



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



PROCESS DATA SHEETS FOR SLUG PUMPS

شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴

پروژه

BK

بسته کاری

GCS

صادر کننده

PEDCO

تجهیزات

120

رشته

PR

نوع مدرک

DT

سریال

0020

نسخه

D05

شماره صفحه: ۱ از ۳

طرح نگهداشت و افزایش تولید ۲۷ مخزن

PROCESS DATA SHEETS FOR SLUG PUMPS

نگهداشت و افزایش تولید میدان نفتی بینک

D05	AUG.2024	AFC	M.Aryafar	M.Fakharian	M.Sadeghian	
D04	AUG.2023	AFC	M.Aryafar	M.Fakharian	A.M.Mohseni	
D03	OCT.2022	IFA	M.Aryafar	M.Fakharian	M.Mehrshad	
D02	JUL.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-708764

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 SLUG PUMPS

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه	شماره پیمان:
D05	0020	DT	PR	120	PEDCO	GCS	BK	۰۵۳ - ۰۷۳ - ۹۱۸۴

شماره صفحه: ۳ از ۲

REVISION RECORD SHEET

Page	D00	D01	D02	D03	D04	D05	Page	D00	D01	D02	D03	D04	D05
1	X	X	X		X	X	65						
2	X	X	X		X	X	66						
3	X	X	X	X		X	67						
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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 SLUG PUMPS										
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۱۸۴		پروژه: BK	بسته کاری: GCS	صادر کننده: PEDCO	تسهیلات: 120	رشته: PR	نوع مدرک: DT	سریال: 0020	نسخه: D05	شماره صفحه: ۳ از ۳
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-2101 A/B	No. of Main/Stand By Units 1 / 1								
8	Service Slug 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	Water + Hydrocarbon								
13	Pumping Temp.e (Min. / Max.)	°C		8.82 / 23.22						
14	Density at Min. / Norm / Max. Temp.	kg/m³		/ 715.80 /						
15	Viscosity At Min. / Normal / Max. Temp.	cP		/ 0.58 /						
16	Vapour Pressure at Max. Pumping Temp.	bara		6.5						
17	Freezing Point / Pour Point	°C								
18	Dissolved Gas	Yes-No		No						
19	Corrosive / Erosive / Hazardous Agents / Flammable	Yes-No		Yes / Yes / Yes / Yes						
20	Suspended solids (Type / Dimen. / Vol.%)	mm								
21	Sour Service			Yes						
22	OPERATING CONDITIONS									
23	Suction Pressure (Min/ Max.)	barg		5.5 / 5.70 						
24	Discharge Pressure at Rated Capacity	barg		19.56 						
25	Differential Pressure at Rated Capacity	bar		14						
26	Capacity (Min/Normal / Rated)	m³/hr		3.5 / 10 / 11 Note 1, 7						
27	Head at Rated Capacity	m		199.5						
28	NPSH Available	m		1.1 						
29	Max Allowable Pressure at Shut-Off	barg		23.30 Note 3						
30	Hydraulic Power	kW		4.3						
31	Reacceleration	Yes-No		No						
32	Automatic Start-Up	Yes-No		Yes						
33	Start-Up with Delivery Valve	☒ Open ☐ Close								
34	Flow Controlled By	☐ Pressure Controller ☐ Level Controller ☒ Flow Controller ☐ Other								
35	DESIGN CONDITIONS									
36	Design Temperature: Min / Max	°C		5 / 85						
37	Design Pressure	barg		23.30 Note3						
38	MECHANICAL DATA									
39	Contamination of Liquid Handled Allowed	Yes-No		Yes						
40	Air Entrainment Allowed	Yes-No		No						
41	Leaks Allowed	Yes-No		No Note 4						
42	Antifreezing Protection	Yes-No		No						
43	Suction Line: Diameter			4"						
44	Discharge Line: Diameter			3"						
45	Mat. in Contact with Liq. Handled (Min.)			API 610, S-6 Note 6						
46	Note									
47	1	Design (rated) flow rates is 110 % of normal flow rate.								
48	2	DELETED								
49	3	finalized by vendor.								
50	4	in Sour service 1560-00-GEN-TI-SPC-0002.								
51	5	DELETED								
52	6	The Material shall be followed in accordance with NACE MR0175/ISO15156 and Technical Specification for Material Requirements								
53	7	DELETED								
54	8	H2S content is 6707.6 ppm								
55	9	Margin between NPSHA and NPSHR shall not be less than 1 m.								
56	10	API Plan 31+53B shall be considered.								
57	11	Applicable standards are: API610, IPS-G-PM-105, IPS-E-EL-131, IPS-E-EL-132. (Last revision of all standards).								
58	12	P&ID :BK-GCS-PEDCO-120-PR-PI-0004								
59	13	Minimum Design Metal Tem (MDMT) = 5								
60	14	Refer to hazardous area classification layout, all instrumentation and electrical devices shall be suitable for: ZONE 2 & Gas group IIA, Temperature class T3								
61	15	Pump is not installed directly on the ground and at least 20~30 cm height for pedestal is considered.								
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