

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							 شرکت توسعه پتروایران 	
	TBE FOR INSTRUMENT/PLANT AIR & NITROGEN PACKAGES								
شماره پیمان:	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۱ از ۷
۰۵۳ - ۰۷۳ - ۹۱۸۴	BK	GCS	PEDCO	120	ME	TB	0006	D03	

طرح نگهداشت و افزایش تولید ۲۷ مخزن

TBE FOR INSTRUMENT/PLANT AIR & NITROGEN PACKAGES

نگهداشت و افزایش تولید میدان نفتی بینک

D03	JUL.2024	IFI	V.Amjadi	M.Fakharian	M.Sadeghian	
D02	FEB.2024	IFI	H.Ghadyani	M.Fakharian	S.Faramarzpour	
D01	OCT.2023	IFI	H.Ghadyani	M.Fakharian	S.Faramarzpour	
D00	MAR.2023	IFI	H. Adineh	M.Fakharian	M.Mehrshad	
Rev.	Date	Purpose of Issue / Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval

Class: 3 CLIENT Doc. Number: F0Z-709228

status: IDC: Inter-Discipline Check IFC: Issued For Comment IFA: Issued For Approval AFD: Approved For Design AFC: Approved For Construction AFP: Approved For Purchase AFQ: Approved For Quotation IFI: Issued For Information AB-R: As-Built for CLIENT Review AB-A: As-Built –Approved
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NISOC

نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



TBE FOR INSTRUMENT/PLANT AIR & NITROGEN PACKAGES

شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴

پروژه

BK

بسته کاری

GCS

صادرکننده

PEDCO

تسهیلات

120

رشته

ME

نوع مدرک

TB

سریال

0006

نسخه




D03

شماره صفحه: ۷ از ۲




REVISION RECORD SHEET

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		نهادت و ارایش تولید بیدان نفی سینک صنعت افرین						 					
شماره بیدان: ۱۹۴ - ۱۳ - ۰۳		TBE FOR INSTRUMENT/PLANT AIR & NITROGEN PACKAGES										شماره مشخصه: ۴ از ۷	
ردیف	بسته کاری	مشارکت کننده	مقیاس	رشته	نوع مدرک	میرال	سند						
BK	GCS	PEDCO	120	ME	TB	0008	D03						
REQ. NO: BK-GCS-PEDCO-120-ME-MR-0006		BIDDER NAME:			HAVAYAR		HAVASAN		PARS COMPRESSOR		ARAZ SANAT ASIA		
QUOTATION NO.:		HY/02/1/3106			HAV-BK-HIRGN-001		IR910		ASA-LR-02-263				
QUOTATION DATE:		25/1/2024			8/30/2023		9/1/2023		22/1/2024				
No.	DESCRIPTION	UNITS	REQ'D BY PURCHASER	MEETS REQUISITION REQUIREMENTS									
				Bidder's Proposal	Status	Bidder's Proposal	Status	Bidder's Proposal	Status	Bidder's Proposal	Status		
6.9	Dry Air Pressure at Normal Conditions at Producer's B/L	bar(g)	9	A	YES	A	YES	A	YES	A	YES	A	YES
6.10	Max. Outlet Air temperature @ after cooler outlet	°C	65	NO	NO	A	YES	A	YES	A	YES	A	YES
6.11	Max. Dust Particle Size	-	< 5 μm	A	YES	A	YES	A	YES	A	YES	A	YES
6.12	Noise Level	dB(A)	< 85	A	YES	A	YES	A	YES	A	YES	A	YES
6.13	Capacity Control Method	-	Load/Unload	A	YES	A	YES	A	YES	A	YES	A	YES
6.14	Cooling Type	-	Air Cooled	A	YES	A	YES	A	YES	A	YES	A	YES
6.15	Inlet Filter	-	Required	A	YES	A	YES	A	YES	A	YES	A	YES
6.16	Air-End Manufacturer / Model	-	VTS	GHH Rand/CDSD	YES	AirEnd GHHRAND - CD RD	YES	GHH Rand/CDSD	YES	GHH	YES	A	YES
6.17	Power Transmission Method	-	Direct Coupled or Gear Type	Gear Type	YES	Gear Type	YES	Direct Coupled	YES	Direct Coupled	YES	A	YES
6.18	Weight	kg	VTS	187	YES	1900	YES	NS	NO	according catalogue of compressor R-dryer	YES	A	YES
6.19	Dimension (L x W x H)	mm	VTS	2240 x 1370 x 1085	YES	2000 x 1200 x 1650	YES	2450x1300x1950	YES	according catalogue of compressor & dryer	YES	A	YES
6.20	Enclosure Fan Motor Power / Qty	kW	VTS	5.5	YES	4	NO	NS/A	NO	5.5/A	YES	A	YES
6.21	Room Mounted Control Panel per compressor	-	PLC Type C	A	YES	NS	NO	A	YES	PLC Type C	YES	A	YES
6.22	SIL Rated loops for safety functions	-	Required	N	YES	NS	NO	N	YES	(SIL-study by EPC contractor)	YES	A	YES
6.23	Control Panel Power (UPS/Non UPS)	KW	10VAC/20VAC	2KW/1.5KW (for each UCP as per HAVAYAR Load list)	YES	NS	NO	A	YES	A	YES	A	YES
6.24	Instrumentation/Analyzer	-	As per Specification	Noted by considering deviation list/ Dew point transmitter on dryer common header	YES	refer to last Deviation list	NO	A	YES	(DEWPOINT)	YES	A	YES
6.25	Local Control Panel	-	Required per compressor	Noted only for stop, start and status without control function. Control in by UCP	YES	A	YES	A	YES	A	YES	A	YES
6.26	Cabling to LCP	-	Required	A	YES	NS	NO	A	YES	A	YES	A	YES
6.27	Serial Link connection	-	Modbus RTU	A	YES	NS	NO	A	YES	A	YES	A	YES
7 MAIN MOTOR													
7.1	Manufacturer	-	VTS	JEMCO	YES	WEG	YES	JEMCO/OME	YES	ABB/SIEMENS/WEG	YES	A	YES
7.2	Motor Power	-	KW	55	YES	55	YES	75	YES	55	YES	A	YES
7.3	Power Supply	V / Hz / Ph	400/50/3	A	YES	A	YES	A	YES	A	YES	A	YES
7.4	IP Degree / Temperature Class	-	VTS	55/B	YES	IP 55 Insulation Class:F-Motor Temp. Rise Class: B	YES	54/T3	YES	55/T4	YES	A	YES
7.5	Speed, Motor / Compressor	rpm	VTS	3000	YES	3000	YES	2950	YES	3000	YES	A	YES
8 AIR DRYER													
8.1	Manufacturer	-	VTS	HAVAYAR	YES	Devoicant Dryer-HAVASAN	YES	Par compressor	YES	ASA CO.	YES	A	YES
8.2	Type / Design Code	-	Healdon Devoicant/ASME SEC. VIII DIV.1 & 2	Healdon Devoicant/ ASME SEC. VIII DIV.1	YES	A	YES	A	YES	A	YES	A	YES
8.3	Dryer Life Time	-	not less than 3 years	A	YES	A	YES	A	YES	A	YES	A	YES
8.4	Quantity	-	2	A	YES	A	YES	A	YES	A	YES	A	YES
8.5	Desiccant Material	-	Molecular sieve / Activated Alumina	A	YES	Molecular sieve	YES	A	YES	Carbon Molecular sieve	YES	A	YES
8.6	Cycle time	min	VTS	7-15	YES	5	YES	20	YES	5/1/2	YES	A	YES
8.7	Dryer Capacity	Nm ³ /hr	VTS	300	YES	1000 @ 35 °C, 100%, 7 bar	YES	NS	NO	175	YES	A	YES
8.8	Inlet Flow Rate	Nm ³ /hr	VTS	140.8	YES	1000	YES	235	YES	150	YES	A	YES
8.9	Outlet Flow Rate	Nm ³ /hr	VTS	119.7	A	900 (With max. 20 % purge)	YES	188	YES	A	YES	A	YES
8.10	Regeneration Flow Ratio	%	VTS	15	YES	20	YES	15-20	YES	15	YES	A	YES
8.11	Dew Point	°C	-40 @ 8 barg	A	YES	A	YES	A	YES	A	YES	A	YES
8.12	Operating Pressure	bar(g)	9	A	YES	A	YES	A	YES	A	YES	A	YES
8.13	Design Pressure	bar(g)	12.5	A	YES	A	YES	A	YES	A	YES	A	YES
8.14	Hydrotest Pressure	bar(g)	VTS (0.57MAWP)	1.3 * Design pressure	YES	A	YES	A	YES	A	YES	A	YES
8.15	Inlet Temperature	°C	60	A	YES	A	YES	A	YES	A	YES	A	YES
8.16	Tower Design Code	-	ASME SEC. VIII DIV.1	A	YES	A	YES	A	YES	A	YES	A	YES
8.17	Material for Shell / Head	-	VTS	SA306 Gr.B/SA 234 WPB	YES	SA 516 Gr.70	YES	CS	YES	AS16 Gr. 70	YES	A	YES
8.18	Corrosion Allowance	mm	3.2	A	YES	A	YES	A	YES	3.2	YES	A	YES
8.19	Safety Valve	-	Required	A	YES	A	YES	A	YES	A	YES	A	YES
8.20	Pic Filter / Qty.	-	Required / 2	A	YES	A	YES	A	YES	A/2	YES	A	YES
8.21	After Filter / Qty.	-	Required / 2	A	YES	A	YES	A	YES	A/2	YES	A	YES
8.22	Filter Manufacturer	-	VTS	OMEGA	NO	OMEGA AIR	NO	MIKROPOR	NO	Domestic brand	NO	A	YES
8.23	Dryer LCP	-	Yes, IP65	Yes, IP65(LCP include only Stop Start and status without control function)	YES	A	YES	IP 55	NO	A	YES	A	YES
8.24	Dryer instrumentation/IP/EX	-	As per Specification	IP65, safe (Non-Ex)	YES	NS	NO	A	YES	According PID/SA/Safe location	YES	A	YES
8.25	Cabling to LCP	-	Required as per specification	A	YES	NS	NO	A	YES	A	YES	A	YES
8.26	Dryer Controller Type	-	Microprocessor	BY UCP	NO	TI Designed by CMC	NO	A	YES	PLC	YES	A	YES
FINAL CONCLUSION				ACCEPTED				CONDITIONALLY ACCEPTED (if approved by the CLIENT)		ACCEPTED		ACCEPTED	

NOTES:
ABBREVIATIONS: A: ACCEPTED By Vendor N: NOT ACCEPTED By Vendor NA/Not Applicable NS/Not Specified C:Clarification Required VTS: Vendor to Specify

		نهادت و افزایش تولید میدان نفتی بینک مجمع آفرین احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک						 							
TBE FOR INSTRUMENT/PLANT AIR & NITROGEN PACKAGES															
شماره پیمانکار	نوع پروژه	کلاس GCS	مکان پروژه	مکان پروژه	مکان پروژه	مکان پروژه	مکان پروژه	مکان پروژه	مکان پروژه	مکان پروژه	مکان پروژه				
114-04-04	BK	GCS	PEDCO	120	ME	TB	0006	0006	0006	0006	0006				
REQ. NO: BK.GCS.PEDCO-120-ME-MR-0006		BIDDER NAME:			HAYAYAR		HAYASAN		PARS COMPRESSOR		ARAZ SANAT ASIA				
QUOTATION NO.:		HY/02/1/306			HAY-02-1/306		HAY-02-1/306		18910		ASA-LR-02-363				
QUOTATION DATE:		24/1/2024			8/30/2023		8/30/2023		9/1/2023		22/1/2024				
MEETS REQUISITION REQUIREMENTS															
No.	DESCRIPTION	UNITS	REQ'D BY PURCHASER	Bidder's Proposal	Status	Bidder's Proposal	Status	Bidder's Proposal	Status	Bidder's Proposal	Status				
11.6	Opening Pressure	bar.g	VTS	9.5	YES	10	YES	NS	NO						
11.7	Heat Exchanger Duty	KW	VTS	5	YES	16.6 kw heat exchanger	YES	4	YES						
12 PRE FILTER															
12.1	Manufacturer / Model	-	VTS	HAYAYAR/OMEGA / HFR 0106	YES	NS	NO	MIKROPOR	NO	Domestic hunter	NO				
12.2	Volume	Lit	VTS	Alter P.O.	YES	NS	NO	Alter P.O.	YES	1/2 inch AA TYPE	YES				
12.3	Casing Material	-	VTS	SAB6 Gr B/SA 234 WPB	YES	NS	NO	CS	YES	C.S.	YES				
12.4	Filter Cartridge Material	-	VTS	borosilicate micro fibres	YES	NS	NO	SS/PEEK	YES	fiberglass	YES				
12.5	Maximum Working Pressure	bar.g	VTS	9.5	YES	NS	NO	NS	NO	16	YES				
12.6	Maximum Working Temperature	°C	VTS	30	YES	NS	NO	NS	NO	66	YES				
12.7	Filtration Mesh	Micron	VTS	1	YES	NS	NO	0.1	YES	0.1	YES				
12.8	Residual Oil Content After Filtration	mg/m3	VTS	OIL FREE	YES	NS	NO	NS	NO	0.1	YES				
13 AFTER FILTER															
13.1	Type / Manufacturer / Model	-	Dust filter	HAYAYAR/OMEGA / HFR 0106	YES	OMEGA AIR- AF 0476-R	NO	Dust	YES	Domestic hunter	NO				
13.2	Volume	Lit	VTS	Alter P.O.	YES	2.8 Lit 120 Nox/2hr	YES	NS	NO	1/2 inch AA TYPE	YES				
13.3	Casing Material	-	VTS	SAB6 Gr B/SA 234 WPB	YES	AL	YES	CS	YES	C.S.	YES				
13.4	Filter Cartridge Material	-	VTS	borosilicate micro fibres	YES	32075 R borosilicate micro fibres	YES	SS	YES	fiberglass	YES				
13.5	Maximum Working Pressure	bar.g	VTS	9.5	YES	16	YES	NS	NO	16	YES				
13.6	Maximum Working Temperature	°C	VTS	30	YES	63	YES	NS	NO	66	YES				
13.7	Filtration Mesh	µm	VTS	0.1	YES	1	YES	5	YES	0.01	YES				
13.8	Residual Oil Content After Filtration	mg/m3	VTS	OIL FREE	YES	OIL FREE	YES	Oil Free	YES	0.1	YES				
14 AIR RECEIVER VESSEL															
14.1	Design Code	-	ASME SEC. VIII DIV. 1 & 2	ASME SEC. VIII DIV. 1	YES	ASME SEC. VIII DIV. 1	YES	A	YES	A	YES				
14.2	Quantity	-	VTS	1	YES	1	YES	1	YES	1	YES				
14.3	Capacity	m³	VTS	1	YES	10	YES	NS	NO	3	YES				
14.4	Position (Vertical/Horizontal)	-	VTS	Vertical	YES	Vertical	YES	V	YES	VERTICAL	YES				
14.5	Dimensions (L x TL/TL)	mm	VTS	850x600	YES	ID=1700, TL/TL=3850	YES	Alter P.O.	YES	1500*1500	YES				
14.6	Design Pressure	bar.g	VTS	12.5	YES	12.5	YES	NS	NO	16	YES				
14.7	Hydrotest Pressure	bar.g	VTS (LSPMAWP)	LSPDesign pressure	YES	16.25	YES	A	YES	20	YES				
14.8	Material	-	VTS	SA 516 Gr 70	YES	SA 516 Gr 70	YES	CS	YES	AS16 GR.70	YES				
14.9	Corrosion Allowance	mm	VTS	3.2	YES	3.2	YES	1.6	YES	3.2	YES				
15 N2 BUFFER VESSEL															
15.1	Design Code	-	ASME SEC. VIII DIV. 1 & 2	ASME SEC. VIII DIV. 1	YES	ASME SEC. VIII DIV. 1	YES	A	YES	A	YES				
15.2	Quantity	-	VTS	1	YES	1	YES	1	YES	1	YES				
15.3	Capacity	m³	VTS	1	YES	10	YES	Alter P.O.	YES	1	YES				
15.4	Position (Vertical/Horizontal)	-	VTS	Vertical	YES	Vertical	YES	V	YES	VERTICAL	YES				
15.5	Dimensions (L x TL/TL)	mm	VTS	850x600	YES	ID=1700, TL/TL=3850	YES	NS	NO	900*1500	YES				
15.6	Design Pressure	bar.g	VTS	12.5	YES	12.5	YES	NS	NO	16	YES				
15.7	Material	-	VTS	LSPDesign pressure	NO	SA 516 Gr 70	YES	CS	YES	AS16 GR.70	YES				
15.8	Corrosion Allowance	mm	VTS	3.2	YES	3.2	YES	1.6	YES	3.2	YES				
FINAL CONCLUSION				ACCEPTED				CONDITIONALLY ACCEPTED (if approved by the CLIENT)				ACCEPTED			

NOTES:
 ABBREVIATIONS: A: ACCEPTED By Vendor N: NOT ACCEPTED By Vendor NA: Not Applicable NS: Not Specified C: Clarification Required VTS: Vendor to Specify