طرح نگهداشت و افزایش تولید 27 مخزن

ISOMETRIC DRAWINGS-W046S

نگهداشت و افزایش تولید میدان نفتی بینک

D00	MAY.2023	IFC	M.Noori	M.Fakharian	A.M.Mohseni	
Rev.	**Date**	**Purpose of Issue / Status**	**Prepared by:**	**Checked by:**	**Approved by:**	**CLIENT Approval**

Class: 1 **CLIENT Doc. Number: F2L-707618**

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 فعالیت‌های رو زمینی در بسته‌های کاری تحت‌الارض ساخت موقعیت چاه، تأسیسات سرچاهی، خطوط جریانی و مربوط به موقعیت W046 Isometric Drawings - W046S	

شماره پیمان:	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
053 - 073 – 9184	BK	W046S	PEDCO	110	PI	DW	0003	D00	شماره صفحه: 2 از 3

REVISION RECORD SHEET

Page	D00	D01	D02	D03	D04	Page	D00	D01	D02	D03	D04
1	X					65					
2	X					66					
3	X					67					
4	X					68					
5	X					69					
6	X					70					
7	X					71					
8	X					72					
9	X					73					
10	X					74					
11	X					75					
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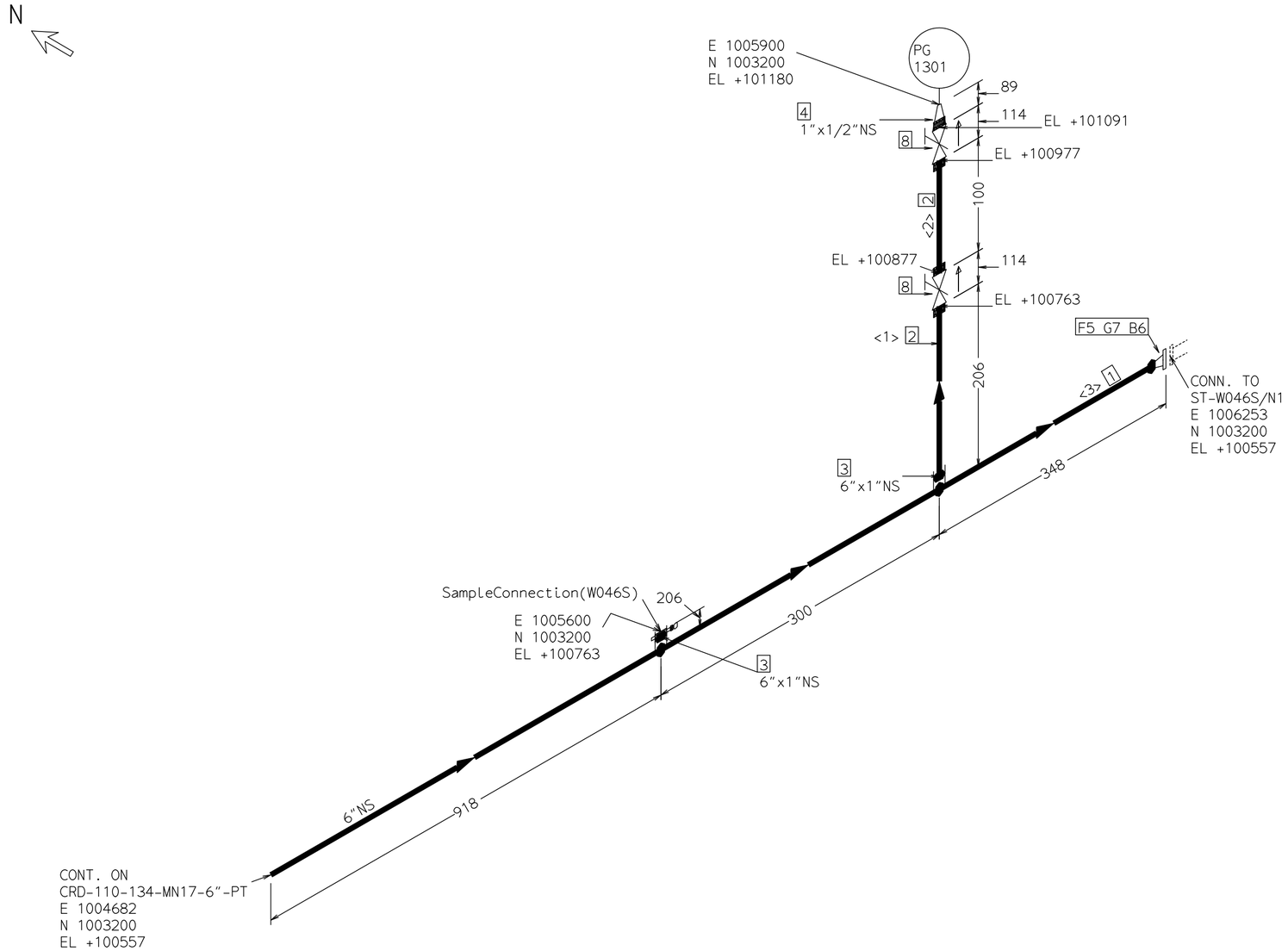
63						127					
64						128					

ISO LIST

Item No.	Line No.	Sheet Q.T.Y	Page No.	Refrence P&ID	Remark
1	CRD-110-130-LN17-6"-PT	1	4	BK-W046S-PEDCO-110-PR-PI-0001	
2	CRD-110-131-LN17-6"-PT	1	5	BK-W046S-PEDCO-110-PR-PI-0001	
3	CRD-110-132-AN15-4"-PT	4	6	BK-W046S-PEDCO-110-PR-PI-0001	
4	CRD-110-133-LN17-4"-PT	1	10	BK-W046S-PEDCO-110-PR-PI-0001	
5	CRD-110-134-MN17-6"-PT	1	11	BK-W046S-PEDCO-110-PR-PI-0001	
6	CRD-110-135-LN15-6"-PT	1	12	BK-W046S-PEDCO-110-PR-PI-0001	
7	TRIM-ST_W046S-LN17-01	1	13	BK-W046S-PEDCO-110-PR-PI-0001	



MATERIAL TAKE OFF

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
	PIPE			
1	PIPE BE SCH120 SMLS ASME B36.10M & IPS-M-PI-190(3) API 5L GR. X52 PSL2 NACE MR0175	6	---	1.5M
2	PIPE PE SCHXXS SMLS ASME B36.10M API 5L GR. B PSL2 NACE MR0175	1	---	0.2M
	FITTINGS			
3	SOCKOLET SW CL6000 AS PER MSS-SP-97 ASTM A105 NACE	6 x 1	---	2
4	SWAGED NIPPLE CONC PLE/TSE CL9000 AS PER IPS-M-PI-150 & MSS-SP-95 ASTM A105 NACE MR0175	1 x 1/2	---	1
	FLANGES			
5	FLANGE WN RTJ API3000 SCH.120 API-6A TYPE-6B API 60K NACE MR0175	6	---	1
	BOLTS			
6	205 mm STUD BOLT WITH 2 HEAVY HEX NUTS ZINC PLATED CHROMATE TREATED PER ASME B18.2.1 & B18.2.2 API-6A(NOT IN PMS) ASTM A193 GR.B7M/ ASTM A194 GR.2HM	1.1/8	---	12
	GASKETS			
7	GASKET, API3000, OCTAGONAL RING JOINT API-6A AISI-316 NACE MR0175	6	---	1
	VALVES / IN-LINE ITEMS			
8	GATE VALVE, CL1500, SW, BB, OS&Y, HO, SOLID WEDGE, API602 BODY:ASTM A105 TRIM:AISI 316L + STELLITE 6, NACE MR0175/ISO15156	1	---	2

CUT PIPE LENGTH

PIECE NO	CUT LENGTH		REMARKS	END PREP.
<1>	100	1		PE/PE
<2>	100	1		PE/PE
<3>	1418	6		PE/BE

-DIMENSIONS OF CHOCK DEVICE, STONE TRAP AND VALVES ARE HOLD FOR VENDOR FINAL DATA.
-ADJACENT SPOOL TO XMAS TREE, CHOCK FLANGES AND STONE TRAP SHALL BE ADJUSTED AT SITE AFTER RECEIVING FABRICATED DEVICES.
-FEASIBILITY AND COORDINATES OF ALL TIE-IN POINTS ON EXISTING LINES SHALL BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE RELEVANT CONSTRUCTION ACTIVITIES.
-CONSTRUCTION CONTRACTOR SHALL CONSIDER ADEQUATE PRECAUTIONS (SUCH AS CHANGING ELEVATION OF RELEVANT PIPE SUPPORTS) TO INSTALL LINES WHEREVER FLOW LINE CROSSES OVER BURN PIT LINE.

1/1	OPERATING CONDITION	DESIGN CONDITION	TEST CONDITION	TEST SYSTEM	FLUID PHASE: A	INSULATION	STRESS ANALY
	PRESSURE: 43.8 BAR	PRESSURE: 207 BAR	TEST PRESSURE: 414 BAR	RADIOGRAPHY TEST: 100	PAINT CODE: -	THK.:	CRITICAL-L:
	TEMPERATURE: 80 °C	TEMPERATURE: 105 °C	TEST MEDIA: WATER		PWHT: YES		

NOTE:
1.UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS, COORDINATES AND ELEVATIONS ARE IN MILLIMETERS.

LEGEND:
STEAM TRACING — ELECTRICAL TRACING — INSUL. FOR A/G SLEEVE FOR U/G
BUTT WELD — SOCKET WELD — SCREWED JOINT

REFP&ID:BK-W046S-PEDCO-110-PR-PI-0001

REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
D00	JUN.2023	ISSUED FOR COMMENT	M.N.	M.F.	M.M.	
			REC.			

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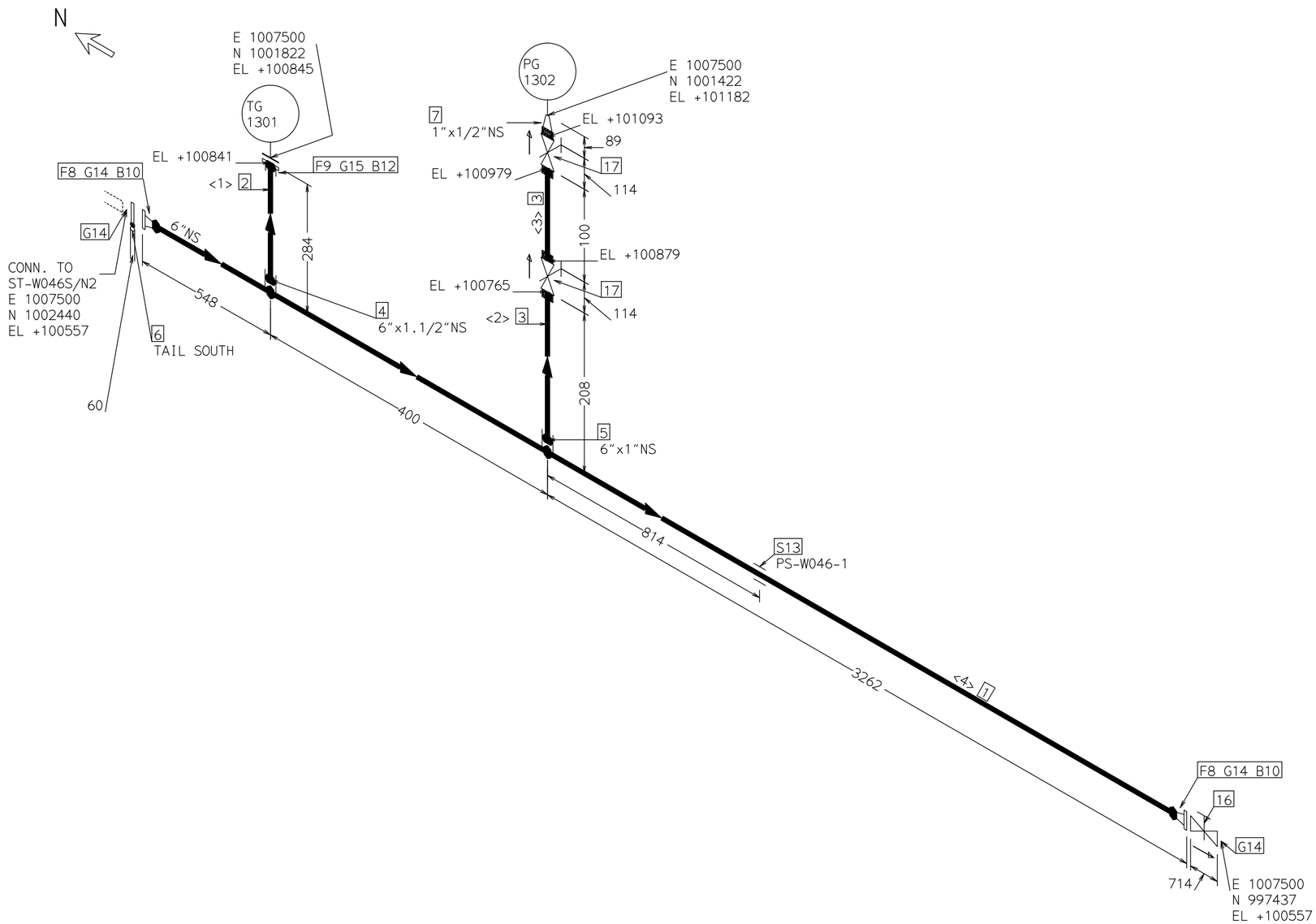
EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR (GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES W046S WELLHEAD FACILITIES
PROJECT NO.: 971020
DRAWING TITLE: ISOMETRIC DRAWINGS - W046S
LINE NUMBER: CRD-110-130-LN17-6"-PT

DRAWN	SIZE	SHEET	SCALE	DRAWING NO.	REV.
M.N.	A3	---	N.T.S	BK-W046S-PEDCO-110-PI-DW-0003	D00



MATERIAL TAKE OFF

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
	PIPE			
1	PIPE BE SCH120 SMLS ASME B36.10M & IPS-M-PI-190(3) API 5L GR. X52 PSL2 NACE MR0175	6	---	4.0M
2	PIPE PE SCHXXS SMLS ASME B36.10M API 5L GR. B PSL2 NACE MR0175	1.1/2	---	0.2M
3	PIPE PE SCHXXS SMLS ASME B36.10M API 5L GR. B PSL2 NACE MR0175	1	---	0.3M
	FITTINGS			
4	SOCKOLET SW CL6000 AS PER MSS-SP-97 ASTM A105 NACE	6 x 1.1/2	---	1
5	SOCKOLET SW CL6000 AS PER MSS-SP-97 ASTM A105 NACE	6 x 1	---	1
6	CHOCK DEVICE, 6"	6	---	1
7	SWAGED NIPPLE CONC PLE/TSE CL9000 AS PER IPS-M-PI-150 & MSS-SP-95 ASTM A105 NACE MR0175	1 x 1/2	---	1
	FLANGES			
8	FLANGE WN RTJ API3000 SCH.120 API-6A TYPE-6B API 60K NACE MR0175	6	---	2
9	FLANGE SW RTJ CL1500 SCHXXS ASME B16.5 & IPS-M-PI-150 ASTM A105 NACE MR0175	1.1/2	---	1
	BOLTS			
10	280 mm STUD BOLT WITH 2 HEAVY HEX NUTS ZINC PLATED CHROMATE TREATED PER ASME B18.2.1 & B18.2.2 API-6A(NOT IN PMS) ASTM A193 GR.B7M/ ASTM A194 GR.2HM	1.1/8	---	12
11	280 mm STUD BOLT WITH 2 HEAVY HEX NUTS ZINC PLATED CHROMATE TREATED PER ASME B18.2.1 & B18.2.2 API-6A(NOT IN PMS) ASTM A193 GR.B7M/ ASTM A194 GR.2HM	1.1/8	---	12
12	280 mm STUD BOLT WITH 2 HEAVY HEX NUTS ZINC PLATED CHROMATE TREATED PER ASME B18.2.1 & B18.2.2 API-6A(NOT IN PMS) ASTM A193 GR.B7M/ ASTM A194 GR.2HM	1	---	4
	SUPPORTS			
13	Support Attachments(NOT IN PMS) unset	6	---	1
	GASKETS			
14	GASKET, API3000, OCTAGONAL RING JOINT API-6A AISI-316 NACE MR0175	6	---	4
15	GASKET, CL1500, OCTAGONAL RING JOINT ASME B16.20 AISI-316 NACE MR0175	1.1/2	---	1
	VALVES / IN-LINE ITEMS			
16	GATE VALVE, API3000, RTJ, PSB, OS&Y, HO, FLEXIBLE WEDGE, TYPE 6B, API 6A BODY: API 60K, TRIM: API 75K, NACE MR0175	6	---	1
17	GATE VALVE, CL1500, SW, BB, OS&Y, HO, SOLID WEDGE, API602 BODY:ASTM A105 TRIM:AISI 316L + STELLITE 6, NACE MR0175/ISO15156	1	---	2

CUT PIPE LENGTH

PIECE NO	CUT LENGTH		REMARKS	END PREP.
<1>	133	1.1/2		PE/PE
<2>	102	1		PE/PE
<3>	100	1		PE/PE
<4>	3914	6		BE/BE

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	OPERATING CONDITION	DESIGN CONDITION	TEST CONDITION	TEST SYSTEM	FLUID PHASE: A	INSULATION	STRESS ANALY
1	PRESSURE: 21 BAR	PRESSURE: 207 BAR	TEST PRESSURE: 414 BAR	RADIOGRAPHY TEST: 100	PAINT CODE: -	THK.:	CRITICAL-L:
1	TEMPERATURE: 78.8 °C	TEMPERATURE: 105 °C	TEST MEDIA: WATER		PWHT: YES		

NOTE:
1.UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS, COORDINATES AND ELEVATIONS ARE IN MILLIMETERS.

LEGEND:
STEAM TRACING — · — · —
ELECTRICAL TRACING — — — — —
INSUL. FOR A/G SLEEVE FOR U/G — — — — —
BUTT WELD
SOCKET WELD
SCREWED JOINT

REFP&ID:BK-W046S-PEDCO-110-PR-PI-0001

REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
D00	JUN.2023	ISSUED FOR COMMENT	M.N.	M.F.	M.M.	
			REC.			

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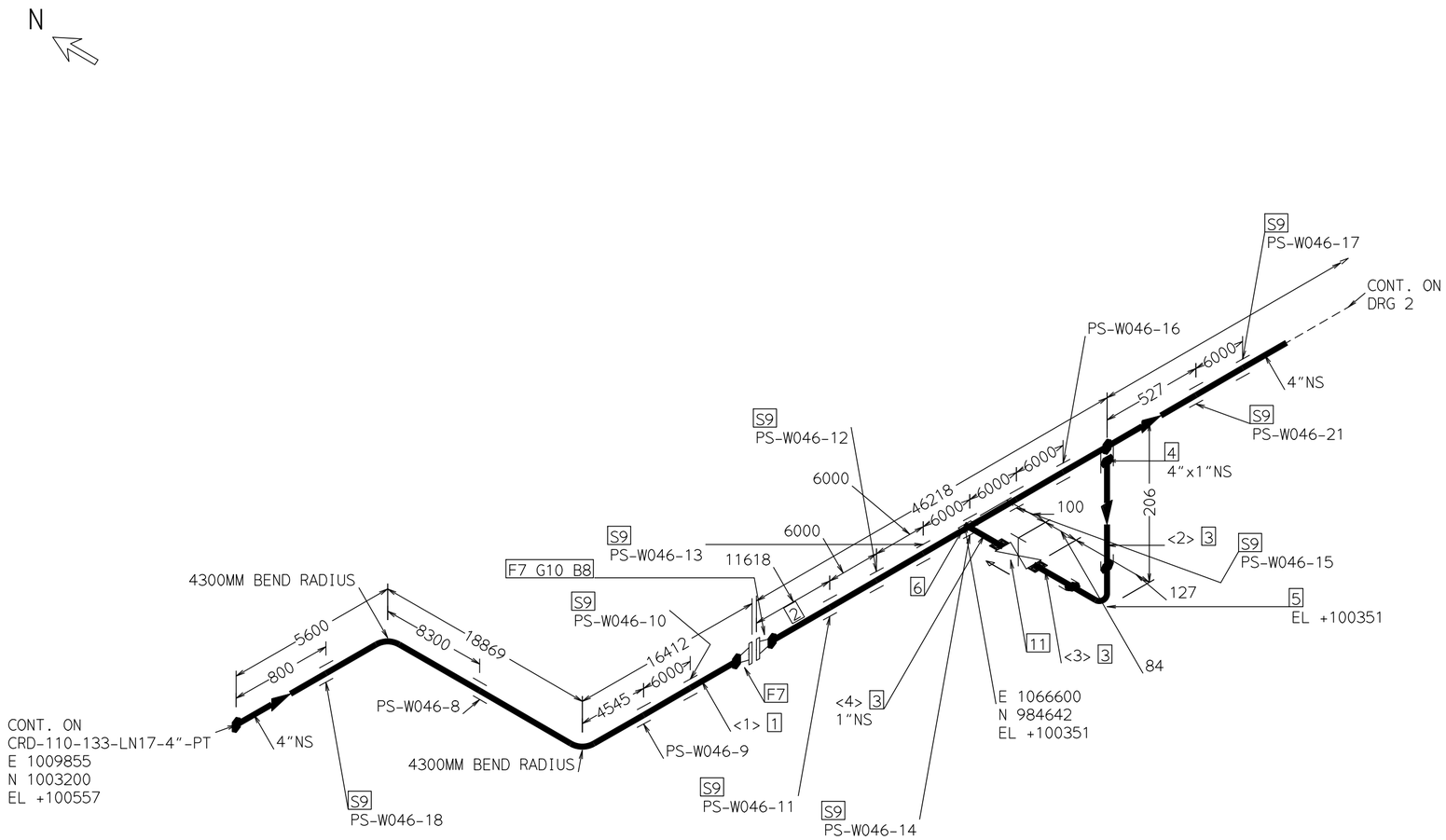
EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR (GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES W046S WELLHEAD FACILITIES
PROJECT NO.: 971020
DRAWING TITLE: ISOMETRIC DRAWINGS - W046S
LINE NUMBER: CRD-110-131-LN17-6"-PT

DRAWN	SIZE	SHEET	SCALE	DRAWING NO.	REV.
M.N.	A3	---	N.T.S	BK-W046S-PEDCO-110-PI-DW-0003	D00



MATERIAL TAKE OFF

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
	PIPE			
1	PIPE BE SCH.40 SMLS/ERW API 5L & IPS-M-PI-190(3) API 5L GR.B PSL2 NACE MR0175	4	---	78.5M
2	PIPE, BE, SCH.80, SMLS, PSL2, ACC to API 5L, IPS-M-PI-190(NOT IN PMS) API 5L X52 NACE MR-0175/ ISO 15156	4	---	11.5M
3	PIPE PE SCH.80 PSL2 SMLS ASME B36.10M(NOT IN PMS) API 5L GR.B	1	---	0.3M
	FITTINGS			
4	HALF COUPLING SW CL6000 AS PER ASME B16.11(NOT IN PMS) ASTM A105	4 x 1	---	1
5	ELBOW 90DEG SW CL3000 SMLS AS PER ASME B16.11(NOT IN PMS) ASTM A105	1	---	1
6	CAP TE AS PER ASME B16.11 CL3000(NOT IN PMS) ASTM A105	1	---	1
	FLANGES			
7	FLANGE WN RTJ API3000 SCH.160 API-6A TYPE-6B API 60K NACE MR0175	4	---	2
	BOLTS			
8	180 mm STUD BOLT WITH 2 HEAVY HEX NUTS ZINC PLATED CHROMATE TREATED PER ASME B18.2.1 & B18.2.2 API-6A(NOT IN PMS) ASTM A193 GR.B7M/ ASTM A194 GR.2HM	1.1/8	---	8
	SUPPORTS			
9	Support Attachment(NOT IN PMS) unset	4	---	9
	GASKETS			
10	GASKET, API3000, OCTAGONAL RING JOINT API-6A AISI-316 NACE MR0175	4	---	1
	VALVES / IN-LINE ITEMS			
11	GATE VALVE CL800 SW TR:13CR SWB-BG-OS&Y WO SOLID WEDGE RENEWABLE SEAT API602 ASME B16.34 STD PORT(NOT IN PMS) ASTM A105	1	---	1

CUT PIPE LENGTH

PIECE NO	CUT LENGTH		REMARKS	END PREP.
<1>	37067	4	PLD BEND	BE/BE
<2>	100	1		PE/PE
<3>	100	1		PE/PE
<4>	100	1		PE/TH

-DIMENSIONS OF CHOCK DEVICE, STONE TRAP AND VALVES ARE HOLD FOR VENDOR FINAL DATA.
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1/4	OPERATING CONDITION	DESIGN CONDITION	TEST CONDITION	TEST SYSTEM	FLUID PHASE: A	INSULATION	STRESS ANALY
	PRESSURE: 0.5 BAR	PRESSURE: 207 BAR	TEST PRESSURE: - BAR	RADIOGRAPHY TEST: 10	PAINT CODE: -	THK.:	CRITICAL-L:
	TEMPERATURE: 80 °C	TEMPERATURE: 105 °C	TEST MEDIA: -		PWHT: YES		

NOTE:
1.UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS, COORDINATES AND ELEVATIONS ARE IN MILLIMETERS.

LEGEND:
STEAM TRACING — ELECTRICAL TRACING — INSUL. FOR A/G SLEEVE FOR U/G
BUTT WELD — SOCKET WELD — SCREWED JOINT

REFP&ID:BK-W046S-PEDCO-110-PR-PI-0001

REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
D00	JUN.2023	ISSUED FOR COMMENT	M.N.	M.F.	M.M.	
			REC.			

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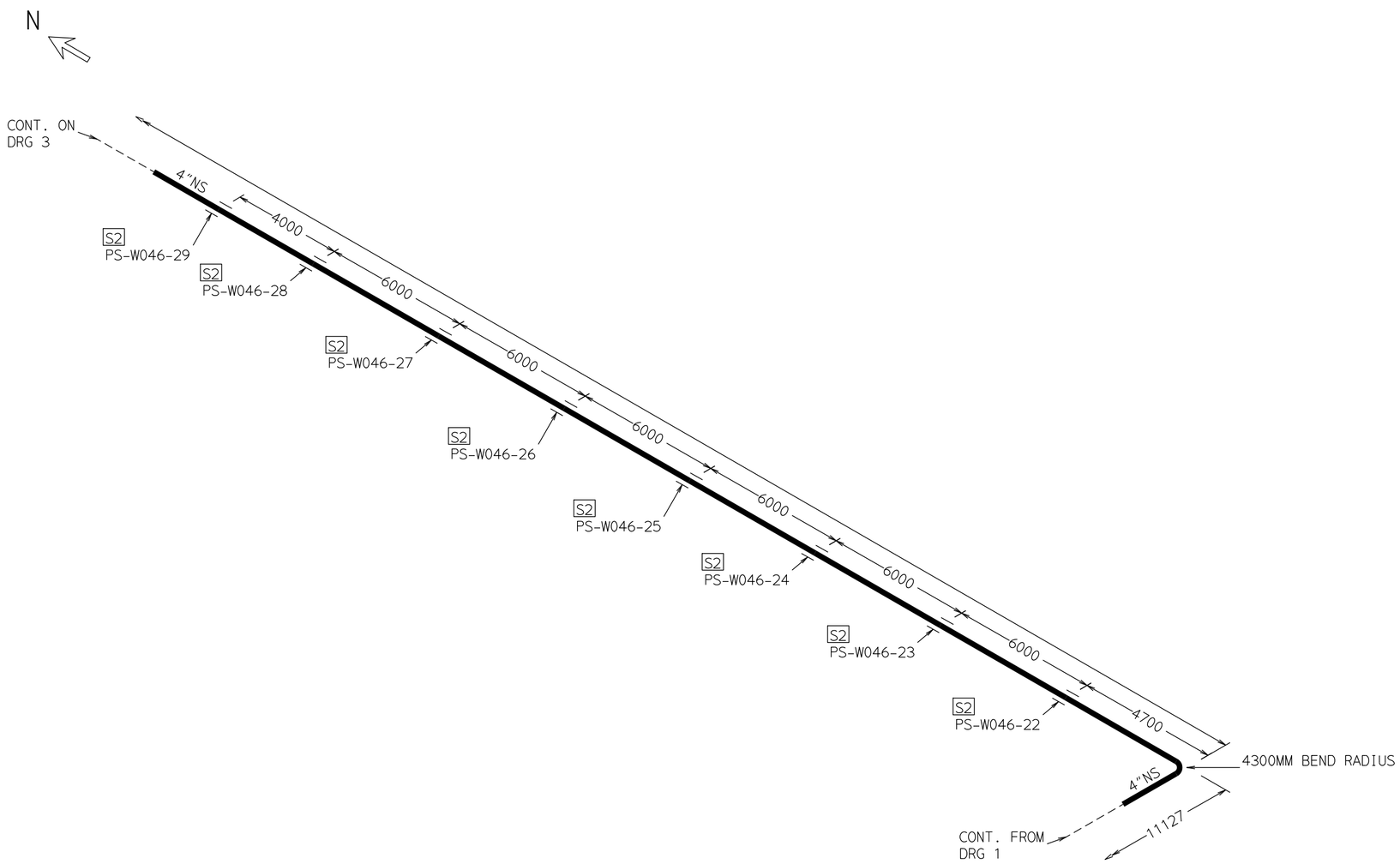
EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY (PEDCO)

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES W046S WELLHEAD FACILITIES
PROJECT NO.: 971020
DRAWING TITLE: ISOMETRIC DRAWINGS - W046S
LINE NUMBER: CRD-110-132-AN15-4"-PT

DRAWN	SIZE	SHEET	SCALE	DRAWING NO.	REV.
M.N.	A3	---	N.T.S	BK-W046S-PEDCO-110-PI-DW-0003	D00



MATERIAL TAKE OFF

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
	PIPE			
1	PIPE BE SCH.40 SMLS/ERW API 5L & IPS-M-PI-190(3) API 5L GR.B PSL2 NACE MR0175	4	---	47.6M
	SUPPORTS			
2	Support Attachment(NOT IN PMS) unset	4	---	8

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2/4	OPERATING CONDITION	DESIGN CONDITION	TEST CONDITION	TEST SYSTEM	FLUID PHASE: A	INSULATION	STRESS ANALY
	PRESSURE: 0.5 BAR	PRESSURE: 207 BAR	TEST PRESSURE: - BAR	RADIOGRAPHY TEST: 10	PAINT CODE: -	THK.:	CRITICAL-L:
	TEMPERATURE: 80 °C	TEMPERATURE: 105 °C	TEST MEDIA: -		PWHT: YES		

NOTE:
1.UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS, COORDINATES AND ELEVATIONS ARE IN MILLIMETERS.

LEGEND:
STEAM TRACING — ELECTRICAL TRACING — INSUL. FOR A/G SLEEVE FOR U/G
BUTT WELD — SOCKET WELD — SCREWED JOINT

REFP&ID:BK-W046S-PEDCO-110-PR-PI-0001

REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
D00	JUN.2023	ISSUED FOR COMMENT	M.N.	M.F.	M.M.	
			REC.			

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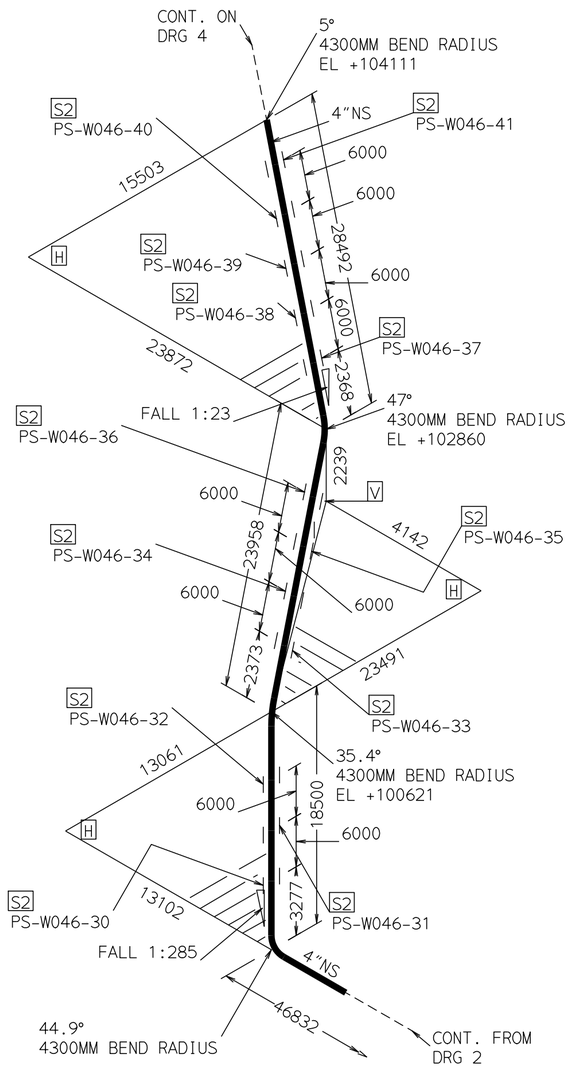
EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR (GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES W046S WELLHEAD FACILITIES
PROJECT NO.: 971020
DRAWING TITLE: ISOMETRIC DRAWINGS - W046S
LINE NUMBER: CRD-110-132-AN15-4"-PT

DRAWN	SIZE	SHEET	SCALE	DRAWING NO.	REV.
M.N.	A3	---	N.T.S	BK-W046S-PEDCO-110-PI-DW-0003	D00



MATERIAL TAKE OFF

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
	PIPE			
1	PIPE BE SCH.40 SMLS/ERW API 5L & IPS-M-PI-190(3) API 5L GR.B PSL2 NACE MR0175	4	---	72.3M
	SUPPORTS			
2	Support Attachment(NOT IN PMS) unset	4	---	12

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	OPERATING CONDITION	DESIGN CONDITION	TEST CONDITION	TEST SYSTEM	FLUID PHASE: A	INSULATION	STRESS ANALY
3	PRESSURE: 0.5 BAR	PRESSURE: 207 BAR	TEST PRESSURE: - BAR	RADIOGRAPHY TEST: 10	PAINT CODE: -	THK.:	CRITICAL-L:
4	TEMPERATURE: 80 °C	TEMPERATURE: 105 °C	TEST MEDIA: -		PWHT: YES		

NOTE:
1.UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS, COORDINATES AND ELEVATIONS ARE IN MILLIMETERS.

LEGEND:
STEAM TRACING — · — · —
ELECTRICAL TRACING — — · — — · —
INSUL. FOR A/G SLEEVE FOR U/G — — —
BUTT WELD
SOCKET WELD
SCREWED JOINT

REFP&ID:BK-W046S-PEDCO-110-PR-PI-0001

REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
D00	JUN.2023	ISSUED FOR COMMENT	M.N.	M.F.	M.M.	
			REC.			

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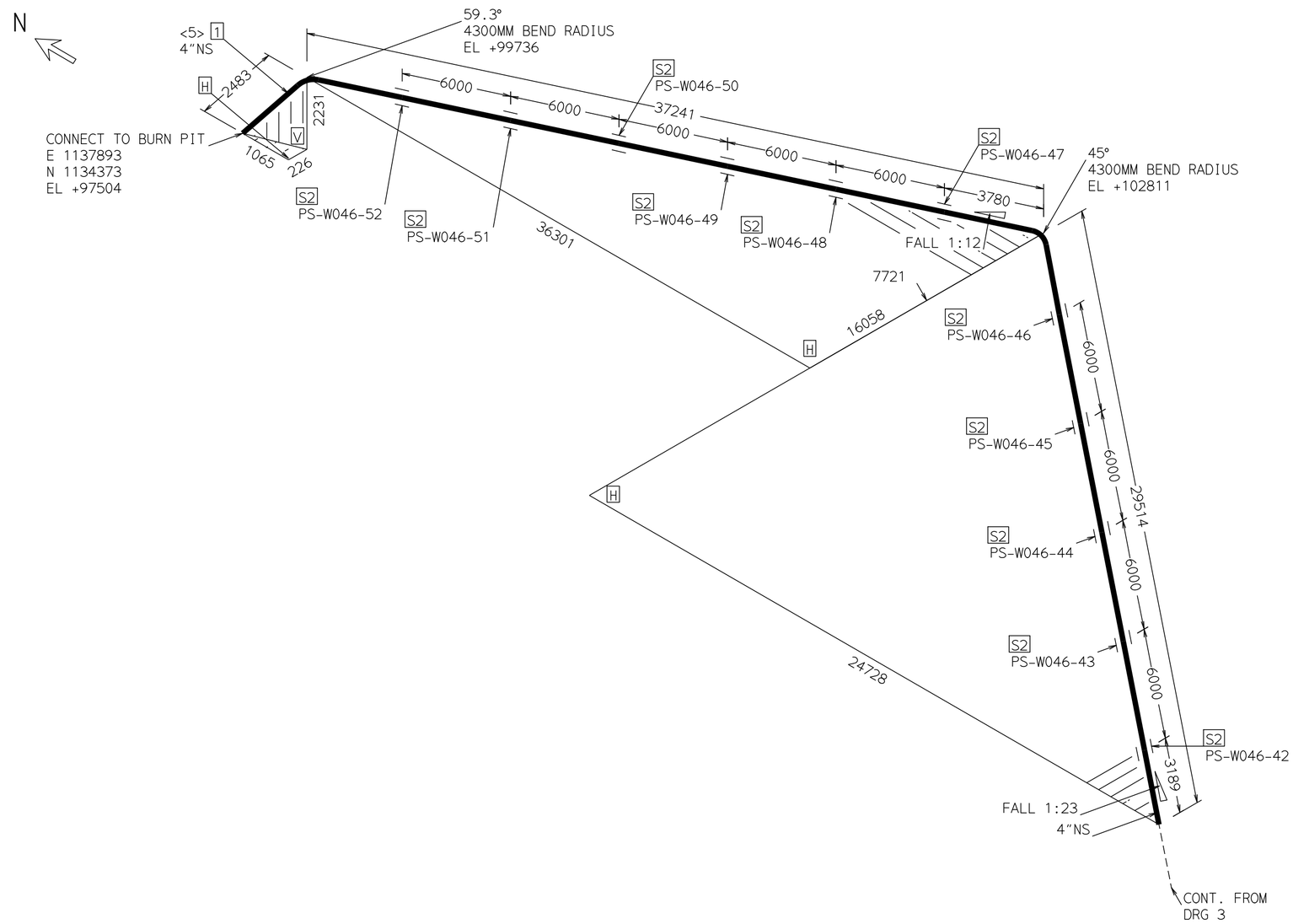
EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR (GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES W046S WELLHEAD FACILITIES
PROJECT NO.: 971020
DRAWING TITLE: ISOMETRIC DRAWINGS - W046S
LINE NUMBER: CRD-110-132-AN15-4"-PT

DRAWN	SIZE	SHEET	SCALE	DRAWING NO.	REV.
M.N.	A3	---	N.T.S	BK-W046S-PEDCO-110-PI-DW-0003	D00



MATERIAL TAKE OFF

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
	PIPE			
1	PIPE BE SCH.40 SMLS/ERW API 5L & IPS-M-PI-190(3) API 5L GR.B PSL2 NACE MR0175	4	---	68.7M
	SUPPORTS			
2	Support Attachment(NOT IN PMS) unset	4	---	11

CUT PIPE LENGTH

PIECE NO	CUT LENGTH		REMARKS	END PREP.
<5>	241284	4	PLD BEND	BE/PE

-DIMENSIONS OF CHOCK DEVICE, STONE TRAP AND VALVES ARE HOLD FOR VENDOR FINAL DATA.
-ADJACENT SPOOL TO XMAS TREE, CHOCK FLANGES AND STONE TRAP SHALL BE ADJUSTED AT SITE AFTER RECEIVING FABRICATED DEVICES.
-FEASIBILITY AND COORDINATES OF ALL TIE-IN POINTS ON EXISTING LINES SHALL BE CHECKED BY CONSTRUCTION CONTRACTOR BEFORE RELEVANT CONSTRUCTION ACTIVITIES.
-CONSTRUCTION CONTRACTOR SHALL CONSIDER ADEQUATE PRECAUTIONS (SUCH AS CHANGING ELEVATION OF RELEVANT PIPE SUPPORTS) TO INSTALL LINES WHEREVER FLOW LINE CROSSES OVER BURN PIT LINE.

4 / 4	OPERATING CONDITION	DESIGN CONDITION	TEST CONDITION	TEST SYSTEM	FLUID PHASE: A	INSULATION	STRESS ANALY
	PRESSURE: 0.5 BAR	PRESSURE: 207 BAR	TEST PRESSURE: - BAR	RADIOGRAPHY TEST: 10	PAINT CODE: -	THK.:	CRITICAL-L:
	TEMPERATURE: 80 °C	TEMPERATURE: 105 °C	TEST MEDIA: -		PWHT: YES		

NOTE:
1.UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS, COORDINATES AND ELEVATIONS ARE IN MILLIMETERS.

LEGEND:
STEAM TRACING — · — · —
ELECTRICAL TRACING — — — — — —
INSUL. FOR A/G SLEEVE FOR U/G — — — — — —
BUTT WELD
SOCKET WELD
SCREWED JOINT

REFP&ID:BK-W046S-PEDCO-110-PR-PI-0001

REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
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			REC.			

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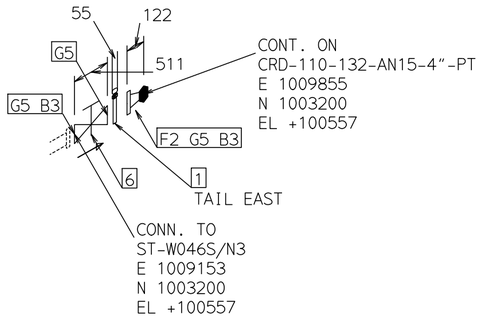
EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR (GC): PEDCO — PETROIRAN DEVELOPMENT COMPANY

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES W046S WELLHEAD FACILITIES
PROJECT NO.: 971020
DRAWING TITLE: ISOMETRIC DRAWINGS - W046S
LINE NUMBER: CRD-110-132-AN15-4"-PT

DRAWN	SIZE	SHEET	SCALE	DRAWING NO.	REV.
M.N.	A3	---	N.T.S	BK-W046S-PEDCO-110-PI-DW-0003	D00

N



MATERIAL TAKE OFF

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
	FITTINGS			
1	CHOCK DEVICE, 4"	4	---	1
	FLANGES			
2	FLANGE WN RTJ API3000 SCH.160 API-6A TYPE-6B API 60K NACE MR0175	4	---	1
	BOLTS			
3	180 mm STUD BOLT WITH 2 HEAVY HEX NUTS ZINC PLATED CHROMATE TREATED PER ASME B18.2.1 & B18.2.2 API-6A(NOT IN PMS) ASTM A193 GR.B7M/ ASTM A194 GR.2HM	1.1/8	---	8
4	180 mm STUD BOLT WITH 2 HEAVY HEX NUTS ZINC PLATED CHROMATE TREATED PER ASME B18.2.1 & B18.2.2 API-6A(NOT IN PMS) ASTM A193 GR.B7M/ ASTM A194 GR.2HM	1.1/8	---	8
	GASKETS			
5	GASKET, API3000, OCTAGONAL RING JOINT API-6A AISI-316 NACE MR0175	4	---	3
	VALVES / IN-LINE ITEMS			
6	GATE VALVE, API3000, RTJ, PSB, OS&Y, HO, FLEXIBLE WEDGE, TYPE 6B, API 6A BODY: API 60K, TRIM: API 75K, NACE MR0175	4	---	1

-DIMENSIONS OF CHOCK DEVICE, STONE TRAP AND VALVES ARE HOLD FOR VENDOR FINAL DATA.
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1/1	OPERATING CONDITION	DESIGN CONDITION	TEST CONDITION	TEST SYSTEM	FLUID PHASE: A	INSULATION	STRESS ANALY
	PRESSURE: 43.8 BAR	PRESSURE: 207 BAR	TEST PRESSURE: 414 BAR	RADIOGRAPHY TEST: 100	PAINT CODE: -	THK.:	CRITICAL-L:
	TEMPERATURE: 80 °C	TEMPERATURE: 105 °C	TEST MEDIA: WATER		PWHT: YES		

NOTE:
1.UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS, COORDINATES AND ELEVATIONS ARE IN MILLIMETERS.

LEGEND:
STEAM TRACING — · — · —
ELECTRICAL TRACING — — — — · — · —
INSUL. FOR A/G SLEEVE FOR U/G — — — —
BUTT WELD
SOCKET WELD
SCREWED JOINT

REFP&ID:BK-W046S-PEDCO-110-PR-PI-0001

REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
D00	JUN.2023	ISSUED FOR COMMENT	M.N.	M.F.	M.M.	
			REC.			

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EPC CONTRACTOR:
HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES

EPD/EPC CONTRACTOR (GC):
PETROIRAN DEVELOPMENT COMPANY
PEDCO

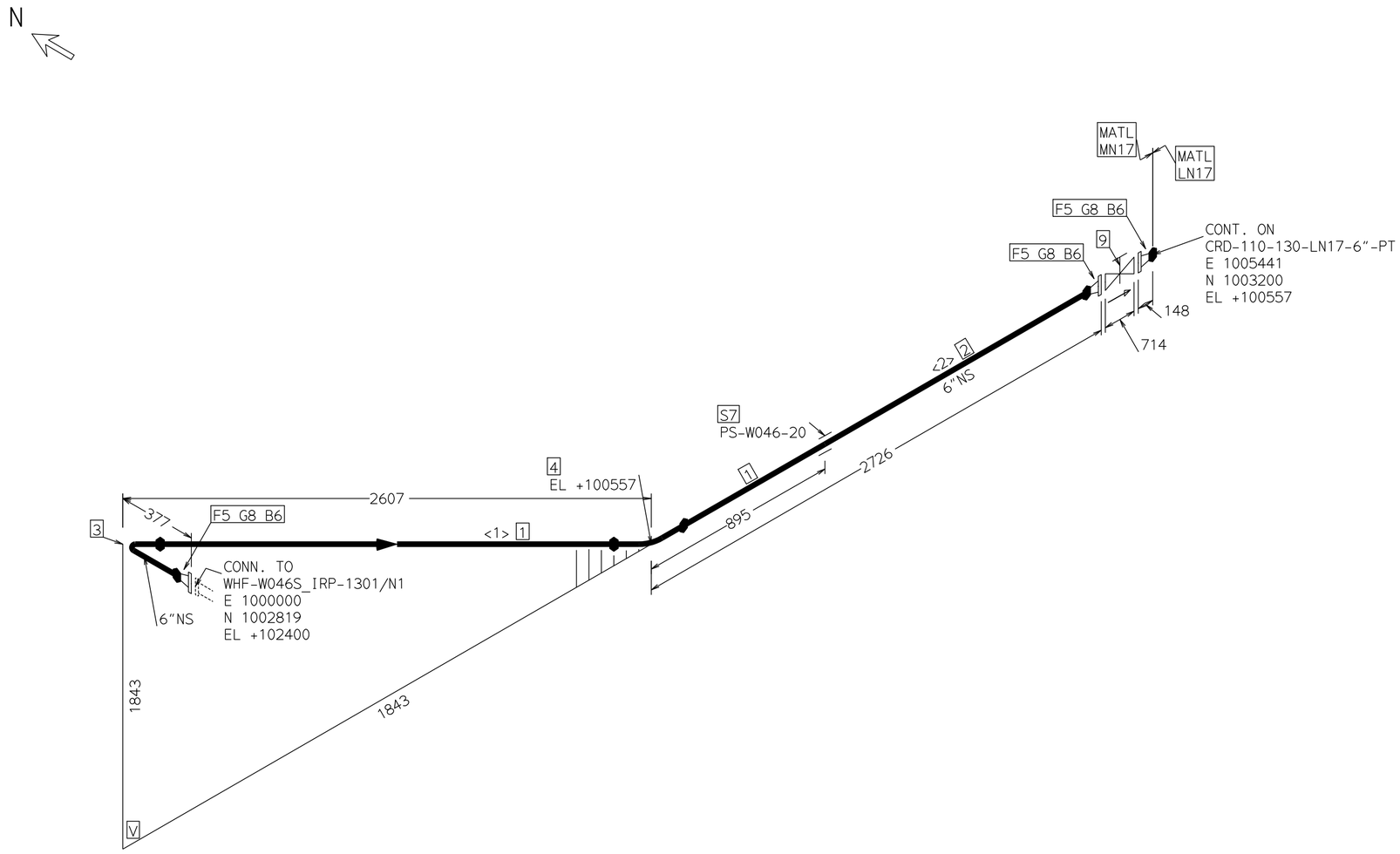
PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES W046S WELLHEAD FACILITIES

PROJECT NO.: 971020

DRAWING TITLE: ISOMETRIC DRAWINGS - W046S

LINE NUMBER: CRD-110-133-LN17-4"-PT

DRAWN	SIZE	SHEET	SCALE	DRAWING NO.	REV.
M.N.	A3	---	N.T.S	BK-W046S-PEDCO-110-PI-DW-0003	D00



MATERIAL TAKE OFF

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
	PIPE			
1	PIPE BE SCHXXS SMLS ASME B36.10M & IPS-M-PI-190(3) API 5L GR. X52 PSL2 NACE MR0175	6	---	3.1M
2	PIPE BE SCH120 SMLS ASME B36.10M & IPS-M-PI-190(3) API 5L GR. X52 PSL2 NACE MR0175	6	---	1.7M
	FITTINGS			
3	ELBOW 90DEG BW THK:7.1mm LR SMLS AS PER ASME B16.9(NOT IN PMS) ASTM A860 WPHY52 NACE	6	---	1
4	ELBOW 45 BW SMLS LR SCH.XXS AS PER MSS-SP-75 ASTM A860 WPHY52 NACE MR0175	6	---	1
	FLANGES			
5	FLANGE WN RTJ API5000 SCHXXS API-6A TYPE-6B API 60K NACE MR0175	6	---	3
	BOLTS			
6	275 mm STUD BOLT WITH 2 HEAVY HEX NUTS ZINC PLATED CHROMATE TREATED PER ASME B18.2.1 & B18.2.2 API-6A(NOT IN PMS) ASTM A193 GR.B7M/ ASTM A194 GR.2HM	1.3/8	---	36
	SUPPORTS			
7	Support Attachments(NOT IN PMS) unset	6	---	1
	GASKETS			
8	GASKET, API5000, OCTAGONAL RING JOINT API-6A AISI-316 NACE MR0175	6	---	3
	VALVES / IN-LINE ITEMS			
9	GATE VALVE, API5000, RTJ, PSB, OS&Y, HO, FLEXIBLE WEDGE, TYPE 6B, API 6A BODY: API 60K, TRIM: API 75K, NACE MR0175/ISO15156	6	---	1

CUT PIPE LENGTH

PIECE NO	CUT LENGTH		REMARKS	END PREP.
<1>	2283	6		BE/BE
<2>	2483	6		BE/BE

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	OPERATING CONDITION	DESIGN CONDITION	TEST CONDITION	TEST SYSTEM	FLUID PHASE: A	INSULATION	STRESS ANALY
1	PRESSURE: 43.8 BAR	PRESSURE: 344 BAR	TEST PRESSURE: 414 BAR	RADIOGRAPHY TEST: 100	PAINT CODE: -	THK.:	CRITICAL-L:
1	TEMPERATURE: 80 °C	TEMPERATURE: 105 °C	TEST MEDIA: WATER		PWHT: YES		

NOTE:
1.UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS, COORDINATES AND ELEVATIONS ARE IN MILLIMETERS.

LEGEND:
STEAM TRACING — · — · —
ELECTRICAL TRACING — — · — — ·
INSUL. FOR A/G SLEEVE FOR U/G — — — —
BUTT WELD
SOCKET WELD
SCREWED JOINT

REFP&ID:BK-W046S-PEDCO-110-PR-PI-0001

REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
D00	JUN.2023	ISSUED FOR COMMENT	M.N.	M.F.	M.M.	
			REC.			

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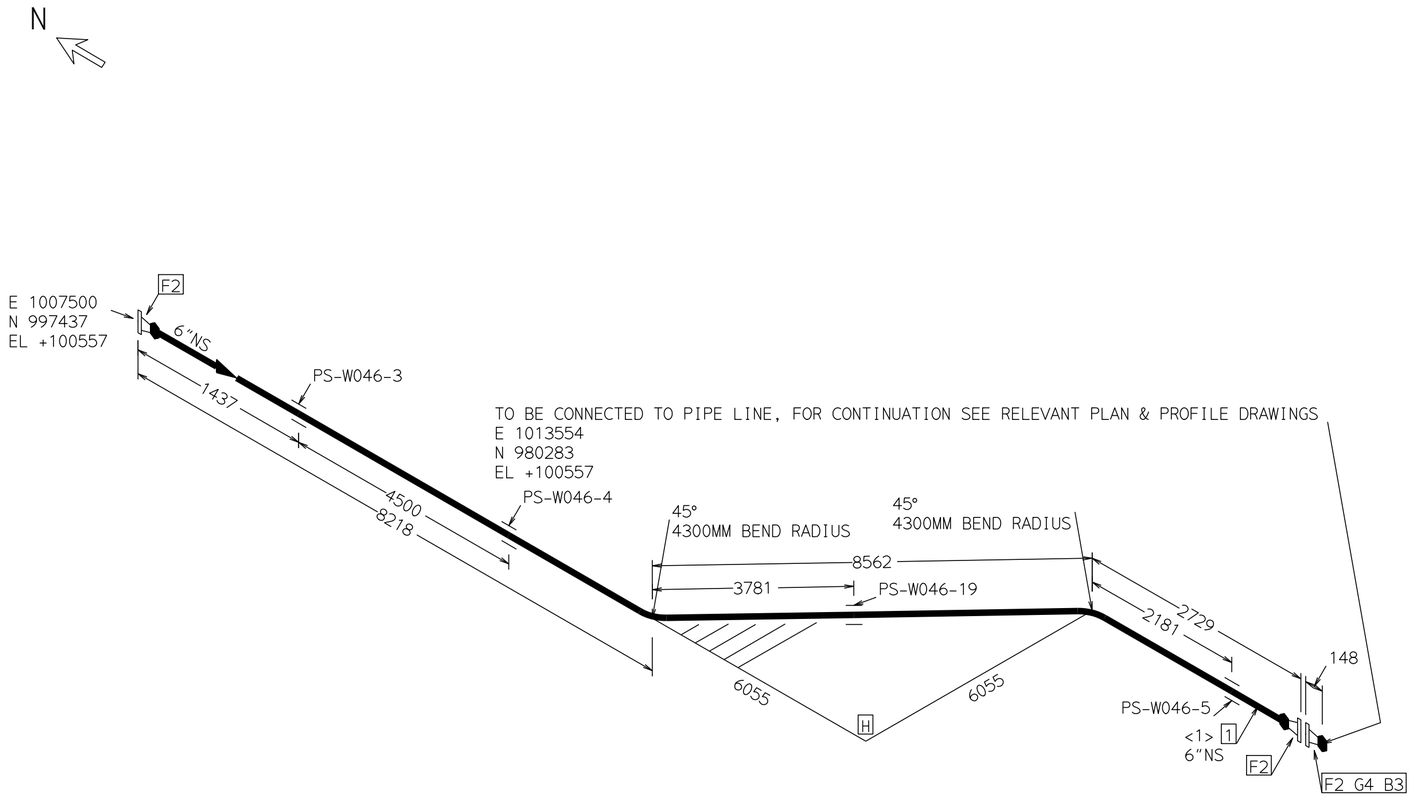
EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY PEDCO

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES W046S WELLHEAD FACILITIES
PROJECT NO.: 971020
DRAWING TITLE: ISOMETRIC DRAWINGS - W046S
LINE NUMBER: CRD-110-134-MN17-6"-PT

DRAWN	SIZE	SHEET	SCALE	DRAWING NO.	REV.
M.N.	A3	---	N.T.S	BK-W046S-PEDCO-110-PI-DW-0003	D00



MATERIAL TAKE OFF

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
	PIPE			
1	PIPE BE WT:7.9mm SMLS ASME B36.10M & IPS-M-PI-190(3) API 5L GR. X52 PSL2 NACE MR0175	6	---	18.9M
	FLANGES			
2	FLANGE WN RTJ API3000 WT:7.9mm API-6A TYPE-6B API 60K NACE MR0175	6	---	3
	BOLTS			
3	205 mm STUD BOLT WITH 2 HEAVY HEX NUTS ZINC PLATED CHROMATE TREATED PER ASME B18.2.1 & B18.2.2 API-6A(NOT IN PMS) ASTM A193 GR.B7M/ ASTM A194 GR.2HM	1.1/8	---	12
	GASKETS			
4	GASKET, API3000, OCTAGONAL RING JOINT API-6A AISI-316 NACE MR0175	6	---	1

CUT PIPE LENGTH

PIECE NO	CUT LENGTH		REMARKS	END PREP.
<1>	18843	6	PLD BEND	BE/BE

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	OPERATING CONDITION	DESIGN CONDITION	TEST CONDITION	TEST SYSTEM	FLUID PHASE: -	INSULATION	STRESS ANALY
1	PRESSURE: 12.8 BAR	PRESSURE: 207 BAR	TEST PRESSURE: 303 BAR	RADIOGRAPHY TEST: 100	PAINT CODE: -	THK.:	CRITICAL-L:
1	TEMPERATURE: 31.6 °C	TEMPERATURE: 105 °C	TEST MEDIA: WATER		PWHT: -		

NOTE:
1.UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS, COORDINATES AND ELEVATIONS ARE IN MILLIMETERS.

LEGEND:
STEAM TRACING — · — · —
ELECTRICAL TRACING — — — — — · — · —
INSUL. FOR A/G SLEEVE FOR U/G — — — — — — —
BUTT WELD
SOCKET WELD
SCREWED JOINT

REFP&ID:BK-W046S-PEDCO-110-PR-PI-0001

REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
D00	JUN.2023	ISSUED FOR COMMENT	M.N.	M.F.	M.M.	
			REC.			

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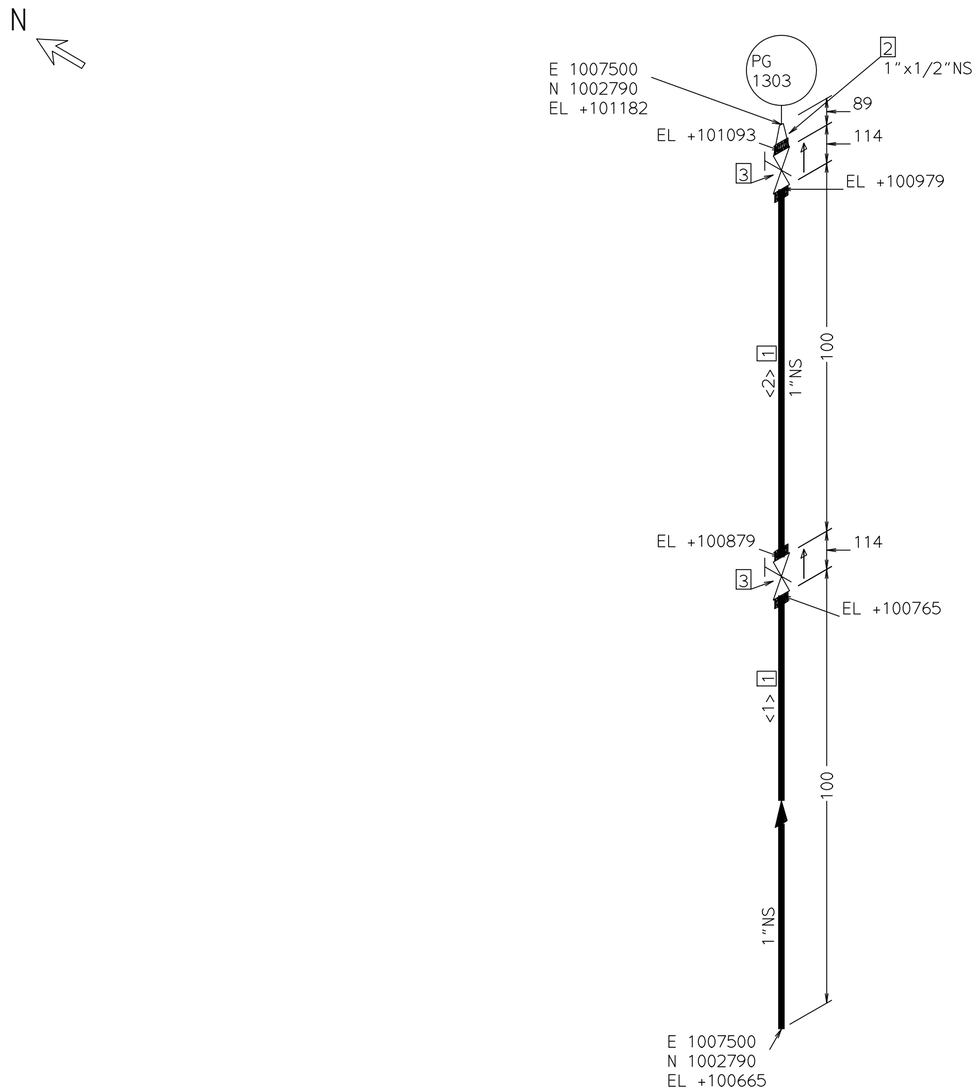
EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR (GC): PETROIRAN DEVELOPMENT COMPANY PEDCO

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES W046S WELLHEAD FACILITIES
PROJECT NO.: 971020
DRAWING TITLE: ISOMETRIC DRAWINGS - W046S
LINE NUMBER: CRD-110-135-LN15-6"-PT

DRAWN	SIZE	SHEET	SCALE	DRAWING NO.	REV.
M.N.	A3	---	N.T.S	BK-W046S-PEDCO-110-PI-DW-0003	D00



MATERIAL TAKE OFF

PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE	QTY
	PIPE			
1	PIPE PE SCHXXS SMLS ASME B36.10M API 5L GR. B PSL2 NACE MR0175	1	---	0.2M
	FITTINGS			
2	SWAGED NIPPLE CONC PLE/TSE CL9000 AS PER IPS-M-PI-150 & MSS-SP-95 ASTM A105 NACE MR0175	1 x 1/2	---	1
	VALVES / IN-LINE ITEMS			
3	GATE VALVE, CL1500, SW, BB, OS&Y, HO, SOLID WEDGE, API602 BODY:ASTM A105 TRIM:AISI 316L + STELLITE 6, NACE MR0175/ISO15156	1	---	2

CUT PIPE LENGTH

PIECE NO	CUT LENGTH		REMARKS	END PREP.
<1>	100	1		PE/PE
<2>	100	1		PE/PE

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	OPERATING CONDITION	DESIGN CONDITION	TEST CONDITION	TEST SYSTEM	FLUID PHASE: -	INSULATION	STRESS ANALY
1	PRESSURE: 43.8 BAR	PRESSURE: 207 BAR	TEST PRESSURE: 414 BAR	RADIOGRAPHY TEST: -	PAINT CODE: -	THK.:	CRITICAL-L:
1	TEMPERATURE: 80 °C	TEMPERATURE: 105 °C	TEST MEDIA: WATER		PWHT: -		

NOTE:
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LEGEND:
STEAM TRACING
ELECTRICAL TRACING
INSUL. FOR A/G SLEEVE FOR U/G
BUTT WELD
SOCKET WELD
SCREWED JOINT

REFP&ID:BK-W046S-PEDCO-110-PR-PI-0001

REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.
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EPC CONTRACTOR: HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES
EPD/EPC CONTRACTOR (GC): PEDCO PETROIRAN DEVELOPMENT COMPANY

PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES W046S WELLHEAD FACILITIES
PROJECT NO.: 971020
DRAWING TITLE: ISOMETRIC DRAWINGS - W046S
LINE NUMBER: TRIM-ST_W046S-LN17-01

DRAWN	SIZE	SHEET	SCALE	DRAWING NO.	REV.
M.N.	A3	---	N.T.S	BK-W046S-PEDCO-110-PI-DW-0003	D00