

Customer: CANADIAN NATURAL RES.Description: LINE HEATER PIPINGFacility: KNOPCIK SOURLocation: 09-29-74-10 W6MReg A#: 3113862Serial #: 98-C3162-3001-CDrawing#: 2CRN #: M9316.2Manufacturer: MALONEY STEEL LTDUnit #: N/AYear Built: 1995

Shell MAWP: _____

Shell MAWT: _____

Shell Material: _____

Nominal: 9.5mmCA: 3.2mmTube "A" MAWP: 21374 kPaTube "A" MAWT: 93°C

Head Material: _____

Nominal: _____

CA: _____

Tube "B" MAWP: 13962 kPaTube "B" MAWT: 93°CTube Material: SA 106 BNominal: 15.2/11.1mmCA: 3.2mmSize: 3" COILSManway: N/AMDMT: N/S

Boot Shell Mat: _____

Nominal: _____

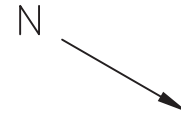
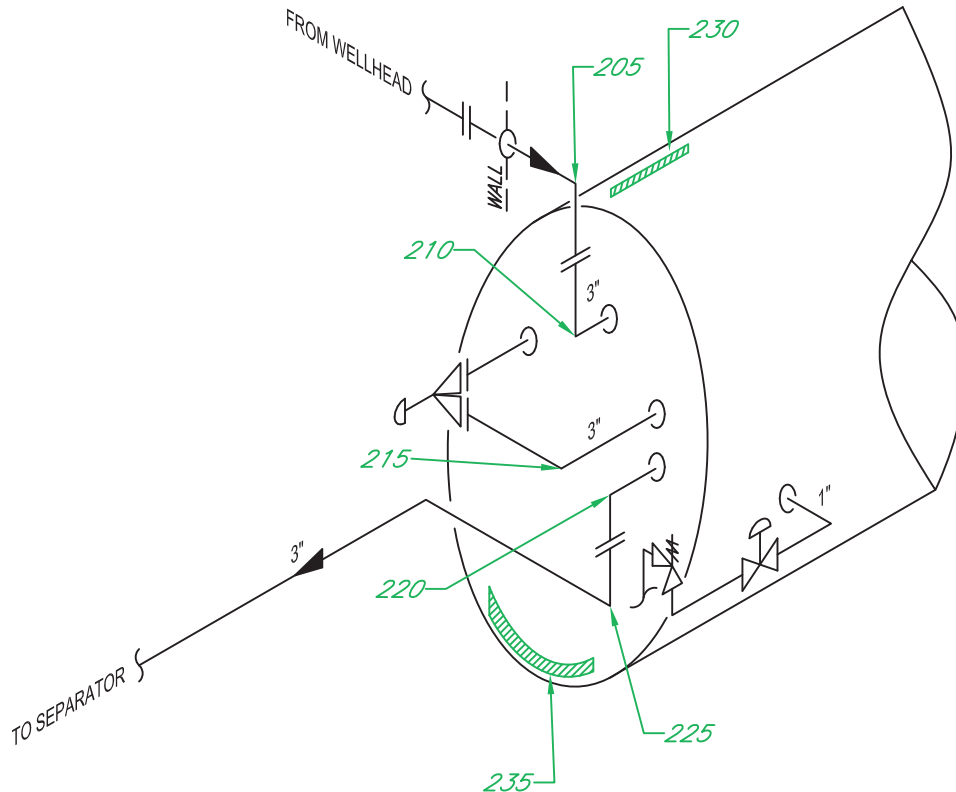
CA: _____

Insulated: YESC Stamp: NORT: 100% PWHT: YES

Boot Head Mat: _____

Nominal: _____

CA: _____

PSV DATAManufacturer: FARRISServed By: TYCOModel: 1850Service Date: 06/08Serial: CE-24253-R1Code Stamp: UVSet Pressure: 1034 kPaCRN: OG2367.5CCapacity: 516 scfmLocation: LP FUEL GASTag: EK-6Inlet Size: 3/4" M.TFlows To: FLAREOutlet Size: 1" F.T**NOTE: SHELL NOMINAL AND CORROSION ALLOWANCE ASSUMED.**



UTS Data Sheet

Client: **Canadian Natural Resources**

Facility: **Knopcik Sour**

LSD: **09-29-74-10 w6m**

Equip Description: **Line Heater & Piping**

Reg A#: **3113862**

Drawing #: **2**

			Nominal Thickness (mm)	Corrosion Allowance (mm)	Flag Thickness (mm)
205	Description: 3" 90° Elbow		15.2	1.9	13.3
	Date: Sept 22, 08	Nov 14, 11			
	Minimum: 16.9	16.9			
	Average: 17.4	17.4			
	Comments: <i>Min scan at mid elbow.</i>				
210	Description: 3" 90° Nozzle		15.2	3.2	12.0
	Date: Sept 22, 08	Nov 14, 11			
	Minimum: 14.6	14.6			
	Average: 15.1	15.1			
	Comments:				
215	Description: 3" 90° Nozzle		15.2	3.2	12.0
	Date: Sept 22, 08	Nov 14, 11			
	Minimum: 15.0	15.0			
	Average: 15.6	15.6			
	Comments: <i>Min scan at mid nozzle.</i>				
220	Description: 3" 90° Nozzle		11.1	3.2	7.9
	Date: Sept 22, 08	Nov 14, 11			
	Minimum: 9.9	9.9			
	Average: 10.7	10.7			
	Comments: <i>Min scan at mid nozzle.</i>				
225	Description: 3" 90° Elbow		7.6	1.0	6.6
	Date: Sept 22, 08	Nov 14, 11			
	Minimum: 7.4	7.3			
	Average: 7.6	7.5			
	Comments:				
230	Description: Top Shell		9.5	3.2	6.3
	Date: Sept 22, 08	Nov 14, 11			
	Minimum: 10.5	10.2			
	Average: 10.6	10.3			
	Comments:				
235	Description: Bottom Shell		9.5	3.2	6.3
	Date: Sept 22, 08	Nov 14, 11			
	Minimum: 10.4	10.2			
	Average: 10.5	10.3			
	Comments:				