
 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض								
شماره پیمان: ۰۵۳-۰۷۳-۹۱۸۴	MECHANICAL DATA SHEETS FOR FIRE WATER PUMPS-DIESEL ENGINE DRIVEN								شماره صفحه: ۱ از ۱۳
	پروژه	بسته کاری	صادر کننده	تجهیزات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	ME	DT	0030	D06	

طرح نگهداشت و افزایش تولید ۲۷ مخزن

MECHANICAL DATA SHEETS FOR FIRE WATER MAIN PUMPS-DIESEL ENGINE DRIVEN
نگهداشت و افزایش تولید میدان نفتی بینک

D06	JUL. 2023	AFC	H. Adineh	M. Fakharian	A.M.Mohseni	
D05	FEB. 2023	IFA	H. Adineh	M. Fakharian	M. Mehrshad	
D04	DEC. 2022	IFA	H. Adineh	M. Fakharian	M. Mehrshad	
D03	OCT. 2022	IFA	H. Adineh	M. Fakharian	M. Mehrshad	
D02	JUL. 2022	IFA	H. Adineh	M. Fakharian	M. Mehrshad	
D01	APR. 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: 1	CLIENT Doc. Number: F0Z-708861
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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نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شماره پیمان:

۰۵۳-۰۷۳-۹۱۸۴

MECHANICAL DATA SHEETS FOR FIRE WATER PUMPS-DIESEL ENGINE DRIVEN

نسخه	سریال	نوع مدرک	رشته	تجهیزات	صادر کننده	بسته کاری	پروژه
D06	0030	DT	ME	120	PEDCO	GCS	BK

شماره صفحه: ۱۳ از ۱۲

REVISION RECORD SHEET

page	D00	D01	D02	D03	D04	D05	D06	page	D00	D01	D02	D03	D04	D05
1	x	x	x	x	x	x	x	65						
2	x	x	x	x	x	x	x	66						
3	x	x	x	x				67						
4	x							68						
5	x	x	x	x				69						
6	x	x	x	x	x			70						
7	x							71						
8	x							72						
9	x							73						
10	x	x	x		x	x		74						
11	x		x					75						
12	x		x					76						
13	x	x						77						
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سطح الارض

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شماره پیمان:

۰۵۳-۰۷۳-۹۱۸۴

MECHANICAL DATA SHEETS FOR FIRE WATER PUMPS-DIESEL ENGINE DRIVEN

نسخه	سریال	نوع مدرک	رشته	تهیهات	صادر کننده	بسته کاری	پروژه
D06	0030	DT	ME	120	PEDCO	GCS	BK

شماره صفحه: ۱۳ از ۱۳

GENERAL NOTES

- 1 Vendor shall fill in the blanks and return the completed data sheet along with Diesel data sheet 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-GNRL-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 Supplier to indicate which minimum flow pumps can achieve.
- 10 Nozzle loads shall be 2 times the loads shown in API 610 11th Edition.
- 11 The Suction line size is 12" and discharge line is 10" .
- 12 Air release valve shall be considered by vendor .
- 13 As the pump jobsite environmental condition is fummy 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.
- 14 Ultrasonic Test shall be performed for forged shaft.
- 15 Couplings shall be dry, flexible and spacer type.
- 16 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'. Alarm and trip shall be specified for diesel control based on NFPA 20.
- 17 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.
- 18 The electrical characteristics of panels shall be specified by vendor such as:- The power demand of control panel. - The number of control panel.
- 19 Fuel daily tank shall be sized for 8 hours and all instruments such as level transmitter with HH/LL Alarm and etc. are in vendor's scope of supply.
- 20 Diesel engine shall be tested at 110% rated speed in mechanical running test also the maximum speed of diesel engines shall be 2300 RPM.
- 21 pressure sensing lines are in the vendor's scope of supply.
- 22 The sparate power & control panels for main pump diesel engine shall be considered by vendor. Therefore required single line, wiring diagram and etc. shall be specified by vendor.
- 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.
- 25 The pumps shall furnish not less than 150% of rated capacity at not less than 65% of rated head.



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شماره پیمان:

• 03-• 73-9184

MECHANICAL DATA SHEETS FOR FIRE WATER PUMPS-DIESEL ENGINE DRIVEN

شماره صفحه: ۴ از ۱۳

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه
D06	0030	DT	ME	120	PEDCO	GCS	BK

CENTRIFUGAL PUMP DATA SHEET (SI UNIT) - P-2301 B (Sheet 1 of 6)

CLIENT: National Iranian South Oil Company (NISOC)

PROJECT TITLE: BINAK Gas Compressor Station

JOB NUMBER: _____

EQUIPMENT NUMBER: P-2301 B

EQUIPMENT SERVICE: Fire Water Pumps - Diesel Engine Driven

SERIAL NUMBER: _____

REQ. / SPEC NO. : BK-GCS-PEDCO-120-ME-SP-0005

PURCH ORDER NO.

Cells coloured thus contain drop-down options

contain calculated values based on input data; do not change.



identify a cross referenced paragraph in the document note, and may also contain a drop down list

When you have completed the DS, highlight the whole page format cells pattern none



Delete these notes on completion



[illegible]




DATA SHEETS						
	ITEM No.	ATT	ITEM No.	ATT	ITEM No.	ATT
PUMP	P-2301 B	YES				
MOTOR						
GEAR						
TURBINE						

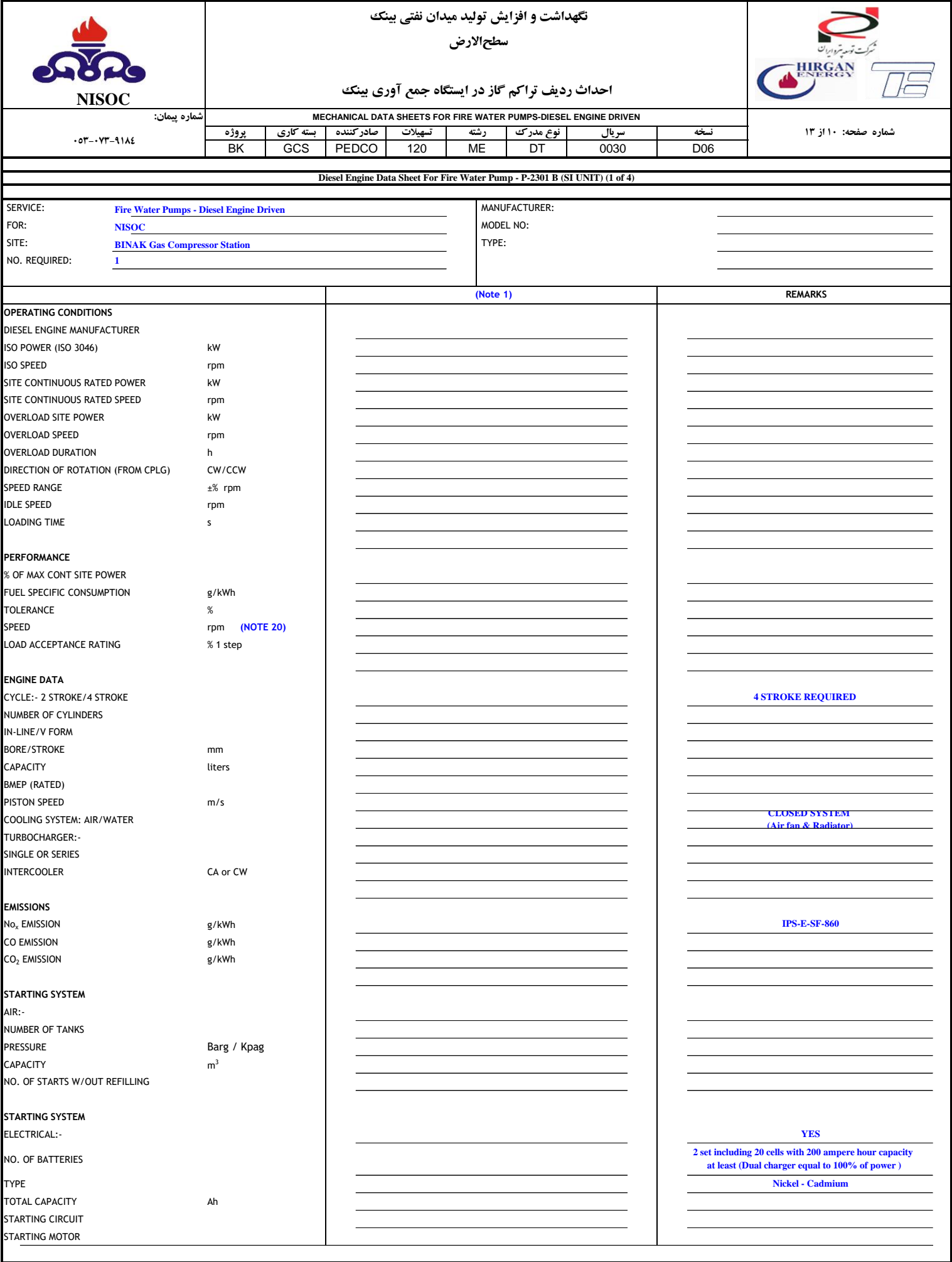
 NISOC		<p align="center">نگهداشت و افزایش تولید میدان نفتی بینک</p> <p align="center">سطح الارض</p> <p align="center">احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>								
شماره پیمان: ۰۵۳-۰۷۳-۹۱۸۴		MECHANICAL DATA SHEETS FOR FIRE WATER PUMPS-DIESEL ENGINE DRIVEN							شماره صفحه: ۱۳ از ۵	
پروژه	بسته کاری	صادر کننده	تهیه کننده	رشته	نوع مدرک	سریال	نسخه			
BK	GCS	PEDCO	120	ME	DT	0030	D06			

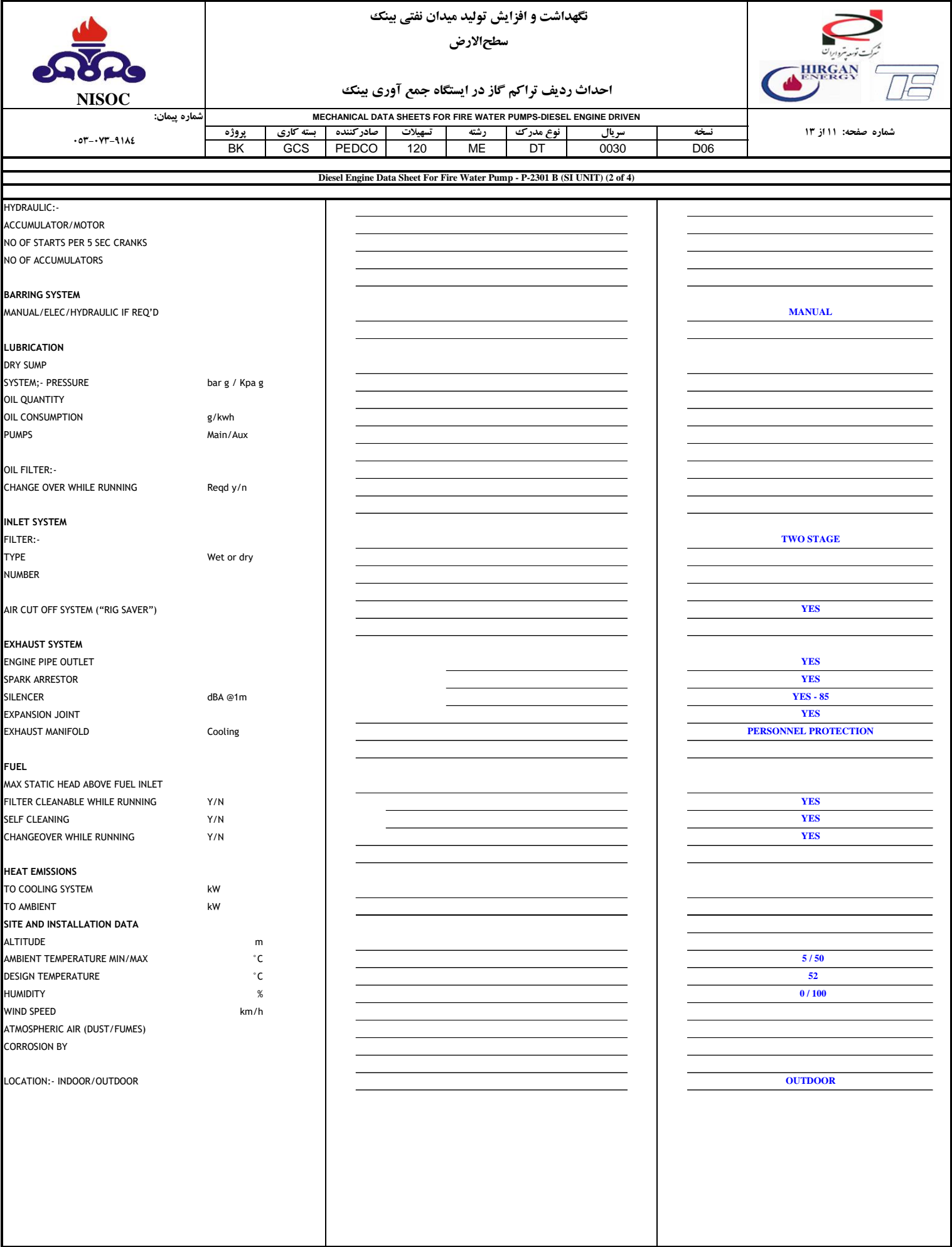
CENTRIFUGAL PUMP DATA SHEET (SI UNIT) - P-2301 B (Sheet 2 of 6)																																																						
APPLICABLE TO: PROPOSAL FOR: NISOC SITE: BINAK Gas Compressor Station NO. REQ: 1 PUMP SIZE: _____ MANUFACTURER: _____					APPLICABLE NTL/INTNL STANDARD: NFPA20 (2019) & IPS-M-PM-125 UNIT: _____ SERVICE: Fire Water Pumps - Diesel Engine Driven TYPE: _____ No. STAGES: _____ MODEL: BB1 (V.T.C) SERIAL NO.: _____																																																	
LIQUID CHARACTERISTICS																																																						
LIQUID TYPE OR NAME :	Units	Maximum	Minimum	Note	SERVICE :																																																	
				Max & min	• IF INTERMITTENT NO. OF STARTS : _____																																																	
VAPOR PRESSURE :	bara	0.0087	0.1219	values refer	PUMPS OPERATE IN: _____																																																	
DENSITY :	kg/m³	997		only to the	CORROSION DUE TO : (6.12.1.9) _____																																																	
SPECIFIC HEAT :	kJ/kgC	4.186		property	EROSION DUE TO : (6.12.1.9) _____																																																	
VISCOSITY :	cP	1		listed	H2S CONCENTRATION (ppm) : (6.12.1.12) N.A.																																																	
OPERATING CONDITIONS (6.1.2)					CHLORIDE CONCENTRATION (ppm) : _____																																																	
	Units	Maximum	Rated	Normal	Min	PARTICULATE SIZE (DIA IN MICRONS) _____																																																
NPSH _A Datum:		C.L. Impeller				PARTICULATE CONCENTRATION (PPM) _____																																																
PUMPING TEMPERATURE :	°C	50			5																																																	
FLOW :	m³/hr		454.20																																																			
DISCHARGE PRESSURE :(6.3.2)	barg		10.4																																																			
SUCTION PRESSURE :	barg	0.83	0.81		0.08																																																	
DIFFERENTIAL PRESSURE :	bar		10.3																																																			
DIFFERENTIAL HEAD :	m		105.0																																																			
NPSH _A :	m		8.8																																																			
HYDRAULIC POWER:	KW		129.50																																																			
SITE AND UTILITY DATA																																																						
LOCATION: OUTDOOR UNHEATED UNDER ROOF MOUNTED AT : ● TROPICALISATION REQ'D ELECTRIC AREA CLASSIFICATION: (6.1.22) ZONE SAFE GROUP _____ TEMP CLASS _____ SITE DATA : ELEVATION (MSL) : 12.5 m BAROMETER : 990.77 mBar RANGE OF DESIGN TEMPS:MIN / MAX 5 85 °C RELATIVE HUMIDITY: MIN / MAX 0 100 % (@ 25.6 °C) UNUSUAL CONDITIONS: NA UTILITY CONDITIONS : <table border="1"> <tr> <td>ELECTRICITY :</td> <td>AUXILIARY</td> <td>HEATING</td> <td>CONTROL</td> <td>SHUTDOWN</td> </tr> <tr> <td>VOLTAGE</td> <td>400</td> <td></td> <td></td> <td></td> </tr> <tr> <td>PHASE</td> <td>3</td> <td></td> <td></td> <td></td> </tr> <tr> <td>HERTZ</td> <td>50</td> <td></td> <td></td> <td></td> </tr> </table>					ELECTRICITY :	AUXILIARY	HEATING	CONTROL	SHUTDOWN	VOLTAGE	400				PHASE	3				HERTZ	50				COOLING WATER : <table border="1"> <tr> <td></td> <td>RETURN</td> <td>DESIGN</td> </tr> <tr> <td>TEMP</td> <td></td> <td></td> </tr> <tr> <td>PRESS.</td> <td></td> <td></td> </tr> <tr> <td>SOURCE</td> <td colspan="2">_____</td> </tr> <tr> <td>COOLING WATER CHLORIDE CONCENTRATION:</td> <td colspan="2">_____</td> </tr> </table> INSTRUMENT AIR : _____ kg MIN _____ kg STEAM <table border="1"> <tr> <td></td> <td>DRIVERS</td> <td>HEATING</td> </tr> <tr> <td>TEMP</td> <td></td> <td></td> </tr> <tr> <td>PRESS.</td> <td></td> <td></td> </tr> </table>							RETURN	DESIGN	TEMP			PRESS.			SOURCE	_____		COOLING WATER CHLORIDE CONCENTRATION:	_____			DRIVERS	HEATING	TEMP			PRESS.		
ELECTRICITY :	AUXILIARY	HEATING	CONTROL	SHUTDOWN																																																		
VOLTAGE	400																																																					
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COOLING WATER CHLORIDE CONCENTRATION:	_____																																																					
	DRIVERS	HEATING																																																				
TEMP																																																						
PRESS.																																																						
PERFORMANCE					DRIVER (7.1.5) (NOTE 22)																																																	
PROPOSAL CURVE NO. _____ RPM _____ As Tested Curve No. _____ IMPELLER DIA.: RATED _____ MAX. _____ MIN. _____ mm RATED POWER _____ Kw EFFICIENCY _____ (%) RATED CURVE BEP FLOW (at rated impeller dia) _____ m³/hr MIN FLOW : _____ kJ/Nm³ _____ m³/hr PREFERRED OPERATING REGION (6.1.11) _____ to _____ m³/hr ALLOWABLE OPERATING REGION _____ to _____ m³/hr MAX HEAD @ RATED IMPELLER _____ m MAX POWER @ RATED IMPELLER _____ kW NPSH3 AT RATED FLOW : _____ m CL PUMP TO U/S BASEPLATE _____ m NPSH MARGIN AT RATED FLOW : _____ m SPECIFIC SPEED (6.1.9) _____ SUCTION SPECIFIC SPEED LIMIT _____ SUCTION SPECIFIC SPEED _____ MAX. ALLOW. SOUND PRESS. LEVEL REQD (6.1.14) 110 (dBA) @ 1 m EST MAX SOUND PRESS. LEVEL _____ (dBA) MAX. SOUND POWER LEVEL REQ'D (6.1.14) _____ EST MAX SOUND POWER LEVEL _____					Driver Type DIESEL ENGINE GEAR NO VARIABLE SPEED REQUIRED NO SOURCE OF VARIABLE SPEED _____ OTHER _____ MANUFACTURER _____ NAMEPLATE POWER _____ @ Site Condition _____ KW Nominal RPM _____ RATED LOAD RPM _____ FRAME OR MODEL _____ ORIENTATION HORIZONTAL LUBE _____ RADIAL / THRUST / STARTING METHOD _____ SEE DRIVER DATA SHEET _____ Max Voltage Variation _____ Max Frequency Variation _____ Max Voltage and Frequency Variation together _____																																																	

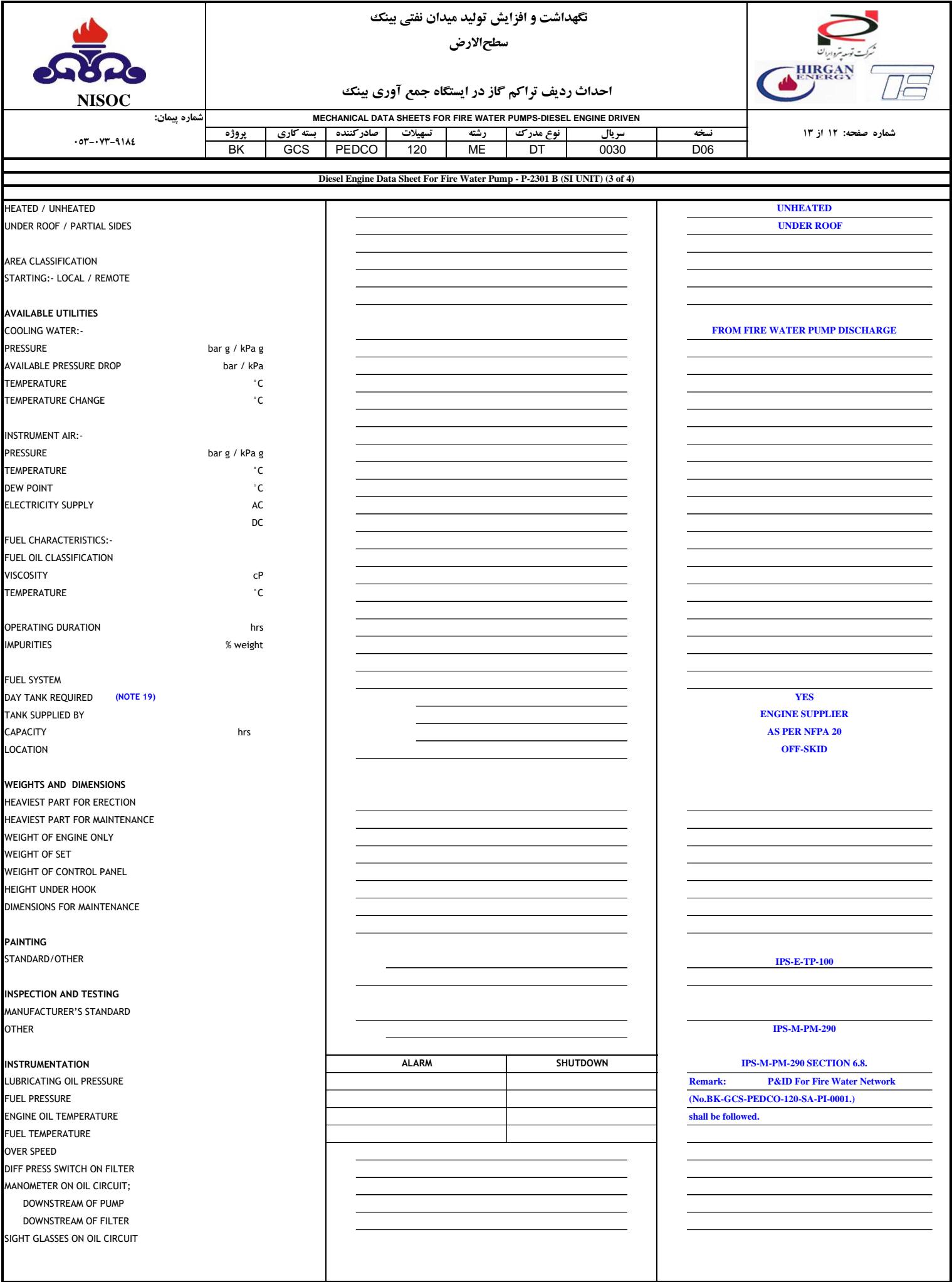
 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک								
شماره پیمان: ۰۵۳-۰۷۳-۹۱۸۴	MECHANICAL DATA SHEETS FOR FIRE WATER PUMPS-DIESEL ENGINE DRIVEN							شماره صفحه: ۱۶ از ۱۳	
	پروژه	بسته کاری	صادر کننده	تهیهات	رشته	نوع مدرک	سریال		نسخه
	BK	GCS	PEDCO	120	ME	DT	0030	D06	
CENTRIFUGAL PUMP DATA SHEET (SI UNIT) - P-2301 B (Sheet 3 of 6)									
CONSTRUCTION									
API PUMP TYPE: <u>BB1</u> [Based on API 610 definitions]					CASING MOUNTING:				
NOZZLE CONNECTIONS: (6.5.5) NOTES 7,11					CASING TYPE: (6.3.10) _____				
					OH3 BACKPULLOUT LIFTING DEVICE REQD. (9.1.2.6) _____				
SUCTION					CASE PRESSURE RATING:				
DISCHARGE					MAWP : (6.3.5) By vendor barg @ _____ °C				
PRESSURE CASING AUX. CONNECTIONS: (6.4.3.2)					HYDROTEST : 1.5*MAWP barg @ _____ °C				
					HYDROTEST OH PUMP AS ASSEMBLY YES				
BAL./LEAK OFF					SUCTN PRESS. REGIONS DESIGNED FOR MAWP YES				
DRAIN					ROTATION: (VIEWED FROM COUPLING END) _____				
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:				
Drain Valve Supplied By SUPPLIER					SHAFT FLEXIBILITY INDEX (SFI) (9.1.1.3) _____				
DRAINS MANIFOLDED YES					First Critical Speed Wet (Multi stage pumps only) _____				
VENT Valve Supplied By SUPPLIER					COMPONENT BALANCE TO ISO 1940 G1.0 NO				
VENTS MANIFOLDED YES					SHRINK FIT -LIMITED MOVEMENT IMPELLERS (9.2.2.3) _____				
THREAD. CONS FOR PIPELINE SERVICE & < 50°C (6.4.3.2) NO					COUPLING:(7.2.3) (7.2.13.f) NOTE 16				
SPECIAL FITTINGS FOR TRANSITIONING (6.4.3.3) NO					MANUFACTURER _____				
CYLINDRICAL THREADS REQUIRED (6.4.3.8) NO					MODEL _____				
GUSSET SUPPORT REQUIRED YES If Needed					RATING (POWER/100 RPM) _____				
MACHINED AND STUDDED CONNECTIONS (6.4.3.12) NO					SPACER LENGTH _____ mm				
VS 6 DRAIN N/A					SERVICE FACTOR Min 1.5				
DRAIN TO SKID EDGE YES					RIGID NO				
MATERIAL (6.12.1.1)					COUPLING WITH HYDRAULIC FIT (7.2.10) _____				
APPENDIX H CLASS I-2 NOTES 3					COUPLING BALANCED TO ISO 1940-1 G6.3 (7.2.3) YES				
MIN DESIGN METAL TEMP (6.12.4.1) 5 °C					COUPLING WITH PROPRIETARY CLAMPING DEVICE (7.2.11) _____				
REDUCED-HARDNESS MATERIALS REQ'D (6.12.1.12.1) _____					COUPLING IN COMPLIANCE WITH (7.2.4) API 671				
Applicable Hardness Standard (6.12.1.12.3) _____					COUPLING GUARD STANDARD PER (7.2.13.a) ISO 14120				
BARREL: _____					Window on Coupling Guard _____				
CASE: _____					BASEPLATE				
DIFFUSERS _____					API BASEPLATE NUMBER : _____				
IMPELLER : _____					BASEPLATE CONSTRUCTION (7.3.14) _____				
IMPELLER WEAR RING : _____					BASEPLATE DRAINAGE (7.3.1) Entire Baseplate Drain Pan				
CASE WEAR RING : _____					MOUNTING : _____				
SHAFT: _____					NON-GROUT CONSTRUCTION : (7.3.13) _____				
Bowl (if VS-type) _____					VERTICAL LEVELING SCREWS : REQUIRED				
Inspection Class Note 2					LONGITUDINAL DRIVER POSITIONING SCREWS : REQUIRED				
BEARINGS AND LUBRICATION (6.10.1.1)					SUPPLIED WITH : <ul style="list-style-type: none">GROUT AND VENT HOLES YESDRAIN CONNECTION YES				
BEARING (TYPE / NUMBER): (6.11.4)					MOUNTING PADS SIZED FOR BASEPLATE LEVELING (7.3.5) YES				
RADIAL _____ / _____					MOUNTING PADS TO BE MACHINED (7.3.6) YES				
THRUST _____ / _____					PROVIDE SPACER PLATE UNDER ALL EQUIPMENT FEET YES				
REVIEW AND APPROVE THRUST BEARING SIZE : (9.2.5.2.4) _____					OTHER _____				
LUBRICATION : (6.10.2.2) (6.11.3) (9.2.6)					REMARKS :				
PRESSURE LUBE SYSTEM TO ISO 10438- (9.2.6.5) _____					_____				
ISO 10438 DATA SHEETS ATTACHED					_____				
Pressurized Lube Oil System mtd on pump baseplate					_____				
Location of Pressurized Lube Oil System mounted on baseplate : _____					_____				
INTERCONNECTING PIPING PROVIDED BY Supplier					_____				
OIL VISC. ISO GRADE VG _____					_____				
CONSTANT LEVEL OILER : _____					_____				

<div><div>NISOC</div></div>	<div>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</div> <div>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</div>	<div></div>					
شماره پیمان: ۰۵۳-۰۷۳-۹۱۸۴	MECHANICAL DATA SHEETS FOR FIRE WATER PUMPS-DIESEL ENGINE DRIVEN	شماره صفحه: ۱۳ از ۸					
پروژه BK	بسته کاری GCS	صادر کننده PEDCO	تهیهات 120	رشته ME	نوع مدرک DT	سریال 0030	نسخه D06
CENTRIFUGAL PUMP DATA SHEET (SI UNIT) -P-2301 B (Sheet 5 of 6)							
SURFACE PREPARATION AND PAINT				TEST			
MANUFACTURER'S STANDARD OTHER (SEE BELOW) SPECIFICATION NO. BK-GNRL-PEDCO-000-PI-SP-0006, "Specification for Painting" PUMP: PUMP SURFACE PREPARATION PRIMER AS PER PROJECT PAINTING SPEC. FINISH COAT AS PER PROJECT PAINTING SPEC. BASEPLATE: BASEPLATE SURFACE PREPARATION PRIMER: AS PER PROJECT PAINTING SPEC. FINISH COAT AS PER PROJECT PAINTING SPEC. DETAILS OF LIFTING DEVICES SHIPMENT: (8.4.1) EXPORT EXPORT BOXING REQUIRED YES OUTDOOR STORAGE MORE THAN 6 MONTHS YES SPARE ROTOR ASSEMBLY PACKAGED FOR: ROTOR STORAGE ORIENTATION (9.2.8.2) SHIPPING & STORAGE CONTAINER FOR VERT STORAGE (9.2.8.3) N ₂ PURGE (9.2.8.4) SPARE PARTS START-UP YES NORMAL MAINTENANCE YES				SHOP INSPECTION (8.1.1) Yes PERFORMANCE CURVE & DATA APPROVAL PRIOR TO SHIPMENT. YES TEST WITH SUBSTITUTE SEAL (8.3.3.2.b) MATERIAL CERTIFICATION REQUIRED CASING YES SHAFT (6.12.1.8) YES IMPELLER YES OTHER YES Casing and impeller Wear ring CASTING REPAIR WELD PROCEDURE APPR REQD YES INSPECTION REQUIRED FOR CONNECTION WELDS (6.12.3.4.d) LIQUID PENETRANT YES MAG PARTICLE ULTRASONIC RADIOGRAPHY YES INSPECTION REQUIRED FOR CASTINGS LIQUID PENETRANT YES MAG PARTICLE YES ULTRASONIC YES RADIOGRAPHY HARDNESS TEST REQUIRED (8.2.2.7) ADDNL SUBSURFACE EXAMINATION (6.12.1.5) (8.2.1.3) FOR METHOD PMI TESTING REQUIRED (8.2.2.8) COMPONENTS TO BE TESTED RESIDUAL UNBALANCE TEST (J.4.1.2) NOTIFICATION OF SUCCESSFUL SHOP YES PERFORMANCE TEST (8.1.1.c) (8.3.3.5) YES BASEPLATE TEST (7.3.21) HYDROSTATIC WIT HYDROSTATIC TEST OF BOWLS & COLUMN (9.3.13.2) PERFORMANCE TEST WIT TEST IN COMPLIANCE WITH (8.3.3.2) NFPA 20 TEST DATA POINTS TO (8.3.3.3) NFPA 20 TEST TOLERANCES TO (8.3.3.4) TABLE 16 NPSH (8.3.4.3.1) (8.3.4.3.4) NOTE 6 WIT NPSH-1ST STG ONLY (8.3.4.3.2) NPSH TESTING TO HI 1.6 OR ISO 9906 (8.3.4.3.3) TEST NPSHA LIMITED TO 110% SITE NPSHA (8.3.3.6) RETEST ON SEAL LEAKAGE (8.3.3.2.d) OBSERVE RETEST REQUIRED AFTER FINAL HEAD ADJ (8.3.3.7.b) COMPLETE UNIT TEST (8.3.4.4.1) WIT SOUND LEVEL TEST (8.3.4.5) WIT CLEANLINESS PRIOR TO FINAL ASSEMBLY (8.2.2.6) OBSERVE LOCATION OF CLEANLINESS INSPECTION NOZZLE LOAD TEST CHECK FOR CO-PLANAR MOUNTING PAD SURFACES MECHANICAL RUN TEST UNTIL OIL TEMP STABLE 4 HR. MECH RUN AFTER OIL TEMP STABLE (8.3.4.2.1) WIT 4 HR. MECH RUN TEST (8.3.4.2.2) BRG HSG RESONANCE TEST (8.3.4.7) STRUCTURAL RESONANCE TEST (9.3.9.2) REMOVE / INSPECT HYDRODYNAMIC BEARINGS AFTER TEST (9.2.7.5) AUXILIARY EQUIPMENT TEST (8.3.4.6) EQUIPMENT TO BE INCLUDED IN AUXILIARY TESTS LOCATION OF AUXILIARY EQUIPMENT TEST IMPACT TEST PER EN 13445 PER ASME SECTION VIII REMOVE CASING AFTER TEST			
ITEM No	PUMP	DRIVER	GEAR	BASE	TOTAL		
OTHER PURCHASER REQUIREMENTS							
COORDINATION MEETING REQUIRED (10.1.3) YES							
MAXIMUM DISCHARGE PRESSURE TO INCLUDE							
OPERATION TO TRIP SPEED							
MAX DIA. IMPELLERS AND/OR NO OF STAGES YES							
CONNECTION DESIGN APPROVAL (9.2.1.4) YES							
TORSIONAL ANALYSIS / REPORT (6.9.2.10) NO							
PROGRESS REPORTS YES							
OUTLINE OF PROC FOR OPTIONAL TESTS (10.2.5)							
ADDITIONAL DATA REQUIRING 20 YEARS RETENTION (8.2.1.1) YES							
LATERAL ANALYSIS REQUIRED (9.1.3.4) (9.2.4.1.3) NO							
MODAL ANALYSIS REQUIRED (9.3.9.2)							
DYNAMIC BALANCE ROTOR (6.9.4.4) YES							
INSTALLATION LIST IN PROPOSAL (10.2.3.1) YES							
VPD STEADY STATE DAMPED RESPONSE ANALYSIS (6.9.2.3) NO							
TRANSIENT TORSIONAL RESPONSE NO							
BEARING LIFE CALCULATIONS REQUIRED (6.10.1.6)							
IGNITION HAZARD ASSMT TO EN 13463-1 (7.2.13.e)							
CASING RETIREMENT THICKNESS DRAWING (10.3.2.3)							
FLANGES RQD IN PLACE OF SKT WELD UNIONS (7.5.2.8)							
INCLUDE PLOTTED VIBRATION SPECTRA (6.9.3.3)							
CONNECTION BOLTING (7.5.1.7)							
CADMIUM PLATED BOLTS PROHIBITED							
VENDOR TO KEEP REPAIR AND HT RCDS (8.2.1.1.c)							
VENDOR SUBMIT TEST PROCEDURES (8.3.1.1) YES							
SUBMIT INSPECTION CHECK LIST (8.1.5) NOTE 2 YES							

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							 شرکت توسعه و پیمانکاری HIRGAN ENERGY 																									
شماره پیمان: ۰۵۳-۰۷۳-۹۱۸۴	MECHANICAL DATA SHEETS FOR FIRE WATER PUMPS-DIESEL ENGINE DRIVEN							شماره صفحه: ۱۳ از ۱۹																									
	پروژه	بسته کاری	صادر کننده	تجهیزات	رشته	نوع مدرک	سریال		نسخه																								
	BK	GCS	PEDCO	120	ME	DT	0030	D06																									
CENTRIFUGAL PUMP DATA SHEET (SI UNIT) - P-2301 B (Sheet 6 of 6)																																	
PRESSURE VESSEL DESIGN CODE REFERENCES																																	
THESE REFERENCES MUST BE LISTED BY THE MANUFACTURER CASTING FACTORS USED IN DESIGN (TABLE 3) SOURCE OF MATERIAL PROPERTIES																																	
WELDING AND REPAIRS (NOTE 12)																																	
THESE REFERENCES MUST BE LISTED BY THE PURCHASER. (DEFAULT TO TABLE 11 IF NO PURCHASER PREFERENCE IS STATED)																																	
ALTERNATE WELDING CODES AND STANDARDS							DEFAULT PER TABLE 11																										
WELDING REQUIREMENT (APPLICABLE CODE OR STANDARD)							DEFAULT PER TABLE 11																										
WELDER/OPERATOR QUALIFICATION							DEFAULT PER TABLE 11																										
WELDING PROCEDURE QUALIFICATION							DEFAULT PER TABLE 11																										
NON-PRESSURE RETAINING STRUCTURAL WELDING SUCH AS BASEPLATES OR SUPPORTS							DEFAULT PER TABLE 11																										
MAGNETIC PARTICLE OR LIQUID PENETRANT EXAMINATION OF PLATE EDGES							DEFAULT PER TABLE 11																										
POSTWELD HEAT TREATMENT							DEFAULT PER TABLE 11																										
POSTWELD HEAT TREATMENT OF CASING FABRICATION WELDS							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)																																	
DEFAULT TO TABLE 14 YES																																	
<table><thead><tr><th>TYPE OF INSPECTION</th><th>METHOD</th><th>FOR FABRICATIONS</th><th>FOR CASTINGS</th></tr></thead><tbody><tr><td>RADIOGRAPHY</td><td></td><td></td><td></td></tr><tr><td>ULTRASONIC INSPECTION</td><td></td><td></td><td></td></tr><tr><td>MAGNETIC PARTICLE INSPECTION</td><td></td><td></td><td></td></tr><tr><td>LIQUID PENETRANT INSPECTION</td><td></td><td></td><td></td></tr><tr><td>VISUAL INSPECTION (all surfaces)</td><td></td><td></td><td></td></tr></tbody></table>										TYPE OF INSPECTION	METHOD	FOR FABRICATIONS	FOR CASTINGS	RADIOGRAPHY				ULTRASONIC INSPECTION				MAGNETIC PARTICLE INSPECTION				LIQUID PENETRANT INSPECTION				VISUAL INSPECTION (all surfaces)			
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REMARKS :																																	
<div></div>																																	









نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

شماره پیمان:

۰۵۳-۰۷۳-۹۱۸۴

MECHANICAL DATA SHEETS FOR FIRE WATER PUMPS-DIESEL ENGINE DRIVEN

نسخه	سریال	نوع موتور	رشته	تجهیزات	صادر کننده	بسته کاری	پروژه
D06	0030	DT	ME	120	PEDCO	GCS	BK

شماره صفحه: ۱۳ از ۱۳

Diesel Engine Data Sheet For Fire Water Pump - P-2301 B (SI UNIT) (4 of 4)

ENGINE EXHAUST TURBOCHARGER

CIRCUIT OF:
RAW WATER
FRESH WATER
OIL
SUPERCHARGING:
AIRSIDE
WATERSIDE

TE BEFORE/ AFTER COOLER	PI BEFORE/ AFTER COOLER
/	/
/	/
/	/
/	/
/	/
/	/

REMARKS:

For each pump set one 400V, 3PH/N auxiliary feeder is delivered by purchaser.

All required power for local control panel (230VAC/110VAC/24VDC) shall be convert by vendor as request.