



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

	شماره پیمان:	N	MECHANICAL	DATA SHEET	TS FOR FIRE	WATER MAII	N PUMPS-ELI	ECTRICAL MOTOR	DRIVEN
053-073-9184		پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرک	سر يال	نسخه
		BK	GCS	PEDCO	120	ME	DT	0029	D03

شماره صفحه: 1 از 9

طرح نگهداشت و افزایش تولید 27 مخزن

MECHANICAL DATA SHEETS FOR FIRE WATER MAIN PUMPS - ELECT. MOTOR DRIVEN (P-2301 A)

نگهداشت و افزایش تولید میدان نفتی بینک

D03	OCT. 2022	IFA	H. Adineh	M. Fakharian	M. Mehrshad	
D02	AUG. 2022	IFA	H. Adineh	M. Fakharian	M. Mehrshad	
D01	MAY. 2022	IFA	H. Adineh	M. Fakharian	M. Mehrshad	
D00	FEB. 2022	IFC	H. Adineh	M. Fakharian	M. Mehrshad	
Rev.	Date	Purpose of Issue / Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval

Class: 2 CLIENT Doc. Number: F0Z-708860

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



HIRGAN TO

NISOC

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

 MECHANICAL DATA SHEETS FOR FIRE WATER MAIN PUMPS-ELECTRICAL MOTOR DRIVEN

 شماره پیمان:
 سلاحت
 سنخه سریال نوع مدر که رشته تسهیلات صادر کننده بسته کاری پروژه
 پروژه

 BK
 GCS
 PEDCO
 120
 ME
 DT
 0029
 D03

شماره صفحه: 2 از 9

REVISION RECORD SHEET

page	D00	D01	D02	D03	REVISIO D04
1	Х	X	X	Х	D04
2	X	X	X	X	
3	X	X	X	X	
4	X	^	^	^	
5	X	х	Х	Х	
6	Х	Х	Х	Х	
7	Х				
8	Х				
9	Х				
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					1
20		-			†
21		1			+
22		-			+
22		-			+
23 24		-			1
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					1
37					
38					
30					
39					
40					
41					
42					1
43					1
44					
45					
46					1
47					
48					
49					İ
50					1
51					1
52		<u> </u>			1
53		-			+
5.0					+
54		-			1
55					_
56					1
57					
58					<u> </u>
59					
60					
			İ		1
61					
61					
61 62 63 64					

ORD SHEET					
page	D00	D01	D02	D03	D04
65					
66					
67					
68 69					
70					
70					
72					
73					
74					
75					
76					
77					
78 79					
80					
81					
82					
83					
84					
85					
86					
87					
88 89					
90					
91					
92					
93					
94					
95					
96					
97					
98 99					
100					
101					
102					
103					
104					
105					
106					
107					
108					
109 110					
111					
112					
113					
114					
115					
116					
117					
118					
119 120					
120					
122					
123					
124					
125 126					
126					
127	-				
128					





NISOC

053-

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

	شماره پیمان:	N	MECHANICAL DATA SHEETS FOR FIRE WATER MAIN PUMPS-ELECTRICAL MOTOR DRIVEN نسخه سبال نهم مدرک رشته تسهلات صادرکننده سته کاری د وز											
ىمان: 3-073-9184		پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سريال	نسخه					
3-073-7104		BK	GCS	PEDCO	120	ME	DT _	0029	D03					

شماره صفحه: 3 از 9

GENERAL NOTES

D03

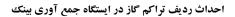
- 1 Vendor shall fill in the blanks and return the completed data sheet along with Motor data sheet, "DOC NO.: BK-GCS-PEDCO-120-EL-DT-0009. with his proposal.
- 2 Vendor shall submit ITP (Inspection & Testing Plan) with his proposal.
- 3 Vendor is requested to confirm the material, or propose appropriate alternative.
- 4 For Instrumentation, Project specification 'Specification For Instrument and Control of package Unit System (PU)' Doc. No. BK-GNRAL-PEDCO-000-IN-SP-0004. shall be followed.
- 5 Instead of mechanical seal, vendor shall advise the suitable Packing specification.
- $6\,\,$ NPSH test shall be done & witnessed if the margin of NPSHr & NPSHa is less than 1.
- 7 The Tie-in flanges shall conform to ASME B-16.1.
- 8 Pump drain shall be terminated at skid edge with flange connection and valved.
- 9 Vendor to indicate which minimum flow pumps can achieve.
- 10 Nozzle loads shall be 2 times the loads shown in API 610 11th Edition.
- 11 Electrical motor shall be rated for 150% of rated capacity. In addition vendor shall follow project specification for rating of motor power .
- 12 The Suction line size is 12" and discharge line is 10"
- 13 Welding repair procedures shall be submitted for approval.
- 14 Air release valve to be considered by vendor.
- 15 As the pump jobsite environmental condition is fumy and dusty, any required protection for pumps, panels and electrical parts (in accordance with IPS-E-EL-100) in this regard shall be considered by pump manufacturer.
- 16 Ultrasonic Test shall be performed for forged shaft.
- 17 Couplings shall be dry, flexible and spacer type.
- 18 For electrical motor descriptions, refer to 'Specification For MV Induction Motors' Doc. No.BK-GNRAL-PEDCO-000-EL-SP-0017.
- 19 A local control panel shall be considered by vendor to be located next to the pumps as per "Specification For Fire Water Pumps", Doc. No. BK-GCS-PEDCO-120-ME-SP-0005."
- 20 Pump LCP shall be designed to manage all required monitoring and control signals, as minimum in accordance with "P&ID For Fire Water Network", Doc.No. BK-GCS-PEDCO-120-SA-PI-0001.
- 21 Pressure sensing lines are in the vendor's scope of supply.
- 22 The pumps shall furnish not less than 150% of rated capacity at not less than 65% of rated head.
- 23 Design pressure is 15.4 barg also as per NFPA 20 standard the hydrotest pressure shall not be less than 17.24 barg.
- 24 Estimated BHP at rated capacity is 199.2 kW by considering 65% efficiency.



NISOC

شماره پیمان:

نگهداشت و افزایش تولید میدان نفتی بینک سطحالارض



HIRGAN TIE

053-073-9184

 MECHANICAL DATA SHEETS FOR FIRE WATER MAIN PUMPS-ELECTRICAL MOTOR DRIVEN

 نسخه
 سریال
 نوع مدر که
 رشته
 نسخه
 سیالات
 سیالات
 بینه کاری
 پروژه

 BK
 GCS
 PEDCO
 120
 ME
 DT
 0029
 D03

شماره صفحه: 4 از 9

		CENT	TRIFUGAL PUMP DA	ATA SHEET (SI UNIT) - P-2301	A (Sheet 1 of 6)		
		CLIENT:	National Irania	ın South Oil Company (NIS	OC)		
	DD	OJECT TITLE:		ompressor Station	50)		
		JOB NUMBER:		•			
		ENT NUMBER:					
		ENT SERVICE:	Fire Water Ma	in Pumps - Electrical Motor	Driven		
		IAL NUMBER:	PV GGG PED	GO 100 ME GD 0005			
		Q. / SPEC NO. :				.	
		CH ORDER NO.					
Cells colo		contain drop-down o	-				
		contain calculated va	lues based on input	t data; do not change.			
	i	dentify a cross refere	enced paragraph in	the document note, and ma	y also contain a drop dowr	list	
Wher	1 you have completed the DS	S highlight the whole	e nage format cells	nattern none			
Delete	e these notes on completion	s, mgmight the whole	e page format cens	pattern none			
	COMMENTS:						
							
							
							
							
				DATA SHEETS			
PUMP	ITEM No. P-2301 A	ATT YES		ITEM No.	ATT	ITEM No.	A
MOTOR GEAR							
TURBINE							





NISOC

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

NIBOC									
شماره پیمان:		MECHANICAL	DATA SHEE	DRIVEN					
053-073-9184	پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سريال	نسخه	شماره صف حه : 5 از 9
033-073-7104	BK	GCS	PEDCO	120	ME	DT	0029	D03	
									•

					CENTRIFUGA	L PUMP DATA SH	IEET (SI UNIT) - P-2301 A (Sheet 2 of 6)			
APPLICABI	ETO:	PROPO	SAL			APPI	LICARLE NTL/IN	TNTL STANDARD:	NFP	PA20 (2019) & IPS-M-PM-125	
FOR	NISOC					UNI		II(IESTAIDARD.		120 (2015) & 110 11 111 120	=
SITE		Gas Compressor	Station			SER'		Fire Water Main Pumps -	Electrical Motor Driven		=
NO. REQ	1		PUMP SI	ZE		TYP			No. STAGES		_
MANUFAC	TURER		-			MOI		BB1 (V.T.C)	SERIAL NO.		-
						LIQUID CH	ARACTERISTIC				
			Units	Maximum	Minimum	Note	SERVICE :			INTERMITTENT	
LIQUID TY	PE OR NAM	E:		Water		Max & min	• IF INTERM	ITTENT NO. OF STARTS :			=
VAPOR PRE	ESSURE :		bara	0.0087	0.1219	values refer	PUMPS OPE	RATE IN:			=
DENSITY:			kg/m³	9!	97	only to the	CORROSION	DUE TO: (6.12.1.9)			
SPECIFIC H	EAT:		kj/kgC		186	property	EROSION DU	JE TO: (6.12.1.9)			
VISCOSITY	:		cР		1 /200	listed	H2S CONCE	NTRATION (ppm) : (6.12.1.12)			N.A.
			OPERA	TING CONDITIONS (6.1	D03	`	CHLORIDE O	CONCENTRATION (ppm):			
			Units	Maximum	Rated No.	ormal Min	PARTICULA'	ΓΕ SIZE (DIA IN MICRONS)		·	
NPSH _A Datu	ım:				C.L. Impeller		PARTICULA'	ΓΕ CONCENTRATION (PPM)	1	·	
PUMPING T	TEMPERATU	JRE:	°C	50	33	5				•	
FLOW:			m ³ /hr		454.2						
	E PRESSUR	E:(6.3.2)	barg		10.4						
SUCTION P			barg	0.83	0.81	0.08					
	TIAL PRESSU		bar		10.3						
DIFFERENT	TIAL HEAD :		m		105.0						
NPSH _A :			m		8.8						
HYDRAULI	C POWER: (Note 24)	KW		129.50						
						SITE AND	UTILITY DAT				
LOCATION							COOLING V	VATER:		1 1	
	OUTDOO	OR U	NHEATED		DER ROOF	=			RETURN	DESIGN	
MOUNTED				• TROPICALISA			TEM				
	AREA CLA	ASSIFICATION	V: (6	6.1.22) ZONE	SAFE	_	PRES				
GROUP				TEMP CLASS		_	SOU				
SITE DATA								LING WATER CHLORIDE CONC			
ELEVATIO		12.5 MPS:MIN / MA	-	BAROMETER		90.77 mF	Bar INSTRUME! STEAM	NI AIR:	kg	MIN kg	
			А	0	85 °C		SIEAM	1	DRIVERS HEATIN	10	
UNUSUAL	HUMIDITY:				100 %	(@ 25.6 °C)	TEM	D.	DRIVERS HEATIN	0	
	CONDITION			NA			PRES	<u> </u>			
ELECTRIC		DRIVERS	HEATING	CONTROL	SHUTDOWN		I KL				
VOLTA		3300	THE THEO	CONTROL	BHC1BOWN						
PHASE		3				=					
HERTZ		50		-		_					
			1	PERFORMANCE					DRIVER (7.1.5)		
PROPOSAL	CURVE NO			RPM			Driver Type			INDUCTION MOTOR	
As Test	ed Curve No.	-		====			GEAR		=	NO	
IMPELLER D	IA.: RAT	ED	MAX.	MIN.		nm	VARIABLE S	PEED REQUIRED		NO	
RATED PO	WER	Kw	EFF	TCIENCY		(%)	SOURCE OF	VARIABLE SPEED			
RATED CU	RVE BEP FL	OW (at rated im	peller dia)	:	п	n³/hr	OTHER				
MIN FLOW:			kJ/Nm³		п	n³/hr	MANUFACT	URER			
PREFERRE	D OPERATII	NG REGION (6.	1.11)	to	п	n³/hr	NAMEPLATI	E POWER	@Site Condition	K	CW
ALLOWABI	LE OPERATI	NG REGION		to	п	n³/hr	Nominal RPM	I			
MAX HEAD	@ RATED	IMPELLER				m	RATED LOA	D RPM			
MAX POWE	ER @ RATEI) IMPELLER		•	I	kW	FRAME OR 1	MODEL			
NPSH3 AT I	RATED FLO	W :		•		m	ORIENTATIO	ON		HORIZONTAL	
CL PUMP T	O U/S BASE	PLATE		•		m	LUBE				
NPSH MAR	GIN AT RAT	ED FLOW:		•		m	BEARING TY	PE:			
SPECIFIC S	PEED (6.1.9))		•			RADIAL			1	
SUCTION S	PECIFIC SPI	EED LIMIT		•			THRUST			1	
	PECIFIC SPI			•			STARTING N		D.O.L/Open	Discharge Valve	
MAX. ALLO	OW. SOUND	PRESS. LEVEL	REQD (6.1.14)		85 (dl	BA) @ 1 m	SEE DRIVER	DATA SHEET		Note 1	
EST MAX S	OUND PRES	SS. LEVEL		•	(d'	BA)	Max Voltage	Variation		±5%	
MAX. SOU	ND POWER	LEVEL REQ'D	(6.1.14)	•			Max Frequenc	y Variation		±2%	
EST MAX S	OUND POW	ER LEVEL		•	· 		Max Voltage	and Frequency Variation together	r	+5%	





NISOC

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

شماره پیمان:									
053-073-9184	پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سريال	نسخه	شماره صف حه : 6 از 9
033-073-7104	BK	GCS	PEDCO	120	ME	DT	0029	D03	

CENTRIFUGAL PUMP DATA SHEET (SI UNIT) - P-2301 A (Sheet 3 of 6) CONSTRUCTION API PUMP TYPE: CASING MOUNTING: [Based on API 610 definitions] BB1 CASING TYPE: (6.3.10) (6.5.5) OH3 BACKPULLOUT LIFTING DEVICE REQD. (9.1.2.6) NOZZLE CONNECTIONS: NOTES 7.12 Size Facing Rating Position CASE PRESSURE RATING: SUCTION MAWP: FF SIDE **By Vendor** barg @ DISCHARGE FF 125 SIDE HYDROTEST: 1.5*MAWP PRESSURE CASING AUX. CONNECTIONS: (6.4.3.2) HYDROTEST OH PUMP AS ASSEMBLY No. Size Type Facing Posn. BAL/LEAK OFF SUCT'N PRESS. REGIONS DESIGNED FOR MAWP DRAIN (VIEWED FROM COUPLING END) ROTATION: VENT IMPELLERS INDIVIDUALLY SECURED : PRESSURE GAGE BOLT OH 3/4/5 PUMP TO PAD / FOUNDATION : TEMP GAGE PROVIDE SOLEPLATE FOR OH 3/4/5 PUMPS WARM-UP LINE ROTOR: SHAFT FLEXIBILITY INDEX (SFI) (9.1.1.3) Drain Valve Supplied By SUPPLIER First Critical Speed Wet (Multi stage pumps only) DRAINS MANIFOLDED YES COMPONENT BALANCE TO ISO 1940 G1.0 SUPPLIER SHRINK FIT -LIMITED MOVEMENT IMPELLERS (9.2.2.3) VENT Valve Supplied By NOTE 17 VENTS MANIFOLDED VES COUPLING: (7.2.3) (7.2.13 f) THREAD. CONS FOR PIPELINE SERVICE & $<50^{\circ}\text{C}$ (6.4.3.2) MANUFACTURER SPECIAL FITTINGS FOR TRANSITIONING (6.4.3.3) NO MODEL CYLINDRICAL THREADS REQUIRED (6.4.3.8) NO RATING (POWER/100 RPM) GUSSET SUPPORT REQUIRED SPACER LENGTH YES If Needed MACHINED AND STUDDED CONNECTIONS (6.4.3.12) NO SERVICE FACTOR Min 1.5 VS 6 DRAIN RIGID NO DRAIN TO SKID EDGE YES COUPLING WITH HYDRAULIC FIT (7.2.10) MATERIAL (6.12.1.1) COUPLING BALANCED TO ISO 1940-1 G6.3 (7.2.3) YES APPENDIX H CLASS NOTE 3 COUPLING WITH PROPRIETARY CLAMPING DEVICE (7.2.11) MIN DESIGN METAL TEMP (6.12.4.1) REDUCED-HARDNESS MATERIALS REO'D (6.12.1.12.1) COUPLING IN COMPLIANCE WITH (7.2.4) API 610 compliant Applicable Hardness Standard (6.12.1.12.3) COUPLING GUARD STANDARD PER (7.2.13.a) BARREL: Window on Coupling Guard CASE : DIFFUSERS BASEPLATE IMPELLER : API BASEPLATE NUMBER : IMPELLER WEAR RING: BASEPLATE CONSTRUCTION (7.3.14) CASE WEAR RING: BASEPLATE DRAINAGE (7.3.1) Entire Baseplate Drain Pan SHAFT: Bowl (if VS-type) NON-GROUT CONSTRUCTION : (7.3.13) VERTICAL LEVELING SCREWS : REQUIRED Inspection Class (Note 2) BEARINGS AND LUBRICATION (6.10.1.1) (VTA) LONGITUDINAL DRIVER POSITIONING SCREWS: REQUIRED BEARING (TYPE / NUMBER): GROUT AND VENT HOLES YES RADIAL DRAIN CONNECTION YES THRUST MOUNTING PADS SIZED FOR BASEPLATE LEVELING (7.3.5) YES REVIEW AND APPROVE THRUST BEARING SIZE : (9.2.5.2.4) MOUNTING PADS TO BE MACHINED (7.3.6) YES PROVIDE SPACER PLATE UNDER ALL EQUIPMENT FEET YES (6.10.2.2) (6.11.3) (9.2.6) OTHER LUBRICATION: PRESSURE LUBE SYSTEM TO ISO 10438-(9.2.6.5) ISO 10438 DATA SHEETS ATTACHED Pressurized Lube Oil System mtd on pump baseplate REMARKS . Location of Pressurized Lube Oil System mounted on baseplate : INTERCONNECTING PIPING PROVIDED BY OIL VISC. ISO GRADE VG CONSTANT LEVEL OILER:





NISOC

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

شماره پیمان∶									
053-073-9184	پروژه	بسته کاری	صادر کننده	تسهيلات	رشته	نوع مدرك	سريال	نسخه	شماره صف حه : 7 از 9
033-073-7104	BK	GCS	PEDCO	120	ME	DT	0029	D03	

CENTRIFUGAL F	PUMP DATA SHEE	T (SI UNIT) - P-2301 A (Sheet 4 of 6)	
INSTRUMENTATION	T	SEAL SUPPORT SYST	EM MOUNTING
SEE ATTACHED API-670 DATA SHEET		SEAL SUPPORT SYSTEM MOUNTED ON PUMP BASEPLA	TE
ACCELEROMETER (7.4.2.1)			(7.5.1.4)
Number of Accelerometers		IDENTIFY LOCATION ON BASEPLATE	
Mounting Location of Accelerometers			
		INTERCONNECTING PIPING BY	Supplier
PROVISION FOR MTG ONLY (6.10.2.10) YES	L		
Number of Accelerometers	Į.	MECHANICAL S	
Mounting Location of Accelerometers		SEE ATTACHED ISO 21049/API 682 DATA SHEET	N/A NOTE 5
(2.40.11)		ADDITIONAL CENTRAL FLUSH PORT	(6.8.9)
FLAT SURFACE REQUIRED (6.10.2.11) N/A	1	HEATING JACKET REQ'D.	(6.8.11) N/A
Number of Accelerometers		FLUSH PLAN	
Mounting Location of Accelerometers			
VIBRATION PROBES (7.4.2.2) N/A	}	HEATING AND CO	OLING (6 1 17)
PROVISIONS FOR VIB. PROBES		COOLING REQ'D	NO NO
NUMBER PER RADIAL BEARING		COOLING WATER PIPING PLAN	
NUMBER PER AXIAL BEARING		COOLING WATER PIPING	
			FITTINGS
MONITORS AND CABLES SUPPLIED BY (7.4.2.4)		COOLING WATER PIPING MATERIALS	
		COOLING WATER REQUIREMENTS:	
TEMPERATURE (7.4.2.3)			
PROVISIONS FOR TEMP PROBES			
RADIAL BEARING TEMP.		TOTAL COOLING WATER	
NUMBER PER RADIAL BEARING		HEATING MEDIUM	
THRUST BEARING TEMP.		OTHER	
NUMBER PER THRUST BEARING ACTIVE SIDE		HEATING PIPING	
NUMBER PER THRUST BEARING INACTIVE SIDE			
TEMP. GAUGES (WITH THERMOWELLS) (9.1.3.6)	Ī	PIPING & APPUR	TENANCES
PRESSURE GAUGE TYPE	Ī	MANIFOLD PIPING FOR PURCHASER CONNECTION (7.5.	1.6)
Remarks		VENT	YES
		DRAIN	YES
		VALVES	YES (NOTE 8)
		COOLING WATER	NO
		TAG ALL ORIFICES (7.5.2.4)	YES
		SOCKET WELD CONN ON SEAL GLAND (7.5.2.8)	





NISOC

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

 MECHANICAL DATA SHEETS FOR FIRE WATER MAIN PUMPS-ELECTRICAL MOTOR DRIVEN

 سفاده پیمان:
 شماره صفحه: 81ز 9

 سماره صفحه: 81ز 9
 BK GCS PEDCO 120 ME DT 0029 D03

				C	ENTRIFUGAL PU	UMP DATA SHEET	(SI UNIT) - P-2301 A (Sheet 5 o	of 6)			
		SUE	RFACE PREPAI	RATION AND PAINT	1				TEST		
MANUFACTU	RER'S STAND						SHOP INSPECTION (8.1.1)				Yes
OTHER (SEE I	BELOW)						PERFORMANCE CURVE				
SPECIFICATIO	ON NO.	BK-GNRAL-P	EDCO-000-PI-SP-	0006, "Specification			& DATA APPROVAL PRIOR	TO SHIPMENT.			YES
		for Painting"		, - 			TEST WITH SUBSTITUTE SE	EAL (8.3.3.2.b)			
PUMP:							MATERIAL CERTIFICATION	REQUIRED		CASING	YES
	CE PREPARAT	TION					SHAFT	YES		(6.12.1.8) IMPELLER	YES
PRIMER			-	AS PER PROJECT PAI	NTING SPEC.		OTHER	YES	Casing and impelle		
FINISH COAT				AS PER PROJECT PAI			CASTING REPAIR WELD PRO				YES
BASEPLATE:							INSPECTION REQUIRED FOR		-		
	URFACE PRE	PARATION					LIQUID PENETRANT		YES	MAG PARTICLE	
PRIMER:			-	AS PER PROJECT PAI	NTING SPEC		ULTRASONIC	:		RADIOGRAPHY	YES
FINISH COAT		- 5		AS PER PROJECT PAI			INSPECTION REQUIRED FOR	R CASTINGS			
	JFTING DEVIC	TES.		THO I EN I NOVE CT I III			LIQUID PENETRANT		YES	MAG PARTICLE	YES
SHIPMENT: (-10		EXP	PORT		ULTRASONIC		YES	RADIOGRAPHY	
	ING REQUIRE	D			YES		HARDNESS TEST REQUIREI	D (8 2 2 7)		N. IDIO GIO II III	
		E THAN 6 MON	THS		YES		ADDNL SUBSURFACE EXAM		0 (8 2 1 3)		
		Y PACKAGED						(417	, (0.2)	FOR	
		TION (9.2.8.2)								METHOD	
			ERT STORAGE (9	2.8.3)							
N ₂ PURGE (9.2							PMI TESTING REQUIRED (8.	2 2 8)			
SPARE PART							• •	PONENTS TO BE TE	STED		
START-UP					YES		RESIDUAL UNBALANCE TE		35125		
NORMAL MAI	INTENANCE				YES		NOTIFICATION OF SUCCESS				YES
TTOTAL ILL IVII II					120		PERFORMANCE TEST (8.1.1.				YES
ITEM No	PUMP	DRIVER	GEAR	BASE	TO	ΓAL	BASEPLATE TEST (7.3.21)	.0) (0.0.0.0)			
							HYDROSTATIC				WIT
							HYDROSTATIC TEST OF BO	WLS & COLUMN (9	9.3.13.2)		
							PERFORMANCE TEST				WIT
				ER REQUIREMENT			TEST IN COMPLIANCE WITH				NFPA 20
		ING REQUIRED			YES		TEST DATA POINTS TO (8.3.				NFPA 20
MAXIMU	M DISCHARG	E PRESSURE TO	O INCLUDE				TEST TOLERANCES TO (8.3.	.3.4)			TABLE 16
							NPSH (8.3.4.3.1) (8.3.4.3.4)			NOTE 6	WIT
			TO TRIP SPEED				NPSH-1ST STG ONLY (8.3.4.3				
	MAX D	IA. IMPELLERS	AND/OR NO OF S	TAGES	YES		NPSH TESTING TO HI 1.6 OR	R ISO 9906 (8.3.4.3.3))		
CONNEC	TION DESIGN	APPROVAL (9.2	2.1.4)		YES		TEST NPSHA LIMITED TO 11	10% SITE NPSHA (8	3.3.3.6)		
TORSION	AL ANALYSIS	/ REPORT (6.9.	2.10)		NO		RETEST ON SEAL LEAKAGE	E (8.3.3.2.d)			OBSERVE
PROGRES	SS REPORTS				YES		RETEST REQUIRED AFTER	FINAL HEAD ADJ (8	8.3.3.7.b)		
OUTLINE	OF PROC FOR	OPTIONAL TE	STS (10.2.5)				COMPLETE UNIT TEST (8.3.4	4.4.1)			WIT
ADDITION	NAL DATA RE	QUIRING 20 YE	EARS RETENTION	(8.2.1.1)			SOUND LEVEL TEST (8.3.4.5				WIT
					YES		CLEANLINESS PRIOR TO FIT	NAL ASSEMBLY (8.	.2.2.6)		OBSERVE
LATERAL	ANALYSIS RI	EQUIRED (9.1.3	.4) (9.2.4.1.3)		NO		LOCATION OF CLEANLINES	SS INSPECTION			
MODAL A	NALYSIS REC	QUIRED (9.3.9.2))				NOZZLE LOAD TEST				
DYNAMIO	C BALANCE R	OTOR (6.9.4.4)			YES		CHECK FOR CO-PLANAR M	IOUNTING PAD SUI	RFACES		
INSTALL	ATION LIST IN	PROPOSAL (10	0.2.3.1)		YES		MECHANICAL RUN TEST UI	NTIL OIL TEMP ST.	ABLE		
VFD STEA	ADY STATE D.	AMPED RESPO	NSE ANALYSIS (6	.9.2.3)	<u></u>	NO	4 HR. MECH RUN AFTER OI	IL TEMP STABLE (8	3.3.4.2.1)		WIT
TRANSIE	NT TORSIONA	L RESPONSE			NO		4 HR. MECH RUN TEST (8.3.4	4.2.2)			
BEARING	LIFE CALCUI	ATIONS REQU	IRED (6.10.1.6)				BRG HSG RESONANCE TEST	T (8.3.4.7)			
IGNITION	HAZARD ASS	MT TO EN 134	63-1 (7.2.13.e)				STRUCTURAL RESONANCE	ETEST (9.3.9.2)			
CASING F	RETIREMENT '	THICKNESS DR	AWING (10.3.2.3)				REMOVE / INSPECT HYDRO	DYNAMIC BEARIN	NGS AFTER TEST	Γ	
FLANGES	RQD IN PLAC	E OF SKT WEL	D UNIONS (7.5.2.8)				(9.2.7.5)				
INCLUDE	PLOTTED VII	BRATION SPEC	TRA (6.9.3.3)				AUXILIARY EQUIPMENT TE	EST (8.3.4.6)			
CONNEC	TION BOLTING	G (7.5.1.7)					EQUIPMENT TO BE INCLUD	DED IN AUXILIARY	TESTS		
CADMIUN	M PLATED BO	LTS PROHIBITE	ED				LOCATION OF AUXILIARY I	EQUIPMENT TEST			
VENDOR	TO KEEP REP	AIR AND HT RO	CDS (8.2.1.1.c)				IMPACT TEST		PER EN	13445	
VENDOR	SUBMIT TEST	PROCEDURES	8 (8.3.1.1)		YES				PER AS	ME SECTION VIII	
SUBMIT I	NSPECTION C	HECK LIST (8.1	.5) NOTE 2		YES		REMOVE CASING AFTER TE	EST			





احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

MECHANICAL DATA SHEETS FOR FIRE WATER MAIN PUMPS-ELECTRICAL MOTOR DRIVEN

053-073-9184

 نسخه
 سریال
 نوع مدر ک
 رشته
 تمهیلات
 صادر کننده
 بید کاری
 پروژه

 BK
 GCS
 PEDCO
 120
 ME
 DT
 0029
 D03

شماره صفحه: 9 از 9

POSTWELD HEAT TREATMENT POSTWELD HEAT TREATMENT OF CASING FABRICATION WELDS MATERIAL INSPECTION THESE REFERENCES MUST BE LISTED BY THE PURCHASER ALTERNATIVE MATERIAL INSPECTIONS AND ACCEPTANCE CRITERIA (SEE TABLE 15) (8.2.2.5) TYPE OF INSPECTION METHOD FOR FABRICATIONS FOR CASTINGS RADIOGRAPHY MAGNETIC PARTICLE INSPECTION MAGNETIC PARTICLE INSPECTION MAGNETIC PARTICLE INSPECTION LIQUID PENETRANT INSPECTION LIQUID PENETRANT INSPECTION		CENTRIFUGAL PUMP DAT	A SHEET (SI UNIT) - P-2301 A (Sheet 6 of 6)		
THESE REFERENCES MUST BE LISTED BY THE MANUFACTURER CASTING FACTORS USED IN DESIGN (TABLE 3) SOURCE OF MATERIAL PROPERTIES WELDING AND REPAIRS (NOTE 13) WELDING AND REPAIRS (NOTE 13) THESE REFERENCES MUST BE LISTED BY THE PURCHASER, (DEFAULT TO TABLE 11 IF NO PURCHASER PREFERENCE IS STATED) ALTERNATE WELDING CODES AND STANDARDS WELDING REQUIREMENT (APPLICABLE CODE OR STANDARD) WELDING REQUIREMENT (APPLICABLE CODE OR STANDARD) WELDING PROCEDURE QUALIFICATION WELDING PROCE		PRESSURE VESSI	EL DESIGN CODE REFERENCES		
WELDING AND REPAIRS (NOTE 13) THESE REFERENCES MUST BE LISTED BY THE PURCHASER (DEFAULT TO TABLE 11 IF NO PURCHASER PREFERENCE IS STATED) ALTERNATE WELDING CODES AND STANDARDS WELDING REQUIREMENT (APPLICABLE CODE OR STANDARD) WELDING PROCEDURE QUALIFICATION WELDING PROCEDURE QUALIFICATION WELDING ROCCEDURE QUALIFICATION WELDING ROCCEDURE QUALIFICATION MAGNETIC PARTICLE OR LIQUID PENETRANT EXAMINATION OF PLATE EDGES MAGNETIC PARTICLE OR LIQUID PENETRANT EXAMINATION OF PLATE EDGES MATERIAL INSPECTION MATERIAL INSPECTION MATERIAL INSPECTION MATERIAL INSPECTION METHOD FOR FABRICATIONS FOR CASTINGS TYPE OF INSPECTION MAGNETIC PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE P	THESE REFERENCES M		EL DESIGN CODE REFERENCES		
WELDING AND REPAIRS (NOTE 13) THESE REFERENCES MUST BE LISTED BY THE PURCHASER. (DEFAULT TO TABLE 11 IF NO PURCHASER PREFERENCE IS STATED) ALTERNATE WELDING CODES AND STANDARDS WELDING REQUIREMENT (APPLICABLE CODE OR STANDARD) WELDING REQUIREMENT (APPLICABLE CODE OR STANDARD) WELDING RPOCEDURE QUALIFICATION WELDING PROCEDURE QUALIFICATION WON-PRESSURE RETAINING STRUCTURAL WELDING SUCH AS BASEPLATES OR SUPPORTS DEFAULT PER TABLE 11 WAGNETIC PARTICLE OR LIQUID PENETRANT EXAMINATION OF PLATE EDGES DEFAULT PER TABLE 11 POSTWELD HEAT TREATMENT OSTSWELD HEAT TREATMENT OF CASING FABRICATION WELDS MATERIAL INSPECTION THESE REFERENCES MUST BE LISTED BY THE PURCHASER ALTERNATIVE MATERIAL INSPECTIONS AND ACCEPTANCE CRITERIA (SEE TABLE 15) (8.22.5) TYPE OF INSPECTION METHOD METHOD FOR FABRICATIONS FOR CASTINGS WAGNETIC PARTICLE INSPECTION MAGNETIC PARTICLE PARTICLE INSPECTION MAGNETIC PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE PARTICLE	CA	STING FACTORS USED IN DESIGN (TABLE 3)			
THESE REFERENCES MUST BE LISTED BY THE PURCHASER. (DEFAULT TO TABLE 11 IF NO PURCHASER PREFERENCE IS STATED) ALTERNATE WELDING CODES AND STANDARDS WELDING REQUIREMENT (APPLICABLE CODE OR STANDARD) WELDING PROCEDURE QUALIFICATION WELDING PROCEDURE QUALIFICATION WELDING PROCEDURE QUALIFICATION WELDING STRUCTURAL WELDING SUCH AS BASEPLATES OR SUPPORTS DEFAULT PER TABLE 11 WON-PRESSURE RETAINING STRUCTURAL WELDING SUCH AS BASEPLATES OR SUPPORTS DEFAULT PER TABLE 11 WOSTWELD HEAT TREATMENT POSTWELD HEAT TREATMENT POSTWELD HEAT TREATMENT OF CASING FABRICATION WELDS THESE REFERENCES MUST BE LISTED BY THE PURCHASER ALTERNATIVE MATERIAL INSPECTIONS AND ACCEPTANCE CRITERIA (SEE TABLE 15) (82.2.5) TYPE OF INSPECTION METHOD METHOD FOR FABRICATIONS FOR CASTINGS RADIOGRAPHY ULTRASONIC INSPECTION MAGNETIC PARTICLE PROCEDURE TO THE TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II M		SOURCE OF MATERIAL PROPERTIES			_
THESE REFERENCES MUST BE LISTED BY THE PURCHASER. (DEFAULT TO TABLE 11 IF NO PURCHASER PREFERENCE IS STATED) ALTERNATE WELDING CODES AND STANDARDS WELDING REQUIREMENT (APPLICABLE CODE OR STANDARD) WELDING PROCEDURE QUALIFICATION WELDING PROCEDURE QUALIFICATION WELDING PROCEDURE QUALIFICATION WELDING STRUCTURAL WELDING SUCH AS BASEPLATES OR SUPPORTS DEFAULT PER TABLE 11 WON-PRESSURE RETAINING STRUCTURAL WELDING SUCH AS BASEPLATES OR SUPPORTS DEFAULT PER TABLE 11 WOSTWELD HEAT TREATMENT POSTWELD HEAT TREATMENT POSTWELD HEAT TREATMENT OF CASING FABRICATION WELDS THESE REFERENCES MUST BE LISTED BY THE PURCHASER ALTERNATIVE MATERIAL INSPECTIONS AND ACCEPTANCE CRITERIA (SEE TABLE 15) (82.2.5) TYPE OF INSPECTION METHOD METHOD FOR FABRICATIONS FOR CASTINGS RADIOGRAPHY ULTRASONIC INSPECTION MAGNETIC PARTICLE PROCEDURE TO THE TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II MEDIAL PER TABLE II M					_
MELDING REQUIREMENT (APPLICABLE CODE OR STANDARD) WELDING REQUIREMENT (APPLICABLE CODE OR STANDARD) WELDING REQUIREMENT (APPLICABLE CODE OR STANDARD) WELDING PROCEDURE QUALIFICATION WON-PRESSURE RETAINING STRUCTURAL WELDING SUCH AS BASEPLATES OR SUPPORTS MAGNETIC PARTICLE OR LIQUID PENETRANT EXAMINATION OF PLATE EDGES MAGNETIC PARTICLE OR LIQUID PENETRANT EXAMINATION OF PLATE EDGES MATERIAL INSPECTION MATERIAL INSPECTION MATERIAL INSPECTION MATERIAL INSPECTION METHOD FOR FABRICATIONS FOR CASTINGS RADIOGRAPHY ULTRASONIC INSPECTION MAGNETIC PARTICLE PARTICLE INSPECTION MAGNETIC PARTICLE PARTICLE PARTICLE INSPECTION MAGNETIC PARTICLE PAR					
WELDING REQUIREMENT (APPLICABLE CODE OR STANDARD) WELDING REQUIREMENT (APPLICABLE CODE OR STANDARD) WELDING PROCEDURE QUALIFICATION WELDING PROCEDURE QUALIFICATION WELDING PROCEDURE QUALIFICATION WON-PRESSURE RETAINING STRUCTURAL WELDING SUCH AS BASEPLATES OR SUPPORTS MAGNETIC PARTICLE OR LIQUID PENETRANT EXAMINATION OF PLATE EDGES MAGNETIC PARTICLE OR LIQUID PENETRANT EXAMINATION OF PLATE EDGES MATERIAL INSPECTION MATERIAL INSPECTION MATERIAL INSPECTION MATERIAL INSPECTION METHOD MATERIAL INSPECTION METHOD FOR FABRICATIONS FOR CASTINGS RADIOGRAPHY ULTRASONIC INSPECTION MAGNETIC PARTICLE METHOD MAGNETIC PARTICLE PARTICLE METHOD MAGNETIC PARTIC			EFERENCE IS STATED)		
WELDER/OPERATOR QUALIFICATION WELDING PROCEDURE QUALIFICATION WELDING PROCEDURE QUALIFICATION WELDING STRUCTURAL WELDING SUCH AS BASEPLATES OR SUPPORTS DEFAULT PER TABLE 11 WAGAGETIC PARTICLE OR LIQUID PENETRANT EXAMINATION OF PLATE EDGES DEFAULT PER TABLE 11 POSTWELD HEAT TREATMENT OF CASING FABRICATION WELDS WATERIAL INSPECTION WELDING PROCEDURE QUALIFICATION WELDING STRUCTURAL WELDING SUCH AS BASEPLATES OR SUPPORTS DEFAULT PER TABLE 11 DEFAULT PER TABLE 11 DEFAULT PER TABLE 11 DEFAULT PER TABLE 11 DEFAULT PER TABLE 11 DEFAULT PER TABLE 11 DEFAULT PER TABLE 11 DEFAULT PER TABLE 11 VES WELDING PROCEDURE WELDING FABRICATION WELDS WELDING PROCEDURE WELD FOR TABLE 11 WELDING PROCEDURE WELDING FABRICATION WELDS WELDING PROCEDURE WELD FOR TABLE 11 WELDING PROCEDURE WELD FOR TABLE 11 WELDING PROCEDURE WELD FROM THE WELD WELD WELD WELD WELD WELD WELD WEL				DEEALL TREE TARLET	_
WELDING PROCEDURE QUALIFICATION NON-PRESSURE RETAINING STRUCTURAL WELDING SUCH AS BASEPLATES OR SUPPORTS MAGNETIC PARTICLE OR LIQUID PENETRANT EXAMINATION OF PLATE EDGES DEFAULT PER TABLE 11 POSTWELD HEAT TREATMENT OF CASING FABRICATION WELDS TOPE OF LINE OF LISTED BY THE PURCHASER ALTERNATIVE MATERIAL INSPECTIONS MATERIAL INSPECTION METHOD FOR FABRICATIONS TYPE OF INSPECTION METHOD FOR FABRICATION METHOD FOR FABRICATIONS RADIOGRAPHY JULIASONIC INSPECTION MAGNETIC PARTICLE PARTICLE PARTIC					_
NON-PRESSURE RETAINING STRUCTURAL WELDING SUCH AS BASEPLATES OR SUPPORTS MAGNETIC PARTICLE OR LIQUID PENETRANT EXAMINATION OF PLATE EDGES DEFAULT PER TABLE 11 POSTWELD HEAT TREATMENT POSTWELD HEAT TREATMENT OF CASING FABRICATION WELDS MATERIAL INSPECTION MATERIAL INSPECTION MATERIAL INSPECTION METHOD FOR FABRICATIONS POR CASTINGS RADIOGRAPHY ULTRASONIC INSPECTION MAGNETIC PROPERTION MAGNETIC P					=
POSTWELD HEAT TREATMENT OF CASING FABRICATION WELDS MATERIAL INSPECTION THESE REFERENCES MUST BE LISTED BY THE PURCHASER ALTERNATIVE MATERIAL INSPECTIONS AND ACCEPTANCE CRITERIA (SEE TABLE 15) (8.2.2.5) TYPE OF INSPECTION METHOD FOR FABRICATIONS FOR CASTINGS RADIOGRAPHY JURIASONIC INSPECTION MAGNETIC PARTICLE INSPECTION LIQUID PENETRANT INSPECTION VISUAL INSPECTION (all surfaces)					_
MATERIAL INSPECTION THESE REFERENCES MUST BE LISTED BY THE PURCHASER ALTERNATIVE MATERIAL INSPECTIONS AND ACCEPTANCE CRITERIA (SEE TABLE 15) (8.2.2.5) TYPE OF INSPECTION METHOD FOR FABRICATIONS RADIOGRAPHY JURIASONIC INSPECTION MAGNETIC PARTICLE PARTICLE INSPECTION MAGNETIC PARTICLE P	MAGNETIC PARTICLE OR LIQUID PENETRANT EXAMINATION OF PLATE EDGES			DEFAULT PER TABLE 11	_
MATERIAL INSPECTION THESE REFERENCES MUST BE LISTED BY THE PURCHASER ALTERNATIVE MATERIAL INSPECTIONS AND ACCEPTANCE CRITERIA (SEE TABLE 15) (8.2.2.5) TYPE OF INSPECTION METHOD FOR FABRICATIONS RADIOGRAPHY JUTEASONIC INSPECTION MAGNETIC PARTICLE INSPECTION JUTEASONIC INSPECTION JUDIO PENETRANT INSPECTION JUGUIL PENETRANT INSPECTION JUSUAL INSPECTION (all surfaces)	POSTWELD HEAT TREATMENT			DEFAULT PER TABLE 11	-
THESE REFERENCES MUST BE LISTED BY THE PURCHASER ALTERNATIVE MATERIAL INSPECTIONS AND ACCEPTANCE CRITERIA (SEE TABLE 15) (8.2.2.5) TYPE OF INSPECTION METHOD FOR FABRICATIONS FOR CASTINGS RADIOGRAPHY LICITRASONIC INSPECTION MAGNETIC PARTICLE INSPECTION LIQUID PENETRANT INSPECTION VISUAL INSPECTION (all surfaces)	POSTWELD HEAT TREATMENT OF CASING	FABRICATION WELDS		DEFAULT PER TABLE 11	_
THESE REFERENCES MUST BE LISTED BY THE PURCHASER ALTERNATIVE MATERIAL INSPECTIONS AND ACCEPTANCE CRITERIA (SEE TABLE 15) (8.2.2.5) TYPE OF INSPECTION METHOD FOR FABRICATIONS FOR CASTINGS RADIOGRAPHY LICITRASONIC INSPECTION MAGNETIC PARTICLE INSPECTION LIQUID PENETRANT INSPECTION VISUAL INSPECTION (all surfaces)					
ALTERNATIVE MATERIAL INSPECTIONS AND ACCEPTANCE CRITERIA (SEE TABLE 15) (8.2.2.5) TYPE OF INSPECTION METHOD FOR FABRICATIONS FOR CASTINGS RADIOGRAPHY ULTRASONIC INSPECTION MAGNETIC PARTICLE INSPECTION LIQUID PENETRANT INSPECTION VISUAL INSPECTION (all surfaces)			ERIAL INSPECTION		
TYPE OF INSPECTION METHOD FOR FABRICATIONS FOR CASTINGS RADIOGRAPHY ULTRASONIC INSPECTION MAGNETIC PARTICLE INSPECTION LIQUID PENETRANT INSPECTION LIQUID PENETRANT INSPECTION LIQUID PENETRANT INSPECTION (all surfaces)				DEFAULT TO TABLE 14 YES	_
RADIOGRAPHY JUTRASONIC INSPECTION MAGNETIC PARTICLE INSPECTION LIQUID PENETRANT INSPECTION VISUAL INSPECTION (all surfaces)			FOR FARRICATIONS	FOR CASTINGS	7
ULTRASONIC INSPECTION MAGNETIC PARTICLE INSPECTION LQUID PENETRANT INSPECTION VISUAL INSPECTION (all surfaces)		MEHOD	FORFABRICATIONS	FOR CASTINGS	+
LIQUID PENETRANT INSPECTION VISUAL INSPECTION (all surfaces)	ULTRASONIC INSPECTION				
VISUAL INSPECTION (all surfaces)	MAGNETIC PARTICLE INSPECTION				
	LIQUID PENETRANT INSPECTION				
REMARKS:	VISUAL INSPECTION (all surfaces)				