

 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: 053 - 073 - 9184	پروژه BK	بسته کاری GCS	صادر کننده PEDCO	تسهیلات 120	رشته PR	نوع مدرک DT	سریال 0023	نسخه D03	شماره صفحه: 1 از 3

طرح نگهداشت و افزایش تولید 27 مخزن

PROCESS DATA SHEETS FOR CLOSED DRAIN PUMPS

نگهداشت و افزایش تولید میدان نفتی بینک

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: 2

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



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:

053 - 073 - 9184

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D03	0023	DT	PR	120	PEDCO	GCS	BK

شماره صفحه: 2 از 3

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



PROCESS DATA SHEETS FOR CLOSED DRAIN PUMPS

شماره پیمان:

053 - 073 - 9184

پروژه

بسته کاری

صادر کننده

تسهیلات

رشته

نوع مدرک

سریال

نسخه

BK

GCS

PEDCO

120

PR

DT

0023

D03

شماره صفحه: 3 از 3

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/m ³	/ 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 / 0.80									
23	Discharge Pressure at Rated Capacity	barg	7									
24	Differential Pressure at Rated Capacity	bar	7									
25	Capacity (Min. / Normal / Rated)	m ³ /hr	/ 3 / 3.3 Note 3									
26	Head at Rated Capacity	m	72.8									
27	NPSH Available	m	0.3									
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-GNRAL-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	D03
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	