

**HIRING OF DIRECTIONAL AND PERFORMANCE DRILLING SERVICES
FOR NORTH & SOUTH/CENTRE REGIONS**

SCOPE OF WORK

1. OGDCL Drilling operations are scattered in the North & South regions of Pakistan. Drilling Department is operating Contractor rigs as well as owned rigs. According to annual plan, OGDCL will drill 25-30 wells per year which includes directional, re-entry & performance wells. OGDCL intends to hire the directional and performance drilling services for North & South/Centre regions for a period of 02 years extendable with mutual consent.
2. OGDCL invites internationally reputed companies with a minimum of 10 years experience including 05 years experience in Pakistan having performed directional & performance drilling services on a minimum 15 numbers of wells in North region in last 05 years (if bidding for North region wells) and 40 numbers of wells in South/Centre region in last 05 years (if bidding for South/ center region).
3. 02 separate contracts will be awarded for directional and performance drilling services region wise i.e. contract for North wells & contract for South/ Centre wells separately.
4. Bidder to submit comprehensive proposals for Directional and Performance Drilling Services at OGDCL wells on "as and when required" rate running contract basis for an initial period of two year extendable with mutual consent.
5. The work requirement is tentative and anticipated ± 10 Directional and Performance drilling jobs at North region and ± 15 directional and performance drilling jobs at south region are expected in one year. However, OGDCL may increase or decrease the volume of work according to the requirement and well targets.

INSTRUCTIONS TO THE BIDDERS

1) General

- i. Bidders are required to provide the following information with their bid document:
 - a) Service company's profile along with certifications (Validity & copies)
 - b) History of Service company establishment, details of last 10 years Directional & Performance Drilling jobs completed by Service Company at wells along with the performance record separately.
 - c) Client list with addresses, email/Fax/Phone Nos. for last 10 years experience for Confirmation of Performance.
 - d) CV's of the offered Directional Drillers and MWD/LWD Engineer, Operations Manager & Drilling Engineer on role of the company showing proof of their required experience.
 - e) Technical specifications & usage history data of the offered equipment. Bidder must also provide the list of all those oil and gas companies in Pakistan to whom the subject services were provided in last five years along with tool details and job performance. Additionally, global experience in similar applications will also be shared.
 - f) Details of facilities/ base in Pakistan including availability of back up equipment etc.
 - g) Bidder to provide sound audited financial report of last 05 years.
- ii. Daily Operating rate per day for equipment will be applicable only for the tools when RIH below rotary table excluding circulating time and will not apply on back up tools at wellsite.

Commendations, Service award should be provided along with Table in Appendix

*Under NPT column, explain if the job had any NPT either trajectory related or due to equipment failure

*Contractor to provide some NPT/NCR incident closeout documentation as well

2) **Equipment**

Bidder to confirm the following:

- i. Availability of high performance, high torque and HPHT mud motors in bidder's inventory.
- ii. Availability of suitable equipment for drilling fluid with high solid concentration, WBM, OBM mud, UBD and air drilling jobs and for mud weight up to 2.3 SG.
- iii. Availability of recoverable and non-recoverable MWD/ LWD equipment in Pakistan/ abroad along with mobilization period for OGDCL jobs.
- iv. The bidder to provide detail of base inside Pakistan. Complete list of related inventory available with the service provider to be attached. The bidders will also attach capability / proof of sufficient quantity of tools for conducting at least 05 jobs in same hole size at the same time and 10 simultaneous jobs in different hole sizes at the same time.
- v. Bidder to provide detailed specs, operational procedure, limitations, maximum circulating hours, GPM requirement & tools differential pressure at different GPM for each offered equipment/ tools.
- vi. MTF (Mean Time failure) of the quoted tools must be shared.
- vii. The offered tools should be capable enough to pump LCM pills, where needed. Any limitations w.r.t mud weight, viscosity, LCM concentration. solid content etc. must be clearly mentioned in technical proposal
- viii. Quoted Equipment should be capable to perform operations efficiently at a maximum circulating pressure of 5000 PSI.
- ix. Bidder to confirm if all the offered motors are equipped with rotor catching device (RCD).
- x. The bidder must have license / approval from PNRA for the provision, storage & handling of radioactive sources for LWD service.
- xi. LWD Interpretation Expert: The bidder must have an expert available in Pakistan for assistance with interpretation of logs and quality control of logs in real-time while providing LWD services (if requested). The expert should be available for consultation for tasks related to Logging While Drilling such as image processing, petro physical analysis, formation pressure evaluation etc. having experience for petro physical support for more than 7 years.

3) **Operating Base/ Yard**

- i. Bidder to confirm the fully functional and well established operating base at Pakistan, if the bidder has no operating base in Pakistan, the bidder will confirm to establish the base within 45 days after issuance of LOI.
- ii. Physical verification for the quoted equipment in bidder's inventory by OGDCL representative may be conducted during technical evaluation at the Service Company's base in Pakistan if required.
- iii. Bidder to facilitate the company representative to conduct physical inspection of the base/yard for following:
 - a) Availability of quoted equipment

- b) Total available inventory
- c) Facility and equipment for repair and maintenance
- d) Maintenance record of equipment

4) **Service facility/ Workshop**

- i. Bidder must have service facility in Pakistan or abroad as per requirement for inspection, servicing, repairing and maintenance of all equipment. Company reserves the right to conduct physical inspection of the facility.
- ii. The bidder to ensure performance for following procedures but not limited to:
 - a) Equipment assembly procedures and checklists.
 - b) Equipment history checking procedure
 - c) Motor service/maintenance procedures
 - d) Qualification & pre-job inspection procedure before equipment mobilization
 - e) Testing, post job inspection & equipment failure examination procedure of incoming equipment.

5) **Personnel**

- i. All contractors's personnel must have qualification and experience as per tender document and approved by company. Company will review the resumes of personnel before commencement of job.
- ii. Contractor is responsible for obtaining Security Clearance for foreigners/ Non local staff in time prior to job execution.
- iii. Contractor crew should be on field location within 48 hours of Mobilization notice.
- iv. Contractor personnel must have valid visas and satisfying immigration formalities in the country of operations i.e. Pakistan.

Field Personnel

- i. **Directional Driller** with graduate engineering degree with 05 years experience or diploma holder/bachelor's degree with 10 years experience as directional driller at directional multilateral ERD, UBD, short radius, relief and other specialized wells. CV's of the Directional Drillers to be attached. Each Directional Driller should have handled at least 30 jobs independently.
- ii. **MWD/LWD Engineers** with graduate engineering degree with 03 years experience or diploma holder/bachelor's degree with 06 years experience as MWD/LWD engineer at directional, multilateral ERD, other specialized wells. CV's of the MWD/ LWD Engineers to be attached. Each MWD/LWD engineer should have worked on at least 20 MWD jobs independently.
- iii. **Single Shot/ Multi-shot Operator** will be responsible for accurate measurement, ensuring connection with wireline/slick line unit, The Operator should be proficient with the functionality of the Equipment used for the job and should have performed at least 10 successful jobs as lead hand.

Base Office Support Personnel

- i. **Operations Manager** with 10 years experience of Directional and Performance Drilling. Operations Manager should have an engineering degree from a recognized university, The Person should be

available for consultation at company head office on short notice and available 24 Hours for support and advice during execution of services.

- ii. **Drilling Engineer/Desk Engineer** with graduate engineering degree & 05 years well planning experience of Directional/Performance and horizontal wells. The Drilling Engineer should be available at company head office for consultation during the planning and execution of job.
- iii. **Equipment repair and maintenance** supervisors with service experience of 07 years.

6. Training Program for Company Engineers

The contractor should provide trainings to at least 05 company engineers on yearly basis on following modules but not limited to:

- Well Design (Trajectory planning)
- BHA and Drill String Design
- Torque & Drag
- Hole Cleaning in Deviated Wells
- Motors & Rotary Steerable Systems
- MWD and LWD systems
- Anti-collision and Survey Management

7. Software requirements

- i. Well Planning software (Trajectory planning, Hydraulics, anti-collision and Torque & Drag) should be available for performing calculations as per industry practices The software shall also be made available to company engineers for the purpose of well planning.
- ii. Provide license certification including full suite of Directional Drilling module.
- iii. Bidder must have capability to do QA/QC on BGGM or HDGM model. It shall be part of End of job report.

8. Reporting

- i. OGDCL requires proper reporting procedures during all phases related to Drilling of the well including planning, execution and completion of job. Well planning proposals should be generated using the licensed software. Soft copies & hard copies in color print must be provided to head office regarding well plans, end of Well reports and Logs. Contractor to ensure submission of following reports to head office.
 - Well Proposal
 - Pre job Report
 - Daily Morning Report
 - End of Well report
- ii. Bidder to provide Pre-inspection reports to Operations Manager / Company man at the time of arrival of their equipment being used in Drilling / Sidetrack. Bidder to submit motor manufacturing date, last service record, last redress record as part of pre-inspection reports.

- iii. Operational procedure / limitations / Circulating Hrs. of mud motor, MWD tool etc. with complete specifications of each equipment / tool should be provided to CM/O.M on arrival at location prior to RIH Mud Motor / MWD tool etc. Tool must be capable of running at least 150 to 200 hours.
- iv. Surface indications about any downhole problem with mud motor i.e. motor stalling / abnormal change in standpipe pressure and bearing failure etc. should be reported to Company Man / O.M immediately. DD must call Company Man / OM on rig floor for eye witness of defective / repairable mud motor or any MWD malfunction.
- v. In case of POOH due to motor / MWD and all malfunction or defect, pull out reason must be clearly mentioned in DD daily activity report and OGDCL DMR (Daily Morning Report).
- vi. Observations about mud motor / MWD and all tool after POOH should also be clearly mentioned in DD daily activity report and OGDCL DMR to clear any ambiguity and for invoices verification.
- vii. The Unit computer system must be able to provide real-time data acquisition, a backup system must be present at all times to prevent any loss of real time data, must have an independent off-line computer for data processing and with minimum one A4 format HP LaserJet printer.
- viii. All data shall be captured in both digital and hard copy forms. Unit shall be manned by at least one MWD or EMS Engineer 24 hours a day. All communication from or to the rig shall be via the well site representative. Personal Working hours must meet OGDCL and local HSE regulations

9. **Mobilization/ Demobilization (Mob/ demob)**

- i. Mob/ demob cost of equipment and personnel will be on “rate per KM” basis. Mob/ demob cost will be paid for south/center region from Karachi/ south base being mobilization point and for North will be paid from Islamabad being mobilization point. Base availability for both regions is not mandatory. Minimum one base anywhere in Pakistan is mandatory. Preference will be given to the bidders having basis in both regions.
- ii. Equipment & Crew Mob/ Demob charges (Both ways from base to well site and back) will be paid one time for each hole size/phase. However, in case of demand by OGDCL for new / conditional items/replacement during the same phase, mob/ demob charges will be applicable.

10. **QA/QC**

- i. The bidder must have a Quality Policy in place approved by it management.
- ii. The bidder must have a Quality Management System in place. ISO 9001 or equivalent management Certification to be provided as proof in the bid response.
- iii. The bidder must provide its own Anti-Collision policies & procedures.
- iv. The bidder must have its own Drill String Interference checks procedure, MWD signal strength prediction and depth control procedures.

- v. The bidder must have its own survey management policies and procedures in place.
- vi. The bidder must provide its pre-job engineering and equipment checklist.
- vii. The bidder to provide its chart book developed for LWD data and LWD data quality manual, as and when applicable.

11. HSE

- i. The bidder must have HSE Management system in place with assigned HSE Organization / Loss Prevention Policy and Loss Prevention Team in Pakistan
- ii. The bidder must have an incident reporting system and system for Hazard Risk Analysis in place
- iii. The bidder must have various HSE policies in place approved from its global management like IT & Data Security Policy, HSE Policy

DIRECTIONAL AND PERFORMANCE DRILLING SERVICES
FOR NORTH REGION
GROUP-I
TECHNICAL EVALUATION CRITERIA FOR NORTH REGION

Sr. No.	Description	Weightage	Minimum qualifying marks
1	Minimum 10 years global experience as Directional and Performance Drilling Service Company with a minimum of 100 wells. (Mandatory)	20 %	20 %
2	Minimum 05 years experience in Pakistan as Directional and Performance Drilling Services Company with a minimum of 15 wells in North region in last 05 years. (Mandatory)	15 %	15 %
3	Provision of record for minimum successful 05 jobs per year during last 10 years by the bidder in and outside Pakistan other than bidder's origin country. Performance letter or any proof of satisfactory performance also to be provided.	20% Yearly satisfactory record= 02 marks per year	15 %
4	Required Directional Drillers, MWD Engineers track record & availability of personnel for OGDCL jobs as per tender document. Bidder to provide at least 10 CVs of Directional drillers and 10 CVs of MWD engineers.	20 % CV of 01 DD & 01 MWD engineer = 1.5 marks	15 %
5	Service Company's established base in Pakistan as per T.O.R.	10 % Established base in Pakistan = 10 marks	7.5 %
6	Company's ability with inventory to undertake minimum 05 Directional and Performance Drilling jobs in same hole size and at the same time with back up inventory or bidder to ensure to provide required inventory to undertake minimum 05 Directional and Performance Drilling jobs in same hole size and at the same time with back up inventory within 45 days of issuance of LOI and carry out OGDCL jobs immediately after signing of contract.	15 % 1 Job = 2.5 Marks	11.25%
	TOTAL MARKS	100%	

Note:

- Technical evaluation will base upon above criteria. Minimum qualifying marks are 75% in discipline at S.No. 3, 4, 5 & 6. Overall aggregated marks for technical qualification will be 80%.

DIRECTIONAL AND PERFORMANCE DRILLING SERVICES
FOR SOUTH/ CENTRE REGION
GROUP-II
TECHNICAL EVALUATION CRITERIA FOR SOUTH/CENTRE REGION

Sr. No.	Description	Weightage	Minimum qualifying marks
1	Minimum 10 years global experience as Directional and Performance Drilling Service Company with a minimum of 100 wells . (Mandatory)	20 %	20 %
2	Minimum 05 years experience in Pakistan as Directional and Performance Drilling Services Company with a minimum of 40 wells in South/ Centre region in last 05 years. (Mandatory)	15 %	15 %
3	Provision of record for minimum successful 05 jobs per year during last 10 years by the bidder in and outside Pakistan other than bidder's origin country. Performance letter or any proof of satisfactory performance also to be provided.	20% Yearly satisfactory record = 02 marks per year	15 %
4	Required Directional Drillers, MWD Engineers track record & availability of personnel for OGDCL jobs as per tender document. Bidder to provide at least 10 CVs of Directional drillers and 10 CVs of MWD engineers.	20 % CV of 01 DD & 01 MWD engineer = 1.5 marks	15 %
5	Service Company's established base with in Pakistan as per T.O.R.	10 % Established base in Pakistan = 10 marks	7.5 %
6	Company's ability with inventory to undertake minimum 05 Directional and Performance Drilling jobs in same hole size and at the same time with back up inventory. Bidder to ensure to provide required inventory within 45 days of issuance of LOI and carry out OGDCL jobs immediately after signing of contract.	15 % 1 Job = 2.5 Marks	11.25%

	TOTAL MARKS	100%	
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Note:

- Technical evaluation will base upon above criteria. Minimum qualifying marks are 75% in discipline at S.No. 3, 4, 5 & 6. Overall aggregated marks for technical qualification will be 80%.

OTHER IMPORTANT INFORMATION**BIDDING METHOD:**

Bids against this tender are invited on ‘**Single stage Two envelop**’

AMOUNT OF BID BOND:

Bid Bond /Bid Security amounting to US \$ 600,000/- is to be attached / provided with the technical bid. Please see Master Set of Tender Document for further details.

BID PRICE:

- i. Bid price shall be inclusive of all taxes, duties, levies, charges etc., except Provincial Sales Tax (PST)/ Islamabad Capital Territory Sales Tax (ICT) in Pakistan.
- ii. The prices quoted by the successful bidder (contractor) for required services shall remain firm and final throughout contract period. The price charged by the successful bidder (contractor) for required services shall not vary from the prices quoted by the service company.

MANDATORY REQUIREMENT

For online payment to vendors/contractors through (IBFT & LFT). Following info is required from your company: -

1. IBAN (INTERNATIONAL BANK ACCOUNT NUMBER 24 DIGITS).
2. VENDOR NAME AS PER TITLE OF THEIR BANK ACCOUNT.
3. NTN NO.
4. CONTACT # OF COMPANY CEO/OWNER (MOBILE & LANDLINE).
5. POSTAL ADDRESS.
6. BANK NAME.
7. BANK BRANCH NAME & ADDRESS.

The master set of tender documents (services) uploaded on OGDCL's website (www.ogdcl.com) is the integral part of this TOR.

Bidders are requested to read TOR & Master Set to Tender Documents (Services) and provide complete information / documents including tender annexures with the bid.

Following is the link for Master Set of Tender Documents for Services:

<https://ogdcl.com/sites/default/files/Tender%20Document%20Services%20Press%20for%20Webloading%20dated%2018-03-2019-N.pdf>

HIRING OF DIRECTIONAL AND PERFORMANCE DRILLING SERVICES FOR NORTH REGION

GROUP-I

RATE FORMAT FOR DIRECTIONAL DRILLING SERVICES FOR NORTH REGION

S.N	DESCRIPTION	OPERATING RATE PER DAY (US\$)	CIRCULATING RATE PER HOUR (US\$)	STANDBY RATE PER DAY (US\$)	REDRESS RATE PER OCCURRENCE (US\$)	LIH COST (US\$)
01	11-3/4" Standard Mud Motor					
02	11-3/4" High Torque Performance Mud Motors					
03	11-3/4" MWD System					
04	11-3/4" Bypass circulation sub					
05	11-3/4" Non-Magnetic Drill Collar-30ft.		N/A		N/A	
06	11-3/4" Integral Blade Stabilizers		N/A		N/A	
08	9-5/8" Standard Mud Motor					
09	9-5/8" High Torque Performance Mud Motors					
10	9-5/8" MWD System					
11	9-1/2" Bypass circulation sub					
12	9-1/2" Non-Magnetic Drill Collar-30ft.		N/A		N/A	
13	17-1/2" / 17" Integral Blade Stabilizers		N/A		N/A	
15	8" Standard Mud Motor					
16	8" High Torque Performance Mud Motors					
17	8" HPHT Mud motor					
18	8" MWD System					
19	8" Bypass circulation sub					
20	8" Non-Magnetic Drill Collar-30ft.		N/A		N/A	
21	12-1/4" Integral Blade Stabilizers		N/A		N/A	
25	6-3/4" Standard Mud Motor					
26	6-3/4" High Torque Performance Mud Motors					
27	6-3/4" HPHT Mud motor					
28	6-3/4" MWD System					
29	6-3/4" Bypass circulation sub					
30	6-3/4" Non-Magnetic Drill Collar-30ft.		N/A		N/A	
31	8" Integral Blade Stabilizers		N/A		N/A	
33	6-3/4" LWD Triple Combo (Density, Porosity & Resistivity logs)					

34	6-3/4" LWD Quad Combo (Density, Porosity, Resistivity & Sonic logs)				
35	4-3/4" Standard Mud Motor				
36	4-3/4" High Torque Performance Mud Motors				
37	4-3/4" HPHT Mud motor				
38	4-3/4" MWD System				
39	4-3/4" Bypass circulation sub				
40	4-3/4" Non-Magnetic Drill Collar-30ft.		N/A		N/A
41	6" / 5-7/8" Integral Blade Stabilizers		N/A		N/A
43	4-3/4" LWD Triple Combo (Density, Porosity & Resistivity logs)				
44	4-3/4" LWD Quad Combo (Density, Porosity, Resistivity & Sonic logs)				
45	3-3/8" Standard Mud Motor				
46	3-3/8" High Torque Performance Mud Motors				
47	3-3/8" HPHT Mud motor				
49	3-3/8" Bypass circulation sub				
50	3-3/8" Non-Magnetic Drill Collar-30ft.				
51	4-1/8" Integral Blade Stabilizers				
52	Single shot kit & Multi-shot kit		Rate per job		
Serial No.	Description	Operating Rate per Day (US\$)		Stand by rate per Day (US\$)	
53	Directional Driller Each				
54	MWD/ LWD Survey Engineer Each				
55	Complete Crew (04 Members) Mob/Demob Package rate per KM				
56	Complete Equipment Mob/Demob Package rate per KM				

Note:-

- LWD Triple Combo = Density, Porosity & Resistivity logs
- LWD Quad Combo = Density, Porosity, Resistivity & Sonic logs

HIRING OF DIRECTIONAL AND PERFORMANCE DRILLING SERVICES FOR NORTH REGION
GROUP-I
RATE FORMAT FOR PERFORMANCE DRILLING SERVICES FOR NORTH REGION

S.N	DESCRIPTION	OPERATING RATE PER DAY (US\$)	CIRCULATING RATE PER HOUR (US\$)	STANDBY RATE PER DAY (US\$)	REDRESS RATE PER OCCURRENCE (US\$)	LIH COST (US\$)
01	11-3/4" Standard Mud Motor					
02	11-3/4" High Torque Performance Mud Motors					
03	11-3/4" MWD System					
04	11-3/4" Bypass circulation sub					
05	11-3/4" Non-Magnetic Drill Collar-30ft.		N/A		N/A	
06	11-3/4" Integral Blade Stabilizers		N/A		N/A	
08	9-5/8" Standard Mud Motor					
09	9-5/8" High Torque Performance Mud Motors					
10	9-5/8" MWD System					
11	9-1/2" Bypass circulation sub					
12	9-1/2" Non-Magnetic Drill Collar-30ft.		N/A		N/A	
13	17-1/2" / 17" Integral Blade Stabilizers		N/A		N/A	
15	8" Standard Mud Motor					
16	8" High Torque Performance Mud Motors					
17	8" HPHT Mud motor					
18	8" MWD System					
19	8" Bypass circulation sub					
20	8" Non-Magnetic Drill Collar-30ft.		N/A		N/A	
21	12-1/4" Integral Blade Stabilizers		N/A		N/A	
25	6-3/4" Standard Mud Motor					
26	6-3/4" High Torque Performance Mud Motors					
27	6-3/4" HPHT Mud motor					
28	6-3/4" MWD System					
29	6-3/4" Bypass circulation sub					

30	6-3/4" Non-Magnetic Drill Collar-30ft.		N/A		N/A
31	8" Integral Blade Stabilizers		N/A		N/A
33	6-3/4" LWD Triple Combo (Density, Porosity & Resistivity logs)				
34	6-3/4" LWD Quad Combo (Density. Porosity, Resistivity & Sonic logs)				
35	4-3/4" Standard Mud Motor				
36	4-3/4" High Torque Performance Mud Motors				
37	4-3/4" HPHT Mud motor				
38	4-3/4" MWD System				
39	4-3/4" Bypass circulation sub				
40	4-3/4" Non-Magnetic Drill Collar-30ft.		N/A		N/A
41	6"/ 5-7/8" Integral Blade Stabilizers		N/A		N/A
43	4-3/4" LWD Triple Combo (Density, Porosity & Resistivity logs)				
44	4-3/4" LWD Quad Combo (Density. Porosity, Resistivity & Sonic logs)				
45	3-3/8" Standard Mud Motor				
46	3-3/8" High Torque Performance Mud Motors				
47	3-3/8" HPHT Mud motor				
49	3-3/8" Bypass circulation sub				
50	3-3/8" Non-Magnetic Drill Collar-30ft.				
51	4-1/8" Integral Blade Stabilizers				
52	Single shot kit & Multi-shot kit	Rate per job			

Serial No.	Description	Operating Rate per Day (US\$)	Stand by rate per Day (US\$)
55	Directional Driller Each		
56	MWD/ LWD Survey Engineer Each		
57	Complete Crew (04 Members) Mob/Demob Package rate per KM		
58	Complete Equipment Mob/Demob Package rate per KM		

Note:-

- LWD Triple Combo = Density, Porosity & Resistivity logs
- LWD Quad Combo = Density. Porosity, Resistivity & Sonic logs

HIRING OF DIRECTIONAL AND PERFORMANCE DRILLING SERVICES FOR SOUTH/CENTRE REGION**GROUP-II****RATE FORMAT FOR DIRECTIONAL DRILLING SERVICES FOR SOUTH/CENTRE REGION**

S.N	DESCRIPTION	OPERATING RATE PER DAY (US\$)	CIRCULATING RATE PER HOUR (US\$)	STANDBY RATE PER DAY (US\$)	REDRESS RATE PER OCCURRENCE (US\$)	LIH COST (US\$)
01	11-3/4" Standard Mud Motor					
02	11-3/4" High Torque Performance Mud Motors					
03	11-3/4" MWD System					
04	11-3/4" Bypass circulation sub					
05	11-3/4" Non-Magnetic Drill Collar-30ft.		N/A		N/A	
06	11-3/4" Integral Blade Stabilizers		N/A		N/A	
08	9-5/8" Standard Mud Motor					
09	9-5/8" High Torque Performance Mud Motors					
10	9-5/8" MWD System					
11	9-1/2" Bypass circulation sub					
12	9-1/2" Non-Magnetic Drill Collar-30ft.		N/A		N/A	
13	17-1/2" / 17" Integral Blade Stabilizers		N/A		N/A	
15	8" Standard Mud Motor					
16	8" High Torque Performance Mud Motors					
17	8" HPHT Mud motor					
18	8" MWD System					
19	8" Bypass circulation sub					
20	8" Non-Magnetic Drill Collar-30ft.		N/A		N/A	
21	12-1/4" Integral Blade Stabilizers		N/A		N/A	

25	6-3/4" Standard Mud Motor				
26	6-3/4" High Torque Performance Mud Motors				
27	6-3/4" HPHT Mud motor				
28	6-3/4" MWD System				
29	6-3/4" Bypass circulation sub				
30	6-3/4" Non-Magnetic Drill Collar-30ft.		N/A		N/A
31	8" Integral Blade Stabilizers		N/A		N/A
33	6-3/4" LWD Triple Combo (Density, Porosity & Resistivity logs)				
34	6-3/4" LWD Quad Combo (Density, Porosity, Resistivity & Sonic logs)				
35	4-3/4" Standard Mud Motor				
36	4-3/4" High Torque Performance Mud Motors				
37	4-3/4" HPHT Mud motor				
38	4-3/4" MWD System				
39	4-3/4" Bypass circulation sub				
40	4-3/4" Non-Magnetic Drill Collar-30ft.		N/A		N/A
41	6" / 5-7/8" Integral Blade Stabilizers		N/A		N/A
43	4-3/4" LWD Triple Combo (Density, Porosity & Resistivity logs)				
44	4-3/4" LWD Quad Combo (Density, Porosity, Resistivity & Sonic logs)				
45	3-3/8" Standard Mud Motor				
46	3-3/8" High Torque Performance Mud Motors				
47	3-3/8" HPHT Mud motor				
49	3-3/8" Bypass circulation sub				
50	3-3/8" Non-Magnetic Drill Collar-30ft.				
51	4-1/8" Integral Blade Stabilizers				
52	Single shot kit & Multi-shot kit			Rate per job	

Serial No.	Description	Operating Rate per Day (US\$)	Stand by rate per Day (US\$)
55	Directional Driller Each		
56	MWD/ LWD Survey Engineer Each		
57	Complete Crew (04 Members) Mob/Demob Package rate per KM		

58	Complete Equipment Mob/Demob Package rate per KM	
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Note:-

- LWD Triple Combo = Density, Porosity & Resistivity logs
- LWD Quad Combo = Density, Porosity, Resistivity & Sonic logs

HIRING OF DIRECTIONAL AND PERFORMANCE DRILLING SERVICES FOR SOUTH/CENTRE REGION
GROUP-II
RATE FORMAT FOR PERFORMANCE DRILLING SERVICES FOR SOUTH/CENTRE REGION

S.N	DESCRIPTION	OPERATING RATE PER DAY (US\$)	CIRCULATING RATE PER HOUR (US\$)	STANDBY RATE PER DAY (US\$)	REDRESS RATE PER OCCURRENCE (US\$)	LIH COST (US\$)
01	11-3/4" Standard Mud Motor					
02	11-3/4" High Torque Performance Mud Motors					
03	11-3/4" MWD System					
04	11-3/4" Bypass circulation sub					
05	11-3/4" Non-Magnetic Drill Collar-30ft.		N/A		N/A	
06	11-3/4" Integral Blade Stabilizers		N/A		N/A	
08	9-5/8" Standard Mud Motor					
09	9-5/8" High Torque Performance Mud Motors					
10	9-5/8" MWD System					
11	9-1/2" Bypass circulation sub					
12	9-1/2" Non-Magnetic Drill Collar-30ft.		N/A		N/A	
13	17-1/2"/ 17" Integral Blade Stabilizers		N/A		N/A	
15	8" Standard Mud Motor					
16	8" High Torque Performance Mud Motors					
17	8" HPHT Mud motor					
18	8" MWD System					
19	8" Bypass circulation sub					
20	8" Non-Magnetic Drill Collar-30ft.		N/A		N/A	
21	12-1/4" Integral Blade Stabilizers		N/A		N/A	
25	6-3/4" Standard Mud Motor					
26	6-3/4" High Torque Performance Mud Motors					
27	6-3/4" HPHT Mud motor					
28	6-3/4" MWD System					
29	6-3/4" Bypass circulation sub					
30	6-3/4" Non-Magnetic Drill Collar-30ft.		N/A		N/A	
31	8" Integral Blade Stabilizers		N/A		N/A	
33	6-3/4" LWD Triple Combo (Density, Porosity & Resistivity logs)					

34	6-3/4" LWD Quad Combo (Density, Porosity, Resistivity & Sonic logs)				
35	4-3/4" Standard Mud Motor				
36	4-3/4" High Torque Performance Mud Motors				
37	4-3/4" HPHT Mud motor				
38	4-3/4" MWD System				
39	4-3/4" Bypass circulation sub				
40	4-3/4" Non-Magnetic Drill Collar-30ft.		N/A		N/A
41	6"/ 5-7/8" Integral Blade Stabilizers		N/A		N/A
43	4-3/4" LWD Triple Combo (Density, Porosity & Resistivity logs)				
44	4-3/4" LWD Quad Combo (Density, Porosity, Resistivity & Sonic logs)				
45	3-3/8" Standard Mud Motor				
46	3-3/8" High Torque Performance Mud Motors				
47	3-3/8" HPHT Mud motor				
49	3-3/8" Bypass circulation sub				
50	3-3/8" Non-Magnetic Drill Collar-30ft.				
51	4-1/8" Integral Blade Stabilizers				
52	Single shot kit & Multi-shot kit	Rate per job			
Serial No.	Description	Operating Rate per Day (US\$)		Stand by rate per Day (US\$)	
55	Directional Driller Each				
56	MWD/ LWD Survey Engineer Each				
57	Complete Crew (04 Members) Mob/Demob Package rate per KM				
58	Complete Equipment Mob/Demob Package rate per KM				

Note:-

- LWD Triple Combo = Density, Porosity & Resistivity logs
- LWD Quad Combo = Density, Porosity, Resistivity & Sonic logs

HIRING OF DIRECTIONAL AND PERFORMANCE DRILLING SERVICES FOR NORTH REGION**GROUP-I****A. FINANCIAL EVALUATION CRITERIA FOR DIRECTIONAL DRILLING SERVICES IN NORTH REGION**

S.N	DESCRIPTION	OPERATING TIME (DAYS)	CIRCULATING TIME (HRS.)	STANDBY TIME (DAYS)	QUANTITY OF REDRESS	10 % LIH (US\$)	Total Cost (US\$)
Section-A (17-1/2")							
01	9-5/8" " High Torque Performance Mud Motor	50	1200	02	04		
02	9-5/8" MWD System	50	1200	02	04		
03	9-1/2" Non-Magnetic Drill Collar-30ft.	50	N/A	02	N/A		
04	17-1/2" Integral Blade Stabilizer	50	N/A	02	N/A		
Section-B (12-1/4")							
05	9-5/8" High Torque Performance Mud Motor	35	800	02	03		
06	8" High Torque Performance Mud Motor	35	800	02	03		
07	8" MWD System	70	1600	02	05		

08	8" Non-Magnetic Drill Collar-30ft.	70	N/A	02	N/A		
09	12-1/4" Integral Blade Stabilizer	70	N/A	02	N/A		
Section-C (8-1/2")							
10	6-3/4" High Torque Performance Mud Motor	60	1400	02	04		
11	6-3/4" MWD System	60	1400	02	04		
12	6-3/4" Non-Magnetic Drill Collar-30ft.	60	N/A	02	N/A		
13	8-1/2" Integral Blade Stabilizers	60	N/A	02	N/A		
Section-D (6" / 5-7/8")							
14	4-3/4" High Torque Performance Mud Motor	20	500	02	02		
15	4-3/4" MWD System	20	500	02	02		
16	4-3/4" Non-Magnetic Drill Collar-30ft.	20	N/A	02	N/A		
17	6" / 5-7/8" Integral Blade Stabilizer	20	N/A	02	N/A		

18	02 Nos. Directional Drillers	200	N/A	02	N/A	N/A	
19	02 Nos. MWD/LWD Survey Engineer	200	N/A	02	N/A	N/A	
20	Complete Crew (04 Members) Mob/Demob Package cost per well	4000 KM					
21	Complete Equipment Mob/Demob Package cost per well	4000 KM					
I	Directional Drilling North region 01 well cost = (Sum of S#01 to S#21)						
II	Directional Drilling North region 10 wells cost = (Directional Drilling North region 01 well cost (I) x 10)						

HIRING OF DIRECTIONAL AND PERFORMANCE DRILLING SERVICES FOR NORTH REGION

GROUP-I

B. FINANCIAL EVALUATION CRITERIA FOR PERFORMANCE DRILLING SERVICES IN NORTH REGION

S.N	DESCRIPTION	OPERATING TIME (DAYS)	CIRCULATING TIME (HRS.)	STANDBY TIME (DAYS)	QUANTITY OF REDRESS	10 % LIH (US\$)	Total Cost (US\$)
Section-A (17-1/2")							
01	9-5/8" " High Torque Performance Mud Motor	45	1000	02	03		
02	9-5/8" MWD System	45	1000	02	03		
03	9-1/2" Non-Magnetic Drill Collar-30ft.	45	N/A	02	N/A		

04	17-1/2" Integral Blade Stabilizer	45	N/A	02	N/A		
Section-B (12-1/4")							
05	9-5/8" High Torque Performance Mud Motor	30	700	02	02		
06	8" High Torque Performance Mud Motor	30	700	02	02		
07	8" MWD System	60	1400	02	05		
08	8" Non-Magnetic Drill Collar-30ft.	60	N/A	02	N/A		
09	12-1/4" Integral Blade Stabilizer	60	N/A	02	N/A		
Section-C (8-1/2")							
10	6-3/4" High Torque Performance Mud Motor	55	1300	02	04		
11	6-3/4" MWD System	55	1300	02	04		
12	6-3/4" Non-Magnetic Drill Collar-30ft.	55	N/A	02	N/A		
13	8-1/2" Integral Blade Stabilizers	55	N/A	02	N/A		
Section-D (6" / 5-7/8")							
14	4-3/4" High Torque Performance Mud Motor	20	500	02	02		

15	4-3/4" MWD System	20	500	02	02			
16	4-3/4" Non-Magnetic Drill Collar-30ft.	20	N/A	02	N/A			
17	6"/ 5-7/8" Integral Blade Stabilizer	20	N/A	02	N/A			
18	02 Nos. Directional Drillers	180	N/A	02	N/A	N/A		
19	02 Nos. MWD/LWD Survey Engineer	180	N/A	02	N/A	N/A		
20	Complete Crew (04 Members) Mob/Demob Package cost per well	4000 KM						
21	Complete Equipment Mob/Demob package cost per well	4000 KM						
III	Performance Drilling North region 01 well cost = (Sum of S#01 to S#21)							
IV	Performance Drilling North region 10 wells cost = (Performance Drilling North region 01 well cost (III) x 10)							
V	GRAND TOTAL FOR NORTH REGION = COST OF DIRECTIONAL DRILLING 10 WELLS (II) + COST OF PERFORMANCE DRILLING WELLS 10 WELLS (IV)							

HIRING OF DIRECTIONAL AND PERFORMANCE DRILLING SERVICES FOR SOUTH/CENTRE REGION**GROUP-II****C. FINANCIAL EVALUATION CRITERIA FOR DIRECTIONAL DRILLING SERVICES IN SOUTH/CENTRE REGION**

S.N	DESCRIPTION	OPERATING TIME (DAYS)	CIRCULATING TIME (HRS.)	STANDBY TIME (DAYS)	QUANTITY OF REDRESS	10 % LIH (US\$)	Total Cost (US\$)
Section-A (17-1/2")							
01	9-5/8" Standard Mud Motor	20	500	02	02		
02	9-5/8" MWD System	20	500	02	02		
03	9-1/2" Non-Magnetic Drill Collar-30ft.	20	N/A	02	N/A		
04	17-1/2" Integral Blade Stabilizer	20	N/A	02	N/A		
Section-B (12-1/4")							
05	9-5/8" High Torque Performance Mud Motor	15	350	02	01		
06	8" High Torque Performance Mud Motor	15	350	02	01		
07	8" MWD System	30	700	02	02		
08	8" Non-Magnetic Drill Collar-30ft.	30	N/A	02	N/A		
09	12-1/4" Integral Blade Stabilizer	30	N/A	02	N/A		

Section-C (8-1/2")							
10	6-3/4" High Torque Performance Mud Motor	20	500	02	02		
11	6-3/4" MWD System	20	500	02	02		
12	6-3/4" Non-Magnetic Drill Collar-30ft.	20	N/A	02	N/A		
13	8-1/2" Integral Blade Stabilizers	20	N/A	02	N/A		
Section-D (6"/ 5-7/8")							
14	4-3/4" High Torque Performance Mud Motor	10	500	02	02		
15	4-3/4" MWD System	10	500	02	02		
16	4-3/4" Non-Magnetic Drill Collar-30ft.	10	N/A	02	N/A		
17	6"/ 5-7/8" Integral Blade Stabilizer	10	N/A	02	N/A		
18	02 Nos. Directional Drillers	80	N/A		N/A	N/A	
19	02 Nos. MWD/LWD Survey Engineer	80	N/A		N/A	N/A	

20	Complete Crew (04 Members) Mob/Demob package rate per KM	4000 KM						
20	Complete Equipment Mob/Demob package rate per KM	4000 KM						
VI	Directional Drilling South/Centre region 01 well cost = (Sum of S#01 to S#21)							
VII	Directional Drilling South/Centre region 12 wells cost = (Directional Drilling South/Centre region 01 well cost (VI) x 12)							

HIRING OF DIRECTIONAL AND PERFORMANCE DRILLING SERVICES FOR SOUTH/CENTRE REGION

GROUP-II

D. FINANCIAL EVALUATION CRITERIA FOR PERFORMANCE DRILLING SERVICES IN SOUTH/CENTRE REGION

S.N	DESCRIPTION	OPERATING TIME (DAYS)	CIRCULATING TIME (HRS.)	STANDBY TIME (DAYS)	QUANTITY OF REDRESS	10 % LIH (US\$)	Total Cost (US\$)
Section-A (17-1/2")							
01	9-5/8" Standard Mud Motor	15	350	02	01		
02	9-5/8" MWD System	15	350	02	01		
03	9-1/2" Non-Magnetic Drill Collar-30ft.	15	N/A	02	N/A		

04	17-1/2" Integral Blade Stabilizer	15	N/A	02	N/A		
Section-B (12-1/4")							
05	9-5/8" High Torque Performance Mud Motor	12	300	02	01		
06	8" High Torque Performance Mud Motor	12	300	02	01		
07	8" MWD System	25	600	02	02		
08	8" Non-Magnetic Drill Collar-30ft.	25	N/A	02	N/A		
09	12-1/4" Integral Blade Stabilizer	25	N/A	02	N/A		
Section-C (8-1/2")							
10	6-3/4" High Torque Performance Mud Motor	15	350	02	01		
11	6-3/4" MWD System	15	350	02	01		
12	6-3/4" Non-Magnetic Drill Collar-30ft.	15	N/A	02	N/A		
13	8-1/2" Integral Blade Stabilizers	15	N/A	02	N/A		

Section-D (6"/ 5-7/8")								
14	4-3/4" High Torque Performance Mud Motor	10	250	02	01			
15	4-3/4" MWD System	10	250	02	01			
16	4-3/4" Non-Magnetic Drill Collar-30ft.	10	N/A	02	N/A			
17	6"/ 5-7/8" Integral Blade Stabilizer	10	N/A	02	N/A			
18	02 Nos. Directional Drillers	65	N/A	02	N/A	N/A		
19	02 Nos. MWD/LWD Survey Engineer	65	N/A	02	N/A	N/A		
20	Complete Crew (04 Members) Mob/Demob Package cost per well	4000 KM						
21	Complete Equipment Mob/Demob package cost per well	4000 KM						
VIII	Performance Drilling South/Centre region 01 well cost = (Sum of S#01 to S#21)							
IX	Performance Drilling South/Centre region 18 wells cost = (Performance Drilling South/Centre region 01 well cost (III) x 18)							
X	GRAND TOTAL FOR SOUTH/CENTRE REGION = COST OF DIRECTIONAL DRILLING WELLS 12 WELLS (VII) + COST OF PERFORMANCE DRILLING WELLS 18 WELLS (IX)							