

	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک (قرارداد ۰۸_۰۱۰_۰۰۱-BK-HD-GCS-CO)								
	PROCESS DATA SHEET FOR GLYCOL CIRCULATION PUMPS								
شماره پیمان:	نسخه	سریال	نوع مدرک	رشته	تهیهات	صادرکننده	بسته کاری	پروژه	شماره صفحه: ۱ از ۵
۰۵۳-۰۷۳-۹۱۸۴	V00	0006	DS	PR	120	MF	GCS	BK	
طرح نگهداشت و افزایش تولید ۲۷ مخزن									
PROCESS DATA SHEET FOR GLYCOL CIRCULATION PUMPS نگهداشت و افزایش تولید میدان نفتی بینک									
V00	NOV.2024	IFI	MFS	M.Fakharian	M.Sadeghian				
Rev.	Date	Purpose of Issue / Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval			
		CLIENT Doc. Number: -							
status: IFA: Issued For Approval IFI: Issued For Information AFC: Approved For Construction									

	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک (قرارداد ۰۸_۰۱۰-۰۰۱-BK-HD-GCS-CO)								
	PROCESS DATA SHEET FOR GLYCOL CIRCULATION PUMPS								
شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۲ از ۵
۰۵۳ - ۰۷۳ - ۹۱۸۴	BK	GCS	MF	120	PR	DS	0006	V00	

REVISION RECORD SHEET

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نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



PROCESS DATA SHEET FOR GLYCOL CIRCULATION PUMPS

شماره پیمان:
۰۵۳-۰۷۳-۹۱۸۴

نسخه	سریال	نوع مدرک	رشته	تهیلات	صادر کننده	بسته کاری	پروژه
V00	0006	DS	PR	120	MF	GCS	BK

شماره صفحه: ۳ از ۵

NOTES

1. Pump will be volumetric type, according to API 675. Pump type finalization will be done during detailed engineering
2. Wetted materials will be SS316 and/or non-metallic materials compatible with process fluid and operating conditions
3. Pulsation dampeners at suction and discharge line
4. Operating flowrate includes 15% design margin
5. Ambient temperature ranging from minimum 5 °C to maximum absolute 50°C, as per Design Basis
6. ATEX classification Zone 1, IIB T4
7. Max TEG viscosity in case of startup at the minimum ambient temperature of 5 °C.
8. 85° C is minimum operating temperature during normal operation. In startup conditions, the TEG temperature can be as low as minimum ambient temperature, i.e. +5 °C.
9. Value of 5 m indicated for NPSH available includes acceleration losses for 3.5 m. This last value is conservative and must be confirmed after pumps selection.
10. A margin of at 1 m (minimum) required between NPSH available and NPSH required.
11. Flow control performed by means a control valve installed on the recycle line from the discharge line (downstream cooler) to the pump's suction.



FOR 0		UNIT GAS DEHYDRATION PACKAGE							
SITE 0		NO. OF PUMPS REQUIRED 2							
SERVICE LEAN TEG	MODEL VOLUMETRIC	SIZE AND TYF VOLUMETRIC RECIPROCATING PUMP							
MANUFACTURER		SERIAL NO.							
NOTE: ☐ INDICATES INFORMATION TO BE COMPLETED BY PURCHASER		☐ BY MANUFACTURER							
GENERAL									
NO. MOTORS DRIVEN		OTHER DRIVER TYPE							
PUMP ITEM NO'S	P-100 A / B	PUMP ITEM NO'S							
MOTOR ITEM NO'S	TBA	DRIVER ITEM NO'S							
MOTOR PROVIDED BY	PUMP VENDOR	GEAR ITEM NO'S							
MOTOR MOUNTED BY	PUMP VENDOR	GEAR PROVIDED BY							
MOTOR DATA SHEET NO.		GEAR MOUNTED BY							
		GEAR DATA SHEET NO.							
☐ OPERATING CONDITIONS		☐ LIQUID							
☒ CAPACITY @ PT (m³/h):		☒ TYPE OR NAME OF LIQUID LEAN TEG (99.75 % WT PURITY)							
MAXIMUM 0.84 MINIMUM _____ RATED 0.96		☒ PUMPING TEMPERATURE (°C):							
☒ DISCHARGE PRESSURE (kPa)(BARG):		NORMAL 113 MAX 119 MIN 85 (8)							
MAXIMUM 55.4 barg MINIMUM TBD		☒ SPECIFIC GRAVITY 1.10 MAXIMUM 1.02 MINIMUM							
☒ SUCTION PRESSURE (kPa)(BARG):		☒ SPECIFIC HE ² 2.687 Cp (kJ/kg °C)							
MAXIMUM 1 barg MINIMUM 0.2 barg		☒ VISCOSITY (Cp) 2.67 MINIMUM 80 (7) MAXIMUM							
☒ DIFFERENTIAL PRESSURE (kPa)(BAR):		☒ CORROSIVE/EROSIVE AGENTS Traces (acid gas, CO2, H2S)							
MAXIMUM 54.2 barg MINIMUM TBD		☒ CHLORIDE CONCENTRATION (PPM) NONE							
☒ NPSH AVAILABLE (m) > 5 (9)		☒ H ₂ S CONCENTRATION (PPM) 670							
WITHOUT ACCELERATION HEAD - ACTUAL -		LIQUID ☒ TOXIC ☐ FLAMMABLE ☒ OTHER H2S traces							
☒ TURNDOWN RATIO NOT APPLICABLE									
☐ PERFORMANCE		SITE AND UTILITY DATA							
☐ NUMBER OF FEEDS _____ RATED CAPACITY (m³/h) 0.96		LOCATION ☐ INDOOR ☐ OUTDOOR							
☐ NPSH REQUIRED (m) VTA (10)		☐ HEATED ☐ UNHEATED ☐ UNDER ROOF							
☐ BHP RATED _____ AT RELIEF SETTING		☐ ELECTRICAL AREA CLASS _____ GROUP _____ DIV							
☐ PLUNGER SPEED (strokes/min) _____ DESIGN MAX		☐ WINTERIZATION REQ'D ☐ TROPICALIZATION REQ'D							
☐ DIAMETER (mm) _____ LENGTH OF STROKE (mm) _____		SITE DATA							
PUMP HEAD: _____		☒ RANGE OF AMBIENT TEMPS: MIN/MAX 8 / 42 °C							
MAXIMUM PRESSURE (bar g) 55		UNUSUAL CONDITIONS							
☐ HYDRO TEST PRESSURE (kPa)(BARG) _____		☒ DUST ☐ FUMES ☐ SALT ATMOSPHERE							
☐ MAX DISCH PRESS. W/ JOB DRIVER (kPa)(BARG) _____		☐ OTHER _____							
☐ MAX BHP BASIS GEAR STRENGTH _____		☒ UTILITY CONDITIONS							
☐ CONSTRUCTION		ELECTRICITY DRIVERS HEATING CONTROL SHUTDOWN							
CONNECTIONS SUCTION DISCHARGE FLUSH	SIZE	RATING	FACING	POSITION	VOLTAGE 400	-	-	-	
	2"	600 #	RF		HERTZ 50	-	-	-	
	1"	600 #	RF		PHASE 3	-	-	-	
					COOLING WA' INLET RETURN DESIGN MAX D	-	-	-	
LIQUID END		☐ JACKET REQ'D		TEMP °C		PRESS. (BARC)		SOURCE	
TYPE ☐ DIAPHRAGM ☐ PLUNGER		NO REQ.		INSTRUMENT AIR MAX MIN		PRESSURE (kPa)(BARG)			
☐ DIAPHRAGM DIA (mm) _____									
☐ VALVES/FEED		SUCTION DISCHARGE							
TYPE _____									
NUMBER _____									
REMARKS									
Vendor data will be implemented									



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سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



PROCESS DATA SHEET FOR GLYCOL CIRCULATION PUMPS

شماره پیمان:

۰۵۳-۰۷۳-۹۱۸۴

پروژه

بسته کاری

صادر کننده

تسهیلات

رشته

نوع مدرک

سریال

نسخه

شماره صفحه: ۵ از ۵

BK

GCS

MF

120

PR

DS

0006

V00

Service

0

1	☐ MATERIALS	CONTROLS (11)			
2	LIQUID END SS 316 L	TYPE: ☒ MANUAL ☐ REMOTE ☐ SIGNAL: ☐ PNEUMATIC			
3	CONTOUR PLATE BY VENDOR	☐ AUTOMATIC ☒ LOCAL ☐ ELECTRONIC			
4	HYDRAULIC DIAPHRAGM BY VENDOR	STROKE CONTROL:			
5	PROCESS DIAPHRAGM BY VENDOR	PNEUMATIC (PSIG):			
6	PLUNGER BY VENDOR	MINIMUM _____ MAXIMUM _____			
7	LANTERN RING BY VENDOR	ELECTRONIC (mA):			
8	PACKING GLAND BY VENDOR	MINIMUM _____ MAXIMUM _____			
9	PACKING BY VENDOR	OTHER PURCHASE REQUIREMENTS			
10	VALVE BY VENDOR	NAMEPLATE UNITS ☐ U.S. CUSTOMARY ☒ SI			
11	VALVE SEAT BY VENDOR	☐ VENDOR FURNISHED PROCESS PIPING			
12	VALVE GUIDE BY VENDOR	☐ VENDOR REVIEW PIPING DRAWINGS			
13	VALVE BODY BY VENDOR	☒ VENDOR FURNISHED PULSATION SUPPRESSION DEVICES			
14	VALVE GASKET BY VENDOR	☐ VENDOR FURNISHED RELIEF VALVE			
15	FRAME BY VENDOR	☐ INTERNAL ☒ EXTERNAL			
16	SPECIAL MATERIAL TESTS BY VENDOR	☒ RELIEF VALVE SETTING (BA 62 bar g)			
17		☐ VENDOR FURNISHED BACK-PRESSURE VALVE			
18	☐ LOW AMBIENT TEMPERATURE MATERIALS TESTS	☐ DOUBLE CHECK VALVES REQUIRED			
19		☐ OIL-FILLED PRESSURE GAUGES REQUIRED			
20	QA INSPECTION AND TEST	☐ VENDOR FURNISHED CONTROL PANEL			
21	☐ COMPLIANCE WITH INSPECTORS CHECK LIST	☐ BASEPLATE PREPARED FOR EPOXY GROUT			
22	☐ CERTIFICATION OF MATERIALS	☐ PROVIDE TECHNICAL DATA MANUAL			
23	☐ FINAL ASSEMBLY CLEARANCES	☐			
24	☐ SURFACE AND SUBSURFACE EXAMINATIONS	☐			
25	☐ RADIOGRAPHY	☐			
26	☐ ULTRASONIC	☐			
27	☐ MAGNETIC PARTICLE	☐			
28	☐ LIQUID PENETRANT	☐			
29	☐ CLEANLINESS PRIOR TO FINAL ASSEMBLY	PREPARATION FOR SHIPMENT			
30	☐ HARDNESS OF PARTS, WELDS & HEAT AFFECTED ZONES	☐ DOMESTIC ☐ EXPORT ☐ EXPORT BOXING			
31	☐ FURNISH PROCEDURES FOR OPTIONAL TESTS	☐ OUTDOOR STORAGE MORE THAN 6 MONTHS			
32	TESTS	WEIGHTS (LBS)			
33	HYDROSTATIC ☒	☐ PUMP ☐ BASE ☐ GEAR ☐ DRIVER			
34	STEADY STATE ACCURACY ☐	DRIVERS			
35	REPEATABILITY ☐	☐ MOTOR:			
36	LINEARITY ☐	☐ MANUFACTURER			
37		☐ TYPE			
38		☐ FRAME NO.			
39		☒ CONSTANT SPEED			
40		☐ VARIABLE SPEED			
41		☐ kW _____ RPM _____			
42	LUBRICATION FLUID	☒ VC 400 _____ PHASE 3			
43	☐ CRANKCASE ☐ INTERMEDIATE	☒ HE 50 _____ SERVICE FACTOR _____			
44	☐ HYDRAULIC FLUID	☐ ENCLOSURE			
45	ACCESSORIES	☐ OTHER (SEE SEPARATE DATA SHEETS)			
46	☐ SPEED REDUCER MANUFACTURER	☐ GAS DRIVEN			
47	☐ INTEGRAL ☐ SEPARATE	☐ STEAM TURBINE			
48	MODEL _____	☐ OTHER			
49	RATIO _____				
50	☐ BASEPLATE UNDER				
51	☐ COUPLING MANUFACTURER				
	☐ TYPE				
	REMARKS				