

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک بسته‌های کاری تحت‌الارض احداث خطوط انتقال گاز/مایعات گازی از ایستگاه تقویت فشار گاز بینک تا ایستگاه تزریق گاز سیاه‌مکان/واحد بهره برداری بینک								
	DATA SHEETS FOR PRESSURE / DIFF. PRESSURE TRANSMITTER								
شماره پیمان: 053 - 073 - 9184	پروژه BK	بسته کاری PPL	صادرکننده PEDCO	تسهیلات 320	رشته IN	نوع مدرک DT	سریال 0003	نسخه D02	شماره صفحه: 1 از 6

طرح نگهداشت و افزایش تولید 27 مخزن

DATA SHEETS FOR PRESSURE / DIFF. PRESSURE TRANSMITTER

نگهداشت و افزایش تولید میدان نفتی بینک

D02	JUN.2023	AFC	P.Hajisadeghi	M.Fakharian	A.M.Mohseni	
D01	JUN.2022	IFA	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
D00	JAN.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-708583

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
بسته‌های کاری تحت‌الارض

احداث خطوط انتقال گاز/مایعات گازی از ایستگاه تقویت فشار گاز بینک تا
ایستگاه تزریق گاز سیاه‌مکان/واحد بهره برداری بینک



DATA SHEETS FOR PRESSURE / DIFF. PRESSURE TRANSMITTER

شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 2 از 6
053 - 073 - 9184	BK	PPL	PEDCO	320	IN	DT	0003	D02	

REVISION RECORD SHEET

Page	D00	D01	D02	D03	D04	Page	D00	D01	D02	D03	D04
1	X	X	X			65					
2	X	X	X			66					
3	X	X				67					
4	X	X				68					
5	X	X	X			69					
6	X	X	X			70					
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نگهداشت و افزایش تولید میدان نفتی بینک
بسته‌های کاری تحت‌الارض

احداث خطوط انتقال گاز/مایعات گازی از ایستگاه تقویت فشار گاز بینک تا
ایستگاه تزریق گاز سیاهمکان/واحد بهره برداری بینک



DATA SHEETS FOR PRESSURE / DIFF. PRESSURE TRANSMITTER

شماره پیمان:

053 - 073 – 9184

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه
D02	0003	DT	IN	320	PEDCO	PPL	BK

شماره صفحه: 3 از 6

REFERENCE DOCUMENTS :

1.Instrument & Control System Design Criteria	BK-PPL-PEDCO-320-IN-DC-0001_D00
2.P&ID - Gas Pipeline (to Siahmakan G.I. Station)	BK-PPL-PEDCO-320-PR-PI-0001_D02
3.P&ID - Condensate Pipeline (to Binak PU)	BK-PPL-PEDCO-320-PR-PI-0002_D02
4.Piping Material Specification	BK-PPL-PEDCO-320-PI-SP-0001_D01
5.Specification For Instrumentation	BK-GNRAL-PEDCO-000-IN-SP-0001_D03
6. Instrument Hook-Up Diagram	BK-PPL-PEDCO-320-IN-DG-0002_D00
7. Process Basic of Design	BK-GNRAL-PEDCO-000-PR-DB-0001_D01

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	DATA SHEETS FOR PRESSURE / DIFF. PRESSURE TRANSMITTER								
شماره پیمان: 053 - 073 - 9184	پروژه BK	بسته کاری PPL	صادرکننده PEDCO	تسهیلات 320	رشته IN	نوع مدرک DT	سریال 0003	نسخه D02	شماره صفحه: 4 از 6

GENERAL NOTES:

- 1 - Zero and span adjustment shall be included and be accessible from outside in addition to Hand Held Communicator (HHC).
- 2 - Pressure elements shall be furnished with over-range protection to at least 1.5 times the maximum range of the instrument
- 3 - S.S. name plate including project description to be provided.
- 4 - Painting shall be in accordance with manufacturer standard.
- 5- If smart type transmitters are selected for ESD application they shall be configured as "write protected".
- 6- All instruments and micro-processor based system shall meet the following Radio Frequency Immunity (RFI) requirements that shall be tested at the acceptance test stage. Basic reference standard is IEC 60801 (part 3) for design and manufacturing considerations.
- 7-Tropicalization shall be applied to protect electrical circuits and electronic cards from being degraded by corrosion and/or fungus growth.
- 8- Environmental condition for field instrumentation of BINAK Complex shall be considered as per the followings:
 - Maximum ambient temperature: 50 (°C)
 - Minimum ambient temperature: 5 (°C)
 - Maximum steel surface exposed to sun: 85 (°C)
 - Maximum summer dry bulb: 50 (°C)
 - Maximum Design relative humidity (%): 100
 - Minimum Design relative humidity (%): 0
 - Maximum Design relative humidity (%): 100
 - Minimum Design relative humidity (%): 0
- 9- Material Test Certificate and calibration Certificate for all transmitters to be submitted by Vendor.

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	احداث خطوط انتقال گاز/مایعات گازی از ایستگاه تقویت فشار گاز بینک تا ایستگاه تزریق گاز سیاه‌مکان/واحد بهره برداری بینک								
	DATA SHEETS FOR PRESSURE / DIFF. PRESSURE TRANSMITTER								
شماره پیمان: 053 - 073 - 9184	پروژه	بسته کاری	صادرکننده	تجهیزات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 5 از 6
	BK	PPL	PEDCO	320	IN	DT	0003	D02	

PRESSURE TRANSMITTER				
GENERAL DATA	1	Tag No.	SEE NEXT PAGE	
	2	P&ID No.	SEE NEXT PAGE	
	3	Equipment No. / Line No.	SEE NEXT PAGE	
	4	Area Classification	ZONE 2, IIB T4	
	5	Piping Class	SEE NEXT PAGE	
OPERATING CONDITIONS	6	Fluid	SEE NEXT PAGE	
	7	Phase	SEE NEXT PAGE	
	8	Operating Pressure (bar-g)	SEE NEXT PAGE	
	9	Design Pressure (bar-g)	SEE NEXT PAGE	
	10	Operating Temperature (°C)	SEE NEXT PAGE	
TRANSMITTER	11	Design Temperature (°C)	SEE NEXT PAGE	
	12	Element Type (NOTE 4 IN BELOW TABLE)	SEE NEXT PAGE	
	13	Size of Process Connection	SEE NEXT PAGE	
	14	Rating of Process Connection	SEE NEXT PAGE	
	15	Element Material	SEE NEXT PAGE	
	16	Enclosure Material	Die cast aluminium	
	17	Instrument Range	SEE NEXT PAGE	
	18	Calibration Range	SEE NEXT PAGE	
	19	Power Supply	24 VDC-Loop powered	
	20	Output Signal	4-20mA	
	21	Communication Protocol	HART(4-20mA)	
	22	Electrical Connection	ISO M20 x 1.5	
	23	Electrical Certification	Ex "ia"	
	24	Weather Protection	IP-65 as minimum	
	25	Accuracy	+/- 0.1% F.S	
	26	Repeatability	+/- 0.1% F.S	
	27	Span and Zero Adjustment	Required	
	28	Over Range Protection	Yes/ 1.5 Times the Maximum Range (Note 2 in General note)	
	29	Write Protected	Required (see Note 5 in General Note)	
	30	RFI Protection	Required (see Note 6 in General Note)	
	31	Tropicalization	Required (see Note 7 in General Note)	
DIAPHRAGM SEAL	32	Type	N/A	
	33	Size (In)	N/A	
	34	Fill Fluid	N/A	
	35	Diaphragm Material	N/A	
	36	Capillary Material	N/A	
	37	Capillary Length	N/A	
OPTIONS	38	Integral Indicator	Display Unit	Required Bar-g
	39	Mounting Brackets	Required, 2" Support Pipe (Note 3 In Below Table)	
	40	Manifold	Manifold Material	2 Way Block & Bleed Manifold 316 S.S
	41	Process/Instrument Connection	Drain Connection D02	1/2 " NPTF (Note 2,5,7 in below table) 1/4" NPTF D02
	42	Manifold Model	Manifold Manufacturer	will be finalized
	43	Integral Indicator Style	LCD TYPE	
	44	NACE Requirements	SEE NEXT PAGE	
	45	Model	Manufacturer	will be finalized
PURCHASING DATA	46	Supplier	Order	will be finalized

NOTES :

- VTA : VENDOR TO ADVISE N/A: NOT APPLICABLE VTC: VENDOR TO CONFIRM
- 1 : As per specification (reference 5) , all of the wetted parts in Sour service " Specification For Material Requirements in Sour service BK-GNRL-PEDCO-000-PI-SP-0008" and NACE-MR-0175/ISO 15156 shall be covered where in Piping/Pipeline Material Specification recommended.
- 2 :All manifolds shall be suitable for connection to transmitter and process line.
- 3 : Mounting Yoke, U-bolt , Nuts and all accessories shall be supplied by vendor.
- 4 : Suitable element type to be confirmed by vendor.
- 5: For manifold rating, refer to "Piping Material Specification Doc No.BK-PPL-PEDCO-320-PI-SP-0001.
- 6 :Burn out direction shall be capable to set.
- 7: Instrument/Process connection to be as follows:
- Process Connection: 1/2" NPTF
- Instrument Connection: 1/2" NPTF
- Drain Connection: 1/4" NPTF
- 8: One "HART COMMUNICATOR DEVICE" shall be provided for Calibrating of the transmitters.



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نگهداشت و افزایش تولید میدان نفتی بینک
 بسته‌های کاری تحت‌الارض

احداث خطوط انتقال گاز/مایعات گازی از ایستگاه تقویت فشار گاز بینک تا ایستگاه تزریق گاز سیاه‌مکان/واحد بهره برداری بینک




DATA SHEETS FOR PRESSURE / DIFF. PRESSURE TRANSMITTER																		
شماره پیمان:		پروژه:	بسته کاری:	مکان/کدام:	نقطه‌ات:	رشته:	نوع مدرک:	سردال:	نقطه:	شماره صفحه: 6 از 6								
053 - 072 - 9184		BK	PPL	PEDCO	320	IN	DT	0003	D02									

PRESSURE TRANSMITTER																					
Rev.	Item No.	Tag No.	P&ID No.	Equipment No. / Line No.	Piping Class/ Rating	Service	Fluid/Phase	Design Pressure (Bar-g)	Operating Pressure (Bar-g)	Design Temp. (°C)	Operating Temp. (°C)	Instrument Range	Calibration Range (Bar-g) (Note 1)	Element Type	Element Material	Size of Process Connection	Rating of Process Connection	2 Way Manifold (Block & Bleed)	NACE	Model	Remark
	1	PT-3201A	BK-PPL-PEDCO-320-PR-PI-0001 (1/3)	GAS-113-0072-FN05-8"-PT	FN05	FROM DEHYDRATION (PK-2101)	HYDROCARBON/GAS	62	50.90	85	58.30	VTA	0-100	Diaphragm (VTC)	SS 316	1/2" NPT	6000#	Yes	Yes	VTA	See Note 1 in Below Table
	2	PT-3201B	BK-PPL-PEDCO-320-PR-PI-0001 (1/3)	GAS-113-0072-FN05-8"-PT	FN05	FROM DEHYDRATION (PK-2101)	HYDROCARBON/GAS	62	50.90	85	58.30	VTA	0-100	Diaphragm (VTC)	SS 316	1/2" NPT	6000#	Yes	Yes	VTA	See Note 1 in Below Table
	3	PT-3201C	BK-PPL-PEDCO-320-PR-PI-0001 (1/3)	GAS-113-0072-FN05-8"-PT	FN05	FROM DEHYDRATION (PK-2101)	HYDROCARBON/GAS	62	50.90	85	58.30	VTA	0-100	Diaphragm (VTC)	SS 316	1/2" NPT	6000#	Yes	Yes	VTA	See Note 1 in Below Table

NOTE:

1- Pressure limit valve to be considered by vendor if required (as per project specification and related standards due to vendor selected instrument range)

2- Existing data to be submitted /confirmed by client.

3- For Manifold Pressure Rating (threaded connection), bolt & gasket material refer to "Piping Material Specification DOC NO. BK-PPL-PEDCO-320-PI-SP-0001"