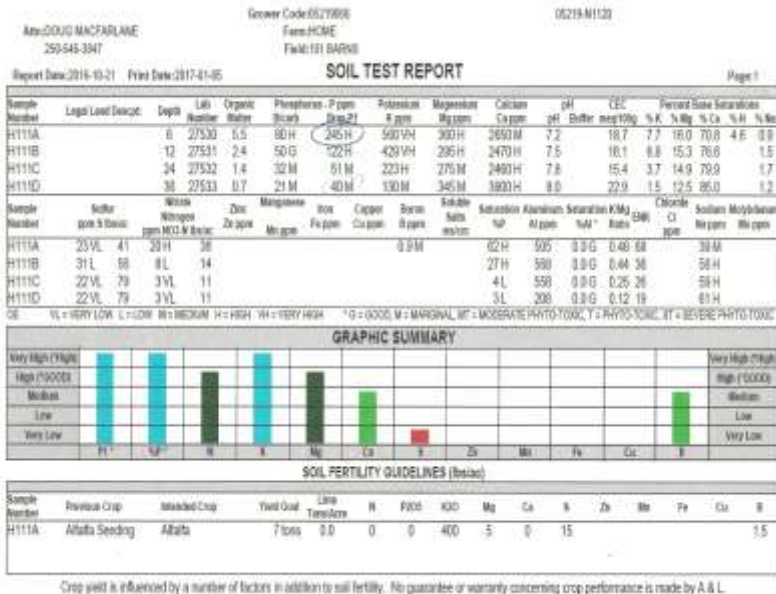


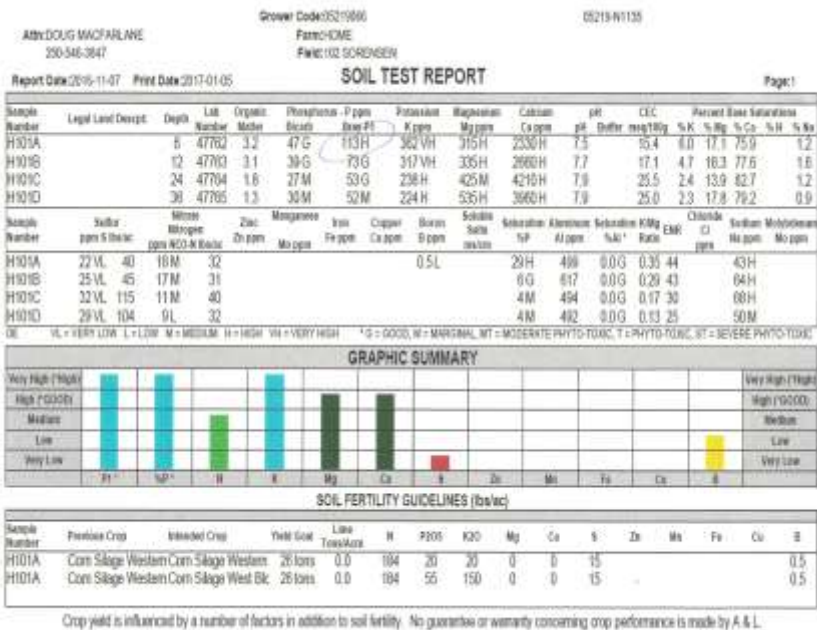
Appendix 2.

HS Jansen and Sons 2017 Nutrient Management Plan - Fall 2016 PHNT Soil Data

Field 101 Barns



Field 102 Sorensen



Field 103A North

Grower Code:05219066 05219-N1124

Attn:DOUG MACFARLANE Farm:HOME 05219-N1124
 250-545-3847 Field:103A (NORTH)

Report Date:2016-10-21 Print Date:2017-01-05 Page:1

SOIL TEST REPORT

Sample Number	Legal Land Descrpt	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb Bray-P1	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC meq/100g	Percent Base Saturations				
											% K	% Mg	% Ca	% H	% Na
H11A		6	27542	5.0	62H 183H	310VH	250M	2370M	7.1	16.3	5.0	12.8	72.8	8.9	0.7
H11B		12	27543	3.2	52H 108H	182H	205M	2500H	7.2	16.4	2.8	13.4	77.9	4.6	1.3
H11C		24	27544	1.6	15L 20VL	59L	85M	600H	7.5	5.0	3.1	14.3	80.7	2.1	
H11D		36	27545	0.8	18L 28L	133M	205H	1710H	7.7	10.8	3.2	15.8	79.3	1.9	

Sample Number	Sulfur ppm S lbs/ac	Nitrate Nitrogen ppm NO3-N lbs/ac	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Soluble Salts meq/100g	Saturation %P	Aluminum Al ppm	Saturation %Al	K/Mg Ratio	Chloride Cl ppm	Sodium Na ppm	Molybdenum Mo ppm
H11A	14VL 25	14M 25							44H	472	0.0G	0.39	63		27M
H11B	25L 45	5L 9							9G	586	0.0G	0.21	44		48H
H11C	10L 36	3VL 11							2VL	239	0.0G	0.22	28		24VH
H11D	20L 72	2VL 7							2VL	552	0.0G	0.20	20		48VH

DE VL = VERY LOW L = LOW M = MEDIUM H = HIGH VH = VERY HIGH *G = GOOD, M = MARGINAL, MT = MODERATE PHYTO-TOXIC, T = PHYTO-TOXIC, ST = SEVERE PHYTO-TOXIC

GRAPHIC SUMMARY

Sample Number	Previous Crop	Intended Crop	Yield Goal Tons/Acre	N	P2O5	K2O	Mg	Ca	S	Zn	Mn	Fe	Cu	B
H11A	Alfalfa	Alfalfa	7 tons	0.0	0	400	10	0	20					

Crop yield is influenced by a number of factors in addition to soil fertility. No guarantee or warranty concerning crop performance is made by A & L.

Field 103A South

Grower Code:05219066 05219-N1123

Attn:DOUG MACFARLANE Farm:HOME 05219-N1123
 250-545-3847 Field:103A (SOUTH)

Report Date:2016-10-21 Print Date:2017-01-05 Page:1

SOIL TEST REPORT

Sample Number	Legal Land Descrpt	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb Bray-P1	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC meq/100g	Percent Base Saturations				
											% K	% Mg	% Ca	% H	% Na
H21A		6	27534	4.0	60G 174H	316VH	225M	1870M	7.1	13.3	6.1	14.1	70.2	8.9	0.7
H21B		12	27535	1.9	52G 118G	313VH	215H	1820H	7.3	11.6	6.8	15.1	78.9	1.4	
H21C		24	27536	1.0	22L 44M	160H	200H	1510H	7.5	9.8	4.4	16.9	76.7	2.2	
H21D		36	27537	0.4	16L 23VL	78M	170H	1070M	7.9	7.2	2.8	19.8	74.7	3.0	

Sample Number	Sulfur ppm S lbs/ac	Nitrate Nitrogen ppm NO3-N lbs/ac	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Soluble Salts meq/100g	Saturation %P	Aluminum Al ppm	Saturation %Al	K/Mg Ratio	Chloride Cl ppm	Sodium Na ppm	Molybdenum Mo ppm
H21A	14VL 25	18M 32							52H	434	0.1G	0.43	52		22M
H21B	16VL 29	4VL 7							24H	635	0.1G	0.45	31		39H
H21C	16VL 58	3VL 11							10G	587	0.1G	0.26	22		50VH
H21D	10VL 36	1VL 4							8L	360	0.0G	0.14	15		40VH

DE VL = VERY LOW L = LOW M = MEDIUM H = HIGH VH = VERY HIGH *G = GOOD, M = MARGINAL, MT = MODERATE PHYTO-TOXIC, T = PHYTO-TOXIC, ST = SEVERE PHYTO-TOXIC

GRAPHIC SUMMARY

Sample Number	Previous Crop	Intended Crop	Yield Goal Tons/Acre	N	P2O5	K2O	Mg	Ca	S	Zn	Mn	Fe	Cu	B
H21A	Alfalfa	Alfalfa	7 tons	0.0	0	400	5	0	15					2.0

Crop yield is influenced by a number of factors in addition to soil fertility. No guarantee or warranty concerning crop performance is made by A & L.

Field 103B East

Grower Code: 05219006 05219-N1121
 Farm: HOME
 Field: 103B(EAST)

SOIL TEST REPORT Page: 1

Addr: C.O.U.G. MACFARLANE
 250-545-3847
 Report Date: 2016-10-21 Print Date: 2017-01-05

Sample Number	Legal Land Descrpt	Depth	Lab Number	Organic Matter	Phosphorus - P ppm	Phosphorus - P ppm	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC	Percent Base Saturation				
					ppm	ppm-PT	ppm	ppm	ppm		meq/100g	% K	% Mg	% Ca	% H	% Na
H51A		8	27526	5.1	80 H	217 H	387 VH	270 M	2380 M	7.2	16.0	6.2	14.1	74.4	4.6	0.7
H51B		12	27527	2.8	59 G	163 H	373 VH	265 H	2030 H	7.3	13.5	7.1	16.4	75.4	1.3	
H51C		24	27528	1.1	30 M	58 M	295 VH	225 H	1330 M	7.5	9.4	8.0	10.9	70.4	1.9	
H51D		36	27529	0.4	20 L	35 L	219 VH	190 H	1120 M	7.7	7.9	7.1	20.0	70.6	2.6	

Sample Number	Sulfur ppm S lb/ac	Nitrate Nitrogen ppm NO3-N lb/ac	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Soluble Salts meq/100g	Saturation %P	Aluminum Al ppm	Saturation %Al	KMn Ratio	Chloride Cl ppm	Sodium Na ppm	Molybdenum Mo ppm
H51A	13 VL	23	13 M	23				0.6 M	52 H	530	0.0 G	0.44	64		27 M
H51B	21 VL	38	10 M	18					34 H	619	0.1 G	0.43	40		40 H
H51C	20 L	72	3 VL	11					13 H	557	0.1 G	0.40	23		42 VH
H51D	12 VL	43	2 VL	7					12 G	417	0.0 G	0.38	15		47 VH

OE VL = VERY LOW L = LOW M = MEDIUM H = HIGH VH = VERY HIGH *G = GOOD, M = MARGINAL, MT = MODERATE PHYTO-TOXIC, T = PHYTO-TOXIC, BT = SEVERE PHYTO-TOXIC

GRAPHIC SUMMARY

SOIL FERTILITY GUIDELINES (lb/ac)

Sample Number	Previous Crop	Intended Crop	Yield Goal (t/acre)	Lime Tons/Acre	N	P205	K2O	Mg	Ca	S	Zn	Mn	Fe	Cu	B
H51A	Alfalfa	Alfalfa	6 tons	0.0	0	0	300	5	0	20					2.0

Crop yield is influenced by a number of factors in addition to soil fertility. No guarantee or warranty concerning crop performance is made by A & L.

Field 103B West

Grower Code: 05219006 05219-N1122
 Farm: HOME
 Field: 103B(WEST)

SOIL TEST REPORT Page: 1

Addr: C.O.U.G. MACFARLANE
 250-545-3847
 Report Date: 2016-10-21 Print Date: 2017-01-05

Sample Number	Legal Land Descrpt	Depth	Lab Number	Organic Matter	Phosphorus - P ppm	Phosphorus - P ppm	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC	Percent Base Saturation				
					ppm	ppm-PT	ppm	ppm	ppm		meq/100g	% K	% Mg	% Ca	% H	% Na
H41A		6	27550	5.6	81 H	222 H	809 VH	430 M	3570 M	7.2	24.3	6.4	14.7	73.4	4.6	0.8
H41B		12	27551	3.6	51 H	103 H	290 VH	200 M	2320 H	7.2	15.4	4.6	14.1	75.2	4.6	1.3
H41C		24	27552	1.6	18 L	33 L	145 H	210 H	1560 H	7.5	10.1	3.7	17.3	76.9	2.4	
H41D		36	27553	0.7	14 L	22 VL	103 M	100 H	9530 H	7.8	9.7	2.7	16.3	78.5	2.7	

Sample Number	Sulfur ppm S lb/ac	Nitrate Nitrogen ppm NO3-N lb/ac	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Soluble Salts meq/100g	Saturation %P	Aluminum Al ppm	Saturation %Al	KMn Ratio	Chloride Cl ppm	Sodium Na ppm	Molybdenum Mo ppm
H41A	23 VL	41	17 M	31					48 H	588	0.0 G	0.44	69		46 M
H41B	23 VL	41	6 L	11					20 H	652	0.1 G	0.34	48		47 H
H41C	14 VL	50	3 VL	11					8 M	556	0.0 G	0.21	28		55 VH
H41D	13 VL	47	3 VL	11					2 VL	483	0.0 G	0.17	19		61 VH

OE VL = VERY LOW L = LOW M = MEDIUM H = HIGH VH = VERY HIGH *G = GOOD, M = MARGINAL, MT = MODERATE PHYTO-TOXIC, T = PHYTO-TOXIC, BT = SEVERE PHYTO-TOXIC

GRAPHIC SUMMARY

SOIL FERTILITY GUIDELINES (lb/ac)

Sample Number	Previous Crop	Intended Crop	Yield Goal (t/acre)	Lime Tons/Acre	N	P205	K2O	Mg	Ca	S	Zn	Mn	Fe	Cu	B
H41A	Alfalfa	Alfalfa	7 tons	0.0	0	0	400	5	0	20					

Crop yield is influenced by a number of factors in addition to soil fertility. No guarantee or warranty concerning crop performance is made by A & L.

Field 103C Island

To: EMERALD BAY AG SERVICES
10 MARYS EMERALD BAY ROAD
VERNON, BC V1H 2A7

Attn: DOUG MACFARLANE
250-545-3947

Report Date: 2016-11-14 Print Date: 2017-03-27

For: JANDEN

Grower Code: 00210081 Farm: HOME

00219-N1138

Field: 103C The Island Field

SOIL TEST REPORT

Page: 1

Sample Number	Legal Land Descrpt	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bray-P1	Potassium - K ppm	Magnesium - Mg ppm	Calcium - Ca ppm	pH	CEC	Percent Base Saturations				
				%	ppm	ppm	ppm	ppm	Butter	meq/100g	% N	% Mg	% Ca	% K	
H131A		8	58092	3.8	36 G	80 G	140 M	330 M	1080 H	7.4	18.7	2.0	14.7	82.0	3.8
H131B		12	58091	3.3	20 L	28 L	95 M	250 M	2410 H	7.6	14.5	1.7	14.3	83.0	1.2
H131C		24	58092	2.0	7 VL	10 VL	65 L	205 M	2000 H	7.8	12.0	1.4	14.2	83.0	1.0
H131D		36	58093	1.8	0 VL	8 VL	89 M	230 M	2100 H	7.8	13.2	1.7	14.0	82.1	1.8

Sample Number	Butter ppm S Basic	Nitrate Nitrogen ppm NO3-N Basic	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Sulfate Sulfate ppm	Selenium Se ppm	Aluminum Al ppm	Selenium K10g DM	Chloride Cl ppm	Sulfur Sulfur ppm	Molybdenum Mo ppm
H131A	16 VL 29	30 H	54				0.5 L		0 M	180	0.0 G	0.14	48	36 M
H131B	16 VL 29	18 M	32						2 VL	425	0.0 G	0.12	45	40 H
H131C	20 VL 72	9 L	32						1 VL	499	0.0 G	0.10	32	46 H
H131D	26 L	94	14 M	50					1 VL	812	0.0 G	0.12	35	55 H

OE VL = VERY LOW L = LOW M = MEDIUM H = HIGH VH = VERY HIGH * G = GOOD, M = MARGINAL, MT = MODERATE PHYTO-TOXIC, T = PHYTO-TOXIC, BT = SEVERE PHYTO-TOXIC

GRAPHIC SUMMARY

SOIL FERTILITY GUIDELINES (lb/acre)

Sample Number	Previous Crop	Intended Crop	Yield Goal	Lime Tons/Acre	N	P205	K2O	Mg	Ca	S	Zn	Mn	Fe	Cu	B
H131A	Corn Silage	Western Corn Silage	Western	25 tons	0.0	138	20	20	0	0	25				0.5
H131A	Corn Silage	Western Corn Silage	West Blc	25 tons	0.0	138	55	215	5	0	25				0.5

Crop yield is influenced by a number of factors in addition to soil fertility. No guarantee or warranty concerning crop performance is made by A & L.

Field 104 Harold's Upper

Attn: DOUG MACFARLANE
250-545-3947

Report Date: 2016-11-14 Print Date: 2017-01-25

Grower Code: 00210066 Farm: HOME

00219-N1132

Field: 104 HAROLDS UPPER

SOIL TEST REPORT

Page: 1

Sample Number	Legal Land Descrpt	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bray-P1	Potassium - K ppm	Magnesium - Mg ppm	Calcium - Ca ppm	pH	CEC	Percent Base Saturations				
				%	ppm	ppm	ppm	ppm	Butter	meq/100g	% N	% Mg	% Ca	% K	
H71A		8	58096	2.6	60 G	151 H	330 VH	285 H	1890 M	7.8	12.7	0.8	16.7	73.2	1.5
H71B		12	58099	2.4	51 G	137 H	310 VH	220 H	1620 M	7.5	10.9	7.3	16.8	74.1	2.1
H71C		24	58100	1.1	33 M	63 M	223 H	190 M	2210 H	7.8	13.4	4.3	11.8	82.4	1.7
H71D		36	58101	0.4	18 L	34 M	147 M	200 M	2750 VH	7.8	16.0	2.4	10.4	86.0	1.3

Sample Number	Butter ppm S Basic	Nitrate Nitrogen ppm NO3-N Basic	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Sulfate Sulfate ppm	Selenium Se ppm	Aluminum Al ppm	Selenium K10g DM	Chloride Cl ppm	Sulfur Sulfur ppm	Molybdenum Mo ppm
H71A	10 VL 18	13 M	23				0.3 VL		32 H	598	0.0 G	0.36	38	44 H
H71B	15 VL 27	13 M	23						26 H	668	0.1 G	0.43	36	52 VH
H71C	16 VL 58	10 M	36						5 M	474	0.0 G	0.36	23	53 H
H71D	15 VL 54	9 L	32						3 L	261	0.0 G	0.23	15	49 H

OE VL = VERY LOW L = LOW M = MEDIUM H = HIGH VH = VERY HIGH * G = GOOD, M = MARGINAL, MT = MODERATE PHYTO-TOXIC, T = PHYTO-TOXIC, BT = SEVERE PHYTO-TOXIC

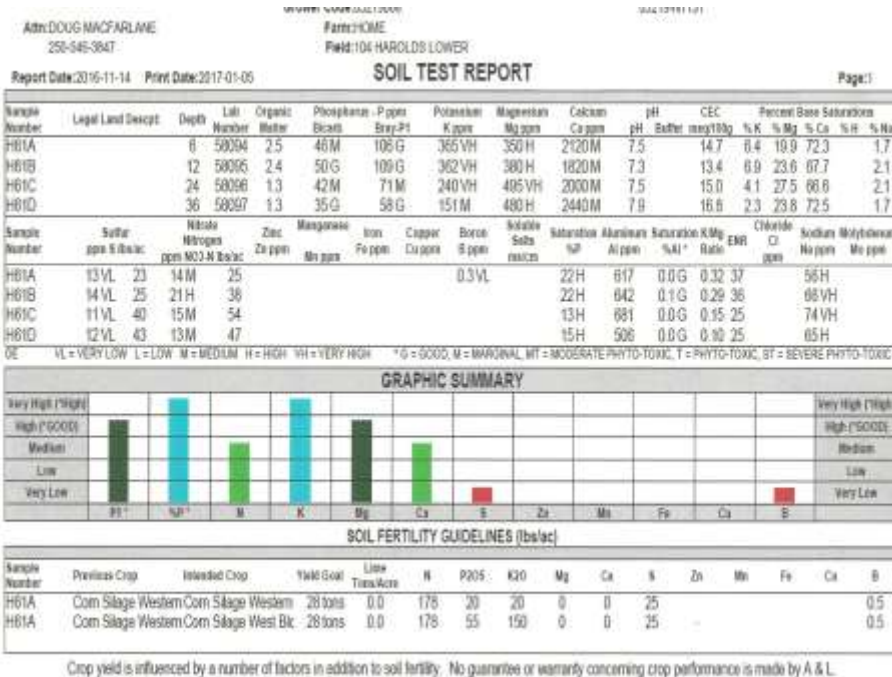
GRAPHIC SUMMARY

SOIL FERTILITY GUIDELINES (lb/acre)

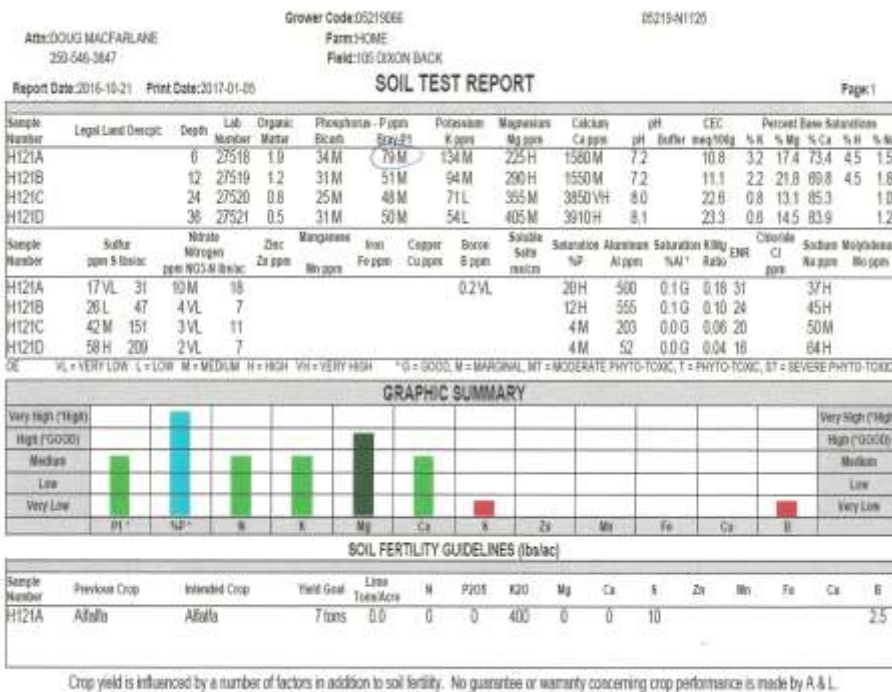
Sample Number	Previous Crop	Intended Crop	Yield Goal	Lime Tons/Acre	N	P205	K2O	Mg	Ca	S	Zn	Mn	Fe	Cu	B
H71A	Corn Silage	Western Corn Silage	Western	20 tons	0.0	135	20	15	0	0	25				0.5
H71A	Corn Silage	Western Corn Silage	West Blc	20 tons	0.0	135	50	125	0	0	25				0.5

Crop yield is influenced by a number of factors in addition to soil fertility. No guarantee or warranty concerning crop performance is made by A & L.

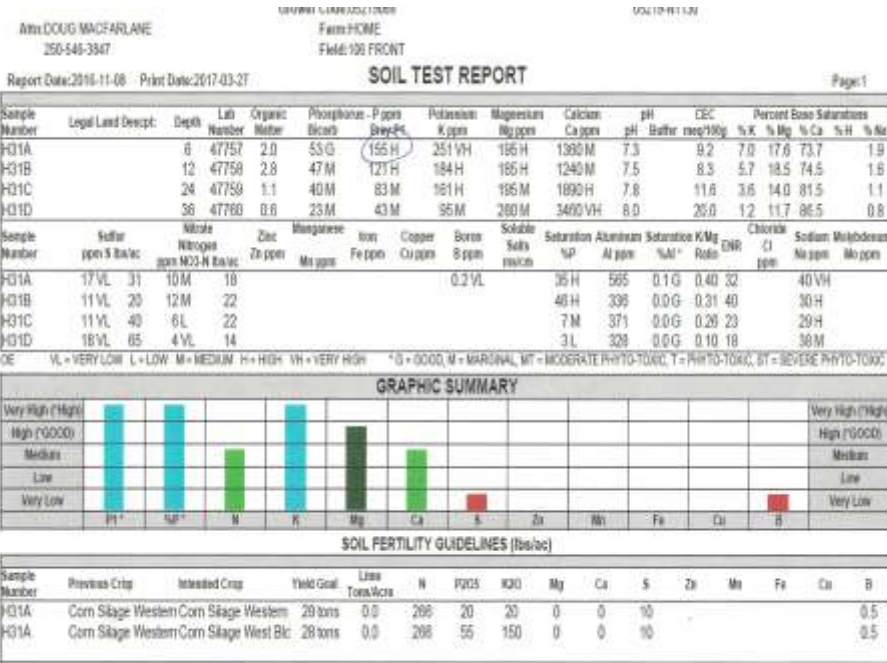
Field 104 Harold's Lower



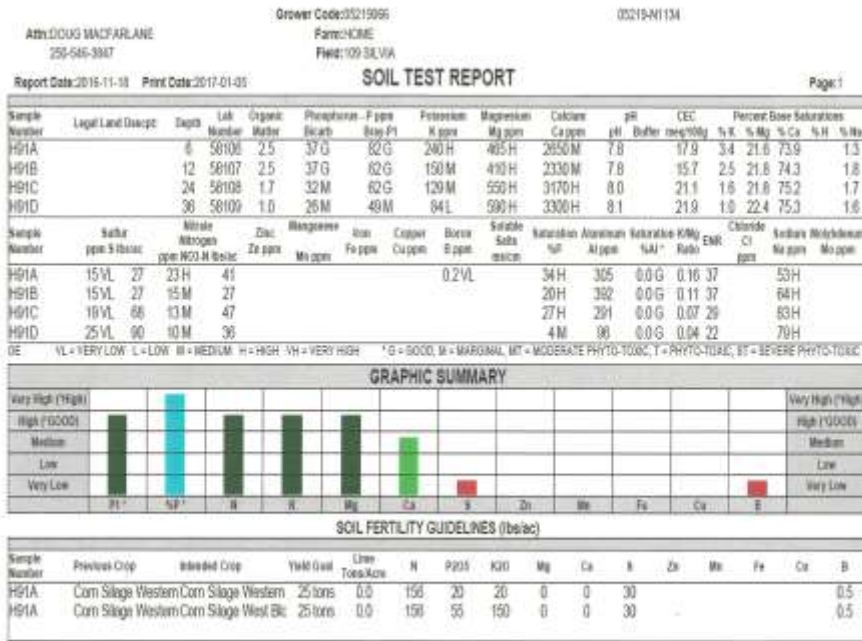
Field 105 Dixon Back



Field 106 Dixon Front



Field 109 Sylvia



Field 201 Skelton

Grower Code: 05219066 05219-N1119
 Farm: HOME
 Field: 201 SKELTON

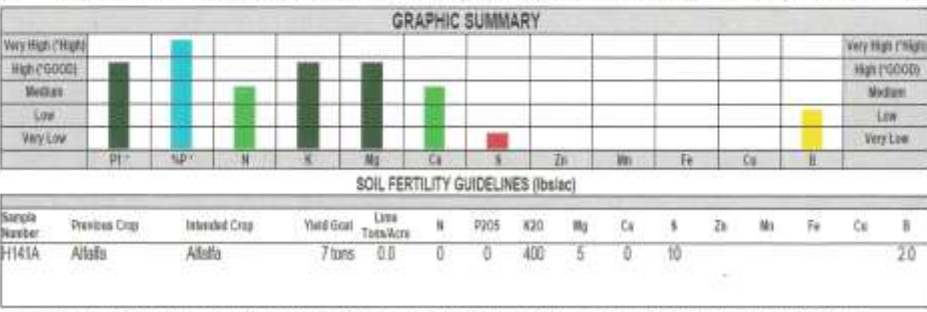
Attn: DOUG MACFARLANE 250-546-3847

Report Date: 2016-10-21 Print Date: 2017-01-05 **SOIL TEST REPORT** Page: 1

Sample Number	Legal Land Descpt	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb	P ppm Bray-P1	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC meq/100g	Percent Base Saturation				
												% K	% Mg	% Ca	% H	% Na
H141A		0	27540	2.7	43M	88G	175H	200H	1470M	6.9	10.8	4.1	15.4	68.0	10.9	1.8
H141B		12	27547	1.2	27M	54M	102M	240H	1810H	7.4	11.5	2.3	17.5	79.0		1.4
H141C		24	27548	0.8	31G	54G	73L	410M	4360VH	8.1	25.6	0.7	13.4	85.3		0.7
H141D		36	27549	0.4	24M	40M	70L	370M	4050VH	8.2	23.7	0.8	13.0	85.8		0.8

Sample Number	Sulfur ppm S lbs/ac	Nitrate Nitrogen ppm NO3-N lbs/ac	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Soluble Salts meq/cc	Saturation %P	Aluminum Al ppm	Saturation %AM	K/Mg Ratio	Chloride Cl ppm	Sodium Na ppm	Molybdenum Mo ppm
H141A	14 VL 25	14 M 25					0.4L		25H	403	0.1G	0.27	39		39H
H141B	25L 45	7L 13							4L	510	0.0G	0.13	24		38H
H141C	24 VL 86	4 VL 14							4M	101	0.0G	0.05	20		44M
H141D	12 VL 43	3 VL 11							3L	87	0.0G	0.06	15		42M

CE VL = VERY LOW L = LOW M = MEDIUM H = HIGH VH = VERY HIGH * G = GOOD, M = MARGINAL, MT = MODERATE PHYTO-TOXIC, T = PHYTO-TOXIC, ST = SEVERE PHYTO-TOXIC



Field 202 Reimer's

Grower Code: 05219066 05219-N1133
 Farm: HOME
 Field: 202 REIMERS

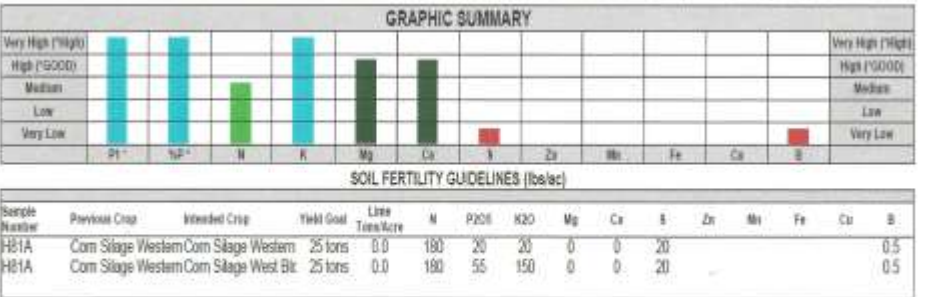
Attn: DOUG MACFARLANE 250-546-3847

Report Date: 2016-11-18 Print Date: 2017-01-05 **SOIL TEST REPORT** Page: 1

Sample Number	Legal Land Descpt	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb	P ppm Bray-P1	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC meq/100g	Percent Base Saturation				
												% K	% Mg	% Ca	% H	% Na
H81A		0	58102	3.0	47M	125H	291VH	240H	1780H	7.4	11.8	6.3	17.0	75.5		1.4
H81B		12	58103	2.0	48M	98G	236VH	296H	1780M	7.2	12.8	4.8	10.2	89.4		2.1
H81C		24	58104	0.8	29M	56M	192H	325H	1850M	7.4	12.7	3.9	21.4	73.1		1.9
H81D		36	58105	0.9	20M	37M	146M	340H	2870H	7.7	17.7	2.1	16.0	81.1		0.9

Sample Number	Sulfur ppm S lbs/ac	Nitrate Nitrogen ppm NO3-N lbs/ac	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Soluble Salts meq/cc	Saturation %P	Aluminum Al ppm	Saturation %AM	K/Mg Ratio	Chloride Cl ppm	Sodium Na ppm	Molybdenum Mo ppm
H81A	9 VL 16	13 M 23					0.2 VL		30H	542	0.0G	0.37	42		39H
H81B	16 VL 29	14 M 25							20H	624	0.1G	0.25	32		62VH
H81C	19 VL 68	10 M 38							12H	601	0.0G	0.18	20		56VH
H81D	20 VL 72	12 M 43							3L	281	0.0G	0.13	21		38M

CE VL = VERY LOW L = LOW M = MEDIUM H = HIGH VH = VERY HIGH * G = GOOD, M = MARGINAL, MT = MODERATE PHYTO-TOXIC, T = PHYTO-TOXIC, ST = SEVERE PHYTO-TOXIC



Field 205 Jessie

Attr: DOUG MACFARLANE
250 546 3847

Grower Code: 2521966
Farm: HOME
Field: 205 JESSIE

0039-N126

Report Date: 2016-10-21 Print Date: 2017-01-05

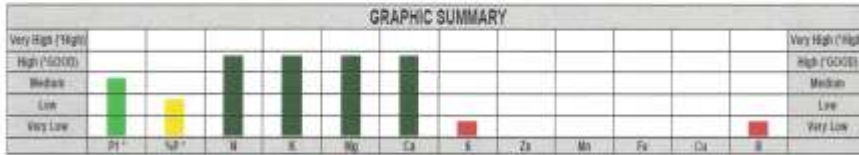
SOIL TEST REPORT

Page: 1

Sample Number	Legal Land Descrpt	Depth	Lab Number	Organic Matter	Phosphorus- P ppm	Phosphorus- P ppm	Potassium- K ppm	Magnesium- Mg ppm	Calcium- Ca ppm	pH	CEC	Percent Base Saturation			
					60M	40L	211H	245H	1970H		meq/100g	%K	%Mg	%Ca	%H
H071A		6	27522	2.4	30M	60M	211H	245H	1970H	7.4	12.6	4.3	16.2	78.1	1.6
H071B		12	27523	1.3	22L	40L	130M	300H	1630H	7.6	12.1	2.8	20.6	75.5	1.3
H071C		24	27524	1.1	32M	84G	95M	485H	4140H	8.4	25.0	1.0	15.5	82.7	1.0
H071D		30	27525	0.7	37H	80H	88L	495H	4180H	8.6	25.4	0.9	16.2	81.9	1.1

Sample Number	Sulfur ppm S basic	Alumina ppm Al ₂ O ₃ basic	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Soluble Salts mg/l	Saturation %P	Aluminum Al ppm	Saturation %Al ³⁺	Chloride Cl ppm	Sodium Na ppm	Molybdenum Mo ppm
H071A	14 VL 25	22 H 40					0.3 VL	5 L	519	0.0 G	0.27 36		46 H	
H071B	17 VL 31	12 M 22						9 M	509	0.0 G	0.14 25		37 H	
H071C	15 VL 54	5 L 18						5 M	96	0.0 G	0.06 23		57 M	
H071D	14 VL 50	1 VL 4						5 M	95	0.0 G	0.06 19		67 H	

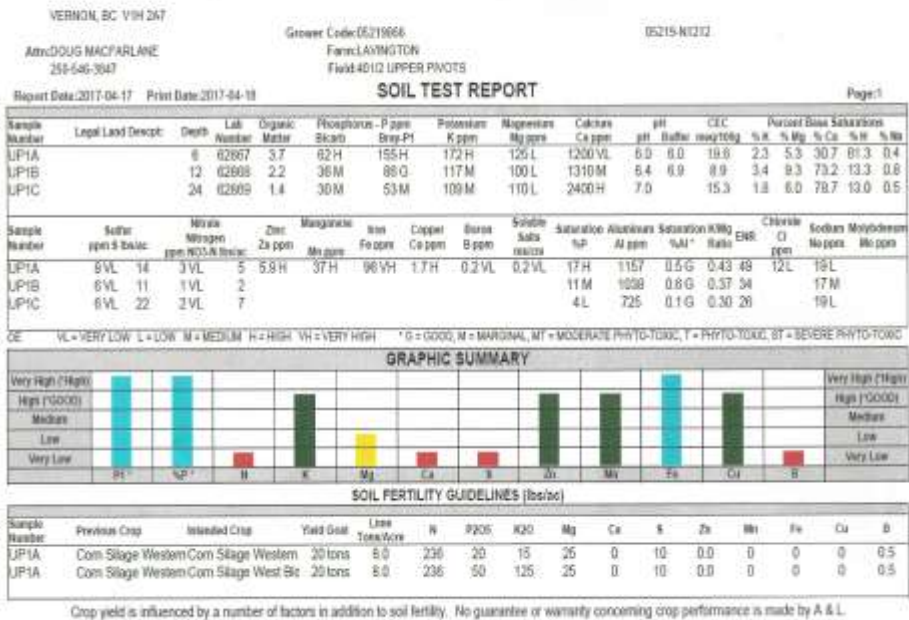
OE VL = VERY LOW L = LOW M = MEDIUM H = HIGH VH = VERY HIGH * G = GOOD, M = MARGINAL, MT = MODERATE PHYTO-TOXIC, T = PHYTO-TOXIC, ST = SEVERE PHYTO-TOXIC



SOIL FERTILITY GUIDELINES (baeac)															
Sample Number	Previous Crop	Intended Crop	Yield Goal	Lime Tons/Acre	N	P205	K2O	Mg	Ca	S	Zn	Mn	Fe	Cu	B
H071A	Alfalfa	Alfalfa	7 tons	0.0	0	95	400	5	0	20					2.0

Crop yield is influenced by a number of factors in addition to soil fertility. No guarantee or warranty concerning crop performance is made by A & L.

Field 400 Lavington – Upper pivots



Field 400 Lavington – Lower pivots

