2017 Varietal Recommendation

LCS Pro

A motion that "LCS Pro" hard red spring wheat from Limagrain Cereal Seeds be recommended dryland and irrigated production for all districts in the state of Montana.

LCS Pro is a hollow stemmed, hard red spring wheat variety developed by Limagrain Cereal Seeds and released to our dealer network in 2015. PVPA certificate No. 201500065 was issued March 1 2016. LCS Pro was derived from a cross of Alsen / Howard and was tested under the experimental code LNR10-0493. LCS Pro is a tall semi-dwarf with average straw strength. It is approximately 3 inches taller than Vida and it is medium in maturity, averaging 1.2 days earlier to head than Vida. LCS Pro has very good test weight patterns, averaging approximately 1.1 Lb/Bu greater than Vida. LCS Pro has historically shown intermediate resistance to Fusarium Head Blight, Bacterial Leaf Streak, Leaf and Stem Rusts. Septoria Leaf Spot and Tan Spot have historically been in the resistant category.

LCS Pro was entered in the 2014 Spring Wheat Quality Advisory Council evaluations and received overall satisfactory scores.

LCS Pro has shown excellent adaptation across the western portions of the HRSW growing area, including western North Dakota and several areas in Montana. In 22 location years of testing (see table 1. below) in official MSU trials from 2014 thru 2016, LCS Pro averaged 63.7 Bu/ac or ~99% yield of Vida. In those same trials LCS Pro has averaged equal grain protein than Vida. Closer examination of the MSU data suggests that LCS Pro is exceptionally well adapted across the entire State of Montana, with the possible exception of dryland trials in Sidney (Zone 6) where is did not perform quite as well on average as it did over the entire State. Conversely, the 3 year data from the other lower yielding dryland sites in Conrad and Havre (Zone 5) and Moccasin (Zone 4) show that LCS Pro has been very competitive in those conditions, so at this point we would request recommendation for all districts. Limited data is available from Irrigated sites (2014-2016 Sidney Irrigated); but there LCS Pro has out-performed Vida by an average of 4.8 Bu/acre (106.7%). It also has out-performed Vida over the same 3 year period in Kalispell (Zone 1) by 8.6 Bu/acre (107.8%) which shows LCS Pro has excellent yield potential under higher yielding conditions. However, given the plant height and average straw strength, LCS Pro would, like many taller varieties, benefit from an application of PGR in higher yield or irrigated production zones.

Yield

	State Wi	ide Mean	Zone	1 Mean	Zone	2 Mean		Zone	4 Mean	Zo	ne l	5 Mean	Zone	6 Mean
	bu/ac	% Mean	bu/ac	% Mean	bu/ac	% Mean		bu/ac	% Mean	bu/a	ас	% Mean	bu/ac	% Mean
BRENNAN	57.9	95.5%	88.6	88.4%	47.8	89.1%		46.7	102.3%	53.	4	96.8%	62.4	99.4%
CORBIN	60.3	99.3%	103.8	103.6%	53.3	99.2%		44.3	97.0%	57.	.1	103.3%	58.2	92.8%
DUCLAIR	63.0	103.8%	106.4	106.1%	52.5	97.9%		48.3	105.8%	55.	.5	100.5%	67.0	106.8%
FORTUNA	50.2	82.7%	90.9	90.7%	44.4	82.8%		34.9	76.5%	46.	.5	84.2%	48.8	77.7%
LCS Prime	64.0	105.5%	110.0	109.8%	56.3	104.9%		46.2	101.3%	58.	0	105.0%	66.1	105.3%
LCS Pro	63.7	105.0%	118.8	118.5%	58.1	108.3%		45.0	98.6%	58.	0	105.0%	59.6	94.9%
MCNEAL	60.7	100.0%	102.7	102.5%	51.8	96.4%		45.5	99.7%	54.	9	99.3%	63.0	100.3%
SY SOREN	59.8	98.6%	99.4	99.2%	53.7	100.0%		43.1	94.5%	54.	8	99.2%	62.5	99.7%
SY TYRA	59.9	98.8%	97.9	97.7%	53.5	99.8%		41.8	91.6%	56.	1	101.7%	63.7	101.4%
THATCHER	51.4	84.8%	89.0	88.8%	50.3	93.8%		38.0	83.3%	45.	9	83.2%	49.6	79.0%
VIDA	64.4	106.1%	110.2	109.9%	62.5	116.4%		46.3	101.5%	59.	6	108.0%	61.7	98.3%
WB GUNNISON	60.5	99.7%	108.4	108.2%	53.6	100.0%]	44.9	98.5%	54.	.1	98.0%	59.0	94.0%
Trial Averages	60.7		100.2	·	53.7			45.6		55.	2	-	62.8	

	Zone 1	l Mean		KA	٩L	ISPELL	- Crop Zo	ne	e 1	
	3 Y	'ear	2	016		2	015		2	014
	bu/ac	% Mean	bu/ac	% Mean		bu/ac	% Mean		bu/ac	% Mean
BRENNAN	88.6	88.4%	69.4	84.1%		102.4	92.3%		94.0	87.7%
CORBIN	103.8	103.6%	80.8	97.9%		114.8	103.5%		115.8	108.0%
DUCLAIR	106.4	106.1%	90.7	109.9%		122.0	109.9%		106.5	99.3%
FORTUNA	90.9	90.7%	89.4	108.4%		95.4	86.0%		87.9	82.0%
LCS Prime	110.0	109.8%	101.8	123.4%		114.0	102.7%		114.3	106.6%
LCS Pro	118.8	118.5%	100.3	121.6%		125.3	112.9%		130.8	122.0%
MCNEAL	102.7	102.5%	86.5	104.8%		99.7	89.8%		121.9	113.7%
SY SOREN	99.4	99.2%	75.3	91.3%		112.3	101.2%		110.7	103.3%
SY TYRA	97.9	97.7%	85.6	103.8%		106.4	95.8%		101.7	94.9%
THATCHER	89.0	88.8%	75.6	91.6%		93.9	84.6%		97.5	91.0%
VIDA	110.2	109.9%	96.2	116.6%		123.5	111.3%		110.8	103.4%
WB GUNNISON	108.4	108.2%	96.7	117.3%		112.4	101.3%		116.1	108.3%
Trial Averages	100.2		82.5		•	111.0		•	107.2	

	Zone 2	2 Mean			ВС	Σ	EMAN	- Crop Zo	n	e 2	
	3 \	'ear		2	016		2	015		2	014
	bu/ac	% Mean		bu/ac	% Mean		bu/ac	% Mean		bu/ac	% Mean
BRENNAN	47.8	89.1%		43.5	87.7%		29.0	80.4%		71.0	94.2%
CORBIN	53.3	99.2%		52.7	106.3%		37.8	104.9%		69.3	91.9%
DUCLAIR	52.5	97.9%		46.5	93.8%		37.7	104.7%		73.4	97.3%
FORTUNA	44.4	82.8%		47.4	95.6%		38.0	105.7%		47.8	63.4%
LCS Prime	56.3	104.9%		55.0	110.8%		38.6	107.3%		75.3	99.9%
LCS Pro	58.1	108.3%		52.6	106.0%		41.9	116.3%		79.9	106.0%
MCNEAL	51.8	96.4%		49.8	100.3%		32.8	91.1%		72.7	96.4%
SY SOREN	53.7	100.0%		49.9	100.5%		35.1	97.6%		76.0	100.8%
SY TYRA	53.5	99.8%		46.8	94.4%		35.3	98.2%		78.5	104.1%
THATCHER	50.3	93.8%		41.8	84.3%		37.3	103.6%		71.9	95.4%
VIDA	62.5	116.4%		61.0	123.1%		39.9	111.0%		86.5	114.7%
WB GUNNISON	53.6	100.0%		49.3	99.4%		38.9	108.1%		72.7	96.4%
Trial Averages	53.7		•	49.6		•	36.0		•	75.4	

	Zone 4	4 Mean	Н	UNTLEY -	Crop Zo	ne 4		MC	CCASIN	- Crop Zo	ne 4	
	3 \	'ear	2	016	2	2014		2016	2	015	2	014
	bu/ac	% Mean	bu/ac	% Mean	bu/ac	% Mean	bu/ac	% Mean	bu/ac	% Mean	bu/ac	% Mean
BRENNAN	46.7	102.3%	84.9	98.6%	46.7	113.3%	32.9	100.2%	26.1	90.6%	42.7	108.9%
CORBIN	44.3	97.0%	87.5	101.6%	44.1	107.0%	28.6	87.1%	25.5	88.5%	35.7	91.1%
DUCLAIR	48.3	105.8%	98.1	113.9%	44.6	108.3%	31.9	97.2%	30.9	107.3%	35.8	91.3%
FORTUNA	34.9	76.5%	60.1	69.8%	29.1	70.6%	25.6	78.0%	28.5	99.0%	31.3	79.8%
LCS Prime	46.2	101.3%	93.4	108.5%	39.1	94.9%	39.7	121.1%	25.5	88.5%	33.4	85.2%
LCS Pro	45.0	98.6%	75.5	87.7%	53.1	128.9%	34.5	105.1%	29.4	102.1%	32.4	82.7%
MCNEAL	45.5	99.7%	84.2	97.8%	39.6	96.1%	32.4	98.8%	29.5	102.4%	41.8	106.6%
SY SOREN	43.1	94.5%	83.0	96.4%	38.1	92.5%	30.1	91.8%	23.5	81.6%	40.8	104.1%
SY TYRA	41.8	91.6%	81.7	94.9%	32.5	78.9%	33.3	101.4%	23.3	80.9%	38.1	97.2%
THATCHER	38.0	83.3%	54.0	62.7%	42.1	102.2%	31.4	95.7%	23.4	81.3%	39.2	100.0%
VIDA	46.3	101.5%	89.0	103.4%	44.2	107.3%	32.7	99.6%	29.9	103.8%	35.8	91.3%
WB GUNNISON	44.9	98.5%	86.8	100.8%	40.0	97.1%	31.1	94.7%	29.5	102.4%	37.3	95.2%
Trial Averages	45.6		86.1		41.2	<u> </u>	32.8	<u> </u>	28.8		39.2	

	Zone !	5 Mean		CC	ONRAD -	Crop Zon	e 5			H	IAVRE	- Crop Zone	: 5	
	3 \	ear/	2	016	2	2015	2	2014	2	2016		2015	2	2014
	bu/ac	% Mean	bu/ac	% Mean	bu/ac	% Mean	bu/ac	% Mean	bu/ac	% Mean	bu/a	c % Mean	bu/ac	% Mean
BRENNAN	53.4	96.8%	64.9	103.3%	50.1	92.9%	79.3	88.8%	38.4	93.5%	46.3	110.0%	41.5	98.6%
CORBIN	57.1	103.3%	65.6	104.4%	51.9	96.3%	98.0	109.7%	45.7	111.3%	42.3	100.5%	38.8	92.2%
DUCLAIR	55.5	100.5%	60.0	95.6%	49.5	91.8%	94.7	106.0%	38.6	93.9%	43.2	102.6%	46.9	111.4%
FORTUNA	46.5	84.2%	61.7	98.2%	49.0	90.9%	64.5	72.2%	36.4	88.6%	34.2	81.2%	33.0	78.4%
LCS Prime	58.0	105.0%	66.3	105.6%	60.1	111.5%	106.4	119.1%	42.3	102.8%	36.8	87.4%	35.9	85.3%
LCS Pro	58.0	105.0%	60.9	97.0%	54.1	100.4%	100.8	112.9%	49.0	119.1%	43.4	103.1%	39.8	94.5%
MCNEAL	54.9	99.3%	54.0	86.0%	58.3	108.2%	92.7	103.8%	39.2	95.5%	43.4	103.1%	41.5	98.6%
SY SOREN	54.8	99.2%	56.8	90.5%	50.4	93.5%	92.5	103.6%	42.2	102.8%	44.3	105.2%	42.5	101.0%
SY TYRA	56.1	101.7%	59.9	95.3%	65.0	120.6%	91.2	102.1%	32.8	79.8%	41.7	99.0%	46.3	110.0%
THATCHER	45.9	83.2%	49.5	78.8%	46.9	87.0%	80.6	90.3%	32.3	78.6%	29.2	69.4%	37.2	88.4%
VIDA	59.6	108.0%	73.5	117.0%	56.1	104.1%	94.0	105.3%	40.5	98.5%	45.9	109.0%	47.9	113.8%
WB GUNNISON	54.1	98.0%	66.3	105.6%	51.8	96.1%	89.3	100.0%	34.0	82.8%	39.7	94.3%	43.4	103.1%
Trial Averages	55.2		62.8		53.9		89.3		41.1		42.1		42.1	
	Zone	6 Mean	SIDNI	Y DRYLAN	ND - Cro	p Zone 6		SIDNEY	/ IRRIGA	TED - Cro	Zone	6		
	3 \	ear/	2	016	2	2014	2	016	2	2015		2014		
	bu/ac	% Mean	bu/ac	% Mean	bu/ac	% Mean	bu/ac	% Mean	bu/ac	% Mean	bu/a	c % Mean		
BRENNAN	62.4	99.4%	44.4	99.8%	48.9	118.4%	66.0	97.0%	52.5	93.4%	100.	1 96.4%		
CORBIN	58.2	92.8%	43.2	97.0%	31.1	75.3%	59.7	87.8%	60.9	108.4%	96.2	92.7%		
DUCLAIR	67.0	106.8%	45.6	102.5%	45.1	109.2%	70.8	104.2%	63.3	112.6%	110.	2 106.2%		
FORTUNA	48.8	77.7%	38.8	87.2%	33.5	81.1%	53.0	78.0%	47.0	83.6%	71.6	69.0%		
LCS Prime	66.1	105.3%	43.4	97.6%	42.6	103.1%	76.0	111.8%	51.4	91.5%	117.	0 112.7%		
LCS Pro	59.6	94.9%	43.9	98.6%	26.1	63.2%	67.3	99.0%	49.1	87.4%	111.	5 107.4%		
MCNEAL	63.0	100.3%	44.5	100.0%	42.8	103.6%	66.3	97.5%	63.7	113.3%	97.5	93.9%		
SY SOREN	62.5	99.7%	41.6	93.5%	46.6	112.8%	72.8	107.1%	45.0	80.1%	106.	7 102.8%		
SY TYRA	63.7	101.4%	45.8	103.0%	42.1	101.9%	71.9	105.7%	53.3	94.8%	105.	2 101.3%		
THATCHER	49.6	79.0%	35.0	78.6%	42.6	103.1%	50.6	74.4%	38.2	68.0%	81.5	78.5%		

VIDA

WB GUNNISON

Trial Averages

61.7

59.0

62.8

98.3%

94.0%

45.2

36.3

44.5

101.6%

81.5%

49.6

28.3

41.3

120.1%

68.5%

59.8

60.6

68.0

87.9%

89.1%

49.9

65.9

56.2

88.8%

117.3%

104.0

103.9

103.8

100.2%

100.1%

Protein

	State W	ide Mean	Zone	1 Mean		Zone	2 Mean		Zone	4 Mean	Zo	ne	5 Mean	Zone	6 Mean
	%	% Mean	%	% Mean		%	% Mean		%	% Mean	9	6	% Mean	%	% Mean
BRENNAN	15.1	104.2%	15.2	105.3%		16.0	106.2%		15.5	105.3%	15	.4	103.6%	13.8	101.6%
CORBIN	14.6	100.9%	14.5	100.5%	Ī	14.8	98.2%		15.2	103.1%	14	.8	99.8%	13.9	101.9%
DUCLAIR	14.4	99.4%	15.0	104.4%		14.6	96.7%		14.5	98.4%	14	.9	100.3%	13.4	98.1%
FORTUNA	14.5	100.2%	15.4	106.9%	ſ	14.6	96.9%		14.6	99.0%	14	.8	99.7%	13.6	100.0%
LCS Prime	13.7	94.3%	13.4	92.8%		13.7	90.7%	Ì	13.9	94.6%	13	8.8	93.0%	13.5	99.1%
LCS Pro	14.3	98.6%	14.8	103.0%		14.3	94.5%	ĺ	14.4	98.2%	14	.8	99.6%	13.3	97.8%
MCNEAL	14.5	100.2%	14.8	102.5%	ſ	15.1	99.8%		15.0	101.8%	14	.9	100.6%	13.2	96.8%
SY SOREN	15.2	104.8%	15.5	107.6%	ſ	15.8	104.9%		15.7	106.8%	15	5.3	103.3%	14.0	102.8%
SY TYRA	13.9	95.6%	14.0	97.0%	Ī	14.2	94.0%		14.1	96.2%	14	.4	96.7%	12.7	93.5%
THATCHER	15.0	103.1%	15.0	104.2%	ſ	14.8	98.2%		15.7	106.5%	15	5.3	103.0%	13.9	102.2%
VIDA	14.3	98.8%	15.0	103.9%	Ī	14.8	98.0%		14.3	97.3%	14	.5	97.6%	13.5	99.1%
WB GUNNISON	14.0	96.2%	14.1	98.1%	ſ	14.2	94.0%		14.2	96.5%	14	.3	96.1%	13.1	96.2%
Trial Averages	14.5		14.4		-	15.1			14.7		14	.8		 13.6	

	Zone	1 Mean			K.A	٩L	ISPELL	- Crop Zo	ne	1	
	3 '	Year		2	016		2	015		2	014
	%	% Mean		%	% Mean		%	% Mean		%	% Mean
BRENNAN	15.2	105.3%		14.9	100.7%		15.9	112.0%		14.7	103.5%
CORBIN	14.5	100.5%		15.3	103.4%		14.8	104.2%		13.3	93.7%
DUCLAIR	15.0	104.4%		14.9	100.7%		15.9	112.0%		14.3	100.7%
FORTUNA	15.4	106.9%		15.6	105.4%		16.0	112.7%		14.6	102.8%
LCS Prime	13.4	92.8%		13.5	91.2%		13.9	97.9%		12.7	89.4%
LCS Pro	14.8	103.0%		15.1	102.0%		15.7	110.6%		13.7	96.5%
MCNEAL	14.8	102.5%		15.9	107.4%		15.1	106.3%		13.3	93.7%
SY SOREN	15.5	107.6%		15.8	106.8%		16.1	113.4%		14.6	102.8%
SY TYRA	14.0	97.0%		14.1	95.3%		14.3	100.7%		13.5	95.1%
THATCHER	15.0	104.2%		15.0	101.4%		16.2	114.1%		13.8	97.2%
VIDA	15.0	103.9%	1	15.1	102.0%		15.6	109.9%		14.2	100.0%
WB GUNNISON	14.1	98.1%	1	13.9	93.9%		15.2	107.0%		13.3	93.7%
Trial Averages	14.4	•	•	14.8			14.2	•		14.2	

	Zone	2 Mean			ВС	Z	EMAN	- Crop Zo	ne	e 2	
	3 '	Year		2	016		2	015		2	014
	%	% Mean		%	% Mean		%	% Mean		%	% Mean
BRENNAN	16.0	106.2%		15.8	106.0%		16.8	110.5%		15.5	102.0%
CORBIN	14.8	98.2%		14.3	96.0%		14.7	96.7%		15.5	102.0%
DUCLAIR	14.6	96.7%		15.0	100.7%		14.6	96.1%		14.2	93.4%
FORTUNA	14.6	96.9%		14.5	97.3%		14.7	96.7%		14.7	96.7%
LCS Prime	13.7	90.7%		13.3	89.3%		13.7	90.1%		14.1	92.8%
LCS Pro	14.3	94.5%		13.3	89.3%		14.9	98.0%		14.6	96.1%
MCNEAL	15.1	99.8%		14.9	100.0%		15.3	100.7%		15.0	98.7%
SY SOREN	15.8	104.9%		15.3	102.7%		16.1	105.9%		16.1	105.9%
SY TYRA	14.2	94.0%		13.8	92.6%		14.3	94.1%		14.5	95.4%
THATCHER	14.8	98.2%		14.6	98.0%		14.3	94.1%		15.6	102.6%
VIDA	14.8	98.0%		14.3	96.0%		15.3	100.7%		14.8	97.4%
WB GUNNISON	14.2	94.0%		14.1	94.6%		14.0	92.1%		14.5	95.4%
Trial Averages	15.1		- '	14.9			15.2		•	15.2	

	Zone 4	l Mean	Н	IUNTLEY -	C	rop Zo	ne 4			МС	CCASIN	l - Crop Zo	ne 4	
	3 Y	'ear	2	2016		2	014		2	016		2015		2014
	%	% Mean	%	% Mean		%	% Mean		%	% Mean	%	% Mean	%	% Mean
BRENNAN	15.5	105.3%	13.0	107.4%		17.9	98.9%		12.5	98.4%	17.5	118.2%	16.5	104.4%
CORBIN	15.2	103.1%	11.3	93.4%		18.2	100.6%		13.3	104.7%	16.4	110.8%	16.6	105.1%
DUCLAIR	14.5	98.4%	12.0	99.2%		17.9	98.9%		11.8	92.9%	14.1	95.3%	16.5	104.4%
FORTUNA	14.6	99.0%	14.0	115.7%		17.2	95.0%		12.4	97.6%	14.0	94.6%	15.2	96.2%
LCS Prime	13.9	94.6%	11.1	91.7%		16.7	92.3%		11.1	87.4%	14.1	95.3%	16.5	104.4%
LCS Pro	14.4	98.2%	12.6	104.1%		16.2	89.5%		11.9	93.7%	15.8	106.8%	15.7	99.4%
MCNEAL	15.0	101.8%	12.6	104.1%		18.2	100.6%		12.3	96.9%	15.1	102.0%	16.6	105.1%
SY SOREN	15.7	106.8%	12.8	105.8%		18.2	100.6%		13.1	103.1%	18.5	125.0%	15.9	100.6%
SY TYRA	14.1	96.2%	10.9	90.1%		17.1	94.5%		11.2	88.2%	16.4	110.8%	15.1	95.6%
THATCHER	15.7	106.5%	13.8	114.0%		19.0	105.0%		12.7	100.0%	16.7	112.8%	16.1	101.9%
VIDA	14.3	97.3%	11.6	95.9%		17.6	97.2%		12.0	94.5%	15.0	101.4%	15.3	96.8%
WB GUNNISON	14.2	96.5%	12.6	104.1%		16.9	93.4%	-	12.0	94.5%	14.1	95.3%	15.3	96.8%
Trial Averages	14.7		12.1			18.1			12.7		14.8		15.8	

	Zone	5 Mean		CC	NRAD -	- Crop Zon	e 5			H	IAVRE	- Crop Zone	e 5	
	3 '	Year	2	2016	2	2015	2	2014		2016		2015		2014
	%	% Mean	%	% Mean	%	% Mean	%	% Mean	%	% Mean	%	% Mean	%	% Mean
BRENNAN	15.4	103.6%	14.6	108.1%	15.5	102.6%	13.1	107.4%	16.3	105.2%	16.	99.4%	16.1	100.6%
CORBIN	14.8	99.8%	13.1	97.0%	14.9	98.7%	12.1	99.2%	15.0	96.8%	17.3	103.6%	16.4	102.5%
DUCLAIR	14.9	100.3%	13.6	100.7%	16.0	106.0%	11.6	95.1%	15.4	99.4%	17.	101.8%	15.7	98.1%
FORTUNA	14.8	99.7%	13.2	97.8%	15.1	100.0%	12.8	104.9%	15.9	102.6%	16.	97.0%	15.5	96.9%
LCS Prime	13.8	93.0%	12.4	91.9%	13.9	92.1%	11.4	93.4%	14.0	90.3%	15.9	95.2%	15.2	95.0%
LCS Pro	14.8	99.6%	13.5	100.0%	15.7	104.0%	11.6	95.1%	15.1	97.4%	16.	7 100.0%	16.0	100.0%
MCNEAL	14.9	100.6%	13.0	96.3%	15.5	102.6%	12.8	104.9%	15.4	99.4%	17.0	101.8%	15.8	98.8%
SY SOREN	15.3	103.3%	14.2	105.2%	16.3	107.9%	12.1	99.2%	15.9	102.6%	17.	3 103.6%	16.1	100.6%
SY TYRA	14.4	96.7%	13.2	97.8%	14.2	94.0%	10.8	88.5%	16.3	105.2%	16.	98.2%	15.2	95.0%
THATCHER	15.3	103.0%	13.0	96.3%	15.0	99.3%	13.0	106.6%	16.0	103.2%	18.	2 109.0%	16.5	103.1%
VIDA	14.5	97.6%	13.3	98.5%	15.6	103.3%	10.7	87.7%	15.6	100.6%	16.0	99.4%	15.1	94.4%
WB GUNNISON	14.3	96.1%	12.4	91.9%	14.5	96.0%	11.9	97.5%	15.0	96.8%	16.0	99.4%	15.1	94.4%
Trial Averages	14.8		13.5		15.1		12.2		15.5		16.	7	16.0)
	Zone	6 Mean	SIDN	EY DRYLAN	ID - Cro	p Zone 6		SIDNEY	'IRRIGA	TED - Cro	Zone	6		
	3 '	Year	2	2016	2	2014	2	2016		2015		2014		
	%	% Mean	%	% Mean	%	% Mean	%	% Mean	%	% Mean	%	% Mean		
BRENNAN	13.8	101.6%	13.4	106.3%	12.1	103.4%	14.7	100.0%	14.1	96.6%	14.9	102.8%		
CORBIN	13.9	101.9%	12.8	101.6%	11.6	99.1%	15.3	104.1%	15.5	106.2%	14.	97.9%		
DUCLAIR	13.4	98.1%	12.4	98.4%	11.5	98.3%	14.7	100.0%	14.4	98.6%	13.	95.2%		
FORTUNA	13.6	100.0%	12.0	95.2%	12.2	104.3%	14.3	97.3%	14.9	102.1%	14.	7 101.4%		
LCS Prime	13.5	99.1%	13.8	109.5%	11.2	95.7%	16.1	109.5%	12.7	87.0%	13.	94.5%		
LCS Pro	13.3	97.8%	12.1	96.0%	11.5	98.3%	14.6	99.3%	13.8	94.5%	14.0	100.7%		
MCNEAL	13.2	96.8%	11.9	94.4%	11.3	96.6%	14.5	98.6%	13.9	95.2%	14.	98.6%		
SY SOREN	14.0	102.8%	13.0	103.2%	11.7	100.0%	15.3	104.1%	15.5	106.2%	14.	100.0%		
SY TYRA	12.7	93.5%	12.8	101.6%	10.5	89.7%	14.2	96.6%	12.9	88.4%	13.	91.7%		

Trial Averages 13.6 12.6 11.7 14.7 14.6 14.5

11.9

10.7

11.5

101.7%

91.5%

98.3%

14.9

14.7

14.9

101.4%

100.0%

101.4%

15.7

15.5

13.7

107.5%

106.2%

93.8%

14.9

14.4

13.8

102.8%

99.3%

95.2%

96.8%

96.8%

92.1%

THATCHER

WB GUNNISON

VIDA

13.9

13.5

13.1

102.2%

99.1%

96.2%

12.2

12.2

11.6

Test Weight

	State W	ide Mean	Zone	1 Mean		Zone	2 Mean	Zone	4 Mean	Zc	ne	5 Mean	Zone	6 Mean
	lb/bu	% Mean	lb/bu	% Mean		lb/bu	% Mean	lb/bu	% Mean	lb/	bu	% Mean	lb/bu	% Mean
BRENNAN	61.2	102.3%	61.2	100.6%	Ī	61.3	101.8%	60.2	102.6%	61	.2	103.8%	61.9	101.5%
CORBIN	60.3	100.8%	61.8	101.5%	Ī	61.1	101.4%	58.6	99.8%	59	.6	101.1%	61.3	100.6%
DUCLAIR	59.0	98.6%	60.3	98.9%	Ī	59.5	98.8%	57.6	98.1%	57	'.8	98.0%	60.6	99.5%
FORTUNA	60.2	100.7%	61.4	100.9%	Ī	61.1	101.5%	59.4	101.2%	59	.4	100.8%	60.7	99.6%
LCS Prime	60.9	101.9%	62.6	102.7%		61.2	101.6%	59.1	100.6%	60	.4	102.4%	62.2	102.0%
LCS Pro	60.3	100.9%	62.2	102.1%		60.8	100.9%	58.9	100.4%	59).1	100.3%	61.7	101.2%
MCNEAL	59.2	99.0%	60.9	99.9%	Ī	59.1	98.1%	58.0	98.8%	58	3.3	98.9%	60.5	99.1%
SY SOREN	60.2	100.7%	61.8	101.5%	Ī	60.5	100.5%	58.7	100.0%	59	.2	100.4%	61.8	101.4%
SY TYRA	60.5	101.1%	61.9	101.6%	Ī	61.3	101.9%	59.5	101.4%	59	.2	100.4%	61.6	101.0%
THATCHER	58.2	97.3%	60.4	99.2%	Ī	58.0	96.4%	57.5	97.9%	56	5.7	96.1%	59.6	97.7%
VIDA	59.2	99.0%	60.8	99.8%	Ī	59.8	99.3%	57.9	98.7%	58	3.6	99.4%	59.9	98.3%
WB GUNNISON	60.4	101.0%	62.1	102.0%	Ī	60.2	100.0%	59.1	100.6%	59	.6	101.1%	61.8	101.3%
Trial Averages	59.8	<u>_</u>	60.9			60.2		58.7	<u>_</u>	59	0.0		61.0	

	Zone :	1 Mean			KA	٩L	ISPELL	- Crop Zo	ne	1	
	3 \	⁄ear		2	016		2	015		2	014
	lb/bu	% Mean		lb/bu	% Mean		lb/bu	% Mean		lb/bu	% Mean
BRENNAN	61.2	100.6%		61.4	100.7%		62.6	101.1%		59.7	99.8%
CORBIN	61.8	101.5%		61.9	101.5%		62.6	101.1%		61.0	102.0%
DUCLAIR	60.3	98.9%		60.4	99.0%		60.7	98.1%		59.7	99.8%
FORTUNA	61.4	100.9%		61.3	100.4%		61.6	99.5%		61.4	102.7%
LCS Prime	62.6	102.7%		63.0	103.3%		63.3	102.3%		61.4	102.7%
LCS Pro	62.2	102.1%		62.6	102.6%		62.5	101.0%		61.5	102.8%
MCNEAL	60.9	99.9%		60.4	99.0%		61.7	99.7%		60.5	101.2%
SY SOREN	61.8	101.5%		61.8	101.3%		63.1	101.9%		60.6	101.3%
SY TYRA	61.9	101.6%		62.7	102.7%		63.1	101.9%		59.8	100.0%
THATCHER	60.4	99.2%		60.8	99.6%		61.2	98.9%		59.3	99.2%
VIDA	60.8	99.8%		60.9	99.8%		61.6	99.5%		59.9	100.2%
WB GUNNISON	62.1	102.0%		61.1	100.2%		63.5	102.6%		61.8	103.3%
Trial Averages	60.9		•	61.0		•	61.9			59.8	

	Zone 2	2 Mean			ВС	Σ	EMAN	- Crop Zo	n	e 2	
	3 Y	'ear		2	016		2	015		2	014
	lb/bu	% Mean	_	lb/bu	% Mean		lb/bu	% Mean		lb/bu	% Mean
BRENNAN	61.3	101.8%		61.0	101.0%		60.6	100.8%		62.3	103.7%
CORBIN	61.1	101.4%		61.7	102.2%		61.6	102.5%		59.9	99.7%
DUCLAIR	59.5	98.8%		57.7	95.5%		60.0	99.8%		60.8	101.2%
FORTUNA	61.1	101.5%		61.5	101.7%		59.8	99.5%		62.1	103.3%
LCS Prime	61.2	101.6%		61.9	102.4%		60.9	101.3%		60.8	101.2%
LCS Pro	60.8	100.9%		61.9	102.4%		61.5	102.3%		58.9	98.0%
MCNEAL	59.1	98.1%		59.1	97.9%		59.4	98.8%		58.7	97.7%
SY SOREN	60.5	100.5%		60.0	99.3%		62.7	104.3%		58.8	97.8%
SY TYRA	61.3	101.9%		61.6	102.0%		62.0	103.2%		60.4	100.5%
THATCHER	58.0	96.4%		58.3	96.5%		58.8	97.8%		56.9	94.7%
VIDA	59.8	99.3%		60.6	100.3%		60.7	101.0%		58.1	96.7%
WB GUNNISON	60.2	100.0%		60.2	99.6%		61.8	102.8%		58.7	97.7%
Trial Averages	60.2		_	60.4		•	60.1		•	60.1	

	Zone 4	4 Mean	Н	UNTLEY -	Crop Zo	ne 4		MC	CCASIN	- Crop Zo	ne 4	
	3 \	⁄ear	2	016	2	2014		2016	2	2015	2	014
	lb/bu	% Mean	lb/bu	% Mean	lb/bu	% Mean	lb/bu	% Mean	lb/bu	% Mean	lb/bu	% Mean
BRENNAN	60.2	102.6%	63.7	101.6%	53.4	107.2%	63.3	101.4%	59.8	100.3%	61.0	103.4%
CORBIN	58.6	99.8%	63.5	101.3%	49.7	99.8%	62.7	100.4%	59.3	99.5%	57.9	98.1%
DUCLAIR	57.6	98.1%	62.1	99.0%	50.2	100.8%	61.5	98.6%	58.2	97.7%	56.0	94.9%
FORTUNA	59.4	101.2%	62.5	99.7%	52.7	105.8%	61.4	98.3%	60.0	100.7%	60.5	102.5%
LCS Prime	59.1	100.6%	63.1	100.6%	51.1	102.6%	63.5	101.7%	60.1	100.8%	57.6	97.6%
LCS Pro	58.9	100.4%	62.4	99.5%	51.2	102.8%	63.4	101.5%	60.1	100.8%	57.5	97.5%
MCNEAL	58.0	98.8%	62.0	98.9%	49.8	100.0%	61.8	99.0%	58.7	98.5%	57.7	97.8%
SY SOREN	58.7	100.0%	63.2	100.8%	50.7	101.8%	61.9	99.2%	58.8	98.7%	59.0	100.0%
SY TYRA	59.5	101.4%	63.2	100.8%	49.4	99.2%	64.3	103.0%	61.1	102.5%	59.7	101.2%
THATCHER	57.5	97.9%	62.3	99.4%	49.5	99.4%	58.7	94.0%	58.0	97.3%	58.8	99.7%
VIDA	57.9	98.7%	61.7	98.4%	48.6	97.6%	62.3	99.8%	58.9	98.8%	58.1	98.5%
WB GUNNISON	59.1	100.6%	62.6	99.8%	51.3	103.0%	62.6	100.3%	60.3	101.2%	58.5	99.2%
Trial Averages	58.7		62.7		49.8		62.4		59.6		59.0	

	Zone 5	Mean		C	ONRAD	- Crop Zon	e 5			H	IAVRE	- Crop Zone	5	
	3 Y	'ear	2	2016	7	2015	2	2014	7	2016		2015	2	2014
	lb/bu	% Mean	lb/bu	% Mean	lb/bu	% Mean	lb/bu	% Mean	lb/bu	% Mean	lb/b	u % Mean	lb/bu	% Mean
BRENNAN	61.2	103.8%	64.6	102.8%	63.5	105.8%	61.1	101.3%	59.8	103.3%	56.	105.0%	61.5	104.8%
CORBIN	59.6	101.1%	64.2	102.1%	59.9	99.8%	61.9	102.7%	58.6	101.2%	53.	98.9%	59.5	101.4%
DUCLAIR	57.8	98.0%	60.5	96.2%	57.0	95.0%	60.9	101.0%	57.5	99.3%	52.	97.4%	58.1	99.0%
FORTUNA	59.4	100.8%	63.3	100.7%	60.4	100.7%	60.3	100.0%	59.0	102.0%	54.	101.3%	58.7	100.0%
LCS Prime	60.4	102.4%	65.1	103.4%	62.4	104.0%	61.5	102.0%	59.1	102.1%	55.0	102.0%	59.2	100.9%
LCS Pro	59.1	100.3%	64.8	103.1%	59.7	99.5%	61.2	101.5%	59.1	102.0%	51.	95.9%	58.1	99.0%
MCNEAL	58.3	98.9%	62.8	99.9%	59.2	98.7%	60.8	100.8%	55.7	96.3%	54.	5 101.1%	56.8	96.8%
SY SOREN	59.2	100.4%	63.7	101.2%	59.3	98.8%	61.1	101.3%	58.5	101.1%	53.	98.5%	59.5	101.4%
SY TYRA	59.2	100.4%	63.0	100.2%	61.3	102.2%	59.9	99.3%	55.8	96.4%	53.	99.3%	61.5	104.8%
THATCHER	56.7	96.1%	62.4	99.2%	58.9	98.2%	58.3	96.7%	55.6	96.0%	50.	92.9%	54.7	93.2%
VIDA	58.6	99.4%	62.6	99.5%	58.7	97.8%	61.3	101.7%	56.5	97.6%	53.	99.8%	58.6	99.8%
WB GUNNISON	59.6	101.1%	63.5	101.0%	60.6	101.0%	62.4	103.5%	56.8	98.1%	56.	104.1%	58.2	99.1%
Trial Averages	59.0		62.9		60.0		60.3		57.9		53.	9	58.7	
	Zone 6	6 Mean	SIDNI	EY DRYLAI	ND - Cro	p Zone 6		SIDNEY	'IRRIGA	TED - Cro	Zone	6		
	3 Y	'ear	2	2016	2	2014	2	2016	2	2015		2014		
	lb/bu	% Mean	lb/bu	% Mean	lb/bu	% Mean	lb/bu	% Mean	lb/bu	% Mean	lb/b	u % Mean		
BRENNAN	61.9	101.5%	63.9	101.4%	61.5	101.3%	61.1	101.2%	62.9	101.6%	60.0	101.9%		
CORBIN	61.3	100.6%	63.3	100.5%	61.0	100.5%	60.3	99.8%	62.5	101.0%	59.	5 101.0%		
DUCLAIR	60.6	99.5%	62.6	99.4%	60.0	98.8%	60.3	99.9%	61.3	99.0%	59.	100.2%		
FORTUNA	60.7	99.6%	62.7	99.6%	61.0	100.5%	59.8	99.0%	61.6	99.5%	58.	99.3%		
LCS Prime	62.2	102.0%	63.4	100.7%	61.0	100.5%	62.5	103.4%	63.6	102.7%	60.	102.7%		
LCS Pro	61.7	101.2%	63.7	101.2%	60.0	98.8%	62.3	103.2%	62.6	101.1%	60.	101.9%		
MCNEAL	60.5	99.1%	61.7	97.9%	60.0	98.8%	60.0	99.3%	61.6	99.5%	59.	100.2%		
SY SOREN	61.8	101.4%	63.7	101.2%	60.5	99.7%	61.3	101.5%	63.0	101.8%	60.	102.7%		
SY TYRA	61.6	101.0%	63.8	101.3%	62.0	102.1%	60.1	99.4%	63.2	102.1%	59.	100.2%		
THATCHER	59.6	97.7%	61.2	97.2%	59.0	97.2%	58.8	97.4%	61.0	98.5%	58.0	98.5%		
	1	1		1				1			1			

58.6

61.6

60.4

97.1%

101.9%

60.6

63.1

61.9

97.9%

101.9%

58.5

59.5

58.9

99.3%

101.0%

VIDA

WB GUNNISON

Trial Averages

98.3%

101.3%

60.9

63.8

63.0

96.7%

101.3%

61.0

61.0

60.7

100.5%

100.5%

59.9

61.8

61.0

Heading

	State Wi	de Mean	Zone	1 Mean		Zone	2 Mean	Zone	4 Mean	Zone	e 5 Mean		Zone	6 Mean
	julian	% Mean	julian	% Mean		julian	% Mean	julian	% Mean	juliar	% Mean	j	ulian	% Mean
BRENNAN	172.3	99.3%	171.6	98.8%	Ī	176.4	99.3%	171.1	99.4%	172.3	99.2%	[1	171.5	99.6%
CORBIN	172.9	99.6%	173.2	99.8%	Ī	176.8	99.5%	172.0	99.9%	172.6	99.4%		171.5	99.6%
DUCLAIR	172.2	99.3%	172.4	99.3%		175.8	99.0%	170.8	99.3%	172.4	99.2%	[1	171.3	99.5%
FORTUNA	174.2	100.4%	173.8	100.1%	Ī	178.5	100.5%	172.7	100.4%	174.7	100.6%	[1	172.6	100.3%
LCS Prime	173.0	99.7%	173.3	99.8%	Ī	177.4	99.9%	172.3	100.1%	172.8	99.4%	1	171.2	99.5%
LCS Pro	173.5	100.0%	173.5	99.9%	Ī	177.4	99.8%	172.7	100.3%	173.7	100.0%	1	171.6	99.7%
MCNEAL	175.1	100.9%	175.1	100.8%	ĺ	179.4	101.0%	172.9	100.5%	175.9	101.2%	[1	173.5	100.8%
SY SOREN	174.0	100.3%	174.4	100.4%	ĺ	178.2	100.3%	173.0	100.5%	174.4	100.4%	[1	171.9	99.9%
SY TYRA	174.1	100.3%	174.8	100.7%	ľ	178.1	100.3%	172.7	100.3%	174.6	100.5%		172.1	100.0%
THATCHER	177.5	102.3%	177.9	102.5%	ĺ	182.1	102.5%	174.9	101.6%	177.4	102.1%	[1	177.1	102.9%
VIDA	174.7	100.7%	175.6	101.1%	ľ	178.3	100.4%	172.9	100.5%	175.3	100.9%		173.2	100.6%
WB GUNNISON	173.8	100.1%	174.3	100.4%		177.7	100.0%	172.2	100.1%	173.8	100.0%		172.6	100.3%
Trial Averages	173.5		173.7	·	•	177.6		172.1		173.8	3	1	72.1	·

	Zone 2	1 Mean			KA	٩L	ISPELL	- Crop Zo	ne	e 1	
	3 \	⁄ear		2	016		2	015		2	014
	julian	% Mean	_	julian	% Mean		julian	% Mean		julian	% Mean
BRENNAN	171.6	98.8%		170.0	98.7%		168.9	99.1%		176.0	98.7%
CORBIN	173.2	99.8%		171.3	99.4%		169.4	99.4%		179.0	100.4%
DUCLAIR	172.4	99.3%		171.7	99.6%		168.6	98.9%		177.0	99.3%
FORTUNA	173.8	100.1%		170.3	98.9%		171.2	100.5%		180.0	101.0%
LCS Prime	173.3	99.8%		172.3	100.0%		170.7	100.2%	1	177.0	99.3%
LCS Pro	173.5	99.9%		172.3	100.0%		170.3	99.9%		178.0	99.8%
MCNEAL	175.1	100.8%		170.3	98.9%		173.0	101.5%		182.0	102.1%
SY SOREN	174.4	100.4%		173.0	100.4%		171.3	100.5%		179.0	100.4%
SY TYRA	174.8	100.7%		174.0	101.0%		171.4	100.6%		179.0	100.4%
THATCHER	177.9	102.5%		176.3	102.3%		173.5	101.8%		184.0	103.2%
VIDA	175.6	101.1%	1	174.3	101.2%		171.6	100.7%	1	181.0	101.5%
WB GUNNISON	174.3	100.4%		172.7	100.2%		171.2	100.5%	1	179.0	100.4%
Trial Averages	173.7			172.3			170.4			178.3	

	Zone 2	2 Mean			ВС	Σ	EMAN	- Crop Zo	n	e 2	
	3 Y	'ear		2	016		2	015		2	014
	julian	% Mean	_	julian	% Mean		julian	% Mean	_	julian	% Mean
BRENNAN	176.4	99.3%		176.0	99.4%		176.0	99.6%		177.3	99.0%
CORBIN	176.8	99.5%		176.0	99.4%		175.7	99.4%		178.7	99.8%
DUCLAIR	175.8	99.0%		175.0	98.8%		174.7	98.9%		177.7	99.2%
FORTUNA	178.5	100.5%		178.0	100.5%		176.7	100.0%		180.7	100.9%
LCS Prime	177.4	99.9%		177.0	99.9%		176.0	99.6%		179.3	100.1%
LCS Pro	177.4	99.8%		175.7	99.2%		176.7	100.0%		179.7	100.3%
MCNEAL	179.4	101.0%		178.7	100.9%		177.7	100.6%		181.7	101.5%
SY SOREN	178.2	100.3%		177.7	100.3%		177.3	100.3%		179.7	100.3%
SY TYRA	178.1	100.3%		178.0	100.5%		178.0	100.7%		178.3	99.6%
THATCHER	182.1	102.5%		180.3	101.8%		179.7	101.7%		186.3	104.0%
VIDA	178.3	100.4%		178.0	100.5%		177.0	100.2%		180.0	100.5%
WB GUNNISON	177.7	100.0%		176.7	99.8%		176.7	100.0%		179.7	100.3%
Trial Averages	177.6		•	177.1			176.7			179.1	

	Zone 4	4 Mean	Н	UNTLEY -	Crop Zo	ne 4		МС	CCASIN	- Crop Zo	ne 4	
	3 \	ear/	2	016	2	014		2016	2	015	2	014
	julian	% Mean	julian	% Mean	julian	% Mean	julian	% Mean	julian	% Mean	julian	% Mean
BRENNAN	171.1	99.4%	157.7	99.2%	170.0	98.6%	174.7	99.3%	174.7	99.9%	178.3	100.1%
CORBIN	172.0	99.9%	157.0	98.8%	174.0	100.9%	175.7	99.9%	174.3	99.7%	179.0	100.4%
DUCLAIR	170.8	99.3%	157.7	99.2%	170.7	99.0%	174.7	99.3%	173.3	99.1%	177.7	99.7%
FORTUNA	172.7	100.4%	158.7	99.9%	174.7	101.3%	176.0	100.1%	175.3	100.2%	179.0	100.4%
LCS Prime	172.3	100.1%	158.3	99.6%	174.0	100.9%	176.0	100.1%	175.0	100.1%	178.3	100.1%
LCS Pro	172.7	100.3%	158.7	99.9%	174.0	100.9%	176.0	100.1%	176.0	100.6%	178.7	100.3%
MCNEAL	172.9	100.5%	159.7	100.5%	174.0	100.9%	176.3	100.2%	175.7	100.5%	179.0	100.4%
SY SOREN	173.0	100.5%	160.0	100.7%	173.0	100.3%	177.0	100.6%	176.7	101.0%	178.3	100.1%
SY TYRA	172.7	100.3%	159.7	100.5%	174.0	100.9%	175.7	99.9%	175.7	100.5%	178.3	100.1%
THATCHER	174.9	101.6%	162.0	102.0%	177.0	102.6%	177.3	100.8%	177.0	101.2%	181.0	101.6%
VIDA	172.9	100.5%	159.0	100.1%	173.0	100.3%	176.7	100.4%	176.7	101.0%	179.0	100.4%
WB GUNNISON	172.2	100.1%	158.7	99.9%	173.0	100.3%	175.3	99.7%	175.3	100.2%	178.7	100.3%
Trial Averages	172.1		158.9		172.5		175.9		174.9		178.2	

	Zone 5	5 Mean	CC	NRAD - Crop Zon	e 5	H	AVRE - Crop Zone	5
	3 Y	'ear	2016	2015	2014	2016	2015	2014
	julian	% Mean	julian % Mean	julian % Mean	julian % Mean	julian % Mean	julian % Mean	julian % Mean
BRENNAN	172.3	99.2%	172.0 99.5%	167.7 99.0%	180.7 99.3%	179.0 99.0%	161.3 99.0%	173.0 99.1%
CORBIN	172.6	99.4%	171.7 99.3%	167.7 99.0%	181.7 99.9%	179.7 99.4%	161.7 99.3%	173.3 99.3%
DUCLAIR	172.4	99.2%	169.7 98.1%	167.3 98.8%	181.0 99.5%	181.0 100.1%	161.7 99.3%	173.7 99.5%
FORTUNA	174.7	100.6%	174.3 100.8%	170.7 100.8%	183.3 100.8%	181.3 100.3%	163.7 100.5%	175.0 100.2%
LCS Prime	172.8	99.4%	172.0 99.5%	168.0 99.2%	181.0 99.5%	180.0 99.6%	162.7 99.9%	173.0 99.1%
LCS Pro	173.7	100.0%	173.3 100.3%	169.3 99.9%	182.3 100.2%	180.3 99.7%	162.7 99.9%	174.3 99.8%
MCNEAL	175.9	101.2%	175.0 101.2%	175.3 103.5%	182.7 100.4%	181.7 100.5%	164.0 100.7%	176.7 101.2%
SY SOREN	174.4	100.4%	174.7 101.0%	170.3 100.5%	182.3 100.2%	181.3 100.3%	163.0 100.1%	174.7 100.1%
SY TYRA	174.6	100.5%	175.3 101.4%	170.7 100.8%	181.7 99.9%	181.3 100.3%	163.7 100.5%	175.0 100.2%
THATCHER	177.4	102.1%	176.3 102.0%	174.3 102.9%	185.0 101.7%	183.3 101.4%	166.7 102.3%	178.7 102.3%
VIDA	175.3	100.9%	175.0 101.2%	171.0 100.9%	182.7 100.4%	182.3 100.8%	164.3 100.9%	176.3 101.0%
WB GUNNISON	173.8	100.0%	171.7 99.3%	169.0 99.8%	182.7 100.4%	181.3 100.3%	163.0 100.1%	175.3 100.4%
Trial Averages	173.8		172.9	169.4	181.9	180.8	162.9	174.6
	Zone 6	6 Mean	SIDNEY DRYLAN	ID - Crop Zone 6	SIDNEY	IRRIGATED - Crop	Zone 6	
	3 Y	'ear	2016	2014	2016	2015	2014	
	julian	% Mean	julian % Mean	julian % Mean	julian % Mean	julian % Mean	julian % Mean	
BRENNAN	171.5	99.6%	165.0 99.7%	175.7 100.0%	169.0 99.5%	170.0 99.2%	177.7 99.7%	
CORBIN	171.5	99.6%	165.0 99.7%	175.0 99.6%	169.3 99.7%	170.7 99.6%	177.3 99.5%	
DUCLAIR	171.3	99.5%	165.0 99.7%	175.0 99.6%	169.0 99.5%	170.3 99.4%	177.0 99.3%	
FORTUNA	172.6	100.3%	165.7 100.1%	177.0 100.7%	170.7 100.5%	171.7 100.2%	178.0 99.9%	
LCS Prime	171.2	99.5%	165.0 99.7%	175.3 99.8%	169.0 99.5%	170.0 99.2%	176.7 99.2%	
LCS Pro	171.6	99.7%	165.3 99.9%	175.3 99.8%	169.0 99.5%	171.0 99.8%	177.3 99.5%	
MCNEAL	173.5	100.8%	165.3 99.9%	178.0 101.3%	170.7 100.5%	173.0 101.0%	180.7 101.4%	
SY SOREN	171.9	99.9%	165.3 99.9%	176.0 100.2%	169.7 99.9%	170.3 99.4%	178.3 100.1%	
SY TYRA	172.1	100.0%	165.0 99.7%	176.0 100.2%	170.0 100.1%	171.3 100.0%	178.3 100.1%	
THATCHER	177.1	102.9%	172.0 103.9%	180.7 102.8%	171.7 101.1%	175.7 102.6%	185.3 104.0%	
VIDA	173.2	100.6%	165.3 99.9%	177.0 100.7%	170.7 100.5%	173.7 101.4%	179.3 100.6%	
	T T	İ						

WB GUNNISON

Trial Averages

100.3%

172.6

172.1

165.3

165.5

99.9%

176.7

175.7

100.6%

170.0

169.8

100.1%

172.7

171.3

100.8%

178.3

178.2

100.1%

Height

	State W	ide Mean	Zone	1 Mean	Zone	2 Mean	Zone	4 Mean	Zo	ne	5 Mean	Zone	6 Mean
	inch	% Mean	inch	% Mean	inch	% Mean	inch	% Mean	ind	ch	% Mean	inch	% Mean
BRENNAN	29.1	94.3%	30.9	89.0%	27.3	95.5%	29.8	97.1%	27	.5	94.5%	30.4	94.4%
CORBIN	31.1	100.6%	35.8	102.9%	29.4	102.7%	31.1	101.2%	29	.2	100.1%	31.6	98.0%
DUCLAIR	31.4	101.8%	35.1	101.1%	29.6	103.5%	31.8	103.5%	29	.0	99.4%	33.0	102.3%
FORTUNA	37.1	120.0%	43.8	126.2%	35.5	124.0%	37.7	123.0%	33	.9	116.2%	37.1	115.2%
LCS Prime	31.6	102.3%	35.6	102.6%	27.7	96.8%	32.4	105.6%	29	.8	102.2%	32.9	102.2%
LCS Pro	34.1	110.4%	40.1	115.6%	31.9	111.5%	33.5	109.3%	32	.2	110.5%	34.6	107.4%
MCNEAL	31.6	102.4%	34.1	98.2%	29.2	102.3%	31.6	103.0%	30	.2	103.4%	33.4	103.7%
SY SOREN	28.7	93.0%	32.0	92.0%	26.6	93.1%	29.0	94.4%	27	.3	93.7%	29.5	91.6%
SY TYRA	27.9	90.3%	31.3	90.0%	25.1	87.6%	26.9	87.5%	27	.0	92.5%	29.7	92.2%
THATCHER	38.2	123.7%	45.9	132.3%	36.1	126.2%	38.3	124.8%	35	.1	120.2%	38.5	119.4%
VIDA	31.3	101.2%	35.4	101.9%	29.3	102.6%	30.4	99.0%	29	.8	102.2%	32.6	101.1%
WB GUNNISON	29.3	94.9%	34.7	100.0%	26.3	91.9%	28.2	92.0%	28	.0	95.9%	30.6	94.8%
Trial Averages	30.9		34.7		28.6		30.7		29	.2		 32.2	

	Zone 2	l Mean		K.	٩L	ISPELL	- Crop Zo	ne	2 1	
	3 \	'ear	2	2016		2	015		2	014
	inch	% Mean	inch	% Mean		inch	% Mean		inch	% Mean
BRENNAN	30.9	89.0%	31.2	91.6%		30.8	87.5%		30.7	88.0%
CORBIN	35.8	102.9%	36.1	105.8%		35.5	100.9%		35.7	102.3%
DUCLAIR	35.1	101.1%	35.3	103.4%		34.8	98.9%		35.3	101.1%
FORTUNA	43.8	126.2%	46.5	136.3%		41.7	118.5%		43.3	124.1%
LCS Prime	35.6	102.6%	34.4	100.8%		37.2	105.7%		35.3	101.1%
LCS Pro	40.1	115.6%	39.1	114.8%		40.0	113.6%		41.3	118.3%
MCNEAL	34.1	98.2%	35.2	103.1%		31.5	89.5%		35.7	102.3%
SY SOREN	32.0	92.0%	31.5	92.4%		31.4	89.2%		33.0	94.6%
SY TYRA	31.3	90.0%	31.9	93.5%		30.6	86.9%		31.3	89.7%
THATCHER	45.9	132.3%	43.4	127.4%		45.4	129.0%		49.0	140.4%
VIDA	35.4	101.9%	33.9	99.3%		36.6	104.0%		35.7	102.3%
WB GUNNISON	34.7	100.0%	36.1	105.8%		33.8	96.0%		34.3	98.3%
Trial Averages	34.7		34.1		-	35.2		•	34.9	

	Zone 2	2 Mean			ВС	Σ	EMAN	- Crop Zo	n	e 2	
	3 \	⁄ear		2	016		2	015		2	014
	inch	% Mean		inch	% Mean		inch	% Mean		inch	% Mean
BRENNAN	27.3	95.5%		25.9	95.4%		24.1	95.3%		32.0	95.8%
CORBIN	29.4	102.7%		28.3	104.4%		25.7	101.6%		34.1	102.1%
DUCLAIR	29.6	103.5%		27.7	102.1%		26.7	105.5%		34.4	103.0%
FORTUNA	35.5	124.0%		32.8	121.2%		32.3	127.7%		41.3	123.7%
LCS Prime	27.7	96.8%		29.0	106.9%		20.0	79.1%		34.1	102.1%
LCS Pro	31.9	111.5%		30.2	111.4%		28.5	112.6%		37.0	110.8%
MCNEAL	29.2	102.3%		28.1	103.8%		26.0	102.8%		33.6	100.6%
SY SOREN	26.6	93.1%		24.8	91.5%		24.1	95.3%		31.0	92.8%
SY TYRA	25.1	87.6%		23.6	87.0%		21.6	85.4%		30.0	89.8%
THATCHER	36.1	126.2%		35.4	130.5%		29.2	115.4%		43.7	130.8%
VIDA	29.3	102.6%		28.5	105.3%		25.7	101.6%		33.8	101.2%
WB GUNNISON	26.3	91.9%		25.1	92.7%		22.9	90.5%		30.8	92.2%
Trial Averages	28.6		-	27.1		•	25.3			33.4	

	Zone	4 Mean	Н	UNTLEY -	Cr	op Zo	ne 4			МО	CCASIN	l - Crop Zo	n	e 4	
	3 \	Year	2	2016		2	014		2	016	2	2015		2	014
	inch	% Mean	inch	% Mean		inch	% Mean	i	nch	% Mean	inch	% Mean		inch	% Mean
BRENNAN	29.8	97.1%	33.2	91.7%		32.8	94.0%	2	24.9	103.0%	26.9	96.8%		31.1	102.6%
CORBIN	31.1	101.2%	36.4	100.6%		35.8	102.6%	2	24.0	99.0%	27.5	98.9%		31.6	104.3%
DUCLAIR	31.8	103.5%	37.7	104.1%		35.5	101.7%	2	25.4	105.0%	29.2	105.0%		31.0	102.3%
FORTUNA	37.7	123.0%	46.4	128.2%		45.2	129.5%	2	24.7	102.2%	35.0	125.9%		37.3	123.1%
LCS Prime	32.4	105.6%	38.1	105.2%		36.4	104.3%	2	26.3	108.5%	29.2	105.0%		32.0	105.6%
LCS Pro	33.5	109.3%	38.8	107.2%		39.8	114.0%	2	27.3	112.8%	29.3	105.4%		32.5	107.3%
MCNEAL	31.6	103.0%	37.0	102.2%		35.3	101.1%	2	24.9	102.8%	30.4	109.4%		30.4	100.3%
SY SOREN	29.0	94.4%	33.0	91.2%		32.7	93.7%	2	22.8	94.1%	26.2	94.2%		30.1	99.3%
SY TYRA	26.9	87.5%	31.8	87.8%		29.9	85.7%	2	23.5	97.0%	23.2	83.5%		25.9	85.5%
THATCHER	38.3	124.8%	47.4	130.9%		45.5	130.4%	2	29.4	121.5%	33.5	120.5%		35.6	117.5%
VIDA	30.4	99.0%	37.1	102.5%		35.6	102.0%	2	24.6	101.7%	26.3	94.6%		28.2	93.1%
WB GUNNISON	28.2	92.0%	32.6	90.1%		32.4	92.8%	2	22.4	92.4%	26.4	95.0%		27.3	90.1%
Trial Averages	30.7		36.2	<u> </u>	_	34.9		2	24.2	<u> </u>	27.8	·		30.3	

	Zone 5 Mean			CONRAD - Crop Zone 5					HAVRE - Crop Zone 5						
	3 Year		2016			2015		2014		2016		2015		2014	
	inch	% Mean	inch	% Mean	inch	% Mean	inch	% Mean	inch	% Mean	inc	n % Mean	inch	% Mean	
BRENNAN	27.5	94.5%	27.3	94.3%	29.0	91.5%	28.7	90.0%	27.2	98.4%	26.	90.7%	26.6	103.9%	
CORBIN	29.2	100.1%	29.0	100.0%	30.0	94.6%	32.3	101.3%	29.3	106.3%	29.	3 102.4%	24.7	96.5%	
DUCLAIR	29.0	99.4%	29.3	101.1%	30.7	96.8%	32.0	100.3%	26.4	95.7%	29.	100.0%	26.4	103.1%	
FORTUNA	33.9	116.2%	31.3	108.0%	36.3	114.5%	41.0	128.5%	32.0	115.8%	32.	113.1%	29.8	116.4%	
LCS Prime	29.8	102.2%	29.7	102.3%	32.0	100.9%	32.3	101.3%	29.8	108.0%	28.	97.3%	26.6	103.9%	
LCS Pro	32.2	110.5%	29.0	100.0%	35.7	112.6%	36.3	113.8%	30.5	110.6%	33.	3 116.2%	27.9	109.0%	
MCNEAL	30.2	103.4%	29.0	100.0%	32.0	100.9%	33.0	103.4%	28.1	101.9%	30.	104.8%	28.3	110.5%	
SY SOREN	27.3	93.7%	29.0	100.0%	28.7	90.5%	29.3	91.8%	26.8	97.0%	26.	90.7%	23.8	93.0%	
SY TYRA	27.0	92.5%	27.0	93.1%	27.0	85.2%	28.7	90.0%	26.4	95.8%	26.	92.4%	25.8	100.8%	
THATCHER	35.1	120.2%	29.7	102.3%	37.3	117.7%	43.0	134.8%	33.5	121.5%	34.	118.6%	32.3	126.2%	
VIDA	29.8	102.2%	31.3	108.0%	29.7	93.7%	34.0	106.6%	28.0	101.3%	29.	101.7%	26.1	102.0%	
WB GUNNISON	28.0	95.9%	30.0	103.4%	28.0	88.3%	33.3	104.4%	24.6	89.1%	27.	93.5%	24.6	96.1%	
Trial Averages	29.2		29.0		31.7	7	31.9		27.6		29.	1	25.6		
	Zone 6 Mean		SIDNEY DRYLAND -) - Crop Zone 6		SIDNEY		IRRIGATED - Crop 2		6			
	3 Year		2	2016		2014		2016		2015		2014			
	inch	% Mean	inch	% Mean	inch	% Mean	inch	% Mean	inch	% Mean	inc	n % Mean			
BRENNAN	30.4	94.4%	28.9	100.2%	29.4	100.0%	32.8	92.0%	28.8	89.7%	32.	91.7%			
CORBIN	31.6	98.0%	26.5	92.1%	28.7	97.6%	36.1	101.0%	32.6	101.6%	34.0	96.9%			
DUCLAIR	33.0	102.3%	29.4	102.1%	30.7	104.4%	36.5	102.1%	32.2	100.3%	36.	102.8%			
FORTUNA	37.1	115.2%	36.5	126.6%	36.3	123.5%	34.8	97.4%	35.0	109.0%	43.0	122.5%			
LCS Prime	32.9	102.2%	28.9	100.3%	31.2	106.1%	36.1	101.1%	32.5	101.2%	36.	102.6%			
LCS Pro	34.6	107.4%	31.5	109.3%	31.6	107.5%	36.6	102.5%	34.0	105.9%	39.	112.3%			
MCNEAL	33.4	103.7%	28.4	98.5%	30.2	102.7%	38.3	107.4%	32.7	101.9%	37.	106.6%			
SY SOREN	29.5	91.6%	26.0	90.3%	26.7	90.8%	32.9	92.3%	29.6	92.2%	32.	92.3%			
SY TYRA	29.7	92.2%	28.5	98.8%	26.8	91.2%	34.4	96.4%	28.4	88.5%	30.	86.6%			

125.5%

103.1%

94.2%

39.8

36.9

31.9

35.7

111.5%

103.3%

89.4%

36.9

30.3

27.7

29.4

112.5%

99.7%

95.3%

43.6

35.3

34.4

35.1

124.2%

100.6%

98.0%

36.1

32.0

30.6

32.1

THATCHER

WB GUNNISON

Trial Averages

VIDA

38.5

32.6

30.6

32.2

119.4%

101.1%

94.8%

35.9

28.5

28.2

28.8

124.8%

98.8%

97.9%

End-use quality of LCS Prime and LCS Pro compared to other popular varieties from 2014 to 2016

Line / Variety	Flour	Flour	Mixograph	Mixing	Bake Mix	Bake Water	Loaf
Line / Variety	Yield	Protein	Tolerance	Time	Time	Absorption	Volume
	(%)	(%, 14% m.b.)		(min.)	(min.)	(%)	(cc)
BRENNAN	69.8	13.9	3.9	3.1	5.1	75.8	1092
CORBIN	71.4	13.3	3.4	5.4	12.8	75.5	1091
DUCLAIR	70.7	13.4	4.4	4.6	8.4	75.3	1227
FORTUNA	72.7	13.4	3.1	3.4	6.5	74.5	1129
LCS Prime	73.0	12.4	4.5	6.8	17.6	79.5	1117
LCS Pro	72.0	13.3	4.6	5.8	11.8	80.3	1146
MCNEAL	68.9	13.5	5.2	7.4	13.9	77.8	1230
SY SOREN	69.3	13.8	3.8	3.5	8.1	76.0	1147
SY TYRA	69.7	12.6	4.1	4.4	9.5	75.4	1116
THATCHER	69.9	14.0	4.0	4.2	8.7	75.8	1207
VIDA	72.4	13.4	2.8	3.4	6.5	75.1	1172
WB GUNNISON	68.5	12.6	5.1	8.5	15.3	77.5	1154
Mean	70.7	13.3	4.1	5.0	10.3	76.6	1152
Probability (Line)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
LSD	0.7	0.5	0.7	0.8	2.2	1.4	44