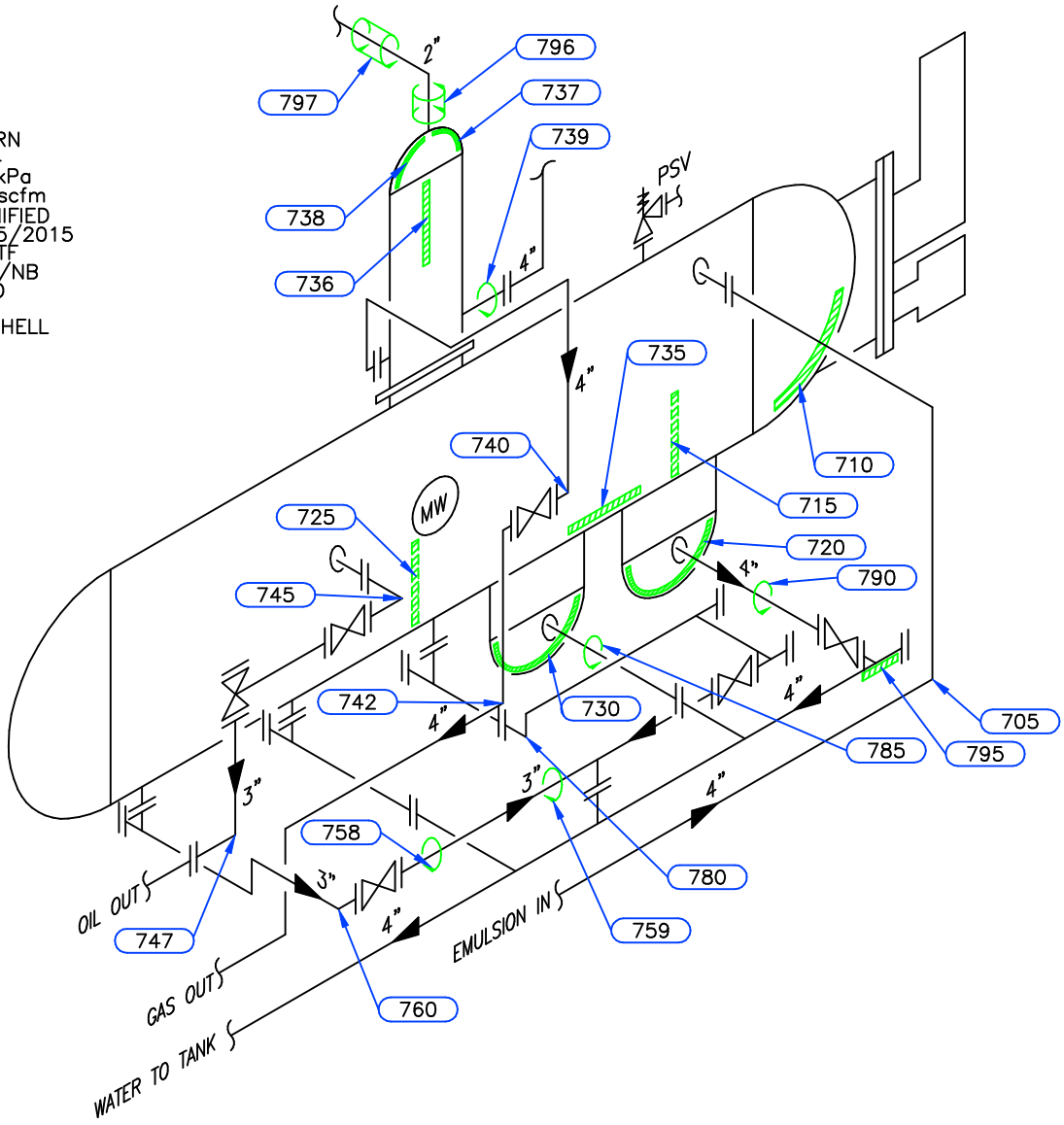
PSV DATA
MFG: WELLMARK
MODEL: W9503-RN
SERIAL: 67893-4
SET PRES: 345 kPa
CAPACITY: 2445 scfm
SERVICED BY: UNIFIED
SERVICE DATE: 05/2015
SIZE: 3in x 3in TF
CODE STAMP: UV/NB
BLOCK VALVE: NO
CRN: N/S
LOCATION: TOP SHELL
TAG: 2415F



BC 42P686

Equip. No. _____ Prov. Reg. No. Ⓐ 68932 C.R.N. A-6968.21 Serial No. L-1059 Yr. Inst. _____

Code/Div. ASME VIII, Div 1 Size: 10ft x 25ft Manufacturer: NATIONAL TANK CO. Yr. Blt. 1967

C. Stamp: M Service: SOUR PWHT: NIL Radiography: NIL Insulated: ASBESTOS

Design & Materials Data

HEAD:
Top Mat'l. SA 283 C Top Nom. 11.1mm Top C.A. N/S
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 285 C Nominal: 9.5mm C.A. N/S

MAWP Shell Side: 345 kPa @ Temp. 149°C

MAWP Tube Side: _____ @ Temp. _____

CLIENT	CANADIAN NATURAL RESOURCES LTD
FACILITY	NANCY BATTERY PEE JAY UNIT#3 LSD d-65-H/94-A-15
ITEM	FREE WATER KNOCK OUT DRUM
BY: LO	DATE: 06/2008 DWG.# 7

UTS DATA

CLIENT: CANADIAN NATURAL RESOURCES
FACILITY: NANCY BATTERY PEE JAY UNIT #3
EQUIPMENT: FREE WATER KNOCK OUT DRUM
SERVICE: SOUR
CRN#: A-6968.21
LOCATION: d-65-H/94-A-15
PROV REG: A 68932
RTD JOB #: 4016101
TESTED ON STREAM
REFER TO DRAWING: 7

THICKNESS DATA

Test Point								Flag	T-Min	C.A.	Nom.	Short Term	Long Term	Ave. mm/py	Retirement Date
710															
Description:	LOWER HEAD														
	2008 6		2011 2		2015 1		2020 2								
Min. Thick.	14.8		14		14		14	11.10	7.9		11.10	0		.07	
Average:	15.3		14.9		14.9		14.9					0		.03	2112
Analysis:	02/2020 - MIN SCAN @ START OF BAND.														
715															
Description:	LOWER SHELL														
	2015 1		2020 2												
Min. Thick.	9.5		9.5					9.50			9.50	0		0	
Average:	10		10									0		0	
Analysis:															
720															
Description:	BOOT-BOTTOM HEAD														
	2008 6		2011 2		2015 1		2020 2								
Min. Thick.	9.8		9.8		9.8		9.8	0.00				0		0	
Average:	11		11		11		11					0		0	
Analysis:	2008/06 MIN SCAN AT KNUCKLE														
725															
Description:	LOWER SHELL														
	2008 6		2011 2		2015 1		2020 2								
Min. Thick.	9.6		9.6		9.6		9.6	9.50			9.50	0		0	
Average:	9.8		9.8		9.8		9.8					0		0	
Analysis:	2008/06 LAMINATIONS NOTED														
730															
Description:	BOOT-BOTTOM HEAD														
	2008 6		2011 2		2015 1		2020 2								
Min. Thick.	9.4		6.8		6.8		6.8	0.00				0		.22	
Average:	11		9.3		9.3		9.3					0		.15	
Analysis:	NOTE: 2011/02 ISOLATED PIT @ SHELL TO WELD: 5.6 (MIN) & 5.9 (AVG).														
735															
Description:	BOTTOM SHELL														
	2008 6		2011 2		2015 1		2020 2								
Min. Thick.	8.1		8.1		8.1		8.1	9.50	7.9		9.50	0		0	
Average:	9		9		9		9					0		0	2028
Analysis:															

UTS DATA

CLIENT: CANADIAN NATURAL RESOURCES
FACILITY: NANCY BATTERY PEE JAY UNIT #3
EQUIPMENT: FREE WATER KNOCK OUT DRUM
SERVICE: SOUR
CRN#: A-6968.21
LOCATION: d-65-H/94-A-15
PROV REG: A 68932
RTD JOB #: 4016101
TESTED ON STREAM
REFER TO DRAWING: 7

THICKNESS DATA

Test Point		Flag	T-Min	C.A.	Nom.	Short Term	Long Term	Ave. mm/py	Retirement Date
736									
Description:	BOOT - SHELL								
	2020 2								
Min. Thick.	7.5	0.00							
Average:	7.7					0	0		
Analysis:									
737									
Description:	BOOT - HEAD								
	2020 2								
Min. Thick.	7	0.00							
Average:	7.5					0	0		
Analysis:									
738									
Description:	BOOT - HEAD								
	2020 2								
Min. Thick.	7	0.00							
Average:	7.5					0	0		
Analysis:									
739									
Description:	4" CIRC NOZZLE								
	2020 2								
Min. Thick.	7.9	8.60	2.5		8.60				
Average:	8.1					0	0		2429
Analysis:	02/2020 - THICKNESS CALCULATIONS CARRIED OUT TO 0.1mm. API 510 REFERENCES 2.5mm AS MINIMUM THICKNESS REQUIRED FOR PRESSURE VESSELS AND PIPING.								

UTS DATA

CLIENT: CANADIAN NATURAL RESOURCES
FACILITY: NANCY BATTERY PEE JAY UNIT #3
EQUIPMENT: FREE WATER KNOCK OUT DRUM PIPING
SERVICE: SOUR
CRN#:
LOCATION: d-65-H/94-A-15
PROV REG:
RTD JOB #: 4016101
TESTED ON STREAM
REFER TO DRAWING: 7

THICKNESS DATA

Test Point		2008 6	2011 2	2015 1	2020 2	Flag	T-Min	C.A.	Nom.	Short Term	Long Term	Ave. mm/py	Retirement Date
705													
Description:	4" 90° ELBOW												
	Min. Thick.	5.9	5.9	5.9	5.9	5.25		.8	6.00	0	0		
	Average:	6.3	6.3	6.3	6.3					0	0		
	Analysis:												
740													
Description:	4" 90° ELBOW												
	Min. Thick.	8.6	8.6	8.6	8.6	7.53		1.1	8.60	0	0		
	Average:	8.9	8.9	8.9	8.9					0	0		
	Analysis:												
742													
Description:	4" 90° ELBOW												
		2015 1	2020 2										
	Min. Thick.	5.7	5.7			5.25		.8	6.00	0	0		
	Average:	5.9	5.9							0	0		
	Analysis:												
745													
Description:	2" 90° ELBOW												
	Min. Thick.	5.6	5.6	5.6	5.3	4.81		.7	5.50	.06	.03		
	Average:	5.8	5.8	5.8	5.6					.04	.02		
	Analysis:												
747													
Description:	3" 90° ELBOW												
		2015 1	2020 2										
	Min. Thick.	5.3	5.3			4.81		.7	5.50	0	0		
	Average:	5.6	5.6							0	0		
	Analysis:												
758													
Description:	3" CIRC BAND												
		2015 1	2020 2										
	Min. Thick.	5	5			6.65	2.5	1	7.60	0	0		
	Average:	6.1	6.1							0	0		

Analysis: 02/2020 - THICKNESS CALCULATIONS CARRIED OUT TO 0.1mm. API 510 REFERENCES 2.5mm AS MINIMUM THICKNESS REQUIRED FOR PRESSURE VESSELS AND PIPING. RETIREMENT DATE 2071.

UTS DATA

CLIENT: CANADIAN NATURAL RESOURCES
FACILITY: NANCY BATTERY PEE JAY UNIT #3
EQUIPMENT: FREE WATER KNOCK OUT DRUM PIPING
SERVICE: SOUR
CRN#:
LOCATION: d-65-H/94-A-15
PROV REG:
RTD JOB #: 4016101
TESTED ON STREAM
REFER TO DRAWING: 7

THICKNESS DATA

Test Point		Flag	T-Min	C.A.	Nom.	Short Term	Long Term	Ave. mm/py	Retirement Date
759									
Description:	3" CIRC BAND								
	2015 1 2020 2								
Min. Thick.	3.4 3.4	6.65	2.5	1	7.60	0	0		
Average:	5.6 5.6					0	0		
Analysis:	02/2020 - CORROSION AT 6 O'CLOCK POSITION. THICKNESS CALCULATIONS CARRIED OUT TO 0.1mm. API 510 REFERENCES 2.5mm AS MINIMUM THICKNESS REQUIRED FOR PRESSURE VESSELS AND PIPING. RETIREMENT DATE								
760									
Description:	3" 90° ELBOW								
	2020 2								
Min. Thick.	6.8	6.65		1	7.60				
Average:	7.1					0	0		
Analysis:									
780									
Description:	3" 90° ELBOW								
	2008 6 2011 2 2015 1 2020 2								
Min. Thick.	6.9 6.9 6.9 6.9	6.65		1	7.60	0	0		
Average:	7.2 7.2 7.2 7.2					0	0		
Analysis:									
785									
Description:	4" CIRC BAND								
	2008 6 2011 2 2015 1 2020 2								
Min. Thick.	8.2 8.2 8.2 8.2	7.53		1.1	8.60	0	0		
Average:	8.7 8.7 8.7 8.7					0	0		
Analysis:	2008/06 MIN SCAN AT 6:00 POSITION								
790									
Description:	4" CIRC BAND								
	2008 6 2011 2 2015 1 2020 2								
Min. Thick.	8.1 8.1 8.1 8.1	7.53		1.1	8.60	0	0		
Average:	8.4 8.4 8.4 8.4					0	0		
Analysis:	2008/06 MIN SCAN AT 6:00 POSITION								
795									
Description:	4" 90° ELBOW								
	2020 2								
Min. Thick.	7.1	7.53	2.5	1.1	8.60	.08	.05		
Average:	8					0	0		
Analysis:	02/2020 - NEW PIPING. MIN SCAN @ WELDS. THICKNESS CALCULATIONS CARRIED OUT TO 0.1mm. API 510 REFERENCES 2.5mm AS MINIMUM THICKNESS REQUIRED FOR PRESSURE VESSELS AND PIPING. RETIREMENT DATE 2183.								

UTS DATA

CLIENT: CANADIAN NATURAL RESOURCES
FACILITY: NANCY BATTERY PEE JAY UNIT #3
EQUIPMENT: FREE WATER KNOCK OUT DRUM PIPING
SERVICE: SOUR
CRN#:
LOCATION: d-65-H/94-A-15
PROV REG:
RTD JOB #: 4016101
TESTED ON STREAM
REFER TO DRAWING: 7

THICKNESS DATA

Test Point		Flag	T-Min	C.A.	Nom.	Short Term	Long Term	Ave. mm/py	Retirement Date
796									
Description:	2" CIRC BAND								
	2020 2								
Min. Thick.	4.7	4.81	2.5	.7	5.50				
Average:	5					0		0	
Analysis:	02/2020 - THICKNESS CALCULATIONS CARRIED OUT TO 0.1mm. API 510 REFERENCES 2.5mm AS MINIMUM THICKNESS REQUIRED FOR PRESSURE VESSELS AND PIPING. RETIREMENT DATE 2166.								
797									
Description:	2" CIRC BAND								
	2020 2								
Min. Thick.	4	4.81	2.5	.7	5.50				
Average:	4.5					0		0	
Analysis:	02/2020 - CORROSION NOTED. THICKNESS CALCULATIONS CARRIED OUT TO 0.1mm. API 510 REFERENCES 2.5mm AS MINIMUM THICKNESS REQUIRED FOR PRESSURE VESSELS AND PIPING. RETIREMENT DATE 2073.								