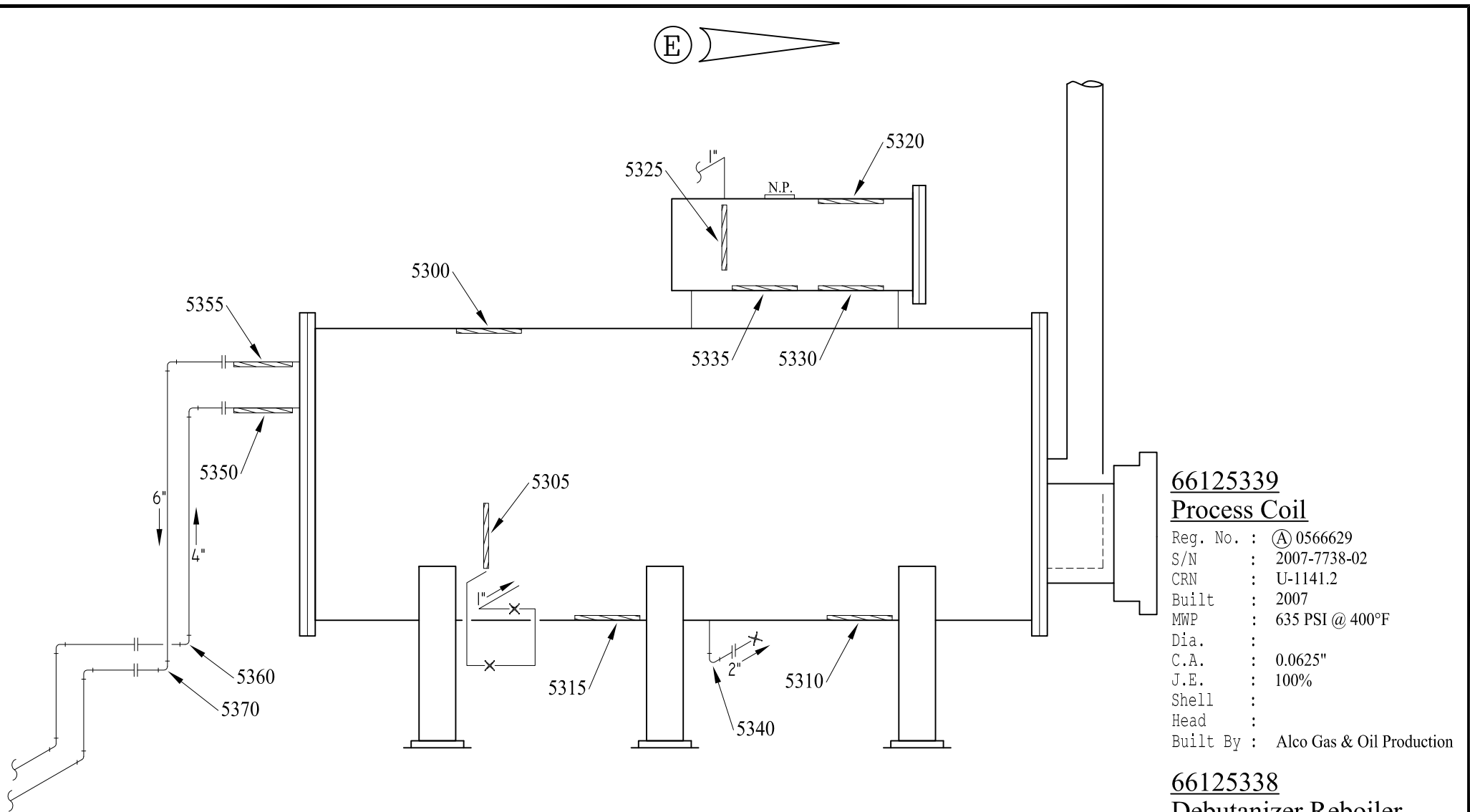




66125339
Process Coil
 Reg. No. : Ⓐ 0566629
 S/N : 2007-7738-02
 CRN : U-1141.2
 Built : 2007
 MWP : 635 PSI @ 400°F
 Dia. :
 C.A. : 0.0625"
 J.E. : 100%
 Shell :
 Head :
 Built By : Alco Gas & Oil Production

66125338
Debutanizer Reboiler
 S/N : 2007-7738-01
 CRN :
 Built : 2007
 MWP : 0
 Dia.Shell: 60" OD
 Dia.Accum: 24" OD
 C.A. : 0
 J.E. : RT / 100%
 Shell : 0.250" SA 36
 Head : 0.375" SA 36
 Built By : Alco Gas & Oil Production

Husky Energy Sylvan Lake Gas Plant 01-21-038-02 W5M		Sketched: SA		Date: 07/2013	
		AutoCad: SH		Revised:	
		Dwg: 53		Items: 5300 - 5370	

DATA PAGE

Index: 53	66125338 De-Butanizer Reboiler	Product:	JE: 100%
Component: (a)	66125338 Vessel	Drawing: 53	Dia: 1524 (mm) OD
TML: 5300	Top Shell (west end)	MfgDate: Jan 2009	CA: 0.00 (mm)
Registration:		Material: SA 36	Nominal: 6.35 (mm)
CRN:		MWP: kpa @ °C	T-min: 6.35 (mm)

	1	2	3	4	5	6	7	8	9	10	11	12	Total Loss (mm)	Loss Rate (mm/yr)	Condition Indicator
Inspection Dates	Jul														
	2013														
Temperature °C	124														
East	1	6.71													
	2	6.76													
	3	6.76													
	4	6.81													
	5	6.73													
	6	6.71													
	7	6.78													
	8	6.83													
	9	6.86													
	10	6.91													
	11	6.91													
West	12	6.83													
Comments:															
Scan Minimum (mm)	6.71														
Avg Thickness (mm)	6.80														
Avg Loss															
Avg Loss Rate															
Max Loss Rate															
Avg.Condition Indicator															
Min.Condition Indicator															

Client: Husky Energy

Facility: Sylvan Lake Gas Plant

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Index: 53	66125338 De-Butanizer Reboiler	Product:	JE: 100%
Component: (a)	66125338 Vessel	Drawing: 53	Dia: 1524 (mm) OD
TML: 5305	Lower South Shell (west end)	MfgDate: Jan 2009	CA: 0.00 (mm)
Registration:		Material: SA 36	Nominal: 6.35 (mm)
CRN:		MWP: kpa @ °C	T-min: 6.35 (mm)

	1	2	3	4	5	6	7	8	9	10	11	12	Total Loss (mm)	Loss Rate (mm/yr)	Condition Indicator
Inspection Dates	Jul														
	2013														
Temperature °C	129														
Top	1	6.92													
	2	7.00													
	3	6.87													
	4	6.70													
	5	6.90													
	6	7.02													
	7	7.10													
	8	7.02													
	9	7.05													
	10	6.97													
	11	7.05													
Bottom	12	7.02													
Comments:															
Scan Minimum (mm)	6.70														
Avg Thickness (mm)	6.97														
Avg Loss															
Avg Loss Rate															
Max Loss Rate															
Avg.Condition Indicator															
Min.Condition Indicator															

DATA PAGE

Index: 53	66125338 De-Butanizer Reboiler	Product:	JE: 100%
Component: (a)	66125338 Vessel	Drawing: 53	Dia: 1524 (mm) OD
TML: 5310	Bottom Shell (east end)	MfgDate: Jan 2009	CA: 0.00 (mm)
Registration:		Material: SA 36	Nominal: 6.35 (mm)
CRN:		MWP: kpa @ °C	T-min: 6.35 (mm)

	1	2	3	4	5	6	7	8	9	10	11	12	Total Loss (mm)	Loss Rate (mm/yr)	Condition Indicator
Inspection Dates	Jul														
	2013														
Temperature °C	110														
East	1	6.42													
	2	6.57													
	3	6.52													
	4	6.45													
	5	6.50													
	6	6.47													
	7	6.47													
	8	6.62													
	9	6.55													
West	10	6.55													
Comments:															
Scan Minimum (mm)	6.42														
Avg Thickness (mm)	6.51														
Avg Loss															
Avg Loss Rate															
Max Loss Rate															
Avg.Condition Indicator															
Min.Condition Indicator															

DATA PAGE

Index: 53	66125338 De-Butanizer Reboiler	Product:	JE: 100%
Component: (a)	66125338 Vessel	Drawing: 53	Dia: 1524 (mm) OD
TML: 5315	Bottom Shell (west of center)	MfgDate: Jan 2009	CA: 0.00 (mm)
Registration:		Material: SA 36	Nominal: 6.35 (mm)
CRN:		MWP: kpa @ °C	T-min: 6.35 (mm)

	1	2	3	4	5	6	7	8	9	10	11	12	Total Loss (mm)	Loss Rate (mm/yr)	Condition Indicator
Inspection Dates	Jul														
	2013														
Temperature °C	104														
East	1 6.61														
	2 6.58														
	3 6.66														
	4 6.63														
	5 6.61														
	6 6.66														
	7 6.68														
	8 6.66														
	9 6.68														
	10 6.66														
	11 6.66														
West	12 6.63														
Comments:															
Scan Minimum (mm)	6.58														
Avg Thickness (mm)	6.64														
Avg Loss															
Avg Loss Rate															
Max Loss Rate															
Avg.Condition Indicator															
Min.Condition Indicator															

DATA PAGE

Index: 53	66125338	De-Butanizer Reboiler	Product:	JE: 100%
Component: (b)		Accumulator	Drawing: 53	Dia: 610 (mm) OD
TML: 5320		Top Shell (east end)	MfgDate: Jan 2009	CA: 0.00 (mm)
Registration:			Material: SA 36	Nominal: 6.35 (mm)
CRN:			MWP: kpa @ °C	T-min: 6.35 (mm)

	1	2	3	4	5	6	7	8	9	10	11	12	Total Loss (mm)	Loss Rate (mm/yr)	Condition Indicator
Inspection Dates	Jul 2013														
Temperature °C	82														
East	1	5.75											0.60	0.13	-4.5
	2	5.70											0.65	0.14	-4.5
	3	5.53											0.82	0.18	-4.5
	4	5.12											1.23	0.27	-4.5
	5	5.70											0.65	0.14	-4.5
	6	5.20											1.15	0.26	-4.5
	7	5.33											1.02	0.23	-4.5
	8	5.78											0.57	0.13	-4.5
	9	5.15											1.20	0.27	-4.5
	10	5.60											0.75	0.17	-4.5
	11	4.95											1.40	0.31	-4.5
West	12	5.05											1.30	0.29	-4.5
Comments:															
Jul 2013	Band: Nominal thickness is assumed to be 6.35 mm and should be confirmed.														
Jul 2013	Band: Indications of internal corrosion appear to be occurring in the top shell of the accumulator to a low of .197". Nominal thickness is assumed to be .250".														
Scan Minimum (mm)	4.95														
Avg Thickness (mm)	5.41														
Avg Loss	0.94														
Avg Loss Rate	0.21														
Max Loss Rate	0.31														
Avg.Condition Indicator	-6.7														
Min.Condition Indicator	-4.5														

DATA PAGE

Index: 53	66125338	De-Butanizer Reboiler	Product:	JE: 100%
Component: (b)		Accumulator	Drawing: 53	Dia: 610 (mm) OD
TML: 5325		Upper South Shell (west of center)	MfgDate: Jan 2009	CA: 0.00 (mm)
Registration:			Material: SA 36	Nominal: 6.35 (mm)
CRN:			MWP: kpa @ °C	T-min: 6.35 (mm)

	1	2	3	4	5	6	7	8	9	10	11	12	Total Loss (mm)	Loss Rate (mm/yr)	Condition Indicator
Inspection Dates	Jul														
	2013														
Temperature °C	82														
Top	1	4.87											1.48	0.33	-4.5
	2	4.87											1.48	0.33	-4.5
	3	5.05											1.30	0.29	-4.5
	4	5.05											1.30	0.29	-4.5
	5	5.33											1.02	0.23	-4.5
	6	5.65											0.70	0.16	-4.5
	7	5.30											1.05	0.23	-4.5
	8	5.05											1.30	0.29	-4.5
	9	5.07											1.28	0.28	-4.5
	10	5.68											0.67	0.15	-4.5
	11	5.38											0.97	0.22	-4.5
Bottom	12	5.48											0.87	0.19	-4.5
Comments:															
Jul 2013															
Jul 2013															
Scan Minimum (mm)	4.87														
Avg Thickness (mm)	5.23														
Avg Loss	1.12														
Avg Loss Rate	0.25														
Max Loss Rate	0.33														
Avg.Condition Indicator	-5.9														
Min.Condition Indicator	-4.5														

DATA PAGE

Index: 53	66125338	De-Butanizer Reboiler	Product:	JE: 100%
Component: (b)		Accumulator	Drawing: 53	Dia: 610 (mm) OD
TML: 5330		Bottom Shell (east of center)	MfgDate: Jan 2009	CA: 0.00 (mm)
Registration:			Material: SA 36	Nominal: 6.35 (mm)
CRN:			MWP: kpa @ °C	T-min: 6.35 (mm)

	1	2	3	4	5	6	7	8	9	10	11	12	Total Loss (mm)	Loss Rate (mm/yr)	Condition Indicator
Inspection Dates	Jul														
	2013														
Temperature °C	104														
East	1	6.43													
	2	6.50													
	3	6.35													
	4	6.48													
	5	6.48													
	6	6.28											0.07	0.02	-4.5
	7	6.33											0.02	0.00	-4.5
	8	6.33											0.02	0.00	-4.5
	9	6.50													
	10	6.28											0.07	0.02	-4.5
	11	6.33											0.02	0.00	-4.5
West	12	6.48													
Comments:															
Jul 2013	Band: Nominal thickness is assumed to be 6.35 mm and should be confirmed.														
Scan Minimum (mm)	6.28														
Avg Thickness (mm)	6.40														
Avg Loss															
Avg Loss Rate															
Max Loss Rate	0.02														
Avg.Condition Indicator															
Min.Condition Indicator	-4.5														

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Index: 53	66125338	De-Butanizer Reboiler	Product:	JE: 100%
Component: (b)		Accumulator	Drawing: 53	Dia: 610 (mm) OD
TML: 5335		Bottom Shell (west of center)	MfgDate: Jan 2009	CA: 0.00 (mm)
Registration:			Material: SA 36	Nominal: 6.35 (mm)
CRN:			MWP: kpa @ °C	T-min: 6.35 (mm)

	1	2	3	4	5	6	7	8	9	10	11	12	Total Loss (mm)	Loss Rate (mm/yr)	Condition Indicator
Inspection Dates	Jul														
	2013														
Temperature °C	104														
East	1	6.48													
	2	6.50													
Pit	3	6.20											0.15	0.03	-4.5
	4	6.50													
	5	6.50													
	6	6.50													
	7	6.40													
	8	6.38													
	9	6.40													
	10	6.40													
	11	6.40													
West	12	6.35													
Comments:															
Jul 2013	Band: Nominal thickness is assumed to be 6.35 mm and should be confirmed.														
Jul 2013	Band: An indication of a possible internal pit may be present at point #3 to a low of .248". Nominal thickness is assumed to be .250".														
Scan Minimum (mm)	6.20														
Avg Thickness (mm)	6.42														
Avg Loss															
Avg Loss Rate															
Max Loss Rate	0.03														
Avg.Condition Indicator															
Min.Condition Indicator	-4.5														

Client: Husky Energy

Facility: Sylvan Lake Gas Plant

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Index: 53	66125338 De-Butanizer Reboiler	Product:	JE: 100%
Component: (c)	66125339 Process Coil - Nozzles	Drawing: 53	Dia: 60 (mm) OD
TML: 5340	2" Drain Elbow	MfgDate: Jan 2009	CA: 0.00 (mm)
Registration: A 0566629		Material: SA 234 WPB	Nominal: 3.91 (mm)
CRN: U-1141.2		MWP: kpa @ °C	T-min: 3.43 (mm)

	1	2	3	4	5	6	7	8	9	10	11	12	Total Loss (mm)	Loss Rate (mm/yr)	Condition Indicator
Inspection Dates	Jul														
	2013														
Temperature °C	32														
Top	1	3.75											0.16	0.04	9.1
	2	3.75											0.16	0.04	9.1
	3	3.68											0.24	0.05	4.7
	4	3.70											0.21	0.05	5.8
Bottom	5	3.83											0.08	0.02	21.4
Comments:															
Scan Minimum (mm)	3.65														
Avg Thickness (mm)	3.74														
Avg Loss	0.17														
Avg Loss Rate	0.04														
Max Loss Rate	0.06														
Avg.Condition Indicator	5.9														
Min.Condition Indicator	3.8														

Client: Husky Energy

Facility: Sylvan Lake Gas Plant

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Index: 53	66125338 De-Butanizer Reboiler	Product:	JE: 100%
Component: (c)	66125339 Process Coil - Nozzles	Drawing: 53	Dia: 168 (mm) OD
TML: 5350	Bottom of 6" Inlet Nozzle	MfgDate: Jan 2009	CA: 0.00 (mm)
Registration: A 0566629		Material: SA 106 B	Nominal: 7.11 (mm)
CRN: U-1141.2		MWP: 4378 kpa @ 204 °C	T-min: 6.22 (mm)

	1	2	3	4	5	6	7	8	9	10	11	12	Total Loss (mm)	Loss Rate (mm/yr)	Condition Indicator
Inspection Dates	Jul														
	2013														
Temperature °C	88														
East	1	8.06													
	2	8.11													
	3	8.08													
	4	8.08													
	5	8.03													
	6	7.98													
West	7	7.96													
Comments:															
Scan Minimum (mm)	7.96														
Avg Thickness (mm)	8.04														
Avg Loss															
Avg Loss Rate															
Max Loss Rate															
Avg.Condition Indicator															
Min.Condition Indicator															

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Index: 53	66125338 De-Butanizer Reboiler	Product:	JE: 100%
Component: (c)	66125339 Process Coil - Nozzles	Drawing: 53	Dia: 168 (mm) OD
TML: 5355	Bottom of 6" Outlet Nozzle	MfgDate: Jan 2009	CA: 0.00 (mm)
Registration: A 0566629		Material: SA 106 B	Nominal: 7.11 (mm)
CRN: U-1141.2		MWP: 4378 kpa @ 204 °C	T-min: 6.22 (mm)

	1	2	3	4	5	6	7	8	9	10	11	12	Total Loss (mm)	Loss Rate (mm/yr)	Condition Indicator
Inspection Dates	Jul 2013														
Temperature °C	93														
East	1	7.37													
	2	7.45													
	3	7.42													
	4	7.55													
	5	7.47													
	6	7.47													
	7	7.42													
	8	7.42													
West															
Comments:															
Scan Minimum (mm)	7.37														
Avg Thickness (mm)	7.45														
Avg Loss															
Avg Loss Rate															
Max Loss Rate															
Avg.Condition Indicator															
Min.Condition Indicator															

DATA PAGE

Index: 53	66125338	De-Butanizer Reboiler	Product:	JE: 100%
Component: (d)		Piping	Drawing:	Dia: 114 (mm) OD
TML: 5360		4" Inlet Elbow	MfgDate: Jan 2007	CA: 1.60 (mm)
Registration:			Material: SA 234 WPB	Nominal: 6.02 (mm)
CRN:			MWP: 4378 kpa @ 204 °C	T-min: 3.67 (mm)

	1	2	3	4	5	6	7	8	9	10	11	12	Total Loss (mm)	Loss Rate (mm/yr)	Condition Indicator
Inspection Dates	Jul														
	2013														
Temperature °C	93														
Top	1	6.09													
	2	5.92											0.10	0.02	100+
	3	6.42													
	4	5.99											0.03	0.00	100+
	5	6.17													
Bottom	6	6.12													
Comments:															
Scan Minimum (mm)	5.92														
Avg Thickness (mm)	6.12														
Avg Loss															
Avg Loss Rate															
Max Loss Rate	0.02														
Avg.Condition Indicator															
Min.Condition Indicator															

Client: Husky Energy

Facility: Sylvan Lake Gas Plant

DATA PAGE

Index: 53	66125338	De-Butanizer Reboiler	Product:	JE: 100%
Component: (d)		Piping	Drawing:	Dia: 168 (mm) OD
TML: 5370		6" Outlet Elbow	MfgDate: Jan 2007	CA: 1.60 (mm)
Registration:			Material: SA 234 WPB	Nominal: 7.11 (mm)
CRN:			MWP: 4378 kpa @ 204 °C	T-min: 4.62 (mm)

	1	2	3	4	5	6	7	8	9	10	11	12	Total Loss (mm)	Loss Rate (mm/yr)	Condition Indicator
Inspection Dates	Jul 2013														
Temperature °C	102														
Top	1	6.66											0.45	0.07	29.2
	2	6.66											0.45	0.07	29.2
	3	6.71											0.40	0.06	33.6
	4	6.88											0.23	0.04	64.3
	5	6.88											0.23	0.04	64.3
	6	6.98											0.13	0.02	100+
Bottom	7	7.31													
Comments:															
Scan Minimum (mm)	6.66														
Avg Thickness (mm)	6.87														
Avg Loss	0.24														
Avg Loss Rate	0.04														
Max Loss Rate	0.07														
Avg.Condition Indicator	54.6														
Min.Condition Indicator	29.2														