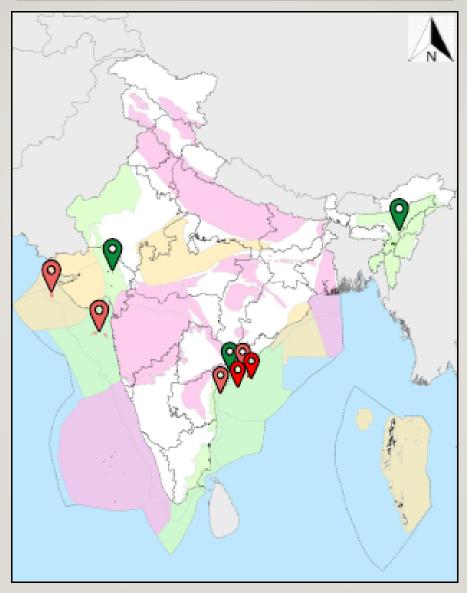




DIRECTORATE GENERAL OF HYDROCARBONS

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

INFORMATION DOCKET



CONTRACT AREA
KG/DWDSF/D6F/2025

DISCOVERED SMALL FIELD BID ROUND - IV

DISCLAIMER

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

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

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

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

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1. INTRODUCTION

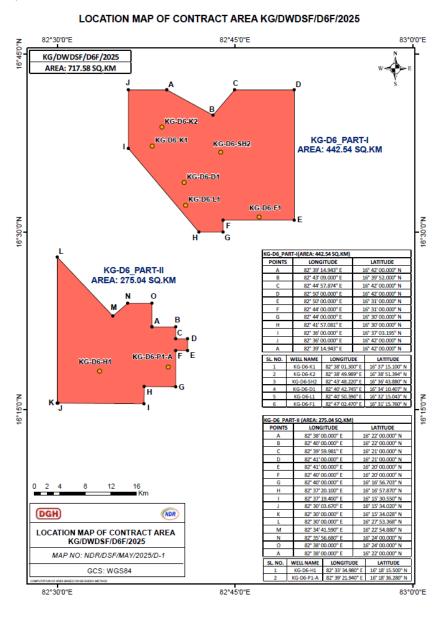
With the extension of the DSF policy 2015, DSF Bid Round IV offers 55 small-to-mid-size oil and gas discoveries through international competitive bidding. There are 9 Contract Areas under DSF-IV spread over Cambay, Assam & Assam Arakan, Gulf of Kutch, Mumbai Offshore and Krishna Godavari Basins. Out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

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

Each Contract Area on offer has multiple discoveries comprehensively described in this 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

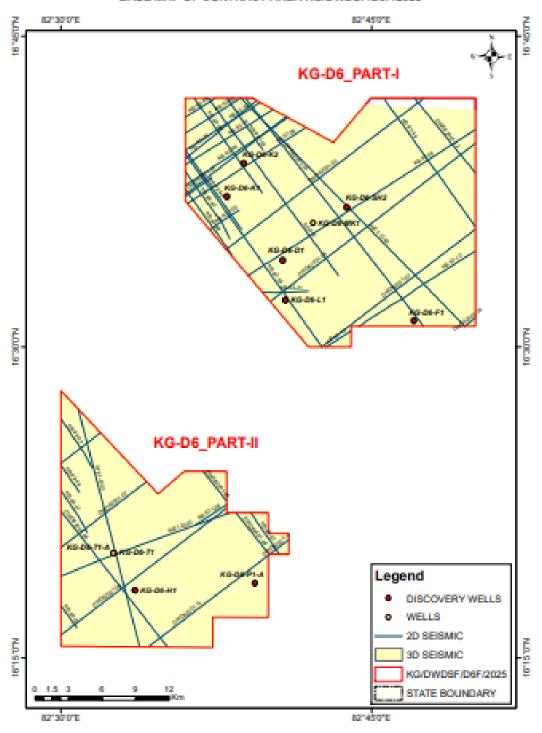
The KG/DWDSF/D6F/2025 contract area is located offshore within the Krishna-Godavari (KG) Basin. The block covers an area of 717.58 square kilometers. The northern boundary is about 40 to 60 kilometers southeast of the city of Kakinada. The water depth in this area ranges from shallow waters (less than 400 meters) in the northwest to more than 2,700 meters in the southeast. Within this contract area, two distinct blocks are included: KG-D6_PART-1 and KG-D6_PART-II. The contract area includes eight discoveries/fields (D6-F1, D6-SH2, D6-D1, D6-K1, D6-K2, D6-H1, D6-P1-A, and D6-L1) distributed in both blocks. In the map enclosed with the notice inviting offer (NIO) document, the contract area is referred to as KG-D6. The following figure(s) illustrate the layout of the contract area across the included blocks and highlight the distribution of key fields and structures.



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The area has information of 463.10 line km of 2D seismic data and 708.94 sq km of 3D seismic data. There are 13 wells in the contract area. The following figure shows the coverage of available 2D and 3D seismic data along with wells drilled across field(s) and/or cluster(s).

BASE MAP OF CONTRACT AREA KG/DWDSF/D6F/2025



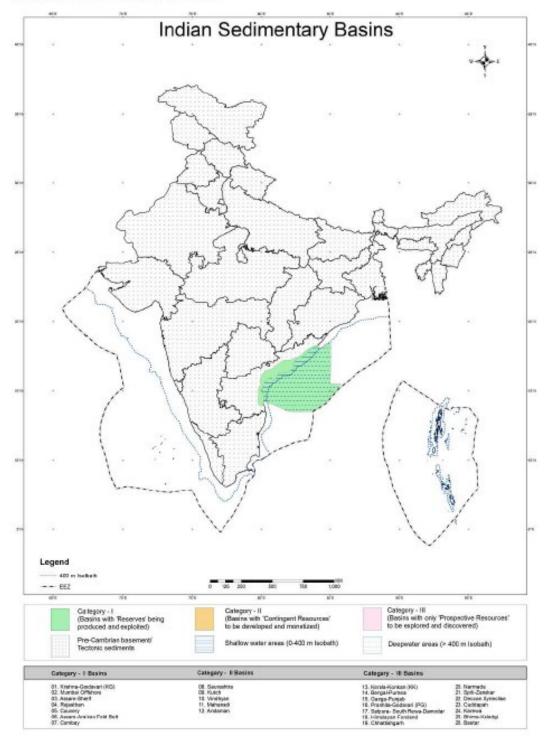
3. BASIN OVERVIEW

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

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

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

Fig.: Reference sedimentary basin:



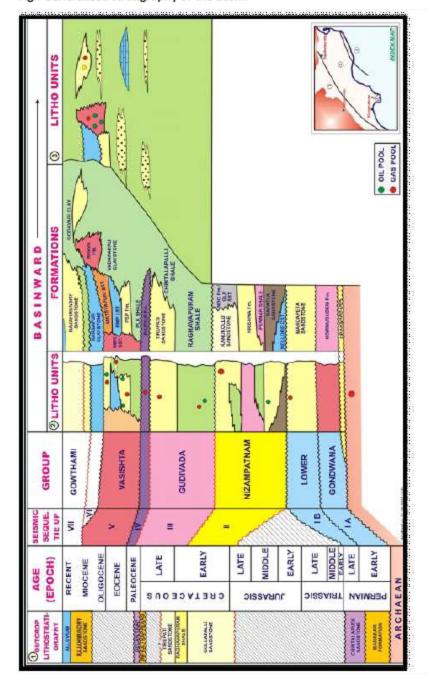
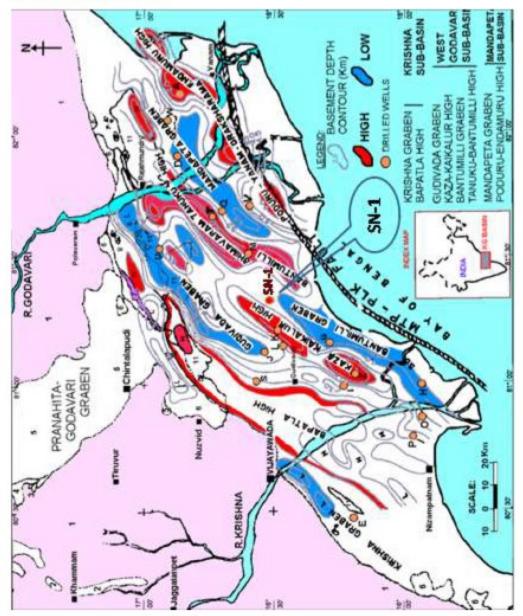


Fig.: Generalized stratigraphy of the basin:

Fig. Tectonic map of the basin:



4. PHYSIOGRAPHY AND ACCESSIBILITY OF THE AREA

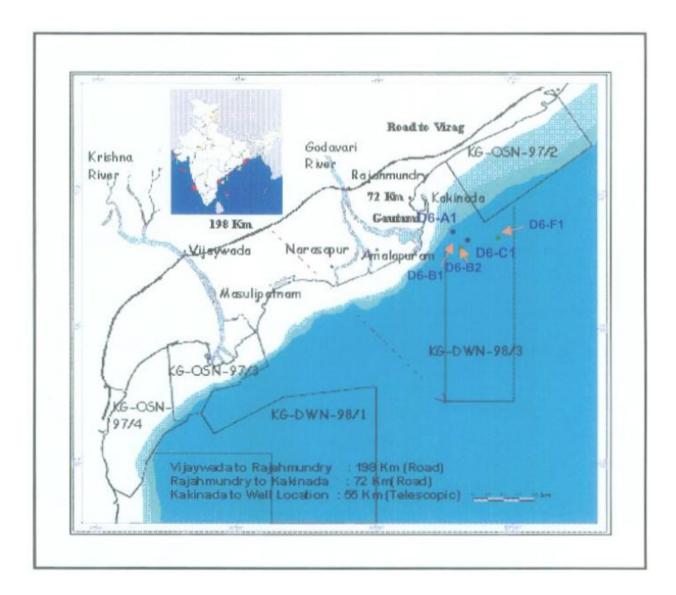
The general gradient of the area is toward the east and southeast. The Godavari and Krishna Rivers form the major deltas in the area. The Krishna delta is a fluvial-dominated elongate and constructive type, and the Godavari delta is lobate and partially affected by wave action. The shelf is narrow near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

5. D6 DISCOVERIES AND FIELD DESCRIPTIONS

5.1. D6-F1 DISCOVERY AND FIELD DESCRIPTION

D6-F1 was the fifth exploration well drilled by Reliance Industries Limited (RIL) in the D6 Block at a water depth of 1,756 meters. This well was drilled in November 2002 with a primary objective to explore the Late Pliocene channel-fan complex and with a secondary objective to evaluate the Middle Miocene and Oligocene prospects.

The well targeted the channel, levee, splay, and fan deposits. Drilling and testing of well D6-F1 resulted in a new gas discovery within the Late Pliocene sequence. High-quality gas-bearing sands were penetrated in the Late Pliocene by the well over the gross interval from 2,545.5 to 2,582 meters MDRT (2,531.7 to 2,582.8 meters true vertical depth subsea (TVDSS)).



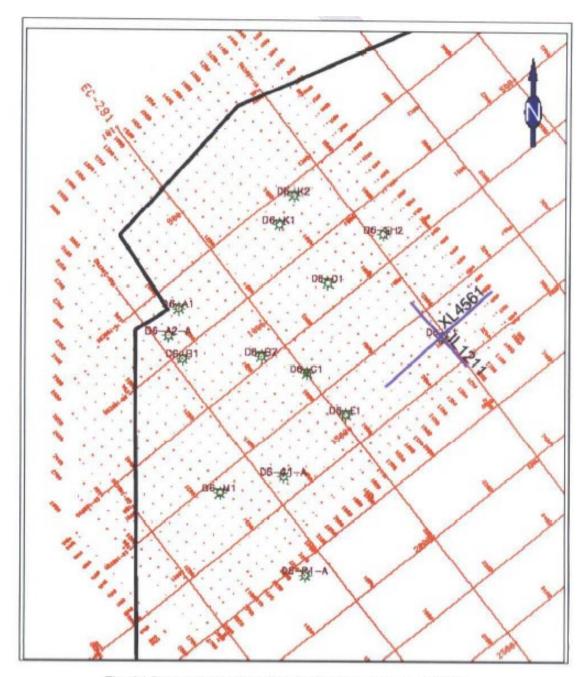
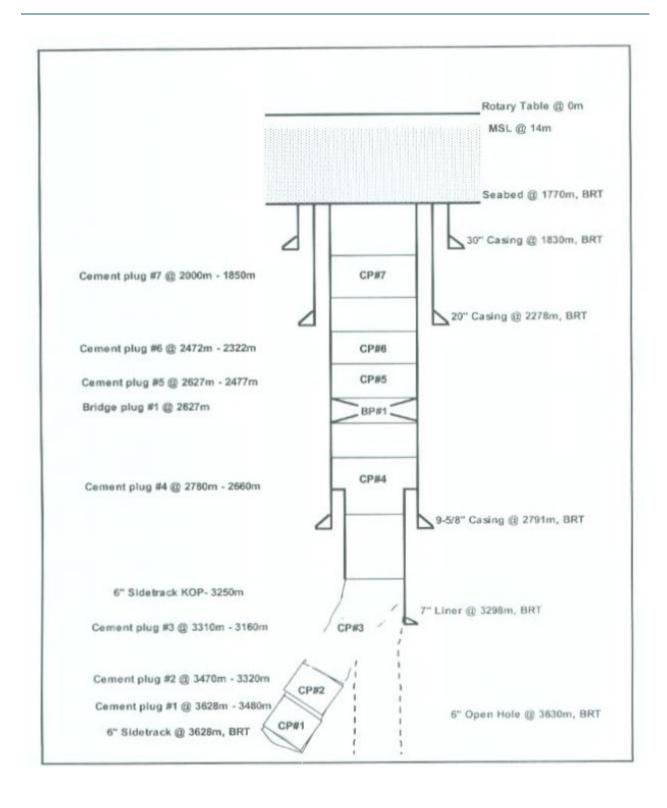


Fig. 4.1 Base map showing Inline & Xline through the well D6-F1

5.1.1. Drilling and Well Completion

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



5.1.2. Well Logging and Formation Evaluation

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

5.1.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	<u>KB</u>	Drilled depth
Only WCR available	01.10.2002	13.7 m	3630 m MDRT

5.1.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

12.25 PEX-HRLA-DSI-HNGS (2,790.0–2,278.5 m)

MDT-GR (Tool stuck at 2,500 m)

MDT-GR (2,785 m to 2,278.8 m)

CCL-MCFL-TLD-CNL-GR, In 9-5/8" casing only

CBL-VDL-USIT-CCL, In 9-5/8" casing only

8.50 PEX-HRLA-DSI-HNGS (3,283 m–2,792 m)

CBL-VDL-USIT-CCL-GR (3,301.7 to 2,791 m)

6.00 PEX-HRLA-DSI-HNGS (3,517.8 m–3,298.1 m)

MDT-GR (Tool held up at 3,240 m)

6.00 PEX-HRLA-DSI-HNGS (Tool held up at 3,281 m)
PEX ONLY (Tool held up at 3,281 m)
VSP (3,240 m to 3,200 m)

5.1.3. Well Testing and Workover History

Two drill-stem tests (DST) were conducted in well D6-F1. DST 1 was performed over the interval from 2,496 to 2,511 meters MDBRT but yielded no influx. DST 2 successfully flowed gas from a 15-meter interval.

5.1.3.1. Drill Stem Test (DST)

DST 1

Formation: Late Pliocene | Interval(m): 2,496-2,511 |No flow

DST₂

Formation: Late Pliocene | Interval(m): 2,567-2,582 | Flow period (hr): 0.16 | Bean (1/64 inch): 16 | FTHP: 3,124 FBHP: 3,859.96 psi | Qgas: 5.8 MMscf/d |

Formation: Late Pliocene | Interval(m): 2,567-2,582 | Flow period (hr): 0.25 | Bean (1/64 inch): 24 | FTHP: 3,042 FBHP: 3,856.85 psi | Qgas: 13.5 MMscf/d |

Formation: Late Pliocene | Interval(m): 2,567-2,582 | Flow period (hr): 0.25 | Bean (1/64 inch): 56 | FTHP: 1,782 FBHP: 3,850.98 psi | Qgas: 39.2 MMscf/d |

Formation: Late Pliocene | Interval(m): 2,567-2,582 | Flow period (hr): 0.25 | Bean (1/64 inch): 60

| FTHP: 1,684 FBHP: 3,850.04 psi | Qgas: 41.4 MMscf/d |

Formation: Late Pliocene | Interval(m): 2,567-2,582 | SBHP: 3,866,2

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

Interval (m.)	Sample No.	Sample type	Depth of measurement	Initial Mud hydrostatic pressure	Formation Pressure (psi)	Temperature (°C)	Drawdown mobility (md/cp)	Remark
2461,13	68	MDT	2461,13	4094	2864,37	27,5	-	5 cc
2461,03	69	MDT	2461,03	4093,1	3814,57	27,4	0.1	5 cc + 5 cc - V slow BU
2486,23	70	MDT	2486,23	4136,8	3325,49	27,3	-	5 cc
2554,03	85	MDT	2554,03	4244	,	30,3	-	seal failure
2554,63	86	MDT	2554,63	4245	3863,1	30,9	74.0	10 cc
2561,44	87	MDT	2561,44	4262,8	3866,44	32,8	381.0	10 cc
2566,63	88	MDT	2566,63	4265,7	3867,46	34,2	607.0	10 cc
2567,73	89	MDT	2567,73	4268,2		34,8	-	seal failure
2570,03	90	MDT	2570,03	4272,7	3867,94	35,1	5.2	5 cc - tight
2377,23	91	MDT	2377,23	3941		26,1	-	seal failure
2377,23	92	MDT	2377,23	3941	3662,8	26,1	1.7	10 cc
2370,83	93	MDT	2370,83	3929		25,7	-	seal failure
2370,83	94	MDT	2370,83	3929	3680,3	25,7	268.0	5 cc - tight
2376,13	95	MDT	2376,13	3940,5	3672,9	26	843.0	5 cc + 5 cc
2376,13	96	MDT	2376,13	3940,5	3887,17	26	198.0	10 cc
2380,03	97	MDT	2380,03	3953,4	3937,3	26,5	30.0	5 cc + 5 cc
2629,13	98	MDT	2629,13	4395	4058,84	30,4	-	5 cc
2629,53	99	MDT	2629,53	4396,4	4068,34	30,4	241.0	10 cc
2715,23	100	MDT	2715,23	4514,7		31	-	5 cc + 5 cc
2738,13	101	MDT	2738,13	4559,7		31,8	-	5 cc + 5 cc
2536,23	102	MDT	2536,23	4144,8	3560	30	-	5 cc - dry test
2537,23	103	MDT	2537,23	4146,3		30,1	-	5 cc - dry test
2541,33	104	MDT	2541,33	4221,1	3256	33,6	-	5 cc - dry test
2541,3	209	MDT	2541,3	4223,2	3862,11	34,8	-	Gas
2546,8	210	MDT	2546,8	4230,6	3860,98	35,7	-	Gas
2518,4	211	MDT	2518,4	4257		35,9	-	No flow
2485,8	213	MDT	2485,8	4130,4		34	-	Low pr. B/up: seal failur

5.1.4.2. Gas composition analysis

Formation: Late Pliocene | Interval(m): 2,555.2 | Sample No.: MPSR 1,765

C1: 99.78 %| C2: 0.05 %| C3: 0.00 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+:

0.00 %

Carbon-dioxide: 0.06 % Nitogen+Oxygen: 0.11 % Sp.Gr.: 0.555 Molar Mass: 16.08

Formation: Late Pliocene| Interval(m): 2,555.2| Sample No.: MPSR 1766

C1: 99.78 %| C2: 0.05 %| C3: 0.00 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+:

0.00 %

Carbon-dioxide: 0.07 % Nitogen+Oxygen: 0.10 % Sp.Gr.: 0.555 Molar Mass: 16.08

Formation: Late Pliocene | Interval(m): 2,560.6 | Sample No.: MPSR 1,767

C1: 99.83 %| C2: 0.05 %| C3: 0.00 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+:

0.00 %

Carbon-dioxide: 0.05 % | Nitogen+Oxygen: 0.08 % | Sp.Gr.: 0.555 | Molar Mass: 16.07

5.1.4.3. Geothermal gradient (from wireline logs)

Formation: Late Pliocene| Depth of measurement: 2,747.9 m| Temperature: 27°C | Formation: Late Pliocene| Depth of measurement: 2,790.0 m| Temperature: 42°C | Formation: Late Pliocene| Depth of measurement: 2,785.0 m| Temperature: 43°C | Formation: Late Pliocene| Depth of measurement: 3,287.0 m| Temperature: 51°C | Formation: Late Pliocene| Depth of measurement: 3,480.0 m| Temperature: 65°C |

5.1.4.4. Other reservoir studies

Biostratigraphy and paleoenvironments of the interval 2,295 – 3,625 m

Petroleum geochemistry screening study of the interval 2,315 to 3,625 m

Quick results of well test analysis

Non Darcy Coefficient: 1.55e-7

 Static Formation Pressure(P*): 3861.3 psi (Pressure did not stabilized in 18hrs. of shut in)

Maximum Flowing gas temp. measured
 @ 2522.2m MDBRT: 41.10C

L1=902ft

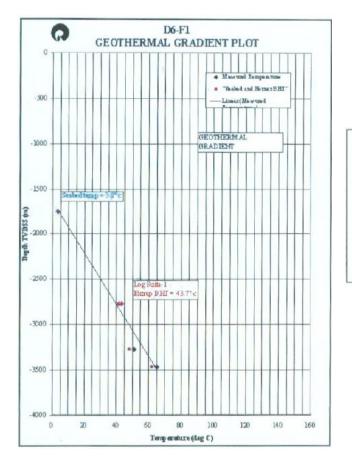
L2=1505ft

410 MMscf/d.

o Permeability: o Skin:

o Parallel Faults:

o AOFP



5.1.4.5. Annexure to Reservoir Engineering studies/analysis



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

5.1.5.1. Geological description

After detailed analysis and gaining an understanding of the well data (logs, cuttings, mud logs, etc.) and the three-dimensional (3–D) seismic and amplitude variation with offset (AVO) inversion volumes, the reservoir zone was mapped in the 3–D volume. Well to seismic tie and depth conversion was performed to generate various maps. Root mean square (RMS) amplitude maps, depth-structure maps for reservoir tops, gross reservoir thickness maps, net pay thickness maps, etc. were prepared to gain an understanding of the reservoir and assess the original gas in place (OGIP).

The reservoir exhibits a wide variation in grain size, starting from pebbly to fine-grained sandstone and siltstone. The integrated interpretation of all geologic data indicates a sand-silt to mud-rich turbidite system, a number of stacked sinuous channels, and associated facies assemblages.

The full-bandwidth trend merge of the P-impedance data was utilized to identify the geobody and its extent. The P-Impedance cutoff distinguishes the seismically resolvable reservoir-quality sands from the non-reservoir shale in a volumetric sense. The gross reservoir zone was estimated between the well-defined reservoir top and the gas/water contact (GWC). The reservoir extent is controlled by the GWC, the fault, and a facies boundary.

Thinly laminated sand constitutes a varying proportion of the main reservoir. These thin sands are not amenable for unambiguous identification in the seismic data. Therefore, connectivity of a seismically identifiable (thick sands) zone may not provide complete information regarding reservoir connectivity and continuity. For characterization of these thin sands and a general reservoir description, several special studies will be carried out. This may include extensive coring and core studies, acquisition, and reprocessing of seismic data. The results will provide a better understanding of the thin bed potential and recovery.

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

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

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

RE SERVOIR PARAMETERS and ORIGINAL GAS in PLACE as of JANUARY 1, 2025 for the KG-D6-F1 DISCOVERY

KG/DWD SF/D6F/2025 CONTRACT AREA

	Reservoir	Total
		Total
Low		
Area, acres	167	
Gas Formation Volume Factor, scf/rcf	0.0041	
Average Thickness, ft	34.2	
Average Porosity, %	19.00	
Average Water Saturation, %	63.00	
Original Gas in Place, 10 ⁹ ft ³	4.27	4.27
Original Gas in Place, 10 ⁶ eq ton	0.11	0.11
Best		
Area, acres	260	
Gas Formation Volume Factor, scf/rcf	0.0041	
Average Thickness, ft	52.6	
Average Porosity, %	20.00	
Average Water Saturation, %	60.00	
Original Gas in Place, 10 ⁹ ft ³	11.60	11.60
Original Gas in Place, 10 ⁶ eq ton	0.29	0.29
High		
Area, acres	654	
Gas Formation Volume Factor, scf/rcf	0.0041	
Average Thickness, ft	61.2	
Average Porosity, %	21.00	
Average Water Saturation, %	57.00	
Original Gas in Place, 10 ⁹ ft ³	38.43	38.43
Original Gas in Place, 10 ⁶ eq ton	0.97	0.97
Oliginal Gas III Flace, TV eq (011	0.57	0.97

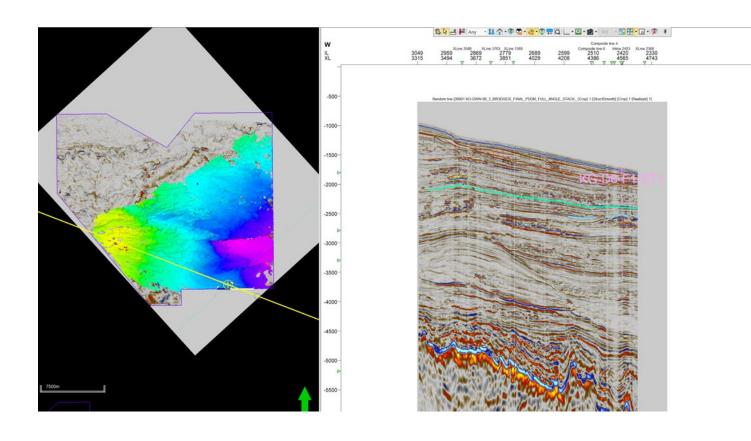
Note: Conversion used 10° s of equal to 0.02519 10° eq tone.

Volumes estimated by a Third Party

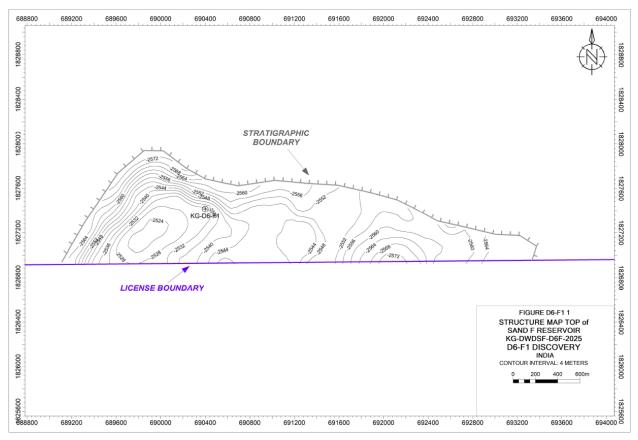
The operator has reported an in-place volume of 9.32 MMTOE (Best case).

5.1.7. Annex

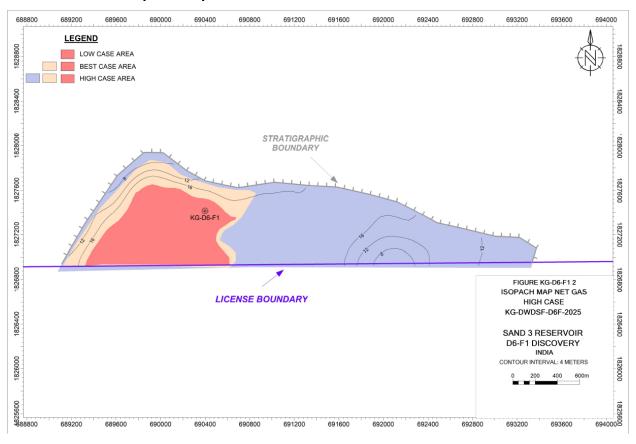
5.1.7.1. Seismic Sections



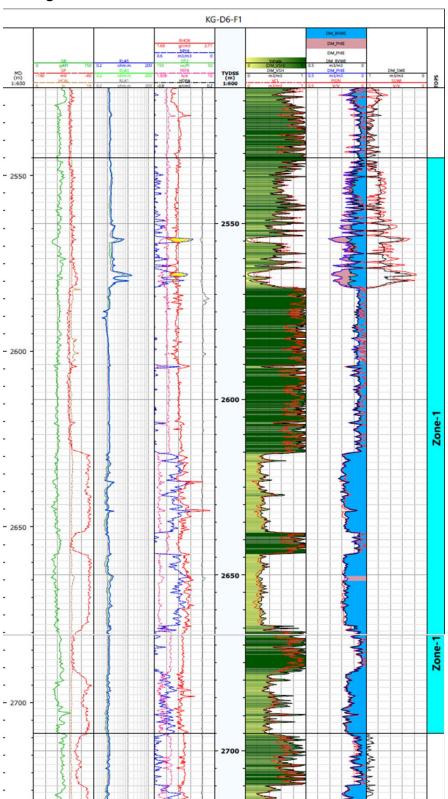
5.1.7.2. Structural Maps



5.1.7.3. Isopach Maps



5.1.7.4. Log Motifs



5.2. D6-K2-ST1 DISCOVERY AND FIELD DESCRIPTION

D6-K2/K2ST1 is the 10th exploratory well drilled in the KG-DWN-98/3 contract area, located in the KG Basin, offshore east India, at a water depth of 978 meters.

The primary geological targets were Pleistocene and Late Pliocene channelized sandstone reservoirs associated with deepwater sinuous channel systems, identified through high-resolution two-dimensional (2–D) and 3–D seismic interpretations.

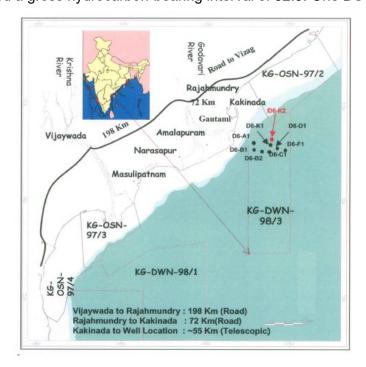
The initial well K2 was spudded on February 12, 2004, and reached 1,792 meters before experiencing stuck pipe issues. A sidetrack (K2ST1) was initiated from 1,443 meters and successfully reached a total depth (TD) of 2,200 meters on March 5, 2004. Drilling was conducted using Transocean Sedco Forex's Discoverer 534 dynamically positioned (DP) drillship.

Real-time decision-making was supported by integrating logging while drilling (LWD)/measuring while drilling (MWD) services, mud logging, and 3–D seismic data with continuous communication between the rig and the interpretation center.

Cuttings, mud logs, wireline logs, and modular dynamics tester (MDT) data confirmed the presence of gas-bearing sands within the Upper Pliocene over three gross intervals: 1,893 to 1,917 meters MDRT, 1,934 to 1,942 meters MDRT, and 2,068 to 2,081 meters MDRT. The reservoir showed heterogeneity in grain size, ranging from fine to very coarse sandstone.

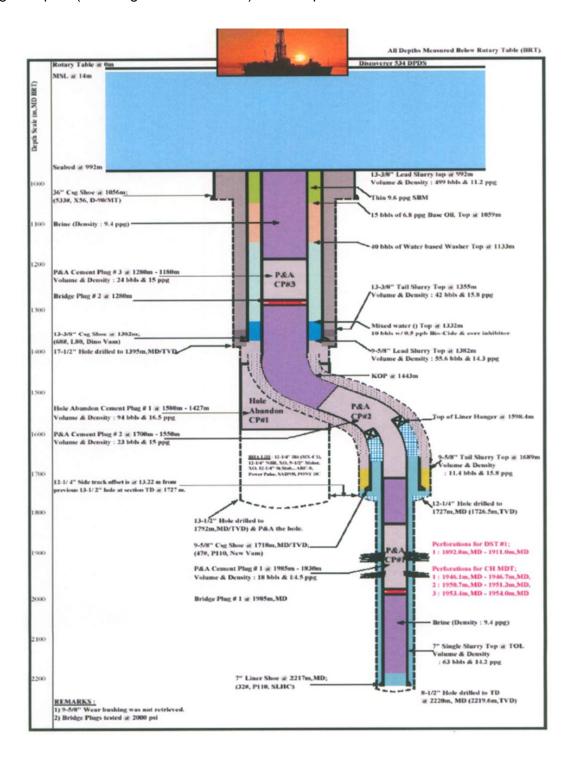
Three GWCs were identified based on wireline logs and MDT pre-test data at 1,901.7 meters TVDSS and 2,071 meters TVDSS for the upper and lower zones, respectively. The mid-zone GWC could not be established due to limited data.

The well encountered a gross hydrocarbon-bearing interval of 52.5. One DST was performed.



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.



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 cased-hole logs and information from conventional and other wireline formation test data are presented in this docket. The availability of key input reports, such as 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.

5.2.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	<u>KB</u>	<u>Drilled depth</u>
Only WCR available	02.12.2004	14 m	2,220.0 m MDRT

5.2.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

12.25 PEX-AITH, tool stood up to 1,412 m.
8.50 PEX-AIT-APS-ECS (2,218.3 -1,380.0 m)
OBMI-DSI-HNGS (2,218.3-1,380.0 m)
MDT-GR Pre-tests only (2,157.2 -1,728.4 m)
VSI - VSP survey (2,215.0-1,322.5 m)
USIT-CBL-VDL-GR-CCL (2,220.0-1,718.0 m)

5.2.3. Well Testing and Workover History

A cased-hole DST was conducted in well D6-K2-ST1. DST 1 was carried out in the interval from 1,892 to 1,911 meters MDRT and flowed hydrocarbon gas.

5.2.3.1. Drill Stem Test (DST)

DST 1

Formation: Late Pliocene | Interval(m): 1892-1911 m MDRT |Flow period (hr): N/A | Bean (1/64 inch): 128 FTHP: N/A | FBHP: N/A | Qgas: 37.10 MMscf/d |

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 PVT data/results are included.

5.2.4.1. Formation dynamics tests

Interval (m.)	Sample No.	Sample type	Depth of	Initial Mud hydrostatic pressure	Formation Pressure (psi)	Temperature (°C)	Drawdown mobility (md/cp)	Remark
1878.68	21	MDT	1878.68	3258.7	(psi)	41.6	mobility (ma/cp)	autoreset
1878.58	22	MDT	1878.58	3258.6	2940.18	41.6	2.7	pretest 9.9cc + 30cc/min
1881.88	23	MDT		3265		41.7	85.4	•
	23		1881.88		2941.84	41.7		pretest 10cc + 30cc/min pretest of 9cc+5cc
1884.68		MDT	1884.68	3269.6	2942.15		1427	
1889.38	25	MDT	1889.38	3278.1	2943.22	42.8	417.1	pretest 10cc+4.9cc
1890.88	26	MDT	1890.88	3279.4	2943.34	43.6	394.4	pretest 10cc+5cc
1892.38	27	MDT	1892.38	3282.9	2943.67	44	3371.6	pretest 20cc
1901.28	28	MDT	1901.28	3298.9	2945.46	44.4	626.1	pretest 10cc +5cc+5cc(30cc/i
1904.28	29	MDT	1904.28	3302.2	2949.54	44.6	400.8	pretest 10cc+5cc+(30cc/min)
1902.88	30	MDT	1902.88	3299.1		49	5.1	Pressure Not Stabilised
1931.88	33	MDT	1931.88	3352		45.5	0.8	Pressure Not Stabilised
1934.28	34	MDT	1934.28	3354.7		45.8	1.5	Pressure Not Stabilised
1936.48	35	MDT	1936.48	3358		46	1.3	Pressure Not Stabilised
1938.48	36	MDT	1938.48	3361.2		46.2		Pressure Not Stabilised
1960.48	37	MDT	1960.48	3402.9		46.6	2.5	Pressure Not Stabilised
2002.07	38	MDT	2002.07	3473.4		47.1	1.6	Pressure Not Stabilised
2053.67	39	MDT	2053.67	3560.5	3153.71	48.2	4772.6	pretest 10cc + 30cc/min
2054.87	40	MDT	2054.87	3562		48.5	3.9	Pressure Not Stabilised
2057.17	41	MDT	2057.17	3566.4	3154.4	50.1	2010.5	pretest 10cc + 5cc
2058.67	42	MDT	2058.67	3567.5		50.9	1.3	Pressure Not Stabilised
2061.27	43	MDT	2061.27	3573.6	3155.12	51.2	42.6	pretest 10cc+30cc/min
2064.77	44	MDT	2064.77	3579.4	3156.77	51.5	210.6	pretest 10cc+5cc+30cc/min
2066.87	45	MDT	2066.87	3582.3	3156.25	52	1272.5	pretest 10cc+5cc+30cc/min
2068.27	46	MDT	2068.27	3583.7	3156.61	52.4	1.7	pretest 10cc +30cc/min
2069.97	47	MDT	2069.97	3586.7	3157.2	52.6	12682.8	pretest 10cc +30cc/min
2071.97	48	MDT	2071.97	3589.9		53		seal faliure
2071.77	49	MDT	2071.77	3587.9	3159.65	53.2	613.4	pretest 10cc+30cc/min
2076.17	50	MDT	2076.17	3598.4	3164.73	53.6	605.5	pretest 10cc+30cc/min
2087.77	51	MDT	2087.77	3621.4		53.9	0.8	Pressure Not Stabilised
2096.67	52	MDT	2096.67	3637.3	3194.08	54	35.9	pretest 10cc+30cc/min
2142.67	55	MDT	2142.67	3714.5		56.1	1.4	Pressure Not Stabilised
2123.67	54	MDT	2123.67	3681.3		54.9	1.8	Pressure Not Stabilised
2137.67	56	MDT	2137.67	3698.3		55.3	3.1	Pressure Not Stabilised
2104.07	53	MDT	2104.07	3648.6	3205.82	54.3	571.4	pretest 10cc +30cc/min
2050.77	57	MDT	2050.77	3542.68		55.4	1.9	Pressure Not Stabilised
2027.17	58	MDT	2027.17	3505.6		54.6	1.3	Pressure Not Stabilised
2004.27	59	MDT	2004.27	3465.1	3125.83	54.1	2436.8	pretest 10cc+30cc/min
1946.68	63	MDT	1946.68	3375.36		51.2	1.9	Pressure Not Stabilised
1916.78	64	MDT	1916.78	3318.6		49.7	2.5	Pressure Not Stabilised
1875.88	65	MDT	1875.88	3248.5		48.1	1.4	Pressure Not Stabilised
1872.78	66	MDT	1872.78	3242.7		48.4	1	Pressure Not Stabilised
1865.68	67	MDT	1865.68	3230.6		48	2.6	Pressure Not Stabilised
1860.78	69	MDT	1860.78	3227.4		47.3	1.5	Pressure Not Stabilised
1851.98	68	MDT	1851.98	3208.4		47.6	1.5	Pressure Not Stabilised
1800.88	70	MDT	1800.88	3120.3		46.9	2.5	Pressure Not Stabilised
1793.08	71	MDT	1793.08	3108.1		46.4	2.2	Pressure Not Stabilised
1748.48	72	MDT	1748.48	3032.5		45.5	2.2	seal faliure
1745.68	73						1 0	
		MDT	1745.68	3026.6		44.2	1.8	Pressure Not Stabilised
1716.88	74 75	MDT	1716.88	2978.5		43.9	1.0	Seal faliure
1716.78	75	MDT	1716.78	2978.3		42.2	1.9	Pressure Not Stabilised
1906.78	76	MDT	1906.78	3308.3		42.5	4.5	seal faliure
1919.18	77	MDT	1919.18	3329.3		44.6	1.3	Pressure Not Stabilised
1713.88	78	MDT	1713.88	2974.3		45.6	2.2	Pressure Not Stabilised

5.2.4.2. Gas composition analysis

Formation: Late Pliocene | Interval(m.): 1946.1-1946.7 | Sample No.: Sample 1.

C1: 99.62 %| C2: 0.13 %| C3: 0.04 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+: 0.01 %|

Carbon-dioxide: 0.21% Nitogen+Oxygen: 0.00 % Sp.Gr.: 0.557 Molar Mass: 16.13 **Formation**: Late Pliocene Interval(m.): 1946.1-1946.7 Sample No.: Sample 1.

C1: 99.73 %| C2: 0.15 %| C3: 0.03 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+:

0.00 %

Carbon-dioxide: 0.09% Nitogen+Oxygen: 0.00 % Sp.Gr.: 0.556 Molar Mass: 16.10

5.2.4.3. Geothermal gradient (from wireline logs)

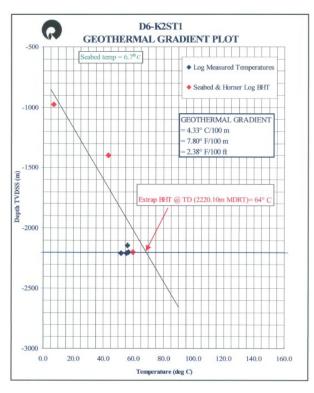
Formation: Upper Pliocene| Depth of measurement: 1412.0 m| Temperature: 43.3°C | Formation: Upper Pliocene| Depth of measurement: 2220.7 m| Temperature: 52.0°C | Formation: Upper Pliocene| Depth of measurement: 2220.7 m| Temperature: 55.6°C | Formation: Upper Pliocene| Depth of measurement: 2157.2 m| Temperature: 56.1°C | Formation: Upper Pliocene| Depth of measurement: 2215.0 m| Temperature: 57.0°C |

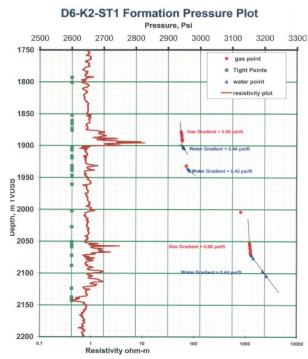
5.2.4.4. Other reservoir studies

Biostratigraphy and paleoenvironments of the interval 1460 - 2220 m.

Petroleum geochemistry screening study of the interval 1775 - 2190 m.

5.2.4.5. Annexure to Reservoir Engineering studies/analysis





5.2.5. Geology and Reservoir Description

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

5.2.5.1. Geological description

The KG-DWN-98/3 Contract Area lies within the northern KG Basin, offshore the State of Andhra Pradesh, along India's passive continental margin. The geological setting is characterized by a heterogeneous continental lithosphere overlying an Archean basement. The basin's evolution began with Permo-Triassic rifting associated with the breakup of Gondwanaland, leading to the development of northeast/southwest-trending Gondwana grabens, later overprinted by Jurassic-Cretaceous en-echelon horsts and grabens.

Subsequent phases included filling of these grabens with thick Middle Jurassic to Early Cretaceous clastics, followed by Late Cretaceous burial of horst and graben topography. Passive margin progradation toward the southeast began in the Late Cretaceous and intensified after tilting of the Indian sub-plate during the Late Cretaceous to Early Paleocene, linked to the Deccan hotspot uplift and the Himalayan orogeny.

Coastal sedimentary basins to the west, formed during the Late Jurassic, are characterized by multiple northeast/southwest-trending grabens and subsurface ridges with thick pre-Tertiary sediments in the depressions and thin sequences over the highs. A widespread Mesozoic-Tertiary unconformity was observed onshore and offshore.

In deepwater offshore areas, thick Neogene sequences accumulated, primarily sourced from the Himalayan fan system. The tilting also triggered a major transgression and enhanced sediment influx from the proto-Krishna and Godavari Rivers, resulting in significant passive margin progradation during the Miocene.

The Tertiary passive margin system is the primary exploration target in the area, with basinward-thickening sequences that include Miocene to Pleistocene submarine intra-rift channels and fan sandstones deposited on the mid to lower slope, sourced mainly from the Godavari River system.

Structurally, the basin is dominated by northeast-trending, down-to-basin growth faults and genetically related younger toe thrust complexes, formed during two main phases: Late Eocene-Early Miocene and Late Miocene-Pliocene. Stratigraphic traps, especially updip pinchouts of slope fan channel complexes, are also considered key exploration targets.

5.2.6. Reservoir Properties and OHIP

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

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

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

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

RESERVOIR PARAMETERS and ORIGINAL GAS in PLACE as of JANUARY 1, 2025 for the KG-D6-K2 DISCOVERY of KG/DWDSF/D6F/2025 CONTRACT A REA

	Reservoir			
	Upper	Lower	Total	
Low				
Area, acres	460	390		
Gas Formation Volume Factor, scf/rcf	0.0051	0.0051		
Average Thickness, ft	48.8	12.3		
A verage Porosity, %	26.00	28.00		
A verage Water Saturation, %	38.00	45.03		
Original Gas in Place, 109ft3	30.63	6.26	36.89	
Original Gas in Place, 10 ⁶ eq ton	0.77	0.16	0.93	
Best				
Area, acres	934	892		
Gas Formation Volume Factor, scf/rcf	0.0051	0.0051		
Average Thickness, ft	49.4	9.8		
A verage Porosity, %	27.00	29.20		
Average Water Saturation, %	37.00	42.01		
Original Gas in Place, 10 ⁹ ft ³	66.79	12.56	79.35	
Original Gas in Place, 10 ⁶ eq ton	1.68	0.32	2.00	
High				
Area, acres	3,348	932		
Gas Formation Volume Factor, scf/rcf	0.0048	0.0048		
Average Thickness, ft	47.0	9.4		
A verage Porosity, %	28.00	30.10		
A verage Water Saturation, %	36.00	38.49		
Original Gas in Place, 109ft3	254.60	29.47	284.07	
Original Gas in Place, 10 ⁶ eq ton	6.41	0.74	7.16	

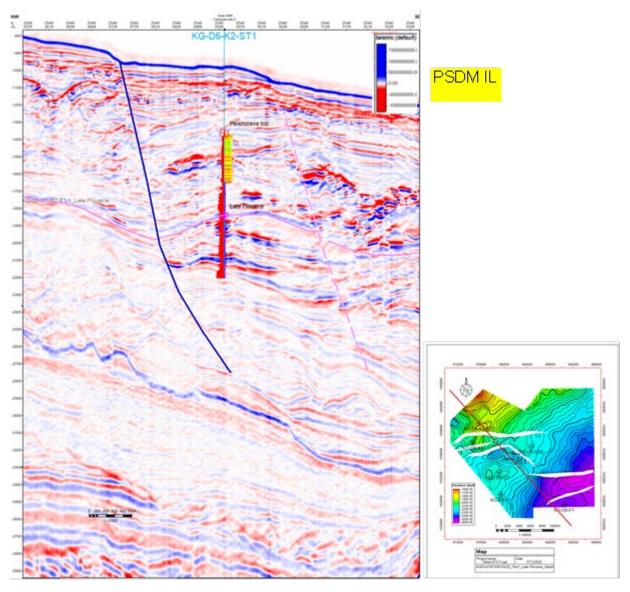
Note: Conversion used 10° scf equal to 0.02519 10° eq tone.

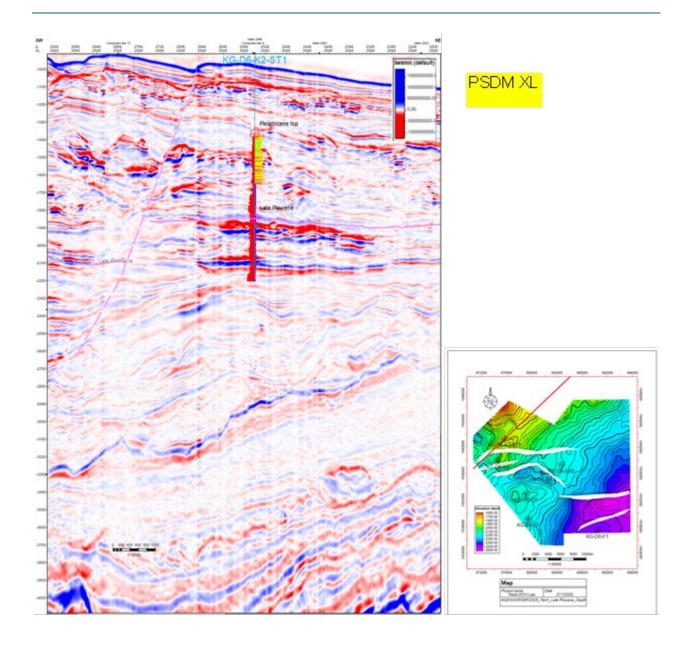
Volumes estimated by a Third Party

The operator has reported an in-place volume of 2.90 MMTOE (Best case).

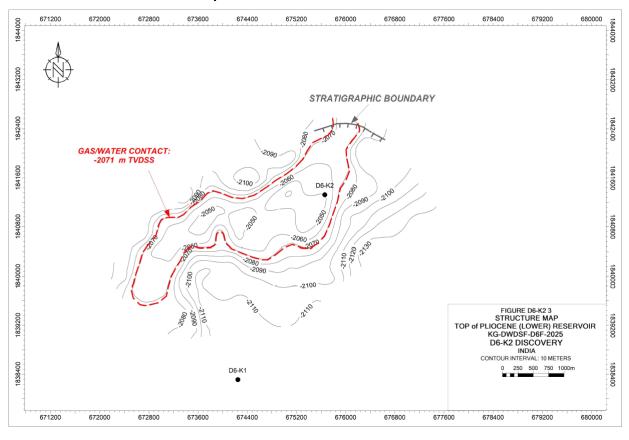
5.2.7. Annex

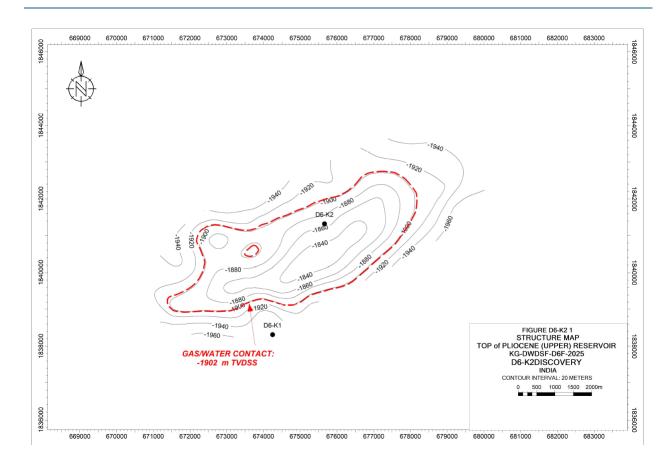
5.2.7.1. Seismic Sections



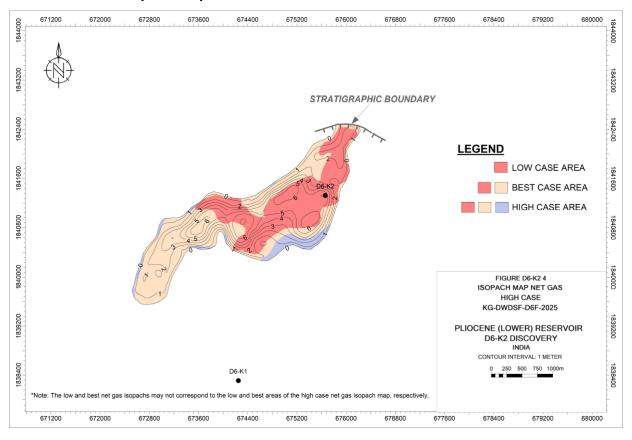


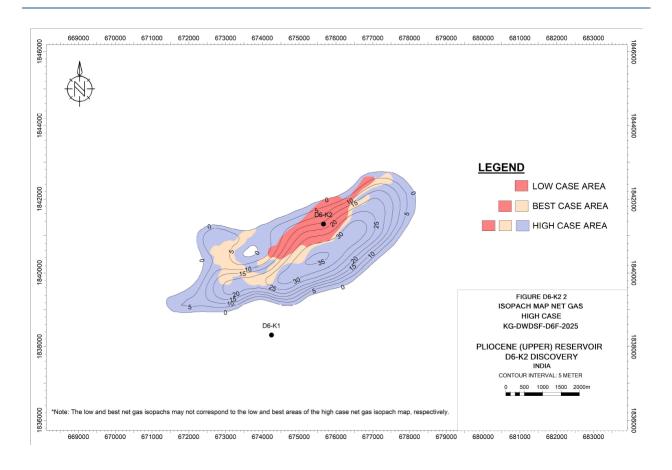
5.2.7.2. Structural Maps



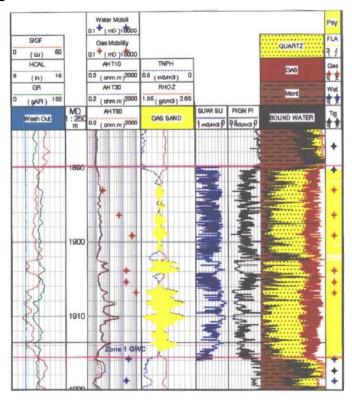


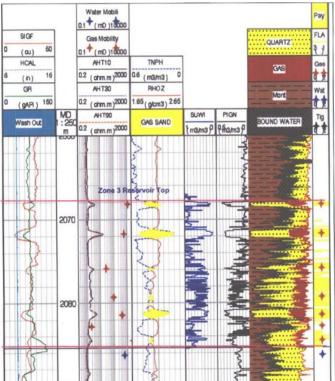
5.2.7.3. Isopach Maps





5.2.7.4. Log Motifs





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

5.3. D6-K1 DISCOVERY AND FIELD DESCRIPTION

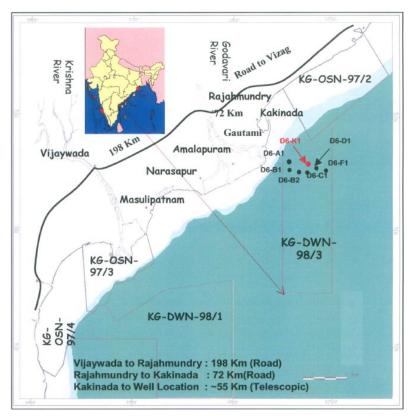
D6-K1 is the ninth exploratory well drilled in the KG-DWN-98/3 Contract Area, offshore eastern India, at a water depth of 1,031 meters. The main geological targets were the Pleistocene and Late Pliocene channel sandstone reservoirs.

Spudded on December 19, 2003, the well reached a TD of 2,537 meters on January 14, 2004. It was drilled as a deviated well with a kickoff point at 1,405 meters, following a 33° deviation along a 138° azimuth, to intersect vertically offset reservoir objectives. Drilling operations were conducted by the Transocean Sedco Forex Discoverer 534 dynamically positioned drillship (DP).

Real-time well monitoring included mud logging, LWD/MWD, pore pressure prediction (PreVue by Geoservices), and continuous communication with the interpretation center, ensuring fast decision-making.

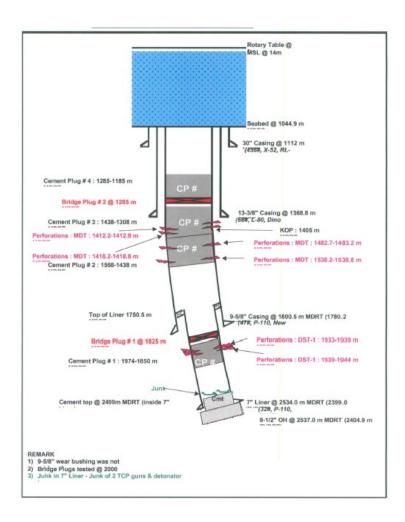
Wireline logs, MDT data, and cuttings analysis confirmed gas-bearing sands in the Upper Pliocene, within a gross interval from 2,126.4 to 2,204 meters MDRT (2,055.3 to 2,121.5 meters TVD RT). The reservoir showed significant grain-size variations ranging from fine to very coarse sandstone. A minor hydrocarbon-bearing interval was also identified between 1,942.5 and 1,944 meters MDRT (1,885 to 1,886 meters TVDSS).

The GWC was interpreted at 2,202 meters MDRT (2,107 meters TVDSS), and another possible GWC was interpreted at 1,944 meters MDRT (1,886.3 meters TVDSS). Total gross hydrocarbon pay was 67.72 meters.



5.3.1. Drilling and Well Completion

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



5.3.2. Well Logging and Formation Evaluation

The well logs of all discovery wells as well as selected key wells in the contract area were reviewed. The logs recorded in various open-hole sections along with 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	<u>KB</u>	<u>Drilled depth</u>
Only WCR available	12.19.2003	14 m	2537.0 m MDRT

5.3.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

5.3.3. Well Testing and Workover History

DST 1 was carried out in the perforation interval from 1,933 to 1,939 meters MDRT where the formation appeared tight. There was some water influx (approximately 13.8 barrels per day) that could be attributed to behind-casing channeling due to a poorly executed cement job. The test proved to be inconclusive for flow measurement and transient pressure determination.

DST 2 was carried out in the perforation interval from 1,939 to 1,944 meters MDRT and flowed gas at a rate of 1.7 million standard cubic feet per day (MMscf/d) from 16/64-inch choke. The well was opened at 16/64-inch choke size and then increased to 32/64-inch choke size for clean up; however, due to sand production, flow rates could not be measured at the larger choke size.

5.3.3.1. Drill Stem Test (DST)

Formation: Late Pliocene | Interval(m): 1933-1939 m MDRT |Flow period (hr): N/A| Bean (1/64 inch): N/A | FTHP: N/A | FBHP: N/A | Qgas: Appeared tight | Inconclusive

Formation: Late Pliocene | Interval(m): 1939-19344 m MDRT |Flow period (hr): 3.25 | Bean (1/64 inch): 16 | FTHP: 1682| FBHP: 2947 | Qgas: 1.7 MMscf/d |

Formation: Late Pliocene | Interval(m): 1939-19344 m MDRT |Flow period (hr): 5.45 | Bean(1/64 inch): 32 | FTHP: 517 | FBHP: N/A | Qgas: Not measured -sand production |

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. Formation dynamics tests

Tost No. Depth Depth (m) (DC	V 4 B 4	DT DE	CIII T		
Depth Dept						1	-סט	N I IVI	DI KE	SULI	<u> </u>	
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56 1887, 7 1838, 6 3193, 8 3190 20 2888, 5 34.7 51.3 G Good test.							2836.20	3128.0	24.3			
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31 1949.4 1896.6 3299.0 2912 20 2949.9 3207.6 54.3 52.5 T Tight and very unstable 1897.1 3209.1 2991.5 20 2941.1 3209.6 21 51.9 G Pre-test good but high drawdown on pumpout. 28 1944.3 1897.4 3211.9 20 2941.1 3209.6 21 51.9 G Pre-test good but high drawdown on pumpout. 28 1944.8 1897.7 3214.3 10			_		2928		2940.16	3213.1				
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1 1538.0 1524.0 2187.5 PO 2520.7 Dry test												
					Questionable;	L = Lost Sea	I; T = Tig	ht/Low F	ermeabili	ty; SC = 9	Super Cha	

5.3.4.2. Gas composition analysis

Formation: Late Pliocene | Interval(m.): 2169.3 | Sample No.: Sample 1.

C1: 99.65 %| C2: 0.05 %| C3: 0.01 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+: 0.02 %|

Carbon-dioxide: 0.16 % Nitogen+Oxygen: 0.11 % Sp.Gr.: 0.557 Molar Mass: 16.12

Formation: Late Pliocene| Interval(m.): 2219.0| Sample No.: Sample 2.

C1: 98.65 %| C2: 0.03 %| C3: 0.03 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+: 0.02 %|

Carbon-dioxide: 0.56 % Nitogen+Oxygen: 0.74 % Sp.Gr.: 0.563 Molar Mass: 16.30

Formation: Late Pliocenel Interval(m.): 1943.3| Sample No.: Sample 3.

C1: 99.75 %| C2: 0.03 %| C3: 0.01 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+: 0.02 %|

Carbon-dioxide: 0.10 % Nitogen+Oxygen: 0.09 % Sp.Gr.: 0.556 Molar Mass: 16.11

Formation: Late Pliocenel Interval(m.): 1943.2| Sample No.: Sample 4.

C1: 98.64 %| C2: 0.03 %| C3: 0.03 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+: 0.02 %|

Carbon-dioxide: 0.12 % Nitogen+Oxygen: 0.14% Sp.Gr.: 0.557 Molar Mass: 16.30

Formation: Late Pliocenel Interval(m.): 2076| Sample No.: Sample 5.

C1: 98.63 %| C2: 0.02 %| C3: 0.00 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+: 0.02 %|

Carbon-dioxide: 0.19 % Nitogen+Oxygen: 0.14 % Sp.Gr.: 0.566 Molar Mass: 16.4

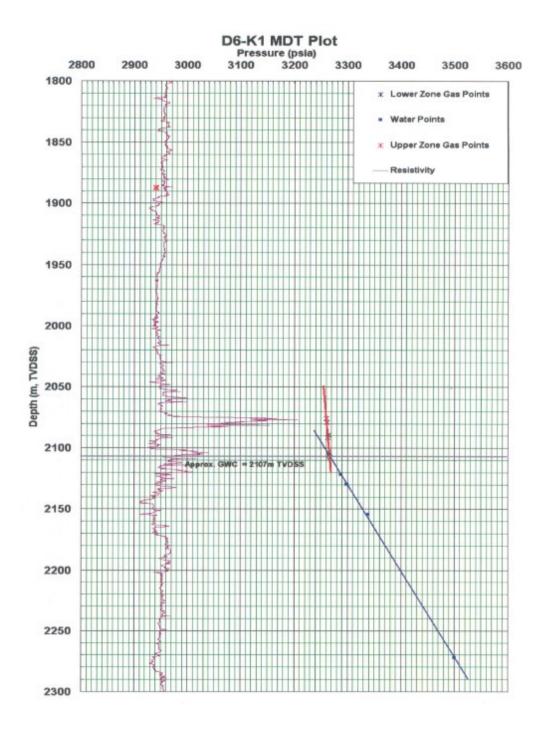
5.3.4.3. Geothermal gradient (from wireline logs)

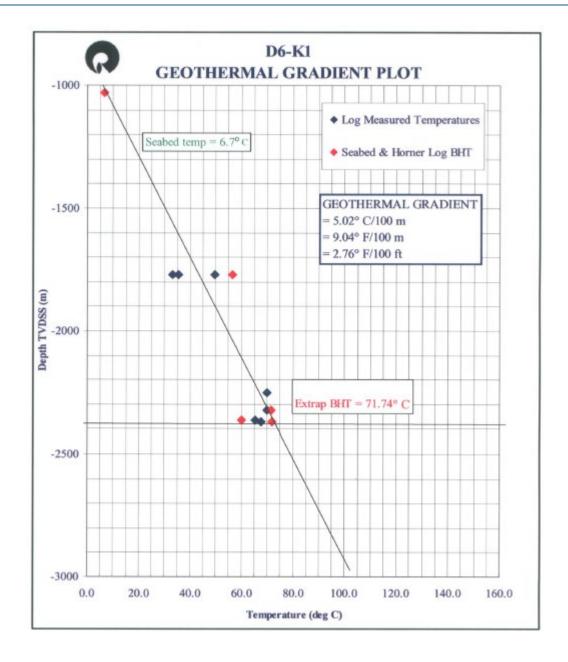
Formation: Pleistocene | Depth of measurement: 1803 m | Temperature: 33.3°C | Formation: Pleistocene | Depth of measurement: 1803 m | Temperature: 35.6°C | Formation: Late Pliocene | Depth of measurement: 2509 m | Temperature: 60.0°C | Formation: Late Pliocene | Depth of measurement: 2507 m | Temperature: 65.5°C | Formation: Late Pliocene | Depth of measurement: 2517 m | Temperature: 67.8°C | Formation: Late Pliocene | Depth of measurement: 2371 m | Temperature: 70.0°C | Formation: Late Pliocene | Depth of measurement: 2464 m | Temperature: 70.0°C |

5.3.4.4. Other reservoir studies

Biostratigraphy and paleoenvironments of the interval 1460 - 2220 m. Petroleum Geochemistry screening study of the interval 1405 - 2265 m.

5.3.4.5. Annexure to Reservoir Engineering studies/analysis





5.3.5. Geology and Reservoir Description

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

5.3.5.1. Geological description

The KG-DWN-98/3 Contract Area lies within the northern KG Basin, offshore Andhra Pradesh, along the passive continental margin of India's east coast. The basin's structural evolution began with rifting during the Permo-Triassic period, associated with the breakup of Gondwanaland. This process led to the formation of northeast/southwest-trending Gondwana Grabens, overprinted by Jurassic-Cretaceous horst and graben systems linked to the separation of India and Antarctica.

Following the Late Cretaceous, the region experienced passive margin progradation toward the southeast, intensified by tectonic tilting during the Late Cretaceous to Early Paleocene, coinciding with the Himalayan orogeny. This tectonic activity buried earlier horst and graben topography with widespread Late Cretaceous clastics.

Coastal basins to the west developed during the Late Jurassic, with northeast/southwest-trending grabens and ridges, featuring thick pre-Tertiary sediments in the lows and thin sequences over highs. The most significant regional unconformity lies between the Mesozoic and Tertiary.

During the Neogene, thick sedimentary sequences accumulated offshore, mainly sourced from the Himalayan fan system. The Miocene tilting event further enhanced sediment influx from proto-Krishna and Godavari Rivers, resulting in delta progradation and the establishment of present-day delta promontories in the Early Miocene.

The main exploration target is the Tertiary passive margin system, characterized by Miocene to Pleistocene submarine channels and fan sandstones, sourced from the Godavari River and deposited along the mid to lower slope.

Structurally, the basin is dominated by northeast-trending, down-to-basin growth faults and associated toe thrust complexes, formed during two main phases: Late Eocene-Early Miocene and Late Miocene-Pliocene. Stratigraphic traps, including updip pinchouts of slope fan complexes, are also considered significant exploration targets.

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 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.

RE SERVOIR PARAMETERS and ORIGINAL GAS in PLACE as of JANUARY 1, 2025 for the KG-D6-K1 DISCOVERY of KG/DWD SF/D6F/2025 CONTRACT AREA

	Reservoir	
		Total
Low		
Area, acres	618	
Gas Formation Volume Factor, scf/rcf	0.0047	
Average Thickness, ft	24.1	
Average Porosity, %	31.00	
Average Water Saturation, %	48.00	
Original Gas in Place, 10 ⁹ ft ³	21.80	21.80
Original Gas in Place, 10 ⁶ eq ton	0.55	0.55
Best		
Area, acres	1,112	
Gas Formation Volume Factor, scf/rcf	0.0047	
Average Thickness, ft	18.8	
Average Porosity, %	32.00	
Average Water Saturation, %	43.00	
Original Gas in Place, 10 ⁹ ft ³	35.31	35.31
Original Gas in Place, 10 ⁶ eq ton	0.89	0.89
High		
Area, acres	6,771	
Gas Formation Volume Factor, scf/rcf	0.0047	
Average Thickness, ft	12.0	
Average Porosity, %	33.00	
Average Water Saturation, %	38.00	
Original Gas in Place, 10 ⁹ ft ³	153.58	153.58
Original Gas in Place, 10 ⁶ eq ton	3.87	3.87
Original Gas III Flace, To eq toll	3.01	3.01

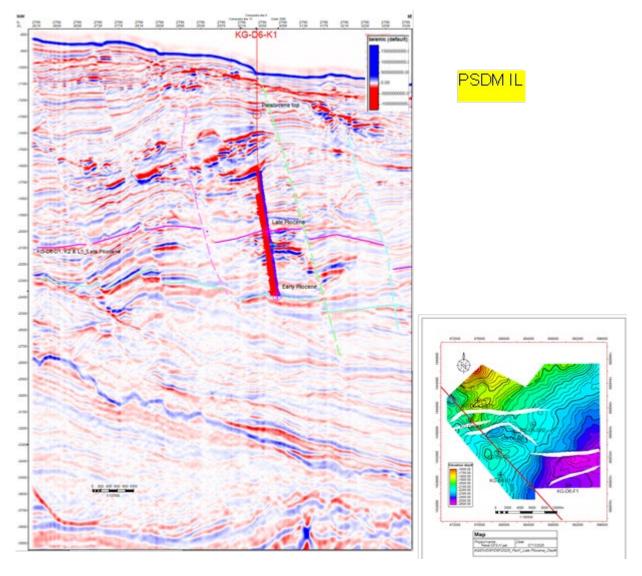
Note: Conversion used 10° s of equal to 0.02519 10° eq tone.

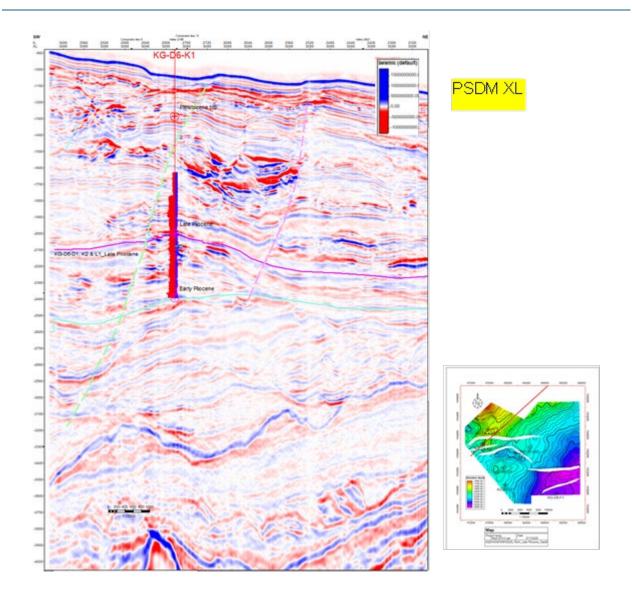
Volumes estimated by a Third Party

The operator has reported an in-place volume of 3.98 MMTOE (Best case).

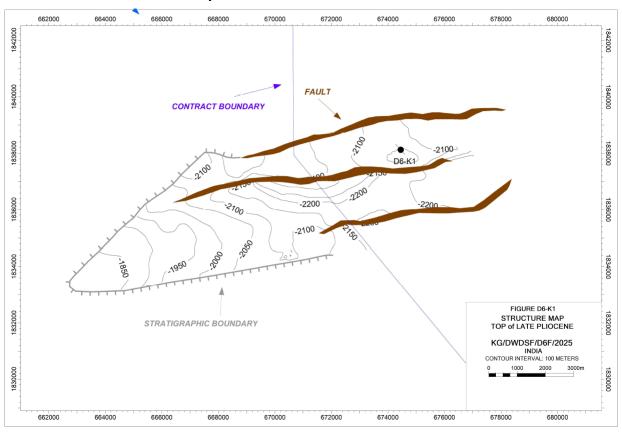
5.3.7. Annex

5.3.7.1. Seismic Sections

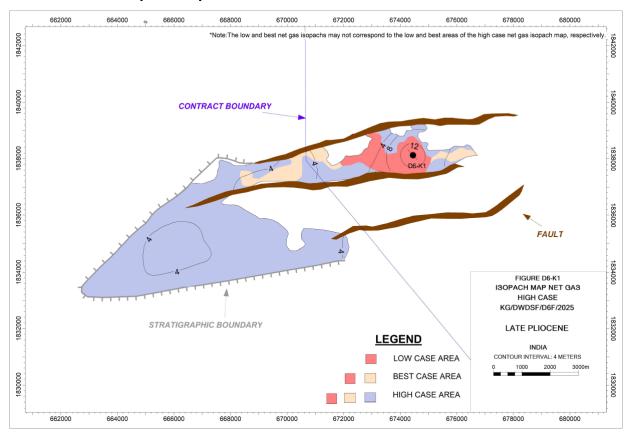




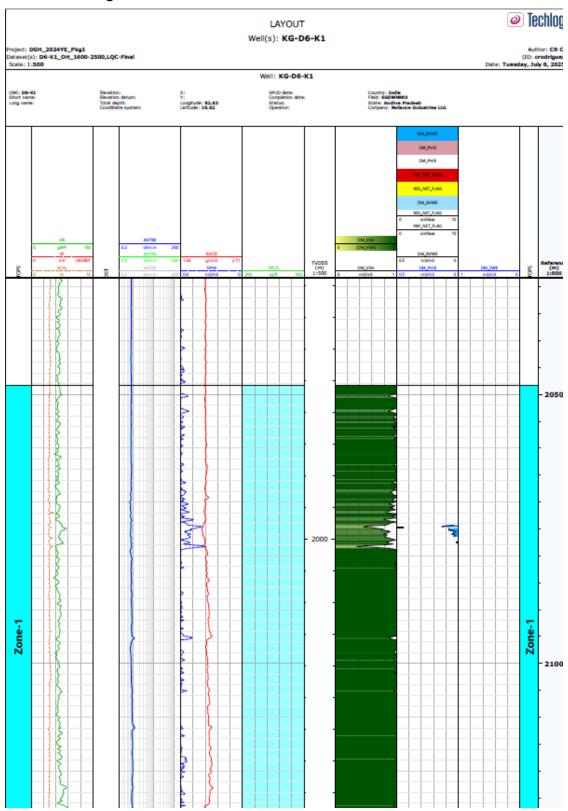
5.3.7.2. Structural Maps

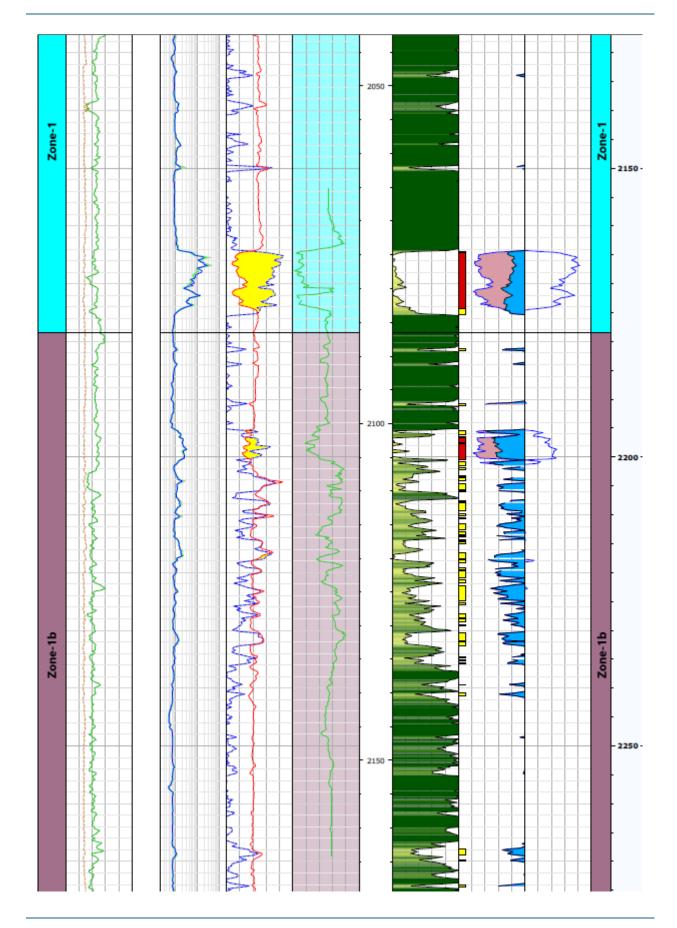


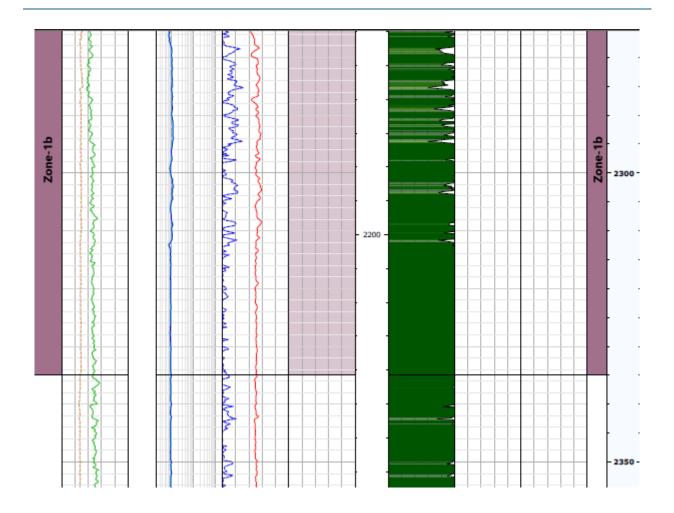
5.3.7.3. Isopach Maps



5.3.7.4. Log Motifs







5.4. D6-SH2 DISCOVERY AND FIELD DESCRIPTION

D6-SH2 is the sixth exploratory well drilled in the KG-DWN-98/3 Contract Area, offshore eastern India, at a water depth of 1,408 meters, targeting the SH2 prospect.

The main geological objectives were Pleistocene and Late Pliocene channel sandstone reservoirs.

The well was spudded on December 27, 2002, and reached a TD of 2,710 meters on January 15, 2003. It was drilled as a sidetrack well with a kickoff point at 2,022 meters, using the Transocean Sedco Forex Discoverer 534 DP drillship.

Operations involved real-time monitoring using mud logging, LWD/MWD, and 3–D seismic data integration, with continuous communication between the rig and the interpretation center for optimized decision-making.

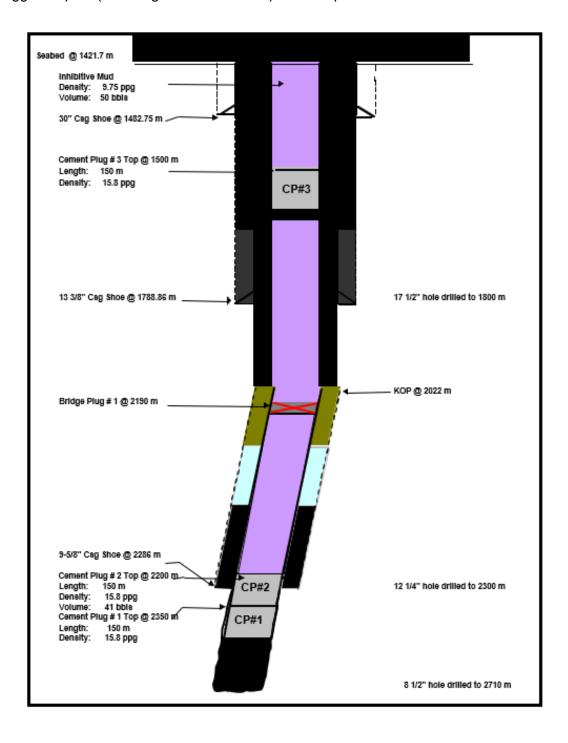
Wireline logs, mud logs, cuttings, and MDT data confirmed gas-bearing sands in the Upper Pliocene, over a gross interval from 2,390.5 meters to 2,423 meters MDRT (2,379 meters to 2,410 meters TVD RT). The reservoir displayed grain size heterogeneity ranging from fine to very coarse sandstone.

No definitive GWC was observed, but an interpreted GWC was placed at 2,423 meters MDRT (2,409.9 meters TVDRT/2,396 meters TVDSS). The well encountered gross hydrocarbon pay of 33 meters.

No DSTs have been performed in this well.

5.4.1. Drilling and Well Completion

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



5.4.2. Well Logging and Formation Evaluation

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

5.4.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	<u>KB</u>	<u>Drilled depth</u>
Only WCR available	12.27.2002	13.7 m	2710.0 m MDRT

5.4.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

12.25 PEX-HRLA-HNGS-FMI-SP (2300 – 1788.9 m)
MDT-GR (2052.9 – 1992.6 m)

8.50 PEX-HRLA-HNGS-DSI (2294.5 – 2705 m)
MDT-GR (2379.5 – 2570.6 m)
CSAT (VSP) (2100 – 2680 m)

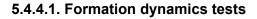
5.4.3. Well Testing and Workover History

5.4.3.1. Drill Stem Test (DST)

No DST has been performed in this well.

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 PVT data/results are included.



Run	Seat	File	Approx	Depth	Depth	Depth	IMHP		Temp	IHP	Min. FP	Form. Pr.	Remark	Form. Pr.	Strain G	Fm Press	FMHP	Mobility	MDT	MDT	Poss	LFA	Comments				1-1-5
No.	No.	No.	Time	m	m RT	m	psia	Hydro	Deg C	EMW	psia	psig		psia	psia	ppg	psig	md.ft/cp	Grad	Grad	Fluid	Fluid		OK	Dry SI	SC	T PO SAM
				MDRT	TVD	SS	Strain G	static psi		ppg	Strain G	Strain G		Quartz G	Fm Pres	Qtz G	Strain G	15%	Qtz psi/ft	Qtz psi/m	Type						
4 1			10th Jan	nuary 200	3			100			n n								100 0		545	1					
1	1	50	12:38	1992.6	1992.54	1978.83	3227.4	2834.0	25.4	9.52			5 cc+5 cc+10 cc	2950.60	2944.10	8.68	3229.5	1723	0.451	1.481	Water		Good test - mod p	1			
1	2	51	12:53	1993.0	1992.94	1979.23	3230.1	2834.6	25.6	9.53			10 cc+10 cc	2951.08	2944.50	8.68	3229.6	332.5	0.366	1.200	Water		Good test	1			
1	3	52	13:08	1994.3	1994.24	1980.53	3233.0	2836.4	25.9	9.53			10 cc+10 cc	2953.08	2946.50	8.68	3232.0	603.5	0.469	1.538	Water		Good test	1			
1	4	53	13:26	2047.5	2047.38	2033.67	3318.8	2912.0	26.4	9.53			10 cc+10 cc	3032.80	3025.80	8.68	3319.1	16.5	0.457	1.500	Water		Good test	1			
1	5	54	13:43	2052.9	2052.76	2039.05	3328.6	2919.6	27.0	9.53			10 cc+10 cc				3327.0						Dry test		1		
1																											
2			16th Jar	nuary 200	3			2 3			7 3																
2	1	33	16:58	2391.0	2379.50	2365.79	4045.0	3384.4	41.7	9.99			5 cc Auto reset x 2										tool resetting x 2			1	
2	2	34	17:04	2390.9	2379.40	2365.69	4045.0	3384.2	41.7	9.99			5 cc Auto reset x 3										tool resetting x 3			1	
2	3	35	17:10	2391.1	2379.60	2365.89	4045.0	3384.5	42.0	9.99			5 cc				4045.0			()			Dry test		1		
2	4	36	17:20	2391.2	2379.70	2365.99	4045.7	3384.6	42.1	9.99			5 cc +5 cc				4045.5			(-)			Dry test		1		
2	5	37	17:35	2422.1	2408.84	2395.13	4095.7	3426.1	42.4	9.99			10 cc				4095.6						Dry test		1		
2	6	38	17:43	2422.4	2409.12	2395.41	4095.7	3426.5	42.9	9.99			10 cc +5 cc Auto Rest x 2	3666.50	3674.00	8.92	4096.6	0.2	#VALUE!	#VALUE!	#VALUE!		Supercharged			1	
2	7	39	18:03	2422.7	2409.40	2395.69	4097.6	3426.9	43.5	9.99			10 cc (Not Stable)	3630.45	3638.50	8.83	4097.3	9.2	-39.243	-128.750			Low Perm	1			
2	8	40	18:23	2423.0	2409.69	2395.98	4098.1	3427.3	43.8	9.99			10 cc (Not Stable)	3630.75	3638.75	8.83	4098.0	179.4	-2.939	1.034			Not Stable	1			
2	9	41	18:40	2423.3	2409.97	2396.26	4098.3	3427.7	43.9	9.99			10 cc (Stable Press)	3628.05	3636.10	8.82	4097.7	80.0	0.610	-9.643	Water		Very good test	1			
2	10	42	18:48	2423.6	2410.25	2396.54	4099.1	3428.1	44.2	9.99			10 cc (Stable Press)	3628.61	3636.80	8.82	4099.0	68.1	0.610	2.000	Water		Very good test	1			
2	11	43	18:57	2423.9	2410.53	2396.82	4099.2	3428.5	44.3	9.99			10 cc +10 cc (Very. Unstable)		3728.00	8.87	4098.9	2.5	21.434	70.321	Water		Very Unstable Pre	ŝŝ	1		
2	12	44	19:19			2396.92	4102.0	3428.6	44.6	10.00			10 cc	3740.00		9.09							Very Unstable Pre	ŝŝ	1		
2	13	45	20:06	2531.9	2512.27	2498.56	4273.0	3573.2		9.99			10 cc								- 4	- 2	Dry test		1		
2	14	46	20:19	2539.9	2519.78	2506.07	4284.8	3583.9	48.2	9.99			10 cc +5 cc Supercharged	4275.00	4284.50	9.94	4284.6						Supercharged			1	
2	15	47	20:37	2546.8	2526.28		4296.0	3593.1	48.3	9.99			10 cc	3780.80	3789.10	8.77	4296.0	267.0	-23.174	-76.031	-	-	Mod Stabilisation	1			
2	16	48	21:03	2549.2	2528.53		4300.0	3596.3	48.9	9.99			10 cc	3782.21	3790.70	8.77	4300.0	141.9	0.446	0.627	Water		Very good test	1			
2	17	49	21:16	2552.6	2531.73		4304.0	3600.9	49.0	9.99			10 cc	3786.89	3795.40	8.77	4304.1	394.7	0.446	1.463	Water		Very good test	1			
2	18	50	21:40	2564.4	2542.81	2529.10	4324.0	3616.6	49.4	9.99			10 cc	3802.64	3811.45	8.77	4323.5	133.0	0.433	1.421	Water		Very good test	1_			
2	19		21:52	2570.6	2548.63	2534.92	4333.0	3624.9	49.6	9.99			10 cc	3811.00	3819.70	8.76	4333.4	606.1	0.438	1.436	Water		Very good test	1_			
2	20	52	22:09	2544.3	2523.93	2510.22	4290.0	3589.8	49.6	9.99			10 cc	3775.65	3784.45	8.77	4291.4	430.0	0.436	1.431	Water		good test	1			
																							Mod good test.				
-																							Took 2 gas				
2	21	53	22:34	2422.5	2409.21	2395.50	4096.0	3426.6	46.5	9.99			10 cc + 10 cc Auto Reset x 2	3627.73	3628.00	8.83	3636.6	23.8	0.128	1.289	Gas		samples	1			2
																							Good test - gas				
																							and water sample.				
2	22	54	0:38	2423.1	2409.78	2396.07	4093.4	3427.4	45.6	9.98			10 cc	3627.89	3635.80	8.82	4093.0	68.0	0.086	0.281	Gas			1_			1
																							Good test - water				
													12.7										sample. Res =				
2	23	55	1:09	2423.5	2410.16	2396.45	4094.0	3428.0	46.2	9.98			10 cc	3628.54	3636.70	8.82	4094.4	127.2	0.521	1.711	Water		0.90.	1_			1
																							Good test - water				
																							sample. Res =				
2	24	56	2:10	2544.4	2524.02	2510.31	4287.8	3589.9	47.1	9.98			10 cc	3775.35	3783.00	8.77	4288.0	124.8	0.393	1.289	Water		0.94.	1			1

5.4.4.2. Gas composition analysis

No data available.

5.4.4.3. Geothermal gradient (from wireline logs)

Formation: Pleistocene | Depth of measurement: 2300.0 m | Temperature: 30.0°C | Formation: Pleistocene | Depth of measurement: 2052.9 m | Temperature: 59.0°C | Formation: Late Pliocene | Depth of measurement: 2708.0 m | Temperature: 46.7°C | Formation: Late Pliocene | Depth of measurement: 2570.6 m | Temperature: 50.0°C | Formation: Late Pliocene | Depth of measurement: 2700.0 m | Temperature: 56.6°C |

5.4.4.4. Other reservoir studies

Biostratigraphy and paleoenvironments of the interval 1805 – 2710 m. Petroleum geochemistry screening study of the interval 1805 – 2675 m.

5.4.4.5. Annexure to Reservoir Engineering studies/analysis

No data available.

5.4.5. Geology and Reservoir Description

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

5.4.5.1. Geological description

The KG-DWN-98/3 Contract Area is located along the passive continental margin of India's east coast and is characterized by a heterogeneous continental lithosphere overlying an Archean basement. The basin's tectonic evolution began with Permo-Triassic rifting related to the breakup of Gondwanaland, forming northeast/southwest-trending Gondwana grabens, which overprinted older Archean Eastern Ghats fault trends. The rift system developed as linked rift-rift-rift triple junctions with failed arms (aulacogens) creating favorable locations for large-scale fluvial drainage systems.

During the Jurassic-Cretaceous breakup between India and Antarctica, a series of northeast-southwest en-echelon horsts and grabens developed, overprinting the older northwest/southeast-trending Pranhita-Godavari Graben, extending offshore. These grabens were filled with thick Middle Jurassic to Early Cretaceous clastics, which were later buried by widespread Late Cretaceous sediments.

The Late Cretaceous to Early Paleocene period saw tilting of the Indian sub-plate toward the southeast, driven by the uplift of northwestern India (Deccan hotspot) and subsequent collision with the Eurasian plate, leading to the formation of the Himalayas. Northeast/southwest-trending Cretaceous volcanic highs represent magmatic activity along an Archean structural weakness just before the early drift phase.

To the west of the deepwater area, Late Jurassic coastal basins developed, characterized by northeast/southwest-trending grabens and ridges with moderately thick pre-Tertiary sediments in the depressions and thin or absent sequences over the ridges. A widespread Mesozoic-Tertiary unconformity was observed onshore and offshore. Paleogene clastics in coastal basins were sourced mainly from the Indian craton, while Neogene deepwater sequences were dominated by sediments from the Himalayan fan system.

The regional tilting triggered a major transgression and increased sediment influx from the proto-Krishna and Godavari Rivers, promoting vigorous passive margin progradation southeastward. Since the Cretaceous, sediment input has been dominated by these river systems, and the current delta configurations were established in the Early Miocene.

The Tertiary passive margin system, thickening basinward, is the main exploration target in KG-DWN-98/3. Depositional systems range from shoreface to deepwater submarine channels and fan sandstones. Primary exploration targets include Miocene to Pleistocene intra-rift river

channels and submarine fan sandstones sourced from the Godavari River system and deposited on the mid to lower slope.

Structural features in the basin are mainly controlled by sediment loading and shelf-edge collapse, forming genetically linked growth faults and toe thrust complexes. Two major tectonic phases affected the area: Late Eocene-Early Miocene and Late Miocene-Pliocene to Present. The dominant structures include northeast-trending, down-to-basin growth faults and related younger toe thrusts. Stratigraphic trapping is also significant with traps commonly associated with updip pinchouts of slope fan channel complexes.

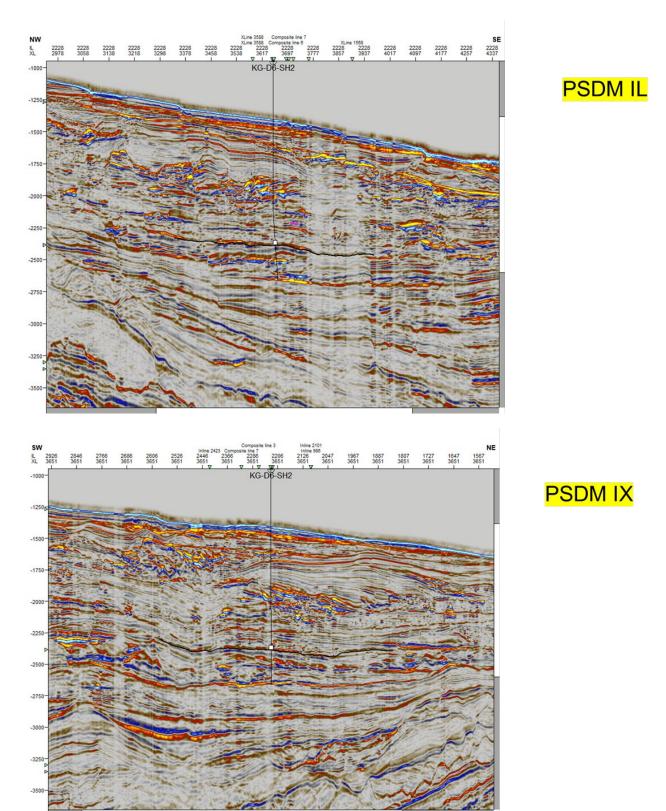
5.4.6. Reservoir Properties and OHIP

Formation testing using MDT with fluid sampling confirmed the presence of gas at the top of the reservoir, underlain by a free water leg. Well log interpretation indicates a gas-bearing net pay interval of approximately 1 meter at the top of the interval, with a gas-water contact observed within the reservoir. An attempt was made to delineate the reservoir extent through attribute-based seismic interpretation. However, due to the sub-seismic thickness of the interval, it could not be confidently mapped. This suggests that the accumulation is laterally limited. Given the limited thickness and areal extent, and the absence of a mappable seismic expression, volumetric estimation is not feasible at this stage, based on the currently available data.

The operator has not reported any in-place volumes.

5.4.7. Annex

5.4.7.1. Seismic Sections



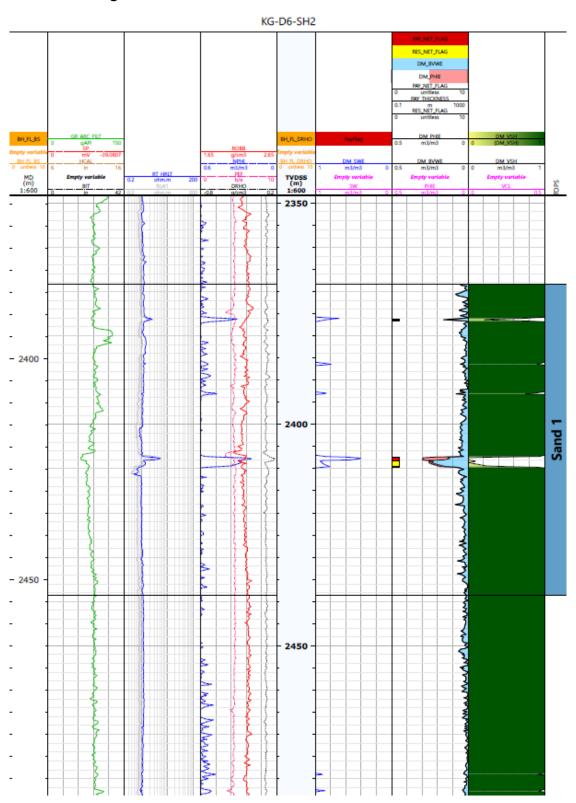
5.4.7.2. Structural Maps

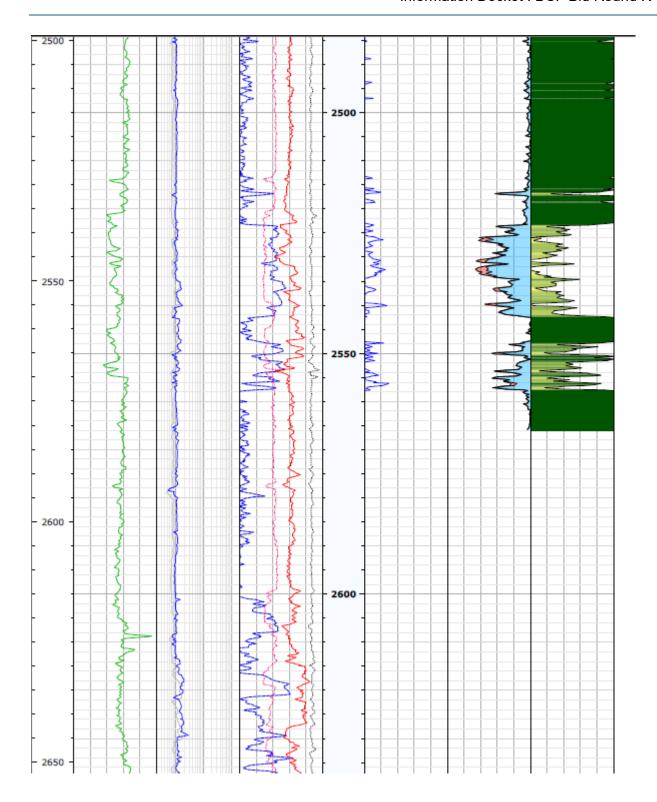
Maps were not generated for this case, as mentioned in 5.4.6. Reservoir Properties and OHIP.

5.4.7.3. Isopach Maps

Maps were not generated for this case, as mentioned in 5.4.6. Reservoir Properties and OHIP.

5.4.7.4. Log Motifs





5.5. D6-D1 DISCOVERY AND FIELD DESCRIPTION

D6-D1, drilled by RIL, is the eighth exploratory well in the KG-DWN-98/3 Block offshore eastern India, at a water depth of 1,278 meters. Its primary objective was to explore the hydrocarbon potential of Pliocene sinuous channel complexes within Channel-A, situated downdip of the Dhirubhai-1 discovery. Additionally, the well was drilled to test a new amplitude anomaly in the Lower Pliocene and to extend the reservoir bodies previously encountered in well D6-A1, located 18 kilometers to the west-southwest.

Drilling operations commenced on March 20, 2003, and the well reached a TD of 2,820 meters MDRT on April 7, 2003, using the Transocean Discoverer 534 DP drillship. Real-time monitoring techniques, including mud logging, LWD/MWD, and continuous interpretation support, ensured accurate drilling and successful penetration of the targeted stratigraphic intervals.

Two hydrocarbon-bearing zones were encountered during drilling: one in the Late Pliocene, with a gross interval from 2,180 to 2,490 meters MDRT and a GWC at 2,336.8 meters, and another in the Early Pliocene, extending from 2,573.7 to 2,810 meters MDRT, with a GWC at 2,750.7 meters. The reservoirs exhibited significant grain size variability, ranging from pebbly sandstones to fine-grained sandstones and siltstones, all deposited within stacked sinuous channel turbidite facies.

No production testing was conducted, and the well was subsequently plugged and abandoned. However, it was officially declared a gas discovery.

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.

No well diagram was submitted.

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 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.

5.5.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	<u>KB</u>	<u>Drilled depth</u>
Only WCR available	03.20.2003	13.7 m	2820.0 m MDRT

5.5.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

```
12.25 PEX-HRLA-HNGS (2480 – 1880 m)
FMI-DSI (2480 – 1880)
MDT-GR single probe (2412.2 – 2213.8 m)
CM (2367m – 2265m / 2140m – 2080 m)
ECS (1882m – 2473m)

8.50 PEX-HRLA-HNGS-CMR (2823 – 2467.9 m)
FMI-DSI-GR (2823 – 2467.9 m)
MDT-GR single probe (2807 – 2488.8 m)
MDT-GR Dual Packer (2634 – 2575 m)
USIT-CBL-VDL-CCL-GPIT (2467 – 1488 m)
MSCT-GR (2785.5 – 2506m)
VSP (2810 – 1860m)
MDT-GR (2596 – 2511.8m)
```

5.5.3. Well Testing and Workover History

5.5.3.1. Drill Stem Test (DST)

No DST has been performed in this well.

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 PVT data/results are included.

5.5.4.1. Formation dynamics tests

			Pressure approaching IHP.		(10)				3334.9	9.78	10	3230.00	Working 32	2.3+0.59+2.9 litres PU V	-	10.12	40.3	2753.3	3332.8	1922.10	1935.81	1936.0	48	8	9
	_		Dry test. Tight.						3372.8				Working	3		10.12	46.0	2788.1	3375.0	1946.59	1960.30	1980.5	300	8	00
F	-		Dry test. Tight.						3883.8				Working	3 3		10.11	50.5	3213.0	3884.4	2245.29	2259.00	2262.2	206	178	7
	-		Dry test. Tight.						3901.6				QG Not Working			10.11	50.5	3233.5	3911.2	2259.73	2273.44	2278.5	120	177	2
		_	Good test. Fast build up. Good seal. Good repeat of first MDT run.		GE C	0.478	0.146		3924.2	9.01		3491.20		of s	71	10.11	503	3229.5	3904.5	2256.89	2270.60	205.5	0.32	175	5
			Dry test. Tight, followed by seal leaking						3934.8				QG Not Working	50	7.5	10.12	49.3	3233.5	3914.5	2259.73	2273.44	2278.5	2323	173	
			Pressure not stabilised. Losing seal. Dry test. Tight.						3954.0				QG Not Working			10.15	46.7 1	3259.5	3958.4	2277.99	2291.70	2298.0	2210	122	2
			Pressure not stabilised. Losing seal. Dry test. Tight.	•	e				3365.6	9.72		3250.00	QG Not Working 32			10.12	38.6		3375.7	1946.00	1959.71	1969.9	20:27	170	2 2
_		_	Gas Sample -450 cc MPSR 1767. Press not fully stabilised	Gas a	Gus	0.509	0.155		3860.5	914		3489.70		Infl Pkrs 300, 500, 600 psig. PO 0 7+2+2+10+22+26 litres V	=	10.11	47.3	3165.5	38291	2211.93	-	2228	17.45	167	-
			leak in packer/ tool. POOH 20 20 hrs	b) ==										Test packer in casing 5 cc x 20 - limit 2000	1					Dual Packers	8 12-1/4" hole - Du	1869	20:10 3rd 4th April	117	24
+	-	H	Dry											10 cc x 30		113	+		3812.2	2197.94		2213.8	19.48	3	23 12
	-	İ	Slow Leaking Packer								10.07		3833.00	-		13				_		2234.5	19.12	1 =	3 22
	-		Dry											10 cc x 30		10.13	428	3173.3	-		2231.10	2234.0	19.03	112	23 13
			Gas sample - 450 cc MPSR 1766	Gas 1	G	0.212	0.065	1114.0	3493.1	9.02	9.00	3492 60	3485.02 34	0E x 30		113			-	2256.89	_	2275.5	18.04	≡	8
_		_	Gas sample - 450 cc MPSR 1766	688	Gus	0.242	0.074	260.8	3964.8	8.92	8 90	3498.50	3490.98	10 cc x 30 + 10 cc x 30 3		10.13	45.7	3269.5	3962.8	2285.00	2298.71	2305.5	17.25	10	17
_		_	Water sample - 1 gal SC-1; No 285	Water 1	Water	1.426	0.436	1220	4017.3	88	881	3505.90	3498.14 35	10 cc x 30 3		10.13	486	3311.5	4014.8	2314.58	2328 29	2337.5	16.25	18	8
		_	Water sample - 1 gal SC-2: No 284	Water 1	Water	1.427	0.436	220	4049.7	88.82	8.80	3632.50	3524.10 36			10.13	48.7 1	3337.4	4043.4	2332.79	2346.50	2357.5	15.40	8	35
			Lost Seal Dry					H						10 cc x 30 10 cc x 30		10.15	457			_		2408.3 2412.2	15:20	107	= =
	-	_	Dry Good test		Water	1432	0.438	24.0	4115.5	888	888	3586.10	3578.39	4		1014		3391.5	4088.5	2370.83	2357.84	2400.0	14.57	ਜੇ	2 =
		Ħ	Dry											10 cc x 20		014						2354.3	14:45	8 2	10 4
		-	Good test		Water	388	0.423	0,	4024.2	882	88	3513.20	3505.69	× 20		4	+		+ +		-	2343.5	1423	3 =	00
+	-	_	Dry Low Perm		Water	**	0.423	48	4021.7	888	88			_		114	+	3316.1				-	14.88	8	7 6
			Very slow build up Good test		Gus	0.187	0.057	929.1	4010.6	8.83	8.81	503.70	38.364	10 cc x 40 3		10.14	41.8	+	4013.5	2311.35	2325.06	2334.0	13.50	88 99	4 0
H			Good test		Ges	0.253	0.007	529.0	3681.8	888	8.87	3500.30	3493.38	88		214	H		-			-	13.29	88 8	w
		-	Good test		ge G	0.218	0.086		3916.7	9.01	99	3491.50		00 x 40		1.13	413		3915.8	2257.36 2757.00	- 3	2276.0	13.07	R 12	3 -
PO SAM	ory or oc i	9		Fiuio	Type	Otz psi/m	Otz psift	na.recp	Strain G	Strain G	Otz G	Fm Pres	uartz G Fr	Q	Strain G Strain G	ppg Str	neg c	static psi	train G st	SS	No.	MDRT	IIIIe		
8	SAM: SAMPLE		Comments		Poss Poss	MOT water>	E MDT			-	8	_	2	Remark	0 5	8	= =	_	_	-	*	Depth	Арргох	F (2)	Run Seat
	PO: PUMP OUT	PO: PUI			0.365	a	Pranay	Amit Somar	howdhury.	Manabesh C	Observer(s): Steve Robinson, Manabesh Chowdhury, Amit Soman ,Pranay	erver(s): Ster	Obs.		RIH to TD after pressure survey Observer(s)	pressure si	to TD after	2	13.71		tion (m RT-SS)	Datum Elevation			
	#	T: TIGHT			0.200	× ×									Max Temp:		-			Strain					
	SC: SUPER CHARGED	SC: SUP										#	Took		Tool Configuration:	-	H	-	L	Quartz	Senal Numbers:	Gauge Sena			H
	OF SEMETALLONG	or. oco			100	1,6677		max remp. or o at		April 2003	12-1/4" - 17th-18th April 2003		Date:		Dete.					2		SACO INDICATE.			
)RY	DRY: DRY			5 6			Max Temp: 50.5°C at		April 2003	12-1/4" - 2nd 4th April 2003		Date:		2	H	H	L	L	2		Mall Manne			t
	OK: GOOD TEST	OK: 600													DATA	SURVE	D6-D1 MDT PRESSURE SURVEY DATA	무용	6-D1 N	0					

	No Seal after 30 litres										60	or arrest on carrie or nadius.		_		-	CE37 2027						
out.	Very slow build up - 2dry. Lost seal. Reinflated. Dry test		Water	132.534	40.397		4639.2	8.92		3870.00	QG Not Working	PO= 23+0.6 litres - Lost Seal Infl Pkrs 560 psi - 4.6 litres PO= 4.0 litres			9 10.70	3617.1 54.9	4630.5 36	2529.42 46	2543.13 25	2579.8	4:15	260	on
-	Poor permeability. LFA = gas. Gas sample = 1 gal. MRSC - 284. Pressure suggests water, but LFA suggests gas	Gas	Water	3 359	1.024	8	4616.9	895		3875.80	OG Not Working	mm rxis 500 ptig - 10 intrea. PO=4.7+1.1+4.6-0.585+7.0+11. 7+4.7+2.3+36.3 itses LFA= gas. Took gas sample MRSC. 284 Infi Pkrs. 300 ssig - 11.7 itres.			5 10.71	3609.4 50.5	4626.9 36	2524.04 46	2537.75	2573.7 2	525	245	-
2	No seal										QG Not Working	Infl Pkrs 500 psig - 20+4 litres PO= litres					100		-	-			N
	No seal. Tool plugging, when pump up pkrs.										-	Infl Pkrs 120 psig - 21.6+2.3 litres. Unable to hold seal.						100				-	Uh .
	Very poor permeability. Not good enough for a sample. More to 2511.8m		Water	1.495	0.456		4585.7	8.81		3762.00	-	Infl Pkrs 400 psig - 6.4 litres. PO= 2.3+2.3+0.59 litres							-			72	ω
1	Moderate permeability, LFA = water, Sample = 1 gal. MRSC - 285		Water	2.210	0.674		4853.4	8.78		3731.59	-	Infl Pkrs 277 psig - 10.5 litres. PO= 10.5+1.2+0.59+1.2+2.3 litres											7
	Slow build up.		Water	1.503	0.458	ē	4504.8	8.81		3731.00	QG Not Working	Infl Pkrs 277 psig - 10.5 lares. PO= 10.5+1.2+0.59+1.2+2.3 litres			5 10.67	3531.8 53.5	4509 1 35		2483.14 24	2511.8	116	8	da.
	Good test		Water	1.440	0.439	0,696	4986.3	8.80	8.78	4121.30	4110.00	000		H			39		744.76 27 hole - Dual I	2807 0 2744,76 2803 - 8-1/2" hole - I	14:14 2807 I 12:13th April 2003 -	12	17
	Water sample, 1 gall MRSC - 284 Good test		Water	1.404	0.428	25.0	4901.2	8.80	8.78	4057.60	4047.45	5cc x 30, 10cc x 80 5cc x 30, 15 x 60			5 1066	3842.1 63.5 3844.4 67.0	4902.0 38	2687.61 49		2758.2 2	12:03	8 2	5 3
oh oh od	Fair Perm Good test		Ges Water	0.332	0.101	16.0 1771.0	4892.7 4892.7	883	8.81	4045.70 4051.70	4037.15	5cc x 30, 10cc x 60 5cc x 30, 10cc x 60			1 1066	5.8 67 67	23 38 38		595.46 26 596.87 26	2749.5 2 2741.5 2 2753.2 2			Z (f) 4s
	Gas sample, MRMS 1768 Good test		Ous	0.257	0.078		4871.1	00 00 00 00 44 44	8.82	4045.80	4036.50	5cc, 10cc x 30, PO 1170 cc 5cc x 30, 10cc x 60				8.2 63.3	75.3 38.3 38.3		581 56 26 584 50 26	2736.0 2			. 12 9
	OK Good test Good test		0 0 0	0.304	0.093	1069.0	4858.1 4862.3 4869.7	8 8 8 8 85 8 85	00 00 00 00 00 00 00 00 00	4045.10 4045.30 4044.90	4034,10 4035,05 4035,77	5cc x 30, reset, 5cc x 60 5cc x 30, 10cc x 60 5cc x 30			0 1068 3 1067 6 1069	3806.0 66.0 3810.4 63.3 3814.0 58.6	4862.4 38 4866.5 38 4877.7 38	2662.24 49 2665.36 49 2667.85 48	675.96 26 679.07 26 581.56 26	2729.7 2675.95 2733.2 2679.07 2736.0 2681.56	11:34	8 2 8	u = 6
	Cow perm, poss plugging, PO <3 stk Good test, Lost Seal - Re-set		Gus	0.158	0.048	6.0	4842.4	88	88	4043.70	4033.50	partial plugging, PO 3 stks				3796.5 59.7	4840.9 379	2655.58 48		2722 2		-	co co
	c1 stk Dry test		Gus	-2057,158	0.073	6.0	4837.4	8.89	00 00 00 00	4042.10	4032.03				0 1065	3792.5 57.0 3805.8 56.0	4833.6 379 4852.8 380	2652.73 48 2662.07 48	2666.44 26 2675.78 26	2719.0 2 2729.5 2	9.29	8 %	0 4
	Dry test Low perm, poss plugging PO						4841.4					5cc x 50 5cc, 5cc, 10cc x 30. Suspect					37.6 37						
	Good test Dry test		Gu	-1104.526	0.067	39.0	4834.6	888	8.87	4042 20	4031.52	5cc x 30, 5cc x 30			6 10.66 4 10.69	3789.4 65.6 3794.6 63.4	4832.8 378 4851.6 379	2650.59 48 2654.24 48	2664 30 26 2667 95 26	2716.6 2	14:32	8 0	19
	Good test. Gas Sample. MRMS-1769		Ou .	130 566	64		4747.0	903	901	4031.80	2	5cc x 30. PO and take 450 cc MRMS-1769					30 37			2863.5			
	Dry test						4825.0				Ħ	5cc x 30			+	8 8 8	50 37	-14-		2710.4		+	325
	Dry test						4805.0				Ħ	5cc x 30		H	2 1066	3786.2 65.0 3776.3 65.2	4802.8 370	2634.24 49	2655.06 26	2706.2	15.06	88	2 22
	Seal Failure						4804.0					5cc x 30, lost seal. Retract and re-set. 5cc x 30				5.0 64.9	13.5 378			2697.3 2			ы
	Dry test						4799.1 4793.4					5cc x 30				44 63	4906.6 379 4796.0 379	2625.88 49 2625.97 47	2639.69 26	2688.9	15.35	110	23 23
-	Dry test						4785.6					5cc x 30				06 62	17 7 37 37 37 37 37 37 37 37 37 37 37 37	-	-	2674.3	11	+	88
	Good Test, but tight		Out.	-80.037	0.062	2.6	47288	911	9.09	4026.20	6015.45	5cc x 30				30 62	67 36	75.80 48	509.51 25 509.51 25	2632.3			888
	Dry test						4728.8 4748.4					5cc x 30 5cc x 30			4.4.1	79 62	27.0 371	93.07 47	806.78 29 814.04 29	26618 2		Н	3 2
	Dry test						4894.7					5cc x 30				0.9 61	36 36 36	74.29 46	598.00	2630.6		+	8 H 8
	Dry test Poss SC Dry test			0.000	0.000		4662.4 4673.5					5cc x 30, 5cc x 30 5cc x 30			0 1066	3656.3 61.0 3664.6 61.2	4661.9 36 4671.1 36	2556.97 46 2562.80 46	570.68 25 576.51 29	2611.0 2570.68 2 2617.6 2576.51 2	18.21	126	888
	Good test Dry test		Water	346 355	0903	. 220	4522.5	880	877	3741.40	3730.24	5cc x 30, 10cc x 30 5cc x 30				0.3	7.4 35	7949 45	493 20 24	2542.5			± 5 5
	Dry test Dry test						4487.9					5cc x 30				01 59	97.0 35 37.0 35	4911 44	462 82 24 474 93 24	24888 2		++	2 2 5
	Retracted & re-set. Dry test - Proof plugged						4495.1					5cc x 30, 5cc x 30				0.7 50.9	36	61.66 45	475.37 24	2503.0 2			N
_	Retracted & re-set. Dry test - 7tool plugged						4471.4					20cc x 40, 10cc x 30			9 10.69	3502.5 50.9	4477.9 350	2448.86 44	2462.57 24	2488.5 2	8:09	77 98	-
Dry SF SC T PO SAM	Comments	Fluid	J ₽ P	MDT Grad Otz psi/m	MDT Grad Otz psi/ft	md.ft/cp	psig Strain G	Fm Press ppg Strain G	Fm Press ppg Qtz G	Strain G psia Fm Pres	Form. Pr. psia Quartz G	Remark	Form. Pr. psig Strain G			dro Deg C	psia Hydro Strain 6 static psi	Depth III	Depth D.	Depth m MORT	Approx	No.	Seat No.
SAM: SAMPLE	SAI		0.365	ell <	Amit Soman ,Pranay	y, Amit Son	Manabesh Chowdhury,	n, Manabesi	Observer(s): Steve Robinson,	Observer(s).		4.7 m	RIH to TD after pressure survey Observer(s) Directional - Max Deviation 28.55 deg at 2424.7 m	Seviation 28.	ID after pressu tional - Max Devi	Directi	13.71	5 5	Survey Type:	Datum Elevatio Directional Sur	0 0	1	
I: TIGHT	: E	Ī		> arg									Max Temp:									-	
SC: SUPER CHARGED	sc							4		Tool:	H	Ĭ.	Tool Configuration	To		H	H	Quartz	75	Gauge Serial Numbers	9	H	
SF: SEAL FAILURE	SE		m MD	2753.1	67.1°C at	Max Temp: 67.1° C		9th & 12-13th April 2003	8-1/2" - 9th &				Date:				\parallel	D6-D1	0	off Name:	5		
OK: GOOD TEST	OK		5		00000			A LI COMPA					2	NAL.	DO-DI MIDI PRESSORE SORVET DATA	TALC	OT MIL	5	+			-	

							D6-D1	MDTP	RESSI	URE SUR	VEY DA	ATA													OK: G	OOD TE	ST	Т	
															Date:	12.1/4" . 2nd	4th April 2003		fav Temn	50.5°C at	2278.5	m MD			DRY:	ngy		_	-
				Well Name		D6-D1						Date:					12-13th April 2			67.1°C at	2753.1					EAL FAI	HDE	_	-
_			_	FFEII FEII IE		00-01						Date.							nax remp.	Or.I C at	2133.1	III MU			3F. 3	LAL PAI	LUNE	-	+
				-											Date:	12-1/4" - 1/01	-18th April 200	5										_	_
				Gauge Seri	al Numbers:	Quartz					Too	ol Configurat	or:		Tool:										SC: S	UPER C	HARGED		
						Strain						Max Temp:									gas	0.200			T: TIG	HT			
				Datum Elev	ration (m RT-	SS):	13.71		RIH to TO) after pressu	ire survey	Observer(s)			Observer(s):	Steve Robins	on, Manabesh	Chowdhury	, Amit Som	an ,Pranay	øil<	0.365			P0: P	UMP OU	Л		
				Directional	Survey Type:		MWD		Direction	nal - Max Dev	riation 28.5	i5 deg at 24	24.7 m								water>	0.365			SAM:	SAMPL	E		
Run	Seat	File	Арргох	Depth	Depth	Depth	IMHP		Temp	IHP	Min. FP	Form. Pr.	Remark	Form. Pr.	Strain G	Fm Press	Fm Press	FMHP	Mobility	MDT	MDT	Poss	LFA	Comments					П
No.	No.	No.	Time	m	m RT	m	psia	Hydro	Deg C	EMW	psia	psig		psia	psia	ppg	ppg	psig	md.ft/cp	Grad	Grad	Fluid	Fluid		OK	Dry SF	SC 1	PO	SAM
				MORT	TVD	SS	Strain G	static psi		ppg	Strain G			Quartz G	Fm Pres	Qtz G	Strain G	Strain G		Qtz psi/ft	Qtz psi/m	Type							
			17th -18Th	April 2003 -	9.58" hole	- Cased H	ole 1 - Dua	al packers																		\neg	П	\top	Т
								ľ					Infl Pkrs 500 psig - 32 litres												П	\neg	П	\top	\top
													PO=1.2+0.6+06.+19.3+10litres									Water /							
4.0	1.0	101	0.5	1933.5	1933.31	1919.6	3242.3	2749.7	38.0	9.9			LFA = water	3009.3	3009.3	9.12	9.1	3256.1				Filterate	Water	Good Test	1				
													Infl Pkrs 500 psig , PO = 64 litres																П
													LFA = Water. Took gas sample									Water /							
4.0	2.0	100	0.4	1934.8	1934.61	1920.9	3245.3	2751.6	36.2	9.9			MRMS 1768	3011.5	3011.4	9.12	9.1	3257.0				Filterate	Water	Good Test	1				
													Infl Pkr 500 psig.												П	\neg	П	\top	П
4	3	87	4:10	1959.1		-13.71	3281.2	0.0	37.4	-12,846.78			P0=5.3+5.3+10.3+5					3280.0						Dry Test		1			
																									П		П		Т
													Infl Pkr 500 psig											Pressure going back to IMHP	1 1				
4	4	86	3:30	1960.4		-13.71	3281.1	0.0	37.0	-12,846.39			P0 = 2.9+3.5+3.5 L					3282.3						instantly after PO. No Seal			1		
4	5	97	8:30	2006.1		-13.71	3364.7	0.0	40.3	-13,173.71			P0=1.2+0.6+1.2 L					3382.9						Very Tight	П	\neg	П	1	Т
													Infl Pckr 500 psig												П	\neg	П	\top	Т
4	6	96	7:50	2007.4		-13.71	3365.5	0.0	40.2	-13,176.84			P0=1.1+0.6+1.2L					3388.6						Dry Test		1			
4	7	92	6:05	2109.6		-13.71	3529.7	0.0	43.5	-13,819.73			P0=5.8+1.75 L					3550.0						Dry Test		1			
4	8	91	5:25	2114.1		-13.71	3536.6	0.0	43.4	-13,846.74			PO= 10+1.75 L					3543.0						Dry Test		1			
4	9	104	12:30	1960.4		-13.71	3284.4	0.0	38.5	-12,859.31			P0=23L					3311.0						Lost Seal			1		
													P0 =												П	\neg	П	Т	П
													23+23+23+23+23+1.2+23+2																
4	10	105	13:00	1959.1		-13.71	3283.5	0.0	38.9	-12,855.79			3+0.3+1.2 L					3304.0						Dry Test		1			
													PO=1.75+4.9+0.6+0.6+0.6+4.7+																
4		106	14:35	1960.5			3286.2	0.0	39.3	-12,866.36			9.9 L					3306.7						Dry Test	Ш	1		\perp	\perp
4	12	108	16:10	2006.1		-13.71	3361.3	0.0	39.8	-13,160.39			P0 = 1.2+0.3+4 L					3388.4						Very Tight	\square			1	
																									Ш	\perp	\perp	\perp	1
			17th -18TI	April 2003	-9-5:8" hole	- Cased H	ole 2 - Du	al Packers																	Ш	\perp	\perp	\perp	\perp
																								Good Test,Gas Sample					
																							١.	(MRMS) Pressure not					
5	1	159	15:15	2213.7	2211.55					9.82			P0=234+23+10.5+15.2 L	3379.0		8.96		3379.0				Gas	Gas	stablized	1	+	\Box	\perp	\perp
5		146	9:25	2254.3			3765.7	0.0		-14,743.73			P0=29+23+59 L					3774.1						Very Tight, 1 gal Sample	\vdash	+	1 1	\perp	\vdash
5	3	144	8:15	2292.6		-13.71	3823.5	0.0	- 51	-14,970.03			P0=23+2.9+0.6+0.6 L,					3841.4	-					Very Tight	\vdash	+	11	+	\perp
_													P0=1.7+1.7+0.6+0.3+0.3+2.3+0.																
5	4	143	6:10	2297.4		-13.71	3828.5	0.0	49.8	-14,989.61			3L,					3849.1	-					Very Tight	\vdash	\rightarrow	11	\perp	\perp
													P0=1.7++1.2+1.2+7.7+3.5+2.9+																
5	- 5	160	17:40	2254.3		-13.71	3762	0.0	48.5	-14,729.24			1.2+1.2 L					3774						Very Tight	Ш		1 1		

5.5.4.2. Gas composition analysis

Formation: Late Pliocenel Interval(m.): 2305.5| Sample No.: Sample MPSR 1765.

C1: 99.84 %| C2: 0.06 %| C3: 0.03 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+:

0.00 %

Carbon-dioxide: 0.07 % Nitogen+Oxygen: 0.00 % Sp.Gr.: 0.555 Molar Mass: N/A

Formation: Late Pliocene | Interval(m.): 2736.0 | Sample No.: Sample MPSR 1769

C1: 98.68 %| C2: 0.14 %| C3: 0.06 %| iC4: 0.02 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+:

0.00 %

Carbon-dioxide: 0.10 % Nitogen+Oxygen: 0.00 % Sp.Gr.: 0.556 Molar Mass: N/A

5.5.4.3. Geothermal gradient (from wireline logs)

Formation: Pliocene | Depth of measurement: 1277.79 m | Temperature: 5.3°C | Formation: Pliocene | Depth of measurement: 1887.8 m | Temperature: 35.6°C | Formation: Pliocene | Depth of measurement: 1889.8 m | Temperature: 34.4°C | Formation: Pliocene | Depth of measurement: 2291.7 m | Temperature: 50.5°C | Formation: Pliocene | Depth of measurement: 2346.7 m | Temperature: 48.7°C | Formation: Pliocene | Depth of measurement: 2455.2 m | Temperature: 38.0°C | Formation: Pliocene | Depth of measurement: 2455.2 m | Temperature: 40.0°C | Formation: Pliocene | Depth of measurement: 2449.0 m | Temperature: 48.9°C |

```
Formation: Pliocene | Depth of measurement: 2759.0 m | Temperature: 53.9°C | Formation: Pliocene | Depth of measurement: 2759.0 m | Temperature: 60.0°C | Formation: Pliocene | Depth of measurement: 2744.8 m | Temperature: 65.7°C | Formation: Pliocene | Depth of measurement: 2695.4 m | Temperature: 70.0°C | Formation: Pliocene | Depth of measurement: 2765.3 m | Temperature: 71.1°C | Formation: Pliocene | Depth of measurement: 2557.4 m | Temperature: 56.7°C |
```

5.5.4.4. Other reservoir studies

Biostratigraphy and paleoenvironments of the interval 1900m-2820m Petroleum geochemistry screening study of the interval 1950m to 2820m

5.5.4.5. Annexure to Reservoir Engineering studies/analysis

No data available.

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 description

The KG-DWN-98/3 Contract Area, located along the passive continental margin of India's east coast, features a heterogeneous continental lithosphere over an Archean basement. Tectonic evolution began with Permo-Triassic rifting associated with the breakup of Gondwanaland, forming northeast/southwest-trending Gondwana grabens, overprinted by Jurassic-Cretaceous northeast-southwest en-echelon horsts and grabens.

The subsequent filling of these grabens with Middle Jurassic to Early Cretaceous clastics was followed by Late Cretaceous passive margin progradation, burying the horst-and-graben topography. A major tilting event during the Late Cretaceous to Early Paleocene caused southeastward subsidence of the Indian sub-plate, linked to the Deccan hotspot and Himalayan orogeny. This period also saw northeast/southwest-trending Cretaceous volcanic highs, which are attributed to Archaean basement weaknesses.

To the west, coastal sedimentary basins developed during the Late Jurassic, featuring northeast/southwest-trending grabens with thick pre-Tertiary sediment fill in depressions. A widespread Mesozoic-Tertiary unconformity was observed onshore and offshore. Paleogene

sediments in coastal areas were sourced predominantly from the Indian craton, while Neogene offshore sequences were influenced by sediment supply from the Himalayan fan system.

The Miocene tilting event triggered a major transgression and increased sediment influx from the proto-Krishna and Godavari Rivers, driving vigorous passive margin progradation. Since the Cretaceous, sedimentation has been dominated by the Krishna and Godavari River systems, leading to the establishment of present-day delta promontories in the Early Miocene.

The primary exploration target in the area is the Tertiary passive margin system, which thickens basinward and includes depositional systems ranging from shoreface sands to deepwater submarine channels and fan sandstones. Exploration has been focused on Miocene to Pleistocene intra-rift meandering channels and submarine fans, sourced from the Godavari River and deposited on the mid to lower slope.

Structural evolution in the basin has been driven by sediment loading and shelf-edge collapse, resulting in genetically linked growth faults and toe thrust complexes. Two major tectonic phases are recognized: Late Eocene-Early Miocene and Late Miocene-Pliocene to Present. Stratigraphic trapping is also significant with hydrocarbon traps commonly associated with updip pinchouts of linear slope fan channel complexes.

5.5.6. Reservoir Properties and OHIP

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

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

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

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

RESERVOIR PARAMETERS and ORIGINAL GAS in PLACE as of JANUARY 1, 2025 for the KG-D6-D1 DISCOVERY

KG/DWD SF/D6F/2025 CONTRACT AREA

	Reservoir	Total
		Total
Low		
Area, acres	460	
Gas Formation Volume Factor, scf/rcf	0.0041	
Average Thickness, ft	61.4	
Average Porosity, %	24.30	
Average Water Saturation, %	41.00	
Original Gas in Place, 10 ⁹ ft ³	43.12	43.12
Original Gas in Place, 10 ⁶ eq ton	1.09	1.09
Rest		
Area, acres	1,496	
Gas Formation Volume Factor, sc/rcf	0.0041	
Average Thickness, ft	53.2	
Average Porosity, %	25.34	
Average Water Saturation, %	39.00	
Original Gas in Place, 10 ⁹ ft ³	131.16	131.16
Original Gas in Place, 10 ⁶ eq ton	3.30	3.30
III-L		
High Area, acres	4.821	
Gas Formation Volume Factor, scf/rcf	0.0041	
Average Thickness, ft	41.3	
Average Porosity, %	26.30	
Average Water Saturation, %	37.00	
Original Gas in Place, 10 ⁹ ft ³	351.58	351.58
_		
Original Gas in Place, 10 ⁶ eq ton	8.86	8.86

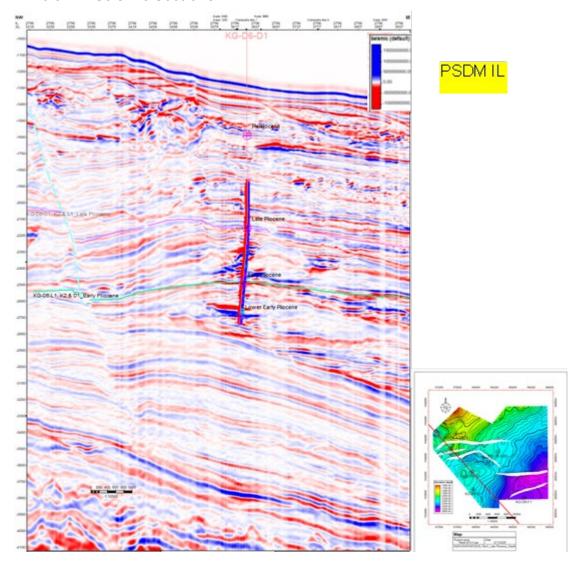
Note: Conversion used 10° s of equal to 0.02519 10° eq tone.

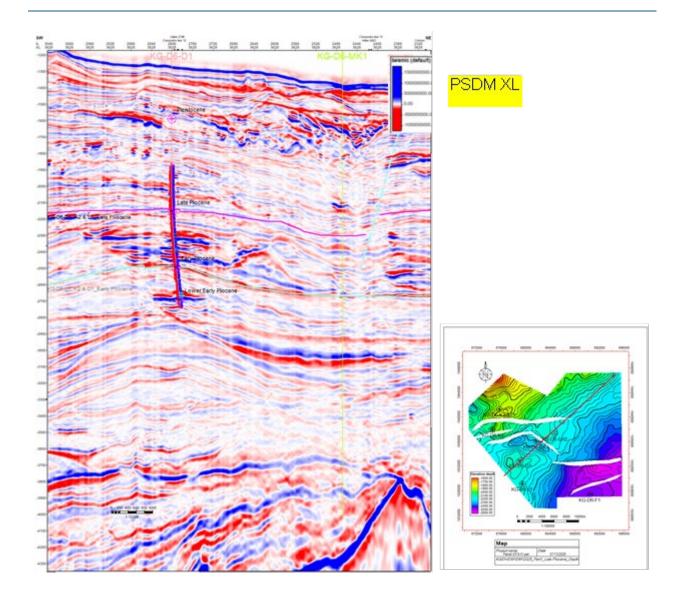
Volumes estimated by a Third Party

The operator has reported an in-place volume of 7.48 MMTOE (Best case).

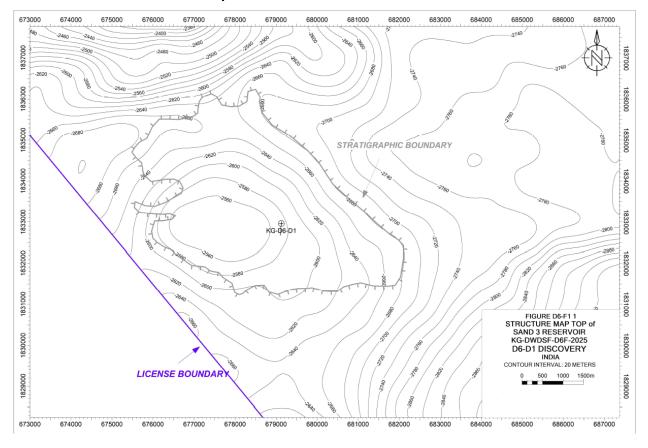
5.5.7. Annex

5.5.7.1. Seismic Sections

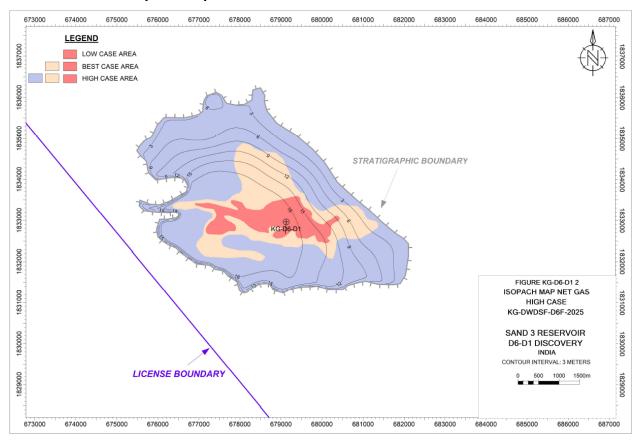




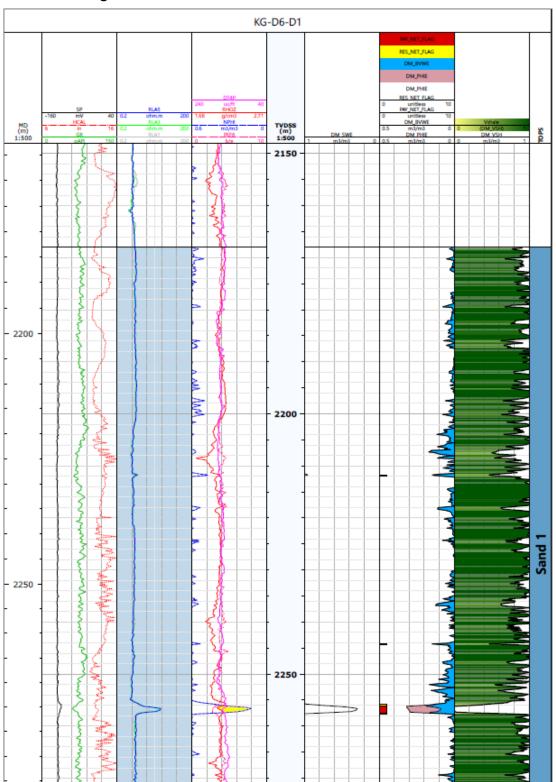
5.5.7.2. Structural Maps

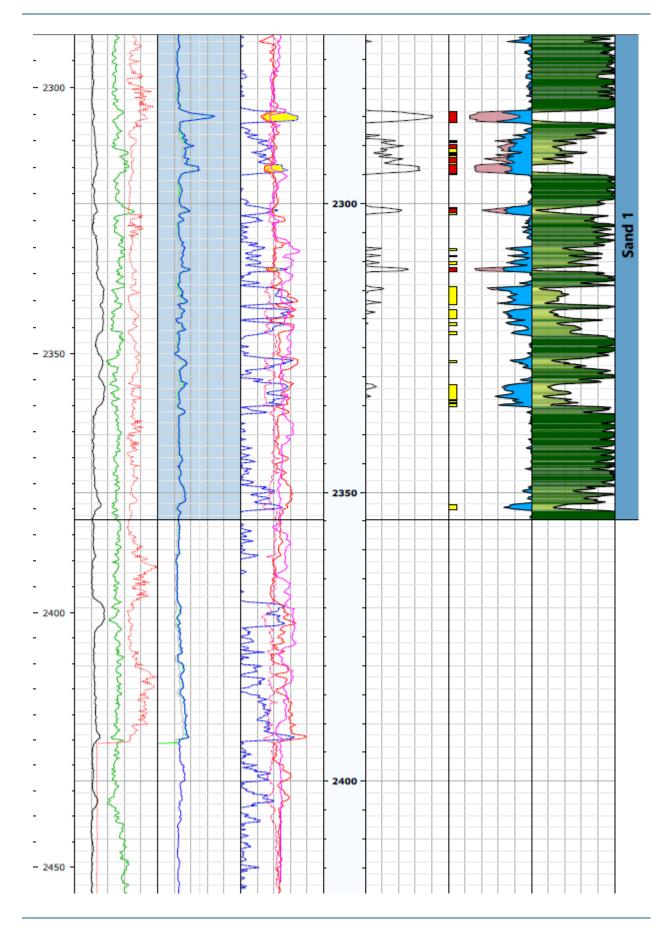


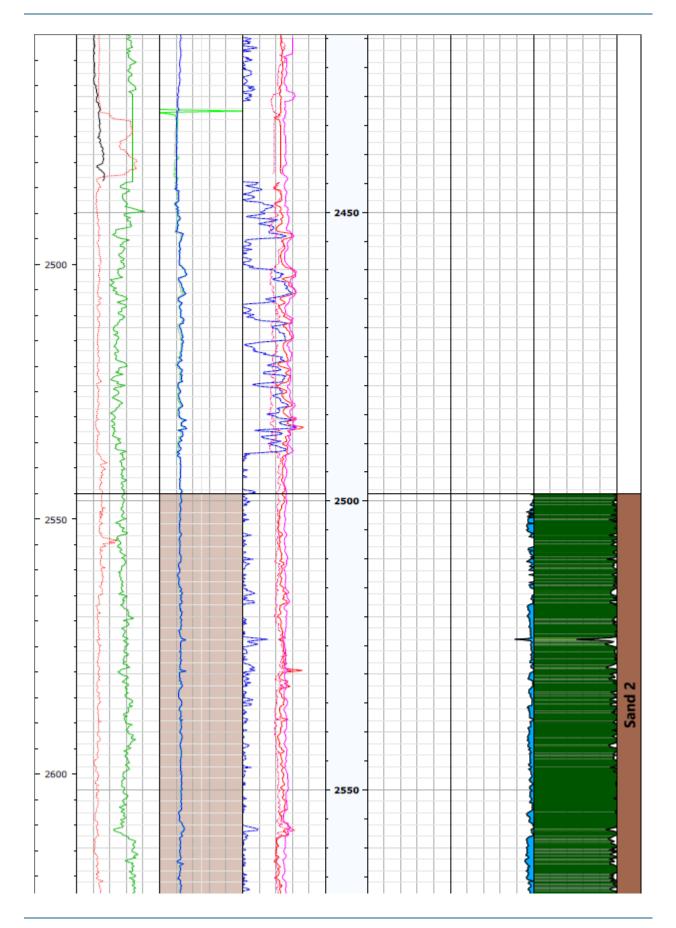
5.5.7.3. Isopach Maps

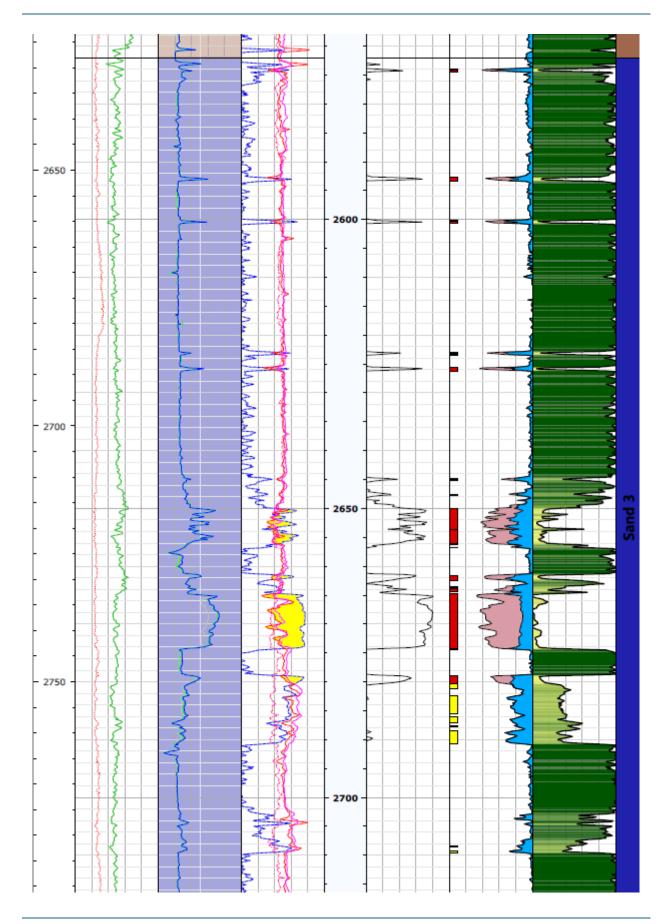


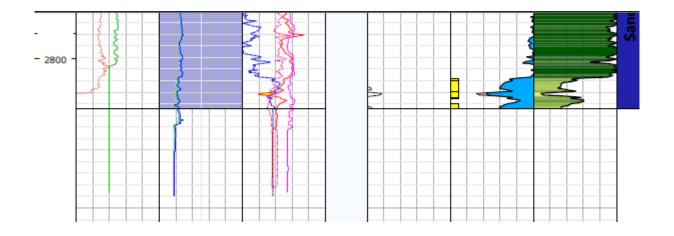
5.5.7.4. Log Motifs











5.6. D6-L1 DISCOVERY AND FIELD DESCRIPTION

KG-D6-L1 is the 26th exploration well drilled by RIL in the KG-DWN-98/3 Block, offshore Andhra Pradesh, within the KG Basin at a water depth of 1,273 meters. The primary objective was to explore the hydrocarbon potential of Mio-Pliocene sand packages. The well was spudded on May 30, 2008, using the Transocean Deepwater Frontier drillship and reached a TD of 3,185 meters MDRT. The drilling campaign included a comprehensive data acquisition program with LWD, wireline logging, gas analysis, mud logging, and continuous real-time monitoring from the RCP center in the city of Navi-Mumbai.

The geological objectives included four sand targets. Objective I (Pleistocene) was encountered at 2,039 meters MDRT and consisted of medium- to coarse-grained sandstone with good inferred porosity and significant gas shows, including a peak of 14.4 percent total gas at 2,043 meters. Petrophysical analysis indicated interesting hydrocarbon potential in this interval. Objective II (Late Pliocene) was encountered at 2,397 meters MDRT and consists of coarse, clean sandstone with fair to good porosity but no hydrocarbon indications based on logs and gas data. Objective III (Early Pliocene), found at 2,612 meters MDRT, consisted of silty sandstone with poor porosity and was interpreted as non-prospective for hydrocarbons. Objective IV (Mid-Miocene) included two intervals at 2,990 meters MDRT and 3,051 meters MDRT. Both zones consisted mainly of sandstone with interbedded limestone or claystone. Although they showed moderate porosity, petrophysical analysis and mud gas data suggested no hydrocarbon potential.

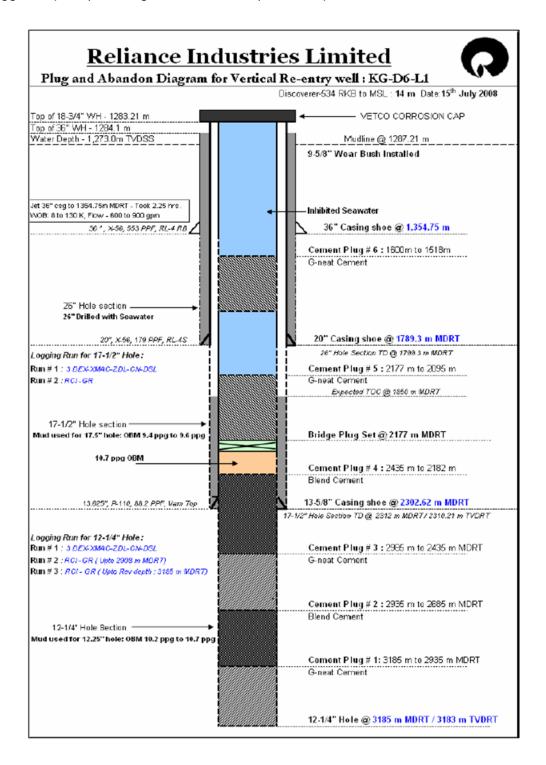
Petrophysical interpretation identified two gas-bearing intervals: one from 2,035 to 2,044 meters MDRT in the Pleistocene sands and one from 2,534 to 2,544 meters MDRT in the Pliocene sands. Gas samples were collected from these intervals during RCI operations at depths of 2,038.2 meters, 2,040.2 meters, 2,540.6 meters, 2,844.3 meters, and 2,907.5 meters.

Throughout the drilling, no major pore pressure issues were encountered. Pore pressure ranged from 8.5 to 9.1 ppg with a minor regression between 2,400 and 2,750 meters depth.

After a detailed evaluation of all drilled stratigraphic units, the well was classified as non-commercial with limited hydrocarbon potential that is restricted to the previously mentioned gasbearing intervals. As a result, the well was plugged and abandoned without conducting any DSTs. The drillship was moved to the next location on July 15, 2008.

5.6.1. Drilling and Well Completion

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



5.6.2. Well Logging and Formation Evaluation

The well logs of all discovery wells as well as selected key wells in the contract area were reviewed. The logs recorded in various open-hole sections along with cased-hole logs and information from conventional and other wireline formation test data are presented in this docket. The availability of key input reports, such as 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.

5.6.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	<u>KB</u>	<u>Drilled depth</u>
Only WCR available	05.30.2008	14 m	3185.0 m MDRT

5.6.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

```
17.50 HDIL-3-DEX-XMAC-ZDL-CN-DSL (1789.3 - 2312 m)
RCI-GR (2208 - 1861 m)

12.25 HDIL-3-DEX-XMAC-6 ARM CALZDL-CN-DSL (2300.2 - 2908.2 m)
RCI-GR (2535.8 - 2898.3 m)
RCI-GR (2907.5 - 3065.5 m)
```

5.6.3. Well Testing and Workover History

5.6.3.1. Dril Stem Test (DST)

No DST has been performed in this well.

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 PVT data/results are included.

5.6.4.1. Formation dynamics tests

File No.	Time	Depth (mMDRT)	Depth (mTVDRT)	Depth (mTVDSS)	IMHP (psia)	IMHP (ppg)	Temp (degF)	FMHP (psia)	Formation Pressure Quartz (psia)	EMW w.r.t TVDRT (ppg)	Estimated Mobility (md/cP)	Sample View Indication	Samples	Comments	Remarks	Minimum Pressure (psia)	
	Hole 17			08, Suite1-R					/ Aabhaas G				ers: Prabhat S.				
3	21:30	1861.0	1860.1	1846.1	3091.9	9.7	82.7	3286.6	2912.59	9.18	359.8	WATER		5 @4500 + 5 @5500 + 5 @5500 + PO	Good	2861.0	230.9
5	22:48	2023.7	2022.5	2008.5	3355.9	9.7	91.3	3436.3						3@3500 + 2@3500	Tight		3355.9
6	23:00	2034.7	2033.5	2019.5	3380.0	9.7	91.2	3537.3						5 @4000	Lost Seal	3213.0	167.0
10	2:02	2035.0	2033.8	2019.8	3382.2	9.8	91.1	3382.0						5 @4000 + 2 @3500	Tight	1679.9	1702.3
7	23:15	2035.1	2033.8	2019.8	3381.4	9.7	91.1	3479.6						5 @4000 + 2 @3500	Tight	1679.9	1701.5
11	2:12	2037.2	2036.0	2022.0	3386.4	9.8	93.5	3385.0						3 @4500 + 3 @4500	Tight	2025.0	1361.4
12	2:23	2037.5	2036.3	2022.3	3387.5	9.8	94.5	3392.1						3 @4500 + 5 @ 5000 + PO + 5 @ 5000 +RE + 5 @5000 + 5 @5000 + RE + 3@4500	Lost Seal		3387.5
8	23:33	2038.2	2037.0	2023.0	3387.4	9.7	94.5	3370.0	3164.20	9.11	6.5	GAS	1SPT+1PVT	5 @4000 + 3 @4000 + PO	Good	2339.0	1048.4
13	2:45	2040.1	2038.8	2024.8	3391.7	9.8	96.0	3390.2						3 @ 4500 + 3 @ 4500	Tight	1960.0	1431.7
14	2:55	2040.2	2039.0	2025.0	3391.7	9.8	97.5	3391.3	3166.03	9.10	40463	GAS	2 SPT	3 @5000 + 5 @ 5000 + 5 @ 5000 + 3 @5000 +PO+ 3 @6000 + 3@6000 + 10 @7000 + 10 @7000 +PO	Good	3154.0	237.7
15	4:35	2041.2	2039.9	2025.9	3393.1	9.8	98.2	3389.4	3166.15	9.10	457			5 @5000 + RE + 5 @ 5000 + 5 @ 5000 + PO + 5 @ 5000 + 5 @ 5000 + PO	Good	3105.0	288.1
16	5:00	2042.3	2041.0	2027.0	3394.7	9.8	98.6	3392.8	3166.49	9.10				5 @5000+3 @500+LS+3 @4000+PO	Good	3105.0	289.7
17	5:30	2045.8	2044.5	2030.5	3400.3	9.8	98.8	3409.8						3 @4500+ LS+3 @4500 + 3 @4500	Tight	2276.3	1124.0
20	6:15	2048.9	2047.6	2033.6	3408.1	9.8	99.9	3402.6						3 @4500+LS+3 @5000 + LS	No Seal	3085.0	323.1
18	5:45	2050.0	2048.7	2034.7	3410.1	9.8	99.5	3405.4						3 @4500+LS+3 @5000+LS	No Seal	2276.5	1133.6
19	6:05	2050.1	2048.9	2034.9	3410.2	9.8	99.7	3415.0						3 @4500+3 @4500+LS+3 @4500	No Seal	3403.4	6.8
21	6:30	2050.5	2049.2	2035.2	3411.1	9.8	100.3	2032.2	3175.48	9.09	1973.7	WATER		3 @4500+3 @ 4500+3 @ 5000+PO+5 @5000+PO	Good	3166.0	245.1
24	7:19	2059.8	2058.4	2044.4	3424.8	9.8	100.1	3424.8	3186.89	9.08				3 @4500+3 @4500+5 @5000+3@5000+3@5500+PO+LS+ 5@4500+LS+5@4500+LS	Good (LS on PO)		3424.8
26	8:10	2059.9	2058.6	2044.6	3430.9	9.8	100.2	3426.9						3 @4500+LS	Lost Seal		3430.9
27	8:20	2060.0	2058.7	2044.7	3426.1	9.8	100.1	3430.0						3 @4500+2@3500	Tight	1625.0	1801.1
25	8:00	2061.1	2059.8	2045.8	3427.5	9.8	100.1	3426.2						5 @4500+2@3500	Tight	1650.0	1777.5
28+29	8:30	2070.5	2069.0	2055.0	3444.6	9.8	100.3	3444.9	3202.76	9.08	73.9	WATER	1 PVT	5 @4500+LS+3@4500 +2@3500+2@3500+5@4500	Good	1940.0	1504.6
34	11:02	2207.9	2206.2	2192.2	3665.8	9.7	106.0	3664.6						3 @4500+2@3500	Tight	1820.0	1845.8
35	11:10	2208.0	2206.3	2192.3	3660.7	9.7	105.3	3660.2						3 @4500+5@ 7000+LS+3@4500+LS+PO+3@4500	No Seal		
32	10:45	2208.0	2206.3	2192.3	3664.0	9.7	105.4	3660.2						3 @4500+3@5500 +LS+3@4500+LS+PO+3@4500	No Seal		3664.0
33	10:55	2208.1	2206.3	2192.3	3665.2	9.7	106.0	3665.7						3 @4500	No Seal		

File No.	Time		Depth (mTVDRT)		IMHP (psia)	IMHP (ppg)	Temp (degF)	FMHP (psia)	Formation Pressure Quartz (psia)	EMW w.r.t TVDRT (ppg)	Estimated Mobility (md/cP)	Sample View Indication	Samples	Comments	Remarks	. ,	Maximum Drawdown w.r.t Hydrostatic (psia)		
Open	Hole 12	.25" Dat	e: 7th July 2	008, S uite2-F	Run2 I	RTOC O	servers:	Subhasi	n J/Dinesh A	. W	Vellsite Obs	ervers: Shakt	ti J. Tool Cor	figuration: CB-EB-WA-IB-RB-OB-BB-	MB-1972X/	MB-1972XA			
4	8:45	2535.6	2533.5	2519.5	4568.5	10.6	120.2	4599.6						5 @4000+ 3@4000	Tight	683.0	3885.5		
3	8:36	2535.8	2533.8	2519.8	4600.0	10.6	119.4	4609.6						5 @ 4000 + 5 @ 4000 + 5 @ 4000	Tight	1494.0	3106.0		
6	9:12	2540.3	2538.3	2524.3	4578.9	10.6	122.3	4792.7						2 @3500+ 2@3500	Tight	2770.0	1808.9		
12	10:30	2540.4	2538.4	2524.4	4580.5	10.6	128.0	4768.5						3 @ 3500 + 3 @ 3500	Tight	1623.0	2957.5		
5	8:58	2540.5	2538.4	2524.4	4578.9	10.6	121.2	4608.7						3 @3500+ 2@3500	Tight	2281.0	2297.9		
8	9:45	2540.5	2538.4	2524.4	4563.2	10.5	126.0	4650.5						3 @3500	Tight	3238.0	1325.2		
11	10:20	2540.5	2538.4	2524.4	4579.2	10.6	128.0	4620.8						3 @3500+ 2@3500	Tight	2312.1	2267.1		
27	6:25	2540.6	2538.6	2524.6	4553.1	10.5	145.0	4687.0	3811.27	8.80	1922.2	Gas	1 SPT	3 @3500+5@5000+3 @4000+3@4000+PO	Good	3810.0	743.1		
13	10:45	2548.2	2546.2	2532.2	4596.4	10.6	127.7	4625.2						3 @3500+2@3500	Tight	2242.0	2354.4		
14	11:10	2592.2	2590.2	2576.2	4684.1	10.6	128.3	4855.1	3882.63	8.79	891.1	Water	1 SPT + 1 PVT	3 @ 3500+5@5000+2@3500+PO+	Good	3842.5	841.6		
15	12:13	2613.3	2611.2	2597.2	4719.2	10.6	131.5	4846.0	3912.88	8.79	506.5			3 @ 4000 + 5 @ 5000 + 3 @ 4000	Good	3824.0	895.2		
18	1:00	2673.2	2671.1	2657.1	4804.9	10.5	136.0	4845.2						3 @ 3500 3 @ 3500	Tight	1840.0	2964.9		
19	1:11	2694.0	2692.0	2678.0	4854.0	10.6	138.0	4855.2	4028.43	8.77	1158	Water		3 @ 3500 + 5 @ 5000 + 3 @ 4000 + PO	Good	4019.6	834.4		
20	2:00	2698.0	2696.0	2682.0	4863.7	10.6	138.7	4972.1	4033.76	8.77	41	Water	1 PVT	5 @ 5000 + 5 @ 5000 + 3 @ 4000 + PO	Good	3388.5	1475.2		
21	2:55	2723.9	2721.9	2707.9	4914.8	10.6	139.4	4982.4	4074.81	8.78	236.8			5+5@5000+10@6000+PO+10@6000	Good	3900.0	1014.8		
22	3:12	2756.0	2753.9	2739.9	4975.1	10.6	140.5	5050.0	4121.35	8.77	1602.6			5 @5000+10@6000	Good	4096.0	879.1		
24	3:35	2844.3	2842.3	2828.3	5113.8	10.5	148.4	5132.0	4329.34	8.93	169.2	Gas	2 SPTs	3 @4000+5@5000+PO	Good	2150.0	2963.8		
25	5:50	2898.3	2896.2	2882.2	5220.4	10.6	150.2	5266.7						3 @3500+3@3500	Tight	3450.0	1770.4		

File No.	Time	Depth (mMDRT)	Depth (mTVDRT)	Depth (mTVDSS)	IMHP (psia)	IMHP (ppg)	Temp (degF)	FMHP (psia)	Formation Pressure Quartz (psia)	EMW w.r.t TVDRT (ppg)	Estimated Mobility (md/cP)	View Indication	Samples	Comments	Remarks	Minimum Pressure (psia)	Maximum Drawdown w.r.t Hydrostatic (psia)
Open	Hole 12	.25" Dat	e: 10th July	2008, Suit	e3-Run1	RTO(C Observ	ers: Hem	ant G.	Wellsite	Observers:	Shakti J.	Tool	Configuration: CB-EB-WA-IB-RB-OB-BB	-MB-XA		
1	22:13	2907.5	2905.5	2891.5	5363.5	10.8	138.2	5363.7	4490.50	9.06	213.7	Gas	3 SPT	@4000 + 5 @ 4500 + 5 @ 4500 +5 @ 5000 + P0	Good	4431.7	931.8
2	0:22	2994.5	2992.5	2978.5	5543.0	10.9	139.7	5547.1	4672.90	9.16	20.6			3 @ 3500 + 3 @ 5000 + 2 @ 5000 + PO	Good	4422.2	1120.8
3	1:15	2997.8	2995.8	2981.8	5551.3	10.9	141.2	5549.4						3 @ 4500 + 3 @ 5000 + 1 @ 4500	Tight	4432.9	1118.4
8	3:36	2998.0	2996.0	2982.0	5536.5	10.8	146.7	5548.1						3 @ 4500 + 5 @ 5000	Tight	3737.7	1798.8
4	1:49	3004.5	3002.5	2988.5	5563.5	10.9	142.0	5570.2	4686.13	9.15	68.8			3 @ 4500 + 3 @ 5000 + 2 @ 5000	Good	4526.6	1036.9
5	2:26	3053.2	3051.2	3037.2	5655.4	10.9	143.4	5669.2	4755.47	9.14	17.2			3 @ 5000 + 3 @ 5000 + 3 @ 5000	Good	4108.4	1547.0
6	2:50	3058.0	3056.0	3042.0	5659.2	10.9	143.7	5659.1	4762.40	9.14	53.6			3 @ 5000 + 3 @ 5000 + 3 @ 5000	Good	4551.7	1107.5
7	3:05	3066.5	3064.5	3050.5	5675.6	10.9	144.3	5676.4	4774.63	9.13	32			3 @ 5000 + 3 @ 5000 + 3 @ 6000 + 5 @ 6000	Good	4608.2	1067.4

5.6.4.2. Gas composition analysis

No data available.

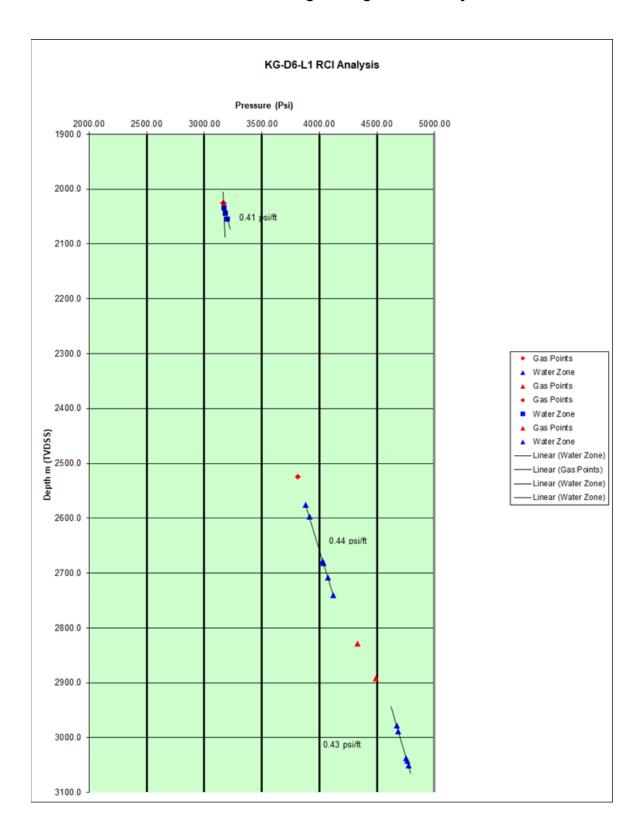
5.6.4.3. Geothermal gradient (from wireline logs)

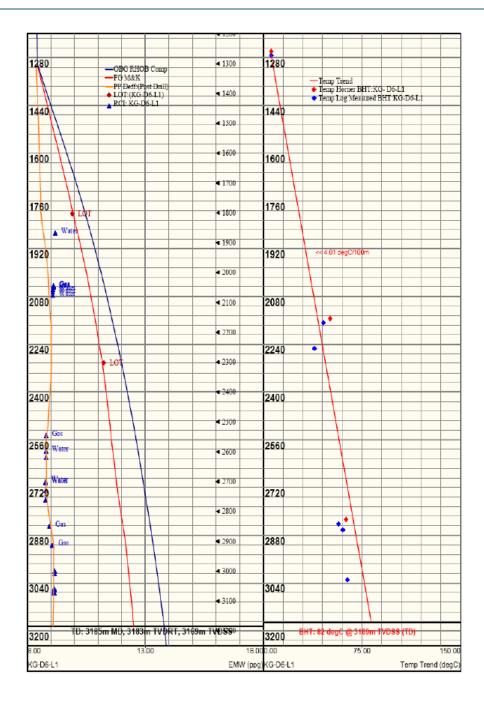
See figure in Annexure.

5.6.4.4. Other reservoir studies

Biostratigraphy and paleoenvironments of the interval 1805 to 3183 m. Petroleum geochemistry screening study of the interval 1995 to 3180 m.

5.6.4.5. Annexure to Reservoir Engineering studies/analysis





5.6.5. Geology and Reservoir Description

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

5.6.5.1. Geological description

Well KG-D6-L1 is located in the northern KG Basin, offshore Andhra Pradesh, within a complex structural and depositional setting shaped by multiple tectonic phases. The basin originated as an intracratonic rift within Gondwanaland during the Permo-Triassic period, evolving into a pericratonic rift basin post-Cretaceous. The present basin architecture consists of three subbasins (Krishna, West Godavari, and East Godavari) separated by basement horsts (Bapatla and Tanuku horsts), and the well is situated within the Krishna Sub-Basin.

The Krishna Sub-Basin features a thick Cretaceous to older sedimentary fill overlying the Archean basement. Regional tectonics, including rifting, horst uplift, and later subsidence, resulted in varied sediment thicknesses and complex fault-controlled depositional patterns. The Cretaceous was marked by horst uplift (e.g., Bapatla and Kaza-Kaikaluru horsts), causing thinning of sequences over structural highs and thickening in adjacent grabens.

During the Late Cretaceous to Paleocene, significant tectonic subsidence affected the East Godavari and southeastern parts of the basin, accompanied by faulting and volcanic activity. This created fault terraces and tilted fault blocks in the northeastern basin. Northeast/southwest-trending en-echelon horst and graben structures, formed during the Jurassic-Cretaceous breakup between India and Antarctica, overprinted the older northwest-southeast Permo-Triassic rift trends.

From the Late Cretaceous onwards, passive margin progradation dominated, driven by sediment supply from the Krishna and Godavari River systems. This led to the development of thick Tertiary sequences, especially submarine fan and channel systems from Miocene to Pleistocene age, which constitute the main hydrocarbon targets.

The structural setting near the well includes growth faults and toe thrust complexes formed by sediment loading and shelf-edge collapse, particularly active during the Late Eocene to Early Miocene and again from the Late Miocene to present. The dominant trapping mechanisms include stratigraphic pinchouts of linear slope fan channels and structural traps associated with growth faults.

In summary, well KG-D6-L1 lies within a mature, passive-margin basin characterized by complex horst and graben structures, multiple tectonic phases, and sedimentation driven by major fluvial systems. The primary exploration focus is the Miocene to Pleistocene submarine fan and channel sandstones deposited on the mid to lower slope.

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 oil in place (OOIP) and 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 information docket.

RESERVOIR PARAMETERS and ORIGINAL GAS in PLACE

as of JANUARY 1, 2025 for the KG-D6-L1 DISCOVERY

KG/DWDSF/D6F/2025 CONTRACT AREA

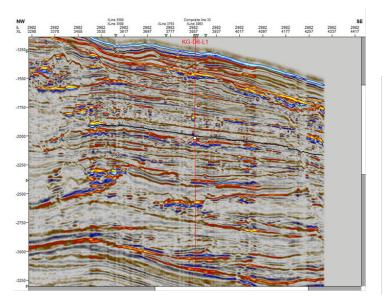
	Reservoir	
		Total
Low		
Area, acres	35	
Gas Formation Volume Factor, scf/rcf	0.0042	
Average Thickness, ft	17.2	
Average Porosity, %	15.96	
Average Water Saturation, %	18.80	
Original Gas in Place, 10 ⁹ ft ³	0.79	0.79
Original Gas in Place, 10 ⁶ eq ton	0.02	0.02
Best		
Area, acres	69	
Gas Formation Volume Factor, scf/rcf	0.0042	
Average Thickness, ft	19.2	
Average Porosity, %	18.02	
Average Water Saturation, %	16.95	
Original Gas in Place, 10 ⁹ ft ³	2.05	2.05
Original Gas in Place, 10 ⁶ eq ton	0.05	0.05
High		
Area, acres	84	
Gas Formation Volume Factor, scf/rcf	0.0042	
Average Thickness, ft	20.6	
Average Porosity, %	19.99	
Average Water Saturation, %	14.08	
Original Gas in Place, 109ft3	3.06	3.06
Original Gas in Place, 10 ⁶ eq ton	0.08	0.08
, ,		

Note: Conversion used 10⁹ scf equal to 0.02519 10⁸ eq tone.

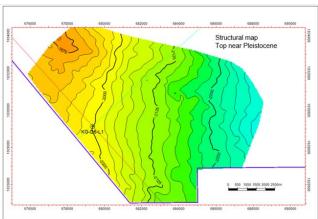
The operator has reported an in-place volume of 1.59 MMTOE (Best case).

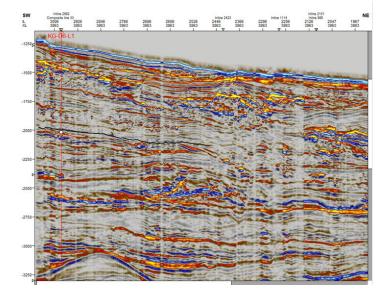
5.6.7. Annex

5.6.7.1. Seismic Sections

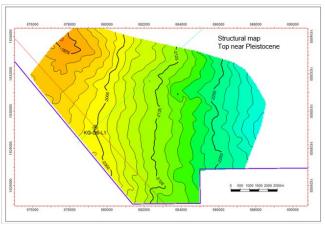


PSDM IL

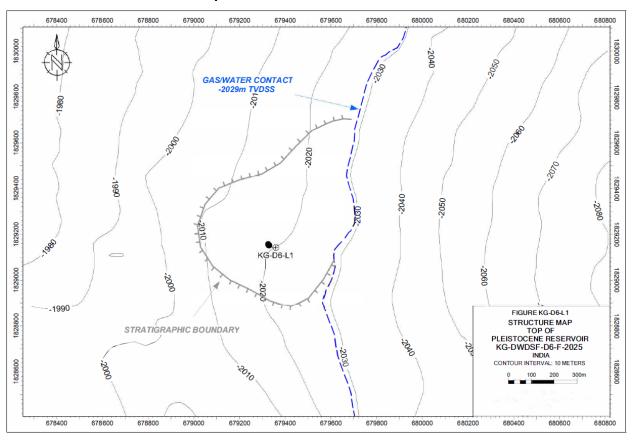




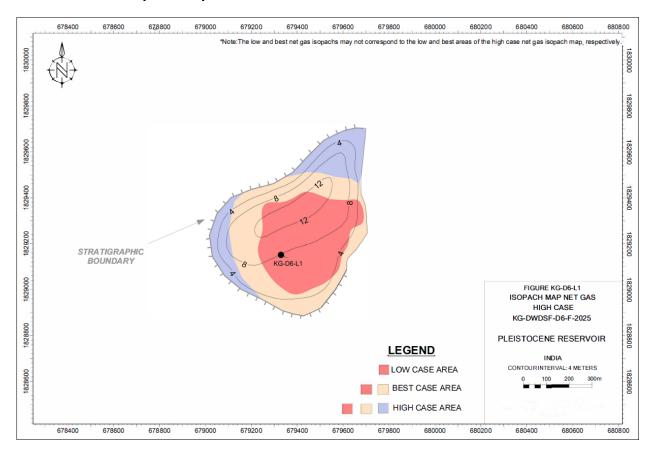
PSDM XL



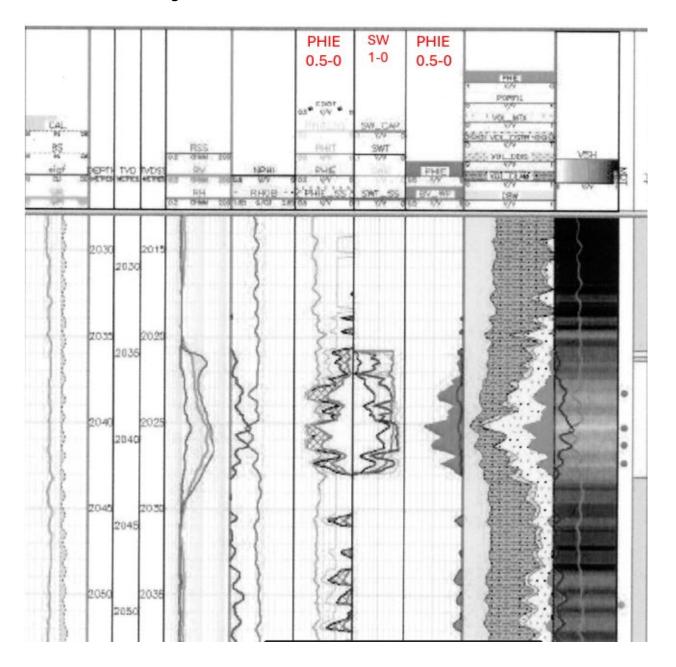
5.6.7.2. Structural Maps



5.6.7.3. Isopach Maps



5.6.7.4. Log Motifs



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

5.7. D6-H1 DISCOVERY AND FIELD DESCRIPTION

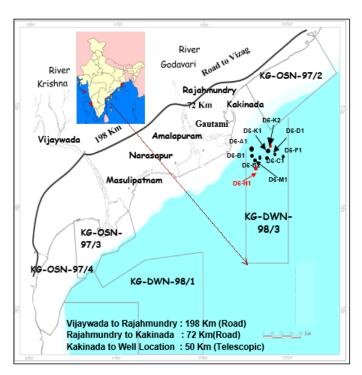
The well D6-H1, located in deep water (1,527 meters) within the KG-DWN-98/3 Block, KG Basin, offshore Andhra Pradesh, Bay of Bengal, was drilled in 2004 targeting Pleistocene and Mio-Pliocene sandstone gas reservoirs. The well forms part of the KG-DWN-98/3 exploration campaign and is the 12th exploration well in the block. The regional geological setting is characterized by complex deepwater depositional systems, including shelf-slope aprons, deep sea channels, levees, and turbidite complexes, mapped with the aid of 2–D and 3–D seismic surveys.

The well was spudded on August 10, 2004, and drilled by the Transocean Sedco Forex Discoverer 534 drillship (DP). Drilling reached a TD of 3,250 meters MDRT on September 17, 2004. The well was planned as a deviated hole to intersect vertically separated stratigraphic targets. The kickoff point was at 2,265 meters with the well deviated at 19 degrees along an azimuth of 316 degrees.

Throughout the drilling operation, close well monitoring was conducted using mud logging, LWD/MWD services, and real-time pore pressure prediction tools (PreVue by Geoservices). Real-time data communication between the rig and the interpretation center allowed for rapid operational decision-making.

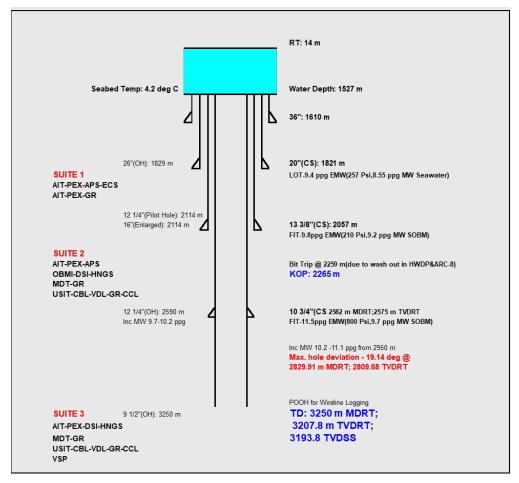
Lithological analysis from cuttings, wireline logs, and MDT confirmed the presence of a gasbearing interval within the Upper Pliocene, between 2,186 meters and 2,211 meters MDRT. The reservoir exhibited grain-size variability from fine to medium and coarse sandstone. Based on wireline-log interpretation, the well encountered a gross hydrocarbon column thickness of 69.21 meters across the shallow Pleistocene, Late Pliocene, and Early Pliocene sequences.

A GWC was identified at 2,214 meters MDRT (2,200 meters TVDSS) based on wireline-log data and MDT pressure testing. The Late Pliocene pay zone was flow-tested via DST. The DST was performed over the identified interval and produced a maximum gas rate of 4.06 MMscf/d through a 40/64-inch choke during testing operations.



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 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.

5.7.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	<u>KB</u>	Drilled depth
Only WCR available	08.10.2004	14 m	3250.0 m MDRT

5.7.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

12.25 AIT-PEX-APS-GR (2590.1 –2058.0 m)

OBMI-DSI-HNGS (2591.6 – 2058.0 m)

MDT-GR (2140.5 – 2532.5 m)

9.50 AIT-PEX-DSI-HNGS (3253.0 – 2582.0 m)

MDT-GR (3212.2 – 2601.0 m)

VSP (3250.0 - 1990.0 m)

5.7.3. Well Testing and Workover History

5.7.3.1. Drill Stem Test (DST)

Formation: Upper Pliocene | Interval(m): 2197 - 2206m MDRT |Flow period (hr): 0.1| Bean (1/64 inch): N/A | FTHP: N/A | FBHP: N/A | Qgas: N/A | Initial flow

Formation: Upper Pliocene | Interval(m): 2197 - 2206m MDRT |Flow period (hr): 11.0| Bean (1/64 inch): -- | THP: N/A | BHP: 3310.7 psi | Qgas: -- | Initial Build-up

Formation: Upper Pliocene | Interval(m): 2197 - 2206m MDRT |Flow period (hr): 5| Bean (1/64 inch): N/A | FTHP: N/A | FBHP: N/A | Qgas: N/A | Cleanup flow

Formation: Upper Pliocene | Interval(m): 2197 - 2206m MDRT |Flow period (hr): 22.5| Bean (1/64 inch): -- | THP: N/A | BHP: 2927.7 psi | Qgas: -- | First Build-up

Formation: Upper Pliocene | Interval(m): 2197 - 2206m MDRT |Flow period (hr): 8.0| Bean (1/64 inch): 16 | FTHP: 1892 psi | FBHP: 2448.0 psi | Qgas: 2.63 MMscf/d | First Drowdown

Formation: Upper Pliocene | Interval(m): 2197 - 2206m MDRT |Flow period (hr): 8.0| Bean (1/64 inch): 24 | FTHP: 1050 psi | FBHP: 1931.6 psi | Qgas: 3.18 MMscf/d | Second Drawdown

Formation: Upper Pliocene | Interval(m): 2197 - 2206m MDRT |Flow period (hr): 1.0| Bean (1/64 inch): 28 | FTHP: 884 psi | FBHP: 1863.5 psi | Qgas: 2.34 MMscf/d | Third Drawdown

Formation: Upper Pliocene | Interval(m): 2197 - 2206m MDRT |Flow period (hr): 7.0| Bean (1/64 inch): 32 | FTHP: 645 psi | FBHP: 1472.0 psi | Qgas: 3.03 MMscf/d | Fourth Drawdown

Formation: Upper Pliocene | Interval(m): 2197 - 2206m MDRT |Flow period (hr): 48.0| Bean (1/64 inch): -- | THP: N/A | BHP: 1662.2 psi | Qgas: -- | Final Build-up

Formation: Upper Pliocene | Interval(m): 2197 - 2206m MDRT |Flow period (hr): 1.0| Bean (1/64 inch): 40 | FTHP: 567 psi | FBHP: 1045.0 psi | Qgas: 4.06 MMscf/d | Maximum Flow

Flow Period	Duration,	Choke	BHP(Psi)	THP	Gas Rate
	hrs	Size(/64")		(Psi)	(MMSCFD)
Initial flow	0.1				
Initial Build-up	11.0		3310.7		
Cleanup flow	5.0				
First Build up	22.5		2927.8		
First Drawdown	8.0	16	2448.0	1892	2.63
Second Drawdown	8.0	24	1931.6	1050	3.18
Third Drawdown	1.0	28	1863.5	884	2.34
Fourth Drawdown	7.0	32	1472.0	645	3.03
Final Buildup	48.0		1662.2		
Maximum Flow	1.0	40	1045.0	567	4.06

BHP is measured at 2140.58m MDRT

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 PVT data/results are included.

5.7.4.1. Formation dynamics tests

	Seat	File	Approx	Depth	Depth	Depth	IMHP	Temp	Remark	Form. Pr.	Strain G	FMHP	Mobility	Comments
No.	No.	No.	Time	m MDRT	m RT	m SS	psia	Deg C		psia	psia	psig	md.ft/cp	
	\Box				TVD		Strain G			Quartz G	Fm Pres	Strain G		
		Date				ite 1, Run 3	45454	***						
3	1	50	06:34	2140.5	2140.5	2126.5	3585.2	33.8	10cc@40cc/min	-		3585.6		tight
3	5	53 54	06:51 07:02	2153.5	2153.4	2139.4	3612.8	34.9 34.4	8cc @ 40cc/min 10cc@40cc/min	-	-	3612.6 3637.4		tight
•	$\overline{}$			2166.0	2165.9	2151.9	3638.1	2	1000051000111111	-	-			tight
3	6	55	07:10	2169.8	2169.3	2155.3	3843.9	34.1	10cc@40cc/min	-		3843.6		tight
3	7	56	07:19	2175.0	2174.9	2160.9	3653.8	34.0	10co@40cc/min	-		3652.9 3654.8		tight
3	8	57	07:32	2176.5	2176.4	2162.4	3655.3	33.8	10cc@40cc/min	-				tight
		58	07:45	2188.6	2188.5	2174.5	3862.5	33.9	10cc@40cc/min	-	-	3882.4		tight
3	9	15	19:08	2198.0	2197.9	2183.9	3702.8	32.3	10co@40cc/min			3702.9		Tight
3	10	16	19:26	2199.0	2198.9	2184.9	3703.8	32.4	10cc+4.7cc@40cc/min	-		3703.4		Tight
3	- 11	17	19:39	2201.0	2200.9	2186.9	3706.8	32.5	9.9cc@40cc/min	-	-	3707.2		Tight
3	12	18	19;53	2202.0	2201.9	2187.9	3708.3	32.7	6.7cc@40cc/min	-	-	3708.7		Tight
3	13	19	20:03	2203.5	2203.4	2189.4	3711.1	33.2	9.9co@40cc/min	3380.6	3366.9	3700.5	2759.7	sample
3	14	21		2204.0	2203.9	2189.9	3701.0	33.2	9.9cc@40cc/min	3380.58	3367	3701.3	1303.4	good
3	15	29	23:01	2204.5	2204.4	2190.4	3703.0	34.3	9.9cc+9.7cc@40cc/min	3380.88	3367.2	3705.0	1909.0	good (sample)
		22	21:43	2205.0	2204.9	2190.9	3703.1	33.8	9.9cc@40cc/min		-	3703.9		tight
		23	22;00	2206.0	2205.9	2191.9	3705.9	34.0	9.9cc@40cc/min	-	-	3706.3		tight
3	16	24	22;16	2208.5	2208.4	2194.4	3711.0	34.1	9.9cc@40cc/min		-	3711.5		tight
3	17	28	22:54	2210.2	2210.1	2196.1	3713.8	34.2	8.9cc@40cc/min		-	3716.8		tight
		25	22:28	2210.5	2210.4	2196.4	3710.8	34.1	4.3cc+7.1cc@40cc/min		-	3715.1		tight
3	18	27	22:44	2212.0	2211.9	2197.9	3717.7	34.2	9.9cc@40cc/min		-	3718.0		tight
3	19	32	00:09	2223.0	2222.9	2208.9	3733.9	34.2	3.2@45cc/min		-	3735.0		tight
3	20	33	00:19	2233.5	2223.4	2209.4	3755.0	34.4	9.9cc@40cc/min		-	3755.0		tight
3	21	34	00;28	2246.6	2246.5	2232.5	3777.0	34.5	9.9cc+9.7cc@40cc/min	-	-	3777.0		tight
3	22	36	01:04	2258.9	2258.8	2244.8	3798.2	34.9	10co@40cc/min	3496.6	3483.2	3799.9	273.3	good (water,sam)
3	23	35	00:46	2265.5	2265.4	2251.4	3809.5	34.6	10cc@40cc/min		-	3810.6		tight
3	24	37	02:14	2279.5	2279.4	2265.4	3833.6	35.6	10cc@40cc/min	-	-	3847.2	13.0	tight
3	25	38	02:33	2296.5	2296.4	2282.4	3875.6	36.0	10co@40cc/min			3871.9		tight
3	26	39	02:46	2337.00	2336.5	2322.5	3927.3	36.4	9.9cc@40cc/min		-	3935.0		tight
3	27	40	03:01	2348.00	2347.7	2333.7	3960.0	37.3	10cc@40cc/min	-	-	3958.0		tight
3	28	41	03:13	2351.50	2350.7	2336.7	3963.9	37.9	10co@40cc/min		-	3964.9		tight
3	29	42	03:26	2353.50	2353.2	2339.2	3967.0	38.3	9.9cc@40cc/min		-	3965.0		tight
3	30	45	04:21	2354.20	2353.8	2339.8	3963.5	33.3	10cc@40cc/min	3795.42	3782.4	3953.6	3355.8	sample, QG unstable
3	31	44	04:12	2354.5	2354.1	2340.1	3965.9	39.3	10co@40cc/min	-	-	3965.2		lost seal
3	32	43	03:38	2355.50	2355.1	2341.1	3968.9	33.5	10cc@40cc/min	3797.35	3784	3966.8	70.6	good
3	33	47	05:38	2356.0	2355.6	2341.6	3956.2	39.6	10cc@40cc/min X 4	3795.63	3784.8	3957.8	3793.1	good
3	34	63	08:15	2370.70	2370.2	2356.2	3982.3	37.5	10co@40cc/min		-	3982.7		tight
3	35	64	08:27	2384.60	2484.0	2470.0	4009.0	30.1	10co@40cc/min	-	-	4008.4		tight
3	36	65	08:37	2400.0	2399.2	2385.2	4034.3	33.7	10cc@40cc/min	-	-	4033.2		tight
3	37	66	08:47	2411.0	2410.0	2396.0	4052.6	39.2	10co@40cc/min	-	-	4052.0		tight
3	38	67	08:58	2455.6	2453.6	2439.6	4123.9	40.0	10co@40cc/min		-	4123.3		tight
3	39	68	9;10	2467.5	2485.1	2451.1	4142.9	41.2	10co@40cc/min			4142.2		tight
3	40	70	09:23	2498.6	2495.0	2481.0	4192.2	41.8	10co@40cc/min			41.92.3		tight
3	41	71	09:33	2502.0	2498.3	2484.3	4198.7	42.6	10co@40cc/min	-	-	4198.3		seal faliure
3	42	73	09:44	2502.2	2498.5	2484.5	4198.3	43.4	10co@40cc/min	4150.64	4137.3	4198.3	7.10	LFA-Water
3	43	77	10:54	2506.0	2502.1	2488.1	4206.2	44.2	10co@40cc/min	-		4207.2		tight
_	L	78	11:05	2507.0	2503.1	2489.1	4214.0	44.2	10cc@40cc/min	-	-	4214.5		tight
3	44	79	11:22	2530	2525.2	2511.2	4258.5	44.6	10co@40cc/min	-		4246.8	\vdash	seal failure
	45	80	11:38	2533	2528.0	2514.0	4253.2	45.1	10co@40cc/min			4253.5		seal failure

Run	Seat	File	Approx	Depth	Depth	Depth	IMHP	Temp	Remark	Form, Pr.	Strain G	FMHP	Mobility	Comments
No.	No.	No.	Time	m MDRT	m RT	m SS	psia	Deg C		psia	psia	psig	md.ft/cp	
					TVD		Strain G			Quartz G	Fm Pres	Strain G		
3	47	82	12:05	2530.1R	2525.3	2511.3	4250.2	45.8	10co@40cc/min	4189.3	4176.2	4250.8		LFA-PO-choking
3	48	86	13:04	2355.5	2355.1	2341.1	3962.0	43.0	10cc@40cc/min	-	-	3962.6		SF
3	49	87	13:14	2355.4	2355.0	2341.0	3982.3	42.2	10cc + 10cc@40cc/min	3793.8	3783.3	3952.0	158.70	LFA-Water sample
3	50	88	13:55	2294	22293.9	22279.9	3837.6	40.5	5cc + 3.3cc @ 40cc/min		-	3838.8		tight
3	51	89	14:06	2230.5	2230.4	2216.4	3732.2	39.1	10co@40co/min X 2	3425.02	3414.6	3733.2	7.1	good
3	52	90	14;27	2216.5	2216.4	2202.4	3709.2	37.8	10cc@40cc/min	-	-	3709.7		tight
3	53	91	14:36	2216.6	2216.5	2202.5	3710.2	37.5	0.9cc + 2.8cc @ 40 cc/mir			3710.9		tight
3	54	92	14:51	2214.6	2214.5	2200.5	3706.6	37.3	10co@40cc/min	-	-	3707.1		tight
3	55	93	15:01	2213.6	2213.5	2199.5	3705.3	37.2	5.7+1.2cc @ 40cc/min	-	-	3706.2		tight

5.7.4.2. Gas composition analysis

Formation: Upper Pliocene | Interval (m.): 2197-2206 m | Sample No.: Sample 1.

C1: 99.69 %| C2: 0.06 %| C3: 0.04 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+:

0.00 %

Carbon-dioxide: 0.00 % Nitogen+Oxygen: 0.25 % Sp.Gr.: 0.554 Molar Mass: 16.04

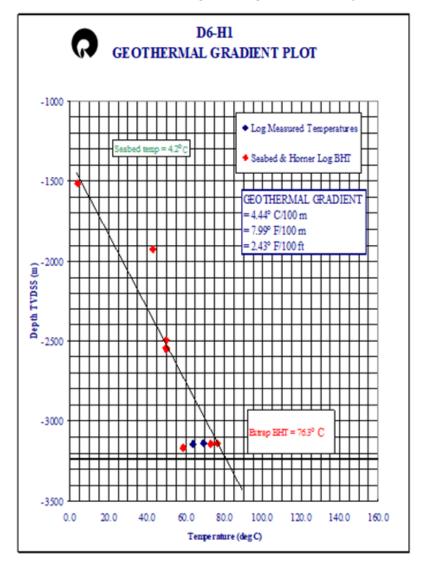
5.7.4.3. Geothermal gradient (from wireline logs)

Formation: Pleistocene | Depth of measurement: 1952.0 m| Temperature: 43.3°C | Formation: Upper Pliocene | Depth of measurement: 2593.0 m| Temperature: 50.0°C | Formation: Upper Pliocene | Depth of measurement: 2593.0 m| Temperature: 50.0°C | Formation: Upper Pliocene | Depth of measurement: 2532.5 m| Temperature: 50.0°C | Formation: Upper Miocene | Depth of measurement: 3255.5 m| Temperature: 58.9°C | Formation: Upper Miocene | Depth of measurement: 3212.2 m| Temperature: 63.9°C | Formation: Upper Miocene | Depth of measurement: 3255.5 m| Temperature: 69.4°C |

5.7.4.4. Other reservoir studies

Biostratigraphy and paleoenvironments of the interval 1835 to 3250 m. Petroleum geochemistry screening study of the interval 2100 to 3200 m.

5.7.4.5. Annexure to Reservoir Engineering studies/analysis



5.7.5. Geology and Reservoir Description

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

5.7.5.1. Geological description

The east coast of India represents a passive continental margin characterized by heterogeneous continental lithosphere overlying an Archean basement. The region experienced initial rifting during the Permo-Triassic period, prior to the breakup of Gondwanaland, leading to the formation of a series of northeast/southwest-trending Gondwana grabens. This rifting followed older Archean fault trends (Eastern Ghats Trend) and was marked by linked rift-rift triple junctions, creating accommodation space favorable for fluvial systems and drainage basin development.

The KG-DWN-98/3 Contract Area lies in the northern KG Basin, offshore Andhra Pradesh. The subsurface is dominated by northeast/southwest-trending en-echelon horsts and grabens formed during the Jurassic-Cretaceous breakup of India from Antarctica. These structures overprint older northwest-southeast Permo-Triassic Pranhita-Godavari graben trends extending offshore.

The northeast-southwest grabens were infilled with Middle Jurassic to Early Cretaceous clastics. Following rifting cessation, Late Cretaceous sediments buried the horst-and-graben topography. Subsequent passive margin progradation commenced in the Late Cretaceous, continuing into the Paleogene, as the Indian sub-plate tilted southeastward due to tectonic uplift in northwestern India and the Himalayan collision. Cretaceous volcanic highs trending northeast-southwest are present in the basin, linked to early magmatic activity along Archean weaknesses.

To the west of the deepwater area, coastal sedimentary basins developed during the Late Jurassic. These northeast/southwest-trending grabens display thick sediment accumulations in depressions and thin or absent sequences over ridges. A widespread Mesozoic-Tertiary unconformity marks both onshore and offshore areas. Coastal Paleogene clastics were predominantly sourced from the Indian craton, while Neogene deepwater sediments were mainly derived from the north (Himalayan fan system).

Regional tilting led to major transgressions and increased depositional energy from the proto-Krishna and Godavari Rivers, enhancing coarse clastic input and promoting passive margin progradation toward the southeast. Since the Cretaceous, sedimentation has been dominated by these river systems, leading to the establishment of modern delta promontories during the Early Miocene.

The thick Tertiary passive margin fill is the main hydrocarbon exploration target within the KG-DWN-98/3 area. The sequence thickens basinward and consists of a shoreface to deepwater submarine channels and fan sandstones. The primary targets are Miocene to Pleistocene intra-

rift meandering river channels and submarine fan sandstones sourced from the Godavari system and deposited along the mid to lower slope.

Structurally, the basin is characterized by sediment-loading-induced collapse and shelf-edge faulting, forming growth fault and toe thrust pairs. Two main deformation phases are recognized: Late Eocene to Early Miocene, and Late Miocene through the Pliocene to present day. Dominant structural elements include major northeast-trending, down-to-basin growth faults and younger toe thrust complexes. Stratigraphic trapping is also important, and hydrocarbon traps are often associated with updip pinchouts of linear slope fan channel complexes.

5.7.6. Reservoir Properties and OHIP

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

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

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

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

RESERVOIR PARAMETERS and ORIGINAL GAS in PLACE

as of JANUARY 1, 2025 for the KG-D6-H1 DISCOVE RY

KG/DWD SF/D6F/2025 CONTRACT AREA

	Reservoir	
		Total
Low		
Area, acres	135	
Gas Formation Volume Factor, scf/rcf	0.0032	
Average Thickness, ft	5.0	
Average Porosity, %	30.00	
Average Water Saturation, %	55.00	
Original Gas in Place, 10 ⁹ ft ³	124	1.24
Original Gas in Place, 10 ⁶ eq ton	0.03	0.03
Best		
Area, acres	373	
Gas Formation Volume Factor, scf/rcf	0.0032	
Average Thickness, ft	7.5	
Average Porosity, %	33.30	
Average Water Saturation, %	52.00	
Original Gas in Place, 10 ⁹ ft ³	6.04	6.04
Original Gas in Place, 10 ⁶ eq ton	0.15	0.15
High		
Area, acres	550	
Gas Formation Volume Factor, scf/rcf	0.0032	
Average Thickness, ft	11.3	
Average Porosity, %	35.00	
Average Water Saturation, %	49.00	
Original Gas in Place, 109 ft3	14.99	14.99
Original Gas in Place, 10 ⁶ eq ton	0.38	0.38

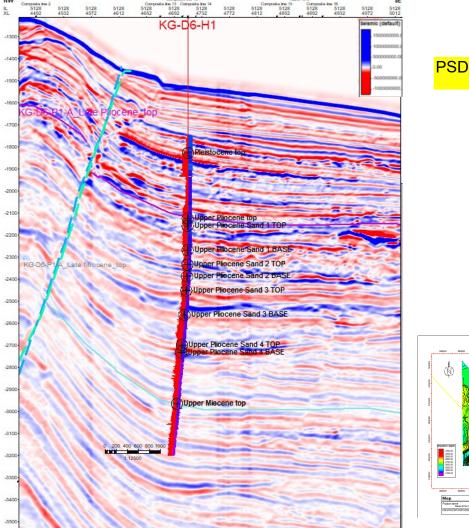
Note: Conversion used 10° s of equal to 0.02519 10° eq tone.

Volumes estimated by a Third Party

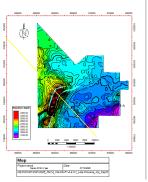
The operator has not reported any in-place volumes.

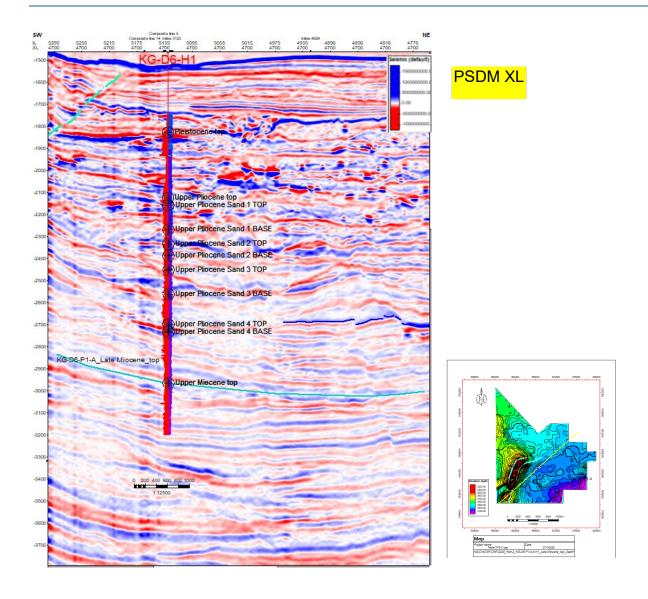
5.7.7. Annex

5.7.7.1. Seismic Sections

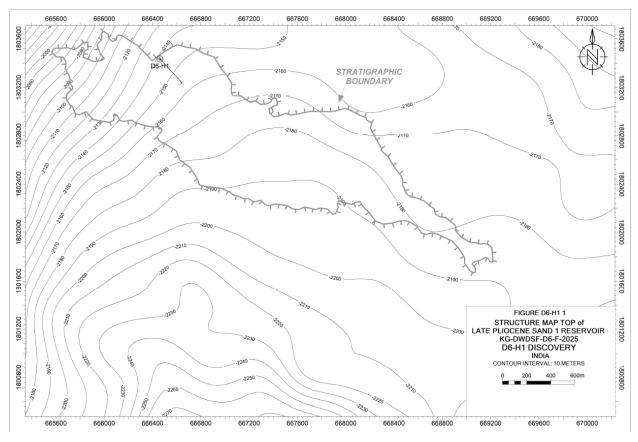


PSDM IL

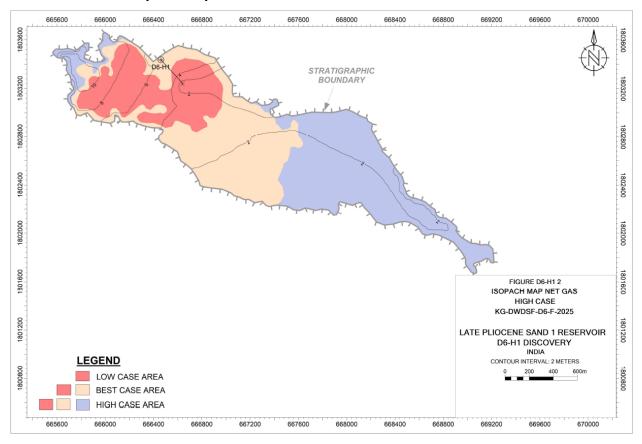




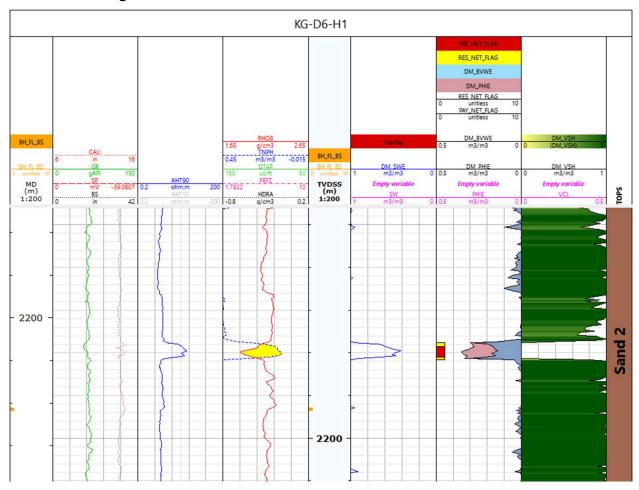
5.7.7.2. Structural Maps



5.7.7.3. Isopach Maps



5.7.7.4. Log Motifs



5.8. D6-P1-A DISCOVERY AND FIELD DESCRIPTION

The well D6-P1-A, located in deep water (1,737 meters) within the D6 Block, KG Basin, offshore Andhra Pradesh, was drilled in 2005 targeting the Upper Miocene to Pleistocene gas reservoirs. The well was the 16th exploration well drilled by RIL in the D6 Block and the 8th in the second drilling campaign.

The original well D6-P1, spudded on April 30, 2005, was abandoned at 1,805 meters due to conductor installation issues, and well D6-P1-A was re-spudded 95.4 meters to the east on May 3, 2005.

Drilled by the Discoverer 534 drillship, the well reached a TD of 3,675 meters MDRT. A $12\frac{1}{4}$ -inch pilot hole was drilled from 2,095 to 2,621 meters to evaluate Pleistocene sands, then opened to 16 inches. Gas-bearing reservoirs of Pliocene and Miocene ages were encountered across the $12\frac{1}{4}$ -inch, $9\frac{1}{2}$ -inch, and $6\frac{5}{8}$ -inch sections. Wireline logs indicated multiple gas-bearing zones, and a GWC was identified at 2,850.5 meters by MDT.

A conventional DST was conducted over the interval from 3,357.0 to 3,381.0 meters MDRT. During a 10.5-hour clean-up flow through a 16/64-inch choke, the well flowed at 5 MMscf/d with a bottomhole pressure (BHP) of 6,092.7 psia at 3,194.9 meters and a THP of 3,339.6 psia. The well was shut in due to bad weather and string de-latching, and no further testing was performed.

5.8.1. 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.

No well diagram was submitted.

5.8.2. 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.

5.8.2.1. Well completion and log evaluation reports availability

WCR/FER availability	Spud date	<u>KB</u>	Drilled depth
Only WCR available	05.03.2005	14 m	3675.0 m MDRT

5.8.2.2. Well logs acquired

Drill hole size (inch) and well logs recorded

```
16.00
      PEX-AIT-APS-HNGS-ECS (2617.0 – 2085.0 m)
       MDT-GR (2113.6 – 2365.3 m)
13.50
      AIT-PEX-APS-ECS (unable to pass 2624 m)
       AIT-PEX-APS-ECS-DSI-HNGS (unable to pass 2624 m)
       MDT-GR-LFA-PO-MRSC- MRMS (unable to pass 2624 m)
       MDT-GR (2656.8 - 2923.2 m)
       OBMI-DSI-HNGS (2893.0 - 2580.0 m)
9.50
       ZAIT-PEX-APS-ECS (3332.0 - 2991.8 m)
       AIT- OBMI-DSI-HNGS (3349.0 - 2991.8 m)
       MDT-GR (3011.9 - 3237.9 m)
       MDT-GR (3078.0 -- 3264.4 m)
6.63
       AIT-PEX-APS-ECS (3675.1 – 3347.0 m)
       OBMI-DSI-HNGS (3675.8 – 3347.0 m)
       MDT-GR (3357.7 – 3625.2 m)
```

5.8.3. Well Testing and Workover History

5.8.3.1. Drill Stem Test (DST)

VSP-GR (3670.0 – 2185.0 m) CST-GR (3651.0 – 3358.0 m)

Formation: Late Miocene | Interval(m): 3194.9 m MDRT | Flow period (hr):10| Bean(1/64 inch): 16 | FTHP: 3339.6 psi | FBHP: 6092.7 psi | Qgas: 5.0 MMscf/d | Clean-up

Formation: Late Miocene | Interval(m): 3194.9 m MDRT | Period (hr): 19.04| Bean(1/64 inch): -- | THP: N/A | BHP: 6102.05 | Qgas: -- | Shut in

5.8.4. 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.

5.8.4.1. Formation dynamics tests

File No.	Approx. Time	Depth m MDRT	Depth m, RT TVD	Depth m,SS TVD	IMHP psia Quartz G	MUD Press. (ppg)	Temp Deg C	FMHP psig Quartz G	Form. Pr. Psia Quartz G	Form. Pr.ppg	Form. Pr. Psia strain	Estimated Mobility md/cp	LFA Indication	Samples	Remarks	Comments
12.25" H	lole Size	On-	Site Observe	er(s): Gau	rav / Manish Supta/Nager	ndra /Vikr				Date: 1	5-May-05		Tool Configuration	: MRPS-MR	HY-MRPO-LFA-MRMS-MRPC-SGTL-TCC-LEHQT	
41	6:45	2113.6	2113.6	2099.6	3331.65	9.2	22.9	3332.19							5co@30co/min	Seal Failure
42	6:56	2113.8	2113.8	2099.8	3332.43	9.2	24.0	3333.32	3219.42	8.9	3216.0	141.6	Gas	1 MRMS	4.9co@30cc/min+9.9co@50cc/min	Good
44	8:11	2115.0	2115.0	2101.0	3334.95	9.2	25.2	3335.39							2.4cc@30cc/min	Tight
43 45	8:02 8:24	2115.1	2115.1	2101.1	3335.60	9.2	25.1	3335.01							4.6cc@30cc/min 3.5cc@30cc/min	Tight Tight
71	16:35	2162.9	2162.9	2148.9	3412.90	9.3	28.3	3413.00							4.3cc@70cc/min	Tight
46	8:35	2162.9	2162.9	2148.9	3414.03	9.3	25.5	3413.09							4.9co@30cc/min +4.9co@30cc/min+9.4co@50cc/min	Tight
69	16:21	2163.0	2163.0	2149.0	3412.82	9.3	28.4	3413.40							5.3cc@70cc/min	Tight
68 47	15:36 8:57	2164.4	2164.4 2164.6	2150.4 2150.6	3415.60	9.3	28.5	3416.22	3296.29	8.9	3293.5		Gas	1 MRMS	19.8cc@70cc/min 4.9cc@30cc/min+10cc@30cc/min	Good Tight
67	15:26	2164.6	2164.6	2150.6	3412.30	9.2	30.4	3414.20							20cc@70cc/min	Tight
54	10:14	2213.3	2213.3	2199.3	3490.10	9.2	27.3	3493.46	3386.58	9.0	3384.2	7	Water	1 MRMS	4.9cc@30cc/min+14.8co@70cc/min	Good
55 56	11:00 11:15	2216.5 2225.1	2216.5 2225.1	2202.5	3498.73	9.3	27.5	3499.33 3510.90	3390.08	9.0	3387.2	109.3			20cc@70cc/min 20cc@70cc/min	Good
57	11:29	2248.3	2248.3	2234.3	3550.87	9.3	27.7	3550.02	3402.04	9.0	3300.0	04.4			20cc@70cc/min	Tight
58	11:42	2253.6	2253.6	2239.6	3558.10	9.3	27.8	3559.38							5cc@30cc/min+15cc@70cc/min	Seal Failure
59 61	11:53	2258.8	2258.8	2244.8	3567.23	9.3	27.9	3567.50	3462.52	9.0	3460.1	11.8	Water		5co@30cc/min+15co@50cc/min	Good
62	12:48	2339.1	2338.1 2339.1	2324.1	3693.40	9.3	30.2	3689.90 3693.65	3651.83	9.2	3649.6	9	Water	1MRMS	5cc@30cc/min 5cc@30cc/min+10cc@50cc/min	Tight Good
63	14:28	2365.3	2365.3	2351.3	3734.00	9.3	30.3	3734.0	0001.00		5516.5		Traile:	THII CHILD	3.5cc@30cc/min	Tight
\neg	Good	Points :7		Tight P	oints : 11		Lost	seal: 2		Total Po	oints: 20					
	-		•			•			•							
13.5" Ho	le Size	Ons	Cobserver(s): Sarwesi · Manish G	h / Gaurav iupta/ Nava	nit/N anen	des			Date:3	I-May-05	Т	ool Configuration: I	MRPS-MRH	Y-MRPO-LFA-MRMS-MRPC-SGTL-TCC-LEHQT	
95	22:17	2657.39	2657.39	2643.39	4485.9	9.9	43	4488.2							5+5 cc @ 30+30 cc/min	Tight
97	22:51	2658.41	2658.41	2644.41	4489.8	9.9	41	4490.1							5 oc @ 30+30 cc/min	Tight
98	22:37	2659.32 2660.4	2659.32 2660.4	2645.32 2646.4	4490.0	9.9	42.4	4491.6 4491.8							5+5+5 oc @ 30+30 oc/min	Tight
98	23:02	2000.4	2716.89	2702.89	4492.08 4586.2	9.9	45.1	4588.7	4379.18	9.45	4379.7	2.7		_	5+10 cc @ 30 cc/min 10+5cc@70+50cc/min	Tight Good
87	19:47	2716.93	2716.93	2702.93	4591.9	9.9	43.2	4595.08	4379.10	8.40	457 8.7				5+10cc@30+100cc/min	Press, Not stablized
87 88	19:16	2717.93	2717.93	2703.93	4594.8	9.9	42	4596	4379.46	9.44	4380	56.91			5+5 oc @ 30+30 oc/min	Good (formation collapse)
82	17:25	2718.21	2718.21	2704.21	4591.1	9.9	42.5	4591.1							10+5cc@70+50cc/min	Tight
94 81	21:38	2718.41 2718.6	2718.41 2718.6	2704.41 2704.6	4593.2 4591.3	9.9	43 42.7	4593.8 4591.3					Gas	MRMS-5	PO 10+50c@70+50cc/min	Sample Lost seal
83	17:44	2719.6	2719.6	2705.6	4593.6	9.9	41.9	4593.6							20cc @ 70cc/min	Tight
84	17:54	2720.11	2720.11	2706.11	4595.2	9.9	41.4	4595.15	4382.65	9.44	4383	20.6			5+5 cc @ 30+30 cc/min	Good (formation collapse)
85	18:20	2721 2740.01	2721 2740.01	2707 2726.01	4597.0 4633.0	9.9	42	4597 4633	4385.29	9.44	4385.2	53.4	Water	MRMS-4	5+5 cc @ 30+30 cc/min	Good
89	20:39	2740.01	2740.01	2732.01	4644.3	9.9	42.1	4643.9							10+5cc@70+50cc/min 5+5+10 cc@30+50+50 cc/min	Tight Tight
91	21:02	2747.5	2747.5	2733.5	4646.9	9.9	42.2	4646.8							5+10 cc@30+50 cc/min	Tight
92	21:12	2748.52	2748.52 2749.31	2734.52 2735.31	4648.4	9.9	42.3	4648.4 4652.6			4369.8	2.8			2+10 co@30+50 cc/min	Tight
93	21:23	2749.31 2751.1	2749.31	2735.31	4652.6 4652.8	9.9	43.2 42.4	4655.9	4368.67	9.31	4369.8	2.8		_	5+5 cc @ 30+30 cc/min 5+10 cc@30 cc/min	Good/ Formation collapsed Tight
43	4:38	2810.98	2810.98	2798.98	4749.9	9.9	41.1	4752.5							5+10cc@20+50cc/min	Tight
44	4:52	2811	2811	2797	4752.9	9.9	40.8	4752.5							4.5+7.8co@30+60cc/min	Tight
45	5:05 5:15	2811.89	2811.89	2797.89	4752.8 4771.0	9.9	41	4752.92 4772.8							5co@30cc/min+5co@50cc/min	Tight
46 47	5:10	2820	2820 2831	2806 2817	4771.0	9.9	41.3	4772.8	_	-	_			-	4.8+10cc@30+50cc/min 5+5+5cc@30+30+20cc/min	Tight Tight
	0.20			2011										MRMS 1		
48	5:47	2839	2839	2825	4804.0	9.9	41.6	4806	4367.85	9.02	4387.7	7.2	Gas	&MRMS 2	5+10cc@30+70cc/min	Good
49	6:54	2840.5	2840.5	2826.5	4807.0	9.9	42.4	4809	4368.85	9.02	4368.9	445	Gas		5+10+5cc@20+70+100cc/min	Good
50	7:25	2842.48	2842.48	2828.48	4812.0	9.9	43.3	4813	4369.19	9.01	4369.4	23.7	04,5		10+10cc@50+100cc/min	Good
54	8:18	2847.49	2847.49	2833.49	4818.0	9.9	44.1	4818.5	4370.15	9.00	4370.3	25.5	Gas		10+10cc@50+100cc/min	Good
55	8:44	2850.97	2850.97	2836.97	4824.6	9.9	44.2	4825.4	4371.4	8.99	4371.6	203.7	14/		10+10co@50+100cc/min	Good
63 51	11:46 8:02	2850.98 2851.8	2850.98 2851.8	2836.98 2837.8	4820.9 4828.0	9.9	47.3 43.4	4824.14 4828	4372.17		4372.6	20.2	Water		5+5+10cc@40+80+100cc/min 10+10cc@50+50cc/min	Good Lost seal
52	8:10	2851.9	2851.9	2837.9	4827.9	9.9	43.5	4827.9							10+10cc@50+50cc/min	Lost seal
60	10:57	2855	2855	2841	4833.0	9.9	46.1	4832	4379.3	9.00	4380.2	2			10+5cc@70+50cc/min	Good
61	11:23 9:53	2856.57 2858	2856.57 2858	2842.57 2844	4834.7 4836.1	9.9	46.1 45.2	4836.4 4841.4	4381.3	8.99	4381.1	16.4	Water	MRSC	5+5 cc @ 30+40 cc/min	Tight
59	9:53	2860.46	2858	2846.46	4836.1 4840.6	9.9	45.2	4841.4	4381.3	8.99	4381.1 4386.6	6.98	Water	MRSC	10+10cc@50+100cc/min 10+10cc@70+100cc/min	Good
58 57	9:10	2862.16	2862.16	2848.16	4841.7	9.9	44.3	4842.4	.000.00	0.00	4000.0	0.00	***************************************		10+10cc@50+100cc/min	Lost seal
	12:12	2874.01	2874.01	2860.01	4865.0	9.9	46.7	4865							5+5 cc @ 30+40 cc/min	No seal
64	14:23	2874.57	2874.57	2860.57	4864.7	9.9	47.1	4865.8							5+5 cc @ 30+40 cc/min	Tight
71		2875.48 2875.5	2875.48 2875.5	2861.48 2861.5	4868.8 4866.4	9.9	46.8 47.2	4868.7 4866.4	4445.71	9.07	4446.3	2	Gas	 	5+5 cc @ 30+40 cc/min 5+5 cc @ 30+40 cc/min	Tight Good
71 65	12:21			2862.66	4870.9	9.9	47.1	4870.9	4446.86	9.07	4447.6	380.3	Gas	MRMS 3	5+5 cc @ 30+40 cc/min	Good
71	12:21 13:51 12:39	2876.66	2876.66												5+5+5 cc @ 70+100+100 cc/min	No seal
71 65 69 66 67	13:51 12:39 13:12	2876.66 2876.66	2876.66	2862.66	4870.8	9.9	48	4870.9								
71 65 69 66 67	13:51 12:39 13:12 13:34	2876.66	2876.66 2877.69	2862.66 2863.69	4870.8 4868.6	9.9	48 47.3	4868.6							5+5 cc @ 30+40 cc/min	No seal
71 65 69 66 67 68 72	13:51 12:39 13:12 13:34 14:38	2876.66 2876.66	2876.66 2877.69 2879.41	2862.66 2863.69 2865.41	4868.6 4873.7	9.9	47.3 47.2	4868.6 4874.9							5+5 cc @ 30+40 cc/min 5+5 cc @ 30+40 cc/min	No seal Tight
71 65 69 66 67 68 72 73 74	13:51 12:39 13:12 13:34	2876.66 2876.66	2876.66 2877.69 2879.41	2862.66 2863.69		9.9		4868.6							5+5 cc @ 30+40 cc/min	No seal

9.5" Ho	ole Size	Onsi	ite observer(s): Gaurav	/ Vikram					Date: 1	2-June-05					
		RTC	OC Observer	s: Manish (Supta/ Nag	endra/Nav	ranit									
108	9:48	3011.9	3011.9	28.0	5756.4	11.2	49.6	5759.0							5+5cc@30+25cc/min	Tight
109	10:03	3012.1	3012.1	2998.1	5759.0	11.2	49.3	5759.0							10cc@25cc/min	Tight
110	10:18	3012.9	3012.9	2998.9	5764.0	11.2	49.5	5765.0							10+5cc@25cc/min	Tight
111	10:30	3021.0	3021.0	3007.0	5782.5	11.2	49.9	5783.0							5+5cc@25cc/min	Tight
112	10:40	3021.2	3021.2	3007.2	5784.0	11.2	49.0	5784.0							5+5@25+40cc/min	Tight
113	10:53	3024.5	3024.5	3010.5	5792.0	11.2	50.2	5793.0							5cc@25cc/min	Tight
114	11:03	3028.5	3028.5	3014.5	5801.0	11.2	50.9	5807.0				10.8	Gas	1MRMS	5+5+5cc@25+25+40cc/min	Press not stab,PO gas
115	12:57	3028.7	3028.7	3014.7	5801.0	11.2	51.4	5802.0							5+10cc@25+50cc/min	Tight
116	13:10	3037.9	3037.9	3023.9	5823.0	11.2	51.9	5821.0							5cc@25cc/min	System Crashed
118	13:56	3037.9	3037.9	3023.9	5821.0	11.2	52.2	5821.0							10+10cc@50cc/min	Tight
119	14:07	3039.1	3039.1	3025.1	5822.0	11.2	52.4	5822.0							5cc@30cc/min	Tight
120	14:16	3040.5	3040.5	3026.5	5824.5	11.2	52.5	5825.2	4848.07	9.3	4846.8	16.3			5cc+ 10cc @30cc/min	Good
121/ 122	14:47	3045.0	3045.0	3031.0	5834.8	11.2	52.9	5833.0	4853.69	9.3	4852.5	66	(Press. Drop when started PO)		5cc+ 10cc +5cc@ 30+60+80cc/min	Good
123	16:14	3047.7	3047.7	3033.7	5838.1	11.2	53.5	5839.0	4857.68	9.3	4856.6	35.7	(Press. Drop when started PO)		5cc+ 10cc@ 30 + 70cc/min	Good
126	17:06	3049.2	3049.2	3035.2	5840.8	11.2	54.0	5841.5							Press. Drop when started PO	Tight
124	16:36	3049.8	3049.8	3035.8	5840.9	11.2	54.3	5841.0	4860.58	9.3	4859.5	612	(Press. Drop		5cc+ 10cc@ 30 + 70cc/min	Good
127	17:16	3051.5	3051.5	3037.5	5845.4	11.2	54.0	5845.4	4862.72	9.3	4861.4		Water (slugs)	MRMS-2	5cc+ 10cc +5cc@ 30+80+80cc/min	Good
129	18:33	3086.5	3086.5	3072.5	5917.5	11.2	54.7	5917.4							5cc+ 10cc +5cc@ 30+50+50cc/min	Tight
131	18:57	3091.7	3091.7	3077.7	5923.4	11.2	54.6	5924.2							5cc+5cc @30+50cc/min + PO	Tight
130	18:48	3091.8	3091.8	3077.8	5925.5	11.2	54.6	5926.1							5cc+5cc @30+50cc/min	Tight
132	19:13	3092.5	3092.5	3078.5	5923.7	11.2	55.1	5925.1							5cc+5cc @30+50cc/min + PO	Tight
136	19:56	3223.0	3223.0	3209.0	6164.6	11.2	59.1	6164.0							5cc+5cc@30cc/min	No Seal
137	20:12	3224.1	3224.1	3210.1	6165.3	11.2	59.5	6166.0							5cc+10cc @30+70cc/min	Tight
138	20:22	3225.1	3225.1	3211.1	6170.1	11.2	59.8	6170.0	5445.17	9.90	5443.7	3041			5cc+ 10cc +5cc@ 30+100+110cc/min	Good, Pump not working
139	20:43	3229.0	3229.0	3215.0	6178.8	11.2	60.1	6179.0	5446.2	9.9	5445.7	20			5cc+ 10cc +5cc@ 30+100+110cc/min	Good, Pump not working
141	21:29	3230.9	3230.9	3216.9	6181.7	11.2	61.1	6182.0							5cc+ 10cc +5cc@ 30+100+110cc/min	Auto reset
140	21:15	3231.0	3231.0	3217.0	6182.7	11.2	60.9	6183.1							5cc+ 10cc +5cc@ 30+100+110cc/min	Auto reset
142	22:11	3234.1	3234.1	3220.1	6186.9	11.2	62.0	6187.1	5447.64	9.9	5446.9	24.1			5cc+ 15cc@ 30+50cc/min	Good, Pump not working
143	22:27	3235.2	3235.2	3221.2	6189.0	11.2	62.2	6189.0							5cc+ 15cc@ 30+50 cc/min	Auto reset
144	22:41	3237.9	3237.9	3223.9	6195.1	11.2	62.3	6195.4							5cc+ 15cc@ 50+80 cc/min	Tool Problem
	Good	Points :8		Tight P	oints : 15		Lost:	seal:1		Total Po	oints: 30				·	

5" Hole	Size Ren		e observer(s)							Date: 13	-June-05		Tool Config	juration: MRPS-MRHY-MRPO-LFA-MRMS-MRPC-SGTL	-TCC-LEHQT
		RTOC	Observers: N	lagendra/N	lanish G/ M	lanish L									
188	12:22	3078.0	3078.0	3064.0	5861.0	11.2	58.2	5861.0						5+5cc@30+60cc/min	Tight
187	12:13	3091.9	3091.9	3077.9	5891.8	11.2	58.5	5891.8						5+5+10cc@30+60+80cc/min	Tight
186	12:05	3095.5	3095.5	3081.5	5899.4	11.2	58.5	5899.4						5+5cc@30+60cc/min	Tight
185	11:46	3099.2	3099.2	3085.2	5905.8	11.2	58.9	5905.8	5128.4	9.7				5+10+5cc@60+100+120cc/min	Pressure not stab.
184	11:37	3103.1	3103.1	3089.1	5913.6	11.2	59.2	5913.6						5+5+5cc@30+30+60cc/min	Tight
183	11:28	3108.5	3108.5	3094.5	5914.2	11.2	59.5	5914.2						5+5cc@30+60cc/min	Tight
182	11:17	3121.0	3121.0	3107.0	5940.6	11.2	60.0	5940.6						5+5+6cc@30+60+80cc/min	Lost seal
181	11:09	3123.6	3123.6	3109.6	5944.2	11.2	60.2	5944.2						5+5cc@30+50cc/min	Tight
179	10:58	3183.5	3183.5	3169.5	6078.0	11.2	60.5	6078.0						5+5+5cc@30+30+60cc/min	Tight
178	10:48	3193.0	3193.0	3179.0	6106.4	11.2	60.0	6106.4						5+5cc@30+50cc/min	Tight
175	10:25	3220.0	3220.0	3206.0	6138.0	11.2	62.4	6138.0						5+5cc@30+60cc/min	Tight
155	6:35	3225.1	3225.1	3211.1	6164.0	11.2	55.7	6164.0						5+5cc@80cc/min	Tight
156	6:43	3225.2	3225.2	3211.2	6164.0	11.2	57.7	6164.0						5+10cc@30+50cc/min	Tight
157	6:51	3225.3	3225.3	3211.3	6164.0	11.2	59.1	6164.0						5+10cc@30+40cc/min	Tight
158	7:00	3235.2	3235.2	3221.2	6188.8	11.2	60.4	6188.8	5448.4	9.9	5446.8	13.9		5+10+5cc@30+50+100cc/min	Good,PO,Pump faile
160	8:13	3237.9	3237.9	3223.9	6188.5	11.2	60.7	6188.5						5co@30cc/min	Tight
161	8:20	3238.0	3238.0	3224.0	6190.3	11.2	61.3	6190.3	5449.3	9.9	5447.7	455.9		5+10cc@50+100cc/min	Good
162	8:35	3240.0	3240.0	3226.0	6192.9	11.2	61.4	6192.9						5+5cc@30+50cc/min	Tight
163	8:46	3242.0	3242.0	3228.0	6196.6	11.2	61.7	6196.6						5co@30cc/min	Tight
164	8:54	3248.5	3248.5	3234.5	6211.2	11.2	61.8	6211.6						5+5+10cc@30+50+80c/min	Tight
165	9:05	3250.1	3250.1	3236.1	6213.3	11.2	61.8	6213.3	5453.1	9.8	5451.8	171.6		5+10cc@30+100cc/min	Good
172	10:14	3253.2	3253.2	3239.2	6211.0	11.2	62.7	6211.0						5+5+10cc@30+60+80cc/min	No seal
166	9:16	3255.0	3255.0	3241.0	6223.4	11.2	62.0	6223.4						5+5+5cc@30+50+50cc/min	No seal
171	10:07	3255.0	3255.0	3241.0	6215.4	11.2	62.6	6215.4						5+5cc@30+60cc/min	Tight
167	9:23	3255.1	3255.1	3241.1	6220.3	11.2	62.1	6220.3						5+5+10cc@30+50+80cc/min	Tight
169	9:46	3260.3	3260.3	3246.3	6230.3	11.2	62.5	6230.3						20cc@30cc/min	Software crash,Retra
170	9:53	3260.3	3260.3	3246.3	6230.3	11.2	62.5	6230.3						5cc@30cc/min	Tight
168	9:37	3264.4	3264.4	3250.4	6242.4	11.2	62.2	6242.4						5+5+10cc@30+60+80cc/min	No seal

6" Ho	le Size	Onsi	ite observer(s): Gaurav						Date: 6	3-July-05	Т	ool Configuration:	MRPS-MRH	Y-MRPO-LFA-MRMS-MRPC-SGTL-TCC-LEHQT	
		RTOC	Observers: I	Manish G /	Nagendra											
74	6:46	3357.7	3357.7	3343.7	6902	12.1	61.5	6904		-	-	-			5+5+10cc@60+45+70cc/min	no seal
75	6:57	3357.9	3357.9	3343.9	6907	12.1	61	6908		-	-	-			5+10@60cc/min	tight
76	7:21	3358.2	3358.2	3344.2	6907	12.1	61	6907		-	-	-			5+10@30+60cc/min	no seal
85	7:28	3358.2	3358.2	3344.2	6910	12.1	61.7	6937	6156.14	10.7	6159.2	461.3	Gas	1 MRMS	5+10+5@30+90+100cc/min	good
87	8:34	3359	3359	3345	6908	12.1	62	6912	6156.44	10.7	6159.4	881.2			5+15cc@40+100cc/min	good
88	8:44	3360	3360	3346	6915	12.1	62.4	6924	6156.78	10.7	6159.8	28076			20co@100cc/min	good
89	9:09	3372	3372	3358	6952	12.1	62.6	6952		-	-	-			5+5cc@40+60cc/min	tight
90	9:16	3373	3373	3359	6953	12.1	63	6953	6200.75	10.8	6203.9	228.2	Gas	1 MRMS	5+15cc@40+100cc/min	Good
91	10:07	3377	3377	3363	6965.7	12.1	64.5	6957.7	6202.58	10.8	6205.8	-			5+15cc@40+100cc/min	Good
92	10:31	3379	3379	3365	6960	12.1	64.8	6962.5	6202.8	10.8	6206.2	727.8			5+15cc@40+100cc/min	Good
94	11:10	3381.5	3381.5	3367.5	6968.3	12.1	65.2	6968.1	6203.46	10.8	6206.9	562.6			5+15cc@40+100cc/min	Good
93	10:54	3382.5	3382.5	3368.5	6969.08	12.1	65.1	6974.5	6203.9	10.8	6207.8	744.9	Gas		5+15cc@40+100cc/min	Good
																Good (pressure drop after
95	11:24	3387	3387	3373	6978	12.1	65.3	6974	6206.48	10.7	6209.7	-	Water	-	5+15cc@40+100cc/min	PO)
1 1		l		l	I	l .	l	l			I			1 1	_	Good (pressure drop after
96	12:07	3388	3388	3374	6978.5	12.1	65.8	6978	6209.04	10.7	6212.4	123	Water		5+15cc@40+100cc/min(pressure not stabilised)	PO)
97	12:41	3389	3389	3375	6978.2	12.1	66.3	6987.21	6208.19	10.7	6212.9	347.4	Water	1 MRMS	5+15cc@40+100cc/min(pressure not stabilised)	Pressure not stabilize
98	13:19	3394.9	3394.9	3380.9	6999.5	12.1	66.6	6999.8		-	-	-		-	5+5cc@40+60cc/min	Tight
99	13:28	3396.5	3396.5	3382.5	6999.6	12.1	66.5	6998		-	-	-			5+5cc@40+60cc/min	tight
100	13:35	3396.6	3396.6	3382.6	6996.6	12.1	66.3	6995		-	-	-		-	5+5cc@40+60cc/min	tight
1 1		l		l	I	l .	l	l			I			1 1	_	Good (pressure drop after
101	13:41	3397.2	3397.2	3383.2	6996.6	12.1	66.6	6995.8	6261.5	10.8	6265	-			5+15cc@40+100cc/min	PO)
102	14:01	3395	3395	3381	6972.8	12.0	66.4	6976.6		-	-	-		-	5+5cc@40+60cc/min	Tight
103	14:12	3396.1	3396.1	3382.1	6989.8	12.1	67.5	6998.6	6259.27	10.8	6263.2	756	No LFA	1 MRMS	5+10+5cc@40+80+100cc/min	Good
107	15:05	3362.6	3362.6	3348.6	6911.54	12.1	67	6915.8		-	-	-			5+5cc@40+60cc/min	Tight
109	15:21	3435.7	3435.7	3421.7	7081.5	12.1	66.6	7080.6				271.8	Gas	1 MRMS	5+15cc@40+100cc/min	Pressure not stabilize
110	16:02	3436.8	3436.8	3422.8	7081.3	12.1	67.1	7077.24	6442.59	11.0	6446.6	466		$\overline{}$	5+15cc@40+100cc/min	Good
111	16:24	3437.9	3437.9	3423.9	7078.6	12.1	67.5	7077.8		-	-	-		$\overline{}$	5+5cc@40+60cc/min	Tight
112	16:31	3439.2	3439.2	3425.2	7079.8	12.1	67.6	7079.3			-	-			5cc@40cc/min	Tight
113	16:38	3456.3	3456.3	3442.3	7122.2	12.1	67.6	7122.2			-	-			5+5cc@40+60cc/min	Tight

5.8.4.2. Gas composition analysis

Formation: Early Pleistocene| Interval(m.): 2113.8 m| Sample No.: Sample 1.01

C1: 99.92 %| C2: 0.08 %| C3: 0.0 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+:

0.00 %

Carbon-dioxide: 0.00 % Nitogen+Oxygen: 0.00 % Sp.Gr.: 0.554 Molar Mass: 16.05

Formation: Early Pleistocene| Interval(m.): 2164.4 m| Sample No.: Sample 1.04

C1: 99.95 %| C2: 0.05 %| C3: 0.0 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+: 0.00 %|

Carbon-dioxide: 0.00 % Nitogen+Oxygen: 0.00 % Sp.Gr.: 0.554 Molar Mass: 16.05

Formation: Early Pliocene| Interval(m.): 2839.0 m| Sample No.: Sample 2.02

C1: 99.21 %| C2: 0.79 %| C3: 0.04 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+: 0.00 %|

Carbon-dioxide: 0.00 % Nitogen+Oxygen: 0.00 % Sp.Gr.: 0.558 Molar Mass: 16.15

Formation: Early Pliocene| Interval(m.): 2876.6 m| Sample No.: Sample 2.04

C1: 99.46 %| C2: 0.54 %| C3: 0.00 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+: 0.00 %|

Carbon-dioxide: 0.00 % Nitogen+Oxygen: 0.00 % Sp.Gr.: 0.556 Molar Mass: 16.21

Formation: Late Miocene| Interval(m.): 3028.5 m| Sample No.: Sample 3.01

C1: 99.10 %| C2: 0.68 %| C3: 0.00 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+: 0.00 %|

Carbon-dioxide: 0.22 % Nitogen+Oxygen: 0.00 % Sp.Gr.: 0.559 Molar Mass: 16.24

Formation: Late Miocenel Interval(m.): 3358.2 ml Sample No.: Sample 4.01

C1: 99.06%| C2: 0.94 %| C3: 0.00 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+: 0.00 %|

Carbon-dioxide: 0.00 % Nitogen+Oxygen: 0.00 % Sp.Gr.: 0.559 Molar Mass: 16.21

Formation: Late Miocenel Interval(m.): 3373.0 ml Sample No.: Sample 4.02

C1: 98.98%| C2: 01.02 %| C3: 0.00 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+: 0.00 %|

Carbon-dioxide: 0.00 % Nitogen+Oxygen: 0.00 % Sp.Gr.: 0.560 Molar Mass: 16.22

Formation: Late Miocenel Interval(m.): 3457.7 ml Sample No.: Sample 4.03

C1: 98.85%| C2: 01.05 %| C3: 0.00 %| iC4: 0.00 %| nC4: 0.00 %| iC5: 0.00 %| nC5: 0.00 %| C6+:

0.00 %

Carbon-dioxide: 0.00 % Nitogen+Oxygen: 0.00 % Sp.Gr.: 0.561 Molar Mass: 16.25

5.8.4.3. Geothermal gradient (from wireline logs)

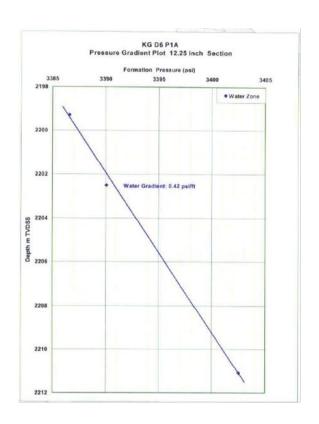
Formation: Early Pleistocene | Depth of measurement: 2589.7 m | Temperature: 34.0°C | Formation: Early Pleistocene | Depth of measurement: 2365.3 m | Temperature: 33.0°C | Formation: Early Pliocene | Depth of measurement: 2903.0 m | Temperature: 47.8°C | Formation: Early Pliocene | Depth of measurement: 2861.0 m | Temperature: 48.9°C | Formation: Late Miocene | Depth of measurement: 3322.0 m | Temperature: 51.7°C | Formation: Late Miocene | Depth of measurement: 3314.0 m | Temperature: 54.5°C | Formation: Late Miocene | Depth of measurement: 3237.0 m | Temperature: 61.0°C | Formation: Late Miocene | Depth of measurement: 3244.0 m | Temperature: 78.3°C | Formation: Late Miocene | Depth of measurement: 3650.0 m | Temperature: 78.3°C |

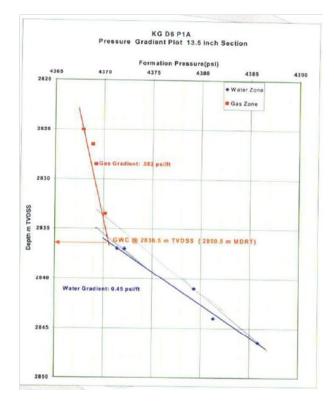
Formation: Late Miocene | Depth of measurement: 3646.0 m | Temperature: 79.4°C | Formation: Late Miocene | Depth of measurement: 3625.2 m | Temperature: 75.9°C | Formation: Late Miocene | Depth of measurement: 3605.0 m | Temperature: 78.3°C |

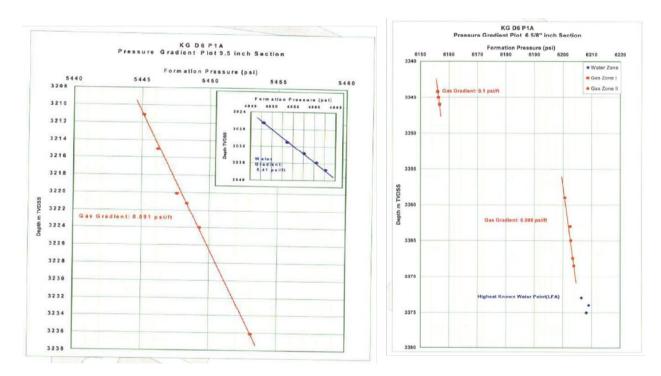
5.8.4.4. Other reservoir studies

Biostratigraphy and paleoenvironments of the interval 2100 to 3675 m. Petroleum geochemistry screening study of the interval 2095 to 3675 m. PVT Express Fluid composition report

5.8.4.5. Annexure to Reservoir Engineering studies/analysis







5.8.5. 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.

5.8.5.1. Geological description

The well is located in the northern KG Basin, offshore Andhra Pradesh, India, within a passive continental margin characterized by a heterogeneous Archean basement and a complex tectonic evolution. The basin's geological history includes multiple rifting phases, starting with Permo-Triassic rifting followed by Jurassic-Cretaceous breakup and later passive margin development. The northeast/southwest-trending, en-echelon horsts and grabens dominate the structural setting, overprinted on older northwest-southeast Permo-Triassic trends.

The area is characterized by thick Jurassic to Cretaceous syn-rift clastics, buried by widespread Late Cretaceous and Tertiary sediments. Significant Neogene deposition was driven by sediment input from the Krishna and Godavari Rivers, leading to the formation of thick deepwater sequences including submarine fans and channel sands.

Two main tectonic phases affected the area: Late Eocene to Early Miocene and Late Miocene through the Pliocene, generating major northeast-trending, down-to-basin growth faults and toe-

thrust systems. Hydrocarbon trapping mechanisms include both structural traps related to these faults and stratigraphic pinchouts of slope fan channels.

The primary exploration targets are Miocene to Pleistocene submarine channels and fan sandstones deposited on the mid to lower slope, mainly sourced from the Godavari River system.

5.8.6. 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)) and 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 information docket.

RESERVOIR PARAMETERS and ORIGINAL GAS in PLACE as of JANUARY 1, 2025 for the KG-D6-P1-A DISCOVERY of KG/DWDSF/D6F/2025 CONTRACT AREA

	Reservoir				
	IV	V	XI	XII-XIII	Total
Low					
Area, acres	17	40	31	9	
Gas Formation Volume Factor, scf/rcf	0.0033	0.0033	0.0030	0.0028	
Average Thickness, ft	7.2	15.8	20.7	32.6	
Average Porosity, %	18.18	20.00	18.00	18.00	
Average Water Saturation, %	56.43	50.97	44.00	37.00	
Original Gas in Place, 10 ⁹ ft ³	0.13	0.81	0.95	0.51	2.39
Original Gas in Place, 10 ⁵ eq ton	0.00	0.02	0.02	0.01	0.06
Best					
Area, acres	44	180	120	20	
Gas Formation Volume Factor, scf/rcf	0.0033	0.0033	0.0030	0.0028	
Average Thickness, ft	9.2	16.3	22.5	35.6	
Average Porosity, %	19.92	22.00	20.00	21.00	
Average Water Saturation, %	54.46	46.00	40.00	32.00	
Original Gas in Place, 10 ⁹ ft ³	0.49	4.61	4.68	1.55	11.33
Original Gas in Place, 10 ⁵ eq ton	0.01	0.12	0.12	0.04	0.29
High					
Area, acres	79	297	161	30	
Gas Formation Volume Factor, scf/rcf	0.0033	0.0033	0.0030	0.0028	
Average Thickness, ft	13.0	16.4	23.6	27.0	
Average Porosity, %	21.97	24.01	22.00	24.00	
Average Water Saturation, %	50.93	41.02	36.00	27.00	
Original Gas in Place, 109ft3	1.46	9.11	7.79	2.18	20.55
Original Gas in Place, 10 ⁶ eq ton	0.04	0.23	0.20	0.05	0.52

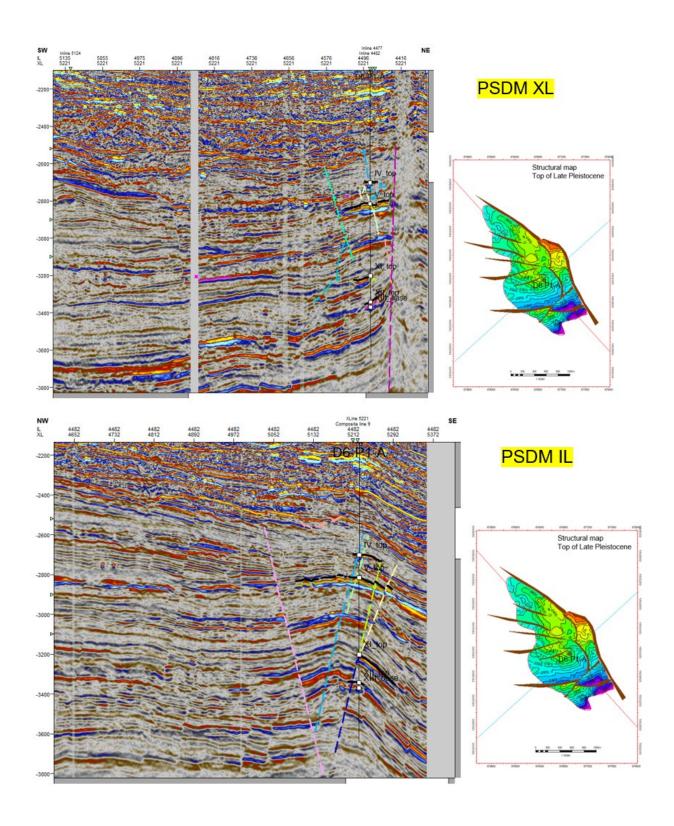
Note: Conversion used 109 scf equal to 0.02519 108 eq tone.

Volumes estimated by a Third Party

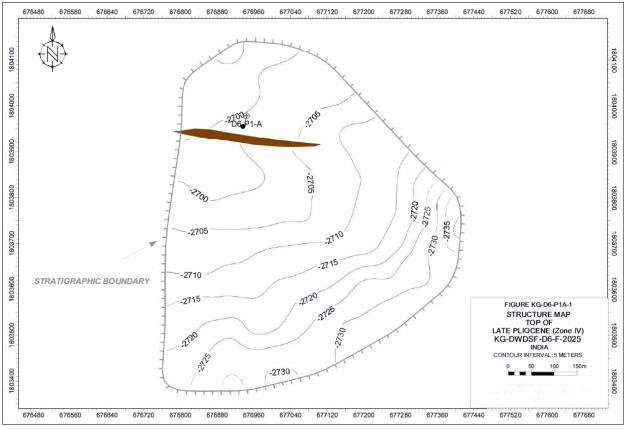
The operator has reported an in-place volume of 9.95 MMTOE (Best case).

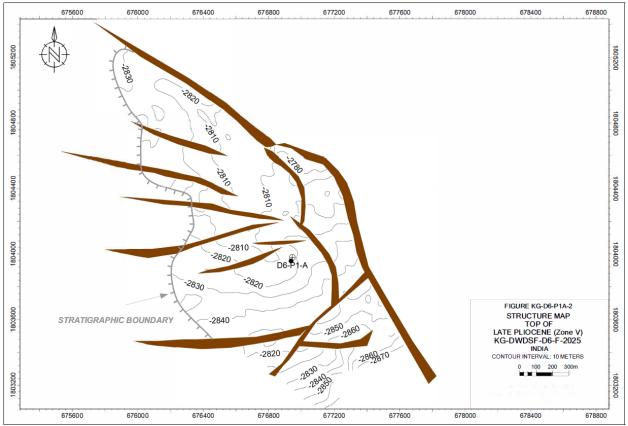
5.8.7. Annex

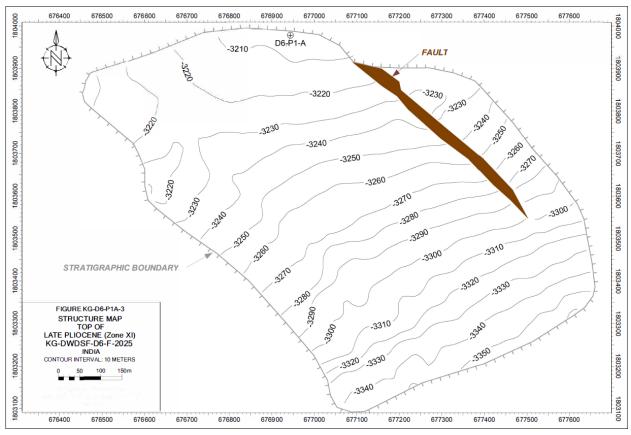
5.8.7.1. Seismic Sections

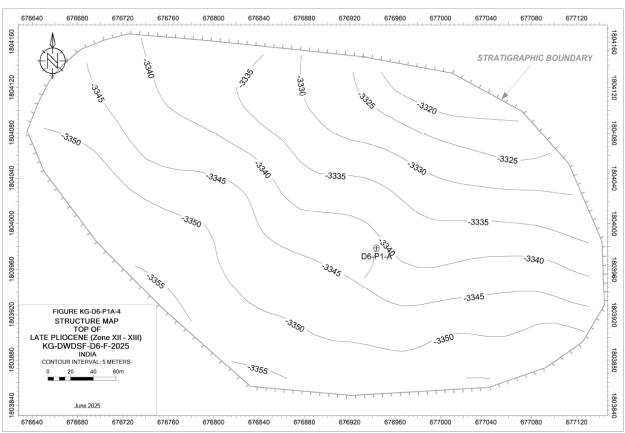


5.8.7.2. Structural Maps

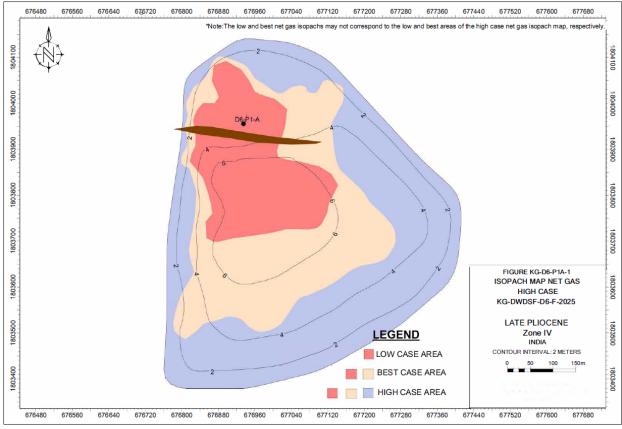


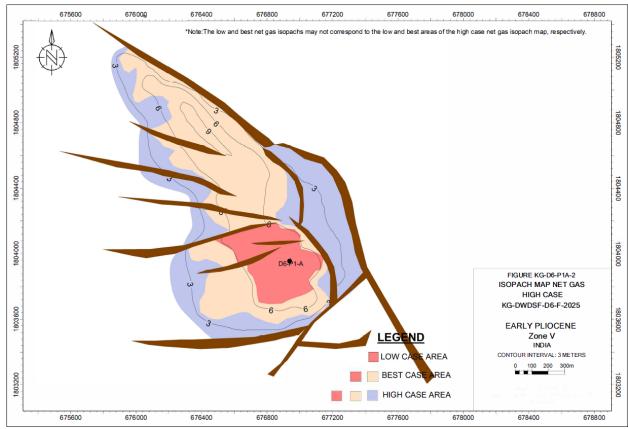


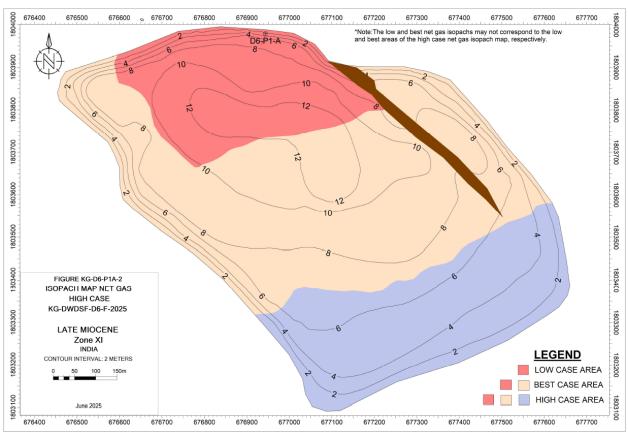


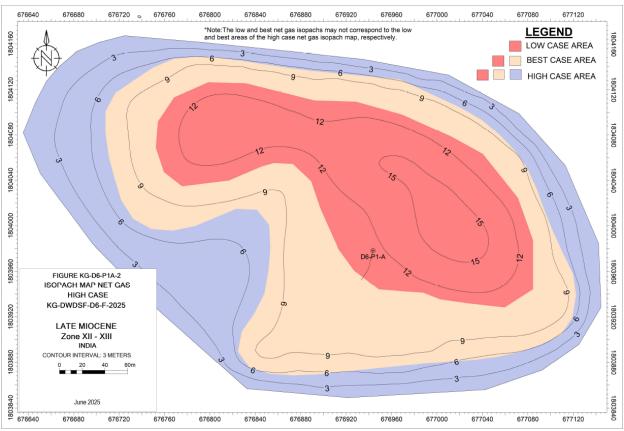


Isopach Maps

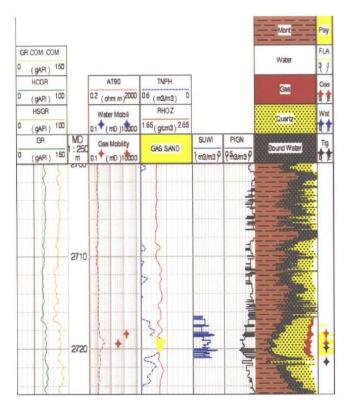


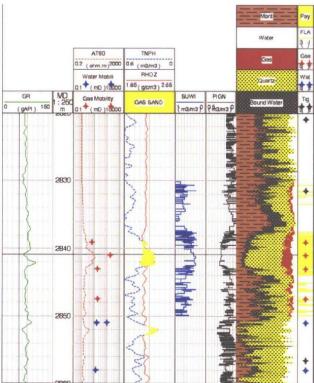


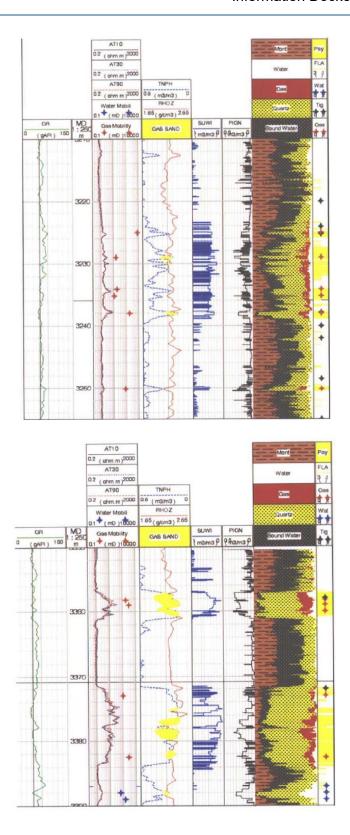




5.8.7.3. Log Motifs







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

5.9. STATUS OF ADDITIONAL WELLS IN THE AREA

The contract area is a single area with eight discoveries/fields (D6-F1, D6-D1, D6-K1, D6-K2, D6-SH2, D6-L1, D6-P1-A, and D6-H1) and two additional wells. The status of the additional wells is described for each field in the following section.

Well D6-MK1, located in deep water (1,350 meters) within the KG-DWN-98/3 Block. KG D6-MK1 Basin, offshore eastern India, was drilled in 2008 targeting hydrocarbon prospectivity within the Cretaceous syn-rift sand packages. The planned TD was 4,174 meters MDRT. The well was drilled in two phases. Phase 1 was drilled by Rig DSS, reaching 2,860 meters MDRT in 17½-inch hole. After setting 135%-inch casing, the rig was released on February 5, 2008. Phase 2 was completed by Rig D534, which reached location on May 13, 2008. The final TD was 4,030 meters MDRT, shallower than planned due to encountering basement at 3,978 meters MDRT. The Cretaceous syn-rift sand target was encountered at 3,729 meters TVDRT. Sandstones were loose, transparent to translucent, medium- to very coarse-grained, moderately sorted with inferred fair porosity. The maximum gas peak was 0.7 percent at 3,806 meters. An influx was observed while drilling at 3,733 meters with 52.63 barrels of water influx. Mud weight increased up to 12.3 ppg to control pressure. No hydrocarbons identified. were RCI tool runs in the 121/4-inch section (3010.8 to 3016.2 meters MDRT) and the 81/2-inch section (3,733.9 to 3,972.2 meters MDRT) both confirmed water-bearing zones with a water gradient of 0.42 psi/ft. Multiple water samples were collected at both intervals. Following wireline logs, MDT, and RCI data, the well was declared dry. No DST was conducted. The well was plugged and abandoned.

D6-T1- Well D6-T1-A, located in deep water (1,212 meters) within the KG-D6 Block, KG Basin, offshore Andhra Pradesh, was drilled in 2005 targeting the Upper Miocene, Pliocene, and Α Pleistocene sandstone reservoirs. The initial well D6-T1 was spudded on January 20, 2005, drilled to 1,655 meters MDRT, but was abandoned due to wellhead integrity failure after 20-inch casing installation. Well D6-T1-A was then re-spudded 117 meters southeast the original location on January The well was drilled using a 26-inch hole to 1,651 meters with 20-inch casing set at 1,642.9 meters. A 121/4-inch section was drilled to 1,890 meters, followed by wireline logging and reaming to 16-inch down to 1,858 meters. The 13%-inch casing was set at 1,850.4 meters. The next interval was drilled using a 121/4-inch/131/2-inch bit to 2.211 meters. Due to rising pore pressure, mud weight increased from 9.5 to 10.0 ppg and later to 10.3 ppg to control fluid influx. Drilling continued to 2,228 meters, then after further control measures, to 2,210 meters and 2.204.9 meters with 95%-inch casing A bicentered 8½-inch bit was then used to drill the final section down to TD at 2,574 meters. However, the well couldn't reach the target due to well control problems and poor borehole conditions. No wireline logging was performed in the final section. Resistivity and gamma ray data were obtained from LWD. Gas data were acquired via FLAIR unit, but no significant sand development was observed. Petrophysical analysis indicated thin, tight sandstone with marginal gas shows, which were not considered as pay. As a result, the well was plugged and abandoned.

6. DATA PACKAGE INFORMATION

This information docket for the contract area, titled KG/DWDSF/D6F/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 13 wells available near the discoveries and well coordinates are shown below.

Latitude	Longitude	Easting	Northing	CRS
				WGS 84,
16°34'10.4070"N	82°40'42.7451"E	679093.70	1832686.62	UTM44
				WGS 84,
16°31'15.7598"N	82°47'2.4698"E	690398.50	1827414.94	UTM44
				WGS 84,
16°31'15.7598"N	82°47'2.4698"E	690398.50	1827414.94	UTM44
				WGS 84,
16°37'15.1000"N	82°38'1.2998"E	674261.46	1838324.34	UTM44
				WGS 84,
16°32'15.0428"N	82°40'50.3958"E	679350.15	1829142.34	UTM44
				WGS 84,
16°35'58.7998"N	82°42'10.3122"E	681661.36	1836040.40	UTM44
40000140.0000111	000 401 40 0000	004554 47	4007454.00	WGS 84,
16°36'43.8800"N	82°43'48.2200"E	684551.47	1837451.00	UTM44
40°00154 000011NI	00000140 0004115	675600 00	1011000 10	WGS 84,
16 38 51.3938 N	82°38′49.9891″E	675680.08	1841296.12	UTM44
16°20'E1 2020"N	00°20'40 0004"F	675600.00	1041006 10	WGS 84, UTM44
10 30 31.3930 N	02 30 49.9091 E	073000.00	1041290.12	WGS 84,
16°18'36 2801"N	82°30'21 0308"E	676033 10	1803053 21	WGS 64, UTM44
10 10 30.2001 N	02 39 21.9390 L	070933.19	1003933.21	WGS 84,
16°20'3 1000"N	82°32'32 4600"E	664758 21	1806520 53	UTM44
10 20 0.1000 14	02 02 02.4000 L	004700.21	1000025.00	WGS 84,
16°20'3 1999"N	82°32'32 4600"F	664758 21	1806529 53	UTM44
	J_ J_ J_ J_ J	3333.21		WGS 84,
16°18'15.5001"N	82°33'34.9800"E	666639.08	1803233.31	UTM44
	16°34'10.4070"N 16°31'15.7598"N 16°31'15.7598"N 16°37'15.1000"N 16°32'15.0428"N 16°35'58.7998"N 16°36'43.8800"N 16°38'51.3938"N 16°38'51.3938"N 16°38'51.3999"N 16°20'3.1999"N	16°34'10.4070"N 82°40'42.7451"E 16°31'15.7598"N 82°47'2.4698"E 16°37'15.1000"N 82°38'1.2998"E 16°32'15.0428"N 82°40'50.3958"E 16°35'58.7998"N 82°42'10.3122"E 16°36'43.8800"N 82°43'48.2200"E 16°38'51.3938"N 82°38'49.9891"E 16°38'51.3938"N 82°38'49.9891"E 16°18'36.2801"N 82°39'21.9398"E 16°20'3.1999"N 82°32'32.4600"E 16°20'3.1999"N 82°32'32.4600"E	16°34'10.4070"N 82°40'42.7451"E 679093.70 16°31'15.7598"N 82°47'2.4698"E 690398.50 16°31'15.7598"N 82°47'2.4698"E 690398.50 16°37'15.1000"N 82°38'1.2998"E 674261.46 16°32'15.0428"N 82°40'50.3958"E 679350.15 16°35'58.7998"N 82°42'10.3122"E 681661.36 16°36'43.8800"N 82°43'48.2200"E 684551.47 16°38'51.3938"N 82°38'49.9891"E 675680.08 16°38'51.3938"N 82°38'49.9891"E 675680.08 16°18'36.2801"N 82°39'21.9398"E 676933.19 16°20'3.1999"N 82°32'32.4600"E 664758.21 16°20'3.1999"N 82°32'32.4600"E 664758.21	16°34'10.4070"N82°40'42.7451"E679093.701832686.6216°31'15.7598"N82°47'2.4698"E690398.501827414.9416°31'15.7598"N82°47'2.4698"E690398.501827414.9416°37'15.1000"N82°38'1.2998"E674261.461838324.3416°32'15.0428"N82°40'50.3958"E679350.151829142.3416°35'58.7998"N82°42'10.3122"E681661.361836040.4016°36'43.8800"N82°43'48.2200"E684551.471837451.0016°38'51.3938"N82°38'49.9891"E675680.081841296.1216°38'51.3938"N82°38'49.9891"E675680.081841296.1216°18'36.2801"N82°39'21.9398"E676933.191803953.2116°20'3.1999"N82°32'32.4600"E664758.211806529.5316°20'3.1999"N82°32'32.4600"E664758.211806529.53

Seismic 2D Data:

Line segment name	Processing type	FSP/CDP	LSP/CDP	Length (Km)	CRS
INE1-2000	FINAL_PSTM_STACK	4936	99876	15.6106	WGS84 UTM 44N
INE1-1240	FINAL_PSTM_STACK	4604	34912	28.0118	WGS84 UTM 44N

INE1-1200	FINAL_PSTM_STACK	5552	39592	21.8598	WGS84 UTM 44N WGS84
KB-97-10	REPROCESSED_FINAL_PSTM_STACK	2	2615	2.5721	UTM 44N
KB-97-10	REPROCESSED_FINAL_PSTM_STACK	2	2615	12.0654	WGS84 UTM 44N
KB-97-08	REPROCESSED_FINAL_PSTM_STACK	2	2615	23.4601	WGS84 UTM 44N
KB-97-06	REPROCESSED_FINAL_PSTM_STACK	2	2679	12.2344	WGS84 UTM 44N
DWD62001- 06	FINAL_PSTM_FILTERED_STACK	6519	22148	15.1935	WGS84 UTM 44N
DWD62001- 05	FINAL_PSTM_FILTERED_STACK	6602	18973	22.583	WGS84 UTM 44N
DWD62001- 05	FINAL_PSTM_FILTERED_STACK	6602	18973	4.3701	WGS84 UTM 44N
DWD62001- 03	FINAL_PSTM_FILTERED_STACK	6519	18866	21.7035	WGS84 UTM 44N
DWD62001- 01	FINAL_PSTM_FILTERED_STACK	6602	18505	11.1299	WGS84 UTM 44N
DWD62001- 12	FINAL_PSTM_FILTERED_STACK	6602	15775	8.4496	WGS84 UTM 44N
DWD62001- 11	FINAL_PSTM_FILTERED_STACK	6519	18812	13.1422	WGS84 UTM 44N
DWD62001- 11	FINAL_PSTM_FILTERED_STACK	6519	18812	2.0896	WGS84 UTM 44N
DWD62001- 10	FINAL_PSTM_FILTERED_STACK	6519	18776	25.4473	WGS84 UTM 44N
DWD62001- 09	FINAL_PSTM_FILTERED_STACK	6608	18937	1.1711	WGS84 UTM 44N
DWD62001- 09	FINAL_PSTM_FILTERED_STACK	6608	18937	18.2286	WGS84 UTM 44N

DWD62001- 08	FINAL_PSTM_FILTERED_STACK	6602	21877	3.3251	WGS84 UTM 44N
DWD62001- 08	FINAL_PSTM_FILTERED_STACK	6602	21877	4.6621	WGS84 UTM 44N
DWD62001- 07	FINAL_PSTM_FILTERED_STACK	6519	18854	16.8625	WGS84 UTM 44N
DWD62001- 07	FINAL_PSTM_FILTERED_STACK	6519	18854	9.4436	WGS84 UTM 44N
KB-97-53	FINAL_STACK	1	3296	20.8612	WGS84 UTM 44N
KB-93-103	FINAL_STACK	105	3424	5.5295	WGS84 UTM 44N
KB-93-100	FINAL_STACK	105	2836	3.0949	WGS84 UTM 44N
KB-93-99	FINAL_STACK	105	3000	10.267	WGS84 UTM 44N
KB-93-96	FINAL_STACK	105	2280	10.705	WGS84 UTM 44N
KB-93-95	FINAL_STACK	105	2794	8.5818	WGS84 UTM 44N
KB-93-94	FINAL_STACK	105	1980	9.0376	WGS84 UTM 44N
KB-93-93	FINAL_STACK	105	1112	7.1583	WGS84 UTM 44N
KB-93-92	FINAL_STACK	105	3088	7.7321	WGS84 UTM 44N
KB-93-90	FINAL_STACK	105	2220	5.6743	WGS84 UTM 44N
KB-93-89	FINAL_STACK	105	2140	7.1464	WGS84 UTM 44N
KB-93-88	FINAL_STACK	105	1358	3.1051	WGS84 UTM 44N

					W0004
KB-93-51	FINAL STACK	105	2888	2.3632	WGS84 UTM
ND-33-31	TINAL_OTAOR	100	2000	2.0002	44N
					WGS84
AD-002	FINAL STACK	1	2072	2.8312	UTM
					44N
					WGS84
AD-001	FINAL STACK	1	2284	19.3583	UTM
					44N
L/D 07 57	FINIAL MIODATION	4	0000	4 4007	WGS84
KB-97-57	FINAL_MIGRATION	1	3333	4.4307	UTM
					44N WGS84
KB-97-49	FINAL MIGRATION	1	3976	13.878	UTM
ND-31-43	T INAL_INICITATION	'	3970	13.070	44N
					WGS84
KB-97-12B	FINAL MIGRATION	1	1769	3.2066	UTM
					44N
					WGS84
KB-93-63	FINAL_MIGRATION	105	2260	5.182	UTM
					44N
					WGS84
KB-93-59	FINAL_MIGRATION	105	2160	2.9184	UTM
					44N
KB-93-57	FINAL MIGRATION	105	2366	4.4066	WGS84 UTM
KD-93-37	FINAL_WIGRATION	105	2300	4.4000	44N
					WGS84
KB-93-31	FINAL MIGRATION	105	3080	3.9535	UTM
112 00 01	<u>-</u>		0000	0.000	44N
					WGS84
KB-93-29	FINAL_MIGRATION	105	2480	8.0578	UTM
					44N
		Total		463.10	

Seismic 3D Data: $KG/DWDSF/D^F/2025$ contract area is covered with PSTM seismic data as details given below.

	00001.KG-DWN-98_3_BRODSEIS_FULL_ANGLE_STACKsgy BD bin centre corner points - all traces										
BD bin c	entre corr	er points - all i	traces : 00001	KG-DWN-98_3_	BRODSEIS_FULL_ANGLE_STACKsgy						
Point	Inline	Crossline	Easting	Northing							
1	1117	2333	683731.19	1858991.00							
2	5775	2333	640656.56	1819815.88							
3	5775	5467	667014.94	1790834.25							
4	1117	5467	710089.56	1830009.38							

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/DWDSF/D6F/2025 contract area) comes to be USD 9,240. 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/DWDSF/D6F/2025

Number of field(s)/discoveries: 8

Number of well(s): 13

Total area: 717.57 Sq. Km.

Seismic 2D data: 463.1LKM.

Seismic 3D data: 708.94 Sq. Km.

Report(s) available: 39

Hydrocarbon in-place: 35.2 MMTOE (Best-case Operator Estimate)

: 7.0 MMTOE (Best-case Third-Party Estimate)

NIO map reference no.: D-1

Geographical area: KG OFFSHORE

Data package cost: 9,240 USD

8. CONCLUSION

The Contract Area KG/DWDSF/D6F/2025 in KG Deepwater, covering an area of 717.58 sq km, comprises eight discoveries.

A quantum of 463.10 LKM of 2D seismic data and 708.94SKM of 3D seismic data are available and a total number of 13 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 eight 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 eight discoveries are envisaged to hold best-case Original Hydrocarbons In-Place of 35.2 MMTOE as per the previous Operator's estimate and 7.0 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.



पेट्रोलियम एवं प्राकृतिक गैस मंत्रालय MINISTRY OF PETROLEUM AND NATURAL GAS





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