OIL AND NATURAL GAS CORPORATION LIMITED

REQUEST FOR PROPOSAL

(No. ONGC/RFP/Crude Oil/KG-DWN-98/2/M-Field/01)

E-AUCTION FOR SALE OF Crude Oil from

M Field of KG-DWN-98/2 block

E-Auction Partner

M/s mjunction services ltd.

Contents

Section A

1. Overview

1.1. **Oil and Natural Gas Corporation (ONGC),** is a public sector undertaking involved in Exploration & Production of crude oil and natural gas. Its registered office is in New Delhi. It is India's National Oil Company under the aegis of Ministry of Petroleum and Natural Gas. It is the largest upstream player in the country and produces around 70% of India's crude oil and around 80% of India's natural gas. In November 2010, the Government of India conferred the *Maharatna* status to ONGC.

1.2. ONGC is planning to conduct an online competitive auction (e-auction) for sale of crude oil from M Field of KG-DWN-98/2 block of ONGC. In line with this, ONGC has launched an e-auction for sale of 02 Lots - Each lot of 450000 BBLs (+/- 10 %, at sellers' option) of crude oil in a period of 2 months, i.e. from May, 2024 to June, 2024.

1.3. The crude oil for sale will be available from ex-FPSO AS V in KG-DWN-98/2 block for a fixed tenure of 2 months. Interested/prospective crude oil consumers (meeting the eligibility criteria given at clause no 3.1) can source available crude oil by participating in this e-Auction process.

1.4. In compliance of MoP&NG's Gazette Notification No. Expl-15019 (25)/161/2019-ONG-D-V (E-34367) dated 11th July 2022, pertaining to "Deregulation of sale of Domestically produced Crude oil", ONGC is hereby issuing a Notice Inviting Offer (NIO) dated _____ and invites offers from interested/prospective entities (meeting the eligibility criteria given at clause no 3.1) to source crude oil available for sale from ex-FPSO AS V in KG-DWN-98/2 block, in accordance with the terms and conditions of this Request for Proposal (RFP) and the Crude Off-take and Sale Agreement (COSA).

1.5. ONGC has appointed M/s mjunction services limited as an independent agency, to conduct e-auction process for sale of crude oil through an online web based electronic auction platform which is available at https://ongcoil.mjunction.in. M/s mjunction services limited would herein after be called the Empanelled Agency.

2. Crude Oil on Offer

2.1. Details of the Crude Oil on offer

<table>
<tr><th>S.N</th><th>Parameter</th><th>Particulars</th></tr>
<tr><td>1</td><td>Crude Oil Quantity offered for sale</td><td>02 Lots - Each lot of 450000 BBLs (+/- 10 %, at sellers option) from M Field in KG-DWN-98/2 block, ex-FPSO AS V

Month wise biddable Lots are as follows.

<table><tr><th></th><th>ex- FPSO AS V</th></tr><tr><td>May’24</td><td>01</td></tr><tr><td>June’24</td><td>01</td></tr></table></td></tr>
<tr><td>2</td><td>Term</td><td>2 Months (May 2024 to June 2024)</td></tr>
<tr><td>3</td><td>Name of Supply locations</td><td>Ex-FPSO AS V in KG-DWN-98/2 block</td></tr>
<tr><td>4</td><td>Mode of Supply</td><td>Marine Vessel</td></tr>
<tr><td>5</td><td>Quality</td><td>As typically made available by Seller at the Delivery Point. Gist of broad parameters of Crude oil is appended for your reference at Appendix 11 hereto.</td></tr>
<tr><td>6</td><td>Delivery Terms</td><td></td></tr>
<tr><td>6.a</td><td>Loading Point</td><td>Ex-FPSO AS V in KG-DWN-98/2 block</td></tr>
<tr><td>6.b</td><td>Delivery Point</td><td>Delivery Point shall be the inlet flange of such marine vessel whether it is chartered by the buyer or seller. Risk, Liability and title of goods would be transferred from seller to buyer at delivery point.</td></tr>
<tr><td>7</td><td>Pricing formula ($/bbl)</td><td>Reserve Price plus Quoted Price Bid (Positive) (P)

Reserve Price = Benchmark price

“Benchmark Price” in USD per barrel applicable for supplies under this RFP shall be monthly average of the daily mean values of the high and low assessments of Dated Brent (PCAAS00) Crude Oil quotations (as published under the Spot Crude Assessment Heading in Platt’s Crude Oil MARKETWIRE spot assessment) in US $ per barrel for the month of supply, to be rounded off to THREE decimal places.</td></tr>
</table>

		Price Bid = Bidder is required to quote Initial Price Bid ("P") at the time of submission of technical bid which can be non zero positive number (a multiple of 0.05 USD). The "P" can be increased in the increment of USD 0.05/bbl. Only upward increments of ("P") shall be allowed and it cannot be decreased. However, Bidders may note that in case the crude oil supply month is different from the month in which it was to be originally off taken, due to any reason other than force majeure and subject to mutual agreement, pricing of crude oil will be done as per provisions of clause 4 of Schedule C of Crude Oil Offtake and Sale Agreement (COSA). ONGC reserves the right to reject the bid/bids received against the e-auction or to cancel the e-Auction without assigning any reason.
8	Taxes and Duties	Seller agrees to bear up to 2 % (CST) for out of state delivery and 3 % (VAT) for within state delivery. Any taxes and duties above the agreed rates shall be borne by buyer. Terminalling charges will be applicable as per COSA.
9	Tentative date of ONGC's readiness to supply of crude oil.	2 Months (May, 2024 to June, 2024) 1. 7th May'2024 – 10th May'2024 2. 12th June'2024 – 15th June '2024 However, final laycan dates would be firmed in respective IWG Meeting.
10	URL for registration and uploading of documents by interested entities for Technical evaluation	https://ongcoil.mjunction.in

2.2. The Crude Oil will be offered for a fixed term of 2 months. However, separate e-Auctions will be conducted for supply of each month.. The term will start from May, 2024 and the supply will start as per the schedule agreed between Seller and Buyer. Tentative Laycan dates are as given above at Sl no 9. Further, the tenure may be extended for a maximum period of 1 month on mutually agreed basis subject to availability of crude and ONGC's ability to supply.

2.3. The successful bidder/s will have to sign the Crude Off-take and Sale Agreement (COSA) annexed hereto at Exhibit-1 within 10 days of issuance of NOA.

2.4. It is the responsibility of the successful bidder to complete the signing of COSA and adhere to all the terms and conditions mentioned in this RFP.

3. Eligible Bidders

The following eligibility criteria will need to be complied by all the bidders

3.1 Eligibility Criteria

3.1.1. All the Public and Private Refineries appearing in the latest Monthly Production Report published by MOPNG are to be considered as empanelled Buyers and only those Refiners shall be invited for participation in the e-auction process. Copy of latest MoPNG monthly report listing the PSU/Private refiners is available at https://mopng.gov.in/en/petroleum-statistics/monthly-production.

3.1.2. The Bidder, if successful, shall submit an undertaking (as per format placed at Appendix 8A) prior to commencement of crude oil off-take, declaring that Bidder has obtained all necessary statutory/ regulatory approvals and compliances for commencement of crude oil off-take. The successful Bidder would hold harmless and Indemnify ONGC against any loss, damage, notice, prosecution etc. arising out of commencement of crude supply by ONGC relying on the undertaking furnished by the successful Bidder.

3.1.3. ONGC shall not be liable for failure of the bidder/s to obtain any statutory/regulatory clearances. The bidder shall submit an Undertaking in the format prescribed at Appendix-8 of the RFP for above compliances.

3.1.4. If Bidder opts to bid for any month, it can bid up to a maximum of lot(s) on offer for that respective month i.e.,

	ex- FPSO AS V
May'24	01
June'24	01

3.1.5. Bidder/s who are in position to start crude oil off take from the contract term start date, should submit their bids.

3.2 IT Requirement / Responsibility of the Bidder

3.2.1. Bidder should have a laptop or desktop with decent internet connection (10 mbps and above).

3.2.2. E-Portal shall be best viewed in Internet Explorer 9.0. If bidder/s are using Internet Explorer 10 or above then compatibility view is to be enabled which is available under Tools menu.

3.2.3. Due to security vulnerabilities, all bidder/s are requested to configure the following changes in Browser (Internet Explorer) & Java console.

A. Configuration of TLS 1.2 in Internet Explorer.
B. Installation of Java Runtime Environment 1.8 latest update. Configuration of TLS 1.2 in Java Control Panel

3.2.4. Bidder/s please refer the 'Browser Setup' tab for details.

3.2.5. Bidder/s may send an email at ongcoilbidding@mjunction.in or call helpdesk (mentioned in the portal) if they face any difficulties in registration and setting up DSC.

3.2.6. Bidder/s may refer the Bidder Manual made available in the Bidding portal.

3.3 Registration and DSC Mapping

3.3.1. The portal will be available for registration on a date specified in Clause 8 of this RFP. Every Bidder would be required to fill a small registration form and will have to enter his/her name, designation, contact number, organization name, PAN number of organisation, GSTIN number, VAT/CST registration, name & address of the refinery or administrative office, and other required details. Bidder/s would need to attach a valid Class III Digital Signature Certificate (DSC) issued in the name of authorized person of the bidding organization. The DSC should be issued on the email address of the authorized person and same should be used for registering on the platform.

3.4 Certificates / Documents to be submitted

3.4.1. Bidder/s are required to mandatorily submit / upload the following documents with DSC signature:

A. Audited financial statements of previous three Financial Years. The latest financial statement should not be later than 18 months from the date of submission of bid.
B. Valid PAN and VAT/CST/GST (as applicable) Registration certificate
C. Power of Attorney / Board Resolution in the name of the authorized representative of the Bidder.
D. Undertaking that they have gone through Crude Offtake Sale Agreement (COSA) and RFP and any Addendum/Corrigendum thereto.
E. Declarations/Undertakings etc., mentioned under section B (including Integrity Pact duly signed & witnessed).

4. Bidder Registration

4.1. **Registration on the bid registration portal:** All bidders would be required to visit the link of the e-portal https://ongcoil.mjunction.in for .

4.2. Steps to be followed by the bidders prior to the submission of the techno-commercial documents:

A. Purchasing of a class III DSC (Digital Signature Certificate)
B. Registering in the e-portal and mapping the DSC
C. System will generate user ID and password and send via email to the registered email ID of the Bidder
D. Bidders can send email on ongcoilbiddding@mjunction.in or call the helpdesk (mentioned in the portal) in case of any difficulty in setting up DSC and registration.

4.3. Bidders already registered with Mjunction for earlier e-auction of ONGC need not register again.

5. Pre-qualification stage

5.1 **Publishing of bidding documents:** To apprise potential Bidders of the e-auction process, the RFP (Request for Proposal) and COSA, etc. would be made available on landing page of the e-portal of Empanelled Agency. The Bidders would be able to download these documents without registering on the platform.

5.2 **Clarifications to Bidders' queries:** Bidders would be able to send their queries to the designated email address (ongcoilbidding@mjunction.in) before registering on the portal. However, post registration on the portal, the bidders would also be able to upload their queries on the portal. The clarification to all the queries would be hosted on the e-portal.

5.3 **Pre-bid meeting:** A pre-bid meeting would be organized on a date specified in Clause 8 of this RFP. The pre-bid meeting would be an interactive session and provide Bidder/s, the opportunity to seek further clarifications and understand the process better. The Pre-bid meeting would be open to all the interested Bidder/s. The Bidder/s willing to participate in the pre-bid meeting would be required to nominate maximum of two representatives from their organization to take part in the meeting. Bidders would be required to use their official email address to share the name, email address and phone number of the nominated person(s) to the designated email address (ongcoilbidding@mjunction.in).

6. Techno-Commercial Evaluation

6.1 Techno-commercial evaluation would be carried out for all the bids received and a list of Techno-commercially qualified Bidders shall be prepared.

6.2 Bid should be complete and covering the entire scope of crude oil supply and should agree to the terms and conditions of the crude oil supply indicated in the RFP & Crude Offtake and Sale Agreement (COSA), duly supported with documents wherever required. In case of incomplete and non-confirming bids, the bid may be rejected.

6.3 The net worth of the bidder shall be positive during the last financial year. The Bidder shall submit Last 3 consecutive Financial Years Audited P&L Account and Balance Sheet certified by Chartered Accountant. The latest financial statement should not be later than 18 months from the date of submission of bid. Bidder need to submit sufficient documentary proof in this regard.

6.4 The bidder should submit a declaration (Appendix-9 of Section B) with Techno-commercial Bid to the effect that neither the bidder themselves, nor any of its allied concerns, partners or associates or directors or proprietors involved in any capacity (the "bidder group"), are currently serving any banning orders issued by ONGC or its subsidiaries debarring the bidder group from carrying on business dealings with ONGC or its subsidiaries. The bid without such declaration shall be rejected.

6.5 Biddable Parameters and Bidding Process

6.5.1 Biddable parameters

6.5.1.1 An e-auction process shall be carried out independently for each month, for the Supply Location i.e., ex- FPSO AS V located in KG-DWN-98/2 block.

6.5.1.2 For each month, Bidder shall be required to quote valid bids against the two parameters: Initial Price Bid, which can be non zero positive number, over the Crude Oil Reserve Price and number of Lots.

6.5.2 Reserve Price: The Reserve Price is "Benchmark Crude Oil Price". "Benchmark Price" in USD per barrel applicable for supplies under this RFP shall be monthly average of the daily mean values of the high and low assessments of Dated Brent (PCAAS00) Crude Oil quotations (as published under the Spot Crude Assessment Heading in Platt's Crude Oil MARKETWIRE spot assessment) in US $ per barrel for the month of supply, to be rounded off to THREE decimal places.

6.5.3 Initial Provisional allocation Process

6.5.3.1 At the time of Technical Bid submission, all Bidders shall quote valid bids for each month against the two parameters which shall constitute their initial bid for provisional allocation.

6.5.3.2 The process for month wise provisional allocation will be as under:

6.5.3.2.1 The bidder who has quoted the highest Price Bid will be provisionally allocated the Lots as per their quote followed by the next higher Price Bid bidder and so on till all the quantity is exhausted.

6.5.3.2.3 In case of tie in Price Bid quoted between multiple Bidders, then the time of Bid submission will be considered and the Bidder who has submitted bids earlier, will be given preference for provisional allocation. **Hence bidders are well advised to submit the bids as early as possible.**

6.5.3.3 The Initial Provisional Allocation Lots allocated to the Bidders would be encrypted at this stage and would be decrypted at the final e-auction Process. The e-auction Process would commence with these Initial Provisionally allocated Lots.

6.5.3.4 **Notification to eligible Bidders:** After the techno-commercial evaluation of the documents, all techno-commercially qualified bidders will be informed of their advancement to next phase of the bidding process for e-auction which would be done on https://auction.coaljunction.com on the date specified in Clause 8 of this RFP. All the techno-commercially qualified bidders will be provided with the login credentials of the e-auction portal.

7. The e-Auction

7.1. All the techno-commercially qualified bidder/s will be contacted by the Empanelled Agency for e-auction.

7.2. **Rules & regulations on conduct of e-Auction:**

7.2.1. During the e-auction, bidder/s may contact the e-auction helpdesk numbers for any assistance/clarification regarding online bid submission as per Clause 10.

7.2.2. All Bidders are required to be active during bidding.

7.2.3. The bidder/s must also ensure that their contact nos. be kept free from any other calls so that empanelled agency's representatives can reach out to the bidder/s easily whenever required.

7.2.4. Bidder/s to ensure stable connectivity. Empanelled Agency or ONGC will not be responsible for any dis-connectivity or infrastructural failure at Bidder's end.

7.2.5. Bidder/s to keep their email inbox open to receive any files, if sent, during the event.

7.2.6. Empanelled Agency recommends to bid at least 5 minutes prior to e-auction closing time to avoid any last minute bid placement. Bidders placing their bids at the last minute will be doing so at their own risk. It is advised to bid well in advance of the e-auction closing time.

7.2.7. E-auction will start as per the time schedule intimated in Clause 8. The time indicated in notice is fixed and under no circumstance will this time be changed. Bidders are required to take necessary steps and be prepared to commence participation at the above-mentioned time.

7.2.8. All organizations to note that the executive of the participating organization placing bids online shall be treated as an authorized representative of the organization for placement of bid on behalf of their organization.

7.2.9. The bidder/s need to change their password to keep it secure. Empanelled Agency or ONGC will not be responsible for any misuse of bidder/s Login ID and password.

7.2.10. Bids once made, cannot be cancelled / withdrawn. ONGC shall take appropriate action including banning, in case of non-acceptance of allocation by the bidder/s (in case the same is conforming to RFP conditions).

7.2.11. Multi log in using the same User ID & Password is not permitted. Please note that Bidder can login with their respective user id and password from one connection only. Simultaneously logging in, using the same user id and password is not possible. In case simultaneous login happens then second logger will receive a message that some body is already logged in & in case Bidder is still interested to login, the first person will be logged out.

7.2.12. Participating bidders need to ensure continuous, uninterrupted and secure operations at their end. Empanelled Agency shall not be responsible for any interruption or failures on these counts.

7.2.13. Bidder is responsible for maintaining the confidentiality of their User ID and Password for restricting access to their computer, computer system and computer network and bidder shall be held responsible for all activities that occur using their User ID and Password.

7.2.14. All commercial/ contractual terms are offered by and agreed to between Bidder and ONGC alone. Empanelled Agency does not have any control or does not determine or advise or in any way involve itself in the offering or acceptance of such commercial/ contractual terms between Bidder/s and ONGC.

7.2.15. The e- auction schedule shall be communicated to all the eligible bidders. ONGC retains the right to cancel or reschedule or relaunch of the e - Auction.

7.2.16. ONGC's decision on award of Contract in accordance with the terms and conditions of the bidding document shall be final and binding on all the bidder/s.

7.3. Price:

7.3.1. Reserve Price is "Benchmark Crude Oil Price". "Benchmark Price" in USD per barrel applicable for supplies under this RFP shall be monthly average of the daily mean values of the high and low assessments of Dated Brent (PCAAS00) Crude Oil quotations (as published under the Spot Crude Assessment Heading in Platt's Crude Oil MARKETWIRE spot assessment) in US $ per barrel for the month of supply, to be rounded off to THREE decimal places.

7.3.2 For each month, Bidder is required to quote Initial Price Bid ('P'), which could be non-zero positive number, over/to the Reserve Price. The Quoted Initial Price Bid can be increased in the increment of USD 0.05/bbl. Only upward increments of the Initial Price Bid shall be allowed and it cannot be decreased. Contract Crude Oil price shall be Crude Oil Reserve Price + Quoted final Price Bid (Positive).

7.4. Lot:

7.4.1. For each month, the bidder can quote 0 (zero) or 1 Lot, where 1 Lot is equal to 450000 US Barrels (+/- 10 %, at sellers option) . In case a bidder wishes not to quote for any month then they need to select "Regret option as YES" in the bidding platform.

7.5. Mock run and training of the Bidding platform to Bidders

Prior to the E-Auction Date, the Empanelled Agency shall organize a mock run of E-Auction Process to help Bidder/s familiarize themselves with the features of the E-Portal. Such mock run shall be held on a predetermined date as specified in Clause 8 of this RFP. The Empanelled Agency shall notify the requisite details for the mock run to relevant Bidders via email. Bidder/s can either complete the training modules uploaded on the portal or can opt for offline training sessions.

7.6. At the start of the e-auction process, the Initial Provisional Lot(s) allocated to the eligible bidders would be decrypted by the system. The e-auction will start at a date and time specified as per Clause 8 of this RFP. The e-auction will be of 30 minutes with details of dynamic bidding as described in Clause 7.8.

7.7. Bid parameters and bidding rounds

7.7.1. All the qualified bidders after techno-commercial evaluation are eligible to participate in the e-auction process. During the e-auction process, the following may be noted:

a. **Starting Price bid:** The starting Price bid for the e-auction process shall be the one initially quoted by the bidder for each month, at the time of submission of technical bid.
b. **Ticker size for price bid:** Only upward increments of the bid shall be allowed and it cannot be decreased. The minimum increment ticker size for the price bid shall be USD 0.05/bbl, and the Bidder can only increase its previous bid in multiples of the ticker size defined.
c. **Starting Lot bid:** The starting Lot(s) bid for the e-auction process shall be the one that is initially quoted by the Bidder for each month. The Lot bid can not be increased or decreased during the e-auction process. Bidder shall not be allowed to increase/reduce the Bid Lot from/below the provisionally allocated Lot(s).

d. Provisionally allocated Lot(s): Based on the e-Auction Process defined under Clause 7.8, the number of Lot(s) allocated to the Bidder at any given point in time.

7.7.2. All the eligible bidders would be able to see the following at any point in time during the e-auction:

- provisionally allocated Lot(s) out of quoted Lot(s) against their respective quoted bid
- maximum bid quoted

However, Bidders would not be able to see the allocated Lot(s) and bid of other bidder/s.

7.7.3The key features of the e-bidding round are as follows:

a. **E-auction Duration:** The total E-auction Process shall be for a period of 30 minutes initially.
b. **Dynamic e-auction:** The entire e-auction process will be dynamic and will be subject to extensions as per clause 7.7.3.c.
c. **Extension of e-auction Duration:** If a bid is received/revised within the last 5 minutes before the close of the e-auction duration and such bid alters the Provisional allocation Quantity determined by the e-Bidding Portal for any of the Bidder, there would be an automatic 15 minutes extension of the e-auction duration. The 15 minutes auto extension will start from the time of the first bid received within the last 5 minutes before the closure of the e-auction period. There will be unlimited auto extensions. In case the e-auction does not get closed within 18:30 hours of a particular day then the e-auction will get automatically paused and the same will be resumed at 11:00 hours of the next business day.
d. **E-auction termination:** The E-auction process ends if there is no bid revision in the period specified above of this RFP.
e. Process of e-auction: Process would start with e-auction for the month of May 2024 and only after concluding the e-auction for May 2024, e-auction for June 2024 would commence.

7.8. Determination of provisional Lot(s) and final Lot(s) allocation

During the e-auction process, the following methodology would be followed to determine provisional allocation when there is any change in the Price Bid of the bidder/s.

Step 1: The crude oil Price Bids will be arranged in descending order.

Step 2: The Provisional Lot(s) shall be determined as follows:

A. Based on the initial quoted Price Bid, the Provisional Lot(s) shall be determined for the Bidder who has quoted the highest price bid as per their quoted Lots or the Lot(s) available for auctioning, whichever is lower. This Provisional Lot determination process will be followed for the Bidder who has quoted the next higher Price Bid for its quoted Lot(s) or remaining available Lot(s), whichever is lower, and so on until the total available Lots are fully allocated.

B. If there is a tie in the quoted Price Bid, the E-Portal shall arrange such tied bids in descending order based on the time at which quote is submitted by the bidders. In such case, the Provisional Lot(s) shall be determined for the Bidder who quoted earlier amongst the tied bids as per its quoted Lot(s) or remaining Lots(s), whichever is lower, followed by the next tied bid submitted at a later timestamp for its quoted Lot(s) or remaining Lot(s), whichever is lower, and so on until the available Lot(s) is fully allocated.

Step 3: Steps 1 and 2 shall continue throughout the E-auction Process and the Provisional Lot(s) shall continue to be determined by the E-Portal dynamically, until the conditions for the closing of the E-auction Process as specified in clause 7.7.3.d. are met.

Step 4: Upon the closing of the E-Bidding Process, the Provisional Lot(s) determined based on the last bids received shall be considered as the Final Lot(s) for each Bidder.

7.9. At the end of the e-bidding process, all the successful Bidders would be notified regarding their respective allocated Lot(s).

7.10. Notice of Award (NOA) to the successful bidder(s) will be awarded after completion of the e-auction process.

8. Activity Schedule

8.1. The schedule of the sale of ONGC's KG-DWN -98/2 FPSO M-Field Crude Oil is given below:

Sr.	Particular	Activity Date and Time
1	Publishing NIO (RFP and COSA)	23/04/2024 at 09:00 Hours
2	Last date for submission of queries of bidder	25/04/2024 at 17:00 hours
3	Pre-bid meeting	26/04/2024
4	Bidder training	23/04/2024 to 25/04/2024
5	Bidder registration on the portal (Bidder/s already registered on the portal in earlier auctions need not register again).	23/04/2024 at 09: 00 Hours to 25/04/2024 at 18:00 Hours
6a	Start Date for bid submission (Technical Bid and initial price bid) along with documents under pre-qualification process	23/04/2024 0900 hours
6b	Last date for bid submission (Technical Bid and initial price bid) along with documents under pre-qualification process	01/05/2024 at 15:00 Hours
7	Notification to techno-commercially qualified Bidders	01/05/2024 at 18:00 Hours
9	E-Auction date	02/05/2024 at 11:00 Hours for May'24 and Jun' 24 Deliveries

9. General Guidelines

9.1 Bidders are expected to thoroughly understand, evaluate and examine all instructions, forms, undertakings, requirements, and terms and conditions of the RFP including COSA. Each Bidder is required to submit its bid based on the terms and conditions of this RFP and the COSA, without any deviations or conditionality. A submission of the bid would imply unconditional acceptance of all the terms and conditions in the RFP and COSA.

9.2 Bids, once made, cannot be cancelled / withdrawn after the Bid closing date.

9.3 Failure to furnish any/all information/documents required under this RFP may lead to disqualification of the Bidder.

9.4 The Crude Oil Price ex-Supply Location (applicable on the allocated quantity) is exclusive of Taxes, Duties such as service tax, GST, education cess, sales tax/VAT, Octroi, and all other statutory levies as applicable at present or to be levied in future by the Central or State Government or Municipality or any other local body or bodies. Such charges payable on sale of Crude Oil shall be borne by the Seller over and above the Crude Oil Price to the extent mentioned in clause 2.1.8.

9.5 After issuance of NOA, in case Bidder fails to execute COSA and provide the Payment Security (as applicable), then ONGC reserves the right to cancel the awarded quantity/allocation and take action as per tender conditions.

9.6 Each Bidder acknowledges and agrees that this Request for Proposal (RFP) by ONGC does not constitute any commitment to supply or sell crude oil and is only an invitation to offer. The Notification of Award (NoA) will constitute the formation of the contract and same shall remain binding on both the parties. Crude Oil supply to the Bidder shall not commence unless payment security is furnished (as applicable) and COSA is signed.

9.7 Any attempt by a Bidder to influence the E-Auction process or other Bidders, bid evaluation or the allocation process shall immediately result in disqualification of its bid.

9.8 In case of any conflict between the provisions of this RFP and the COSA, the provisions of the COSA shall prevail.

9.9 ONGC reserve the right to withhold or withdraw the E-Auction process at any stage or cancel or modify the process or change / modify / amend any or all provisions of this RFP, at any time, without assigning any reason whatsoever by notice to all Bidders. ONGC shall have sole discretion and reserve the right, without any obligation or liability, to accept or reject any or all of the bids at any stage of the E-auction process. ONGC, at its own discretion, can seek additional documents from Bidders that it may require to ascertain the capability of Bidders to offtake crude oil as per the terms of COSA.

9.10 Failure to furnish any/all information/documents required under this RFP shall lead to disqualification of the Bidder.

9.11 Each Bidder shall participate in the E-Bidding Process at its own expense and none of the expenses incurred during the participation in e-auction can be claimed from the Sellers, regardless of the outcome of the e-auction.

9.12 Each Bidder acknowledges and agrees that this Request for Proposal by the Sellers does not constitute any commitment to supply or sell Crude Oil. The obligation to supply or sell Crude Oil to a Buyer shall become effective only upon the execution of the COSA.

9.13 A company which owns multiple Crude Oil consuming facilities can participate in the E-Auction by a single registration for all facilities.

10. Bidding Support

10.1 A Bidder who requires any clarifications pertaining to the E-auction Process in general or technical support during E-auction Process may seek the required assistance at the following contact details:

Query Type	Contact Details
General clarification regarding bidding process OR for any kind of Technical Support	ongcoilbidding@mjunction.in
Helpdesk Nos for e-bidding	033-6601-1717 / 033-6603-1747
Auction Helpline nos	Souvik Ghosh - 9163348134 Arijit Paul – 9163348277 Amit Banerjee – 9163348281 Shirshendu De – 9163348247

Section B

(Declaration Formats)

Appendix–1

BIDDING DOCUMENT ACKNOWLEDGEMENT PRO- FORMA

(On company letter head)

Dated: _____

To,

ED, Chief marketing Services,
1st Floor, Tower B,
Deendayal Urja Bhavan,
Nelson Mandela Road,
Vasantkunj, New Delhi
Pin: 110 070.

Dear Sirs,

We hereby acknowledge receipt of a complete set of Bidding Documents consisting of COSA and RFP enclosed to the "Notice for inviting Offer (NIO)" pertaining to Crude Oil Sales from ONGC's M field in KG-DWN -98/2 block.

We guarantee that the contents of the above said Bidding Documents will be kept confidential within our organization and text of the said documents shall remain the property of ONGC and that the said documents are to be used only for the purpose intended by ONGC.

Our address for further correspondence on this offer will be as under:

_____

_____

_____

FAX NO:

TELEPHONE No: **Yours faithfully,**

PERSONAL ATTENTION OF:

(IF REQUIRED)

(BIDDER)

Note: This form should be uploaded at the time of initial bid submission along with offer duly digitally signed.

Appendix–2

BID SUBMISSION PRO-FORMA

(On company letter head)

To

ED, Chief marketing Services,

1st Floor, Tower B,

Deendayal Urja Bhavan,

Nelson Mandela Road,

Vasantkunj, New Delhi

Pin: 110 070.

Dear Sir,

1. I/We hereby offer to purchase the crude oil detailed in terms of RFP and draft COSA to or such portion thereof as you specify in the Notice of Award and agree to hold the validity of this bid <_____> (45 days from NIO).
2. I/We have understood and agree to comply with the RFP, COSA and any addendums / corrigendum thereto for purchasing crude oil and am/are fully aware of the nature of the crude oil to be purchased and my/our Offer is to purchase crude oil strictly in accordance with the conditions mentioned in RFP and COSA and any addendums / corrigendum thereto.

Yours faithfully,

Signature of Bidder

Address:

Dated :

Signature of Witness

Address:

Dated:

Note: This form should be uploaded at the time of initial bid submission.

Appendix–3

CONFIRMATIONS TO BE GIVEN BY THE BIDDERS

Following confirmations are to be given by the bidder by **selecting confirmed /not confirmed** in the last column		
1.	I/We hereby confirm that our unconditional validity of the bid is for 45 days from the publication of NIO.	
2.	I/We hereby confirm that our bid is firm during the entire duration of the e-bidding process without any qualification.	
3.	I/We hereby confirm acceptance of Scope of terms of crude oil supply in toto, without exceptions and exclusions/deviation.	
4.	I/We hereby confirm that all handwritten matter in all the documents submitted are authenticated by me/us.	
5.	I/We hereby confirm that in all the legal documents submitted, the signatures of witnesses are taken.	
6.	I/We hereby confirm that I/we have submitted the Integrity Pact in original duly signed on all pages.	

Signature of the Bidder

Note: This form should be uploaded at the time of initial bid submission. If any box above is not marked or falsely tick marked, the bid is likely to be rejected.

Appendix–4

PRO-FORMA CERTIFICATE ON RELATIVES OF DIRECTORS OF ONGC TO BE SUBMITTED PURSUANT TO SECTION 297 OF COMPANIES ACT, 1956

CERTIFICATE

This has reference to our proposed offer/bid for utilization of Crude Oil from ONGC's KG-DWN -98/2 FPSO M-Field.

For the purpose of Section 297/299 of the Companies Act, 1956, we certify to the best of my/our knowledge.

(i) I am not a relative of any Director of ONGC.

(ii) We are not a firm in which a Director of ONGC or his relative is a partner.

(iii) I am not a partner in a firm in which a Director of ONGC or his relative is a partner.

(iv) We are not a private company in which a Director of ONGC is a member or Director.

(v) We are not a Company in which Directors of ONGC hold more than 2% of the paid-up share capital of our company or vice-versa.

Signature

(Authorized Signatory of the Bidder /Company/Firm)

Place:

Date:

Note:

1. "Relative" means as mentioned in Section 6 of the Indian Companies Act 1956.
2. To be provided on company's letter head.
3. This form should be uploaded at the time of initial bid submission.

Appendix–5

LETTER OF UNDERTAKING

Undertaking for Payment Security (to be given by PSUs on Stamp Paper of Rs 300/-)

[to be printed on the bottom of NJSP]

This Non Judicial Stamp Paper of Rs 300/- forms part and parcel of this undertaking submitted by _____(Buyer) to Oil And Natural Gas Corporation Ltd. [Seller] and executed by Mr/Ms _____on ____th Day of _____ 2024, for and on behalf of _____ (Buyer)

[to be printed on fresh page]

[Stamp Paper No…….. dated ……..]

UNDERTAKING

Whereas _____ (Buyer) (which expression shall unless it is repugnant to the context or meaning thereof be deemed to include their successors and assigns) is desirous to buy Crude Oil from ONGC for Refining operations.

And Whereas pursuant to e-auction process concluded on [ ] Day of 2024, ONGC and Buyer have entered into a Crude Oil Sales Agreement dated [ ] [hereinafter referred to as the 'Agreement'] for sale and purchase of crude oil as per the terms and conditions given therein.

And Whereas as per Article [ ] of the Agreement, the Buyer being a Public Sector Undertaking is required to give this Undertaking.

Now therefore, in consideration of the above the Buyer hereby undertakes and agrees that,

(1) _____ (Buyer) shall comply with all the Terms and Conditions of the Agreement without any deviation.

(2) _____ (Buyer) shall more specifically comply with the provisions of Article no ___ relating to Payment Terms.

(3) _____ (Buyer) shall make payment (in full) due against sale of Crude oil to ONGC, on the Due Date as per the provision of Article ___ of the Agreement, without any deduction.

This undertaking is given at _____ (Place) on this ___ day of _____ 2024 to Oil And Natural Gas Corporation, New Delhi, hereinafter called ONGC (which expression shall unless it is repugnant to the context or meaning thereof be deemed to include their successors and assigns).

By:

(Name of Buyer)

Member/Authorized Signatory **Notary:**

(Signature/Stamp) **(Stamp & Seal)**

Registered Office:

(Full Address of Buyer)

Note: This form should be submitted by the successful bidders at the time of/before signing of Crude Oil Offtake Agreement (COSA).

Appendix – 5A

PSU Bidders to submit Supporting Document for Appendix-5 in the format as shown below:

Supporting Document

Appendix 5 of RFP for Sale of Mumbai Region crude Oil of ONGC

(To be submitted on the Letter head of the company)

We hereby acknowledge that we have taken due cognizance of the contents of Appendix – 5 (Undertaking for Payment Security – To be given by PSUs on Stamp Paper of Rs 300/-) of RFP for Sale of Crude Oil from ONGC KG-DWN -98/2 FPSO M-Field.

We agree to furnish the said Undertaking, immediately post results of e-auction and completion of related formalities.

By:

Member/Authorized Signatory

(Signature/Stamp)

Full Address of Buyer:

Appendix-6

Payment Security Deposit

PRO-FORMA FOR LETTER OF CREDIT (L/C) TOWARDS PAYMENT SECURITY DEPOSIT(S)
UNCONDITIONAL IRREVOCABLE LETTER OF CREDIT. NO.
BENEFICIARY: OIL AND NATURAL GAS CORPORATION LTD,

To

[SELLER / BENEFICIARY]
[ADDRESS]
…….

AMOUNT OF LETTER OF CREDIT: ₹_..... EXPIRY DATE……..

We hereby establish unconditional irrevocable Letter of Credit no.----------Dt.----------in favour of Oil and Natural Gas Corporation Ltd., _____ Asset,_____ Dist.:_____, _____Pin– _____for ₹…….. against COSA /RFP no. <RFP no. to be entered> as per following details:-

1. This is an unconditional IRREVOCABLE and without recourse LETTER OF CREDIT which allows multiple part encashment and is valid up to _____ for submission of documents for negotiation to the bank.

2. This Letter of Credit covers payment towards Payment Security Deposit as a part of the bid to cover the corresponding Security Value as per provision of the COSA.

3. All bank charges including negotiation/ handling and interest charges will be borne by the opener of Letter of Credit i.e. Bidder/buyer.

4. If the payment to ONGC/ONGC banker is not made at sight of documents, interest @ SBI Base Rate plus 6 % (six percent) per annum compounded quarterly for each day payments are overdue until paid, shall be charged.

5. Payment against the Letter of Credit shall be released immediately on presentation of duly signed invoice/provisional invoices/ debit notes in duplicate by ONGC.

6. This unconditional irrevocable Letter of Credit is available for negotiation directly with the issuing Bank/Branch or through ONGC's bankers without recourse to the drawer.

7. The Issuing Bank undertakes not to amend any of the terms and conditions of this letter of credit (L/C) without prior consent of Beneficiary during the validity of this Letter of Credit.

8. The issuing Bank certifies that the officer(s) signing this Letter of Credit is (are) authorized for this purpose and shall remain binding upon the issuing bank.

9. The Issuing Bank shall forward and submit this Letter of Credit to the Advising Bank for advising of this Letter of Credit to Beneficiary

We hereby guarantee to protect the beneficiary from any consequences, which may arise in the event of non-acceptance or non-payment of, draft drawn in accordance with the terms of credit.

Yours faithfully

(Sign of authorized Officer of Bank)

Note: This form should be submitted by the successful bidders at the time of/before signing of Crude Oil Offtake Agreement (COSA).

Appendix-7

Undertaking regarding Fraud Prevention Policy of ONGC

(On company letter head)

Dated: _____

To,

ED, Chief marketing Services,

1st Floor, Tower B,

Deendayal Urja Bhavan,

Nelson Mandela Road,

Vasantkunj, New Delhi

Pin: 110 070.

Sub: Undertaking regarding Fraud Prevention Policy of ONGC.

Dear Sirs,

I/We have read the Fraud Prevention Policy of ONGC available at ONGC's public portal http://www.ongcindia.com/ and would adhere to the same and shall not indulge myself/ourselves or allow others to indulge in fraudulent activities and would immediately apprise ONGC of the fraud/suspected fraud as soon as it comes to my/our notice.

FAX NO:

TELEPHONE No: **Yours faithfully,**

PERSONAL ATTENTION OF:

(IF REQUIRED)

(BIDDER)

Name:

Designation:

Note: This form should be uploaded at the time of initial bid submission.

Appendix -8

Undertaking regarding statutory/ regulatory compliances prior to commencement of crude oil off-take

(On company letter head)

Dated: _____

To,

ED, Chief marketing Services,

1st Floor, Tower B,

Deendayal Urja Bhavan,

Nelson Mandela Road,

Vasantkunj, New Delhi

Pin: 110 070.

Dear Sirs,

We have read the terms and conditions provided in the RFP and COSA regarding obligation of the bidder to obtain all the necessary statutory/regulatory clearance for the proposed crude oil usage.

We agree and undertake that we will obtain all the necessary statutory/regulatory compliances before commencement of crude oil offtake and will furnish an undertaking as per Appendix 8A of the RFP confirming that we have obtained all necessary statutory / regulatory compliances and approvals before commencement of the crude oil offtake. We also confirm that we will hold harmless and indemnify ONGC against any loss, damage, notice, prosecution etc, arising out of commencement of crude oil supply by ONGC relying on the undertaking furnished by us.

FAX NO:

TELEPHONE No: **Yours faithfully,**

PERSONAL ATTENTION OF:

(IF REQUIRED)

(BIDDER)

Name:

Designation:

Note: This form should be uploaded at the time of initial bid submission.

Appendix -8A

Undertaking regarding statutory/ regulatory compliances prior to commencement of crude oil off-take

(On company letter head)

Dated: _____

To,

ED, Chief marketing Services,

1st Floor, Tower B,

Deendayal Urja Bhavan,

Nelson Mandela Road,

Vasantkunj, New Delhi

Pin: 110 070.

Dear Sirs,

We have read the terms and conditions provided in the RFP and COSA regarding obligation of the bidder to obtain all the necessary statutory/regulatory clearance for the proposed Crude Oil usage.

We confirm that we have obtained all the necessary statutory/regulatory compliances and approvals for commencement of crude oil offtake as per terms of RFP and COSA. We further confirm that we will hold harmless and indemnify ONGC against any loss, damage, notice, prosecution etc arising out of commencement of crude oil supply by ONGC relying on the undertaking furnished by us.

FAX NO:

TELEPHONE No: **Yours faithfully,**

PERSONAL ATTENTION OF:

(IF REQUIRED)

(Customer)

Name:

Designation:

Note: This form should be submitted by the successful bidders before the commencement of crude oil offtake.

Appendix-9

Declaration regarding banning order

(On company letter head)

Dated: _____

To,

ED, Chief marketing Services,

1st Floor, Tower B,

Deendayal Urja Bhavan,

Nelson Mandela Road,

Vasantkunj, New Delhi

Pin: 110 070.

Sub: Declaration regarding banning order.

Dear Sirs,

I/We hereby declare that neither ourselves, nor any of our allied concerns/partners/ associates/directors / proprietors involved in any capacity (the "bidder group"), are currently serving any banning orders issued by ONGC or its subsidiaries debarring the bidder group from carrying on business dealings with ONGC or its subsidiaries.

FAX NO:

TELEPHONE No:

PERSONAL ATTENTION OF:

(IF REQUIRED)

Yours faithfully,

(BIDDER)

Name:

Designation:

Note: This form should be uploaded at the time of initial bid submission.

Appendix -10

PROFORMA OF INTEGRITY PACT

(To be executed on plain paper and applicable for all tenders of value above Rs.1 Crore)

INTEGRITY PACT

Between

Oil and Natural Gas Corporation Ltd (ONGC) hereinafter referred to as "The Principal",

and

…… hereinafter referred to as "The Bidder(s)/ Contractor(s)"

(The Principal and the Bidder (s)/Contractor(s) are collectively referred to as "the Parties".

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for ---------- ("the Contract"). The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s.

In order to achieve these goals, the Principal, by way of this Integrity Pact ("the Pact") will appoint Independent External Monitor ("IEM") who will monitor the tender process and the execution of the Contract for compliance with the principles mentioned above.

Section 1

Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following:-

a. No employee of the Principal, personally or through relatives or any other person, will in connection with the tender, or for the execution of the Contract, demand, promise or accept for himself/herself or any third person, any material or immaterial benefit which he/she is not legally entitled to.

b. The Principal will, during the tender process treat all Bidders with equity and reason. The Principal will in particular, before and during the tender process, provide to all bidders the same information and will not provide to any bidder additional/confidential information through which the bidder could obtain an advantage in relation to the tender process or the contract execution.

c. The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2

Commitments of the Bidder/ contractor

(1) The Bidder / Contractor commits to take all measures necessary to prevent corruption. He commits himself to observe the following during his participation in the tender process and during the contract execution:

a. The Bidder / Contractor will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

b. The Bidder / Contractor will not enter into any agreement or understanding with other Bidders in connection with the bid, including but not limited to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.

c. The Bidder / Contractor will not commit any offence under the relevant Anti-corruption Laws of India/Indian Penal Code, 1860. Further the Bidder / Contractor will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

d. The Bidder / Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to make or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

e. The bidder(s)/ contractor (s) of foreign origin shall disclose the name and address of agents and representatives in India related to this tender. Similarly, the bidder(s)/ contractor(s) of Indian nationality shall furnish the name and address of their foreign principals or associates, if any, related to this tender.

f. The bidder(s)/ contractor (s) who have signed the Pact shall not approach the Courts while the matters/disputes/issues, related to tender process or the Contract are presented before the IEM and awaiting the final decision.

(2) The Bidder / Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3

Disqualification from tender process and exclusion from future contracts

i) If the Bidder, before the Contract is awarded, has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question:

a. the Principal is entitled to disqualify the Bidder from the tender process or to terminate the Contract, if already signed, for such reason.
b. the Principal is entitled to exclude the Bidder / Contractor from participating in future contracts/tenders. The imposition and duration of the exclusion will be determined by the Principal based on the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of six (6) months and maximum of three (3) years.

ii) An act/omission would be treated as a transgression after due consideration of the available evidence by the Principal.

iii) The Bidder accepts and undertakes to respect and uphold the Principal's absolute right to resort to and impose such disqualification/exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision of disqualification/exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.

iv) If the Bidder / Contractor can prove that he has restored the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the aforesaid disqualification/exclusion prematurely.

Section 4

Compensation for Damages

(1) Without prejudice to any rights that may be available to the Principal under any law or the contract or its laid down policies and procedures, the Principal shall have the following rights in case of breach of this Pact by the Bidder/Contractor:

(1) To forfeit the Earnest Money/Bid Security if the Bidder is disqualified from the tender process prior to the award in terms of Section 3;

(2) To forfeit/invoke the Security Deposit/ Performance Bank Guarantee if the Principal has either terminated or is entitled to terminate the Contract of the Bidder in terms of Section 3.

Section 5

Previous transgression

(1) The Bidder declares that he has not committed any transgressions in the last three (3) years against any Company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could invite/justify his exclusion from this tender process.

(2) Any concealment of information or misrepresentation of facts, in regard to the aforesaid, can lead to his disqualification from the tender process or termination of the Contract, if already awarded, or invite any other appropriate action(s) as deemed fit.

Section 6

Equal treatment of all Bidders / Contractors / Subcontractors

(1) The Principal will enter into Pacts on identical terms with all bidders and contractors.

(2) The Bidder(s) / Contractor(s) assures to procure from all their subcontractors an undertaking for the adoption of this Pact. The Bidder (s) / Contractor(s) shall alone be responsible for any violation (s) of the provisions laid down in the Pact by any/all of their sub-contractor (s) or sub-vendor (s).

(3) The Principal will be entitled to disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7

Criminal charges against violating Bidders/Contractors/Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption as per existing Anti-Corruption Law in India, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8

Independent External Monitor / Monitors

(1) The Principal appoints competent and credible Independent External Monitor as nominated and approved by the Central Vigilance Commission. The task of the IEM is to review independently and objectively, whether and to what extent the Parties comply with the obligations under this Pact.

The IEM would be required to sign 'Non- Disclosure Agreements' alongwith a declaration of 'Absence of Conflict of Interest'. In case of any conflict of interest arises at a later date, the IEM shall inform Chairperson of the Board of the Principal and recuse himself/herself from that case.

(2) The IEM is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.

The IEM would be provided access to all documents/records pertaining to the contract for which a complaint or issue is raised before them, as and when warranted. However, the documents/records/ information having National Security implications and those documents which have been classified as Secret/Top Secret are not to be disclosed.

(3) The Bidder/Contractor accepts that the IEM has the right to access, without restriction, all Project documentation available with the Principal including the documents/ records/ information provided by the Bidder/Contractor. The Bidder/Contractor will also grant the IEM, upon their request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The IEM is under contractual obligation to treat the documents/ records/ information of the Bidder/Contractor/ Subcontractor with confidentiality.

(4) The Principal will provide to the IEM sufficient information about all meetings among the parties related to the Project provided that such meetings could have an impact on the contractual relations between the Principal and the Bidder/Contractor. The Parties will offer to the IEM the option to participate in such meetings.

(5) As soon as the IEM notices, or suspects, a violation of this Pact, he will inform the Management of the Principal and request the Management to discontinue or rectify the violation, or take any other relevant action. The IEM can in this regard submit non-binding recommendations. Beyond this, the IEM has no right to demand from the Parties that they act in a specific manner, refrain from action or tolerate action. However, the IEM shall give an opportunity to the Bidder / Contractor to present his case before making its recommendations to the Principal.

(6) The IEM is expected to tender their recommendation on all the complaints within 30 days of their receipt, to the Chairperson of the Board of the Principal. Further, should the occasion arise, the IEM may submit proposals for correcting problematic situations.

(7) If the IEM has reported to the Chairperson of the Board of the Principal a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India/Indian Penal Code, 1860, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the IEM may transmit this information directly to the Central Vigilance Commissioner, Government of India.

(8) The word 'IEM' would include both singular and plural.

Section 9

Pact Duration

(1) This Pact comes into force when both parties have signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.

(2) If any claim is made / lodged during the aforesaid duration, the same shall continue to be valid despite the lapse of this pact as specified above, till it is discharged / determined by Chairperson of the Board of the Principal.

Section 10

Other provisions

(1) This Pact is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi. The Arbitration clause provided in the main tender document / contract shall not be applicable to any issue / dispute arising under this Pact.

(2) If the Contractor is a partnership or a consortium, this Pact must be signed by all partners or consortium members.

(3) If one or several provisions of this Pact are held to be invalid/unenforceable, the remainder of this Pact shall remain valid as though the invalid or unenforceable parts had not been included herein. In this case, the parties will strive to come to an agreement to their original intentions.

(4) Issues like warranty/ guarantee etc. shall be outside the purview of IEM.

---------- ----------

For the Principal For the Bidder / Contractor

Place ----------

Witness 1 : ----------

Date ----------

Witness 2 : ----------

Appendix -11

A. Typical Crude Oil Characteristics

LABORATORY REPORT NO. MUM/000524/24

CRUDE OIL - DETAILED ASSAY ALL CUTS OVERVIEW

M- Field CRUDE of KG-DWN 98/2 (FPSO RUNDOWN SAMPLE DATED 02-01-24)

Tests	Methods	Units	Whole Crude	Light Ends	Fractions					
Initial BP		°C		Below 15	C5	140	250	370+	370	550+
Final BP		°C			140	250	370		550	
Yield	ASTM D 2892 & D5236	% Wt.		0.82	12.72	14.42	22.66	49.38	35.60	13.78
		% Vol.		1.19	14.62	15.26	22.82	46.11	34.32	11.79
Density @ 15° C	ASTM D5002/D4052	kg/L	0.8505	0.5645	0.7350	0.8028	0.8451	0.9105	0.8825	0.9919
Specific Gravity @ 60/60° F	Conversion		0.8509		0.7352	0.8032	0.8455	0.9110	0.8830	0.9925
API Gravity @ 60° F	Calculated	° API	34.8		61.0	44.7	35.9	23.8	28.8	11.1
Composition (Upto C9)	GC	% Wt.		See Page 8						
Aromatics										
Mono	IP 391	% mass				9.80	12.60			
Di		% mass				1.00	5.00			
Tri		% mass				<0.10	0.20			
Poly		% mass				1.00	5.20			
Asphaltene	IP 143	% Wt.	<0.50					<0.50		0.71
Basic Nitrogen	UOP 269	ppm wt				<1	24	690		1900
Benzene	ASTM D5580	% Wt			0.297					
Carbon Residue- Micro	ASTM D4530	% Wt	1.68				<0.10	3.4	<0.10	12.3
Organic Chloride	ASTM D4929 Proc B	ppm wt	<1		<1					
Composition - Light HC	IP 601	%wt & %Vol	See Page 14							
Paraffins	ASTM D6730	Vol %			46.691					
Olefins		Vol %			<0.010					
Naphthene		Vol %			48.414					
Aromatics		Vol %			4.763					
Flash Point (PMCC)	ASTM D93/D 170	°C	<-5			51.8	120			
Freezing Point	ASTM D2386	°C				-52				
Hydrogen Sulphide (Liquid Phase)	UOP163	ppm wt			<1					
Kinematic Viscosity @ 20°C		#								
Kinematic Viscosity @ 40°C	ASTM D445	cSt	9.514				4.683			
Kinematic Viscosity @ 50°C		cSt	5.736				3.759			
Kinematic Viscosity @ 70°C		cSt						28.86	12.5	#
Kinematic Viscosity @ 100°C		cSt						11.76	6.6	209.10
Kinematic Viscosity @ 135°C		cSt								58.02
Mercaptan Sulphur	UOP163	ppm wt			<3					
Metals										
Copper	ICPOES	ppm wt	<1					<1	<1	<1
Iron	ICPOES	ppm wt	8					17	48	55
Nickel	ICPOES	ppm wt	3					6	460	21
Zinc	ICPOES	ppm wt	<1					<1	0	<1
Vanadium	ICPOES	ppm wt	<1					<1	0	2
Motor Octane Number	ASTM D2700	Rating			67					
Pour Point	ASTM D97	°C	21				3	+48	48	81
Cold Filter Plugging Point	IP 309	°C				-30				
Cloud Point	ASTM D2500	°C					4			
Aniline Point	ASTM D611	°C				61.00	80.5			
Aniline Point & API Product	Calculation					6347				
Saybolt	ASTM D156					+30				
Doctor Test	IP 30				Negative					
Copper Strip Corrosion	ASTM D130				1a	1a				
Cetane Index	ASTM D976	Rating				38.7	54.3			
Diesel Index	IP 21	-				63.5	63.6			
Reid Vapour Pressure @37.8°C	ASTM D5191/D323	psi	4.60		4.40					
Research Octane Number	ASTM D2699	Rating			69					
Salt Content	ASTM D3230	lb/1000bbls	136							
Smoke Point	ASTM D1322	mm				26				
Total Acid Number	ASTM D664	mg KOH/g	0.30				0.15			
Total Nitrogen	ASTM D4629/D5762	ppm wt	708			2.50	59	1380	460	
Total Sulphur	ASTM D4294/D5453	% Wt	0.0608		0.0021	0.0170	0.0493	0.0935	0.0695	0.155
Water Content	ASTM D4006/D6304	% Vol	0.55							
Water Content	ASTM D6304	ppm					95			
Water & Sediments	ASTM D4007	% Vol	0.55							
Mercury	UOP 938	ppb	<1							
Sediment by Extraction	ASTM D473	% Wt					<0.01			
Wax Appearance Temperature	DSC	°C	37							
Wax Disappearance Temperature	DSC	°C	46							
Wax Content	UOP 46*	% Wt	22.5				9.5	40.5	41.5	
Distillation	ASTM D86 / D1160	°C			See Below	See Below	See Below	See Below	See Below	

Initial Boiling Point		°C			39.8	152.1	258.8	343.9	384.1	
5% recovered		°C			69.6	166.5	273.4	401.6	396.6	
10% recovered		°C			74.3	168.4	275.9	410.3	400.4	
20% recovered		°C			80.3	172.2	280.2	418.0	411.8	
30% recovered		°C			85.8	176.2	284.3	428.6	422.7	
40% recovered		°C			90.9	180.8	289.9	442.2	432.4	
50% recovered		°C			95.5	186.2	296.3	453.6	441.8	
60% recovered		°C			99.9	192.7	303.8	469.0	450.8	
70% recovered		°C			104.5	200.6	312.3	496.8	458.8	
80% recovered		°C			110.2	210.1	322.3	547.4	472.3	
90% recovered		°C			118.1	221.5	335.6		494.2	
95% recovered		°C			124.5	230.9	343.6		515.8	
Final Boiling Point		°C			136.8	239.8	355.8			
AET @ 400 °C Kettle Temp:		°C						547.4	538.1	
Recovery		Vol %			98.6	98.4	97.8	80.4	98.6	
Resdue		Vol %			0.60	0.80	1.40			
Loss		Vol %			0.30	0.80	0.80			

Note : (#) Not possible due to the nature of sample (*)Withdrawn method

LABORATORY REPORT NO. MUM/000524/24

WHOLE CRUDE PROPERTIES

Sample Descriptions / Label : M- Field CRUDE of KG-DWN 98/2 (FPSO RUNDOWN SAMPLE DATED 02-01-24)

Tests	Methods	Units	Results
Density @ 15° C	ASTM D5002	kg/L	0.8505
Specific Gravity @ 60/60° F	Conversion		0.8509
API Gravity @ 60° F	Calculated	° API	34.8
Asphaltene	IP 143	% Wt	<0.50
Carbon Residue- Micro	ASTM D4530	% Wt	1.68
Composition (Upto C9)	IP 601	% Wt & %Vol.	See Page 14
Organic Chloride	ASTM D4929 Proc B	ppm wt	<1
Flash Point	IP 170	° C	<-5
Kinematic Viscosity @ 20° C	ASTM D445	cSt	#
Kinematic Viscosity @ 40° C			9.514
Kinematic Viscosity @ 50° C			5.736
Metals			
Copper	ICPOES		<1
Iron	ICPOES	ppm wt	8
Nickel	ICPOES	ppm wt	3
Zinc	ICPOES	ppm wt	<1
Vanadium	ICPOES	ppm wt	<1
Pour Point	ASTM D97	° C	21
Reid Vapour Pressure @ 100° F	ASTM D323	psi	4.6
Salt Content	ASTM D3230	PTB	136
Total Acid Number	ASTM D664	mg KOH/g	0.30
Total Nitrogen	ASTM D5762	ppm wt	708
Total Sulphur	ASTM D4294	% Wt	0.0608
Water Content	ASTM D4006	% Vol	0.55
Water & Sediments	ASTM D4007	% Vol	0.55
Wax Appearance Temperature	DSC	°C	37.00
Wax Disappearance Temperature	DSC	°C	46.00
Wax Content	UOP 46*	% Wt	22.5

Note : (#) Not possible due to the nature of the sample (*) Withdrawn method

Page 2

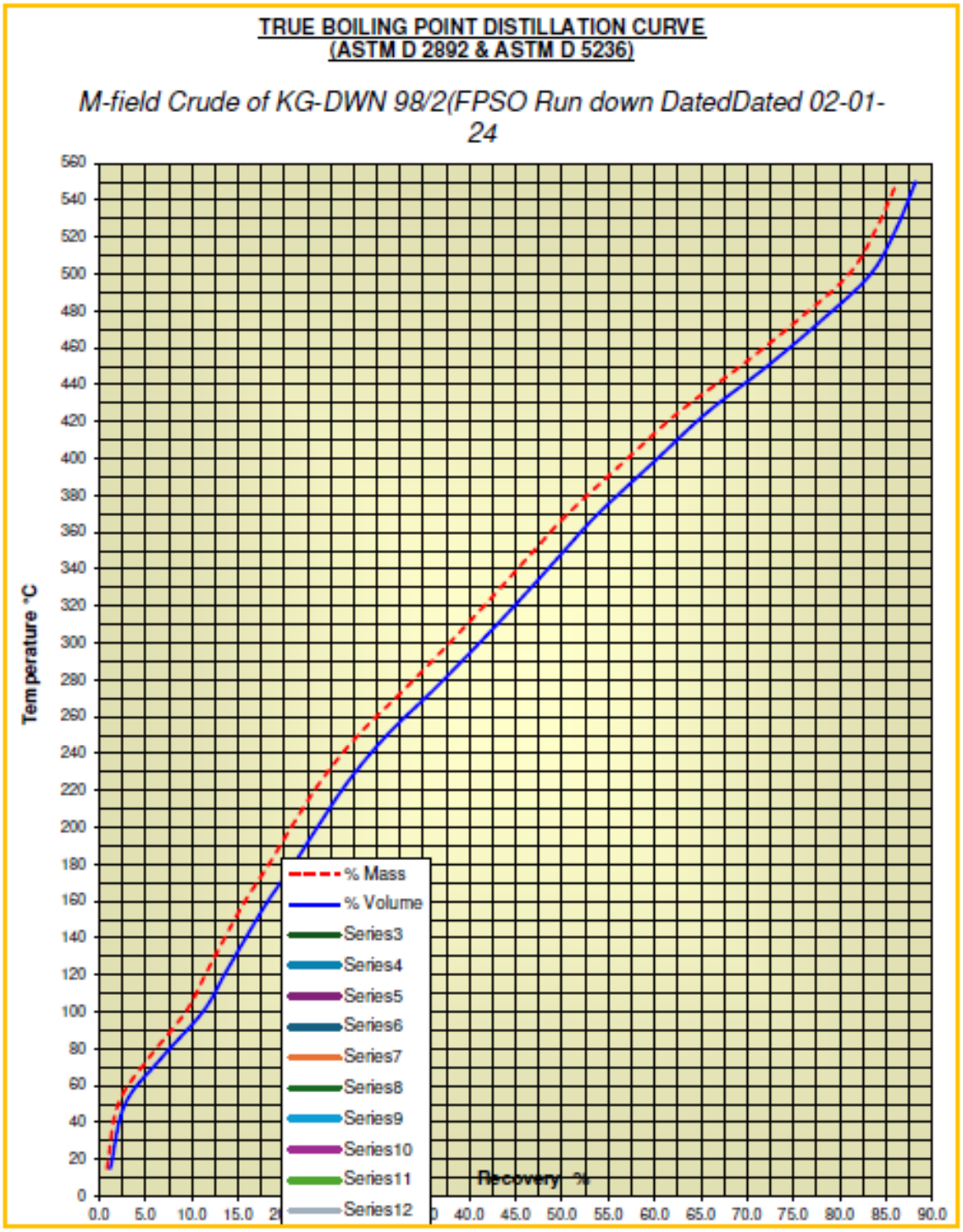
LABORATORY REPORT NO. MUM/000524/24

TRUE BOILING POINT DISTILLATION DATA

(ASTM D 2892 & ASTM D 5236)

Sample Descriptions / Label : M-Field CRUDE of KG-DWN 98/2 (FPSO RUNDOWN SAMPLE DATED 02-01-24)

Sl. No.	Method	Vapour Temperature °C	% Mass	Cumulative % Mass	% Volume	Cumulative % Volume
1	ASTM D2892	Gas	0.82	0.82	1.19	1.19
2		15 - 50	1.22	2.04	1.60	2.79
3		50 - 75	3.31	5.35	3.93	6.72
4		75 - 100	3.98	9.33	4.46	11.18
5		100 - 120	2.11	11.44	2.33	13.51
6		120 - 140	2.10	13.54	2.30	15.81
7		140 - 160	2.20	15.74	2.40	18.21
8		160 - 180	2.59	18.33	2.80	21.01
9		180 - 200	2.40	20.73	2.55	23.56
10		200 - 225	3.20	23.93	3.35	26.91
11		225 - 250	4.03	27.96	4.16	31.07
12		250 - 275	5.04	33.00	5.13	36.20
13		275 - 300	4.83	37.83	4.88	41.08
14	ASTM D5236	300 - 325	4.64	42.47	4.67	45.75
15		325 - 350	4.48	46.95	4.49	50.24
16		350 - 370	3.67	50.62	3.65	53.89
17		370 - 400	6.46	57.08	6.42	60.31
18		400 - 425	5.50	62.58	5.38	65.69
19		425 - 450	6.69	69.27	6.47	72.16
20		450 - 475	6.18	75.45	5.90	78.06
21		475 - 500	5.57	81.02	5.29	83.35
22		500 - 525	2.98	84.00	2.80	86.15
23		525 - 550	2.22	86.22	2.06	88.21
24		550 + Residue	13.78	100.00	11.79	100.00


TRUE BOILING POINT DISTILLATION CURVE
(ASTM D 2892 & ASTM D 5236)
M-field Crude of KG-DWN 98/2(FPSO Run down DatedDated 02-01-24
Temperature °C
Recovery %
% Mass
% Volume
Series3
Series4
Series5
Series6
Series7
Series8
Series9
Series10
Series11
Series12

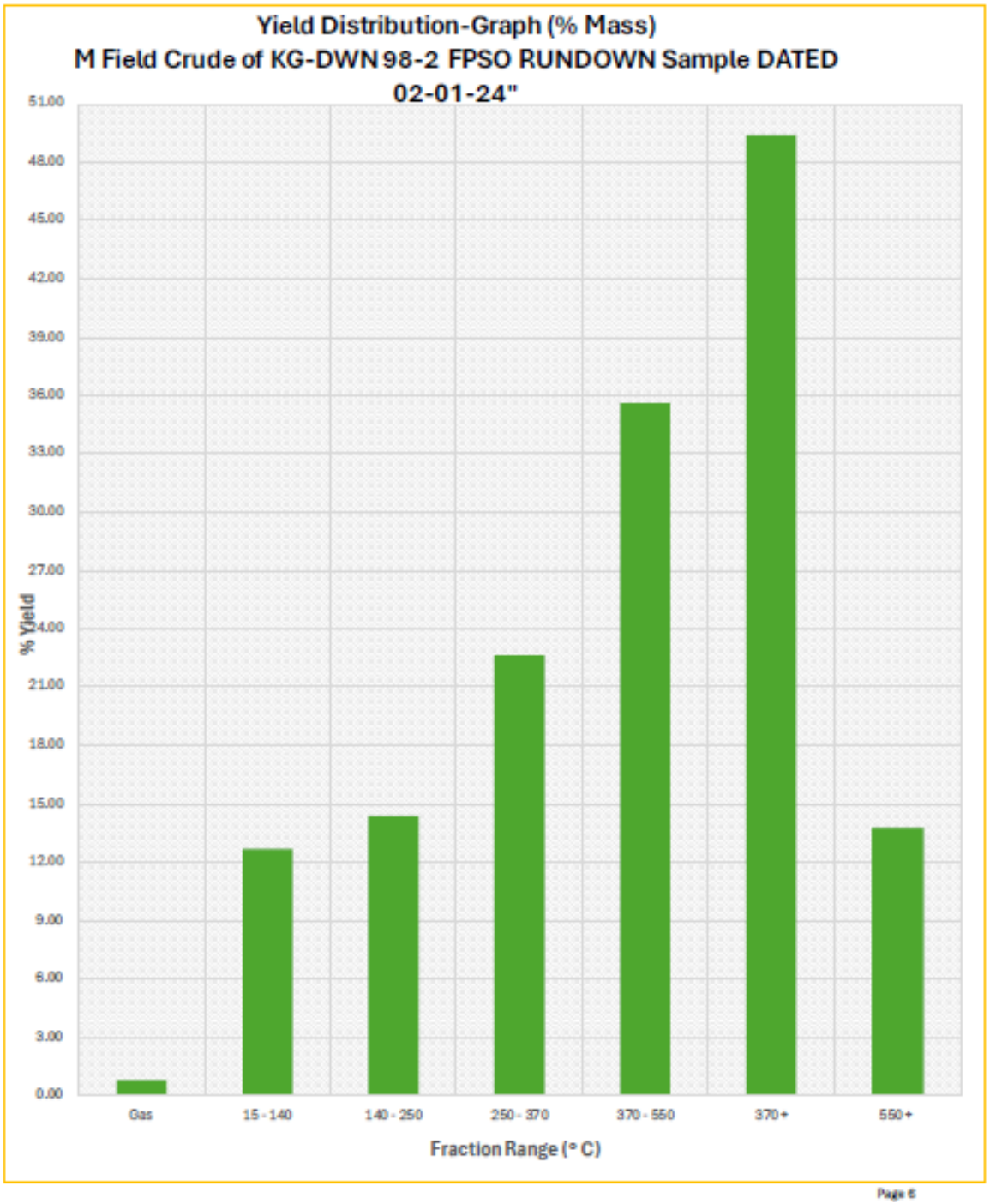
LABORATORY REPORT NO. MUM/00052424

SUMMARY OF PRODUCT / RESIDUE CUT POINTS AND YIELDS

Sample Descriptions: M- Field CRUDE of KG-DWN 98/2 (FPSO RUNDOWN SAMPLE DATED 02-01-24)

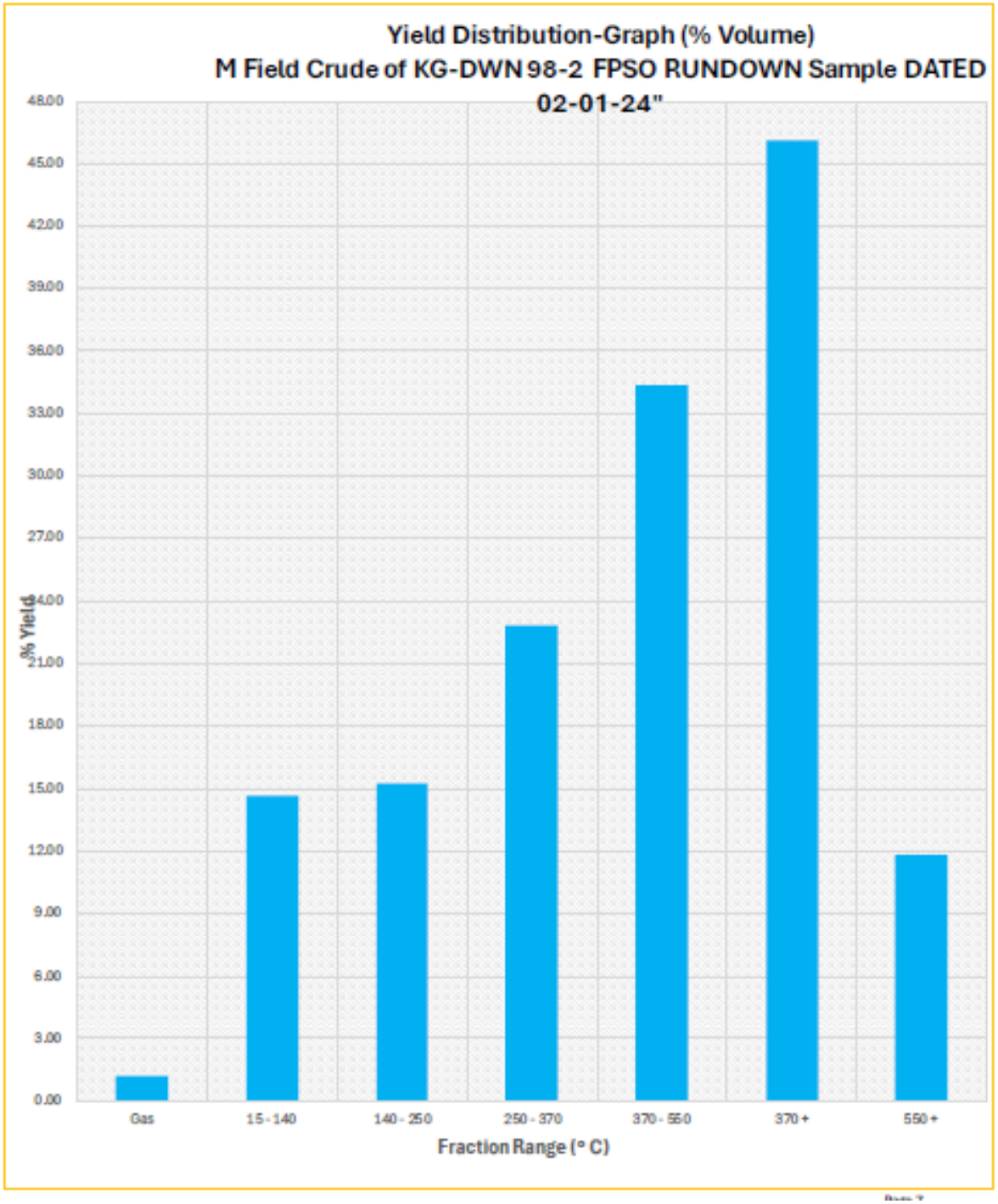
Products	Cut Points	Yield	
	(° C)	% Mass	Volume %
Gas	Below 15	0.82	1.19
Naphtha	15 - 140	12.72	14.62
Kerosene	140 - 250	14.42	15.26
Gas Oil	250 - 370	22.66	22.92
Vacuum Gas Oil	370 - 550	35.60	34.32
Residues	370 +	49.38	46.11
	550 +	13.78	11.79

LABORATORY REPORT NO. MUM/000524/24



Page 6

LABORATORY REPORT NO. MUM/000524/24



LABORATORY REPORT NO. MUM/00052a/24

SUMMARY OF LIGHT END COMPOSITION

Sample Descriptions : M- Field CRUDE of KG-DWN 98/2 (FPSO RUNDOWN SAMPLE DATED 02-01-24)

Tests	Methods	Units	Results
Yield	ASTM D 2892	% Wt.	0.82
Yield		% Vol.	1.19
Density @ 15°C	GC / Calculated	kg/L	0.5645
Methane	GC	% Wt.	<0.010
Ethane			0.792
Propane			47.771
i-butane			20.557
n-Butane			29.263
i-pentane			1.228
n-Pentane			0.389

LABORATORY REPORT NO. MUM/000524/24

Sample Descriptions: M- Field CRUDE of KG-DWN 98/2 (FPSO RUNDOWN SAMPLE DATED 02-01-24)

Tests	Methods	Units	Results
Initial BP		°C	15
Final BP		°C	140
Yield	ASTM D2892	% Wt.	12.72
		% Vol.	14.62
Density @ 15°C	ASTM D4052	kg/L	0.7350
Specific Gravity @ 60/60° F	Conversion		0.7352
API Gravity @ 60° F	Calculated	° API	61.0
Benzene	ASTM D5580	% Wt.	0.297
Paraffins	ASTM D6730	% Vol.	46.691
Olefins		% Vol.	<0.010
Naphthene		% Vol.	48.414
Aromatics		% Vol.	4.763
Hydrogen Sulphide (Liquid Phase)	UOP163	ppm wt	<1
Mercaptan Sulphur	UOP 163	ppm wt	<3
Organic Chloride	ASTM D4929B	ppm wt	<1
Motor Octane Number	ASTM D2700	Rating	67
Doctor Test	IP 30		Negative
Copper Strip Corrosion	ASTM D130		1a
Reid Vapour Pressure @ 100° F	ASTM D5191	psi	4.40
Research Octane Number	ASTM D2699	Rating	69
Sulphur	ASTM D5453	% Wt.	0.0021
Distillation			
Initial Boiling Point	ASTM D86	°C	39.8
5% recovered		°C	69.6
10% recovered		°C	74.3
20% recovered		°C	80.3
30% recovered		°C	85.8
40% recovered		°C	90.9
50% recovered		°C	95.5
60% recovered		°C	99.9
70% recovered		°C	104.5
80% recovered		°C	110.2
90% recovered		°C	118.1
95% recovered		°C	124.5
Final Boiling Point		°C	136.8
Recovery		Vol %	98.6
Resdue		Vol %	0.50
Loss		Vol %	0.90

LABORATORY REPORT NO. MUM/000524/24

Sample Descriptions: M- Field CRUDE of KG-DWN 98/2 (FPSO RUNDOWN SAMPLE DATED 02-01-24)

Tests	Methods	Units	Results
Initial BP		°C	140
Final BP		°C	250
Yield	ASTM D2892	% Wt.	14.42
Yield		% Vol.	15.26
Density @ 15° C	ASTM D4052	kg/L	0.8028
Specific Gravity @ 60/60° F	Conversion		0.8032
API Gravity @ 60° F	Calculated	° API	44.7
Aromatics			
Mono	IP 391	% Wt.	9.8
DI		% Wt.	1.0
Tri		% Wt.	<0.10
Poly		% Wt.	1.0
Basic Nitrogen	UOP 269	ppm wt	<1
Flash Point (PMCC)	ASTM D93	°C	51.8
Freezing Point	ASTM D2386	°C	-52
Cold Filter Plugging Point	IP 309	°C	<-30
Aniline Point	ASTM D611	°C	61.0
Aniline Point & API Product	Calculation		6347
Saybolt Color	ASTM D156		+30
Cetane Index	ASTM D976	Rating	38.7
Diesel Index	IP 21	-	63.5
Copper Strip Corrosion@50 degree C	ASTM D130		1a
Smoke Point	ASTM D1322	mm	26
Total Nitrogen	ASTM D4629	ppm wt	2.5
Total Sulphur	ASTM D5453	% Wt	0.0170
Distillation			
Initial Boiling Point	ASTM D86	°C	152.1
5% recovered		°C	166.5
10% recovered		°C	168.4
20% recovered		°C	172.2
30% recovered		°C	176.2
40% recovered		°C	180.8
50% recovered		°C	186.2
60% recovered		°C	192.7
70% recovered		°C	200.6
80% recovered		°C	210.1
90% recovered		°C	221.5
95% recovered		°C	230.9
Final Boiling Point		°C	239.8
Recovery		Vol %	98.4
Residue		Vol %	0.80
Loss		Vol %	0.80

LABORATORY REPORT NO. MUM/000524/24

Sample Descriptions: M- Field CRUDE of KG-DWN 98/2 (FPSO RUNDOWN SAMPLE DATED 02-01-24)

Tests	Methods	Units	Results
Initial BP		°C	250
Final BP		°C	370
Yield	ASTM D2892	% Wt.	22.66
Yield		% Vol.	22.82
Density @ 15° C	ASTM D4052	kg/L	0.8451
Specific Gravity @ 60/60° F	Conversion		0.8455
API Gravity @ 60° F	Calculated	°API	35.9
Aromatics	IP 391		
Mono		% Wt.	12.6
Di		% Wt.	5.0
Tri		% Wt.	0.2
Poly		% Wt.	5.2
Carbon Residue- Micro	ASTM D4530	% Wt	<0.10
Basic Nitrogen	UOP 269	ppm wt	24
Flash Point (PMCC)	ASTM D93	°C	120
Kinematic Viscosity @ 40°C	ASTM D445	cSt	4.683
Kinematic Viscosity @ 50°C	ASTM D445	cSt	3.759
Pour Point	ASTM D97	°C	3
Cloud Point	ASTM D2500	°C	4
Aniline Point	ASTM D611	°C	80.5
Cetane Index	ASTM D976	Rating	54.3
Diesel Index	IP 21	-	63.6
Total Acid Number	ASTM D664	mg KOH/g	0.15
Total Nitrogen	ASTM D5762	ppm wt	59
Total Sulphur	ASTM D4294	% Wt	0.0493
Water Content	ASTM D6304	ppm	95
Sediment by Extraction	ASTM D473	% Wt	<0.01
Wax Content	UOP 46*	% Wt	9.5
Distillation			
Initial Boiling Point	ASTM D86	°C	258.8
5% recovered		°C	273.4
10% recovered		°C	275.9
20% recovered		°C	280.2
30% recovered		°C	284.3
40% recovered		°C	289.9
50% recovered		°C	296.3
60% recovered		°C	303.8
70% recovered		°C	312.3
80% recovered		°C	322.3
90% recovered		°C	335.6
95% recovered		°C	343.6
Final Boiling Point		°C	355.8
Recovery		Vol %	97.8
Residue		Vol %	1.40
Loss		Vol %	0.80

LABORATORY REPORT NO. MUM/000524/24

Sample Descriptions: M- Field CRUDE of KG-DWN 98/2 (FPSO RUNDOWN SAMPLE DATED 02-01-24)

Tests	Methods	Units	Results
Initial BP		°C	370
Final BP		°C	550
Yield	ASTM D5236	% Wt.	35.60
Yield		% Vol.	34.32
Density @ 15° C	ASTM D4052	kg/L	0.8825
Specific Gravity @ 60/60° F	Conversion		0.8830
API Gravity @ 60° F	Calculated	° API	28.8
Carbon Residue - Micro	ASTM D4530	% Wt	<0.10
Kinematic Viscosity @ 70°C	ASTM D445	cSt	12.46
Kinematic Viscosity @ 100°C	ASTM D445	cSt	6.625
Metals			
Copper	ICPOES	ppm wt	<1
Iron	ICPOES	ppm wt	<1
Nickel	ICPOES	ppm wt	<1
Zinc	ICPOES	ppm wt	<1
Vanadium	ICPOES	ppm wt	<1
Pour Point	ASTM D97	°C	48
Total Nitrogen	ASTM D5762	ppm wt	460
Total Sulphur	ASTM D4294	% Wt	0.0695
Wax Content	UOP 46*	% Wt.	41.5
Distillation			
Initial Boiling Point	ASTM D1160	°C	384.1
5% recovered		°C	396.6
10% recovered		°C	400.4
20% recovered		°C	411.8
30% recovered		°C	422.7
40% recovered		°C	432.4
50% recovered		°C	441.8
60% recovered		°C	450.8
70% recovered		°C	458.8
80% recovered		°C	472.3
90% recovered		°C	494.2
95% recovered		°C	515.8
AET @ 400 °C Kettle Temperature		°C	538.1
Recovery @ 400°C Kettle Temp.		Vol %	98.6

Note: (*) Withdrawn method

LABORATORY REPORT NO. MUM/000524/24

Sample Descriptions: M- Field CRUDE of KG-DWN 98/2 (FPSO RUNDOWN SAMPLE DATED 02-01-24)

Tests	Methods	Units	Results	
Initial BP		°C	370 + Residue	550 + Residue
Final BP		°C		
Yield	ASTM D2892/D5236	% Wt.	49.38	13.78
Yield		% Vol.	46.11	11.79
Density @ 15° C	IP 365	kg/L	0.9105	0.9919
Specific Gravity @ 60/60° F	Conversion		0.9110	0.9925
API Gravity @ 60° F	Calculated	° API	23.8	11.1
Asphaltene	IP 143	% Wt.	<0.50	0.71
Carbon Residue- Micro	ASTM D4530	% Wt.	3.4	12.3
Kinematic Viscosity @ 70°C	ASTM D445	cSt	28.86	#
Kinematic Viscosity @ 100°C			11.76	209.1
Kinematic Viscosity @ 135°C				58.02
Metals				
Copper	ICPOES	ppm wt	<1	<1
Iron			17	55
Nickel			6	21
Zinc			<1	<1
Vanadium			<1	2
Pour Point	ASTM D97	°C	+48	81
Aniline Point	ASTM D611	°C	84.0	
Total Sulphur	ASTM D4294	% Wt.	0.0935	0.155
Basic Nitrogen	UOP 269	ppm wt	690	1900
Total Nitrogen	ASTM D5762	ppm wt	1380	3800
Wax Content	UOP 46*	% Wt.	40.5	
Initial boiling point	ASTM D1160	°C	343.9	
AET @ 5% Recovery		°C	401.6	
AET @ 10% Recovery		°C	410.3	
AET @ 20% Recovery		°C	418.0	
AET @ 30% Recovery		°C	428.6	
AET @ 40% Recovery		°C	442.2	
AET @ 50% Recovery		°C	453.6	
AET @ 60% Recovery		°C	469.0	
AET @ 70% Recovery		°C	496.8	
AET @ 80% Recovery		°C	547.4	
AET @ 400 °C Kettle Temperature		°C	547.4	
Recovery @ 400°C Kettle Temp.		Vol %	80.0	

Note: (*) Withdrawn method

LABORATORY REPORT NO. MUM/000524/24

Sample Descriptions / Label : M- Field CRUDE of KG-DWN 98/2 (FPSO RUNDOWN SAMPLE DATED 02-01-24)

COMPOSITION UP TO C9

Component	Mass %	Volume %
propane	0.172	0.343
i-butane	0.178	0.319
n-butane	0.484	0.835
i-pentane	0.504	0.813
n-pentane	0.539	0.861
2,2-dimethylbutane	0.011	0.017
cyclopentane	0.128	0.172
2,3-dimethylbutane	0.067	0.101
2-methylpentane	0.356	0.545
3-methylpentane	0.215	0.323
n-hexane	0.474	0.719
methylcyclopentane	0.611	0.817
2,4-dimethylpentane	0.026	0.038
benzene	0.034	0.039
cyclohexane	1.063	1.365
2-methylhexane	0.151	0.223
2,3-dimethylpentane	0.083	0.119
1,1-dimethylcyclopentane	0.053	0.070
3-methylhexane	0.166	0.242
1c,3-dimethylcyclopentane	0.166	0.223
1t,3-dimethylcyclopentane	0.159	0.212
3-ethylpentane	0.023	0.033
1t,2-dimethylcyclopentane	0.275	0.366
n-heptane	0.490	0.716
unknown	0.038	0.055
methylcyclohexane	1.501	1.950
2,2-dimethylhexane	0.074	0.106
ethylcyclopentane	0.140	0.182
unknown	0.028	0.039
1c,2t,4-trimethylcyclopentane	0.105	0.138
1t,2c,3-trimethylcyclopentane	0.135	0.175
toluene	0.436	0.503
2,3-dimethylhexane	0.026	0.037
2-methyl-3-ethylpentane	0.060	0.084
2-methylheptane	0.232	0.332
4-methylheptane	0.039	0.055
unknown	0.016	0.023
3-methylheptane	0.081	0.114
1t,4-dimethylcyclohexane	0.015	0.020
1c,2t,3-trimethylcyclopentane	0.418	0.542
unknown	0.034	0.049
1,1-dimethylcyclohexane	0.138	0.177
3c-ethylmethylcyclopentane	0.042	0.055
3t-ethylmethylcyclopentane	0.062	0.080
2t-ethylmethylcyclopentane	0.056	0.073
1,1-methylethylcyclopentane	0.144	0.184

Component	Mass %	Volume %
unknown	0.012	0.017
1c,2c,3-trimethylcyclopentane	0.252	0.323
n-octane	0.481	0.684
1c,4-dimethylcyclohexane	0.029	0.036
unknown	0.111	0.159
2,4,4-trimethylhexane	0.024	0.033
unknown	0.013	0.019
N3	0.019	0.025
2,2-dimethylheptane	0.017	0.024
N4	0.067	0.085
ethylcyclohexane	0.047	0.060
2,4-dimethylheptane	0.448	0.627
4,4-dimethylheptane	0.146	0.204
2,5-dimethylheptane	0.030	0.042
3,3-dimethylheptane	0.026	0.036
3,5-dimethylheptane	0.024	0.033
2,6-dimethylheptane	0.031	0.043
1,1,3-trimethylcyclohexane	0.022	0.028
N10	0.021	0.027
ethylbenzene	0.105	0.122
1c,2t,4t-trimethylcyclohexane	0.087	0.112
unknown	0.011	0.016
1,3-dimethylbenzene	0.126	0.146
1,4-dimethylbenzene	0.157	0.182
I7	0.065	0.089
4-methyloctane	0.047	0.066
I4	0.072	0.099
1c,2t,3-trimethylcyclohexane	0.019	0.025
3-ethylheptane	0.017	0.023
3-methyloctane	0.072	0.100
unknown	0.027	0.038
unknown	0.013	0.018
unknown	0.012	0.018
unknown	0.019	0.027
1,2-dimethylbenzene	0.059	0.067
unknown	0.014	0.021
unknown	0.012	0.017
I6	0.060	0.082
N18	0.143	0.183
I8	0.086	0.117
N20	0.0104	0.0133
N21	0.0124	0.0159
N22	0.0186	0.0238
unknown	0.0148	0.0212
n-nonane	0.4802	0.6691

LABORATORY REPORT NO. MUM/000524/24

Sample Descriptions / Label : M- Field CRUDE of KG-DWN 98/2 (FPSO RUNDOWN SAMPLE DATED 02-01-24)

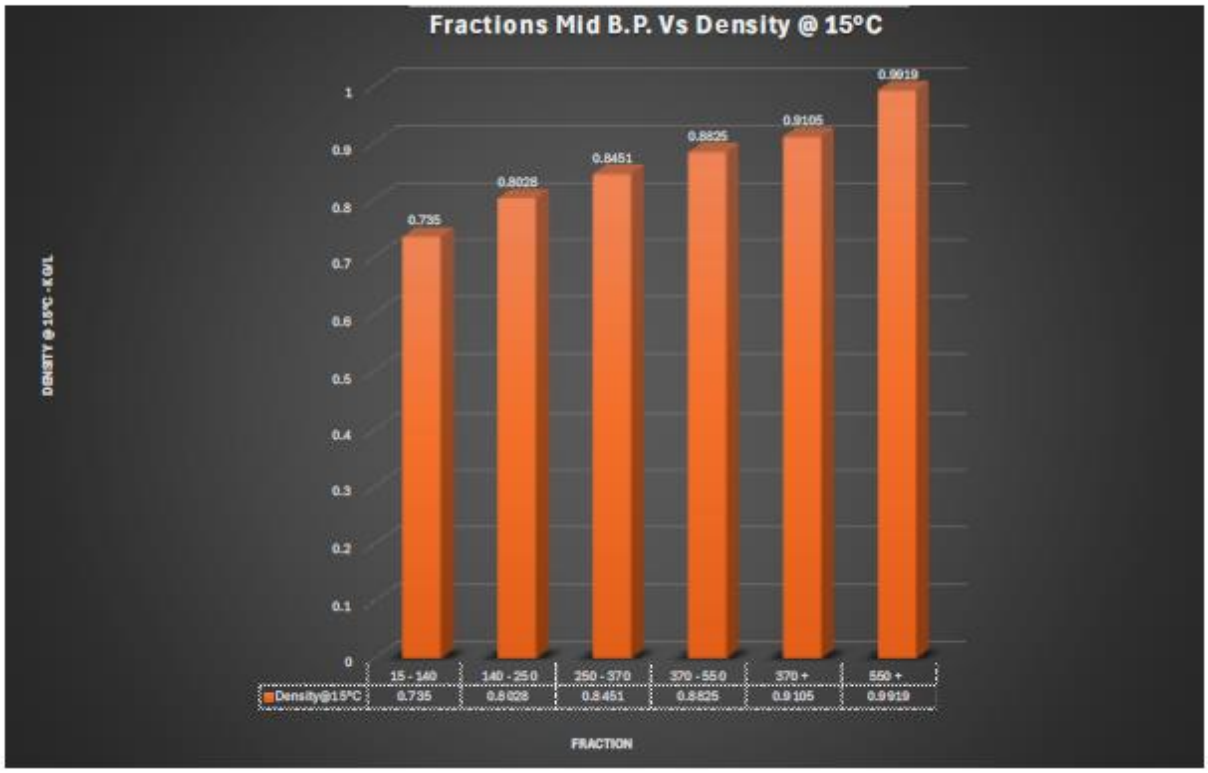
COMPOSITION UP TO C9

Component	Mass %	Volume %
propane	0.172	0.343
i-butane	0.178	0.319
n-butane	0.484	0.835
i-pentane	0.504	0.813
n-pentane	0.539	0.861
2,2-dimethylbutane	0.011	0.017
cyclopentane	0.128	0.172
2,3-dimethylbutane	0.067	0.101
2-methylpentane	0.356	0.545
3-methylpentane	0.215	0.323
n-hexane	0.474	0.719
methylcyclopentane	0.611	0.817
2,4-dimethylpentane	0.026	0.038
benzene	0.034	0.039
cyclohexane	1.063	1.365
2-methylhexane	0.151	0.223
2,3-dimethylpentane	0.083	0.119
1,1-dimethylcyclopentane	0.053	0.070
3-methylhexane	0.166	0.242
1c,3-dimethylcyclopentane	0.166	0.223
1t,3-dimethylcyclopentane	0.159	0.212
3-ethylpentane	0.023	0.033
1t,2-dimethylcyclopentane	0.275	0.366
n-heptane	0.490	0.716
unknown	0.038	0.055
methylcyclohexane	1.501	1.950
2,2-dimethylhexane	0.074	0.106
ethylcyclopentane	0.140	0.182
unknown	0.028	0.039
1c,2t,4-trimethylcyclopentane	0.105	0.138
1t,2c,3-trimethylcyclopentane	0.135	0.175
toluene	0.436	0.503
2,3-dimethylhexane	0.026	0.037
2-methyl-3-ethylpentane	0.060	0.084
2-methylheptane	0.232	0.332
4-methylheptane	0.039	0.055
unknown	0.016	0.023
3-methylheptane	0.081	0.114
1t,4-dimethylcyclohexane	0.015	0.020
1c,2t,3-trimethylcyclopentane	0.418	0.542
unknown	0.034	0.049
1,1-dimethylcyclohexane	0.138	0.177
3c-ethylmethylcyclopentane	0.042	0.055
3t-ethylmethylcyclopentane	0.062	0.080
2t-ethylmethylcyclopentane	0.056	0.073
1,1-methylethylcyclopentane	0.144	0.184

Component	Mass %	Volume %
unknown	0.012	0.017
1c,2c,3-trimethylcyclopentane	0.252	0.323
n-octane	0.481	0.684
1c,4-dimethylcyclohexane	0.029	0.036
unknown	0.111	0.159
2,4,4-trimethylhexane	0.024	0.033
unknown	0.013	0.019
N3	0.019	0.025
2,2-dimethylheptane	0.017	0.024
N4	0.067	0.085
ethylcyclohexane	0.047	0.060
2,4-dimethylheptane	0.448	0.627
4,4-dimethylheptane	0.146	0.204
2,5-dimethylheptane	0.030	0.042
3,3-dimethylheptane	0.026	0.036
3,5-dimethylheptane	0.024	0.033
2,6-dimethylheptane	0.031	0.043
1,1,3-trimethylcyclohexane	0.022	0.028
N10	0.021	0.027
ethylbenzene	0.105	0.122
1c,2t,4t-trimethylcyclohexane	0.087	0.112
unknown	0.011	0.016
1,3-dimethylbenzene	0.126	0.146
1,4-dimethylbenzene	0.157	0.182
I7	0.065	0.089
4-methyloctane	0.047	0.066
I4	0.072	0.099
1c,2t,3-trimethylcyclohexane	0.019	0.025
3-ethylheptane	0.017	0.023
3-methyloctane	0.072	0.100
unknown	0.027	0.038
unknown	0.013	0.018
unknown	0.012	0.018
unknown	0.019	0.027
1,2-dimethylbenzene	0.059	0.067
unknown	0.014	0.021
unknown	0.012	0.017
I6	0.060	0.082
N18	0.143	0.183
I8	0.086	0.117
N20	0.0104	0.0133
N21	0.0124	0.0159
N22	0.0186	0.0238
unknown	0.0148	0.0212
n-nonane	0.4802	0.6691

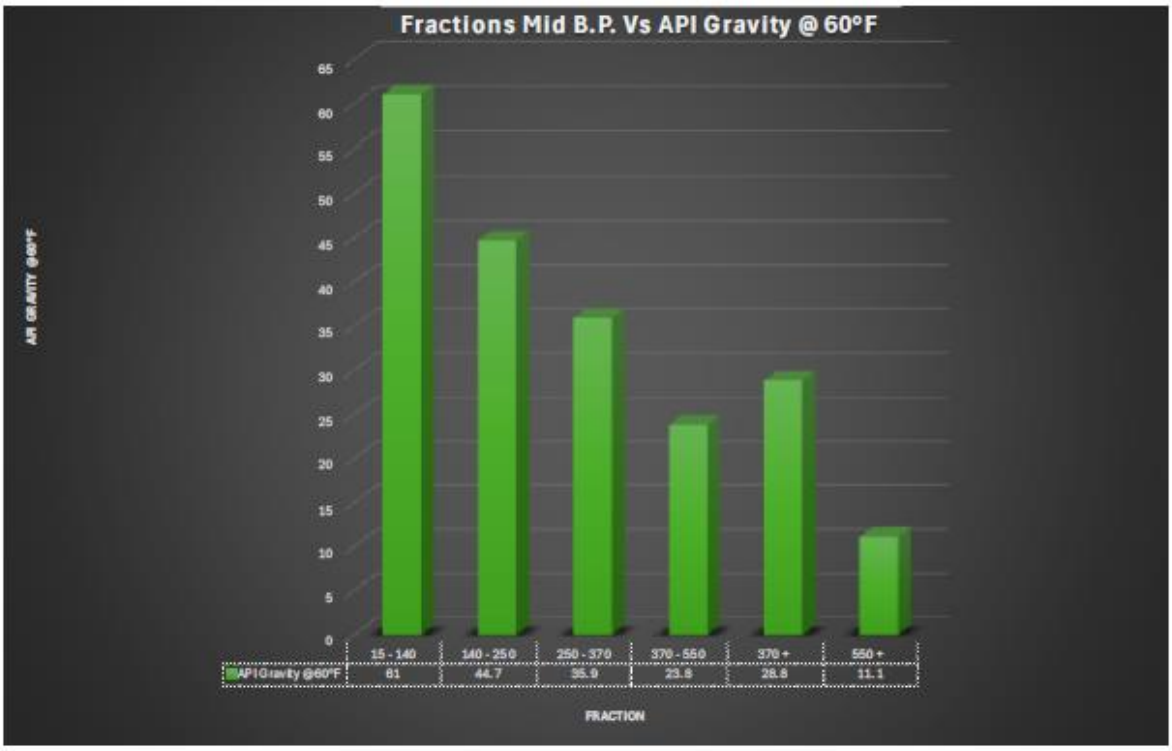
LABORATORY REPORT NO. MUM/000524/24

M- field Crude of KG-DWN 98/2 (FPSO RUNDOWN DATED 02-01-24"



LABORATORY REPORT NO. MUM/000524/24

M -Field Crude of KG-DWN 98/2 (FPSO RUNDOWN DATED 02-01-24"



LABORATORY REPORT NO. MUM/000524/24

M-Field crude of KG-DWN 98/2 (FPSO RUNDOWN SAMPLE DATED 02-01-24"