

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 ENCAPSULATED CORROSION INHIBITOR
Tender Enquiry No PROC-FA/CB/PROD-5244/2021
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	ENCAPSULATED CORROSION INHIBITOR as per given specifications	DRUM (208.2 LTR)	40					

Note:

1. **Bid Bond Amount:** US \$ 2,000 (United State Dollar Two Thousand 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 Encapsulated Corrosion Inhibitor.

1. Generalized Specifications.

Specific Gravity	1.05-1.12 @60 F	Odour	Amine Like
Color	Off-white to Amber	Density	8 (lbs/gal)
Appearance	Solid free flowing pills	Pour Point	Up to 120 C
Solubility	Oil soluble	Chemical nature	Paraffin waxes and Hydrocarbon waxes
Flash Point	> 200 Degree F		

2. The supplier / 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 / manufacturer 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 where the offered corrosion inhibitor has been used 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 complete procedure of batch treatment job. (Analysis data of fields is attached)
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. Corrosion inhibitor should be non-formation damaging gel type micro-encapsulated, designed for long term release of active ingredients by settling into rat hole of oil and gas producing wells to provide continuous corrosion protection for extended /long time period as compared to conventional batch treatment.
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. Field visit after material is received at fields is mandatory when batch treatment job is planned at fields. 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, quantity of chemical in Ltrs / US gallons.

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 tity of chemical in Ltrs / US gallons.

Sinjhero field

Product Analysis Report

a) Gas Composition Sinjhero Mix Raw (Sinjhero , jakhro & Bitrisim wells)												
(Mole %) max.											(C _v) max.	Specific gravity max.
C1	C2	C3	iC4	nC4	iC5	nC5	C6+	CO ₂	N ₂	H ₂ S PPM	BTU/SC F	
70.45 6	11.24 2	5.231	0.61 2	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.	Specific gravity max.
C1	C2	C3	iC4	nC4	iC5	nC5	C6+	CO ₂	N ₂	H ₂ S PPM	BTU/SCF	
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
CO ₂	2-5 Mole %
H ₂ S	7 - 10 %