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Soils of Oregon: Summaries of Physical and Chemical Data



Oregon State University Extension Service
Special Report 662 / June 1982



SOILS OF OREGON:

SUMMARIES OF PHYSICAL AND CHEMICAL DATA

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Oregon State University Extension Service

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INTRODUCTION

This report is the second document prepared to help answer the question, "What do we know about Oregon soils?" As with the first (SR 535 on Classification and Physiography), it is designed to make existing information much more accessible than it has been in the past.

Beginning in the mid-1950's, soil samples have been collected from throughout Oregon for chemical and physical characterization. Most of these samples have been taken in conjunction with progressive soil surveys. The objective has been to compile a body of information on the characterization and classification of Oregon soils. The data have been very useful for the stated objective, but because they have been stored only in file drawers in the Department of Soil Science and in local SCS offices, they really have not been readily available to other potential users.

From time to time people want to know the clay content, or the CEC, or some other property of a certain horizon in a specific soil. The only way to answer these questions has been to go to the files to dig out the lab data. With this report, the answers to these and many other questions about properties of Oregon soils will be readily available.

The data in this report are only summaries and statistical averages. They do not represent any specific soil profile, unless data were available for only a single profile of a given series. Where there were two or more soil profiles analyzed in a series, there were often variations in horizon nomenclature. One profile, for example, might have described on A3, whereas the other may have described a B1. In compiling the data, all horizons that

were judged to be equivalent were grouped together, and their data averaged. Thus, the objective is to give a general picture of the character of a soil profile and the properties of its component horizons. Specific data on specific profiles are still available in the files.

Data reported for each property of each horizon include the average, the standard deviation, the range, and the number of observations used in the calculations. The number of observations varies because not all profiles were analyzed for the same characteristics. For example, a file containing three profiles might have had organic carbon data for two of them, but not the third. Where there was only one profile or one observation, that value is reported as the average, and there is no calculation of standard deviation or range.

As thick as it is, even this report does not include all of the data available for Oregon soils. None of the data collected in various research projects and reported in theses, published papers, or Experimental Station publications are included. Characterization data through 1978 are summarized, but data since then are not. Changes in classification since 1980 are not indicated either. The introduction of an isomesic temperature regime, for example, is not reflected in the names and classifications reported.

Many people have made significant contributions to the effort to bring all these data together. Dr. Gerald Simonson made the files available to us. Mark Mellbye, Terry Svalberg, Michael Pauly, and Michael Degler all worked diligently to compile the data and calculate the statistics.

TABLE OF CONTENTS

Abegg	2	Colestine	102
Abiqua	4	Concord	104
Agate	6	Condon	106
Albee	8	Coosbay	108
Alicel	10	Courtrock	110
Alsea	12	Couse	112
Alspaugh	14	Crooked	114
Aloha	16	Crutch	116
Amity	18	Curant	118
Apt	20	Day	120
Aschoff	22	Dayton	122
Astoria	24	Debenger	124
Athena	28	Delena	126
Awbrey	32	Dement	128
Ayres	34	Deschutes	130
Baker	36	Digger	132
Barlow	38	Dinzer	134
Barron	40	Dixonville	136
Bashaw	42	Dupee	138
Bellpine	44	Dufur	140
Blachly	46	Dumont	142
Blacklock	50	Elmore	146
Boardtree	52	Enola	148
Bohannon	54	Era	150
Bornstedt	56	Fives	152
Brallier	58	Flagstaff	154
Brand	60	Floke	156
Brenner	62	Floke-like	158
Briedwell	64	Fopiano	160
Brightwood	66	Fort Rock	162
Bull Run	68	Freezener	164
Burlington	70	Frohman	166
Calimus	72	Goble	168
Camas	74	Goodlow	170
Carney	76	Gustin	172
Cazadero	78	Hall Ranch	174
Central Point	80	Hankins	176
Chehalis	82	Hatchery	178
Chenoweth	84	Hazelair	180
Cherryhill	86	Headley	182
Chesnimus	88	Hebo	184
Chilcott	90	Helvetia	186
Clatsop	92	Henley	188
Climax	94	Holcomb	190
Cloquato	96	Holland	192
Cobleigh	98	Honeygrove	194
Coburg	100	Hood	196

Hoopal	198
Horeb	200
Hot Lake	202
Hullt	204
Hurwal	206
Imbler	208
Izee	210
Jimbo	212
Jory	214
Kanutchan	216
Keel	218
Kerby	220
Kiesel	222
Kimberly	224
Kinton	226
Kinzel	228
Klamath	230
Klicker	232
Klickitat	234
Knappa	236
Labuck	238
LaGrande	240
Laki	242
Lamonta	244
Lapine	246
Lastance	248
Laurelhurst	250
Laurelwood	252
Licksillet	254
Lint	256
Malabon	258
Maklak	260
Malheur	262
Marty	264
McCully	266
McDuff	268
McKay	270
Medco	274
Medford	276
Minam	278
Modoc	280
Morehouse	282
Morrow	284
Mt. Hood	286
Mulkey	288
Multopor	290
Nehalem	292
Nekia	294
Nyssa	296

Oak Grove	298
Ochoco	300
Odin	302
Oneonta	304
Owyhee	306
Oxbow	308
Palouse	310
Panther	312
Parkdale	314
Peavine	316
Pinehurst	318
Poe	320
Pokegema	322
Pollard	324
Powell	326
Powley	328
Powwatka	330
Preacher	332
Prineville	334
Provig	336
Quatama	338
Quillayute	340
Rickreall	342
Ridgeway	344
Ritner	346
Ritzville	348
Roseburg	350
Ruch	352
Saturn	354
Saum	356
Shanahan	358
Sifton	360
Silcox	362
Simas	364
Siskiyou	366
Skellock	368
Skyline	370
Slickrock	372
Stanfield	374
Steiger	376
Steiwer	378
Suver	380
Swartz	382
Tahkenitch	384
Talapus	386
Thader	388
Timberly	390
Tolovana	392
Top	394

Tournquist	396
Trask	398
Tub	400
Tulana	402
Tutni	406
Ukiah	408
Vannoy	410
Veneta	414
Verboort	416
Virtue	418
Wahkeena	420
Walla Walla	422
Wallowa	426
Wamic	428
Wanoga	430
Wapato	432
Westport	434
Willakenzie	436
Willamette	438
Winema	440
Winopee	442
Witham	444
Witzel	446
Woodburn	448
Woodcock	450
Wyeast	452
Yamhill	454
Yaquina	456
Zumwalt	458

SOILS OF OREGON:

SUMMARIES OF PHYSICAL AND CHEMICAL DATA

SOIL SERIES:

Abegg

TAXONOMIC NAME:

Ultic Haploxeralf

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (I Cat)	Ca/Mg
				%			%	(ppm)			Meq/100g						
A11	Ave	6.0	17.3	-----	NO AVAILABLE DATA			33.0	14.7	3.0	.2	1.0	23.2	36.0	52.5	---	4.9
	S D	/	/					/	/	/	/	/	/	/	/	---	/
	Rng	/	/					/	/	/	/	/	/	/	/	---	/
	N	1	1					1	1	1	1	1	1	1	1	---	1
A12	Ave	5.6	13.0	-----	NO AVAILABLE DATA			15.0	10.1	1.6	.3	.8	15.9	31.8	40.2	---	6.3
	S D	/	/					/	/	/	/	/	/	/	/	---	/
	Rng	/	/					/	/	/	/	/	/	/	/	---	/
	N	1	1					1	1	1	1	1	1	1	1	---	1
B1	Ave	5.5	4.5	-----	NO AVAILABLE DATA			6.0	2.5	1.1	.2	.6	13.8	17.3	25.4	---	2.3
	S D	/	/					/	/	/	/	/	/	/	/	---	/
	Rng	/	/					/	/	/	/	/	/	/	/	---	/
	N	1	1					1	1	1	1	1	1	1	1	---	1
B21t	Ave	5.3	2.3	-----	NO AVAILABLE DATA			4.0	1.3	1.1	.2	.5	11.9	15.2	20.4	---	1.2
	S D	/	/					/	/	/	/	/	/	/	/	---	/
	Rng	/	/					/	/	/	/	/	/	/	/	---	/
	N	1	1					1	1	1	1	1	1	1	1	---	1
B22t	Ave	5.5	---	-----	NO AVAILABLE DATA			3.0	2.1	1.6	.1	.5	11.6	16.0	26.9	---	1.3
	S D	/	---					/	/	/	/	/	/	/	/	---	/
	Rng	/	---					/	/	/	/	/	/	/	/	---	/
	N	1	---					1	1	1	1	1	1	1	1	---	1
B3t	Ave	5.5	---	-----	NO AVAILABLE DATA			2.0	2.5	1.8	.4	.5	8.9	17.3	30.0	---	1.4
	S D	/	---					/	/	/	/	/	/	/	/	---	/
	Rng	/	---					/	/	/	/	/	/	/	/	---	/
	N	1	---					1	1	1	1	1	1	1	1	---	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Abiqua

TAXONOMIC NAME: Cumulic Ultic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
Ap	Ave S D Rng N	7.4 / 1	--- / 1	--- / 1	NO DATA	AVAILABLE	--- / 1	--- / 1	21.4 13.0 12-31 2	5.6 2.7 4-8 2	.5 .65 .08-1.0 2	.9 .5 .6-1.3 2	5.3 / 1	31.8 / 1	70.2 25.7 52-88 2	--- / 1	3.7 .6 3.3-4.1 2
A1	Ave S D Rng N	6.8 / 1	2.05 / 1	--- / 1	NO DATA	AVAILABLE	--- / 1	--- / 1	13.7 12.4 5-23 2	4.45 2.2 3-6 2	.6 .5 .25-1.0 2	.65 .07 .6-.7 2	19.4 19.8 5-33 2	29.7 / 1	57.1 39.1 30-85 2	--- / 1	3.8 / 1
A3	Ave S D Rng N	--- / 1	--- / 1	--- / 1	NO DATA	AVAILABLE	--- / 1	--- / 1	13.0 / 1	6.7 / 1	.1 / 1	.8 / 1	--- / 1	40.5 / 1	50.8 / 1	--- / 1	1.9 / 1
B2t	Ave S D Rng N	5.1 / 1	1.6 / 1	--- / 1	NO DATA	AVAILABLE	--- / 1	--- / 1	8.1 4.8 5-12 2	5.2 1.1 4-6 2	.2 .09 .1-.3 2	.3 .2 .2-.4 2	27.6 / 1	35.4 1.6 34-37 2	39.4 18.8 26-53 2	--- / 1	1.8 / 1
B3t	Ave S D Rng N	--- / 1	--- / 1	--- / 1	NO DATA	AVAILABLE	--- / 1	--- / 1	11.3 / 1	6.0 / 1	.1 / 1	.35 / 1	--- / 1	42.6 / 1	41.7 / 1	--- / 1	1.9 / 1
IIC	Ave S D Rng N	--- / 1	--- / 1	--- / 1	NO DATA	AVAILABLE	--- / 1	--- / 1	11.3 / 1	5.9 / 1	.1 / 1	.4 / 1	--- / 1	37.7 / 1	46.9 / 1	--- / 1	1.9 / 1
	Ave S D Rng N	--- / 1	--- / 1	--- / 1	NO DATA	AVAILABLE	--- / 1	--- / 1	11.3 / 1	5.9 / 1	.1 / 1	.4 / 1	--- / 1	37.7 / 1	46.9 / 1	--- / 1	1.9 / 1
	Ave S D Rng N	--- / 1	--- / 1	--- / 1	NO DATA	AVAILABLE	--- / 1	--- / 1	11.3 / 1	5.9 / 1	.1 / 1	.4 / 1	--- / 1	37.7 / 1	46.9 / 1	--- / 1	1.9 / 1
	Ave S D Rng N	--- / 1	--- / 1	--- / 1	NO DATA	AVAILABLE	--- / 1	--- / 1	11.3 / 1	5.9 / 1	.1 / 1	.4 / 1	--- / 1	37.7 / 1	46.9 / 1	--- / 1	1.9 / 1

Agate

Typic Durochrept

[illegible]

Utic Naploxe roll

[illegible]

SOIL SERIES: Albee

TAXONOMIC NAME: Ultic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (I Cat)	Ca/Mg
				---			%	(ppm)			Meq/100g						
1	Ave	5.7	3.4	---	.2	12.0	---	16.0	10.6	3.0	.1	.9	---	---	---	---	3.6
	S D	/	/	---	/	/	---	/	/	/	/	/	---	---	---	---	/
	Rng	/	/	---	/	/	---	/	/	/	/	/	---	---	---	---	/
	N	1	1	---	1	1	---	1	1	1	1	1	---	---	---	---	1
2	Ave	5.7	1.8	---	.1	10.0	---	6.8	10.0	3.2	.1	.6	---	---	---	---	3.2
	S D	/	/	---	/	/	---	/	/	/	/	/	---	---	---	---	/
	Rng	/	/	---	/	/	---	/	/	/	/	/	---	---	---	---	/
	N	1	1	---	1	1	---	1	1	1	1	1	---	---	---	---	1
3	Ave	5.5	1.5	---	.09	10.0	---	10.0	9.7	3.4	.1	.5	---	---	---	---	2.9
	S D	/	/	---	/	/	---	/	/	/	/	/	---	---	---	---	/
	Rng	/	/	---	/	/	---	/	/	/	/	/	---	---	---	---	/
	N	1	1	---	1	1	---	1	1	1	1	1	---	---	---	---	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Alicel

TAXONOMIC NAME: Pachic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
Ap	Ave S D Rng N	6.9 .5 6.4-7.4 3	2.5 .7 2.0-3.3 3	1.5 .5 1.2-1.9 2	.1 /	17.9 /	--- /	14.65 4.0 12-18 2	8.4 /	3.0 /	.1 /	1.8 /	--- /	22.0 /	60.0 /	--- /	2.8 /
A12	Ave S D Rng N	6.9 .25 6.6-7.1 3	2.5 .3 2.2-2.8 3	1.5 .15 1.4-1.6 2	.1 /	16.5 /	--- /	11.8 2.5 10-14 2	9.2 /	3.7 /	.1 /	1.2 /	--- /	19.9 /	71.0 /	--- /	2.5 /
B1	Ave S D Rng N	7.1 .1 7.0-7.2 2	1.75 .35 1.5-2.0 2	1.0 .2 .9-1.1 2	.1 /	14.2 /	--- /	14.5 /	8.1 /	3.9 /	.1 /	.8 /	--- /	18.5 /	70.0 /	--- /	2.1 /
B21t	Ave S D Rng N	7.7 .7 7.3-8.5 3	.9 .25 .1-1.2 3	.5 .15 .4-.7 3	.1 /	--- /	--- /	12.3 /	7.8 /	5.4 /	.2 /	.9 /	--- /	19.1 /	75.0 /	--- /	1.4 /
B22t	Ave S D Rng N	8.0 1.55 7-9 2	.45 .07 .4-.5 2	.3 .05 .2-.3 2	T /	--- /	--- /	9.0 /	7.8 /	5.6 /	.2 /	1.0 /	--- /	19.1 /	--- /	--- /	1.5 /
B3Ca	Ave S D Rng N	9.3 /	.3 /	.2 /	--- /	--- /	--- /	--- /	--- /	--- /	--- /	--- /	--- /	--- /	--- /	--- /	--- /
C	Ave S D Rng N	8.7 .7 7.9-9.2 3	.2 .1 .1-.3 3	.1 .07 .06-.20 3	T /	--- /	--- /	6.5 /	6.6 /	5.0 /	.2 /	.7 /	--- /	16.5 /	--- /	--- /	1.3 /
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Alsea

TAXONOMIC NAME: Cumulic Hapludoll

[illegible]

SOIL SERIES: Alsea

TAXONOMIC NAME: Cumulic Hapludoll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
A11	Ave S D Rng N	6.0 / 1	---	7.6 / 1	.3 / 1	27.1 / 1	---	---	16.2 / 1	9.5 / 1	.2 / 1	1.2 / 1	---	40.1 / 1	67.5 / 1	---	1.7 / 1
A12	Ave S D Rng N	5.9 / 1	---	6.6 / 1	.2 / 1	30.0 / 1	---	---	15.6 / 1	9.5 / 1	.5 / 1	.5 / 1	---	42.1 / 1	62.0 / 1	---	1.6 / 1
A3	Ave S D Rng N	5.8 / 1	---	6.3 / 1	.2 / 1	28.6 / 1	---	---	15.6 / 1	10.0 / 1	.3 / 1	.4 / 1	---	41.1 / 1	64.0 / 1	---	1.6 / 1
B1	Ave S D Rng N	5.8 / 1	---	5.6 / 1	---	---	---	---	16.2 / 1	10.3 / 1	.3 / 1	.3 / 1	---	40.7 / 1	66.6 / 1	---	1.6 / 1
B21	Ave S D Rng N	5.9 / 1	---	4.2 / 1	---	---	---	---	15.9 / 1	10.3 / 1	.5 / 1	.3 / 1	---	39.4 / 1	68.5 / 1	---	1.5 / 1
B22	Ave S D Rng N	5.9 / 1	---	6.1 / 1	---	---	---	---	17.5 / 1	11.0 / 1	.3 / 1	.3 / 1	---	39.2 / 1	74.2 / 1	---	1.6 / 1
B23	Ave S D Rng N	6.0 / 1	---	1.5 / 1	---	---	---	---	16.5 / 1	10.8 / 1	.4 / 1	.2 / 1	---	32.8 / 1	85.1 / 1	---	1.5 / 1
B3	Ave S D Rng N	6.0 / 1	---	1.2 / 1	---	---	---	---	17.5 / 1	10.3 / 1	.4 / 1	.2 / 1	---	28.4 / 1	100.0 / 1	---	1.7 / 1
	Ave S D Rng N																

SOIL SERIES: Alsapagh

TAXONOMIC NAME: Humic Hapludult

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
A _p	Ave	5.5	---	5.8	.2275	21	3.0	---	8.25	2.3	.1	1.15	26.5	31.1	37.5	30.9	7
	S D	.42	---	.396	.004	1.41	/	---	.495	.42	---	.07	.92	1.2	2.12	1.06	5.65
	Rng	5.2-5.8	---	5.5-6.1	.02-.03	20-22	/	---	7.9-8.6	2-2.6	.1	1.1-1.2	26-27	30-32	36-39	30-32	3-11
	N	2	---	2	2	2	1	---	2	2	2	2	2	2	2	2	2
A ₃	Ave	5.5	---	2.5	.149	17	3.1	---	4.2	1.8	.1	1.15	21.3	24.5	29	25.5	2.35
	S D	0.07	---	.93	.033	2.8	/	---	.42	---	---	.35	2.3	1.3	1.41	1.9	.21
	Rng	5.4-5.6	---	1.9-3.2	.13-.17	15-19	/	---	3.9-4.5	1.8	.1	.9-1.4	20-23	24-25	28-30	24-27	2.2-2.5
	N	2	---	2	2	2	1	---	2	2	2	2	2	2	2	2	2
B ₁	Ave	5.55	---	.88	.067	13.5	3.3	---	4.0	1.45	.1	1.0	16.9	22.4	28.5	27.8	3
	S D	0.07	---	.21	.0014	3.5	/	---	---	.63	---	.42	.212	3.4	.707	2.9	1.34
	Rng	5.5-5.6	---	.73-1.0	.06-.07	11-16	/	---	4.0	1.0-1.9	.1	.7-1.3	16-17	20-25	28-29	25-30	2-4
	N	2	---	2	2	2	1	---	2	2	2	2	2	2	2	2	2
B _{21t}	Ave	5.45	---	.40	.045	12	3.4	---	3.6	1.45	.15	.25	17.1	20.9	25.5	23.9	3.15
	S D	.071	---	.23	/	/	/	---	.707	1.06	.071	.071	.35	2.2	6.4	6.8	1.76
	Rng	5.4-5.5	---	.24-.56	/	/	/	---	3.1-4.1	.7-2.2	.1-.2	.2-.3	17-18	19-22	21-30	19-29	2-4
	N	2	---	2	1	1	1	---	2	2	2	2	2	2	2	2	2
B _{22t}	Ave	5.3	---	.285	---	---	3.3	---	2.95	1.55	.1	.15	16.8	20.6	22.5	22.1	2.09
	S D	.141	---	.149	---	---	/	---	.071	.636	---	.071	1.06	1.3	2.12	1.2	.9
	Rng	5.2-5.4	---	.18-.39	---	---	/	---	2.9-3	1.1-2	.1	.1-2	16-18	20-22	21-24	21-23	1.5-2.7
	N	2	---	2	---	---	1	---	2	2	2	2	2	2	2	2	2
B ₃	Ave	5.15	---	.095	---	---	3.2	---	2.8	1.7	.1	.1	17.7	20.7	22	21.0	1.6
	S D	.071	---	.035	---	---	/	---	/	/	/	/	/	/	/	/	/
	Rng	5.1-5.2	---	.07-.12	---	---	/	---	/	/	/	/	/	/	/	/	/
	N	2	---	2	---	---	1	---	1	1	1	1	1	1	1	1	1
C	Ave	5.15	---	.07	---	---	3.3	---	2.0	1.8	0.2	0.1	20.0	23.6	17	17.0	1.1
	S D	.212	---	.014	---	---	/	---	/	/	/	/	/	/	/	/	/
	Rng	5.0-5.3	---	.06-.08	---	---	/	---	/	/	/	/	/	/	/	/	/
	N	2	---	2	---	---	1	---	1	1	1	1	1	1	1	1	1
	Ave																
	S D																
	Rng																
	Ave																
	S D																
	Rng																

SOIL SERIES: Aloha

TAXONOMIC NAME: Aquic Xerochrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
				%			%	(ppm)			Meq/100g						
Ap	Ave	5.8	2.5	---	---	---	---	54.4	6.0	1.7	.1	.5	10.9	14.25	57.8	---	3.4
	S D	.1	.1	---	---	---	---	40.2	2.0	.6	---	.2	2.1	1.1	12.6	---	1.0
	Rng	5.7-6.0	2.4-2.6	---	---	---	---	26-83	3-8	1.3-2.4	.1	.3-.7	9-12	13-15	43-68	---	2.9-5.0
	N	4	2	---	---	---	---	2	3	3	2	3	2	2	3	---	3
A3	Ave	6.0	.8	---	---	---	---	77.2	4.3	1.6	.1	.4	10.5	---	54.3	---	2.7
	S D	---	/	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	Rng	6.0	/	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	N	2	1	---	---	---	---	1	1	1	1	1	1	---	1	---	1
B1	Ave	5.7	.85	---	---	---	---	32.4	5.6	2.0	.1	.3	8.3	12.7	65.2	---	3.0
	S D	.1	.2	---	---	---	---	/	1.3	.3	---	.1	---	/	8.1	---	/
	Rng	5.6-5.8	.7-1.0	---	---	---	---	/	4-7	1-3	.1	.2-.4	8.3	/	59-71	---	/
	N	2	.2	---	---	---	---	1	2	2	2	2	2	1	2	---	1
B21	Ave	5.7	.7	---	---	---	---	---	7.2	3.3	.2	.2	8.1	13.5	80.7	---	2.2
	S D	---	/	---	---	---	---	---	/	/	/	/	/	/	/	---	/
	Rng	5.7	/	---	---	---	---	---	/	/	/	/	/	/	/	---	/
	N	2	1	---	---	---	---	---	1	1	1	1	1	1	1	---	1
B22	Ave	5.9	.35	---	---	---	---	27.1	8.9	3.8	.1	.4	8.6	---	88.7	---	2.3
	S D	---	.2	---	---	---	---	---	/	/	/	/	/	---	/	---	/
	Rng	5.9	.2-.5	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	N	3	2	---	---	---	---	1	1	1	1	1	1	---	1	---	1
B3	Ave	6.05	.03	---	---	---	---	19.6	11.6	5.2	.1	.3	5.9	---	79.6	---	1.7
	S D	.2	/	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	Rng	5.9-6.2	/	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	N	2	1	---	---	---	---	1	1	1	1	1	1	---	1	---	1
C1	Ave	6.1	.05	---	---	---	---	---	10.5	5.3	.2	.3	5.6	17.5	93.1	---	2.0
	S D	.1	/	---	---	---	---	---	/	/	/	/	/	/	/	---	/
	Rng	6.0-6.2	/	---	---	---	---	---	/	/	/	/	/	/	/	---	/
	N	2	1	---	---	---	---	---	1	1	1	1	1	1	1	---	1
C2	Ave	6.15	.2	---	---	---	---	---	10.8	5.3	.2	.3	5.4	17.6	94.3	---	2.0
	S D	.2	/	---	---	---	---	---	/	/	/	/	/	/	/	---	/
	Rng	6.0-6.3	/	---	---	---	---	---	/	/	/	/	/	/	/	---	/
	N	2	1	---	---	---	---	---	1	1	1	1	1	1	1	---	1
Ave																	
S D																	
Rng																	
N																	

SOIL SERIES:		Apt	TAXONOMIC NAME: Typic Haplohumult														
Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)		%			%	(ppm)							(NH ₄ OAc)	(Σ Cat)	
A11	Ave	6.3	---	6.9	.3	21.6	---	---	31.1	12.4	.3	3.5	---	45.0	100.0	---	2.5
	S D	/	---	/	/	/	---	---	/	/	/	/	---	/	/	---	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	---	1	1	---	1
A12	Ave	6.5	---	5.1	.3	12.7	---	---	25.6	10.0	.2	3.0	---	41.9	92.6	---	2.6
	S D	/	---	/	/	/	---	---	/	/	/	/	---	/	/	---	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	---	1	1	---	1
B11	Ave	5.9	---	1.9	.1	16.9	---	---	8.0	5.0	.2	1.0	---	34.2	41.5	---	1.6
	S D	/	---	/	/	/	---	---	/	/	/	/	---	/	/	---	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	---	1	1	---	1
B12	Ave	5.6	---	.8	.1	13.7	---	---	6.1	4.2	.3	.4	---	34.2	32.2	---	1.5
	S D	/	---	/	/	/	---	---	/	/	/	/	---	/	/	---	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	---	1	1	---	1
B21	Ave	5.7	---	.4	.03	13.0	---	---	4.0	2.9	.3	.3	---	35.3	21.2	---	1.4
	S D	/	---	/	/	/	---	---	/	/	/	/	---	/	/	---	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	---	1	1	---	1
B22	Ave	5.8	---	.3	.03	9.0	---	---	3.4	2.9	.3	.3	---	32.6	21.2	---	1.2
	S D	/	---	/	/	/	---	---	/	/	/	/	---	/	/	---	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	---	1	1	---	1
B3	Ave	5.5	---	.5	.03	12.0	---	---	2.5	2.2	.2	.3	---	33.5	15.5	---	1.1
	S D	/	---	/	/	/	---	---	/	/	/	/	---	/	/	---	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	---	1	1	---	1
	Ave																
	S D																
	Rng N																
	Ave																
	S D																
	Rng N																

SOIL SERIES: Aschoff

TAXONOMIC NAME: Andic Haplumbrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
A1	Ave S D Rng N	5.65 .5 5.2-6.3 4	11.05 3.8 8-16 4	6.4 2.2 4.6-9.2 4	.25 .05 .2-.3 4	25.0 3.7 23-29 4	4.2 1.1 3.4-5.0 2	6.3 4.95 2.8-9.8 2	2.6 3.8 1-8.2 4	.85 1.1 .2-2.5 4	.15 .13 .04-.30 4	.4 .4 .1-1.0 4	---	30.7 6.2 23-38 4	12.2 16.1 2-36 4	---	4.65 1.9 3.3-6.0 2
A3	Ave S D Rng N	5.6 .4 5.3-6.0 4	11.0 2.1 7.8-12 4	6.4 1.2 4.5-7.2 4	.23 .035 .19-.26 4	28.2 4.2 24-34 4	4.2 .9 3.2-5.4 4	4.0 1.7 1.5-5.5 4	1.7 1.6 .4-4.0 4	.78 .4 .5-1.4 4	.275 .10 .2-.4 4	.35 .25 .1-.7 4	---	36.1 4.2 32-41 4	9.15 7.0 4-19 4	---	2.1 1.4 .8-3.6 4
B1	Ave S D Rng N	5.6 .6 5.2-6.0 2	5.7 2.8 3.7-7.7 2	3.3 1.7 2.1-4.5 2	.13 .04 .10-.16 2	25.1 5.5 21-29 2	4.8 .85 4.2-5.4 2	3.9 2.0 2.5-5.3 2	1.75 1.8 .5-3.0 2	.95 .9 .3-1.6 2	.3 .1 .2-.4 2	.45 .2 .3-.6 2	---	27.3 .4 27-34 2	12.5 10.3 5-20 2	---	1.8 .1 1.7-1.9 2
B2	Ave S D Rng N	5.6 .4 5.1-6.0 5	3.0 2.5 .6-6.7 5	3.0 2.8 .3-7.2 5	.07 .06 .02-.16 5	18.5 7.2 10-26 5	5.0 2.4 3.2-7.7 3	2.3 1.5 1.0-4.0 3	1.1 1.6 .2-2.7 5	.9 1.0 .2-2.7 5	.2 .1 .04-.3 5	.3 .3 .1-.9 5	---	21.6 5.7 15-27 5	12.1 12.3 4-33 5	---	2.1 1.7 .07-4.0 3
B3	Ave S D Rng N	6.3 .4 6.0-6.6 2	2.9 2.0 1.5-4.3 2	1.7 1.1 .9-2.5 2	.07 .06 .03-.10 2	27.45 6.6 23-32 2	7.2 3.8 4.5-9.9 2	2.65 .2 2.5-2.8 2	6.35 2.3 4.7-8.0 2	2.5 1.3 1.6-3.4 2	.5 .1 .4-.6 2	.8 .85 .2-1.4 2	---	28.95 1.5 28-30 2	35.0 1.55 34-36 2	---	3.2 2.55 1.4-5.0 2
C	Ave S D Rng N	5.8 .5 5.1-6.2 4	1.95 1.6 .5-4.1 4	1.1 .9 .2-2.3 4	.04 .02 .02-.05 4	27.0 18.9 10-53 4	5.2 1.7 3.7-7.0 3	2.1 1.5 .5-3.5 3	3.2 4.0 .5-9.0 4	1.8 2.1 .3-4.8 4	.4 .3 .2-.8 4	.4 .2 .2-.6 4	---	28.3 3.5 25-33 4	18.8 18.5 9-46 4	---	2.0 .4 .2-2.4 3
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Astoria

TAXONOMIC NAME: Andic Haplumbrept

Horizon	Stat.	Horizon Thickness (cm)	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density (g/cc)				
				—X—			—% H ₂ O—						
A11	Ave	18.6	12.9	45.9	41.2	---	---	31.1	---				
	S D	5.0	2.5	8.3	6.8	---	---	.49	---				
	Rng	15-25	9.1-16	36-56	32-47	---	---	30-32	---				
	N	5	5	5	5	---	---	2	---				
A12	Ave	17.8	14.1	48.2	37.7	82	72	27.2	---				
	S D	4.2	3.7	8.8	5.5	/	/	2.3	---				
	Rng	15-25	9.8-19	36-58	30-45	1	1	24-29	---				
	N	4	4	4	4	1	1	4	---				
B1	Ave	18.0	16.2	42.0	41.7	---	---	28.5	---				
	S D	7.0	3.2	7.4	4.8	---	---	.38	---				
	Rng	10-23	12-20	35-53	34-45	---	---	28-29	---				
	N	3	4	4	4	---	---	4	---				
B21	Ave	34.4	16.4	44.8	38.8	61	57	27.2	---				
	S D	6.8	3.1	7.22	6.6	/	/	3.4	---				
	Rng	28-43	12-22	37-56	28-45	1	1	22-30	---				
	N	5	5	5	5	1	1	4	---				
B22	Ave	31.5	20.2	40.9	38.8	---	---	28.7	---				
	S D	5.1	4.8	4.64	2.1	---	---	/	---				
	Rng	27-38	14-26	37-46	37-42	---	---	1	---				
	N	4	4	4	4	---	---	1	---				
B23	Ave	17.5	22.3	37.9	39.9	---	---	28.95	---				
	S D	10.6	.14	1.6	1.5	---	---	1.48	---				
	Rng	10-25	22-23	37-39	39-41	---	---	28-30	---				
	N	2	2	2	2	---	---	2	---				
B24	Ave	35	20.9	35.8	43.3	---	---	28.45	---				
	S D	7.07	6.08	3.89	2.19	---	---	.64	---				
	Rng	30-40	16-25	33-39	42-45	---	---	28-29	---				
	N	2	2	2	2	---	---	2	---				
B3	Ave	29.8	22.6	38.6	37.2	---	---	30.1	---				
	S D	9.9	7.18	7.07	8.04	---	---	.38	---				
	Rng	13-47	10-32	30-50	25-49	---	---	29-31	---				
	N	6	6	6	6	---	---	3	---				
C	Ave	35.7	26.3	36.0	37.6	---	---	29.6	---				
	S D	13.8	20.9	9.1	15.0	---	---	/	---				
	Rng	20-46	9-50	26-45	24-54	---	---	1	---				
	N	3	3	3	3	---	---	1	---				

SOIL SERIES: Astoria

TAXONOMIC NAME: Andic Haplumbrept

Horizon	Stat.	Horizon Thickness (cm)	Sand	Silt	Clay	.10 Atm.	.33 Atm. % H ₂ O	15 Atm.	Bulk Density (g/cc)			
Dr	Ave	22.7	34.5	32.1	33.7	---	---	29.0	---			
	S D	2.5	15.0	12.0	11.56	---	---		---			
	Rng	20-25	21-51	23-46	22-46	---	---		---			
	N	3	3	3	3	---	---	1	---			
	Ave											
	S D											
	Rng											
	N											
	Ave											
	S D											
	Rng											
	N											
	Ave											
	S D											
	Rng											
	N											
	Ave											
	S D											
	Rng											
	N											
	Ave											
	S D											
	Rng											
	N											

SOIL SERIES: Astoria

TAXONOMIC NAME: Andic Haplumbrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
A11	Ave	5.1	14.8	7.77	.1431	17.9	5.05	---	2.88	2.36	.51	1.1	44	49.8	5.5	5.05	1.2
	S D	.30	3.8	2.04	.07	1.92	.07	---	2.31	1.62	.103	.19	6.5	5.3	.7	.07	.93
	Rng	4.8-5.5	13-19	5.6-11	.35-.55	16-20	5.0-5.1	---	4-4.4	.8-4.7	.4-.65	.8-1.3	39-49	45-55	5-6	5-5.1	.1-2.7
	N	4	3	5	5	5	2	---	5	5	4	5	2	3	2	2	5
A12	Ave	5.1	7.28	3.83	.230	17.7	5.2	---	2.18	1.1	.422	.47	39.9	33.5	3.5	6	1.2
	S D	.16	2.4	1.2	.093	4.6	---	---	4.26	.78	.167	.22	.14	7.8	.7	1.4	1.8
	Rng	4.9-5.3	4.5-9.2	2.5-4.7	.10-.33	14-26	5.2	---	.1-9.8	.3-2.3	.3-.61	.2-.8	39-40	26-41	3-4	5-7	.2-4.3
	N	5	3	5	5	5	2	---	5	5	5	5	2	3	2	2	5
B1	Ave	5.1	9.9	2.66	.119	22.25	5.0	---	.32	.73	.275	.375	40.7	34.2	4.5	4.5	.5
	S D	.14	/	2.2	.048	20	.15	---	.096	.30	.10	.17	1.4	11	.7	.7	.14
	Rng	5-5.3	/	.63-2.8	.06-.18	9-52	4.9-5.2	---	.2-.4	.3-1.0	.2-.4	.2-.6	39-43	26-42	4-5	4-5	.4-.7
	N	4	1	4	4	4	3	---	4	4	4	4	3	2	2	2	4
B21	Ave	5.12	1.88	1.29	.095	13.1	5.15	---	.254	1.3	.32	.28	44.3	29.8	4.5	6.5	.34
	S D	.19	1.1	.99	.05	6.22	.07	---	.095	1.4	.129	.08	2.83	6.9	3.5	3.5	.19
	Rng	4.8-5.3	.6-2.5	.3-2.8	.05-.18	6-22	5.1-5.2	---	.17-.4	.3-3.8	.2-.5	.2-.4	42-46	26-38	2-7	4-9	.05-.4
	N	5	3	5	5	5	2	---	5	5	5	5	2	3	2	2	5
B22	Ave	5.98	1.34	.58	.053	13.07	4.95	---	.30	2.45	.34	.24	44.0	31.3	4	7.5	.13
	S D	.096	.085	.23	.015	3.72	.07	---	.08	2.06	.18	.05	4.38	10.6	/	5	.12
	Rng	4.9-5.1	1.2-1.4	.32-.74	.04-.07	10-17	4.9-5	---	.2-.4	.5-5	.2-.57	.2-.3	41-47	24-39	4-11	4-11	.04-.3
	N	4	2	4	3	3	2	---	4	4	4	4	2	2	1	2	4
B23	Ave	5.05	---	.285	---	---	4.9	---	.35	1.95	.2	.25	43.5	---	---	6	.3
	S D	.21	---	.007	---	---	.07	---	.07	1.63	---	.07	6.2	---	---	2.8	.28
	Rng	4.9-5.2	---	.28-.29	---	---	4.8-4.9	---	.3-.4	.8-3.1	.2	.2-.3	39-48	---	---	4-8	.1-.5
	N	2	---	2	---	---	2	---	2	2	2	2	2	---	---	2	2
B24	Ave	5.05	---	.31	---	---	4.95	---	.25	2.3	.2	.3	43.5	---	---	6.5	.15
	S D	.35	---	.099	---	---	.07	---	.07	1.7	---	.14	6.92	---	---	3.5	.08
	Rng	.48-.53	---	.24-.38	---	---	4.9-5.0	---	.2-.3	1.1-3.5	.2	.2-.4	38-48	---	---	4-9	.09-.2
	N	2	---	2	---	---	2	---	2	2	2	2	2	---	---	2	2
B3	Ave	5.0	.74	.32	.044	10.4	5.6	---	.25	2.37	.29	.24	45.2	31.4	7.3	8	.067
	S D	.117	.25	.17	.011	3.9	1.4	---	.37	1.75	.10	.08	2.4	9.5	4.2	2.8	.045
	Rng	4.8-5.1	.5-1.0	.11-.6	.03-.05	6-13	4.5-7.2	---	.1-1	.8-4.7	.2-.4	.2-.4	43-48	22-41	4-12	6-10	.02-.12
	N	6	3	6	3	3	3	---	6	6	6	6	3	3	3	2	6
C	Ave	4.9	.4	.2	.04	5.5	---	---	.5	1.2	.28	.27	44.1	38.3	4.0	7	.3
	S D	.2	.14	.1	---	2.12	---	---	.56	.58	.04	.058	/	2.3	---	/	.28
	Rng	4.7-5.1	.3-.5	.11-.3	.04	4-7	---	---	.1-.9	.9-1.9	.23-3	.2-.3	/	37-40	4.0	/	.1-.5
	N	3	2	3	2	2	---	---	2	3	3	3	1	2	2	1	2

SOIL SERIES: Astoria

TAXONOMIC NAME: Andic Haplumbrept

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)		%			%	(ppm)			Meq/100g				(NH ₄ OAc)	(E Cat)	
Dr	Ave	4.9	.3	.18	.03	6	3.5	---	.26	1.15	.29	.3	42.7	45.9	3	6	.21
	S D	.14		.03				---	.34	.35	.014	---					.27
	Rng	4.8-5.0		.16-.2				---	.02-.5	.9-1.4	.28-.3	.3					.02-.4
	N	2	1	2	1	1	1	---	2	2	2	2	1	1	1	1	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Athena

TAXONOMIC NAME: Pachic Haploxeroll

Horizon	Stat.	Horizon Thickness (cm)	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density (g/cc)			
				%			% H ₂ O					
A1	Ave S D Rng N	20.0 / 1	13.9 / 1	68.9 / 1	18.2 / 1		NO DATA AVAILABLE					
A3	Ave S D Rng N	18.0 / 1	12.2 / 1	65.6 / 1	22.2 / 1		NO DATA AVAILABLE					
B1	Ave S D Rng N	28.0 / 1	11.6 / 1	68.1 / 1	20.3 / 1		NO DATA AVAILABLE					
B2	Ave S D Rng N	33.0 / 1	13.1 / 1	69.3 / 1	17.6 / 1		NO DATA AVAILABLE					
B3	Ave S D Rng N	18.0 / 1	10.3 / 1	73.3 / 1	16.4 / 1		NO DATA AVAILABLE					
B3Ca1	Ave S D Rng N	13.0 / 1	9.3 / 1	76.3 / 1	14.4 / 1		NO DATA AVAILABLE					
B3Ca2	Ave S D Rng N	5.0 / 1	6.5 / 1	80.8 / 1	12.7 / 1		NO DATA AVAILABLE					
C1	Ave S D Rng N	8.0 / 1	11.05 2.3 9-13 2	72.8 3.7 70-75 2	16.2 6.0 12-20 2		NO DATA AVAILABLE					
C2	Ave S D Rng N	10.0 / 1	7.3 / 1	73.6 / 1	19.1 / 1		NO DATA AVAILABLE					

SOIL SERIES: Athena

TAXONOMIC NAME: Pachic Haploxeroll

Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
		(cm)		X			X H ₂ O		(g/cc)				
C3	Ave	13.0	7.3	74.0	18.7		NO DATA AVAILABLE						
	S D	/	/	/	/								
	Rng												
	N	1	1	1	1								
	Ave												
	S D												
	Rng												
	N												
	Ave												
	S D												
	Rng												
	N												
	Ave												
	S D												
	Rng												
	N												
	Ave												
	S D												
	Rng												
	N												
	Ave												
	S D												
	Rng												
	N												

SOIL SERIES:

Athena

TAXONOMIC NAME: Pachic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (1 Cat)	Ca/Mg
				%			%	(ppm)									
A1	Ave	6.9	4.2	2.0	---	---	---	29.2	NO DATA AVAILABLE					25.0	---	---	---
	S D	1.0	2.5	/	---	---	---	20.0						/	---	---	---
	Rng	5.8-7.7	2.4-6.0	/	---	---	---	15-43						/	---	---	---
	N	3	2	1	---	---	---	2						1	---	---	---
A3	Ave	6.9	3.55	.9	---	---	---	16.25	NO DATA AVAILABLE					23.8	---	---	---
	S D	1.0	2.5	/	---	---	---	13.1						/	---	---	---
	Rng	6.1-8.0	1.8-5.3	/	---	---	---	7-26						/	---	---	---
	N	3	2	1	---	---	---	2						1	---	---	---
B1	Ave	6.8	---	.5	NO DATA AVAILABLE									21.9	---	---	---
	S D	/	---	/										/	---	---	---
	N	1	---	1										1	---	---	---
B2	Ave	6.9	---	.3	NO DATA AVAILABLE									19.4	---	---	---
	S D	/	---	/										/	---	---	---
	N	1	---	1										1	---	---	---
B3	Ave	6.9	---	.2	NO DATA AVAILABLE									19.4	---	---	---
	S D	/	---	/										/	---	---	---
	N	1	---	1										1	---	---	---
B3Ca1	Ave	7.2	---	.1	NO DATA AVAILABLE									18.7	---	---	---
	S D	/	---	/										/	---	---	---
	N	1	---	1										1	---	---	---
B3Ca2	Ave	8.0	---	.2	---	---	---	---	---	---	.7	.5	---	21.2	---	---	---
	S D	/	---	/	---	---	---	---	---	---	/	/	---	/	---	---	---
	N	1	---	1	---	---	---	---	---	---	1	1	---	1	---	---	---
C1	Ave	7.7	---	.15	---	---	---	---	---	---	.7	.6	---	21.9	---	---	---
	S D	.7	---	.04	---	---	---	---	---	---	/	/	---	6.2	---	---	---
	Rng	7.2-8.2	---	.12-.18	---	---	---	---	---	---	/	/	---	18-26	---	---	---
	N	2	---	2	---	---	---	---	---	---	1	1	---	2	---	---	---
C2	Ave	8.1	---	.2	---	---	---	---	13.9	6.3	.8	.5	---	21.2	100.0	---	---
	S D	/	---	/	---	---	---	---	/	/	/	/	---	/	/	---	---
	Rng	/	---	/	---	---	---	---	/	/	/	/	---	/	/	---	---
	N	1	---	1	---	---	---	---	1	1	1	1	---	1	1	---	---

SOIL SERIES:

Athena

TAXONOMIC NAME:

Pachic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
								(ppm)									
C3	Ave	7.9	---	.2	NO DATA AVAILABLE				13.9	6.3	.8	.5	---	21.2	100.0	---	---
	S D	/	---	/					/	/	/	/	---	/	/	---	---
	Rng		---										---			---	---
	N	1	---	1					1	1	1	1	---	1	1	---	---
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Awbrey (Awbrig)

TAXONOMIC NAME: Vertic Albaqualf

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)		%			%	(ppm)			Meq/100g				(NH ₄ OAc)	(I Cat)	
Ap	Ave	5.6	3.4	2.1	.14	21.0	---	15.25	10.35	5.0	.35	.45	---	19.6	93.7	---	2.05
	S D	.1	---	---	.05	---	---	8.1	1.8	---	.07	.2	---	5.4	---	---	.35
	Rng	5.5-5.7	3.4	2.1	.10-.17	21.0	---	10-21	9-12	5.0	.3-.4	.3-.6	---	16-23	93.7	---	1.8-2.3
	N	2	2	2	2	2	---	2	2	2	2	2	---	2	2	---	2
A2	Ave	6.0	2.2	1.7	.11	---	---	6.0	10.9	6.15	.35	.3	---	18.7	98.7	---	1.75
	S D	.4	---	---	---	---	---	1.6	1.9	.2	.2	.1	---	3.3	---	---	.2
	Rng	5.7-6.3	2.2	1.7	.11	---	---	4.9-7.1	9.5-12.2	6.0-6.3	.2-.5	.2-.4	---	16-21	98.7	---	1.6-1.9
	N	2	2	2	2	---	---	2	2	2	2	2	---	2	2	---	2
B21t	Ave	6.1	1.0	.9	.05	---	---	2.45	17.85	13.25	1.1	.45	---	43.6	73.6	---	1.4
	S D	.1	---	---	---	---	---	.5	.35	2.5	.7	.07	---	4.8	---	---	.3
	Rng	6.0-6.2	1.0	.9	.05	---	---	2.1-2.8	17-18	11-15	.6-1.6	.4-.5	---	40-47	73.6	---	1.2-1.6
	N	2	2	2	2	---	---	2	2	2	2	2	---	2	2	---	2
B22t	Ave	6.65	.5	.4	.08	4.0	---	1.6	20.0	15.55	1.65	.5	---	42.15	97.3	---	1.3
	S D	.07	---	---	.04	---	---	.3	1.7	3.7	1.2	---	---	7.0	---	---	.4
	Rng	6.6-6.7	.5	.4	.05-.1	4.0	---	1.4-1.8	19-21	13-18	.8-2.5	.5	---	37-41	97.3	---	1.0-1.6
	N	2	2	2	2	2	---	2	2	2	2	2	---	2	2	---	2
B3t	Ave	6.8	.2	.3	---	---	---	4.1	19.5	14.9	1.4	.4	---	41.2	76.0	---	1.3
	S D	.4	---	---	---	---	---	2.8	3.3	2.1	.9	---	---	8.4	---	---	.4
	Rng	6.5-7.1	.2	.3	---	---	---	2.1-6.0	17-22	13-16	.8-2.0	.4	---	35-47	76.0	---	1.0-1.6
	N	2	2	2	---	---	---	2	2	2	2	2	---	2	2	---	2
C	Ave	7.0	.1	.3	.2	1.5	---	23.3	20.2	15.65	1.4	.5	---	41.7	82.0	---	1.4
	S D	1.0	---	---	---	---	---	30.0	2.6	6.9	1.0	.3	---	19.1	---	---	.4
	Rng	6.3-7.7	.1	.3	.2	1.5	---	2-44	18-22	11-21	.7-2.1	.3-.7	---	28-55	82.0	---	1.1-1.7
	N	2	2	2	2	2	---	2	2	2	2	2	---	2	2	---	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES:

Ayres

TAXONOMIC NAME:

Xerollic Durargid

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)					%	(ppm)							(NH ₄ OAc)	(E Cat)	
A1	Ave	6.7	1.7	.7	.06	11.7	---	14.5	8.5	5.7	.35	1.2	2.6	18.0	85.5	---	1.6
	S D	.2	/	.05	.006	.4	---	/	1.6	1.3	.07	.4	---	2.6	.7	---	.6
	Rng	6.4-6.8	/	.6-.7	.05-.07	11-12	---	/	7.3-9.6	4.7-6.6	.3-.4	.9-1.5	2.6	16-20	85-86	---	1.1-2.0
	N	3	1	2	2	2	---	1	2	2	2	2	2	2	2	---	2
A3	Ave	6.9	1.4	.6	.06	9.5	---	5.0	11.3	6.1	.4	1.0	3.2	23.9	85.5	---	1.9
	S D	.2	/	.03	.001	.7	---	/	.35	.7	.3	.3	.2	.4	.7	---	.3
	Rng	6.7-7.1	/	.5-.6	.06-.07	9-10	---	/	11-12	5.6-6.6	.2-.6	.8-1.2	3.0-3.3	23-24	85-86	---	1.7-2.1
	N	3	1	2	2	2	---	1	2	2	2	2	2	2	2	---	2
B1	Ave	7.2	---	.5	.06	8.8	---	---	17.7	10.2	.85	1.1	2.6	33.8	92.0	---	1.7
	S D	.07	---	.2	.02	.35	---	---	5.8	1.9	.07	.5	.35	9.2	1.4	---	.3
	Rng	7.1-7.2	---	.4-.7	.04-.07	8.5-9	---	---	13-22	8-12	.8-.9	.7-1.4	2.3-2.8	27-40	91-93	---	1.5-1.9
	N	2	---	2	2	2	---	---	2	2	2	2	2	2	2	---	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
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	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Baker

TAXONOMIC NAME: Orthidic Durixeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
A1 (0-15 cm)	Ave S D Rng N	7.6 1.27 6.7-8.5 2	3.1 .42 2.8-3.4 2	---	.13 / 1	---	---	9.6 3.4 7-12 2	9.85 / 1	3.82 / 1	---	2.48 / 1	---	17.17 / 1	---	---	---
A2 (15-30 cm)	Ave S D Rng N	8.4 / 1	3.5 / 1	---	---	---	---	5.0 / 1	---	---	---	---	---	---	---	---	---
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Barlow

TAXONOMIC NAME: Typic Cryorthod

Horizon	Stat.	Horizon Thickness (cm)	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density (g/cc)
A2	Ave S D Rng N	4.0 / 1	45.9 / 1	50.2 / 1	4.0 / 1	NO AVAILABLE DATA			
B21r	Ave S D Rng N	19.0 / 1	33.8 / 1	57.9 / 1	5.8 / 1	NO AVAILABLE DATA			
B31r	Ave S D Rng N	27.0 / 1	35.0 / 1	61.9 / 1	3.2 / 1	NO AVAILABLE DATA			
IIC	Ave S D Rng N	25.0 / 1	58.8 / 1	36.4 / 1	4.8 / 1	NO AVAILABLE DATA			
	Ave S D Rng N								
	Ave S D Rng N								
	Ave S D Rng N								
	Ave S D Rng N								

SOIL SERIES: Barlow

TAXONOMIC NAME: Typic Cryorthod

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (I Cat)	Ca/Mg
A2	Ave S D Rng N	4.7 / 1	4.0 / 1	2.3 / 1	.1 / 1	21.9 / 1	.1 / 1	14.8 / 1	.6 / 1	.3 / 1	.3 / 1	.1 / 1	--- / 1	7.1 / 1	19.2 / 1	--- / 1	2.0 / 1
B21r	Ave S D Rng N	5.1 / 1	6.0 / 1	3.5 / 1	.1 / 1	30.1 / 1	.3 / 1	6.8 / 1	.1 / 1	.1 / 1	.1 / 1	.1 / 1	--- / 1	17.1 / 1	2.4 / 1	--- / 1	1.0 / 1
B31r	Ave S D Rng N	5.4 / 1	3.2 / 1	1.9 / 1	.6 / 1	29.8 / 1	.3 / 1	5.5 / 1	.1 / 1	.1 / 1	.1 / 1	.1 / 1	--- / 1	7.8 / 1	3.8 / 1	--- / 1	1.0 / 1
IIC	Ave S D Rng N	5.4 / 1	7.0 / 1	4.1 / 1	.1 / 1	33.2 / 1	.8 / 1	3.8 / 1	.1 / 1	.1 / 1	.1 / 1	--- / 1	--- / 1	18.5 / 1	1.8 / 1	--- / 1	1.0 / 1
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Barron

TAXONOMIC NAME: Typic Xerochrept

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
		(1:1 H ₂ O)						(ppm)									
A ₁	Ave	5.85	2.96	---	.21	---	---	22.4	8.1	2.9	.05	.40	2.5	13.2	100	71.6	3.0
	S D	.78	2.1	---	/	---	---	23.5	5.0	2.3	/	.05	/	9.9	/	/	.71
	Rng	5.3-6.4	1.6-5.4	---	/	---	---	6-39	5-12	1.3-4.6	/	.3-.5	/	6-20	/	/	2.5-3.5
	N	2	3	---	1	---	---	2	2	2	1	2	1	2	1	1	2
A ₂	Ave	5.2	1.0	---	---	---	---	53.0	3.4	2.3	.07	.2	1.8	6.2	96.3	76.8	2.9
	S D	/	/	---	---	---	---	/	/	/	/	/	/	/	/	/	/
	Rng	/	/	---	---	---	---	/	/	/	/	/	/	/	/	/	/
	N	1	1	---	---	---	---	1	1	1	1	1	1	1	1	1	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Bashaw TAXONOMIC NAME: Typic Pelloxerert

Horizon	Stat.	Horizon Thickness (cm)	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density (g/cc)				
				%			% H ₂ O						
Ap	Ave	12.0	7.4	39.2	52.6	---	---	26.3	---				
	S D	1.9	4.9	11.6	9.7	---	---	---	---				
	Rng	8-13	.9-12.6	19-55	37-61	---	---	---	---				
	N	8	12	12	12	---	---	1	---				
A12	Ave	24.5	5.3	33.7	62.7	---	45.7	27.5	1.8				
	S D	17.0	3.8	10.2	11.7	---	---	---	---				
	Rng	13-48	1.8-10.7	16-48	50-82	---	---	---	---				
	N	8	6	6	6	---	1	1	1				
A13	Ave	28.2	5.3	31.7	62.7	---	---	---	---				
	S D	11.8	3.8	10.0	9.5	---	---	---	---				
	Rng	15-40	.6-11.3	18-46	49-78	---	---	---	---				
	N	6	7	7	7	---	---	---	---				
A14	Ave	38.0	6.35	31.8	56.9	---	---	---	---				
	S D	---	.5	5.1	1.5	---	---	---	---				
	Rng	---	6.0-6.7	28-35	56-58	---	---	---	---				
	N	1	2	2	2	---	---	---	---				
AC1	Ave	28.1	8.0	32.5	59.5	---	48.6	27.6	2.0				
	S D	10.5	7.1	6.4	2.9	---	---	---	---				
	Rng	13-43	4-20	22-40	57-65	---	---	---	---				
	N	7	5	5	5	---	1	1	1				
AC2	Ave	33.6	7.25	42.0	50.75	---	---	27.9	---				
	S D	12.8	.8	7.7	8.4	---	---	---	---				
	Rng	15-50	6.7-7.8	36-48	44-57	---	---	---	---				
	N	7	2	2	2	---	---	1	---				
Bb	Ave	20.0	7.0	50.0	42.0	---	---	---	---				
	S D	---	---	---	---	---	---	---	---				
	Rng	---	---	---	---	---	---	---	---				
	N	1	1	1	1	---	---	---	---				
C1	Ave	46.0	5.9	27.0	63.6	---	---	---	---				
	S D	23.1	4.4	11.5	8.7	---	---	---	---				
	Rng	33-73	1.3-12.7	11-39	57-82	---	---	---	---				
	N	3	8	8	8	---	---	---	---				
C2	Ave	41.5	16.5	32.0	52.1	---	---	25.5	---				
	S D	12.0	10.9	13.5	13.9	---	---	---	---				
	Rng	33-50	12-32	15-47	41-72	---	---	---	---				
	N	2	4	4	4	---	---	1	---				

SOIL SERIES:

Bashaw

TAXONOMIC NAME:

Typic Pelloxerert

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (I Cat)	Ca/Mg
				%			%	(ppm)			Meq/100g						
Ap	Ave	5.5	6.5	3.8	---	---	---	7.0	14.2	9.2	.2	.8	11.5	38.1	61.9	---	2.2
	S D	.4	2.4	1.5	---	---	---	/	6.9	5.4	.1	.6	/	7.3	20.3	---	1.9
	Rng	4.7-6.3	2.5-12.6	1.4-7.3	---	---	---	/	7-34	2-18	.1-.4	.3-2.4	/	28-52	36-105	---	.7-5.9
	N	12	12	10	---	---	---	1	12	12	4	12	1	12	12	---	11
A12	Ave	5.95	2.6	1.6	---	---	---	---	16.4	13.3	.2	.5	9.0	42.8	66.7	---	1.3
	S D	.4	.8	.4	---	---	---	---	9.0	5.9	.2	.1	/	9.5	11.8	---	.6
	Rng	5.4-6.6	1.6-3.4	1.0-2.0	---	---	---	---	9-34	8-21	.1-.5	.3-.7	/	27-53	52-85	---	.6-2.3
	N	6	6	4	---	---	---	---	6	6	4	6	1	6	6	---	5
A13	Ave	6.1	1.9	1.2	---	---	---	---	14.6	11.5	.1	.6	---	41.2	63.7	---	1.8
	S D	.6	.8	.5	---	---	---	---	3.6	6.9	---	.3	---	7.3	12.8	---	1.3
	Rng	5.5-6.9	1.3-3.5	.7-2.0	---	---	---	---	8-20	3-23	.1	.3-1.3	---	33-52	38-76	---	.6-4.5
	N	7	7	6	---	---	---	---	7	7	2	7	---	7	7	---	7
A14	Ave	5.4	1.6	.925	---	---	---	---	11.4	6.75	.2	.65	---	34.4	55.1	---	1.7
	S D	.6	1.1	.7	---	---	---	---	.6	1.2	/	.35	---	1.1	2.1	---	.4
	Rng	5.0-5.8	.8-2.4	.5-1.4	---	---	---	---	11-11.8	5.9-7.6	/	.4-.9	---	33-35	34-57	---	1.4-2.0
	N	2	2	2	---	---	---	---	2	2	1	2	---	2	2	---	2
AC1	Ave	6.9	1.25	.6	---	---	---	3.0	18.6	11.3	.3	.5	5.4	42.4	66.2	---	1.75
	S D	.4	.5	.1	---	---	---	/	9.7	5.7	.4	.1	/	6.5	16.3	---	.6
	Rng	6.5-7.4	.7-2.2	.4-.7	---	---	---	/	10-35	5-20	.1-.7	.3-.6	/	35-44	45-91	---	1.2-2.4
	N	5	5	4	---	---	---	1	5	5	3	5	1	5	5	---	4
AC2	Ave	7.65	.955	.4	---	---	---	2.0	27.4	16.2	.55	.45	.25	47.9	83.6	---	1.6
	S D	.2	.4	/	---	---	---	/	13.9	5.3	.6	.21	/	6.9	17.3	---	.3
	Rng	7.5-7.8	.7-1.2	/	---	---	---	/	17-37	12-20	.1-1.0	.3-.6	/	43-53	71-96	---	1.4-1.8
	N	2	2	1	---	---	---	1	2	2	2	2	1	2	2	---	2
Bb	Ave	7.5	.3	.2	---	---	---	---	18.0	11.6	.1	.5	---	37.6	80.0	---	1.6
	S D	/	/	/	---	---	---	---	/	/	/	/	---	/	/	---	/
	Rng	/	/	/	---	---	---	---	/	/	/	/	---	/	/	---	/
	N	1	1	1	---	---	---	---	1	1	1	1	---	1	1	---	1
C1	Ave	6.7	.75	.5	---	---	---	---	16.4	10.3	.15	.6	---	45.4	60.1	---	1.9
	S D	.9	.35	.2	---	---	---	---	4.8	6.3	.06	.2	---	9.7	14.7	---	.5
	Rng	5.0-7.7	.4-1.4	.2-.8	---	---	---	---	11-24	5-25	.1-.2	.4-.9	---	34-60	41-85	---	.7-2.4
	N	8	8	7	---	---	---	---	8	8	4	8	---	8	8	---	8
C2	Ave	7.2	.5	.3	---	---	---	2.0	21.25	13.5	.4	.5	1.4	43.1	77.7	---	1.5
	S D	.7	.15	.1	---	---	---	/	8.7	4.4	.6	.15	/	3.5	13.2	---	.15
	Rng	6.3-8.0	.4-.7	.2-.4	---	---	---	/	17-33	10-20	.1-1.1	.3-.6	/	40-48	70-98	---	1.4-1.7
	N	4	4	3	---	---	---	1	4	4	3	4	1	4	4	---	3

SOIL SERIES: Bellpine

TAXONOMIC NAME: Xeric Haplohumult

Horizon	Stat.	Horizon Thickness (cm)	Sand	Silt %	Clay	.10 Atm.	.33 Atm. % H ₂ O	15 Atm.	Bulk Density (g/cc)				
A1	Ave	13.2	14.3	43.8	41.9	---	---	---	---				
	S D	3.2	4.2	7.4	4.0	---	---	---	---				
	Rng	3-18	8-21	35-55	36-47	---	---	---	---				
	N	17	6	6	6	---	---	---	---				
A3	Ave	16.7	11.0	50.1	38.9	---	---	---	---				
	S D	1.2	3.3	3.89	.63	---	---	---	---				
	Rng	16-18	8-13	47-53	38-40	---	---	---	---				
	N	3	2	2	2	---	---	---	---				
B1	Ave	16	---	---	---	---	---	---	---				
	S D	7.6	---	---	---	---	---	---	---				
	Rng	8-26	---	---	---	---	---	---	---				
	N	6	---	---	---	---	---	---	---				
B21t	Ave	18.5	6.4	44.0	49.7	---	---	---	---				
	S D	2.1	.28	2.8	3.0	---	---	---	---				
	Rng	17-20	6.2-6.6	42-46	47-52	---	---	---	---				
	N	2	2	2	2	---	---	---	---				
B22t	Ave	19.0	12.5	39.2	48.3	---	---	---	---				
	S D	4.0	4.0	2.5	3.7	---	---	---	---				
	Rng	13-22	5-17	35-45	43-53	---	---	---	---				
	N	6	6	6	6	---	---	---	---				
B23t	Ave	21.3	14.8	33.9	51.3	---	---	---	---				
	S D	3.4	2.1	2.3	3.7	---	---	---	---				
	Rng	18-26	12-18	30-36	46-56	---	---	---	---				
	N	4	4	4	4	---	---	---	---				
IIB2t	Ave	22.1	---	---	---	---	---	---	---				
	S D	5.0	---	---	---	---	---	---	---				
	Rng	18-30	---	---	---	---	---	---	---				
	N	7	---	---	---	---	---	---	---				
IIB3t	Ave	19.4	---	---	---	---	---	---	---				
	S D	6.4	---	---	---	---	---	---	---				
	Rng	13-25	---	---	---	---	---	---	---				
	N	3	---	---	---	---	---	---	---				
IIC	Ave	38	15.3	42.5	42.3	---	---	---	---				
	S D	20.7	9.1	5.6	8.5	---	---	---	---				
	Rng	25-65	8-29	36-50	32-56	---	---	---	---				
	N	11	6	6	6	---	---	---	---				

SOIL SERIES: Bellpine

TAXONOMIC NAME: Xeric Haplohumult

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
				%			%	(ppm)			Meq/100g						
A1	Ave	5.4	7.05	4.3	.25	18.1	8.4	---	10.3	5.1	.12	1.26	18.0	27.7	38	46.6	1.9
	S D	.32	2.7	1.6	.02	2.7	2.5	---	8.1	2.9	.23	1.19	2.6	4.9	15	19	.77
	Rng	4.8-5.7	3-15	2-8.5	.22-.27	15-22	5-11	---	1.4-32	1.3-9.2	0-1	.2-5.1	14-22	23-36	16-54	15-67	.08-3.6
	N	8	18	16	6	6	6	---	18	18	18	18	10	6	6	12	18
A3	Ave	5.45	5.18	2.99	.18	17.5	6.2	---	9.5	4.9	.34	1.6	19.8	25.4	42.5	51.4	2.0
	S D	.5	.81	.48	.04	2.0	.70	---	5.6	2.3	.44	.96	.14	1.6	23	10	1.0
	Rng	5.1-5.8	4.2-6.1	2.4-3.5	.15-.2	16-19	5.7-6.7	---	3-17	2.8-7.4	.1-1	.9-3	20-21	24-27	26-59	44-59	1.1-3.3
	N	2	4	4	2	2	2	---	4	4	4	4	1	2	2	2	2
B1	Ave	4.8	3.49	1.88	---	---	---	---	9.8	5.9	.03	1.1	16.7	20	13	46.4	1.5
	S D	1.1	.6	---	---	---	---	---	6.9	2.6	.05	.8	3.1	---	---	18.5	.63
	Rng	1.8-4.8	1-2.5	---	---	---	---	---	1-19	1.5-9	0-1	.1-2.4	11-21	---	---	13-65	.7-2.3
	N	1	7	6	---	---	---	---	6	6	6	6	6	1	1	6	6
B21t	Ave	5.5	2.35	1.4	.08	16.95	7.5	---	5.85	3.8	.115	.77	---	27.1	37.8	---	1.5
	S D	.42	.5	.28	.014	.35	.14	---	4.9	.28	.02	.18	---	4.4	13.7	---	1.1
	Rng	5.2-5.8	2-2.7	1.2-1.6	.07-.09	16-17	7.4-7.6	---	2-9	2.6-4	.1-.13	.64-.89	---	24-30	28-48	---	.7-2.3
	N	2	2	2	2	2	2	---	2	2	2	2	---	2	2	---	2
B22t	Ave	5.2	2.1	1.2	.09	13.2	9.8	---	2.5	1.9	.11	.28	---	23.1	19.7	---	1.3
	S D	.21	1.0	.60	.04	2.2	2.0	---	2.0	1.1	.02	.31	---	3.25	10.9	---	.41
	Rng	4.9-5.5	.8-3.3	.4-1.9	.04-.12	11-16	7-12	---	.6-6.1	.6-3.4	.1-.15	.08-.72	---	20-30	7-35	---	.8-1.8
	N	6	6	6	6	6	6	---	6	6	6	6	---	6	6	---	6
B23t	Ave	5.0	1.7	.98	.07	14.0	10.7	---	.98	1.0	.12	.06	---	48	10	---	.9
	S D	.17	.39	.22	.014	1.7	.80	---	1.0	.59	.03	.02	---	4.5	8.1	---	.53
	Rng	4.8-5.2	1.3-2.1	.9-1.2	.06-.09	13-16	10-12	---	.3-2.5	.5-1.8	.09-.15	.04-.08	---	20-28	5-22	---	.3-1.4
	N	4	4	4	4	4	4	---	4	4	4	4	---	4	4	---	4
IIB2t	Ave	---	1.26	.73	---	---	---	---	7.4	6.5	.15	.59	19.6	---	---	38.1	1.0
	S D	---	.64	.37	---	---	---	---	6.9	3.9	.34	.40	7.0	---	---	16.9	.4
	Rng	---	.4-2.3	.2-1.3	---	---	---	---	1-23	2-13	0-1	.101.4	13-33	---	---	20-71	.6-1.8
	N	---	8	8	---	---	---	---	8	8	8	8	8	---	---	8	8
IIB3t	Ave	---	.7	.41	---	---	---	---	12.3	11.25	.40	.53	25.5	---	---	48.4	1.0
	S D	---	.28	.17	---	---	---	---	9.0	4.3	.42	.096	10.6	---	---	20.4	.4
	Rng	---	.5-1.1	.29-.64	---	---	---	---	6-16	7-16	.1-1	.4-.6	16-39	---	---	27-71	.8-1.6
	N	---	4	4	---	---	---	---	4	4	4	4	4	---	---	4	4
IIC	Ave	5.2	.57	.34	.045	12.9	9.5	---	5.1	5.6	.47	.28	20.9	25.3	12.4	44.5	.9
	S D	.3	.47	.28	.02	6.8	2.8	---	7.9	7.0	.44	.21	11.5	6.7	8.9	24	.5
	Rng	4.8-5.6	0-1.7	0-1	.02-.07	3-24	5-13	---	.3-28	.5-24	.09-1	.04-.57	11-42	17-36	4-26	23-79	.4-1.3
	N	7	12	6	6	6	---	12	12	12	12	2	6	6	6	6	12

SOIL SERIES: Blachly

TAXONOMIC NAME: Umbric Dystrachrept

Horizon	Stat.	Horizon Thickness (cm)	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density (g/cc)			
				%			% H ₂ O					
A1	Ave	12.8	20.8	40.4	39.0	57.3	46.2	27.6	.65			
	S D	7.2	8.8	10.4	14.1	8.2	5.6	6.3	.07			
	Rng	6-25	11-32	30-57	24-50	46-66	40-50	19-35	.6-.7			
	N	5	5	5	5	4	3	4	2			
A3	Ave	14.7	17.3	38.5	44.2	42.8	31.6	24.8	---			
	S D	8.5	7.5	8.1	12.5	15.1	3.3	7.1	---			
	Rng	6-25	10-28	32-49	31-58	32-60	29-34	18-32	---			
	N	4	4	4	4	3	2	3	---			
B1	Ave	20.7	13.4	27.7	56.3	57.0	52.6	29.9	.9			
	S D	3.8	2.2	1.9	4.4	2.3			.09			
	Rng	18-25	10-16	26-30	50-60	55-59	/	/	.8-1.0			
	N	3	4	4	4	2	1	1	2			
B21	Ave	24.2	15.1	32.1	53.0	36.3	33.1	22.5	1.0			
	S D	8.1	5.5	8.6	11.6	6.6	5.5	3.8	/			
	Rng	17-33	10-26	22-45	39-65	30-43	27-38	18-25	/			
	N	5	5	5	5	3	3	3	1			
B22	Ave	26.4	16.0	30.5	53.5	33.7	30.9	21.2	---			
	S D	5.9	3.7	7.3	7.4	5.9	5.6	4.2	---			
	Rng	18-33	11-21	23-42	46-63	29-38	27-35	18-24	---			
	N	5	5	5	5	2	2	2	---			
B23	Ave	37.5	18.25	24.1	57.7	37.6	---	25.0	1.2			
	S D	3.6	3.0	4.9	7.6	/	---	/	/			
	Rng	12-63	16-20	20-28	52-63	/	---	/	/			
	N	2	2	2	2	1	---	1	1			
B31	Ave	29.2	19.6	31.3	48.1	38.2	32.5	23.7	---			
	S D	12.1	11.2	6.3	12.8	1.3	4.7	2.7	---			
	Rng	14-30	10-39	22-39	29-62	37-39	29-36	21-26	---			
	N	4	5	5	5	2	2	2	---			
B32	Ave	30.0	14.3	34.8	51.3	37.8	33.2	23.2	---			
	S D	10.3	5.4	10.5	5.6	3.4	4.6	3.7	---			
	Rng	25-43	8-18	27-47	45-56	35-40	30-36	21-26	---			
	N	3	3	3	3	2	2	2	---			
B33	Ave	25.7	20.3	33.0	53.4	42.4	36.7	23.9	---			
	S D	4.0	2.7	8.8	17.1	7.4	8.3	2.1	---			
	Rng	22-30	18-23	24-42	35-68	37-48	31-43	22-25	---			
	N	3	3	3	3	2	2	2	---			

SOIL SERIES: Blachly

TAXONOMIC NAME: Umbric Dystrochrept

Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		%			% H ₂ O		(g/cc)			
C	Ave	33.7	24.2	36.7	39.1	42.5	36.5	22.1	---			
	S D	20.7	6.2	11.6	14.5	12.1	11.3	3.4	---			
	Rng	15-56	15-28	21-47	26-52	34-51	28-45	20-25	---			
	N	3	4	4	4	2	2	2	---			
	Ave											
	S D											
	Rng											
	N											
	Ave											
	S D											
	Rng											
	N											
	Ave											
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	Rng											
	N											

SOIL SERIES: Blachly

TAXONOMIC NAME: Umbric Dystrachrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
				z			z	(ppm)									
A1	Ave	5.3	---	8.4	.4	26.2	5.7	---	5.8	2.7	.3	1.1	43.7	39.0	24.8	---	2.1
	S D	.3	---	2.2	.2	12.2	2.3	---	3.2	1.2	.1	.5	10.9	4.9	12.9	---	.65
	Rng	4.7-5.6	---	6.4-12	.2-.7	14-45	4-8	---	2-9	1-4	.2-.5	.6-1.7	32-53	33-44	11-40	---	1.3-3.1
	N	5	---	5	5	5	2	---	5	5	5	5	3	4	5	---	5
A3	Ave	5.1	---	4.25	.2	20.1	7.6	---	2.3	1.4	.2	.7	30.7	28.7	14.9	---	1.5
	S D	.4	---	2.9	.08	10.1	3.7	---	2.3	.9	.1	.3	4.7	9.1	8.3	---	.6
	Rng	4.7-5.5	---	1.1-6.9	.09-.3	11-33	4-10	---	.7-5.6	.65-2.7	.1-.3	.2-.9	27-36	23-39	5-24	---	.7-2.1
	N	4	---	4	4	4	2	---	4	4	4	4	3	3	4	---	4
B1	Ave	5.65	---	2.1	.2	19.2	---	---	1.5	.9	.3	.4	21.4	20.4	16.0	---	1.8
	S D	.3	---	1.0	.02	2.1	---	---	1.1	.6	.08	.35	6.5	6.5	9.0	---	.7
	Rng	5.4-6.0	---	1-3	.1-.3	16-22	---	---	.4-3.1	.4-1.8	.15-.3	.1-.9	16-28	16-28	5-27	---	.9-2.6
	N	4	---	4	4	4	---	---	4	4	4	4	1	3	4	---	4
B21	Ave	5.4	---	1.0	.08	12.2	7.7	---	1.8	.9	.2	.5	21.4	19.8	16.8	---	3.4
	S D	.5	---	.5	.04	1.8	3.5	---	1.8	.6	.2	.4	4.5	2.6	12.6	---	3.7
	Rng	4.7-6.1	---	.6-1.6	.04-.1	10-15	5.2-10	---	.4-5.0	.2-1.8	.07-.6	.07-1.0	18-27	16-22	4-38	---	1.3-10.0
	N	5	---	4	4	4	2	---	5	5	5	5	3	4	5	---	5
B22	Ave	5.3	---	.6	.06	10.3	8.15	---	1.8	1.1	.1	.3	20.8	17.8	18.4	---	1.6
	S D	5.2	---	.3	.03	2.0	3.7	---	1.7	.8	.05	.25	6.3	4.1	14.1	---	.5
	Rng	4.6-6.0	---	.3-.9	.02-.1	8-12	5-11	---	.6-4.8	.4-2.5	.1-.2	.1-.7	15-28	12-22	7-43	---	1.0-3.3
	N	5	---	4	4	4	2	---	5	5	5	5	3	4	5	---	5
B23	Ave	5.65	---	.25	.03	9.65	---	---	.85	.3	.1	.1	6.0	10.9	16.0	---	2.5
	S D	.07	---	.07	---	2.3	---	---	.6	.1	---	.08	3.0	3.0	3.0	---	1.2
	Rng	5.6-5.7	---	.2-.3	.03	8-11	---	---	.4-1.3	.25-.40	.1	.08-.2	14-18	14-18	6-34	---	1.6-3.3
	N	2	---	2	2	2	---	---	2	2	2	2	1	1	2	---	2
B31	Ave	5.2	---	.295	.03	7.8	8.9	---	1.6	1.1	.2	.2	21.0	19.7	15.4	---	1.5
	S D	.5	---	.15	.02	1.6	3.8	---	1.2	.75	.08	.2	3.0	1.7	11.4	---	.5
	Rng	4.6-5.7	---	.3-.5	.02-.07	6-10	6-12	---	.6-3.3	.4-2.3	.1-.3	.1-.5	19-25	18-22	6-34	---	.9-2.2
	N	5	---	3	4	4	2	---	5	5	5	5	5	4	5	---	4
B32	Ave	4.8	---	.195	.03	6.9	9.1	---	1.7	1.4	.2	.2	21.25	19.7	17.6	---	1.2
	S D	.3	---	.09	.03	2.5	3.4	---	1.0	.6	.15	.1	1.1	2.5	6.0	---	.35
	Rng	4.6-5.2	---	.1-.3	.01-.05	5-9	6-12	---	.7-2.6	.7-1.8	.1-.4	.1-.3	20-22	17-22	10-22	---	1.0-1.6
	N	3	---	2	2	2	2	---	3	3	3	3	2	3	3	---	3
B33	Ave	4.9	---	.1	.02	5.7	10.1	---	1.4	1.2	.2	.2	21.7	18.2	16.2	---	1.2
	S D	.6	---	.06	.02	1.4	4.8	---	.6	.35	.1	.06	2.2	1.7	3.2	---	.2
	Rng	4.4-5.5	---	.08-.16	.01-.04	4.7-6.7	7-14	---	.8-1.9	.8-1.4	.1-.3	.1-.3	20-23	16-20	13-19	---	1.0-1.4
	N	3	---	2	2	2	2	---	3	3	3	3	2	3	3	---	3

SOIL SERIES: Blachly

TAXONOMIC NAME: Umbric Dystrochrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	X Base Sat. (NH ₄ OAc)	X Base Sat. (I Cat)	Ca/Mg
				%			%	(ppm)			Meq/100g						
C	Ave	4.8	---	.095	.02	6.3	9.4	---	1.0	1.4	.2	.17	19.0	18.3	16.4	---	.8
	S D	.5	---	.02	.009	2.4	5.8	---	.7	.6	.15	.06	8.0	1.3	4.6	---	.1
	Rng	4.4-5.4	---	.08-.11	.01-.03	4.6-8.0	5-14	---	.2-1.5	.8-1.9	.1-.4	.1-.2	13-25	17-20	11-20	---	.7-.9
	N	3	---	2	2	2	2	---	3	3	3	3	2	3	3	---	3
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Boardtree

TAXONOMIC NAME: Typic Vitrandept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
				%			%	(ppm)									
A1	Ave	6.1	---	1.4	0.08	17.5	---	---	9.6	3.2	0.19	2.86	9.8	20.5	77.3	61.8	3.00
	S D	/	---	/	/	/	---	---	/	/	/	/	/	/	/	/	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	1	1	1	1	1
AC	Ave	6.1	---	1.2	0.06	20.0	---	---	9.9	3.7	0.21	2.25	10.5	19.1	84.1	60.5	2.68
	S D	/	---	/	/	/	---	---	/	/	/	/	/	/	/	/	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	1	1	1	1	1
C1	Ave	6.2	---	0.8	0.06	13.3	---	---	9.3	4.6	0.21	1.79	7.1	20.7	76.8	69.1	2.02
	S D	/	---	/	/	/	---	---	/	/	/	/	/	/	/	/	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	1	1	1	1	1
C2	Ave	6.4	---	0.6	0.04	15.0	---	---	9.0	5.3	0.37	1.68	5.8	18.6	87.9	41.4	1.70
	S D	/	---	/	/	/	---	---	/	/	/	/	/	/	/	/	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	1	1	1	1	1
B2tb	Ave	6.7	---	0.3	0.04	7.5	---	---	16.1	10.9	0.46	1.71	4.8	29.5	98.9	85.9	1.48
	S D	/	---	/	/	/	---	---	/	/	/	/	/	/	/	/	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	1	1	1	1	1
	Ave																
	S D																
	Rng N																
	Ave																
	S D																
	Rng N																
	Ave																
	S D																
	Rng N																

SOIL SERIES: Bohannon

TAXONOMIC NAME: Typic Haplumbrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
							%	(ppm)									
A1	Ave	5.5	11.9	6.98	.31	24.7	---	---	4.0	2.75	.27	.80	35.75	44.1	21.0	28.5	1.8
	S D	.6	4.0	2.3	.16	7.3	---	---	1.9	2.3	.14	.13	11.1	/	9.9	9.1	.75
	Rng	4.8-5.9	7-16	4.6-9.2	.14-.44	20-33	---	---	2-6	1-5.4	.19-.43	.6-.9	28-44	/	10-28	22-35	1-2.5
	N	3	3	3	3	3	---	---	3	3	3	3	3	1	3	2	3
A3	Ave	5.7	7.4	4.3	.20	21.5	---	---	2.2	1.7	.25	.55	30.6	29.6	16.5	18.1	1.3
	S D	.35	2.1	1.26	.06	2.2	---	---	1.95	1.3	.14	.26	10.5	/	13.3	7.4	.79
	Rng	5.3-6.0	4-9	2.9-5.3	.13-.25	19-23	---	---	.3-4.2	.3-2.8	.12-.39	.25-.72	23-38	/	4-30	13-23	.7-2.2
	N	3	3	3	3	3	---	---	3	3	3	3	2	1	3	2	3
B2	Ave	5.6	4.54	2.65	.13	20.1	---	---	1.2	1.1	.14	.35	24.75	29.1	12.2	13.7	1.4
	S D	.35	3.0	1.73	.06	4.5	---	---	1.2	.7	.03	.15	6.9	/	10.7	7.8	.35
	Rng	5.4-6.0	2.7-8.0	1.6-4.7	.08-.19	15-25	---	---	.3-2.5	.3-1.6	.1-.17	.2-.5	20-29.6	/	9-24	8-19	1.0-1.6
	N	3	3	3	3	3	---	---	3	3	3	3	2	1	3	2	3
B3	Ave	5.65	2.6	1.5	.07	20.8	---	---	1.1	1.8	.195	.3	17.4	20.3	16.7	22.1	1.1
	S D	.5	1.2	.7	.028	1.4	---	---	1.3	1.4	.09	.24	/	/	17.9	/	.28
	Rng	5.3-6.0	1.7-3.4	1-2	.05-.09	20-22	---	---	.2-2.0	.15-2.2	.13-.26	.13-.47	/	/	3-28	/	.9-1.3
	N	2	2	2	2	2	---	---	2	2	2	2	1	1	2	1	2
C	Ave	5.6	2.36	1.1	.05	21.9	---	---	.65	1.2	.23	.20	20.0	14.4	12.0	15.8	1.25
	S D	.6	/	.33	.01	.63	---	---	.5	1.5	.08	.11	/	/	9.5	/	1.1
	Rng	5.2-6.0	/	.9-1.4	.04-.06	21-22	---	---	.3-1	.15-2.2	.17-.28	.13-.28	/	/	5-19	/	.5-2.0
	N	2	1	2	2	2	---	---	2	2	2	2	1	1	2	1	2
Dr	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

SOIL SERIES: Bornstedt

TAXONOMIC NAME: Typic Fragiochrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
								(ppm)									
Ap	Ave	5.5	---	2.3	.2	14.0	2.1	---	4.65	1.6	.1	.6	15.0	16.2	43.0	31.5	3.15
	S D	.3	---	.4	.03	---	---	---	1.9	1.0	---	.4	3.1	.35	21.2	14.8	.8
	Rng	5.3-5.7	---	2.0-2.6	.1-.3	14.0	/	---	3-7	.9-2.3	.1	.3-.9	13-17	15-16	28-58	21-42	2.6-3.7
	N	2	---	2	2	2	1	---	2	2	2	2	2	2	2	2	2
B21	Ave	5.6	---	.4	.05	8.0	2.9	---	3.1	1.05	.1	.3	8.4	10.75	42.0	---	3.15
	S D	.2	---	.1	.009	1.4	/	---	---	.35	---	---	.85	.2	4.2	---	1.1
	Rng	5.5-5.7	---	.3-.5	.04-.05	7-9	/	---	3.1	.8-1.3	.1	.3	7.8-9.0	10-11	39-45	---	2.4-3.9
	N	2	---	2	2	2	1	---	2	2	2	2	2	2	2	---	2
B22	Ave	5.4	---	.4	.04	11.5	2.7	---	3.2	1.4	.1	.25	7.9	10.8	45.0	---	2.3
	S D	---	---	.4	.001	12.0	/	---	---	---	---	.07	.3	.1	1.4	---	---
	Rng	5.4	---	.1-.7	.03-.04	3-20	/	---	3.2	1.4	.1	.2-.3	7.7-8.1	10-11	44-46	---	2.3
	N	2	---	2	2	2	1	---	2	2	2	2	2	2	2	---	2
B3	Ave	5.4	---	.08	---	---	3.6	---	3.15	1.45	.1	.15	8.8	11.3	42.0	---	2.2
	S D	.1	---	.06	---	---	/	---	.5	.07	---	.07	.1	.4	4.2	---	.2
	Rng	5.3-5.5	---	.04-.12	---	---	/	---	2.8-3.5	1.4-1.5	.1	.1-.2	8.7-8.9	11-12	39-45	---	2.0-2.3
	N	2	---	2	---	---	1	---	2	2	2	2	2	2	2	---	2
Bx1	Ave	5.35	---	.11	---	---	3.8	---	2.6	1.9	.1	.15	11.3	13.75	34.0	---	1.4
	S D	.2	---	.04	---	---	/	---	.4	.6	---	.07	.85	1.5	4.2	---	.1
	Rng	5.2-5.5	---	.08-.13	---	---	/	---	2.3-2.9	1.5-2.3	.1	.1-.2	10-12	12-15	31-37	---	1.3-1.5
	N	2	---	2	---	---	1	---	2	2	2	2	2	2	2	---	2
Bx2	Ave	5.05	---	.04	---	---	4.6	---	2.4	1.95	.1	.1	11.7	13.6	33.0	---	1.25
	S D	.07	---	.03	---	---	/	---	.1	.07	---	---	.6	.7	2.8	---	.07
	Rng	5.0-5.1	---	.02-.06	---	---	/	---	2.3-2.5	1.9-2.0	.1	.1	11-12	13-14	31-35	---	1.2-1.3
	N	2	---	2	---	---	1	---	2	2	2	2	2	2	2	---	2
Ave																	
S D																	
Rng																	
N																	
Ave																	
S D																	
Rng																	
N																	

SOIL SERIES: Brallier

TAXONOMIC NAME: Typic Medihermist

[illegible]

SOIL SERIES: Brallier

TAXONOMIC NAME: Typic Medihemist

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
OE1	Ave	---	8.3	---	---	---	---	6	2.7	8.9	33.0	1.18	35.6	54.8	83.5	56.2	.30
	S D	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/	/
	Rng	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/	/
	N	---	1	---	---	---	---	1	1	1	1	1	1	1	1	1	1
OA	Ave	---	0.8	---	---	---	---	3	1.6	8.9	19.0	0.95	47.2	56.9	53.5	39.2	.20
	S D	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/	/
	Rng	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/	/
	N	---	1	---	---	---	---	1	1	1	1	1	1	1	1	1	1
OE	Ave	---	5.7	---	---	---	---	6	1.2	6.3	15.8	0.74	49.6	45.3	53.1	32.7	.20
	S D	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/	/
	Rng	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/	/
	N	---	1	---	---	---	---	1	1	1	1	1	1	1	1	1	1
IIC	Ave	---	1.8	---	---	---	---	125	3.2	7.6	11.0	1.35	8.7	33.2	61.7	72.7	.40
	S D	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/	/
	Rng	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/	/
	N	---	1	---	---	---	---	1	1	1	1	1	1	1	1	1	1
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

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[illegible]

SOIL SERIES: Brand

TAXONOMIC NAME: Aeric Haplaquept

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)		%			%	(ppm)			Meq/100g				(NH ₄ OAc)	(E Cat)	
1	Ave	4.7	4.73	---	.20	---	---	2	2.13	7.40	.213	.312	---	13.8	72.9	---	.29
	S D	/	/	---	/	---	---	/	/	/	/	/	---	/	/	---	/
	Rng	/	/	---	/	---	---	/	/	/	/	/	---	/	/	---	/
	N	1	1	---	1	---	---	1	1	1	1	1	---	1	1	---	1
2	Ave	5.0	2.61	---	.14	---	---	2	2.38	5.80	.516	.333	---	16.7	54.1	---	.41
	S D	/	/	---	/	---	---	/	/	/	/	/	---	/	/	---	/
	Rng	/	/	---	/	---	---	/	/	/	/	/	---	/	/	---	/
	N	1	1	---	1	---	---	1	1	1	1	1	---	1	1	---	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Brenner

TAXONOMIC NAME: Fluvaqueptic Humaquept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
				Σ			Σ	(ppm)			Meq/100g						
A11	Ave	4.7	4.71	---	---	---	---	11	0.23	1.6	0.35	0.33	27.46	---	---	8.4	.14
	S D	/	/	---	---	---	---	/	/	/	/	/	/	---	---	/	/
	Rng	/	/	---	---	---	---	/	/	/	/	/	/	---	---	/	/
	N	1	1	---	---	---	---	1	1	1	1	1	1	---	---	1	1
A12	Ave	5.1	9.52	---	---	---	---	10	1.8	1.5	0.33	0.27	21.66	---	---	15.3	1.2
	S D	/	/	---	---	---	---	/	/	/	/	/	/	---	---	/	/
	Rng	/	/	---	---	---	---	/	/	/	/	/	/	---	---	/	/
	N	1	1	---	---	---	---	1	1	1	1	1	1	---	---	1	1
A3	Ave	5.2	2.02	---	---	---	---	6	2.3	2.4	0.42	0.26	28.04	---	---	16.1	.99
	S D	/	/	---	---	---	---	/	/	/	/	/	/	---	---	/	/
	Rng	/	/	---	---	---	---	/	/	/	/	/	/	---	---	/	/
	N	1	1	---	---	---	---	1	1	1	1	1	1	---	---	1	1
B21g	Ave	5.3	1.15	---	---	---	---	6	2.7	3.1	0.35	0.16	17.29	---	---	26.7	.87
	S D	/	/	---	---	---	---	/	/	/	/	/	/	---	---	/	/
	Rng	/	/	---	---	---	---	/	/	/	/	/	/	---	---	/	/
	N	1	1	---	---	---	---	1	1	1	1	1	1	---	---	1	1
B22g	Ave	5.3	0.87	---	---	---	---	5	4.0	4.2	0.37	0.16	14.57	---	---	37.5	.95
	S D	/	/	---	---	---	---	/	/	/	/	/	/	---	---	/	/
	Rng	/	/	---	---	---	---	/	/	/	/	/	/	---	---	/	/
	N	1	1	---	---	---	---	1	1	1	1	1	1	---	---	1	1
B3g	Ave	5.3	0.82	---	---	---	---	4	5.1	5.3	0.39	0.16	13.69	---	---	44.4	.96
	S D	/	/	---	---	---	---	/	/	/	/	/	/	---	---	/	/
	Rng	/	/	---	---	---	---	/	/	/	/	/	/	---	---	/	/
	N	1	1	---	---	---	---	1	1	1	1	1	1	---	---	1	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Briedwell

TAXONOMIC NAME: Utlic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
A1 & Ap	Ave	5.7	---	4.15	.23	17.5	2.4	---	8.6	1.55	.1	1.1	21.9	24.7	44.5	33.5	6.3
	S D	.14	---	1.7	.07	2.1	/	---	3.3	1.1	---	.14	3.3	5.2	7.8	4.9	2.3
	Rng	5.6-5.8	---	2.9-5.3	.18-.28	16-19	/	---	6-11	.8-2.3	.1	1-1.2	19-24	21-28	39-50	30-37	4.7-7.9
	N	2	---	2	2	2	1	---	2	2	2	2	2	2	2	2	2
B21	Ave	6.15	---	1.58	.11	14	2.1	---	4.7	1.1	.1	1.15	14.7	16.8	41	31.5	4.2
	S D	.07	---	.28	.01	1.4	/	---	2.1	.14	---	.49	1.13	1.41	12.7	10.6	1.41
	Rng	6.1-6.2	---	1.3-1.8	.10-.12	13-15	/	---	3.2-6.2	1-1.2	.1	.8-1.5	14-16	16-18	32.50	24-39	3.2-5.2
	N	2	---	2	2	2	1	---	2	2	2	2	2	2	2	2	2
B22	Ave	5.95	---	.50	.065	7.5	2.2	---	3.25	1.2	.1	1.15	11.5	13.45	32.0	32.0	2.7
	S D	.21	---	.099	.003	.71	/	---	.78	.14	---	.78	.28	.5	7.1	7.1	.28
	Rng	5.8-6.1	---	.4-.6	.06-.07	7-8	/	---	2.7-3.8	1.1-1.3	.1	.6-1.7	11-12	13-14	27-37	27.37	2.5-2.9
	N	2	---	2	2	2	1	---	2	2	2	2	2	2	2	2	2
C1	Ave	5.95	---	.31	.043	12	1.8	---	4.7	1.6	0.2	.9	10.3	15.6	46.5	41.0	3.1
	S D	.07	---	.28	/	/	/	---	---	.35	---	.71	1.4	.28	6.4	7.1	.70
	Rng	5.9-6.0	---	.11-.5	/	/	/	---	4.7	1.3-1.8	.2	.4-1.4	9-12	15-16	42-51	36-46	2.6-3.6
	N	2	---	2	1	1	1	---	2	2	2	2	2	2	2	2	2
C2	Ave	6.0	---	.37	---	---	1.3	---	7.3	2.5	.3	.7	7.5	20.5	51.5	58.0	2.2
	S D	.14	---	/	---	---	/	---	2.5	1.1	---	.14	2.5	.91	16.3	17.0	1.4
	Rng	5.9-6.1	---	/	---	---	/	---	5-9	1.7-3.3	.3	.6-.8	5.7-9.2	20-21	40-63	46-70	1.2-3.2
	N	2	---	1	---	---	1	---	2	2	2	2	2	2	2	2	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Brightwood

TAXONOMIC NAME: Typic Haplumbrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
A1	Ave	5.6	6.8	3.9	.129	32.2	1.7	19.6	3.7	2.1	.13	.33	---	21.4	46	---	3.3
	S D	.15	2.6	1.5	.018	16.9	.2	23.7	3.0	.4	.06	.06	---	6.2	16	---	.55
	Rng	5.5-5.8	4-10	2.6-5.6	.11-.15	18-50	1.5-1.9	5-47	6-7	1.6-2.4	.1-.2	.3-.4	---	15-28	36-64	---	3-4
	N	3	3	3	3	3	3	3	3	3	3	3	---	3	3	---	3
B21r	Ave	5.9	6.4	3.7	.117	30.7	1.8	13.0	4.1	1.18	.15	.15	---	18.8	31.3	---	3.35
	S D	.17	3.23	1.88	.047	5.9	.14	19.7	2.13	.74	.06	.06	---	2.29	19.3	---	.78
	Rng	5.7-6.1	2.6-11	1.5-6.1	.07-.18	23-36	1.6-1.9	2.0-43	2.0-6.2	.5-2.0	.1-.2	.1-.2	---	17-21	13-49	---	2.8-3.9
	N	4	4	4	4	4	4	4	4	4	4	4	---	4	4	---	2
C	Ave	5.9	4.1	2.4	.078	30.1	1.88	6.7	3.0	.98	.175	.1	---	18.7	24.5	---	2.9
	S D	.096	1.6	.92	.025	2.43	.25	7.1	2.0	.74	.05	---	---	3.4	17.5	---	1.1
	Rng	5.8-6.0	2-6	1-4	.04-.11	27-33	1.6-2.2	1-17	1-6	.2-1.7	.1-.2	.1	---	15-23	7-42	---	2-4
	N	4	4	4	4	4	4	4	4	4	4	4	---	4	4	---	4
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
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	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Bull Run

TAXONOMIC NAME: Umbric Vitrandept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
A1	Ave	5.7	16.4	9.7	.37	24.6	2.55	4.8	5.0	2.6	.2	.6	---	29.7	29.0	---	1.8
	S D	.3	13.8	7.9	.24	3.9	.2	.7	4.0	2.05	.25	.3	---	10.8	21.6	---	1.2
	Rng	5.5-6.0	7-32	4-19	.19-.65	20-29	2.4-2.7	4.3-5.3	.6-8.4	.6-4.7	.04-.5	.4-.9	---	22-42	7-50	---	1.0-3.2
	N	3	3	3	3	3	2	2	3	3	3	3	---	3	3	---	3
A3	Ave	5.5	14.8	9.7	.30	37.6	2.65	3.9	2.4	1.7	.2	.45	---	22.8	22.8	---	1.8
	S D	.3	15.4	8.4	.29	26.6	.07	2.0	2.2	2.0	.2	.05	---	6.4	22.9	---	.8
	Rng	5.2-5.7	8-33	8-22	.12-.64	16-67	2.6-2.7	2.5-5.3	.7-4.8	.5-4.0	.09-.4	.4-.5	---	19-30	9-49	---	1.4-2.7
	N	3	3	3	3	3	2	2	3	3	3	3	---	3	3	---	3
B2	Ave	5.7	5.15	3.0	.14	17.65	3.3	2.0	.9	.4	.2	.3	---	17.0	12.3	---	1.6
	S D	.06	3.9	2.3	.075	4.1	1.0	.7	.8	.2	.1	.1	---	5.5	8.5	---	1.3
	Rng	5.7-5.8	2.4-7.9	1.4-4.6	.09-.23	14-21	2.6-4.0	1.5-2.5	.3-1.8	.2-.6	.09-.3	.1-.4	---	12-23	5-22	---	1.4-3.0
	N	3	2	2	3	3	3	2	3	3	3	3	---	3	3	---	3
B3	Ave	5.8	2.4	1.4	.082	16.4	3.5	2.0	.4	.3	.2	.3	---	17.4	7.1	---	1.6
	S D	.2	1.4	.8	.033	4.3	.9	.25	.1	.05	.1	.1	---	3.3	2.3	---	.5
	Rng	5.6-6.0	1.0-4.3	.6-2.5	.06-.14	10-19	2.4-4.0	1.8-2.3	.3-.6	.2-.3	.07-.3	.16-.4	---	15-23	5-10	---	1-2
	N	4	4	4	4	4	3	3	4	4	4	4	---	4	4	---	4
C	Ave	5.8	1.03	.6	.042	12.7	3.6	2.7	.2	.15	.2	.2	---	15.6	4.7	---	1.5
	S D	.06	.55	.3	.018	4.4	1.8	1.0	.2	.07	.1	.1	---	5.3	1.0	---	.7
	Rng	5.7-5.8	.4-1.4	.2-.7	.02-.06	8-17	1.5-5.0	2.0-3.8	.1-.4	.1-.2	.1-.3	.1-.3	---	10-21	4.0-5.8	---	1-2
	N	3	3	3	3	3	3	3	3	2	3	3	---	3	3	---	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES:

Burlington

TAXONOMIC NAME: Entic Ultic Haploxeroll

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)		%			%	(ppm)			Meq/100g				(NH ₄ OAc)	(E Cat)	
Ap1	Ave S D Rng N							NO DATA AVAILABLE									
Ap2	Ave S D Rng N							NO DATA AVAILABLE									
C1	Ave S D Rng N							NO DATA AVAILABLE									
C2	Ave S D Rng N							NO DATA AVAILABLE									
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Calimus

TAXONOMIC NAME: Pachic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺ Meq/100g	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
Ap	Ave	6.85	---	1.22	.111	---	.7	---	32.7	13.4	.3	6.1	2.6	37.2	98	96	2.4
	S D	.5	---	.22	.019	---	/	---	/	/	---	7.1	.21	30	/	/	/
	Rng	6.5-7.2	---	1.0-1.4	.09-.12	---	/	---	/	/	.3	1-11	2.4-2.7	16-59	/	/	/
	N	2	---	2	2	---	1	---	1	.1	2	2	2	2	1	1	1
A12	Ave	6.6	---	.75	.059	---	.8	---	43.1	12.9	.45	5.2	3.5	36.4	100	93	3.3
	S D	/	---	.38	/	---	/	---	/	/	.07	6.4	1.6	29.7	/	/	/
	Rng	/	---	.4-1.0	/	---	/	---	/	/	.4-.5	.6-10	2.4-4.6	15-58	/	/	/
	N	1	---	2	1	---	1	---	1	1	2	2	2	2	1	1	1
B2	Ave	6.6	---	.595	.048	---	.8	---	38.8	14.0	1.3	3.6	2.8	38.7	100	95	2.8
	S D	/	---	.30	/	---	/	---	/	/	1.13	4.2	.21	32.0	/	/	/
	Rng	/	---	.3-.8	/	---	/	---	/	/	.5-2.1	.6-6.5	2.6-2.9	16-62	/	/	/
	N	1	---	2	1	---	1	---	1	1	2	2	2	2	1	1	1
B31	Ave	6.7	---	.445	---	---	.7	---	39.8	18.0	1.25	1.5	2.6	39.5	100	96	2.2
	S D	/	---	.09	---	---	/	---	/	/	.78	1.3	.35	31.7	/	/	/
	Rng	/	---	.38-.51	---	---	/	---	/	/	.7-1.8	.6-2.4	2.3-2.8	17-62	/	/	/
	N	1	---	2	---	---	1	---	1	1	2	2	2	2	1	1	1
B32	Ave	7.3	---	.435	---	---	.7	---	33.0	19.5	1.7	1.55	5.1	41.9	96	95	1.7
	S D	/	---	.16	---	---	/	---	/	/	.57	.07	3.0	23.1	/	/	/
	Rng	/	---	.3-.6	---	---	/	---	/	/	1.3-2.1	1.5-1.6	2.9-7.2	26-58	/	/	/
	N	1	---	2	---	---	1	---	1	1	2	2	2	2	1	1	1
R-C	Ave	7.2	---	.21	---	---	.6	---	29.1	19.8	1.6	.95	1.0	29.7	100+	100+	1.5
	S D	/	---	.14	---	---	/	---	/	/	1.34	.21		18.1	/	/	/
	Rng	/	---	.1-.3	---	---	/	---	/	/	.6-2.5	.8-1.1		16-43	/	/	/
	N	1	---	2	---	---	1	---	1	1	2	2	1	2	1	1	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Camas

TAXONOMIC NAME: Fluventic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
Ap	Ave	5.5	4.8	2.2	.2	11	---	34.6	12.0	2.8	.123	.67	---	26.7	93.0	---	6.3
	S D		.61				---		2.9	2.0	.05	.61	---	17.0		---	4.3
	Rng		4-5.4				---		9-16	.8-5.2	.09-.2	.05-1.3	---	16-52		---	2.6-11.7
	N	1	3	1	1	1	---	1	4	4	4	4	---	4	1	---	4
A12	Ave	5.75	1.95	.7	.1	7.0	---	41.2	11.4	4.7	.135	.39	---	16.6	81.5	---	2.45
	S D	.35					---		4.9	2.0	.05	.13	---	2.8		---	.07
	Rng	5.5-6					---		8-15	3.2-6.2	.1-.2	.3-.5	---	14-19		---	2.4-2.5
	N	2	1	1	1	1	---	1	2	2	2	2	---	2	1	---	2
IIC	Ave	6.0	---	.1	T	---	---	5.0	4.6	1.9	0.1	0.3	---	8.0	86.5	---	2.4
	S D		---				---						---			---	
	Rng		---				---						---			---	
	N	1	---	1	1	---	---	1	1	1	1	1	---	1	1	---	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Carney

TAXONOMIC NAME: Typic Chromoxerert

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (I Cat)	Ca/Mg
A1	Ave S D Rng N	6.8 .37 6.3-7.2 4	3.3 1.1 2.2-4.7 4	2.4 .42 2.1-2.7 2	.139 .018 .12-.15 2	17.7 5.3 14-22 2	--- --- --- ---	22.3 11.0 14-30 2	32.4 10.0 18-41 4	19.0 2.2 17-22 4	.31 .18 .2-.6 4	1.1 .25 .7-1.4 4	5.2 .50 4.8-5.5 2	55.3 3.6 52-61 4	92.2 14.3 71-100 4	91.7 .35 91-92 2	1.7 .56 1.0-2.4 4
A12	Ave S D Rng N	6.83 .13 6.7-7.0 4	1.3 .90 .1-2 4	1.2 --- 1.2 2	.057 .001 .05-.06 2	21.0 .57 20-22 2	--- --- --- ---	12.1 9.8 5-19 2	37.8 3.9 33-43 4	20.4 2.1 17-23 4	.41 .23 .1-.7 4	.67 .27 .4-1 4	4.35 .07 4.3-4.4 2	57.6 2.2 54-59 4	98.3 3 95-100 3	93.2 .64 92-94 2	1.9 .24 1.7-2.1 4
A13	Ave S D Rng N	7.15 .24 7-7.5 4	1.19 .83 .1-1.9 4	1.05 .07 1-1.1 2	.053 --- .053 2	19.8 1.3 18-21 2	--- --- --- ---	9.1 9.8 2-16 2	36.8 4.8 31-42 4	20.3 1.8 17-22 4	.580 .31 .3-.9 4	.64 .29 .4-1.0 4	3.9 1.1 3.1-4.7 2	58.2 7.1 49-67 4	92.4 7.5 85-100 3	93.9 2.0 93-95 2	1.8 .17 1.6-2.0 4
A14	Ave S D Rng N	7.6 .14 7.5-7.7 2	1.6 .14 1.5-1.7 2	.95 .07 .9-1 2	.055 .01 .04-.07 2	17.9 3.6 15-20 2	--- --- --- ---	4.8 2.8 32-37 1	34.5 2.8 18-25 2	21.6 4.2 18-25 2	1.0 .76 .5-1.6 2	.56 .16 .4-.7 2	--- --- --- ---	60.8 4.3 58-64 2	94.6 5.9 90-99 2	--- --- --- ---	1.6 .18 1.5-1.8 2
AC	Ave S D Rng N	7.7 .36 7.2-8.0 2	.74 .22 .5-1 2	.55 .07 .5-.6 2	.028 .005 .02-.03 2	17.6 4.5 14-21 2	--- --- --- ---	11.3 11.0 3-19 2	37.8 4.2 32-43 4	22.8 3.4 18-27 4	1.4 1.5 .4-3.6 4	.64 .31 .4-1.1 4	3.0 .36 2.7-3.2 2	56.8 4.7 52-61 4	100 --- 100 2	95.6 .71 95-96 2	1.70 .21 1.4-1.9 4
C	Ave S D Rng N	8.1 .06 8.1-8.2 3	.74 .16 .6-1 3	.35 .07 .3-.4 2	.235 .04 .02-.03 2	14.9 .78 14-16 2	--- --- --- ---	2.8 15.2 34-61 1	43.3 15.2 18-31 3	25.4 6.2 18-31 3	1.95 1.8 .3-4.0 3	.42 .17 .25-.58 3	3.0 11.8 50-73 1	61.8 11.8 50-73 3	100 --- 100 2	96.8 --- --- 1	1.7 .38 1.3-2.0 3
IIC	Ave S D Rng N	8.15 .07 8.1-8.2 2	.40 .28 .2-.6 2	.2 .14 .1-.3 2	.095 .121 .01-.02 2	13.9 4.0 11-17 2	--- --- --- ---	2.2 7.1 34-35 1	34.5 .71 17-27 2	21.9 7.2 17-27 2	3.02 2.9 .95-5.0 2	.34 .14 .2-.5 2	--- --- --- ---	47.0 11.7 28-55 2	100 --- 100 2	--- --- --- ---	1.7 .55 1.3-2.1 2
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Cazadero

TAXONOMIC NAME: Typic Rhodudult

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
				%			%	(ppm)									
Ap	Ave	5.33	---	2.2	.145	14.7	---	---	3.3	.77	.1	.7	17.9	18.2	26.3	21.7	4.3
	S D	.51	---	.45	.02	.58	---	---	1.8	.42	---	.1	3.6	.82	13.2	11.2	.15
	Rng	4.8-6.0	---	1.6-2.6	.11-.17	14-15	---	---	1-5	.3-1.1	.1	.6-.8	14-22	17-19	12-38	9-32	4.1-4.4
	N	3	---	3	3	3	---	---	3	3	3	3	3	3	3	3	3
B1t	Ave	5.7	---	.79	.064	12.0	---	---	3.4	.8	.1	.60	12.6	15.8	30.5	27.8	4.2
	S D	.28	---	.34	.02	1.4	---	---	.78	---	---	.14	1.6	3.3	2.1	.14	1.0
	Rng	5.5-5.9	---	.5-1.0	.05-.08	11-13	---	---	2.8-3.9	.8	.1	.5-.7	11-14	13-18	29-32	27-28	3.5-4.9
	N	2	---	2	2	2	---	---	2	2	2	2	2	2	2	2	2
B21t	Ave	5.6	---	.315	.047	9	---	---	4.0	1.3	.1	.45	10.1	15.5	37.5	36.8	3.2
	S D	.28	---	.15	/	/	---	---	.57	.14	---	.35	1.4	1.4	3.5	2.9	.78
	Rng	5.4-5.8	---	.2-.5	/	/	---	---	3-5	1-2	.1	.2-.7	9-11	14-17	35-40	34-39	2.6-3.7
	N	2	---	2	1	1	---	---	2	2	2	2	2	2	2	2	2
B22t	Ave	5.4	---	.17	---	---	---	---	3.0	1.5	.1	.25	11.7	16.7	28.5	29.3	2.0
	S D	.07	---	.03	---	---	---	---	.14	---	---	.21	.42	.42	.70	2.3	.14
	Rng	5.3-5.4	---	.15-.19	---	---	---	---	2.9-3.1	1.5	.1	.10.4	11-12	16-17	28-29	27-31	1.9-2.1
	N	2	---	2	---	---	---	---	2	2	2	2	2	2	2	2	2
B23t	Ave	5.25	---	.17	---	---	---	---	2.5	1.5	.1	.2	13.7	16.2	25.5	23.7	1.7
	S D	.07	---	.028	---	---	---	---	.35	.42	---	.14	2.5	2.8	.71	.64	.21
	Rng	5.2-5.3	---	.15-.19	---	---	---	---	2.2-2.7	1.2-1.8	.1	.1-.3	12-16	14-18	25-26	23-24	1.5-1.8
	N	2	---	2	---	---	---	---	2	2	2	2	2	2	2	2	2
B3t	Ave	5.27	---	.093	---	---	---	---	2.0	1.5	.1	.17	14.6	17.7	20.6	20.5	1.33
	S D	.06	---	.029	---	---	---	---	.10	---	---	.06	.72	1.2	2.08	.93	.06
	Rng	5.2-5.3	---	.06-.11	---	---	---	---	1.9-2.1	1.5	.1	.1-.2	14-16	16-19	19-23	19-21	1.3-1.4
	N	3	---	3	---	---	---	---	3	3	3	3	3	3	3	3	3
C1	Ave	5.3	---	.07	---	---	---	---	1.8	1.4	.1	.1	15	16.1	21	18.5	1.3
	S D	/	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/
	Rng	/	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/
	N	1	---	1	---	---	---	---	1	1	1	1	1	1	1	1	1
C2	Ave	5.2	---	.07	---	---	---	---	1.7	1.3	.3	.1	11.8	13.9	24	22.4	1.3
	S D	/	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/
	Rng	/	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/
	N	1	---	1	---	---	---	---	1	1	1	1	1	1	1	1	1
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Central Point

TAXONOMIC NAME: Pachic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (1 Cat)	Ca/Mg
Ap	Ave	6.3	6.2	3.6	.15	24.3	---	15.2	11.2	2.8	.18	.35	---	15.7	93.0	---	4.0
	S D	.21	1.3	.78	.03	.71	---	---	.42	.28	.04	.10	---	.21	5.3	---	.28
	Rng	6.1-6.4	5.2-7.1	3.0-4.1	.12-.17	24-25	---	---	11-12	2-3	.1-.2	.2-.4	---	15-16	89-97	---	3.8-4.2
	N	2	2	2	2	2	---	1	2	2	2	2	---	2	2	---	2
A12	Ave	6.05	4.8	2.75	.109	25.4	---	14.5	11.5	3.2	.18	.30	---	16.4	92.6	---	3.6
	S D	.07	.64	.35	.01	.78	---	---	.42	---	.11	.17	---	---	.85	---	.14
	Rng	6.0-6.1	4.3-5.2	2.5-3	.1-.2	25-26	---	---	11-12	3.2	.1-.26	.1-.5	---	16.4	92-93	---	3.5-3.7
	N	2	2	2	2	2	---	1	2	2	2	2	---	2	2	---	2
A13	Ave	6.45	2.65	1.55	.062	25.8	---	17.0	10.1	4.15	.19	.28	---	14.8	96.4	---	2.4
	S D	.07	.07	.07	.02	5.1	---	---	2.3	.07	.1	.14	---	1.3	5.1	---	.6
	Rng	6.4-6.5	2.6-2.7	1.5-1.6	.05-.08	22-30	---	---	8-12	4.1-4.2	.1-.3	.1-.4	---	14-16	93-100	---	2-2.8
	N	2	2	2	2	2	---	1	2	2	2	2	---	2	2	---	2
AC	Ave	6.7	1.4	.85	.037	23.7	---	11.2	9.8	5.0	.21	.27	---	14.5	100	---	1.9
	S D	.14	.14	.07	.005	5.2	---	---	2.5	.57	.13	.13	---	3.1	---	---	.28
	Rng	6.6-6.8	1.3-1.5	.8-.9	.03-.04	20-27	---	---	8-12	4-6	.1-.3	.1-.4	---	12-17	100	---	1.7-2.1
	N	2	2	2	2	2	---	1	2	2	2	2	---	2	2	---	2
C1	Ave	6.8	.75	.45	.023	19.9	---	9.0	9.6	4.8	.23	.24	---	14.0	94.7	---	2.0
	S D	.28	.35	.21	.001	10.5	---	---	4.3	2.0	.11	.13	---	3.6	7.5	---	.07
	Rng	6.6-7	.5-1	.3-.6	.02-.03	12-27	---	---	6-13	3-6	.1-.3	.1-.33	---	11-17	89-100	---	1.9-2
	N	2	2	2	2	2	---	1	2	2	2	2	---	2	2	---	2
C2	Ave	7.0	.6	.35	.018	19.4	---	7.8	10.1	5.1	.30	.22	---	12.5	100	---	2.15
	S D	.57	.28	.21	---	11.7	---	---	4.0	1.6	.26	.08	---	3.3	---	---	.50
	Rng	6.6-7.4	.4-.8	.2-.5	.018	11-28	---	---	7-13	4-6	.1-.5	.1-.3	---	10-15	100	---	1.8-2.5
	N	2	2	2	2	2	---	1	2	2	2	2	---	2	2	---	2
C3	Ave	6.7	.3	.2	.010	20	---	---	4.1	2.5	.19	.12	---	6.9	100	---	1.6
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	1	1	1	1	1	---	---	1	1	1	1	---	1	1	---	---
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

SOIL SERIES: Chehalis

TAXONOMIC NAME: Cumulic Ultic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
Ap	Ave	6.23	3.3	3.6	.2	18.0	---	---	17.5	8.5	.324	.73	---	31.1	86.7	---	2.1
	S D	1.9	.5	/	/	/	---	---	1.9	1.4	.09	.30	---	1.4	5.8	---	.38
	Rng	6.1-6.5	3-3.9	/	/	/	---	---	15-19	7-10	.2-.4	.4-1.1	---	29-32	79-92	---	1.9-2.7
	N	4	3	1	1	1	---	---	4	4	4	4	---	4	4	---	4
All-A13	Ave	6.22	5.23	2.93	.197	16.6	5.0	9.7	17.9	8.3	.31	.40	---	23.8	79.6	---	2.3
	S D	.30	2.0	.91	.09	6.5	/	.50	4.7	1.5	.10	.25	---	4.7	7.6	---	1.0
	Rng	5.8-6.4	3.8-6.7	2.4-4	.1-.3	12-24	/	9.3-10	15-25	6-10	.2-.4	.2-.7	---	29-39	68-84	---	1.5-3.8
	N	4	2	3	3	3	1	2	4	4	4	4	---	4	4	---	4
AC	Ave	6.1	---	2.4	.1	24	---	19.4	15.0	11.0	.4	.2	---	31.4	84.7	---	1.4
	S D	/	---	/	/	/	---	/	/	/	/	/	---	/	/	---	/
	Rng	/	---	/	/	/	---	/	/	/	/	/	---	/	/	---	/
	N	1	---	1	1	1	---	1	1	1	1	1	---	1	1	---	1
A3	Ave	6.0	2.03	1.25	.11	11.3	3.1	---	19.6	6.7	.28	.18	---	31.2	86	---	2.9
	S D	/	/	/	/	/	/	---	/	/	/	/	---	/	/	---	/
	Rng	/	/	/	/	/	/	---	/	/	/	/	---	/	/	---	/
	N	1	1	1	1	1	1	---	1	1	1	1	---	1	1	---	1
B21-B22	Ave	6.63	1.73	---	---	---	---	---	16.1	11.5	.50	.34	---	30.7	92.6	---	1.4
	S D	.05	.63	---	---	---	---	---	1.4	.41	.12	.04	---	2.3	4.4	---	.18
	Rng	6.6-6.7	.9-2.4	---	---	---	---	---	14-18	11-12	.4-.6	.3-.4	---	28-33	89-97	---	1.2-1.6
	N	4	4	---	---	---	---	---	4	4	4	4	---	4	4	---	4
B23-B3	Ave	6.7	1.6	---	---	---	---	---	14.8	11.7	.60	.23	---	28.8	94.9	---	1.3
	S D	.1	.45	---	---	---	---	---	1.4	1.2	.10	.06	---	2.6	3.2	---	.15
	Rng	6.6-6.8	1.1-2.0	---	---	---	---	---	13-16	10-13	.5-.7	.2-.3	---	28-32	91-98	---	1.1-1.4
	N	3	3	---	---	---	---	---	3	3	3	3	---	3	3	---	3
Cl	Ave	6.35	1.5	1.07	.1	10.7	3.2	---	15.3	8.7	.4	.24	---	27.0	91.4	---	1.9
	S D	.35	.28	/	/	/	/	---	4.4	2.0	.14	.08	---	2.9	2.0	---	1.0
	Rng	6.1-6.6	1.3-1.7	/	/	/	/	---	12-19	7.2-10	.3-.5	.1-.3	---	25-29	90-93	---	1.2-2.6
	N	2	2	1	1	1	1	---	2	2	2	2	---	2	2	---	2
C	Ave	5.83	1.36	.88	.045	13.5	3.0	22.8	15.0	10.7	.44	.22	---	30.4	86.9	---	1.5
	S D	.76	.25	/	.05	3.5	/	/	2.3	2.3	.09	.07	---	2.7	8.1	---	.6
	Rng	5-6.5	1.1-1.6	/	.01-.08	11-16	/	/	13-18	8-12	.3-.5	.15-.3	---	28-33	77-93	---	1.1-2.2
	N	3	3	1	2	2	1	1	3	3	3	3	---	3	3	---	3
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Chenoweth

TAXONOMIC NAME: Typic Haploxeroll

Horizon	Stat.	Horizon Thickness (cm)	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density	pH 1:10	Elect. Cond.	Moisture at Sat.
			-----	-----	-----	-----	-----	-----	(g/cc)			
Ap	Ave	15	51.6	37.2	11.3	29.6	16.2	6.45	---	6.25	.65	33.1
	S D	---	3.7	1.3	2.4	.28	.85	.50	---	.35	.21	2.9
	Rng	15	49-54	36-38	9-13	29-30	15-17	6-7	---	6-6.5	.5-.8	31-35
	N	2	2	2	2	2	2	2	---	2	2	2
Alm	Ave	10	52.9	36.5	10.6	25.1	15.2	6.2	---	6.6	.2	26.1
	S D	/	/	/	/	/	/	/	---	/	/	/
	Rng	/	/	/	/	/	/	/	---	/	/	/
	N	1	1	1	1	1	1	1	---	1	1	1
AB	Ave	16.5	54.6	33.3	12.1	27.3	16.4	6.8	---	6.4	.25	28.2
	S D	2.1	10.5	8.1	2.4	1.8	1.8	.78	---	.14	.07	.28
	Rng	15-18	47-62	27-39	10-14	26-29	15-18	6-7	---	6.3-6.5	.2-.3	28-29
	N	2	2	2	2	2	2	2	---	2	2	2
B21	Ave	27.5	51.9	35.8	12.4	27.1	16.0	7.0	---	6.45	.23	29.0
	S D	9.2	4.1	2.9	1.2	3.5	2.1	1.1	---	.07	.07	.35
	Rng	21-34	49-55	33-38	11-13	24-30	14-18	6-8	---	6.4-6.5	.2-.3	28-30
	N	2	2	2	2	2	2	2	---	2	2	2
B22	Ave	40.5	52.9	36.2	11.0	28.5	15.8	6.7	---	6.5	.2	28.9
	S D	3.5	7.9	7.0	.92	3.8	2.8	.92	---	---	---	.64
	Rng	38-43	47-59	31-41	10-12	25-31	13-18	6-7	---	6.5	.2	28-30
	N	2	2	2	2	2	2	2	---	2	2	2
B3	Ave	21.0	55.4	35.6	9.1	28.5	15.3	6.3	---	6.5	.1	28.2
	S D	1.4	9.0	9.2	.21	3.6	2.3	.64	---	---	---	2.3
	Rng	20-22	49-62	29-42	8-10	26-31	13-17	5-7	---	6.5	.1	26-30
	N	2	2	2	2	2	2	2	---	2	2	2
C11	Ave	45	59.5	32.8	7.8	28.5	13.9	6.0	---	6.5	.1	29.7
	S D	8.5	6.9	7.8	.92	5.5	2.0	.35	---	---	---	1.2
	Rng	39-51	54-64	27-38	7-9	24-32	12-15	5-6	---	6.5	.1	28-31
	N	2	2	2	2	2	2	2	---	2	2	2
C12	Ave	45.5	64.3	30.2	5.6	27.1	12.6	5.7	---	6.45	.15	28.9
	S D	21.9	7.4	9.1	1.8	5.8	.57	.21	---	.07	.07	3.5
	Rng	30-61	59-70	23-37	4-7	23-31	12-13	5-6	---	6.4-6.5	.1-.2	26-31
	N	2	2	2	2	2	2	2	---	2	2	2
C2	Ave	65.5+	71.7	35.4	3.0	23.6	9.9	4.4	---	6.45	.25	31.5
	S D	43.1	11.7	13.0	1.3	10.6	2.5	.50	---	.07	.07	1.2
	Rng	35-96	63-80	16-35	2-4	16-31	8-12	4-5	---	6.4-6.5	.2-.3	30-33
	N	2	2	2	2	2	2	2	---	2	2	2

SOIL SERIES: Chenoweth

TAXONOMIC NAME: Typic Haploxeroll

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)		%			%	(ppm)							(NH ₄ OAc)	(1 Cat)	
Ap	Ave	6.3	---	1.2	.09	12.6	---	---	9.1	2.85	.25	1.65	4.15	17.9	77.7	76.9	3.2
	S D	.42	---	.70	.03	3.5	---	---	.14	.07	.07	.07	.21	.64	2.3	.99	.14
	Rng	6-6.6	---	.7-1.7	.06-.12	10-15	---	---	9-9.2	2.8-2.9	.2-.3	1.6-1.7	4-4.3	17-19	76-80	76-78	3.1-3.3
	N	2	---	2	2	2	---	---	2	2	2	2	2	2	2	2	2
Alm	Ave	6.6	---	.75	.06	12.5	---	---	9.5	2.5	.1	1.4	3.1	16.8	80.3	81.3	3.8
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	1	---	1	1	1	---	---	1	1	1	1	1	1	1	1	1
AB	Ave	6.6	---	.47	.046	9.9	---	---	10.7	2.3	.25	1.1	3.2	18.4	77.9	81.7	5.0
	S D	.14	---	.21	.01	1.4	---	---	.85	.64	.07	.14	.14	1.4	5.2	.42	1.8
	Rng	6.5-6.7	---	.3-.6	.03-.06	9-11	---	---	10-11	1-3	.2-.3	1-1.2	3.1-3.3	17-20	74-82	81-82	3.7-6.3
	N	2	---	2	2	2	---	---	2	2	2	2	2	2	2	2	2
B21	Ave	6.8	---	---	.044	7.7	---	---	10.4	2.45	.3	.8	2.65	17.6	79.6	84.1	4.7
	S D	---	---	---	---	---	---	---	2.1	.78	.14	.14	.21	2.2	.64	.50	2.3
	Rng	6.8	---	.17-.34	---	---	---	---	8-12	2-3	.2-.4	.7-.9	2.5-2.8	16-19	79-80	83-85	3-6.3
	N	2	---	2	1	1	---	---	2	2	2	2	2	2	2	2	2
B22	Ave	6.8	---	.165	---	---	---	---	10.3	2.45	.25	.70	2.9	16.9	81.0	82.8	4.5
	S D	.07	---	.05	---	---	---	---	2.8	.50	.07	.14	1.0	3.0	.85	2.3	2.1
	Rng	6.7-6.8	---	.1-.2	---	---	---	---	8-12	2-3	.2-.3	.6-.8	2.2-2.6	14-19	80-82	81-85	3-6
	N	2	---	2	---	---	---	---	2	2	2	2	2	2	2	2	2
B3	Ave	6.8	---	.11	---	---	---	---	11.3	1.7	.2	.45	2.2	16.6	82.2	85.9	7.1
	S D	.14	---	.01	---	---	---	---	2.8	.42	---	.07	.28	2.8	.92	3.7	3.4
	Rng	6.7-6.9	---	.1-.2	---	---	---	---	9-13	1.4-2	.2	.4-.5	2-2.4	14-19	81-83	83-89	4-10
	N	2	---	2	---	---	---	---	2	2	2	2	2	2	2	2	2
C11	Ave	6.7	---	.09	---	---	---	---	10.6	2.4	.3	.45	1.9	15.9	86.2	87.7	6.2
	S D	.14	---	.01	---	---	---	---	3.3	1.5	.14	.07	.14	2.1	.85	2.1	5.3
	Rng	6.6-6.8	---	.08-.1	---	---	---	---	8-13	1-4	.2-.4	.4-.5	1.8-2	14-18	85-87	86-89	2-10
	N	2	---	2	---	---	---	---	2	2	2	2	2	2	2	2	2
C12	Ave	7.05	---	.085	---	---	---	---	7.5	4.5	.2	.3	1.4	15.7	80.0	89.9	1.65
	S D	.07	---	.063	---	---	---	---	.85	.28	---	---	.14	1.8	1.8	1.8	.07
	Rng	7-7.1	---	.04-.13	---	---	---	---	7-8	4-5	.2	.3	1.3-1.5	14-17	78-81	88-91	1.6-1.7
	N	2	---	2	---	---	---	---	2	2	2	2	2	2	2	2	2
C2	Ave	7.05	---	.035	---	---	---	---	5.6	4.8	.70	.15	.70	13.2	85.4	94.7	1.15
	S D	.07	---	.02	---	---	---	---	.99	1.1	.57	.07	.71	2.1	1.3	4.9	.07
	Rng	7-7.1	---	.02-.05	---	---	---	---	4.9-6.3	4-5.6	.3-1.1	.1-.2	.2-1.2	11-15	84-86	91-98	1.1-1.2
	N	2	---	2	---	---	---	---	2	2	2	2	2	2	2	2	2

TAXONOMIC NAME: Ulric Haploxera lf

87

SOIL SERIES: Chesnimnus

TAXONOMIC NAME: Calcic Argixeroll

Horizon	Stat.	pH (1:1 H ₂ O)	pH (1:10)	Organic Carbon %	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
Ap	Ave	6.85	---	2.0	.174	11.5	1.1	---	19.3	3.7	.28	.8	3.3	28.9	83.0	88.0	5.3
	S D	.07	---	.52	.04	.71	---	---	3.3	.21	.07	.28	.99	3.5	2.8	1.4	.57
	Rng	6.8-6.9	---	1.6-2.4	.1-.2	11-12	---	---	17-22	3.5-3.8	.2-.3	.6-1	2.6-4.0	26-31	81-85	87-89	4.9-5.7
	N	2	---	2	2	2	1	---	2	2	2	2	2	2	2	2	2
B2t	Ave	7.1	7.6	.615	.07	9	1.2	---	23.0	8.1	.35	.55	2.4	34.8	91.5	93.0	3.0
	S D	.50	---	.12	.01	---	---	---	.64	2.0	.07	.07	.99	.57	6.4	2.8	.64
	Rng	6.7-7.4	---	.5-.7	.06-.08	9	---	---	22-24	6.7-9.5	.3-.4	.5-.6	1.7-3.1	34-35	89-96	91-95	2.5-3.4
	N	2	1	2	2	2	1	---	2	2	2	2	2	2	2	2	2
B3	Ave	8.0	8.6	.42	.05	8	1.1	---	29.8	8.0	.3	.4	---	31.3	---	100	3.8
	S D	.28	.21	.21	.02	---	---	---	3.0	.64	---	---	---	5.0	---	---	.71
	Rng	7.8-8.2	8.4-8.7	.2-.6	.03-.07	8	---	---	27-32	7.5-8.4	.3	.4	---	28-34	---	100	3.3-4.3
	N	2	2	2	2	2	1	---	2	2	2	2	---	2	---	2	2
Clca	Ave	8.2	8.8	.285	---	---	.6	---	34.2	8.9	.4	.30	---	32.9	---	100	3.9
	S D	---	---	.08	---	---	---	---	4.2	1.8	---	.28	---	4.4	---	---	.28
	Rng	8.2	8.8	.2-.4	---	---	---	---	31-37	7-10	.4	.1-.5	---	30-36	---	100	3.7-4.1
	N	2	2	2	---	---	1	---	2	2	2	2	---	2	---	2	2
C2ca	Ave	8.25	8.8	.345	---	---	.3	---	27.3	5.9	.4	.15	---	23.0	---	100	5.5
	S D	.21	.14	.12	---	---	---	---	5.4	2.8	---	.07	---	3.7	---	---	3.5
	Rng	8.1-8.4	8.7-8.9	.2-.4	---	---	---	---	23-31	4-8	.4	.1-.2	---	20-26	---	100	3-8
	N	2	2	2	---	---	1	---	2	2	2	2	---	2	---	2	2
11C3	Ave	8.5	8.9	.11	---	---	.7	---	18.2	4.5	0.4	0.2	---	16.6	---	160	4.0
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	1	1	1	---	---	1	---	1	1	1	1	---	1	---	1	1
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

SOIL SERIES: Chilcott

TAXONOMIC NAME: Abruptic Xerollic Durargid

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K Meq/100g	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
Ap	Ave	6.45	.865	---	---	---	---	15.5	9.6	5.4	.25	2.14	3.3	7.7	100	83.9	1.75
	S D	.21	.19	---	---	---	---	6.4	.92	1.1	.13	.16	.14	1.2	---	2.1	.21
	Rng	6.3-6.6	.7-1.0	---	---	---	---	11-20	9-10	4-6	.1-.4	2.0-2.3	3.2-3.4	6.8-8.6	100	82-86	1.6-1.9
	N	2	2	---	---	---	---	2	2	2	2	2	2	2	2	2	2
A2	Ave	6.9	.47	---	---	---	---	7	8.2	5.2	.71	1.38	2.7	6.28	100	85.2	1.6
	S D	/	/	---	---	---	---	/	/	/	/	/	/	/	/	/	/
	Rng	/	/	---	---	---	---	/	/	/	/	/	/	/	/	/	/
	N	1	1	---	---	---	---	1	1	1	1	1	1	1	1	1	1
B2t	Ave	7.65	---	---	---	---	---	3	16.2	11.6	2.2	1.9	2.1	8.8	100	93.9	1.4
	S D	.21	---	---	---	---	---	1.4	---	.5	.26	.23	.99	1.3	---	2.7	---
	Rng	7.5-7.8	---	---	---	---	---	2-4	16.2	11-12	2.0-2.4	1.7-2.0	1.4-2.8	7.9-9.7	100	92-96	1.4
	N	2	---	---	---	---	---	2	2	2	2	2	2	2	2	2	2
B3ca	Ave	8.5	---	---	---	---	---	6	40.2	13.9	3.3	1.52	---	13.7	100	---	2.9
	S D	/	---	---	---	---	---	/	/	/	/	/	---	/	/	---	/
	Rng	/	---	---	---	---	---	/	/	/	/	/	---	/	/	---	/
	N	1	---	---	---	---	---	1	1	1	1	1	---	1	1	---	1
C	Ave	8.6	---	---	---	---	---	21	30.2	10.6	2.5	1.23	---	14.8	100	---	2.8
	S D	/	---	---	---	---	---	/	/	/	/	/	---	/	/	---	/
	Rng	/	---	---	---	---	---	/	/	/	/	/	---	/	/	---	/
	N	1	---	---	---	---	---	1	1	1	1	1	---	1	1	---	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Clatsop

TAXONOMIC NAME: Histic Humaquept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
				%			%	(ppm)				Meq/100g					
A1	Ave	5.06	24.6	19.01	1.07	17.8	4.0	3.55	6.5	11.5	34.2	1.3	---	42.4	26.2	---	.85
	S D	.22	11.5	/	/	/	/	1.2	5.8	12.9	46.8	1.8	---	4.8	5.9	---	.63
	Rng	4.8-6.5	16-33	/	/	/	/	2-4.5	2-18	3-37	1-67	.2-4.8	---	39-49	21-36	---	.2-2
	N	5	5	1	1	1	1	4	6	6	2	6	---	6	5	---	6
C1	Ave	5.7	8.7	6.69	.67	10	2.0	---	11.0	17.3	24.3	2.68	---	42.0	24.8	---	.67
	S D	/	1.0	/	/	/	/	---	12.0	19.6	32.0	2.23	---	3.5	/	---	.1
	Rng	/	6-12	/	/	/	/	---	2-19	3-31	1.6-47	1-4	---	39-41	/	---	.6-.74
	N	1	2	1	1	1	1	---	2	2	2	2	---	2	1	---	2
C2	Ave	6.3	7.03	4.08	.33	12.25	2.0	---	5.9	13.4	20.1	2.7	---	48.4	17.0	---	.55
	S D	/	/	/	/	/	/	---	4.5	13.6	25.3	2.4	---	12.2	/	---	.21
	Rng	/	/	/	/	/	/	---	2-9	3.8-23	2-38	1-4.4	---	40-47	/	---	.4-.7
	N	1	1	1	1	1	1	---	2	2	2	2	---	2	1	---	2
C3	Ave	6.5	7.7	3.55	.22	15.2	2.6	---	6.45	18.5	16.5	2.9	---	36.9	72	---	.35
	S D	/	2.2	/	/	/	/	---	.21	3.6	18.0	2.7	---	.63	/	---	.07
	Rng	/	6-9	/	/	/	/	---	6.3-6.6	16-21	4-29	1-5	---	36-38	/	---	.3-.4
	N	1	2	1	1	1	1	---	2	2	2	2	---	2	1	---	2
	Ave																
	S D																
	Rng																
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SOIL SERIES: Climax

TAXONOMIC NAME: Chromic Pelloxerert

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
A11	Ave S D Rng N	6.3 / 1	7.71 / 1	--- / ---	0.27 / 1	--- / ---	--- / ---	2.5 / 1	23.00 / 1	21.08 / 1	--- / ---	.24 / 1	--- / ---	53.38 / 1	83 / 1	--- / ---	1.1 / 1
A12	Ave S D Rng N	6.2 / 1	4.94 / 1	--- / ---	0.17 / 1	--- / ---	--- / ---	2.4 / 1	24.50 / 1	21.50 / 1	--- / ---	.18 / 1	--- / ---	51.10 / 1	90 / 1	--- / ---	1.1 / 1
C1	Ave S D Rng N	6.2 / 1	2.34 / 1	--- / ---	0.09 / 1	--- / ---	--- / ---	3.8 / 1	24.00 / 1	21.50 / 1	--- / ---	.21 / 1	--- / ---	47.94 / 1	87 / 1	--- / ---	1.1 / 1
C2	Ave S D Rng N	6.4 / 1	0.92 / 1	--- / ---	0.06 / 1	--- / ---	--- / ---	3.6 / 1	20.50 / 1	15.00 / 1	--- / ---	.10 / 1	--- / ---	44.91 / 1	81 / 1	--- / ---	1.4 / 1
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Cloquato

TAXONOMIC NAME: Cumulic Ultic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
				%			%	(ppm)									
Ap	Ave	5.9	---	1.59	.135	11.5	1.8	---	19.1	6.25	.4	.65	8.4	---	---	75.5	3.1
	S D	---	---	.02	.007	.71	/	---	2.5	.50	.14	.21	.14	---	---	2.1	.21
	Rng	5.9	---	1.5-1.6	1.3-1.4	11-12	/	---	17-21	6-7	.3-.5	.5-.8	8.3-8.5	---	---	74-77	2.9-3.2
	N	2	---	2	2	2	1	---	2	2	2	2	2	---	---	2	2
B2	Ave	6.2	---	.91	.091	10	1.9	---	19.5	6.7	.5	.23	7.1	---	---	79	3.0
	S D	.17	---	.22	.02	---	---	---	.95	.41	---	.06	1.1	---	---	2.6	.3
	Rng	6-6.3	---	.6-1.1	.07-.11	10	1.9	---	18-21	6.2-7	.5	.2-.3	6-8	---	---	77-82	2.7-3.3
	N	3	---	3	3	3	2	---	3	3	3	3	3	---	---	3	3
B31	Ave	6.4	---	.55	.057	9.5	1.8	---	18.3	6.4	.45	.2	5.7	---	---	81.5	3.0
	S D	---	---	.11	.007	.71	/	---	1.8	.5	.07	---	1.1	---	---	2.1	.5
	Rng	6.4	---	.4-.6	.05-.06	9-10	/	---	17-20	6-6.7	.4-.5	.2	5-6.4	---	---	80-83	2.6-3.3
	N	2	---	2	2	2	1	---	2	2	2	2	2	---	---	2	2
B32	Ave	6.35	---	.73	.076	10	---	---	19.5	7.3	.45	.2	5.35	---	---	83.5	2.9
	S D	.07	---	.06	.008	---	---	---	.14	.85	.07	---	.35	---	---	.70	.57
	Rng	6.3-6.4	---	.6-.8	.07-.08	10	---	---	19-20	6.7-7.9	.4-.5	.2	5.1-5.6	---	---	83-84	2.5-3.3
	N	2	---	2	2	2	---	---	2	2	2	2	2	---	---	2	2
C	Ave	6.45	---	.47	.062	10	1.7	---	16.7	7.25	.5	.2	4.9	---	---	83.5	2.3
	S D	.07	---	.18	/	/	/	---	2.8	1.6	---	---	1.3	---	---	.71	.14
	Rng	6.4-6.5	---	.3-.6	/	/	/	---	14-19	6-8	.5	.2	4-6	---	---	83-84	2.2-2.4
	N	2	---	2	1	1	1	---	2	2	2	2	2	---	---	2	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
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	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Cobleigh

TAXONOMIC NAME: Typic Rhodoxeralf

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
				%			%	(ppm)			Meq/100g				(% Cat)	(NH ₄ OAc)	
A1	Ave	6.3	8.50	---	---	---	---	6	19.9	2.9	.10	1.43	17.3	---	58.4	---	6.9
	S D	/	/	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	Rng	/	/	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	N	1	1	---	---	---	---	1	1	1	1	1	1	---	1	---	1
A3	Ave	6.4	4.50	---	---	---	---	5	16.9	2.8	.10	1.81	15.8	---	57.8	---	6.0
	S D	/	/	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	Rng	/	/	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	N	1	1	---	---	---	---	1	1	1	1	1	1	---	1	---	1
B1	Ave	6.3	2.23	---	---	---	---	2	9.8	2.6	.10	1.16	12.3	---	52.6	---	3.8
	S D	/	/	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	Rng	/	/	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	N	1	1	---	---	---	---	1	1	1	1	1	1	---	1	---	1
B21t	Ave	6.3	---	---	---	---	---	2	7.8	3.1	.10	1.37	10.6	---	53.9	---	2.5
	S D	/	---	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	Rng	/	---	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	N	1	---	---	---	---	---	1	1	1	1	1	1	---	1	---	1
B22t	Ave	5.9	---	---	---	---	---	---	8.5	6.0	.19	1.26	12.2	---	56.7	---	1.4
	S D	/	---	---	---	---	---	---	/	/	/	/	/	---	/	---	/
	Rng	/	---	---	---	---	---	---	/	/	/	/	/	---	/	---	/
	N	1	---	---	---	---	---	---	1	1	1	1	1	---	1	---	1
B3t	Ave	5.3	---	---	---	---	---	2	4.1	5.8	.29	.74	16.6	---	39.7	---	.71
	S D	/	---	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	Rng	/	---	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	N	1	---	---	---	---	---	1	1	1	1	1	1	---	1	---	1
C1	Ave	5.3	---	---	---	---	---	2	3.4	7.0	.43	.58	10.6	---	51.8	---	.50
	S D	/	---	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	Rng	/	---	---	---	---	---	/	/	/	/	/	/	---	/	---	/
	N	1	---	---	---	---	---	1	1	1	1	1	1	---	1	---	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Coburg

TAXONOMIC NAME: Pachic Ultic Argixeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
				%			%	(ppm)			Meq/100g						
Ap	Ave	5.9	---	2.4	0.1	24.0	---	16.4	12.2	5.6	0.2	0.7	---	24.7	75.7	---	2.2
	S D	/	---	/	/	/	---	/	/	/	/	/	---	/	/	---	/
	Rng N	1	---	1	1	1	---	1	1	1	1	1	---	1	1	---	1
B1	Ave	5.8	---	1.7	T	---	---	11.4	15.1	7.2	0.2	0.5	---	24.6	93.4	---	2.1
	S D	/	---	/	/	---	---	/	/	/	/	/	---	/	/	---	/
	Rng N	1	---	1	1	---	---	1	1	1	1	1	---	1	1	---	1
B21t	Ave	5.9	---	0.8	T	---	---	10.7	17.1	9.6	0.3	0.4	---	37.7	72.1	---	1.8
	S D	/	---	/	/	---	---	/	/	/	/	/	---	/	/	---	/
	Rng N	1	---	1	1	---	---	1	1	1	1	1	---	1	1	---	1
IIB22t	Ave	6.1	---	0.2	0.1	2.0	---	6.0	18.5	10.6	0.7	0.5	---	30.9	98.1	---	1.7
	S D	/	---	/	/	/	---	/	/	/	/	/	---	/	/	---	/
	Rng N	1	---	1	1	1	---	1	1	1	1	1	---	1	1	---	1
IIB3t	Ave	6.1	---	0.3	T	---	---	6.4	19.3	12.2	0.8	0.6	---	37.1	88.8	---	1.6
	S D	/	---	/	/	---	---	/	/	/	/	/	---	/	/	---	/
	Rng N	1	---	1	1	---	---	1	1	1	1	1	---	1	1	---	1
IIIC	Ave	6.5	---	0.1	T	---	---	4.3	16.1	9.7	0.7	0.4	---	27.0	99.6	---	1.6
	S D	/	---	/	/	---	---	/	/	/	/	/	---	/	/	---	/
	Rng N	1	---	1	1	---	---	1	1	1	1	1	---	1	1	---	1
	Ave																
	S D																
	Rng N																
	Ave																
	S D																
	Rng N																

SOIL SERIES: Colestine

TAXONOMIC NAME: Typic Xerochrept

[illegible]

SOIL SERIES: Colestine

TAXONOMIC NAME: Typic Xerochrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
1	Ave	6.6	---	1.66	---	---	---	---	11.6	4.5	0.10	0.36	7.0	13.2	100.0	70.3	2.6
	S D	/	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/
	Rng	/	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/
	N	1	---	1	---	---	---	---	1	1	1	1	1	1	1	1	1
2	Ave	6.8	---	---	---	---	---	---	13.5	5.6	0.15	0.22	6.4	12.2	100.0	75.3	2.4
	S D	/	---	---	---	---	---	---	/	/	/	/	/	/	/	/	/
	Rng	/	---	---	---	---	---	---	/	/	/	/	/	/	/	/	/
	N	1	---	---	---	---	---	---	1	1	1	1	1	1	1	1	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
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	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Concord

TAXONOMIC NAME: Typic Ochraqualf

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
				%			%	(ppm)				Meq/100g					
Ap-1	Ave	5.24	---	---	---	---	---	---	5.3	2.2	.082	.324	---	15.7	63	---	2.4
	S D	.30	---	---	---	---	---	---	1.8	.60	.03	.21	---	2.2	---	---	.5
	Rng	4.8-5.6	---	---	---	---	---	---	2.8-7.8	1.2-2.8	.04-.13	.2-.7	---	13-29	---	---	2.0-3.3
	N	5	---	---	---	---	---	---	5	5	5	5	---	5	1	---	5
A2	Ave	5.54	---	---	---	---	---	---	6.3	3.5	.16	.204	---	15.7	76	---	1.8
	S D	.18	---	---	---	---	---	---	1.6	.73	.07	.006	---	2.0	---	---	.67
	Rng	5.3-5.7	---	---	---	---	---	---	5-8.5	2.6-4.2	.1-.25	.2-.21	---	14-19	---	---	1.3-3.0
	N	5	---	---	---	---	---	---	5	5	5	5	---	5	1	---	5
B1	Ave	5.7	---	---	---	---	---	---	10.4	7.0	.325	.32	---	22.6	68	---	1.6
	S D	.18	---	---	---	---	---	---	1.7	1.7	.119	.29	---	5.4	---	---	.51
	Rng	5.6-5.9	---	---	---	---	---	---	8-12	5-8.8	.25-.3	.29-.35	---	18-30	---	---	1.1-2.3
	N	4	---	---	---	---	---	---	4	4	4	4	---	4	1	---	4
B2t	Ave	5.9	---	---	---	---	---	---	14.0	9.3	.25	.37	---	34.3	95	---	1.6
	S D	.6	---	---	---	---	---	---	6.9	4.7	.29	.12	---	7.6	---	---	.31
	Rng	5.4-6.7	---	---	---	---	---	---	4-20	2-13	.14-.84	.2-.5	---	28-45	---	---	1.3-1.9
	N	4	---	---	---	---	---	---	4	4	4	4	---	4	1	---	4
B3	Ave	6.5	---	---	---	---	---	---	14.7	9.3	.55	.32	---	31.9	91	---	1.5
	S D	.73	---	---	---	---	---	---	7.6	3.8	.29	.14	---	5.4	---	---	.36
	Rng	5.6-7.1	---	---	---	---	---	---	4-23	3-12	.2-.9	.1-.5	---	25-38	---	---	1.3-2.1
	N	4	---	---	---	---	---	---	4	4	4	4	---	4	1	---	4
C	Ave	6.9	---	---	---	---	---	---	16.2	11.9	.64	.36	---	26.2	100	---	1.4
	S D	.53	---	---	---	---	---	---	2.9	3.6	.30	.09	---	2.9	---	---	.42
	Rng	6-7.3	---	---	---	---	---	---	13-21	8-18	.3-1.2	.2-.5	---	22-31	---	---	.97-2.1
	N	6	---	---	---	---	---	---	6	6	6	6	---	6	1	---	6
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Condon

TAXONOMIC NAME: Typic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
				%			%	(ppm)									
Ap	Ave	6.4	---	.98	.089	11.0	---	---	10.7	5.1	.167	1.15	4.5	22.8	75.6	79.5	2.1
	S D	.04	---	.20	.014	.71	---	---	1.6	.65	.082	.30	.69	2.1	9.8	2.1	.20
	Rng	6.4-6.5	---	.6-1.2	.07-.10	10-12	---	---	8-12	4-6	.1-.3	.8-1.5	3.6-5.1	21-27	65-90	76-81	1.9-2.4
	N	6	---	6	6	6	---	---	6	6	6	6	6	6	6	6	6
A11 & 12	Ave	6.6	---	1.51	.129	11.3	---	---	12.2	5.7	.3	1.5	4.1	24.2	82.3	82.3	2.2
	S D	.26	---	.81	.049	1.6	---	---	.30	.76	.1	.62	.91	3.4	12.7	3.2	.30
	Rng	6.4-6.9	---	1.0-2.5	.1-.19	10-13	---	---	12-13	4.8-6.2	.2-.4	.8-2.0	3-5	22-28	68-92	80-86	1.9-2.5
	N	3	---	3	3	3	---	---	3	3	3	3	3	3	3	3	3
A3-B1	Ave	6.6	---	.73	.077	9.5	---	---	11.4	6.3	.15	.98	3.6	23.1	81.8	84	1.8
	S D	.20	---	.13	.008	.91	---	---	1.5	1.1	.1	.13	.42	.98	9.5	2.4	.19
	Rng	6.3-6.7	---	.6-.9	.06-.09	9-10	---	---	9-13	5-8	.1-.3	.8-1.1	3-4	21-24	69-92	81-86	1.6-2.0
	N	4	---	4	4	4	---	---	4	4	4	4	4	4	4	4	4
B2-21-22	Ave	6.86	---	.59	.068	8.6	---	---	14.9	6.7	.26	.86	2.9	26.1	87.4	88.5	2.4
	S D	.15	---	.17	.012	1.0	---	---	2.8	1.5	.14	.23	.53	2.7	8.6	1.9	1.1
	Rng	6.6-7.0	---	.4-.9	.04-.09	6-10	---	---	12-18	4-9	.1-.5	.5-1.2	2-4	22-30	75-98	86-91	1.6-3.0
	N	8	---	8	8	8	---	---	8	8	8	8	8	8	8	8	8
B3	Ave	7.02	---	.514	.063	8.2	---	---	14.1	7.5	.38	.68	1.68	25.3	90.4	93	1.9
	S D	.29	---	.096	.01	.62	---	---	2.5	.66	.13	.18	.54	3.0	11.6	1.4	.44
	Rng	6.6-7.3	---	.3-.7	.04-.07	7-9	---	---	12-18	7-9	.2-.5	.5-.9	1.2-2.6	21-29	77-102	91-95	1.7-2.6
	N	5	---	5	4	4	---	---	5	5	5	5	5	5	5	5	5
C	Ave	7.0	---	.38	---	---	---	---	16.7	9.5	0.4	0.5	2.5	27.0	100	92	1.8
	S D	/	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/
	Rng	/	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/
	N	1	---	1	---	---	---	---	1	1	1	1	1	1	1	1	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Coosbay

TAXONOMIC NAME: Andic Dystrachrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
A1	Ave S D Rng N	5.4 /	---	---	---	---	---	---	4.9 1.6 3.7-6.0 2	2.0 .57 1.6-2.4 2	.55 .21 .4-.7 2	.9 --- .9 2	---	52.8 4.4 49-56 2	15.5 3.5 13-18 2	---	2.4 .14 2.3-2.5 2
A3	Ave S D Rng N	4.6 /	---	---	---	---	---	---	1.6 /	.4 /	.4 /	.4 /	---	32.6 /	9 /	---	4.0 /
B1	Ave S D Rng N	5.2 .28 5-5.4 2	---	---	---	---	---	---	2.1 .84 1.5-2.7 2	1.1 .78 .5-1.6 2	.65 .07 .6-.7 2	.5 .28 .3-.7 2	---	33.5 9.6 27-40 2	13.5 5.0 10-17 2	---	3.2 3.2 .9-5.4 2
B21	Ave S D Rng N	4.95 .21 4.8-5.1 2	---	---	---	---	---	---	1.9 .85 1.3-2.5 2	2.3 2.8 .3-4.2 2	.5 .14 .4-.6 2	.25 .07 .2-.3 2	---	25.9 2.1 24-28 2	19.5 16.3 8-31 2	---	2.5 2.6 .6-4.3 2
B22	Ave S D Rng N	4.85 .07 4.8-4.9 2	---	---	---	---	---	---	2.2 .60 1.8-2.6 2	1.9 2.3 .3-3.5 2	.55 .07 .5-.6 2	.25 .07 .2-.3 2	---	20.7 7.3 15-26 2	22.5 6.4 18-27 2	---	3.4 3.7 1.74-6.0 2
C1	Ave S D Rng N	4.7 .28 4.5-4.9 2	---	---	---	---	---	---	2.5 .99 1.8-3.2 2	.95 .64 .5-1.4 2	.5 .14 .4-.6 2	.25 .07 .2-.3 2	---	23.3 12.0 15-32 2	18.5 2.1 17-20 2	---	3.0 .91 2.3-3.6 2
C2	Ave S D Rng N	4.75 .35 4.5-5.0 2	---	---	---	---	---	---	2.1 .57 1.7-2.5 2	.85 .64 .4-1.3 2	.4 --- .4 2	.25 .07 .2-.3 2	---	23.9 7.3 19-29 2	15 1.4 14-16 2	---	3.1 1.7 1.9-4.3 2
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Courtrock

TAXONOMIC NAME: Calcitriolic Naploxeroll

[illegible]

SOIL SERIES: Courtrock

TAXONOMIC NAME: Calciorthidic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
				%			%	(ppm)									
Ap	Ave	---	---	1.19	.081	14.7	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	/	/	/	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	/	/	/	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	1	1	1	---	---	---	---	---	---	---	---	---	---	---
All & 12	Ave	---	---	.69	.047	14.9	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	.06	.0007	1.5	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	.6-.8	.04-.05	14-16	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	2	2	2	---	---	---	---	---	---	---	---	---	---	---
B21	Ave	---	---	.72	.048	14.7	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	.34	.017	1.9	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	.4-1	.3-.6	13-16	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	2	2	2	---	---	---	---	---	---	---	---	---	---	---
B22	Ave	---	---	.48	.029	17.3	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	.39	.024	1.3	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	.2-.8	.01-.05	16-18	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	2	2	2	---	---	---	---	---	---	---	---	---	---	---
B23	Ave	---	---	.61	.040	15.3	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	/	/	/	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	/	/	/	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	1	1	1	---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---				---	---	---	---	---	---	---	---	---	---	---
	S D	---	---				---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---				---	---	---	---	---	---	---	---	---	---	---
	N	---	---				---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---				---	---	---	---	---	---	---	---	---	---	---
	S D	---	---				---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---				---	---	---	---	---	---	---	---	---	---	---
	N	---	---				---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---				---	---	---	---	---	---	---	---	---	---	---
	S D	---	---				---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---				---	---	---	---	---	---	---	---	---	---	---
	N	---	---				---	---	---	---	---	---	---	---	---	---	---

SOIL SERIES: Couse

TAXONOMIC NAME: Typic Haploxeroll

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
		(1:1 H ₂ O)		%			%	(ppm)									
1	Ave	5.5	6.52	---	0.21	18/1	---	12.6	21.1	7.8	0.2	0.7	---	---	---	---	2.7/1
	S D	/	/	---	/	/	---	/	/	/	/	/	---	---	---	---	/
	Rng	/	/	---	/	/	---	/	/	/	/	/	---	---	---	---	/
	N	1	1	---	1	1	---	1	1	1	1	1	---	---	---	---	1
2	Ave	5.5	6.61	---	0.22	17/1	---	8.2	18.9	6.0	0.3	0.4	---	---	---	---	3.2/1
	S D	/	/	---	/	/	---	/	/	/	/	/	---	---	---	---	/
	Rng	/	/	---	/	/	---	/	/	/	/	/	---	---	---	---	/
	N	1	1	---	1	1	---	1	1	1	1	1	---	---	---	---	1
3	Ave	5.3	1.82	---	0.08	13/1	---	4.8	17.0	7.8	0.4	0.5	---	---	---	---	2.2/1
	S D	/	/	---	/	/	---	/	/	/	/	/	---	---	---	---	/
	Rng	/	/	---	/	/	---	/	/	/	/	/	---	---	---	---	/
	N	1	1	---	1	1	---	1	1	1	1	1	---	---	---	---	1
4	Ave	5.4	0.94	---	0.04	14/1	---	2.6	25.5	12.5	0.7	0.5	---	---	---	---	2.0/1
	S D	/	/	---	/	/	---	/	/	/	/	/	---	---	---	---	/
	Rng	/	/	---	/	/	---	/	/	/	/	/	---	---	---	---	/
	N	1	1	---	1	1	---	1	1	1	1	1	---	---	---	---	1
5	Ave	6.6	0.40	---	0.02	12/1	---	2.4	29.5	14.5	0.9	0.4	---	---	---	---	2.0/1
	S D	/	/	---	/	/	---	/	/	/	/	/	---	---	---	---	/
	Rng	/	/	---	/	/	---	/	/	/	/	/	---	---	---	---	/
	N	1	1	---	1	1	---	1	1	1	1	1	---	---	---	---	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Crooked

TAXONOMIC NAME: Xerollic Durorthid

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)		%			%	(ppm)			Meq/100g				(NH ₄ OAc)	(Σ Cat)	
Ap	Ave	---	---	.685	.07	9.8	---	---	14.2	2.1	9.25	4.9	---	20.0	43.5	---	6.7
	S D	---	---	.163	.02	.57	---	---	4.8	.28	.35	.42	---	2.4	5.2	---	1.4
	Rng	---	---	.5-.8	.05-.08	9-10	---	---	11-18	1.9-2.3	9-9.5	4.6-5.2	---	18-22	40-47	---	5.7-7.7
	N	---	---	2	2	2	---	---	2	2	2	2	---	2	2	---	2
A3	Ave	---	---	.30	.038	8.0	---	---	9.5	2.35	13.7	3.2	---	20.7	44.5	---	4.1
	S D	---	---	.04	.0007	1.3	---	---	9.5	1.62	3.5	2.1	---	1.8	2.4	---	2.4
	Rng	---	---	.27-.33	.03-.04	7-9	---	---	2-16	1.2-3.5	11-16	1.7-4.6	---	19-22	42-46	---	2.3-5.8
	N	---	---	2	2	2	---	---	2	2	2	2	---	2	2	---	2
B21	Ave	---	---	.26	.026	9.8	---	---	11.8	8.2	24.9	4.9	---	42.4	54.1	---	1.4
	S D	---	---	.05	.004	.28	---	---	8.6	4.7	9.9	2.9	---	2.8	3.9	---	.28
	Rng	---	---	.22-.29	.02-.03	9.6-10	---	---	5-18	5-12	18-32	2.8-6.9	---	40-44	51-57	---	1.2-1.6
	N	---	---	2	2	2	---	---	2	2	2	2	---	2	2	---	2
B22	Ave	---	---	.165	.017	8.7	---	---	14.5	9.5	23.6	4.7	---	43.7	56.4	---	1.6
	S D	---	---	.035	.0014	2.7	---	---	4.9	2.8	8.1	3.2	---	4.6	7.2	---	.07
	Rng	---	---	.14-.19	.01-.02	6-11	---	---	11-18	7-12	18-29	2.4-6.9	---	40-47	51-62	---	1.5-1.6
	N	---	---	2	2	2	---	---	2	2	2	2	---	2	2	---	2
C1	Ave	---	---	.125	---	---	---	---	20.1	9.6	17.5	3.6	---	39.1	46.0	---	2.1
	S D	---	---	.007	---	---	---	---	5.7	1.9	9.1	2.4	---	5.8	3.7	---	.14
	Rng	---	---	.12-.13	---	---	---	---	16-24	8-11	11-24	1.9-5.3	---	35-43	43-49	---	2-2.2
	N	---	---	2	---	---	---	---	2	2	2	2	---	2	2	---	2
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

SOIL SERIES: Crutch

TAXONOMIC NAME: Duric Haploorthod

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
A2	Ave	5.0	4.8	2.8	.14	26.5	1.9	14.8	3.1	.8	.45	.30	---	14.5	31.2	---	3.3
	S D	.28	1.3	.71	.11	16.3	2.1	4.9	2.9	.42	.07	.14	---	9.5	2.1	---	1.8
	Rng	4.8-5.2	3.9-5.7	2.3-3.3	.06-.22	15-38	.4-3.4	11-18	1-5	.5-1.1	.4-.5	.2-.4	---	8-21	29-33	---	2-4.6
	N	2	2	2	2	2	2	2	2	2	2	2	---	2	2	---	2
B21r	Ave	5.55	3.1	1.8	.041	53.3	1.63	12.3	.53	.28	.35	.18	---	5.9	22.8	---	1.9
	S D	.29	.91	.53	.03	21.4	1.4	8.7	.46	.22	.17	.05	---	3.8	3.5	---	.25
	Rng	5.2-5.9	1.9-4.0	1.1-2.3	.02-.09	27-74	.8-3.7	5-24	.2-1.2	.1-.6	.2-.6	.1-.2	---	3-11	19-28	---	1.5-2.0
	N	4	4	4	4	4	4	4	4	4	4	4	---	4	4	---	4
B31r	Ave	5.9	1.7	1.0	.033	28.5	1.95	3.9	.45	.2	.2	.15	---	5.9	24.7	---	2.5
	S D	.35	1.4	.85	.026	3.5	1.5	1.3	.21	.14	.14	.07	---	5.3	20.9	---	.71
	Rng	5.6-6.1	.7-2.7	.4-1.6	.01-.06	26-31	.9-3.0	3-4.8	.3-.6	.1-.3	.1-.3	.1-.2	---	2-10	9-40	---	2-3
	N	2	2	2	2	2	2	2	2	2	2	2	---	2	2	---	2
B321r	Ave	5.5	2.7	1.6	.046	33.7	1.1	7.0	.3	.3	.1	9.7	---	7.7	9.7	---	1.0
	S D	/	/	/	/	/	/	/	/	/	/	/	---	/	/	---	/
	Rng	/	/	/	/	/	/	/	/	/	/	/	---	/	/	---	/
	N	1	1	1	1	1	1	1	1	1	1	1	---	1	1	---	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Curant

TAXONOMIC NAME: Calcic Pachic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
A11	Ave S D Rng N	6.8 / 1	--- / 1	4.4 / 1	0.20 / 1	22.0 / 1	--- / 1	--- / 1	13.9 / 1	7.6 / 1	0.11 / 1	2.09 / 1	5.4 / 1	28.1 / 1	84.3 / 1	82.8 / 1	1.83 / 1
A12	Ave S D Rng N	6.9 / 1	--- / 1	3.2 / 1	0.12 / 1	26.7 / 1	--- / 1	--- / 1	15.4 / 1	9.2 / 1	0.14 / 1	1.92 / 1	4.4 / 1	37.9 / 1	70.3 / 1	85.8 / 1	1.67 / 1
B2	Ave S D Rng N	7.2 / 1	--- / 1	1.0 / 1	0.07 / 1	14.3 / 1	--- / 1	--- / 1	17.3 / 1	11.5 / 1	0.28 / 1	1.80 / 1	5.9 / 1	36.5 / 1	84.6 / 1	84.0 / 1	1.50 / 1
B3	Ave S D Rng N	8.1 / 1	--- / 1	0.7 / 1	0.04 / 1	17.5 / 1	--- / 1	--- / 1	15.4 / 1	11.3 / 1	0.50 / 1	1.65 / 1	2.0 / 1	24.6 / 1	100.0 / 1	93.5 / 1	1.46 / 1
C1	Ave S D Rng N	8.5 / 1	--- / 1	0.5 / 1	0.04 / 1	12.5 / 1	--- / 1	--- / 1	16.1 / 1	10.9 / 1	0.65 / 1	1.47 / 1	1.1 / 1	25.2 / 1	100.0 / 1	96.4 / 1	1.48 / 1
C2	Ave S D Rng N	8.7 / 1	--- / 1	0.5 / 1	0.04 / 1	12.5 / 1	--- / 1	--- / 1	35.2 / 1	10.6 / 1	1.26 / 1	1.21 / 1	0.7 / 1	23.6 / 1	100.0 / 1	98.6 / 1	3.32 / 1
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Day

TAXONOMIC NAME: Typic Chromoxerert

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)		%			%	(ppm)			Meq/100g				(NH ₄ OAc)	(Σ Cat)	
A1	Ave	7.5	---	0.58	0.04	14.5	---	---	42.6	3.9	3.62	1.34	---	46.9	100	---	10.92
	S D	/	---	/	/	/	---	---	/	/	/	/	---	/	/	---	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	---	1	1	---	1
AC1	Ave	7.0	---	0.53	0.04	13.3	---	---	45.4	3.4	5.70	1.28	---	42.9	100	---	13.35
	S D	/	---	/	/	/	---	---	/	/	/	/	---	/	/	---	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	---	1	1	---	1
AC2	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
AC3	Ave	8.2	---	0.23	0.02	11.5	---	---	58.5	2.7	6.40	1.11	---	47.6	100	---	21.67
	S D	/	---	/	/	/	---	---	/	/	/	/	---	/	/	---	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	---	1	1	---	1
AC4	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

SOIL SERIES: Dayton

TAXONOMIC NAME: Typic Albaqualf

Horizon	Stat.	Horizon Thickness (cm)	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density (g/cc)			
				-%			-% H ₂ O					
Ap	Ave	18.8	9.0	72.8	18.2	28.1	26.0	9.8	1.4			
	S D	1.8	7.8	8.1	4.0	/	1.4	2.1	.05			
	Rng	17-20	4-23	62-82	14-24	/	24-27	8-13	1.3-1.5			
	N	9	5	5	5	1	3	6	4			
A12	Ave	10.75	10.5	71.3	18.2	---	24.7	10.15	1.5			
	S D	2.9	12.5	9.7	3.0	---	/	1.9	.04			
	Rng	7-13	3-25	60-78	15-21	---	/	9-12	1.4-1.6			
	N	4	3	3	3	---	1	2	2			
A2	Ave	16.7	8.1	71.7	20.2	28.0	21.7	9.8	1.5			
	S D	6.5	7.7	6.4	4.9	1.7	10.9	2.7	.05			
	Rng	8-26	3-28	60-81	12-26	27-29	2-28	6-16	1.4-1.6			
	N	18	9	9	9	2	5	10	7			
B21t	Ave	31.6	3.2	51.4	45.4	35.95	36.4	22.6	1.7			
	S D	20.1	1.5	4.1	5.5	/	1.2	2.8	.3			
	Rng	16-30	1.1-4.6	47-55	40-52	/	35-37	20-25	1.5-1.9			
	N	7	4	4	4	1	2	3	2			
B22t	Ave	23.1	2.7	55.4	42.0	---	37.4	24.35	1.9			
	S D	4.7	.2	1.4	1.5	---	/	.6	/			
	Rng	17-31	2.4-2.8	54-57	40-43	---	/	23-25	/			
	N	8	4	4	4	---	1	2	1			
B3t	Ave	26.5	3.2	68.8	28.0	---	35.95	19.7	1.6			
	S D	8.3	.8	4.8	4.6	---	3.0	2.6	.06			
	Rng	21-32	2.5-4.3	65-76	22-32	---	34-38	17-22	1.5-1.7			
	N	8	4	4	4	---	2	3	2			
IIB2t	Ave	27.0	14.9	43.3	41.8	---	29.2	19.2	1.5			
	S D	12.2	8.3	2.8	11.1	---	/	5.6	.2			
	Rng	12-41	8-24	41-47	29-50	---	/	14-26	1.4-1.7			
	N	5	3	3	3	---	1	5	3			
IIB3t	Ave	46.25	19.25	46.8	34.0	---	28.6	17.5	1.5			
	S D	12.7	9.1	9.8	18.9	---	/	5.4	.1			
	Rng	33-63	13-26	40-54	21-47	---	/	13-23	1.4-1.6			
	N	4	2	2	2	---	1	3	2			
C	Ave	35.25	7.3	66.6	25.7	---	28.0	16.7	1.5			
	S D	10.2	3.5	15.6	16.0	---	.8	8.7	.007			
	Rng	25-55	2-11	32-76	13-59	---	27-29	10-31	1.4-1.6			
	N	8	7	7	7	---	2	5	2			

0
2.11
18"

18"

49.96

29.96

62.79

2.95

4.23

6.57

12.44

2.53

10.43

19.63

18.20

SOIL SERIES: Dayton

TAXONOMIC NAME: Typic Albaqualf

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (I Cat)	Ca/Mg
				%			%	(ppm)									
Ap	Ave	5.2	3.4	2.1	.16	14.3	.85	22.3	6.5	3.4	.2	.3	12.9	17.8	52.3	34.7	2.5
	S D	.5	/	.7	.06	4.6	.2	13.5	3.6	3.6	.2	.15	2.8	4.6	27.3	2.1	.9
	Rng	4.2-5.7	/	1.5-3.3	.10-.28	10-21	.7-1.0	10-37	3-13	1.3-13	.05-.8	.1-.6	10-17	13-27	19-100	32-37	1.0-4.2
	N	8	1	6	6	6	2	3	10	10	9	10	4	10	10	4	10
A12	Ave	5.0	4.4	2.1	.18	11.3	1.3	---	4.4	1.75	.1	.3	12.6	15.1	43.4	33.3	2.7
	S D	.2	3.1	.9	.06	1.5	.7	---	.6	.6	.01	.1	1.7	2.1	4.9	2.7	1.1
	Rng	4.8-5.3	2.2-6.6	1.1-3.4	.11-.25	8-13	.7-2.0	---	3.6-5.0	1.2-2.4	.1-.13	.1-.4	11-14	13-17	37-48	32-35	1.8-4.1
	N	4	2	4	4	4	3	---	4	4	4	4	2	4	4	2	4
A2	Ave	5.6	1.45	.8	.07	9.75	1.45	4.7	5.7	3.4	.2	.2	7.6	14.1	58.3	48.9	1.9
	S D	.3	1.1	.5	.03	1.7	.3	1.9	3.5	3.0	.2	.2	1.6	4.2	19.3	9.2	.6
	Rng	5.2-6.3	.7-2.2	.4-1.7	.04-.07	8-13	1.2-1.9	2.5-7.1	1.5-15	.8-14	.06-.9	.1-.9	5.8-11	7-21	36-100	34-59	1.1-3.3
	N	15	2	11	10	10	4	4	19	19	17	19	7	19	19	7	19
B21t	Ave	5.7	.7	.3	.04	6.5	1.6	4.5	14.5	12.5	.7	.4	8.95	38.8	75.5	78.0	1.2
	S D	.3	/	.06	/	/	/	/	2.2	2.0	.3	.05	.4	5.3	8.7	2.2	.2
	Rng	5.2-5.9	/	.26-.38	/	/	/	/	12-18	10-16	.25-1.0	.37-.49	8.7-9.2	27-44	60-80	76-80	.9-1.5
	N	5	1	3	1	1	1	1	7	7	6	7	2	5	5	2	5
B22t	Ave	6.2	.4	.2	.03	6.0	2.0	3.5	15.85	13.4	.8	.4	6.05	34.4	87.7	88.2	1.2
	S D	.5	/	.02	/	/	1.0	/	4.0	3.2	.4	.06	1.06	6.6	11.6	/	.2
	Rng	5.4-6.8	/	.18-.21	/	/	1.3-2.7	/	8-21	7-18	.3-1.4	.3-.5	5.3-6.8	29-44	61-97	/	.9-1.5
	N	6	1	3	1	1	2	1	8	8	7	8	2	8	8	1	8
B3t	Ave	6.8	---	.1	---	---	1.45	2.0	14.3	10.4	.6	.4	3.6	30.3	78.0	90.6	2.0
	S D	.3	---	.04	---	---	.07	/	5.0	5.5	.4	.08	1.4	5.7	30.2	2.8	1.3
	Rng	6.4-7.2	---	.07-.14	---	---	1.4-1.5	/	7-21	1-15	.05-.95	.3-.5	2.5-5.2	25-41	31-100	87-93	1.0-4.2
	N	5	---	3	---	---	2	1	8	8	7	7	3	7	7	3	8
IIB2t	Ave	5.9	.75	.3	.1	4.0	1.6	2.0	15.3	12.1	.9	.4	6.6	34.5	83.5	75.5	1.3
	S D	.6	.4	.3	/	/	.5	/	4.6	3.5	.8	.07	.7	9.2	9.2	1.0	.2
	Rng	5.2-6.7	.5-1.0	.1-.9	/	/	/	1.4-2.8	10-19	9-18	.3-2.5	.3-.5	6.1-7.4	24-47	74-97	74-76	1.0-1.6
	N	7	2	5	1	1	1	5	7	7	7	7	3	7	7	3	7
IIB3t	Ave	5.8	---	.15	---	4.0	1.5	6.0	13.0	11.1	.9	.3	5.25	31.3	81.6	83.0	1.2
	S D	.8	---	.13	---	/	/	/	3.6	4.5	.9	.06	1.6	13.8	9.6	/	.2
	Rng	5.0-6.5	---	.05-.3	---	/	/	/	11-17	8-16	.4-2.0	.3-.4	4.1-6.4	22-47	76-93	/	1.0-1.4
	N	3	---	3	---	1	1	1	3	3	3	3	2	3	3	1	3
C	Ave	6.9	.2	.09	.11	3.0	1.7	16.5	14.3	10.7	.8	.4	2.6	28.7	90.1	90.5	1.5
	S D	.5	.2	.10	.13	2.1	.8	24.2	4.1	4.3	.5	.1	.6	9.6	14.3	.7	.5
	Rng	6.3-7.7	.1-.3	.03-.30	.02-.20	1.5-4.5	1.2-2.7	2-45	7-22	3-21	.1-2.1	.2-.7	2.1-3.4	20-55	51-100	89-91	.9-2.7
	N	7	2	6	2	2	3	3	11	11	10	11	4	11	11	4	11

SO11. SERIES: Debenger

TAXONOMIC NAME: Typic Xerochrept

[illegible]

SOIL SERIES: Debenger

TAXONOMIC NAME: Typic Xerochrept

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)		---	---		%	(ppm)							(NH ₄ OAc)	(Σ Cat)	
1	Ave	6.6	---	2.35	---	---	---	---	7.7	2.7	0.07	0.40	4.9	12.5	87.0	68.9	2.9
	S D	/	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/
	Rng	/	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/
	N	1	---	1	---	---	---	---	1	1	1	1	1	1	1	1	1
2	Ave	6.5	---	---	---	---	---	---	11.3	4.7	0.14	0.31	4.5	12.8	100	78.95	2.4
	S D	/	---	---	---	---	---	---	/	/	/	/	/	/	/	/	/
	Rng	/	---	---	---	---	---	---	/	/	/	/	/	/	/	/	/
	N	1	---	---	---	---	---	---	1	1	1	1	1	1	1	1	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Delena

TAXONOMIC NAME: Humic Fragiaquept

[illegible]

SOIL SERIES: Delena

TAXONOMIC NAME: Humic Fraglaquept

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)		%			%	(ppm)			Meq/100g				(NH ₄ OAc)	(E Cat)	
A11	Ave	6.0	---	---	---	---	---	---	13.9	3.7	0.3	0.4	20.8	27.5	66.6	46.8	3.8
	S D	/	---	---	---	---	---	---	/	/	/	/	/	/	/	/	/
	Rng	/	---	---	---	---	---	---	/	/	/	/	/	/	/	/	/
	N	1	---	---	---	---	---	---	1	1	1	1	1	1	1	1	1
A12	Ave	5.9	---	---	---	---	---	---	9.6	3.2	0.3	0.4	16.9	22.4	60.3	44.4	3.0
	S D	/	---	---	---	---	---	---	/	/	/	/	/	/	/	/	/
	Rng	/	---	---	---	---	---	---	/	/	/	/	/	/	/	/	/
	N	1	---	---	---	---	---	---	1	1	1	1	1	1	1	1	1
B2	Ave	6.0	---	---	---	---	---	---	7.1	2.3	0.3	0.3	12.3	14.3	70	44.8	3.1
	S D	/	---	---	---	---	---	---	/	/	/	/	/	/	/	/	/
	Rng	/	---	---	---	---	---	---	/	/	/	/	/	/	/	/	/
	N	1	---	---	---	---	---	---	1	1	1	1	1	1	1	1	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Dement

TAXONOMIC NAME: Umbric Dystrochrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
				%			%	(ppm)			Meq/100g						
A1	Ave	5.3	---	---	---	---	---	---	6.6	3.9	.47	1.3	---	32.4	36.0	---	1.9
	S D	.173	---	---	---	---	---	---	3.2	2.7	.06	.45	---	7.9	10.5	---	.50
	Rng	5.2-5.5	---	---	---	---	---	---	3-10	1.5-7.0	.4-.5	.8-1.7	---	25-41	25-46	---	1.4-2.4
	N	3	---	---	---	---	---	---	3	3	3	3	---	3	3	---	3
A3-B1	Ave	4.55	---	---	---	---	---	---	3.2	1.5	.45	.70	---	30.2	20.0	---	2.3
	S D	.78	---	---	---	---	---	---	.21	.35	.07	.28	---	9.0	5.6	---	.71
	Rng	4-5.1	---	---	---	---	---	---	3-3.3	1.2-1.7	.4-.5	.5-.9	---	24-37	16-24	---	1.8-2.8
	N	2	---	---	---	---	---	---	2	2	2	2	---	2	2	---	2
B21	Ave	4.4	---	---	---	---	---	---	2.4	1.25	.4	.4	---	23.6	18.5	---	1.95
	S D	.71	---	---	---	---	---	---	.07	.35	---	.14	---	.21	.71	---	.50
	Rng	3.9-4.9	---	---	---	---	---	---	2.3-2.4	1-1.5	.4	.3-.5	---	23-24	18-19	---	1.6-2.3
	N	2	---	---	---	---	---	---	2	2	2	2	---	2	2	---	2
B22	Ave	4.75	---	---	---	---	---	---	2.0	1.45	.4	.3	---	23.6	17	---	1.3
	S D	.07	---	---	---	---	---	---	.50	.07	---	.14	---	.57	1.4	---	.28
	Rng	4.7-4.8	---	---	---	---	---	---	1.6-2.3	1.4-1.5	.4	.2-.4	---	23-24	16-18	---	1.1-1.5
	N	2	---	---	---	---	---	---	2	2	2	2	---	2	2	---	2
B23t	Ave	4.8	---	---	---	---	---	---	.9	1.2	.5	.3	---	21.9	13	---	.75
	S D	/	---	---	---	---	---	---	/	/	/	/	---	/	/	---	/
	Rng	/	---	---	---	---	---	---	/	/	/	/	---	/	/	---	/
	N	1	---	---	---	---	---	---	1	1	1	1	---	1	1	---	1
B24t-25t	Ave	5.6	---	---	---	---	---	---	.9	1.8	.45	.25	---	23.6	13	---	.50
	S D	1.3	---	---	---	---	---	---	/	---	.07	.07	---	2.4	---	---	/
	Rng	4.7-6.5	---	---	---	---	---	---	/	1.8	.4-.5	.2-.3	---	22-25	13	---	/
	N	2	---	---	---	---	---	---	1	2	2	2	---	2	2	---	1
C1	Ave	4.5	---	---	---	---	---	---	2.5	1.8	.5	.3	---	24.6	21	---	1.4
	S D	/	---	---	---	---	---	---	/	/	/	/	---	/	/	---	/
	Rng	/	---	---	---	---	---	---	/	/	/	/	---	/	/	---	/
	N	1	---	---	---	---	---	---	1	1	1	1	---	1	1	---	1
C2	Ave	4.4	---	---	---	---	---	---	1.6	1.5	.4	.2	---	24.6	15	---	1.1
	S D	/	---	---	---	---	---	---	/	/	/	/	---	/	/	---	/
	Rng	/	---	---	---	---	---	---	/	/	/	/	---	/	/	---	/
	N	1	---	---	---	---	---	---	1	1	1	1	---	1	1	---	1
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Deschutes

TAXONOMIC NAME: Xerollic Camborthid

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)		---	---		%	(ppm)							(NH ₄ OAc)	(E Cat)	
A1	Ave	7.0	---	.515	.042	12	---	---	5.7	2.1	.1	1.0	2.4	11.9	74.2	78.5	2.7
	S D	.14	---	.02	.004	---	---	---	1.2	.35	---	.14	.42	2.2	.57	.71	.11
	Rng	6.9-7.1	---	.5-.6	.4-.5	12	---	---	4.8-6.5	1.8-2.3	.1	.9-1.1	2.1-2.7	10-13	73-75	78-79	2.6-2.8
	N	2	---	2	2	2	---	---	2	2	2	2	2	2	2	2	2
AC1	Ave	7.2	---	.43	.041	10.5	---	---	6.5	2.9	.2	.8	1.85	13.0	85.2	84.5	2.3
	S D	.28	---	.04	.003	.71	---	---	2.0	.50	---	.14	.07	2.0	5.4	2.1	.30
	Rng	7.0-7.4	---	.4-.5	.04-.05	10-11	---	---	5.1-7.9	2.5-3.2	.2	.7-.9	1.8-1.9	11-15	81-89	83-86	2.0-2.5
	N	2	---	2	2	2	---	---	2	2	2	2	2	2	2	2	2
AC2	Ave	7.4	---	.40	.047	9	---	---	6.7	3.5	.2	.8	1.15	12.9	86.1	87.5	1.91
	S D	.28	---	.04			---	---	2.5	.78	---	.28	.44	2.2	9.0	3.5	.30
	Rng	7.2-7.6	---	.37-.43			---	---	5-9	3-4	.2	.6-1	1.4-1.6	11-14	79-92	85-90	1.7-2.1
	N	2	---	2	1	1	---	---	2	2	2	2	2	2	2	2	2
IIC	Ave	8.75	---	.31	---	---	---	---	9.3	6.3	1.0	1.3	.6	16.8	106.9	96.5	1.52
	S D	.35	---	.08	---	---	---	---	1.1	1.1	.71	.71	---	1.2	.78	.71	.45
	Rng	8.5-9.0	---	.2-.4	---	---	---	---	8.5-10	5.5-7.1	.5-1.5	.8-1.8	.6	16-18	106-107	96-97	1.2-1.8
	N	2	---	2	---	---	---	---	2	2	2	2	2	2	2	2	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Digger

TAXONOMIC NAME: Dystric Eutrochrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
A1	Ave	6.43	---	2.85	.57	23.4	---	---	13.9	7.0	.31	1.3	---	26.4	84.6	---	2.0
	S D	.60	---	.92	.61	1.7	---	---	2.2	.71	.15	.19	---	2.51	1.5	---	.57
	Rng	5.8-6.0	---	2-4	.1-1	22-25	---	---	12-16	6.5-7.5	.2-.4	1.1-1.4	---	24-28	83-86	---	1.6-2.4
	N	2	---	2	2	2	---	---	2	2	2	2	---	2	2	---	2
B1	Ave	5.8	---	1.45	.075	25.0	---	---	10.3	7.0	.28	.77	---	24.1	75.5	---	1.6
	S D	.28	---	.92	.035	5.4	---	---	3.2	.78	.11	.1	---	.50	7.0	---	.64
	Rng	5.6-6	---	.8-2.1	.05-.1	21-29	---	---	8-13	6.4-7.5	.2-.4	.7-.9	---	23-25	70-80	---	1-2
	N	2	---	2	2	2	---	---	2	2	2	2	---	2	2	---	2
B2-B3	Ave	5.85	---	.50	.035	19.1	---	---	10.9	8.9	.31	.80	---	25.4	81.5	---	1.35
	S D	.07	---	.14	.007	6.0	---	---	3.8	.28	.15	.28	---	3.18	21.0	---	.64
	Rng	5.8-5.9	---	.4-.6	.03-.04	15-23	---	---	8-14	8-9	.2-.4	.6-1	---	23-28	66-96	---	.9-1.8
	N	2	---	2	2	2	---	---	2	2	2	2	---	2	2	---	2
Dr	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

SOIL SERIES: Dinzer

TAXONOMIC NAME: Typic Cryorthod

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
02	Ave	4.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	/	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	/	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
A2	Ave	4.6	---	---	---	---	1.6	---	---	---	---	---	---	---	---	---	---
	S D	.71	---	---	---	---	.42	---	---	---	---	---	---	---	---	---	---
	Rng	4.1-5.1	---	---	---	---	1.3-1.9	---	---	---	---	---	---	---	---	---	---
	N	2	---	---	---	---	2	---	---	---	---	---	---	---	---	---	---
B21r	Ave	5.6	5.6	3.2	.08	40.6	3.0	2.3	.18	.17	.17	.23	---	20.9	3.56	---	1.1
	S D	.26	1.04	.58	.006	6.2	.36	.93	.19	.12	.06	.15	---	.95	1.94	---	.17
	Rng	5.3-5.8	5.0-6.8	2.9-3.9	.07-.98	35-47	2.7-3.4	1.5-3.3	.05-.4	.1-.3	.1-.2	.1-.4	---	20-21	2.3-5.8	---	1.0-1.3
	N	3	3	3	3	3	3	3	3	3	3	3	---	3	3	---	3
B3	Ave	6.0	3.2	1.85	.08	24.8	3.65	2.5	.1	.2	.2	.25	---	24.9	3.0	---	.65
	S D	.21	.85	.50	.03	4.2	.78	---	---	.14	---	.21	---	5.1	1.9	---	.50
	Rng	5.8-6.1	2-4	1.5-2.2	.06-.1	21-28	3-4	2.5	.1	.1-.3	.2	.1-.4	---	21-29	1.6-4.3	---	.3-1.0
	N	2	2	2	2	2	2	2	2	2	2	2	---	2	2	---	2
C	Ave	5.6	1.4	.8	.02	34.2	3.3	3.8	.3	.1	.1	.1	---	18.2	3.5	---	3.0
	S D	/	/	/	/	/	/	/	/	/	/	/	---	/	/	---	/
	Rng	/	/	/	/	/	/	/	/	/	/	/	---	/	/	---	/
	N	1	1	1	1	1	1	1	1	1	1	1	---	1	1	---	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Dixonville

TAXONOMIC NAME: Pachic Ultic Argixeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
			----- %	----- %			%	(ppm)			----- Meq/100g						
A1	Ave	5.84	6.2	3.61	.19	18.9	7.0	3.5	20.4	15.0	.20	.87	---	44.4	82.6	---	1.5
	S D	.22	1.4	.85	.03	2.3	1.1	1.3	6.5	5.3	.06	.48	---	8.6	2.7	---	.60
	Rng	5.4-6.1	4.2-8.1	4.7-2.4	.15-.24	15-22	5.4-7.7	2.3-4.8	12-30	9-19	.15-.28	.2-1.6	---	40-56	79-86	---	.7-2.3
	N	7	7	7	7	7	4	3	8	8	5	8	---	8	5	---	8
A3	Ave	5.8	4.05	2.34	.138	17.3	6.8	1.75	19.8	14.2	.215	.465	---	41.5	84.0	---	1.5
	S D	.25	.99	.56	.039	3.0	1.1	.78	7.3	3.0	.104	.293	---	7.8	8.3	---	.51
	Rng	5.5-6.1	3.0-5.4	1.7-3.1	.11-.21	13-22	5.3-7.7	1.2-2.3	13-29	10-19	.1-.4	.2-1	---	31-53	77-96	---	.88-2.2
	N	6	6	6	6	6	4	2	6	6	4	6	---	6	4	---	6
B1	Ave	5.1	2.85	1.65	.09	18.3	---	2.0	17.2	22.3	.21	.60	---	47.5	81.4	---	.87
	S D	/	/	/	/	/	---	/	2.3	9.4	/	.42	---	5.5	/	---	.47
	Rng	/	/	/	/	/	---	/	15-19	15-29	/	.3-.9	---	43-52	/	---	.5-1.2
	N	1	1	1	1	1	---	1	2	2	1	2	---	2	1	---	2
B2	Ave	5.6	1.39	.80	.06	13.6	---	2.3	16.2	21.4	.26	.38	---	42.3	83.7	---	.88
	S D	.56	.94	.54	.04	.50	---	.14	5.4	10.1	/	.40	---	9.0	/	---	.37
	Rng	5.2-6	.7-2.1	.4-1.2	.03-.09	13-14	---	2.2-2.4	13-22	14-33	/	.1-.8	---	32-49	/	---	.4-1.3
	N	2	2	2	2	2	---	2	3	3	1	3	---	3	1	---	3
B2tg	Ave	5.85	1.9	1.1	.077	13.7	---	1.45	24.8	20.4	.27	.22	---	46.5	102.4	---	1.3
	S D	.47	1.0	.60	.022	4.1	---	.07	7.0	7.5	.05	.10	---	6.3	8.3	---	.62
	Rng	5.3-6.6	.7-3.3	.4-1.9	.05-.11	7-19	---	1.4-1.5	15-32	13-32	.21-.33	.1-.4	---	39-55	93-113	---	.66-2.1
	N	6	6	6	6	6	---	2	6	6	4	6	---	6	4	---	6
B3	Ave	6.12	1.25	.73	.048	14.5	4.3	2.2	26.6	21	.30	.177	---	46.3	108.2	---	1.2
	S D	.41	.60	.36	.015	4.4	1.2	.14	9.4	7.2	.059	.066	---	9.3	5.6	---	.74
	Rng	5.5-6.8	.4-2.2	.23-1.3	.03-.07	7-19	3.2-5.7	2.1-2.3	14-35	15-34	.26-.39	.1-.3	---	32-53	102-116	---	.3-2.3
	N	6	6	6	6	6	4	2	6	6	4	6	---	6	4	---	6
C	Ave	6.02	.828	.48	.03	15.3	3.35	1.9	29.4	25.4	.37	.148	---	55.7	100.5	---	1.1
	S D	.53	.47	.27	.01	4.0	.94	.57	11.6	9.1	.09	.041	---	6.6	10.1	---	.78
	Rng	6.1-6.7	.3-1.5	.19-.9	.02-.05	9-21	2.2-4.3	1.5-2.3	15-43	15-36	.23-.43	.1-.2	---	45-62	88-113	---	.4-2.1
	N	6	6	6	6	6	4	2	6	6	3	6	---	6	4	---	6
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Dupee

TAXONOMIC NAME: Aquatic Haploxeralf

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
		(1:1 H ₂ O)	-----	-----	-----	-----	%	(ppm)	-----	-----	-----	-----	-----	-----	-----	-----	-----
A1p	Ave	5.45	---	1.18	.092	12.5	1.25	---	4.5	1.2	.15	.3	8.1	---	---	43	3.8
	S D	.21	---	.05	.008	.71	.35	---	.71	.14	.07	---	1.4	---	---	1.4	.14
	Rng	5.3-5.6	---	1.1-1.2	.08-.1	12-13	1-1.5	---	4-5	1.1-1.3	.1-.2	.3	7-9	---	---	42-44	3.6-3.9
	N	2	---	2	2	2	2	---	2	2	2	2	2	---	---	2	2
B1	Ave	5.4	---	.46	.051	9.0	1.4	---	5	1.8	.2	.2	8.2	---	---	50	2.8
	S D	.28	---	.07	.003	1.4	.42	---	.78	.42	---	---	2.2	---	---	.14	.22
	Rng	5.2-5.6	---	.4-.5	.04-.05	8-10	1.1-1.7	---	4-6	1-2	.2	.2	6-10	---	---	49-51	2.6-2.9
	N	2	---	2	2	2	2	---	2	2	2	2	2	---	---	2	2
B21	Ave	5.2	---	.33	---	---	1.6	---	7.1	3.4	.2	.25	8.5	---	---	57	2.1
	S D	.42	---	.007	---	---	.14	---	.14	.42	---	.07	2.0	---	---	4.2	.22
	Rng	4.9-5.5	---	.32-.33	---	---	1.5-1.7	---	7-7.2	3.1-3.7	.2	.2-.3	7-10	---	---	54-60	1.9-2.3
	N	2	---	2	---	---	2	---	2	2	2	2	2	---	---	2	2
B22	Ave	5.0	---	.27	---	---	1.7	---	9.5	4.9	.2	.25	9.8	---	---	60.5	2.0
	S D	.42	---	.02	---	---	.21	---	.21	.85	---	.07	2.7	---	---	5.0	.30
	Rng	4.7-5.3	---	.25-.28	---	---	1.5-1.8	---	9.3-9.6	4.3-5.5	.2	.2-.3	8-12	---	---	57-64	1.7-2.2
	N	2	---	2	---	---	2	---	2	2	2	2	2	---	---	2	2
B23	Ave	4.85	---	.195	---	---	1.75	---	11.9	6.3	.3	.3	10.1	---	---	64.0	1.9
	S D	.35	---	.007	---	---	1.1	---	.64	.50	.07	.07	2.5	---	---	5.7	.25
	Rng	4.6-5.1	---	.19-.2	---	---	1-2.5	---	11-12	6-7	.2-.3	.2-.3	8-12	---	---	61-69	1.7-2.1
	N	2	---	2	---	---	2	---	2	2	2	2	2	---	---	2	2
C1	Ave	4.9	---	.093	---	---	1.63	---	9.4	5.1	.4	.3	8.1	---	---	64.8	1.9
	S D	.14	---	.004	---	---	1.6	---	3.9	2.1	---	.07	2.0	---	---	3.9	.04
	Rng	4.8-5	---	.09-.1	---	---	.5-2.8	---	6-12	3-7	.4	.2-.3	6-10	---	---	62-68	1.8-1.9
	N	2	---	2	---	---	2	---	2	2	2	2	2	---	---	2	2
C2	Ave	4.9	---	.06	---	---	1.3	---	9.0	5.2	.45	.2	8.0	---	---	63.5	1.7
	S D	.28	---	.014	---	---	1.4	---	6.1	3.3	.07	---	3.5	---	---	5.0	.11
	Rng	4.7-5.1	---	.05-.07	---	---	.3-2.3	---	4-13	2.9-7.5	.4-.5	.2	6-11	---	---	60-67	1.6-1.8
	N	2	---	2	---	---	2	---	2	2	2	2	2	---	---	2	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Dufur

TAXONOMIC NAME: Calcic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
				%			%	(ppm)			Meq/100g						
Ap	Ave	6.47	---	1.00	.085	11.8	---	---	10.0	3.0	.17	1.4	3.9	19.0	76.7	80.0	3.4
	S D	.06	---	.14	.001	1.6	---	---	.4	.36	.06	.23	.35	.66	2.5	77-83	.34
	Rng	6.4-6.5	---	.8-1.1	.08-.09	10-13	---	---	9-11	2.7-3.4	.1-.2	1.1-1.5	3.6-4.3	18-20	74-79	3.0	3.1-3.7
	N	3	---	3	3	3	---	---	3	3	3	3	3	3	3	3	3
B1	Ave	6.7	---	.76	.075	10.1	---	---	10.1	3.4	0.3	1.3	3.3	19.4	78	82	3.0
	S D	/	---	/	/	/	---	---	/	/	/	/	/	/	/	/	/
	Rng	/	---	/	/	/	---	---	/	/	/	/	/	/	/	/	/
	N	1	---	1	1	1	---	---	1	1	1	1	1	1	1	1	1
B21	Ave	7.0	---	.615	.063	9.8	---	---	9.5	4.1	.15	1.2	2.7	18.9	78.5	85	2.4
	S D	---	---	.007	.003	.6	---	---	.5	.35	.07	---	.14	.14	3.5	1.4	.07
	Rng	7.0	---	.61-.62	.06-.07	9-10	---	---	9-10	3.8-4.3	.1-.2	1.2	2.6-2.8	18.8-19	76-81	84-86	2.3-2.4
	N	2	---	2	2	2	---	---	2	2	2	2	2	2	2	2	2
B22	Ave	7.35	---	.36	.061	8.7	---	---	9.4	5.15	.35	2.55	1.35	18.0	97.0	93	1.8
	S D	.07	---	.24	/	/	---	---	.57	.21	.07	.21	.21	.92	8.5	1.4	---
	Rng	7.3-7.4	---	.1-.6	/	/	---	---	9-10	5-5.3	.3-.4	2.4-2.7	1.2-1.5	17-19	91-100	92-94	1.8
	N	2	---	2	1	1	---	---	2	2	2	2	2	2	2	2	2
B23	Ave	7.55	---	.22	---	---	---	---	8.05	5.0	.35	2.7	1.0	18.2	88.5	94	1.6
	S D	.21	---	.17	---	---	---	---	.07	.35	.07	.57	.56	.28	3.5	2.8	.14
	Rng	7.4-7.7	---	.1-.4	---	---	---	---	8-8.1	4.7-5.2	.3-.4	2.3-3.1	.6-1.4	18-18.4	86-91	92-96	1.5-1.7
	N	2	---	2	---	---	---	---	2	2	2	2	2	2	2	2	2
Cca	Ave	8.45	---	.145	---	---	---	---	17.5	8.0	7.8	4.5	---	22.1	100	100	2.25
	S D	.50	---	.02	---	---	---	---	1.3	1.1	8.6	.92	---	4.9	---	---	.50
	Rng	8.1-8.8	---	.13-.16	---	---	---	---	16-19	7.2-8.8	1-14	3-5	---	18-26	100	100	1.9-2.6
	N	2	---	2	---	---	---	---	2	2	2	2	---	2	2	2	2
Cca-Dr	Ave	8.0	---	.09	---	---	---	---	18.9	7.9	1.5	3.1	.7	25.8	100	98	2.4
	S D	/	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/
	Rng	/	---	/	---	---	---	---	/	/	/	/	/	/	/	/	/
	N	1	---	1	---	---	---	---	1	1	1	1	1	1	1	1	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Dumont

TAXONOMIC NAME: Typic Haploxerult

Horizon	Stat.	Horizon Thickness (cm)	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density (g/cc)			
				-%			-% H ₂ O					
A1	Ave	6.3	38.9	41.2	19.9	---	---	17.0	.81			
	S D	3.2	4.6	6.1	1.6	---	---	1.4				
	Rng	4-10	34-43	35-48	18-21	---	---	15-18				
	N	3	3	3	3	---	---	3	1			
A12	Ave	5.5	33.3	42.7	24.1	---	---	14.6	---			
	S D	.71	2.3	4.4	2.1	---	---	3.8	---			
	Rng	5-6	31-35	39-56	22-26	---	---	12-17	---			
	N	2	2	2	2	---	---	2	---			
A3-B1	Ave	7.0	34.3	38.1	27.6	---	---	16.1	.88			
	S D	2.6	5.5	4.3	2.3	---	---	3.8				
	Rng	5-10	29-40	34-43	25-30	---	---	11-19				
	N	3	3	3	3	---	---	3	1			
B21t	Ave	9	26	37.5	36.6	---	---	17.1	---			
	S D	1.4	2.6	6.5	9.1	---	---	5.9	---			
	Rng	8-10	24-28	33-42	30-43	---	---	13-21	---			
	N	2	2	2	2	---	---	2	---			
B22t	Ave	12.3	23.1	32.1	44.8	---	---	21.4	1.21			
	S D	6.0	1.7	4.4	2.7	---	---	4.1				
	Rng	6-18	21-25	27-35	43-48	---	---	17-25				
	N	3	3	3	3	---	---	3	1			
B23t	Ave	8.5	19.8	36.1	44.2	---	---	20.7	---			
	S D	2.1	.57	2.5	1.9	---	---	3.7	---			
	Rng	7-10	19-20	34-38	43-46	---	---	18-23	---			
	N	2	2	2	2	---	---	2	---			
B24t	Ave	7	15.7	32.4	51.9	---	---	21.8	---			
	S D					---	---		---			
	Rng					---	---		---			
	N	1	1	1	1	---	---	1	---			
B31t	Ave	11.5	12.2	35.9	47.5	---	---	25.9	1.45			
	S D	2.1	15.3	3.3	12.2	---	---	5.9				
	Rng	10-13	10-23	33-38	39-56	---	---	22-30				
	N	2	2	2	2	---	---	2	1			
B32t	Ave	15.0	21.4	40.3	38.4	---	---	26.0	1.47			
	S D	8.5	4.0	3.4	.64	---	---	1.3				
	Rng	9-21	18-24	38-43	38-39	---	---	25-27				
	N	2	2	2	2	---	---	2	1			

SOIL SERIES: Dumont

TAXONOMIC NAME: Typic Haploxerult

Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
		(cm)	-----	%-----	-----	-----	% H ₂ O-----	-----	(g/cc)				
C1	Ave	24.7	31.6	44.9	23.5	---	---	21.2	1.20				
	S D	11.5	4.4	8.9	5.0	---	---	2.3	.23				
	Rng	13-36	27-36	38-55	18-27	---	---	18-23	1.0-1.4				
	N	3	3	3	3	---	---	3	2				
C2	Ave	27	33.0	47.4	19.6	---	---	21.3	---				
	S D	9.9	8.0	11.7	3.7	---	---	.28	---				
	Rng	20-34	27-39	39-56	17-22	---	---	21-22	---				
	N	2	2	2	2	---	---	2	---				
	Ave												
	S D												
	Rng												
	N												
	Ave												
	S D												
	Rng												
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	S D												
	Rng												
	N												

SOIL SERIES: Dumont

TAXONOMIC NAME: Typic Haploxerult

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (E Cat)	% Base Sat. (NH ₄ OAc)	Ca/Mg
C1	Ave	4.83	---	.01	---	---	5.4	2.2	3.8	5.3	.15	.25	26.2	36.6	32.0	30.5	1.1
	S D	.15	---	---	---	---	.91	---	3.9	.64	.07	.05	12.7	6.8	17	15	.84
	Rng	4.7-5	---	.01	---	---	4.4-6.2	---	.6-8	4.8-5.7	.1-.2	.2-.3	17-35.2	32-46	20-44	20-41	.4-1.7
	N	3	---	2	---	---	2	1	3	2	2	3	2	3	2	2	2
C2	Ave	4.8	---	.01	---	---	5.35	---	5.1	6.1	.15	.2	27.4	40.8	30.0	28.5	1.0
	S D	.14	---	---	---	---	.91	---	1.3	2.6	.07	.14	7.4	4.0	2.8	.7	.61
	Rng	4.7-4.9	---	.01	---	---	4.7-6.0	---	4.2-6	4.2-7.9	.1-.2	.1-.3	22-32.6	38-44	28-32	28-29	
	N	2	---	2	---	---	2	---	2	2	2	2	2	2	2	2	2
	Ave																
	S D																
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	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Elmore (Stony loam)

TAXONOMIC NAME: Pachic Ultic Argixeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
				%			%	(ppm)									
A1	Ave	6.5	---	1.51	.124	12.0	---	---	11.4	5.7	.40	1.68	4.7	24.2	79	80.5	2.1
	S D	.30	---	.71	.05	1.2	---	---	.9	.99	.14	.19	1.7	3.3	6.2	5.5	.34
	Rng	6.2-6.8	---	.9-2.4	.08-.18	11-13	---	---	10-13	4.2-6.4	.2-.5	1.4-1.8	3.1-6.7	19-27	73-86	74-86	1.6-2.5
	N	4	---	4	4	4	---	---	4	4	4	4	4	4	4	4	4
A3	Ave	6.6	---	1.2	.11	11.13	---	---	13.5	7.2	.38	1.8	4.6	28.0	81.5	84.5	1.9
	S D	.22	---	.35	.02	.93	---	---	2.0	.35	.17	.28	1.1	1.9	4.8	3.9	.27
	Rng	6.3-6.8	---	.9-1.7	.08-.14	10-12	---	---	11-15	6.8-7.6	.2-.6	1.5-2.1	3.2-5.7	25-30	75-86	80-89	1.5-2.2
	N	4	---	4	4	4	---	---	4	4	4	4	4	4	4	4	4
B1	Ave	6.6	---	1.25	.119	10.5	---	---	16.5	6.1	.35	1.7	5.0	36.1	79.0	85	1.60
	S D	.21	---	.21	.009	1.0	---	---	6.1	4.1	.21	.4	1.2	10.0	4.4	4.4	.18
	Rng	6.4-6.8	---	1.0-1.5	.11-.13	9-12	---	---	12-24	8-14	.2-.6	1.3-2.1	3.6-5.7	30-48	76-84	80-88	1.3-1.7
	N	3	---	3	3	3	---	---	3	3	3	3	3	3	3	3	3
B2	Ave	6.95	---	9.45	.096	9.9	---	---	18.2	12.1	.63	1.9	4.0	38.4	85.5	89.3	1.5
	S D	.17	---	.14	.009	.82	---	---	4.9	3.0	.17	.14	1.2	10.1	4.2	1.7	.17
	Rng	6.7-7.1	---	.7-1.1	.08-.11	8-11	---	---	13-25	10-16	.4-.8	1.7-2	2.9-5.4	29-52	81-91	87-91	1.3-1.8
	N	4	---	4	4	4	---	---	4	4	4	4	4	4	4	4	4
B3	Ave	7.1	---	.88	.09	9.6	---	---	20.7	13.0	1.4	5.3	4.5	39.9	91.8	91.3	1.6
	S D	.57	---	.37	.03	.67	---	---	3.8	3.0	.75	7.1	1.3	10.6	16.8	6.6	.17
	Rng	6.5-7.8	---	.6-1.4	.06-.14	9-11	---	---	17-26	10-17	.3-1	1.6-2.0	3.1-5.7	31-55	81-116	84-100	1.4-1.9
	N	4	---	4	4	4	---	---	4	4	4	4	4	4	4	4	4
Cca	Ave	7.3	---	.57	.056	9.8	---	---	24.5	22.1	.85	1.8	3.3	47.0	100	95	1.2
	S D	.43	---	.20	.03	1.4	---	---	7.8	6.1	.44	.30	.81	8.3	23.4	3.5	.50
	Rng	7.0-7.9	---	.36-.77	.03-.09	8-11	---	---	15-33	17-23	.5-1.5	1.4-2.1	2.6-4.2	35-55	86->100	92-100	.5-1.6
	N	4	---	4	3	3	---	---	4	4	4	4	4	3	4	4	4
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Enola

TAXONOMIC NAME: Andic Dystrochrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
O1	Ave S D Rng N	4.9 / 1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
A2	Ave S D Rng N	5.6 / 1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
B21r	Ave S D Rng N	5.9 / 1	3.9 / 1	2.3 / 1	.085 / 1	26 / 1	1.5 / 1	6.3 / 1	1.7 / 1	0.4 / 1	0.3 / 1	0.3 / 1	--- / 1	16.0 / 1	16.6 / 1	--- / 1	4.25 / 1
B311r	Ave S D Rng N	5.8 / 1	2.5 / 1	1.5 / 1	.058 / 1	25 / 1	1.3 / 1	1.7 / 1	0.8 / 1	0.3 / 1	0.3 / 1	0.2 / 1	--- / 1	12.7 / 1	12.2 / 1	--- / 1	2.66 / 1
B321r	Ave S D Rng N	5.5 / 1	2.1 / 1	1.2 / 1	.066 / 1	19 / 1	1.9 / 1	2.5 / 1	0.7 / 1	0.3 / 1	0.4 / 1	0.2 / 1	--- / 1	14.2 / 1	10.8 / 1	--- / 1	2.33 / 1
C	Ave S D Rng N	5.8 / 1	0.9 / 1	0.5 / 1	.035 / 1	2 / 1	1.9 / 1	1.0 / 1	0.7 / 1	0.3 / 1	0.2 / 1	0.1 / 1	--- / 1	17.9 / 1	6.9 / 1	--- / 1	2.33 / 1
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Era

TAXONOMIC NAME: Calciorthidic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
				%			%	(ppm)									
Ap	Ave	7.4	---	0.9	0.09	10.0	---	---	10.8	6.9	0.15	1.84	3.1	19.7	99.9	86.4	1.57
	S D	/	---	/	/	/	---	---	/	/	/	/	/	/	/	/	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	1	1	1	1	1
A12	Ave	7.6	---	0.8	0.05	16.0	---	---	10.8	7.4	0.15	1.74	2.4	18.8	100.0	89.3	1.46
	S D	/	---	/	/	/	---	---	/	/	/	/	/	/	/	/	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	1	1	1	1	1
B2	Ave	7.7	---	0.6	0.06	10.0	---	---	12.4	8.6	0.24	1.56	3.3	18.7	100.0	84.1	1.44
	S D	/	---	/	/	/	---	---	/	/	/	/	/	/	/	/	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	1	1	1	1	1
C1	Ave	8.0	---	0.5	0.06	8.3	---	---	11.9	8.6	0.26	1.26	1.6	19.5	100.0	93.2	1.38
	S D	/	---	/	/	/	---	---	/	/	/	/	/	/	/	/	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	1	1	1	1	1
C2ca	Ave	8.5	---	0.3	0.40	7.5	---	---	10.8	8.8	0.74	1.18	0.5	18.2	100.0	97.7	1.23
	S D	/	---	/	/	/	---	---	/	/	/	/	/	/	/	/	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	1	1	1	1	1
	Ave	9.2	---	0.2	0.30	6.7	---	---	30.2	11.5	3.22	0.86	0.1	15.4	100.0	100.0	2.63
	S D	/	---	/	/	/	---	---	/	/	/	/	/	/	/	/	/
	Rng N	1	---	1	1	1	---	---	1	1	1	1	1	1	1	1	1
	Ave																
	S D																
	Rng N																
	Ave																
	S D																
	Rng N																
	Ave																
	S D																
	Rng N																

SOIL SERIES: Fives

TAXONOMIC NAME: Ultic Haploxera1f

TAXONOMIC NAME: Uitic Haploxeralf																	
Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)		%			%	(ppm)							(NH ₄ OAc)	(E Cat)	
A1	Ave	5.75	---	2.2	.10	23.2	1.5	---	15.0	3.5	.2	1.25	13.1	35.2	57.1	60.45	4.3
	S D	.07	---	.2	.04	7.6	.14	---	.7	.3	---	1.1	1.8	5.7	4.9	1.6	.6
	Rng	5.7-5.8	---	2.1-2.4	.07-.13	18-29	1.4-1.6	---	15-15.5	3.3-3.7	.2	.5-2.0	12-14	31-39	54-61	59-62	3.9-4.7
	N	2	---	2	2	2	2	---	2	2	2	2	2	2	2	2	2
A3	Ave	5.25	---	1.1	.06	19.3	1.45	---	14.8	4.15	.2	1.1	11.25	34.15	59.8	64.35	3.6
	S D	.07	---	.01	.02	6.8	.35	---	.7	.9	---	.8	1.3	4.0	9.4	3.6	.6
	Rng	5.2-5.3	---	1-1.13	.05-.08	14-24	1.2-1.7	---	14-15	3.5-4.8	.2	.5-1.7	10-12	31-37	53-66	62-67	3.2-4.1
	N	2	---	2	2	2	2	---	2	2	2	2	2	2	2	2	2
B1	Ave	5.1	---	.6	.04	16.0	1.5	---	15.9	5.5	.2	.95	10.85	33.95	66.45	67.5	3.1
	S D	.1	---	.1	.01	8.4	.3	---	.8	1.8	.1	.6	.6	.9	2.5	1.1	1.2
	Rng	5.0-5.2	---	.51-.68	.03-.05	10-22	1.3-1.7	---	15-17	4.2-6.8	.1-.3	.5-1.4	10-11	33-35	65-68	67-68	2.3-3.9
	N	2	---	2	2	2	2	---	2	2	2	2	2	2	2	2	2
B21t	Ave	4.95	---	.45	.03	14.0	1.55	---	16.55	5.9	.15	.85	11.6	37.1	63.0	66.65	3.0
	S D	.07	---	.03	.01	5.7	.21	---	5.1	1.3	.07	.35	1.8	5.0	3.25	7.6	1.5
	Rng	4.9-5.0	---	.43-.47	.03-.04	10-18	1.4-1.7	---	13-20	5.0-6.8	.1-.2	.6-1.1	10-13	34-41	61-65	61-72	1.9-4.0
	N	2	---	2	2	2	2	---	2	2	2	2	2	2	2	2	2
B22t	Ave	4.95	---	.3	.03	13.7	1.45	---	17.55	6.1	.2	.75	11.6	36.6	66.3	67.0	2.95
	S D	.07	---	.1	/	/	.35	---	8.3	.3	---	.35	.1	4.7	14.2	7.8	1.5
	Rng	4.9-5.0	---	.24-.41	/	/	1.2-1.7	---	12-23	5.9-6.3	.2	.5-1.0	11.5-12	33-40	56-76	62-73	1.9-4.0
	N	2	---	2	1	1	2	---	2	2	2	2	2	2	2	2	2
B3	Ave	4.9	---	.2	---	---	1.35	---	18.3	6.9	.3	.65	11.1	37.3	68.95	69.5	2.65
	S D	.1	---	.02	---	---	.35	---	9.5	.3	---	.4	1.6	5.8	14.9	4.9	1.5
	Rng	4.8-5.0	---	.19-.22	---	---	1.1-1.6	---	12-25	6.7-7.1	.3	.4-.9	10-12	33-41	58-80	66-73	1.6-3.7
	N	2	---	2	---	---	2	---	2	2	2	2	2	2	2	2	2
C1	Ave	4.85	---	.135	---	---	1.0	---	16.2	5.9	.25	.5	11.15	35.5	63.75	66.5	2.95
	S D	.07	---	.02	---	---	.4	---	8.6	1.1	.07	.4	1.3	10.2	4.2	5.2	2.05
	Rng	4.8-4.9	---	.12-.15	---	---	.7-1.3	---	10-22	5.1-6.7	.2-.3	.2-.8	10-12	28-43	61-67	63-70	1.5-4.4
	N	2	---	2	---	---	2	---	2	2	2	2	2	2	2	2	2
C2	Ave	4.8	---	.175	---	---	1.3	---	15.1	5.65	.25	.4	11.15	35.65	60.2	65.75	3.1
	S D	.3	---	.007	---	---	.4	---	6.9	2.15	.07	.3	2.9	9.5	1.4	.4	2.4
	Rng	4.6-5.0	---	.17-.18	---	---	1.0-1.6	---	10-20	4.2-7.1	.2-.3	.2-.6	9.1-13	29-42	59-62	60-66	1.4-4.8
	N	2	---	2	---	---	2	---	2	2	2	2	2	2	2	2	2
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Flagstaff

TAXONOMIC NAME: Haploxerollic Durargid

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
				%			%	(ppm)			Meq/100g						
A1	Ave	8.2	---	.5	.05	9.8	---	---	5.4	2.7	6.9	4.2	---	19.3	---	---	1.9
	S D	1.0	---	.2	.015	2.8	---	---	2.4	1.1	5.0	2.5	---	12.9	---	---	1.1
	Rng	7.4-9.5	---	.2-.6	.03-.07	5.2-12	---	---	2.2-8.8	1.1-3.9	.6-25	1.5-8.0	---	10-42	---	---	1.2-3.7
	N	5	---	5	5	5	---	---	5	5	5	5	---	5	---	---	5
A3/B1	Ave	8.6	---	.45	.05	6.5	---	---	8.0	5.0	13.5	5.7	---	33.6	---	---	1.8
	S D	.8	---	.2	.015	3.8	---	---	3.2	1.7	13.6	2.9	---	18.1	---	---	1.1
	Rng	7.7-9.3	---	.2-.7	.03-.07	4.2-11	---	---	5.6-14	2.7-7.0	1.4-32	3.5-11	---	19-63	---	---	.8-3.4
	N	5	---	5	5	5	---	---	5	5	5	5	---	5	---	---	5
B2	Ave	9.1	---	.6	.06	8.8	---	---	13.3	9.1	27.7	6.2	---	48.8	---	---	1.6
	S D	.4	---	.3	.02	.9	---	---	7.2	4.7	23.6	2.9	---	19.1	---	---	1.2
	Rng	8.7-9.4	---	.3-.9	.04-.09	7.4-9.7	---	---	6-23	3-15	8-57	3-10	---	33-76	---	---	.5-3.6
	N	5	---	5	5	5	---	---	5	5	5	5	---	5	---	---	5
B3	Ave	9.3	---	.5	.06	8.8	---	---	17.3	9.05	32.4	4.9	---	47.95	---	---	2.8
	S D	.4	---	.2	.01	2.2	---	---	6.1	6.0	22.6	.85	---	35.7	---	---	1.8
	Rng	8.9-9.7	---	.2-.7	.04-.07	5.6-10	---	---	11-26	3-15	13-56	3.8-5.7	---	32-77	---	---	.8-4.7
	N	4	---	4	4	4	---	---	4	4	4	4	---	4	---	---	4
C1	Ave	9.2	---	.3	.06	6.15	---	---	24.3	20.9	27.3	5.4	---	56.2	---	---	2.6
	S D	.6	---	.2	.02	.8	---	---	20.4	18.2	16.3	1.2	---	18.3	---	---	2.5
	Rng	8.5-9.8	---	.1-.6	.04-.07	5.6-6.7	---	---	14-47	2-43	14-50	4.2-7.0	---	39-81	---	---	1.1-6.3
	N	5	---	5	2	2	---	---	4	4	4	4	---	4	---	---	4
C2	Ave	9.0	---	.3	.45	9.3	---	---	29.3	18.8	28.0	4.65	---	55.2	---	---	2.6
	S D	.7	---	.1	/	/	---	---	37.2	20.7	12.9	1.1	---	12.2	---	---	2.5
	Rng	8.1-9.8	---	.1-.4	/	/	---	---	4-95	2-51	15-42	3.0-5.7	---	39-68	---	---	.5-6.7
	N	5	---	5	1	1	---	---	5	5	5	5	---	5	---	---	5
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Floke

TAXONOMIC NAME: Abruptic Xerollic Durargid

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)		%			%	(ppm)			Meq/100g				(NH ₄ OAc)	(E Cat)	
A1	Ave	7.55	1.4	.825	---	---	---	21.1	8.45	5.4	.7	1.5	---	11.5	86.5	---	2.0
	S D	1.2	1.7	1.0	---	---	---	25.7	7.3	5.8	.9	1.1	---	4.6	19.1	---	.8
	Rng	6.7-8.4	.21-2.6	.12-1.5	---	---	---	2.9-39	3.3-14	1.3-9.5	.6-.7	.66-2.3	---	8.2-15	73-100	---	1.4-2.5
	N	2	2	2	---	---	---	2	2	2	2	2	---	2	2	---	2
B1	Ave	7.8	1.8	1.07	---	---	---	9.0	16.4	9.35	5.05	1.4	---	30.6	96.7	---	1.8
	S D	1.1	.9	.5	---	---	---	11.7	---	1.5	6.3	.8	---	9.8	4.7	---	.3
	Rng	7-8.6	1.2-2.5	.68-1.5	---	---	---	.3-17	16.4	8.3-10	.6-9.5	.81-2	---	24-38	93-100	---	1.6-2
	N	2	2	2	---	---	---	2	2	2	2	2	---	2	2	---	2
B21t	Ave	7.6	1.45	.6	---	---	---	4.3	22.7	14.25	9.7	1.4	---	46.1	96.7	---	1.6
	S D	1.1	.3	.5	---	---	---	5.1	1.0	.9	12.1	.04	---	7.5	4.7	---	.03
	Rng	6.8-8.4	1.2-1.7	.32-.96	---	---	---	.7-7.9	22-23	14-15	1.1-18	1.3-1.4	---	41-51	93-100	---	1.57-1.6
	N	2	2	2	---	---	---	2	2	2	2	2	---	2	2	---	2
B22t	Ave	7.7	1.7	.8	---	---	---	1.8	31.75	17.95	15.2	1.5	---	46.6	100	---	1.8
	S D	.7	.5	.6	---	---	---	.6	1.06	2.2	19.2	.45	---	3.7	---	---	.2
	Rng	7.2-8.2	1.3-2.1	.36-1.2	---	---	---	1.4-2.2	31-33	16-20	1.6-29	1.2-1.8	---	44-49	100	---	1.7-1.9
	N	2	2	2	---	---	---	2	2	2	2	2	---	2	2	---	2
C1 (sim/Ca)	Ave	8.4	1.2	.7	---	---	---	3.8	43.7	18.75	19.4	1.4	---	45.8	100	---	2.4
	S D	.1	.1	.06	---	---	---	.3	6.0	2.5	23.8	.5	---	4.8	---	---	.6
	Rng	8.3-8.5	1.1-1.2	.64-.72	---	---	---	3.6-4.0	40-48	17-21	2.5-36	1.0-1.8	---	42-49	100	---	1.9-2.8
	N	2	2	2	---	---	---	2	2	2	2	2	---	2	2	---	2
Csim	Ave	8.6	1.4	.9	---	---	---	11.65	38.0	14.8	13.4	1.0	---	51.5	100	---	2.6
	S D	.3	.15	.06	---	---	---	1.9	.7	1.7	16.0	.4	---	3.3	---	---	.35
	Rng	8.4-8.8	1.3-1.5	.88-.96	---	---	---	10-13	38-39	14-16	2.1-25	.69-1.3	---	49-54	100	---	2.3-2.8
	N	2	2	2	---	---	---	2	2	2	2	2	---	2	2	---	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Floke-like

TAXONOMIC NAME: Abruptic Xerollic Durargid

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)		Z			%	(ppm)				Meq/100g			(NH ₄ OAc)	(E Cat)	
A1	Ave	8.1	.69	.40	---	---	---	8.3	5.6	2.4	.80	6.7	---	9.5	100	---	2.31
	S D	.50	.1	.06	---	---	---	3.5	1.6	.71	1.15	8.6	---	2.7	---	---	---
	Rng	7.7-8.4	.62-.76	.36-.44	---	---	---	5-11	4.4-6.7	1.9-2.9	.69-.90	.59-13	---	7-11	100	---	2.31
	N	2	2	2	---	---	---	2	2	2	2	2	---	2	2	---	2
B1	Ave	7.9	.80	.46	---	---	---	2.9	12.9	7.7	4.65	.69	---	21.8	99.0	---	1.70
	S D	.14	.25	.14	---	---	---	2.1	8.1	5.1	3.0	.26	---	10.0	1.4	---	.08
	Rng	7.8-8	.6-1	.3-.6	---	---	---	1-4	7-19	4-11	2-7	.5-.9	---	14-29	98-100	---	1.6-1.8
	N	2	2	2	---	---	---	2	2	2	2	2	---	2	2	---	2
B2	Ave	8.1	1.6	.95	---	---	---	1.3	22.8	16.8	11.0	1.2	---	36.4	100	---	1.4
	S D	.21	.15	.07	---	---	---	.21	3.5	.57	.92	.11	---	5.4	---	---	.16
	Rng	7.9-8.2	1.5-1.7	.9-1	---	---	---	1.1-1.4	20-25	16-17	10-12	1.1-1.3	---	32-40	100	---	1.2-1.5
	N	2	2	2	---	---	---	2	2	2	2	2	---	2	2	---	2
B3	Ave	8.2	1.63	.94	---	---	---	1.7	29.3	20.7	15.3	1.36	---	50.2	100	---	1.4
	S D	---	.83	.48	---	---	---	.78	6.0	6.1	5.2	.13	---	8.7	---	---	.13
	Rng	8.2	1.0-2.2	.6-1.3	---	---	---	4.9-5.8	36-60	14-23	9-21	1-1.3	---	29-54	100	---	2.4-2.7
	N	2	2	2	---	---	---	2	2	2	2	2	---	2	2	---	2
Csim	Ave	8.3	2.0	1.2	---	---	---	5.4	48.0	18.6	15.3	1.2	---	41.8	100	---	2.6
	S D	.92	.69	.40	---	---	---	.64	17.0	5.6	8.0	.22	---	17.0	---	---	.13
	Rng	7.6-8.9	1.5-2.5	.8-1.4	---	---	---	4.9-5.8	36-60	14-23	9-21	1-1.3	---	29-54	100	---	2.4-2.7
	N	2	2	2	---	---	---	2	2	2	2	2	---	2	2	---	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Fopiano

TAXONOMIC NAME: Typic Argixeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
				%			%	(ppm)									
A1	Ave	7.1	9.84	2.81	0.19	14.79	---	22.2	21.3	6.7	0.4	1.7	6.5	31.1	96.8	82.2	3.18
	S D	/	/	/	/	/	---	/	/	/	/	/	/	/	/	/	/
	Rng	/	/	/	/	/	---	/	/	/	/	/	/	/	/	/	/
	N	1	1	1	1	1	---	1	1	1	1	1	1	1	1	1	1
A12	Ave	7.0	---	---	0.14	---	---	10.3	24.7	7.6	0.3	1.7	5.6	35.9	95.5	86.0	3.25
	S D	/	---	---	/	---	---	/	/	/	/	/	/	/	/	/	/
	Rng	/	---	---	/	---	---	/	/	/	/	/	/	/	/	/	/
	N	1	---	---	1	---	---	1	1	1	1	1	1	1	1	1	1
B2t	Ave	7.1	1.63	0.95	---	---	---	4.4	34.3	10.2	0.5	1.0	5.0	46.9	98.1	90.2	3.36
	S D	/	/	/	---	---	---	/	/	/	/	/	/	/	/	/	/
	Rng	/	/	/	---	---	---	/	/	/	/	/	/	/	/	/	/
	N	1	1	1	---	---	---	1	1	1	1	1	1	1	1	1	1
C	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

SOIL SERIES: Fort Rock

TAXONOMIC NAME: Durixerollic Camborthid

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
				%			%	(ppm)			Meq/100g						
A1	Ave	8.0	---	0.80	0.089	9.0	---	---	28.0	4.0	0.2	4.5	---	26.8	100	---	7.0
	S D	/	---	/	/	/	---	---	/	/	/	/	---	/	/	---	/
	Rng	1	---	1	1	1	---	---	1	1	1	1	---	1	1	---	1
A3	Ave	8.1	---	0.76	0.093	8.2	---	---	31.5	4.5	0.2	3.5	---	31.8	100	---	7.0
	S D	/	---	/	/	/	---	---	/	/	/	/	---	/	/	---	/
	Rng	1	---	1	1	1	---	---	1	1	1	1	---	1	1	---	1
B1	Ave	8.2	---	0.68	0.083	8.2	---	---	36.1	5.3	0.3	3.6	---	34.6	100	---	6.81
	S D	/	---	/	/	/	---	---	/	/	/	/	---	/	/	---	/
	Rng	1	---	1	1	1	---	---	1	1	1	1	---	1	1	---	1
B3mca	Ave	8.2	---	0.51	0.057	8.9	---	---	31.6	6.1	0.5	2.5	---	32.2	100	---	5.18
	S D	/	---	/	/	/	---	---	/	/	/	/	---	/	/	---	/
	Rng	1	---	1	1	1	---	---	1	1	1	1	---	1	1	---	1
C1	Ave	8.3	---	0.37	---	---	---	---	33.6	7.9	0.5	1.4	---	33.5	100	---	4.25
	S D	/	---	/	---	---	---	---	/	/	/	/	---	/	/	---	/
	Rng	1	---	1	---	---	---	---	1	1	1	1	---	1	1	---	1
C2	Ave	8.2	---	0.41	---	---	---	---	32.6	10.1	0.5	1.2	---	34.6	100	---	3.23
	S D	/	---	/	---	---	---	---	/	/	/	/	---	/	/	---	/
	Rng	1	---	1	---	---	---	---	1	1	1	1	---	1	1	---	1
C3	Ave	8.2	---	0.52	---	---	---	---	32.8	12.4	0.8	1.8	---	41.2	100	---	2.65
	S D	/	---	/	---	---	---	---	/	/	/	/	---	/	/	---	/
	Rng	1	---	1	---	---	---	---	1	1	1	1	---	1	1	---	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

TAXONOMIC NAME: Ultic Haploxera lf

165

SOIL SERIES: Frohman

TAXONOMIC NAME: Xerollic Durorthid

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
			---	---	---		%	(ppm)	---	---	---	---	---	---	---	---	---
Ap	Ave	7.8	0.42	---	---	---	---	4	10.0	4.6	0.56	1.28	2.2	7.99	100	88.1	2.17
	S D	/	/	---	---	---	---	/	/	/	/	/	/	/	/	/	/
	Rng N	1	1	---	---	---	---	1	1	1	1	1	1	1	1	1	1
B2	Ave	7.8	0.41	---	---	---	---	2	10.8	8.4	1.38	0.92	2.3	10.84	100	90.3	1.29
	S D	/	/	---	---	---	---	/	/	/	/	/	/	/	/	/	/
	Rng N	1	1	---	---	---	---	1	1	1	1	1	1	1	1	1	1
C1SIM	Ave	8.6	---	---	---	---	---	5	19.1	13.7	2.88	0.60	---	---	---	---	1.39
	S D	/	---	---	---	---	---	/	/	/	/	/	---	---	---	---	/
	Rng N	1	---	---	---	---	---	1	1	1	1	1	---	---	---	---	1
	Ave																
	S D																
	Rng N																
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	Ave																
	S D																
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	Ave																
	S D																
	Rng N																

SOIL SERIES: Goble

TAXONOMIC NAME: Andic Fragiumbrept

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)		%			%	(ppm)			Meq/100g				(NH ₄ OAc)	(Σ Cat)	
A1	Ave	5.95	5.7	---	---	---	---	7	7.5	2.25	.09	.81	23.9	14.6	52.1	36.4	3.25
	S D	.35	3.1	---	---	---	---	/	4.0	.50	.01	.15	/	/	/	/	1.1
	Rng	5.7-6.2	3.5-7.9	---	---	---	---	/	4-10	1.9-2.6	.08-.1	.7-.9	/	/	/	/	2.5-4
	N	2	2	---	---	---	---	1	2	2	2	2	1	1	1	1	2
A3	Ave	5.75	3.5	---	---	---	---	5	2.95	1.25	.08	.47	24.4	11.5	31.1	19.5	2.4
	S D	.49	3.15	---	---	---	---	/	1.6	.07	.03	.09	/	/	/	/	1.2
	Rng	5.4-6.1	1.2-5.7	---	---	---	---	/	1.8-4.1	1.2-1.3	.06-.1	.4-.6	/	/	/	/	1.5-3.2
	N	2	2	---	---	---	---	1	2	2	2	2	1	1	1	1	2
B1t	Ave	5.75	1.2	---	---	---	---	2	1.7	.75	.1	.34	16.3	15.1	32.2	8.4	2.0
	S D	.35	.85	---	---	---	---	/	1.6	.35	---	.06	/	/	/	/	1.1
	Rng	5.5-6.0	.6-1.8	---	---	---	---	/	.6-2.8	.5-1	.1	.3-.4	/	/	/	/	1.2-2.8
	N	2	2	---	---	---	---	1	2	2	2	2	1	1	1	1	2
B2t	Ave	5.73	.89	---	---	---	---	3	1.5	1.0	.50	.43	16.4	11.6	36.8	8.4	1.4
	S D	.25	.87	---	---	---	---	/	1.3	.74	.53	.18	/	/	/	/	.21
	Rng	5.5-5.9	.2-1.5	---	---	---	---	/	.6-2.4	.5-1.6	.1-.2	.1-.6	/	/	/	/	1.2-1.5
	N	2	2	---	---	---	---	1	2	2	2	2	1	1	1	1	2
IIBtb	Ave	5.5	.41	---	---	---	---	4	3.1	2.7	.13	.22	13.7	16.25	28.2	35.7	1.2
	S D	---	.27	---	---	---	---	/	1.4	.78	.04	.02	/	/	/	/	.21
	Rng	5.5	.2-.7	---	---	---	---	/	2.1-4.1	2.1-3.2	.1-.2	.2-.3	/	/	/	/	1-1.3
	N	2	2	---	---	---	---	1	2	2	2	2	1	1	1	1	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Goodlow

TAXONOMIC NAME: Typic Cryumbrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
A1	Ave	5.4	15.8	9.2	.278	28.3	4.4	3.8	.75	.35	.075	.44	---	39.8	4.6	---	1.3
	S D	2.8	3.2	1.8	/	/	/	.35	.50	.35	.035	.06	---	7.2	.64	---	.71
	Rng	5.2-5.8	13-18	8-11	/	/	/	3.5-4	.4-1.1	.1-.6	.05-.1	.4-.48	---	35-45	4-5	---	.8-1.8
	N	2	2	2	1	1	1	2	2	2	2	2	---	2	2	---	2
A3	Ave	5.25	5.9	3.4	.063	27.0	6.1	1.5	.6	.40	.122	.38	---	26.0	5.1	---	1.4
	S D	.35	4.2	2.4	/	/	/	---	.42	.14	.11	.02	---	6.3	.67	---	.57
	Rng	5-5.5	3-9	1.7-5.1	/	/	/	1.5	.3-.9	.3-.5	.05-.2	.36-.4	---	21-31	4.6-5.6	---	1-1.8
	N	2	2	2	1	1	1	2	2	2	2	2	---	2	2	---	2
B2	Ave	5.52	1.7	.99	.025	12.8	5.9	1.15	.6	.40	.455	.225	---	27.7	6.5	---	1.6
	S D	.46	1.7	.98	/	/	/	.21	.14	.14	.49	.035	---	4.4	3.6	---	.21
	Rng	5.2-5.9	.5-2.9	.3-.1.7	/	/	/	1-1.3	.5-.7	.3-.5	.11-.8	.2-.25	---	24-31	4-9	---	1.4-1.7
	N	2	2	2	1	1	1	2	2	2	2	2	---	2	2	---	2
C	Ave	5.35	.79	.45	.022	18.6	5.6	1.4	.5	.45	.58	.18	---	27.1	6.5	---	1.1
	S D	.35	.12	.07	/	/	/	.57	---	.07	.59	.03	---	2.3	3.3	---	.18
	Rng	5.1-5.6	.7-.9	.4-.5	/	/	/	1-1.8	.5	.4-.5	.16-1	.16-.2	---	25-29	4-9	---	1-1.25
	N	2	2	2	1	1	1	2	2	2	2	2	---	2	2	---	2
Ave																	
S D																	
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SOIL SERIES: Gustin

TAXONOMIC NAME: Aquultic Haploxeralf

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (1 Cat)	Ca/Mg
				%			%	(ppm)									
A1	Ave	5.9	---	2.76	.152	20.25	1.95	---	12.0	3.25	.15	.875	16.55	32.0	51.5	50.3	4.03
	S D	---	---	.757	.028	3.89	.495	---	.212	1.34	.071	.177	3.6	2.05	7.8	7.43	1.63
	Rng	5.9	---	2.2-3.3	.13-.17	18-23	1.6-2.3	---	12-12.2	2.3-4.2	.1-.2	.75-1	14-19	31-34	46-57	45-56	2.9-5.2
	N	2	---	2	2	2	2	---	2	2	2	2	2	2	2	2	2
A3	Ave	5.7	---	1.47	.103	14	1.9	---	10.3	3.6	.15	.8	13.4	29	52	42.5	2.87
	S D	.141	---	.573	.013	4.24	.141	---	2.9	1.13	.071	.141	11.6	.85	14.9	14.85	.071
	Rng	5.6-5.8	---	1.1-1.9	.09-.11	11-17	1.8-2	---	8.2-12	2.8-4.4	.1-.2	.7-.9	10-17	28-30	41-62	42-63	2.8-2.9
	N	2	---	2	2	2	2	---	2	2	2	2	2	2	2	2	2
B1	Ave	5.4	---	.64	.06	10.5	2.0	---	11.8	4.3	.2	.55	10.8	26.3	64	61	2.68
	S D	.495	---	.092	.007	.707	.424	---	2.33	1.0	---	.071	3.32	3.89	3.5	12.73	/
	Rng	5.0-5.7	---	.57-.7	.06-.07	10-11	1.7-2.3	---	10-13	3.6-5	.2	.5-.6	8.4-13	24-29	61-66	52-70	
	N	2	---	2	2	2	2	---	2	2	2	2	2	2	2	2	1
B21	Ave	4.7	---	.30	.04	10	2.1	---	16.0	6.8	.35	.35	14.5	38.8	59	59.5	2.72
	S D	.212	---	.163	/	/	.636	---	8.132	4.1	.212	.071	1.77	10.61	16	6.26	.141
	Rng	4.5-4.8	---	.18-.41	/	/	1.6-2.5	---	10-22	3.9-9.7	.2-.5	.3-.4	13-16	31-46	47-70	48-71	2.6-2.8
	N	2	---	2	1	1	2	---	2	2	2	2	2	2	2	2	2
B22	Ave	4.2	---	.19	.023	10	1.65	---	19.4	8.5	.6	.3	16.2	43.1	65	62.5	2.36
	S D	.141	---	.042	/	/	.071	---	8.34	4.53	.283	.141	1.0	7.64	18	12.02	.283
	Rng	4.1-4.3	---	.16-.22	/	/	1.6-1.7	---	14-25	5.3-12	.4-.8	.2-.4	16-17	38-49	52-78	54-71	2.2-2.6
	N	2	---	2	1	1	2	---	2	2	2	2	2	2	2	2	2
B3	Ave	4.1	---	.095	---	---	1.6	---	18.1	7.6	.9	.3	13.7	41.5	65	66.5	2.41
	S D	.141	---	.007	---	---	1.41	---	3.39	1.98	---	.141	.636	6.93	2.0	3.54	.177
	Rng	4.0-4.2	---	.09-.10	---	---	.2-2.3	---	16-21	6.2-9	.9	.2-.4	13-14	37-46	63-66	64-69	2.3-2.5
	N	2	---	2	---	---	2	---	2	2	2	2	2	2	2	2	2
C1	Ave	2.45	---	.08	---	---	1.4	---	16.8	7	.7	.25	12.5	38.7	63	66	2.5
	S D	.707	---	.014	---	---	.141	---	5.45	3.111	.283	.071	1.2	10.68	5.7	5.66	.325
	Rng	2.9-3.9	---	.07-.09	---	---	1.3-1.5	---	13-21	4.8-9.2	.5-.9	.2-.3	12-13	31-46	59-67	62-70	2.2-2.7
	N	2	---	2	---	---	2	---	2	2	2	2	2	2	2	2	2
	Ave																
	S D																
	Rng																
	Ave																
	S D																
	Rng																

SOIL SERIES: Hall Ranch

TAXONOMIC NAME: Ultic Haploxeroll

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H ₂ O)		%			%	(ppm)			Meq/100g				(NH ₄ OAc)	(E Cat)	
A11	Ave	6.2	---	4.34	.20	21.5	1.4	---	17.9	4.2	.05	2.65	15.2	27.9	89.5	62.5	4.25
	S D	.42	---	2	.06	3.5	.14	---	.7	---	.07	.64	5.1	3.7	12	7.8	.21
	Rng	6-6.5	---	2.9-5.7	.16-.24	19-24	1.3-1.5	---	17-18	4.2	Tr-.1	2.2-3.1	11.6-19	25-31	81-98	57-68	4.1-4.4
	N	2	---	2	2	2	2	---	2	2	2	2	2	2	2	2	2
A12	Ave	6.45	---	2.09	.12	17.5	1.45	---	15.6	3.5	.05	2.15	10.4	22.7	93.5	67	4.6
	S D	.21	---	.11	.004	.71	.21	---	2.4	.35	.07	.07	1.1	.64	6.4	4.2	1.1
	Rng	6.3-6.6	---	2-2.2	.12-.13	17-18	1.3-1.6	---	14-17	3.2-3.7	Tr-.1	2.1-2.2	9.6-11	22-23	98-98	64-70	3.8-5.4
	N	2	---	2	2	2	2	---	2	2	2	2	2	2	2	2	2
B1	Ave	6.5	---	1.4	.09	15.5	1.5	---	13.5	3.6	0.1	2	9.1	20.1	95	68	3.8
	S D	.3	---	.4	.002	3.5	.3	---	2.3	.3	---	.2	2.7	.7	5.7	8.5	.9
	Rng	6.3-6.7	---	1.1-1.7	.08-.09	13-18	1.3-1.7	---	12-15	3.4-3.8	.1	1.8-2	7-11	19.6-21	91-99	62-74	3.1-4.4
	N	2	---	2	2	2	2	---	2	2	2	2	2	2	2	2	2
B2	Ave	6.6	---	.655	.29	12.5	1.3	---	10.8	3.25	0.1	1.7	6.7	17.1	92.5	70.5	3.25
	S D	.14	---	.007	.33	.71	.3	---	2.8	.35	---	.71	.35	2.3	2.1	2.1	.5
	Rng	6.5-6.8	---	.65-.66	.05-.52	12-13	1.1-1.5	---	9-13	3-3.5	0.1	1.2-2.2	6.4-6.9	15.5-19	91-94	69-72	2.9-3.6
	N	2	---	2	2	2	2	---	2	2	2	2	2	2	2	2	2
B3&R	Ave	6.7	---	.68	---	---	1.2	---	11.3	3.9	.15	.75	5	16.9	95	76.5	2.9
	S D	---	---	.02	---	---	---	---	1.6	.14	.07	.21	.5	1.4	---	.7	.6
	Rng	6.7	---	.66-.69	---	---	1.2	---	10-12.4	3.8-4	.1-.2	.6-.9	4.6-5.3	16-18	95	76-77	2.5-3.5
	N	2	---	2	---	---	2	---	2	2	2	2	2	2	2	2	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
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	Rng																
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SOIL SERIES: Hankins

TAXONOMIC NAME: Ultic Palexeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
				%			%	(ppm)			Meq/100g						
A11	Ave	6.05	4.8	3.7	.16	22.4	---	28.0	14.5	5.1	.1	1.3	5.8	24.2	98.6	76.3	2.9
	S D	.6	/	2.9	.12	.6	---	/	3.6	1.3	.05	.3	2.1	10	14	6.2	.8
	Rng	5.6-6.5	/	1.7-5.7	.08-.3	22-22.8	---	/	12-18	3.7-6.3	.13-.2	1-1.6	4.3-7.3	18-36	74-100	72-81	2.1-3.6
	N	2	1	2	2	2	---	1	3	3	3	3	2	3	3	2	2
A12	Ave	6.6	2.5	2.3	.11	20.6	---	15	15.0	6.0	.2	1.1	4.0	24.6	90.9	84.1	2.6
	S D	---	/	1.8	.08	.8	---	/	2.0	1.04	.04	.35	.4	7.3	14.7	.8	.7
	Rng	6.6	/	1-3.6	.05-.2	20-21	---	/	13-16	4.8-6.7	.13-.2	.9-1.5	3.7-4.3	20-33	74-100	84-85	1.9-2.5
	N	2	1	2	2	2	---	1	3	3	3	3	2	3	3	2	2
A3	Ave	6.5	1.1	1.35	.09	14.1	---	11	20.1	9.4	.3	1.04	8.1	32.0	90.9	82	2.1
	S D	.1	/	.9	.03	6.0	---	/	8.0	1.5	.1	.2	5.0	7.2	15.6	5.7	.5
	Rng	6.4-6.6	/	.7-2	.07-.1	10-18.5	---	/	14-29	8-11	.15-.4	.9-1.3	4.5-12	25-39	73-100	78-86	1.7-2.6
	N	2	1	2	2	2	---	1	3	3	3	3	2	3	3	2	3
B2	Ave	6.95	.5	.85	.05	16.9	---	48	20.6	11.3	.3	1.0	3.7	30.0	93.03	91.15	1.9
	S D	.2	/	.5	.03	.3	---	/	5.3	3.4	.09	.1	1.8	2.7	12.07	3.2	.6
	Rng	6.8-7.1	/	.5-1.2	.03-.07	16.7-17	---	/	15-24	9.2-15	.24-.4	.8-1.1	2.4-5	27-32	79-100	89-93	1.5-2.6
	N	2	1	2	2	2	---	1	3	3	3	3	2	3	3	2	3
11B2b	Ave	6.9	---	.55	.045	12.0	---	---	23.2	14.3	.4	.7	4.2	34.45	91.8	91.1	1.6
	S D	/	---	.2	.007	2.8	---	---	5.7	.6	.1	.03	/	9.3	11.5	/	.3
	Rng	/	---	.4-.7	.04-.05	10-15	---	---	19-27	14-15	.3-.5	.7-.74	/	28-41	84-100	/	1.4-1.9
	N	1	---	2	2	2	---	---	2	2	2	2	1	2	2	1	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
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	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Hatchery

TAXONOMIC NAME: Dystric Eutrochrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
A1	Ave S D Rng N	6.2 / 1	4.0 / 1	4.0 / 1	0.14 / 1	28.4 / 1	--- --- ---	--- --- ---	27.7 / 1	10.0 / 1	0.05 / 1	2.4 / 1	--- --- ---	--- --- ---	43.2 / 1	93.2 / 1	2.8 / 1
B21	Ave S D Rng N	6.5 / 1	1.5 / 1	1.5 / 1	0.07 / 1	21.9 / 1	--- --- ---	--- --- ---	21.2 / 1	8.2 / 1	0.05 / 1	1.9 / 1	--- --- ---	--- --- ---	35.1 / 1	90.5 / 1	2.6 / 1
B22	Ave S D Rng N	6.4 / 1	1.1 / 1	1.1 / 1	0.05 / 1	22.6 / 1	--- --- ---	--- --- ---	19.8 / 1	8.6 / 1	0.05 / 1	1.6 / 1	--- --- ---	--- --- ---	34.4 / 1	88.6 / 1	2.3 / 1
Cl-Dr	Ave S D Rng N	6.5 / 1	1.1 / 1	1.1 / 1	0.05 / 1	22.8 / 1	--- --- ---	--- --- ---	23.0 / 1	9.4 / 1	0.02 / 1	1.5 / 1	--- --- ---	--- --- ---	37.2 / 1	93.0 / 1	2.5 / 1
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Hazelair

TAXONOMIC NAME: Aquultic Haploxeroll

Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
		(1:1 H ₂ O)	-----	-----	-----		%	(ppm)	-----	-----	-----	-----	-----	-----			
A1	Ave	5.2	---	2.23	1.1	11.3	3	---	18.2	7.3	.2	.83	14.3	---	---	69.5	2.5
	S D	.14	---	.03	1.3	.35	.4	---	3.7	1.8	---	.11	.9	---	---	3.5	.1
	Rng	5.1-5.3	---	2.2-2.3	.2-1.9	11-12	2.7-3.3	---	16-21	6-9	.2	.8-.9	14-15	---	---	62-67	2.4-2.6
	N	2	---	2	2	2	2	---	2	2	2	2	2	---	---	2	2
B1	Ave	5.1	---	1	.1	10	2.6	---	23.8	10.8	.25	.8	13.8	---	---	70.5	2.26
	S D	.2	---	.3	.035	---	.3	---	11.6	6.1	.07	.3	1.1	---	---	9.2	.2
	Rng	4.9-5.2	---	.8-1.3	.08-.13	10	2.4-2.8	---	15.6-32	6.5-15	.2-.3	.6-1	13-15	---	---	64-77	2.1-2.4
	N	2	---	2	2	2	2	---	2	2	2	2	2	---	---	2	2
B21	Ave	4.6	---	.6	.066	9.5	2.75	---	28.7	13.6	.35	.85	17.3	---	---	71	2.1
	S D	.14	---	.014	.008	.7	.5	---	5.7	2.5	.07	.07	2.4	---	---	7.1	.02
	Rng	4.5-4.7	---	.59-.61	.06-.07	9-10	2.4-3.1	---	25-33	12-15	.3-.4	.8-.9	16-19	---	---	66-76	2.09-2.1
	N	2	---	2	2	2	2	---	2	2	2	2	2	---	---	2	2
B22	Ave	4.6	---	.41	.042	10	2.6	---	29.7	13.6	.5	.75	18.4	---	---	70	2.2
	S D	---	---	.04	/	/	.3	---	7.4	2.9	.14	.07	3.2	---	---	8.5	.12
	Rng	4.6	---	.38-.44	/	/	2.4-2.8	---	24-35	12-16	.4-.6	.7-.8	16-21	---	---	64-76	2.1-2.2
	N	2	---	2	1	1	2	---	2	2	2	2	2	---	---	2	2
B23	Ave	4.65	---	.18	---	---	2.45	---	33	14.5	.5	.7	14.9	---	---	76	2.3
	S D	.07	---	.06	---	---	.07	---	8.3	3	.14	.14	3	---	---	8.5	.1
	Rng	4.6-4.7	---	.13-.22	---	---	2.4-2.5	---	27-39	12-17	.4-.6	.6-.8	13-17	---	---	70-82	2.2-2.3
	N	2	---	2	---	---	2	---	2	2	2	2	2	---	---	2	2
R	Ave	5	---	.165	---	---	3	---	46.1	16	.7	.6	12.8	---	---	83.5	3
	S D	.3	---	.007	---	---	.14	---	5	5.6	.14	---	2.8	---	---	.71	.7
	Rng	4.8-5.2	---	.16-.17	---	---	2.9-3.1	---	43-50	12-20	.6-.8	.6	11-15	---	---	83-84	2.5-3.5
	N	2	---	2	---	---	2	---	2	2	2	2	2	---	---	2	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

S011. SERIES: Headley

TAXONOMIC NAME: Andic Dystrochrept

[illegible]

SOIL SERIES: Headley

TAXONOMIC NAME: Andic Dystrochrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
Aoo + Ao	Ave S D Rng N	4.3 / 1							NO AVAILABLE DATA								
A2	Ave S D Rng N	4.2 / 1							NO AVAILABLE DATA								
B21r	Ave S D Rng N	4.8 / 1							NO AVAILABLE DATA								
B311r	Ave S D Rng N	5.4 / 1	15.0 / 1	8.7 / 1	.291 / 1	30.0 / 1	4.8 / 1	1.5 / 1	.2 / 1	.2 / 1	.3 / 1	.4 / 1	--- / 1	26.6 / 1	4.4 / 1	--- / 1	1.0 / 1
B321r	Ave S D Rng N	5.6 / 1	8.2 / 1	4.8 / 1	.176 / 1	27.0 / 1	4.9 / 1	2.8 / 1	.4 / 1	.3 / 1	.3 / 1	.4 / 1	--- / 1	24.6 / 1	5.5 / 1	--- / 1	1.3 / 1
B331r	Ave S D Rng N	5.7 / 1	4.0 / 1	2.3 / 1	.121 / 1	19.0 / 1	5.1 / 1	3.3 / 1	.4 / 1	.4 / 1	.4 / 1	.3 / 1	--- / 1	21.2 / 1	7.1 / 1	--- / 1	1.0 / 1
C	Ave S D Rng N	5.8 / 1	1.9 / 1	1.1 / 1	.064 / 1	18.0 / 1	5.4 / 1	1.5 / 1	.2 / 1	.5 / 1	.6 / 1	.3 / 1	--- / 1	21.1 / 1	7.3 / 1	--- / 1	.4 / 1
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Hebo

TAXONOMIC NAME: Typic Umbraquilt

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
Apg	Ave	4.8	11.7	6.8	.65	10.5	---	---	2.25	1.8	.45	.35	---	36.6	14	---	1.1
	S D	.14	1.3	.8	.04	2.1	---	---	2.5	1.27	.07	.07	---	2.9	11.3	---	.7
	Rng	4.7-4.9	11-12.6	6.2-7.3	.62-.67	9-12	---	---	.5-4.0	.9-2.7	.4-.5	.3-.4	---	34.5-39	6-22	---	.6-1.6
	N	2	2	2	2	2	---	---	2	2	2	2	---	2	2	---	2
A3g	Ave	4.8	8.8	5.1	.48	10.5	---	---	2.3	2	.45	.25	---	34.2	15	---	.95
	S D	.14	4	2.3	.05	3.54	---	---	2.4	1.27	.07	.07	---	2.83	12.7	---	.64
	Rng	4.7-4.9	6-11.6	3.5-6.7	.44-.51	8-13	---	---	.6-4	1.1-2.9	.4-.5	.2-.3	---	32-36	6-24	---	.5-1.4
	N	2	2	2	2	2	---	---	2	2	2	2	---	2	2	---	2
BC1	Ave	4.9	1.6	.95	.10	10	---	---	4	3.6	.45	.15	---	27.7	41	---	1.2
	S D	.42	.57	.35	.007	2.8	---	---	/	.3	.07	.07	---	11.8	/	---	/
	Rng	4.6-5.2	1.2-2	.7-1.2	.09-.1	8-12	---	---	/	3.4-3.8	.4-.5	.1-.2	---	19-36	/	---	/
	N	2	2	2	2	2	---	---	1	2	2	2	---	2	1	---	1
BC2	Ave	4.9	1.2	.70	.06	11	---	---	4.7	4.9	.5	.2	---	31.8	33.5	---	1
	S D	.42	.6	.3	.01	2.8	---	---	.4	1.8	---	---	---	11.5	5	---	.3
	Rng	4.6-5.2	.8-1.6	.5-.9	.05-.07	9-13	---	---	4.4-5	3.6-6.1	.5	.2	---	23.6-40	30-37	---	.8-1.2
	N	2	2	2	2	2	---	---	2	2	2	2	---	2	2	---	2
BC3	Ave	5.05	1.1	.65	.055	11.5	---	---	5.9	5.8	.5	.2	---	39.5	31	---	1.1
	S D	.21	.4	.21	.007	3.5	---	---	2.1	3.4	.14	---	---	2.1	12.7	---	.28
	Rng	4.9-5.2	.8-1.4	.5-.8	.05-.06	9-14	---	---	4.4-7.4	3.4-8.2	.4-.6	.2	---	38-41	22-40	---	.9-1.3
	N	2	2	2	2	2	---	---	2	2	2	2	---	2	2	---	2
C	Ave	5.15	.6	.35	.045	7.5	---	---	10.8	8.7	.55	.15	---	39.4	42	---	1.25
	S D	.21	.28	.21	.007	2.1	---	---	8.6	6.6	.21	.07	---	13.4	29.7	---	.07
	Rng	5-5.3	.4-.8	.2-.5	.04-.05	6-9	---	---	4.7-17	4-13.3	.4-.7	.1-.2	---	30-49	21-63	---	1.2-1.3
	N	2	2	2	2	2	---	---	2	2	2	2	---	2	2	---	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Helvetia

TAXONOMIC NAME: Ultic Argixeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
Ap	Ave S D Rng N	6.1 .42 6-6.5 2	2.6 1.1 1.8-3.3 2	1.91 / 1	---	---	---	---	7.3 .14 7.2-7.4 2	1.35 .07 1.3-1.4 2	.15 .21 0-.3 2	.75 .07 .7-.8 2	11.4 2 10-12.8 2	17 2.1 16-18 2	56.4 7.9 51-62 2	46 4.2 43-49 2	5.4 .14 5.3-5.5 2
B1	Ave S D Rng N	6.1 .4 5.8-6.3 2	.7 .42 .4-1 2	.23 / 1	---	---	---	---	6 .3 5.8-6.2 2	1.85 .64 1.4-2.3 2	.1 --- .1 2	.55 .07 .5-.6 2	8.5 1.1 7.7-9.3 2	14.1 1.6 13-15.2 2	61.1 15.8 51-71 2	50 --- 50 2	3.4 1 2.7-4 2
B21t	Ave S D Rng N	5.6 .5 5.2-5.9 2	.35 .21 .2-.5 2	.12 / 1	---	---	---	---	8.8 1.4 7.8-9.8 2	3.1 .3 2.9-3.3 2	.15 .07 .1-.2 2	.8 --- .8 2	8.1 1.9 6.7-9.4 2	32.2 16 21-43.5 2	77.3 16.5 65.6-89 2	61.5 7.8 56-67 2	2.9 .71 2.4-3.4 2
B22t	Ave S D Rng N	5.7 .42 5.4-6 2	.20 .14 .1-.3 2	.06 / 1	---	---	---	---	10.8 2.1 9.3-12 2	4.4 .71 3.9-4.9 2	.60 .71 .1-1.1 2	.95 .07 .9-1 2	8.8 1.1 8-9.5 2	20.1 11.4 12-28 2	84.2 22.4 68-100 2	65.5 7.8 60-71 2	2.45 .07 2.4-2.5 2
B3t	Ave S D Rng N	5.5 .5 5.2-5.8 2	.25 .07 .2-.3 2	.17 / 1	---	---	---	---	13.6 1.8 12.3-15 2	5 .5 4.6-5.3 2	.75 .78 .2-1.3 2	.98 .85 .9-1.1 2	9.2 1.4 8.2-10 2	27.6 6 23.4-32 2	73.8 4.2 71-76.8 2	29.5 1.8 64-73 2	2.73 .11 2.7-2.8 2
C1	Ave S D Rng N	5.5 .4 5.2-5.8 2	.1 --- .1 2	.06 / 1	---	---	---	---	13.0 --- 13 2	4.6 .4 4.3-4.9 2	.55 .49 .2-.9 2	.8 .14 .7-.9 2	7.9 1.4 6.9-8.9 2	23.8 1.8 22.5-25 2	79.7 1.7 79-81 2	70 4.24 67-73 2	2.85 .21 2.7-3 2
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Henley

TAXONOMIC NAME: Aquic Durorthid

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
Ap	Ave S D Rng N	8.3 .9 7.7-8.9 2	--- --- --- ---	1.2 .4 .9-1.5 2	.12 .04 .09-.14 2	--- --- --- ---	.5 1	--- --- --- ---	--- --- --- ---	--- --- --- ---	9.4 11.4 1-17.5 2	6.3 1.5 5-7.3 2	--- --- --- ---	30.4 8 25-36 2	--- --- --- ---	--- --- --- ---	---
A1	Ave S D Rng N	8.9 1	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	14.6 1	5.0 1	--- --- --- ---	28.4 1	--- --- --- ---	--- --- --- ---	---
B2	Ave S D Rng N	8.4 .11 8.4-8.5 2	--- --- --- ---	.69 .2 .57-.81 2	.087 1	--- --- --- ---	.45 1	--- --- --- ---	--- --- --- ---	--- --- --- ---	6.6 3.8 4-9.3 2	2.5 .8 2-3.1 2	--- --- --- ---	31.7 2.3 30-33 2	--- --- --- ---	--- --- --- ---	---
B3	Ave S D Rng N	8.33 .1 8.3-8.4 2	--- --- --- ---	.58 .03 .56-.61 2	--- --- --- ---	--- --- --- ---	.25 1	--- --- --- ---	--- --- --- ---	--- --- --- ---	5.7 .92 5-6.3 2	1.23 .32 1-1.5 2	--- --- --- ---	36.3 3 34-38.5 2	--- --- --- ---	--- --- --- ---	---
C	Ave S D Rng N	8.43 .04 8.4-8.5 2	--- --- --- ---	.28 .06 .24-.32 2	--- --- --- ---	--- --- --- ---	.3 1	--- --- --- ---	--- --- --- ---	--- --- --- ---	7.4 4.5 4.2-11 2	.7 .11 .6-.8 2	--- --- --- ---	35.1 10.3 28-42.3 2	--- --- --- ---	--- --- --- ---	---
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Holcomb

TAXONOMIC NAME: Mollic Albaqualf

[illegible]

SOIL SERIES: Holcomb

TAXONOMIC NAME: Mollic Albaqualf

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
				%			%	(ppm)			Meq/100g						
1	Ave	6.8	3.57	---	.13	---	---	21.0	19.1	8.15	.157	.328	---	30.2	---	---	---
	S D	/	/	---	/	---	---	/	/	/	/	/	---	/	---	---	---
	Rng N	1	1	---	1	---	---	1	1	1	1	1	---	1	---	---	---
2	Ave	5.9	2.22	---	.10	---	---	19.0	19.5	7.62	.182	.221	---	28.5	---	---	---
	S D	/	/	---	/	---	---	/	/	/	/	/	---	/	---	---	---
	Rng N	1	1	---	1	---	---	1	1	1	1	1	---	1	---	---	---
	Ave																
	S D																
	Rng N																
	Ave																
	S D																
	Rng N																
	Ave																
	S D																
	Rng N																
	Ave																
	S D																
	Rng N																
	Ave																
	S D																
	Rng N																

SOIL SERIES: Holland

TAXONOMIC NAME: Ultic Haploxeralf

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
A1	Ave S D Rng N	6.3 / 1	3.64 / 1	----	NO AVAILABLE DATA	----	----	63.0 / 1	6.4 / 1	1.4 / 1	.10 / 1	.42 / 1	6.3 / 1	----	----	56.9 / 1	----
A2	Ave S D Rng N	6.0 / 1	.96 / 1	----	NO AVAILABLE DATA	----	----	21.0 / 1	3.7 / 1	1.1 / 1	.10 / 1	.22 / 1	4.1 / 1	----	----	55.5 / 1	----
B1	Ave S D Rng N	5.9 / 1	.71 / 1	----	NO AVAILABLE DATA	----	----	9.0 / 1	3.4 / 1	1.5 / 1	.10 / 1	.11 / 1	4.1 / 1	----	----	55.5 / 1	----
B21c	Ave S D Rng N	5.6 / 1	----	----	NO AVAILABLE DATA	----	----	2.0 / 1	4.7 / 1	3.6 / 1	.14 / 1	.07 / 1	4.3 / 1	----	----	66.4 / 1	----
B22c	Ave S D Rng N	5.7 / 1	----	----	NO AVAILABLE DATA	----	----	----	5.7 / 1	4.3 / 1	.24 / 1	.07 / 1	4.2 / 1	----	----	71.1 / 1	----
B3	Ave S D Rng N	5.5 / 1	----	----	NO AVAILABLE DATA	----	----	2.0 / 1	7.4 / 1	5.1 / 1	.19 / 1	.03 / 1	3.1 / 1	----	----	80.4 / 1	----
C1	Ave S D Rng N	5.8 / 1	----	----	NO AVAILABLE DATA	----	----	----	8.1 / 1	4.9 / 1	.24 / 1	.03 / 1	3.0 / 1	----	----	81.6 / 1	----
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Honeygrove

TAXONOMIC NAME: Typic Haplohumult

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
A1	Ave S D Rng N	4.75 .4 4.5-5 2	-----	NO DATA AVAILABLE	-----	-----	-----	-----	3.0 .7 2.5-3.5 2	3.2 2.2 1.6-4.7 2	.75 .07 .6-.7 2	1.075 .04 1.05-1. 2	---	57.6 10 50-65 2	15.3 3.9 13-18 2	---	1.34 1.15 .5-2.2 2
B1	Ave S D Rng N	4.6 .14 4.5-4.7 2	-----	NO DATA AVAILABLE	-----	-----	-----	-----	2.1 .14 2-2.2 2	.9 .42 .6-1.2 2	.45 .07 .4-.5 2	.55 .07 .5-.6 2	---	36.3 6.9 31-41 2	11 1.4 10-12 2	---	2.67 1.42 1.7-3.7 2
B21t	Ave S D Rng N	4.8 --- 4.8 2	-----	NO DATA AVAILABLE	-----	-----	-----	-----	1.8 .5 1.4-2.1 2	1.1 --- 1.1 2	.45 .21 .3-.6 2	.5 .3 .3-.7 2	---	37 9.7 30-44 2	11 4.2 8-14 2	---	1.6 .44 1.3-1.9 2
B22t	Ave S D Rng N	4.6 .4 4.3-4.8 2	-----	NO DATA AVAILABLE	-----	-----	-----	-----	1.2 .6 .8-1.6 2	1.6 .4 1.3-1.9 2	.6 --- .6 2	.4 .3 .2-.6 2	---	41.8 14.6 31-52 2	10 5.7 6-14 2	---	.72 .16 .6-.8 2
B23t	Ave S D Rng N	4.6 .14 4.5-4.7 2	-----	NO DATA AVAILABLE	-----	-----	-----	-----	1.5 .14 1.4-1.6 2	1.65 .35 1.4-1.9 2	.6 --- .6 2	.35 .21 .2-.5 2	---	47.6 14.7 37-58 2	9 1.4 8-10 2	---	.94 .29 .7-1.1 2
B3	Ave S D Rng N	4.55 .07 4.5-4.6 2	-----	NO DATA AVAILABLE	-----	-----	-----	-----	1.5 .7 1-2 2	1.45 .21 1.3-1.6 2	.5 --- .5 2	.35 .21 .2-.5 2	---	41.8 11.4 34-50 2	9.5 3.5 7-12 2	---	1.08 .65 .6-1.5 2
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Hood

TAXONOMIC NAME: Ultic Haploxeralf

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
Ap	Ave S D Rng N	5.9 .5 5.5-6.5 3	2.7 / 1	2.35 .5 2-2.7 2	.19 .04 .16-.21 2	13 --- 13 2	1.1 / 1	64.5 / 1	9.4 2.9 6.1-10 3	1.35 .07 1.3-1.4 2	.25 .07 .2-.3 2	1.05 .07 1-1.1 2	8.3 1.5 7.2-9.3 2	---	---	57.5 12 49-66 2	---
A3	Ave S D Rng N	5.8 .15 5.7-6 3	3.0 / 1	.99 .05 .95-1 2	.08 .005 .08-.09 2	12 1.4 11-13 2	1.1 / 1	53.1 / 1	6.9 2.1 5.3-9.3 3	1 .14 .9-1.1 2	.2 --- .2 2	.6 .14 .5-.7 2	7.6 .17 7.5-7.7 2	---	---	49.5 .7 49-50 2	---
B1	Ave S D Rng N	6.15 .07 6.1-6.2 2	--- --- --- 2	.25 .04 .22-.28 2	.03 .004 .03-.05 2	8 --- 8 2	1.1 / 1	--- --- --- 2	4.9 .3 4.7-5.1 2	1.1 .14 1-1.2 2	.15 .07 .1-.2 2	.55 .21 .4-.7 2	5.1 .4 4.8-5.4 2	---	---	56.5 2.1 55-58 2	---
B21	Ave S D Rng N	6.1 .21 5.9-6.2 2	--- --- --- 2	.13 .06 .09-.17 2	--- --- --- 2	--- --- --- 2	1.5 / 1	--- --- --- 2	7.4 1.4 6.4-8.4 2	1.9 .5 1.5-2.2 2	.2 --- .2 2	.65 .2 .5-.8 2	5.7 .85 5.1-6.3 2	---	---	64 1.4 63-65 2	---
B31	Ave S D Rng N	5.85 .07 5.8-5.9 2	--- --- --- 2	.09 .02 .07-.1 2	--- --- --- 2	--- --- --- 2	1.6 / 1	--- --- --- 2	11.75 .35 11.5-12 2	3.05 .8 2.5-3.6 2	.2 --- .2 2	.55 .07 .5-.6 2	6.2 .6 5.7-6.6 2	---	---	72 1.4 71-73 2	---
B32	Ave S D Rng N	5.9 .14 5.8-6 2	--- --- --- 2	.065 .007 .06-.07 2	--- --- --- 2	--- --- --- 2	1.3 / 1	--- --- --- 2	11.6 .8 11-12.1 2	3.6 .6 3.2-4 2	.25 .07 .2-.3 2	.5 --- .5 2	5.2 .9 4.5-5.8 2	---	---	75.5 2.1 74-77 2	---
C	Ave S D Rng N	5.95 .07 5.9-6 2	--- --- --- 2	.05 .01 .04-.06 2	--- --- --- 2	--- --- --- 2	1.2 / 1	--- --- --- 2	10.4 .2 10-11 2	3.3 .9 2.7-3.9 2	.3 --- .3 2	.43 .11 .35-.5 2	4 --- 4 2	---	---	78.8 1.1 78-80 2	---
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Hoopal

TAXONOMIC NAME: Typic Duraquoll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Cat)	Ca/Mg
			----	----	----		%	(ppm)	----	----	Meq/100g			----			
A1	Ave	8.75	---	1.65	.15	11.0	.35	---	---	2.6	10.0	10.5	---	27.1	---	---	---
	S D	.07	---	.05	.01	1.0	.07	---	---	.6	1.0	3.5	---	.1	---	---	---
	Rng	8.7-8.8	---	1.6-1.7	.14-.16	10-12	.3-.4	---	---	2.2-3.0	9-11	8-13	---	27-27.2	---	---	---
	N	2	---	2	2	2	2	---	---	2	2	2	---	2	---	---	---
AC	Ave	9.65	---	.6	.07	9.5	.4	---	---	1.0	20.5	7.0	---	25.5	---	---	---
	S D	.07	---	.1	.01	.5	---	---	---	.2	2.1	.5	---	2.1	---	---	---
	Rng	9.6-9.7	---	.5-.7	.06-.08	9-10	.4	---	---	.8-1.2	19-22	6.7-7.4	---	24-27	---	---	---
	N	2	---	2	2	2	2	---	---	2	2	2	---	2	---	---	---
C1	Ave	10.15	---	.5	.05	10.0	.35	---	---	1.35	21.5	3.7	---	23.5	---	---	---
	S D	.07	---	.06	.01	---	.07	---	---	.35	3.5	.7	---	2.1	---	---	---
	Rng	10.1-10.2	---	.5-.6	.04-.06	10.0	.3-.4	---	---	1.1-1.6	19-24	3.2-4.2	---	22-25	---	---	---
	N	2	---	2	2	2	2	---	---	2	2	2	---	2	---	---	---
C2	Ave	10.15	---	.8	.06	13.5	.2	---	---	3.6	22.0	1.45	---	19.5	---	---	---
	S D	.07	---	.1	.01	2.1	---	---	---	1.1	1.4	.9	---	.7	---	---	---
	Rng	10.1-10.2	---	.7-.9	.05-.07	12-15	.2	---	---	2.8-4.4	21-23	.8-2.1	---	19-20	---	---	---
	N	2	---	2	2	2	2	---	---	2	2	2	---	2	---	---	---
C3	Ave	9.95	---	.5	.05	13.0	.15	---	---	5.2	10.6	.5	---	11.2	---	---	---
	S D	.07	---	.3	/	/	.07	---	---	1.4	7.7	.6	---	6.7	---	---	---
	Rng	9.9-10.0	---	.3-.7	/	/	.1-.2	---	---	4.2-6.2	5-16	.1-.9	---	6-16	---	---	---
	N	2	---	2	1	1	2	---	---	2	2	2	---	2	---	---	---
C4	Ave	9.45	---	.3	---	---	.45	---	---	12.0	6.9	.35	---	17.7	---	---	---
	S D	.3	---	.04	---	---	.35	---	---	9.9	2.5	.2	---	10.8	---	---	---
	Rng	9.2-9.6	---	.2-.3	---	---	.2-.7	---	---	5-19	5.2-8.7	.2-.5	---	10-25	---	---	---
	N	2	---	2	---	---	2	---	---	2	2	2	---	2	---	---	---
C5	Ave	9.0	---	.15	---	---	.5	---	---	10.5	3.4	.4	---	16.5	---	---	---
	S D	.1	---	.08	---	---	.3	---	---	7.7	1.4	.3	---	9.2	---	---	---
	Rng	8.9-9.1	---	.09-.21	---	---	.3-.7	---	---	5-16	2.4-4.4	.2-.6	---	10-23	---	---	---
	N	2	---	2	---	---	2	---	---	2	2	2	---	2	---	---	---
C6	Ave	9.8	---	.05	---	---	.1	---	---	1.0	1.6	.3	---	2.9	---	---	---
	S D	/	---	/	---	---	/	---	---	/	/	/	---	/	---	---	---
	Rng	/	---	/	---	---	/	---	---	/	/	/	---	/	---	---	---
	N	1	---	1	---	---	1	---	---	1	1	1	---	1	---	---	---
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Horeb

TAXONOMIC NAME: Typic Haplumbrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Cat)	Ca/Mg
A11	Ave S D Rng N	5.6 / 1	26.51 / 1	15.37 / 1	NO AVAILABLE DATA			8.0 / 1	9.8 / 1	3.7 / 1	.15 / 1	1.25 / 1	--- / ---	57.93 / 1	25.7 / 1	--- / ---	---
A12	Ave S D Rng N	5.6 / 1	12.33 / 1	7.15 / 1	NO AVAILABLE DATA			4.0 / 1	2.3 / 1	.9 / 1	.31 / 1	.61 / 1	--- / ---	32.86 / 1	12.0 / 1	--- / ---	---
A13	Ave S D Rng N	5.7 / 1	5.52 / 1	3.2 / 1	NO AVAILABLE DATA			3.0 / 1	2.5 / 1	.6 / 1	.14 / 1	.33 / 1	--- / ---	31.70 / 1	11.3 / 1	--- / ---	---
B1	Ave S D Rng N	5.9 / 1	4.60 / 1	2.67 / 1	NO AVAILABLE DATA			3.0 / 1	2.3 / 1	.8 / 1	.15 / 1	.30 / 1	--- / ---	26.23 / 1	13.5 / 1	--- / ---	---
B2	Ave S D Rng N	5.6 / 1	3.03 / 1	1.76 / 1	NO AVAILABLE DATA			3.0 / 1	2.1 / 1	.9 / 1	.15 / 1	.35 / 1	--- / ---	24.63 / 1	14.2 / 1	--- / ---	---
B3	Ave S D Rng N	5.8 / 1	.60 / 1	.35 / 1	NO AVAILABLE DATA			4.0 / 1	1.4 / 1	1.2 / 1	.20 / 1	.40 / 1	--- / ---	22.73 / 1	14.1 / 1	--- / ---	---
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Hot Lake

TAXONOMIC NAME: Aquic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
			---	---	---		%	(ppm)	---	---	---	---	---	---	---	---	---
Ap	Ave	7.9	---	2.8	.25	11.1	---	---	---	13.3	2.08	.4	1.3	35.8	---	---	---
	S D	.3	---	1.2	.09	.6	---	---	---	2.7	1.6	.3	1.2	2.4	---	---	---
	Rng	7.7-8.1	---	2-3.6	.19-.32	10-12	---	---	---	11-15	1-3.2	.6-.2	.5-2	34-38	---	---	---
	N	2	---	2	2	2	---	---	---	2	2	2	2	2	---	---	---
Clca	Ave	8.25	---	.6	.065	8.6	---	---	---	11.55	1.8	.2	---	25.5	---	---	---
	S D	.07	---	.07	.004	.6	---	---	---	4.7	.3	---	---	1.7	---	---	---
	Rng	8.2-8.3	---	.51-.61	.01-.07	8-9	---	---	---	8-15	1.6-2	.2	---	24-27	---	---	---
	N	2	---	2	2	2	---	---	---	2	2	2	---	2	---	---	---
C2	Ave	8.25	---	.3	.03	9.05	---	---	---	6.85	1.2	.1	.6	16.5	---	---	---
	S D	.2	---	.064	.004	.9	---	---	---	1.6	.7	---	.1	1.6	---	---	---
	Rng	8.1-8.4	---	.21-.3	.02-.03	8-10	---	---	---	5.7-8	.7-1.7	.1	.5-.7	15-18	---	---	---
	N	2	---	2	2	2	---	---	---	2	2	2	2	2	---	---	---
C4	Ave	8.4	---	.08	---	---	---	---	5.5	3.2	1.1	.1	.55	8.15	100	94.7	1.75
	S D	.5	---	.05	---	---	---	---	1.2	.4	1.0	.04	---	.1	---	---	.6
	Rng	8.1-8.8	---	.12-.45	---	---	---	---	4.6-6.4	2.9-3.5	.4-1.8	.1-.15	---	8.1-8.3	---	---	1.3-2.2
	N	2	---	2	---	---	---	---	2	2	2	2	1	2	2	1	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
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SOIL SERIES: Bullt

TAXONOMIC NAME: Typic Xerumbrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg

A1	Ave	5.9			NO AVAILABLE DATA				9.4	5.4	.2	1.5	---	32.7	50.5	---	1.7
	S D	/							/	/	/	/	---	/	/	---	/
	Rng	/							/	/	/	/	---	/	/	---	/
	N	1							1	1	1	1	---	1	1	---	1
B1	Ave	5.9			NO AVAILABLE DATA				8.3	5.4	.2	.8	---	30.6	48.0	---	1.5
	S D	/							/	/	/	/	---	/	/	---	/
	Rng	/							/	/	/	/	---	/	/	---	/
	N	1							1	1	1	1	---	1	1	---	1
B21	Ave	5.8			NO AVAILABLE DATA				6.8	6.2	.2	.7	---	27.9	49.8	---	1.1
	S D	/							/	/	/	/	---	/	/	---	/
	Rng	/							/	/	/	/	---	/	/	---	/
	N	1							1	1	1	1	---	1	1	---	1
IIB22	Ave	5.6			NO AVAILABLE DATA				5.8	7.8	.3	.7	---	29.2	50.5	---	.7
	S D	/							/	/	/	/	---	/	/	---	/
	Rng	/							/	/	/	/	---	/	/	---	/
	N	1							1	1	1	1	---	1	1	---	1
IIB3	Ave	5.4			NO AVAILABLE DATA				4.8	10.0	.7	.4	---	34.7	45.8	---	.5
	S D	/							/	/	/	/	---	/	/	---	/
	Rng	/							/	/	/	/	---	/	/	---	/
	N	1							1	1	1	1	---	1	1	---	1
IIC	Ave	---			NO AVAILABLE DATA				---	---	---	---	---	---	---	---	---
	S D	---							---	---	---	---	---	---	---	---	---
	Rng	---							---	---	---	---	---	---	---	---	---
	N	---							---	---	---	---	---	---	---	---	---
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Hurwal

TAXONOMIC NAME: Pachic Argixeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (1 Cat)	Ca/Mg
			---	---	---		%	(ppm)	---	---	---	---	---	---	---	---	---
Ap	Ave	6.4	---	3.5	.2	14.25	1.3	---	22.3	5.0	.2	1.6	7.9	33.8	86.6	78.75	4.5
	S D	.1	---	.7	.04	.3	.1	---	1.0	.3	---	.6	.6	2.2	9.2	1.1	.3
	Rng	6.3-6.6	---	2.9-4.4	.2-.31	14-15	1.2-1.4	---	21-23.2	5-5.4	.2	1.1-2.2	7.3-8.5	31-35.4	80-97	78-80	4.2-4.8
	N	4	---	4	4	4	2	---	3	3	3	3	3	3	3	3	3
A3	Ave	6.65	---	1.7	.1	12.6	1.35	---	19.6	5.4	.2	1.0	5.3	31.2	84.1	83.1	3.6
	S D	.09	---	.25	.02	1.7	.07	---	1.9	.5	.06	.3	.7	1.6	4.5	2.6	.45
	Rng	6.6-6.8	---	1.5-2	.12-.16	11-14	1.3-1.4	---	18.4-22	5-5.9	.2-.3	.8-1.35	4.6-6	29-32.1	79-88	81-86	3.1-4
	N	3	---	3	3	3	2	---	3	3	3	3	3	3	3	3	3
B1	Ave	6.8	---	.8	.08	10.0	1.7	---	17.7	7.0	.5	.7	4.2	30.4	85.15	86	2.5
	S D	.1	---	.07	.008	.7	---	---	1.4	.6	.35	.2	.7	1.8	3.7	2.6	---
	Rng	6.7-6.9	---	.8-.9	.08-.09	9-11	1.7	---	16.5-19	6.6-7.7	.3-.9	.5-.9	3.7-5	28.5-32	81-88	83-88	2.5
	N	3	---	3	3	3	2	---	3	3	3	3	3	3	3	3	3
B2	Ave	7.1	---	.6	.07	7.95	1.7	---	18.3	7.4	1.4	.4	3.8	32.0	86	87.8	2.5
	S D	.4	---	.2	.02	1.5	.1	---	.5	.2	1.4	.2	.7	.09	2.9	2.3	.1
	Rng	6.6-7.5	---	.37-.89	.05-.09	8-9.8	1.6-1.8	---	18-18.6	7.2-7.6	.4-3	.3-.6	3-4.25	31.8-32	84.5-89	86-90	2.3-2.6
	N	4	---	4	4	4	2	---	3	3	3	3	3	3	3	3	3
B3	Ave	7.7	---	.2	---	---	1.8	---	22.3	7.3	2.3	.2	2.9	31.0	93.3	90.5	3.1
	S D	1.0	---	.1	---	---	/	---	5.4	2.1	2.5	.2	2.0	3.4	7.1	5.7	.6
	Rng	6.6-8.5	---	.12-.33	---	---	/	---	19-28.5	5.1-7.3	.4-5.1	.1-.4	1.5-4.3	27-34	86-100	86-94	2.6-3.7
	N	3	---	3	---	---	1	---	3	3	3	3	2	3	3	2	3
C	Ave	8.2	---	.3	.05	8.5	1.6	---	21.3	9.5	6.6	.2	---	31.6	100	---	2.2
	S D	.4	---	.3	/	/	/	---	/	/	/	/	---	/	/	/	/
	Rng	7.9-8.5	---	.08-.44	/	/	/	---	/	/	/	/	---	/	/	/	/
	N	2	---	2	1	1	1	---	1	1	1	1	---	1	1	---	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Imbler

TAXONOMIC NAME: Pacific Haploxyeroll

[illegible]

SOIL SERIES: Izeo

TAXONOMIC NAME: Pachic Haploxeroll

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (1 Cat)	Ca/Mg
A11	Ave	7.5	3.13	1.83	.13	14.08	---	11.8	15.8	3.1	.3	1.0	2.8	17.5	100.0	87.8	5.0
	S D	/	/	/	/	/	---	/	/	/	/	/	/	/	/	/	/
	Rng	/	/	/	/	/	---	/	/	/	/	/	/	/	/	/	/
	N	1	1	1	1	1	---	1	1	1	1	1	1	1	1	1	1
A12	Ave	7.5	2.65	1.50	.12	12.50	---	4.4	15.0	3.4	.3	1.0	2.6	19.8	100.0	88.5	4.5
	S D	/	/	/	/	/	---	/	/	/	/	/	/	/	/	/	/
	Rng	/	/	/	/	/	---	/	/	/	/	/	/	/	/	/	/
	N	1	1	1	1	1	---	1	1	1	1	1	1	1	1	1	1
B21	Ave	7.5	1.97	1.14	---	---	---	5.9	14.4	3.9	.3	.6	2.5	20.9	91.9	88.5	3.6
	S D	/	/	/	---	---	---	/	/	/	/	/	/	/	/	/	/
	Rng	/	/	/	---	---	---	/	/	/	/	/	/	/	/	/	/
	N	1	1	1	---	---	---	1	1	1	1	1	1	1	1	1	1
B22	Ave	7.5	1.63	.94	---	---	---	5.2	15.8	4.4	1.0	.6	2.3	21.7	100.0	90.4	3.5
	S D	/	/	/	---	---	---	/	/	/	/	/	/	/	/	/	/
	Rng	/	/	/	---	---	---	/	/	/	/	/	/	/	/	/	/
	N	1	1	1	---	---	---	1	1	1	1	1	1	1	1	1	1
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES: Jimbo

TAXONOMIC NAME: Andic Haplumbrept

[illegible]

SOIL SERIES: Jimbo

TAXONOMIC NAME: Andic Haplumbrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
A1	Ave S D Rng N	5.6 / 1	11.2 / 1	6.50 / 1	---	---	---	---	6.8 / 1	1.6 / 1	.2 / 1	.7 / 1	---	34.4 / 1	27.0 / 1	---	4.3 / 1
A3	Ave S D Rng N	5.7 / 1	2.5 / 1	1.45 / 1	---	---	---	---	3.8 / 1	1.2 / 1	.1 / 1	.5 / 1	---	22.6 / 1	24.8 / 1	---	3.2 / 1
B2	Ave S D Rng N	5.5 / 1	2.0 / 1	1.16 / 1	---	---	---	---	3.5 / 1	1.1 / 1	.1 / 1	.5 / 1	---	23.3 / 1	22.4 / 1	---	3.2 / 1
C	Ave S D Rng N	5.4 / 1	.6 / 1	.35 / 1	---	---	---	---	9.0 / 1	4.5 / 1	.4 / 1	.6 / 1	---	22.5 / 1	64.4 / 1	---	2.0 / 1
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																

[illegible]

SOIL SERIES: Jory

TAXONOMIC NAME: Xeric Haplohumult

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
				%			%	(ppm)			Meq/100g						
Ap	Ave	5.7	4.1	6.4	.3	21.1	8.65	33.0	8.0	2.6	.4	1.3	24.1	29.2	43.9	30.4	3.6
	S D	.4	/	1.9	.06	4.5	2.9	43.9	4.5	1.8	.5	1.3	6.0	9.6	19.4	11.2	2.2
	Rng	4.8-6.4	/	4.8-7.4	.2-.3	16-25	7-11	2-64	2-15	.9-4.8	.1-1.3	.3-5.3	17-29	14-49	24-84	23-43	1.7-9.1
	N	12	1	4	3	3	2	2	14	14	4	14	3	13	13	3	14
A3	Ave	5.7	1.5	3.4	.16	16.4	9.25	32.4	8.35	3.3	.4	1.1	19.2	34.3	47.9	36.2	2.7
	S D	.2	/	1.5	.09	2.1	3.2	/	3.6	1.9	.5	.7	8.5	15.1	19.3	3.3	.9
	Rng	5.5-6.0	/	1.7-4.5	.1-.3	14-18	7-12	/	2-12	1.2-6.3	.1-1.2	.4-2.3	11-28	13-55	33-79	33-39	1.8-4.1
	N	5	1	5	3	3	2	1	6	6	4	6	3	5	5	3	6
B1	Ave	5.6	1.1	2.7	.13	15.75	9.3	1.3	6.6	2.6	.3	.4	20.7	25.4	40.3	34.7	3.1
	S D	.3	/	1.3	.10	4.2	3.1	/	3.3	1.7	.4	.3	8.0	7.5	19.7	4.6	2.0
	Rng	5.3-6.1	/	.8-3.7	.06-.2	13-19	7-12	/	3-12	.35-6.6	.1-.9	.05-1.2	12-27	17-43	17-91	30-39	1.8-9.4
	N	13	1	4	2	2	2	1	13	13	4	13	3	12	12	3	13
B2	Ave	5.5	.4	.7	.07	9.5	10.0	19.1	5.0	2.8	.4	.3	16.5	20.5	41.2	37.4	1.8
	S D	.4	/	.6	.04	5.8	4.0	/	2.4	1.2	.5	.2	5.1	2.9	15.6	9.8	.5
	Rng	4.8-6.0	/	.3-1.3	.03-.1	4-15	7-13	/	2-10	1.0-4.6	.1-1.2	.05-.53	12-22	17-26	16-62	31-49	1.5-2.6
	N	12	1	3	3	3	2	1	12	12	4	12	3	11	11	3	12
B3	Ave	5.4	.2	.6	.06	10.2	11.45	14.4	5.3	3.0	.8	.3	21.7	32.6	37.3	30.8	1.7
	S D	.5	/	.2	.04	2.6	4.6	/	3.2	1.6	1.1	.1	9.8	8.6	8.1	7.4	.4
	Rng	4.8-6.1	/	.3-.8	.03-.10	8-13	8-15	/	1.3-9.9	.7-4.6	.1-2.4	.1-.5	12-32	24-45	22-45	28-39	1.1-1.9
	N	7	1	4	3	3	2	1	7	7	4	5	3	4	4	3	5
C	Ave	4.7	---	.4	.02	16.5	10.9	---	7.25	4.35	.35	.3	26.4	30.7	39.8	32.3	1.65
	S D	.3	---	.1	.003	6.3	4.4	---	1.5	.2	.07	.3	7.4	.4	7.1	9.8	.2
	Rng	4.5-4.9	---	.3-.4	.02-.03	12-21	8-14	---	6.2-8.3	4.2-4.5	.3-.4	.1-.5	21-32	30-31	35-45	25-39	1.5-1.8
	N	2	---	2	2	2	2	---	2	2	2	2	2	2	2	2	2
	Ave																
	S D																
	Rng																
	N																
	Ave																
	S D																
	Rng																
	N																

SOIL SERIES:

Kanutechan

TAXONOMIC NAME: Typic Pelloxerert

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
				%			%	(ppm)			Meq/100g						
Ap	Ave	6.6	4.1	2.4	.14	17.7	---	14.5	27.5	19.5	.38	1.15	---	53.8	85.7	---	1.38
	S D	.4	.8	.4	.02	5.3	---	---	12.7	2.8	.27	.27	---	1.8	20.2	---	.45
	Rng	6.3-6.9	3.6-4.7	2.1-2.7	.13-.15	14-21	---	---	19-37	18-22	.19-.57	.96-1.3	---	52-55	71-100	---	1.0-1.7
	N	2	2	2	2	2	---	1	2	2	2	2	---	2	2	---	2
Al	Ave	6.7	3.4	1.1	.05	19.6	---	4.5	31.6	18.2	.61	.46	12.3	54.1	93.7	75.7	1.74
	S D	.6	2.8	.05	.005	.9	---	.7	7.4	4.6	.38	.21	---	11.5	4.7	---	.09
	Rng	6.1-7.1	1.8-6.6	1.0-1.1	.05-.06	19-20	---	4.1-5.4	24-38	14-23	.36-1.1	.27-.68	---	41-63	90-97	---	1.7-1.8
	N	3	3	2	2	2	---	2	3	3	3	3	1	3	3	1	2
AC	Ave	7.7	1.2	.55	.03	20.1	---	2.75	31.9	20.6	1.59	.43	3.6	51.2	100	91.9	1.56
	S D	.4	.5	.07	.005	1.0	---	1.06	7.4	5.7	1.71	.19	---	10.1	---	---	.16
	Rng	7.3-8.0	.8-1.7	.5-.6	.02-.03	19-21	---	2-3.5	24-39	16-27	.58-3.6	.24-.62	---	41-61	100	---	1.4-1.8
	N	3	3	2	2	2	---	2	3	3	3	3	1	3	3	1	3
C	Ave	8.15	.65	.35	.02	15.4	---	2.5	34.5	22.8	2.66	.51	---	54.3	100	---	1.57
	S D	.07	.07	.07	.005	---	---	---	.7	6.0	2.67	.11	---	6.3	---	---	.45
	Rng	8.1-8.2	.6-.7	.3-.4	.02-.03	15.4	---	---	34-35	19-27	.77-4.5	.43-.58	---	50-59	100	---	1.3-1.9
	N	2	2	2	2	2	---	1	2	2	2	2	---	2	2	---	2
IIR	Ave	8.2	.2	.1	.01	11.1	---	---	35.0	16.8	.95	.24	---	38.7	100	---	2.08
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	1	1	1	1	1	---	---	1	1	1	1	---	1	1	---	1
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Ave	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	S D	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Rng	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	N	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

SOIL SERIES: Keel

TAXONOMIC NAME: Andic Cryumbrept

[illegible]

SOIL SERIES: Keel

TAXONOMIC NAME: Andic Cryumbrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃	Avail. P	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (Σ Cat)	Ca/Mg
				%			%	(ppm)									
A1	Ave	5.2	12.0	-----NO	AVAILABLE DATA		-----	13.0	1.15	.32	.35	.46	40.6	36.0	6.23	---	---
	S D	/	/					/	/	/	/	/	/	/	/	---	---
	Rng N	1	1					1	1	1	1	1	1	1	1	---	---
B2	Ave	5.15	2.91	-----NO	AVAILABLE DATA		-----	3.0	.55	.17	.18	.15	35.95	31.95	3.33	---	---
	S D	/	/					/	/	/	/	/	/	/	/	---	---
	Rng N	1	1					1	1	1	1	1	1	1	1	---	---
B3	Ave	4.9	6.17	-----NO	AVAILABLE DATA		-----	3.0	.70	.39	.23	.27	32.8	28.6	5.56	---	---
	S D	/	/					/	/	/	/	/	/	/	/	---	---
	Rng N	1	1					1	1	1	1	1	1	1	1	---	---
	Ave																
	S D																
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	Ave																
	S D																
	Rng N																

SOIL SERIES: Kerby

TAXONOMIC NAME: Typic Xerochrept

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na Meq/100g	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
Ap	Ave S D Rng N	6.1 / 1	5.9 / 1	-----	NO AVAILABLE DATA	-----	-----	13.0 / 1	4.5 / 1	1.8 / 1	.2 / 1	.4 / 1	13.0 / 1	15.1 / 1	45.7 / 1	34.0 / 1	---
A12	Ave S D Rng N	5.7 / 1	2.2 / 1	-----	NO AVAILABLE DATA	-----	-----	10.0 / 1	1.9 / 1	.9 / 1	.1 / 1	.2 / 1	12.3 / 1	10.6 / 1	29.2 / 1	20.1 / 1	---
B1	Ave S D Rng N	5.6 / 1	1.8 / 1	-----	NO AVAILABLE DATA	-----	-----	7.0 / 1	1.5 / 1	1.2 / 1	.2 / 1	.1 / 1	10.3 / 1	9.2 / 1	32.6 / 1	22.5 / 1	---
B21	Ave S D Rng N	5.7 / 1	1.0 / 1	-----	NO AVAILABLE DATA	-----	-----	1.0 / 1	2.7 / 1	3.0 / 1	.2 / 1	.1 / 1	8.4 / 1	11.4 / 1	52.6 / 1	41.7 / 1	---
B22	Ave S D Rng N	5.9 / 1	----- / 1	-----	NO AVAILABLE DATA	-----	-----	2.0 / 1	3.5 / 1	4.9 / 1	.2 / 1	.1 / 1	8.3 / 1	13.0 / 1	66.9 / 1	40.1 / 1	---
IIC	Ave S D Rng N	6.1 / 1	----- / 1	-----	NO AVAILABLE DATA	-----	-----	3.0 / 1	2.4 / 1	4.5 / 1	.2 / 1	.1 / 1	6.4 / 1	10.8 / 1	66.7 / 1	52.9 / 1	---
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SERIES: Kiesel

TAXONOMIC NAME: Xerollic Natrargid

Horizon	Stat.	pH (1:1 H ₂ O)	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe ₂ O ₃ %	Avail. P (ppm)	Ca	Mg	Na	K	H ⁺	CEC	% Base Sat. (NH ₄ OAc)	% Base Sat. (E Cat)	Ca/Mg
A1	Ave S D Rng N	9.6 / 1	.52 / 1	-----NO AVAILABLE DATA-----				7.0 / 1	13.0 / 1	1.5 / 1	7.54 / 1	2.17 / 1	1.1 / 1	6.85 / 1	--- / ---	95.7 / 1	---
B21	Ave S D Rng N	9.9 / 1	.26 / 1	-----NO AVAILABLE DATA-----				4.0 / 1	13.3 / 1	1.1 / 1	27.0 / 1	1.57 / 1	.2 / 1	10.27 / 1	--- / ---	100.0 / 1	---
B22	Ave S D Rng N	10.2 / 1	.47 / 1	-----NO AVAILABLE DATA-----				23.0 / 1	31.8 / 1	1.6 / 1	38.2 / 1	1.62 / 1	T / 1	17.12 / 1	--- / ---	100.0 / 1	---
B23	Ave S D Rng N	10.4 / 1	--- / ---	-----NO AVAILABLE DATA-----				30.0 / 1	31.4 / 1	1.6 / 1	34.1 / 1	1.20 / 1	T / 1	27.11 / 1	--- / ---	100.0 / 1	---
C	Ave S D Rng N	10.6 / 1	--- / ---	-----NO AVAILABLE DATA-----				21.0 / 1	27.8 / 1	1.6 / 1	33.5 / 1	.62 / 1	T / 1	10.27 / 1	--- / ---	100.0 / 1	---
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																