

BILL OF MATERIALS

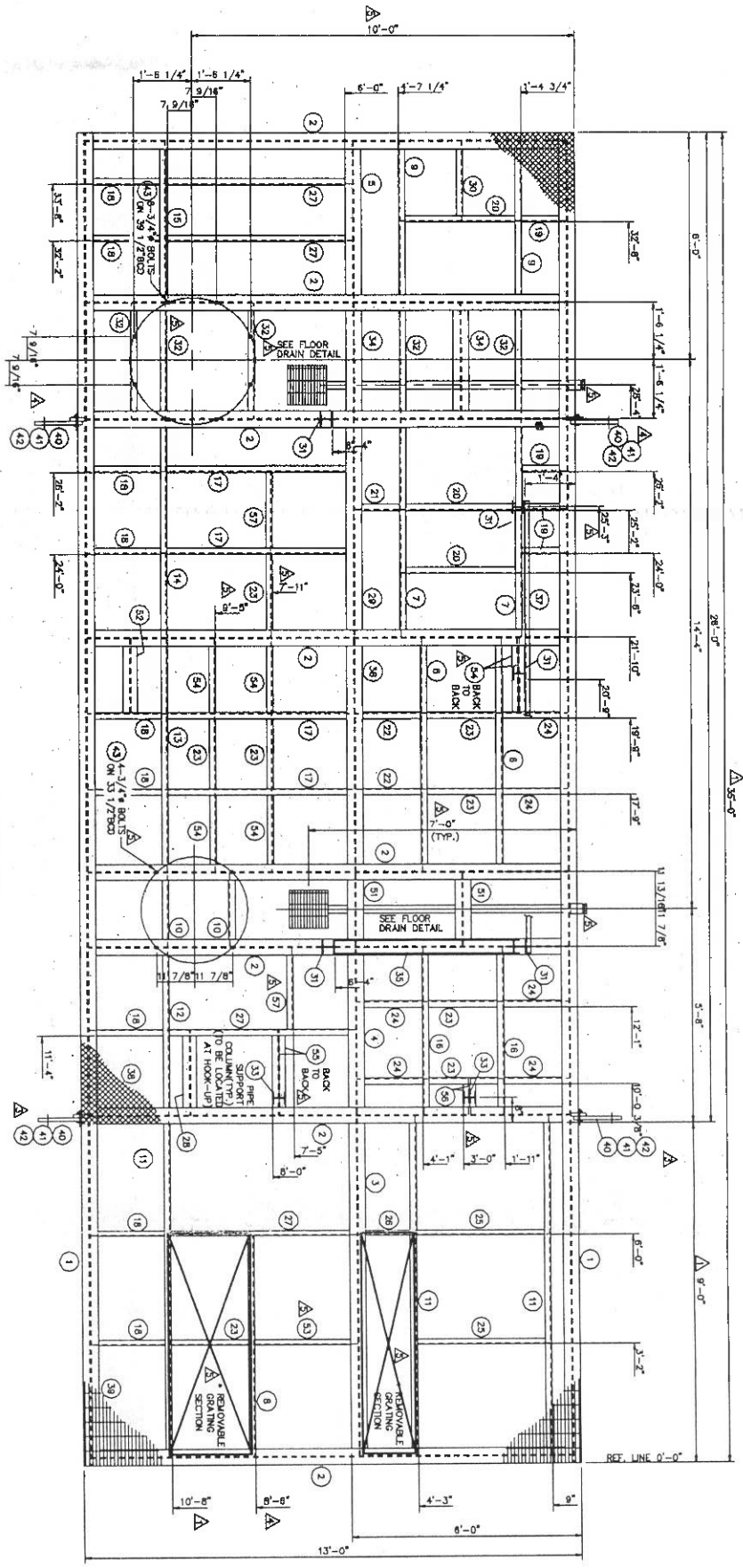
ITEM	QTY	DESCRIPTION	MATERIAL
1	2	W14 X 22# X 13'-0" LG.	C60-21 44#
2	8	W14 X 22# X 13'-0" LG.	44#
3	1	W14 X 22# X 13'-0" LG.	22#
4	1	W14 X 22# X 13'-0" LG.	10#
5	1	W14 X 22# X 13'-0" LG.	8#
6	2	W14 X 22# X 13'-0" LG.	4#
7	2	W14 X 22# X 13'-0" LG.	14#
8	2	W14 X 22# X 13'-0" LG.	15#
9	2	W14 X 22# X 13'-0" LG.	6#
10	2	W14 X 22# X 13'-0" LG.	34#
11	3	W14 X 22# X 13'-0" LG.	44#
12	1	W14 X 22# X 13'-0" LG.	50#
13	1	W14 X 22# X 13'-0" LG.	50#
14	1	W14 X 22# X 13'-0" LG.	53#
15	1	W14 X 22# X 13'-0" LG.	35#
16	2	W14 X 22# X 13'-0" LG.	44#
17	4	W14 X 22# X 13'-0" LG.	44#
18	8	W14 X 22# X 13'-0" LG.	154#
19	4	W14 X 22# X 13'-0" LG.	78#
20	3	W14 X 22# X 13'-0" LG.	44#
21	1	W14 X 22# X 13'-0" LG.	44#
22	2	W14 X 22# X 13'-0" LG.	30#
23	8	W14 X 22# X 13'-0" LG.	138#
24	8	W14 X 22# X 13'-0" LG.	44#
25	2	W14 X 22# X 13'-0" LG.	25#
26	1	W14 X 22# X 13'-0" LG.	44#
27	4	W14 X 22# X 13'-0" LG.	168#
28	1	W14 X 22# X 13'-0" LG.	28#
29	1	W14 X 22# X 13'-0" LG.	44#
30	1	W14 X 22# X 13'-0" LG.	18#
31	1	W14 X 22# X 13'-0" LG.	44#
32	5	W14 X 22# X 13'-0" LG.	73#
33	2	W14 X 22# X 13'-0" LG.	168#
34	2	W14 X 22# X 13'-0" LG.	94#
35	1	W14 X 22# X 13'-0" LG.	138#
36	1	W14 X 22# X 13'-0" LG.	83#
37	1	W14 X 22# X 13'-0" LG.	300#
38	1	W14 X 22# X 13'-0" LG.	380#
39	1	W14 X 22# X 13'-0" LG.	44#
40	4	W14 X 22# X 13'-0" LG.	44#
41	4	W14 X 22# X 13'-0" LG.	44#
42	18	W14 X 22# X 13'-0" LG.	6#
43	12	W14 X 22# X 13'-0" LG.	6#
44	2	W14 X 22# X 13'-0" LG.	5#
45	1	W14 X 22# X 13'-0" LG.	2#
46	2	W14 X 22# X 13'-0" LG.	18#
47	2	W14 X 22# X 13'-0" LG.	2#
48	2	W14 X 22# X 13'-0" LG.	2#
49	2	W14 X 22# X 13'-0" LG.	2#
50	2	W14 X 22# X 13'-0" LG.	2#
51	2	W14 X 22# X 13'-0" LG.	2#
52	1	W14 X 22# X 13'-0" LG.	2#
53	1	W14 X 22# X 13'-0" LG.	2#
54	5	W14 X 22# X 13'-0" LG.	44#
55	2	W14 X 22# X 13'-0" LG.	44#
56	2	W14 X 22# X 13'-0" LG.	37#
57	2	W14 X 22# X 13'-0" LG.	18#

- NOTE:**
- CHECKERPLATE SEAMS TO BE SOL WELDED & PERMITTER TO BE SMOOTH WELDED.
 - USE 1/4" RILET WELD ON ALL STRUCTURAL MEMBERS & 1/2" ON LIFT LUGS.
 - SMOOTH WELD FLOOR PLATE FROM UNDERSIDE USING 1/8" RILET X 3/16" @ 12" O/C.
 - SMOOTH WELD TO SPOC-SIP-6, 1 5/8" ZMC CHROMIUM PIPER 2 5/8" W/SHIM KIRBY BLUE GUNWELD.
 - 7/16" THK. SCHEDULE 40 ON UNDERSIDE OF SPOC.
 - ALL TOTAL ESTIMATED WEIGHTS: 13,000 LB.
 - WEED MEAS 51 & 53 DIRECTLY TO STRUCTURAL MEMBERS BY GOADING HUB CHECKERPLATE SPOC FORUM MARK LOCATIONS OF UNDERLYING BEAMS FOR LOCATING POINTS.
 - SHOP LOCATE ANGLE SUPPORTS WHERE REQUIRED.

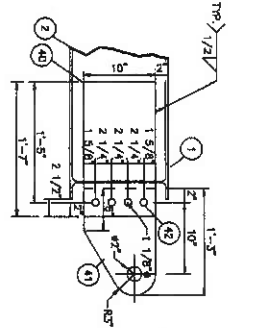
WELLS-HALL FABRICATION & CONSTRUCTION LTD.

CUSTOMER: CANADIAN NATURAL RESOURCES
 SHOP ORDER: 96-001 TAG No. 166, No. 26
 13'-0" W X 33'-0" LG X W14 X 22# MAIN BEAM
 STRUCTURAL STEEL SPOC FOR
 SOUR TEST/GROUP SEPARATOR PACKAGE #26
 SOUTH BUICK CREEK - SOUTH SATELLITE #1
 LOCATION: 9-34-88-20 W8M

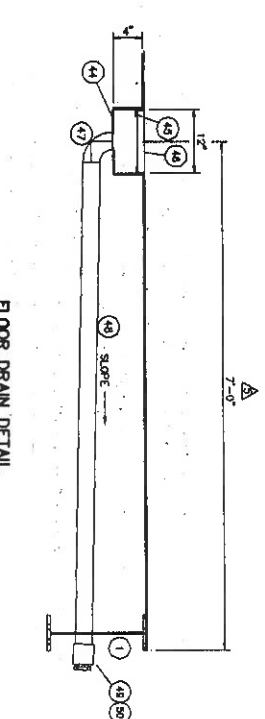
DATE: 96-01-04 SCALE: AS SHOWN
 DATE: 96-01-17 DWG#: 60-4-2001-3



PLAN VIEW
SCALE: 1/2"=1'-0"



REMOVABLE LIFT LUG
SCALE: 1"=1'-0"

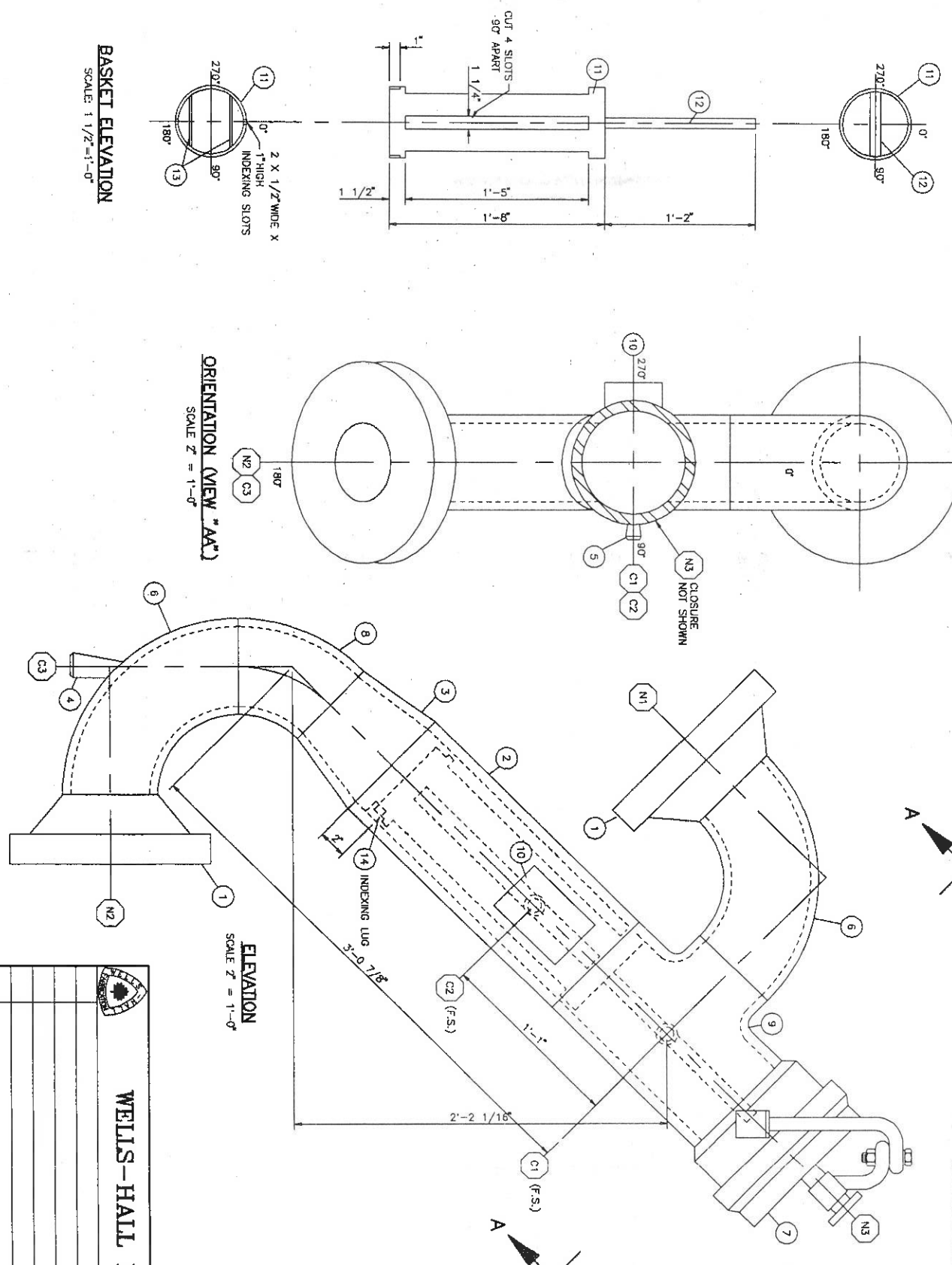


FLOOR DRAIN DETAIL
SCALE: 1"=1'-0"

NOZZLE SCHEDULE AND WELD DETAILS

MARK No. REQ'D	SIZE	ANSI RATING & FACING	SERVICE	O.D. OF NOZZLE NECK	PROJECTION OUTSIDE	PROJECTION INSIDE	WELDING DETAIL NUMBER	FILLET WELD SIZE	BILL OF MATERIALS ITEM NUMBER	REMARKS
N1	6"	600 ANSI RF	INLET	6 5/8"	SHOWN	-	I	-	1	
N2	6"	600 ANSI RF	OUTLET	6 5/8"	SHOWN	-	I	-	1	
N3	6"	CLASS 900 CLOSURE	CLOSURE/INSPECT	8 5/8"	-	-	I	-	1	
C1	1 1/2"	6000# TOL	PI	3 3/4"	-	-	VII	3/8"	5	
C2	1 1/2"	6000# TOL	FUEL GAS	3 3/4"	-	-	VII	3/8"	5	
C3	1"	6000# TOL	DRAIN	1 5/16"	-	-	VII	3/8"	4	

ITEM	QTY	DESCRIPTION	MATERIAL
1	2	FLG. 6" 600 ANSI RPN W/SCH.120 BORE	SA-350-LF2
2	1	PIPE. 6" SCH.120 SMLS X 1'-8" LG (9.B.E.)	SA-333-6
3	1	REDUCER. 6" X 6" SCH.120 CONC. BUTTWELD	SA-420-WPL6
4	1	TOL. 1" -6000# FOR 6" PIPE	SA-350-LF2
5	2	TOL. 1/2" -6000# FOR 6" PIPE	SA-420-WPL6
6	2	6" SCH.120 90° LR BUTTWELD ELBOW	SA-350-LF2
7	1	QUICK OPENING CLOSURE HUBER-MALE 6" CLASS 900. FIG. 500. SCH.120. NACE. PRESSURE ALERT VALVE. ANGLED HINGE	SA-420-WPL6
8	1	ELL. 6" SCH.120 45° L.R. BUTTWELD	SA-420-WPL6
9	1	TEE. 6" X 6" X 6" SCH.120 BUTTWELD REDUCING	SA-420-WPL6
10	1	WELLS-HALL STD. NAMEPLATE C/W BRACKET	SA-106-B
11	1	6" SCH.40 SMLS PIPE X 1'-8" LG.	SA-516-70MT
12	1	1/4" THK X 1" FB X 2'-4" LG. (HANDLE)	SA-516-70MT
13	2	1/4" THK X 1" FB X 4 7/8" LG. (PIG BAR)	SA-516-70MT
14	1	1/4" THK X 1" FB X 3/4" LG. (INDEXING LUG)	SA-516-70MT

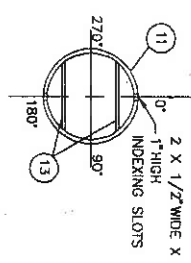


NOTE:
 * WHERE ATTACHMENT FILLET WELD SIZES OR THEIR PROCEDURES ARE NOT SHOWN ON DWG, USE 1/4" FILLET WELD WITH A101 WELD PROCEDURE FOR A-36 OR 44W MATERIAL WELDED TO PRESSURE BOUNDARY, USE 1/4" FILLET WELD AND A103 WELD PROCEDURE IF NOT OTHERWISE NOTED.

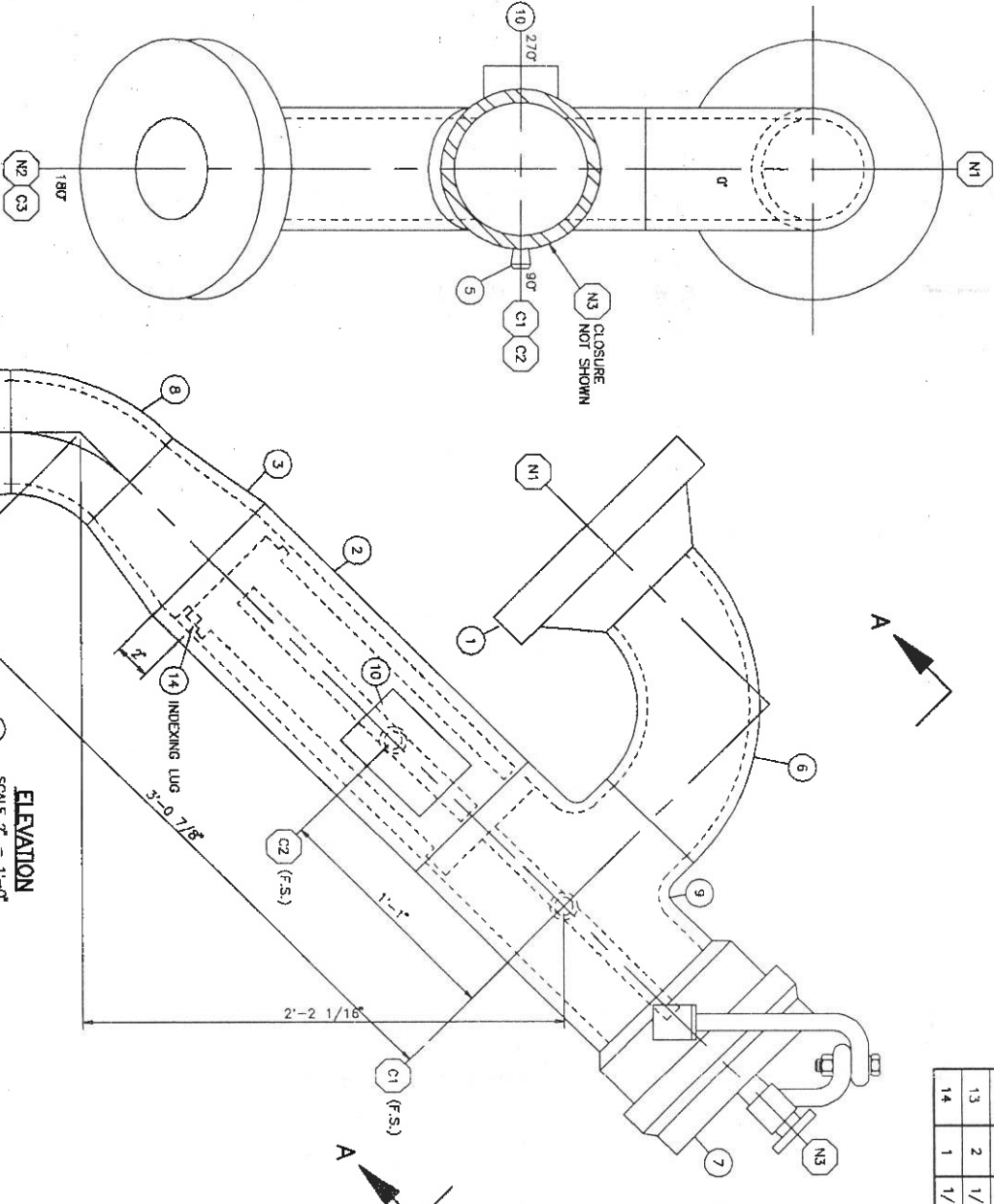
GENERAL NOTES

- * CONSTRUCTION IN ACCORDANCE WITH ASME CODE SEC.VIII DIV.1 1995
- * INSPECTION BY PROVINCIAL BOILER INSPECTOR
- * DESIGN PRESSURE 1440 psig, 9928 kPa @ 130° F, 54° C
- * MDMT: -40° F, -40° C @ 1440 psig, 9928 kPa.
- * CORROSION ALLOWANCE 1/8" IN., 3.18 mm.
- * HYDROTEST 2180 psig, 14893 kPa. (LTD BY _____)
- * STRESS RELIEVE: YES, (60 MINUTES @ 1150°F)
- * RADIOGRAPH: 100%
- * ALL DIMENSIONS ARE TO REF. LINE UNLESS OTHERWISE NOTED.
- * ALL BOLT HOLES ARE TO STRADDLE VESSEL CENTER LINES UNLESS OTHERWISE NOTED.
- * VESSEL TO BE THOROUGHLY CLEANED INSIDE AND OUT.
- * PROTECT ALL OPENINGS FOR SHIPMENT.
- * PAINT: BAST TO SSPC-SP6, 1 S/C ZINC PHOSPHATE PRIMER
- * 2 S/G WARM GREY FINISH EXTERNAL
- * ESTIMATED SHIPPING WT. 630 lbs., 286 kg.
- * VOLUME: 1.4 CUBIC FEET, 0.039 CUBIC METERS.
- * SERIAL No.: 95-8080C-0
- * CIRC. AND LONG SEAM SEE WELD DETAIL VI.
- * CRN:
- * IMPACT TESTING: EXEMPT PER UCS-66(g)
- * LSD: 9-34-88-20 WGM
- * CLOSURE CRN: 01121,24170688
- * REGISTERED IN ALBERTA AND BRITISH COLUMBIA

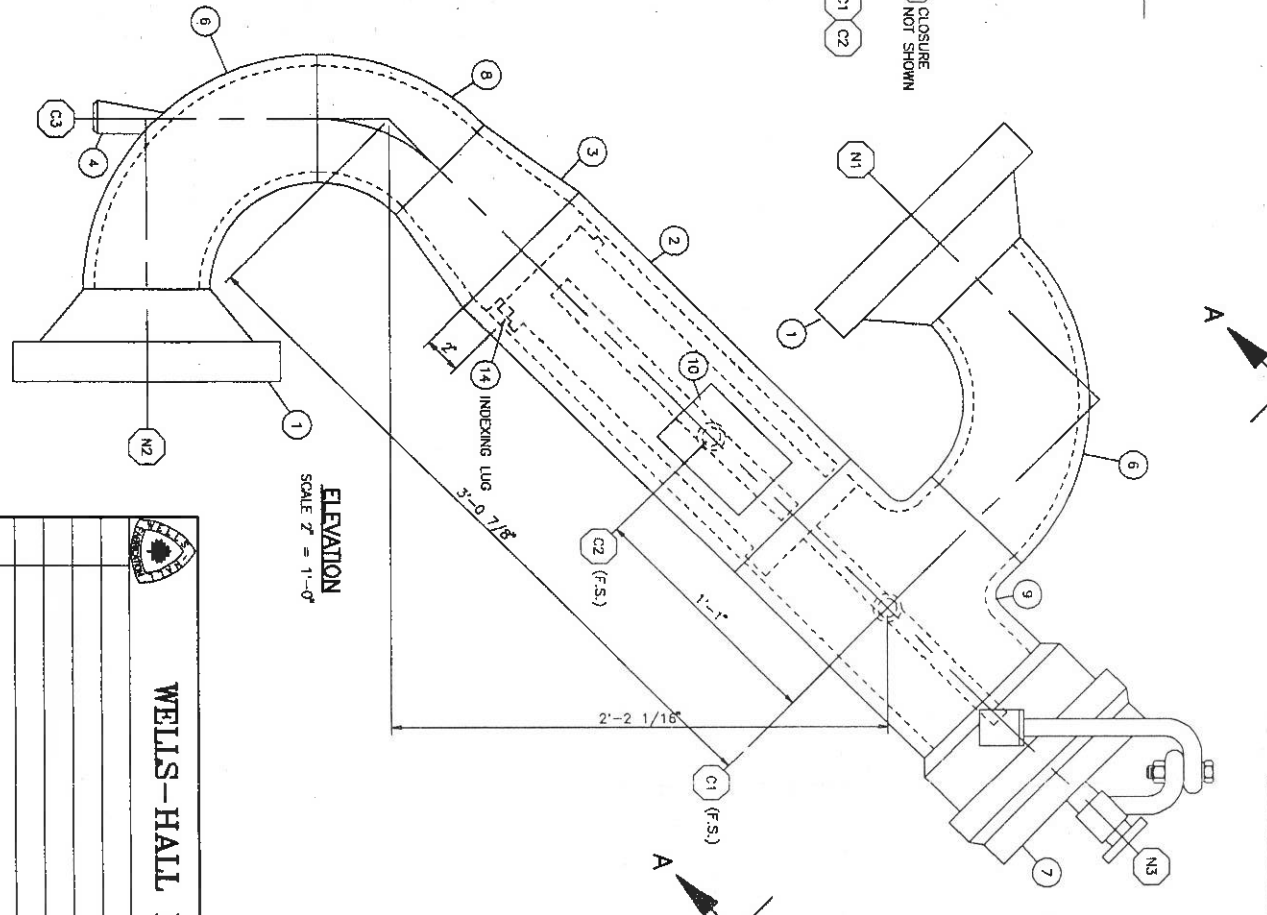
BASKET ELEVATION
 SCALE 1 1/2"=1'-0"



ORIENTATION VIEW "A-A"
 SCALE 2"=1'-0"



ELEVATION
 SCALE 2"=1'-0"



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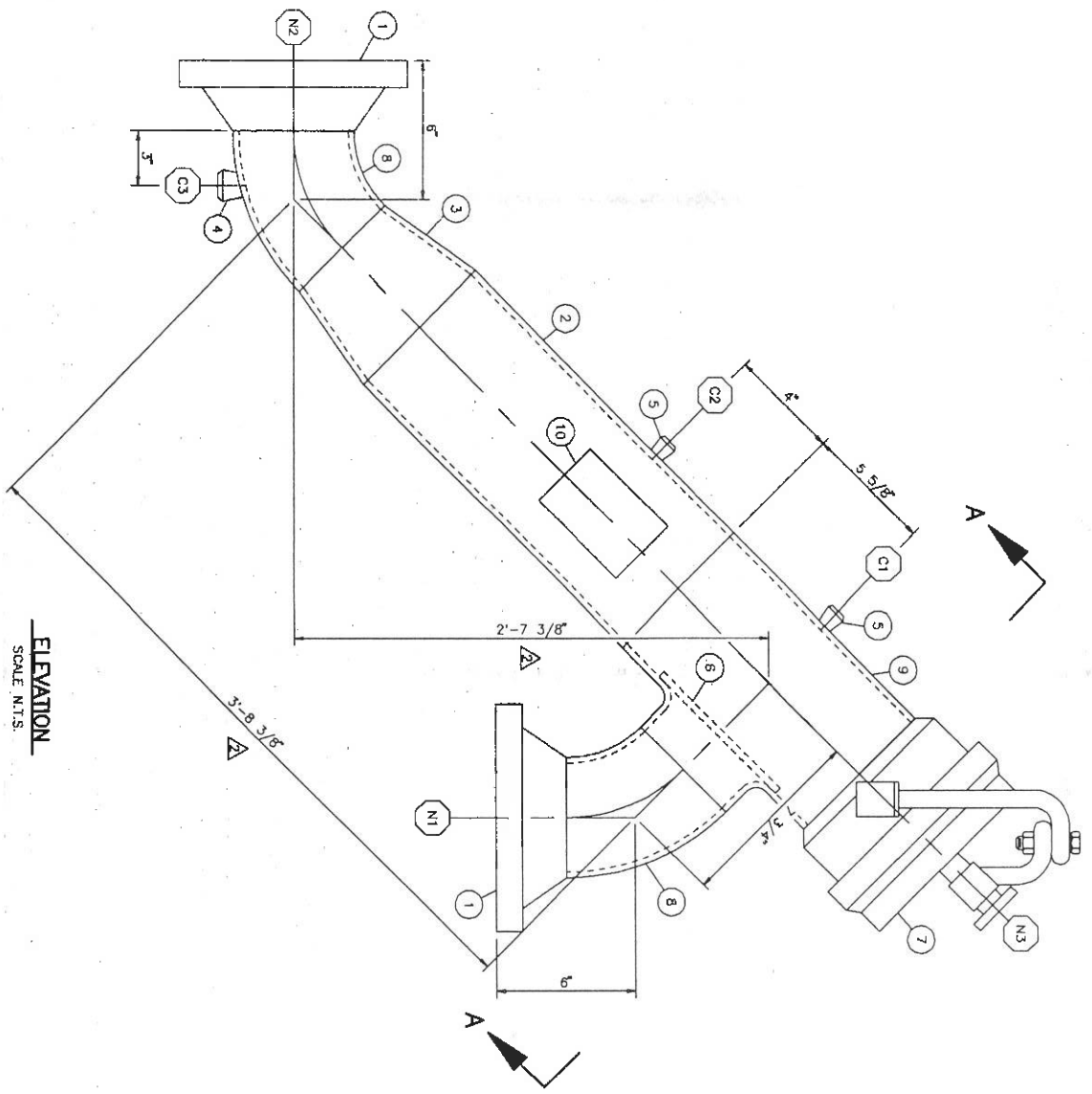
CUSTOMER: CANADIAN NATURAL RESOURCES		SHOP ORDER: 95-8080	TAG No. PKG. No.26	CUST. No. 3989012
8 5/8" OD X 6 5/8" OD X 1440PSIG DP +1/8" CA		SOUR TEST/GROUP SEPARATOR PKG. #26		
45" PIG RECEIVER		SOUTH BUICK CREEK - SOUTH SATELLITE #1		
DATE: 95-12-07	SCALE: AS SHOWN	DATE: 96-01-15	DWG#: 30-B-8080C-3	

NOZZLE SCHEDULE AND WELD DETAILS

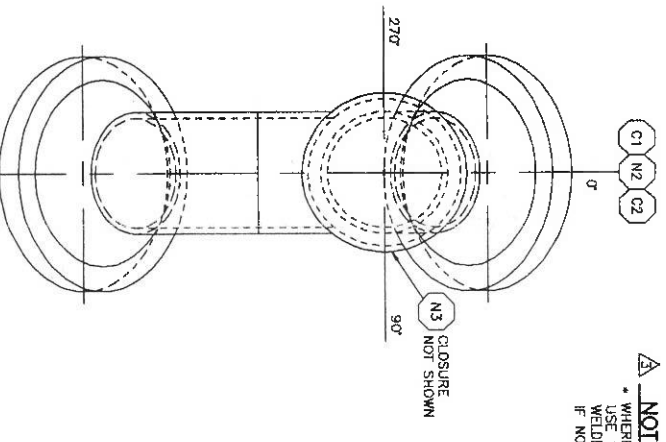
MARK No. REC'D	SIZE	ANSI RATING & FACING	SERVICE	O.D. OF NOZZLE NECK	PROJECTION OUTSIDE	INSIDE	WELDING DETAIL NUMBER	FILET WELD SIZE	BILL OF MATERIALS ITEM NUMBER	REMARKS	ITEM	QTY	DESCRIPTION	MATERIAL
WPS-103	1"	300 ANSI RF	INLET	4 1/2"	SHOWN	-	1	-	1	FLG: 4" 300 ANSI RF W/SCH 80 BORE	1	2	SA-350-LF2	
WPS-103	1"	300 ANSI RF	OUTLET	4 1/2"	SHOWN	-	1	-	1	REDUCER: 6" x 4" SCH 80 CONC. BUTTWELD	2	1	SA-333-8	
WPS-103	1"	300 ANSI RF	PI	3/4"	-	-	1	-	1	TOE: 1/2" - 3000# FOR 4" PIPE	3	1	SA-420-WPL6	
WPS-103	1"	300 ANSI RF	PI	3/4"	-	-	1	-	1	TOE: 1/2" - 6000# FOR 4" PIPE	4	1	SA-350-LF2	
WPS-103	1"	300 ANSI RF	PI	3/4"	-	-	1	-	1	TOE: 1/2" - 6000# FOR 4" PIPE	5	1	SA-516-70	
WPS-103	1"	300 ANSI RF	PI	3/4"	-	-	1	-	1	TOE: 1/2" - 6000# FOR 4" PIPE	6	1	SA-350-LF2	
WPS-103	1"	300 ANSI RF	PI	3/4"	-	-	1	-	1	TOE: 1/2" - 6000# FOR 4" PIPE	7	1	SA-420-WPL6	
WPS-103	1"	300 ANSI RF	PI	3/4"	-	-	1	-	1	TOE: 1/2" - 6000# FOR 4" PIPE	8	1	SA-350-LF2	
WPS-103	1"	300 ANSI RF	PI	3/4"	-	-	1	-	1	TOE: 1/2" - 6000# FOR 4" PIPE	9	1	SA-420-WPL6	
WPS-103	1"	300 ANSI RF	PI	3/4"	-	-	1	-	1	TOE: 1/2" - 6000# FOR 4" PIPE	10	1	SA-420-WPL6	

BILL OF MATERIALS

NOTE:
 WHERE ATTACHMENT FILET WELD SIZES OR THEIR PROCEDURES ARE NOT SHOWN ON DWGS., USE 1/4" FILET WELD WITH A101 WELD PROCEDURE FOR A-36 OR A44M MATERIAL WELDED TO PRESSURE BOUNDARY, USE 1/4" FILET WELD AND A105 WELD PROCEDURE IF NOT OTHERWISE NOTED.



ELEVATION
SCALE N.T.S.



ORIENTATION VIEW "AA"
SCALE N.T.S.

GENERAL NOTES

- * CONSTRUCTION IN ACCORDANCE WITH ASME VIII DIV.1, 1995 ED.
- * INSPECTION BY PROVINCIAL BOILER INSPECTOR.
- * DESIGN PRESSURE 720 psig, 4964 kPa @ 130° F, 54° C
- * MOMT: -47 F, -47 C @ 720 psig, 4964 kPa
- * CORROSION ALLOWANCE 1/8" in., 3.18 mm
- * HYDROTEST 1080 psig, 7447 kPa, (LTD BY _____)
- * STRESS RELIEVE: YES (60 MINUTES @ 1190°F)
- * RADIOGRAPH: 100%
- * ALL DIMENSIONS ARE TO REF. LINE UNLESS OTHERWISE NOTED.
- * ALL BOLT HOLES ARE TO STRADDLE VESSEL CENTER LINES UNLESS OTHERWISE NOTED.
- * VESSEL TO BE THOROUGHLY CLEANED INSIDE AND OUT.
- * PROTECT ALL OPENINGS FOR SHIPMENT.
- * PAINT: BLAST TO SSPC-SP8, 1.5/C ZINC PHOSPHATE PRIMER, 2.5/C WARM GREY FINISH ENAMEL
- * ESTIMATED SHIPPING WT. 240 lbs., 109 kg.
- * VOLUME: 0.68 CUBIC FEET, 0.019 CUBIC METERS.
- * SERIAL No.: 95-80608-0
- * CIRC. AND LONG SEAM SEE WELD DETAIL VI.
- * CRN:
- * IMPACT TESTING: EXEMPT PER U.S. (66X)
- * LSD: b-5-A/94-A-14
- * CLOSURE CRN: 01121:24170588
- * REGISTERED IN ALBERTA AND BRITISH COLUMBIA

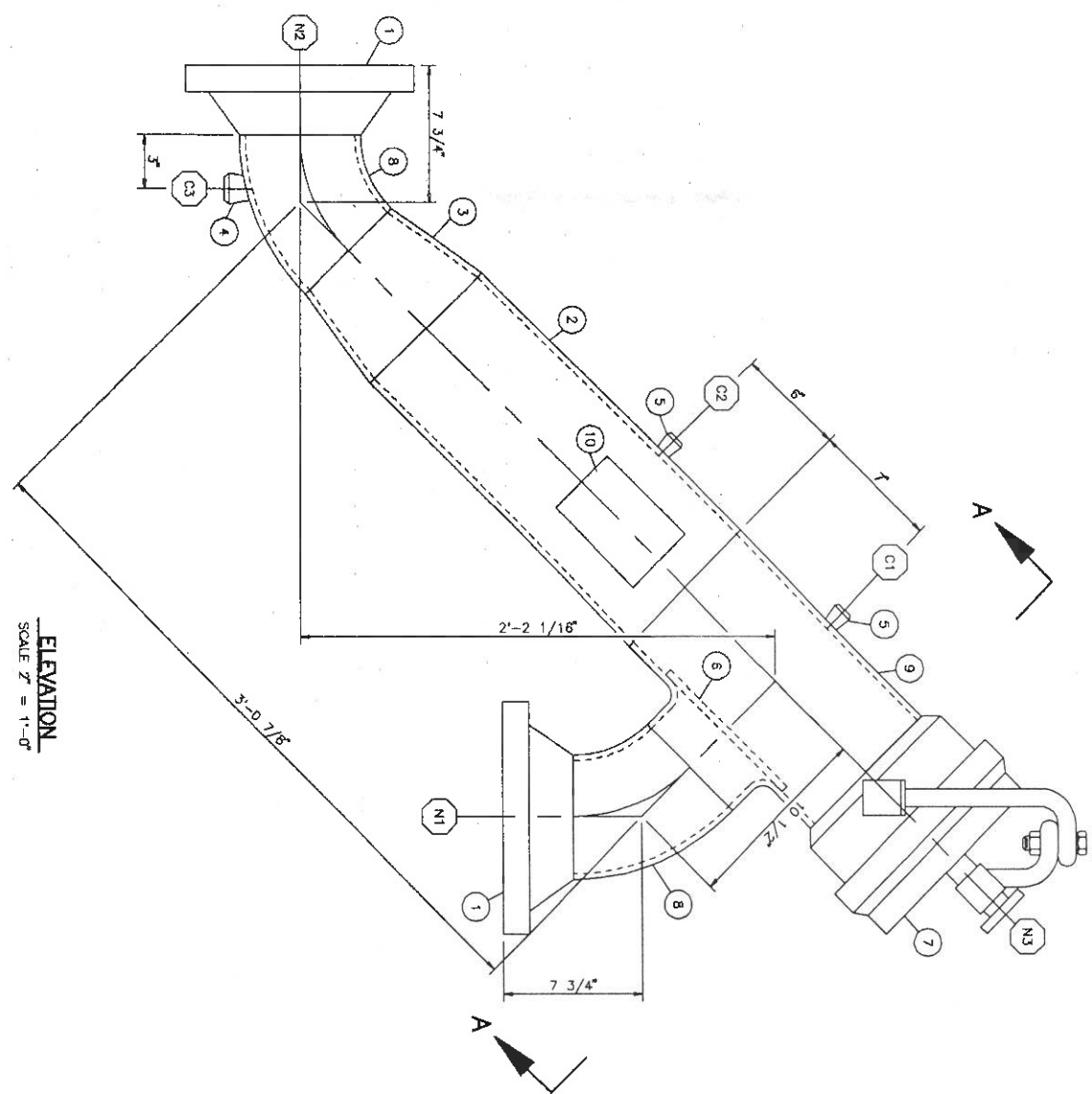
WELLS-HALL FABRICATION & CONSTRUCTION LTD.

CUSTOMER: CANADIAN NATURAL RESOURCES		CUST. No. 1989012	
SHOP ORDER: 95-8060		TAG No.	
6 5/8" OD X 4 1/2" OD X 720PSIG DP +1/8" CA			
45" PIG LAUNCHER			
SOUTH BUICK CREEK SATELLITE #1			
SOUR TEST / GROUP SEPARATOR PKG			
DATE: 95-12-07	SCALE: AS SHOWN	DATE: 96-01-15	DWG#: 30-9-80608-3
DATE: 01-12	APP. BY:	DATE:	

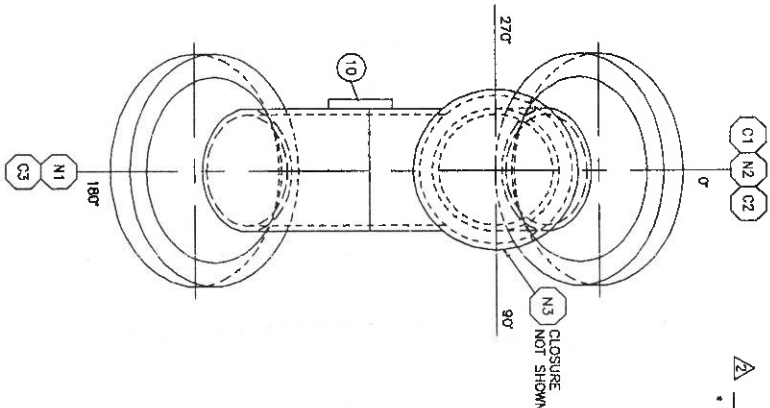
REV	DESCRIPTION	BY	APP.	DATE
Δ	DESIGN CHANGES	RL		01-12
Δ	CHANGES PER CUSTOMER	RL		01-96
Δ	UPDATE WELD PROCEDURES	RL		02-96
Δ				96

NOZZLE SCHEDULE AND WELD DETAILS

MARK No. RECD.	SIZE	ANSI RATING & FACING	SERVICE	O.D. OF NOZZLE NECK	PROJECTION OUTSIDE	PROJECTION INSIDE	WELDING DETAIL NUMBER	FILLET WELD SIZE	BILL OF MATERIALS ITEM NUMBER	REMARKS	ITEM QTY	DESCRIPTION	MATERIAL
WPS-1	1"	3000# TOL	DRAIN	1 7/16"	-	-	VI	3/8"	4		1	WELLS-HALL STD. NAMEPLATE C/W BRACKET	
WPS-2	1 1/2"	8000# TOL	PURGE	3 3/4"	-	-	VI	3/8"	5		1	TEE 6" X 6" X 6" SCH.80 BUTTWELD REDUCING	SA-420-WPL8
WPS-3	1 1/2"	6000# TOL	PI	3 3/4"	-	-	VI	3/8"	5		1	ELB. 6" SCH.80 45° LR. BUTTWELD	SA-420-WPL8
WPS-4	6"	300 ANSI RF	INLET	6 5/8"	SHOWN	-	I	-	6		1	QUICK OPENING CLOSURE HUBER-YALE 6" CLASS 300, FIG. 500, SCH.80, NACE, PRESSURE ALERT VALVE, ANGLED HINGE	SA-350-LF2
WPS-5	6"	300 ANSI RF	OUTLET	6 5/8"	SHOWN	-	I	-	7		1	ELB. 6" SCH.80 45° LR. BUTTWELD	SA-350-LF2
WPS-6	6"	300 ANSI RF	INLET	6 5/8"	SHOWN	-	I	-	8		1	REDUCER 6" X 6" SCH.80 CONC. BUTTWELD	SA-420-WPL8
WPS-7	6"	300 ANSI RF	OUTLET	6 5/8"	SHOWN	-	I	-	9		1	REDUCER 6" X 6" SCH.80 CONC. BUTTWELD	SA-420-WPL8
WPS-8	6"	300 ANSI RF	INLET	6 5/8"	SHOWN	-	I	-	10		1	FIG. 6" 300 ANSI RHM W/SCH.80 BORE	SA-350-LF2



ELEVATION
SCALE 1" = 1'-0"



ORIENTATION VIEW "AA"
SCALE 1" = 1'-0"

NOTE

* WHERE ATTACHMENT FILLET WELD SIZES OR THEIR PROCEDURES ARE NOT SHOWN, ON DWG., USE 1/4" FILLET WELD WITH A101 WELD PROCEDURE, FOR A-36 OR 44W MATERIAL WELDED TO PRESSURE BOUNDARY, USE 1/4" FILLET WELD AND A105 WELD PROCEDURE, IF NOT OTHERWISE NOTED.

GENERAL NOTES

- * CONSTRUCTION IN ACCORDANCE WITH ASME CODE SEC. VIII DIV.1 1995
- * INSPECTION BY PROVINCIAL BOILER INSPECTOR
- * DESIGN PRESSURE 720 psig, 4964 kPa, @ 130° F, 54° C
- * MDMT: -40° F, -40° C @ 720 psig, 4964 kPa.
- * CORROSION ALLOWANCE 1/8" in., 3.18 mm.
- * HYDROTEST 1080 psig, 74.7 kPa, (LTD BY _____)
- * STRESS RELIEVE: YES, (60 MINUTES @ 1150° F)
- * RADIOGRAPH: 100%
- * ALL DIMENSIONS ARE TO REF. LINE UNLESS OTHERWISE NOTED.
- * ALL BOLT HOLES ARE TO STRADDLE VESSEL CENTER LINES UNLESS OTHERWISE NOTED.
- * VESSEL TO BE THOROUGHLY CLEANED INSIDE AND OUT.
- * PROTECT ALL OPENINGS FOR SHIPMENT.
- * PAINT: BUST TO SPFC-SP6, 1.5/G ZINC PHOSPHATE PRIMER, 2.5/G WARM GREY FINISH ENAMEL
- * ESTIMATED SHIPPING WT. 420 lbs., 191 kg.
- * VOLUME: 1.16 CUBIC FEET, 0.033 CUBIC METERS.
- * SERIAL No.: 95-8060A-0
- * CRG. AND LONG SEAM SEE WELD DETAIL VI.
- * CRN: _____
- * IMPACT TESTING: EXEMPT PER UG-66(d)
- * LSD: B-5-A/94-A-14
- * CLOSURE CRN: 0112124170658
- * REGISTERED IN ALBERTA AND BRITISH COLUMBIA

WELLS-HALL FABRICATION & CONSTRUCTION LTD.

CUSTOMER: CANADIAN NATURAL RESOURCES
SHOP ORDER: 95-8060 TAG No. _____ CUST. No. 198F012

8 5/8" OD X 6 5/8" OD X 720PSIG DP +1/8" CA
45" PIG LAUNCHER
SOUTH BUICK CREEK SATELLITE #1
SOUR TEST/GROUP SEPARATOR PKG.

REV	DESCRIPTION	BY	APP	DATE	SCALE
1	UPDATE WELD PROCEDURES	RL		05-08	AS SHOWN
2	DESIGN CHANGES	RL		01-12	AS SHOWN