

Notice Inviting Tenders
(Spot Tender)

NIT No. OEL-OEL-IND-ONM-GEN-CNP-011-002

(Under National Competitive Bidding)

to Offtake

Hydrocarbon (Crude and Condensate)

produced from

Oil Block: CB/ONDSF/INDRORA/2021

Date of Release of NIT: 19-May-2023

Oilmax Energy Private Limited (**Oilmax**), a E&P company (“**Seller**”) has entered into a Revenue Sharing Contract (RSC) with Government of India for Oil Block Indrora (CB/ONDSF/INDRORA/2021) (“**Field**”) located in Gandhinagar district of Gujarat of India (Refer Annexure 1). Seller intend to sell **Hydrocarbon** (Crude and Condensate produced from the Field).

Seller invites Bids from eligible Bidders having the necessary experience, capability and requisite statutory & regulatory clearances, to offtake 2000 BBLs at Seller’ option. The Hydrocarbon shall be available at nozzle of the loading arm connecting to the Buyer’s tank truck at Tank farm, **Tank farm, Indrora EPS, Palaj, of Indrora Oil Block (CB/ONDSF/INDRORA), Gandhinagar District, Gujarat** during the period from 23rd May to 30th May 2023 with an option to extend period at Seller’s option. The successful Bidder shall be referred to as **Buyer**. Buyer and Seller shall be collectively referred as **Parties**.

The NIT for Offtake of Hydrocarbon produced from CB/ONDSF/INDRORA/2021 is divided into 3 parts:

Part 1- Instructions to Bidders

Part 2- Scope of Hydrocarbon Offtake

Part 3- Conditions of the Contract

For Bidders ready reference, few salient points of NIT are highlighted below:

a.	NIT no	OEL-OEL-IND-ONM-GEN-CNP-011-002
b.	Bid Submission	Sealed envelope, Single stage- two bid system
c.	Bid Bond	Rs. 25 lacs
d.	Bid Bond validity	120 days from Bid Opening date
e.	Bid Closing Date & time	15:00 IST, 22 nd May 2023
f.	Technical Bid Opening	17:00 IST 22 nd May 2023
g.	Bid Validity	120 days from Bid Opening date and time
h.	Scope of Work	Offtake of 2,000 BBLs Hydrocarbon from Indrora Oil Block (CB/ONDSF/INDRORA)
i.	Duration of Contract	23 rd May 2023-30 th May 2023
j.	Quantity of Hydrocarbon for Sale	Total Contract Total Quantity (“ TCQ ”): 2,000 BBLs Minimum Contract Quantity (“ MCQ ”): 500 BBLs
k.	Location of Offtake	nozzle of the loading arm connecting to the Buyer’s tank truck at Tank farm, Indrora EPS, Palaj, CB/ONDSF/INDRORA, Gandhinagar District, Gujarat.
l.	Performance Bank Guarantee (PBG) value	Nil
m.	Address of Communication	Head-Procurement Oilmax Energy Private Limited 3A- Omkar E-Square, Chunnabhatti Signal, Eastern Express Highway, Sion (East), Mumbai- 400 022 Email: procurement@oilmax.in Landline No: +91 22 42441136

Part 1- Instruction to Bidders

1. General Instructions

- 1.1. Bidders shall prepare the Bids at their own expense and none of the expenses incurred in the preparation and submission of Bids can be claimed from the Seller, regardless of the outcome of the Bidding process. In order to facilitate comparison amongst the Bids on the same terms and conditions, Seller shall not accept conditional Bids.
- 1.2. The Seller reserve the right to withhold or withdraw the Bidding process at any stage with intimation to all Bidders. The Seller further, at their sole discretion, reserve the right, without any obligation or liability, to accept or reject any or all of the Bids at any stage of the Bidding process without assigning any reason whatsoever.
- 1.3. Absolute right to award rests with the Seller and this NIT does not impose or create any legally binding obligation whatsoever on the Seller.
- 1.4. Bid Documents are non-transferable. Bid can be submitted only by the Bidder in whose name the Bid Document has been issued/registered
- 1.5. Bid Validity shall be 120 days from the date of Bid opening
- 1.6. A Bid bond as per **Annexure 2** shall be submitted by Bidder
- 1.7. At any time prior to the deadline for submission of Bids, the Company may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bid Documents through issuance of an Addendum(s) /Corrigendum(s) / Amendment(s).
- 1.8. A prospective Bidder requiring any clarification on this NIT may notify Seller through email to designated representatives of Oilmax on or before 9:00 IST 22nd May 2023.
- 1.9. Designated email ID for correspondence is **procurement@oilmax.in**

2. Eligibility of the Bidder

2.1. Technical Eligibility:

- 2.1.1. Bidders shall not take any exception/deviation to the Bid Document. If exceptions/deviations are maintained in the Bid, such conditional/non-conforming Bids shall not be considered and shall be rejected by Seller.
- 2.1.2. Bidders shall have minimum of one year of experience (in last 10 years from date of issue of this NIT) to offtake Hydrocarbon

OR

Bidders shall be a user who has owned or owns or has operated facility, factory, refinery or have tie up with end user who consumes Hydrocarbon.

- 2.1.3. Bidders shall have tie up with Oil Tankers/Tankers to offtake Hydrocarbon from Delivery Point.
- 2.1.4. Bidders shall have all requisite statutory & regulatory clearances such as license for bulk storage, handling and processing of Class – “A” petroleum products and NOC from Pollution Control Boards.
- 2.1.5. Bidder shall be allowed to meet Technical Eligibility through credentials of parent company, subsidiary, joint venture or consortium.
- 2.1.6. Bidders who do not have experience in their name, shall tie up with other company who has experience in its name. Bidder shall submit MOU/Agreement with that company along with Technical Bid.
- 2.1.7. Bidders who do not have Technical Eligibility shall be allowed to participate in a Bid subject to Bidder submitting Bid Bond of value of 1.2 times as the value mentioned in NIT.

2.2. Financial Eligibility

2.2.1. Turnover:

- a. Bidder’s annual financial turnover during any one of the last Ten (10) completed financial years (as on the Bid closing date) to be more than Rs. 20 crores.
- b. Bidder shall be allowed to meet Financial Eligibility through credentials of parent company, subsidiary, joint venture or consortium.

2.2.2. Net Worth:

- c. Bidder’s Net Worth to be more than INR 0 (INR Zero).
- d. Bidder shall be allowed to meet Technical Eligibility through credentials of parent company, subsidiary, joint venture or consortium.
- e. Bidders who do not have experience in their name, shall tie up with other company who has experience in its name. Bidder shall submit MOU/Agreement with that company along with Technical Bid.

3. Bid Submission

- 3.1. The Bid prepared by the Bidder and all correspondence and documents relating to the Bid exchanged by the Bidder and the Seller shall be written in English language.

3.2. Bidders should indicate in their Bids their detailed postal address including the Fax/Telephone / Cell Phone Nos. and E-mail address.

3.3. Bidder should submit bids for the offtake in multiples of MCQ as mentioned in Part 2 Clause 3.

3.4. Bids should be submitted in two parts: (A) “**Technical Unpriced Bid**” and (B) “**Price Bid**”, which should be in two separate sealed envelopes that must be clearly labelled / identified. No Bid, which has been corrected or overwritten, shall be accepted.

3.5. Technical Unpriced Bid:

3.5.1. In the Technical Unpriced Bid, the Bidder shall submit minimum of below documents

a. showing technical qualification

- Experience certificate, Agreements/MOU with other company
- The details of the facilities, with supporting documents, where it intends to process the Hydrocarbon.
- Details of Oil tankers owned or MOU with the Oil Tanker providers
- The details of the end user company who intends to process the Hydrocarbon

b. Showing financial qualification

- Financial statements and
- Net worth Certificate for last 10 years.

3.5.2. The complete Technical Unpriced Bid document must be signed and stamped on each page by the authorized signatory of the Bidder.

3.5.3. The first file with name “Technical & Un-priced Commercial Proposal” shall contain duly signed copy of the particulars as per 3.6 of Part 1

3.6. List of Bid Documents

3.6.1. Industry Registration certificate issued by Department of Industries to process petroleum products like naphtha, NGL, condensate, Hydrocarbon etc. or MoU/Contract copy with such industries for sale of Hydrocarbon

3.6.2. Documents proving that end use are as per statutes and rules in force and not for trading or re selling in the same form

- 3.6.3. Location, process details and plant layout of Bidder's facility or facilities of Company with which Bidder has tie up
- 3.6.4. No Objection Certificate / environmental clearance for the Bidder's facilities from State Pollution Control Board.
- 3.6.5. Chief Controller of Explosive's license for bulk storage, handling and processing of Class – "A" petroleum products at Bidder's facilities. (Bidder may tie up with Company who has such license and submit the same)
- 3.6.6. Solvent, Raffinate & Slop license from State Government authorities by whatever name called. (Bidder may tie up with Company who has such license and submit the same) Insurance coverage of building, plant & machineries and stock at Bidder's facilities.
- 3.6.7. VAT Registration (as per applicability).
- 3.6.8. CST Registration (as per applicability).
- 3.6.9. GST Registration (as per applicability).
- 3.6.10. Central Excise Registration (as per applicability).
- 3.6.11. A brief report on the appropriate utilization plan of the Hydrocarbon to be procured and processing methods to be followed in the Facilities must be submitted along with the Technical Unpriced Bid, clearly undertaking that the Hydrocarbon shall not be disposed or used for any other purpose.
- 3.6.12. Audited Balance Sheet along with Profit & Loss account for last 10 financial years
- 3.6.13. Bid bond as per Annexure 2 Bidder shall submit Undertaking as per Annexure 3

3.7. Price Bid

- 3.7.1. Seller has defined benchmark price for Sale of Hydrocarbons which is 'daily average of Dated Brent (published by S&P)
- 3.7.2. In the Price Bid, Bidders shall quote component "**B**" (Please note that "**B**" can be positive or negative) and is required to be in USD/Barrel) to be used in the pricing formula as provided in clause 5 of Part 2- Scope of Hydrocarbon Offtake.
- 3.7.3. Bidder shall submit signed and stamped by the authorized signatory copy of a filled Price bid form (as per Annexure 4). Price Bid which has been corrected or overwritten, shall not be accepted.
- 3.8. The Bids should be submitted physically through couriers and received at address mentioned below by **15:00** hrs IST on 22nd May 2023 ("**Bid Due Date**")
- 3.9. Failure to furnish all information / documents listed above or submission of incomplete information / documents which are not as per the requirements of this NIT may result

in rejection of the Bid by the Seller without seeking any clarifications from the Bidder. Further, award of contract to the successful Bidder shall be subject to inspection of the Bidder's facilities by Seller' representative and verification of authenticity of the documents listed above.

- 3.10. All Proposals are required to be submitted physically through courier strictly as per the instructions as cited herein to:

Head-Procurement
Oilmax Energy Private Limited
3A- Omkar E-Square, Chunnabhatti Signal,
Eastern Express Highway, Sion (East),
Mumbai- 400 022

- 3.11. No oral, telephonic or email proposals or modifications in the Proposal shall be considered under any circumstances.
- 3.12. Discounts/rebates, if any, given in the bid shall be considered for the evaluation.
- 3.13. Post bid or conditional discounts/rebates offered by any bidder shall not be considered for evaluation of bids. However, if the highest bidder happens to be the final acceptable bidder for award of contract, and if they have offered any discounts/rebates, the contract shall be awarded after taking into account such discounts/rebates.

4 Modification and withdrawal of Bids

- 4.1. The Bidder after submission of Bid cannot modify their Bid and shall not be allowed to resend its revised Bid. Bidder shall ensure that revised Bid is submitted within Bid Due Date.
- 4.2. No Bid can be modified or withdrawn subsequent to the Bid Due Date

5 Bid Opening and evaluation

- 5.1. The technical Bids shall be opened at 17:00 IST 22nd May 2023 at office of Oilmax Energy Private Limited, Mumbai.
- 5.2. Bids would be accepted technically provided the Bidder meets the eligibility and the Bids qualify in line with this NIT.
- ~~5.3.~~ Only the Priced Bids of the Bidders whose Technical Unpriced Bids are technically acceptable and are to the satisfaction of Seller shall be opened for further evaluation. The Priced Bids of technically acceptable Bidders shall be opened after completion of due diligence on technical eligibility and submitted documents.
- 5.4. Bidder who has quoted highest value of "B" shall be announced as the winner of the Bid and shall be considered for signing of the Contract for Bid Quantity.

5.5. Any unsold quantity of Hydrocarbons (i.e. TCQ minus Bid Quantity by H1 bidder) will be offered to the H2 bidder and so on.

6 Signing of Contract

6.1. Seller shall notify (“Letter of Award”) the successful Bidder within 1 business days of opening of Price Bid

6.2. Successful Bidder shall confirm with “Letter of Acceptance” and shall transfer 100% advance payment for the Bid Quantity.

6.3. Seller and Buyer shall sign the Contract immediately after acceptance of Letter of Acceptance.

6.4. Bidder shall not have an option to withdraw its Bid post Bid Opening.

6.5. If bidder fails to offtake Bid Quantity, Bid Bond shall be forfeited.

6.6. Bidder shall mobilize within 2 days after acceptance of Letter of Acceptance.

6.7. Bidder is allowed to visit site from 18th May 2023 to 22nd May 2023 and collect sample from site.

Part 2- Scope of Hydrocarbon Offtake

1. Period

The Hydrocarbon produced from Field shall be available nozzle of the loading arm connecting to the Buyer's tank truck at Tank farm, Indrora EPS, Palaj, of Indrora Oil Block (CB/ONDSF/INDRORA), Gandhinagar District, Gujarat. (the "Delivery Point") during the period from 23rd May 2023 - 30th May 2023 ("**Term**") with an option to extend quantity and period at Seller's options. The successful Bidder (Buyer) shall have to enter into Crude Oil Sales Agreement ("**COSA**") with the Seller.

2. Delivery Terms

2.1. Delivery Terms shall be Ex. Works- Loading Terminal

2.2. Loading Terminal means (i) the "Truck Loading Facility ("**TLF**") located at Tank farm, Indrora EPS, Palaj, of Field (Gandhinagar District, Gujarat)

2.3. Delivery Point (the "**Delivery Point**") means the nozzle of the loading arm connecting to the Buyer's tank truck at Tank farm, Indrora EPS, Palaj, CB/ONDSF/INDRORA, Gandhinagar District, Gujarat.

2.4. **Custody Transfer Point** means the Delivery Point where the title and risk of Hydrocarbon passes on to the Buyer without any recourse to Seller

2.5. Any Charges or losses on transportation of Hydrocarbon post Delivery Point shall be borne by Buyer.

~~2.6.~~ From 23rd May 2023 - 30th May 2023 during which Hydrocarbon from Field is delivered at the Delivery Point ("**Delivery Period**"). Seller may extend the Delivery Period at its option.

3. Quantity, Offtake and Scheduling

3.1. Seller shall deliver quantity of approximately-2000 barrels during Term of the contract. Seller may increase the quantity at its option.

3.2. During the Term, the Minimum Contract Quantity ("**MCQ**") of Hydrocarbon to be lifted by the Buyer is 500 bbls and Total Contract Quantity ("**TCQ**") of 2000 bbls . On the best endeavor basis, Bidder may bid for extra quantity in multiples of MCQ ("**Bid Quantity**").

3.3. Buyer shall offtake MCQ as notified and as made available by the Operator (as identified under the RSC) on behalf of Seller. Buyer shall offtake quantity such that production (Hydrocarbon) in the Field is not interrupted due to non-evacuation of extracted Hydrocarbon in the storage tanks of Seller.

- ~~3.4.~~The Buyer shall arrange for transportation of Hydrocarbon from the Delivery Point to off take Bid Quantity.
- 3.5. Buyer shall make sure that preventive maintenance at their plants/tankers is planned in a such way it shall offtake entire Bid Quantity throughout the Term.
- 3.6. **Day** shall start at 6 AM on each day and shall end after 24 Hr.
- 3.7. Seller and Buyers agree that the quantity of the Hydrocarbon delivered at Delivery Point shall be calculated by Dip method as per **Annexure 6**.
- 3.8. After loading of oil tankers at Delivery Point, two set of samples shall be collected from each oil tankers each for Buyer and Seller. Sample collected shall be sent to in-house laboratory (in and around Field) to calculate Basic Sediment and Water (**BS&W**) and Buyer's representative shall have access to in-house laboratory. Buyer has an option to send the sample to external laboratory (mutually agreed by Buyer and Seller) at Buyer's cost.
- 3.9. Buyer and Seller shall together (1) measure quantity and (2) measure quality i.e. BS&W of Hydrocarbon delivered by Seller at Delivery Point. Measurement shall be carried out as per procedure detailed in **Annexure 6**.
- 3.10. Buyer at its choice and cost, within 7 days from signing of Contract, may request for appointment of mutually agreed third party auditor/surveyor ("**TPA**") at Field to (1) measure quantity and (2) measure quality i.e. BS&W of Hydrocarbon delivered by Seller at Delivery Point. The TPA shall issue Delivery Certificate ("**DC**") on daily basis and a complied DC at the end of each fortnight. The same DC shall be used by Seller to raise invoices. In case, TPA is not able to release DC, Seller shall issue DC which shall be used for invoicing purpose till such time TPA restarts to issue DC. The cost of TPA shall be borne by Buyer. For term, Seller and Buyer shall have right to change the TPA.
- 3.11. The total Quantity delivered during a Term means total of MCQ delivered at Custody Transfer Point over all days of the Fortnight at supplied parameters. ("**Fortnightly Quantity**").
- 3.12. Buyer shall offtake Bid Quantity and MCQ of Hydrocarbon, if Buyer fails to lift any Quantity on any Day, Buyer shall pay for the entire amount of Hydrocarbon as per Bid Quantity.
- 3.13. Buyer shall make arrangements with owners of oil bowers ("**Transporters**") to offtake Bid Quantity from Delivery Point. All the arrangement with Transporters shall be at the cost of the Buyer. As per requirement, Buyer shall make arrangements of dedicated office/parking/waiting area for vehicles/manpower/staff/labor/support staff of Transporters, Buyer and TPA. Buyer shall make arrangement with local communities, villagers etc. for smooth operations and deployment of tankers.

- 3.14. Buyer shall make sure Transporter's vehicles shall qualify HSE guidelines followed by Seller.
- 3.15. Buyer shall provide to Seller an undertaking from the Transporter that they shall follow all HSE guidelines set out under PSC and various policies issued by state and central agencies but not limited to MoPNG, DGH, CPCB, SPCB, OISD etc. Buyer shall make sure that sufficient insurance (vehicle insurance, term insurance, health insurance etc.) cover is taken for office/parking/waiting area for vehicles/manpower/staff/labor/support staff of Transporters, Buyer and TPA
- 3.16. Sale shall be subject to Government policy and any advisories issued by DGH, MOPNG, DGMS, PCB etc.

4. Specification of Hydrocarbon

Hydrocarbon as made available at the time, place and conditions during loading at Delivery Point. Refer Annexure-5 for specifications. It is anticipated that specification of Hydrocarbon may change by + - 10% based on the reservoir behavior.

Seller agree to sell and Buyer agrees to purchase all the Hydrocarbon produced from Field. The Seller do not provide any warranty for a particular use for Hydrocarbon and do no guarantee the end use suitability to the Buyers. The Sale of Hydrocarbon shall be without prejudice to terms of the Revenue Sharing Contract.

The seller shall deliver Hydrocarbon with BS&W less than 0.5%.

5. Price

The Ex-Works/FCA Price, in US Dollars, per Barrel of Hydrocarbon shall be equal to "A+B" ("Price") Wherein, A and B are as below,

"A" = Arithmetic Mean of all FOB Quotes published for Brent in Platts Hydrocarbon Marketwise, USD/Barrel during the previous fortnight in which Hydrocarbon is delivered at the Delivery Point.

+ (Plus)

"B" = Quoted Premium, up to two decimal places, USD/Barrel for premium for 'additional quality' of Hydrocarbon (To be quoted by Bidder), Please note that "B" may be positive or negative and is required to be in USD/Barrel

The conversion from USD to INR shall be on the basis of average of foreign exchange reference rate published by Financial Benchmark India Limited (FBIL) for the calendar month prior to the month in which the Hydrocarbon is delivered.

6. Measurement and Testing

- 6.1. It is Buyer's responsibility to arrange the tanker transport at its own cost and shall ensure its timely availability at the Delivery Point as per the schedule agreed between the Parties and updated from time to time.
- 6.2. All measurements (of volume and % BS&W at site condition) shall follow ASTM standards. Procedure to measure and Test Hydrocarbons shall be as per **Annexure 6**. Any amendment in measurement and testing procedures shall be mutually agreed by Parties before signing of Contract.
- 6.3. Sample of Hydrocarbon shall be taken in presence of representatives of Buyer and Operator to test for the Basic Sediment and Water ("BS & W") at a lab mutually decided upon by Parties. The Cost of sampling and testing charges shall be paid in equal proportions by Seller and Buyer. The maximum BS&W permitted is 0.5% by volume. If the lab report for any loading results in BS&W of more than 0.5%%, such excess shall be deducted from Delivered Quantity to get the actual quantity of Hydrocarbon delivered.

7. Invoicing:

- 7.1. The Seller shall submit invoice for Bid Quantity.
- 7.2. The invoiced values shall be equal to:

$$\text{Price in INR} = \text{Price in USD (As per clause 5 of Part 2 of NIT)} \times \text{Exchange Rate in INR/USD} \times \text{Quantity of Hydrocarbon delivered in a Delivery Period in Barrels (at site conditions) as per Delivery Certificate}$$
- 7.3. Every month has two Delivery Periods one from the 1st of the month till 15th of the month and the second Delivery Period will be from 16th of the month till end of the month.
- 7.4. The Seller shall raise invoices in Electronic form for quantity of Hydrocarbon delivered.
- 7.5. Seller and Buyer shall mutually agree for Take or Pay arrangement as detailed under:
 - 7.5.1. For sake of Take or Pay arrangement, during the Period, the Bid Quantity of Hydrocarbon to be lifted by the Buyer.
 - 7.5.2. The Parties intend to enter into Take or Pay or Supply of Pay obligations for the Period. Buyer warrants that it shall offtake Bid Quantity of Hydrocarbon produced from Block after Seller make it available it at Delivery point.
 - 7.5.3. In case, Buyer fails to offtake Bid Quantity from Field, then Buyer shall be liable to pay for entire Bid Quantity.
 - 7.5.4. Seller shall raise the invoice for Bid Quantity by the Buyer.

- 7.5.5. Any shortage in offtake by Buyer Bid Quantity, Buyer shall be liable to pay penalty equal to the amount of loss incurred by Buyer towards any unsold quantity of Hydrocarbon and stoppage of production, loss of revenue (or loss towards limited internal consumption) @ USD 30/bbl.

8. Payment Terms

- 8.1. The Buyer shall make 100% advance payment within 2 days of acceptance of Letter of Award to Seller in accordance with Bid Quantity & Price. (“**Due Date**”).
- 8.2. In respect of any payment not made in full by the Due Date, the Buyer shall pay interest @ State Bank of India Marginal Cost Lending Rate (“SBIMCLR”) plus seven and a half (7.50) percentage points per annum. Interest shall accrue from the Due Date until the date the payment is received by the Seller’ banks.

9. Taxes and Duties

All taxes, levies including VAT, GST, duties etc. arising on and after delivery of Hydrocarbon at Custody Transfer Point shall be in the scope of Buyer. Any taxes, duties of similar nature payable on the sale(s) of Hydrocarbon under this contract shall be borne/ reimbursed by the Buyer.

10. Mobilization, site preparedness and local condition

- 11.1. In order to understand the Standard Operating Procedure at Delivery Point, Buyer shall visit the Delivery Point before submitting Bid and successful Bidder shall mobilize at Delivery Point within 1 day of Letter of Award.
- 11.2. Buyer shall submit the permits, checklists and other necessary documents for the oil tankers planned to be deployed,
- 11.3. It is imperative for Buyer to be fully informed themselves of all Indian as well as local social and political conditions, factors and legislation which may have any effect on the Offtake of Hydrocarbon. The Buyer shall be deemed, prior to submitting their bids to have satisfied themselves of all the aspects covering the nature of the work as stipulated in the Bidding Document and obtain for themselves all necessary information as to the risks, contingencies and all other circumstances, which may influence or affect the various obligations under the Contract. No request will be considered for clarifications from the Seller regarding such conditions, factors and legislation. It is understood and agreed that such conditions, factors and legislation have been properly investigated and considered by the Buyer while submitting the Bids. Failure to do so shall not relieve the Buyer from responsibility to offtake Hydrocarbon within the provided timeframe. Seller shall assume no responsibility for any understandings or representations concerning conditions made by any of their officers prior to award of the Contract.
- 11.4. Movement of oil tankers, vehicles, employees/staff/labor of Buyer/Transport/TPA shall be in the scope of Buyer.

- 11.5. Seller shall not permit any changes to the Period or any financial adjustments arising from the Bidder's lack of knowledge and its effect on the cost of offtake of Hydrocarbon.
- 11.6. Buyer shall take care of all local relations, annual repair of roads, community welfare measures etc. on the way from Delivery Point. If Seller spend any money on roads or community welfare measures on behalf of Buyer, then the Seller shall recover the amount from Buyer

11. Buyers Obligation

- 12.1. The Hydrocarbon sold shall be exclusively used, processed, refined, stored at the Buyer's Facilities or any other facilities within India or used by end user within India, unless agreed otherwise between the Parties in writing.
- 12.2. The Buyer covenants and undertakes that it shall not commit an Unauthorized Use of Hydrocarbon sold and delivered shall at all times use (or allow the use of) Hydrocarbon purchased hereunder solely for the consumption in the Facilities within India. For the purposes of this clause, "Unauthorized Use" of Hydrocarbon means any act on the part of the Buyer resulting in any quantities of Hydrocarbon not being used for the purposes as stated under this NIT.
- 12.3. Buyer or Buyer's designee shall take delivery of the Hydrocarbon at the Delivery Point and shall cause the Hydrocarbon to be transported to Buyer's Facilities and shall make all requisite arrangements and equipment for the movement of the Hydrocarbon from the Delivery Point to Buyer's Facilities.
- 12.4. Buyer shall furnish the Seller with all supporting documents to evidence such movement of Hydrocarbon from the Delivery Point to Buyer's Facilities.
- 12.5. Buyer covenants that it shall not sell (or purport to sell) or transfer title in any manner whatsoever to the Hydrocarbon purchased hereunder (or commit to do any of the foregoing).
- 12.6. Buyer shall ensure receipt, offtake and transportation of the Hydrocarbon from the Delivery Point to Buyer's Facilities.
- 12.7. The Buyer shall furnish utilization certificate or statement of value added products manufactured from the Hydrocarbon on a monthly basis to the Seller for the quantity of Hydrocarbon purchased from the Seller.
- 12.8. The Seller shall have the right to designate a representative who shall at all times, during the Period, and have complete access to the Buyer's Facilities to inspect the storage, handling and processing facilities of the Hydrocarbon. The Buyer shall duly maintain proper records of production, sales and inventory of stocks, which shall be made available for verification by the Seller' representative during such inspection. Compliance to all statutory and regulatory requirements under the laws shall be the sole responsibility of the Buyer. The Buyer shall abide by all statutory / regulatory orders / guidelines in force from time to time during the subsistence of this NIT.

- 12.9. The Seller shall allow Buyer to offtake the Hydrocarbon only after submission of duly attested copies of all the requisite documents, certificates and licenses as demanded by Seller at their sole discretion from time to time and the contents of copies stated in item above are scrutinized and accepted by the Seller.
- 12.10. The Buyer / Buyer's representative shall ensure strict adherence to the Standard Operating Procedure ("SOP") for safely loading and dispatching of the Hydrocarbon to the Buyer's Facilities. Refer Annexure 6 for guidelines on SOP.
- 12.11. A detailed SOP will be prepared by the Seller in consultation with the Buyer, prior to commencement of sale of the Hydrocarbon.
- 12.12. The Buyer hereby undertakes and warrants that it has conducted and shall conduct its business in accordance with the highest ethical standards and it shall comply with all applicable Laws (OMR, Mines Act etc.) in the performance of its obligations under this NIT including all Laws dealing with ethical business practices viz., the Foreign Corrupt Practices Act 1977, the UK Bribery Act, 2010 and the Prevention of Corruption Act, 1988.
- 12.13. Buyer represents and warrants to the Seller that it has (and shall continue to have during the term of this NIT) all the requisite legal and regulatory permissions, contents and approvals which may be necessary for maintaining Buyer's Facilities and for using, processing, storing transporting, etc. the Hydrocarbon purchased under this NIT.
- 12.14. Buyer represents and warrants that, it shall ensure safe storage, transportation and processing of Hydrocarbon such that there is no theft/pilferage of Hydrocarbon purchased under this NIT and also that there is no tampering or alteration of the measurement equipment at the Delivery Point(s) or otherwise.
- 12.15. The Buyer shall defend, indemnify and hold the Seller harmless from and against any and all losses, costs, damages and expenses of any kind (including penalties and reasonable attorney's fees) directly or indirectly arising from the Buyer's (i) breach of this NIT; (ii) and any failure to comply with applicable laws and regulations

12. Safety and Compliance

The Buyer and their transporter shall comply with all applicable rules and regulations and comply with safety and environmental requirements.

Part 3- Conditions of Contract

1. Indemnity

1.1. Any loss, damage, liability, cost and/or expense related to:

- 1.1.1. Any injury to, ill health, disease or death of an employee or a contractor or subcontractor of a Party (or any employee of such contractor or sub-contractor); and/or
- 1.1.2. Actual physical loss to a Party's facilities;

which is caused by either Party's operations at or near the Custody Transfer Point, shall be borne by the Party causing such loss, damage and/or cost or the Party which has engaged the relevant employee or contractor or sub-contractor, causing such loss, damage and/or cost and the Party bearing as aforesaid such loss, damage, liability, cost and/or expense shall defend, indemnify, hold harmless and release the other Party in respect of such loss, damage, liability, cost and/or expense.

1.2. Whenever a Party (the "Indemnitee") becomes aware of a claim in respect of which it shall or may be entitled to require the other Party (the "Indemnitor") to defend, indemnify, hold harmless and release it pursuant to this Article above, the Indemnitee shall promptly notify the Indemnitor and the Indemnitee shall take such action as the Indemnitor may reasonably request to avoid, dispute, resist, appeal, compromise or defend the relevant claim and any judgement in respect thereof, subject to the Indemnitee being indemnified and secured to its reasonable satisfaction by the Indemnitor against all losses, costs, damages and expenses relating to such claim including, without limitation, those thereby incurred or to be incurred. If the Indemnitor does not request the Indemnitee to take any appropriate action as aforesaid, or shall fail to indemnify and secure the Indemnitee to its reasonable satisfaction within twenty-eight 28 days of the notice to the Indemnitor, the Indemnitee shall be free to pay or settle the relevant claim on such terms as it may in its absolute discretion think fit and thereafter recover from the Indemnitor pursuant to the Indemnitee's rights under this Article

2. Termination

2.1. The Seller, at any time, terminate the Contract if

- 2.1.1. Buyer fails to offtake pro rata Bid Quantity per day (Bid Quantity / no of days in Term) at Delivery Point for consecutive 3 days.
- 2.1.2. Buyer fails to pay in full for entire Fortnightly Quantity delivered to Buyer at Custody Transfer Point within due date for two consecutive invoices

2.2. Termination for Cause

If Buyer, is in material breach under this Contract, the Seller shall deliver a written notice to the Buyer, and provide the Buyer 45 Days' time to rectify the default ("Cure Period", which Cure Period can be mutually extended by the Parties). If the Buyer fails to rectify the default within the Cure Period (as may be extended) the Contract shall stand terminated on the last day of the Cure Period. In such case, the Term of this Contract shall end as of the last date Cure Period (as may be extended).

2.3.The Seller, at any time, terminate this Agreement by giving the other party 7 days' notice

- 2.3.1. if Buyer becomes bankrupt or insolvent, has a receiving order issued against it;
- 2.3.2. if Buyer has insolvency, receivership, reorganization, bankruptcy, or proceedings of a similar nature brought against it and the proceedings are not dismissed or effectively stayed within 30 (thirty) days of such commencement.

2.4.Effect of Expiry of the Term and Termination

- 2.4.1. If this Contract is terminated, Seller shall be entitled to any amount already due and payable to Seller prior to such termination, but not paid.
- 2.4.2. If this Contract is terminated due to default by Buyer, then Seller shall be entitled to all amount already due and payable to Seller prior to such termination, but not paid and all amount payable towards MCQ which could have been delivered at Delivery Point at an agreed price till such a time a new Buyer is identified by Seller.

2.5.By mutual agreement, the Parties, may by written agreement terminate this Agreement at any time during the Term of this Contract.

2.6.The Seller, at any time, terminate this Agreement by giving the other party 90 days' notice.

3. Insurance

3.1.Buyer at his cost shall arrange, secure and maintain insurance as may be necessary and to its full value for all such amounts to protect the works in progress from time to time and the interest of Seller against all risks. The form and the limit of such insurance should be as acceptable to the Seller. However, irrespective of work acceptance the responsibility to maintain adequate insurance coverage at all times during the period of Contract shall be that of Buyer alone. Buyer's failure in this regard shall not relieve him of any of his responsibilities & obligations under Contract. All costs on account of insurance liabilities covered under Contract will be to Buyer's account. Buyer shall cover insurance with Indian Insurance Companies

3.2.Buyer shall at all time during the currency of the contract provide, pay for and maintain the following insurance amongst others for Buyer/TPA/Transporter/office/facilities,

and his employees/staff/TPA/3rd party vendors etc. and shall ensure the compliance of Insurance for transporter or any other sub-contractor of Buyer involved in Offtake of Hydrocarbon:

- 3.2.1. Workman Compensation and/Employers' Liability Insurance: Workmen's compensation and employer's liability insurance as required by the laws of the country of origin of the employee.
 - 3.2.2. Commercial General Liability Insurance: Commercial General Public Liability Insurance covering liabilities including contractual liability for bodily injury, including death of persons, and liabilities for damage of property. This insurance must cover all operations of Buyer required to fulfil the provisions under this Contract.
 - 3.2.3. Comprehensive General Automotive Liability: Automobile Public Liability Insurance covering owned, non-owned and hired automobiles used in the performance of the work hereunder, with bodily injury limits and property damage limits shall be governed by Indian Insurance Regulations.
 - 3.2.4. Carrier's Legal Liability Insurance: Carrier's Legal Liability Insurance in respect of all Buyer's items to be transported by the Buyer to the site of work, for physical loss or destruction of or damage to goods or merchandise, while in transit.
 - 3.2.5. Public Liability Act Policy: Public Liability Act Policy covering the statutory liability arising out of accidents occurring during the currency of the contract due to handling hazardous substances as provided in the Public Liability Insurance Act 1991 and the Rules framed there under.
 - 3.2.6. Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY): Buyer shall, ensure that all his/its personnel deployed under this contract have obtained additional insurance coverage under the Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) through the participating banks and submit the proof of such insurance coverage
 - 3.2.7. Buyer's equipment used for execution of the work hereunder shall have an insurance cover with a suitable limit (as per international standards)
- 3.3. Waiver of Subrogation: All insurance policies of the Buyer with respect to the operations conducted hereunder as set forth in clauses hereof, shall be endorsed by the underwriter in accordance with the following policy wording:
- “The insurers hereby waive their rights of subrogation against Oilmax Energy Private Limited, or any of their employees or their affiliates and assignees”

4. Force Majeure

- 4.1. No Party shall be responsible for any failure or delay in fulfilling any terms of this Contract caused due to Force Majeure.

- 4.2. The term "Force Majeure" shall mean unavoidable causes reasonably beyond the control and without the fault or negligence of either party and shall be limited to following events: acts of God or sabotage, fires, floods, cyclones, typhoons, earthquakes, wars (declared or undeclared), hostilities, invasion, Fieldades, riots, epidemics, quarantine restrictions, nationwide strikes, freight embargos, civil commotion or any order of Government, any court, local authority having jurisdiction or anybody or person purporting to be or to act for such authority.
- 4.3. In the event of Force Majeure, the affected Party shall provide notice promptly and in no case later than 48 hours after the occurrence of event of Force Majeure, notify the other Party with respect to the ongoing Force Majeure event, giving full particulars of the Force Majeure, the estimated duration thereof, the obligations affected and the reasons of its suspension and the affected Party's ability to recommence performance of its obligations under the Contract as soon as possible.
- 4.4. The Party asserting the claim of Force Majeure shall have the burden of proving the circumstances constitute valid grounds of Force Majeure under this article and that such Party has exercised reasonable diligence and efforts to remedy the cause of any alleged Force Majeure.
- 4.5. In the event of Force Majeure, the Parties agree to use best efforts to remedy the event of and mitigate the effect of Force Majeure.

5. Dispute Resolution

5.1. General

The Parties shall use their best efforts to settle amicably all disputes, differences or claims arising out of or in connection with any of the terms and conditions of this Contract or concerning the interpretation on or performance thereof.

Subject to the provisions of this Contract, the Parties hereby agree that any controversy, difference, disagreement or claim for damages, compensation or otherwise (hereinafter in this Article referred to as a "dispute") arising between the Parties, which cannot be settled amicably within 90 days after the dispute arises, may (except for those referred to in Article 5.1.1, which may be referred to an Expert) be submitted to dispute resolution mechanism as at Article 5.2 for final decision as hereinafter provided.

5.2. Technical Expert

5.2.1. Matters which, by the terms of this Agreement, the Parties have agreed to refer to an technical expert and any other matters which the Parties may agree to so refer, may be referred to a sole technical expert ("Expert") who shall be an independent and impartial person of international standing with relevant qualifications and experience, appointed by an agreement between the Parties and who shall not, by virtue of nationality, personal connection or commercial interest, have a conflict between his/her own interest and his/her duty as a sole expert. In the event that the Parties fail or are unable, to agree on an Expert within 30 days or such longer period as may be mutually agreed by Parties, the matter shall be referred to

dispute resolution mechanism. Any Expert appointed shall be acting as an expert and not as an arbitrator and the decision of the Expert on matters referred to him/her shall be final and binding on the Parties and shall not be subject to further arbitration.

5.2.2. The Parties intend that the Expert will primarily deal with "technical matters" (meaning matters involving issues including metering or measurement of the products and payment disputes which are capable of determination by reference to engineering or scientific or commercial knowledge and practice). Fees and expenses of an Expert appointed by the Parties shall be borne equally by the Parties.

5.2.3. The venue of the Expert pursuant to this Article, unless the Parties agree otherwise, shall be Mumbai, India and shall be conducted in the English language. Insofar as practicable, the Parties shall continue to implement the terms of this Agreement notwithstanding initiation of proceedings before an Expert, or any pending claim or dispute.

5.2.4. The fees and expenses of an Expert appointed by the Parties shall be borne equally by the Parties.

6. Arbitration

6.1. The agreement shall be subjected to Indian laws both substantive and procedural, rules and regulations and notifications etc. issued under such laws and the court at Mumbai shall have exclusive jurisdiction in the matter.

6.2. The Parties shall try their best to resolve any difference or disputes between them first by mutual discussion. However, if parties are unable to resolve their disputes mutually or through conciliation, then the dispute shall be settled through arbitration. The parties shall first mutually choose any arbitral institutions and then the claimant shall refer the dispute to that arbitral institution. The arbitration shall be conducted by the arbitral institution chosen by the parties as per the arbitration clause and as per the arbitration rules prescribed by it and applicable at the time of reference.

6.3. It is expressly agreed by the parties that if they are unable to mutually agree upon the arbitral institution within 90 days of the notice from the claimant, the dispute will be referred to below list of arbitration institution (in the order of preference as listed below).

6.3.1. Indian Council of Arbitration (website: icaindia.co.in)

6.3.2. Delhi International Arbitration Centre (Website: dacdelhi.org)

6.3.3. Nani Palkhiwala Arbitration Centre, Chennai

6.3.4. Scope Forum of Conciliation and Arbitration (Website: scopeonline.in)

6.4. Notwithstanding anything contrary in the rules framed by the arbitral institutions chosen by the parties, parties agree that:

6.4.1. Arbitral Institution will hold arbitration meetings in the city where it has its office and which is nearest to Mumbai or Delhi.

6.4.2. For the purpose of Section 20 of the Arbitration and Conciliation Act, 1996, Mumbai shall be the place of the arbitration or at the place mentioned in the contract to be the seat of Arbitration or Parties to Contract agrees.

7. Entire Contract, Amendments, Waiver and Miscellaneous

7.1. This Contract supersedes and replaces any previous Contract or understanding between the Parties, whether oral or written, on the subject matter hereof, prior to the execution date of this Contract.

7.2. In the event of any conflict between the terms of this Contract and the terms of the production sharing contract, the terms of the production sharing contract shall prevail. The Buyer acknowledges that the Seller are bound by the terms of the production sharing contract and the directions of the Government of India (and its departments and ministries) and nothing done by the Seller in pursuance of the production sharing contract and/or the directions of the Government of India (including its departments and ministries) shall constitute a violation of the terms of this Contract.

7.3. This Contract shall not be amended, modified, varied or supplemented in any respect except by an instrument in writing signed by all the Parties which shall state the date upon which the amendment or modification shall become effective.

7.4. No waiver by any Party of any one or more obligations or defaults by any other Party in the performance of this Contract shall operate or be construed as a waiver of any other obligations or defaults whether of a like or of a different character.

7.5. No assignment or other transfer of any right, title or interest in this agreement shall be made by any party without the prior written consent of the other party(ies), which shall not be unreasonably withheld provided that in the case of any Party constituting the Seller, each such Party shall be entitled to assign its interest, rights and/or obligations in and under this Agreement to any third party if it has concurrently assigned its corresponding interest, rights and/or obligations in and under the PSC in accordance with Article 28 of the PSC.

7.6. The provisions of this Contract shall inure to the benefit of and be binding upon the Parties and their permitted assigns and successors in interest.

7.7. In the event of any conflict between any provisions in the main body of this Contract and any provision in the Annexures, the provision in the main body shall prevail.

7.8. The headings of this Contract are for convenience of reference only and shall not be taken into account in interpreting the terms of this Contract.

7.9. Reference to any law or regulation having the force of law includes a reference to the law or regulation as from time to time may be amended, or re-enacted.

7.10. A reference in this Contract to the word 'including' shall also mean 'including but not limited to'.

Annexures

Annexure 1: Location map of Contract Area

Annexure 2: Bid bond

Annexure 3: Undertaking by Buyer

Annexure 4: Priced bid form

Annexure 5: Assay Report of Hydrocarbon

Annexure 6: Loading, Unloading, Sampling and Measurement

Annexure 1- Location map of Contract Area



Annexure 2- Bid Bond

To: Oilmax Energy Private Limited a Company incorporated under the provisions of the Companies Act, 1956 and having its registered office at 3A- Omkar E-Square, Chunnabhatti Signal, Eastern Express Highway, Sion (East), Mumbai- 400 022 India. (here in after referred to as “Seller”).

WHEREAS:

..... (hereinafter referred to as “Bidder”) has submitted a proposal dated (“hereinafter referred to as Bid”) against [OEL-OEL-IND-ONM-GEN-CNP-011-002](#) dated 18th May 2023 for Offtake of Hydrocarbon from CB/ONDSF/INDRORA/2021 (hereinafter referred to as the “NIT”).

NOW, THEREFORE,

(1) In response to the request made by the Bidder, we (Name of Banker/Insurer _____ (hereinafter called the “Guarantor”) hereby irrevocably and unconditionally guarantee the sum of Indian Rupees 25,00,000. (Twenty-Five Lacs for Indian Bidders) in favor of Seller, if Bidder fails to perform its obligations as set forth below:

- (i) The Bidder agrees to keep the Bid open for acceptance by Seller during the period of validity (120 days from the Bid Closing Date) specified in the NIT.
- (ii) The Bidder, having been notified of acceptance of its Bid by Seller during the period of NIT validity:
 - (a) Fails or refuses to execute the agreed Contract, if required; or
 - (b) Seeks Variation or modification of Proposal; modifications to the agreed terms and conditions
 - (c) Tries to influence Seller on bid evaluation, bid comparison or Contract award decision.

The sum shall become payable by us immediately on first demand by Seller without proof or conditions notwithstanding any constitution or protest by the Bidder or any other third party.

- (iii) Seller shall have the fullest liberty without our consent and without affecting in any manner, our obligation hereunder, to relax any of the terms and conditions of the aforesaid NIT, from time to time, or to postpone any time any of the powers exercisable by Seller against the said Bidder and Guarantor shall not be relieved from its liabilities by reason of any such relaxation being granted to the Bidder by Seller or any indulgence by Seller to the said Bidder or by any such matters or things whatsoever.

- (iv) The Guarantor shall not be discharged or released from this Guarantee by any Contract made between the Bidder and Seller with or without the consent of the Guarantor or by any alteration in the obligations undertaken by the Bidder or by any change in name or constitution of Seller or the Bidder.
- (v) The Guarantee herein shall not be affected by any change in the constitution of the Bank or the Bidder.
- (vi) This Guarantee shall not be revoked during its currency and shall remain in effect for One Hundred and twenty (120) days from the Bid Due Date.
- (vii) This Guarantee shall be governed and construed in accordance with the laws of India and all of the parties to this Guarantee hereby irrevocably submit to the non-exclusive jurisdiction of the High Court of Mumbai

IN WITNESS whereof this Guarantee has been duly executed by GUARANTOR the _____ day of _____ for and on behalf of
(_____)

Name : _____
Designation : _____
Banker's Seal : _____
Address : _____

NOTE:

Bid Bond submission

Bidder is required to submit Bid Bond with submission of Bid Documents on or before Bid closing date. Bids shall be rejected in case of non-submission of Bid Bond within due date. Bid Bond for an amount of Rs 25,00,000. (Twenty-Five Lacs) shall be submitted in form of a. Bank Guarantee (As per Annexure 2) or b. Cash Deposit to the Bank account provided by Seller. Validity of Bid Bond shall be for a period of 120 days from the Bid Due Date.

Invocation of Bid Bond

The following conditions would lead to invocation of Bid Bond:

- a) If Bidder fails to lift MDQ (500 BBLs) of Hydrocarbon
- b) If Bidder withdraws the Bid during the validity period or any extension thereof.
- c) If the Bid is varied or modified which is not in accordance with NIT
- d) If the successful Bidder seek modifications to the agreed terms and conditions after notification of award or declines to accept the Letter of Intent/Award.

- e) ~~If the successful Bidder fails to furnish Performance Bank Guarantee within 7 days of the issue of the Letter of Intent/Award.~~
- f) Any effort by the Bidder to influence Seller on bid evaluation, bid comparison or Contract award decision.

The formats for any of the Bank Guarantees shall not be changed except for any minor variations that the Bank may require. Failure to comply with this requirement may entail disqualification of the NIT.

Annexure 3: Undertaking by Buyer

UNCONDITIONAL UNDERTAKING BY BUYER

WHEREAS, OILMAX ENERGY PRIVATE LIMITED (hereinafter referred to as “**Seller**”) and _____ (hereinafter referred to as “**Buyer**”) with respect to Bid Quantity submitted under **Notice Inviting Tenders (NIT)** No. OEL-OEL-IND-ONM-GEN-CNP-011-002 to Offtake Hydrocarbon produced from the Block **CB/ONDSF/INDRORA/2021**.

NOW THEREFORE, the Buyer hereby undertakes:

- a) Buyer has shown interest to offtake Bid Quantity and is aware of quality of crude produced from Block CB/ONDSF/INDRORA/2021.
- b) the Buyer is of good standing, has the capacity and ability to meet its obligations under, and is willing to provide an unconditional undertaking to the Seller to enter into Crude Sales Agreement and its obligations.
- c) the Buyer has arranged funding and has financial capacity to offtake Bid Quantity with any reasonable conditions of the Seller as may be necessary in the circumstances with a view of ensuring offtake of crude from the Block

Annexure 4- Priced Bid Form

Bidder shall quote premium (“B”) in USD/bbl. over and above Brent \$/BBL.

Particular	UOM	Bid Value (“B”)
<p>“B” = for premium for ‘additional quantity’ of Hydrocarbon (To be quoted by Bidder), up to two decimal places, USD/Barrel, (Bidder to quote).</p> <p>Please note that “B” may be positive or negative \$/bbl. and is required to be Bid in USD/Barrel</p>	<p>USD/Barrels</p>	<p><u>±</u>.....\$/BBL.</p>

INDIAN INSTITUTE OF PETROLEUM

ASSESSMENT REPORT

**CRUDE OIL INDRORA OF
CAMBAY BASIN**

EXECUTIVE SUMMARY

Indrora Crude Oil

Indrora crude oil field is situated 25 Km north of Ahmedabad. Indrora crude oil is also a medium API crude (36.92 °API). However it is lighter by approximately 5° AP as compared to Bakrol crude. Indrora crude oil is also a very low sulphur crude (0.09 %wt.) having very high amount of wax (17.8 %wt) resulting in quite high pour point value (-39°C).

Total yield of distillate from Indrora Crude Oil upto 370°C is 45.9 %wt. Yield of straight run naphtha IBP-140°C from the crude oil is 10.6 %wt. The kerosine fraction 140-240°C (13.6 %wt) has quite high smoke point value (31 mm) and low freezing point (-58°C). Total yield of the two gas oils examined viz 240-270°C and 270-370°C is 19.9 %wt. These cuts have appreciably high diesel index values (73 and 83 respectively).

Indrora crude also offers quite appreciable yield of vacuum gas oils. Total yield of 370-400°C and 400-530°C cuts is 30.8 %wt. The cuts are highly waxy in nature having quite high pour point values. Yield of residues left after topping of the crude oil upto 370°C and 530°C are quite high from Indrora Crude Oil also (54.1% of 370°C+ and 23.3 % of 530°C). The residues have relatively high pour point values and quite low sulphur content.

INDRORA CRUDE OIL

Characteristics of Crude Oil

Characteristics	Crude oil (as such)
Density, Kg/L at 15°C	0.8397
Specific Gravity at 60/60°F	0.8402
Gravity °API	36.92
Reid Vapour Pressure, Kg/Cm ² at 38°C	0.14
K Pa	13.73
Kinematic Viscosity, cSt	-
at 40°C	9.42
at 50°C	-
Salt Content, %wt	0.00292
Ibs/1000 bbl	9.7
Sulphur Total, %wt	0.09
Pour Point, °C	+39
Carbon Residue (Con), %wt	1.75
Wax Content, %wt	17.8
Asphaltene Content, %wt	0.04
Sediment and Water (BS & W), %vol	4.1
Water Content, %vol	1.1
Trace Metals, ppm	
Vanadium	<0.1
Nickel	23.0
Iron	17.0
Copper	0.08
Light Hydrocarbon Analysis by Gas Liquid Chromatography	
Components,	% wt
Methane	0.01
Ethane	0.06
Propane	0.46
Iso-butane	0.25
n-butane	0.60
i-pentane	0.16
n-pentane	0.21
Total	1.75

INDRORA CRUDE OIL

TBP Distillation Data

IBP -----> 27°C

Fraction Boiling Range °C	%Wt	Cumu. %Wt	Density d_{4}^{25}	%Vol	Cumu. %Vol
Gases+Loss upto 27°C	1.8	1.8	-	2.0	2.0
IBP-50	0.5	2.3	0.6415	0.6	2.6
50-75	1.7	4.0	0.6988	2.0	4.6
75-100	2.5	6.5	0.7377	2.8	7.4
100-125	3.8	10.3	0.7563	4.2	11.6
125-150	3.2	13.5	0.7684	3.5	15.1
150-175	3.1	16.6	0.7770	3.3	18.4
175-200	3.0	19.6	0.7866	3.2	21.6
200-225	3.5	23.1	0.8071	3.6	25.2
225-250	4.0	27.1	0.8145	4.1	29.3
250-275	3.3	30.4	0.8207	3.4	32.7
275-300	2.7	33.1	0.8220	2.8	35.5
300-325	4.6	37.7	0.8150	4.7	40.2
325-350	4.2	41.9	0.8213	4.3	44.5
350-370	4.0	45.9	0.8234	4.1	48.6
Residue 370°C+	54.1	100.0	0.8843	51.4	100.0

INDRORA CRUDE OIL

Characteristics of Distillates

Fraction IBP-140°C

Yield, %wt	10.6
Density, Kg/L at 15°C	0.7396
Aromatics, %vol	10.5
Sulphur Total, ppm	5.0

Fraction 140-240°C

Yield, %wt	13.6
Density, Kg/L at 15°C	0.7902
Aromatics, %vol	14.5
Sulphur Total, ppm	76.0
Hydrogen Sulphide, ppm	Nil
Mercaptan Sulphur, ppm	3.2
Freezing Point, °C	-58
Smoke Point, mm	31

Fraction 240-270°C

Yield, %wt	4.0
Density, Kg/L at 15°C	0.8196
Smoke Point, mm	25
Total Sulphur, ppm	202.5
Aniline Point, °C	81.4
Diesel Index	73

Fraction 270-370°C

Yield, %wt	15.9
Density, Kg/L at 15°C	0.8200
Total Sulphur, ppm	368.7
Pour Point, °C	+15
Aniline Point, °C	94.6
Diesel Index	83

INDRORA CRUDE OIL

Characteristics of Vacuum Gas Oils

Fraction 370-400°C

Yield, % wt	5.1
Density, Kg/L at 15°C	0.8325
Kinematic Viscosity, cSt at	
40°C	9.86
50°C	7.59
100°C	2.88
Sulphur Total, %wt	0.06
Pour Point, °C	+39
Wax Content, %wt	33.1
Trace Metal, ppm	
Vanadium	<0.1
Nickel	0.7
Iron	0.2
Copper	<0.01

Fraction 400-530°C

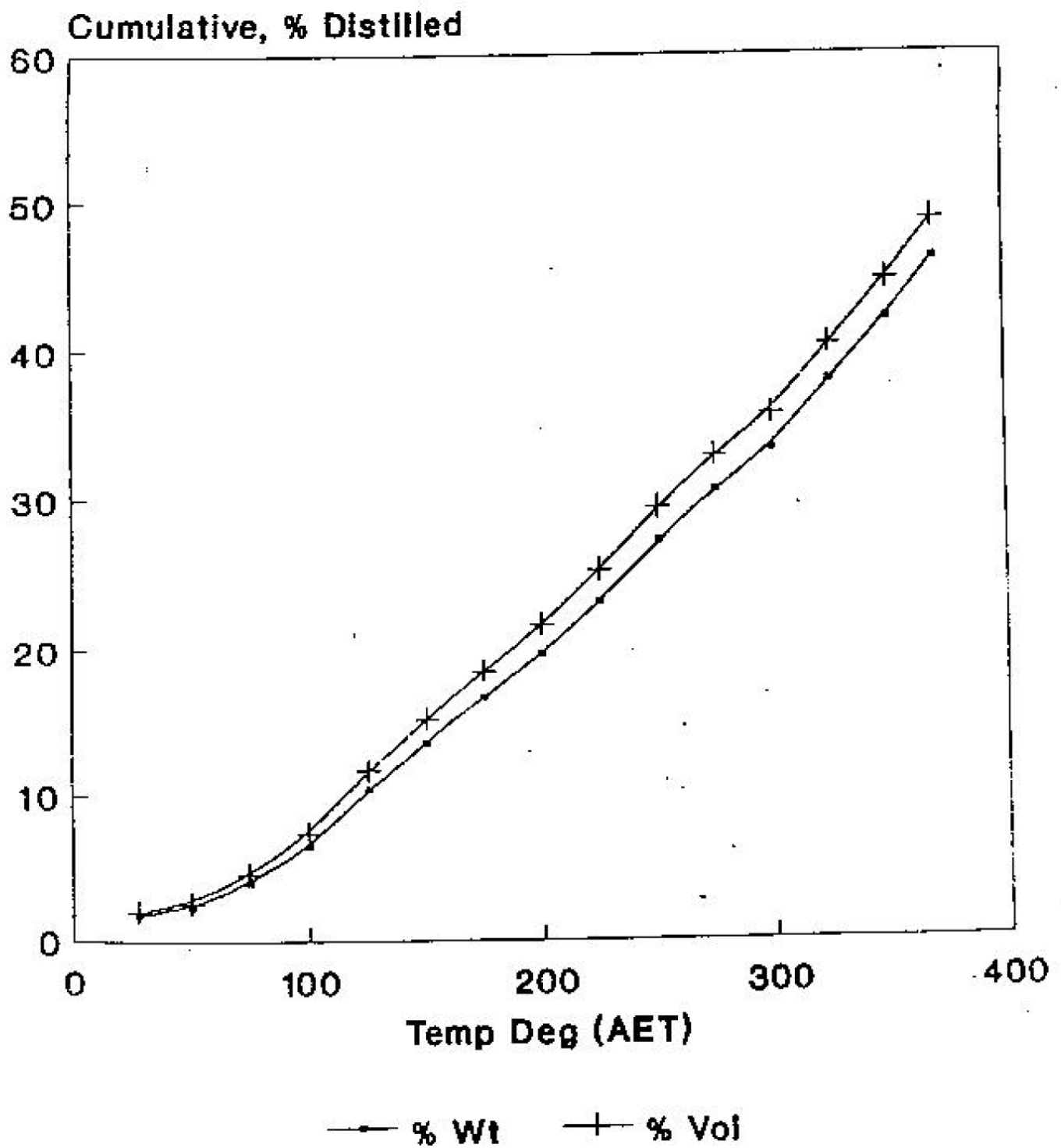
Yield, %wt	25.7
Density, Kg/L at 15°C	0.8593
Kinematic Viscosity, cSt at	
70°C	9.61
100°C	5.03
Sulphur Total, %wt	0.06
Pour Point, °C	+51
Wax Content, %wt	44.0
Trace Metals, ppm	
Vanadium	<0.1
Nickel	0.8
Iron	0.3
Copper	<0.01

INDRORA CRUDE OIL

Characteristics of Residues

	370°C*	530°C*
Yield, %wt	54.1	23.3
Density, Kg/L at 15°C	0.8843	0.9272
Kinematic Viscosity, cSt, at		
70°C	36.23	-
100°C	11.81	85.49
135°C	-	27.94
Sulphur Total, %wt	0.14	0.20
Pour Point, °C	+48	+54
Carbon Residue (Con), %wt	3.83	9.41
Asphaltene, %wt	0.11	0.19
Penetration Number (25°C/100g/5 Sec)	-	40

INDRORA CRUDE OIL TBP DISTILLATION CURVES



Annexure 6- Measurement, Sampling and loading

1. Purpose

This procedure explains the steps that must be followed and the precautions to be taken while loading oil tankers according to its volumetric calibration and oil sample collection using TMB sampler (ASTM D 7831) from oil dispatch tankers.

2. Scope

The procedure applies to EPS.

Definition

TMB sampler	- Top Middle Bottom sampler
B.V	- Ball valve
G. V	- Gate Valve

3. Health & safety requirements

- 3.1. Make sure floors (walking and working surface) is clean, free of slip, trip or fall hazards, protrusions, nails, biological hazards etc., all openings covered, or barricaded & proper drainage (in an orderly manner) is maintained.
- 3.2. Always maintain normal body positions when (seated or standing) while working. Lifting and twisting in combination not to be done in any case.
- 3.3. Maintain normal body position while using hand tools.
- 3.4. All personnel involved in operations shall wear protective equipment Coverall, Safety goggles, Hand gloves, ear plugs, safety boots and gas mask.
- 3.5. Personnel shall be alert to avoid potential source of ignition and shall keep sample containers sealed when not in use.
- 3.6. Visual integrity checks to be carried out on all fittings before starting oil loading pumps.
- 3.7. While working near oil loading pumps proper PPEs are used. Rotation of personnel is done to minimize exposure and it is ensured exposure is within limits.
- 3.8. While working near export pumps proper PPEs are used. Rotation of personnel is done to minimize exposure and it is ensured exposure is within limits.

4. Procedure

/

4.1. Pre-checks before loading oil tanker

- 4.1.1. Ensure that there is no hot work or ignition source in the area.
- 4.1.2. Gas test shall be carried out and recorded.
- 4.1.3. Ensure the availability of fire extinguisher, fire water hose and fire water header pressure.
- 4.1.4. Make sure the tanker is parked properly.
- 4.1.5. Confirm the tanker engine is switched OFF.
- 4.1.6. Confirm for tanker hand brake application.
- 4.1.7. Ensure loading hose condition is healthy before loading.
- 4.1.8. Ensure that all valves in tanker manifold are in closed condition.
- 4.1.9. Tanker checks to be done before entry as per the Tanker Entry permit with HSE checklist.
- 4.1.10. Ensure electrical earthing cables are connected to the tanker body throughout the loading process.

4.2. Procedures to load oil tankers.

- 4.2.1. Oil tanker to be loaded should be drained properly and it should be made sure that the tankers are emptied before starting loading operation.
- 4.2.2. Ensure that all the storage tanks outlet lines are isolated from the dispatch pumps suction header. The dispatch tank physical dip should be taken before lining up the tank for dispatch.
- 4.2.3. Before starting the loading procedure, ensure that the B.V at the discharge line of dispatch pump connecting to oil loading header is in isolated condition.
- 4.2.4. Tanker loading should be carried out with one dispatch pump at a time and the idle dispatch pump's discharge line G.V should be kept in isolated condition.

- 4.2.5. Tankers are loaded against the tanker calibration certificate provided by the tanker contractors.
- 4.2.6. Each oil tanker is provided with a physical dip which is designed according to the calibration certificate provided by the tanker contractors. It is used for measuring oil during loading of each compartment of the oil tanker.
- 4.2.7. After completion of the loading process, the physical tank dip of the dispatch tank is recorded by operator as final reading. Also, the Coriolis flow meter reading is taken as final reading. The difference between the initial reading and the final reading of tank dip and gives the total quantity of oil loaded in the tanker.
- 4.2.8. The tanker top-up opening is closed manually and individual sealing tags with serial numbers are used to seal each compartment. Finally, the tanker oil compartment locking mechanism is provided with lock and key.

4.3. Procedure to collect oil sample with TMB sampler (ASTM D 7831)

- 4.3.1. Ensure that TMB sampler where oil sample to be collected is rinsed properly and is in clean condition. Also make sure it is free from water particles or moisture.
- 4.3.2. After loading of tanker is completed, sample from all the compartments will be collected from the tanker top-up opening using TMB sampler.
- 4.3.3. Carefully insert the TMB sampler inside the 1st compartment of the oil tanker till it comes in contact with the bottom of the vessel body of the tanker.
- 4.3.4. Pull the spring-operated lifter and open the lids of all the three sample containers spaced equidistantly on the TMB sampler and start taking the sample (samples will be collected from top, middle and the bottom section of the compartment and each sample container has 1/3 liters' capacity.)
- 4.3.5. Release the lifter slowly and start retrieving the sampler form the 1st compartment of the tanker.
- 4.3.6. Continue to collect sample from the 2nd and the 3rd compartment respectively.
- 4.3.7. After completion of sample collection, collect the aggregate volume (3 liters) in a sample container/beaker, and a composite sample is made.
- 4.3.8. Make sure to close the lid or cap of the container/beaker and mark the date, time, and Tanker vehicle no. on the sample container.

4.3.9. Send the sample containers to Lab for centrifuge test.

5. Replacement

None

6. Environmental aspects

Environmental aspects	Control measure
Spillage/ leakage of rinsed well fluid	Dispense rinsed Hydrocarbon or well fluid during sampling to CDD. Oil spills/ leaks are cleaned with cotton rags and stored in green garbage bins, which are disposed as per waste management plans.
Generation of noise during pump operation	Use of PPEs and rotation of personnel is done. Exposure duration is within limits. Audiometry tests are conducted every year to the personnel exposed to high noise levels.

7. Records

None