

OIL INDIA LIMITED
RAJASTHAN PROJECT
JODHPUR

CORRIGENDUM

TENDER NO. CJG4758P18

Amendment No. 5 dated 14.08.2017 to Tender No. CJG4758P18 has been issued to incorporate the changes in clauses under BEC, SOW, GCC, Schedule of Services and Price Bid Format(PROFORMA - B) as mentioned below. The Bid Closing Date / Technical Bid Opening Date and Tender Sale Date has also been extended as under :

Bid Closing Date & Time : 05.09.2017 at 11-00 hrs. (IST)
Technical Bid Opening Date & Time : 05.09.2017 at 15-00 hrs. (IST)
Tender Document Sale Date Extended to : 29.08.2017 at 16-30 hrs. (IST)

PART - 2, BID EVALUATION CRITERIA(BEC)			
Srl. No.	Clause No.	Existing Clause	Amended Clause
1	I. Technical Criteria, Clause No.2.0	2.0 The bidders shall quote for full scope of work. Bidder has to provide the following services i) SDMM Services plus Jar for 17.1/2 " section ii) Rotary Steerable System service for 12.1/4" and 8.1/2" Sections iii) MWD –LWD Surface Unit Services with resistivity, Gamma Ray log iv) APWD services for 12.1/4" and 8.1/2" sections v) Neutron Porosity, density with calliper services for 12.1/4" and 8.1/2" sections. vi) Supply of chemicals consumables. vii)Supply of 7" Perforated Liner as per Revised Annexure N viii) Supply of Thermal packer as per Annexure Q	2.0 The bidders shall quote for full scope of work. Bidder has to provide the following services i) SDMM Services for 17.1/2 " section with 8"jar. For 12.1/4" section RSS with 8" jar and for 8.1/2" section RSS with 6.1/2"or 6.3/4"jar. ii) Rotary Steerable System service for 12.1/4" and 8.1/2" Sections plus jars. (Revised Annexure-E) iii) MWD –LWD Surface Unit Services with resistivity, Gamma Ray log iv) APWD services for 12.1/4" and 8.1/2" sections v) Neutron Porosity, density with calliper services for 12.1/4" and 8.1/2" sections. vi) Supply of chemicals consumables.

		ix) Liner Hanger Services for 9.5/8" liner and 7" Perforated Liner. x)Supply of 7"Perforated Liner.	vii)Supply of 7" Perforated Liner as per Revised Annexure N viii) Supply of Thermal packer as per Annexure Q ix) Liner Hanger Services for 9.5/8" liner and 7" Perforated Liner. x)Supply of 7"Perforated Liner.
2.	I. Technical Criteria Clause no. 6.0	<p>6.0 Mobilization:</p> <p>(a) Mobilization period is amended as under:</p> <p>(i) Mobilization of services of Deviation Package (MWD/LWD surface unit , SDMM, RSS etc.) , liner hanger setting tools, Mud Engineering Lab equipments, Centrifuge to be completed in 60 days ,</p> <p>(ii) Mobilization of consumables to be completed in 120 days and</p> <p>(iii) Mobilization of personnel to be completed in 7 days</p> <p>from the issue of LOA or Mobilization advice from Company. Separate manpower mobilization notice will be provided for liner hanger services.</p> <p>b) All consumables including chemicals for remaining wells shall have to be mobilized in a manner that these are available at site for at least one well at a time including the well under drilling.</p> <p>OIL reserves the right to request successful bidder to mobilize services for three(03) horizontal wells in a year, if desired.</p>	<p>6.0 Mobilization :</p> <p>(A) For Initial mobilization of tools and equipment's at first well, Mobilization time shall be as follows</p> <ol style="list-style-type: none"> 1.Tools and equipments – 60 days 2.Personnel 07 days <p>For successive call outs Mobilization time shall be as follows</p> <ol style="list-style-type: none"> 1.Tools and equipments – 30 days 2.Personnel 07 days <p>(C) For consumables as listed in price bid format, mobilization time shall be 120 days. Consumables shall be supplied for 2 wells at a time.</p> <p>(D) The second and third well (depending on the success of the first well) may be back to back. So only one-time mobilization and demobilization will be considered for these two wells.</p> <p>(E) During the gap period in between 2nd and 3rd well only stand by charges shall be paid for tools and equipments. No charges shall be paid for the personnel.</p> <p>(F) Mobilization time for consumables for the third well shall be 120 days.</p> <p>(G) Mobilization time for initial and successive call out should be reckoned from the date / day mentioned in Mobilization Notice served by the Company.</p> <p>OIL reserves the right to request successful bidder to mobilize</p>

			services for three(03) horizontal wells in a year, if desired.
PART-3, SOW, SECTION-II,			
3.	Clause No. 2.4(v)	<p>2.4 The bidder must have drilled and completed minimum three (3) Nos. of horizontal wells in the last 7 (seven years) as on bid closing date. All of Horizontal wells should have point no: (v) as minimum and any two from (i) to (IV)</p> <p>i) Kick Off Point (KOP) :220Meter(minimum) ii) Target Depth :1870 Meter(minimum) iii) True Vertical Depth : 1093 Meter (min) iv) Horizontal Displacement : 400 Meter (min) v) Inclination Angle : 90°(minimum)at toe</p>	<p>2.5 The bidder must have drilled and completed minimum three (3) Nos. of horizontal wells in the last 7 (seven years) as on bid closing date. All of Horizontal wells should have point no: (v) as minimum and any two from (i) to (IV)</p> <p>i) Kick Off Point (KOP) :220Meter(minimum) ii) Target Depth :1870 Meter(minimum) iii) True Vertical Depth : 1093 Meter (min) iv) Horizontal Displacement : 400 Meter (min) v) Inclination Angle : 85 - 90°(minimum)at toe</p>
4.	Clause No. 3.1 Work Schedule	<p>(ii) Contractor shall provide the following services as an Deviation Package for drilling of horizontal well: The deviation package includes</p> <p>i. Directional Drilling Service with MWD and LWD with resistivity and gamma ray log. ii. SDMM with Stabilizer Service for 17.1/2" section. iii. RSS services for 12.1/4" and 8.1/2" sections. iv. Drilling Jar services. v. MWD Equipment & Service for Directional & Gamma Measurement vi. LWD Equipment & Services.</p> <p>The contractor will also provide i)Liner Hanger services without Packer for 7" X 9.5/8" casing and that for 9.5/8"x13.3/8" casing (without packer).ii)Centrifuge Services .</p>	<p>(ii) Contractor shall provide the following services as an Deviation Package for drilling of horizontal well: The deviation package includes,</p> <p>i. Directional Drilling Service with MWD and LWD with APWD, Resistivity and Gamma Ray log ii. SDMM with Stabilizer Service for 17.1/2" section. iii. RSS services for 12.1/4" and 8.1/2" sections. iv. Drilling Jar services. v. MWD Equipment & Service for Directional & Gamma Ray Measurement for 17.1/2", 12.1/4" and 8.1/2" section vi. LWD Equipment Services (Resistivity & APWD) for 12.1/4" and 8.1/2" section</p> <p>The contractor will also provide i)Liner Hanger services without Packer for 7" X 9.5/8" casing and that for 9.5/8"x13.3/8" casing (without packer).ii)Centrifuge Services .</p> <p>1 main & with sufficient back up of each tool shall be supplied in the Deviation package.</p>

5.	Clause No. 4.3(iii)	<p>iii) In RSS services in place of SDMM with MWD/ LWD services <u>with resistivity and gamma ray log</u>, the necessary spares /equipment to be provided for drilling in the 12.1/4" and 8.1/2" sections for inclination, <u>resistivity with neutron porosity and density</u> measurements in line with the above points no.(i) and (ii) and the NOTES attached along with.</p>	<p>iii) 9.5/8" OD SDMM is required for 171/2" hole section. Refer Annexure D. Three numbers of stabilizers(one DB and two PB) are to be supplied for each of 17.1/2", 12.1/4" and 8.1/2" for hole probing trip after drilling each section.</p>
6.	Clause No. 4.3(vii)	<p>(vi) <u>MWD/LWD Engineers:</u></p> <p>Bidder will provide qualified, skilled and experienced MWD/LWD Engineers (Minimum 3 years of experience) on call out basis for OIL's operation.</p> <p>The personnel will be required to work on a suitable ON/OFF-day rotation. They must have documented training and experience (curriculum vitae) verifying their ability to operate the modern DD/MWD/LWD logging tools. The engineers must be fluent in written and spoken English. The LWD/MWD Engineer will be responsible including but not limited to the following:</p> <ul style="list-style-type: none"> ○ Prepare Logging plan and program, ○ Run, maintain and manage the MWD/LWD tools and unit, ○ Prepare daily reports of major real time observations and definition of markers, ○ Maintain adequate stock and inventory of tools and spares on the Drilling Unit and Shore Base to perform the drilling program, ○ Ensure adequate spares for all the equipment and tools are available. ○ Drilling Unit to carry out any repairs without downtime. 	<p>(vii) <u>MWD/LWD Engineers:</u></p> <p>Bidder will provide two(02) nos. qualified, skilled and experienced MWD/LWD Engineers (Minimum 3 years of experience) on call out basis for OIL's operation.</p> <p>The personnel will be required to work on a suitable ON/OFF-day rotation. They must have documented training and experience (curriculum vitae) verifying their ability to operate the modern DD/MWD/LWD logging tools. The engineers must be fluent in written and spoken English. The LWD/MWD Engineer will be responsible including but not limited to the following:</p> <ul style="list-style-type: none"> ○ Prepare Logging plan and program, ○ Run, maintain and manage the MWD/LWD tools and unit, ○ Prepare daily reports of major real time observations and definition of markers, ○ Maintain adequate stock and inventory of tools and spares on the Drilling Unit and Shore Base to perform the drilling program, ○ Ensure adequate spares for all the equipment and tools are available. ○ Drilling Unit to carry out any repairs without downtime.

PART – 3, SCHEDULE OF RATES, SECTION - IV			
7.	Clause No. B(i)	Mobilization charges as lump sum amount against individual packages of tool/equipment will be payable when all equipment/tools (free of defects/encumbrances) are positioned at Company's designated site and duly certified by the Company representative which shall be no later than 7 working days from the date of arrival at the mobilization point regarding readiness of the equipment & personnel to undertake / commence the work assigned under the contract	Mobilization charges as lump sum amount against individual packages of tool/equipment will be payable when all equipment/tools (free of defects/encumbrances) are positioned at Company's designated site and duly certified by the Company representative which shall be no later than 7 working days from the date of arrival at the mobilization point regarding readiness of the equipment to undertake / commence the work assigned under the contract
8.	Clause No. D (ix)	ix) Selective Zero rate will be applicable only for those malfunctioning components of BHA, when normal operation (drilling or round-trip) is continued with other functional components of BHA. The Selective Zero rate for non functional tool will continue from the time of fault detection (down hole) till the drill string is pulled out of hole after completion of normal operation. The functional components of BHA will continue to be paid operating rate under such circumstances.	ix) Selective Zero rate will be applicable only for those malfunctioning components of BHA, when normal operation (drilling or round-trip) is continued with other functional components of BHA. The Selective Zero rate for non functional tool will continue from the time of fault detection (down hole) till the drill string is pulled out of hole after completion of normal operation. The functional components of BHA will continue to be paid operating rate under such circumstances. If a tool fails below rotary table and the operation is suspended then "Zero Rate" shall be applied for the entire package till the tool is rectified and operation is resumed. In case operation is continued even after partial failure of the tool then selective zero rate shall be applied for that service / tool. Payment would be made for the remaining tool / service as per below : Failure of SDMM or RSS = 1/3 deduction Failure of MWD or LWD or GR = 1/3 Deduction Failure of Resistivity or APWD= 1/3 Deduction. So if GR fails and OIL decides to drill ahead, operating rate payable will be 2/3 rd of package cost.

9.	Clause No. G (v)	v) Operational Charges shall not be payable to MWD/LWD engineer in case of malfunctioning of MWD/ Gamma/ Resistivity/Pulser/RSS tool below rotary table after surface testing (during drilling or running in) or malfunctioning of surface computer for decoding pulser transmitted data from down hole.	(v) Operational Charges shall not be payable to MWD/LWD engineer in case of malfunctioning of MWD/ Gamma/ Resistivity/Pulser tool below rotary table after surface testing (during drilling or running in) or malfunctioning of surface computer for decoding pulser transmitted data from down hole.
10.	Clause No. G (vi)	vi) Operational Charges shall not be payable to Directional Driller in case of malfunctioning of RSS/SDMM/ Stabilizer/ Jar tool below rotary table after surface testing (during drilling or running in) or in case of decision to suspend normal operation and to pull out the drill string due to malfunctioning of RSS/MWD/Gamma/Resistivity/Pulser tool below rotary table.	vi) Operational Charges shall not be payable to Directional Driller in case of malfunctioning of RSS/SDMM/ Stabilizer/ Jar tool below rotary table after surface testing (during drilling or running in) or in case of decision to suspend normal operation and to pull out the drill string due to malfunctioning of RSS/SDMM/Pulser tool below rotary table.
PART-3, GCC, SECTION-I			
11.	Clause No. 2.2	2.2 MOBILISATION/De- MOBILISATION TIME OF THE CONTRACT: The mobilization of equipment, personnel etc. should be completed by Contractor within 30 days from the date of LOA or mobilization Advice. Mobilization shall be deemed to be completed when Contractor's equipment and manpower are placed at the nominated location in readiness to commence Work as envisaged under the Contract duly certified by the Company's authorized representative.	2.2 MOBILISATION/De- MOBILISATION TIME OF THE CONTRACT: The mobilization of equipment, personnel etc. should be completed by Contractor as under : (A)For Initial mobilization of tools and equipment's at first well, Mobilization time shall be as follows 1.Tools and equipments – 60 days 2.Personnel 07 days (B)For successive call outs Mobilization time shall be as follows 1.Tools and equipments – 30 days 2.Personnel 07 days

			<p>(C) For consumables as listed in price bid format, mobilization time shall be 120 days. Consumables shall be supplied for 2 wells at a time.</p> <p>(D) The second and third well (depending on the success of the first well) may be back to back. So only one-time mobilization and demobilization will be considered for these two wells.</p> <p>(E) During the gap period in between 2nd and 3rd well only stand by charges shall be paid for tools and equipments. No charges shall be paid for the personnel.</p> <p>(F) Mobilization time for consumables for the third well shall be 120 days.</p> <p>(G) Mobilization time for initial and successive call out should be reckoned from the date / day mentioned in Mobilization Notice served by the Company. Mobilization shall be deemed to be completed when Contractor's equipment and manpower are placed at the nominated location in readiness to commence Work as envisaged under the Contract duly certified by the Company's authorized representative.</p>
ANNEXURES			
12.	Annexure-G		Revised Annexure-G furnished below.
13.	Annexure-I		Revised Annexure-I furnished below.
14.	Annexure-L		Revised Annexure-L furnished below.

15.	PROFORM A-B		Re-Revised Proforma-B furnished below.

2.0 For the **Re-Revised Price Bid Format , PROFORMA – B (REVISED)** in excel format to be referred.

3.0 All other terms & Conditions remain unchanged.

ANNEXURE – E (REVISED)

SPECIFICATION OF DRILLING JARS (Hydro-mech/Hydraulic)

1.0	JAR FEATURES	OIL'S REQUIREMENT	BIDDER'S OFFER	REF: FILE & PAGE NO. BY BIDDER
6½”/6¾” OD Drilling Jar	Length (Maximum)	30 feet (± 3 feet)		
	ID (Minimum)	2½” / 2.¾” ID		
	Tool Joint	4½” API IF Box x Pin		
	Torsional Yield	Not less than 50,000 ft-lbs		
	Jar Up-stroke minimum	160,000 - 175000 pounds		
	Jar Down-stroke minimum	37600 - 175000 pounds		
	Stroke Length (Up & Down)	12” Minimum		
	Tensile Yield	730,000 Lbs.		
	Max Operating Temp.	120° C or more		
	Max Operating Pressure (Psi)	18000 PSI or more		

	Manufacturer / Model	From the manufacturers specified in NIT.		
--	----------------------	--	--	--

- All x-over subs required for connection contractor's string to operator's drill string is to be provided and furnished by the CONTRACTOR.
- In case the contractor provides retrievable RA sources, assembly should have the suitable ID to retrieve the sources if any.
- Additional features/information (if any) is to be provided by the bidder.

SPECIFICATION OF DRILLING JARS (Hydro-mech/Hydraulic)

1.0	JAR FEATURES	OIL'S REQUIREMENT	BIDDER'S OFFER	REF: FILE & PAGE NO. BY BIDDER
7³/₄" / 8" OD Drilling Jar	Length (Maximum)	30 feet (± 3 feet)		
	ID (Minimum)	2½" / 2.¾" / 3" ID		
	Tool Joint	6 ⁵ / ₈ " API Reg. Box x Pin		
	Torsional Yield	Not less than 95,000 ft-lbs		
	Jar Up-stroke minimum	260,000 - 300000 pounds		
	Jar Down-stroke minimum	42,000 - 300000 pounds		

Stroke Length (Up & Down)	12" Minimum		
Tensile Yield	10, 00,000 lbs.		
Max Operating Temp.	120° C or more		
Max Operating Pressure (Psi)	20000 PSI or more		
Manufacturer / Model	From the manufacturers specified in NIT.		

ANNEXURE-G (REVISED)

SPECIFICATION OF LWD TOOLS FOR 12.1/4" and 8 ½" HOLE SECTIONS

Service Description	Required Specifications
GR, Resistivity (Induction type) hole size: 8.5	Temperature rating: 300 deg F or more
	Pressure rating: 18000 PSI or more

inch and 6 inch

Code: GRIND

Measurement while drilling (MWD):
Resistivity and Gamma ray logging are required for 12.1/4" and 8.5 inch hole size and should be combinable & compatible with MWD and other LWD equipment.
The provision of real time data transmission should exist. Data is to be recorded in memory mode as well. Data also is to be recorded while pulling out by back reaming / with pump-on.
Resistivity Measurement:
To be recorded in Multiple frequencies and in multiple depth of investigations (minimum 5). Bore-hole compensated phase & attenuation measurement systems with multiple depths of investigation
Resistivity measurement: 0.2 to 200 Ohm-m and above
Invasion Profile from curve separations
Gamma Ray:
Gamma Ray 0-250 API

	Gamma Ray:
	Gamma Ray range between 0-250 API unit

ANNEXURE-I (REVISED)

SPECIFICATION OF NEUTRON, DENSITY WITH CALIPER

FOR 12.1/4" and 8 ½" (Call out) HOLE SECTION

Service Description	Required Specifications
Neutron, Density with Caliper hole size: 12.1/4" and 8.5" Code: RHONPHI	Temperature rating: 300 deg F or more
	Pressure rating: 18000 PSI or more
	Density Range = 1.8 to 2.8 gm/ cc
	Pe = 1 to 10 units
	Neutron porosity = -6 to 54 P.U. or 0 to 60 P.U.

DELIVERABLES FOR TOOLS MENTIONED ABOVE

Sl	Equipment/Description	Real Time Output	Memory Mode Output after each round trip	Processed Output (after completion of a hole section)	Processed Output (after completion of a well)
(I)	Delivery Time	Real-Time while Drilling/Tripping	Within 24 hrs. of round trip	Within 3 days of completion of Hole Section	Within 3 days of completion of Well
Sl	Equipment/Description	Real Time Output	Memory Mode Output after each round trip	Processed Output (after completion of a hole section)	Processed Output (after completion of a well)
(II)	Deliverables	RT Log Prints in Morning and Evening and whenever required during drilling	Rush Print Memory Mode Log Prints	Memory Recorded Mode Log Prints 2 Copies each	QC'd Recorded Mode Composite Log Prints 2 Copies each LAS/DLIS and PDF format In DVD
		GR - 0 -250 API Phase Shift resistivity - Minimum 2	GR - 0 -250 API Phase Shift resistivity - Minimum 4 Curves	Memory Recorded Mode Log Prints of GR - 0 - 250 API Phase Shift	Recorded Mode Composite Log Prints Average GR - 0 -250 API

(III)	<p>Directional , GR, Resistivity (Induction type) (GRIND) hole size: 12.1/5" and 8.5 inch</p>	<p>Curves Attenuation Resistivity - Minimum 1 Curve (Resistivity Curves to be transmitted after prior discussion with Company)</p>	<p>Attenuation Resistivity - Minimum 4 Curves</p> <p>All resistivity curves should be borehole compensated and environmentally corrected.</p>	<p>resistivity - Minimum 4 Curves Attenuation Resistivity - Minimum 4 Curves</p> <p>All resistivity curves should be borehole compensated and environmentally corrected.</p>	<p>Phase Shift resistivity - Minimum 4 Curves Attenuation Resistivity - Minimum 4 Curves</p> <p>All resistivity curves should be borehole compensated and environmental ly corrected.</p>
(IV)	<p>Neutron, Density with Calliper (RHONPHI) hole size: 12.1/4" and 8.1/2"</p>	<p>Density transmitted in real-time ("bottom" density in case of a deviated borehole)</p> <p>Density Correction PEF- O- 10 Thermal Neutron</p>	<p>Field Deliverable recorded mode data consisting the following :-</p> <p>Density Correction Calliper (Ultrasonic / Density) PEF-0-10 Thermal Neutron</p>	<p>Recorded mode Data :</p> <p>Correction Calliper (Ultrasonic / Density) PEF - 0- 10 Thermal Neutron Porosity environmentally-corrected log curves on-depth Time after Bit Sliding indicator</p>	<p>Recorded mode Composite Data and End of Well Report :-</p> <p>Density Correction Calliper (Ultrasonic /Density)</p>

		Porosity -	Porosity -		PEF - 0-
--	--	------------	------------	--	----------

SI	Equipment/ Description	Real Time Output	Memory Mode Output after each round trip	Processed Output (after completion of a hole section)	Processed Output (after completion of a well)
		<p>environmentally -corrected log curves on-depth</p> <p>Real-time data at 2 data points / ft. or better</p>	<p>Environmentall y corrected log curves on-depth Time after Bit Sliding indicator</p>	<p>Density Image</p> <p>Corrected near far counts of neutron should also be provided One copy in LAS/DLIS to Logging Services.</p>	<p>Thermal Neutron Porosity environmenta nally corrected curves on depth Time after Bit Sliding indicator</p>
