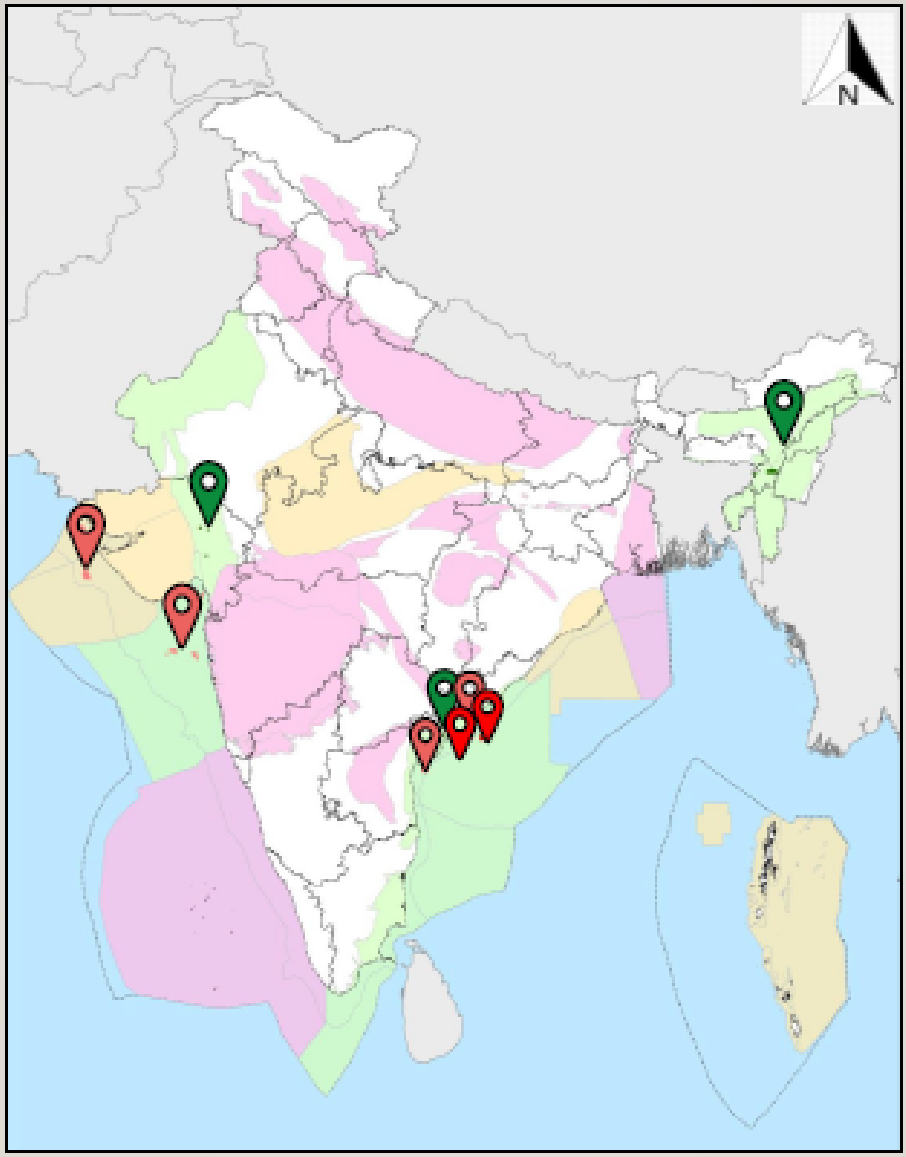
पेट्रोलियम एवं
प्राकृतिक गैस मंत्रालय
MINISTRY OF
PETROLEUM AND NATURAL GAS

सत्यमेव जयते

DGH

DIRECTORATE GENERAL OF HYDROCARBONS
(Ministry of Petroleum & Natural Gas,Government of India)

INFORMATION DOCKET



CONTRACT AREA

KG/ONDSF/KG ONLAND/2025

DISCOVERED SMALL FIELD BID ROUND - IV

DISCLAIMER

This document, titled Information Docket, provides a consolidated overview of the Contract Area comprising the discoveries/fields offered under the Discovered Small Fields (DSF) Bid Round-IV. This docket has been prepared based on original inputs /information received from National Oil Companies, Private Operators/JV and available at National Data Repository (NDR).

Third Parties were engaged to independently assess the information and estimate the in-place volumes. In conducting these estimations, Third Parties used the available data/information and employed assumptions, procedures and methods deemed necessary given the timeframe available for evaluation.

The accuracy and clarity of the information presented herein, including the reported hydrocarbon resources, are thus limited to the data available at the time of analysis and the verifications performed by the Third Parties during the evaluation timeframe. The findings are subject to further review and validation by bidders upon receipt of additional and clarified data/information.

Given these limitations, all bidders are hereby advised to undertake their own independent technical and commercial due diligence and conduct thorough evaluations of the data and resource potential to support informed investment and bidding decisions.

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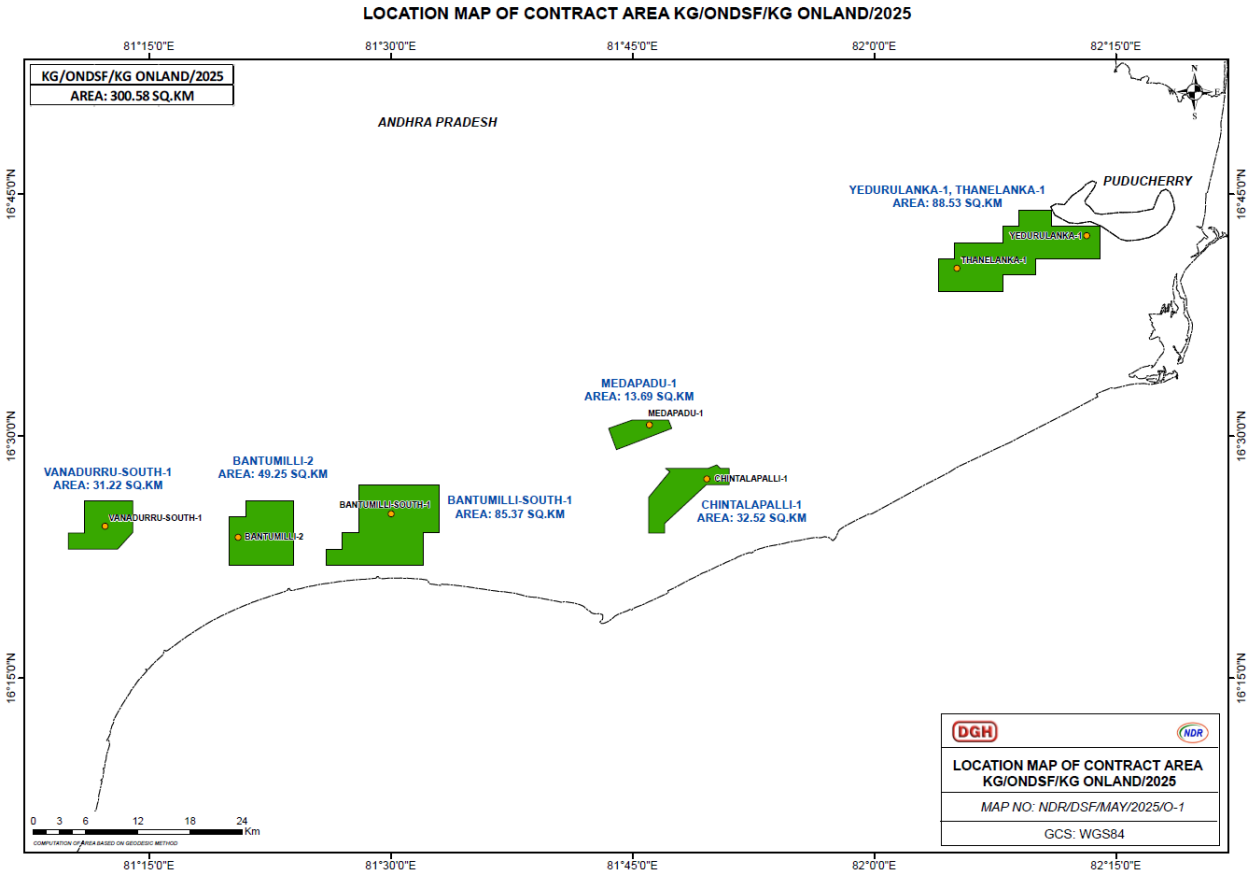
1. INTRODUCTION

With the extension of the DSF policy 2015, DSF Bid Round IV offers 55 small-to-mid-size oil and gas discoveries through international competitive bidding. There are 9 Contract Areas under DSF-IV spread over Cambay, Assam & Assam Arakan, Gulf of Kutch, Mumbai Offshore and Krishna Godavari Basins. Out of 55 discoveries, there are 19 onshore discoveries in 3 Contract Areas, 26 shallow water discoveries in four Contract Areas and 10 Deepwater discoveries in two Contract Areas. The discoveries have been suitably clustered in order to leverage shared resources and operational flexibility.

In terms of hydrocarbon prospectivity, the fields-on-offer lie in 5 sedimentary basins which include 8 Contract Areas in Category I basins with hydrocarbon reserves and 1 Contract Area in Category II basins with contingent resources.

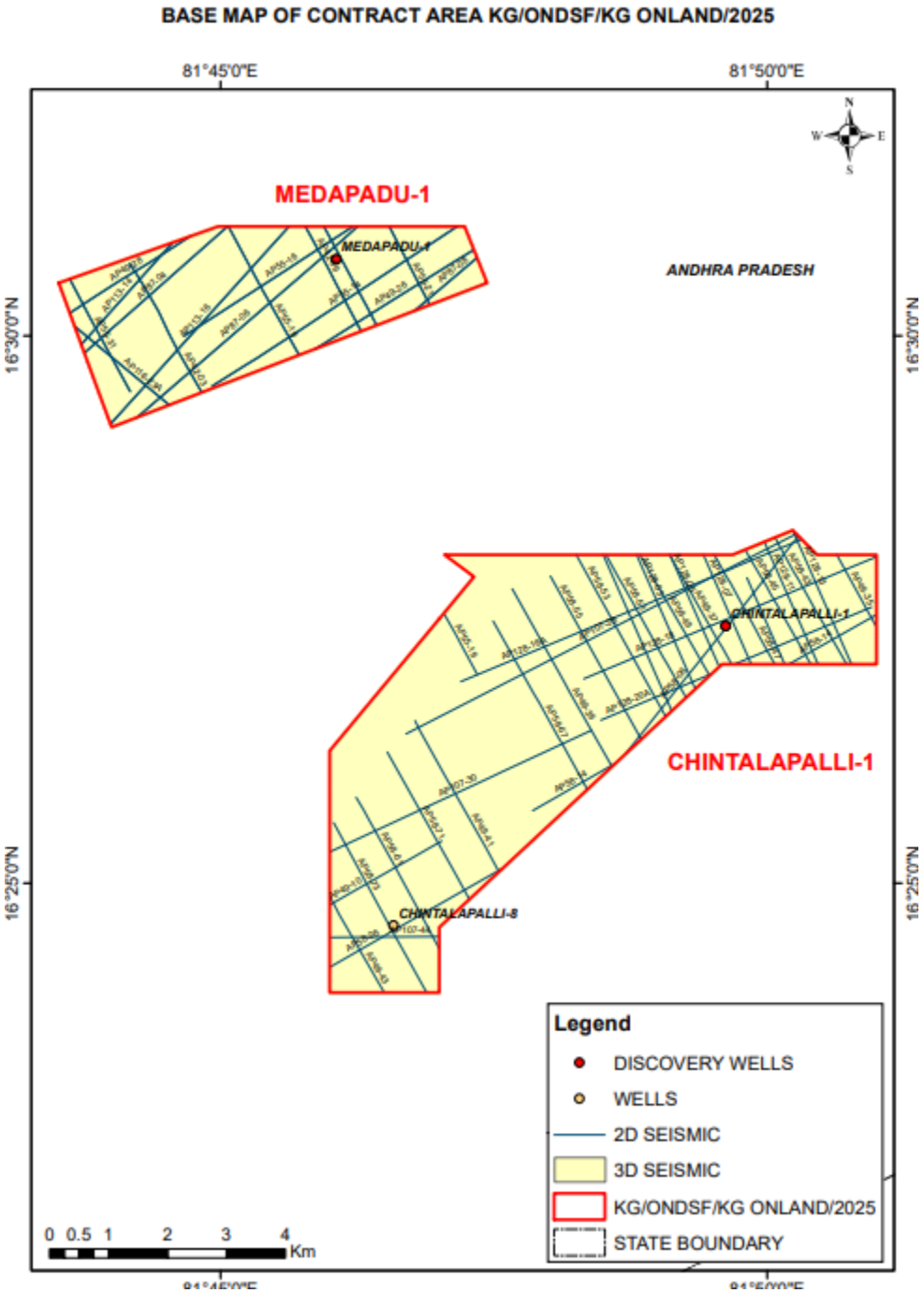
Each Contract Area on offer has multiple discoveries comprehensively described in this Docket information to bring in all relevant subsurface facts of geo-scientific and engineering information. This technical booklet will be useful if read while working with the Data Package which would be available on sale once the Data Room is set up for viewing.

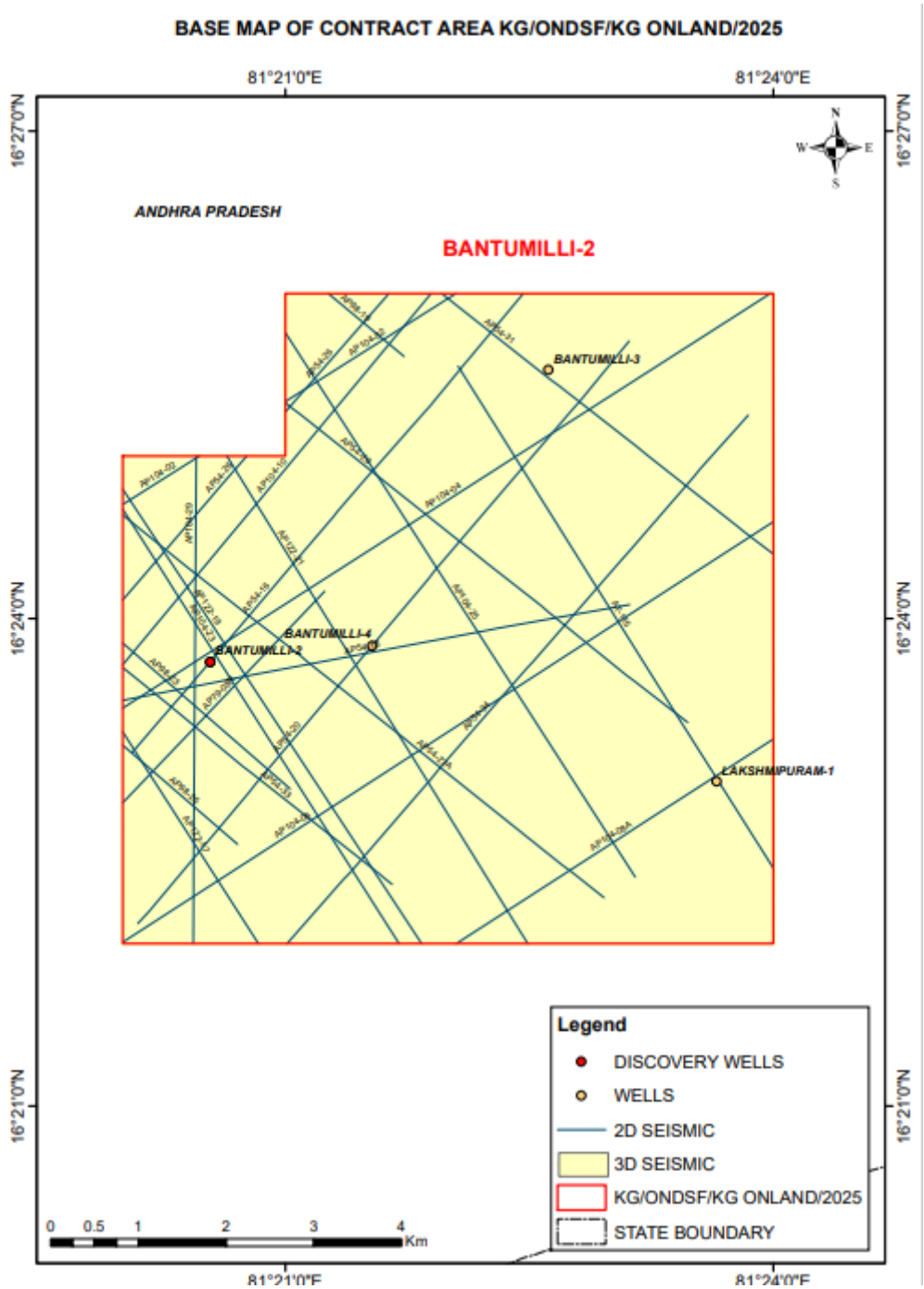
2. CONTRACT AREA DESCRIPTION



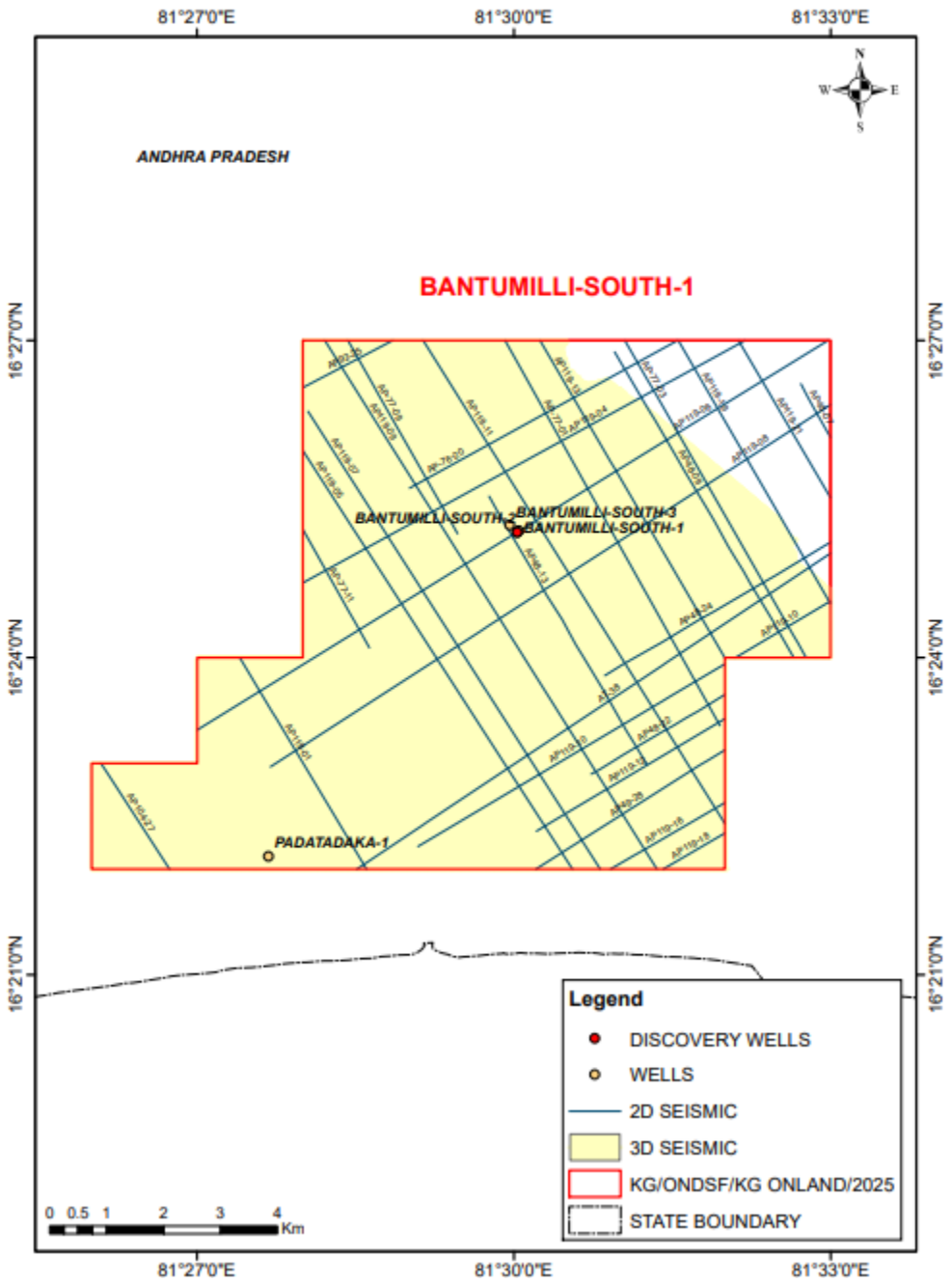
The area has information of 699.19 LKM 2D seismic data and 293.38 sq km of 3D seismic data. There are 17 wells in the contract area. The following figures show the coverage of available seismic 2D and 3D seismic data along with the wells drilled across the fields.

Seismic and well data coverage in KG/ONDSF/KG-ONLAND/2025 Contract Area:

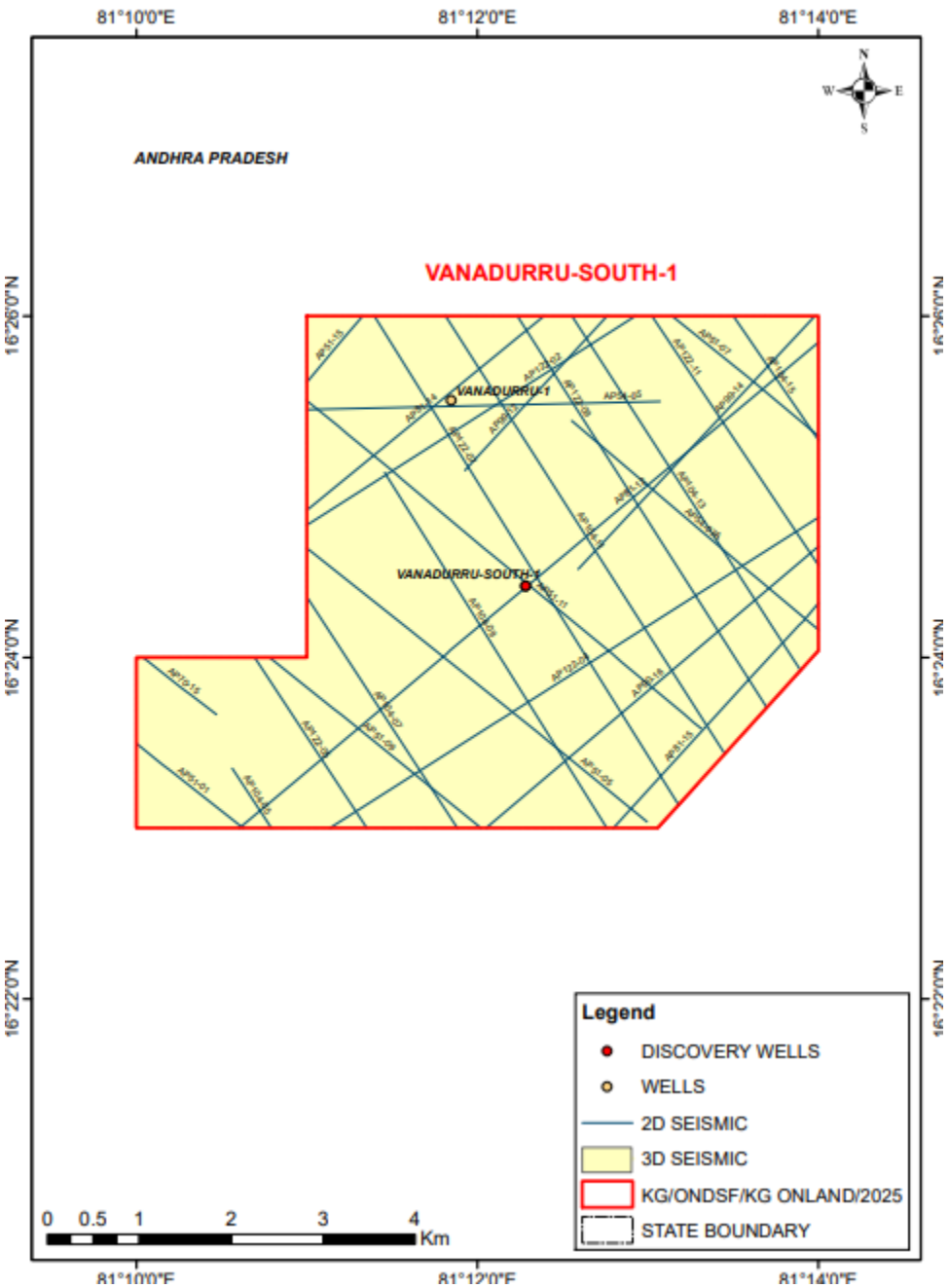



BASE MAP OF CONTRACT AREA KG/ONDSF/KG ONLAND/2025
81°21'0"E
81°24'0"E
16°27'0"N
16°24'0"N
16°21'0"N
N
W
E
S
ANDHRA PRADESH
BANTUMILLI-2
BANTUMILLI-3
BANTUMILLI-4
LAKSHMIPURAM-1
Legend
DISCOVERY WELLS
WELLS
2D SEISMIC
3D SEISMIC
KG/ONDSF/KG ONLAND/2025
STATE BOUNDARY
0 0.5 1 2 3 4
Km

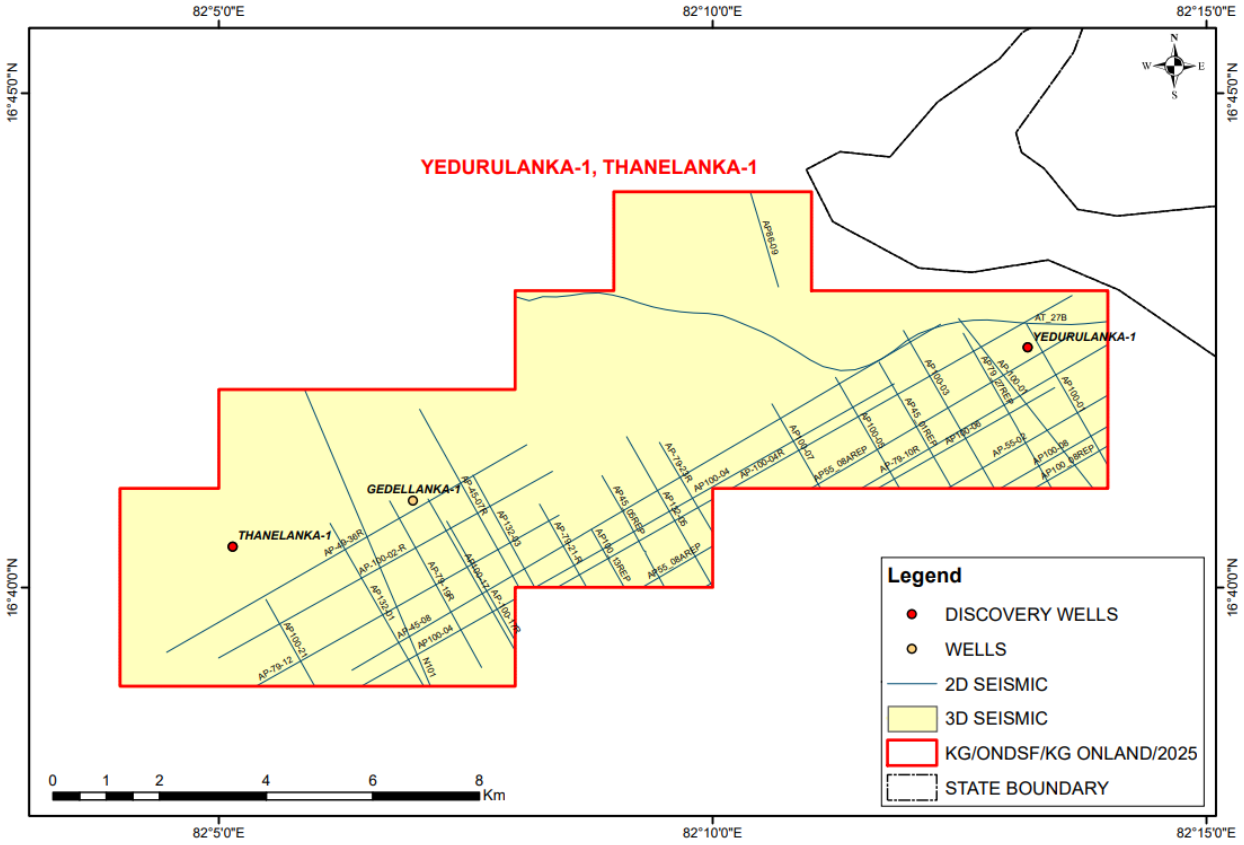
BASE MAP OF CONTRACT AREA KG/ONDSF/KG ONLAND/2025



BASE MAP OF CONTRACT AREA KG/ONDSF/KG ONLAND/2025



BASE MAP OF CONTRACT AREA KG/ONDSF/KG ONLAND/2025



3. BASIN OVERVIEW

The KG Basin is characterized by a primarily siliciclastic shelf margin and is situated along the east coast of the Indian peninsula, lying between the Mahanadi Basin to the north and the Cauvery Basin to the south. Commercial hydrocarbon occurrences spread over wide stratigraphic horizons ranging from the Permian to the Pliocene with geographical onland and offshore distribution, including ultradeep bathymetry. Several oil and gas fields have been discovered onland and offshore with structural, stratigraphic, and strati-structural entrapment conditions. The exploration thrust in the basin has resulted in the discovery of large to medium- and small-sized oil and gas pools in the onland and offshore areas of the shallow, deep, and ultradeep water. The basin is a dual-rift province with a Late Jurassic rift that resulted in a northeast/southwest-trending passive margin basin orthogonally superimposed over the northwest/southeast-trending Gondwana Pranhita-Godavari Basin. The KG Basin consists of sediments with thickness of more than 7,000 meters, ranging in age from the Early Permian to Recent. The onland portion of the basin is mostly covered by the alluviums deposited by the major Godavari and Krishna River systems and several stratigraphic sequences, including that of the Lower Gondwana, which are outcropped near the basin margin. The reservoirs are primarily sandstones with isolated occurrences of limestone and unconventional reservoirs like fractured basalts. The effective source rocks have been identified to be Permian to Eocene shales. The hydrocarbon accumulations often indicate charging by more than one source, and the potential for biogenic plays is significant.

The KG Basin is a Category I basin in the newly formulated three-tier category, implying that the basin has potentially commercially discoverable volumes of in-place hydrocarbons (reserves), which need efficient exploitation through accelerated and enhanced production. This categorization was made in accordance with the industry-standard Petroleum Resources Management System (PRMS) and conforms to various policies in place or under implementation by government of India.

The basin covers an area of 230,000 square kilometers: 31,456 square kilometers onland, 25,649 square kilometers in shallow water (up to 400 meters of water depth), and 17,2895 square kilometers in deepwater. Twelve plays have been identified within the Basement, Permian, Mesozoic, Paleocene, Eocene, Miocene (+Biogenic), and Pliocene (+Biogenic).

Fig.: Reference sedimentary basin:

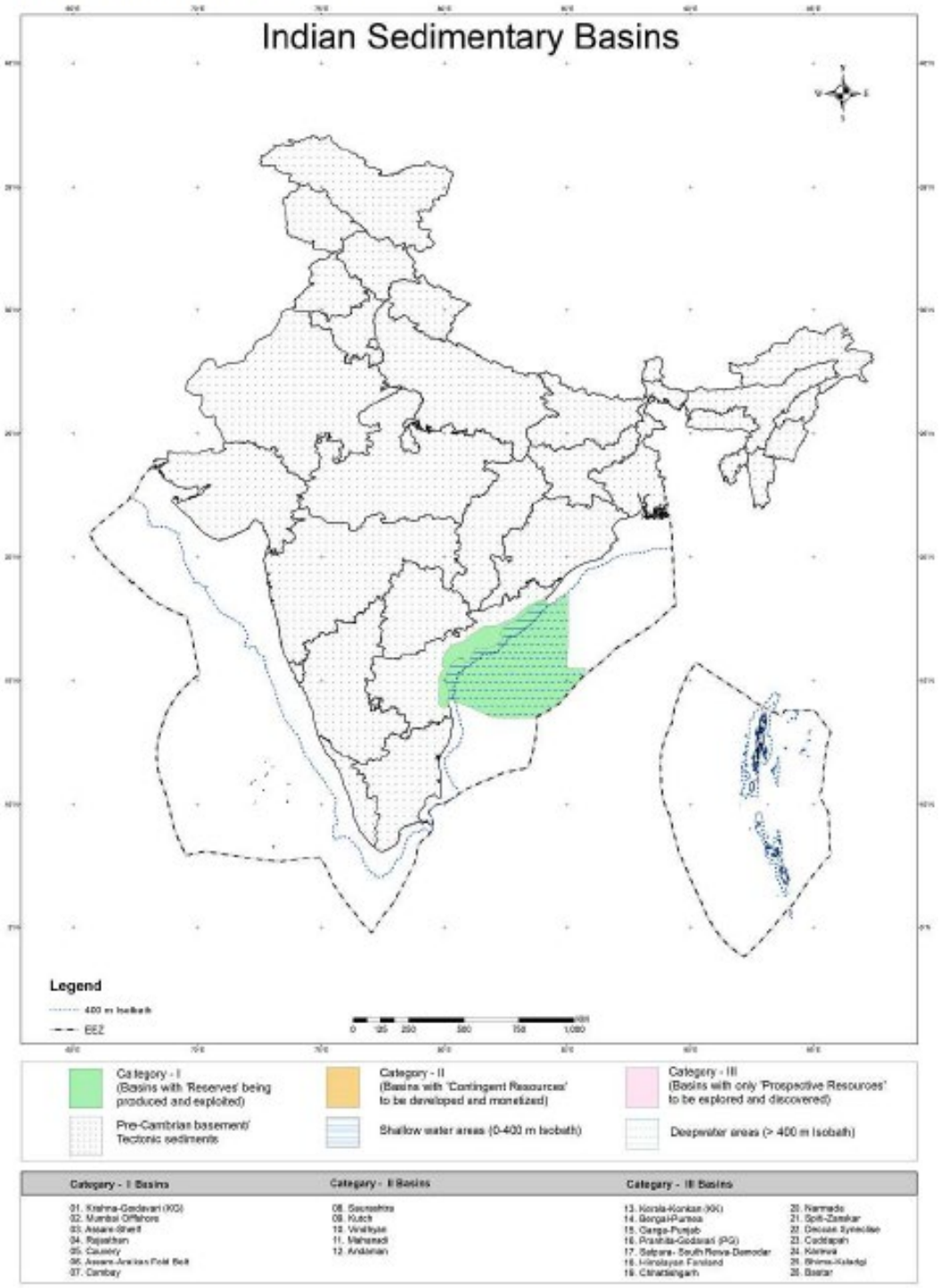


Fig.: Generalized stratigraphy of the basin:

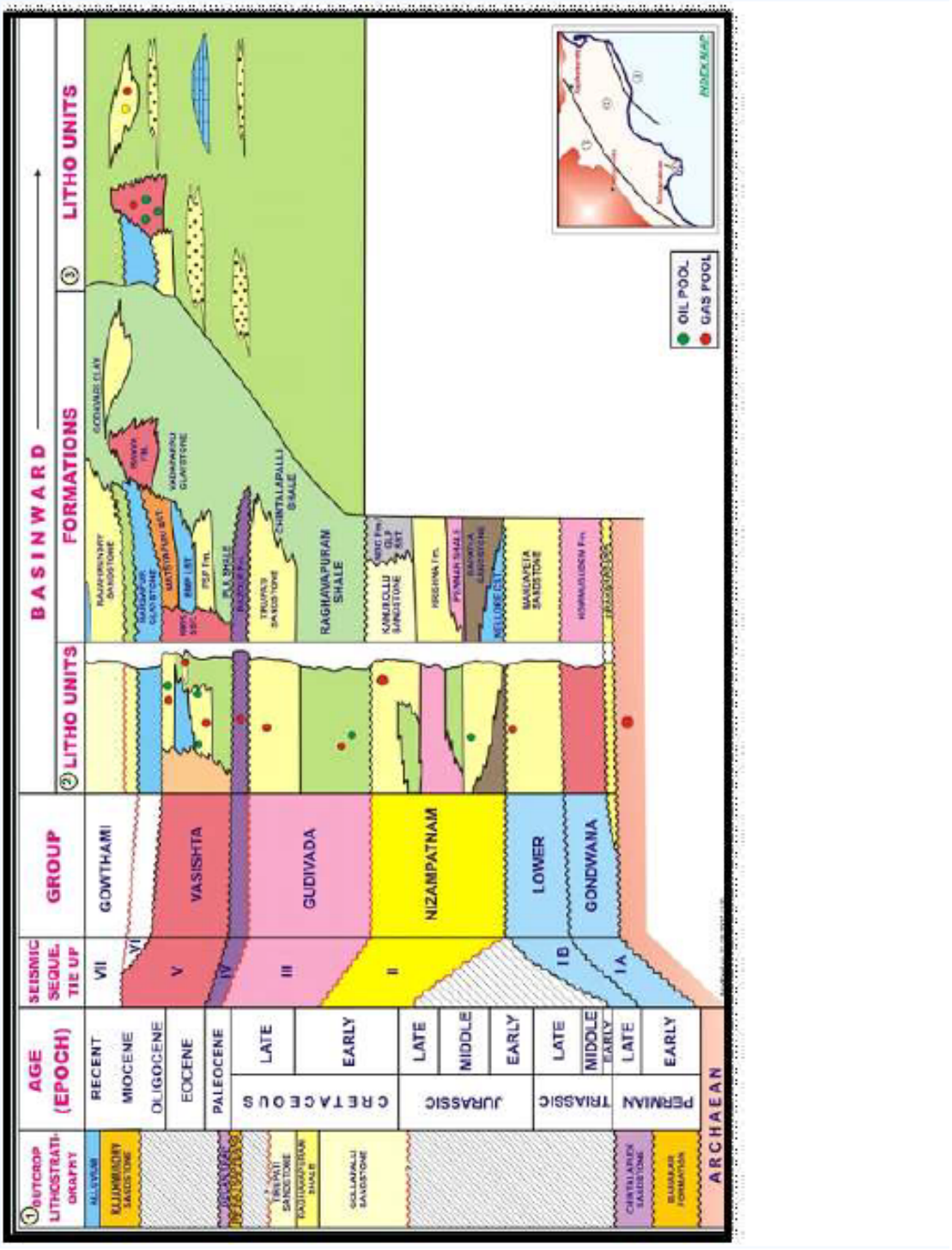
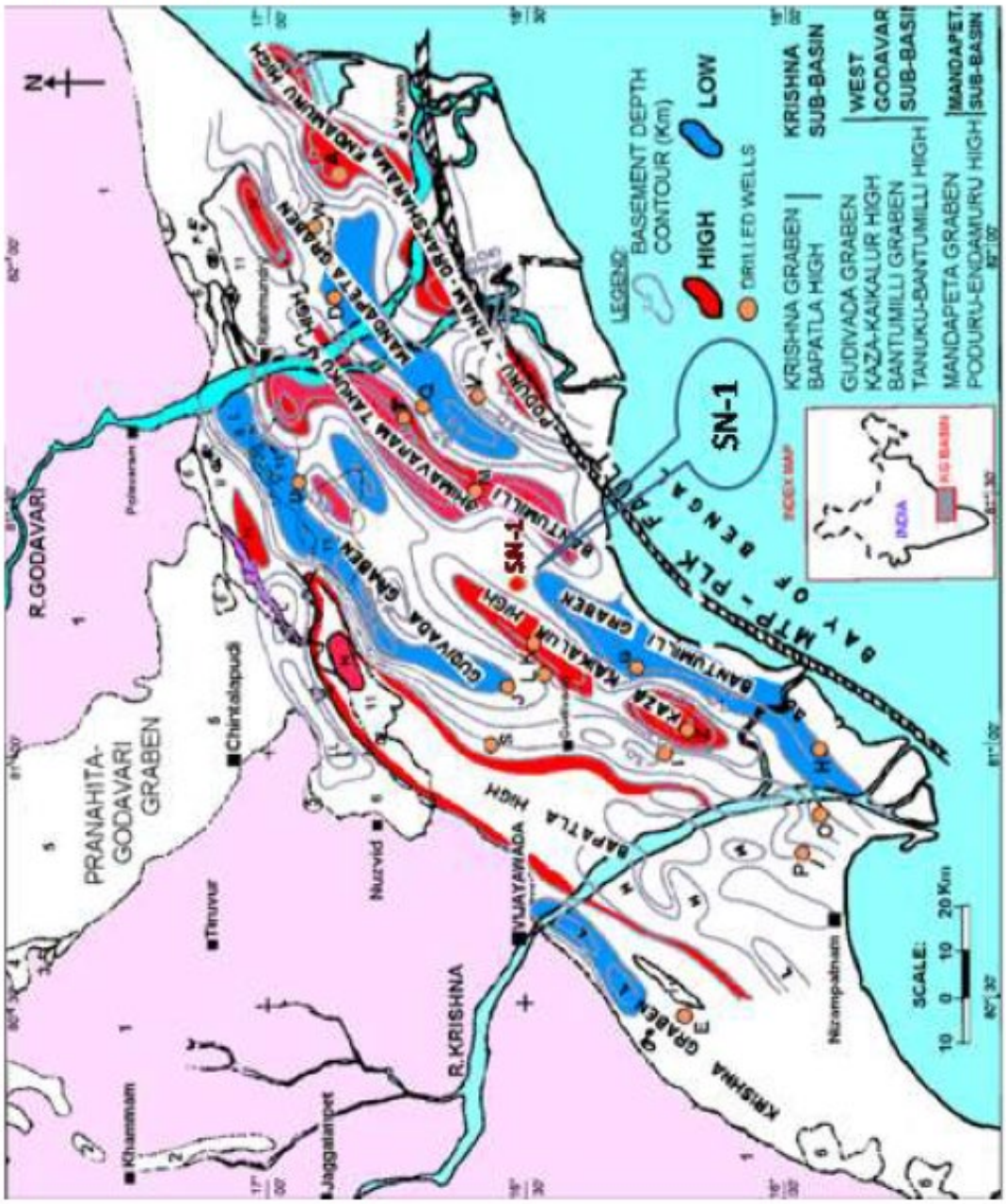


Fig. Tectonic map of the basin:



4. PHYSIOGRAPHY AND ACCESSIBILITY OF THE AREA

The general gradient of the area is toward the east and southeast. The Godavari and Krishna Rivers form the major deltas in the area. The Krishna delta is a fluvial-dominated elongate and constructive type, and the Godavari delta is lobate and partially affected by wave action. The shelf is narrow near the river mouths and widens in the bay areas. The climate is hot and humid with temperatures reaching up to 42 degrees Celsius (°C) during the summer. The mean daily temperature varies between 35°C and 40°C during the summer and between 25°C and 30°C during the winter. Widespread rains with occasional cyclonic storms occur during the period from June to August due to the southwest monsoon and during the period from October to December due to the northeast monsoon. The average annual rainfall is about 1,250 millimeters. The nearest international airports are located in the cities of Chennai (Madras) and Hyderabad. The cities of Vijayawada and Rajahmundry, at distances of 150 kilometers and 100 kilometers to the west and east, respectively, also offer air connectivity. Narsapuram/Narsapur and Machilipatnam are important nearby towns. Visakhapatnam (250 kilometers) is a major port city with ship repair and cargo handling facilities while Kakinada (150 kilometers) is the nearest seaport with all facilities.

The following table shows the nearest facilities to each well:

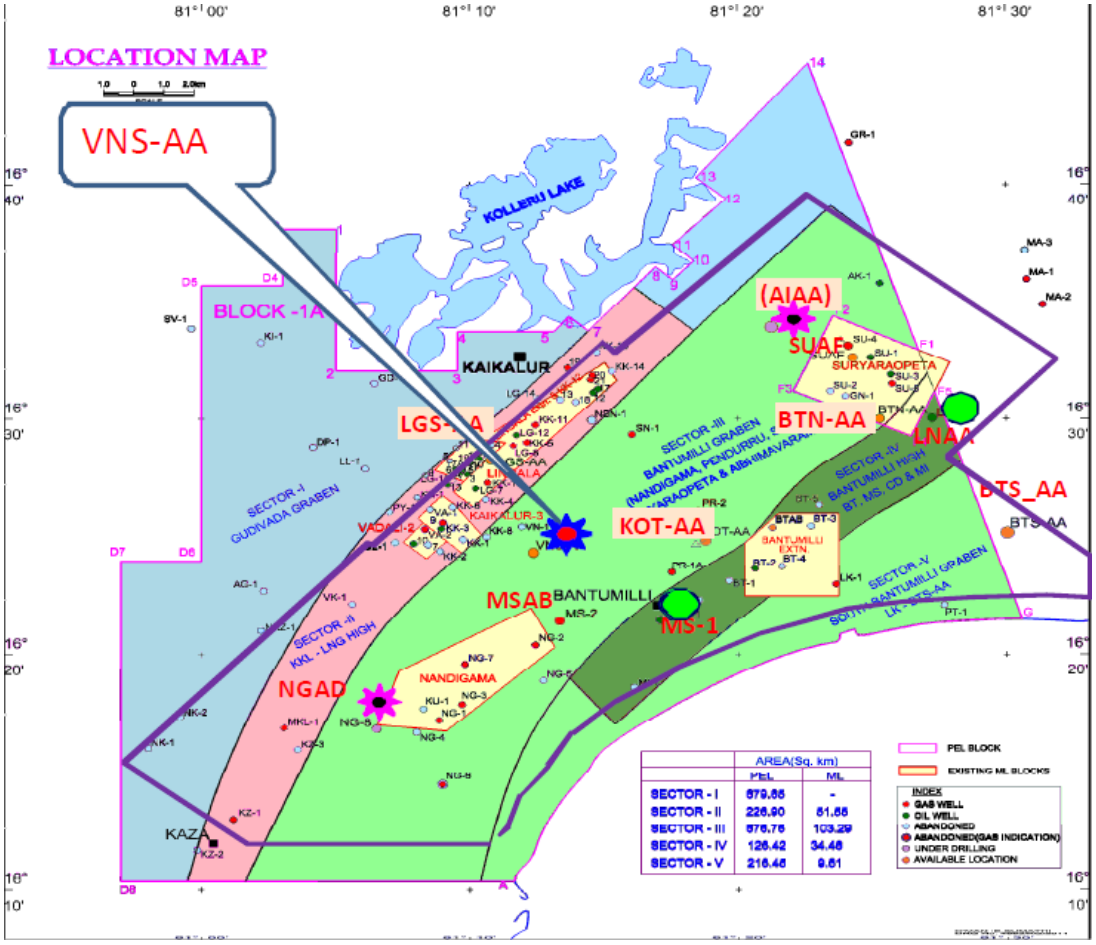
Well Name	Near-by surface facility (distance)
Bantumilli South-1 (BTA-AA)	Malleswaram EPS (12 km)
CHINTALAPALLI	Tatipaka GCS (12 km)
MEDAPADU#1	Narsapur GCS (18 km)
Bantumilli-2	Malleshwaram EPS (15 km)
VANADURRU SOUTH	Lingala GGS (2 km)
Thanelanka-1	Ravva Onshore Terminal (25 km)
Yedurulanka-1	Ravva Onshore Terminal (25 km)

5. KG ONLAND DISCOVERY AND FIELD DESCRIPTION

5.1. VANADURRU SOUTH 1 DISCOVERY AND FIELD DESCRIPTION

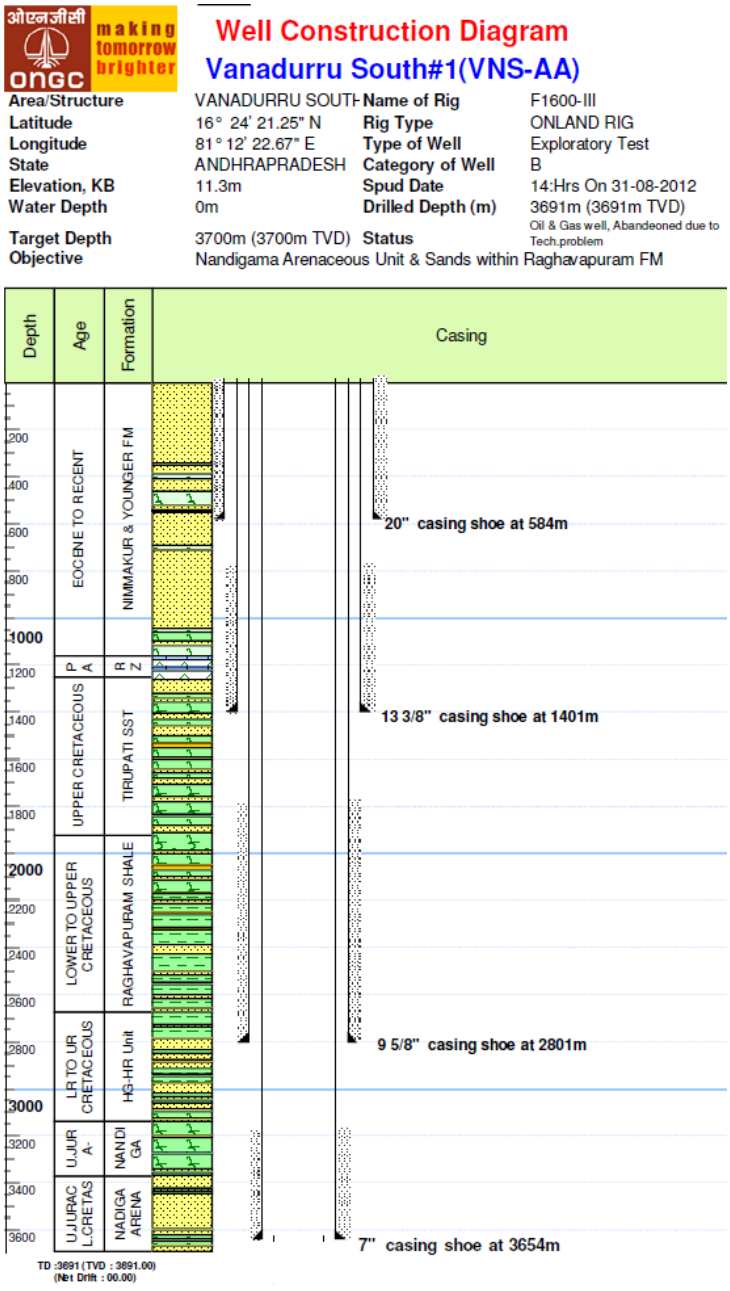
The location 'VNSAA' (Vanadurru South) is situated at around 5.67 km NNW of MS#2 and about 2.1 km SSE-of Vinnakota#1, falling under West Godavari PML block of KG Onland. The location VNS-AA, proposed as KB-VNS- AA in 62nd REXB was released as an exploratory test 'B' category at the crossings of IL-1666 & XL-638 with a target depth of 3700m to explore Nandigama Arenaceous unit and sands within Raghavapuram Formation. The location VNSAA was drilled vertically down to 3691m as Vanadurru-1 (VNS#1) and was terminated at this depth due to drilling complications. Significant gas shows were observed in HR-HG sequence of Raghavapuram and Nandigama formations during drilling.

The well VNS#1 has encountered about 1914m of Tirupati Sandstone and Younger sediments, 1450m of Raghavapuram Shale and 316+m Nandigama Formation and was bottomed within Nandigama Formation. The well VNS#1 is fairly correlatable with nearby wells and the present well is structurally deeper w.r.t to Vanadurru#1 and structurally shallower w.r.t Malleswaram#2 at all the stratigraphic levels.



5.1.1. Drilling and Well Completion

Key information regarding the drilled wells has been collated and presented herein. The adjoining figures, wherever shown, illustrate the well construction diagram and the litho-column information for key wells. Other well statics, such as kelly bushing reference depth, water depth, and drilled and logged depths (including well coordinates) are also provided.



5.1.2. Well Logging and Formation Evaluation

The well logs of all discovery wells as well as selected key wells in the contract area were reviewed. The logs recorded in various open-hole sections along with casedhole logs and

information from conventional and other wireline formation test data are presented in this docket. The availability of key input reports, such as well completion reports (WCR) and formation evaluation reports (FER), was checked. Reservoir parameters of interesting zones and results of the tested zone(s) are included in this report. Log motifs of tested/interesting zones of key wells are also appended.

5.1.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	KB	Drilled depth
Both available	31.08.2012	11.3 m	3691 m MDRT

5.1.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

17.5	HRI-GR-SP-CAL (1836-583.6m) Remarks: BHT@169°F
	BCS-GR (1836.5-583.6m) Remarks: BHT@171°F
	HRI-GR-SP-CAL (1850-1820m) Remarks: BHT@170°F
	BCS-GR (1850-1820m)
12.25	DLL-MLL-GR-SP-CAL (2804-1800m) Remarks: BHT@250°F
	ZDL-CN-GR (2804-1700m) Remarks: BHT@ 250°F
8.5	DLL-MLL-GR-SP (3495-2800.3m) Remarks: BHT@182.77°F
	ZDL-CN-CAL-GR (3492.6-2800.3m) Remarks: BHT@ 184.44°F
	DLL-MLL-GR-SP (3495-2800.3m) Remarks: BHT@288°F
	ZDL-CN-CAL-GR (3676-3250m) Remarks: BHT@ 310°F
	FMI-GR (3669.5-3200m) Remarks: BHT@290°F

5.1.3. Well Testing and Workover History

Four objects were released for production testing within the Nandigama and Raghavapuram fm. (2 objects each). Only two objects within Nandigama could be tested. Object –I (3628-3634m) produced oil (Qo; 155.5 bbl/d) and gas (Qg: 51772 m3/d), FTHP: 1585 psi thru 6mm choke. Object –II (3390-3402m, 3387-3381m) was re-perforated and flowed feeble gas at 0 psi; yielded an influx of 8m3 of oil and emulsion on reverse out.

5.1.4. Reservoir Engineering Studies and Analysis

Key reservoir engineering datasets, wherever available, were collated and are presented under various data genres. In a comprehensive data presentation, the results from well tests, formation dynamics tests, reservoir pressure buildup studies, and pressure-volume-temperature (PVT) data/results are included.

5.1.4.1. Formation dynamics tests

8 ½" hole

SEQ.	Probe DEPTH	Formation Press	Eq. Formation Pressure	Before Mud Press	After Mud Press	Temp	Eq. Mud Wt.	MOBILITY	Remarks
NO.	MD (M)	(psia)	(Sg) *	(psia)	(psia)	DegF	(Sg) *	md/CP	
1	3271.50	-	0.00	7474.22	7472.52	293.62	1.61	-	-
2	3272.50	-	0.00	7472.95	7472.26	292.07	1.61	-	-
3	3275.00	-	0.00	7479.35	7479.03	290.37	1.61	-	-
4	3276.50	-	0.00	7481.52	7481.75	288.18	1.61	-	-
5	3277.00	-	0.00	7483.34	7482.81	289.18	1.61	0.34	-
6	3299.00	-	0.00	7544.21	7530.26	287.51	1.61	-	-
7	3305.00	-	0.00	7543.78	7545.04	287.22	1.61	-	-
8	3306.00	-	0.00	7547.01	7547.39	287.12	1.61	-	-
9	3306.00	-	0.00	7548.46	7547.24	287.97	1.61	-	-
10	3312.00	-	0.00	7562.55	7561.45	287.12	1.61	-	-
11	3313.00		0.00	7562.45	7562.59	287.35	1.61	-	-
12	3313.00		0.00	7562.72	7562.00	287.86	1.61	-	-
13	3315.00		0.00	7567.07	7567.31	287.45	1.61	-	-
14	3381.50		0.00	7715.75	7715.12	291.99	1.61	-	-
15	3382.00		0.00	7717.39	7717.49	291.90	1.61	0.04	-
16	3383.00		0.00	7719.56	7719.67	291.76	1.61	-	-
17	3383.50		0.00	7720.87	7721.53	291.60	1.61	-	-
18	3384.00		0.00	7721.95	7721.57	291.35	1.61	0.02	-
19	3384.80		0.00	7723.98	7723.88	291.13	1.61		-
20	3385.00		0.00	7724.31	7723.77	290.97	1.61	-	-
21	3385.50		0.00	7725.49	7753.39	290.58	1.61	0.06	-
22	3387.00		0.00	7729.40	7728.67	290.00	1.61	-	-
23	3388.00		0.00	7731.69	7731.13	288.89	1.61	-	-
24	3388.30		0.00	7731.43	7731.27	289.47	1.61		-
25	3389.00		0.00	7733.59	7733.25	287.88	1.61	0.02	-
26	3390.00		0.00	7735.55	7735.79	286.59	1.61	0.01	-
27	3391.00		0.00	7739.68	7737.95	283.85	1.61	0.01	-
28	3396.00	6701.51	1.39	7750.16	7750.02	281.00	1.61	1.00	-
29	3396.00		0.00	7749.79	7748.90	293.51	1.61	-	-
30	3399.50	7495.88	1.55	7756.89	7757.16	270.00	1.61	0.01	-
31	3401.00		0.00	7758.92	7759.44	293.04	1.61	-	-
32	3401.50		0.00	7805.00	7760.37	285.85	1.61	-	-
33	3401.80		0.00	7761.60	7761.41	292.69	1.61		-
34	3402.00		0.00	7772.48	7758.93	292.09	1.60		-
35	3402.20		0.00	7762.24	7762.22	292.55	1.61		-
36	3506.00	6677.55	1.34	8052.34	8052.00	296.01	1.62	1.07	-
37	3511.00	6677.31	1.34	7958.52	7958.52		1.59	**0.30**	Recorded by XPT

5.1.4.2. Oil composition analysis

Formation: Nandigama| Object: I | Interval(m.): 3628-3634 | Sample No.: 185 | Density: 0.7835 gm/ml at 15 degC | API: 49.02.

Formation: Godavari Clay| Object: I | Interval(m.): 2269-2299, 2310-2316.5 | Sample No.: 11-02-2017 | Density: 0.8366 gm/ml at 15 degC | API: 37.55.

5.1.4.3. Gas composition analysis

Formation: Nandigama| Object: I | Interval(m.): 3628-3634 | Sample No.: 758 | Choke: 4mm.| C1: 81.74 %| C2: 11.68 %| C3: 3.04 %| iC4: 1.05 %| Carbon-dioxide: 0.58 %| Nitrogen+Oxygen: 0.79 %| Z: 0.9968 | Sp.Gr.: 0.6848| Heat value (INF): 40.12 MJ/m3| Heat value (SUP): 44.3 MJ/m3.
Formation: Nandigama| Object: I | Interval(m.): 3628-3634 | Sample No.: 786 | Choke: 5mm.| C1: 76.53 %| C2: 12.47 %| C3: 3.56 %| iC4: 1.50 %| Carbon-dioxide: 0.92 %| Nitrogen+Oxygen: 0.69 %| Z: 0.9964 | Sp.Gr.: 0.7264| Heat value (INF): 40.13 MJ/m3| Heat value (SUP): 46.46 MJ/m3.
Formation: Nandigama| Object: I | Interval(m.): 3628-3634 | Sample No.: 787 | Choke: 5mm.| C1: 77.22 %| C2: 12.53 %| C3: 3.74 %| iC4: 1.66 %| Carbon-dioxide: 0.91 %| Nitrogen+Oxygen: 0.91 %| Z: 0.9962 | Sp.Gr.: 0.7476 | Heat value (INF): 43.21 MJ/m3| Heat value (SUP): 47.61 MJ/m3.

5.1.4.4. Temperature gradient

Maximum-recorded log head temperatures of different runs were corrected by Horner's Plot and recalculated to generate a temperature gradient plot. Maximum recorded BHT at 3683m, 154.44°C and seabed temperature is taken as 32°C.

- Seabed to 1838m: 2.64°C/ 100m Remark: normal gradient
- 1838m to 2804m: 5.46°C/ 100m Remark: abnormal gradient
- 2804m to 3683m: 6.04°C/ 100m Remark: abnormal gradient

The overall temperature gradient from MSL to 3683m is 4.19°C/ 100m.

5.1.5. Geology and Reservoir Description

The geology of the area was comprehensively reviewed using correlations, sections, and maps. The well correlation, seismic sections, top structure, seismic attribute/amplitude, and net sand/pay maps were used to illustrate the magnitude and distribution of key reservoir properties in and around the discovered gas pools (accumulations). The local tectonic setting and geological section of the area, wherever available, are also provided. These maps/sections are sequentially shown field-wise and reservoir-unit-wise on figures, each of which is appropriately titled and illustrated in the following section.

5.1.5.1. Geological description

The Krishna-Godavari (KG) Basin is a pericratonic, multi-phase rift basin on India's east coast, shaped by successive rifting events from the Proterozoic through the Late Jurassic–Early Cretaceous. It includes major sub-basins—Krishna, West Godavari (WG), and East Godavari (EG)—separated by structural highs. In the WG sub-basin, thick Jurassic to Cretaceous sediments host significant hydrocarbon accumulations, particularly in the Nandigama and Raghavapuram formations.

The basin's evolution involved early syn-rift clastics (Nandigama Formation) followed by post-rift marine shales and sands (Raghavapuram Formation). These formations serve as both source

and reservoir rocks, with the Raghavapuram Shale being the main source. Tertiary sediments provide effective overburden. Hydrocarbon generation began around the Campanian and continued into the Miocene, with accumulations controlled mainly by stratigraphic and stratistructural traps formed during inversion and sea-level changes.

In the Vanadurru South area, exploration has confirmed oil and gas presence in several fields. Reservoirs are thin, laterally discontinuous sands, mainly within the Raghavapuram and Nandigama formations, deposited in a wave-dominated setting. Structural highs, faults, and sand geometry indicate limited reservoir extent, with entrapment largely due to subtle stratigraphic and structural features.

5.1.6. Reservoir Properties and OHIP

Estimates of in-place volumes presented in this section have been prepared in accordance with the Petroleum Resources Management System (PRMS) approved in March 2007 and revised in June 2018 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, the Society of Petroleum Evaluation Engineers, the Society of Exploration Geophysicists, the Society of Petrophysicists and Well Log Analysts, and the European Association of Geoscientists & Engineers.

The volumetric method was used to estimate the original oil in place (OOIP)) of certain fields evaluated herein. A review of selected geophysical data, in conjunction with well control and other relevant information, served as the basis for the structural interpretation of the fields. The geological interpretation provided by DGH was extensively reviewed and, where appropriate, adjusted.

Wireline electrical logs, radioactivity logs, wireline formation pressure tests, wireline fluid sample tests, and other data were acquired in wells drilled in the evaluated fields. When available, drill cuttings, hole cores, and sidewall cores were analyzed. These combined analyses of the well-log data were used to establish petrophysical properties. Estimates of OOIP were made using net pay isopach maps. These isopach maps were constructed using geological depth structure maps and petrophysical analyses of the well-log data.

Following is the summary of the average reservoir parameters and estimates of OOIP. Seismic sections, log motifs, structure and isopach maps are in the annex bound with this information docket.

RESERVOIR PARAMETERS and ORIGINAL OIL in PLACE
as of
JANUARY 1, 2025
for the
VANADURRU SOUTH DISCOVERY
of
KG/ONDSF/KG ONLAND/2025 CONTRACT AREA

	Reservoir	Total
Low		
Area, acres	232	
Oil Formation Volume Factor, rbbl/bbl	1.25	
Average Thickness, ft	28.9	
Average Porosity, %	8.00	
Average Water Saturation, %	59.97	
Original Oil in Place, 10^6bbl	1.33	**1.33**
Original Oil in Place, 10^6eq ton	0.19	**0.19**
Best		
Area, acres	899	
Oil Formation Volume Factor, rbbl/bbl	1.25	
Average Thickness, ft	28.5	
Average Porosity, %	10.00	
Average Water Saturation, %	49.98	
Original Oil in Place, 10^6bbl	7.96	**7.96**
Original Oil in Place, 10^6eq ton	1.16	**1.16**
High		
Area, acres	1,532	
Oil Formation Volume Factor, rbbl/bbl	1.25	
Average Thickness, ft	25.2	
Average Porosity, %	12.00	
Average Water Saturation, %	40.00	
Original Oil in Place, 10^6bbl	17.25	**17.25**
Original Oil in Place, 10^6eq ton	2.52	**2.52**

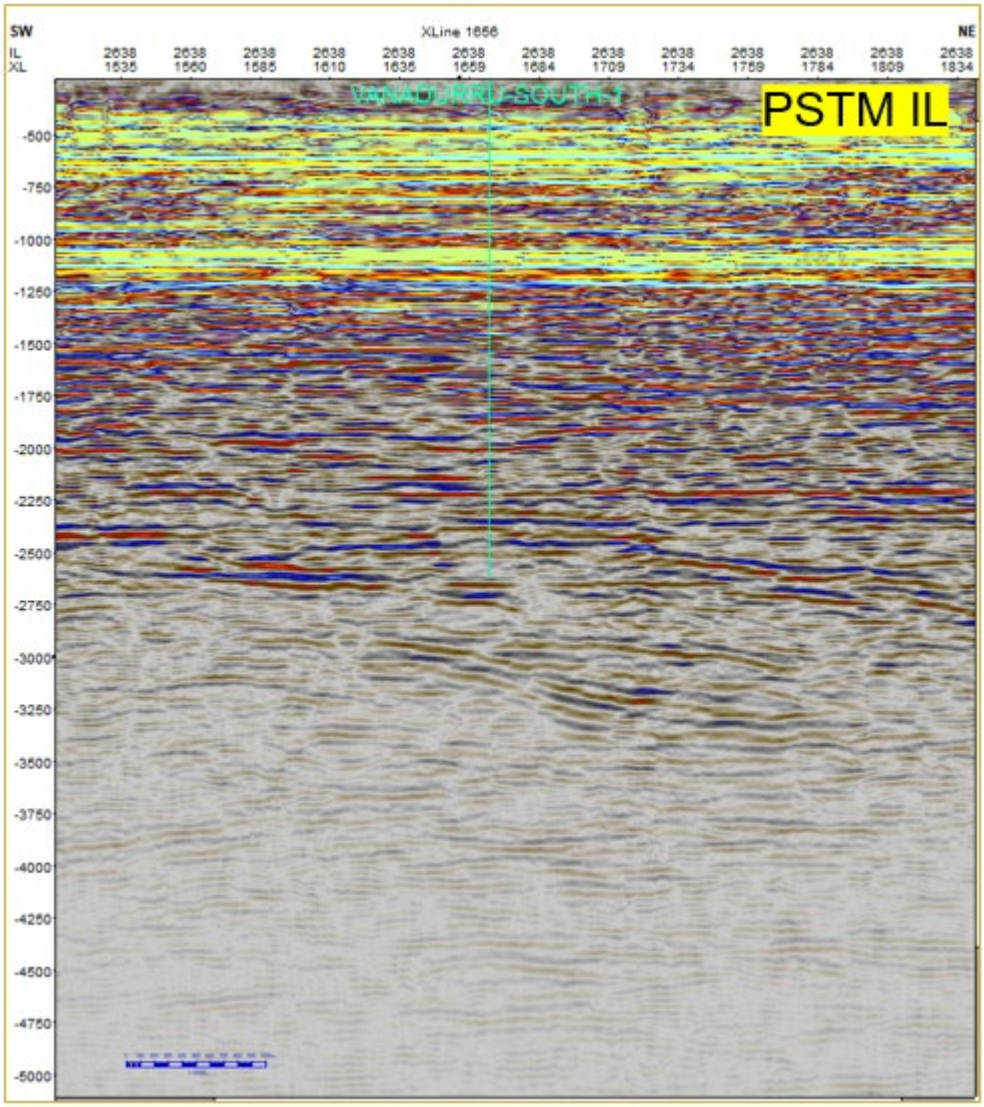
Note: Conversion used 10^6 bbl equal to 0.1461 10^6 eq tone.

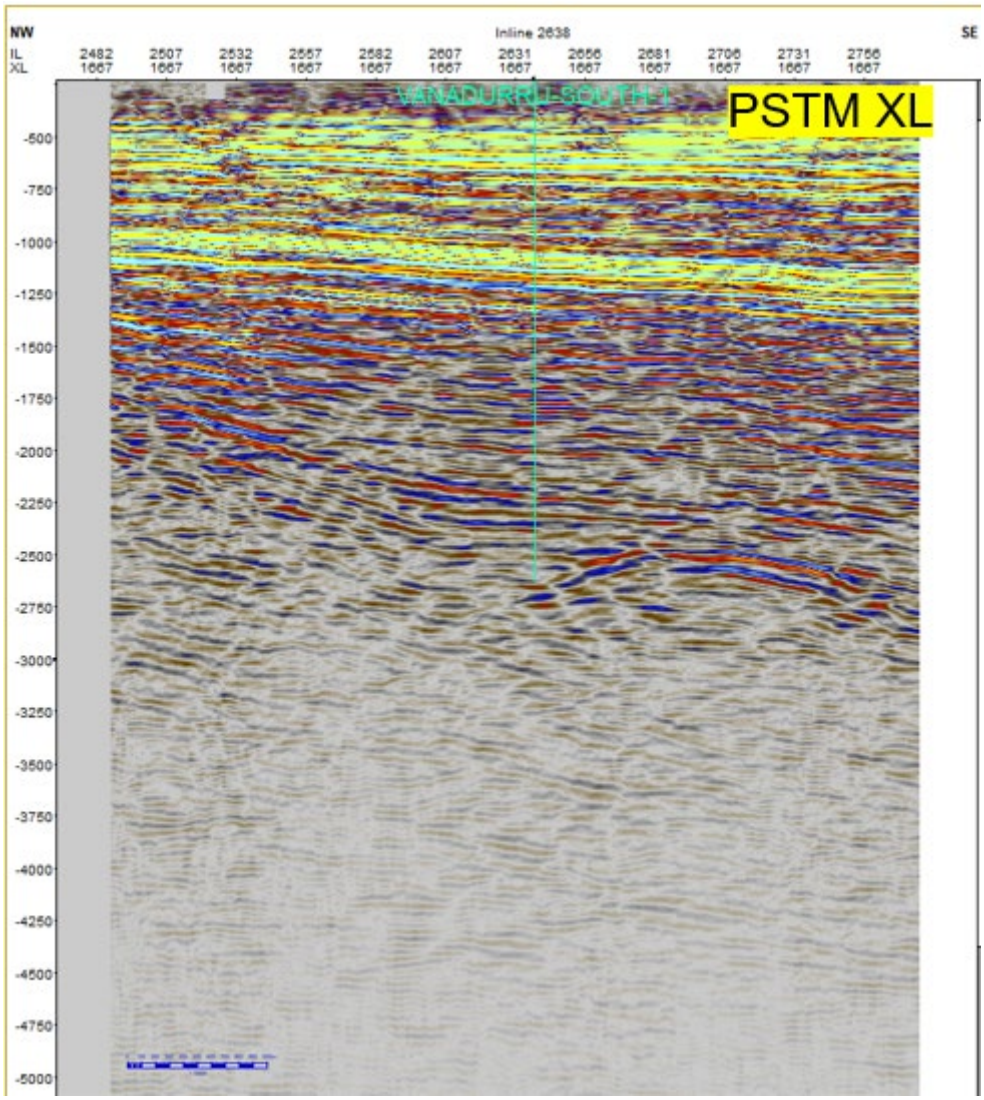
Volumes estimated by a Third Party

The operator has reported an in-place volume of 6.08 MMTOE (Best case).

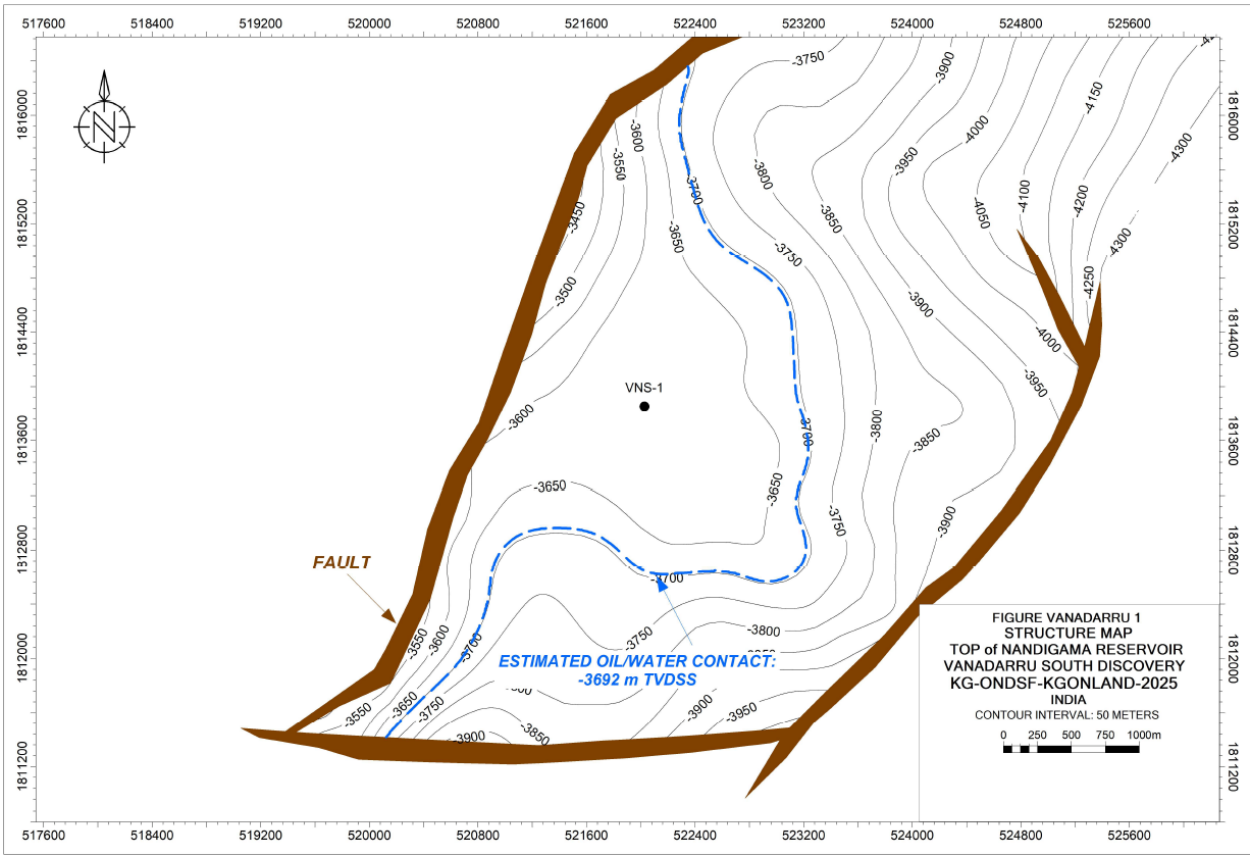
5.1.7. Annex

5.1.7.1. Seismic Sections

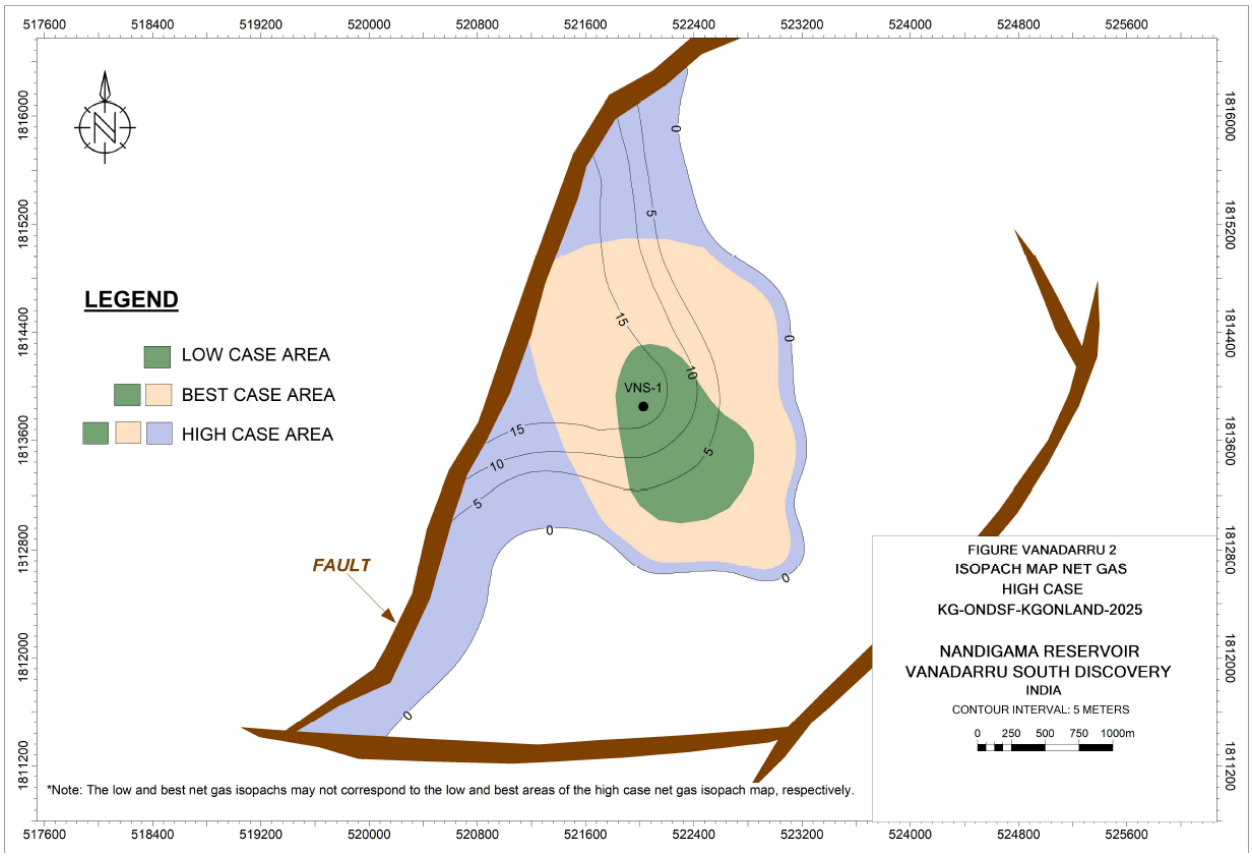



NW
Inline 2638
SE
IL
XL
2482 1667
2507 1667
2532 1667
2557 1667
2582 1667
2607 1667
2631 1667
2656 1667
2681 1667
2706 1667
2731 1667
2756 1667
VANADURR1 SOUTH 1
PSTM XL
-500
-750
-1000
-1250
-1500
-1750
-2000
-2250
-2500
-2750
-3000
-3250
-3500
-3750
-4000
-4250
-4500
-4750
-5000

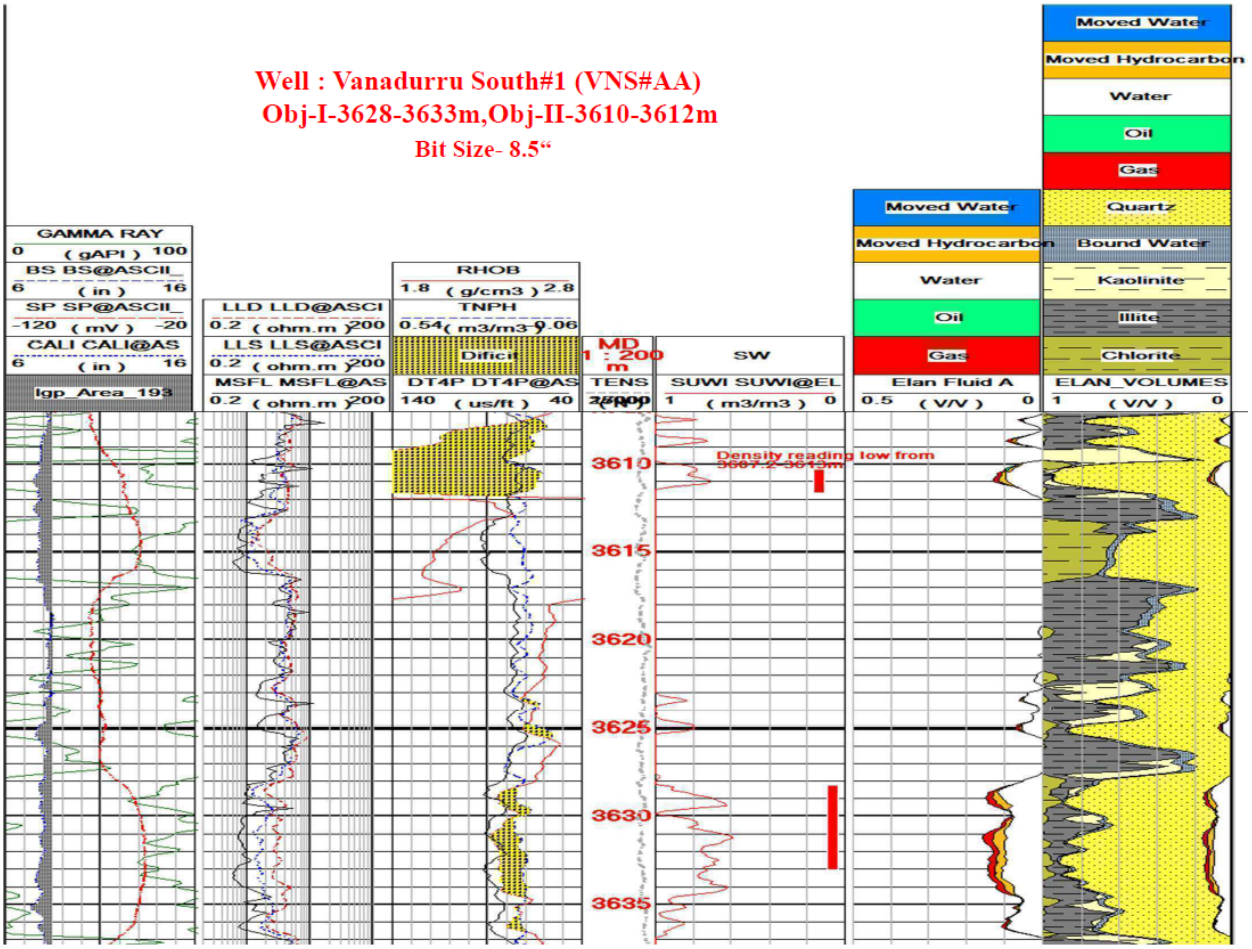
5.1.7.2. Structural Maps

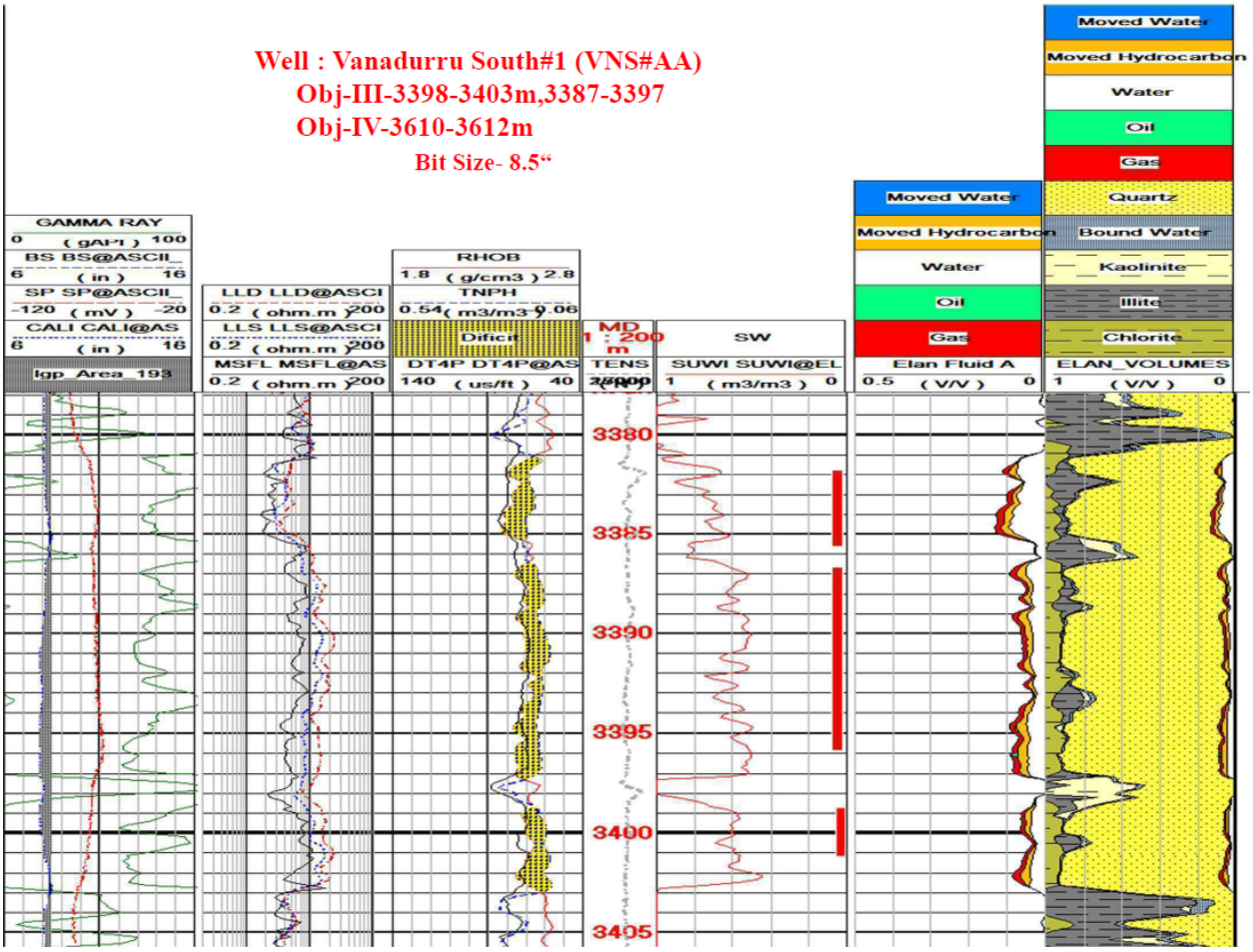


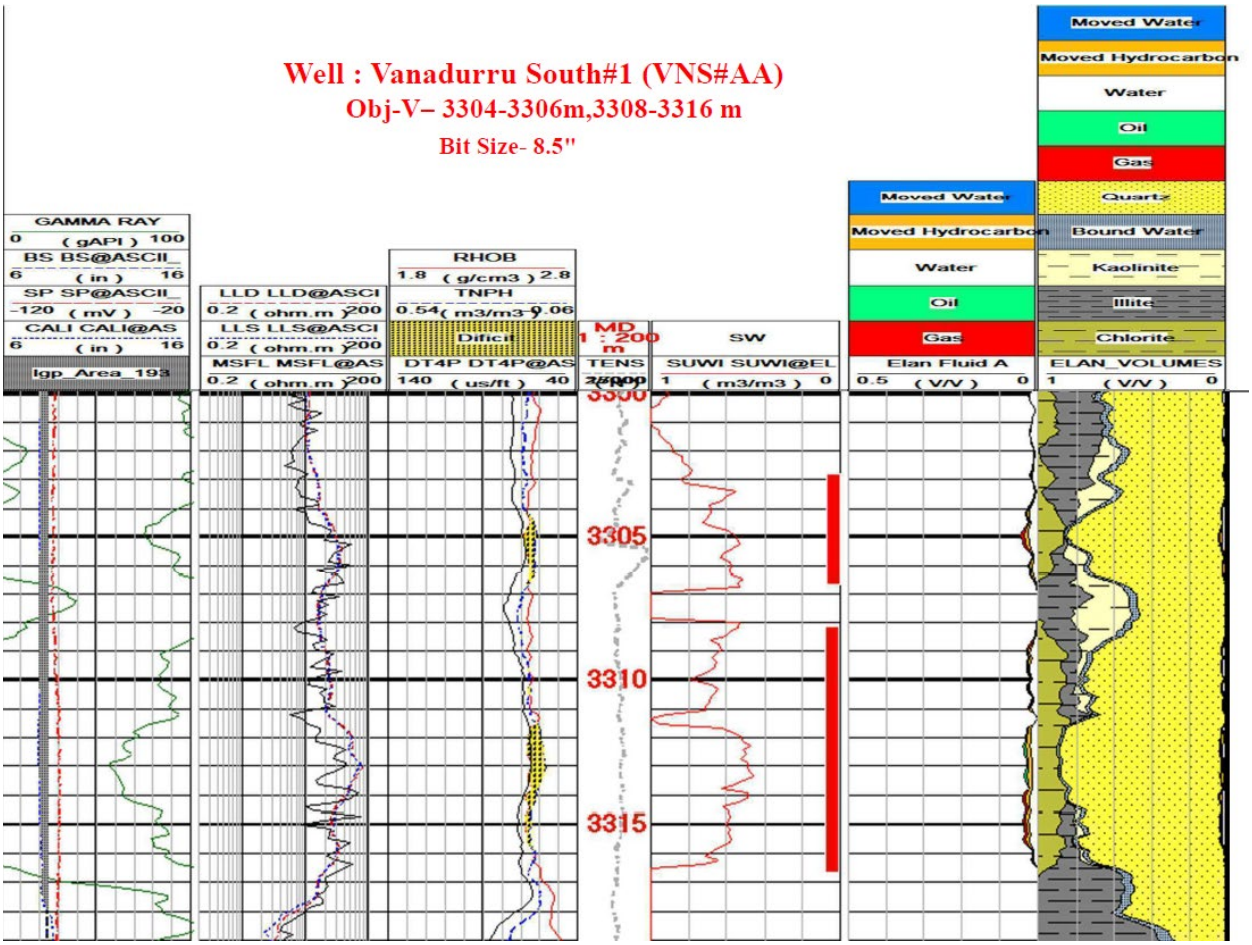
5.1.7.3. Isopach Maps



5.1.7.4. Log Motifs




Well : Vanadurru South#1 (VNS#AA)
Obj-III-3398-3403m,3387-3397
Obj-IV-3610-3612m
Bit Size- 8.5“
GAMMA RAY
0 (gAPI) 100
BS BS@ASCII_
6 (in) 16
SP SP@ASCII_
-120 (mV) -20
CALI CALI@AS
6 (in) 16
lgp_Area_193
LLD LLD@ASCI
0.2 (ohm.m) 200
LLS LLS@ASCI
0.2 (ohm.m) 200
MSFL MSFL@AS
0.2 (ohm.m) 200
RHOB
1.8 (g/cm3) 2.8
TNPH
0.54 (m3/m3) -0.06
Dificil
DT4P DT4P@AS
140 (us/ft) 40
MD
1 : 200
m
TENS
SW
SUWI SUWI@EL
1 (m3/m3) 0
Moved Water
Moved Hydrocarbon
Water
Oil
Gas
Elan Fluid A
0.5 (V/V) 0
Moved Water
Moved Hydrocarbon
Water
Oil
Gas
Quartz
Bound Water
Kaolinite
Illite
Chlorite
ELAN_VOLUMES
1 (V/V) 0
3380
3385
3390
3395
3400
3405

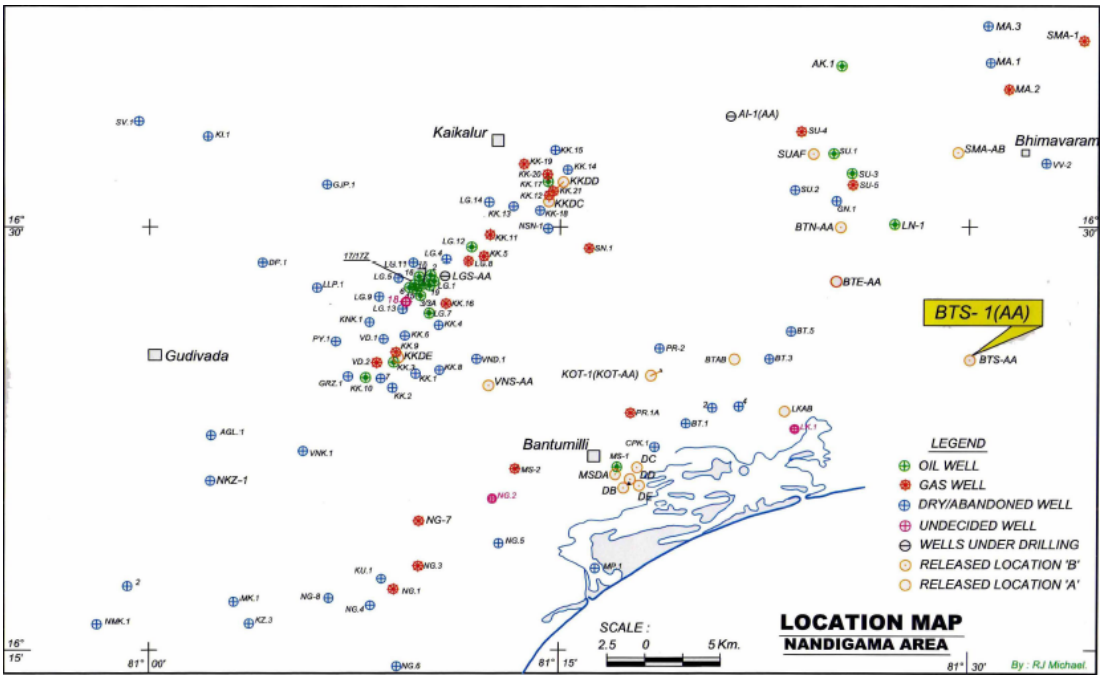

Well : Vanadurru South#1 (VNS#AA)
Obj-V– 3304-3306m,3308-3316 m
Bit Size- 8.5"
GAMMA RAY
0 (gAPI) 100
BS BS@ASCII_
6 (in) 16
SP SP@ASCII_
-120 (mV) -20
CALI CALI@AS
6 (in) 16
Igp_Area_193
LLD LLD@ASCI
0.2 (ohm.m) 200
LLS LLS@ASCI
0.2 (ohm.m) 200
MSFL MSFL@AS
0.2 (ohm.m) 200
RHOB
1.8 (g/cm3) 2.8
TNPH
0.54 (m3/m3) -0.06
Dificil
DT4P DT4P@AS
140 (us/ft) 40
MD
1 : 200
m
TENS
SW
SUWI SUWI@EL
1 (m3/m3) 0
Moved Water
Moved Hydrocarbon
Water
Oil
Gas
Elan Fluid A
0.5 (V/V) 0
Moved Water
Moved Hydrocarbon
Water
Oil
Gas
Quartz
Bound Water
Kaolinite
Illite
Chlorite
ELAN_VOLUMES
1 (V/V) 0
3305
3310
3315

5.2. BANTUMILLI SOUTH-1 DISCOVERY AND FIELD DESCRIPTION

The location known as BTSAA (Bantumilli South) lies northeast of Laxmipuram-1 and slightly north-northeast of Padatadaka-1, within the PEL-18 block of the Krishna-Godavari onshore region. Initially proposed as KB-BTS-2 during the 63rd REXB, it was approved as an exploratory well to test a four-way structural closure near the intersection of two seismic lines, aiming to evaluate the arenaceous unit of the Nandigama formation.

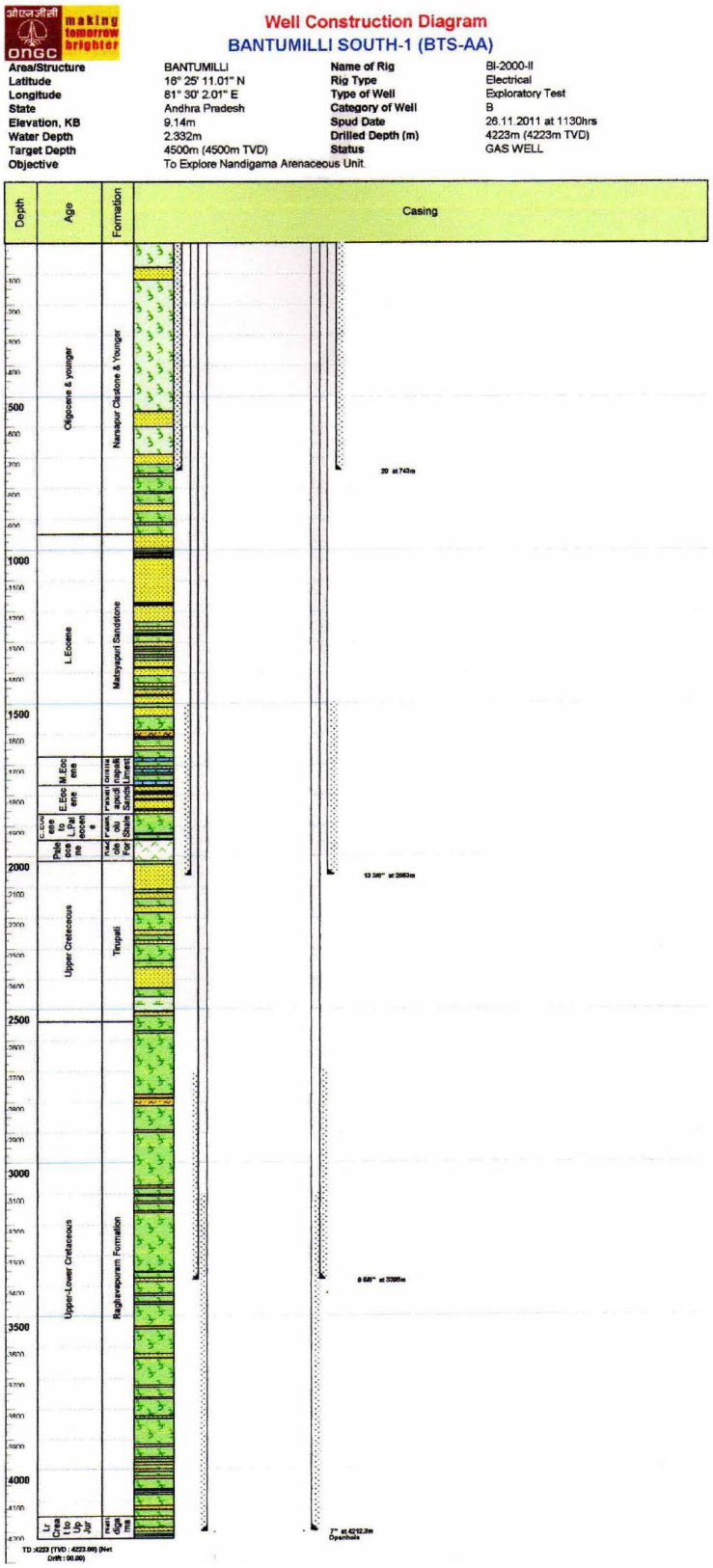
The well, designated as Bantumilli South-1 (BTS#1), was drilled vertically but did not reach its planned depth, being halted earlier due to technical challenges. Drilling progressed through several geological layers, including a significant section of Tirupati and younger sediments, a thick sequence of Raghavapuram shale, and part of the Nandigama formation. The bottom of the well was found in the arenaceous section, and it recorded elevated subsurface temperatures.

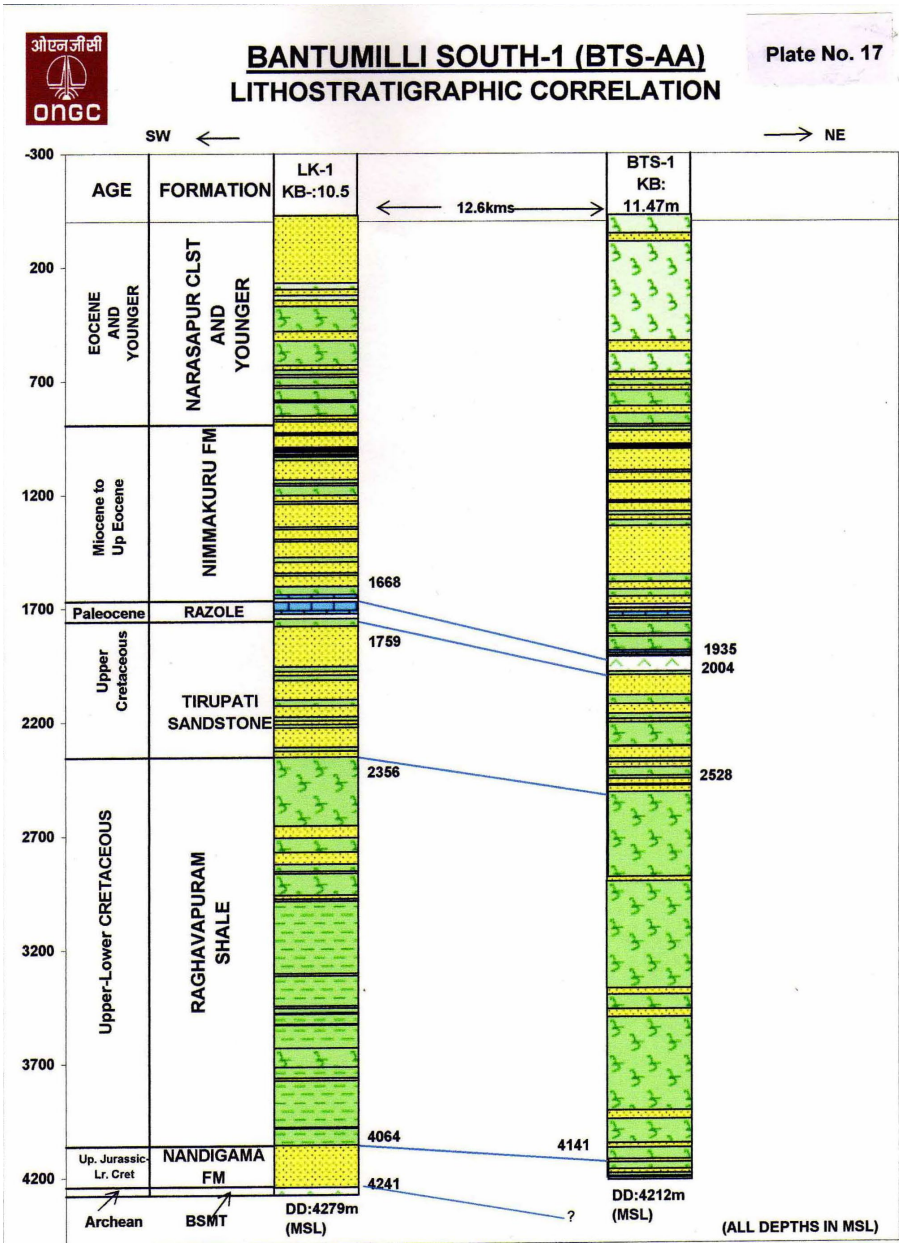
Stratigraphically, BTS#1 aligns well with the nearby LK-1 well, although it lies deeper across all geological levels.



5.2.1. Drilling and Well Completion

Key information regarding the drilled wells has been collated and presented herein. The adjoining figures, wherever shown, illustrate the well construction diagram and the litho-column information for key wells. Other well statics, such as kelly bushing reference depth, water depth, and drilled and logged depths (including well coordinates) are also provided.


making tomorrow brighter
ONGC
Well Construction Diagram
BANTUMILLI SOUTH-1 (BTS-AA)
Area/Structure BANTUMILLI
Latitude 16° 25' 11.01" N
Longitude 81° 30' 2.01" E
State Andhra Pradesh
Elevation, KB 9.14m
Water Depth 2.332m
Target Depth 4500m (4500m TVD)
Objective To Explore Nandigama Arenaceous Unit.
Name of Rig BI-2000-II
Rig Type Electrical
Type of Well Exploratory Test
Category of Well B
Spud Date 26.11.2011 at 1130hrs
Drilled Depth (m) 4223m (4223m TVD)
Status GAS WELL
Depth
Age
Formation
Casing
Oligocene & younger
Narsapur Clay&one & Younger
L.Eocene
Matsyapuri Sandstone
Upper Cretaceous
Tirupati
Upper-Lower Cretaceous
Raghavapuram Formation
500
1000
1500
2000
2500
3000
3500
4000



5.2.2. Well Logging and Formation Evaluation

The well logs of all discovery wells as well as selected key wells in the contract area were reviewed. The logs recorded in various open-hole sections along with casedhole logs and information from conventional and other wireline formation test data are presented in this docket. The availability of key input reports, such as well completion reports (WCR) and formation evaluation reports (FER), was checked. Reservoir parameters of interesting zones and results of the tested zone(s) are included in this report. Log motifs of tested/interesting zones of key wells are also appended.

5.2.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	KB	Drilled depth
Both available	26.11.2011	9.14 m	4223 m MDRT

5.2.2.2. Well logs acquired

Well logs recorded

DSL-MSFL-SP-GR-SP-CALI (2066-741m) Remarks: Driller's depth: 2068m (MD-KB) Logger's depth: 2068m; BHT@ 88.33°F

BCS-GR (2066-741m) Remarks: Driller's depth: 2068m (MD-KB) Logger's depth: 2068m; BHT@ 114°F

HRLA-DSI-SP-GR (3398-2062m) Remarks: Driller's depth: 3406m (MD-KB) Logger's depth: 3400m; BHT@ 114°F

PEX-HNGS-GR-CAL (3400-2062m) Remarks: Driller's depth: 3406m (MD-KB) Logger's depth: 3400m; BHT@ 116.66°F

PEX-HRLA-GR-SP-HCAL (4075-3400m) Remarks: Driller's depth: 3406m (MD-KB) Logger's depth: 3400m; BHT@ 143°F Remarks: bad quality due to severity in tight pulls

HRLA-SP-GR-GPIT (4098-3403m) Remarks: Logger's depth: 4106m; BHT@ 143.33°F

PEX-GR-CAL (4095-3403m) Remarks: Logger's depth: 4106m; BHT@ 147.77°F

MDT-GR (3431-3432.5m, 3454-3460m) Remarks: 11 sample points, 3 dry & 8 lost seal. BHT @ 140°F

ARC-AND-GR (4054-4215m) Remarks: BHT @ 125°F

VSP (3480-500) Remarks: Temp@ 3480m: 144°C. Due 3480-500 to temp limit of 145°C of VSP tool, VSP data could not be recorded below 3480m.

CBL-VDL-GR-CCL (4219.6-4100) Remarks: BHT @ 172.22°F

GR-CCL (4232-4100) Remarks: Correlation log recorded through 3-1/2" tubing

TCL-GR (4035-3365) Remarks: Depth correlation for packer setting

GR-CCL (4010-4179) Remarks: Correlation log recorded through 3-1/2" tubing

CBL-VDL-GR-CCL (4195-4075) Remarks: BHT @ 173.88°F. Tool could not go beyond 4197m.

CBL-VDL-GR-CCL (4215-4050) Remarks: BHT @ 173.88°F.

CBL-VDL-GR-CCL (4214-4075)

Look ahead VSP (4205-3405m)

5.2.2.3. MDT DATA

MDT Pressure Test 8$^{1/2}$" Hole

MD (m)	Temp (°F)	Mud Pressure (psi) Before	Mud Pressure (psi) After	Formation Pressure (psia)	Mobility (mD/cp)	EMW (g/cc) / (ppg)	Remarks Pretest Type & Sample
3431.2	275.4	7925.13	7927	N/A	N/A	1.62	Lost seal
3432.2	274	7927.73	7928.3	N/A	N/A	1.62	Tight
3131.3	276.3	7921.59	7924.38	N/A	N/A	1.62	Tight
3456.8	278.4	7988.4	7986.85	N/A	N/A	1.62	Lost seal
3457	278.7	7984.7	7984.26	N/A	N/A	1.62	Lost seal
3458.8	279.2	7986.81	7986.65	N/A	N/A	1.62	Lost seal
3459.8	279.8	7985.32	7986.48	N/A	N/A	1.62	Lost seal

3458.2	280	7980.81	7982.35	N/A	N/A	1.62	Lost seal
3455.9	280.3	7975.03	7976.07	N/A	N/A	1.62	Lost seal

5.2.3. Well Testing and Workover History

5.2.3.1. Drill Stem Test (DST)

Three objects were released for production testing, two within the Nadingama Fm. and one in the Raghavapuram Fm. Object –I (4223-4219m) produced gas (Qg: 98010 m3/d), FTHP: 6250 psi thru 4mm choke. Object –II (4206.5-4203m, 4201.5-4199.5m, 4197.5-4195m, 4189.5-4188.5m, 4173.5-4172m & 4170-4165.5m) produced gas (Qg: 12328 m3/d), FTHP: 800 psi thru 4mm choke (limited for sand incursion and wellhead). Object-III (3460-3455m & 3433-3430m) was tested and flowed with little gas at 0 PSI.

DST 1
Formation: Nandigama| Interval(m.): 4219-4223 | Gauge depth (m.): 4075.34 | Duration: 4.3hrs. | Choke(mm): 4| FTHP: 6186 psi| BHP: 8071.3 psi | Max.BHT: 365 °F |Bg (e-3 ft3/scf): 3.1604 | Z factor: 1.5233

Formation: Nandigama| Interval(m.): 4219-4223 | Gauge depth (m.): 4075.34 | Duration: 7.4hrs. | Choke(mm): 4| FTHP: 6250 psi| BHP: 8081.9 psi | Max.BHT: 365 °F |Qg: 98010 m3/d
Formation: Nandigama| Interval(m.): 4219-4223 | Gauge depth (m.): 4075.34 | Duration: N/A | Choke(mm): Shut-in| SBHP: 11261.3 psi | Max.BHT: 365 °F |Remarks: SBHP measured during subdue process

DST 2
Formation: Nandigama | Interval(m.): 4165.5-4170, 4172-4173.5, 4188.5-4189.5, 4195.5-4201.5, 4203-4206.5 | Gauge depth (m.): 4065.87 | Duration: 13hrs. | Choke(inch.): 14/64"| FTHP: 349.8psi| BHP: 844.4 psi | Max.BHT: 348.6 °F |Qg: 9734 m3/d | Bg (e-3 ft3/scf): 3.3076 | Z factor: 1.31083

Formation: Nandigama | Interval(m.): 4165.5-4170, 4172-4173.5, 4188.5-4189.5, 4195.5-4201.5, 4203-4206.5 | Gauge depth (m.): 4065.87 | Duration: 23hrs. | Choke(inch.): Shut-in| FTHP: 7149.8psi| BHP: 9061.8 psi | Max.BHT: 348.6 °F |Remarks: pressure not stabilized

Formation: Nandigama | Interval(m.): 4165.5-4170, 4172-4173.5, 4188.5-4189.5, 4195.5-4201.5, 4203-4206.5 | Gauge depth (m.): 4065.87 | Duration: 10hrs. | Choke(inch.): 14/64"| FTHP: 449.3 psi| BHP: 801.3 psi | Max.BHT: 348.6 °F | Qg: 14264 m3/d

Formation: Nandigama | Interval(m.): 4165.5-4170, 4172-4173.5, 4188.5-4189.5, 4195.5-4201.5, 4203-4206.5 | Gauge depth (m.): 4065.87 | Duration: 9.5hrs. | Choke(mm): 4| FTHP: 800.6 psi| BHP: 1211.7 psi | Max.BHT: 348.6 °F | Qg: 12328 m3/d

DST 2 (re-perforated and re-tested)
Formation: Nandigama | Interval(m.): 4165.5-4170, 4172-4173.5, 4188.5-4189.5, 4195.5-4201.5, 4203-4206.5 | Gauge depth (m.): 4061.2 | Duration: 1.5hrs. | Choke(inch.): 14/64"| FTHP: 7799.7 psi| BHP: 9732 psi | Max.BHT: 368 °F |Qg: N/A | Bg (e-3 ft3/scf): 3.0177 | Z factor: 1.46279 | Remarks: sand cut observed

Formation: Nandigama | Interval(m.): 4165.5-4170, 4172-4173.5, 4188.5-4189.5, 4195.5-4201.5, 4203-4206.5 | Gauge depth (m.): 4061.2 | Duration: 45hrs. | Choke(inch.): Shut-in| FTHP: 9001 psi| BHP: 11343 psi | Max.BHT: 368 °F

5.2.4. Reservoir Engineering Studies and Analysis

Key reservoir engineering datasets, wherever available, were collated and are presented under various data genres. In a comprehensive data presentation, the results from well tests, formation dynamics tests, reservoir pressure buildup studies, and pressure-volume-temperature (PVT) data/results are included.

5.2.4.1. Reservoir build-up studies data

Choke size (mm.)	FTHP (psi)	STHP (psi)	Qg (m3/d)	Remarks
5.5	600	-	9734	Flow study
-	-	7150	-	Build-up study
5.5	450	-	14264	Flow study
4	800	-	12328	Flow study

5.2.4.2. Oil composition analysis

Formation: Nandigama | Object: II | Interval(m.): 4165.5-4170, 4172-4173.5, 4188.5-4189.5, 4195.5-4201.5, 4203-4206.5 | Sample No.: 061| Density: 0.7908 gm/ml at 15 degC| API: 47.35 | Remarks: well subduing

5.2.4.3. Gas composition analysis

Formation: Nandigama | Object: I | Interval(m.): 4214-4210 | Sample No.: Sample 101 | Choke(mm): 4 | C1: 60.84 %| C2: 3.03 %| C3: 0.27 %| iC4: 0.16 %| nC4: 0.13 %| iC5: 0.17 %| nC5: 0.27 %| C6+: 3.73 %| Carbon-dioxide: 14.96 %| Nitrogen+Oxygen: 16.44 %| Sp.Gr.: 0.8892 | Z factor: 0.9968 |Contaminated with air

Formation: Nandigama | Interval(m.): 4206.5-4203, 4201.5-4199.5, 4197.5-4195.5, 4189.5-4188.5, 4173.5-4172, 4170-4165.5 | Sample No.: Sample 212 | Choke (1/64 inch): 14 | C1: 87.30 % | C2: 2.52 % | C3: 0.18 % | iC4: 0.10 % | nC4: 0.03 % | iC5: 0.03 %| nC5: 0.01 %| C6+: 0.14 %| Carbon-dioxide: 9.33 %| Nitrogen+Oxygen: 0.36 %| Sp.Gr.: 0.6672 | Z factor: 0.9976

Formation: Nandigama | Object: II | Interval(m.): 3460-3455, 3433-3430 | Sample No.: Sample 364 | Choke (1/64 inch): N/A | C1: 79.77 %| C2: 5.60 %| C3: 2.79 %| iC4: 0.62 %| nC4: 0.78 %| iC5: 0.33 %| nC5: 0.31 %| C6+: 0.94 %| Carbon-dioxide: 4.45 %| Nitrogen+Oxygen: 4.41 %| Sp.Gr.: 0.7270 | Z factor: 0.9969

5.2.4.4.

5.2.4.5. Temperature Gradient

Maximum-recorded log head temperatures of different runs were corrected by Horner's Plot and recalculated to generate a temperature gradient plot. Maximum recorded BHT at 4106m, 147.77°C and seabed temperature is taken as 30°C.

- Surface to 2066m: 3.05°C/ 100m
- 2066m to 3400m: 1.77°C/ 100m
- 3400m to 4100m: 8.57°C/ 100m

The overall temperature gradient from MSL to 4100m is 3.58°C/ 100m.

5.2.5. Geology and Reservoir Description

The geology of the area was comprehensively reviewed using correlations, sections, and maps. The well correlation, seismic sections, top structure, seismic attribute/amplitude, and net sand/pay maps were used to illustrate the magnitude and distribution of key reservoir properties in and around the discovered gas pools (accumulations). The local tectonic setting and geological section of the area, wherever available, are also provided. These maps/sections are sequentially shown field-wise and reservoir-unit-wise on figures, each of which is appropriately titled and illustrated in the following section.

5.2.5.1. Geological description

The West Godavari Sub-basin hosts hydrocarbon-bearing formations from the Early Cretaceous and possibly the Upper Jurassic. Key structural features include horsts and grabens such as the Kaza and Kaikalur-Lingala horsts, and the Bantumilli and Gudivada grabens. The Bantumilli high trends northeast before bending northwest, with asymmetrical flanks—gentler to the northwest and steeper to the southeast.

Southeastern faults extend from the basement to basalt levels, indicating long-term tectonic activity. This shaped a half-graben structure in the Bantumilli graben, filled with fluvial to marginal marine sediments overlying the Archean basement. Rift-related deposition ended with the formation of a distinctive shale unit from the Aptian-Albian period, bounded by regional unconformities.

A basin tilt toward the southeast led to marine conditions. Above the rift fill are claystones and shales of the Upper Cretaceous, overlain by southeastward-prograding Tirupati sandstones, transitioning into deeper marine shales. Post-igneous structural shifts, influenced by the Matsyapuri-Palakollu fault, created terrace-like features on the northwest flanks of the major highs.

5.2.6. Reservoir Properties and OHIP

Estimates of in-place volumes presented in this section have been prepared in accordance with the Petroleum Resources Management System (PRMS) approved in March 2007 and revised in June 2018 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, the Society of Petroleum Evaluation Engineers, the Society of Exploration Geophysicists, the Society of Petrophysicists and Well Log Analysts, and the European Association of Geoscientists & Engineers.

The volumetric method was used to estimate the original gas in place (OGIP) of certain fields evaluated herein. A review of selected geophysical data, in conjunction with well control and other relevant information, served as the basis for the structural interpretation of the fields. The geological interpretation provided by DGH was extensively reviewed and, where appropriate, adjusted.

Wireline electrical logs, radioactivity logs, wireline formation pressure tests, wireline fluid sample tests, and other data were acquired in wells drilled in the evaluated fields. When available, drill cuttings, hole cores, and sidewall cores were analyzed. These combined analyses of the well-log

data were used to establish petrophysical properties. Estimates of OGIP were made using net pay isopach maps. These isopach maps were constructed using geological depth structure maps and petrophysical analyses of the well-log data.

Following is the summary of the average reservoir parameters and estimates of OGIP. Seismic sections, log motifs, structure and isopach maps are in the annex bound with this information docket.

RESERVOIR PARAMETERS and ORIGINAL GAS in PLACE
as of
JANUARY 1, 2025
for the
Bantumilli South-1 DISCOVERY
of
KG/ONDSF/KG ONLAND/2025 CONTRACT AREA

	Reservoir	Total
Low		
Area, acres	1,295	
Gas Formation Volume Factor, scf/rcf	0.0025	
Average Thickness, ft	95.1	
Average Porosity, %	8.00	
Average Water Saturation, %	60.00	
Original Gas in Place, 10^9 ft^3	68.65	**68.65**
Original Gas in Place, 10^6 eq ton	1.73	**1.73**
Best		
Area, acres	6,909	
Gas Formation Volume Factor, scf/rcf	0.0025	
Average Thickness, ft	91.3	
Average Porosity, %	12.00	
Average Water Saturation, %	50.00	
Original Gas in Place, 10^9 ft^3	659.18	**659.18**
Original Gas in Place, 10^6 eq ton	16.60	**16.60**
High		
Area, acres	13,499	
Gas Formation Volume Factor, scf/rcf	0.0025	
Average Thickness, ft	68.6	
Average Porosity, %	14.00	
Average Water Saturation, %	40.00	
Original Gas in Place, 10^9 ft^3	1,355.49	**1,355.49**
Original Gas in Place, 10^6 eq ton	34.14	**34.14**

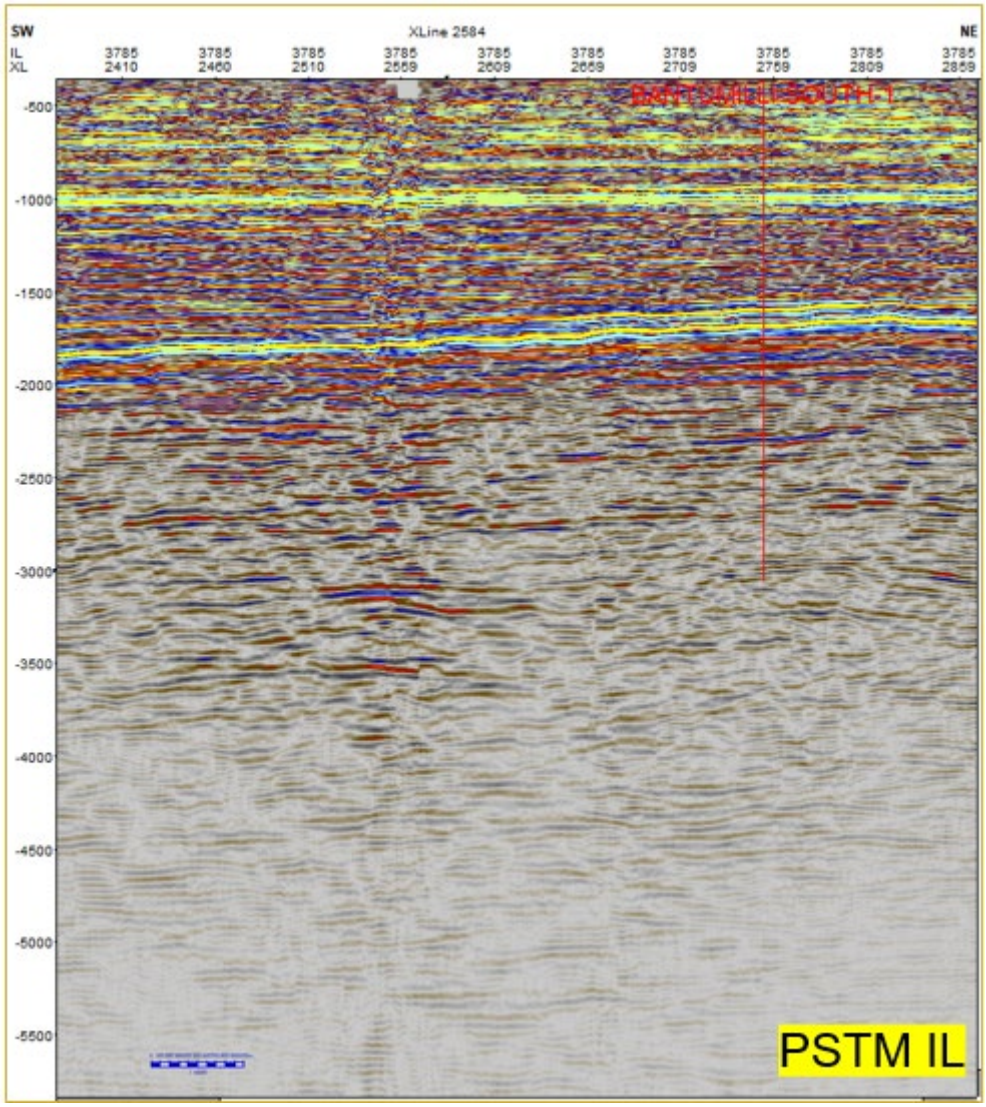
Note: Conversion used 10^9 scf equal to 0.0.2519 10^6 eq tone.

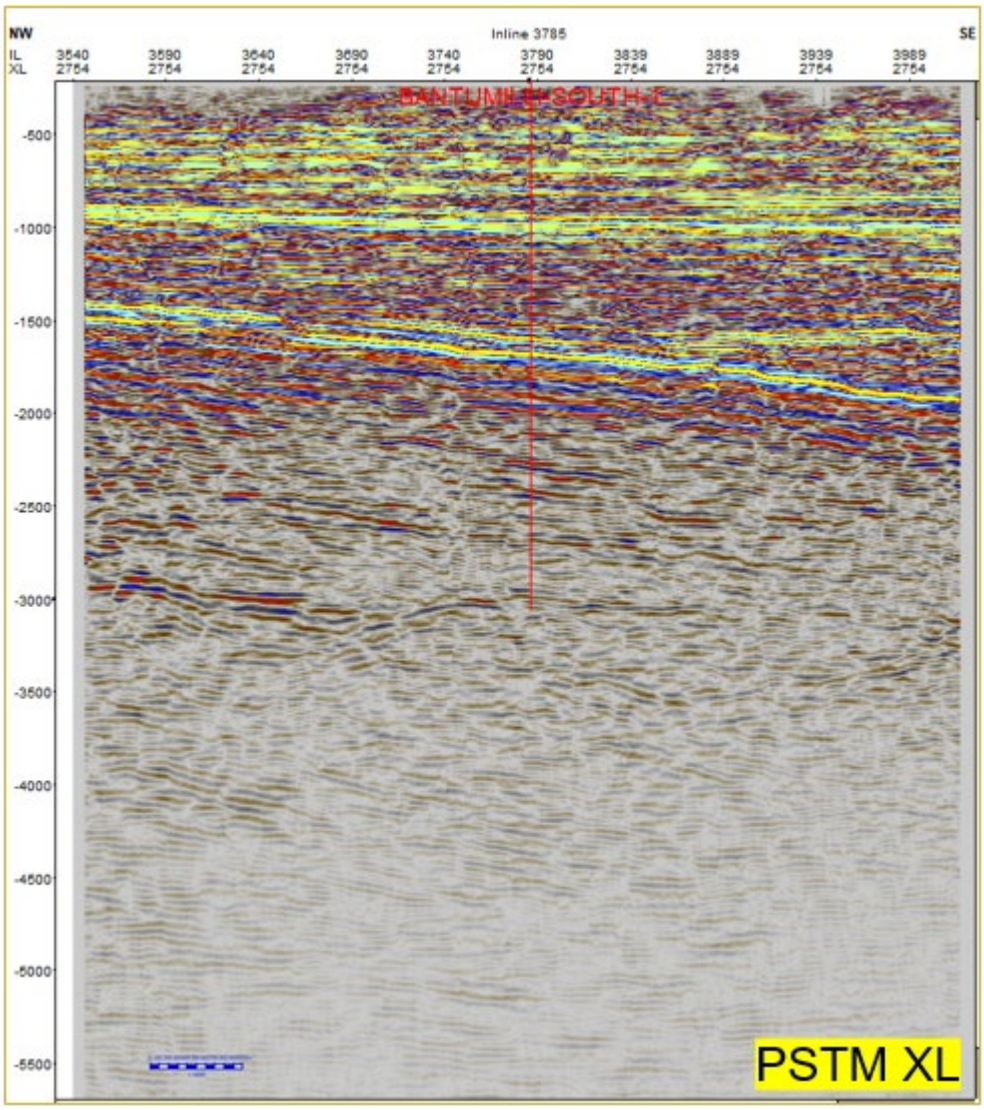
Volumes estimated by a Third Party

The operator has reported an in-place volume of 34.37 MMTOE (Best case).

5.2.7. Annex

5.2.7.1. Seismic Sections




NW
Inline 3785
SE
IL
XL
3540
2754
3590
2754
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3740
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3839
2754
3889
2754
3939
2754
3989
2754
-500
-1000
-1500
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-3000
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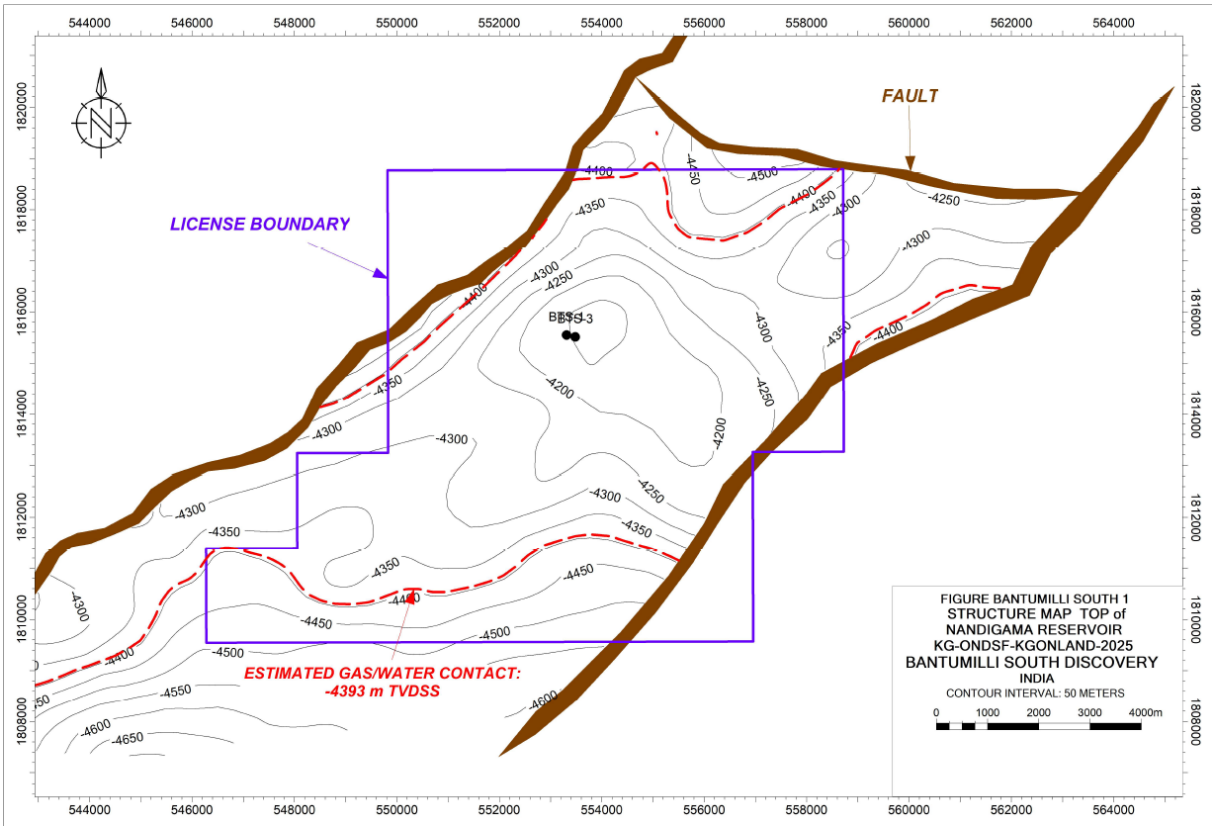
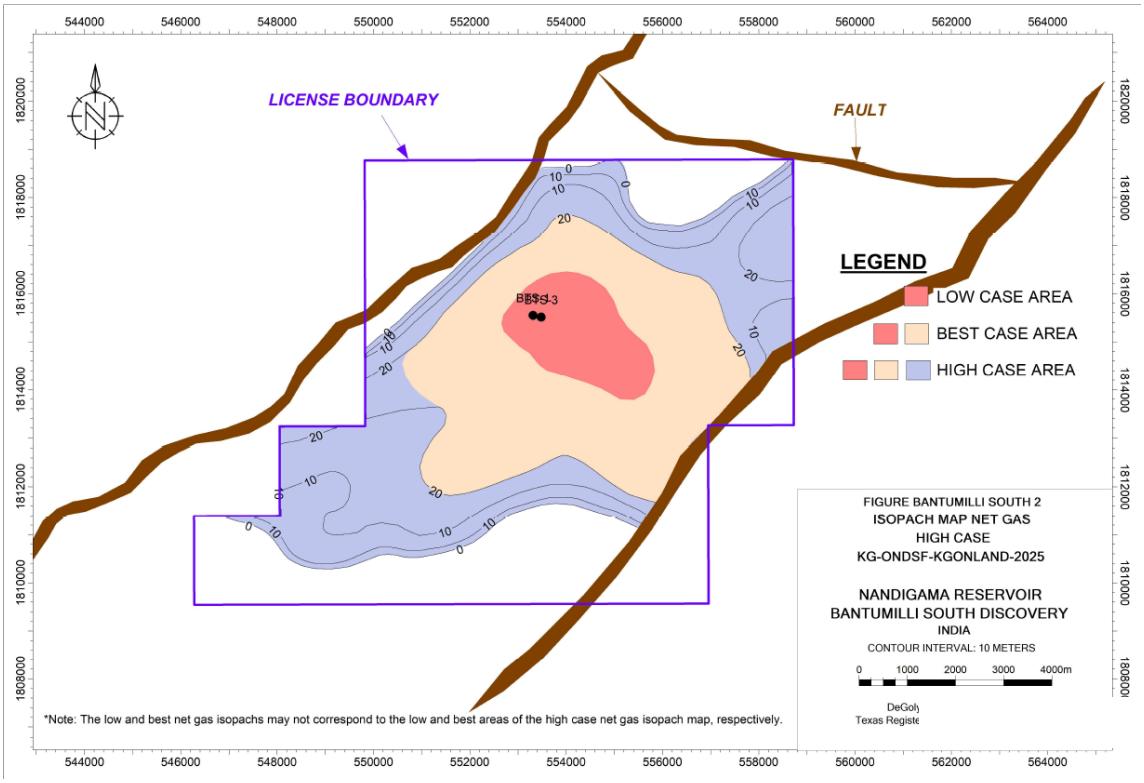
-4000
-4500
-5000
-5500
PSTM XL

5.2.7.2. Structural Maps



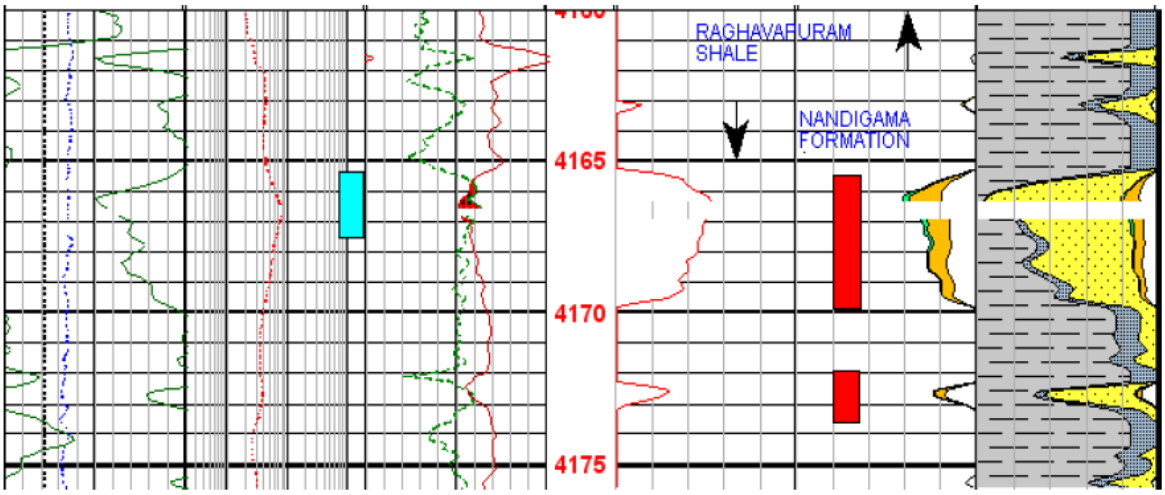
5.2.7.3. Isopach Maps



5.2.7.4. Log Motifs

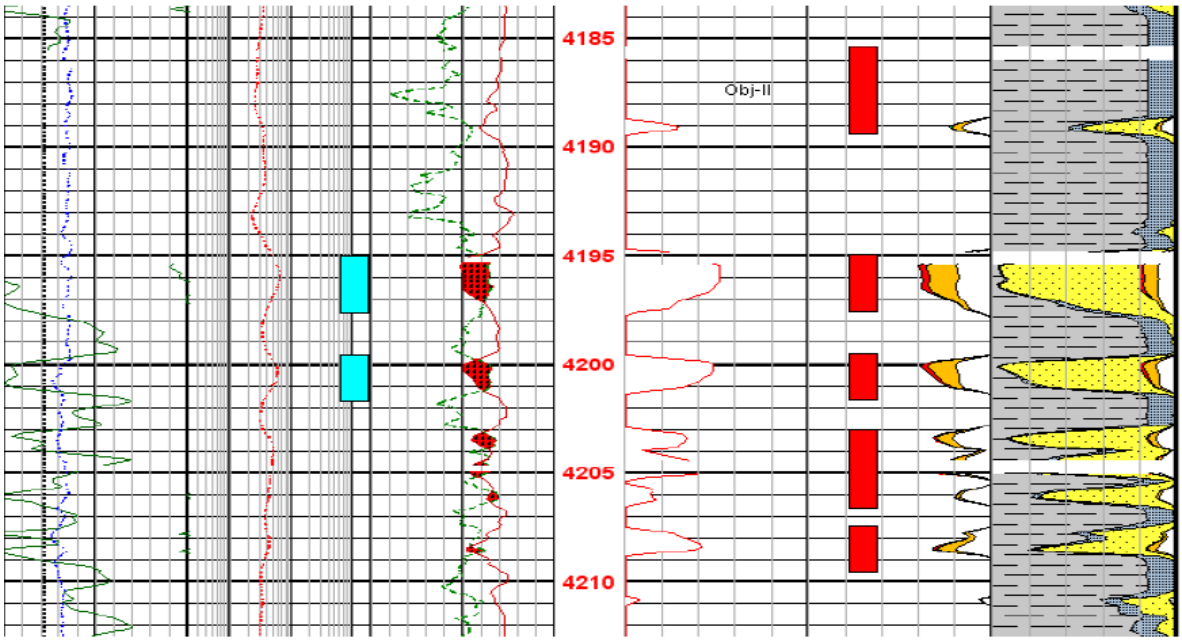
Interval 4165.5-4173.5 m:

Intervals 4165.5-4170m and 4172-4173.5m



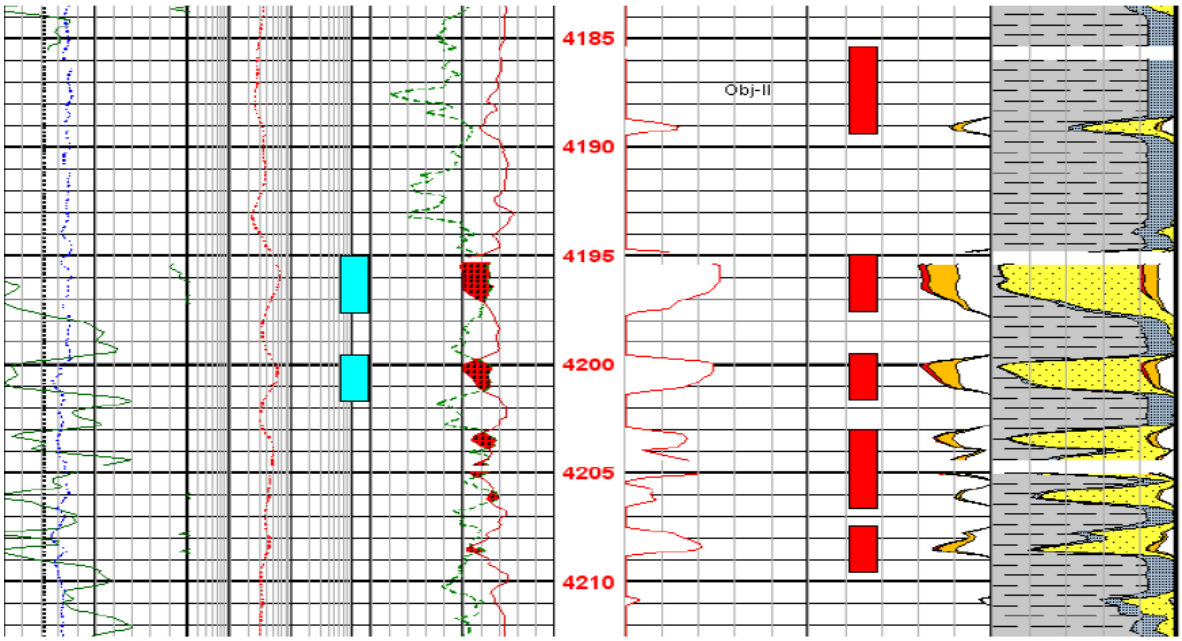
Interval 4185.5 – 4209.5 m:

Intervals 4185.5 – 4189.5 m, 4195 – 4197.5m , 4199.5 – 4201.5m, 4203 – 4206.5m, 4207.5 – 4209.5m



Interval 4185.5 – 4209.5 m:

Intervals 4185.5 – 4189.5 m, 4195 – 4197.5m , 4199.5 – 4201.5m, 4203 – 4206.5m, 4207.5 – 4209.5m



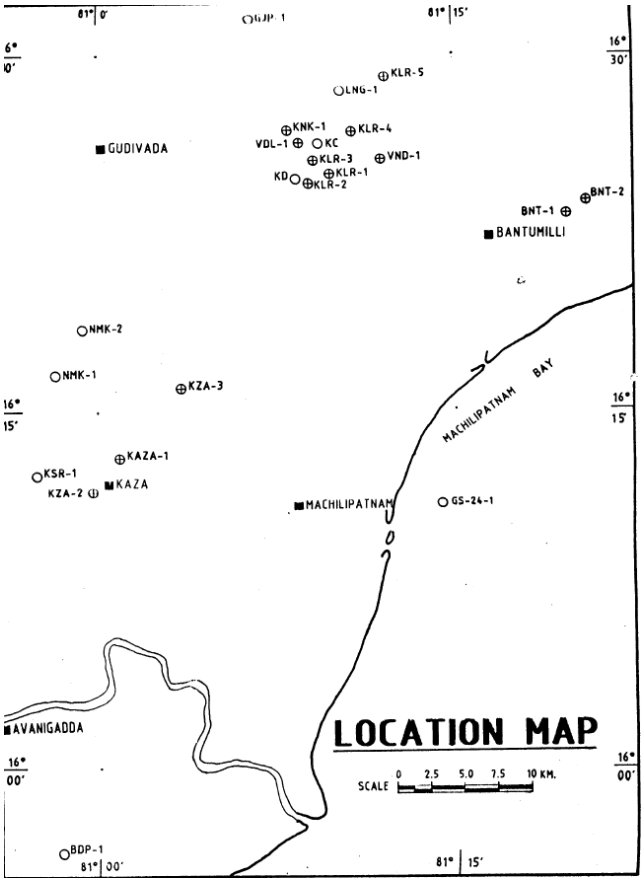
5.3. BANTUMILLI-2 DISCOVERY AND FIELD DESCRIPTION

The Bantumilli 2 well was drilled with the objective of testing the Cretaceous and Tertiary sedimentary sequences down to the basement. However, drilling was halted prematurely when the Archean Basement was encountered, preventing the well from reaching its intended target.

A second well, Bantumilli-2, was drilled near a structural crest to the northeast of the original location. This site is positioned higher, with the fresh basement lying significantly deeper than in the first well, and the two are separated by a basement fault. The stratigraphy in Bantumilli-2 shows a higher proportion of arenaceous (sand-rich) sediments compared to Bantumilli-1, indicating a trend of increasing sand content toward the northeast.

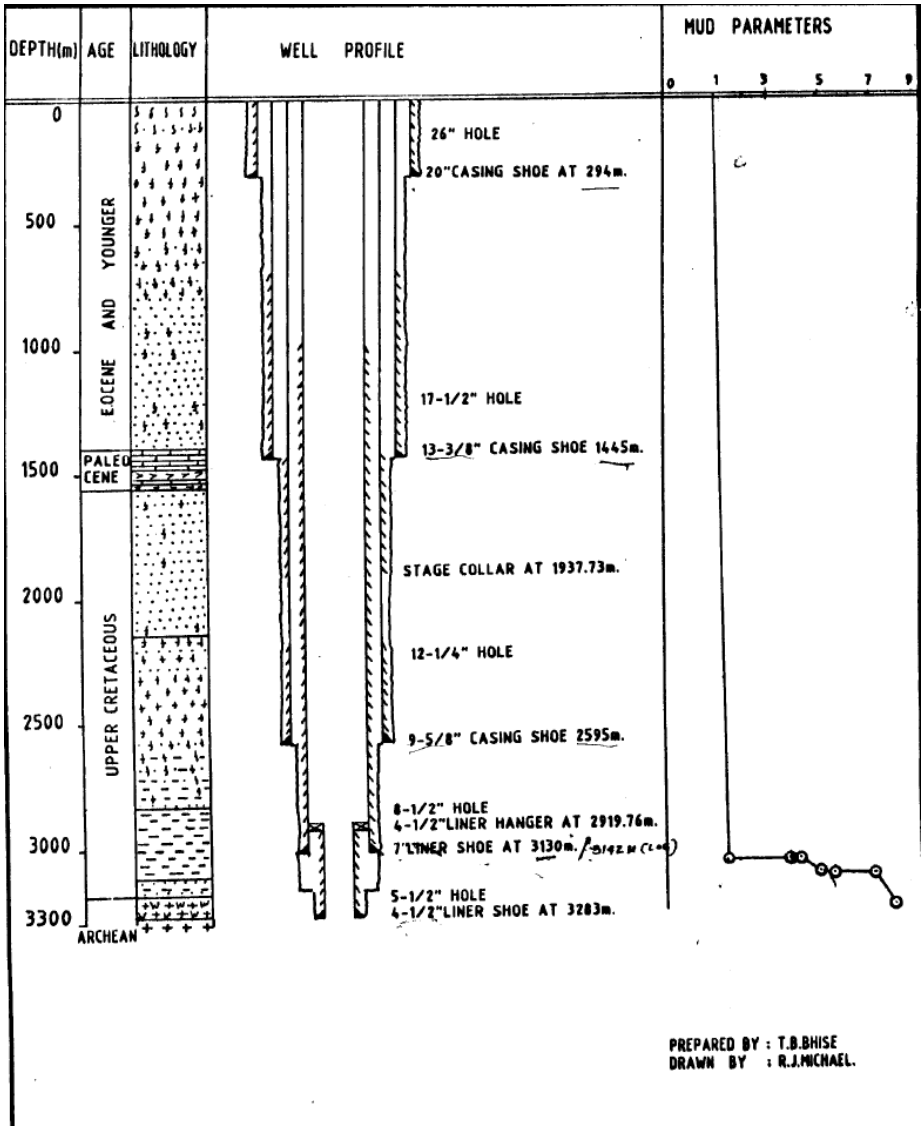
A specific interval within the Upper Cretaceous sands was tested and found to produce oil, gas, and water. Based on these results, the well was completed as a producer. Despite the generally marginal organic matter content in the Cretaceous section of Bantumilli-2, the presence of hydrocarbons supports the idea that liquid hydrocarbons may have been generated in deeper sections of the graben and migrated toward this structural high.

Following this discovery, additional drilling locations have been designated to further investigate and potentially expand the hydrocarbon accumulation identified in this area.



5.3.1. Drilling and Well Completion

Key information regarding the drilled wells has been collated and presented herein. The adjoining figures, wherever shown, illustrate the well construction diagram and the litho-column information for key wells. Other well statics, such as kelly bushing reference depth, water depth, and drilled and logged depths (including well coordinates) are also provided.



5.3.2. Well Logging and Formation Evaluation

The well logs of all discovery wells as well as selected key wells in the contract area were reviewed. The logs recorded in various open-hole sections along with cased-hole logs and information from conventional and other wireline formation test data are presented in this docket. The availability of key input reports, such as well completion reports (WCR) and formation evaluation reports (FER), was checked. Reservoir parameters of interesting zones and results of

the tested zone(s) are included in this report. Log motifs of tested/interesting zones of key wells are also appended.

5.3.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	KB	Drilled depth
Both available	23.05.1988	10.7 m	3293 m MDRT

5.3.2.2. Well logs acquired

Well logs recorded

DLL-MSFL-GR (1448-294m)

SLS (1450-294) Remarks: LDL_CNL not recorded due to large hole (17-1/2”).

DLL-MSFL-GR (2607-1449m)

LDL-CNL-GR (2611-1449m)

BHC Sonic (2609-1449m)

HDT (2598-1449m)

RFT (2200-1509m)

DLL-MSFL-GR (3176.5-2606m) Remarks: SP is noisy

LDL-CNL-GR (3180-2606m) Remarks: Logs might be affected due to heavy viscous pill in the interval of 2670m to bottom.

BHC Sonic (3180-2606m)

SHDT (3030-2606m) Remarks: tool did not go below 3030m. The interval 3030-3180m could not be attempted again as the centralizer of the Sonic tool was left in the hole. RFT and SWC have not been attempted due to heavy tight pulls and tool sticking while recording LDL-CNL

DLL-MSFL-GR (3300-3142m)

CNL-GR (3280-3142m) Tool didn´t go below 3280m.

SLS (3300-3142m)

WFT (3300-3200m)

CBL-VDL-GR (3139-2560m) Remarks: LDL, RFT and SWC not attempted due to slim hole (5-7/8”)

VSP (3200-1400m @ 25m. interval, 1300-1000m @ 100m. interval)

5.3.3. Well Testing and Workover History

5.3.3.1. Drill Stem Test (DST)

DST 1

Formation: Cretaceous| Object: I | Interval(m.): 3244-3230 | Choke(inch.): 16/64 | FTHP: 0 psi| SBHP: 6834.5 psi | No flow.

DST 2

Formation: Cretaceous | Object: II | Interval(m.): 3167-3163 | Choke(inch.): 16/64 | FTHP: 636 psi| SBHP: 7491 psi | Well flowed little gas and condensate.

DST 3

Formation: Cretaceous | Object: III | Interval(m.): 3134-3127 | Choke(inch.): 16/64 | FTHP: 673 psi| FBHP: 1686 psi | Qg: 23000 m3/d | Qo: 200 bbl/d

Formation: Cretaceous | Object: III | Interval(m.): 3134-3127 | Choke(inch.): 8/64 | FTHP: 1550 psi| FBHP: 3361 psi | Qg: 8800 m3/d | Qo: 55 bbl/d | Qw:15 bbl/d. | Gas gravity: 0.75 | Oil API: 47.52

DST 4

Formation: Cretaceous | Object: IV | Interval(m.): 3117-3113 | Choke(inch.): 10/64| FTHP: 715 psi| FBHP: 2438 psi | Qg: 5000 m3/d | Qo: 42.5 bbl/d

Formation: Cretaceous | Object: IV | Interval(m.): 3117-3113 | Choke(inch.): 6/64| FTHP: 1200 psi| FBHP: 3249 psi | Qg: 4600 m3/d | Qo: 24 bbl/d | Qw: 12 bbl/d

Formation: Cretaceous | Object: IV | Interval(m.): 3117-3113 | Choke(inch.): 8/64| FTHP: 650 psi| FBHP: 2762 psi | Qg: 3000 m3/d | Qo: 7.6 bbl/d | Qw: 30.7 bbl/d

Formation: Cretaceous | Object: IV | Interval(m.): 3117-3113 | Choke(inch.): 10/64| FTHP: 715 psi| FBHP: 2438 psi | Qg: 5000 m3/d | Qo: 42.5 bbl/d | Remarks: well flowed in surges occasionally only gas, only oil or gas, oil and water.

5.3.4. Reservoir Engineering Studies and Analysis

Key reservoir engineering datasets, wherever available, were collated and are presented under various data genres. In a comprehensive data presentation, the results from well tests, formation dynamics tests, reservoir pressure buildup studies, and pressure-volume-temperature (PVT) data/results are included.

5.3.4.1. Temperature gradient

Maximum-recorded log head temperatures of different runs were corrected by Horner's Plot and recalculated to generate a temperature gradient plot. Maximum recorded BHT at 3304m, 157°C and seabed temperature is taken as 30°C.

- Seabed to 2600m: 3.076 °C/ 100m
- 2600m to 3304m: 6.67°C/ 100m

The overall temperature gradient from MSL to 3304m. is 3.84°C/ 100m.

5.3.5. Geology and Reservoir Description

The geology of the area was comprehensively reviewed using correlations, sections, and maps. The well correlation, seismic sections, top structure, seismic attribute/amplitude, and net sand/pay maps were used to illustrate the magnitude and distribution of key reservoir properties in and around the discovered gas pools (accumulations). The local tectonic setting and geological section of the area, wherever available, are also provided. These maps/sections are sequentially shown field-wise and reservoir-unit-wise on figures, each of which is appropriately titled and illustrated in the following section.

5.3.5.1. Geological description

The area lies within the southern part of the Bantumilli High, specifically in a graben structure, part of the West Godavari sub-basin in the Krishna-Godavari Basin. It is characterized by complex tectonic elements, including horsts and grabens such as the Kaza Horst, Kaikalur-Lingala Horst, and Bantumilli–Bhimavaram High, which create a varied structural landscape. The Bantumilli Graben exhibits a half-graben geometry, filled with clastic rocks deposited in environments ranging from fluvial to marginal marine, overlying the ancient Achaean basement.

This region has undergone prolonged tectonic activity, evident from faults that penetrate deep into the basement and continued to be active until the Paleocene. These tectonic features have shaped sediment deposition and created favorable conditions for hydrocarbon traps, mainly through strati-structural mechanisms. Over time, the area experienced marine transgressions due to basin tilting, leading to the deposition of finer sediments and clays from the Upper Cretaceous, grading into deeper marine environments.

The stratigraphy includes rift fill sequences overlain by distinctive shale units of Aptian-Albian age, followed by younger argillaceous and sandstone formations. These sequences contain both potential source rocks and reservoirs, with evidence of isolated sand bodies that can trap hydrocarbons effectively. Overall, the area south of the Bantumilli High is geologically less explored but shows strong potential due to its structural complexity, favorable sedimentary history, and hydrocarbon indicators.

5.3.6. Reservoir Properties and OHIP

Estimates of in-place volumes presented in this section have been prepared in accordance with the Petroleum Resources Management System (PRMS) approved in March 2007 and revised in June 2018 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, the Society of Petroleum Evaluation Engineers, the Society of Exploration Geophysicists, the Society of Petrophysicists and Well Log Analysts, and the European Association of Geoscientists & Engineers.

The volumetric method was used to estimate the original oil in place (OOIP) of certain fields evaluated herein. Structure maps were prepared using the available data. Time-structure maps were created from the interpreted seismic data. These time maps were converted to depth-structural geological maps using velocity data acquired in wells in the fields. The 3–D seismic data were interpreted to analyze faulting and geological structural trends.

Wireline electrical logs, radioactivity logs, wireline formation pressure tests, wireline fluid sample tests, and other data were acquired in wells drilled in the evaluated fields. When available, drill cuttings, hole cores, and sidewall cores were analyzed. These combined analyses of the well-log data were used to establish petrophysical properties. Estimates of OOIP were made using net pay isopach maps. These isopach maps were constructed using geological depth structure maps and petrophysical analyses of the well-log data.

Following is the summary of the average reservoir parameters and estimates of OOIP. Seismic sections, log motifs, structure and isopach maps are in the annex bound with this information docket.

RESERVOIR PARAMETERS and ORIGINAL OIL in PLACE
as of
JANUARY 1, 2025
for the
Bantumilli-2 DISCOVERY
of
KG/ONDSF/KG ONLAND/2025 CONTRACT AREA

	Reservoir	Total
Low		
Area, acres	185	
Oil Formation Volume Factor, rbbl/bbl	1.24	
Average Thickness, ft	19.9	
Average Porosity, %	12.40	
Average Water Saturation, %	45.92	
Original Oil in Place, 10^6bbl	1.55	**1.55**
Original Oil in Place, 10^6 eq ton	0.23	**0.23**
Best		
Area, acres	512	
Oil Formation Volume Factor, rbbl/bbl	1.24	
Average Thickness, ft	23.4	
Average Porosity, %	13.60	
Average Water Saturation, %	43.99	
Original Oil in Place, 10^6bbl	5.72	**5.72**
Original Oil in Place, 10^6 eq ton	0.84	**0.84**
High		
Area, acres	1,342	
Oil Formation Volume Factor, rbbl/bbl	1.24	
Average Thickness, ft	31.5	
Average Porosity, %	14.80	
Average Water Saturation, %	41.00	
Original Oil in Place, 10^6bbl	23.09	**23.09**
Original Oil in Place, 10^6 eq ton	3.37	**3.37**

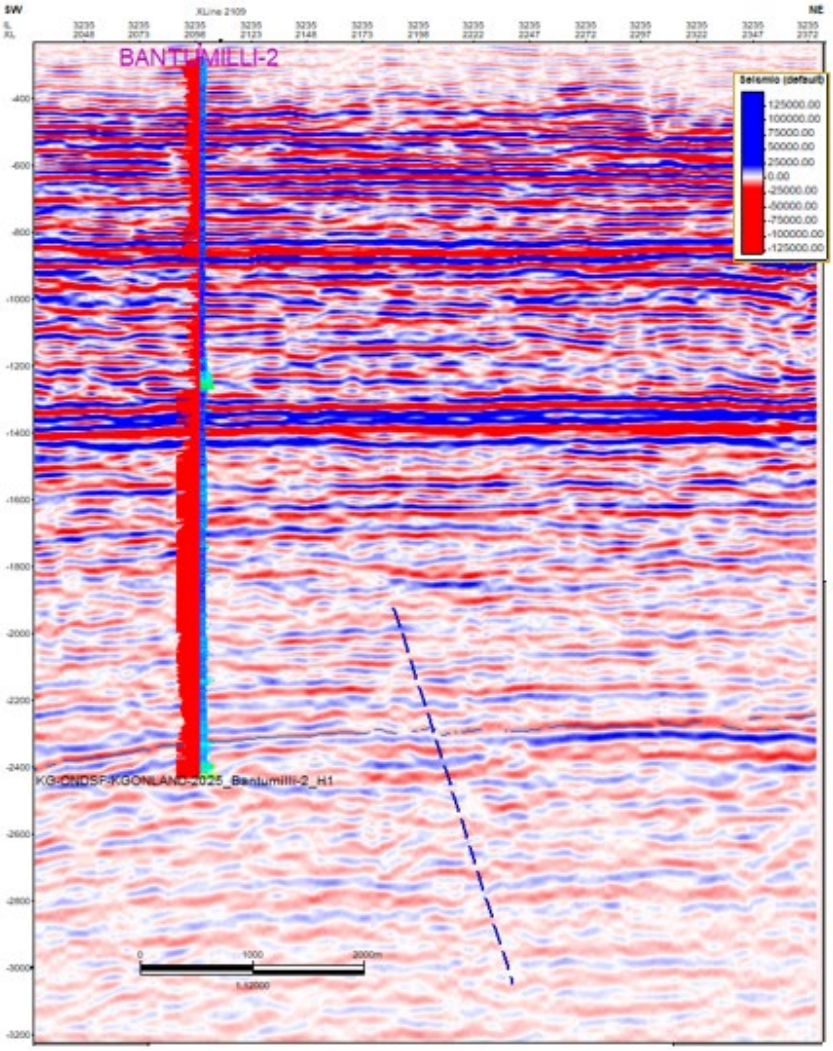
Note: Conversion used 10^6 bbl equal to 0.1461 10^6 eq tone.

Volumes estimated by a Third Party

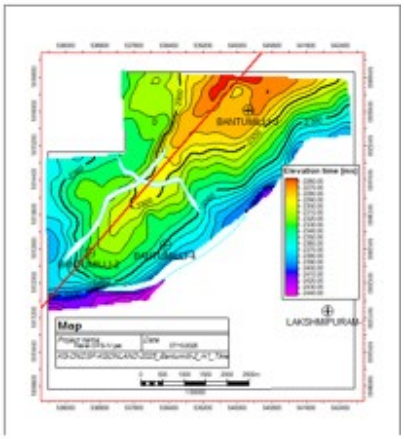
The operator has reported an in-place volume of 0.63 MMTOE (Best case).

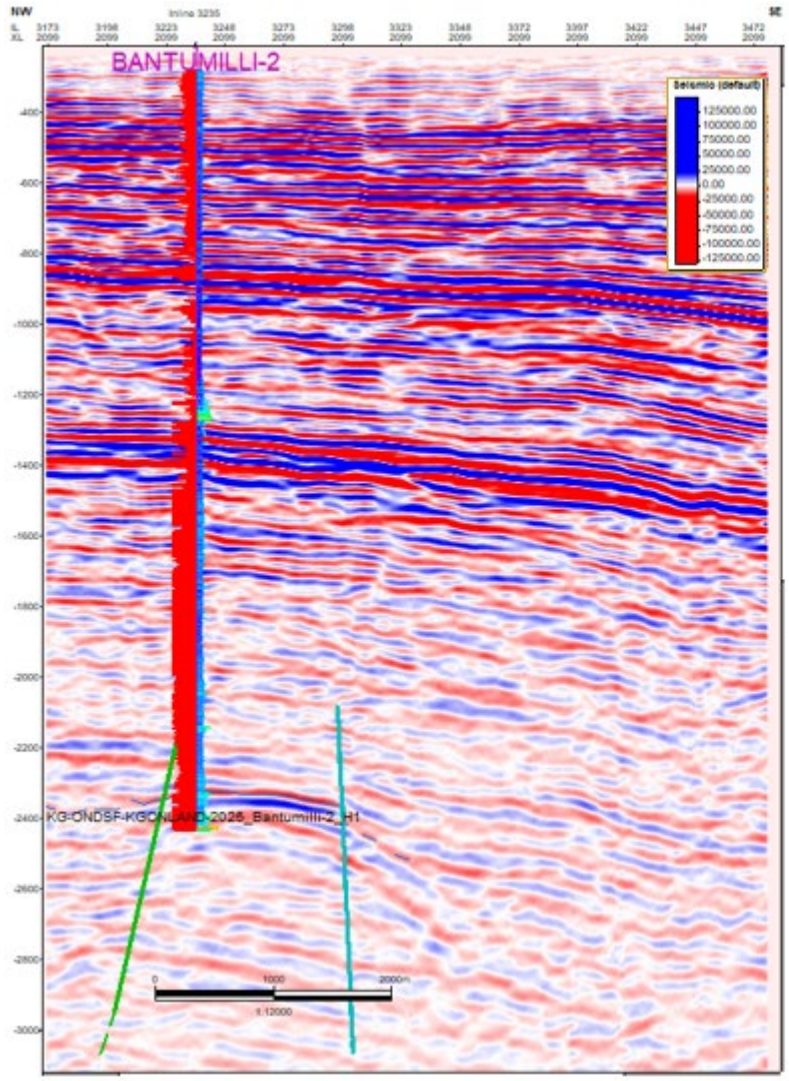
5.3.7. Annex

5.3.7.1. Seismic Sections



PSTM IL




NW
SE
Inline 3235
BANTUMILLI-2
Seismic (default)
125000.00
100000.00
75000.00
50000.00
25000.00
0.00
-25000.00
-50000.00
-75000.00
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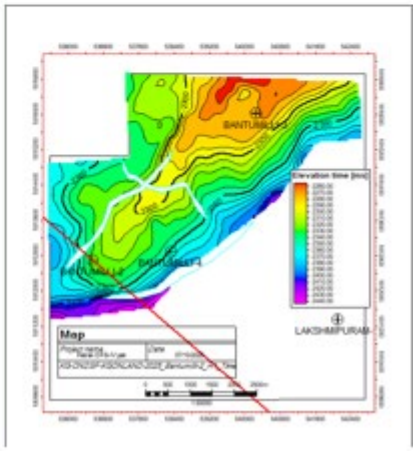
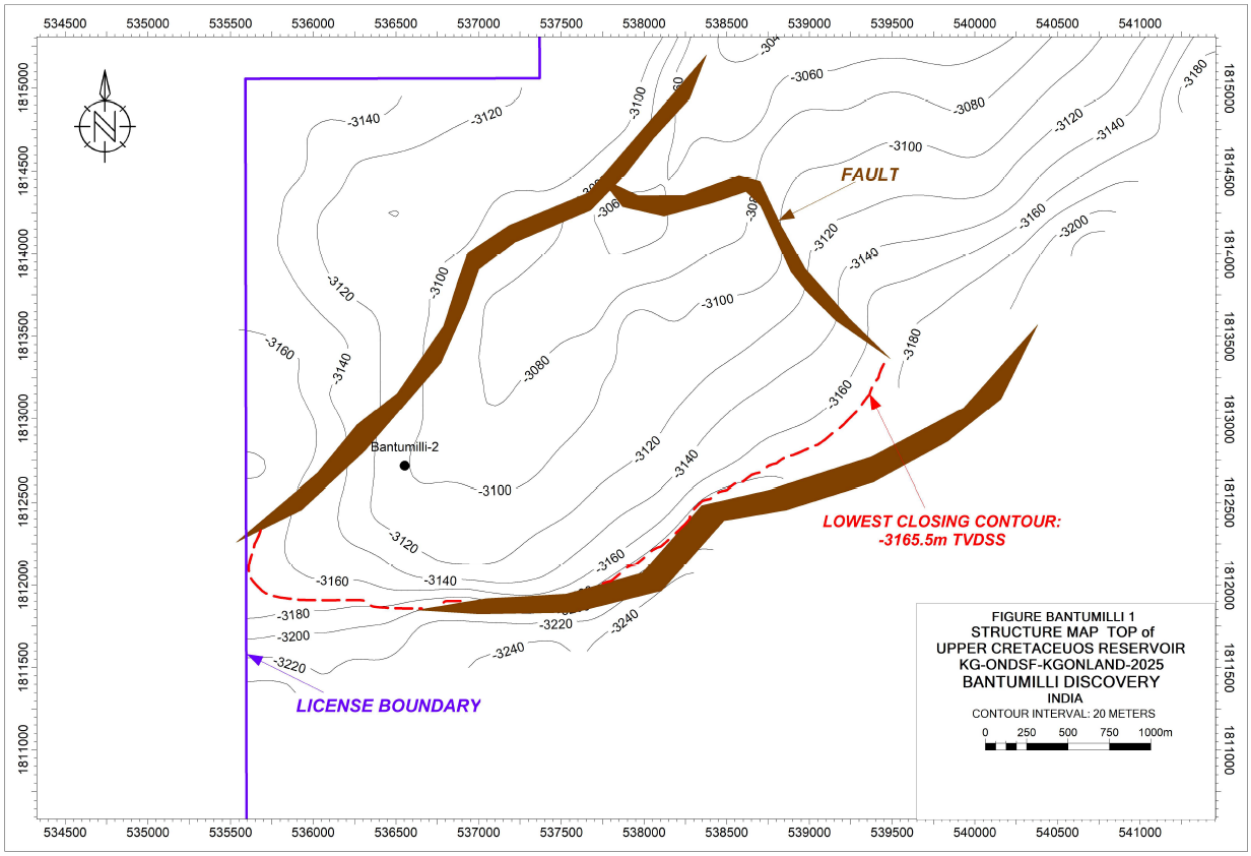
-125000.00
KG-ONDSF-KGONLAND-2025_Bantumilli-2_H1
0
1000
2000m
1:12000

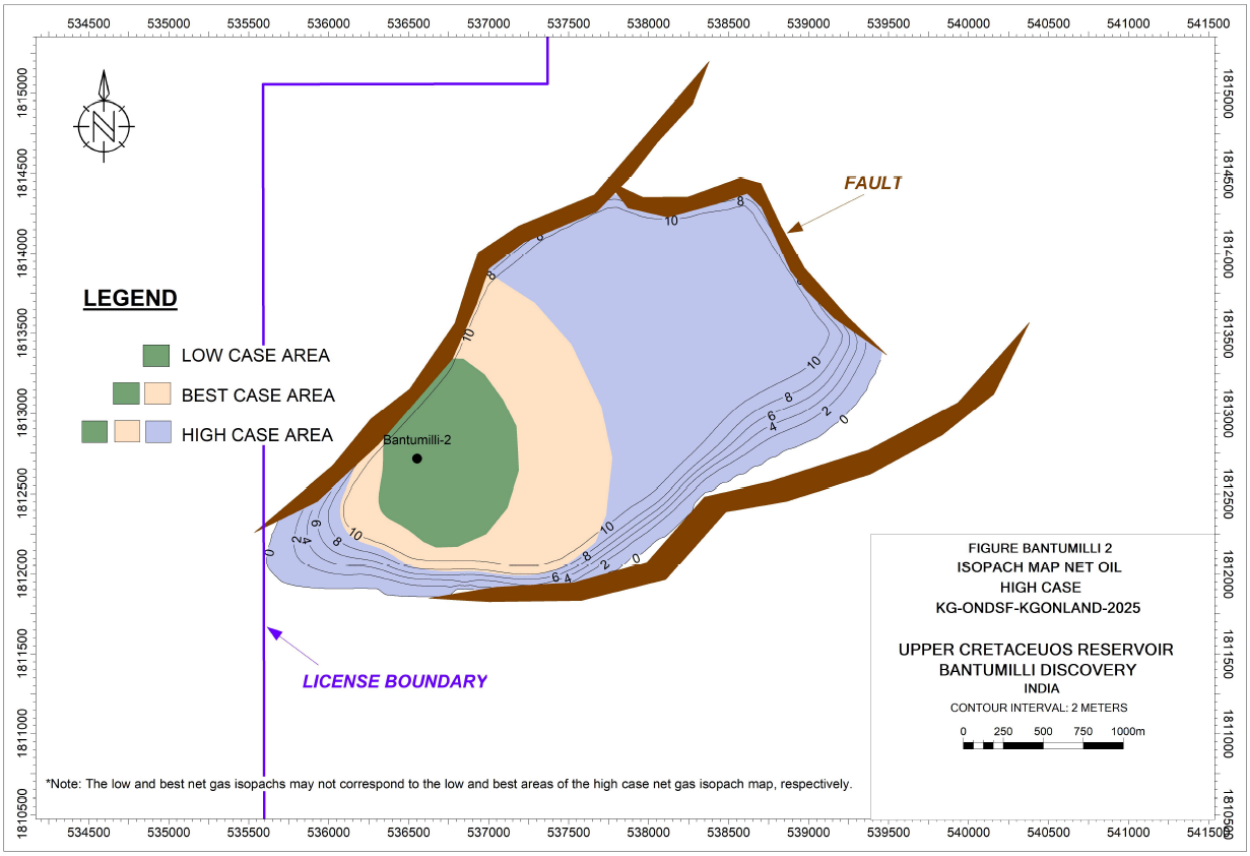
PSTM XL


BANTUMILLI-2
BANTUMILLI-1
LAKSHMIPURAM
Elevation time [ms]
Map

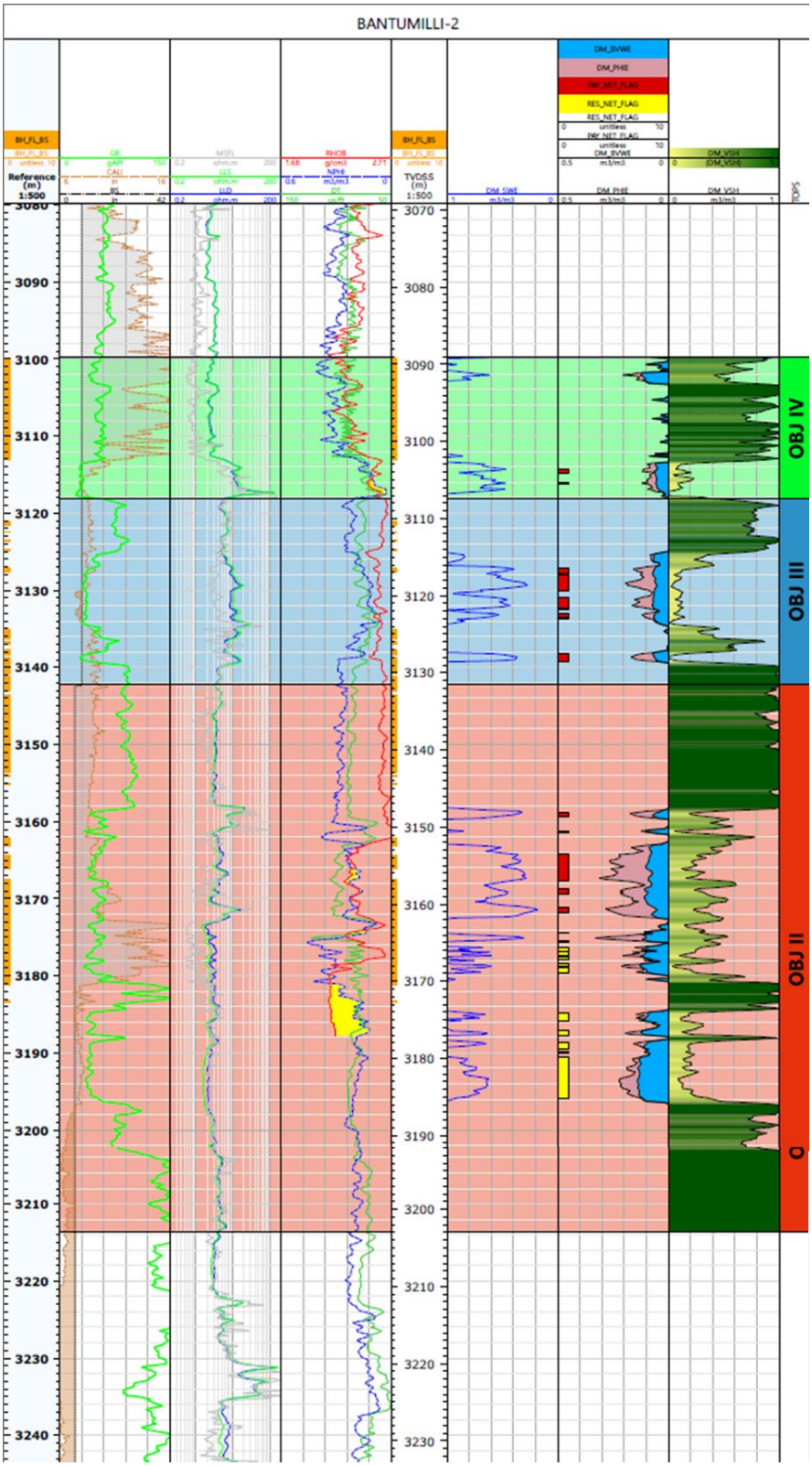
5.3.7.2. Structural Maps



5.3.7.3. Isopach Maps



5.3.7.4. Log Motifs



5.4. CHINTALAPALLI-1 DISCOVERY AND FIELD DESCRIPTION

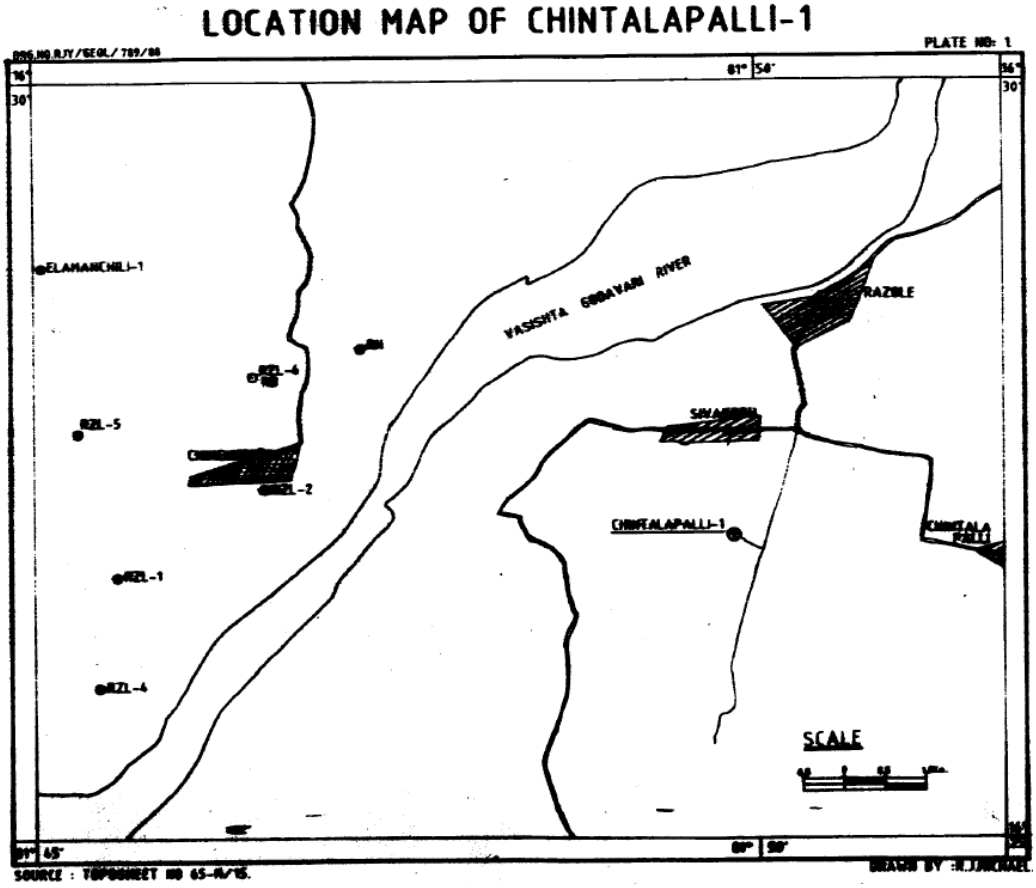
The exploration test well Chintalapalli-1 was drilled in a location with stratigraphy similar to that found in the Tatipaka area. Volcanic flows from the Paleocene/Upper Cretaceous were encountered, along with an igneous intrusion in Upper Cretaceous claystone. This intrusion was later selectively replaced by crystalline carbonate while the clay remained unchanged.

A specific interval within the well contains carbonate-rich rock that showed gas during testing. This is related to the intrusion of basic igneous rock into the claystone, which is significant as it helps in developing porosity and also serves as a gas reservoir. The characteristics of the gas suggest a deep origin.

Proper identification and mapping of such carbonate reservoirs at great depth are essential for future exploration and development efforts, especially since this reservoir type is relatively uncommon.

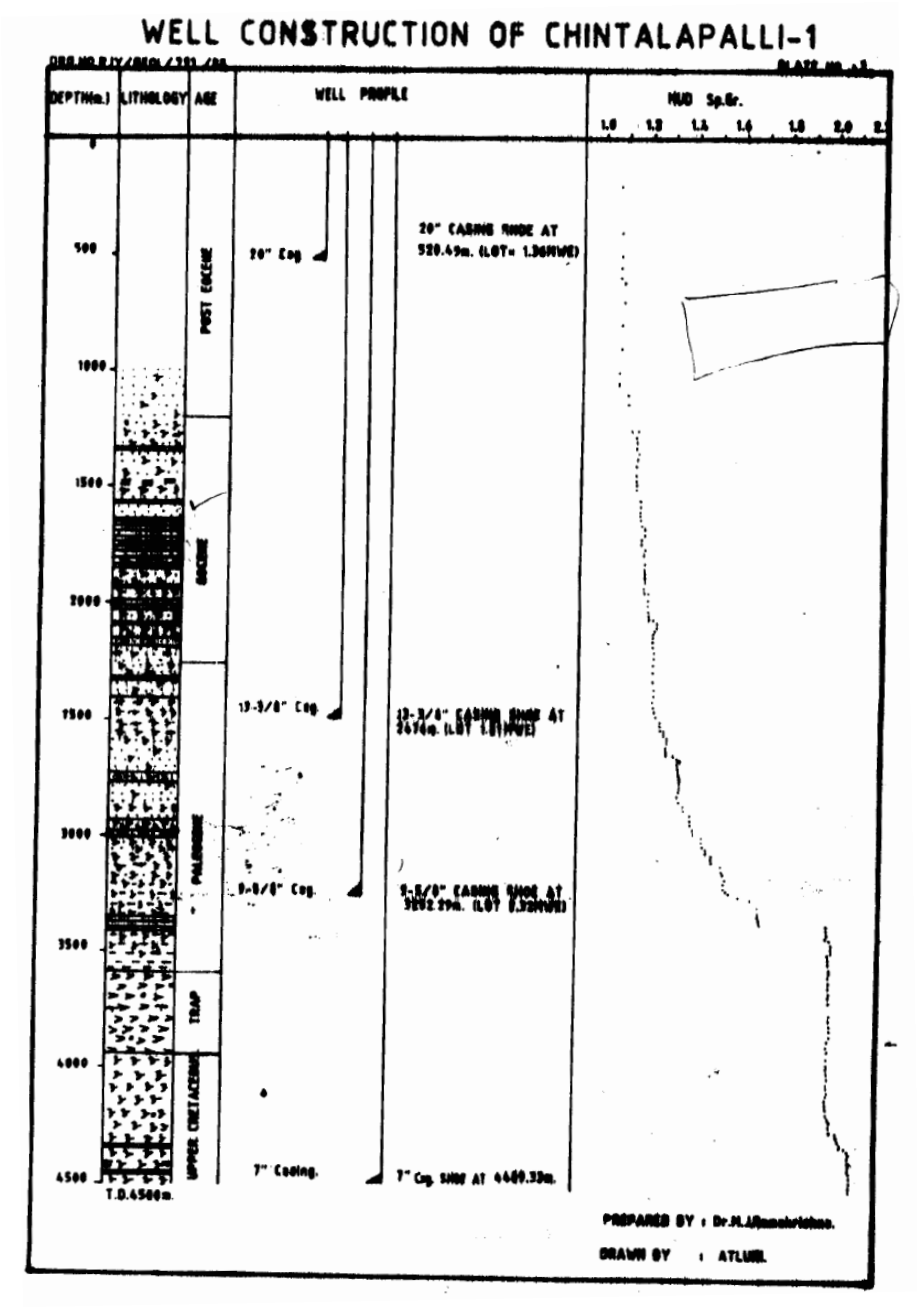
The presence of igneous intrusions in the Cretaceous claystone offers insights into tectonic events that align with regional geological patterns.

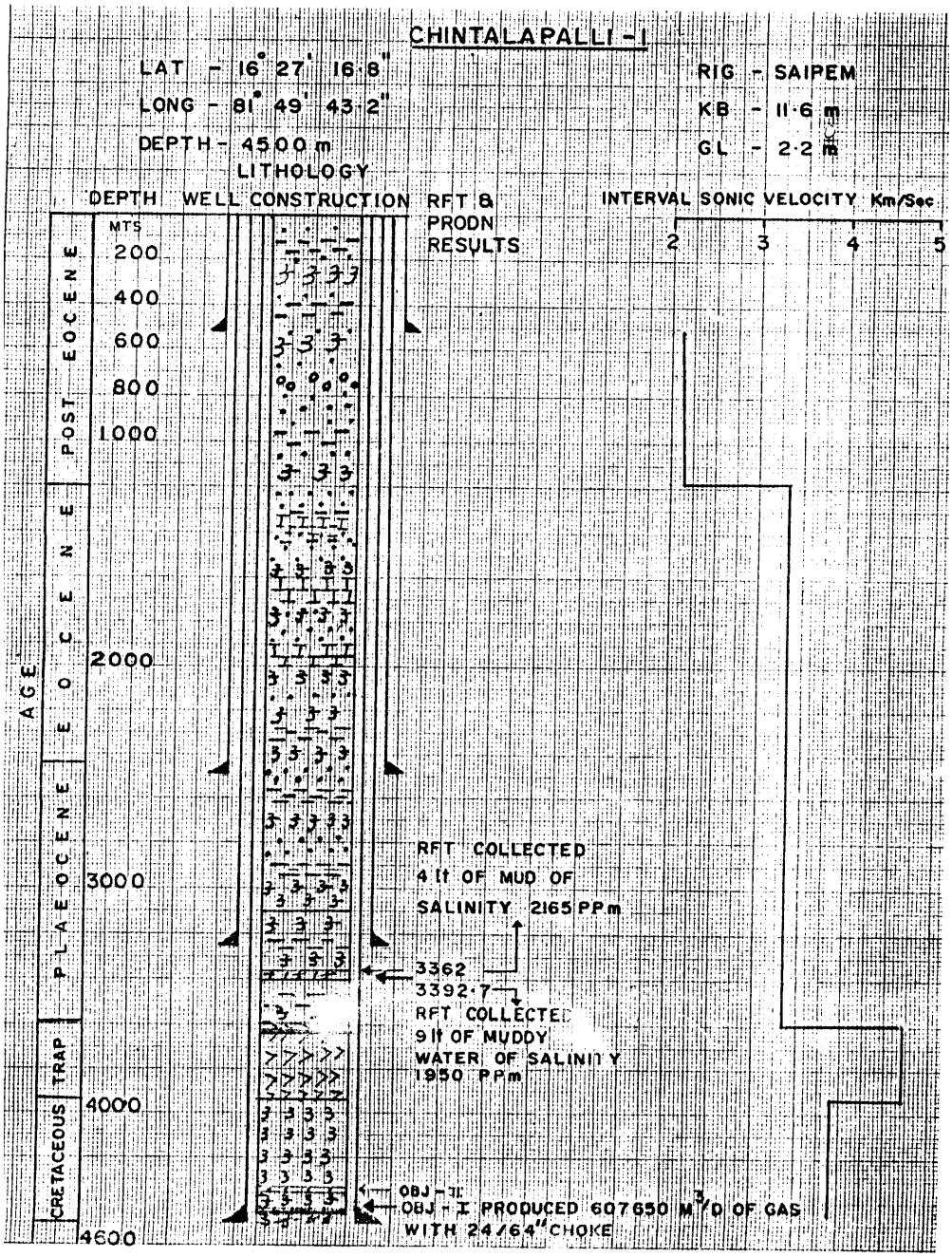
Chintalapalli-1 is identified as a gas-producing well with a notable production rate.



5.4.1. Drilling and Well Completion

Key information regarding the drilled wells has been collated and presented herein. The adjoining figures, wherever shown, illustrate the well construction diagram and the litho-column information for key wells. Other well statics, such as kelly bushing reference depth, water depth, and drilled and logged depths (including well coordinates) are also provided.





5.4.2. Well Logging and Formation Evaluation

The well logs of all discovery wells as well as selected key wells in the contract area were reviewed. The logs recorded in various open-hole sections along with cased-hole logs and information from conventional and other wireline formation test data are presented in this docket. The availability of key input reports, such as well completion reports (WCR) and formation evaluation reports (FER), was checked. Reservoir parameters of interesting zones and results of

the tested zone(s) are included in this report. Log motifs of tested/interesting zones of key wells are also appended.

5.4.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	KB	Drilled depth
Both available	29.06.1987	11.6 m	4500 m MDRT

5.4.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

DLL-GR (2470-520m) Remarks: BHT@192.2°F
CAL-GR (2470-520m) Remarks: BHT@197°F
BHC Ac-GR (2471-520m) Remarks: BHT@197°F
DLL-MSFL-GR (3248-2480m) Remarks: BHT@204°F
LDL-CNL (3250-2480m) Remarks: BHT@215.6°F
SONIC BHC (3249-2480m) Remarks: BHT@221.2°F
DLL-MSFL-GR (3817-3252m) Remarks: BHT@278°F
SONIC BHC (3820-3252m) Remarks: BHT@284°F
LDL-CNL (3820-3252m) Remarks: BHT@284°F
DLL-MSFL-GR (4325-3765m) Remarks: BHT@298°F
SONIC BHC (4330-3772m) Remarks: BHT@295°F
LDL-CNL-GR (3950-3775m) Remarks: Density pad closed
DLL-GR (4500-3784m) Remarks: BHT@320°F

5.4.3. Well Testing and Workover History

One object was released for production testing within the Upper Cretaceous Fm. Object – I (4438-4441m, 4442-4444m) produced gas (Qg: 600000 m3/d), FTHP: 2144 psi thru 24/64” choke.

5.4.3.1. Drill Stem Test (DST)

DST 1

Formation: Upper Cretaceous | Interval(m.): (4438-4441, 4442-4444) | Choke size (1/64 inch.): 24| FTHP: 6700 psi | Qg: 607650 m3/d | Qw: 12 bbl/d | FTHT: 218°F

Shut in for 12hrs., STHP:9800 psi (stabilized)
Formation: Upper Cretaceous | Interval(m.): (4438-4441, 4442-4444) | Choke size (1/64 inch.): 20| FTHP: 7300 psi | Qg: 470820 m3/d | Qw: 64 bbl/d | FTHT: 200°F

Formation: Upper Cretaceous | Interval(m.): (4438-4441, 4442-4444) | Choke size (1/64 inch.): 16 | FTHP: 8180 psi | Qg: 343610 m3/d | Qw: 43 bbl/d | FTHT: 184°F | Gas gravity: 0.63

Shut in for 10hrs., STHP: 9600 psi (stabilized)

5.4.4. Reservoir Engineering Studies and Analysis

Key reservoir engineering datasets, wherever available, were collated and are presented under various data genres. In a comprehensive data presentation, the results from well tests, formation dynamics tests, reservoir pressure buildup studies, and pressure-volume-temperature (PVT) data/results are included.

5.4.4.1. Temperature gradient

Maximum-recorded log head temperatures of different runs were corrected by Horner's Plot and recalculated to generate a temperature gradient plot. Maximum recorded BHT at 3304m, 157°C and seabed temperature is taken as 30°C.

- Seabed to 3588m: 2.64 °C/ 100m
- 3588m to 3939m: 6.6°C/ 100m

The overall temperature gradient from MSL to 3304m. is 3.44°C/ 100m.

5.4.4.2. Gas composition analysis

Formation: Creataceous| Interval(m.): 4438-4441, 4442-4444 | Sample No.: 1. |
Choke (1/64 inch): 10
C1: 95.44 %| C2: 0.54 %| C3: 0.16 %| iC4: 0.04 %| nC4: 0.05 %| iC5: 0.02 %| nC5: 0.01 %| C6+: 0.01 %|
Carbon-dioxide: 0.92 %| Nitrogen+Oxygen: 2.23 %| Sp.Gr.: 0.5762
Formation: Creataceous | Interval(m.): 4438-4441, 4442-4444 | Sample No.: 2 | Choke (1/64 inch): 24
C1: 97.01 %| C2: 0.62 %| C3: 0.03 %| iC4: 0.04 %| nC4: 0.01 %| iC5: 0.00 %| nC5: 0.00 %| C6+: 0.00 %| Carbon-dioxide: 1.8 %| Nitrogen+Oxygen: 0.5 %| Sp.Gr.: 0.5762

5.4.5. Geology and Reservoir Description

The geology of the area was comprehensively reviewed using correlations, sections, and maps. The well correlation, seismic sections, top structure, seismic attribute/amplitude, and net sand/pay maps were used to illustrate the magnitude and distribution of key reservoir properties in and around the discovered gas pools (accumulations). The local tectonic setting and geological section of the area, wherever available, are also provided. These maps/sections are sequentially shown field-wise and reservoir-unit-wise on figures, each of which is appropriately titled and illustrated in the following section.

5.4.5.1. Geological description

The Chintalapalli prospect is located in the East Godavari sub-basin of the Krishna-Godavari Basin and lies along the same structural trend as the Pasarlapudi and Tatipaka areas. Seismic interpretation reveals a fault-trending structure with closures identified at the top of the Cretaceous and within the Eocene. The regional stratigraphy is based on parameters from the Pasarlapudi–Tatipaka–Chintalapalli area, with specific boundaries marked by gamma shifts and lithological indicators. A significant high gamma shift beneath the Deccan Trap marks the top of the Upper Cretaceous, while another marker defines the Deccan Trap section. The gas-bearing claystone in Tatipaka, originally identified as Paleocene, appears to thicken towards the Razole area,

suggesting a rising top boundary. A gamma deflection is used to tentatively mark the top of the Paleocene, and structural changes at greater depth suggest the presence of the Lower Paleocene. The Chintalapalli-1 well is situated southwest of Tatipaka-1 and east of Razole-1, with some correlation observed in the upper section of the well with Tatipaka-1.

5.4.6. Reservoir Properties and OHIP

Estimates of in-place volumes presented in this section have been prepared in accordance with the Petroleum Resources Management System (PRMS) approved in March 2007 and revised in June 2018 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, the Society of Petroleum Evaluation Engineers, the Society of Exploration Geophysicists, the Society of Petrophysicists and Well Log Analysts, and the European Association of Geoscientists & Engineers.

The volumetric method was used to estimate the original gas in place (OGIP) of certain fields evaluated herein. Structure maps were prepared using the available data. Time-structure maps were created from the interpreted seismic data. These time maps were converted to depth-structural geological maps using velocity data acquired in wells in the fields. The 3–D seismic data were interpreted to analyze faulting and geological structural trends.

Wireline electrical logs, radioactivity logs, wireline formation pressure tests, wireline fluid sample tests, and other data were acquired in wells drilled in the evaluated fields. When available, drill cuttings, hole cores, and sidewall cores were analyzed. These combined analyses of the well-log data were used to establish petrophysical properties. Estimates of OGIP were made using net pay isopach maps. These isopach maps were constructed using geological depth structure maps and petrophysical analyses of the well-log data.

Following is the summary of the average reservoir parameters and estimates of OGIP. Seismic sections, log motifs, structure and isopach maps are in the annex bound with this information docket.

RESERVOIR PARAMETERS and ORIGINAL GAS in PLACE
as of
JANUARY 1, 2025
for the
Chintalapalli DISCOVERY
of
KG/ONDSF/KG ONLAND/2025 CONTRACT AREA

	Reservoir	Total
Low		
Area, acres	109	
Gas Formation Volume Factor, scf/rcf	0.0028	
Average Thickness, ft	12.2	
Average Porosity, %	5.97	
Average Water Saturation, %	44.90	
Original Gas in Place, $10^9 ft^3$	0.68	**0.68**
Original Gas in Place, 10^6 eq ton	0.02	**0.02**
Best		
Area, acres	262	
Gas Formation Volume Factor, scf/rcf	0.0028	
Average Thickness, ft	16.1	
Average Porosity, %	7.00	
Average Water Saturation, %	42.03	
Original Gas in Place, $10^9 ft^3$	2.66	**2.66**
Original Gas in Place, 10^6 eq ton	0.07	**0.07**
High		
Area, acres	395	
Gas Formation Volume Factor, scf/rcf	0.0028	
Average Thickness, ft	17.1	
Average Porosity, %	8.00	
Average Water Saturation, %	39.94	
Original Gas in Place, $10^9 ft^3$	5.04	**5.04**
Original Gas in Place, 10^6 eq ton	0.13	**0.13**

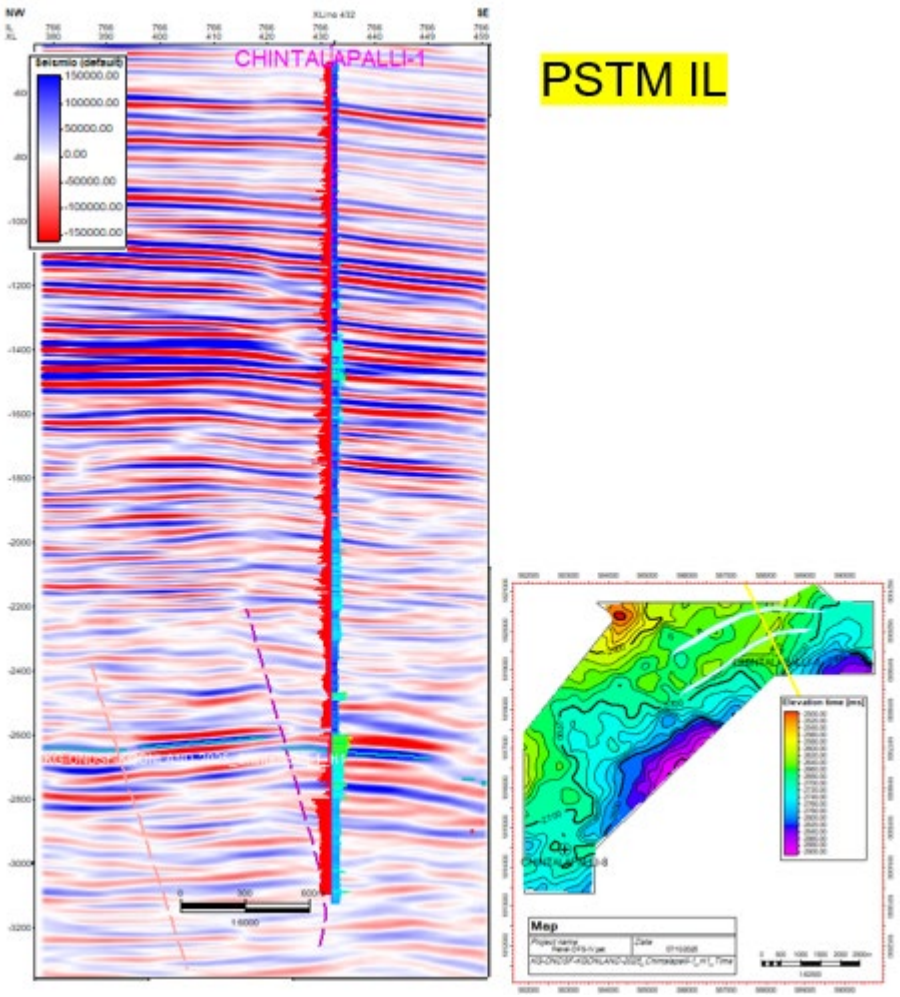
Note: Conversion used 10^9 scf equal to 0.0.2519 10^6 eq tone.

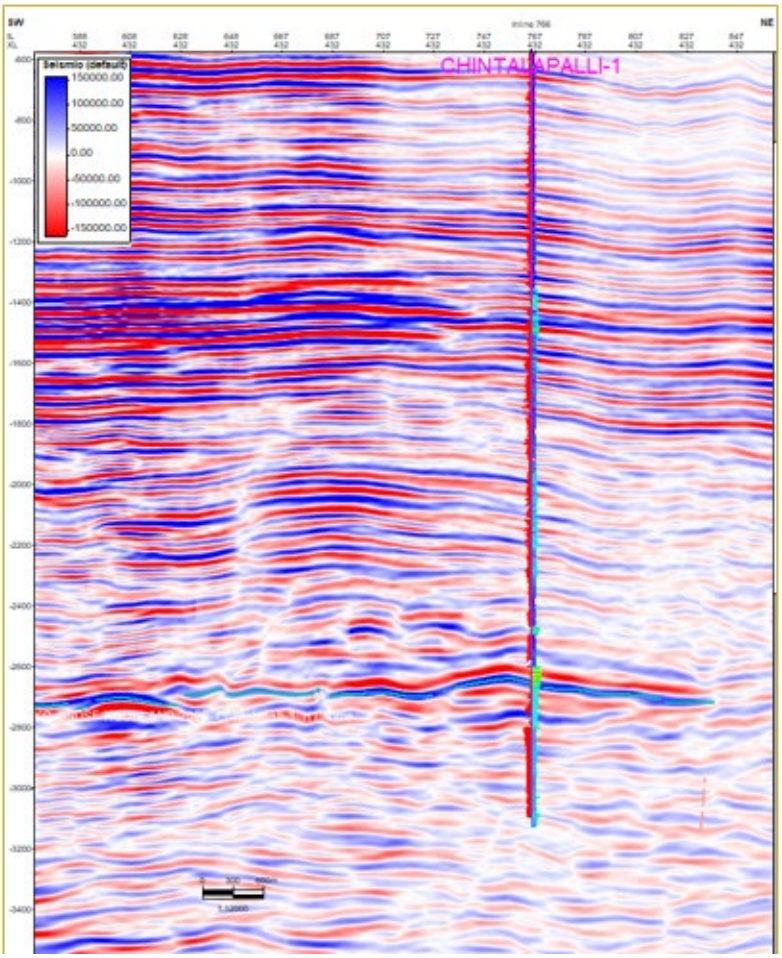
Volumes estimated by a Third Party

The operator has reported an in-place volume of 0.27 MMTOE (Best case).

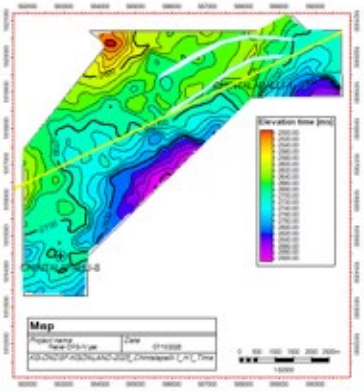
5.4.7. Annex

5.4.7.1. Seismic Sections

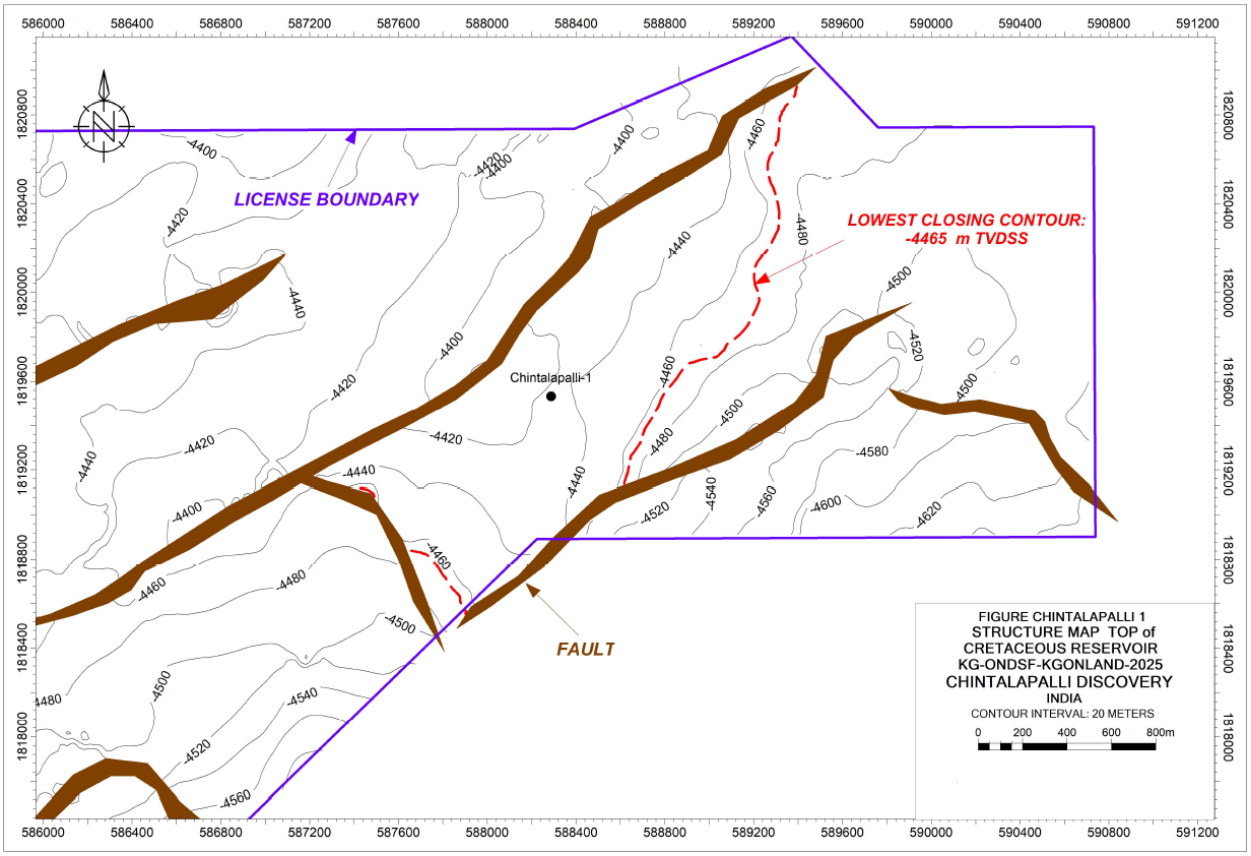



SW
NE
CHINTALAPALLI-1
Seismic (default)
150000.00
100000.00
50000.00
0.00
-50000.00
-100000.00
-150000.00

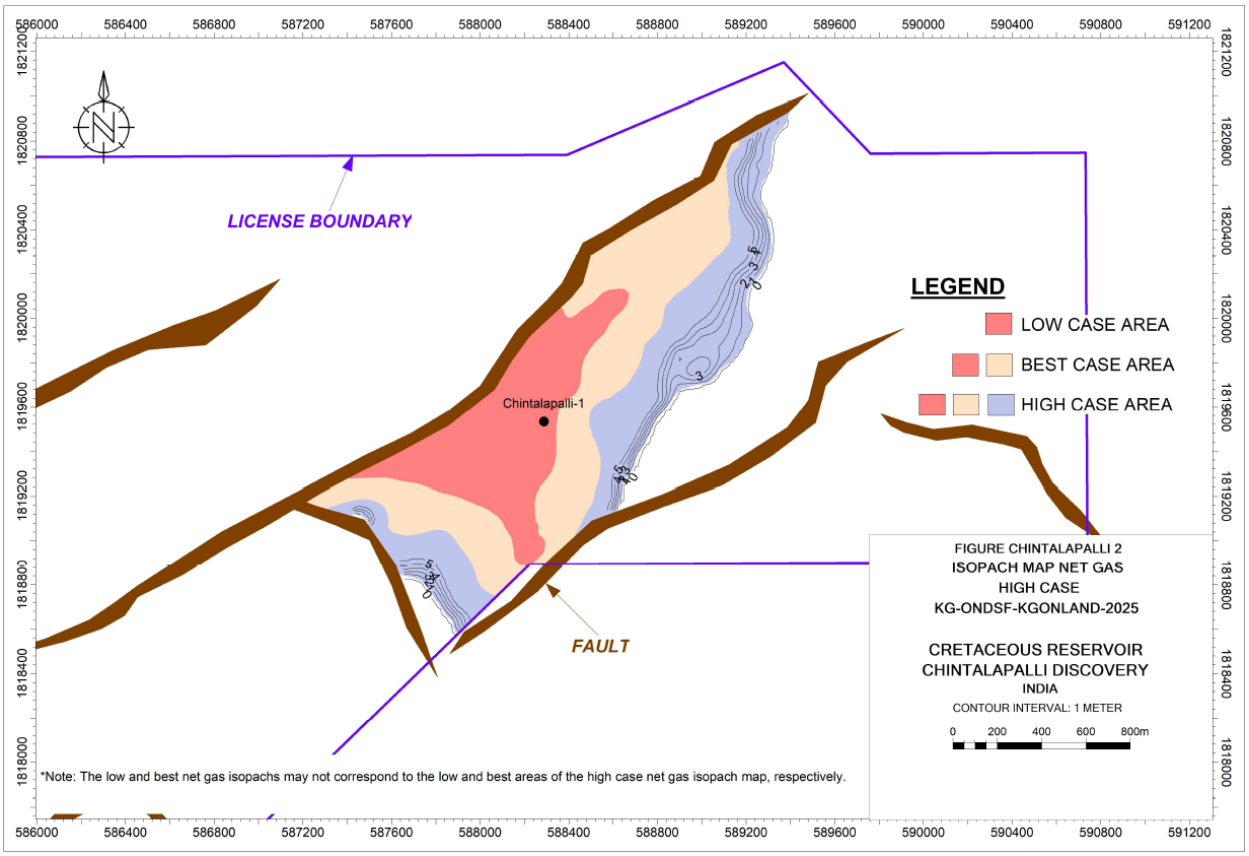
PSTM XL


Map

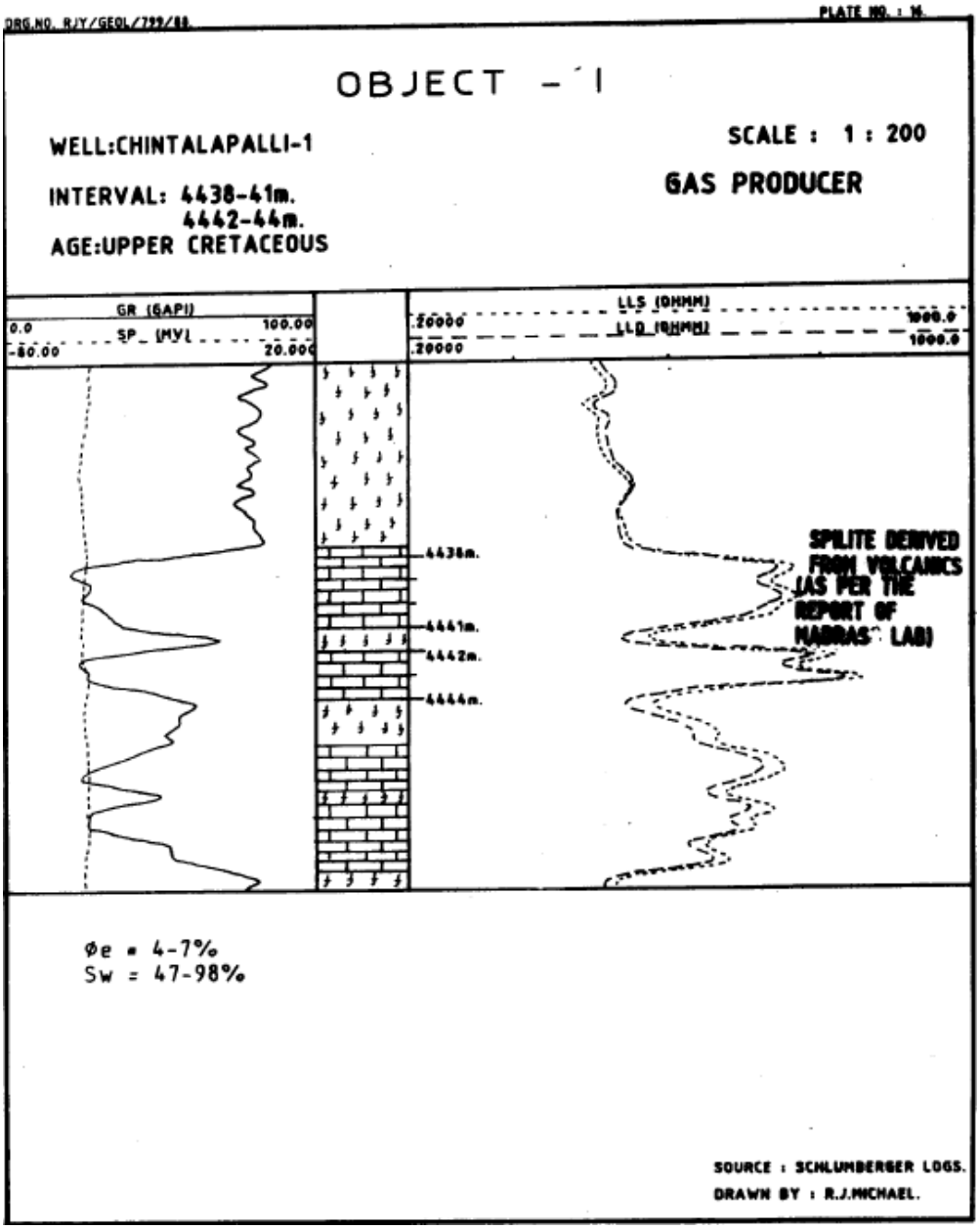
5.4.7.2. Structural Maps



5.4.7.3. Isopach Maps



5.4.7.4. Log Motifs

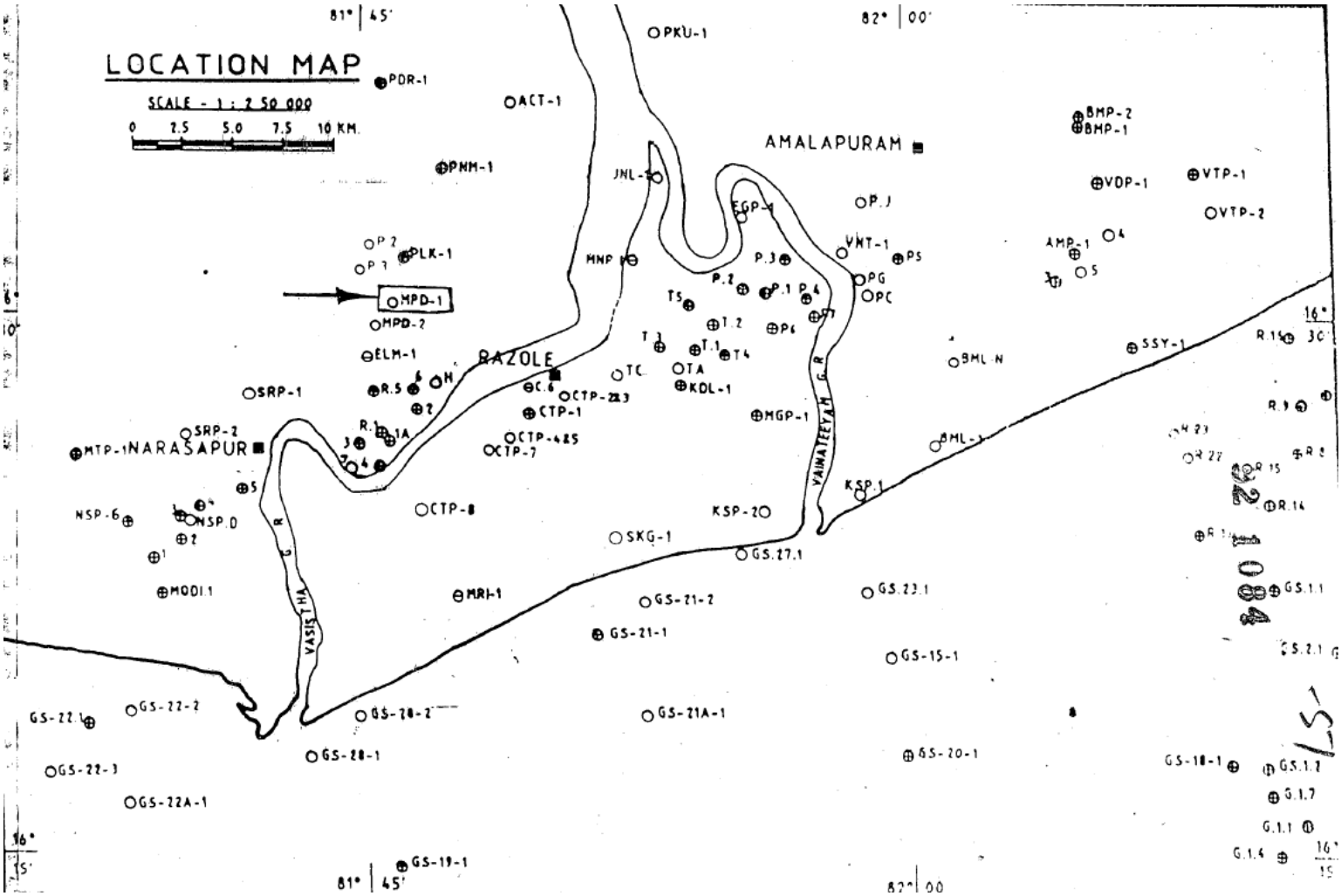


The operator data provided by DGH has been qualitatively validated and utilized by the third party.

5.5. MEDAPADU-1 DISCOVERY AND FIELD DESCRIPTION

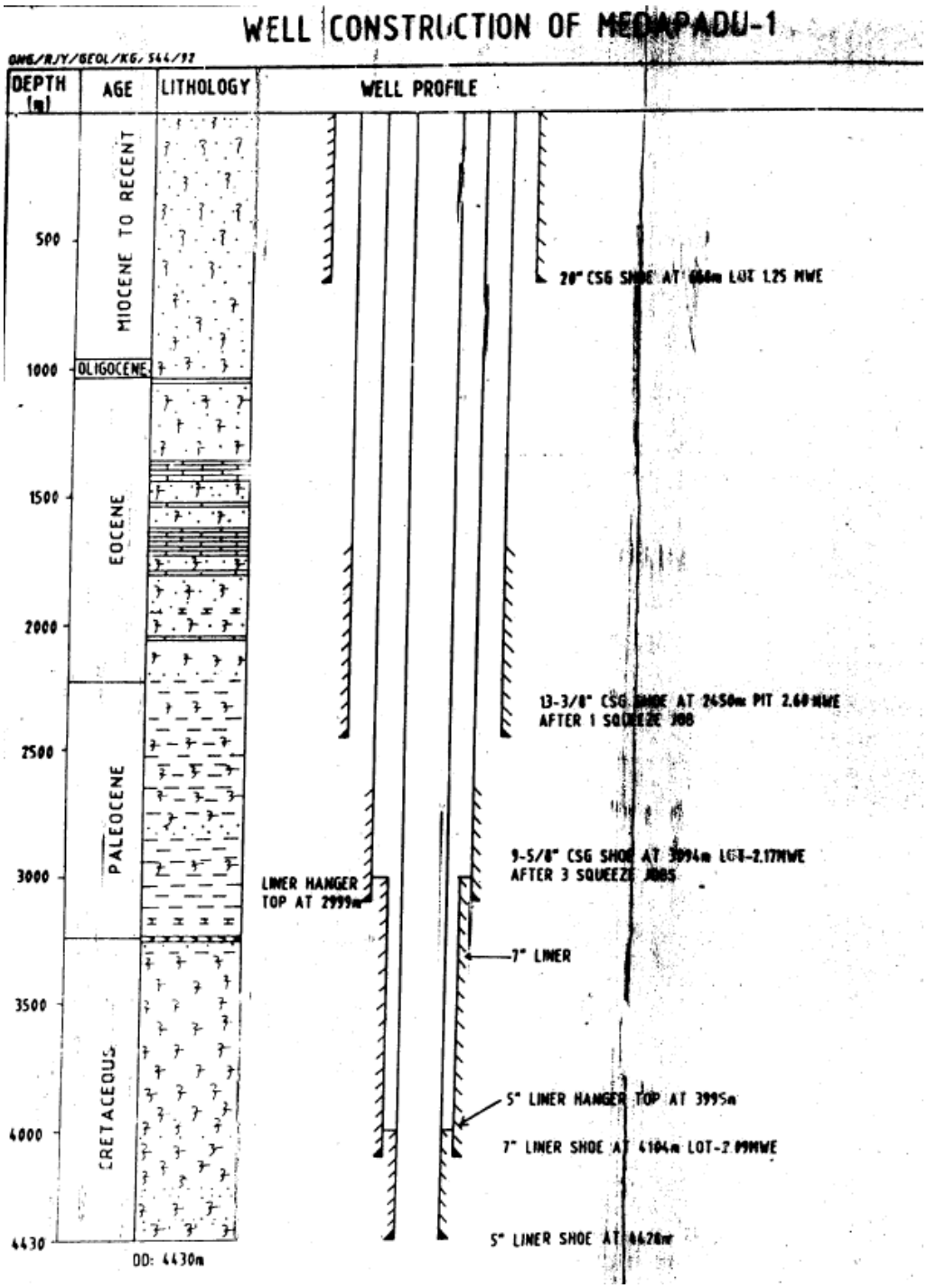
The well Medapadu-1 is located 3.5 km NNE of Elamanchili-1. The well was drilled down to 4430m against the target depth of 4400m with an objective to explore Cretaceous, Paleocene and trap sections.

The well is bottomed in Upper Cretaceous section. At the top of Cretaceous, the present well is structurally down by 569m with respect to PLK#1 well. At trap level, Medapadu#1 is structurally down by 631m with respect to PLK#1. The lithological characters in this well are similar to those observed elsewhere in this area.



5.5.1. Drilling and Well Completion

Key information regarding the drilled wells has been collated and presented herein. The adjoining figures, wherever shown, illustrate the well construction diagram and the litho-column information for key wells. Other well statics, such as kelly bushing reference depth, water depth, and drilled and logged depths (including well coordinates) are also provided.



5.5.2. Well Logging and Formation Evaluation

The well logs of all discovery wells as well as selected key wells in the contract area were reviewed. The logs recorded in various open-hole sections along with cased-hole logs and information from conventional and other wireline formation test data are presented in this docket. The availability of key input reports, such as well completion reports (WCR) and formation evaluation reports (FER), was checked. Reservoir parameters of interesting zones and results of

the tested zone(s) are included in this report. Log motifs of tested/interesting zones of key wells are also appended.

5.5.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	KB	Drilled depth
Both available	03.04.1981	12.6 m	4430 m MDRT

5.5.2.2. Well logs acquired

Well logs recorded

DLL-MSFL-GR-SP-GCAL (2447-668m) Remarks: BHT= 159.8°F. Drillers depth: 2453m.

DLL-MSFL-GR-SP-GCAL (3100-2453m) Remarks: BHT= 266°F. Drillers depth: 3100m.

LDL-CNL (3102-2453m) Remarks: BHT= 266°F. Drillers depth: 3100m.

DLL-MSFL-GR-SP-GCAL (4095-3096m) Remarks: BHT= 298.4°F. Drillers depth: 4096m.

BHC SONIC (4098-3096m) Remarks: BHT= 372.2°F. Drillers depth: 4096m.

CNL (4005-3096m) Remarks: BHT=372.2°F. Drillers depth: 4096m. Tool couldn't go below 4005m.

ILD-GR (4431.5-4109m) Remarks: BHT= 356.6°F. Drillers depth: 4430m.

5.5.3. Well Testing and Workover History

Four objects were released for production testing within the formations studied. Object –I (4395-4389m) produced gas (Qg: 330000 m3/d) with water (Qw: 6 m3/d) thru 16/64" choke. The other objects were not tested.

5.5.3.1. Drill Stem Test (DST)

Formation: Cretaceous| Interval(m.): 4395-4389 | Choke size (1/64 inch.): 24 | FTHP: 7525 psi| Qg: 420000 m3/d | Qw: 24 m3/d

Formation: Cretaceous| Interval(m.): 4395-4389 | Choke size (1/64 inch.): 16 | FTHP: 6658 psi| Qg: 300000 m3/d | Qw: 5.5 m3/d

Shut in for 13.5 hs. | STHP: 7550 | SBHP: 8950 psi

Formation: Cretaceous| Interval(m.): 4395-4389 | Choke size (1/64 inch.): 16 | FTHP: 6305 psi| Qg: 260000 m3/d | Qw: 6 m3/d

Shut in for 6.75 hs. | STHP: 7230 psi

Formation: Cretaceous| Interval(m.): 4395-4389 | Choke size (1/64 inch.): 12 | FTHP: 6634 psi| Qg: 157900 m3/d | Qw: 2.5 m3/d

Shut in for 6.75 hs. | STHP: 7027 psi

Formation: Cretaceous| Interval(m.): 4395-4389 | Choke size (1/64 inch.): 10 | FTHP: 6685 psi| Qg: 103000 m3/d

Shut in for 4.3 hs. | STHP: 6705 psi

Formation: Cretaceous| Interval(m.): 4395-4389 | Choke size (1/64 inch.): 12 | FTHP: 6395 psi| Qg: 154640 m3/d | Qw: 1.2 m3/d

Shut in for 39 hs. | STHP: 6910 | SBHP: 8062 psi

5.5.4. Reservoir Engineering Studies and Analysis

Key reservoir engineering datasets, wherever available, were collated and are presented under various data genres. In a comprehensive data presentation, the results from well tests, formation dynamics tests, reservoir pressure buildup studies, and pressure-volume-temperature (PVT) data/results are included.

5.5.4.1. Temperature Gradient

Maximum-recorded log head temperatures of different runs were extrapolated by using analytical extrapolation technique (Fertl & Witchman, 1977) and recalculated to generate a temperature gradient plot. The surface temperature is considered 30°C.

- Seabed to 3100m: 3.24 °C/ 100m
- 3100m to 4098m: 5.91°C/ 100m

5.5.4.2. SBHP gradient

Formation: Createceous | Depth(m.): 0 | SBHP: 7550 psi | Gradient (kg/cm2/10m): -
Formation: Createceous | Depth(m.): 500 | SBHP: 7589 psi | Gradient (kg/cm2/10m): 0.05
Formation: Createceous | Depth(m.): 1000 | SBHP: 7779 psi | Gradient (kg/cm2/10m): 0.26
Formation: Createceous | Depth(m.): 1500 | SBHP: 8000 psi | Gradient (kg/cm2/10m): 0.31
Formation: Createceous | Depth(m.): 2000 | SBHP: 8212 psi | Gradient (kg/cm2/10m): 0.30
Formation: Createceous | Depth(m.): 2500 | SBHP: 8416 psi | Gradient (kg/cm2/10m): 0.28
Formation: Createceous | Depth(m.): 3000 | SBHP: 8573 psi | Gradient (kg/cm2/10m): 0.22
Formation: Createceous | Depth(m.): 3500 | SBHP: 8573 psi | Gradient (kg/cm2/10m): 0.25
Formation: Createceous | Depth(m.): 3800 | SBHP: 8950 psi | Gradient (kg/cm2/10m): 0.46

5.5.4.3. Gas composition analysis

Formation: Creataceous| Interval(m.): 4395-4389| Sample No.: 35. | Choke size: 12/64”
C1: 83 %| Carbon-dioxide: 17 %| Hydrogen sulphide: 12 ppm| Sp.Gr.: 0.7193| Z factor: 0.9977

5.5.5. Geology and Reservoir Description

The geology of the area was comprehensively reviewed using correlations, sections, and maps. The well correlation, seismic sections, top structure, seismic attribute/amplitude, and net sand/pay maps were used to illustrate the magnitude and distribution of key reservoir properties in and around the discovered gas pools (accumulations). The local tectonic setting and geological section of the area, wherever available, are also provided. These maps/sections are sequentially shown field-wise and reservoir-unit-wise on figures, each of which is appropriately titled and illustrated in the following section.

The Medapadu-1 well is located in the Krishna-Godavari basin, which spans both onshore and offshore areas and includes a range of sedimentary rocks from the Late Jurassic to the Miocene. The basin is geologically significant due to promising results from nearby structures and has been divided into sub-basins, including the East Godavari sub-basin, which lies on the southeastern slope of a regional basement high. Structurally, the Medapadu-1 location targets a fault closure, and the Cretaceous sands—although relatively thin—are of exploration interest due to their good

reservoir potential. Stratigraphically, the well was drilled through upper Cretaceous formations composed predominantly of clay and claystone, with interbedded sandstone and a thin basaltic layer. Overlying this is a volcanic trap section, followed by compact claystones with minor sand and silt intercalations. The Eocene section is characterized by arenaceous rocks and thick limestone, while the Oligocene is mainly clay. Above these, the Miocene to Recent sediments are made up of coarser clastics. Within the Cretaceous, massive clay with sandstone and occasional basaltic flows dominate. The overlying trap section includes dense volcanic flows with intertrappean sediments containing a variety of secondary minerals. The Paleocene unit that follows contains a mix of claystone, shale, and siltstone with occasional signs of alteration, secondary mineralization, and evidence of hydrocarbons. Overall, the well intersects a complex sequence of sedimentary and volcanic rocks with multiple intervals of interest for hydrocarbon exploration.

5.5.6. Reservoir Properties and OHIP

Estimates of in-place volumes presented in this section have been prepared in accordance with the Petroleum Resources Management System (PRMS) approved in March 2007 and revised in June 2018 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, the Society of Petroleum Evaluation Engineers, the Society of Exploration Geophysicists, the Society of Petrophysicists and Well Log Analysts, and the European Association of Geoscientists & Engineers.

The volumetric method was used to estimate the original gas in place (OGIP) of certain fields evaluated herein. A review of selected geophysical data, in conjunction with well control and other relevant information, served as the basis for the structural interpretation of the fields. The geological interpretation provided by DGH was extensively reviewed and, where appropriate, adjusted.

Wireline electrical logs, radioactivity logs, wireline formation pressure tests, wireline fluid sample tests, and other data were acquired in wells drilled in the evaluated fields. When available, drill cuttings, hole cores, and sidewall cores were analyzed. These combined analyses of the well-log data were used to establish petrophysical properties. Estimates of OGIP were made using net pay isopach maps. These isopach maps were constructed using geological depth structure maps and petrophysical analyses of the well-log data.

Following is the summary of the average reservoir parameters and estimates of OGIP. Seismic sections, log motifs, structure and isopach maps are in the annex bound with this information docket.

RESERVOIR PARAMETERS and ORIGINAL GAS in PLACE
as of
JANUARY 1, 2025
for the
MEDAPADU-1 DISCOVERY
of
KG/ONDSF/KG ONLAND/2025 CONTRACT AREA

	Reservoir	Total
Low		
Area, acres	77	
Gas Formation Volume Factor, scf/rcf	0.0040	
Average Thickness, ft	16.7	
Average Porosity, %	10.01	
Average Water Saturation, %	50.00	
Original Gas in Place, $10^9 ft^3$	0.70	**0.70**
Original Gas in Place, 10^6 eq ton	0.02	**0.02**
Best		
Area, acres	141	
Gas Formation Volume Factor, scf/rcf	0.0040	
Average Thickness, ft	17.0	
Average Porosity, %	14.00	
Average Water Saturation, %	44.93	
Original Gas in Place, $10^9 ft^3$	2.01	**2.01**
Original Gas in Place, 10^6 eq ton	0.05	**0.05**
High		
Area, acres	217	
Gas Formation Volume Factor, scf/rcf	0.0040	
Average Thickness, ft	18.0	
Average Porosity, %	17.47	
Average Water Saturation, %	39.43	
Original Gas in Place, $10^9 ft^3$	4.50	**4.50**
Original Gas in Place, 10^6 eq ton	0.11	**0.11**

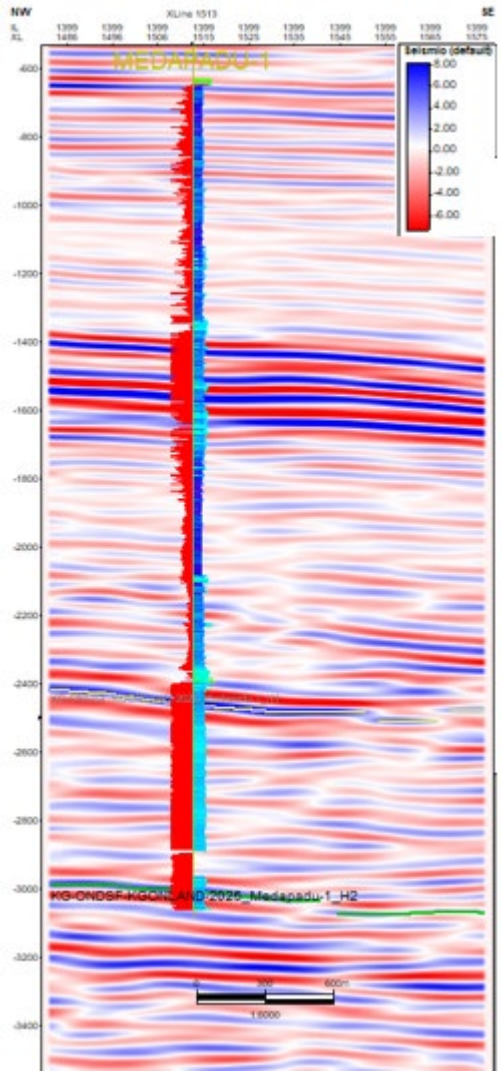
Note: Conversion used 10^9 scf equal to 0.0.2519 10^6 eq tone.

Volumes estimated by a Third Party

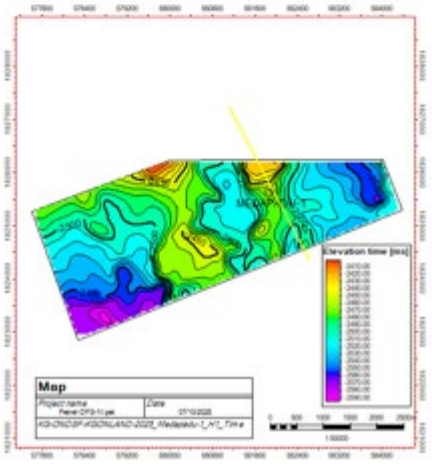
The operator has reported an in-place volume of 0.06 MMTOE (Best case).

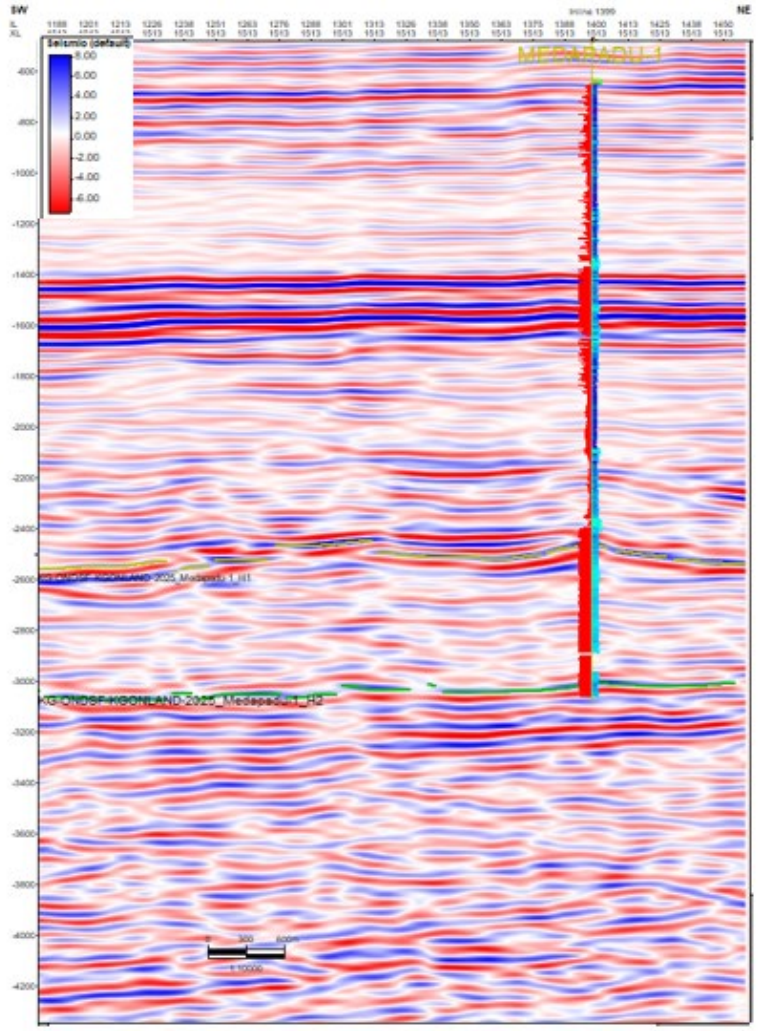
5.5.7. Annex

5.5.7.1. Seismic Sections

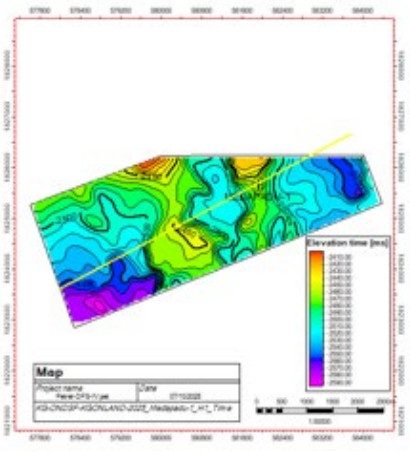


PSTM IL

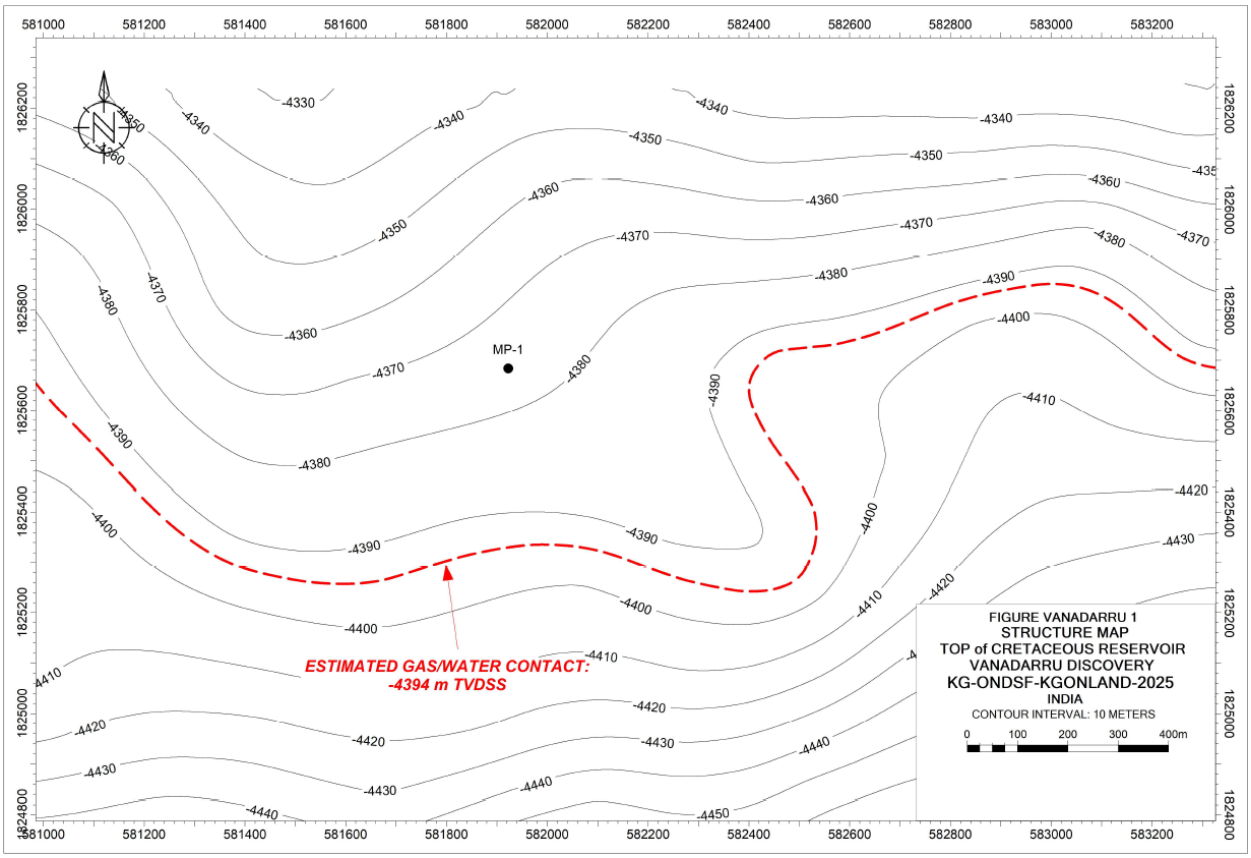



SW
NE
MEDAPADU-1
KG/ONDSF/KGONLAND/2025_Medapadu-1_Int
KG/ONDSF/KGONLAND/2025_Medapadu-1_H2

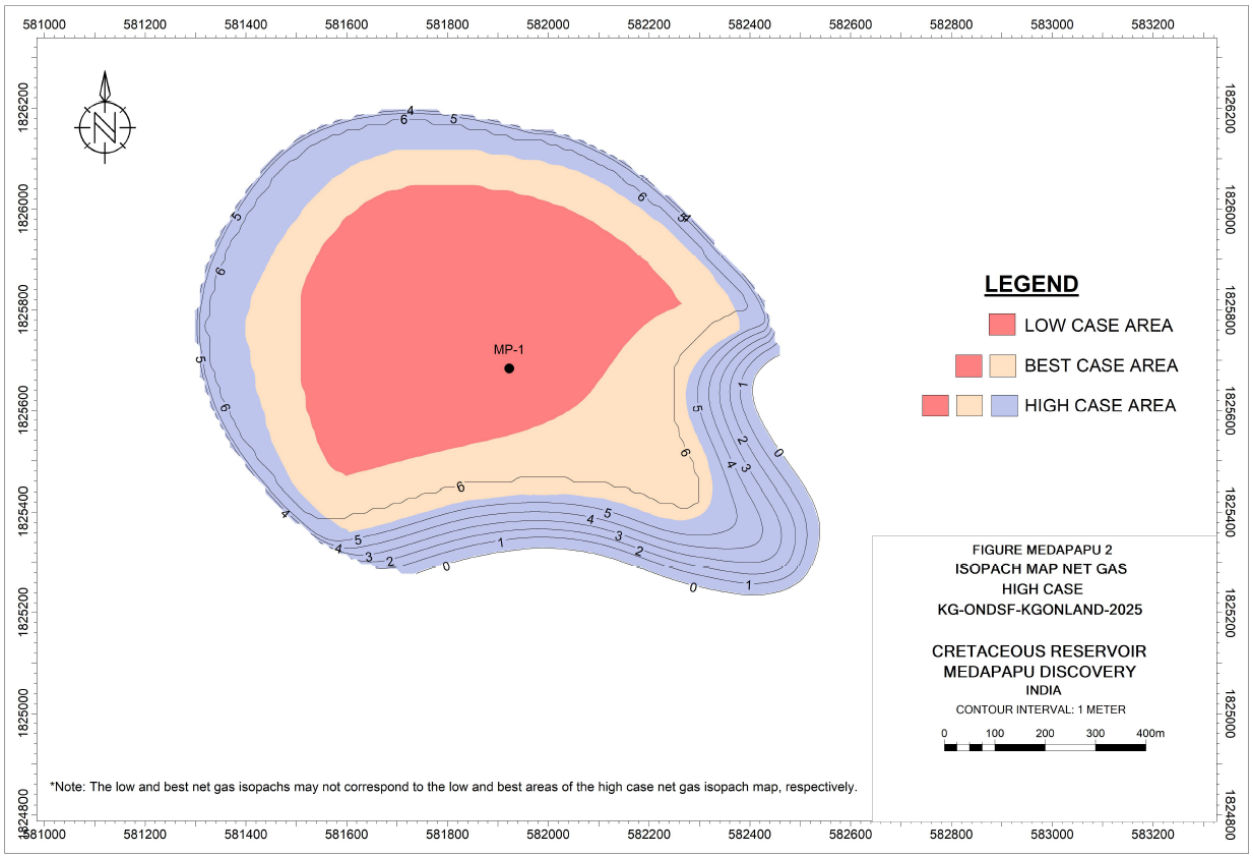
PSTM XL


Elevation time [ms]
Map

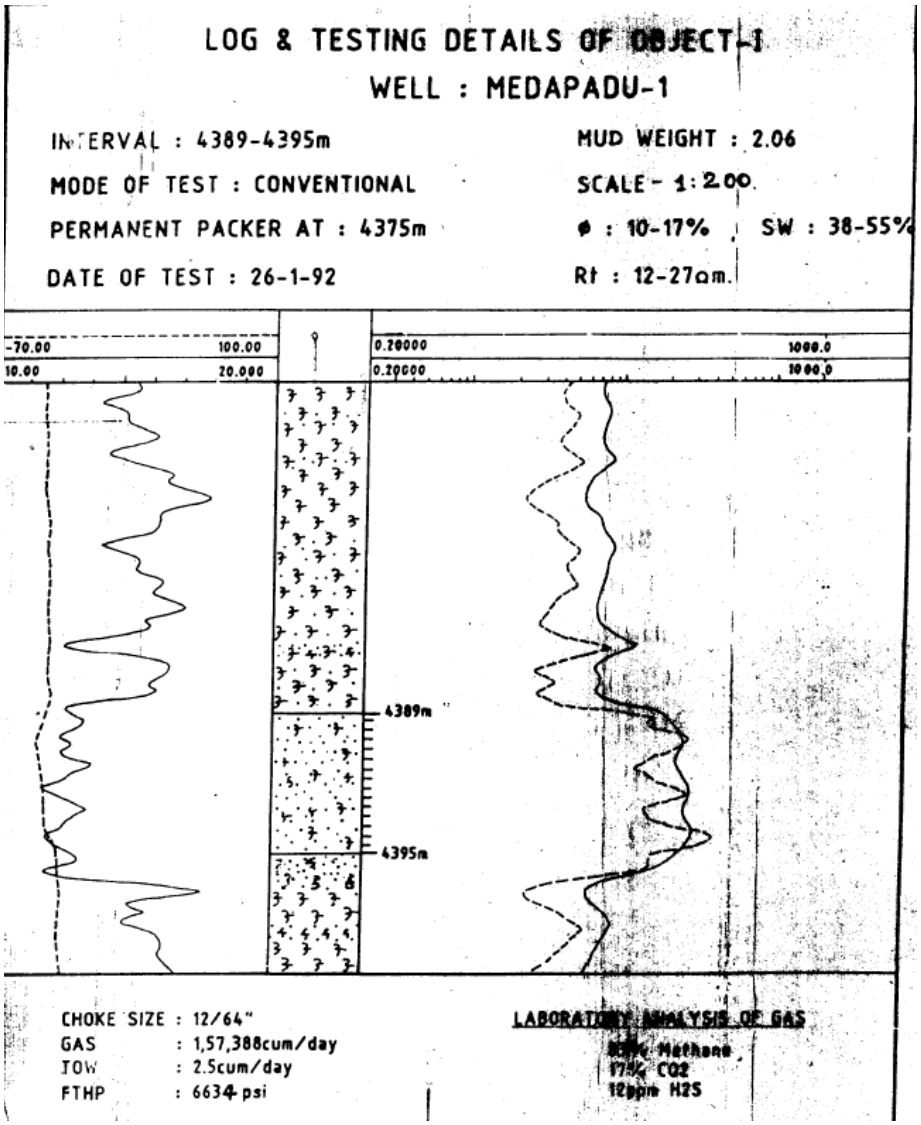
5.5.7.2. Structural Maps



5.5.7.3. Isopach Maps



5.5.7.4. Log Motifs

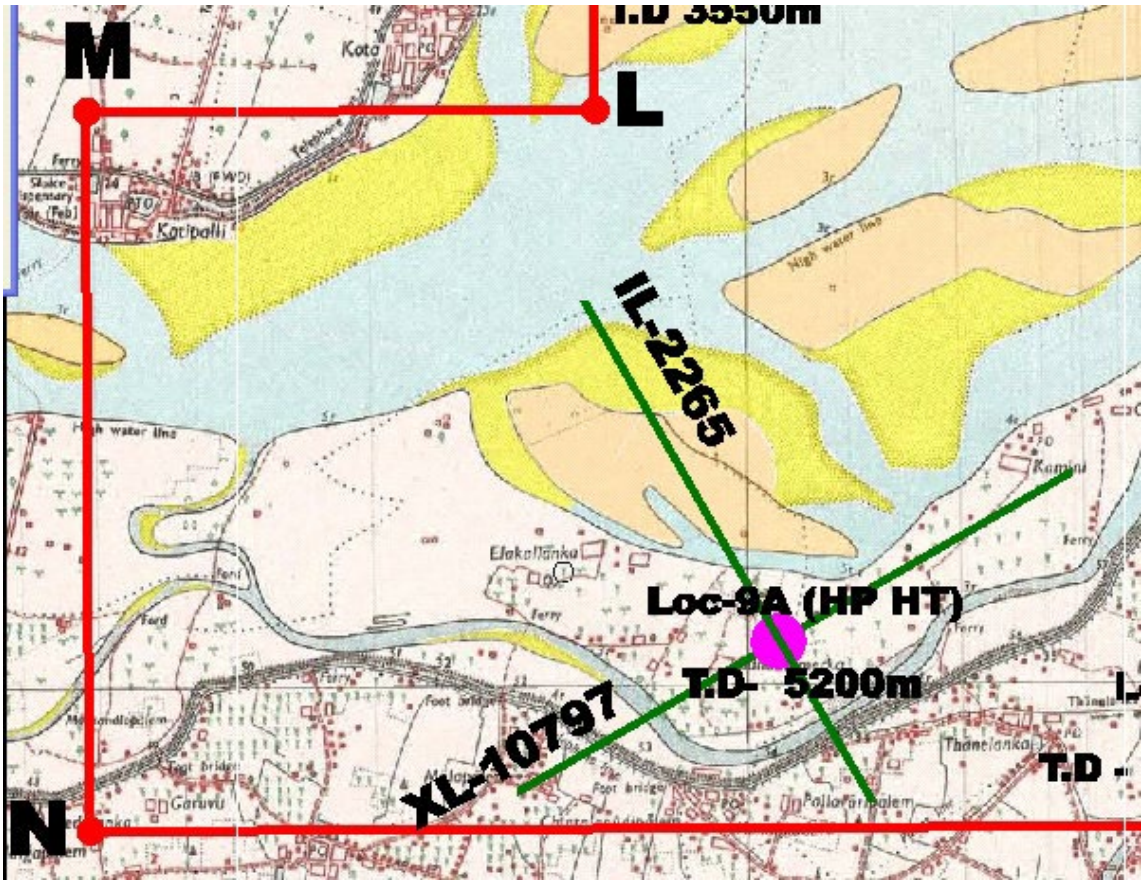


The operator data provided by DGH has been qualitatively validated and utilized by the third party.

5.6. THANELANKA-1 DISCOVERY AND FIELD DESCRIPTION

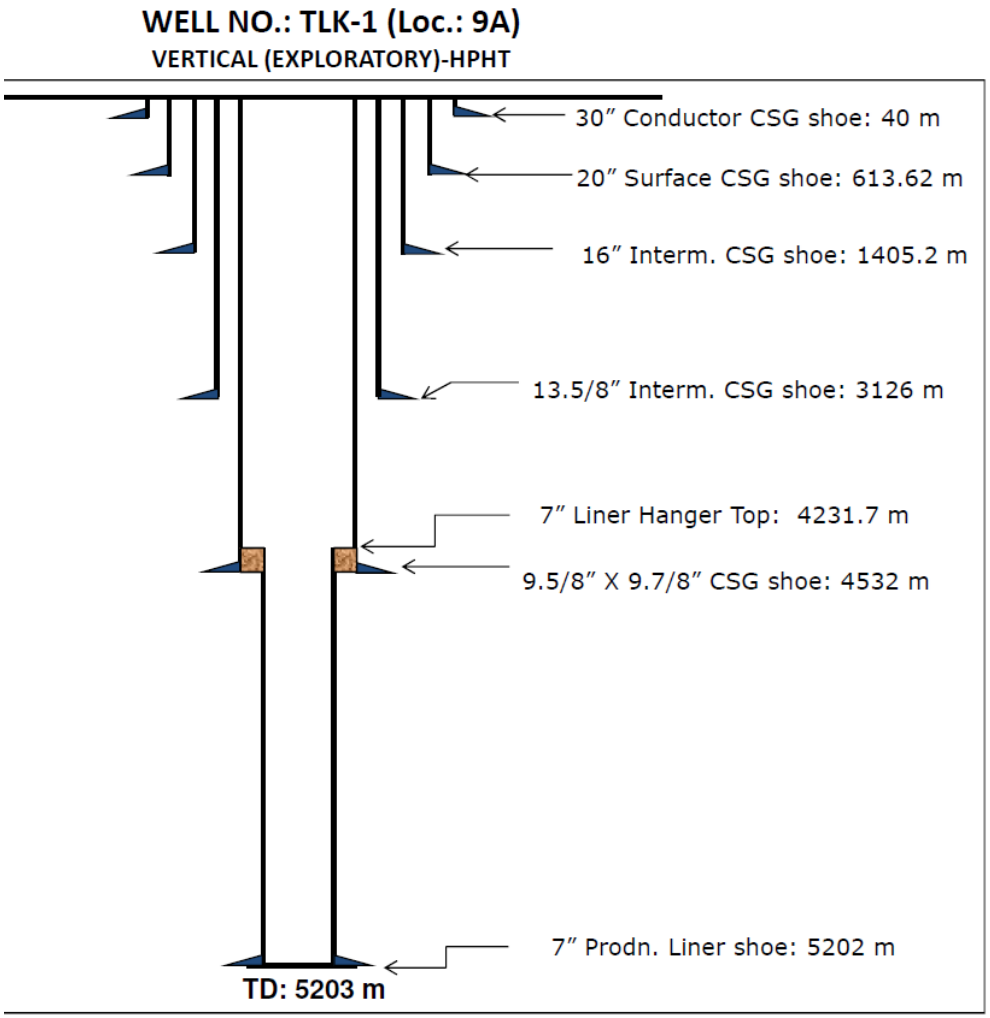
The exploration well Thanelanka-1 is located in the southwestern part of the KG-ONN-2004/1 block, positioned on a river island between the Gautami-Godavari River and near the previously drilled Dangeru-1 well. Its primary objective is to evaluate a fault closure within the Gollapalli Formation of Early Cretaceous age, known for high amplitude anomalies. This High Pressure-High Temperature (HPHT) well aims to reach the basement by drilling through thick syn-rift sediments, which are expected to offer promising hydrocarbon entrapment conditions, similar to those found in nearby offshore gas fields. Additionally, a pinch-out prospect within the Lower Eocene Pasarlapudi Formation—part of a proven petroleum system in the Krishna-Godavari Basin—is also targeted.

The well intersected a sequence of geological formations ranging from Archean basement quartzites to recent sediments, including several Cretaceous and Paleogene formations. Notably, the well encountered hydrocarbon shows in multiple zones within the Gollapalli, Raghavapuram, and Chintalapalli formations. Fluid samples taken from the Chintalapalli Shale and Raghavapuram Shale confirmed the presence of gas and gas-condensate, indicating potential for hydrocarbon production.



5.6.1. Drilling and Well Completion

Key information regarding the drilled wells has been collated and presented herein. The adjoining figures, wherever shown, illustrate the well construction diagram and the litho-column information for key wells. Other well statics, such as kelly bushing reference depth, water depth, and drilled and logged depths (including well coordinates) are also provided.



5.6.2. Well Logging and Formation Evaluation

The well logs of all discovery wells as well as selected key wells in the contract area were reviewed. The logs recorded in various open-hole sections along with cased-hole logs and information from conventional and other wireline formation test data are presented in this docket. The availability of key input reports, such as well completion reports (WCR) and formation evaluation reports (FER), was checked. Reservoir parameters of interesting zones and results of the tested zone(s) are included in this report. Log motifs of tested/interesting zones of key wells are also appended.

5.6.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	KB	Drilled depth
Both available	12.01.2016	18.68 m	5203 m MDRT

5.6.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

18.5	DLL-MSFL-LDL-CNL-GR-SP-CALI (1678-611m) Remarks: BHT@75°F | Hole Depth: 1719m | Held-up @ 1678m
	SDLT-DSNT-WSTT-GR-CALI (1680-611m) Remarks: BHT@75°F | Tool held up at 1680m
16	CBL-VDL-GR (1404.3-590m) Remarks: BHT@79°F. Cased hole Logging
14.75	DLL-MSFL-GR-SP- CAL-WSTT-IDT (3136.6-1665m) Remarks: BHT@129.5°F. Hole Depth: 3135m Logger's Depth: 3136.6m
	SDLT-DSNT-GR-CAL (3136.6-1665m) Remarks: BHT@137.8°F
	RDT-GR (Run to 3100mm) Remarks: POOH tools due to signal Loss from 3100m
	RDT-GR (3091.5-1860mm) Remarks: BHT@126.6°F. Pretest:26, tight:15, Good Test:08, Lost Seal: 03, Sample: 02 @ 2713.3m & 3010.0m
	VSP-GR (3120-1050m) Remarks: shots taken @ every 30m intervals
	SWC-GR (1863-3091.5m) Remarks: Attempted:24, Recovered:18 Missfired:02, Loss in Hole:04
13.625	CBL-VDL-GR-CCL (3042-1390m) Remarks: BHT@126.6°F. Cased hole Logging
12.25	DLL-MSFL-GR-SP- CAL (3925.5-3125.6m) Remarks: BHT@157.2°F. Held-up @ 3925.5m
	HRCH-HDNT-GR-CAL (4025.0-3125.6m) Remarks: BHT@160°F. Held-up @ 4028m
	HRCH-HACRT-SP-GR (Run to 3888mm) Remarks: POOH due to communication failure, SP tool malfunctioned
	HRCH-HWST-GR (4537.2-3125.6m) Remarks: BHT@185°F. Tagged bottom @ 4537.2m
	RDT-GR (3850-3125.6m) Remarks: BHT@154°F. Pretest:25, tight:11, Good Test:03, Lost perm test:09, No Seal: 02, Sample: 01 @ 3773.5m.
	SWC-GR (4500-3125.6m) Remarks: Held-up @ 4500m. Attempted:24, Recovered:17 Lost in hole: 03, Mud Cake:2 Empty:02
9.625	HCBL-VDL-GR-CCL (m) Remarks: Held-up 4109.28 &Tool Malfunctioned
	CBL-VDL-GR-CCL (4035.79-2900.0m) Remarks: Not tagged bottom due to temperature constraint. Poor to Moderate Cement, Cement top @ 2925m
8.5	HACRT-HWST-HGR (5065-4532m) Remarks: BHT@198°F. Tool got held up @ 5065m
	HDNS-HDNI-H4TG (5200-4532.4m) Remarks: BHT@215°F
	HACRT-HWST-HGR (5198.9-5000.2m) Remarks: BHT@215°F
9.625	HCBL-VDL-HGR-CCL (4517.0-2900.0m) Remarks: Held up @ 4522m
7	Junk Basket-HGR- HCCL (4795.2-4615.0m) Remarks: Held up @ 4798.5m
	HCBL-VDL-GR-CCL (5098.2-4226.4m) Remarks: Held up @ 5099.5m

5.6.3. Well Testing and Workover History

Three objects of interest were selected, but production testing was not performed. Object –I (5173-4912m), Object –II (4813-4668m) and Object –III (3852-3771m).

5.6.4. Reservoir Engineering Studies and Analysis

Key reservoir engineering datasets, wherever available, were collated and are presented under various data genres. In a comprehensive data presentation, the results from well tests, formation dynamics tests, reservoir pressure buildup studies, and pressure-volume-temperature (PVT) data/results are included.

5.6.4.1. Formation dynamics tests

RDT Pressure Test Summary 121/4" Hole (31/07/2016)

Sl. No	Probe Depth (m)	Stop Depth (m)	Hydro static pressure before	Formation/ Shut in Pressure	Hydrostatic pressure after	Mobility md/cp	Sample Details	Remarks
1	3046.9	3050.20	8921.89	-	8921.15	-	-	Casing Check
2	3149.0	3152.11	9209.38	-	9215.59	-	-	Tight test
3	3150.1	3153.20	9215.81	-	9217.26	-	-	Tight test, Still building
4	3152.1	3155.21	9222.64	-	9221.70	-	-	Tight test
5	3189.0	3192.11	9333.75	-	9328.31	-	-	Tight test
6	3192.0	3195.11	9337.08	-	9335.62	-	-	Tight test, Still building
7	3749.0	3752.11	10939.51	-	10939.50	-	-	Tight test
8	3750.0	3753.11	10942.52	-	10943.62	-	-	Tight test
9	3772.5	3775.60	11006.45	10705.92	11004.92	3.17	-	Valid test
10	3773.5	3776.61	11002.31	10708.87	10932.79	3.65	Sample was filled @ 14753. 56 psi	Good test (Sample taken)
11	3774.0	3777.11	10931.67	10678.01	10933.64	1.36	-	Valid test
12	3775.0	3778.11	10966.71	-	10932.81	-	-	Low perm, still building

13	3790.5	3793.61	11011.40	-	10986.41	-	-	Tight test, Still building
14	3801.5	3804.60	11037.72	-	11029.24	-	-	Low perm, still building
15	3803.0	3806.11		-		-	-	NO SEAL
16	3803.5	3806.61	11042.51	-	11040.98	-	-	Low perm, still building
17	3804.0	3807.11	11044.13	-	11046.71	-	-	Low perm, still building
18	3809.0	3812.11	11062.92	-	11026.71	-	-	Tight test, Still building
19	3812.0	3815.11	11017.07	-	11015.67	-	-	Low perm, still building
20	3811.0	3814.11	11015.76	-	11014.76	-	-	Low perm, still building
21	3813.0	3816.11		-		-	-	NO SEAL
22	3813.5	3816.61	11074.00	-	11071.23	-	-	Low perm, still building
23	3832.0	3835.11	11118.42	-	11119.86	-	-	Good buildup stability
24	3833.0	3836.11	11086.84	-	11107.45	-	-	Tight test, Still building
25	3834.0	3837.12	11128.26	-	11127.00	-	-	Tight test, Still building
26	3835.0	3838.11	11123.16	-	11113.66	-	-	Low perm, still building

5.6.4.2. Gas composition analysis

Formation: Creataceous| Depth(m.): 2713.5| Sample No.: I | RDT Sampler |
C1: 89.31 %| C2: 3.63 %| C3: 1.05 %| iC4: 0.18 %| nC4: 0.30 %| iC5: 0.14 %| nC5: 0.19 %|
C6+: 2.17 %| Carbon-dioxide: 2.82 %| Nitrogen+Oxygen: 0.21 %| Sp.Gr.: 0.6755

Formation: Creataceous| Depth(m.): 3010| Sample No.: II | RDT Sampler |
C1: 54.94 %| C2: 8.05 %| C3: 7.71 %| iC4: 0.57 %| nC4: 3.62 %| iC5: 1.16 %| nC5: 1.70 %|
C6+: 4.70 %| Carbon-dioxide: 15.79 %| Nitrogen+Oxygen: 0.76 %| Sp.Gr.: 1.0679

5.6.5. Geology and Reservoir Description

The geology of the area was comprehensively reviewed using correlations, sections, and maps. The well correlation, seismic sections, top structure, seismic attribute/amplitude, and net sand/pay maps were used to illustrate the magnitude and distribution of key reservoir properties in and around the discovered gas pools (accumulations). The local tectonic setting and geological section of the area, wherever available, are also provided. These maps/sections are sequentially shown field-wise and reservoir-unit-wise on figures, each of which is appropriately titled and illustrated in the following section.

5.6.5.1. Geological description

The Thanelanka-1 exploration HPHT well is located in the southwestern part of Block KG-ONN-2004/1, which lies on the present-day Godavari river delta in the northeastern Krishna-Godavari (KG) Basin. This basin, part of India's southeastern passive margin, developed from coast-parallel rifting during the Cretaceous and subsequent passive margin subsidence. The basin's arcuate shape is bordered by Cretaceous and basement rock outcrops to the west, northwest, and north, and it extends southeastward into the deep Bay of Bengal. The tectonic framework includes three main grabens—the Krishna, West Godavari, and East Godavari sub-basins—separated by structural highs like the Bapatla High and the Bantumilli–Tanuku Ridge. Within the West Godavari sub-basin, the Gudivada and Bantumilli grabens are divided by the Kaza-Kaikalur High. The Thanelanka-1 well lies in the East Godavari sub-basin, near the Tanuku Horst, which separates it from the West Godavari sub-basin.

Geologically, Thanelanka-1 was designed to test a fault closure with high-amplitude anomalies within the Early Cretaceous Gollapalli Formation, targeting syn-rift sediments expected to be juxtaposed against the basement—conditions favorable for hydrocarbon entrapment. These syn-rift sequences are analogous to gas-producing intervals in nearby offshore fields. Additionally, a Lower Eocene pinch-out prospect in the Pasarlapudi Formation, part of a proven petroleum system in the KG Basin, was also targeted. The well encountered a complete stratigraphic succession from Archean metamorphic basement quartzites upward through Mesozoic to Cenozoic formations. Key formations include the Gollapalli Sandstone (Upper Jurassic–Lower Cretaceous), Raghavapuram Formation (Lower Cretaceous), Chintalapalli Shale and Tirupati Sandstone (Upper Cretaceous), Paleocene units (Razole Trap, Palakollu Shale), Eocene units (Pasarlapudi Sandstone, Bhimanapalli Limestone), Oligocene Matsyapuri Formation, and Miocene to Recent Rajahmundry and younger sediments.

Multiple zones within the Gollapalli, Raghavapuram, and Chintalapalli formations exhibited hydrocarbon shows. PVT analysis of samples from Chintalapalli Shale and Raghavapuram Shale

confirmed the presence of gas and gas-condensate, highlighting the well's promising potential for hydrocarbon accumulation in Cretaceous syn-rift and post-rift intervals.

5.6.6. Reservoir Properties and OHIP

Estimates of in-place volumes presented in this section have been prepared in accordance with the Petroleum Resources Management System (PRMS) approved in March 2007 and revised in June 2018 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, the Society of Petroleum Evaluation Engineers, the Society of Exploration Geophysicists, the Society of Petrophysicists and Well Log Analysts, and the European Association of Geoscientists & Engineers.

The volumetric method was used to estimate the original gas in place (OGIP) of certain fields evaluated herein. Structure maps were prepared using the available data. Time-structure maps were created from the interpreted seismic data. These time maps were converted to depth-structural geological maps using velocity data acquired in wells in the fields. The 3–D seismic data were interpreted to analyze faulting and geological structural trends.

Wireline electrical logs, radioactivity logs, wireline formation pressure tests, wireline fluid sample tests, and other data were acquired in wells drilled in the evaluated fields. When available, drill cuttings, hole cores, and sidewall cores were analyzed. These combined analyses of the well-log data were used to establish petrophysical properties. Estimates of OGIP were made using net pay isopach maps. These isopach maps were constructed using geological depth structure maps and petrophysical analyses of the well-log data.

Following is the summary of the average reservoir parameters and estimates of OGIP. Seismic sections, log motifs, structure and isopach maps are in the annex bound with this information docket.

RESERVOIR PARAMETERS and ORIGINAL GAS in PLACE
as of
JANUARY 1, 2025
for the
Thanelanka-1 DISCOVERY
of
KG/ONDSF/KG ONLAND/2025 CONTRACT AREA

	Reservoir	Total
Low		
Area, acres	642	
Gas Formation Volume Factor, scf/rcf	0.0030	
Average Thickness, ft	155.6	
Average Porosity, %	9.00	
Average Water Saturation, %	65.00	
Original Gas in Place, 10^9 ft^3	45.73	**45.73**
Original Gas in Place, 10^6 eq ton	1.15	**1.15**
Best		
Area, acres	1,159	
Gas Formation Volume Factor, scf/rcf	0.0030	
Average Thickness, ft	185.8	
Average Porosity, %	10.00	
Average Water Saturation, %	60.00	
Original Gas in Place, 10^9 ft^3	125.05	**125.05**
Original Gas in Place, 10^6 eq ton	3.15	**3.15**
High		
Area, acres	2,095	
Gas Formation Volume Factor, scf/rcf	0.0030	
Average Thickness, ft	195.5	
Average Porosity, %	11.00	
Average Water Saturation, %	55.00	
Original Gas in Place, 10^9 ft^3	294.43	**294.43**
Original Gas in Place, 10^6 eq ton	7.42	**7.42**

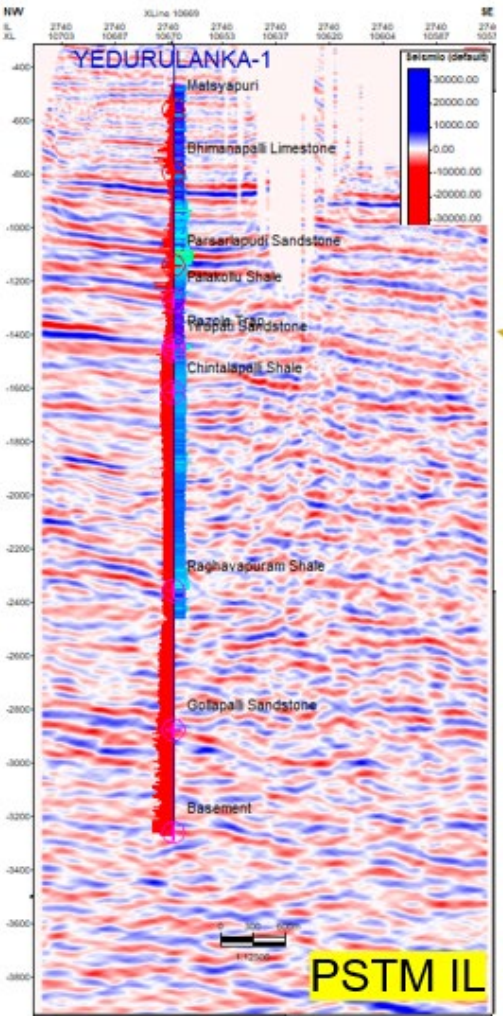
Note: Conversion used 10^9 scf equal to 0.0.2519 10^6 eq tone.

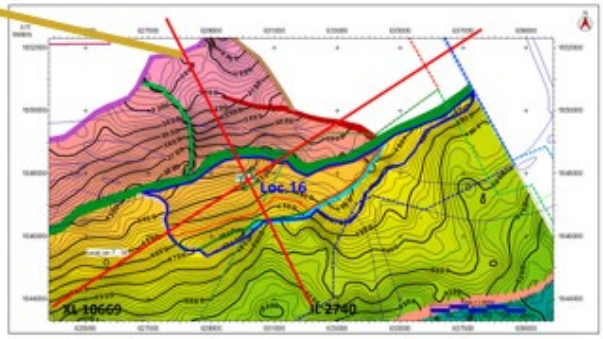
Volumes estimated by a Third Party

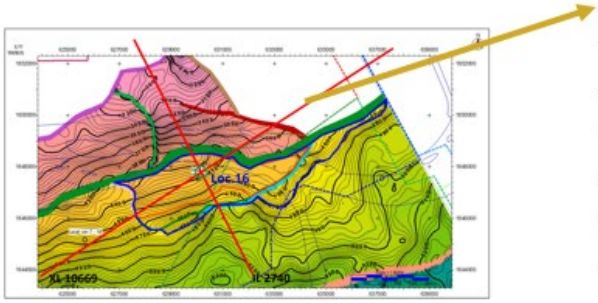
The operator has reported an in-place volume of 0.23 MMTOE (Best case).

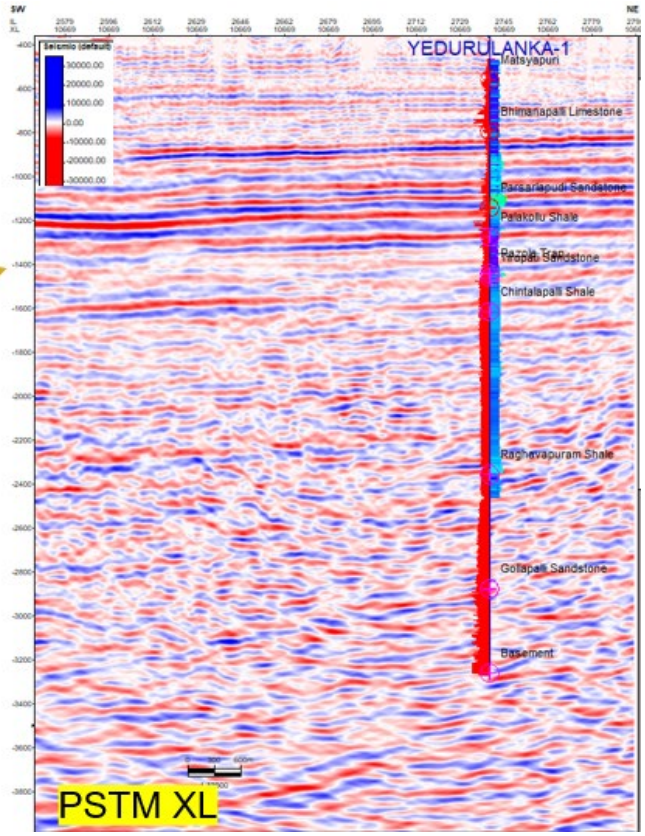
5.6.7. Annex

5.6.7.1. Seismic Sections

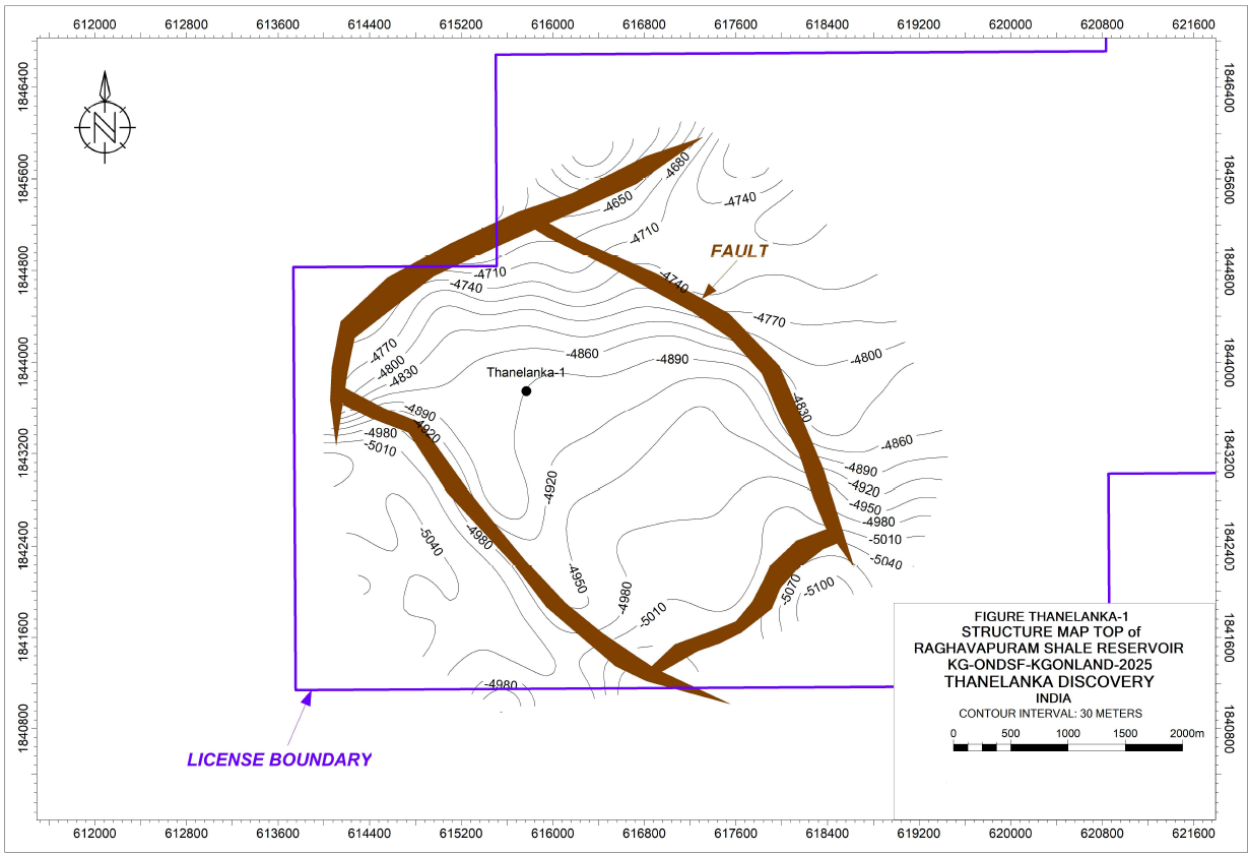




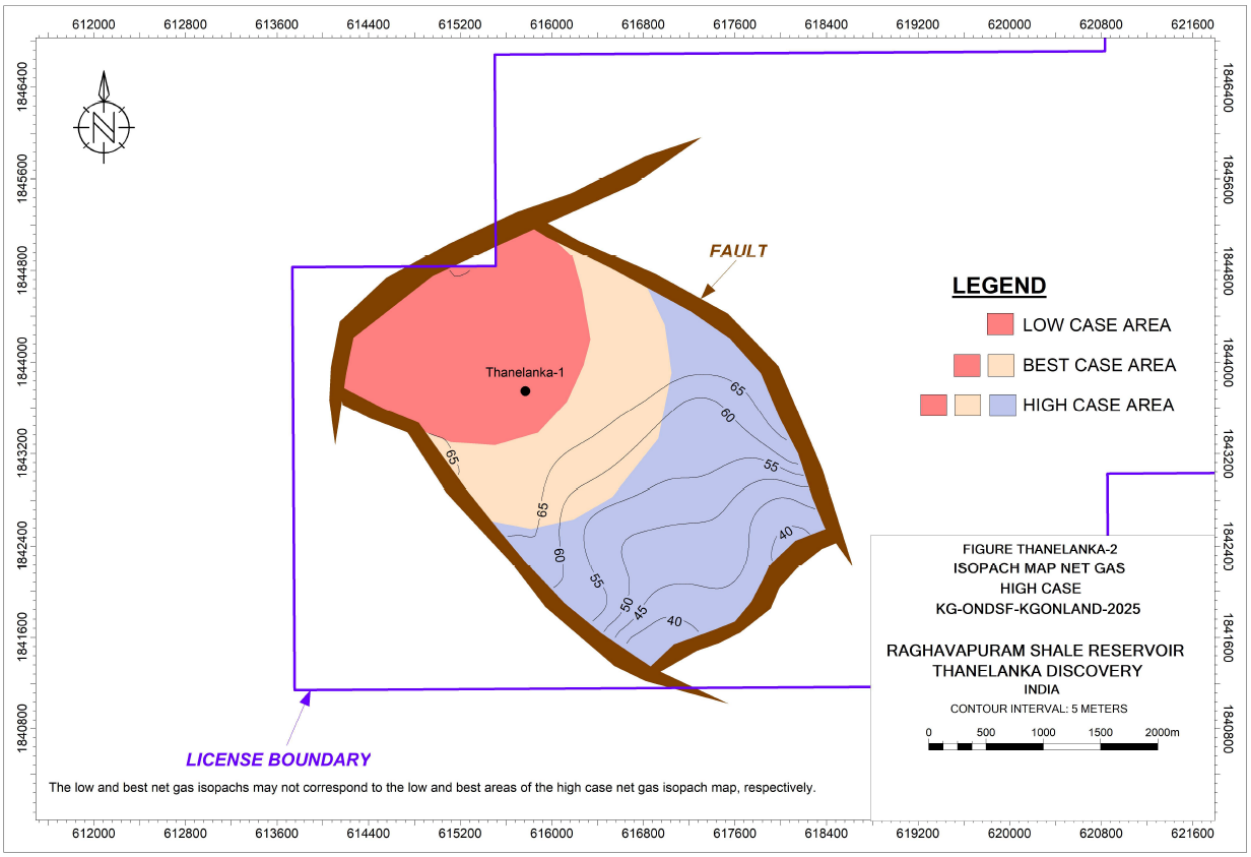

Loc.16
XL 10669
IL 2780


YEDURULANKA-1
Matsyapuri
Bhimanapalli Limestone
Parsaraopudi Sandstone
Palakollu Shale
Razole Sand
Kapavaram Sandstone
Chintalapalli Shale
Raghavapuram Shale
Gollapalli Sandstone
Basement
PSTM XL

5.6.7.2. Structural Maps

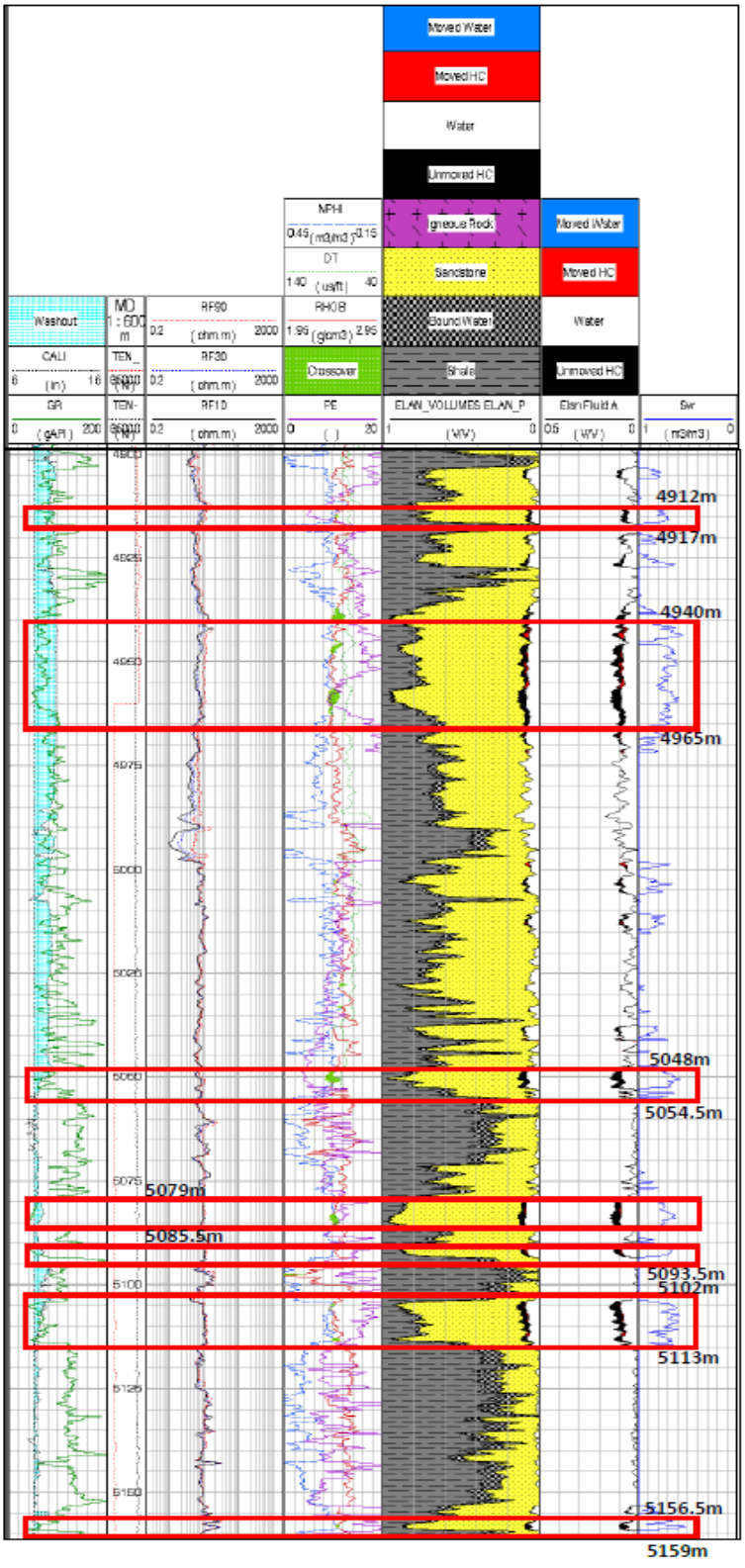


5.6.7.3. Isopach Maps

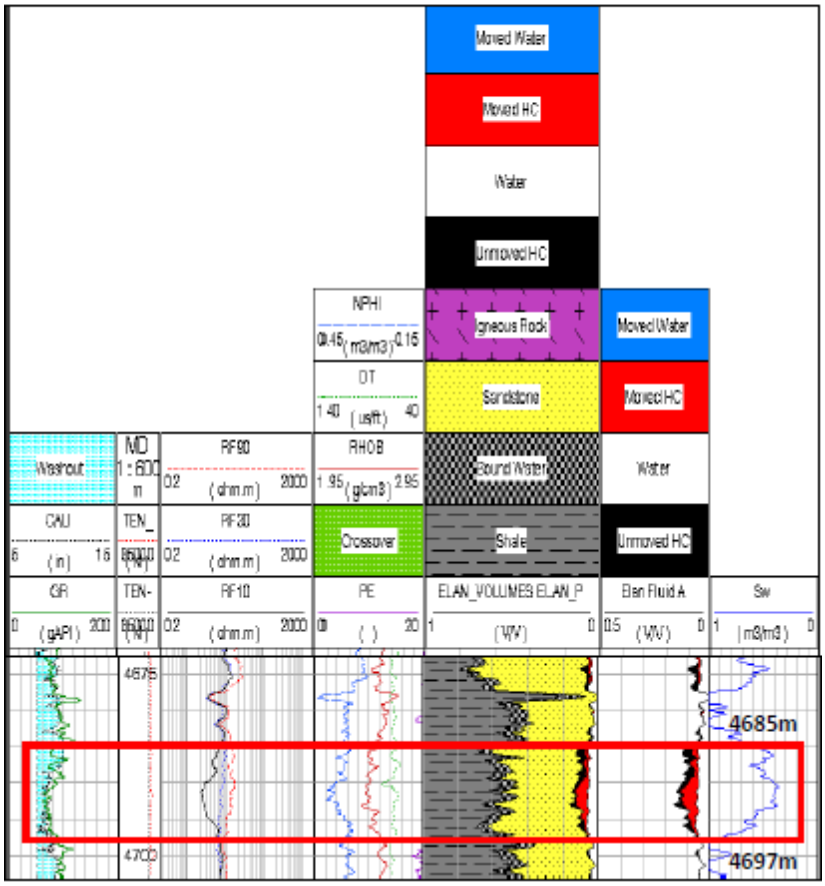


5.6.7.4. Log Motifs

LOG MOTIF OF OBJECT-I (4912-5159m)



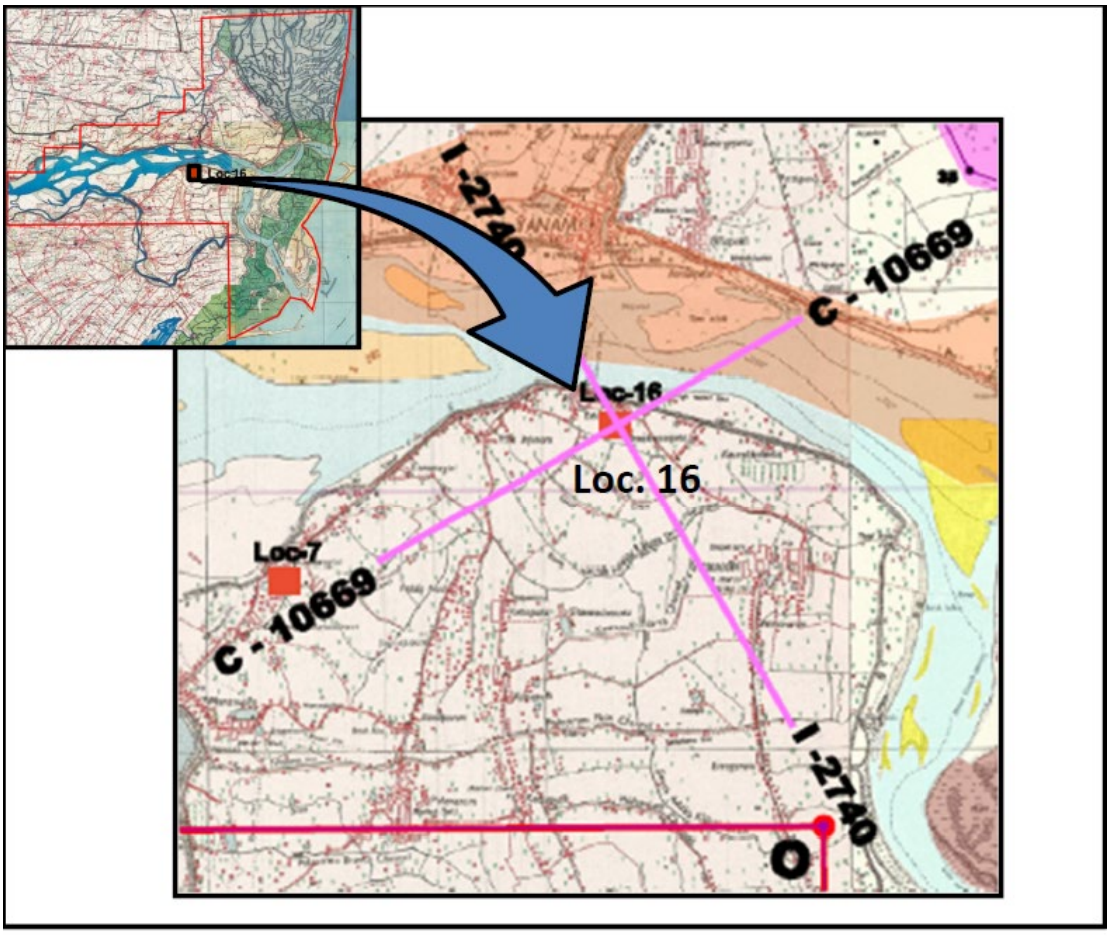
LOG MOTIF OF OBJECT-II (4685-4697m)



The operator data provided by DGH has been qualitatively validated and utilized by the third party.

5.7. YEDURULANKA-1 DISCOVERY AND FIELD DESCRIPTION

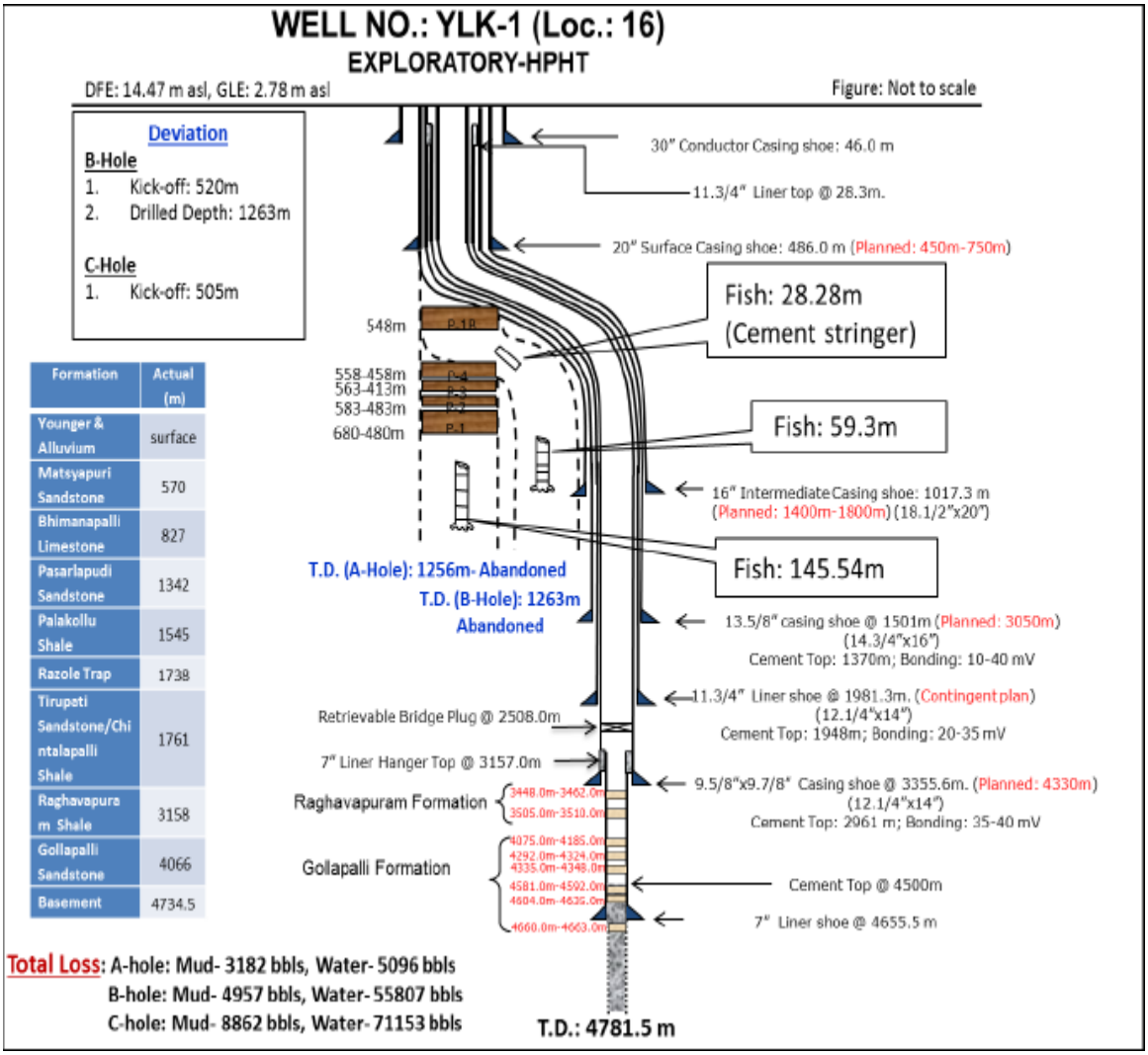
The exploratory HPHT well Yedurulanka-1(Loc.16) lies in the bank of Gowthami-Godavari River, in the east central part of the KG-ONN- 2004/1 Block. The objective of this Location is to explore the deeper Gollapalli Formation of Early Cretaceous age in HPHT regime. This is a syn-rift prospect, and the location is aimed at probing the fault closure formed on the hanging wall side in the Syn-rift zone. Seismic interpretation indicated an elongated structure closed by dip against an E-NE side of Draksharama high. This HP-HT location is prognoses to drill up to 5300m. Gaseous hydrocarbons are expected from this prospect. Moreover, the Lower Eocene pinch-out prospect within the Pasarlapudi Formation is also envisaged at this location. The Pasarlapudi Formation forms one of the most significant Petroleum Systems within the Krishna-Godavari Basin, having been proven as hydrocarbon producer in a number of discoveries.



Location map YLK-1 (Loc.16)

5.7.1. Drilling and Well Completion

Key information regarding the drilled wells has been collated and presented herein. The adjoining figures, wherever shown, illustrate the well construction diagram and the litho-column information for key wells. Other well statics, such as kelly bushing reference depth, water depth, and drilled and logged depths (including well coordinates) are also provided.



5.7.2. Well Logging and Formation Evaluation

The well logs of all discovery wells as well as selected key wells in the contract area were reviewed. The logs recorded in various open-hole sections along with casedhole logs and information from conventional and other wireline formation test data are presented in this docket. The availability of key input reports, such as well completion reports (WCR) and formation evaluation reports (FER), was checked. Reservoir parameters of interesting zones and results of the tested zone(s) are included in this report. Log motifs of tested/interesting zones of key wells are also appended.

5.7.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	KB	Drilled depth
Both available	04.11.2016	14.47 m	4781.5 m MDRT

5.7.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

18.5	DLL-MSFL-SP-GR-CAL-IDT. (1030.21-484.6m) Remarks: BHT at 125.
	SDL-DSN-GR-CAL-WSTT (1015.82-484.2m) Remarks: BHT at 125.
14.75	MSFL-DLL-GR-IDT-SP-CAL. (1495.7-1017.3m) Remarks: BHT at 140.
	SDL-DSNT-GR-CAL-BSAT. (1491.5-1017.3m) Remarks: BHT at 145.
12.25	DLL-MSFL-GR-SP-CAL- BSAT-IDT (3359.0-1497.3m) Remarks: BHT@270. Hole Depth: 3360m Logger's Depth: 3362.0m
	SDLT-DSNT-GR-CAL (3159.6-1497.3m) Remarks: BHT at 275. Hole Depth: 3360m Logger's Depth: 3362.0m
14.75	CBL-VDL (1497.3-650m) Remarks: Cement Bonding: Moderate to Poor
11.75	CBL-VDL-GR-CCL (1935-1480m)
	CBL-VDL-GR-CCL (1981.3-1870m)
9.625	GPLT-Junk Basket (3179.4-2910m)
	CAST-V-GR-CCL-LCCH (3355.6-1900m) Remarks: Cement Bonding: Moderate to Poor
8.5	DLL-MSFL-SP-GR-CALI-IDT (4120-3356m) Remarks: BHT at 320. First run got held up at 3461.0m.
	HRCH-H4TG-SDNT-HACRT- CALI (4585.8-3355.5m) Remarks: BHT at 345.
	HWSTT-H4TG (4585.8-3355.5m)
	RDT-GR/HSFT (3456-3510, 4048-4432m) Remarks: BHT at 343.
	HACRt-HSDL-HDSN-HSP- HHRC (4660.2-4585.5m) Remarks: BHT at 372.
	HWST-HGR-HHRC (4660.2-4585m) Remarks: BHT at 372.
	VSP-HGR-HHRC (4200-200m)
	HSFT-HGR-HHRC (4131.5m) Remarks: Pad damage at 4131.5m
	SWC-GR-HHRC (HPHT) (4431-3448.5m) Remarks: Collected 23 samples
	XRMI-GTET (4389-4374, 3789-3355.5m) Remarks: BHT at 337.
	XRMI-GTET (Re run with Back-up tool) (4413.3-3789m)
7	HCBL-VDL-HCCL-HGR- HRCH (4655.5-3162m) Remarks: BHT at 380.
	HVSP-HGR-HRCH (4660-4200m)
5.875	HACRt-HWST-HGR-HSP- HRCH (4781.5-4655.5m) Remarks: BHT at 385.
	HSDL-HDSN-HGR-HSP- HRCH-CALI (4781.5-4655.5m)

5.7.3. Well Testing and Workover History

No production tests were performed in this well.

5.7.4. Reservoir Engineering Studies and Analysis

Key reservoir engineering datasets, wherever available, were collated and are presented under various data genres. In a comprehensive data presentation, the results from well tests, formation dynamics tests, reservoir pressure buildup studies, and pressure-volume-temperature (PVT) data/results are included.

5.7.4.1. Formation dynamics tests

RDT Pressure Test Summary 8½" HOLE

SL. NO	PROBE DEPTH (M)	STOP DEPTH (M)	HYDRO STATIC PRESSURE BEFORE (PSI)	FORMATION SHUT IN PRESSURE (PSI)	MOBILITY MD/CP	SAMPLE DETAILS	REMARKS
1	3456.0	3459.1	9425	6406			Dry Test
2	3460.5	3463.6	9436	8807			Good Test
3	3462.0	3465.1	9429	8798	2.9		Good Test
4	3462.6	3465.7	9372	8792	24.5		Good Build up stability
5	3463.0	3466.1	9436	8800	1.3		Good Test
6	3463.2	3466.3	9434	8801	1.3		Good Test
7	3464.1	3467.2	9435	8798	1.2		Good Test
8	3464.5	3467.6	9420	8798	18.2	Sample Collected	Good Build up stability
9	3464.6	3467.7	9372	8792	24.5		Good Build up stability
10	3464.6	3467.7	9398	8798	23.3		Good Build up stability
11	3466.0	3469.1	9439	8799			Good Test
12	3506.0	3509.1	9522	9426			Tight Test, still building
13	3506.5	3509.6	9524	9465			Tight Test, still building
14	3507.0	3510.1	9525	9490			Tight Test, still building
15	3508.0	3511.1	9509	9325			Tight Test, still building
16	3508.5	3511.6	9536	8976			Tight Test, still building
17	3508.5	3511.6	9531	9443			Tight Test, still building
18	3509.0	3512.1	9531	9388			Good Build up stability
19	3509.5	3512.6	9539	8371			Tight Test, still building
20	3509.7	3512.8	9514	9221			Tight Test, still building
21	3510.0	3513.1	9541	6632			Tight Test

22	4078.5	4081.6	10991	8351	Tight Test
23	4080.5	4083.6	10996	10463	Tight Test, still building
24	4081.5	4084.6	10994	10271	Tight Test, still building
25	4084.5	4087.6	11002	10978	Good Test
26	4089.5	4092.6	11052	10892	Tight Test, still building
27	4292.7	4295.8	11737	8441	Dry Test
28	4296.1	4299.2	11745	9150	Tight Test
29	4337.5	4340.6	11867	6881	Dry Test
30	4339.5	4342.6	11872	9156	Tight test, still building
31	4341.5	4344.6	11878	7259	Dry Test
32	4344.9	4348.0	11890	6797	Dry Test
33	4347.0	4350.1	11896	8461	Dry Test
34	4347.5	4350.6	11896	6567	Dry/Tight Test
35	4351.3	4354.4	11910	5608	Dry Test
36	4351.5	4354.6	11910	4948	Dry Test
37	4355.0	4358.1	11914	8556	Tight Test, still building
38	4358.5	4361.6	11931	6025	Tight Test
39	4373.6	4376.7	12015	12005	Tight Test, still building
40	4374.1	4377.2	12038	13087	Tight Test, still building
41	4423.0	4426.1	12157	4840	Dry Test

5.7.5. Geology and Reservoir Description

The geology of the area was comprehensively reviewed using correlations, sections, and maps. The well correlation, seismic sections, top structure, seismic attribute/amplitude, and net sand/pay maps were used to illustrate the magnitude and distribution of key reservoir properties in and around the discovered gas pools (accumulations). The local tectonic setting and geological section of the area, wherever available, are also provided. These maps/sections are sequentially shown field-wise and reservoir-unit-wise on figures, each of which is appropriately titled and illustrated in the following section.

5.7.5.1. Geological description

The Thanelanka-1 well, located in Block KG-ONN-2004/1 within the Krishna-Godavari Basin, is situated in the East Godavari sub-basin—one of the basin's primary structural lows formed by tectonic activity. This region is part of India's southeastern passive margin and lies on the present-day Godavari River delta. The well sits within a complex geological framework shaped by multiple rift events and passive margin subsidence phases since the Proterozoic. Basin development began with early rifting in the Pranhita-Godavari region and evolved through Jurassic-Cretaceous tectonism, with the Krishna-Godavari Basin becoming an active rift and then a passive margin as India drifted northwards.

The Thanelanka-1 location was selected due to its structural position within this evolved rift system, which includes syn-rift and post-rift sedimentary sequences that are known to host hydrocarbons. The area's geological history—marked by rifting, subsidence, sea floor spreading, and later deltaic sedimentation from Himalayan uplift—has contributed to the formation of thick, hydrocarbon-prone sedimentary layers. These include Cretaceous and Tertiary sequences, such as the Razole Volcanics from the Deccan event and basinward-thinning deltaic wedges formed during Neogene sediment influx. The well's setting within this mature passive margin basin offers favorable conditions for hydrocarbon entrapment and preservation.

5.7.6. Reservoir Properties and OHIP

Estimates of in-place volumes presented in this section have been prepared in accordance with the Petroleum Resources Management System (PRMS) approved in March 2007 and revised in June 2018 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, the Society of Petroleum Evaluation Engineers, the Society of Exploration Geophysicists, the Society of Petrophysicists and Well Log Analysts, and the European Association of Geoscientists & Engineers.

For the Upper Zone the volumetric method was used to estimate the original gas in place (OGIP) of certain fields evaluated herein. A review of selected geophysical data, in conjunction with well control and other relevant information, served as the basis for the structural interpretation of the fields. The geological interpretation provided by DGH was extensively reviewed and, where appropriate, adjusted.

For the Lower zone the volumetric method was used to estimate the original gas in place (OGIP) of certain fields evaluated herein. Structure maps were prepared using the available data. Time-structure maps were created from the interpreted seismic data. These time maps were converted to depth-structural geological maps using velocity data acquired in wells in the fields. The 3–D seismic data were interpreted to analyze faulting and geological structural trends.

Wireline electrical logs, radioactivity logs, wireline formation pressure tests, wireline fluid sample tests, and other data were acquired in wells drilled in the evaluated fields. When available, drill cuttings, hole cores, and sidewall cores were analyzed. These combined analyses of the well-log data were used to establish petrophysical properties. Estimates of OGIP were made using net pay isopach maps. These isopach maps were constructed using geological depth structure maps and petrophysical analyses of the well-log data.

Following is the summary of the average reservoir parameters and estimates of OGIP. Seismic sections, log motifs, structure and isopach maps are in the annex bound with this information docket.

RESERVOIR PARAMETERS and ORIGINAL GAS in PLACE
as of
JANUARY 1, 2025
for the
Yedurulanka-1 DISCOVERY
of
KG/ONDSF/KG ONLAND/2025 CONTRACT AREA

	Reservoir Lower Zone	Total
Low		
Area, acres	267	
Gas Formation Volume Factor, scf/rcf	0.0028	
Average Thickness, ft	30.9	
Average Porosity, %	3.00	
Average Water Saturation, %	55.08	
Original Gas in Place, 10^9 ft^3	1.73	**1.73**
Original Gas in Place, 10^6 eq ton	0.04	**0.04**
Best		
Area, acres	326	
Gas Formation Volume Factor, scf/rcf	0.0028	
Average Thickness, ft	55.9	
Average Porosity, %	4.00	
Average Water Saturation, %	50.00	
Original Gas in Place, 10^9 ft^3	5.68	**5.68**
Original Gas in Place, 10^6 eq ton	0.14	**0.14**
High		
Area, acres	405	
Gas Formation Volume Factor, scf/rcf	0.0028	
Average Thickness, ft	77.0	
Average Porosity, %	5.00	
Average Water Saturation, %	44.99	
Original Gas in Place, 10^9 ft^3	13.36	**13.36**
Original Gas in Place, 10^6 eq ton	0.34	**0.34**

Note: Conversion used 10^9 scf equal to 0.0.2519 10^6 eq tone.

Volumes estimated by a Third Party

The operator has not reported any in-place volumes.

RESERVOIR PARAMETERS and ORIGINAL GAS in PLACE
as of
JANUARY 1, 2025
for the
Yedurulanka-1 DISCOVERY
of
KG/ONDSF/KG ONLAND/2025 CONTRACT AREA

	Reservoir Upper Zone	Total
Low		
Area, acres	326	
Gas Formation Volume Factor, scf/rcf	0.0030	
Average Thickness, ft	21.3	
Average Porosity, %	5.00	
Average Water Saturation, %	54.91	
Original Gas in Place, $10^9 ft^3$	2.27	**2.27**
Original Gas in Place, 10^6 eq ton	0.06	**0.06**
Best		
Area, acres	571	
Gas Formation Volume Factor, scf/rcf	0.0030	
Average Thickness, ft	53.2	
Average Porosity, %	6.00	
Average Water Saturation, %	49.98	
Original Gas in Place, $10^9 ft^3$	13.24	**13.24**
Original Gas in Place, 10^6 eq ton	0.33	**0.33**
High		
Area, acres	1,048	
Gas Formation Volume Factor, scf/rcf	0.0030	
Average Thickness, ft	80.6	
Average Porosity, %	7.00	
Average Water Saturation, %	45.00	
Original Gas in Place, $10^9 ft^3$	47.22	**47.22**
Original Gas in Place, 10^6 eq ton	1.19	**1.19**

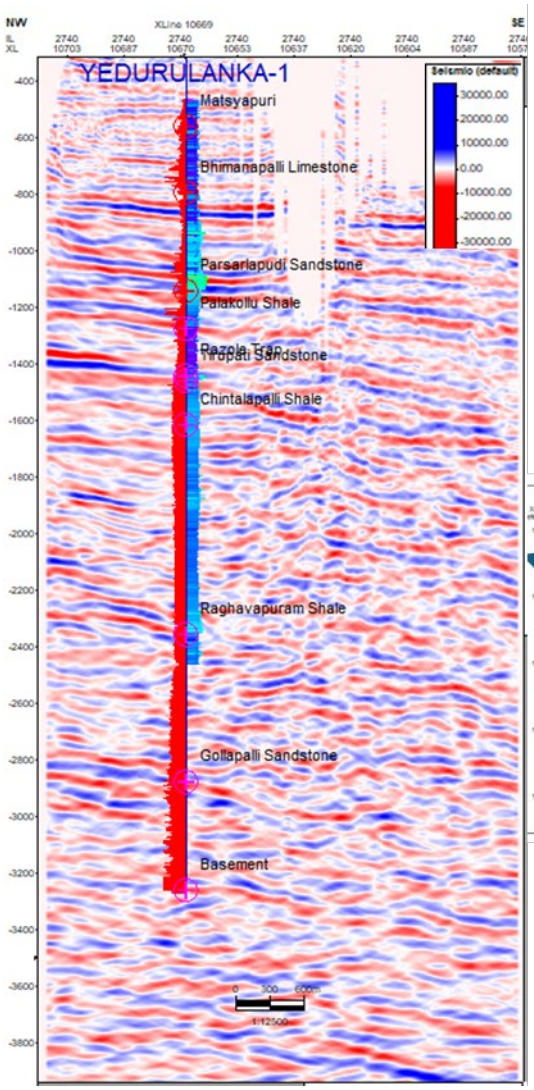
Note: Conversion used 10^9 scf equal to 0.0.2519 10^6 eq tone.

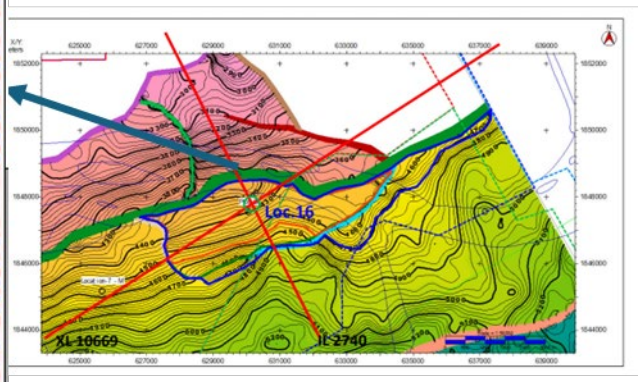
Volumes estimated by a Third Party

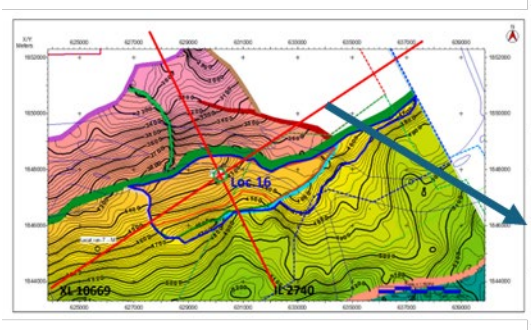
The operator has not reported any in-place volumes.

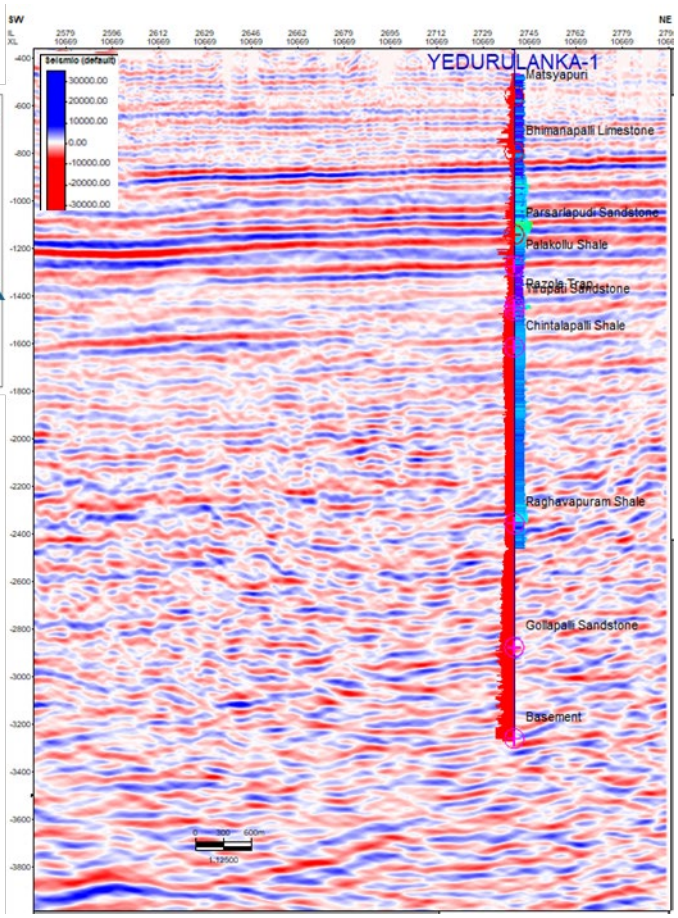
5.7.7. Annex

5.7.7.1. Seismic Sections

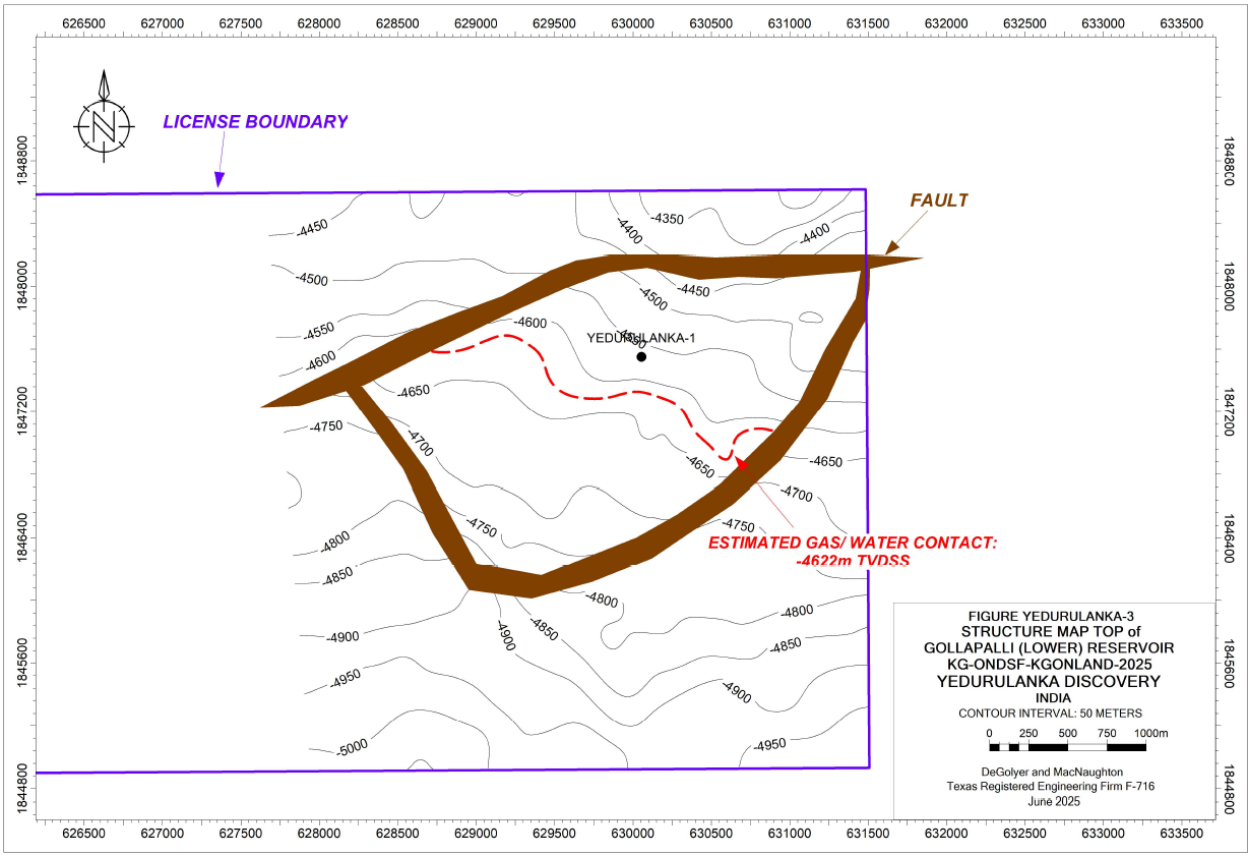


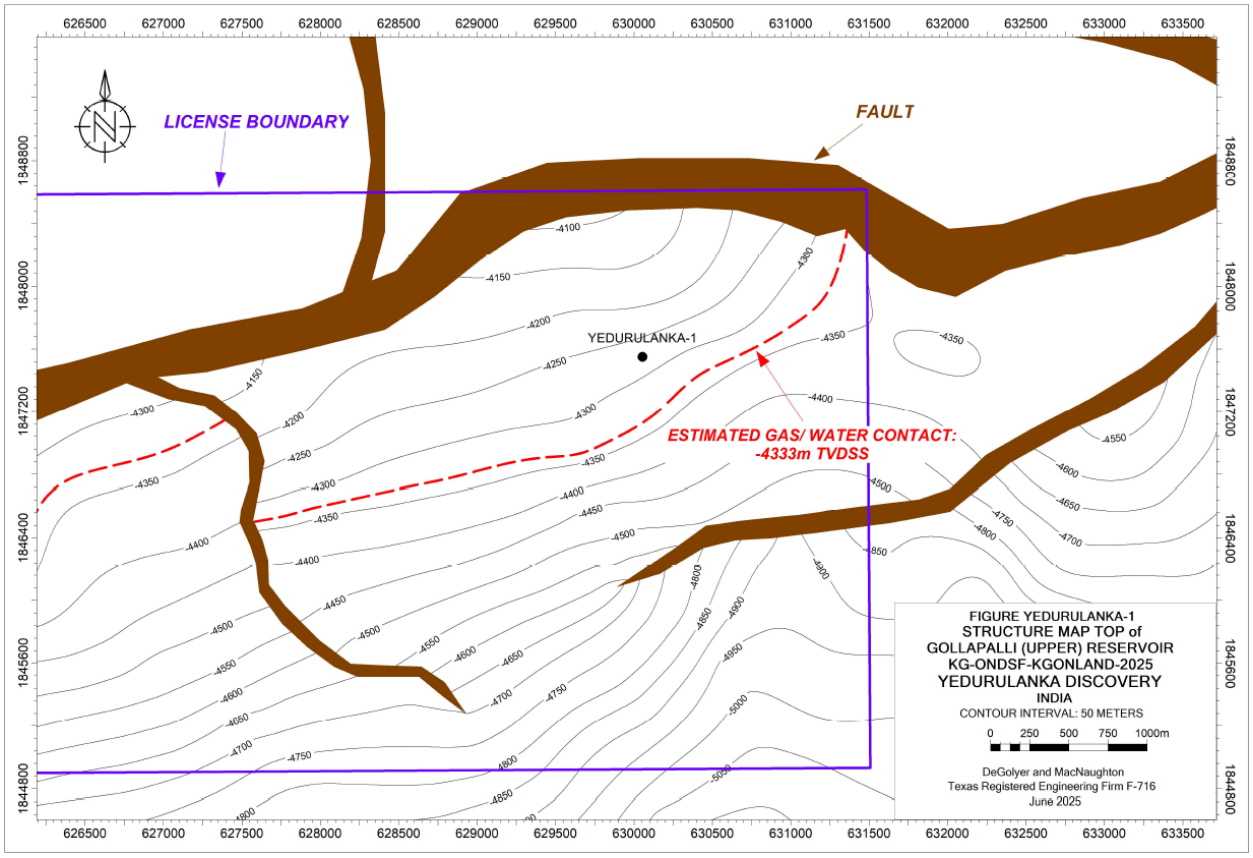



Loc 16
XL 10669
IL 2740

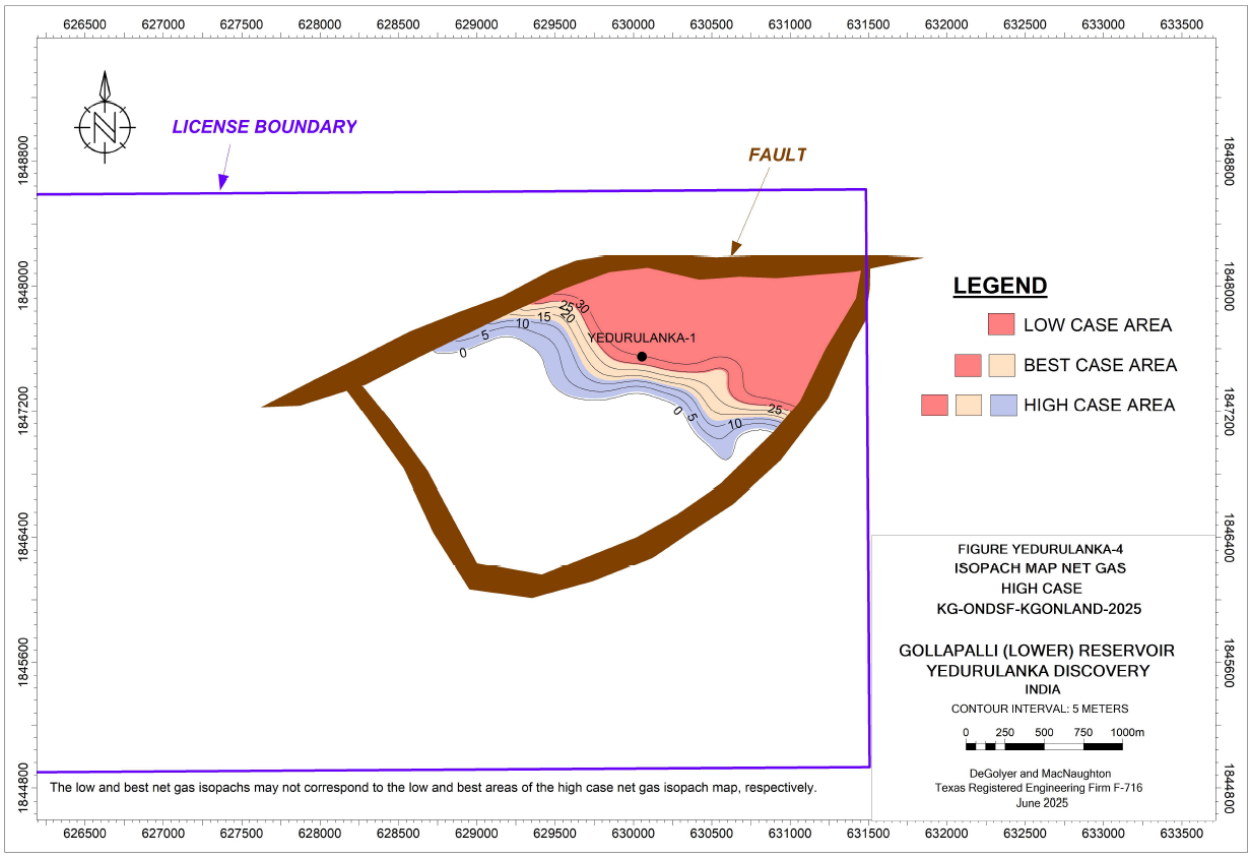

SW
NE
YEDURULANKA-1
Matsyapuri
Bhimanapalli Limestone
Parsarlapudi Sandstone
Palakollu Shale
Razole Trap
Tirupati Sandstone
Chintalapalli Shale
Raghavapuram Shale
Gollapalli Sandstone
Basement

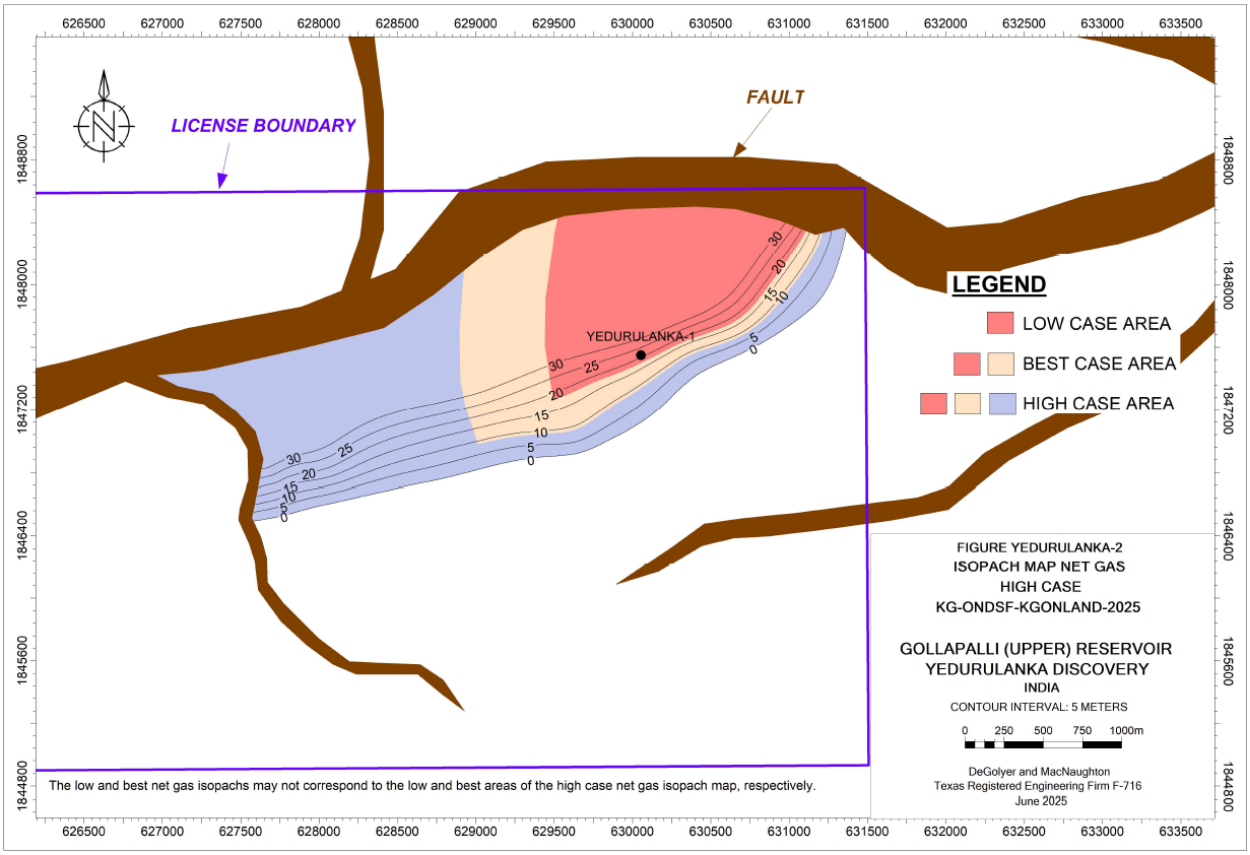
5.7.7.2. Structural Maps




LICENSE BOUNDARY
FAULT
YEDURULANKA-1
ESTIMATED GAS/ WATER CONTACT:
-4333m TVDSS
FIGURE YEDURULANKA-1
STRUCTURE MAP TOP of
GOLLAPALLI (UPPER) RESERVOIR
KG-ONDSF-KGONLAND-2025
YEDURULANKA DISCOVERY
INDIA
CONTOUR INTERVAL: 50 METERS
0 250 500 750 1000m
DeGolyer and MacNaughton
Texas Registered Engineering Firm F-716
June 2025

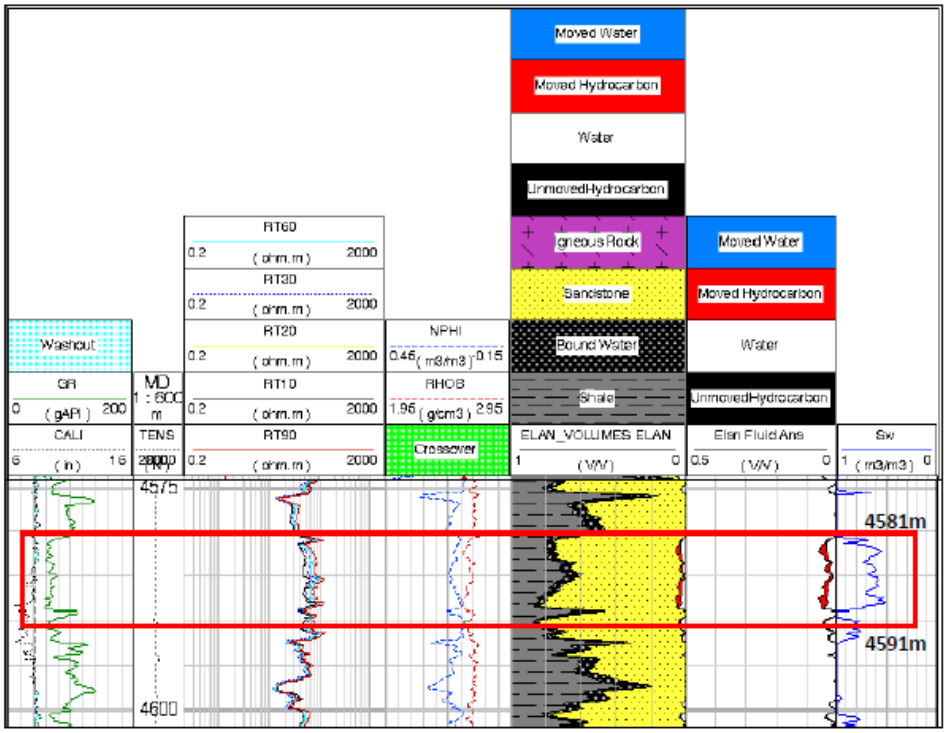
5.7.7.3. Isopach Maps



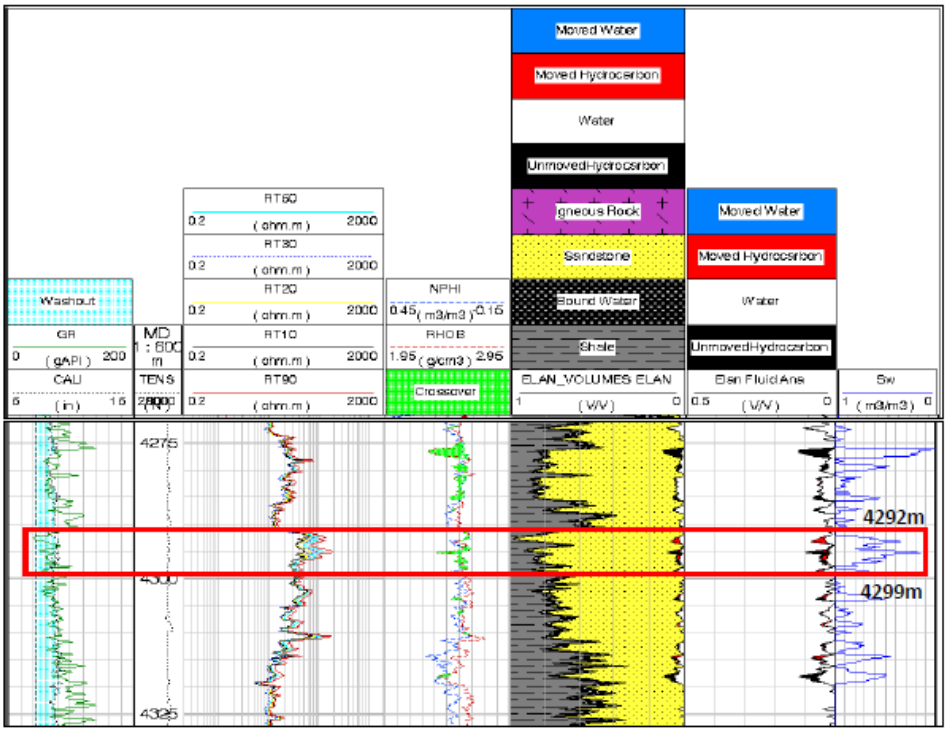

LICENSE BOUNDARY
FAULT
YEDURULANKA-1
LEGEND
LOW CASE AREA
BEST CASE AREA
HIGH CASE AREA
FIGURE YEDURULANKA-2
ISOPACH MAP NET GAS
HIGH CASE
KG-ONDSF-KGONLAND-2025
GOLLAPALLI (UPPER) RESERVOIR
YEDURULANKA DISCOVERY
INDIA
CONTOUR INTERVAL: 5 METERS
0 250 500 750 1000m
DeGolyer and MacNaughton
Texas Registered Engineering Firm F-716
June 2025
The low and best net gas isopachs may not correspond to the low and best areas of the high case net gas isopach map, respectively.
626500 627000 627500 628000 628500 629000 629500 630000 630500 631000 631500 632000 632500 633000 633500
1848800 1848000 1847200 1846400 1845600 1844800

5.7.7.4. Log Motifs

LOG MOTIF OF OBJECT-I (4581-4591m)



LOG MOTIF OF OBJECT-II (4292-4299m)



5.8. STATUS OF ADDITIONAL WELLS IN THE AREA

Well Bantumili-3

This well was drilled as the fourth exploratory well on the Bantumilli structure, specifically located on the northeastern flank to investigate the presence of the productive pay sand encountered in the earlier Bantumilli-2 well. The drilling reached a depth of 3038m., penetrating through the Quaternary, Tertiary, and Upper Cretaceous sedimentary sequences before terminating in the Archean Basement, which was encountered at 2951m. The stratigraphic correlation with nearby wells (Bantumilli-1, -2, and -4) was generally good. However, this well was found to be structurally higher than the others—both at the claystone marker and at the basement level. Crucially, the hydrocarbon-bearing basal sandstone that was successfully developed in Bantumilli-2 was absent in Well No. 3. Instead, three sand intervals were identified within the Late Cretaceous claystone sequence, showing indications of gas. These intervals, although gas-bearing, exhibited a fast-depleting nature and were therefore deemed non-commercial. Equivalent zones in adjacent wells were also predominantly shaly, making correlation and reservoir continuity difficult. Four different intervals were tested in the well. One test in the basement using open-hole DST showed no influx, indicating a lack of hydrocarbons. The other three zones tested in the Late Cretaceous sequence did contain gas but confirmed their low productivity and fast depletion. Ultimately, due to the absence of a viable reservoir and uneconomical results, the well was abandoned.

Well Bantumili-4

This was the third well on the Bantumilli structure, drilled to test the interval equivalent to the pay zone of Bantumilli-2. The well reached a depth of 3223 m., terminating in weathered basement rock, against a planned target of 3400 m. (with 100 m. expected in basement). It encountered 123 m. of weathered basement composed of Garnetiferous Biotite Schist. Located east of Bantumilli-2, the well is structurally 10 m. higher at the Lower Cretaceous shale top (met at 2845 m. in BNT#2) and 105 m. higher at the basement top compared to BNT#2. Lower Cretaceous sands that were present in BNT#2 between 3113–3167 m. had shaled out in BNT#4, indicating that sandstone or basal sandstone development above the basement is limited to the flanks of the Bantumilli high.

DST were conducted on both the top of the weathered basement (3100–3120 m.) and fractured basement intervals (3168–3173 m. and 3177–3179 m.), but these zones were found to be dry. Another DST was carried out in a Cretaceous sand interval between 2575–2578 m. using a cased hole, which resulted in 12.5 m. of water influx with a salinity of 19.86 g/l. Due to the absence of hydrocarbons and non-commercial findings, the well was declared dry and subsequently abandoned.

Well Bantumili South-2

The Bantumilli South-2 well was drilled as an exploratory test at a ‘B’ category location to evaluate sands within the Syn-rift sequence of the Nandigama Arenaceous Formation, with a planned vertical depth of 4600 m. Drilling successfully reached 4373 m but had to be terminated due to severe operational issues and lack of kick tolerance in the 8½" hole section. The well penetrated multiple formations including Nimmakuru Sandstone, Razole Trap, Tirupati Sandstone,

Raghavapuram Shale, Nandigama Argillaceous Formation, and the targeted Nandigama Arenaceous Formation (4166–4373+ m). Correlation with nearby Bantumilli South-1 suggests the current well is structurally about 6 m lower at the Nandigama top.

Based on log analysis, several sand/shaly sand layers were identified as gas-bearing or hydrocarbon-bearing, primarily within the Nandigama and Raghavapuram formations. Intervals between 4197–4355 m were interpreted as gas-bearing, with variable porosity and water saturation. Some sands between 4177–4194.5 m showed low porosity marginal hydrocarbon potential. Additional marginal sands were identified within Raghavapuram between 3372–3374 m, 3380–3382.5 m, and 3454–3459 m. Sands in four groups were selected for testing: Object-I (4321–4333 m), Object-II (4249–4268 m), Object-III (4199–4225 m), and Object-IV (3380–3457 m). The well will proceed with production testing of Object-I.

Well Bantumilli South-3

It was drilled as a 'B' category exploratory test to evaluate Syn-rift sands of the Nandigama Arenaceous unit, reaching a depth of 4602 m. The well penetrated several formations, including Nimmakuru Sandstone, Razole Trap, Tirupati, Raghavapuram, Nandigama Argillaceous, and finally the Nandigama Arenaceous Formation (4154–4602+ m). Correlation at the top of the Nandigama Formation showed the well was structurally down by 1 m and up by 15 m compared to Bantumilli South-1 and South-2, respectively. Both those wells were previously abandoned after limited gas results or technical complications. Standard open hole logs were acquired in 17½″ and 12¼″ sections. High-temperature logging was conducted in the 8½″ hole from 4093–4602 m, though data from 4366–4562 m was missed due to equipment hold-up. Cement bond logging was completed in 4000–4555.7 m. Several gas-bearing sands were identified in both the Raghavapuram and Nandigama formations. In particular, gas-bearing sands in the Raghavapuram (3450–3457 m) and numerous Nandigama intervals (4524–4591 m and others) were selected as objects for testing, grouped under Objects I to VII.

While Object-I was not tested due to its depth, Objects II and III were tested by TCP-DST using clear fluid. Object-II (4524.0–4528.0 m and 4531.5–4534.5 m) gave a gas flow of 60,000–65,000 scf/d with a water influx of 5.72 m³/day (salinity: 13,000–14,000 ppm NaCl) through a 16/64″ choke. Object-III (4542.0–4549.0 m and 4555.0–4563.0 m) produced gas at 50,000–55,000 scf/d and water at 1.43 m³/day with salinity ~10,000 ppm NaCl, also through a 16/64″ choke. These results were considered to evaluate in-place of the discovery.

Well Chintalapalli-8

Chintalapalli-8 was drilled as an exploratory well targeting a depth of 3900 m to evaluate sands within the Pasarlapudi Formation, Palakollu Shale, and Razole Formation, as per the 1990 REXB objective. Drilled to 3822 m, the well bottomed in the Razole Formation. Correlation with nearby wells (CTP-1 and CTP-6) shows that CTP-8 is structurally lower at all stratigraphic levels. However, it matches more closely, in terms of stratigraphy, with Sakhnietipalli-1, particularly from surface to the top of the Pasarlapudi Formation.

Despite this, all sands in the Pasarlapudi and Palakollu formations (equivalent to productive zones in CTP-1 and CTP-6) were found to be water-bearing in CTP-8 due to unfavorable entrapment

conditions. The fractured basalt section of the Razole Formation, which produced hydrocarbons in nearby wells, lacked fractures in CTP-8 and was also non-productive. As no interesting hydrocarbon bearing zones could be identified, the area is recommended for re-evaluation before further exploration in the western part of the Island block.

Well Gedellanka-1

The well Gedellanka-1(Loc.10) is the third HPHT well drilled by OIL in NELP-VI Block KG-ONN-2004/1 of KG Basin. The well was drilled vertically to a depth of 4758m and terminated within Basement. The well was spudded in as a vertical well on 22.10.2017 with NABORS RIG-503 (3000 HP) drilling outfit. Five stage casing policy was planned for drilling of this well.

The well has penetrated through 662m vertical thickness of Rajahmundry & younger Alluvium, 305m of Matsyapuri Sandstone Fm., 364m of Bhimanapalli Limestone Fm., 167m of Pasarlapudi Sandstone Fm., 311m of Palakollu Shale Fm., 65m of Razole Trap Fm., 135m of Tirupati Sandstone Fm., 1193m of Chintalapalli Shale Fm., 1115m of Raghavapuram Shale Fm., 414m of Gollapalli Sandstone Fm., and 27m of Archean Basement. One Conventional core was taken within Gollapalli Formation in the range 4329.0-4347.5m. Hydrocarbon shows were observed in the cores. Routine core analysis was carried out and observed average porosity in the range 5-8% and average permeability 0.183mD. This reveals that the sands within Gollapalli Formation are very tight. Further, gas shows and hydrocarbon shows in drill cuttings during drilling were observed. The Petrophysical interpretation results of logs indicate the presence of promising sands within Gollapalli Formation. Based on overall observations, one object in the range 4321.0-4328.0m. has been planned for testing and Hydro-fracturing. Presently, the well has been temporarily abandoned by placing two cement plugs in the intervals 3100-2912m & 500-414m. Production testing is planned to be carried out by deploying a workover outfit at a later date.

Well Lakshmipuram-1

Location LKAA, drilled as an exploration test well under the 31st REXB, targeted Cretaceous sands within a fault closure of approximately 12 square kilometers and a 40-millisecond amplitude, aiming for a depth of 4500 meters. The well reached 4289.5 meters, penetrating 1679 meters of Tertiary sediments, 91 meters of basaltic trap, and 2482 meters of Cretaceous formations, including Tirupati Sandstone, Raghavapuram Shale, and Kanukollu Sandstone, before encountering 37 meters of weathered Archean Basement. Structurally, the well was found to be lower than nearby wells such as CPK#1. Due to total mud loss, about 31% of the well (between 1674 and 3000 meters) yielded minimal geological data, and open-hole logs could not be recorded. Three pressure regimes were identified: hydrostatic up to 3300 meters, transitional to 4075 meters, and high pressure below that depth, with an overall temperature gradient of 2.88°C per 100 meters. Four zones within the Raghavapuram Shale were tested, all showing feeble gas at zero psi, with Object IV also producing oil emulsion. No formation water was observed. However, testing was hindered by poor cementation, an active annulus, and casing limitations. Despite these challenges, the well provided valuable exploratory insights, particularly suggesting potential wedge-outs of the lower Raghavapuram Shale toward the Bantumilli High, warranting further investigation.

Well Padatadaka-1

Drilled as part of the 47th REXB, was an exploratory test well in the "B" category targeting the Pasarlpudi and Tirupati Sandstone formations, with a planned depth of 2650 meters. The well successfully reached its target depth, penetrating 615 meters of Narasapur Clay, 1191 meters of Matsyapuri Sandstone, 68 meters of Bhimanapalli Limestone, 83 meters of Pasarlpudi Sandstone, 122 meters of Pallakollu Shale, 161 meters of Razole Formation, and over 400 meters of Chintalapalli Shale. Structurally, the well was higher than those in the Matsyapuri area but lower than Laxmipuram-1. The Tirupati Sandstone was not encountered due to a facies change. No significant hydrocarbon shows were observed, aside from minor fluorescence and mild cut, and all reservoir sands were water-bearing. As a result, the well was declared dry and abandoned without testing. The stratigraphy suggests a west-northwest rise, and the main fault between PT-1 and LK-1 does not appear to trap hydrocarbons, undermining the expected trapping mechanism. The hypothesized HST-TST model could not be confirmed, and the limited success of similar wells in the sub-basin highlights the need for a comprehensive re-evaluation of integrated data and failure analysis to reduce exploration risk.

Well Vanadurru-1

Located on the southeastern flank of the Kaza-Kaikalur ridge, this well was drilled to a depth of 3138 meters without reaching the basement. The well encountered approximately 950 meters of additional sediments not present on the crest of the Kaza-Kaikalur horst, including a basal 180-meter-thick conglomerate overlain by predominantly clay with minor sand beds. Microfaunal analysis of cuttings around 2600 meters indicated a Cenomanian age, a first for this part of the basin. At around 2895 meters, the presence of both deep-water (radiolarians and planktonic foraminifera) and shallow-water (carbonaceous streaks and glauconitic pellets) indicators suggested a steeply sloping sea floor that prevented carbonate accumulation. Four sandy intervals between 2905 and 2080 meters were tested, all yielding saline water (ranging from 27 to 16 grams per liter) and minor gas in Object III. The well was ultimately declared dry and abandoned.

6. DATA PACKAGE INFORMATION

This information docket for the contract area, titled KG/ONDSF/KG ONLAND/2025, is available with a Data Package, which includes seismic data, well data and well completion and other reports. Given below is the detail of datasets that are available in the Data Package.

6.1. Well, Seismic Data and Reports availability

There are a total of 14 wells available near the discoveries as shown in the table below.

Well Name	Latitude	Longitude	Easting	Northing	CRS
CHINTALAPALLI-1	16°27'20.8058"N	81°49'37.4228"E	588287.86	1819532.75	WGS 84, UTM44
CHINTALAPALLI-8	16°24'36.7178"N	81°46'35.1037"E	582900.7	1814468.91	WGS 84, UTM44
MEDAPADU-1	16°30'41.8190"N	81°46'3.6322"E	581924.63	1825684.88	WGS 84, UTM44
GEDELLANKA-1	16°40'52.5400"N	82°06'58.0000"E	619007.8	1844627.85	WGS 84, UTM44
THANELANKA-1	16°40'24.4898"N	82°05'8.4998"E	615768.91	1843747.9	WGS 84, UTM44
YEDURULANKA-1	16°42'25.4999"N	82°13'11.5000"E	630054.24	1847549.64	WGS 84, UTM44
BANTUMILLI-2	16°23'43.8151"N	81°20'32.3570"E	536552.77	1812715.48	WGS 84, UTM44
BANTUMILLI-3	16°25'31.7975"N	81°22'37.1564"E	540248.31	1816040.12	WGS 84, UTM44
BANTUMILLI-4	16°23'49.8217"N	81°21'32.0526"E	538323.09	1812903.11	WGS 84, UTM44
LAKSHMIPURAM-1	16°22'59.8001"N	81°23'39.1999"E	542097.39	1811373.04	WGS 84, UTM44
BANTUMILLI-SOUTH-1	16°25'11.0100"N	81°30'2.0099"E	553442.86	1815429.92	WGS 84, UTM44
BANTUMILLI-SOUTH-2	16°25'11.8301"N	81°30'2.8901"E	553468.91	1815455.18	WGS 84, UTM44
BANTUMILLI-SOUTH-3	16°25'15.1399"N	81°29'57.8602"E	553319.48	1815556.52	WGS 84, UTM44
PADATADAKA-1	16°22'7.0000"N	81°27'40.7401"E	549265.94	1809765.68	WGS 84, UTM44
VANADURRU-1	16°25'30.2556"N	81°11'50.8769"E	521081.97	1815965.57	WGS 84, UTM44
VANADURRU-SOUTH-1	16°24'25.0096"N	81°12'17.0528"E	521860.28	1813961.49	WGS 84, UTM44
VANADURRU-SOUTH-1	16°24'25.0096"N	81°12'17.0528"E	521860.28	1813961.49	WGS 84, UTM44

Seismic 2D Data:

Line segment name	Processing type	FSP/CDP	LSP/CDP	Length (Km)	CRS
AP48-24	RAW_STACK	1	529	4.4787	WGS84 UTM 44N
AP48-22	RAW_STACK	1	582	2.6604	WGS84 UTM 44N
AP48-13	RAW_STACK	1	216	5.4111	WGS84 UTM 44N
AP48-09	RAW_STACK	1	276	6.1544	WGS84 UTM 44N
AP48-07	RAW_STACK	1	867	1.0581	WGS84 UTM 44N
AT-38	RAW_STACK	100	2090	9.7398	WGS84 UTM 44N
AP104-27	RAW_STACK	103	876	2.1857	WGS84 UTM 44N
AP119-21	RAW_STACK	1	1090	3.1635	WGS84 UTM 44N
AP119-19	RAW_STACK	97	1089	5.2822	WGS84 UTM 44N
AP119-18	RAW_STACK	97	1227	1.2167	WGS84 UTM 44N
AP119-16	RAW_STACK	105	991	2.256	WGS84 UTM 44N
AP119-13	RAW_STACK	99	835	6.3798	WGS84 UTM 44N
AP119-12	RAW_STACK	97	1086	3.7492	WGS84 UTM 44N
AP119-11	RAW_STACK	97	975	9.8834	WGS84 UTM 44N
AP119-10	RAW_STACK	97	1402	1.8854	WGS84 UTM 44N

AP119-10	RAW_STACK	97	1402	6.1002	WGS84 UTM 44N
AP119-09	RAW_STACK	377	1298	10.8323	WGS84 UTM 44N
AP119-08	RAW_STACK	97	1044	11.4081	WGS84 UTM 44N
AP119-07	RAW_STACK	101	788	9.4165	WGS84 UTM 44N
AP119-06	RAW_STACK	97	1209	12.6747	WGS84 UTM 44N
AP119-05	RAW_STACK	333	1218	8.6374	WGS84 UTM 44N
AP119-04	RAW_STACK	98	985	8.6104	WGS84 UTM 44N
AP119-01	RAW_STACK	1008	1624	4.2796	WGS84 UTM 44N
AP-76-20	FINAL STACK	2	1401	5.2253	WGS84 UTM 44N
AP49-28	FINAL_MIGRATION	1000	3782	3.82	WGS84 UTM 44N
AP-77-11	FINAL STACK	1	1660	2.3626	WGS84 UTM 44N
AP-77-09	FINAL STACK	1	1608	3.863	WGS84 UTM 44N
AP-77-03	FINAL STACK	1	2076	6.3412	WGS84 UTM 44N
AP-77-01	FINAL STACK	1	1846	7.6657	WGS84 UTM 44N
AP92-25	FINAL_MIGRATION	180	1847	1.7323	WGS84 UTM 44N
AP58-67	FINAL_STACK	3	620	3.2366	WGS84 UTM 44N

AP58-61	FINAL_STACK	14	1227	2.8925	WGS84 UTM 44N
AP58-53	FINAL_STACK	14	748	3.1004	WGS84 UTM 44N
AP58-51	FINAL_STACK	15	562	2.7454	WGS84 UTM 44N
AP58-49	FINAL_STACK	14	574	2.3414	WGS84 UTM 44N
AP58-47	FINAL_STACK	14	546	2.0988	WGS84 UTM 44N
AP58-45	FINAL_STACK	14	740	2.2122	WGS84 UTM 44N
AP58-43	FINAL_STACK	16	568	2.4398	WGS84 UTM 44N
AP58-26	FINAL_STACK	1	833	3.2741	WGS84 UTM 44N
AP58-73	FINAL_MIGRATION	1	517	3.2481	WGS84 UTM 44N
AP58-71	FINAL_MIGRATION	1	548	2.8246	WGS84 UTM 44N
AP58-55	FINAL_MIGRATION	1	544	3.1295	WGS84 UTM 44N
AP58-14	FINAL_MIGRATION	1	1338	1.56	WGS84 UTM 44N
AP58-14	FINAL_MIGRATION	1	1338	1.6538	WGS84 UTM 44N
AP58-06	FINAL_MIGRATION	1	828	4.6219	WGS84 UTM 44N
AP128-20A	RAW_MIGRATION_STACK	65	1985	1.9648	WGS84 UTM 44N
AP128-20A	RAW_MIGRATION_STACK	65	1985	2.4395	WGS84 UTM 44N

AP128-18	RAW_MIGRATION_STACK	65	7442	5.2054	WGS84 UTM 44N
AP128-16A	RAW_MIGRATION_STACK	53	3189	6.063	WGS84 UTM 44N
AP128-13	RAW_MIGRATION_STACK	73	4519	2.457	WGS84 UTM 44N
AP128-11	RAW_MIGRATION_STACK	65	4498	2.2461	WGS84 UTM 44N
AP128-09	RAW_MIGRATION_STACK	235	4308	1.584	WGS84 UTM 44N
AP128-07	RAW_MIGRATION_STACK	11	4601	2.0098	WGS84 UTM 44N
AP128-05	RAW_MIGRATION_STACK	1	4606	2.0569	WGS84 UTM 44N
AP128-03	RAW_MIGRATION_STACK	1	4614	2.4619	WGS84 UTM 44N
AP128-01	RAW_MIGRATION_STACK	15	4657	2.867	WGS84 UTM 44N
AP107-44	RAW_STACK	1	1396	1.7865	WGS84 UTM 44N
AP107-30	RAW_STACK	1	1100	4.7464	WGS84 UTM 44N
AP107-28	RAW_STACK	1	812	7.2131	WGS84 UTM 44N
AP49-43	FINAL_MIGRATION	1	1164	1.8568	WGS84 UTM 44N
AP49-41	FINAL_MIGRATION	1	571	2.8998	WGS84 UTM 44N
AP49-39	FINAL_MIGRATION	1	641	3.4183	WGS84 UTM 44N
AP49-37	FINAL_MIGRATION	1	657	2.1098	WGS84 UTM 44N

AP49-35	FINAL_MIGRATION	2	620	1.3788	WGS84 UTM 44N
AP49-10	FINAL_MIGRATION	2634	3696	2.1249	WGS84 UTM 44N
AP55-19	FINAL_MIGRATION	58	661	1.1657	WGS84 UTM 44N
AP113-16	RAW_MIGRATION_STACK	1	1213	4.4364	WGS84 UTM 44N
AP113-14	RAW_MIGRATION_STACK	1	1283	2.2813	WGS84 UTM 44N
AP42-09	RAW_STACK	1024	2039	1.9939	WGS84 UTM 44N
AP42-03	RAW_STACK	1024	1267	2.4812	WGS84 UTM 44N
AP116-23A	RAW_STACK	103	763	2.0386	WGS84 UTM 44N
AP87-08	FINAL STACK	48	1429	1.3525	WGS84 UTM 44N
AP87-06	FINAL STACK	69	3087	4.8423	WGS84 UTM 44N
AP87-04	FINAL STACK	77	3167	3.1705	WGS84 UTM 44N
AP87-01	FINAL STACK	109	1243	1.8817	WGS84 UTM 44N
AP49-28	FINAL_MIGRATION	1000	3782	2.356	WGS84 UTM 44N
AP49-26	FINAL_MIGRATION	1001	3655	3.085	WGS84 UTM 44N
AP55-31	FINAL_MIGRATION	354	687	2.1411	WGS84 UTM 44N
AP55-21	FINAL_MIGRATION	58	617	1.483	WGS84 UTM 44N

AP55-19	FINAL_MIGRATION	58	661	2.4639	WGS84 UTM 44N
AP55-16	FINAL_MIGRATION	8	567	3.3195	WGS84 UTM 44N
AP55-14	FINAL_MIGRATION	2	545	4.8294	WGS84 UTM 44N
AP122-17	FINAL_PSTM_STACK	360	2730	2.8379	WGS84 UTM 44N
AP122-21	FINAL_STACK	1	2512	6.4662	WGS84 UTM 44N
AP122-11	FINAL_STACK	1	2416	3.2176	WGS84 UTM 44N
AP122-09	FINAL_STACK	1	2411	4.989	WGS84 UTM 44N
AP122-07	FINAL_STACK	1	2392	6.1901	WGS84 UTM 44N
AP122-05	FINAL_STACK	18	2368	2.1941	WGS84 UTM 44N
AP122-04	FINAL_STACK	1	4296	6.1333	WGS84 UTM 44N
AP122-02	FINAL_STACK	1	2964	4.123	WGS84 UTM 44N
AP122-19	FINAL_MIGRATION	1	2488	6.1329	WGS84 UTM 44N
AP98-25	RAW_STACK	107	1343	1.6948	WGS84 UTM 44N
AP98-23	RAW_STACK	115	1325	2.4775	WGS84 UTM 44N
AP98-19	RAW_STACK	106	1079	1.1005	WGS84 UTM 44N
AP90-16	RAW_MIGRATION_STACK	116	2041	4.6355	WGS84 UTM 44N

AT-115	RAW_STACK	1	1745	6.6886	WGS84 UTM 44N
AP54-34	FINAL_PSTM_STACK	55	753	7.8739	WGS84 UTM 44N
AP54-33	FINAL_PSTM_STACK	55	775	3.8551	WGS84 UTM 44N
AP54-31	FINAL_PSTM_STACK	113	1286	4.7002	WGS84 UTM 44N
AP54-29	FINAL_PSTM_STACK	205	1180	5.7286	WGS84 UTM 44N
AP54-27A	FINAL_PSTM_STACK	253	1657	6.8555	WGS84 UTM 44N
AP54-26	FINAL_PSTM_STACK	75	1368	1.7632	WGS84 UTM 44N
AP54-26	FINAL_PSTM_STACK	75	1368	2.1311	WGS84 UTM 44N
AP54-20	FINAL_PSTM_STACK	41	724	8.5592	WGS84 UTM 44N
AP54-18	FINAL_PSTM_STACK	11	1996	5.6785	WGS84 UTM 44N
AP54-16	FINAL_PSTM_STACK	62	1211	6.7651	WGS84 UTM 44N
AP54-07A	FINAL_PSTM_STACK	113	1195	3.4401	WGS84 UTM 44N
AP54-05	FINAL_PSTM_STACK	150	1079	3.7052	WGS84 UTM 44N
AP104-29	RAW_STACK	103	796	5.5561	WGS84 UTM 44N
AP104-25	RAW_STACK	103	642	7.3001	WGS84 UTM 44N
AP104-23	RAW_STACK	103	686	5.8083	WGS84 UTM 44N

AP104-15	RAW_STACK	103	998	1.6141	WGS84 UTM 44N
AP104-13	RAW_STACK	103	1060	4.5292	WGS84 UTM 44N
AP104-11	RAW_STACK	103	1300	5.581	WGS84 UTM 44N
AP104-10	RAW_STACK	103	1378	5.4211	WGS84 UTM 44N
AP104-09	RAW_STACK	100	1091	4.5092	WGS84 UTM 44N
AP104-08A	RAW_STACK	3	894	4.1902	WGS84 UTM 44N
AP104-07	RAW_STACK	103	1020	2.9521	WGS84 UTM 44N
AP104-06	RAW_STACK	103	2385	8.6088	WGS84 UTM 44N
AP104-05	RAW_STACK	103	1022	0.7663	WGS84 UTM 44N
AP104-04	RAW_STACK	101	2112	8.5418	WGS84 UTM 44N
AP104-02	RAW_STACK	103	1913	1.007	WGS84 UTM 44N
AP104-02	RAW_STACK	103	1913	2.2415	WGS84 UTM 44N
AP99-14	RAW_MIGRATION_STACK	101	1040	3.7026	WGS84 UTM 44N
AP99-12	RAW_MIGRATION_STACK	101	1016	2.2435	WGS84 UTM 44N
AP70-15	FINAL STACK	1	1036	0.9874	WGS84 UTM 44N
AP81-15	FINAL STACK	103	1414	3.2528	WGS84 UTM 44N

AP81-14	FINAL STACK	103	1746	3.2579	WGS84 UTM 44N
AP81-12	FINAL STACK	103	2020	8.043	WGS84 UTM 44N
AP51-15	FINAL_MIGRATION	150	1287	0.9235	WGS84 UTM 44N
AP51-11	FINAL_MIGRATION	150	1299	5.4545	WGS84 UTM 44N
AP51-09	FINAL_MIGRATION	150	1309	2.8889	WGS84 UTM 44N
AP51-07	FINAL_MIGRATION	150	1249	2.0117	WGS84 UTM 44N
AP51-05	FINAL_MIGRATION	150	1279	4.6405	WGS84 UTM 44N
AP51-01	FINAL_MIGRATION	150	1249	1.4455	WGS84 UTM 44N
AP79-08R	FINAL_MIGRATION	49	2182	3.2766	WGS84 UTM 44N
N101	RAW_PSTM_STACK	2002	2937	5.9961	WGS84 UTM 44N
AT_27BRE	REPROCESSED_FINAL_PSTM_STACK	1	1060	17.0773	WGS84 UTM 44N
AP79_27REP	REPROCESSED_FINAL_PSTM_STACK	1	681	3.3172	WGS84 UTM 44N
AP55_08AREP	REPROCESSED_FINAL_PSTM_STACK	1	584	1.4852	WGS84 UTM 44N
AP55_08AREP	REPROCESSED_FINAL_PSTM_STACK	1	584	5.5112	WGS84 UTM 44N
AP45_05REP	REPROCESSED_FINAL_PSTM_STACK	1	347	2.3922	WGS84 UTM 44N
AP45_01REP	REPROCESSED_FINAL_PSTM_STACK	1	508	2.7011	WGS84 UTM 44N

AP100_13REP	REPROCESSED_FINAL_PSTM_STACK	1	184	1.2334	WGS84 UTM 44N
AP100_08REP	REPROCESSED_FINAL_PSTM_STACK	1	779	1.55	WGS84 UTM 44N
AP-79-23R	REPROCESSED_FINAL_PSTM_STACK	1	327	1.9398	WGS84 UTM 44N
AP-79-21-R	REPROCESSED_FINAL_PSTM_STACK	1	224	1.7756	WGS84 UTM 44N
AP-79-19R	REPROCESSED_FINAL_PSTM_STACK	1	235	3.529	WGS84 UTM 44N
AP-79-12	REPROCESSED_FINAL_PSTM_STACK	1	444	6.335	WGS84 UTM 44N
AP-79-10R	REPROCESSED_FINAL_PSTM_STACK	1	883	5.2028	WGS84 UTM 44N
AP-55-02	REPROCESSED_FINAL_PSTM_STACK	1	517	3.3779	WGS84 UTM 44N
AP-49-36R	REPROCESSED_FINAL_PSTM_STACK	1	433	7.5764	WGS84 UTM 44N
AP-45-08	REPROCESSED_FINAL_PSTM_STACK	1	355	12.4364	WGS84 UTM 44N
AP-45-07R	REPROCESSED_FINAL_PSTM_STACK	1	322	3.7806	WGS84 UTM 44N
AP-100-17R	REPROCESSED_FINAL_PSTM_STACK	1	216	2.5535	WGS84 UTM 44N
AP-100-04R	REPROCESSED_FINAL_PSTM_STACK	1	805	3.2562	WGS84 UTM 44N
AP-100-04R	REPROCESSED_FINAL_PSTM_STACK	1	805	7.1272	WGS84 UTM 44N
AP-100-02-R	REPROCESSED_FINAL_PSTM_STACK	1	464	6.9646	WGS84 UTM 44N
AP-100-01	REPROCESSED_FINAL_PSTM_STACK	1	421	3.9973	WGS84 UTM 44N

AP132-05	FINAL_MIGRATION	1259	2669	3.2119	WGS84 UTM 44N
AP132-03	FINAL_MIGRATION	2205	3823	2.3773	WGS84 UTM 44N
AP132-01	FINAL_MIGRATION	1157	3070	3.4866	WGS84 UTM 44N
AP86-09	FINAL_MIGRATION	130	2035	1.846	WGS84 UTM 44N
AP100-21	Raw Migration	1	907	1.8472	WGS84 UTM 44N
AP100-17	Raw Migration	13	893	3.2437	WGS84 UTM 44N
AP100-08	Raw Migration	111	1777	2.2618	WGS84 UTM 44N
AP100-07	Raw Migration	17	819	1.8135	WGS84 UTM 44N
AP100-06	Raw Migration	115	1795	3.7092	WGS84 UTM 44N
AP100-05	Raw Migration	13	767	2.3808	WGS84 UTM 44N
AP100-04	Raw Migration	108	1761	3.2211	WGS84 UTM 44N
AP100-04	Raw Migration	108	1761	7.5112	WGS84 UTM 44N
AP100-03	Raw Migration	18	713	3.3806	WGS84 UTM 44N
AP100-01	Raw Migration	14	434	3.0247	WGS84 UTM 44N
		Total		**699.19**	

Seismic 3D Data: KG/ONDSF/KG ONLAND/2025 contract area is covered with a PSTM seismic data set as shown below:

00001.MORI-ADIVIPALEM-AP131-PSTM_FINAL_PSTM_STACK_.sgy
3D bin centre corner points - all traces

3D bin centre corner points - all traces : 00001.MORI-ADIVIPALEM-AP131-PSTM_FINAL_PSTM_STACK_.sgy

Point	Inline	Crossline	Easting	Northing
1	428	310	579343.88	1818614.12
2	875	310	589421.12	1823445.50
3	875	574	592274.50	1817493.00
4	428	574	582197.25	1812662.62

00002.KAVI-ELAM-AP-106-109-124-129-130-FSTK_FINAL_PSTM_STACK_.sgy
3D bin centre corner points - all traces

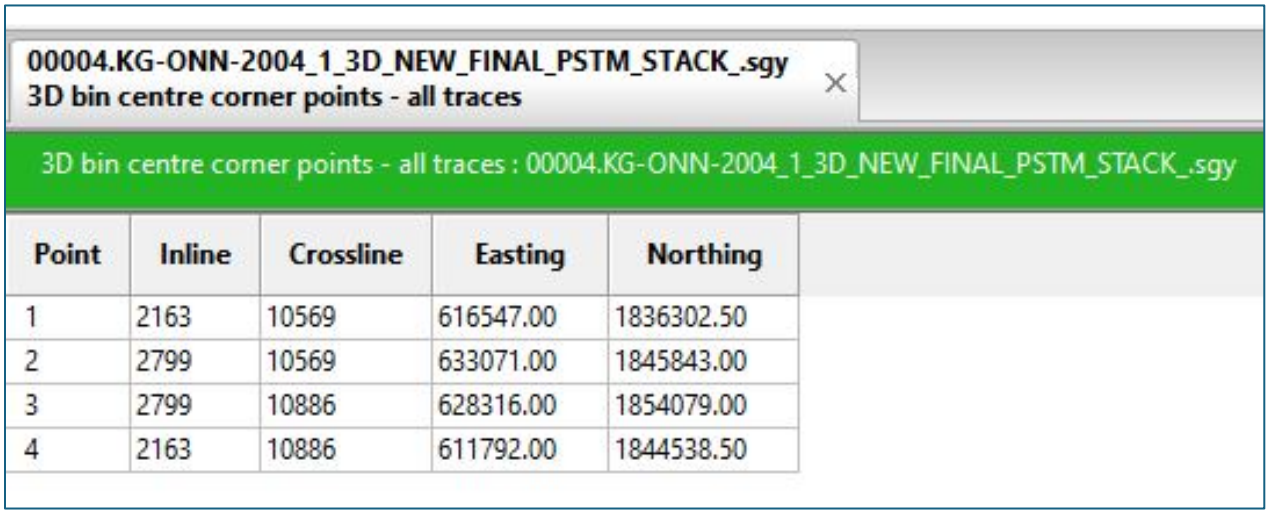
3D bin centre corner points - all traces : 00002.KAVI-ELAM-AP-106-109-124-129-130-FSTK_FINAL_PSTM_STACK_.sgy

Point	Inline	Crossline	Easting	Northing
1	1176	1426	577174.00	1825143.25
2	1503	1426	582953.00	1828206.12
3	1503	1588	584470.62	1825342.50
4	1176	1588	578691.56	1822280.00

00003.KAZA-NANDIGAMA_MERGE_FINAL_PSTM_STACK__NO_CORNER_SNAP.sgy
3D bin centre corner points - all traces

3D bin centre corner points - all traces : 00003.KAZA-NANDIGAMA_MERGE_FINAL_PSTM_STACK__NO_CORNER_SNAP.sgy

Point	Inline	Crossline	Easting	Northing
1	2457	1435	516090.84	1812832.88
2	4110	1435	541113.75	1791224.38
3	4110	2907	560355.75	1813504.38
4	2457	2907	535332.75	1835112.75



00004.KG-ONN-2004_1_3D_NEW_FINAL_PSTM_STACK_.sgy
3D bin centre corner points - all traces

3D bin centre corner points - all traces : 00004.KG-ONN-2004_1_3D_NEW_FINAL_PSTM_STACK_.sgy

Point	Inline	Crossline	Easting	Northing
1	2163	10569	616547.00	1836302.50
2	2799	10569	633071.00	1845843.00
3	2799	10886	628316.00	1854079.00
4	2163	10886	611792.00	1844538.50

6.2. Data Package Cost

The Data Package contains seismic (2D and/or 3D) and well data along with reports. The cost of the Data Package of this information docket (KG/ONDSF/KG-ONLAND/2025 contract area) comes to be USD 5,840. This cost is as per the current data policy of NDR at the time of writing this report and subject to changes if data rates or policy framework are revised.

7. CONTRACT AREA SUMMARY

Contract area name: KG/ONDSF/KG ONLAND/2025

Number of field(s)/discoveries: 7

Number of well(s): 17

Total area: 300.58 Sq. Km.

Seismic 2D data: 699.19 LKM.

Seismic 3D data: 293.38 Sq. Km.

Report(s) available: 49

Hydrocarbons In-place: 41.64 MMTOE (Best-Case Operator Estimate)

: 22.35 MMTOE (Best-Case Third-Party Estimate)

NIO map reference no: O-1

Geographical area: KG ONLAND

Data package cost: 5,840 USD

8. CONCLUSION

The Contract Area KG/ONDSF/KG ONLAND/2025 in KG onshore, covering an area of 300.58 sq km, comprises seven discoveries.

A quantum of 699.19 LKM of 2D seismic data and 293.38 SKM of 3D seismic data are available and a total number of 17 wells have been drilled inside the contract area.

This information docket has been compiled utilizing geoscientific and engineering datasets, including reports, analyses, and results available in the NDR. Such data serves as a valuable reference, but those data should not be solely relied upon without independent verification. This information is intended to serve as a supplementary document that provides additional context and insights to the bidder.

The seven discoveries are currently not licensed to any operator despite containing discovered hydrocarbon accumulations and present potential opportunities for further development and potential commercial production.

The seven discoveries are envisaged to hold a best-case Original Hydrocarbons In-Place of 41.64 MMTOE as per the previous Operator’s estimate and 22.35 MMTOE as per the estimates of Third Party.

Although this information docket highlights estimated hydrocarbon quantities, it primarily indicates the approximate extent and size of the hydrocarbon pools. In preparing these estimates, the Third Party employed the necessary assumptions, procedures, data, and methods considered appropriate given the timeframe available for evaluation. However, it is important to clarify that the Third Party relied on the available information and those data were accepted as represented.

Given these limitations, it is strongly recommended that all bidders conduct their own independent due diligence evaluations and independent assessments of the resource base in preparation for well-informed bidding decisions.

सत्यमेव जयते

पेट्रोलियम एवं
प्राकृतिक गैस मंत्रालय
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PETROLEUM AND NATURAL GAS

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