

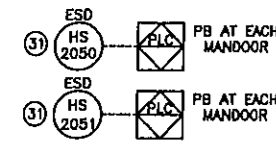
EF-2000/2001
 EXHAUST FAN
 SIZE: 12", MODEL#: CANARM SD12-XPF
 1/3HP, 115/1/230V, XP, 1625RPM, 1640CFM

V-2100
 INLET SEPARATOR
 SIZE: 30" O.D. X 10'-0" S/S
 DESIGN PRESSURE: 9378 kPa (1380 PSI) @ 90°C (194°F)
 X-RAY: 100%
 PWHT: YES
 3-PHASE VERTICAL DESIGN

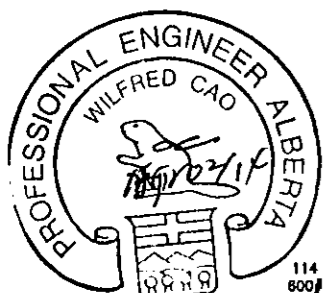
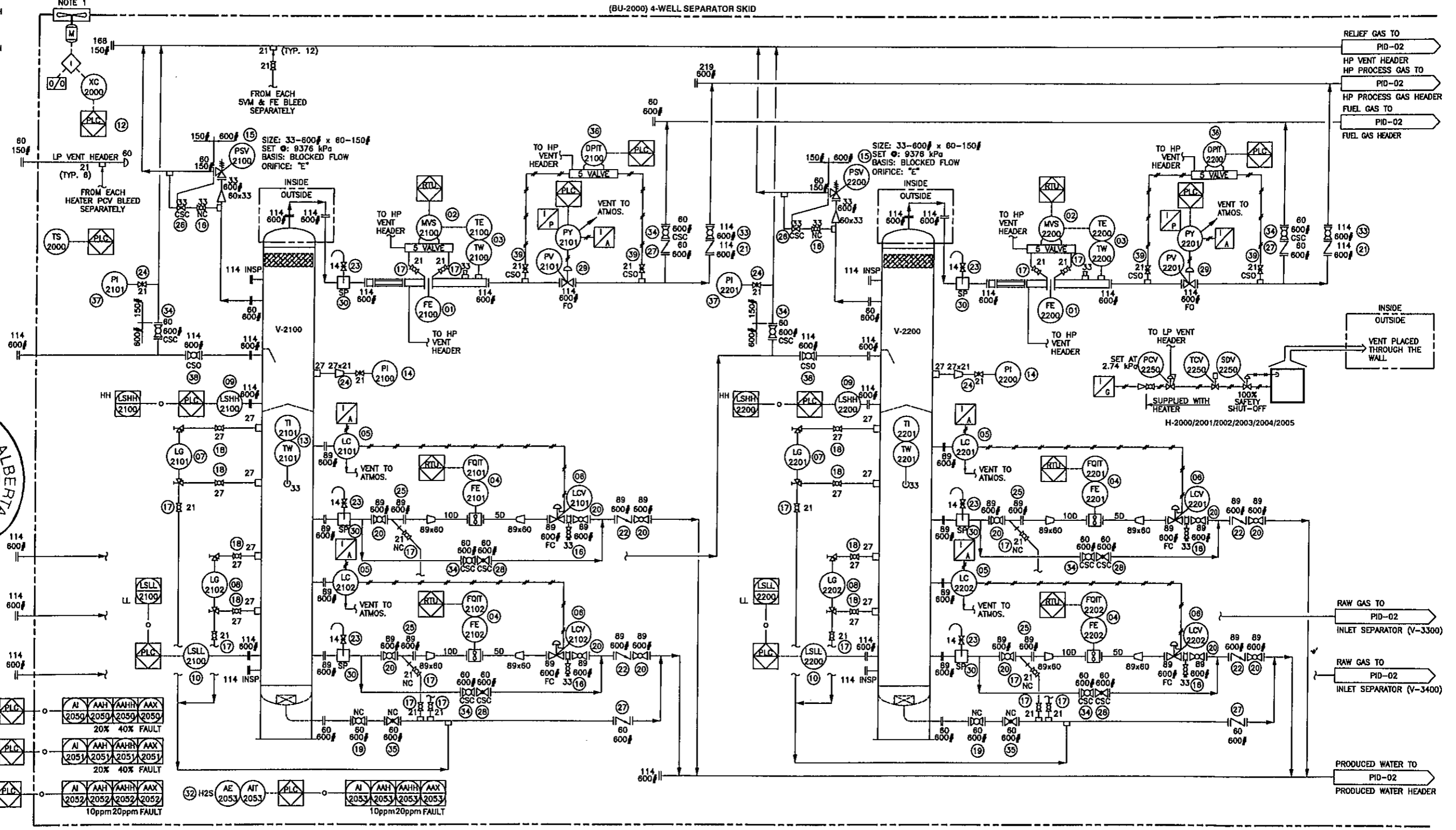
V-2200
 INLET SEPARATOR
 SIZE: 30" O.D. X 10'-0" S/S
 DESIGN PRESSURE: 9378 kPa (1380 PSI) @ 90°C (194°F)
 X-RAY: 100%
 PWHT: YES
 3-PHASE VERTICAL DESIGN

H-2000/2001/2002/2003/2004/2005
 BUILDING HEATER
 MAKE: CATADYNE
 MODEL: WX24X36
 OUTPUT: 30,000BTU/HR EACH
 GRILL, SAFETY SHUTOFF, REGULATOR, VENT HOOD, THERMOSTAT
 CLASS 1, DIV 1, (NATURAL GAS) 120V

(BU-2000) 4-WELL SEPARATOR SKID



NOTE:
 1. EXHAUST FAN MOUNTING POSITIONS: EF-2000 TO BE MOUNTED 2' ABOVE TOP OF SKID, EF-2001 TO BE MOUNTED 1' BELOW BUILDING EVE.



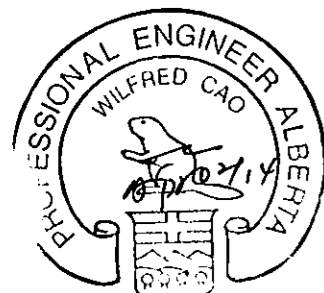
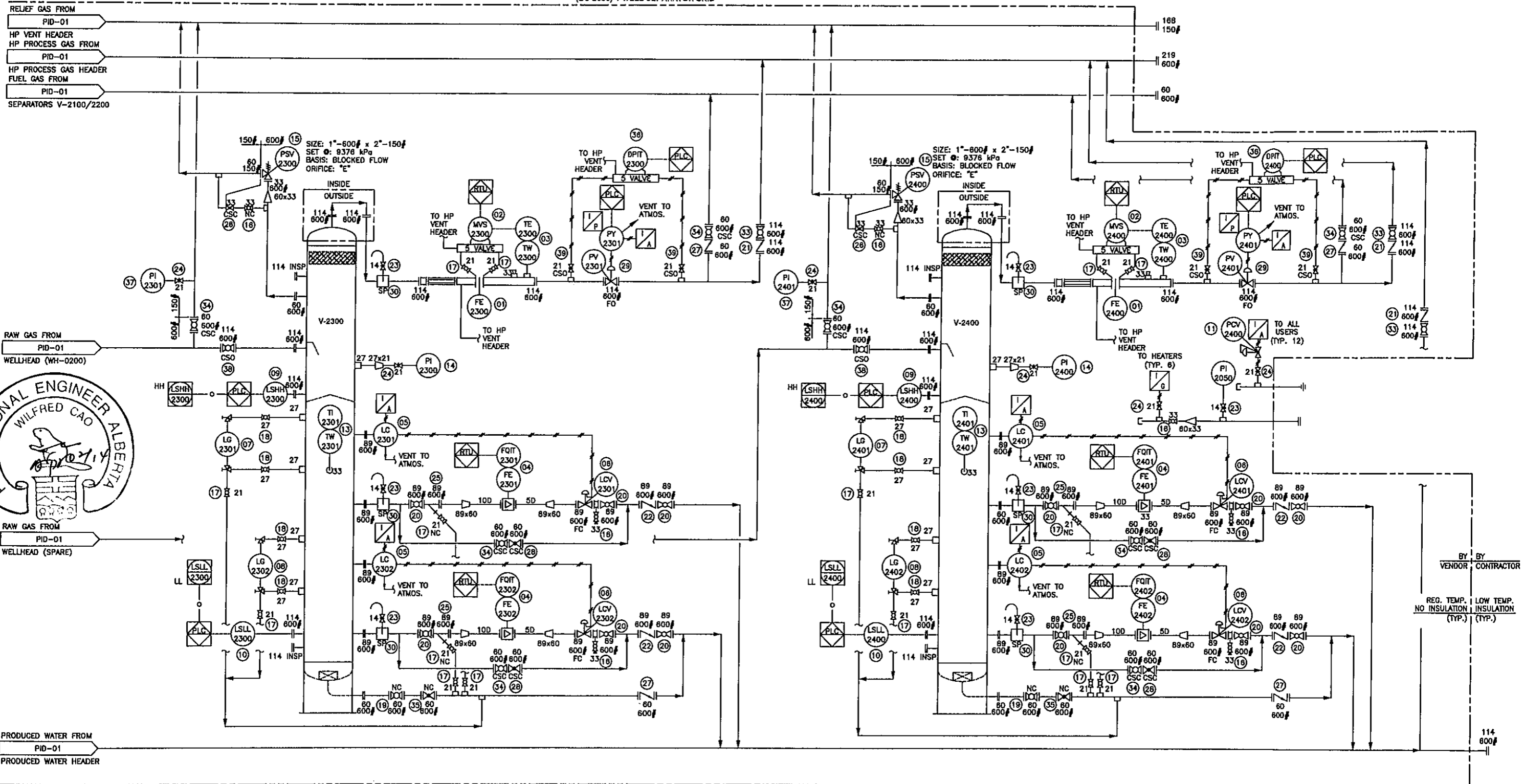
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2	AS BUILT	AP	WC	WC	APR 02/14Z	Drawn	A. PERNA	CADO INDUSTRIES INC. 7491 - 110 AVE SE, CALGARY, ALBERTA T2C 8B8 TEL: (403) 279-6662; FAX: (403) 279-6667		
1	RE-ISSUED FOR CONSTRUCTION	AP	WC	WC	NOV 05/13	Date	OCT. 08, 2013			
0	ISSUED FOR CONSTRUCTION	AP	WC	WC	OCT 28/13	Scale	NTS			
A	ISSUED FOR APPROVAL	AP	WC	WC	OCT 09/13	Customer:	PENNWEST EXPLORATION c/o PIONEER ENGINEERING INC.			
Rev.	Description	By	Chk	Eng	Date	Title:	PIPING AND INSTRUMENTATION DIAGRAM 4-WELL SEPARATOR SKID (BU-2000)	Job No: 2013-070	Drawing Number: SHT 1 of 1 2013-070-101	Rev. 2

V-2300
 INLET SEPARATOR
 SIZE: 30" O.D. X 10'-0" S/S
 DESIGN PRESSURE: 9376 kPa (1360 PSI) @ 90°C (194°F)
 X-RAY: 100%
 PWHT: YES
 3-PHASE VERTICAL DESIGN

V-2400
 INLET SEPARATOR
 SIZE: 30" O.D. X 10'-0" S/S
 DESIGN PRESSURE: 9376 kPa (1360 PSI) @ 90°C (194°F)
 X-RAY: 100%
 PWHT: YES
 3-PHASE VERTICAL DESIGN

(BU-2000) 4-WELL SEPARATOR SKID

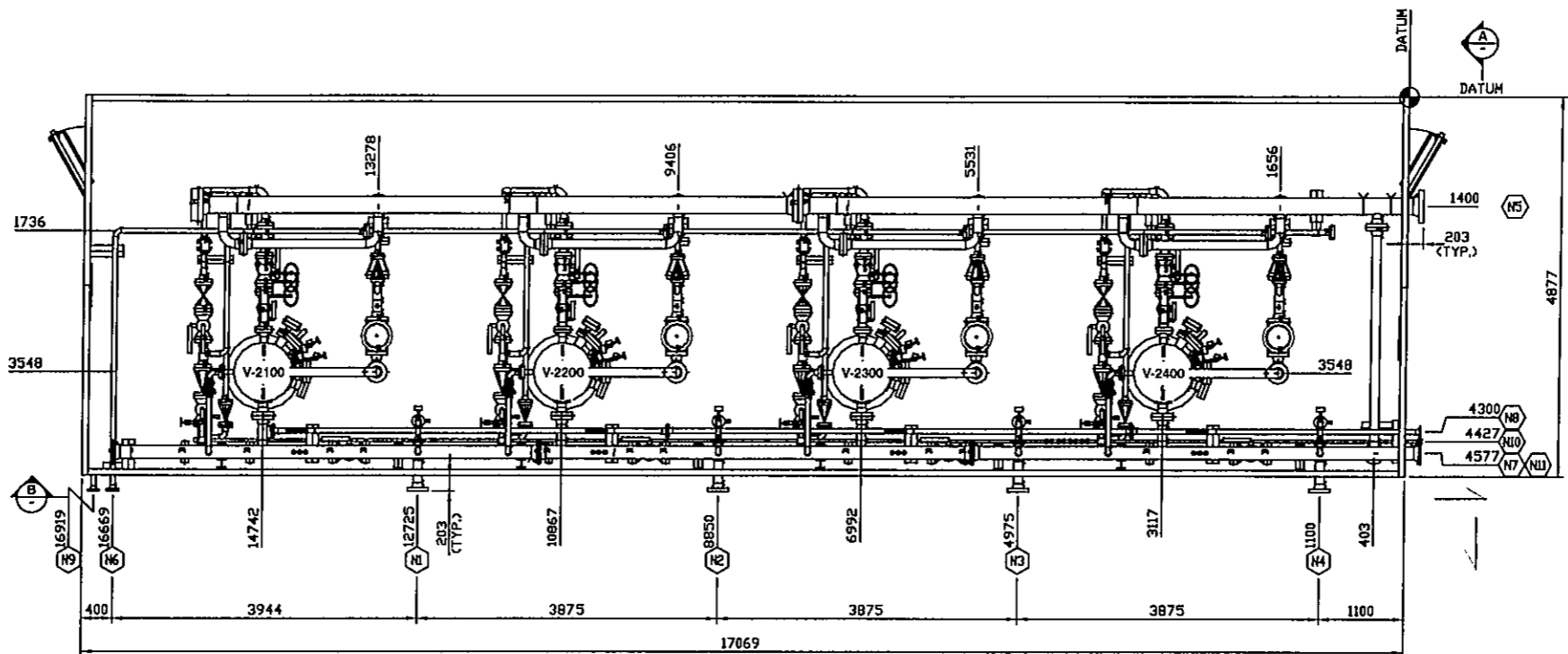


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Rev.	Description	By	Chk	Eng	Date	Title:	Drawn	Date	Scale	Customer:	Job No	Drawing Number:	Rev.
2	AS BUILT	AP	WC	WC	APR 02/14	PIPING AND INSTRUMENTATION DIAGRAM	A. PERNA	OCT. 08, 2013	NTS	PENNWEST EXPLORATION c/o PIONEER ENGINEERING INC.	2013-070	SHT 1 OF 1	2
1	RE-ISSUED FOR CONSTRUCTION	AP	WC	WC	NOV 05/13	4-WELL SEPARATOR SKID (BU-2000)					2013-070-102		
0	ISSUED FOR CONSTRUCTION	AP	WC	WC	OCT 28/13								
A	ISSUED FOR APPROVAL	AP	WC	WC	OCT 09/13								

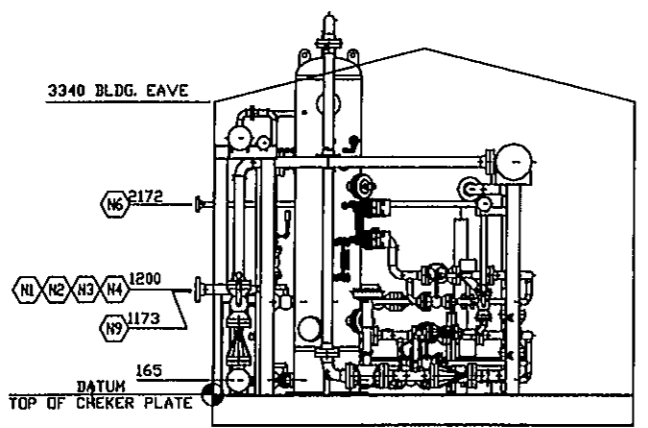
BY VENDOR CONTRACTOR
 REG. TEMP. INSULATION (TYP.)
 LOW TEMP. INSULATION (TYP.)

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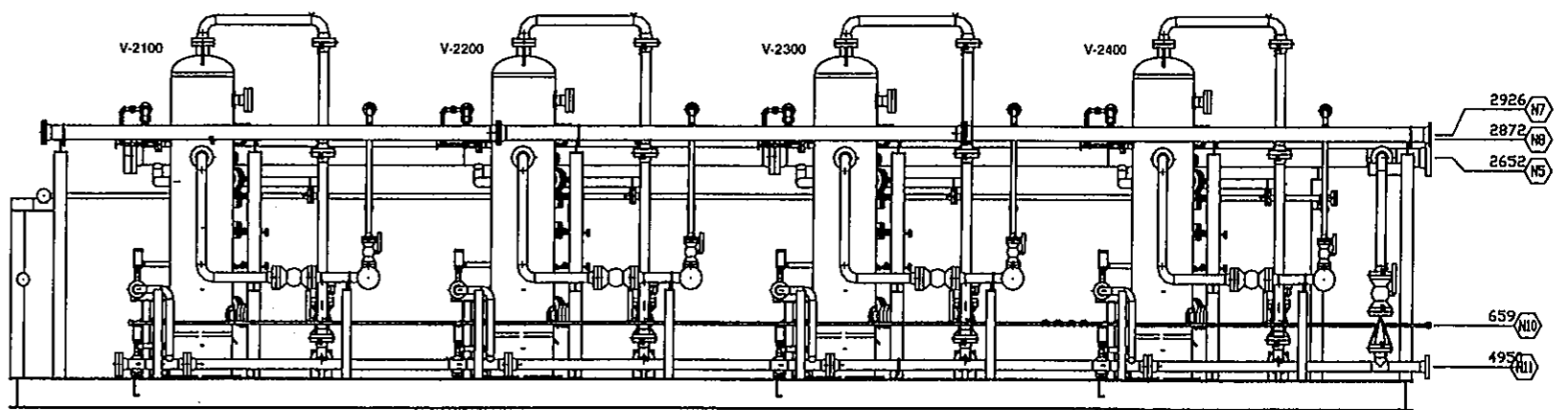


PLAN VIEW
SCALE 1:30

- N1 4"-600# GAS INLET
- N2 4"-600# GAS INLET
- N3 4"-600# GAS INLET
- N4 4"-600# GAS INLET
- N5 8"-600# GAS OUTLET
- N6 2"-600# FUEL GAS OUTLET
- N7 6"-150# RELIEF FLARE
- N8 2"-150# LP FLARE
- N9 2"-150# FUEL GAS INLET
- N10 1"-3000# INSTRUMENT AIR INLET
- N11 4"-600# WATER OUTLET



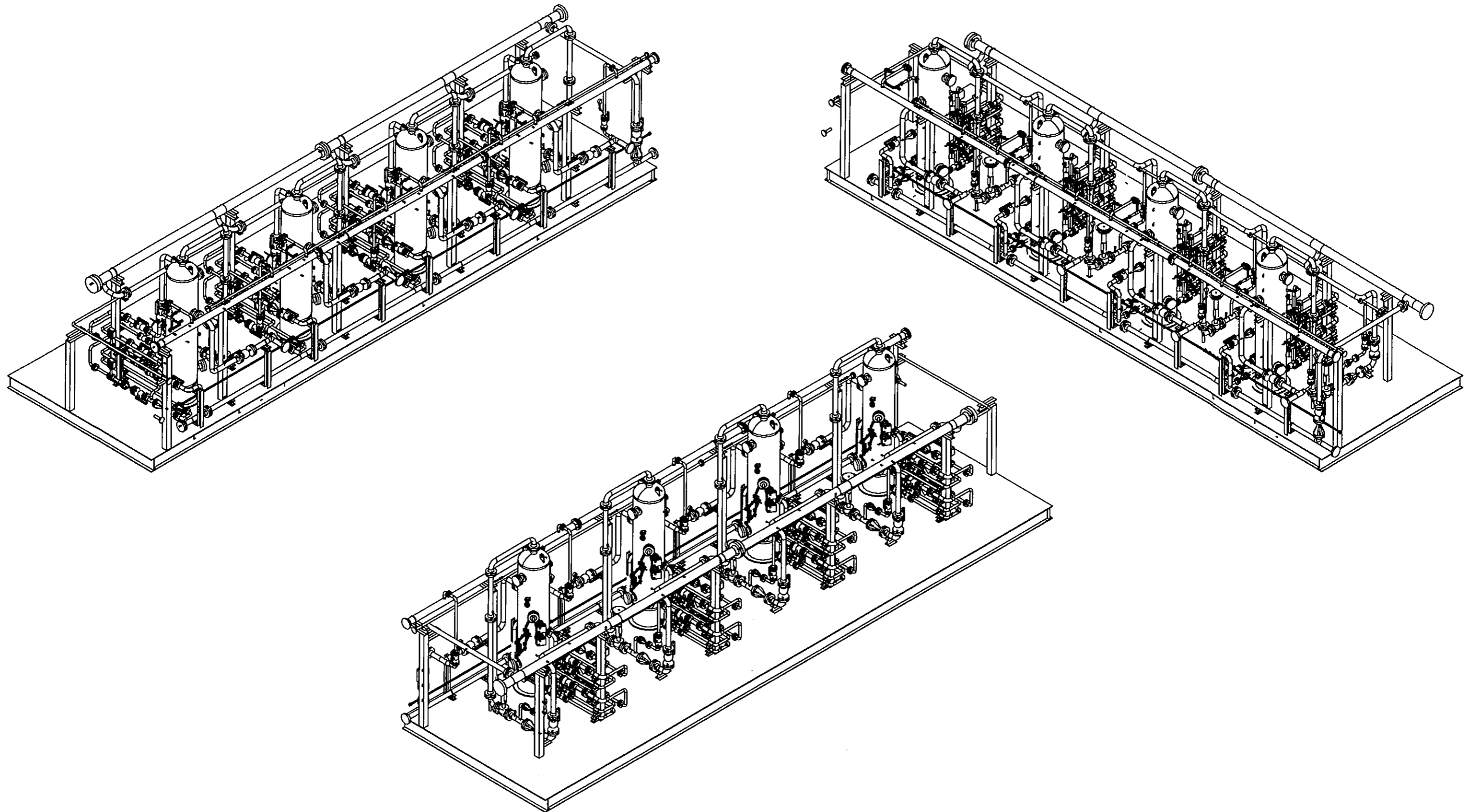
ELEVATION VIEW A-A
SCALE 1:30



ELEVATION VIEW B-B
SCALE 1:30

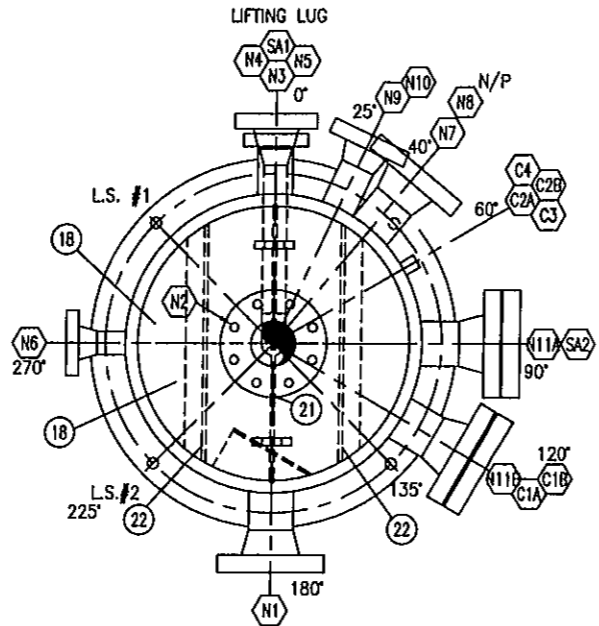
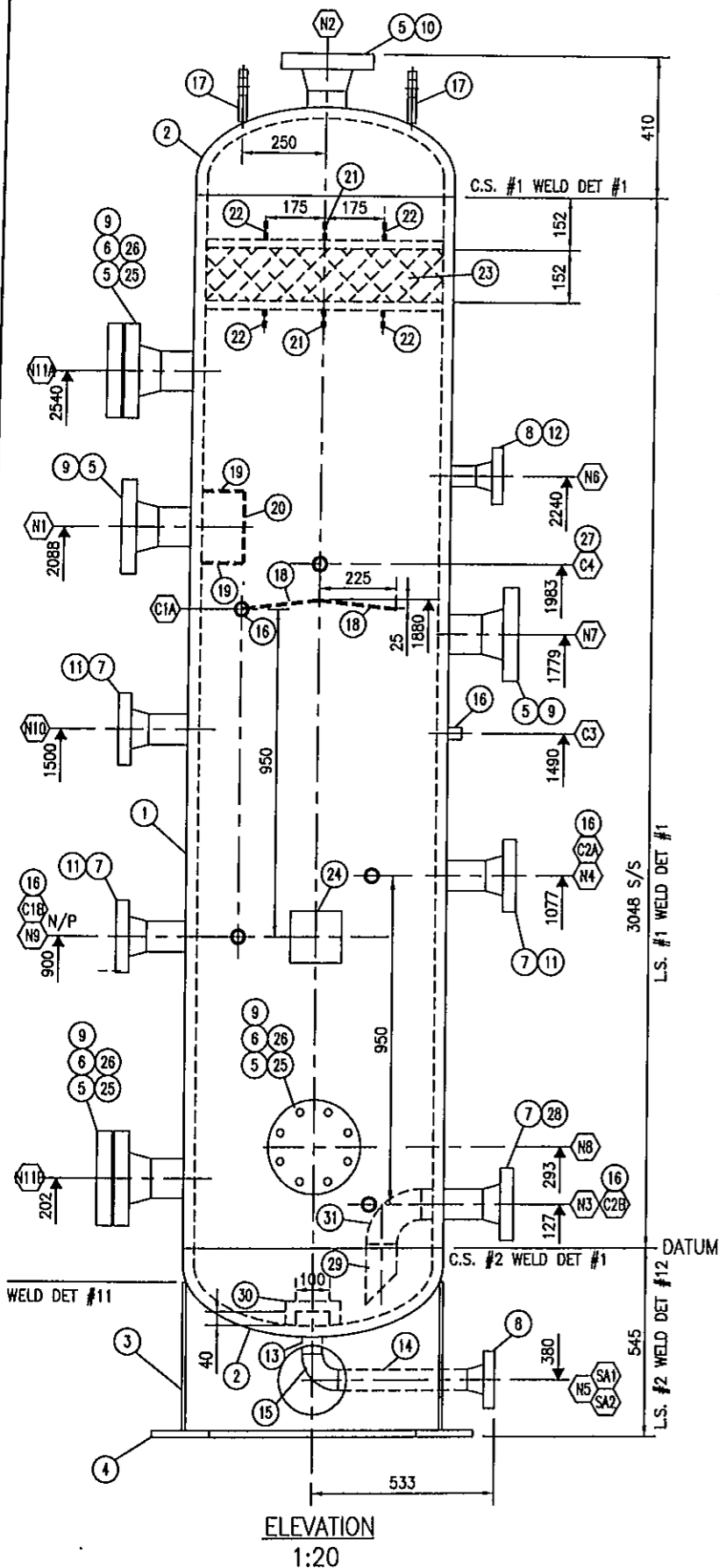
Rev.	Description	By	Chk	Eng	Date	Drawn	Date	Scale	Title	Job No	Drawing Number	Rev.
3	AS BUILT	AP	WC	WC	APR 02/14	A. PERNA			GENERAL ARRANGEMENT 4-WELL SEPARATOR SKID (BU-2000)	2013-070	SHT 1 OF 2 2013-070-201	3
2	RE-ISSUED FOR CONSTRUCTION	AP	WC	WC	NOV 05/13							
1	RE-ISSUED FOR CONSTRUCTION	AP	WC	WC	NOV 04/13							
0	ISSUED FOR CONSTRUCTION	AP	WC	WC	OCT 28/13							
A	ISSUED FOR APPROVAL	AP	WC	WC	OCT 09/13							
<p style="text-align: center;">REVISIONS</p>										<p style="text-align: center;">CADO INDUSTRIES INC. 7491 - 110 AVE SE, CALGARY, ALBERTA T2C 3B8 TEL: (403) 279-8882; FAX: (403) 279-8887</p>		
										<p>Customer: PENNWEST EXPLORATION c/o PIONEER ENGINEERING INC.</p>		

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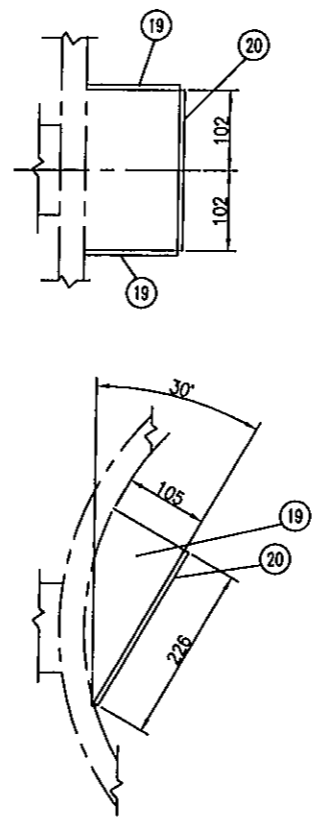


Rev.	Description	By	Chk	Eng	Date	Title:	Job No	Drawing Number:	Rev.	
3	AS BUILT	AP	WC	WC	APR 02/14	Drawn	A. PERNA	CADO INDUSTRIES INC. 7491 - 110 AVE SE, CALGARY, ALBERTA T2C 3B8 TEL: (403) 270-6662; FAX: (403) 270-6667	Customer: PENNWEST EXPLORATION c/o PIONEER ENGINEERING INC.	
2	RE-ISSUED FOR CONSTRUCTION	AP	WC	WC	NOV 05/13	Date	OCT. 08, 2013			
1	RE-ISSUED FOR CONSTRUCTION	AP	WC	WC	NOV 04/13	Scale	NTS			
0	ISSUED FOR CONSTRUCTION	AP	WC	WC	OCT 28/13	GENERAL ARRANGEMENT				
A	ISSUED FOR APPROVAL	AP	WC	WC	OCT 09/13	4-WELL SEPARATOR SKID (BU-2000)				
REVISIONS							2013-070		SHI 2 OF 2 2013-070-201	

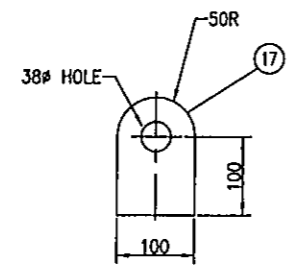
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ORIENTATION
1:20



INLET DIVERTER DETAIL
1:10



LIFTING LUG DETAIL
1:10

NOTE: 1) 1/4" CONT. FOR ALL NON-SPECIFIED WELDS(STITCH WELD N.P. BRACKET TO VESSEL), 1/2" FOR LIFTING LUGS
2) FABRICATE THE VESSEL PER CADO'S FABRICATION TOLERANCE AND WPR FOR WELDING TOLERANCE
3) TWO HARDNESS TEST(MAX 200 BHN)

BILL OF MATERIAL IS FOR ONE, EIGHT ARE REQ'D

ITEM	QTY.	DESCRIPTION	MATERIAL	HEAT NO.
1	1	SHELL PLATE 1 1/4" THK X 3048 LG ROLLED TO 762 OD	SA-516-70N	
2	2	ELLIPTICAL HEAD 1 1/4" THK (1.14" MIN) 2:1 W/ 51 SF	SA-516-70N	
3	1	SKIRT PLATE 3/8" THK X 445 LG ROLLED TO 762 OD (CIS)	SA-36	
4	1	BASEPLATE 3/4" THK X 940 X 610 ID C/W (4) #29 HOLES ON 864 BCD	SA-36	
5	6	FLANGE 4" 600# RFWN SCH XXH BORE	SA-105N	
6	3	BLIND FLANGE 4" 600# RF	SA-105N	
7	4	FLANGE 3" 600# RFWN SCH XXH BORE	SA-105N	
8	2	FLANGE 2" 600# RFWN SCH XXH BORE	SA-105N	
9	5	PIPE 114(4") SCH XXH X 163 LG SMLS	SA-106-B	
10	1	PIPE 114(4") OD SCH XXH X 113 LG SMLS	SA-106-B	
11	3	PIPE 89(3") OD SCH XXH X 172 LG SMLS	SA-106-B	
12	1	PIPE 60(2") OD SCH XXH X 105 LG SMLS	SA-106-B	
13	1	PIPE 60(2") OD SCH XXH X 81 LG SMLS	SA-106-B	
14	1	PIPE 60(2") OD SCH XXH X 371 LG SMLS	SA-106-B	
15	1	ELBOW LR 60(2") OD SCH XXH SMLS	SA-234-WPB	
16	5	CPLG 27(3/4") 6000# THD	SA-105N	
17	2	LIFTING LUG 19(3/4") THK X 150 LG X 100 WD	SA-36	
18	2	HOOD PLATE 10(3/8") THK X 695 LG X 225 WD(CUT & WELD TO SUIT)	SA-36	
19	2	INLET DIVERTER TOP&BTM PLATE 10(3/8") THK X 226 LG X 105 WD(CUT TO SUIT)	SA-36	
20	2	INLET DIVERTER SIDE PLATE 10(3/8") THK X 226 LG X 203 WD	SA-36	
21	2	DEMISTER SUP'T PLATE (MIDDLE) 13(1/2") THK X 695 LG X 50 WD	SA-36	
22	4	DEMISTER SUP'T PLATE (SIDE) 13(1/2") THK X 598 LG X 50 WD	SA-36	
23	1	DEMISTER 152 THK X 695 DIA X 144 KG/M3 C/W 25 CS TOP AND BOTTOM GRID	316 SS	
24	1	NAME PLATE C/W CS BRACKET	ALUM / SA-36	
25	36	25(1") STUD X 171 LG UNC C/W (2) 1" UNC NUTS EACH	SA-193-B7M/194-2HM	
26	3	114(4") 600# RF GASKET SPIRAL WOUND WITH CENTRE RING	316 SS	
27	1	CPLG 33(1") 6000# THD	SA-105N	
28	1	PIPE 89(3") OD SCH XXH X 174 LG SMLS	SA-106-B	
29	1	PIPE 89(3") OD SCH 80 X 175 LG SMLS	SA-106-B	
30	1	VORTEX BREAKER PLATE 10(3/8") THK X 160 LG X 70 WD(CUT TO SUIT)	SA-36	
31	1	ELBOW LR 89(3") OD SCH 80 SMLS	SA-234-WPB	
32				

NOZZLE SCHEDULE

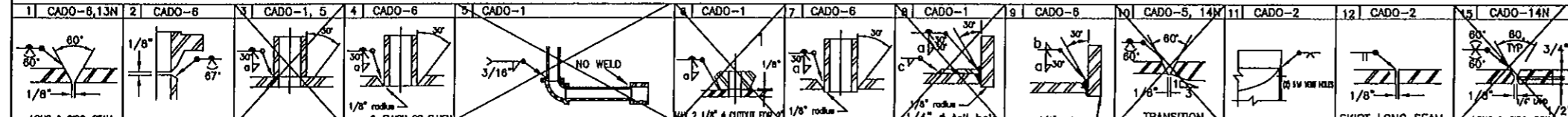
Mark	Qty	Size	Rating	Type	Nozz. Sch.	Service	Int. Proj.	Ext. Proj.	Weld Det. Number	Weld Size		
										a	b	c
N1	1	4"	600#	RFWN	XXH	INLET	32	203	2, 9	29	29	-
N2	1	4"	600#	RFWN	XXH	GAS OUTLET	32	SPEC	2, 9	29	22	-
N3	1	3"	600#	RFWN	XXH	H2O OUTLET	25 min	203	2, 9	29	19	-
N4	1	3"	600#	RFWN	XXH	HC OUTLET	25	203	2, 9	29	19	-
N5	1	2"	600#	RFWN	XXH	DRAIN	FLUSH	SPEC	1, 2, 4	10	-	-
N6	1	2"	600#	RFWN	XXH	PSY	-	152	2, 7	10	-	-
N7	1	4"	600#	RFWN	XXH	LSHH	32	203	2, 9	29	29	-
N8	1	4"	600#	RFWN	XXH	LSL	32	203	2, 9	29	29	-
N9	1	3"	600#	RFWN	XXH	LC (H2O)	25	203	2, 9	29	19	-
N10	1	3"	600#	RFWN	XXH	LC (HC)	25	203	2, 9	29	19	-
N11A/B	2	4"	600#	RFWN	XXH	INSPECTION	32	203	2, 9	29	29	-
C1A/B	2	3/4"	6000#	CPLG	-	LG (H2O)	-	-	7	3/8"	-	-
C2A/B	2	3/4"	6000#	CPLG	-	LG (HC)	-	-	7	3/8"	-	-
C3	1	3/4"	6000#	CPLG	-	PG	-	-	7	3/8"	-	-
C4	1	1"	6000#	CPLG	-	TG	-	-	7	3/8"	-	-
SA1	1	#200	HOLE	-	-	SKIRT ACCESS FOR N5	-	-	-	-	-	-
SA2	1	#200	HOLE	-	-	SKIRT ACCESS	-	-	-	-	-	-

DESIGN DATA

MAMP.	9376 KPAG @ 90 °C (1360 PSIG @194 °F)	ASME Code	SEC. VIII, DIV. 1 '10 ED. & '11 ADD.
MDMT.	-29 °C @ 9376 KPAG(-20 °F @ 1360 PSIG)	Service	SWEET
Corrosion All.	3.2 MM (0.125")	Impact Testing	EXEMPT - PER RC UCS66, UCS 66(b)(1)(b) AND UC-20(0)
Hydrostatic Test Press.	12189 KPAG (1768 PSIG)	Serial No.	1667 to 1674
X-Ray	RT-1	C.R.N. No.	W2114.213
Stress Relief	YES - 593 °C(1100 °F) FOR 75 min	Location	LSD TBA
Cyclic Loading	-	Paint Spec.	EXTERNAL: SAND BLAST TO SP-6 1 S/C PRIMER, 1 S/C ENAMEL(WARM GRAY F-34)
Empty Weight	2830 KG (6240 LB)	For Tack Weld and Attachment	CADO-2
Vessel Volume	1.30 CU M (45.8 CU FT)	Welding Procedure RQP/APQ	WP 2612.2/1426(S)
Weight in Full Water	4126 KG (9096 LB)		

Rev.	Description	Calc	Rev	Lev	By	Chk	Apr	Date
3	AS BUILT	0	WZ	WC	WC	WC		APR 02/14
2	CHANGED DP AND DT	0	WZ	WC	WC	WC		NOV 08/13
1	REVISED N2 and N3	0	WZ	WC	WC	WC		NOV 08/13
0	ISSUED FOR CONSTRUCTION	0	WZ	WC	WC	WC		OCT 03/13

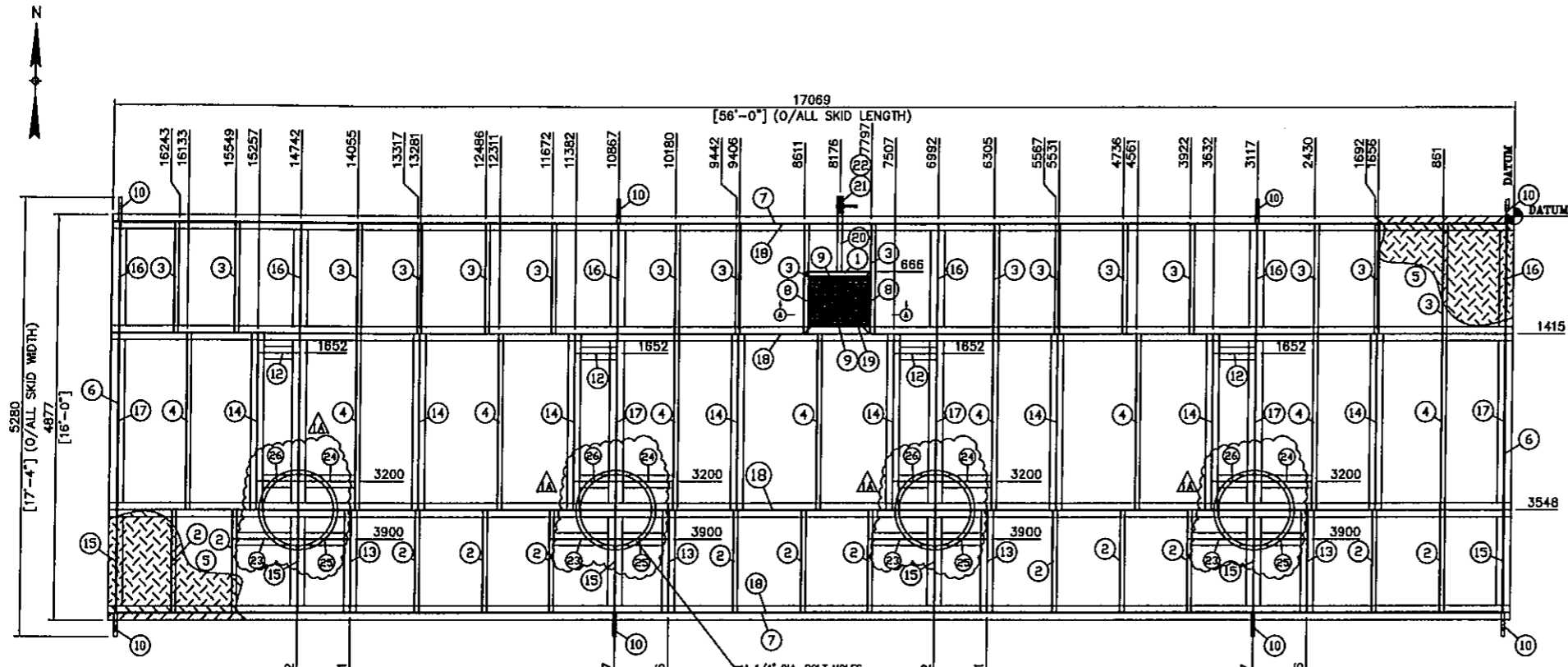
REVISIONS



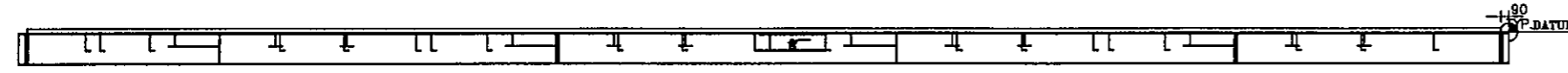
Drawn WZ
Date JUNE 05/13
Scale AS SHOWN
Customer: PENN WEST
Title: 762 O/D X 3048 S/S SEPARATOR
Job No: 2013-070
Drawing Number: SHF 1 OF 1
Rev. 3

CADO INDUSTRIES INC.
7491 - 110 AVE SE, CALGARY, ALBERTA T2C 3B8
TEL: (403) 270-8882; FAX: (403) 270-8887

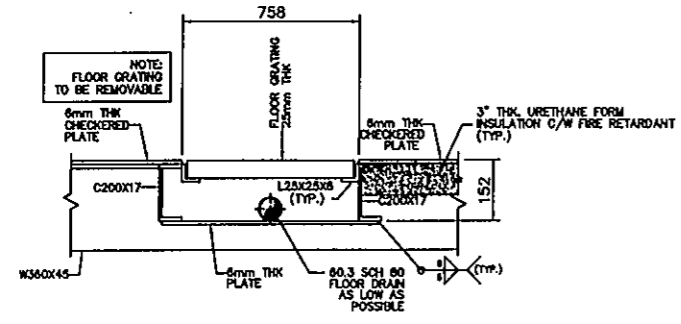
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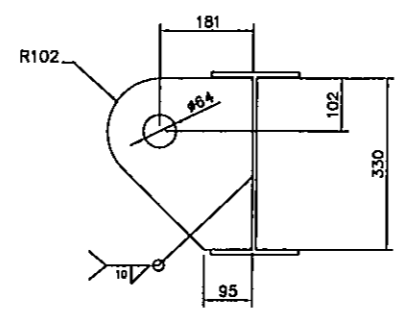
PLAN VIEW



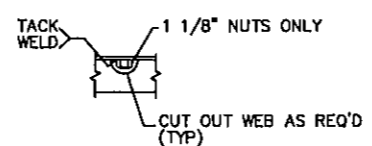
ELEV. VIEW



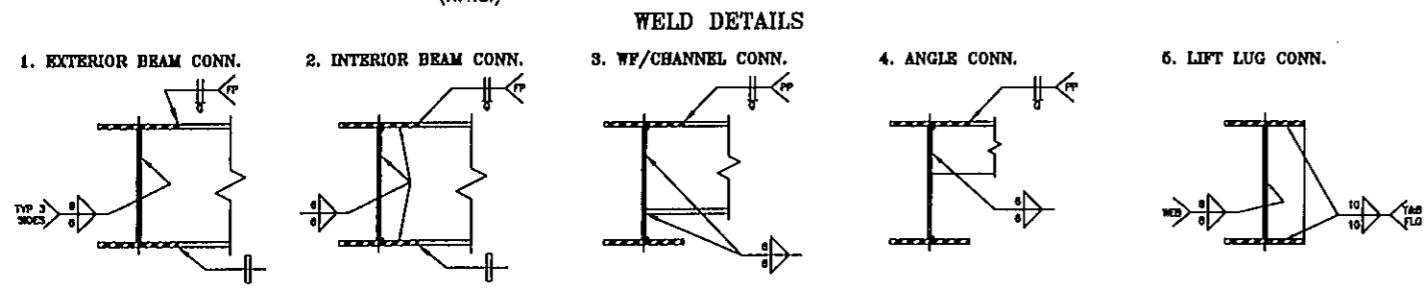
VIEW A-A
(FLOOR DRAIN DETAIL)
(N.T.S.)



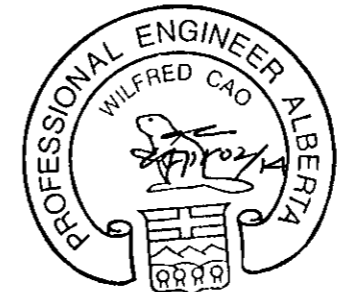
DETAIL ITEM #10



BOLT DETAIL 1
(N.T.S.)



WELD DETAILS



BILL OF MATERIAL

MARK	QTY	LONG ANNOTATION	LENGTH	MATERIAL	WEIGHT
1	1	C200x17	809	G40.21-44W	13.84
2	13	C200x17	1236	G40.21-44W	266.90
3	17	C200x17	1322	G40.21-44W	374.04
4	9	C200x17	2125	G40.21-44W	321.25
5	1	CHECKER PL-6 X 17069 X 4877	17069	SA-36	3921.61
6	2	FB50x6	4685	SA-36	23.71
7	2	FB50x6	16889	SA-36	85.46
8	2	L25x25x4.8	600	G40.21-44W	2.08
9	2	L25x25x4.8	758	G40.21-44W	2.62
10	8	PL-38 X 330 X 282	330	SA-36	175.03
11	1	PL-6 X 809 X 746	809	SA-36	28.44
12	4	W150x22	509	G40.21-50W	38.26
13	4	W150x22	1236	G40.21-50W	105.61
14	8	W150x22	2125	G40.21-50W	369.47
15	6	W360x45	1236	G40.21-50W	305.16
16	6	W360x45	1322	G40.21-50W	328.20
17	6	W360x45	2125	G40.21-50W	543.30
18	4	W360x45	17069	G40.21-50W	3047.80
19	1	GRATING - 25 X 4.8 BEARING BAR	748x600	SA-36	38.44
20	1	PIPE, 2", SCH. XH SMLS, SA-106-B, CUT TO FIT	1000	-	8.05
21	1	BALL VALVE, CL800 THRD	-	-	-
22	1	HEX HEAD PLUG, 2", 3000#, SA-105N	-	-	-
23	4	W150x22	798	G40.21-50W	66.62
24	4	W150x22	683	G40.21-50W	58.54
25	4	W150x22	635	G40.21-50W	49.78
26	4	W150x22	509	G40.21-50W	38.55
TOTAL WEIGHT:					10107.41 KG

GENERAL STRUCTURAL STEEL NOTES:

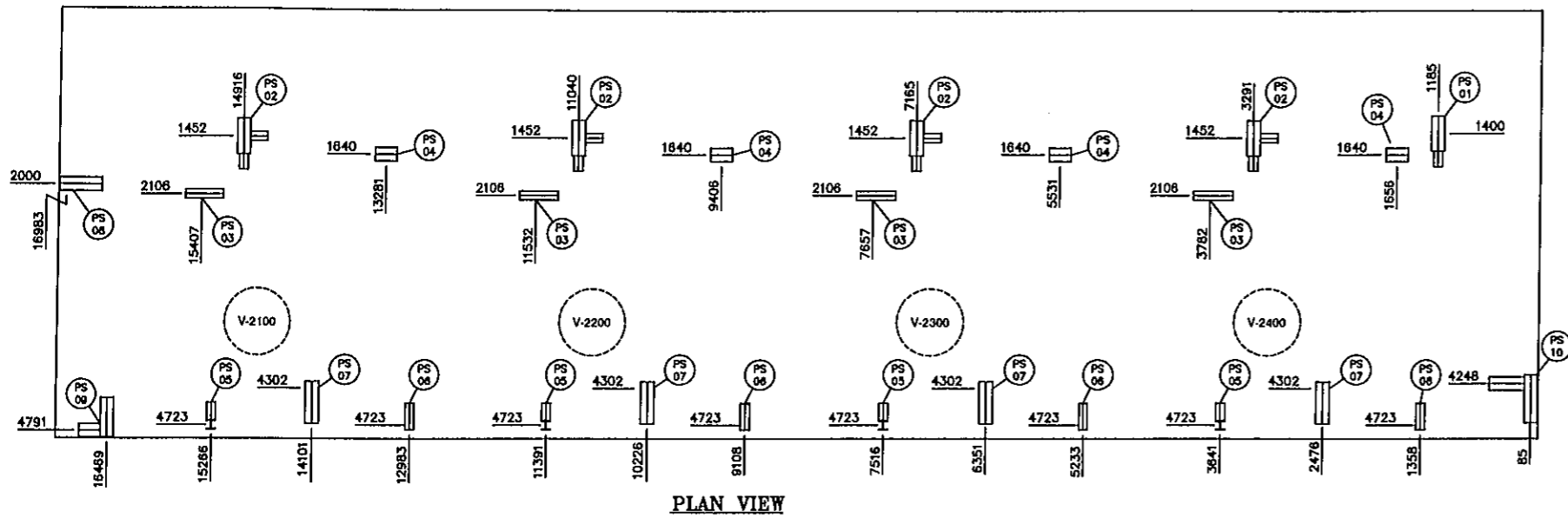
- ALL DIMENSION ARE IN MILLIMETERS UNLESS NOTED. ALL ELEVATIONS ARE REFERED FROM TOP OF CHECKER PLATE.
- ALL WORK SHALL GENERALLY CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING CODES AND STANDARDS:
CSA W47.1-92
CISC HANDBOOK OF STEEL CONSTRUCTION
- ALL STEEL SHALL BE OF NEW STOCK AND SHALL BE IN ACCORDANCE WITH CSA G40.21-M. STRUCTURAL STEEL SHALL GRADE 50W FOR WF AND 44W FOR ANGLE AND CHANNELS. PLATE MATERIAL SHALL BE 44W. EXCEPT CHECKERED PLATE TO BE A-36.
- WELDING SHALL BE IN GENERAL CONFORMANCE WITH CSA W59-1989. FILLER METAL SHALL CONFORM TO CSA STD. W48.5-M-E4802C-6-CH. WELDS TO BE 6mm CONTINUOUS FILLET WELD UNLESS NOTED. USE PROLINK WELDING PROCEDURE AS SHOWN IN WELDING DETAILS.
- CHECKERED PLATED SEAMS TO BE WELDED CONTINUOUSLY ON ONE SIDE & AROUND PERIMETER OF BUILDING. STITCH WELD TO SKID USING 6mm FILLETS 50mm AT 300mm INTERVALS.
- CLEAN ALL STEEL SURFACES PRIOR TO PAINTING TO SSPC-SP6 COMMERCIALY SANDBLASTED.
PRIMER TO BE ONE (1) COAT OF ANTI-CORROSIVE INDUSTRIAL PRIMER
PAINTING TO BE TWO (2) COATS OF WARM GREY INDUSTRIAL ENAMEL.
- UNDERSIDE OF ENTIRE SKID SHALL BE INSULATED WITH 3" THK URETHANE.
- TOTAL SHIPPING WEIGHT OF STRUCTURAL STEEL SKID = 7,827 Kg (17,255 Lbs) (INCLUDING 100LBS UNDERSIDE SKID 3" THK URETHANE INSULATION)
- CWB CERTIFICATION IS REQUIRED FOR FABRICATORS AND WELDERS.
- MPI REQUIRED ON LIFTING LUGS.
- LIFTING NOTES:
MAX. SLING LOAD = 117 KN
SHACKLE: USE G209 CROSBY SCREW TYPE SWL = 17 TONS
SLING: 28# MIN. BREAKING LOAD = 52 TONS

Rev.	Description	By	Chk	Eng	Date	Drawn	Date	Scale	Title	Customer	Job No	Drawing Number	Rev.
3	AS BUILT	AP	WC	WC	APR 02/14	A. PERNA	OCT. 08, 2013	NTS	SKID STEEL DETAILS	PENNWEST EXPLORATION c/o PIONEER ENGINEERING INC.	2013-070	2013-070-401	3
2	ISSUED FOR CONSTRUCTION	AP	WC	WC	NOV 08/13				4-WELL SEPARATOR SKID (BU-2000)				
1	RE-ISSUED FOR APPROVAL	AP	WC	WC	NOV 05/13								
A	ISSUED FOR APPROVAL	AP	WC	WC	OCT 09/13								

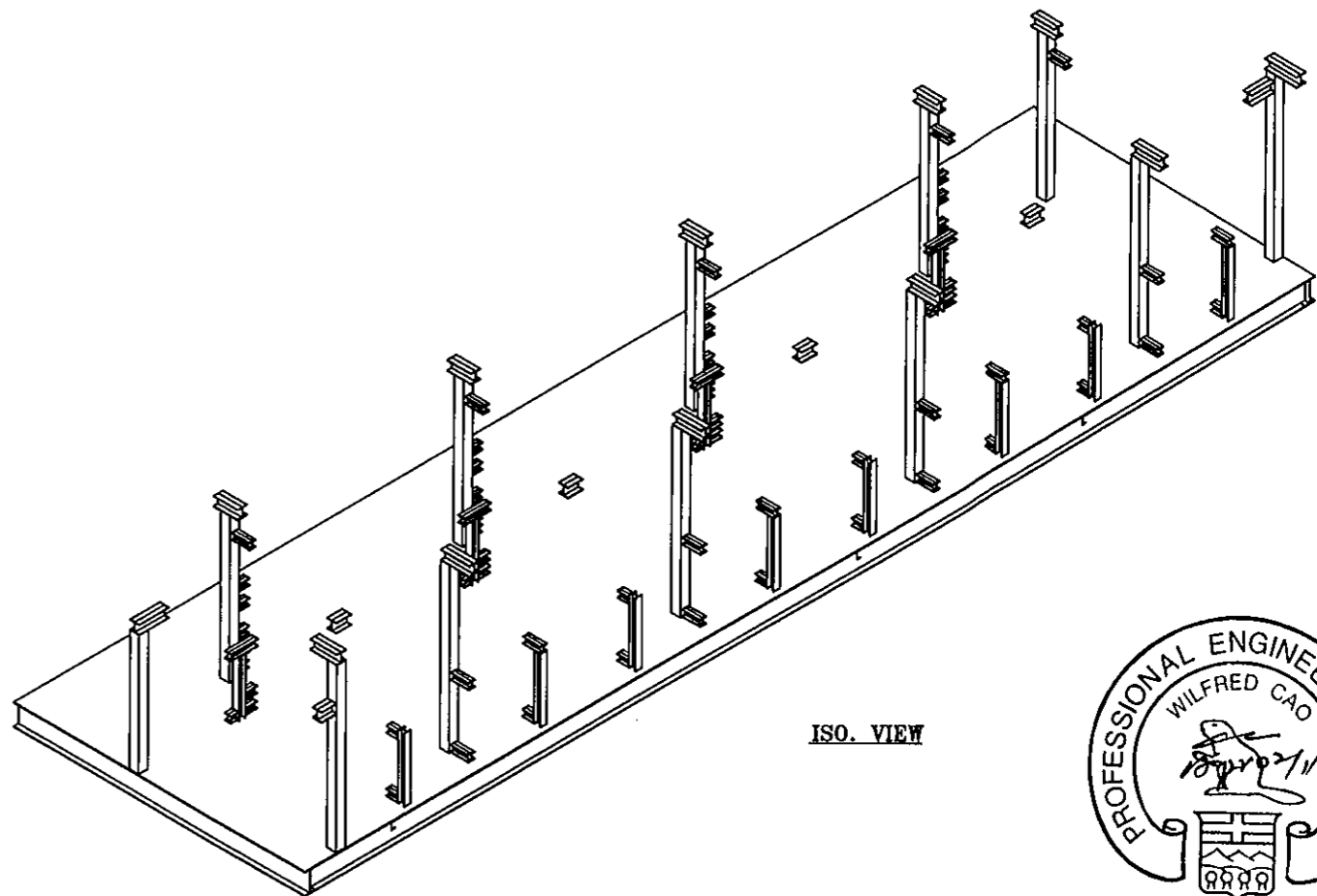
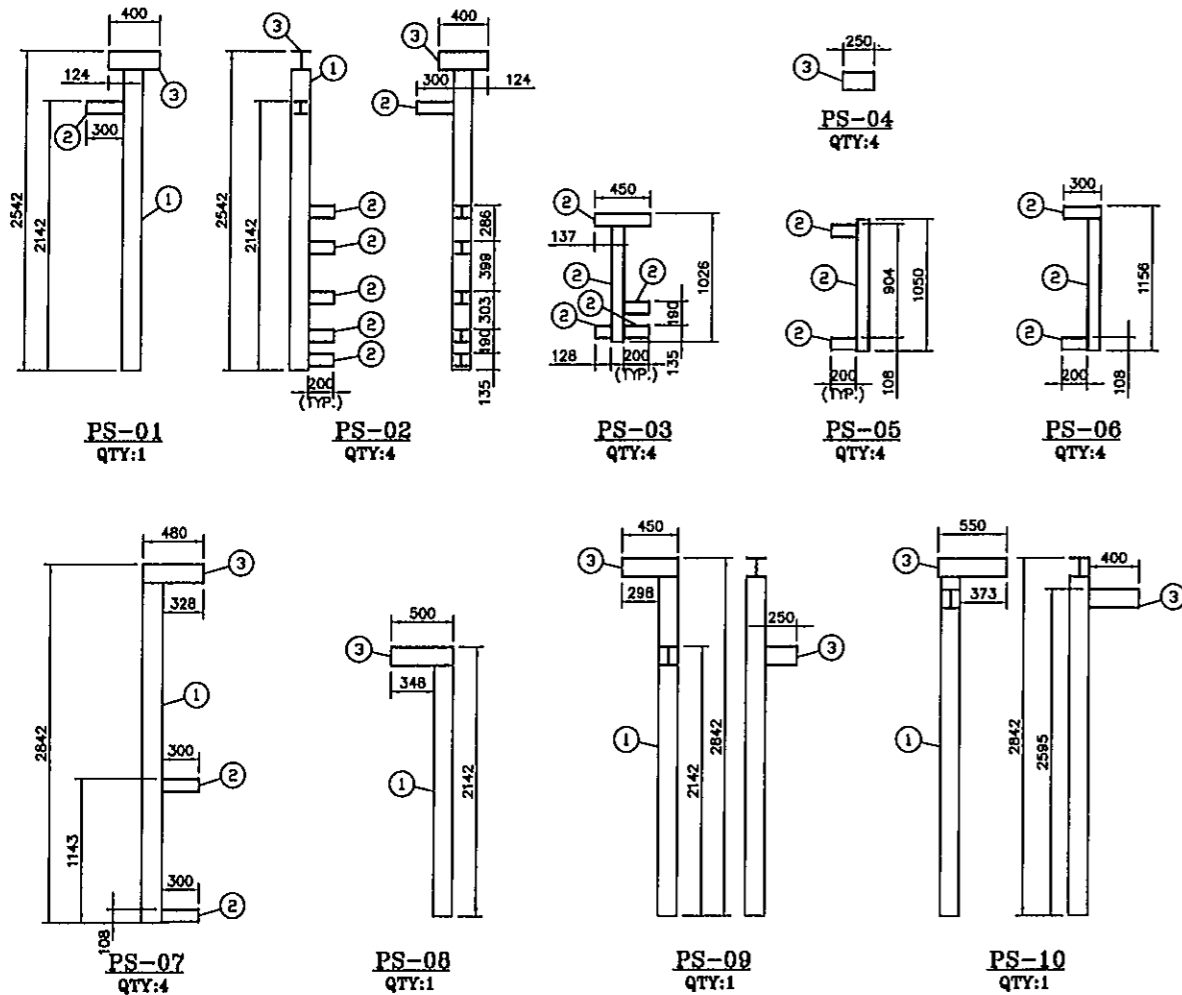
REVISIONS

BILL OF MATERIAL

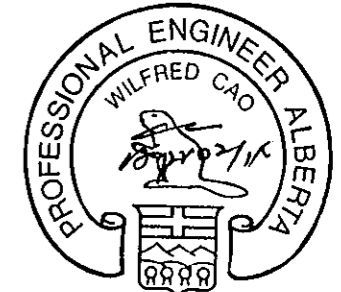
MARK	LONG ANNOTATION	LENGTH	WEIGHT
1	HS152x152x6.4	30081	850.70
2	W100x19	27490	531.93
3	W150x22	7070	157.8
TOTAL WEIGHT:		1528.84	



PLAN VIEW



ISO VIEW



Rev.	Description	By	Chk	Eng	Date	Title
3	AS BUILT	AP	WC	WC	APR 02/14	Drawn A. PERNA
2	ISSUED FOR CONSTRUCTION	AP	WC	WC	NOV 05/13	Date OCT. 08, 2013
1	RE-ISSUED FOR APPROVAL	AP	WC	WC	NOV 05/13	Scale NTS
0	ISSUED FOR CONSTRUCTION	AP	WC	WC	OCT 28/13	Customer: PENNWEST EXPLORATION c/o PIONEER ENGINEERING INC.
A	ISSUED FOR APPROVAL	AP	WC	WC	OCT 09/13	Job No 2013-070
REVISIONS						Drawing Number: SKI 1 of 1 2013-070-402 Rev. 3

CADO INDUSTRIES INC.
7491 - 110 AVE SE, CALGARY, ALBERTA T2C 9B9
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SKID STEEL DETAILS
4-WELL SEPARATOR SKID (BU-2000)

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ITEM	INST. TAG	QUANTITY	DESCRIPTION
1	FE-2100/2200/2300/2400	4	4" SCH. 80 DANIEL SENIOR METER RUN, 4"-600# RF, c/w FLANGE FLOW CONDITIONER, CONFORMS TO AGA 2000, FLANGED BOTH ENDS, 100% X-RAY, HYDRO-TEST, PWHT, SOUR SERVICE
2	MVS-2100/2200/2300/2400	4	ROSEMOUNT MULTIVARIABLE TRANSMITTER, MODEL# MVS205E (FORMELY PART NUMBER: RSE2DS), OUTPUT: EIA-485 (RS-485), MODBUS, DIFFERENTIAL PRESSURE RANGE: 0-250 IN H2O, STATIC PRESSURE RANGE: 0-3626 PSIG, PROCESS TEMPERATURE RANGE -40 TO 752 DEG. F, c/w 5TIS-4FLG 5 WAY MANIFOLD, c/w MOUNTING BRACKET (MODEL AK-002-10-HD)
3	TW/TE-2100/2200/2300/2400	4	ROSEMOUNT RTD ASSEMBLY, MODEL# RTD-3", 3 WIRE RTD c/w THERMOWELL (3" INSERTION LENGTH), 3/4" NPT PROCESS CONNECTION, -100 TO 260 DEG. C
4	FE-2101/2201/2301/2401/2102/2202/2302/2402	8	2"-600# RF NUPRO EZE IN TURBINE METER c/w MC-III TOTALIZER FLOW ANALYZER, EXPL. PROOF, PULSE OUTPUT, 4-20 mA OUTPUT AND MAGNETIC PICK-UP AND ACCESSORIES, M3/DAY REGISTER, SOUR SERVICE
5	LC-2101/2201/2301/2401/2102/2202/2302/2402	8	2" NPT FISHER LEVEL CONTROLLERS, STANDARD NACE SERVICE, SNAP ACTING, 6 TO 30 PSIG 1 7/8" x 12" PVC DISPLACER, DIRECT MOUNT, NOTE: SPECIFIC GRAVITY DIFFERENCE OF 0.3 REQUIRED FOR OIL/WATER INTERFERENCE
6	LCV-2101/2201/2301/2401/2102/2202/2302/2402	8	3" 600# RF CVS 667 ET CONTROL VALVE, 3 7/16" EQUAL PERCENT CAGE GUIDED TRIM c/w FISHER 667 SPRING AND DIAPHRAGM ACTUATOR, FAIL CLOSED, SIZED 45 ACTUATOR, 0-33 PSIG OPERATING RANGE.
7	LG-2101/2201/2301/2401	4	PENBERTHY 2RL7 REFLEX GAUGE, 1950 PSIG AT 100 DEG. F MAWP, SET OF 330J GAUGE VALVES, VISIBLE GLASS 22"
8	LG-2102/2202/2302/2402	4	PENBERTHY 2TH7 TRANSPARENT GAUGE, 2250 PSIG AT 100 DEG. F MAWP, SET OF 330J GAUGE VALVES, VISIBLE GLASS 22"
9	LSHH-2100/2200/2300/2400	4	1 1/2" NPT SOR ELECTRIC HIGH LEVEL SWITCH, MODEL# 1510-C-G5A-C-L1-ES-CS-CV-MC c/w MANUAL CHECK, DIRECT ACTING, DIRECT MOUNT c/w 4"-600# RF BLIND FLANGE (TAPPED 1 1/2" NPT) (MECHANICAL TEST FACING UP)
10	LSSL-2100/2200/2300/2400	4	1 1/2" NPT SOR ELECTRIC LOW LEVEL SWITCH, MODEL# 1510-C-G5A-C-L1-ES-CS-CV-MC c/w MANUAL CHECK, DIRECT ACTING, DIRECT MOUNT c/w 4"-600# RF BLIND FLANGE (TAPPED 1 1/2" NPT) (MECHANICAL TEST FACING DOWN)
11	PCV-2400	12	FISHER 1/4" NPT TYPE 67CFR PRESSURE REGULATORS (SOUR SERVICE), STANDARD BODY/TRIM c/w VENTED BONNET, 0 TO 35 PSIG RANGE
12	EF-2000/2001	2	12" EXHAUST FAN, CANARM SD12-XP, 1/3HP, 115/1/230V, XP, 1625RPM, 1640CFM
13	TW/TG-2101/2201/2301/2401	4	3" TREND MODEL 33 BIMETAL THERMOMETER, -40/120 DEG. F RANGE, 12" STEM LENGTH (1/2" BACK CONNECTION), c/w 1/2" x 3/4" x 12" LONG 316 SS THERMOWELL
14	PI-2100/2200/2300/2400	4	4" WKA 233.54 LIQUID PRESSURE GAUGE, DUAL SCALE, 0 TO 1500 PSIG RANGE 1/2" NPT BOTTOM CONNECTION, 316 SS BOURDON TUBE/SOCKET
15	PSV-2100/2200/2300/2400	4	FARRIS 26EA13-120 PRESSURE RELIEF VALVE, 1"-600# RF INLET x 2"-150# RF OUTLET, "E" SIZE ORIFICE, SET AT 9928 kPag (1440 PSIG), (BLOCKED FLOW GAS)
16		13	1" NPT 3000 PSIG WOG, FULL PORT KH, BALL VALVE, SOUR SERVICE
17		33	1/2" NPT 2000 PSIG WOG, REG PORT KF, BALL VALVE, SOUR SERVICE
18		16	3/4" NPT 2000 PSIG WOG, REG PORT KF, BALL VALVE, SOUR SERVICE
19		4	2"-600# RF REG PORT, KF BALL VALVE, SOUR SERVICE
20		24	3"-600# RF FULL PORT, KF BALL VALVE, SOUR SERVICE
21		5	4" CL 600 RF, KF SWNG CHECK VALVE, SOUR SERVICE
22		8	3" CL 600 RF, KF SWNG CHECK VALVE, SOUR SERVICE
23		13	1/4" NPT, 6000# AGCO H7VC-2 NEEDLE VALVE, SOUR SERVICE
24		26	1/2" NPT, 6000# AGCO H7VC-44Q NEEDLE VALVE, SOUR SERVICE
25		8	3"-600# RF, ALTA STRAINER, Y-STRAINER, SOUR SERVICE
26		4	1" NPT NEWCO GLOBE VALVE, CARSEAL CLOSED, CLASS 800, SOUR SERVICE
27		8	2" CL 600 RF, KF SWNG CHECK VALVE, SOUR SERVICE
28		8	2"-600# RF NEWCO GLOBE VALVE, CARSEAL CLOSED, SOUR SERVICE
29	PV/PY-2101/2201/2301/2401	4	4" 600# RF CVS 667-ET PRESSURE CONTROL VALVE c/w FISHER 667 SPRING AND DIAPHRAGM ACTUATOR, FISHER DVC6200 FIELDMEW POSITIONED, SIZE 45 ACTUATOR, FAIL OPEN, NACE, SOUR SERVICE
30		12	WELKER SP-2 SAMPLE PROBE, 3/4" x 1/2" NPT x 4" LG (TO BE CUT 45 DEG. AT MIDDLE OF PIPE)
31	HS-2050/2051	2	SUPPLIED AND INSTALLED BY CUSTOMER
32	AE/AIT-2050/2051/2052/2053	4	SUPPLIED AND INSTALLED BY CUSTOMER
33		5	4"-600# RF REG PORT BALL VALVE, KF, SOUR SERVICE

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2	AS BUILT	AP	WC	WC	APR 02/14	Date				OCT. 08, 2013		
1	RE-ISSUED FOR CONSTRUCTION	AP	WC	WC	NOV 05/13	Scale	NTS	Customer:	PENNWEST EXPLORATION c/o PIONEER ENGINEERING INC.			
0	ISSUED FOR CONSTRUCTION	AP	WC	WC	OCT 28/13							
A	ISSUED FOR APPROVAL	AP	WC	WC	OCT 09/13							
Rev.	Description	By	Chk	Eng	Date	Title:	BILL OF MATERIAL		Job No	Drawing Number:	SHT 1 of 1	Rev.
							4-WELL SEPARATOR SKID (BU-2000)		2013-070	2013-070-501		2

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ITEM	INST. TAG	QUANTITY	DESCRIPTION
34		16	2"-600# RF FULL PORT BALL VALVE, KF, CARSEAL CLOSED, SOUR SERVICE
35		4	2"-600# RF, NEWCO GLOBE VALVE
36	DPIT-2100/2200/2300/2400	4	ROSEMOUNT 3051C PRESSURE TRANSMITTER MODEL 3051CD4A02A1AM5K6S5, 4-20mA WITH DIGITAL SIGNAL BASED ON HART PROTOCOL, CSA EXPL. PROOF c/w ROSEMOUNT 305 INTEGRAL 5-VALVE MANIFOLD MODEL: 0305RC52B11SG
37	PI-2101/2201/2301/2401	4	2 1/2" DIAL WKA 233.53 LIQUID PRESSURE INDICATOR, DUAL UNIT, LIQUID FILLED, 1/2" NPT BOTTOM CONNECTION, 0-200 PSIG RANGE.
38		4	4"-600# RF REG PORT BALL VALVE, KF, CARSEAL OPEN, SOUR SERVICE
39		8	1/2" NPT, 6000# AGCO H7VC-44Q NEEDLE VALVE, CARSEAL OPEN, SOUR SERVICE

					Drawn	A. PERNA		CADO INDUSTRIES INC. 7401 - 110 AVE SE, CALGARY, ALBERTA T2C 9B8 TEL: (403) 270-8662; FAX: (403) 270-8687				
					Date	OCT. 08, 2013						
2	AS BUILT	AP	WC	WC	APR 02/14	Scale	NTS		Customer: PENNWEST EXPLORATION c/o PIONEER ENGINEERING INC.			
1	RE-ISSUED FOR CONSTRUCTION	AP	WC	WC	NOV 05/13							
0	ISSUED FOR CONSTRUCTION	AP	WC	WC	OCT 28/13							
A	ISSUED FOR APPROVAL	AP	WC	WC	OCT 09/13							
Rev.	Description	By	Chk	Eng	Date	Title:		BILL OF MATERIAL 4-WELL SEPARATOR SKID (BU-2000)		Job No 2013-070	Drawing Number: SH1 OF 1 2013-070-502	Rev. 2
REVISIONS												