

FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
 (Alternative 1 for Single Chamber, Completely Shop-Fabricated Vessels Only)
 As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

F-4

1. Manufactured and certified by PRODUCTS FABRICATION, INC. 1602 MOONEY ROAD HOUSTON TEXAS 77093
(Name and address of manufacturer)

2. Manufactured for PLENTY FILTRATION, 19203 HEMPSTEAD HWY, HOUSTON, TEXAS 77065
(Name and address of purchaser)

Location of installation PLENTY FILTRATION, 19203 HEMPSTEAD HWY, HOUSTON, TEXAS 77065
(Name and address)

4. Type: VERTICAL VESSEL 7514-3 - 03-7514-B1 4522 2003
(Horiz. or vert. tank) (Mfr's serial No.) (CRN) (Drawing no.) (Nat'l Bd. No.) (Year built)

5. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The design, construction, and workmanship conform to ASME Rules, Section VIII, Division 1

to 2002 2001
Addenda (Date) Code Case Nos. Special Service per UG 120(d)

6. Shell: SA-516-70 0.375" 0.125" 45.250" 29.500"
Matl. (Spec No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I.D. (ft. & in.) Length (overall) (ft. & in.)

7. Seams: WELDED SPOT 85 1150 1 WELDED SPOT 1
Long. (Welded, Dbl., Sngl., Lap, Butt) R.T. (Spot or Full) Eff. (%) H.T. Temp (F) Time (hr) Girth (Welded, Dbl., Sngl., Lap, Butt) R.T. (Spot, Partial, or Full) No. of Courses

8. Heads: (a) Matl. SA-516-70 (b) Matl. SA-516-70
(Spec No., Grade) (Spec No., Grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	TOP	0.375"	0.125"	-	-	2:1	-	-	-	CONCAVE
(b)	BOTTOM	0.375"	0.125"	-	-	2:1	-	-	-	CONCAVE

If removable, bolts used (describe other fastenings) (20) 1" - 8 UNC HX HD CAP SCREW, SA-193-B7 (PLATED)
(Matl., Spec. No., Gr., Size, No.)

9. MAWP 150 psi at max. temp. 250 °F
 Min. design metal temp. -20 °F at 150 psi. Hydro. ~~test~~ test pressure 225 psi.

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Matl.	Nom. Thk.	Reinforcement Matl.	How Attached	Location
Inlet	1	10"	CL150RFWN	SA-105	0.718"	-	WELDED	BOTTOM
Outlet	1	10"	CL150RFWN	SA-105	0.718"	-	WELDED	BOTTOM
Vent	1	1/2"	6M CPL	SA-105	-	-	WELDED	TOP
Drain	1	3/4"	6M CPL	SA-105	-	-	WELDED	BOTTOM
WP Conn	2	1/2"	6M CPL	SA-105	-	-	WELDED	BOTTOM
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-

11. Supports: Skirt YES Lugs - Legs - Other - Attached WELDED BOTTOM
(Yes or no) (No.) (No.) (Describe) (Where and how)

12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: -
(Name of part, item number, Mfr's name and identifying stamp)

-EXEMPT FROM IMPACT TESTING PER UG-20 & UCS-66 / S.V. EXEMPT PER UG-120 / TESTED IN VERTICAL POSITION

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME Code for Pressure Vessels, Section VIII, Division 1. "U" Certificate of Authorization No. 2677 expires 12/23, 2004

Date 7/1/03 Co. Name PRODUCTS FABRICATION, INC. Signed Michael S. Men
(Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by PRODUCTS FABRICATION, INC. at 1602 MOONEY ROAD HOUSTON, TEXAS 77093

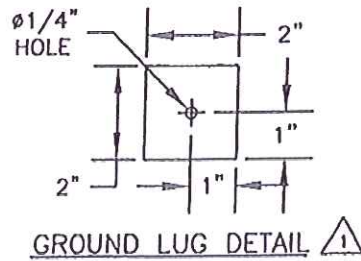
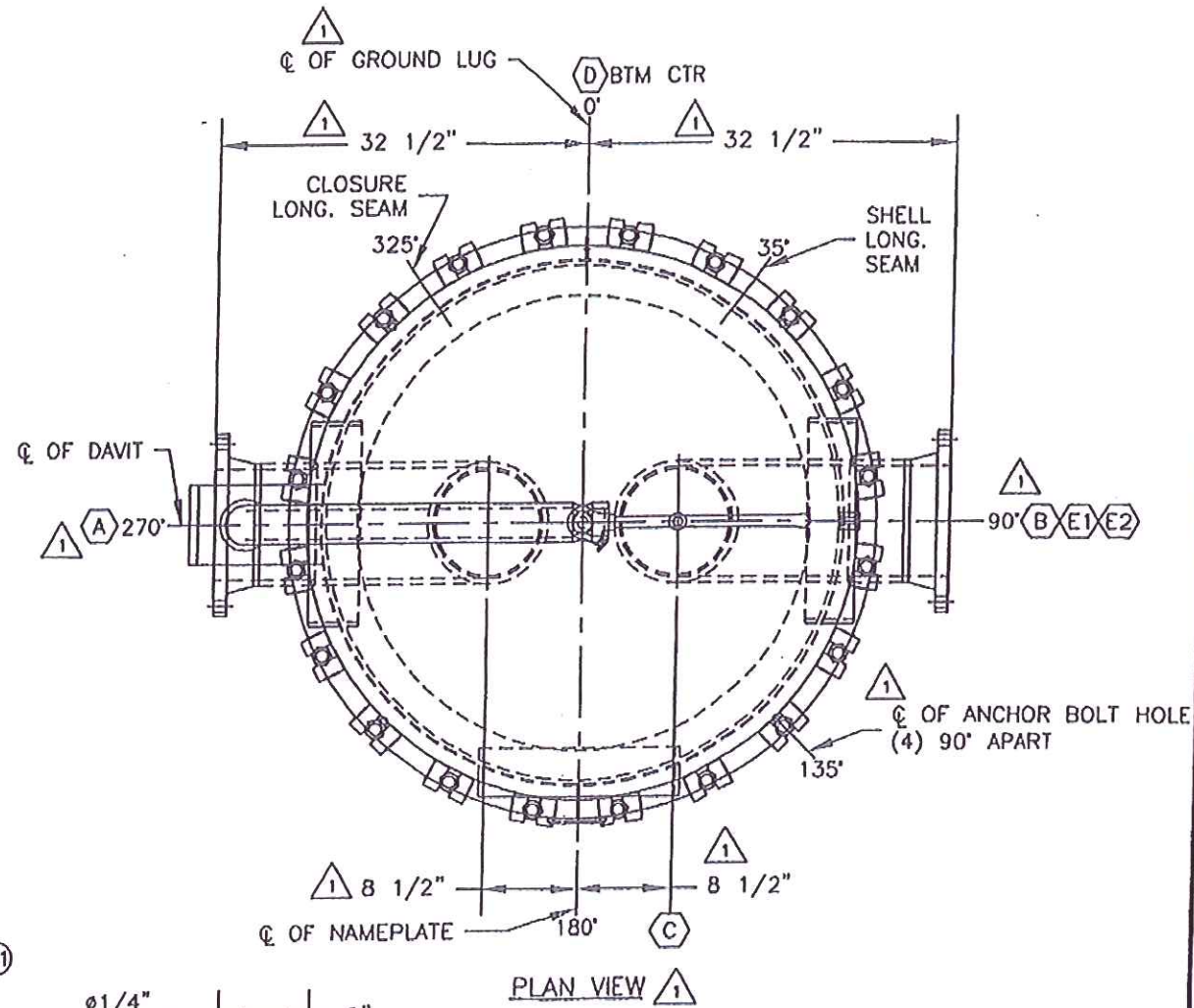
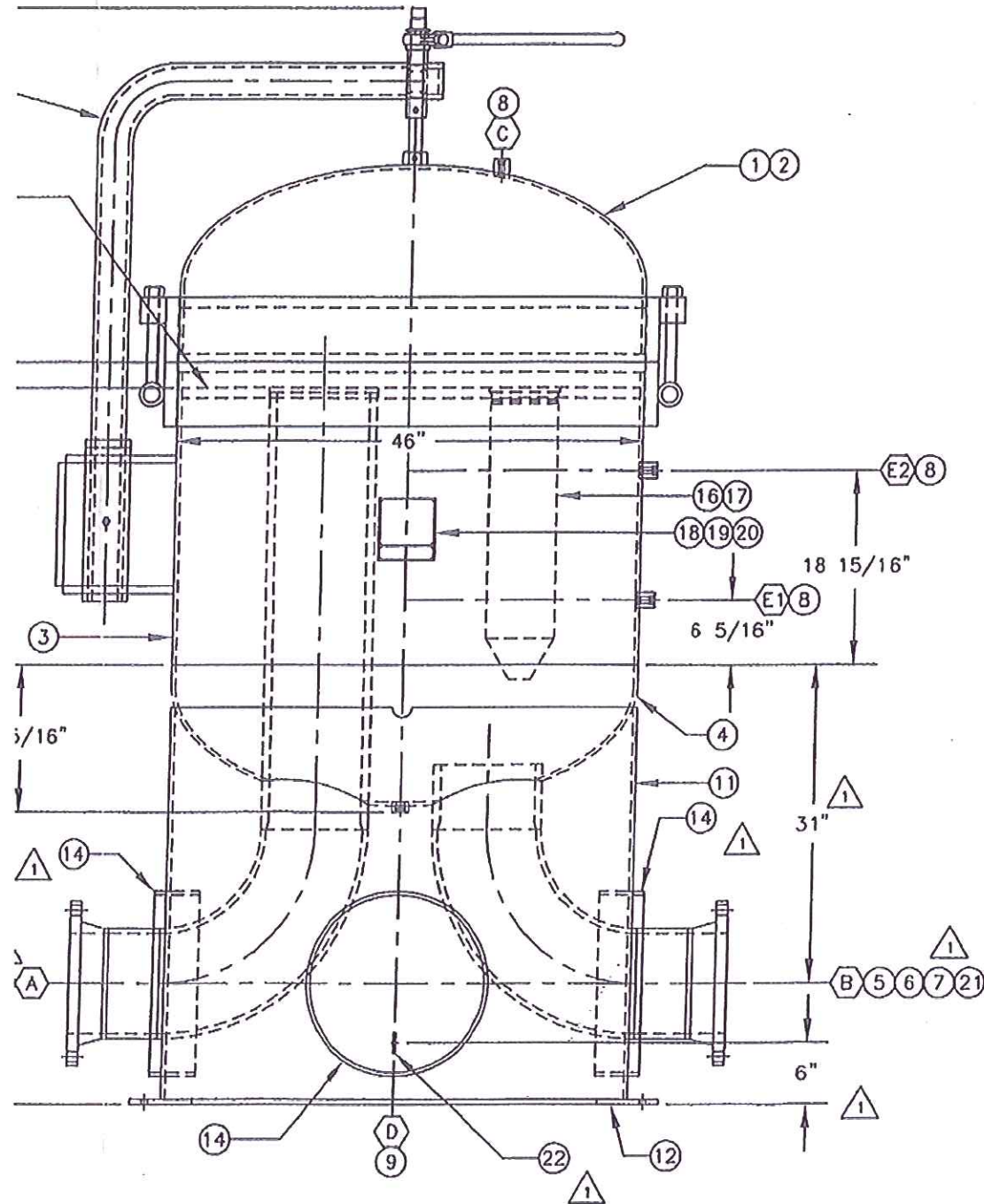
I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the State or Province of TX and employed by HSB CT have inspected the component described in this Manufacturer's Data Report on 7-1-2003, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME Code, Section VIII, Division 1. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 7-1-03 Signed E. Smith Commissions NB9763A-TX 1050
(Authorized Inspector) (Nat'l Board. (incl. endorsements) State, Prov. and No.)

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VESSEL CENTERLINES IF WELD SPATTER, MENT. TOLERANCE TO BE STRY STANDARDS. ERED OR TAPED 3S	6				SCALE: 3/4"=1'	PAGE: 1 OF 3	SHOP NO: 7514-3	WORK ORDER: 111136-OD	QTY: ONE	TAG NO: F-4
	5				Plenty Filtration 19203 HEMPSTEAD HIGHWAY HOUSTON, TX 77065 PH (281) 807-2814 TELEFACS (281) 807-2854					
4				DRAWN BY: ROBERT C						
3				ENG. MGR.:	DATE: 3/28/03	MODEL: BFE-21-150-10-CS	SERVICE: RICH AMINE FILTER			
2				Q.C. MGR.:	DATE: 3/28/03	DRAWING DESCRIPTION: GENERAL ARRANGMENT	CAD FILE: 7514B1	DRAWING NO: 03-7514-B1		
1	REVISED PER CUSTOMER COMMENTS	3/27/03	RC	PROJECT MGR.:	DATE:					
A	FIRST ISSUE	2/27/03	RC	SHIPPING MGR.:	DATE:					
NO.	REVISIONS	DATE	BY							

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ICE WITH:
ON "2001" ADDENDA "2002"
NATIONAL BOARD: YES, LATER

250 °F

150PSIG

ATE OF: 400 °F PER HOUR

RATE OF: 500 °F PER HOUR
SIG FOR: 1 HR CHART: NO

INSPECTION

IN HOUSE: ALL ITEMS ARE INSPECTED BY OUR QUALITY CONTROL REP.
CODE: HSB CT
CUSTOMER: -
THIRD PARTY: -

SURFACE PREP./PAINTING REQUIREMENTS Δ

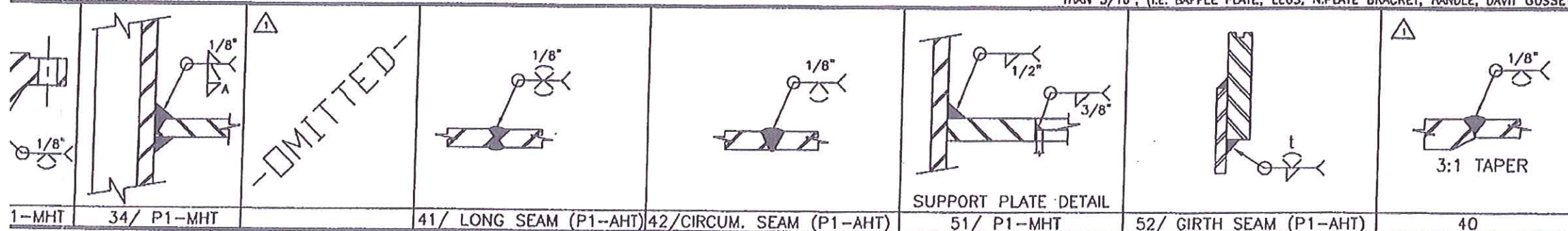
INTERNAL: NEAR WHITE BLAST (SSPC-SP10)
EXTERNAL: NEAR WHITE BLAST (SSPC-SP10)
INTERNAL COATING: LIGHT COAT RUST INHIBITING OIL
EXTERNAL COATING: PRIMER: CARBOZINC 11 (3-4 MILS DFT) COLOR: 0300 GREEN
FINISH: CARBOGAURD 890 (4-7 MILS DFT) COLOR: SAFETY WHITE S800

NONDESTRUCTIVE EXAMINATION

RADIOGRAPHY: YES, RT-3
LOCATION: ONE SPOT ON THE INTERSECT. OF THE CIRCUM. SEAM TO LONG. SEAM SHALL BE RADIOGRAPHED.
MAG. PARTICLE: N/A
LOCATION:
DYE PENETRATE: N/A
LOCATION:
ULTRASONIC: N/A
LOCATION:
HARDNESS: N/A
LOCATION:

NOZZLE SCHEDULE & WELDING DETAILS

NOTES:
1) ALL WELDS OF ATTACHMENTS NOT DETAILED SHALL BE FILLET TYPE NOT LESS THAN 3/16" (I.E. BAFFLE PLATE, LEGS, N. PLATE BRACKET, HANDLE, DAVIT GUSSET.)



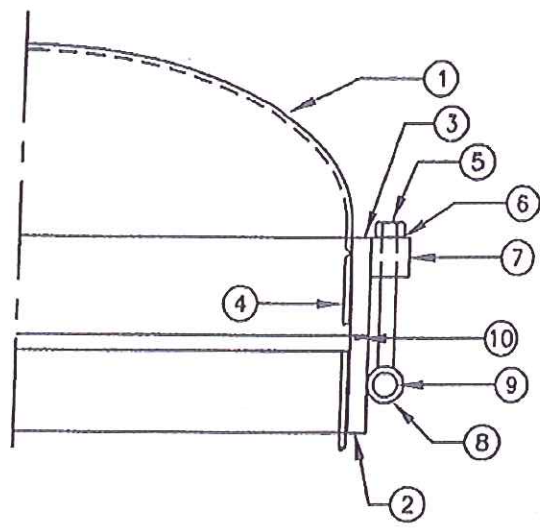
MARK	QTY	SIZE	RATING	FACING	TYPE	SERVICE	NECK O.D.	NECK THK.	REINFORCING PAD SIZE	WELDING DETAIL NO.	WELD SIZE			WPS
											A	B	C	
E1,E2	2	1/2"	6000#	NPT	CPLG	DP CONNECTIONS					2	1/4"		P1-MHT
D	1	3/4"	6000#	NPT	CPLG	DRAIN					1	1/4"		P1-MHT
C	1	1/2"	6000#	NPT	CPLG	VENT					2	1/4"		P1-MHT
B	1	10"	150#	RF	WN	OUTLET	10.75"	0.718"		26,34,40,42	1/4"			P1-MHT
A	1	10"	150#	RF	WN	INLET	10.75"	0.718"		26,34,40,42	1/4"			P1-MHT

NOZZLE NOTES:
1) DRILL & TAP 1/4" NPT HOLE IN RE-PADS. 2) INSIDE EDGES OF NOZZLE NECKS SHALL BE ROUNDED TO 1/8" RADIUS OR HALF THE WALL THICKNESS IF LESS THAN 1/4". 3) GOUGE, GRIND OR CHIP INSIDE TO SOUND METAL BEFORE WELDING.

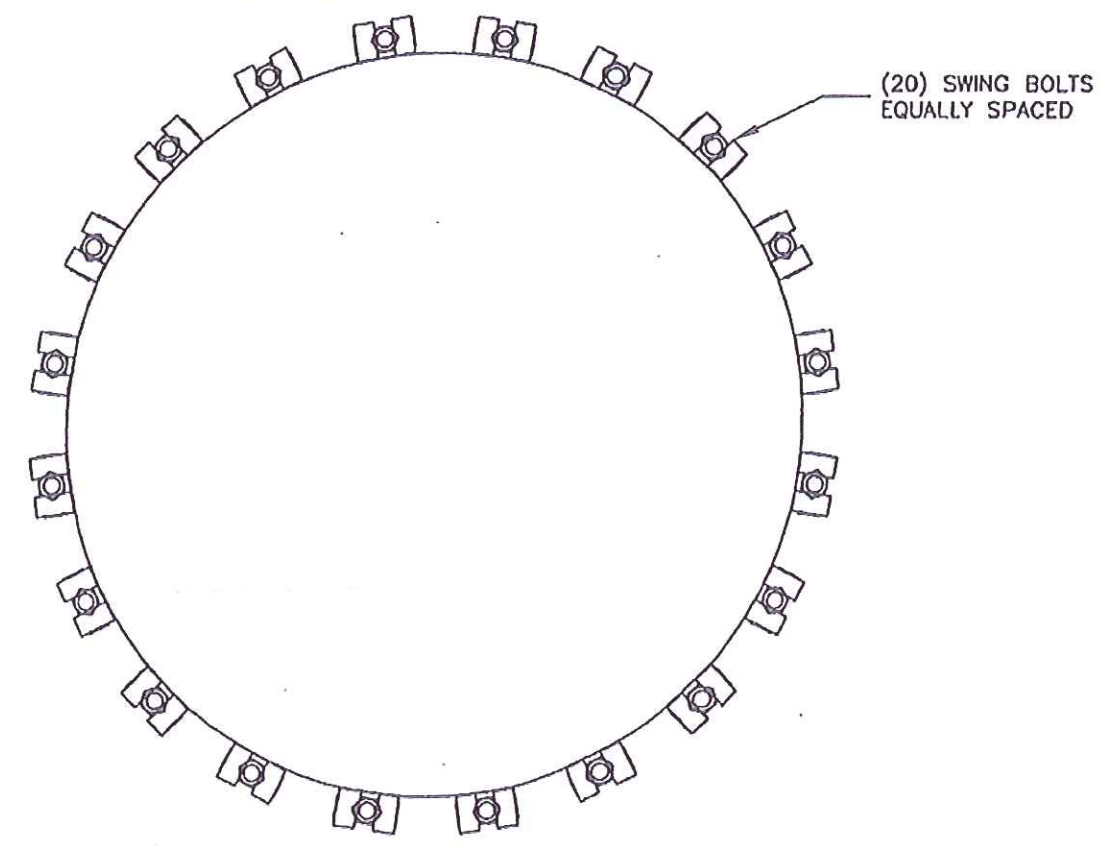
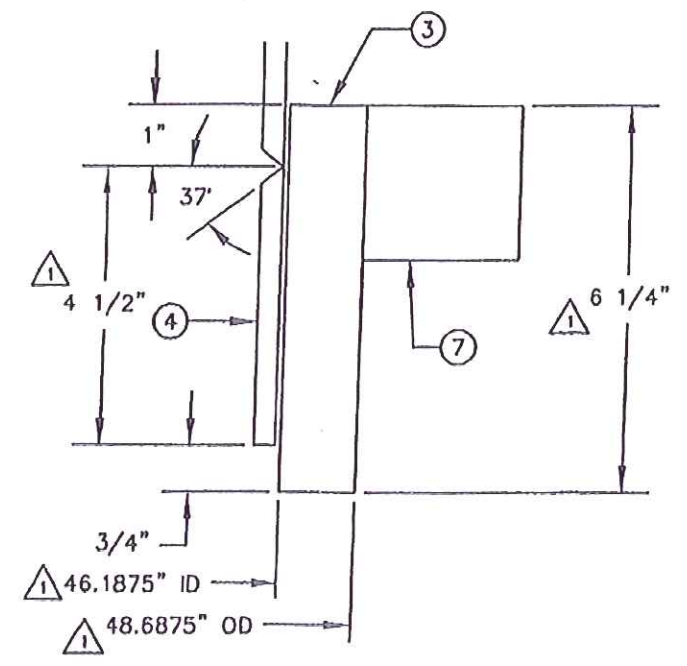
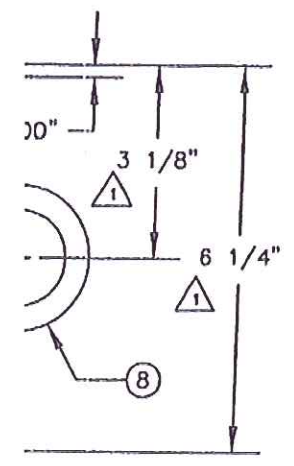
6							SCALE: N/A	PAGE: 2 OF 3	SHOP NO: 7514-3	WORK ORDER: 111136-OD	QTY: ONE	TAG NO: F-4	
5							DRAWN BY: ROBERT C	DATE: 2/27/03	<p align="center">Plenty Filtration 19203 HEMPSTEAD HIGHWAY HOUSTON, TX 77065 PH (281) 807-2814 TELEFACS (281) 807-2854</p>				
4						ENG. MGR.: <i>JL</i>	DATE: 3/28/03						
3						Q.C. MGR.: <i>WMOSS</i>	DATE: 3/28/03						
2						PROJECT MGR.: <i>WMOSS</i>	DATE: 3/28/03						
1	REVISED PER CUSTOMER COMMENTS						3/27/03	RC	CUSTOMER: ANADARKO PETROLEUM			PO NO: 103000244	
A	FIRST ISSUE						2/27/03	RC	MODEL: BFE-21-150-10-CS Δ			SERVICE: RICH AMINE FILTER	
NO.	REVISIONS						DATE	BY	DRAWING DESCRIPTION: DESIGN DATA/ WELD MAP			CAD FILE: 7514B2	DRAWING NO: 03-7514-B2

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NO.	QTY.	DESCRIPTION	MATERIAL
1	1	3/8" THK x 46" OD 2:1 ELLIP. HEAD W/ 2" S.F (0.3324" MIN)	SA-516-70
2	1	1 1/4" THK x 149.03" LONG x 6 1/4" WIDE (ROLLED TO 48 11/16" OD)	SA-516-70N
3	1	1 1/4" THK x 149.03" LONG x 6 1/4" WIDE (ROLLED TO 48 11/16" OD)	SA-516-70N
4	1	3/8" THK x 143.34" LONG x 4 1/2" WIDE (ROLLED TO 44" OD)	SA-516-70
5	20	1"-8 UNC x 10 3/4" LONG HEX HEAD CAP SCREW (PLATED)	SA-193-B7
6	20	1" PLAIN FLAT WASHER (PLATED)	SA-36
7	40	1/2" THK x 2 1/2" x 2 1/2"	SA-36
8	40	2" XXH (0.436" WALL) PIPE x 1 1/4" LONG	SA-106-B
9	20	1.41" Ø PD BAR x 3 3/4" LONG (PLATED)	SA-193-B7
10	1	O'RING TO SUIT 46" QUICK OPEN CLOSURE P/N: 0-1-4760-275-B	BUNA N
11	-		
12	-		



NO.	REVISIONS	DATE	BY
6			
5			
4			
3			
2			
1	REVISED TO 46" CLOSURE	3/27/03	RC
A	FIRST ISSUE	2/27/03	RC

SCALE: 1"=1'	PAGE: 1 OF 1	SHOP NO: 7514-3	WORK ORDER: 111136-OD	QTY: ONE	TAG NO: F-4
DRAWN BY: ROBERT C			DATE: 2/27/03		
ENG. MGR.:			DATE: 3/28/03		
C.C. MGR.:			DATE: 3/28/03		
PROJECT MGR.:			DATE:		
SHIPPING MGR.:			DATE:		
CUSTOMER: ANADARKO PETROLEUM			PO NO: 103000244		
MODEL: BFE-21-150-10-CS			SERVICE: RICH AMINE FILTER		
DRAWING DESCRIPTION: CLOSURE DETAIL			CAD FILE: 7514B4		DRAWING NO: 03-7514-B3

Plenty Filtration

19203 HEMPSTEAD HIGHWAY HOUSTON, TX 77065
PH (281) 807-2814 TELEFACS (281) 807-2854

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PART NO.	SIZE & DESCRIPTION	MATERIAL SPECIFICATIONS	REMARKS	PRICE OF MATERIALS	VENDER	RECEIVING INSPECTION ACCEPTANCE	MTR'S CERT'S REQ,D	UCS-79 & UG-81
514B4	46" QUICK OPEN CLOSURE	SA-516-70					YES	
1-4760-275-B	O'RING TO SUIT 46" QUICK OPEN CLOSURE	BUNA N						
	3/8" THK PLATE x 143.34" LONG x 28 1/2" WIDE (ROLLED TO 46" OD)	SA-516-70					YES	
	3/8" THK PLATE x 46" OD 2:1 ELLIP. HEAD W/ 2" S.F (0.3324" MIN)	SA-516-70					YES	
	10" XH (0.500" WALL) PIPE	SA-106-B					YES	
	10" XH (0.500" WALL) 90° LR ELBOW	SA-234-WPB					YES	
	10" 150# ASME B16.5 RFWN (XH, 9.75" BORE)	SA-105					YES	
	1/2" 6000# NPT (FULL) COUPLING	SA-105						
	3/4" 6000# NPT (HALF) COUPLING	SA-105						
3110V	3" DAVIT ASSEMBLY	CS						
14B7	3/8" THK PLATE x 143.34" LONG x 38 1/8" WIDE (ROLLED TO 46" OD)	SA-36						
14B7	1/2" THK PLATE x 52" OD x 40" ID	SA-36						
	18" STD WT (0.375" WALL) PIPE	SA-106-B						
	1" THK PLATE x 45 1/8" OD	SA-516-70						
	PLENTY No.2 SIZE SNAP IN FILTER BASKET	316SS						
	PLENTY No. 2 SIZE SNAP IN FILTER BAG							
	1/4" THK 'T' TYPE NAMEPLATE BRACKET (6" x 6 1/2" x 2 1/2" PROJ.)	SA-36						
	CODE NAMEPLATE	SS						
	PLENTY NAMEPLATE	SS						
	10" S/100 (0.718" WALL) PIPE	SA-106-B					YES	
	1/4" THK PLATE x 2" x 2"	SA-36						

MARKINGS MUST BE TRANSFERRED AS REQUIRED BY SECTION II OF THE CODE.
 UPON RECEIPT.
 TOTAL COUNT.

6				SCALE: N/A	PAGE: 3 OF 3	SHOP NO: 7514-3	WORK ORDER: 111136-OD	QTY: ONE	TAG NO: F-4
5				DRAWN BY: ROBERT C DATE: 2/27/03		Plenty Filtration 19203 HEMPSTEAD HIGHWAY HOUSTON, TX 77065 PH (281) 807-2814 TELEFACS (281) 807-2854			
4				ENG. NBR.: DATE: 3/22/07					
3				Q.C. NBR.: DATE: MMLOSS 3/28/05		CUSTOMER: ANADARKO PETROLEUM		PO NO: 103000244	
2				PROJECT NBR.: DATE:		MODEL: BFE--21-150-10-CS Δ		SERVICE: RICH AMINE FILTER	
1	REVISED PER CUSTOMER COMMENTS	3/27/03	RC	SHIPPING NBR.: DATE:		DRAWING DESCRIPTION: BILL OF MATERIALS		CAD FILE: 7514B3	
A	FIRST ISSUE	2/27/03	RC					DRAWING NO: 03-7514-83	
NO.	REVISIONS	DATE	BY						

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