Project No.: EA16335

wood.

Attn: Rishi Adhikari, P.Eng.

To: Alberta Transportation
Technical Standards Branch
2nd Floor, Twin Atria Building
4999 - 98 Ave
Edmonton, AB T6B 2X3

Distribution Addressee: Wood Environment & Infrastructure Solutions

5671 - 70 Street Edmonton, AB

Canada T6B 3P6 Tel +1 (780) 436-2152

Fax +1 (780) 377-3599

Fo	rmulation:	Su	ıpplier:		ENNIS				
Yellow	WB EF-62-0035		Tests R	equired					
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2018	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B 6	CPP1903Y0142	1.610	79.1	78.8	59.2	May-16	May-24	Jun-3	AAA Stripping Hwy 27:06
B 8	CPP1807Y1314	1.467*	69.2*	76.1	57.8	May-14	May-22	Jun-3	Lafrentz Hwy 2:64
B10	CPP1904Y0239	1.579	74.0	77.8	59.2	May-13	May-24		Volker Stevin Pincher Greek AB
B12	CPP1904Y0418	1.631	79.3	78.9	59.9	May-26	May-29		CMA18 Hwy 11:10
			Toleranc	e Limits				<u> </u>	
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	erance Limits			± 2%	± 2%				
		± 0.05	± 5	absolute	absolute				
U	pper Limit	1.677	83.2	80.5	61.3				
L	ower Limit	1.577	73.2	76.5	57.3				

* Indicates result outside tolerance limits.

Test not Required by AT

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Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2018	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B14	CPP1904Y0419	1.588	78.0	78.7	59.9	May-28	May-30	Jun-7	Lafrentz Hwy 16:22 and 24
B16	CPP1806Y0764	1.607	79.1	78.6	59.8	May-30	N/A		Lafrentz Hwy 661: 12
B18	CPP1904Y0419	1.614	77.8	78.9	60.1	May-31	May-28	Jun-7	Lafrentz Hwy 11:08
B20	CPP1810Y1681	1.588	77.0	78.7	59.4	May-26	Jun-5		AAA Stripping Hwy 45:12
B22	CPP1810Y1681	1.609	76.2	78.4	59.2	May-26	Jun-5		AAA Stripping Hwy 45:10
B24	CPP1809Y1550	1.609	90.9*	80.4	61.3	May-30	Jun-5	 	Aecon Hwy 3:4
			Tolerance	e Limits					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	erance Limits			± 2%	± 2%				
		± 0.05	± 5	absolute	absolute				
U	pper Limit	1.677	83.2	80.5	61.3				
L	ower Limit	1.577	73.2	76.5	57.3				

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VIIIIIII VOI IIIIIIIIIIIIIIIIIIIIIIIIII	PER:	111-11	7 Jun 10
	r = n.	Maril	7-Jun-19
			DATE
	Reviewed By:		
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Yellow	WB EF-62-0035		Tests R	equired					
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2018	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B26	CPP1903Y0142	1.592	76.4	78.6	59.3	May-20	Jun-5		AAA Stripping Hwy 13:06
B28	CPP1905Y0557	1.572*	76.6	78.4	59.4	May-4	Jun-7	Jun-17	Lafrentz Hwy 35:06
B30	CPP1904Y0418	1.582	78.6	78.8	59.7	May-27	Jun-10	Jun-17	Lafrentz Hwy 2A: 36 and 35: 04 CMA East 4
B32	CPP1903Y0142	1.599	76.6	78.7	59.3	Jun-6	Jun-10		AAA Stripping Hwy 27: 06
B34	CPP1903Y0142	1.611	77.0	80.2	59.3	Jun-6	Jun-11	Jun-17	AAA Stripping Hwy 21 :24 to Camrose CL Km 27:903 to 31:449 Hwy 13 to N OF Hwy 616
B36	CPP1903Y01227	1.638	76.0	78.8	59.7	Jun-5	Jun-11		Emcon Services Hwy 63:12
B38	CPP1904Y0419	1.579	76.3	78.1	59.5	Jun-8	Jun-11		Lafrentz Hwy 33:04 from Hwy 43 to 9Km south of Hwy 651 to Km 19
B40	CPP1903Y0208	1.600	75.6	78.1	59.5	Jun-10	Jun-11	Jun-17	Volker Stevin Lethbridge
			Toleranc	e Limits					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	rance Limits			± 2%	± 2%				
		± 0.05	± 5	absolute	absolute				
	pper Limit	1.677	83.2	80.5	61.3				
Lo	ower Limit	1.577	73.2	76.5	57.3	·			

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PER:

17-Jun-19

DATE

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Yellow	WB EF-62-0035		Tests R	equired					
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2018	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B42	CPP1903Y0227	1.605	76.6	78.6	59.2	Jun-10	Jun-14	Jun-24	Volker Stevin TEBAR, AB
B44	CPP1903Y0177	1.608	77.8	78.4	59.2	Jun-14	Jun-17	Jun-24	Ledcor Hwy 748: 04/RR165
B46	CPP1905Y0620	1.611	76.0	78.2	60.0	Jun-17	Jun-18	1	Lafrentz Hwy 661:12 ,21: 26, 21:28 and Hwy 803:02 Lafrentz Hwy 642: 04
B52	CPP1905Y0620	1.563*	76.6	78.3	59.7	Jun-18	Jun-19		Emcon Hwy 36:26 CMA 8
B54	CPP1904Y0240	1.624	74.0	77.9	59.0	Jun-13	Jun-17	1	Volker Stevin Hwy 22x: 04
			Toleranc	e Limits					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	erance Limits			± 2%	± 2%				
		± 0.05	± 5	absolute	absolute				
U	pper Limit	1.677	83.2	80.5	61.3				
L	ower Limit	1.577	73.2	76.5	57.3				
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Test not Required by AT

24-Jun-19 DATE

Reviewed By:

Reporting of these results constitutes a testing service only.

Engineering Interpretation or evaluation of the test results is provided only on written request.

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Fo	rmulation:	St	upplier:		ENNIS				
Yellow	WB EF-62-0035	Tests Required							
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2018	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B56	CPP1903Y0228	1.610	70*	78.4	59.6	Jun-18	Jun-21	Jul-2	Hwy 43 : 14 WBL
B58	CPP1809Y1550	1.593	88.0*	79.9	61.0	Jun-18	Jun-21	Jul-2	Aecon Trans West Hwy 3:14
B60	CPP18091550	1.490*	69.5*	75.9*	57.8	Jun-22	Jun-26		AeconTrans West Hwy 587 :03 From Hwy 2 to Hwy 791 Pm Howie Hedges 403-348-3703
	·		Toleranc	e Limits					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	erance Limits			± 2%	± 2%				
****		± 0.05	± 5	absolute	1 1				
U	pper Limit	1.677	83.2	80.5	61.3				
L.	ower Limit	1.577	73.2	76.5	57.3				

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Test not Required by AT

PER:

2-Jul-19

DATE

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Technical Standards Branch
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Yellow	WB EF-62-0035		Tests Re	equired					
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2018	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B64	CPP1903Y0228	1.600	77.4	78.2	59.6	Jun-25	Jul-2	Jul-12	Volker Stevin Medicine Hat, AB
B68	CPP1905Y0558	1.560*	76.2	78.6	59.5	Jun-20	Jul-5	Jul-12	AAA Striping Hwy 733:02
B70	CPP1903W0143	1.577	76.2	78.1	59.2	Jun-26	Jul-10	Jul-12	Emcon Hwy 9:10 CMA 21
B72	CPP1903W0144	1.535*	76.2	78.1	59.2	Jul-9	Jul-10	Jul-12	Emcon Hwy 575:04 CMA 21
			Toleranc	e Limits					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	erance Limits			± 2%	± 2%				
		± 0.05	± 5	absolute	absolute				
L	Jpper Limit	1.677	83.2	80.5	61.3				
L	ower Limit	1.577	73.2	76.5	57.3				
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Test not nequired by AT	PER:	They	12-Jul-19
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Project No.: EA16335

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Yellow	WB EF-62-0035		Tests R	equired					
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2018	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B74	CPP1906Y0824	1.625	79.5	79.5	60.8	Jul-11	Jul-12	Jul-22	AAA Striping Hwy 63:11 SB
B76	CPP1906Y0824	1.558*	76.4	78.4	58.7	Jul-15	Jul-15	Jul-22	AAA Striping Hwy 43: 9+337 NB
B78	CPP1906Y0700	1.543*	77.4	78.9	59.9	Jul-8	Jul-16	Jul-22	Lafrentz Hwy 2:32
B82	CPP1906Y0824	1.605	76.4	78.9	59.4	Jul-7	Jul-16	Jul-22	AAA Striping Hwy 14:14 From E Hwy 870 to E Hwy 883
B84	CPP1904Y0238	1.604	76.4	78.6	59.5	Jul-11	Jul-17	Jul-22	Volker Stevin Brooks; AB
			Toleranc	e Limits					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	erance Limits			± 2%	± 2%				
		± 0.05	± 5	absolute	absolute				
U	pper Limit	1.677	83.2	80.5	61.3				
L	ower Limit	1.577	73.2	76.5	57.3				

* Indicates result outside tolerance limits. Test not Required by AT	111 1/	
PER:	Hul	22-Jul-19
Reviewed By:	W	DATE
· · · · · · · · · · · · · · · · · · ·		

Project No.: EA16335

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Yellow	WB EF-62-0035		Tests R	equired					
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2018	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B86	CPP1905Y0617	1.599	75.8	78.8	60.0	Jul-11	Jul-19	Jul-29	Ledcor Hwy 49:04 From Junction Hwy 727 to Junction Hwy 725
B88	CPP1904Y0296	1.612	75.2	78.5	59.3	Jul-16	Jul-23	Jul-29	Volker Stevin Hwy 1:04 CMA 28
B90	CPP1906Y0824	1.615	77.8	78.9	59.4	Jul-20	Jul-24	Jul-29	AAA Striping Hwy 14 E of Hwy 883
			Toleranç	e Limits					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	rance Limits			± 2%	± 2%				
		± 0.05	± 5	absolute	absolute				
U	pper Limit	1.677	83.2	80.5	61.3				
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Fo	rmulation:	Sı	applier:		ENNIS				
Yellow	WB EF-62-0035		Tests R	equired					
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2018	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B92	CPP1905Y0620	1.579	76.6	78.5	60.0	Jun-23	Jul-25	Aug-2	Lafrentz Hwy 986:01
B94	CPP1904Y0240	1.578	77.2	78.8	59.5	Jul-21	Jul-29	Aug-2	Volker Stevin Taber, AB
B96	CPP1803Y0191	1.625	80.1	79.4	60.3	Jul-25	Jul-29	Aug-2	Volker Stevin Foremost; AB
B97	CPP1807Y1314	1.607	80.1	79.4	60.3	Jul-25	Jul-29	Aug-2	Volker Stevin Foremost; AB
			Toleranc	e l'imite					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	rance Limits			± 2%	± 2%				
		± 0.05	± 5	absolute	absolute				
U	pper Limit	1.677	83.2	80.5	61.3				
L	ower Limit	1.577	73.2	76.5	57.3				

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Fo	rmulation:	Su	upplier:		ENNIS							
Yellow	WB EF-62-0035	Tests Required										
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location			
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported				
Number	. 2018	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019				
B100	CPP1809Y1550	1.524*	69.2*	76.5	58.0	Aug-7	Jul-10	Aug-16	Line King Hwy 3:10			
B104	CPP1906Y0583	1.630	77.0	79.4	60.2	Aug-7	Aug-8	Aug-16	Emcon Hwy 16:30 WBL Km 30			
B106	CPP1907Y1036	1.597	78.6	78.7	59.7	Aug-9	Aug-13	Aug-16	Volker Stevin Carstin; AB			
	Tolerance Limits											
2018	EF-62-0035	1.627	78.2	78.5	59.3	THE STATE OF THE PARTY STATE AND STATE OF THE STATE STATE AND STATE STAT						
Tole	erance Limits			± 2%	± 2%							
	± 0.05 ± 5 absolu		absolute	absolute								
U	Upper Limit 1.677 83.2 80		80.5	61.3								
L.	Lower Limit 1.577 73.2 76.5			76.5	57.3							

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Yellow	WB EF-62-0035	Tests Required							
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2018	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B108	CPP1906Y0700	1.621	74.8	78.9		Jul-31	Aug-16	Aug-23	Lafrentz Hwy 2:40 JCT Hwy 55 South of JCT Hwy 663
B110	CPP1903Y0228	1.603	76.0	78.4	59.7	Aug-2	Aug-19	Aug-23	Ledcor Hwy 43
B112	CPP1903Y0079	1.602	75.8	78.5	59.1	Aug-14	Aug-19		Ledcor Hinton Yard Sampler D. Farr 780-712-3372
B114	CPP1906Y0825	1.517*	76.6	78.8	59.6	Aug-1	Aug-19		Line King Hwy 840 From Hwy 561 To North of JCT Hwy 564
B116	CPP1907Y1115	1.600	77.4	78.6	59.4	Aug-11	Aug-20		Volker Stevin Fort Macleod, AB
B118	CPP1906Y0941	1.609	78.4	79.0	59.4	Aug-16	Aug-21		Contract No: 121-20019-00 Hwy 64/bf 71824 (Peace region)
			Toleranc	e Limits					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	erance Limits			± 2%	± 2%				
		± 0.05	± 5	absolute	absolute	÷			
U	pper Limit	1.677	83.2	80.5	61.3				
L	Lower Limit 1.577 73.		73.2	76.5	57.3				

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Batch		Toote D						
1		16212 U	equired					
1	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Number	Density		Volatile	Content	Sampled	Received	Reported	
2018	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
PP1907Y0971	1.544*	74.0	78.3	59.4	Aug-15			Border Paving Ltd Hwy21:16
PP1906Y0737	1.553*	75.0	78.6	59.4				AT Peace River Hwy 697
PP1907Y1115	1.621	77.6	79.0	59.8	Aug-23			EMCIN Hwy 661:04 Sampler Arthur Kavclok 780-675-2780
PP1906Y0824	1.633	80.4	80.3	61.2				AAA Striping Hwy 9 :02
PP1906Y0824	1.598	78.8	79.1	60.0				AAA Striping Hwy 1 :14
PP1906Y0941	1.593	78.6	79.3	58.0	Aug-26	Aug-27		AAA Striping Hwy 36 :06
		Tolerance	e Limits					
EF-62-0035	1.627	78.2	78.5	59.3				
nce Limits			± 2%	± 2%				
	± 0.05	± 5	absolute	absolute				
er Limit	1.677	83.2	80.5	61.3				
Lower Limit 1.577 7			76.5	57.3				
	PP1906Y0737 PP1907Y1115 PP1906Y0824 PP1906Y0941 PP1906Y0941 F-62-0035 ce Limits	PP1906Y0737 1.553* PP1907Y1115 1.621 PP1906Y0824 1.633 PP1906Y0824 1.598 PP1906Y0941 1.593 EF-62-0035 1.627 the Limits ± 0.05 Third 1.677	PP1906Y0737 1.553* 75.0 PP1907Y1115 1.621 77.6 PP1906Y0824 1.633 80.4 PP1906Y0824 1.598 78.8 PP1906Y0941 1.593 78.6 PP1906Y0941 1.593 78.6 Tolerance F-62-0035 1.627 78.2 De Limits ± 0.05 ± 5 T Limit 1.677 83.2	PP1907Y0971 1.544* 74.0 78.3 PP1906Y0737 1.553* 75.0 78.6 PP1907Y1115 1.621 77.6 79.0 PP1906Y0824 1.633 80.4 80.3 PP1906Y0824 1.598 78.8 79.1 PP1906Y0941 1.593 78.6 79.3 Tolerance Limits	PP1907Y0971	PP1907Y0971 1.544* 74.0 78.3 59.4 Aug-15 PP1906Y0737 1.553* 75.0 78.6 59.4 Aug-18 PP1907Y1115 1.621 77.6 79.0 59.8 Aug-23 PP1906Y0824 1.633 80.4 80.3 61.2 Aug-21 PP1906Y0824 1.598 78.8 79.1 60.0 Aug-23 PP1906Y0941 1.593 78.6 79.3 58.0 Aug-26 PP1906Y0941 1.593 78.6 79.3 58.0 Aug-26 PP1906Y0941 1.593 78.2 78.5 59.3 PP1906Y0824 5.5 59.3 59.3 59.3 59.3 59.3 59.3 59.3	PP1907Y0971 1.544* 74.0 78.3 59.4 Aug-15 Aug-22 PP1906Y0737 1.553* 75.0 78.6 59.4 Aug-18 Aug-22 PP1907Y1115 1.621 77.6 79.0 59.8 Aug-23 Aug-27 PP1906Y0824 1.633 80.4 80.3 61.2 Aug-21 Aug-27 PP1906Y0824 1.598 78.8 79.1 60.0 Aug-23 Aug-27 PP1906Y0941 1.593 78.6 79.3 58.0 Aug-26 Aug-27 PP1906Y0941 1.593 78.6 79.3 59.3 PP1906Y0941 1.593 78.2 78.5 59.3 PP1906Y0941 1.627 78.2 78.5 59.3 PP1906Y0941 1.677 83.2 80.5 61.3 PP1906Y0941 1.577 73.2 76.5 57.3	PP1907Y0971 1.544* 74.0 78.3 59.4 Aug-15 Aug-22 Sep-4 PP1906Y0737 1.553* 75.0 78.6 59.4 Aug-18 Aug-22 Sep-3 PP1907Y1115 1.621 77.6 79.0 59.8 Aug-23 Aug-27 Sep-3 PP1906Y0824 1.633 80.4 80.3 61.2 Aug-21 Aug-27 Sep-3 PP1906Y0824 1.598 78.8 79.1 60.0 Aug-23 Aug-27 Sep-3 PP1906Y0941 1.593 78.6 79.3 58.0 Aug-26 Aug-27 Sep-3 PP1906Y0941 1.593 78.6 79.3 58.0 Aug-26 Aug-27 Sep-3 PP1906Y0941 1.593 78.2 78.5 59.3 Sep-3 PP1906Y0941 1.627 8.2 78.5 59.3 Sep-3 PP1906Y0941 1.627 8.2 80.5 61.3

* Indicates result outside tolerar	1 1		
Test not Required by AT		$\Lambda \cup \Lambda$	
	PER:		3-Sep-19
			DATE
	Reviewed By:	' //	

Project No.: EA16335

wood.

Attn: Rishi Adhikari, P.Eng.

To: Alberta Transportation, Technical Standards Branch 2nd Floor, Twin Atria Building 4999 - 98 Ave

Edmonton, AB T6B 2X3

Distribution Addressee: Wood Environment & Infrastructure Solutions

5671 - 70 Street

Edmonton, AB

Canada T6B 3P6

Tel +1 (780) 436-2152

Fax +1 (780) 377-3599

Fo	ormulation:	Supplier:			ENNIS				
Yellow	WB EF-62-0035	Tests Required							
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2018	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B134	CPP1904Y0418	1.617	76.4	78.0	58.4	Jul-23	Sep-3	Sep-6	Contract No: 12990 (flatiron construction)
B136	CPP1903Y0142	1.616	78.6	79.0	60.5	Aug-26	Sep-3		AAA Striping Hwy 44:02 From Hwy 661 To Km 5 S of UAR 83 Km 22:30 To Km 44:699
B138	CPP1907Y1115	1.624	76.0	78.4	59.7	Aug-29	Sep-3	Sep-6	Emco Hwy 663:02 Sampler Arthur Kavclok 780-675-2780
B140	CPP1906Y0824	1.591	78.4	78.7	78.0	Aug-28	Sep-5	Sep-6	AAA Striping Hwy 3:06
B142	CPP1907Y1036	1.535*	76.8	78.4	59.4	Aug-28	Sep-5	Sep-6	Lafrentz Hwy 689 CMA 4 East
B144	CPP1906Y0825	1.564*	81.0	79.5	60.3	Aug-26	Sep-5	 	Line King Hwy 2:22 to Hwy 27 2 Km North Bowden
B146	CPP1906Y0825	1.584	80.8	79.6	60.3	Aug-19	Sep-5	 	Line King Hwy p:12
			Toleranc	e Limits					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	erance Limits			± 2%	± 2%				
· · · · · · · · · · · · · · · · · · ·		± 0.05	± 5	absolute	absolute				
U	pper Limit	1.677	83.2	80.5	61.3				
L	ower Limit	1.577	73.2	76.5	57.3				

* Indicates result outside tolerance Test not Required by AT	e limits.	111	
(I)	PER:	1/1/1/1	6-Sep-19
	Reviewed By:		DATE
	_		

Project No.: EA16335

wood.

Attn: Rishi Adhikari, P.Eng.

To: Alberta Transportation
Technical Standards Branch
2nd Floor, Twin Atria Building
4999 - 98 Ave

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Fo	Formulation:		Supplier:						
Yellow	WB EF-62-0035	Tests Required							
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2019	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B148	CPP1907Y1036	1.552*	78.8	79.0	60.0	Sep-4	Sep-6		Contract No: 11476 Hwy 43x :03 Grande Praire
			Toleranc	e Limits					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	erance Limits			± 2%	± 2%				
		± 0.05	± 5	absolute	absolute				
U	Upper Limit		83.2	80.5	61.3				
L	Lower Limit		73.2	76.5	57.3				

* Indicates result outside tolerance limits.

Test not Required by AT

PER:

13-Sep-19

DATE

Project No.: EA16335

wood.

Attn: Rishi Adhikari, P.Eng.

To: Alberta Transportation
Technical Standards Branch
2nd Floor, Twin Atria Building
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Fo	rmulation:	Sı	upplier:		ENNIS				
Yellow	WB EF-62-0035	Tests Required							
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2019	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B150	CPP1903Y0142	1.585	76.0	78.7	59.2	Sep-15	Sep-17	-	AAA Striping From N of Drayton Valley Hwy 22:30 to Hwy 16 Km 17 to Km 54:899
B152	CPP1907Y1036	1.514*	74.0	78.1	59.2	Sep-11	Sep-17		Lfrentz Hwy 2:60
B154	CPP1908Y1229	1.548*	78.4	79.0	60.1	Sep-6	Sep-17		Line King Hwy 9:12/14 Cereal Alberta 1 Km East Hwy 884 To Hwy 41
			Toleranc	e Limits					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	erance Limits			± 2%	± 2%				
		± 0.05	± 5	absolute	absolute				
U	Upper Limit		83.2	80.5	61.3				
Lo	Lower Limit 1.577 73.2 76		76.5	57.3					

* Indicates result outside tolerance Test not Required by AT	limits.	///	/ /	
	PER:	1/h	m/),	23-Sep-19
	Reviewed By:	VVI		DATE

Project No.: EA16335

wood.

Attn: Rishi Adhikari, P.Eng.

To: Alberta Transportation
Technical Standards Branch
2nd Floor, Twin Atria Building
4999 - 98 Ave
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Distribution Addressee: Wood Environment & Infrastructure Solutions 5671 - 70 Street Edmonton, AB

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Fo	Formulation:		Supplier:						
Yellow	Yellow WB EF-62-0035		Tests Required			****			
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2019	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B156	CPP1908Y1229	1.518*	79.0	78.8	59.6	Sep-16	Sep-19		Aecon Transportion West Ltd West Hwy 540:02
B158	CPP1907Y1115	1.584	71.6*	77.5	58.3	Sep-19	Sep-19	T	Emcon CMA 11
B160	CPP1906Y0941	1.613	78.0	79.1	57.7	Sep-17	Sep-19	· · · · · · · · · · · · · · · · · · ·	AAA Striping Hwy 677 : 02 +724
B162	CPP1906Y0941	1.591	79.1	79.4	62.2	Sep-23	Sep-25	 	AAA Striping Hwy 875 :02
			Toleranc	e Limits					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	Tolerance Limits			± 2%	± 2%				
		± 0.05	± 5	absolute	absolute				
U	pper Limit	1.677	83.2	80.5	61.3				
L.C	ower Limit	1.577	73.2	76.5	57.3				

* Indicates result outside tolerance limits.

Test not Required by AT

PER:

27-Sep-19

DATE

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wood.

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Fax +1 (780) 377-3599

Fo	Formulation:		Supplier:		ENNIS				
Yellow	Yellow WB EF-62-0035		Tests Required						
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2019	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B164	CPP1906Y0824	1.558*	78.6	78.7	59.6	Oct-1	Oct-7	Oct-15	Lafrentz Hwy 679:06 From E Hwy 750 High Prairie
			Toleranc	e Limits					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	erance Limits			± 2%	± 2%				
		± 0.05	± 5	absolute	absolute				
U	Jpper Limit	1.677	83.2	80.5	61.3				
<u>L</u>	ower Limit	1.577	73.2	76.5	57.3				

* Indicates result outside tolerance limits.

Test not Required by AT

PER:

15-Oct-19

DATE

Reviewed By:

Project No.: EA16335

wood.

Attn: Rishi Adhikari, P.Eng.

To: Alberta Transportation Technical Standards Branch 2nd Floor, Twin Atria Building 4999 - 98 Ave

Edmonton, AB T6B 2X3

Distribution Addressee: Wood Environment & Infrastructure Solutions

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Formulation: Yellow WB EF-62-0035		Supplier: Tests Required						
Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Number	Density		Volatile	Content	Sampled	Received	Reported	
2019	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
CPP1908Y1229	1.499*	84.4*	78.0	58.9	Oct-3	 		Aecon Group ING Hwy 23:06 & Hwy24:02
CPP1908Y1229	1.532*	80.4	79.2	60.1				Aecon Group ING Hwy 23:06 & Hwy24:02
							00.20	
		Toleranc	e Limits				1	
EF-62-0035	1.627	78.2	78.5	59.3		****************		
rance Limits			± 2%	± 2%				·
	± 0.05	± 5	absolute	absolute				
pper Limit	1.677	83.2	80.5	61.3				
ower Limit	1.577	73.2	76.5	57.3				
	Batch Number 2019 CPP1908Y1229 CPP1908Y1229 EF-62-0035 rance Limits Oper Limit	## Relative Density ## Page 14	### Tolerance ### Description Batch	WB EF-62-0035 Tests Required Batch Number Relative Density Viscosity Viscosity Volatile Content (%) 2019 (25/25°C) (Krebs) (%) CPP1908Y1229 1.499* 84.4* 78.0 CPP1908Y1229 1.532* 80.4 79.2 Tolerance Limits EF-62-0035 1.627 78.2 78.5 rance Limits ± 2% absolute oper Limit 1.677 83.2 80.5	Tests Required Pigment Content Content	Tests Required Date	Tests Required Date Date Sampled Received	Tests Required Tests Required Pigment Date Date Received Reported

* Indicates result outside tolerance limits.

Test not Required by AT

PER:

Reviewed By:

Project No.: EA16335

Attn: Rishi Adhikari, P.Eng.

To: Alberta Transportation Technical Standards Branch 2nd Floor, Twin Atria Building

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Distribution Addressee: Wood Environment & Infrastructure Solutions

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Fo	Formulation:		Supplier:		ENNIS				
Yellow	Yellow WB EF-62-0035		Tests Required						
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2019	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B170	CPP1907Y0971	1.522*	76.0	78.1	59.6	Oct-15	Oct-28	Nov-4	Lafrentz Hwy 15:04
B172	CPP1906Y0889	1.579	79.5	79.0	60.1	Oct-24	Oct-29	Nov-4	AAA Striping Hwy 64:02 Km 0.00 to Km 17.85
B174	CPP1907Y1036	1.580	78.4	78.8	59.9	Oct-2	Oct-29	Nov-4	Border paving / Lafrentz Hwy616:10
			Toleranc	e Limits					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	Tolerance Limits			± 2%	± 2%				
		± 0.05	± 5	absolute	absolute				
U	Upper Limit		83.2	80.5	61.3				
L	ower Limit	1.577	73.2	76.5	57.3				

* Indicates result outside tolerance limits. Test not Required by AT PER: 4-Nov-19 DATE Reviewed By:

Project No.: EA16335

wood.

Attn: Rishi Adhikari, P.Eng.

To: Alberta Transportation
Technical Standards Branch
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Edmonton, AB T6B 2X3

Distribution Addressee: Wood Environment & Infrastructure Solutions

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Fax +1 (780) 377-3599

Fo	Formulation:		Supplier:		ENNIS				
Yellow	Yellow WB EF-62-0035		Tests Required						
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2019	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B178	CPP1907Y0971	1.649	77.8	78.9	59.5	Oct-11	Nov-6	Nov-8	Lafrentz Hwy 814 & Hwy 625
			Toleranc	e Limits					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	erance Limits			± 2%	± 2%				
		± 0.05	± 5	absolute	absolute				
U	pper Limit	1.677	83.2	80.5	61.3				
L	ower Limit	1.577	73.2	76.5	57.3				

* Indicates result outside tolerance limits.

Test not Required by AT

PER:

Reviewed By:

Project No.: EA16335



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To: Alberta Transportation
Technical Standards Branch
2nd Floor, Twin Atria Building
4999 - 98 Ave
Edmonton, AB T6B 2X3

Distribution Addressee: Wood Environment & Infrastructure Solutions

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Fo	Formulation:		Supplier:						
Yellow	Yellow WB EF-62-0035		Tests Required						
Lab	Batch	Relative	Viscosity	Non-	Pigment	Date	Date	Date	Applicator and Location
Sample	Number	Density		Volatile	Content	Sampled	Received	Reported	
Number	2019	(25/25°C)	(Krebs)	Content (%)	(%)	2019	2019	2019	
B180	CPP1908Y1229	1.470*	73.4	77.0	58.6	Sep-22	Nov-12	Nov-15	Line King Hwy 41 Junction with Hwy 9 by ESSO
B182	CPP1908Y1229	1.514*	80.3	78.5	59.9	Oct-12	Nov-12	Nov-15	Line King Hwy 41:12
			Toleranc	e Limits					
2018	EF-62-0035	1.627	78.2	78.5	59.3				
Tole	Tolerance Limits			± 2%	± 2%				
		± 0.05	± 5	absolute	absolute				
U	pper Limit	1.677	83.2	80.5	61.3				
L	ower Limit	1.577	73.2	76.5	57.3				

* Indicates result outside tolerance limits.

Test not Required by AT

PER:

15-Nov-19

DATE