



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



DATA SHEETS FOR PRESSURE & DIFF. PRESSURE GAUGE

شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴

پروژه

BK

بسته کاری

GCS

صادر کننده

PEDCO

تسهیلات

120

رشته

IN

نوع مدرک

DT

سریال

0001

نسخه

D02

شماره صفحه: ۱ از ۱۰

طرح نگهداشت و افزایش تولید ۲۷ مخزن

DATA SHEETS FOR PRESSURE & DIFF. PRESSURE GAUGE

نگهداشت و افزایش تولید میدان نفتی بینک

D02	SEP.2023	AFC	P.Hajisadeghi	M.Fakharian	S.Faramarzpour	
D01	JUL.2022	IFA	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
D00	MAR.2022	IFC	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
Rev.	Date	Purpose of Issue / Status	Prepared by:	Checked by:	Approved by:	Client Approval

Class: 1

Client Doc. Number: F9Z-708922

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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D02

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REVISION RECORD SHEET

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3	X	X			
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شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۱۸۴	پروژه BK	بسته کاری GCS	صادر کننده PEDCO	تسهیلات 120	رشته IN	نوع مدرک DT	سریال 0001	نسخه D02	شماره صفحه: ۳ از ۱۰

REFERENCE DOCUMENTS :

Specification For Instrumentation	BK-GNRAL-PEDCO-000-IN-SP-0001
Process Basis Of Design	BK-GNRAL-PEDCO-000-PR-DB-0001
Piping Material Specification	BK-GCS-PEDCO-120-PI-SP-0001
Hazardous Area Classification Layout	BK-GCS-PEDCO-120-SA-PY-0002
Instrument & Control System Design Criteria	BK-GCS-PEDCO-120-IN-DC-0002
Symbol & Legend For PFD and P&ID	BK-GCS-PEDCO-120-PR-PI-0001
P&ID - Gas Compression Inlet Gas Pipeline (Binak)	BK-GCS-PEDCO-120-PR-PI-0002
P&ID - Gas Compression Inlet Gas Pipeline (Golkhari)	BK-GCS-PEDCO-120-PR-PI-0003
P&ID - Slug Catcher System	BK-GCS-PEDCO-120-PR-PI-0004
P&ID - Gas Compression Inlet Knock Out Drum	BK-GCS-PEDCO-120-PR-PI-0005
P&ID - 1st Stage Gas Compression Suction Drums	BK-GCS-PEDCO-120-PR-PI-0006
P&ID - 1st Stage Gas Compression Compressors	BK-GCS-PEDCO-120-PR-PI-0007
P&ID - 1st Stage Gas Compression Air Coolers	BK-GCS-PEDCO-120-PR-PI-0008
P&ID - 2nd Stage Gas Compression Suction Drums	BK-GCS-PEDCO-120-PR-PI-0009
P&ID - 2nd Stage Gas Compression Compressors	BK-GCS-PEDCO-120-PR-PI-0010
P&ID - 2nd Stage Gas Compression Air Coolers	BK-GCS-PEDCO-120-PR-PI-0011
P&ID - 2nd Stage Gas Compression Discharge Drum	BK-GCS-PEDCO-120-PR-PI-0012
P&ID - Gas Compression Dehydration Package	BK-GCS-PEDCO-120-PR-PI-0013
P&ID - Lean Glycol Storage Tank	BK-GCS-PEDCO-120-PR-PI-0014
P&ID - Instrument & Plant Air System	BK-GCS-PEDCO-120-PR-PI-0015
P&ID - Nitrogen Generation System	BK-GCS-PEDCO-120-PR-PI-0016
P&ID - Close Drain System	BK-GCS-PEDCO-120-PR-PI-0017
P&ID - Corrosion Inhibitor Package	BK-GCS-PEDCO-120-PR-PI-0018
P&ID - Methanol Injection Package	BK-GCS-PEDCO-120-PR-PI-0019
P&ID - LP Flare System	BK-GCS-PEDCO-120-PR-PI-0020
P&ID - Oily Water Sewer	BK-GCS-PEDCO-120-PR-PI-0021
P&ID - Fuel Gas System	BK-GCS-PEDCO-120-PR-PI-0022
P&ID - Diesel Oil System	BK-GCS-PEDCO-120-PR-PI-0023
P&ID - Potable Water System	BK-GCS-PEDCO-120-PR-PI-0024
P&ID - Glycol Sump Drum	BK-GCS-PEDCO-120-PR-PI-0025
P&ID - Fire Water Network	BK-GCS-PEDCO-120-SA-PI-0001
P&ID - Total Flooding System For Extension of Existing Elect. Building	BK-GCS-PEDCO-120-SA-PI-0002



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DATA SHEETS FOR PRESSURE & DIFF. PRESSURE GAUGE

شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۴ از ۱۰
۰۵۳ - ۰۷۳ - ۹۱۸۴	BK	GCS	PEDCO	120	IN	DT	0001	D02	

GENERAL NOTES:

- Pressure elements shall be capable of withstanding intermittent over-ranging to 1.3 times the maximum scale reading.
- Ranges shall be selected suitable to have the operating pressure in the middle third of the scale.
- Vendor is responsible for applying suitable accessories to prevent damage and to reach required accuracy for PG.
- Vendor to follow materials indicated in the Data Sheets, related wetted parts, these materials can be as minimum and shall be verified by vendor.
- Gauges shall be supplied with syphon on steam services which operating temperatures are more than 100°C.
- Tag plate as per Specification for Instrumentation, shall be stainless steel 304 SS (VTC). Following details shall be engraved on them:
 - Tag Number
 - Range limit
 - Service
 - Manufacturer model and serial number
- Weep hole shall be provided on the case bottom of all gauges.
- Material Test Certificate and Calibration Certificate for all gauges to be submitted by vendor.
- Each pressure gauge which doesn't have Diaphragm Seal, shall be supplied with a Two way (valve) manifold (block & bleed manifold) by vendor (Process Conn. 1/2"NPTF, 316 S.S.).
- Environmental Condition For Field Instrumentation Of BINAK Complex Shall Be Considered As Per The Following (According to "BK-GNRL-PEDCO-000-PR-DB-0001: Process Basis Of Design":

Maximum ambient temperature: 50 (°C)
 Minimum ambient temperature: 5 (°C)
 Maximum steel surface exposed to sun: 85 (°C)
 Maximum summer dry bulb: 50 (°C)
 DB/RH for Summer HVAC Design: 41 °C / 61 % (Note */ Note**
 DB FOR Winter HVAC Design: 6 °C

Relative Humidity:

 - Maximum Design relative humidity (%): 100
 - Minimum Design relative humidity (%): 0
- Will be finalized as per Safety Department information.



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DATA SHEETS FOR PRESSURE & DIFF. PRESSURE GAUGE

شماره پیمان:

۰۵۳ - ۰۷۳ - ۹۱۸۴

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PRESSURE GAUGE

GENERAL	1	Tag No.	P&ID No.	SEE PAGE 6	SEE PAGE 6
	2	Service	Piping Class	SEE PAGE 6	SEE PAGE 6
	3	Area Clacification		Zone 2, IIB T4	
PROCESS CONDITION	4	Fluid	Phase	SEE PAGE 6	SEE PAGE 6
	5	Operating. Pressure	Design. Pressure	SEE PAGE 6	SEE PAGE 6 (barg)
	6	Operating. Temperature	Design. Temperature	SEE PAGE 6	SEE PAGE 6 (°C)
	7	Min. Design Metal Temperature		SEE PAGE 6	(°C)
GAUGE	8	Range		SEE PAGE 6	
	9	Type		Pressure Gauge-Direct Reading	
	10	Instrument Range		SEE PAGE 6	
	11	Liquid Filled		Silicon Oil - SEE PAGE 6~9	(Note 5)
	12	Mounting		Direct	
	13	Dial Size	Dial Color	Zero Adjustment	150 mm
	14	Case Material	Ring Material		White with black lettering
	15	Blow-Out Protection			Adjustable pointer
	16	Windows Material	Dial Material		304 SS (Note 2 & 9)
	17	Pressure Element Type			304 SS
	18	Pressure Element Material	Stem Material		Required-Back
	19	Connection Material			Shatter proof glass
	20	Connection Size			Aluminum
	21	Connection Location			SEE PAGE 6
	22	Movement Material			SEE PAGE 6
DIAPHRAGM SEAL	23	Nominal Accuracy			316 SS
	24	Ingress Protection			IP-65 as minimum
	25	Type			N/A
	26	Size (In)			N/A
	27	Diaphragm Material			N/A
	28	Fill Fluid			N/A
OPTIONS	29	Capillary Length			N/A
	30	Capillary Material			N/A
	31				
	32	Movement Damping			SEE PAGE 6
	33	Overrange Protection			SEE PAGE 6 (1.3 of F.S) (Note 7)
	34	Siphon	Material		SEE PAGE 6
	35	Manifold	Body Material		316 S.S
	36	Process Connection	Rating		2 Way Manifold
PURCHASING DATA	37	Manifold Model	Manifold Manufacturer		SEE PAGE 6 (Note 6)
	38	NACE Requirements			SEE PAGE 6 (Note 1)
	39				
	40				
PURCHASING DATA	41	Model No.	Manufacturer		(Note 8)
	42	Supplier	Order		(Note 8)
	43				
	44				

NOTES : VTA : Vendor to Advise

- (1) NACE-MR-0175/ISO 15156 requirements shall be covered where Piping/Pipeline Material Specification recommended.
- (2) Window shall be heavy plate glass, breakage resistance and shatter proof.
- (3) Pressure gauges shall be double scale type (Bar and Psi).
- (4) All gauges shall be equipped with screw driver slot type adjustment for calibration purposes.
- (5) Oil-filled system or Pulsation dampeners shall be supplied for all pressure instruments and gauges in vibrating or pulsating services.
- (6) 1/2"NPT for Instrument/Process connection and 1/4" NPT for Drain Connection-All Manifolds, Pulsation Dampners and Siphons shall be suitable for connecting to gauges (1/2" NPT). And the material shall be 316 SS.
- (7) Over range protection shall be 1.3 times the maximum range.
- (8) Will be finalized later at the purchasing time.
- (9) Cases for pressure gauges shall be solid front stainless steel.
- (10) Weep hole shall be provided on the case bottom of all gauges.



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شماره صفحه: ۶ از ۱۱

Rev.	Item No.	Tag No.	P&ID No.	LINE/ EQUIPME T	Piping Class	Process Connection	Fluid	Phase	Operating Pressure (barg)	Design Pressure (barg)	Instrument Range (barg)	Liquid, Filled	Press. Element Type	Press. Element Material	Movement Dampener (Snubber)	Over Range Protection	Siphon	Diaphragm Seal	Nace	Model	Remark
D02-Modified	1	PG-2101	BK-GCS-PEDCO-120-PR-PI-0002	GAS-111-0001-AN07-6"-PT	AN07	1/2" NPT	HYDROCARBON	GAS	7.5	18.2	0-16	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	2	PG-2102	BK-GCS-PEDCO-120-PR-PI-0002	GAS-111-0001-AN07-6"-PT	AN07	1/2" NPT	HYDROCARBON	GAS	7.5	18.2	0-16	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	3	PG-2103	BK-GCS-PEDCO-120-PR-PI-0003	GAS-111-0008-FN07-8"-PT	FN07	1/2" NPT	HYDROCARBON	GAS	7.5	175	0-16	Yes	Bourdon	SS 316L	No	Yes	No	No	Yes	VTA	Note 1
D02-Modified	4	PG-2104	BK-GCS-PEDCO-120-PR-PI-0003	GAS-111-0008-FN07-8"-PT	FN07	1/2" NPT	HYDROCARBON	GAS	7.5	175	0-16	Yes	Bourdon	SS 316L	No	Yes	No	No	Yes	VTA	Note 1
D02-Modified	5	PG-2111	BK-GCS-PEDCO-120-PR-PI-0004 (1 of 2)	V-2104	AN07	1/2" NPT	HYDROCARBON/ WATER	GAS	5.5	FV/9	0-10	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	6	PG-2114A	BK-GCS-PEDCO-120-PR-PI-0004 (2 of 2)	CDH-111-0010-AS00-4"-NP	AS00	1/2" NPT	WATER	LIQUID	5.5	13.9	0-10	Yes	Bourdon	SS 316L	No	Yes	No	No	Yes	VTA	Note 1
D02-Modified	7	PG-2113A	BK-GCS-PEDCO-120-PR-PI-0004 (2 of 2)	CDH-111-0012-CN05-3"-PT	CN05	1/2" NPT	WATER	LIQUID	19.5	47.7	0-40	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	8	PG-2113B	BK-GCS-PEDCO-120-PR-PI-0004 (2 of 2)	CDH-111-0013-CN05-4"-PT	CN05	1/2" NPT	WATER	LIQUID	19.5	47.7	0-40	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	9	PG-2114B	BK-GCS-PEDCO-120-PR-PI-0004 (2 of 2)	CDH-111-0011-AS00-4"-PT	AS00	1/2" NPT	WATER	LIQUID	5.5	13.9	0-10	Yes	Bourdon	SS 316L	No	Yes	No	No	Yes	VTA	Note 1
D02-Modified	10	PG-2114	BK-GCS-PEDCO-120-PR-PI-0005	V-2105	AN07	1/2" NPT	HYDROCARBON/ WATER	GAS	5.3	FV/9	0-10	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	11	PG-2115	BK-GCS-PEDCO-120-PR-PI-0005	GAS-111-0025-AN07-10"-PT	AN07	1/2" NPT	HYDROCARBON/ WATER	GAS	5.1	18.2	0-10	Yes	Bourdon	SS 316L	No	Yes	No	No	Yes	VTA	Note 1
D02-Modified	12	PG-2121A	BK-GCS-PEDCO-120-PR-PI-0006 (1 of 3)	V-2101-A	CN05	1/2" NPT	HYDROCARBON	GAS	5.1	FV/22	0-10	Yes	Bourdon	SS 316L	No	Yes	No	No	Yes	VTA	Note 1
D02-Modified	13	PG-2121B	BK-GCS-PEDCO-120-PR-PI-0006 (2 of 3)	V-2101-B	CN05	1/2" NPT	HYDROCARBON	GAS	5.1	FV/22	0-10	Yes	Bourdon	SS 316L	No	Yes	No	No	Yes	VTA	Note 1
D02-Modified	14	PG-2121C	BK-GCS-PEDCO-120-PR-PI-0006 (3 of 3)	V-2101-C	CN05	1/2" NPT	HYDROCARBON	GAS	5.1	FV/22	0-10	Yes	Bourdon	SS 316L	No	Yes	No	No	Yes	VTA	Note 1
D02-Modified	15	PG-2122A	BK-GCS-PEDCO-120-PR-PI-0007 (1 of 3)	GAS-111-0031A-CN05-8"-ET	CN05	1/2" NPT	HYDROCARBON	GAS	4.9	47.7	0-10	Yes	Bourdon	SS 316L	No	Yes	No	No	Yes	VTA	Note 1
D02-Modified	16	PG-2123A	BK-GCS-PEDCO-120-PR-PI-0007 (1 of 3)	GAS-111-0036A-CN05-6"-NP	CN05	1/2" NPT	HYDROCARBON	GAS	19	47.7	0-40	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	17	PG-2122B	BK-GCS-PEDCO-120-PR-PI-0007 (2 of 3)	GAS-111-0031B-CN05-8"-ET	CN05	1/2" NPT	HYDROCARBON	GAS	4.9	47.7	0-10	Yes	Bourdon	SS 316L	No	Yes	No	No	Yes	VTA	Note 1
D02-Modified	18	PG-2123B	BK-GCS-PEDCO-120-PR-PI-0007 (2 of 3)	GAS-111-0036B-CN05-6"-NP	CN05	1/2" NPT	HYDROCARBON	GAS	19	47.7	0-40	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	19	PG-2122C	BK-GCS-PEDCO-120-PR-PI-0007 (3 of 3)	GAS-111-0031C-CN05-8"-ET	CN05	1/2" NPT	HYDROCARBON	GAS	4.9	47.7	0-10	Yes	Bourdon	SS 316L	No	Yes	No	No	Yes	VTA	Note 1
D02-Modified	20	PG-2123C	BK-GCS-PEDCO-120-PR-PI-0007 (3 of 3)	GAS-111-0036C-CN05-6"-NP	CN05	1/2" NPT	HYDROCARBON	GAS	19	47.7	0-40	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	21	PG-2124A	BK-GCS-PEDCO-120-PR-PI-0008 (1 of 3)	GAS-111-0037A-CS00-6"-NP	CS00	1/2" NPT	HYDROCARBON	GAS/LIQUID	18.3	30.3	0-40	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1
D02-Modified	22	PG-2124B	BK-GCS-PEDCO-120-PR-PI-0008 (2 of 3)	GAS-111-0037B-CS00-6"-NP	CS00	1/2" NPT	HYDROCARBON	GAS/LIQUID	18.3	30.3	0-40	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1
D02-Modified	23	PG-2124C	BK-GCS-PEDCO-120-PR-PI-0008 (3 of 3)	GAS-111-0037C-CS00-6"-NP	CS00	1/2" NPT	HYDROCARBON	GAS/LIQUID	18.3	30.3	0-40	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1



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DATA SHEETS FOR PRESSURE & DIFF. PRESSURE GAUGE



شماره صفحه: ۷ از ۱۱

Rev.	Item No.	Tag No.	P&ID No.	LINE/ EQUIP T	Piping Class	Process Connection	Fluid	Phase	Operating Pressure (barg)	Design Pressure (barg)	Instrument Range (barg)	Liquid Filled	Press. Element Type	Press. Element Material	Movement Dampener (Snubber)	Over Range Protection	Siphon	Diaphragm Seal	Nace	Model	Remark
D02-Modified	24	PG-2131A	BK-GCS-PEDCO-120-PR-PI-0009 (1 of 3)	V-2102-A	CS00	1/2" NPT	HYDROCARBON	GAS	18.3	FV/22	0-40	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	25	PG-2131B	BK-GCS-PEDCO-120-PR-PI-0009 (2 of 3)	V-2102-B	CS00	1/2" NPT	HYDROCARBON	GAS	18.3	FV/22	0-40	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	26	PG-2131C	BK-GCS-PEDCO-120-PR-PI-0009 (3 of 3)	V-2102-C	CS00	1/2" NPT	HYDROCARBON	GAS	18.3	FV/22	0-40	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	27	PG-2132A	BK-GCS-PEDCO-120-PR-PI-0010 (1 of 3)	GAS-111-0044A-CN05-6"-ET	CN05	1/2" NPT	HYDROCARBON	GAS	18.1	47.7	0-40	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	28	PG-2133A	BK-GCS-PEDCO-120-PR-PI-0010 (1 of 3)	GAS-111-0051A-FN05-6"-IS	FN05	1/2" NPT	HYDROCARBON	GAS	54.8	90	0-100	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	29	PG-2132B	BK-GCS-PEDCO-120-PR-PI-0010 (2 of 3)	GAS-111-0044B-CN05-6"-ET	CN05	1/2" NPT	HYDROCARBON	GAS	18.1	47.7	0-40	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	30	PG-2133B	BK-GCS-PEDCO-120-PR-PI-0010 (2 of 3)	GAS-111-0051B-FN05-6"-IS	FN05	1/2" NPT	HYDROCARBON	GAS	54.8	90	0-100	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	31	PG-2132C	BK-GCS-PEDCO-120-PR-PI-0010 (3 of 3)	GAS-111-0044C-CN05-6"-ET	CN05	1/2" NPT	HYDROCARBON	GAS	18.1	47.7	0-40	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	32	PG-2133C	BK-GCS-PEDCO-120-PR-PI-0010 (3 of 3)	GAS-111-0051C-FN05-6"-IS	FN05	1/2" NPT	HYDROCARBON	GAS	54.8	90	0-100	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	33	PG-2134A	BK-GCS-PEDCO-120-PR-PI-0011 (1 of 3)	GAS-111-0058A-FS00-6"-NP	FS00	1/2" NPT	HYDROCARBON	GAS/LIQUID	54.1	62.4	0-100	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1
D02-Modified	34	PG-2134B	BK-GCS-PEDCO-120-PR-PI-0011 (2 of 3)	GAS-111-0058B-FS00-6"-NP	FS00	1/2" NPT	HYDROCARBON	GAS/LIQUID	54.1	62.4	0-100	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1
D02-Modified	35	PG-2134C	BK-GCS-PEDCO-120-PR-PI-0011 (3 of 3)	GAS-111-0058C-FS00-6"-NP	FS00	1/2" NPT	HYDROCARBON	GAS/LIQUID	54.1	62.4	0-100	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1
D02-Modified	36	PG-2142	BK-GCS-PEDCO-120-PR-PI-0012	V-2103	FN05	1/2" NPT	HYDROCARBON	GAS	53.9	90	0-100	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	37	PG-2141	BK-GCS-PEDCO-120-PR-PI-0012	V-2103	FN05	1/2" NPT	HYDROCARBON	GAS	53.9	FV/62	0-100	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1
D02-Modified	38	PG-2162	BK-GCS-PEDCO-120-PR-PI-0014	TEG-111-0004-AN04-2"-PT	AN04	1/2" NPT	LEAN GLYCOL	LIQUID	0.02	18.2	0-40 mbar VTA	Yes	Diaphragm	SS 316L	No	Yes	No	No	No	VTA	Note 1
D02-Modified	39	PG-2163A	BK-GCS-PEDCO-120-PR-PI-0014	TEG-111-0002-AN04-2"-PT	AN04	1/2" NPT	LEAN GLYCOL	LIQUID	2.1	18.2	0-4	Yes	Bourdon	SS 316L	No	Yes	No	No	No	VTA	Note 1
D02-Modified	40	PG-2163B	BK-GCS-PEDCO-120-PR-PI-0014	TEG-111-0006-AN04-2"-PT	AN04	1/2" NPT	LEAN GLYCOL	LIQUID	2.1	18.2	0-4	Yes	Bourdon	SS 316L	No	Yes	No	No	No	VTA	Note 1
D02-Modified	41	PG-2161	BK-GCS-PEDCO-120-PR-PI-0014	TOP OF THE TK-2102	AN07	1/2" NPT	LEAN GLYCOL	GAS	0.1	FULL OF LIQUID + 160MBARG/-7MBARG	0-250 mbar VTA	Yes	Diaphragm	SS 316L	No	Yes	No	No	No	VTA	Note 1
D02-Modified	42	PG-2201	BK-GCS-PEDCO-120-PR-PI-0015 (2 of 2)	ISA-112-0012-AZ00-2"-NP	AZ00	1/2" NPT	Air	GAS	8	18.2	0-16	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1
D02-Modified	43	PG-2202	BK-GCS-PEDCO-120-PR-PI-0015 (2 of 2)	V-2203	AZ00	1/2" NPT	Air	GAS	8	12.5	0-16	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1
D02-Modified	44	PG-2211	BK-GCS-PEDCO-120-PR-PI-0016	NIT-112-0021-AN01-2"-PT	AN01	1/2" NPT	Nitrogen	GAS	8	18.2	0-16	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1
D02-Modified	45	PG-2212	BK-GCS-PEDCO-120-PR-PI-0016	V-2204	AN01	1/2" NPT	Nitrogen	GAS	8	12.5	0-16	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1
D02-Modified	46	PG-2221	BK-GCS-PEDCO-120-PR-PI-0017 (2 of 2)	V-2202	AN07	1/2" NPT	HYDROCARBON/ WATER	LIQUID	0.5	FV/6.0	0-1	Yes	Diaphragm	SS 316L	No	Yes	No	No	Yes	VTA	Note 1
D02-Modified	47	PG-2251	BK-GCS-PEDCO-120-PR-PI-0020 (2 of 3)	V-2201	AN07	1/2" NPT	HYDROCARBON	GAS	0.5	FV/6.0	0-1	Yes	Diaphragm	SS 316L	No	Yes	No	No	Yes	VTA	Note 1
D02-Modified	48	PG-2251A	BK-GCS-PEDCO-120-PR-PI-0020 (2 of 3)	CDH-112-0038-AN07-2"-PT	AN07	1/2" NPT	HYDROCARBON	LIQUID	1.6	18.2	0-4	Yes	Bourdon	SS 316L	No	Yes	No	No	Yes	VTA	Note 1



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نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



شرکت توسعه و پارسا



DATA SHEETS FOR PRESSURE & DIFF. PRESSURE GAUGE

شماره صفحه: ۸ از ۱۱

شماره پیمان:

۰۵۴ - ۰۲۲ - ۹۱۸۴

روزه

بسته کاری

مادر کننده

تجهیزات

رشته

مروال

نصفه

BK

GCS

PEDCO

120

IN

0001

D02

D02

D02

D02

PRESSURE GAUGE

D02

D02

Rev.	Item No.	Tag No.	P&ID's No.	LINE/ EQUIPMENT	Piping Class	Process Connection	Fluid	Phase	Operating Pressure (barg)	Design Pressure (barg)	Instrument Range (barg)	Liquid Filled	Press. Element Type	Press. Element Material	Movement Dampener (Snubber)	Over Range Protection	Siphon	Diaphragm Seal	Nace	Model	Remark
D02-Modified	49	PG-2251B	BK-GCS-PEDCO-120-PR-PI-0020 (2 of 3)	CDH-112-0037-AN07-2"-PT	AN07	1/2" NPT	HYDROCARBON	LIQUID	1.6	18.2	0-4	Yes	Bourdon	SS 316L	No	Yes	No	No	Yes	VTA	Note 1
D02-Modified	50	PG-2272	BK-GCS-PEDCO-120-PR-PI-0022	FLG-111-0004-AN07-2"-PT	AN07	1/2" NPT	HYDROCARBON	GAS	5.1	18.2	0-10	Yes	Bourdon	SS 316L	No	Yes	No	No	Yes	VTA	Note 1
D02-Modified	51	PG-2273	BK-GCS-PEDCO-120-PR-PI-0022	V-2205	AN07	1/2" NPT	HYDROCARBON	GAS	4.9	FVI/9	0-10	Yes	Bourdon	SS 316L	No	No	No	No	Yes	VTA	Note 1



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نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

DATA SHEETS FOR PRESSURE & DIFF. PRESSURE GAUGE



شماره صفحه: ۹ از ۱۱

نسخه														مروال		رشته		تهیات		مادر کننده		بسته کاری		روژه		شماره پیمان:	
D02														0001		IN		120		PEDCO		GCS		BK		۰۴ - ۰۲ - ۱۱۸۱	
شماره صفحه: ۱۱ از ۹																											
PRESSURE GAUGE																											
D02		D02		D02		D02		D02		D02																	
Rev.	Item No.	Tag No.	P&IDs No.	LINE/ EQUIPME NT	Piping Class	Process Connection	Fluid	Phase	Operating Pressure (bar)	Design Pressure (bar)	Instrument Range (bar)	Liquid. Filled	Press. Element Type	Press. Element Material	Movement Damper (Snubber)	Over Range Protection	Siphon	Diaphragm Seal	Nace	Model	Remark						
D02-Modified	52	PG-2271	BK-GCS-PEDCO-120-PR-PI-0022	FLG-112-0010-AN07-2"-PT	AN07	1/2" NPT	HYDROCARBON	GAS	4.9	18.2	0-10	Yes	Bourdon	SS 316L	No	Yes	No	No	Yes	VTA	Note 1						
D02-Modified	53	PG-2274	BK-GCS-PEDCO-120-PR-PI-0022	FL-112-0040-AN07-2"-PT	AN07	1/2" NPT	HYDROCARBON	GAS	0.5	18.2	0-1	Yes	Diaphragm	SS 316L	No	Yes	No	No	Yes	VTA	Note 1						
D02-Modified	54	PG-2282	BK-GCS-PEDCO-120-PR-PI-0023	V-2206	AN01	1/2" NPT	HYDROCARBON	LIQUID/OIL	0.95	18.2	0-2.5	Yes	Diaphragm	SS 316L	No	Yes	No	No	No	VTA	Note 1						
D02-Modified	56	PG-2283	BK-GCS-PEDCO-120-PR-PI-0023	V-2206	AN01	1/2" NPT	HYDROCARBON	LIQUID/OIL	0.95	18.2	0-2.5	Yes	Diaphragm	SS 316L	No	Yes	No	No	No	VTA	Note 1						
D02-Modified	58	PG-2291	BK-GCS-PEDCO-120-PR-PI-0024	PTW-112-0003-AZ00-2"-NP	AZ00	1/2" NPT	Water	Liquid	1.95	18.2	0-4	Yes	Bourdon	SS 316L	No	Yes	No	No	No	VTA	Note 1						
D02-Modified	59	PG-2292	BK-GCS-PEDCO-120-PR-PI-0024	PTW-112-0001-AZ00-2"-NP	AZ00	1/2" NPT	Water	Liquid	0.15	18.2	0-250 mbar VTA	Yes	Diaphragm	SS 316L	No	Yes	No	No	No	VTA	Note 1						
D02-Modified	60	PG-2293	BK-GCS-PEDCO-120-PR-PI-0025	V-2107	AN04	1/2" NPT	RICH GLYCOL	Liquid	2.1	18.2	0-4	Yes	Bourdon	SS 316L	No	Yes	No	No	No	VTA	Note 1						
D02-Modified	61	PG-2294	BK-GCS-PEDCO-120-PR-PI-0025	TEG-111-001-AN04-2"-PT	AN04	1/2" NPT	RICH GLYCOL	Liquid	0.01	FV3.5	0-25 mbar VTA	Yes	Diaphragm	SS 316L	No	Yes	No	No	No	VTA	Note 1						
D02-Modified	62	PG-2295	BK-GCS-PEDCO-120-PR-PI-0025	NIT-111-0009-AN04-1"-PT	AN04	1/2" NPT	NITROGEN	GAS	0.5	18.2	0-1	Yes	Diaphragm	SS 316L	No	Yes	No	No	Yes	VTA	Note 1						
D02-Modified	63	PG-2301	BK-GCS-PEDCO-120-SA-PI-0001 (1 of 8)	FWA-113-0001-AN04-3"-PT	AN04	1/2" NPT	Water	Liquid	11.3	17	0-25	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1						
D02-Modified	64	PG-2305	BK-GCS-PEDCO-120-SA-PI-0001 (2 of 8)	FWA-113-0025-AN04-12"-PT	AN04	1/2" NPT	Water	Liquid	11.3	17	0-25	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1						
D02-Modified	65	PG-2303A	BK-GCS-PEDCO-120-SA-PI-0001 (2 of 8)	FWA-113-0027-AN04-2"-PT	AN04	1/2" NPT	Water	Liquid	1	1.5	0-2.5	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1						
D02-Modified	66	PG-2304A	BK-GCS-PEDCO-120-SA-PI-0001 (2 of 8)	FWA-113-0029-AN04-2"-PT	AN04	1/2" NPT	Water	Liquid	11.3	17	0-25	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1						
D02-Modified	67	PG-2303B	BK-GCS-PEDCO-120-SA-PI-0001 (2 of 8)	FWA-113-0026-AN04-2"-PT	AN04	1/2" NPT	Water	Liquid	1	1.5	0-2.5	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1						
D02-Modified	68	PG-2304B	BK-GCS-PEDCO-120-SA-PI-0001 (2 of 8)	FWA-113-0028-AN04-2"-PT	AN04	1/2" NPT	Water	Liquid	11.3	17	0-25	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1						
D02-Modified	69	PG-2301A	BK-GCS-PEDCO-120-SA-PI-0001 (2 of 8)	FWA-113-0006-AN04-12"-PT	AN04	1/2" NPT	Water	Liquid	1	1.5	0-2.5	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1						
D02-Modified	70	PG-2302A	BK-GCS-PEDCO-120-SA-PI-0001 (2 of 8)	FWA-113-00022-AN04-10"-PT	AN04	1/2" NPT	Water	Liquid	11.3	17	0-25	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1						
D02-Modified	71	PG-2301B	BK-GCS-PEDCO-120-SA-PI-0001 (2 of 8)	FWA-113-0006-AN04-12"-PT	AN04	1/2" NPT	Water	Liquid	1	1.5	0-2.5	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1						
D02-Modified	72	PG-2302B	BK-GCS-PEDCO-120-SA-PI-0001 (2 of 8)	FWA-113-0021-AN04-10"-PT	AN04	1/2" NPT	Water	Liquid	11.3	17	0-25	Yes	Bourdon	SS 316L	No	No	No	No	No	VTA	Note 1						

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							 	
	DATA SHEETS FOR PRESSURE & DIFF. PRESSURE GAUGE								
	شماره پیمان:	پروژه	بسته کاری	صادر کننده	تجهیزات	رشته	نوع مدرک	سریال	نسخه
۰۵۳ - ۰۷۳ - ۹۱۸۴	BK	GCS	PEDCO	120	IN	DT	0001	D02	شماره صفحه: ۹ از ۱۰

Differential Pressure Gauge				
GENERAL	1	Item	See Page 10	
	2	Tag Number	See Page 10	
	3	Service	See Page 10	
	4	Line No.	See Page 10	
	5	Equipment No.	P&ID No.	See Page 10
	6	Area Classification	Zone 2, IIB T4	
PROCESS CONDITIONS	7	Fluid	Fluid State	See Page 10
	8	Max Press. Oper.	Design Pressure	See Page 10 barg
	9	Oper. Temp.	Design Temperature	See Page 10 °C
MANIFOLD	10	Manifold Type	Manifold Material	5 Way Manifold 316 S.S.
	11	Connection	Manifold Rating	1/2" NPTF (Note 6) (Note 11)
CASE	12	Case Type	Case Style	Silicon Oil Filled weather proof (IP 65)
	13	Case Material	Case Size	304 S.S. 150 mm
	14	Case Pressure Relief	Yes	
	15	Conn. Location	Proc. Connection	bottom See Page 10
	16	Ring Style	Ring Material	VTA 304 S.S.
	17	Mounting Type	Blow-out protection	Direct Back
	18	Socket Material	316 S.S.	
	19	Window Material	Shatterproof glass	
	20	Seal / O-Ring Material	VTA	
	21	Liquid Fill Material	VTA	
ELEMENT	22	Element Type	Element Material	Diaphragm 316 S.S.
	23	Movement Style	Movement Material	VTA 316 S.S.
	24	Over Range Protection	1.3 times of maximum operating pressure	
	25	Accuracy	±0.5% of F.S.	
	26	Internal Stop	Yes	
	27	Measuring Range	See Page 10	barg
	28	Dial Scale Type	Dial Material	Dual indicating scales (barg/psig) aluminum
DIAL	29	Dial Color	black marks on white background	
	30	Zero Adjustment	Adjustable pointer	
	31	Syphon	Material	See Page 10 316 S.S.(if necessary)
ACCESSORY	32	Pulsation Damper	Material	See Page 10 316 S.S.(if necessary)
	33	Over Range Protection	Material	See Page 10 316 S.S.(if necessary)
	34	End Connection	1/2" NPT (Note 6)	
	35	Seal Type	N/A	
DIAPHRAGM SEAL	36	Instrument Conn.	Process Conn.	N/A N/A
	37	Diaphragm Extension Length	N/A	
	38	Diaphragm Material	N/A	
	39	Capillary Material	Capillary Length	N/A N/A
	40	Housing Mtrl.	Lower	N/A N/A
	41	Bolting Material	N/A	
	42	Gasket / O-Ring Material	N/A	
	43	Fill Fluid Material	N/A	
	44	NACE MR0175/ISO 15156 Compliance	See Page 10	
PURCHASE	45	Manufacturer	(Note 8)	
	46	Model	(Note 8)	

NOTES: VTA : Vendor to Advise
N/A: Not Applicable

- (1) NACE-MR-0175/ISO 15156 requirements shall be covered where Piping/Pipeline Material Specification recommended.
- (2) Window shall be heavy plate glass, breakage resistance and shatter proof.
- (3) Pressure gauges shall be double scale type (Bar and Psi).
- (4) All gauges shall be equipped with screw driver slot type adjustment for calibration purposes.
- (5) Oil-filled system or Pulsation dampeners shall be supplied for all pressure instruments and gauges in vibrating or pulsating services.
- (6) 1/2"NPT for Instrument/Process connection and 1/4" NPT for Drain Connection-All Manifolds, Pulsation Dampners and Siphons shall be suitable for connecting to gauges (1/2" NPT). And the material shall be 316 SS.
- (7) Over range protection shall be 1.3 times the maximum range.
- (8) Will be finalized later at the purchasing time.
- (9) Cases for pressure gauges shall be solid front stainless steel.
- (10) Weep hole shall be provided on the case bottom of all gauges.
- (11) For manifolded rating, Bolt & Gasket material refer to "Piping Material Specification Doc No.: BK-GCS-PEDCO-120-PI-SP-0001"
- (12) Gauge pointer shall be adjustable (micro meter adjustment) without removal from pinion shaft.

 NISOC		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک										 شرکت توسعه و پارس													
		DATA SHEETS FOR PRESSURE & DIFF. PRESSURE GAUGE																							
شماره پیمان: ۱۳۸۶ - ۱۳ - ۰۳		پروژه	بسته کاری	مکان کننده	نمودار	رشته	نوع مدرک	میرال	نقطه	شماره سند: ۴ از ۱۱															
		BK	GCS	PEDCO	120	IN	DT	0001	D02																
DIFFERENTIAL PRESSURE GAUGE																									
Rev.	Item No.	Tag No.	P&IDs No.	Service.	LINE/ EQUIPMENT	Piping Class	Connection Rating	Process Connection	Fluid	Phase	Operating Pressure (barg)	Design Pressure (barg)	Operating Temperature (°C)	Design Temperature (°C)	Instrument Range (mbarg)	Liquid Filled	Press. Element Type	Press. Element Material	Movement Damper (Snubber)	Over Range Protection	Siphon	Diaphragm Seal	Nace	Model	Remark
	1	PDG-2114A	BK-GCS-PEDCO-120-PR-PI-0004 (2 of 2)	BEFORE SLUG PUMP A	CDH-112-0010-AS00-4"-PT	AS00	-	1/2" NPT	WATER	LIQUID	5.5	13.9	23.22/8.82	85	0-500	Yes	Bourdon	SS 316L	No	Yes	No	No	NO	VTA	Note 1
	2	PDG-2114B	BK-GCS-PEDCO-120-PR-PI-0004 (2 of 2)	BEFORE SLUG PUMP B	CDH-112-0011-AS00-4"-PT	AS00	-	1/2" NPT	WATER	LIQUID	5.5	13.9	23.22/8.82	85	0-500	Yes	Bourdon	SS 316L	No	Yes	No	No	NO	VTA	Note 1
	3	PDG-2271	BK-GCS-PEDCO-120-PR-PI-0022	FUEL GAS K.O. DRUM	V-2205	-	-	1/2" NPT	HYDROCARBON	GAS	4.9	FV9	33.6	85	0-500	Yes	Bourdon	SS 316L	No	Yes	No	No	YES	VTA	Note 1