

Note:

Please confirm your interest to participate in this tender through email to Contract@abrajenergy.com and to submit the EOI & confidentiality declaration forms to be duly filled and send to us for our records within 3 days of receiving this invitation.

You will receive a link to submit your proposal through SAP Ariba System

The submission deadline is as per SAP Ariba System





Tender Document

Tender No. JTC.250414.MNT.8000442

Tender Title: Rate Agreement of NOV pipe cat Major Overhaul



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1. INVITATION TO TENDER

Abraj Energy Services SAOC "the Company" invites 'Bidder' to Tender for the Work or Services in accordance with the terms and conditions set down in the Tender Documents. If you are a successful Bidder you shall be required to enter into a Contract in accordance with the Form of Agreement.

JTC.250414.MNT.8000442 Rate Agreement of NOV pipe CAT Major Overhaul

There should be no indications or markings on envelopes or the parcel, which may reveal the identity of the Bidder except Tender No and Title. The parcel should be delivered on the date and time as specified in the advertised invitation of this Tender and should be addressed to:

Abraj Energy Services (SAOC) Al-Mawaleh, PO Box 1156, PC 130, Azaiba, Sultanate of Oman

Abraj Energy Services SAOC is not bound to accept the lowest Tender or award the full Bidder scope of work and reserves the right to reject any or all Tenders without assigning any reason



2. INSTRUCTIONS TO BIDDERS

2.1 General

Bidders must notify the Company immediately if they find discrepancies omissions or ambiguities in the description of the services or specifications of goods.

Bidders should note the restrictions set out in the Contract regarding the subcontracting and assignment of any part of the Contract to other companies.

Bidders should also note those terms peculiar to the conducting of services in the Sultanate of Oman, including the requirements set out in the Contract for use of Omani supplies, equipment, machinery, consumables, Omani workers and subcontractors, and the importation of materials, equipment and consumables.

By submitting a Tender, the Bidder is deemed to have made the necessary allowances in the Tender Price for adhering to all laws, rules, regulations, Policies, and procedures applicable in the Sultanate of Oman.

Clarification Requests: All questions or communications regarding this Invitation to tender shall be directed by e-mail to Contract@abrajenergy.com before the clarification closing date.

Any addendums, clarifications or any other correspondence will be issued and sent via e-mail to all Bidder during the tendering period.

The Tender Documents and all Tender submissions are to be made in the English language.

2.2 Expression of Interest

The bidder will confirm the Express of Interest (EOI) for the Tender as per Annexure-02 and provide the documents as per following:

To register your interest please complete the forms listed below duly signed by authorized signatory and submitted within three (3) days of reviewing the Invitation to Tender (ITT) to:

Contract@abrajenergy.com

1. Annexure-03 Interest to Participate in Tender and Condifentiality Declaration (Form #AES-03) 2. Annexure-04 Declaration to Comply with Company Requirement (Form # AES-04)

2.3 Confidentiality

All recipients of tender documents (whether they submit Tenders or not) shall treat the details of the documents as private and confidential.

During the tender period, the Bidder shall not communicate with anyone related to or



deemed to be related to the owner or custodian of the project unless expressly so directed by the Abraj Contract department or where such communication shall constitute an enquiry as set down in these instructions.

2.4 Clarification Requests

All Clarification Requests regarding this Tender shall be submitted by Bidder in the format as included in Annexure 09.

The request for the extension of Submission Bid will be provided well within 5 days from receipt of the Tender Document and the extension of Bid will be requested in same form of Annexure-09.

Company reserves the right not to entertain any Clarification Request received by Company after the Clarification Request Closing Date stipulated in the Tender schedule.

Addenda to the Tender Documents may be issued prior to the date of delivery of Tenders for the purpose of amending or clarifying the Tender Documents. Should there be any doubt or obscurity as to the meaning of the Tender Documents, or as a request for a site visit, or as to anything to be done under the Contract or concerning these instructions, or any other matter, the Bidder must set forth in writing such doubt or obscurity and deliver the same to Abraj Tender Committee, not later than ten (10) working days before the date fixed for the submission of Tenders. If considered appropriate a reply in the form of a Circular Letter or Addendum will be distributed to all Bidders who have obtained the Tender Documents.

Company will endeavor to revert within 2-3 working days from receipt of Clarification submissions as per Tender Schedule below.

2.5 Preparation of Bids

The scope of work has been attached herein in Annexure- 01. The technical Bid should be provide to meet the requirement specified in scope of work.

Any bid exceptions must be attached to the bid. Exceptions to the provisions of the contract will not be accepted by Company for review or negotiation after the bid closing time. Exceptions shall be accompanied by complete information on the nature and extent of the proposed exception and the consequent impacts to the prices, schedule or other aspect of the bid.

Bidders will not be compensated for the cost of preparing a bid, including, without limitation, any travel costs, whether successful or unsuccessful and regardless of whether Company chooses not to award the contract.

Bidders are encouraged to provide any additional information helpful to Company in evaluating their bids.

Bidder shall submit their bid in accordance with Tender documents and provide information as per attached Annexures wherever required.



Bidder shall ensure upon receipt that the copy of the Tender Documents has received in complete and inform if they have not received any of mentioned above to Contract Administration on email address Contract@abrajenergy.com with five (5) days after received of mail.

All copies shall be properly executed, all blank spaces shall be filled in, and any interlineations, alterations, or erasures shall be formally explained and initialed by the Bidder. Failure to comply with these requirements may be cause for rejection of the bid.

Bid may not be considered unless they are in conformity with the Tender Documents. You are specifically advised that evaluation of BID shall include the degree of exceptions taken (if any) to the Body of terms and conditions.

Bidder shall confirm acceptance of the proposed terms and conditions together with any exceptions, clearly shown in the Tender documents. Partial or incomplete BID received after the stated due time may be rejected.

Each Bidder shall give the full legal name, registered number, place of incorporation and registered office address of the Bidder. Where the Bidder operates under any trading name this also shall be stated, as shall be any trading or mailing address if different to the registered office address.

BID shall be written in English and labelled with the name of the part inside.

The Bidders should Submit following documents in the Technical Bid submission:-

- a. Maximum technical information of all the services or equipment covering the Scope of work as per attached Annexure-01.
- b. Specification, brand name, manufacturer name, material detailed, etc. maximum information of each component or part of all equipment or assembly of Equipment.
- c. List of Certificates. If possible, sample of certification.
- d. Country of Origin of Raw Material and Assembly of equipment.
- e. Product drawing or assembly drawing with maximum information.
- f. Part Catalogue or Product catalogue.
- g. Manufacturer experience detailed.
- h. List of Customer to whom you are dealing.
- i. Any other information which can be useful for technical evaluation of scope of work as per attached Annexure- 01



- j. Deviation to our requirement will be marked separately and any change in price will be provided in Commercial BID.
- k. For any additional Item or scope of work should be specified with optional price.
- I. Bidder should provide detailed product specification along with catalogue copy in Technical BID.
- m. All items should be supplied as per latest standard of American Petroleum Institute.
- n. This is general standard of the equipment required in Oil and Gas Industries.
- o. Purchaser should have right to select line item in the bid.
- p. The Technical Tender shall not contain any pricing information.

The Bidders should Submit following documents in the Commercial Bid submission:-

- a. Submit your price for the equipment as per attached Price Schedule Annexure 10. The total price need to be carried to the Form of Tender and complete all blanks applicable in the Appendix of Form of Tender.
- b. Price of each equipment or group of equipment as per scope of supply as per attached Annexure -10.
- c. Provide Delivery period. Abraj expects to get better delivery and the delivery is one of the criteria of commercial evaluation.
- d. Provide clear delivery term.
- e. Packing charges if any required.
- f. Manufacturer of each item of Equipment or assembly of Equipment.
- g. Country of origin of each item of Equipment or assembly of Equipment.
- h. Provide additional information which can be useful for commercial evaluation of scope of supply as per attached Annexure-01.
- i. Commercial Part shall be submitted with prices and rates in US \$/OMR taking into account the Works to be executed with terms and conditions included herein.
- j. Technical and Contractual Part shall be submitted with the format and content specified hereinafter. No prices shall be indicated in the technical and contractual part.

2.6 Visit to the Site (If Required)

The Bidder must visit the Site and obtain, at his own expense, all information necessary for preparing a Tender. He must carefully examine the Tender Documents and satisfying himself as to the tasks, risks, obligations and responsibilities to be



undertaken in the Contract, form and nature of the entire areas in which the Works are to be carried out, the means of access to the Site and in general all other matters which may affect his tender.

Any neglect or failure on the part of the Bidder to obtain reliable information at Site or elsewhere or on any other matters affecting the execution and completion of the Works of this Contract shall not relieve the accepted Bidder from any risks or liabilities or from the responsibilities of completing and handing over the works.

Abraj Energy Services will arrange a guided Site Visit and a notice to this effect will be issued during the tendering period. The Bidder shall contact Contract Administrator/ Contract Engineer through Email regarding the time and date of the guided Site Visit.

Any of the employees, servants or agents of the Bidder will be allowed by Abraj to enter the site and his premises and land for the purposes of inspection and examination strictly on condition that such persons, firms or companies will indemnify the Company and his servants and agents from and against all liability arising out of any personal injury, fatal or otherwise, loss or damage to property and any other loss directly or indirectly attributable to the said inspection and examination.

2.7 Submission of Bids

The Tender shall be submitted in two part: one comprising a Technical Tender and one containing the Commercial Tender. The Technical Tender shall contain all the required documents requested in the Tender Documents excluding any financial references. The Commercial Tender shall contain all financial documents and information. Bidders who fail to adhere to this requirement will result in the disqualification of their Tender.

The Bid Form together with all information and documentation shall be completed and submitted by email only.

The bidder must affix its initialed company stamp to every page of its original Tender submission which should include all parts of the Tender Documents. The original shall be clearly marked "ORIGINAL"

Bidders not complying with the requirements of the Bid Form and the submission and delivery of the bids may be deemed non-responsive to the Invitation to Tender and their bids may be excluded from further consideration.

The Bidders should submit the bids which should be signed by Authorized person of the company and company may verify if it is required from CEO or Owner of bidder or any other Agencies e.g. Chamber of Commerce. .

No deletions or erasures may be made in the list of prices and the schedule of categories. Any correction in the prices etc. shall be re-written in numbers and words and signed by the authorized person.

The bidder may not delete or modify any clauses or technical specifications irrespective of the nature of such modification.

Any special conditions or modifications shall be sent in or attached with a separate letter



kept in the tender envelope. A reference shall be made to this letter in the bid itself. No other alternative shall be acceptable.

The price schedule shall specify whether the item is manufactured in the Sultanate of Oman or abroad. Inaccuracy of the information submitted, partly or fully, shall lead to the rejection of the item without prejudice to the Abraj Tender Committee's right to deprive the bidder of the facility to deal with other tenders of the Company within a period specified by the relevant Abraj Tender Committee (ATC), depending on the situation of each case.

The prices quoted by the bidder in the schedule of categories shall include and cover all the expenses and liabilities, irrespective of their nature, to be incurred or met in respect of each clause and shall also include those involved in the completion, delivery and maintenance if required, of all the works during the period of guarantee and maintenance.

The final calculation shall be done on the basis of these prices irrespective of fluctuations in the market, the customs duty and other duties and taxes.

The bidder shall, in case of the submission of one or more alternative offer, ensure that these offers are clear and detailed and referred to in the list of contents.

If the bidder fails to specify the price of an item required to be supplied in the price list, this shall be considered as abstention from participation in the tender in respect of such item.

The prices specified in words shall be accepted. As an exception, the relevant may accept the offer specified in numbers only in the Company's interest.

A bid based on a reduction in the lowest bid by a specified percentage shall also not be acceptable.

To submit the Commercial bid, the following shall be taken into account:

- a. If the goods are required to be delivered on board the ship, the price given in the bid shall include the price of the items, adding thereto the expenses for mobilization, transportation and loading in accordance with the FOB system.
- b. If the goods are required to be delivered at the port of arrival, the price given in the bid shall include the price of the items, adding thereto the expenses for mobilization, transportation, loading and shipping in accordance with the C & F system.
- c. If the goods are required to be delivered at the port of arrival, the price given in the bid shall include the price of the items, adding thereto the expenses for mobilization, transportation, loading, shipping, insurance and unloading in accordance with the CIF system.
- d. If the goods are required to be delivered at the stores of the purchaser or the work sites, the price given in the bid shall include the price of the items, adding thereto the expenses for mobilization, transportation and loading, the shipment charges, the insurance cost and expenses on unloading, customs duties, internal transportation and other additional charges.



- e. In all cases, the contractor shall bear all the expenses for getting the letter of credit from the Company pertaining to their banker while the Company shall bear the letter of credit opening charges pertaining to its banker in Oman.
- f. The data or information for Commercial Bid submission will be as per attached Annexure-10.

Bidders accept full responsibility for ensuring their bids are delivered or submitted to the correct email address by the specified deadline. Bids submitted to any other address or later than the deadline may not be considered.

Bidders forwarding their bids by courier should advise by email to Contract@abrajenergy.com, when the bid has been sent by courier, naming the courier and tracing number.

Bids received after the final bid submission deadline will be returned unopened to the bidder.

Company expressly reserves the right to extend the bid submission deadline.

2.8 Currency of Contract

The currency of the contract will be in Omani Rials (OMR) or US Dollar. In the case of a tender submitted by an individual or companies abroad, it is permitted to write the prices in foreign currency provided the equivalent Oman currency must be mentioned. Tender in foreign currency without the equivalent Oman currency will be rejected.

2.9 Validity of Tenders

The Bid Proposal shall remain valid and irrevocable for a period of Ninety (90) days from the closing date for the submission of Tenders. Company intends to notify all Bidder of the result of their Tender submission during this period. If Bidder retracts or withdraws its Tender during the period of its validity without receiving authorization from Company, Company may, at its sole discretion, without the need for summons, notice or other legal formalities or exercise any other rights stipulated in the Tender Documents.

In exceptional circumstances, prior to expiry of the original, the procuring agency may request the bidders to extend the period of validity for a specified additional period, which shall not be for more than one third of the original period of bid validity. The request and the responses thereto, shall be made in writing. A bidder may refuse the request without the forfeiture of the bid security. In case, a bidder agreed to the request, shall not be required or permitted to modify the bid, but will be required to extend the validity of the bid security for the period of the extension

2.10 Language of Contract

All correspondence with the Company or the Company' representative shall be in the



English Language. Original documents or copies submitted by Tenders, which are not in Arabic or English, should be accompanied by English translation.

2.11 No Alterations

No Alterations to the text of the Tender Documents shall be made except for fillingin blanks intended to be filled-in. Failure to fully comply with this instruction may result in the rejection of the Tender.

Any alteration to a unit rate or amount made by the Bidder to correct clerical errors entered by him in the Schedule of Prices and Schedule of Rates during the preparation of the tender must be initialed by the person authorized to sign the Tender prior to the submission of tender.

2.12 QHSE Requirements

The Supplier shall comply with all the HSE requirements of Abraj Energy Services (S.A.O.C). As specified while executing the required supply works. Bidder shall fully describe its HSE record for the last three years. This shall include details of accidents and incidents involving Bidder's personnel and third parties for the activities undertaken by Bidder.

2.13 Bidder Registration Requirements

The successful bidder(s), who are not already registered, will be sent a supplier registration form and will have up to 30 days to register with Abraj Energy Services. The request need to be send to following email address to get the necessary documents required to complete registration process:

Email Address: Contract@abrajenergy.com

2.14 Opening of Tenders

Both Technical & Financial Offers submitted will be opened at the time and day specified in the advertised invitation to Tender at the offices of Abraj Energy Services. Any Tender received after the time and date fixed for submission of Tenders will be rejected.

2.15 Tender Bond

The Bidder must furnish, as part of his Tender, a Tender Bond in the value of not less than 1% of the Tender Value. If the Bidder submits an alternative Tender, the one percent shall be calculated based on the highest Tender Value. The wording of the Tender Bond shall be as per the prescribed Form of Tender Bond included within the Tender Document. See Annexure-12.

The Tender Bond shall be denominated in Omani currency and shall be obtained from a bank located and registered in the Sultanate of Oman and valid for ninety (90) days from the latest date fixed for the submission of Tenders. Any Tender not accompanied



by a Tender Bond will be rejected.

The Tender Bond of unsuccessful Bidders will be returned on its expiration or after the award of the Contract to the successful Bidder.

The Tender Bond will be forfeited:

- i) If a Bidder withdraws his Tender during the period of Tender validity specified in the Tender Documents; or
- ii) In the case of a successful Bidder, if the Bidder fails:
 - a) to sign the Contract; and/or
 - b) To furnish the Performance Bond.

2.16 Performance Bond

For the due performance of the Contract, The Supplier will be required to provide a Performance Bond within (7) calendar days from the date of the Letter of Acceptance to the value of five percent (5%) of the Contract Value, obtained from a Bank registered in the Sultanate of Oman, and valid for the whole of the Contract and Defects Liability Period. The Performance Bond will be retained by the Company during the Contract and Defects Liability Period and will be returned to the Supplier upon the satisfactory completion of the Defects Liability Period. The Performance Bond shall be as per the prescribed "Form of Performance Bond" included in the Tender Document.

2.17 Evaluation of Tenders

After received of Bids, Abraj evaluation Team will conduct evaluation of Bid. Technical and Commercial bids will be evaluated separately by different Evaluation Team. Tender evaluation Strategy of bids will be conducted as per Annexure-11.

2.18 Award contract

Abraj reserves the right to reject all of the bids for any reason and not award the Contract to any Bidder.

Abraj reserves the right to award the Contract to a Bidder other than the lowest Bidder and to negotiate any amendment to the terms of the contract with the successful Bidder.

Abraj reserves the right to seek clarification from bidders during the evaluation process.

Bids will be evaluated by Company to determine the best qualified and most competitive.

Bidder taking into consideration all aspects of the bid, including but not limited to:

a. The bidder's technical ability to perform the job to Company specifications and the suitability of the proposed equipment, tools, goods, processes and programs.



- b. The rates offered.
- c. Bidder's financial integrity, past performance, reputation within the industry.

In the event that Company estimates that the bid price exceeds competitive limits, it may request the bidder to reconsider the bid price with the aim to lower the price, and such a request shall not be considered as a rejection or acceptance by the Company until the validity period specified herein.

Notification of Acceptance: By way of a Letter of Intent to Award, Company shall notify the successful Bidder of Company acceptance of its Tender subject to the following conditions precedent: Signing of the Contract.

For the purpose of determining the start dates of the Performance Bond and the Insurances, the date of the Letter of Intent to Award shall be used unless another date is otherwise stipulated in the Letter of Intent to Award. If the successful Bidder fails to submit the documentation per (a) and (b) above within the time period stipulated in the Letter of Intent to Award, Company may, at its sole discretion, without the need for summons or notice or other legal formalities, exercise any rights stipulated in the Tender Documents, and notify the successful Bidder that the Contract is, ipso facto, terminated. The Effective Date, as entered in the Agreement, shall be determined at the sole discretion of Company.

3. ABRAJ STANDARD TERMS & CONDITIONS

Abraj's standard terms and conditions are attached as per Annexure 12 and any deviation to terms and conditions should be specifying in Commercial Bid.

Company expressly reserves the right to extend the bid submission deadline. Bidders not complying with the requirements of the Bid Form and the submission and delivery of the bids may be deemed non-responsive to the Invitation to Tender and their bids may be excluded from further consideration.

Bidders accept full responsibility for ensuring their Bids are delivered to the email addresses by the specified deadline. Bids submitted to any other email address or later than the deadline may not be considered.



FORM OF TENDER

JTC.250414.MNT.8000442 Rate Agreement of NOV pipe CAT Major Overhaul

To:

Abraj Energy Services (SAOC) Al-Mawaleh, PO Box 1156, PC 130, Azaiba, **Sultanate of Oman**

	Sir/Madam,
1.	We have examined the Conditions of Contract, Company's Requirements, and Addenda listed hereunder for the above named Works. We have examined, understood and checked these documents and have ascertained that they contain no errors or other defects. We, the undersigned accordingly, offer to execute and completely maintain the whole of the said Works for the prices set out in our Tender.
	Rials Omani
	(R.O) or such other sum or currency*
	()
2.	We undertake if our Tender is accepted to commence the work in accordance within Days of the Contract Conditions and to complete the Works in accordance with the above documents within the time for Completion stated in the Appendix to the Form of Tender. We guarantee that the Works will then conform to the Performance Guarantees included in this Tender.
3.	We undertake that if our Tender is accepted we will provide the specified Performance Bond from a locally registered Insurance Company or Bank in accordance with SubClause 2.16 of the above instruction to Bidder to be jointly and severally bound with us in the sum of five percent (5%) of the Contract Price for the due performance of the Contract under the terms of a Performance Bond to be approved by you.
4.	We agree to abide by this Tender for a period of 90 days from the date fixed for receiving same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
5.	Until the Contract is prepared and executed this Letter of Tender, together with your written acceptance thereof, shall constitute a binding obligation upon us.
6.	We understand that you are not bound to accept the lowest or any tender you may receive.
7.	We acknowledge the receipt of the following Circular Letter and Addenda:
	Reference number of Addenda: Date



	And confirm that we have taken account of same in our Tender.
8.	We confirm that we have an Agent/s for the provision of Spare Parts, Maintenance Services and repair who are:
	Name
	Address
	And whose Agency Registration Number is
	Dated
	Name
	Address
	And whose Agency Registration Number is
	Dated



Annexure- 01 Scope of Work

Scope of Work:

1: NOV PC-5-65 Pipe Cat Rigs (R209)

- 1. Receiving the Pipe cat in the WS
- 2. Carry out initial inspection on the machine
- 3. Issue initial inspection report & recommendations for repair/certification
- 4. Complete dismantle for all hydraulic components
- 5. Perform inspection and resealing of all Hydraulic cylinders
- 6. Perform resealing of trough hydraulic motor
- 7. Perform resealing of both Main Hydraulic Pumps
- 8. Replace all hoses regardless of the condition from outside based on Gates survey as reference (Annexure I)
- 9. All Control Valves/Solenoids stations to be sent for inspection/pressure testing & re sealing with new seal kit
- 10. Hydraulic tank to be dumbed, cleaned, flushed & send for inspection to 3rd party
- 11. All filters to be replaced
- 12. All hydraulic valves to be inspected/replaced
- 13. Pressure test for all hydraulic SS pipes, replace if failed
- 14. Perform Servicing and cleaning of oil cooler heat exchanger
- 15. Check nitrogen pre charge pressure (1500PSI) in hydraulic noise suppressors
- 16. Perform recertification of Trough Lift Winch
 - o Integral planetary gearbox is to inspected & certified
 - o Pressure test the winch, absorb for any noise / leakage
 - o Dismantle and inspect.
 - o Replace the seals and bearings.
 - o Replace the parts if found damaged.
 - o MPI on weld areas.
 - o Assemble & pressure test.
 - o Carry the load test and issue certificate.
 - o Blast & paint.

Structural

- 17. Pipe racks to be sandblast all critical welding areas & MPI, painted
- 18. All indexer pins to be Sandblasted, MPI
- 19. V-Door Ramp, all critical areas to be sandblasted, MPI & painted
- 20. Trough Lift Winch mounting areas to be sandblasted, MPI & Painted
- 21. Complete dismantling for critical path & loads for all beams & structures
- 22. MPI, UT if required to be done all
- 23. Check all landing beams & perform MPI on its welding areas
- 24. Lifting leg all to be inspected, sandblasted & MPI

Trough

- 25. Trough to be dismantled from the Pipe cat frame
- 26. Trough leg to be inspected thoroughly
- 27. All safety pins to be inspected, MPI
- 28. All Kickers to be inspected/replaced as required
- 29. Skate drive to be inspected/ replaced as required
- 30. Skate hydraulic motor to be send 3rd party for inspection
- 31. Skate chain & its tensioner assembly including all parts to be inspected/ replaced as required (Abraj free issue)



- 32. Wire tensioner assembly including all parts to be inspected/replaced as required
- 33. Winch wire rope to be change (Abraj free issue)
- 34. Pipe cat skate to be inspected/ Repaired
- 35. Trough kicker to be inspected/ replaced as required
- 36. Safety pins to be inspected/ replaced as required
- 37. Check/replace skate bumper springs
- 38. Check/replace bearings in trough front roller (Abraj free issue)
- 39. Check/replace bearings in trough to lifting leg connection (Abraj free issue)
- 40. Check/replace bearings in kicker assemblies (Abraj free issue)
- 41. Check/replace bearings in V-door roller assembly (Abraj free issue)
- 42. Check/replace bearings in V-door sheave assembly (Abraj free issue)
- 43. Check/inspect V-door sheave assembly, use Go/No GO groove gauge to identify the wear in the sheave groove and shoulder.
- 44. Check/replace rollers on front of trough (Abraj free issue)
- 45. Check/replace V-rollers on rear of trough (Abraj free issue)
- 46. Check/replace skate travel stop bumpers (Abraj free issue)
- 47. Check/inspect lifting leg stop bumpers
- 48. Drag chain assembly skids to be inspected/repaired as required
- 49. Trough chain guard to be inspected/repaired/replaced if necessary
- 50. All bolts and nuts to be sorted locally with the same quality.
- 51. Grease all fittings
- 52. Certificates with all welding procedures used to be included in the certification packages
- 53. Complete painting for the equipment as per OEM specifications

Electrical

- 54. Dismantle, clean, and inspect all electrical parts and equipment.
- 55. Check all power cables, sensors, transmitters, and encoders to ensure they are in good condition and free from damage.
- 56. Clean and inspect all solenoids mounted on the PipeCat and trough, ensuring they are in good condition.
- 57. Submit an initial investigation report with all electrical findings, including clear pictures and a list of required parts
- 58. All materials highlighted in bad condition will supplied by Abraj after receiving the initial report with all findings (see Annex1&2 for parts IC and Cables length).
- 59. Inspect the oil cooler fan blades for any damage. (Abraj will provide a new one if necessary).
- 60. Dismantle all auxiliary motors (main HPU motors, oil cooler fan motor with blade for balancing) and send them to the Abraj workshop for overhaul.
- 61. Repair any bends in the safety curtain posts, ensuring proper tightness and alignment for each post relative to its opposite post.
- 62. Abraj will provide two new multicore control cables (18C x 16 AWG) to be sent with the PipeCat. The repair shop will replace both multicore control cables in the drag chain and return the old cables to the rig with the overhauled PipeCat.
- 63. Clean the electrical control panels, ensure panel doors have proper locks, repair or replace locks as needed, and secure them with ropes to prevent damage during transportation.
- 64. Install and test all supplied electrical materials as per the findings.

Acceptance Criteria:

- 1. Job completion report including:
 - COC
 - load test certificate of the winch



- MPI reports
- Pressure test report for all hydraulic components
- 2. 100 % functionality of the unity without any hydraulic/ electrical/ Structure issues

Mandatory Requirements:

- 1. Submit a valid certificate for Quality management system ISO 9001 or API Q1 or equivalent
- 2. Comply with full Pipe Cat Unit SOW
- 3. Submit project plan
- 4. Submit inspection & testing plan (ITP)

Technical criteria:

- 1. Bidder shall provide 1 year warranty (workmanship)
- 2. Lead time including repair in/out

Contract period:

Contract period 2 Year + 1 Year

Service code:

	Service Code	Service lines	Quantity
1	1004521	Perform the SOW for NOV Pipe Cat	4
2	1004526	Repair of Cat walk external channel frame	45
3	1004527	Repair of Cable trays	45
4	1004530	Replace of SS hydraulic pipe 2"	45
5	1004531	Replace of SS hydraulic pipe 1"	45
6	1004532	Replace of SS hydraulic pipe 3/4"	35
7	1004533	Replace of SS hydraulic pipe 1/2"	30
8	1004536	Replacement of Bolts & fasteners	100
9	1004537	Replacement of Nuts	100
10	1004538	straightening of bend beams areas	50
11	1004541	Repair of Pad eyes	50
12	1004543	Fabrication of Teflon shims	75
13	1004544	All crack Weld and weld repair as per 1 cm Weld as measuring unit	100
14	1004545	Fabricate Pins as per 1 kg as measuring Unit (material AISI 4140)	10.2



Annexure I: Gates Hydraulic hoses survey

NO	TAG	HOSE P/N	LENGT H	END FITTING -1	FERRUL E	END FITTING-2	FERRUL E	QTY	REMARK S
1	A60/A98	6MXT-XTP	1	6G-6FJX		6G-6FJX90M		1	
2	A94/A85	8MXT-XTP	0.73	8G-8FJX		8G-8FJX		1	
3	A92/A82	6MXT-XTP	0.73	6G-6FJX		6G-6FJX		1	
4	A83//A84	8MXT-XTP	0.9	8G-8FJX		8G-8FJX90M		1	
5	A66/A103	6MXT-XTP	1.45	6G-6FJX		6G-6FJX90M		1	
6	A88/A89	6MXT-XTP	0.65	6G-6FJX		6G-6FJX90M		1	
7	A69/A68	6MXT-XTP	1.1	6G-6MJ		6G-6FJX90M		1	
8	A42/A40	6MXT-XTP	0.6	6G-6FJX		6G-6FJX90M		1	
9	A24/A6	6MXT-XTP	0.9	6G-6FJX		6G-6FJX		1	
10	A87/A72	6MXT-XTP	0.65	6G-6FJX		6G-6FJX90M		1	
11	A71/A78	6MXT-XTP	0.73	6G-6FJX		6G-6FJX		1	
12	152/A44	6MXT-XTP	0.42	6G-6FJX		6G-6FJX		1	
13	A55/A51	4MXT-XTP	1.25	4G-4FJX		4G-4FJX90S		1	
14	A53/A46	16MXG	1.7	16GS- 16FJX	16GS1F-4	16GS-16FJX	16GS1F-4	1	
15	A22	6MXT-XTP	3.4	6G-6FJX		6G-6FJX		1	
16	A23	6MXT-XTP	3.5	6G-6FJX		6G-6MP		1	
17	A56/A47	6MXT-XTP	1.5	6G-6FJX		6G-6FJX90M		1	
18	A39/A41	6MXT-XTP	0.65	6G-6FJX		6G-6FJX90M		1	
19	A19/A63	6MXT-XTP	6.7	6G- 8FJX90		6G-6FJX		1	
20	A91/A74	6MXT-XTP	1.65	6G-6FJX		6G-6FJX		1	
21	A36/A30	6MXT-XTP	0.95	6G-6FJX		6G-6FJX90M		1	
22	A100/A64	6MXT-XTP	1.1	6G-6FJX		6G-6FJX		1	
23	A76/A102	6MXT-XTP	2.3	6G-6FJX		6G-6FJX90M		1	
24	A105/A77	6MXT-XTP	2	6G-6FJX		6G-6FJX		1	
25	A97/A86	6MXT-XTP	1.05	6G-6FJX		6G-6FJX90M		1	
26	A99/A61	6MXT-XTP	1.6	6G-6FJX		6G-6FJX		1	
27	A35/A18	6MXT-XTP	0.72	6G-6FJX		6G-6FJX		1	
28	A106/A96	8MXT-XTP	1.5	8G-8FJX		8G-8FJX90M		1	
29	A59/A68	6MXT-XTP	1.1	6G-6FJX		6G-6FJX90M		1	
30	A44/A54	8MXT-XTP	1.45	8G-8FJX		8G-8FJX		1	
31	A38/A27	6MXT-XTP	0.9	6G-6FJX		6G-6FJX90M		1	
32	A57/A65	6MXT-XTP	0.4	6G-6FJX		6G-6FJX90M		1	
33	A33/A17	6MXT-XTP	0.35	6G-6FJX		6G-6FJX		1	
34	A48/A50	6MXT-XTP	0.55	6G-6FJX		6G-6FJX		1	
35	A34/A26	6MXT-XTP	0.7	6G-6FJX		6G-6FJX		1	
36	A25/A7	8MXT-XTP	0.96	8G-8FJX		8G-8FJX		1	



37	A95/A107	8MXT-XTP	1.25	8G-8FJX		8G-8FJX90M		1	
38	A80/A75	6MXT-XTP	0.72	6G-6FJX		6G-6FJX		1	
39	A73/A93	8MXT-XTP	0.8	8G-8FJX		8G-8FJX90M		1	
40	A62/A90	6MXT-XTP	1	6G-6FJX		6G-6FJX90M		1	
A-LO	CATION				l		l .	1	
41	A110/A119	32G2	1.6	32GSP- 32FJX	32GSP1F- 4	32GSP- 32FL90M	32GSP1F-	1	
42	A28/C3	6MXT-XTP	4.8	6G-6FJX		6G-6FJX		1	
43	A20/C4	6MXT-XTP	4.8	6G-6FJX		6G-6FJX		1	
44	A31/C2	6MXT-XTP	5.1	6G-6FJX		6G-6FJX90M		1	
45	A32/C1	6MXT-XTP	5.1	6G-6FJX		6G-6FJX90M		1	
46	A29/C5	6MXT-XTP	4.4	6G-6FJX		6G-6FJX		1	
47	A21/C6	6MXT-XTP	4.4	6G-6FJX		6G-6FJX		1	
48	G3/G1	6MXT-XTP	1.1	6G-6FJX		6G-6FJX90M		1	
49	G4/G7	6MXT-XTP	0.35	6G-6FJX		6G-6FJX		1	
50	G5/G9	6MXT-XTP	0.35	6G-6FJX		6G-6FJX		1	
51	B1/B2	6MXT-XTP	2.1	6G-6FJX	1	6G-6FJX90M		1	
52	B30/B25	12MXG	2.1	12GS- 12FJX	12GS1F-4	12GS- 12FJX90M	12GS1F-4	1	
53	B18/B15	6MXT-XTP	1.1	6G-6FJX		6G-6FJX90M		1	
54	B33/B34	6MXT-XTP	1.9	6G-6FJX		6G-6FJX45S		1	
55	B5/B6	6MXT-XTP	3.1	6G-6FJX		6G-6FJX90M		1	
56	B3/B4	4MXT-XTP	2.1	4G-4FJX		4G-4FJX90S		1	
57	B13/B14	4MXT-XTP	1.4	4G-4FJX		4G-4FJX90S		1	
C-LO	CATION		I.	·L	l	l	<u>l</u>	1	<u> </u>
58	B9/B10	4MXT-XTP	0.62	4G-4FJX		4G-4FJX90S		1	
59	B45/B44	8MXT-XTP	0.5	8G-8FJX		8G-8FJX		1	
60	B8/B7	4MXT-XTP	0.4	4G-4FJX		4G-4FJX90S		1	
61	G2/G6	6MXT-XTP	1	6G-6FJX		6G-6FJX90M		1	
62	B37/B36	6MXT-XTP	0.35	6G-6FJX		6G-6FJX		1	
63	B28/B26	8MXT-XTP	1.5	8G-8FJX		8G-8FJX90M		1	
64	B23/B39	6MXT-XTP	1.5	6G- 6FJX45S		6G-6FJX90M		1	0
65	B21/B42	6MXT-XTP	1.5	6G-6FJX		6G-6FJX90M		1	
66	B41/B43	8MXT-XTP	0.25	8G-8FJX		8G-8FJX		1	
67	B32/B35	4MXT-XTP	2.9	4G-4FJX		4G-4FJX90S		1	
68	B22/B38	6MXT-XTP	0.9	6G-6FJX		6G-6FJX90M		1	
69	1//3	24EFG6K	1.8	24GSP- 24FL	24GSP1F- 4	24GSP-24FL	24GSP1F- 4	1	
70	7/B	24EFG6K	1.55	24GSP- 24FL	24GSP1F- 4	24GSP-24FJX	24GSP1F- 4	1	
71	2/4B	24EFG6K	1.8	24GSP- 32FL	24GSP1F- 4	24GSP-24FL	24GSP1F- 4	1	
72	8B/	24EFG6K	1.3	24GSP- 24FL	24GSP1F- 4	24GSP-24FL	24GSP1F- 4	1	
73	B11/B20	6MXT-XTP	3.3	6G-6FJX		6G-6FJX90M		1	



Total	74	B24/B40	8MXT-XTP	1.7	8G-8FJX		8G-8FJX45S		1	
76 B14/B12 6MXT-XTP 0.6 6G-6FIX 6G-6FXMOM 1 77 B17/GSD 4MXT-XTP 1.5 4G-4FXMOS 4G-4FXMOS 1 78 B27/G49 4MXT-XTP 1.2 4G-4FXMOS 4G-4FX 1 79 G46/B16 4MXT-XTP 1.5 4G-4FXMOS 4G-4FX 1 80 A142/AL28 6MXT-XTP 1.9 6G-6FIX 6G-6FIX 1 81 A126/AL48 6MXT-XTP 1.8 6G-6FIX 6G-6FIX 1 81 A126/AL48 6MXT-XTP 1.8 6G-6FIX 6G-6FIX 1 84 A125/AL4 6MXT-XTP 1.8 6G-6FIX 6G-6FIX 1 85 A185/AL72 12MMG 1.6 12GS-1 12GSIF-4 12GSIF-4 1 86 A138/AL53 8MXT-XTP 1.9 8G-8FIX 8G-8FIX 1 87 A157/AL18 8MXT-XTP 1.4 8G-8FIX 8G-8FIX 1 <td< td=""><td>75</td><td>B29/B31</td><td>16MXG</td><td>2.1</td><td></td><td>16GS1F-4</td><td>16GS-16FJX</td><td>16GS1F-4</td><td>1</td><td></td></td<>	75	B29/B31	16MXG	2.1		16GS1F-4	16GS-16FJX	16GS1F-4	1	
A	76	B14/B12	6MXT-XTP	0.6			6G-6FJX90M		1	
78 BZ/G-99 4MXT-XTP 1.2 4G-4F, MOSS 4G-4F, MS 1 1 79 G48/B16 4MXT-XTP 1.5 4G-4F, MOSS 4G-4F, MS 1 1 80 A142/A128 6MXT-XTP 1.8 6G-6F, M 6G-6F, M 1 1 81 A126/A148 6MXT-XTP 1.8 6G-6F, M 6G-6F, M 1 1 82 A116/A150 6MXT-XTP 1.8 6G-6F, M 6G-6F, M 1 1 84 A125/A14 6MXT-XTP 1.8 6G-6F, M 6G-6F, M 1 1 84 A175/A172 12MXG 1.6 12GS-12F, M 12GS1F-4 12GS1F-4 12GS1F-4 1 1 1 85 A185/A174 12MXG 2.7 12GSF-1 12GS1F-4 12GS1F-4 1 1 1 86 A138/A153 8MXT-XTP 1.9 8G-8F, M 8G-8F, M 1 1 1 1 87 A157/A118	77	B17/G50	4MXT-XTP	1.5			4G-4FJX90S		1	
79 G48/B16 4MXT-XTP 1.5 4G- 4F,1900S 4G-4F,1X 1 1 80 A142/A128 6MXT-XTP 1.9 6G-6F,1X 6G-6F,1X 1 1 81 A126/A148 6MXT-XTP 1.8 6G-6F,1X 6G-6F,1X 1 1 82 A116/A150 6MXT-XTP 1.8 6G-6F,1X 6G-6F,1X 1 1 84 A15/A14 6MXT-XTP 1.6 12GS-1 12GS,1F-4 12GS-1F-4 1 1 85 A185/A174 12MXG 1.6 12GS-1 12GS-1F-4 12GS-1F-4 1	78	B27/G49	4MXT-XTP	1.2	4G-		4G-4FJX		1	
81 A126/A148 6MXT-XTP 1.8 6G-6FJX 1 1 82 A116/A150 6MXT-XTP 1.8 6G-6FJX 6G-6FJX 1 83 A125/A14 6MXT-XTP 2.05 6G-6FJX 6G-6FJX 1 84 A175/A172 12MXG 1.6 12GS-12FJX 12GS1F-4 1 85 A185/A174 12MXG 2.7 12GS-12FJX 12GS1F-4 1 86 A138/A153 8MXT-XTP 1.9 8G-8FJX 8G-8FJX 1 87 A157/A118 8MXT-XTP 1.4 8G-8FJX 8G-8FJX 1 89 A156/A2137 8MXT-XTP 1.85 8G-8FJX 8G-8FJX 1 89 A156/A2137 8MXT-XTP 1.7 6G-6FJX 6G-6FJX 1 90 A129/A157 6MXT-XTP 1.7 6G-6FJX 8G-8FJX 1 91 A159/A123 8MXT-XTP 1.45 8G-8FJX 8G-8FJX 1 92 A	79	G48/B16	4MXT-XTP	1.5	4G-		4G-4FJX		1	
82 A116/A150 6MXT-XTP 1.8 6G-6FJX 6G-6FJX 1 83 A125/A14 6MXT-XTP 2.05 6G-6FJX 1 1 84 A175/A172 12MXG 1.6 12GS-12FJX 12GS-12FJX 12GS-12FJX 12GSIF-4 1 85 A185/A174 12MXG 2.7 12GS-12FJX 12GSIF-4 12GS-12FJX 12GSIF-4 1 86 A138/A153 8MXT-XTP 1.9 8G-8FJX 8G-8FJX 1 1 87 A157/A118 8MXT-XTP 1.4 8G-8FJX 8G-8FJX 1 1 88 A152/ 6MXT-XTP 1.2 6G-6FJX 8G-8FJX 1 1 89 A156/A2137 8MXT-XTP 1.7 6G-6FJX 8G-8FJX 1 1 90 A129/A157 6MXT-XTP 1.7 6G-6FJX 8G-8FJX 1 1 91 A156/A123 8MXT-XTP 1.65 6G-6FJX 8G-8FJX 1 1 <t< td=""><td>80</td><td>A142/A128</td><td>6MXT-XTP</td><td>1.9</td><td>6G-6FJX</td><td></td><td>6G-6FJX</td><td></td><td>1</td><td></td></t<>	80	A142/A128	6MXT-XTP	1.9	6G-6FJX		6G-6FJX		1	
83 A125/A14 6MXT-XTP 2.05 6G-6FJX 6G-6FJX 1 84 A175/A172 12MXG 1.6 12GS-12FJX 12GSI-4 1 85 A185/A174 12MXG 2.7 12GS-12FJX 12GS1F-4 1 86 A138/A153 8MXT-XTP 1.9 8G-8FJX 8G-8FJX 1 87 A157/A118 8MXT-XTP 1.4 8G-8FJX 8G-8FJX 1 88 A152/ 6MXT-XTP 1.4 8G-8FJX 8G-8FJX 1 89 A156/A2137 8MXT-XTP 1.75 6G-6FJX 6G-6FJX 1 90 A129/A157 6MXT-XTP 1.7 6G-6FJX 8G-8FJX 1 91 A156/A2137 8MXT-XTP 1.45 8G-8FJX 8G-8FJX 1 91 A159/A123 8MXT-XTP 1.65 8G-8FJX 8G-8FJX 1 92 A144/A121 6MXT-XTP 1.95 6G-6FJX 6G-6FJX 1 94 <t< td=""><td>81</td><td>A126/A148</td><td>6MXT-XTP</td><td>1.8</td><td>6G-6FJX</td><td></td><td>6G-6FJX</td><td></td><td>1</td><td></td></t<>	81	A126/A148	6MXT-XTP	1.8	6G-6FJX		6G-6FJX		1	
84 A175/A172 12MXG 1.6 12GS-12FIX 12FIX 12FIX 12GS1F-4 12GS1F-4 1 1 85 A185/A174 12MXG 2.7 12GS-12FIX 	82	A116/A150	6MXT-XTP	1.8	6G-6FJX		6G-6FJX		1	
S	83	A125/A14	6MXT-XTP	2.05	6G-6FJX		6G-6FJX		1	
12F3X	84	A175/A172	12MXG	1.6		12GS1F-4		12GS1F-4	1	
87 A157/A118 8MXT-XTP 1.4 8G-8FJX 8G-8FJX 1 88 A152/ 6MXT-XTP 2 6G-6FJX 6G-6FJX90M 1 89 A156/A2137 8MXT-XTP 1.85 8G-8FJX 8G-8FJX 1 90 A129/A157 6MXT-XTP 1.7 6G-6FJX 6G-6FJX 1 91 A159/A123 8MXT-XTP 1.45 8G-8FJX 8G-8FJX 1 92 A144/A121 6MXT-XTP 1.65 6G-6FJX 6G-6FJX 1 93 A179/A177 8MXT-XTP 0.35 8G-8FJX 8G-8FJX 1 94 A1568A140 6MXT-XTP 1.9 6G-6FJX 6G-6FJX 1 95 A136/A154 8MXT-XTP 1.9 8G-8FJX 8G-8FJX 1 96 A155/A133 8MXT-XTP 1.75 8G-8FJX 8G-8FJX 1 97 A164/A165 8MXT-XTP 1.9 6G-6FJX 6G-6FJX 1 98 A151 6MXT-XTP 1.9 6G-6FJX 6G-6FJX 1 1	85	,	12MXG	2.7	12FJX	12GS1F-4	12FJX90M	12GS1F-4	1	
88 A152/ 6MXT-XTP 2 6G-6FJX 6G-6FJX90M 1 89 A156/A2137 8MXT-XTP 1.85 8G-8FJX 8G-8FJX 1 90 A129/A157 6MXT-XTP 1.7 6G-6FJX 6G-6FJX 1 91 A159/A123 8MXT-XTP 1.45 8G-8FJX 8G-8FJX 1 92 A144/A121 6MXT-XTP 1.65 6G-6FJX 6G-6FJX 1 93 A179/A177 8MXT-XTP 0.35 8G-8FJX 8G-8FJXOS 1 94 A1568A140 6MXT-XTP 1.9 6G-6FJX 6G-6FJX 1 95 A136/A154 8MXT-XTP 1.9 8G-8FJX 8G-8FJX 1 96 A155/A133 8MXT-XTP 1.75 8G-8FJX 8G-8FJX 1 97 A164/A165 8MXT-XTP 0.45 8G-8FJX 8G-8FJXOS 1 109 A120/A187 6MXT-XTP 0.75 6G-6FJX 6G-6FJX 1 100	86		8MXT-XTP	1.9			8G-8FJX		1	
89 A156/A2137 8MXT-XTP 1.85 8G-8FJX 8G-8FJX 1 90 A129/A157 6MXT-XTP 1.7 6G-6FJX 6G-6FJX 1 91 A159/A123 8MXT-XTP 1.45 8G-8FJX 8G-8FJX 1 92 A144/A121 6MXT-XTP 1.65 6G-6FJX 6G-6FJX 1 93 A179/A177 8MXT-XTP 0.35 8G-8FJX 8G-8FJXOS 1 94 A1568A140 6MXT-XTP 1.9 6G-6FJX 6G-6FJX 1 95 A136/A154 8MXT-XTP 1.9 8G-8FJX 8G-8FJX 1 96 A155/A133 8MXT-XTP 1.75 8G-8FJX 8G-8FJX 1 97 A164/A165 8MXT-XTP 1.9 6G-6FJX 8G-8FJX 1 98 A151 6MXT-XTP 1.9 6G-6FJX 6G-6FJX 1 100 A181/A180 8MXT-XTP 0.75 6G-6FJX 8G-8FJX90S 1 101	87	A157/A118	8MXT-XTP	1.4	8G-8FJX		8G-8FJX		1	
90 A129/A157 6MXT-XTP 1.7 6G-6FJX 6G-6FJX 1 91 A159/A123 8MXT-XTP 1.45 8G-8FJX 8G-8FJX 1 92 A144/A121 6MXT-XTP 1.65 6G-6FJX 6G-6FJX 1 93 A179/A177 8MXT-XTP 0.35 8G-8FJX 8G-8FJX90S 1 94 A1568A140 6MXT-XTP 1.9 6G-6FJX 6G-6FJX 1 95 A136/A154 8MXT-XTP 1.9 8G-8FJX 8G-8FJX 1 96 A155/A133 8MXT-XTP 1.75 8G-8FJX 8G-8FJX 1 97 A164/A165 8MXT-XTP 1.9 6G-6FJX 6G-6FJX90M 1 98 A151 6MXT-XTP 1.9 6G-6FJX 6G-6FJX 1 100 A181/A180 8MXT-XTP 0.75 6G-6FJX 6G-6FJX 1 101 A176/A173 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 102	88	A152/	6MXT-XTP	2	6G-6FJX		6G-6FJX90M		1	
91 A159/A123 8MXT-XTP 1.45 8G-8FJX 8G-8FJX 1 92 A144/A121 6MXT-XTP 1.65 6G-6FJX 6G-6FJX 1 93 A179/A177 8MXT-XTP 0.35 8G-8FJX 8G-8FJX 1 94 A1568A140 6MXT-XTP 1.9 6G-6FJX 6G-6FJX 1 95 A136/A154 8MXT-XTP 1.75 8G-8FJX 8G-8FJX 1 96 A155/A133 8MXT-XTP 1.75 8G-8FJX 8G-8FJX 1 97 A164/A165 8MXT-XTP 0.45 8G-8FJX 8G-8FJX 1 98 A151 6MXT-XTP 0.45 8G-8FJX 8G-8FJX90S 1 99 A120/A187 6MXT-XTP 0.75 6G-6FJX 6G-6FJX 1 100 A181/A180 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90S 1 101 A176/A173 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 102 <td>89</td> <td>A156/A2137</td> <td>8MXT-XTP</td> <td>1.85</td> <td>8G-8FJX</td> <td></td> <td>8G-8FJX</td> <td></td> <td>1</td> <td></td>	89	A156/A2137	8MXT-XTP	1.85	8G-8FJX		8G-8FJX		1	
92 A144/A121 6MXT-XTP 1.65 6G-6FJX 6G-6FJX 1 93 A179/A177 8MXT-XTP 0.35 8G-8FJX 8G-8FJX90S 1 94 A1568A140 6MXT-XTP 1.9 6G-6FJX 6G-6FJX 1 95 A136/A154 8MXT-XTP 1.9 8G-8FJX 8G-8FJX 1 96 A155/A133 8MXT-XTP 1.75 8G-8FJX 8G-8FJX 1 97 A164/A165 8MXT-XTP 0.45 8G-8FJX 8G-8FJX90S 1 98 A151 6MXT-XTP 1.9 6G-6FJX 6G-6FJX 1 99 A120/A187 6MXT-XTP 0.75 6G-6FJX 6G-6FJX 1 100 A181/A180 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90S 1 101 A176/A173 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 102 A168/A16 8MXT-XTP 0.37 8G-8FJX 8G-8FJX90S 1 10	90	A129/A157	6MXT-XTP	1.7	6G-6FJX		6G-6FJX		1	
93 A179/A177 8MXT-XTP 0.35 8G-8FJX 8G-8FJX90S 1 94 A1568A140 6MXT-XTP 1.9 6G-6FJX 6G-6FJX 1 95 A136/A154 8MXT-XTP 1.9 8G-8FJX 8G-8FJX 1 96 A155/A133 8MXT-XTP 1.75 8G-8FJX 8G-8FJX 1 97 A164/A165 8MXT-XTP 0.45 8G-8FJX 8G-8FJX90S 1 98 A151 6MXT-XTP 1.9 6G-6FJX 6G-6FJX90M 1 99 A120/A187 6MXT-XTP 0.75 6G-6FJX 6G-6FJX 1 100 A181/A180 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90S 1 101 A176/A173 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 102 A168/A16 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 103 A170/A171 8MXT-XTP 0.37 8G-8FJX 8G-8FJX0L 1	91	A159/A123	8MXT-XTP	1.45	8G-8FJX		8G-8FJX		1	
94 A1568A140 6MXT-XTP 1.9 6G-6FJX 6G-6FJX 1 95 A136/A154 8MXT-XTP 1.9 8G-8FJX 8G-8FJX 1 96 A155/A133 8MXT-XTP 1.75 8G-8FJX 8G-8FJX 1 97 A164/A165 8MXT-XTP 0.45 8G-8FJX 8G-8FJX90S 1 98 A151 6MXT-XTP 1.9 6G-6FJX 6G-6FJX 1 99 A120/A187 6MXT-XTP 0.75 6G-6FJX 6G-6FJX 1 100 A181/A180 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90S 1 101 A176/A173 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 102 A168/A16 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 103 A170/A171 8MXT-XTP 0.37 8G-8FJX 8G-8FJX90L 1 104 A166/A167 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90L 1 105 A183/A182 8MXT-XTP 0.42 6G-6FJX 6G-6FJX 1	92	A144/A121	6MXT-XTP	1.65	6G-6FJX		6G-6FJX		1	
95 A136/A154 8MXT-XTP 1.9 8G-8FJX 8G-8FJX 1 96 A155/A133 8MXT-XTP 1.75 8G-8FJX 8G-8FJX 1 97 A164/A165 8MXT-XTP 0.45 8G-8FJX 8G-8FJX90S 1 98 A151 6MXT-XTP 1.9 6G-6FJX 6G-6FJX 1 99 A120/A187 6MXT-XTP 0.75 6G-6FJX 6G-6FJX 1 100 A181/A180 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90S 1 101 A176/A173 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 102 A168/A16 8MXT-XTP 0.37 8G-8FJX 8G-8FJX90S 1 103 A170/A171 8MXT-XTP 0.37 8G-8FJX 8G-8FJX90S 1 104 A166/A167 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90S 1 105 A183/A182 8MXT-XTP 0.45 8G-8FJX 8G-8FJX90S 1	93	A179/A177	8MXT-XTP	0.35	8G-8FJX		8G-8FJX90S		1	
96 A155/A133 8MXT-XTP 1.75 8G-8FJX 8G-8FJX 1 97 A164/A165 8MXT-XTP 0.45 8G-8FJX 8G-8FJXOS 1 98 A151 6MXT-XTP 1.9 6G-6FJX 6G-6FJXOM 1 99 A120/A187 6MXT-XTP 0.75 6G-6FJX 6G-6FJX 1 100 A181/A180 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90S 1 101 A176/A173 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 102 A168/A16 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 103 A170/A171 8MXT-XTP 0.37 8G-8FJX 8G-8FJX90L 1 104 A166/A167 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90L 1 105 A183/A182 8MXT-XTP 0.45 8G-8FJX 8G-8FJX 1 106 A189/A115 6MXT-XTP 0.42 6G-6FJX 6G-6FJX 1	94	A1568A140	6MXT-XTP	1.9	6G-6FJX		6G-6FJX		1	
97 A164/A165 8MXT-XTP 0.45 8G-8FJX 8G-8FJX90S 1 98 A151 6MXT-XTP 1.9 6G-6FJX 6G-6FJX 1 99 A120/A187 6MXT-XTP 0.75 6G-6FJX 6G-6FJX 1 100 A181/A180 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90S 1 101 A176/A173 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 102 A168/A16 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 103 A170/A171 8MXT-XTP 0.37 8G-8FJX 8G-8FJX90L 1 104 A166/A167 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90S 1 105 A183/A182 8MXT-XTP 0.45 8G-8FJX 8G-8FJX90S 1 106 A189/A115 6MXT-XTP 0.42 6G-6FJX 6G-6FJX 1 107 A117/A190 6MXT-XTP 0.42 6G-6FJX 6G-6FJX90M 1 109 A135/A160 8MXT-XTP 1.5 8G-8FJX 8G-8FJX	95	A136/A154	8MXT-XTP	1.9	8G-8FJX		8G-8FJX		1	
98	96	A155/A133	8MXT-XTP	1.75	8G-8FJX		8G-8FJX		1	
99 A120/A187 6MXT-XTP 0.75 6G-6FJX 6G-6FJX 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	97	A164/A165	8MXT-XTP	0.45	8G-8FJX		8G-8FJX90S		1	
100 A181/A180 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90S 1 101 A176/A173 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 102 A168/A16 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 103 A170/A171 8MXT-XTP 0.37 8G-8FJX 8G-8FJX90L 1 104 A166/A167 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90S 1 105 A183/A182 8MXT-XTP 0.45 8G-8FJX 8G-8FJX90L 1 106 A189/A115 6MXT-XTP 0.42 6G-6FJX 6G-6FJX 1 107 A117/A190 6MXT-XTP 0.42 6G-6FJX 6G-6FJX90M 1 108 A188/A122 6MXT-XTP 0.85 6G-6FJX 6G-6FJX90M 1 109 A135/A160 8MXT-XTP 1.5 8G-8FJX 8G-8FJX 1 110 A131/A158 8MXT-XTP 1.5 8G-8FJX 8G-8FJX 1 111 A163/A145 6MXT-XTP 6 6G-6FJX 6G-6FJX	98	A151	6MXT-XTP	1.9	6G-6FJX		6G-6FJX90M		1	
101 A176/A173 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 102 A168/A16 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 103 A170/A171 8MXT-XTP 0.37 8G-8FJX 8G-8FJX90L 1 104 A166/A167 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90S 1 105 A183/A182 8MXT-XTP 0.45 8G-8FJX 8G-8FJX90L 1 106 A189/A115 6MXT-XTP 0.42 6G-6FJX 6G-6FJX 1 107 A117/A190 6MXT-XTP 0.42 6G-6FJX 6G-6FJX90M 1 108 A188/A122 6MXT-XTP 0.85 6G-6FJX 6G-6FJX90M 1 109 A135/A160 8MXT-XTP 1.5 8G-8FJX 8G-8FJX 1 110 A131/A158 8MXT-XTP 1.5 8G-8FJX 8G-6FJX 1 111 A163/A145 6MXT-XTP 6.6 6G-6FJX 6G-6FJX 1 112 A141/C18 6MXT-XTP 6 6G-6FJX 6G-6FJX <td< td=""><td>99</td><td>A120/A187</td><td>6MXT-XTP</td><td>0.75</td><td>6G-6FJX</td><td></td><td>6G-6FJX</td><td></td><td>1</td><td></td></td<>	99	A120/A187	6MXT-XTP	0.75	6G-6FJX		6G-6FJX		1	
102 A168/A16 8MXT-XTP 0.33 8G-8FJX 8G-8FJX90S 1 103 A170/A171 8MXT-XTP 0.37 8G-8FJX 8G-8FJX90L 1 104 A166/A167 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90S 1 105 A183/A182 8MXT-XTP 0.45 8G-8FJX 8G-8FJX90L 1 106 A189/A115 6MXT-XTP 0.42 6G-6FJX 6G-6FJX 1 107 A117/A190 6MXT-XTP 0.42 6G-6FJX 6G-6FJX90M 1 108 A188/A122 6MXT-XTP 0.85 6G-6FJX 6G-6FJX90M 1 109 A135/A160 8MXT-XTP 1.5 8G-8FJX 8G-8FJX 1 110 A131/A158 8MXT-XTP 1.5 8G-8FJX 8G-8FJX 1 111 A163/A145 6MXT-XTP 1.8 6G-6FJX 6G-6FJX 1 112 A141/C18 6MXT-XTP 6 6G-6FJX 6G-6FJX 1	100	A181/A180	8MXT-XTP	0.4	8G-8FJX		8G-8FJX90S		1	
103 A170/A171 8MXT-XTP 0.37 8G-8FJX 8G-8FJX90L 1 104 A166/A167 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90S 1 105 A183/A182 8MXT-XTP 0.45 8G-8FJX 8G-8FJX90L 1 106 A189/A115 6MXT-XTP 0.42 6G-6FJX 6G-6FJX 1 107 A117/A190 6MXT-XTP 0.42 6G-6FJX 6G-6FJX90M 1 108 A188/A122 6MXT-XTP 0.85 6G-6FJX 6G-6FJX90M 1 109 A135/A160 8MXT-XTP 1.5 8G-8FJX 8G-8FJX 1 110 A131/A158 8MXT-XTP 1.5 8G-8FJX 8G-8FJX 1 111 A163/A145 6MXT-XTP 1.8 6G-6FJX 6G-6FJX 1 112 A141/C18 6MXT-XTP 6 6G-6FJX 6G-6FJX90M 1	101	A176/A173	8MXT-XTP	0.33	8G-8FJX		8G-8FJX90S		1	
104 A166/A167 8MXT-XTP 0.4 8G-8FJX 8G-8FJX90S 1 105 A183/A182 8MXT-XTP 0.45 8G-8FJX 8G-8FJX90L 1 106 A189/A115 6MXT-XTP 0.42 6G-6FJX 6G-6FJX 1 107 A117/A190 6MXT-XTP 0.42 6G-6FJX 6G-6FJX90M 1 108 A188/A122 6MXT-XTP 0.85 6G-6FJX 6G-6FJX90M 1 109 A135/A160 8MXT-XTP 1.5 8G-8FJX 8G-8FJX 1 110 A131/A158 8MXT-XTP 1.5 8G-8FJX 8G-8FJX 1 111 A163/A145 6MXT-XTP 1.8 6G-6FJX 6G-6FJX 1 112 A141/C18 6MXT-XTP 6 6G-6FJX 6G-6FJX90M 1	102	A168/A16	8MXT-XTP	0.33	8G-8FJX		8G-8FJX90S		1	
105 A183/A182 8MXT-XTP 0.45 8G-8FJX 8G-8FJX90L 1 106 A189/A115 6MXT-XTP 0.42 6G-6FJX 6G-6FJX 1 107 A117/A190 6MXT-XTP 0.42 6G-6FJX 6G-6FJX90M 1 108 A188/A122 6MXT-XTP 0.85 6G-6FJX 6G-6FJX90M 1 109 A135/A160 8MXT-XTP 1.5 8G-8FJX 8G-8FJX 1 110 A131/A158 8MXT-XTP 1.5 8G-8FJX 8G-8FJX 1 111 A163/A145 6MXT-XTP 1.8 6G-6FJX 6G-6FJX 1 112 A141/C18 6MXT-XTP 6 6G-6FJX 6G-6FJX90M 1	103	A170/A171	8MXT-XTP	0.37	8G-8FJX		8G-8FJX90L		1	
106 A189/A115 6MXT-XTP 0.42 6G-6FJX 1 107 A117/A190 6MXT-XTP 0.42 6G-6FJX 6G-6FJX90M 1 108 A188/A122 6MXT-XTP 0.85 6G-6FJX 6G-6FJX90M 1 109 A135/A160 8MXT-XTP 1.5 8G-8FJX 8G-8FJX 1 110 A131/A158 8MXT-XTP 1.5 8G-8FJX 1 1 111 A163/A145 6MXT-XTP 1.8 6G-6FJX 6G-6FJX 1 112 A141/C18 6MXT-XTP 6 6G-6FJX 6G-6FJX90M 1	104	A166/A167	8MXT-XTP	0.4	8G-8FJX		8G-8FJX90S		1	
107 A117/A190 6MXT-XTP 0.42 6G-6FJX 6G-6FJX90M 1 108 A188/A122 6MXT-XTP 0.85 6G-6FJX 6G-6FJX90M 1 109 A135/A160 8MXT-XTP 1.5 8G-8FJX 8G-8FJX 1 110 A131/A158 8MXT-XTP 1.5 8G-8FJX 1 1 111 A163/A145 6MXT-XTP 1.8 6G-6FJX 6G-6FJX 1 1 112 A141/C18 6MXT-XTP 6 6G-6FJX 6G-6FJX90M 1 1	105	A183/A182	8MXT-XTP	0.45	8G-8FJX		8G-8FJX90L		1	
108 A188/A122 6MXT-XTP 0.85 6G-6FJX 6G-6FJX90M 1 109 A135/A160 8MXT-XTP 1.5 8G-8FJX 8G-8FJX 1 110 A131/A158 8MXT-XTP 1.5 8G-8FJX 1 1 111 A163/A145 6MXT-XTP 1.8 6G-6FJX 6G-6FJX 1 112 A141/C18 6MXT-XTP 6 6G-6FJX 6G-6FJX90M 1	106	A189/A115	6MXT-XTP	0.42	6G-6FJX		6G-6FJX		1	
109 A135/A160 8MXT-XTP 1.5 8G-8FJX 1 110 A131/A158 8MXT-XTP 1.5 8G-8FJX 1 111 A163/A145 6MXT-XTP 1.8 6G-6FJX 6G-6FJX 1 112 A141/C18 6MXT-XTP 6 6G-6FJX 6G-6FJX90M 1	107	A117/A190	6MXT-XTP	0.42	6G-6FJX		6G-6FJX90M		1	
110 A131/A158 8MXT-XTP 1.5 8G-8FJX 1 111 A163/A145 6MXT-XTP 1.8 6G-6FJX 6G-6FJX 1 112 A141/C18 6MXT-XTP 6 6G-6FJX 6G-6FJX90M 1	108	A188/A122	6MXT-XTP	0.85	6G-6FJX		6G-6FJX90M		1	
111 A163/A145 6MXT-XTP 1.8 6G-6FJX 6G-6FJX 1 112 A141/C18 6MXT-XTP 6 6G-6FJX 6G-6FJX90M 1	109	A135/A160	8MXT-XTP	1.5	8G-8FJX		8G-8FJX		1	
112 A141/C18 6MXT-XTP 6 6G-6FJX 6G-6FJX90M 1	110	A131/A158	8MXT-XTP	1.5	8G-8FJX		8G-8FJX		1	
	111	A163/A145	6MXT-XTP	1.8	6G-6FJX		6G-6FJX		1	
113 A139/C21 6MXT-XTP 4.32 6G-6FJX 6G-6FJX90M 1	112	A141/C18	6MXT-XTP	6	6G-6FJX		6G-6FJX90M		1	
	113	A139/C21	6MXT-XTP	4.32	6G-6FJX		6G-6FJX90M		1	



114	A124/C20	6MXT-XTP	4.3	6G-6FJX		6G-6FJX90M		1	
115	C22/A127	6MXT-XTP	3.7	6G-6FJX		6G-6FJX90M		1	
116	A32/C19	6MXT-XTP	4.3	6G-6FJX		6G-6FJX90M		1	
117	A143/C17	6MXT-XTP	6	6G-6FJX		6G-6FJX90M		1	
118	C10/A101	6MXT-XTP	3.3	6G-6FJX		6G-6FJX90M		1	
119	A104/C12	6MXT-XTP	3.1	6G-6FJX		6G-6FJX90M		1	
120	A70/C7	6MXT-XTP	4.3	6G-6FJX		6G-6FJX90M		1	
121	A67/C8	6MXT-XTP	4.3	6G-6FJX		6G-6FJX90M		1	
122	A79/C6	6MXT-XTP	4.4	6G-6FJX		6G-6FJX		1	
123	A81/C11D56/D2 4	6MXT-XTP	3.8	6G-6FJX		6G-6FJX		1	
124	D56/D24	8MXT-XTP	1.65	8G-8FJX		8G-8FJX		1	
125	D70/D67	6MXT-XTP	0.4	6G-6FJX		6G-6FJX90M		1	
126	D58/D74	8MXT-XTP	0.75	8G-8FJX		8G-8FJX		1	
127	D75/D63	6MXT-XTP	0.45	6G-6FJX		6G-6FJX90M		1	
128	D37/D26	6MXT-XTP	0.85	6G-6FJX		6G-6FJX90L		1	
129	D8/D7	12MXG	0.95	12GS- 12FJX	12GS1F-4	12GS-12FJX	12GS1F-4	1	
130	D20/D41	8MXT-XTP	1.45	8G-8FJX		8G-8FJX		1	
131	D68/D48	8MXT-XTP	1	8G-8FJX		8G-8FJX		1	
132	D9/D2	12MXG	2.1	12GS- 12FJX	12GS1F-4	12GS-12FJX	12GS1F-4	1	
133	D10/D3	12MXG	2.2	12GS- 12FJX	12GS1F-4	12GS-12FJX	12GS1F-4	1	
134	D52/D82	12MXG	1.9	12GS- 12FJX90L	12GS1F-4	12GS- 12FJX45	12GS1F-4	1	180
135	D21/D53	8MXT-XTP	1.75	8G-8FJX		8G-8FJX		1	
136	D11/D1	12MXG	2.3	12GS- 12FJX	12GS1F-4	12GS-12FJX	12GS1F-4	1	
137	D83/D14	12MXG	1.7	12GS- 12FJX	12GS1F-4	12GS- 12FJX90M	12GS1F-4	1	
138	D81/D51	12MXG	1.3	12GS- 12FJX	12GS1F-4	12GS- 12FJX90M	12GS1F-4	1	
139	D33/D31	6MXT-XTP	0.65	6G-6FJX		6G-6FJX90M		1	
140	D29/D40	6MXT-XTP	0.75	6G-6FJX		6G-6FJX		1	
141	D39/D30	6MXT-XTP	0.85	6G-6FJX		6G-6FJX90L		1	
142	D32/D34	6MXT-XTP	0.46	6G-6FJX		6G-6FJX		1	
143	D46/D64	8MXT-XTP	0.85	8G-8FJX		8G-8FJX		1	
144	D86/D90	6MXT-XTP	0.63	6G-6FJX		6G-6FJX90M		1	
145	0	12MXG	1.1	12GS- 12FJX	12GS1F-4	12GS- 12FJX90M	12GS1F-4	1	
146	D12/D13	12MXG	0.9	12GS- 12FJX	12GS1F-4	12GS- 12FJX90M	12GS1F-4	1	
147	D16/D50	16MXG	0.72	16GS- 16FJX	16GS1F-4	16GS- 16FJX90M	16GS1F-4	1	
148	D76/D45	8MXT-XTP	0.65	8G-8FJX		8G-8FJX		1	
149	D47/D72	8MXT-XTP	0.9	8G-8FJX		8G-8FJX		1	
150	D73/D57	8MXT-XTP	0.75	8G-8FJX		8G-8FJX		1	
151	D79/D62	6MXT-XTP	0.63	6G-6FJX		6G-6FJX90M		1	



152	D69/D66	6MXT-XTP	0.5	6G-6FJX		6G-6FJX90M		1	
153	D97/D84	6MXT-XTP	0.73	6G-6FJX		6G-6FJX		1	
154	D77/D61	6MXT-XTP	0.7	6G-6FJX		6G-6FJX90L		1	
155	D35/D28	6MXT-XTP	0.7	6G- 6FJX90M		6G-6FJX90M		1	0
156	D106/D107	6MXT-XTP	0.6	6G-6FJX		6G-6FJX90M		1	
157	D36/D27	6MXT-XTP	0.65	6G-6FJX		6G-6FJX90M		1	
158	D87/D39	6MXT-XTP	0.5	6G-6FJX		6G-6FJX		1	
159	D71/D65	6MXT-XTP	0.65	6G-6FJX		6G-6FJX90M		1	
160	D95/D94	6MXT-XTP	0.5	6G-6FJX		6G-6FJX		1	
161	D69/D99	6MXT-XTP	0.63	6G-6FJX		6G-6FJX90M		1	
162	D88/D89	6MXT-XTP	0.75	6G-6FJX		6G-6FJX		1	
163	D110/D109	6MXT-XTP	0.75	6G-6FJX		6G-6FJX		1	
164	D100/D101	6MXT-XTP	0.5	6G-6FJX		6G-6FJX		1	
165	D104/D105	6MXT-XTP	0.5	6G-6FJX		6G-6FJX		1	
166	D118/D119	4MXT-XTP	0.5	4G- 4FJX90S		4G-4FJX90S		1	
167	D91/D92	6MXT-XTP	9.9	6G-6FJX		6G-6FJX90L		1	
168	D113/D112	6MXT-XTP	0.75	6G-6FJX		6G-6FJX		1	
169	D98/D85	6MXT-XTP	0.85	6G-6FJX		6G-6FJX90L		1	
170	D108/D111	6MXT-XTP	0.9	6G-6FJX		6G-6FJX90L		1	
171	D54/D23	8MXT-XTP	1.65	8G-8FJX		8G-8FJX		1	
172	D122/D124	6MXT-XTP	0.4	6G-6FJX		6G-6FJX		1	
173	D78/D69	8MXT-XTP	1.1	8G-8FJX		8G-8FJX90M		1	
174	D18/D43	8MXT-XTP	1.65	8G-8FJX		8G-8FJX		1	
175	D49/D15	16MXG	0.65	16GS- 16FJX	16GS1F-4	16GS- 16FJX90M	16GS1F-4	1	
176	D102/D103	6MXT-XTP	0.65	6G-6FJX		6G-6FJX90M		1	
177	D128/D127	12MXG	1.3	12GS- 12FJX	12GS1F-4	12GS- 12FJX90M	12GS1F-4	1	
178	D129/D123	12MXG	1.2	12GS- 12FJX	12GS1F-4	12GS- 12FJX90M	12GS1F-4	1	
179	D120/D121	6MXT-XTP	0.6	6G-6FJX		6G-6FJX		1	
180	D114/D115	6MXT-XTP	1	6G- 6FJX90M		6G-6FJX90L		1	
181	D117D116	4MXT-XTP	0.56	4G-4FJX		4G-4FJX		1	
182	D60/D80	8MXT-XTP	1	8G-8FJX		8G-8FJX90M		1	
183	D25/D38	6MXT-XTP	0.7	6G-6FJX		6G-6FJX		1	
184	D126/D125	12MXG	1.3	12GS- 12FJX	12GS1F-4	12GS- 12FJX90M	12GS1F-4	1	
185	D17/D44	8MXT-XTP	1.65	8G-8FJX		8G-8FJX		1	
186	D22/D55	8MXT-XTP	1.8	8G-8FJX		8G-8FJX		1	
187	D19/D42	8MXT-XTP	1.5	8G-8FJX		8G-8FJX		1	
188	A2/	8MXT-XTP	1.9	8G-8FJX		8G-8MP		2	
189	A3	8MXT-XTP	1.9	8G-8FJX		8G-8MP		2	
190	A1	8MXT-XTP	1.9	8G-8FJX		8G-8MP		2	



191	A4	8MXT-XTP	1.9	8G-8FJX		8G-8MP		2	
192	A5	6MXT-XTP	1.9	6G-6FJX		6G-6MP		2	
193	A13	6MXT-XTP	4.2	6G- 6FJX90L		6G-6FJX		1	
194	A14	6MXT-XTP	4.2	6G- 6FJX90L		6G-6FJX		1	
195	A11	6MXT-XTP	4.2	6G- 6FJX90L		6G-6FJX		1	
196	A104/C12	6MXT-XTP	4.2	6G- 6FJX90L		6G-6FJX		1	
197	A12	6MXT-XTP	4.2	6G- 6FJX90L		6G-6FJX		1	
198	A9	6MXT-XTP	4.2	6G-6FJX		6G-6FJX		1	
199	A8	8MXT-XTP	4.2	8G-8FJX		8G-8FJX		1	
200	A15	6MXT-XTP	5.5	6G-6FJX		6G-6MP		1	
201	A16	6MXT-XTP	5.5	6G-6FJX		6G-6MP		1	
202	C23/A162	8MXT-XTP	6.6	8G-8FJX		8G-8FJX90M		1	
203	C25/A161	6MXT-XTP	6.6	6G-6FJX		6G-6FJX90M		1	
204	СВО	6MXT-XTP	1.5	6G-6MP		6G-6MP		1	
205	C29	6MXT-XTP	1.5	6G-8MP		6G-6MP		1	
206	A184/C26	8MXT-XTP	4.3	8G-8FJX		8G-8FJX		1	
207	C27/A18	8MXT-XTP	5.5	8G-8FJX		8G-8FJX90M		1	
208	A130/C28	6MXT-XTP	7.5	6G-6FJX		6G-6FJX		1	
209	C24/A34	6MXT-XTP	7.5	6G-6FJX		6G-6FJX		1	
210	1	6MXT-XTP	0.46	6G-6FJX		6G-6FJX		1	
211	1	8MXT-XTP	0.47	8G-8FJX		8G-8FJX		1	
212	1	8MXT-XTP	0.47	8G-8FJX		8G-8FJX		1	
213	1	8MXT-XTP	0.47	8G-8FJX		8G-8FJX		1	
214	2	6MXT-XTP	0.45	6G-6FJX		6G-6FJX		2	
215	2	8MXT-XTP	0.42	8G-8FJX		8G-8FJX		2	
216	2	8MXT-XTP	0.42	8G-8FJX		8G-8FJX		2	
217	2	8MXT-XTP	0.42	8G-8FJX		8G-8FJX		2	
218	2	12MXG	0.46	12GS- 12FJX	12GS1F-4	12GS-12FJX	12GS1F-4	2	
219	2	12MXG	0.55	12GS- 12FJX	12GS1F-4	12GS-12FJX	12GS1F-4	2	
220	2	12MXG	0.66	12GS- 12FJX	12GS1F-4	12GS-12FJX	12GS1F-4	2	
221	3	6MXT-XTP	0.38	6G-6FJX		6G-6FJX		3	
222	3	8MXT-XTP	0.34	8G-8FJX		8G-8FJX		3	
223	3	8MXT-XTP	0.34	8G-8FJX		8G-8FJX		3	
224	3	8MXT-XTP	0.34	8G-8FJX		8G-8FJX		3	
225	4	6MXT-XTP	0.41	6G-6FJX		6G-6FJX		4	
226	4	8MXT-XTP	0.43	8G-8FJX		8G-8FJX		4	
227	4	8MXT-XTP	0.43	8G-8FJX		8G-8FJX		4	
228	4	8MXT-XTP	0.43	8G-8FJX		8G-8FJX		4	
229	5	6MXT-XTP	0.39	6G-6FJX		6G-6FJX		5	



230	5	8MXT-XTP	0.42	8G-8FJX		8G-8FJX		5
231	5	8MXT-XTP	0.42	8G-8FJX		8G-8FJX		5
232	5	8MXT-XTP	0.42	8G-8FJX		8G-8FJX		5
233	6	6MXT-XTP	0.42	6G-6FJX		6G-6FJX		6
234	6	8MXT-XTP	0.42	8G-8FJX		8G-8FJX		6
235	6	8MXT-XTP	0.42	8G-8FJX		8G-8FJX		6
236	6	8MXT-XTP	0.42	8G-8FJX		8G-8FJX		6
K-LO	CATION			l	l	L		l l
237	A10*/A108	24EFG6K	1.15	24GSP- 32FL	24GSP1F-	24GSP-24FJX	24GSP1F- 4	1
238	A114/A113	24EFG6K	1.8	24GSP- 32FL	24GSP1F-	24GSP-24FJX	24GSP1F-	1
239	C14/C13	16MXG	0.72	16GS- 16FJX	16GS1F-4	16GS- 16FJX90M	16GS1F-4	1
240	A111/A112	24EFG6K	1.4	24GSP- 32FL	24GSP1F- 4	24GSP-24FJX	24GSP1F- 4	1
241	C15/C16	16MXG	0.65	16GS- 16FJX	16GS1F-4	16GS- 16FJX90M	16GS1F-4	1
242	0	16MXG	3.4	16GS- 16FJX	16GS1F-4	16GS-16FJX	16GS1F-4	1
243	0	16MXG	4.3	16GS- 16FJX	16GS1F-4	16GS-16FJX	16GS1F-4	1
244	0	16MXG	2.8	16GS- 16FJX	16GS1F-4	16GS-16FJX	16GS1F-4	1
245	0	16MXG	1.7	16GS- 16FJX	16GS1F-4	16GS-16FJX	16GS1F-4	1
246	0	24EFG6K	1.5	24GSP- 32FL	24GSP1F- 4	24GSP-32FL	24GSP1F- 4	1
247	0	24EFG6K	1.25	24GSP- 32FL	24GSP1F- 4	24GSP-32FL	24GSP1F- 4	1
248	0	24EFG6K	1.4	24GSP- 24FJX	24GSP1F- 4	24GSP-24FJX	24GSP1F- 4	1
249	0	32G2	1.6	32GSP- 32FJX	32GSP1F- 4	32GSP-32FL	32GSP1F- 4	1
250	0	24EFG6K	3.1	24GSP- 24FJX	24GSP1F- 4	24GSP-24FJX	24GSP1F- 4	1
251	0	24EFG6K	1.8	24GSP- 24FJX	24GSP1F- 4	24GSP-24FJX	24GSP1F- 4	1
252	0	24EFG6K	2.6	24GSP- 24FJX	24GSP1F- 4	24GSP-32FL	24GSP1F- 4	1
253	0	SUPERVAC -32	1	24GSP- 24FJX	24GSP1F- 4	24GSP-32FL	24GSP1F- 4	1
254	0	SUPERVAC -32	2.6	24GSP- 24FJX	24GSP1F- 4	24GSP-32FL	24GSP1F- 4	1
255	0	SUPERVAC -32	3.4	24GSP- 24FJX	24GSP1F- 4	24GSP-32FL	24GSP1F- 4	1
256	G16/G18	6MXT-XTP	1.05	6G-6FJX		6G-6FJX90M		1
257	G36/G34	6MXT-XTP	0.6	6G-6FJX		6G-6FJX90M		1
258	G26/G22	6MXT-XTP	0.6	6G-6FJX		6G-6FJX90M		1
259	G37/G35	6MXT-XTP	75	6G-6FJX		6G-6FJX90M		1
260	0	6MXT-XTP	0.6	6G-6FJX		6G-6FJX90M		1
261	G40 /G42	6MXT-XTP	0.4	6G-6FJX		6G-6MJ		1
262	0	6MXT-XTP	0.6	6G-6FJX		6G-6FJX90M		1
263	0	6MXT-XTP	0.75	6G-6FJX		6G-6FJX90M		1
264	G41/G43	6MXT-XTP	0.4	6G-6FJX		6G-6MJ		1



265	G44/G45	6MXT-XTP	0.75	6G-6FJX		6G-6FJX90M		1	
266	G10	6MXT-XTP	0.75	6G-6FJX		6G-6FJX90M		1	
267	G46/G47	6MXT-XTP	0.6	6G-6FJX		6G-6FJX90M		1	
268	G8	6MXT-XTP	0.6	6G-6FJX		6G-6FJX90M		1	
269	G17/G15	6MXT-XTP	1.1	6G-6MJ		6G-6FJX90M		1	
270	0	6MXT-XTP	0.75	6G-6FJX		6G-6FJX90M		1	
271	523/G24	6MXT-XTP	0.75	6G-6FJX		6G-6FJX90M		1	
272	G14/G21	6MXT-XTP	0.37	6G-6FJX		6G-6FJX		1	
273	G20	6MXT-XTP	0.37	6G-6FJX		6G-6FJX		1	
274	0	6MXT-XTP	0.4	6G-6FJX		6G-6FJX		1	
275	0	6MXT-XTP	0.4	6G-6FJX		6G-6FJX		1	
276	G11	6MXT-XTP	1.05	6G-6FJX		6G-6FJX90M		1	
277	G12	6MXT-XTP	1.1	6G-6FJX		6G-6FJX90M		1	
278	G30/G32	6MXT-XTP	0.36	6G-6FJX		6G-6FJX		1	
279	G31/G33	6MXT-XTP	0.36	6G-6FJX		6G-6FJX		1	
280	G27/G29	6MXT-XTP	1.05	6G-6FJX		6G-6FJX90L		1	
281	G25/G28	6MXT-XTP	1.05	6G-6FJX		6G-6FJX90M		1	
282	G14/G21	6MXT-XTP	1.05	6G-6FJX		6G-6FJX90M		1	
283	G13	6MXT-XTP	1.05	6G-6FJX		6G-6FJX90M		1	
284	0	6MXT-XTP	0.36	6G-6FJX		6G-6FJX		2	
285	A43/D6	12MXG	15.2	12GS- 12FJX	12GS1F-4	12GS-12FJX	12GS1F-4	1	
286	A45/D5	12MXG	16.6	12GS- 12FJX	12GS1F-4	12GS-12FJX	12GS1F-4	1	
287	A37/D4	12MXG	16.6	12GS- 12FJX	12GS1F-4	12GS-12FJX	12GS1F-4	1	
288	A4	4MXT-XTP	0.47	4G-4FJX		4G-4FJX90S		1	
289	A5	4MXT-XTP	0.47	4G-4FJX		4G-4FJX90S		1	

Annex 1: electrical parts:

Item Code	Descreption
4018137	SOLENOID VLV, PIPE HANDLER, NOV
4018143	SNSR RECEIVER, PIPE HANDLER, NOV
4018115	JOYSTICK, SINGLE AXIS, 2SPDT SWITCH
4023867	SWITCH, PROXIMITY, TROUGH LANDED, PIPE CAT
4014931	PLC-WAGO, END MODULE, DLR CON NOV
4018075	BARRIER 2 CHL, PIPE HANDLER, NOV
4018156	MOTOR STARTER 1 FLA, NOV, 10513550-001
4018098	4 CH DIGI INPUT MOD, PIPE HANDLER, NOV
4018073	BATTERY, PIPE HANDLER, NOV
4018088	PSU 24VDC, 20A, SOLA, PIPE HANDLER, NOV
4018092	PROFIBUS, ELECTRONIC SOLENOID DRIVER
4018099	MODULE, ANALOG INPUT,2CH,4-20mA PIPE CAT
4018113	PUSH BUTTON, TYPE-800T-BLACK CLUSH CAP



4018133	TEMP SNSR, PIPE HANDLER, NOV
4018155	PROFIBUS FIELD COUPLER, NOV
4023606	SWITCH, PB, ILLU, 24V, 2AOBOC, AB, PIPECAT
4023865	SOLENOID,TROUGH WINCH,PIPECAT,P-5-65,NOV
4023868	SWITCH, SELECTOR,3P,SPRING RETURN CENTER
4023869	MODULE, POWER SUPPLY REDUNDANT, PIPE CAT
4023870	SENSOR,LASER RECEIVER, P-5-65, NOV
4023871	SENSOR,LASER TRANSMITTER, P-5-65, NOV
4028377	PUSH BUTTON,2POS,PUSH/PULL TWIST RELEASE
4029539	SWITCH, SEL, 3 POS, MAINTAINED CONTACT
4029542	CONTACT BLOCK, STACKABLE, SEALED, PIPECAT
4029543	CONTACT BLOCK, 1A1BOC, PIPECAT, PC-5-65
2014510	STARTER, COMBO, 7 HP, PIPECAT, PC-5-6
4018111	PL-24V,GRN, 30.5MM, PIPE HANDLER, NOV
4018112	PILOT LIGHT-24V,RED,30.5MM, NOV

Annex 2: electrical Cables

Cable ID - Construction P/N Tag number Location Tag Number Location PCAT-PIO 4C X 2/0 AWG Connector MCC Connector Pluq Plate PCAT-PIOB 4C X 2/0 AWG Connector Pipe Pluq Plate Connector Pipecat Pluq Plate PCAT-PIOB 4C X 2/0 AWG 10042203-046 Connector Pipecat Pluq Plate PNJB-01 Power Control PCAT-PI 1 4C X 8 AWG Connector Pluq Plate Connector Pluq Plate PCAT-PI 1B 4C X 8 AWG Connector Pipecat Pluq Plate PNJB-01 Power Control PCAT-P03 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control PCAT-P05 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control LGT-01 Ambient Light (Optional) PCAT-P08 3C X 12 AWG 10042203-043 PNJB-01 Power Control HPM-01 HPU#1 Motor HP-P01 4C X 2 AWG 10042203-043 PNJB-01 Power Control HPW-02	Length in M 16 35 27
PCAT-PIO 4C X 2/0 AWG Connector MCC Connector Plug Plate PCAT-P\OA 4C X 2/0 AWG Connector Plug Plate Connector Pipecat Plug Plate PCAT-PIOB 4C X 2/0 AWG 10042203-046 Connector Pipecat Plug Plate PNJB-01 Power Control PCAT-PI 1 4C X 8 AWG Connector Plug Plate Connector Plug Plate PCAT-PI 1B 4C X 8 AWG Connector Pipecat Plug Plate PNJB-01 Power Control PCAT-P03 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control PCAT-P05 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control LGT-01 Ambient Light (Optional) PCAT-P08 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control HP-POI 4C X 2 AWG 10042203-043 PNJB-01 Power Control HPM-01 HPU #1 Motor	16 35
PCAT-PIOB 4C X 2/0 AWG 10042203-046 Connector Pipecat Pluq Plate PNJB-01 Power Control PCAT-PI 1 4C X 8 AWG Connector MCC Connector Pluq Plate PCAT-PI IA 4C X 8 AWG Connector Pluq Plate Connector Pipecat Pluq Plate PCAT-PI 1B 4C X 8 AWG Connector Pipecat Pluq Plate PNJB-01 Power Control PCAT-P03 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control PCAT-P05 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control LGT-01 Ambient Light (Optional) PCAT-P08 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control HP-POI 4C X 2 AWG 10042203-043 PNJB-01 Power Control HPM-01 HPU#1 Motor	
PCAT-PI 1 4C X 8 AWG Connector MCC Connector Plug Plate PCAT-PI IA 4C X 8 AWG Connector Plug Plate Connector Pipecat Plug Plate PCAT-PI IB 4C X 8 AWG Connector Pipecat Plug Plate PNJB-01 Power Control PCAT-P03 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control PCAT-P05 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control LGT-01 Ambient Light (Optional) PCAT-P08 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control HP-POI 4C X 2 AWG 10042203-043 PNJB-01 Power Control HPM-01 HPU #1 Motor	27
PCAT-PI 1 4C X 8 AWG Connector MCC Connector Plug Plate PCAT-PI IA 4C X 8 AWG Connector Plug Plate Connector Pipecat Plug Plate PCAT-PI IB 4C X 8 AWG Connector Pipecat Plug Plate PNJB-01 Power Control PCAT-P03 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control PCAT-P05 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control LGT-01 Ambient Light (Optional) PCAT-P08 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control HP-POI 4C X 2 AWG 10042203-043 PNJB-01 Power Control HPM-01 HPU #1 Motor	
PCAT-PI IA 4C X 8 AWG Connector Plug Plate Connector Pipecat Plug Plate PCAT-PI 1B 4C X 8 AWG Connector Pipecat Plug Plate PNJB-01 Power Control PCAT-P03 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control PCAT-P05 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control LGT-01 Ambient Light (Optional) PCAT-P08 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control HP-POI 4C X 2 AWG 10042203-043 PNJB-01 Power Control HPM-01 HPU-#1 Motor	16
PCAT-PI 1B 4C X 8 AWG Connector Pipecat Pluq Plate PNJB-01 Power Control PCAT-P03 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control PCAT-P05 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control LGT-01 Ambient Light (Optional) PCAT-P08 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control HP-POI 4C X 2 AWG 10042203-043 PNJB-01 Power Control HPM-01 HPU #1 Motor	35
PCAT-P03 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control PCAT-P05 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control LGT-01 Ambient Light (Optional) PCAT-P08 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control HP-POI 4C X 2 AWG 10042203-043 PNJB-01 Power Control HPM-01 HPU #1 Motor	27
PCAT-P05 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control LGT-01 Ambient Light (Optional) PCAT-P08 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control HP-POI 4C X 2 AWG 10042203-043 PNJB-01 Power Control HPM-01 HPU #1 Motor	5
PCAT-P08 3C X 12 AWG 10050874-001 PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control HP-POI 4C X 2 AWG 10042203-043 PNJB-01 Power Control HPM-01 HPW-01 HPU #1 Motor	
HP-POI 4C X 2 AWG 10042203-043 PNJB-01 Power Control HPM-01 HPU #1 Motor	5
	5
UD D03	11.5
HP-P02 4C X 2 AWG 10042203-043 PNJB-01 Power Control HPM-02 HPU #2 Motor	12.5
HP-P03 4CX12AWG PNJB-01 PowerControl OC-01 HPUOilCoolerFan	7.5
<u>HP-P04</u> 4C X 12 AWG <u>PNJB-01</u> <u>Power Control</u> <u>OC-02</u> <u>HPU Oil Cooler Pump</u>	6
PCAT-D\00 PROFIBUS & POWER 10517034-001 PSNJB-01 Remote 1/0 / Local Control DJB-01 Winch Encoder J-Box	25
PCAT-DIOOA PROFIBUS & POWER PiqTail DJB-01 Winch EncoderJ-Box ENC-01 Winch Encode1	5
HP-NOS 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control LS-01 Hydraulic Fluid Level Swit	
HP-N06	10.5
	3.5
PCAT-NOI 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-01 DS V-Door Up Solenoid PCAT-N02 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-02 DS V-Door Down Solenoid	
PCAT-N03 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-03 DS Middle Up Solenoid	3.5
PCAT-N04 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-04 DS Middle Down Solenoic	
PCAT-N05 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-05 DS Flare End Up Solenoid	
PCAT-N06 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-06 DS Flare End Down Soler	<u>ioid</u> 4
PCAT-N07 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-07 DS Inner Raise Up Soleno	
PCAT-NOS 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-08 OS Inner Raise Down Sol	
PCAT-N09 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-09 DS Outer Raise Up Solen	
PCAT-NIO 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-10 OS Outer Raise Down So	lenoid 4
PCAT-NI 1 3C x 16 AWG 10067357-001 NJB-03 Trough Mounted J-Box SOY-\I OS Kicker Up Solenoid	8.5
PCAT-N12 3C x 16 AWG \0067357-001 NJB-03 Trough Mounted J-Box SOV-12 OS Kicker Down Solenoi PCAT-N13 3C x 16 AWG \0067357-001 NJB-03 Trough Mounted J-Box SOV-13 DS Safety Pin Up Solenoi	
PCAT-N13 3C x 16 AWG \0067357-001 NJB-03 Trough Mounted J-Box SOV-13 DS Safety Pin Up Soleno PCAT-N14 3C x 16 AWG 10067357-001 NJB-03 Trough Mounted J-Box SOV-14 DS Safety Pin Down Sole	
PCAT-N15 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-15 <u>ODS V-Door Up Solenoi</u>	<u>d</u> 3.5
PCAT-N16 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-16 ODS V-Door Down Sole	
PCAT-N17 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOY-\7 ODS Middle Up Solenoid PCAT-N18 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-18 ODS Middle Down Solen	
PCAT-NI9 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-19 ODS Flare End Up Solen	
PCAT-N20 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-20 ODS Flare End Do\\-n So	lenoid 3.5
PCAT-N21 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-21 ODS Inner Raise Up Sol	
PCAT-N22 3C x 16 AWG 10067357-00l PSNJB-01 Remote 1/0 / Local Control SOV-22 ODS Inner Raise Down S PCAT-N23 3C x 16 AWG 10067357-00l PSNJB-01 Remote J/0 / Local Control SOV-23 ODS Outer Raise Up Sol	
PCAT-N24 3C x 16 AWG 10067357-001 PSNJB-01 Remote 1/0 / Local Control SOV-24 <u>ODS Outer Raise Down Soverage Control Soverage </u>	
PCAT-N25 3C x 16 AWG 10067357-001 NJB-03 Trough Mounted J-Box SOV-25 ODS Kicker Up Solenoid	8.5
PCAT-N26 3C x 16 AWG 10067357-001 NJB-03 Trough Mounted J-Box SOV-26 ODS Kicker Down Solenome PCAT-N27 3C x 16 AWG 10067357-001 NJB-03 Trough Mounted J-Box SOV-27 ODS Safety Pin Up Solenome	
PCAT-N28 3C x 16 AWG 10067357-001 NJB-03 Trough Mounted J-Box SOV-27 ODS Safety Pin Op Sole	
PCAT-N29 3C x 14 AWG A&S 10043641-001 PSNJB-01 Remote 1/0 / Local Control SOV-29 Winch High/Low Solenoid	24
PCAT-N35 14C X14 AWG PSNJB-01 Remote 1/0 / Local Control PNJB-01 Power Control PCAT-N40 37C x 14 AWG 10042204-038 PSNJB-01 Remote 1/0 / Local Control NJB-04 Frame Mounted J-Box	4
PCAT-N40 37C x 14 AWG 10042204-038 PSNJB-01 Remote 1/0 / Local Control NJB-04 Frame Mounted J-Box PCAT-N40A 1SC x 16 AWG \0068343-001 NJB-04 Frame Mounted J-Box NJB-03 Trough Mounted J-Box	16 30
PCAT-N408 ISC x 16 AWG 10068343-001 NJB-04 Frame Mounted J-Box NJB-03 Trough Mounted J-Box	30
PCAT-N41 3C x 16 AWG \ \(\text{N067357-001} \) \(\text{PSNJB-01} \) \(\text{Remote 1/0 / Local Control} \) \(\text{PS-01} \) \(\text{HPU #I Filter Pressure \$\frac{1}{2}\$} \)	
PCAT-N42 3C x 16 AWG \0067357-001 PSNJB-01 Remote 1/0 / Local Control PS-02 HPU #2 Filter Pressure PCAT-N\00 4C x 16 AWG \0042204-006 PSNJB-01 Remote 1/0 / Local Control PRV-100 Trough Winch Solenoid I/O	
PCAT-NIOI TSPX 16 AWG \(\frac{10042204-006}{0042204-006}\) PSNJB-01 Remote 1/0 / Local Control \(\frac{PKV-100}{PKV-100}\) \(1100000000000000000000000000000000000	
PCAT-NIOI	
PCAT-NI04 7C x 14 AWG Connector Driller's Chair E-Stop Connector Pipecat Plug Plate	NA NA
(Optional) PCAT-NI04A 7CXI4AWG Connector Pipecat Plug Plate PSNJB-01 Remote 1/0 / Local Control	ol NA
PCAT-NI05 3Cx16AWG 10067357-001 PSNJB-01 Remote I / / Local Control IND-01 Pipecat Operational Strobe	· · · · · · · · · · · · · · · · · · ·
PCAT-N106 3CX 14 AWG A&S 10043641-001 PSNJB-01 Remote 1/0 / Local Control PS-03 Trough Lift Winch Brake I	Pressure Switch 30
PCAT-N\07 I TSPx 18 AWG A&S I 0054268-001 PSNJB-01 Remote 1/0 / Local Control PT-03 Trough Lift Winch Brake	Pressure Transmitter 30
PCAT·N200 4Cx16AWG 10042204-006 PSNJB-01 Remote I /0 / Local Control PRV-200 Trough Winch Solenoid 2	A & 2B Lower/Raise 5



PCAT-N204	3C x 14 AWG A&S	10043641-001	NJB-03	Trough Mounted J-Box	PS-04	Skate Pressure Switch	20
PCAT-N300	4Cx16AWG	10042204-006	NJB-03	Trough Mounted J-Box	PRV-300	Skate Solenoid A & B, Forward/Reverse	10
PCAT-SOI	1 TSPx I.Omm•	10054269-001	PSNJB-01	Remote 1/0 / Local Control	ZS-100	Trough Landed Proximity Switch	5
PCAT-SIOO	3TSPx I.Omm•	10054270-001	PSNJB-01	Remote I /0 / Local Control	&JB-13	Driller Side Safey Curtain J-Box	5
PCAT-SIOOTA	I TSPx I.Omm•	10054269-001	&JB-13	Drillers Side Safey Curtain J- Box	&JB-11	J-Box	20
PCAT-SIOOTB	3Cx 18 AWG CORDSET	10067439-001	&JB-11	J-Box	ZT-JOITT	DS Safety Curtain Laser Transmitter Sensor	4
PCAT-SIOOR	3Cx ISAWGCORDSET	10067439-001	&JB-13	Drillers Side Safey Curtain J- Box	ZT-IOOR	DS Safety Curtain Laser Reciver Sensor	4
PCAT-S200	3TSPx 1.0mm	10054270-001	PSNJB-01	Remote 1/0 / Local Control	&JB-14	Off Driller Side Safey Curtain J-Box	5
PCAT-S200TA	1 TSP x 1.0mm•	10054269-001	&JB-14	Off Drillers Side Safey Curtain J-Box	&JB-12	J-Box	30
PCAT-S200TB	3Cx 18 AWG CORDSET	10067439-001	&JB-12	J-Box	ZT-20ITT	ODS Safety Curtain Laser Transmitter Sensor	4
	18C x 16 AWG					Rough multi core cable	
PCAT-S200R	3Cx 18 AWG CORDSET	10067439-001	&JB-14	Off Drillers Side Safey Curtain J-Box	ZT-200R	ODS Safety Curtain Laser Receiver Sensor	4



Annexure - 02 Expression of Interest

	Abraj Energy Services S.A.O.C.
FROM:	Supply Chain Department
DOCUMENT:	AES-02 / Expression of Interest
TENDER REFERENCE	JTC.250414.MNT.8000442 Rate Agreement of NOV pipe CAT
	Major Overhaul

Dear Sir/Madam,

You are hereby invited to express your interest (EOI) for the above mentioned tender and confirms the following:

To register your interest please complete the forms listed below duly signed by authorized signatory and submitted within three (3) days of reviewing the Invitation to Tender (ITT) to:

Contract@abrajenergy.com

- 1. Annexure-03 Interest to Participate in Tender and Confidentiality Declaration for Tender
- 2. Annexure-04 Declaration to Comply with Company Requirement

Please note that all submissions and communications pursuant to this EOI notice shall bear following caption the Tender Reference

Our pre-qualification and tendering processes shall follow your EOI. If we do not receive any response from you on or before the above mentioned date, you will not be eligible to participate in this tender.

Abraj takes this opportunity to wish you all the best and we hope to deal with you soon.

Regards,

Supply Chain Department

Abraj Energy Services S.A.O.C.



Annexure - 03 Interest to Participate in Tender and Confidentiality Declaration for Tender

	Abraj Energy Services S.A.O.C.
FROM:	Supply Chain Department
DOCUMENT:	AES-03 / Interest to Participate in Tender and Confidentiality
	Declaration for Tender
TENDER	JTC.250414.MNT.8000442 Rate Agreement of NOV pipe
REFERENCE	CAT Major Overhaul

Attention: Contracts Officer

Dear Sir/Madam,

Having reviewed the Tender Document our company would like to register our interest in bidding for above referenced tender.

We the undersigning party (hereinafter called the 'Bidder') hereby represents and warrants to ABRAJ ENERGY SERVICES SAOC, being a company incorporated under the laws of the Sultanate of Oman having its Head Office at Al-Mawaleh, PO Box 1156, PC 130, Azaiba, Muscat, Sultanate of Oman (hereinafter called the 'Company') to be unconditionally bound by the following terms and conditions with respect to the receipt, review, and treatment of all information and documents provided to the Bidder by or on behalf of the Company, including but not limited to the Tender Documents, in connection with the Tender Reference mentioend above.

- 1.1. Confidential Information shall mean all knowledge, data or information in connection with this Tender or the Project, which from time to time may be disclosed to the Bidder by Company, or on behalf of Company, in writing, including drawings, magnetic tapes, computer programs or in any other way, as well as all knowledge, data or information derived there from, to the extent that such knowledge, data or information at the time of such acquisition or disclosure is not either already in the unrestricted possession of Contractor or part of public knowledge or literature.
- 1.2. Confidential Record shall mean all documents and any other material containing Confidential Information.

2.1. The Bidder shall:

- (a) preserve and cause its employees, potential Subcontractors and Manufacturers to preserve the secrecy of any Confidential Information;
- (b) not disclose, except with the prior written consent of the Company, to any Third Party any Confidential Information or Confidential Record or enable any Third Party to note the fact that the Bidder has been invited to submit a Tender for the work for any purpose other than the performance of the work or the preparation and submission of a Tender for the work;
- (c) not, except with the prior written consent of the Company, reproduce, copy or use, or disclose to, place at the disposal of or use on behalf of any Third Party or enable any Third Party to peruse, copy or use, any Confidential Information for any purpose other than the performance of the work or the preparation and submission of a Tender for the work.
- 2.2. The Bidder may disclose Confidential Information or Confidential Records as required by law or to a court or tribunal of competent jurisdiction if an order for such disclosure is made and, in those circumstances, only to the extent necessary by law or to satisfy such order for disclosure.



The Bidder shall notify the Company prior to any such disclosure and shall provide all reasonable assistance as may be requested by the Company to prevent or minimize such disclosure.

- 2.3. The undertakings under Clause 2.1 above shall continue so far as the Confidential Information in question has:
 - (a) not become part of public knowledge or literature, or
 - (b) not been disclosed to the Bidder by a Third Party (other than one disclosing on behalf of the Company) whose possession of such information is lawful and who is under no secrecy obligation with respect to the same.
- 3.1. All intellectual property rights, including but not limited to copyright, patents, trademarks, moral rights and industrial design rights in any Confidential Record shall, in the absence of any express provision to the contrary thereon, be vested in the Company.
- 4.1. In the event that it is decided by the Company that the tendered work will be entrusted to another Bidder, or if the tender process is terminated or suspended by the Company for any reason whatsoever, the Bidder shall, upon receipt of a written notification thereof from the Company, return to the Company the Tender Documents as well as any Confidential Record pertaining thereto and delete any electronic record thereof in Bidder's possession.
- 5.1. The Bidder shall ensure that if, under the terms of this Confidentiality Declaration, any of the Confidential Information comes to the knowledge of and/or into the possession of any Third Party, the Bidder shall require from such Third Party that it shall abide by identical stipulations to those contained in this Confidentiality Declaration.
- 5.2. Notwithstanding the above clause 5.1, the Bidder shall at all times remain liable to Company for any breach of the obligations under this Confidentiality Declaration, irrespective of whether or not the disclosure is actually caused by the Bidder or a Third Party to whom the Bidder has disclosed the Confidential Information.
- 6.1 This Confidentiality Declaration shall be governed by and construed in accordance with the Laws of the Sultanate of Oman.
- 6.2 In the event of a dispute arising under or in connection with this Confidentiality Declaration, including with respect to the existence, operation or validity of this Confidentiality Declaration, such dispute shall be resolved by arbitration in accordance with the arbitration proceedings and shall be conducted in the English language and the seat of the arbitration shall be Muscat, Sultanate of Oman.

Yours faithfully for:
Signature & date:
Full Name:
Position:
Stamp of Bidder



Annexure – 04 Declaration to Comply with Company Requirement

Whereas M/s	confirm	to	comply	with	company	requirements	as	per	below
checklist:									

Item Description	Required by Company	Supplier Confirmation	Comments
nem Description	(Yes/No)	(Yes/No)	
Compline to Abraj Terms and Conditions	Yes		
Tender Fees	No		
Bidder to Submit Tender Bond as per clause 2.15 of this document	No		
Bidder to Submit Performance Bond as per clause 2.16 of this document	No		
Bidder to Submit Advance Payment Bank Guarantee (if any advance payment requested)	Yes		
Bidder to submit Omanisation Certificate	Yes		

Failure to comply with the above checklist will result in Bidder being disqualified from the tendering
process.
Agreed and accepted this Day of [Insert year]
For and on behalf of Bidder:



Annexure – 05 Form of Tender Bond

Abraj Energy Services (SAOC) Al-Mawaleh, PO Box 1156, PC 130, Azaiba, **Sultanate of Oman**

Tender Bond No
By this bond wewhose address
is hereby guarantee Messrs.
of
your disposal the sum of R.O. being1% of the Tender Value from until
This bond shall be free of interest and payable in cash on your first written demand in the event of the Bidder either withdrawing his Tender within a period of (90) calendar days from the date for the receipt of Tenders or failing to provide a Performance Bond within ten (10) working days of acceptance of the Tender whichever date is earlier without any reference to or contestation on behalf of the Contractor.
This bond should be returned to us upon its expiry or upon fulfilment of our undertaking, whichever is the earlier.
Authorized Signatures

(To be issued by a locally registered bank)



Annexure - 06 Form of Performance Bond

[LETTERHEAD OF BANK]

Guarantee No. [Insert]
[Date]
[Insert Name] Attention: [Insert] [Insert Address] [Insert Address]

Subject: Bank Guarantee/Performance Bond
Contract No. [Insert] dated [Insert] between Abraj Energy Services and [Insert Name of
Contractor]

NOW THEREFORE, we, [Insert Name of the Bank], having its registered office at [Insert] (the "Guarantor"), on condition that the Company and the Contractor, in fact, enter into the Contract, do hereby unconditionally and irrevocably undertake and guarantee to pay the Company an amount or amounts up to [Insert amount 5% of the value of the contract], the exact amount or amounts to be solely determined by the Company, immediately upon first written demand by the Company for any such amount or amounts, notwithstanding any objection or contestation by the Contractor.

The Guarantor hereby waives any right it may have to first require the Company to proceed against or enforce any other rights or other guarantee or security with respect to or claim payment from the Contractor before making a demand against or claiming from the Guarantor hereunder. Furthermore, the Guarantor's obligations hereunder shall not be exonerated by the following described actions, circumstances, matter or thing which, but for this provision, might operate to release or otherwise exonerate the Guarantor from its obligations, including without limitation and whether known or not known to the Guarantor or the Company:

- 1. Any amendment, modification, extension, indulgence, time, waiver or concession granted to the Contractor, whether as to payment, time performance, or otherwise, under the Contract;
- 2. Any legal limitation, disability, incapacity or other similar circumstances relating to the Contractor; and/or
- 3. Any unenforceability or invalidity of any of the Contractor's obligations to be performed by it under the Contract.

Tender Reference: JTC.250414.MNT.8000442 Page 36 of 46



This Guarantee shall be governed by and shall be construed in accordance with the laws of [the Sultanate of Oman], except for the conflict of law principles that would cause the laws of another jurisdiction to apply.

This Guarantee shall be valid from the date first above written and shall remain in full force and effect for [insert date or duration]. Upon expiry of the said [date/duration], the Guarantee shall be null and void without the necessity of it being returned to us.

Yours faithfully, [Insert Name of the Bank],	
Signed by:	
Name:	
Title:	
And Authorized Signatory	



Annexure – 07 Form of Advance Payment Bond

Advance Payment Bond No.....

Abraj Energy Services (SAOC) Al-Mawaleh, PO Box 1156, PC 130, Azaiba, **Sultanate of Oman**

Whereas M/s (Hereinafter called the Contractor) has been awarded a Contract dated for implementation, completion and maintenance of Project as described in the contract for the total Contract Price of R.O
(Omani Rials
guarantee to pay you a sum not exceeding R.O (Omani Rials
It is understood that our liability towards you will be progressively reduced by the amount repaid to you by the Contractor as contained in the Certificates and Payment against the said advance payment.
The bond will be effective from and shall be valid until, or until the amount of advance payment is fully recovered, whichever occurs later.
This bond should be returned to us upon its expiry or upon fulfillment of our undertaking whichever is the earlier.
Authorised Signatories (To be issued by a locally registered bank)
Place: Date:



Annexure – 08 In Country Value (ICV)

1- Workforce: Number of Omanis Employed

				Co	ntracto	or.							
	Workforce	Senio	⁻ Manage	ment	Pi	rofessio	nal	Sı	uperviso	ry		lled/Ser Skilled	mi
	Category	HD	МН	СР	HD	МН	СР	HD	МН	СР	HD	МН	(
Contracto	Omanis												
r	Expatriate												Ī
-		•				•						•	
Sub-	Omanis												Γ
Contracto r	Expatriate												Ì

2- Use of Local Goods/Services

Bidder must provide details in the format below showing local goods/services proposed to be utilized in the performance of the Services. If none: Bidder shall so state.

a- Goods Made-in-Oman

#	Goods Description	Manufacturer / Provider	Address	Quantity	% of total quantity sourced from local manufacturer	Total value of local manufactured goods
1						
2						
3						



b- Goods Procured in Oman

#	Goods Description	Location of International Manufacturer	Local Supplier Address	Quantity	% of total Contract quantity to be local supply	Total value of local manufactured goods
1						
2						
3						

	Summary of Tables A & B	
Total Value of Goods Made in Oman (OMR / USD)	Total Value of Goods Procured in Oman (OMR / USD)	Total Value of Goods Procured from Overseas (OMR / USD)
\$0	\$0	\$0

c- Local Services Obtained in Oman

#	Type of Service	Proposed Subcontractor Address	Value added	% of total Contract value
1				
2				
3				
4				

Summary of Tables C				
Total Value of Local Sourcing (USD / OMR)	Total Value of Overseas Sourcing (OMR / USD)			
\$0	\$0			



ICV Terminologies/Definitions

Table B - Work Force

<u>HD stands for Headcount</u>: "Headcount" means the number of full-time equivalent employees or in-house Contractors/agency staff within the Contractor or 3rd Party Sub-Contractor who will be involved in execution of the Contract.

<u>MH stands for Man-hours</u>: "Man-hours" means the number of hours of work undertaken in execution of the Contract (only the actual hours written, or to be written, to Contract execution are included).

The method of calculation and reporting is as follows;

MH= Contract Duration x number of headcount of that category

For example, contract awarded for a period of 4 years, with 2 professional resources working full time on the execution of the contract:

4 years x 12 months x 30 days x 8 hours x 2 professionals = 23,040 Manhours

<u>CP stands for Compensation:</u> "Compensation" means the sum of Man hours multiplied by an average all-inclusive average hourly rate. Average hourly rate calculated from Gross Salaries pro rated.

The currency shall be in USD.

For example, contract listed the 2 headcount Professional as Drilling Engineer and Chemical Engineer with a monthly salary of \$2,000 and \$1,800 respectively. The total monthly salary shall be inclusive of PASI and other permanent allowances such Housing and Transport allowance.

The formula to calculate the average hourly compensation rate will be as follows:

Drilling Engineer Monthly salary divided by man-hours working per month: 2000 USD / (22 days x 8 hours)= 11.4 USD as hourly rate

Chemical Engineer Monthly salary divided by man-hours working per month: 1,800 USD / (30 days x 8 hours)= 7.5 USD as hourly rate

Total hourly rate for both resources = 11.4+7.5= 18.9

Average hourly rate for both resources =18.9/2= 9.5

The compensation per hour as calculated above to be included shall 9.5 USD/hour

JOB POSITIONS

- 6. "Senior Management" means a member of the decision-making executive of a function within Contractor or sub-Contractor Company. -CEO and all managers titles who reported to CEO.HR Mangers , Admin manager , finance manager , project manager .etc..
- <u>7."Professional"</u> means an individual who has completed bachelor degree related tertiary education and achieved professional certifications status within a professional body. Includes chartered engineers and accountants, lawyers, architects, procurement professionals and Engineer.
- **8."Supervisory"** means a worker who manages a team of at least two subordinates (but who is not considered part of the Senior Management team, nor a Professional). Supervisors include construction foreman, equipment overseers, business administration team leaders etc.
- <u>9."Skilled"</u> means a worker with a high level of technical expertise accumulated over a number of years (but not a member of a recognised 'profession'). A skilled worker may have attended a Technical College or learned their skill via a formal apprenticeship or on-the-job over a number of years. Includes: electricians, scaffolders, welders, crafts, business admin, personnel assistants, computer programmers, equipment and machinery operators.
- 10.""Semi-skilled" means workers with a skill set acquired in a short space of time (a few weeks or months). Following short periods of training a casual labor may become semi-skilled, thus demonstrating how the Contract has contributed to human capacity in Oman. Semi-skilled positions include secretaries, drivers, meet and greet services, fencing, block laying, basic construction skills etc.



Annexure – 09 Clarification Request

Tender Reference: JTC.250414.MNT.8000442 Rate Agreement of NOV pipe CAT Major Overhaul

1	Question Received XX/XX/XXXX
	Article X.X.X
	Company Response Dated XX/XX/XXXX
2	Question Received XX/XX/XXXX
	Article X.X.X
	Company Response Dated XX/XX/XXXX
3	Question Received XX/XX/XXXX
	Article X.X.X
	···
	Company Response Dated XX/XX/XXXX
4	Question Received XX/XX/XXXX
	Article X.X.X
	···
	Company Response Dated XX/XX/XXXX



Annexure – 10 Pricing Schedule

Contract Period	2 Years + 1 Year
Delivery Period	
Delivery Term	
Payment Term	
Bid Validity	90 day



Annexure - 11 Tender Strategy for Evaluation of bid

Abraj Management had followed the tendering strategy as per the tender procedure which forms part of the Abraj Tender Policies and Procurement (ATPP).

The process followed was the following:-

- 1. Tender for purchase of equipment and materials or availing of Services and includes Purchase Order, Service Order or other arrangement will sent seeking Technical and commercial bids in a two separate sealed envelopes which are submitted in a sealed envelope or electronic mode.
- 2. The technical bids will evaluated as per the evaluation process defined below. We have tender opening protocol duly signed by the authorized persons as per ATPP.
- 3. The Commercial bids will opened for the technical qualified bidders only.
- 4. The Commercial bids will be reviewed and evaluated. The best offer will be awarded the Contract after evaluation and approval from Abraj Management Team.
- 5. Letter of Intent (LOI) has been issued to the successful bidder followed by execution of Contract wherever required.

Process for Evaluation of bid

The Technical Evaluation Process for the different types of bids will be carried out in the following steps:

- 1. Opening of the Technical Bids.
- 2. Analysis of the Technical Bids.
- **3.** Gather all missing information from the technical bids.
- 4. Sending clarifications to those bidders who have not been disqualified initially.
- 5. Receive clarifications.
- 6. Set weightage for scoring based on importance of each evaluation criteria.
- 7. Evaluate data and score.
- 8. Finalize Technical Evaluation.
- 9. Minimum Technical Score to be obtained is 70 % to be Eligible for getting qualified for Commercial Bid Evaluation. For bidders who are technically disqualified, their commercial bid will not be opened.
- 10. Whoever is technically qualified, all are treated at par for commercial evaluation and L-1 bidder would be awarded the contract.



11. The Company reserves the right to award the contract in the best interest of the company to any bidder other than L-1 without assigning any reason whatsoever.

Technical Methodology

At first, Bidders shall be evaluated on technical proposals in accordance with Evaluation Criteria as described in the Tender Document.

Each of technical proposals shall be evaluated on the basis of the Bidder's degree of compliance, with requirements as specified in the Tender Document including the Specifications. Bidder who achieves the Technical evaluation threshold will be evaluated commercially.

The evaluation shall consist of

Technical Proposal Evaluation

1. Compliance & Evaluation Criteria

Mandatory Requirements:

- 1. Submit a valid certificate for Quality management system ISO 9001 or API Q1 or equivalent
- 2. Comply with full Pipe Cat Unit SOW
- 3. Submit project plan
- 4. Submit inspection & testing plan (ITP)

Technical criteria:

No.	Criteria	Weight Age
1	Lead time including repair in/out	40
2	Warranty Period (workmanship)	60

Cutoff: 70%

Financial Proposal Evaluation

Lowest bid ranked higest



Annexure – 12 Standard Terms and Conditions

Annexure - 13 In Country Value