FOREST AND WILDLIFE RESEARCH CENTER

DEPARTMENT of Sustainable Bioproducts

Eighth Annual Evaluation of MSU/RTA Alternative Preservative Study

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This report covers the eighth annual evaluation of the full length crossties exposed as part of the MSU/RTA alternative preservative study. A visual evaluation of the exposed top surface was conducted for all ties at both exposure sites.

General Observations:

No unexpected results were found. Checks and/or splits were noted to be worse at Site 2 probably due to more direct sunlight exposure. Termite activity is still not as intensive as expected at this site which again may be due to the sunlight exposure. However, the decay at this site was active. Ties at Site 1 were more moist/wet due to the increased rain fall, shade and leaf litter as well as the clay soil at this site and these ties showed an increased amount of decay in the controls and more vigorous termite (*Reticulitermes flavipes)* activity due to these conditions.

Photographs documenting the condition of the sites at the time of inspection are shown in Figures 1&2.

Photographic evidence from the segmented ties can be found in the appendix (the tie number denotes the position of exposure as recorded on the plot-maps). Copies of the inspection forms can also be found in the appendix.

Figure 1 - An overall view of Site 2 at the time of inspection.

Figure 2 - A general photograph of Site 1 at the time of inspection.

APPENDIX:

Site 1 – Dorman Lake Research Site

Figure 1 - Tie #4 (Cedarcide/white oak) with decay.

Figure 2 - Tie #4 (Cedarcide/white oak) with decay.

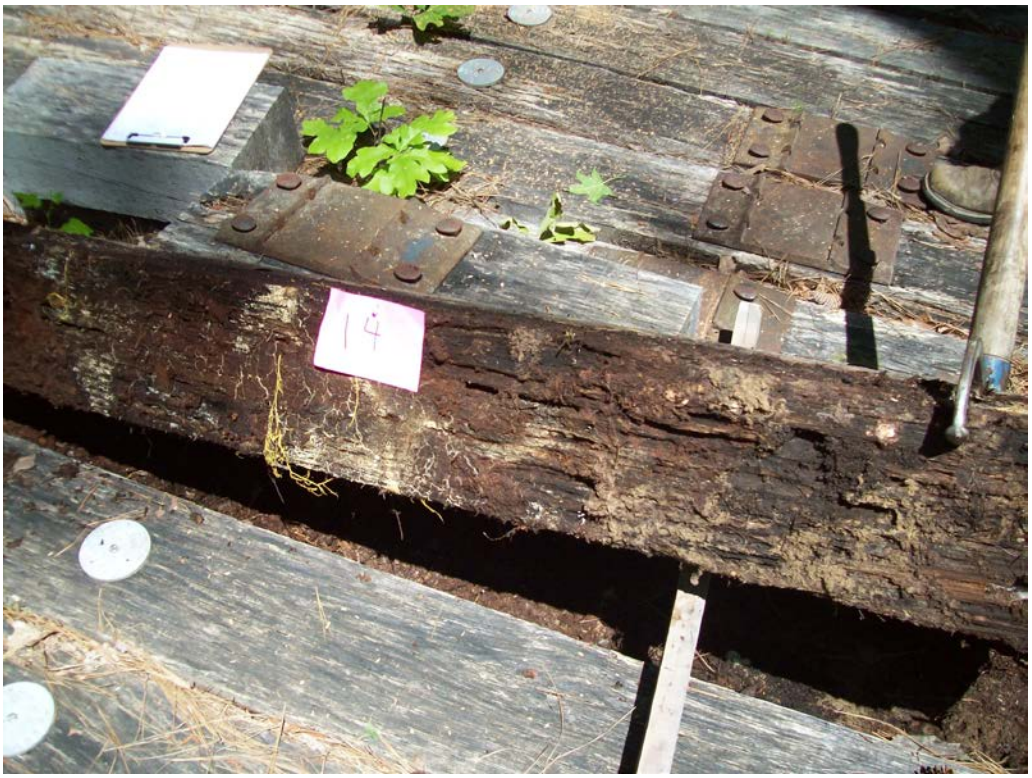

Figure 3 – Tie #14 (Cedarcide/red oak) with decay.

Figure 4 – Tie #14 (Cedarcide/red oak) with decay.

Figure 5 – Tie #24 (Turada) with light decay on bottom.

Figure 6 – Tie #24 (Turada).

Figure 7 – Tie #41 (Boartright/red oak/borate/creosote 7pcf).

Figure 8 – Tie #33 (Boatright/red oak/borate/creosote 7pcf) internal decay around check.

Figure 9 - Tie #56 (Boatright/white oak/borate/creosote to refusal).

Figure 10 - Tie #56 (Boatright/white oak/borate/creosote to refusal).

Figure 11 - Tie #64 (Boatright/red oak/creosote 5pcf).

Figure 12 - Tie #64 (Boatright/red oak/creosote 5pcf).

Figure 13 - Tie #72 (Boatright/red oak/borate/creosote 5pcf).

Figure 14 - Tie #72 (Boatright/red oak/borate/creosote 5pcf).

Figure 15 - Tie #76 (Boatright/white oak/creosote to refusal).

Figure 16 - Tie #76 (Boatright/white oak/creosote to refusal).

Figure 17 - Tie #91 (Lonza/white oak) decay on bottom.

Figure 18 - Tie #91 (Lonza/white oak) decay on bottom.

Figure 19 - Tie #98 (Lonza/red oak).

Figure 20 – Tie #98 (Lonza/red oak).

Figure 21 – Tie #112 (Lonza/white oak).

Figure 22 - Tie #112 (Lonza/white oak).

Figure 23 - Tie #125 (Lonza/red oak) with light decay on bottom.

Figure 24 - Tie #125 (Lonza/red oak).

Figure 25 - Tie #127 (KMG/red oak).

Figure 26 - Tie #127 (KMG/red oak).

Figure 27 - Tie #143 (KMG/white oak).

Figure 28 - Tie #143 (KMG/white oak).

Figure 29 - Tie #148 (untreated/red oak) with extensive decay.

Figure 30 - Tie #148 (untreated/red oak) with extensive decay.

Figure 31 - Tie #151 (Nisus/white oak/borate/oil B).

Figure 32 - Tie #151 (Nisus/white oak/borate/oil B).

Figure 33 - Tie #161 (Nisus/white oak/borate/oil A).

Figure 34 - Tie #161 (Nisus/white oak/borate/oil A).

Figure 35 Tie #185 (Nisus/red oak/borate/oil B).

Figure 36 - Tie #185 (Nisus/red oak/borate/oil B).

Figure 37 - Tie #188 (Nisus/red oak/borate/oil A).

Figure 38 - Tie # 188 (Nisus/red oak/borate/oil A).

Figure 39 - Tie #197 (Nisus/red oak/borate) decay on bottom.

Figure 40 - Tie #197 (Nisus/red oak/borate).

Figure 41 - Tie #208 (Nisus/white oak/borate) with decay on bottom.

Figure 42 - Tie #208 (Nisus/white oak/borate) with decay on bottom.

Figure 43 - Tie #221 (Merichem/red oak/borate/CuNap).

Figure 44 - Tie #221 (Merichem/red oak/borate/CuNap).

Figure 45 - Tie #224 (untreated/white oak) with decay.

Figure 46 - Tie #224 (untreated/white oak) with decay.

Figure 47 - Tie #228 (Merichem/red oak/CuNap).

Figure 48 - Tie #228 (Merichem/red oak/CuNap).

Figure 49 - Tie #237 (Merichem/white oak/borate/CuNap).

Figure 490 - Tie #237 (Merichem/white oak/borate/CuNap).

Figure 501 - Tie #253 (Koppers/white oak/creosote petroleum solution).

Figure 512 - Tie #253 (Koppers/white oak/creosote petroleum solution).

Figure 523 - Tie #262 (Koppers/red oak/creosote petroleum solution).

Figure 534 - Tie #262 (Koppers/red oak/creosote petroleum solution).

Figure 545 - Tie #269 (Koppers/white oak/P2 creosote).

Figure 556 - Tie #269 (Koppers/white oak/P2 creosote).

Figure 567 - Tie #279 (Koppers/red oak/P2 creosote).

Figure 58 - Tie #279 (Koppers/red oak/P2 creosote).

Figure 579. Tie #332 (Merichem/white oak/CuNap).

Figure 60. Tie #332 (Merichem/white oak/CuNap).

Site 2 – Formosan Termite Research Facility

Figure 1 - Tie #2 (Turada) with decay.

Figure 2 - Tie #2 (Turada).

Figure 3 – Tie #12 (Envirosafe/red oak) with trace decay.

Figure 4 – Tie #12 (Envirosafe/red oak) with trace decay.

Figure 5 – Tie #23 (Envirosafe/white oak) with light decay on bottom.

Figure 6 – Tie #23 (Envirosafe/white oak) with light decay on bottom.

Figure 7 – Tie #33 (Boartright/red oak/creosote 5pcf).

Figure 8 – Tie #33 (Boatright/red oak/creosote 5pcf) internal decay around check.

Figure 9 - Tie #43 (Boatright/red oak/borate-creosote 5pcf).

Figure 10 - Tie #43 (Boatright/red oak/borate-creosote 5pcf).

Figure 11 - Tie #59 (Boatright/white oak//creosote to refusal).

Figure 12 - Tie #59 (Boatright/white oak//creosote to refusal).

Figure 13 - Tie #69 (Boatright/white oak/borate-creosote to refusal).

Figure 14 - Tie #69 (Boatright/white oak/borate-creosote to refusal) internal decay.

Figure 15 - Tie #79 (Boatright/red oak/borate-creosote 7pcf) large knot on side.

Figure 16 - Tie #79 (Boatright/red oak/borate-creosote 7pcf).

Figure 17 - Tie #85 (Lonza/red oak) decay on bottom.

Figure 18 - Tie #85 (Lonza/red oak) decay evident in cross-section.

Figure 19 - Tie #100 (Nisus/red oak/borate/oil A).

Figure 20 – Tie #100 (Nisus/red oak/borate/oil A).

Figure 21 – Tie #111 (Nisus/red oak/borate/oil B).

Figure 22 - Tie #111 (Nisus/red oak/borate/oil B).

Figure 23 - Tie #115 (Nisus/white oak/borate/oil B).

Figure 24 - Tie #115 (Nisus/white oak/borate/oil B).

Figure 25 - Tie #138 (Nisus/white oak/borate/oil A).

Figure 26 - Tie #138 (Nisus/white oak/borate/oil A).

Figure 27 - Tie #152 (Lonza/white oak).

Figure 28 - Tie #152 (Lonza/white oak).

Figure 29 - Tie #166 (untreated/White oak) with extensive decay.

Figure 30 - Tie #166 (untreated/white oak) with decay.

Figure 31 - Tie #168 (untreated/red oak) with decay on top and bottom.

Figure 32 - Tie #168 (untreated/red oak) complete failure.

Figure 33 - Tie #178 (Lonza/red oak) with decay evident.

Figure 34 - Tie #178 (Lonza/red oak) with internal decay.

Figure 35 Tie #181 (Lonza/white oak) with decay on bottom.

Figure 36 - Tie #181 (Lonza/white oak).

Figure 37 - Tie #192 (Cedarcide/white oak) decay on bottom and side.

Figure 38 - Tie #192 (Cedarcide/white oak) internal decay.

Figure 39 - Tie #204 (Cedarcide/red oak) decay on bottom and side.

Figure 40 - Tie #204 (Cedarcide/red oak) internal decay also.

Figure 41 - Tie #217 (Merichem/white oak/borate/CuNap).

Figure 42 - Tie #217 (Merichem/white oak/borate/CuNap).

Figure 43 - Tie #223 (Merichem/red oak/CuNap) with light decay.

Figure 44 - Tie #223 (Merichem/red oak/CuNap).

Figure 45 - Tie #240 (Merichem/white oak/borate/CuNap) with slight decay.

Figure 46 - Tie #240 (Merichem/white oak/borate/CuNap) with internal decay.

Figure 47 - Tie #245 (Merichem/red oak/borate/CuNap).

Figure 48 - Tie #245 (Merichem/red oak/borate/CuNap).

Figure 49 - Tie #281 (KMG/red oak).

Figure 490 - Tie #281 (KMG/red oak) with heart decay.

Figure 501 - Tie #302 (Koppers/red oak/creosote petroleum solution).

Figure 512 - Tie #302 (Koppers/red oak/creosote petroleum solution).

Figure 523 - Tie #308 (Koppers/white oak/creosote petroleum solution).

Figure 534 - Tie #308 (Koppers/white oak/creosote petroleum solution) with heart decay.

Figure 545 - Tie #323 (Koppers/red oak/P2 creosote).

Figure 556 - Tie #297 (Koppers/red oak/P2 creosote).

Figure 57 - Tie #331 (Koppers/white oak/P2 creosote).

Figure 58 - Tie #331 (Koppers/white oak/P2 creosote).

Plot Map RTA Ties (Dorman - installed 4-08)

Position Row 1 runs North - South (Eastern most row)

Position			May-16 Decay	May-16 Termite	Decay	Termite	Comments
1	wo-2	Cedar	x	x	x	x	Cut 5/10
2	wo-3		x	x	x	x	Cut 5/12
3	wo-4		x	x	x	x	Cut 5/14
4	wo-5		7	8	x	x	Cut 5/16
5	wo-7		8	10			check
6	wo-6		7	10			
7	wo-1		8	10			
8	wo-10		8	10			check
9	wo-8		6	10			
10	wo-9		8	10			
11	wo-21		8	9			live termites/DK top&bottom
12	ro-18		x	x	x	x	Cut 5/10
13	ro-19		x	x	x	x	Cut 5/12
14	ro-20		7	10	x	x	Cut 5/16
15	ro-7		9	10			
16	ro-6		9	10			check
17	ro-5		8	10			alligator
18	ro-21		9	10			
19	ro-4		6	10			check
20	ro-3		9	10			check
21	ro-2		8	10			check
22	ro-1		x	x	x	x	Cut 5/14
23	5	Turada	x	x	x	x	Cut 5/10
24	6		9.5	10	x	x	Cut 5/16
25	7		10	10			
26	4		9	10			
27	2		x	x	x	x	Cut 5/14
28	9		10	10			
29	8		9.5	10			edge
30	10		10	10			
31	1		10	10			
32	3		x	x	x	x	Cut 5/12
33	SROBC-7	Seaman	x	x	x	x	Cut 5/10
34	SROBC-7		x	x	x	x	Cut 5/12
35	SROBC-7		10	10			
36	SROBC-7		10	10			
37	SROBC-7		10	10			check
38	SROBC-7		10	10			check
39	SROBC-7		x	x	x	x	Cut 5/14
40	SROBC-5		x	x	x	x	Cut 5/10
41	SROBC-7		10	10	x	x	Cut 5/16
42	SWOCEF		x	x	x	x	Cut 5/10
43	SWOCEF		x	x	x	x	Cut 5/12
44	SWOCEF		10	10			
45	SWOCEF		10	10			

46	SWOCEF		10	10			check
47	SWOCEF		10	10			
48	SWOCEF		10	10			check
49	SWOCEF		10	10			
50	SWOCEF		x	x	x	x	Cut 5/14
51	SROC-7		x	x	x	x	Cut 5/10
52	SWOC-5		x	x	x	x	Cut 5/10
53	SROBC-5		7	9			
54	SWOBCREF		x	x	x	x	Cut 5/10
55	SWOBCREF		x	x	x	x	Cut 5/14
56	SWOBCREF		10	10	x	x	Cut 5/16
57	SWOBCREF		10	10			check
58	SWOBCREF		10	10			check
59	SWOBCREF		10	10			check
60	SWOBCREF		10	10			
61	SWOBCREF		x	x	x	x	Cut 5/12
62	SROC5		x	x	x	x	Cut 5/10
63	SROC5		x	x	x	x	Cut 5/12
64	SROC5		10	10	x	x	Cut 5/16
65	SROC5		10	10			
66	SROC5		10	10			
67	SROC5		10	10			
68	SROC5		10	10			
69	SROC5		10	10			
70	SROC5		x	x	x	x	Cut 5/14
71	SROBC5		x	x	x	x	Cut 5/12
72	SROBC5		10	10	x	x	Cut 5/16
73	SROBC5		10	10			
74	SROBC5		10	10			check
75	SWOBCREF		10	10			check
76	SWOCREF		10	10	x	x	Cut 5/16
77	SROC5		10	10			check
78	SROBC5		10	10			check
79	SROBC5		10	10			check
80	SROBC5		10	10			check
81	SROBC5		10	10			check
82	SWOBCREF		10	10			check
83	SROBC5		10	10			check
84	SROBC5		x	x	x	x	Cut 5/14
85	wo-136	Lonza	x	x	x	x	Cut 5/10
86	wo-130		x	x	x	x	Cut 5/12
87	wo-129		x	x	x	x	Cut 5/14
88	wo-121		10	10			
89	wo-127		9.5	10			
90	wo-124		10	10			
91	wo-128		9	10	x	x	Cut 5/16
92	wo-122		10	10			
93	wo-123		10	10			
94	wo-125		10	10			

95	ro-105		x	x	x	x	Cut 5/10
96	ro-104		x	x	x	x	Cut 5/12
97	ro-103		x	x	x	x	Cut 5/14
98	ro-102		10	10	x	x	Cut 5/16
99	ro-110		10	10			
100	ro-107		10	10			
101	ro-106		10	10			
102	ro-109		10	10			
103	ro-101		10	10			
104	ro-108		10	10			check
105	wo-135		x	x	x	x	Cut 5/10
106	wo-134		x	x	x	x	Cut 5/12
107	wo-138		10	10			
108	wo-139		10	10			
109	wo-137		10	10			
110	wo-132		10	10			
111	wo-136		9	10			
112	wo-140		10	10	x	x	Cut 5/16
113	wo-133		x	x	x	x	Cut 5/14
114	wo-131		9	10			
115	ro-182		0	0	0	0	FAILED
116	wo-181		6	10			
117	ro-114		x	x	x	x	Cut 5/10
118	ro-120						
119	ro-117		x	x	x	x	Cut 5/12
120	ro-112		10	10			
121	ro-113		10	10			
122	ro-115		10	10			check
123	ro-119		10	10			
124	ro-116		10	10			
125	ro-111		9.5	10	x	x	Cut 5/16
126	ro-118		x	x	x	x	Cut 5/14
127	P3RO7-39	KMG	10	10	x	x	Cut 5/16
128	P3RO7-36		10	10			
129	P3RO7-37		10	10			
130	P3RO7-38		10	10			
131	P3RO7-23		10	10			
132	P3RO7-40		10	10			
133	P3RO7-26		10	10			
134	P3RO7-42		x	x	x	x	Cut 5/14
135	P3RO7-35		x	x	x	x	Cut 5/12
136	P3RO7-41		x	x	x	x	Cut 5/10
137	P3WO7-5		x	x	x	x	Cut 5/10
138	P3WO7-4		x	x	x	x	Cut 5/12
139	P3WO7-6		x	x	x	x	Cut 5/14
140	P3WO7-7		10	10			check
141	P3WO7-11		10	10			
142	P3WO7-17		10	10			
143	P3WO7-20		10	10	x	x	Cut 5/16

144	P3WO7-2		10	10			
145	P3WO7-8		10	10			
146	P3WO7-3		10	10			
147	Woctrl-21		8	9			live termites/check
148	Roctrl-43		4	9	x	x	Cut 5/16
149	WO122	Nisus	x	x	x	x	Cut 5/14
150	WO14		10	10			
151	WO128		10	10	x	x	Cut 5/16
152	WO61		10	10			check
153	WO5		10	10			
154	WO1		10	10			check
155	WO71		10	10			check
156	WO98		10	10			
157	WO139		x	x	x	x	Cut 5/14
158	WO135		10	10			check
159	WO144		10	10			
160	WO126		10	10			check
161	WO131		10	10	x	x	Cut 5/16
162	WO138		10	10			split
163	WO130		10	10			check
164	WO125		x	x	x	x	Cut 5/12
165	WO29		x	x	x	x	Cut 5/12
166	WO52		x	x	x	x	Cut 5/10
167	WO137		10	10			
168	WO134		x	x	x	x	Cut 5/10
169	WO44ctrl		x	x	x	x	Cut 5/14
170	WO94ctrl		x	x	x	x	Cut 5/12
171	RO6ctrl		x	x	x	x	Cut 5/12

172	RO-51ctrl		x	x	x	x	Cut 5/14
173	RO21		x	x	x	x	Cut 5/14
174	RO22		10	10			
175	RO15		10	10			check
176	RO62		10	10			check
177	RO46		10	10			
178	RO2		10	10			
179	RO24		x	x	x	x	Cut 5/12
180	RO20		x	x	x	x	Cut 5/10
181	RO37		x	x	x	x	Cut 5/10
182	RO31		10	10			
183	RO59		x	x	x	x	Cut 5/14
184	RO89		10	10			
185	RO13		10	10	x	x	Cut 5/16
186	RO58		10	10			
187	RO57		10	10			
188	RO12		10	10	x	x	Cut 5/16
189	RO56		10	10			
190	RO25		10	10			
191	RO43		10	10			check
192	RO10		x	x	x	x	Cut 5/12
193	RO54		x	x	x	x	Cut 5/10
194	RO38		x	x	x	x	Cut 5/12
195	RO45		x	x	x	x	Cut 5/14
196	RO16		10	10			
197	RO72		9	10	x	x	Cut 5/16
198	RO77		9.5	9.5			
199	RO40		10	10			
200	RO55		10	10			check
201	RO18		9.5	10			
202	RO3		9.5	10			
203	WO49		x	x	x	x	Cut 5/10
204	WO121		x	x	x	x	Cut 5/12
205	WO68		x	x	x	x	Cut 5/14
206	WO11		9	10			
207	WO65		9	10			
208	WO92		9	10	x	x	Cut 5/16
209	WO60		8	10			
210	WO47		9.5	10			
211	WO90		9.5	10			
212	WO69		9	10			
213	MRO8	Merichem	x	x	x	x	Cut 5/10
214	MRO8		x	x	x	x	Cut 5/14
215	MROB8		x	x	x	x	Cut 5/10
216	MROB8		10	10			check
217	MROB8		10	10			check
218	MROB8		10	10			
219	MROB8		10	10			check
220	MROB8		10	10			check

221	MROB8	9	10	x	x	Cut 5/16
222	MROB8	x	x	x	x	Cut 5/14
223	MROB8	x	x	x	x	Cut 5/12
224	MWO8ctrl	6	10	x	x	Cut 5/16
225	MWO8ctrl	6	9			
226	MRO8ctrl	0	0	0	0	FAILED
227	MRO8	x	x	x	x	Cut 5/12
228	MRO8	10	10	x	x	Cut 5/16
229	MRO8	10	10			check
230	MRO8	10	10			check
231	MRO8	10	10			check
232	MRO8	10	10			
233	MRO8	10	10			
234	MRO8	10	10			
235	MWOB8	x	x	x	x	Cut 5/10
236	MWOB8	x	x	x	x	Cut 5/14
237	MWOB8	10	10	x	x	Cut 5/16
238	MWOB8	10	10			check
239	MWOB8	10	10			check
240	MWOB8	10	10			check
241	MWOB8	10	10			check
242	MWOB8	10	10			check
243	MWOB8	10	10			check
244	MWOB8	x	x	x	x	Cut 5/12

Row 2 runs North - South (West row)

		Decay	Termite	Decay	Termite	Comments
245	6	x	x	x	x	Cut 5/10
246	14	x	x	x	x	Cut 5/14
247	79	10	10			
248	73	x	x	x	x	Cut 5/12
249	75	x	x	x	x	Cut 5/14
250	?	10	10			
251	80	10	10			
252	?	10	10			
253	62	10	10	x	x	Cut 5/16
254	82	10	10			
255	68	10	10			check
256	74	10	10			
257	37	x	x	x	x	Cut 5/10
258	26	x	x	x	x	Cut 5/14
259	53	x	x	x	x	Cut 5/10
260	59	x	x	x	x	Cut 5/14
261	52	10	10			
262	48	10	10	x	x	Cut 5/16
263	45	10	10			
264	67	x	x	x	x	Cut 5/10
265	51?	10	10			

266	?		10	10			
267	88		10	10			
268	46		x	x	x	x	Cut 5/12
269	12		10	10	x	x	Cut 5/16
270	20		x	x	x	x	Cut 5/12
271	31		x	x	x	x	Cut 5/12
272	17		10	10			check
273	4		10	10			
274	10?		10	10			
275	16		10	10			
276	5		10	10			
277	27		10	10			
278	36		10	10			
279	24		10	10	x	x	Cut 5/16
280	?		10	10			
281	22		10	10			
282	39		10	10			
283	25		10	10			
284	?		10	10			
285	WO30	Enviro	x	x	x	x	Cut 5/10
286	RO6		x	x	x	x	Cut 5/10
287	RO7		10	10			
288	RO8		9	10			
289	RO9		8	9.5			
290	RO1		x	x	x	x	Cut 5/14
291	RO2		10	10			
292	RO3		9.5	10			check
293	RO4		9.5	10			
294	RO5		9.5	10			
295	RO10		x	x	x	x	Cut 5/12
296	6	BioP					
297	1						
298	7						
299	8						
300	9						
301	10						
302	2						
303	3						
304	4						
305	5						
306	12						control?
307	9469						
308	9459						
309	9460						
310	9471						
311	9472						
312	9470						
313	9464						
314	11						control?

315	9468						
316	9466						
317	9467						
318	roctrl	Enviro	0	0	0	0	FAILED
319	roctrl		0	4	0	0	FAILED
320	woctrl		7	10			
321	woctrl		6	9			fruiting body
322	WO22		x	x	x	x	Cut 5/14
323	WO23		9.5	10			
324	WO24		9.5	10			
325	W025		9.5	10			
326	WO27		9.5	10			
327	WO28		9.5	10			
328	WO29		9.5	10			
329	WO21		9.5	10			
330	WO26		x	x	x	x	Cut 5/12
331	MWO8	Meri	x	x	x	x	Cut 5/12
332	MWO8		10	10	x	x	Cut 5/16
333	MWO8		10	10			check
334	MWO8		10	10			
335	MWO8		10	10			
336	MWO8		10	10			
337	MWO8		10	10			
338	MWO8		10	10			
339	MWO8		10	10			
340	MWO8		x	x	x	x	Cut 5/14
341	MWO8		x	x	x	x	Cut 5/10/heart rot

Plot Map RTA Ties (McNeill)

Position Row 1 runs East - West (Northern most row)

			March-16				
			Decay	Termite	Decay	Termite	Comments
Turada	1	1	x	x	x	x	cut 4/10
	2	2	8	10	x	x	cut 3/16
	3	3	10	10			
	4	4	10	10			large check
	5	5	10	10			
	6	6	10	10			
	7	7	10	10			
	8	8	x	x	x	x	cut 4/14
	9	9	8	10			Dk on top
	10	10	x	x	x	x	cut 5/12
Envirosafe	11	11RO	x	x	x	x	cut 5/12
	12	15RO	9.5	10	x	x	cut 3/16
	13	14RO	10	10			large check
	14	13RO	10	10			large check
	15	12RO	10	10			large check
	16	20RO	10	10			
	17	19RO	10	10			large check/FB in check
	18	18RO	10	10			large check
	19	17RO	x	x	x	x	cut 4/14
	20	16RO	x	x	x	x	large check/cut 4/10
	21	35WO	x	x	x	x	cut 4/10
	22	34WO	x	x	x	x	cut 4/14
	23	33WO	9.5	10	x	x	cut 3/16
	24	32WO	10	10			large check
	25	31WO	10	10			large check
	26	40WO	10	10			large check
	27	39WO	9.5	10			large check/FB in check
	28	38WO	10	10			
	29	37WO	10	10			large check
	30	36WO	x	x	x	x	cut 5/12
Seaman	31	SROC5	x	x	x	x	cut 4/10
	32	SROC5	x	x	x	x	cut 4/14
	33	SROC5	9.5	10	x	x	cut 3/16
	34	SROC5	10	10			pic 09/large check
	35	SROC5	10	10			large check
	36	SROC5	10	10			
	37	SROC5	10	10			
	38	SROC5	10	10			
	39	SROC5	10	10			large check
	40	SROC5	x	x	x	x	cut 5/12
	41	SROBC5	x	x	x	x	split/cut 4/10
	42	SROBC5	x	x	x	x	cut 4/14
	43	SROBC5	10	10	x	x	cut 3/16
	44	SROBC5	10	10			check
	45	SROBC5	10	10			large check
	46	SROBC5	10	10			
	47	SROBC5	10	10			
	48	SROBC5	10	10			check

	49	SROBC5		10		10	_____	_____	check_____
	50	SROBC5	x		x		x	x	cut 5/12_____
	51	SWOCREF	x		x		x	x	cut 4/10_____
	52	SWOCREF	x		x		x	x	cut 4/14_____
	53	SWOCREF		10		10	_____	_____	_____
	54	SWOCREF		10		10	_____	_____	large check_____
	55	SWOCREF		10		10	_____	_____	check_____
	56	SWOCREF		10		10	_____	_____	check_____
	57	SWOCREF		10		10	_____	_____	check_____
	58	SWOCREF		10		10	_____	_____	check_____
	59	SWOCREF		10		10	x	x	cut 3/16_____
	60	SWOCREF	x		x		x	x	cut 5/12_____
	61	SWOBCREF	x		x		x	x	cut 4/10_____
	62	SWOBCREF	x		x		x	x	cut 4/14_____
	63	SWOBCREF		10		10	_____	_____	large check_____
	64	SWOBCREF		10		10	_____	_____	check/loose plate_____
	65	SWOBCREF		10		10	_____	_____	large check_____
	66	SWOBCREF		10		10	_____	_____	_____
	67	SWOBCREF		10		10	_____	_____	large check_____
	68	SWOBCREF		10		10	_____	_____	large check_____
	69	SWOBCREF		9		10	x	x	cut 3/16_____
	70	SWOBCREF	x		x		x	x	cut 5/12_____
	71	SROBC7	x		x		x	x	cut 4/10_____
	72	SROBC7	x		x		x	x	cut 4/14_____
	73	SROBC7		10		10	_____	_____	check_____
	74	SROBC7		10		10	_____	_____	_____
	75	SROBC7		10		10	_____	_____	large check_____
	76	SROBC7		10		10	_____	_____	check_____
	77	SROBC7		10		10	_____	_____	large check_____
	78	SROBC7		10		10	_____	_____	check_____
	79	SROBC7		10		10	x	x	cut 3/16_____
	80	SROBC7	x		x		x	x	cut 5/12_____
	81	ctrlSROC7	x		x		x	x	cut 4/10_____
	82	ctrlSWOC5	x		x		x	x	cut 4/10_____
	83	ctrlSWOC5		6		9	_____	_____	pic 09/active DK/FB_____
Lonza	84	209	x		x		x	x	cut 4/10_____
	85	206		8		10	x	x	cut 3/16_____
	86	204		10		10	_____	_____	large check_____
	87	201	x		x		x	x	cut 4/14_____
	88	208		10		10	_____	_____	large check_____
	89	203		10		10	_____	_____	_____
	90	205		9.5		10	_____	_____	large check/FB on side_____
	91	207		10		10	_____	_____	_____
	92	210		8		10	_____	_____	large check/DK top_____
	93	202	x		x		x	x	cut 5/12_____
Nisus	94	240	x		x		x	x	cut 4/10_____
	95	237	x		x		x	x	cut 5/12_____
	96	243	x		x		x	x	cut 4/14_____
	97	238		10		10	_____	_____	large check_____
	98	245		10		10	_____	_____	large check_____
	99	239		10		10	_____	_____	large check_____
	100	247		10		10	x	x	cut 3/16_____

	101	241		10		10	_____	_____ check_____
	102	233		10		10	_____	_____ large check_____
	103	242		10		10	_____	_____ large check_____
	104	203	x		x		x	x cut 4/10_____
	105	227	x		x		x	x cut 5/12_____
	106	207	x		x		x	x cut 4/14_____
	107	200		10		10	_____	_____ large check_____
	108	229		10		10	_____	_____ check_____
	109	206		10		10	_____	_____ split_____
	110	216		10		10	_____	_____ split_____
	111	220		10		10	x	x cut 3/16_____
	112	212		10		10	_____	_____ large check_____
	113	222		10		10	_____	_____ _____
	114	217	x		x		x	x cut 4/10_____
	115	264		10		10	x	x cut 3/16_____
	116	287		10		10	_____	_____ large check_____
	117	253		10		10	_____	_____ large check_____
	118	283		10		10	_____	_____ large check_____
	119	219	x		x		x	x cut 5/12_____
	120	276		10		10	_____	_____ large check_____
	121	292		10		10	_____	_____ _____
	122	269		10		10	_____	_____ large check_____
	123	289	x		x		x	x cut 4/14_____
	124	225	x		x		x	x cut 4/10_____
	125	204	x		x		x	x cut 5/12_____
	126	234	x		x		x	x cut 4/14_____
	127	215		8		10	_____	_____ large check/Dk around plate____
	128	231		8		10	_____	_____ large check/Dk around plate____
	129	213		8		10	_____	_____ Dk around plate_____
	130	205		8		10	_____	_____ large check/Dk around plate____
	131	208		8		10	_____	_____ large check/Dk around plate____
	132	210		8		10	_____	_____ split/Dk around plate_____
	133	226		8		10	_____	_____ Dk around plate_____
	134	305	x		x		x	x cut 4/10_____
	135	201		10		10	_____	_____ large check_____
	136	313	x		x		x	x cut 4/14_____
	137	294		10		10	_____	_____ _____
	138	308		10		10	x	x cut 3/16_____
	139	301		10		10	_____	_____ _____
	140	291		10		10	_____	_____ large check_____
	141	309		10		10	_____	_____ large check_____
	142	296		10		10	_____	_____ _____
	143	314		10		10	_____	_____ _____
Lonza	144	236	x		x		x	x cut 5/12_____
	145	232	x		x		x	x cut 4/14_____
	146	238		10		10	_____	_____ _____
	147	234		10		10	_____	_____ _____
	148	231		10		10	_____	_____ large check_____
	149	233		10		10	_____	_____ large check_____
	150	235		10		10	_____	_____ large check_____
	151	239		10		10	_____	_____ _____
	152	240		9		10	x	x cut 3/16_____

	153	237	x		x		x	x	cut 4/10_____
Nisus	154	272	x		x		x	x	cut 4/10_____
	155	223	x		x		x	x	cut 4/14_____
	156	256	x		x		x	x	cut 5/12_____
	157	297		10		10	_____	_____	_____
	158	295		10		10	_____	_____	split_____
	159	267		10		10	_____	_____	split_____
	160	299		10		10	_____	_____	check_____
	161	261		10		10	_____	_____	_____
	162	214		10		10	_____	_____	_____
	163	275		10		10	_____	_____	_____
Lonza	164	281		8		10	_____	_____	fruiting body_____
	165	282		4		10	_____	_____	fruiting body/loose plate_____
Nisus	166	315		4		10	x	x	cut 3/16_____
	167	316	x		x		x	x	cut 4/14_____
	168	249		0		10	x	x	cut 3/16_____
	169	248	x		x		x	x	cut 4/14_____

Row 2 runs East - West (middle row)

			March-16				
			Decay	Termite	Decay	Termite	Comments
Lonza	170	220	x	x	x	x	cut 4/10
	171	218	x	x	x	x	cut 4/14
	172	214	10	10			large check
	173	219	10	10			
	174	212	10	10			
	175	217	10	10			large check
	176	216	10	10			large check
	177	211	10	10			
	178	213	8	10	x	x	cut 3/16
	179	215	x	x	x	x	cut 5/12
	180	224	x	x	x	x	cut 4/10
	181	228	8	10	x	x	cut 3/16
	182	221	10	10			large check
	183	222	10	10			
	184	230	10	10			large check
	185	225	10	10			large check
	186	226	10	10			large check
	187	229	10	10			large check
	188	223	x	x	x	x	cut 4/14
	189	227	x	x	x	x	cut 5/12
Cedarcide	190	19W	x	x	x	x	cut 4/10
	191	20W	x	x	x	x	cut 4/14
	192	15W	8	10	x	x	cut 3/16
	193	16W	10	10			large check
	194	18W	10	10			split
	195	17W	7	10			shake/FB
	196	10R	x	x	x	x	cut 4/10
	197	9R	9	10			large check
	198	8R	x	x	x	x	cut 5/12
	199	11W	x	x	x	x	cut 5/12
	200	12W	6	10			split
	201	13W	9.5	10			split
	202	14W	9.5	10			split
	203	11R	x	x	x	x	cut 4/14
	204	12R	8	10	x	x	cut 3/16
	205	13R	9	10			split
	206	14R	9	10			
	207	15R	9	10			split
	208	16R	7	10			alligator
	209	17R	0	9	0	0	Failed
	210	22R	0	8	0	0	Failed
	211	22W	10	10			split
Merichem	212	MWOB8	x	x	x	x	cut 4/10
	213	MWOB8	x	x	x	x	cut 4/14
	214	MWOB8	10	10			large check/iron sickness
	215	MWOB8	10	10			iron sickness
	216	MWOB8	10	10			large check/iron sickness
	217	MWOB8	10	10	x	x	cut 3/16

	218	MWOB8	x		x		x	x	cut 5/12
	219	MRO8	x		x		x	x	cut 5/12
	220	MRO8	x		x		x	x	cut 4/10
	221	MRO8	x		x		x	x	cut 4/14
	222	MRO8		10		10			pic 09
	223	MRO8		9		10	x	x	cut 3/16
	224	MRO8		10		10			
	225	MRO8		10		10			large check
	226	MRO8		10		10			split
	227	MWOB8		10		10			
	228	MWOB8		10		10			large check
	229	MRO8		10		10			
	230	MRO8		10		10			large check
	231	MRO8		10		10			iron sickness
	232	MWO8	x		x		x	x	cut 4/10
	233	MWO8	x		x		x	x	cut 4/14
	234	MWO8		10		10			large check/iron sickness
	235	MWO8		10		10			
	236	MWO8		10		10			
	237	MWO8		10		10			
	238	MWO8		10		10			large check
	239	MWO8		10		10			large check
	240	MWO8		9		10	x	x	cut 3/16
	241	MROB8	x		x		x	x	cut 4/10
	242	MROB8	x		x		x	x	cut 4/14
	243	MROB8	x		x		x	x	cut 5/12
	244	MWO8	x		x		x	x	cut 5/12
	245	MROB8		10		10	x	x	cut 3/16
	246	MROB8		10		10			iron sickness
	247	MROB8		10		10			large check/iron sickness
	248	MROB8		10		10			large check/iron sickness
	249	MROB8		10		10			large check/iron sickness
	250	MROB8		10		9			spike kill/iron sickness
	251	MROB8		10		9			pic 09/DK/iron sickness
	252	MROCONT		9		10			
BioPres	253	MWOCONT		9		10			pic 09/DK top side
	254	MWOCONT		9		10			
	255	75							
	256	67							
	257	68							DK top side
	258	69							DK top side
	259	71							
	260	74							DK top side
	261	82							
	262	77							
	263	93							
	264	?							DK top side
	265	66							
	266	65							
	267	73							
KMG	270	1	x		x		x	x	cut 5/12
	271	14	x		x		x	x	cut 4/14

	272	12		10		10	x	x	cut 3/16
	273	16		10		10			
	274	15		10		10			large check
	275	18		10		10			check
	276	19		10		10			check
	277	10	x		x		x	x	cut 4/10
	278	30	x		x		x	x	cut 4/10
	279	33	x		x		x	x	cut 4/14
	280	34		10		10	x	x	
	281	24		10		10	x	x	cut 3/16
	282	27		10		10			large check
	283	28		10		10			
	284	29		10		10			large check
	285	32		10		10			large check
	286	13		10		10			large check
	287	31	x		x		x	x	cut 5/12
	288	9		10		10			large check
	289	25		10		10			
	290	22(Woctrl)		9		10			
	291	44(Roctrl)		8		10			large check
Koppers	292	11	x		x		x	x	cut 5/12
	293	?		10		10			
	294	?		10		10			
	295	?		10		10			
	296	19	x		x		x	x	cut 4/10
	297	15	x		x		x	x	cut 4/14
	298	?		10		10			
	299	?		10		10			large check
	300	47	x		x		x	x	cut 4/10
	301	44	x		x		x	x	cut 4/14
	302	41		10		10	x	x	cut 3/16
	303	55		10		10			large check
	304	60		10		10			
	305	43	x		x		x	x	cut 5/12
	306	51		10		10			
	307	?		10		10			
	308	76		10		10	x	x	cut 3/16
	309	65		10		10			check
	310	61	x		x		x	x	cut 4/10
	311	70	x		x		x	x	cut 4/14
	312	72		10		10			
	313	71		10		10			
	314	64		10		10			
	315	2?		10		10			large check
	316	?		10		10			
	317	34	x		x		x	x	cut 4/10
	318	38	x		x		x	x	cut 5/12
	319	?		10		10			
	320	29	x		x		x	x	cut 4/14
	321	?		10		10			
	322	21?		10		10			
	323	31		10		10	x	x	cut 3/16

	324	35		10		10	_____	_____	_____
	325	23		10		10	_____	_____	large check_____
	326	66	x		x		x	x	cut 5/12_____
	327	67		10		10	_____	_____	_____
	328	42		10		10	_____	_____	check_____
	329	49		10		10	_____	_____	_____
	330	7		10		10	_____	_____	check_____
	331	8		10		10	x	x	cut 3/16_____
	332	WO	x		x		x	x	cut 5/12_____
	333	RO	x		x		x	x	FST Alate wings found/cut 5/12___
	334	RO		0		9.5	0	0	Failed
Enviro	335	ctrl		4		10	_____	_____	large check_____
	336	ctrl		7		10	_____	_____	large check_____
	337	ctrl		7		10	_____	_____	_____

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Applicable Standards:
None: