



Client:
CNRL

UT SURVEY
PSV INSP
VTE INSP
VTI INSP

Accept
Accept
Accept
N/A

EQUIPMENT DEFICIENCY SUMMARY

District:	Fort St John	Facility	Gutah	Location/LSD	A-098-L/094-H-10
Equipment Name	SEPARATOR			Prov Reg No.:	0535747
Serial No.:	05.328HS	Equip No.:	N/A	National Board No.:	N/S

UT SURVEY

LATEST UT DATE USED IN SUMMARY January 18, 2018

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 January 18, 2018

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

VISUAL EXTERNAL INSPECTION

LATEST VTE DATE USED IN SUMMARY January 18, 2018

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:	Fort St John		
Facility:	Gutah		
Location /LSD:	A-098-L/094-H-10	Operating Province:	British Columbia
Equipment Name:	SEPARATOR		
Equipment Status:	Operating	Orientation:	Horizontal
Skid No.:	INLET	Unit:	

EQUIPMENT STATIC DATA

AB Registration No.:	0535747		Serial No.:	05.328HS	
Registration No./Other:			Equipment No.:	N/A	
CRN NO.:	R0733.21		Unique ID No.:		
National Board No.:	N/S		Oncor ID No.:	164582	
Manufacturer:	ORBAN INDUSTRIES LTD.		Year Built:	2006	
MAWP:	655.00 (psi)	4516.09 (Kpa)	Temperature:	150.00 (F)	65.56 (C)
Diameter.:	72.000 (In)	1828.80 (mm)	Length:	302.00 (In)	7670.80 (mm)
Radiography:	RT2		Heat Treatment:	No	
Corrosion allowance:	0.000 (In)	0.000 (mm)	MDMT:	-20.00	
Lining Or Coated:	No		Painted:	Yes	
Insulated:	No		Internally Clad:	No	
Hand Hole:	No		Support Type:	Saddle	
Manway:	Yes		Manway Size(In):	20.00	
Capacity/Volume(m3):			Nozzle Rating:	300.00	

MATERIALS/COMPONENTS

Name	Joint Efficiency	Outside Diameter(In.)	Head Type	Material Type	Stress Value (PSI)	Nominal Thickness(In.)
SHELL	1.00	72.000		SA-516 70	20000	1.03
HEAD	1.00	72.000	Ellipsoidal	SA-516 70MT	20000	1.38
BRIDLE SHELL	1.00	4.000		Unknown	17500	

PIPING STATIC DATA

Primary Flange Rating:	300	ASME B16.5 - Table 2-1.1 @ 150F:	740 (psi)
Pressure Use For TMin:	Vess Design Press	Piping Operating Press:	655 (psi)
Stress Value:	20000 (psi)	E Value:	1.00 Joint: SMLS

SERVICE CONDITIONS

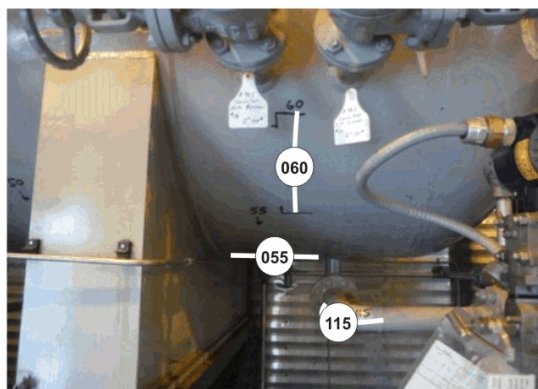
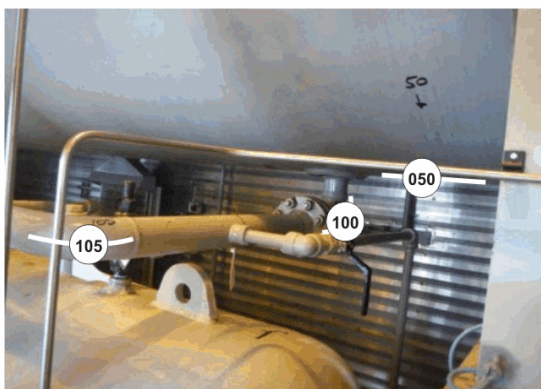
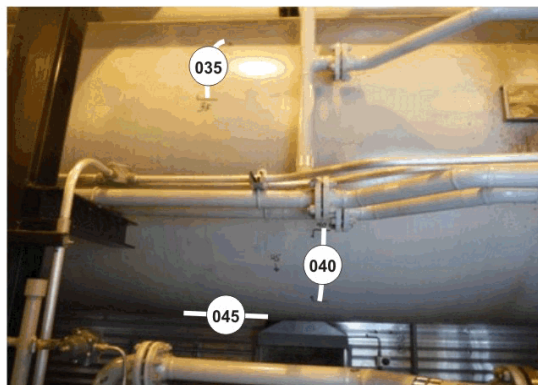
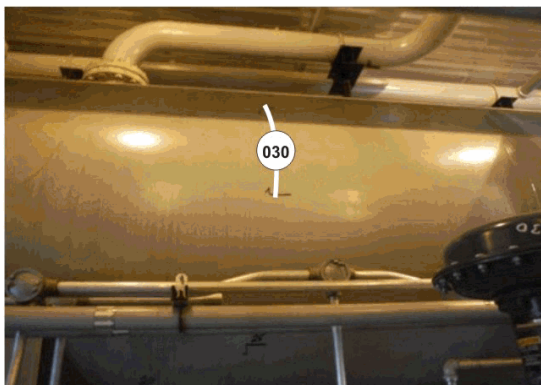
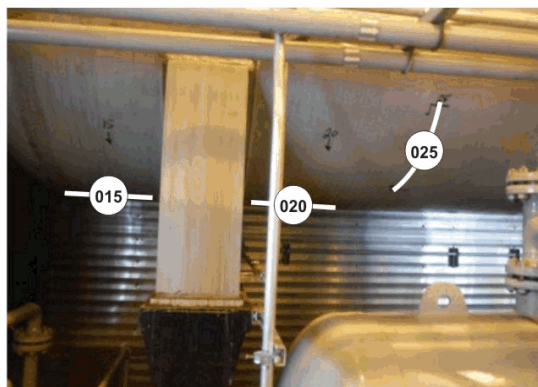
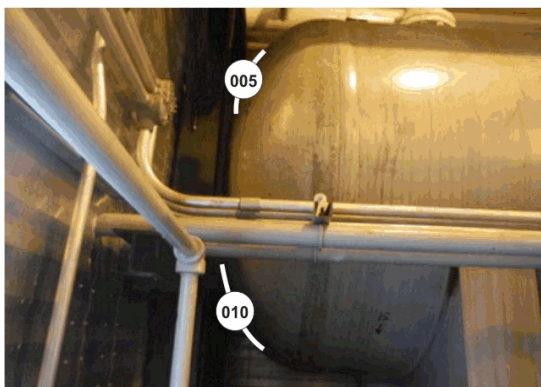
Sweet	Sour	Oil	Gas	Water
Amine	LPG	Condensate	Air	Glycol

COMMENTS

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EXAMINATION ILLUSTRATION

DISTRICT:	Fort St John	FACILITY:	Gutah	LOCATION/LSD:	A-098-L/094-H-10
EQUIP NAME:	SEPARATOR			PROV REG No.:	0535747
SERIAL No.:	05.328HS	Equip No.:	N/A	National Board No.:	N/S

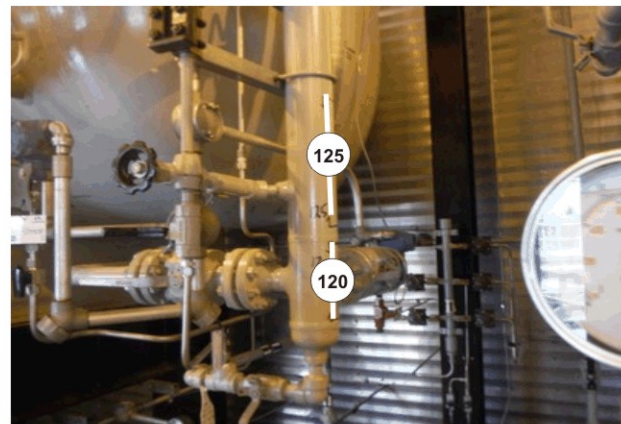
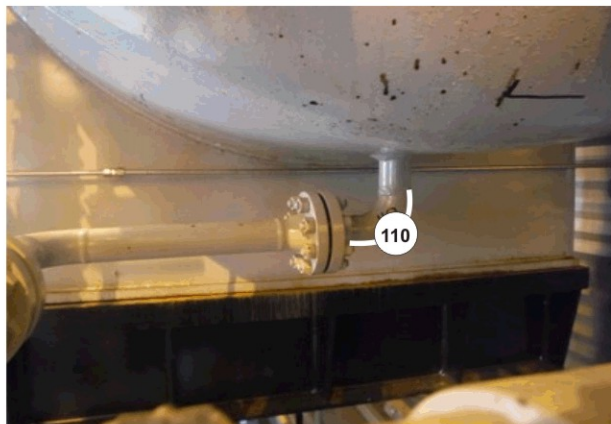
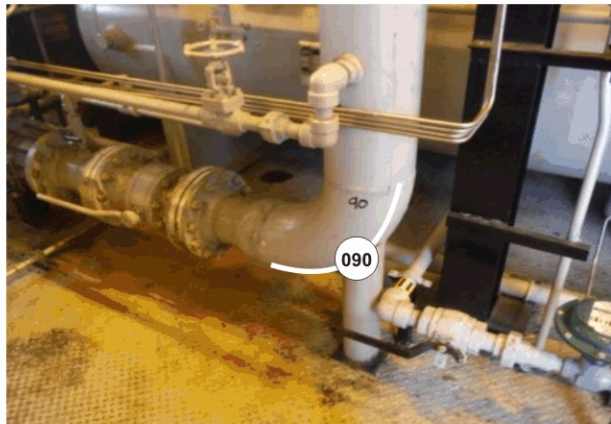
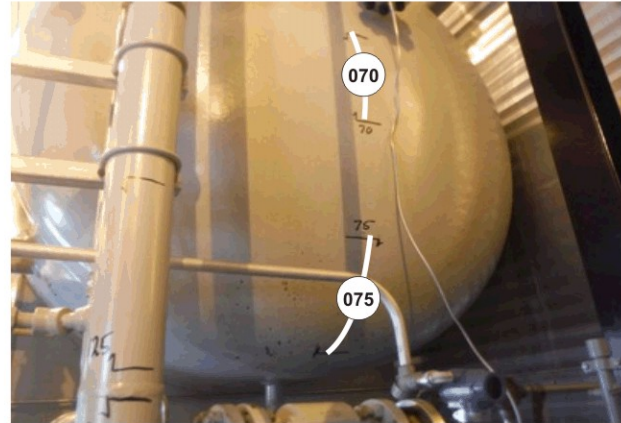
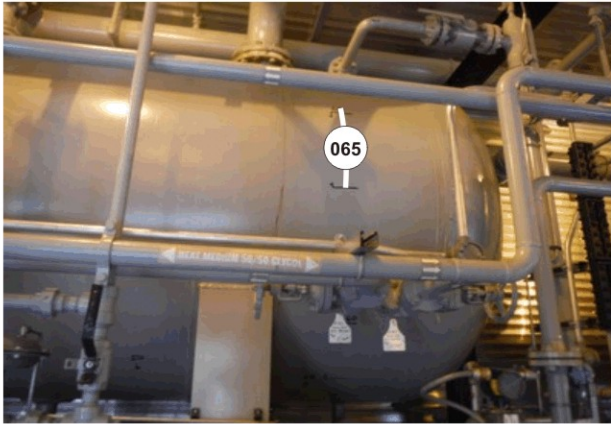


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EXAMINATION ILLUSTRATION

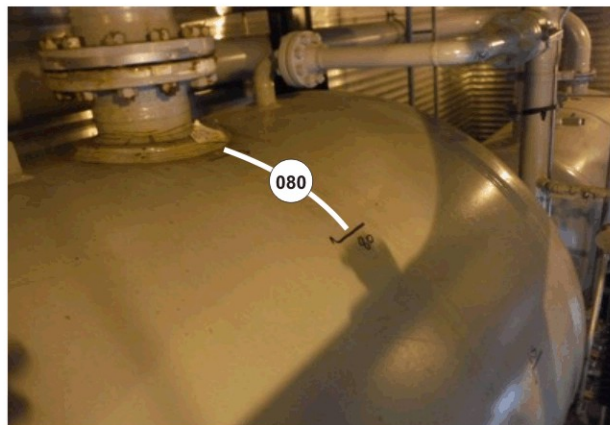
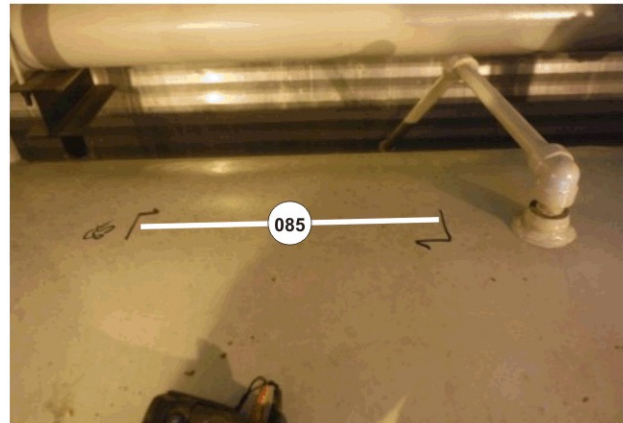
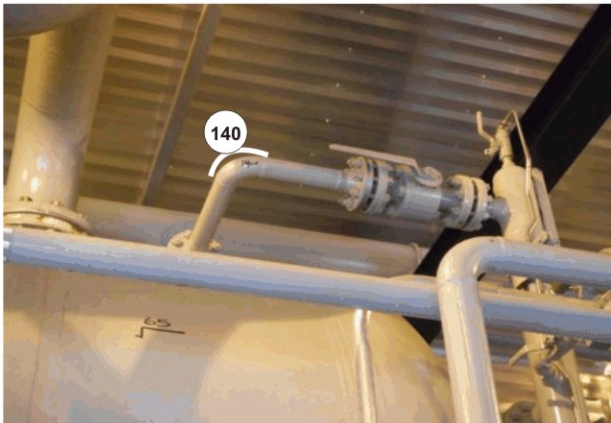
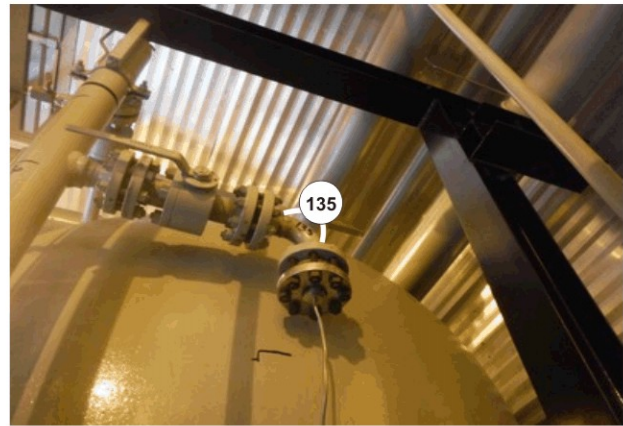
DISTRICT:	FORT ST JOHN	FACILITY:	GUTAH	LOCATION/LSO:	A-098-L/094-H-10
EQUIP NAME:	INLET SEPARATOR			PROV REG No.:	0535747
SERIAL No.:	05.328HS	Equip No.:		National Board No.:	



NOTES:

EXAMINATION ILLUSTRATION

DISTRICT:	FORT ST JOHN	FACILITY:	GUTAH	LOCATION/LSD:	A-098-L/094-H-10
EQUIP NAME:	INLET SEPARATOR			PROV REG No.:	0535747
SERIAL No.:	05.328HS	Equip No.:		National Board No.:	



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ULTRASONIC CORROSION SURVEY REPORT

DISTRICT:	Fort St John	FACILITY:	Gutah	LOCATION/LSD:	A-098-L/094-H-10
EQUIP NAME:	SEPARATOR			PROV REG No.:	0535747
SERIAL No.:	05.328HS	Equip No.:	N/A	National Board No.:	N/S

SUMMARY

TYPE	LAST INSPECTIONS	INSPECTION INTERVAL (YEARS)	CORROSION RATE (IN/YR)		REMAINING LIFE (YEARS)	NEXT INSPECTION DATE
			SHORT TERM	LONG TERM		
VESSEL	Jan 18, 2018	5.0	0.0007	0.0007	198.0	Jan 18, 2023
PIPING	Jan 18, 2018	5.0	0.0030	0.0030	58.1	

VESSEL SURVEY READINGS

POINT DATA (INCH)						SURVEY READINGS			CALCULATIONS			
POINT NUMBER	TYPE	NOM.	C.A.	NOM-CA	DATE	LOW	AVG	T Req (inch)	short term corr	long term	remaining life	Flag
005	HEAD	1.3750	0.0000	1.3750	Jan 18/18	1.386	1.400	1.145	0.0000	0.0000	198.0	NO COMMENTS
010	HEAD	1.3750	0.0000	1.3750	Jan 18/18	1.383	1.400	1.145	0.0000	0.0000	198.0	NO COMMENTS
015	SHELL	1.0250	0.0000	1.0250	Jan 18/18	1.260	1.270	1.164	0.0000	0.0000	198.0	NO COMMENTS
020	SHELL	1.0250	0.0000	1.0250	Jan 18/18	1.264	1.270	1.164	0.0000	0.0000	198.0	NO COMMENTS
025	SHELL	1.0250	0.0000	1.0250	Jan 18/18	1.272	1.280	1.164	0.0000	0.0000	198.0	NO COMMENTS
030	SHELL	1.0250	0.0000	1.0250	Jan 18/18	1.273	1.275	1.164	0.0000	0.0000	198.0	NO COMMENTS
035	SHELL	1.0250	0.0000	1.0250	Jan 18/18	1.262	1.265	1.164	0.0000	0.0000	198.0	NO COMMENTS
040	SHELL	1.0250	0.0000	1.0250	Jan 18/18	1.256	1.260	1.164	0.0000	0.0000	198.0	NO COMMENTS
045	SHELL	1.0250	0.0000	1.0250	Jan 18/18	1.258	1.265	1.164	0.0000	0.0000	198.0	NO COMMENTS
050	SHELL	1.0250	0.0000	1.0250	Jan 18/18	1.256	1.260	1.164	0.0000	0.0000	198.0	NO COMMENTS
055	SHELL	1.0250	0.0000	1.0250	Jan 18/18	1.256	1.260	1.164	0.0000	0.0000	198.0	NO COMMENTS
060	SHELL	1.0250	0.0000	1.0250	Jan 18/18	1.256	1.260	1.164	0.0000	0.0000	198.0	NO COMMENTS
065	SHELL	1.0250	0.0000	1.0250	Jan 18/18	1.260	1.265	1.164	0.0000	0.0000	198.0	NO COMMENTS
070	HEAD	1.3750	0.0000	1.3750	Jan 18/18	1.366	1.380	1.145	0.0007	0.0007	298.4	NO COMMENTS
075	HEAD	1.3750	0.0000	1.3750	Jan 18/18	1.388	1.400	1.145	0.0000	0.0000	198.0	NO COMMENTS
080	SHELL	1.0250	0.0000	1.0250	Jan 18/18	1.263	1.270	1.164	0.0000	0.0000	198.0	NO COMMENTS
085	SHELL	1.0250	0.0000	1.0250	Jan 18/18	1.281	1.290	1.164	0.0000	0.0000	198.0	NO COMMENTS
120	BRIDLE SHELL	0.0000	0.0000	0.0000	Jan 18/18	0.417	0.430	0.074	0.0000	0.0000	198.0	NO COMMENTS
125	BRIDLE SHELL	0.0000	0.0000	0.0000	Jan 18/18	0.337	0.345	0.074	0.0000	0.0000	198.0	NO COMMENTS
130	BRIDLE SHELL	0.0000	0.0000	0.0000	Jan 18/18	0.337	0.350	0.074	0.0000	0.0000	198.0	NO COMMENTS

PIPING SURVEY READINGS


POINT DATA (INCH)							SURVEY READINGS				CALCULATIONS			
POINT NUMBER	TYPE	SIZE	SCH	NOM.	Mill Tol./CA	NOM-CA	DATE	LOW	AVG	T Req (inch)	short term corr	long term corr rate	remaining life	Flag
090	90L 8 40	8.00	40	0.3220	0.0403	0.2818	Jan 18/18	0.319	0.340	0.141	0.0002	0.0002	720.9	NO COMMENTS
095	90L 8 40	8.00	40	0.3220	0.0403	0.2818	Jan 18/18	0.331	0.350	0.141	0.0000	0.0000	198.0	NO COMMENTS
100	90L 3 XXS	3.00	XXS	0.6000	0.0750	0.5250	Jan 18/18	0.564	0.600	0.057	0.0030	0.0030	171.2	NO COMMENTS



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POINT DATA (INCH)							SURVEY READINGS			CALCULATIONS				
POINT NUMBER	TYPE	SIZE	SCH	NOM.	Mill Tol./CA	NOM-CA	DATE	LOW	AVG	T Req (inch)	short term corr	long term corr rate	remaining life	Flag
105	90L 3 40	3.00	40	0.2160	0.0270	0.1890	Jan 18/18	0.226	0.240	0.057	0.0000	0.0000	198.0	NO COMMENTS
110	90L 2 160	2.00	160	0.3440	0.0430	0.3010	Jan 18/18	0.368	0.380	0.039	0.0000	0.0000	198.0	NO COMMENTS
115	90L 2 80	2.00	80	0.2180	0.0273	0.1908	Jan 18/18	0.187	0.200	0.039	0.0025	0.0025	58.1	NO COMMENTS
135	90L 2 80	2.00	80	0.2180	0.0273	0.1908	Jan 18/18	0.198	0.215	0.039	0.0016	0.0016	96.8	NO COMMENTS
140	90L 2 80	2.00	80	0.2180	0.0273	0.1908	Jan 18/18	0.205	0.220	0.039	0.0011	0.0011	155.5	NO COMMENTS

INSPECTOR-EQUIPMENT DATA

Inspected By	Signature	CGSB Level	CGSB No.	Survey Dat	UT Equipment	Due Date OF Calibration	NDE Procedure #
Justin Orichowski		SNT LV 2	16325	01/18/2018	104_91638503_EPOCH4	04/30/2018	WQS UT-001



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District	Fort St John	Facility	Gutah	Location/LSD	A-098-L/094-H-10
Equipment Name:	SEPARATOR			Prov Reg No.:	0535747
Serial No.:	05.328HS	Equip No.:	N/A	National Board No.:	N/S

External Inspection

Inspector:	Justin Orichowski	ABSA PESL #000758	Signature:		Date:	01/18/2018
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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 Saddle and is acceptable

Accept

Vessel support anchor bolts are in place and acceptable

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
Inlet Piping	Painted	Accept
Outlet Piping	Painted	Accept

Accept

Accept

Accept

Pressure Envelope Flanging

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

Accept

Accept

Accept

Accept

Accept

General

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

Accept

Comment

PRESSURE RELIEF VALVE SUMMARY

District:	Fort St John	Facility:	Gutah	Location/LSD:	A-098-L/094-H-10
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PSV STATIC DATA

Tag/Equip No.:	G705532	Serial No.:	490702-3-A10
Manufacturer:	FARRIS	CRN No.:	0G8442.5C
Model No.:	26JA12-120	Code Stamp:	
Side (Shell or Tube):	Shell	Outlet Size:	4
Inlet Size:	2.5	Outlet Type / ANSI Rating:	Flanged / 150
Inlet Type / ANSI Rating	Flanged / 300		

PSV SERVICE DATA

Set Date:	4 Feb, 2014	Service Interval:	60
Set Pressure (psig)	245	Capacity (scfm):	6391
Service Company:	UNIFIED VALVE	Next Service Date:	4 Feb, 2019

PSV FIELD INSPECTION

Inspector Justin Orichowski **Company** Western Quality Services **Signature:**  **Inspection Date:** 18-Jan-2018

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	Accept
		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
0535747	N/A	05.328HS	SEPARATOR	Operating	655.00



Client:
CNRL

GENERAL INTERNAL COMPONENT INFORMATION

District:	Fort St John	Skid No.:	INLET
Facility:	Gutah	Location (LSD):	A-098-L/094-H-10
Name & Equip No:	SEPARATOR - N/A	Orientation:	Horizontal
Company:	CNRL	Cost Code:	
Status:	Operating	Operating Province:	British Columbia

NAMEPLATE DATA

Registration Number:	Registration Number (Other):
Serial Number: 05.328HS	Manufacturer:
Year Built: 2006	Design Pressure: 150.00 (psi) 1034.22 (Kpa)
Internal Component: COIL	Design Temperature: 300.00 (F) 0.00 (C)
Equipment Type: coil	Size Diameter: (In) (mm)
Material Type: Unknown	Size Length: (In) (mm)
S Value: 15000.00	CRN: R0733.21
Joint Efficiency: 1.00	X-RAY: RT2
Corrosion Rate Allowance: (In)	Heat Treatment

ASSOCIATED EQUIPMENT

Registration Number	Equipment Number	Equipment Name
0535747	N/A	SEPARATOR

GENERAL COMMENTS

PHOTOGRAPHS

EQUIP NAME:	INLET SEPARATOR	PROV REG No.:	0535747
SERIAL No.:	05.328HS	Equip No.:	
		National Board No.:	



LSD



NAMEPLATE



OVERALL



PSV



PSV TAG



PSV TAG

NOTES: