

71-9218
71-9279

Washington

TRU Solutions LLC

PK:08:00002
UFC:2300.00

January 21, 2008

Mr. M. Rahimi, Senior Project Manager
NMSS/SFPO MS/013D13
U.S. Nuclear Regulatory Commission
One White Flint North
15555 Rockville Pike
Rockville, MD 20852-2738

Subject: PROPOSED METHODOLOGY FOR SHIPMENT OF ANALYTICAL CATEGORY
100-GALLON DRUM TRANSURANIC WASTES IN TRUPACT-II AND HalfPACT
PACKAGES

- References:
1. Personal Correspondence between M. Rahimi (U.S. Nuclear Regulatory Commission) and T. E. Sellmer (Washington TRU Solutions LLC), dated December 2007 and January 2008.
 2. Letter from T. E. Sellmer (Washington TRU Solutions LLC) to M. Rahimi (U.S. Nuclear Regulatory Commission), Subject: Shipment of 100-Gallon Drum Transuranic Wastes in TRUPACT-II and HalfPACT Packages, dated November 20, 2007 [Docket Nos. 71-9218 and 71-9279].
 3. Letter from M. Rahimi (U.S. Nuclear Regulatory Commission) to T. E. Sellmer (Washington TRU Solutions LLC), Subject: Shipment of 100-Gallon Drum Transuranic Wastes in TRUPACT-II and HalfPACT Packages, dated October 12, 2007 [Docket Nos. 71-9218 and 71- 9279].

Dear Mr. Rahimi:

This letter is provided in response to your requests for additional hydrogen sampling data on the 100-gallon drums containing supercompacted 55-gallon puck drums and for proposed CH-TRU Waste Authorized Methods for Payload Control (CH-TRAMPAC) control of those 100-gallon drums (Reference 1). The content of this letter supplements the information previously provided on November 20, 2007 (Reference 2), in answer to the request made by the U.S. Nuclear Regulatory Commission (Reference 3) for information on 100-gallon drums containing 55-gallon puck drums shipped under the analytical category in TRUPACT-II and HalfPACT packages. Reference 2 noted that the elevated hydrogen concentrations observed in the small percentage of the 100-gallon drum inventory correspond to a transient condition resulting from the supercompaction treatment process. The elevated 100-gallon drum headspace hydrogen concentrations produced from this condition are not due to steady-state generation and therefore do not correlate to the decay heat values per 100-gallon drum. As described in Reference 2, the Advanced Mixed Waste Treatment Project (AMWTP) has implemented specific site practices to ensure that any elevated hydrogen concentrations are allowed to decrease prior to shipment, regardless of the analytical decay heat limits being met. Per your request (Reference 1), this letter outlines a proposal to replace the AMWTP-specific practices with formalized controls to be specified in the CH-TRAMPAC document, which defines

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payload requirements for the TRUPACT-II and HalfPACT packages. Controls proposed for specification in the CH-TRAMPAC require that all 100-gallon drums (containing 55-gallon puck drums) evaluated under the analytical category additionally undergo a test category by measurement evaluation, where the test category by measurement evaluation uses an adjusted headspace gas measurement for hydrogen value that is specific to 100-gallon drums containing 55-gallon puck drums. Also as requested by Reference 1, data (cited in Reference 2) on 100-gallon drums for which multiple hydrogen measurement samples were taken are provided in Attachment 1.

Figure 1 provides a flowchart that outlines the proposed CH-TRAMPAC controls for analytical category 100-gallon drums containing 55-gallon puck drums. The proposed 100-gallon-drum-specific test category by measurement methodology for 100-gallon drums meeting analytical category limits consists of the following elements:

- **Measurement of 100-gallon drum headspace hydrogen concentration** – The data package for each 100-gallon drum containing 55-gallon puck drums must include the headspace gas sampling results for hydrogen for each 100-gallon drum. If a given 100-gallon drum data package does not include headspace gas sampling data, the drum will be rejected and may not be further evaluated for shipment until the headspace hydrogen concentration is measured and the drum data package is updated.
- **Use of decay curve to establish an adjusted hydrogen concentration at the time of certification** – The measured 100-gallon drum headspace hydrogen concentration value along with the dates of 100-gallon drum generation (i.e., closure), headspace gas sampling, and certification are used to determine an adjusted hydrogen concentration (corresponding to the time of 100-gallon drum certification) according to a decay curve based on multiple sampling measurement data from the AMWTP (provided in Attachment 1). The decay curve defines the exponential decrease of any initially elevated hydrogen concentration values due to the temporary and transient phenomenon associated with the waste supercompaction process.
- **Application of test category by measurement methodology** – The 100-gallon drum headspace hydrogen concentration applicable at the time of certification (as determined following the application of the decay curve) is evaluated under the currently approved CH-TRAMPAC measurement methodology.

As shown in Figure 1, any 100-gallon drum meeting analytical category decay heat limits that does not also meet test category flammable (gas/VOC) concentration limits is not authorized for shipment.

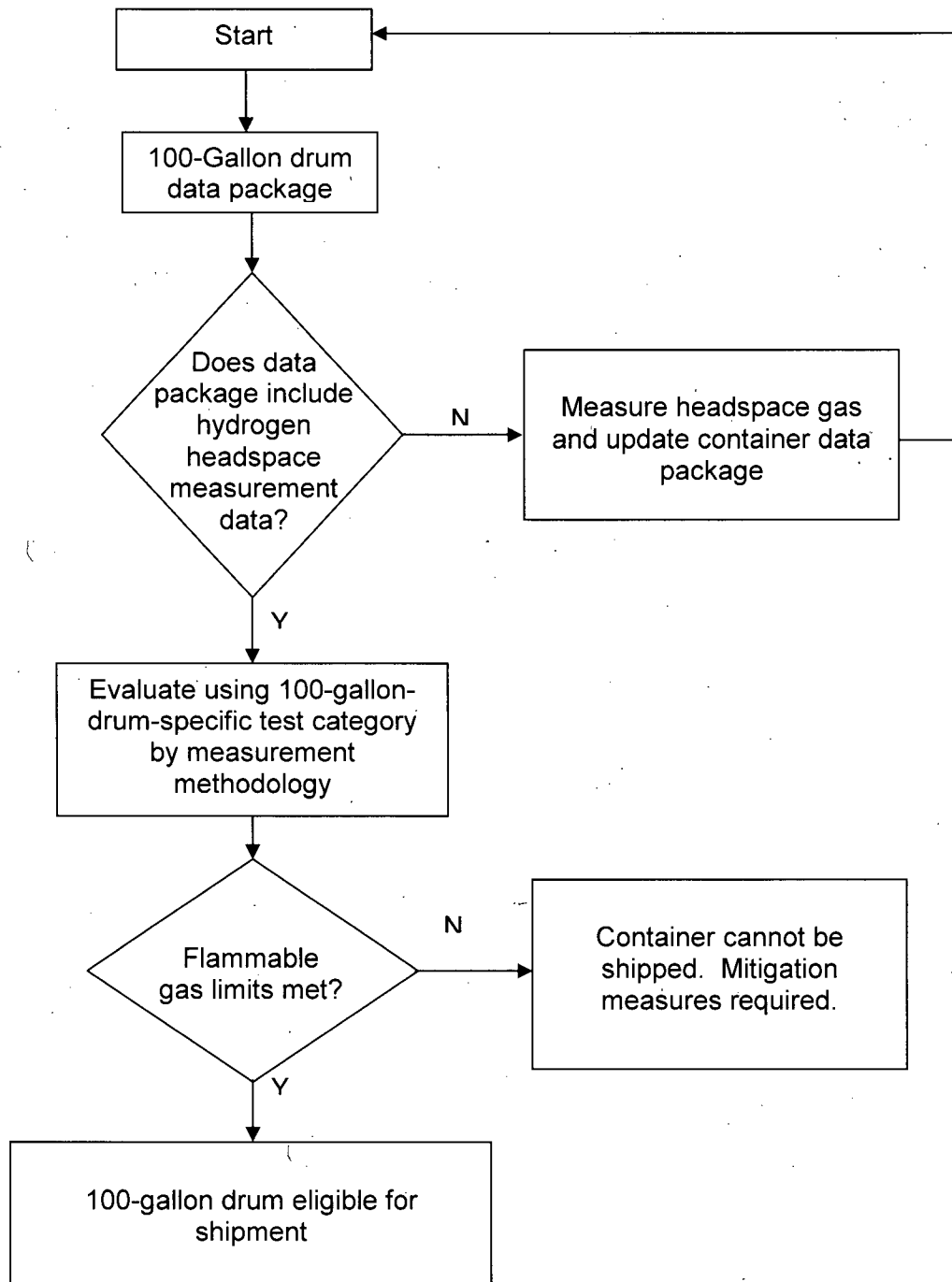


Figure 1. Proposed Gas Generation Methodology for 100-Gallon Drums with 55-Gallon Puck Drums Meeting Analytical Category Limits

In summary, revisions will be made to the CH-TRAMPAC to specify controls so that all analytical category 100-gallon drums with 55-gallon puck drums also are evaluated under the test category per the 100-gallon-drum-specific test category by measurement methodology proposed herein.

If you have any questions or require additional information, please contact me at (505) 234-7396.

Sincerely,



T. E. Sellmer, Manager
Packaging Integration

TES:yhc

Attachment

cc: M. R. Brown, CBFO ED
D.C. Gadbury, CBFO ED
M. A. Italiano, CBFO ED
D. S. Miehls, CBFO ED
D. Moody, CBFO ED
M. P. Navarette, CBFO ED

ATTACHMENT 1

**DATA FROM MULTIPLE HYDROGEN SAMPLES OF
100-GALLON DRUMS WITH 55-GALLON PUCK DRUMS**

Attachment 1

	Container	Closure Date	Vent Date	Sample Date	Days from Vent	Hydrogen Vol%
1	BN10096849	5/5/2006	5/5/2006	5/9/2006	4	2.9
				2/27/2007	298	0.23
2	BN10108979	7/13/2006	7/13/2006	7/20/2006	7	3.2
				10/4/2006	83	0.26
3	BN10114712	9/30/2006	9/30/2006	10/5/2006	5	3.7
				10/21/2006	21	2.3
4	BN10114713	10/1/2006	10/1/2006	10/5/2006	4	3
				10/21/2006	20	0.9
5	BN10115705	8/30/2006	8/30/2006	9/5/2006	6	5.3
				10/4/2006	35	1.8
6	BN10115708	8/29/2006	8/29/2006	9/2/2006	4	5.1
				9/12/2006	14	3.5
				9/27/2006	29	1.5
				10/21/2006	53	1.4
7	BN10115716	8/29/2006	8/29/2006	9/5/2006	7	4.4
				10/4/2006	36	0.9
8	BN10120302	9/27/2006	9/27/2006	10/4/2006	7	4
				10/21/2006	24	2
9	BN10120365	9/28/2006	9/28/2006	10/3/2006	5	4.1
				10/21/2006	23	1.3
10	BN10120368	9/28/2006	9/28/2006	10/3/2006	5	3.1
				10/21/2006	23	1.2
11	BN10120371	9/28/2006	9/28/2006	10/3/2006	5	11
				10/9/2006	11	7.4
				10/25/2006	27	3.9
				11/14/2006	47	2.1
				11/22/2006	55	2
				11/29/2006	62	1.8
12	BN10120731	9/28/2006	9/28/2006	12/22/2006	85	1.4
				10/3/2006	5	2.8
13	BN10120796	10/1/2006	10/1/2006	10/21/2006	23	1.1
				10/4/2006	3	5.6
14	BN10120934	10/1/2006	10/1/2006	10/21/2006	20	2.7
				11/6/2006	36	1.5
15	BN10120937	10/1/2006	10/1/2006	10/5/2006	4	4.3
				10/21/2006	20	1.4
16	BN10120939	10/1/2006	10/1/2006	10/5/2006	4	3.2
				11/6/2006	36	1.1
17	BN10121485	10/5/2006	10/5/2006	10/5/2006	4	6.2
				10/21/2006	20	2.6
18	BN10122080	10/11/2006	10/11/2006	11/6/2007	401	1.5
				10/9/2006	4	6.9
19	BN10122088	10/11/2006	10/11/2006	10/21/2006	16	3.3
				11/6/2006	32	1.6
18	BN10122080	10/11/2006	10/11/2006	10/17/2006	6	2.9
				11/6/2006	26	0.85
19	BN10122088	10/11/2006	10/11/2006	10/17/2006	6	2.6
				11/6/2006	26	0.74

Attachment 1

	Container	Closure Date	Vent Date	Sample Date	Days from Vent	Hydrogen Vol%
20	BN10122314	10/15/2006	10/15/2006	10/21/2006	6	3.1
				11/6/2006	22	1.3
21	BN10122321	10/13/2006	10/13/2006	10/17/2006	4	2.9
				11/6/2006	24	1.1
22	BN10123514	10/19/2006	10/19/2006	10/24/2006	5	0.036
				11/26/2006	38	0.023
23	BN10123809	10/21/2006	10/21/2006	10/25/2006	4	0.13
				11/26/2006	36	0.093
24	BN10124128	10/23/2006	10/23/2006	10/28/2006	5	2.7
				11/9/2006	17	0.24
25	BN10124524	10/24/2006	10/24/2006	10/28/2006	4	5.3
				12/14/2006	51	1.6
26	BN10125631	10/31/2006	10/31/2006	11/4/2006	4	2.9
				11/9/2006	9	1.9
27	BN10125633	10/31/2006	10/31/2006	11/4/2006	4	3.8
				11/9/2006	9	2.4
28	BN10125776	10/30/2006	10/30/2006	11/4/2006	5	5.1
				11/9/2006	10	3.3
				12/9/2006	40	0.58
29	BN10125949	11/9/2006	11/9/2006	11/16/2006	7	2.5
				3/4/2007	115	0.45
30	BN10127258	11/4/2006	11/4/2006	11/9/2006	5	3.2
				1/3/2007	60	1.5
31	BN10127522	11/7/2006	11/7/2006	11/14/2006	7	2.7
				12/5/2006	28	0.92
32	BN10127530	11/7/2006	11/7/2006	11/14/2006	7	3.3
				12/15/2006	38	0.93
33	BN10128334	11/8/2006	11/8/2006	11/14/2006	6	3
				12/4/2006	26	0.91
34	BN10128344	11/8/2006	11/8/2006	11/14/2006	6	2.7
				12/9/2006	31	0.9
35	BN10128671	11/11/2006	11/11/2006	11/16/2006	5	3.7
				11/24/2006	13	3.6
				1/14/2007	64	2.5
				3/4/2007	113	0.85
36	BN10128675	11/11/2006	11/11/2006	11/16/2006	5	5.1
				11/24/2006	13	5.5
				1/14/2007	64	3.8
				3/4/2007	113	1.3
37	BN10129119	11/13/2006	11/13/2006	11/17/2006	4	6.1
				12/17/2006	34	1.7
				12/22/2006	39	1.5
38	BN10129125	11/13/2006	11/13/2006	11/17/2006	4	5.5
				12/8/2006	25	3.5
				1/14/2007	62	2.6
				2/24/2007	103	1.8
				3/4/2007	111	2
				3/29/2007	136	2.5
				4/22/2007	160	1.9

Attachment 1

	Container	Closure Date	Vent Date	Sample Date	Days from Vent	Hydrogen Vol%
39	BN10129246	11/13/2006	11/13/2006	11/22/2006	9	3.3
				12/22/2006	39	1.2
40	BN10129248	11/13/2006	11/13/2006	11/22/2006	9	3.6
				2/24/2007	103	0.51
41	BN10131220	11/23/2006	11/23/2006	11/28/2006	5	1.7
				12/8/2006	15	1.4
42	BN10133604	12/4/2006	12/4/2006	12/10/2006	6	7.3
				2/24/2007	82	2.4
				3/29/2007	115	2.6
43	BN10134587	12/11/2006	12/11/2006	12/17/2006	6	2.1
				2/24/2007	75	1
44	BN10134886	12/13/2006	12/13/2006	12/18/2006	5	3.4
				1/18/2007	36	0.68
45	BN10134888	12/13/2006	12/13/2006	12/18/2006	5	3.8
				2/24/2007	73	0.71
46	BN10134889	12/13/2006	12/13/2006	12/21/2006	8	2.3
				12/22/2006	9	0.9
47	BN10134890	12/13/2006	12/13/2006	12/18/2006	5	1.8
				3/4/2007	81	1.1
48	BN10136422	12/20/2006	12/20/2006	12/27/2006	7	3.8
				2/24/2007	66	0.63
49	BN10136431	12/19/2006	12/19/2006	12/27/2006	8	3
				2/24/2007	67	0.83
50	BN10136719	12/21/2006	12/21/2006	12/28/2006	7	1.8
				2/24/2007	65	0.45
51	BN10137832	12/23/2006	12/23/2006	12/29/2006	6	4.6
				2/27/2007	66	1.5
				1/15/2007	18	7.9
52	BN10138421	12/28/2006	12/28/2006	3/29/2007	91	2.1
				4/22/2007	115	0.8
				1/8/2007	5	1.4
53	BN10139215	1/3/2007	1/3/2007	2/24/2007	52	0.47
				1/15/2007	4	5.6
54	BN10140026	1/11/2007	1/11/2007	3/4/2007	52	1.2
				2/2/2007	5	2.7
55	BN10142994	1/28/2007	1/28/2007	2/24/2007	27	1.5
				2/3/2007	5	9.3
56	BN10143240	1/29/2007	1/29/2007	4/18/2007	79	1.3
				2/3/2007	5	3.4
57	BN10143241	1/29/2007	1/29/2007	2/24/2007	26	1.1
				2/3/2007	5	1.9
58	BN10143246	1/29/2007	1/29/2007	2/24/2007	26	0.58
				2/5/2007	6	2.5
59	BN10143446	1/30/2007	1/30/2007	2/24/2007	25	2
				3/4/2007	33	2.1
				3/29/2007	58	2.4
60	BN10144239	2/7/2007	2/7/2007	2/12/2007	5	3.2
				3/6/2007	27	1.2

Attachment 1

	Container	Closure Date	Vent Date	Sample Date	Days from Vent	Hydrogen Vol%
61	BN10144247	2/7/2007	2/7/2007	2/12/2007	5	2.9
				3/1/2007	22	1.3
62	BN10144256	2/7/2007	2/7/2007	2/12/2007	5	2.3
				2/24/2007	17	0.9
63	BN10144258	2/6/2007	2/6/2007	2/11/2007	5	6.6
				2/27/2007	21	2.6
64	BN10144787	2/10/2007	2/10/2007	2/15/2007	5	3.3
				3/10/2007	28	0.79
65	BN10144788	2/10/2007	2/10/2007	2/16/2007	6	4.3
				3/17/2007	35	1.7
66	BN10144790	2/11/2007	2/11/2007	2/16/2007	5	1.8
				2/24/2007	13	0.82
67	BN10144909	2/13/2007	2/13/2007	2/17/2007	4	2.9
				3/6/2007	21	1.5
68	BN10144971	2/13/2007	2/13/2007	2/17/2007	4	1.7
				2/27/2007	14	1.3
69	BN10146057	2/15/2007	2/15/2007	2/20/2007	5	2
				3/4/2007	17	1.1
70	BN10146419	2/18/2007	2/18/2007	2/22/2007	4	3.1
				3/29/2007	39	1.2
71	BN10146426	2/18/2007	2/18/2007	2/22/2007	4	5.5
				4/22/2007	63	0.69
72	BN10147789	2/21/2007	2/21/2007	2/25/2007	4	2.1
				3/4/2007	11	1.5
73	BN10148709	2/25/2007	2/25/2007	3/1/2007	4	2.1
				3/29/2007	32	0.62
74	BN10148712	2/25/2007	2/25/2007	3/1/2007	4	4.6
				5/7/2007	71	0.96
75	BN10148714	2/25/2007	2/25/2007	3/1/2007	4	2.4
				5/7/2007	71	0.48
76	BN10149953	3/7/2007	3/7/2007	3/12/2007	5	2.5
				4/22/2007	46	1.3
77	BN10150673	3/9/2007	3/9/2007	3/15/2007	6	3
				4/22/2007	44	0.52
78	BN10150885	3/10/2007	3/10/2007	3/15/2007	5	3.1
				5/7/2007	58	0.82
79	BN10150971	3/11/2007	3/11/2007	3/20/2007	9	2.5
				5/7/2007	57	0.91
80	BN10151977	3/14/2007	3/14/2007	3/20/2007	6	2.7
				5/7/2007	54	0.46
81	BN10151978	3/14/2007	3/14/2007	3/20/2007	6	2.1
				5/7/2007	54	0.49
82	BN10153040	3/21/2007	3/21/2007	3/25/2007	4	2.8
				4/22/2007	32	0.58
83	BN10153997	3/24/2007	3/24/2007	3/29/2007	5	1.8
				4/22/2007	29	0.33
84	BN10154147	3/24/2007	3/24/2007	3/29/2007	5	2.2
				4/22/2007	29	0.53
85	BN10154151	3/24/2007	3/24/2007	4/4/2007	11	1.7
				5/7/2007	44	0.47

Attachment 1

	Container	Closure Date	Vent Date	Sample Date	Days from Vent	Hydrogen Vol%
86	BN10155152	3/25/2007	3/25/2007	3/29/2007	4	5.1
				5/7/2007	43	1.1
87	BN10155934	4/1/2007	4/1/2007	4/8/2007	7	2
				4/22/2007	21	0.8
88	BN10155935	4/1/2007	4/1/2007	4/8/2007	7	2.6
				5/15/2007	44	1.9
				7/8/2007	98	0.98
89	BN10155938	4/1/2007	4/1/2007	4/8/2007	7	2.6
				5/7/2007	36	0.67
90	BN10155943	4/1/2007	4/1/2007	4/8/2007	7	5.3
				7/8/2007	98	0.98
91	BN10155947	4/2/2007	4/2/2007	4/5/2007	3	4.4
				5/7/2007	35	1.2
				4/8/2007	6	2.1
92	BN10156127	4/2/2007	4/2/2007	4/22/2007	20	0.94
				4/12/2007	5	1.8
93	BN10157435	4/7/2007	4/7/2007	4/22/2007	15	1.1
				4/12/2007	5	2.7
94	BN10157438	4/7/2007	4/7/2007	4/12/2007	5	2.7
				5/7/2007	30	1.7
				7/9/2007	93	1.3
95	BN10159172	4/18/2007	4/18/2007	4/22/2007	4	1.8
				5/7/2007	19	0.97
96	BN10159191	4/18/2007	4/18/2007	4/22/2007	4	2
				5/7/2007	19	0.65
97	BN10159281	4/17/2007	4/17/2007	4/22/2007	5	3
				5/15/2007	28	1.5
98	BN10159283	4/17/2007	4/17/2007	4/22/2007	5	2.7
				5/7/2007	20	1.5
99	BN10159288	4/18/2007	4/18/2007	4/22/2007	4	3.6
				5/7/2007	19	1.3
100	BN10159290	4/17/2007	4/17/2007	4/22/2007	5	4
				5/7/2007	20	1.5
101	BN10159608	4/19/2007	4/19/2007	4/23/2007	4	2.5
				5/7/2007	18	0.85
102	BN10159620	4/19/2007	4/19/2007	4/23/2007	4	2.2
				5/7/2007	18	0.75
103	BN10161410	4/25/2007	4/25/2007	4/30/2007	5	1.8
				5/18/2007	23	0.56
104	BN10161774	4/27/2007	4/27/2007	5/1/2007	4	2.3
				5/18/2007	21	1
105	BN10161781	4/27/2007	4/27/2007	5/1/2007	4	2.3
				5/18/2007	21	0.77
106	BN10161776	4/27/2007	4/27/2007	5/1/2007	4	3
				6/5/2007	39	0.85
107	BN10162114	4/30/2007	4/30/2007	5/4/2007	4	3.5
				6/4/2007	35	1
108	BN10161771	4/27/2007	4/27/2007	5/2/2007	5	6.1
				8/3/2007	98	0.74

Attachment 1

	Container	Closure Date	Vent.Date	Sample Date	Days from Vent	Hydrogen Vol%
109	BN10161782	4/27/2007	4/27/2007	5/1/2007	4	7.8
				7/8/2007	72	1.4
110	BN10164483	5/10/2007	5/10/2007	5/15/2007	5	4.8
				7/8/2007	59	1.4
111	BN10165320	5/14/2007	5/14/2007	5/18/2007	4	4
				8/3/2007	81	0.68
112	BN10165315	5/14/2007	5/14/2007	5/18/2007	4	3.6
				8/18/2007	96	0.76
113	BN10165137	5/13/2007	5/13/2007	5/17/2007	4	3
				7/8/2007	56	1.1
114	BN10165129	5/13/2007	5/13/2007	5/18/2007	5	2.9
				7/8/2007	56	0.57
115	BN10165309	5/14/2007	5/14/2007	5/18/2007	4	2.8
				7/8/2007	55	0.61
116	BN10165318	5/14/2007	5/14/2007	5/18/2007	4	2.3
				7/9/2007	56	1
117	BN10164557	5/10/2007	5/10/2007	5/16/2007	6	1.9
				7/8/2007	59	0.32
118	BN10165531	5/15/2007	5/15/2007	5/19/2007	4	7.9
				8/3/2007	80	1.5
119	BN10165532	5/16/2007	5/16/2007	5/19/2007	3	6.9
				8/3/2007	79	1.4
120	BN10165414	5/15/2007	5/15/2007	5/19/2007	4	2.4
				7/8/2007	54	0.75
121	BN10165856	5/17/2007	5/17/2007	5/22/2007	5	2.4
				7/8/2007	52	0.7
122	BN10165421	5/15/2007	5/15/2007	5/19/2007	4	2.2
				7/9/2007	55	0.78
123	BN10166797	5/25/2007	5/25/2007	5/29/2007		6.2
				10/23/2007	151	0.25
124	BN10169831	6/9/2007	6/9/2007	6/14/2007	5	8.8
				10/21/2007	134	0.49
125	BN10169827	6/9/2007	6/9/2007	6/14/2007	5	8.5
				10/21/2007	134	0.75
126	BN10169822	6/9/2007	6/9/2007	6/12/2007	3	7.2
				10/20/2007	133	0.42
127	BN10169825	6/9/2007	6/9/2007	6/12/2007	3	6.2
				10/22/2007	135	0.33
128	BN10168472	6/4/2007	6/4/2007	6/8/2007	4	3.9
				8/3/2007	60	1.2
129	BN10170130	6/13/2007	6/13/2007	6/16/2007	3	3.8
				10/23/2007	132	0.21
130	BN10169824	6/9/2007	6/9/2007	6/12/2007	3	2.4
				8/3/2007	55	0.94
131	BN10168604	6/5/2007	6/5/2007	6/12/2007	7	1.9
				8/3/2007	59	0.89
132	BN10169651	6/8/2007	6/8/2007	6/16/2007	8	1.9
				8/3/2007	56	0.46
133	BN10171306	6/13/2007	6/13/2007	6/17/2007	4	9.6
				10/20/2007	129	0.67

Attachment 1

	Container	Closure Date	Vent Date	Sample Date	Days from Vent	Hydrogen Vol%
134	BN10171305	6/13/2007	6/13/2007	6/17/2007	4	8.6
				10/20/2007	129	0.44
135	BN10171311	6/13/2007	6/13/2007	6/17/2007	4	8.1
				10/23/2007	132	0.85
136	BN10171317	6/14/2007	6/14/2007	6/17/2007	3	6.9
				10/23/2007	131	1.5
137	BN10170129	6/13/2007	6/13/2007	6/17/2007	4	4.9
				10/20/2007	129	0.28
138	BN10171308	6/13/2007	6/13/2007	6/17/2007	4	4.9
				10/21/2007	130	0.34
139	BN10171309	6/13/2007	6/13/2007	6/17/2007	4	4.6
				10/20/2007	129	0.45
140	BN10171304	6/13/2007	6/13/2007	6/17/2007	4	4
				10/21/2007	130	0.27
141	BN10170128	6/13/2007	6/13/2007	6/17/2007	4	1.9
				8/3/2007	51	0.43
142	BN10172358	6/22/2007	6/22/2007	6/26/2007	4	6.2
				10/22/2007	122	0.34
143	BN10172362	6/22/2007	6/22/2007	6/26/2007	4	6
				7/8/2007	16	3.1
				10/21/2007	121	0.37
144	BN10172109	6/20/2007	6/20/2007	6/25/2007	5	5.8
				10/22/2007	124	1.5
145	BN10172092	6/19/2007	6/19/2007	6/26/2007	7	3.5
				10/21/2007	124	0.65
146	BN10172989	6/24/2007	6/24/2007	6/29/2007	5	3.3
				10/22/2007	120	0.66
147	BN10172364	6/22/2007	6/22/2007	6/26/2007	4	3.2
				7/8/2007	16	1.7
				8/3/2007	42	0.46
148	BN10172356	6/22/2007	6/22/2007	6/26/2007	4	2.9
				10/21/2007	121	0.25
149	BN10172365	6/22/2007	6/22/2007	6/26/2007	4	2.4
				8/3/2007	42	0.46
150	BN10172361	6/22/2007	6/22/2007	6/26/2007	4	2.3
				8/3/2007	42	0.41
151	BN10172106	6/20/2007	6/20/2007	6/24/2007	4	0.86
				8/18/2007	59	0.26
152	BN10173666	6/30/2007	6/30/2007	7/6/2007	6	3.4
				10/23/2007	115	0.29
153	BN10172999	6/25/2007	6/25/2007	7/2/2007	7	2.6
				10/22/2007	119	0.22
154	BN10173453	6/28/2007	6/28/2007	7/5/2007	7	2.5
				10/21/2007	115	0.087
155	BN10173663	6/29/2007	6/29/2007	7/3/2007	4	2.4
				10/22/2007	115	0.26
156	BN10173458	6/28/2007	6/28/2007	7/2/2007	4	2.1
				8/3/2007	36	0.92
157	BN10173084	6/25/2007	6/25/2007	7/2/2007	7	2
				8/3/2007	39	0.76

Attachment 1

	Container	Closure Date	Vent Date	Sample Date	Days from Vent	Hydrogen Vol%
158	BN10176287	7/12/2007	7/12/2007	7/17/2007	5	5.5
				10/20/2007	100	0.46
159	BN10176479	7/13/2007	7/13/2007	7/27/2007	14	2.2
				10/22/2007	101	0.35
160	BN10176423	7/13/2007	7/13/2007	7/26/2007	13	1.7
				10/23/2007	102	0.22
161	BN10177537	7/28/2007	7/28/2007	8/5/2007	8	2.3
				10/20/2007	84	0.21
162	BN10177534	7/28/2007	7/28/2007	8/4/2007	7	1.8
				10/20/2007	84	0.16
163	BN10179544	8/10/2007	8/10/2007	8/19/2007	9	4.2
164				10/20/2007	71	0.19
	BN10179443	8/12/2007	8/12/2007	8/23/2007	11	2.3
165				10/23/2007	72	0.46
	BN10179543	8/10/2007	8/10/2007	8/19/2007	9	1.8
166				10/23/2007	74	0.2
	BN10182848	9/8/2007	9/8/2007	9/12/2007	4	2
167				10/2/2007	24	0.74
	BN10180990	8/24/2007	8/24/2007	9/3/2007	10	2.5
168				10/21/2007	58	0.21
169	BN10180439	8/24/2007	8/24/2007	9/4/2007	11	2
				10/22/2007	59	0.18