J-681

FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured and certified by: Eastern Manufacturing Inc. 9760 County Road Clarence Center, New York 14032 (Name and address of Manufacturer) PO# 56603-P-13-18
2. Manufactured for: Pall Advanced Separation Systems PO Box 5630 Cortland New York 13045 (Name and address of Purchaser) Tag# J-681 (Regenerator Filter Assembly)
3. Location of installation: unknown (Name and address)
4. Type: Vertical (Horiz., vert., or sphere) — Filter Vessel (Tank, separator, jkt. vessel, heat exh., etc.) — 5071 (Mfg's serial No.)
   - (CRN) — 10000011097 Rev.01 (Drawing No.) — 3791 (Nat'l. Bd. No.) — 2007 (Year built)
5. ASME Code, Section VIII, Div. 1: 2004 / 2006 (Edition and Addenda (date)) — - (Code Case No.) — - (Special Service per UG-120(d))

Items 6–11 incl. to be completed for single wall vessels, jackets of jacketed vessels, shell of heat exchangers, or chamber of multichamber vessels.

6. Shell (a) No. of course(s): 2 (b) Overall length (ft & in.): 14'-10"

Course(s)			Material	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter, in.	Length (ft & in.)	Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
1	36" OD	12'-6"	SA516-70	.375	.125	1	Full	100	1	Full	100	-	-
1	36" OD	2'-4"	SA516-70	.375	.125	1	Full	100	1	Full	100	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-

7. Heads: (a) SA516-70 (Mat'l Spec. No., Grade or Type) (H.T. — Time & Temp.) (b) SA516-70 (Mat'l Spec. No., Grade or Type) (H.T. — Time & Temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)	Top	.375	.125	-	-	2:1	-	-	-	-	concave	S	none	1
(b)	Bottom	.375	.125	-	-	-	60	-	-	-	-	1	Full	1

If removable, bolts used (describe other fastening): Stud Qty(64) 1 1/2-8 x 15.5" SA193 B7 Qty(128) Nut 1 1/2-8 SA194 2H (Mat'l Spec. No., Grade, size, No.)

8. Type of jacket: - Jacket closure: - (Describe as ogee & weld, bar, etc.)
   If bar, give dimensions: - If bolted, describe or sketch.
9. MAWP: 170 (internal) - (external) psi at max. temp. 500 (internal) - (external) °F Min. design metal temp. 0 °F at 170 psi.
10. Impact test: UCS 66 (a) UHA 51 (d) (Indicate yes or no and the component(s) impact tested) at test temperature of - °F.
11. Hydro., pneu., or comb. test press.: 221 Proof test: -

Items 12 and 13 to be completed for tube sections.

12. Tubesheet: - (Stationary (Mat'l Spec. No.)) - (Dia., in. (subject to press.)) - (Nom. thk., in.) - (Corr. Allow., in.) - (Attachment (welded or bolted))
    - (Floating (Mat'l Spec. No.)) - (Dia., in.) - (Nom. thk., in.) - (Corr. Allow., in.) - (Attachment)
13. Tubes: - (Mat'l Spec. No., Grade or Type) - (O.D., in.) - (Nom. thk., in. or gauge) - (Number) - (Type (Straight or U))

Items 14–18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

14. Shell (a) No. of course(s): - (b) Overall length (ft & in.): -

Course(s)			Material	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter, in.	Length (ft & in.)	Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-

15. Heads: (a) - (Mat'l Spec. No., Grade or Type) (H.T. — Time & Temp.) (b) - (Mat'l Spec. No., Grade or Type) (H.T. — Time & Temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(b)	-	-	-	-	-	-	-	-	-	-	-	-	-	-

If removable, bolts used (describe other fastening): - (Mat'l Spec. No., Grade, size, No.)

(7/00) This form (E00108) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

E00108

TAG# J-681

J-681

NATIONAL BOARD NB 3791

Certified By: EASTERN MANUFACTURING, INC. Clarence Center, New York

	SHELL	TUBES	JACKET
MAWP PSI	170		
DESIGN TEMP. °F	500		

W	MIN. DESIGN SHELL METAL TEMP.	0	°F@ 170	PSI
RT-1	MIN. DESIGN TUBE METAL TEMP.		°F@	PSI
	MIN. DESIGN JACKET METAL TEMP.		°F@	PSI

MFG. SERIAL NO. 5071 YEAR BUILT 2007

MODEL NO. TAGNO. J-681 PO 56603-P-13-16

PALL®

FILTER HOUSING

FILTER HSG. MM#

CART. PART NO.

CUST. P.O. NO.

CUST. TAG NO. J-681

FOR MAXIMUM ALLOWABLE DIFFERENTIAL PRESSURE SEE PRODUCT LITERATURE

WARNING: DO NOT INSTALL OR SERVICE THIS EQUIPMENT WITHOUT READING THE INSTRUCTION MANUAL

PALL ADVANCED SEPARATIONS SYSTEMS

J-681

FORM NB-5 BOILER OR PRESSURE VESSEL DATA REPORT
FIRST INTERNAL INSPECTION
Standard Form for Jurisdications Operating Under the ASME Code

1	DATE INSPECTED MO I DAY I YEAR	CERT EXP DATE MO I YEAR	CERTIFICATE POSTED ☐Yes ☐No	OWNER NO. J-681	JURISDICTION NUMBER 700602	NAT'L BD NO. ☒ ~~5071~~ / OTHER NO. ☐ 3791
2	OWNER Western Refining Yorktown, Inc.				NATURE OF BUSINESS Petroleum Refining	KIND OF INSPECTION ☐Int ☐Ext / CERTIFICATE INSPECTION ☒Yes ☐No
	OWNER STREET ADDRESS NUMBER 2201 Goodwin Neck Rd.				OWNERS CITY Yorktown	STATE VA / ZIP 23692
3	USER'S NAME - OBJECT LOCATION Western Refining Yorktown, Inc.				SPECIFIC LOCATION IN PLANT G D U	OBJECT LOCATION - COUNTY York
	USER'S STREET ADDRESS NUMBER 2201 Goodwin Neck Rd.				USER'S CITY Yorktown	STATE VA / ZIP 23692
4	TYPE ☐FT ☐WT ☐CI ☐AIR TANK ☐WATER TANK Other DRUM			YEAR BUILT 2007	MANUFACTURER EASTERN MFG. INC.	YEAR INST 2007 / ☒New ☐Second Hand
5	USE ☐Power ☐Process ☐Steam Htg ☐HWH ☐HWS ☐Storage ☐Heat Exchange ☐Other				FUEL (BOILER)	METHOD OF FIRING (BOILER) / PRESSURE GAGE TESTED ☐Yes ☒No
6	PRESSURE This Inspection 170 Prev. Inspection N/A			SAFETY-RELIEF VALVES Set at 50	EXPLAIN IF PRESSURE CHANGED	
7	IS CONDITION OF OBJECT SUCH THAT A CERTIFICATE MAY BE ISSUED? ☒Yes ☐No (If no, explain fully on back of form - listing code violation)					HYDRO TEST ☒Yes 221 psi Date 2007 ☐No
8	SHELL No	DIAMETER 36 in. ☐ID ☒OD	OVERALL LENGTH 14 ft 10 in.	THICKNESS in.	TOTAL HTG SURFACE (BOILER) Sq Ft	MATERIAL ASME Spec Nos
9	ALLOWABLE STRESS psi	BUTT STRAP Thks in ☐Single ☐Double	HEADERS - WT BOILERS Thickness in.	TYPE ☐Box ☐Sinuous ☐Wtr Wall ☐Other		
10	TYPE LONGITUDINAL SEAM ☐Lap ☐Butt ☐Welded ☐Brazed ☐Rivited			RIVITED Dia Hole in.	PITCH in. X in. X in.	SEAM EFF %
11	HEAD THICKNESS in.	HEAD TYPE ☐Fixed ☐Movable ☐Plus ☐Minus ☐Flat ☐Quick Opening		RADIUS DISH in.	ELLIP RATIO	BOLTING No. Dia in. Material
12	TUBE SHEET THICKNESS in.	TUBES No. Dia in. Length ft in.				PITCH (WT BLRS) in. X in. / LIGAMENT EFF %
13	FIRE TUBE BOILERS	DISTANCE UPPER TUBES TO SHELL Front in. Rear in.		STAYED AREA FRONT HEAD { Above Tubes / Below Tubes	BEAR HEAD { Above Tubes / Below Tubes	
	STAYS ABOVE TUBES Front No. Rear No.			TYPE ☐Head to Head ☐Diagonal ☐Welded ☐Weldless		AREA OF STAYS Front Rear
	STAYS BELOWTUBES Front No. Rear No.			TYPE ☐Head to Head ☐Diagonal ☐Welded ☐Weldless		AREA OF STAYS Front Rear
14	FURNACE - TYPE Adamson (No. Sect) ☐Corrugated ☐Plain ☐Other				THICKNESS in.	TOTAL LENGTH ft in. / TYPE LONG. SEAM ☐Welded ☐Riveted ☐Seamless
15	STAYBOLTS - TYPE Threaded Welded Hollow Drilled (Size Hole in.)				DIAMETER in.	PITCH in. X in. / NET AREA sq. in.
16	SAFETY-RELIEF VALVES No 1 Size 4X6		TOTAL CAPACITY Cfm Lb/Hr Btu/Hr		OUTLETS No Size	PROPERLY DRAINED ☐Yes ☐No (If no, explain on back of form)
17	STOP VALVES	ON STEAM LINE ☐Yes ☐No	ON RETURN LINES ☐Yes ☐No	OTHER CONNECTIONS ☐Yes ☐No	STEAM LINES PROPERLY DRAINED ☐Yes ☐No (If no, explain on back of form)	
18	FEED PIPE Size in.	FEED APPLIANCES No	TYPE DRIVE ☐Steam ☐Motor	CHECK VALVES	FEED LINE ☐Yes ☐No	RETURN LINE ☐Yes ☐No
19	WATER GAGE GLASS No	TRY COOKS No	BLOWOFF PIPE Size in. Location		INSPECTION OPENINGS COMPLY WTH CODE ☐Yes ☐No (If no, explain on back of form)	
20	CAST-IRON BOILERS Length in. Width in. Height in.			SECTIONS No	DOES WELDING ON STEAM, FEED BLOWOFF AND OTHER PIPING COMPLY WITH CODE ☐Yes ☐No (If no, explain on back of form)	
21	SHOW ALL CODE STAMPING ON BACK OF FORM. Give details (use sketch) for special objects NOT covered above - such as Double wall vessels etc.				DOES ALL MATERIAL OTHER THAN AS INDICATED ABOVE COMPLY WITH CODE ☐Yes ☐No (If no, explain on back of form)	
22	NAME AND TITLE OF PERSON TO WHOM REQUIREMENTS WERE EXPLAINED: Gregor A. Thomson, Technical Services Manager					
23	I HEREBY CERTIFY THIS IS A TRUE REPORT OF MY INSPECTION Signature of Inspector			IDENT NO. VA1021R	EMPLOYED BY Western Refining Yorktown, Inc.	IDENT NO. OU-60

Complete When Not Registered National Board

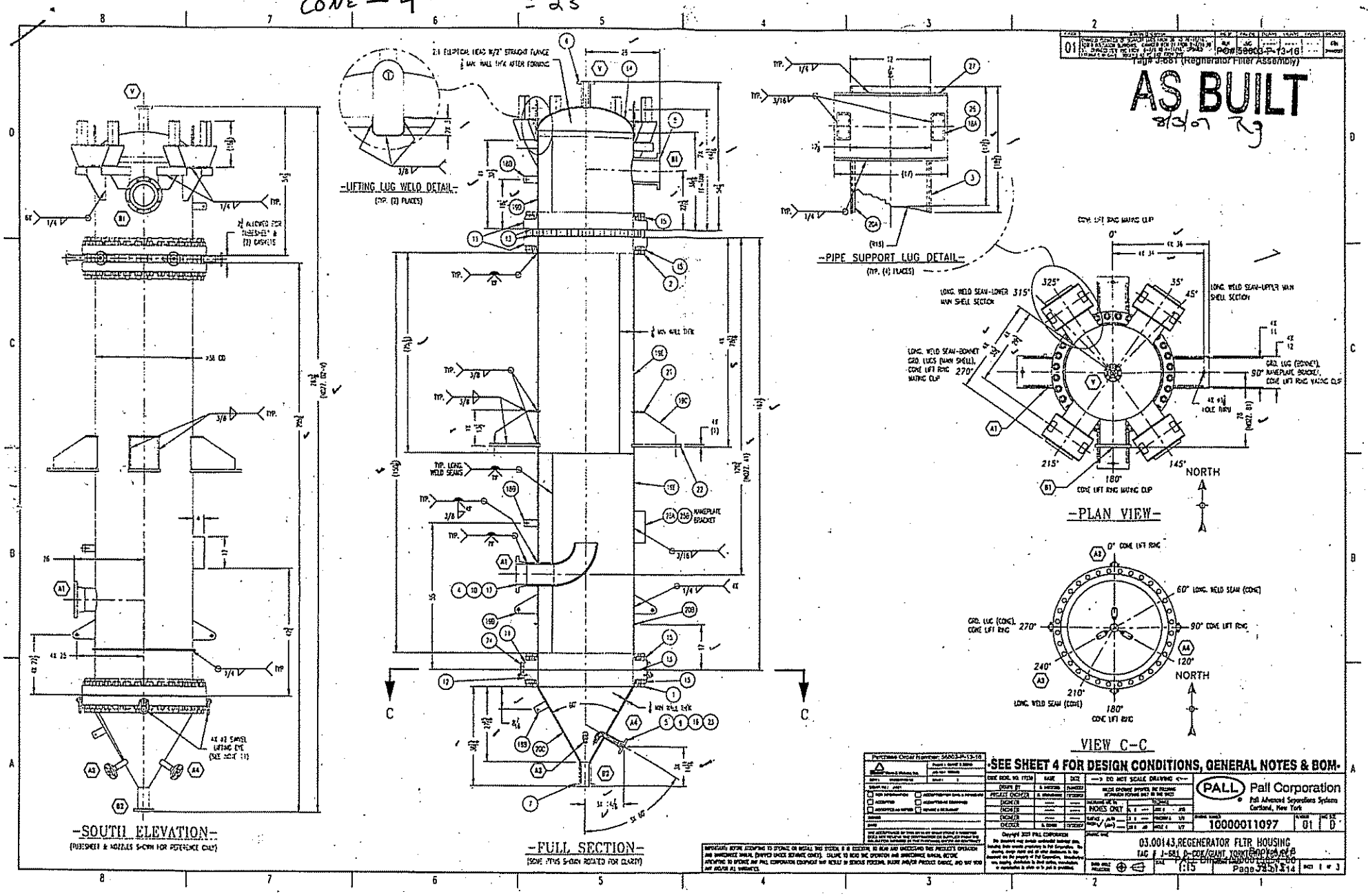
Complete When Not Registered National Board

PSV 66068

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Ave., Columbus, OH 43229

NB-5 Rev. 0

TML'S NOZZLES — 7
HEADS — 8
SHELL — 3
CONE — 4
= 23 TTL



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