

2004 Western Regional Red/Specialty Potato Trial

Table of Contents

Description of Clones 2004 Western Regional Red-skinned Trial	Page 1
Cultural Management.....	Pages 2-4
Table 1 - Percent Stand and Stems/Hill	Page 5
Table 2 - Vine Vigor and Vine Maturity	Page 6
Table 3 - Total Yield	Page 7
Table 4 - Yield and Percent U.S. No. 1s (4-10 oz + > 10 oz).....	Page 8
Table 5 - Yield and Percent U.S. No. 1s (< 4 oz + 4-10 oz).....	Page 9
Table 6 - Yield and Percent U.S. No. 1s > 10 oz.....	Page 10
Table 7 - Yield and Percent U.S. No. 1s 6-10 oz.....	Page 11
Table 8 - Yield and Percent U.S. No. 1s 4-6 oz.....	Page 12
Table 9 - Yield and Percent < 4 oz.....	Page 13
Table 10 - Yield and Percent No. 2s & Culls.....	Page 14
Table 11 - Specific Gravity.....	Page 15
Table 12 - Average Tuber Size and Tubers/plant.....	Page 16
Table 13 - Tuber Shape.....	Page 17
Table 14 - Skin and Flesh Color.....	Page 18
Table 15 - Eye Depth, Skinning and External Defects.....	Page 19
Table 16 - Internal Defects.....	Page 20
Table 17 - Fresh Market Quality (Merit Scores).....	Page 21
Table 18 - Tuber Late Blight and Tuber Composition.....	Page 22
Table 19 - Culinary Tuber Quality and General Notes.....	Page 23
Table 20 - Summary.....	Page 24
Table 21 - 3-Year Summary of Graduating Entries.....	Page 25

Description of Clones - 2004 Western Regional Red/Specialty Trial

Clone/Variety	Parents		Flower Color	Vine Size	Maturity	Tuber Shape	Skin Type	Entered By	Use	Seed	Year
	Female	Male									
Red/White Flesh											
1 Dk. Red Norland	RedKote	ND626	Red-purple	Sm	Early	Oval	Dk. Red	Check	Fresh	OR	***
2 Red LaSoda	Triumph	Katahdin	Red-purple	Med	Med	Oval	Lt. Red	Check	Fresh	OR	***
3 A96741-1R	IdaRose	Mazama	Red-purple	Med/Small	Med	Round	Dk. Red	ID	Fresh	ID	1
4 A96741-2R	IdaRose	Mazama	Red-purple			Round	Red	ID	Fresh	ID	1
5 AO93487-2R	NDO3503-5	Mazama	Red-purple	Med	Med-early	Round	Lt. Red	OR	Fresh	OR	3
6 CO93037-6R	CO82177-9	NDO4030-12	Red-purple	Large	Med	Round	Red	CO	Fresh	OR	3
7 NDTX4304-1R	ND1562-4R	NDTX1068-11R	Red-purple	Small/Med	Early/late	Round	Red	TX	Fresh	OR	3
8 VC1075-1R	ND1196-2R	Red Ruby	Purple	Med	Early	Round	Red	CO	Fresh	CO	1
Red/Yellow Flesh											
9 VCO967-2R/Y	Agria	Redsen	Red-purple	Med	Med/Early	Oval	Red	CO	Fr./Fry	OR	2
10 VC1015-7R/Y	Agria	Chieftain	Purple	Med	Early	Oval	Red	CO	Fresh	CO	1
Red/Red Flesh											
11 CO94183-1R/R	All Red	ND2109-7	Red-purple	Med/Small	Med	Oval	Red	CO	Fr./Chip	OR	2
Purple/Purple Flesh											
12 All Blue	???	???	Blue	Med/Lg	Med/Late	Long	Dk. Blue	Check	Fresh	OR	***
13 CO94165-3P/P	ND2008-2	All Blue	Lt. Blue	Med/Small	Early	Oblong	Purple	CO	Fr./Chip	OR	2
Yellow/Yellow Flesh											
14 Yukon Gold	Nogleam	W5279-4	Pink	Med	Early	Oval	White	Check	Fresh	OR	***
15 BTX1544-2W/Y	BO811-13	Yukon Gold	White	Med	Med	Oval	White	TX	Fresh	OR	2
16 NDA5507-3YF	Brodick	Yukon Gold	Red-purple	Med	Med/Early	Round	White	ID	Fresh	OR	2
17 VC1002-3W/Y	Agria	Wischip	White	Large	Med	Oval	White	CO	Fr./Fry	CO	2
18 VC1009-1W/Y	Agria	MN12823	White	Large	Med	Oblong	White	CO	Fr./Fry	CO	1
Russet/Yellow Flesh											
19 A95074-6	Agria	Summit Russet	White	Large	Med/Late	Oblong	Lt. Russet	ID	Dual	OR	1

Cultural Management

Trial Information

Trial Location	Tulelake, CA
Cooperators	Carlson, Kirby
Irrigation	Solid Set
Fertilizer	306-234-279-9
Planting date	5/11/2004
Vine kill date	9/1/2004
Vine kill method	Reglone
Harvest date	9/30/2004

Trial Chemical Applications

Herbicides	Insecticides	Fungicides
Sencor		Maxim 4FS
		Blocker
		Curzate
		Dithane
		Bravo

Trial Information

Trial Location	San Luis Valley, CO
Cooperators	Holm, Naranjo
Irrigation	Center Pivot
Fertilizer	80-70-40-18-1(Zn)
Planting date	5/6/2004
Vine kill date	9/2/2004
Vine kill method	Sulfuric Acid
Harvest date	9/20/2004

Trial Chemical Applications

Herbicides	Insecticides	Fungicides
Dual Magnum	Permethrin 3.2EC	Polyram 80 DF
	Endosulfan 3 EC	

Trial Information

Trial Location	Aberdeen, ID
Cooperators	Love, Salaiz, Bain, Novy Whitworth, Schneider
Irrigation	Sprinkler
Fertilizer	200-50-40
Planting date	4/26/2004
Vine kill date	8/16/2004
Vine kill method	Mechanical
Harvest date	8/17/2004

Trial Chemical Applications

Herbicides	Insecticides	Fungicides
Sencor DF	Admire 2F	Bravo Weather Stik
Spartan		Equus
		Curzate
		Dithane

Cultural Management

Trial Information

Trial Location	Corvallis, OR
Cooperators	Mosley, Yilma
Irrigation	Sprinkler
Fertilizer	150-150-150-90
Planting date	5/20/2004
Vine kill date	9/10/2004
Vine kill method	Reglone
Harvest date	9/22/2004

Trial Chemical Applications

Herbicides	Insecticides	Fungicides
Matrix	Thimet	Bravo
Prowl	Provado	Dithane
		Quadris

Trial Information

Trial Location	Hermiston, OR
Cooperators	Hane, Leroux
Irrigation	Center Pivot
Fertilizer	260-80-250-40-2(B)
Planting date	3/24/2004
Vine kill date	7/13/2004
Vine kill method	Enquik
Harvest date	7/26/2004

Trial Chemical Applications

Herbicides	Insecticides	Fungicides
Eptam	MoCap	Vapam
Matrix	Admire	Ridomil Gold
	Asana	Quadris
	Monitor	Bravo
		Dithane
		Omega
		Maxim

Trial Information

Trial Location	Klamath Falls, OR
Cooperators	Rykbost, Charlton
Irrigation	Sprinkler
Fertilizer	160-80-80-140
Planting date	5/24/04
Vine kill date	9/3/04
Vine kill method	Reglone
Harvest date	10/9/04

Trial Chemical Applications

Herbicides	Insecticides	Fungicides
Dual	Admire	Quadris
Prowl	Monitor	Dithane
		Bravo
		Ridomil Gold
	Fumigants	
	Telone II	
	Vapam	

Cultural Management

Trial Information

Trial Location	Springlake, TX
Cooperators	Miller, Scheuring, Koym
Irrigation	Center Pivot
Fertilizer	130-25-25
Planting date	3/15/04
Vine kill date	6/30/04
Vine kill method	Gramoxone Max
Harvest date	7/26/04

Trial Chemical Applications

Herbicides	Insecticides	Fungicides
RoundUp	Dimethoate	Quadris
Dual		Bravo
Matrix		Tops MZ Gaucho
Treflan		
Sencor		

Trial Information

Trial Location	Dalhart, Tx
Cooperators	Miller, Scheuring, Koym
Irrigation	Center Pivot
Fertilizer	263-54-0
Planting date	5/10/04
Vine kill date	9/2/04
Vine kill method	Gramoxone Max followed by vine beater
Harvest date	10/11/04

Trial Chemical Applications

Herbicides	Insecticides	Fungicides
Prowl	Baythroid	Dithane
Sencor	Monitor	Echo
Spartan	Actara	Endura
Select	Dinamic	
Matrix		

Trial Information

Trial Location	Mt. Vernon, WA
Cooperators	Pavek, Driscoll Knowles, Fuller, Knutsen
Irrigation	Dryland
Fertilizer	72-276-384
Planting date	5/5/04
Vine kill date	8/10/04
Vine kill method	Rely
Harvest date	9/8/04

Trial Chemical Applications

Herbicides	Insecticides	Fungicides
Sencor		

Table 1. Percent Stand and Stems/Hill

Clone	Percent Stand										Stems/hill				
	CA	CO	ID	OR			TX		WA	Mean	TX		WA	Mean	
	TUL	SLV	AB	COR	HRM	KLM	SPL	DAL	Mt.V		SPL	DAL	Mt.V		
Red/White Flesh															
1	Dk. Red Norland	95	97	91	100	99	98	100	100	88	96	1.5	1.3	2.8	1.9
2	Red LaSoda	100	97	91	100	99	97	100	100	85	97	1.3	1.4	2.2	1.6
3	A96741-1R	94	---	95	100	98	99	99	100	96	98	1.7	1.4	2.8	2.0
4	A96741-2R	95	---	93	100	99	98	69	100	85	92	2.4	1.6	3.1	2.4
5	AO93487-2R	97	96	96	100	100	98	100	100	84	97	1.8	1.3	2.9	2.0
6	CO93037-6R	97	98	97	100	99	96	100	100	86	97	1.7	1.8	2.7	2.1
7	NDTX4304-1R	92	90	90	100	98	96	98	100	90	95	1.5	1.3	2.3	1.7
8	VC1075-1R	97	98	93	100	100	96	100	100	89	97	2.1	1.4	3.8	2.4
Red/Yellow Flesh															
9	VCO967-2R/Y	85	85	94	100	98	96	89	100	90	93	1.4	1.5	2.5	1.8
10	VC1015-7R/Y	95	96	79	100	100	97	100	100	85	95	1.3	1.4	2.5	1.7
Red/Red Flesh															
11	CO94183-1R/R	98	94	94	100	100	97	99	100	90	97	1.4	4.5	2.4	2.8
Purple/Purple Flesh															
12	All Blue	98	98	86	100	100	99	99	100	93	97	1.9	3.2	3.1	2.7
13	CO94165-3P/P	98	99	94	100	100	97	99	100	90	97	2.0	2.8	3.5	2.8
Yellow/Yellow Flesh															
14	Yukon Gold	88	95	93	100	96	96	100	100	90	95	1.2	1.1	1.8	1.4
15	BTX1544-2W/Y	98	96	93	100	100	96	100	100	91	97	1.0	1.3	1.8	1.4
16	NDA5507-3YF	94	81	98	100	100	96	96	100	85	94	1.5	1.3	2.1	1.6
17	VC1002-3W/Y	89	94	92	100	100	98	100	100	83	95	1.6	1.4	2.8	1.9
18	VC1009-1W/Y	91	96	94	100	99	94	100	100	85	95	1.8	1.6	2.5	2.0
Russet/Yellow Flesh															
19	A95074-6	95	91	92	100	99	94	98	100	94	96	1.4	1.6	2.2	1.7
Mean		95	94	92	100	99	97	97	100	88	96	1.6	1.7	2.6	2.0

Table 2. Vine Vigor and Vine Maturity

Clone	Vine Vigor/Size								Vine Maturity								
	CO	ID	OR		TX		WA	Mean	CA	CO	ID	OR	TX		WA	Mean	
	SLV	AB	COR	KLM	SPL	DAL	Mt.V		TUL	SLV	AB	COR	SPL	DAL	Mt.V		
Red/White Flesh																	
1	Dk. Red Norland	2.5	2.0	3.2	4.8	4.0	3.4	2.0	3.1	2.5	1.0	2.0	2.5	4.0	2.4	4.0	2.6
2	Red LaSoda	3.0	2.5	3.0	3.3	4.4	3.5	2.0	3.1	2.7	2.3	2.5	3.0	4.0	2.6	4.0	3.0
3	A96741-1R	---	1.8	3.0	3.5	4.2	3.5	2.0	3.0	3.5	---	3.8	3.0	4.6	4.1	5.0	4.0
4	A96741-2R	---	4.8	3.0	4.0	4.3	3.8	3.0	3.8	2.7	---	3.8	3.0	4.9	4.0	5.0	3.9
5	AO93487-2R	2.8	1.3	4.0	4.0	3.3	4.0	3.0	3.2	1.9	1.3	2.8	1.5	3.2	2.4	4.0	2.4
6	CO93037-6R	4.3	4.0	3.0	3.3	4.6	4.2	4.0	3.9	3.5	3.0	4.5	4.0	5.0	3.8	5.0	4.1
7	NDTX4304-1R	2.8	1.3	2.0	3.3	4.0	4.1	2.0	2.8	3.0	2.5	2.5	3.0	3.9	2.7	5.0	3.2
8	VC1075-1R	4.0	2.3	---	4.3	4.5	4.2	2.0	3.6	2.5	3.0	3.5	---	4.8	2.2	5.0	3.5
Red/Yellow Flesh																	
9	VCO967-2R/Y	3.0	1.8	3.0	3.5	3.4	4.0	3.0	3.1	2.4	2.3	3.3	3.0	3.4	2.7	5.0	3.2
10	VC1015-7R/Y	2.3	1.5	3.0	4.3	3.2	3.9	2.0	2.9	1.7	2.0	1.5	2.0	3.0	2.1	4.0	2.3
Red/Red Flesh																	
11	CO94183-1R/R	2.5	1.3	2.0	2.0	3.7	2.2	1.0	2.1	2.8	1.8	3.3	2.0	4.4	2.2	5.0	3.1
Purple/Purple Flesh																	
12	All Blue	4.0	3.8	3.0	4.0	4.5	4.7	3.0	3.9	3.7	3.3	4.8	5.0	5.0	3.9	5.0	4.4
13	CO94165-3P/P	3.0	1.5	3.0	4.3	4.1	4.2	3.0	3.3	2.5	1.8	1.5	2.0	4.2	2.4	4.0	2.6
Yellow/Yellow Flesh																	
14	Yukon Gold	3.0	2	3	2.5	4.0	4.4	3.0	3.1	2.8	1.0	2.8	2.0	3.8	1.7	5.0	2.7
15	BTX1544-2W/Y	3.0	2.8	4.0	3.0	3.9	4.4	4.0	3.6	2.3	2.3	3.0	3.0	3.3	3.2	5.0	3.2
16	NDA5507-3YF	3.5	2.8	4.0	4.0	4.4	4.7	4.0	3.9	3.0	2.5	3.0	3.0	4.6	3.7	4.0	3.4
17	VC1002-3W/Y	3.8	3.5	4.0	4.5	4.9	4.7	3.0	4.1	3.4	3.0	4.5	3.0	5.0	4.2	5.0	4.0
18	VC1009-1W/Y	4.5	4.0	4.0	4.8	4.9	4.7	4.0	4.4	4.3	3.3	4.3	3.0	5.0	4.5	5.0	4.2
Russet/Yellow Flesh																	
19	A95074-6	4.0	3.8	4.0	2.0	4.9	4.7	4.0	3.9	4.3	3.0	4.5	4.0	5.0	3.8	5.0	4.2
Mean		3.3	2.6	3.2	3.7	4.2		2.8	3.3	2.9	2.3	3.3	2.9	4.3		4.7	3.4

Table 3. Total Yield

Clone	Total Yield (cwt/A)										Mean	Rank
	CA	CO	ID	OR			TX		WA			
	TUL	SLV	AB	COR	HRM	KLM	SPL	DAL	Mt.V			
Red/White Flesh												
1	Dk. Red Norland	527	447	444	611	616	651	368	552.7	382	511	6
2	Red LaSoda	533	557	459	528	599	615	491	445.3	386	513	5
3	A96741-1R	443	---	504	614	719	611	351	407.4	409	507	4
4	A96741-2R	566	---	411	684	789	697	197	393.6	425	520	1
5	AO93487-2R	435	484	444	484	580	551	415	401.5	342	460	8
6	CO93037-6R	404	630	437	662	650	722	251	417.9	426	511	3
7	NDTX4304-1R	592	447	407	615	629	620	393	397.2	555	517	2
8	VC1075-1R	510	553	475	---	632	685	253	358.8	412	485	7
Red/Yellow Flesh												
9	VCO967-2R/Y	461	454	378	601	564	671	393	265.5	417	467	2
10	VC1015-7R/Y	547	416	340	677	665	759	272	550.9	472	522	1
Red/Red Flesh												
11	CO94183-1R/R	404	386	362	486	483	445	389	458.6	315	414	
Purple/Purple Flesh												
12	All Blue	470	566	283	466	686	457	122	364	395	423	2
13	CO94165-3P/P	464	497	376	530	572	657	339	511.7	449	488	1
Yellow/Yellow Flesh												
14	Yukon Gold	430	419	327	511	523	532	338	371.8	397	428	5
15	BTX1544-2W/Y	443	496	413	484	531	656	327	345.9	448	460	4
16	NDA5507-3YF	508	523	426	712	795	708	265	399.6	490	536	2
17	VC1002-3W/Y	347	494	419	628	706	652	249	294.2	475	474	3
18	VC1009-1W/Y	593	622	578	683	706	726	148	303.7	472	537	1
Russet/Yellow Flesh												
19	A95074-6	475	566	389	503	628	577	167	379.6	393	453	
Mean		482	503	414	582	635	631	301	401	424	486	

Table 4. Yield and Percent U.S. No. 1s (4-10 oz + > 10 oz)

Clone	Yield and Percent U.S. NO. 1s > 4 oz (Cwt/A & %)										Mean	Rank
	CA	CO	ID	OR			TX		WA			
	TUL	SLV	AB	COR	HRM	KLM	SPL	DAL	Mt.V			
Red/White Flesh												
1 Dk. Red Norland	442	404	381	488	504	582	322	449	165	415	1	
	84	90	86	80	82	89	88	81	43	80	2	
2 Red LaSoda	416	492	390	442	530	470	457	398	136	415	2	
	78	88	85	84	88	76	93	89	35	80	3	
3 A96741-1R	260	---	375	482	577	478	233	241	179	353	7	
	59	---	74	79	80	78	66	59	44	67	8	
4 A96741-2R	429	---	294	573	687	602	146	257	230	402	5	
	76	---	72	84	87	86	74	65	54	75	6	
5 AO93487-2R	314	405	343	388	490	454	372	264	193	358	6	
	72	84	77	80	84	82	90	66	56	77	5	
6 CO93037-6R	249	548	339	528	527	608	218	339	232	399	4	
	62	87	78	80	81	84	87	81	54	77	4	
7 NDTX4304-1R	477	408	358	481	500	460	356	340	348	414	3	
	81	91	88	78	79	74	91	86	63	81	1	
8 VC1075-1R	359	380	362	---	414	586	161	247	185	337	8	
	70	69	76	---	66	86	64	69	45	68	7	
Red/Yellow Flesh												
9 VCO967-2R/Y	354	407	227	509	375	567	344	197	119	344	2	
	77	90	60	85	66	85	88	74	29	73	2	
10 VC1015-7R/Y	474	378	282	622	547	649	241	454	331	442	1	
	87	91	83	92	82	86	89	82	70	85	1	
Red/Red Flesh												
11 CO94183-1R/R	263	247	262	373	320	349	342	370	138	296		
	65	64	72	77	66	78	88	81	44	71		
Purple/Purple Flesh												
12 All Blue	253	397	152	271	512	272	24	199	167	256	2	
	54	70	54	58	75	60	20	55	42	70	2	
13 CO94165-3P/P	292	354	181	384	417	489	185	289	232	288	1	
	63	71	48	72	73	74	55	56	52	89	1	
Yellow Flesh												
14 Yukon Gold	378	381	273	442	463	473	315	325	182	363	4	
	88	91	83	86	89	89	93	87	46	110	1	
15 BTX1544-2W/Y	354	443	363	407	427	552	303	302	183	347	3	
	80	89	88	84	80	84	93	87	41	105	2	
16 NDA5507-3YF	365	476	328	640	621	572	199	319	309	400	1	
	72	91	77	90	78	81	75	80	63	105	3	
17 VC1002-3W/Y	104	272	275	516	517	493	187	175	284	303	5	
	30	55	66	82	73	76	75	60	60	77	5	
18 VC1009-1W/Y	356	488	471	490	517	465	101	210	250	355	2	
	60	78	81	72	73	64	68	69	53	84	4	
Russet/Yellow Flesh												
19 A95074-6	372	481	312	356	435	402	151	321	134	329		
	78	85	80	71	69	70	90	85	34	74		
Mean	343	409	314	466	494	501	245	300	210	365		
	70	81	75	80	77	79	78	74	49	74		

Table 5. Yield and Percent U.S. No. 1s (<4 oz + 4-10 oz)

Clone	Yield and Percent U.S. No. 1s (<4 oz + 4-10 oz) (Cwt/A & %)										Mean	Rank
	CA	CO	ID	OR			TX		WA			
	TUL	SLV	AB	COR	HRM	KLM	SPL	DAL	Mt.V			
Red/White Flesh												
1 Dk. Red Norland	352	299	323	309	541	400	367	429	218		360	6
	67	67	73	51	88	61	73	78	57		68	6
2 Red LaSoda	247	294	271	202	421	255	295	347	140		275	7
	46	53	59	38	70	41	60	78	36		53	7
3 A96741-1R	377	---	446	441	622	546	316	403	288		430	1
	85	---	88	72	87	89	90	99	70		85	3
4 A96741-2R	384	---	345	405	566	524	159	358	293		379	4
	68	---	84	59	72	75	81	91	69		75	4
5 AO93487-2R	383	412	396	348	528	437	374	395	250		391	3
	88	85	89	72	91	79	90	98	73		85	2
6 CO93037-6R	320	359	328	327	473	500	208	368	344		359	5
	79	63	52	49	73	69	83	88	81		71	5
7 NDTX4304-1R	248	235	240	256	352	284	242	333	234		269	8
	42	53	59	42	56	46	62	84	42		54	8
8 VC1075-1R	430	493	440	---	552	578	222	345	330		424	2
	84	89	93	---	87	84	88	96	80		88	1
Red/Yellow Flesh												
9 VCO967-2R/Y	352	364	367	374	529	508	363	246	334		382	1
	76	80	97	62	94	76	92	93	80		83	1
10 VC1015-7R/Y	378	317	282	297	641	343	254	465	348		369	2
	69	58	68	44	96	45	93	84	74		70	2
Red/Red Flesh												
11 CO94183-1R/R	333	358	344	287	446	321	338	429	215		341	
	82	93	95	59	92	72	87	94	68		82	
Purple/Purple Flesh												
12 All Blue	432	483	261	230	634	414	67	344	316		353	2
	92	85	92	49	92	91	55	95	80		81	2
13 CO94165-3P/P	414	469	352	351	551	545	272	512	362		425	1
	89	94	94	66	96	83	80	100	81		87	1
Yellow Flesh												
14 Yukon Gold	167	251	276	202	368	281	269	231	130		242	5
	39	60	84	40	70	53	80	62	33		58	5
15 BTX1544-2W/Y	290	364	248	259	439	403	284	301	162		306	4
	65	73	60	54	83	61	87	87	36		67	4
16 NDA5507-3YF	437	304	371	389	597	553	261	365	316		399	3
	86	58	87	55	75	78	98	91	64		77	3
17 VC1002-3W/Y	331	474	372	394	671	595	242	294	369		416	2
	95	96	89	63	95	91	97	100	78		89	1
18 VC1009-1W/Y	500	488	442	351	647	591	135	304	326		420	1
	84	78	76	51	92	81	91	100	69		80	2
Russet/Yellow Flesh												
19 A95074-6	277	446	280	181	363	316	152	204	115		259	
	58	79	72	36	58	55	91	54	29		59	
Mean	350	377	336	311	523	442	254	351	268		357	
	73	74	80	53	82	70	83	88	63		74	

Table 6. Yield and Percent U.S. No. 1s >10 oz

Clone	Yield and Percent U.S. No. 1s >10 oz (Cwt/A & %)										Mean	Rank
	CA	CO	ID	OR			TX		WA			
	TUL	SLV	AB	COR	HRM	KLM	SPL	DAL	Mt.V			
Red/White Flesh												
1 Dk. Red Norland	153	142	111	197	49	208	93	123	30	123	4	
	29	32	25	32	8	32	25	22	8	24	3	
2 Red LaSoda	207	236	162	251	168	244	189	99	43	178	2	
	39	42	35	48	28	40	38	22	11	34	2	
3 A96741-1R	16	---	54	74	57	52	11	4	21	36	7	
	4	---	11	12	8	9	3	1	5	7	7	
4 A96741-2R	160	---	64	192	206	149	33	35	50	111	5	
	28	---	16	28	26	21	17	9	12	20	5	
5 AO93487-2R	45	71	47	64	39	99	41	7	31	49	6	
	10	15	11	13	7	18	10	2	9	11	6	
6 CO93037-6R	52	253	99	218	122	186	43	50	28	117	3	
	13	35	16	33	19	26	17	12	7	20	4	
7 NDTX4304-1R	276	206	153	240	199	206	150	64	165	184	1	
	47	46	38	39	32	33	38	16	30	35	1	
8 VC1075-1R	56	53	32	---	28	97	5	14	13	37	8	
	11	10	7	---	4	14	2	4	3	7	8	
Red/Yellow Flesh												
9 VCO967-2R/Y	89	87	8	149	3	137	30	20	0	58	2	
	19	19	2	25	1	20	8	7	0	11	2	
10 VC1015-7R/Y	151	98	55	337	13	334	18	86	71	129	1	
	28	42	13	50	2	44	7	16	15	24	1	
Red/Red Flesh												
11 CO94183-1R/R	27	23	12	104	4	82	47	30	15	30	38	
	7	6	3	21	1	18	12	6	5	9		
Purple/Purple Flesh												
12 All Blue	16	73	16	64	28	21	0	12	7	26	2	
	3	13	6	14	4	5	0	3	2	6	2	
13 CO94165-3P/P	28	23	19	58	9	91	2	0	17	27	1	
	6	5	5	11	2	14	1	0	4	5	1	
Yellow Flesh												
14 Yukon Gold	241	164	49	248	138	218	69	141	81	150	1	
	56	39	15	49	26	41	20	38	20	34	1	
15 BTX1544-2W/Y	118	118	138	164	49	210	43	45	60	105	2	
	27	24	33	34	9	32	13	13	13	22	2	
16 NDA5507-3YF	51	207	52	263	82	104	4	35	60	95	3	
	10	40	12	37	10	15	2	9	12	16	3	
17 VC1002-3W/Y	2	15	43	140	5	46	3	0	27	31	5	
	1	3	10	22	1	7	1	0	6	6	5	
18 VC1009-1W/Y	45	121	134	160	23	60	6	0	37	65	4	
	8	19	23	23	3	8	4	0	8	11	4	
Russet/Yellow Flesh												
19 A95074-6	156	92	94	191	129	137	14	176	53	116		
	33	16	24	38	21	24	9	46	14	25		
Mean	99	117	71	173	71	141	42	49	43	90		
	20	24	16	29	11	22	12	12	10	17		

Table 7. Yield and Percent U.S. No. 1s 6-10 oz

Clone	Yield and Percent U.S. No. 1s 6-10 oz (Cwt/A & %)										Mean	Rank
	CA	CO	ID	OR			TX		WA			
	TUL	SLV ¹	AB	COR	HRM ²	KLM	SPL	DAL	Mt.V			
Red/White Flesh												
1 Dk. Red Norland	186	262	189	200	137	252	148	130	76	176	3	
	35	59	43	33	22	39	40	23	20	35	2	
2 Red LaSoda	141	256	164	138	156	152	170	196	59	159	7	
	26	46	36	26	26	25	35	44	15	31	6	
3 A96741-1R	92	---	185	239	166	219	98	76	79	144	8	
	21	---	37	39	23	36	28	19	19	28	7	
4 A96741-2R	168	---	140	226	221	247	42	111	94	156	5	
	30	---	34	33	28	35	21	28	22	29	7	
5 AO93487-2R	142	334	156	190	167	176	206	83	87	171	2	
	33	69	35	39	29	32	50	21	25	37	1	
6 CO93037-6R	105	295	155	205	189	232	106	169	90	172	1	
	26	47	35	31	29	32	42	40	21	34	3	
7 NDTX4304-1R	136	202	147	167	178	164	147	183	124	161	6	
	23	45	36	27	28	26	37	46	22	32	5	
8 VC1075-1R	154	327	190	---	102	238	71	129	71	160	4	
	30	59	40	---	16	35	28	36	17	33	4	
Red/Yellow Flesh												
9 VCO967-2R/Y	145	320	87	242	28	271	132	103	24	150	2	
	31	70	23	40	5	40	34	39	6	32	2	
10 VC1015-7R/Y	218	280	136	205	117	210	139	217	165	187	1	
	40	67	40	30	18	28	51	39	35	39	1	
Red/Red Flesh												
11 CO94183-1R/R	125	224	132	173	62	150	202	193	56	146		
	31	58	36	36	13	34	52	42	18	36		
Purple/Purple Flesh												
12 All Blue	90	324	72	133	117	93	4	76	53	107	2	
	19	57	25	29	17	20	3	21	13	23	2	
13 CO94165-3P/P	121	331	76	194	78	192	72	80	94	138	1	
	26	67	20	37	14	29	21	16	21	28	1	
Yellow Flesh												
14 Yukon Gold	90	217	157	135	172	158	149	130	61	141	5	
	21	52	48	26	33	30	44	35	15	34	3	
15 BTX1544-2W/Y	154	325	179	150	146	226	173	121	74	172	2	
	35	66	43	31	27	34	53	35	17	38	1	
16 NDA5507-3YF	155	269	159	272	251	268	92	124	149	193	1	
	31	51	37	38	32	38	35	31	30	36	2	
17 VC1002-3W/Y	25	257	116	239	69	217	74	56	148	133	4	
	7	52	28	38	10	33	30	19	31	28	5	
18 VC1009-1W/Y	141	367	211	235	99	214	45	120	109	171	3	
	24	59	37	34	14	29	30	40	23	32	4	
Russet/Yellow Flesh												
19 A95074-6	140	389	157	123	144	166	75	93	52	149		
	29	69	40	24	23	29	45	24	13	33		
Mean	133	293	148	193	137	202	113	126	88	159		
	27	58	35	33	21	32	36	31	20	33		

Table 8. Yield and Percent U.S. No. 1s 4-6 oz

Clone	Yield and Percent U.S. No. 1s 4-6 oz (Cwt/A & %)										Mean	Rank
	CA	CO	ID	OR			TX		WA			
	TUL	SLV ¹	AB	COR	HRM ²	KLM	SPL	DAL	Mt.V			
Red/White Flesh												
1 Dk. Red Norland	103	---	81	91	318	122	81	196	59	131	6	
	20	---	18	15	52	19	22	35	15	25	6	
2 Red LaSoda	68	---	64	53	206	74	98	103	34	88	7	
	13	---	14	10	34	12	20	23	9	17	7	
3 A96741-1R	152	---	136	169	354	207	124	161	79	173	1	
	34	---	27	27	49	34	35	40	19	33	2	
4 A96741-2R	101	---	90	155	260	206	71	111	86	135	4	
	18	---	22	23	33	30	36	28	20	26	4	
5 AO93487-2R	127	---	140	134	284	179	125	175	75	155	3	
	29	---	32	28	49	32	30	44	22	33	3	
6 CO93037-6R	92	---	85	105	216	190	69	120	114	124	5	
	23	---	19	16	33	26	28	29	27	25	5	
7 NDTX4304-1R	65	---	58	74	123	90	59	93	59	78	8	
	11	---	14	12	20	15	15	23	11	15	8	
8 VC1075-1R	149	---	140	---	284	251	85	105	101	159	2	
	29	---	29	---	45	37	34	29	25	33	1	
Red/Yellow Flesh												
9 VCO967-2R/Y	120	---	132	118	344	159	182	74	95	153	1	
	26	---	35	20	61	24	46	28	23	33	1	
10 VC1015-7R/Y	105	---	91	80	417	105	84	151	95	141	2	
	19	---	27	12	63	14	31	27	20	27	2	
Red/Red Flesh												
11 CO94183-1R/R	111	---	118	96	254	117	93	147	67	125		
	27	---	33	20	53	26	24	32	21	30		
Purple/Purple Flesh												
12 All Blue	147	---	64	74	367	158	20	112	107	131	2	
	31	---	23	16	53	35	16	31	27	29	2	
13 CO94165-3P/P	143	---	86	132	330	206	111	209	121	167	1	
	31	---	23	25	58	31	33	41	27	34	1	
Yellow Flesh												
14 Yukon Gold	47	---	67	59	153	97	97	54	40	77	5	
	11	---	20	12	29	18	29	14	10	18	5	
15 BTX1544-2W/Y	82	---	46	93	232	116	87	136	49	105	4	
	19	---	11	19	44	18	27	39	11	24	4	
16 NDA5507-3YF	159	---	117	105	288	200	103	161	100	154	2	
	31	---	27	15	36	28	39	40	20	30	2	
17 VC1002-3W/Y	77	---	116	137	443	230	110	119	109	168	1	
	22	---	28	22	63	35	44	40	23	35	1	
18 VC1009-1W/Y	170	---	126	95	395	191	50	90	104	153	3	
	29	---	22	14	56	26	34	30	22	29	3	
Russet/Yellow Flesh												
19 A95074-6	76	---	61	42	162	99	62	52	29	73		
	16	---	16	8	26	17	37	14	7	18		
Mean	110	---	96	101	286	158	90	125	80	131		
	23	---	23	17	45	25	31	31	19	27		

Table 9. Yield and Percent < 4 oz

Clone	Yield and Percent < 4 oz (Cwt/A & %)										Mean	Rank
	CA	CO	ID	OR			TX		WA			
	TUL	SLV	AB	COR	HRM	KLM	SPL	DAL	Mt.V			
Red/White Flesh												
1 Dk. Red Norland	63	37	53	18	86	26	38	104	83	56	6	
	12	8	12	3	14	4	10	19	22	12	6	
2 Red LaSoda	38	38	43	11	59	29	27	47	47	38	8	
	7	7	9	2	10	5	5	11	12	8	7	
3 A96741-1R	133	---	125	33	102	120	94	166	130	113	2	
	30	---	25	5	14	20	27	41	32	24	2	
4 A96741-2R	115	---	115	24	85	71	46	137	113	88	3	
	20	---	28	4	11	10	23	35	26	20	3	
5 AO93487-2R	114	78	100	24	77	82	43	137	88	83	4	
	26	16	23	5	13	15	10	34	26	19	4	
6 CO93037-6R	123	64	88	17	68	78	33	79	140	77	5	
	30	10	20	3	10	11	13	19	33	17	5	
7 NDTX4304-1R	47	33	35	15	51	30	36	57	51	39	7	
	8	7	9	2	8	5	9	14	9	8	8	
8 VC1075-1R	127	166	110	---	166	89	66	111	158	124	1	
	25	30	23	---	26	13	26	31	38	27	1	
Red/Yellow Flesh												
9 VCO967-2R/Y	87	44	148	14	157	78	49	69	215	96	1	
	19	10	39	2	28	12	13	26	52	22	1	
10 VC1015-7R/Y	55	37	55	12	107	28	31	97	88	57	2	
	10	9	16	2	16	4	11	18	19	12	2	
Red/Red Flesh												
11 CO94183-1R/R	97	134	94	18	130	54	43	89	92	83		
	24	35	26	4	27	12	11	19	29	21		
Purple/Purple Flesh												
12 All Blue	195	159	125	23	150	163	43	156	156	130	2	
	41	28	44	5	22	36	35	43	40	33	1	
13 CO94165-3P/P	150	138	190	25	143	147	89	223	147	139	1	
	32	28	51	5	25	22	26	44	33	30	2	
Yellow Flesh												
14 Yukon Gold	30	34	52	8	43	26	23	47	29	32	5	
	7	8	16	1	8	5	7	13	7	8	5	
15 BTX1544-2W/Y	54	39	23	16	61	61	24	44	39	40	4	
	12	8	6	3	11	9	7	13	9	9	4	
16 NDA5507-3YF	123	35	95	12	58	85	66	80	67	69	3	
	24	7	22	2	7	12	25	20	14	15	3	
17 VC1002-3W/Y	229	217	140	18	159	148	58	119	112	133	1	
	66	44	33	3	23	23	23	40	24	31	1	
18 VC1009-1W/Y	189	121	105	21	153	186	40	93	113	113	2	
	32	19	18	3	22	26	27	31	24	22	2	
Russet/Yellow Flesh												
19 A95074-6	61	57	62	16	57	51	15	59	34	46		
	13	10	16	3	9	9	9	15	9	10		
Mean	107	84	93	18	101	82	45	101	100	81		
	23	17	23	3	16	13	17	26	24	18		

Table 10. Yield and Percent No. 2s & Culls

Clone	Yield and Percent No. 2s & Culls (Cwt/A & %)										Mean	Rank
	CA	CO	ID	OR			TX		WA			
	TUL	SLV	AB	COR	HRM	KLM	SPL	DAL	Mt.V			
Red/White Flesh												
1 Dk. Red Norland	22	6	10	105	26	43	7	0	134	39	4	
	4	1	2	17	4	7	2	0	35	8	4	
2 Red LaSoda	79	27	26	75	10	116	8	0	203	60	2	
	15	5	6	14	2	19	2	0	53	13	1	
3 A96741-1R	50	---	4	100	40	13	24	0	101	42	3	
	11	---	1	16	6	2	7	0	25	9	3	
4 A96741-2R	22	---	2	86	18	24	4	0	82	30	6	
	4	---	0	13	2	3	2	0	19	5	6	
5 AO93487-2R	7	2	1	73	13	15	0	0	61	19	8	
	2	0	0	15	2	3	0	0	18	4	8	
6 CO93037-6R	32	18	10	116	55	36	0	0	54	36	5	
	8	3	2	18	8	5	0	0	13	6	5	
7 NDTX4304-1R	68	6	14	119	78	130	0	0	156	63	1	
	11	1	3	19	12	21	0	0	28	11	2	
8 VC1075-1R	24	7	3	---	51	10	26	0	69	24	7	
	5	1	1	---	8	1	10	0	17	5	6	
Red/Yellow Flesh												
9 VCO967-2R/Y	20	3	3	78	32	26	0	0	82	27	1	
	4	1	1	13	6	4	0	0	20	5	1	
10 VC1015-7R/Y	18	0	3	44	12	82	0	0	53	24	2	
	3	0	1	6	2	11	0	0	11	4	2	
Red/Red Flesh												
11 CO94183-1R/R	44	5	6	94	33	42	3	0	85	35		
	11	1	2	19	7	9	1	0	27	9		
Purple/Purple Flesh												
12 All Blue	22	10	6	173	24	22	57	8	72	44	1	
	5	2	2	37	3	5	46	2	18	13	1	
13 CO94165-3P/P	22	4	5	120	12	21	65	0	70	35	2	
	5	1	1	23	2	3	19	0	16	8	2	
Yellow Flesh												
14 Yukon Gold	22	3	2	61	17	33	0	0	187	36	4	
	5	1	1	12	3	6	0	0	47	8	3	
15 BTX1544-2W/Y	35	14	27	61	43	43	1	0	226	50	2	
	8	3	7	13	8	7	0	0	50	11	1	
16 NDA5507-3YF	20	11	3	59	116	51	0	0	115	42	3	
	4	2	1	8	15	7	0	0	23	7	4	
17 VC1002-3W/Y	14	4	4	95	29	11	4	0	79	27	5	
	4	1	1	15	4	2	1	0	17	5	5	
18 VC1009-1W/Y	48	12	2	171	35	75	7	0	108	51	1	
	8	2	0	25	5	10	5	0	23	9	2	
Russet/Yellow Flesh												
19 A95074-6	42	27	15	131	136	124	0	0	225	78		
	9	5	4	26	22	21	0	0	57	16		
Mean	32	9	8	98	41	48	11	0	114	40		
	7	2	2	17	6	8	5	0	27	8		

Table 11. Specific Gravity

Clone	Specific Gravity										Mean	Rank
	CA	CO	ID	OR			TX		WA			
	TUL	SLV	AB	COR	HRM	KLM	SPL	DAL	Mt.V			
Red/White Flesh												
1	Dk. Red Norland	1.066	1.072	1.066	1.067	1.059	1.066	1.054	1.059	1.070	1.064	6
2	Red LaSoda	1.067	1.081	1.070	1.067	1.054	1.071	1.056	1.063	1.069	1.066	4
3	A96741-1R	1.075	---	1.071	1.075	1.055	1.068	1.048	1.059	1.069	1.065	5
4	A96741-2R	1.067	---	1.062	1.071	1.051	1.066	1.042	1.062	1.068	1.061	7
5	AO93487-2R	1.072	1.079	1.070	1.068	1.058	1.065	1.056	1.059	1.074	1.067	3
6	CO93037-6R	1.076	1.089	1.073	1.079	1.057	1.076	1.055	1.068	1.073	1.072	1
7	NDTX4304-1R	1.067	1.072	1.066	1.061	1.056	1.059	1.053	1.047	1.067	1.061	8
8	VC1075-1R	1.079	1.084	1.073	---	1.058	1.073	1.052	1.061	1.074	1.069	2
Red/Yellow Flesh												
9	VCO967-2R/Y	1.074	1.077	1.074	1.075	1.060	1.074	1.058	1.071	1.075	1.071	1
10	VC1015-7R/Y	1.077	1.077	1.069	1.074	1.057	1.072	1.056	1.068	1.074	1.069	2
Red/Red Flesh												
11	CO94183-1R/R	1.080	1.083	1.078	1.079	1.063	1.074	1.058	1.074	1.081	1.074	
Purple/Purple Flesh												
12	All Blue	1.078	1.090	1.076	1.078	1.065	1.079	1.061	1.076	1.077	1.076	2
13	CO94165-3P/P	1.073	1.087	1.075	1.077	1.062	1.082	1.069	1.071	1.080	1.075	1
Yellow/Yellow Flesh												
14	Yukon Gold	1.084	1.086	1.086	1.088	1.068	1.084	1.067	1.070	1.082	1.079	2
15	BTX1544-2W/Y	1.076	1.083	1.083	1.079	1.067	1.079	1.066	1.074	1.080	1.076	3
16	NDA5507-3YF	1.079	1.079	1.075	1.079	1.060	1.079	1.053	1.071	1.071	1.072	4
17	VC1002-3W/Y	1.088	1.093	1.086	1.092	1.065	1.093	1.055	1.073	1.078	1.080	1
18	VC1009-1W/Y	1.081	1.089	1.079	1.084	1.058	1.080	1.052	1.067	1.068	1.073	5
Russet/Yellow Flesh												
19	A95074-6	1.086	1.097	1.076	1.091	1.067	1.089	1.058	1.075	1.075	1.079	
Mean		1.076	1.083	1.074	1.077	1.060	1.075	1.056	1.067	1.074	1.071	

Table 12. Average Tuber Size and Tubers/plant

Clone	Average Tuber Size (oz)									Tubers/plant			
	CA	ID	OR		TX		WA	Mean	TX		WA	Mean	
	TUL	AB	COR	HRM	SPL	DAL	Mt.V		SPL	DAL	GR		
Red/White Flesh													
1	Dk. Red Norland	6.5	6.3	6.3	5.5	6.3	4.9	4.5	5.8	4.8	10.4	8.7	6.8
2	Red LaSoda	6.3	7.1	7.5	7.1	7.5	6.4	5.5	6.8	5.5	6.5	7.3	6.4
3	A96741-1R	4.1	4.7	4.8	5.7	3.7	3.1	3.7	4.3	8.0	12.2	10.1	9.1
4	A96741-2R	4.0	4.4	5.0	6.6	3.7	3.5	4.2	4.5	7.3	10.6	10.4	8.9
5	AO93487-2R	5.0	4.8	5.5	5.8	6.2	3.3	4.2	5.0	5.7	11.1	8.5	7.1
6	CO93037-6R	4.1	5.3	5.6	7.6	5.0	4.6	3.8	5.1	4.2	8.6	11.6	7.9
7	NDTX4304-1R	6.7	7.3	6.5	8.2	6.8	4.6	7.0	6.7	4.9	7.9	7.7	6.3
8	VC1075-1R	3.7	5.4	---	4.5	3.6	3.3	3.4	4.0	6.0	9.9	11.9	9.0
Red/Yellow Flesh													
9	VCO967-2R/Y	5.5	4.1	5.8	4.3	5.1	4.3	3.0	4.6	7.2	5.8	14.5	10.9
10	VC1015-7R/Y	4.0	5.5	7.3	5.3	5.2	4.5	5.0	5.3	4.4	11.6	9.8	7.1
Red/Red Flesh													
11	CO94183-1R/R	4.8	4.3	5.2	4.3	5.2	4.5	3.7	4.6	6.3	9.5	8.3	7.3
Purple/Purple Flesh													
12	All Blue	4.1	3.5	5.7	4.9	2.4	3.2	3.4	3.9	4.4	10.6	10.9	7.7
13	CO94165-3P/P	4.6	3.6	4.3	4.5	3.7	2.8	3.9	3.9	7.7	17.1	11.2	9.5
Yellow/Yellow Flesh													
14	Yukon Gold	7.4	5.9	7.8	7.6	5.8	7.1	6.0	6.8	4.8	4.9	6.4	5.6
15	BTX1544-2W/Y	5.2	7.7	5.9	6.3	6.0	5.3	6.1	6.1	4.5	6.0	7.1	5.8
16	NDA5507-3YF	4.8	5.2	7.4	7.0	4.0	5.0	5.3	5.5	5.8	7.6	9.5	7.7
17	VC1002-3W/Y	3.4	4.2	6.2	5.0	3.8	3.5	4.3	4.3	5.4	7.7	11.5	8.5
18	VC1009-1W/Y	3.1	5.7	5.4	4.9	3.7	3.8	4.6	4.5	3.4	7.5	10.6	7.0
Russet/Yellow Flesh													
19	A95074-6	6.3	5.7	6.9	7.1	4.8	6.6	6.2	6.2	2.9	5.4	5.9	4.4
Mean		4.9	5.3	6.1	5.9	4.9	4.4	4.6	5.1	5.4	9.0	9.6	7.5

Table 13. Tuber Shape

Clone	Tuber Shape (1 - 5 long)										L/W OR HRM	
	CA	CO	ID	OR			TX		WA	Mean		
	TUL	SLV	AB	COR	HRM	KLM	SPL	DAL	Mt.V			
Red/White Flesh												
1	Dk. Red Norland	2.0	2.0	2.0	2.0	2.2	2.0	3.0	1.9	2.0	2.1	1.2
2	Red LaSoda	1.8	2.0	1.5	2.0	1.4	2.0	2.9	1.4	2.0	1.9	1.1
3	A96741-1R	1.5	---	1.0	1.0	1.9	1.0	2.6	1.8	2.0	1.6	1.1
4	A96741-2R	1.0	---	1.0	1.0	1.1	1.0	3.0	1.6	1.0	1.3	1.0
5	AO93487-2R	1.5	1.0	1.0	1.0	1.4	1.0	2.6	1.4	2.0	1.4	1.1
6	CO93037-6R	1.5	1.0	2.0	1.0	1.0	1.0	2.6	1.4	1.0	1.4	0.9
7	NDTX4304-1R	1.5	2.0	1.0	1.0	1.1	1.0	2.4	1.5	2.0	1.5	1.0
8	VC1075-1R	1.3	2.0	1.0	---	1.0	1.0	2.1	2.1	1.0	1.4	1.0
Red/Yellow Flesh												
9	VCO967-2R/Y	2.5	2.0	2.0	1.0	1.4	2.8	3.4	3.5	3.0	2.4	1.4
10	VC1015-7R/Y	2.3	2.0	1.5	1.0	1.7	2.5	2.8	3.4	2.0	2.1	1.1
Red/Red Flesh												
11	CO94183-1R/R	2.5	2.0	2.0	2.0	2.4	2.0	3.1	3.8	1.0	2.3	1.3
Purple/Purple Flesh												
12	All Blue	4.0	3.0	4.3	2.0	3.0	5.0	3.6	4.9	2.0	3.5	1.4
13	CO94165-3P/P	3.8	3.0	2.5	2.0	2.4	3.3	3.0	3.9	2.0	2.9	1.3
Yellow/Yellow Flesh												
14	Yukon Gold	3.3	2.0	1.3	2.0	2.4	2.3	2.6	3.1	2.0	2.3	1.2
15	BTX1544-2W/Y	2.5	2.0	1.3	2.0	2.4	2.0	2.9	3.3	3.0	2.4	1.3
16	NDA5507-3YF	2.8	2.0	2.3	2.0	2.8	2.0	2.6	3.0	3.0	2.5	1.4
17	VC1002-3W/Y	2.3	2.0	1.3	1.0	2.1	1.0	2.4	2.9	2.0	1.9	1.2
18	VC1009-1W/Y	2.8	3.0	2.8	2.0	2.3	3.0	3.8	3.4	3.0	2.9	1.2
Russet/Yellow Flesh												
19	A95074-6	4.3	5.0	4.0	2.0	4.1	4.0	4.1	4.0	3.0	3.8	1.7
Mean		2.4	2.2	1.9	1.6	2.0	2.1	2.9	2.7	2.1	2.2	1.2

Table 14. Skin and Flesh Color

Clone	Skin Color (1 - 5 dark)										Flesh Color (1 - 5 dark)											
	CA	CO	ID	OR			TX	WA		Mean	CA	CO	ID	OR			TX	WA		Mean		
	TUL	SLV	AB	COR	HRM	KLM	SPL	Mt.V	TUL		SLV	AB	COR	HRM	KLM	SPL	DAL	Mt.V				
Red/White Flesh																						
1	Dk. Red	Norland	1.8	3.0	3.3	3.0	3.3	3.0	3.3	2.9	4.0	3.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
2	Red	LaSoda	1.8	1.0	2.5	2.0	3.5	2.0	2.9	3.0	4.0	2.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
3	A96741-1R		2.3	---	3.5	4.0	4.4	5.0	3.9	3.9	4.0	3.9	1.0	---	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
4	A96741-2R		3.3	---	3.3	3.0	4.4	4.0	3.8	4.0	4.0	3.7	1.0	---	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
5	AO93487-2R		2.8	2.0	3.5	3.0	4.5	4.0	3.1	4.1	5.0	3.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
6	CO93037-6R		4.8	5.0	4.8	3.0	5.0	4.8	4.6	4.4	5.0	4.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
7	NDTX4304-1R		3.5	3.0	4.3	3.0	4.6	3.0	4.5	4.0	5.0	3.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
8	VC1075-1R		3.5	4.0	4.0	---	4.8	3.5	4.1	4.1	5.0	4.1	1.0	1.0	1.0	---	1.0	1.0	1.0	1.0	1.0	1.0
Red/Yellow Flesh																						
9	VCO967-2R/Y		1.3	3.0	2.3	2.0	1.9	1.0	2.0	2.9	3.0	2.2	3.0	3.0	3.0	3.0	2.0	3.5	2.8	3.6	2.0	2.9
10	VC1015-7R/Y		1.0	3.0	1.8	2.0	1.5	2.0	2.0	2.4	3.0	2.1	3.0	3.0	2.8	3.0	2.0	4.0	3.7	4.0	2.0	3.1
Red/Red Flesh																						
11	CO94183-1R/R		4.3	4.0	4.3	5.0	5.0	5.0	4.3	4.3	5.0	4.6	2.0	2.0	2.5	3.0	2.0	2.5	2.9	2.4	5.0	2.7
Purple/Purple Flesh																						
12	All Blue		5.0	4.0	4.8	4.0	5.0	5.0	5.0	5.0	5.0	4.8	4.3	3.0	4.3	4.0	4.0	4.0	3.0	3.0	5.0	3.8
13	CO94165-3P/P		5.0	4.0	4.5	5.0	5.0	5.0	5.0	5.0	5.0	4.8	5.0	4.0	4.8	5.0	5.0	5.0	4.0	4.3	5.0	4.7
Yellow/Yellow Flesh																						
14	Yukon Gold		1.8	---	1.5	1.0	2.0	2.0	1.3	1.5	1.0	1.5	2.8	3.0	2.5	3.0	3.0	2.8	3.4	3.1	2.0	2.8
15	BTX1544-2W/Y		1.0	---	1.5	1.0	2.0	2.0	1.9	1.8	1.0	1.5	2.5	3.0	2.8	3.0	2.5	2.1	3.0	3.6	1.0	2.6
16	NDA5507-3YF		1.0	---	1.5	1.0	2.0	2.0	1.5	2.1	1.0	1.5	2.0	3.0	2.3	3.0	2.0	2.8	1.6	2.9	2.0	2.4
17	VC1002-3W/Y		1.0	---	1.5	1.0	2.1	2.0	1.6	1.6	1.0	1.5	3.0	3.0	3.5	3.0	2.5	3.9	3.3	3.3	2.0	3.1
18	VC1009-1W/Y		1.0	---	1.5	1.0	2.0	2.0	1.1	1.1	1.0	1.3	2.8	4.0	3.8	3.0	2.5	3.9	3.1	3.4	1.0	3.1
Russet/Yellow Flesh																						
19	A95074-6		1.0	---	1.5	1.0	2.3	3.0	3.6	3.1	1.0	2.1	2.5	3.0	3.0	3.0	3.0	2.3	2.1	2.9	2.0	2.6
Mean			2.5	3.3	2.9	2.5	3.4	3.2	3.1	3.2	3.3	3.0	2.2	2.4	2.3	2.4	2.0	2.4	2.2	2.3	1.9	2.2

Table 15. Eye Depth, Skinning and External Defects

Clone	Eye Depth	Skinning	External Defects (1=severe; 5=none)				
			Growth Cracks	Knobs	Shatter Bruise	Scab	
Red/White Flesh							
1	Dk. Red Norland	3.0	4.3	4.0	4.7	4.6	4.7
2	Red LaSoda	1.8	3.7	3.5	WA 2.0 3.9	SLV 2.0 5.0	5.0
3	A96741-1R	3.3	3.2	4.7	4.8	4.0	4.7
4	A96741-2R	3.1	3.4	4.6	5.0	4.4	5.0
5	AO93487-2R	3.8	3.1	4.8	5.0	4.6	4.9
6	CO93037-6R	3.6	3.3	4.3	4.6	4.7	4.9
7	NDTX4304-1R	3.7	3.4	3.6	KLM 2.5 4.8	3.6	4.9
8	VC1075-1R	3.6	3.5	4.8	4.7	4.4	4.8
Red/Yellow Flesh							
9	VCO967-2R/Y	4.1	4.3	4.7	4.8	4.9	4.8
10	VC1015-7R/Y	3.2	4.5	4.8	5.0	4.7	4.8
Red/Red Flesh							
11	CO94183-1R/R	4.1	4.6	4.2	4.5	4.8	5.0
Purple/Purple Flesh							
12	All Blue	3.2	4.4	4.7	4.6	5.0	5.0
13	CO94165-3P/P	3.5	4.6	4.7	4.9	5.0	5.0
Yellow/Yellow Flesh							
14	Yukon Gold	4.0	4.6	4.7	4.8	4.9	4.8
15	BTX1544-2W/Y	3.0	4.5	4.4	4.4	4.7	4.8
16	NDA5507-3YF	4.0	4.3	4.7	4.5	5.0	4.8
17	VC1002-3W/Y	4.1	3.9	4.8	4.7	4.9	5.0
18	VC1009-1W/Y	3.6	2.9	4.5	4.6	4.6	5.0
Russet/Yellow Flesh							
19	A95074-6	3.5	2.4	4.4	4.4	4.8	5.0
Mean		3.5	3.8	4.5	4.6	4.6	4.9

Table 16. Internal Defects

Clone	HH BC %	%		Blackspot Bruise 1-5=none
		IBS	VD	
Red/White Flesh				
1 Dk. Red Norland	2	1	4	4.6
2 Red LaSoda	7 AB 18, SLV 24	0	5	4.6
3 A96741-1R	1	0	14 TX 38, COR 30	5.0
4 A96741-2R	1	0	4	4.8
5 AO93487-2R	0	1	2	4.2
6 CO93037-6R	0	0	2	4.2
7 NDTX4304-1R	3 HRM 15	1	4	4.6
8 VC1075-1R	0	0	12 TX 48	4.6
Red/Yellow Flesh				
9 VCO967-2R/Y	0	2	2	4.7
10 VC1015-7R/Y	1	1	0	4.8
Red/Red Flesh				
11 CO94183-1R/R	1	1	0	4.5
Purple/Purple Flesh				
12 All Blue	2	0	0	5.0
13 CO94165-3P/P	3	0	0	5.0
Yellow/Yellow Flesh				
14 Yukon Gold	3	2	4	4.0
15 BTX1544-2W/Y	11 AB 63, HRM 15	0	3	4.5
16 NDA5507-3YF	3	1	0	4.8
17 VC1002-3W/Y	1	5	1	4.9
18 VC1009-1W/Y	4	1	6 COR 23	4.7
Russet/Yellow Flesh				
19 A95074-6	6 COR 20, KLM 20	1	0	4.3
Mean	3	1.0	3.3	4.6

Table 17. Fresh Market Quality (Merit Scores)

Clone	Merit Scores (1-5=best)									Mean	Rank
	CA	CO	ID	OR		TX		WA			
	TUL	SLV	AB	HRM	KLM	SPL	DAL	Mt.V			
Red/White Flesh											
1	Dk. Red Norland	3.0	1.0	3.5	3.0	2.5	3.3	3.2	2.0	2.7	7
2	Red LaSoda	1.0	1.0	1.8	1.0	1.5	3.8	3.1	2.0	1.9	8
3	A96741-1R	4.8	---	4.0	3.0	4.3	3.0	3.1	4.0	3.7	1
4	A96741-2R	3.5	---	4.0	4.0	3.3	2.8	3.5	3.0	3.4	3
5	AO93487-2R	4.0	1.0	3.5	2.0	3.5	4.0	3.6	4.0	3.2	5
6	CO93037-6R	3.5	5.0	3.8	3.0	4.0	2.9	3.7	4.0	3.7	2
7	NDTX4304-1R	3.0	1.0	3.3	2.0	1.0	4.9	3.5	4.0	2.8	6
8	VC1075-1R	3.5	3.0	4.5	2.0	3.8	2.2	3.3	5.0	3.4	4
Red/Yellow Flesh											
9	VCO967-2R/Y	4.5	4.0	3.3	2.0	3.5	3.5	3.0	3.0	3.4	1
10	VC1015-7R/Y	3.5	2.0	3.0	1.0	2.5	3.2	3.1	3.0	2.7	2
Red/Red Flesh											
11	CO94183-1R/R	3.3	3.0	3.3	2.0	4.0	4.0	3.2	4.0	3.4	
Purple/Purple Flesh											
12	All Blue	3.0	4.0	2.5	2.0	2.5	2.0	2.8	3.0	2.7	2
13	CO94165-3P/P	3.8	4.0	3.0	3.0	4.0	3.1	3.2	3.0	3.4	1
Yellow/Yellow Flesh											
14	Yukon Gold	4.0	2.0	3.5	4.0	3.5	3.9	3.5	2.0	3.3	1
15	BTX1544-2W/Y	3.0	3.0	2.3	2.0	2.5	4.0	3.5	1.0	2.7	5
16	NDA5507-3YF	4.0	3.0	3.5	2.0	2.5	3.2	2.9	3.0	3.0	4
17	VC1002-3W/Y	4.5	3.0	3.3	1.0	4.5	2.3	2.9	4.0	3.2	2
18	VC1009-1W/Y	3.0	5.0	3.5	2.0	3.5	2.3	3.0	3.0	3.2	2
Russet/Yellow Flesh											
19	A95074-6	2.5	4.0	3.0	2.5	2.0	2.5	3.0	2.0	2.7	
Mean		3.4	2.9	3.3	2.3	3.1	3.2	3.2	3.1	3.1	

Table 18. Foliar & Tuber Late Blight and Tuber Composition

Clone		L. Blight Foliar ¹	Tuber blight ²	Aberdeen, Idaho					
				Mean					
				Solids	Protein ³	Dextrose ⁴	Sucrose ⁴	Vitamin C ⁵	TGA ⁵
Red/White Flesh									
1	Dk. Red Norland	8,9,9	68	17.1	5.1	0.00	0.10	25.8	2.2
2	Red LaSoda	8,9,9	60	18.9	5.2	0.00	0.20	31.4	1.5
3	A96741-1R	8,9,9	33	19.1	5.2	0.00	0.30	32.2	1.5
4	A96741-2R	7,9,9	48	17.6	5.3	0.00	0.50	28.5	0.4
5	AO93487-2R	8,9,9	59	19.0	5.1	0.00	0.20	34.0	0.8
6	CO93037-6R	5,9,9	68	18.9	4.2	0.10	0.40	26.2	0.8
7	NDTX4304-1R	8,9,9	41	17.5	4.7	0.00	0.30	28.1	0.9
8	VC1075-1R	---	---	19.3	5.7	0.00	0.20	27.0	2.2
Red/Yellow Flesh									
9	VCO967-2R/Y	7,9,9	45	18.8	4.4	0.00	0.10	27.6	1.4
10	VC1015-7R/Y	8,9,9	3	18.0	6.7	0.00	0.30	26.5	1.1
Red/Red Flesh									
11	CO94183-1R/R	7,9,9	78	20.3	4.8	0.00	0.10	24.3	3.0
Purple/Purple Flesh									
12	All Blue	6,9,9	88	19.5	4.1	0.00	0.20	23.6	3.5
13	CO94165-3P/P	7,9,9	60	19.5	3.7	0.00	0.10	25.4	2.9
Yellow/Yellow Flesh									
14	Yukon Gold	5,9,9	80	21.4	5.1	0.00	0.10	38.4	2.6
15	BTX1544-2W/Y	7,9,9	48	21.7	5.0	0.00	0.10	35.1	2.2
16	NDA5507-3YF	4,6,8	0	19.4	5.2	0.00	0.10	32.8	2.0
17	VC1002-3W/Y	5,9,9	21	21.9	5.7	0.00	0.10	23.2	1.5
18	VC1009-1W/Y	4,8,9	16	20.7	5.0	0.00	0.20	33.6	2.3
Russet/Yellow Flesh									
19	A95074-6	5,8,9	20	20.2	5.2	0.00	0.20	26.3	1.9
Mean		7,9,9	48	19.4	5.0	0.01	0.20	29.1	1.8

^{1/} Injury ratings: 1=0%; 2=1-5%; 3=5-10%; 4=10-20%; 5=20-40%; 6=40-60%; 7=60-75%; 8=75-90%; 9=≥90%

Ratings occurred on 9/16, 9/24, and 9/30 respectfully. Mosley & Yilma; Corvallis, OR.

^{2/} % of late blight infected tubers at harvest (10 randomly selected tubers). Mosley & Yilma; Corvallis, OR.

^{3/} % Dry Weight Basis

^{4/} % Fresh Weight Basis

^{5/} % Fresh Weight Basis (mg/100g)

Table 19. Culinary Tuber Quality and General Notes

Clone	Washington Culinary Quality ¹				Rank	Notes	
	Boiling	Baking	Micro	Total			
Red/White Flesh							
1	Dk. Red Norland	20.0	21.0	19.0	60.0	1	rough, some shatter, pale color
2	Red LaSoda	19.0	16.8	16.0	51.8	6	deep eyes, rough, lumpy, folded bud ends
3	A96741-1R	17.8	16.4	14.3	48.5	8	variable color, SB, attractive
4	A96741-2R	17.4	20.2	16.8	54.4	4	rough, bronzing, sticky stolons, SB, flat
5	AO93487-2R	19.0	14.4	15.3	48.7	7	uniform, nice shape & color, nice
6	CO93037-6R	18.2	18.0	19.0	55.2	3	dark color, sticky stolons x 3, uniform size
7	NDTX4304-1R	18.3	16.8	18.3	53.4	5	GC, big, SB, skinning, junk
8	VC1075-1R	18.0	18.6	19.5	56.1	2	excellent, uniform, flat, rough
Red/Yellow Flesh							
9	VCO967-2R/Y	15.8	20.6	18.0	54.4	2	smooth x 2, flat, poor shape
10	VC1015-7R/Y	17.0	19.6	18.0	54.6	1	poor color, irregular, rough, no visual appeal
Red/Red Flesh							
11	CO94183-1R/R	15.6	18.4	16.0	50.0		good color & size profile, GC
Purple/Purple Flesh							
12	All Blue	16.4	18.2	14.9	49.5	1	bronzing, rough, curved, sticky stolons
13	CO94165-3P/P	15.8	14.8	18.5	49.1	2	poor skin x 2, bronzing, excellent shape
Yellow/Yellow Flesh							
14	Yukon Gold	20.6	22.4	20.3	63.3	1	lg., nice shape
15	BTX1544-2W/Y	18.2	21.8	22.3	62.3	2	malformed, bumpy, misshaped, rough
16	NDA5507-3YF	19.7	19.4	19.5	58.6	3	skin russeting, color splash, poor skin x 3
17	VC1002-3W/Y	18.7	17.0	21.3	57.0	4	small, uniform x 2, smooth
18	VC1009-1W/Y	16.6	15.6	17.5	49.7	5	flat x 3, rough, misshaped
Russet/Yellow Flesh							
19	A95074-6	20.4	17.8	19.3	57.5		extremely rough x 2, junk
Mean		18.0	18.3	18.1	54.4		

^{1/} Higher score = better quality, maximum = 25 per test. Knowles & Fuller, Pullman, WA.

Table 20. Summary

Clone	Field Data				Yield Qualities						Quality		Disposition 2004
	% Stand	HH/ BC	Vine Size	Vine Mat.	Total Yield	% 4-10	% >10	% <4	Yield <4-10 oz	% <4-10 oz	Specific gravity	Fresh Merit	
Red/White Flesh													
1	Dk. Red Norland	96	2	3.1	2.7	511	61	24	12	360	68	1.064	2.7
2	Red LaSoda	96	7	3.0	3.1	513	47	34	8	275	53	1.066	1.9
3	A96741-1R	97	1	2.9	4.0	507	64	7	24	430	85	1.065	3.7
4	A96741-2R	91	1	3.8	3.9	520	57	20	20	379	75	1.061	3.4
5	AO93487-2R	96	0	3.1	2.5	460	73	11	19	391	85	1.067	3.2
6	CO93037-6R	97	0	3.9	4.2	522	59	21	8	370	73	1.072	3.7
7	NDTX4304-1R	94	3	2.6	3.3	517	46	35	27	269	54	1.061	2.8
8	VC1075-1R	97	0	3.4	3.8	485	67	7	26	424	88	1.069	3.4
Red/Yellow Flesh													
9	VCO967-2R/Y	92	0	3.0	3.2	467	66	11	22	382	83	1.071	3.4
10	VC1015-7R/Y	94	1	2.7	2.4	502	60	24	12	349	72	1.069	2.7
Red/Red Flesh													
11	CO94183-1R/R	97	1	2.1	3.2	414	64	9	21	341	82	1.074	3.4
Purple/Purple Flesh													
12	All Blue	97	2	3.7	4.5	423	57	6	33	353	81	1.076	2.7
13	CO94165-3P/P	97	3	3.2	2.7	488	64	5	30	425	87	1.075	3.4
Yellow/Yellow Flesh													
14	Yukon Gold	95	3	2.9	2.9	428	51	34	8	242	58	1.079	3.3
15	BTX1544-2W/Y	97	11	3.5	3.2	460	62	22	9	306	67	1.076	2.7
16	NDA5507-3YF	94	3	3.8	3.4	536	66	16	15	399	77	1.072	3.0
17	VC1002-3W/Y	95	1	4.0	4.0	474	66	6	31	416	89	1.080	3.2
18	VC1009-1W/Y	95	4	4.4	4.2	537	62	11	22	420	80	1.073	3.2
Russet/Yellow Flesh													
19	A95074-6	95	6	3.8	4.3	453	50	25	10	259	59	1.079	2.7
Mean		95	2.5	3.3	3.4	486	60	17	19	357	75	1.071	3.1

Table 21. 3-Year Summary of Graduating Entries

Clone	Yield (cwt/a)					Culls	Total Yield (cwt/a)	Spec. Grav.	% HH & BC	Skin Color1	Quality Rating ²	Culinary Quality ³
	B's	4-6 oz	6-10 oz	Total	> 10							
Red/White Flesh												
1 Dk. Red Norland	52	97	168	317	106	36	459	1.066	6	3.0	2.6	56
2 Red LaSoda	35	69	159	263	180	49	492	1.068	6	2.4	2.1	53
3 AO93487-2R	80	125	159	364	54	17	435	1.068	1	3.5	3.4	50
4 CO93037-6R	81	116	172	369	104	33	506	1.072	2	4.6	3.6	54
5 NDTX4304-1R	45	78	163	286	168	50	504	1.063	2	3.9	3.0	53

¹ Skin Color: 1 = light, 5 = dark

² Fresh Market Rating: 1 = Poor, 5 = Best

³ Rating: Boiling, Baking, Microwave Test, Higher score = better quality; maximum = 25 per test