LANCE INSPECTIONS INC.

Customer: CANADIAN NATURAL RES. Description: LINE HEATER & PIPING
Facility: KNOPCIK SOUR Location: 16-15-74-12 W6M
Reg A#: 3151624 Serial #: HC-48-2000-2334-AB Drawing#: 3
CRN #: F-3092.213 Manufacturer: OPSCO 92' Unit #: N/A Year Built: 1996

Shell MAWP:		Shell MAWT:		Shell Material:		Nominal:	6.4mm	CA: 3.2mm
Tube "A" MAWP:	13962 kPa	Tube "A" MAWT:	293°C	Head Material:		Nominal:		CA:
Tube "B" MAWP:	23271 kPa	Tube "B" MAWT:	293°C	Tube Material:	N/S	Nominal:	11.1/15.2mm	CA:
Size:	3" COILS	Manway:	N/A	MDMT:	N/A	Boot Shell Mat:		Nominal: CA:
Insulated:	YES	C Stamp:	NO	RT:	100%	PWHT:	YES	Boot Head Mat: Nominal: CA:

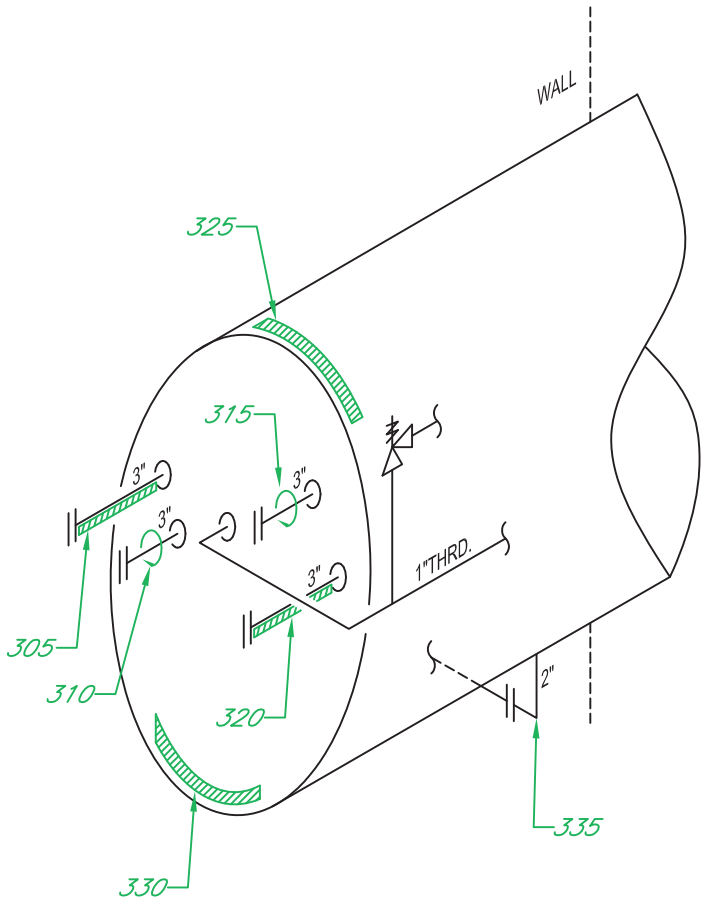
PSV DATA

Manufacturer:	CROSBY	Serviced By:	UNIFIED VALVE
Model:	961102MA	Service Date:	9/14/2005
Serial:	12860-2	Code Stamp:	UV
Set Pressure:	103 kPa	CRN:	OG0102.2
Capacity:	64 scfm	Location:	FUEL GAS PIPING
Tag:	SN-002	Inlet Size:	1" M.T
Flows To:	TANK	Outlet Size:	1" F.T

NOTE: SHELL NOMINAL AND CORROSION ALLOWANCE ASSUMED.

N

NOTE: NOT IN SERVICE



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UTS Data Sheet

Client: **Canadian Natural Resources**
Facility: **Knopcik Sour**
LSD: **16-15-74-12 w6m**
Equip Description: **Line Heater & Piping**
Reg A#: **3151624**
Drawing #: **3**

		Nominal Thickness (mm)	Corrosion Allowance (mm)	Flag Thickness (mm)
305				
Description:	**Bottom Band on 3" Nozzle**	11.1	3.2	7.9
Date:	Dec 8, 08			
Minimum:	11.7			
Average:	12.2			
Comments:				
310				
Description:	**3" Nozzle Circ**	15.2	3.2	12.0
Date:	Dec 8, 08			
Minimum:	17.1			
Average:	17.5			
Comments:				
315				
Description:	**3" Nozzle Circ**	11.1	3.2	7.9
Date:	Dec 8, 08			
Minimum:	11.4			
Average:	12.3			
Comments:				
320				
Description:	**Bottom Band on 3" Nozzle**	15.2	3.2	12.0
Date:	Dec 8, 08			
Minimum:	15.3			
Average:	16.0			
Comments:				
325				
Description:	**Top Shell**	6.4	3.2	3.2
Date:	Dec 8, 08			
Minimum:	5.7			
Average:	6.0			
Comments:				
330				
Description:	**Bottom Shell**	6.4	3.2	3.2
Date:	Dec 8, 08			
Minimum:	5.7			
Average:	6.1			
Comments:				
335				
Description:	**2" 90° Nozzle**	3.9	3.2	0.7
Date:	Dec 8, 08			
Minimum:	4.3			
Average:	4.6			
Comments:				