

2013

**Marker Reports for all Alleles
[corrected for Sbm1 - 6/11/2013]
Eastern Regional Nurseries**

Uniform Eastern Soft White Winter Wheat Nursery

Eastern Regional Small Grains Genotyping Lab

Collaborator: Gina Brown-Guedira

USDA-ARS

Notes

"nd" = not determined or lack of amplification

if marker is dominant, samples with no amplification are left blank 2008-2010; in 2011-2013 dominant markers are indicated with **

"?" indicates that markers may not be diagnostic or data was not clear; therefore, can not be sure if gene is present or not

All numbers are size in base pairs of amplified fragments
HEX? = not quite a Y allele; FAM? = not quite an X allele
Target alleles are in **bold or bold italics**

NT = marker Not Tested on those samples

Rht-B1b = dwarfing allele; Rht-B1a = tall allele

Rht-D1b = dwarfing allele; RhtD1a = tall allele

Ppd-D1a = photoperiod insensitive; Ppd-D1b = photosensitive allele

Ppd-B1a = photoperiod insensitive for either Chinese Spring [CS] or Sonora 64/Timstein [S64]; null = photosensitive allele

Ppd-A1a = photoperiod insensitive allele Ppd-A1a.1 in Japanese winter wheat cultivar Chikokukomugi; Ppd-A1b = photosensitive allele

vrn-A1 = short vernalization allele

vrn-B1 = short vernalization allele - in 2013 wmc75 for vrn-B1 was replaced by a SNP marker with the short vernalization allele present in AGS2000 which identifies fewer lines as having the short vern allele

Vrn-D1a = spring type; vrn-D1 = winter type

in 2013 - KASP markers for the Fhb QTL on 3BL reported in Massey were identified (thought to be the same as the one in Ernie) and are reported in a new column as **Fhb_Massey_3BL** following the **Fhb Ernie 3Bc** column. The new markers have been integrated with the old markers in the order of their chromosome location

in 2013 - the columns **Fhb 5A Ernie & Fhb 5A Ning7840** were combined into a single column **Fhb_5A**

Lr34/Yr18 - lines identified as **Lr34/Yr18** are checked with Lr34Jagger marker - presence of Jagger allele reported as nonfunctional-Lr34/Yr18

Lr9 - Y:Y? were reported as 'no' for Lr9 based on correlation of data from Jim Kolmer at the Cereal Disease Lab

Tsn1 = susceptibility to the necrotrophic effector SnToxA involved in development of Stagonospora leaf blotch and tan spot. This is a dominant marker since the gene is deleted in lines that are not susceptible.

in 2013 - **Texture** = **Pina-D1** is **pina-D1a_soft**; D1b = hard and **Pinb-D1** is **pinb_D1_soft**; D1b = hard
previously Texture was pina_taqman(AlleleX) = hard; **pinb D1a-b_taqman(AlleleY) = D1a_soft**; **pinb D1a-d_taqman(AlleleX) = D1a_soft**

* pedigrees, contributors and other notes that were available, are at the far right side of the tables

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Summary of Marker Data

All Marker Data

Dwarfing, Photoperiod Insensitive & Vernalization alleles

FHB QTLs

Leaf, Stem & Stripe Rusts and Powdery Mildew

Rye Translocations, Hessian Fly, Barley Yellow Dwarf Virus, Soil Borne Mosaic Virus, Stagonospora Leaf Blotch and Tan Spot

Quality Traits - Glutenins, Pre-Harvest sprouting, Hardness & Mill Quality (Sucrose Synthase)

Kernel Color

2013 UESWWWN

Year	Nursery	Entry	Sample Name	Pedigree	Contributor	Plant Source
2013	UESWWWN	1	Superior	TWC839-3 / Harus	Mark Etienne	check
2013	UESWWWN	2	Envoy		Lee Siler	
2013	UESWWWN	3	VA09W-188WS		Carl Griffey	
2013	UESWWWN	4	VA09W-192WS		Carl Griffey	
2013	UESWWWN	5	VA10W-159WS		Carl Griffey	
2013	UESWWWN	6	VA11W-323WS		Carl Griffey	
2013	UESWWWN	7	MSU Line F1029		Lee Siler	
2013	UESWWWN	8	MSU Line F0065		Lee Siler	
2013	UESWWWN	9	KWS 014	Unknown	KWS-Christopher	New Entry
2013	UESWWWN	10	KWS 015	Unknown	KWS-Christopher	New Entry
2013	UESWWWN	11	KWS 016	Unknown	KWS-Christopher	New Entry
2013	UESWWWN	12	KWS 017	Unknown	KWS-Christopher	New Entry
2013	UESWWWN	13	KWS 018	MSU D6234 ((X1291 (I3118 / Frankenmuth // Frankenmuth)) / 3 / (C5107 (B2218 / B2142 // B5250))) / Pioneer 2552	KWS-Christopher	New Entry
2013	UESWWWN	14	KWS 019	MSU Line D6206 ((X1293 (I3118 / Hillsdale // Hillsdale)) / 3 / (Caldwell (PD5724 // PD5724 / Siete_Cerros_66))) / Pioneer 2552	KWS-Christopher	New Entry
2013	UESWWWN	15	Caledonia		Mark Sorrells	
2013	UESWWWN	16	Cayuga		Mark Sorrells	
2013	UESWWWN	17	NY99045-3110		Mark Sorrells	
2013	UESWWWN	18	NY99059-249		Mark Sorrells	
2013	UESWWWN	19	NY94046-150		Mark Sorrells	
2013	UESWWWN	20	NY99056-161		Mark Sorrells	
2013	UESWWWN	21	NY01016-AN		Mark Sorrells	
2013	UESWWWN	22	M11-2353W		Lee Siler	Syngenta
2013	UESWWWN	23	M11*3144W		Lee Siler	Syngenta
2013	UESWWWN	24	MC07*7001W (SY901)		Lee Siler	Syngenta
2013	UESWWWN	25	DANW2005	W064-080 / 25R23	Mark Etienne	retest in 2013
2013	UESWWWN	26	DANW2009	W169-085 / TW169--081	Mark Etienne	New Entry
2013	UESWWWN	27	DANW2010	W156-021 / HW537	Mark Etienne	New Entry
2013	UESWWWN	28	DANW2016	HW639 / WF233-028	Mark Etienne	New Entry

2013 UESWWWN				Dwarfing alleles			Photoperiod Insensitivity alleles			Vernalization alleles		
Year	Nursery	Entry	Sample Name	Rht-B1	Rht-D1	Rht8c	Ppd-D1	Ppd-B1	Ppd-A1	vrn-A1	vrn-B1	Vrn-D1
2013	UESWWWN	1	Superior	Rht-B1a	Rht-D1b_het	nd	Ppd-D1b	**	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	2	Envoy	Rht-B1a	Rht-D1b	no	Ppd-D1a_insens	**	nd	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	3	VA09W-188WS	Rht-B1a	Rht-D1b	no	Ppd-D1a_insens	**	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	4	VA09W-192WS	Rht-B1b_het	Rht-D1a	no	Ppd-D1b	Ppd-B1a_CS_het	nd	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	5	VA10W-159WS	Rht-B1b_het	Rht-D1a	no	Ppd-D1a_het	Ppd-B1a_CS_het	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	6	VA11W-323WS	Rht-B1b_het	Rht-D1a	nd	Ppd-D1a_het	Ppd-B1a_CS_het	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	7	MSU Line F1029	Rht-B1a	Rht-D1b	nd	Ppd-D1a_insens	**	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	8	MSU Line F0065	Rht-B1a	Rht-D1b	nd	Ppd-D1a_insens	**	Ppd-A1b	?	vrn-B1	vrn-D1
2013	UESWWWN	9	KWS 014	Rht-B1a	Rht-D1b	no	Ppd-D1b	**	Ppd-A1a.1_insens	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	10	KWS 015	Rht-B1a	Rht-D1b	no	Ppd-D1b	**	Ppd-A1a.1_insens	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	11	KWS 016	Rht-B1a	Rht-D1b	no	Ppd-D1b	**	Ppd-A1a.1_insens	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	12	KWS 017	Rht-B1a	Rht-D1b	no	Ppd-D1b	null	Ppd-A1a.1_insens	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	13	KWS 018	Rht-B1a	Rht-D1b	no	Ppd-D1a_insens	**	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	14	KWS 019	Rht-B1a	Rht-D1b	no	Ppd-D1a_insens	**	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	15	Caledonia	Rht-B1a	Rht-D1b	nd	Ppd-D1b	**	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	16	Cayuga	Rht-B1a	Rht-D1a	nd	Ppd-D1b	**	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	17	NY99045-3110	Rht-B1a	Rht-D1b	no	Ppd-D1b	**	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	18	NY99059-249	Rht-B1a	Rht-D1b	no	Ppd-D1a_insens	**	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	19	NY94046-150	Rht-B1a	Rht-D1b	no	Ppd-D1b	**	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	20	NY99056-161	Rht-B1a	Rht-D1b	no	Ppd-D1a_het	**	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	21	NY01016-AN	Rht-B1a	Rht-D1b	no	Ppd-D1a_insens	**	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	22	M11-2353W	Rht-B1b	Rht-D1a	nd	Ppd-D1b	**	Ppd-A1a.1_insens	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	23	M11*3144W	Rht-B1a	Rht-D1b	nd	Ppd-D1b	**	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	24	MC07*7001W (SY901)	Rht-B1a	Rht-D1b	no	Ppd-D1b	**	Ppd-A1a.1_insens	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	25	DANW2005	Rht-B1a	Rht-D1a	Rht8c	Ppd-D1b	**	Ppd-A1a.1_insens	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	26	DANW2009	Rht-B1b	Rht-D1a	Rht8c	Ppd-D1a_insens	**	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	27	DANW2010	Rht-B1b	Rht-D1a	no	Ppd-D1b	**	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1
2013	UESWWWN	28	DANW2016	Rht-B1a	Rht-D1b	no	Ppd-D1b	**	Ppd-A1b	vrn-A1	vrn-B1	vrn-D1

2013 UESWWWN				Fusarium Head Blight alleles				Leaf, Stem and Stripe Rusts & Powdery Mildew alleles					
Year	Nursery	Entry	Sample_Name	Fhb1	Fhb_Massey_3BL	Fhb_2DL-Wuhan1/W14	Fhb_5A	Sr2	Sr36	Sr24/Lr24	Yr17/Lr37/Sr38	Lr34/Yr18	Lr9
2013	UESWWWN	1	Superior	no	no	no	no	no	no	no	?	no	no
2013	UESWWWN	2	Envoy	no	no	no	no	no	no	no	no	no	no
2013	UESWWWN	3	VA09W-188WS	no	no	no	no	no	no	no	no	no	no
2013	UESWWWN	4	VA09W-192WS	no	no	no	no	no	Sr36?	no	no	no	no
2013	UESWWWN	5	VA10W-159WS	no	no	no	no	no	Sr36?	no	no	no	no
2013	UESWWWN	6	VA11W-323WS	no	no	no	no	no	Sr36?	no	no	no	no
2013	UESWWWN	7	MSU Line F1029	no	no	no	no	no	no	no	no	no	no
2013	UESWWWN	8	MSU Line F0065	no	no	no	no	no	no	no	no	no	no
2013	UESWWWN	9	KWS 014	no	no	no	no	no	no	Sr24/Lr24	no	no	no
2013	UESWWWN	10	KWS 015	no	no	no	no	no	Sr36?	Sr24/Lr24	no	no	no
2013	UESWWWN	11	KWS 016	no	no	no	no	no	no	Sr24/Lr24	no	no	no
2013	UESWWWN	12	KWS 017	no	no	no	no	no	no	Sr24/Lr24	no	no	no
2013	UESWWWN	13	KWS 018	no	no	no	no	no	no	nd	no	no	no
2013	UESWWWN	14	KWS 019	no	no	no	no	no	no	no	no	no	no
2013	UESWWWN	15	Caledonia	no	no	no	no	no	no	no	no	no	no
2013	UESWWWN	16	Cayuga	no	no	no	no	no	no	no	no	no	no
2013	UESWWWN	17	NY99045-3110	no	no	no	no	no	no	no	no	no	no
2013	UESWWWN	18	NY99059-249	no	no	no	Fhb_5A_Ernie	no	no	no	no	no	no
2013	UESWWWN	19	NY94046-150	no	no	no	no	no	no	no	no	no	no
2013	UESWWWN	20	NY99056-161	no	no	no	Fhb_5A_Ernie	no	no	no	no	no	no
2013	UESWWWN	21	NY01016-AN	no	no	no	no	no	no	no	no	no	no
2013	UESWWWN	22	M11-2353W	no	no	no	Fhb_5A_Ernie	no	no	no	no	no	no
2013	UESWWWN	23	M11*3144W	no	no	no	no	no	no	no	no	no	no
2013	UESWWWN	24	MC07*7001W (SY901)	no	no	no	Fhb_5A_Ernie	no	no	no	no	no	no
2013	UESWWWN	25	DANW2005	no	no	no	no	no	no	no	no	no	no
2013	UESWWWN	26	DANW2009	no	no	no	no	no	no	no	no	Lr34/Yr18	no
2013	UESWWWN	27	DANW2010	no	no	no	no	no	no	no	no	no	no
2013	UESWWWN	28	DANW2016	no	no	no	no	no	no	no	no	Lr34/Yr18	no

2013 UESWWWN				Rye Translocations	Hessian Fly		BYDV	SBMV	SnToxA
Year	Nursery	Entry	Sample_Name	1RS	H13	H9	Bdv2/3	Sbm1	Tsn1
2013	UESWWWN	1	Superior	non-1RS	no	no	no	Sbm1	no
2013	UESWWWN	2	Envoy	non-1RS	no	no	no	Sbm1	no
2013	UESWWWN	3	VA09W-188WS	non-1RS	no	no	no	Sbm1	no
2013	UESWWWN	4	VA09W-192WS	1RS:1BL	no	no	no	no	no
2013	UESWWWN	5	VA10W-159WS	1RS:1BL	no	no	no	Sbm1	no
2013	UESWWWN	6	VA11W-323WS	1RS:1BL	no	no	no	Sbm1	no
2013	UESWWWN	7	MSU Line F1029	non-1RS	no	no	no	Sbm1	no
2013	UESWWWN	8	MSU Line F0065	1RS:1BL	no	no	no	no	no
2013	UESWWWN	9	KWS 014	1RS:1AL	no	nd	no	Sbm1	no
2013	UESWWWN	10	KWS 015	1RS:1AL	no	nd	no	Sbm1	no
2013	UESWWWN	11	KWS 016	1RS:1AL	no	nd	no	Sbm1	no
2013	UESWWWN	12	KWS 017	1RS:1AL	no	nd	no	Sbm1	no
2013	UESWWWN	13	KWS 018	1RS:1BL	no	no	no	no	no
2013	UESWWWN	14	KWS 019	non-1RS	no	no	nd	Sbm1	no
2013	UESWWWN	15	Caledonia	non-1RS	no	no	no	Sbm1	no
2013	UESWWWN	16	Cayuga	non-1RS	no	no	nd	Sbm1	no
2013	UESWWWN	17	NY99045-3110	non-1RS	no	no	no	Sbm1	no
2013	UESWWWN	18	NY99059-249	non-1RS	no	no	no	no	no
2013	UESWWWN	19	NY94046-150	non-1RS	no	no	no	no	no
2013	UESWWWN	20	NY99056-161	non-1RS	no	no	no	no	no
2013	UESWWWN	21	NY01016-AN	non-1RS	no	no	no	Sbm1	no
2013	UESWWWN	22	M11-2353W	1RS:1BL	no	no	no	Sbm1	no
2013	UESWWWN	23	M11*3144W	non-1RS	no	no	no	Sbm1	no
2013	UESWWWN	24	MC07*7001W (SY901)	non-1RS	no	no	no	no	no
2013	UESWWWN	25	DANW2005	1RS:1BL	no	nd	no	no	no
2013	UESWWWN	26	DANW2009	non-1RS	no	no	no	no	no
2013	UESWWWN	27	DANW2010	1RS:1BL	no	no	no	Sbm1	no
2013	UESWWWN	28	DANW2016	non-1RS	no	no	no	no	no

2013 UESWWWN				Glutenin alleles			Pre-Harvest Sprouting	Hardness Quality			Mill Quality
Year	Nursery	Entry	Sample_Name	Glu-B1	Glu-D1	Glu-A1	PHS_Cayuga	Pina-D1	Pinb-D1	Texture	Sucrose_Synthase
2013	UESWWWN	1	Superior	no	2+12	het	PHS_Cayuga_het	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	2	Envoy	no	2+12	Ax1_or_null	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	3	VA09W-188WS	no	2+12	Ax2*	PHS_Cayuga	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	4	VA09W-192WS	no	2+12	Ax1_or_null	no	pina-D1a_soft	pinb-D1a_soft	soft	TaSus2-2B
2013	UESWWWN	5	VA10W-159WS	no	2+12	het	no	pina-D1a_soft	pinb-D1a_soft	soft	TaSus2-2B
2013	UESWWWN	6	VA11W-323WS	no	2+12	Ax2*	no	pina-D1a_soft	pinb-D1a_soft	soft	TaSus2-2B
2013	UESWWWN	7	MSU Line F1029	no	2+12	het	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	8	MSU Line F0065	no	5+10	Ax2*	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	9	KWS 014	no	2+12	Ax2*	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	10	KWS 015	no	2+12	Ax2*	no	pina-D1a_soft	pinb-D1a_soft	soft	TaSus2-2B_het
2013	UESWWWN	11	KWS 016	no	2+12	Ax2*	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	12	KWS 017	no	2+12	Ax2*	no	pina-D1a_soft	pinb-D1a_soft	soft	TaSus2-2B
2013	UESWWWN	13	KWS 018	Bx7oe	2+12	Ax1_or_null	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	14	KWS 019	no	2+12	Ax1_or_null	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	15	Caledonia	no	2+12	Ax2*	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	16	Cayuga	no	2+12	Ax1_or_null	PHS_Cayuga	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	17	NY99045-3110	no	2+12	Ax1_or_null	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	18	NY99059-249	no	2+12	Ax1_or_null	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	19	NY94046-150	no	2+12	Ax1_or_null	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	20	NY99056-161	no	2+12	Ax1_or_null	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	21	NY01016-AN	no	5+10	Ax2*	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	22	M11-2353W	no	2+12	het	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	23	M11*3144W	Bx7oe	2+12	Ax2*	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	24	MC07*7001W (SY901)	no	2+12	Ax1_or_null	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	25	DANW2005	no	5+10	Ax1_or_null	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	26	DANW2009	no	5+10	Ax2*	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	27	DANW2010	no	2+12	Ax2*	no	pina-D1a_soft	pinb-D1a_soft	soft	no
2013	UESWWWN	28	DANW2016	no	2+12	Ax2*	no	pina-D1a_soft	pinb-D1a_soft	soft	no

2013 UESWWWN			Kernel Color genes					
Year	Nursery	Entry	Sample_Name	Tamby10-A1	Tamby10_Nor17	Tamby10-B1	Tamby10-D1	Combined_Color
2013	UESWWWN	1	Superior	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	2	Envoy	nd	R-A1	r-B1_white	r-D1_white	nd rr rr
2013	UESWWWN	3	VA09W-188WS	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	4	VA09W-192WS	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	5	VA10W-159WS	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	6	VA11W-323WS	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	7	MSU Line F1029	r-A1_white	nd	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	8	MSU Line F0065	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	9	KWS 014	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	10	KWS 015	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	11	KWS 016	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	12	KWS 017	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	13	KWS 018	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	14	KWS 019	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	15	Caledonia	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	16	Cayuga	r-A1_white	R-A1	R-B1	r-D1_white	rr RR rr
2013	UESWWWN	17	NY99045-3110	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	18	NY99059-249	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	19	NY94046-150	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	20	NY99056-161	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	21	NY01016-AN	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	22	M11-2353W	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	23	M11*3144W	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	24	MC07*7001W (SY901)	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	25	DANW2005	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	26	DANW2009	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	27	DANW2010	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr
2013	UESWWWN	28	DANW2016	r-A1_white	R-A1	r-B1_white	r-D1_white	rr rr rr