OIL & GAS DEVELOPMENT COMPANY LIMITED
PROCUREMENT DEPARTMENT, ISLAMABAD
FOREIGN SECTION A

(To be completed, filled in, signed and stamped by the principal)

ANNEXURE 'A'

Material Water Soluble Corrosion Inhibitor
Tender Enquiry No PROC–FA/CB/PROD–5358/2022
Due Date
Evaluation Criteria FULL

SCHEDULE OF REQUIREMENT

Sr No	Description	Unit	Quantity	Unit Price (FOB)	Total Price (FOB)	Unit Price C & F BY SEA	Total Price C & F BY SEA	Deviated From Tender Spec. If Any
1	Water Soluble Corrosion Inhibitor EC–1304–A , PC–CI–2176U OR Equivalent	DRUM (208.2 LTR)	560					

Note:

1. Bid Bond Amount: US $ 3,500 (United State Dollar Three Thousand Five hundred only) or equivalent Pak Rupees valid up to 210 Days from the date of technical bid opening
2. Mode of Bidding: Single stage two Envelope basis.
3. Evaluation Criteria: - Full Consignment wise C&F By Sea
4. Delivery Period:- 90 days from establishment of LC
5. Bid Validity: 180 Days
6. Bidders are advised to carefully read all the terms and conditions of the MASTER SET OF FOREIGN TENDER DOCUMENT (PRESS-SINGLE STAGE TWO ENVELOP) available on OGDCL website which is an integral part of this Schedule of Requirement

Mandatory Specs, Terms, Conditions and Requirements For Procurement of Water-Soluble Corrosion Inhibitor For X Fields.

1. Generalized Specifications.

Specific Gravity	0.90-0.99 @ 60 F	odour	Amine / Pungent
Density	7.3- 8.3 ib/gallon	pH	6-8
Appearance	Clear liquid	Surfactant	Non-ionic surfactant
Solubility	Water soluble	Chemical nature	Imidazoline salts, and Quaternary ammonium compounds in organic solvent.
Flash Point	83 degree C		

2. The manufacturer must have atleast 7 years of supply experience preferably locally in Pakistan's E & P and other relevant companies. (Proven track record of supply is must).

3. In case supplier has no local supply record in Pakistan, then it is mandatory to provide internationally supply record with satisfactory performance evidence from atleast three supplied company on their letter head showing all contact details and concerned responsible person. (OGDCL may contact that company for verification / authenticity of the letter / performance).

4. Verifiable evidence of ownership of ISO-14001-2015 or 9001-2015 certified blending facility / plant by supplier or proper agreement along with complete address and contact details to blend the corrosion inhibitor as per specs.

5. MSDS sheet confirming the range of ingredients as given in above specs. Handling, charging, application notes etc along with residual level determination test method, residual test frequency and satisfactory range of residue.

6. Product shelf life must not be less than 3 years if stored under standard shade at atmospheric temperatures varying from 0 – 52 degree Celsius. Supplier to comply.

7. The product must be effective to form protective film on mixed flow / production stream having an avg. velocity range of 30-40 Ft/sec/10-13 m/s, temperature 200 °F and pressure 1500 Psi. The dosage rate should be in range of 20-50 PPM & 0.25-0.50 liters/mmscf to obtain average corrosion rate $\leq$ 5 MPY. Supplier to confirm and comply.

8. Already used / approved products by OGDCL are mentioned in SOR, in case bidder intends to offer other than mentioned, it is mandatory for technically responsive and financially lowest bidder to supply at least 10 drums and conduct test and trial solely at bidder's risk and cost within two month's period after P.O issuance on "No Cure No Pay basis"

9. Supplier / manufacturer must have its' own or representative's registered office and technical man-power on its payroll to provide after sale's services throughout useful life of supplied product. First visit after material is received at fields is mandatory for optimization, setting of dosage rates and stabling residual levels. The other visits shall be on as and when required basis with no additional charges. Bidder to confirm & comply.

10. Supplier / Manufacturer will ensure Quality Control Procedures adopted during blending. Also authenticate that test & Analysis reports meets the specs of TORs/MSDS sheet.

11. The chemical shall be packed in robust type drums (Plastic or steel) suitable for international sea / road travelling with clear marking showing product name, supplier's and receivers name, manufacturing and expiry dates, port of shipment.

Note; *Manufacturer is one who formulate specific chemical for specific use and provide MSDS & PDS of the chemical along with composition of ingredients and hazard identification of chemical in Ltrs / US gallons.*

S.No	Lacation	Salt Cont. PTB	Water	Sludge	Oil			Water			
					Temp °F	API Sp.Gravity	API @ 60/60°F	Temp °F	Sp.Gravity	Cl.Cont PPM	P.H
1	TDM # 02										
2	TDM # 03										
3	TDM# 16A	40	35	Nil	75	39.8	38.7	75	1.05	28400	7.5
4	TDM# 19	-	100	Oil traces	76	-	-	76	1.1	63900	7.6
5	TDM # 20	30	10	Nil	76	40.4	39.2	76	1.07	56800	7.6
6	THORA#01	12	59	Nil	76	40.8	39.6	76	1.06	42600	7.5
7	THORA# 03										
8	THORA # 06										
9	THORA#08	14	0.3	Nil	76	43.8	42.5	76	-	-	-
10	SONO # 02										
11	SONO # 04	24	72	Nil	74	42.3	41.2	75	1.06	46150	7.6
12	SONO# 07	14	76	Nil	75	40.6	39.5	75	1.06	49700	7.5
13	SONO # 08	18	66	Nil	75	41.9	40.7	75	1.08	60350	7.6
14	LASHARI # 03										
15	LASHARI # 05	18	58	Nil	74	41.3	40.2	74	1.05	42600	7.6
16	MOLLAN NORTH	-	95	Nil	74	-	-	74	1.07	60350	7.7
17	PASAKHI # 10	6	2.8	0.2	73	41.7	40.7	-	-	-	-
18	PASAKHI NORTH# 01	9	4.7	0.3	73	42.5	41.5	-	-	-	-
19	MISSAN # 01	-	100	Nil	74	Oil Layer		74	1.1	78100	7.6
20	JARWAR # 01	-	100	Nil	74	Oil Layer		74	1.1	81650	7.6
21	PASAKHI# 01	28	30	Nil	77	40.6	39.3	77	1.06	31950	7.5
22	PASAKHI #02	6	22	Nil	77	41.7	40.3	77	1.06	42600	7.5
23	PASAKHI # 05	27	79	Nil	78	40.8	39.4	78	1.06	46150	7.6
24	PASAKHI # 06	22	79	Nil	78	41.1	39.6	78	1.06	46150	7.6
25	PASAKHI # 07	6	6	Nil	77	42.5	41.2	-	-	-	-
1	Dachra Pur#01										
2	Nim #01										
3	Norai Jagir #01										

Sinjhoro field

Product Analysis Report

a) **Gas Composition Sinjhoro Mix Raw (Sinjhoro , jakhro & Bitrisim wells)**

(Mole %) max.											($C_{v)\ max.}$	Specific gravity max.
C1	C2	C3	iC4	nC4	iC5	nC5	C6+	CO_2	N_2	H_2S PPM	BTU/SCF	
70.456	11.242	5.231	0.612	1.118	0.237	0.222	0.328	7	6.995	1-12	1138.81	0.765

b) **Gross Production of Field**

Q Raw Gas (MMSCF)	Qoil (bbl)	Qw (bbl)
38	2200	1050

c) **Sizing of flow lines**

Nominal Dia Flow Lines	Avg. Length (km)	Max. Length (km)
4",6" & 8"	15	28

d) **Temperatures**

	Avg. Temp. °F	Max. Temp. °F
Well Head Flowing Temperature	130	170
Flow Line Temperature	100	130

e) **Pressures**

	Avg. Pressure (psi)	Max. Pressure (psi)
Well Head Flowing Pressure	1500	2050
Flow Line Pressure	1100	1440

f) **Water Analysis Report**

PH min.	TDS min. (mg/l)/ ppm	S/S min. (mg/l)	Fe min. (mg/l)	Chlorides min. (ppm)	SP. Gr 60/60 min.
5.5	45000	150	80	40,000	1.02
PH max.	**TDS max. (mg/l)**	**S/S max. (mg/l)**	**Fe max. (mg/l)**	**Chlorides max. (ppm)**	**SP. Gr 60/60 max**
7.9	75000 ppm	400	200	60,000	1.09

g) Oil analysis Report

SP. Gr 60/60 min	BS & W min.	API at 60/60 min	Salt PTB min
0.730	0	52	1
SP. Gr 60/60 max	**BS & W max.**	**API at 60/60 max**	**Salt PTB max.**
0.790	7	62	60

NOTE: **Well-wise composition and flowing parameters can be obtained separately - if required - on condition of confidentiality of information by the prospective bidder.**

Uch Field

a) **Gas Composition UCH-I**

(Mole %) max.											($C_{v)\ max.}$ BTU/SCF	Specific gravity max.
C1	C2	C3	iC4	nC4	iC5	nC5	C6+	CO_2	N_2	H_2S PPM		
66.1	1.95	0.69	0.18	0.18	0.12	0.09	0.12	46.6	25.2	985	743	1.11

Gas Composition UCH-II

67.7	1.91	0.63	0.18	0.20	0.11	0.08	0.12	46.1	25.4	975	740	1.11

b) **Gross Production of Field**

Q Raw Gas (MMSCF)	Qoil (bbl)	Qw (bbl)
430	35	700

c) **Sizing of flow lines**

Nominal Dia Flow Lines	Avg. Length (km)	Max. Length (km)
8", 10", 12"	10	22

d) **Temperatures**

	Avg. Temp. °F	Max. Temp. °F
Well Head Flowing Temperature	130	160
Flow Line Temperature	100	120

e) **Pressures**

	Avg. Pressure (psi)	Max. Pressure (psi)
Well Head Flowing Pressure	1150	1300
Flow Line Pressure	875	950

f) **Water Analysis Report**

PH min.	TDS min. (mg/l)	S/S min. (mg/l)	Fe min. (mg/l)	Chlorides min. (ppm)
3.9	110	25	04	30
PH max.	**TDS max. (mg/l)**	**S/S max. (mg/l)**	**Fe max. (mg/l)**	**Chlorides max. (ppm)**
6.9	95000	1600	150	4500

NOTE: **Well-wise composition and flowing parameters can be obtained separately - if required - on condition of confidentiality of information by the prospective bidder.**

Dakhni Field

Typical Water Analysis

Fe (ppm)	pH	Cl (ppm)	TDS	Mn
2-9	6-7	41080	49895	2.45

Typical Gas Analysis

Specific gravity	0.627 - 0.718
CO2	2-5 Mole %
H2S	7 – 10 %

Kunnar Field

a) **Gas Composition**

(Mole %)											(C_v)	Specific gravity
C1	C2	C3	iC4	nC4	iC5	nC5	C6+	CO_2	N_2	H_2S	BTU/SCF	
77.8	6.6	2.1	0.3	0.5	0.2	0.2	0.5	7.24	4.7	Nil	1020.6	0.73

b) **Gross Production of Field**

Qgas (MMSCF)	Qoil (bbl)	Qw (bbl)
200.72	2940	925

c) **Sizing of flow lines**

Nominal Dia	Avg. Legth (km)	Max. Length (km)
4", 6", 12"	4~5	25

d) **Temperatures**

	Avg. Temp. °F	Max. Temp. °F
Well Head Flowing Temperature	200	225
Flow Line Temperature	175	200

e) **Pressures**

	Avg Pressure (psi)	Max. Pressure (psi)
Well Head Flowing Pressure	1800	2000
Flow Line Pressure	1175	1250

f) **GOR**

Min	Max	Gross
0.018	0.212	0.080

NOTE: **Well-wise composition and flowing parameters can be obtained separately - if required - on condition of confidentiality of information by the prospective bidder.**