B1620

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

(Alterna Form for Single Chamber, Completely Shop-F cated Vessels Only)

As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

925 (A) 2953681

1. Manufactured and certified by THERMO DESIGN ENGINEERING LTD., 1624 - 70 Ave., Edmonton, AB (Name and address of manufacturer)

2. Manufactured for TRI LINK RESOURCES LTD. / #1000, 5506 Ave SW, Calgary, AB (Name and address of purchaser)

3. Location of installation GILBY/LSD 11-20-41-4 W5M (Name and address)

4. Type VERTICAL (Horiz. or vert., tank) #1029 (Mfg's serial No.) M-2903.2 (CRN) 9014-0050-201/Rev. 2 (Drawing No.) (Nat'l. Bd. No.) 1994 (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 1992 (Year)

to 1992 (Addenda (Date)) (Code Case Nos.) (Special Service per UG-120(d))

6. Shell: SA-333-6 (Mat'l. (Spec. No., Grade)) 0.375" (Nom. Thk. (in.)) 0.0625" (Corr. Allow. (in.)) 12" ID (Diam. I.D. (ft. & in.)) 48'-2" S/S (Length (overall) (ft. & in.))

7. Seams: SML's PIPE (Long. (Welded, Dbl., Sngl., Lap, Butt)) N/A (R.T. (Spot or Full)) 100% (Eff. (%)) N/A (H.T. Temp. (°F)) N/A (Time (hr)) SGL "V" (Girth (Welded, Dbl., Sngl., Lap, Butt)) EACH SPOT (R.T. (Spot, Partial, or Full)) 4 (No. of Courses)

8. Heads: (a) Matl. SA-516-70N (Spec. No., Grade) (b) Matl. SA-516-70N (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	0.340"	0.0625"			2:1				CONCAVE
(b)	BOTTOM	0.349"	0.0625"			2:1				CONCAVE

If removable, bolts used (describe other fastenings) N/A (Mat'l., Spec. No., Gr., Size, No.)

9. MAWP 500 psi at max. temp. 300 °F

Min. design metal temp. -40 °F at 500 psi. Hydro., pneu., or comb. test pressure 750 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
N1	1	2"	WN FLG.	SA-333-6	300# SCH160		N/A	WELDED	SHELL
N2	1	2"	WN FLG.	SA-333-6	300# SCH160		N/A	WELDED	SHELL
N3	1	2"	WN FLG.	SA-333-6	300# SCH160		N/A	WELDED	HEAD
N4	1	2"	WN FLG.	SA-333-6	300# SCH160		N/A	WELDED	SHELL

11. Supports: Skirt YES (Yes or no) Lugs (No.) Legs (No.) Other CHAIR SUPPORT (Describe) 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, item number, Mfg's. name and identifying name)

12 3/4" OD x 48'-2" S/S DEETHANIZER TOWER "V-406"
CAPACITY: 39 cu ft. / IMPACT TEST EXEMPT PER UCS-66
BRAKE FLG'S CONN: (6) 1 1/8" Ø STUDS, MAT-SA-193-B7M. SEE ATTACHED "U-4" FORM

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. 22,145 expires Sept 15, 19 96.

Date 14.04.94 Co. name THERMO DESIGN ENGINEERING LTD. (Manufacturer) Signed [signature] (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by THERMO DESIGN ENGINEERING LTD. at 1624 - 70 Ave., Edmonton, AB.

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 ALBERTA and employed by GOVERNMENT OF ALBERTA have inspected the component described in this Manufacturer's Data Report on April 14, 19 94, 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 94-4-14 Signed [signature] (Authorized Inspector) Commissions Alberta 39R (Nat'l Board (incl. endorsements), State, Prov. and No.)

(12/87) This form (E00117) may be obtained from the ASME Order Dept., 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

REPRINT 5/90 (2300)

(A) 2953681

FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured and certified by THERMO DESIGN ENGINEERING LTD., 1624 - 70 Ave., Edmonton, AB (Name and address of Manufacturer)

2. Manufactured for TRI LINK RESOURCES LTD. (Name and address of Purchaser)

3. Location of Installation GILBY/LSD 11-20-41-4 W5M (Name and address)

4. Type: VERTICAL (Horiz., vert., or spheres) TOWER (Tank, separator, heat exch., etc.) #1029 (Bldg's. serial No.)

M-2903.2 (CRN) 9014-0050-201/Rev. 2 (Drawing No.) (Nat'l. Bd. No.) 1994 (Year built)

Data Report Item Number	Remarks								
10	N5	3	6"	WN FLG	SA-333-6	300#SCH 80	N/A	WELDED	SHELL
	N6	1	2"	WN FLG	SA-333-6	300#SCH 160	N/A	WELDED	SHELL
	C1	1	1½"	DBL CPLG	SA-350-LF2	3000#	N/A	WELDED	SHELL
	C2	1	1½"	CPLG	SA-333-6	3000#SCH 160	N/A	WELDED	SHELL
	C3	1	1"	DBL CPLG	SA-350-LF2	3000#	N/A	WELDED	SHELL
	C4	2	3/4"	DBL CPLG	SA-350-LF2	3000#	N/A	WELDED	SHELL
	C5	2	1½"	DBL CPLG	SA-350-LF2	3000#	N/A	WELDED	SHELL
	C6	2	3/4"	DBL CPLG	SA-350-LF2	3000#	N/A	WELDED	SHELL
	C7	1	3/4"	DBL CPLG	SA-350-LF2	3000#	N/A	WELDED	SHELL
	C8	1	2"	CPLG	SA-350-LF2	3000#	N/A	WELDED	SHELL
	C9	1	3/4"	DBL CPLG	SA-350-LF2	3000#	N/A	WELDED	SHELL
BRAKE	FLG's	3sets	12"	WN FLG		300#	N/A	WELDED	SHELL

Certificate of Authorization: Type "U" CERTIFICATE No. 22,145 Expires SEPT 15 19 96

Date 14.04.94 Name THERMO DESIGN ENGINEERING LTD. (Manufacturer) Signed [illegible] (Representative)

Date 94-4-14 Name R Hayes (Authorized Inspector) Commission Alberta 39R (Nat'l Board Incl. endorsement, State, Province and No.)

(12/91) This form (E00118) may be obtained from the ASME Order Dept., 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300 REPRINT 9/92