

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

1. Manufactured and certified by: Bota Welding, LLC 402 - 56th Street, Niagara Falls, NY 14304
(Name and address of manufacturer)

2. Manufactured for: Thermal Kinetics Systems, LLC 667 Tiftt Street Buffalo, NY 14220
(Name and address of purchaser)

3. Location of installation: UNKNOWN
(Name and address)

4. Type: Horizontal TP-4205 116 2007
(Horizontal or vertical tank) (CWV) (Drawing No.) (Part 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, Div. 1 2004
Year

6. Shell: SA-240 TP-304L .188 0 3' 5-5/8" 5' 7-7/8"
Material (Part) (Nom. Thk (in)) (Corr. Allow (in)) (Diam. I.D. (ft. & in.)) (Length (overall) (ft. & in.))

7. Seams: Type 1 None N/A Type 1 None 1
(Welded, Dbl. Stng., Lap, Butt) (R.T. (Spot or Full)) (Eff. (%)) (H.T. Temp. (°F)) (Time (hr)) (Grain (Welded, Dbl. Stng., Lap, Butt)) (R.T. (Spot or Full)) (No. of Courses)

8. Heads: (a) Mat: SA-240 TP-304L (b) Mat: SA-240 TP-304L
(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	.125	0			2:1				Concave
(b) Bottom	.125	0			2:1				Concave

9. MAWP: 25 (internal) 15 (external) 200 (internal) 200 (external) °F
 Min. design metal temp. -20 °F at 25 psi. Hydro. pneu., or comb. test press. 32.5 psi

10. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain) Spare	No.	Diam. or Size	Type	Mat	Nom. Thk	Reinforcement Material	How Attached	Location
Vent	1	1.5"	CI150Flg	SA-312 TP-304L	.1450	N/A	UW16.1⊙	shell
Level & Inlet	2	2"	CI150Flg	SA-312 TP-304L	.1540	N/A	UW16.1⊙	shell
Outlet	3	3"	CI150Flg	SA-312 TP-304L	.2160	N/A	UW16.1⊙	head-shell
Liquid Inlet	1	6"	CI150Flg	SA-312 TP-304L	.2800	SA-240 TP-304L	UW16.1⊙	shell
Sight Glass	1	8"	CI150Flg	SA-312 TP-304L	.3220	SA-240 TP-304L	UW16.1⊙	shell
Supports: Skirt	1	6"	studpad	SA-240 TP-304L	2.000	N/A	UW16.1⊙	shell

11. Supports: Skirt Legs 2 saddle Attached Welded
(See or No.) (No.) (No.) (Where attached)

12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report:
Impact Test Exempt Per UHA-51(d) UCS 66(C). Owner/User responsible for Pressure Relief Valve
Cir seam 70% E. 2 Lifting Lugs welded to heads.

CERTIFICATE OF SHOP/FIELD COMPLIANCE

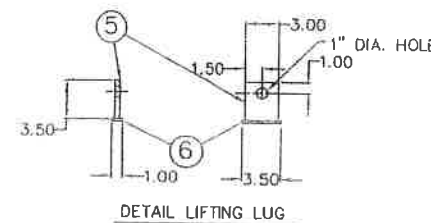
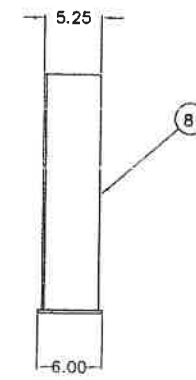
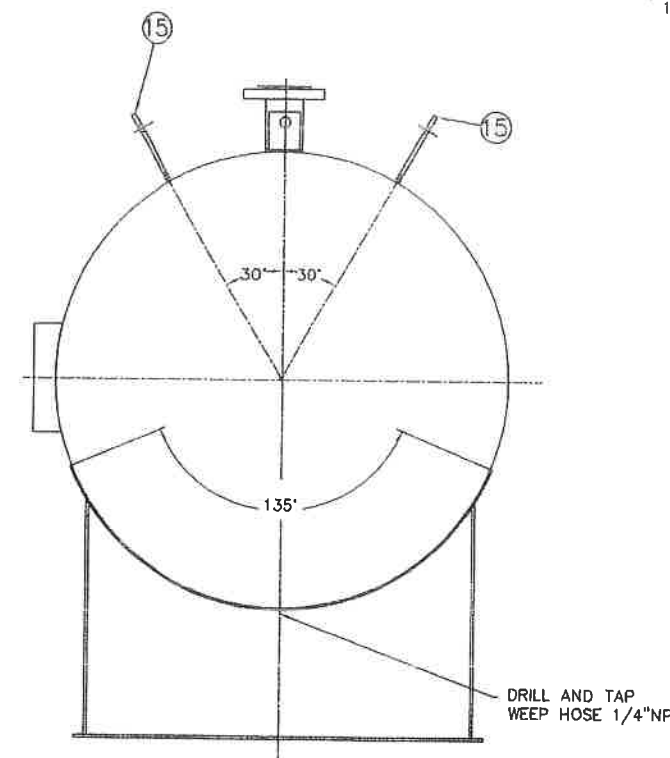
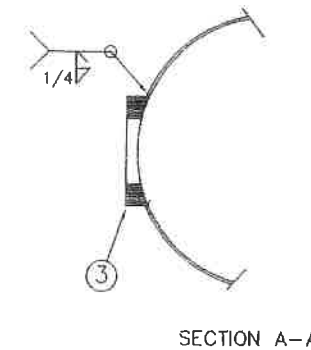
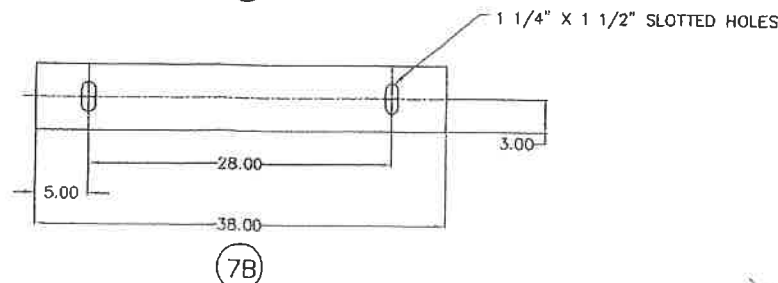
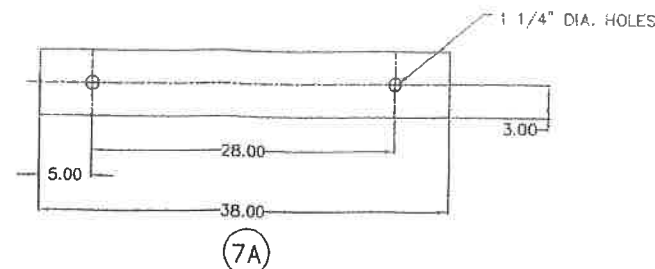
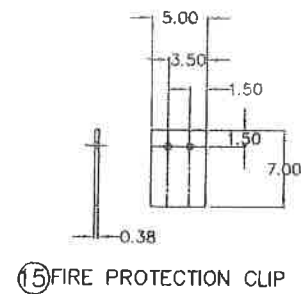
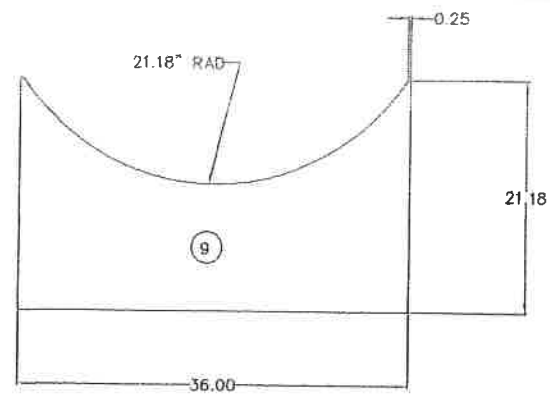
We certify that the statements made in this report are correct and that all details of design, material, construction and workmanship of this vessel conform to the ASME Code for Pressure Vessels, Section VIII, Division 1. U Certificate of Authorization No. 32004 Expires 7/26 2009

Date 1/2/07 Co. Name Bota Welding, LLC Signed [Signature]
(Date of Report) (Manufacturer) (Inspector)

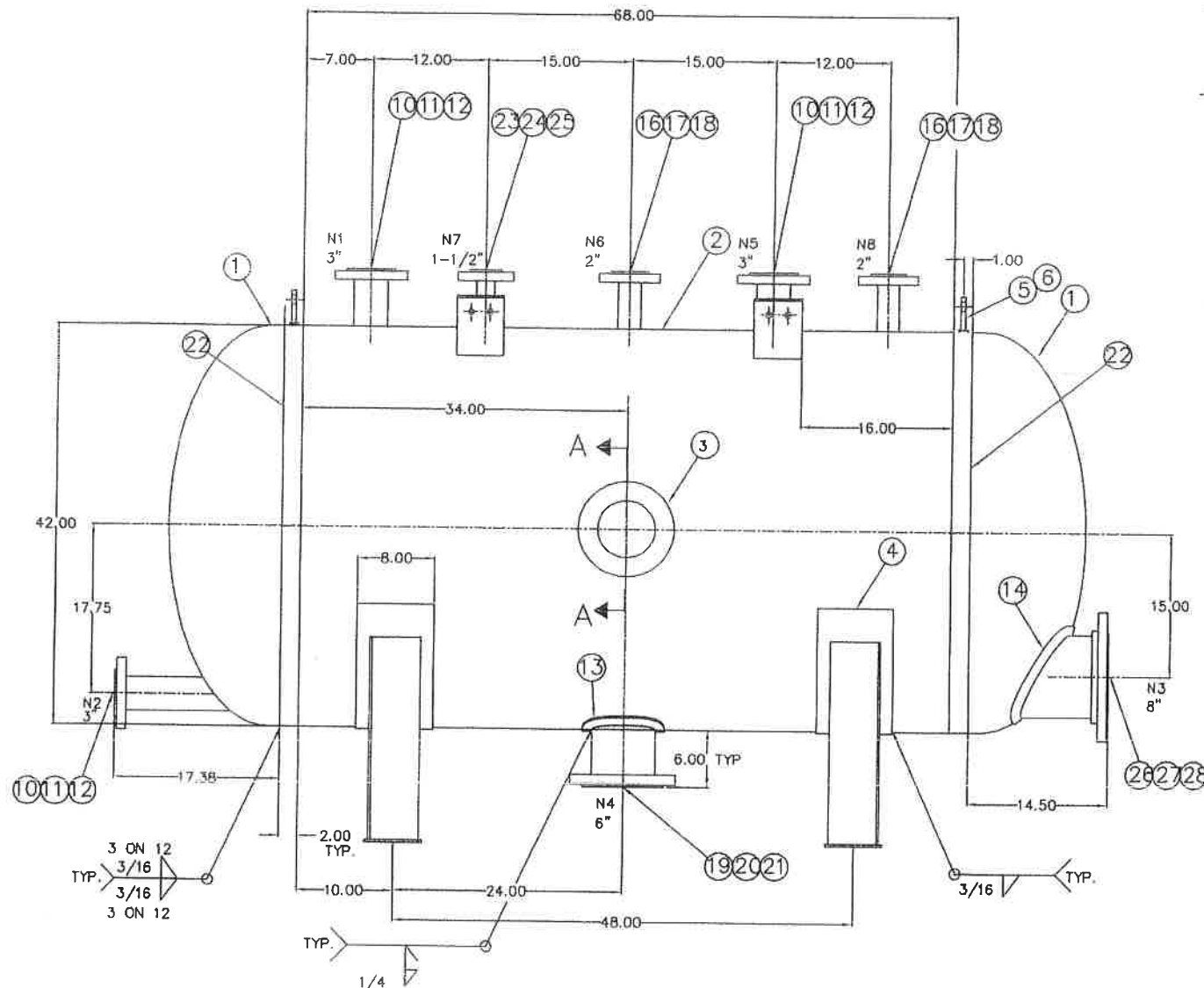
CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by Bota Welding, LLC at 402 - 56th Street, Niagara Falls, NY 14304
 I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of New York and employed by HSB CT
 have inspected the component described in this Manufacturer's Data Report on 1/2/07 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.

1/2/07 Signed [Signature] Commissions NB1103ANTY5078



DESIGN DATA	
CODE:	ASME VIII DIV1 STAMPED AND REGISTERED
SPECIFIC GRAVITY/CONTENTS:	0.746
DESIGN PRESS.	25/FV (psig)
DESIGN TEMP.:	200 (F)
OPERATING PRESS.:	10.168 (psig)
OPERATING TEMP.:	176 (F)
MDMT:	-20 DEG. F
CORROSION ALLOWANCE:	NONE
HYDRAULIC TEST PRESSURE:	32.5 PSI



NOZZ.	SERVICE	SIZE	RATING	TYPE	REMARKS
W1	SIGHT GLASS 6" VIEW			W/PAD	
N8		2"	150#	LJ	FR ET-4205
N7		1.5"	150#	LJ	FR PV-4205
N6	VENT	2"	150#	LJ	TO ET-4205
N5	REGEN CONDENSATE INLET	3"	150#	LJ	FR PC-4303
N4	OUTLET	6"	150#	LJ	TO PC-4205
N3	LIQUID INLET	8"	150#	LJ	FR ET-4201
N2	LEVEL TRANS. CONN.	3"	150#	LJ	LT-007
N1	LEVEL TRANS. CONN.	3"	150#	LJ	LT-007

- NOTES:**
- 1) ALL BOLT HOLES TO STRADDLE NATURAL CENTERLINES UNLESS NOTED OTHERWISE.
 - 2) ALL STAINLESS STEEL TO BE L GRADE AND CERTIFIED.
 - 3) FOR ALL INTERIOR AND EXTERIOR SURFACES SEE THERMAL KINETICS CLEANING AND BLASTING SPEC, GF-1.8.0 CLASS 1
 - 4) ALL TOLERANCES PER ASME PRESSURE VESSEL CODE LATEST EDITION, SECTION VIII, DIVISION 1
 - 5) WIND 80 MPH, EXP. C W/F = 1.0
 - 6) ALL FILLET WELDS TO BE 3/16" UNLESS NOTED

AS BUILT DRAWING

BOTA WELDING

Customer: THERMAL-KENETICS

Title: FABRICATION EQUIPMENT_#_TP-4205

Drawing Scale: Plot Scale: 10

Customer Dwg. Number: D 6018-MQ-4205

Sheet: 2 of 2

REV	BY	DATE	DESCRIPTION

UNLESS OTHERWISE NOTED, ALL MACHINE SURFACES TO HAVE 125 RMS FINISH

UNLESS OTHERWISE NOTED, TOLERANCES ARE:

HOLES: ± 1/2"

FRACTIONS: ± 1/16"

DECIMAL: .XX ± .01

.XXX ± .005

.XXXX ± .0005

DRAWN BY: MG

CHECKED BY:

INSTR. APPR:

PIPING APPR:

DATE: 9/28/06

01:18
 8888 WE-01A3 243
 23 X X
 200 X X
 1 X X
 20 23
 X X
 X X
 4203 203
 Thermal Windows Systems, LLC