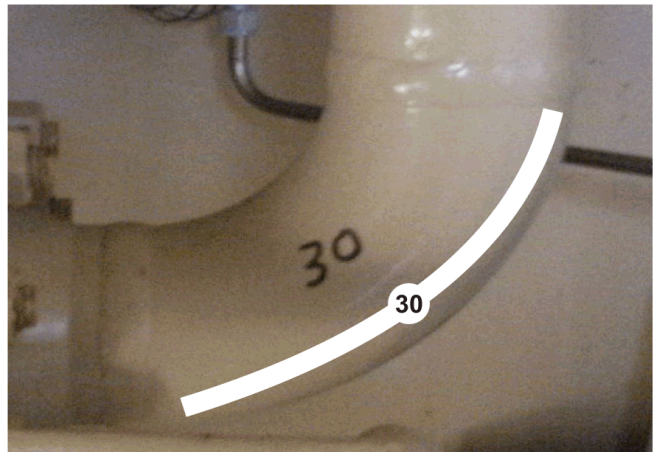
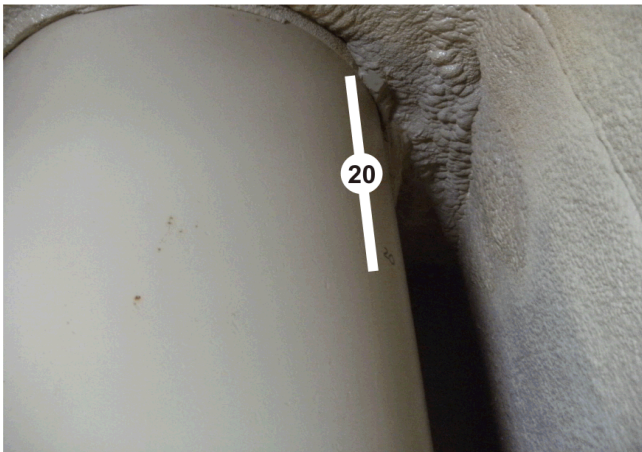
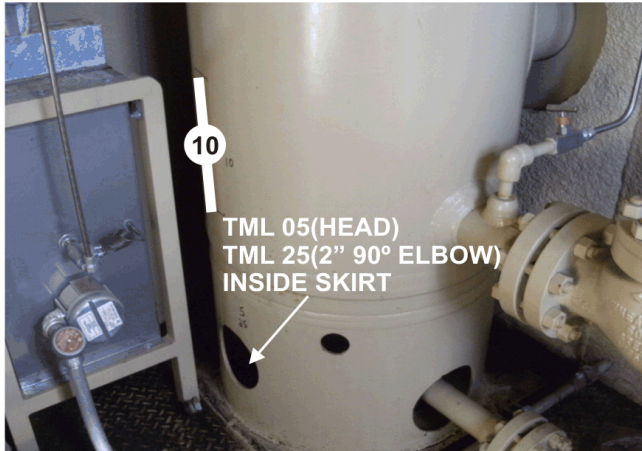


GENERAL PRESSURE VESSEL INFORMATION						
District: Slave Lake			Skid No.:			
Facility: 12-12 Boneyard			Location (LSD): 12-12-000-00W0			
Name & Equip No: SWEETNING TOWER - N/S			Orientation: Vertical			
Company: CNRL			Cost Code:			
Status: Stock			Operating Province: Alberta			
Unit:						
ABSA						
Plant:			Vessel:			
Process:			Special:			
Amount(\$):						
PRESSURE VESSEL NAMEPLATE DATA						
Registration Number: 0542589			Registration Number (Other):			
Serial Number: 3821-V1			CRN Number: R8092.231			
MAWP: 1,480.00 (psi) 10204.30 (Kpa)			AT temperature: 100.00 (F) 37.78 (C)			
Size (diam. x length): 24.00 x 120.00(In) 609.60 x 048.00 (mm)			Manufacturer: PLAINS OIL LTD.			
X-Ray: RT1			Lining Or Coated:			
Year Built: 2005			Heat Treatment: Yes			
Code parameters: UW12A			Corrosion allowance: 0.13 (In) 3.18 (mm)			
			Manway: No			
PIPING NAMEPLATE DATA						
Primary Flange Rating: 600			ASME B16.5 - Table 2-1.1 @ 150F: 1480 (psi)			
Pressure Use For TMin: Vess Design Press			Piping Operating Press: 1480 (psi)			
Stress Value: 20000 (psi)			E Value: 1			
Comments:						
SERVICE CONDITIONS-INDICATE ALL THAT APPLY						
Sweet	Sour	Oil	Gas	Water		
Amine	LPG	Condensate	Air	Glycol		
Other (Describe):						
COMPONENTS						
Name	Joint Efficiency	Outside Diameter(in.)	Head Type	Material Type	Stress Value (PSI)	Nominal Thickness(Inch)
SHELL	1.00	24.00		Unknown	17500	
HEAD	1.00	24.00	Ellipsoidal	Unknown	17500	
GENERAL COMMENTS						
PICS: 287 - 293.						



OWNER	CNRL	EQUIPMENT #	N/S
EQUIPMENT NAME	SWEETENER TOWER	SERIAL #	3821-V1
REGISTRATION #	0542589	INSPECTION DATE	APRIL 06, 2011
NOTES			

ULTRASONIC CORROSION SURVEY REPORT

EQUIP NAME: SWEETNING TOWER

SERIAL #: 3821-V1

DISTRICT: Slave Lake

PROV REG: 0542589

CRN: R8092.231

FACILITY: 12-12 Boneyard

EQUIP #: N/S

LSD: 12-12-000-00W0

SUMMARY

TYPE	LAST INSPECTION	INSPECTION INTERVAL (YEARS)	CORROSION RATE (IN/YR)		REMAINING HALF LIFE (YEARS)	GOVERNING INSPECTION INTERVAL	NEXT INSPECTION DATE
VESSEL	Apr 6, 2011	4.0	0.0000	0.0000	99.0	REGULATORY	Apr 6, 2015
PIPING	Apr 6, 2011	4.0	0.0000	0.0000	99.0		

VESSEL SURVEY READINGS

POINT NUMBER	TYPE	POINT DATA (INCH)			DATE	SURVEY READINGS			T Req (inch)	CALCULATIONS		
		NOM.	C.A.	NOM-CA		LOW	AVG			short term corr rate	long term corr rate	remaining half life
05	Head	0.0000	0.1250	-0.1250	Apr 6/11	1.104	1.130	0.943		0.0000	0.0000	99.0
10	Shell	0.0000	0.1250	-0.1250	Apr 6/11	1.018	1.025	0.982		0.0000	0.0000	99.0
15	Shell	0.0000	0.1250	-0.1250	Apr 6/11	1.031	1.035	0.982		0.0000	0.0000	99.0
20	Shell	0.0000	0.1250	-0.1250	Apr 6/11	1.030	1.035	0.982		0.0000	0.0000	99.0

PIPING SURVEY READINGS

POINT NUMBER	TYPE	POINT DATA (INCH)			DATE	SURVEY READINGS			T Req (inch)	CALCULATIONS		
		NOM.	Mill Tol./CA	NOM-CA		LOW	AVG			short term corr rate	long term corr rate	remaining half life
25	90L 2 160	0.3440	0.0430	0.3010	Apr 6/11	0.325	0.340	0.088		0.0000	0.0000	99.0
30	90L 3 XS	0.3000	0.0375	0.2625	Apr 6/11	0.282	0.295	0.129		0.0000	0.0000	99.0
35	90L 3 XS	0.3000	0.0375	0.2625	Apr 6/11	0.295	0.305	0.129		0.0000	0.0000	99.0

Field Inspection Report - CNRL

1,419

Registration #:	0542589	Equipment Name:	SWEETNING TOWER	Province:	Alberta
District:	Slave Lake	LSD:	12-12-000-00W0	Location:	12-12 Boneyard
CRN:	R8092.231	Skid Number:		Service:	
Manway:	No	Coating:		Equipment Number:	N/S
MAWP (psi):	1480.00 (psi)	Temp:	100.00 (F)	Serial Number:	3821-V1
Outstanding NCR's:	No	No.:	0		
General:					

Safety Valves

Side:	MAWP (psi)	MAWP (kPa)	PSV No.	Set Press (psi)	Set Press (kPa)	Capacity Imperial	Imperial Units	Capacity Metric	Metric Units
Shell	1480.00	10204.30	1212-2W	1440.00	9928.51	5180.00	SCFM		
Status: Stock		Examination Methods:		Access: EXTERNAL		Cleaning:			

External Inspection

Inspection Date:	Apr 6, 2011	Inspection Interval:	48	Next Insp. Date:	Apr 6, 2015
Item	Condition	Inspection Comments			
Insulation	Accept	IN GOOD CONDITION.			
External Condition	Accept	IN GOOD CONDITION, MINOR SURFACE CORROSION AROUND OUTLET PIPE.			
Leakage	Accept	NO VISIBLE LEAKS.			
Skirt/Saddle	Accept	IN GOOD CONDITION.			
Anchor Bolts	N/A	WELDED.			
Concrete Foundation	N/A				
Ladder/Platform	N/A				
Nozzle	Accept	IN GOOD CONDITION.			
Gauges	Accept	IN GOOD CONDITION.			
External Piping	Accept	IN GOOD CONDITION.			
Valving	Accept	NO LEAKS, IN GOOD CONDITION.			
PSV	Reject	NO OUTLET PIPING, SET DATE- 05/2005.			
NDE Methods	Accept	UT/VT.			
Other	N/A				
Recommendations:	INSTALL OUTLET PIPE ON PSV. SERVICE PSV BEFORE USE.		Inspected By:	Jamey Tanasichuk	ABSA PESL #: 000411

INSPECTOR : I have witnessed/done the above inspections and certify that they have been done in accordance with our approved manual and that the information is accurate. I certify that the status of the Pressure equipment detailed here is:

Suitable to be returned to service:

Repairs complete(AB-40 attached):

Repairs are still required:

Suggested Inspection interval: 48

Inspector: Jamey Tanasichuk

ABSA PESL #: 000411

Signature: 

Date: Apr 6, 2011

Pressure Safety Valve Summary

PSV Static Data

Client:	CNRL	Facility:	12-12 Boneyard
District:	Slave Lake	PSV Number:	1212-2W
Location:	12-12-000-00W0	Serial Number:	22328-4
Description:		Manufacturer:	TAYLOR
CRN:	OG1316.2C	Code Stamp:	
Model:	T-8200-1	Outlet Size:	1
Inlet Size:	1		
Side (Shell or Tube):	Shell		

PSV Service/Inspection

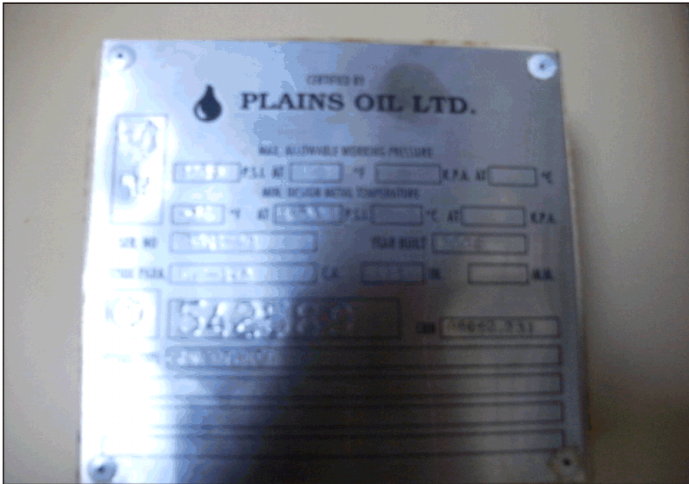
Set Date:	1 May, 2005	Service Interval:	36
Set Pressure (psig):	1440	Capacity (scfm):	5180
Service Sealed Intact:	Yes		
Block Valve Inlet:	No	Block Valve Inlet Locked Open:	
Block Valve Outlet:	No	Block Valve Outlet Locked Open:	
Service Company:		Ref Number:	
Condition:		Prepped Results:	
Service Type:		Installed Date:	
Next Service Date:	1 May, 2008		
Comments:			

Equipment Protected

<u>Reg #</u>	<u>Equip #</u>	<u>Type</u>	<u>Name</u>	<u>Status</u>	<u>MAWP</u>
0542589	N/S	Pressure Vessel	SWEETNING TOWER	Stock	1480.00

PSV Summary

PSV service is past due.



NAMEPLATE



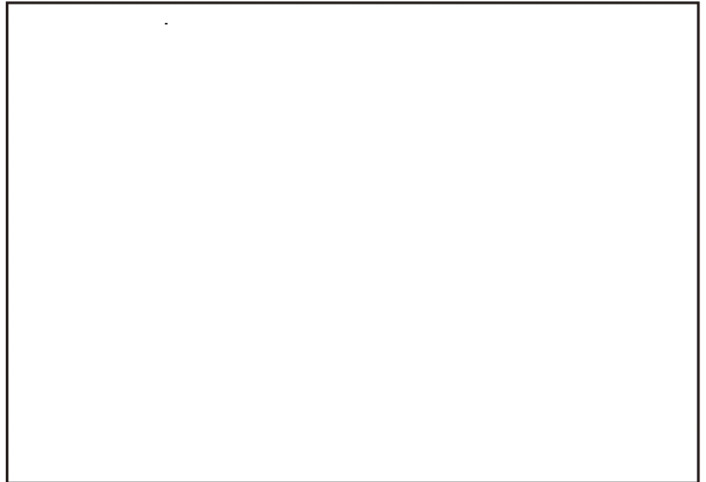
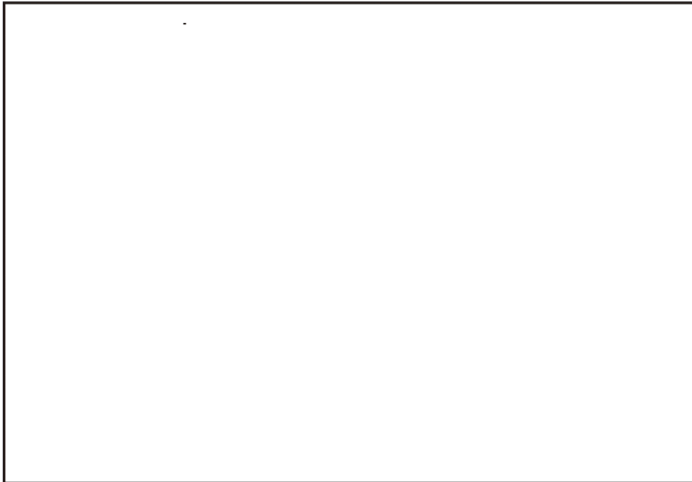
OVERALL



OVERALL



TOP/PSV



OWNER	CNRL	NOTES
EQUIPMENT NAME	SWEETENER TOWER	
REGISTRATION #	0542589	
EQUIP NUMBER	N/S	
SERIAL NUMBER	3821-V1	