



Equip. No. \_\_\_\_\_ Prov. Reg. No. Ⓐ C 34664 C.R.N. K-2109.1 Serial No. 12026 Yr. Inst. \_\_\_\_\_  
 Code/Div. ASME VIII, DIV1 Size: 96in x 10ft Manufacturer: BILTON Yr. Blt. 2001  
 C. Stamp: \_\_\_\_\_ Service: SOUR PWHT: NIL Radiography: NIL Insulated: YES

**Design & Materials Data**

HEAD:  
 Top Mat'l. SA 516 70 Top Nom. 7.9mm Top C.A. 3.2mm  
 Btm. Mat'l. \_\_\_\_\_ Btm. Nom. \_\_\_\_\_ Btm. C.A. \_\_\_\_\_  
 CHANNEL:  
 Material: \_\_\_\_\_ Nominal: \_\_\_\_\_ C.A. \_\_\_\_\_  
 BOOT  
 Head Mat'l. \_\_\_\_\_ Head Nom. \_\_\_\_\_ Head C.A. \_\_\_\_\_  
 Shell Mat'l. \_\_\_\_\_ Shell Nom. \_\_\_\_\_ Shell C.A. \_\_\_\_\_  
 SHELL  
 Material: SA 516 70 Nominal: 9.5mm C.A. 3.2mm  
 MAWP Shell Side: 345 kPa @ Temp. 93°C  
 MAWP Tube Side: \_\_\_\_\_ @ Temp. \_\_\_\_\_

CLIENT	CANADIAN NATURAL RESOURCES LTD	
FACILITY	GRAHAM GAS GATHERING a-95-K/94-B-08	
ITEM	FLARE KNOCKOUT	
BY: NR	DATE: 11/2008	DWG.# 69



# UTS DATA

**CLIENT:** CANADIAN NATURAL RESOURCES  
**EQUIPMENT:** FLARE KNOCKOUT PIPING  
**CRN#:**  
**PROV REG:**  
**TESTED ON STREAM**

**FACILITY:** GRAHAM GAS GATHERING  
**SERVICE:** SOUR  
**LOCATION:** a-95-K/94-B-08  
**RTD JOB #:** 05.002402  
**REFER TO DRAWING:** 69

Test Point	THICKNESS DATA				Flag	Crit	C.A.	Nom.	Short Term	Long Term	Ave. mm/py	Flag Date
<b>205</b>												
Description:	<b>2" 90° ELBOW</b>											
	2008 11											
Min. Thick.	4.6	4.81	1.6	.7	5.5							L 2008
Average:	5							0	0			L
Analysis:	2008/11 CORROSION PRESENT. CRITICAL THICKNESS CALCULATIONS CARRIED OUT TO 0.1mm BUT CODE MINIMUM IS MAINTAINED AT 1.6mm											

<b>220</b>												
Description:	<b>3" 90° ELBOW</b>											
	2008 11											
Min. Thick.	4.6	4.81		.7	5.5							L 2008
Average:	4.7							0	0			L 2008
Analysis:	2008/11 CRITICAL THICKNESS CALCULATIONS CARRIED OUT TO 0.1mm BUT CODE MINIMUM IS MAINTAINED AT 1.6mm											