

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک فعالیت های رو زمینی در بسته های کاری تحت الارض ساخت موقعیت چاه، تأسیسات سرچاهی، خطوط جریانی، تسهیلات برق رسانی مربوط به موقعیت W007S و توسعه چندراهه کلاستر بینک DATA SHEETS FOR PRESSURE TRANSMITTER- EXTENSION OF BINAK B/C MANIFOLD							 	
	شماره پیمان:	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه
۰۵۳ - ۰۷۳ - ۹۱۸۴	D02	0003	DT	IN	110	PEDCO	W007S	BK	

طرح نگهداشت و افزایش تولید ۲۷ مخزن

DATA SHEETS FOR PRESSURE TRANSMITTER- EXTENSION OF BINAK B/C MANIFOLD

نگهداشت و افزایش تولید میدان نفتی بینک

D02	SEP.2022	AFC	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
D01	MAR.2022	IFA	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
D00	DEC.2021	IFC	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
Rev.	Date	Purpose of Issue / Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval
Class: 2		CLIENT Doc. Number: F9Z-707973				
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 فعالیت های روزمینی در بسته های کاری تحت الارض ساخت موقعیت چاه، تأسیسات سرچاهی، خطوط جریانی، تسهیلات برق رسانی مربوط به موقعیت W007S و توسعه چندراهه کلاستر بینک							 	
	DATA SHEETS FOR PRESSURE TRANSMITTER- EXTENSION OF BINAK B/C MANIFOLD								
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۱۸۴	پروژه BK	بسته کاری W007S	صادرکننده PEDCO	تسهیلات 110	رشته IN	نوع مدرک DT	سریال 0003	نسخه D02	شماره صفحه: ۲ از ۶

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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NISOC

نگهداشت و افزایش تولید میدان نفتی بینک
فعالیت های رو زمینی در بسته های کاری تحت الارض

ساخت موقعیت چاه، تأسیسات سرچاهی، خطوط جریانی، تسهیلات
برق رسانی مربوط به موقعیت W007S و توسعه چندراهه کلاستر بینک

DATA SHEETS FOR PRESSURE TRANSMITTER- EXTENSION OF BINAK B/C MANIFOLD



شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۱۸۴	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه	شماره صفحه: ۶ از ۳
	D02	0003	DT	IN	110	PEDCO	W007S	BK	

REFERENCE DOCUMENTS :

Specification for Instrumentation	BK-GNRAL-PEDCO-000-IN-SP-0001
Process Basis Of Design	BK-GNRAL-PEDCO-000-PR-DB-0001
P&ID - Extension of Binak B/C Manifold	BK-W007S-PEDCO-110-PR-PI-0001
Piping Material Specification	BK-SSGRL-PEDCO-110-PI-SP-0001
Instrument & Control System Design Criteria	BK-SSGRL-PEDCO-110-IN-DC-0002
Process Flow Diagram - Extension of Binak B/C Manifold	BK-W007S-PEDCO-110-PR-PF-0001

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک فعالیت های رو زمینی در بسته های کاری تحت الارض ساخت موقعیت چاه، تأسیسات سرچاهی، خطوط جریانی، تسهیلات برق رسانی مربوط به موقعیت W007S و توسعه چندراهه کلاستر بینک								
	DATA SHEETS FOR PRESSURE TRANSMITTER- EXTENSION OF BINAK B/C MANIFOLD								
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۱۸۴	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۴ از ۶
	BK	W007S	PEDCO	110	IN	DT	0003	D02	

GENERAL NOTES:

- 1 - Zero and span adjustment shall be included and be accessible from outside in addition to HHC.
- 2 - Over range protection (at least 30% full scale) shall be considered.
- 3 - S.S. name plate including project description to be provided.
- 4 - Painting shall be in accordance with manufacturer standard.
- 5 - VTA : Vendor To Advise
- 6 - N/A : Not Applicable
- 7 - Environmental condition for field instrumentation of Binak Oilfield 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: - (°C)

DB/RH for Summer HVAC Design: 41 °C / 61 % (Note */ Note**)

DB FOR Winter HVAC Design: 6 °C Note *

* Refer to " HVAC Design Criteria; N.I.O.C. NO.: F-1-B-422001".

** Refer to "NISOC Meteorological Studies Report".

Relative Humidity:

- Maximum Design relative humidity (%): 100
- Minimum Design relative humidity (%): 0

8 - Material Test Certificate and calibration Certificate for all transmitters to be submitted by Vendor.

9 - The manifold valves on Pressure and differential transmitters shall be bracket mounted type with the base bracket mounting holes such that the instruments can be directly connected to the manifold valves, and the assembly can be installed and supported on 2" stanchions by bracket mounted manifolds.

10 - For all transmitters, one set of hand held communicator for Calibrating is required.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک فعالیت های رو زمینی در بسته های کاری تحت الارض ساخت موقعیت چاه، تأسیسات سرچاهی، خطوط جریانی، تسهیلات برق رسانی مربوط به موقعیت W007S و توسعه چندراهه کلاستر بینک								
	DATA SHEETS FOR PRESSURE TRANSMITTER- EXTENSION OF BINAK B/C MANIFOLD								
شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۵ از ۶
۰۵۳ - ۰۷۳ - ۹۱۸۴	BK	W007S	PEDCO	110	IN	DT	0003	D02	

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 (Barg)	SEE NEXT PAGE	
	9	Design Pressure (Barg)	SEE NEXT PAGE	
	10	Operating Temperature (°C)	SEE NEXT PAGE	
	11	Design Temperature (°C)	SEE NEXT PAGE	
TRANSMITTER	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	Power Supply	24 VDC-Loop powered	
	19	Output Signal	4-20mA	
	20	Communication Protocol	SMART HART (4-20mA)	
	21	Electrical Connection	ISO M20 x 1.5	
	22	Electrical Certification	Ex "ia"	
	23	Weather Protection	IP-65 as minimum	
	24	Accuracy	Better than +/- 0.1% F.S	
	25	Repetability	+/- 0.1% or better	
	26	Span and Zero Adjustment	Required	
	27	Over Range Protection	Yes	
DIAPHRAGM SEAL	28	Type	N/A	
	29	Size (In)	N/A	
	30	Fill Fluid	N/A	
	31	Diaphragm Material	N/A	
	32	Capillary Material	N/A	
	33	Capillary Length	N/A	
OPTIONS	34	Integral Indicator	Display Unit	Barg
	35	Mounting Brackets	Material	Required, 2" Support Pipe (Note 3 in Below Table)
	36	Manifold	Body Material	2 Way Block & Bleed Manifold
	37	Connection	1/2 " NPT (Notes 2,5,7 in Below Table)	
	38	Manifold Model	Manifold Manufacturer	
	39	Integral Indicator Style	LCD TYPE	
	40	NACE Requirements	SEE NEXT PAGE	
PURCHASING DATA	41	Model	Manufacturer	Will Be Finalized Later
	42	Supplier	Order	Will Be Finalized Later

NOTES : VTA : VENDOR TO ADVISE

- 1 : Wetted part shall be according To NACE MR0175/ISO 15156 as per list.
- 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-SSRAL-PEDCO-100-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

نگهداشت و افزایش تولید میدان نفتی بینک

ساخت موقعیت چاه، تأسیسات سرچاهی، خطوط جریانی، تسهیلات برق رسانی مربوط به موقعیت W0۰۷S و توسعه چندراهه کلاستر بینک



DATA SHEETS FOR PRESSURE TRANSMITTER- EXTENSION OF BINAK B/C MANIFOLD

شماره صفحه: ۶ از ۶

PRESSURE TRANSMITTER																				
Rev.	Item No.	Tag No.	P&ID No.	Equipment No. / Line No.	Piping Class/ Line Size D02	Fluid D02	State/ Phase D02	Design Pressure (Barg)	Operating Pressure (Barg)	Design Temp. (°C)	Operating Temp. (°C)	Calibration Range (Barg) (Notes 1 & 2 in Below Table) D02	Element Type	Element Material	Size of Process Connection	Rating of Process Connection	2 Way Manifold (Block & Bleed)	NACE	Model	D02 Remark
D02	1	PT-1701A	BK-W007S-PEDCO-110-PR-PI-0001 (3/6)	CRD-110-171A-FN05-4"-PT	FN05 / 4"	liquid	3 phase (Crude oil/Water/Vapour)	93	12.78	85	36.31/22.62	0-22	Diaphragm	SS 316L	1/2" NPT	6000# Note 4 in Below Table	Yes	Yes	VT A	Note 2 in Below Table
D02	2	PT-1702A	BK-W007S-PEDCO-110-PR-PI-0001 (3/6)	CRD-110-171A-FN05-4"-PT	FN05 / 4"	liquid	3 phase (Crude oil/Water/Vapour)	93	12.78	85	36.31/22.62	0-22	Diaphragm	SS 316L	1/2" NPT	6000# Note 4 in Below Table	Yes	Yes	VT A	Note 2 in Below Table
D02	3	PT-1701B	BK-W007S-PEDCO-110-PR-PI-0001 (3/6)	CRD-110-171B-FN05-4"-PT	FN05 / 4"	liquid	3 phase (Crude oil/Water/Vapour)	93	12.78	85	31.60/15.20	0-22	Diaphragm	SS 316L	1/2" NPT	6000# Note 4 in Below Table	Yes	Yes	VT A	Note 2 in Below Table
D02	4	PT-1702B	BK-W007S-PEDCO-110-PR-PI-0001 (3/6)	CRD-110-171B-FN05-4"-PT	FN05 / 4"	liquid	3 phase (Crude oil/Water/Vapour)	93	12.78	85	31.60/15.20	0-22	Diaphragm	SS 316L	1/2" NPT	6000# Note 4 in Below Table	Yes	Yes	VT A	Note 2 in Below Table
D02	5	PT-1701C	BK-W007S-PEDCO-110-PR-PI-0001 (4/6)	CRD-110-171C-FN05-4"-PT	FN05 / 4"	liquid	3 phase (Crude oil/Water/Vapour)	93	12.78	85	46.19/33.90	0-22	Diaphragm	SS 316L	1/2" NPT	6000# Note 4 in Below Table	Yes	Yes	VT A	Note 2 in Below Table
D02	6	PT-1702C	BK-W007S-PEDCO-110-PR-PI-0001 (4/6)	CRD-110-171C-FN05-4"-PT	FN05 / 4"	liquid	3 phase (Crude oil/Water/Vapour)	93	12.78	85	46.19/33.90	0-22	Diaphragm	SS 316L	1/2" NPT	6000# Note 4 in Below Table	Yes	Yes	VT A	Note 2 in Below Table
D02	7	PT-1701D	BK-W007S-PEDCO-110-PR-PI-0001 (4/6)	CRD-110-171D-FN05-4"-PT	FN05 / 4"	liquid	3 phase (Crude oil/Water/Vapour)	93	12.78	85	44.41/32.15	0-22	Diaphragm	SS 316L	1/2" NPT	6000# Note 4 in Below Table	Yes	Yes	VT A	Note 2 in Below Table
D02	8	PT-1702D	BK-W007S-PEDCO-110-PR-PI-0001 (4/6)	CRD-110-171D-FN05-4"-PT	FN05 / 4"	liquid	3 phase (Crude oil/Water/Vapour)	93	12.78	85	44.41/32.15	0-22	Diaphragm	SS 316L	1/2" NPT	6000# Note 4 in Below Table	Yes	Yes	VT A	Note 2 in Below Table
D02	9	PT-1701E	BK-W007S-PEDCO-110-PR-PI-0001 (5/6)	CRD-110-171E-FN05-4"-PT	FN05 / 4"	liquid	3 phase (Crude oil/Water/Vapour)	93	12.78	85	40.71/27.31	0-22	Diaphragm	SS 316L	1/2" NPT	6000# Note 4 in Below Table	Yes	Yes	VT A	Note 2 in Below Table
D02	10	PT-1702E	BK-W007S-PEDCO-110-PR-PI-0001 (5/6)	CRD-110-171E-FN05-4"-PT	FN05 / 4"	liquid	3 phase (Crude oil/Water/Vapour)	93	12.78	85	40.71/27.31	0-22	Diaphragm	SS 316L	1/2" NPT	6000# Note 4 in Below Table	Yes	Yes	VT A	Note 2 in Below Table
D02	11	PT-1701F	BK-W007S-PEDCO-110-PR-PI-0001 (5/6)	CRD-110-171F-FN05-4"-PT	FN05 / 4"	liquid	3 phase (Crude oil/Water/Vapour)	93	12.78	85	41.77/22.21	0-22	Diaphragm	SS 316L	1/2" NPT	6000# Note 4 in Below Table	Yes	Yes	VT A	Note 2 in Below Table
D02	12	PT-1702F	BK-W007S-PEDCO-110-PR-PI-0001 (5/6)	CRD-110-171F-FN05-4"-PT	FN05 / 4"	liquid	3 phase (Crude oil/Water/Vapour)	93	12.78	85	41.77/22.21	0-22	Diaphragm	SS 316L	1/2" NPT	6000# Note 4 in Below Table	Yes	Yes	VT A	Note 2 in Below Table
NOTE:																				
1- Instrument range shall be finalized by vendor.																				
2- Pressure limit valve to be considered by vendor (as per project specification and related standards due to vendor selected instrument range)																				
3- Existing data to be submitted /confirmed by client.																				
4- For manifold rating (treaded connection), bolt & gasket material refer to "Piping Material Specification DOC NO. BK-SSRAL-PEDCO-100-PI-SP-0001																				