
 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>								
شماره پیمان: 053-073-9184	MECHANICAL DATA SHEETS FOR SLUG PUMP								شماره صفحه: 1 از 10
	پروژه	بسته کاری	صادر کننده	تجهیزات	رشته	نوع مدرک	سریال	نسخه	
	BK	GCS	PEDCO	120	ME	DT	0019	D03	

طرح نگهداشت و افزایش تولید 27 مخزن

MECHANICAL DATA SHEETS FOR SLUG PUMP (P-2101 A/B)

نگهداشت و افزایش تولید میدان نفتی بینک

D03	SEP. 2022	AFC	H. Adineh	M. Fakharian	M. Mehrshad	
D02	APR. 2022	AFC	H. Adineh	M. Fakharian	M. Mehrshad	
D01	JAN. 2022	IFA	H. Adineh	M. Fakharian	M. Mehrshad	
D00	DEC. 2021	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-708850

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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سطح الارض

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پروژه	بسته کاری	صادر کننده	تجهیزات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	ME	DT	0019	D03

شماره صفحه: 2 از 10

REVISION RECORD SHEET

page	D00	D01	D02	D03	D04
1	x	x	x	x	
2	x	x	x	x	
3	x	x	x		
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نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

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BK	GCS	PEDCO	120	ME	DT	0019	D03



شماره صفحه: 3 از 10



طرح نگهداشت و افزایش تولید 27 مخزن



D03

General Notes

- Density and Viscosity at Normal temperature is respectively 715.80 kg/m³ and 0.58 cP.
- Allowable external forces and moments on nozzle equal to two times of table 5 of API 610-11th edition.
- For technical requirements of electrical lv motors refer to " Data sheets for lv induction motors; DOC NO.:BK-GCS-PEDCO-120-EL-DT-0008", 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-0008" with his proposal.
- Vendor shall submit ITP (Inspection & Testing Plan) with his proposal.
- The motors, pump mechanical seal, pump coupling and pump accessories shall be supplied from the project's approved vendor list (A.V.L.). Chinese & Indian vendors are not acceptable for Mechanical seal , Electro motor and coupling subvendors.
- Vendor is requested to confirm the material, or propose appropriate alternative.
- For Instrumentation, Project specification 'Specification For Instrument and Control of package Unit System (PU)' Doc. No. BK-GNRAL-PEDCO-000-IN-SP-0004 and other instrument specification which to be attached to MR shall be followed.
- Mechanical seal data sheet shall fill in by vendor as per API 682. Pump Manufacturer shall supply all instrumentation for mechanical seals as per API 682 4th Edition and project requirements.
- NPSH test shall be done & witnessed if the margin of NPSHr & NPSHa is less than 1.
- The Tie-in flanges shall conform to ASME B-16.5
- Valves in the piping system shall be Welded Flanged type.
- Supplier to indicate which minimum flow pumps can achieve.
- Pumps shall be designed, fabricated, tested, and inspected in accordance with the requirements of API 610 11th & IPS-G-PM-105(3).
- Nozzle loads shall be 2 times the loads shown in API 610 11th Edition.
- Pump starts Automatically with open delivery valve.
- Electrical motor shall be rated for the end of curve.
- The Suction line size is 4" and discharge line size is 3".
- The Material shall be followed in accordance with NACE MR0175/ISO15156 and Technical Specification for Material Requirements in sour service. Doc.No: BK-GNRAL-PEDCO-000-PI-SP-0008.
- H₂S content is 6707.6 ppmw.
- Pump Manufacturer shall supply all instrumentation for mechanical seals as per API 682 4th Edition and project requirements.
- Based on project instrumentation specification, these equipments are classified as Type B (Connected to DCS/ESD): Centrifugal Pump Package.
- Welding repair procedures shall be submitted for approval.
- Refer to hazardous area classification layout Doc. No.: BK-GCS-PEDCO-120-SA-PY-0002 , all instrumentation and electrical devices shall be suitable for: ZONE 2 & Gas group IIA, Temperature class T3.
- Ultrasonic Test shall be performed for forged shaft.
- For pumps with vacuum suction pressure the minimum NPSH margin shall be 2 m. for other pumps the minimum NPSH margin shall be 1 m.
- Spare parts shall be supplied by vendor according to 'MR's appendix for Centrifugal Pumps ' Doc. No. BK-GCS-PEDCO-120-ME-MR-0009.
- Couplings shall be dry, flexible and spacer type.
- Bearing temperature shall be measured during mechanical run test.
- For electrical motor descriptions, refer to 'Specification For LV & MV Induction Motors' Doc. No.BK-GNRAL-PEDCO-000-EL-SP-0010 & 0017 .
- Minimum Design Metal Tem (MDMT)= 5 °C
- Turn down and design (rated) flow rates are 30% and 110 % of normal flow rate respectively.
- API Plan 31+53B shall be considered.
- PMI Testing For Alloy Steel Shall be Done.
- Power Factor, efficiency, frequent, voltage, frequent variation and voltage variation of motor shall be specified by vendor in data sheet.
- All drain and vents (If any) to be manifolded, valved and routed to the skid edge.
- Range of ambient temperature: Min. ambient temperature: 5 °C , Max. ambient temperature: 50 °C
- Pump is not installed directly on the ground and at least 20~30 cm height for pedestal is considered.
- Max Allowable Pressure at Shut-Off at rated impeller (barg) (finalized by vendor): 22.5
- For related P&ID refer to " BK-GCS-PEDCO-120-PR-PI-0004 ".

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	BK	GCS	PEDCO	120	ME	DT	0019	D03																																									
طرح نگهداشت و افزایش تولید 27 مخزن																																																	
APPLICABLE TO: PROPOSAL					APPLICABLE NTL/INTNTL STANDARD: API 610-11th Ed.& IPS-G-PM-105(3)																																												
FOR NISOC					UNIT																																												
SITE BINAK Gas Compressor Station					SERVICE SLUG PUMP																																												
NO. REQ 2 (1+1) PUMP SIZE					TYPE VS6 (V.T.A)			No. STAGES																																									
MANUFACTURER					MODEL V.T.A.			SERIAL NO. V.T.A.																																									
LIQUID CHARACTERISTICS																																																	
	Units	Maximum	Minimum	Note Max & min values refer only to the property listed	SERVICE : INTERMITTENT																																												
LIQUID TYPE OR NAME :	water+hydrocarbon				• IF INTERMITTENT NO. OF STARTS :																																												
VAPOR PRESSURE :	bara	6.50			PUMPS OPERATE IN:																																												
DENSITY : (NOTE 1)	kg/m³				CORROSION DUE TO : (6.12.1.9) CO₂ H₂S																																												
SPECIFIC HEAT :	kJ/kgC				EROSION DUE TO : (6.12.1.9)																																												
VISCOSITY : (NOTE 1)	cP			H2S CONCENTRATION (ppm) : (6.12.1.12) 6707.6																																													
OPERATING CONDITIONS (6.1.2)																																																	
	Units	Maximum	Rated	Normal	Min																																												
NPSH _A Datum:		C.L. Impeller																																															
PUMPING TEMPERATURE :	°C	23.22			8.82																																												
FLOW :	m³/hr		11	10.00	3.50																																												
DISCHARGE PRESSURE : (6.3.2)	barg		19.5																																														
SUCTION PRESSURE :	barg	5.75			5.50																																												
DIFFERENTIAL PRESSURE :	bar		14.0																																														
DIFFERENTIAL HEAD :	m		199.5																																														
NPSH _A :	m		0.9																																														
HYDRAULIC POWER:	KW		4.30																																														
SITE AND UTILITY DATA																																																	
LOCATION: OUTDOOR UNHEATED MOUNTED AT : ELECTRIC AREA CLASSIFICATION: (6.1.22) ZONE 2 GROUP II A TEMP CLASS T3 SITE DATA : ELEVATION (MSL) : m BAROMETER : mBar RANGE OF DESIGN TEMPS:MIN / MAX 5 85 °C RELATIVE HUMIDITY: MIN / MAX 0 100 % (@ 25.6 °C) UNUSUAL CONDITIONS: UTILITY CONDITIONS : ELECTRICITY : <table><tr><td>DRIVERS</td><td>HEATING</td><td>CONTROL</td><td>SHUTDOWN</td></tr><tr><td>VOLTAGE 400</td><td></td><td></td><td></td></tr><tr><td>PHASE 3</td><td></td><td></td><td></td></tr><tr><td>HERTZ 50</td><td></td><td></td><td></td></tr></table>					DRIVERS	HEATING	CONTROL	SHUTDOWN	VOLTAGE 400				PHASE 3				HERTZ 50				COOLING WATER : <table><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></td><td></td></tr><tr><td colspan="3">COOLING WATER CHLORIDE CONCENTRATION:</td></tr></table> INSTRUMENT AIR : MIN kg STEAM <table><tr><td></td><td>DRIVERS</td><td></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		TEMP			PRESS.		
DRIVERS	HEATING	CONTROL	SHUTDOWN																																														
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	DRIVERS																																																
TEMP																																																	
PRESS.																																																	
PERFORMANCE					DRIVER (7.1.5) (NOTES 3,16,29,34)																																												
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) 85 (dBA) @ 1 m EST MAX SOUND PRESS. LEVEL (dBA) MAX. SOUND POWER LEVEL REQD (6.1.14) EST MAX SOUND POWER LEVEL					Driver Type MOTOR GEAR NO VARIABLE SPEED REQUIRED NO SOURCE OF VARIABLE SPEED OTHER MANUFACTURER NAMEPLATE POWER AND POWER FACTOR @ Site Condition KW Nominal RPM RATED LOAD RPM FRAME OR MODEL ORIENTATION VERTICAL LUBE BEARING TYPE: RADIAL THRUST STARTING METHOD D.O.L (OPEN DISCHARGE VALVE) SEE DRIVER DATA SHEET Max Voltage Variation ±5% Max Frequency Variation ±2% Max Voltage and Frequency Variation together ±5%																																												

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	پروژه BK	بسته کاری GCS	صادر کننده PEDCO	تسهیلات 120	رشته ME	نوع مدرک DT	سریال 0019		نسخه D03																																																											
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CONSTRUCTION																																																																				
API PUMP TYPE: VS6 (VTC) [Based on API 610 definitions] SEE ALSO PAGE 6 NOZZLE CONNECTIONS: (6.5.5) NOTES 10,14,17 <table><tr><td>Size</td><td>Facing</td><td>Rating</td><td>Position</td></tr><tr><td></td><td>RF</td><td>300</td><td>SIDE</td></tr><tr><td></td><td>RF</td><td>300</td><td>SIDE</td></tr></table> SUCTION DISCHARGE PRESSURE CASING AUX. CONNECTIONS: (6.4.3.2) NOTES 10, 11 <table><tr><td>No.</td><td>Size</td><td>Type</td><td>Facing</td><td>Rating</td><td>Posn.</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>BAL./LEAK OFF</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>DRAIN</td><td></td><td></td><td>RF</td><td></td><td></td></tr><tr><td>VENT</td><td></td><td></td><td>RF</td><td></td><td></td></tr><tr><td>PRESSURE GAGE</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>TEMP GAGE</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>WARM-UP LINE</td><td></td><td></td><td></td><td></td><td></td></tr></table> Drain Valve Supplied By SUPPLIER DRAINS MANIFOLDED VENT Valve Supplied By SUPPLIER VENTS MANIFOLDED THREAD. CONS FOR PIPELINE SERVICE & < 50°C (6.4.3.2) NO SPECIAL FITTINGS FOR TRANSITIONING (6.4.3.3) NO CYLINDRICAL THREADS REQUIRED (6.4.3.8) NO GUSSET SUPPORT REQUIRED YES If Needed MACHINED AND STUDDED CONNECTIONS (6.4.3.12) NO VS 6 DRAIN External DRAIN TO SKID EDGE					Size	Facing	Rating	Position		RF	300	SIDE		RF	300	SIDE	No.	Size	Type	Facing	Rating	Posn.							BAL./LEAK OFF						DRAIN			RF			VENT			RF			PRESSURE GAGE						TEMP GAGE						WARM-UP LINE						CASING MOUNTING: VERTICAL CASING TYPE: (6.3.10) DIFFUSER OH3 BACKPULLOUT LIFTING DEVICE REQD. (9.1.2.6) CASE PRESSURE RATING: MAWP : (6.3.5) By Supplier barg @ °C HYDROTEST : 1.5 X MAWP barg @ °C HYDROTEST OH PUMP AS ASSEMBLY SUCT'N PRESS. REGIONS DESIGNED FOR MAWP YES ROTATION: (VIEWED FROM COUPLING END) • IMPELLERS INDIVIDUALLY SECURED : YES • BOLT OH 3/4/5 PUMP TO PAD / FOUNDATION : • PROVIDE SOLEPLATE FOR OH 3/4/5 PUMPS ROTOR: SHAFT FLEXIBILITY INDEX (SFI) (9.1.1.3) First Critical Speed Wet (Multi stage pumps only) COMPONENT BALANCE TO ISO 1940 G1.0 SHRINK FIT -LIMITED MOVEMENT IMPELLERS (9.2.2.3) COUPLING:(7.2.3) (7.2.13.f) NOTE 27 MANUFACTURER MODEL RATING (POWER/100 RPM) SPACER LENGTH mm SERVICE FACTOR Min 1.5 RIGID COUPLING WITH HYDRAULIC FIT (7.2.10) COUPLING BALANCED TO ISO 1940-1 G6.3 (7.2.3) YES COUPLING WITH PROPRIETARY CLAMPING DEVICE (7.2.11) COUPLING IN COMPLIANCE WITH (7.2.4) API 610 compliant COUPLING GUARD STANDARD PER (7.2.13.a) ISO 14120 Window on Coupling Guard			
Size	Facing	Rating	Position																																																																	
	RF	300	SIDE																																																																	
	RF	300	SIDE																																																																	
No.	Size	Type	Facing	Rating	Posn.																																																															
BAL./LEAK OFF																																																																				
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WARM-UP LINE																																																																				
MATERIAL (6.12.1.1) APPENDIX H CLASS S-8 NOTES 18,19 MIN DESIGN METAL TEMP (6.12.4.1) 5 °C REDUCED-HARDNESS MATERIALS REQ'D (6.12.1.12.1) YES D03 Applicable Hardness Standard (6.12.1.12.3) BARREL : CASE : DIFFUSERS IMPELLER : IMPELLER WEAR RING : CASE WEAR RING : SHAFT: Bowl (if VS-type) Inspection Class (Note 4) Level 2					BASEPLATE API BASEPLATE NUMBER : BASEPLATE CONSTRUCTION (7.3.14) BASEPLATE DRAINAGE (7.3.1) MOUNTING : NON-GROUT CONSTRUCTION : (7.3.13) VERTICAL LEVELING SCREWS : REQUIRED LONGITUDINAL DRIVER POSITIONING SCREWS : REQUIRED SUPPLIED WITH : ○ GROUT AND VENT HOLES ○ DRAIN CONNECTION MOUNTING PADS SIZED FOR BASEPLATE LEVELING (7.3.5) YES MOUNTING PADS TO BE MACHINED (7.3.6) YES PROVIDE SPACER PLATE UNDER ALL EQUIPMENT FEET YES OTHER REMARKS :																																																															
BEARINGS AND LUBRICATION (6.10.1.1) BEARING (TYPE / NUMBER): (6.11.4) RADIAL / THRUST / REVIEW AND APPROVE THRUST BEARING SIZE : (9.2.5.2.4) LUBRICATION : (6.10.2.2) (6.11.3) (9.2.6) RING OIL 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 : REQUIRED																																																																				

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طرح نگهداشت و افزایش تولید 27 مخزن											
SURFACE PREPARATION AND PAINT						TEST					
MANUFACTURER'S STANDARD _____						SHOP INSPECTION (8.1.1) YES					
OTHER (SEE BELOW) _____						PERFORMANCE CURVE _____					
SPECIFICATION NO. BK-GNRAL-PEDCO-000-PI-SP-0006 , "Specification for Painting"						& DATA APPROVAL PRIOR TO SHIPMENT. YES					
PUMP:						TEST WITH SUBSTITUTE SEAL (8.3.3.2.b) NO					
PUMP SURFACE PREPARATION _____						MATERIAL CERTIFICATION REQUIRED CASING YES					
PRIMER AS PER PROJECT PAINTING SPEC.						SHAFT YES (6.12.1.8) IMPELLER YES					
FINISH COAT AS PER PROJECT PAINTING SPEC.						OTHER YES Casing and impeller Wear ring NOTE 18					
BASEPLATE:						CASTING REPAIR WELD PROCEDURE APPR REQD YES					
BASEPLATE SURFACE PREPARATION _____						INSPECTION REQUIRED FOR CONNECTION WELDS (6.12.3.4.d)					
PRIMER: AS PER PROJECT PAINTING SPEC.						LIQUID PENETRANT YES MAG PARTICLE YES					
FINISH COAT AS PER PROJECT PAINTING SPEC.						ULTRASONIC _____ RADIOGRAPHY _____					
DETAILS OF LIFTING DEVICES _____						INSPECTION REQUIRED FOR CASTINGS NOTE 26					
SHIPMENT: (8.4.1) EXPORT						LIQUID PENETRANT YES MAG PARTICLE YES					
EXPORT BOXING REQUIRED YES						ULTRASONIC (NOTE 24) _____ RADIOGRAPHY _____					
OUTDOOR STORAGE MORE THAN 6 MONTHS YES						HARDNESS TEST REQUIRED (8.2.2.7) _____					
SPARE ROTOR ASSEMBLY PACKAGED FOR:						ADDNL SUBSURFACE EXAMINATION (6.12.1.5) (8.2.1.3) _____					
ROTOR STORAGE ORIENTATION (9.2.8.2) _____						FOR _____					
SHIPPING & STORAGE CONTAINER FOR VERT STORAGE (9.2.8.3) _____						METHOD _____					
N ₂ PURGE (9.2.8.4) _____											
SPARE PARTS NOTE 26						PMI TESTING REQUIRED (8.2.2.8) (NOTE 33) YES					
START-UP YES						COMPONENTS TO BE TESTED					
NORMAL MAINTENANCE YES						RESIDUAL UNBALANCE TEST (J.4.1.2) _____					
						NOTIFICATION OF SUCCESSFUL SHOP _____					
						PERFORMANCE TEST (8.1.1.c) (8.3.3.5) (WIT) YES					
ITEM No PUMP DRIVER GEAR BASE TOTAL						BASEPLATE TEST (7.3.21) _____					
						HYDROSTATIC WIT					
						HYDROSTATIC TEST OF BOWLS & COLUMN (9.3.13.2) _____					
						PERFORMANCE TEST WIT					
OTHER PURCHASER REQUIREMENTS						TEST IN COMPLIANCE WITH (8.3.3.2) _____					
COORDINATION MEETING REQUIRED (10.1.3) YES						TEST DATA POINTS TO (8.3.3.3) _____					
MAXIMUM DISCHARGE PRESSURE TO INCLUDE						TEST TOLERANCES TO (8.3.3.4) _____					
MAX RELATIVE DENSITY YES						NPSH (8.3.4.3.1) (8.3.4.3.4) (NOTE 9) WIT					
OPERATION TO TRIP SPEED _____						NPSH-1ST STG ONLY (8.3.4.3.2) _____					
MAX DIA. IMPELLERS AND/OR NO OF STAGES YES						NPSH TESTING TO HI 1.6 OR ISO 9906 (8.3.4.3.3) _____					
CONNECTION DESIGN APPROVAL (9.2.1.4) _____						TEST NPSHA LIMITED TO 110% SITE NPSH (8.3.3.6) _____					
TORSIONAL ANALYSIS / REPORT (6.9.2.10) _____						RETEST ON SEAL LEAKAGE (8.3.3.2.d) _____					
PROGRESS REPORTS YES						RETEST REQUIRED AFTER FINAL HEAD ADJ (8.3.3.7.b) _____					
OUTLINE OF PROC FOR OPTIONAL TESTS (10.2.5) _____						COMPLETE UNIT TEST (8.3.4.4.1) WIT					
ADDITIONAL DATA REQUIRING 20 YEARS RETENTION (8.2.1.1) _____						SOUND LEVEL TEST (8.3.4.5) WIT					
						CLEANLINESS PRIOR TO FINAL ASSEMBLY (8.2.2.6) NON-WIT					
LATERAL ANALYSIS REQUIRED (9.1.3.4) (9.2.4.1.3) _____						LOCATION OF CLEANLINESS INSPECTION _____					
MODAL ANALYSIS REQUIRED (9.3.9.2) _____						NOZZLE LOAD TEST _____					
DYNAMIC BALANCE ROTOR (6.9.4.4) _____						CHECK FOR CO-PLANAR MOUNTING PAD SURFACES _____					
INSTALLATION LIST IN PROPOSAL (10.2.3.1) YES						MECHANICAL RUN TEST UNTIL OIL TEMP STABLE WIT					
VFD STEADY STATE DAMPED RESPONSE ANALYSIS (6.9.2.3) _____						4 HR. MECH RUN AFTER OIL TEMP STABLE (8.3.4.2.1) WIT					
TRANSIENT TORSIONAL RESPONSE _____						4 HR. MECH RUN TEST (8.3.4.2.2) _____					
BEARING LIFE CALCULATIONS REQUIRED (6.10.1.6) _____						BRG HSG RESONANCE TEST (8.3.4.7) _____					
IGNITION HAZARD ASSMT TO EN 13463-1 (7.2.13.e) _____						STRUCTURAL RESONANCE TEST (9.3.9.2) _____					
CASING RETIREMENT THICKNESS DRAWING (10.3.2.3) _____						REMOVE / INSPECT HYDRODYNAMIC BEARINGS AFTER TEST (9.2.7.5) _____					
FLANGES RQD IN PLACE OF SKT WELD UNIONS (7.5.2.8) YES						AUXILIARY EQUIPMENT TEST (8.3.4.6) _____					
INCLUDE PLOTTED VIBRATION SPECTRA (6.9.3.3) _____						EQUIPMENT TO BE INCLUDED IN AUXILIARY TESTS _____					
CONNECTION BOLTING (7.5.1.7) _____						LOCATION OF AUXILIARY EQUIPMENT TEST _____					
CADMIUM PLATED BOLTS PROHIBITED _____						IMPACT TEST _____					
VENDOR TO KEEP REPAIR AND HT RCDS (8.2.1.1.c) YES											
VENDOR SUBMIT TEST PROCEDURES (8.3.1.1) YES											
SUBMIT INSPECTION CHECK LIST (8.1.5) NOTE 4 YES						REMOVE CASING AFTER TEST _____					



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

شماره پیمان:

053-073-9184

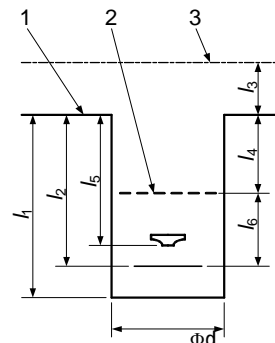
MECHANICAL DATA SHEETS FOR SLUG PUMP

پروژه	بسته کاری	صادر کننده	تجهیزات	رشته	نوع مدرک	سریال	نسخه
BK	GCS	PEDCO	120	ME	DT	0019	D03

شماره صفحه: 10 از 9

طرح نگهداشت و افزایش تولید 27 مخزن

1	Note	VERTICAL TYPE (FIG 1.1)	VS6
2	REMARKS		
3			
4			
5			
6		VERTICAL PUMPS	VERTICAL PUMPS (CONT'D)
7	PUMP THRUST:	(+) UP	(-) DOWN
8	STATIC THRUST	N	N
9	AT MIN FLOW	N	N
10	AT RATED FLOW	N	N
11	AT MAX FLOW	N	N
12	MAX THRUST	N	N
13	SOLEPLATE REQUIRED		
14	SOLEPLATE Length x Width	m	X m
15	SOLEPLATE THICKNESS		mm
16	MOUNTING FLANGE REQUIRED		
17	COLUMN PIPE:		
18	DIAMETER		mm
19	LENGTH		m
20	NUMBER		
21	SPACING		m
22	GUIDE BUSHINGS:		
23	NUMBER		
24	LINE SHAFT BEARING SPACING		mm
25	GUIDE BUSHING LUBE:		
26			
27			
28		MATERIALS (additional)	
29	SUCTION CAN / BARREL:		LINESHAFT SLEEVES :
30	DISCHARGE HEAD :		BEARING RETAINER :
31	BOWL SHAFT :		SHAFT ENCLOSING TUBE :
32	LINESHAFT :		DISCHARGE COLUMN :
33	LINESHAFT HARDFACING :		PRESSURE RATING:
34	BELLMOUTH :		MAWP
35	BOWL BEARING :		HEAD
36	LINESHAFT BEARING :		COLUMN PIPE
37			BOWL
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احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



053-073-9184

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D03	0019	DT	ME	120	PEDCO	GCS	BK

شماره صفحه: 10 از 10

PRESSURE VESSEL DESIGN CODE REFERENCES

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)

WELDER/OPERATOR QUALIFICATION

WELDING PROCEDURE QUALIFICATION

NON-PRESSURE RETAINING STRUCTURAL WELDING SUCH AS BASEPLATES OR SUPPORTS

MAGNETIC PARTICLE OR LIQUID PENETRANT EXAMINATION OF PLATE EDGES

POSTWELD HEAT TREATMENT

POSTWELD HEAT TREATMENT OF CASING FABRICATION WELDS

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

THESE REFERENCES MUST BE LISTED BY THE PURCHASER

DEFAULT TO TABLE 14

YES

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)			

REMARKS :

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.