



Customer: CANADIAN NATURAL RES. Description: LINE HEATER PIPING

Facility: KNOPCIK SOUR Location: 12-23-74-10 W6M

Reg A#: 420492 Serial #: H0-2612-A/B Drawing#: 2

CRN #: N5295.21/N5297.21 Manufacturer: OPSCO Unit #: N/A Year Built: 1997

Shell MAWP: _____ Shell MAWT: _____ Shell Material: _____ Nominal: 9.5mm CA: 3.2mm

Tube "A" MAWP: 21616 kPa Tube "A" MAWT: 121°C Head Material: _____ Nominal: _____ CA: _____

Tube "B" MAWP: 11170 kPa Tube "B" MAWT: 121°C Tube Material: _____ Nominal: _____ CA: _____

Size: 2" / 3" COILS Manway: NO MDMT: N/S Boot Shell Mat: _____ Nominal: _____ CA: _____

Insulated: YES C Stamp: N/S RT: 100% PWHT: YES Boot Head Mat: _____ Nominal: _____ CA: _____

NOTE: SHELL NOMINAL AND CORROSION ALLOWANCE ASSUMED.





UTS Data Sheet

Client: **Canadian Natural Resources**
 Facility: **Knopcik Sour**
 LSD: **12-23-74-10 w6m**
 Equip Description: **Line Heater Piping**
 Reg A#: **420492**
 Drawing #: **2**

	Nominal Thickness (mm)	Corrosion Allowance (mm)	Flag Thickness (mm)
205 Description: 3" 90° Elbow Date: Nov 16, 11 Minimum: 14.7 Average: 15.0 Comments:	15.2	1.9	13.3
210 Description: 3" 90° Elbow Date: Nov 16, 11 Minimum: 13.8 Average: 14.2 Comments:	15.2	1.9	13.3
215 Description: Back of 3" Tee Date: Nov 16, 11 Minimum: 17.4 Average: 20.0 Comments:	15.2	1.9	13.3
220 Description: 2" 90° Elbow Date: Nov 16, 11 Minimum: 4.8 Average: 5.1 Comments:	5.5	0.7	4.8
223 Description: 3" 90° Elbow Date: Nov 16, 11 Minimum: 7.6 Average: 7.9 Comments:	7.6	1.0	6.6
225 Description: 3" 90° Elbow Date: Nov 16, 11 Minimum: 7.2 Average: 7.4 Comments:	7.6	1.0	6.6
230 Description: Upper Head Plate Date: Nov 16, 11 Minimum: 9.4 Average: 9.7 Comments: <i>Nov 2011_Min scan at top of band.</i>	9.5	3.2	6.3
235 Description: Lower Head Plate Date: Nov 16, 11 Minimum: 9.6 Average: 8.7 Comments:	9.5	3.2	6.3