

 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 & SAFETY RELIEF VALVES - EXTENSION OF BINAK B/C MANIFOLD								
شماره پیمان: 053 - 073 - 9184	پروژه BK	بسته کاری W007S	صادر کننده PEDCO	تسهیلات 110	رشته IN	نوع مدرک DT	سریال 0004	نسخه D03	شماره صفحه: 1 از 16

طرح نگهداشت و افزایش تولید 27 مخزن

DATA SHEETS FOR PRESSURE & SAFETY RELIEF VALVES - EXTENSION OF BINAK B/C MANIFOLD

نگهداشت و افزایش تولید میدان نفتی بینک

D03	NOV. 2023	AFC	P.Hajisadeghi	M.Fakharian	S.Faramarzpour	
D02	DEC. 2022	IFA	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
D01	OCT. 2022	IFA	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
D00	MAY. 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-707974

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
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 & SAFETY RELIEF VALVES - EXTENSION OF BINAK
B/C MANIFOLD



شماره پیمان:
053 - 073 - 9184

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D03	0004	DT	IN	110	PEDCO	W007S	BK

شماره صفحه: 2 از 16

REVISION RECORD SHEET

Page	D00	D01	D02	D03	D04	Page	D00	D01	D02	D03	D04
1	X	X	X	X		65					
2	X	X	X	X		66					
3	X	X	X			67					
4	X		X	X		68					
5	X	X	X	X		69					
6	X	X	X	X		70					
7	X	X	X	X		71					
8	X	X	X	X		72					
9	X	X	X	X		73					
10	X	X	X	X		74					
11	X	X	X	X		75					
12	X	X	X	X		76					
13	X	X	X	X		77					
14	X	X	X	X		78					
15	X	X	X	X		79					
16	X	X	X	X		80					
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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 & SAFETY RELIEF VALVES - EXTENSION OF BINAK B/C
MANIFOLD

شماره پیمان:

053 - 073 - 9184

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه
D03	0004	DT	IN	110	PEDCO	W007S	BK

شماره صفحه: 3 از 16

REFERENCE DOCUMENTS :

Specification For Instrumentation	BK-GNRL-PEDCO-000-IN-SP-0001
Specification For Pressure Safety Valves(PSV)	BK-GNRL-PEDCO-000-IN-SP-0007
Process Basis Of Design	BK-GNRL-PEDCO-000-PR-DB-0001
Piping Material Specification	BK-SSGRL-PEDCO-110-PI-SP-0001
Symbol & Legend For PFD and P&ID	BK-SSGRL-PEDCO-110-PR-PI-0001
P&ID - EXTENSION OF BINAK B/C MANIFOLD	BK-W007S-PEDCO-110-PR-PI-0001
Instrument Hook-Up Diagram	BK-PPL-PEDCO-320-IN-DG-0002
Instrument & Control System Design Criteria	BK-SSGRL-PEDCO-110-IN-DC-0002
Specification For Painting	BK-GNRL-PEDCO-000-PI-SP-0006
Calculation book for (CV,PSV,Pump & Line sizing) - Extension of Binak B/C Manifold	BK-W007S-PEDCO-110-PR-CN-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 & SAFETY RELIEF VALVES -
EXTENSION OF BINAK B/C MANIFOLD**



شماره صفحه: 4 از 16

053 - 073 - 9184

شماره پیمان:

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه
D02	0004	DT	IN	110	PEDCO	W007S	BK

GENERAL NOTES:

1- All valves shall be clearly and permanently marked. The name plate shall be corrosion resistant Stainless Steel and pinned to the valve body. Wired on labels are not acceptable. Following information shall be submitted on nameplate for approval.

- Tag number
- Manufacturer name, model and serial number
- Set Pressure
- Pressure rating
- Body size and material
- Measurement Range
- Liquid density
- Degree of protection & electrical construction
- Marking as per IEC Codes
- Well name

2- Calculation sheet using API RP-520 formula shall be provided by vendor for each safety/relief valve in accordance with process values.

3- All wetted part material shall be in accordance with ISO 15156-2 region 2 or NACE MR-01-75 as specified in data sheets for each tag . For these mentioned tags, both the compliance shall be provided. primary and secondary sides of valves shall meet NACE MR-01-75 requirements and certificate of

4- The safety/ relief valves shall comply with API RP 520, 521, 526 and 527 standards. All valves shall be supplied with ASME section VIII.

5- All valves shall be tested for leakage at the manufacturer's works in accordance with API 527. The procedures for these tests shall be submitted for approval.

6- Gasket material shall be suitable for the application.

7- The inlet/outlet sizes & rating and center to flange face dimensions for all valves shall be in accordance with ANSI B 16.34. , unless otherwise Where threaded inlet and outlet connections have been specified, they shall be in accordance with ANSI B 1.20.1 (NPT), unless otherwise noted.

8- All the valves with the materials offered shall meet the set pressure and other design conditions for the orifice selected.

9- Vendor to advise all wetted parts materials include disc holder, stem guide, blowdown ring, ring pin, bushing and other internal components in contact with process fluid in bid stage

10. According to "process basic of design" document, environmental condition for field instrumentation of binak complex shall be considered as per the following:

- 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

11. For flammable or toxic services, bonnets shall be vented to the discharge side of the relief valve.

12. Balanced bellows valves shall have open bonnet construction. In bellows type, bonnet shall be vented separately from discharge. In valves with balancing bellow, the bonnet shall have a ½" threaded hole, NPT as per ANSI 1.20.1.

13. Body color of Pressure & Safety Relief Valves shall be yellow. For more details refer to the latest revision of Specification For Painting Doc No. "BK-GNRL-PEDCO-000-PI-SP-0006", (Paint system 2-A as per table 2 of reference specification is required).



نگهداشت و افزایش تولید میدان نفتی بینک
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ساخت موقعیت چاه، تأسیسات سرچاهی، خطوط جرابانی، تسهیلات
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DATA SHEETS FOR PRESSURE & SAFETY RELIEF VALVES - EXTENSION OF BINAK B/C MANIFOLD

053 - 073 - 9184

شماره پیمان:

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شماره صفحه: 5 از 16

Item	Data Category	Technical Features		D03	Project Data & Requirements	
1	GENERAL	Tag Number		TRV-1701A		
2		P&ID NO and Page :		BK-W007S-PEDCO-110-PR-PI-0001-D04 (3/6)		
3		Service		MIXED/ 3 PHASES		
4		Inlet Line No.	Outlet Line No.	CRD-110-170A-LN15-1"-PT	CDH-110-170A-AN05-1"-PT	
5		Discharge to		TO HP DRAIN HEADER		
6		Protect Equipment		FLOW LINE		
7		Area Clacification for Discharge		ZONE 2, IIB T4		
8		Sour Service		YES		
9		NACE MR0175/ISO 15156 Compliance		YES		
10	BASIS	Nozzle (Full, Semi)		Full Nozzle		
11		Design Type	Safety, Relief, Safety-Relief	Relief		
12			Conventional, Bellow, Pilot Op.	Conventional		
13		Bonnet Type		Closed		
14	PROCESS CONDITIONS (note 2)	Fluid / Phase / State		Liquid/2phase		
15		Ambient Temperature °C		-5	50	
16		Temperature °C	Operating	36.31		
17		Pressure Barg	Operating	12.78		
18		Oper. Temperature °C	RelievingTemp. °C	36.31	317.5	
19		Required Capacity kg/h		VTC		
20		Molecular Mass	Sp. Gr.@ relief Tmp kg/m3	77.41	0.6841	
21		Oper. Pressure barg	Set Pressure barg	12.78	207	
22		Back Pressure Barg	Constant	1.5		
23			Variable	0		
24			Total	1.5		
25		% Allowable Overpressure		10		
26		Over Pressure Factor		-		
27		Compressibility Factor (Z)		0.95		
28		Latent Heat of Vaporization (Kj/Kg)		489.5		
29		Ratio of Specific Heats(Cp/Cv)		1.005		
30		Density @ Oper. kg/m3temprature & pressure		913		
31		Operating Viscosity cP		0.011		
32		Barometric Pressure (psia)		13.26 ~ 14.37		
33		SELECTION	Design Code	Sizing Basis	API 520	-
34	pressure relieving and de-pressurising systems Code		API 521			
35	Design of Construction		API 521			
36	Scenarios		VTC			
37	Basis of Selection		VTC			
38	Calculated Area		mm²	VTC		
39	Selected Area		mm²	VTC		
40	Accumulation AC %		VTC			
41	Orifice Designation		D			
42	CONNECTIONS	Size: Inlet	Outlet	3/4"	1"	
43		Rating & Facing : Inlet	Outlet	Thread (6000# SW)	Thread(3000# SW)	
44	MATERIALS (VTC)	Body and Bonnet		ASTM A105 (VTC)		
45		Seat and Disc (Trim)		316 SS+PTFE (VTC)		
46		Nozzle		316 SS (VTC)		
47		Guide and Rings		316 SS (VTC)		
48		Spring		ASTM A105 (VTC)(Note***)		
49		Bellows		N/A		
50	OPTIONS	Cap without Lever: Screwed or Bolted		Screwed cap		
51		Lifting Lever: Plain or Packed		N/A		
52		Test Gage		Yes		
53		With Rupture Disc		No		
54		Flame Arrestor		No		
55		Hydro Test		Required		
56		Seat Leakage Test		Required		
57		Compliance Standard		According to NACE MR-0175 / ISO15156		
58	PURCHASE	Manufacturer		will be finalized later		
59		Model		will be finalized later		
60		Serial No.		will be finalized later		

Main Notes:

*VTA : Vendor to Advise in bidding stage VTC : Vendor to confirm in bidding stage N/A: Not applicable

** For material details refer to the latest revision of "Piping Material Specification Doc No."BK-SSGRL-PEDCO-110-PI-SP-0001 ".

~~*** Body color of valves shall be selected same as pipe color. For more details refer to the latest revision of "Specification For Painting Doc No."BK-GNRL-PEDCO-000-PI-SP-0006".~~

*** Suitable coating such as cadmiun plated shall be considered (vendor to advise)



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نگهداشت و افزایش تولید میدان نفتی بینک

فعالیت های رو زمینی در بسته های کاری تحت الارض

ساخت موقعیت چاه، تأسیسات سرچاهی، خطوط جرابانی، تسهیلات

برق رسانی مربوط به موقعیت W007S و توسعه چندراهه کلاستر بینک




DATA SHEETS FOR PRESSURE & SAFETY RELIEF VALVES - EXTENSION OF BINAK B/C MANIFOLD

شماره پیمان: 053 - 073 – 9184

پروژه

بسته کاری

صادر کننده

تسهیلات

رشته

نوع مدرک

سریال

نسخه

BK

W007S

PEDCO

110

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0004

D03

شماره صفحه: 16 از 6

Item	Data Category	Technical Features	D03	Project Data & Requirements	
1	GENERAL	Tag Number		TRV-1701B	
2		P&ID NO and Page :		BK-W007S-PEDCO-110-PR-PI-0001-D04 (5/6)	
3		Service		MIXED/ 3 PHASES	
4		Inlet Line No.	Outlet Line No.	CRD-110-170B-LN15-1"-PT	CDH-110-170B-AN05-1"-PT
5		Discharge to		TO HP DRAIN HEADER	
6		Protect Equipment		FLOW LINE	
7		Area Clacification for Discharge		ZONE 2, IIB T4	
8		Sour Service		YES	
9		NACE MR0175/ISO 15156 Compliance		YES	
10	BASIS	Nozzle (Full, Semi)		Full Nozzle	
11		Design Type	Safety, Relief, Safety-Relief	Relief	
12			Conventional, Bellow, Pilot Op.	Conventional	
13		Bonnet Type		Closed	
14	PROCESS CONDITIONS (note 2)	Fluid / Phase / State		Liquid/2phase	
15		Ambient Temperature °C		-5	50
16		Temperature °C	Operating	31.6	
17		Pressure Barg	Operating	12.78	
18		Oper. Temperature °C	RelievingTemp. °C	31.60	287.8
19		Required Capacity kg/h		VTC	
20		Molecular Mass	Sp. Gr.@ relief Tmp kg/m3	39.09	0.6645
21		Oper. Pressure barg	Set Pressure barg	12.78	207
22		Back Pressure Barg	Constant	1.5	
23			Variable	0	
24			Total	1.5	
25		% Allowable Overpressure		10	
26		Over Pressure Factor		-	
27		Compressibility Factor (Z)		-	
28		Latent Heat of Vaporization (Kj/Kg)		474.5	
29		Ratio of Specific Heats(Cp/Cv)		1.007	
30		Density @ Oper. kg/m3temperature & pressure		934.4	
31		Operating Viscosity cP		0.011	
32		Barometric Pressure (psia)		13.26 ~ 14.37	
33	SELECTION	Design Code	Sizing Basis	API 520	-
34		pressure relieving and de-pressurising systems Code		API 521	
35		Design of Construction		API 521	
36		Scenarios		VTC	
37		Basis of Selection		VTC	
38		Calculated Area	mm²	VTC	
39		Selected Area	mm²	VTC	
40		Accumulation AC %		VTC	
41		Orifice Designation		D	
42	CONNECTIONS	Size: Inlet	Outlet	3/4"	1"
43		Rating & Facing : Inlet	Outlet	Thread (6000# SW)	Thread(3000# SW)
44	MATERIALS (VTC)	Body and Bonnet		ASTM A105 (VTC)	
45		Seat and Disc (Trim)		316 SS+PTFE (VTC)	
46		Nozzle		316 SS (VTC)	
47		Guide and Rings		316 SS (VTC)	
48		Spring		ASTM A105 (VTC)(Note***)	
49		Bellows		N/A	
50	OPTIONS	Cap without Lever: Screwed or Bolted		Screwed cap	
51		Lifting Lever: Plain or Packed		N/A	
52		Test Gage		Yes	
53		With Rupture Disc		No	
54		Flame Arrestor		No	
55		Hydro Test		Required	
56		Seat Leakage Test		Required	
57		Compliance Standard		According to NACE MR-0175 / ISO15156	
58	PURCHASE	Manufacturer		will be finalized later	
59		Model		will be finalized later	
60		Serial No.		will be finalized later	

Main Notes:

*VTA : Vendor to Advise in bidding stage VTC : Vendor to confirm in bidding stage N/A: Not applicable

** For material details refer to the latest revision of "Piping Material Specification Doc No."BK-SSGRL-PEDCO-110-PI-SP-0001 ".

*** Body color of valves shall be selected same as pipe color. For more details refer to the latest revision of "Specification For Painting Doc No."BK-GNRL-PEDCO-000-PI-SP-0006 ".

*** Suitable coating such as cadmiun plated shall be considered (vendor to advise)



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک

فعالیت های رو زمینی در بسته های کاری تحت الارض

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DATA SHEETS FOR PRESSURE & SAFETY RELIEF VALVES - EXTENSION OF BINAK B/C MANIFOLD

شماره پیمان:

053 - 073 - 9184

پروژه

W007S

بسته کاری

PEDCO

صادر کننده

110

رشته

IN

نوع مدرک

DT

سریال

0004

نسخه

D03

شماره صفحه: 16 از 7

Main Notes:

*VTA : Vendor to Advise in bidding stage VTC : Vendor to confirm in bidding stage N/A: Not applicable

** For material details refer to the latest revision of "Piping Material Specification Doc No."BK-SSGRL-PEDCO-110-PI-SP-0001 ".

*** Body color of valves shall be selected same as pipe color. For more details refer to the latest revision of "Specification For Painting Doc No."BK-GNRL-PEDCO-000-PI-SP-0006 "-.

*** Suitable coating such as cadmiun plated shall be considered (vendor to advise)



NISOC

تگداشت و افزایش تولید میدان نفتی بینک

فعالیت های رو زمینی در بسته های کاری تحت الارض

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DATA SHEETS FOR PRESSURE & SAFETY RELIEF VALVES - EXTENSION OF BINAK B/C MANIFOLD

شماره پیمان:

053 - 073 – 9184

پروژه

W007S

بسته کاری

PEDCO

تسهیلات

110

رشته

IN

نوع مدرک

DT

سریال

0004

نسخه

D03

شماره صفحه: 8 از 16

Item	Data Category	Technical Features	Project Data & Requirements	
1	GENERAL	Tag Number	TRV-1701D	
2		P&ID NO and Page :	BK-W007S-PEDCO-110-PR-PI-0001-D04 (4/6)	
3		Service	MIXED/ 3 PHASES	
4		Inlet Line No.	Outlet Line No.	CRD-110-170D-LN15-1"-PT
5		Discharge to	TO HP DRAIN HEADER	
6		Protect Equipment	FLOW LINE	
7		Area Clacification for Discharge	ZONE 2, IIB T4	
8		Sour Service	YES	
9		NACE MR0175/ISO 15156 Compliance	YES	
10	BASIS	Nozzle (Full, Semi)	Full Nozzle	
11		Design Type	Safety, Relief, Safety-Relief	Relief
12		Conventional, Bellow, Pilot Op.	Conventional	
13		Bonnet Type	Closed	
14	PROCESS CONDITIONS (note 2)	Fluid / Phase / State	Liquid/2phase	
15		Ambient Temperature °C	-5	50
16		Temperature °C	Operating	44.41
17		Pressure Barg	Operating	12.78
18		Oper. Temperature °C	RelievingTemp. °C	44.41
19		Required Capacity kg/h	VTC	
20		Molecular Mass	Sp. Gr.@ relief Tmp kg/m3	39.09
21		Oper. Pressure barg	Set Pressure barg	12.78
22		Back Pressure Barg	Constant	1.5
23			Variable	0
24			Total	1.5
25		% Allowable Overpressure	10	
26		Over Pressure Factor	-	
27		Compressibility Factor (Z)	-	
28		Latent Heat of Vaporization (Kj/Kg)	481.2	
29		Ratio of Specific Heats(Cp/Cv)	1.007	
30		Density @ Oper. kg/m3temprature & pressure	922.3	
31	Operating Viscosity cP	0.012		
32	Barometric Pressure (psia)	13.26 ~ 14.37		
33	SELECTION	Design Code	Sizing Basis	API 520
34		pressure relieving and de-pressurising systems Code	API 521	
35		Design of Construction	API 521	
36		Scenarios	VTC	
37		Basis of Selection	VTC	
38		Calculated Area mm²	VTC	
39		Selected Area mm²	VTC	
40		Accumulation AC %	VTC	
41		Orifice Designation	D	
42	CONNECTIONS	Size: Inlet	Outlet	3/4"
43		Rating & Facing : Inlet	Outlet	Thread (6000# SW)
44	MATERIALS (VTC)	Body and Bonnet	ASTM A105 (VTC)	
45		Seat and Disc (Trim)	316 SS+PTFE (VTC)	
46		Nozzle	316 SS (VTC)	
47		Guide and Rings	316 SS (VTC)	
48		Spring	ASTM A105 (VTC)(Note***)	
49		Bellows	N/A	
50	OPTIONS	Cap without Lever: Screwed or Bolted	Screwed cap	
51		Lifting Lever: Plain or Packed	N/A	
52		Test Gage	Yes	
53		With Rupture Disc	No	
54		Flame Arrestor	No	
55		Hydro Test	Required	
56		Seat Leakage Test	Required	
57	Compliance Standard	According to NACE MR-0175 / ISO15156		
58	PURCHASE	Manufacturer	will be finalized later	
59		Model	will be finalized later	
60		Serial No.	will be finalized later	

Main Notes:

*VTA : Vendor to Advise in bidding stage VTC : Vendor to confirm in bidding stage N/A: Not applicable

** For material details refer to the latest revision of "Piping Material Specification Doc No."BK-SSGRL-PEDCO-110-PI-SP-0001 ".

*** Body color of valves shall be selected same as pipe color. For more details refer to the latest revision of "Specification For Painting Doc No."BK-GNRL-PEDCO-000-PI-SP-0006 "-.

*** Suitable coating such as cadmiun plated shall be considered (vendor to advise)



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک

فعالیت های رو زمینی در بسته های کاری تحت الارض

ساخت موقعیت چاه، تأسیسات سر چاهی، خطوط جریانی، تسهیلات

برق رسانی مربوط به موقعیت W007S و توسعه چندراهه کلاستر بینک




053 - 073 – 9184

شماره پیمان:

پرژه

بسته کاری

صادر کننده

تسهیلات

رشته

نوع مدرک

سریال

نسخه

BK

W007S

PEDCO

110

IN

DT

0004

D03

شماره صفحه: 16 از 9

Item	Data Category	Technical Features	D03	Project Data & Requirements
1	GENERAL	Tag Number		TRV-1701E
2		P&ID NO and Page :		BK-W007S-PEDCO-110-PR-PI-0001-D04 (3/6)
3		Service		MIXED/ 3 PHASES
4		Inlet Line No. Outlet Line No.		CRD-110-170E-LN15-1"-PT CDH-110-170E-AN05-1"-PT
5		Discharge to		TO HP DRAIN HEADER
6		Protect Equipment		FLOW LINE
7		Area Clacification for Discharge		ZONE 2, IIB T4
8		Sour Service		YES
9		NACE MR0175/ISO 15156 Compliance		YES
10	BASIS	Nozzle (Full, Semi)		Full Nozzle
11		Design Type	Safety, Relief, Safety-Relief	Relief
12			Conventional, Bellow, Pilot Op.	Conventional
13		Bonnet Type		Closed
14	PROCESS CONDITIONS (note 2)	Fluid / Phase / State		Liquid/2phase
15		Ambient Temperature °C		-5 50
16		Temperature °C	Operating	40.71
17		Pressure Barg	Operating	12.78
18		Oper. Temperature °C	RelievingTemp. °C	40.71 288.8
19		Required Capacity kg/h		VTC
20		Molecular Mass	Sp. Gr.@ relief Tmp kg/m3	39.09 0.6644
21		Oper. Pressure barg	Set Pressure barg	12.78 207
22		Back Pressure Barg	Constant	1.5
23			Variable	0
24			Total	1.5
25		% Allowable Overpressure		10
26		Over Pressure Factor		-
27		Compressibility Factor (Z)		-
28		Latent Heat of Vaporization (Kj/Kg)		479.1
29		Ratio of Specific Heats(Cp/Cv)		1.007
30		Density @ Oper. kg/m3temperature & pressure		925.8
31	Operating Viscosity cP		0.012	
32	Barometric Pressure (psia)		13.26 ~ 14.37	
33	SELECTION	Design Code Sizing Basis	API 520	-
34		pressure relieving and de-pressurising systems Code		API 521
35		Design of Construction		API 521
36		Scenarios		VTC
37		Basis of Selection		VTC
38		Calculated Area mm²		VTC
39		Selected Area mm²		VTC
40		Accumulation AC %		VTC
41		Orifice Designation		D
42	CONNECTIONS	Size: Inlet Outlet	3/4" 1"	
43		Rating & Facing : Inlet Outlet	Thread (6000# SW) Thread(3000# SW)	
44	MATERIALS (VTC)	Body and Bonnet		ASTM A105 (VTC)
45		Seat and Disc (Trim)		316 SS+PTFE (VTC)
46		Nozzle		316 SS (VTC)
47		Guide and Rings		316 SS (VTC)
48		Spring		ASTM A105 (VTC)(Note***)
49		Bellows		N/A
50	OPTIONS	Cap without Lever: Screwed or Bolted		Screwed cap
51		Lifting Lever: Plain or Packed		N/A
52		Test Gage		Yes
53		With Rupture Disc		No
54		Flame Arrestor		No
55		Hydro Test		Required
56		Seat Leakage Test		Required
57		Compliance Standard		According to NACE MR-0175 / ISO15156
58	PURCHASE	Manufacturer		will be finalized later
59		Model		will be finalized later
60		Serial No.		will be finalized later

Main Notes:

*VTA : Vendor to Advise in bidding stage VTC : Vendor to confirm in bidding stage N/A: Not applicable

** For material details refer to the latest revision of "Piping Material Specification Doc No."BK-SSGRL-PEDCO-110-PI-SP-0001 ".

*** Body color of valves shall be selected same as pipe color. For more details refer to the latest revision of "Specification For Painting Doc No."BK-GNRAL-PEDCO-000-PI-SP-0006 ".

*** Suitable coating such as cadmiun plated shall be considered (vendor to advise)

 NISOC		نگهداشت و افزایش تولید میدان نفتی بینک فعالیت های رو زمینی در بسته های کاری تحت الارض ساخت موقعیت چاه، تأسیسات سرچاهی، خطوط جرابانی، تسهیلات برق رسانی مربوط به موقعیت W007S و توسعه چندراهه کلاستر بینک							 	
		DATA SHEETS FOR PRESSURE & SAFETY RELIEF VALVES - EXTENSION OF BINAK B/C MANIFOLD								
شماره پیمان: 053 - 073 - 9184		پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 10 از 16
		BK	W007S	PEDCO	110	IN	DT	0004	D03	
Item	Data Category	Technical Features				D03	Project Data & Requirements			
1	GENERAL	Tag Number				TRV-1701F				
2		P&ID NO and Page :				BK-W007S-PEDCO-110-PR-PI-0001-D04 (5/6)				
3		Service				MIXED/ 3 PHASES				
4		Inlet Line No.		Outlet Line No.		CRD-110-170F-LN15-1"-PT		CDH-110-170F-AN05-1"-PT		
5		Discharge to				TO HP DRAIN HEADER				
6		Protect Equipment				FLOW LINE				
7		Area Clacification for Discharge				ZONE 2, IIB T4				
8		Sour Service				YES				
9		NACE MR0175/ISO 15156 Compliance				YES				
10	BASIS	Nozzle (Full, Semi)				Full Nozzle				
11		Design Type		Safety, Relief, Safety-Relief		Relief				
Conventional, Bellow, Pilot Op.				Conventional						
12		Bonnet Type				Closed				
13	PROCESS CONDITIONS (note 2)	Fluid / Phase / State				Liquid/2phase				
14		Ambient Temperature °C				-5		50		
15		Temperature °C		Operating		41.77				
16		Pressure Barg		Operating		12.78				
17		Oper. Temperature °C		RelievingTemp. °C		41.77		288.9		
18		Required Capacity kg/h				VTC				
19		Molecular Mass		Sp. Gr.@ relief Tmp kg/m3		39.09		0.6644		
20		Oper. Pressure barg		Set Pressure barg		12.78		207		
21		Back Pressure Barg		Constant		1.5				
Variable				0						
Total				1.5						
22		% Allowable Overpressure				10				
23		Over Pressure Factor				-				
24		Compressibility Factor (Z)				-				
25		Latent Heat of Vaporization (Kj/Kg)				479.8				
26		Ratio of Specific Heats(Cp/Cv)				1.007				
27		Density @ Oper. kg/m3temperature & pressure				924.8				
28		Operating Viscosity cP				0.012				
29		Barometric Pressure (psia)				13.26 ~ 14.37				
30		SELECTION	Design Code		Sizing Basis		API 520		-	
31	pressure relieving and de-pressurising systems Code				API 521					
32	Design of Construction				API 521					
33	Scenarios				VTC					
34	Basis of Selection				VTC					
35	Calculated Area		mm²		VTC					
36	Selected Area		mm²		VTC					
37	Accumulation AC %				VTC					
38	CONNECTIONS	Orifice Designation				D				
39		Size: Inlet		Outlet		3/4"		1"		
40	MATERIALS (VTC)	Rating & Facing : Inlet		Outlet		Thread (6000# SW)		Thread(3000# SW)		
41		Body and Bonnet				ASTM A105 (VTC)				
42		Seat and Disc (Trim)				316 SS+PTFE (VTC)				
43		Nozzle				316 SS (VTC)				
44		Guide and Rings				316 SS (VTC)				
45		Spring				ASTM A105 (VTC)(Note***)				
46		Bellows				N/A				
47	OPTIONS	Cap without Lever: Screwed or Bolted				Screwed cap				
48		Lifting Lever: Plain or Packed				N/A				
49		Test Gage				Yes				
50		With Rupture Disc				No				
51		Flame Arrestor				No				
52		Hydro Test				Required				
53		Seat Leakage Test				Required				
54		Compliance Standard				According to NACE MR-0175 / ISO15156				
55	PURCHASE	Manufacturer				will be finalized later				
56		Model				will be finalized later				
57		Serial No.				will be finalized later				
Main Notes: *VTA : Vendor to Advise in bidding stage VTC : Vendor to confirm in bidding stage N/A: Not applicable ** For material details refer to the latest revision of "Piping Material Specification Doc No."BK-SSGRL-PEDCO-110-PI-SP-0001 ". *** Body color of valves shall be selected same as pipe color. For more details refer to the latest revision of "Specification For Painting Doc No."BK-GNRAL-PEDCO-000-PI-SP-0006 ". *** Suitable coating such as cadmiun plated shall be considered (vendor to advise)										



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک

فعالیت های رو زمینی در بسته های کاری تحت الارض

ساخت موقعیت چاه، تأسیسات سرچاهی، خطوط جرابانی، تسهیلات

برق رسانی مربوط به موقعیت W007S و توسعه چندراهه کلاستر بینک




DATA SHEETS FOR PRESSURE & SAFETY RELIEF VALVES - EXTENSION OF BINAK B/C MANIFOLD

شماره صفحه: 11 از 16

نسخه

سریال

نوع مدرک

رشته

تسهیلات

صادر کننده

بسته کاری

پروژه

شماره پیمان:

D03

DT

0004

IN

110

PEDCO

W007S

BK

053 - 073 – 9184

Item	Data Category	Technical Features	Project Data & Requirements
1	GENERAL	Tag Number	PRV-1701A
2		P&ID NO and Page :	BK-W007S-PEDCO-110-PR-PI-0001-D04 (3/6)
3		Service	MIXED/ 3 PHASES
4		Inlet Line No.	CDH-110-174A-FN05-4"-PT
5		Outlet Line No.	CDH-110-174A-AN05-6"-PT
6		Discharge to	TO DRAIN SEP.
7		Protect Equipment	FLOW LINE
8		Area Clacification for Discharge	ZONE 2, IIB T4
9		Sour Service	YES
10	BASIS	NACE MR0175/ISO 15156 Compliance	YES
11		Nozzle (Full, Semi)	Full Nozzle
12		Design Type	Relief
13		Conventional, Bellow, Pilot Op.	Conventional
14		Bonnet Type	Closed
15		Fluid / Phase / State	Liquid/2phase
16		Ambient Temperature °C	-5
17		Operating	36.31
18		Pressure Barg	12.78
19	PROCESS CONDITIONS (note 2)	Operating	36.31
20		Oper. Temperature °C	36.31
21		RelievingTemp. °C	36.31
22		Required Capacity kg/h	11347.034
23		Molecular Mass	77.41
24		Sp. Gr.@ relief Tmp kg/m3	0.902
25		Oper. Pressure barg	12.78
26		Set Pressure barg	93
27		Constant	1.5
28		Back Pressure Barg	0
29		Variable	1.5
30		Total	1.5
31		% Allowable Overpressure	10%
32		Over Pressure Factor	1.10
33	SELECTION	Compressibility Factor (Z)	-
34		Latent Heat of Vaporization (Kj/Kg)	-
35		Ratio of Specific Heats(Cp/Cv)	1.005
36		Density @ Oper. kg/m3temperature & pressure	902.3
37		Operating Viscosity cP	0.011
38		Barometric Pressure (psia)	13.26 ~ 14.37
39		Design Code	API 520
40		Sizing Basis	-
41		pressure relieving and de-pressurising systems Code	API 521
42		Design of Construction	API 521
43		Scenarios	-
44	CONNECTIONS	Basis of Selection	Blocked Outlet
45		Calculated Area mm²	153.9
46		Selected Area mm²	82.96
47		Accumulation AC %	1.10
48		Orifice Designation	E
49	MATERIALS (VTC)	Size: Inlet	1 "
50		Outlet	2"
51		Rating & Facing : Inlet	FLANGED (600# RF)
52		Outlet	FLANGED (150# RF)
53		Body and Bonnet	A216 Gr. WCB (VTC)
54	OPTIONS	Seat and Disc (Trim)	316 SS+PTFE (VTC)
55		Nozzle	316 SS (VTC)
56		Guide and Rings	316 SS (VTC)
57		Spring	A216 Gr. WCB (VTC)(Note***)
58		Bellows	N/A
59	PURCHASE	Cap without Lever: Screwed or Bolted	Screwed cap
60		Lifting Lever: Plain or Packed	N/A
		Test Gage	Yes
		With Rupture Disc	No
		Flame Arrestor	No
	Hydro Test	Required	
	Seat Leakage Test	Required	
	Compliance Standard	According to NACE MR-0175 / ISO15156	
	Manufacturer	will be finalized later	
	Model	will be finalized later	
	Serial No.	will be finalized later	

Main Notes:

*VTA : Vendor to Advise in bidding stage VTC : Vendor to confirm in bidding stage N/A: Not applicable

** For material details refer to the latest revision of "Piping Material Specification Doc No."BK-SSGRL-PEDCO-110-PI-SP-0001 ".

*** Body color of valves shall be selected same as pipe color. For more details refer to the latest revision of "Specification For Painting Doc No."BK-GNRL-PEDCO-000-PI-SP-0006 ".

*** Suitable coating such as cadmiun plated shall be considered (vendor to advise)



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




053 - 073 – 9184

شماره پیمان:

پرژه

پروژه

بسته کاری

W007S

صادر کننده

PEDCO

تسهیلات

110

رشته

IN

نوع مدرک

DT

سریال

0004

نسخه

D03

شماره صفحه: 12 از 16

Item	Data Category	Technical Features	D03	Project Data & Requirements	
1	GENERAL	Tag Number		PRV-1701B	
2		P&ID NO and Page :		BK-W007S-PEDCO-110-PR-PI-0001-D04 (5/6)	
3		Service		MIXED/ 3 PHASES	
4		Inlet Line No.	Outlet Line No.	CRD-110-174B-FN05-4"-PT	CDH-110-174B-AN05-6"-PT
5		Discharge to		TO DRAIN SEP.	
6		Protect Equipment		FLOW LINE	
7		Area Clacification for Discharge		ZONE 2, IIB T4	
8		Sour Service		YES	
9		NACE MR0175/ISO 15156 Compliance		YES	
10	BASIS	Nozzle (Full, Semi)		Full Nozzle	
11		Design Type	Safety, Relief, Safety-Relief	Relief	
12			Conventional, Bellow, Pilot Op.	Conventional	
13		Bonnet Type		Closed	
14	PROCESS CONDITIONS (note 2)	Fluid / Phase / State		Liquid/2phase	
15		Ambient Temperature °C		-5	50
16		Temperature °C	Operating	31.6	
17		Pressure Barg	Operating	12.78	
18		Oper. Temperature °C	RelievingTemp. °C	31.60	31.6
19		Required Capacity kg/h		17421.909	
20		Molecular Mass	Sp. Gr.@ relief Tmp kg/m3	39.09	0.920
21		Oper. Pressure barg	Set Pressure barg	12.78	93
22		Back Pressure Barg	Constant	1.5	
23			Variable	0	
24			Total	1.5	
25		% Allowable Overpressure		10%	
26		Over Pressure Factor		1.10	
27		Compressibility Factor (Z)		-	
28		Latent Heat of Vaporization (Kj/Kg)		-	
29		Ratio of Specific Heats(Cp/Cv)		1.007	
30		Density @ Oper. kg/m3temperature & pressure		920.7	
31		Operating Viscosity cP		0.011	
32		Barometric Pressure (psia)		13.26 ~ 14.37	
33		SELECTION	Design Code	Sizing Basis	API 520
34	pressure relieving and de-pressurising systems Code		API 521		
35	Design of Construction		API 521		
36	Scenarios		-		
37	Basis of Selection		Blocked Outlet		
38	Calculated Area		mm²	254	
39	Selected Area		mm²	162.83	
40	Accumulation AC %			1.1	
41	Orifice Designation		F		
42	CONNECTIONS	Size: Inlet	Outlet	1 1/2"	2"
43		Rating & Facing : Inlet	Outlet	FLANGED (600# RF)	FLANGED (150# RF)
44	MATERIALS (VTC)	Body and Bonnet	A216 Gr. WCB (VTC)		
45		Seat and Disc (Trim)	316 SS+PTFE (VTC)		
46		Nozzle	316 SS (VTC)		
47		Guide and Rings	316 SS (VTC)		
48		Spring	A216 Gr. WCB (VTC)(Note***)		
49		Bellows	N/A		
50	OPTIONS	Cap without Lever: Screwed or Bolted	Screwed cap		
51		Lifting Lever: Plain or Packed	N/A		
52		Test Gage	Yes		
53		With Rupture Disc	No		
54		Flame Arrestor	No		
55		Hydro Test	Required		
56		Seat Leakage Test	Required		
57		Compliance Standard	According to NACE MR-0175 / ISO15156		
58	PURCHASE	Manufacturer	will be finalized later		
59		Model	will be finalized later		
60		Serial No.	will be finalized later		

Main Notes:

*VTA : Vendor to Advise in bidding stage VTC : Vendor to confirm in bidding stage N/A: Not applicable

** For material details refer to the latest revision of "Piping Material Specification Doc No."BK-SSGRL-PEDCO-110-PI-SP-0001 ".

*** Body color of valves shall be selected same as pipe color. For more details refer to the latest revision of "Specification For Painting Doc No."BK-GNRAL-PEDCO-000-PI-SP-0006".

*** Suitable coating such as cadmiun plated shall be considered (vendor to advise)



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




053 - 073 – 9184

شماره پیمان:

پروژه

بسته کاری

صادر کننده

تسهیلات

رشته

نوع مدرک

سریال

نسخه

16

شماره صفحه: 13 از 16

Item

Data Category

Technical Features

Project Data & Requirements

1

GENERAL

Tag Number

PRV-1701C

2

P&ID NO and Page :

BK-W007S-PEDCO-110-PR-PI-0001-D04 (4/6)

3

Service

MIXED/ 3 PHASES

4

Inlet Line No.

Outlet Line No.

CRD-110-174C-FN05-4"-PT

CDH-110-174C-AN05-6"-PT

5

Discharge to

TO DRAIN SEP.

6

Protect Equipment

FLOW LINE

7

Area Clacification for Discharge

ZONE 2, IIB T4

8

Sour Service

YES

9

NACE MR0175/ISO 15156 Compliance

YES

10

BASIS

Nozzle (Full, Semi)

Full Nozzle

11

Design Type

Safety, Relief, Safety-Relief

Relief

12

Conventional, Bellow, Pilot Op.

Conventional

13

Bonnet Type

Closed

14

PROCESS CONDITIONS
(note 2)

Fluid / Phase / State

Liquid/2phase

15

Ambient Temperature °C

-5

50

16

Temperature °C

Operating

46.19

17

Pressure Barg

Operating

12.78

18

Oper. Temperature °C

RelievingTemp. °C

46.19

46.19

19

Required Capacity kg/h

11347.034

20

Molecular Mass

Sp. Gr.@ relief Tmp kg/m3

77.41

0.894

21

Oper. Pressure barg

Set Pressure barg

12.78

93

22

Back Pressure Barg

Constant

1.5

23

Variable

0

24

Total

1.5

25

% Allowable Overpressure

10%

26

Over Pressure Factor

1.10

27

Compressibility Factor (Z)

-

28

Latent Heat of Vaporization (Kj/Kg)

-

29

Ratio of Specific Heats(Cp/Cv)

1.005

30

Density @ Oper. kg/m3temprature & pressure

893.9

31

Operating Viscosity cP

0.011

32

Barometric Pressure (psia)

13.26 ~ 14.37

33

SELECTION

Design Code

Sizing Basis

API 520

-

34

pressure relieving and de-pressurising systems Code

API 521

35

Design of Construction

API 521

36

Scenarios

-

37

Basis of Selection

Blocked Outlet

38

Calculated Area mm²

153.9

39

Selected Area mm²

79.4

40

Accumulation AC %

1.10

41

Orifice Designation

E

42

CONNECTIONS

Size: Inlet

Outlet

1 "

2"

43

Rating & Facing : Inlet

Outlet

FLANGED (600# RF)

FLANGED (150# RF)

44

MATERIALS (VTC)

Body and Bonnet

A216 Gr. WCB (VTC)

45

Seat and Disc (Trim)

316 SS+PTFE (VTC)

46

Nozzle

316 SS (VTC)

47

Guide and Rings

316 SS (VTC)

48

Spring

A216 Gr. WCB (VTC)(Note***)

49

Bellows

N/A

50

OPTIONS

Cap without Lever: Screwed or Bolted

Screwed cap

51

Lifting Lever: Plain or Packed

N/A

52

Test Gage

Yes

53

With Rupture Disc

No

54

Flame Arrestor

No

55

Hydro Test

Required

56

Seat Leakage Test

Required

57

Compliance Standard

According to NACE MR-0175 / ISO15156

58

PURCHASE

Manufacturer

will be finalized later

59

Model

will be finalized later

60

Serial No.

will be finalized later

Main Notes:

*VTA : Vendor to Advise in bidding stage VTC : Vendor to confirm in bidding stage N/A: Not applicable

** For material details refer to the latest revision of "Piping Material Specification Doc No."BK-SSGRL-PEDCO-110-PI-SP-0001 ".

*** Body color of valves shall be selected same as pipe color. For more details refer to the latest revision of "Specification For Painting Doc No."BK-GNRAL-PEDCO-000-PI-SP-0006 ".

*** Suitable coating such as cadmiun plated shall be considered (vendor to advise)



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک

فعالیت های رو زمینی در بسته های کاری تحت الارض

ساخت موقعیت چاه، تأسیسات سرچاهی، خطوط جرابانی، تسهیلات

برق رسانی مربوط به موقعیت W007S و توسعه چندراهه کلاستر بینک




DATA SHEETS FOR PRESSURE & SAFETY RELIEF VALVES - EXTENSION OF BINAK B/C MANIFOLD

شماره پیمان:

053 - 073 - 9184

پروژه

بسته کاری

صادر کننده

تسهیلات

رشته

نوع مدرک

سریال

نسخه

BK

W007S

PEDCO

110

IN

DT

0004

D03

شماره صفحه: 14 از 16

Item	Data Category	Technical Features	Project Data & Requirements	
1	GENERAL	Tag Number	PRV-1701D	
2		P&ID NO and Page :	BK-W007S-PEDCO-110-PR-PI-0001-D04 (4/6)	
3		Service	MIXED/ 3 PHASES	
4		Inlet Line No. Outlet Line No.	CRD-110-174D-FN05-4"-PT	CDH-110-174D-AN05-6"-PT
5		Discharge to	TO DRAIN SEP.	
6		Protect Equipment	FLOW LINE	
7		Area Clacification for Discharge	ZONE 2, IIB T4	
8		Sour Service	YES	
9		NACE MR0175/ISO 15156 Compliance	YES	
10	BASIS	Nozzle (Full, Semi)	Full Nozzle	
11		Design Type	Safety, Relief, Safety-Relief	Relief
12			Conventional, Bellow, Pilot Op.	Conventional
13		Bonnet Type	Closed	
14	PROCESS CONDITIONS (note 2)	Fluid / Phase / State	Liquid/2phase	
15		Ambient Temperature °C	-5	50
16		Temperature °C	Operating	44.41
17		Pressure Barg	Operating	12.78
18		Oper. Temperature °C	RelievingTemp. °C	44.41 44.41
19		Required Capacity kg/h	29036.515	
20		Molecular Mass	Sp. Gr.@ relief Tmp kg/m3	39.09 0.907
21		Oper. Pressure barg	Set Pressure barg	12.78 93
22		Back Pressure Barg	Constant	1.5
23			Variable	0
24			Total	1.5
25		% Allowable Overpressure	10%	
26		Over Pressure Factor	1.10	
27		Compressibility Factor (Z)	-	
28		Latent Heat of Vaporization (Kj/Kg)	-	
29		Ratio of Specific Heats(Cp/Cv)	1.007	
30		Density @ Oper. kg/m3temperature & pressure	907.4	
31		Operating Viscosity cP	0.012	
32		Barometric Pressure (psia)	13.26 - 14.37	
33	SELECTION	Design Code Sizing Basis	API 520	-
34		pressure relieving and de-pressurising systems Code	API 521	
35		Design of Construction	API 521	
36		Scenarios	-	
37		Basis of Selection	Blocked Outlet	
38		Calculated Area mm²	397	
39		Selected Area mm²	284.13	
40		Accumulation AC %	1.10	
41		Orifice Designation	G	
42	CONNECTIONS	Size: Inlet Outlet	1 1/2"	3"
43		Rating & Facing : Inlet Outlet	FLANGED (600# RF)	FLANGED (150# RF)
44	MATERIALS (VTC)	Body and Bonnet	A216 Gr. WCB (VTC)	
45		Seat and Disc (Trim)	316 SS+PTFE (VTC)	
46		Nozzle	316 SS (VTC)	
47		Guide and Rings	316 SS (VTC)	
48		Spring	A216 Gr. WCB (VTC)(Note***)	
49		Bellows	N/A	
50	OPTIONS	Cap without Lever: Screwed or Bolted	Screwed cap	
51		Lifting Lever: Plain or Packed	N/A	
52		Test Gage	Yes	
53		With Rupture Disc	No	
54		Flame Arrestor	No	
55		Hydro Test	Required	
56		Seat Leakage Test	Required	
57		Compliance Standard	According to NACE MR-0175 / ISO15156	
58	PURCHASE	Manufacturer	will be finalized later	
59		Model	will be finalized later	
60		Serial No.	will be finalized later	

Main Notes:

*VTA : Vendor to Advise in bidding stage VTC : Vendor to confirm in bidding stage N/A: Not applicable

** For material details refer to the latest revision of "Piping Material Specification Doc No."BK-SSGRL-PEDCO-110-PI-SP-0001 ".

*** Body color of valves shall be selected same as pipe color. For more details refer to the latest revision of "Specification For Painting Doc No."BK-GNRAL-PEDCO-000-PI-SP-0006 ".

*** Suitable coating such as cadmiun plated shall be considered (vendor to advise)



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک

فعالیت های رو زمینی در بسته های کاری تحت الارض

ساخت موقعیت چاه، تأسیسات سرچاهی، خطوط جرابانی، تسهیلات

برق رسانی مربوط به موقعیت W007S و توسعه چندراهه کلاستر بینک




DATA SHEETS FOR PRESSURE & SAFETY RELIEF VALVES - EXTENSION OF BINAK B/C MANIFOLD

شماره پیمان:

053 - 073 - 9184

شماره صفحه: 15 از 16

نسخه

سریال

نوع مدرک

رشته

تسهیلات

صادر کننده

بسته کاری

پروژه

D03

0004

DT

IN

110

PEDCO

W007S

BK

Item	Data Category	Technical Features	D03	Project Data & Requirements	
1	GENERAL	Tag Number		PRV-1701E	
2		P&ID NO and Page :		BK-W007S-PEDCO-110-PR-PI-0001-D04 (3/6)	
3		Service		MIXED/ 3 PHASES	
4		Inlet Line No.	Outlet Line No.	CRD-110-174E-FN05-4"-PT	CDH-110-174E-AN05-6"-PT
5		Discharge to		TO DRAIN SEP.	
6		Protect Equipment		FLOW LINE	
7		Area Clacification for Discharge		ZONE 2, IIB T4	
8		Sour Service		YES	
9		NACE MR0175/ISO 15156 Compliance		YES	
10	BASIS	Nozzle (Full, Semi)		Full Nozzle	
11		Design Type	Safety, Relief, Safety-Relief	Relief	
12			Conventional, Bellow, Pilot Op.	Conventional	
13		Bonnet Type		Closed	
14	PROCESS CONDITIONS (note 2)	Fluid / Phase / State		Liquid/2phase	
15		Ambient Temperature °C		-5	50
16		Temperature °C	Operating		40.71
17		Pressure Barg	Operating		12.78
18		Oper. Temperature °C	RelievingTemp. °C	40.71	40.71
19		Required Capacity kg/h		29036.515	
20		Molecular Mass	Sp. Gr.@ relief Tmp kg/m3	39.09	0.911
21		Oper. Pressure barg	Set Pressure barg	12.78	93
22		Back Pressure Barg	Constant		1.5
23			Variable		0
24			Total		1.5
25		% Allowable Overpressure		10%	
26		Over Pressure Factor		1.10	
27		Compressibility Factor (Z)		-	
28		Latent Heat of Vaporization (Kj/Kg)		-	
29		Ratio of Specific Heats(Cp/Cv)		1.007	
30		Density @ Oper. kg/m3temperature & pressure		911.3	
31		Operating Viscosity cP		0.012	
32	Barometric Pressure (psia)		13.26 - 14.37		
33	SELECTION	Design Code	Sizing Basis	API 520	-
34		pressure relieving and de-pressurising systems Code		API 521	
35		Design of Construction		API 521	
36		Scenarios		-	
37		Basis of Selection		Blocked Outlet	
38		Calculated Area	mm²	397	
39		Selected Area	mm²	280.4	
40		Accumulation AC %		1.10	
41		Orifice Designation		G	
42	CONNECTIONS	Size: Inlet	Outlet	1 1/2 "	3"
43		Rating & Facing : Inlet	Outlet	FLANGED (600# RF)	FLANGED (150# RF)
44	MATERIALS (VTC)	Body and Bonnet		A216 Gr. WCB (VTC)	
45		Seat and Disc (Trim)		316 SS+PTFE (VTC)	
46		Nozzle		316 SS (VTC)	
47		Guide and Rings		316 SS (VTC)	
48		Spring		A216 Gr. WCB (VTC)(Note***)	
49		Bellows		N/A	
50	OPTIONS	Cap without Lever: Screwed or Bolted		Screwed cap	
51		Lifting Lever: Plain or Packed		N/A	
52		Test Gage		Yes	
53		With Rupture Disc		No	
54		Flame Arrestor		No	
55		Hydro Test		Required	
56		Seat Leakage Test		Required	
57		Compliance Standard		According to NACE MR-0175 / ISO15156	
58	PURCHASE	Manufacturer		will be finalized later	
59		Model		will be finalized later	
60		Serial No.		will be finalized later	

Main Notes:

*VTA : Vendor to Advise in bidding stage VTC : Vendor to confirm in bidding stage N/A: Not applicable

** For material details refer to the latest revision of "Piping Material Specification Doc No."BK-SSGRL-PEDCO-110-PI-SP-0001 ".

*** Body color of valves shall be selected same as pipe color. For more details refer to the latest revision of "Specification For Painting Doc No."BK-GNRAL-PEDCO-000-PI-SP-0006 ".

*** Suitable coating such as cadmiun plated shall be considered (vendor to advise)



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک

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DATA SHEETS FOR PRESSURE & SAFETY RELIEF VALVES - EXTENSION OF BINAK B/C MANIFOLD

شماره پیمان:

053 - 073 – 9184

شماره صفحه: 16 از 16

نسخه

D03

سریال

0004

نوع مدرک

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رشته

IN

تسهیلات

110

صادر کننده

PEDCO

بسته کاری

W007S

پروژه

BK

Item	Data Category	Technical Features	Project Data & Requirements
1	GENERAL	Tag Number	PRV-1701F
2		P&ID NO and Page :	BK-W007S-PEDCO-110-PR-PI-0001-D04 (5/6)
3		Service	MIXED/ 3 PHASES
4		Inlet Line No.	CRD-110-174F-FN05-4"-PT
5		Outlet Line No.	CDH-110-174F-AN05-6"-PT
6		Discharge to	TO DRAIN SEP.
7		Protect Equipment	FLOW LINE
8		Area Clacification for Discharge	ZONE 2, IIB T4
9		Sour Service	YES
10	BASIS	NACE MR0175/ISO 15156 Compliance	YES
11		Nozzle (Full, Semi)	Full Nozzle
12		Design Type	Relief
13		Conventional, Bellow, Pilot Op.	Conventional
14		Bonnet Type	Closed
15	PROCESS CONDITIONS (note 2)	Fluid / Phase / State	Liquid/2phase
16		Ambient Temperature °C	-5
17		Temperature °C	41.77
18		Pressure Barg	12.78
19		Oper. Temperature °C	41.77
20		Required Capacity kg/h	11614.606
21		Molecular Mass	39.09
22		Sp. Gr.@ relief Tmp kg/m3	0.910
23		Oper. Pressure barg	12.78
24		Set Pressure barg	93
25		Back Pressure Barg	Constant
26			Variable
27			Total
28		% Allowable Overpressure	10%
29		Over Pressure Factor	1.10
30		Compressibility Factor (Z)	-
31		Latent Heat of Vaporization (Kj/Kg)	-
32	Ratio of Specific Heats(Cp/Cv)	1.007	
33	Density @ Oper. kg/m3temprature & pressure	910.2	
34	Operating Viscosity cP	0.012	
35	Barometric Pressure (psia)	13.26 ~ 14.37	
36	SELECTION	Design Code	API 520
37		Sizing Basis	-
38		pressure relieving and de-pressurising systems Code	API 521
39		Design of Construction	API 521
40		Scenarios	-
41		Basis of Selection	Blocked Outlet
42		Calculated Area mm²	153.9
43		Selected Area mm²	112.6
44	Accumulation AC %	1.1	
45	Orifice Designation	E	
46	CONNECTIONS	Size: Inlet	1"
47		Outlet	2"
48		Rating & Facing : Inlet	FLANGED (600# RF)
49		Outlet	FLANGED (150# RF)
50	MATERIALS (VTC)	Body and Bonnet	A216 Gr. WCB (VTC)
51		Seat and Disc (Trim)	316 SS+PTFE (VTC)
52		Nozzle	316 SS (VTC)
53		Guide and Rings	316 SS (VTC)
54		Spring	A216 Gr. WCB (VTC)(Note***)
55		Bellows	N/A
56	OPTIONS	Cap without Lever: Screwed or Bolted	Screwed cap
57		Lifting Lever: Plain or Packed	N/A
58		Test Gage	Yes
59		With Rupture Disc	No
60		Flame Arrestor	No
61		Hydro Test	Required
62		Seat Leakage Test	Required
63		Compliance Standard	According to NACE MR-0175 / ISO15156
64	PURCHASE	Manufacturer	will be finalized later
65		Model	will be finalized later
66		Serial No.	will be finalized later

Main Notes:

*VTA : Vendor to Advise in bidding stage VTC : Vendor to confirm in bidding stage N/A: Not applicable

** For material details refer to the latest revision of "Piping Material Specification Doc No."BK-SSGRL-PEDCO-110-PI-SP-0001 ".

*** Body color of valves shall be selected same as pipe color. For more details refer to the latest revision of "Specification For Painting Doc No."BK-GNRL-PEDCO-000-PI-SP-0006 ".

*** Suitable coating such as cadmiun plated shall be considered (vendor to advise)