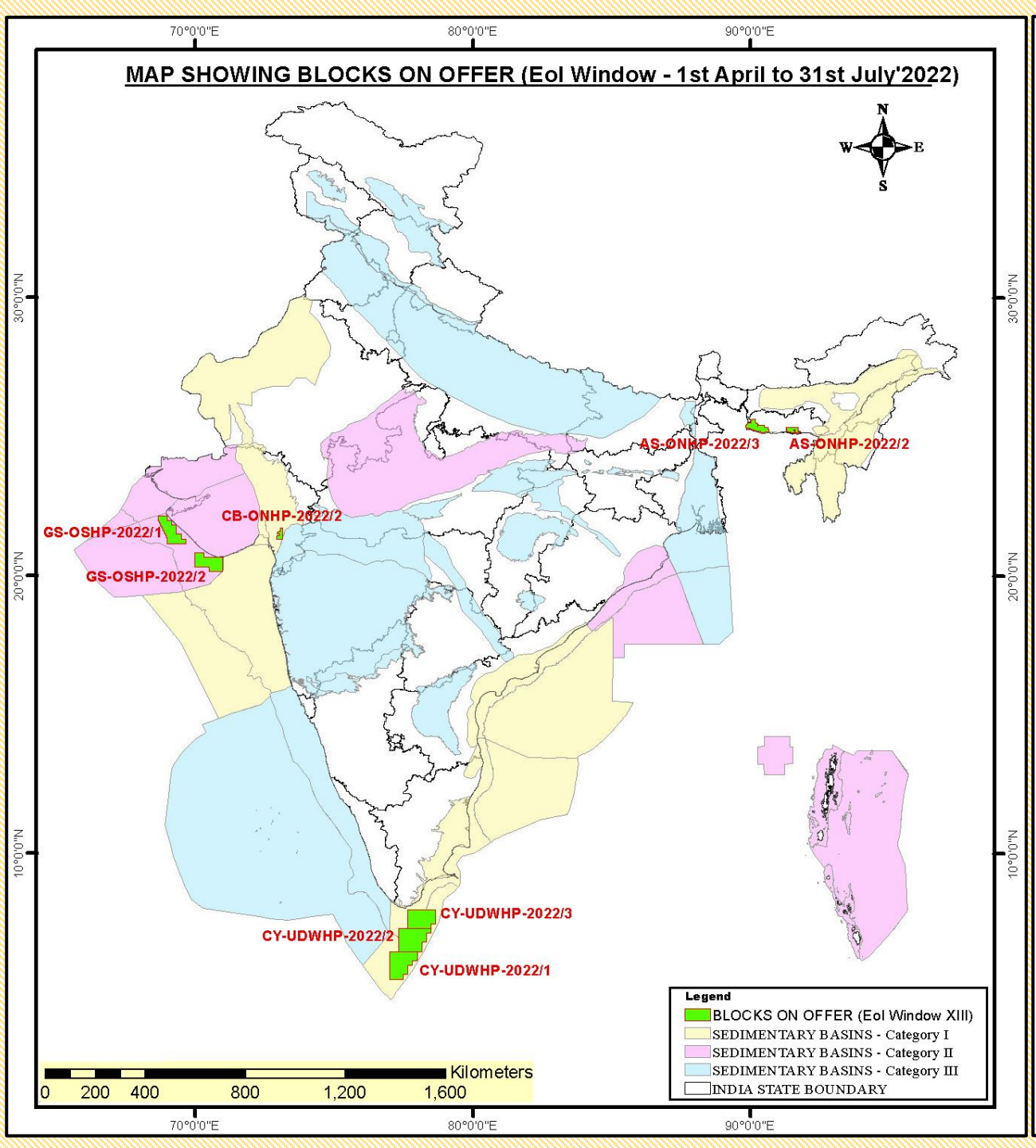
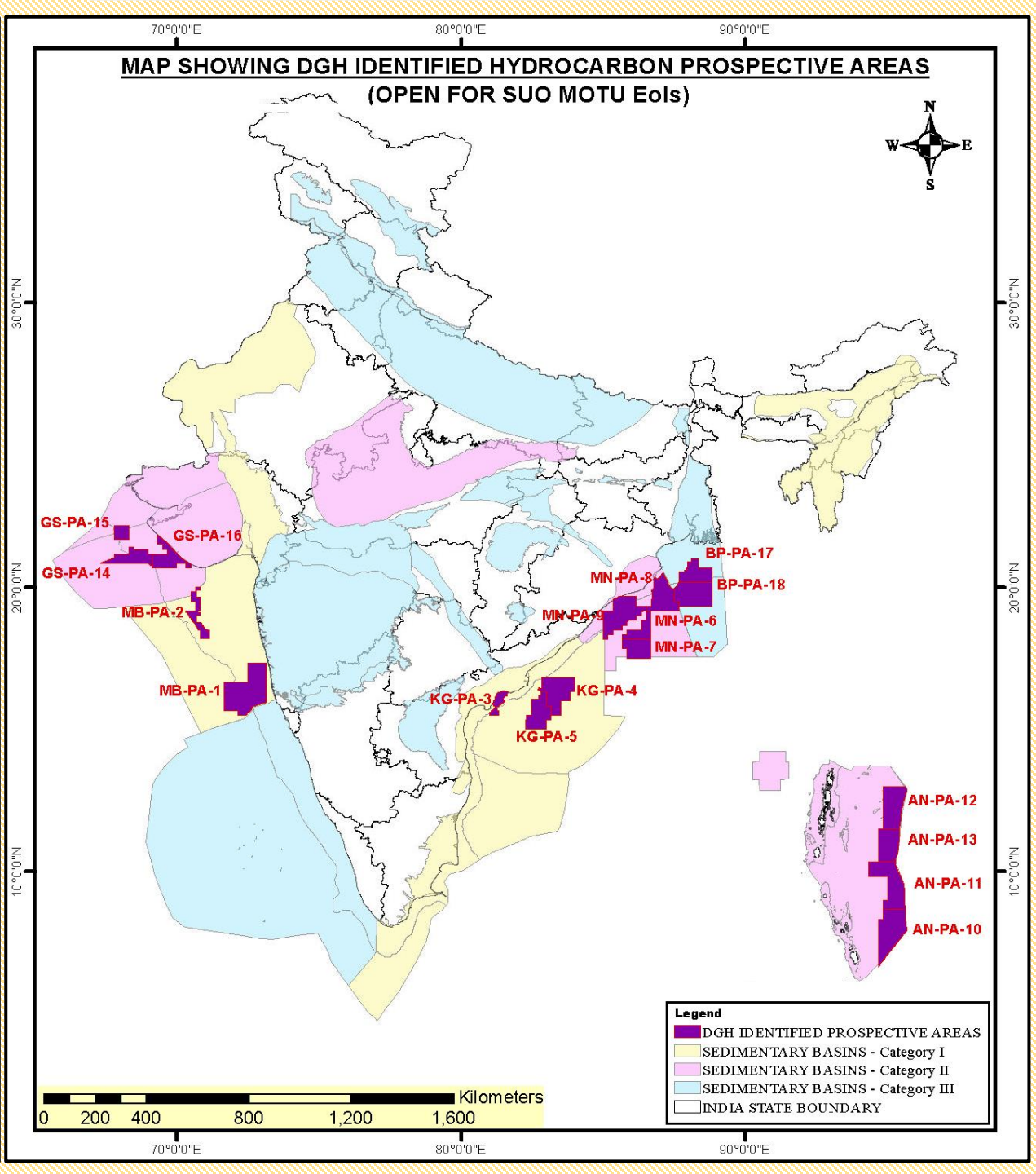
Offshore Bid Round (OALP-IX) – India

9 basins | 18 Identified Prospective Areas+8 Blocks | 220,000+ SQ KM Area

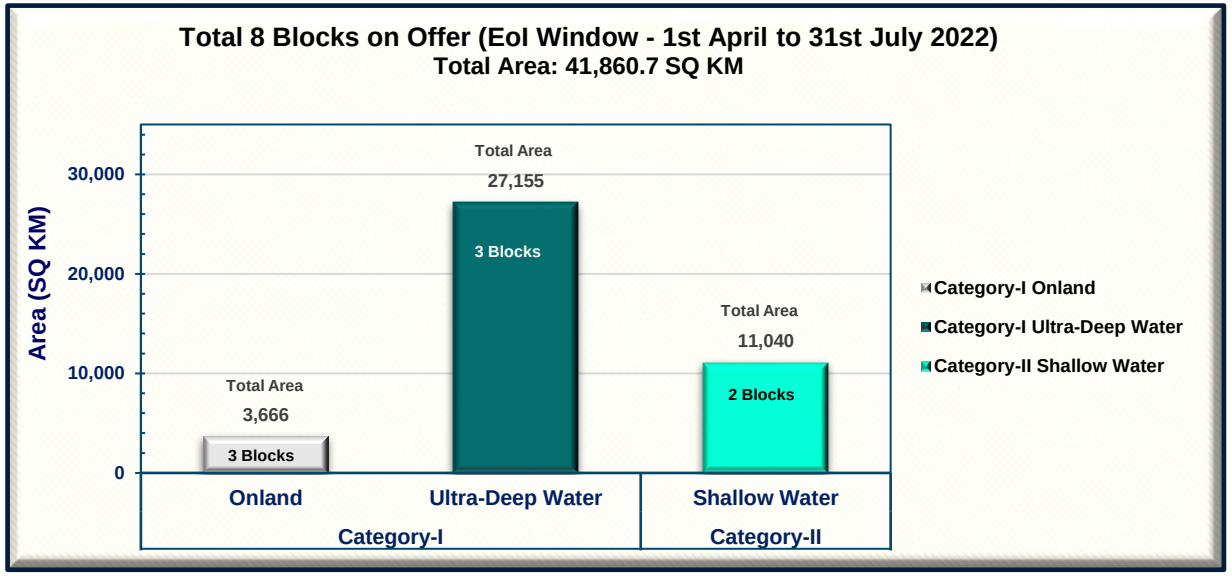
Email :- facilitationoal@dghindia.gov.in Web: www.dghindia.gov.in
Phone- +91-120-2472000 Fax- +91-1202472049


MAP SHOWING BLOCKS ON OFFER (EoI Window - 1st April to 31st July'2022)
70°0'0"E
80°0'0"E
90°0'0"E
30°0'0"N
20°0'0"N
10°0'0"N
N
W
E
S
AS-ONHP-2022/3
AS-ONHP-2022/2
CB-ONHP-2022/2
GS-OSHP-2022/1
GS-OSHP-2022/2
CY-UDWHP-2022/3
CY-UDWHP-2022/2
CY-UDWHP-2022/1
Legend
BLOCKS ON OFFER (EoI Window XIII)
SEDIMENTARY BASINS - Category I
SEDIMENTARY BASINS - Category II
SEDIMENTARY BASINS - Category III
INDIA STATE BOUNDARY
Kilometers
0 200 400 800 1,200 1,600


MAP SHOWING DGH IDENTIFIED HYDROCARBON PROSPECTIVE AREAS
(OPEN FOR SUO MOTU EoIs)
70°0'0"E
80°0'0"E
90°0'0"E
30°0'0"N
20°0'0"N
10°0'0"N
N
W
E
S
GS-PA-15
GS-PA-16
GS-PA-14
MB-PA-2
MB-PA-1
BP-PA-17
MN-PA-8
BP-PA-18
MN-PA-9
MN-PA-6
MN-PA-7
KG-PA-3
KG-PA-4
KG-PA-5
AN-PA-12
AN-PA-13
AN-PA-11
AN-PA-10
Legend
DGH IDENTIFIED PROSPECTIVE AREAS
SEDIMENTARY BASINS - Category I
SEDIMENTARY BASINS - Category II
SEDIMENTARY BASINS - Category III
INDIA STATE BOUNDARY
Kilometers
0 200 400 800 1,200 1,600

Details of 8 Blocks on Offer (EoI Window - 1st April to 31st July 2022)*

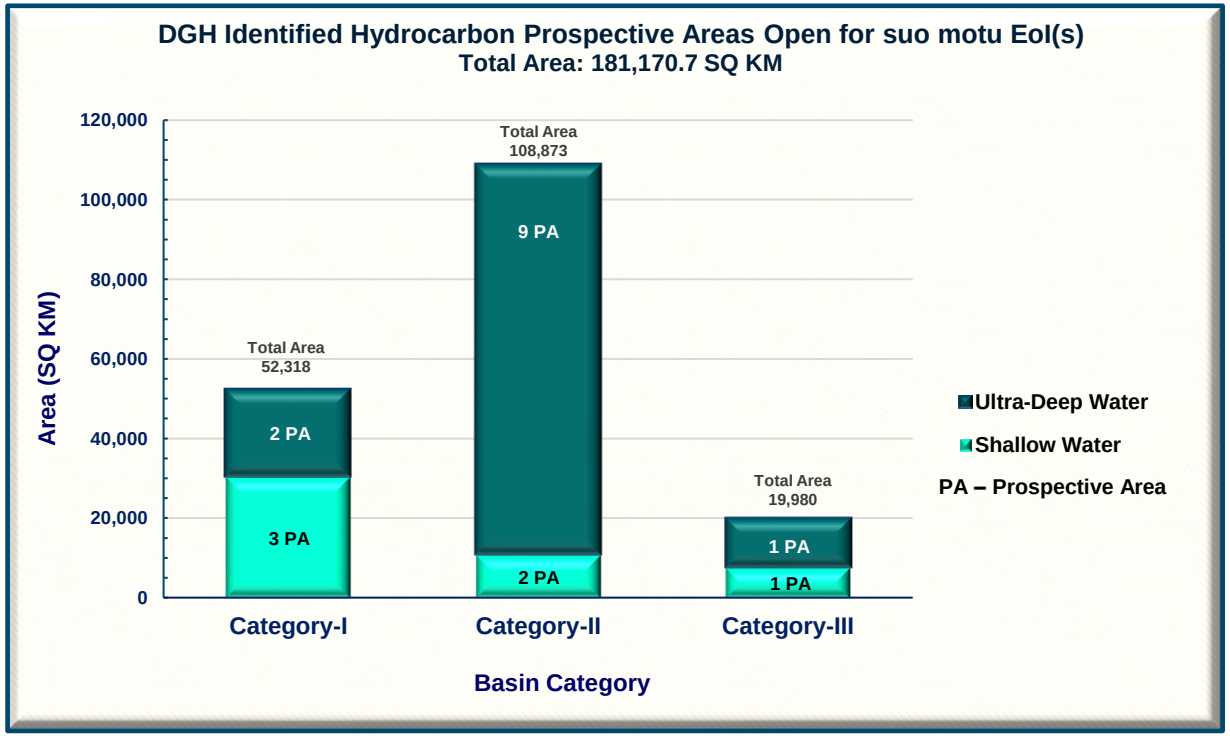
S. No.	Basin Category	Basin	Name of Block	Area (SQ KM)	Type
1	Category-I	Cambay Basin	CB-ONHP-2022/2	713.92	Onland
2		Assam Shelf Basin	AS-ONHP-2022/2	784.32	
3		Assam Shelf Basin	AS-ONHP-2022/3	2168.09	
4		Cauvery Basin	CY-UDWHP-2022/1	9514.63	Ultra-Deep Water
5		Cauvery Basin	CY-UDWHP-2022/2	9844.72	
6		Cauvery Basin	CY-UDWHP-2022/3	7795.45	
7	Category-II	Saurashtra Basin	GS-OSHP-2022/1	5585.61	Shallow Water
8		Saurashtra Basin	GS-OSHP-2022/2	5453.96	
Total Area				41,860.7	



**Additional Blocks shall be added after completion of EoI window - 1st April to 31st July 2023*

DGH Identified Hydrocarbon Prospective Areas Open for suo motu EoI(s)

S. No.	Basin Category	Basin	DGH Identified Area	Area (SQ KM)	Type
1	Category-I	Mumbai	MB-PA-1	22377.31	Shallow Water
2		Mumbai	MB-PA-2	5195.56	
3		Krishna Godavari	KG-PA-3	2797.19	
4		Krishna Godavari	KG-PA-4	12610.14	Ultra-Deep Water
5		Krishna Godavari	KG-PA-5	9337.36	
6	Category-II	Mahanadi	MN-PA-6	5520.09	Ultra-Deep Water
7		Mahanadi	MN-PA-7	7169.14	
8		Mahanadi	MN-PA-8	10657.2	
9		Mahanadi	MN-PA-9	14157.23	
10		Andaman	AN-PA-10	15744.97	
11		Andaman	AN-PA-11	14928.09	
12		Andaman	AN-PA-12	12531.53	
13		Andaman	AN-PA-13	9894.62	
14		Gujarat Saurashtra	GS-PA-14	7381.27	
15		Gujarat Saurashtra	GS-PA-15	3050.87	Shallow Water
16		Gujarat Saurashtra	GS-PA-16	7838.3	
17	Category-III	Bengal Purnia	BP-PA-17	7626.47	
18		Bengal Purnia	BP-PA-18	12353.38	Ultra-Deep Water
Total Area (Sq Km)				181,170.7	

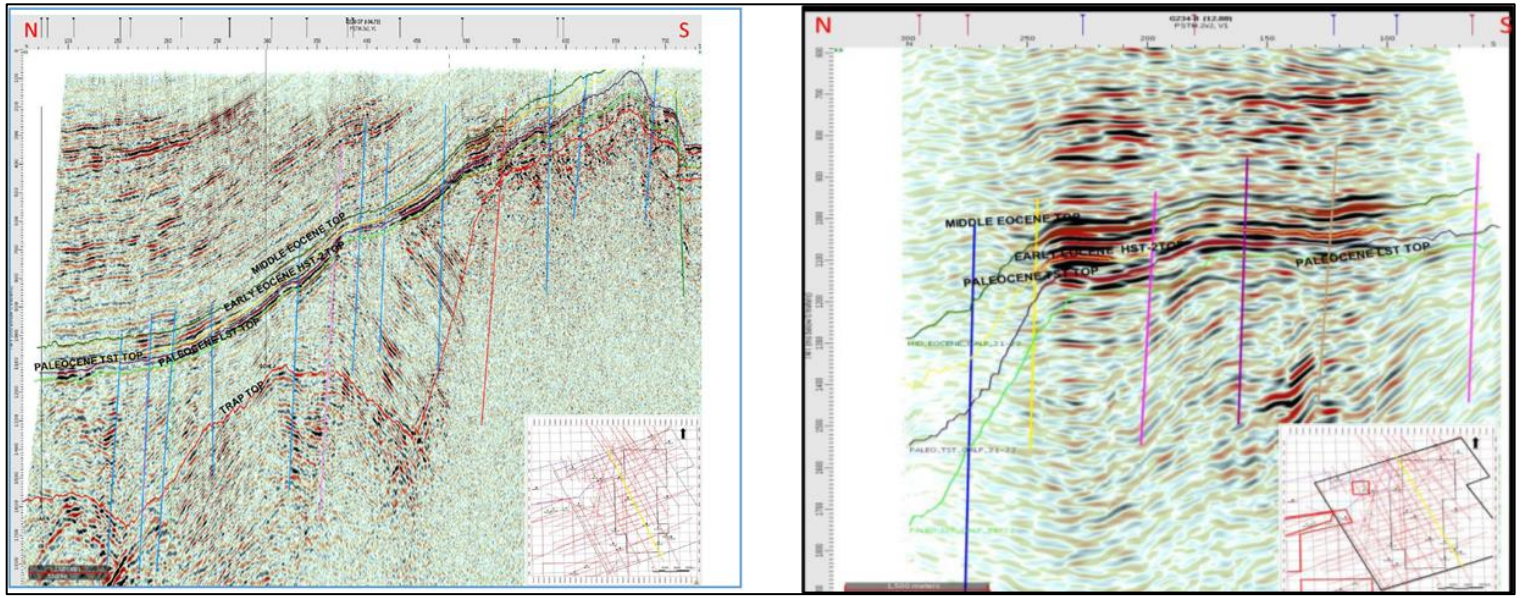


Blocks/ Prospective Areas in Category – I Basins

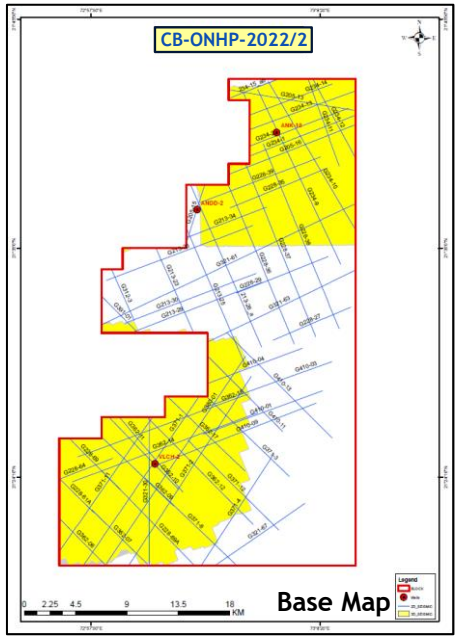
Cambay Basin

Block Name: CB-ONHP-2022/2

Block Area: 714 SQ KM



Representative Seismic Section



Data Availability

2D (LKM)	3D (SKM)	Exp. Well
641	418	3

Target plays: Middle Eocene along with Paleocene LST and Early Eocene

Petroleum System:

Source rock:- Cambay Shale, shale of the Ankleshwar/ Kalol Formation and Tarapur Shale

Reservoir:- Olpad Formation and Sandstone of Middle/Late Eocene

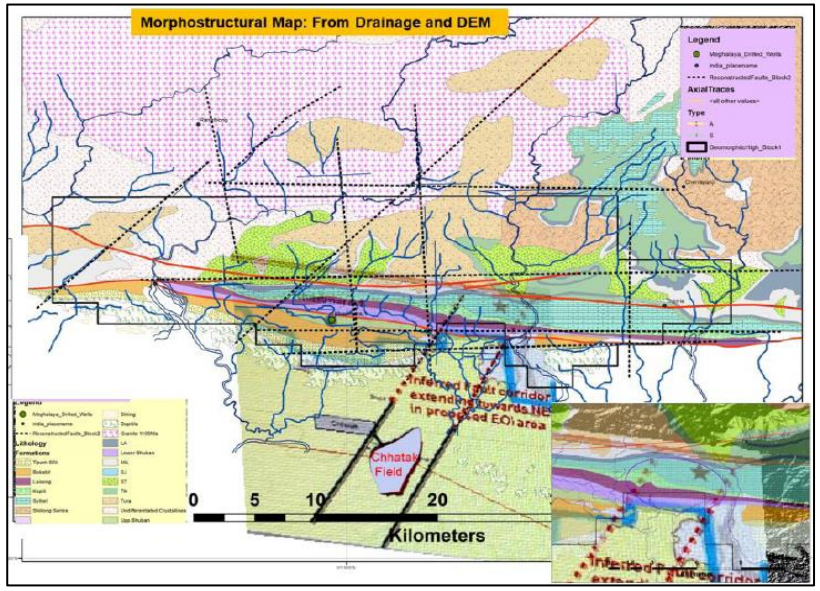
Entrapment mechanism:- Structural and Stratigraphic Traps

Envisaged Petroleum system: Paleocene, Early Eocene and Middle Eocene- Paleocene, Early Eocene and Middle Eocene

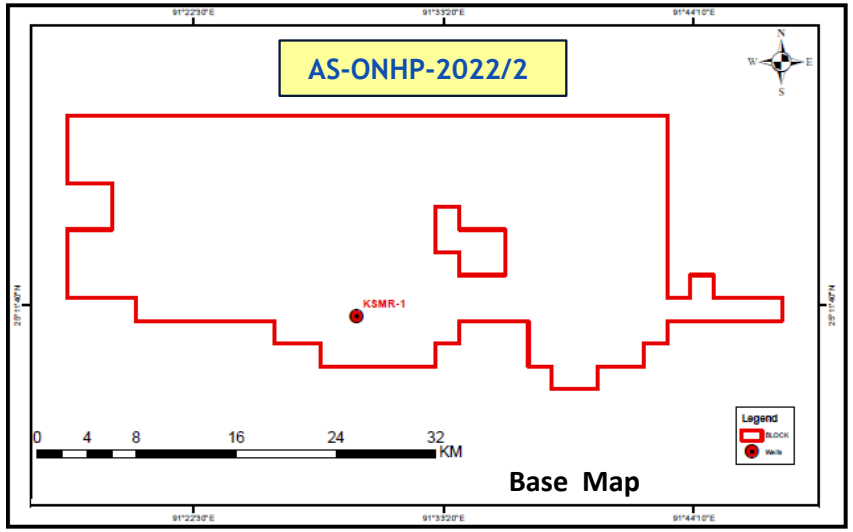
Assam Shelf Basin

Block Name: AS-ONHP-2022/2

Block Area: 784 SQ KM



Conceptual model for the area



Data Availability

2D (LKM)	3D (SKM)	Exp. Well
0	0	1

Target plays: Paleocene & Oligo-Miocene sequences

Petroleum System:

Source rock:- Kopili, Sylhet and Tura formations

Reservoir:- The sandstone reservoirs within Tura, Sylhet, Kopili, Barail and Bhuban formations are probably sheet to discrete lenticular bodies

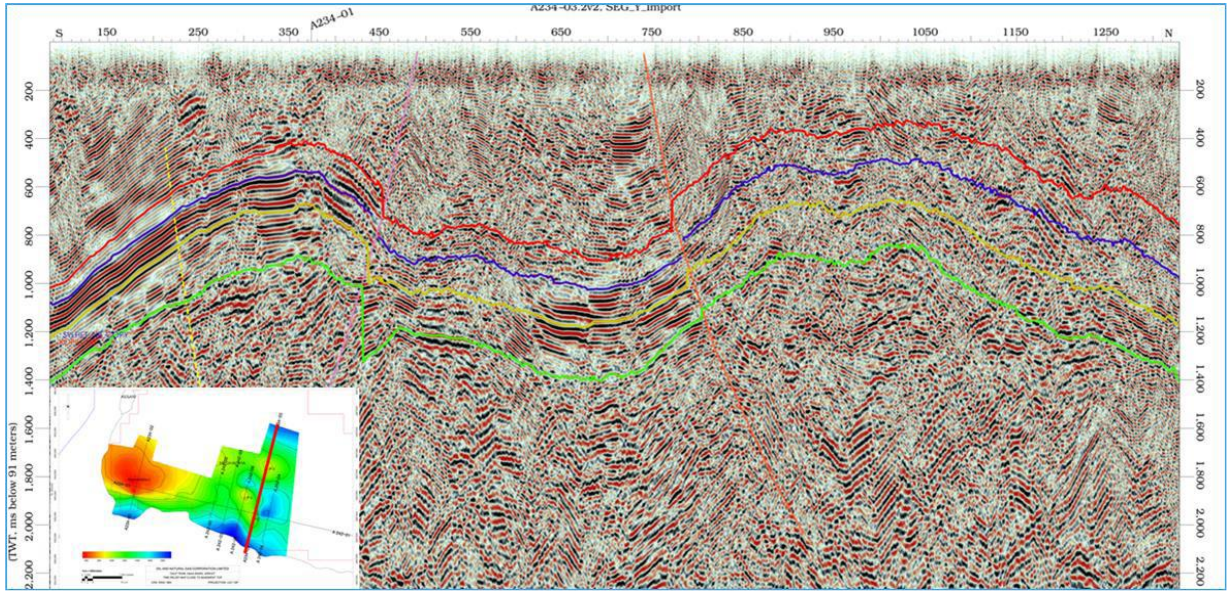
Entrapment mechanism:- Structural trap

Envisaged Petroleum system: Petroleum system envisaged are (i) Paleocene- Eocene: Tura- Sylhet- Kopili (ii) Oligo-Miocene Play: Barail-Bhuban play

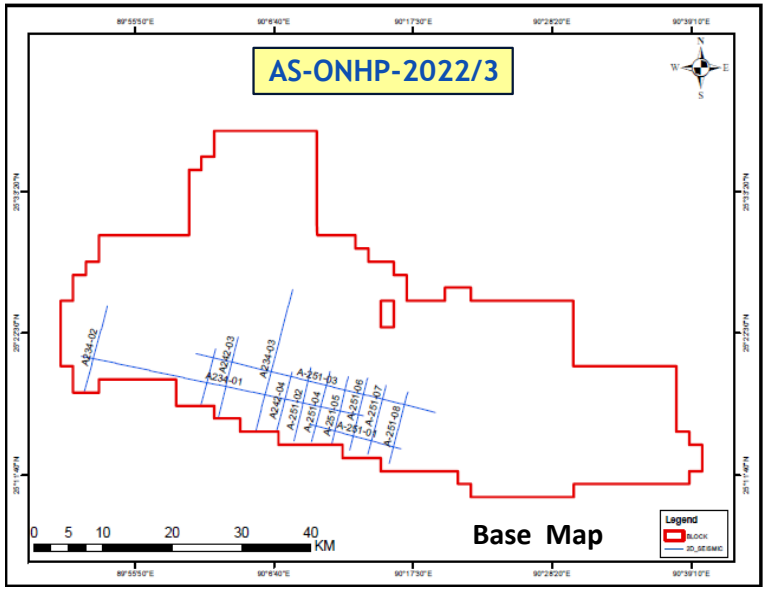
Assam Shelf Basin

Block Name: AS-ONHP-2022/3

Block Area: 2,168 SQ KM



Representative Seismic Section



Data Availability

2D (LKM)	3D (SKM)	Exp. Well
206	0	0

Target plays: Paleocene & Oligo-Miocene sequences

Petroleum System:

Source rock:- Kopili, Sylhet and Tura formations

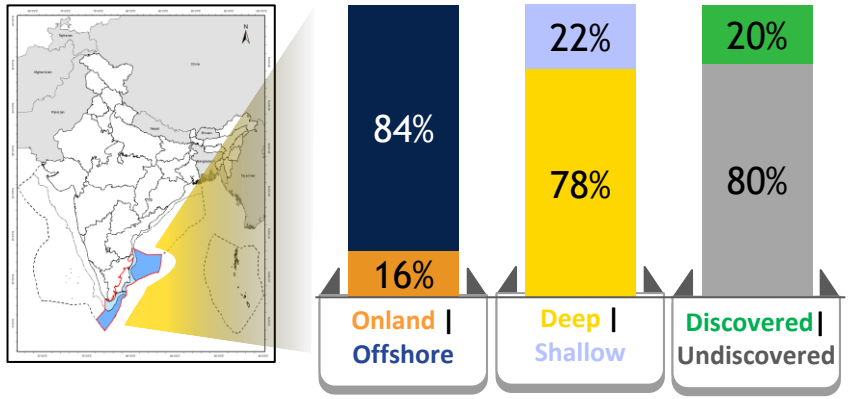
Reservoir:- The sandstone reservoirs within Tura, Sylhet, Kopili, Barail and Bhuban formationsare probably sheet to discrete lenticular bodies

Entrapment mechanism:- Structural trap

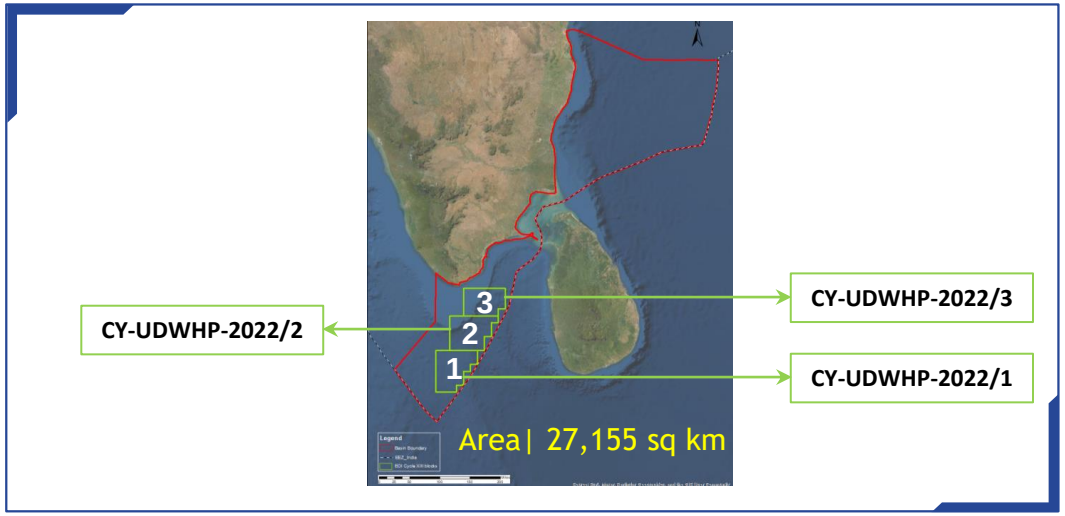
Envisaged Petroleum system: Petroleum system envisaged are (i) Paleocene- Eocene: Tura- Sylhet- Kopili (ii) Oligo-Mio Play: Barail-Bhuban play

Cauvery Basin

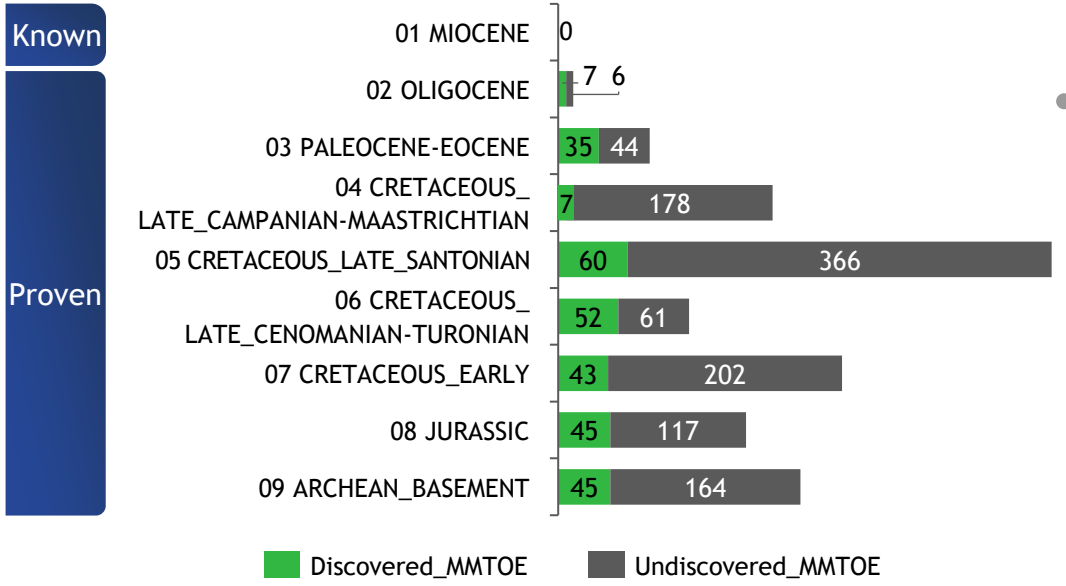
Proven resources in Mesozoic and Basement



3 Blocks on offer



Basin's risked resource potential - 1,139 MMTOE



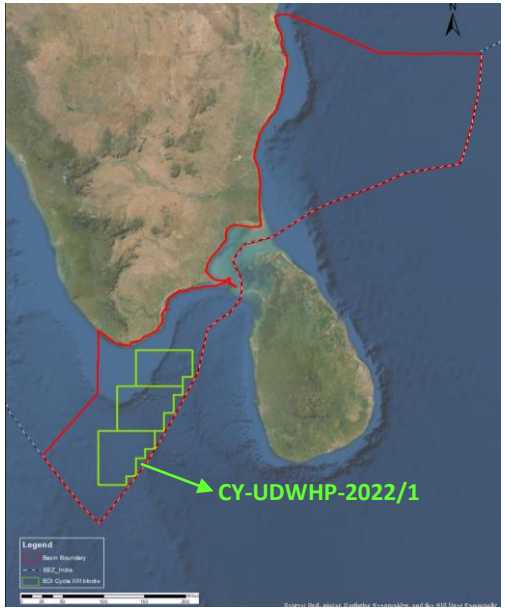
Key characteristics

- Basin with significant production from Mesozoic and Basement
- Deep-to-Ultradeep water largely appraised but less explored
- Opportunity to explore Ultradeep in the north-east and southern part towards Gulf of Mannar

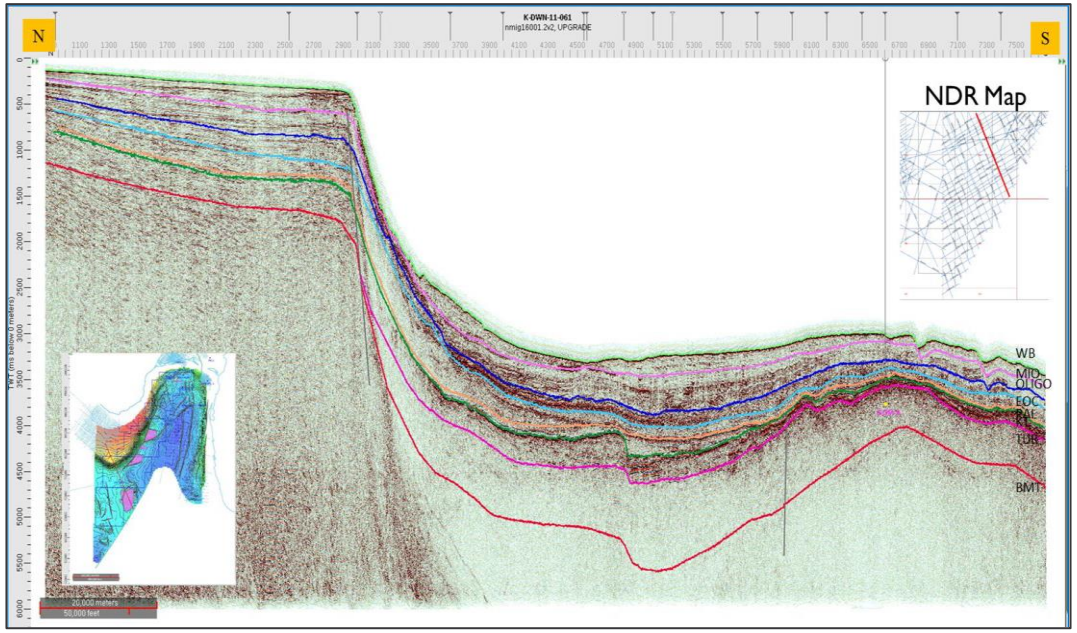
Cauvery Basin

Block Name: CY-UDWHP-2022/1

Block Area: 9,515 SQ KM



Location Map

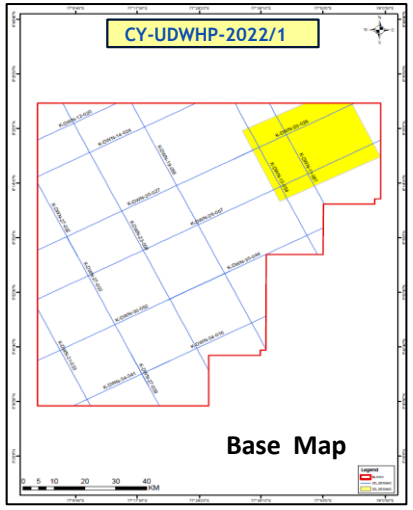


Representative Seismic Section

Data Availability

2D (LKM)	3D (SKM)	Exp. Well
1002	988	Nil

Target plays: Paleocene, Cretaceous & Basement/ Technical basement



Petroleum System:

Source rock: Late Jurassic to Early Cretaceous sequences

Reservoir: Late synrift sequences, Lowstand sequences during Turonian, Late Coniacian-Santonian, Late Maastrichtian and Late Paleocene would result in the deposition of clastic reservoir facies in the Sub-Basin in the form of slope fans & basin floor fans.

Entrapment Mechanism: Fault closure , stratigraphic drape over structural highs, pinch-out traps and channel fills.

Envisaged plays: Basement, Cretaceous & Older and Tertiary play.

Thermogenic Petroleum System:

1. Middle Jurassic – Jurassic, Early Cretaceous, Late Cretaceous (?)
2. Early Cretaceous – Early Cretaceous, Late Cretaceous (?)
3. Late Cretaceous – Late Cretaceous (?)

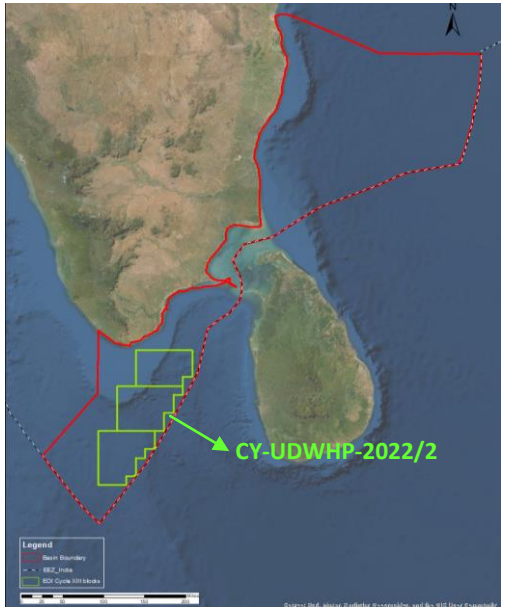
Biogenic Petroleum System:

1. Oligocene – Oligocene (?)

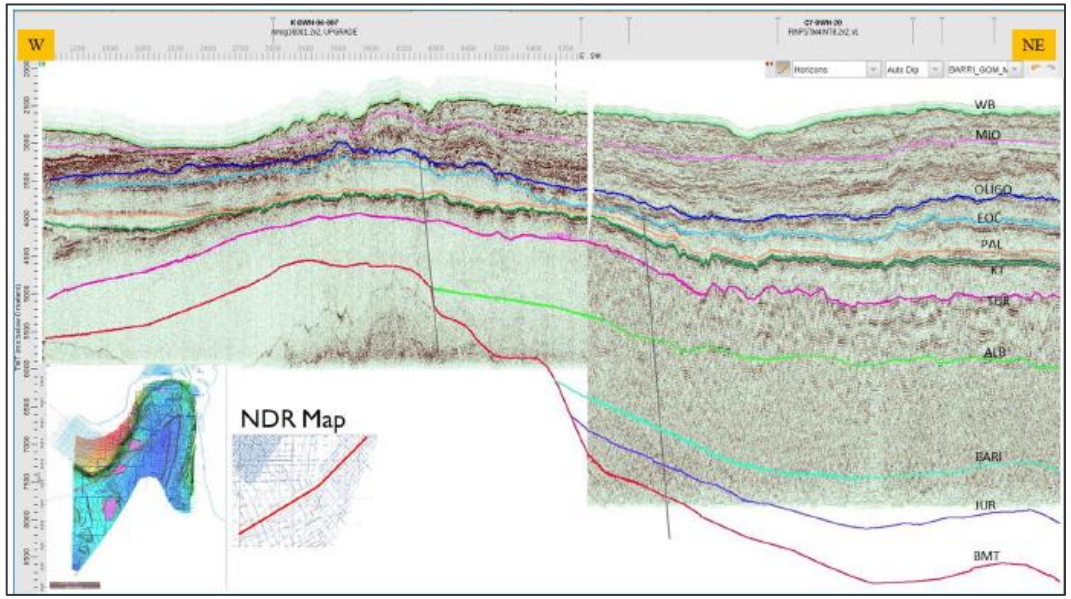
Cauvery Basin

Block Name: CY-UDWHP-2022/2

Block Area: 9,845 SQ KM



Location Map

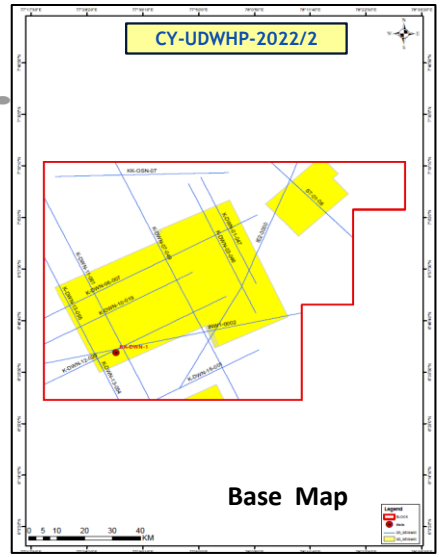


Representative Seismic Section

Data Availability

2D (LKM)	3D (SKM)	Exp. Well
892	2811	1

Target plays: Paleocene, Cretaceous & Basement/ Technical basement



Petroleum System:

Source rock: Late Jurassic to Early Cretaceous sequences

Reservoir: Late synrift sequences, Lowstand sequences during Turonian, Late Coniacian-Santonian, Late Maastrichtian and Late Paleocene would result in the deposition of clastic reservoir facies in the Sub-Basin in the form of slope fans & basin floor fans.

Entrapment Mechanism: Fault closure , stratigraphic drape over structural highs, pinch-out traps and channel fills.

Envisaged plays: Basement, Cretaceous & Older and Tertiary play.

Thermogenic Petroleum System:

1. Middle Jurassic – Jurassic, Early Cretaceous, Late Cretaceous (?)
2. Early Cretaceous – Early Cretaceous, Late Cretaceous (?)
3. Late Cretaceous – Late Cretaceous (?)

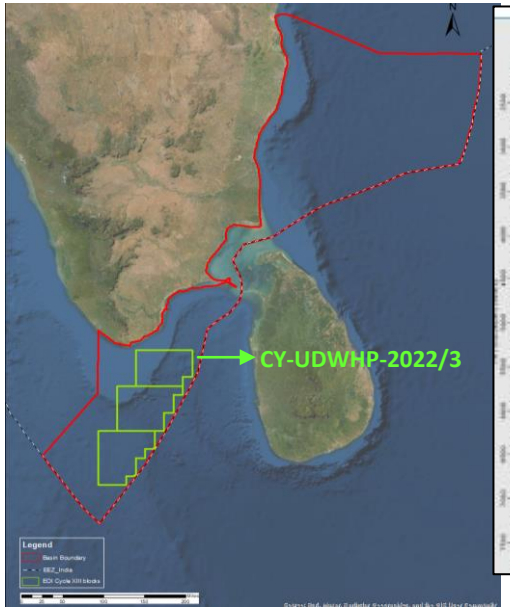
Biogenic Petroleum System:

1. Oligocene – Oligocene (?)

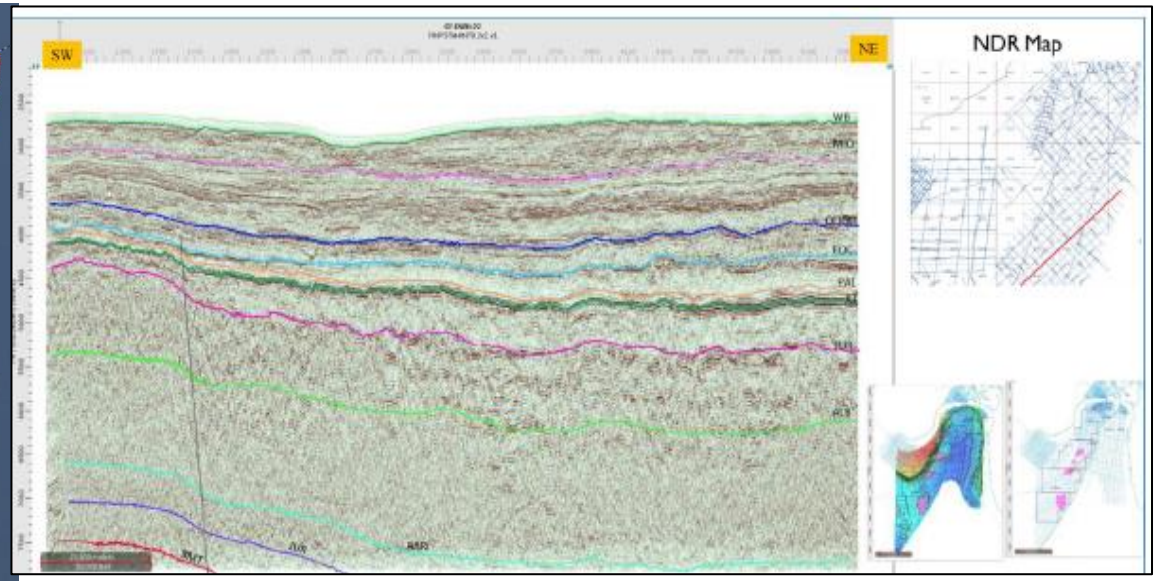
Cauvery Basin

Block Name: CY-UDWHP-2022/3

Block Area: 7,795 SQ KM



Location Map

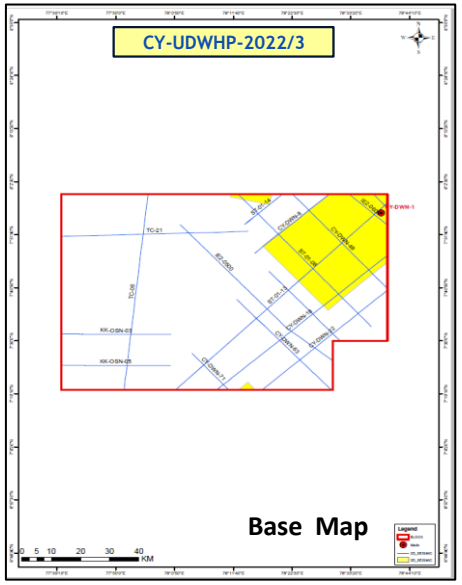


Representative Seismic Section

Data Availability

2D (LKM)	3D (SKM)	Exp. Well
894	1444	1

Target plays: Eocene, Paleocene & Cretaceous



Petroleum System:

Source rock: Late Jurassic to Early Cretaceous sequences

Reservoir: Late synrift sequences, Lowstand sequences during Turonian, Late Coniacian-Santonian, Late Maastrichtian and Late Paleocene would result in the deposition of clastic reservoir facies in the Sub-Basin in the form of slope fans & basin floor fans.

Entrapment Mechanism: Fault closure , stratigraphic drape over structural highs, pinch-out traps and channel fills.

Envisaged plays: Basement, Cretaceous & Older and Tertiary play.

Thermogenic Petroleum System:

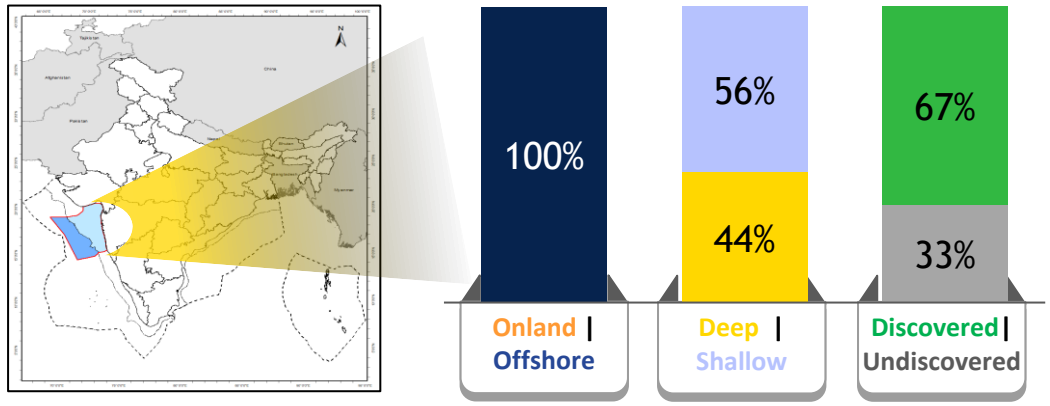
1. Middle Jurassic – Jurassic, Early Cretaceous, Late Cretaceous (?)
2. Early Cretaceous – Early Cretaceous, Late Cretaceous (?)
3. Late Cretaceous – Late Cretaceous (?)

Biogenic Petroleum System:

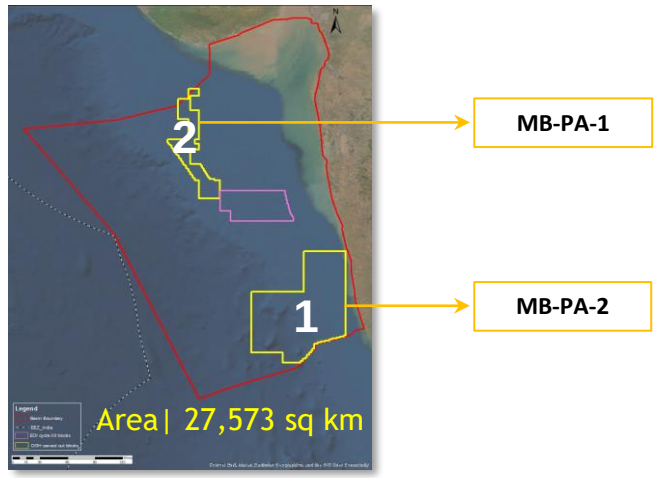
1. Oligocene – Oligocene (?)

Mumbai Basin

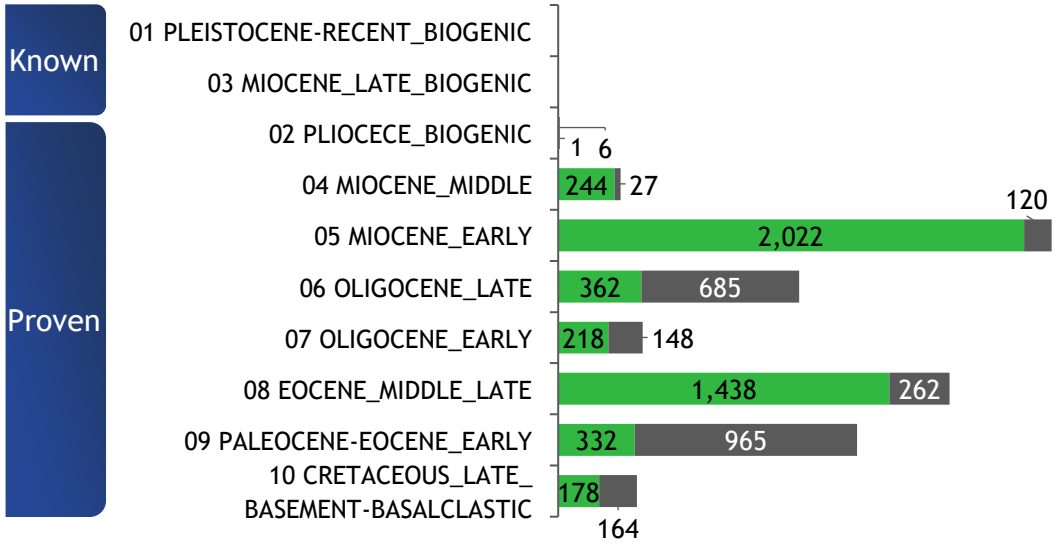
Mostly discovered, Mesozoic an opportunity



2 Prospective Areas Identified



Basin's risked resource potential - 2,377 MMTOE



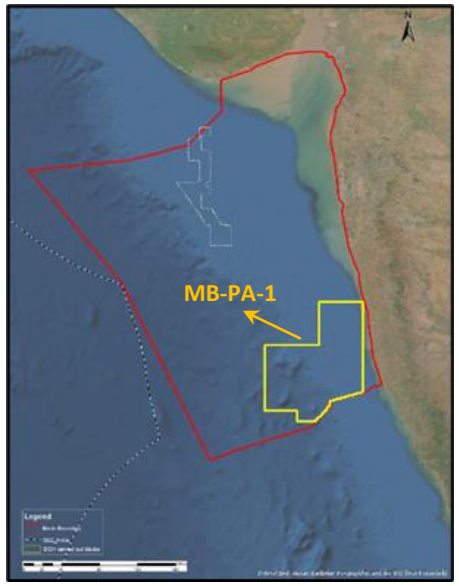
Key characteristics

- The basin has discovered resources of 4.8 BTOE, producing half of country's oil and gas
- Opportunity to chase prospective plays (Paleocene and Eocene) towards deepwater
- Opportunity to explore Sub-basalt Mesozoic Play at a deeper depth (3,000m+)

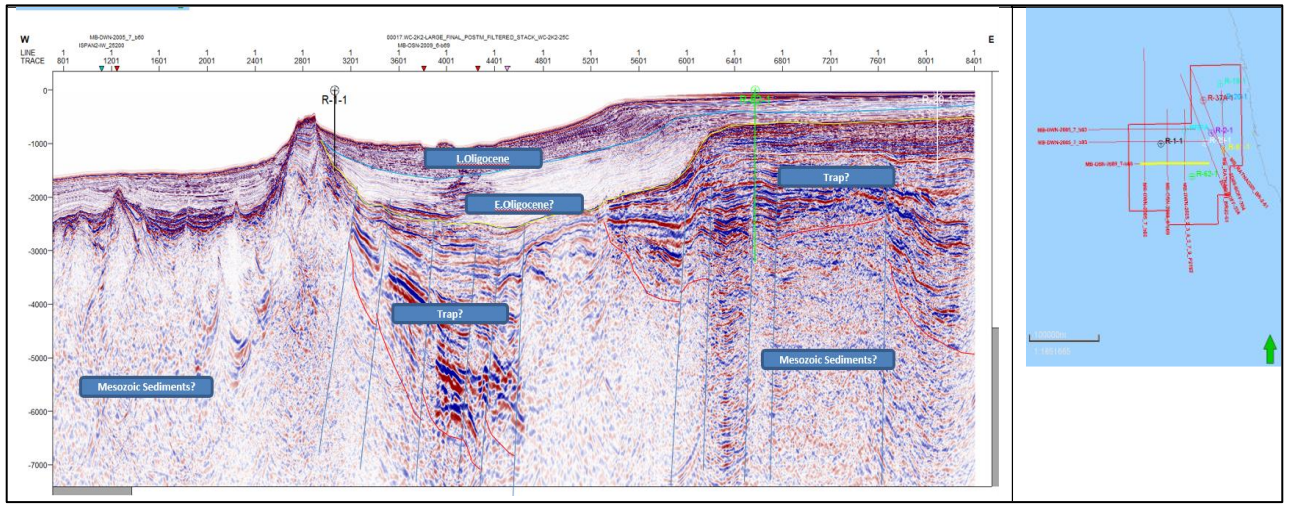
Mumbai Basin

Prospective Area Name: MB-PA-1

Area: 22,377 SQ KM



Location Map

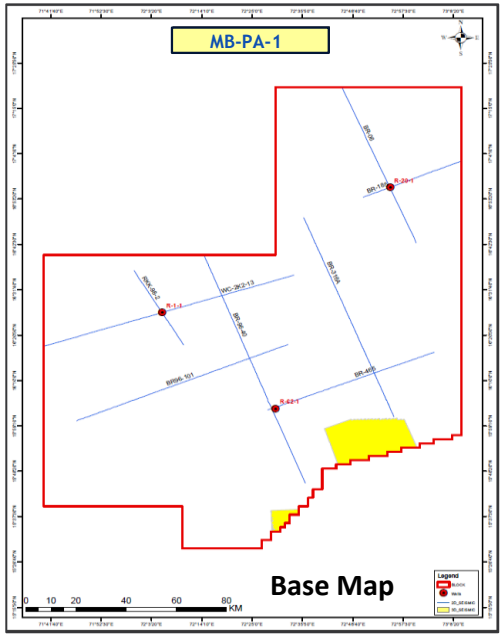


Representative Seismic Section

Data Availability

2D (LKM)	3D (SKM)	Exp. Well
612	561	3

Prospective plays: To explore prospectivity of Cretaceous, additionally play of Late Miocene (Biogenic)



Base Map

Petroleum System:

Source rock: Paleocene to Early Eocene

Reservoir: Panna Clastic (Paleocene), Devgarh Carbonate (Early Eocene), Bassein Limestone (Middle-to-Late Eocene), Mukta Limestone (Early Oligocene) and Miocene carbonates

Seal: Panna

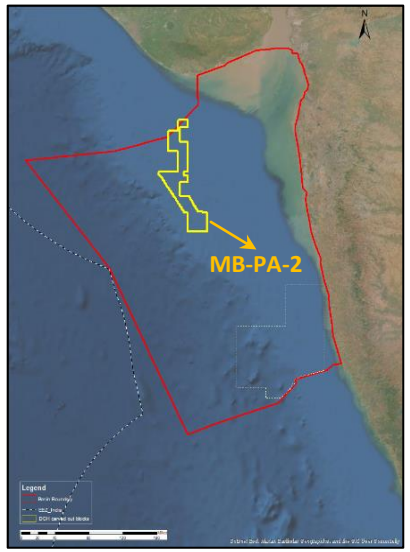
Entrapment mechanism: Structural (Fault-bound closures)

Envisaged play: Paleocene Clastic, Early Eocene Carbonate, Middle-Late Eocene Carbonate, Early Oligocene Carbonate and Miocene Carbonate

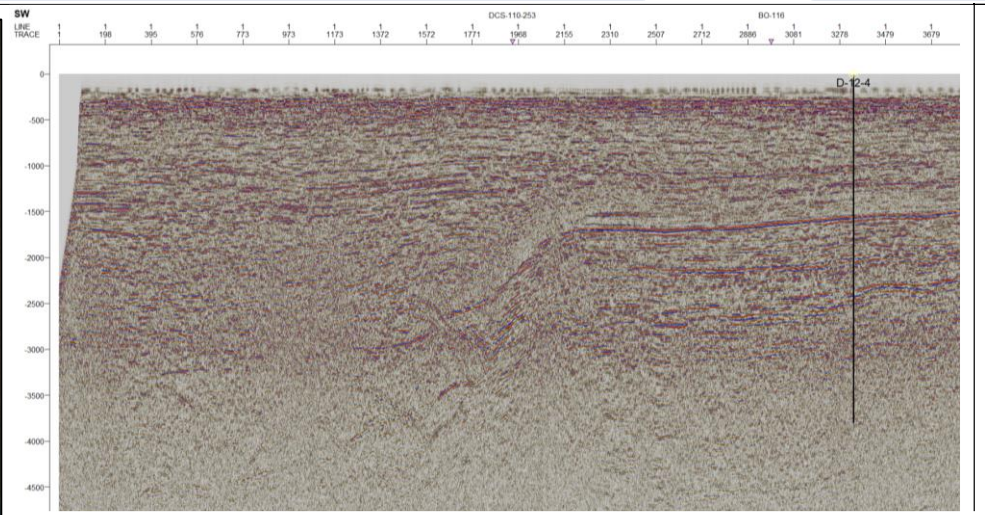
Mumbai Basin

Prospective Area Name: MB-PA-2

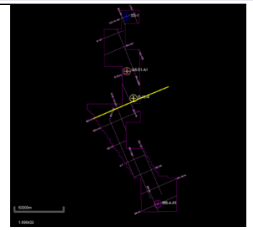
Area: 5,196 SQ KM

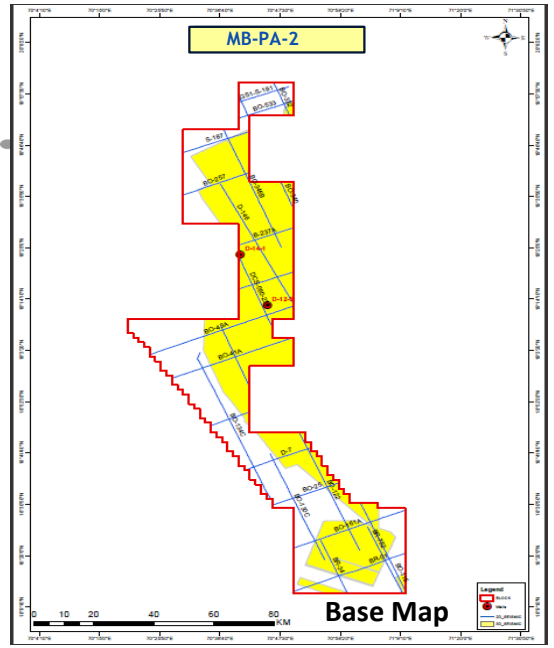


Location Map



Representative Seismic Section





Base Map

Data Availability

2D (LKM)	3D (SKM)	Exp. Well
770	2969	2

Prospective plays: To explore prospectivity of Early Miocene and Middle Miocene

Petroleum System:

Source rock: Paleocene to Early Eocene

Reservoir: Panna Clastic (Paleocene), Devgarh Carbonate (Early Eocene), Bassein Limestone (Middle-to-Late Eocene), Mukta Limestone (Early Oligocene) and Miocene carbonates

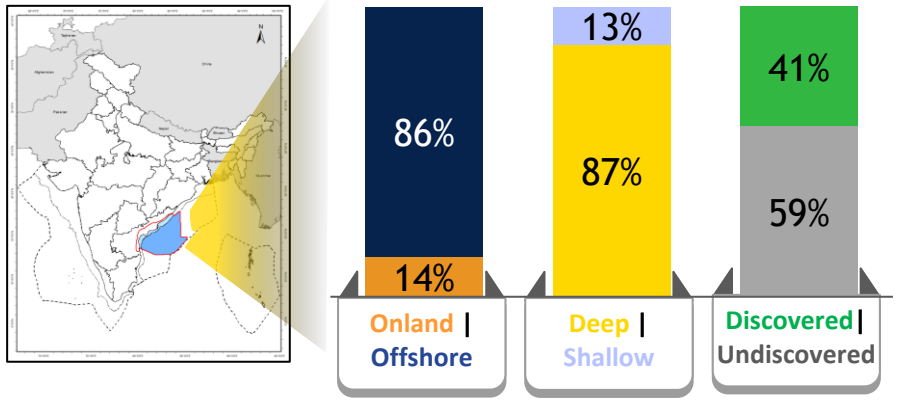
Seal: Panna

Entrapment mechanism: Structural (Fault-bound closures)

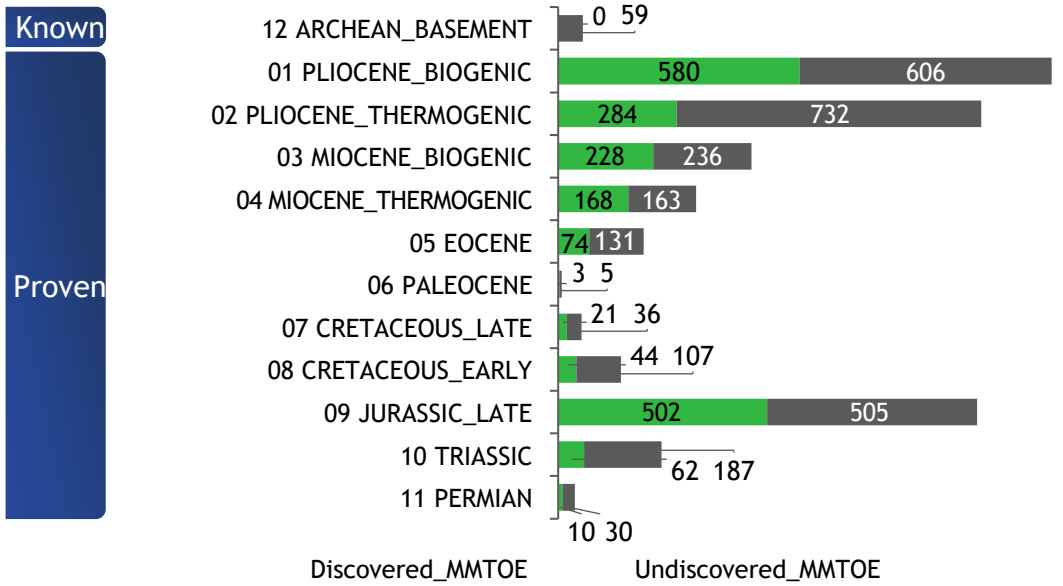
Envisaged play: Paleocene Clastic, Early Eocene Carbonate, Middle-Late Eocene Carbonate, Early Oligocene Carbonate and Miocene Carbonate

Krishna-Godavari Basin

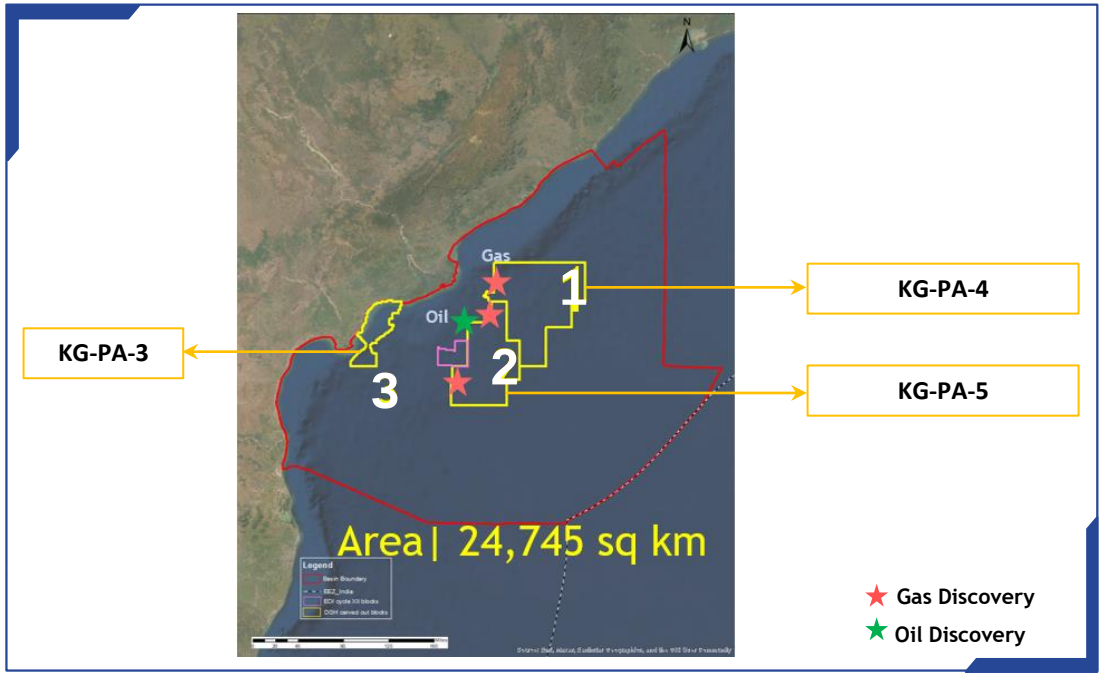
Most prospective, largely proven



Basin's risked resource potential - 2,796 MMTOE



3 Prospective Areas Identified



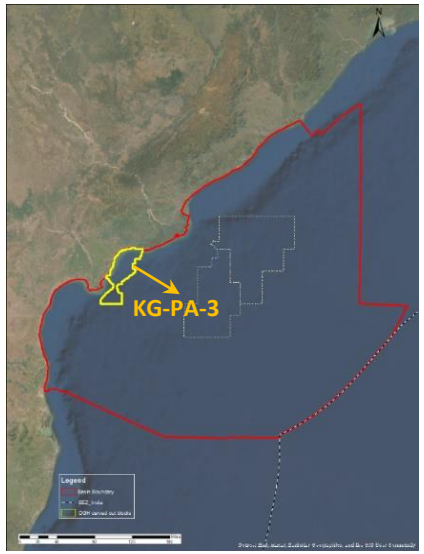
Key characteristics

- Maximum resources, known for country's largest deepwater biogenic gas field
- With 2.0 BTOE resource established, proven plays have significant prospective resources
- Deep/shallow water extensively appraised with large-scale datasets, an opportunity for intensive exploration of channelized deposits

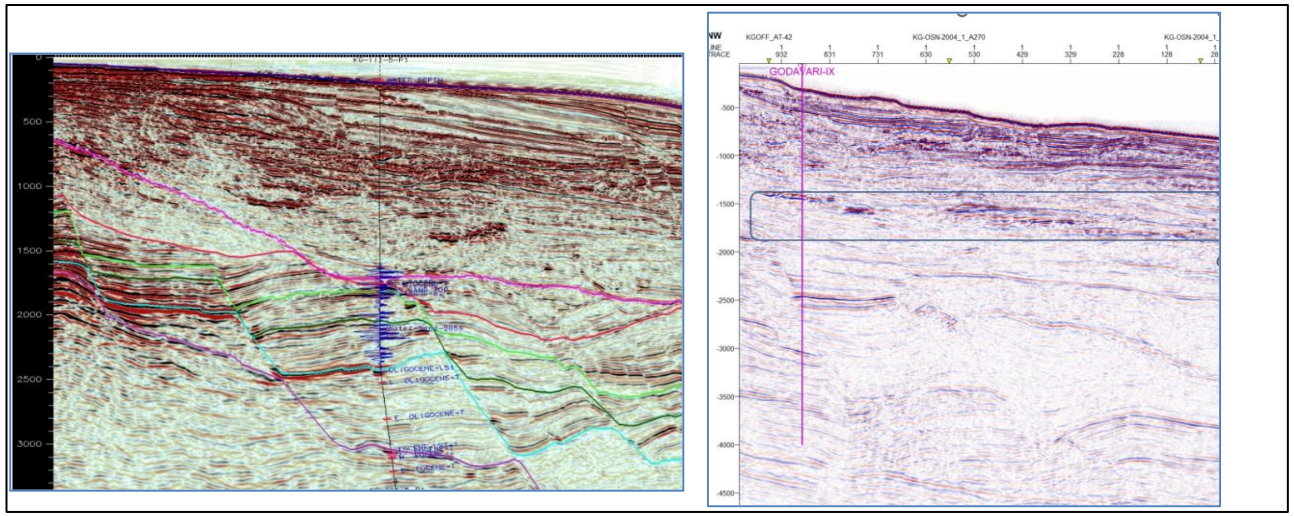
Krishna-Godavari Basin

Prospective Area Name: KG-PA-3

Area: 2,797 SQ KM



Location Map

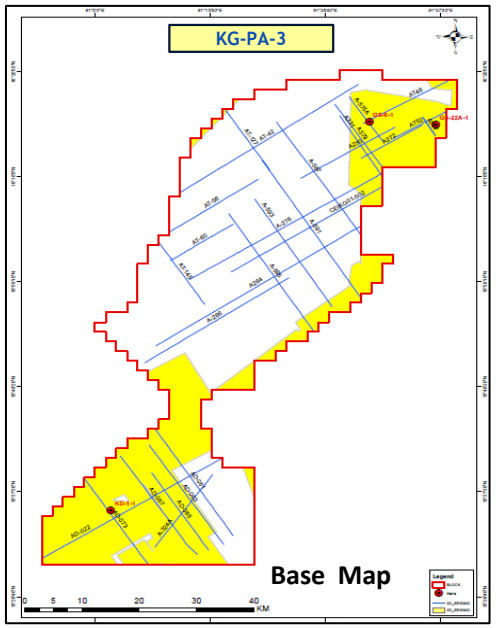


Representative Seismic Sections

Data Availability

2D (LKM)	3D (SKM)	Exp. Well
602	1066	3

Prospective plays: To explore prospectivity in Miocene and Pliocene plays of offshore bars, channel and slope fans.



Base Map

Petroleum System:

Source rock: Mesozoic/Eocene-Oligocene (Thermogenic), Mio-Pleistocene (Biogenic)

Reservoir: Mio-Pliocene and Pleistocene

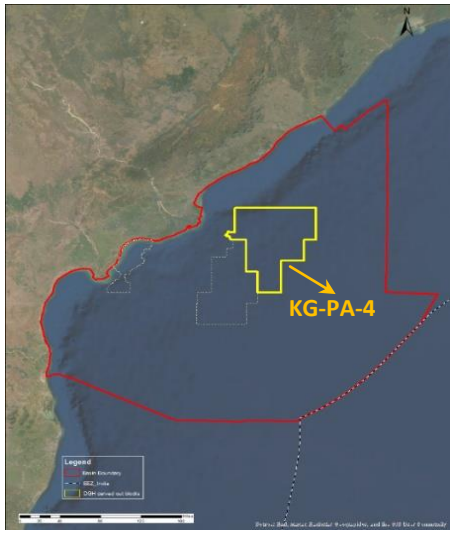
Entrapment Mechanism: Stratigraphic and Strati-structural

Envisaged plays: Pleistocene deepwater channel-lobe complexes, Pliocene deepwater channel complexes abutting against frontal thrust, Late Miocene channelized lobes on the slope created by the frontal thrust.

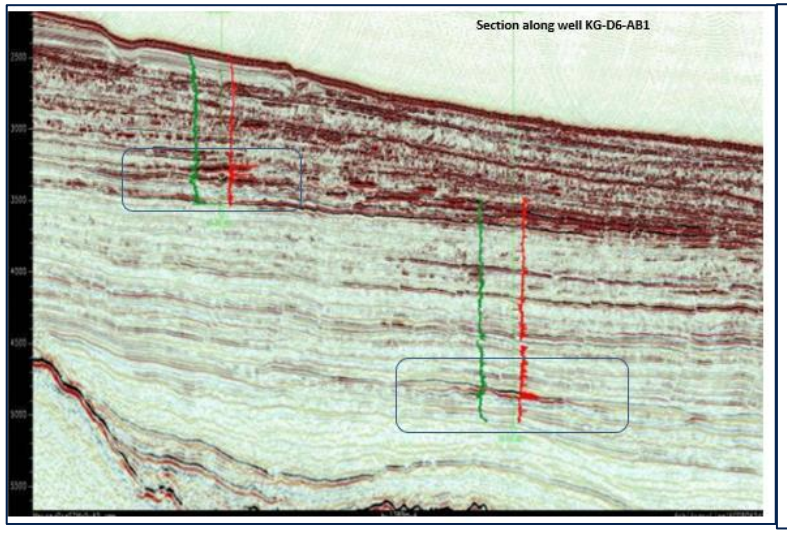
Krishna-Godavari Basin

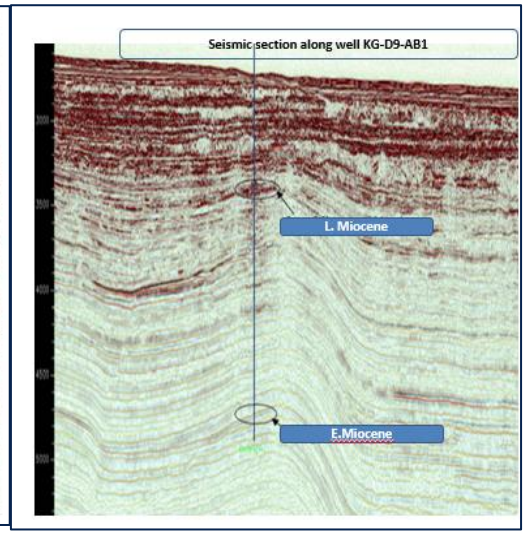
Prospective Area Name: KG-PA-4

Area: 12,610 SQ KM



Location Map



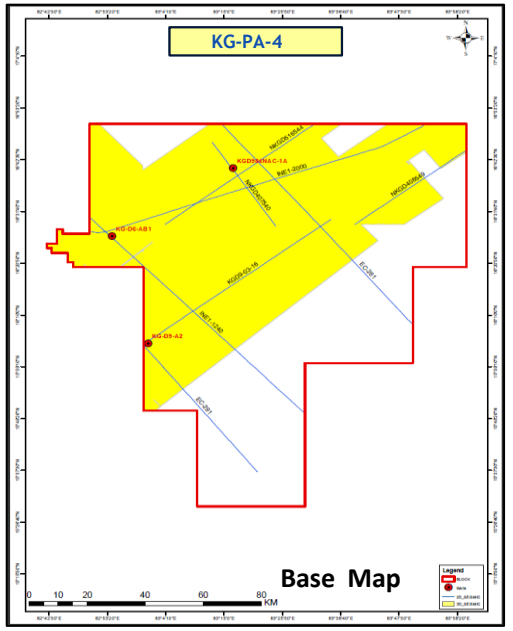


Representative Seismic Sections

Data Availability

2D (LKM)	3D (SKM)	Exp. Well
615	7567	3

Prospective plays: To explore prospectivity in Pliocene Deepwater channel complexes abutting against frontal thrust, Late Miocene channelized lobes on the slope created by the frontal thrust, Pleistocene Deepwater channel-lobe complexes.



Base Map

Petroleum System:

Source rock: Mesozoic/Eocene-Oligocene (Thermogenic), Mio-Pleistocene (Biogenic)

Reservoir: Mio-Pliocene and Pleistocene

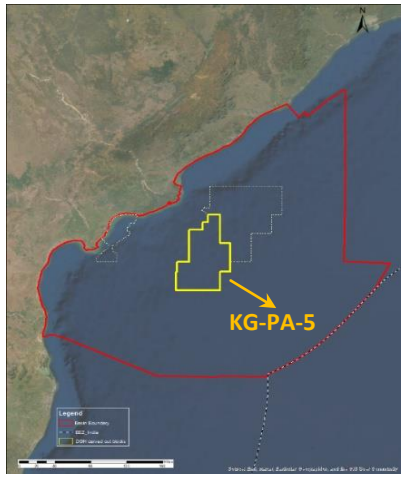
Entrapment Mechanism: Stratigraphic and Strati-structural

Envisaged plays: Pleistocene Deepwater channel-lobe complexes, Pliocene Deepwater channel complexes abutting against frontal thrust, Late Miocene channelized lobes on the slope created by the frontal thrust.

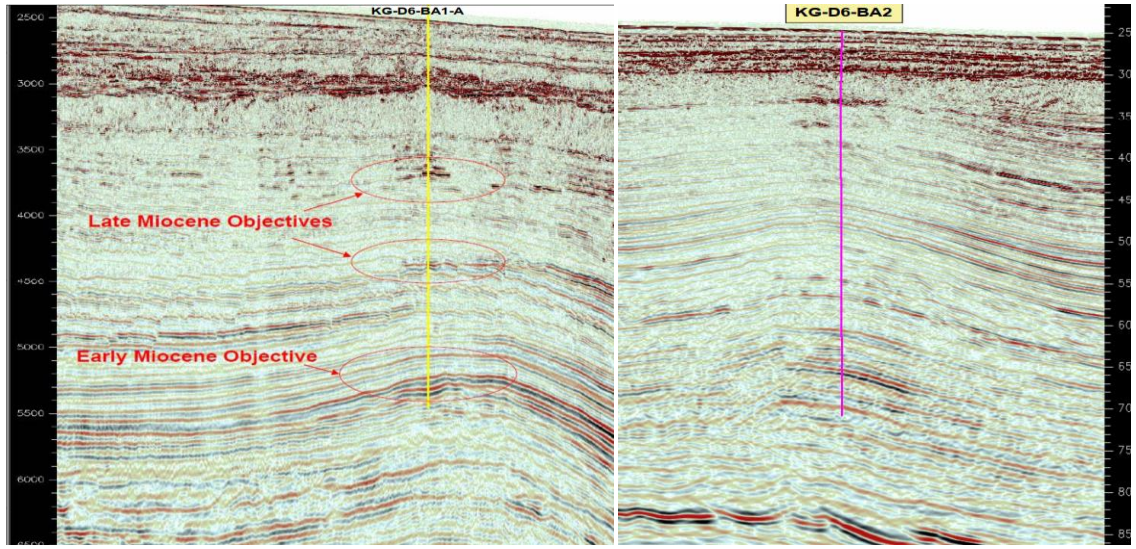
Krishna-Godavari Basin

Prospective Area Name: KG-PA-5

Area: 9,337 SQ KM



Location Map

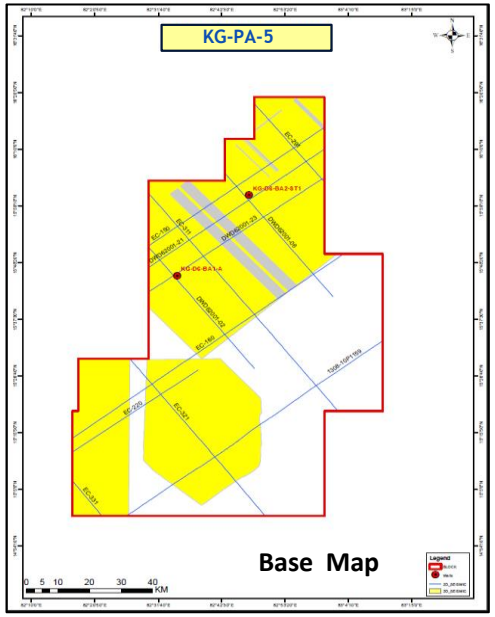


Representative Seismic Sections

Data Availability

2D (LKM)	3D (SKM)	Exp. Well
782	9370	2

Prospective plays: To explore prospectivity in Pliocene deepwater channel complexes abutting against frontal thrust, Late Miocene channelized lobes on the slope created by the frontal thrust, Pleistocene deepwater channel-lobe complexes.



Base Map

Petroleum System:

Source rock: Mesozoic/Eocene-Oligocene (Thermogenic), Mio-Pleistocene (Biogenic)

Reservoir: Mio-Pliocene and Pleistocene

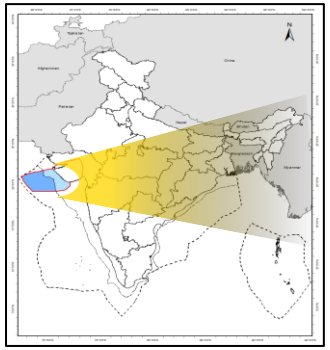
Entrapment Mechanism: Stratigraphic and Strati-structural

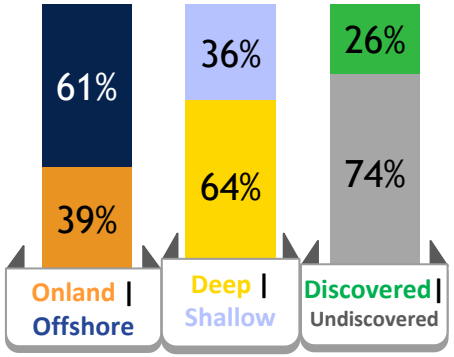
Envisaged plays: Pleistocene deepwater channel-lobe complexes, Pliocene deepwater channel complexes abutting against frontal thrust, Late Miocene channelized lobes on the slope created by the frontal thrust.

Blocks/ Prospective Areas in Category – II Basins

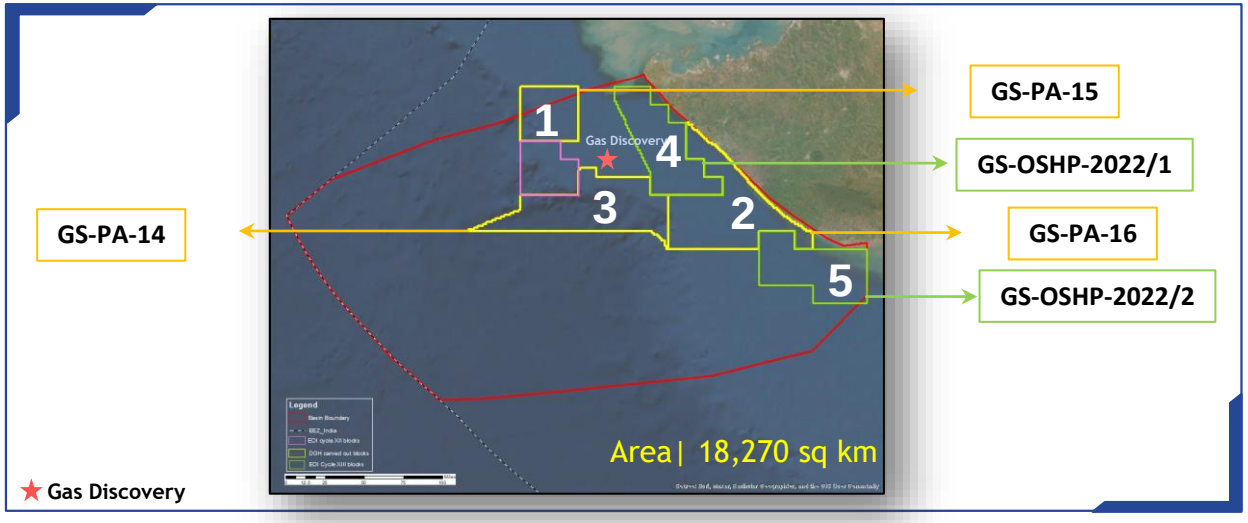
Saurashtra Basin

Significant sub-basalt Mesozoic discovery

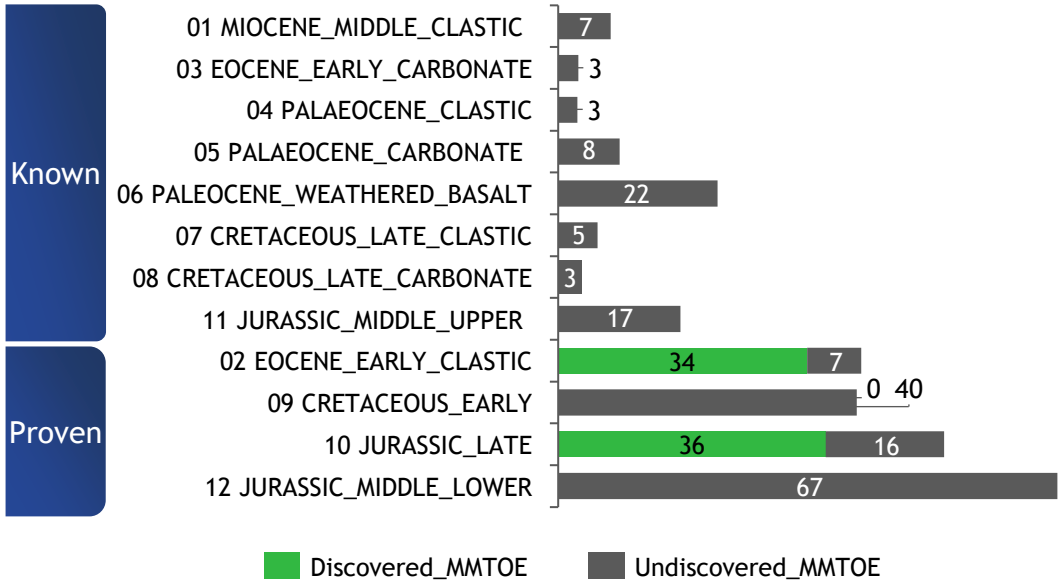




2 Blocks on offer & 3 Prospective Areas Identified



Basin's risked resource potential - 198 MMTOE



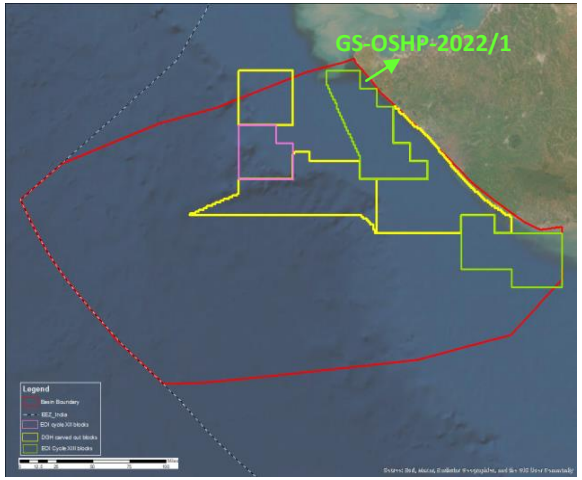
Key characteristics

- Presence of prospective plays of Middle Jurassic to Early Cretaceous
- A significant gas discovery in Early Cretaceous reservoirs at 4,500m depth, below 2,500m thick weathered basalt
- Extended proven Tertiary Plays of Kutch basin are potential target

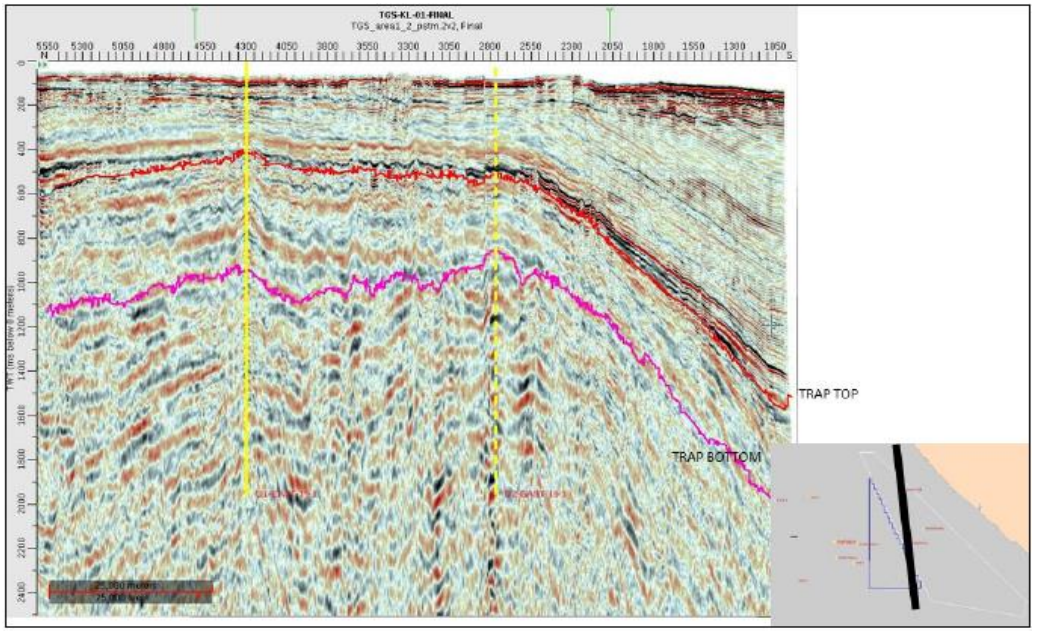
Saurashtra Basin

Block Name: GS-OSHP-2022/1

Block Area: 5,586 SQ KM



Location Map

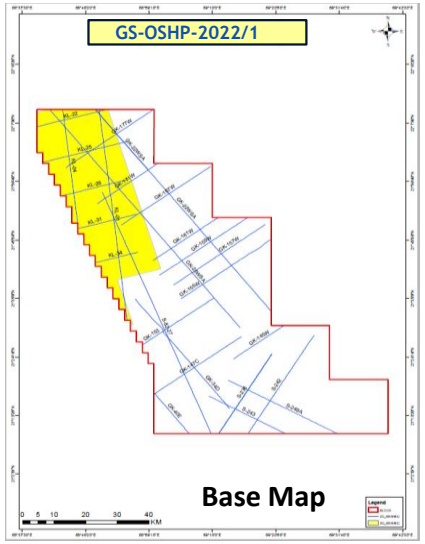


Representative Seismic Section

Data Availability

2D (LKM)	3D (SKM)	Exp. Well
1030	1369	Nil

Target plays: Clastic Mesozoic sediments capped by Deccan basalt.



Base Map

Petroleum System:

Source rock: Mesozoic

Reservoir: Late Jurassic, Cretaceous, Eocene-Early Miocene, Fractured Basalt

Seal: Basalt/Shale

Entrapment Mechanism: Strati-Structural & Structural

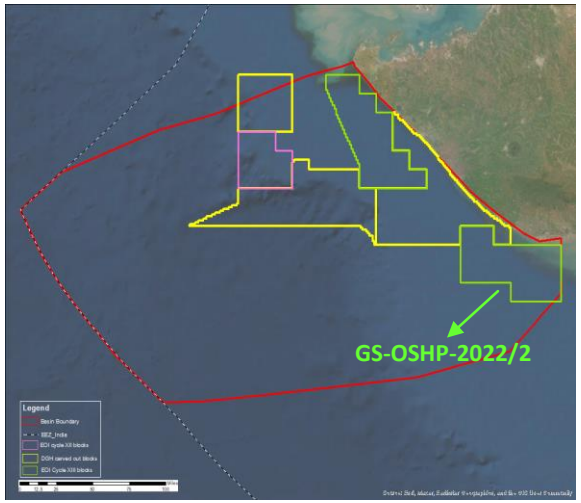
Envisaged plays: Jurassic, Cretaceous Plays dominantly strati-structural as wedge out against Trap bottom is present in drilled well.

Envisaged Petroleum system: Petroleum system envisaged is Jurassic-Jurassic, Jurassic-Cretaceous, Cretaceous-Cretaceous.

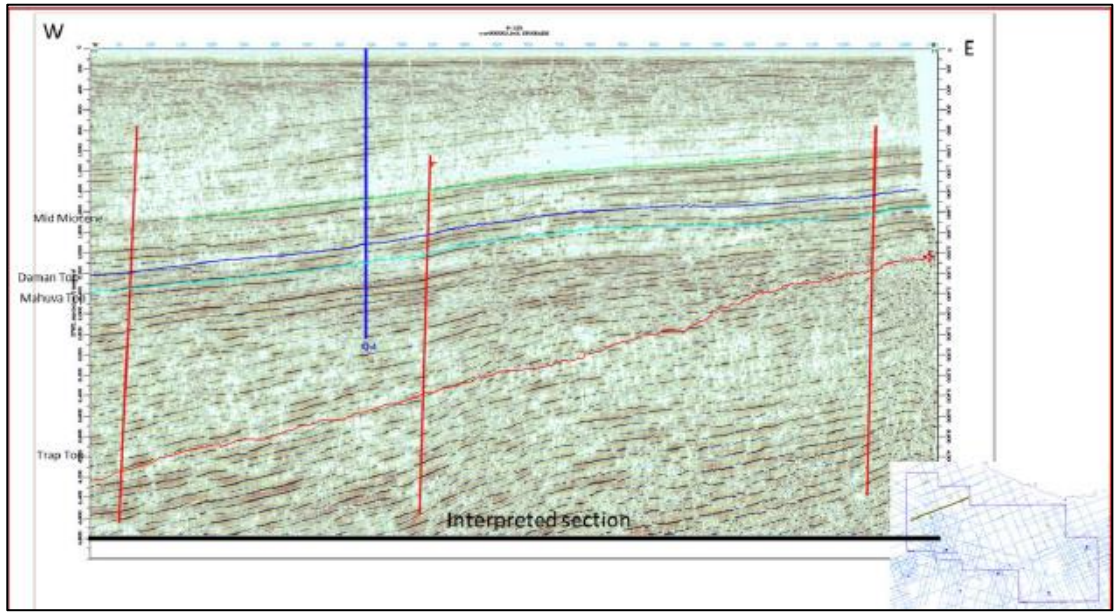
Saurashtra Basin

Block Name: GS-OSHP-2022/2

Block Area: 5,454 SQ KM



Location Map

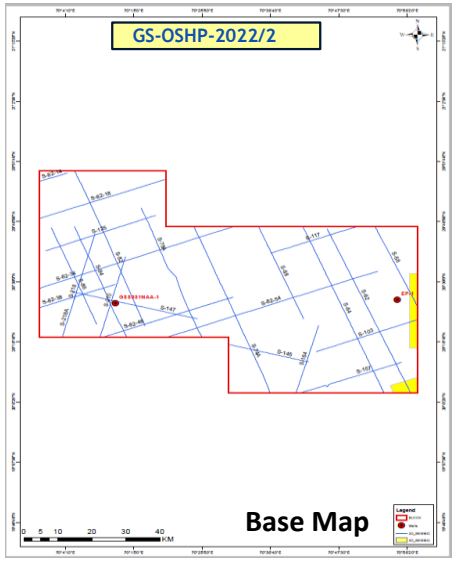


Representative Seismic Section

Data Availability

2D (LKM)	3D (SKM)	Exp. Well
912	56	2

Target plays: Early Miocene carbonates, Late Oligocene carbonates.



Petroleum System:

Source rock: Palaeogene shales of syn-rift stage deposited in the paleo-lows

Reservoir: Oligocene- Miocene section in form of limestones

Seal: Basalt/Shale

Entrapment Mechanism: Structural

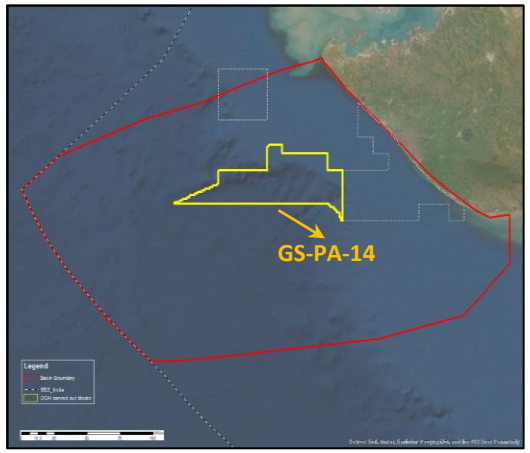
Envisaged plays: Early Miocene carbonates, Late Oligocene carbonates

Envisaged Petroleum system: Eocene-Oligocene-Miocene carbonate Play

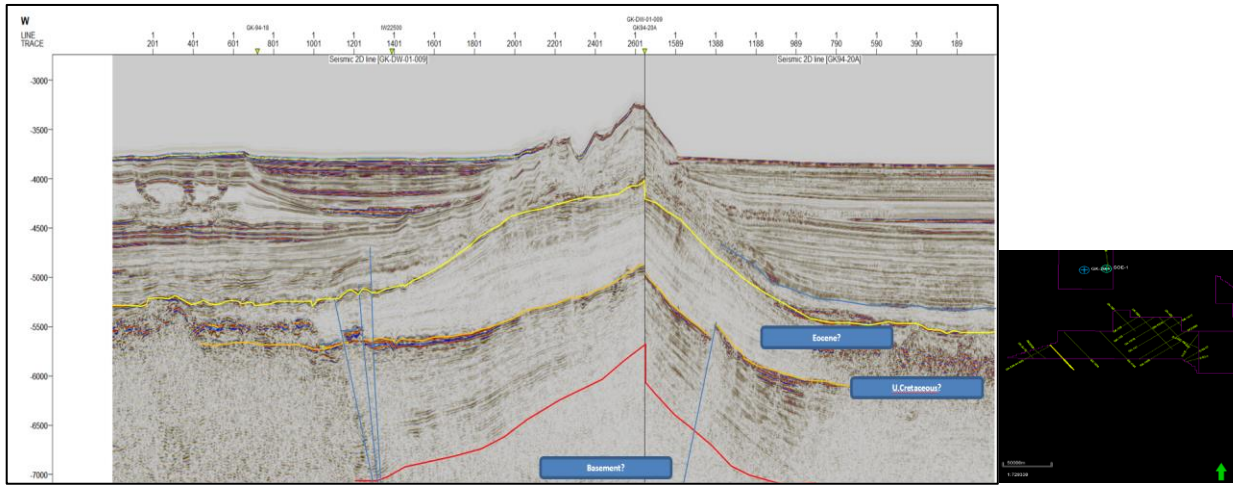
Saurashtra Basin

Prospective Area Name: GS-PA-14

Area: 7,381 SQ KM



Location Map

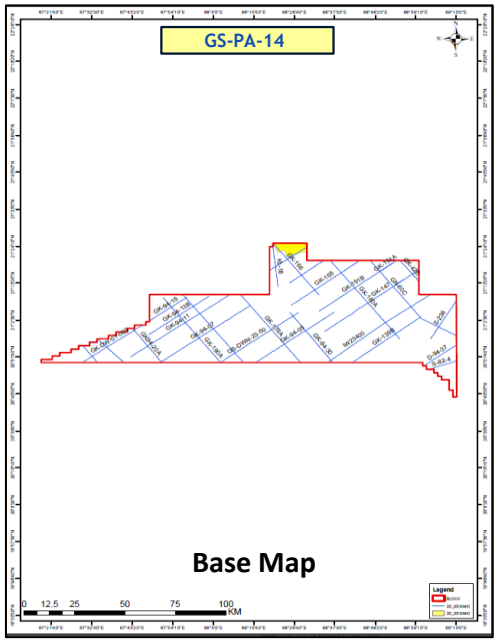


Representative Seismic Section

Data Availability

2D (LKM)	3D (SKM)	Exp. Well
1048	61	Nil

Prospective plays: Prominent play is middle Jurassic with additional targets in Early Cretaceous



Base Map

Petroleum System:

Source rock: Mesozoic

Reservoir: Late Jurassic, Cretaceous, Eocene-Early Miocene, Fractured Basalt

Seal: Basalt/Shale

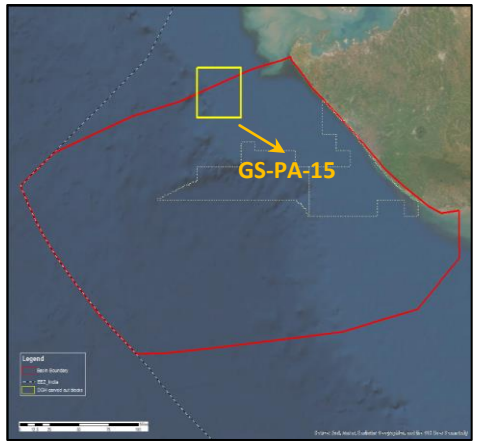
Entrapment Mechanism: Strati-Structural & Structural

Envisaged plays: Jurassic, Cretaceous Plays

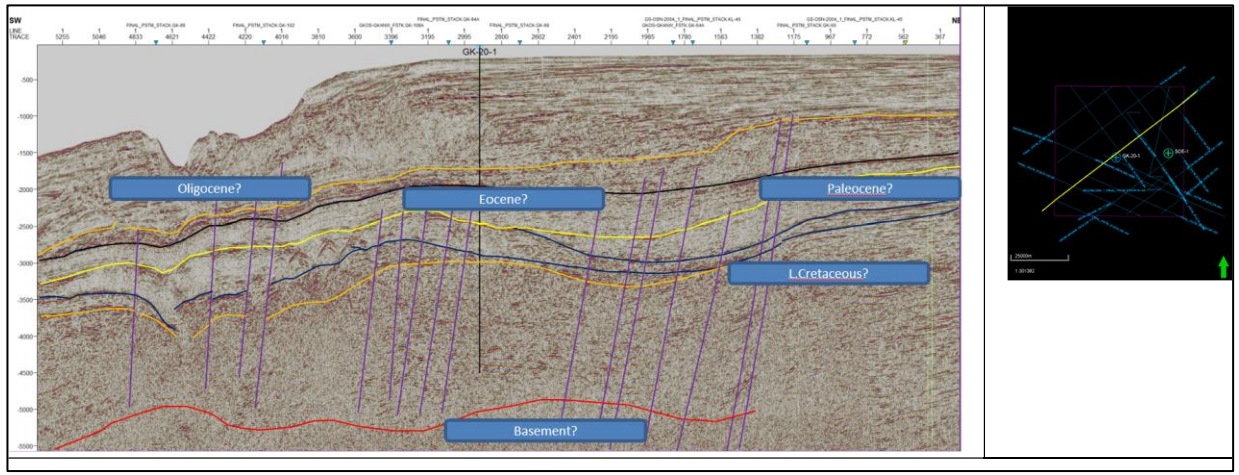
Saurashtra Basin

Prospective Area Name: GS-PA-15

Area: 3,051 SQ KM



Location Map

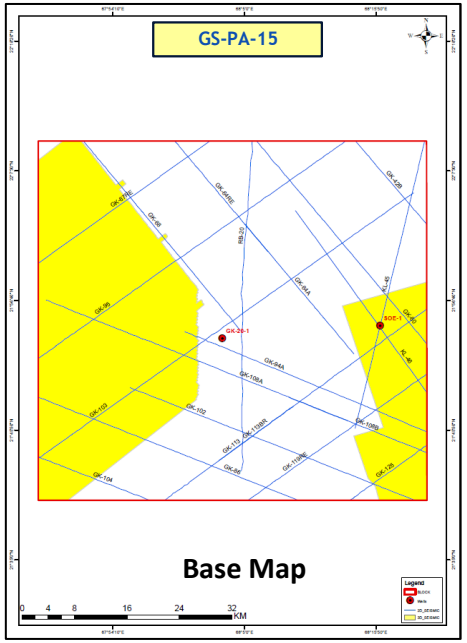


Representative Seismic Section

Data Availability

2D (LKM)	3D (SKM)	Exp. Well
748	1190	2

Prospective plays: To probe prospectivity in Middle Jurassic with Early Cretaceous.



Base Map

Petroleum System:

Source rock: Mesozoic

Reservoir: Late Jurassic, Cretaceous, Eocene-Early Miocene, Fractured Basalt

Seal: Basalt/Shale

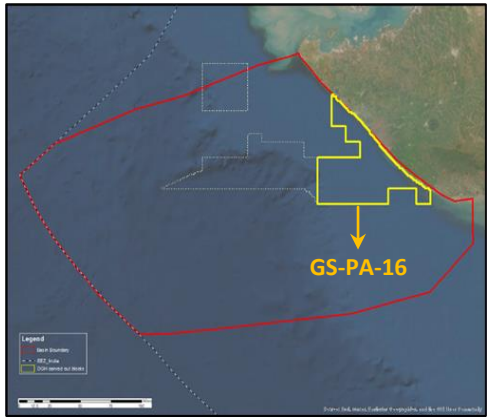
Entrapment Mechanism: Strati-Structural & Structural

Envisaged plays: Jurassic, Cretaceous Plays

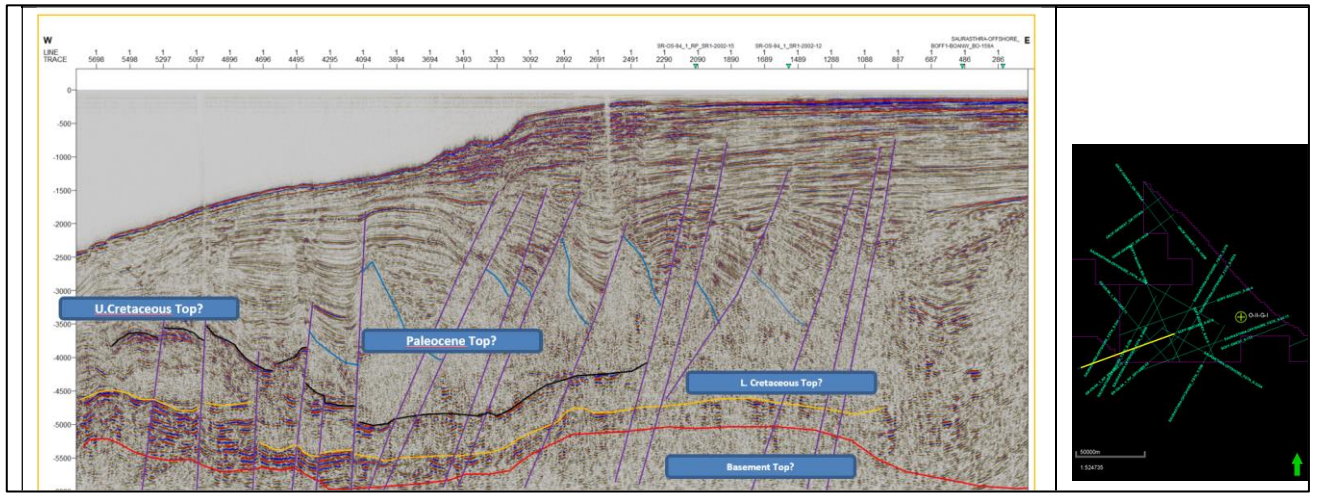
Saurashtra Basin

Prospective Area Name: GS-PA-16

Area: 7,838 SQ KM



Location Map

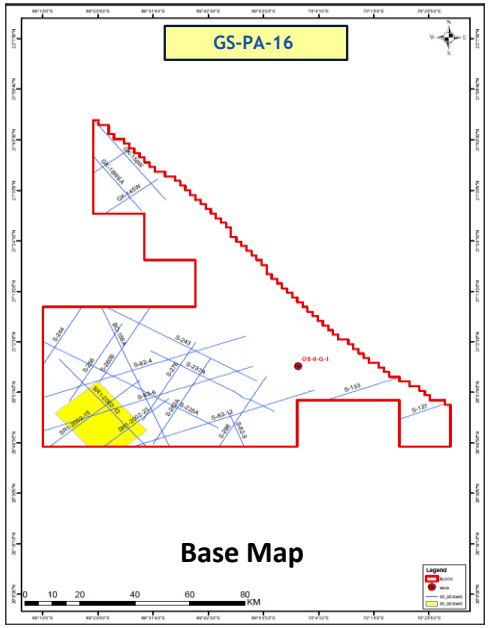


Representative Seismic Section

Data Availability

2D (LKM)	3D (SKM)	Exp. Well
944	461	1

Prospective plays: To probe prospectivity in Middle Jurassic with Early Cretaceous.



Petroleum System:

Source rock: Mesozoic

Reservoir: Late Jurassic, Cretaceous, Eocene-Early Miocene, Fractured Basalt

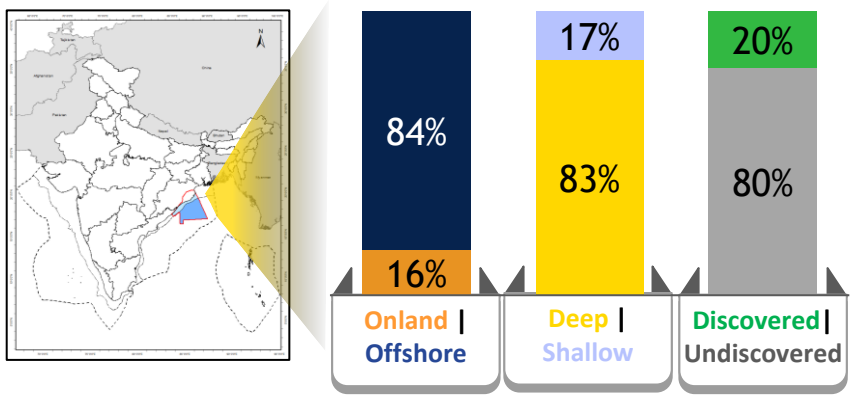
Seal: Basalt/Shale

Entrapment Mechanism: Strati-Structural & Structural

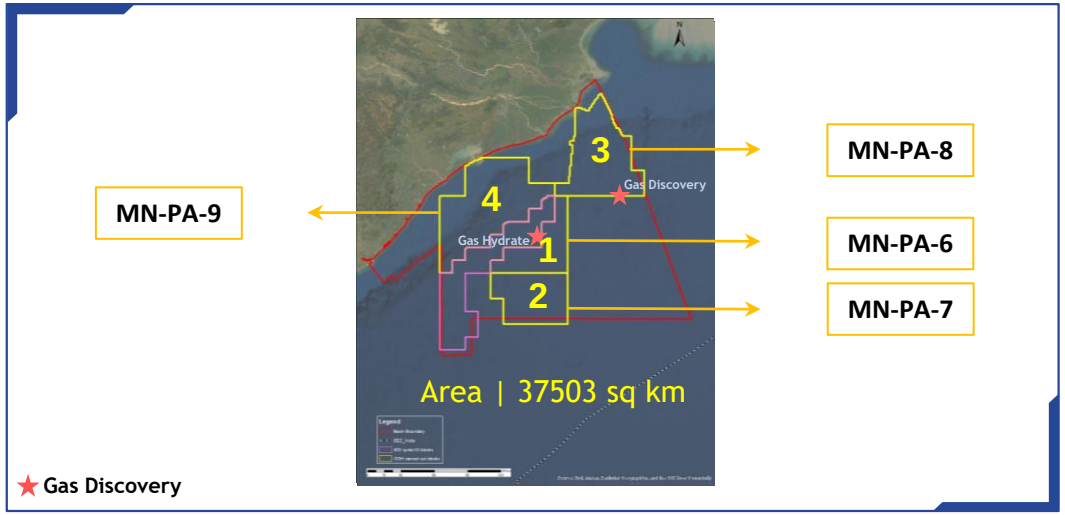
Envisaged plays: Jurassic, Cretaceous Plays

Mahanadi Basin

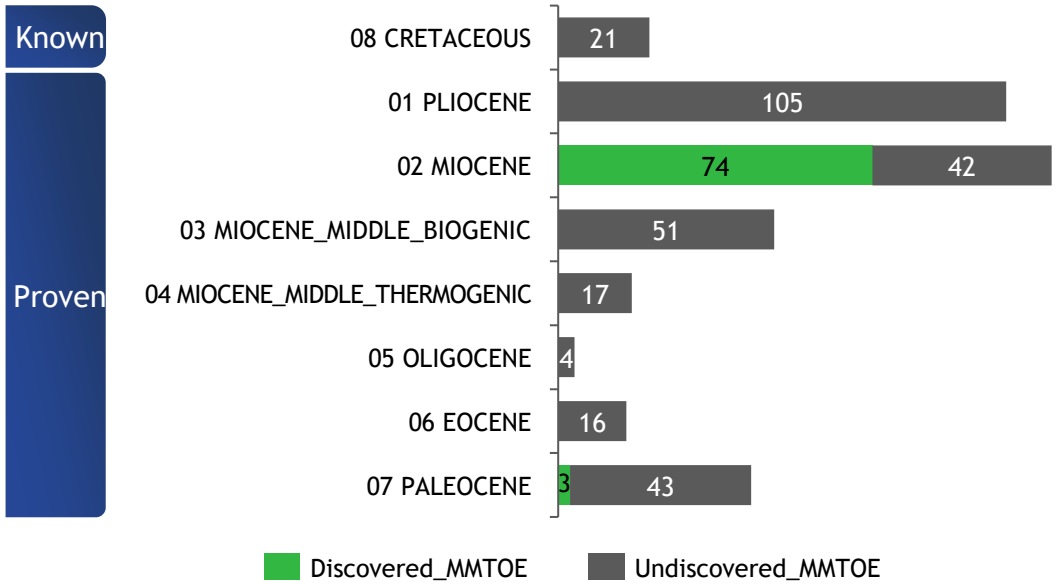
Significant resource in Mio-Pliocene



4 Prospective Areas Identified



Basin's risked resource potential - 299 MMTOE



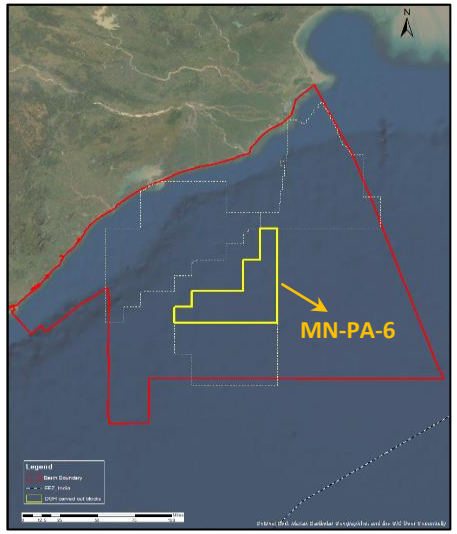
Key characteristics

- **Strong analogy** with easterly **Bengal offshore** that has numerous **small-to-medium discoveries**
- Discovered **Miocene** play occurs as discrete and stacked reservoirs
- Opportunity to explore significant prospective resource of **Pliocene Play**

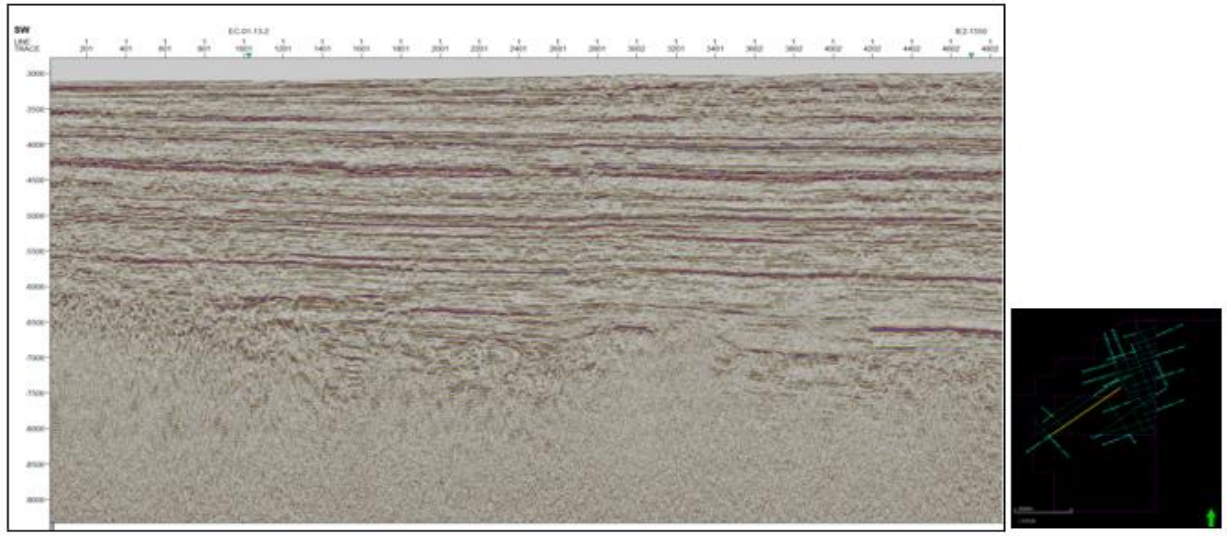
Mahanadi Basin

Prospective Area Name: MN-PA-6

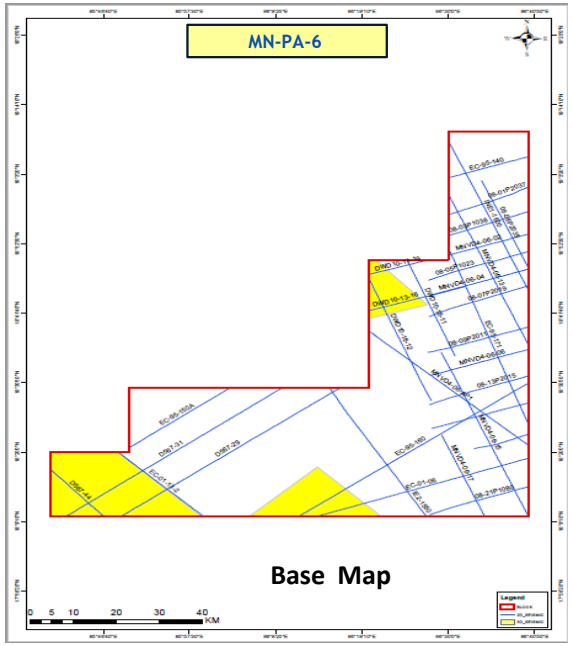
Area: 5,520 SKM



Location Map



Representative Seismic Section



Base Map

Data Availability

2D (LKM)	3D (SKM)	Exp. Well
1022	759	0

Prospective plays: To explore prospectivity in Middle Miocene and Cretaceous plays.

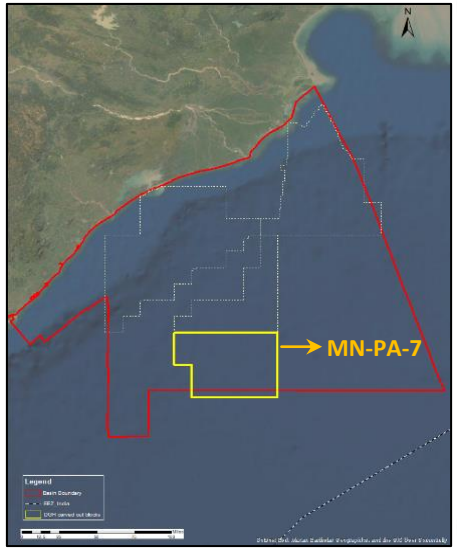
Petroleum System:

- **Source rock:** Cretaceous/Paleogene(Thermogenic), Neogene (Biogenic)
- **Reservoir:** Cretaceous, Oligocene, Mio-Pliocene and Pleistocene
- **Entrapment Mechanism:** Stratigraphic, Strati-structural
- **Envisaged plays:** Paleogene and Neogene are proven plays, while Cretaceous is known but un-discovered play.

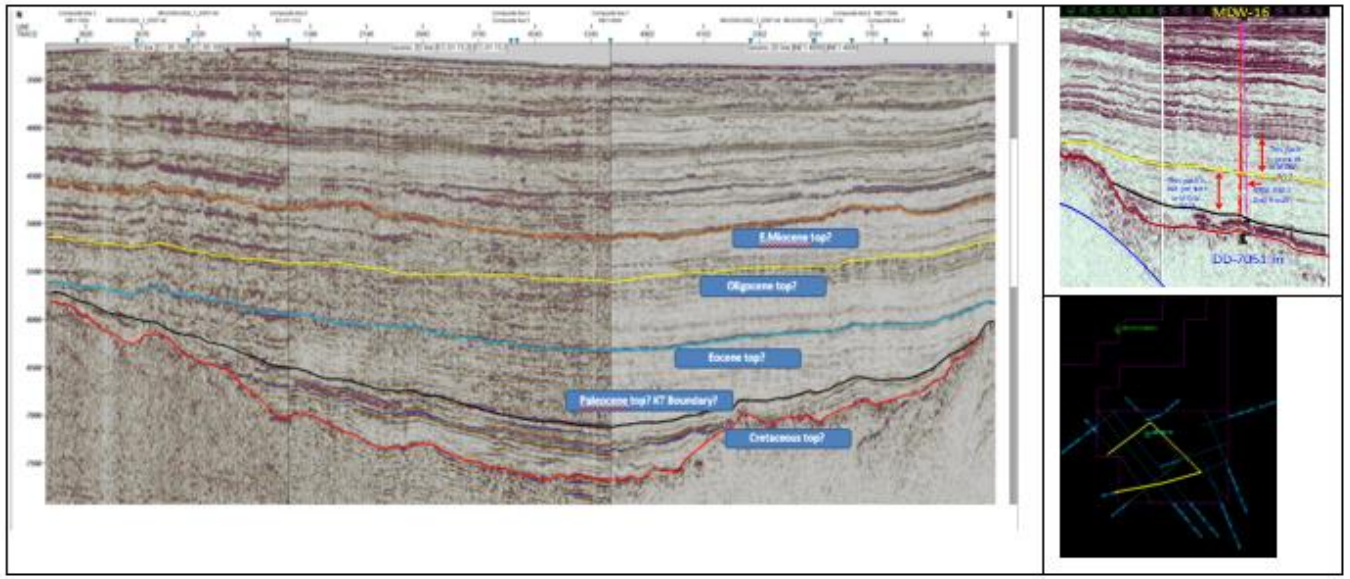
Mahanadi Basin

Prospective Area Name: MN-PA-7

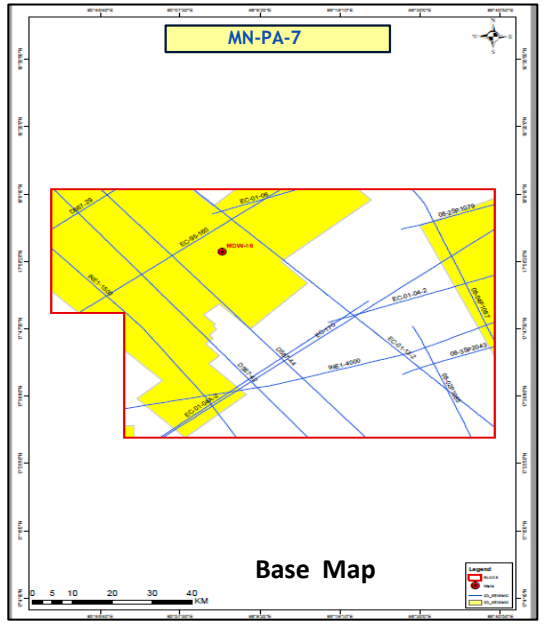
Area: 7,169 SKM



Location Map



Representative Seismic Section



Data Availability

2D (LKM)	3D (SKM)	Exp. Well
899	3850	1

Prospective plays: To explore prospectivity in Middle Miocene and Cretaceous plays.

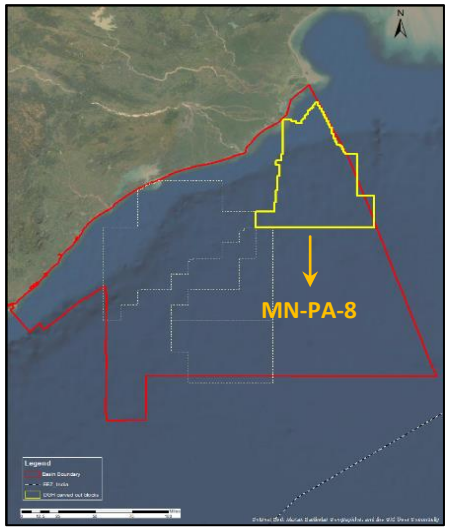
Petroleum System:

- **Source rock:** Cretaceous/Paleogene(Thermogenic), Neogene (Biogenic)
- **Reservoir:** Cretaceous, Oligocene, Mio-Pliocene and Pleistocene
- **Entrapment Mechanism:** Stratigraphic, Strati-structural
- **Envisaged plays:** Paleogene and Neogene are proven plays, while Cretaceous is known but un-discovered play.

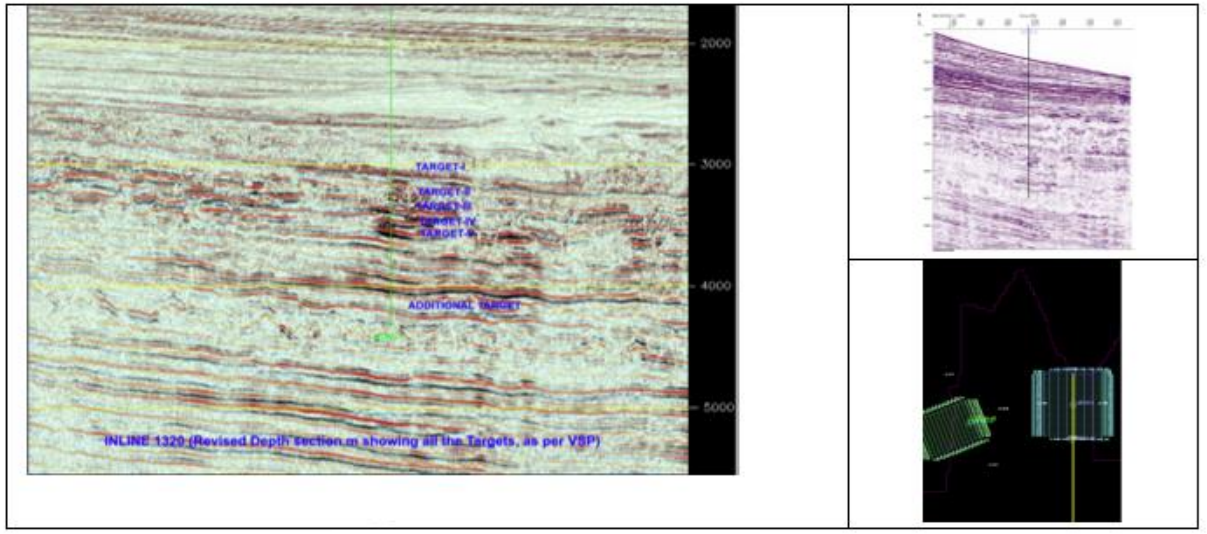
Mahanadi Basin

Prospective Area Name: MN-PA-8

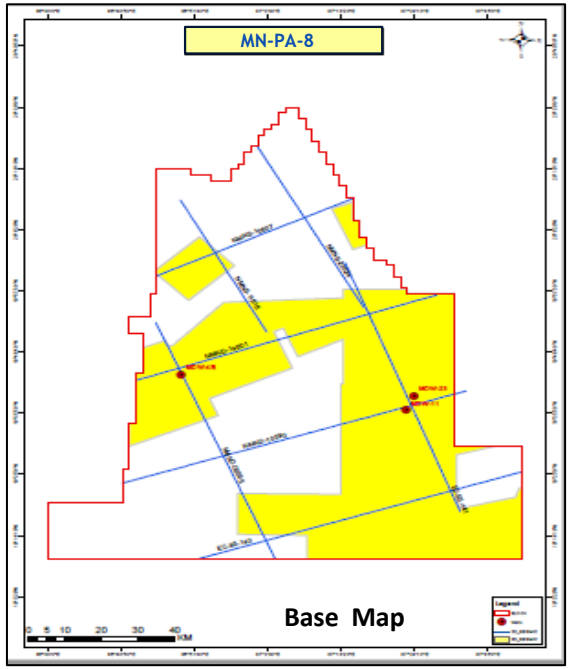
Area: 10,657 SKM



Location Map



Representative Seismic Section



Data Availability

2D (LKM)	3D (SKM)	Exp. Well
598	4504	3

Prospective plays: To explore prospectivity in Middle Miocene and Cretaceous

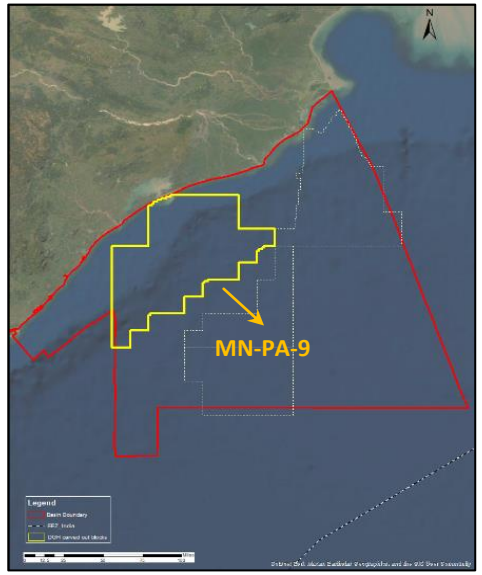
Petroleum System:

- **Source rock:** Cretaceous/Paleogene(Thermogenic), Neogene (Biogenic)
- **Reservoir:** Cretaceous, Oligocene, Mio-Pliocene and Pleistocene
- **Entrapment Mechanism:** Stratigraphic, Strati-structural
- **Envisaged plays:** Paleogene and Neogene are proven plays, while Cretaceous is known but un-discovered play.

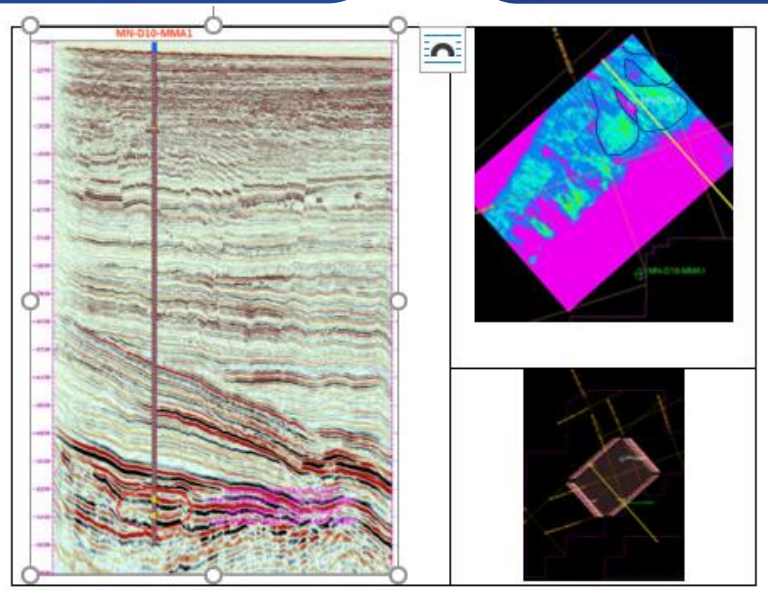
Mahanadi Basin

Prospective Area Name: MN-PA-9

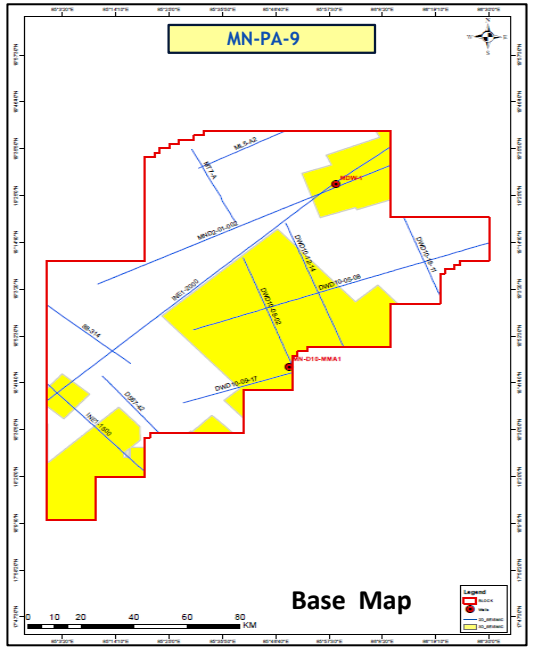
Area: 14,157 SKM



Location Map



Representative Seismic Section



Data Availability

2D (LKM)	3D (SKM)	Exp. Well
780	5845	2

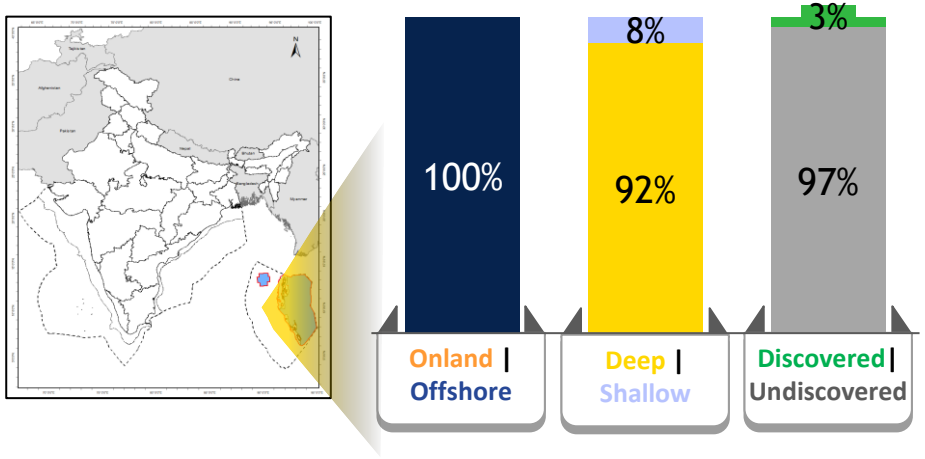
Prospective plays: To explore prospectivity in Middle Miocene and Cretaceous

Petroleum System:

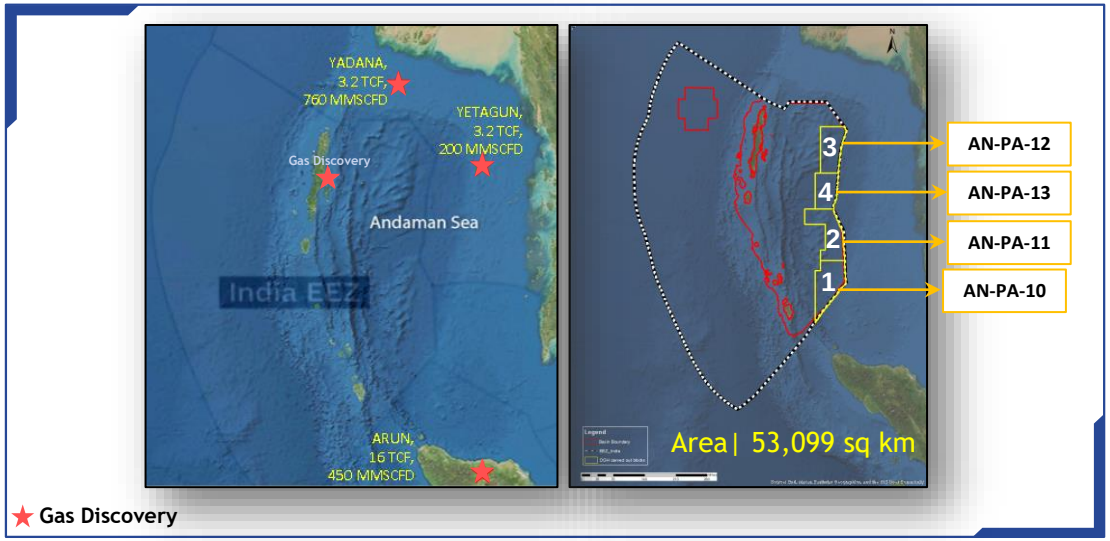
- **Source rock:** Cretaceous/Paleogene(Thermogenic), Neogene (Biogenic)
- **Reservoir:** Cretaceous, Oligocene, Mio-Pliocene and Pleistocene
- **Entrapment Mechanism:** Stratigraphic and Strati-structural
- **Envisaged plays:** Paleogene and Neogene are proven plays, while Cretaceous is known but undiscovered play.

Andaman Basin

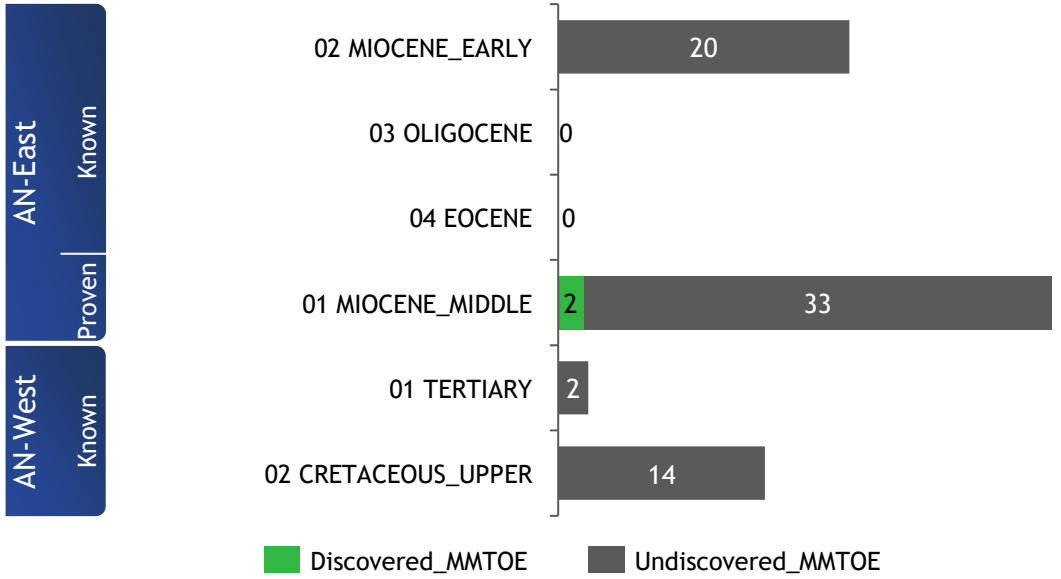
Strong analogy with nearby fields



4 Prospective Areas Identified



Basin's risked resource potential - 70 MMTOE



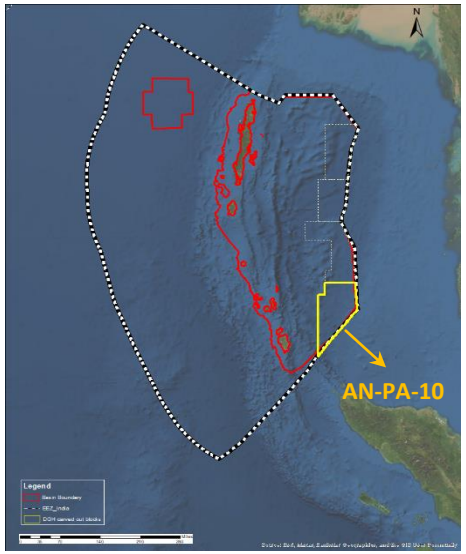
Key characteristics

- Fore-arc has a significant **Gas discovery in Miocene**, analogous to producing reservoirs of Myanmar and Indonesia gas fields
- **Back-arc area** has sediments with significant prospectivity in the **Eastern Part**
- **Gas hydrate** is established in Fore-arc

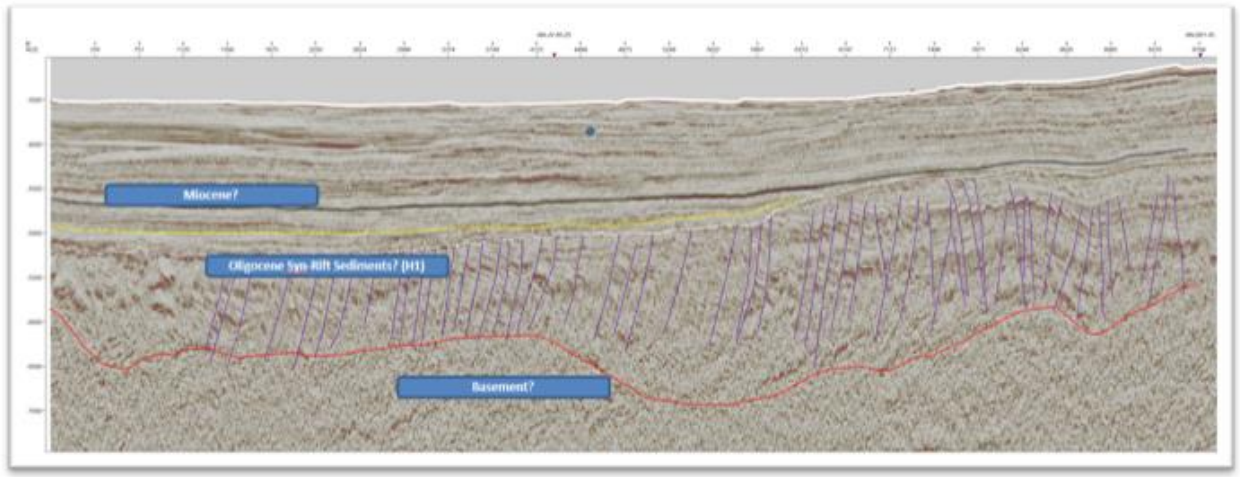
Andaman Basin

Prospective Area Name: AN-PA-10

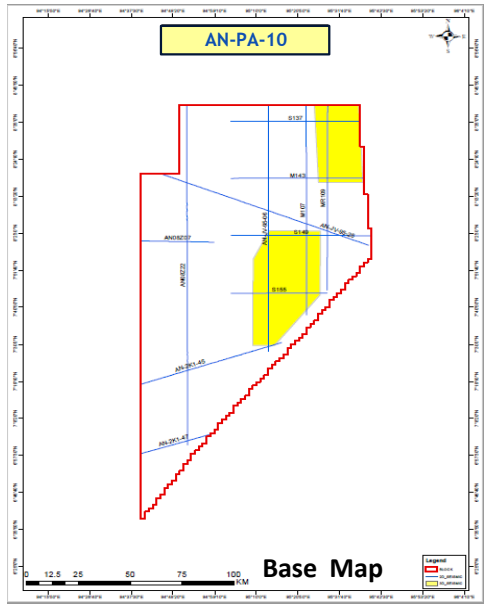
Area: 15,745 SKM



Location Map



Representative Seismic Section



Data Availability

2D (LKM)	3D (SKM)	Exp. Well
1016	2533	0

Prospective plays: To explore prospectivity in Miocene clastic. Oligocene formations may also be targeted as a secondary play.

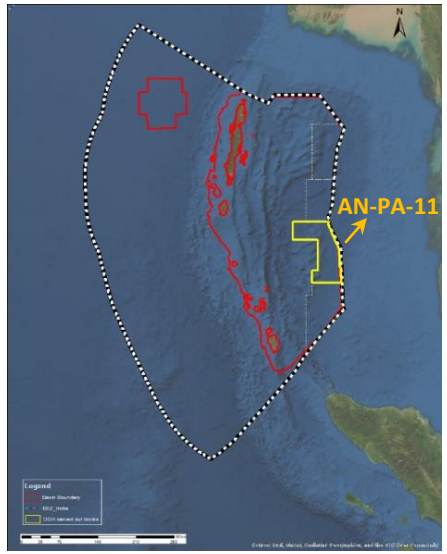
Petroleum System:

- **Source rock:** Upper Cretaceous and Paleogene formations.
- **Reservoir:** Dominantly Miocene clastic formations. Also evaluated in Oligocene and Paleocene-Eocene formations.
- **Entrapment mechanism:** Structural and stratigraphic combinations.
- **Seal:** Dominantly Miocene-Pliocene shales.
- **Envisaged plays:** Middle Miocene, Early Miocene, Oligocene and Eocene.

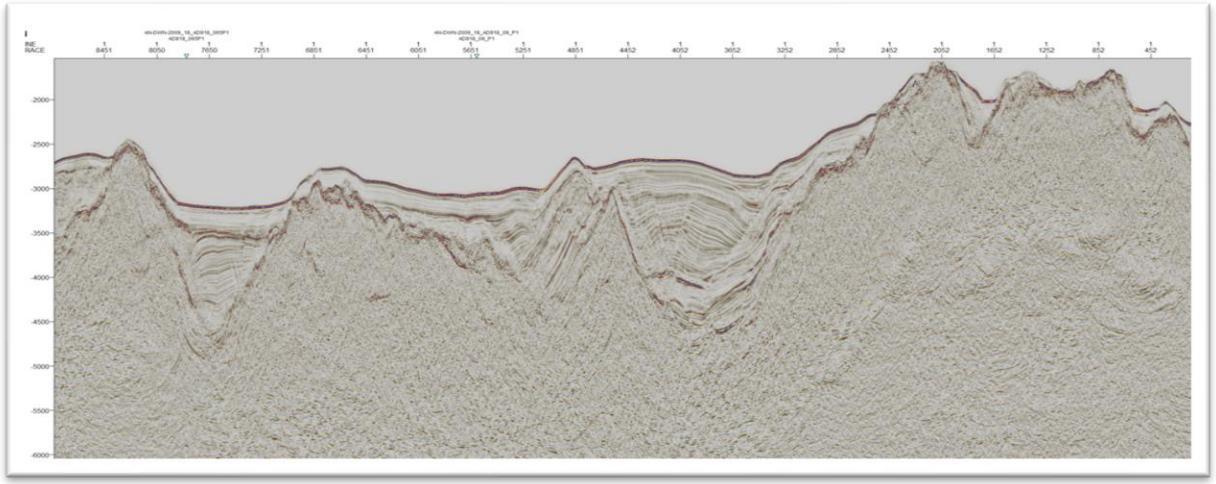
Andaman Basin

Prospective Area Name: AN-PA-11

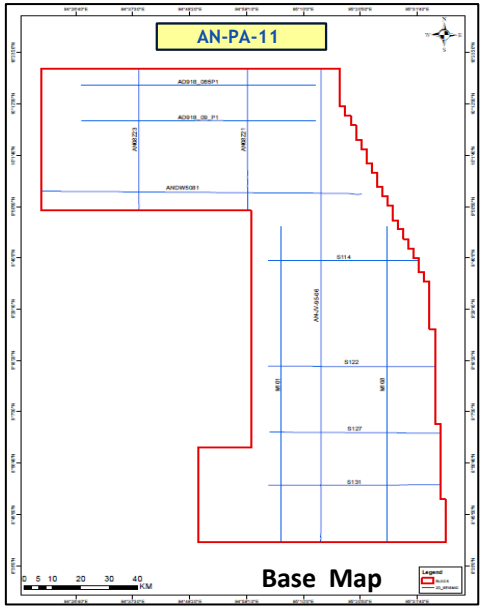
Area: 14,928 SKM



Location Map



Representative Seismic Section



Base Map

Data Availability

2D (LKM)	3D (SKM)	Exp. Well
1046	0	0

Prospective plays: To explore prospectivity in Miocene clastic. Oligocene and Paleocene-Eocene formations may also be targeted as secondary plays.

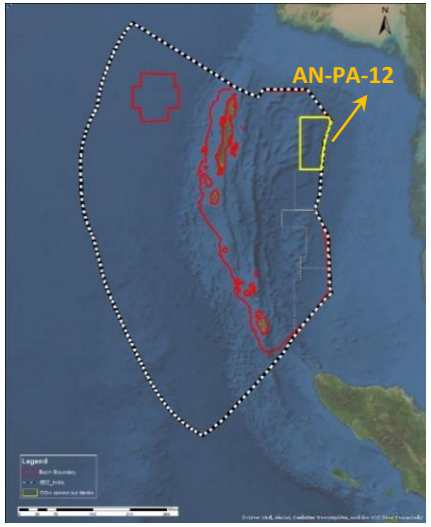
Petroleum System:

- **Source rock:** Upper Cretaceous and Paleogene formations.
- **Reservoir:** Dominantly Miocene clastic formations. Also evaluated in Oligocene and Paleocene-Eocene formations.
- **Entrapment mechanism:** Structural and stratigraphic combinations.
- **Seal:** Dominantly Miocene-Pliocene shales.
- **Envisaged plays:** Middle Miocene, Early Miocene, Oligocene and Eocene.

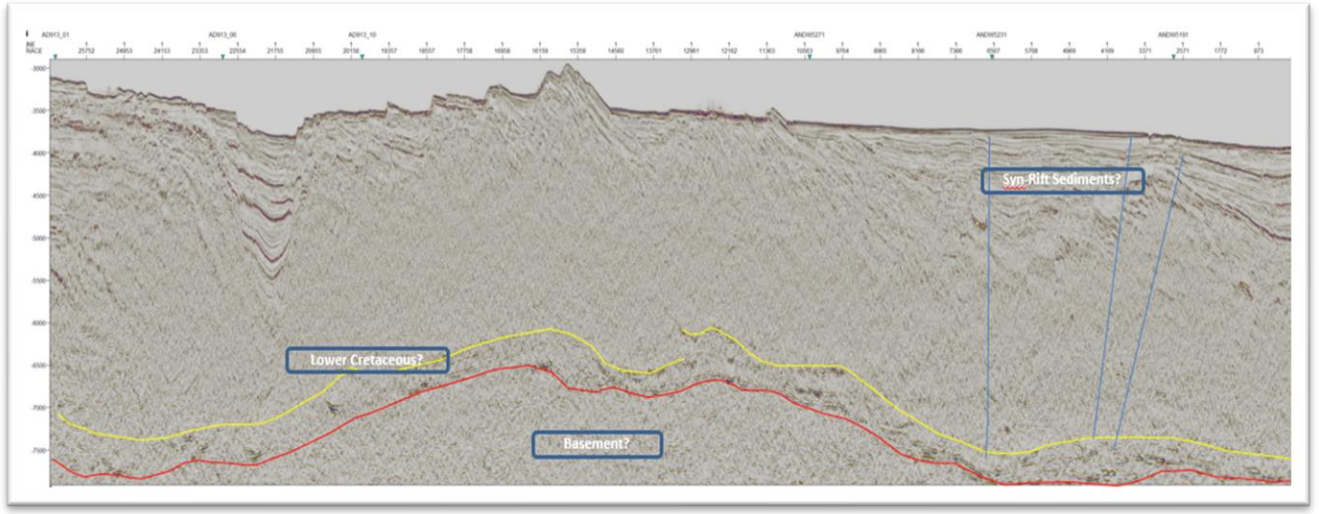
Andaman Basin

Prospective Area Name: AN-PA-12

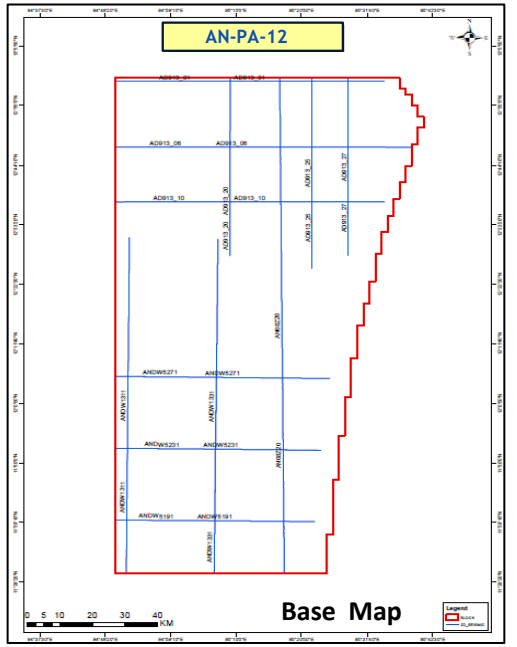
Area: 12,532 SKM



Location Map



Representative Seismic Section



Data Availability

2D (LKM)	3D (SKM)	Exp. Well
1011	0	0

Prospective plays: To explore prospectivity in Miocene clastic. Oligocene and Paleocene-Eocene formations may also be targeted as secondary plays.

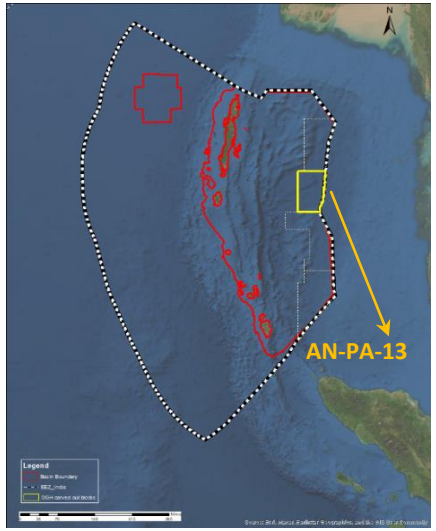
Petroleum System:

- **Source rock:** Upper Cretaceous and Paleogene formations.
- **Reservoir:** Dominantly Miocene clastic formations. Also evaluated in Oligocene and Paleocene-Eocene formations.
- **Entrapment mechanism:** Structural and stratigraphic combinations.
- **Seal:** Dominantly Miocene-Pliocene shales.
- **Envisaged plays:** Middle Miocene, Early Miocene, Oligocene and Eocene.

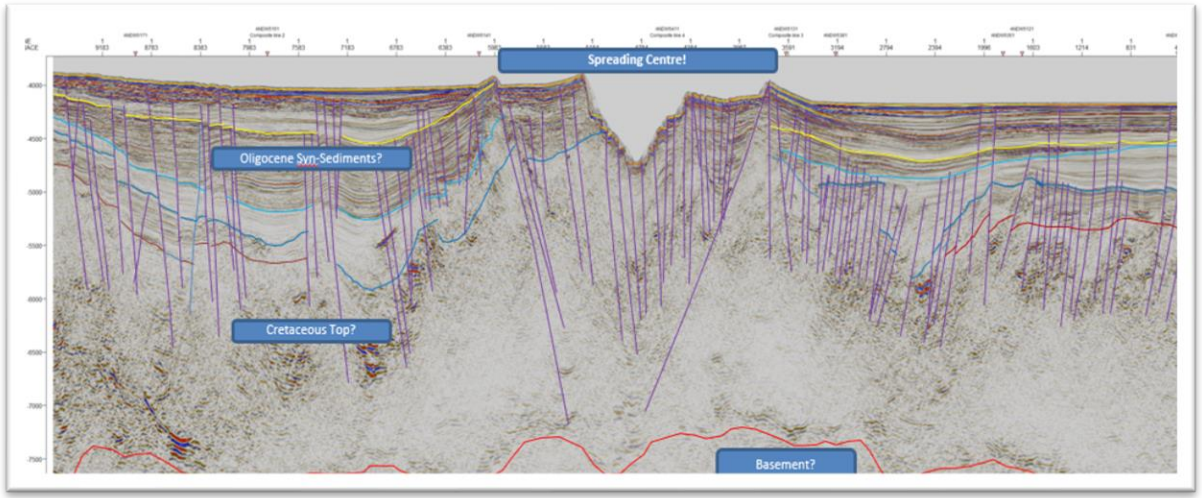
Andaman Basin

Prospective Area Name: AN-PA-13

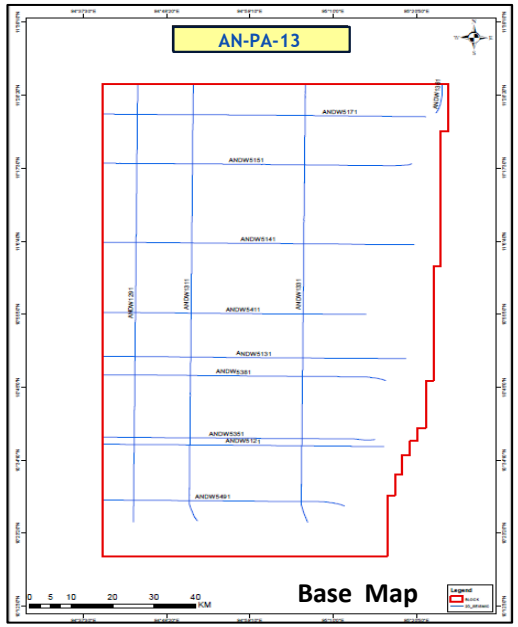
Area: 9,895 SKM



Location Map



Representative Seismic Section



Data Availability

2D (LKM)	3D (SKM)	Exp. Well
984	0	0

Prospective plays: To explore prospectivity in Miocene clastic. Oligocene and Paleocene-Eocene formations may also be targeted as secondary plays.

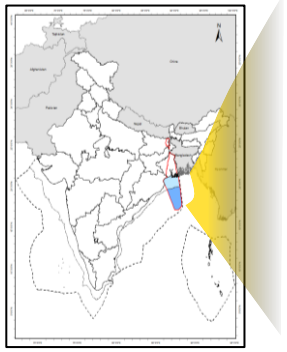
Petroleum System:

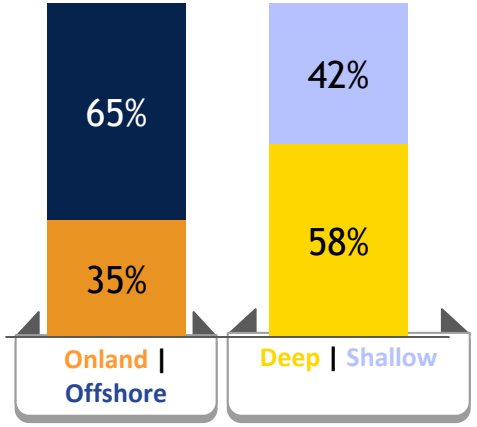
- **Source rock:** Upper Cretaceous and Paleogene formations.
- **Reservoir:** Dominantly Miocene clastic formations. Also evaluated in Oligocene and Paleocene-Eocene formations.
- **Entrapment mechanism:** Structural and stratigraphic combinations.
- **Seal:** Dominantly Miocene-Pliocene shales.
- **Envisaged plays:** Middle Miocene, Early Miocene, Oligocene and Eocene.

Prospective Areas
in
Category – III Basin

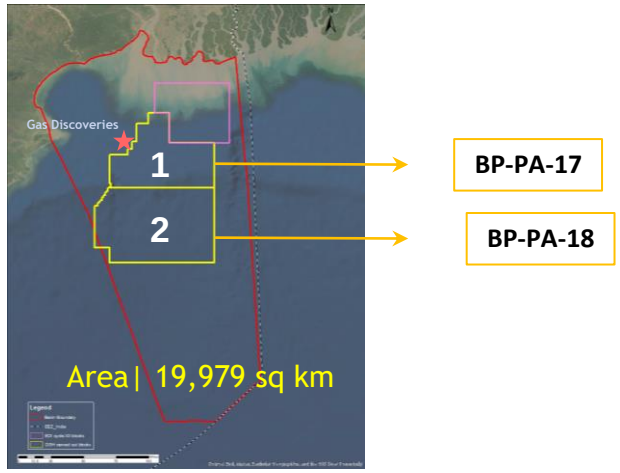
Bengal-Purnea Basin

Significant resource in Miocene

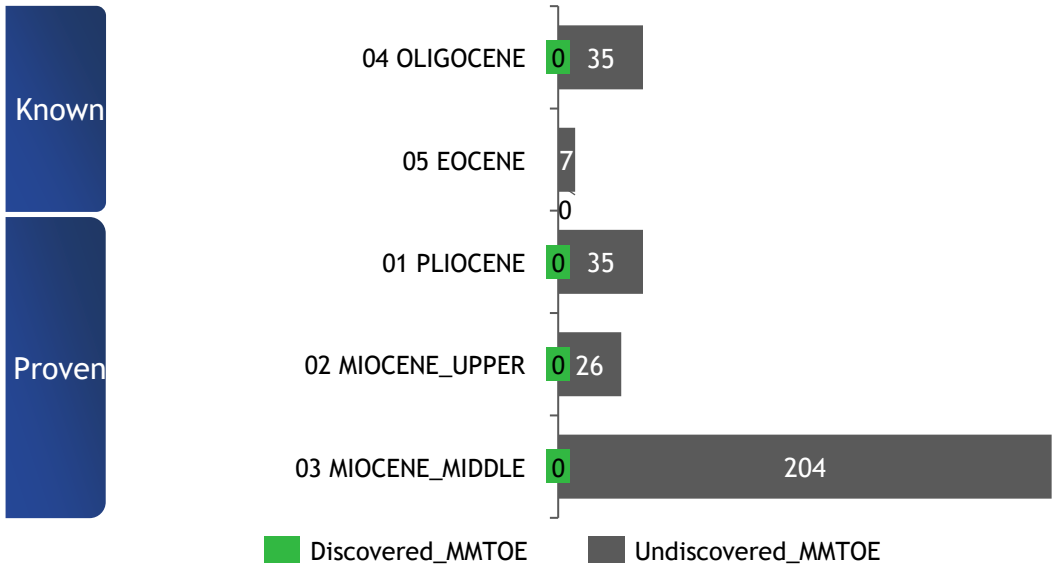




2 Prospective Areas Identified



Basin's risked resource potential - 306 MMTOE



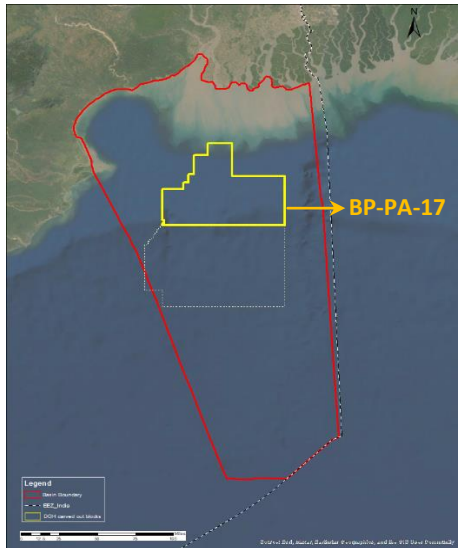
Key characteristics

- 2/3rd potential lies in Middle Miocene play
- Blocks close to a contract area with 6 gas discoveries, contemplated for development
- Occurrence of channelized deposits associated to subtle structures in the east-central area

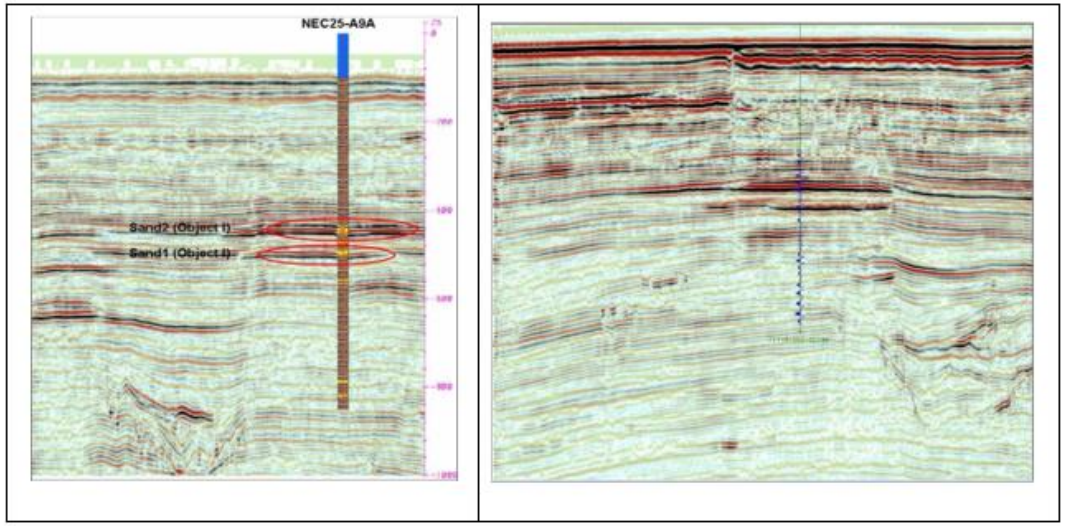
Bengal-Purnea Basin

Prospective Area Name: BP-PA-17

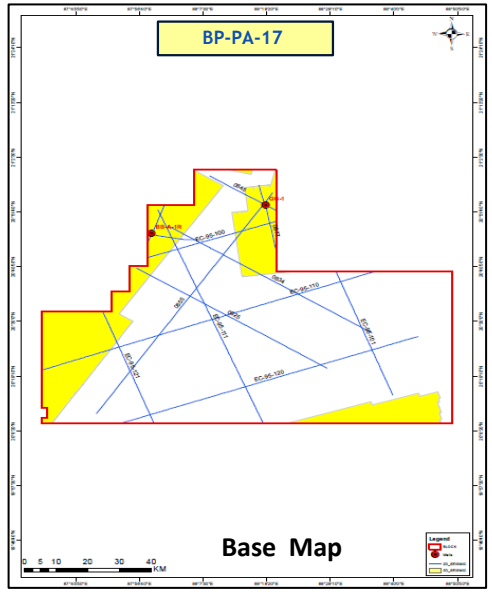
Area: 7,626 SKM



Location Map



Representative Seismic Sections



Data Availability

2D (LKM)	3D (SKM)	Exp. Well
728	1684	2

Prospective plays: To explore prospectivity in Mio-Pliocene Formation and Oligocene Formation in the block area.

Petroleum System:

Source rock: Palaeogene and Cretaceous sediments (Thermogenic), Neogene (Biogenic)

Reservoir: Mio-Pliocene Formation and Oligocene Formation

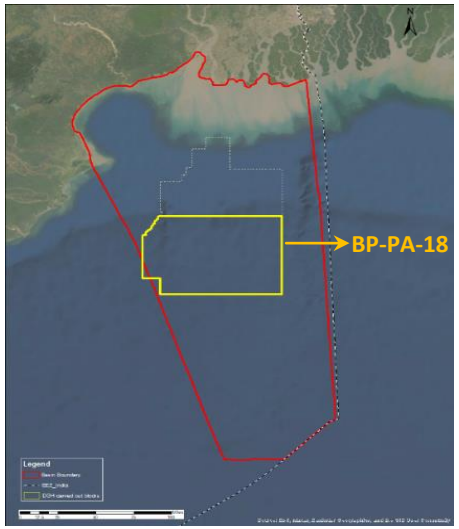
Entrapment mechanism: Structural, stratigraphic and strati-structural

Envisaged plays: Middle/Upper Miocene and Pliocene are proven plays, while Eocene and Oligocene are known but un-discovered.

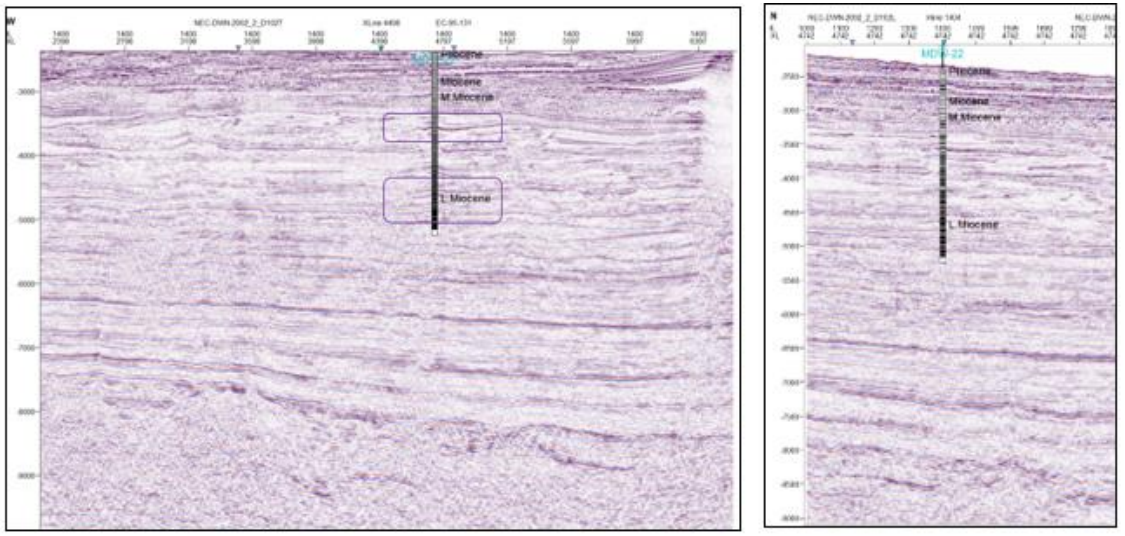
Bengal-Purnea Basin

Prospective Area Name: BP-PA-18

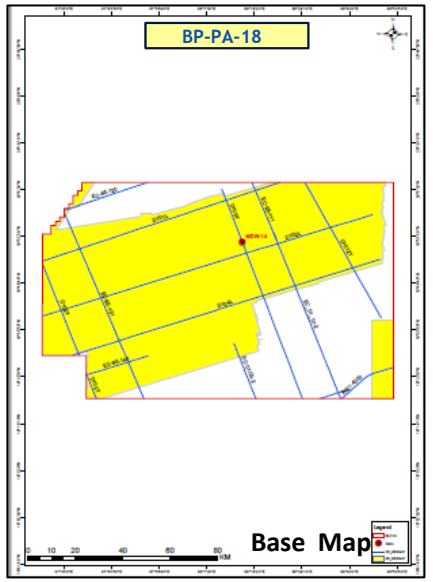
Area: 12,353 SKM



Location Map



Representative Seismic Sections



Data Availability

2D (LKM)	3D (SKM)	Exp. Well
894	7702	1

Prospective plays: To explore prospectivity in Miocene-Pliocene clastic. Oligocene formations may also be targeted as a secondary reservoir.

Petroleum System:

Source rock: Palaeogene and Cretaceous sediments (Thermogenic), Neogene (Biogenic)

Reservoir: Mio-Pliocene Formation and Oligocene Formation

Entrapment mechanism: Structural (fault or small 4-way closures), stratigraphic (channel-levee complex) and strati-structural

Envisaged plays: Oligocene (thermogenic), Middle Miocene (Thermogenic), Upper Miocene (Biogenic) and Pliocene (Biogenic) play

Directorate General of Hydrocarbons

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