
 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک فعالیت های رو زمینی در بسته های کاری تحت الارض عمومی و مشترک								
	DATA SHEETS FOR WHCP/HPU-WELLHEADS								
شماره پیمان: 053 - 073 - 9184	پروژه BK	بسته کاری SSGRL	صادر کننده PEDCO	تسهیلات 110	رشته IN	نوع مدرک DT	سریال 0001	نسخه D04	شماره صفحه: 1 از 12

طرح نگهداشت و افزایش تولید 27 مخزن

DATA SHEETS FOR WHCP/HPU - WELLHEADS

نگهداشت و افزایش تولید میدان نفتی بینک

D04	JAN.2023	IFA	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
D03	JUN.2022	IFA	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
D02	DEC.2021	IFA	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
D01	NOV.2021	IFA	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
D00	AUG.2021	IFC	M.Asgharnejad	M.Fakharian	Sh.Ghalikar	
Rev.	Date	Purpose of Issue / Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval

Class: 2

CLIENT Doc. Number: F9Z-707368

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 رو زمینی در بسته های کاری تحت الارض

عمومی و مشترک

DATA SHEETS FOR WHCP/HPU-WELLHEADS



شماره پیمان:

053 - 073 - 9184



نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D04	0001	DT	IN	000	PEDCO	SSGRL	BK

شماره صفحه: 12 از 12

REVISION RECORD SHEET

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3	X	X			
4	X	X			
5	X	X	X		
6	X		X	X	X
7	X		X		X
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 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بینک</p> <p>فعالیت های رو زمینی در بسته های کاری تحت الارض</p> <p>عمومی و مشترک</p> <p>DATA SHEETS FOR WHCP/HPU-WELLHEADS</p>								
شماره پیمان: 053 - 073 - 9184	پروژه BK	بسته کاری SSGRL	صادر کننده PEDCO	تسهیلات 000	رشته IN	نوع مدرک DT	سریال 0001	نسخه D04	شماره صفحه: 3 از 12

REFERENCE DOCUMENTS:

1- SPECIFICATION FOR INSTRUMENTATION	BK-GNRAL-PEDCO-000-IN-SP-0001
2- PIPING AND PIPELINE MATERIAL SPECIFICATION	BK-SSGRL-PEDCO-110-PI-SP-0001
3- PIPING & INSTRUMENT DIAGRAM:	
P&ID - W018S	BK-W018S-PEDCO-110-PR-PI-0001
P&ID - W028	BK-W028-PEDCO-110-PR-PI-0001
P&ID - W035	BK-W035-PEDCO-110-PR-PI-0001
P&ID - W008N	BK-W008N-PEDCO-110-PR-PI-0001
4- SPECIFICATION FOR WHCP/HPU	BK-SSGRL-PEDCO-110-IN-SP-0001
5- WHCP HYDRAULIC/PNEUMATIC DIAGRAM- WELLHEADS	BK-SSGRL-PEDCO-110-IN-DG-0002
6- INSTRUMENT & CONTROL DESIGN CRITERIA	BK-SSGRL-PEDCO-110-IN-DC-0002

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک فعالیت های رو زمینی در بسته های کاری تحت الارض عمومی و مشترک DATA SHEETS FOR WHCP/HPU-WELLHEADS								
شماره پیمان: 053 - 073 - 9184	پروژه BK	بسته کاری SSGRL	صادر کننده PEDCO	تسهیلات 000	رشته IN	نوع مدرک DT	سریال 0001	نسخه D04	شماره صفحه: 4 از 12



GENERAL NOTES








1- Environmental Condition For Field Instrumentation Of Binak wellhead area Shall Be Considered as Per The Following:

- Minimum ambient temperature (°C): -5 °C
- Maximum ambient temperature (°C): 50 °C
- Maximum steel surface exposed to sun (°C): 85 °C

Relative Humidity:

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

 NISOC	<p>تکداشت و افزایش تولید میدان نفتی بینک فعالیت های روزمینی در بسته های کاری تحت الارض عمومی و مشترک</p>							 
	DATA SHEETS FOR WHCP/HPU-WELLHEADS							
	پروژه	بسته کاری	صادر کننده	تجهیزات	رشته	نوع مدارک	سریال	نسخه
053 - 073 - 9184	BK	SSGRL	PEDCO	000	IN	DT	0001	D04
شماره پیمان:								شماره صفحه: 5 از 12

WELLHEAD CONTROL PANEL FOR WELL NO. W018S			
GENERAL DATA	1	TAG NUMBERS	WHCP-1101
	2	DIMENSIONS FOR PANEL	VTA
	3	P&ID NO.	BK-W018S-PEDCO-110-PR-PI-0001
	4	HYDRAULIC DIAGRAM NO.	BK-SSGRL-PEDCO-110-IN-DG-0002
	5	NUMBER OF WELLS PER WHCP /NUMBER OF ATUMATIC VALVES PER WELL	1 WELL/2 VALVE(SSV/SSSV)
SITE CONDITION	6	AS PER PROJECT REQUIREMENT	REFER TO NOTE 1 IN PAGE 4(GENERAL NOTES)
PROCESS DATA	7	WELL DESIGN PRESSURE(Psi)	5000
	8	WELL OPERATING PRESSURE(Psi)	650
	9	WELL DESIGN TEMPERATURE(°C)	100
	10	WELL OPERATING TEMPERATURE(°C)	75
SSV/SSSV SPECIFICATION DATA	11	SSV SWEPT VOLUME/ CRACK OPEN HYDRAULIC PRESSURE	6000 CC/2500 PSI(NOTE 5) 
	12	SSSV SWEPT VOLUME / CRACK OPEN HYDRAULIC PRESSURE	250 CC/5000 PSI(NOTE 5) 
	13	SSV OPEN& CLOSE TIME /SSSV OPEN&CLOSE TIME(SECOND)	270 & 14-38/5-10 & 2-5 (NOTE 5) 
	14	SSV ACTUATOR HYDRULIC DESIGN PRESSURE/SSSV ACTUATOR HYDRULIC DESIGN PRESSURE	 5000 PSI
	15	SSV MAXIMUM WORKING PRESSURE/SSSV MAXIMUM WORKING PRESSURE	 2500 PSI/3500 PSI (NOTE 5)
	16	SSV MINIMUM WORKING PRESSURE	 600 PSI (NOTE 5)
	17	SSV / SSSV CONNECTION SIZE	1/2" / 1/4"(NOTE 5)
WHCP ENCLOSURE	18	IP RATING	IP 65(NOTE 1)
	19	NACE MR0175/ISO 15156 COMPLIANCE	NOT REQUIRED EXCEPT FOR PSHH/ PSLL AS PER BELOW TABLE
	20	NAME PLATE	BOTH TAG AND WELL NUMBER TO BE INCLUDED IN NAME PLATE
	21	MATERIAL OF WHCP AND ALL ACCESSORIES	316 SS (NOTE 1)
	22	PANEL ACCESSORIES	AS MINIMUM AS PER PROJECT (NOTE 1,5)
HPU	23	NUMBER OF OIL TANK/ VOLUME FOR OIL TANK	2 TANKS /ONE AS THE MAIN OIL TANK AND ONE FOR SSSV RETURN LINE (NOTE 9,10) 
	24	NUMBER OF ACCUMULATOR	2 NO. FOR HP/MP HEADERS (VTC)
	25	PUMP REQUIREMENT	N2 DRIVEN AND HAND PUMPS(NOTE 1,3)
	26	PUMP MAX. WORKING PRESSURE	5000 PSI (EACH PUMPS SEPARATELY)
NITROGEN BOTTLES/ PNEUMATIC SUPPLY (PER PANEL) (NOTE 1,2)	27	NUMBER OF BOTTLES	VENDOR TO ADVISE (CALCULATION TO BE PROVIDED)(NOTE 2)
	28	DIMENSIONS FOR BOTTLES RACK	VENDOR TO ADVISE(NOTE 2)
	29	PRESSURE GAUGES FOR EACH HEADER	REQUIRED(NOTE 1)
PANEL MOUNTED GAUGES	30	PRESSURE GAUGES ON PANEL FRONT	FRONT FACE MOUNTED, AS PER PROJECT DIAGRAMS (VTC)(NOTE 6,1)
	31	PRESSURE GAUGES MATERIAL	316 SS (NOTE 1)
	32	DIAL SIZE	60 mm
SSV/SSSV COMMAND TUBING(NOTE 8,9)	33	TUBE SIZE TO SSV/ SSSV(BY WHCP VENDOR)	1/2" / 1/4"(NOTE 5)
	34	TUBE MATERIAL	316 SS (NOTE 1)
	35	TUBE LENGTH FROM WELL TO SSV/ SSSV (BY WHCP VENDOR)	30 m /30 m
FUSIBLE PLUG LOOP (NOTE 8,9)	36	TUBE SIZE	1/4"
	37	TUBE LENGTH TO AROUND WELL (BY WHCP VENDOR)	50m
	38	TUBE MATERIAL	316 SS (NOTE 1)
	39	NUMBER OF FUSIBLE PLUG FOR EACH WELL/SET POINT	3 NO. (SET POINT:100°C)
PANEL MOUNTED PUSH BUTTONS	40	ESD RESSET FUNCTION/SSV AND SSSV OPEN/CLOSE COMMAND FOR EACH WELL	REQUIRED DEDICATED FRONT FACE PUSH BUTTONS AS PER PROJECT DIAGRAMS (VTC)(NOTE 6,1)
PANEL MOUNTED INDICATORS/ LAMPS	41	VALVES OPEN & CLOSE FEEDBACK STATUS	REQUIRED DEDICATED FRONT FACE INDICATORS AS PER PROJECT DIAGRAMS(VTC)(NOTE 6,1)

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک فعالیت های رو زمینی در بسته های کاری تحت الارض عمومی و مشترک							 	
	DATA SHEETS FOR WHCP/HPU-WELLHEADS								
	شماره پیمان:	پروژه	بسته کاری	صادر کننده	تهیهات	رشته	نوع مدرک	سریال	نسخه
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شماره صفحه: 6 از 12									

PRESSURE PILOT	42	PRESSURE SWITCHES FOR PRESSURE SENSING LINE	4 NO. FOR EACH PANEL
SPARE PART	43	SPARE PARTS FOR COMMISSIONING AND START-UP	REQUIRED(NOTE 1)
	44	SPARE PARTS FOR TWO YEARS OPERATION	REQUIRED(NOTE 1)
INSPECTION & TEST	45	AS PER PROJECT REQUIREMENT	REQUIRED(NOTE 1)
PURCHASE	46	MANUFACTURER	FINALIZED BASED ON VENDOR DATA
	47	MODEL	FINALIZED BASED ON VENDOR DATA

RELATED DATA SHEETS FOR PRESSURE SENSING LINE AND SWITCHES								
TAG NO.		P&IDs No.	OPER. TEMP. (°C)	SERVICE	PROCESS CON. OF SENSING LINE TO THE PIPE	FLUID	OPER. PRESS. (PSIG)	OVER RANGE PROT.
	PSHH-1101A	BK-W018S-PEDCO-110-PR-PI-0001	75	PNEUMATIC LOGIC LINE(N2) OF WELLHEAD PANEL ACTUATED BY PROCESS FLUID FROM MAIN LINE	1/2"	CRUDE OIL	635.2	REQUIRED
		LINE / EQUIPMENT NO.	DSG. TEMP. (°C)		PRESS. ELEM.TYPE	PRESS. ELEM. MTR.	DESIGN PRESS. (PSIG)	SET POINT (PSIG)
		WHCP-1101	100		BY VENDOR	SS 316	5000	1200
	PSLL-1101A	BK-W018S-PEDCO-110-PR-PI-0001	75	PNEUMATIC LOGIC LINE(N2) OF WELLHEAD PANEL ACTUATED BY PROCESS FLUID FROM MAIN LINE	1/2"	CRUDE OIL	635.2	REQUIRED
		LINE / EQUIPMENT NO.	DSG. TEMP. (°C)		PRESS. ELEM.TYPE	PRESS. ELEM. MTR.	DESIGN PRESS. (PSIG)	SET POINT (PSIG)
		WHCP-1101	100		BY VENDOR	SS 316	5000	194.575
	PSHH-1101B	BK-W018S-PEDCO-110-PR-PI-0001	75	PNEUMATIC LOGIC LINE(N2) OF WELLHEAD PANEL ACTUATED BY PROCESS FLUID FROM MAIN LINE	1/2"	CRUDE OIL	242	REQUIRED
		LINE / EQUIPMENT NO.	DSG. TEMP. (°C)		PRESS. ELEM.TYPE	PRESS. ELEM. MTR.	DESIGN PRESS. (PSIG)	SET POINT (PSIG)
		WHCP-1101	100		BY VENDOR	SS 316	5000	800
	PSLL-1101B	BK-W018S-PEDCO-110-PR-PI-0001	75	PNEUMATIC LOGIC LINE(N2) OF WELLHEAD PANEL ACTUATED BY PROCESS FLUID FROM MAIN LINE	1/2"	CRUDE OIL	242	REQUIRED
		LINE / EQUIPMENT NO.	DSG. TEMP. (°C)		PRESS. ELEM.TYPE	PRESS. ELEM. MTR.	DESIGN PRESS. (PSIG)	SET POINT (PSIG)
		WHCP-1101	100		BY VENDOR	SS 316	5000	200

NOTE:

VTA : VENDOR TO ADVISE VTC: VENDOR TO CONFIRM NIA: NOT APPLICABLE

1- FOR DETAIL DATA REFER TO DOC.:SPECIFICATION FOR WHCP/HPU, BK-SSGRL-PEDCO-110-IN-SP-0001.

2- AS MINIMUM, BOTTLES WITH CAPACITY OF 50 LITER WITH QUANTITY: 4 MAIN BOTTLES AND 4 RESERVED BOTTLES SHALL BE CONSIDERED

3- NITROGEN GAS FOR N2 DRIVEN PUMP SUPPLY AT LEAST FOR TWO TIMES ACTUATION OF EACH VALVES (SSV AND SSSV) IS REQUIRED.

4- THE WHCP PANEL SHALL BE SUPPLIED WITH "FIRST OUT" FEATURE SO THE PANEL LOGIC SHALL BE DESIGNED IN A MANNER THAT FIRST CAUSE OF PANEL SHUTDOWN BE DISTINGUISHABLE FOR MAINTENANCE PURPOSES.

5- TO BE FINALIZED BASED ON SSV/SSSV VENDOR FINAL DATA BOOK.

6- REFER TO "WHCP HYDRAULIC DIAGRAM,BK-SSGRL-PEDCO-110-IN-DG-0002".

7- ALL TUBE AND ACCESSORIES FOR SSV/SSSV, FUSIBLE PLUG AND INTERCONNECTION ON WHCP SHALL BE SUPPLIED BY WHCP VENDOR

8- THE QUANTITY OF TUBE AND ACCESSORIES FOR SSV/SSSV, FUSIBLE PLUG AND INTERCONNECTION ON WHCP SHALL BE FINALIZED BY WHCP VENDOR.



9- THE MINIMUM VOLUME OF OIL TANK(50 LITER) SHALL BE CONSIDERED IN ACCORDANCE TO THE CAPACITY OF SSV/SSSV AND THE HYDRAULIC OIL LINE.








10- QUICK EXHAUST VALVE FOR QUICK OPENING OF SSV TO BE CONSIDERED BY WHCP'S VENDOR.




11- RETURN LINE FROM SSSV TO RETURN OIL TANK TO BE CONSIDERED BY WHCP'S VENDOR.

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	DATA SHEETS FOR WHCP/HPU-WELLHEADS								
	پروژه	بسته کاری	صادر کننده	تهیهات	رشته	نوع مدرک	سریال		نسخه
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WELLHEAD CONTROL PANEL FOR WELL NO. W008N			
GENERAL DATA	1	TAG NUMBERS	WHCP-1601
	2	DIMENSIONS FOR PANEL	VTA
	3	P&ID NO.	BK-W008N-PEDCO-110-PR-PI-0001
	4	HYDRAULIC DIAGRAM NO.	BK-SSGRL-PEDCO-110-IN-DG-0002
	5	NUMBER OF WELLS PER WHCP /NUMBER OF ATUMATIC VALVES PER WELL	1 WELL/2 VALVE(SSV/SSSV)
SITE CONDITION	6	AS PER PROJECT REQUIREMENT	REFER TO NOTE 1 IN PAGE 4(GENERAL NOTES)
PROCESS DATA	7	WELL DESIGN PRESSURE(PSI)	5000
	8	WELL OPERATING PRESSURE(PSI)	650
	9	WELL DESIGN TEMPERATURE(°C)	100
	10	WELL OPERATING TEMPERATURE(°C)	75
SSV/SSSV SPECIFICATION DATA	11	SSV SWEPT VOLUME/ CRACK OPEN HYDRAULIC PRESSURE	6000 CC/2500 PSI(NOTE 5) 
	12	SSSV SWEPT VOLUME / CRACK OPEN HYDRAULIC PRESSURE	250 CC/5000 PSI(NOTE 5) 
	13	SSV OPEN& CLOSE TIME /SSSV OPEN&CLOSE TIME(SECOND)	270 & 14-38/5-10 & 2-5 (NOTE 5) 
	14	SSV ACTUATOR HYDRULIC DESIGN PRESSURE/SSSV ACTUATOR HYDRULIC DESIGN PRESSURE 	5000 PSI
	15	SSV MAXIMUM WORKING PRESSURE/SSSV MAXIMUM WORKING PRESSURE 	2500 PSI/3500 PSI (NOTE 5)
	16	SSV MINIMUM WORKING PRESSURE 	600 PSI (NOTE 5)
	17	SSV / SSSV CONNECTION SIZE	1/2" / 1/4"(NOTE 5)
WHCP ENCLOSURE	18	IP RATING	IP 65(NOTE 1)
	19	NACE MR0175/ISO 15156 COMPLIANCE	NOT REQUIRED EXCEPT FOR PSHH/ PSLL AS PER BELOW TABLE
	20	NAME PLATE	BOTH TAG AND WELL NUMBER TO BE INCLUDED IN NAME PLATE
	21	MATERIAL OF WHCP AND ALL ACCESSORIES	316 SS (NOTE 1)
	22	PANEL ACCESSORIES	AS MINIMUM AS PER PROJECT (NOTE 1,5)
HPU	23	NUMBER OF OIL TANK/ VOLUME FOR OIL TANK	2 TANKS /ONE AS THE MAIN OIL TANK AND ONE FOR SSSV RETURN LINE (NOTE 9,10) 
	24	NUMBER OF ACCUMULATOR	2 NO. FOR HP/MP HEADERS (VTC)
	25	PUMP REQUIREMENT	N2 DRIVEN AND HAND PUMPS(NOTE 1,3)
	26	PUMP MAX. WORKING PRESSURE	5000 PSI (EACH PUMPS SEPARATELY)
NITROGEN BOTTLES/ PNEUMATIC SUPPLY (PER PANEL) (NOTE 1,2)	27	NUMBER OF BOTTLES	VENDOR TO ADVISE (CALCULATION TO BE PROVIDED)(NOTE 2)
	28	DIMENSIONS FOR BOTTLES RACK	VENDOR TO ADVISE(NOTE 2)
	29	PRESSURE GAUGES FOR EACH HEADER	REQUIRED(NOTE 1)
PANEL MOUNTED GAUGES	30	PRESSURE GAUGES ON PANEL FRONT	FRONT FACE MOUNTED, AS PER PROJECT DIAGRAMS (VTC)(NOTE 6,1)
	31	PRESSURE GAUGES MATERIAL	316 SS (NOTE 1)
	32	DIAL SIZE	60 mm
SSV/SSSV COMMAND TUBING(NOTE 8,9)	33	TUBE SIZE TO SSV/ SSSV(BY WHCP VENDOR)	1/2" / 1/4"(NOTE 5)
	34	TUBE MATERIAL	316 SS (NOTE 1)
	35	TUBE LENGTH FROM WELL TO SSV/ SSSV (BY WHCP VENDOR)	30 m /30 m
FUSIBLE PLUG LOOP (NOTE 8,9)	36	TUBE SIZE	1/4"
	37	TUBE LENGTH TO AROUND WELL (BY WHCP VENDOR)	50m
	38	TUBE MATERIAL	316 SS (NOTE 1)
	39	NUMBER OF FUSIBLE PLUG FOR EACH WELL/SET POINT	3 NO. (SET POINT:100°C)
PANEL MOUNTED PUSH BUTTONS	40	ESD RESET FUNCTION/SSV AND SSSV OPEN/CLOSE COMMAND FOR EACH WELL	REQUIRED DEDICATED FRONT FACE PUSH BUTTONS AS PER PROJECT DIAGRAMS (VTC)(NOTE 6,1)








 NISOC	نگهداشت و افزایش تولید میدان نفتی بیک فعالیت های روزمینی در بسته های کاری تحت الارض عمومی و مشترک							 
	DATA SHEETS FOR WHCP/HPU-WELLHEADS							
	شماره پیمان:	پروژه	بسته کاری	صادر کننده	تهیهات	رشته	نوع مدرک	سریال
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								شماره صفحه: 8 از 12



PANEL MOUNTED INDICATORS/ LAMPS	41	VALVES OPEN & CLOSE FEEDBACK STATUS	REQUIRED DEDICATED FRONT FACE INDICATORS AS PER PROJECT DIAGRAMS(VTC)(NOTE 6,1)
PRESSURE PILOT	42	PRESSURE SWITCHES FOR PRESSURE SENSING LINE	4 NO. FOR EACH PANEL
SPARE PART	43	SPARE PARTS FOR COMMISSIONING AND START-UP	REQUIRED(NOTE 1)
	44	SPARE PARTS FOR TWO YEARS OPERATION	REQUIRED(NOTE 1)
INSPECTION & TEST	45	AS PER PROJECT REQUIREMENT	REQUIRED(NOTE 1)
PURCHASE	46	MANUFACTURER	FINALIZED BASED ON VENDOR DATA
	47	MODEL	FINALIZED BASED ON VENDOR DATA

RELATED DATA SHEETS FOR PRESSURE SENSING LINE AND SWITCHES								
TAG NO.	PSHH-1601A	P&IDs No.	OPER. TEMP. (°C)	SERVICE	PROCESS CON. OF SENSING LINE TO THE PIPE	FLUID	OPER. PRESS. (PSIG)	OVER RANGE PROT.
		BK-W008N-PEDCO-110-PR-PI-0001	75		1/2"	CRUDE OIL	635.2	REQUIRED
		LINE / EQUIPMENT NO.	DSG. TEMP. (°C)	PNEUMATIC LOGIC LINE(N2) OF WELLHEAD PANEL ACTUATED BY PROCESS FLUID FROM MAIN LINE	PRESS. ELEM.TYPE	PRESS. ELEM. MTR.	DESIGN PRESS. (PSIG)	SET POINT (PSIG)
		WHCP-1601	100		BY VENDOR	SS 316	5000	1200
TAG NO.	PSLL-1601A	P&IDs No.	OPER. TEMP. (°C)	SERVICE	PROCESS CON. OF SENSING LINE TO THE PIPE	FLUID	OPER. PRESS. (PSIG)	OVER RANGE PROT.
		BK-W008N-PEDCO-110-PR-PI-0001	75		1/2"	CRUDE OIL	635.2	REQUIRED
		LINE / EQUIPMENT NO.	DSG. TEMP. (°C)	PNEUMATIC LOGIC LINE(N2) OF WELLHEAD PANEL ACTUATED BY PROCESS FLUID FROM MAIN LINE	PRESS. ELEM.TYPE	PRESS. ELEM. MTR.	DESIGN PRESS. (PSIG)	SET POINT (PSIG)
		WHCP-1601	100		BY VENDOR	SS 316	5000	200
TAG NO.	PSHH-1601B	P&IDs No.	OPER. TEMP. (°C)	SERVICE	PROCESS CON. OF SENSING LINE TO THE PIPE	FLUID	OPER. PRESS. (PSIG)	OVER RANGE PROT.
		BK-W008N-PEDCO-110-PR-PI-0001	75		1/2"	CRUDE OIL	230	REQUIRED
		LINE / EQUIPMENT NO.	DSG. TEMP. (°C)	PNEUMATIC LOGIC LINE(N2) OF WELLHEAD PANEL ACTUATED BY PROCESS FLUID FROM MAIN LINE	PRESS. ELEM.TYPE	PRESS. ELEM. MTR.	DESIGN PRESS. (PSIG)	SET POINT (PSIG)
		WHCP-1601	100		BY VENDOR	SS 316	5000	800
TAG NO.	PSLL-1601B	P&IDs No.	OPER. TEMP. (°C)	SERVICE	PROCESS CON. OF SENSING LINE TO THE PIPE	FLUID	OPER. PRESS. (PSIG)	OVER RANGE PROT.
		BK-W008N-PEDCO-110-PR-PI-0001	75		1/2"	CRUDE OIL	230	REQUIRED
		LINE / EQUIPMENT NO.	DSG. TEMP. (°C)	PNEUMATIC LOGIC LINE(N2) OF WELLHEAD PANEL ACTUATED BY PROCESS FLUID FROM MAIN LINE	PRESS. ELEM.TYPE	PRESS. ELEM. MTR.	DESIGN PRESS. (PSIG)	SET POINT (PSIG)
		WHCP-1601	100		BY VENDOR	SS 316	5000	200

NOTE:
VTA : VENDOR TO ADVISE VTC: VENDOR TO CONFIRM NIA: NOT APPLICABLE
1- FOR DETAIL DATA REFER TO DOC.:SPECIFICATION FOR WHCP/HPU, BK-SSGRL-PEDCO-110-IN-SP-0001.
2- AS MINIMUM, BOTTLES WITH CAPACITY OF 50 LITER WITH QUANTITY: 4 MAIN BOTTLES AND 4 RESERVED BOTTLES SHALL BE CONSIDERED
3- NITROGEN GAS FOR N2 DRIVEN PUMP SUPPLY AT LEAST FOR TWO TIMES ACTUATION OF EACH VALVES (SSV AND SSSV) IS REQUIRED.
4- THE WHCP PANEL SHALL BE SUPPLIED WITH "FIRST OUT" FEATURE SO THE PANEL LOGIC SHALL BE DESIGNED IN A MANNER THAT FIRST CAUSE OF PANEL SHUTDOWN BE DISTINGUISHABLE FOR MAINTENANCE PURPOSES.
5- TO BE FINALIZED BASED ON SSV/SSSV VENDOR FINAL DATA BOOK.
6- REFER TO "WHCP HYDRAULIC DIAGRAM,BK-SSGRL-PEDCO-110-IN-DG-0002".
7- ALL TUBE AND ACCESSORIES FOR SSV/SSSV, FUSIBLE PLUG AND INTERCONNECTION ON WHCP SHALL BE SUPPLIED BY WHCP VENDOR
8- THE QUANTITY OF TUBE AND ACCESSORIES FOR SSV/SSSV, FUSIBLE PLUG AND INTERCONNECTION ON WHCP SHALL BE FINALIZED BY WHCP VENDOR.
9- THE MINIMUM VOLUME OF OIL TANK(50 LITER) SHALL BE CONSIDERED IN ACCORDANCE TO THE CAPACITY OF SSV/SSSV AND THE HYDRAULIC OIL LINE.
10- QUICK EXHAUST VALVE FOR QUICK OPENING OF SSV TO BE CONSIDERED BY WHCP'S VENDOR.
11- RETURN LINE FROM SSSV TO RETURN OIL TANK TO BE CONSIDERED BY WHCP'S VENDOR.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بیک فعالیت های روزمینی در بسته های کاری تحت الارض عمومی و مشترک DATA SHEETS FOR WHCP/HPU-WELLHEADS								 شماره صفحه: 9 از 12
شماره پیمان:	پروژه	بسته کاری	صادر کننده	تهیه کننده	رشته	نوع مدرک	سریال	نسخه	
053 - 073 - 9184	BK	SSGRL	PEDCO	000	IN	DT	0001	D04	

WELLHEAD CONTROL PANEL FOR WELL NO. W028		
GENERAL DATA	1	TAG NUMBERS WHCP-1401
	2	DIMENSIONS FOR PANEL VTA
	3	P&ID NO. BK-W028-PEDCO-110-PR-PI-0001
	4	HYDRAULIC DIAGRAM NO. BK-SSGRL-PEDCO-110-IN-DG-0002
	5	NUMBER OF WELLS PER WHCP /NUMBER OF ATUMATIC VALVES PER WELL 1 WELL/2 VALVE(SSV/SSSV)
SITE CONDITION	6	AS PER PROJECT REQUIREMENT REFER TO NOTE 1 IN PAGE 4(GENERAL NOTES)
PROCESS DATA	7	WELL DESIGN PRESSURE(Psi) 5000
	8	WELL OPERATING PRESSURE(Psi) 650
	9	WELL DESIGN TEMPERATURE(°C) 105
	10	WELL OPERATING TEMPERATURE(°C) 80
SSV/SSSV SPECIFICATION DATA	11	SSV SWEPT VOLUME/ CRACK OPEN HYDRAULIC PRESSURE 6000 CC/2500 PSI(NOTE 5) 
	12	SSSV SWEPT VOLUME / CRACK OPEN HYDRAULIC PRESSURE 19 CC/5000 PSI(NOTE 5) 
	13	SSV OPEN& CLOSE TIME /SSSV OPEN&CLOSE TIME(SECOND) 270 & 14-38/5-10 & 2-5 (NOTE 5) 
	14	SSV ACTUATOR HYDRULIC DESIGN PRESSURE/SSSV ACTUATOR HYDRULIC DESIGN PRESSURE 5000 PSI 
	15	SSV MAXIMUM WORKING PRESSURE/SSSV MAXIMUM WORKING PRESSURE 2500 PSI/3500 PSI (NOTE 5) 
	16	SSV MINIMUM WORKING PRESSURE 600 PSI (NOTE 5) 
	17	SSV / SSSV CONNECTION SIZE 1/2" / 1/4"(NOTE 5)
WHCP ENCLOSURE	18	IP RATING IP 65(NOTE 1)
	19	NACE MR0175/ISO 15156 COMPLIANCE NOT REQUIRED EXCEPT FOR PSHH/ PSLL AS PER BELOW TABLE
	20	NAME PLATE BOTH TAG AND WELL NUMBER TO BE INCLUDED IN NAME PLATE
	21	MATERIAL OF WHCP AND ALL ACCESSORIES 316 SS (NOTE 1)
	22	PANEL ACCESSORIES AS MINIMUM AS PER PROJECT (NOTE 1,5)
HPU	23	NUMBER OF OIL TANK/ VOLUME FOR OIL TANK 2 TANKS /ONE AS THE MAIN OIL TANK AND ONE FOR SSSV RETURN LINE (NOTE 9,10) 
	24	NUMBER OF ACCUMULATOR 2 NO. FOR HP/MP HEADERS (VTC)
	25	PUMP REQUIREMENT N2 DRIVEN AND HAND PUMPS(NOTE 1,3)
	26	PUMP MAX. WORKING PRESSURE 5000 PSI (EACH PUMPS SEPARATELY)
NITROGEN BOTTLES/ PNEUMATIC SUPPLY (PER PANEL) (NOTE 1,2)	27	NUMBER OF BOTTLES VENDOR TO ADVISE (CALCULATION TO BE PROVIDED)(NOTE 2)
	28	DIMENSIONS FOR BOTTLES RACK VENDOR TO ADVISE(NOTE 2)
	29	PRESSURE GAUGES FOR EACH HEADER REQUIRED(NOTE 1)
PANEL MOUNTED GAUGES	30	PRESSURE GAUGES ON PANEL FRONT FRONT FACE MOUNTED, AS PER PROJECT DIAGRAMS (VTC)(NOTE 6,1)
	31	PRESSURE GAUGES MATERIAL 316 SS (NOTE 1)
	32	DIAL SIZE 60 mm
SSV/SSSV COMMAND TUBING(NOTE 8,9)	33	TUBE SIZE TO SSV/ SSSV(BY WHCP VENDOR) 1/2" / 1/4"(NOTE 5)
	34	TUBE MATERIAL 316 SS (NOTE 1)
	35	TUBE LENGTH FROM WELL TO SSV/ SSSV (BY WHCP VENDOR) 30 m /30 m
FUSIBLE PLUG LOOP (NOTE 8,9)	36	TUBE SIZE 1/4"
	37	TUBE LENGTH TO AROUND WELL (BY WHCP VENDOR) 50m
	38	TUBE MATERIAL 316 SS (NOTE 1)
	39	NUMBER OF FUSIBLE PLUG FOR EACH WELL/SET POINT 3 NO. (SET POINT:100°C)
PANEL MOUNTED PUSH BUTTONS	40	ESD RESET FUNCTION/SSV AND SSSV OPEN/CLOSE COMMAND FOR EACH WELL REQUIRED DEDICATED FRONT FACE PUSH BUTTONS AS PER PROJECT DIAGRAMS (VTC)(NOTE 6,1)
PANEL MOUNTED INDICATORS/ LAMPS	41	VALVES OPEN & CLOSE FEEDBACK STATUS REQUIRED DEDICATED FRONT FACE INDICATORS AS PER PROJECT DIAGRAMS(VTC)(NOTE 6,1)

 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بینک فعالیت های روزمینی در بسته های کاری تحت الارض عمومی و مشترک</p> <p>DATA SHEETS FOR WHCP/HPU-WELLHEADS</p>								
شماره پیمان: 053 - 073 - 9184	پروژه: BK	بسته کاری: SSGRL	صادر کننده: PEDCO	تجهیزات: 000	رشته: IN	نوع مدرک: DT	سریال: 0001	نسخه: D04	شماره صفحه: 10 از 12

PRESSURE PILOT	42	PRESSURE SWITCHES FOR PRESSURE SENSING LINE	4 NO. FOR EACH PANEL
SPARE PART	43	SPARE PARTS FOR COMMISSIONING AND START-UP	REQUIRED(NOTE 1)
	44	SPARE PARTS FOR TWO YEARS OPERATION	REQUIRED(NOTE 1)
INSPECTION & TEST	45	AS PER PROJECT REQUIREMENT	REQUIRED(NOTE 1)
PURCHASE	46	MANUFACTURER	FINALIZED BASED ON VENDOR DATA
	47	MODEL	FINALIZED BASED ON VENDOR DATA

RELATED DATA SHEETS FOR PRESSURE SENSING LINE AND SWITCHES								
TAG NO.	PSHH-1401A	P&IDs No.	OPER. TEMP. (°C)	SERVICE	PROCESS CON. OF SENSING LINE TO THE PIPE	FLUID	OPER. PRESS. (PSIG)	OVER RANGE PROT.
		BK-W028-PEDCO-110-PR-PI-0001	80		1/2"	CRUDE OIL	635.2	REQUIRED
		LINE / EQUIPMENT NO.	DSG. TEMP. (°C)	PNEUMATIC LOGIC LINE(N2) OF WELLHEAD PANEL ACTUATED BY PROCESS FLUID FROM MAIN LINE	PRESS. ELEM.TYPE	PRESS. ELEM. MTR.	DESIGN PRESS. (PSIG)	SET POINT (PSIG)
		WHCP-1401	105		BY VENDOR	SS 316	5000	D04 1200
TAG NO.	PSLL-1401A	P&IDs No.	OPER. TEMP. (°C)	SERVICE	PROCESS CON. OF SENSING LINE TO THE PIPE	FLUID	OPER. PRESS. (PSIG)	OVER RANGE PROT.
		BK-W028-PEDCO-110-PR-PI-0001	80		1/2"	CRUDE OIL	635.2	REQUIRED
		LINE / EQUIPMENT NO.	DSG. TEMP. (°C)	PNEUMATIC LOGIC LINE(N2) OF WELLHEAD PANEL ACTUATED BY PROCESS FLUID FROM MAIN LINE	PRESS. ELEM.TYPE	PRESS. ELEM. MTR.	DESIGN PRESS. (PSIG)	SET POINT (PSIG)
		WHCP-1401	105		BY VENDOR	SS 316	5000	D04 200
TAG NO.	PSHH-1401B	P&IDs No.	OPER. TEMP. (°C)	SERVICE	PROCESS CON. OF SENSING LINE TO THE PIPE	FLUID	OPER. PRESS. (PSIG)	OVER RANGE PROT.
		BK-W028-PEDCO-110-PR-PI-0001	80		1/2"	CRUDE OIL	273	D04 REQUIRED
		LINE / EQUIPMENT NO.	DSG. TEMP. (°C)	PNEUMATIC LOGIC LINE(N2) OF WELLHEAD PANEL ACTUATED BY PROCESS FLUID FROM MAIN LINE	PRESS. ELEM.TYPE	PRESS. ELEM. MTR.	DESIGN PRESS. (PSIG)	SET POINT (PSIG)
		WHCP-1401	105		BY VENDOR	SS 316	D04 5000	800
TAG NO.	PSLL-1401B	P&IDs No.	OPER. TEMP. (°C)	SERVICE	PROCESS CON. OF SENSING LINE TO THE PIPE	FLUID	OPER. PRESS. (PSIG)	OVER RANGE PROT.
		BK-W028-PEDCO-110-PR-PI-0001	80		1/2"	CRUDE OIL	273	D04 REQUIRED
		LINE / EQUIPMENT NO.	DSG. TEMP. (°C)	PNEUMATIC LOGIC LINE(N2) OF WELLHEAD PANEL ACTUATED BY PROCESS FLUID FROM MAIN LINE	PRESS. ELEM.TYPE	PRESS. ELEM. MTR.	DESIGN PRESS. (PSIG)	SET POINT (PSIG)
		WHCP-1401	105		BY VENDOR	SS 316	5000	200

NOTE:

VTA : VENDOR TO ADVISE VTC: VENDOR TO CONFIRM NIA: NOT APPLICABLE

1- FOR DETAIL DATA REFER TO DOC.:SPECIFICATION FOR WHCP/HPU, BK-SSGRL-PEDCO-110-IN-SP-0001.

2- AS MINIMUM, BOTTLES WITH CAPACITY OF 50 LITER WITH QUANTITY: 4 MAIN BOTTLES AND 4 RESERVED BOTTLES SHALL BE CONSIDERED

3- NITROGEN GAS FOR N2 DRIVEN PUMP SUPPLY AT LEAST FOR TWO TIMES ACTUATION OF EACH VALVES (SSV AND SSSV) IS REQUIRED.

4- THE WHCP PANEL SHALL BE SUPPLIED WITH "FIRST OUT" FEATURE SO THE PANEL LOGIC SHALL BE DESIGNED IN A MANNER THAT FIRST CAUSE OF PANEL SHUTDOWN BE DISTINGUISHABLE FOR MAINTENANCE PURPOSES.

5- TO BE FINALIZED BASED ON SSV/SSSV VENDOR FINAL DATA BOOK.

6- REFER TO "WHCP HYDRAULIC DIAGRAM,BK-SSGRL-PEDCO-110-IN-DG-0002".

7- ALL TUBE AND ACCESSORIES FOR SSV/SSSV, FUSIBLE PLUG AND INTERCONNECTION ON WHCP SHALL BE SUPPLIED BY WHCP VENDOR



8- THE QUANTITY OF TUBE AND ACCESSORIES FOR SSV/SSSV, FUSIBLE PLUG AND INTERCONNECTION ON WHCP SHALL BE FINALIZED BY WHCP VENDOR.








9- THE MINIMUM VOLUME OF OIL TANK(50 LITER) SHALL BE CONSIDERED IN ACCORDANCE TO THE CAPACITY OF SSV/SSSV AND THE HYDRAULIC OIL LINE.



10- QUICK EXHAUST VALVE FOR QUICK OPENING OF SSV TO BE CONSIDERED BY WHCP'S VENDOR.

11- RETURN LINE FROM SSSV TO RETURN OIL TANK TO BE CONSIDERED BY WHCP'S VENDOR.



 NISOC	نگهداشت و افزایش تولید میدان نفتی بیک فعالیت های روزمینی در بسته های کاری تحت الارض عمومی و مشترک								
شماره پیمان: 053 - 073 - 9184	DATA SHEETS FOR WHCP/HPU-WELLHEADS								شماره صفحه: 11 از 12
	پروژه: BK	بسته کاری: SSGRL	صادر کننده: PEDCO	تهیهات: 000	رشته: IN	نوع مدرک: DT	سریال: 0001	نسخه: D04	

WELLHEAD CONTROL PANEL FOR WELL NO. W035		
GENERAL DATA	1	TAG NUMBERS WHCP-1501
	2	DIMENSIONS FOR PANEL VTA
	3	P&ID NO. BK-W035-PEDCO-110-PR-PI-0001
	4	HYDRAULIC DIAGRAM NO. BK-SSGRL-PEDCO-110-IN-DG-0002
	5	NUMBER OF WELLS PER WHCP /NUMBER OF ATUMATIC VALVES PER WELL 1 WELL/2 VALVE(SSV/SSSV)
SITE CONDITION	6	AS PER PROJECT REQUIREMENT REFER TO NOTE 1 IN PAGE 4(GENERAL NOTES)
PROCESS DATA	7	WELL DESIGN PRESSURE(Psi) 5000
	8	WELL OPERATING PRESSURE(Psi) 650
	9	WELL DESIGN TEMPERATURE(°C) 105
	10	WELL OPERATING TEMPERATURE(°C) 80
SSV/SSSV SPECIFICATION DATA	11	SSV SWEPT VOLUME/ CRACK OPEN HYDRAULIC PRESSURE 6000 CC/2500 PSI(NOTE 5) 
	12	SSSV SWEPT VOLUME / CRACK OPEN HYDRAULIC PRESSURE 19 CC/5000 PSI(NOTE 5) 
	13	SSV OPEN& CLOSE TIME /SSSV OPEN&CLOSE TIME(SECOND) 270 & 14-38/5-10 & 2-5 (NOTE 5) 
	14	SSV ACTUATOR HYDRULIC DESIGN PRESSURE/SSSV ACTUATOR HYDRULIC DESIGN PRESSURE 5000 PSI 
	15	SSV MAXIMUM WORKING PRESSURE/SSSV MAXIMUM WORKING PRESSURE 2500 PSI/3500 PSI (NOTE 5) 
	16	SSV MINIMUM WORKING PRESSURE 600 PSI (NOTE 5) 
	14	SSV / SSSV CONNECTION SIZE 1/2" / 1/4"(NOTE 5)
WHCP ENCLOSURE	15	IP RATING IP 65(NOTE 1)
	16	NACE MR0175/ISO 15156 COMPLIANCE NOT REQUIRED EXCEPT FOR PSHH/ PSLL AS PER BELOW TABLE
	17	NAME PLATE BOTH TAG AND WELL NUMBER TO BE INCLUDED IN NAME PLATE
	18	MATERIAL OF WHCP AND ALL ACCESSORIES 316 SS (NOTE 1)
	19	PANEL ACCESSORIES AS MINIMUM AS PER PROJECT (NOTE 1,5)
HPU	20	NUMBER OF OIL TANK/ VOLUME FOR OIL TANK 2 TANKS /ONE AS THE MAIN OIL TANK AND ONE FOR SSSV RETURN LINE (NOTE 9,10) 
	21	NUMBER OF ACCUMULATOR 2 NO. FOR HP/MP HEADERS (VTC)
	22	PUMP REQUIREMENT N2 DRIVEN AND HAND PUMPS(NOTE 1,3)
	23	PUMP MAX. WORKING PRESSURE 5000 PSI (EACH PUMPS SEPARATELY)
NITROGEN BOTTLES/ PNEUMATIC SUPPLY (PER PANEL) (NOTE 1,2)	24	NUMBER OF BOTTLES VENDOR TO ADVISE (CALCULATION TO BE PROVIDED)(NOTE 2)
	25	DIMENSIONS FOR BOTTLES RACK VENDOR TO ADVISE(NOTE 2)
	26	PRESSURE GAUGES FOR EACH HEADER REQUIRED(NOTE 1)
PANEL MOUNTED GAUGES	27	PRESSURE GAUGES ON PANEL FRONT FRONT FACE MOUNTED, AS PER PROJECT DIAGRAMS (VTC)(NOTE 6,1)
	28	PRESSURE GAUGES MATERIAL 316 SS (NOTE 1)
	29	DIAL SIZE 60 mm
SSV/SSSV COMMAND TUBING(NOTE 8,9)	30	TUBE SIZE TO SSV/ SSSV(BY WHCP VENDOR) 1/2" / 1/4"(NOTE 5)
	31	TUBE MATERIAL 316 SS (NOTE 1)
	32	TUBE LENGTH FROM WELL TO SSV/ SSSV (BY WHCP VENDOR) 30 m /30 m
FUSIBLE PLUG LOOP (NOTE 8,9)	33	TUBE SIZE 1/4"
	34	TUBE LENGTH TO AROUND WELL (BY WHCP VENDOR) 50m
	35	TUBE MATERIAL 316 SS (NOTE 1)
	36	NUMBER OF FUSIBLE PLUG FOR EACH WELL/SET POINT 3 NO. (SET POINT:100°C)
PANEL MOUNTED PUSH BUTTONS	37	ESD RESET FUNCTION/SSV AND SSSV OPEN/CLOSE COMMAND FOR EACH WELL REQUIRED DEDICATED FRONT FACE PUSH BUTTONS AS PER PROJECT DIAGRAMS (VTC)(NOTE 6,1)
PANEL MOUNTED INDICATORS/ LAMPS	38	VALVES OPEN & CLOSE FEEDBACK STATUS REQUIRED DEDICATED FRONT FACE INDICATORS AS PER PROJECT DIAGRAMS(VTC)(NOTE 6,1)

 NISOC	<p>نگهداشت و افزایش تولید میدان نفتی بیک</p> <p>فعالیت های روزمینی در بسته های کاری تحت الارض</p> <p>عمومی و مشترک</p> <p>DATA SHEETS FOR WHCP/HPU-WELLHEADS</p>								
شماره پیمان: 053 - 073 - 9184	پروژه: BK	بسته کاری: SSGRL	صادر کننده: PEDCO	تجهیزات: 000	رشته: IN	نوع مدرک: DT	سریال: 0001	نسخه: D04	شماره صفحه: 12 از 12

PRESSURE PILOT	39	PRESSURE SWITCHES FOR PRESSURE SENSING LINE	4 NO. FOR EACH PANEL
SPARE PART	40	SPARE PARTS FOR COMMISSIONING AND START-UP	REQUIRED(NOTE 1)
	41	SPARE PARTS FOR TWO YEARS OPERATION	REQUIRED(NOTE 1)
INSPECTION & TEST	42	AS PER PROJECT REQUIREMENT	REQUIRED(NOTE 1)
PURCHASE	43	MANUFACTURER	FINALIZED BASED ON VENDOR DATA
	44	MODEL	FINALIZED BASED ON VENDOR DATA

RELATED DATA SHEETS FOR PRESSURE SENSING LINE AND SWITCHES								
TAG NO.	PSHH-1501A	P&IDs No.	OPER. TEMP. (°C)	SERVICE	PROCESS CON. OF SENSING LINE TO THE PIPE	FLUID	OPER. PRESS. (PSIG)	OVER RANGE PROT.
		BK-W035-PEDCO-110-PR-PI-0001	80		1/2"	CRUDE OIL	635.2	REQUIRED
		LINE / EQUIPMENT NO.	DSG. TEMP. (°C)	PNEUMATIC LOGIC LINE(N2) OF WELLHEAD PANEL ACTUATED BY PROCESS FLUID FROM MAIN LINE	PRESS. ELEM.TYPE	PRESS. ELEM. MTR.	DESIGN PRESS. (PSIG)	SET POINT (PSIG)
		WHCP-1501	105		BY VENDOR	SS 316	5000	D04 1200
TAG NO.	PSLL-1501A	P&IDs No.	OPER. TEMP. (°C)	SERVICE	PROCESS CON. OF SENSING LINE TO THE PIPE	FLUID	OPER. PRESS. (PSIG)	OVER RANGE PROT.
		BK-W035-PEDCO-110-PR-PI-0001	80		1/2"	CRUDE OIL	635.2	REQUIRED
		LINE / EQUIPMENT NO.	DSG. TEMP. (°C)	PNEUMATIC LOGIC LINE(N2) OF WELLHEAD PANEL ACTUATED BY PROCESS FLUID FROM MAIN LINE	PRESS. ELEM.TYPE	PRESS. ELEM. MTR.	DESIGN PRESS. (PSIG)	SET POINT (PSIG)
		WHCP-1501	105		BY VENDOR	SS 316	5000	D04 200
TAG NO.	PSHH-1501B	P&IDs No.	OPER. TEMP. (°C)	SERVICE	PROCESS CON. OF SENSING LINE TO THE PIPE	FLUID	OPER. PRESS. (PSIG)	OVER RANGE PROT.
		BK-W035-PEDCO-110-PR-PI-0001	80		1/2"	CRUDE OIL	298	REQUIRED
		LINE / EQUIPMENT NO.	DSG. TEMP. (°C)	PNEUMATIC LOGIC LINE(N2) OF WELLHEAD PANEL ACTUATED BY PROCESS FLUID FROM MAIN LINE	PRESS. ELEM.TYPE	PRESS. ELEM. MTR.	DESIGN PRESS. (PSIG)	SET POINT (PSIG)
		WHCP-1501	105		BY VENDOR	SS 316	5000	D04 800
TAG NO.	PSLL-1501B	P&IDs No.	OPER. TEMP. (°C)	SERVICE	PROCESS CON. OF SENSING LINE TO THE PIPE	FLUID	OPER. PRESS. (PSIG)	OVER RANGE PROT.
		BK-W035-PEDCO-110-PR-PI-0001	80		1/2"	CRUDE OIL	298	REQUIRED
		LINE / EQUIPMENT NO.	DSG. TEMP. (°C)	PNEUMATIC LOGIC LINE(N2) OF WELLHEAD PANEL ACTUATED BY PROCESS FLUID FROM MAIN LINE	PRESS. ELEM.TYPE	PRESS. ELEM. MTR.	DESIGN PRESS. (PSIG)	SET POINT (PSIG)
		WHCP-1501	105		BY VENDOR	SS 316	5000	D04 200

NOTE:

VTA : VENDOR TO ADVISE VTC: VENDOR TO CONFIRM NIA: NOT APPLICABLE

1- FOR DETAIL DATA REFER TO DOC.:SPECIFICATION FOR WHCP/HPU, BK-SSGRL-PEDCO-110-IN-SP-0001.

2- AS MINIMUM, BOTTLES WITH CAPACITY OF 50 LITER WITH QUANTITY: 4 MAIN BOTTLES AND 4 RESERVED BOTTLES SHALL BE CONSIDERED

3- NITROGEN GAS FOR N2 DRIVEN PUMP SUPPLY AT LEAST FOR TWO TIMES ACTUATION OF EACH VALVES (SSV AND SSSV) IS REQUIRED.

4- THE WHCP PANEL SHALL BE SUPPLIED WITH "FIRST OUT" FEATURE SO THE PANEL LOGIC SHALL BE DESIGNED IN A MANNER THAT FIRST CAUSE OF PANEL SHUTDOWN BE DISTINGUISHABLE FOR MAINTENANCE PURPOSES.

5- TO BE FINALIZED BASED ON SSV/SSSV VENDOR FINAL DATA BOOK.

6- REFER TO "WHCP HYDRAULIC DIAGRAM,BK-SSGRL-PEDCO-110-IN-DG-0002".

7- ALL TUBE AND ACCESSORIES FOR SSV/SSSV, FUSIBLE PLUG AND INTERCONNECTION ON WHCP SHALL BE SUPPLIED BY WHCP VENDOR

8- THE QUANTITY OF TUBE AND ACCESSORIES FOR SSV/SSSV, FUSIBLE PLUG AND INTERCONNECTION ON WHCP SHALL BE FINALIZED BY WHCP VENDOR.

9- THE MINIMUM VOLUME OF OIL TANK(50 LITER) SHALL BE CONSIDERED IN ACCORDANCE TO THE CAPACITY OF SSV/SSSV AND THE HYDRAULIC OIL LINE.

10- QUICK EXHAUST VALVE FOR QUICK OPENING OF SSV TO BE CONSIDERED BY WHCP'S VENDOR.

11- RETURN LINE FROM SSSV TO RETURN OIL TANK TO BE CONSIDERED BY WHCP'S VENDOR.