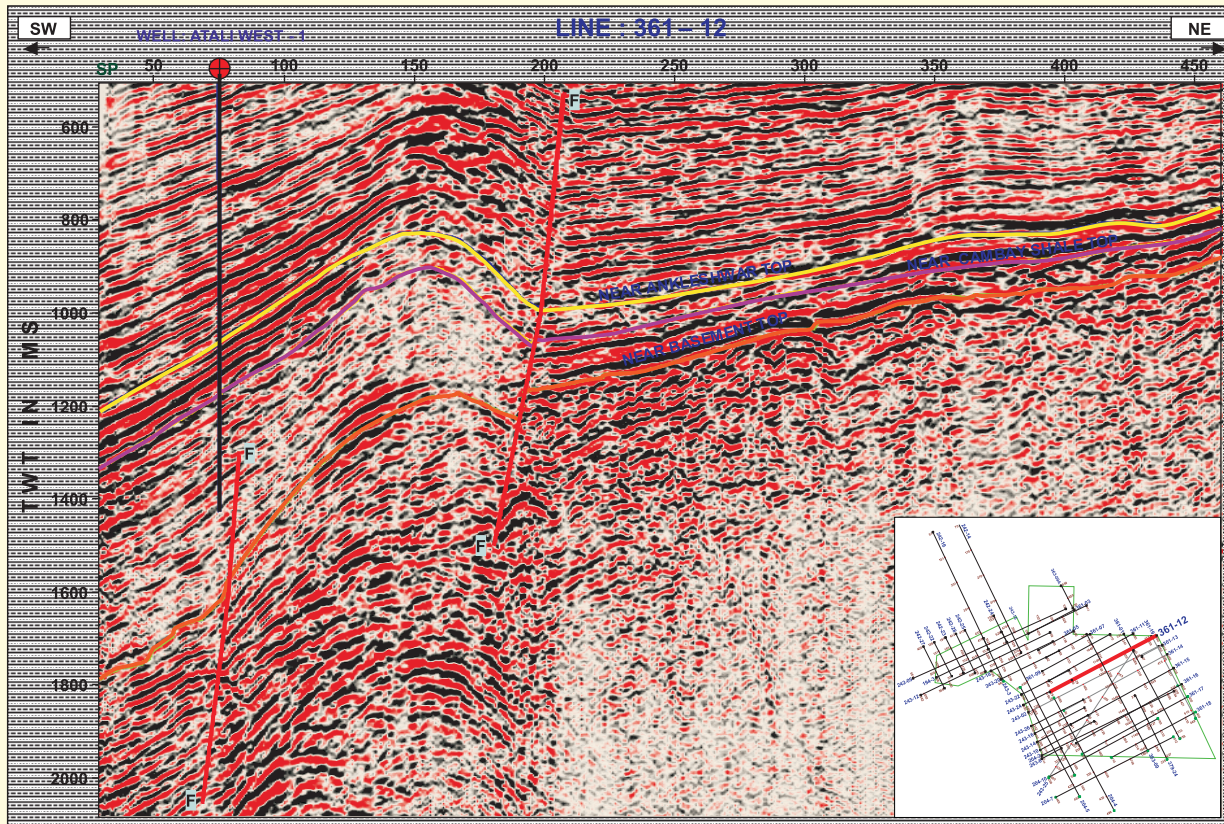


SECTION SHOWS A STRUCTURAL HIGH INVOLVING OLPAD AND CAMBAY SHALE BETWEEN SP 1425-1700 AND AN ANTICLINAL INVERSION STRUCTURE INVOLVING OLPAD AND YOUNGER STRATA BETWEEN SP 1250-1450.

CAMBAY ONLAND

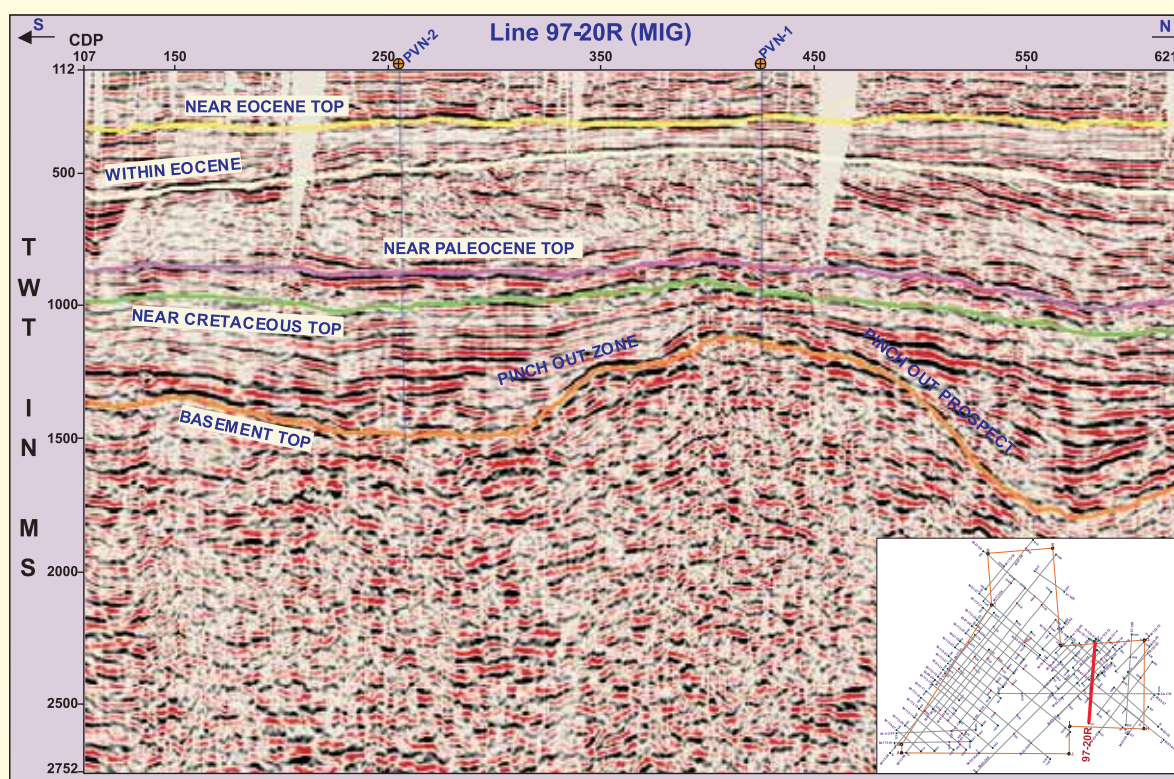


SECTION SHOWS A STRATIGRAPHIC PINCHOUT PROSPECT, INVOLVING OLPAD FORMATION.

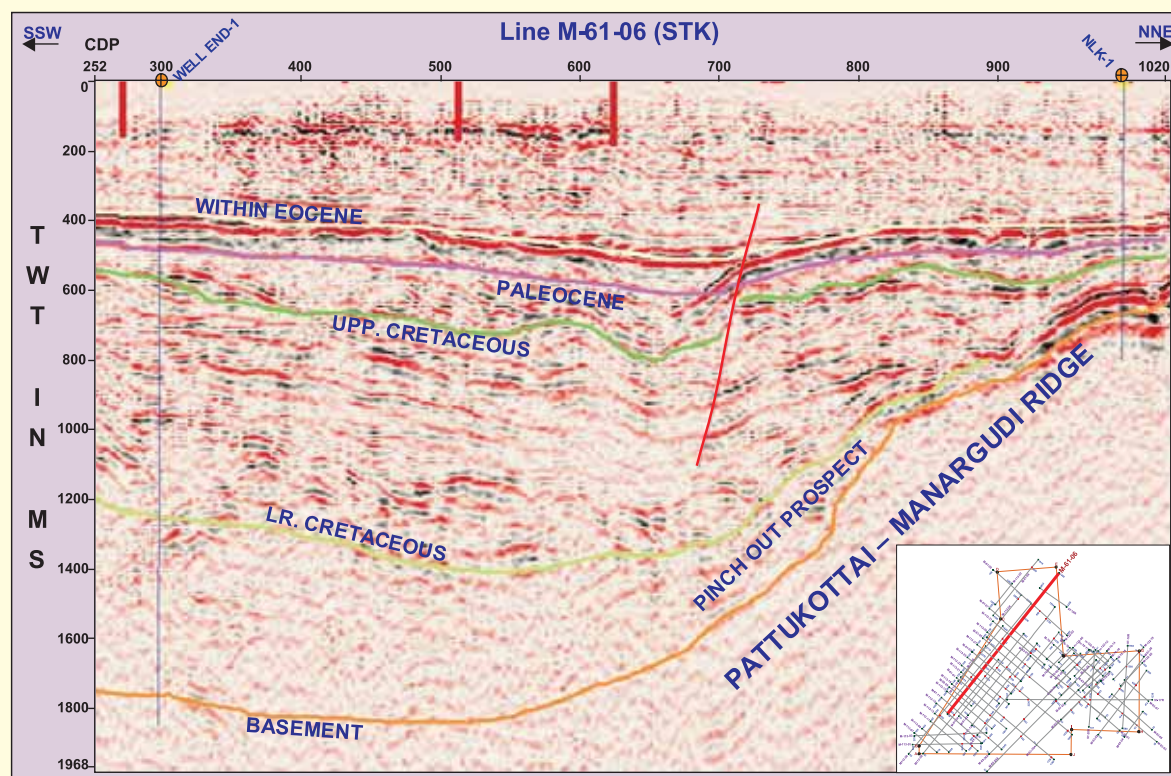


SECTION SHOWS AN ANTICLINAL INVERSION STRUCTURE INVOLVING OLPAD, CAMBAY SHALE, ANKLESHWAR FORMATIONS AND YOUNGER SEDIMENTS. WELL ATALI WEST -1 LIES AT FLANK OF THE STRUCTURE.

CAUVERY ONLAND

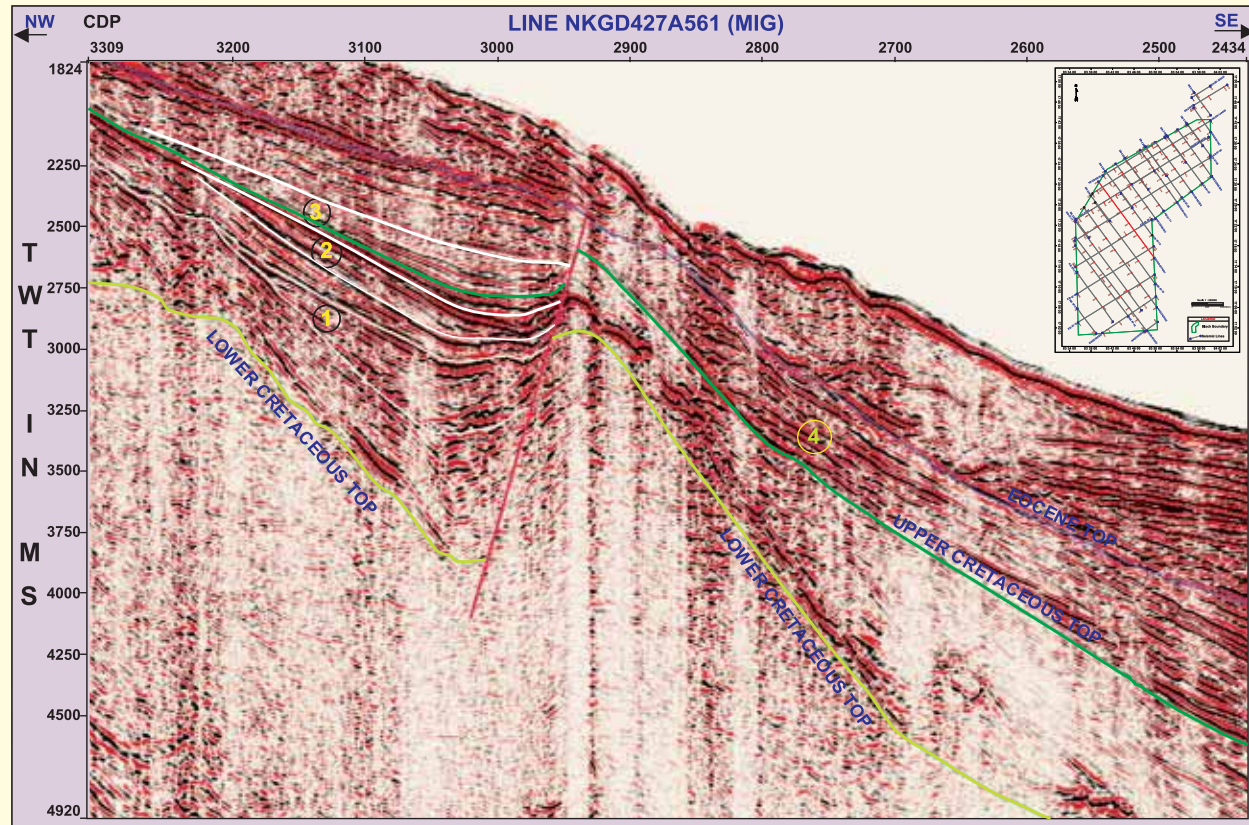


SECTION SHOWING PINCHINGOUT OF LOWER CRETACEOUS AND A MAJOR PORTION OF UPPER CRETACEOUS SEDIMENTARY SECTION AT WESTERN FLANK OF PATTUKOTTAI – MANARGUDI RIDGE, FORMING PINCHOUT TRAP.

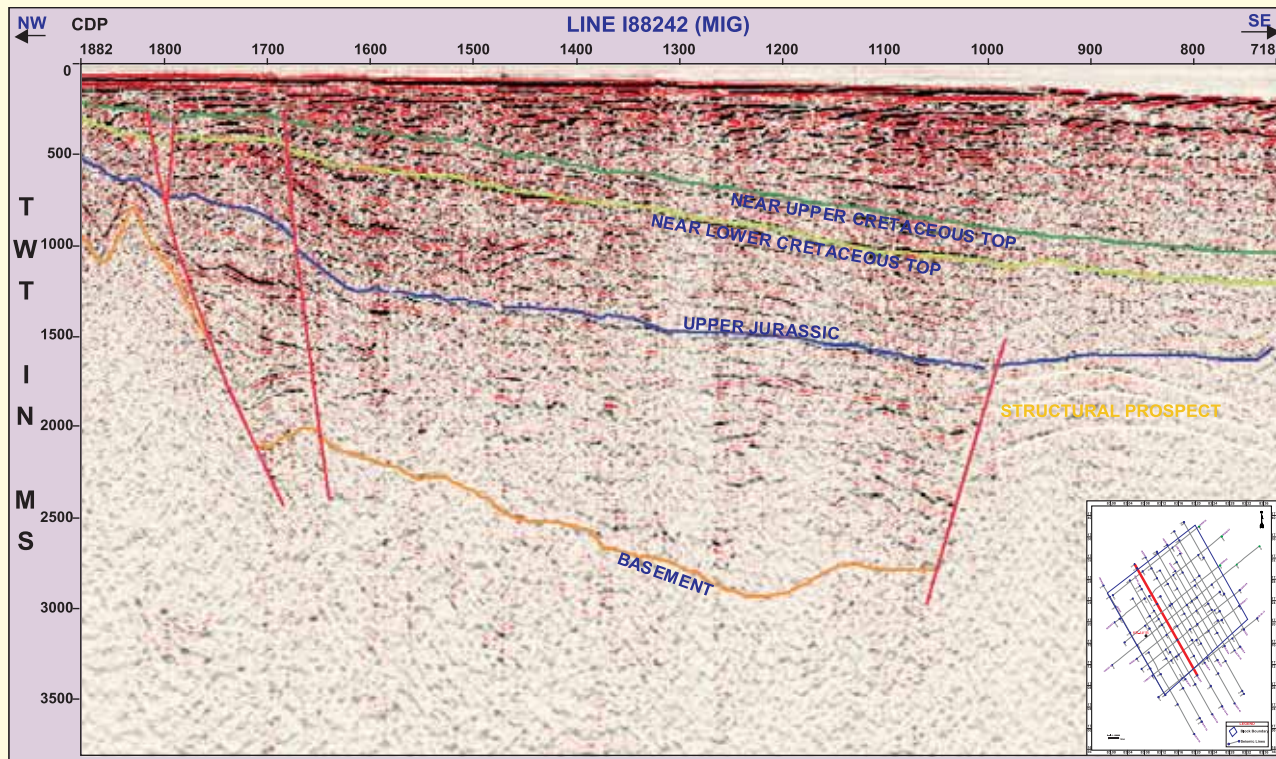


SECTION SHOWING PINCHINGOUT OF LOWER CRETACEOUS AND A MAJOR PORTION OF UPPER CRETACEOUS SEDIMENTARY SECTION AT WESTERN FLANK OF PATTUKOTTAI – MANARGUDI RIDGE, FORMING PINCHOUT TRAP.

KRISHNA GODAVARI OFFSHORE

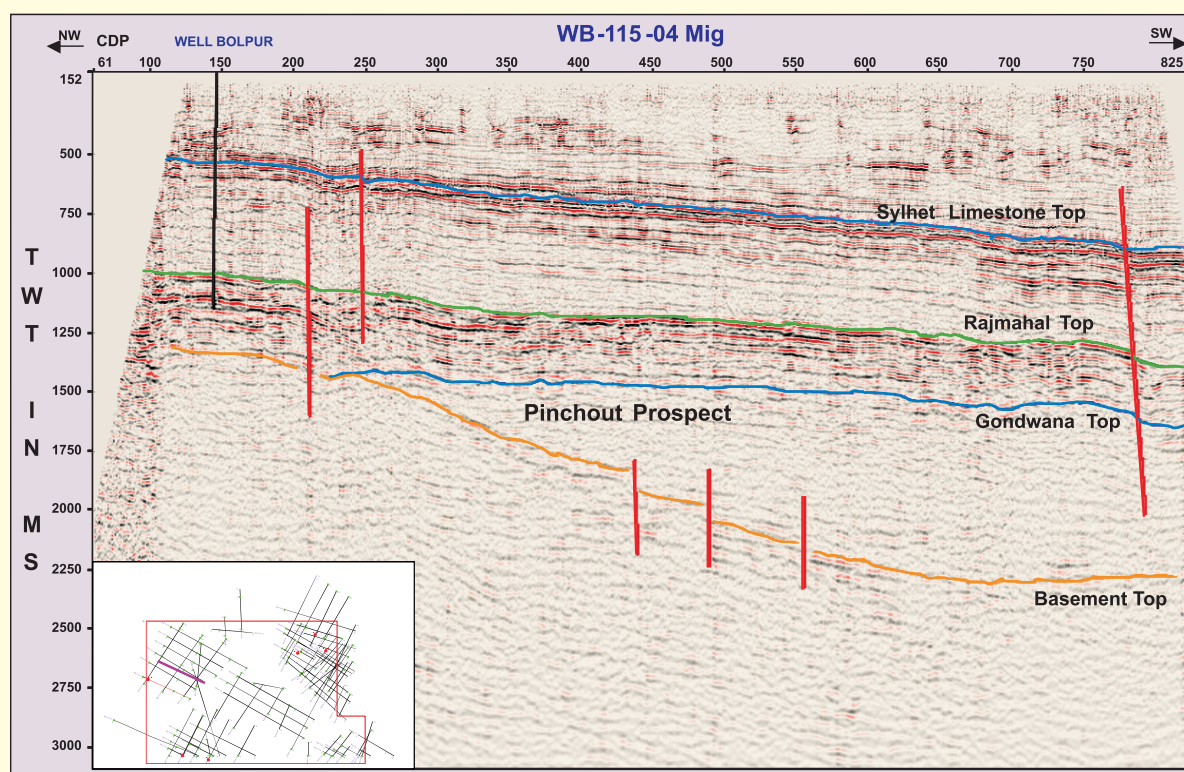


INTERPRETED SEISMIC LINE NO. NKGD427A561 (MIG)
SECTION SHOWS FOUR STRATIGRAPHIC PINCHOUTS (PROSPECTS)

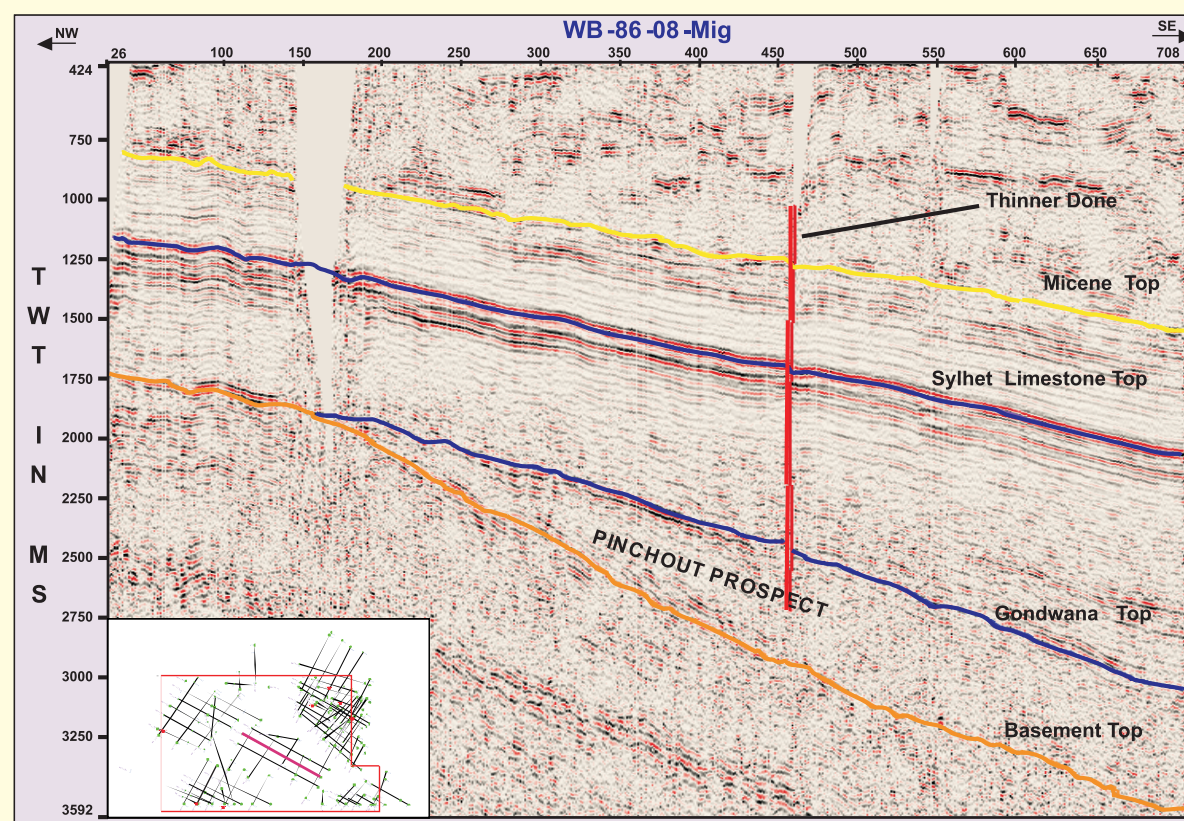


INTERPRETED SEISMIC LINE NO. 188242 (MIG)
(A CONSPICUOUS STRUCTURAL HIGH IS OBSERVED IN THE JURASSIC SECTION BETWEEN SP 718 AND 1000.
FAULT BOUNDED STRUCTURAL FEATURE (MAY BE FAULT CLOSURE) AND ONLY PING OF STRATA ARE SEEN NW OF SHOT POINT 1600)

BENGAL BASIN

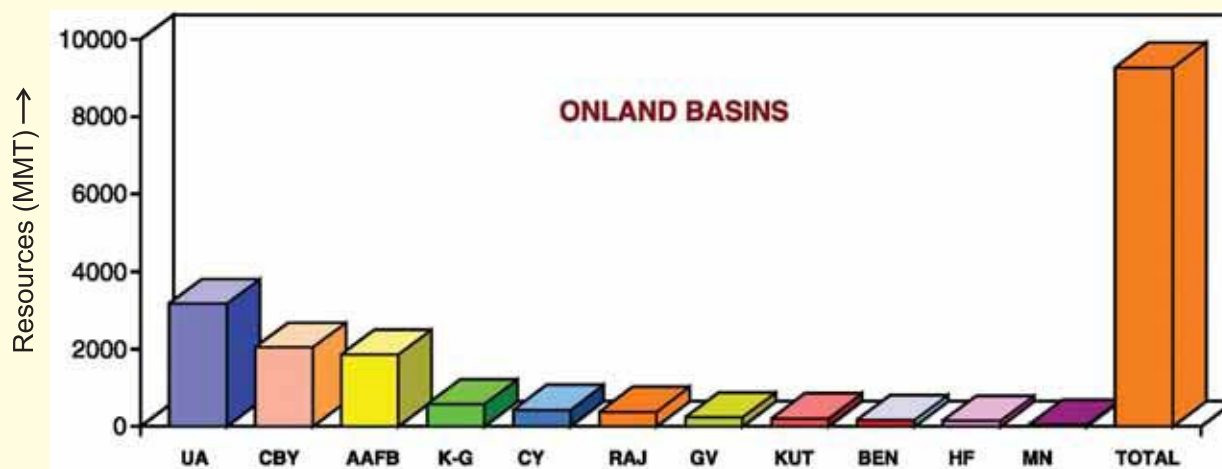
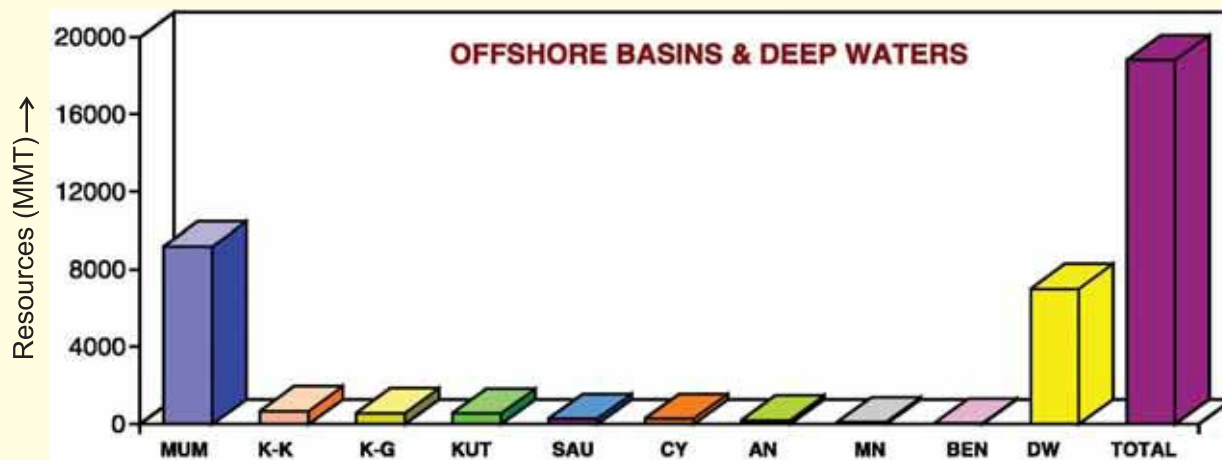


INTERPRETED SEISMIC LINE WB-115-04-Mig
(SECTION SHOWS A PROMINENT PINCHOUT PROSPECT INVOLVING THE GONDWANA SEDIMENTS)



INTERPRETED SEISMIC LINE WB-86-08-Mig
(SECTION SHOWS UPDIP PINCHOUT OF GONDWANA SEDIMENTS FORMING A PROMINENT PINCHOUT PROSPECT)

TOTAL HYDROCARBON RESOURCES (AS ON 01-04-2007)



BASIN-WISE HYDROCARBON RESOURCES (MMT)

BASIN	OFFSHORE	ONLAND	TOTAL
MUMBAI (MUM)	9,190	---	9,190
ASSAM-ARAKAN FOLD BELT (AAFB)	---	1,860	1,860
CAMBAY (CBY)	---	2,050	2,050
UPPER ASSAM (UA)	---	3,180	3,180
KRISHNA-GODAVARI (K-G)	555	575	1,130
CAUVERY (CY)	270	430	700
RAJASTHAN (RAJ)	---	380	380
KUTCH (KUT)	550	210	760
ANDAMAN-NICOBAR (AN)	180	---	180
KERALA-KONKAN (K-K)	660	---	660
SAURASHTRA OFFSHORE (SAU)	280	---	280
GANGA VALLEY (GV)	---	230	230
BENGAL (BEN)	30	160	190
HIMALAYAN FORELAND (HF)	---	150	150
MAHANADI (MN)	100	45	145
DEEP WATER (DW)	7,000	---	7,000
GRAND TOTAL	18,815	9,270	28,085

E&P Data Statistics

SUMMARY

A. Resources and Reserves

- Total hydrocarbon resources, inclusive of deep waters, are estimated at around 28 billion tonnes oil and oil-equivalent of gas (O+OEG). As on 01.04.2007, initial in-place oil and oil equivalent gas of 8.99 billion tonnes and ultimate reserves of 3.37 billion tonnes have been established. The resources estimated by DGH for its 'internal use', for the country, are 32 billion tonnes (O+OEG).

B. Seismic Surveys

- During the year 2006-07, 2-D seismic data acquisition comprised 4,772.17 LKM onland and 37,476.95 LKM offshore data.
- In respect of 3-D seismic data, 7,195.40 Sq. Km onland and 45,092.75 Sq.Km offshore data were acquired.
- A total of 18 nos. 2D seismic parties and 33 nos. 3D seismic parties were deployed in onland areas. 17 seismic vessels were engaged to carryout 2D and 3D seismic surveys in offshore areas.

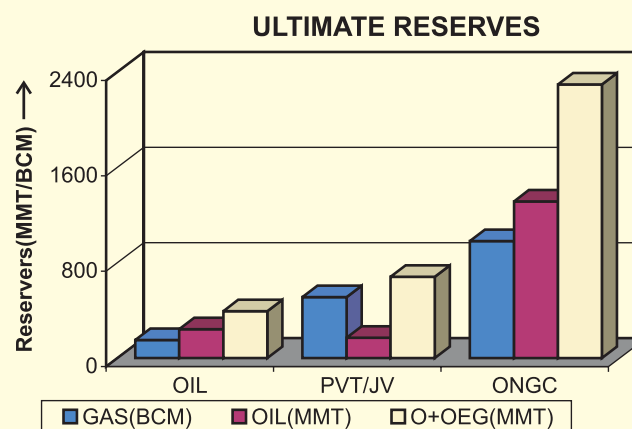
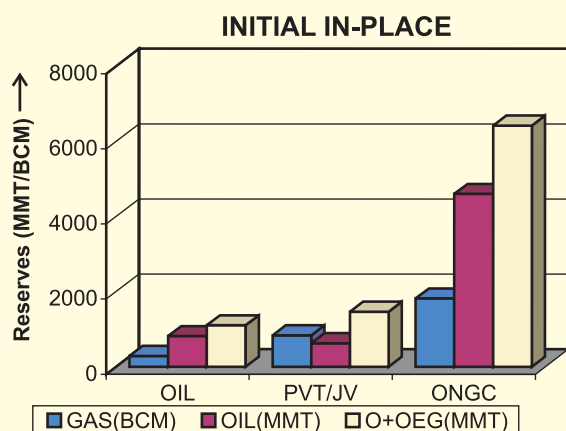
C. Drilling

- Of the total of 415 wells drilled, 163 were exploratory and 252 were development wells. As in the previous year, the national oil companies contributed to the bulk of the drilling. A total of 10,05,050 meters were drilled which includes 406,960 meters of exploratory and 598,090 meters of development drilling.

D. Production

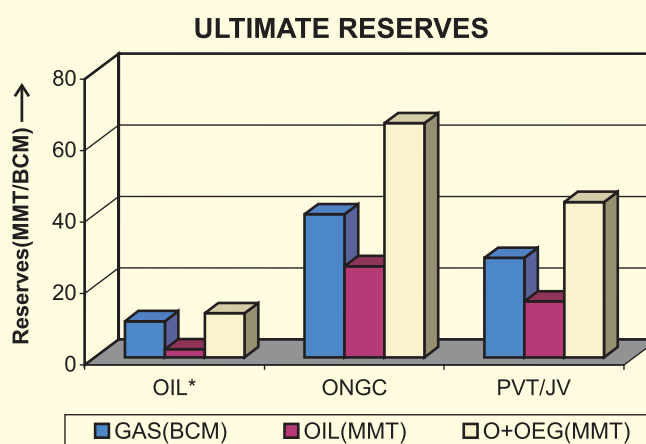
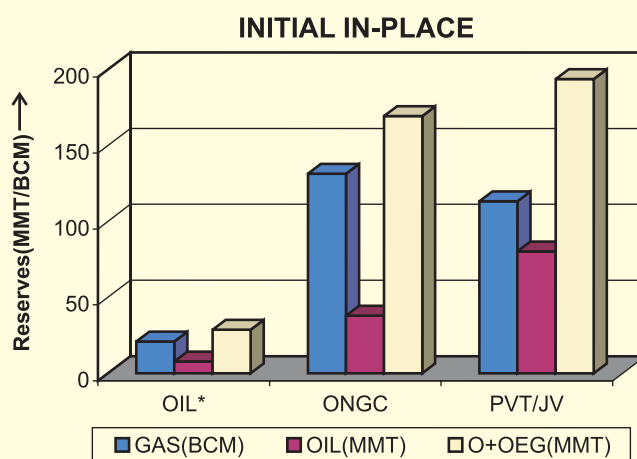
- Total oil production during the year was 33.990 MMT and that of gas 31.746 BCM. The contribution of Pvt / Joint Venture companies was about 18% of the total Oil & OEG production.

INITIAL IN-PLACE AND ULTIMATE RESERVES OF HYDROCARBONS (AS ON 01-04-2007)



COMPANY	INITIAL IN-PLACE			ULTIMATE RESERVES		
	GAS(BCM)	OIL(MMT)	O+OEG(MMT)	GAS(BCM)	OIL(MMT)	O+OEG(MMT)
OIL*	290.01	814.78	1104.79	151.41	242.62	394.03
PVT/JV	838.39	629.23	1467.62	511.26	171.50	682.76
ONGC	1819.95	4602.50	6422.45	982.31	1313.37	2295.68
GRAND TOTAL	2948.35	6046.51	8994.86	1644.98	1727.49	3372.47

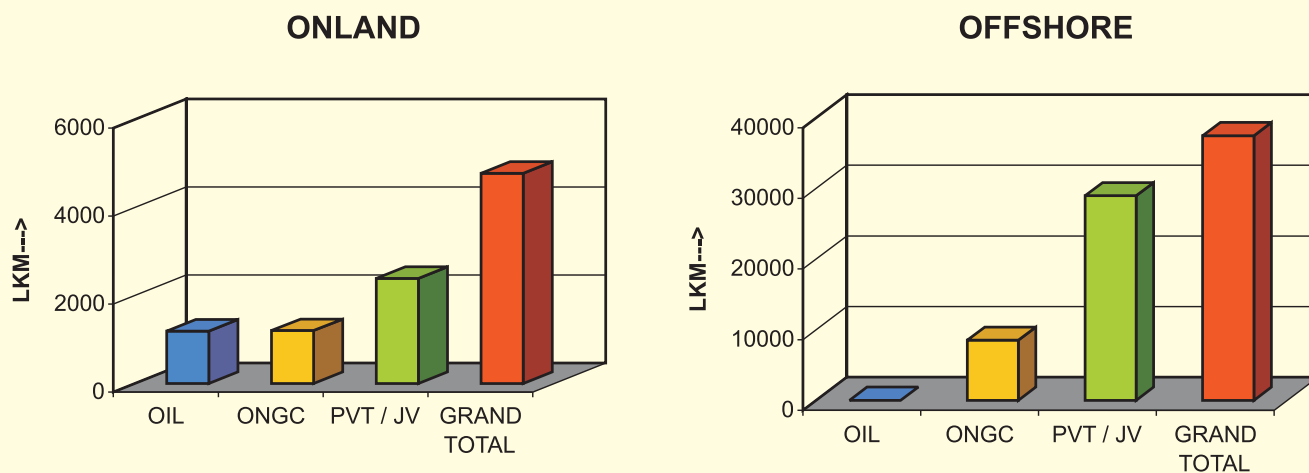
ACCRETION OF IN-PLACE AND ULTIMATE RESERVES ACHIEVED DURING 2006-07



COMPANY	INITIAL IN-PLACE			ULTIMATE RESERVES		
	GAS(BCM)	OIL(MMT)	O+OEG(MMT)	GAS(BCM)	OIL(MMT)	O+OEG(MMT)
OIL*	21.06	7.79	28.85	10.10	2.24	12.34
ONGC	131.55	37.97	169.52	40.03	25.53	65.56
PVT/JV	113.43	80.45	193.88	27.84	15.65	43.49
GRAND TOTAL	266.04	126.21	392.25	77.97	43.42	121.39

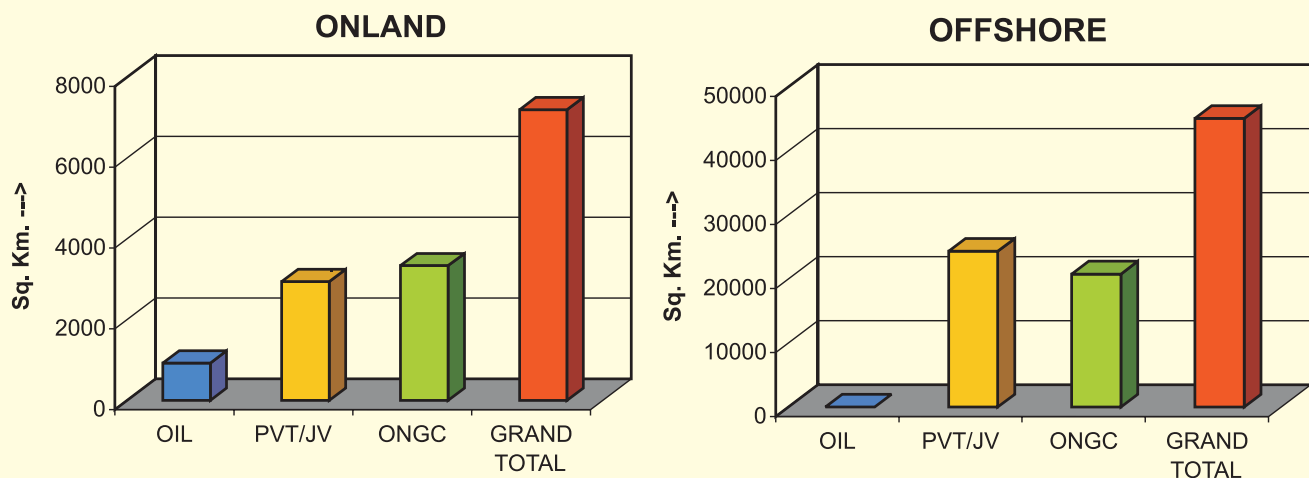
* 2P reserves considered for Oil India Ltd.

2-D SEISMIC DATA ACQUIRED (2006-07)



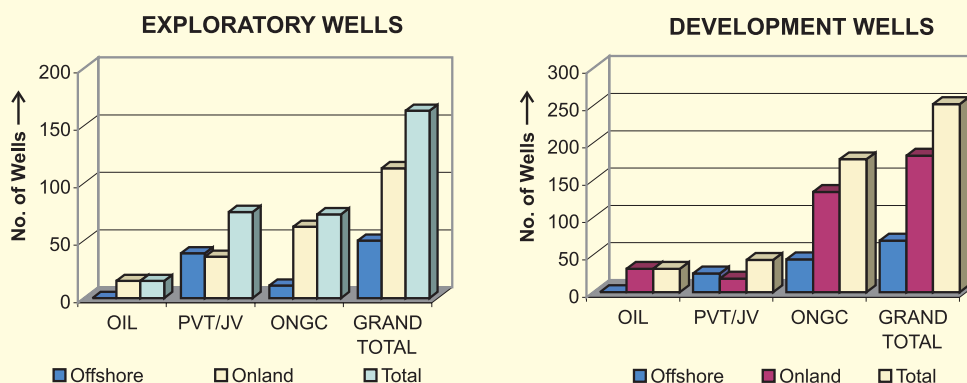
COMPANY	ONLAND LKM	OFFSHORE LKM
OIL	1185.77	0.00
ONGC	1199.40	8512.95
PVT / JV	2387.00	28964.00
GRAND TOTAL	4772.17	37476.95

3-D SEISMIC DATA ACQUIRED (2006-07)



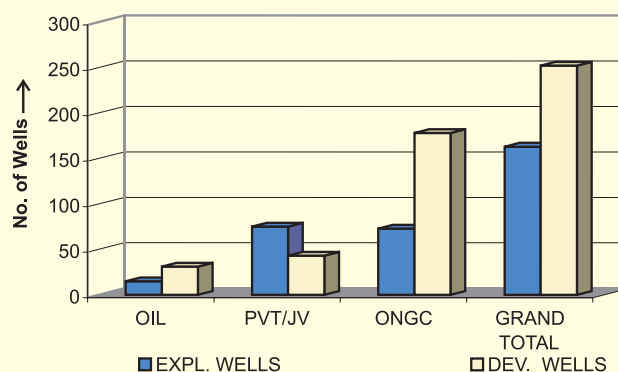
COMPANY	ONLAND Sq.Km.	OFFSHORE Sq.Km.
OIL	923.39	0.00
PVT/JV	2937.00	24318.00
ONGC	3335.01	20774.75
GRAND TOTAL	7195.40	45092.75

EXPLORATORY AND DEVELOPMENT WELLS DRILLED (2006-07)



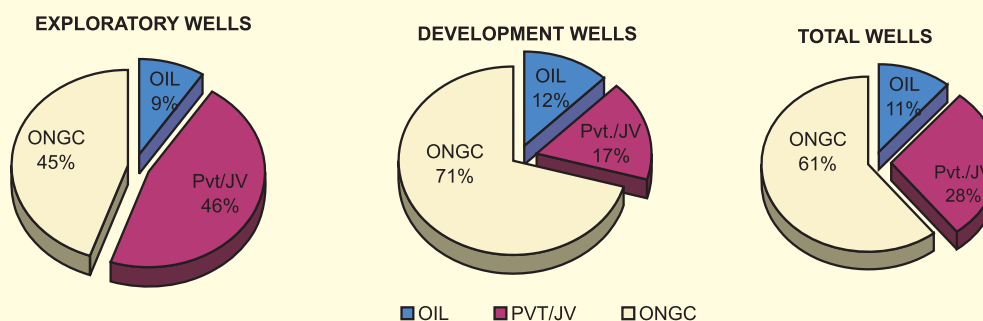
COMPANY	EXPLORATORY WELLS			DEVELOPMENT WELLS		
	Offshore	Onland	Total	Offshore	Onland	Total
OIL	0	15	15	0	31	31
PVT/JV	39	36	75	25	18	43
ONGC	11	62	73	44	134	178
GRAND TOTAL	50	113	163	69	183	252

TOTAL WELLS DRILLED



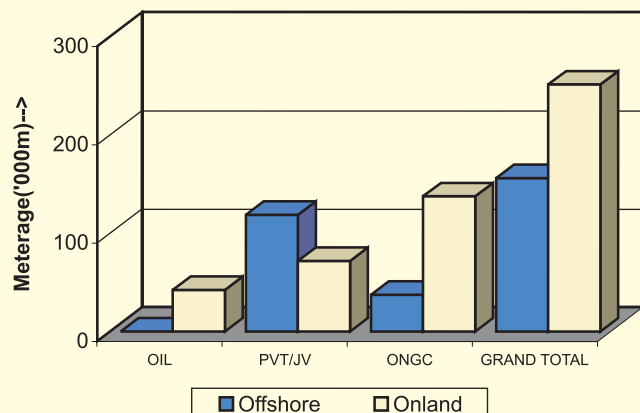
COMPANY	EXPL. WELLS	DEV. WELLS	TOTAL
OIL	15	31	46
PVT/JV	75	43	118
ONGC	73	178	251
GRAND TOTAL	163	252	415

PERCENTAGE DISTRIBUTION

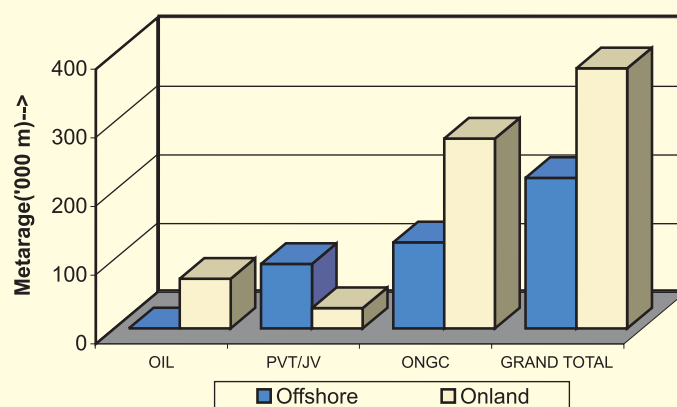


EXPLORATORY AND DEVELOPMENT METERAGE DRILLED (2006-07)

EXPLORATORY METERAGE

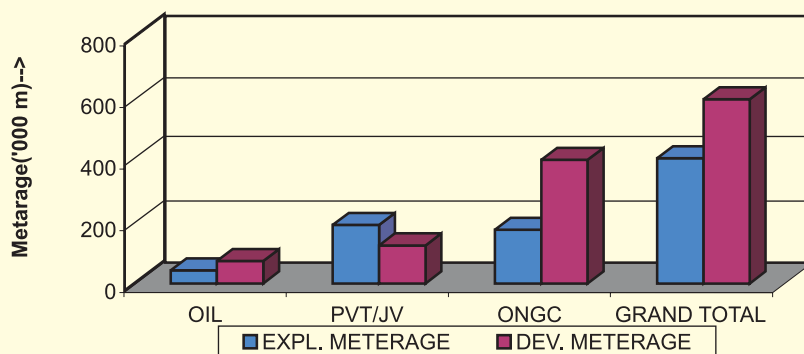


DEVELOPMENT METERAGE



COMPANY	EXPL. METERAGE('000M)		DEV. METERAGE('000M)	
	Offshore	Onland	Offshore	Onland
OIL	0.00	42.07	0.00	72.55
PVT/JV	118.62	71.64	93.91	29.75
ONGC	37.26	137.37	125.50	276.38
GRAND TOTAL	155.88	251.08	219.41	378.68

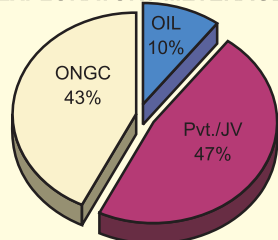
TOTAL METERAGE DRILLED



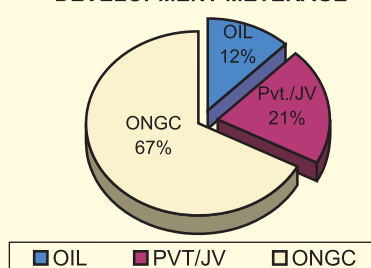
COMPANY	EXPL. METERAGE ('000M)	DEV. METERAGE ('000M)	TOTAL ('000m)
OIL	42.07	72.55	114.62
PVT/JV	190.26	123.66	313.92
ONGC	174.63	401.88	576.51
GRAND TOTAL	406.96	598.09	1005.05

PERCENTAGE DISTRIBUTION

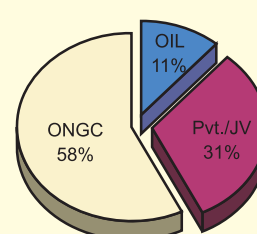
EXPLORATORY METERAGE



DEVELOPMENT METERAGE

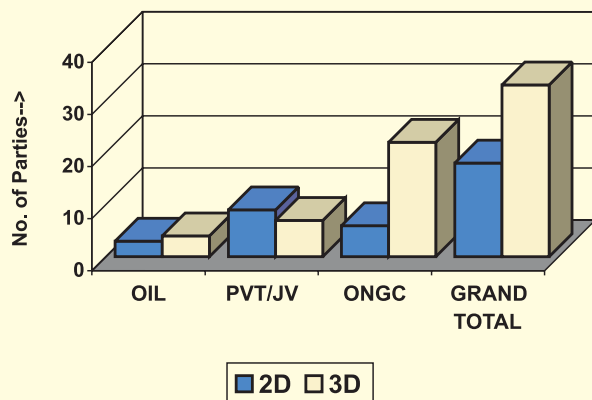


TOTAL METERAGE

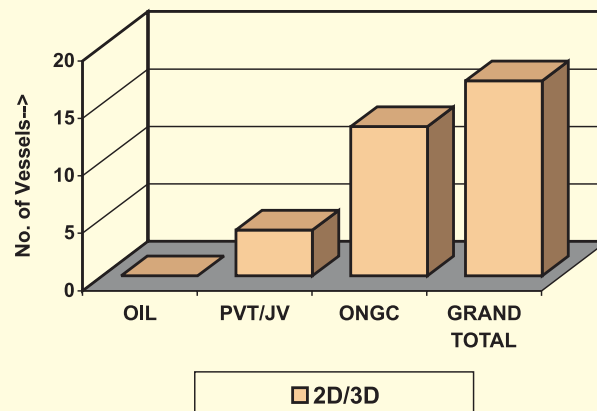


SEISMIC PARTIES / VESSELS DEPLOYED (2006-07)

ONLAND (Parties)

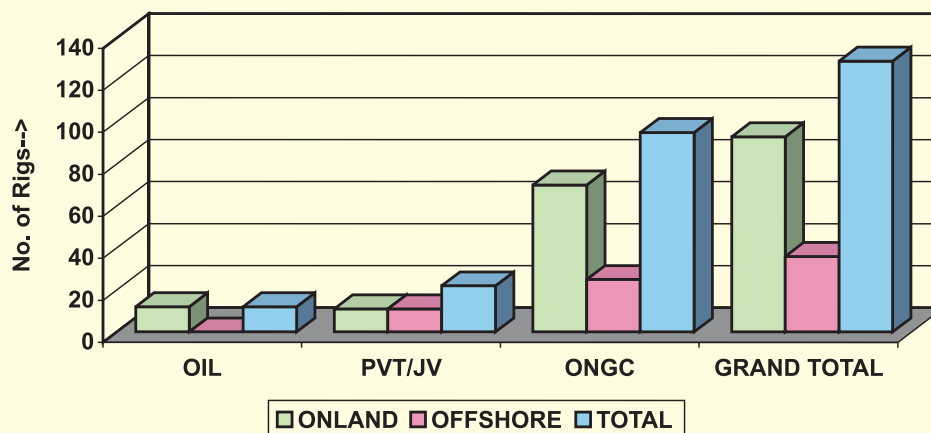


OFFSHORE (Vessels)



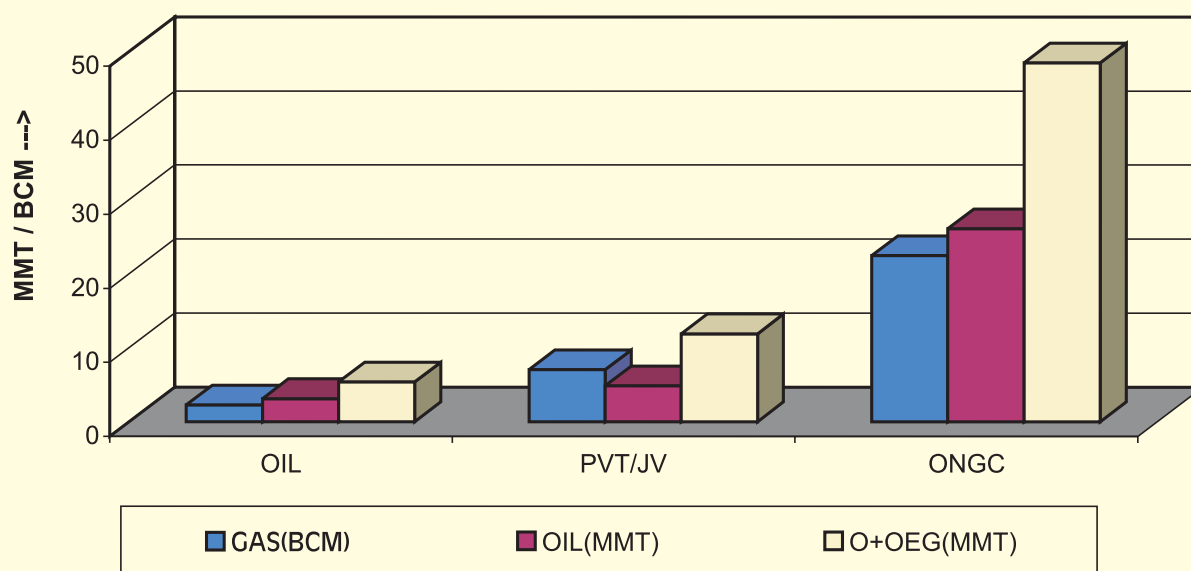
COMPANY	ONLAND (Parties)		OFFSHORE (Vessels)	TOTAL
	2D	3D	2D/3D	
OIL	3	4	0	7
PVT/JV	9	7	4	20
ONGC	6	22	13	41
GRAND TOTAL	18	33	17	68

DEPLOYMENT OF DRILLING RIGS



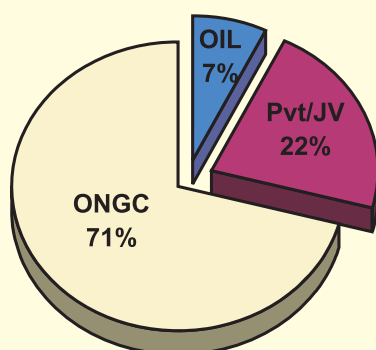
COMPANY	ONLAND	OFFSHORE	TOTAL
OIL	12	0	12
PVT/JV	11	11	22
ONGC	70	25	95
GRAND TOTAL	93	36	129

OIL & GAS PRODUCTION (2006-07)

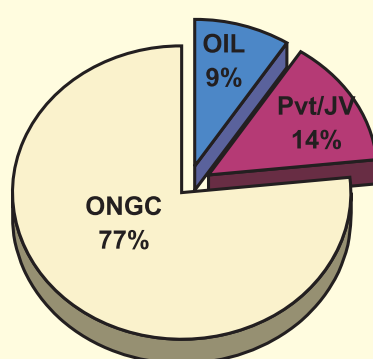


PERCENTAGE DISTRIBUTION

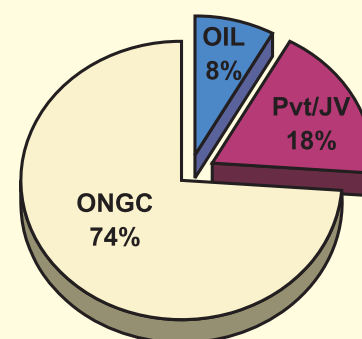
GAS PRODUCTION



OIL PRODUCTION

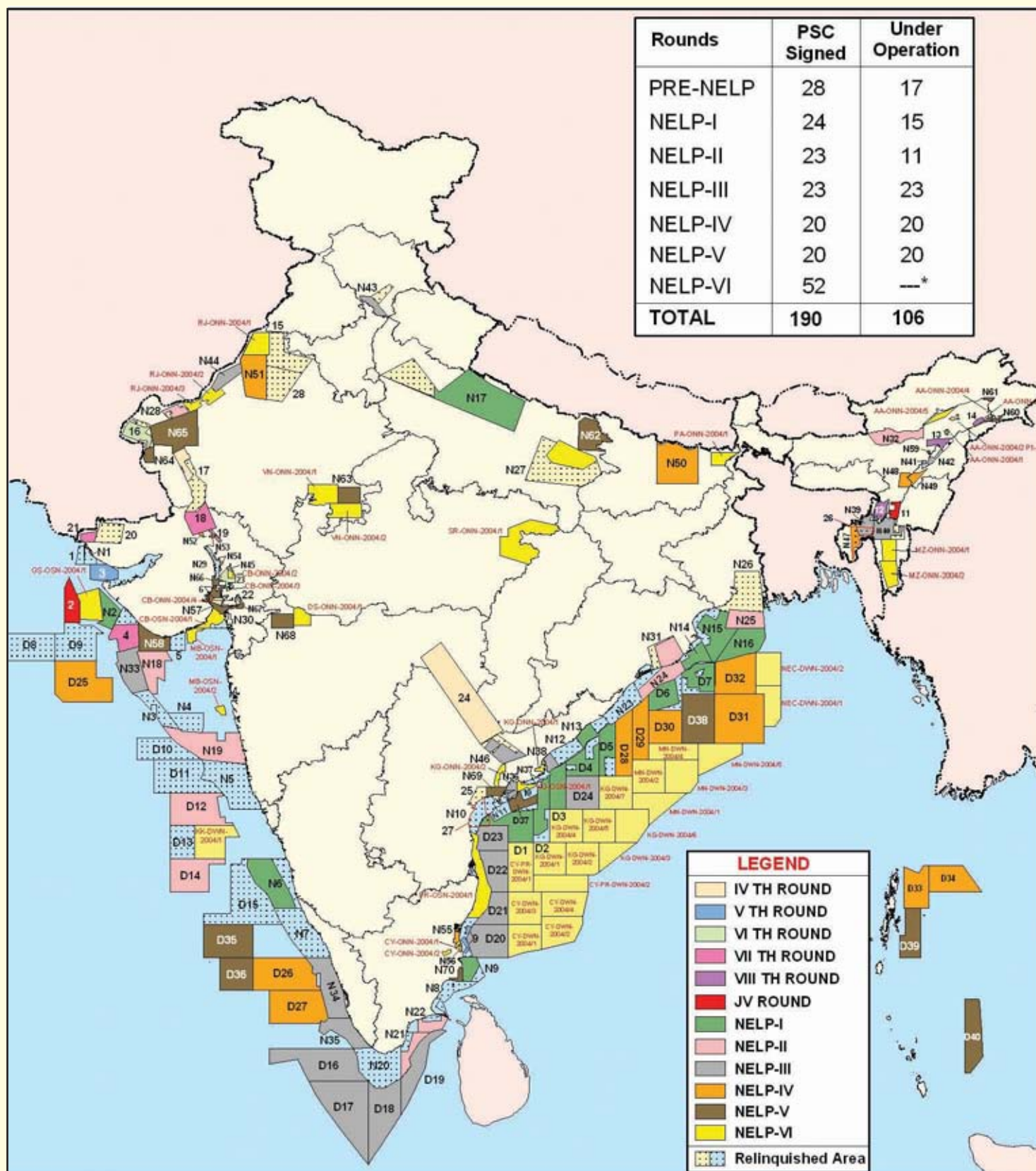


O+OEG PRODUCTION



COMPANY	GAS(BCM)	OIL(MMT)	O+OEG(MMT)
OIL	2.264	3.110	5.374
PVT/JV	7.039	4.829	11.868
ONGC	22.443	26.051	48.494
GRAND TOTAL	31.746	33.990	65.736

PRE-NELP & NELP EXPLORATION BLOCKS UNDER OPERATION BY NOCs & Pvt/JV COMPANIES



New Initiatives

SUMMARY

- Of the various initiatives taken by DGH, the first, second, third, fourth and fifth rounds of the New Exploration Licensing Policy (NELP-I, II, III, IV & V) are already under operation. Blocks awarded in NELP-VI were granted PELs in the year 2007-08.
- In the first round of NELP (NELP-I), 24 blocks were awarded for hydrocarbon exploration, which include 7 blocks in east coast deep water, 16 blocks in shallow Offshores of east and west coasts and 1 onland. 9 blocks have been relinquished / surrendered. At present, 15 exploration blocks are under operation.
- Under NELP-II, 23 blocks were awarded for exploration including 8 in the deep waters off the west coast, 8 in the shallow offshore regime of both east and west coasts, and 7 onland. 12 blocks have been relinquished / surrendered. 11 exploration blocks are presently under operation.
- Under NELP-III, 23 blocks were awarded for exploration including 9 in the deep waters off the west and east coast of India, 6 in the shallow offshore regime of both east and west coasts, and 8 onland.
- Under NELP-IV, a total of 20 blocks were awarded, of which 10 blocks are in onland and 10 in the deep waters of the west coast, east coast and Andamans. Blocks in Andaman offshore were awarded for the first time.
- Under NELP-V, a total of 20 blocks were awarded, of which 6 blocks in the deepwaters, 2 in the shallow offshore and 12 in onland sedimentary basins.
- Under NELP-VI, a total of 52 blocks were awarded of which 21 blocks fall in deepwater, 6 blocks in shallow offshore and 25 blocks fall in onland. 3 blocks - 1 in Andaman and 2 in Kerala - Konkan deep water have not received any bids.
- A new policy namely, Open Acreage Licensing Policy (OALP), is emerging. Under this policy, E&P companies will be able to access geoscientific data throughout the year at National Data Repository (NDR) and bid for acreages at predetermined intervals of time, like twice or thrice in a year. OALP will provide a continuous window of opportunity for companies to invest in exploration activities. The OALP envisages demarcating the country into geodetic grids of a particular size. This will provide basis to bidders to select the size and shape of the block they intend to explore. E&P companies are required to choose and bid for a full grid or a contiguous part of it. Government of India is in the process of establishing National Data Repository (NDR), which will have diverse E&P data, collected in the past by different agencies. NDR will also have regional seismic lines and exploratory well information for the basins. In the first phase of NDR, Government is planning to populate only E&P data of those areas which are likely to be offered in the initial OALP phase. OALP is expected to be announced and implemented in the near future.
- DGH has taken important strides in providing a platform for exploration and subsequent commercial exploitation of CBM by national, private and international entrepreneurs. Under three rounds of international bidding 26 blocks have so far been awarded. There was overwhelming response in each round of bidding. All these blocks

together have opened up an area of 13600 sq. km. for CBM exploration, with estimated CBM resources of 1453 BCM. The exploration activities have established encouraging CBM resources in these blocks. There has been significant finds in the central & eastern parts of India. CBM gas is being flared in the test wells of Sohagpur, Raniganj and Jharia CBM blocks. RIL has already started producing 2 MW power from CBM gas for their in-house use from the block awarded.

- DGH interacts with various Institutes, Universities, and Organizations related to upstream hydrocarbon sector both in India and abroad. The interactions are both on regulatory provisions of upstream hydrocarbon sector and R&D subjects. After its conception in August 2004, DGH has started cooperation with various Institutes & Universities of repute in India and abroad. Consequent to the Brain Storming session on “R&D in upstream Hydrocarbon Sector” organized on March 2, 2005, DGH has signed MOUs with Alberta Research Council, Canada; Norwegian Petroleum Directorate, Norway and Energy Resources and Development Unit (ERDU) of Department of Trade and Industries (DTI), U.K. Yet another Brainstorming session on January 6, 2006 was organized and DGH extended its cooperation both at the national and International level.

At the National level DGH has taken up the task of curriculum revision which would be suggested to the Institutes and Universities in India for implementation. This need was felt due to the increasing demand in the E&P Human Resources globally. The idea is to prepare our freshers passing out from Universities technically sound in Geology & Geophysics meeting the expectations of the E&P Industry. A model curriculum has been prepared and discussed with most of the premier Institutes and Universities of our country. IIT Mumbai is the first to implement the same as well.

At the International level DGH is actively interacting with the Norwegian Petroleum Directorate and the Energy Research and Development Unit of the DTI, UK in matters pertaining to various projects like the setting up of the National Data Repository & Evaluation of Development plan etc.

- DGH is setting up a National Data Repository (NDR) of geoscientific data in India. This will provide a common platform for E & P companies in India and abroad for knowledge sharing and technology development and also create a network between R & D institutes, academic institutions and industry.
- DGH has been actively involved in the National Gas Hydrate Programme which was formulated in 1997 and got a boost by the launch of Gas Hydrate R & D Drillship “JOIDES RESOLUTION”.
- More than 20 lakh documents were scanned and electronically stored to improve upon Document Storage Management.
- A seismic data processing system has been fully installed at DGH. This facility is capable of normal processing jobs as well as specialized processing requirements. Seismic data processing including special processing on commercial basis was undertaken for the first time at DGH for HOEC during this year.
- DGH has undertaken “Technical Surveillance visits” to various Pvt/JV fields for better reservoir management, optimal production and better co-ordination with operators.

NEW EXPLORATION LICENSING POLICY (NELP)

The New Exploration Licensing Policy (NELP) was formulated by Government of India during 1997-98 to provide a level playing field to both Public and Private sector companies in exploration and production of hydrocarbons. The foreign and Indian private companies are invited to supplement the efforts of National Oil Companies in the discovery of hydrocarbons. Under NELP, acreages are offered to the participating companies through the process of open competitive bidding. The first round for offer of blocks was in the year 1999 and second to sixth rounds were in the years 2000, 2002, 2003, 2005 and 2006 respectively. The seventh round of offer is expected to take place towards the **end of 2007** and good number of blocks are expected to be offered in the seventh round.

Companies would be required to bid for:

- Work programme commitment.
- Percentage of value of annual production sought to be allocated towards cost recovery.
- Profit Petroleum share offer to Govt. of India by the contractor at minimum and maximum levels of pre-tax multiple of investments expected to be reached.

The weightage to the above three parameters varies from one round to another depending upon the contemporary environment / competition and government policies. The companies winning the blocks will enter into Production Sharing Contract (PSC) with Govt. of India.

Some of the features of the attractive terms offered by the Government are:

- The possibility of seismic option alone in the first phase of the exploration period.
- Upto 100% participation by foreign companies.
- Partnership with foreign companies is encouraged for deep water blocks.
- New category Type-S created to encourage non E&P Companies.
- No minimum expenditure commitment during exploration period.
- No signature, discovery or production bonus.
- No mandatory state participation.
- No interest carried by National Oil Companies (NOCs).
- Income Tax Holidays for seven years from start of commercial production.
- No custom duty on imports required for petroleum operations.
- Biddable cost recovery limit: Upto 100%.
- Option to amortise exploration and drilling expenditures over a period of 10 years from first commercial production.
- Sharing of profit petroleum with Government of India based on pre-tax investment multiple achieved by the contractor and is biddable.
- Royalty for onland areas is payable at the rate of 12.5% for crude oil and 10% for natural gas. For shallow water offshore areas, royalty is payable at the rate of 10% for both crude oil and natural gas whereas for deepwater offshore areas (beyond 400m iso-bath) royalty is payable for both crude oil & natural gas at the rate of 5% for the first seven years of commercial production and thereafter at the rate of 10%.
- Fiscal stability provision in the contract.
- Freedom to the contractor for marketing of gas in the domestic market.
- Provisions for assignment.
- Arbitration and Conciliation Act 1996, based on UNCITRAL model, applicable.
- To facilitate investors, a Petroleum Tax Guide (PTG) is in place.

Significant discoveries have been made after the implementation of NELP with active participation by private companies from India and abroad.

EXPLORATION BLOCKS AWARDED UNDER PRE-NELP

(As on 01.04.2007)

SL NO.	ROUND	BASIN	BLOCK NAME	REF.NO ON MAP	CONSORTIUM (PARTICIPATING INTEREST)	DATE OF SIGNING CONTRACT	APPROX AREA (SQ. KM.)
A. BLOCKS AWARDED							
ONLAND							
1.	IV	PRANHITA-GODAVARI	GN-ON-90/3	24	HOEC (75) & MIL (25)	29-03-1993	21,850
2.		RAJASTHAN	RJ-ON-90/1	17	CEIL (50) & CEHL (50)	15-05-1995	879.50
3.	VI	RAJASTHAN	RJ-ON/6	16	FEL (10), ISIL (65) & NOCL (25)	30-06-1998	4,026.16
4.		CAMBAY	CB-ON/7	22	HOEC (50) & GSPCL (50)	12-04-2000	369
5.			CB-ON/2	23	GSPC (80) & GGR (20)	12-04-2000	1,201.17
6.	VII	CAMBAY	CB-ON/1	18	RIL (40), TIOL (50) & OOHL (10)	16-07-1998	4600
7.			CB-ON/3	19	EOL (100)	16-07-1998	430.50
8.		GUJARAT-KUTCH	GK-ON/4	21	FEL (100)	30-06-1998	1162.43
9.	VIII	ASSAM-ARAKAN	AAP-ON-94/1	14	HOEC (40), OIL (16) & IOC (44)	30-06-1998	435
10.			CR-ON-90/1	12	PONEI (29), OIL (20), EOL (16) & IOC (35)	30-06-1998	635.38
11.			AA-ON-07	13	CRL (65) & ACL (35)	19-02-1999	1,444.70
12.	JV	ASSAM-ARAKAN	AA-ONJ/2	11	TULLOW (60) & ONGC (40)	07-11-2003	1,277
TOTAL AREA : 38310.84							
OFFSHORE							
13.	V	CAUVERY	CY-OS/2	9	HEPI (75) & GAIL (25)	19-11-1996	859
14.		GUJARAT-KUTCH	GK-OS/5	3	RIL (40), TIOL (50) & OKLAND (10)	16-07-1998	3,750
15.	VI	CAMBAY	CB-OS/1	6	ONGC(32.89), HOEC (57.11) & TPL (10)	19-11-1996	846
16.	VII	SAURASHTRA	SR-OS-94/1	4	RIL (100)	12-04-2000	6,860
17.	JV	GUJARAT-KUTCH	GK-OSJ-3	2	RIL (60), ONGC (25) & OIL (15)	06-09-2001	5,725
TOTAL AREA : 18,040.00							
GRAND TOTAL : 56,350.84							

Blocks Relinquished / Surrendered : Ten

Sl. No.	Block Name	Map Ref. No.	Consortium
1.	KG-ON/1	25	RIL & TIOL
2.	BB-OS/5	5	Petrom SA & EOL
3.	GK-OSJ/1	1	RIL, TIOL & ONGC
4.	GK-ON-90/2	20	Okland
5.	RJ-ON-90/5	15	EOL & POGC
6.	CB-OS/2	7	CEIL, CEIW, CEC, CEG TPL & ONGC
7.	KG-OS/6	10	Cairn & VPL
8.	AA-ON/3	26	Okland
9.	KG-OS-90/1	27	Hardy, HOEC, NIKO & Naga. Fertiliser
10.	RJ-ON-90/4	28	EOL & POGC

1. CY-OS-90/1 Block converted to ML.

EXPLORATION BLOCKS AWARDED UNDER FIRST ROUND OF NELP (NELP-I)

(As on 01.04.2007)

SL NO.	BASIN	BLOCK NAME	REF.NO ON MAP	CONSORTIUM (PARTICIPATING INTEREST)	DATE OF SIGNING CONTRACT	APPROX AREA (SQ. KM.)																																								
DEEP WATER																																														
1.	KRISHNA-GODAVARI	KG-DWN-98/1	D1	RIL (100)	12-04-2000	8100																																								
2.		KG-DWN-98/2	D2	ONGC (90) & CEIL (10)	12-04-2000	7,294.60																																								
3.		KG-DWN-98/3	D3	RIL (90) & NIKO (10)	12-04-2000	7,645																																								
4.		KG-DWN-98/4	D4	ONGC (85) & OIL (15)	12-04-2000	4,970																																								
5.		KG-DWN-98/5	D5	ONGC (100)	12-04-2000	4,490																																								
6.	MAHANADI-NEC	MN-DWN-98/2	D6	RIL (100)	12-04-2000	7,195																																								
7.		MN-DWN-98/3	D7	ONGC (100)	12-04-2000	4,988																																								
					TOTAL AREA :	44,682.60																																								
SHALLOW OFFSHORE																																														
8.	SAURASHTRA	SR-OSN-97/1	N-2	RIL (100)	12-04-2000	5,040																																								
9.	KERALA-KONKAN	KK-OSN-97/2	N-6	RIL (100)	12-04-2000	14,395																																								
10.	CAUVERY	CY-OSN-97/1	N-9	HOEC (80) & MIL (20)	08-01-2001	2,470																																								
11.	KRISHNA-GODAVARI	KG-OSN-97/1	N-13	ONGC (100)	12-04-2000	2,236																																								
12.	MAHANADI-NEC	MN-OSN-97/3	N-14	ONGC (85) & GAIL (15)	12-04-2000	2,710																																								
13.		NEC-OSN-97/2	N-15	RIL (90) & NIKO (10)	12-04-2000	10,755																																								
14.		NEC-OSN-97/1	N-16	OAO GAZPROM (50) & GAIL (50)	03-10-2000	7,779																																								
					TOTAL AREA :	45,385																																								
ONLAND																																														
15.	GANGA VALLEY	GV-ONN-97/1	N-17	ONGC (40), IOC (30) CEIL (15) & CEEPC (15)	12-04-2000	18,375																																								
					TOTAL AREA :	18,375																																								
GRAND TOTAL :						108,442.60 SQ.KM.																																								
Blocks Relinquished : Nine																																														
<table><tr><th>Sl. No.</th><th>Block Name</th><th>Map Ref. No.</th><th>Consortium</th></tr><tr><td>1.</td><td>MB-OSN-97/2</td><td>N-3</td><td>RIL & NIKO</td></tr><tr><td>2.</td><td>MB-OSN-97/3</td><td>N-4</td><td>RIL</td></tr><tr><td>3.</td><td>MB-OSN-97/4</td><td>N-5</td><td>ONGC & IOC</td></tr><tr><td>4.</td><td>CY-OSN-97/2</td><td>N-8</td><td>OIL</td></tr><tr><td>5.</td><td>GK-OSN-97/1</td><td>N-1</td><td>RIL</td></tr><tr><td>6.</td><td>KK-OSN-97/3</td><td>N-7</td><td>ONGC</td></tr><tr><td>7.</td><td>KG-OSN-97/2</td><td>N-12</td><td>RIL</td></tr><tr><td>8.</td><td>KG-OSN-97/3</td><td>N-11</td><td>RIL</td></tr><tr><td>9.</td><td>KG-OSN-97/4</td><td>N-10</td><td>RIL</td></tr></table>							Sl. No.	Block Name	Map Ref. No.	Consortium	1.	MB-OSN-97/2	N-3	RIL & NIKO	2.	MB-OSN-97/3	N-4	RIL	3.	MB-OSN-97/4	N-5	ONGC & IOC	4.	CY-OSN-97/2	N-8	OIL	5.	GK-OSN-97/1	N-1	RIL	6.	KK-OSN-97/3	N-7	ONGC	7.	KG-OSN-97/2	N-12	RIL	8.	KG-OSN-97/3	N-11	RIL	9.	KG-OSN-97/4	N-10	RIL
Sl. No.	Block Name	Map Ref. No.	Consortium																																											
1.	MB-OSN-97/2	N-3	RIL & NIKO																																											
2.	MB-OSN-97/3	N-4	RIL																																											
3.	MB-OSN-97/4	N-5	ONGC & IOC																																											
4.	CY-OSN-97/2	N-8	OIL																																											
5.	GK-OSN-97/1	N-1	RIL																																											
6.	KK-OSN-97/3	N-7	ONGC																																											
7.	KG-OSN-97/2	N-12	RIL																																											
8.	KG-OSN-97/3	N-11	RIL																																											
9.	KG-OSN-97/4	N-10	RIL																																											

EXPLORATION BLOCKS AWARDED UNDER SECOND ROUND OF NELP (NELP-II)

(As on 01.04.2007)

SL NO.	BASIN	BLOCK NAME	REF.NO ON MAP	CONSORTIUM (PARTICIPATING INTEREST)	DATE OF SIGNING CONTRACT	APPROX AREA (SQ. KM.)
DEEP WATER						
1.	KERALA-KONKAN	KK-DWN-2000/1	D12	RIL (100)	17-07-2001	18,113
2.		KK-DWN-2000/3	D14	RIL (100)	17-07-2001	14,889
TOTAL AREA :						33,002
SHALLOW OFFSHORE						
3.	GUJARAT-SAURASHTRA	GS-OSN-2000/1	N18	RIL (90) & HEPI (10)	17-07-2001	8,841
4.	MUMBAI	MB-OSN-2000/1	N19	ONGC (75), IOC (15) & GSPC (10)	17-07-2001	18,414
5.	CAUVERY	CY-OSN-2000/1	N21	ONGC (100)	17-07-2001	4,440
6.		CY-OSN-2000/2	N22	ONGC (100)	17-07-2001	3,530
7.	MAHANADI-NEC	MN-OSN-2000/2	N24	ONGC (40), IOC (20), GAIL (20) & OIL (20)	17-07-2001	4,061
8.	BENGAL	WB-OSN-2000/1	N25	ONGC (85) & IOC (15)	17-07-2001	6,700
TOTAL AREA :						45,986
ONLAND						
9.	RAJASTHAN	RJ-ONN-2000/1	N28	OIL (100)	17-07-2001	1,862.40
10.	MAHANADI	MN-ONN-2000/1	N31	OIL (40), ONGC (20), IOC (20) & GAIL (20)	17-07-2001	5,903
11.	ASSAM-ARAKAN	AS-ONN-2000/1	N32	RIL (90) & HEPI (10)	17-07-2001	6,215
TOTAL AREA :						13,980.40
GRAND TOTAL : 92,968.40 SQ.KM.						

Blocks Relinquished : Twelve

Sl. No.	Block Name	Map Ref. No.	Consortium
1.	KK-DWN-2000/2	D13	ONGC & GAIL
2.	KK-OSN-2000/1	N20	ONGC
3.	KK-DWN-2000/4	D15	ONGC
4.	GV-ONN-2000/1	N27	ONGC & IOC
5.	GS-DWN-2000/1	D8	ONGC
6.	GS-DWN-2000/2	D9	ONGC & GAIL
7.	CB-ONN-2000/2	N30	NIKO
8.	CB-ONN-2000/1	N29	GSPC
9.	WB-ONN-2000/1	N26	ONGC & IOC
10.	MN-OSN-2000/1	N23	ONGC
11.	MB-DWN-2000/1	D10	ONGC & IOC
12.	MB-DWN-2000/2	D11	ONGC, IOC, GAIL, OIL, GSPC

EXPLORATION BLOCKS AWARDED UNDER THIRD ROUND OF NELP (NELP-III)

(As on 01.04.2007)

SL NO.	BASIN	BLOCK NAME	REF.NO ON MAP	CONSORTIUM (PARTICIPATING INTEREST)	DATE OF SIGNING CONTRACT	APPROX AREA (SQ. KM.)
DEEP WATER						
1.	KERALA-KONKAN	KK-DWN-2001/1	D16	RIL (100)	04-02-2003	27,315
2.		KK-DWN-2001/2	D17	RIL (100)	04-02-2003	31,515
3.		KK-DWN-2001/3	D18	ONGC (100)	04-02-2003	21,775
4.	CAUVERY	CY-DWN-2001/1	D19	ONGC (80), OIL (20)	04-02-2003	12,425
5.		CY-DWN-2001/2	D20	RIL (100)	04-02-2003	14,325
6.	CAUVERY-PALAR	CY-PR-DWN-2001/3	D21	RIL (100)	04-02-2003	8,600
7.		CY-PR-DWN-2001/4	D22	RIL (100)	04-02-2003	10,590
8.	PALAR	PR-DWN-2001/1	D23	RIL (90) & HEPI (10)	04-02-2003	8,255
9.	KRISHNA-GODAVARI	KG-DWN-2001/1	D24	RIL (90) & HEPI (10)	04-02-2003	11,605
TOTAL AREA : 146,405						
SHALLOW OFFSHORE						
10.	GUJARAT-SAURASHTRA	GS-OSN-2001/1	N33	ONGC (100)	04-02-2003	7,101
11.	KERALA-KONKAN	KK-OSN-2001/2	N34	ONGC (100)	04-02-2003	10,588
12.		KK-OSN-2001/3	N35	ONGC (100)	04-02-2003	6,445
13.	KRISHNA-GODAVARI	KG-OSN-2001/1	N36	RIL (100)	04-02-2003	1,100
14.		KG-OSN-2001/2	N37	RIL (100)	04-02-2003	210
15.		KG-OSN-2001/3	N38	GSPC (80), GGR (10) & JOGPL (10)	04-02-2003	1,850
TOTAL AREA : 27,294						
ONLAND						
16.	ASSAM-ARAKAN	AA-ONN-2001/1	N39	ONGC (100)	04-02-2003	2,257
17.		AA-ONN-2001/2	N40	ONGC (80) & IOC (20)	04-02-2003	4,005
18.		AA-ONN-2001/3	N41	ONGC (85) & OIL (15)	04-02-2003	110
19.		AA-ONN-2001/4	N42	ONGC (100)	04-02-2003	645
20.	HIMALAYAN FORELAND	HF-ONN-2001/1	N43	ONGC (100)	04-02-2003	1,513.88
21.	RAJASTHAN	RJ-ONN-2001/1	N44	OIL (70) & ONGC (30)	04-02-2003	3,425
22.	CAMBAY	CB-ONN-2001/1	N45	ONGC (70), CEIL (15) & CED (15)	04-02-2003	215
23.	PRANHITA-GODAVARI	PG-ONN-2001/1	N46	ONGC (100)	04-02-2003	5,190
TOTAL AREA : 17,360.88						
GRAND TOTAL : 191,059.88 SQ.KM.						

EXPLORATION BLOCKS AWARDED UNDER FOURTH ROUND OF NELP (NELP-IV)

(As on 01.04.2007)

SL NO.	BASIN	BLOCK NAME	REF. NO ON MAP	CONSORTIUM (PARTICIPATING INTEREST)	DATE OF SIGNING CONTRACT	APPROX AREA (SQ. KM.)
DEEP WATER						
1.	GUJARAT-SAURASHTRA	GS-DWN-2002/1	D-25	ONGC (100)	06-02-2004	21,450
2.	KERALA-KONKAN	KK-DWN-2002/2	D-26	ONGC (80) & HPCL (20)	06-02-2004	22,810
3.		KK-DWN-2002/3	D-27	ONGC (80) & HPCL (20)	06-02-2004	20,910
4.	KRISHNA-GODAVARI	KG-DWN-2002/1	D-28	ONGC (70), OIL (20) & BPCL (10)	06-02-2004	10,600
5.	MAHANADI-NEC	MN-DWN-2002/1	D-29	ONGC (70), OIL (20) & BPCL (10)	06-02-2004	9,980
6.		MN-DWN-2002/2	D-30	ONGC (100)	06-02-2004	11,390
7.		NEC-DWN-2002/1	D-31	RIL (90) & HEPI (10)	06-02-2004	25,565
8.		NEC-DWN-2002/2	D-32	ONGC (100)	06-02-2004	15,465
9.	ANDAMAN-NICOBAR	AN-DWN-2002/1	D-33	ONGC (100)	06-02-2004	10,990
10.		AN-DWN-2002/2	D-34	ONGC (100)	06-02-2004	12,495
						TOTAL AREA : 161,655
ONLAND						
11.	ASSAM-ARAKAN	AA-ONN-2002/1	N-47	JOGPL (20) & GAIL (80)	06-02-2004	1,680
12.		AA-ONN-2002/3	N-48	OIL (30) & ONGC (70)	06-02-2004	1,460
13.		AA-ONN-2002/4	N-49	ONGC (90) & OIL (10)	06-02-2004	1,060
14.	GANGA	GV-ONN-2002/1	N-50	CPIL (50) & CESL (50)	06-02-2004	15,550
15.	RAJASTHAN	RJ-ONN-2002/1	N-51	OIL (60) & ONGC (40)	06-02-2004	9,900
16.	CAMBAY	CB-ONN-2002/1	N-52	ONGC (70) & CEGB1(30)	06-02-2004	135
17.		CB-ONN-2002/2	N-53	JOGPL (30), GSPC (60) & GGR (10)	06-02-2004	125
18.		CB-ONN-2002/3	N-54	GSPC (55), JEPL (20), PPCL (15) & GGR (10)	06-02-2004	285
19.	CAUVERY	CY-ONN-2002/1	N-55	JOGPL (30), GAIL (50) & GSPC (20)	06-02-2004	680
20.		CY-ONN-2002/2	N-56	ONGC (60) & BPCL (40)	06-02-2004	210
						TOTAL AREA : 31,085
GRAND TOTAL : 192,740 SQ.KM.						
<div> <div> ONGC - Oil & Natural Gas Corpn. Ltd. IOC - Indian Oil Corpn. Ltd. OIL - Oil India Ltd. GSPC - Gujarat State Petroleum Corporation Ltd. RIL - Reliance Industries Ltd. EOL - Essar Oil Ltd. Okland - Okland Offshore Holdings Ltd. TPL - Tata Petrodyne Ltd. FEL - Focus Energy Ltd. VPL - Videocon Petroleum Ltd. HEPI - Hardy Exploration & Production (India) Inc. JTI - Joshi Technologies Inc. EEIPL - Energy Equity India Petroleum Pty. Ltd. JOGPL - Jubilant Oil & Gas Pvt. Ltd. BPCL - Bharat Petroleum Corporation Ltd. CPIL - Cairn Petroleum India Ltd. CESL - Cairn Energy Search Ltd. CEGB1 - Cairn Energy Gujarat Block -1 MIL - Mosbacher India LLC BGEPIIL - British Gas Explo. & Prod. India Ltd. </div> <div> TIOL - Tullow India Opn. Ltd. CEIL - Cairn Energy India Pty. Ltd. CEIW - Cairn Energy India West B.V CEC - Cairn Energy Cambay B.V CEG - Cairn Energy Gujarat B.V CED - Cairn Energy Discovery Ltd. CEEPC - Cairn Energy Explo. & Prod. Company Ltd. OOHL - Okland Offshore Holdings Ltd. PONEI - Premier Oil North East India POGC - Polish Oil & Gas Company HOEC - Hindusthan Oil Exploration Company Ltd. GAIL - Gas Authority of India Ltd. CEHL - Cairn Energy Hydrocarbons Ltd. NIKO - Niko Resources Ltd. GEO - Geo Global Resources (India) Inc. HPCL - Hindustan Petroleum Corporation Ltd. PPCL - Prize Petroleum Company Ltd. GGR - GeoGlobal Resources (Barbados) Inc. CRL - Canoro Resources Ltd. ACL - Assam Company Ltd. </div> </div>						

EXPLORATION BLOCKS AWARDED UNDER FIFTH ROUND OF NELP (NELP-V)

(As on 1.04.2007)

SL NO.	BASIN	BLOCK NAME	REF.NO ON MAP	CONSORTIUM (PARTICIPATING INTEREST)	DATE OF SIGNING CONTRACT	APPROX AREA (SQ. KM.)
DEEP WATER						
1.	KERALA-KONKAN	KK-DWN-2003/1	D-35	RIL (100)	23-09-2005	18,245
2.		KK-DWN-2003/2	D-36	RIL (100)	23-09-2005	12,285
3.	KRISHNA-GODAVARI	KG-DWN-2003/1	D-37	RIL (90) & HEPI (10)	23-09-2005	3,288
4.	MAHANADI-NEC	MN-DWN-2003/1	D-38	RIL (85) & NR(V)L (15)	23-09-2005	17,050
5.	ANDAMAN-NICOBAR	AN-DWN-2003/1	D-39	ONGC (100)	23-09-2005	9,970
6.		AN-DWN-2003/2	D-40	ENI (40), ONGC (45) & GAIL (15)	23-09-2005	13,110
TOTAL AREA : 73,948						
SHALLOW OFFSHORE						
7.	GULF OF CAMBAY	CB-OSN-2003/1	N-57	ONGC (100)	23-09-2005	2,394
8.	SAURASHTRA	GS-OSN-2003/1	N-58	ONGC (51) & CE7L (49)	23-09-2005	5,970
TOTAL AREA : 8,364						
ONLAND						
9.	ASSAM-ARAKAN	AA-ONN-2003/1	N-59	JOGP (10), JSPL (35), GSPC (20) & GAIL (35)	16-12-2005	81
10.		AA-ONN-2003/2	N-60	GPI (30), NTPC (40) & CRL (30)	16-12-2005	295
11.		AA-ONN-2003/3	N-61	OIL (85) & HPCL (15)	23-09-2005	275
12.	GANGA VALLEY	GV-ONN-2003/1	N-62	CEIL (24), CE1L (25) & ONGC (51)	23-09-2005	7,210
13.	VINDHYAN	VN-ONN-2003/1	N-63	CEIL (24), CE6L (25) & ONGC (51)	23-09-2005	3,585
14.	RAJASTHAN	RJ-ONN-2003/1	N-64	ENI (34), ONGC (36) & CE2L (30)	23-09-2005	1,335
15.		RJ-ONN-2003/2	N-65	FEL (10) & BIL (40) & XOH (50)	23-09-2005	13,195
16.	CAMBAY	CB-ONN-2003/1 (PART - A&B)	N-66	RIL (100)	23-09-2005	635
17.		CB-ONN-2003/2	N-67	GSPC (50), GAIL (20), JCPL (20) & GGR (10)	23-09-2005	448
18.	DECCAN SYNECLISE	DS-ONN-2003/1	N-68	GGR (100)	23-09-2005	3,155
19.	KRISHNA-GODAVARI	KG-ONN-2003/1	N-69	CEIL (24) ONGC (51) & CE4L (25)	23-09-2005	1,697
20.	CAUVERY	CY-ONN-2003/1	N-70	NR (V)L(100)	23-09-2005	957
TOTAL AREA : 32,868						
GRAND TOTAL : 115,180 SQ.KM.						
<div> <div> NR(V)L - Niko Resources (NELP-V) Ltd. ENI - ENI India Ltd. CE7L - Cairn Exploration (No.7) Ltd. JOGP - Jubilant Oil & Gas Pvt. Ltd. JSPL - Jubilant Securities Pvt. Ltd. NTPC - National Thermal Power Corporation Ltd. GPI - GeoPetrol International Inc. CRL - Canoro Resources Ltd. HPCL - Hindustan Petroleum Corporation Ltd. </div> <div> CEIL - Cairn Energy India Pty. Ltd. CE1L - Cairn Exploration (No.1) Ltd. CE6L - Cairn Exploration (No.6) Ltd. CE4L - Cairn Exploration (No.4) Ltd. CE2L - Cairn Exploration (No.2) Ltd. FEL - Focus Energy Ltd. BIL - Birkbeck Investment Ltd., Mauritius JCPL - Jubilant Capital Pvt. Ltd. GGR - Geo Global Resources Ltd. </div> </div>						

EXPLORATION BLOCKS AWARDED UNDER SIXTH ROUND OF NELP (NELP-VI)

(As on 01.04.2007)

SL NO.	BASIN	BLOCK NAME	CONSORTIUM (PARTICIPATING INTEREST)	DATE OF SIGNING CONTRACT	APPROX AREA (SQ. KM.)
DEEP WATER (21)					
1	KERALA-KONKAN	KK-DWN-2004/1	ONGC(45), CIL(40) & TATA(15)	02.03.07	12324
2	CAUVERY	CY-DWN-2004/1	ONGC(70), GSPC(10), HPCL(10) & GAIL(10)	02.03.07	10302
3		CY-DWN-2004/2	ONGC(70), GSPC(10), HPCL(10) & GAIL(10)	02.03.07	12059
4		CY-DWN-2004/3	ONGC(70), GSPC(10), HPCL(10) & GAIL(10)	02.03.07	12017
5		CY-DWN-2004/4	ONGC(70), GSPC(10), HPCL(10) & GAIL(10)	02.03.07	12025
6		CY-PR-DWN-2004/1	ONGC(70), GSPC(10), HPCL(10) & GAIL(10)	02.03.07	13451
7		CY-PR-DWN-2004/2	ONGC(70), GSPC(10), HPCL(10) & GAIL(10)	02.03.07	9994
8	KRISHNA-GODAVARI	KG-DWN-2004/1	ONGC(70), GSPC(10), HPCL(10) & GAIL(10)	02.03.07	11951
9		KG-DWN-2004/2	ONGC(60), GSPC(10) HPCL(10), GAIL(10) & BPCL(10)	02.03.07	11851
10		KG-DWN-2004/3	ONGC(70), GSPC(10), HPCL(10) & GAIL(10)	02.03.07	6205
11		KG-DWN-2004/4	RIL(100)	02.03.07	11904
12		KG-DWN-2004/5	ONGC(50), GSPC(10), HPCL(10), GAIL(10), OIL(10) & BPCL(10)	02.03.07	11922
13		KG-DWN-2004/6	ONGC(60), GSPC(10), HPCL(10), GAIL(10) & OIL(10)	02.03.07	10907
14		KG-DWN-2004/7	RIL(100)	02.03.07	11856
15	MAHANADI - NEC	MN-DWN-2004/1	RIL(100)	02.03.07	9885
16		MN-DWN-2004/2	RIL(100)	02.03.07	11813
17		MN-DWN-2004/3	RIL(100)	02.03.07	11316
18		MN-DWN-2004/4	RIL(100)	02.03.07	8822
19		MN-DWN-2004/5	RIL(100)	02.03.07	10454
20		NEC-DWN-2004/1	SANTOS INTERNATIONAL OPERATIONS PTY LTD (100),	02.03.07	7790
21		NEC-DWN-2004/2	SANTOS INTERNATIONAL OPERATIONS PTY LTD (100)	02.03.07	8706
SHALLOW OFFSHORE BLOCKS (6)					
22	GUJARAT-SAURASHTRA	GS-OSN-2004/1	ONGC(100)	02.03.07	6589
23	GULF OF CAMBAY	CB-OSN-2004/1	FOCUS(10) & NEWBURY(90)	02.03.07	2616
24	MUMBAI	MB-OSN-2004/1	GSPC(20), IOC(20), GAIL(20), HPCL(20) & PETRO GAS(20)	02.03.07	1520
25		MB-OSN-2004/2	PETROGAS(20), GAIL(20), IOC(20), GSPC(20) & HPCL(20)	02.03.07	741
26	PALAR	PR-OSN-2004/1	CEIL(10), ONGC(35), CAIRN INDIA(25) & TATA(30)	02.03.07	9417
27	KRISHNA-GODAVARI	KG-OSN-2004/1	ONGC(55) & BGEPI(45)	02.03.07	1151
ONLAND BLOCKS (25)					
28	MIZORAM	MZ-ONN-2004/1	OIL(75), SUNTERA(10) & SHIV-VANI(15)	02.03.07	3213
29		MZ-ONN-2004/2	NAFTOGAZ(10), RNRL(10), GEOPETROL (10) & REL(70)	02.03.07	3619
30	ASSAM	AA-ONN-2004/1	OIL(85) & SHIV-VANI(15)	02.03.07	144
31	ASSAM-ARAKAN	AA-ONN-2004/2(Part-A&B)	OIL(90) & SUNTERA(10)	02.03.07	218
32		AA-ONN-2004/3	ESSAR OIL (10) & ESSAR ENERGY (90),	02.03.07	1252
33		AA-ONN-2004/4	NAFTOGAZ (10), ADANI ENTERPRISES (35), ADANI PORT(20) & JAYCEE MUMBAI (35)	02.03.07	95
34		AA-ONN-2004/5	ESSAR OIL (10) & ESSAR ENERGY (90)	02.03.07	46
35	PURNEA	PA-ONN-2004/1	ONGC(100)	02.03.07	2537
36	GANGA	GV-ONN-2004/1	ONGC(100)	02.03.07	8354
37	SOUTH REWA	SR-ONN-2004/1	PRIZE PETROLEUM(10), Jaiprakash Associates Ltd.(90)	02.03.07	13277
38	VINDHYAN	VN-ONN-2004/1	ONGC(100)	02.03.07	5801
39		VN-ONN-2004/2	ONGC(100)	02.03.07	4466
40	RAJASTHAN	RJ-ONN-2004/1	GSPC(20), GAIL(20), HPCL(20), BPCL(10), NITINFIRE (10) HALLWORTHY (PANAMA) (10) & SILVERWAVE (MYANMAR)(10)	02.03.07	4613
41		RJ-ONN-2004/2	OIL(75), GEOGLOBAL(25)	02.03.07	2196
42		RJ-ONN-2004/3	OIL(60), GEOGLOBAL(25) & HPCL(15)	02.03.07	1330
43	CAMBAY	CB-ONN-2004/1	ONGC(50), GSPC(40) & HERAMEC(10)	02.03.07	32
44		CB-ONN-2004/2	ONGC(50), GSPC(40) & SUNTERA RES LTD.(10)	02.03.07	423
45		CB-ONN-2004/3	ONGC(40), GSPC(35) & ENSEARCH(25)	02.03.07	113
46		CB-ONN-2004/4	ONGC(50), GSPC(40) & HERAMEC(10)	02.03.07	70
47		CB-ONN-2004/5	NAFTOGAZ(10), ADANI ENTERPRISES(35), WELSPUN(35) & ADANI PORT(20)	02.03.07	75
48	DECCAN SYNECLISE	DS-ONN-2004/1	GEOGLOBAL RESOURCES BARBADOS(100)	02.03.07	2649
49	KRISHNA-GODAVARI	KG-ONN-2004/1	OIL(90) & GEOGLOBAL(10)	02.03.07	549
50		KG-ONN-2004/2	GSPC(40), GAIL(40) & PETROGAS(20)	02.03.07	1140
51	CAUVERY	CY-ONN-2004/1	ONGC(80) & BPCL(20)	02.03.07	214
52		CY-ONN-2004/2	ONGC(80) & BPCL(20)	02.03.07	375

BASIN-WISE DISTRIBUTION OF PEL AREAS UNDER OPERATION (PRE-NELP & NELP BLOCKS)

(As on 01.04.2007)

SL NO.	BASIN (No. of Blocks)	PRE-NELP	NELP-I	NELP-II	AREA (Sq.Km)		NELP-IV	NELP-V	TOTAL
					NELP-III				
DEEP WATER (34)									
1.	GUJARAT-SAURASHTRA (1)	--	--	--	--		21,450	--	21,450
2.	KERALA-KONKAN (9)	--	--	33,002	80,605		43,720	30,530	187,857
3.	CAUVERY (2)	--	--	--	26,750		--	--	26,750
4.	CAUVERY-PALAR (2)	--	--	--	19,190		--	--	19,190
5.	PALAR (1)	--	--	--	8,255		--	--	8,255
6.	KRISHNA-GODAVARI (8)	--	32499.60	--	11,605		10,600	3,288	57,992.60
7.	MAHANADI-NEC (7)	--	12,183	--	--		62,400	17,050	91,633
8.	ANDAMAN-NICOBAR (4)	--	--	--	--		23,485	23,080	46,565
TOTAL AREA :		--	44,682.60	33,002	146,405		161,655	73,948	459,692.60
SHALLOW OFFSHORE (26)									
9.	GUJARAT-KUTCH (3)	9,475	--	--	--		--	--	9,475
10.	GUJARAT-SAURASHTRA (4)	6,860	5,040	8,841	7101		--	5,970	33,812
11.	CAMBAY (2)	846	--	--	--		--	2,394	3,240
12.	MUMBAI (1)	--	--	18,414	--		--	--	18,414
13.	KERALA-KONKAN (3)	--	14,395	--	17,033		--	--	31,428
14.	CAUVERY (4)	859	2,470	7,970	--		--	--	11,299
15.	KRISHNA-GODAVARI (4)	--	2,236	--	3,160		--	--	5,396
16.	MAHANADI-NEC (4)	--	21,244	4,061	--		--	--	25,305
17.	BENGAL (1)	--	--	6,700	--		--	--	6,700
TOTAL AREA :		18,040	45,385	45,986	27,294		--	8,364	145,069
ONLAND (46)									
18.	VINDHYAN (1)	--	--	--	--		--	3,585	3,585
19.	GUJARAT-KUTCH (1)	1,162.43	--	--	--		--	--	1,162.43
20.	RAJASTHAN (7)	4,905.66	--	1,862.40	3,425		9,900	14,530	34,623.06
21.	CAMBAY (10)	6,600.67	--	--	215		545	1,083	8,443.67
22.	PRANHITA-GODAVARI (2)	21,850	--	--	5,190		--	--	27,040
23.	MAHANADI (1)	--	--	5,903	--		--	--	5,903
24.	CAUVERY (3)	--	--	--	--		890	957	1,847
25.	HIMALAYAN FORELAND (1)	--	--	--	1,513.88		--	--	1,513.88
26.	GANGA VALLEY (3)	--	18,375	--	--		15,550	7,210	41,135
27.	ASSAM-ARAKAN (15)	3,792.08	--	6,215	7017		4,200	651	21,875.08
28.	DECCAN SYNECLISE (1)	--	--	--	--		--	3,155	3,155
29.	KRISHNA-GODAVARI (1)	--	--	--	--		--	1,697	1,697
TOTAL AREA :		38,310.84	18,375	13,980.40	17,360.88		31,085	32,868	151,980.12
GRAND TOTAL :		56,350.84	108,442.60	92,968.40	191,059.88		192,740	115,180	756,741.72

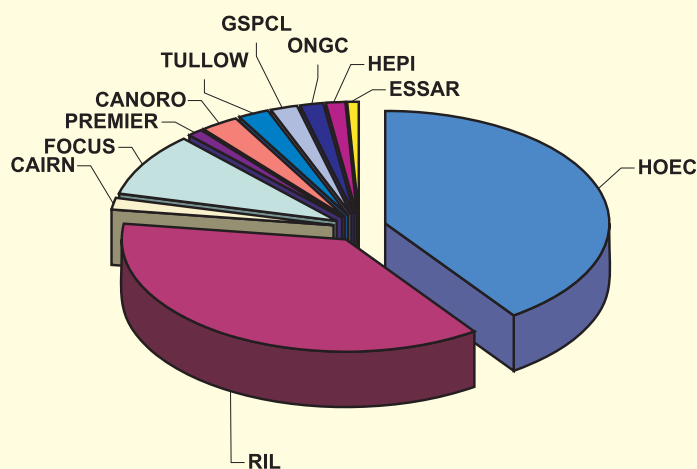
COMPANY-WISE DISTRIBUTION OF PEL AREAS UNDER OPERATION (PRE-NELP & NELP ROUNDS)

(As on 01.04.2007)

SL. NO.	COMPANY/ OPERATOR	NO. OF BLOCKS	PRE-NELP	NELP-1	NELP-II	NELP-III	NELP-IV	NELP-V	TOTAL
1	ONGC	40	846	45,063.60	37,145	72,269.88	137,495	18,334	311,153.48
2	RIL	29	20,935	53,130	48,058	113,515	25,565	51,503	312,706
3	OIL	6	—	—	7,765.40	3,425	11,360	275	22,825.40
4	CAIRN	5	879.50	—	—	—	15,550	12,492	28,921.50
5	GSPC	4	1,201.17	—	—	1,850	285	448	3,784.17
6	HOEC	4	22,654	2,470	—	—	—	--	25,124
7	PREMIER OIL	1	635.38	—	—	—	—	--	635.38
8	OAO GAZPROM	1	—	7,779	—	—	—	--	7,779
9	CANORO	1	1,444.70	—	—	—	—	--	1,444.70
10	TULLOW	1	1,277	—	—	—	—	--	1,277
11	ESSAR	1	430.50	—	—	—	—	--	430.50
12	JOGP	4	—	—	—	—	2485	81	2,566
13	FOCUS	3	5,188.59	—	—	—	—	13,195	18,383.59
14	GGR	1	—	—	—	—	—	3,155	3,155
15	NR(V)L	1	—	—	—	—	—	957	957
16	GPI	1	—	—	—	—	—	295	295
17	ENI	2	—	—	—	—	—	14,445	14,445
18	HEPI	1	859	—	—	—	—	—	859
TOTAL		106	56,350.84	108,442.60	92,968.40	191,059.88	192,740	115,180	756,741.72

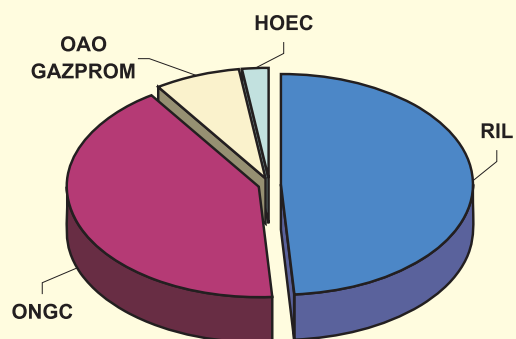
COMPANY - WISE DISTRIBUTION OF PEL AREAS UNDER OPERATION (PRE-NELP & NELP ROUNDS)

PRE - NELP



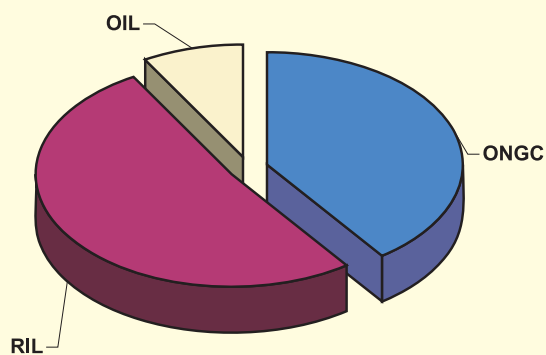
COMPANY / OPERATOR	AREA (Sq. Km.)	(%)
HOEC	22,654.00	40.20
RIL	20,935.00	37.15
CAIRN	879.50	1.56
FOCUS	5,188.59	9.21
PREMIER	635.38	1.13
CANORO	1,444.70	2.56
TULLOW	1,277.00	2.27
GSPCL	1,201.17	2.13
ONGC	846.00	1.50
HEPI	859.00	1.52
ESSAR	430.50	0.76
TOTAL	56,350.84	100.00

NELP - I



COMPANY / OPERATOR	AREA (Sq. Km.)	(%)
RIL	53,130.00	48.99
ONGC	45,063.60	41.56
OAO GAZPROM	7,779.00	7.17
HOEC	2,470.00	2.28
TOTAL	108,442.60	100

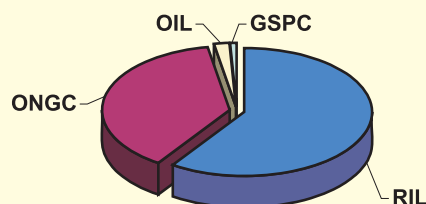
NELP - II



COMPANY / OPERATOR	AREA (Sq. Km.)	(%)
ONGC	37,145.00	39.95
RIL	48,058.00	51.69
OIL	7,765.40	8.35
TOTAL	92,968.40	100.00

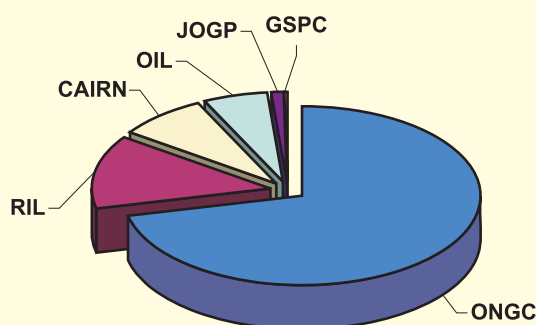
COMPANY - WISE DISTRIBUTION OF PEL AREAS UNDER OPERATION (PRE-NELP & NELP ROUNDS)

NELP - III



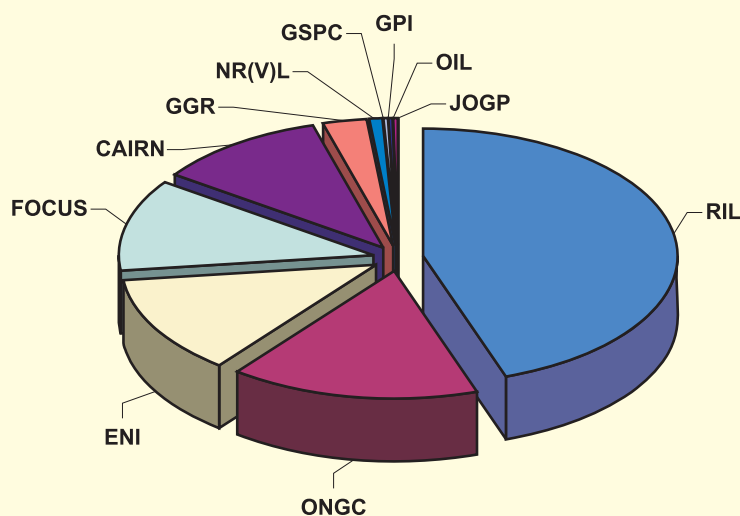
COMPANY / OPERATOR	AREA (Sq. Km.)	(%)
RIL	113,515.00	59.41
ONGC	72,269.88	37.83
OIL	3,425.00	1.79
GSPC	1,850.00	0.97
TOTAL	191,059.88	100.00

NELP - IV



COMPANY / OPERATOR	AREA (Sq. Km.)	(%)
ONGC	137,495.00	71.34
RIL	25,565.00	13.26
CAIRN	15,550.00	8.07
OIL	11,360.00	5.89
JOGP	2,485.00	1.29
GSPC	285.00	0.15
TOTAL	192,740.00	100.00

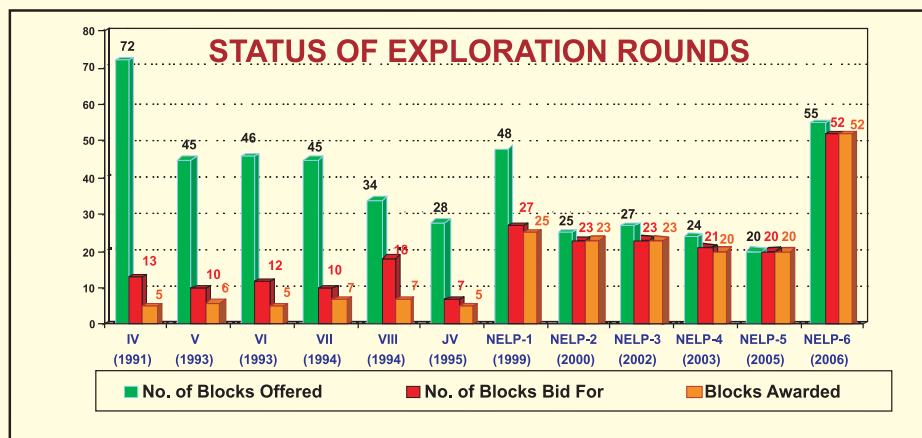
NELP - V



COMPANY / OPERATOR	AREA (Sq. Km.)	(%)
RIL	51,503.00	44.72
ONGC	18,334.00	15.92
ENI	14,445.00	12.54
FOCUS	13,195.00	11.46
CAIRN	12,492.00	10.85
GGR	3,155.00	2.74
NR(V)L	957.00	0.83
GSPC	448.00	0.39
GPI	295.00	0.26
OIL	275.00	0.24
JOGP	81.00	0.07
TOTAL	115,180.00	100.00

SALIENT ACHIEVEMENT OF NELP

As on 1.4.07



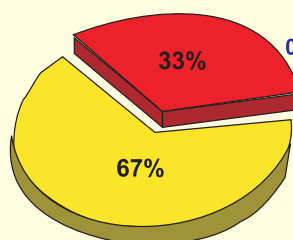
ACREAGE DISTRIBUTION SCENARIO

Comparison of area under Nomination and Pre-NELP

TOTAL : 0.20 MILLION SQ.KM

NOC's
0.14 Million Sq.Km

Pvt. / JV
0.06 Million Sq.Km



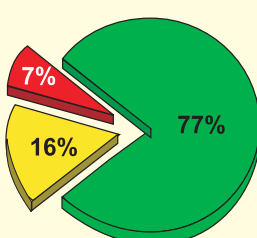
Comparison of area under Nomination, Pre-NELP and NELP

TOTAL : 0.90 MILLION SQ.KM

Pre-NELP
0.06 Million Sq.Km

NOC's (Nomination)
0.14 Million Sq.Km

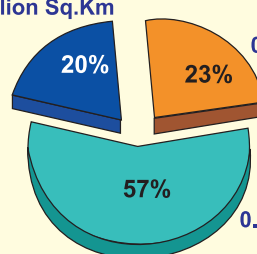
NELP - I, II, III, IV & V
0.70 Million Sq.Km



Shallow Offshore
0.18 Million Sq.Km

Onland
0.21 Million Sq.Km

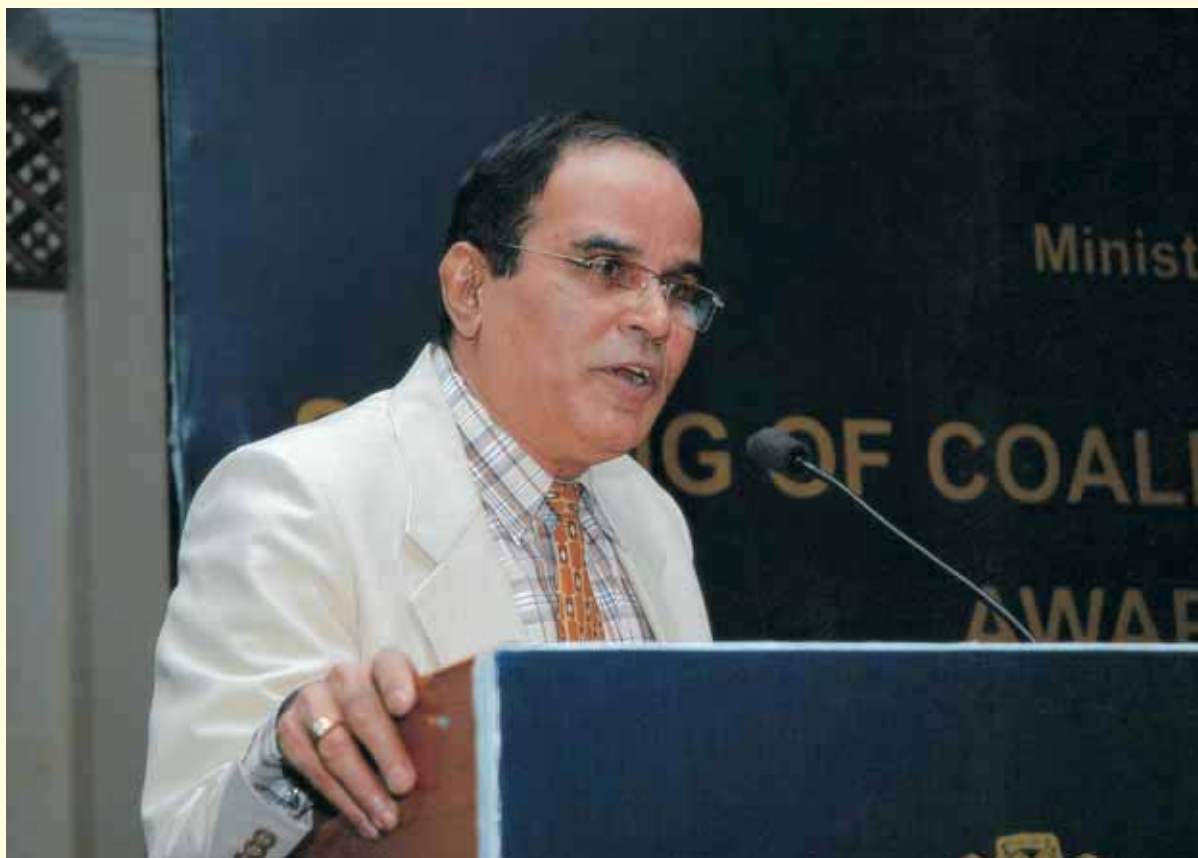
Deep Water
0.51 Million Sq.Km



STATUS OF EXPLORATION ACTIVITIES : PRE- NELP Vs. NELP

	Pre - NELP (1993-2007)	NELP- I, II, III, IV & V (2000-07)
2D Seismic Survey	25036 LKM	139711 LKM
3D Seismic Survey	6029 SKM	94010 SKM
Exploratory Wells	188	131
No. of Discoveries	25	39
Investment made on Exploration	US\$ 1037 million *	US\$ 2849 million*

* Upto March, 2007



Shri M.S. Srinivasan, Secretary, MOPNG addressing gathering during CBM-III CONTRACT SIGNING CEREMONY.



Shri V.K. Sibal DG, DGH welcoming the delegates in INTERNATIONAL WORKSHOP ON NON-CONVENTIONAL FOSSIL - FUEL RESOURCES held on Jan. 9, 2007 in New Delhi.

Development of Coalbed Methane in India

“a vision comes true”

Harnessing Coalbed Methane

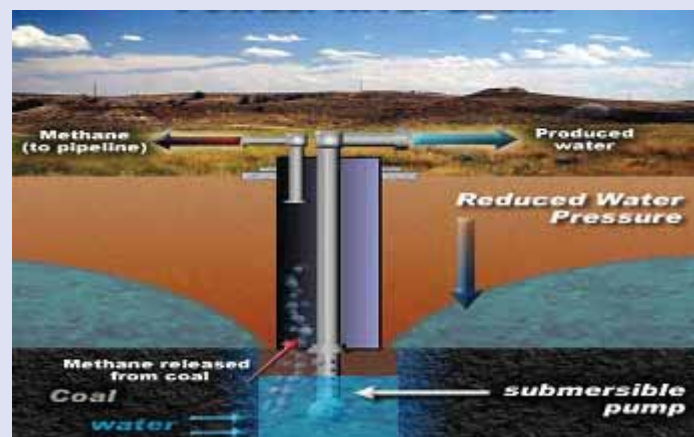
Coalbed Methane (CBM) is natural gas contained in coal. It consists primarily of methane, the gas we use for home heating, gas fired electrical generation and industrial fuel. CBM commonly is referred to as an “unconventional” form of natural gas because it is primarily stored through adsorption to the coal itself rather than in the pore space of the rock, like most “conventional” gas. The gas is released in response to a drop in pressure in the coal.

Commercial production of CBM is a proven technology and USA is the leader in CBM production in the world. Having the 4th largest proven coal reserves and being the third largest coal producer in the world, India holds significant prospects for commercial recovery of CBM.

CBM policy initiative in India

In order to harness CBM potential in the country, the Government of India formulated CBM policy in 1997. Ministry of Petroleum & Natural Gas (MOP & NG) became the Administrative Ministry and DGH became the implementing agency for CBM policy.

To facilitate implementation of CBM policy, an MOU was signed between the MOP & NG and Ministry of Coal (MOC). Giving due consideration for future coal mining areas, several potential CBM blocks were carved out by DGH in close interaction with MOC and coal companies.



PRODUCTION PROCESS OF A CBM WELL

Fiscal contractual terms operating regime and Model Contract was put in place with one of the best fiscal terms to attract the investors.

Highlights of CBM Policy

Some of the attractive terms offered by the Government are:

- ✓ The blocks would be awarded through open international competitive bidding system.
- ✓ No participating interest of the Government.
- ✓ No upfront payment.
- ✓ No signature bonus.
- ✓ Exemption from payment of customs duty on imports required for CBM operation.
- ✓ Walkout option at the end of Phase-I & II.
- ✓ Freedom to sell gas in the domestic market.
- ✓ Provision of fiscal stability.
- ✓ A seven years tax holiday

The successful bidder would be required to enter into a contract with Government of India. There is scope of negotiation within the parameters laid down in the model contract.

CBM-I

DGH in close interaction with Ministry of Coal (MOC), carved out several prospective CBM blocks in different coalfields of the country, generated CBM related data and prepared Information Dockets & Data Packages.

In May 2001, for the first time in the country, Government offered 7 blocks under **1st round of CBM bidding**, out of which 5 blocks were awarded and contracts were signed. Contracts for another 3 blocks awarded on nomination basis were also executed.



CBM Well Drill Rig of ESSAR



CBM Gas / Water Separation Facilities of RIL

CBM-II

Under **2nd round of CBM** bidding 9 blocks were offered through international competitive bidding in May 2003 with bid closing date of 15th October 2003. A total of 14 bids were received for 8 out of 9 blocks offered . Contracts for these 8 awarded blocks were signed in June 2004.

CBM-III

International competitive bids were invited by Government of India for 10 CBM blocks under **3rd round of CBM** bidding with bid closing date of 30th June 2006. There was an overwhelming response to the CBM-III round of bidding. For the first time major foreign E&P companies participated in the CBM-III bidding round. 70 nos. of data packages valued Rs. 10 crores (approx.) were sold and a total of 54 bids were received for all the 10 blocks, from 26 companies including 8 foreign and 18 Indian companies. Multiple bids were received for all the 10 blocks.

CURRENT CBM E&P ACTIVITIES

- ✓ Area Opened Up for CBM Exploration : 13600 Sq Km
- ✓ Blocks Awarded : 26 Nos.
- ✓ CBM Resources in Awarded Blocks : 1374 BCM
- ✓ Production Potential in Awarded Blocks : 38 MMSCMD
- ✓ Exploration Activities

	Commitment	Achievement
❖ Core Holes	201	94
❖ Test/Pilot Wells	361	68
❖ Investment (Rs. In Crores)	1400	298



Dewatering Process of a CBM Well of GEECL

- ✓ The exploration activities have established encouraging CBM resources in some of the awarded blocks. There has been significant findings in eastern and central part of India. CBM gas being flared in the test wells bare ample testimony of the story of success.
- ✓ Commercial assessment is completed in 4 blocks. The total established reserves in these blocks is 6.24 TCF.
- ✓ Exploration activities (Phase-I & II) have been completed in three blocks. Commercial potentiality of the identified fairways were established and Field Development Plan for all these three blocks has been submitted for approval.

- ✓ 410 development wells are planned to be drilled in the next five years and targeted a production potential of about 6 MMSCMD by the year 2012, from these three blocks.
- ✓ Commercial production of CBM in India is now a reality and has already commenced w.e.f July 2007.

Future Rounds

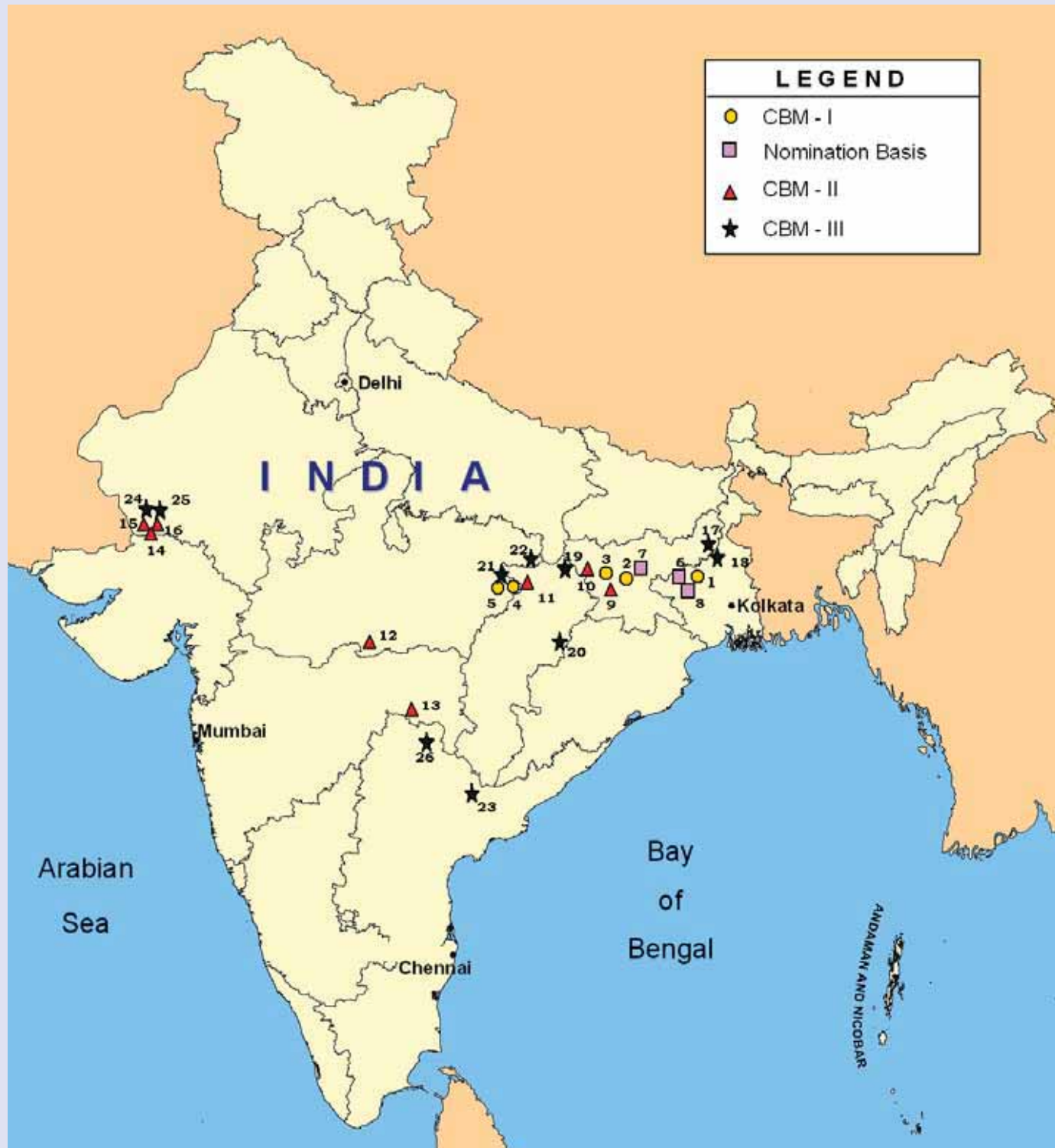
The Directorate General of Hydrocarbons in its endeavour to increase the pace of exploration and development of CBM in the country, is closely interacting with MOC for carving out additional prospective blocks for future rounds of bidding. In this context, several additional blocks in different coalfields of the country have been identified. Drilling of coreholes and generation of CBM related data in these identified blocks will be taken up shortly.

**INSIDE VIEW OF A MOBILE CBM
LAB OF ESSAR**



**HRSS SURVEY BY NGRI FOR
ESSAR IN PROGRESS**

MAP SHOWING CBM BLOCKS AWARDED SO FAR



CBM BLOCKS AWARDED						
SL NO.	COAL FIELD / STATE	BLOCK NAME	REF. NO ON MAP	CONSORTIUM (PARTICIPATING INTEREST)	DATE OF SIGNING CONTRACT	APPROX AREA (SQ. KM.)
CBM-I ROUND						
1.	RANIGANJ EAST / WEST BENGAL	RG(E)-CBM-2001/1	1	EOL (100)	26.07.2002	500
2.	BOKARO / JHARKHAND	BK-CBM-2001/1	2	ONGC (80) & IOC (20)	26.07.2002	95
3.	N. KARANPURA / JHARKHAND	NK-CBM-2001/1	3	ONGC (80) & IOC (20)	26.07.2002	340
4.	SOHAGPUR EAST / M.P.	SP(E)-CBM-2001/1	4	RIL (100)	26.07.2002	495
5.	SOHAGPUR WEST / M.P.	SP(W)-CBM-2001/1	5	RIL (100)	26.07.2002	500
TOTAL AREA :						1930
ON NOMINATION BASIS						
6.	RANIGANJ NORTH / WEST BENGAL	RANIGANJ NORTH	6	ONGC (74) & CIL (26)	06.02.2003	350
7.	JHARIA / JHARKHAND	JHARIA	7	ONGC (90) & CIL (10)	06.02.2003	85
8.	RANIGANJ SOUTH / WEST BENGAL	RANIGANJ SOUTH	8	GEECL (100)	31.05.2001	210
TOTAL AREA :						645
CBM-II ROUND						
9.	SOUTH KARANPURA / JHARKHAND	SK-CBM-2003/II	9	ONGC (100)	06.02.2004	70
10.	NORTH KARANPURA / JHARKHAND	NK(WEST)-CBM-2003/II	10	ONGC (100)	06.02.2004	267
11.	SONHAT / CHATTISGARH & M.P.	SH(NORTH)-CBM-2003/II	11	RIL (100)	06.02.2004	825
12.	SATPURA / M.P.	ST-CBM-2003/II	12	ONGC (100)	06.02.2004	714
13.	WARDHA / MAHARASHTRA	WD-CBM-2003/II	13	ONGC (100)	06.02.2004	503
14.	BARMER-SANCHOR / GUJARAT	BS(3)-CBM-2003/II	14	ONGC(70)&GSPCL(30)	06.02.2004	790
15.	BARMER / RAJASTHAN	BS(1)-CBM-2003/II	15	RIL (100)	06.02.2004	1045
16.	BARMER / RAJASTHAN	BS(2)-CBM-2003/II	16	RIL (100)	06.02.2004	1020
TOTAL AREA :						5234
CBM-III ROUND						
17.	RAJMAHAL / JHARKHAND	RM-CBM-2005/III	17	ARROW-GAIL-EIG-TATA	07.11.06	469
18.	BIRBHUM / WEST BENGAL	BB-CBM-2005/III	18	BPE	16.11.06	248
19.	TATAPANI RAMKOLA / CHATTISGARH	TR-CBM-2005/III	19	ARROW-GAIL-EIG-TATA	07.11.06	458
20.	MAND RAIGARH / CHATTISGARH	MR-CBM-2005/III	20	ARROW-GAIL-EIG	07.11.06	634
21.	SOHAGPUR / M.P.	SP(N)-CBM-2005/III	21	REL-RNPL-GEO	07.11.06	609
22.	SINGRAULI / M.P.	SR(N)-CBM-2005/III	22	COALGAS-DIL	07.11.06	330
23.	KOTHAGUDEM / ANDHRA PRADESH	KG(E)-CBM-2005/III	23	REL-RNRL-GEO	07.11.06	750
24.	BARMER / RAJASTHAN	BS(4)-CBM-2005/III	24	REL-RNRL-GEO	07.11.06	1168
25.	BARMER / RAJASTHAN	BS(5)-CBM-2005/III	25	REL-RNRL-GEO	07.11.06	739
26.	GODAVARI / ANDHRA PRADESH	GV(N)-CBM-2005/III	26	COALGAS-DIL-ADINATH	07.11.06	386
TOTAL AREA :						5791
GRAND TOTAL : 13600 SQ.KM						
<div> <div> ONGC : Oil & Natural Gas Corporation Ltd. IOC : Indian Oil Corporation Ltd. GSPCL : Gujarat State Petroleum Corporation Ltd. RIL : Reliance Industries Ltd. EOL : Essar Oil Ltd. CIL : Coal India Ltd. GEECL : Great Eastern Energy Corporation Ltd. GAIL : GAIL (India) Ltd. BPE : BP Exploration Alpha Ltd. </div> <div> ARROW : Arrow Energy India Pvt. Ltd. RNRL : Reliance Natural Resources Ltd. GEO : Geopetrol International Inc. REL : Reliance Energy Ltd. TATA : Tata Power Company Ltd. EIG : EIG Energy Infrastructure Group AB DIL : Deep Industries Ltd. COALGAS : Coalgas Mart LLC. ADINATH : Adinath Exim Resources Ltd. </div> </div>						

Quest for an Alternate source of Energy – Gas Hydrates



As an unconventional hydrocarbon resource, Methane hydrates have been the focus of our quest for meeting our energy demands and it was with this objective that India's National Gas Hydrate Program (NGHP) was launched. Steered by the Ministry of Petroleum & Natural Gas and technically coordinated by Directorate General of Hydrocarbons (DGH), NGHP is a consortium of National E&P companies (Oil and Natural Gas Corporation Ltd., Gas Authority of India Ltd & Oil India Ltd.) and National Research Institutions (National Institute of Oceanography, National Geophysical Research Institute and National Institute of Ocean Technology).

The NGHP roadmap envisages achieving the commercial production of gas from gas hydrates beyond 2010.

To understand the subsurface distribution of gas hydrates along the continental margins of India, an integrated study through acquisition of multidisciplinary investigations were undertaken in the year 2002-03 under National Gas Hydrate Programme (NGHP) of Ministry of Petroleum and Natural Gas (MOPNG) coordinated by Directorate General of Hydrocarbons (DGH).

Based on geophysical, geological and geochemical data, areas were identified for gas hydrate coring/drilling operations and a dedicated gas hydrate coring/drilling/LWD/MWD expedition NGHP-01 was launched for exploring four Indian Offshore areas during 28th April 2006 to 19th August 2006 through a Consortium consisting of Overseas Drilling Ltd (ODL), Fugro McClelland Marine Geosciences, Geotek Ltd, Lamont-Doherty Earth Observatory (LDEO) and scientists from numerous universities and national laboratories.

The NGHP efforts in Indian offshore for gas hydrate exploration led to the following:

- Comprehensive analysis of gas hydrate bearing marine sediments in both passive continental margin and marine accretionary wedge settings;
- Discovery of gas hydrate in numerous complex geologic settings and collection of unprecedented number of gas hydrate cores (more than 2800 m from 21 sites and 39 holes);
- Discovery in Krishna-Godavari basin of one of the thickest marine gas hydrate accumulations in the world;
- Discovery in Andaman Islands of one of the thickest and deepest gas hydrate occurrences yet known which revealed gas hydrate bearing volcanic ash layers as deep as 600 meters below the seafloor;
- Establishing the existence of a fully developed gas hydrate system in the Mahanadi basin of the Bay of Bengal.

The NGHP Expedition-01, 2006 was a Collaborative Research Programme in its true sense with the active participation of foreign organizations like Overseas Drilling Ltd, Fugro/Geotek, Lamont-Doherty Earth Observatory, USGS and the US DOE. In addition, there were 24 other foreign organizations involved. The Indian participation included scientists from DGH, ONGC, GAIL, RIL, OIL and NIO.

Some of the studies carried out on the Gas Hydrate samples acquired during the NGHP Expedition – 01 have yielded very positive results.

The SEM studies of core 29 at Site 10 in the KG basin shows fully formed crystals (Figure 1 to Figure 3) such that have never been seen in any hydrate occurring naturally in nature. In fact these crystals are quite similar to the ones generated in laboratories.

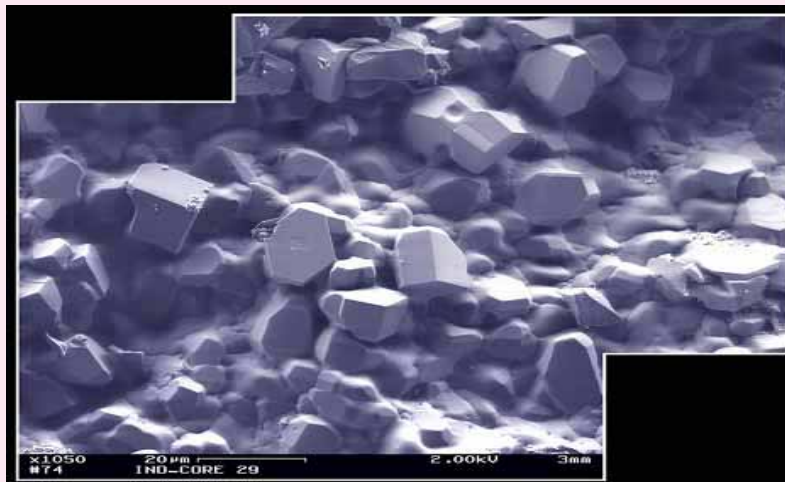


FIGURE - 1

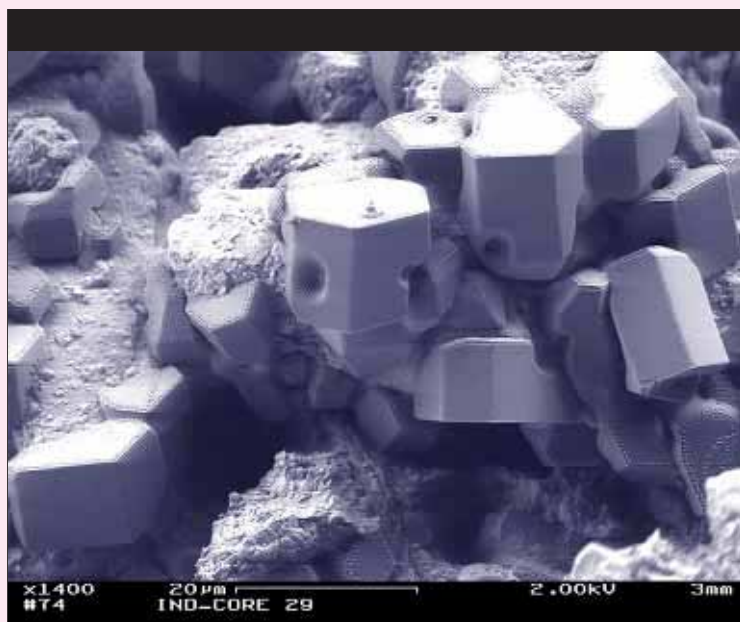


FIGURE - 2

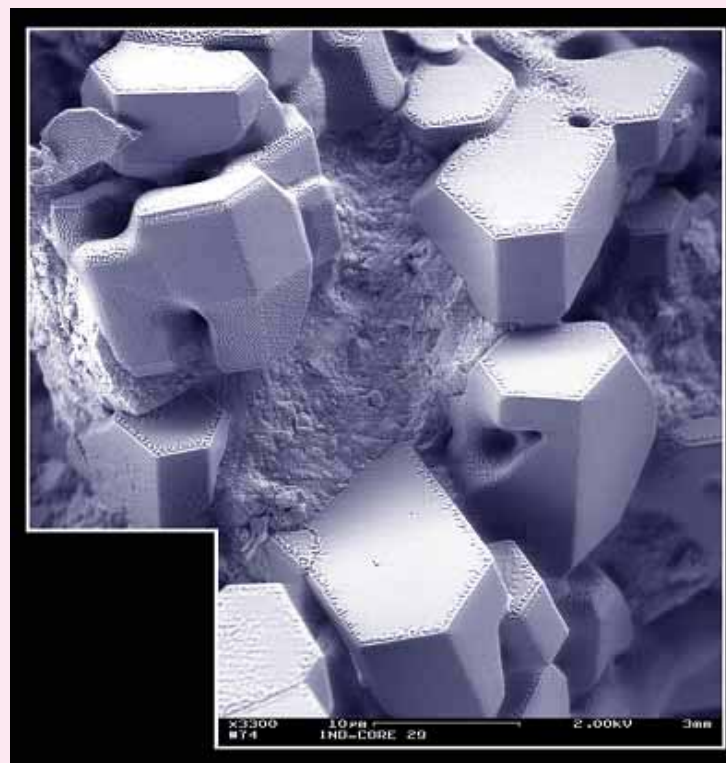


FIGURE - 3

FIGURE - 1, 2 & 3 : CRYSTALS OF GAS HYDRATES

The Summary of gas hydrate occurrence type in sediments recovered from offshore India along with the matrix is shown in Table below:

Hole	Core	Sample Number	Depth (mbsf)	Sediment matrix	Gas hydrate occurrence
NGHP-01-10B K-G Basin	4X	1	26	Dark fine sediments	Platy
	cc*	9	42	Dark fine sediments	Massive
	10X	18	63	Dark fine sediments	Vein-like
	12X	20	72	Dark fine sediments	Film-like
	14X	23	90	Dark fine sediments	Thin vein-like
	17X	30	110	Dark fine sediments	Patchy
	cc	33	128	Dark fine sediments	Thin film like
NGHP-01-10C K-G Basin	1H	35	29	Dark fine sediments	Vein-like
	1H	39	31	Dark fine sediments	Thin film-like
NGHP-01-10D K-G Basin	5X	40	35	Dark fine sediments	Thin film-like
	cc	42	43	Dark fine sediments	Thin film-like
	cc	56	65?	Dark fine sediments	Patchy
	10X	58	60	Dark fine sediments	Thin vein-like
	cc	68	69	Dark fine sediments	Thin vein-like
	14X	69	92	Dark fine sediments	Vein-like
	17X	73	101	Dark fine sediments	Vein-like
	17X	76	114	Dark fine sediments	Thin film-like
	18X	78	123	Dark fine sediments	Thin vein-like
	20X	86	128	Dark fine sediments	Massive
	cc	87	132	Dark fine sediments	Massive
	cc	88	149	Dark fine sediments	Nodular
NGHP-01-14A K-G Basin	16X	95	105	Dark fine sediments	Pore-filling
	16X	97	106	Dark fine sediments	Pore-filling
NGHP-01-15A K-G Basin	9X	100	79	Grey medium sands	Pore-filling
NGHP-01-17A Offshore Andaman Islands	39X	105	336	Green fine sediments	Pore-filling
	47X	111	408	White fine volcanic ash	Pore-filling
	55X	112	467	Green fine sediments	Pore-filling
	63X	116	525	Green fine sediments	Pore-filling
	67X	119	566	Green fine sediments	Pore-filling
	72X	123	588	Green fine sediments	Pore-filling
NGHP-01-21A K-G Basin	12X	128	84.67	Dark fine sediments	Pore-filling
	12X	131	84.37	Dark fine sediments	Pore-filling
	12X	133	84.17	Dark fine sediments	Massive
	12X	138	83.67	Dark fine sediments	Pore-filling

*: cc, core catcher; K-G Basin: Krishna-Godavari Basin.

The following are the conclusions drawn based on the Hydrate characterization studies carried out :

- 1) The structure of the gas hydrates in the samples studied is always S-1 with methane as the dominant guest.
- 2) The occupancy of methane in large cage is almost 100%, while it is variable in the small cage (0.75 to 0.99).
- 3) For pore filling gas hydrate, the saturation level in silty clay is low, generally less than 2.7% of pore space, while high in sands (26.1% of pore space) and volcanic ash (22.6% of pore space), indicating an obvious sedimentary control on hydrate saturation level.

The NGHP would now endeavor, utilizing the inputs from the geoscientific data generated during the Expedition-01, to meet the challenge that lies ahead of us in finding an efficient, and cost effective method to delineate our Gas hydrate reserves, carry out volumetric reserve estimation and finally of course, to produce the gas from these hydrates in an environmentally friendly manner.

11 E&P cos team up for rig-sharing project

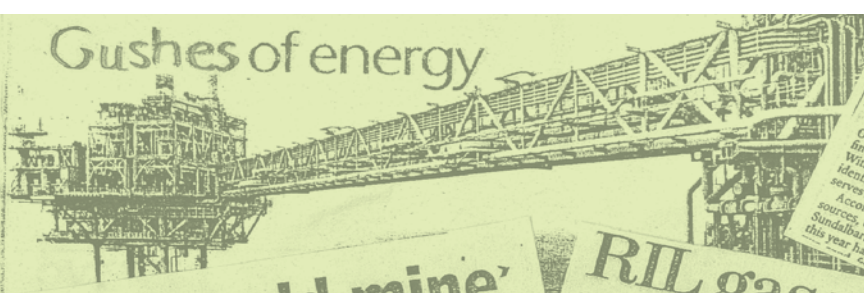
Bid to bring down cost of hiring rigs

Richa Mishra
New Delhi, June 7

Exploration and production (E&P) companies are looking at various cost-saving options to enhance returns from their core activities. According to a senior government official, 11 E&P companies, have associated themselves with the rig-sharing project initiated by the Directorate General of Hydrocarbons (DGH). This would enable the companies

the project are Oil India Ltd, GAIL, Indo Resources Ltd, Hardy Exploration, Gujarat State Petroleum Corporation Ltd, Hindustan Oil & Gas, Cairn Energy, BG Exploration & Production India Ltd and EPL.

Oil and Natural Gas Corporation (ONGC) till now, according to project, since it was in a comfort-



Gushes of energy

'GSPC's K-G gas find a gold mine'

Potential Will Be Known Once Developmental Plans Are Submitted

India steps on the gas for African hydrocarbon equity

Around 36 African countries invited for conference next month as India eyes the continent's oil reserves

BY UTPAL BHASKAR
utpal.b@livemint.com

NEW DELHI

In an attempt to check Chi-

RIL gas production from KG basin in June 2008

ONGC has struck a new gas find at Sundarban in Tripura. This, the company has identified two new gas reserves in the state this year. According to company sources, the exploration well Sundarban-1 drilled in April this year has flowed gas from

ONGC

On Bureau
Kolkata, Aug 20

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C hits on gas reserve in Bay

Testing results before handing any guess on the size of the discovery. The estimate 50 tcf of reserves in the block is based on the results of the first well, which is being drilled. The company would be producing 40 million metric tons of gas from the block.

According to the estimates of ONGC, the reserves could be as high as 50 tcf or more, as both RIL and GSPC have a stake in the block.

BM evaluation unbiased: DGH

Delhi, August 20

Under attack from Anil Ambani's Anand Group (ADAG) for alleged discrimination in evaluation of coal and methane (CBM) blocks, the Directorate General of Hydrocarbons (DGH) today issued a counter-offensive, saying ADAG was questioning the criteria for bid evaluation before the tender closed. The Director-General of Hydrocarbons, M.V. who is fully back-

NELP-VI attracts 165 bids from global, domestic majors

Ministry expects \$8-10 b investment in all phases; \$2 b in first phase

Continued from Page 1

Surveys travelling 32,000 km in the Arabian Sea and Bay of Bengal have finally completed their work, and the two ministries hope to finalise the plan within two months, so it can go to the cabinet this year.

India has a deadline of 2009 to file claims before the UN's New York-based Commission on the Limits of the Continental Shelf (CLCS).

The process will lead to stability in the ocean. Peter HT, from New York, Croker quoted an international seabed authority estimate that as of 2000 India's extended continental shelf was estimated to be 1.5 million sq km.

India's undersea treasure hunt

Continued from Page 1

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Cairn submits commercial viability of discoveries in Rajasthan

Cairn, ONGC panel validated commercial viability earlier

Pratim Ranjan Bose
Kolkata, Nov. 15

Cairn India has submitted the declaration of commerciality for the three discoveries in the Northern Appraisal Area (NAA) of Rajasthan block (RJ-ON-90/1) for approval of the management.

Rajasthan discoveries

Northern Appraisal Area may prove to be a high prospect region for Cairn. The potential of the area is estimated to be in excess of 200 million barrels of oil.

India to produce 1 mmscmd gas within 4 yrs

More production will reduce gas prices.

ONGC strikes gas in Rajasthan

Since the block is a pre-Nelp one, the company does not need to notify the Directorate-General of Hydrocarbons, the upstream regulator.

The rate of gas flowing from the discovery is "encouraging", another senior ONGC official said. He added that although the flow rate was not very large, it was "not bad".

The company will now undertake various tests to determine the reserves, besides studying the quality of the gas.

Besides gas, the Rajasthan basin is believed to be rich in oil. Cairn India has already discovered crude oil in the Barmer area of Rajasthan and production from which is scheduled to begin in the middle of 2009. At a peak production rate of 150,000 barrels of oil per day, the Barmer field is expected to increase the country's oil production

Global energy giants bid for oil, gas blocks

DELHI, Sept. 15: Global energy giants including British Petroleum (BP) and Petronas of Malaysia were among the companies that bid today for oil and gas blocks in India offered in the first round of auction under the New Exploration and Licensing Policy (NELP-VI).

Cairn hopes to sustain Ravva output for a decade

Plans to pump in more money into the field

partner in five others.

Mr. Sibal said while 52 bids were received for 24 deep water blocks, 10 shallow blocks got 24 bids. "We will also bid for



DIRECTORATE GENERAL OF HYDROCARBONS

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