



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



PROCESS DATA SHEETS FOR CLOSED DRAIN PUMPS

شماره پیمان:	نسخه	سریال	نوع مدرک	رشته	تهیه کننده	صادر کننده	بسته کاری	پروژه	شماره پیمان:
۰۵۳ - ۰۷۳ - ۹۱۸۴	D06	0023	DT	PR	120	PEDCO	GCS	BK	۰۵۳ - ۰۷۳ - ۹۱۸۴

شماره صفحه: ۱ از ۳

طرح نگهداشت و افزایش تولید ۲۷ مخزن

PROCESS DATA SHEETS FOR CLOSED DRAIN PUMPS

نگهداشت و افزایش تولید میدان نفتی بینک

D06	DEC.2024	AFC	M.Aryafar	M.Fakharian	S.Faramarzpour	
D05	AUG.2024	AFC	M.Aryafar	M.Fakharian	M.Sadeghian	
D04	FEB.2023	AFC	M.Aryafar	M.Fakharian	M.Mehrshad	
D03	OCT.2022	IFA	M.Aryafar	M.Fakharian	M.Mehrshad	
D02	AUG.2022	IFA	M.Aryafar	M.Fakharian	M.Mehrshad	
D01	FEB.2022	IFC	M.Aryafar	M.Fakharian	M.Mehrshad	
D00	NOV.2021	IFC	M.Aryafar	M.Fakharian	M.Mehrshad	
Rev.	Date	Purpose of Issue / Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval

Class: 1

CLIENT Doc. Number:

F0Z-708767

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



PROCESS DATA SHEETS FOR CLOSED DRAIN PUMPS

شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴

نسخه	سریال	نوع مدرک	رشته	تجهیزات	صادر کننده	بسته کاری	پروژه
D06	0023	DT	PR	120	PEDCO	GCS	BK

شماره صفحه: ۳ از ۲

REVISION RECORD SHEET

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 NISOC		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک						 شرکت توسعه و پارس		
PROCESS DATA SHEETS FOR CLOSED DRAIN PUMPS										
شماره پیمان:		پروژه	بسته کاری	صادرکننده	تسهيلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۳ از ۳
۰۵۳ - ۰۷۳ - ۹۱۸۴		BK	GCS	PEDCO	120	PR	DT	0023	D06	

1	Note									Rev
2		GENERAL DATA								
3		Type								
4		☒ Centrifugal ☐ Positive displacement								
5		Centrifugal ☒ Horizontal ☐ Vertical								
6		Positive displacement ☐ Reciprocating ☐ Rotary ☐ Metering								
7		Item P-2202 A/B		No. of Main/Stand By Units		1 / 1				
8		Service Closed Drain Pumps		Installation (Indoor-Outdoor-Other)		Outdoor				
9		Operation ☐ Continuous ☒ Discontinuous ☐ Parallel ☒ Single								
10		Type of Driver Electrical Motor								
11		CHARACTERISTICS OF HANDLED LIQUID								
12		Type of Handled Liquid HC								
13		Pumping Temp.e (Min. / Normal / Max.)	°C	/ 5 (worse case)		/ Note 1				
14		Density at Min. / Norm / Max. Temp.	kg/m³	/ 980		/				
15		Viscosity At Min. / Normal / Max. Temp.	cP	/ 0.46		/				
16		Vapour Pressure at Max. Pumping Temp.	bara	1						
17		Freezing Point / Pour Point	°C							
18		Dissolved Gas	Yes-No							
19		Corrosive / Erosive / Hazardous Agents / Flammable	Yes-No	Yes /		Yes /		Yes / Yes		
20		Suspended solids (Type / Dimen. / Vol.%)	mm	/		/				
21		OPERATING CONDITIONS								
22		Suction Pressure (Min/ Max.)	barg	0.2 / 0.90						
23		Discharge Pressure at Rated Capacity	barg	7.2						
24		Differential Pressure at Rated Capacity	bar	7						
25		Capacity (Min. / Normal / Rated)	m³/hr	/ 3		/ 3.3		Note 3		
26		Head at Rated Capacity	m	72.8						
27		NPSH Available	m	2.5						
28		Max Allowable Pressure at Shut-Off	barg	14.50		Note 16				
29		Hydraulic Power	kW	0.6						
30		Reacceleration	Yes-No	No						
31		Automatic Start-Up	Yes-No	No						
32		Start-Up with Delivery Valve	☒ Open ☐ Close							
33		Flow Controlled By	☐ Pressure Controller ☐ Level Controller ☐ Flow Controller ☒ Other							
34		DESIGN CONDITIONS								
35		Design Temperature: Min / Max	°C	5 / 85						
36		Design Pressure	barg	14.50		Note 16				
37		MECHANICAL DATA								
38		Contamination of Liquid Handled Allowed	Yes-No	Yes						
39		Air Entrainment Allowed	Yes-No	No						
40		Leaks Allowed	Yes-No	No		Note 7				
41		Antifreezing Protection	Yes-No	No						
42		Suction Line: Diameter	in	2"						
43		Discharge Line: Diameter	in	2"						
44		Mat. in Contact with Liq. Handled (Min.)		API610/S6		Note 6				
Note										
45	1	Pumping fluid might be hydrocarbon, water or a mixture of both.								
46	2	Deleted								
47	3	Design (rated) flow rates is 110 % of normal flow rate.								
48	4	Deleted								
49	5	Deleted								
50	6	The material shall be in compliance with NACE MR0175/ISO15156 and Specification For Material Requirements in Sour service Document No. BK-GNRL-PEDCO-000-PI-SP-0008								
51	7	(Vendor to confirm)								
52	8	Liquid saturated at operating temperature.								
53	9	Applicable standards are: API610, IPS-G-PM-105, IPS-E-EL-131, IPS-E-EL-132.(Latest revision)								
54	10	Refer to hazardous area classification layout, all instrumentation and electrical devices shall be suitable for: ZONE 1 & Gas group IIB, Temperature class T3								
55	11	Margin between NPSHA and NPSHR shall not be less than 1 m.								
56	12	For P&ID refer to BK-GCS-PEDCO-120-PR-PI-0017								
57	13	Minimum Design Metal Tem (MDMT) = 5								
58	14	About the operation of the two pumps (A/B) it should be noted that if liquid level of V-2202 reaches H1 level, lead pump will be started. in case of H2 level alarm, lag pump will be started. Refer to (BK-GCS-PEDCO-120-PR-PI-0017)								
59	15	H2S (ppm) at winter 465.5611 & H2S (ppm) at summer 861.4594								
60	16	Design pressure of the suction vessel+ liquid height at vessel HLL at pump suction + pump differential pressure at rated flow of the pump								

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