

APPENDIX B - U-1A FORMS

FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS

(Alternative Form for Single Chamber, Completely Shop-Fabricated Vessels Only)
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

07/17/1998

S/O X-714231

TRINITY INDUSTRIES, INC.
617 E. SYCAMORE, TX 76205

PLANT #23

1. Manufactured and certified by TRINITY INDUSTRIES, INC.
(NAME AND ADDRESS OF MANUFACTURER)
2. Manufactured for PROTON ENERGY SYSTEMS, 50 INWOOD RD. ROCKY HILL, CT
(NAME AND ADDRESS OF PURCHASER)
3. Location of installation Phoenix, Arizona
(NAME AND ADDRESS)
4. Type HORIZ 123982 714231 r= 23729 1998
(WORK OR OVER-TANK) (WQ'S SERIAL NO.) (CRN) (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, Division 1 1995
YEAR
6. Shell: SA612 0.517" 0" 6'-10.966" 19'-0"
(MATERIAL SPEC. NO., GRADE) (NOM. THK. (IN)) (CORR. ALLOW. (IN)) (DIAM. (FT. & IN.)) (LENGTH (OVERALL) (FT. & IN.))
7. Seams: WELD, DBL FULL 100% ---- ---- WELD, DBL UW-11a(5b) 2
(LONG. WELDED DBL. (INCL. LAP, BUTT)) (R.T. (SPOT OR FULL)) (EFF. (IN)) (H.T. TEMP. (F)) (TAYE (HR)) (DRY (WELDED DBL. (INCL. LAP, BUTT)) (R.T. (SPOT OR FULL)) (NO. OF COURSES)
8. Heads: (a) Matl. SA455 HOT FORMED, NORM. (b) Matl. SA455 HOT FORMED, NORM.
(SPEC. NO., GRADE) (SPEC. NO., GRADE)

Seg. Seams: WELD, DBL H.T.: SPOT E.T.: 85%

LOCATION (TOP/BOTTOM, END)	MINIMUM THICKNESS	CORROSION ALLOWANCE	CROWN RADIUS	KNUCKLE RADIUS	ELLIPITICAL RATIO	CONICAL APERTURE ANGLE	HEMISPHERICAL RADIUS	FLAT DIAMETER	SIZE TO PRESSURE (CONCAVE OR CONVEX)
(IN) ENDS	0.327"	0"					41.673		CONCAVE
(IN)							I.S.		

If removable, bolts used (describe other fastenings)

(MATERIAL SPEC. NO., OR, SIZE, NO.)

9. MAWP 250 psi at max. temp. 125 °F
Min. design metal temp. -3 °F at 250 psi. Hydrostatic test pressure 375 psi.
10. Nozzles, inspection and safety valve openings: UW-16.1

PURPOSE (INLET, OUTLET, DRAIN)	NO.	DIAM. OR SIZE	TYPE	MATL.	NOM. THK.	REINFORCEMENT MATL.	HOW ATTACHED	LOCATION
MANWAY	1	15"	PTFLG	SA516-70N	2.50"	INTERGRAL	(1)	HEAD
FLOAT, ROT.	1, 1	2.5", 2"	CPLG	SA105	3000#		(y-2)	
TW, LL/PG	1, 1	.75"	CPLG	SA105	6000#		(y-2)	
L.O., SPARE	1, 1	3", .25"	CPLG	SA105	6000#		(z-1)	
VAP. RELIEF	1, 1	2"	CPLG	SA105	3000#		(y-1)(z-1)	
FILL, VAPOR	1, 1	2"	CPLG	SA105	3000#		(z-1)	

11. Supports: Skirt NO Lugs NO Legs NO Other SADDLES Attached SHELL, WELDED
(YES OR NO) (YES OR NO) (YES OR 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: Shell Assy S/N 2298085, Head S/N T373-37-H13, S/N 969-72
Trinity Plts #22 and #373 (NAME OF PART, ITEM NUMBER, WQ'S NAME AND IDENTIFYING STAMP) Pt. North, TX and Frontera, Coahuila, Mexico
714231 SHT 1 REV.0, SHT 2 REV.0
TANK, HORIZONTAL, LPG STORAGE: 84" OD x 6,565 NOM WG
TO BE USED IN A NON-CORROSIVE SERVICE. MDMT -20 @ 207 PSI.
LINE 9: MDMT/PSI BASED ON UCS-66(a), UCS-66(b) AND UG-20 (f).

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. 10,920 which expires Jan. 15, 2001
Date 9-21-98 Co. Na TRINITY INDUSTRIES, INC. Signed Mike Stanford
MANUFACTURER REPRESENTATIVE

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by TRINITY INDUSTRIES, INC. at DENTON TX 76205
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 TEXAS and employed by OLD REPUBLIC INS., CO.-DALLAS, TX
have inspected the component described in this Manufacturer's Data Report on 9-21, 19 98, 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 the 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 9-21-98 Signed [Signature] Commissions 9323 2 1126 TX
TR 427-COM2 (7-97) (AUTHORIZED INSPECTOR) (NAT'L BOARD (INCL. ENDORSEMENTS), STATE, PROV. AND REG.)

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

1. Manufactured and certified by CP INDUSTRIES, INC., CHRISTY PARK PLANT, 2214 WALNUT STREET, McKEESPORT, PA 15132
(Name and address of Manufacturer)
2. Manufactured for PINNACLE WEST CAPITAL CORP., P.O. BOX 53999, MS 8948, PHOENIX, AZ 85072
(Name and address of Purchaser)

3. Location of installation NOT KNOWN
(Name and address)

4. Type HORIZ. 46705 8X15993 REV. 1 46705 2000
(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 1998
(Year)

to 1999 AND APPENDIX 22 (SF=3)
Addenda (Date)

6. Shell: SA372 GRADE J, CLASS 70 1.250" 0 16" 28'-0"
Mat'l. (Spec. No., Grade) Min. Thk. (in.) Corr. Allow. (in.) Diam. O.D. (in.) Length (overall) (ft. & in.)

7. Seams: SEAMLESS NONE 100 SEAMLESS NONE 1
Long. (Welded, Dbl., Singl., Lap, Butt) R.T. (Spot or Full) EL (%) H.T. Temp (F) Time (hr) Girth (Welded, Dbl., Singl., Lap, Butt) R.T. (Spot, Partial or Full) No. of Courses

8. Heads: (a) Mat'l. SAME AS 6. (b) Mat'l. SAME AS 6.
(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)	ENDS	1.250"	0					8"		CONCAVE
(b)	(INTEGRALLY FORGED HEADS AND NECKS)									

If removable, ends used (describe other fastenings)

(Mat'l., Spec. No., Gr., Size, No.)

9. MAWP 6667 psi at max. temp. +200 °F

Min. design metal temperature -20 ° F at 6667 psi. Hydrostatic test pressure 10001 psi.

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Mat'l.	Nom. Thk.	Reinforcement Mat'l.	How Attached	Location
INLET/OUTLET	2	2 3/4"	THREAD				FORMED IN HEADS	
OUTLET	1	1/2" NGT	THREAD				IN	HEAD

11. Supports: Skirt NO Lugs 0 Legs 0 Other NONE Attached N/A
(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)

CONSTRUCTED IN ACCORDANCE WITH APPENDIX 22, INTEGRALLY FORGED VESSELS, DRY GAS STORAGE, NON CORROSIVE SERVICE.

VESSEL MATERIAL IMPACT TESTED PER UHT-6, LIQUID Q&T PER SA 372.

UT NDT VESSEL OAL: 30'-0" PIPE NO: E838 SC 16045

MO 7412

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 1127

expires 3/30, 20 03

Date: 9/26/00 Co. Name: CP INDUSTRIES, INC. Signed: [Signature]
(Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by CP INDUSTRIES, INC. at McKEESPORT, PA. 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 PENNSYLVANIA and employed by ABS GROUP INC., HOUSTON, TX have inspected the component described in this Manufacturer's Data Report on 9/28, 20 00, 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: 9/28/00 Signed: Michael J. Henth Commissions NB 11193AB PA2630
(Authorized Inspector) (Nat'l Board (incl. endorsements, State, Prov. and No.))

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

1. Manufactured and certified by CP INDUSTRIES, INC., CHRISTY PARK PLANT, 2214 WALNUT STREET, McKEESPORT, PA 15132
(Name and address of Manufacturer)

2. Manufactured for PINNACLE WEST CAPITAL CORP., P.O. BOX 53999, MS 8948, PHOENIX, AZ 85072
(Name and address of Purchaser)

3. Location of installation NOT KNOWN
(Name and address)

4. Type HORIZ. 46708 8X15993 REV. 1 46708 2000
(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 1998
(Year)
to 1999 AND APPENDIX 22 (SF=3)
Addenda (Date)

6. Shell: SA372 GRADE J, CLASS 70 1.250" 0 16" 28'-0"
Mat'l. (Spec. No., Grade) Min. Thk. (in.) Corr. Allow. (in.) Diam. O.D. (in.) Length (overall) (ft. & in.)

7. Seams: SEAMLESS NONE 100 SEAMLESS NONE 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) Mat'l. SAME AS 6. (b) Mat'l. SAME AS 6.
(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)	ENDS	1.250"	0					8"		CONCAVE
(b)	(INTEGRALLY FORGED HEADS AND NECKS)									

If removable, ends used (describe other fastenings) _____

9. MAWP 6667 psi at max. temp. +200 °F
(Mat'l., Spec. No., Gr., Size, No.)

Min. design metal temperature -20 ° F at 6667 psi. Hydrostatic test pressure 10001 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/OUTLET	2	2 3/4"	THREAD				FORMED IN	HEADS
OUTLET	1	1/2" NGT	THREAD				IN	HEAD

11. Supports: Skirt NO Lugs 0 Legs 0 Other NONE Attached N/A
(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)

CONSTRUCTED IN ACCORDANCE WITH APPENDIX 22, INTEGRALLY FORGED VESSELS. DRY GAS STORAGE, NON CORROSIVE SERVICE.

VESSEL MATERIAL IMPACT TESTED PER UHT-6. LIQUID Q&T PER SA 372.

UT NDT VESEL OAL: 30'-0" PIPE NO: E842 MO 7412

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. 1127

expires 3/30 20 03

Date: 9/26/00 Co. Name: CP INDUSTRIES, INC.
(Manufacturer)

Signed: [Signature]
(Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by CP INDUSTRIES, INC. at McKEESPORT, PA. 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 PENNSYLVANIA and employed by ABS GROUP INC., HOUSTON, TX. have inspected the component described in this Manufacturer's Data Report on 9/28, 20 00, 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 9/28/00 Signed Michael J. Hunk
(Authorized Inspector)

Commissions NB 11193 AB PA2630
(Nat'l Board (Incl. endorsements, State, Prov. and No.))

FORM U-1A MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS
(Alternate Form for Single Chamber, Completely Shop-Fabricated Vessels Only)
 as required by the provisions of the ASME Code rules, Section VIII, Division 1

CP INDUSTRIES, INC., CHRISTY PARK PLANT

1. Manufactured and certified by 2214 WALNUT STREET, HICKESPORT, PA 15132

(name and address of manufacturer)

2. Manufactured for TRON FUELS INC., 520 AUSTIN CIRCLE, 701 HAZARD, AUSTIN, TX 78701

(name and address of purchaser)

3. Location of installation NOT KNOWN

(name and address)

4. Type: BULK 42301 EX15261Y R.7 42301 1992

(name of vessel, grade)

(shell's serial no.)

(SHELL)

(drawing no.)

(PART 1 SER. 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 Code, Section VIII, Division 1; 1989

(year)

ASME APPENDIX 22 (SF=3)

(subgroup design)

(classification)

(maximum service per UG-120(a))

6. Shell: SA332 TYPE IV 1.093 MIN. 0 20" O.D. 22' 4"

(shell's spec. no., grade)

(minimum thickness (in.))

(shell's diam. (in.))

(O.D. representation)

(length (feet) (ft. & in.))

7. Seams: SEAMLESS NONE 100 SEAMLESS NONE 1

(seam, welded, etc., shell's spec. no.)

(W.T. defect or hole)

(W.T. (%))

(W.T. defect (%))

(time (hr.))

(seam, welded, etc., shell's spec. no.)

(W.T. defect or hole)

(no. of seams)

8. Heads: (a) SAME AS 6 (b) SAME AS 6

(shell's spec. no., grade)

(shell's spec. no., grade)

	Locust post, bottom, ends	Minimum thickness	Corrosion allowance	Other factors	Flange factors	Welded factors	Conical apex angle	Hemispherical radius	Flat diameter	Stress to Pressure (maximum of specified)
(a)	<u>ENDS</u>	<u>1.093"</u>	<u>0</u>					<u>10"</u>		<u>CONCAVE</u>
(b)	<u>(INTEGRALLY FORCED HEADS AND NECKS)</u>									

If removable, bolts used (describe other fastenings):

(shell's spec. no., grade, size, no.)

9. MAWP: 4000 at max. temp. 200 Min design metal temp. -20 at 6000 Hydro. pres-or-sustained pressure 6000

(psia)

(°F)

(°F)

(psia)

(psia)

10. Nozzles, inspection and safety valve openings:

Purpose (inlet, outlet, vent, etc.)	No.	Dia. or Size	Type	Shell	Min. Thickness	Reinforcement (Min.)	Weld Attached	Location
<u>INLET/OUTLET</u>	<u>2</u>	<u>2 3/4"</u>	<u>THREAD</u>				<u>FORCED</u>	<u>IN HEADS</u>
<u>OUTLET</u>	<u>1</u>	<u>1/2" NPT THREAD</u>						<u>IN HEAD</u>

11. Supports: Skid NO Lugs 0 Legs 0 Other NONE Attached NA

(yes or no)

(no.)

(no.)

(yes or no)

(yes or no)

(yes or no)

12. Remarks: Manufacturers' Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished to the following items of the report: AND PRESSURE VESSEL INSPECTORS.

(name of person, name number, title, name and identifying stamp)

CONSTRUCTED IN CONFORMANCE WITH APPENDIX 22, INTEGRALLY FORCED VESSELS

DRY GAS STORAGE - NON CORROSIVE SERVICE

PIPE NO.

4856

MO5192

SC06565

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 1127 expires 3/30/94

Date 7-22-92 Name CP INDUSTRIES, INC. Signed [Signature]

(manufacturer)

(representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by CP INDUSTRIES, INC. at HICKESPORT, PA

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the state or province of PENNSYLVANIA and employed by KEMPER NATIONAL INSURANCE COMPANIES

of LOW CROWN, IL have inspected the component described in this Manufacturers' Data Report on 7-11 1992 and

state that, to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the 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 the Manufacturers' 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 8-11 1992 Signed [Signature] Commission NR0153 PA2227

(No. 1 Bo. and Ins. Commissioning date, spec. and no.)

FORM U-1A MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS
(Alternate Form for Single Chamber, Completely Shop-Fabricated Vessels Only)

as required by the provisions of the ASME Code rules, Section VIII, Division 1

CP INDUSTRIES, INC., CHRISTY PARK PLANT

1. Manufactured and certified by 2214 WALNUT STREET, MCKESPORT, PA 15132

(name and address of manufacturer)

2. Manufactured for THEM PUELS INC., 520 AUSTIN CENTRE, 701 BRAZOS, AUSTIN, TX 78701

(name and address of purchaser)

3. Location of installation NOT KNOWN

(name and address)

4. Type: HORIZ. 42302 5X15261Y R-7 42302 1992

(type, or vert., horiz.)

(part's serial no.)

(code)

(drawing no.)

(part's, ser. 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 Code, Section VIII, Division 1; 1989

(year)

APP AND APPENDIX 22 (SF-3)

(specification)

(special service per UG-120.02)

6. Shell: SA372 TYPE IV 1.093 MIN. 0 20" O.D. 22' 4"

(part's serial no., grades)

(min. thickness in in.)

(corr. allow. in in.)

(dia. in in.)

(length overall in ft. & in.)

7. Seams: SEAMLESS NONE 100 SEAMLESS NONE 1

(long. welded, det., long. lap, butt)

(RT det. or type)

(RT %)

(RT seam, %)

(type in in.)

(seam welded, det., long. lap, butt)

(RT seam, partial or full)

(% of coverage)

8. Heads: (a) SAME AS 6 (b) SAME AS 6

(part's serial no., grades)

(part's serial no., grades)

	Location req. between ends	Minimum Thickness	Corrosion Allowance	Open Flange	Flange Radius	Elliptical Flange	Conical Apex Angle	Nonmechanical Flange	Full Character	Note to Pressure (drawings or approved)
(a)	<u>ENDS</u>	<u>1.093"</u>	<u>0</u>					<u>10"</u>		<u>CONCAVE</u>
(b)		<u>(INTEGRALLY FORGED HEADS AND NOCKS)</u>								

If removable, bolts used (describe other fastening):

(part's serial no., gr., size, no.)

9. MAWP: 4000 at max. temp. 200 Min design metal temp. -20 at 4000 Hydro. pressure combined test pressure 6000

(psi)

(°F)

(°F)

(psi)

(psi)

10. Nozzles, inspection and safety valve openings:

Purpose (inlet, outlet, drain, etc.)	RA	Dia. or Size	Type	Shell	Top Thickness	Reinforcement Mat'l	How Attached	Location
<u>INLET/OUTLET</u>	<u>2</u>	<u>2 3/4"</u>	<u>THREAD</u>				<u>FORGED IN HEADS</u>	
<u>OUTLET</u>	<u>1</u>	<u>1/2" NPT THREAD</u>						<u>IN HEAD</u>

11. Supporter: SMT NO Lugs 0 Legs 0 Other NONE Attached NA

(yes or no)

(no.)

(no.)

(direction)

(vertical & horizontal)

12. Remarks: Manufacturers' 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)

CONSTRUCTED IN CONFORMANCE WITH APPENDIX 22, INTEGRALLY FORGED VESSELS.

DRY GAS STORAGE - NON CORROSIVE SERVICE

PIPE NO. AR80

UHT-6

ND5192

SC06585

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. 1127 expires 3/30/94

Date 7-22-92

Name CP INDUSTRIES, INC.

Signed W. Small

(manufacturer)

(representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by CP INDUSTRIES, INC. at MCKESPORT, PA.

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the state or province of PENNSYLVANIA and employed by KEMPER NATIONAL INSURANCE COMPANIES

of LONG GROVE, IL have inspected the component described in this Manufacturers' Data Report on 7/1 19 92 and state that, to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the 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 the Manufacturers' Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage of any kind arising from or connected with this inspection.

Date 8-11 19 92

Signed W. Small

Commission NA8153

PA2227

(signature)

(part's serial no., endorsement state, date, and no.)

FORM U-1A MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS
(Alternate Form for Single Chamber, Completely Shop-Fabricated Vessels Only)

as required by the provisions of the ASME Code rules, Section VIII, Division 1

CP INDUSTRIES, INC., CHRISTY PARK PLANT

1. Manufactured and certified by 2214 WALNUT STREET, MCKESPORT, PA 15132

(name and address of manufacturer)

2. Manufactured for TRM FUELS INC., 520 AUSTIN CENTER, 701 BRAZOS, AUSTIN, TX 78701

(name and address of purchaser)

3. Location of installation NOT KNOWN

(name and address)

4. Type: HORIZ. A2703 8X15261Y R.7 42303 1992

(type, or vert., horiz.)

(mfr's. serial no.)

(CRS)

(drawing no.)

(ASME 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 Code, Section VIII, Division 1: 1989

(year)

APPENDIX 22 (SF-3)

(material spec)

(design standard)

(special service per US 1200)

6. Shell: SA372 TYPE IV 1.093 NOM 0 20" O.D. 22' 4"

(shell type, no., grade)

(max. thickness in in.)

(cor. allow. in in.)

(nom. diam. in.)

(length in ft. & in.)

7. Material: STAINLESS NONE 100 STAINLESS NONE 1

(type, temp., etc., or spec. no., grade)

(PTT report or fully)

(in in.)

(PTT report or fully)

(in in.)

(type, temp., etc., or spec. no., grade)

(PTT report or fully)

(in in.)

8. Heads: (a) SAME AS 6 (b) SAME AS 6

(shell type, no., grade)

(shell type, no., grade)

	Location from bottom, in.	Minimum Thickness	Corrosion Allowance	Open Markings	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flare Diameter	Shoe to Pressure (concave or convex)
(a)	<u>ENDS</u>	<u>1.093"</u>	<u>0</u>					<u>10"</u>		<u>CONCAVE</u>
(b)	<u>(INTEGRALLY FORGED HEADS AND NECKS)</u>									

If removable, bolts used (describe other fastenings):

(shell, spec. no., gr., size, no.)

9. MAWP: 4000 at max. temp. 200 Min design metal temp. -20 at 4000 Hydro. test pressure 6000

(psia)

(°F)

(°F)

(psia)

(psia)

10. Nozzles, inspection and safety valve openings:

Purpose (inlet, outlet, drain, etc.)	No.	Dia. or Size	Type	Wall	Min. Thickness	Reinforcement Mark	Shoe Attached	Location
<u>INLET/OUTLET</u>	<u>2</u>	<u>2 3/4"</u>	<u>THREAD</u>				<u>FORGED IN HEADS</u>	
<u>OUTLET</u>	<u>1</u>	<u>1 1/2" NPT THREAD</u>						<u>IN HEAD</u>

11. Supports: Skirt NO Lugs 0 Legs 0 Other NONE Attached NA

(type or no.)

(no.)

(no.)

(description)

(where & type)

12. Remarks: Manufacturers' Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report:

(name of item, item number, mfr's name and identifying stamp)

CONSTRUCTED IN CONFORMANCE WITH APPENDIX 22, INTEGRALLY FORGED VESSELS.

DRY GAS STORAGE - NON CORROSIVE SERVICE

UHT-6

PIPE NO. AB64

NO5192

SC06565

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. 1127 expires 3/30/94

Date 7-28-92 Name CP INDUSTRIES, INC. Signed L. J. Small

(manufacturer)

(representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by CP INDUSTRIES, INC. at MCKESPORT, PA

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the state or province of PENNSYLVANIA and employed by KEMPER NATIONAL INSURANCE COMPANIES

of LONG GROVE, IL have inspected the component described in this Manufacturers' Data Report on 7-23 19 92 and state that, to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the 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 the Manufacturers' Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 7-23 19 92 Signed [Signature] Commission NAB 153 PAB 227

(Authorized Inspector)

(Name of inspector and commission number)

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

1. Manufactured and certified by CP INDUSTRIES, INC., COUNTY PARK PLANT, 2214 HAINES STREET, MEMPHIS, TN 38112
(Name and address of manufacturer)

2. Manufactured for GENIE RENTAL COMPANY, P.O. BOX 3750, COLUMBIA COUNTY, TN 38463
(Name and address of purchaser)

3. Location of installation NOT KNOWN

4. Type BOILER 43190 43190 43190 Ser. 1 43190 1982
(Mark or vert. mark) (Mfg's serial No.) (CRN) (Drawing no.) (Part Id. 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 1982
Year

6. SEE APPENDIX 22 (22-1)

7. Shell: SA312 TYPE 304, 1/2", 11.383 in. 0 18" O.D. 11' 6"
(Mat. (Spec. No., Grade)) (Mean Thk. (in.)) (Corr. Allow. (in.)) (O.D. (in.)) (Length (overall) (ft. & in.))

8. Seams: SEAMLESS 0 100 SEAMLESS 0 1
(Long. (Welded, Cbl., R.T. (Spot or Full) E.T. (%) H.T. Temp. (F) Time (hr) Girth (Welded, Cbl., R.T. (Spot, Partial, or Full) No. of Courses or Full)

9. Head(s): (a) Mat. SA312 304 (b) Mat. SA312 304
(Spec. No., Grade) (Spec. No., Grade)

	Location (Top, Bottom, End)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flare Diameter	Side to Pressure (Convex or Concave)
(a)	END	1.383"	0					18"		CONCAVE
(b)	INTERIORLY FORGED STEAM AND STEEL									

If removable, bolts used (describe other fastenings)

10. MAWP 5500 5500 180 180
(Mat. Spec. No., Gr., Size, No.) (psi) (Max. Wt. (lb.)) (psi) (Max. Wt. (lb.))

Min. design metal temp. -20 5500 180 180
(F) (psi) (Max. Wt. (lb.)) (psi) (Max. Wt. (lb.))

11. Nozzle, inspection and safety valve openings:

Process (Inlet, Outlet, Drain)	No.	Orn. or Size	Type	Mat.	Min. Thk.	Reinforcement Mat.	How Attached	Location
INLET/OUTLET	2	2 3/4"	FORGED					FORGED TO STEEL
OUT	1	1 1/2" NPT	WELDED					TO STEEL

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

CONSTRUCTION IN COMPLIANCE WITH APPENDIX 22, INTERIORLY FORGED VESSELS
ONE GAS STORAGE, NON COMPOSITE SERVICE

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. 1127 1/18 19 92
Date 6/22/92 Co. name CP INDUSTRIES, INC. Signed [Signature]
(Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by CP INDUSTRIES, INC. at MEMPHIS, TN

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PENNSYLVANIA and employed by EMPER NATIONAL INSURANCE COMPANIES, 1001 GROVE, IL have inspected the component described in this Manufacturer's Data Report on 9-7 19 92, 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 9-7-92 Signed [Signature] Commission NAB153AB PA2227
(Authorized Inspector) (Not Board, Incl. endorsements) State, Prov. and No.)

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

1. Manufactured and certified by CP INDUSTRIES, INC., CHRISTY ROAD PLANT, 2214 VILLYN STREET, ROCKFORD, IL 61152
(Name and address of manufacturer)

2. Manufactured for GENERAL ENGINE COMPANY, P.O. BOX 9250, CORPUS CHRISTI, TX 78469
(Name and address of purchaser)

3. Location of installation NOT KNOWN
(Name and address)

4. Type BOILER 43000 AR15632 Ser 1 15000 1993
(Type, or part name) (Mfg's serial no.) (CRN) (Drawing no.) (Plant Id. 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 1993
Year

to INDEX AND APPENDIX 22 (NP-1)

6. Shaft: SA572 TYPE F, GR. 5, CL. 1 1.343 in. 1 28" O.D. 11'-6"
(Mat'l (Spec. No., Grade)) (Nom. Dia. (in.)) (Corr. Allow. (in.)) (Diam. (N.D. or O.D.)) (Length (overall) (ft. & in.))

7. Seams: SEAMLESS INDEX 100 SEAMLESS INDEX 1
(Long. (Welded, Dbl. R.T. (Spot or Full) Eff. (%) H.T. Temp. (F) Time (hr) Girth (Welded, Dbl. Singl., Lap, Butt) R.T. (Spot, Partial, or Full) No. of Courses

8. Header: (a) Mat'l. SA572 GR 5 (b) Mat'l. SA572 GR 5
(Spec. No., Grade) (Spec. No., Grade)

Location (Top, Bottom, End)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
<u>HEAD</u>	<u>1.311"</u>	<u>0</u>					<u>10"</u>		<u>CONVEX</u>
<u>(INTERNALLY POWER GRAB AND MEASURE)</u>									

If removable, bolts used (describe other fastenings)

9. MAWP 5500 200 28 5500 1150
(Mat'l, Spec. No., Gr., Size, No.)
Min. design metal temp. -28 °F at 5500 psi. Hydro. pressure-test pressure 1150 psi.

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Mat'l	Nom. Thk.	Reinforcement Mat'l	How Attached	Location
<u>INLET/OUTLET</u>	<u>2</u>	<u>2 3/4"</u>	<u>TRILOBE</u>				<u>WELDED TO HEAD</u>	
<u>DRY</u>	<u>1</u>	<u>1 1/2" NPT</u>	<u>PERMAN</u>					<u>IN HEAD</u>

11. Supports: Skirt NO Legs 1 Legs 1 Other INDEX Attached YES
(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:

THIS IS A CERTIFIED COPY OF ORIGINAL DATA REPORT
RECEIVED WITH THE NATIONAL BOARD OF BOILER
AND PRESSURE VESSEL INSPECTORS

CONSTRUCTED IN CONFORMANCE WITH APPENDIX 22, INTERNALLY POWER GRAB AND MEASURE
NOT FOR STORAGE, FOR CONSTRUCTIVE SERVICE

TYPE NO. - C473 SC4115

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. 1127 expires 3/30 19 94
Date 9/3/93 Co. name CP INDUSTRIES, INC. Signed L.W. Small
(Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by CP INDUSTRIES, INC. at ROCKFORD, IL

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PENNSYLVANIA and employed by KEMPER NATIONAL INSURANCE COMPANIES, LONG GROVE, IL have inspected the component described in this Manufacturer's Data Report on 9-7 19 93, 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 9-7-93 Signed Arthur J. Gorman Commissions NB153AB PA2227
(Authorized Inspector) (N.B. Board, Incl. endorsements) State, Prov. and No.)

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

1. Manufactured and certified by CP INDUSTRIES, INC., CHRISTY PARK PLANT, 2214 SALMON STREET, ROCKFORD, PA 15132

(Name and address of manufacturer)

2. Manufactured for KEPERI ENGINE COMPANY, P.O. BOX 9250, CARMA CHRISTY, PA 15101

(Name and address of purchaser)

3. Location of installation NOT KNOWN

4. Type BOILER (1301) 001552 RT. 1 43001 1993

(Mark or part name)

(Mfg's serial No.)

(CPN)

(Drawing no.)

(Plant 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 1002

Year

6. BOILER APPENDIX 22 (22-1)

Addenda (Date)

7. Shell: SA572 TYPE 1, GR. 50, 1/2", 1.543 THK. 0 20" S.S. 11'-6"

(Mat. Spec. No., Grade)

(Nom. THK. (in.))

(Corr. Allow. (in.))

(Diam. (ft.-in.-dec.))

(Length (feet) (ft. & in.))

8. Seams: SEAMLESS WELD 100 SEAMLESS WELD 1

(Long. (welded, Dec.))

(R.T. (Spot or Full))

(GR (%))

(H.T. Temp. (F))

(Time (hr))

(Grth. (welded, Dec.))

(R.T. (Spot or Full))

(No. of Seams)

9. Heads: (a) Map SA572 GR 50 (b) Mat. SA572 GR 50

(Spec No., Grade)

(Spec No., Grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Convex Apex Angle	Hemispherical Radius	Flat Diameter	State of Pressure (Convex or Concave)
(a)	END	1.543"	0					10"		CONCAVE
(b)	(INTEGRALLY FORGED HEADS AND NOCKS)									

If removable, bolts used (describe other fastenings)

10. SAHP 5500 gal at max. temp. 200 °F

(Mat. Spec. No. Or. Size, No.)

Min. design metal temp. -20 °F at 5500 psi hydro. pressure, test pressure 2750 psi.

11. Flanges, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Mat.	Nom. Thk.	Reinforcement Mat.	Flange Attached	Location
INLET/OUTLET	2	2 3/4"	FLANGE					FORGED IN HEAD
DRY	1	1 1/2" NPT	FLANGE					IN HEAD

12. Remarks: Manufacturer's Partial Data Report properly identified and signed by Commissioned Inspectors have been submitted to the National Board of Boiler and Pressure Vessel Inspectors.

(Name of part, serial number, Mfg's name and identifying stamp)

CONSTRUCTED IN CONFORMANCE WITH APPENDIX 22, INTEGRALLY FORGED VESSELS

NO GAS STORAGE, BUT CORROSIVE SERVICE

THIS IS A CERTIFIED COPY OF ORIGINAL REPORT
REGISTERED WITH THE NATIONAL BOARD OF BOILER
AND PRESSURE VESSEL INSPECTORS.
RIPR NO. 001
EXECUTIVE DIRECTOR
NBB-1
000015

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. 1127 expires 3/31 to 94

Date 3/5/93 Co. name CP INDUSTRIES, INC. Signed [Signature]

(Manufacturer)

(Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by CP INDUSTRIES, INC. at ROCKFORD, PA

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the State or Province of PENNSYLVANIA and employed by KEPERI NATIONAL INSURANCE COMPANIES, LONG GROVE, IL have inspected

the component described in this Manufacturer's Data Report on 9-7 1993 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 9-7-93 Signed [Signature] Commission NBB15300 PA2227

(Authorized Inspector)

(Nat'l Board (incl. endorsements) State, Prov. and No.)