

OIL & GAS DEVELOPMENT COMPANY LIMITED



TENDER ENQUIRY # PROC-SERVICES/CB/WS-4955/2021

HIRING OF CEMENTATION SERVICES ALONG WITH CEMENT CLASS "G", CEMENT SLURRIES, PRE FLUSHES & ADDITIVES FOR WELLS/ RIGS IN SOUTHERN REGION (SINDH AND BALUCHISTAN PROVINCES)

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**Terms Of Reference (Tor's) For Hiring Of Cementation Services Along With
Cement Class "G", Cement Slurries, Pre flushes & Additives For Wells/ Rigs
In Southern Region (Sindh And Baluchistan Provinces)**

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• **INTRODUCTION**

Oil and Gas Development Company (OGDCL) is a Government of Pakistan Enterprise and largest E&P company in Pakistan. OGDCL is engaged in exploration, production and transportation of crude oil & natural gas in various operated and partner operated blocks throughout Pakistan.

The Company plans to drill number of exploratory and development wells in south region (Sindh & Baluchistan provinces) of OGDCL's Operated Areas / Blocks during the next three (03) years. In addition to this, work over wells has also been planned during next three (03) years in operated areas. The tender of Cementing services has been floated to hire services in south region (Sindh & Baluchistan provinces) of operated blocks.


The selected Contractor would be responsible for Cementing services including pumping, placement of cement plugs, squeeze jobs, leak-off tests, injectivity tests, pressure tests (down hole and surface) and provision of class "G" cement, additives and special additives at OGDCL's operated blocks or any other well to be drilled in OGDCL's operated areas in south region (Sindh & Baluchistan provinces) during three (03) years period commencing on executing the contract.

The selected Contractor will provide the cementing services along with oil well class "G" cement, additives and cement slurries on as and when required basis in all OGDCL's Operated Areas / Blocks at south region with back up resources also.

The Contract will be on as and when required basis for period of three (03) years commencing on execution of the contract and it will include drilling and work over operations.


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SECTION 'A' – SCOPE OF SERVICES

Bidders are invited to bid for providing Cementing & Pumping Services on as and when required basis along with class "G" cement and additives and slurries for casing / liner cementation as well as for placing different loss circulation plugs / water shut-off plugs / squeeze cement jobs as per OGDCL's requirements.

- 1- Contractor shall provide the equipment, personnel and material as specified in the scope of work and perform the cementing for all kind of casings / liners, squeeze jobs, plug jobs, pumping, testing, and any related work as per Contract as well as other instructions.
- 2- Contractor shall provide conventional, heavy weight, anti-gas migration, light and ultra-light cement slurries, and any other specialized slurry systems required due to well conditions, spacers and chemical washes mentioned in the financial bid format. (Anti gas cement slurry but should be effective to control severe gas problems of well)
- 3- Contractor shall provide Imported Class "G" cement (HSR) which shall conform to API 10A specifications.
- 4- Bidder should be capable of preparing & providing cement slurries exactly as proposed in the tender enquiry.
- 5- Bidder shall provide all types of conventional and special additives as proposed in tender enquiry.
- 6- The physical inventory of offered cementing units will be carried out at bidder's facility / yard during technical evaluation of bids to confirm the availability of equipment as per bid document submitted. In case of fresh bidders having no setup in Pakistan, bidders will confirm the equipment availability before the start of the contract as per terms outlined in this tender enquiry.
- 7- In the event the Contractor (after the award of contract) is unable to mobilize the cementing unit with other equipment and personnel as per contract within three (03) days after serving the mobilization notice/email, then OGDCL may without further notice or judicial proceedings and without prejudice to any other rights and remedies the Company may have under the law or the Contract, will mobilize the cementing and other equipment and additives / chemicals from other sources, in which case, the Contractor shall be liable to OGDCL for the increased cost, if any, incurred by OGDCL for procuring such Services from other sources as per Draft Contract Section 16 "Default".
- 8- OGDCL will reserve the right to pass any job to another Contractor if the CONTRACTOR fails or does not possess the requisite capacity to perform the job in time or due to any other reason whatsoever.
- 9- The Contract will be on as and when required basis for period of three (03) years and extendable with mutual consent of both the parties from commencing on execution of the contract and it will include drilling and work over operations that may happen on rig or rigless locations.
- 10- The expected work volume and type of operation specified in the financial bid format are for reference purpose only. This is subject to change during the Contract period. The expected work volume and type of operation shall not be construed as a commitment or guarantee by OGDCL.
- 11- Tentative volumes of cement slurries, cement additives, spacers & no. of complete sets of bulking equipment and pumping units have been provided for cost estimates purpose only to be included in financial bid.


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SECTION 'B' – KEY ACCEPTANCE CRITERIA

Prospective bidders must fulfill the “Key Acceptance criteria”. All of the following requisites are “Mandatory”. Noncompliance/Non consent to any of the below stated requisites will lead to disqualification without further evaluation.

Sr.No	Requisites	Criteria
1.1	In case of award of contract to companies with operational base and cementing laboratory in Pakistan, Cementing Equipment to be made available for mobilization & rigged up at OGDCL's well location, within 30 days after the issuance of LOI. In case of bidder having no set up & Support base in Pakistan, upon award of contract such bidder has to establish its full setup with all support services in Pakistan within 90 days after the issuance of LOI and provide affidavit to confirm unconditional compliance to this tender enquiry.	Mandatory
1.2	In case of award of Rate running contract, Contractor must agree to perform cementing operations anywhere in south region i.e. Sindh & Balochistan provinces.	Mandatory
1.3	Proof of minimum 10 years of operations as a Cementing Service Provider inside or outside Pakistan (but outside country of origin of the bidder) with major E&P companies.	Mandatory
1.4	In case of award of Rate running contract, Contractor must provide minimum four (04) no. of Cementing packages and crew as per Sr. No 1.1 1.2 and 3 of financial bid format.	Mandatory
1.5	Bidder must have its own “Cementing Crew Competence and Training System” (Training Matrix) in place. Relevant record proof for last two (2) year shall be submitted along with bid documents.	Mandatory
1.6	Bidder must provide imported Class “G” cement (HSR) which shall conform to API 10A specifications. Bidders to mention the source of Class “G” cement along with API conformance certificates for cement and manufacturing process.	Mandatory
1.7	Bidder must provide cement slurries of all types as well as cement additives mentioned in tender enquiry. OGDCL reserves the right to purchase slurry or additives or Class “G” cement individually or simultaneously as per rates against financial bid.	Mandatory
1.8	For complete cementing package at well site, Crew will consist of at least 3 persons i.e., Service Engineer/Supervisor, Operator and helper. Number of crew can be increased as per job requirement.	Mandatory
1.9	All equipment, materials and supplies should be in good condition for the performance of the services. Bidder will facilitate Technical Evaluation Committee in case of visit to respective base or yard.	Mandatory
1.10	Following systems to be in place and implemented. Bidder to submit relevant records, management system documents, for period as highlighted in brackets: <ul style="list-style-type: none"> • QA/QC Management System. (Last 2 Years Record). • HSEQ Management System. (Last 2 Years Record). • Certification for Calibration of Cementing Equipment. (Last 2 Years Record). 	Mandatory
1.11	Bidder will maintain a minimum of THREE months utilization of In-Country materials inventory (Class “G” Cement, Chemicals and Additives) and submit monthly report for the same. In case of bidder having no set up & Support base, upon award of contract such bidder has to establish its base	Mandatory

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	in Pakistan within 90 days after the issuance of LOI and provide the minimum inventory it will maintain to cater for OGDCL's cementing requirement in south region (Sindh & Baluchistan provinces). An affidavit in this regard must be submitted by the bidder. The support base will be evaluated against the criteria mentioned at Sr. no. 2.4 of Section C. In case of fresh bidder having Support base outside Pakistan should exist and may be evaluated by Technical Evaluation Committee.	
1.12	Cement slurries with various parameters listed at Section-D will be tested in OGDCL lab or Bidder's lab for compliance to technical specifications. Non achievement of desired parameters in any of the given cases in section "D" will lead to disqualification from technical evaluation. In case of test conducted in bidder's lab, OGDCL officials will witness the test for confirmation.	Mandatory
1.13	Contractor to confirm to deploy qualified, experienced, permanent, and competent manpower for carrying out the cementing operations against the contract.	Mandatory
1.14	Additional crew including cementing service supervisor will be required with additional pumping unit for cementation jobs for more than 500 bbl. at no additional cost.	Mandatory
1.15	A senior engineer experienced in cementing services will be stationed in Islamabad. He will be assigned as coordinator for daily coordination and support with concerned OGDCL personnel at Head office and with site at no cost to OGDCL. The appointed engineer will be approved by OGDCL and can only be replaced upon OGDCL approval.	Mandatory
1.16	Proposed personnel for coordination should be fluent in spoken and written English having specific Pakistan experience	Mandatory
1.17	To ensure proper maintenance and performance of the contractor's equipment to well site the bidder must provide a reasonable schedule for maintenance of equipment.	Mandatory
1.18	Contractor's service engineer should be responsible for maintenance of adequate cement and cement additives stock at well site as well as at their warehouse.	Mandatory

Note:

- All relevant/required reports and documents must be in English language.
- Above attachments are mandatory to be submitted. In case of unavailability of these documents, bids shall be disqualified.


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SECTION 'C' – TECHNICAL EVALUATION CRITERIA

Bids will be technically evaluated as per below mentioned criteria. Scores against Sr. number 2.1, 2.2, 2.3

& 2.4 will be calculated as per percentage of each segment. The following is evaluated for equipment available in the country for bidders having local presence. In case of bidder having no set up & Support base in Pakistan, upon award of contract such bidder has to establish its full setup with all support services in Pakistan within 90 days after the issuance of LOI and provide affidavit to confirm unconditional compliance to this tender enquiry.

• **EQUIPMENT (40%):**

Sr. No.	Description	Allotted Points
2.1	Cement Twin Pumping Unit & auxiliary equipment.	
2.1.1	List of total Twin Cementing Units available in the country.(For fresh bidders having no set up in Pakistan, Affidavit with list of equipment to be provided to OGDCL must be submitted)	60(Max)
2.1.1.1	If (04) units are available.	40
2.1.1.2	If (05) units are available.	50
2.1.1.3	If (06) units are available.	60
2.1.2	At least 04 Cementing Units should not be older than 10 years on bid submission date. (Units older than 10 years will be allotted zero points. Documentary evidence must be furnished)	20(Max)
2.1.2.1	For each pumping unit less than (05) years old.	05
2.1.2.2	For each pumping unit between 5 to 7 years.	03
2.1.2.3	For each pumping unit between 7 to 10 years.	01
2.1.3	Bidder must provide history of last 3 years of cemented wells (in Pakistan or internationally) that are planned for fracturing.	20(Max)
2.1.3.1	Up to 05 wells.	0
2.1.3.2	Between 6and 10 wells.	10
2.1.3.3	More than 10 wells.	20
2.1.4	List of total assets available in the country. (For fresh bidders having no set up in Pakistan, Affidavit with list of equipment to be provided to OGDCL must be submitted)	136(Max)
2.1.4.1	H.P Silos (One point for each 1000 cubic feet of each HP silos, Max allotted points=20)	20
2.1.4.2	Cutting bottles (min size 35 cu ft) (02 points for each, Max allotted points=10)	10
2.1.4.3	Air Compressors (2 points for each no. of equipment, Max allotted points=10)	10
2.1.4.4	Banana Bulklers for dry cement transportation. (05 points for each no. of equipment, Max allotted points=10)	10
2.1.4.5	100 bbl. Twin Compartment Batch Mixers. (10 points for each no. of equipment, Max allotted points=30)	30
2.1.4.6	200 bbl. Twin Compartment Batch Mixers. (10 points for each no. of equipment, Max allotted points=30)	30

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2.1.4.7	20-25 bbl. Mixing tub for Fly mixing and agitation. (05 points for each no. of equipment, Max allotted points=10)	10
2.1.4.8	Frac Tank / Water Storage Tank having capacity up to 500bbl for mixing lead and tail mix water with valves, hoses, connections, auxiliary and ancillary equipment.(01 point for each no. of equipment, Max allotted points=06)	06
2.1.4.9	C-Pump (4x5 or 5x6) for fluid pumping and circulation (02 points for each no. of equipment, Max allotted points=10)	10
2.1.5	Cementing Heads	08 (Max)
2.1.5.1	18 5/8" Double Plug, Buttress (01 point for two sets of equipment, Max allotted points=02)	02
2.1.5.2	14", 13-3/8", Double Plug, Buttress (01 point for two sets of equipment, Max allotted points=02)	02
2.1.5.3	10-5/8", 9-7/8, 9-5/8", Double Plug, Buttress (01 point for two sets of equipment, Max allotted points=02)	02
2.1.5.4	7", 7-5/8" Double Plug, Buttress (01 point for two sets of equipment, Max allotted points=02)	02
2.1.6	Circulation /Casing Swages	10(Max)
2.1.6.1	18 5/8", Buttress (01point for two sets of equipment , Max allotted points=02)	02
2.1.6.2	14", 13-3/8", Buttress (01 point for two sets of equipment, Max allotted points=02)	02
2.1.6.3	10-5/8", 9-7/8, 9-5/8", Buttress (01 point for two sets of equipment, Max allotted points=02)	02
2.1.6.4	7", 7-5/8" Buttress (01 point for two sets of equipment, Max allotted points=02)	02
2.1.6.5	4-1/2", 5", Buttress (01 point for two sets of equipment, Max allotted points=02)	02
TOTAL POINTS (MAX.)		254


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PERSONNEL (20 %)

Sr. No. 2.2	Description	Allotted Points
2.2.1	Eight (8) Service Supervisors must have 05 years exclusive experience of providing relevant services. (Documentary evidence must be submitted)	16
2.2.2	Eight (8) Equipment Operators, each having 03 years exclusive experience of providing relevant services.(Documentary evidence must be submitted)	08
2.2.3	Eight (8) Helpers, each having 03 years exclusive experience of providing services.(Documentary evidence must be submitted)	08
2.2.4	Service Supervisor / Operator should at least be engineering/ diploma holder.(Documentary evidence must be submitted)	04
TOTAL POINTS (MAX.)		36


General Information (10%)

Contractor's history for providing similar services being offered globally and within Pakistan


Sr. No. 2.3	Description	Allotted Points
2.3.1	The contractor should be internationally recognized for providing cementing services and preferably in Pakistan as well.	
2.3.1.1	Above 20 years international or within Pakistan experience.	20
2.3.1.2	Between 10 to 20years international and within Pakistan experience.	10
2.3.1.3	Between 10 to 20years International experience only.	05
2.3.1.4	Less than 10 years international and within Pakistan experience.	Disqualified
TOTAL POINTS (MAX.)		20


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Operational Support Base including API Lab facilities (30%)


Sr. No. 2.4	Description	Allotted Points
2.4.1	List of total assets related to Cementing lab available in the country.(For fresh bidders having no set up in Pakistan, Affidavit with list of equipment to be provided to OGDCL must be submitted). Only the assets in working condition in the lab, rigged up and valid calibrations at the time of TEC visit will qualify.	58(Max)
2.4.1.1	Consistometer with capacity more than 20,000 psi. (05 point for each no. of equipment, Max allotted points=20)	20
2.4.1.2	Compressive strength tester. (04 points for each no. of equipment, Max allotted points = 08)	08
2.4.1.3	Fluid loss cells. (04 points for each no. of equipment, Max allotted points = 08)	08
2.4.1.4	Rheometer. (02 points for each no. of equipment, Max allotted points = 06)	06
2.4.1.5	Static Gel Strength Analyzer (SGSA). (04 points for each no. of equipment, Max allotted points = 08)	08
2.4.1.6	Ultra-sonic Cement Analyzer. (04 points for each no. of equipment, Max allotted points = 08)	08
2.4.2	Lab with computer facility for cement slurry design and jobs should be available in Pakistan to cover OGDCL's scope of work, along with support by their R & D facility (In case of having no setup in Pakistan, design facility shall be fully functional / equipped / established before the start of the contract, an affidavit in this regard must be submitted.)	10(Max)
2.4.3	Contractor should be capable of performing Pre-Job and Post Job Simulations including but not limited to well stability (loss / gain) including ECD results, centralization program along with its running forces, mud removal, placement pressures, temperature charts vis-à-vis fluid circulation, and other parameter simulations as required during the job design phase. (02 points for each simulation, Max allotted points=16)	16(Max)
TOTAL POINTS (MAX.)		84

TOTAL POINTS OF 2.1, 2.2, 2.3& 2.4 (MAX.)	394
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SECTION "D"

"TENTATIVE WELL DESIGNS / SAMPLE CASES"

The tentative sample cases are given below for verification of proposed slurry designs and their compliance to the technical requirements. Non achievement of desired parameters in any of the given cases in section "D" will lead to disqualification from technical evaluation. The following slurry systems are tentative with major parameters and only for technical qualification criteria. The actual slurry design and rheologies will be optimized as per actual well conditions.

Case-1:

Slurry Type: Ultra Light Anti gas migration Slurry	Design Range	Test Range
Density (SG)	1.20-1.40	1.30
Compressive Strength (psi in 24 hrs.)	>1200	>1200
API Fluid Loss (ml/30 min)	<50	<100
Free Fluid (%)	<1%	<1%
Thickening Time (hrs. @30 BC)	As required operationally	4-6
Slurry mixability	Good	Good
Temperature (deg F)	Up to 210	185

Note: Strength Enhancer may be added to achieve desired compressive strength.

Case-2:


Slurry Type: Extended Slurry	Design Range	Test Range
Density (S.G)	1.50-1.75	1.60
Compressive Strength (psi in 24 hrs.)	>250	>250
Thickening Time (hrs. @30 BC)	As required operationally	4-6
Slurry mixability	Good	Good
Temperature (deg F)	Up to 210	180

Case-3:

Slurry Type: Low Temp Conventional slurry	Design Range	Test Range
Density (SG)	1.80-1.94	1.90
Compressive Strength (psi in 24 hrs)	>2000	>2000
API Fluid Loss (ml/30 min)	<250	<250
Free Fluid (%)	0	0
Thickening Time (hrs. @30 BC)	As required operationally	4-6
Slurry mixability	Good	Good
Temperature (deg F)	Up to 160	150


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Case-4:

Slurry Type: Medium Temp Conventional slurry	Design Range	Test Range
Density (SG)	1.80-1.94	1.90
Compressive Strength (psi in 24 hrs)	>2000	>2000
API Fluid Loss (ml/30 min)	<250	<250
Free Fluid (%)	0	0
Thickening Time (hrs. @30 BC)	As required operationally	4-6
Slurry mixability	Good	Good
Temperature (deg F)	Up to 210	190

Case-5:

Slurry Type: High Temp, Conventional slurry	Design Range	Test Range
Density (SG)	1.80-1.94	1.90
Compressive Strength (psi in 24 hrs.)	>2000	>2000
API Fluid Loss (ml/30 min)	<250	<250
Free Fluid (%)	<1%	<1%
Thickening Time (hrs. @30 BC)	As required operationally	4-6
Slurry mixability	Good	Good
Temperature (deg F)	Up to 375	250

Case-6:

Slurry Type: Low Temp Latex based Anti Gas Migration Expandable Slurry	Design Range	Test Range
Density (SG)	1.80-1.94	1.90
Compressive Strength (psi in 24 hrs)	>2500	>2500
API Fluid Loss (ml/30 min)	<50	<50
Free Fluid (%)	0	0
Thickening Time (hrs @30 Bc)	As required operationally	4-6
Slurry mixability	Good	Good
Temperature (deg F)	Up to 160	150

Case-7:

Slurry Type: Medium Temp Latex based Anti-Gas Migration Expandable Slurry	Design Range	Test Range
Density (SG)	1.80-1.94	1.90
Compressive Strength (psi in 24 hrs.)	>2500	>2500
API Fluid Loss (ml/30 min)	<50	<50
Free Fluid (%)	0	0
Thickening Time (hrs. @30 BC)	As required operationally	4-6
Slurry mixability	Good	Good
Temperature (deg F)	Up to 210	190

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Case-8:

Slurry Type: High Temp Latex based Anti-Gas Migration expandable slurry	Design Range	Test Range
Density (SG)	1.80-1.94	1.90
Compressive Strength (psi in 24 hrs.)	>2500	>2500
API Fluid Loss (ml/30 min)	<50	<50
Free Fluid (%)	0	0
Thickening Time (hrs. @30 BC)	As required operationally	4-6
Slurry mixabilty	Good	Good
Temperature (deg F)	Up to 375	250

Case-9:

Slurry Type: Heavy weight, High Compressive Strength Cement Slurry	Design Range	Test Range
Density (SG)	2.03-2.15	2.04
Compressive Strength (psi in 24 hrs)	>5000	>5000
API Fluid Loss (ml/30 min)	<100	<100
Free Fluid (%)	0%	0%
Thickening Time (hrs. @30 BC)	As required operationally	4-6
Slurry mixabilty	Good	Good
Temperature (deg F)	Up to 375	220

GENERAL GUIDELINES (MANDATORY)


1. Class "G" Cement / cement additive requirements and temperature estimates are tentative and based on anticipated temperature / pressure / borehole conditions in offset wells. Final slurry compositions and the corresponding additives / material requirements will be according to the actual temperature and hole conditions.
2. Contractor should submit the complete lab test result (API lab report) sheet with all required data like Slurry Type, Density, Yield, Fluid Loss, Free Water, Thickening Time, Compressive Strength, Rheologies, Centralizer placement program with simulation results / charts, pumping schedule etc.
3. Compatibility test for mud, spacer fluids with cement slurry is required, wherever applicable.
4. OGDCL reserves the right to perform additional tests, e.g. sedimentation, Go-NoGo, etc. in order to confirm slurry stability & performance as per operational requirements.
5. Silica Flour to be added to the slurry whenever technically required.
6. Concentration of expansion agent in Expandable Cement Slurries should be minimum 4%.
7. All recipes to be based on Class "G" HSR (Imported) cement.

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SECTION 'E' – INSTRUCTIONS TO BIDDER/CONTRACTOR

- 1- The bidder should be internationally recognized and providing cementing services internationally.
- 2- Contractor shall, upon Company's request, supply all required cementing equipment, materials and tools for the services stipulated in "Scope of Service".
- 3- Volumes of cement slurries, spacers, pre flushes and no. of sets of equipment mentioned in Annexure-II are tentative and may be increased or decreased as per scope of OGDCL work volume.
- 4- Bidder should be capable of preparing & providing cement slurries exactly as proposed in the tender. The bidder should also be capable to provide following special slurries:
 - i. Ultra-Light & Light weight slurries from 0.77 SG to 1.45 SG.
 - ii. Foam Cement Slurries.
 - iii. Ultra-High density Slurry systems up to 2.65 SG.
 - iv. Salt resisting cement slurry systems.
 - v. High Temperature Slurries upto 190 C°.
 - vi. Latex Based Anti-Gas cement slurries systems.
 - vii. Thixotropic cementing slurry systems
 - viii. Water control cementing slurry systems
 - ix. Pre and Post Flush fluids and spacer systems
- 5- Prior to the start of contract, The contractor should have warehouse and sizeable stock of the required standard spares, handling equipment and consumables etc. available in Pakistan.
- 6- Bidder to provide its Maintenance and Inventory Management System for the equipment and Chemicals (including Class "G" cement).
- 7- All the equipment, materials and supplies should be in good working condition for the performance of the services.
- 8- The bidder should furnish the printed technical literature/catalogue for the offered cementing unit, Batch mixer, tool/ equipment/ accessories, etc. along with the technical section of the bid.
- 9- Class "G" Cement (Conforming to API specifications), cement additives, cement slurries will be provided by the contractor as deemed by OGDCL. OGDCL reserves the right to obtain class "G" cement (Conforming to API specifications), cement slurries mentioned in Annexure-II or cement additives mentioned in Annexure II independently or simultaneously.
- 10- OGDCL will provide the following services and materials free of cost.
 - i. Barite, Bentonite and Calcium Carbonate for the weight-up of spacer.
 - ii. Boarding & lodging of the crew at well site.
 - iii. Diesel fuel to contractor's equipment while operating at well site.
 - iv. Cranes & folk lifters for loading & unloading of equipment and material.
 - v. Security at job site or conveying for crew and equipment.
- 11- Contractor will provide the following services free of cost to OGDCL.
 - i. Drafting of cement programs.
 - ii. Designing of cement slurries and spacers.
 - iii. Designing of centralization programs.
 - iv. Recommendation of flow regime and pumping rate.
 - v. Recommendation of mud parameters prior to cementation jobs.
 - vi. Pre-Job Simulations including but not limited to well stability (loss / gain) including ECD results, centralization program along with its running forces, mud removal, placement pressures, temperature charts vis-à-vis fluid circulation, and other parameter simulations as required during the job design phase.
 - vii. Post Job Simulations incorporating job data on jobs as desired by OGDCL.
 - viii. Pumping of cement slurries/other fluids.
 - ix. Any kind of pressure testing/killing operation etc. of OGDCL wells.
 - x. Blending/ cutting/ mixing of chemicals for cement slurries, spacers and chemical washes.
 - xi. All cementation heads/ circulating heads as required.


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- xii. Labor charges for cutting/blending/mixing of cement and additives will be paid by the service company.
 - xiii. Mobilization/demobilization of cement and cement additives for job at well site.
 - xiv. Contractor will have to submit three (03) copies of detailed Standard Recap (End of Well Report) upon completion of each well containing complete data, tables, charts, discussion, recommendation, and conclusion. The recap in USB or equivalent is also required.
- 12- Contractor's service engineer should be responsible for maintenance of adequate cement additives stock at well site and will be responsible for cement additives stock in Pakistan.
 - 13- Lab (local or international) with facility for cement slurry design and run simulations for mud removal, cement displacement and perform tests to ascertain mechanical properties of cement (expansion, flexibility, Poisson Ratio, Young's Modulus, etc.) along with support by their R & D facility. The Bidder should furnish details of the facilities and printed literatures/catalogues of the various tools & equipment available in the Lab to undertake cement formulation and slurry design covering all parameters along with the bid.
 - 14- The contractor will submit complete slurry & design simulations along with pumping schedule as per requirement.
 - 15- Contractor shall run pilot and quality test on cement product(s) as deemed necessary by the Company. Such tests will be at contractor's expense. OGDCL may request to witness the test or request the Contractor to deliver samples for testing at OGDCL facility.
 - 16- The Twin pumping unit shall have adequate pumping capacity to mix and pump the recipes at optimum rates and shall be equipped with real time computerized job monitoring & recording system.
 - 17- The twin pumping unit shall have maximum operating pressure rating of 10,000 psi.
 - 18- The age of cement pumping unit supplied by contractor shall not be more than ten (10) years old as on Technical bid closing date, counted from date of its manufacturing. The contractor is required to submit certificates / documents in this regard.
 - 19- The contractor is required to maintain and service all its equipment and thus avoid downtime.
 - 20- Arrangement for mixing / pumping various types of loss circulation plugs (LCP's) including, Barite / Gunk / Gel / CaCo3 plugs and brine should also be available with cementing unit.
 - 21- HSE / Safety related equipment, as required, should be available with cementing package.
 - 22- Bidder should submit Material Safety Data Sheets (MSDS) for the proposed additives / chemicals and will be responsible for safe disposal of leftover material.
 - 23- Contractor should also have properly functioning communication devices during operation / Cement Jobs.
 - 24- Contractor will be responsible for proper disposal of empty drums, sacks, etc.
 - 25- The hook up as required for cement and pumping jobs will be contractor's responsibility.
 - 26- Operational safety will be contractor's responsibility.
 - 27- The contractor shall be responsible for taking care of products storage condition at OGDCL's drilling site.
 - 28- Company has right to award any job to another contractor if the contractor has no capacity to perform job in time or is unable to mobilize the cementing and other equipment/ personnel as per the contract within three (03) days after serving the mobilization notice.
 - 29- The Contractor shall place independent cement bulk plants at each location for each rig operation or OGDCL may ask the Contractor for cutting of cement at one of its well sites.
 - 30- Contractor will provide Check List of Equipment and Additives / Chemicals before mobilizing to well site.
 - 31- Contractor is required to comply with company's Quality Management System / HSE Management System and is bound to submit equipment pressure test / function test / QA / QC / calibration reports / certificates, third party inspection reports. Standard QMS and HSE documents should be submitted with delivery at well site & OGDCL Head Office.
 - 32- To ensure proper maintenance and performance of the contractor's equipment to well site the bidder must provide a reasonable schedule for maintenance of equipment.
 - 33- The Contractor will arrange for 1,000 Training Hours per year for OGDCL personnel as technology transfer initiative.
 - 34- Contractor is bound to conduct quarterly Service Quality meeting to review performance.

35- Contractor will provide skilled staff at its expenses and under its exclusive responsibility to perform the services. One Service Supervisor per one cementing unit (with backup) shall be required. Back-up crew and unit shall be mobilized for the jobs requiring more than 500 bbl.

36- Contractor to provide the following set of tests for each cement job:

Sr. #	Description	Requirement
i.	Typical cement test as per API	Mandatory
ii.	Rheology	Mandatory
iii.	Thickening Time (TT)	Mandatory
iv.	Compressive Strength (CS)	Mandatory
v.	Fluid Loss (FL)	Mandatory
vi.	Free Fluids	Mandatory
vii.	Sedimentation Test (ST)	Mandatory
viii.	Static Gel Strength (SGS)	Mandatory
ix.	Thickening Time (TT) with Go/No-Go of 30 min.	Mandatory
x.	TT/CS/Rheology with contamination	Mandatory
xi.	Mud/Spacer/cement compatibility at surface temp and at BHCT	Mandatory
xii.	Simulation of drag, standoff and Hydraulics	Mandatory

37- The services/material which is not covered by this contract may be hired with discounted rates. The bidder will provide complete price list of their proprietary services/material along with reasonable discount, but it will not be the part of financial evaluation.

Note:

All above mentioned Technical Requirements under Section 'E' are **MANDATORY**


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SECTION 'F' – PENALTIES

1. For equipment, in case of non-provision of a set of equipment or any equipment from the list of additional equipment or shortfall of a single component from the package, described at Annexure - II, within a week after written request by OGDCL, an amount of USD 5,000/- may be deducted from the invoices of the Contractor. This penalty may be applied up to maximum of ONCE per month per package of equipment and One component of additional equipment. To clarify, maximum penalty in a month may be applied as 4 packages x USD 5,000/= and 1 component x USD 5,000/= to a maximum sum of USD 25,000/=.
2. For slurries, spacers, washers, or materials; in case of non-provision of any of the slurry, spacer, washer or material, described at Annexure -II, within a week after written request from OGDCL, an amount of USD 5,000/- per job will be deducted as penalty from the invoices of the Contractor. Moreover, in such case of non-compliance if the job is conducted or material is provided by another contractor, then the difference of cost to OGDCL, between the “CONTRACTOR” and another contractor, will also be charged to the “CONTRACTOR”. This penalty is re-occurring and will be considered for one job only and may be apply multiple times in calendar month.


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SECTION 'G' – QUALITY CUM COST BASED EVALUATION CRITERIA

Minimum qualifying score in technical evaluation is 70%. Bidders failing to score 70% in technical evaluation will be disqualified.

Scores of each prospective bidder in technical evaluation will be uploaded on OGDCL's website before opening the Commercial bid.

Technical & Commercial scores will be weighted at 40% & 60% respectively.

Technical evaluation will be conducted as per below formula:

$$T.E = (\text{Bidder Score}) / (\text{Maximum Score}) * 40\%$$

Commercial evaluation will be conducted as per below formula:

$$C.E = (\text{Lowest bidder value}) / (\text{Bidder value}) * 60\%$$

$$\text{Final Score} = T.E + C.E$$

The bidder getting highest "Final Score" shall stand first.



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SPECIMEN FOR FINANCIAL BID

HIRING OF CEMENTATION SERVICES WITH CEMENT SLURRIES, PRE-FLUSHES, SPECIAL MATERIALS, CEMENTATION AND BULKING EQUIPMENT AT WELLS/RIGS IN SINDH AND BALOCHISTAN PROVINCES ON RATE RUNNING CONTRACT BASIS

SECTION-A (LINE ITEMS AT SR NO.1 TO SR. NO4 WILL BE CONSIDERED AS SERVICES)

S.NO.	DESCRIPTION	UNIT	QTY.	COMPANY NAME		
				UNIT PRICE	TOTAL	
1.1	MONTHLY EQUIPMENT RENTAL CHARGES (PACKAGE-1)					-
	i-Twin Pumping Truck 450hp Pressure Rating 10,000psi (For Pumping Cement Slurry And Other Fluid)	Month	72			
	ii- Bulking Equipment- (03 Hi-Pressure Silos)(100 Cuf each)					
	iii- Air Compressor (01 No.)					
	iv- Weigh Batch Blender (01 No.)					
	v - Cutting Bottle (01 No.)					
	vi - Raw(Rock) Catcher (01 No.)					
	vii -Solution Tank (300-500 Bbl) (01 No.)					
	viii- Batch Mixer 100 Bbl (01 No.)					
	ix -Casing/Liner Circulation /Cementing Heads (Considering 02 Sets For 36 Months)					
1.2	MONTHLY EQUIPMENT RENTAL CHARGES (PACKAGE-2)					
	i-Twin Pumping Truck 450hp Pressure Rating 10,000psi (For Pumping Cement Slurry And Other Fluid)	Month	72			
	ii- Bulking Equipment- (03 Silos)(1000 Cuf Each) (Hi-Pressure)					
	iii- Air Compressor (01 No.)					
	iv- Weigh Batch Blender (01 No.)					
	v - Cutting Bottle (01 No.)					
	vi - Raw(Rock) Catcher (01 No.)					
	vii -Solution Tank (300-500 Bbl) (01 No.)					
	viii- Batch Mixer 200 Bbl (01 No.) or (100Bbl X 2)					
	ix -Casing/Liner Circulation /Cementing Heads (Considering 02 Sets For 36 Months)					
1.3	CHARGES FOR HIRING OF ONE COMPONENT					
	i-Twin Pumping Truck 450hp Pressure Rating 10,000psi (For Pumping Cement Slurry And Other Fluid)	DAY	200			
	ii- Bulking Equipment- (01 Silo) (1000 Cuf Each) (Hi-Pressure)	DAY	100			
	iii- Air Compressor (01 No.)	DAY	100			
	iv- Weigh Batch Blender (01 No.)	DAY	100			
	v - Cutting Bottle (01 No.)	DAY	100			
	vi – Raw (Rock) Catcher (01 No.)	DAY	100			
	vii -Solution Tank (300-500 Bbl) (01 No.)	DAY	200			
	viii -Casing/Liner Circulation /Cementing Heads	DAY	200			
	ix-Batch Mixer 100 Bbl (01 No.)	DAY	200			
	Sub Total (1.1- 1.3) (A)					

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2	MOB/DEMOB OF EQUIPMENT			
2.1	Mob/De mob of equipment (complete set) mention at Sr.No. 1.1 & 1.2 from Sukkur to well sites of Sindh Province or well to well.	Km	9,600	
2.2	Mob/De mob of equipment (complete set) mention at Sr.No. 1.1 & 1.2 from Sukkur to well sites of Balochistan Province or well to well.	Km	8,400	
2.3	Mob/De mob of one component of equipment mentioned at sr.no.1.3 from Sukkur to well sites of Sindh Province or well to well.	Km	9,600	
2.4	Mob/De mob of one component of equipment mentioned at sr.no.1.3 from Sukkur to well sites of Balochistan Province or well to well.	Km	8,400	
2.5	Mob/Demob of Banana Bulker for dry cement transportation from well to well in Sindh Province.	Km	960	
	Sub Total (2.1-2.5) (B)			
3	MONTHLY PERSONNEL CHARGES			
3.1	Service Engr. Or Supervisor + Operator + Helper	Month	144	
3.2	Monthly Personnel Mob/Demob Charges for Sindh and Balochistan Provinces.	Trip	144	
	Sub Total (3.1-3.2) (C)			
4	PERSONNEL CHARGES (FOR CALL OUT JOBS)			
4.1	Mob/De-mob (round trip)	Trip	100	
4.2	Charges of Crew Per Day (Operational)	Day	300	
4.3	Standby charges of crew per day (Standby Charges must be less than operational charges)	Day	400	
	Sub Total (4.1-4.3) (D)			
SECTION-B (LINE ITEMS AT SR NO. 5 TO SR NO. 7 WILL BE CONSIDERED AS MATERIAL)				
5	Rates for Cement Slurries (All material will be provided by service company inclusive of special additives like silica, micromax, liteweight, strength enhancer, etc. to comply with the technical parameters mentioned)			
5.1	Latex Based Anti Gas Migration Cement slurry having Sp.gr. from 1.20 to 1.40 and temperature up to 210 °F and Compressive strength more than 1200 psi, Free fluid=0, Fluid loss less than 50 ml.	Bbl	1,900	
5.2	Extended Cement slurry having Sp.gr. from 1.55 to 1.75 and temperature up to 210 °F and Compressive strength more than 250 psi.	Bbl	10,000	
5.3	Low Temp Conventional Cement slurry having Sp.gr. from 1.80 to 1.94 and temperature upto 160 °F with compressive strength more than 2000 psi, Free fluid=0 and Fluid loss less than 250ml.	Bbl	15,000	
5.4	Medium Temp Conventional Cement slurry having Sp.gr. from 1.80 to 1.94 and temperature upto 210 °F with compressive strength more than 2000 psi, Free fluid=0 and Fluid loss less than 250ml.	Bbl	3,200	
5.5	High Temp Conventional Cement slurry having Sp.gr. from 1.80 to 1.94 and temperature upto 375 °F with compressive strength more than 2000 psi, Free fluid=0 and Fluid loss less than 250ml.	Bbl	17,000	

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5.6	Low Temp Latex Based Anti Gas Migration Expandable Cement slurry having Sp.gr. from 1.80 to 1.94 and temperature less than 160 °F with compressive strength more than 2500 psi, Free fluid=0 and Fluid loss less than 50ml.	Bbl	2,500		
5.7	Medium Temp Latex Based Anti Gas Migration Expandable Cement slurry having Sp.gr. from 1.80 to 1.94 and temperature less than 210 °F with compressive strength more than 2500 psi, Free fluid=0 and Fluid loss less than 50ml.	Bbl	2,500		
5.8	High Temp Latex Based Anti Gas Migration Expandable Cement slurry having Sp.gr. from 1.80 to 1.94 and temperature above 210 °F with compressive strength more than 2500 psi, Free fluid=0 and Fluid loss less than 50ml.	Bbl	4,000		
5.9	Cement slurry having Sp.gr. from 2.03 to 2.15 and temperature upto 375 °F with compressive strength more than 5000 psi, Free fluid=0 and Fluid loss less than 100ml.	Bbl	1,300		
5.10	Slurry for wells requiring frac job (parameters designed as per job design of frac stress cycle simulations)	Bbl	700		
Sub Total (5.1-5.10) (E)					
6	Spacers, Pre flushes, Loss Control Systems				
6.1	Chemical wash	Bbl	1,500		
6.2	Spacer for WBM (Barite Provided By OGDCL)	Bbl	8,000		
6.3	Spacer for OBM (Barite Provided By OGDCL)	Bbl	1,000		
6.4	Specialized Non Cement Based Loss Control Fluid (Cement concentration < 20%) (e.g. LossSeal, Sentinel, Etc.)	Bbl	1,000		
Sub Total (6.1-6.4) (F)					
7	Cement, Additives & Special additives				
7.1	Oil Well Class "G" Cement HSR (Imported)	M.Ton	1,600		
7.2	Retarder (< 185 degF)	Lbs	4,800		
7.3	Retarder (> 185 degF and upto 375 degF)	Lbs	1,600		
7.4	Dispersant	Lbs	4,800		
7.5	Fluid Loss Controller Low Temp	Lbs	3,200		
7.6	Fluid Loss HPHT	Lbs	1,600		
7.7	Latex Based Gas Migration Controller	Gal	3,200		
7.8	Defoamer / Anti foam	Gal	800		
7.9	Weighing Material (Micromax or equivalent)	Lbs	8,000		
7.10	Mutual Solvent	Gal	400		
7.11	Surfactant	Gal	400		
7.12	Thixotropic Chemicals	Gal	200		
7.13	Loss Circulation Fiber Material for Cement Slurry	Lbs	3,000		
7.14	Expanding Agent	Lbs	8,000		
Sub Total (7.1-7.14) (G)					
GrandTotal (A+B+C+D+E+F+G)					

NOTE

- I. The above prices are inclusive of all taxes duties, levies, charges etc., (Except ICT/PST/GST)
- II. Only one Mob/Demob of personnel charges will be given for one month.
- III. OGDCL reserves the right to use its own slurry / Contractor's (slurry/Cement/additives/propriety additives) simultaneously.
- IV. Rates are based on for hiring of 04 sets for the period of 36 months, however magnitude of work may be changed as per drilling activities.
- V. The charges will cover equipment rental charges per month for the equipment mentioned in equipment list at Sr #1.1 & Sr #1.2 regardless the month is 28 ,29,30 or 31 days.
- VI. Distance will always be considered from sukkur to well site or well to well, which ever applicable. (As per OGDCL Distance Chart). In case of inter provincial well to well movement Mob/Demob of equipment will charged as per destination province transportation rates.
- VII. Contractor must provide services in all areas of Sindh and Balochistan provinces. In case the Contractor refuses to go any particular area (remote or tribal) the amount of Performance Bond Guarantee (PBG) may be forfeited and backup services will be hired from other service company and the difference of the cost will be deducted from PBG or Subsequent invoices.
- VIII. All material(s) for assigned wells or call out jobs shall be mobilized free of cost.
- IX. There are two sections in the financial evaluation bid format, section "A" will be considered as services whereas section "B" will be considered as material for applicability of PST/ICT taxes on services and GST on products respectively.
- X. The services/material which is not covered by this contract may be hired with discounted rates. The bidder will provide complete price list of their proprietary services/material along with reasonable discount but it will not be the part of financial evaluation.
- XI. Contract will be awarded to bidder having maximum score in techno commercial evaluation as per criteria mentioned in Section -E.


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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 **USD 100,000/-** is to be attached / provided with the technical bid. Please see Master Set of Tender Document for further details.

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%20download/Tender%20Document%20Services%20Press%20for%20Web%20loading-Bid%20Bond%20%26%20PBG%20Extension%20text%20added%20dated%2009-09-2020.pdf>


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