CSI

REPORT No.: 1

Canadian Softwood Inspection Agency, Inc.

Grade Inspection Report

Client:	**LACOMBE COUNTY**	*Job Number / Name*	
Manufacturer	**Koppers**	*Client P/O Number*	
Location:	**Ashcroft, British Columbia**	*Manuf P/O Number*	
Product:	**Coastal Douglas Fir Timbers**	*Specification:*	**NLGA - see description**
Est. Delivery		*Inspection Date(s):*	**April 25, 2018**

QUANTITY	SIZE/CLASS	LENGTH	DESCRIPTION	QUANTITY	SIZE/CLASS	LENGTH	DESCRIPTION
48	3 x 10	20	No. 1 Str (124B)				
48	3 x 10	24	No. 1 Str (124B)				
48	3 x 12	20	No. 1 Str (124B)				
48	3 x 12	24	No. 1 Str (124B)				
48	4 x 12	18	No. 1 Str (124B)				
48	4 x 12	22	No. 1 Str (124B)				
48	4 x 12	24	No. 1 Str (124B)				
96	4 x 12	26	No. 1 Str (124B)				
96	4 x 12	28	No. 1 Str (124B)				
72	6 x 8	22	Sel Str (131A)				
12	12 x 12	18	Sel Str (131A)				
12	12 x 12	24	Sel Str (131A)				
12	12 x 12	28	Sel Str (131A)				
12	12 x 14	30	Sel Str (131A)				

COMMENTS: 66,096 FBM

No. of Pieces Required:		Mark on Accepted Pieces:	CSI
Previously Accepted:			
Accepted This Report:	648		
ACCEPTED TO DATE:	648	Inspector:	George Nickerson

March 25, 2018

DUE DATE	~~9-Apr-18~~
PO#	LACOMBE
STRUCT SUPVR	BUTCH
BRIDGE #	0
FRAME	NO
TREAT	8 lbs @ 100%

PCS	SIZE	LENGTH		FBM
48	3 X 10	20	INCISE AND TREAT	2400

•T-810-40
•T-811-8

8-1400
40-7000

48	3 X 10	24	INCISE AND TREAT	2880

•T-812-20 •T-815-20
•T-813-8

8-1680
20-4200

48	3 X 12	20	INCISE AND TREAT	2880

•T-814-20 •T-817-18
•T-816-10

10-2100
18-3780
20-4200

48	3 X 12	24	INCISE AND TREAT	3456

•T-818-10 •T-820-10
•T-819-20 •T-821-8

8-2016
10-2520
20-5040

48	4 X 12	18	INCISE AND TREAT	3456

•T-822-24
•T-823-12
•T-824-12

12-3024
24-6048

48	4 X 12	22	INCISE AND TREAT	4224

•T-825-20
•T-826-10
•T-827-18

10-3080
18-5544
20-6160

48	4 X 12	24	INCISE AND TREAT	4608

•T-828-20
•T-829-10
•T-830-18

10-3360
18-6048
20-6720

96	4 X 12	26	INCISE AND TREAT	9984

•T-831-16 •T-834-8 •T-837-16
•T-832-8 •T-835-16 •T-838-8
•T-833-16 •T-836-8

8-2912
16-5824

96	4 X 12	28	INCISE AND TREAT	10752

•T-839-16 •T-842-8 •T-845-16
•T-840-16 •T-843-16 •T-846-8
•T-841-8 •T-844-8

8-3136
16-6272

72	6 X 8	22	INCISE AND TREAT	6336

•T-847-18 •T-850-18
•T-848-18
•T-849-18

18-5544

12	12 X 12	18	INCISE AND TREAT	2592

•T-851-8
•T-852-4

4-3024
8-6648

12	12 X 12	24	INCISE AND TREAT	3456

•T-853-4
•T-854-4
•T-855-4

4-4032

12	12 X 12	28	INCISE AND TREAT	4032

•T-856-4
•T-857-4
•T-858-4

4-4704

12	12 X 14	30	INCISE AND TREAT	5040

•T-859-4
•T-860-4
•T-861-4

4-5040

TOTAL FBM 66096

CSI

Canadian Softwood Inspection Agency, Inc.
TREATED WOOD PRODUCTS
Inspection and Progress Report

Item: Douglas Fir Timbers
Client: LACOMBE COUNTY
Manuf. And Location: Koppers, Ashcroft, BC
Destination: Lacombe County, AB
Framed To Drawing: No Incised: Yes

Purchase Order No.:
Specification: NLGA
Treatment Specification: CSA O80
Manuf. P / O No.: LACOMBE
Seasoning (MC%): Min. / Max. / Ave.

Report No.: 2
Project:
Date: June 4, 2018
Charge No.: 0963

PENETRATION RESULTS

☑ Incised Zone ☐ Non-incised Zone
☐ mm ☑ eighths

	DEPTH SAPWOOD	DEPTH PEN	% SAP SAPWOOD		DEPTH SAPWOOD	DEPTH PEN	% SAP SAPWOOD
1		8	100	1			
2		9	100	2			
3		10	100	3			
4		12	100	4			
5		11	100	5			
6		9	100	6			
7		7	100	7			
8		4	100	8			
9		7	100	9			
0		10	100	0			
1		9	100	1			
2		1	100	2			
3		7	100	3			
4		6	100	4			
5		9	100	5			
6		10	100	6			
7		5	100	7			
8		7	100	8			
9		8	100	9			
0		9	100	0			

MATERIAL INSPECTED

Process: ☑ LOWRY ☐ RUEPING ☐ FULL CELL ☐ REFUSAL

ITEM	NO. OF PIECES	SIZE / CLASS	LENGTH	☐ Lineal ☑ Fbm
	8	3 x 10	20	400
	48	3 x 10	24	2,880
	48	3 x 12	20	2,880
	48	3 x 12	24	3,456
	48	4 x 12	22	4,224
	48	4 x 12	24	4,608
	96	4 x 12	26	9,984
	24	4 x 12	28	2,688
				31,120

TREATABLE CUBIC FEET IN CHARGE: 2592

PRESERVATIVE

☑ Creosote ☐ CCA
☐ Pentachlorophenol - 5% ☐ ACQ
☐ ACZA ☐ 50/50 mix

RETENTION BY ASSAY

REQUIRED: ☐ 0.25 ☐ 0.40 ☐ 0.60 ☑ 6 lbs

INCISED ZONE		NON-INCISED ZONE
Outer	Inner	

RETENTION BY GAUGE

REQUIRED:	GALS.	RETAINED	GALS.
REQUIRED:	6.0 pcf	RETAINED	10.87 pcf

TREATING CYCLE SUMMARY

Stage	TIME	MAX. TEMP	MAX. PRESS.	VACUUM	CONDEN.
Pre-condition					
Initial Vacuum					
Bath	3.0	220			
Ball In Oil	15.2	215		20	
Initial Air					
Pressure	4.0	210	142		
Exp Bath	5.0	208			
Final vacuum	4.0			24	
Steam / Fix					

TOTAL TIME FOR TREATING: 33.25 hrs

MARKING ON ACCEPTED PIECES: CSI ☑ Yes ☐ No ☐ Random

RUNNING TALLY

NO. OF PIECES REQUIRED:	648
PREVIOUSLY ACCEPTED:	0
ACCEPTED THIS REPORT:	368
TOTAL ACCEPTED TO DATE:	368

REMARKS

George Nickerson
Inspector

KOPPERS

CONTROLLED DOCUMENT
If this box is not blue, DO NOT use this procedure - see your supervisor.

SUBJECT: **Core Sample Record** SCOPE: **Ashcroft**

Date: MAY 31, 2018 Charge #: 0963 Cyl # ONE

Instructions for sample taking: 20 samples shall be taken from representative pieces and shall be selected proportionately from different locations in the charge (i.e. Could take 10 samples from one side of the charge and 10 from the other side). (CSA 080.2-97 Section 2.2 "Retention Assay")

Sample Taken By: CASEY **Shift:** D/4

Charge Content:	
Fir	✓
Hemlock	
H.Wood	
Ties	
Bridge Timbers	✓
Piling	
Other	

Note: If more than 4 samples fail, more samples may need to be taken The charge may need to be retested if the sample failure is greater than 20% of total samples taken.

Core #	Penetration	Pass / Fail	Extra Samples
1	5/8	P	
2	6		
3	6		
4	6		
5	8		
6	8		
7	8		
8	8		
9	5		
10	5		
11	5		
12	5		
13	5		
14	5		
15	5		
16	5	P	
17	4	F	
18	5	P	
19	4	F	
20	4	↓	

Inspection Result: 100% CREO.

Charge Passes: (Y) N Retreat: Y (N) More Samples? Y (N) How Many?_____

Verified By: _____

KOPPERS

CONTROLLED DOCUMENT
If this box is not blue, DO NOT use this procedure - [illegible] your supervisor.

SUBJECT: **Timber Charge Detail** SCOPE: **Ashcroft**

Charge # 0963 Material: C.FIR Cylinder # ONE Date: MAY 30, 2018

TRAM NO	TAG NO	ORDER NO CUSTOMER	TREAT	SIZE	TALLY	PCS FBM	CU/FT
1)	846	KACOMBE	100%	4x12	8/28'	896	
	845	✓ (ALL)	CREO	4x12	16/28'	1792	
	831	✓		4x12	16/26'	1664	
	832	✓		4x12	8/26'	832	
	837	✓		4x12	16/26'	1664	
	838	✓		4x12	8/26'	832	
2)	814	✓		3x12	20/20'	1200	
	816	✓		3x12	10/20'	600	
	817	✓		3x12	18/20'	1080	
	811	✓		3x10	8/20'	406	
	835	✓		4x12	16/26'	1664	
	836	✓		4x12	8/26'	832	
3)	821	✓		3x12	8/24'	576	
	825	✓		4x12	20/22'	1760	
	826	✓		4x12	10/22'	880	
	833			4x12	16/26'	1664	
	834	✓		4x12	8/26'	832	
4)	830	✓		4x12	18/24'	1728	
	812	✓		3x10	20/24'	1200	
	813	✓		3x10	8/24'	480	
	829	✓		4x12	10/24'	960	
	828	✓		4x12	20/24'	1920	
5)	827	✓		4x12	18/22'	1584	
	818	✓		3x12	10/24'	720	
	815	✓		3x10	20/24'	1200	
	820	✓		3x12	10/24	720	
	819	✓		3x12	20/24'	1200	1440

30006 2593
31,120

Entered by: _____ Tallied by: CASEY

CHARGE DETAILS - ASHCROFT, 1425 EVANS ROAD, ASHCROFT BC V0K 1A0

Charge# 20180963	Start Date: 5/30/2018
Cylinder#: 1	Preservative: P1 (61468-1)
Conditioning: Boultonize	Borate: No
Total CuFT: 2593	Specie. Pine
Moisture%:	Required PCF: 8
Required Borate PCF:	Solution Concentration:
Plugged By: CL	Treatment Method: Lowry
Pulled By: CL	Refusal: Y
End Customer: Koppers	End Date: 5/31/2018

Comments: 100% Creosote, #3 WT.‡Pressure: IG.‡Downtime to fix back door.

ITEM DETAILS

End Cust	Commodity	Size	Description	Length	Qty	PerCuFT	Cubic Feet
KOP	Bridge timbers		3-12-288		48	6	288
KOP	Bridge timbers		3-12-240		48	5	240
KOP	Bridge timbers		4-12-336		24	9.33	223.92
KOP	Bridge timbers		4-12-312		96	8.67	832.32
KOP	Bridge timbers		4-12-264		48	7.33	351.84
KOP	Bridge timbers		4-12-288		48	8	384
KOP	Bridge timbers		3-10-288		48	5	240
KOP	Bridge timbers		3-10-240		8	4.17	33.36

Total Conditioning Hrs: 18.67

Total Borate Hrs:

Total Boultonizing Hrs: 15.17

Total Pressure Hrs: 4

Total Treating Hrs: 14.58

Total Charge Time: 33.25

Total PCS: 368

Preservative Used Lb: 28182(factor: 9.15) GL: 3080

Actual PCF: 10.87

Gross PCF:

Borate Used GL:

Borate Actual PCF: 0

Gallons Solution to Retain: ?

Total Water Removed GL: 470

STEAM CONDITIONING: NONE

BOULTONIZING TANK HEADER

Tank Begin Gallons	Tank End Gallons
42402	40691

BOULTONIZING DETAILS

Step Name	Start Date	Start Time	End Date	End Time	Temp	Inches	Water Removed	Hours
Preservative In	2018-05-30	12:30:00	2018-05-30	13:00:00	188			.5
Heat in Oil	2018-05-30	13:00:00	2018-05-30	16:00:00	220			3
Boultonizing	2018-05-30	16:00:00	2018-05-30	17:00:00	187	19	50	1
Boultonizing	2018-05-30	17:00:00	2018-05-30	18:15:00	220			1.25
Boultonizing	2018-05-30	18:15:00	2018-05-30	19:15:00	199	17	50	1
Boultonizing	2018-05-30	19:15:00	2018-05-30	21:00:00	215			1.75
Boultonizing	2018-05-30	21:00:00	2018-05-30	22:00:00	196	18	100	1
Boultonizing	2018-05-30	22:00:00	2018-05-30	23:15:00	215			1.25
Boultonizing	2018-05-30	23:15:00	2018-05-31	00:15:00	197	17	50	1
Boultonizing	2018-05-31	00:15:00	2018-05-31	01:45:00	215			1.5
Boultonizing	2018-05-31	01:45:00	2018-05-31	02:45:00	198	17	80	1
Boultonizing	2018-05-31	02:45:00	2018-05-31	04:00:00	215			1.25
Boultonizing	2018-05-31	04:00:00	2018-05-31	05:00:00	200	17	80	1
Boultonizing	2018-05-31	05:00:00	2018-05-31	06:10:00	215			1.17
Boultonizing	2018-05-31	06:10:00	2018-05-31	07:10:00	204	17	60	1
Preservative Back								0
Vacuum								0
Pumpdrips								0

TREATMENT DETAILS

Step Name	Start Date	Start Time	End Date	End Time	Vacuum	Pressure	Temp	Hours	Bump
Initial								0	
Preservative In	2018-05-31	07:10:00	2018-05-31	07:25:00			210	.25	
Heat in Oil								0	
Pressure	2018-05-31	07:25:00	2018-05-31	07:55:00		140	210	.5	
Pressure	2018-05-31	07:55:00	2018-05-31	08:25:00		140	209	.5	

Pressure	2018-05-31	08:25:00	2018-05-31	08:55:00		140	208	.5	
Pressure	2018-05-31	08:55:00	2018-05-31	09:25:00		140	207	.5	
Pressure	2018-05-31	09:25:00	2018-05-31	09:55:00		140	206	.5	
Pressure	2018-05-31	09:55:00	2018-05-31	10:25:00		140	205	.5	
Pressure	2018-05-31	10:25:00	2018-05-31	10:55:00		142	204	.5	
Pressure	2018-05-31	10:55:00	2018-05-31	11:25:00		140	202	.5	
Expansion Bath	2018-05-31	11:25:00	2018-05-31	16:25:00			208	5	
Preservative Back	2018-05-31	16:25:00	2018-05-31	17:10:00			208	.75	
Vacuum	2018-05-31	17:10:00	2018-05-31	21:10:00				4	
Pumpdrips	2018-05-31							0	
Crack and Vac	2018-05-30							0	
Change Cylinder	2018-05-31	23:10:00	2018-05-31	23:45:00				.58	

BORATE TANK READINGS

Tank Begin	Tank End	Used	Hours

TREATMENT TANK READINGS (GALLONS)

Step Name	Tank Begin	Tank End	Used	Hours
Initial				0
Preservative In				.25
Heat in Oil				0
Pressure	11745	10941	804	.5
Pressure	10941	10343	598	.5
Pressure	10343	9918	425	.5
Pressure	9918	9560	358	.5
Pressure	9560	9402	158	.5
Pressure	9402	9302	100	5
Pressure	9302	9255	47	5
Pressure	9255	9208	47	.5
Expansion Bath				5
Preservative Back	9208	39322	-30114	.75
Vacuum				4
Pumpdrips				0
Crack and Vac				0
Change Cylinder				.58

CSI

Canadian Softwood Inspection Agency, Inc.
TREATED WOOD PRODUCTS
Inspection and Progress Report

Item: Douglas Fir Timbers
Client: LACOMBE COUNTY
Manuf. And Location: Koppers, Ashcroft, BC
Destination: Lacombe County, AB
Framed To Drawing: No Incised: Yes

Purchase Order No.:
Specification: NLGA
Treatment Specification: CSA O80
Manuf. P / O No.: LACOMBE
Seasoning (MC%): Min. Max. Ave.

Report No. 3
Project:
Date: June 4, 2018
Charge No.: 0965

PENETRATION RESULTS

☑ Incised Zone ☐ Non-incised Zone
☐ mm ☑ eighths

	DEPTH SAPWOOD	DEPTH PEN	% SAP SAPWOOD		DEPTH SAPWOOD	DEPTH PEN	% SAP SAPWOOD
1		5	100	1			
2		6	100	2			
3		8	100	3			
4		4	100	4			
5		6	100	5			
6		7	100	6			
7		5	100	7			
8		9	100	8			
9		8	100	9			
0		7	100	0			
1		6	100	1			
2		5	100	2			
3		7	100	3			
4		8	100	4			
5		4	100	5			
6		6	100	6			
7		6	100	7			
8		8	100	8			
9		7	100	9			
0		8	100	0			

PRESERVATIVE

☑ Creosote ☐ CCA
☐ Pentachlorophenol - 5% ☐ ACQ
☐ ACZA ☐ 50/50 mix

RETENTION BY ASSAY

REQUIRED: ☐ 0.25 ☐ 0.40 ☐ 0.60 ☑ 6 lbs

INCISED ZONE		NON-INCISED ZONE
Outer	Inner	

RETENTION BY GAUGE

	GALS.		RETAINED	GALS.
REQUIRED:	6.0	pcf	RETAINED	7.90 pcf

RUNNING TALLY

NO. OF PIECES REQUIRED:	648
PREVIOUSLY ACCEPTED:	368
ACCEPTED THIS REPORT:	280
TOTAL ACCEPTED TO DATE	648

MATERIAL INSPECTED

Process: ☑ LOWRY ☐ RUEPING ☐ FULL CELL ☐ REFUSAL

ITEM	NO. OF PIECES	SIZE / CLASS	LENGTH	☐ Lineal ☑ Fbm
	40	3 x 10	20	2,000
	48	4 x 12	18	3,456
	72	4 x 12	28	8,064
	72	6 x 8	22	6,336
	12	12 x 12	18	2,592
	12	12 x 12	24	3,456
	12	12 x 12	28	4,032
	12	12 x 14	30	5,040
				34,976

TREATABLE CUBIC FEET IN CHARGE: 2592

TREATING CYCLE SUMMARY

Stage	TIME	MAX. TEMP	MAX. PRESS	VACUUM	CONDEN.
Pre-condition					
Initial Vacuum					
Bath	1.8	220			
Boil In Oil	9.3	220		18	
Initial Air					
Pressure	2.5	209	140		
Exp Bath	1.0	208			
Final vacuum	4.0			22	
Steam / Fix					
TOTAL TIME FOR TREATING			20.9 hrs		

MARKING ON ACCEPTED PIECES: CSI ☑ Yes ☐ No ☐ Random

REMARKS
0965 retreated as 0974 for gauge retention value shown is total for both charges

George Nickerson
Inspector

KOPPERS

CONTROLLED DOCUMENT
If this box is not blue, DO NOT use this procedure - see your supervisor.

SUBJECT: **Core Sample Record** SCOPE: **Ashcroft**

Date: JUNE 1, 2018 Charge #: 0965 Cyl # ONE

Instructions for sample taking: 20 samples shall be taken from representative pieces and shall be selected proportionately from different locations in the charge (i.e. Could take 10 samples from one side of the charge and 10 from the other side). (CSA 080.2-97 Section 2.2 "Retention Assay")

Sample Taken By: CASEY Shift: G/Y

Charge Content:	
Fir	✓
Hemlock	
H.Wood	
Ties	
Bridge Timbers	✓
Piling	
Other	

Note: If more than 4 samples fail, more samples may need to be taken. The charge may need to be retreated if the sample failure is greater than 20% of total samples taken.

Core #	Penetration	Pass / Fail	Extra Samples
1	8/8	P	
2	8		
3	7		
4	6		
5	5		
6	5		
7	5		
8	5		
9	5		
10	5		
11	5		
12	5		
13	5		
14	5		
15	5		
16	5	P	
17	4	F	
18	3		
19	3		
20	1	F	

Inspection Result: 100% - REFUSAL

Charge Passes: (Y) / N Retreat: Y / (N) More Samples? Y / (N) How Many?_____

Verified By: _____

KOPPERS

CONTROLLED DOCUMENT
If this box is not blue, DO NOT use this procedure - see your supervisor.

SUBJECT: **Timber Charge Detail** SCOPE: **Ashcroft**

Charge # 0965 Material: C.FIR Cylinder # 1(B) Date: 05.31.18

TRAM NO	TAG NO	ORDER NO CUSTOMER	TREAT	SIZE	TALLY	PCS FBM	CU/FT
	839	LACOMBF		4 X12	16/28'	1792	✓
	840	"		"	"	1792	✓
1	841	"		"	8/28'	896	✓
1	842	"		"	"	896	✓
	843	"		"	16/28'	1792	✓
	844	"		"	8/28'	896	✓
	849	"		6 X8	18/22'	1584	✓
	850	"		"	"	1584	✓
2	851	"		12 X12	8/18'	1728	✓
2	852	"		"	4/18'	864	✓
	847	"		6 X8	18/22'	1584	✓
	848	"		"	"	1584	✓
3	853	"		12 X12	4/24'	1152	✓
3	854	"		"	"	1152	✓
	855	"		"	"	1152	✓
	810	"		3 X10	40/20'	2000	✓
4	822	"		4 X12	24/18'	1728	✓
4	823	"		"	12/18'	864	✓
	824	"		"	"	864	✓
	856	"		12 X12	4/28'	1344	✓
	857	"		"	"	1344	✓
5	858	"		"	"	1344	✓
5	859	"		12 X14	4 X30'	1440	✓
	860	"		"	"	1440	✓
	861	"		"	"	1440	✓
						34256	2915

Entered by: _____ Tallied by: IREK

CHARGE DETAILS - ASHCROFT, 1425 EVANS ROAD, ASHCROFT BC V0K 1A0

Charge# 20180965	Start Date: 5/31/2018
Cylinder#: 1	Preservative: P1 (61468-1)
Conditioning: Boultonize	Borate: No
Total CuFT: 2915	Specie: Pine
Moisture%:	Required PCF: 8
Required Borate PCF:	Solution Concentration:
Plugged By: CL	Treatment Method: Lowry
Pulled By: CL	Refusal: Y
End Customer: Koppers	End Date: 6/1/2018

Comments: 15162

ITEM DETAILS

End Cust	Commodity	Size	Description	Length	Qty	PerCuFT	Cubic Feet
KOP	Bridge timbers		4-12-216		48	6	288
KOP	Bridge timbers		12-12-336		12	28	336
KOP	Bridge timbers		12-12-216		12	18	216
KOP	Bridge timbers		4-12-336		72	9.33	671.76
KOP	Bridge timbers		6-8-264		72	7.33	527.76
KOP	Bridge timbers		3-10-240		40	4.17	166.8
KOP	Bridge timbers		12-14-360		12	35	420
KOP	Bridge timbers		12-12-288		12	24	288

Total Conditioning Hrs: 11.58

Total Borate Hrs:

Total Boultonizing Hrs: 9.25

Total Pressure Hrs: 2.5

Total Treating Hrs: 9.34

Total Charge Time: 20.92

Total PCS: 280

Preservative Used Lb: 12096.3(factor: 9.15) GL: 1322

Actual PCF: 4.15

Gross PCF:

Borate Used GL:

Borate Actual PCF: 0

Gallons Solution to Retain: ?

Total Water Removed GL: 345

STEAM CONDITIONING. NONE

BOULTONIZING TANK HEADER

Tank Begin Gallons	Tank End Gallons
39258	36710

BOULTONIZING DETAILS

Step Name	Start Date	Start Time	End Date	End Time	Temp	Inches	Water Removed	Hours
Preservative In	2018-05-31	23:45:00	2018-06-01	00:15:00				5
Heat in Oil	2018-06-01	00:15:00	2018-06-01	02:05:00	220			1.83
Boultonizing	2018-06-01	02:05:00	2018-06-01	03:05:00	193	18	50	1
Boultonizing	2018-06-01	03:05:00	2018-06-01	04:15:00	220			1.17
Boultonizing	2018-06-01	04:15:00	2018-06-01	05:15:00	205	17	75	1
Boultonizing	2018-06-01	05:15:00	2018-06-01	06:20:00	220			1 08
Boultonizing	2018-06-01	06 20:00	2018-06-01	07:20 00	206	17	80	1
Boultonizing	2018-06-01	07:20:00	2018-06-01	08:20.00	220			1
Boultonizing	2018-06-01	08:20:00	2018-06-01	09:20 00	204	18	80	1
Boultonizing	2018-06-01	09:20:00	2018-06-01	10:20.00	220			1
Boultonizing	2018-06-01	10:20:00	2018-06-01	11:20:00	206	18	60	1
Preservative Back								0
Vacuum								0
Pumpdrips								0

TREATMENT DETAILS

Step Name	Start Date	Start Time	End Date	End Time	Vacuum	Pressure	Temp	Hours	Bump
Initial								0	
Preservative In	2018-06-01	11:20:00	2018-06-01	11:30:00			210	.17	
Heat in Oil								0	
Pressure	2018-06-01	11:30.00	2018-06-01	12:00:00		140	209	.5	
Pressure	2018-06-01	12:00:00	2018-06-01	12:30:00		140	208	.5	
Pressure	2018-06-01	12:30:00	2018-06-01	13:00:00		140	206	.5	
Pressure	2018-06-01	13:00:00	2018-06-01	13:30:00		140	205	.5	
Pressure	2018-06-01	13:30:00	2018-06-01	14:00:00		140	204	.5	
Expansion Bath	2018-06-01	14:00:00	2018-06-01	15:00:00				1	

Preservative Back	2018-06-01	15:00:00	2018-06-01	15:40:00			208	.67	
Vacuum	2018-06-01	15:40:00	2018-06-01	19:40:00	22			4	
Pumpdrips	2018-06-01							0	
Crack and Vac	2018-05-31							0	
Change Cylinder	2018-06-01	21:40:00	2018-06-01	22:40:00				1	

BORATE TANK READINGS

Tank Begin	Tank End	Used	Hours

TREATMENT TANK READINGS (GALLONS)

Step Name	Tank Begin	Tank End	Used	Hours
Initial				0
Preservative In				.17
Heat in Oil				0
Pressure	12614	10302	2312	.5
Pressure	10302	9724	578	.5
Pressure	9724	9373	351	.5
Pressure	9373	9326	47	.5
Pressure	9326	9279	47	.5
Expansion Bath				1
Preservative Back	9279	37936	-28657	.67
Vacuum				4
Pumpdrips				0
Crack and Vac				0
Change Cylinder				1

G

KOPPERS

CONTROLLED DOCUMENT
If this box is not blue, DO NOT use this procedure - see your supervisor.

SUBJECT: **Core Sample Record** SCOPE: **Ashcroft**

Date: 06 June 18 Charge #: 0974 Cyl # 1

Instructions for sample taking: 20 samples shall be taken from representative pieces and shall be selected proportionately from different locations in the charge (i.e. Could take 10 samples from one side of the charge and 10 from the other side). (CSA 080.2-97 Section 2.2 "Retention Assay")

Sample Taken By: DARRIN Shift: Ey

Charge Content:	
Fir	/
Hemlock	
H.Wood	
Ties	
Bridge Timbers	/
Piling	
Other	

Note: If more than 4 samples fail, more samples may need to be taken. The charge may need to be retreated if the sample failure is greater than 20% of total samples taken.

Core #	Penetration	Pass / Fail	Extra Samples
1	5	P	
2	"	"	
3	"	"	
4	"	"	
5	"	"	
6	"	"	
7	"	"	
8	"	"	
9	"	"	
10	"	"	
11	"	"	
12	"	"	
13	"	"	
14	"	"	
15	"	"	
16	"	"	
17	"	"	
18	"	"	
19	"	"	
20	V	V	

Inspection Result:

Charge Passes: (Y) N Retreat: (Y) N More Samples? Y (N) How Many?_____

Verified By: _____

CHARGE DETAILS - ASHCROFT, 1425 EVANS ROAD, ASHCROFT BC V0K 1A0

Charge# 20180974	Start Date: 6/4/2018
Cylinder#: 1	Preservative: P1 (61468-1)
Conditioning: Boultonize	Borate: No
Total CuFT: 2915	Specie: Pine
Moisture%:	Required PCF: 8
Required Borate PCF:	Solution Concentration:
Plugged By: DC	Treatment Method: Lowry
Pulled By: DC	Refusal: N
End Customer: Koppers	End Date: 6/6/2018

Comments: 06/05/2018 05:32:42 pm]

ITEM DETAILS

End Cust	Commodity	Size	Description	Length	Qty	PerCuFT	Cubic Feet
KOP	Bridge timbers		[null]		1	2915	2915

Total Conditioning Hrs: 8.58

Total Borate Hrs:

Total Boultonizing Hrs: 5.24

Total Pressure Hrs: .33

Total Treating Hrs: 30.08

Total Charge Time: 38.66

Total PCS: 1

Preservative Used Lb: 10935.46(factor: 9.15) GL: 1195

Actual PCF: 3.75

Gross PCF:

Borate Used GL:

Borate Actual PCF: 0

Gallons Solution to Retain: ?

Total Water Removed GL: 140

STEAM CONDITIONING: NONE

BOULTONIZING TANK HEADER

Tank Begin Gallons	Tank End Gallons
37556	34792

BOULTONIZING DETAILS

Step Name	Start Date	Start Time	End Date	End Time	Temp	Inches	Water Removed	Hours
Preservative In	2018-06-04	22:10:00	2018-06-04	23:00:00				.83
Heat in Oil	2018-06-04	23:00:00	2018-06-05	01:30:33	220			2.51
Boultonizing	2018-06-05	01:30:33	2018-06-05	02:30:00	195	18	60	.99
Boultonizing	2018-06-05	02:30:00	2018-06-05	03:30:00	220			1
Boultonizing	2018-06-05	03:30:00	2018-06-05	04:30:00	200	18	80	1
Boultonizing	2018-06-05	04:30:00	2018-06-05	05:45:00	220			1.25
Boultonizing	2018-06-05	05:45:00	2018-06-05	06:45:00	210	20	0	1
Preservative Back								0
Vacuum	2018-06-04							0
Pumpdrips	2018-06-04							0

TREATMENT DETAILS

Step Name	Start Date	Start Time	End Date	End Time	Vacuum	Pressure	Temp	Hours	Bump
Initial	2018-06-04							0	
Preservative In								0	
Heat in Oil								0	
Pressure	2018-06-05	11:40:00	2018-06-05	12:00:00		160	190	.33	
Expansion Bath	2018-06-05	15:45:00	2018-06-05	16:45:00			215	1	
Preservative Back	2018-06-05	16:45:00	2018-06-06	17:30:00			188	24.75	
Vacuum	2018-06-05	18:00:00	2018-06-05	22:00:00	21			4	
Pumpdrips	2018-06-05							0	
Crack and Vac	2018-06-04							0	
Change Cylinder	2018-06-04							0	

BORATE TANK READINGS

Tank Begin	Tank End	Used	Hours

TREATMENT TANK READINGS (GALLONS)

Step Name	Tank Begin	Tank End	Used	Hours
Initial				0
Preservative In				0
Heat in Oil				0

Pressure	6577	4698	1879	.33
Expansion Bath				1
Preservative Back	4698	36274	-31576	24.75
Vacuum				4
Pumpdrips				0
Crack and Vac				0
Change Cylinder				0