



FOREST AND WILDLIFE RESEARCH CENTER

FOREST PRODUCTS DEPARTMENT

**Field Test to Determine the Comparative Durability of Crossties
Treated with Alternative Preservatives
*1st annual Inspection Report***



Submitted To:

**Jim Gauntt
Railway Tie Association
115 Commerce Drive, Suite C
Fayetteville, GA 30214
Email: jgauntt@rta.org**

Submitted By:

**T.L. Amburgey, M.G. Sanders,
H.M. Barnes and G.B. Lindsey
Department of Forest Products
Wood Protection Testing Laboratory
Box 9820
Mississippi State, MS 39762
Phone: (662) 325-8097
Fax: (662) 325-8986
Email: msanders@cfr.msstate.edu**

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This report covers the first 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. Various ties at each site were selected at random to be examined on all four surfaces. The rating scale used for inspections is found in table one. Photo documentation from the inspections and copies of the inspection forms can be found in the appendix.

Rating	Description of Condition
10	Sound. Suspicion of decay permitted
9	Trace decay to 3% of cross section
8	Decay from 3 to 10% of cross section
7	Decay from 10 to 30% of cross section
6	Decay from 30 to 50% of cross section
4	Decay from 50 to 75% of cross section
0	Failure



Figure 1 – An overall view of the ties exposed at the Dorman Lake research site at the time of inspection (Site 2).



Figure 2 – After one year of exposure, evidence of decay could already be found in some ties (Site 2).



Figure 3 – Fruiting bodies of decay fungi are an obvious sign of active decay (Site 2).



Figure 4 – After only one year of exposure, termite (*Reticulitermes flavipes*) damage was found in several control (untreated) ties (Site 2).



Figure 5 – An overall view of the ties exposed at the MSU Formosan Termite Research Facility at the time of the one-year inspection (Site 1).



Figure 6 – Obvious decay was evident in some ties after one year of exposure (Site 1).



Figure 7 – As shown in this photograph, the harsh conditions of exposure provided ample opportunity for the growth of decay fungi (Site 1).



Figure 8 – After one year of exposure evidence of termite (*Coptotermes formosanus*) damage was found in some control (untreated) ties (Site 1).

APPENDIX

Plot Map RTA Ties (Dorman)			May-09				
Position	Row 1 runs North - South (Eastern most row)		Decay	Termite	Decay	Termite	Comments
1	wo-2	Cedar	10	10			
2	wo-3		10	10			
3	wo-4		10	10			
4	wo-5		10	10			
5	wo-7		10	10			
6	wo-6		10	10			
7	wo-1		10	10			
8	wo-10		10	10			
9	wo-8		10	10			
10	wo-9		10	10			
11	wo-21		10	10			
12	ro-18		10	10			
13	ro-19		10	10			
14	ro-20		10	10			
15	ro-7		10	10			
16	ro-6		10	10			
17	ro-5		10	10			
18	ro-21		10	10			
19	ro-4		10	10			
20	ro-3		10	10			
21	ro-2		10	10			
22	ro-1		10	10			
23	5	Turada	9	10			DK
24	6		10	10			
25	7		10	10			
26	4		10	10			
27	2		10	10			
28	9		10	10			
29	8		10	10			
30	10	10	10				
31	1	10	10				
32	3	10	10				
33	SROBC-33	Seaman	10	10			
34	SROBC-34		10	10			
35	SROBC-35		10	10			
36	SROBC-36		10	10			
37	SROBC-37		10	10			
38	SROBC-38		10	10			
39	SROBC-39		10	10			
40	SROBC-40		10	10			
41	SROBC-41		10	10			
42	SWOCEF-42		10	10			
43	SWOREF-43		10	10			
44	SWOREF-44		10	10			
45	SWOCREF-45		10	10			
46	SWOCREF-46		10	10			
47	SWOCREF-47		10	10			

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48	SWOCREF-48		10	10	_____	_____	_____
49	SWOCREF-49		10	10	_____	_____	_____
50	SWOCREF-50		10	10	_____	_____	_____
51	SROC-51		9	9	_____	_____	live termites_____
52	SWOC-52		9	9	_____	_____	live termites_____
53	SWOC-53		10	10	_____	_____	_____
54	SWOBCREF-54		10	10	_____	_____	_____
55	SWOBCREF-55		10	10	_____	_____	_____
56	SWOBCREF-56		10	10	_____	_____	_____
57	SWOBCREF-57		10	10	_____	_____	_____
58	SWOBCREF-58		10	10	_____	_____	_____
59	SWOBCREF-59		10	10	_____	_____	_____
60	SWOBCREF-60		10	10	_____	_____	_____
61	SWOBCREF-61		10	10	_____	_____	_____
62	SWOBDREF-62		10	10	_____	_____	_____
63	SROC5-63		10	10	_____	_____	_____
64	SROC5-64		10	10	_____	_____	_____
65	SROC5-65		10	10	_____	_____	_____
66	SROC5-66		10	10	_____	_____	_____
67	SROC5-67		10	10	_____	_____	_____
68	SROC5-68		10	10	_____	_____	_____
69	SROC5-69		10	10	_____	_____	_____
70	SROC5-70		10	10	_____	_____	_____
71	SROBC5-71		10	10	_____	_____	_____
72	SROBC5-72		10	10	_____	_____	_____
73	SROBC5-73		10	10	_____	_____	_____
74	SROBC5-74		10	10	_____	_____	_____
75	SWOBCREF-75		10	10	_____	_____	_____
76	SWOCREF-76		10	10	_____	_____	_____
77	SROC-77		10	10	_____	_____	_____
78	SROBC5-78		10	10	_____	_____	_____
79	SROBC5-79		10	10	_____	_____	_____
80	SROBC5-80		10	10	_____	_____	_____
81	SROBC5-81		10	10	_____	_____	_____
82	SWOBCREF-82		10	10	_____	_____	_____
83	SROBC5-83		10	10	_____	_____	_____
84	SROBC5-84		10	10	_____	_____	_____
85	wo-136	Lonza	10	10	_____	_____	_____
86	wo-130		10	10	_____	_____	_____
87	wo-129		10	10	_____	_____	_____
88	wo-121		10	10	_____	_____	_____
89	wo-127		10	10	_____	_____	_____
90	wo-124		10	10	_____	_____	_____
91	wo-128		10	10	_____	_____	_____
92	wo-122		10	10	_____	_____	_____
93	wo-123		10	10	_____	_____	_____
94	wo-125		10	10	_____	_____	_____
95	ro-105		10	10	_____	_____	_____
96	ro-104		10	10	_____	_____	_____
97	ro-103		10	10	_____	_____	_____
98	ro-102		10	10	_____	_____	_____

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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	_____	_____	_____
105	wo-135		10	10	_____	_____	_____
106	wo-134		10	10	_____	_____	_____
107	wo-138		10	10	_____	_____	_____
108	wo-139		10	10	_____	_____	_____
109	wo-137		10	10	_____	_____	_____
110	wo-132		10	10	_____	_____	_____
111	wo-136		10	10	_____	_____	_____
112	wo-140		10	10	_____	_____	_____
113	wo-133		10	10	_____	_____	_____
114	wo-131		9	10	_____	_____	_____
115	ro-182		9	10	_____	_____	_____
116	ro-181		10	10	_____	_____	_____
117	ro-114		10	10	_____	_____	_____
118	ro-120		10	10	_____	_____	_____
119	ro-117		10	10	_____	_____	_____
120	ro-112		10	10	_____	_____	_____
121	ro-113		10	10	_____	_____	_____
122	ro-115		10	10	_____	_____	_____
123	ro-119		10	10	_____	_____	_____
124	ro-116		10	10	_____	_____	_____
125	ro-111		10	10	_____	_____	_____
126	ro-118		10	10	_____	_____	_____
127	P3RO	KMG	10	10	_____	_____	_____
128	P3RO		10	10	_____	_____	_____
129	P3RO		10	10	_____	_____	_____
130	P3RO		10	10	_____	_____	_____
131	P3RO		10	10	_____	_____	_____
132	P3RO		10	10	_____	_____	_____
133	P3RO		10	10	_____	_____	_____
134	P3RO		10	10	_____	_____	_____
135	P3RO		10	10	_____	_____	_____
136	P3RO		10	10	_____	_____	_____
137	P3WO		10	10	_____	_____	_____
138	P3WO		10	10	_____	_____	_____
139	P3WO		10	10	_____	_____	_____
140	P3WO		10	10	_____	_____	_____
141	P3WO		10	10	_____	_____	_____
142	P3WO		10	10	_____	_____	_____
143	P3WO		10	10	_____	_____	_____
144	P3WO		10	10	_____	_____	_____
145	P3WO		10	10	_____	_____	_____
146	P3WO		10	10	_____	_____	_____
147	Woctrl		8	9	_____	_____	live termites
148	Roctrl		10	10	_____	_____	_____
149	WO122	Nisus	10	10	_____	_____	_____

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150	WO14	10	10	_____	_____	_____
151	WO128	10	10	_____	_____	_____
152	WO61	10	10	_____	_____	_____
153	WO5	10	10	_____	_____	_____
154	WO1	10	10	_____	_____	_____
155	WO71	10	10	_____	_____	_____
156	WO98	10	10	_____	_____	_____
157	WO139	10	10	_____	_____	_____
158	WO135	10	10	_____	_____	_____
159	WO144	10	10	_____	_____	_____
160	WO126	10	10	_____	_____	_____
161	WO131	10	10	_____	_____	_____
162	WO138	10	10	_____	_____	_____
163	WO130	10	10	_____	_____	_____
164	WO125	10	10	_____	_____	_____
165	WO29	10	10	_____	_____	_____
166	WO52	10	10	_____	_____	_____
167	WO137	10	10	_____	_____	_____
168	WO134	10	10	_____	_____	_____
169	WO44ctrl	10	10	_____	_____	fruiting body_____
170	WO94ctrl	10	10	_____	_____	_____
171	RO6ctrl	9	10	_____	_____	_____

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172	RO-51ctrl		10	10	_____	_____	_____
173	RO21		10	10	_____	_____	_____
174	RO22		10	10	_____	_____	_____
175	RO15		10	10	_____	_____	_____
176	RO62		10	10	_____	_____	_____
177	RO46		10	10	_____	_____	_____
178	RO2		10	10	_____	_____	_____
179	RO24		10	10	_____	_____	_____
180	RO20		10	10	_____	_____	_____
181	RO37		10	10	_____	_____	_____
182	RO31		10	10	_____	_____	_____
183	RO59		10	10	_____	_____	_____
184	RO89		10	10	_____	_____	_____
185	RO13		10	10	_____	_____	_____
186	RO58		10	10	_____	_____	_____
187	RO57		10	10	_____	_____	_____
188	RO12		10	10	_____	_____	_____
189	RO56		10	10	_____	_____	_____
190	RO25		10	10	_____	_____	_____
191	RO43		10	10	_____	_____	_____
192	RO10		10	10	_____	_____	_____
193	RO54		10	10	_____	_____	_____
194	RO38		10	10	_____	_____	_____
195	RO45		10	10	_____	_____	_____
196	RO16		10	10	_____	_____	_____
197	RO72		10	10	_____	_____	_____
198	RO77		10	10	_____	_____	_____
199	RO40		10	10	_____	_____	_____
200	RO55		10	10	_____	_____	_____
201	RO18		10	10	_____	_____	_____
202	RO3		10	10	_____	_____	_____
203	WO49		10	10	_____	_____	_____
204	WO121		10	10	_____	_____	_____
205	WO68		10	10	_____	_____	_____
206	WO11		10	10	_____	_____	_____
207	WO65		10	10	_____	_____	_____
208	WO92		10	10	_____	_____	_____
209	WO60		10	10	_____	_____	_____
210	WO47		10	10	_____	_____	_____
211	WO90		10	10	_____	_____	_____
212	WO69		10	10	_____	_____	_____
213	MROB8	Merichem	10	10	_____	_____	_____
214	MROB8		10	10	_____	_____	_____
215	MROB8		10	10	_____	_____	_____
216	MROB8		10	10	_____	_____	_____
217	MROB8		10	10	_____	_____	_____
218	MROB8		10	10	_____	_____	_____
219	MROB8		10	10	_____	_____	_____
220	MROB8		10	10	_____	_____	_____
221	MROB8ctrl		9	10	_____	_____	_____
222	MROB8		10	10	_____	_____	_____

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223	MROB8	10	10			
224	MWO8ctrl	7	10			
225	MWO8ctrl	10	10			
226	MRO8ctrl	10	10			
227	MRO8	10	10			
228	MRO8	10	10			
229	MRO8	10	10			
230	MRO8	10	10			
231	MRO8	10	10			
232	MRO8	10	10			
233	MRO8	10	10			
234	MRO8	10	10			
235	MWOB8	10	10			
236	MWOB8	10	10			
237	MWOB8	10	10			
238	MWOB8	10	10			
239	MWOB8	10	10			
240	MWOB8	10	10			
241	MWOB8	10	10			
242	MWOB8	10	10			
243	MWOB8	10	10			
244	MWOB8	10	10			

Row 2 runs North - South (West row)

		May-09				
		Decay	Termite	Decay	Termite	Comments
245	6	10	10			
246	14	10	10			
247	79	10	10			
248	73	10	10			
249	75	10	10			
250	?	10	10			
251	80	10	10			
252	?	10	10			
253	62	10	10			
254	82	10	10			
255	68	10	10			
256	74	10	10			
257	37	10	10			
258	26	10	10			
259	53	10	10			
260	59	10	10			
261	52	10	10			
262	48	10	10			
263	45	10	10			
264	67	10	10			
265	51?	10	10			
266	?	10	10			
267	88	10	10			
268	46	10	10			
269	12	10	10			

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270	20		10	10	_____	_____	_____
271	31		10	10	_____	_____	_____
272	17		10	10	_____	_____	_____
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	_____	_____	_____
280	?		10	10	_____	_____	_____
281	22		10	10	_____	_____	_____
282	39		10	10	_____	_____	_____
283	25		10	10	_____	_____	_____
284	?		10	10	_____	_____	_____
285	WO30	Enviro	10	10	_____	_____	_____
286	RO6		10	10	_____	_____	_____
287	RO7		10	10	_____	_____	_____
288	RO8		10	10	_____	_____	_____
289	RO9		10	10	_____	_____	_____
290	RO1		10	10	_____	_____	_____
291	RO2		10	10	_____	_____	_____
292	RO3		10	10	_____	_____	_____
293	RO4		10	10	_____	_____	_____
294	RO5		10	10	_____	_____	_____
295	RO10		10	10	_____	_____	_____
296	6	BioP	10	10	_____	_____	_____
297	1		10	10	_____	_____	_____
298	7		10	10	_____	_____	_____
299	8		10	10	_____	_____	_____
300	9		10	10	_____	_____	_____
301	10		10	10	_____	_____	_____
302	2		10	10	_____	_____	_____
303	3		10	10	_____	_____	_____
304	4		10	10	_____	_____	_____
305	5		10	10	_____	_____	_____
306	12		10	10	_____	_____	control?_____
307	9469		10	10	_____	_____	_____
308	9459		10	10	_____	_____	_____
309	9460		10	10	_____	_____	_____
310	9471		10	10	_____	_____	_____
311	9472		10	10	_____	_____	_____
312	9470		10	10	_____	_____	_____
313	9464		10	10	_____	_____	_____
314	11		9	10	_____	_____	control?_____
315	9468		10	10	_____	_____	_____
316	9466		10	10	_____	_____	_____
317	9467		10	10	_____	_____	_____
318	roctrl	Enviro	10	10	_____	_____	_____
319	roctrl		10	10	_____	_____	_____
320	woctrl		10	10	_____	_____	_____

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321	wocrl		8	10	_____	_____	fruiting body_____
322	WO22		10	10	_____	_____	_____
323	WO23		10	10	_____	_____	_____
324	WO24		10	10	_____	_____	_____
325	WO25		10	10	_____	_____	_____
326	WO27		10	10	_____	_____	_____
327	WO28		10	10	_____	_____	_____
328	WO29		10	10	_____	_____	_____
329	WO21		10	10	_____	_____	_____
330	WO26		10	10	_____	_____	_____
331	MWO8	Meri	10	10	_____	_____	_____
332	MWO9		10	10	_____	_____	_____
333	MRO10		10	10	_____	_____	_____
334	MWO11		10	10	_____	_____	_____
335	MWO12		10	10	_____	_____	_____
336	MWO13		10	10	_____	_____	_____
337	MWO14		10	10	_____	_____	_____
338	MWO15		10	10	_____	_____	_____
339	MWO16		10	10	_____	_____	_____
340	MWO17		10	10	_____	_____	_____
341	MWO18		10	10	_____	_____	_____

APPENDIX

Plot Map RTA Ties (McNeill)		Mar. 09					
Position	Row 1 runs East - West (Northern most row)		Decay	Termite	Decay	Termite	Comments
1	1	Turada	10	10	_____	_____	pic 09_____
2	2		10	10	_____	_____	_____
3	3		10	10	_____	_____	_____
4	4		10	10	_____	_____	_____
5	5		10	10	_____	_____	_____
6	6		10	10	_____	_____	_____
7	7		10	10	_____	_____	_____
8	8	DK	9	10	_____	_____	DK present upon delivery_____
9	9		10	10	_____	_____	_____
10	10	DK	9	10	_____	_____	DK present upon delivery_____
11	11RO	Envirosafe	10	10	_____	_____	pic 09_____
12	15RO		10	10	_____	_____	_____
13	14RO		10	10	_____	_____	_____
14	13RO		10	10	_____	_____	_____
15	12RO		10	10	_____	_____	_____
16	20RO		10	10	_____	_____	_____
17	19RO		10	10	_____	_____	_____
18	18RO		10	10	_____	_____	_____
19	17RO		10	10	_____	_____	_____
20	16RO		10	10	_____	_____	_____
21	35WO		10	10	_____	_____	_____
22	34WO		10	10	_____	_____	_____
23	33WO		10	10	_____	_____	_____
24	32WO		10	10	_____	_____	_____
25	31WO		10	10	_____	_____	_____
26	40WO		10	10	_____	_____	_____
27	39WO		10	10	_____	_____	_____
28	38WO		10	10	_____	_____	_____
29	37WO		10	10	_____	_____	_____
30	36WO		10	10	_____	_____	_____
31	SROC5	Seaman	10	10	_____	_____	_____
32	SROC5		10	10	_____	_____	_____
33	SROC5		10	10	_____	_____	_____
34	SROC5		10	10	_____	_____	pic 09_____
35	SROC5		10	10	_____	_____	_____
36	SROC5		10	10	_____	_____	_____
37	SROC5		10	10	_____	_____	_____
38	SROC5		10	10	_____	_____	_____
39	SROC5		10	10	_____	_____	_____
40	SROC5		10	10	_____	_____	_____
41	SROBC5		10	10	_____	_____	_____
42	SROBC5		10	10	_____	_____	_____
43	SROBC5		10	10	_____	_____	_____
44	SROBC5		10	10	_____	_____	_____
45	SROBC5		10	10	_____	_____	_____
46	SROBC5		10	10	_____	_____	_____
47	SROBC5		10	10	_____	_____	_____
48	SROBC5		10	10	_____	_____	_____
49	SROBC5		10	10	_____	_____	_____
50	SROBC5		10	10	_____	_____	_____
51	SWOREF		10	10	_____	_____	_____
52	SWOREF		10	10	_____	_____	_____
53	SWOREF		10	10	_____	_____	_____
54	SWOREF		10	10	_____	_____	_____
55	SWOREF		10	10	_____	_____	_____

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56	SWOREF		10	10			
57	SWOREF		10	10			
58	SWOREF		10	10			
59	SWOREF		10	10			
60	SWOREF		10	10			
61	SWOBCREF		10	10			
62	SWOBCREF		10	10			
63	SWOBCREF		10	10			
64	SWOBCREF		10	10			
65	SWOBCREF		10	10			
66	SWOBCREF		10	10			
67	SWOBCREF		10	10			
68	SWOBCREF		10	10			
69	SWOBCREF		10	10			
70	SWOBCREF		10	10			
71	SROBC7		10	10			
72	SROBC7		10	10			
73	SROBC7		10	10			
74	SROBC7		10	10			
75	SROBC7		10	10			
76	SROBC7		10	10			
77	SROBC7		10	10			
78	SROBC7		10	10			
79	SROBC7		10	10			
80	SROBC7		10	10			
81	ctrlSROC7		10	10			
82	ctrlSWOC5		10	10			
83	ctrlSWOC5		9	10			pic 09/active DK/FB
84	209	Lonza	10	10			pic 09
85	206		10	10			
86	204		10	10			
87	201		10	10			
88	208		10	10			
89	203		10	10			
90	205		10	10			
91	207		10	10			
92	210		10	10			
93	202		10	10			
94	240	Nisus	10	10			pic 09
95	237		10	10			
96	243		10	10			
97	238		10	10			
98	245		10	10			
99	239		10	10			
100	247		10	10			
101	241		10	10			
102	233		10	10			
103	242		10	10			
104	203		10	10			
105	227		10	10			
106	207		10	10			
107	200		10	10			
108	229		10	10			
109	206		10	10			
110	216		10	10			
111	220		10	10			
112	212		10	10			
113	222		10	10			
114	217		10	10			

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115	264		10	10			
116	287		10	10			
117	253		10	10			
118	283		10	10			
119	219		10	10			
120	276		10	10			
121	292		10	10			
122	269		10	10			
123	289		10	10			
124	225		10	10			
125	204		10	10			
126	234		10	10			
127	215		10	10			
128	231		10	10			
129	213		10	10			
130	205		10	10			
131	208		10	10			
132	210		10	10			
133	226		10	10			
134	305		10	10			
135	201		10	10			
136	313		10	10			
137	294		10	10			
138	308		10	10			
139	301		10	10			
140	291		10	10			
141	309		10	10			
142	296		10	10			
143	314		10	10			
144	236	Lonza	10	10			
145	232		10	10			
146	238		10	10			
147	234		10	10			
148	231		10	10			
149	233		10	10			
150	235		10	10			
151	239		10	10			
152	240		10	10			
153	237		10	10			
154	272	Nisus	10	10			
155	223		10	10			
156	256		10	10			
157	297		10	10			
158	295		10	10			
159	267		10	10			
160	299		10	10			
161	261		10	10			
162	214		10	10			
163	275		10	10			
164	281	Lonza	10	10			
165	282		10	10			
166	315	Nisus	10	10			
167	316		10	10			
168	249		10	10			
169	248		9	10			pic 09/DK active

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Row 2 runs East - West (middle row)

			Mar. 09				
			Decay	Termite	Decay	Termite	Comments
170	220	Lonza	10	10			pic 09
171	218		10	10			
172	214		10	10			
173	219		10	10			
174	212		10	10			
175	217		10	10			
176	216		10	10			
177	211		10	10			
178	213		10	10			
179	215		10	10			
180	224		10	10			
181	228		10	10			
182	221		10	10			
183	222		10	10			
184	230		10	10			
185	225		10	10			
186	226		10	10			
187	229		10	10			
188	223		10	10			
189	227		10	10			
190	19W	Cedarcide	9	10			pic 09
191	20W		10	10			
192	15W		10	10			
193	16WC		10	10			
194	18W		10	10			
195	17W		10	10			
196	10R		10	10			pic 09/alligator
197	9RC		10	10			
198	8R		10	10			
199	11W		10	10			
200	12W		10	10			
201	13W		10	10			
202	14W		10	10			
203	11R		10	10			
204	12R		10	10			
205	13R		10	10			
206	14R		10	10			
207	15R		10	10			
208	16R		10	10			
209	17R		10	10			
210	22R		10	10			
211	22W		10	10			
212	MWOB8-1	Merichem	10	10			
213	MWOB9-5		10	10			
214	MWOB8-?		10	10			
215	MWOB8-?		10	10			
216	MWOB8-4		10	10			
217	MWOB8-8		10	10			
218	MWPB8-9		10	10			
219	MRO8-4		10	10			
220	MRO8-?		10	10			
221	MRO8-?		10	10			
222	MRO8-6		10	10			pic 09
223	MRO8-7		10	10			
224	MRO8-?		10	10			

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225	MRO8-2		10	10			
226	MRO8-?		10	10			
227	MWOB8-10		10	10			
228	MWOB8-9		10	10			
229	MRO8-?		10	10			
230	MRO8-?		10	10			
231	MWO8-20		10	10			
232	MWO8-?		10	10			
233	MWO8-?		10	10			
234	MWO8-15		10	10			
235	MWO8-11		10	10			
236	MWO8-16		10	10			
237	MWO8-18		10	10			
238	MWO8-?		10	10			
239	MROB8-17		10	10			
240	MROB8-20		10	10			
241	MROB8-?		10	10			
242	MWO8-13		10	10			
243	MROB8-14		10	10			
244	MROB8-18		10	10			
245	MROB8-19		10	10			
246	MROB8-?		10	10			
247	MROB8-?		10	10			
248	MROB8-15		10	10			
249	MROB8-16		10	10			
250	MROCONT		10	9			pic 09/termite dmg
251	MWOCONT		10	9			pic 09/DK
252	MWOCONT		10	10			
253	72	BioPres	9	10			pic 09/DK top side
254	76		10	10			
255	75		10	10			
256	67		10	10			
257	68		9	10			DK top side
258	69		9	10			DK top side
259	71		10	10			
260	74		9	10			DK top side
261	82		10	10			
262	77		10	10			
263	93		10	10			
264	?		9	10			DK top side
265	66		10	10			
266	65		10	10			
267	73		10	10			
268	1	KMG	10	10			
269	14		10	10			
270	12		10	10			
271	16		10	10			
272	15		10	10			
273	18		10	10			
274	19		10	10			
275	10		10	10			
276	30		10	10			pic 09
277	33		10	10			
278	34		10	10			
279	24		10	10			
280	27		10	10			
281	28		10	10			
282	29		10	10			
283	32		10	10			

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284	13		10	10			
285	31		10	10			
286	9		10	10			
287	25		10	10			
288	22		10	10			
289	44		10	10			pic 09
290	11	Koppers	10	10			
291 ?			10	10			
292 ?			10	10			
293 ?			10	10			
294	19		10	10			
295	15		10	10			
296 ?			10	10			
297 ?			10	10			
298	47		10	10			
299	44		10	10			
300	41		10	10			
301	55		10	10			
302	60		10	10			
303	43		10	10			pic 09
304	51		10	10			
305	76		10	10			
306	65		10	10			
307	61		10	10			
308	70		10	10			
309	72		10	10			
310	71		10	10			
311	77		10	10			
312	64		10	10			
313 2?			10	10			
314	34		10	10			
315	38		10	10			
316	33		10	10			
317	29		10	10			
318	32		10	10			
319 ?			10	10			
320	31		10	10			
321	35		10	10			
322	23		10	10			
323	66		10	10			
324	67		10	10			
325 ?			10	10			
326	61		10	10			
327	7		10	10			
328	8		10	10			
329 WO			9	10			pic 09/DK
330 WO			10	10			pic 09
331 RO			10	10			
332 RO			9	10			pic 09/DK
333 ctrl		Enviro	10	10			
334 ctrl			10	10			

Key
 DK Decay
 pic Picture Taken

Report authorized by:



Date: 9-8-09

H. Michael Barnes, Thompson Professor of Wood Science & Technology
Department of Forest Products, Wood Protection Testing Laboratory
Mississippi State University

Deliveries: 100 Blackjack Road
Starkville, MS 39759

Phone: 662-325-3056

Fax: 662-325-8126

Email: mbarnes@cfr.msstate.edu

Mail: Box 9820

Mississippi State, MS 39762-9820

No Applicable Standards

Reference: RTA Crosstie Folder.