



**OIL & GAS DEVELOPMENT COMPANY LIMITED**  
**PROCUREMENT DEPARTMENT (LOCAL), ISLAMABAD**  
**SCHEDULE OF REQUIREMENT**

**Material : Requirement of Calibration Gas Cylinders for Various Field Locations**

**Due Date:**

9/3

**Tender Enquiry No: prod-18639/2021**

**Bid Bond Value : RS.500,000/-**  
**Attachment(if any) : YES**

**EVALUATION WILL BE CARRIED OUT ON FULL PKG.**

Sr No	Description	Quantity	Make/Brand offered	Unit	Unit Price (PKR) Inclusive Of All Taxes Except GST	Unit Price (PKR) Inclusive of GST	Total Price (PKR) Inclusive of GST	Delivery Period Offered	deviation from Tender Spec. If Any
1	CALIBRATION GAS CYLINDER WITH COMPATIBLE REGULATOR, 10 LITERS ALUMINUM CYLINDER WITH SS VALVE, CYLINDER PRESSURE 45 BAR, FOR CALIBRATION OF GAS CHROMATOGRAPH, GAS COMPOSITION AND DETAIL SPECIFICATION IS ATTACHED AT ANNEXURE-U (UCH)	5		Number					
2	CALIBRATION GAS CYLINDER WITH COMPATIBLE REGULATOR, 50 LITERS ALUMINUM CYLINDER WITH SS VALVE, CYLINDER PRESSURE 90 BAR, FOR CALIBRATION OF GAS CHROMATOGRAPH, GAS COMPOSITION AND DETAIL SPECIFICATION IS ATTACHED AT ANNEXURE-V (VCH)	1		Number					
3	CALIBRATION GAS CYLINDER WITH COMPATIBLE REGULATOR, 50 LITERS STEEL CYLINDER WITH SS VALVE, CYLINDER PRESSURE 90 BAR FOR CALIBRATION OF GAS CHROMATOGRAPH, GAS COMPOSITION AND DETAIL SPECIFICATION IS ATTACHED AT ANNEXURE-1g (TOGH)	1		Number					
4	CALIBRATION GAS CYLINDER WITH COMPATIBLE REGULATOR, 50 LITERS STEEL CYLINDER WITH SS VALVE, CYLINDER PRESSURE 90 BAR, FOR CALIBRATION OF GAS CHROMATOGRAPH, GAS COMPOSITION AND DETAIL SPECIFICATION IS ATTACHED AT ANNEXURE-N (NASHPA)	1		Number					
5	CALIBRATION GAS CYLINDER WITH COMPATIBLE REGULATOR, 50 LITERS STEEL CYLINDER WITH SS VALVE, CYLINDER PRESSURE 90 BAR, FOR CALIBRATION OF GAS CHROMATOGRAPH, GAS COMPOSITION AND DETAIL SPECIFICATION IS ATTACHED AT ANNEXURE-I (TOCI)	2		Number					
6	CALIBRATION GAS CYLINDER WITH COMPATIBLE REGULATOR, 50 LITRES ALUMINUM CYLINDER WITH SS VALVE, CYLINDER PRESSURE 90 BAR, FOR CALIBRATION OF GAS CHROMATOGRAPH, GAS COMPOSITION AND DETAIL SPECIFICATION IS ATTACHED AT ANNEXURE-K (KPPD)	1		Number					
7	CALIBRATION GAS CYLINDER WITH COMPATIBLE REGULATOR, 50 LITRES STEEL CYLINDER WITH SS VALVE, CYLINDER PRESSURE 90 BAR, FOR CALIBRATION OF GAS CHROMATOGRAPH, GAS COMPOSITION AND DETAIL SPECIFICATION IS ATTACHED AT ANNEXURE-B (BOBI)	3		Number					
8	CALIBRATION GAS CYLINDER WITH COMPATIBLE REGULATOR, 50 LITERS ALUMINUM/STEEL CYLINDER WITH SS VALVE, CYLINDER PRESSURE 90 BAR, FOR CALIBRATION OF GAS CHROMATOGRAPH, GAS COMPOSITION AND DETAIL			Number					



**OIL & GAS DEVELOPMENT COMPANY LIMITED**  
**PROCUREMENT DEPARTMENT (LOCAL), ISLAMABAD**  
**SCHEDULE OF REQUIREMENT**

**Material :Requirement of Calibration Gas Cylinders for Various Field Locations**

**Due Date:**

**Tender Enquiry No: prod-18639/2021**

**EVALUATION WILL BE CARRIED OUT ON FULL PKG.**

Sr No	Description	Quantity	Make/Brand offered	Unit	Unit Price (PKR) Inclusive Of All Taxes Except GST	Unit Price (PKR) Inclusive of GST	Total Price (PKR) Inclusive of GST	Delivery Period Offered	deviation from Tender Spec. If Any
SPECIFICATION IS ATTACHED AT ANNEXURE-S (SINJHORO)									

**Special Note:** The prospective bidders also download the master set of Tender Document

- The prospective bidders may keep in touch with OGDCL web site for downloading the clarifications/amendments (if any) issued by OGDCL.
- BID VALIDITY: 180 DAYS FROM TECHNICAL BID OPENING, DELIVERY PERIOD: 120 DAYS AFTER ISSUANCE OF LPO PAYMENT: AFTER DELIVERY & INSPECTIONS.

*Vetted*

*[Signature]*  
**HINA**  
**FDMS Officer (Pr...)**  
**Extn. 2797**

*(2/3)*

**Tender Enquiry No. PROD-18639/2021 for Requirement of  
Calibration Gas Cylinders for Various Field Locations**

**Delivery Locations:**

- Serial No. 1 & 2 of SOR:** Uch Gas Field
- Serial No. 3 of SOR:** Togh Field
- Serial No. 4 of SOR:** Nashpa Field
- Serial No. 5 of SOR:** TOC
- Serial No. 6 of SOR:** KPD
- Serial No. 7 of SOR:** Bobi Field
- Serial No. 8 of SOR:** Sinjhorro Field

**Instructions to Bidder/Supplier:**

- i. Bidder/Supplier shall be responsible for the compliance of SOR
- ii. Bidder/ Supplier shall be responsible for the compliance of detailed composition of required calibration gas cylinders specified at Annexure-B, Annexure-K, Annexure-N, Annexure-S, Annexure-T, Annexure-Tg and Annexure-U.
- iii. Mole% composition given against each component at attached annexures is approximate value, hence 1-2% margin will be acceptable for offered gas calibration cylinders.
- iv. Each Calibration gas cylinder is required with compatible regulator.
- v. Bidder/ Supplier shall be responsible to ensure the delivery of material within 02 Months after issuance of LPO.
- vi. Each Calibration cylinder is required to be delivered at desired field location as mentioned at attached annexures.

**Necessary Attachments/Documents:**

1. Complete Technical data, Literature, calibration gas composition certificate and other relevant documents in Hard Copies.
2. Valid material test certificates to ensure that cylinder material is safe for use of filled gas mixture.
3. Copy of at least 3 POs for same type of material to be provided with the bid.
4. Warrantee Guarantee must be confirmed with the technical bid.

## Annexure-B

Required Composition of Calibration Gas Cylinder for Bobi Gas Field	
Cal Gas Cylinders Composition and Specification	GC (ABB NGC-8206)
Delivery Location	Bobi
Specifications	
Cylinder Material Type	Steel with SS valve
Cylinder Volume	50L
Cylinder Pressure	90 Bar
With or Without Regulator	With Comaptible Regulator (Adjustable Outlet Pressure 0-4 Bar)
Accuracy	± 1%
Quantity	01 No
Shelf Life	36 months
Composition	
Nitrogen (Mol %)	7.18487
Carbon Dioxide (Mol %)	3.58613
Methane (Mol %)	67.78204
Ethane (Mol %)	14.37264
Propane (Mol %)	5.59159
IsoButane (Mol %)	0.50684
N-butane (Mol %)	0.8574
Isopentane (Mol %)	0.07874
N-pentane (Mol %)	0.04899
N-hexane (Mol %)	0.0076

Note: Bidder/Supplier is required to go through the attached Instructions to bidder/ Supplier and confirm provision of mentioned necessary documents

## Annexure-K

Required Composition of Calibration Gas Cylinder for KPD Gas Field		
Cal Gas Cylinders Composition and Specification	GC1 (X770)	GC2 (X700)
Delivery Location	KPD-TAY	
<b>Specifications</b>		
Cylinder Material Type	Aluminum with SS Valve	Aluminum with SS Valve
Cylinder Volume	50L	50L
Cylinder Pressure	90 Bar	90 Bar
With or Without Regulator	With Comaptible Regulator (Adjustable Outlet Pressure 0-4 Bar)	With Comaptible Regulator (Adjustable Outlet Pressure 0-4 Bar)
Accuracy	± 1%	± 1%
Quantity	01 No	01 No
Shelf Life	24 months	24 months
<b>Composition</b>		
Nitrogen (Mol %)	2	2
Carbon Dioxide (Mol %)	3	3
Methane (Mol %)	Balance	Balance
Ethane (Mol %)	5.5	5.5
Propane (Mol %)	1.5	1.5
IsoButane (Mol %)	0.2	0.2
N-butane (Mol %)	0.3	0.3
Isopentane (Mol %)	0.05	0.05
N-pentane (Mol %)	0.03	0.03
N-hexane (Mol %)	0.05	0.05
Methyl Mercaptan	8ppm	Not Required
Hydrogen Sulphide (ppm)	20ppm	20ppm

**Note: Bidder/Supplier is required to go through the attached Instructions to bidder/ Supplier and confirm provision of mentioned necessary documents**

## Annexure-N

Required Composition of Calibration Gas Cylinder for Nashpa Gas Field	
Cal Gas Cylinders Composition and Specification	GC (ABB NGC-8206 & Daniel 700XA)
Delivery Location	Nashpa
<b>Specifications</b>	
Cylinder Material Type	Steel with SS valve
Cylinder Volume	50L
Cylinder Pressure	90 Bar
With or Without Regulator	With Comaptible Regulator (Adjustable Outlet Pressure 0-4 Bar)
Accuracy	± 1%
Quantity	01 No
Shelf Life	36 months
<b>Composition</b>	
Nitrogen (Mol %)	0.3
Carbon Dioxide (Mol %)	1.8361
Methane (Mol %)	89.4644
Ethane (Mol %)	7.0995
Propane (Mol %)	0.6
IsoButane (Mol %)	0.2
N-butane (Mol %)	0.2
Isopentane (Mol %)	0.1
N-pentane (Mol %)	0.1
N-hexane (Mol %)	0.1

Note: Bidder/Supplier is required to go through the attached Instructions to bidder/ Supplier and confirm provision of mentioned necessary documents

## Annexure-S

Required Composition of Calibration Gas Cylinder for Sinjhoru Gas Field		
Cal Gas Cylinders Composition and Specification	2 NGC (ABB 8206)	2 GCs With H2S Detection (ABB 8206)
Delivery Location	Sinjhoru	
<b>Specifications</b>		
Cylinder Material Type	Steel with SS Valve	Aluminum with SS Valve
Cylinder Volume	50L	50L
Cylinder Pressure	90 Bar	90 Bar
With or Without Regulator	With Comaptible Regulator (Adjustable Outlet Pressure 0-4 Bar)	With Comaptible Regulator (Adjustable Outlet Pressure 0-4 Bar)
Accuracy	± 1%	± 1%
Quantity	02 No	01 No
Shelf Life	36 months	24 months
<b>Composition</b>		
Nitrogen (Mol %)	6.49536	
Carbon Dioxide (Mol %)	2.77584	
Methane (Mol %)	76.92448	
Ethane (Mol %)	12.34172	
Propane (Mol %)	1.39186	
IsoButane (Mol %)	0.0309	
N-butane (Mol %)	0.03538	
Isopentane (Mol %)	0.00192	
N-pentane (Mol %)	0.00112	
N-hexane (Mol %)	0.00134	
Hydrogen Sulphide (ppm)		3-10 PPM

**Note: Bidder/Supplier is required to go through the attached Instructions to bidder/ Supplier and confirm provision of mentioned necessary documents**



## Annexure-T

Required Composition of Calibration Gas Cylinder for TOC Gas Field	
Cal Gas Cylinders Composition and Specification	GC (ABB BTU-8000)
Delivery Location	TOC
<b>Specifications</b>	
Cylinder Material Type	Steel with SS valve
Cylinder Volume	50L
Cylinder Pressure	90 Bar
With or Without Regulator	With Comaptible Regulator (Adjustable Outlet Pressure 0-4 Bar)
Accuracy	± 1%
Quantity	01 No
Shelf Life	36 months
<b>Composition</b>	
Nitrogen (Mol %)	1.2
Carbon Dioxide (Mol %)	2.6
Methane (Mol %)	Balance
Ethane (Mol %)	8.3
Propane (Mol %)	4.1
IsoButane (Mol %)	0.78
N-butane (Mol %)	0.84
Isopentane (Mol %)	0.34
N-pentane (Mol %)	0.18
N-hexane (Mol %)	0.25

**Note: Bidder/Supplier is required to go through the attached Instructions to bidder/ Supplier and confirm provision of mentioned necessary documents**

## Annexure-Tg

Required Composition of Calibration Gas Cylinder for Togh Gas Field	
Cal Gas Cylinders Composition and Specification	GC (ABB NGC-8206)
Delivery Location	Togh
<b>Specifications</b>	
Cylinder Material Type	Steel with SS valve
Cylinder Volume	50L
Cylinder Pressure	90 Bar
With or Without Regulator	With Comaptible Regulator (Adjustable Outlet Pressure 0-4 Bar)
Accuracy	± 1%
Quantity	01 No
Shelf Life	36 months
<b>Composition</b>	
Nitrogen (Mol %)	0.7724
Carbon Dioxide (Mol %)	0.6537
Methane (Mol %)	94.1105
Ethane (Mol %)	2.7424
Propane (Mol %)	0.7065
IsoButane (Mol %)	0.2253
N-butane (Mol %)	0.2225
Isopentane (Mol %)	0.146
N-pentane (Mol %)	0.1067
N-hexane (Mol %)	0.314

Note: Bidder/Supplier is required to go through the attached Instructions to bidder/ Supplier and confirm provision of mentioned necessary documents

## Annexure-U

Required Composition of Calibration Gas Cylinder for Uch Gas Field			
Cal Gas Cylinders Composition and Specification	GC (for Sale Gas)	GC (for Feed Gas)	GC (H2S)
Delivery Location	Uch		
Specifications			
Cylinder Material Type	Aluminum with SS valve	Aluminum with SS valve	Aluminum with SS valve
Cylinder Volume	10L	10L	50L
Cylinder Pressure	45 Bar	45 Bar	90 Bar
With or Without Regulator	With Comaptible Regulator (Adjustable Outlet Pressure 0-4 Bar)	With Comaptible Regulator (Adjustable Outlet Pressure 0-4 Bar)	With Comaptible Regulator (Adjustable Outlet Pressure 0-4 Bar)
Accuracy	± 1%	± 1%	± 1%
Quantity	04 Nos	01 Nos	01 Nos
Shelf Life	24 months	24 months	24 months
<b>Composition</b>			
Nitrogen (Mol %)	23.99	20.9638	
Carbon Dioxide (Mol %)	Balance	Balance	
Methane (Mol %)	40.24	35.5254	
Ethane (Mol %)	1.05	0.9276	
Propane (Mol %)	0.39	0.3487	
IsoButane (Mol %)	0.103	0.1	
N-butane (Mol %)	0.118	0.1122	
Isopentane (Mol %)	0.0603	0.063	
N-pentane (Mol %)	0.042	0.0448	
N-hexane (Mol %)	0.157	0.102	
Hydrogen Sulphide (ppm)	20	500	50

Note: Bidder/Supplier is required to go through the attached Instructions to bidder/ Supplier and confirm provision of mentioned necessary documents