

EQUIPMENT DEFICIENCY SUMMARY

District:	HANDHILLS	Facility	CESSFORD	Location/LSD	04-15-027-15W4
Equipment Nam	SEPARATOR			Prov Reg No.:	2947334
Serial No.:	40027-200	Equip No.:		National Board No.:	

UT SURVEY LATEST UT DATE USED IN SUMMARY June 30, 2015

LOCATION	Nom - CA	Low RDG	Avg RD	TMin	UT Flag	RECOMMENDATION	QUALITY ACTION	RESULT
N/A					No TMLs Flagged for This	N/A	N/A	Accept

PSV INSPECTION LATEST PSV INSP DATE USED IN SUMMARY June 30, 2015

DEFICIENCY	RECOMMENDATION	QUALITY ACTION	RESULT
No Deficiencies Found	N/A	N/A	Accept

VISUAL EXTERNAL INSPECTION LATEST VTE DATE USED IN SUMMARY June 30, 2015

DEFICIENCY	RECOMMENDATION	QUALITY ACTION	RESULT
No Deficiencies Found	N/A	N/A	Accept

VISUAL INTERNAL INSPECTION LATEST VTI DATE USED IN SUMMARY

DEFICIENCY	RECOMMENDATION	QUALITY ACTION	RESULT
N/A	N/A	N/A	N/A

PRESSURE EQUIPMENT DATA REPORT

EQUIPMENT GENERAL INFORMATION

District:	HANDHILLS		
Facility:	CESSFORD		
Location /LSD:	04-15-027-15W4	Operating Province:	Alberta
Equipment Name:	SEPARATOR		
Equipment Status:	Operating	Orientation:	Vertical
Skid No.:	Unit:		

EQUIPMENT STATIC DATA

AB Registration No.:	2947334		Serial No.:	40027-200	
Registration No./Other:			Equipment No.:		
CRN NO.:	K9275.2		Unique ID No.:		
National Board No.:			Oncor ID No.:	157144	
Manufacturer:	Nusco		Year Built:	1994	
MAWP:	1440.00 (psi)	9928.51 (Kpa)	Temperature:	100.00 (F)	37.78 (C)
Diameter.:	24.000 (In)	609.600 (mm)	Length:	90.00 (In)	2286.00 (mm)
Radiography:	RT2		Heat Treatment:		
Corrosion allowance:	0.063 (In)	1.588 (mm)	MDMT:	-20.00	
Lining Or Coated:			Painted:		
Insulated:			Internally Clad:		
Hand Hole:			Support Type:		
Manway:	No		Manway Size(In):		
Capacity/Volume(m3):			Nozzle Rating:	600.00	

MATERIALS/COMPONENTS

Name	Joint Efficiency	Outside Diameter(In.)	Head Type	Material Type	Stress Value (PSI)	Nominal Thickness(In.)
SHELL	1.00	24.000		SA-516 70	17500	1.13
HEAD	1.00	24.000	Ellipsoidal	SA-516 70	17500	1.07

PIPING STATIC DATA

Primary Flange Rating:		ASME B16.5 - Table 2-1.1 @ 150F:	(psi)
Pressure Use For TMin:	Vess Design Press	Piping Operating Press:	1440 (psi)
Stress Value:	20000 (psi)	E Value:	1.00 Joint:

SERVICE CONDITIONS

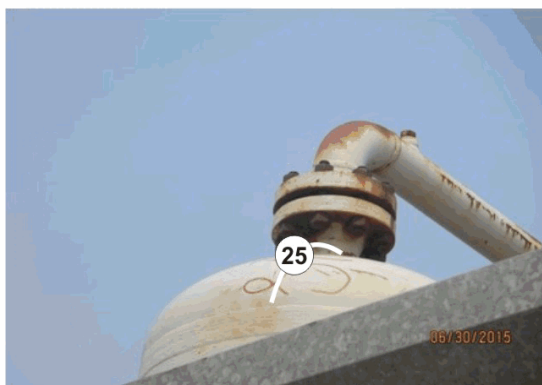
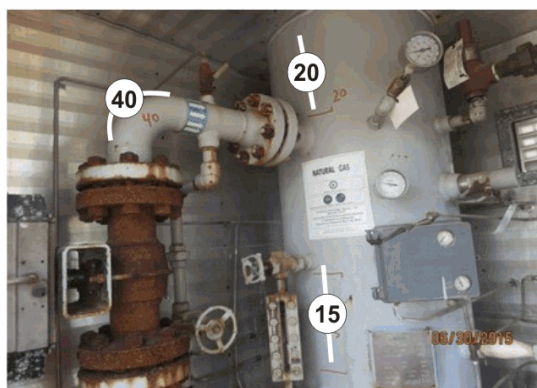
Sweet ✓	Sour	Oil	Gas	Water
Amine	LPG	Condensate	Air	Glycol

COMMENTS

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EXAMINATION ILLUSTRATION

DISTRICT:	HANDHILLS	FACILITY:	CESSFORD	LOCATION/LSD:	04-15-027-15W4
EQUIP NAME:	SEPARATOR			PROV REG No.:	2947334
SERIAL No.:	40027-200	Equip No.:		National Board No.:	



NOTES:

2947334

ULTRASONIC CORROSION SURVEY REPORT

DISTRICT:	HANDHILLS	FACILITY:	CESSFORD	LOCATION/LSD:	04-15-027-15W4
EQUIP NAME:	SEPARATOR			PROV REG No.:	2947334
SERIAL No.:	40027-200	Equip No.:		National Board No.:	

SUMMARY

TYPE	LAST INSPECTIONS	INSPECTION INTERVAL (YEARS)	CORROSION RATE (IN/YR)		REMAINING LIFE (YEARS)	NEXT INSPECTION DATE
			SHORT TERM	LONG TERM		
VESSEL	Jun 30, 2015	5.0	0.0003	0.0003	198.0	Jun 30, 2020
PIPING	Jun 30, 2015	5.0	0.0004	0.0004	198.0	


VESSEL SURVEY READINGS

POINT NUMBER	TYPE	POINT DATA (INCH)			DATE	SURVEY READINGS			CALCULATIONS				Flag
		NOM.	C.A.	NOM-CA		LOW	AVG	T Req (inch)	short term corr	long term	remaining life		
05	HEAD	1.0740	0.0625	1.0115	Jun 30/15	1.086	1.100	0.919	0.0000	0.0000	198.0	NO COMMENTS	
10	SHELL	1.1250	0.0625	1.0625	Jun 30/15	1.146	1.160	0.956	0.0000	0.0000	198.0	NO COMMENTS	
15	SHELL	1.1250	0.0625	1.0625	Jun 30/15	1.146	1.160	0.956	0.0000	0.0000	198.0	NO COMMENTS	
20	SHELL	1.1250	0.0625	1.0625	Jun 30/15	1.142	1.155	0.956	0.0000	0.0000	198.0	NO COMMENTS	
25	HEAD	1.0740	0.0625	1.0115	Jun 30/15	1.067	1.085	0.919	0.0003	0.0003	455.3	NO COMMENTS	

PIPING SURVEY READINGS

POINT NUMBER	TYPE	SIZE	SCH	POINT DATA (INCH)			DATE	SURVEY READINGS			CALCULATIONS				Flag
				NOM.	Mill Tol./CA	NOM-CA		LOW	AVG	T Req (inch)	short term corr	long term corr rate	remaining life		
30	90L 2 160	2.00	160	0.3440	0.0430	0.3010	Jun 30/15	0.354	0.370	0.086	0.0000	0.0000	198.0	NO COMMENTS	
35	90L 2 STD	2.00	STD	0.1540	0.0193	0.1347	Jun 30/15	0.209	0.220	0.086	0.0000	0.0000	198.0	NO COMMENTS	
40	90L 3 STD	3.00	STD	0.2160	0.0270	0.1890	Jun 30/15	0.208	0.215	0.126	0.0004	0.0004	221.2	NO COMMENTS	

INSPECTOR-EQUIPMENT DATA

Inspected By	Signature	CGSB Level	CGSB No.	Survey Dat	UT Equipment	Due Date OF Calibration	NDE Procedure #
Jamey Tanasichuk		1	11444	06/30/2015	109_81583903_EPOCH 4	06/27/2016	WQS UT-001

District	HANDHILLS	Facility	CESSFORD	Location/LSD	04-15-027-15W4
Equipment Name:	SEPARATOR			Prov Reg No.:	2947334
Serial No.:	40027-200	Equip No.:		National Board No.:	

External Inspection

Inspector:	Jamey Tanasichuk	ABSA PESL #:000411	Signature:		Date:	06/30/2015
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External Corrosion

There was no significant external corrosion found on the vessel/piping

Accept

External Damage

There was no external corrosion found on the vessel/piping

Accept

Leakage

No Leaks were found on the vessel or piping connections

Accept

Vessel and Piping Supports

Vessel support is Skirt and is acceptable

Accept

Vessel was not designed with anchor bolts

Accept

Vessel Foundation is Metal and is acceptable

Accept

Piping is supported by clamp and is acceptable

Accept

Insulation/Paint

	Type	Findings	
Vessel	Painted	Accept	Accept
Inlet Piping	Painted	Accept	Accept
Outlet Piping	Painted	Accept	Accept

Pressure Envelope Flanging

	Bolting	Thread engagement	Gaskets	Flange Rating	
Manway	NA				Accept
Vessel	NA				Accept
Inlet Piping	Accept	Accept	Accept	Accept	Accept
Outlet Piping	Accept	Accept	Accept	Accept	Accept
Other Piping	Accept	Accept	Accept	Accept	Accept

General

Pressure Gauge is acceptable, Temp Gauge is acceptable, Level Gauge is acceptable, Grounding is acceptable,

Accept

Comment

PRESSURE RELIEF VALVE SUMMARY

District:	HANDHILLS	Facility:	CESSFORD	Location/LSD:	04-15-027-15W4
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PSV STATIC DATA

Tag/Equip No.:	E773	Serial No.:	94C0019
Manufacturer:	CONSOLIDATED	CRN No.:	OG0449.2
Model No.:	1993C	Code Stamp:	
Side (Shell or Tube):	Shell	Outlet Size:	1
Inlet Size:	1	Outlet Type / ANSI Rating:	/
Inlet Type / ANSI Rating:	/		

PSV SERVICE DATA

Set Date:	15 Sep, 2010	Service Interval:	60
Set Pressure (psig)	1440	Capacity (scfm):	
Service Company:		Next Service Date:	15 Sep, 2015

PSV FIELD INSPECTION

Inspector Jamey Tanasichuk **Company** Western Quality Services **Signature:**  **Inspection Date:** 30-Jun-2015

Inspection Type:

RESTRICTIONS	BLINDS	INLET:	No Blinds found btwn vessels and psv inlet	Accept
		OUTLET:	No blinds found btwn PSV and discharge point	Accept
	REDUCERS	INLET:	No reducers found btwn Vessel(s) and PSV Inlet	Accept
		OUTLET:	No reducers found btwn PSV and Discharge Point	Accept
	BLOCK VALVES	INLET:	No block valve	Accept
		OUTLET:	No block valve	Accept
SERVICING	SET PRESSURE	PSV set pressure is at or less than MAWP of all linked vessels in the system.		Accept
	SERVICE DATE	PSV set date is current at time of inspection		Accept
	SERVICE SEAL	Service seal is intact		Accept
OPERATION	TAGGING	Service tag is properly attached to the psv		Accept
	VIBRATION	None		Accept
	DISCHARGE	PSV Discharge point is in a safe location and is acceptable		Accept
	LEAKS	INLET:	No visible leaks found at psv inlet connection	
OUTLET:		No visible leaks found at psv outlet connection		Accept
INSTALLATION	PSV SUPPORTS	PSV supported		Accept
	ANGLE	PSV is installed in the proper upright positon		Accept

EQUIPMENT PROTECTED

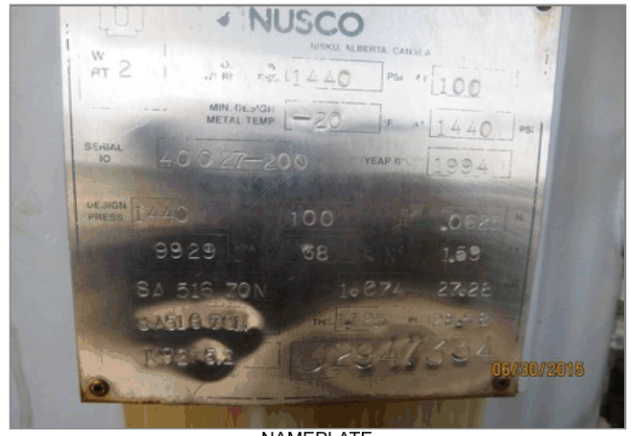
Prov Reg No.	Equipment No.	Serial No.	Equipment Name	Status	MAWP
2947334		40027-200	SEPARATOR	Operating	1440.00

PHOTOGRAPHS

EQUIP NAME:	SEPARATOR	PROV REG No.:	2947334
SERIAL No.:	40027-200	Equip No.:	National Board No.:



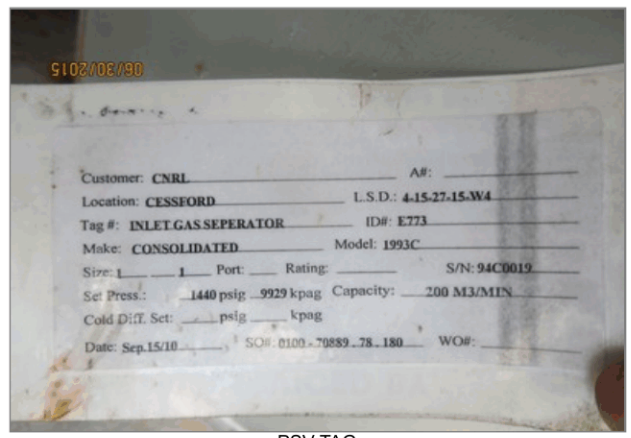
LSD



NAMEPLATE



OVERALL + PSV



PSV TAG



OVERALL



NOTES: