



AMENDMENT NO. 1 DATED 26.10.2021

TO

TENDER NO. SDG8439P22/09 FOR PROCUREMENT OF 5 (FIVE) NUMBERS 2000 HP VFD DRILLING RIGS WITH TOP DRIVE & ACCESSORIES

1.0 This addendum is issued to amend the following tender clauses:

Sl. No.	Tender Clause /Page No.	Existing Tender Clause Description	Modified clause Description
TECHNICAL SPECIFICATION & SCOPE OF WORK – MAST & SUBSTRUCTURE			
1	Clause no: 1.1.4/ Pg: 4 of 261	Two (2) Counter weight system. Details at Section 1.15 (Hydraulic power tong)	Two (2) of Counter weight system. Details at Section 1.15.
2	Clause no: 1.3.7/ Pg: 6 of 261	Suitable arrangement for lowering crown block sheaves when the mast is in erect position.	Suitable arrangement for lowering crown block sheaves <u>to ground level & for lifting Sheaves from ground level to its position in crown</u> when the mast is in erect position
3	Clause no: 1.4-Sub point: c/ Pg: 7 of 261	One (1) Escape line, including wire line, clips, thimbles and hand brake for emergency dual escape from racking board with complete provision for hooking up the same. One (1) Sure-Lock retractable lifeline complete with ground brackets to be mounted above diving board. (Escape device landing preferably towards Cat-walk side.)	Deleted
4	Clause no: 1.7.2 / Pg: 8 of 261	Tool room on Off-Drillers side each on two supports. Support pins to Drillers and Off-Drillers side floor elevator boxes. (Ref-casing spooler)	Tool room on Off-Drillers side each on two supports. Support pins to Drillers and Off-Drillers side floor elevator boxes.
5	Clause no: 1.16.1 / Pg: 13 of 261	One (1) set of drill floor panels with 8mm thick checkered plate for the substructure and 3/8" (10mm) thick checkered plate along the rotary area. Drill floor should be complete with handrails 1m (3'6") high with toe plates for the perimeter of the drill floor. All the checkered plates should have numbers engraved on it. Most of the drill floor panels, hand rails and floor mounting equipment to be set in to position at ground level and raised with Draw works & setback support	One (1) set of drill floor panels with 8mm thick checkered plate for the substructure and 3/8" (10mm) thick checkered plate along the rotary area. Drill floor should be complete with handrails 1m (3'6") high with toe plates for the perimeter of the drill floor. All the checkered plates should have numbers engraved on it. Most of the drill floor panels, hand rails and floor mounting equipment to be set in to position at ground level and raised with Draw works & setback support. <u>Drill floor should have opening for Kelly accommodation & clamped Mouse Hole accommodation</u>

6	Clause no: 1.18.3 / Pg: 13 of 261	The setback support should be designed to support at least 375 Short Ton or 700,000 lbs of racked pipe simultaneously with 650 Short Ton OR 1300,000 lbs) of casing load on rotary (Rotary Load)	The setback support should be designed to support at least <u>350</u> Short Ton or 700,000 lbs of racked pipe simultaneously with 650 Short Ton OR 1300,000 lbs) of casing load on rotary (Rotary Load).
7	Clause no: 2.1.5.10/ Pg: 20 of 261	Hoist and Torque Tool.	Deleted
8	Clause no: 2.1.5.15/ Pg: 20 of 261	0 – 20 RPM	0 – 40 RPM
9	Clause no: 2.1.5.20/ Pg: 20 of 261	NC50 (4-½" IF) API RH Box	NC50 (4-½" IF) API RH Box <u>for connection with TDS Saver Sub.</u> <u>Note: TDS Saver sub bottom connection NC 50 (4 ½"IF) API Right Hand Pin.</u>
10	Clause no: 3.5/ Pg: 28 of 261	CASING STABBING BOARD: One (1) air powered (Hydraulic) heavy-duty counterbalanced Casing Stabbing Board with the following features:	CASING STABBING BOARD: One (1) <u>pneumatic</u> powered / Hydraulically operated heavy-duty counterbalanced Casing Stabbing Board with the following features:
11	Clause no: 3.5.3/ Pg: 28 of 261	Platform should be raised and lowered by hydraulic operated chain hoist / wire line. The chain / wireline attaches to the platform at a spring -loaded safety latch, ensuring that the safety latch engages at any loss of tension in the chain.	Platform should be raised and lowered by <u>pneumatic powered</u> / hydraulic operated chain hoist/wire line. The chain / wireline attaches to the platform at a spring -loaded safety latch, ensuring that the safety latch engages at any loss of tension in the chain.
12	Clause no: 4.13.2.1/ Pg: 49 of 261	Support beams for Mud cleaner and vertical vacuum degasser.	Support beams for Mud cleaner.
13	Clause no: 4.13.4.6/ Pg: 50 of 261	For the 1st, 2nd & 3rd reserve tanks - Two Nos. 12" connections for mud ditch line & 4 Nos. 10" connections for interconnection between tanks. The last reserve tank to have only one 10" connection for mud ditch line and Two nos. connections for interconnection between tanks. Three Nos. clean out valves. All connections in tanks to have suitable Butterfly Valve / flexible Dresser coupling as applicable	For the 1st, 2nd & 3rd reserve tanks - Two Nos. 12" connections for mud ditch line & 4 Nos. 10"connections for interconnection between tanks. The last reserve tank to have only one <u>12"</u> connection for mud ditch line and Two nos. connections for interconnection between tanks. Three Nos. clean out valves. All connections in tanks to have suitable Butterfly Valve / flexible Dresser coupling as applicable
14	Clause no: 4.13.5/ Pg: 50 of 261	TRIP TANK: Trip tank with same width and height as that of mud tanks with capacity approximately 15 cubic meter mounted on three runner 17 feet long oil field skid and includes following:	TRIP TANK: Trip tank with same width and height as that of mud tanks with capacity approximately <u>16 cubic meter (100 US BBL)</u> mounted on three runner 17 feet long oil field skid and includes following:
15	Clause no: 4.16.1.6/ Pg: 54 of 261	Scope of supply also includes one set of screens API 170 fitted on each unit. One	Scope of supply also includes one set of screens API <u>200</u> fitted on each unit. One

		set of crown rubber discharge kit hand tool etc.	set of crown rubber discharge kit hand tool etc.
16	Clause no: 4.17.2.2/ Pg: 56 of 261	Maximum vacuum desired rating 203 to 381 mm (8" to 15") of mercury for maximum lift of 3 meters.	Vacuum desired rating minimum <u>15" Hg of mercury</u> for maximum lift of 3 meters.
17	Clause no: 6.3.9/ Pg: 83 of 261	All electrical connections shall be of FLP type.	Deleted
18	Clause no: 6.4.6/ Pg: 83 of 261	All electrical connections shall be of FLP type.	Deleted
19	Clause no: 6.12.3/ Pg: 86 of 261	Line pull capacity (top layer) : 800 lbs.	Line pull capacity (top layer) : <u>1000 lbs</u>
20	Clause no: 6.12.10/ Pg: 86 of 261	Line dia.: 1/4" for 600 kg capacity 7/16" for 1500 kg capacity	Line dia.: 1/4" for 600 kg capacity
21	Clause no: 6.15.2/ Pg: 88 of 261	The following shall be connected to the HPU: Iron rough neck, hydraulic cathead, Hydraulic power slip, Hydraulic BOP handling system, BOP Cart, Casing Running Tool, Casing Power Tong and Casing Stabbing Board.	Casing Power tong is not a part of the Rig package supply. Technical specs of present Casing Power Tong available with OIL: High Speed: 65 GPM at 1000 psi. Low Speed: 30 GPM at 3000 psi.
22	Clause no: 6.15.5.11/ Pg: 89 of 261	Ambient temperature: -6 deg C to +55 deg C	Ambient temperature: <u>4 deg C to 45 deg C, stands modified wherever appearing in the tender.</u>
23	All clauses	Hydraulic Cat walk	All clauses /wordings related to Hydraulic catwalk stands deleted wherever appearing in the tender
24	ANNEXURE-A: CC:: GENERAL NOTES TO BIDDERS 25.4 (Page 17 of 55)	Inland transportation charges from dispatch point to designated Project Site/dump area/dump yard including loading and unloading of materials. The prices should be inclusive of all taxes, duties, levies etc.	Inland transportation charges from dispatch point to designated Project Site/dump area/dump yard including loading and unloading of materials. The prices should be inclusive of all taxes, duties, levies etc. <u>Only crane services will be provided by OIL for unloading of the Rig items.</u>
SECTION-5: POWER SYSTEM			
25	Clause no: 5.1.7/ Pg: 63 of 261	COMPONENTS TO BE OFFERED WITH FOUR POWER PACK	COMPONENTS TO BE OFFERED WITH <u>FIVE (05) POWER PACK</u>
26	Clause no: 5.1.A.4/ Pg: 71 of 261	The successful bidder shall unitize the CAT 3512B engines supplied by OIL in the new cap on type canopy with acoustic enclosure and couple the same with the new alternator supplied. Footprint of the engine are as per APPENDIX-AA-VIII.	The successful bidder shall unitize the CAT 3512B engines supplied by OIL in the new cap-on type canopy with acoustic enclosure and couple the same with the new alternator supplied. Footprint of the engine are as per APPENDIX-AA-VIII. <u>The</u>

		<p>Unitizing existing CAT 3512 B engines to alternators in the power pack with suitable flexible coupling mechanism. The flexible coupling mechanism shall be identical to the ones in the new power packs.</p> <p>Alignment of engine to alternator.</p> <p>Integrating engine control ECM with VFD PCR for speed and load control.</p> <p>The signal to the CAT 3512B engine from the VFD PCR should be readable by the engine ECM and the bidder to carry out necessary modification required if any.</p> <p>It should be able to run in synchronization with the new power packs over its entire loading range.</p> <p>Commissioning and load testing of the complete power pack in OIL operational areas.</p>	<p><u>cap-on type canopies and skids of the retrofitted engines shall be dimensionally same with the new CAT 3512B powerpacks.</u></p> <p>Unitizing existing CAT 3512 B engines to alternators in the power pack with suitable flexible coupling mechanism. The flexible coupling mechanism shall be identical to the ones in the new power packs.</p> <p>Alignment of engine to alternator.</p> <p>Integrating engine control ECM with VFD PCR for speed and load control.</p> <p>The signal to the CAT 3512B engine from the VFD PCR should be readable by the engine ECM and the bidder to carry out necessary modification required if any.</p> <p>It should be able to run in synchronization with the new power packs.</p> <p><u>Bidder to commission the retrofitted powerpacks and to load test the same with available operational load during the designated time as per Clause 4 of Annexure AA IV.</u></p>
27	Clause no: 5.2.1.6-d/ Pg: 73 of 261	Instrument / Control panel should have Oil & Fuel pressure gauge, Oil, Water & Exhaust temperature gauge, Electronic Tachometer with R/Hrs meter etc. There should have sufficient space for maintenance and repair of the Instrument /Control Panel. Bidder should provide detail about the Instrument / control panel system.	Instrument / Control panel should have Oil & Fuel pressure gauge (<u>analog / digital display</u>), Oil, Water & Exhaust temperature gauge (analog / digital display), Electronic Tachometer with R/Hrs meter (analog / digital display) etc. There should have sufficient space for maintenance and repair of the Instrument /Control Panel. Bidder should provide detail about the Instrument / control panel system.
28	Clause no: 5.2.1.6-h/ Pg: 73 of 261	Lube system with full flow Spin on lube oil filter, adequate capacity in line lube oil centrifuge, lube oil pump, sump, oil cooler, breather, lube oil drain pump etc.	Deleted
29	Clause no: 5.2.1.16(b)/ Pg: 76 of 261	Master Skid: complete DG set must be placed on a 2 (two) runner oilfield type skid fabricated out of ISMB200 & reinforced with min 3 (three) numbers cross member. Approx. 500mm wide working platform with 6mm chequered plate welded on it	Master Skid: complete DG set must be placed on a <u>3 (three)</u> runner oilfield type skid fabricated out of ISMB200 & reinforced with min 3 (three) numbers cross member. Approx. 500 mm wide working platform with 6 mm chequered

		should be provided in all 4 (four) sides of the DG set skid. The ends of the skid should be projected out by 300mm and curved upwards. 125mm (5") NB X 8mm thick pipe with provision for lifting should reinforce the end of skid for tail boarding.	plate welded on it should be provided in all 4 (four) sides of the DG set skid. The ends of the skid should be projected out by 300 mm and curved upwards. 125 mm (5") NB X 8 mm thick pipe with provision for lifting should reinforce the end of skid for tail boarding.
30	Clause no: 5.2.4.2/ Pg: 77 of 261	The kiosk should have base of 8-mm. thick checkered plates and the side wall should have 3 mm thick sheet.	The kiosk should have base of <u>6 mm</u> thick checkered plates and the side wall should have 3 mm thick sheet.
31	Clause no: 9.2.1.23/ Pg: 102 of 261	The rating plate of the alternator shall be as per IS/IEC standard.	The rating plate of the alternator shall be as per IS/IEC/ <u>OEM</u> standard.
32	Clause no: 9.3.1.3/ Pg: 102 of 261	Cables for AC VFD motor (from the outgoing of the inverter) shall be single core multi stranded, tinned copper conductor, flexible having insulation grade of 2 KV. The cable insulation and sheath material should be Type-P as per IEEE-1580. The cable shall be suitable to be used with VFD system (shall have shielding - copper tape/braiding). If cable without shield is used for VFD motors, same shall be approved by the specific VFD drive manufacturer. VFD Drive Manufacturer's Certification regarding the same (i.e. suitability of non- shielded type cables with their VFD drive) shall be submitted with bid for technical evaluation.	Cables for AC VFD motor (from the outgoing of the inverter) shall be single core multi stranded, tinned copper conductor, flexible having insulation grade of 2 KV. The cable insulation and sheath material should be Type-P as per IEEE-1580. The cable shall be suitable to be used with VFD system.
33	Clause no: 9.4.2.6/ Pg: 105 of 261	Portable small size "T" type light pole for mud tank and mud pump illuminations, 50 mm OD, 4000 mm height- fitted with anti-vibration devices	Portable small size "T" type light pole for mud tank and mud pump illuminations, 50 mm OD, 4000 mm height.
34	Clause no: 9.5.2.2.6/ Pg: 108 of 261	Indoor Lighting: Three numbers of 2X24 W LED lamps shall be used for aisle lighting of each PCR. Four- 230-volt Phase – Phase duplex receptacles (suitable for Indian style plug pins) to be included, two at each end of the house. The PCR shall be equipped with portable type emergency lamps which shall adequately light up the PCR in the event of a blackout. Additionally, two emergency lighting fixtures with EXIT sign to be also included at each end of the House. There shall be emergency floor-path illuminations (fluorescents strips) guiding towards exit doors of PCRs for emergency evacuation.	<u>Adequate number of suitable wattage /lumen LED indoor light fittings shall be provided inside each PCR to maintain the required LUX level.</u> Four- 230-volt Phase – Phase duplex receptacles (suitable for Indian style plug pins) to be included, two at each end of the house. The PCR shall be equipped with portable type emergency lamps which shall adequately light up the PCR in the event of a blackout. Additionally, two emergency lighting fixtures with EXIT sign to be also included at each end of the House. There shall be emergency floor-path illuminations (fluorescents strips) guiding towards exit doors of PCRs for emergency evacuation.

35	Clause no: 9.5.3.10.1.11/ Pg: 122 of 261	<p>415V Emergency Bus: (Refer to Annexure – Typical Single Line Diagram)</p> <p>The power from the 250 KVA Genset shall be fed into an emergency 415V bus bar inside the PCR.</p> <p>To limit the load on 250 KVA Gen set, only following outgoing feeder /Motor Starter panel shall be from the 415V Emergency Bus:</p> <p>a) One feeder for Isolation transformer hut, b) one feeder for Air compressor, c) one number water booster Motor d) Hydraulic motor (for rig up / down), e) Hazardous area lighting (i.e. incomer of 60 KVA lighting transformer)</p> <p>There shall be provision for electrical isolation of the emergency bus bar from the main 415V bus bar using a withdrawable type air circuit breaker (ACB) of sufficient nominal rating, breaking/ withstand and making capacity, manually chargeable, electric closing, with solid state trip unit. There shall be an interlocking of the 250 KVA generator output ACB and the emergency busbar isolation ACB such that only one of the two operates at a time.</p>	<p>415V Emergency Bus: (Refer to Annexure – Typical Single Line Diagram)</p> <p>The power from the 250 KVA Genset shall be fed into an emergency 415V bus bar inside the PCR.</p> <p>To limit the load on 250 KVA Gen set, only following outgoing feeder /Motor Starter panel shall be from the 415V Emergency Bus:</p> <p>a) One feeder for Isolation transformer hut, b) one feeder for Air compressor, c) one number water booster Motor d) Hydraulic motor (for rig up / down), e) Hazardous area lighting (i.e. incomer of 60 KVA lighting transformer)</p> <p><u>There shall be provision for electrical isolation of the emergency bus bar from the main 415V bus bar using air circuit breaker (ACB) or MCCB of sufficient rating. There shall be an interlocking of the 250 KVA generator output ACB/MCCB and the emergency busbar isolation ACB/MCCB such that only one of the two operates at a time.</u></p>
36	Clause no: 9.5.3.11.4/ Pg: 124 of 261	Additionally, the air conditioners shall be able to reduce the relative humidity level to recommended levels from 98% by itself.	The air conditioners shall be able to reduce the relative humidity level to recommended levels from 98% by itself or <u>additionally dehumidifier units may be provided if required.</u>
37	Clause no: 9.9.2.11/ Pg: 143 of 261	Analog meter shall be provided on the generator control panel to display Phase Volt, Phase current, Kilowatt, KVAR, Actuator Current, Exciter Current. A digital energy meter and RTD temperature metre shall be provided. The metres shall be same as the one on the generator control panel inside the PCR	Analog/digital meter shall be provided on the generator control panel to display various electrical parameters like voltage, current, frequency, power factor, cumulative KWh reading etc.
38	Clause no: 9.10.4.1/ Pg: 147 of 261	Digital multi-meter; Make: Fluke/Megger/Kyoritsu	Digital multi-meter; Make: Fluke/Megger/ Kyoritsu/ <u>HIOKI / YOKOGAWA / MOTWANE / PHILIPS / KEYSIGHT</u>
39	Clause no: 9.10.4.2/ Pg: 147 of 261	Digital clamp-meter; Make: Fluke/Megger/Kyoritsu	Digital clamp-meter; Make: Fluke/Megger/ Kyoritsu/ <u>HIOKI/ YOKOGAWA / MOTWANE / PHILIPS / KEYSIGHT</u>

40	Clause no: 9.10.4.3/ Pg: 147 of 261	Digital Insulation Tester; Make: AVO/Megger / Fluke / Kyoritsu	Digital Insulation Tester; Make: AVO/ Megger / Fluke / Kyoritsu/ <u>HIOKI / YOKOGAWA / MOTWANE / PHILIPS / KEYSIGHT</u>
41	Clause no: 9.10.4.4/ Pg: 147 of 261	Earth resistance tester: Make AVO/Megger / Fluke	Earth resistance tester: Make AVO/ Megger / Fluke/ <u>HIOKI / YOKOGAWA / MOTWANE / PHILIPS / KEYSIGHT</u>
42	Clause no: 9.10.4.7/ Pg: 147 of 261	Combined temperature and humidity meter, Make: Fluke/Megger/Kyoritsu	Combined temperature and humidity meter, Make: Fluke/Megger/Kyoritsu <u>/HIOKI / YOKOGAWA / MOTWANE / PHILIPS / KEYSIGHT</u>
43	Clause no: 9.10.4.8/ Pg: 147 of 261	Vibration meter, Make: Fluke / Entek/ Megger	Vibration meter, make: Fluke / Entek/ Megger/ <u>Precise eco/Kusam-Meco/Lutron</u>
44	Clause no: 9.10.4.10/ Pg: 147 of 261	Handheld thermal camera/imager Make: Megger/Flir/ Fluke	Handheld thermal camera/imager Make: Megger/ Flir/ Fluke/ <u>HIOKI / YOKOGAWA</u>
45	Clause no: 9.10.4.25/ Pg: 148 of 261	Cable Height Meter; Make: Fluke/Megger	Cable Height Meter; Make: Fluke/Megger/ <u>HIOKI / YOKOGAWA / KEYSIGHT</u>
46	APPENDIX – AA- X / Pg: 261 of 261	APPENDIX – AA- X (Electrical - Statutory Guidelines)	Deleted Note: For Electrical - Statutory Guidelines, bidders are to be guided by statutory references as stipulated in the tender.
47	ANNEXURE-D1	Price bid format - Indian bidder	Srl. No. 7 under Section – E (PRICE FORMAT FOR MAJOR RIG COMPONENTS) is deleted. Revised Price Bid Format (Annexure – D1) has been uploaded under “Notes & Attachments” in e-portal.
48	ANNEXURE-D2	Price bid format - Foreign bidder	Srl. No. 7 under Section – E (PRICE FORMAT FOR MAJOR RIG COMPONENTS) is deleted. Revised Price Bid Format (Annexure – D2) has been uploaded under “Notes & Attachments” in e-portal.
49	ANNEXURE-A CC: GENERAL NOTES TO BIDDERS Clause No. 33.0 Note (iv)	Inclusion of additional clause	For FOR Destination order for Indian Bidder, only 80% of freight and insurance charges shall be released along with 80% payment of supply. Payment shall be released Rig-wise against complete supply of rig and submission of Invoice for the complete Rig.
50	ANNEXURE-A CC: GENERAL NOTES TO BIDDERS Clause No. 34.6	Inclusion of additional clause	LD shall be applicable rig-wise (each Rig is considered as one package). Liquidated damage shall be payable on Landed Cost of the materials at Duliajan inclusive of all cost.

2.0 Extension of Bid Closing and Technical Bid Opening Date:

Description	Existing Date & Time	Extended upto
Bid Closing Date & Time	03.11.2021 (at 11.00 Hrs. IST)	17.11.2021 (at 11.00 Hrs. IST)
Technical Bid Opening Date & Time	03.11.2021 (at 14.00 Hrs. IST)	17.11.2021 (at 14.00 Hrs. IST)

3.0 Other terms and conditions of the tender remain unchanged.

sd/-
(M. B. Singha)
Chief Manager Materials(FP)
For GM Materials (HoD)
For Resident Chief Executive