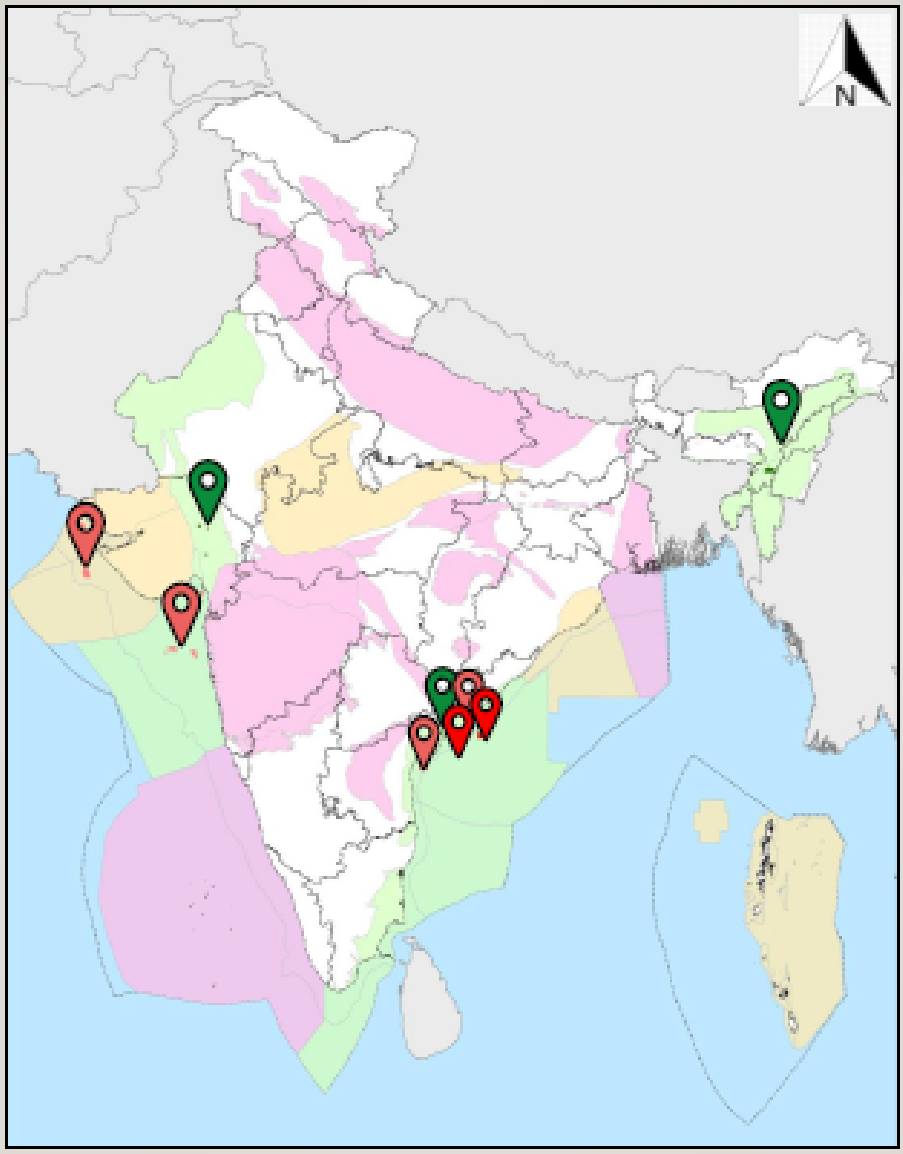
सत्यमेव जयते

पेट्रोलियम एवं
प्राकृतिक गैस मंत्रालय
MINISTRY OF
PETROLEUM AND NATURAL GAS

DGH

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

INFORMATION DOCKET



CONTRACT AREA

KG/OSDSF/G1/2025

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.

Table of Contents

1. INTRODUCTION 6
2. CONTRACT AREA DESCRIPTION 7
3. BASIN OVERVIEW 8
4. PHYSIOGRAPHY AND ACCESSABILITY OF THE AREA 12
5. G1 DISCOVERY AND FIELD DESCRIPTION 13
5.1. G1-N2 DISCOVERY AND FIELD DESCRIPTION 13
5.1.1. Drilling and Well Completion 14
5.1.2. Well Logging and Formation Evaluation 15
5.1.3. Well Testing and Workover History 16
5.1.4. Reservoir Engineering Studies and Analysis 17
5.1.5. Geology and Reservoir Description 20
5.1.6. Reservoir Properties and OHIP 21
5.1.7. Annex 23
5.2. G1-NE2 DISCOVERY AND FIELD DESCRIPTION 28
5.2.1. Drilling and Well Completion 28
5.2.2. Well Logging and Formation Evaluation 30
5.2.3. Well Testing and Workover History 34
5.2.4. Reservoir engineering studies and analysis 35
5.2.5. Geology and Reservoir Description 36
5.2.6. Reservoir Properties and OHIP 37
5.2.7. Annex 39
5.3. G1-NE1 DISCOVERY AND FIELD DESCRIPTION 44
5.3.1. Drilling and Well Completion 44
5.3.2. Well Logging and Formation Evaluation 46
5.3.3. Well Testing and Workover History 47
5.3.4. Reservoir engineering studies and analysis 47
5.3.5. Geology and Reservoir Description 47
5.3.6. Reservoir Properties and OHIP 48
5.3.7. Annex 50
5.4. GS-15-15 DISCOVERY AND FIELD DESCRIPTION 55
5.4.1. Drilling and Well Completion 56

5.4.2. Well Logging and Formation Evaluation 58
5.4.3. Well Testing and Workover History 58
5.4.4. Reservoir engineering studies and analysis....59
5.4.5. Geology and Reservoir Description 60
5.4.6. Reservoir Properties and OHIP....61
5.4.7. Annex 63
5.5. G1-15-14 DISCOVERY AND FIELD DESCRIPTION....68
5.5.1. Drilling and Well Completion 68
5.5.2. Well Logging and Formation Evaluation 69
5.5.3. Well Testing and Workover History 70
5.5.4. Reservoir engineering studies and analysis....71
5.5.5. Geology and Reservoir Description 75
5.5.6. Reservoir Properties and OHIP....76
5.5.7. Annex 79
5.6. GS-15-22 DISCOVERY AND FIELD DESCRIPTION 87
5.6.1. Drilling and Well Completion 87
5.6.2. Well Logging and Formation Evaluation 88
5.6.3. Well Testing and Workover History 89
5.6.4. Reservoir engineering studies and analysis....91
5.6.5. Geology and Reservoir Description 94
5.6.6. Reservoir Properties and OHIP....94
5.6.7. Annex 97
5.7. KGIII6-A1 DISCOVERY AND FIELD DESCRIPTION 104
5.7.1. Drilling and Well Completion 105
5.7.2. Well Logging and Formation Evaluation 106
5.7.3. Well Testing and Workover History 106
5.7.4. Reservoir Engineering Studies and Analysis 107
5.7.5. Geology and Reservoir Description 113
5.7.6. Reservoir Properties and OHIP....114
5.7.7. Annex 117
5.8. STATUS OF ADDITIONAL WELLS IN THE AREA....123
6. DATA PACKAGE INFORMATION 128
6.1. Well, Seismic Data and Reports availability....128

6.2. Data Package Cost 132
7. CONTRACT AREA SUMMARY 133
8. CONCLUSION 134

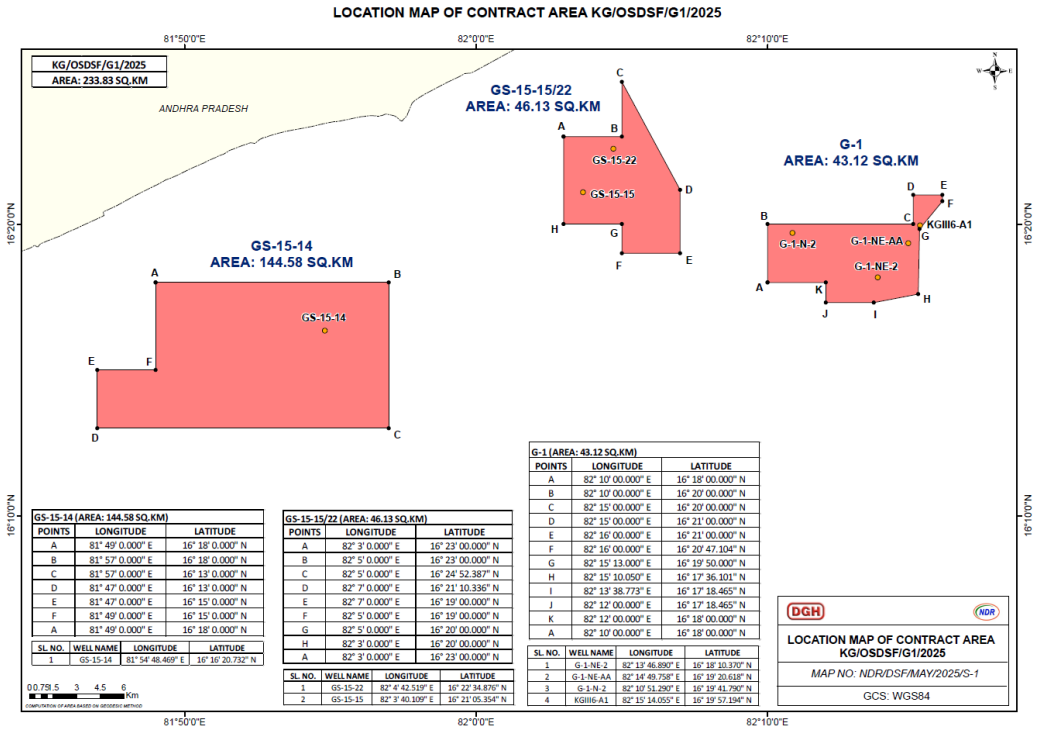
1. INTRODUCTION

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 Information Docket 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



GS-15-14 (AREA: 144.58 SQ.KM)

POINTS	LONGITUDE	LATITUDE
A	81° 49' 0.000" E	16° 18' 0.000" N
B	81° 57' 0.000" E	16° 18' 0.000" N
C	81° 57' 0.000" E	16° 13' 0.000" N
D	81° 47' 0.000" E	16° 13' 0.000" N
E	81° 47' 0.000" E	16° 15' 0.000" N
F	81° 49' 0.000" E	16° 15' 0.000" N
A	81° 49' 0.000" E	16° 18' 0.000" N

SL NO.	WELL NAME	LONGITUDE	LATITUDE
1	GS-15-14	81° 54' 48.469" E	16° 16' 20.732" N

GS-15-15/22 (AREA: 46.13 SQ.KM)

POINTS	LONGITUDE	LATITUDE
A	82° 3' 0.000" E	16° 23' 00.000" N
B	82° 5' 0.000" E	16° 23' 00.000" N
C	82° 5' 0.000" E	16° 24' 52.387" N
D	82° 7' 0.000" E	16° 21' 10.336" N
E	82° 7' 0.000" E	16° 19' 00.000" N
F	82° 5' 0.000" E	16° 19' 00.000" N
G	82° 5' 0.000" E	16° 20' 00.000" N
H	82° 3' 0.000" E	16° 20' 00.000" N
A	82° 3' 0.000" E	16° 23' 00.000" N

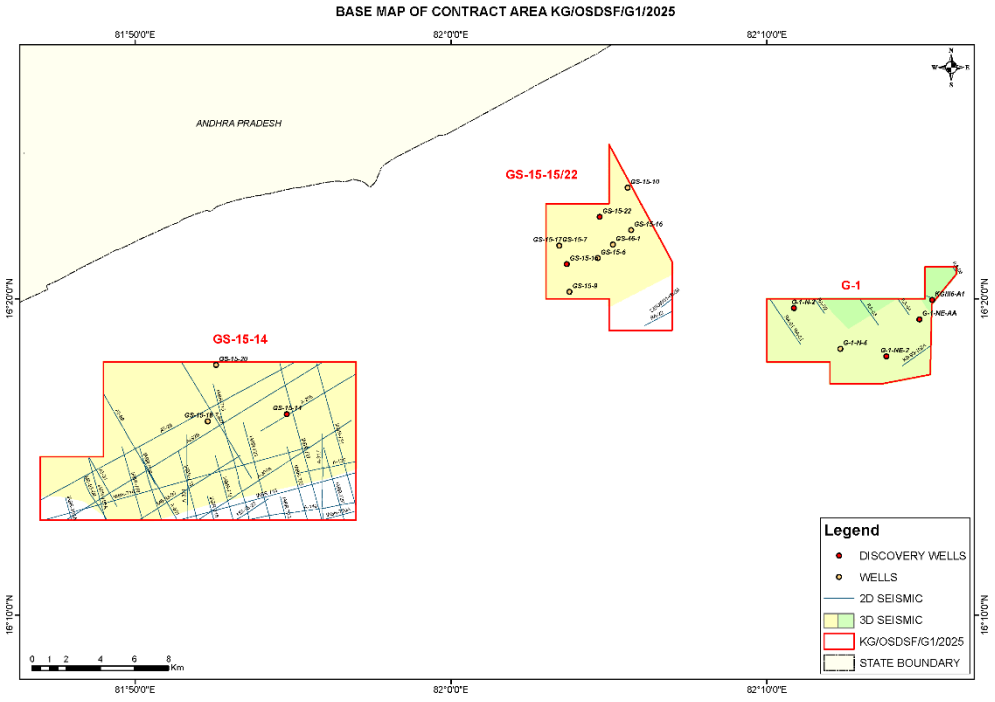
SL NO.	WELL NAME	LONGITUDE	LATITUDE
1	GS-15-22	82° 4' 42.519" E	16° 22' 34.876" N
2	GS-15-15	82° 3' 40.109" E	16° 21' 05.354" N

G-1 (AREA: 43.12 SQ.KM)

POINTS	LONGITUDE	LATITUDE
A	82° 10' 00.000" E	16° 18' 00.000" N
B	82° 10' 00.000" E	16° 20' 00.000" N
C	82° 15' 00.000" E	16° 20' 00.000" N
D	82° 15' 00.000" E	16° 21' 00.000" N
E	82° 16' 00.000" E	16° 21' 00.000" N
F	82° 16' 00.000" E	16° 20' 47.104" N
G	82° 15' 13.000" E	16° 19' 50.000" N
H	82° 15' 10.050" E	16° 17' 36.101" N
I	82° 13' 38.773" E	16° 17' 18.465" N
J	82° 12' 00.000" E	16° 17' 18.465" N
K	82° 12' 00.000" E	16° 18' 00.000" N
A	82° 10' 00.000" E	16° 18' 00.000" N

SL NO.	WELL NAME	LONGITUDE	LATITUDE
1	G-1-NE-2	82° 13' 46.890" E	16° 18' 10.370" N
2	G-1-NE-AA	82° 14' 49.758" E	16° 19' 20.618" N
3	G-1-N-2	82° 10' 51.290" E	16° 19' 41.790" N
4	KGIII6-A1	82° 15' 14.055" E	16° 19' 57.194" N

The area has information of 210.40 line km of 2D seismic data and 204.81 sq km of 3D seismic data. There are 19 wells in the contract area. The following figure(s) show(s) the coverage of available seismic 2D and 3D data along with wells drilled across field(s) and/or cluster(s).



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:

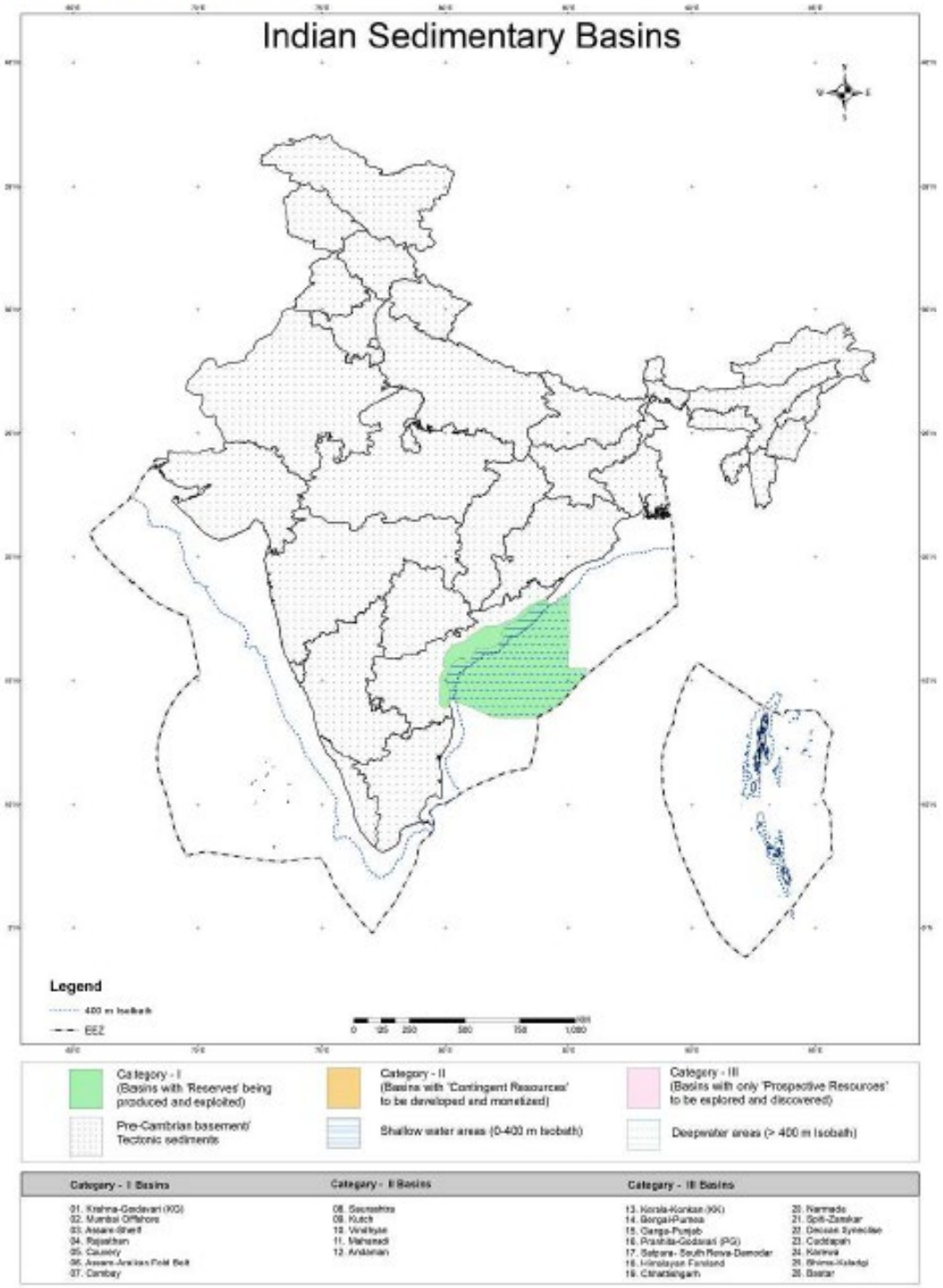


Fig.: Generalized stratigraphy of the basin:

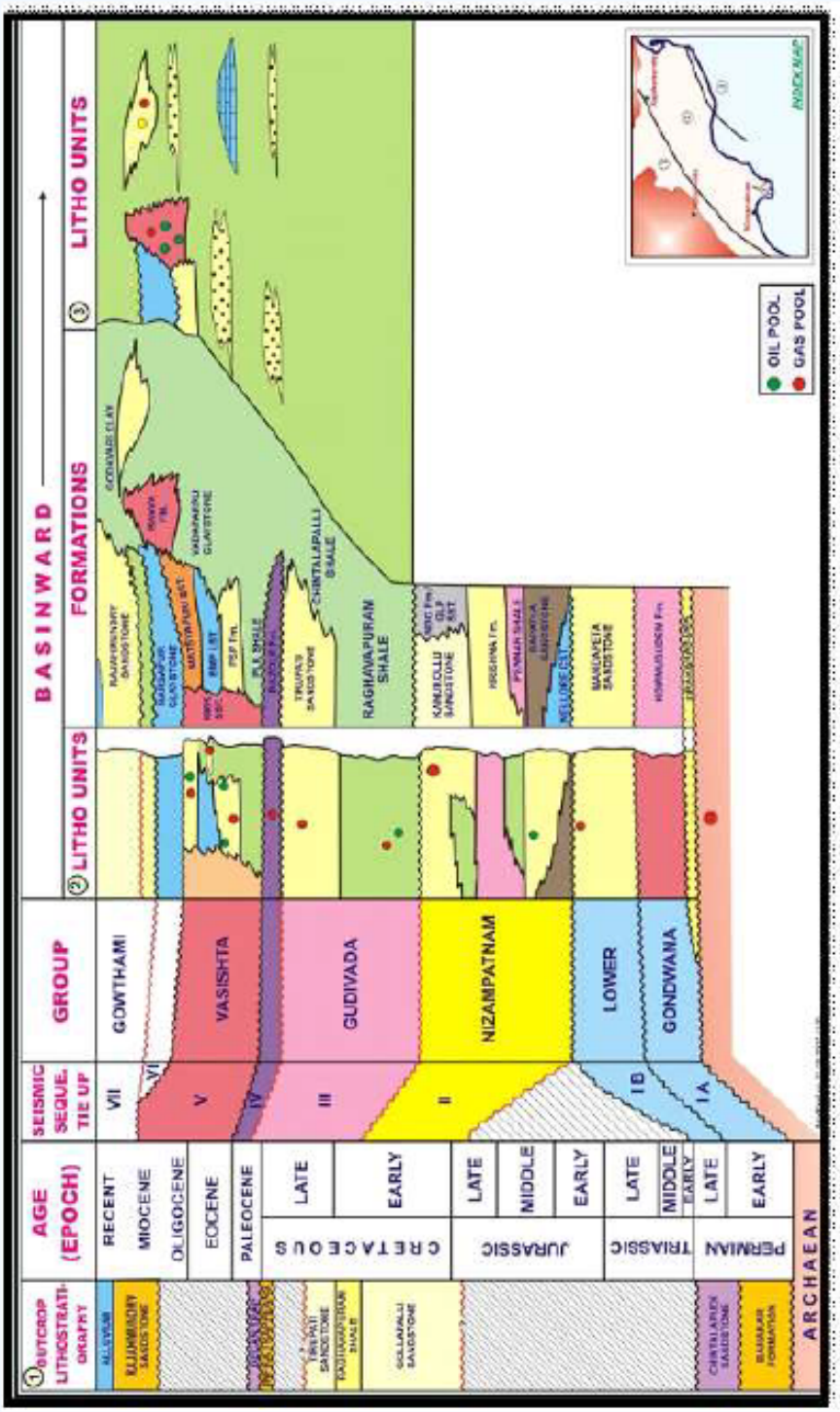
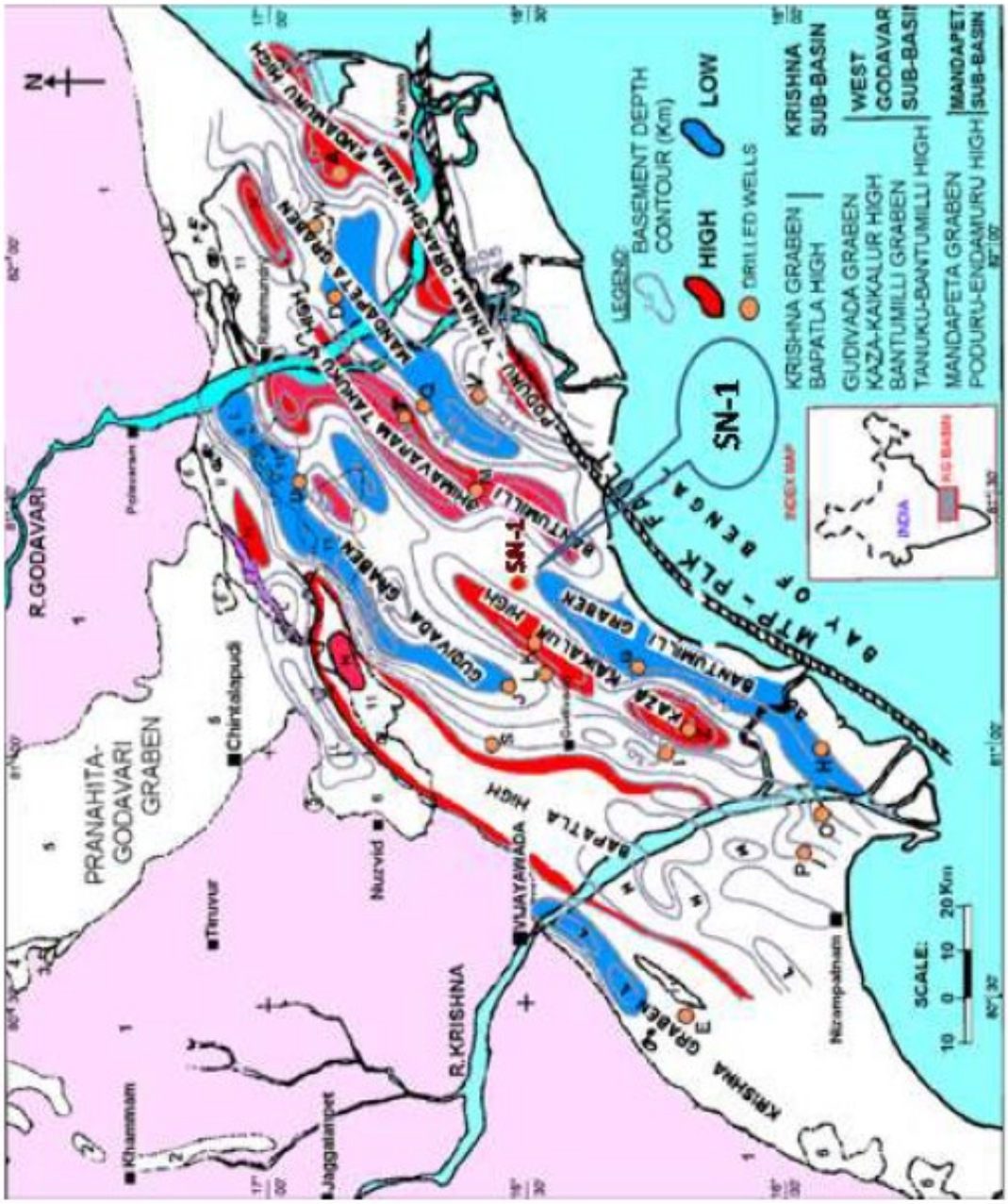


Fig. Tectonic map of the basin:



4. PHYSIOGRAPHY AND ACCESSABILITY 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 and distance
G-1-N-2 (G-1-N-AB)	G-1-N-2 is at a distance of ~9.7 km from PM-02 manifold of KG-DWN-98/2 cluster 2 project.
G-1-NE-1 (AA)	G-1-NE-1 is at a distance of ~2.5 km from PM-02 manifold of KG-DWN-98/2 cluster-2 project.
G-1-NE-2 (AB)	G-1-N-2 is at a distance of ~9.7 km from PM-02 manifold of of KG-DWN-98/2 cluster 2 project.
GS-15-14	G1-GS-15 facilities
GS-15-15 (GS-15-AP)	G1-GS-15 facilities
GS-15-22	Odalarevu Onshore Terminal

5. G1 DISCOVERY AND FIELD DESCRIPTION

5.1. G1-N2 DISCOVERY AND FIELD DESCRIPTION

The location G-1-N-AB has been released in Exploratory B- category with an objective to explore Zone -18 equivalent of G-I-NE field, Zone -7 equivalent of Kanakadurga field, high amplitude event of Zone-l8 top and S-1 pays with a target depth of 2800m TVDSS.

Spudded on 16th September 2016 by rig Sagar Vijay as G-1-N-2(AB). 12 1/4" vertical section has been drilled down to 1592m and during the process of reciprocation the string was stuck up at 1589m and could not be released despite several attempts and finally lead to side-tracking of the well from 1272m and drilled successfully to the target depth of 2818m RKB. The well penetrated 2529.6m of Godavari Clay and 178m+ of MTC. Log evaluation clubbed with direct Hydrocarbon indications during drilling proved that the bottom part of the open hole section is devoid of Hydrocarbons. Accordingly, the bottom part of the 8 1/2" section has been abandoned by placing cement plug with top at 2392m.

Lowered 30", 20", 13 3/8", 9 5/8" & 7" liner at 206.7m, 496.68m, 1269.45m,1915.3m & 2390m respectively. Synthesized ELAN processing with MDT results and Hydrocarbon indications during drilling, one object in the interval 2296-2299.5m & 2310-2316.5m has been released for testing. Object-1, on testing yielded oil and gas with high rate of water cut. It has been surmised that the bottom part of the lower perforated interval is contributing water, carried out water shut off job by cement squeeze and re-perforated the modified interval, i.e. 2296.0-2299.5m & 2310.0-2311.0 m. Well flowed oil and gas with, Qo: 3886 BPD & Qg: 127772 m3/day through 32/64" choke. Carried out the relevant reservoir studies. The presence of commercial hydrocarbons in late Pliocene sands is a critical lead to pursue in this area and the Z-7 & Z-18 equivalent water bearing sands encountered below, may prove to be hydrocarbon bearing at a structurally favorable position towards southern fault. Further the lead obtained in this well, will be a curtain riser for further exploration and surmised to open up adjacent area of Vashistha PML block towards the Northern part for future exploration endeavors. The well has been declared as Oil & Gas well and temporarily abandoned with a provision for re-entry. The rig Sagar Vijay was released on 21.03.2017 to move to GS-29-11(AL) for re-entry and testing.

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.

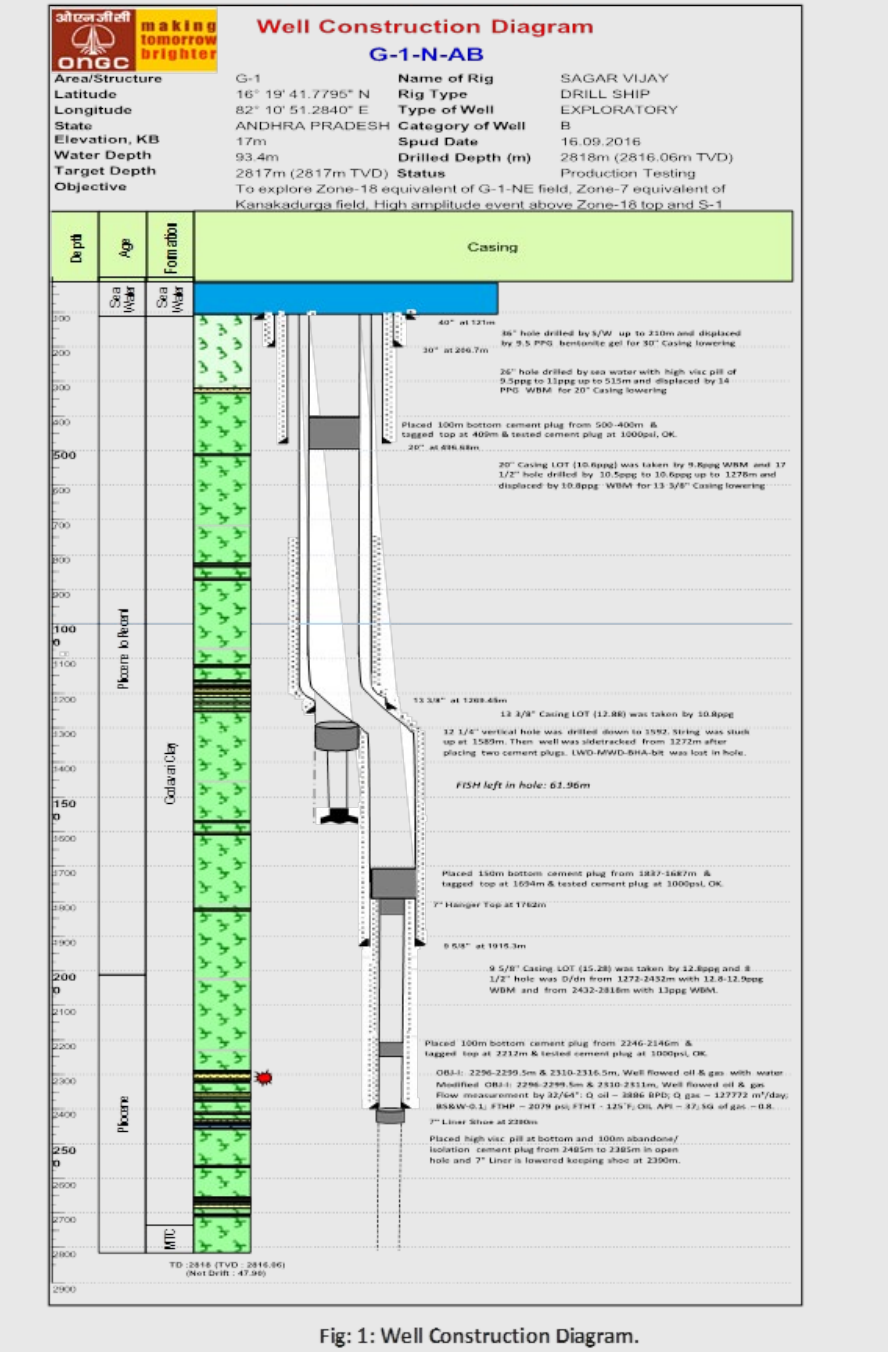


Fig: 1: Well Construction Diagram.

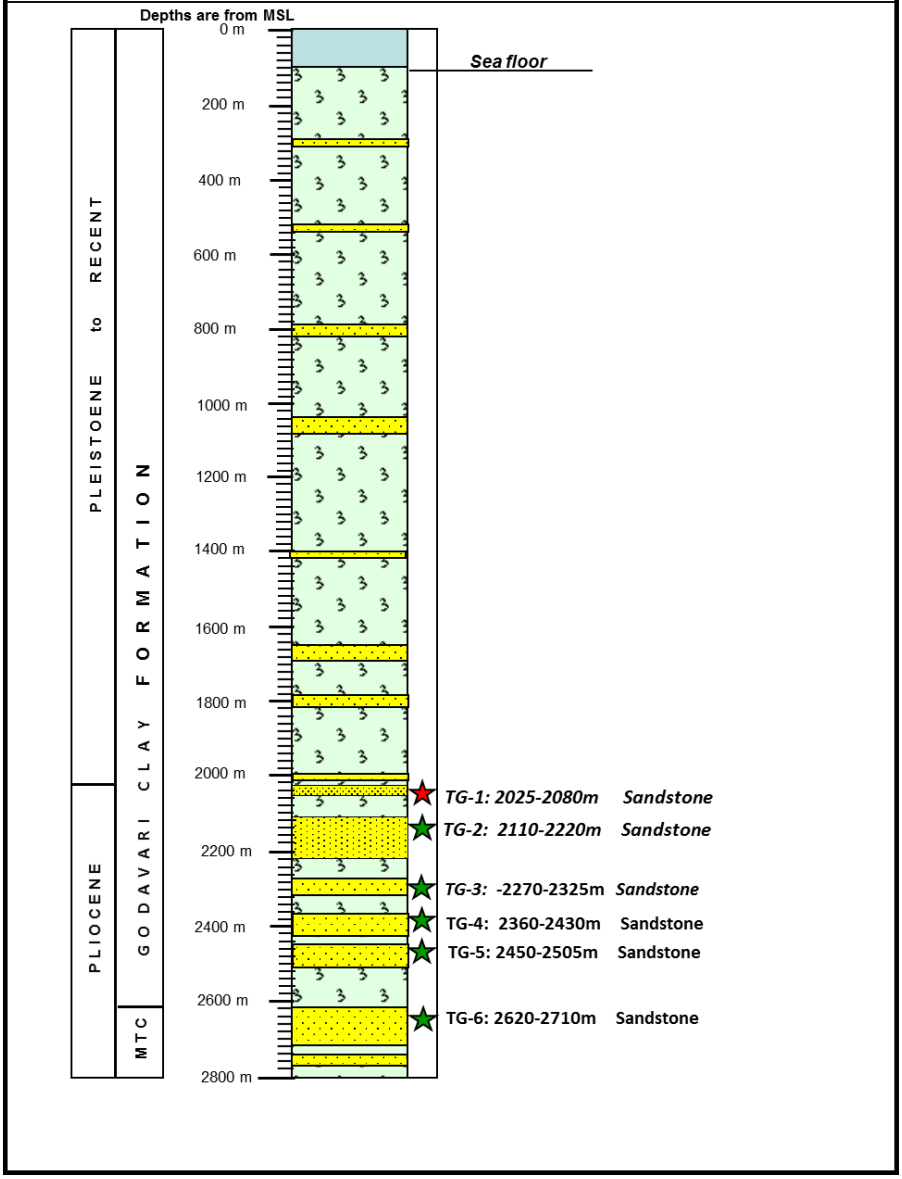
LITHO COLUMN OF G-1-N-AB

WELL NAME : G-1-N-AB
Water Depth : 98m
Proposed TD : 2800m (TVDSS)
OBJECTIVE :- To explore Zone-18 equivalent of G-1-NE field, Zone-7 equivalent of Kanakadurga field, High amplitude event above Zone-18 top and S-1 equivalent pay sands of G-1 field.

TYPE/CATEGORY: Exploratory "B" Category

Location : Godavari Offshore, India
Block : G-1
PEL/PML : Vashista PML
SEISMIC REFERENCE:- **IL:** 1913 **XL:** 3286
WELL CO-ORDINATES:-
Lat: 16° 19' 41.79" N
Long: 82° 10' 51.29" E

X : 626146.81m, **Y :** 1805612.88m



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
Only WCR available	16.09.2016	17 m	2818 m MDRT

5.1.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

17.5 PEX-HRLA-GR (1272-498.5m) Remarks: BHT@125°F
DSI-GPIT-GR (1272-498.5m) Remarks: BHT@128°F

12.25 ROP-GR-CAL-RT-Density-Porosity (1565-1270m)
PEX-HRLA-SP-CAL-GR (1878-1272m) Remarks: BHT@145°F
DSI-GPIT-HNGS-GR (1870-1272m) Remarks: BHT@150°F

8.5 PEX-HRLA-SP-CAL-GR (2817-1917.2m) Remarks: BHT@215°F
DSI-GPIT-HNGS-GR (2816-1917.2m) Remarks: BHT: 220°F ; Drilled Depth: 2818m; Logger's Depth: 2824m
VSP (2814-168m) Remarks: Recorded at 44 stations at 15m interval
CMR-GR (2700-2200m)
MDT-GR (2688.5-1999m) Remarks: MDT at 38 points (Lost seal = 0, Good = 33, Dry = 5). FID as water was observed at 7 depths and collected water samples at 4 stations (2683m, 2567m, 2435m & 2324m). FID as OIL was observed at 5 depths and collected Oil sample as PVT at 1
station (2297m).

5.1.3. Well Testing and Workover History

One object was released for production testing within the Godavari clay. Object –I (2296-2299.5 & 2310-2316.5m) produced oil (Qo; 1157 bbl/d) and gas (Qg: 35715 M3/d), FTHP: 2453 psi thru 16/64" choke.

Formation: Godavari Clay| Interval(m.): 2296-2299.5, 2310-2316.5m| Bean(1/64 inch): 24| FTHP: 568 psi| Qoil: 550 BPD | Qg: 10200 m3/d| FTHT: 89 °F.
Formation: Godavari Clay| Interval(m.): 2296-2299.5, 2310-2311m| Bean(1/64 inch): 16| FTHP: 2453 psi| Qoil: 1157 BPD | Qg: 35715 m3/d| FTHT: 98 °F.
Well shut-in at Surface for build-up studies (1st build-up) STHP: 2476 psi; STHT: 87°F
Formation: Godavari Clay| Interval(m.): 2296-2299.5, 2310-2311m| Bean(1/64 inch): 14| FTHP: 2473 psi| Qoil: 810 BPD | Qg: 25491 m3/d| FTHT: 96 °F.
Formation: Godavari Clay| Interval(m.): 2296-2299.5, 2310-2311m| Bean(1/64 inch): 16| FTHP: 2463 psi| Qoil: 1148 BPD | Qg: 36959 m3/d| FTHT: 99 °F.
Formation: Godavari Clay| Interval(m.): 2296-2299.5, 2310-2311m| Bean(1/64 inch): 18| FTHP: 2456 psi | Qoil: 1309 BPD | Qg: 43653 m3/d| FTHT: 104 °F.
Well shut-in Down hole for build-up studies (2nd build-up) STHP: 1790 psi; STHT: 87°F
Formation: Godavari Clay| Interval(m.): 2296-2299.5, 2310-2311m| Bean(1/64 inch): 20| FTHP: 2427 psi| Qoil: 1722 BPD | Qg: 53912 m3/d| FTHT: 104 °F.

Well shut-in at Surface for build-up studies (3rd build-up) STHP: 2503 psi; STHT: 103°F
Formation: Godavari Clay| Interval(m.): 2296-2299.5, 2310-2311m| Bean(1/64 inch): 24| FTHP: 2339 psi| Qoil: 2557 BPD | Qg: 80270 m3/d| FTHT: 117 °F.
Formation: Godavari Clay| Interval(m.): 2296-2299.5, 2310-2311m| Bean(1/64 inch): 32| FTHP: 2079 psi| Qoil: 3886 BPD | Qg: 127772 m3/d| FTHT: 125 °F.
Well shut-in Down hole for build-up studies (4rd build-up) STHP: 1684 psi; STHT: 88°F

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

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2683 | Initial pressure (psi): 4568.83 | Mobility (mD/cp): 301.19 | Remarks: Conventional Sample Taken - Water. Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2676 | Initial pressure (psi): 4562.12 | Mobility (mD/cp): 43.61 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2674 | Initial pressure (psi): 4564.37 | Mobility (mD/cp): 32.306 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2668.3 | Initial pressure (psi): 4551.95 | Mobility (mD/cp): 723.254 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2666 | Remarks: Tight.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2665.9 | Initial pressure (psi): 4548.36 | Mobility (mD/cp): 45.86 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2665 | Initial pressure (psi): 4547.2 | Mobility (mD/cp): 289.976 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2661.8 | Initial pressure (psi): 4542.46 | Mobility (mD/cp): 1343.768 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2655.5 | Initial pressure (psi): 4534.04 | Mobility (mD/cp): 1726.502 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2567 | Initial pressure (psi): 4580.82 | Mobility (mD/cp): 13287.74 | Remarks:FID-Water. Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2435 | Initial pressure (psi): 4809.21 | Mobility (mD/cp): 1333.562 | Remarks:Low Shock Sample Taken-Water. Good.
Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2437 | Initial pressure (psi): 4812.05 | Mobility (mD/cp): 115.628 | Remarks:Low Shock Sample Taken-Water. Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2444.5 | Initial pressure (psi): 4822.41 | Mobility (mD/cp): 126.95 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2451.5 | Initial pressure (psi): 4832.14 | Mobility (mD/cp): 3955.442 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2452.79 | Initial pressure (psi): 4834.03 | Mobility (mD/cp): 2914.466 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2456 | Initial pressure (psi): 4838.51 | Mobility (mD/cp): 1887.53 | Remarks:FID-Water. Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2363.49 | Initial pressure (psi): 4710.66 | Mobility (mD/cp): 48.38 | Remarks:Pumping cannot sustain. Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2364 | Initial pressure (psi): 4711.17 | Mobility (mD/cp): 98.924 | Remarks:FID-Water. Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2320.5 | Remarks: Tight.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2321.5 | Initial pressure (psi): 4653.23 | Mobility (mD/cp): 565.7 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2320.79 | Initial pressure (psi): 4652.55 | Mobility (mD/cp): 478.58 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2324 | Initial pressure (psi): 4656.04 | Mobility (mD/cp): 109.526 | Remarks:Conventional Sample Taken - Water. Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2317 | Initial pressure (psi): 4648.72 | Mobility (mD/cp): 359.294 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2310 | Remarks: Tight.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2310.5 | Initial pressure (psi): 4643.53 | Mobility (mD/cp): 1042.52 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2315.5 | Initial pressure (psi): 4648.04 | Mobility (mD/cp): 1591.754 | Remarks:FID-Oil. Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2313 | Initial pressure (psi): 4645.66 | Mobility (mD/cp): 104.522 | Remarks:FID-Oil. Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2302.3 | Remarks: Tight.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2298.8 | Initial pressure (psi): 4632.55 | Mobility (mD/cp): 572.594 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2297 | Initial pressure (psi): 4631.34 | Mobility (mD/cp): 1749.146 | Remarks:Low Shock Sample Taken-Oil. Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2287.2 | Initial pressure (psi): 4622.18 | Mobility (mD/cp): 296.024 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2288,51 | Initial pressure (psi): 4623.72 | Mobility (mD/cp): 94.856 | Remarks: Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2292.5 | Initial pressure (psi): 4627.2 | Mobility (mD/cp): 342.374 | Remarks:FID-Oil. Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2294.3 | Remarks: Tight.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2294.8 | Initial pressure (psi): 4629.19 | Mobility (mD/cp): 56.192 | Remarks:FID-Oil. Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2001.9 | Remarks:Supercharged Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 2000.9 | Remarks:Supercharged Good.

Formation: Godavari Clay | Sample type: MDT | Depth of measurement(m.): 1998.1 | Remarks:Supercharged Good.

5.1.4.2. Pressure build-up study

Formation: Godavari Clay| Object: I| Interval(m.): 2296-2299.5, 2310-2311 | Duration of build-up: 25.8 hrs| Static bottom hole pressure: 2556.97 psi| Initial pressure: 4574 psi| Skin: 0.5 | Permeability to oil: 535 md| Capacity (kh): 18184.3 mdft | Average open flow potential (oil): 79,468.14 STB/day.

5.1.4.3. PVT

Formation: Godavari clay | Object: I | Interval(m.): 2297 | Oil specific gravity: 0.8218 | Stock tank API gravity: 40.42 Sample type: MDT.

5.1.4.4. Oil composition analysis

Formation: Godavari Clay| Object: I | Interval(m.): 2269-2299, 2310-2316.5 | Sample No.: 10-02-2017 | Density: 0.8519 gm/ml at 15 degC | API: 34.51.

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.

5.1.4.5. Gas composition analysis

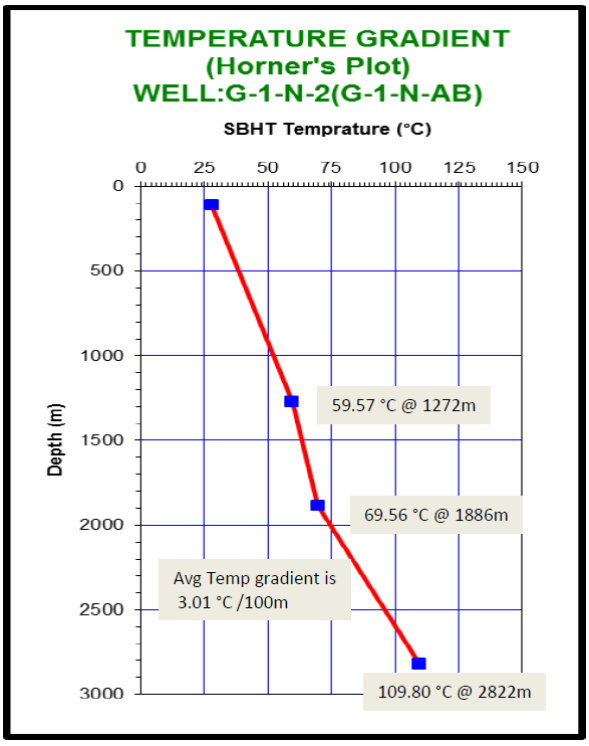
Formation: Godavari Clay| Object: I| Type: Production Testing| Interval(m.): 2299-2296 | Sample No.: 604| Choke (1/64 inch): 18 inch.| C1: 69.94 %| C2: 5.69 %| C3: 10.58 %| iC4: 2.61 %| Carbon-dioxide: 0.24 %| Nitogen+Oxygen: 0.80 %| Z: 0.9938 | Sp.Gr.: 0.9162| Heat value (INF): 52.88 Kcal/m3| Heat value (SUP): 57.99 Kcal/m3.
Formation: Godavari Clay| Object: I| Type: Production Testing| Interval(m.): 2299-2296 | Sample No.: 604| Choke (1/64 inch): 20 inch.| C1: 72.13 %| C2: 5.99 %| C3: 10.60 %| iC4: 2.43 %| Carbon-dioxide: 0.18 %| Nitogen+Oxygen: 0.72 %| Z: 0.9945 | Sp.Gr.: 0.8701 | Heat value (INF): 50.5 Kcal/m3| Heat value (SUP): 55.4 Kcal/m3.

5.1.4.6. Geothermal 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 2822m, 109.8°C and seabed (110m) temperature is taken as 28°C.

- Seabed to 1272m: 2.72°C/ 100m
- 1272m to 1886m: 1.63°C/ 100m
- 1886m to 2822m: 4.3°C/ 100m

The overall temperature gradient from MSL to 2822m is 3.01°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 correlations, sections, and maps

Block KG-OS-DW-IV lies 20–25 km off the Amalapuram coast in the deep waters of the KG-PG basin. Exploratory seismic surveys and well drilling have revealed multi-layered oil and gas-bearing sands, primarily from the Pliocene. The area features NE-SW trending growth faults, rollover structures, and a toe thrust complex. Reservoirs are mainly Mid-Late Miocene coastal sands on the shelf and Pliocene-Pleistocene channel deposits on the slope. Primary exploration targets include submarine fan and channel-levee complexes, with sediments sourced from the Godavari River and deposited across intra-slope basins.

The G-1-N2 discovery, formed in a Pliocene-Pleistocene deltaic setting, shows signs of faulting and includes sand/sandstone layers typical of abandoned channels and crevasses plays. These are found within the over 2,500 m thick Godavari Clay, which consists of claystones with interbedded laminated sands. The sandstones are mostly fine to medium grained, moderately sorted, and non-calcareous. Beneath this lies the Mass Transport Complex (MTC), comprising similar sandstone and claystone characteristics. The G-1-N-2 reservoir shows seismic amplitude

support, with about 12 m of pay in the Sand 10 reservoir, and is geologically correlated with nearby wells G-1-NE-1 and G-1-7.

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 docket information.

RESERVOIR PARAMETERS and ORIGINAL OIL in PLACE
as of
JANUARY 1, 2025
for the
G-1-N-2 (G-1-N-AB) DISCOVERY
of
KG/OSDSF/G1/2025 CONTRACT AREA

	Reservoir	Total
Low		
Area, acres	115	
Oil Formation Volume Factor, rbbl/bbl	1.70	
Average Thickness, ft	38.8	
Average Porosity, %	20.00	
Average Water Saturation, %	50.00	
Original Oil in Place, 10^6bbl	2.03	**2.03**
Original Oil in Place, 10^6eq ton	0.30	**0.30**
Best		
Area, acres	340	
Oil Formation Volume Factor, rbbl/bbl	1.70	
Average Thickness, ft	23.8	
Average Porosity, %	21.00	
Average Water Saturation, %	48.00	
Original Oil in Place, 10^6bbl	4.03	**4.03**
Original Oil in Place, 10^6eq ton	0.59	**0.59**
High		
Area, acres	340	
Oil Formation Volume Factor, rbbl/bbl	1.70	
Average Thickness, ft	23.8	
Average Porosity, %	22.00	
Average Water Saturation, %	46.00	
Original Oil in Place, 10^6bbl	4.38	**4.38**
Original Oil in Place, 10^6eq ton	0.64	**0.64**

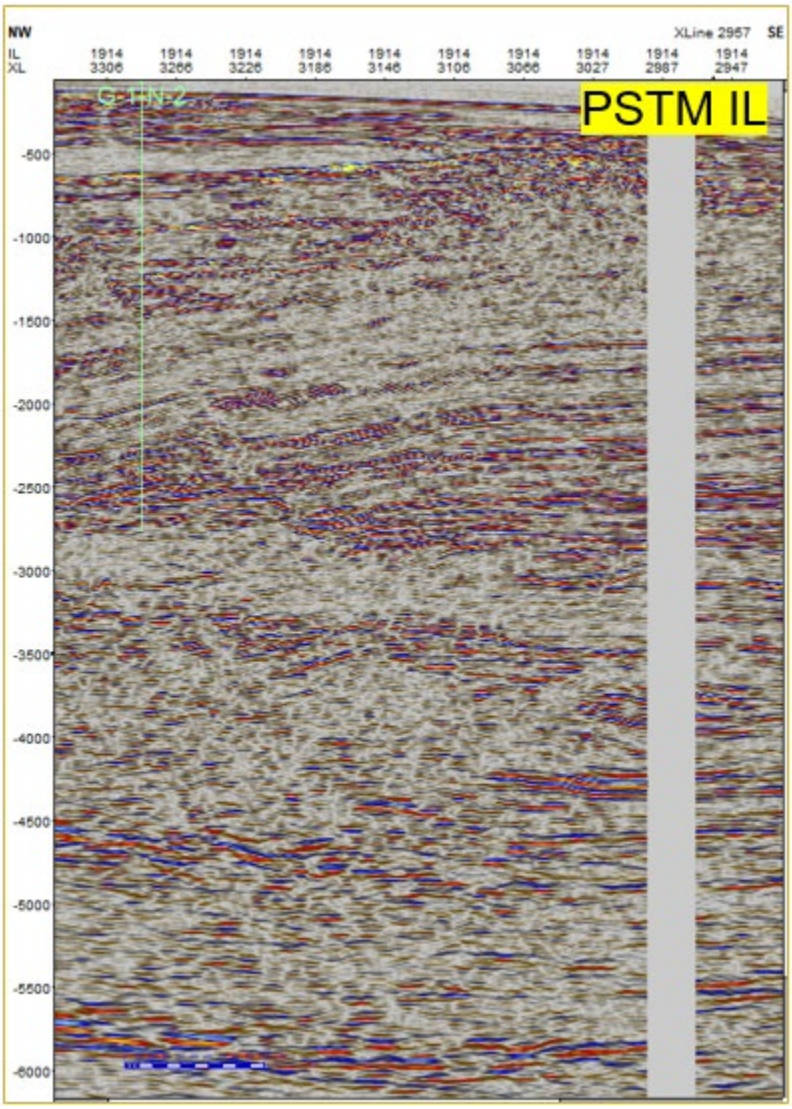
Note: Conversion used 10^6 bbl equal to 0.1461 10^6 eq tone.

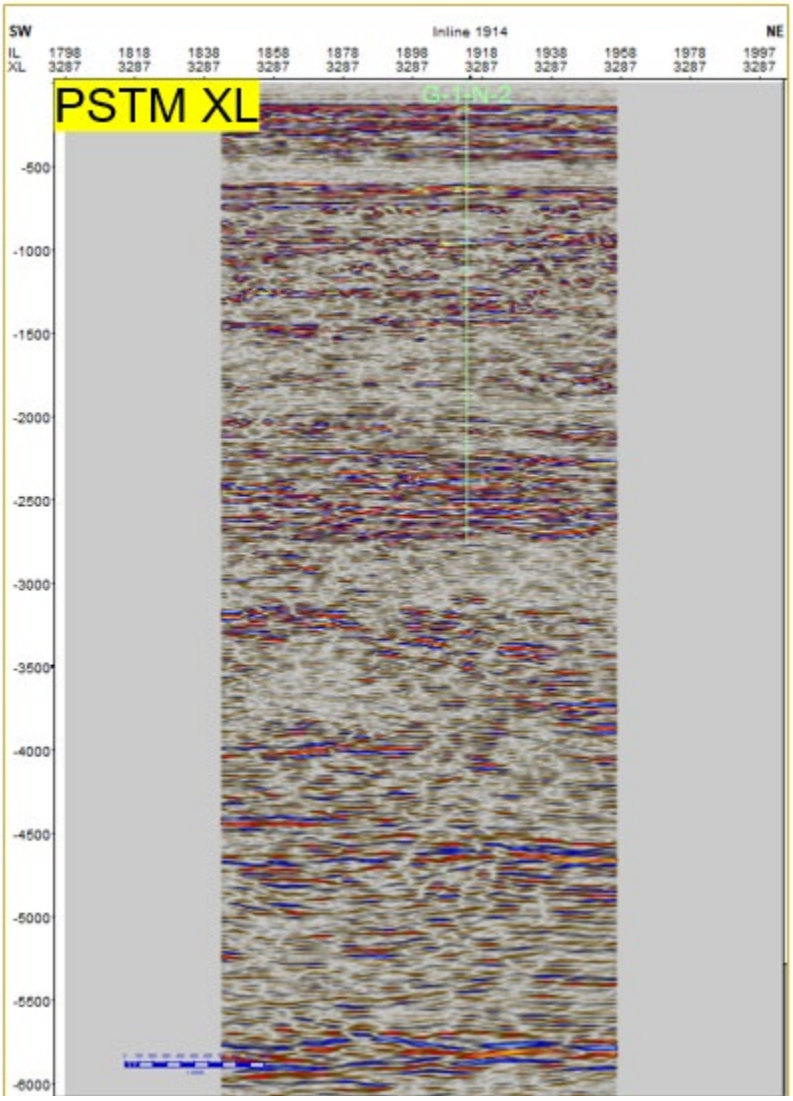
Volumes estimated by a Third Party

The operator has reported an in-place volume of 0.89 MMTOE (Best case).

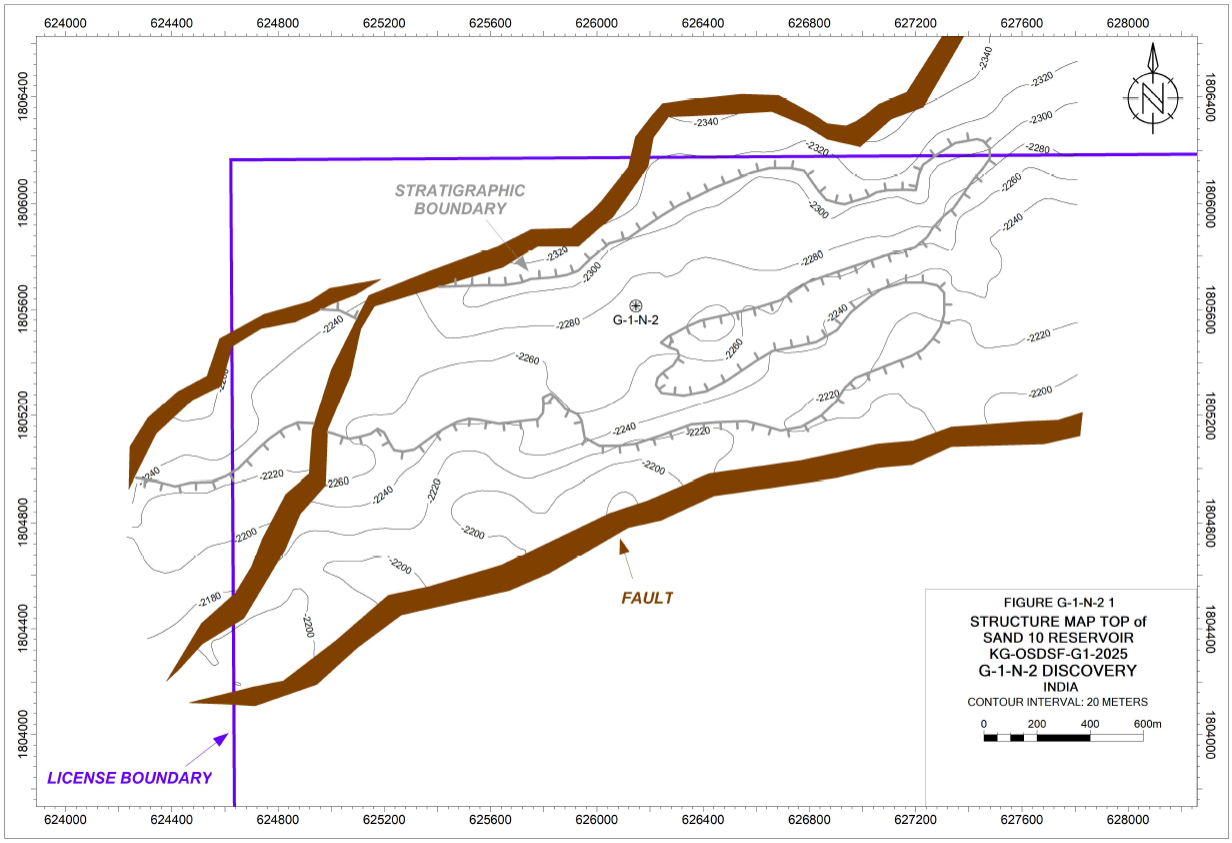
5.1.7. Annex

5.1.7.1. Seismic Sections

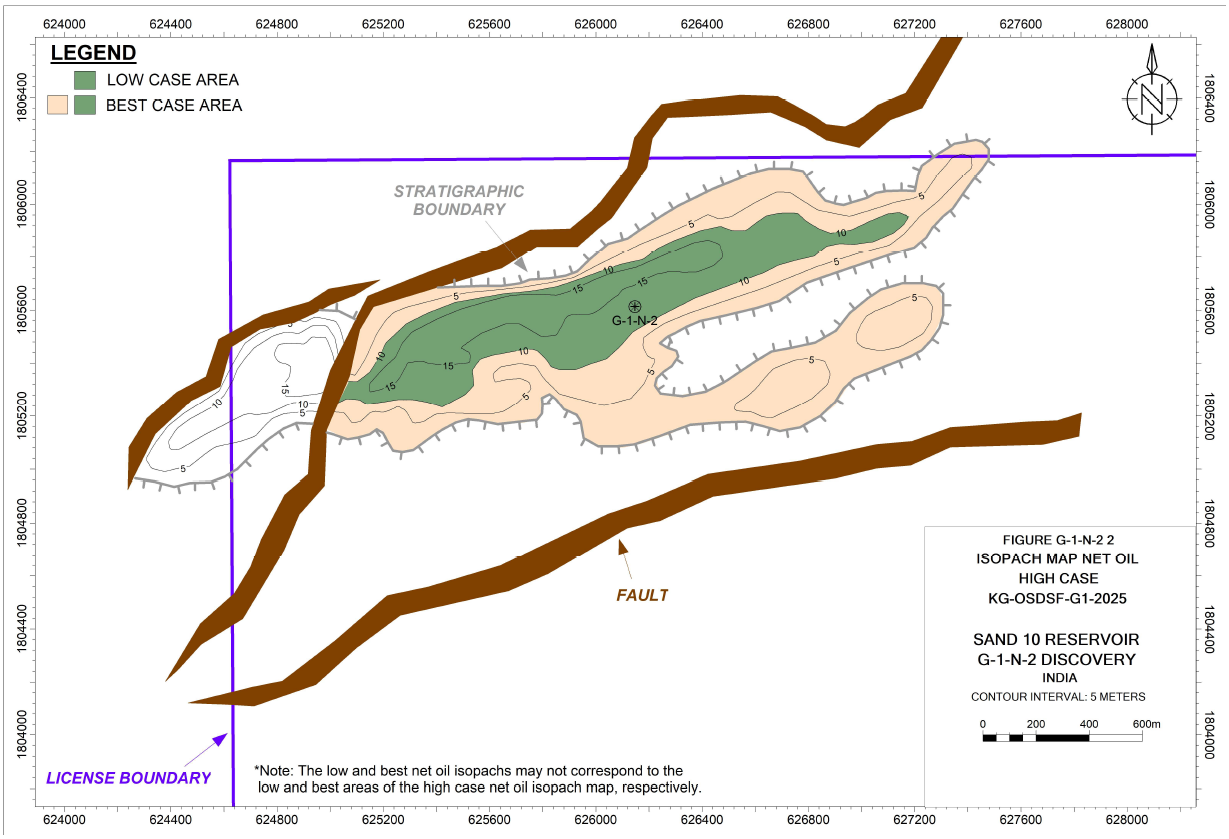



SW
Inline 1914
NE
IL
XL
1798 3287
1818 3287
1838 3287
1858 3287
1878 3287
1898 3287
1918 3287
1938 3287
1958 3287
1978 3287
1997 3287
PSTM XL
G-1-N-2
-500
-1000
-1500
-2000
-2500
-3000
-3500
-4000
-4500
-5000
-5500
-6000

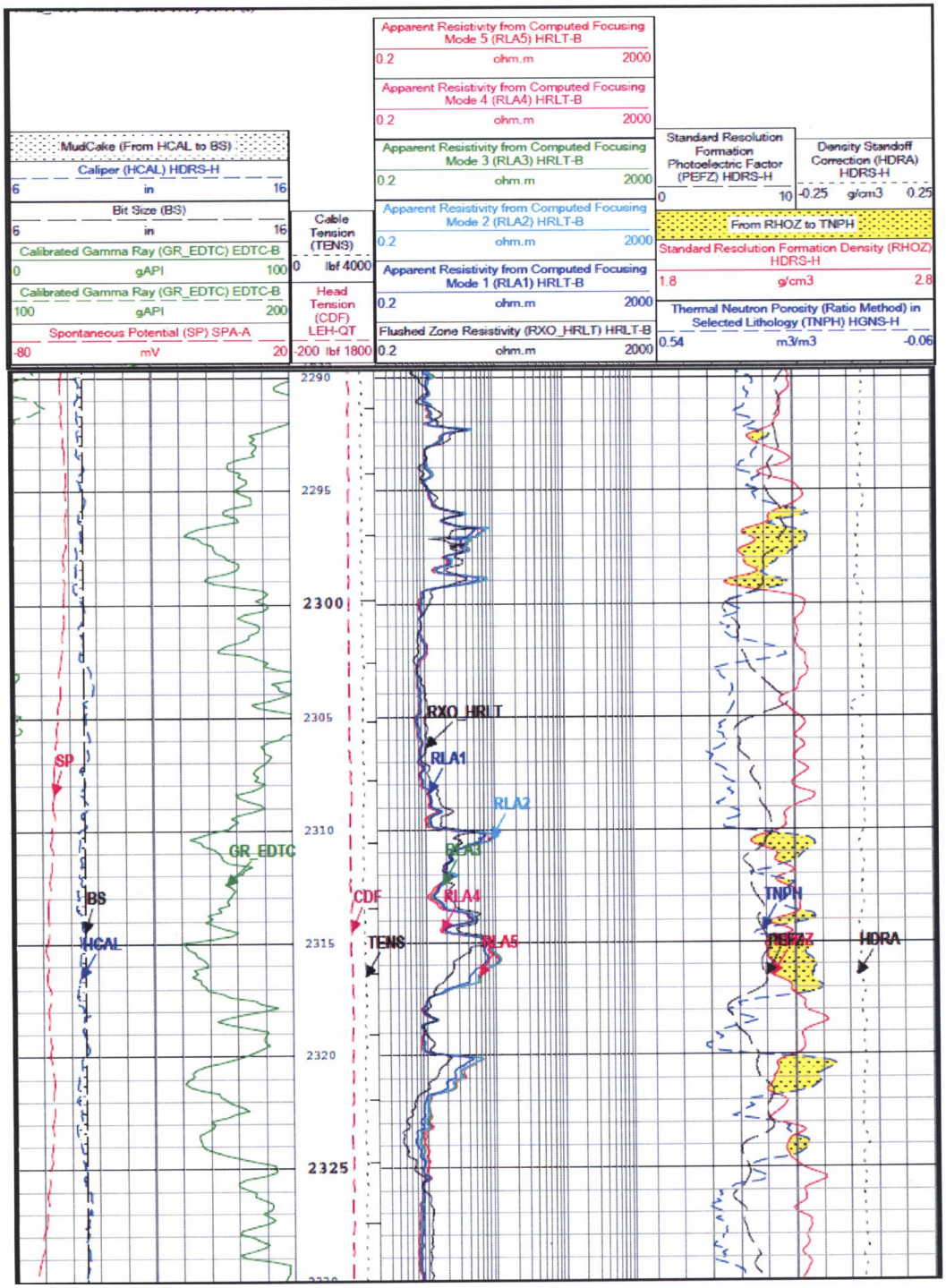
5.1.7.2. Structural Maps



5.1.7.3. Isopach Maps



5.1.7.4. Log Motifs



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

5.2. G1-NE2 DISCOVERY AND FIELD DESCRIPTION

The exploratory B category location G-1-NE-AB is situated in Vasishta PML block of KG offshore, released with a target depth of 3000m TVDSS, to explore equivalent of Zone-18 (Primary) and Zone-7 (Secondary) Oil pays of Kanakadurga.

The location was spudded in on 18.11.2014 as G-1-NE-2 (G-1-NE-AB) in bathymetry of 292.04m and was drilled vertically to 3015m RKB (Target Depth), lowering 30", 20", 13-3/8" and 9-5/8" casing at 400.24m, 884.97m, 1597.66m and 2591.2m, respectively. As the G&G analysis suggested no interest, the 8 ½" open hole section was abandoned.

The well penetrated 2707.73m+ of Godavari clay Formation and terminated within. Bottom hole temperature studies indicated an overall Geothermal gradient of 2.97°C/100m.

Based on Hydrocarbon shows, log analysis, and MDT results, three objects were released for testing: Object-I: 2344-2362m, Object-II: 2287.5-2292.0m and Object-III: 2163-2165m within Godavari clay formation.

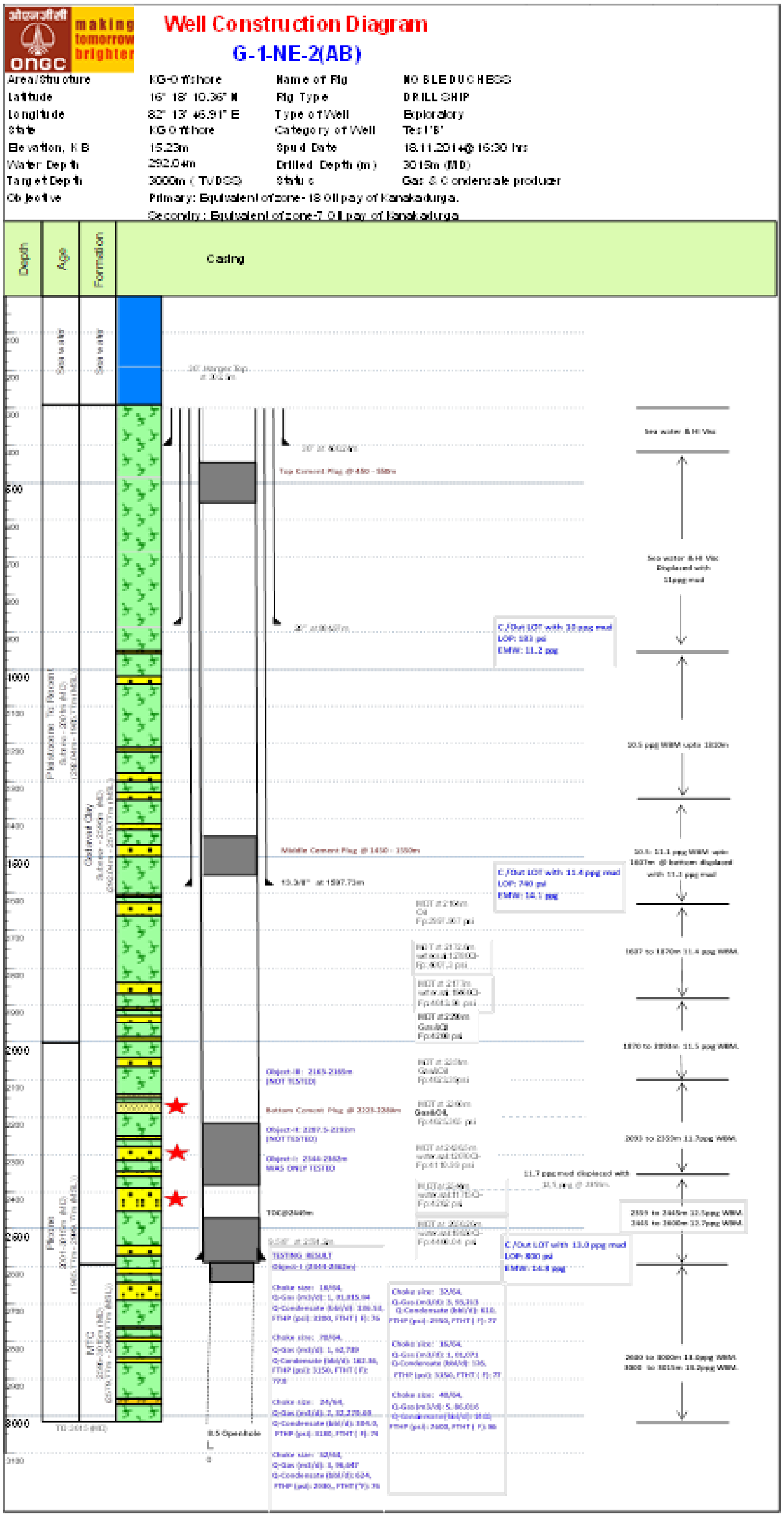
Object-I produced Gas @ 586016 m3/d and Condensate @ 1400 BOPD through 40/64"choke, FTHP: 2600psi (SBHP: 3981psi (279.95 kg/cm2) at 2293.61m (DST gauge depth)). The Formation pressure at 2344m is 3995.10 psi (280.96kg/cm2) and MWE 1.20gm/cc. Remaining objects are to be tested at a later date.

The well G-1-NE-2 (G-1-NE-AB) was declared as " Gas and Condensate (temporarily abandoned with provision of re-entry)".

Rig Noble Duchess was released on 20.02.2015 to next location/well KGS041NASG–1 (KGSO41NASG-A) in KG-OSN-2004/1, NELP-VI block for re-entry.

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.


Well Construction Diagram
G-1-NE-2(AB)
Area/Structure KG-Offshore
Latitude 16° 18' 10.36" N
Longitude 82° 13' 46.91" E
State KG Offshore
Elevation, KB 15.23m
Water Depth 292.04m
Target Depth 3000m (TVDSS)
Objective Primary: Equivalent of zone- 18 Oil pay of Kanakadurga.
Secondary: Equivalent of zone-7 Oil pay of Kanakadurga.
Name of Rig NOBLE DUCHESS
Rig Type DRILL SHIP
Type of Well Exploratory
Category of Well Test 'B'
Spud Date 18.11.2014@ 16:30 hrs
Drilled Depth (m) 3015m (MD)
Status Gas & Condensate producer
Depth
Age
Formation
Casing
500
1000
1500
2000
2500
3000

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	18.11.2014	15 m	3015 m MDRT

5.2.2.2. Well logs acquired

MDT Pressure Test 12 ¼ Hole

MD (m)	TVD (m)	Temp (°F)	Mud Pressure (psi)		Formation Pressure (psia)	Mobility (mD/cp)	EMW (g/cc) / (ppg)	Remarks
			Before	After				Pretest Type & Sample
2361.33	2361.33	165.28	5353.33	5346.87	4026.80	4.15	10.00	Good
2358.57	2358.57	163.20	5342.11	5341.24	4027.41	0.35	10.01	Good
2355.46	2355.46	164.25	5335.64	5334.37	4023.72	35.61	10.01	Good
2354.01	2354.01	164.81	5331.81	5331.19	4023.33	78.16	10.02	Good
2353.20	2353.20	164.72	5331.07	5329.45	4023.46	7.67	10.02	Good
2344.70	2344.70	163.33	5311.72	5311.08	N/A	N/A	N/A	Tight
2554.00	2554.00	190.39	5790.70	5777.15	4262.09	5.64	9.78	Good PVT Sample-1
2436.50	2436.50	182.26	5521.17	5513.70	4110.99	448.64	9.89	Good Conventional Sample-2
2362.29	2362.29	172.23	5356.38	5354.75	N/A	N/A	N/A	Tight
2360.00	2360.00	172.46	5349.88	5349.56	4025.37	94.14	10.00	Good PVT Sample-3
2350.99	2350.99	173.43	5330.31	5331.60	4023.39	22.06	10.03	Good PVT Sample-4
2345.98	2345.98	171.83	5321.05	5319.73	N/A	N/A	N/A	Tight

2290.01	2290.01	170.45	5202.95	5197.68	4208.53	34.25	10.77	Good PVT Sample-5
2177.01	2177.01	171.45	4943.91	4939.94	4013.98	812.50	10.81	Good Conventional Sample-6
2164.00	2164.00	168.21	4911.02	4917.41	3997.97	1129.36	10.83	Good PVT Sample-7
2168.00	2168.00	165.85	4920.37	4915.44	4790.47	0.50	12.95	Good Low confidence for low mob
2171.48	2171.48	166.14	4924.62	4923.13	N/A	N/A	N/A	Tight
2172.59	2172.59	170.75	4927.48	4928.86	4007.30	110.56	10.81	Good PVT Sample-8

Note: Samples were Collected at following depths: 2544m, 2436.5m, 2360m, 2351, 2290m, 2177m, 2164m, and 2172.6m. Four Samples showing Water indication on LFA (2544m, 2436.5m,2177m and 2172.6m) three Sample showing Oil/Gas indication on LFA (2360m,2351.0m,2290m). One sample showed Mostly Oil (90%-100%) at 2164m.

MDT Sampling in 12 ¼" hole

Sample No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Sample Depth(m)	2544	2436.5	2360	2351	2290	2177	2164	2172.6
Date	7.01.15	7.01.15	7.01.15	7.01.15	7.01.15	7.01.15	7.01.15	7.01.15
Chamber / PVT Bottle	PVT MPSR-30151	Chamber MRSC-GB-483	PVT MPSR-30152	PVT MPSR-4084	PVT MPSR-4666	Chamber MRSC-JB- 514	PVT MPSR-2992	PVT MPSR-2851
Chamber / PVT sampler capacity	418cm3	1Gal	418cm3	418cm3	418cm3	2.75Gal	418cm3	418cm3
Gas / Fluid Type (LFA)	Water	Water	Gas & OIL	Gas & OIL	Gas & OIL	Water	OIL	Water
Formation Pressure (psi) / MWE	4262.09	4110.99	4025.365	4023.39	4208.53	4013.98	3997.967	4007.3
Hydrostatic Pressure (psi) before	5790.70	5521.17	5349.88	5330.31	5202.95	4943.91	4911.02	4927.48
Hydrostatic Pressure (psi) After	5777.15	5513.70	5349.56	5331.60	5197.68	4939.94	4917.41	4928.86

Mobility (md/cp)	5.64	448.64	94.14	22.06	34.25	812.5	1129.4	110.56
Temp. (ºF)	190.39	182.26	172.46	173.43	170.45	171.45	168.21	170.75
Time pumped min.	91	81	84	81	95	93	84	71
Volume pumped (Lit)	37.6	42.3	41.1	47.7	60.1	69.2	77.8	44.9
Max Drawdown pressure (psia)	727	3824	85	181	203	3748	17	72
Min. Pressure while cleanup (psia)	3977.0	4097.0	4017.0	3986.0	4079.0	3998.0	3986.0	3992.0
Final Down hole sampling pressure (psia)	8739.9	N/A	8503.0	8500.8	8684.3	N/A	8476.1	8461.7
Down hole shut-in sampling pressure (psia)	8739.9	N/A	8503.0	8500.8	8684.3	N/A	8476.1	8461.7
Qty recovered (CC)	380ml Formation water +0.045cf gas	3.75lit of Formation water +0.140cf gas	4.705cf of Gas +18ml of fluid (Water)	Not Drained	Not Drained	10lit of formation water+ 0.595cf gas	Not Drained	430ml of Formation water+0.043 cf of gas
OIL Specific Gravity / API Value @60°F	-	-	-	-	-	-	-	-
Down hole Resistivity (ohm-m)	0.075	0.068	25.343	-	0.112	0.049	23.052	0.068
Resistivity at surface ohm-m	0.290	0.275	-	-	-	0.210	-	0.299
Temp at surface (°F)	71.6	71.6	-	-	-	71.5	-	72.2

PVT/Chamber Pressure (psi)	-	1500	3700			2000		120
Salinity (ppm as Cl-)	11715	12070				18460		12780
Mud Filtrate Salinity During Drilling (ppm as chlorides)	66345	58220	71000	71000	66385	66030	69580	66030
pH/ Alkalinity	>8	>8				>8		>8
Remarks (MLU Gas Analysis)			TG: 55.6% C1:16.75 %,C2:7.4 4%,C3:3. 69%,iC4: 0.79%,nC 4:1.24%,i C5:0.45% ,Nc5:0.44 %			TG: 30% C1:15.77 %,C2:1.6 2%,C3:1. 14%,iC4: 0.368%,n C4:0.619 %,iC5:0.3 62%,nC5: 0.337%		

Note: Sample at depth: 2164m (LFA-OIL), 2290m (LFA Gas & Oil), & 2351m (LFA Gas & Oil) not drained at well site.

MDT Pressure Test 8 ½" Hole

MD (m)	TVD(m)	Temp (°F)	Mud Pressure (psi)		Formation Pressure (psia)	Mobility (mD/cp)	EMW (g/cc) / (ppg)	Remarks
			Before	After				Pretest Type & Sample
2685.00	2685.00	186.8	6240.42	6259.47	-	-	13.68	T
2683.88	2683.88	185.1	6262.41	6276.26			13.72	T
2682.00	2682.00	184.8	6272.89	6277.70	6135.38	0.50	13.73	G
2680.52	2680.52	185.5	6269.67	6272.89	-	-	13.73	T
2681.90	2681.90	185.6	6272.43	6274.75	-	-	13.72	T
2680.40	2680.40	185.8	6267.94	6271.33	-	-	13.73	T
2639.00	2639.00	186.2	6146.90	6162.49	-	-	13.70	T
2643.00	2643.00	185.8	6178.71	6184.67	-	-	13.73	T
2641.01	2641.01	186.3	6176.01	6179.65	6069.77	1.06	13.73	G
2650.20	2650.20	185.9	6193.83	6192.77	4408.04	5.36	13.71	G (Sample Taken)
2637.35	2637.35	192.9	6156.96	6165.99	-	-	13.71	L
2665.50	2665.50	189.3	6159.28	6161.69	-	-	13.56	T

2636.61	2636.61	188.8	6154.19	6152.51	-	-	13.69	T
2614.02	2614.02	188.7	6088.81	6106.44	-	-	13.70	T
2612.54	2612.54	188.1	6103.77	6112.72	6040.57	0.52	13.73	G
2610.01	2610.01	187.9	6101.66	6106.89	-	-	13.73	T
2608.50	2608.50	188.0	6099.16	6104.36	6061.85	0.42	13.73	G
2607.31	2607.31	188.1	6097.36	6101.82	-	-	13.73	T

MDT Sampling in 8 ½" Hole

Sample No.	**1**		
Sample Depth(m)	**2650.20m**	Max Drawdown pressure (psia)	3620.00
Date	26-01-2015	Min. Pressure while clean up (psia)	3620
Chamber / PVT Bottle	SCNGB483	Final Down hole sampling pressure (psia)	NA
Chamber / PVT sampler capacity	1Gal	Down hole shut in sampling pressure (psia)	NA
Gas / Fluid Type (LFA)	Water	Qty recovered (CC)	3700
Formation Pressure (psi) / MWE	4408.04	OIL Specific Gravity / API Value (@60°F)	NA
Hydrostatic Pressure (psi) before	6193.8	Down hole Resistivity (ohm-m)	0.040
Hydrostatic Pressure (psi) After	6192.7	Resistivity at surface (ohm-m)	-
Mobility (md/cp)	5.36	Temp at surface (°F)	-
Temp. (ºF)	185.9	PVT/Chamber Pressure (psi)	1500psi
Time pumped(min)	47.67	Salinity(ppm as Cl-)	19850
Volume pumped (Lit)	12.125	Mud Filtrate Salinity During Drilling (ppm as Cl)	73840
pH/ Alkalinity	7	Remarks	

5.2.3. Well Testing and Workover History

5.2.3.1. Drill Stem Test (DST)

Formation: Godavari Clay| Interval(m.): 2344-2362m| Flow period(hrs.): 12.00| Bean(1/64 inch): 16| FTHP: 3200 psi|Qcond: 136.53 BPD | API Gravity: 56.4| Qg: 101015.84 m3/d| Gas gravity: 0.67 |FTHT: 76 °F
Formation: Godavari Clay| Interval(m.): 2344-2362m| Flow period(hrs.): 08.30| Bean(1/64 inch): 20 | FTHP: 3150 psi|Qcond: 162.32 BPD | API Gravity: 56.2| Qg: 162739 m3/d| Gas gravity: 0.672 |FTHT: 77.8 °F.
Formation: Godavari Clay| Interval(m.): 2344-2362m| Flow period(hrs.): 08.00| Bean(1/64 inch): 24 | FTHP: 3180 psi| Qcond: 304 BPD | API Gravity: 57.6| Qg: 232279.69 m3/d| Gas gravity: 0.698 |FTHT: 74 °F.

Formation: Godavari Clay| Interval(m.): 2344-2362m| Flow period(hrs.): 07.30| Bean(1/64 inch): 32 | FTHP: 2930 psi|Qcond: 624 BPD | API Gravity: 62.7 | Qg: 396647 m3/d| Gas gravity: 0.654 |FTHT: 76 °F
Formation: Godavari Clay| Interval(m.): 2344-2362m| Flow period(hrs.): 08.00| Bean(1/64 inch): 32 | FTHP: 2950 psi|Qcond: 610 BPD | API Gravity: 62.6 | Qg: 393213 m3/d| Gas gravity: 0.654 |FTHT: 77 °F
Formation: Godavari Clay| Interval(m.): 2344-2362m| Flow period(hrs.): 06.00| Bean(1/64 inch): 16 | FTHP: 3150 psi|Qcond: 126 BPD | API Gravity: 56.8 | Qg: 101071 m3/d| Gas gravity: 0.654 |FTHT: 77 °F
Formation: Godavari Clay| Interval(m.): 2344-2362m| Flow period(hrs.): 03.00| Bean(1/64 inch): 40 | FTHP: 2600 psi|Qcond: 1400 BPD | API Gravity: 62.8 | Qg: 586016 m3/d| Gas gravity: 0.654 |FTHT: 86 °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

Formation: Godavari Clay| Interval(m.): 2344-2362m| Depth of measurement: 2293.61m (DST gauge) | Duration (hs.): 18.00 | SBHP: 3998.4 psi | Temp.: 204 °F

5.2.4.2. Oil composition analysis

Formation: Godavari Clay| Object: I | Interval(m.): 2344-2362 DST Sample| Sample No.: 149| Density: 0.7532 gm/ml at 15 degC| API: 56.29 at 79.7 degF.

Formation: Godavari Clay| Object: I | Interval(m.): 2344-2362 DST Sample| Sample No.: 150| Density: 0.7597 gm/ml at 15 degC| API: 54.68 at 78.8 degF.

Formation: Godavari Clay| Object: I | Interval(m.): 2344-2362 DST Sample| Sample No.: 151| Density: 0.7455 gm/ml at 15 degC| API: 58.23 at 77.9. degF.

Formation: Godavari Clay| Object: I | Interval(m.): 2344-2362 DST Sample| Sample No.: 152| Density: 0.7342 gm/ml at 15 degC| API: 61.15 at 77 degF.

Formation: Godavari Clay| Object: I | Interval(m.): 2344-2362 DST Sample| Sample No.: 153| Density: 0.7455 gm/ml at 15 degC| API: 58.23 at 77.9 degF.

5.2.4.3. Gas composition analysis

Formation: Godavari clay| Interval(m.): 2344-2362| Sample No.: Sample 575. | Choke(1/64 inch): 16 |
C1: 85.03 %| C2: 2.69 %| C3: 3.22 %| iC4: 0.70 %| nC4: 1.11 %| iC5: 0.40 %| nC5: 0.34 %| C6+: 0.93 %|
Carbon-dioxide: 0.28 %| Nitogen+Oxygen: 5.30 %| Sp.Gr.: 0.6878
Formation: Godavari clay| Interval(m.): 2344-2362| Sample No.: Sample 576. | Choke(1/64 inch): 20 |
C1: 89.20 %| C2: 2.83 %| C3: 3.33 %| iC4: 0.71 %| nC4: 1.12 %| iC5: 0.38 %| nC5: 0.32 %| C6+: 1.44 %|
Carbon-dioxide: 0.25 %| Nitogen+Oxygen: 0.42 %| Sp.Gr.: 0.6814

Formation: Godavari clay| Interval(m.): 2344-2362| Sample No.: Sample 577. | Choke(1/64 inch): 24 |
C1: 89.20 %| C2: 2.82 %| C3: 3.30 %| iC4: 0.69 %| nC4: 1.09 %| iC5: 0.36 %| nC5: 0.31 %| C6+: 1.24 %|
Carbon-dioxide: 0.27 %| Nitogen+Oxygen: 0.72 %| Sp.Gr.: 0.6760
Formation: Godavari clay| Interval(m.): 2344-2362| Sample No.: Sample 578. | Choke(1/64 inch): 32 |
C1: 91.49 %| C2: 2.80 %| C3: 3.01 %| iC4: 0.55 %| nC4: 0.77 %| iC5: 0.18 %| nC5: 0.13 %| C6+: 0.22 %|
Carbon-dioxide: 0.35 %| Nitogen+Oxygen: 0.50 %| Sp.Gr.: 0.6346
Formation: Godavari clay| Interval(m.): 2344-2362| Sample No.: Sample 577. | Choke(1/64 inch): 40 |
C1: 91.73 %| C2: 2.78 %| C3: 2.97 %| iC4: 0.54 %| nC4: 0.77 %| iC5: 0.19 %| nC5: 0.14 %| C6+: 0.33 %|
Carbon-dioxide: 0.29 %| Nitogen+Oxygen: 0.26 %| Sp.Gr.: 0.6353

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 correlations, sections, and maps

The G-1 and VASISHTA PML block, covering 224 sq. km off India's east coast, lies south of Kakinada and Yanam, with water depths ranging from 100 to 750 meters. The block features NE-SW trending down-to-basin growth faults, rollover structures, and a toe thrust complex, formed by sediment loading and shelf-edge collapse. Two key collapse events shaped the region—during Late Eocene to Early Miocene and Late Miocene to Pliocene—and continue to present.

Shelf reservoirs consist of Mid-Late Miocene coastal plain to shoreface sands, while slope reservoirs are mainly Pliocene-Pleistocene channel deposits and incised slope sands. Primary exploration targets are Miocene to Plio-Pleistocene submarine fan and channel-levee complexes, sourced from the Godavari River and deposited across intra-slope basins. The known petroleum system in the KG Basin offshore is the Vadaparru-Ravva-Godavari system. Reservoirs are interpreted as extensions of lower Pliocene channel-levee and DWN-Q-1 submarine fan complexes, proven hydrocarbon-bearing in wells G-2-P-1 and DWN-Q-1.

The regional source rock is the transgressive Vadaparru shale (Paleocene to Early Miocene), while clay within the Godavari Formation serves as the cap rock. Hydrocarbon migration into Late Pliocene sands is confirmed, with strati-structural traps formed by up-dip pinch-outs and sealed by Plio-Pleistocene interbedded clays/shales.

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 OGIP. Seismic sections, log motifs, structure and isopach maps are in the annex bound with this docket information.

RESERVOIR PARAMETERS and ORIGINAL GAS in PLACE
as of
JANUARY 1, 2025
for the
G-1-NE-2 (AB) DISCOVERY
of
KG/OSDSF/G1/2025 CONTRACT AREA

	Reservoir	Total
Low		
Area, acres	128	
Gas Formation Volume Factor, scf/rcf	0.0036	
Average Thickness, ft	50.7	
Average Porosity, %	19.40	
Average Water Saturation, %	61.00	
Original Gas in Place, $10^9 ft^3$	5.97	**5.97**
Original Gas in Place, 10^6 eq ton	0.15	**0.15**
Best		
Area, acres	717	
Gas Formation Volume Factor, scf/rcf	0.0036	
Average Thickness, ft	33.0	
Average Porosity, %	20.40	
Average Water Saturation, %	59.00	
Original Gas in Place, $10^9 ft^3$	23.95	**23.95**
Original Gas in Place, 10^6 eq ton	0.60	**0.60**
High		
Area, acres	1,612	
Gas Formation Volume Factor, scf/rcf	0.0036	
Average Thickness, ft	37.1	
Average Porosity, %	21.40	
Average Water Saturation, %	57.00	
Original Gas in Place, $10^9 ft^3$	66.66	**66.66**
Original Gas in Place, 10^6 eq ton	1.68	**1.68**

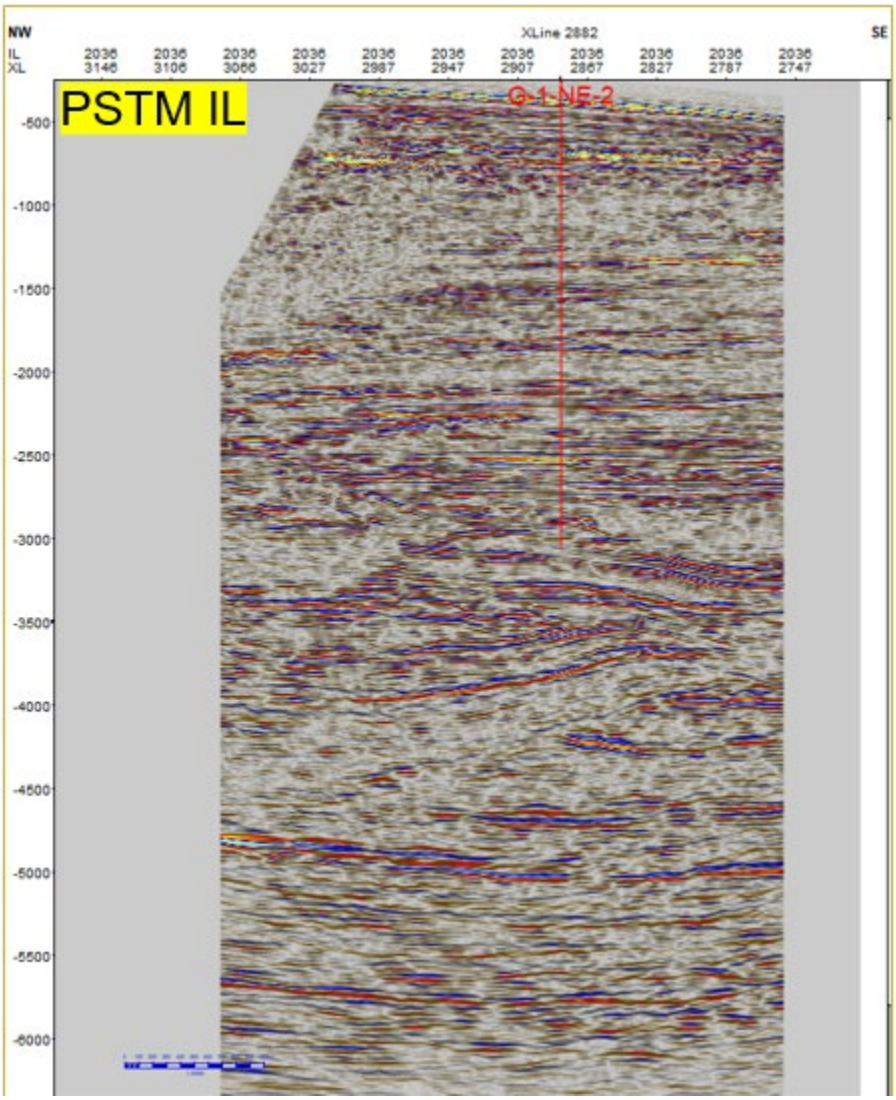
Note: Conversion used 10^9 scf equal to 0.02519 10^6 eq tone.

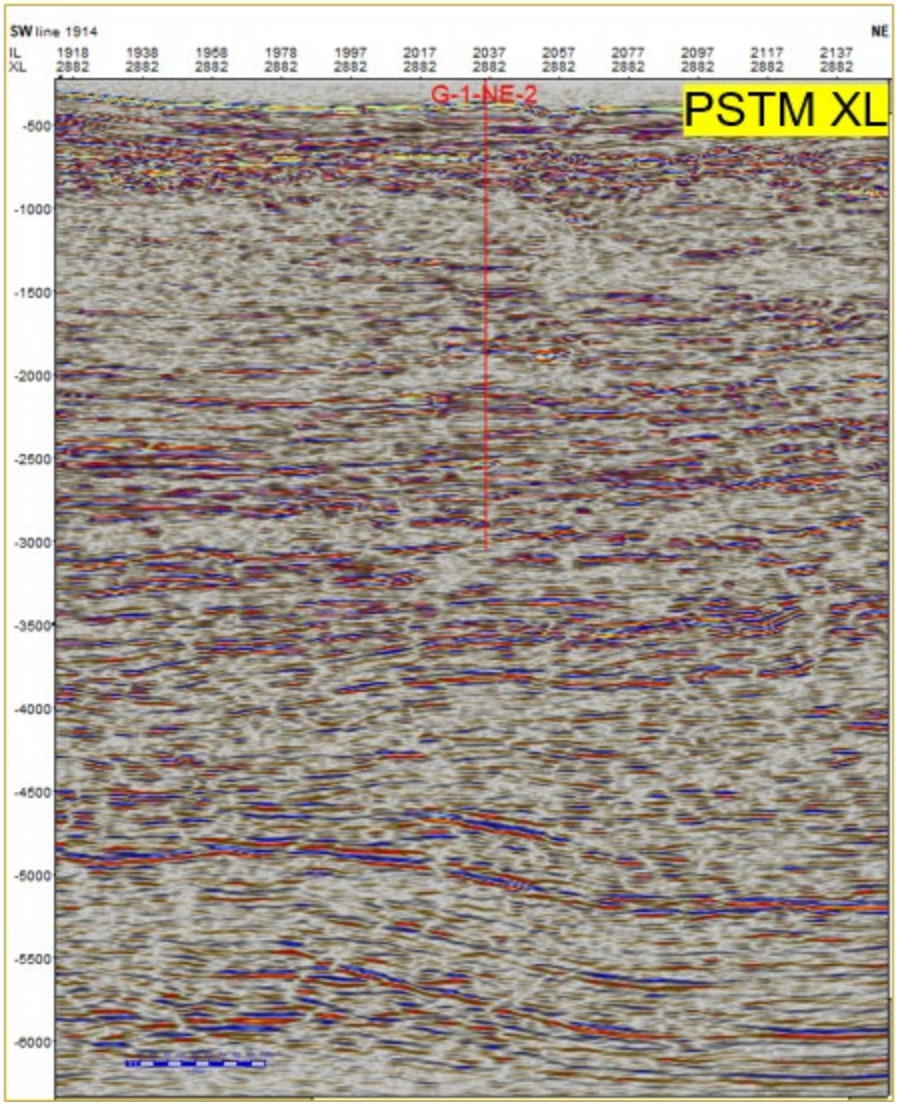
Volumes estimated by a Third Party

The operator has reported an in-place volume of 0.69 MMTOE (Best case).

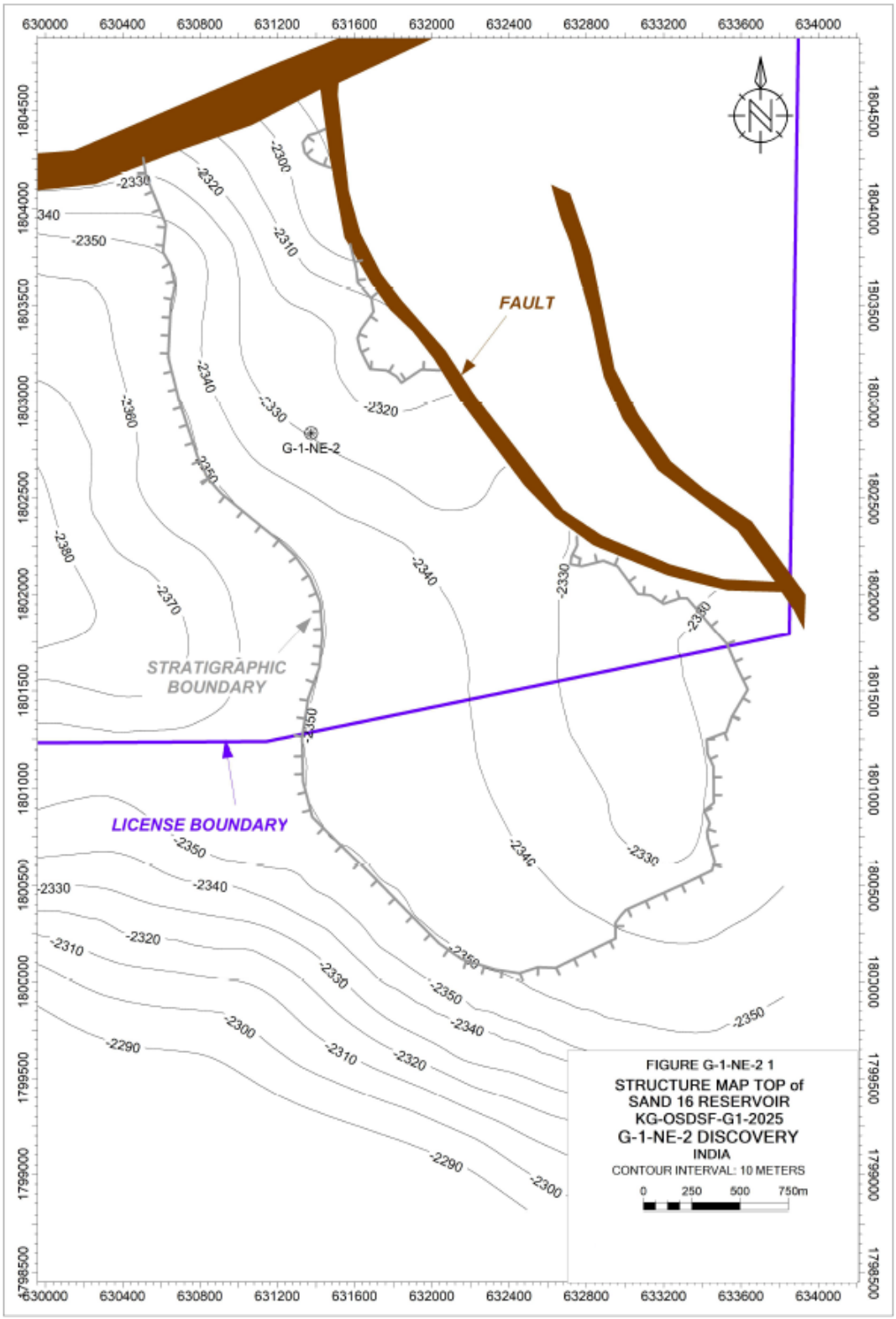
5.2.7. Annex

5.2.7.1. Seismic Sections

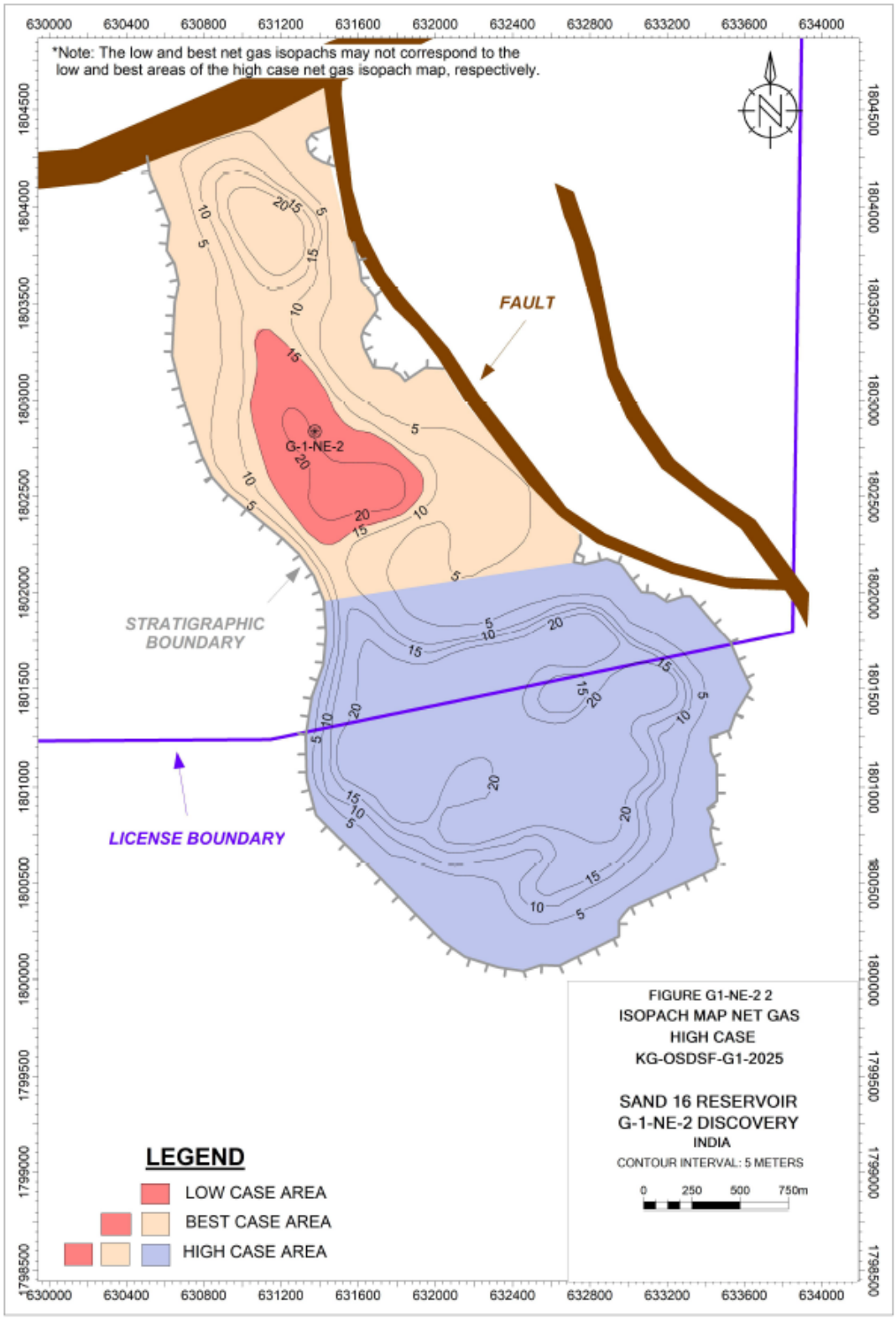



SW line 1914
NE
IL
XL
1918 2882
1938 2882
1958 2882
1978 2882
1997 2882
2017 2882
2037 2882
2057 2882
2077 2882
2097 2882
2117 2882
2137 2882
G-1-NE-2
PSTM XL
-500
-1000
-1500
-2000
-2500
-3000
-3500
-4000
-4500
-5000
-5500
-6000

5.2.7.2. Structural Maps

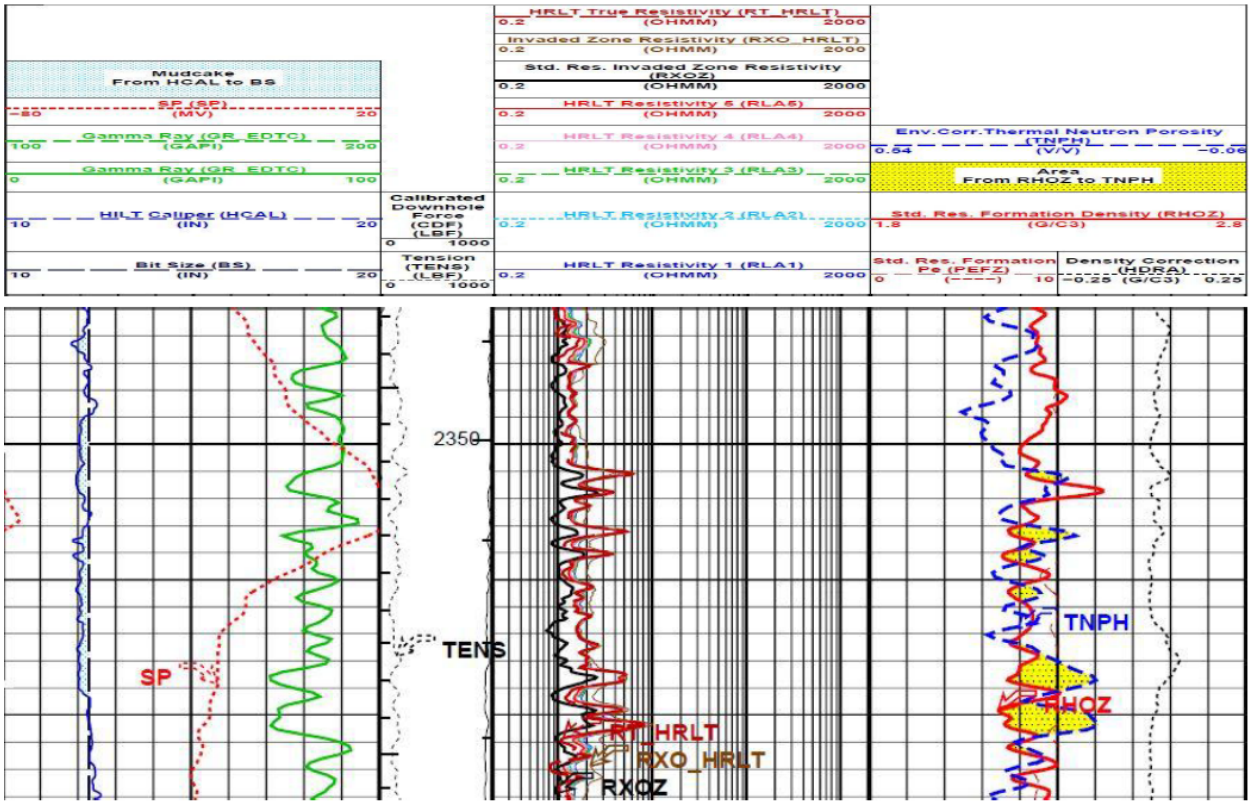


5.2.7.3. Isopach Maps



5.2.7.4. Log Motifs

Object I: 2344-2362m



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

5.3. G1-NE1 DISCOVERY AND FIELD DESCRIPTION

The location G-1-NE-1 situated in VASISTA PML block has been proposed as an Exploratory “B” category appraisal location to explore the Oil pay equivalent of early Pliocene paysands of KG-DWN-98/2-G2-P1 (Zone 18 & Zone 7). The location has been released to probe the amplitude anomaly around the Zone 18 and Zone 7 of Kanakadurga Prospect with a target depth of 3000 m (TVDSS).

The well G-1-NE-1 was spudded in on 05.08.2014 in the bathymetry of 260m. As the exploratory objective has been achieved and to avoid likely drilling complications the well has been drilled down to 2790m and terminated against the approved target depth of 3026m MD. The well has penetrated 2229m of Pliocene to Recent sediments (Godavari clay) and 270+ m. of Mass Transport Complex (MTC).

One object has been tested in the interval 2349-2331m and flowed Qo: 2842 BPD and Qg: 74198 m^3/d through 32/64” choke at FTHP- 1520psi. API: 35.3°, BS&W: Nil.

Success of this well is a curtain raiser for chasing the Pliocene prospects in nearby areas as future exploratory cum delineation targets. The well G-1-NE-1 has been declared as an oil and gas well and has been temporarily abandoned with provision for re-entry. Rig was released on 30th January 2015 to move to the next well KG-DW-S2A (AB) for completion job under EAO, Kakinada.

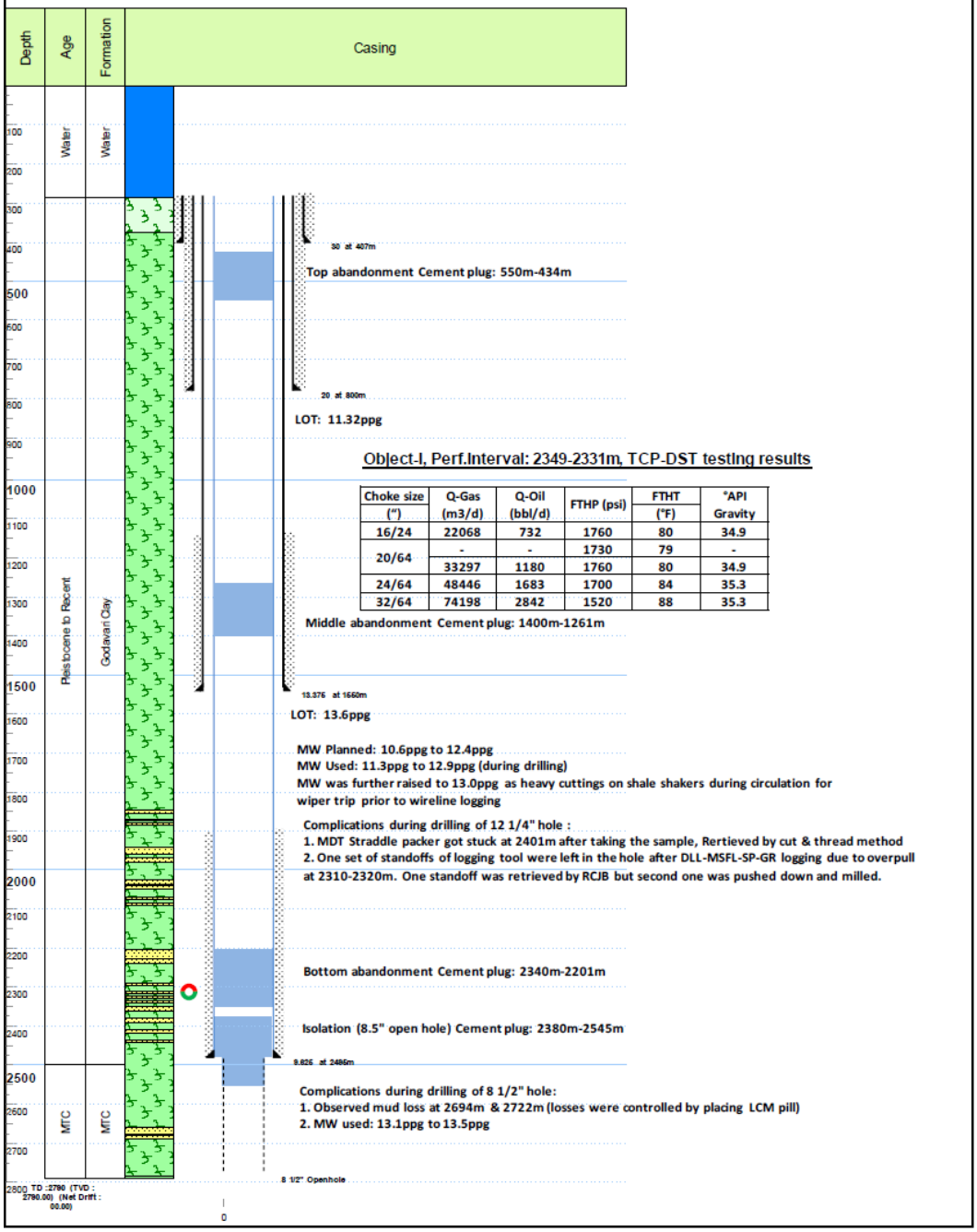
5.3.1. Drilling and Well Completion

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.

Well Construction Diagram

G-1-NE-1(G-1-NE-AA)

Area/Structure	G-1 Northeast	Name of Rig	Actinia Majuro (Transocean)
Latitude	16° 19' 20.6179" N	Rig Type	Semi submercible
Longitude	82° 14' 49.7579" E	Type of Well	Exploratory
State	Andhra Pradesh	Category of Well	B
Elevation, KB	25.62m	Spud Date	05.08.2014
Water Depth	260m	Drilled Depth (m)	2790m (2790m TVD)
Target Depth	3026m (3026m TVD)	Status	Oil and Gas Producer,
Objective	Primary:Equivalent of Zone-18 Oil Pay, Secondary: Eq. of Zone-7 Oil Pay		



Object-I, Perf.Interval: 2349-2331m, TCP-DST testing results

Choke size (")	Q-Gas (m3/d)	Q-Oil (bbl/d)	FTHP (psi)	FTHT (°F)	°API Gravity
16/24	22068	732	1760	80	34.9
20/64	-	-	1730	79	-
	33297	1180	1760	80	34.9
24/64	48446	1683	1700	84	35.3
32/64	74198	2842	1520	88	35.3

MW Planned: 10.6ppg to 12.4ppg
MW Used: 11.3ppg to 12.9ppg (during drilling)
MW was further raised to 13.0ppg as heavy cuttings on shale shakers during circulation for wiper trip prior to wireline logging

Complications during drilling of 12 1/4" hole :
1. MDT Straddle packer got stuck at 2401m after taking the sample, Rertieved by cut & thread method
2. One set of standoffs of logging tool were left in the hole after DLL-MSFL-SP-GR logging due to overpull at 2310-2320m. One standoff was retrieved by RCJB but second one was pushed down and milled.

Complications during drilling of 8 1/2" hole:
1. Observed mud loss at 2694m & 2722m (losses were controlled by placing LCM pill)
2. MW used: 13.1ppg to 13.5ppg

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 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 WCRs and FERs, 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	05.08.2004	25.62 m	2,790.0 m MDRT

5.3.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

17.5	DLL-MSFL-CALI-SP-GR (1550-801m) Remarks: BHT@125°F
	DSI -GR (1546.5-801m) Remarks: BHT@128°F
12.25	DLL-MSFL-CALI-SP-GR (2445-1550m) Remarks: BHT@184°F
	DSI-GIPT-GR (2442-1550m) Remarks: BHT@190°F
	PEX-GR (TLD-CNL- MSCL-HNGS-HCALI-GR) (2449-1550m) Remarks: BHT@190°F
	MDT-AFA-GR (2405-2395m, 2365-2325m, 2235-2210m, 1954-1946m
	Remarks: BHT@180-190°F
	DLL-MSFL-CALI-SP-GR (2498-2450m) Remarks: BHT: 220°F ; Drillers Depth: 2500m
	DSI-GR (2497-2400m) Remarks: BHT: 172°F. Hole size- 12 ¼”
	Driller’s Depth-2502m Logger’s Depth-2505.7m
	LDL-CNL-CAL-GR (2504-2400m) Remarks: BHT: 178°F.
	FMI-GR (2400-2200m) Remarks: BHT: -°F.
	CMR-GR (2400-2200m) Remarks: BHT: 180°F. Hole size- 12 ¼”
	VSP-GR (2500-300m) Remarks: BHT: 182°F.
	MDT-AFA-GR (2357m, 2339m, 2328m-2333m, 2325m, 2440.5-2444.5mm) Remarks: BHT: 178°F. Hole size- 12 ¼”:Total pre-tests:22, Good: 11, Lost seal: 02, Tight-09, Total samples attempted:- 5, Collected:-5
	CST-GR (2443.50m-1602mm) Remarks: BHT: 180°F. Hole size-12.25” Sample attempted-24 Recovered-21, Lost-0, Accepted- 21, Empty: 03
8.5	DLL-MSFL-CALI-SP- GR (2786-2494m) Remarks: BHT: 190°F. Hole size- 8 ½”, Driller’s Depth-2790m, Logger’s Depth-2792m.
	LDL-CNL-GR (2784.5-2494m) Remarks: BHT: 193°F. Hole size- 8 ½”, Driller’s Depth-2790m, Logger’s Depth-2792m.
	DSI-GIPT-GR (2784-2494m) Remarks: BHT: 204°F. Hole size- 8 ½”, Driller’s Depth-2790m, Logger’s Depth-2792m.

MDT-LFA-GR (2566.80, 2662.50, 2684.00, 2661-2685.0m) Remarks: BHT: -°F. Hole size- 8 ½": Total pre-tests:15, Good: 13, Lost seal: 0, Tight-02, Total samples attempted:-3, Collected:-3, all samples
shown as water on LFA.

CBL-VDL-CCL (2381-1895m) Remarks: BHT: 162°F. Behind 9 5/8" casing

HSD Perforating Gun (2357-2356m) Remarks: BHT: 162°F. Perforated 9 5/8" Casing from 2357m- 2356m@6SPM

CBL-VDL-CCL (2350-2200m) Remarks: BHT: 160°F. Behind 9 5/8" casing

CBL-VDL-CCL (2366-2266m) Remarks: BHT: 161°F. Behind 9 5/8" casing

HSD Perforating Gun (2356-2355m) Remarks: BHT: 162°F. Perforated 9 5/8" Casing from 2356m-
2355m@6SPM

5.3.3. Well Testing and Workover History

5.3.3.1. Drill Stem Test (DST)

Formation: Godavari Clay| Interval(m.): 2349-2331m| Flow period(hrs.): 11.30| Bean(1/64 inch): 16| FTHP: 1760 psi|Qoil: 732 BPD | API Gravity: 34.9| Qg: 22068 m3/d|FTHT: 80 °F

Formation: Godavari Clay| Interval(m.): 2349-2331m| Flow period(hrs.): 06.30| Bean(1/64 inch): 20| FTHP: 1760 psi|Qoil: 1180 BPD | API Gravity: 34.9| Qg: 33297 m3/d|FTHT: 80 °F

Formation: Godavari Clay| Interval(m.): 2349-2331m| Flow period(hrs.): 08.00| Bean(1/64 inch): 24| FTHP: 1700 psi|Qoil: 1683 BPD | API Gravity: 35.3| Qg: 48446 m3/d|FTHT: 84 °F

Formation: Godavari Clay| Interval(m.): 2349-2331m| Flow period(hrs.): 12.00| Bean(1/64 inch): 32| FTHP: 1520 psi|Qoil: 2842 BPD | API Gravity: 35.3| Qg: 74198 m3/d|FTHT: 88 °F

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 PVT data/results are included.

5.3.4.1. Pressure build-up study

Formation: Godavari Clay| Object: I| Interval(m.): 2349-2331 | Duration of build-up: 24 hrs| Static bottom hole pressure: 3929 psi | BHT: 208 °F | Initial pressure: 3556.5 psi| Skin: 0.9 | Permeability to oil: 145 md| Capacity (kh): 5437.5 mdft | Average open flow potential (oil): 17687.6 STB/day.

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 correlations, sections, and maps

The Vadaparru-Ravva-Godavari petroleum system is a well-established and recognized hydrocarbon system in the offshore Krishna-Godavari Basin. The primary reservoirs are interpreted as extensions of Lower Pliocene channel-levee complexes. These channel and fan sands, trapped under strati-structural conditions, have been confirmed to contain hydrocarbons in wells such as G-2-P-1 and DWN-Q-1.

The regional source rock is the transgressive Vadaparru shale, dating from the Paleocene to Early Miocene, while localized sealing is provided by clay layers within the Godavari Formation. Hydrocarbon migration into the Late Pliocene sands has been verified at multiple structurally and stratigraphically favorable locations in the surrounding area.

Reservoirs are primarily composed of Plio-Pleistocene slope-channel deposits, including some incised slope channels, with interbedded clays and shales acting as effective cap rocks. The dominant trap style is strati-structural, typically formed by updip pinchouts.

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. 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 docket information.

RESERVOIR PARAMETERS and ORIGINAL OIL in PLACE
as of
JANUARY 1, 2025
for the
G-1-NE-1 (AA) DISCOVERY
of
KG/OSDSF/G1/2025 CONTRACT AREA

	Reservoir	Total
Low		
Area, acres	84	
Oil Formation Volume Factor, rbbl/bbl	1.58	
Average Thickness, ft	139.6	
Average Porosity, %	21.40	
Average Water Saturation, %	70.00	
Original Oil in Place, 10^6bbl	3.70	**3.70**
Original Oil in Place, 10^6eq ton	0.54	**0.54**
Best		
Area, acres	562	
Oil Formation Volume Factor, rbbl/bbl	1.58	
Average Thickness, ft	74.2	
Average Porosity, %	22.40	
Average Water Saturation, %	68.00	
Original Oil in Place, 10^6bbl	14.68	**14.68**
Original Oil in Place, 10^6eq ton	2.15	**2.15**
High		
Area, acres	1,010	
Oil Formation Volume Factor, rbbl/bbl	1.58	
Average Thickness, ft	70.8	
Average Porosity, %	23.40	
Average Water Saturation, %	66.00	
Original Oil in Place, 10^6bbl	27.96	**27.96**
Original Oil in Place, 10^6eq ton	4.08	**4.08**

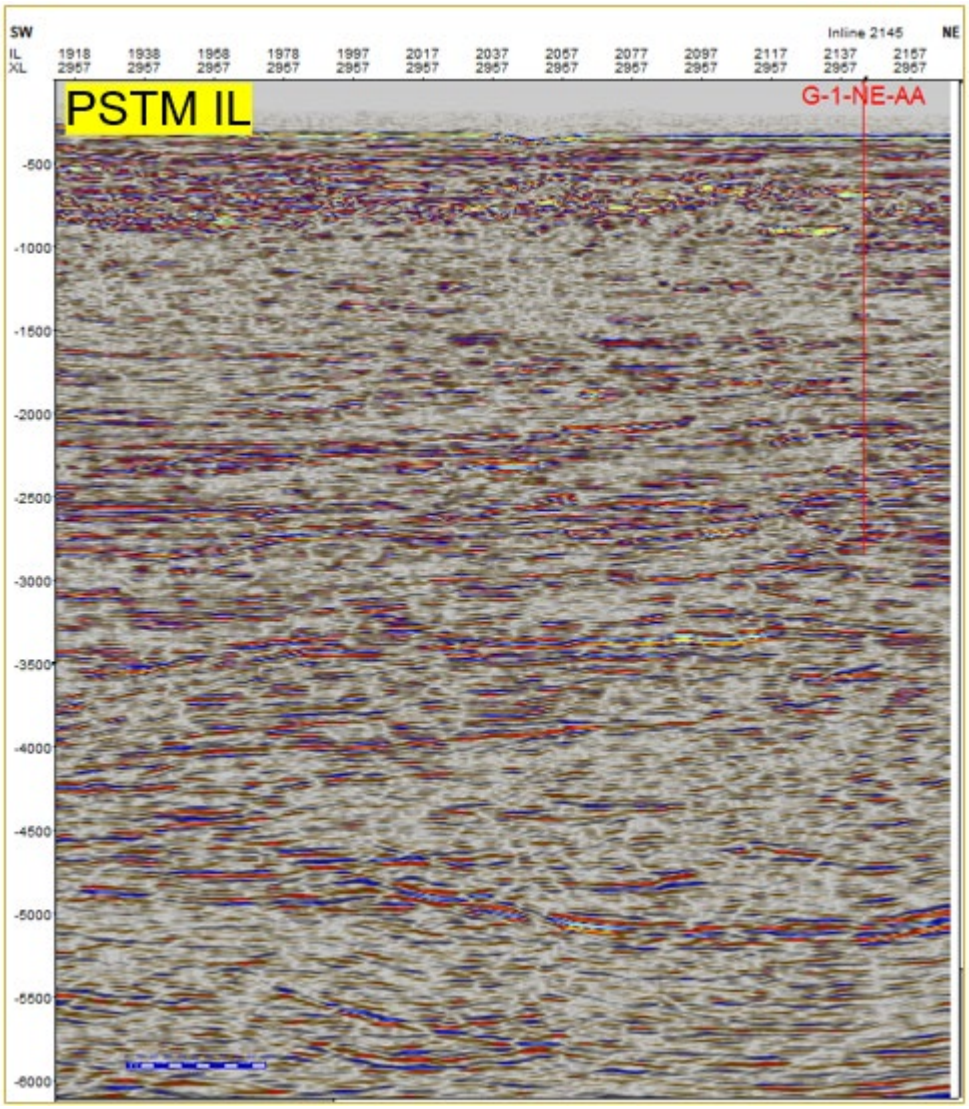
Note: Conversion used 10^6 bbl equal to 0.1461 10^6 eq tone.

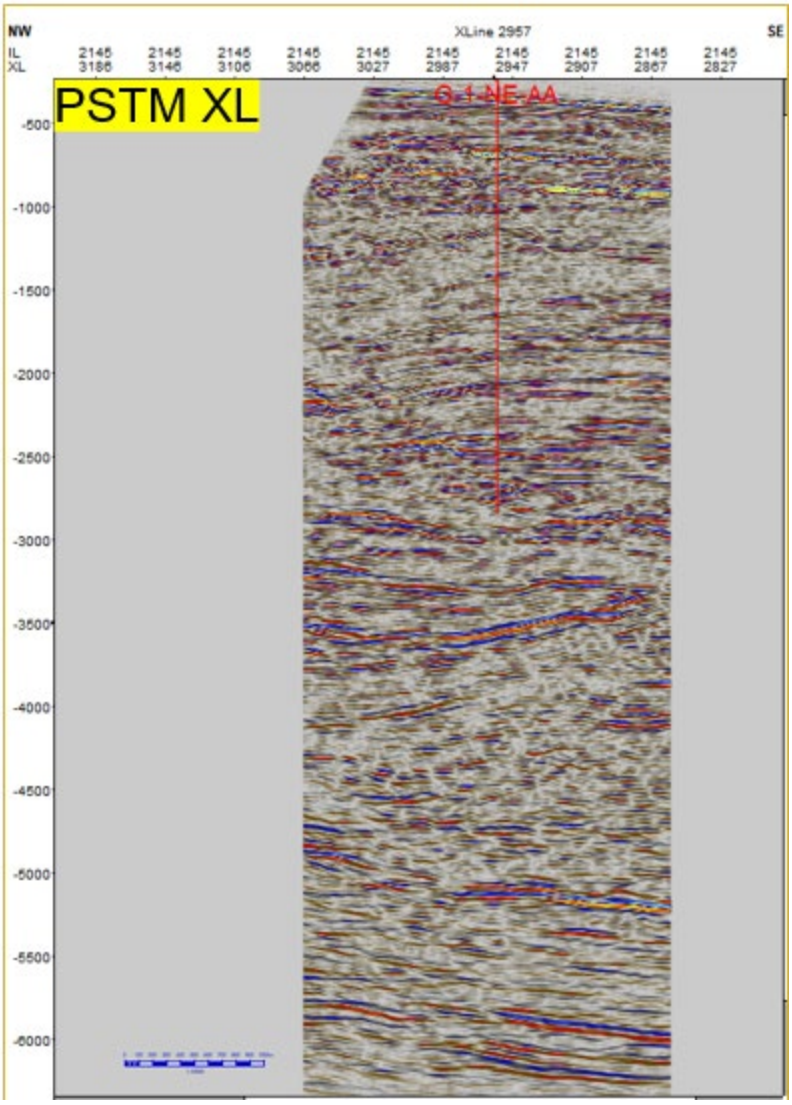
Volumes estimated by a Third Party

The operator has reported an in-place volume of 1.93 MMTOE (Best case).

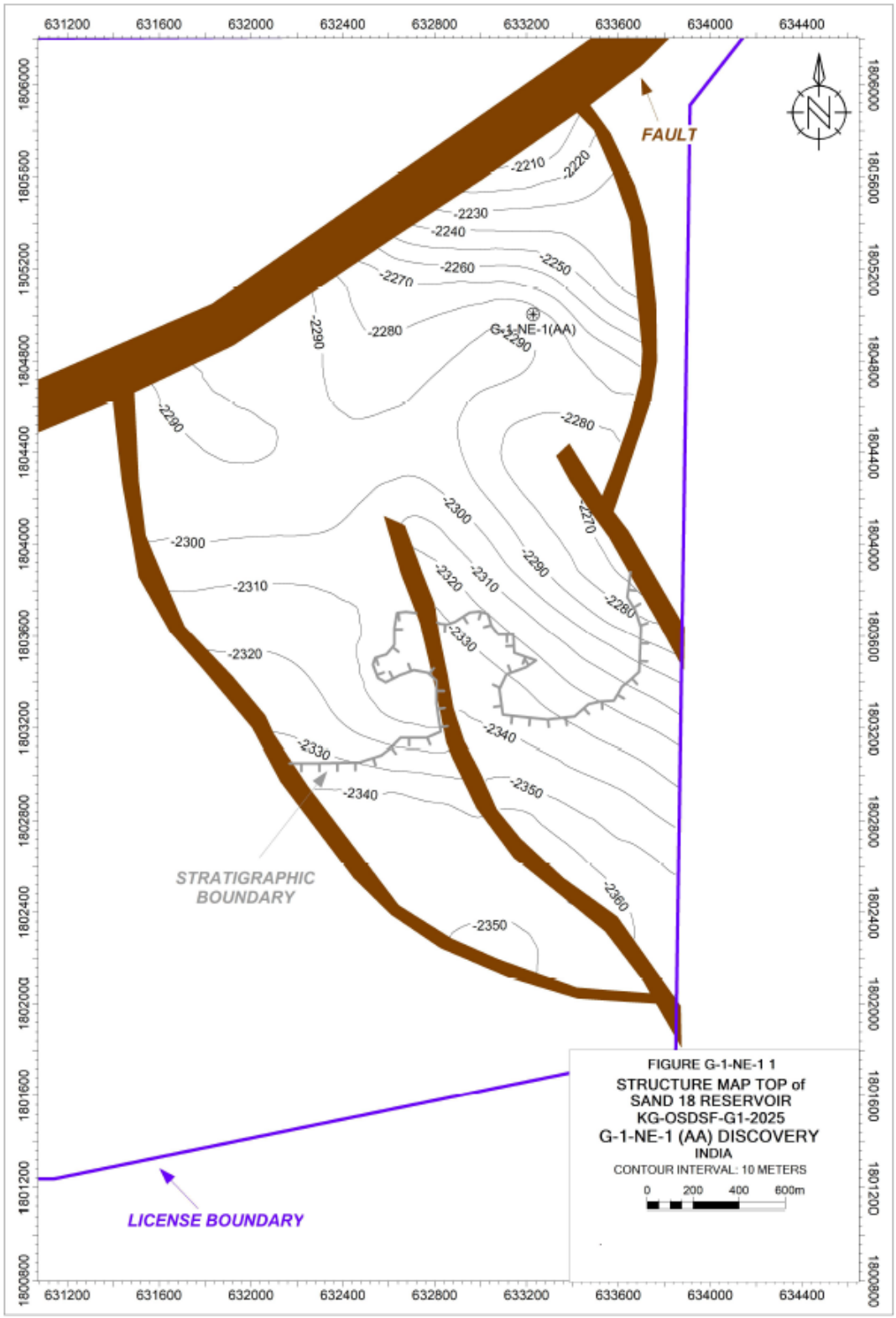
5.3.7. Annex

5.3.7.1. Seismic Sections

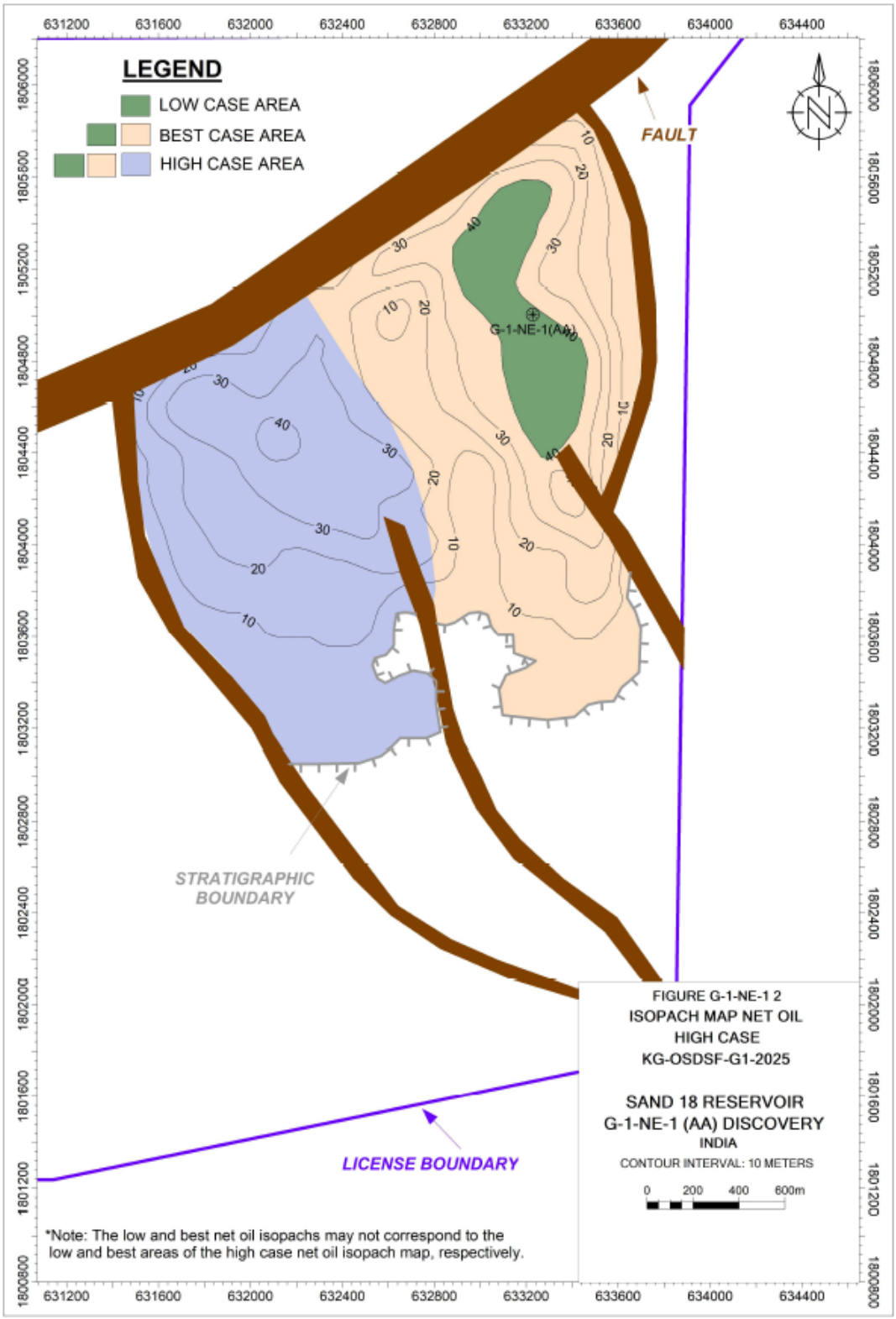



NW
XLine 2957
SE
IL
XL
2145 3186
2145 3146
2145 3106
2145 3066
2145 3027
2145 2987
2145 2947
2145 2907
2145 2867
2145 2827
PSTM XL
G-1-NE-AA
-500
-1000
-1500
-2000
-2500
-3000
-3500
-4000
-4500
-5000
-5500
-6000

5.3.7.2. Structural Maps



5.3.7.3. Isopach Maps



5.3.7.4. Log Motifs

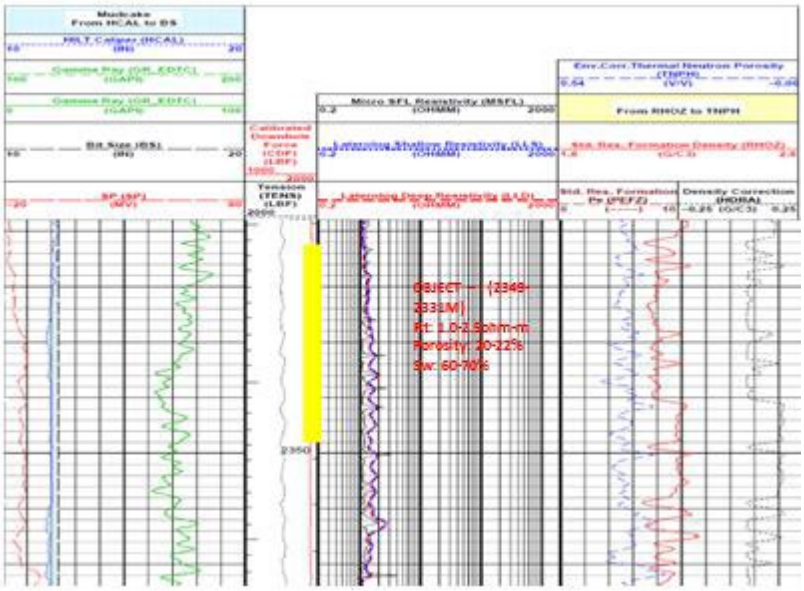


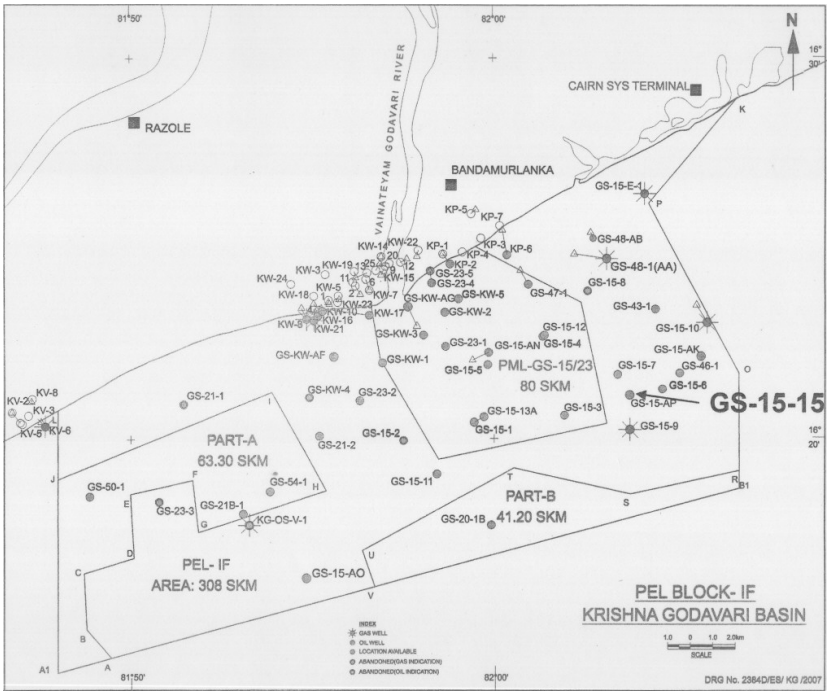
Fig.: LOG MOTIF OF OBJECT – I (2349-2331M)

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

5.4. GS-15-15 DISCOVERY AND FIELD DESCRIPTION

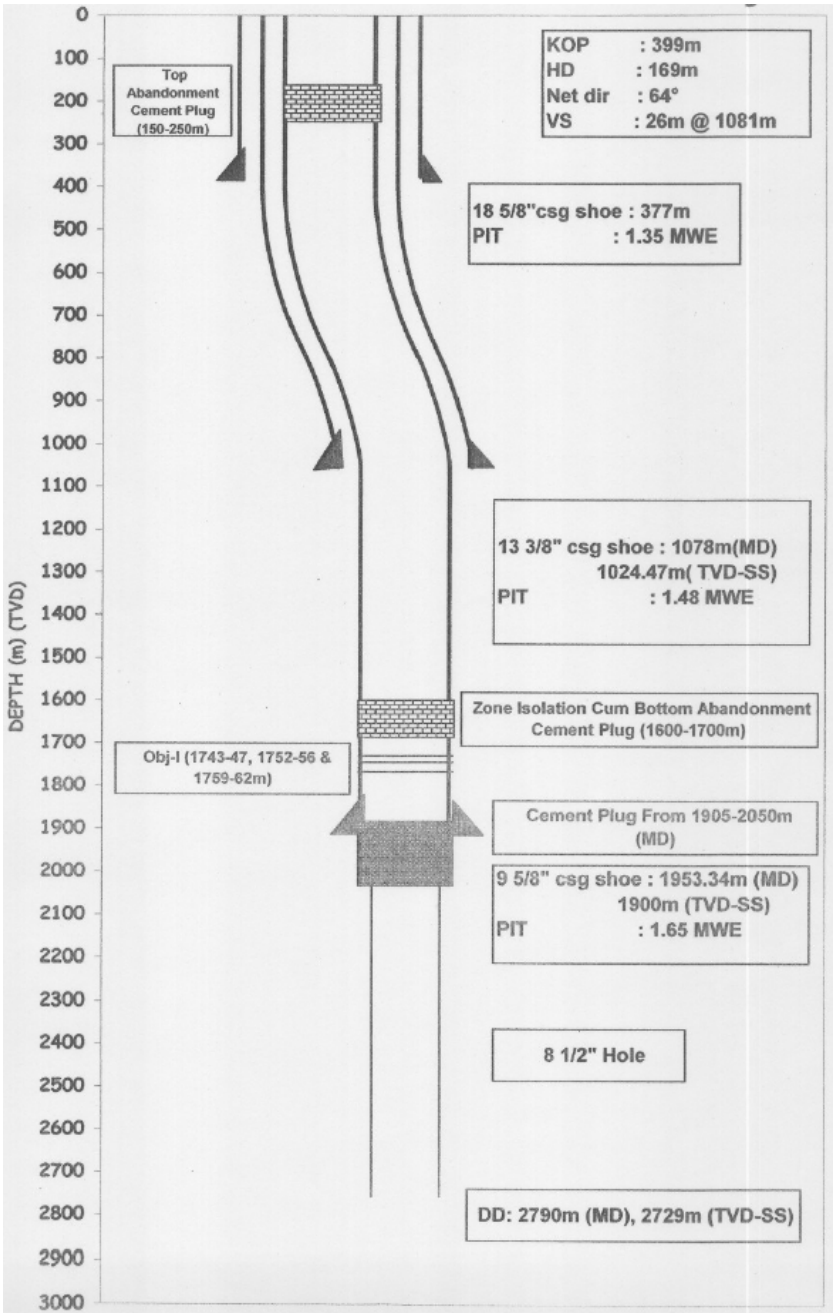
The GS-15-15 (AP) well was drilled as part of an exploratory effort aimed at extending geological understanding in the area and assessing the hydrocarbon potential of a sub-unconformity trap below the Mio-Pliocene unconformity, in a setting analogous to that of well GS-15-9. A secondary objective was to evaluate the reserve potential of a sand unit previously encountered in well GS-15-3. Drilling penetrated the Ravva Formation after crossing significant thicknesses of Godavari Clay, allowing for robust geological correlation with nearby wells. This correlation indicated that GS-15-15 is structurally shallower compared to equivalent markers in GS-15-3 and GS-15-9, offering valuable insight into the geometry of the targeted trap. Gas shows were observed across several sand intervals within the Ravva Formation. However, most of these intervals were interpreted as water-bearing based on log data. One well-developed sand body below the Mio-Pliocene unconformity displayed positive log response, consistent with the sub-unconformity play seen in GS-15-9, although the two belong to different fault blocks. The key pay sand encountered in GS-15-3 was not present in GS-15-15, having been replaced by shale at this location.

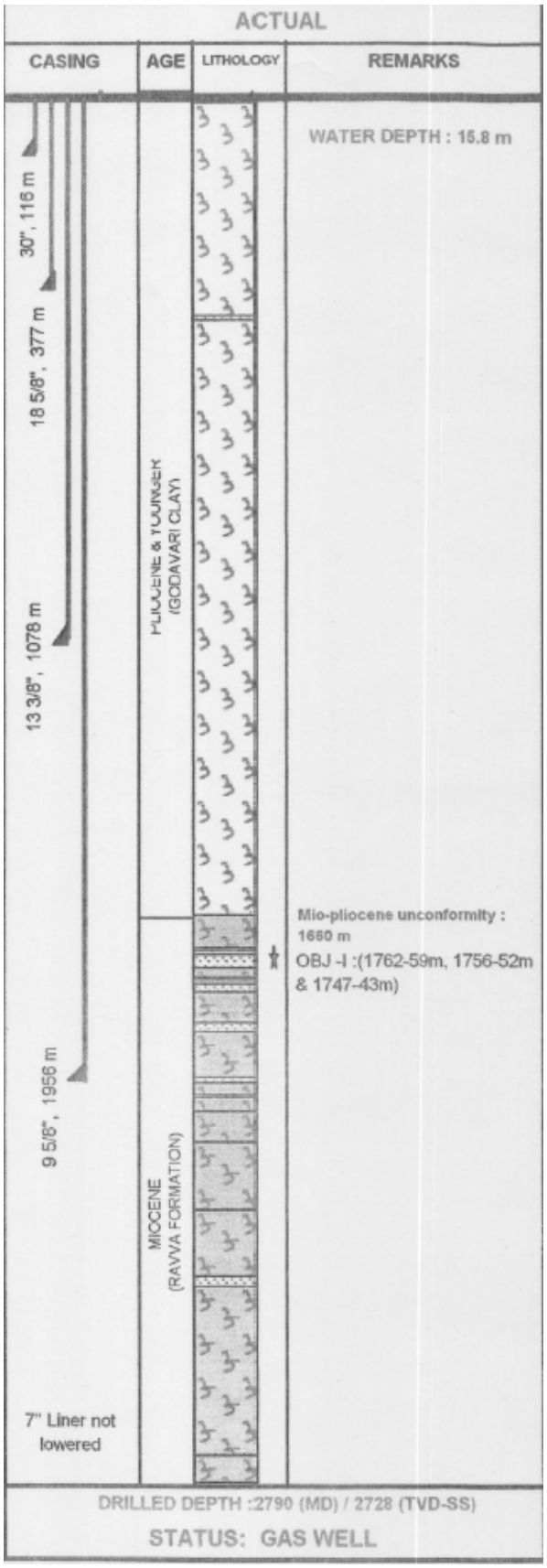
A single interval within the prospective zone was selected for production testing, which yielded gas and condensate under stabilized conditions. While the volumes were modest, the results confirmed the presence of hydrocarbons within the sub-unconformity trap. The well was consequently classified as a gas producer and temporarily abandoned with provisions for future re-entry. The results of GS-15-15 support the exploration model for hydrocarbon accumulation beneath the Mio-Pliocene unconformity in the GS-15 area. Additionally, the absence of hydrocarbons in deeper sections of the Ravva Formation highlights the need for further depositional and stratigraphic studies to better predict hydrocarbon distribution in the area and support future exploratory efforts.



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.




ACTUAL
CASING
AGE
LITHOLOGY
REMARKS
WATER DEPTH : 15.8 m
30", 116 m
18 5/8", 377 m
13 3/8", 1078 m
9 5/8", 1956 m
PLIOCENE & YOUNGER
(GODAVARI CLAY)
MIOCENE
(RAVVA FORMATION)
Mio-pliocene unconformity :
1660 m
OBJ -I :(1762-59m, 1756-52m
& 1747-43m)
7" Liner not
lowered
DRILLED DEPTH :2790 (MD) / 2728 (TVD-SS)
STATUS: GAS WELL

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 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.

5.4.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	KB	Drilled depth
Both available	11.12.2007	27.43 m	2790 m MDRT

5.4.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

17.5 DLL-MSFL-SP-GR-CAL (1072-377m) Remarks: BHT@138°F
BHC-GR (1078.5-377m) Remarks: BHT@139°F

12.25 PEX-HRLA-SP-GR (1948.4-1071.5m) Remarks: BHT@175°F
FMI-DSI-GR (1948-1071.5m) Remarks: BHT@186°F
MDT-GR (1928- 1729m) Remarks: BHT@196°F

8.5 DLL-MSFL-SP-GR-CAL-BHC-SONIC (2536.5m-csg shoe) Remarks: BHT@229°F
LDL-CNL-GR (2537.5m-csg shoe) Remarks: BHT@229°F. Logger depth: 2552m / Csg shoe: 1950m (LD)
CBL-VDL-GR-CCL (1925-1325m)
PEX-HRLA-DSI (2686.5m-csg shoe) Remarks: BHT@208°F. Logger depth: 2702m
PEX-HRLA-DSI (2748-2600m) Remarks: BHT@210°F
HNGS (2740m-csg shoe) Remarks: BHT@210°F. Logger depth: 2779.6m
DLL-MSFL-SP-GR-CAL (1072-377m) Remarks: BHT@138°F
CBL-VDL-GR-CCL (1795-1475.5m) Remarks: recorded under "0" psi
CBL-VDL-GR-CCL (1860-1637.8m) Remarks: recorded under "700" psi

5.4.3. Well Testing and Workover History

One object was released for production testing within the Godavari clay. Object –I (1743-1747m & 1759-1762m) produced gas (Qg: 165072 M3/d) and condensate (Qo; 15.1 m3/d), FTHP: 2144 psi thru 10mm choke.

5.4.3.1. Drill Stem Test (DST)

Formation: Godavari Clay| Interval(m.): (1743-1747m, 1752-1756m, 1759-1762m) | Choke size(mm.): 6| FTHP: 2171 psi|Qg: 75552 m3/d | Qcond: 22.6 BPD

Initial shut in for 12hrs., STHP-2222 psi (stabilized)

Formation: Godavari Clay| Interval(m.): (1743-1747m, 1752-1756m, 1759-1762m) | Choke size(mm.): 7| FTHP: 2187 psi|Qg: 91872 m3/d | Qcond: 26.4 BPD

Formation: Godavari Clay| Interval(m.): (1743-1747m, 1752-1756m, 1759-1762m) | Choke size(mm.): 8| FTHP: 2182 psi|Qg: 114432 m3/d | Qcond: 51.6 BPD

Formation: Godavari Clay| Interval(m.): (1743-1747m, 1752-1756m, 1759-1762m) | Choke size(mm.): 10| FTHP: 2144 psi|Qg: 165072 m3/d | Qcond: 95 BPD

Formation: Godavari Clay| Interval(m.): (1743-1747m, 1752-1756m, 1759-1762m) | Choke size(mm.): 6| FTHP: 2203 psi|Qg: 78448 m3/d | Qcond: 23.9 BPD

Final build up for 15hrs., STHP-2224 psi (stabilized)

Recorded SBHP-2549 psi and BHT: 215°F at 1708.48m

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. Formation dynamics tests

Sl. No	Log Depth (m)	Formation Pressure		Hydrostatic Pressure		Drawdown Mobility md/cp	Remarks
		(psi)	MWE (SG)	(psi)	MWE (SG)		
1	1729.0	3038.1	1.24	2576.39	1.05	11.2	Good Pretest
2	1730.0	3039.1	1.24	2574.69	1.05	213.4	Good Pretest
3	1729.2			2575.84	1.05		Good Pretest
4	1729.7						Lost seal
5	1731.1	3036.3	1.23	2574.45	1.05	496.6	Good Pretest
6	1732.0	3036.6	1.23	2574.47	1.05	187	Good Pretest
7	1745.0						Lost seal
8	1745.2	3062.3	1.23	2572.48	1.04	895	Good Pretest
9	1747.3	3065.4	1.23	2572.42	1.04	322.8	Good Pretest
10	1750.0	3068.5	1.23	2572.88	1.03	197.9	Good Pretest
11	1742.0	3053.7	1.23	2571.64	1.04	126.1	Good Pretest
12	1752.4	3077.2	1.23	2573.7	1.03	799.1	Good Pretest
13	1755.5	3081.7	1.23	2573.74	1.03	104.9	Good Pretest
14	1757.5	3084.0	1.23	2574.23	1.03	2414.5	Good Pretest
15	1759.5	3087.0	1.23	2574.93	1.03	2353.4	Good Pretest
16	1760.8						Lost seal
17	1760.6	3090.5	1.23	2575.1	1.03	793.6	Good Pretest
18	1761.6	3091.2	1.23	2575.48	1.03	743	Good Pretest
19	1763.5	3093.8	1.23	2575.46	1.03	400.5	Good Pretest
20	1765.0	3094.5	1.23	2576.25	1.03	616.1	Good Pretest
21	1767.5	3098.8	1.23	2575.83	1.02	450.5	Good Pretest
22	1767.8	3099.8	1.23	2576.46	1.02		Good Pretest
23	1770.0	3103.8	1.23	2577.9	1.02	402.3	Good Pretest

24	1772.0	3107.9	1.23	2580.81	1.02	53.1	Good Pretest
25	1773.5	3114.0	1.23	2583.2	1.02	221.8	Good Pretest
26	1778.0	3121.6	1.23	2589.93	1.02	969.9	Good Pretest
27	1787.0	3137.2	1.23	2601.58	1.02	17	Good Pretest
28	1790.5	3142.5	1.23	2607.05	1.02	119.2	Good Pretest
29	1797.0	3153.8	1.23	2616.09	1.02	344.3	Good Pretest
30	1802.0	3166.2	1.24	2622.94	1.02	66	Good Pretest
31	1807.5						Lost seal
32	1807.8	3175.8	1.24	2631.17	1.02	1241.4	Good Pretest
33	1882.5	3305.7	1.23	2740.52	1.02	1957.6	Good Pretest
34	1884.0	3307.5	1.23	2742.69	1.02	1198	Good Pretest
35	1886.3	3311.5	1.23	2746.08	1.02	1430.2	Good Pretest
36	1890.0	3317.8	1.23	2751.12	1.02	11	Good Pretest
37	1924.0	3377.1	1.23	2798.85	1.02	1182.5	Good Pretest
38	1926.5	3381.1	1.23	2802.3	1.02	449.4	Good Pretest
39	1928.0	3383.4	1.23	2804.5	1.02	84.1	Good Pretest
40	1767.8	3097.5	1.23	2574.73	1.02	46.9	Good Pretest

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 correlations, sections, and maps

The GS-15 field, located in the shallow offshore PEL IF block of the Krishna-Godavari (KG) Basin, lies near productive fields such as GS-23, GS-KW, and the prolific Ravva field. It forms part of the broader Ravva petroleum system. Of the fourteen wells drilled in the GS-15 block, several—specifically GS-15-1, 3, 4, and 13A—have produced commercial hydrocarbons from Miocene sands, while others showed hydrocarbon indications or were dry. The primary reservoir play in the area is associated with the Ravva play, which involves sandstone reservoirs connected through growth and listric faults, with upthrown sides sealed by impermeable argillaceous facies. Entrapment types include structural closures such as four-way and three-way fault closures, sub-unconformity traps located beneath the Mio-Pliocene unconformity, and deeper strati-structural configurations.

The source rock for both gaseous and liquid hydrocarbons is the Vadaparru shale, which is well documented across the IF PEL block. During the Lower to Middle Miocene, transgressive-regressive sequences led to the deposition of well-sorted deltaic sands in shallow marine bars and coarser, less sorted sands and clays in channels, submarine fans, and slope environments. These depositional features were later modified by tectonic activity that created prominent

erosional unconformities in the Late Miocene, which were subsequently filled by the Godavari Clay Formation interbedded with Pliocene channel sands.

Comprehensive 3D seismic studies and pool mapping across the GS-15 area led to the identification of eighteen potential drilling locations within the IA and IF PEL blocks, of which seven were approved. One such location, KB-GS-71A, was selected based on pool mapping and its structural position relative to the productive GS-15-3 well. Object-I in GS-15-3 had previously yielded significant oil and gas, and the mapped extension of that pay zone led to the selection of a new structurally higher location on the eastern side of the faulted block. The expected entrapment mechanism at the new site is a fault closure, with an additional sub-unconformity play beneath the Mio-Pliocene boundary, similar to that found in GS-15-9 but within a different fault block.

The new location, designated GS-15-AP, is situated approximately 3.5 kilometers northeast of GS-15-3 and is planned to be drilled to a depth of 2,500 meters. It is expected to test multiple stratigraphic levels, including moderate seismic amplitude reflectors within the Miocene, potentially adding valuable reserves to the GS-15 field.

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. 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 docket information.

RESERVOIR PARAMETERS and ORIGINAL GAS in PLACE
as of
JANUARY 1, 2025
for the
GS-15-15 (GS-15-AP) DISCOVERY
of
KG/OSDSF/G1/2025 CONTRACT AREA

	Reservoir	Total
Low		
Area, acres	28	
Gas Formation Volume Factor, scf/rcf	0.0069	
Average Thickness, ft	79.5	
Average Porosity, %	21.40	
Average Water Saturation, %	57.20	
Original Gas in Place, $10^9 ft^3$	1.31	**1.31**
Original Gas in Place, 10^6 eq ton	0.03	**0.03**
Best		
Area, acres	186	
Gas Formation Volume Factor, scf/rcf	0.0069	
Average Thickness, ft	34.9	
Average Porosity, %	22.40	
Average Water Saturation, %	55.20	
Original Gas in Place, $10^9 ft^3$	4.13	**4.13**
Original Gas in Place, 10^6 eq ton	0.10	**0.10**
High		
Area, acres	607	
Gas Formation Volume Factor, scf/rcf	0.0069	
Average Thickness, ft	23.5	
Average Porosity, %	23.40	
Average Water Saturation, %	53.20	
Original Gas in Place, $10^9 ft^3$	9.91	**9.91**
Original Gas in Place, 10^6 eq ton	0.25	**0.25**

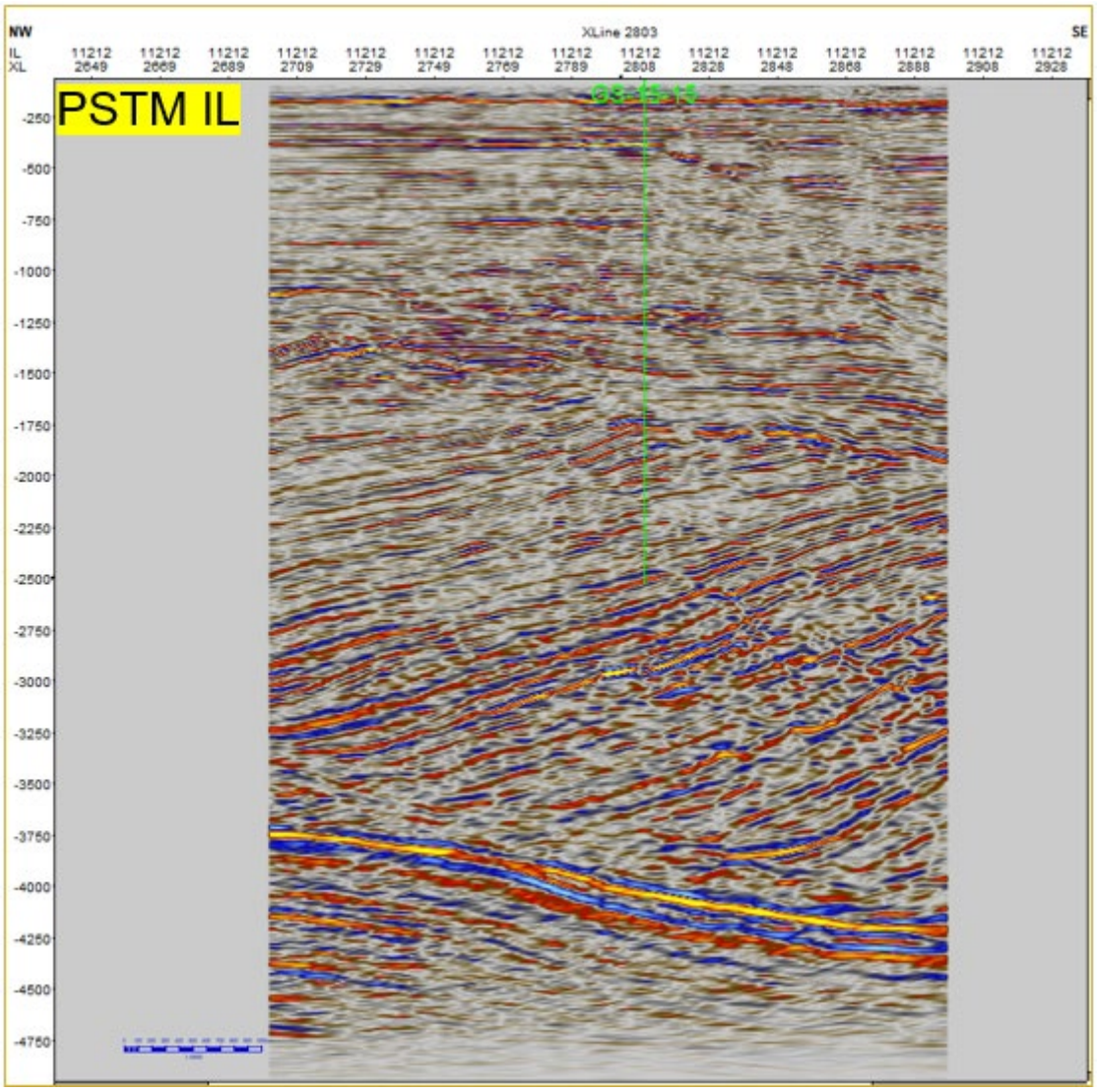
Note: Conversion used 10^9 scf equal to 0.02519 10^6 eq tone.

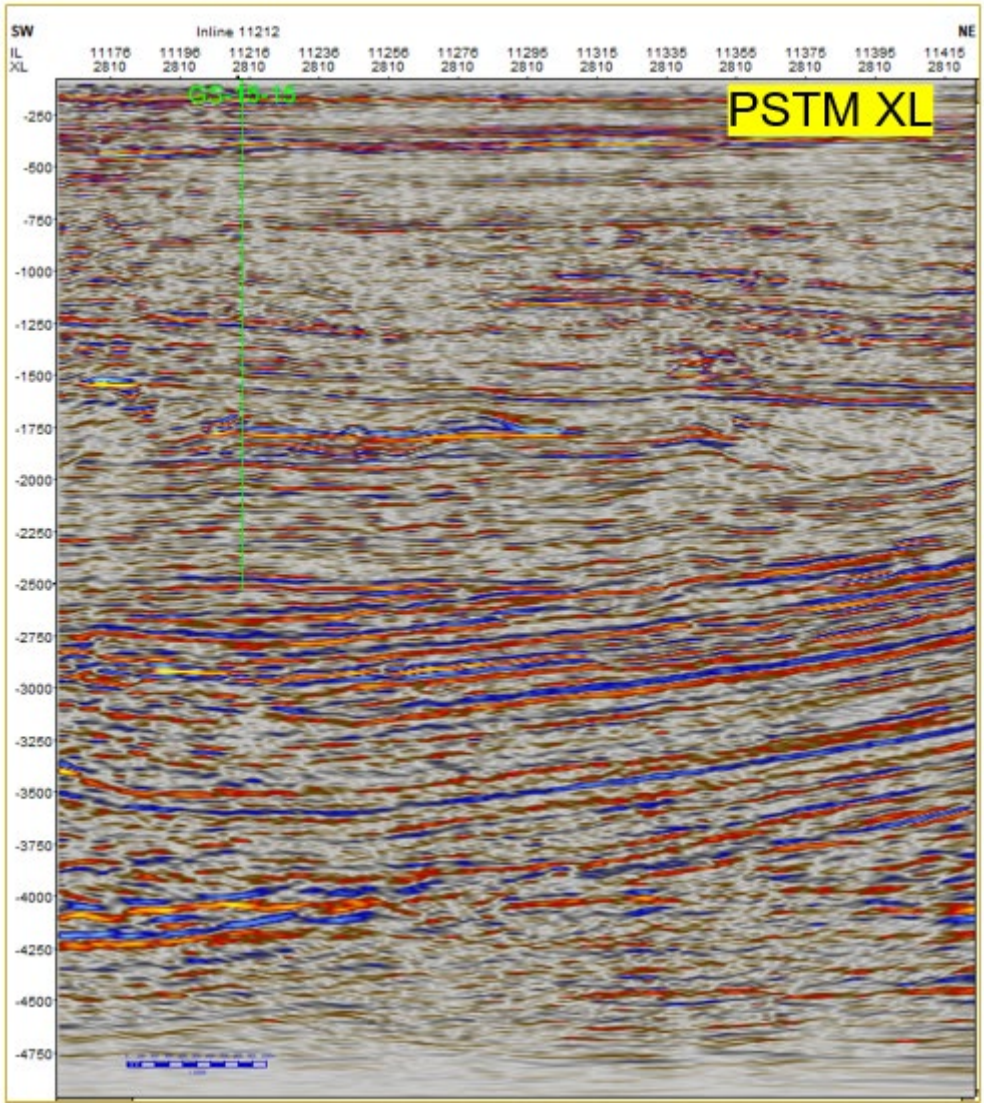
Volumes estimated by a Third Party

The operator has reported an in-place volume of 0.86 MMTOE (Best case).

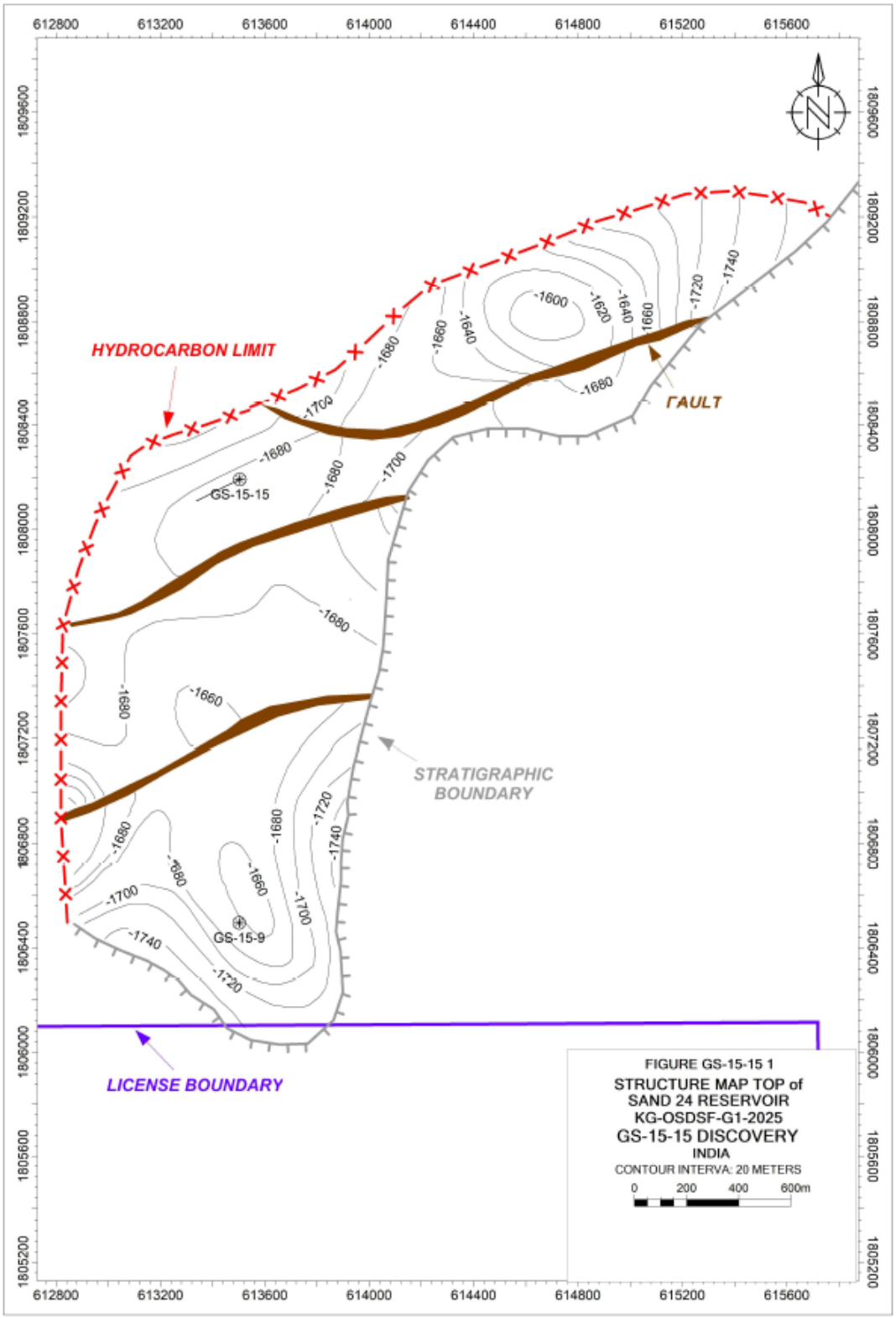
5.4.7. Annex

5.4.7.1. Seismic Sections

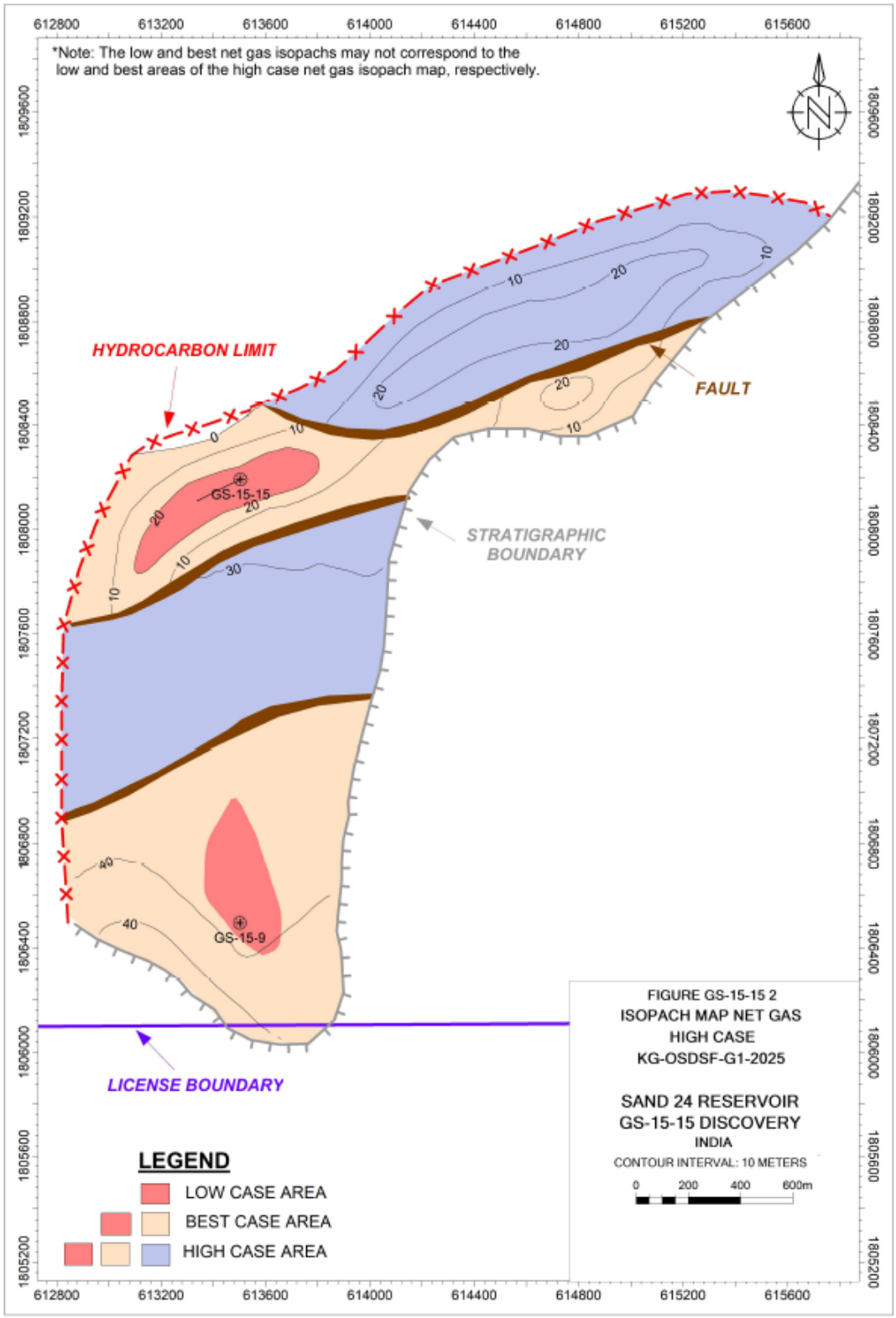



SW
Inline 11212
NE
IL
XL
11176 2810
11196 2810
11216 2810
11236 2810
11256 2810
11276 2810
11296 2810
11316 2810
11336 2810
11356 2810
11376 2810
11396 2810
11416 2810
PSTM XL
-250
-500
-750
-1000
-1250
-1500
-1750
-2000
-2250
-2500
-2750
-3000
-3250
-3500
-3750
-4000
-4250
-4500
-4750

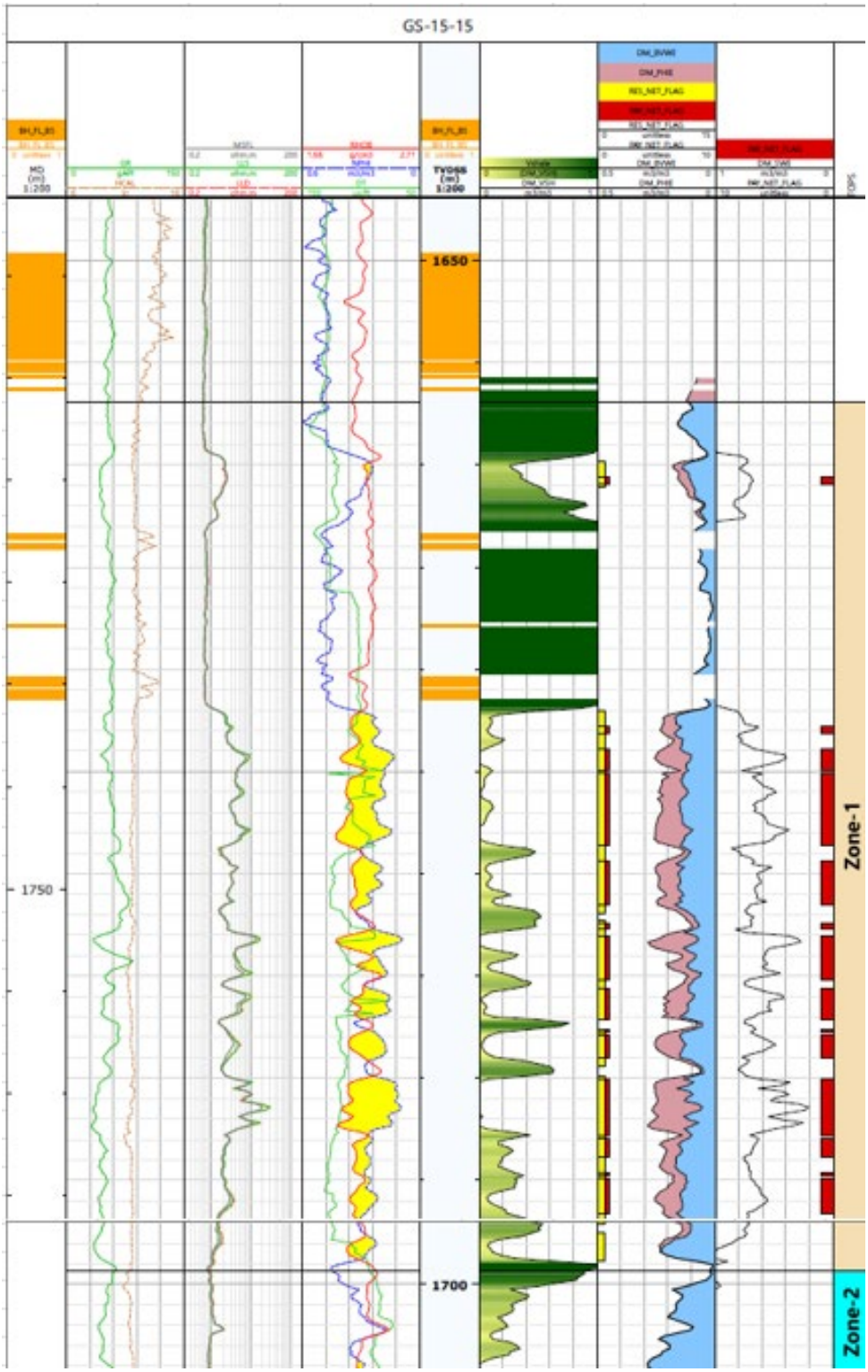
5.4.7.2. Structural Maps



5.4.7.3. Isopach Maps



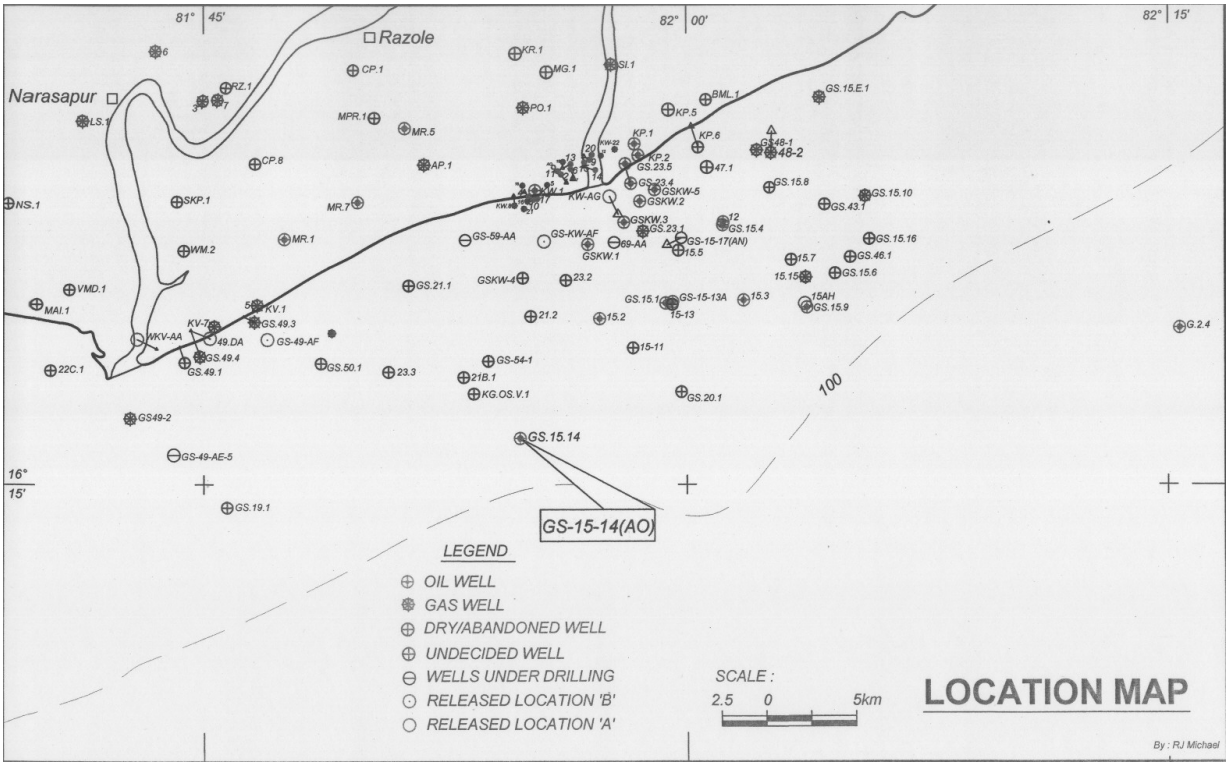
5.4.7.4. Log Motifs



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

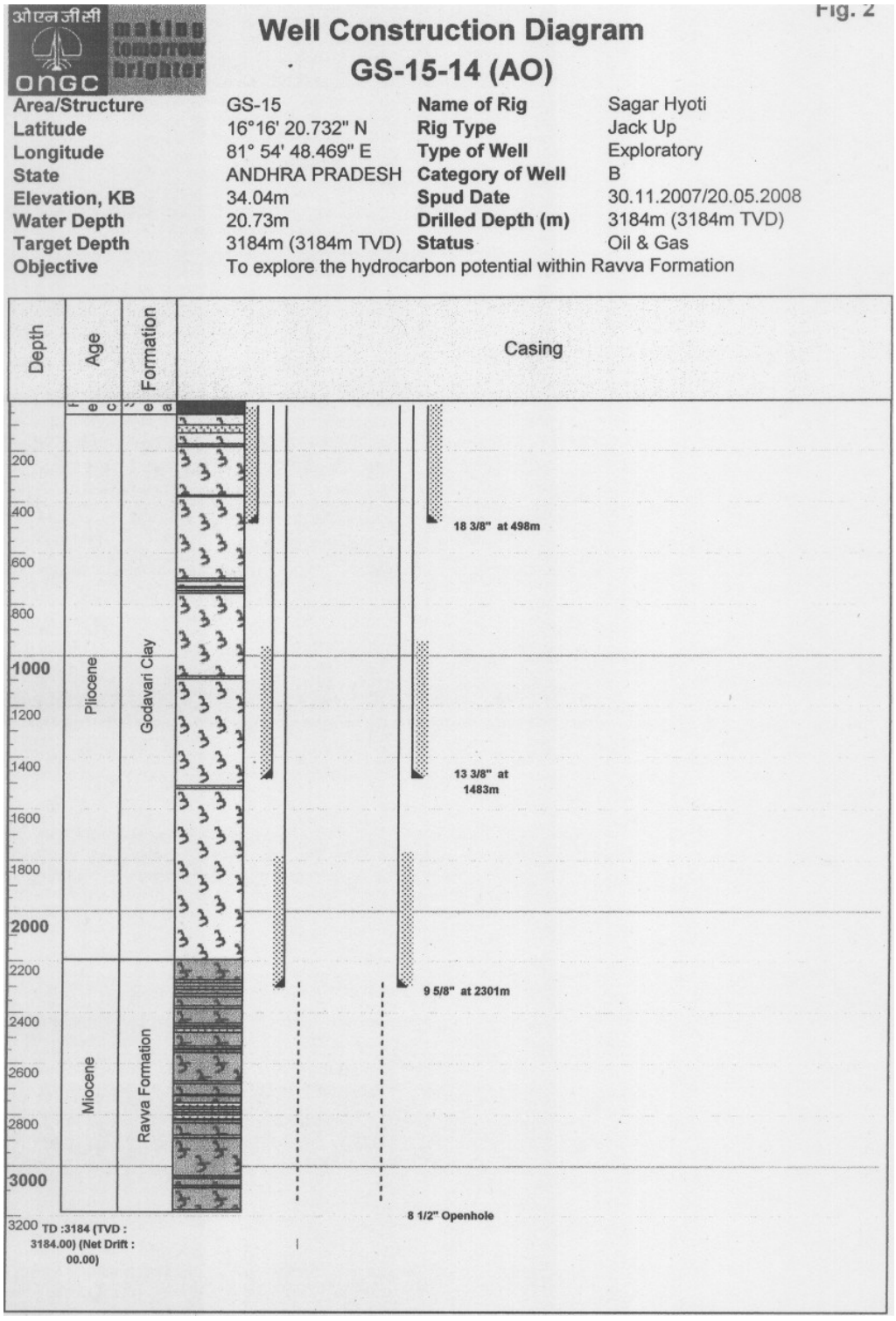
5.5. G1-15-14 DISCOVERY AND FIELD DESCRIPTION

GS-15-AO is located in the southern part of the IF PEL block in the shallow offshore Krishna-Godavari Basin, within the established Ravva petroleum system. The primary reservoirs are Miocene sandstones deposited in deltaic and shelfal environments, influenced by transgressive-regressive cycles. These sands are charged with hydrocarbons through listric and growth faults, with sealing provided by argillaceous facies on the upthrown side. Entrapment styles include structural and fault closures, sub-unconformity traps beneath the Mio-Pliocene boundary, and deeper strati-structural traps. A major Late Miocene erosional surface, filled with Godavari Clay and interbedded Pliocene channel sands, adds secondary reservoir potential. The regional source rock is the Vadaparru shale. Seismic studies, including 3D OBC data, have guided the selection of GS-15-AO to test Miocene fault-controlled traps and potential Pliocene channel sands, with a planned vertical depth of 3,150 meters.



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 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.

5.5.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	KB	Drilled depth
Both available	30.11.2007	34.04 m	3184 m MDRT

5.5.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

17.5	HRLA-PEX-GR (1372.2-497.7m) Remarks: TD was not tagged due to complicated hole condition BHT= 56.1°C DSI-GR-SP (1376.1-497.7m) MDT-GR (1085-610m) Remarks: Three MDT samples were collected at 698.6m, 760.4m and 1084.6m respectively.
12.25	PEX- HRLA-SP-GR (2303-1491m) Remarks: Schlumberger BHT=210°F BHC SONIC- HNGS (2297-1491m) Remarks: Schlumberger BHT=221°F MDT-GR (2282.5-1963m) Remarks: Schlumberger 4 MDT samples at 2282.3, 2281, 2280 & 1963m. No Pre-test data.
8.5	PEX-HRLA-SP-GR-CAL (3191.4-2289.3m) Remarks: Loggers' Depth : 3192m 9-5/8" Csg shoe : 2289.3m BHT=265° F BHCSONIC (3188.7-2289.3m) HNGS Ratios (3182-2289.3m)

5.5.3. Well Testing and Workover History

Two objects were released for production testing within the Ravva formation. Object –I (2326.5-2328m) produced oil (Qo: 1689.7 bbl/d), FTHP: 5868.77 psi thru 1/2” choke.

Object –II (2534.2-2541.8m) produced oil (Qo: 1660.3 bbl/d), FTHP: 6271.5 psi thru 1/2” choke.

5.5.3.1. Drill Stem Test (DST)

DST 1

Formation: Ravva| Interval(m.): (2326.5-2328m) | Choke size(inches): 1/2| FTHP: 5868.77 psi| Qoil: 1689.7 BPD

Recorded SBHP: 5868.77 psi and BHT: 248°F at 2327.4m

DST 2

Formation: Ravva| Interval(m.): (2534.2-2541.8m) | Choke size(inches): 1/2| FTHP: 6271.5 psi| Qoil: 1660.3 BPD

Recorded SBHP: 6271.46 psi and BHT: 254°F at 2539.9m

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. Formations dynamic tests

MDT Pressure data (17-1/2” hole)

Sl No.	Depth (m)	Temp (OC)	Hyd. Press. (before in psi)	Hyd. Press. (after in psi)	Mobility (md/cp)	Form. Press. (psi)	Remarks
1	610.3	52.6	1286.6	1287.5	0.06	904.46	Good Pretest, Tight Formation
2	609.8	53.3	1287.4	-	-	-	Lost Seal
3	609.6	53.5	1287.0	1288.0	0.05	945.83	
4	611.4	54.0	1293.6	1291.0	0.1	938	
5	612.7	54.3	1296.0	1294.9	-	-	
6	613.1	54.4	1296.6	1295.4	0.06	1027.66	
7	613.2	54.5	1296.2	-	-	-	Lost Seal
8	622.1	54.6	1315.0	-	-	-	Lost Seal
9	621.6	54.6	1314.0	-	-	-	Lost Seal
10	625.1	54.5	1320.7	1320.2	1.4	1292.55	-
11	625.3	54.6	1322.0	1320.0	9.9	1301.29	
12	639.1	54.6	1350	-	-	-	Lost Seal
13	639.3	54.7	1351.09	1349.6	1.9	1188.29	???
14	641.1	54.7	1355.11	1353.1	0.6	1213.21	???
15	642.3	54.7	1357.4	1356.7	1	708.62	Tight
16	664	54.8	1403	-	-	-	Lost Seal
17	669	54.8	1413.15	1412	0.1	624.44	Tight
18	669.2	54.8	1414.6	-	-		Lost Seal
19	670.8	54.8	1417	1415.55	1.5	951.18	???
20	672.7	54.9	1421.8	1419	0.6	866.41	???
21	677.4	54.91	1432	1430	2.6	1200.42	???
22	687.5	55.0	1452.2	1450	2.2	969.92	???
23	696.3	55.0	1470.9	1469	47.6	973.95	Good Pretest
24	698.6	55.1	1475.67	1473.85	9	977.55	Sample (Water)
25	700.6	55.3	1479.7	1478.63	29.8	980.14	-
26	705.2	55.3	1488.8	1487.44	137.7	986.75	-
27	707.3	55.3	1493.4	1492.11	126.3	989.94	-
28	760.4	55.4	1605.4	1601	50.9	1066.69	Sample (Water)
29	762.5	55.7	1607.1	1605.4	118.1	1068.41	-
30	763.7	55.8	1609.8	1607.9	740.9	1070.1	-
31	767.5	55.8	1616.2	1615.23	544.2	1075.72	-
32	767.4	55.9	1616.5	1615	332.4	1075.5	-
33	999.2	56.7	2096.3	2094.99	0.2	1494.76	Tight Formation
34	998.6	57.8	2093.7	2092.16	11.2	2092.16	Lost Seal

35	1000.5	57.6	2097.4	2097.15	0.7	1651.1	???
36	1001.1	57.9	2100.75	2100.19	0.6	1301.95	-
37	1003	58.1	2106.9	2105.44	1.5	1563.66	-
38	1004.5	58.3	2108.5	2108.01	1.4	1729.48	-
39	1084.6	60.6	2274.3	2271.6	228.2	1987.22	Sample (Gas)
40	1085.4	60.6	2273.7	2272	12.8	1987.9	-
41	1085.8	60.6	2273.78	2273	21	1988.47	-

MDT Pressure data (8-1/2” hole)

Sl. No.	Depth (m)	Temp (OF)	Hyd. Press. (before In psi)	Hyd. Press. (after in psi)	Mobility (md/cp)	Form. Press. (psi)	Remarks
1	2300	109.0	6173.4				Tight
2	2301	109.1	6174.9				Tight
3	2301	108.9	6175.7				Lost Seal
4	2302	108.9	6176.4	6175.96	1.0	5794.83	
5	2302	108.9	6176.5		1.0	5796.80	
6	2303	109.0	6176.0	6175.90	71.1	5795.95	Unstable
7	2303	109.2	6175.9	6175.29	6.2	5797.58	Unstable
8	2304	109.3	6176.1	6176.00			Tight
9	2304	109.3	6176.6	6176.60			Tight
10	2305	109.3	6176.7	6176.60	29.6	5801.01	
11	2305	109.4	6177.7	6177.60	655.0	5801.70	
12	2306	109.4	6178.3	6178.50			Tight
13	2306	109.4	6179.3				Lost Seal
14	2307	109.5	6180.7	6180.20	7.9	5804.14	
15	2307	109.5	6181.7				Lost Seal
16	2307	109.5	6180.7	6180.30	0.2		S/C Unstable
17	2326	109.6	6233.5	6233.10			Tight
18	2327	109.5	6234.0	6232.90			Tight
19	2327	109.7	6234.3	6237.00	122.4	5861.90	Sample 1: dtd:19/07/08 400 cc Water/Oil, 0.65cft Gas, 34% TG, Ch. Pr.-1300psi. Res: 1.257 @ 82.5 °F
20	2328	112.0	6233.6	6232.88	225.3	5862.35	Unstable
21	2328	111.5	6232.9	6232.40	1.9	5862.48	
22	2376	111.5	6357.5	6358.00			Tight
23	2377	111.7	6359.8	6359.50			Tight
24	2377	111.8	6360.0	6360.30			Tight
25	2378	111.9	6360.3				Tight
26	2378	111.9	6360.4				Tight
27	2379	106.7	6443.4				Tight
28	2379	107.8	6442.7				Tight
29	2380	108.6	6442.8	6442.00			Tight
30	2380	109.2	6442.7				Tight
31	2381	109.8	6443.0	6442.00			Tight
32	2381	110.4	6442.5				Lost Seal
33	2381	'110.73	6442.0				Tight

34	2382	111.0	6442.3			5996.43	
35	2382	111.3	6442.3				Tight
36	2468	112.7	6680.7				Tight
37	2469	113.3	6678.3				Tight
38	2469	113.9	6672.9				Tight
39	2470	108.2	6719.0		68.8	6248.59	Sample 2: dtd:24/07/08, 418 cc Water, 0% Gas Res: 0.249 @ 79 °F
40	2470	116.0	6720.0				Lost Seal
41	2471	116.8	6720.7				SC
42	2471	116.9	6721.4		306.8	6218.20	
43	2475	116.9	6730.3				Tight
44	2476	116.9	6731.0				Lost Seal
45	2470	116.0	6716.0				Tight
46	2476	115.9	6730.3				SC
47	2535	116.0	6874.8				Tight
48	2540	116.2	6887.2			6268.50	Sample 3: dtd:24/07/08 80 cc Oil, 1.0 cft Gas, 35-37% Gas, Ch. Pr.-1600psi Res: NIA
49	2553	118.2	6918.1	227.70		6285.16	
50	2555	118.5	6920.1	409.20		6287.85	
51	2556	118.5	6922.9	818.40		6289.98	
52	2558	118.7	6925.6	256.20		6292.13	
53	2559	118.8	6928.7	446.60		6294.13	
54	2561	118.8	6932.9	0.09		6299.15	
55	2567	119.0	6946.4				Tight
56	2569	119.1	6952.0				
57	2570	119.1	6956.1	133.80		6310.20	
58	2571	119.3	6955.5				Tight
59	2574	119.4	6960.9	115.70		6314.75	
60	2577	119.5	6968.8	3.60		6319.18	
61	2587	119.7	6990.4	0.30		6332.03	
62	2589	119.9	6955.1				Tight
63	2602	120.0	7025.4				Tight
64	2604	120.0	7027.2				Tight
65	2605	120.1	7028.1				SC
66	2606	120.3	7032.4				Tight
67	2608	120.4	7032.6				Tight
68	2610	120.5	7038.2				Tight
69	2612	120.6	7044.6				Lost Seal
70	2612	120.7	7045.0				Lost Seal
71	2631	120.9	7087.7				Tight
72	2632	121.1	7089.9				SC
73	2633	121.3	7093.6				SC
74	2635	121.4	7095.5				Tight
75	2648	121.6	7129.8				SC
76	2649	121.7	7130.1				Lost Seal

77	2650	121.8	7130.2	61.50		6579.88	
78	2651	122.1	7130.3	114.50		6581.92	
79	2652	122.4	7135.5	292.30		6583.14	
80	2653	122.5	7137.6				Tight
81	2657	122.5	7146.6				SC
82	2660	122.6	7153.1		7.3	6483.47	
83	2661	122.7	7156.2				Tight
84	2662	122.8	7156.9		158.0	6486.85	
85	2664	122.9	7162.3		135.5	6489.33	
86	2665	123.0	7165.2				SC
87	2667.50·	123.1	7168.1				SC
88	2668	111.4	7173.6		90.9	6494.06	
89	2672	114.6	7184.2				Lost Seal
90	2674	115.4	7188.7		56.3	6502.27	
91	2727	120.2	7329.3		627.1	6757.36	
92	2726	120.9	7323.7				SC
93	2728	121.1	7330.5		305.0	6759.80	
94	2763	121.7	7423.8				Lost Seal
95	2763	121.9	7422.8				SC
96	2780	122.1	7469.0		346.6	6843.69	
97	2783	124.3	7473.7				Lost Seal
98	2785	124.4	7449.6		266.8	6850.35	
99	2813	125.6	7554.5		40.9		SC
			MDT through TLC on 30.07.08 & 31.07.08				
100	2673	121.5	7296.5				Lost Seal
101	2674	122.8	7289.4		228.9	6502.27	
102	2721	125.5	7434.0				Lost Seal
103	2726	125.5	7439.0		890.4	6756.57	
104	2728	127.2	7442.0		292.7	6759.83	
105	2729	127.6	7444.0		970.6	6761.52	
106	2762	128.4	7555.0				Lost Seal
107	2763	128.3	7549.0				SC
108	2767	128.2	7550.0				Lost Seal
109	2780	128.2	7536.0		277.2	6844.84	Sample 4: Dt: 01/08/08 375 cc Water, Ch. Pr.-Nll Res: 0.326 @ 78.9" F. Water salinity: 11,144 ppm as NaCl
110	2784	131.1	7574.4		473.9	6850.71	
111	2813	132.2	7629.2		176.4	6890.29	Sample 5: Dt: 01/08/08 385 cc Water, Ch. Pr.- NIL Res:0.359 @ 77.8° F Water salinity: 11,144 ppm as NaCl
112	2829	131.8	7739.0		34.9	6912.84	Sample 6: Dt: 01/08/08 385 cc Water, Ch. Pr.- NIL Res:0.323 @ 77.5 • F Water salinity: 11,438 ppm

113	2837	132.8	7776.9			SC
114	2884	131.5	7883.5	582.8	7007.61	Sample 7: Dt: 01/08/08 375 cc Water, Ch. Pr.- NIL Res: 0.374 @ 78.4° F Water salinity: 9972 ppm as NaCl
115	2901	134.2	7967.4			SC
116	2902	134.1	7944.0			Lost Seal
117	2920	134.0	7992.0			Tight
118	2921	134.0	7975.0			SC
119	2922	134.0	7979.0			Tight
120	2923	134.0	7959.0			SC

5.5.4.2. Pressure build-up study

Formation: Ravva| Station: I| Depth(m.): 2327.4 | SBHP: 5868.77 psi | SBHT: 248°F
Formation: Ravva| Station: II| Depth(m.): 2539.9 | SBHP: 6271.46 psi| SBHT: 254°F
Formation: Ravva| Station: III| Depth(m.): 1084.6 | SBHP:1987.22 psi| SBHT: 141.2°F

5.5.4.3. Pressure transient analysis study

Formation: Ravva| Station: I| Depth(m.): 2327.4 | Skin: -1.24 | Permeability to oil: 394 md| Average open flow potential (oil): 24400 STB/day/psi.

Formation: Ravva| Station: II| Depth(m.): 2539.9 | Skin: 0.848 | Permeability to oil: 527 md| Average open flow potential (oil): 22100 STB/day/psi.

5.5.4.4. Oil composition analysis

Formation: Ravva| Object: I | Interval(m.): 2327.4 | Density: 0.854 gm/ml at 28 degC | API: 34.19.
Formation: Ravva| Object: II | Interval(m.): 2540 | Density: 0.8719 gm/ml at 27.5 degC | API: 30.79.

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.

5.5.5.1. Geological correlations, sections, and maps

The GS-15-AO location lies in a slightly deeper bathymetric setting in the southern part of the IF PEL block within the shallow offshore Krishna-Godavari Basin. Geologically, the area belongs to the well-characterized Ravva petroleum system, where the primary play involves Miocene sandstone reservoirs. These reservoirs are typically associated with listric and growth faults that provide pathways for hydrocarbon migration, with sealing provided on the upthrown side by impermeable argillaceous facies. Entrapment styles include structural closures, fault-bound traps,

sub-unconformity plays beneath the Mio-Pliocene boundary, and deeper strati-structural traps. Additionally, Pliocene channel sands identified in parts of the block offer secondary reservoir potential. The Vadaparru shale is the regional source rock, capable of generating both gas and oil. Depositional environments from the Lower to Middle Miocene reflect a transgressive-regressive sequence that produced well-sorted sands in shallow marine deltaic bars and coarser, less sorted sands and clays in shelf channels and submarine fans. Tectonic processes in the Late Miocene created erosional unconformities, which were later filled with the thick Godavari Clay Formation interbedded with Pliocene sands. Seismic analyses, including 3D OBC TZ and GS-15/23 seismic data, have been used to evaluate Miocene sand distribution and hydrocarbon potential. In this context, the GS-15-AO location was selected to target Miocene reservoirs structurally controlled by fault entrapment, with faults trending toward the basin acting as conduits for hydrocarbon migration. Pliocene channel sands are also considered a secondary target. The proposed well is planned to be drilled vertically to a depth of 3,150 meters to test these geological objectives.

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.

For Sand 5 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.

For Sand 32 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 OOIP and 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 OOIP and OGIP. Seismic sections, log motifs, structure and isopach maps are in the annex bound with this docket information.

RESERVOIR PARAMETERS and ORIGINAL OIL in PLACE
as of
JANUARY 1, 2025
for the
GS-15-14 DISCOVERY
of
KG/OSDSF/G1/2025 CONTRACT AREA

	Reservoir Sand 5	Total
Low		
Area, acres	118	
Oil Formation Volume Factor, rbbl/bbl	1.00	
Average Thickness, ft	3.2	
Average Porosity, %	20.50	
Average Water Saturation, %	72.03	
Original Oil in Place, 10^6 bbl	0.17	**0.17**
Original Oil in Place, 10^6 eq ton	0.02	**0.02**
Best		
Area, acres	118	
Oil Formation Volume Factor, rbbl/bbl	1.00	
Average Thickness, ft	3.2	
Average Porosity, %	21.46	
Average Water Saturation, %	67.26	
Original Oil in Place, 10^6 bbl	0.21	**0.21**
Original Oil in Place, 10^6 eq ton	0.03	**0.03**
High		
Area, acres	118	
Oil Formation Volume Factor, rbbl/bbl	1.00	
Average Thickness, ft	3.2	
Average Porosity, %	22.49	
Average Water Saturation, %	61.99	
Original Oil in Place, 10^6 bbl	0.25	**0.25**
Original Oil in Place, 10^6 eq ton	0.04	**0.04**

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 0.02 MMTOE (Best case).

RESERVOIR PARAMETERS and ORIGINAL GAS in PLACE
as of
JANUARY 1, 2025
for the
GS-15-14 DISCOVERY
of
KG/OSDSF/G1/2025 CONTRACT AREA

	Reservoir Sand 32	Total
Low		
Area, acres	89	
Gas Formation Volume Factor, scf/rcf	0.0047	
Average Thickness, ft	3.0	
Average Porosity, %	27.00	
Average Water Saturation, %	69.00	
Original Gas in Place, $10^9 ft^3$	0.21	**0.21**
Original Gas in Place, 10^6 eq ton	0.01	**0.01**
Best		
Area, acres	333	
Gas Formation Volume Factor, scf/rcf	0.0047	
Average Thickness, ft	3.6	
Average Porosity, %	28.00	
Average Water Saturation, %	67.00	
Original Gas in Place, $10^9 ft^3$	1.01	**1.01**
Original Gas in Place, 10^6 eq ton	0.03	**0.03**
High		
Area, acres	827	
Gas Formation Volume Factor, scf/rcf	0.0047	
Average Thickness, ft	4.0	
Average Porosity, %	29.00	
Average Water Saturation, %	65.00	
Original Gas in Place, $10^9 ft^3$	3.09	**3.09**
Original Gas in Place, 10^6 eq ton	0.08	**0.08**

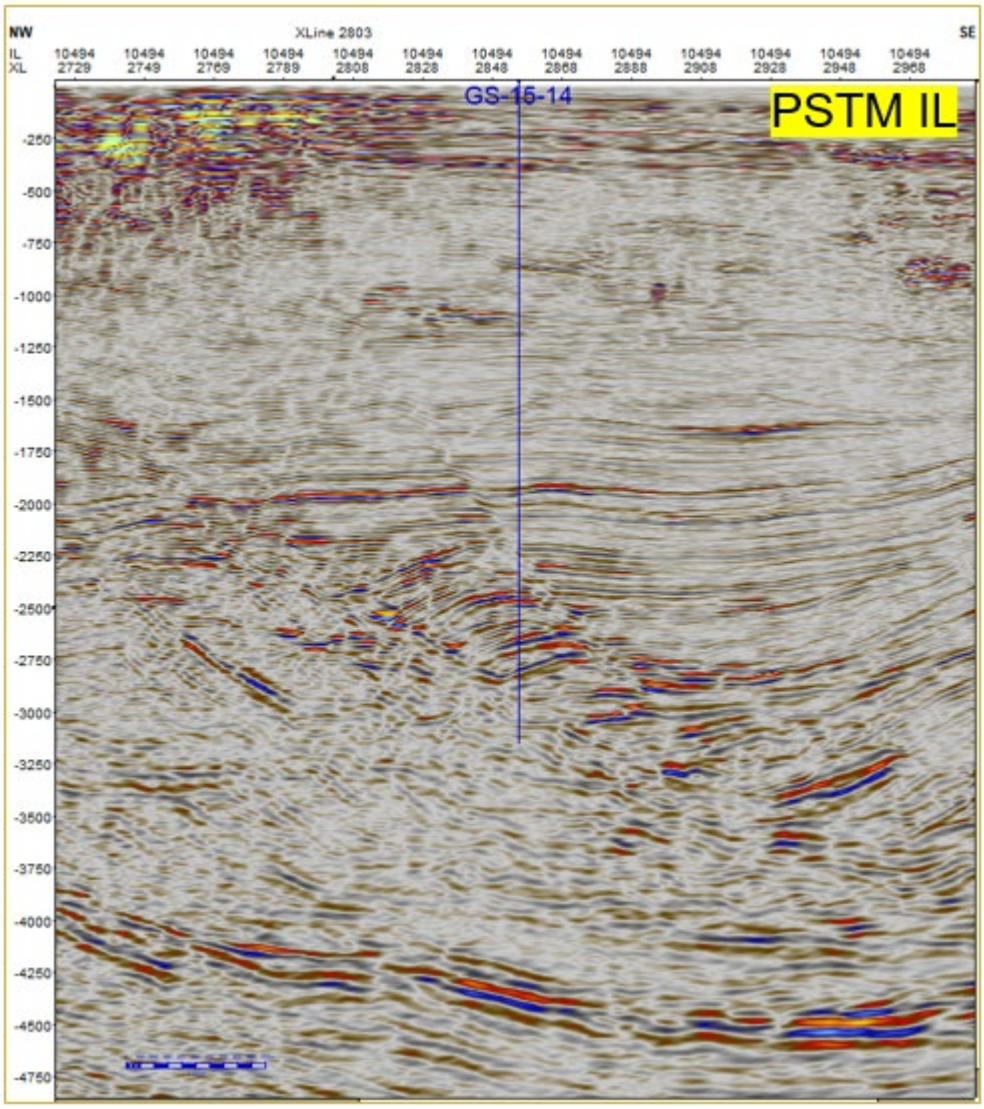
Note: Conversion used 10^9 scf equal to 0.02519 10^6 eq tone.

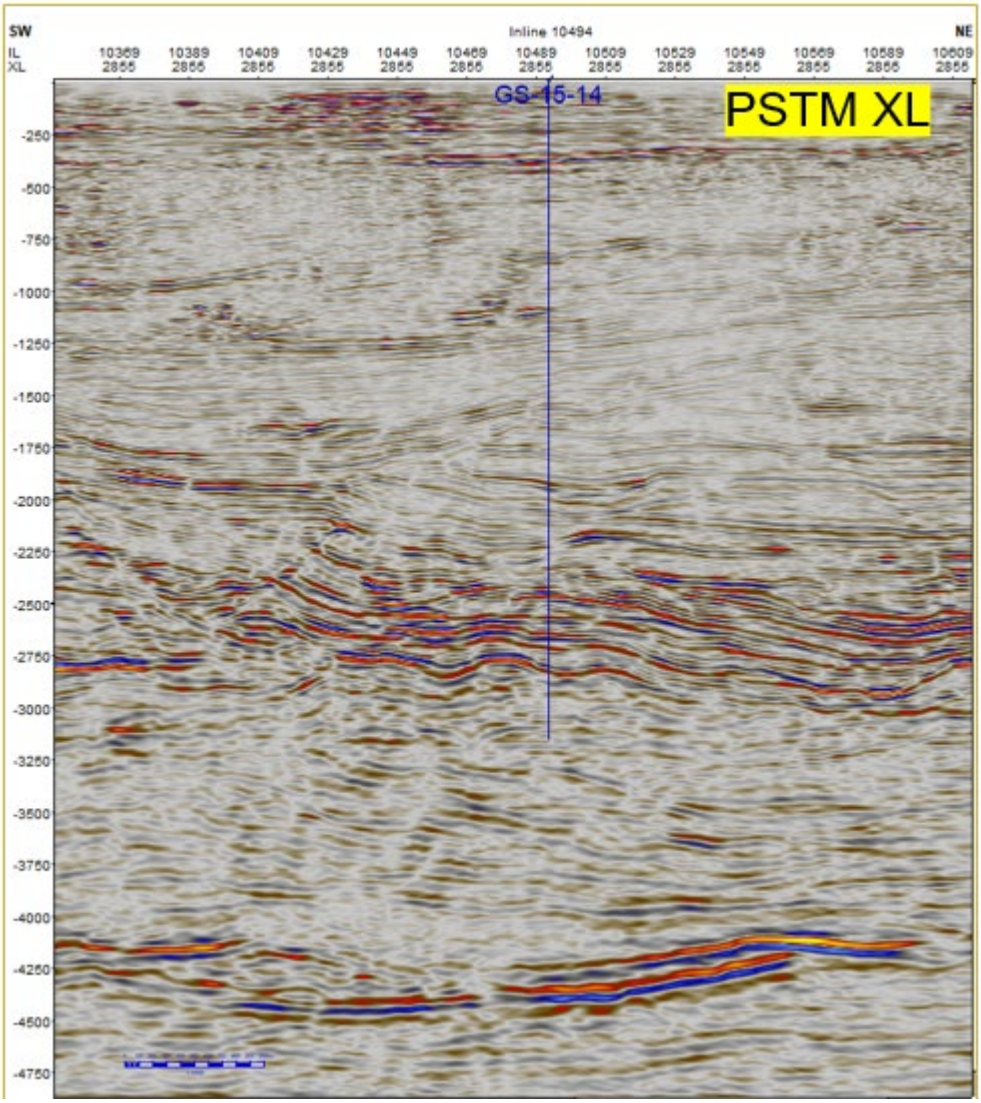
Volumes estimated by a Third Party

The operator has reported an in-place volume of 0.01 MMTOE (Best case).

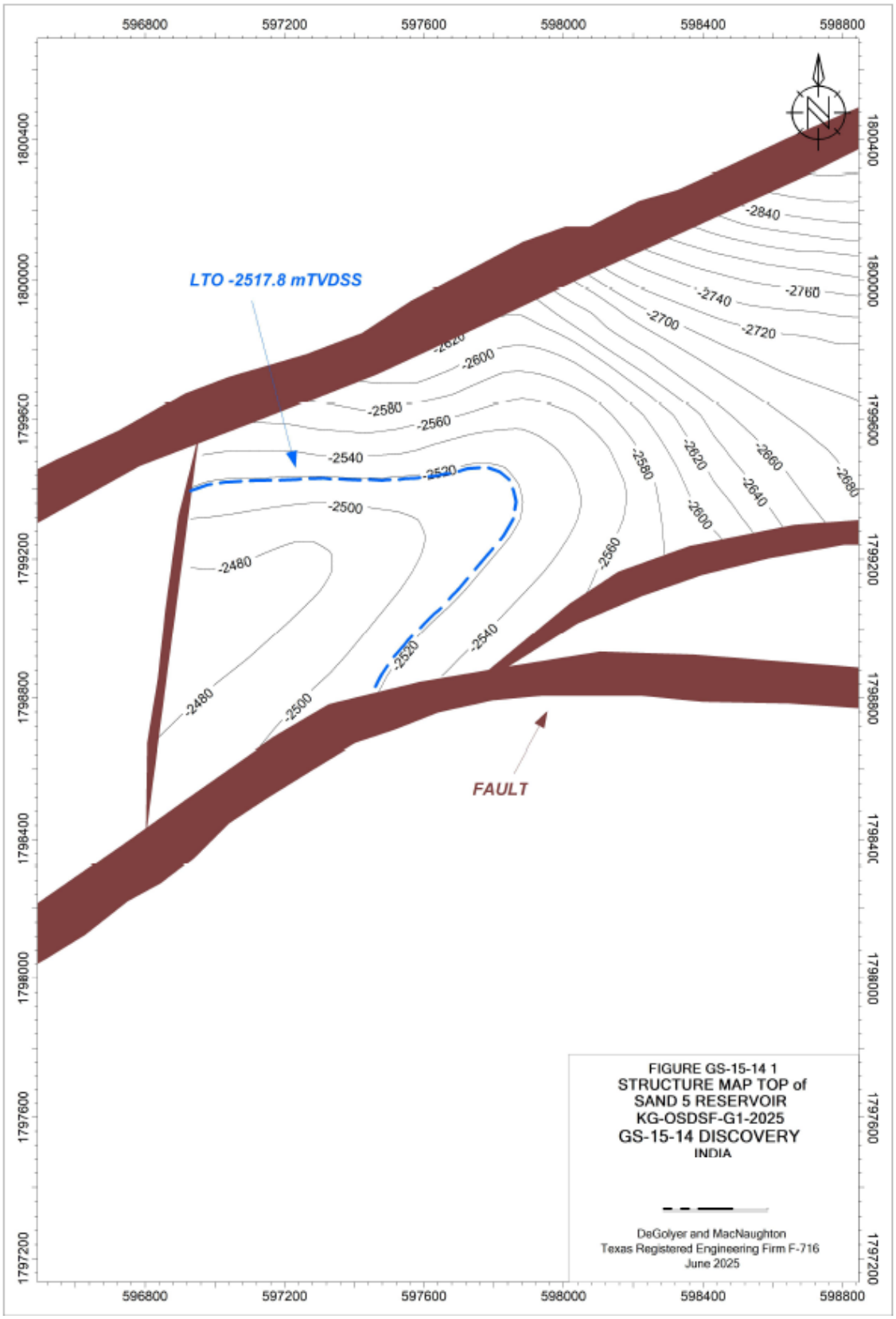
5.5.7. Annex

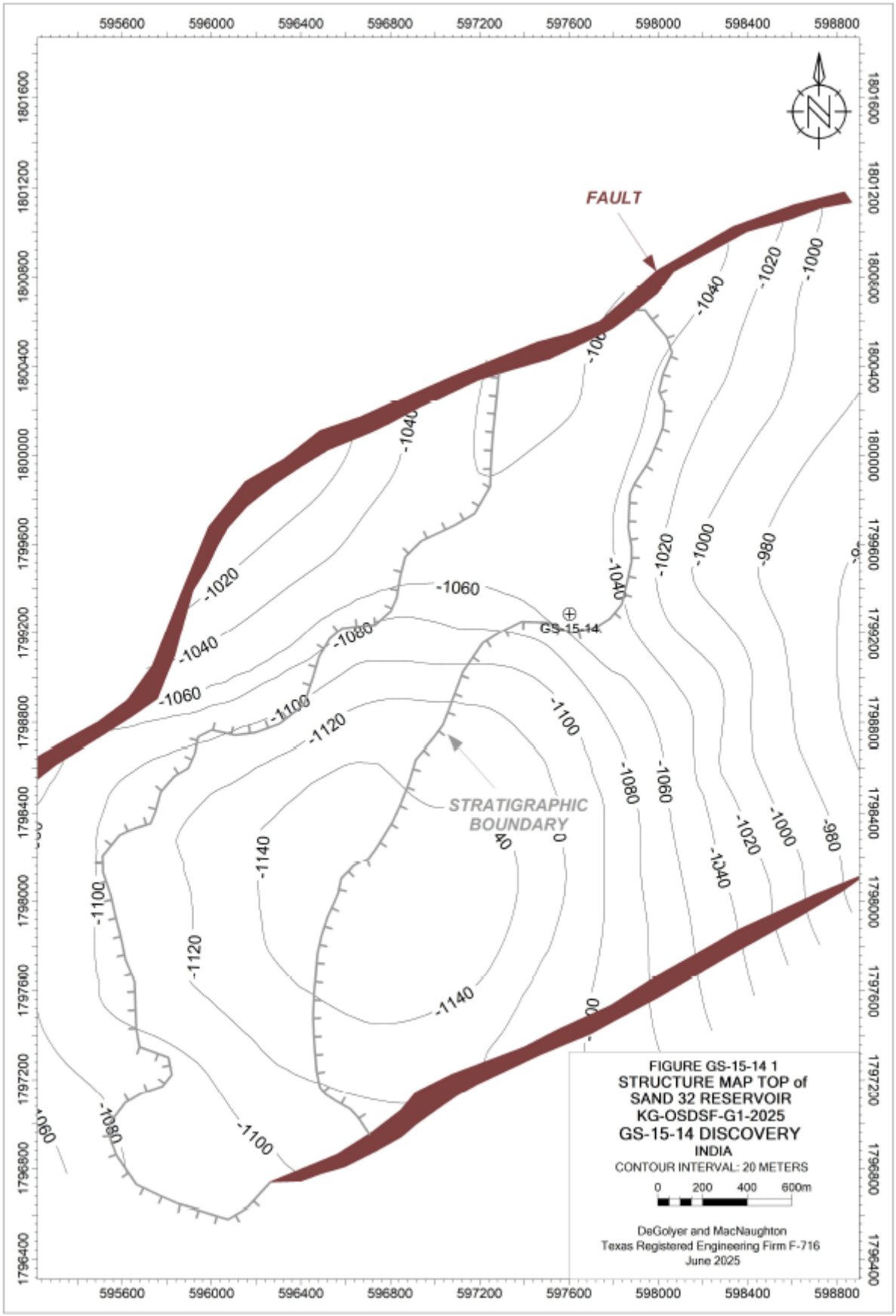
5.5.7.1. Seismic Sections



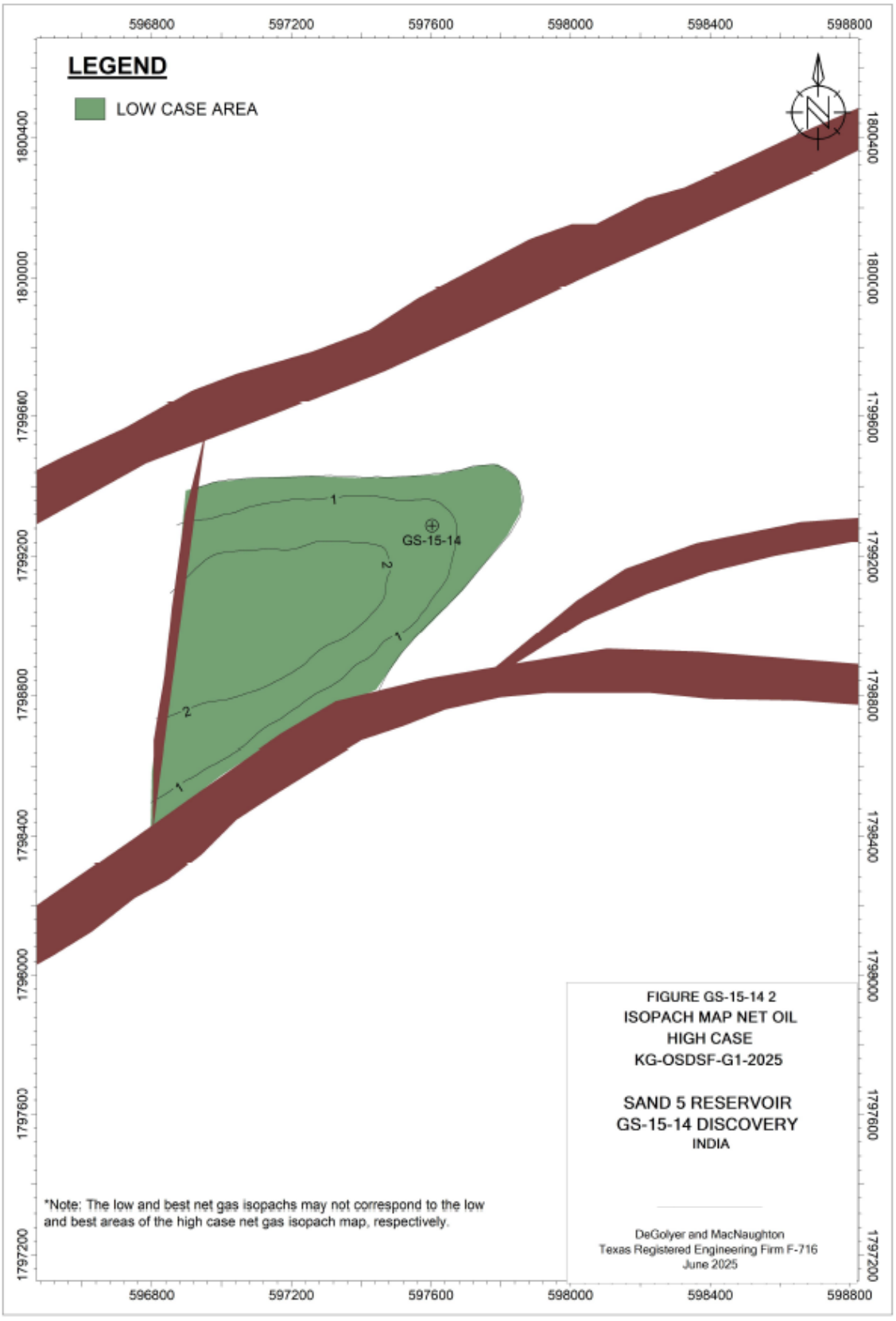

SW
Inline 10494
NE
IL
XL
10369 2855
10389 2855
10409 2855
10429 2855
10449 2855
10469 2855
10489 2855
10509 2855
10529 2855
10549 2855
10569 2855
10589 2855
10609 2855
GS-15-14
PSTM XL
-250
-500
-750
-1000
-1250
-1500
-1750
-2000
-2250
-2500
-2750
-3000
-3250
-3500
-3750
-4000
-4250
-4500
-4750

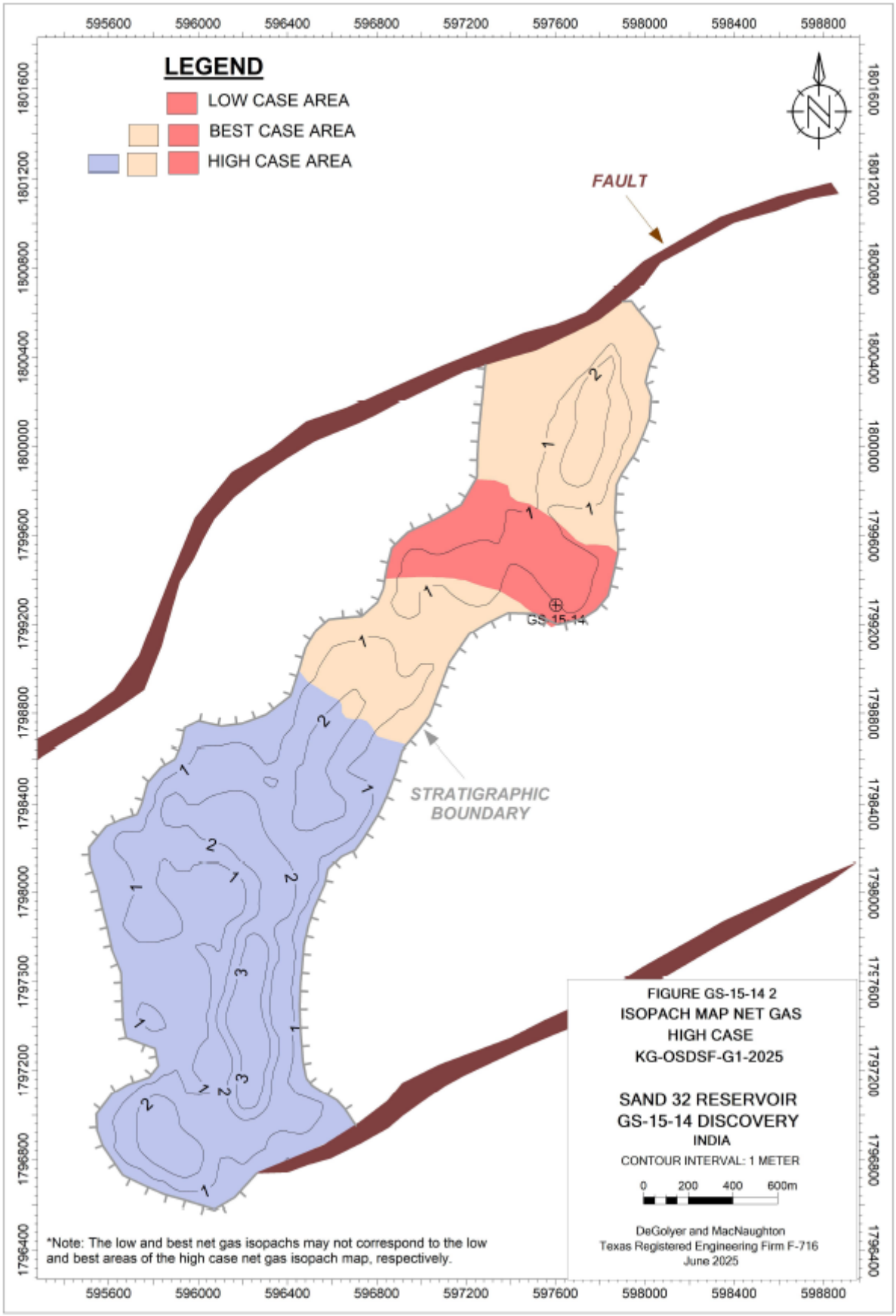
5.5.7.2. Structural Maps



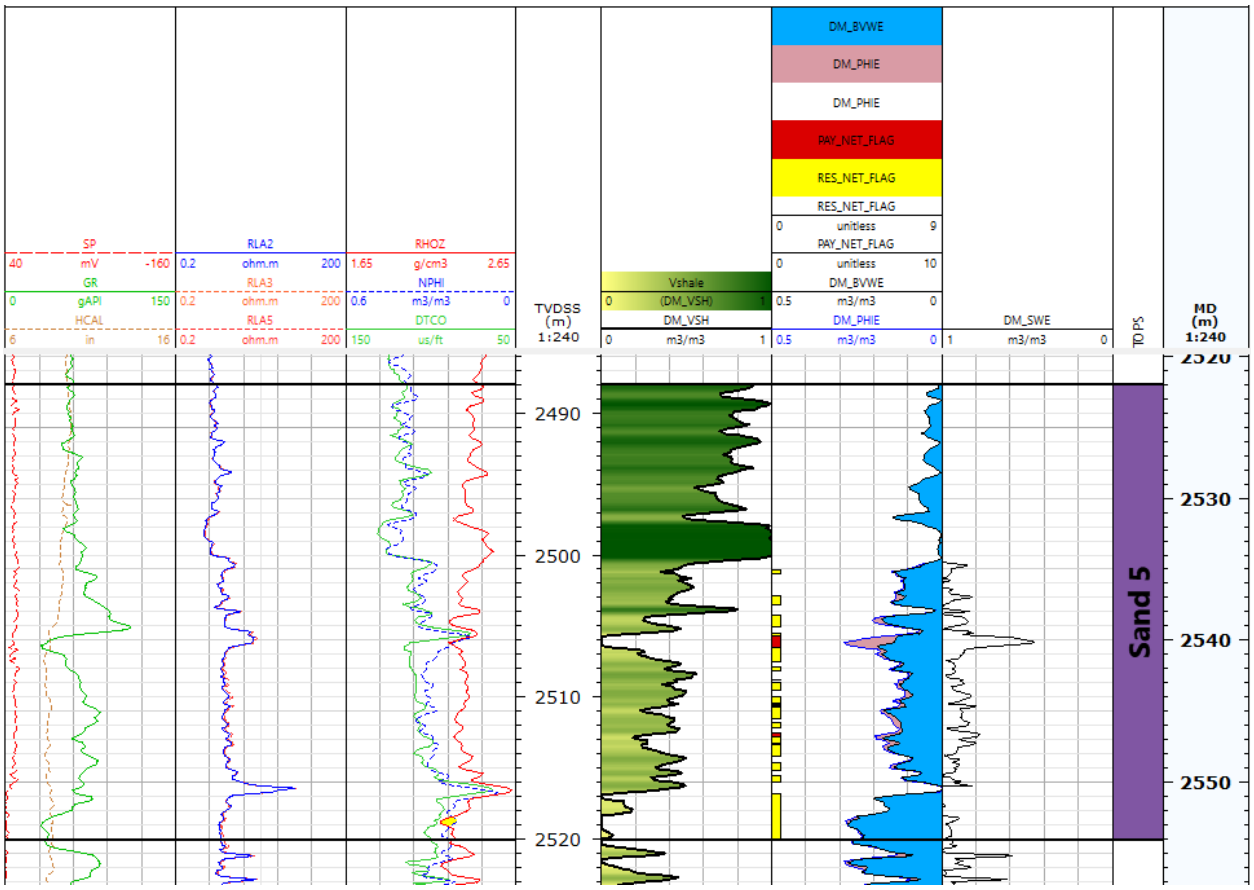

595600
596000
596400
596800
597200
597600
598000
598400
598800
1801600
1801200
1800800
1800400
1800000
1799600
1799200
1798800
1798400
1798000
1797600
1797200
1796800
1796400
FAULT
-1000
-1020
-1040
-1060
-1080
-1100
-1120
-1140
-980
GS-15-14
STRATIGRAPHIC BOUNDARY
FIGURE GS-15-14 1
STRUCTURE MAP TOP of
SAND 32 RESERVOIR
KG-OSDSF-G1-2025
GS-15-14 DISCOVERY
INDIA
CONTOUR INTERVAL: 20 METERS
0 200 400 600m
DeGolyer and MacNaughton
Texas Registered Engineering Firm F-716
June 2025

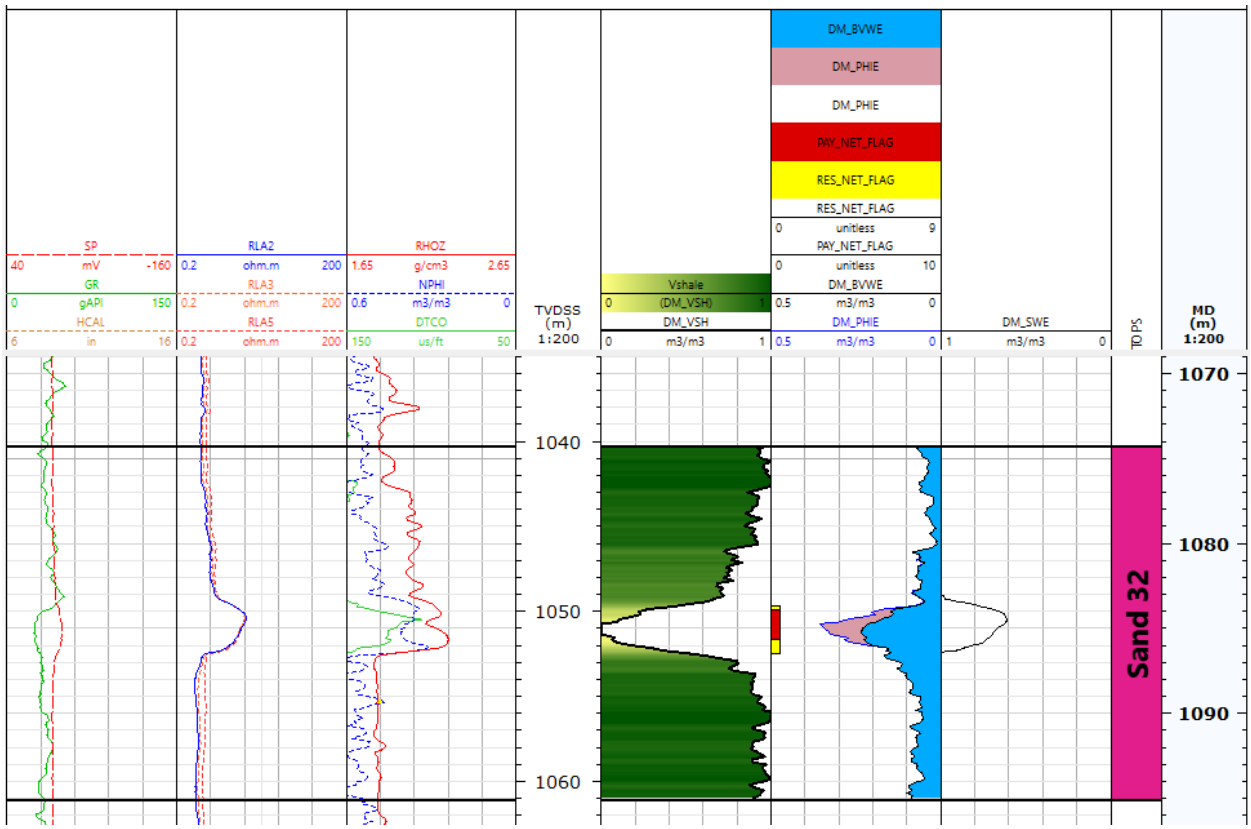
5.5.7.3. Isopach Maps




LEGEND
LOW CASE AREA
BEST CASE AREA
HIGH CASE AREA
FAULT
STRATIGRAPHIC BOUNDARY
GS-15-14
595600
596000
596400
596800
597200
597600
598000
598400
598800
1801600
1801200
1800800
1800400
1800000
1799600
1799200
1798800
1798400
1798000
1797600
1797200
1796800
1796400
*Note: 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.
FIGURE GS-15-14 2
ISOPACH MAP NET GAS
HIGH CASE
KG-OSDSF-G1-2025
SAND 32 RESERVOIR
GS-15-14 DISCOVERY
INDIA
CONTOUR INTERVAL: 1 METER
0 200 400 600m
DeGolyer and MacNaughton
Texas Registered Engineering Firm F-716
June 2025

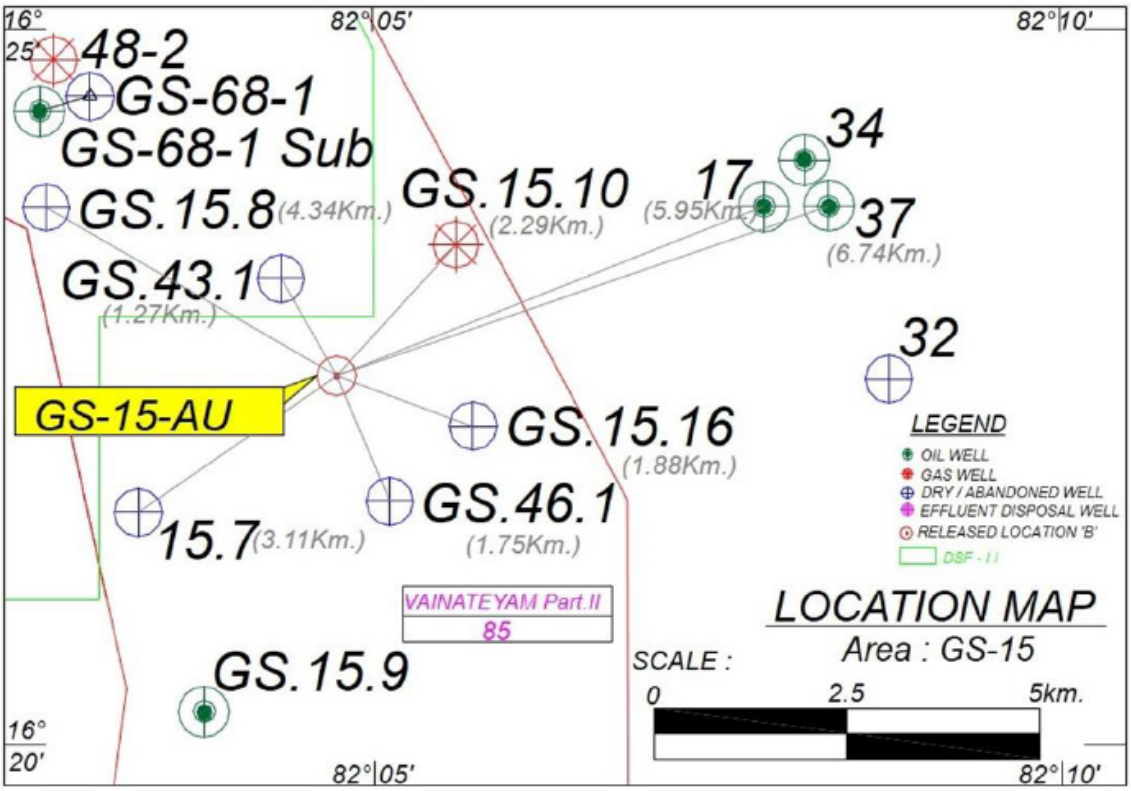
5.5.7.4. Log Motifs




SP
40 mV -160
GR
0 gAPI 150
HCAL
6 in 16
RLA2
0.2 ohm.m 200
RLA3
0.2 ohm.m 200
RLA5
0.2 ohm.m 200
RHOZ
1.65 g/cm3 2.65
NPHI
0.6 m3/m3 0
DTCO
150 us/ft 50
TVDSS (m) 1:200
Vshale
0 (DM_VSH) 1
DM_VSH
0 m3/m3 1
DM_BVWE
DM_PHIE
DM_PHIE
PAY_NET_FLAG
RES_NET_FLAG
RES_NET_FLAG
0 unitless 9
PAY_NET_FLAG
0 unitless 10
DM_BVWE
0.5 m3/m3 0
DM_PHIE
0.5 m3/m3 0
DM_SWE
1 m3/m3 0
TD PS
MD (m) 1:200
1040
1050
1060
1070
1080
1090
Sand 32

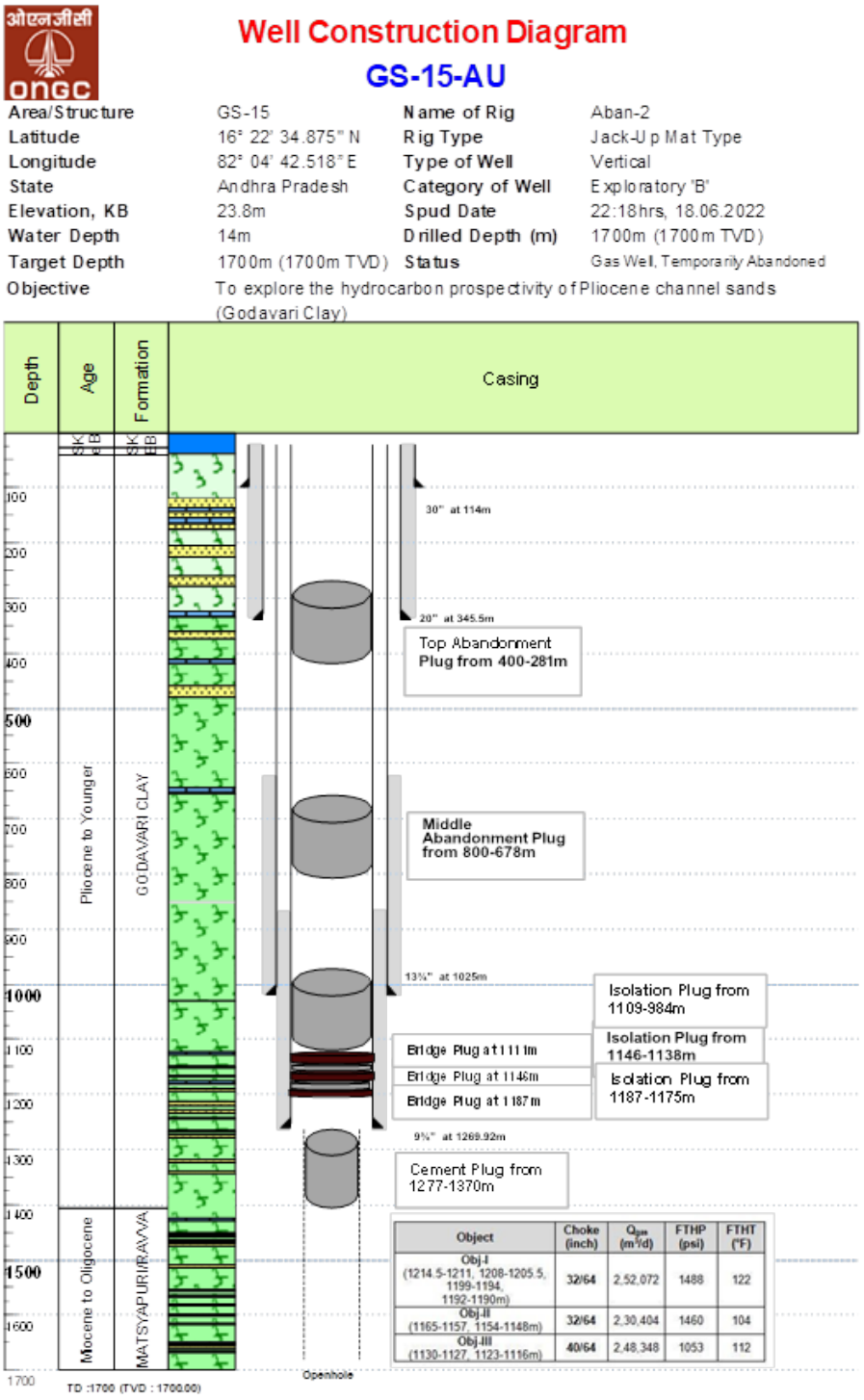
5.6. GS-15-22 DISCOVERY AND FIELD DESCRIPTION

The IF block in the shallow offshore Krishna-Godavari Basin represents a geologically diverse area with established Miocene and emerging Pliocene hydrocarbon plays. Within this block, the GS-15-AU location was identified as a promising site based on detailed seismic and geological analysis. The Early Miocene Matsyapuri sandstones form the primary reservoir system in the region, deposited in deltaic and shallow marine environments and structurally trapped by rollover anticlines and fault closures. However, GS-15-AU specifically targets a localized Pliocene channel feature characterized by high seismic amplitude, identified within the thick Godavari Clay Formation. Seismic interpretation, including RMS amplitude and sweetness attribute mapping, reveals a well-defined sand body at this site, distinct from surrounding wells. The channel geometry suggests potential for stratigraphic entrapment, supported by seismic attributes and analogs like GS-15-10, which encountered similar Pliocene channel sands with tested hydrocarbon flows. The GS-15-AU well is planned as a vertical test to evaluate this undrilled Pliocene anomaly, aiming to establish new reservoir potential within the block and expand the productive footprint beyond traditional Miocene targets.



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 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.

5.6.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	KB	Drilled depth
Only WCR available	18.06.2022	23.8 m	1700 m MDRT

5.6.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

17.5
DSL-XMAC-RTEX-ORIT (1021.6-345.5m) Remarks: Driller's depth: 1031m (MD-KB) Logger's depth: 1030.1m; BHT@129.57°F

12.25
MLL-DSL-XMAC-RTEX- ORIT (1701-1024.98m) Remarks: 12 ¼" Open Hole Logs, Recorded by Baker Wireline
Logger's Depth: 1702m; BHT: 163.61°F
CALI-CNL-GR-ZDL (1701-1024.98m) Remarks: 12 ¼" Open Hole Logs, Recorded by Baker Wireline
Logger's Depth: 1702m; BHT: 177.79°F
RCI-LFA-GR (1333-1117m) Remarks: Cumulative 36 points; Good: 24; Tight/Dry: 11; Lost Seal:01.
FID: 06 (1117.01m-Gas+Mud Filtrate; 1125.01m-Gas+MF, 1175.51m-Gas+MF; 1179.49m-Gas+MF, 1198.01m-Gas; 1223.50m-Water+MF); Samples: 03 (Gas @ 1125.01m; Gas @ 1179.49m; Gas+Water @ 1223.5m).
BHT: 176.53°F at 1333m.
VSP-GR (1685-260m) Remarks: 4 Shuttles, 15m apart; Source Offset: 43m
SBT-CCL-GR (1240-800m)
CCL-GR (1205-400m) Remarks: Dummy run through flex string
CCL-GR (1115-400m) Remarks: TCP-DST Correlation log (Obj-I)
JB-CCL-GR (1190-450m) Remarks: Run#1: Correlation run for BP setting (JB)
CCL-GR (1190-450m) Remarks: Run#2: Set Bridge Plug at 1187m
CCL-GR (1050-450m) Remarks: Correlation run for Cement drilling Depth
CCL-GR (1075-450m) Remarks: TCP-DST Correlation log (Obj-II)
JB-CCL-GR (1145-450m) Remarks: Run#1: Correlation run for BP setting (JB)
CCL-BP (1146-450m) Remarks: Run#2: Set Bridge Plug at 1146m
CCL-GR (950-450m) Remarks: Correlation run for Cement drilling Depth
CCL-GR (1035-450m) Remarks: TCP-DST Correlation log (Obj-III)
JB-CCL-GR (1145-450m) Remarks: Run#1: Correlation run for BP setting (JB)
CCL-BP (1146-450m) Remarks: Run#2: Set Bridge Plug at 1111m

5.6.3. Well Testing and Workover History

Three objects were released for production testing within the Gadavari clay formation. Object –I (1214.5-1211m, 1208-1205.5m, 1199-1194m, 1192-1190m) produced gas (Qg: 252072 m3/d), FTHP: 1488 psi thru 32/64" choke. Object –II (1165-1157m, 1154-1148m) produced gas (Qg:

230404 m3/d), FTHP: 1460 psi thru 32/64” choke. Object –III (1130-1127m, 1123-1116m.) produced gas (Qg: 248348 m3/d), FTHP: 1053 psi thru 40/64” choke.

DST 1
Formation: Godavari Clay/Pliocene| Interval(m.): (1214.5-1211.0, 1208.0-1205.5, 1199.0-1194.0, 1192.0-1190.0) | Duration: 10hrs. | Choke (1/64 inch): 16| FTHP: 1588 psi| FTHT: 87 °F |Qg: 46495 m3/d
Well shut-in at choke manifold for 24 hours; STHP: 1611psi.
Formation: Godavari Clay/Pliocene| Interval(m.): (1214.5-1211.0, 1208.0-1205.5, 1199.0-1194.0, 1192.0-1190.0) | Duration: 10hrs. | Choke (1/64 inch): 20| FTHP: 1581 psi| FTHT: 95 °F |Qg: 87723 m3/d
Formation: Godavari Clay/Pliocene| Interval(m.): (1214.5-1211.0, 1208.0-1205.5, 1199.0-1194.0, 1192.0-1190.0) | Duration: 10hrs. | Choke (1/64 inch): 24| FTHP: 1564 psi| FTHT: 104 °F |Qg: 140228 m3/d
Formation: Godavari Clay/Pliocene| Interval(m.): (1214.5-1211.0, 1208.0-1205.5, 1199.0-1194.0, 1192.0-1190.0) | Duration: 10hrs. | Choke (1/64 inch): 28| FTHP: 1533 psi| FTHT: 115 °F |Qg: 177351 m3/d
Well shut-in at POTV for Bottom Hole Pressure build-up study for 72hrs. SBHP:1754 PSI
Formation: Godavari Clay/Pliocene| Interval(m.): (1214.5-1211.0, 1208.0-1205.5, 1199.0-1194.0, 1192.0-1190.0) | Duration: 21.5hrs. | Choke (1/64 inch): 32| FTHP: 1488 psi| FTHT: 122 °F |Qg: 252072 m3/d

DST 2
Formation: Godavari Clay/Pliocene| Interval(m.): (1165-1157, 1154-1148) | Duration: 10hrs. | Choke (1/64 inch): 16| FTHP: 1579 psi| FTHT: 91 °F |Qg: 62514 m3/d
Well shut-in at choke manifold for 23 hours; STHP: 1610psi.
Formation: Godavari Clay/Pliocene| Interval(m.): (1165-1157, 1154-1148) | Duration: 8hrs. | Choke (1/64 inch): 20| FTHP: 1573 psi| FTHT: 106 °F |Qg: 99128 m3/d
Formation: Godavari Clay/Pliocene| Interval(m.): (1165-1157, 1154-1148) | Duration: 8hrs. | Choke (1/64 inch): 24| FTHP: 1549 psi| FTHT: 97 °F |Qg: 138026 m3/d
Formation: Godavari Clay/Pliocene| Interval(m.): (1165-1157, 1154-1148) | Duration: 8hrs. | Choke (1/64 inch): 28| FTHP: 1513 psi| FTHT: 100 °F |Qg: 176032 m3/d
Well shut-in at POTV for Bottom Hole Pressure build-up study for 72hrs. SBHP:1744 PSI
Formation: Godavari Clay/Pliocene| Interval(m.): (1165-1157, 1154-1148) | Duration: 24.5hrs. | Choke (1/64 inch): 32| FTHP: 1460 psi| FTHT: 104 °F |Qg: 230404 m3/d

DST 3

Formation: Godavari Clay/Pliocene| Interval(m.): (1130-1127, 1123-1116) | Duration: 10hrs. | Choke (1/64 inch): 16| FTHP: 1495 psi| FTHT: 95 °F |Qg: 5842 m3/d
Well shut-in at choke manifold for 23 hours; STHP: 1593 psi.

Formation: Godavari Clay/Pliocene| Interval(m.): (1165-1157, 1154-1148) | Duration: 7hrs. | Choke (1/64 inch): 20| FTHP: 1496 psi| FTHT: 102 °F |Qg: 94713 m3/d

Formation: Godavari Clay/Pliocene| Interval(m.): (1165-1157, 1154-1148) | Duration: 8hrs. | Choke (1/64 inch): 24| FTHP: 1432 psi| FTHT: 102 °F |Qg: 127120 m3/d

Formation: Godavari Clay/Pliocene| Interval(m.): (1165-1157, 1154-1148) | Duration: 8hrs. | Choke (1/64 inch): 28| FTHP: 1356 psi| FTHT: 105 °F |Qg: 157436 m3/d
Well shut-in at POTV for Bottom Hole Pressure build-up study for 72hrs. SBHP:1726 PSI

Formation: Godavari Clay/Pliocene| Interval(m.): (1165-1157, 1154-1148) | Duration: 24hrs. | Choke (1/64 inch): 32| FTHP: 1258 psi| FTHT: 108 °F |Qg: 196952 m3/d

Formation: Godavari Clay/Pliocene| Interval(m.): (1165-1157, 1154-1148) | Duration: 8hrs. | Choke (1/64 inch): 36| FTHP: 1163 psi| FTHT: 108 °F |Qg: 231868 m3/d

Formation: Godavari Clay/Pliocene| Interval(m.): (1165-1157, 1154-1148) | Duration: 8hrs. | Choke (1/64 inch): 40| FTHP: 1053 psi| FTHT: 111 °F |Qg: 248348 m3/d
Well shut-in at choke manifold for 24hrs. STHP:1482 PSI

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

Sl No	Depth MD (m)	Depth TVD (m)	Hydrostatic Pressure (psi)	EMW Hyd (ppg)	Formation Pressure (psi)	EMW FM (ppg)	Mobility (mD/cP)	Temp (°F)	Status	Remarks
1	1117.01	1116.99	2174.59	11.41	1746.78	9.17	47.33	159.20	Good	FID: Gas + WBMF Fi l trate Pumpout Vol:19.2L.
2	1119.53	1119.51	2180.35	11.42	1747.39	9.15	68.42	158.73	Good	
3	1123.02	1123.00	2186.23	11.41	--	--	--	158.60	Tight	
4	1123.50	1123.48	2187.57	11.41	1748.01	9.12	2078.00	158.70	Good	
5	1125.01	1124.99	2189.11	11.41	1748.26	9.11	1235.00	158.99	Good	FID: Gas + WBMF Filtrate. Pumpout Vol:28.16L. Sample Taken.
6	1129.00	1129.98	2202.39	11.42	--	--	--	159.50	Lost Seal	
7	1129.52	1129.50	2200.27	11.42	--	--	--	159.78	Tight/ Slow Build-up	
8	1130.50	1130.48	2202.40	11.42	--	--	--	159.78	Tight/ Slow Build-up	
9	1139.00	1138.98	2218.32	11.42	--	--	--	160.23	Tight	
10	1145.00	1144.98	2229.67	11.41	--	--	--	160.54	Tight/ Slow	

11	1144.51	1144.49	2229.20	11.42	--	--	--	160.56	Build-up Tight	
12	1148.00	1147.98	2235.67	11.41	1752.23	8.95	411.11	159.90	Good	
13	1150.00	1149.98	2239.19	11.41	--	--	--	160.10	Tight	
14	1151.50	1151.48	2241.39	11.41	1752.32	8.92	54.85	160.87	Good	
15	1153.00	1152.98	2244.09	11.41	--	--	--	160.87	Tight	
16	1157.05	1157.03	2251.55	11.41	1753.14	8.88	22.89	160.67	Good	
17	1160.05	1160.03	2257.93	11.41	1753.24	8.86	140.38	160.85	Good	
18	1162.01	1161.99	2261.55	11.41	1753.68	8.85	262.19	160.39	Good	
19	1164.00	1163.98	2265.05	11.41	1755.27	8.84	1954.86	161.16	Good	
20	1173.10	1173.08	2282.00	11.40	1754.85	8.77	562.00	162.59	Good	
21	1175.51	1175.49	2287.00	11.40	1755.02	8.75	532.00	163.29	Good	FID: Gas (Dominant) + Water/WBM
22	1178.01	1177.98	2292.00	11.40	1755.01	8.73	21.26	163.79	Good	
23	1179.49	1179.47	2295.00	11.40	1755.06	8.72	24.67	163.70	Good	FID: Gas + WBMF Fi l trate. Pumpout Vol:38L. Sample taken.
24	1191.00	1190.99	2310.68	11.37	1756.63	8.64	868.80	162.61	Good	
25	1194.01	1193.98	2320.67	11.39	1756.91	8.62	270.00	164.68	Good	
26	1195.51	1195.48	2325.00	11.40	1762.27	8.64	1911.00	165.70	Good	
27	1198.01	1197.98	2289.00	11.20	1758.56	8.60	1054.73	165.87	Good	FID: Gas Pumpout Vol:32L.
28	1206.00	1205.98	2344.00	11.39	1761.16	8.56	297.51	165.15	Good	
29	1207.51	1207.49	2347.99	11.40	--	--	--	167.63	Tight	
30	1207.02	1207.00	2346.39	11.39	--	--	--	167.71	Tight	
31	1212.00	1211.98	2356.24	11.40	1760.88	8.52	4881.93	168.14	Good	
32	1214.00	1213.98	2360.85	11.40	1759.41	8.49	610.77	168.11	Good	
33	1217.00	1216.98	2365.06	11.39	1760.69	8.48	2803.55	168.01	Good	
34	1223.50	1223.48	2378.85	11.40	1764.57	8.45	81.67	168.62	Good	FID: Water & WBMF Pumpout Vol:40.4L. Sample taken.
35	1247.50	1247.48	2422.16	11.38	--	--	--	168.97	Tight	
36	1333.00	1332.98	2586.80	11.37	1930.94	8.49	206.36	176.53	Good	

5.6.4.2. Gas composition analysis

Formation: Godavari clay| Interval(m.): 1214.5-1211.0, 1208.0-1205.5, 1199.0-1194.0, 1192.0-1190.0| Sample No.: Sample 165. | Choke (1/64 inch): 32 | C1: 95.38 %| C2: 0.27 %| C3: 0.21 %| iC4: 0.04 %| nC4: 0.05 %| iC5: 0.02 %| nC5: 0.01 %| C6+: 0.15 %| Carbon-dioxide: 0.38 %| Nitogen+Oxygen: 3.48 %| Sp.Gr.: 0.5631

Formation: Godavari clay| Interval(m.): 1214.5-1211.0, 1208.0-1205.5, 1199.0-1194.0, 1192.0-1190.0| Sample No.: Sample 166. | Choke (1/64 inch): 28 | C1: 98.47 %| C2: 0.28 %| C3: 0.22 %| iC4: 0.05 %| nC4: 0.05 %| iC5: 0.02 %| nC5: 0.01 %| C6+: 0.16 %| Carbon-dioxide: 0.36 %| Nitogen+Oxygen: 0.34 %| Sp.Gr.: 0.5669

Formation: Godavari clay| Interval(m.): 1214.5-1211.0, 1208.0-1205.5, 1199.0-1194.0, 1192.0-1190.0| Sample No.: Sample 167. | Choke (1/64 inch): 24 | C1: 98.45 %| C2: 0.28 %| C3: 0.22 %| iC4: 0.05 %| nC4: 0.05 %| iC5: 0.03 %| nC5: 0.01 %| C6+: 0.09 %| Carbon-dioxide: 0.19 %| Nitogen+Oxygen: 0.61 %| Sp.Gr.: 0.5627

Formation: Godavari clay| Interval(m.): 1214.5-1211.0, 1208.0-1205.5, 1199.0-1194.0, 1192.0-1190.0| Sample No.: Sample 168. | Choke (1/64 inch): 20 | C1: 98.45 %| C2: 0.28 %| C3: 0.21 %| iC4: 0.04 %| nC4: 0.05 %| iC5: 0.02 %| nC5: 0.01 %| C6+: 0.09 %| Carbon-dioxide: 0.26 %| Nitogen+Oxygen: 0.54 %| Sp.Gr.: 0.5669

Formation: Godavari clay| Interval(m.): 1214.5-1211.0, 1208.0-1205.5, 1199.0-1194.0, 1192.0-1190.0| Sample No.: Sample 169. | Choke (1/64 inch): 16 | C1: 98.62 %| C2: 0.27 %| C3: 0.21 %| iC4: 0.04 %| nC4: 0.05 %| iC5: 0.02 %| nC5: 0.00 %| C6+: 0.12 %| Carbon-dioxide: 0.20 %| Nitogen+Oxygen: 0.39 %| Sp.Gr.: 0.5632

Formation: Godavari clay| Interval(m.): 1165-1157, 1154-1148| Sample No.: Sample 187 | Choke(1/64 inch): 32 | C1: 97.84 %| C2: 0.31 %| C3: 0.24 %| iC4: 0.05%| nC4: 0.06 %| iC5: 0.02 %| nC5: 0.01 %| C6+: 0.08 %| Carbon-dioxide: 0.39 %| Nitogen+Oxygen: 1.01 %| Sp.Gr.: 0.5707

Formation: Godavari clay| Interval(m.): 1165-1157, 1154-1148| Sample No.: Sample 188 | Choke(1/64 inch): 28 | C1: 97.05 %| C2: 0.31 %| C3: 0.23 %| iC4: 0.05%| nC4: 0.06 %| iC5: 0.02 %| nC5: 0.01 %| C6+: 0.16 %| Carbon-dioxide: 0.36 %| Nitogen+Oxygen: 1.74 %| Sp.Gr.: 0.5754

Formation: Godavari clay| Interval(m.): 1165-1157, 1154-1148| Sample No.: Sample 189 | Choke(1/64 inch): 24 | C1: 97.77 %| C2: 0.31 %| C3: 0.23 %| iC4: 0.05%| nC4: 0.06 %| iC5: 0.02 %| nC5: 0.00 %| C6+: 0.14 %| Carbon-dioxide: 0.39 %| Nitogen+Oxygen: 1.03 %| Sp.Gr.: 0.5721

Formation: Godavari clay| Interval(m.): 1165-1157, 1154-1148| Sample No.: Sample 191 | Choke(1/64 inch): 16 | C1: 97.51 %| C2: 0.31 %| C3: 0.23 %| iC4: 0.05%| nC4: 0.06 %| iC5: 0.02 %| nC5: 0.01 %| C6+: 0.13 %| Carbon-dioxide: 0.39 %| Nitogen+Oxygen: 1.28 %| Sp.Gr.: 0.5731

Formation: Godavari clay| Interval(m.): 1130-1127, 1123-1116| Sample No.: Sample 210 | Choke(1/64 inch): 16 | C1: 98.48 %| C2: 0.28 %| C3: 0.21 %| iC4: 0.05%| nC4: 0.06 %| iC5: 0.03 %| nC5: 0.01 %| C6+: 0.10 %| Carbon-dioxide: 0.25 %| Nitogen+Oxygen: 0.53 %| Sp.Gr.: 0.5676

Formation: Godavari clay| Interval(m.): 1130-1127, 1123-1116| Sample No.: Sample 211 | Choke(1/64 inch): 20 | C1: 98.47 %| C2: 0.28 %| C3: 0.21 %| iC4: 0.05%| nC4: 0.06 %| iC5: 0.03 %| nC5: 0.01 %| C6+: 0.12 %| Carbon-dioxide: 0.25 %| Nitogen+Oxygen: 0.52 %| Sp.Gr.: 0.5682

Formation: Godavari clay| Interval(m.): 1130-1127, 1123-1116| Sample No.: Sample 212 | Choke(1/64 inch): 24 | C1: 98.40 %| C2: 0.28 %| C3: 0.21 %| iC4: 0.05%| nC4: 0.06 %| iC5: 0.03 %| nC5: 0.01 %| C6+: 0.08 %| Carbon-dioxide: 0.25 %| Nitogen+Oxygen: 0.53 %| Sp.Gr.: 0.5676

Formation: Godavari clay| Interval(m.): 1130-1127, 1123-1116| Sample No.: Sample 213 | Choke(1/64 inch): 28 | C1: 98.45 %| C2: 0.28 %| C3: 0.22 %| iC4: 0.05%| nC4: 0.06 %| iC5: 0.03 %| nC5: 0.01 %| C6+: 0.23 %| Carbon-dioxide: 0.17 %| Nitogen+Oxygen: 0.50 %| Sp.Gr.: 0.5700

Formation: Godavari clay| Interval(m.): 1130-1127, 1123-1116| Sample No.: Sample 214 | Choke(1/64 inch): 32 | C1: 98.66 %| C2: 0.28 %| C3: 0.22 %| iC4: 0.05%| nC4: 0.06 %| iC5: 0.03 %| nC5: 0.01 %| C6+: 0.13 %| Carbon-dioxide: 0.20 %| Nitogen+Oxygen: 0.34 %| Sp.Gr.: 0.5674

Formation: Godavari clay| Interval(m.): 1130-1127, 1123-1116| Sample No.: Sample 215 | Choke(1/64 inch): 36 | C1: 98.54 %| C2: 0.28 %| C3: 0.22 %| iC4: 0.05%| nC4: 0.06 %| iC5: 0.03 %| nC5: 0.01 %| C6+: 0.18 %| Carbon-dioxide: 0.29 %| Nitogen+Oxygen: 0.34 %| Sp.Gr.: 0.5693

Formation: Godavari clay| Interval(m.): 1130-1127, 1123-1116| Sample No.: Sample 216 | Choke(1/64 inch): 40 | C1: 98.65 %| C2: 0.28 %| C3: 0.22 %| iC4: 0.05%| nC4: 0.06 %| iC5: 0.03 %| nC5: 0.01 %| C6+: 0.09 %| Carbon-dioxide: 0.30 %| Nitogen+Oxygen: 0.31 %| Sp.Gr.: 0.5671

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 correlations, sections, and maps

The IA and IF blocks in the shallow offshore Krishna-Godavari Basin are part of a geologically complex area with multiple proven and potential hydrocarbon plays. The main reservoir units are the Miocene Matsyapuri sandstones and the Eocene Vadaparru shales, which have been deposited in a deltaic to shallow marine environment, influenced by river systems and later modified by wave action. These formations exhibit structural traps such as rollover anticlines and fault closures. The Early Miocene sequence is characterized by alternating sandstone and shale layers, with sand dispersal controlled by paleo-depocenters located near ancient river mouths. In contrast, the overlying Pliocene sequence consists predominantly of thick Godavari Clay, within which localized high-amplitude channel sands have been identified. These Pliocene features are associated with slope channel systems and exhibit subtle seismic signatures, often faintly correlatable between wells. One such feature, targeted at the GS-15-AU location, shows promising seismic attributes including high amplitudes and favorable sweetness responses, suggesting the presence of stratigraphically controlled channel sands. The geological evaluation includes detailed seismic interpretation, amplitude and attribute mapping, and fault correlation, aiming to establish new Pliocene reservoir potential within this structurally and stratigraphically varied setting.

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. 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
GS-15-22 DISCOVERY
of
KG/OSDSF/G1/2025 CONTRACT AREA

	Reservoir	Total
Low		
Area, acres	214	
Gas Formation Volume Factor, scf/rcf	0.0071	
Average Thickness, ft	35.5	
Average Porosity, %	28.80	
Average Water Saturation, %	55.00	
Original Gas in Place, $10^9 ft^3$	6.00	**6.00**
Original Gas in Place, 10^6 eq ton	0.15	**0.15**
Best		
Area, acres	343	
Gas Formation Volume Factor, scf/rcf	0.0071	
Average Thickness, ft	43.7	
Average Porosity, %	29.84	
Average Water Saturation, %	49.68	
Original Gas in Place, $10^9 ft^3$	13.76	**13.76**
Original Gas in Place, 10^6 eq ton	0.35	**0.35**
High		
Area, acres	570	
Gas Formation Volume Factor, scf/rcf	0.0071	
Average Thickness, ft	51.7	
Average Porosity, %	31.00	
Average Water Saturation, %	45.00	
Original Gas in Place, $10^9 ft^3$	30.67	**30.67**
Original Gas in Place, 10^6 eq ton	0.77	**0.77**

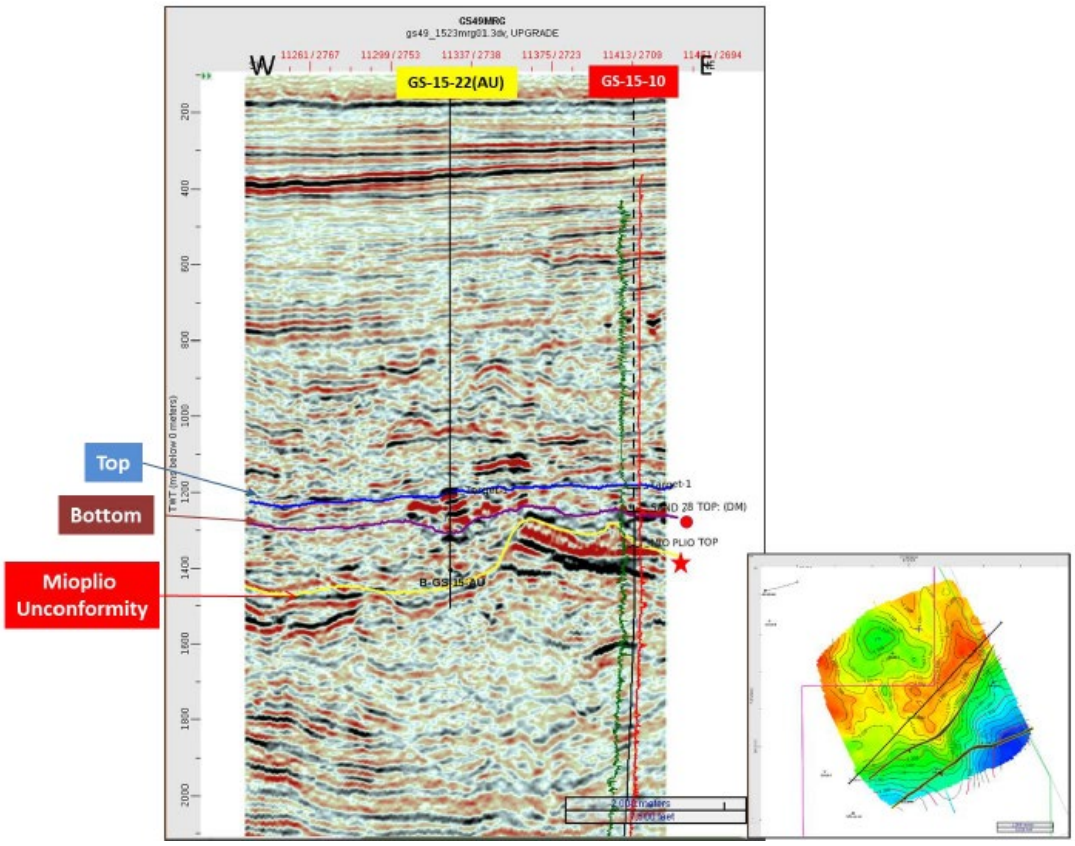
Note: Conversion used 10^9 scf equal to 0.02519 10^6 eq tone.

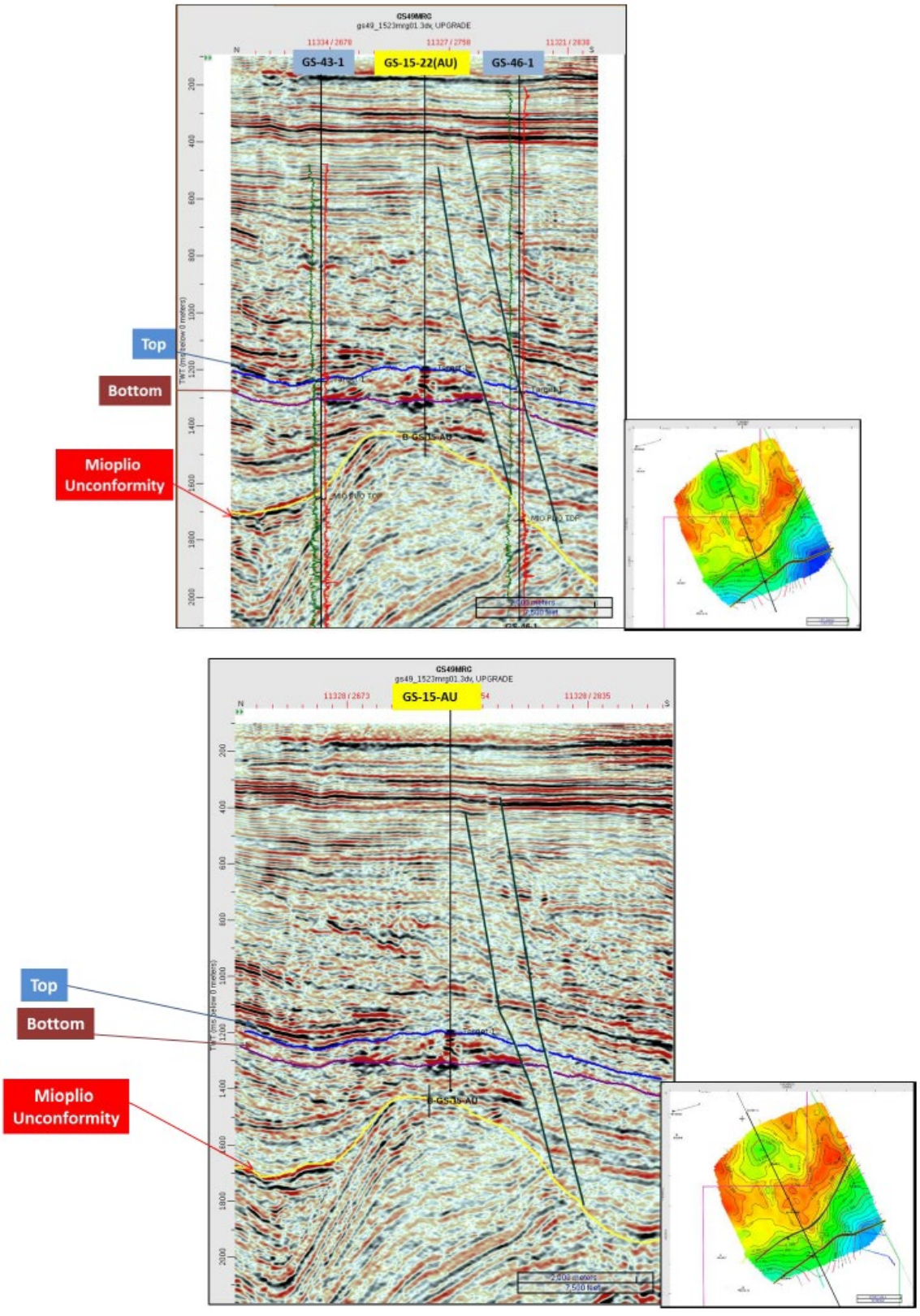
Volumes estimated by a Third Party

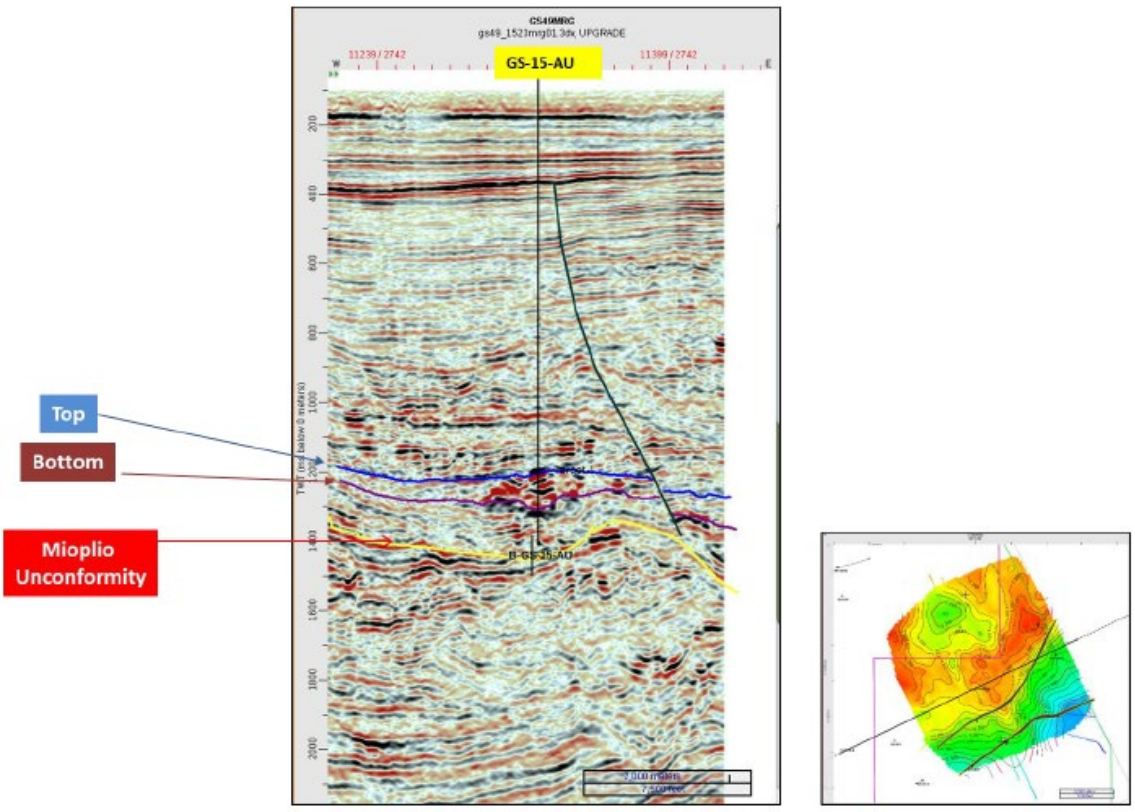
The operator has reported an in-place volume of 0.61 MMTOE (Best case).

5.6.7. Annex

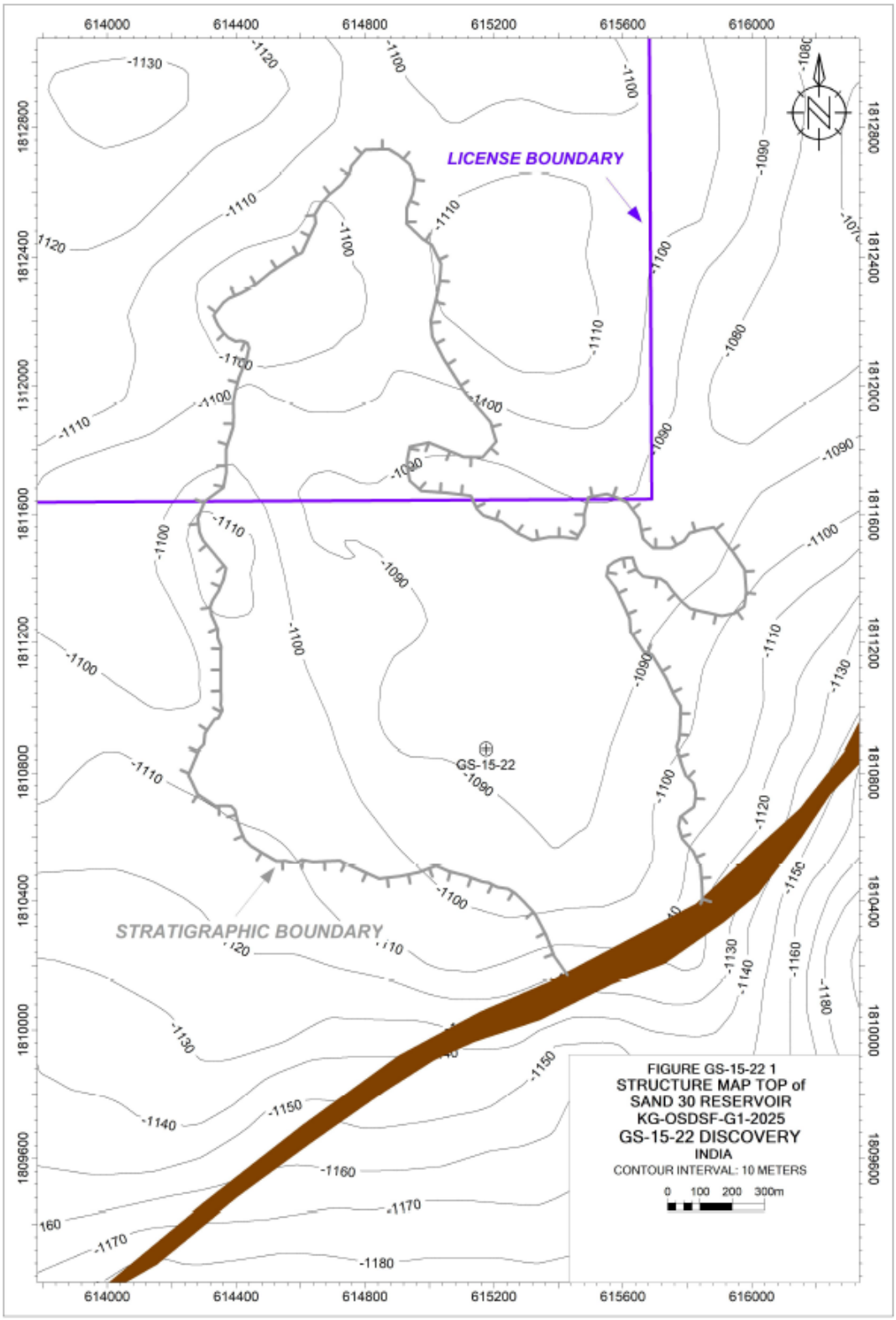
5.6.7.1. Seismic Sections



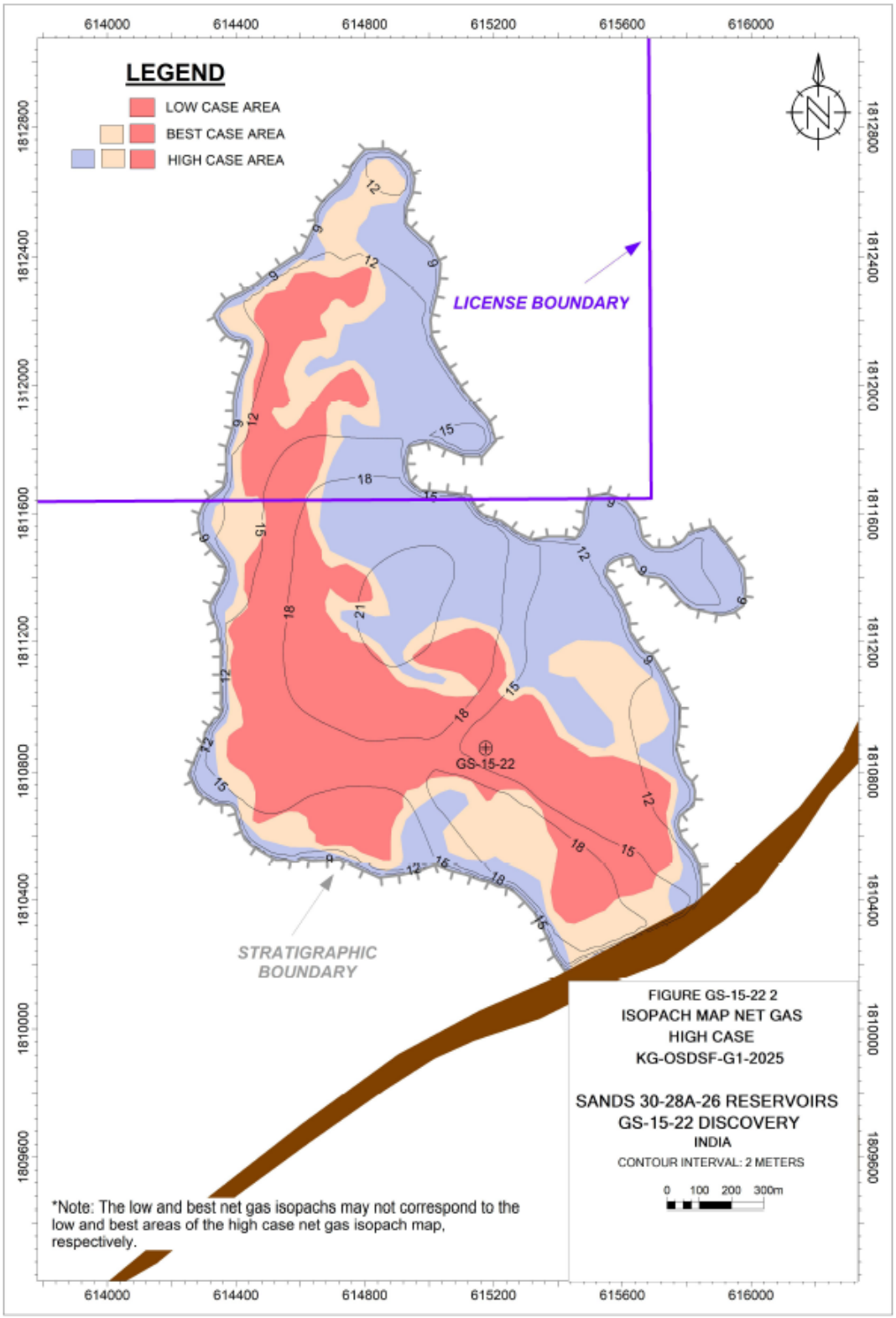

GS-43-1
GS-15-22(AU)
GS-46-1
Top
Bottom
Mioplio Unconformity
GS-15-AU
Top
Bottom
Mioplio Unconformity


GS-15-AU
Top
Bottom
Mioplio
Unconformity

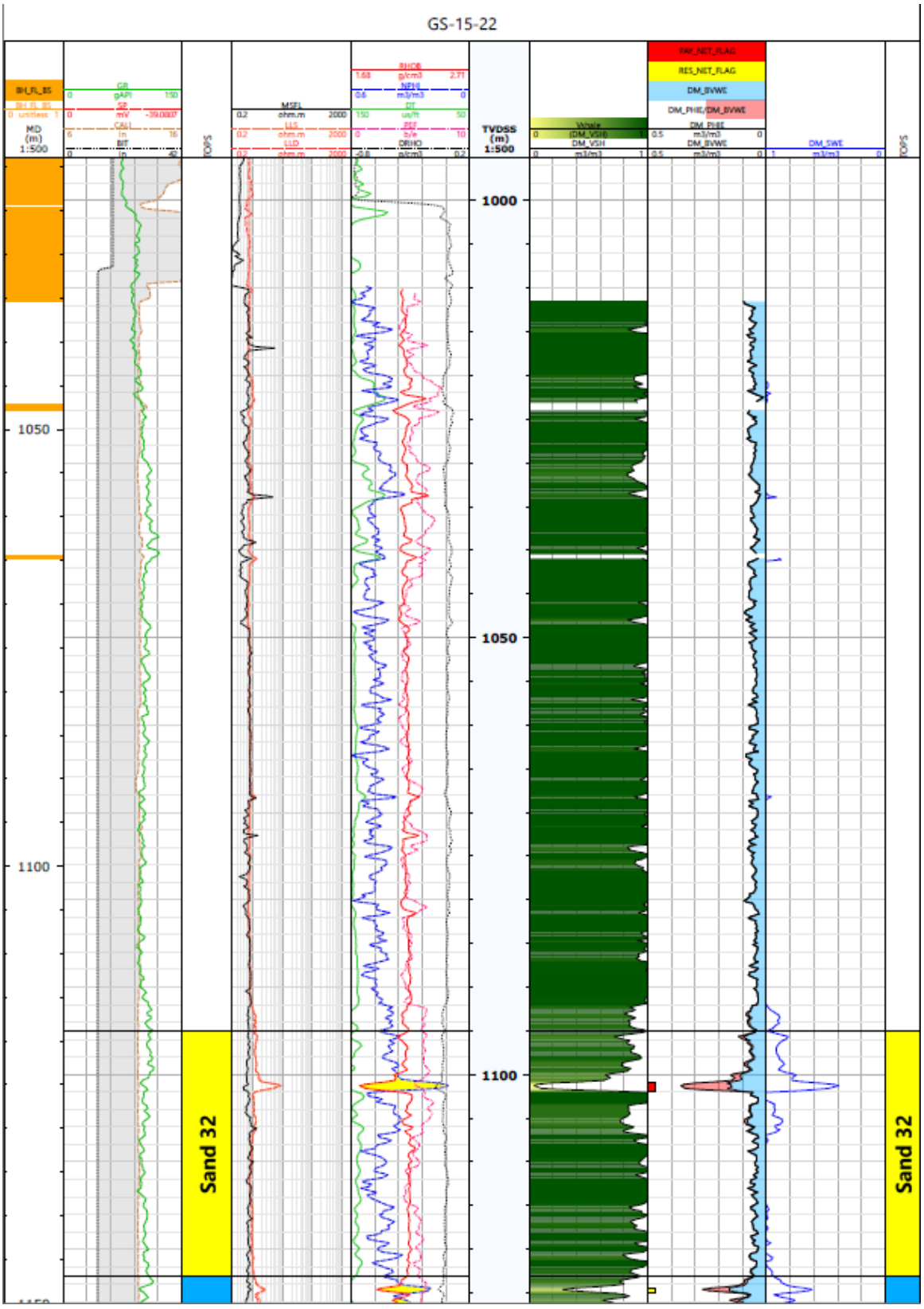
5.6.7.2. Structural Maps

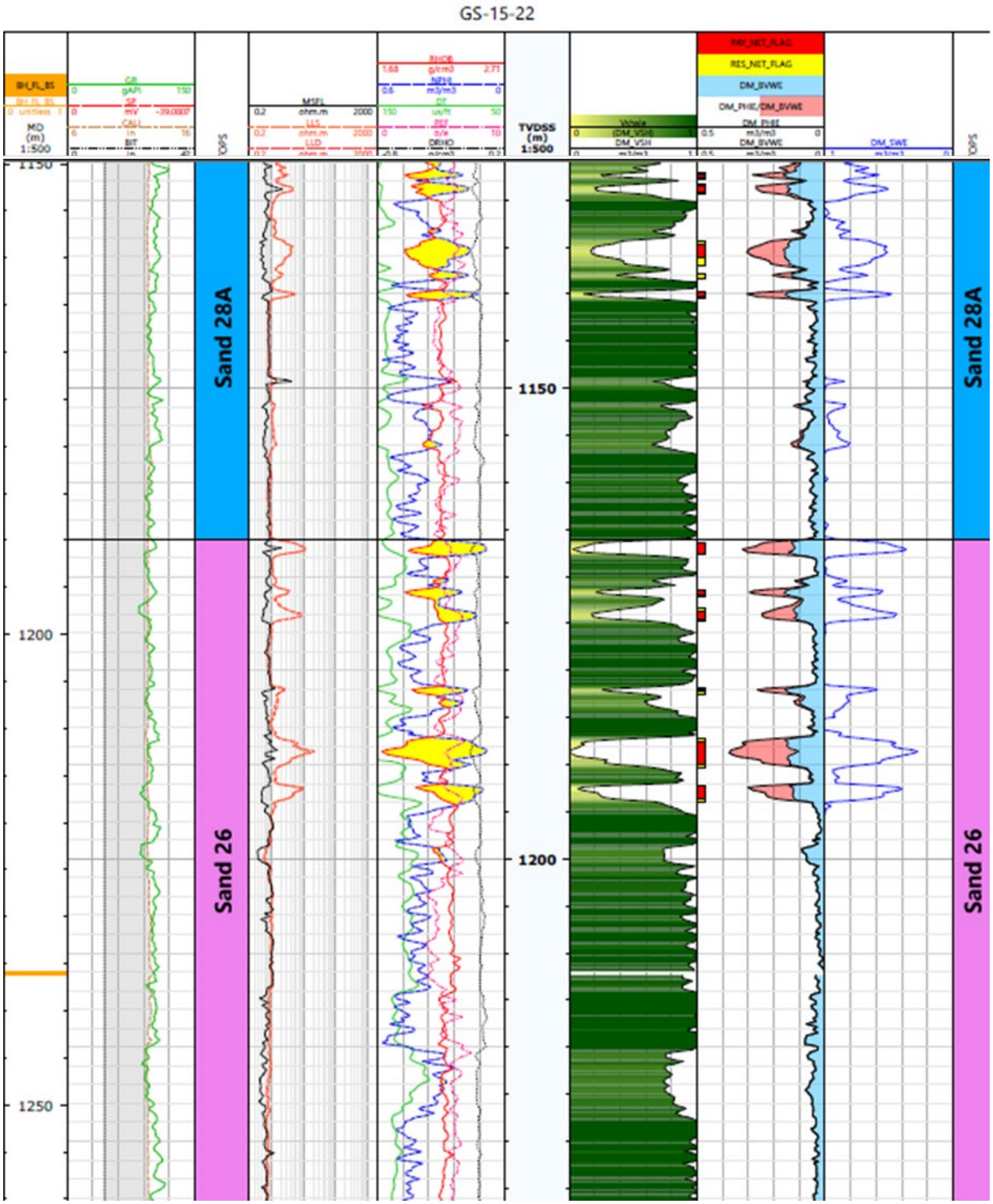


5.6.7.3. Isopach Maps



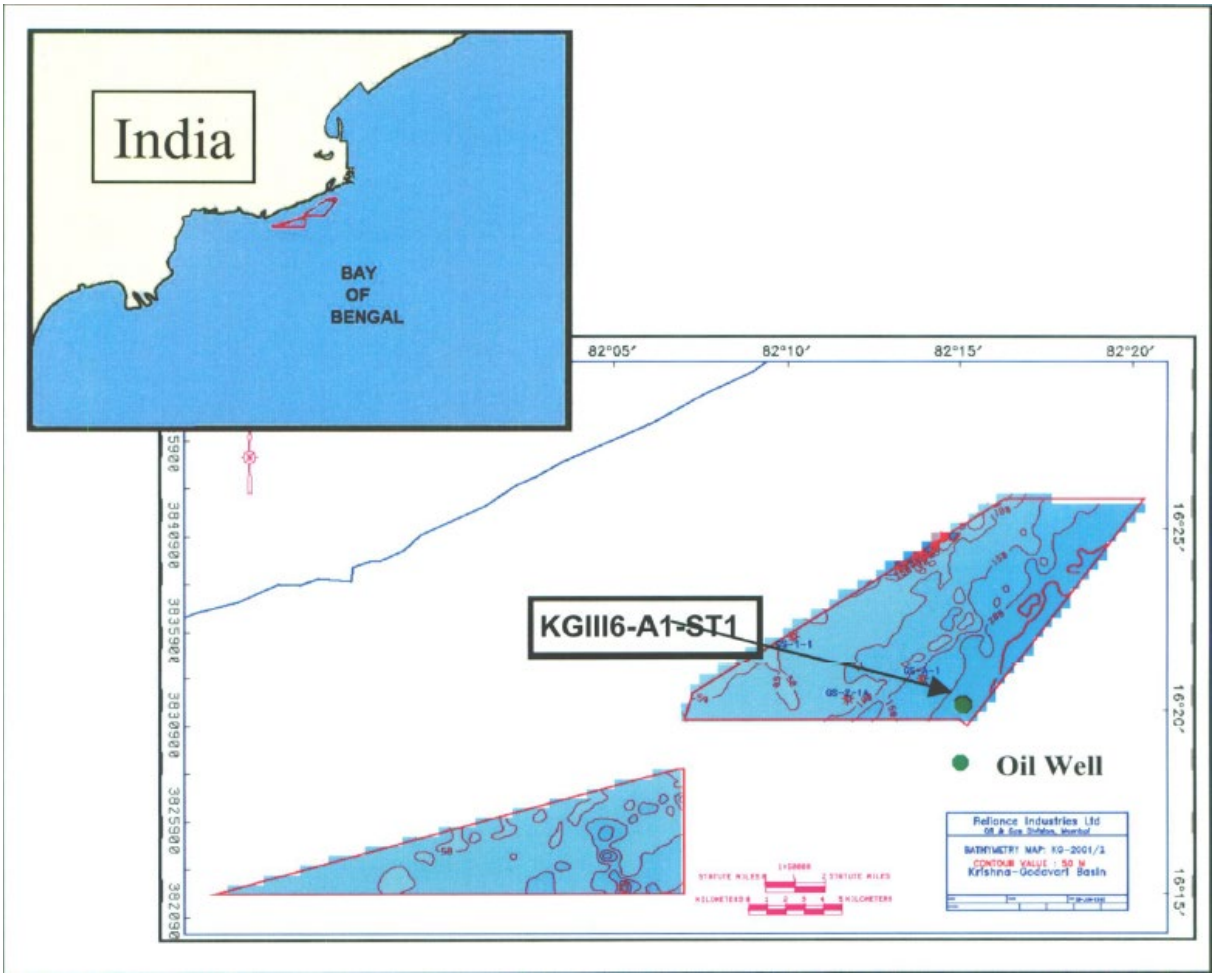
5.6.7.4. Log Motifs




GS-15-22
MD (m) 1:500
TVDSS (m) 1:500
Sand 28A
Sand 26
1150
1200
1250

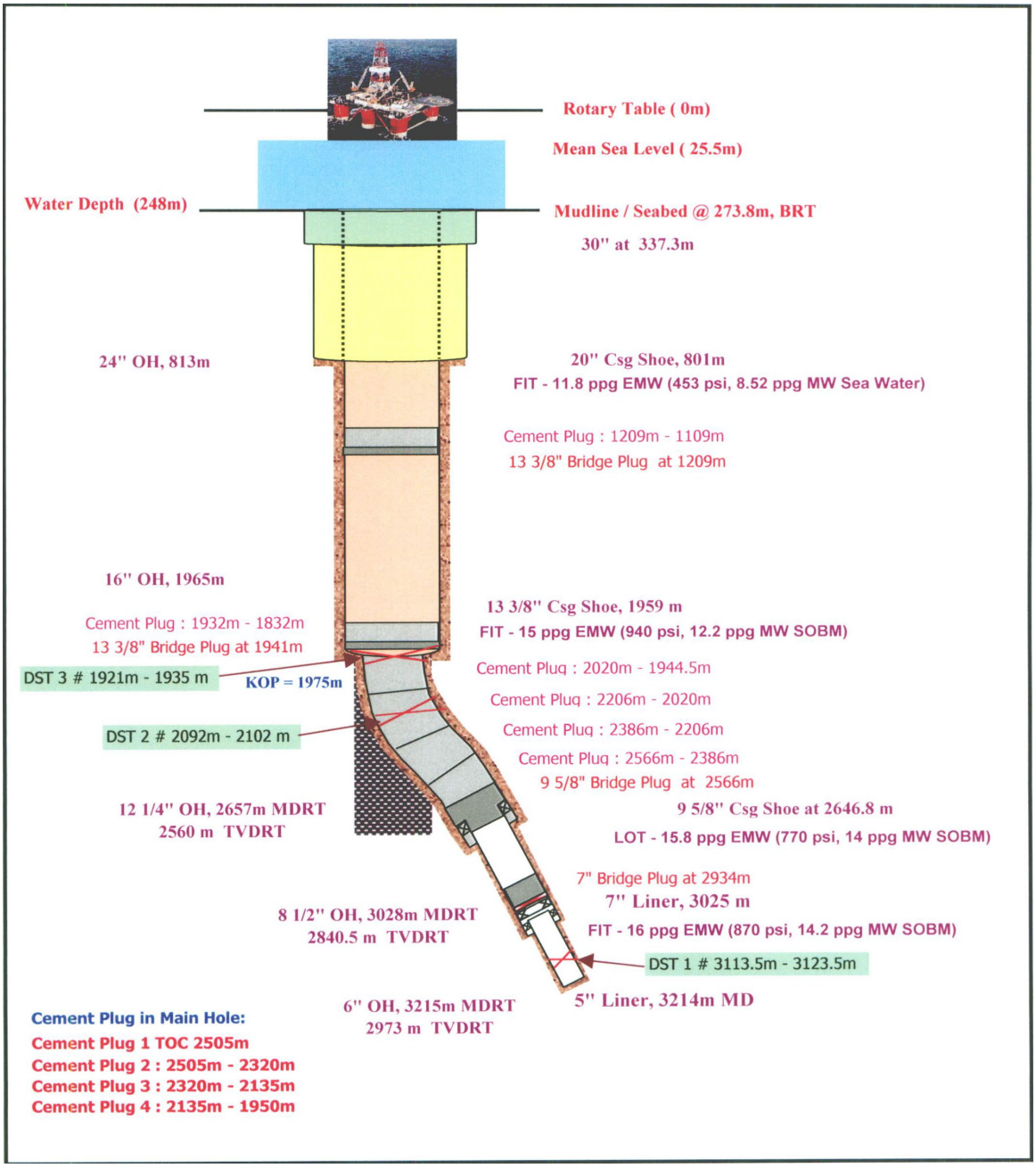
5.7. KGIII6-A1 DISCOVERY AND FIELD DESCRIPTION

The exploratory well KG1116-A1-ST1 was drilled in the Krishna-Godavari Basin, a geologically diverse region offshore the east coast of India. This basin features a range of depositional environments, including coastal plains, deltas, shelf slopes, deep-sea channels, and turbidite systems. The well is located in a shelfal area of the basin, targeting Pliocene and Miocene sandstone formations known for their potential as gas reservoirs. The drilling operation encountered challenges, including a pressure kick that required a sidetrack, and was executed with continuous real-time monitoring through mud logging, logging-while-drilling, and seismic data integration. The lithological analysis revealed heterogeneous sandstone reservoirs varying in grain size from fine to very coarse, indicative of complex depositional processes. Hydrocarbon presence was confirmed within a broad Pliocene interval, and fluid contacts were interpreted using wireline and formation testing data. The results point to stratified gas and oil zones within the reservoir, emphasizing the geological complexity and potential of the target formations.



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
Only WCR available	09.10.2004	25.5 m	2639 m MDRT

5.7.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

16	ZDL-CN-DSL (1963.5-796m) Remarks: BHT@164°F
	HDIL-XMACII-GR (1948.4-796m) Remarks: BHT@166°F
12.25	ZDL-CN-DSL-GR (2639.6-1955.2m) Remarks: BHT@186°F
	XMAC-3DEX-HDIL-GR (2639.6-1955.2m) Remarks: BHT@189°F
	RCI-GR (2633-2030.1m) Remarks: BHT@207°F
	SBT-VDL-GR-CCL (1955-273m)
	VSP (2630-815m) Remarks: BHT@207°F
	HDIL-ZDL-CN-DSL (2639.6-1955.2m) Remarks: BHT@192°F
	RCI-GR (2639.6-1955.2m) Remarks: BHT@212°F
	EI-XMAC-GR (2633-2030.1m) Remarks: BHT@220°F
	SWC-PFC (2633-1955m)
6	MREX-ZDL-CN-GR (3216-3024m) Remarks: BHT@243°F
	HDIL-3DEX-XMAC-GR (3216-3024m) Remarks: BHT@245°F
	RCI-GR (3155-3024m)
	SBT-GR (3022-1586m) Remarks: BHT@232°F
	RCI-GR (3155-3024m)

5.7.3. Well Testing and Workover History

Three objects were released for production testing within the Gadavari clay formation. Object –I (3113.5-3123.5m) produced water, FTHP: 1488 psi thru 16/64” choke. Object –II (2090-2100m) produced gas (Qg: 0.805 mmscf/d), oil (8.2 bbl/d) and water (405.7 bbl/d), FTHP: 367 psi thru 24/64” choke. Object –III (1921-1935m) produced oil (Qo: 650 bbl/d) and gas (Qg: 0.7 mmscf/d), FTHP: 950 psi thru 28/64” choke.

A well test report was not provided.

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

File No.	Approx Time	Depth m MDRT	Depth m RT TVD	Depth m SS	IMHP psia Quartz G	Temp Deg C	FMHP psig Quartz G	Form. Pr. psia Quartz G	Estimated Mobility md/cp	Samples	Remark	Comments
KG-III-6-A1, FMT PRESSURE SURVEY DATA 16" HOLE (Tool :Cable Head+GR+FMT VPC HP Electronics+FMT Mandrel W HP Probe+FMT 4 Litre Tank+FMT 2.5 Gallon Tank+Bull												
C04	5:36	1904.4	1904.4	1878.9	3865.5	71.3	3866.1	3691.8	332.9		drawdown @20cc /7sec	good
C05	5:44	1907.4	1907.4	1881.9	3860.47		3860.6				drawdown @20cc /7sec	lost seal
C06	6:00	1907.3	1907.3	1881.8	3860.2		3859.3		-		drawdown @20cc /7sec	supercharged
C07	6:04	1910.3	1910.3	1884.8	3864.5	74.5	3865.2	3694.20	125		drawdown @20cc /7sec	good
C08	6:11	1912.7	1912.7	1887.2	3869.9	75.2	3868.7	3694.50	264.1		drawdown @20cc /7sec	good
C09	6:24	1918.0	1918.0	1892.5	3878.5		3897.6				drawdown @20cc /7sec	lost seal
C10	6:35	1917.8	1917.8	1892.3	3877.5	76.3	3876.1		53.335		drawdown @20cc /7sec	good
C11	7:01	1917.8	1917.8	1892.3	3876.5	76.8	3875.9	3698.80	50.37		drawdown @20cc /7sec	good
C12	7:15	1924.0	1924.0	1898.5	3889.2						drawdown @20cc /7sec	no seal
C13	7:17	1923.8	1923.8	1898.3							drawdown @20cc /7sec	no seal
C14	7:26	1927.4	1927.4	1901.9	3896.8		3895.8				drawdown @20cc /7sec	supercharge retracted next try no seal
C15	7:38	1927.2	1927.2	1901.7	3895.2	78.1	3893.9	3709.00	83.8		drawdown @20cc /7sec	good
C16	7:51	1927.2	1927.2	1901.7							drawdown @20cc /7sec	no seal
C17	7:55	1928.1	1927.2	1901.7	3896.1	78.4			19.2		drawdown @20cc /7sec	good
C18	8:01	1930.2	1930.2	1904.7	3900	78.6	3898.9	3710.4	2.98		drawdown @20cc /7sec	good
C19	8:27	1935.0	1935.0	1909.5	3909.5		3908.7	3716.01	38.4		drawdown @20cc /7sec	good
C20	8:37	1942.0	1942.0	1916.5	3923.7	79.1	3923.4	3725.50	54.8		drawdown @20cc /7sec	good
C21	8:50	1943.0	1943.0	1917.5		79.2					drawdown @20cc /7sec	no seal
C22	8:52	1942.8	1942.8	1917.3	3924.5	79.4	3923.1	3726.71	17.123		drawdown @20cc /7sec	good
C23	9:04	1947.2	1947.2	1921.7	3933.7	79.7	3932.1	3732.90	3.03		drawdown @20cc /7sec	good
C24	9:20	1920.2	1920.2	1894.7	3873.4	79.8	3873.6	3701.07	8.5		drawdown @20cc /7sec	good

C25	9:36	1914.4	1914.4	1888.9	3860.9	79.9	3861.4	3690.68	4.2		drawdown @20cc /7sec	good
C26	9:52	1948.2	1948.2	1922.7	3934.35	79.9	3932.5	3732.45	41.55		drawdown @20cc /7sec	good
C27	10:08	1950.0	1950.0	1924.5	3937.1	79.9		3735.00	1.412		drawdown @20cc /7sec	good
C28	10:40	1951.0	1951.0	1925.5	3938.4	80.0	3937.6	3738.00	63.5		drawdown @20cc /7sec	good
C29	10:48	1953.0	1953.0	1927.5							drawdown @20cc /7sec	tight
C31	10:55	1952.8	1952.8	1927.3							drawdown @20cc /7sec	lost seal
C32	11:09	1935.0	1935.0	1909.5							drawdown @20cc /7sec	no seal
C33	11:18	1934.8	1934.8	1909.3				3716.00	34	4lt+10 lt sample	drawdown @20cc /7sec, sampling	some plugging while sampling....Tool retracted
C34	13:21	1750.0	1750.0	1724.5	3522.2		3524.7		103		drawdown @20cc /7sec	not valid
C35	13:52	1744.4	1744.4	1718.9	3512.7	77.3	3510.8		50.88		drawdown @20cc /7sec	not valid
C36	14:00	1741.2	1741.2	1715.7	3507.4	77.2	3507.9				drawdown @20cc /7sec	not valid
C37	14:14	1736.2	1736.2	1710.7	3498.5	76.6	3499.5				drawdown @20cc /7sec	not valid
C38	14:27	1744.4	1744.4	1718.9	3517.4		3517.0				drawdown @20cc /7sec	not valid
C39	14:55	1912.7	1912.7	1887.2	3869.6	76.0					drawdown @20cc /7sec	tool check failure found
2nd Run of FMT			0.0	-25.5								
C41	23:31	849.7	849.7	824.2		45.1					drawdown @20cc /7sec	no seal
C42	23:33	849.5	849.5	824.0	1731.8	48.3	1727.0		3.97		drawdown @20cc /7sec	supercharge
C43	0:16	856.6	856.6	831.1	1740.7	48.5	1740.5		-		drawdown @20cc /7sec	supercharge
C44	0:38	869.6	869.6	844.1	1768.0	49.2	1765.0				drawdown @20cc /7sec	Tight
C45	1:36	1242.1	1242.1	1216.6		55.6					drawdown @20cc /7sec	lost seal
C46	1:37	1239.9	1239.9	1214.4	2525.5	56.7					drawdown @20cc /7sec	Supercharged increasing @ 3 psi/min
C47	1:57	1251.7	1251.7	1226.2	2550.0	57.2	2548.0				drawdown @20cc /7sec	tight
C48	2:07	1243.4	1243.4	1217.9	2530.9	59.8					drawdown @20cc /7sec	
C49	2:18	1243.4	1243.4	1217.9		59.8					drawdown @20cc /7sec	Tight
C51	2:26	1560.0	1560.0	1534.5	3171.5		3171.5				drawdown @20cc /7sec	no seal
C52	3:06	1562.0	1562.0	1536.5							drawdown @20cc /7sec	no seal
C53	3:15	1561.8	1561.8	1536.3							drawdown @20cc /7sec	no seal
C54	3:19	1566.2	1566.2	1540.7	3180.4	66.6	3179.4				drawdown @20cc /7sec	no seal
C55	3:33	1660.3	1660.3	1634.8	3369.5		3370.7				drawdown @20cc /7sec	tight
C57	4:03	1912.7	1912.7	1887.2							drawdown @20cc /7sec	tool check working fine
C58	4:30	1750	1750	1724.5	3535.5	75	3533.5				drawdown @20cc /7sec	tight
C59	4:36	1749.8	1749.8	1724.3	3534.6	75.3	3534.6				drawdown @20cc /7sec	tight
C60	4:42	1744.4	1744.4	1718.9	3523.9	75.3	3526.15				drawdown @20cc /7sec	supercharge
C62	5:01	1741.2	1741.2	1715.7	3520	75.7	3520				drawdown @20cc /7sec	supercharge
C63	5:15	1738.2	1738.2	1712.7	3513.5	75.8	3515				drawdown @20cc /7sec	no seal
C64	5:24	1736.2	1736.2	1710.7	3510.8	75.7	3510.8				drawdown @20cc /7sec	tight
C65	5:30	1743.6	1743.6	1718.1	3525.5	75.7	3526.8				drawdown @20cc /7sec	supercharge
C66	5:54	1671.8	1671.8	1646.3	3373.7	75.8	3373.7				drawdown @20cc /7sec	no seal
C67	6:03	1671.6	1671.6	1646.1	3374.3	75.6	3374.3				drawdown @20cc /7sec	tight
C69	6:46	1951	1951	1925.5	3957.1	75.8	3957.1				drawdown @20cc /7sec	tight
C70	6:59	1952	1952	1926.5	3956	76.7	3956.3				drawdown @20cc /7sec	tight
C71		1951.2	1951.2	1925.7	3953.1	77.5		3740.0	4.236	one 10 litre samp	drawdown @20cc /7sec	good, sample bottle found empty at surface
C72	7:40	1955	1955	1929.5	3958		3957.9				drawdown @20cc /7sec	Tight
C73	7:44	1956	1956	1930.5	3958.9	79.2	3959.1				drawdown @20cc /7sec	Tight
C74	7:49	1952.8	1952.8	1927.3	3950.9	79.6	3951.8				drawdown @20cc /7sec	Tight

File No.	Approx Time	Depth m MDRT	Depth m RT TVD	Depth m SS	IMHP psia Quartz G	MUD Pr ppg	Temp Deg C	FMHP psig Quartz G	Form. Pr. psia Quartz G	Form. Pr. ppg	Estimated Mobility md/cp	ample View Indication	Samples	Remark	Comments
KG-IB-A1, RCI PRESSURE SURVEY DATA 12 1/4" HOLE															
G05		2589.0	2589.0	2563.5	5935.29	13.42	195.7		4633.5	10.5	9.0	-	-	drawdown @10cc + drawdown @10cc	good
G06		2602	2602.0	2576.5	5965.75	13.39	198.1		4651.30	10.46	4.052	-	-	drawdown @10cc + drawdown @10cc	good
G07		2604.5	2604.5	2579.0	5968.37	13.39	198.2		4655.00	10.46	78	-	-	drawdown @10cc + drawdown @10cc	good
G08		2608.0	2608.0	2582.5	5962.75	13.39	199.2		4660.90	10.46	5.98	-	-	drawdown @10cc + drawdown @10cc	good
G09		2609.5	2609.5	2584.0	5969.32	13.39	200.1		4665.20	10.46	3.607	-	-	drawdown @10cc + drawdown @10cc	Good Test
G10		2617.8	2617.8	2592.3	-	-	-				-	-	-	-	No Seal
G11		2619.8	2619.8	2594.3	5987.8	13.37	-		5611.70	12.53	-	-	-	drawdown @10cc + drawdown @10cc + drawdown @10cc	Tight/ Supercharged ??
G12		2619.0	2619.0	2593.5	5987.7	13.38	-				-	-	-	-	No Seal
G13		2623.5	2623.5	2598.0	-	-	-				-	-	-	-	No Seal
G14		2628.5	2628.5	2603.0	6013.0	13.39	198.9		5938.90	13.22	282	-	-	4 Drawdown @10cc	Good Test
G15		2630.0	2630.0	2604.5	6014.0	13.39	199.3		5940.70	13.22	21.54	-	-	2 Drawdown @10cc	Good Test
G16		2631.0	2631.0	2605.5	6016.5	13.38	199.8		5942.50	13.22	19.6	-	-	5 Drawdown @10cc	Good Test
G17		2633.0	2633.0	2607.5	-	-	-				-	-	-	3 Drawdown @10cc	Tight
G20		2628.8	2628.8	2603.3	6008.3	13.37	199.7		5939.17	13.22	12	-	-	2 Drawdown @10cc	Good Test but lost seal while sampling
G19		2631	2631.0	2605.5	6015	13.38	199.2		5942.5	13.22	6.71	-	-	3 Drawdown @10cc	Good Test but lost seal while sampling
G21		**2630.0**	2630.0	2604.5	6014.0	13.38	205.0		5941.38	13.22	1590	Water	1 Std. PVT tank (640cc)	3 Drawdown @10cc	Good Test/ Sample Acquired
G22		**2604.5**	2604.5	2579.0	5942.3	13.4	207.0		4655.00	10.46		Water	1 SP tank (500cc)	Drawdown @10cc	Good Test/ Sample Acquired
G23		2594.5	2594.5	2569.0	5921.7	13.4	205.7				-	-	-	Drawdown @10cc	No Seal
G25		2375.4	2375.4	2349.9	5416.0	13.3	198.7		4500.30	11.09	223	-	-	4 Drawdown @10cc	Good Test
G26		2380.0	2380.0	2354.5	5429.3	13.3	198.5				-	-	-	Drawdown @10cc	Tight
G27		2402.9	2402.9	2377.4	5480.7	13.4	198.1		4543.80	11.07	277.8	-	-	3 Drawdown @10cc	Good Test
G28		**2407.0**	2407.0	2381.5	5500.1	13.4	198.2		4551.70	11.07	8.37	Water		3 Drawdown @10cc	Good Test
G29		2417.0	2417.0	2391.5	5514.7	13.4	198.7				-	-	-	Drawdown @10cc	Tight
G30		2422.0	2422.0	2396.5	5526.0	13.4	198.8				-	-	-	Drawdown @10cc	Tight
G31		2436.0	2436.0	2410.5	5556.8	13.4	199.0				-	-	-	2 Drawdown @10cc	Tight
C32		**2445.5**	2445.5	2420.0	5564.0	13.4	199.0		5005.90	11.38	4120	gas	sample collected	3 Drawdown @10cc	Good Test
C33		2453.8	2453.8	2428.3	5602.2	13.4			4973.90	11.06	5.607			2 Drawdown @10cc	Good Test
C34		2477.2	2477.2	2451.7	5661.7	13.4	200.3								no seal
C35		2477.6	2477.6	2452.1	5662.7	13.4									Tight
C36		2479.2	2479.2	2453.7	5659.8	13.4	200.7								supercharged
C37		2483.0	2483.0	2457.5	5679.0	13.4									tight
C38		2482.9	2482.9	2457.4	5676.9	13.4									tight
C39		2483.3	2483.3	2457.8	5676.2	13.4	201.1								no seal
C41		2477.0	2477.0	2451.5	5661.6	13.4									tight
C42		2466.2	2466.2	2440.7	5645.0	13.4	201.3								tight
C43		2531.0	2531.0	2505.5	5795.0	13.4									tight
C44		2531.1	2531.1	2505.6		0.0									tight

C45		2545.0	2545.0	2519.5		0.0								tight
C46		2445.4	2445.4	2419.9	5662.2	13.4			4998.23	11.96				good test
C47		2460.2	2460.2	2434.7	5611.0	13.3								tight
C48		2448.0	2448.0	2422.5	5588.0	13.4								tight
C49		2030.0	2030.0	2004.5	4649.0	13.4	186.6		3760.70	10.84	22.057			5 Drawdown @10cc	Good test
C51		2032.0	2032.0	2006.5		0.0									tight
C52		2068.3	2068.3	2042.8	4728.4	13.38	183.7							2 Drawdown @10cc + 5cc	tight
C53		2072.2	2072.2	2046.7	4737.4	13.4			3598.90	10.16	15.899			4 Drawdown @10cc	good test
C54		2075	2075	2049.5	4745.8	13.38	183.6		3600.6	10.15				4 Drawdown @10cc	good test
C55		**2076**	2076	2050.5	4748.2	13.38	183.8		3601.0	10.15				5 Drawdown @10cc	good test
C57		2079.1	2079.1	2053.6	4754.3	13.38	183.9		3601.3	10.14				4 Drawdown @10cc	good test
C58		2084.3	2084.3	2058.8	4772	13.40	183.9								tight
C59		2086	2086	2060.5	4769	13.38									tight
C60		2100.6	2100.6	2075.1	4802.2	13.38	184.1		3619.7	10.1					
C62		**2085.8**	2085.8	2060.3	4765	13.37			3603.4	10.1		Gas	sample collected		good test
C63		2096.7	2096.7	2071.2	4791	13.37	185.3								tight
C64		2093.5	2093.5	2068	4784.5	13.37	185.7								tight
C65		2114.7	2114.7	2089.2	4801	13.29									lost seal
C66		2114.8	2114.8	2089.3	4830.4	13.37	185.9								lost seal
C67		2143.8	2143.8	2118.3	4887.2	13.37									lost seal
C69		2223	2223	2197.5	5076.9	13.36	187.4								tight
C70		2263.1	2263.1	2237.6	5168.1	13.37	188.8								lost seal
C71		2264.1	2264.1	2238.6											tight
C72		2290	2290	2264.5											tight
C73		2301.5	2301.5	2276											tight
C74		2314.5	2314.5	2289	5267.1	13.37	194.8		4007.1	10.1	1.939				good test
C76		2113	2113	2087.5											tight
C77		2100.6	2100.6	2075.1										10+20cc drawdown	lost seal
C78		2100.4	2100.4	2074.9			189.7								press not stab started PO tight
C81		2269.5	2269.5	2244											lost seal
C82		2296.7	2296.7	2270.2	5226.7	13.33	195		3987.1	10.2	5.03	water	sample		good test
C83		2300.3	2300.3	2274.8	5244.6	13.34	196.1		3992.9						good test
C84		2305.7	2305.7	2280.2											tight
C86		2111	2111	2085.5	4817	13.35	193.1								tight
C87		2113.1	2113.1	2087.6	4826.2	13.37	192.6		3633.9						good test
C88		2113.1	2113.1	2087.6											lost seal
C89		2114.2	2114.2	2088.7	4826.5	13.36	191.1		3634.8						good press lost seal while PO
C90		2076	2076	2050.5											tight
C91		2075.8	2075.8	2050.3											tight
C92		2075.5	2075.5	2050											

KG-III-6-A1-ST,RCI PRESSURE SURVEY DATA - 12 1/4" Hole Size

Well Name:	KG-III-6-A1	Date:	24-25 November, 2004
Gauge Serial Numbers:	Quartz	Tool Configuration:	
		Max Temp:	215.8 F at 2546 mDRT
Datum Elevation (m RT-SS):	25.6m	Observer(s)	Navanit Kumar, Amit Suman(Arunabh/Prannay)

File No.	Depth m MDRT	Depth m RT TVD	Depth m SS	IMHP psia Quartz G	MUD Pr ppg	Temp Deg F	FMHP psig Quartz G	Form. Pr. psia Quartz G	Form. Pr. ppg	Estimated Mobility md/cp	Sample Viewer Indication	Samples	Comments
G03	2029.7	2029.66	2004.2	4270.80	12.31	174.8		3761.7	10.8	9.0	-	-	good
G04	2066	2065.80	2040.3	4347.70	12.32	176.2		3597.50	10.19	7.5	-	-	good
G05	2069.0	2068.80	2043.3	4352.32	12.31	178.9		3599.30	10.18	37.4	-	-	good
G06	2074.9	2074.66	2049.2	4365.45	12.31	179.5		3601.50	10.16	12000.00	-	-	good
G07	2076.0	2075.74	2050.2	4366.70	12.31	180.2		3602.13	10.15	27100	-	-	Good Test
G08	2083.3	2082.99	2057.5	4383.5	12.31	180.4		3603.80	10.12	238	-	-	good
G09	2094.0	2093.68	2068.1	4399.0	12.30	181.7			0.00		-	-	Tight
G10	**2097.5**	2097.04	2071.5	4412.8	12.31	182.4		3625.50	10.12	629	oil	1 Sample collected	good
G11	2101.0	2100.50	2075.0	4417.4	12.31	186.1			0.00		-	-	Tight
G12	2105.5	2104.74	2079.2	4426.2	12.31	186.4			0.00		-	-	Tight
G13	2114.9	2114.20	2088.7	4445.0	12.30	187.0			0.00	468	-	-	Good Test Seal failure while pumpout
G14	**2114.9**	2114.20	2088.7	4444.3	12.30	187.0		3635.10	10.06	907	Water	1 Sample collected	good test and pump out@ same depth
G15	2117.7	2116.76	2091.3	4450.1	12.29	188.4		3637.69	10.06	1110	-	-	good test
G16	2131.5	2130.13	2104.6	4480.5	12.31	188.8			0.00		-	-	Slow B/U, unstable
G17	2145.0	2143.75	2118.3	4510.0	12.31	189.5		3693.60	10.08	2.71	-	-	good test
G18	2100.0	2099.50	2074.0	4408.3	12.29	189.6		3616.00	10.08	254.27			good test
G19	2106.0	2105.43	2079.9	4423.6	12.29	189.7							Tight
G20	2111.2	2110.55	2085.1	4437.0	12.30	189.7							Tight
G21	2108.0	2107.40	2081.9	4429.2	12.30	189.6							Tight
G22	2095.5	2095.06	2069.6	4401.3	12.29	189.7							Tight
G23	2297.8	2287.68	2262.2		0.00				0.00		-	-	correlation file
G24	2301.2	2290.69	2265.2		0.00				0.00				correlation file
G25	**2315.0**	2302.79	2277.3	4827.3	12.27	195.8		3991.80	10.14	10.1	water	-	Good Test Seal failure while pumpout
G26	2311.3	2299.56	2274.1	4820.5	12.27	197.4		3987.21		39.95			good test
G27	2336.3	2321.10	2295.6	4871.2	12.26	198.1			0.00		-	-	Tight
G28	2431.1	2396.48	2371.0	5026.5	12.27	199.4			0.00		-	-	Tight
G29	2435.1	2399.44	2373.9	5030.5	12.3	199.8			0.00				Tight
G32	**2482.1**	2433.89	2408.4	5095.0	12.2	205.5		4586.20	11.03	697	water	-	good test with pumpout
G33	2484.5	2435.64	2410.1	5104.3	12.3	206.7			0.00		-	-	Seal failure
G34	2498.3	2438.41	2412.9	5106.3	12.3	207.1			0.00		-	-	Tight
G35	2492.0	2441.11	2415.6	5112.0	12.3	207.5			0.00				Tight
G36	2495.1	2443.37	2417.9	5117.7	12.3	207.6			0.00				Tight
G37	2496.8	2444.60	2419.1	5118.5	12.3	207.6			0.00				Tight
G38	2501.0	2447.66	2422.2	5130.7	12.3	207.6			0.00				Tight
G39	2504.7	2450.36	2424.9	5136.2	12.3	207.7			0.00				Tight
G40	2508.0	2452.76	2427.3	5141.5	12.3	207.9			0.00				Tight

G41	2509.0	2453.5	2428.0	5143.1	12.3	207.8			0.00				Tight
G42	2514.4	2457.4	2431.9	5153.2	12.3	208.2			0.00				Tight
G43	2521.0	2462.2	2436.7	5163.0	12.3	208.3			0.00				Tight
G44	2525.0	2465.1	2439.6	5166.7	12.3	209.5		4692.10	11.14	729	water	1 Sample collected	Goodtest,final pressure 4641.1
G46	2528.0	2467.3	2441.8	5166.7	12.3	211.4		4681.50	11.10	846			Good test
G47	2531.1	2469.6	2444.1	5175.4	12.3	211.4		4685.60	11.10	10.7			Good test
G48	2534.9	2472.3	2446.8	5180.5	12.3	211.5			0.00				Seal Failure
G49	2544.4	2479.2	2453.7	5196.8	12.3	211.8			0.00				Tight
G50	2553.0	2485.4	2459.9	5210.8	12.3	211.9			0.00				Tight
G51	2566.2	2494.9	2469.4	5232.7	12.3	211.9			0.00				Tight
G52	2571.6	2498.8	2473.3	5241.0	12.3	212.2			0.00				Tight
G54	2619.0	2533.0	2507.5	5309.2	12.3	214.0			0.00				Tight
G55	2625.3	2537.0	2511.5	5319.2	12.3	214.5			0.00				Tight
G56	2632.0	2542.4	2516.9	5330.4	12.3	214.8			0.00				Tight
G57	2636.0	2545.2	2519.7	5335.7	12.3	214.8			0.00				Seal Failure
G58	2639.7	2547.9	2522.4	5341.6	12.27	214.9			0.00				Tight
G59	2647.0	2553.1	2527.6	5355.1	12.3	215.1			0.00				Seal Failure
G60	2646	2552.409	2526.909	5353	12.27	215.8			0.00				Seal Failure
G62	2496.5	2444.385	2418.885	5114.8	12.24	214.2			0.00				Tight
G64	2040.5	2040.434	2014.934	4298.6	12.33	186.9			0.00				Tight
G65	2044.5	2044.421	2018.921	4306.9	12.33	186.8			0.00				Tight
G66	2050	2049.9	2024.4	4319.51	12.33	186.8			0.00				Tight
G67	2108.5	2107.897	2082.397	4437.22	12.32	187.3			0.00				Tight
G68	2110	2109.376	2083.876	4438.2	12.31	187.7			0.00				Tight
G69	2113.5	2112.624	2087.324	4447.33	12.32	188.9			0.00				Supercharged
G70	2089.5	2089.126	2063.626	4389.9	12.30	191.7		3615.5	10.13		oil	2 Samples collected	Goodtest/two single phase sample collected/ compression test done and repeated
G71	2079	2078.724	2053.224	4372.9	12.31	193.8			0.00				Tight
G72	2084.6	2084.274	2058.774	4385.7	12.31	193.6		3603.3	10.12	58600	Gas		Goodtest and pumpout
G73	2100.1	2099.508	2074.008	4421.2	12.32	193.8							
G74	2100.1	2099.508	2074.008	4420	12.32	194							Tight
G75	2100.5	2100.002	2074.502	4419.93	12.32	194.46							Tight
G76	2100.2	2099.706	2074.206	4419.3	12.32	194.6							Tight (Call for correlation)
G78	2100	2099.5	2074	4409	12.29	195.9							Tight
G79	2100	2099.5	2074	4418.2	12.31	195.6							Tight
G81	2029.7	2029.66	2004.16	4270.4	12.31	193.7							Tight
G82	2030	2029.96	2004.46	4270.7	12.31	192.9		3759.3	10.84	325	water	1 sample collected	good test pump out for sample

KGIII6-A1ST1 RCI PRESSURE SURVEY DATA

				Well Name:	KGIII6-A1ST1			Location	KG III 6				
				Gauge Serial Numbers		Quartz							
						Quartz						0.200	
				Datum Elevation (m RT-SS):			25.50					0.400	
				Directional Survey Type:			MWD	Location				0.400	
Run No.	Seat No.	File No.	Approx Time	Depth m MDRT	Depth m RT TVD	Depth m SS	IMHP psia Quartz G	Hydrostatic Psi	Temp Deg F	IHP EMW ppg	Spectral View Fluid	Comments	
	Run 1	Date	11-Dec										
1	1			3045.1	2849.57	2824.1	7288.60	4052.9	235.5	15.00		Lost seal/Tried thrice wit cont lost seal	
1	2			3049.8	2853.00	2827.5	7301.40	4057.8	236.2	15.00		Lost seal	
				3049.7	2852.90	2827.4	7298.00		236.0	15.00		Lost Seal	
1	3			3056.2	2857.64	2832.1	7311.80	4064.4	237.3	15.00		Tight	
1	4			3066.8	2865.36	2839.9	7341.20	4075.4	238.2	15.02		Lost Seal	
1	5			3067.5	2865.89	2840.4	7303.12	4076.2	246.5	14.94		Lost Seal	
1	6			3070.6	2868.14	2842.6	7306.40	4079.4	248.1	14.94		Tight	
1	7			3072.1	2869.25	2843.8	7315.17	4080.9	246.0	14.95		Seal Failure	
1	8			3074.3	2870.85	2845.4		4083.2		14.97			
1	9			3079.0	2874.28	2848.8	7332.14	4088.1		14.96		Tight	
1	10			3082.5	2876.84	2851.3		4091.7		0.00			
1	11			3083.0	2877.23	2851.7		4092.3		15.03			
1	12			3084.2	2878.09	2852.6	7374.10	4093.5	240.8	0.00		Lost Seal	
1	13			3102.5	2891.51	2866.0		4112.6		15.06			
1	14			3114.8	2900.53	2875.0	7427.62	4125.4	250.9	15.03		Tight	
1	15			3116.0	2901.42	2875.9	7433.37	4126.7	250.3	15.03		Lost Seal	
1	16			3117.4	2902.45	2877.0	7436.11	4128.2	250.2	15.05		Seal failure intementely	
1	17			3122.2	2905.96	2880.5	7450.96	4133.1	250.4	15.03		Seal failure intementely	
1	18			3123.7	2907.08	2881.6	7451.56	4134.7		0.00		Seal Fauilure	
1	19			3126.7	2909.28	2883.8		4137.9		0.00			
1	20			3133.5	2914.3	2888.8		4145.0		0.00		Probe Plugged	
1	21			3137.8	2917.4	2891.9		4149.5		0.00		Probe Plugged	
1	22			3146.8	2924.0	2898.5		4158.8		15.08		Tight	
1	23			3147.6	2924.6	2899.1	7522.54	4159.7	251.2	15.09		Seal Failure	
1	24			3149.0	2925.6	2900.1	7527.22	4161.1	251.0	15.10		Tight	
				3152.5	2928.2	2902.7	7534.00	4164.8	249.1	15.10		Tight	
				3153.2	2928.7	2903.2	7540.56	4165.5	243.2	15.10		Tight	
1	25			3154.2	2929.4	2903.9	7544.00	4166.5	246.8	15.10		Tight	
1	26			3155.1	2930.1	2904.6	7545.80	4167.5	245.5	0.00		Tight	
1	27			3156.4	2931.0	2905.5		4168.8		0.00			
1	28			3157.0	2931.5	2906.0		4169.5		0.00			
1	29			3158.0	2932.2	2906.7		4170.5		0.00			
1	30			3164.0	2936.6	2911.1		4176.7		0.00			
1	31			3166.9	2938.7	2913.2		4179.7		0.00			
1	32			3179.9	2948.2	2922.7		4193.3		0.00			
1	33			3185.9	2952.6	2927.1		4199.5		0.00			
	34			3195.0	2959.3	2933.8		4209.0		0.00			

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 correlations, sections, and maps

KG1116-A1-ST1 is the 1st exploratory well drilled within the KG-OSN-2001/2 Contract Area of the Krishna-Godavari Basin, offshore Andhra Pradesh, Bay of Bengal, India. The well is located in a water depth of 248m in Part A.

The Krishna-Godavari basin, which lies off of east coast of India, presents a wide range of geologic settings from coastal plain through delta, shelf-slope apron, deep sea channel to a deep water fan and turbidite complex. The block is located in an area, northeast of Rajamundry and east of Yanam in the shelfal part of Krishna-Godavari basin covering an area of 210 sq. kms with water depth varying from less than 50m to about 400m. The objectives of the well were Pliocene and Miocene sandstone gas reservoirs

5.7.6. Reservoir Properties and OHIP

Three objects were tested in well KG-III6A-1 and two have produced hydrocarbon. The seismic data available for this potential discovery covers only a limited area, preventing any meaningful interpretation, maps were not generated for this case.

A third party conducted a conceptual volumetric estimate based on the petrophysical interpretation provided by the Operator, and using arbitrary areas for the Low, Best, and High cases of 31, 70, and 124 acres, respectively. The purpose was to capture an approximate volume associated with the test results.

It is important to note that a proper volumetric assessment, based on seismic interpretations and an independent petrophysical analysis, cannot be performed with the information currently available.

RESERVOIR PARAMETERS and ORIGINAL GAS in PLACE
as of
JANUARY 1, 2025
for the
KGIII6-A1 DISCOVERY
of
KG/OSDSF/G1/2025 CONTRACT AREA

	Reservoir (Gas)	Total
Low		
Area, acres	31	
Gas Formation Volume Factor, scf/rcf	0.0050	
Average Thickness, ft	26.2	
Average Porosity, %	18.00	
Average Water Saturation, %	55.00	
Original Gas in Place, $10^9 ft^3$	0.58	**0.58**
Original Gas in Place, 10^6 eq ton	0.01	**0.01**
Best		
Area, acres	70	
Gas Formation Volume Factor, scf/rcf	0.0050	
Average Thickness, ft	39.4	
Average Porosity, %	20.00	
Average Water Saturation, %	50.00	
Original Gas in Place, $10^9 ft^3$	2.40	**2.40**
Original Gas in Place, 10^6 eq ton	0.06	**0.06**
High		
Area, acres	124	
Gas Formation Volume Factor, scf/rcf	0.0050	
Average Thickness, ft	52.5	
Average Porosity, %	22.00	
Average Water Saturation, %	45.00	
Original Gas in Place, $10^9 ft^3$	6.88	**6.88**
Original Gas in Place, 10^6 eq ton	0.17	**0.17**

Note: Conversion used 10^9 scf equal to 0.02519 10^6 eq tone.

Volumes estimated by a Third Party

The operator has reported an in-place volume of 0.15 MMTOE (Best case).

RESERVOIR PARAMETERS and ORIGINAL OIL in PLACE
as of
JANUARY 1, 2025
for the
KGIII6-A1 DISCOVERY
of
KG/OSDSF/G1/2025 CONTRACT AREA

	Reservoir (Oil)	Total
Low		
Area, acres	31	
Oil Formation Volume Factor, rbbl/bbl	1.33	
Average Thickness, ft	45.9	
Average Porosity, %	12.00	
Average Water Saturation, %	45.00	
Original Oil in Place, 10^6bbl	0.55	**0.55**
Original Oil in Place, 10^6 eq ton	0.08	**0.08**
Best		
Area, acres	70	
Oil Formation Volume Factor, rbbl/bbl	1.33	
Average Thickness, ft	59.1	
Average Porosity, %	15.00	
Average Water Saturation, %	40.00	
Original Oil in Place, 10^6bbl	2.17	**2.17**
Original Oil in Place, 10^6 eq ton	0.32	**0.32**
High		
Area, acres	124	
Oil Formation Volume Factor, rbbl/bbl	1.33	
Average Thickness, ft	72.2	
Average Porosity, %	18.00	
Average Water Saturation, %	35.00	
Original Oil in Place, 10^6bbl	6.12	**6.12**
Original Oil in Place, 10^6 eq ton	0.89	**0.89**

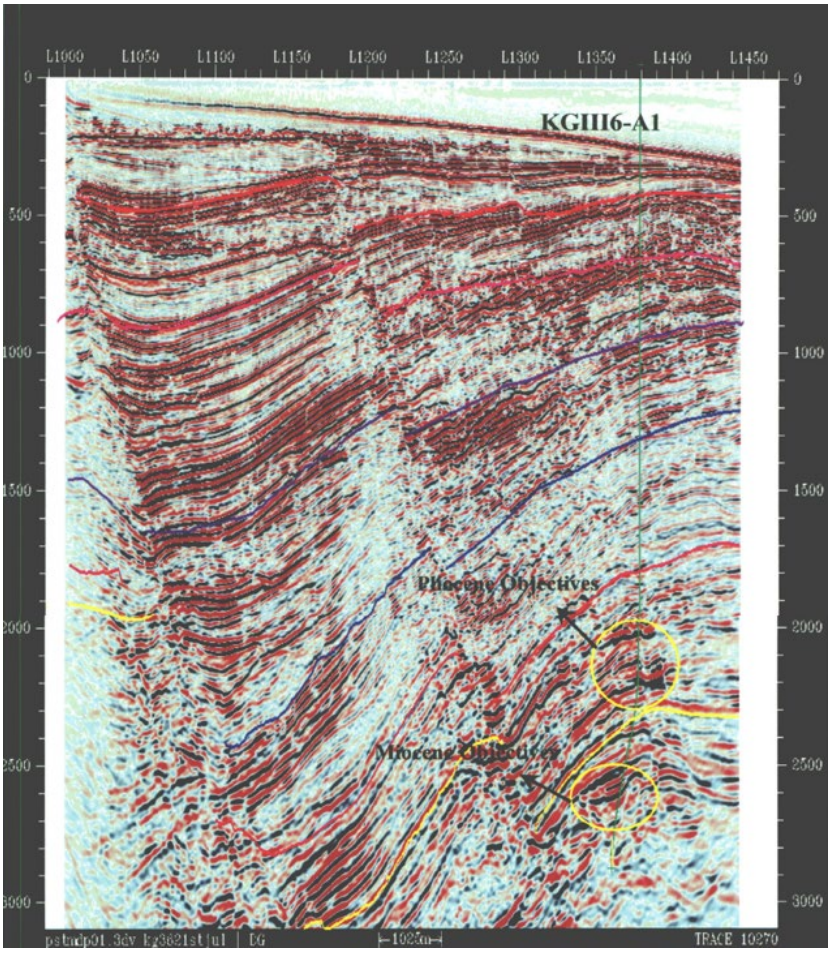
Note: Conversion used 10^6 bbl equal to 0.1461 10^6 eq tone.

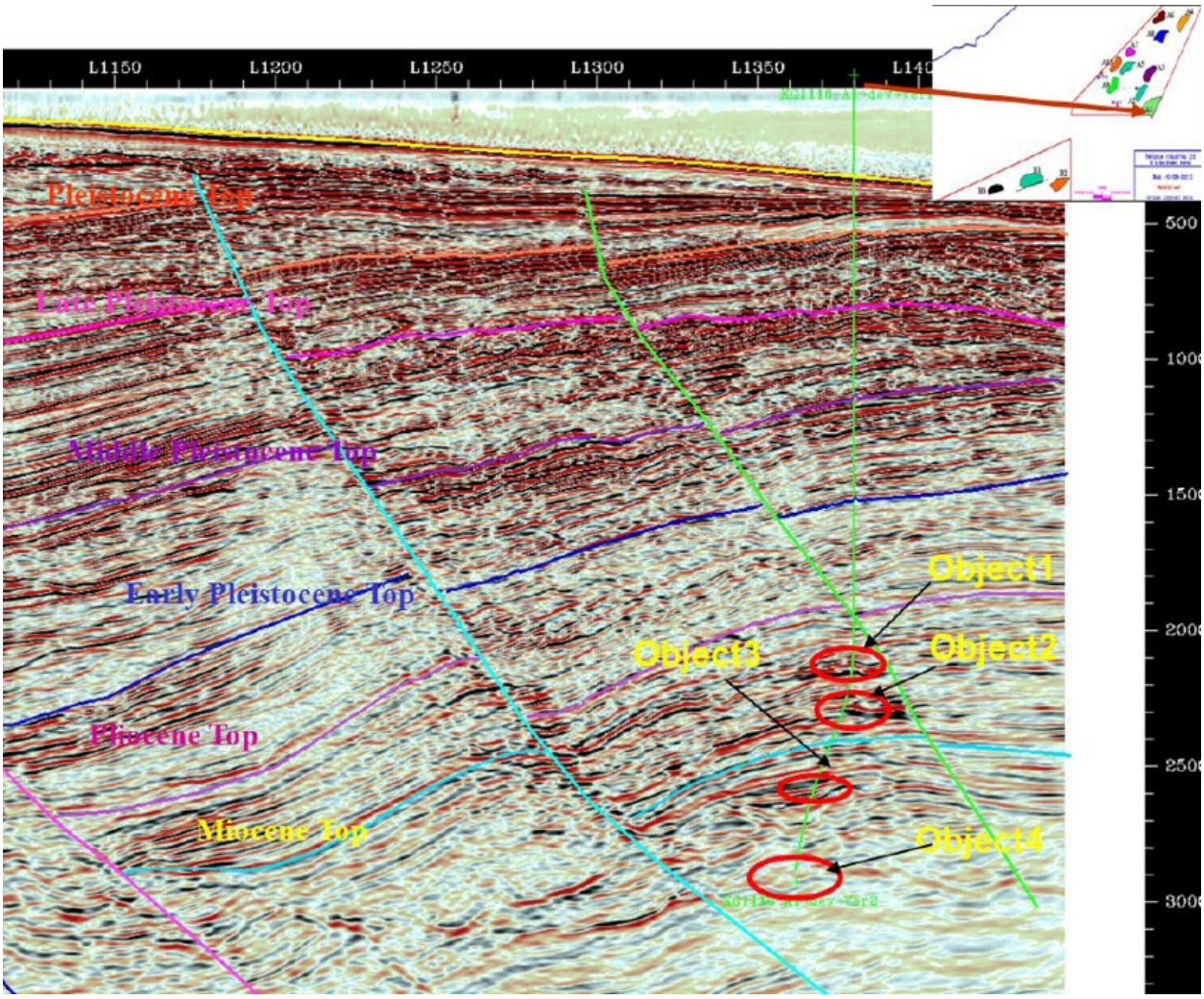
Volumes estimated by a Third Party

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

5.7.7. Annex

5.7.7.1. Seismic Sections





5.7.7.2. Structural Maps

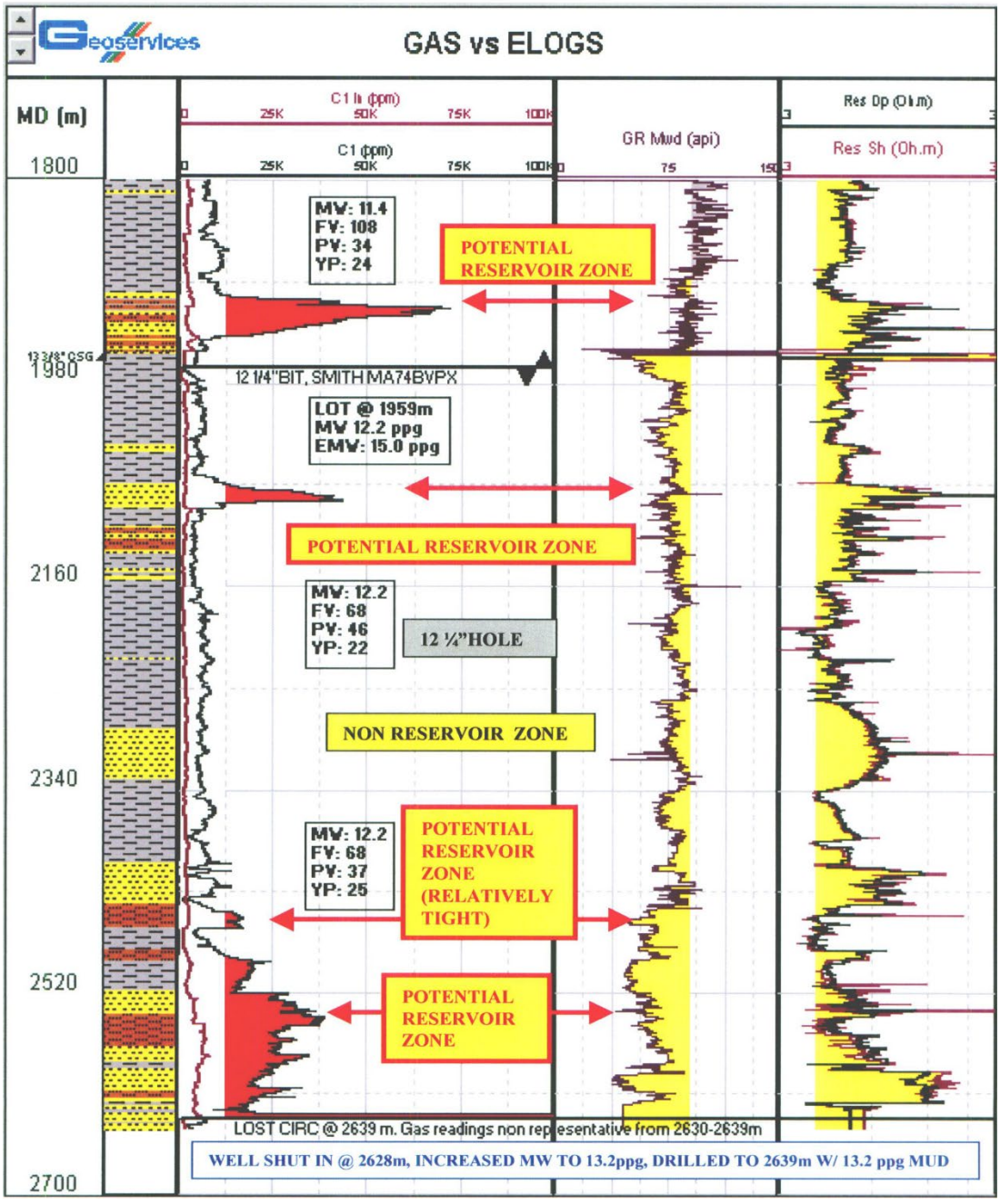
Maps were not generated for this case, as mentioned in 5.7.6. Reservoir Properties and OHIP.

5.7.7.3. Isopach Maps

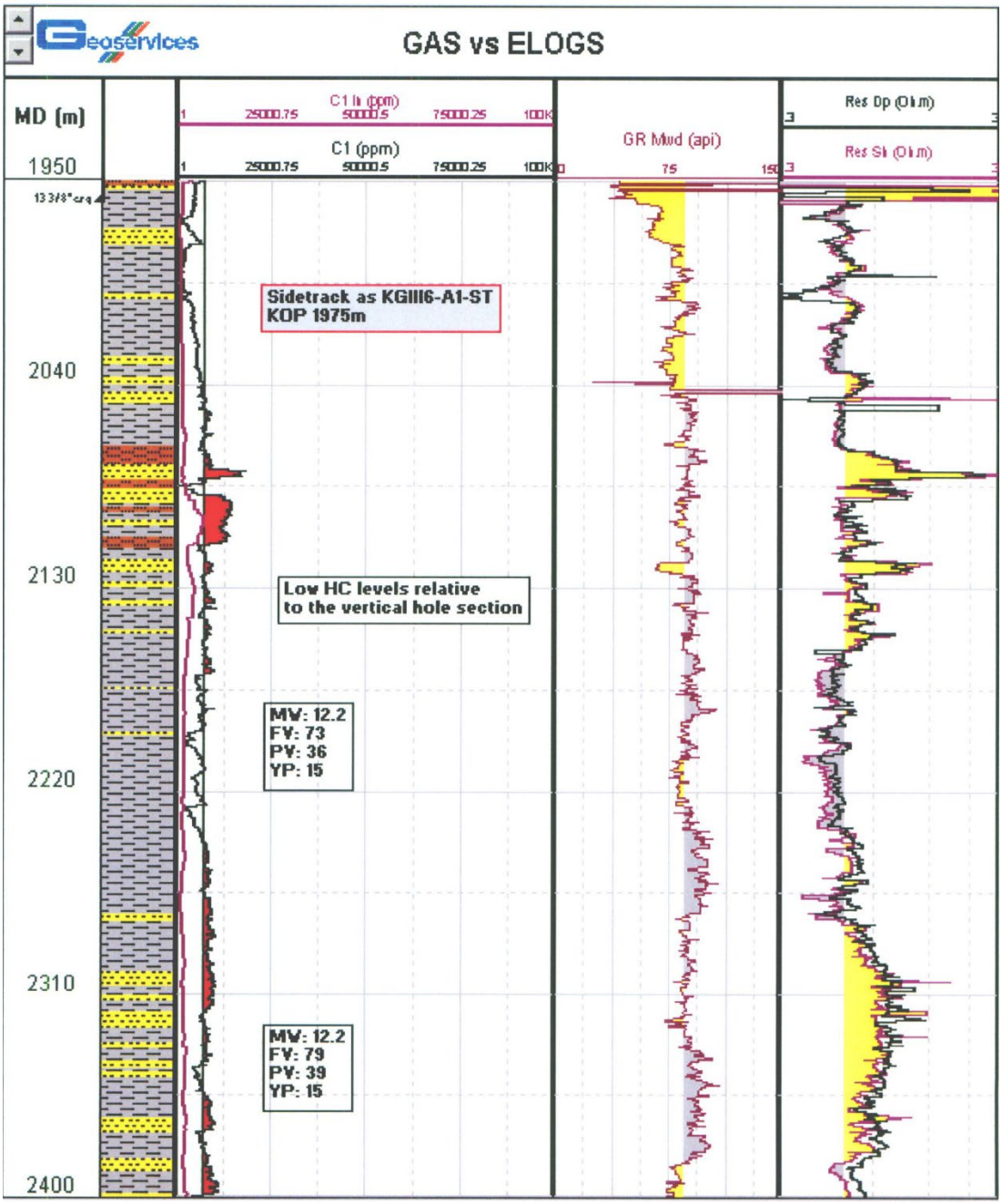
Maps were not generated for this case, as mentioned in 5.7.6. Reservoir Properties and OHIP.

5.7.7.4. Log Motifs

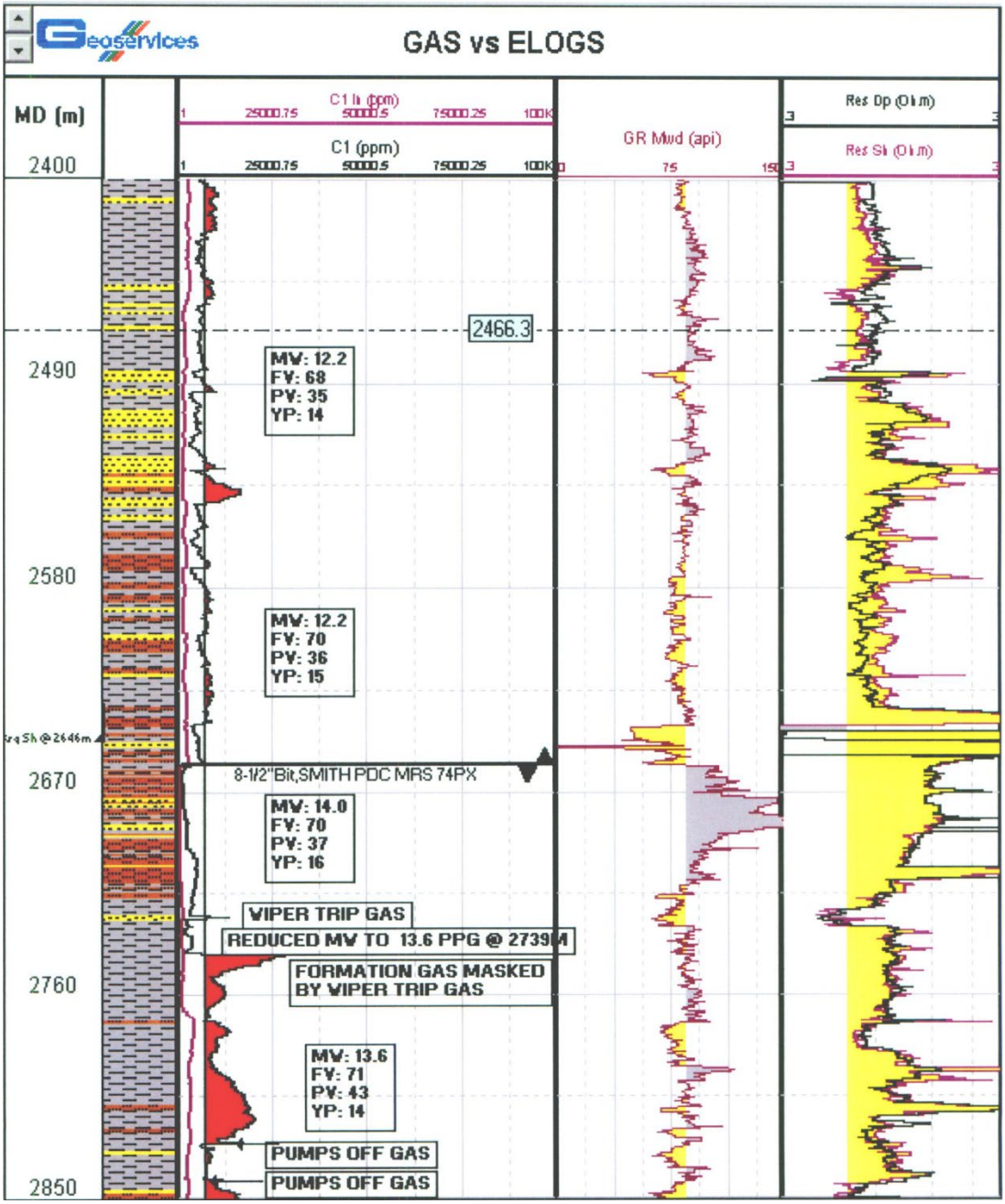
Gas Vs Elogs From 1850 To 2639m (Pilot Hole)



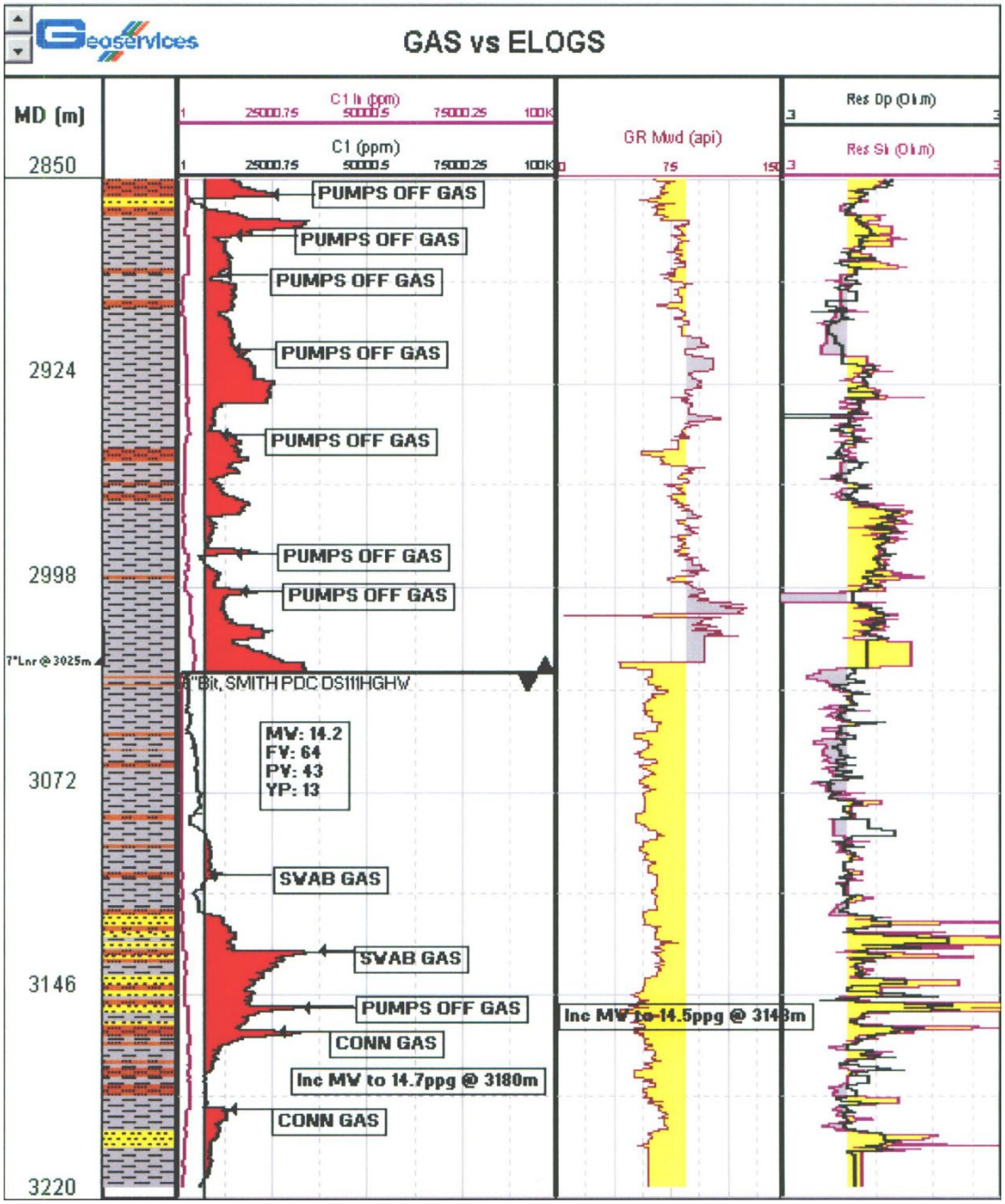
Gas Vs Elogs From 1950 To 2400m



Gas Vs Elogs From 2400 To 2850m



Gas Vs Elogs From 2850 To 3215m



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

5.8. STATUS OF ADDITIONAL WELLS IN THE AREA

Well G1-N-4

Well G-1-N-AD, located in the Vashista PML block (KG offshore), was drilled to explore Miocene sands and equivalents to Zone-18 of the G-1-NE field, with a target depth of 4500m TVDSS. Initially spudded as G-1-N-4 in September 2018, the well was drilled vertically to 800m before being temporarily abandoned. It was later re-entered in January 2019 by Rig Essar Wildcat and drilled to a final depth of 4525m MD, with casing points set at various depths.

During drilling operations, minor gas shows were noted in the 12¼" pilot hole and the 8½" section. Full logging, including RT scanner and RCI, was conducted in the relevant hole sections. In the Godavari Clay Formation (Pliocene), most sands were water-bearing, with a single RCI sample at 2440.2m yielding gas. In the Ravva Formation (Miocene), sands were found to be tight, with an RCI sample at 3831.5m yielding water and gas with some SOBM filtrate. Straddle packer RCI was carried out in three intervals, two of which were tight; one interval (4397–4398m) produced water and minor gas.

Based on geological observations, petrophysical evaluation, and RCI results, the reservoir was assessed to be non-commercial, with tight or water-bearing sands. The well was permanently abandoned without running the 7" liner, following standard safety and abandonment procedures. Final status: gas indications, permanently abandoned.

Well GS-15-6

Well GS-15-6, located at GS-15-AG, was initially released as an 'A' category prospect and later upgraded to 1B1 with a target depth of 3000m. The well was drilled beyond this depth to 3150m due to continued sand development at the original TD. The well encountered a sequence from Recent to Oligocene age, with Godavari Clay (Recent to Pliocene) from seabed to 1745m, Ravva Formation (Miocene) up to 2904m, and Vadaparru Shale (Oligocene) from 2904m to TD. These formations were mostly claystone/siltstone with minor and thin sandstones.

A hydrostatic pressure regime was observed down to 2700m, below which a transitional pressure system was inferred. The geothermal gradient was measured at 3.51°C/100m, consistent with the overall thermal trend of the structure. Structurally, GS-15-6 was positioned higher than surrounding wells—ranging from 2 to 116 meters depending on the reference pay zone and comparison well (GS-15-1, 3, 4, 5, and 25).

Despite this favorable structural position, the well exhibited poor reservoir development and limited sand presence. Two intervals were tested: Obj-I (3062–3060m) produced 2 bbls of liquid as a reverse-out sample, while Obj-II (2810–2807m) showed no response. With no significant hydrocarbon indications, the well was declared dry and permanently abandoned.

Well GS-15-7

Well GS-15-7 was drilled to a target depth of 3100m to evaluate GS-15 pay sands and explore the possible extension of Ravva pay sands. The well penetrated sedimentary sequences ranging

from Recent to Oligocene and was terminated within Oligocene strata. Structurally, the well lies deeper than GS-15-1, GS-15-4, and other nearby wells, both at GS-15 and Ravva pay levels.

Reservoir facies were developed within the Miocene section; however, the post-Miocene sequence lacked effective reservoir quality. No significant hydrocarbon shows were observed during drilling, and electro-log evaluation confirmed that the encountered reservoir intervals were water-bearing.

A transitional pressure regime was identified below 2920m extending to TD, and a geothermal gradient of 3.76°C per 100m was recorded. The well is notably deeper—ranging from 30 to 176 meters—compared to equivalent pay levels in surrounding wells (GS-15-1, 3, 4, 5, 6, and 2S), further supporting its water-bearing nature.

With no commercial hydrocarbon indications, the well was declared dry and abandoned without running the 7" liner.

Well GS-15-9

Well GS-15-9 (GS-15-AL), classified as an exploratory Test ‘B’ in the IF PEL block, was drilled to investigate potential reservoirs below a geomorphic high in the Miocene sequence. Originally planned to 2500m, the well was deepened to 2850m to assess oil sands equivalent to the 3062–3060m interval of GS-15-6 (AG) within the Vadaparru Shale. Spudded on 28.05.2005, the well encountered 1662m of Godavari Clay, 861m of Ravva Formation, and terminated in over 305m of Vadaparru Shale.

Stratigraphic correlation with GS-15-3 and GS-15-6 showed GS-15-9 to be shallower by 57m and 256m respectively at the Mio-Pliocene unconformity. At the top of the Vadaparru Shale, GS-15-9 was 360m shallower than GS-15-6 and 30m deeper than GS-15-3.

Pore pressure analysis revealed a normal hydrostatic regime up to 2300m, a transitional regime from 2300 to 2790m, and a high-pressure regime below 2790m. Gas shows were observed in the Ravva Formation, but most sands proved water-bearing except for a thick sand pack (1684–1750m) located just below the Mio-Pliocene surface. In the Vadaparru Shale, a thin sand pack (2791–2795m) was also found to be water-bearing.

Although five zones were identified for testing in the 1684–1750m sand pack, testing was deferred due to operational priorities. Based on MDT results, the well was classified as oil and gas bearing but left untested and temporarily abandoned with the option to re-enter. The rig was released on 17.07.2005.

GS-15-9 confirmed the presence of a younger Miocene sequence truncated by the Mio-Pliocene unconformity, supporting the potential for subtle traps formed by erosion surfaces—pointing toward future stratigraphic exploration south of the GS-15 area.

Well GS-15-10

Well GS-15-10 (GS-15-AM) was drilled as an exploratory test in the ‘L’ profile under the 52nd REXB to a target depth of 2600m TVD, aiming to probe Pliocene channel-fill deposits and

underlying Miocene sequences. The well reached 2607m TVD (2924m MD), penetrating 1123m of Godavari Clay, 1227m of Ravva Formation, and bottomed in over 235m of Vadaparru Shale.

Correlation with nearby wells GS-43-1 and Ravva-17 showed that GS-15-10 is structurally shallower by 434m compared to GS-43-1 and deeper by 135m compared to Ravva-17 at the Mio-Pliocene unconformity. Pore pressure analysis indicated a normal hydrostatic regime down to the top of Vadaparru Shale (2330m TVD), transitioning into a higher-pressure regime from 2330m to TD.

In the Miocene (Ravva Formation), well-developed sand packs with gas shows were encountered. MDT in the sand pack just below the Mio-Pliocene unconformity confirmed gas presence. No sand pack was found in the Vadaparru Shale section.

Of two interesting intervals, only one was tested: Object-I, comprising three sub-intervals (1148–1151.5m, 1169–1170.5m, and 1176–1177.5m), flowed gas at a rate of 131,696 m^3/d and condensate at 3.969 m^3/d through a 10mm choke. The total net pay in this well is approximately 7 meters.

The well was declared a gas producer and temporarily abandoned with the option for re-entry. Results from GS-15-10 suggest that subtle traps formed by differential erosion beneath the Mio-Pliocene unconformity could be promising targets for future hydrocarbon exploration to the west-northwest of the GS-15 area.

Well GS-15-16

Well GS-15-16 (GS-15-AK) was drilled as an exploratory Test 'B' in the PEL-IF block to evaluate the updip potential of GS-15-6 and deeper stratigraphic levels within the Ravva and Vadaparru Shale formations. The well reached 3327m MD (3314m TVD), penetrating 1583m of Godavari Clay, 1325m of Ravva Formation, and over 363m of Vadaparru Shale.

Correlation with nearby wells GS-15-6 and GS-46-1 showed that GS-15-16 is shallower by 84m and 20m at the Mio-Pliocene unconformity, and deeper by 46m at the Vadaparru Shale level compared to GS-15-6. Gas shows were recorded in both Ravva and Vadaparru formations, but electro-log evaluation and MDT results confirmed all sands were water-bearing.

Pore pressure analysis revealed a normal regime up to 2957m, transitioning to high pressure below 3013m. Based on MDT samples yielding formation water, the well was declared dry and permanently abandoned. Rig ABAN-11 was released on 13.09.2008. Due to the hydrocarbon shows in deeper sections, further integrated studies combining seismic and depositional models are recommended to define future exploration targets in the area.

Well GS-15-17

Well GS-15-17 (GS-15-AN), located in the Godavari Shallow Offshore (KG Basin), was drilled as an exploratory Test 'B' well in L-profile, targeting sands within the VDP and Ravva formations. The well was spudded on 10.09.2008 using the rig Sagar Jyoti and drilled to a planned TD of 3860m MD (3600m TVDSS), but operations were terminated at 2518m due to complications and well control issues.

The well encountered Godavari Clay from seabed to ~2415m and Ravva Formation up to TD. Multiple drilling problems were faced, including fishing, engine fire, gas influx, well kicks, high pressures, and loss of circulation, which required well control operations and finally led to side-tracking the hole from 2379m. Despite encountering several sand/sandstone intervals with gas shows and elevated total gas (TG%) values (e.g., up to 1.8% at 2689–2690m), no conclusive hydrocarbon-bearing zones were confirmed based on log or sample evaluation. No production testing was carried out.

No conventional or sidewall cores were acquired. Electrologs and VSP were recorded, and pressure analysis indicated a transition into a high-pressure regime. Shale density and shale factor values supported this interpretation. The well was finally declared dry and permanently abandoned due to lack of commercial hydrocarbon zones and operational challenges.

Well GS-15-18

Well GS-15-18 (GS-15-AQ), located in the PEL-IF block, was drilled as an exploratory Test 'B' with a target depth of 3000m to evaluate Miocene/Pre-Miocene sands and a Pliocene anomaly identified through reinterpreted 3D OBC seismic and findings from GS-15-14 (AO). The well was spudded on 22.10.2009 and drilled to 1310m before being sidetracked due to stuck pipe. The sidetrack was successfully drilled to 3030m MD (3000m TVDSS), penetrating 1840m of Godavari Clay, 1039m of Ravva Formation, and 103m of Vadaparru Shale.

Correlation with GS-15-14 showed GS-15-18 to be shallower by 303m at the Miocene top. Although gas shows were observed while drilling in Miocene sands, log evaluation confirmed these intervals were water-bearing. The productive sands of GS-15-14 appear to be shaled out in this location.

Pore pressure remained within a normal hydrostatic regime throughout the well. Bottom-hole temperature data indicated a geothermal gradient of 3.45°C/100m. Based on geological and petrophysical analysis, the well showed no hydrocarbon potential and was permanently abandoned without running production casing. The rig OS Maersk Drill was released on 01.02.2010 to move to Cauvery Offshore.

Well GS-15-20

Well GS-15-20 (GS-15-AS), located in the Vainateyam Extn PML block in 13.5m water depth, was drilled to a target depth of 3730m MD (TVDSS) by rig Aban-11, targeting sands within the Vadaparru Formation. The well penetrated multiple casing intervals and bottomed in the Eocene Vadaparru Shale. RCI samples collected in the 12¼" section (at 2292.3m and 2294m) indicated oil, while those in the 8½" section (at 2888m and 2981.5m) yielded water. Sidewall cores showed mild positive hydrocarbon indicators, but subsequent straddle packer RCI at 3454.5m confirmed water-bearing sands; the rest of the 8½" section was tight or water-bearing.

After abandoning the open hole phase, one object between 2291–2295m was tested via TCP-DST. It initially produced oil at 1043 BOPD, gas at 19,211 m³/day, and water at 282 BPD. Due to high water cut, a re-test of the interval 2291–2293.5m yielded reduced oil (347 BOPD), gas

(13,707 m³/day), and higher water (842 BPD). Oil gravity was 46° API, gas gravity 0.825, and water salinity ranged from 10,395 to 11,550 ppm NaCl.

Due to the high water cut, a new structurally updip location (GS-15-20-ST) was planned as a sidetrack from GS-15-20, starting below the 13⅜" casing. The original well was permanently abandoned and classified as "Oil & Gas well, permanently abandoned." Rig Aban-11 was released on 25.06.2018 to begin sidetrack operations.

Well GS-46-1

Well GS-46-1 was drilled to a target depth of 2200m to explore Miocene sands, including potential extensions of the Ravva pay sands, in the southeastern part of the Ravva field. The well penetrated Recent to Miocene sediments and was terminated within the Miocene section. It is located 117m below the Mio-Pliocene erosional surface and 92m structurally lower than the Ravva-17 pay sand.

Reservoir facies were present within the Miocene, but post-Miocene intervals lacked effective reservoir development. No significant hydrocarbon shows were recorded while drilling, and detailed analysis of lithology and electro-logs confirmed the encountered sands were non-productive.

A transitional pressure regime was observed between 1730m and 2000m, followed by a moderately high-pressure zone. The geothermal gradient was measured at 3.96°C/100m. Structurally, the equivalent pay sequence is lower than in Ravva-17, likely contributing to the dry outcome. The well was declared dry and permanently abandoned without lowering the 7" liner.

6. DATA PACKAGE INFORMATION

This information docket for the contract area, titled KG/OSDSF/G1/2025 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 19 wells available near the discoveries. Well coordinates are shown in the table below.

Well Name	Easting	Northing	Latitude	Longitude	CRS
GS-15-10	616746.31	1812578.35	16°23'30.1250"N	82°05'35.7799"E	WGS 84, UTM44
GS-15-15	613338.07	1808111.07	16°21'5.3539"N	82°03'40.1090"E	WGS 84, UTM44
GS-15-16	616955.65	1810110.08	16°22'9.7748"N	82°05'42.3881"E	WGS 84, UTM44
GS-15-17	612908.49	1809185.88	16°21'40.3999"N	82°03'25.8199"E	WGS 84, UTM44
GS-15-22	615175.28	1810871.97	16°22'34.8755"N	82°04'42.5186"E	WGS 84, UTM44
GS-15-6	615086.56	1808475.09	16°21'16.8998"N	82°04'39.1001"E	WGS 84, UTM44
GS-15-7	612908.49	1809185.88	16°21'40.3999"N	82°03'25.8199"E	WGS 84, UTM44
GS-15-9	613501.58	1806495.73	16°20'12.7651"N	82°03'45.3352"E	WGS 84, UTM44
GS-46-1	615929.14	1809262.34	16°21'42.3698"N	82°05'7.6380"E	WGS 84, UTM44
GS-15-14	597602.89	1799287.98	16°16'20.7322"N	81°54'48.4690"E	WGS 84, UTM44
GS-15-18	593150.76	1798848.76	16°16'7.0720"N	81°52'18.4159"E	WGS 84, UTM44
GS-15-20	593601.61	1802138.19	16°17'54.0499"N	81°52'34.0799"E	WGS 84, UTM44
GS-15-20ST	593601.61	1802138.19	16°17'54.0499"N	81°52'34.0799"E	WGS 84, UTM44
G-1-N-2	626147.05	1805613.4	16°19'41.7900"N	82°10'51.2900"E	WGS 84, UTM44
G-1-N-4	628784.17	1803256.45	16°18'24.5988"N	82°12'19.6801"E	WGS 84, UTM44
G-1-NE-2	631375.18	1802834.61	16°18'10.3702"N	82°13'46.8901"E	WGS 84, UTM44
G-1-NE-AA	633227.93	1805004.88	16°19'20.6180"N	82°14'49.7580"E	WGS 84, UTM44
KGIII6-A1	633942.1	1806133.41	16°19'57.1940"N	82°15'14.0551"E	WGS 84, UTM44
KG III6-A1ST	633942.1	1806133.41	16°19'57.1940"N	82°15'14.0551"E	WGS 84, UTM44

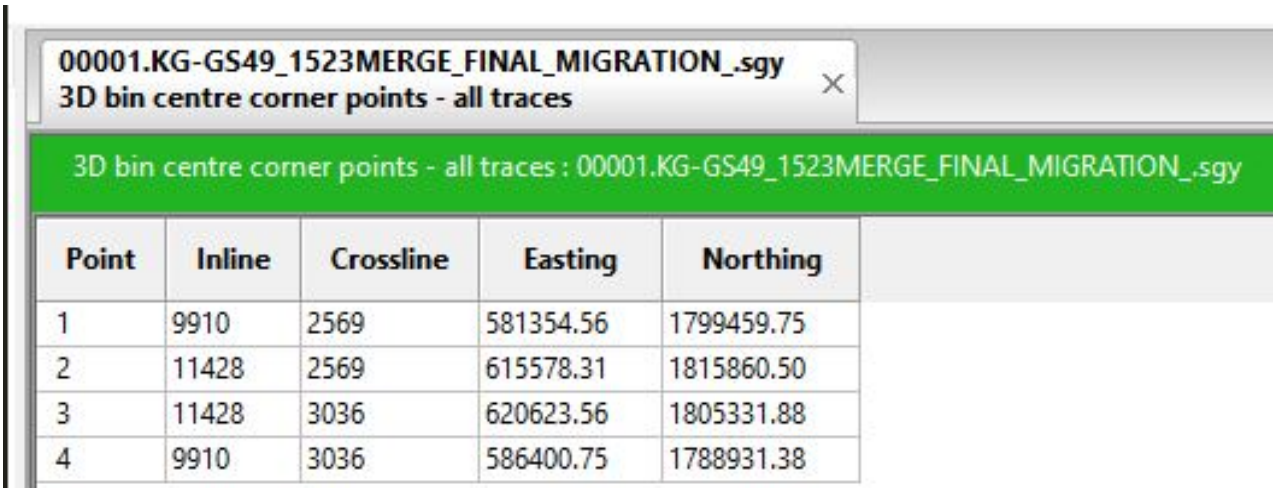
Seismic 2D Data:

Line segment name	Processing type	FSP/CDP	LSP/CDP	Length (Km)	CRS
IABR-729	RAW_MIGRATION_STACK	1	1067	4.4079	WGS84 UTM 44N
IABR-725	RAW_MIGRATION_STACK	1	1113	4.3997	WGS84 UTM 44N
IABR-721	RAW_MIGRATION_STACK	1	1285	5.939	WGS84 UTM 44N
IABR-720A	RAW_MIGRATION_STACK	1	2683	1.997	WGS84 UTM 44N
IABR-718	RAW_MIGRATION_STACK	1	1930	10.3917	WGS84 UTM 44N
IABR-717	RAW_MIGRATION_STACK	1	1221	3.8869	WGS84 UTM 44N
IABR-716	RAW_MIGRATION_STACK	1	1259	15.6594	WGS84 UTM 44N
IABR-713	RAW_MIGRATION_STACK	1	1233	4.1578	WGS84 UTM 44N
IABR-709	RAW_MIGRATION_STACK	1	491	4.4269	WGS84 UTM 44N
IABR-707	RAW_MIGRATION_STACK	1	1249	4.4249	WGS84 UTM 44N
IABR-703A	RAW_MIGRATION_STACK	1	759	1.3616	WGS84 UTM 44N
A292B	REPROCESSED_FINAL_PSTM_STACK	1	1706	17.2368	WGS84 UTM 44N
A-551	RAW_MIGRATION_STACK	1	1496	3.9734	WGS84 UTM 44N
A-547	RAW_MIGRATION_STACK	1	954	7.8898	WGS84 UTM 44N
A-321	RAW_MIGRATION_STACK	1	913	4.9809	WGS84 UTM 44N

A-317	RAW_MIGRATION_STACK	1	933	5.0301	WGS84 UTM 44N
A-300A	RAW_MIGRATION_STACK	22	2937	10.4586	WGS84 UTM 44N
A-296	RAW_MIGRATION_STACK	1	906	6.3676	WGS84 UTM 44N
A-140	RAW_MIGRATION_STACK	1	2115	6.339	WGS84 UTM 44N
A-136	RAW_MIGRATION_STACK	1	1853	3.4825	WGS84 UTM 44N
IABR-731	FINAL_STACK	1	2838	8.8156	WGS84 UTM 44N
IABR-727	FINAL_STACK	1	2986	9.5577	WGS84 UTM 44N
IABR-723	FINAL_STACK	1	1848	1.3901	WGS84 UTM 44N
IABR-719	FINAL_STACK	1	2754	8.2026	WGS84 UTM 44N
IABR-715	FINAL_STACK	1	1960	1.444	WGS84 UTM 44N
IABR-705A	FINAL_STACK	1	1838	3.8272	WGS84 UTM 44N
AT-91	RAW_STACK	1	1387	3.3086	WGS84 UTM 44N
AT-89	RAW_STACK	1	1390	6.1097	WGS84 UTM 44N
AT-28	RAW_STACK	2919	5892	16.5529	WGS84 UTM 44N
MB-93-22	FINAL_STACK	105	4199	2.244	WGS84 UTM 44N
MB-93-20	FINAL_STACK	105	2080	6.8545	WGS84 UTM 44N

MB-93-09	FINAL_STACK	1	2686	2.8219	WGS84 UTM 44N
RA-02	REPROCESSED_RAW_PSTM_STACK	1	496	1.0347	WGS84 UTM 44N
CEIDW01-602M	FINAL_MIGRATION	313	2316	0.7799	WGS84 UTM 44N
CEIDW01-601M	FINAL_MIGRATION	313	1564	0.6407	WGS84 UTM 44N
KB-93-102A	FINAL_STACK	105	638	2.0109	WGS84 UTM 44N
RA-22	FINAL_STACK	160	3380	1.7802	WGS84 UTM 44N
RA-04	FINAL_STACK	160	930	1.1408	WGS84 UTM 44N
RA-03	FINAL_STACK	520	980	1.876	WGS84 UTM 44N
RA-01	FINAL_STACK	160	930	3.1922	WGS84 UTM 44N
		Total		**210.40**	

Seismic 3D Data: KG/OSDSF/G1/2025 contract area is covered with PSTM seismic data as shown below:



Point	Inline	Crossline	Easting	Northing
1	9910	2569	581354.56	1799459.75
2	11428	2569	615578.31	1815860.50
3	11428	3036	620623.56	1805331.88
4	9910	3036	586400.75	1788931.38

00002.KG-PG-OFF_3D_3DKGOSDWIII_G1GD-1B_PSTM_FINAL_PSTM_STACK_.sgy
3D bin centre corner points - all traces

3D bin centre corner points - all traces : 00002.KG-PG-OFF_3D_3DKGOSDWIII_G1GD-1B_PSTM_FINAL_PSTM_STACK_.sgy

Point	Inline	Crossline	Easting	Northing
1	1798	2709	627352.38	1797942.38
2	2169	2709	635330.06	1802673.38
3	2169	3386	631013.12	1809952.62
4	1798	3386	623036.44	1805221.62

3D bin centre corner points - all traces : POOJA.1047920617.SEGY.00001.KG-PG-OFF_3D_3DKGOFF_MEGA-MRG_PSTM.3D.FINAL_PSTM_STACK INTERVAL: custom

Point	Inline	Crossline	Easting	Northing
1	8185	8097	6374510.50	18063680.00
2	9063	8097	6306617.50	17977448.00
3	9063	8893	6228441.50	18039002.00
4	8185	8893	6296334.00	18125232.00

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/OSDSF/G1/2025 contract area) comes to be USD 4,730. 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/OSDSF/G1/2025

Number of field(s)/discoveries: 7

Number of well(s): 19

Total area: 233.83 Sq. Km.

Seismic 2D data: 210.40 Km.

Seismic 3D data: 204.81 Sq. Km.

Report(s) available: 37

Hydrocarbons In-place: 5.22 MMTOE (Best-Case Operator Estimate)

: 4.65 MMTOE (Best-Case Third Party Estimate)

NIO map reference no.: S-1

Geographical area: KG OFFSHORE

Data package cost: 4,730 USD

8. CONCLUSION

The Contract Area KG/OSDSF/G1/2025 in KG offshore, covering an area of 233.83 sq km, comprises seven discoveries.

A quantum of 210.40 LKM of 2D seismic data and 204.81 SKM of 3D seismic data are available and a total number of 19 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 5.22 MMTOE as per the previous Operator’s estimate and 4.65 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

MINISTRY OF
PETROLEUM AND NATURAL GAS

DGH

DIRECTORATE GENERAL OF HYDROCARBONS

(Ministry of Petroleum & Natural Gas,Government of India)

OIDB Bhawan,
Tower A, Plot No 2, Sector 73, Noida,
Uttar Pradesh, 201301
INDIA