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-5244A/2021

Due Date

Evaluation Criteria

FULL

SCHEDULE OF REQUIREMENT

	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	40	-	-					
		(208.2 LTR)								

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. <u>Bid Validity:</u> 180 Days
- Didders 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.

Generalized Specifications.

Specific Gravity	1.05-1.12 @60 F	Odour	Amine Like
Color	Off-white to Amber	Density	8 (ibs/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.



Sinjhoro field

Product Analysis Report

a) G	as Com	position	Sinjho	ro Mix	Raw (Si	njhoro	, jakhro,	& Bitris	im wells	3)		
				(N	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	5.231	0.61	1.118	0.237	0.222	0.328	7	6.995	1-12	1138.81	0.765
b) G	ross Pr	oduction	of Fiel	d								
(Q Raw (Gas (MN	ISCF)			Qo	il (bbl)				Qw (bbl)	
		38				22	200				1050	
c) Si	izing of	flow line	es									
N	ominal	Dia Flov	v Lines			Avg. Lo	ength (kr	n)		Ma	x. Length (k	m)
	4"	',6" & 8"		14			15				28	
d) T	empera	tures			`						1	
			1			Avg.	Temp. °F	7		M	ax. Temp. °	F
Well Head Flowing Temperature					130						170	
F	low Lin	e Tempe	rature		19		100				130	
e) P	ressure	s										
						Avg. Pr	essure (p	osi)		Max	. Pressure (psi)
Wel	ll Head	Flowing	Pressu	re			500				2050	
	Flow I	ine Pres	sure				100				1440	
f) V	Vater A	nalysis R	Report									
PH TDS min. S/S m min. (mg/l)/ ppm								orides n (ppm)	opm) SP. Gr 60/60 n			
5.5		45000		1	150 80				40,000		1.02	
PH max.	7	TDS max (mg/l)		S/S ma	ax. (mg/l) Fe max. Ch			Chl	orides max. SP. Gr 60/60 (ppm)			/60 max
7.9	7	5000 ppn	n	4	400 200 60,000						1.09	
g) O	il analy	sis Repor	t					1				
SP. Gr 60/60 min BS &			BS & \	W min. API at 60/60 m				min	in Salt PTB min		min	
	0.730			(0 52					1		
SP. 0	Gr 60/60) max		BS & V	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

				(M	ole %) n	nax.					(C _{v) max.}	Specif	
C1	C2	C3	iC4	nC4	iC5	nC5	C6+	CO ₂	N ₂	H ₂ S PPM	BTU/SCF	gravit max.	
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 C	omposit	ion UCI	H-II			L							
67.7	1.91	0.63	0.18	0.20	0.11	0.08	0.12	46.1	25.4	975	740	1.11	
) G	ross Pro	duction	of Field										
(Q Raw C	Gas (MN	ASCF)			Qoi	l (bbl)				Qw (bbl)		
		430	-				35			700			
e) Si	izing of f	low line	es		*5								
N	ominal l	Dia Flov	v Lines			Avg. Le	ngth (k	m)		M	ax. Length (k	m)	
	8",	10", 12'	,		10						22		
l) To	emperat	ures			9								
						Avg. T	Tomm 0T	7					
				- 1		Avg. I	emp. T			ľ	Max. Temp. º	F	
Well H	lead Flo	wing Te	emperatu	ire		(375)	30		-	Г	160	F	
	lead Flo			ire		1						F	
FI				ire		1	30				160	F	
Fl	low Line			ire	A	1	30				160		
FI) Pr	low Line	Tempe			A	1 Avg. Pre	30				160		
FI) Pr	low Line	Tempe	Pressure		A	l l l	30 00 ssure (p				160 120 x. Pressure (p		
FI) Pr Well	essures Head F	Tempe lowing	Pressure		A	l l l	30 00 ssure (p				160 120 x. Pressure (1		
FI) Pr Well	essures Head F	Tempe lowing ne Press	Pressure			l l l	30 00 ssure (p	si)	n. (mg/l	Ma	160 120 x. Pressure (1	osi)	
FI Well Wall PH	essures Head F Flow Li	Tempe lowing ne Press	Pressure sure			l l l l l l l l l l l l l l l l l l l	30 00 ssure (p	si) Fe mi	n. (mg/l	Ma	160 120 x. Pressure (J 1300 950	osi)	
Well Well A	Head F Flow Li ater Ana	lowing ne Press	Pressure sure eport S min. (n	ng/l)	S/S n	avg. Pre	30 00 ssure (p	si) Fe mi		Ma	160 120 x. Pressure (11300 950 Chlorides mi	osi) n. (ppm)	

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 %