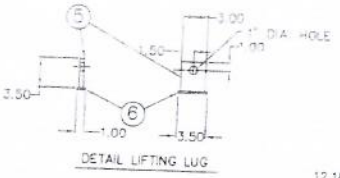
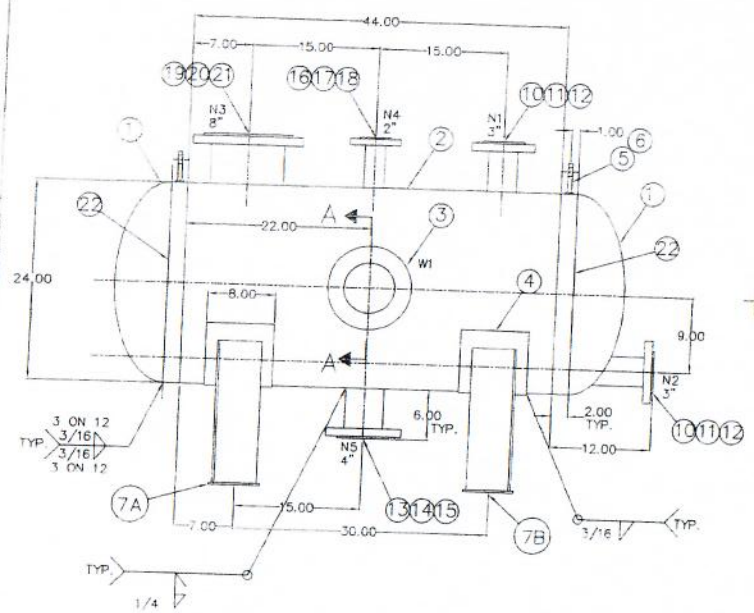
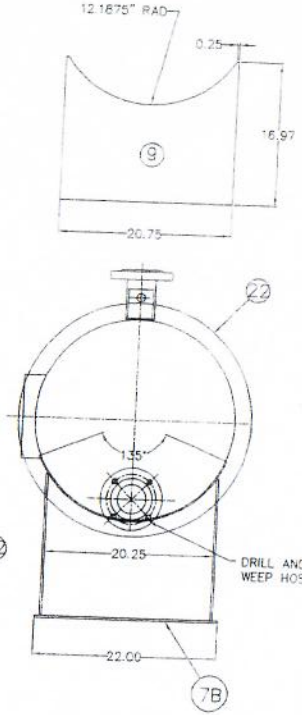
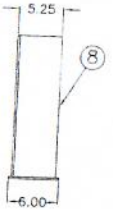
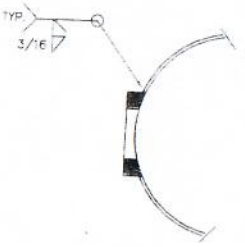


DESIGN DATA	
CODE: ASME VIII DIV1 STAMPED AND REGISTERED	
SPECIFIC GRAVITY/CONTENTS: 1	
DESIGN PRESS: 25/FV	(psig)
DESIGN TEMP.: 150	(F)
OPERATING PRESS.: 2.05	(psig)
OPERATING TEMP.: 122	(F)
MDMT. -20 DEG. F	
CORROSION ALLOWANCE: NONE	
HYDRAULIC TEST PRESSURE: 32.5 PSI	

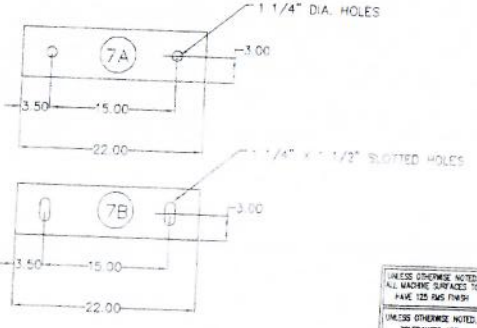








SECTION A-A



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 TORENANCES PER ASME PRESSURE VESSEL CODE LASTEST EDITION, SECTION VIII, DIVISION 1
5) WIND 80 MPH, EXP. C WF = 1.0
6) ALL FILLET WELDS TO BE 3/16" UNLESS NOTED

AS BUILT DRAWING

N°	SIGHT GLASS A° VIEW				
N5	OUTLET	4"	150#	LJ	TO PC-4204
N4	VENT	2"	150#	LJ	TO PV-4201
N3	LIQUID INLET	8"	150#	LJ	FR ET 4204
N2	LEVEL TRANS. CONN.	3"	150#	LJ	LT-004
N1	LEVEL TRANS. CONN.	3"	150#	LJ	LT-004
NOZZ.	SERVICE	SIZE	RATING	TYPE	REMARKS

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

UNLESS OTHERWISE NOTED TOLERANCES ARE:
ANGLES ± 1/2°
FRACTIONS ± 1/16"
DECIMAL: X ± .03
XX ± .010
XXX ± .005
XXXX ± .0005

REV	BY	DATE	DESCRIPTION

SIGNATURES	DATE
DRAWN BY: MJC	9-25-06
CHECKED BY:	
INSTRU. APPR:	
PIPING APPR:	

BOTA WELDING

Customer: THERMAL KINETICS

Title: EQUIP #TP-4204
FABRICATION

Drawing Scale: | Plot Scale:

Customer Dwg. Number: 6018-MQ-4207

SIZE: C | Dwg Number | Sheet 1 | Con't On | Rev 1

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 Tifft Street Buffalo, NT 14220 (Name and address of purchaser)

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

4. Type: Horizontal | TP-4204 | - | 6018-MQ-4207 Rev 1 | 118 | 2006
(Horiz. or vert. tank) | (Mfg'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, Div. 1 2004 (Year)

to 2005 (Addenda (Date)) - (Code Case Nos.) - (Special Service per UG-120 (a))

6. Shell: SA-240 TP-304L (Mat'l (Spec. No. Grade)) | .188 (Nom. Thk (In.)) | 0 (Corr. Allow (In.)) | 1' 11-5/8" (Diam. I.D. (ft. & in.)) | 3' 7-7/8" (Length (overall) (ft. & in.))

7. Seams: Type 1 (Long (Welded, Dbl. Butt, Lap, Hom)) | None (R.T. (Spot or Full)) | 70 (Eff. (%)) | N/A (Ct. Temp. (°F)) | - (Time (hr)) | Type 1 (Girth (Welded, Dbl. Butt, Lap, Butt)) | None (R.T. (Spot or Full)) | 1 (No. of Courses)

8. Heads: (a) Matl SA-240 TP-304L (Spec. No., Grade) (b) Matl SA-240 TP-304L (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

If removable, bolts used (describe other fastenings) (Mat'l Spec. No., Grade, Size, No.)

9. MAWP 25 (internal) 15 (external) psi at max temp. 150 (internal) 150 (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)	No.	Diam. or Size	Type	Matl	Nom. Thk	Reinforcement Material	How Attached	Location
Vent	1	2"	Cl150Flg	SA-312 TP-304L	.1540		UW16.1©	shell
Level	2	3"	Cl150Flg	SA-312 TP-304L	.2160	N/A	UW16.1©	head-shell
Outlet	1	4"	Cl150Flg	SA-312 TP-304L	.2370	N/A	UW16.1©	shell
Liquid Inlet	1	8"	Cl150Flg	SA-312 TP-304L	.3220	N/A	UW16.1©	shell
Sight Glass	1	6"	studpad	SA-240 TP-304L	2.000	N/A	UW16.1©	shell

11. Supports: Skirt (Yes or No) Lugs (No.) Legs (No.) Others 2 Saddles (Detailed) Attached Welded (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, Mark number, Mfgr's name and identifying stamp)

Impact Test Exempt Per UHA-51(d)UCS 66(c), Owner/User responsible for Pressure Relief Valve
Clr seam 70% E.

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

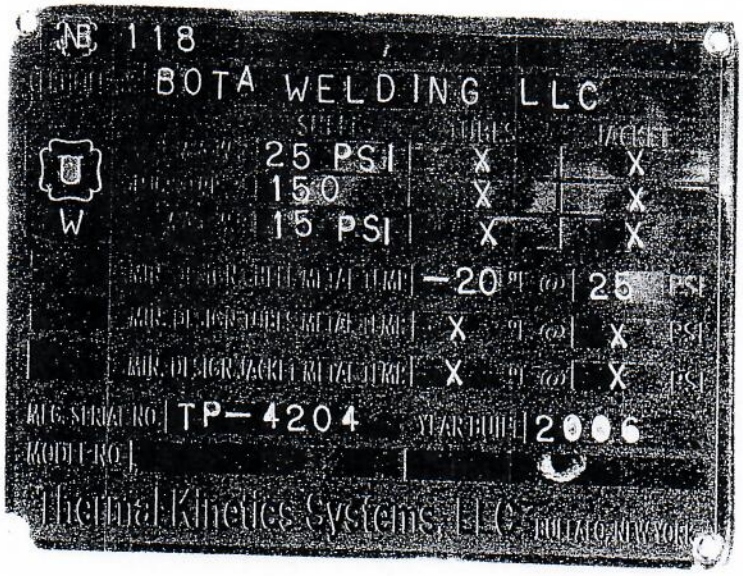
Date 12/14/06 Co. Name Bota Welding, LLC (Manufacturer) Signed (Authorized Representative)

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 12/14/06, 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 12/14/06 Signed Commissions NB11103ANY5078


NB 118
BOTA WELDING LLC
SHELL
TUBES
JACKET
25 PSI
X
X
150
X
X
15 PSI
X
X
-20 °F @ 25 PSI
X °F @ X PSI
X °F @ X PSI
MFG. SERIAL NO. TP-4204
YEAR BUILT 2006
MODEL NO.
Thermal Kinetics Systems, LLC
BUFFALO, NEW YORK