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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.

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.

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# SOILS OF OREGON:

SUMMARIES OF PHYSICAL AND CHEMICAL DATA

SOIL SER	les:	Abegg		_			TAXONOMIC	NAME: Ul	tic Haplox	eralf		
Hort zon	Stat.	Horizon Thickness	Sand	Silt	Clay	. 10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		x			<b>х</b> н <sub>2</sub> 0		(g/cc)			
All	Ave S D Rng N	10.0	44.5	34.1	21.3		37.0	16.8			, .	
A12	Ave S D Rng N	12.5	39.0	35.9	25.0		35.0	15.5				
В1	Ave S D Rng N	17.5	40.4	34.4	25.1		26.1	13.4				·
B21t	Ave S D Rng N	26.5	39.4	32.5	28.2		23.9	13.3				
B22t	Ave S D Rng .N	26.5	37.8	31.7	30.5		23.9	14.4				
B3t	Ave S D Rng N	45.0	43.4	32.4	24.3		23.1	14.1				
	Ave S D Rng N			1								
	Ave S D Rng N											
	Ave S D Rng N			,			·					
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	SOIL SE	RIES:	Abegg	1.			1 .	4		raxonomic	NAME:	Ultic	Haploxera ı	ilf				-
	Hori zon	<b></b>	рĦ	Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	H+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
			(1:1 H <sub>2</sub> 0)		<b>z</b>			z	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(E Cat)	
	A11	Ave	6.0	17.3		NO AVAII	LABLE DAT	k'	33.0	14.7	3.0	. 2	1.0	23.2	36.0	52.5		4.9
		S D Rng					.	1		/	/					/		/
		N	<b>1</b>	1	1 1	. !		1	1	1	1	1	1	1	1	1		1
	A12	Ave S D	5.6	13.0		NO AVAIL	ABLE DAT	^'	15.0	10.1	1.6	.3	.8	15.9	31.8	40.2		6.3
		Rng N	1		1			1	1	1	1	1	1	1	1	1		1
	В1	Ave	5.5	4.5		NO AVAI	ABLE DAT	A	6.0	2.5	1.1	.2	.6	13.8	17.3	25.4		2.3
	ļ	S D Rng		/	i '			<i>l</i> '	1/1	/	/	/	/	1	1	1		1
		N	1	1	1			$I_{\uparrow}=-{}^{\prime}$	1	1	1	1	1	ł	]			
	B21t	Ave S D	5.3	2.3		NO AVAI	ABLE DAT	/A!	4.0	1.3	1.1	.2	.5	11.9	15.2	20.4		1.2
		Rng N	/	1	i			, ,		1	1	1	1	1	1	1		1
			1		,	NA AVAT	ABI P DA			2.1	1.6	.1	.5	11.6	16.0	26.9		1.3
		Ave S D	5.5			NO AVAL	ABLE DAT	A 1	1 //	'/	'''/	/	/	/	/	/		
		Rng N	1					<i>'</i>	1	1	1	1	1	1	1	1		1
		Ave	5.5			IAVA ON	LABLE DA	f*!	2.0	2.5	1.8	.4	.5	8.9	17.3	30.0		1.4
		S D Rog	/					i '	1	1	1	1	1	1	1	1		1
		N	1		,			· '		*			_					
		Ave S D						· 1										
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	f	1	İ	1	-	, 1	, <b>j</b>	, <b>!</b>	1 '							1		

SOIL SER	ies:	Abiqua					TAXONOMIC	NAME: Cum	ulic Ultic	Haploxero	11		
Hor1 zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
		(cm)		x			х н <sub>2</sub> 0		(g/cc)				
Ар	Ave S D Rng N	18.0		!	-NO DATA A	VAILABLE ~-							
<b>A1</b>	Ave S D Rng N	35.0	14.4	52.2	33.4			17.6					
A3	Ave S D Rng N	  			-NO DATA A	VAILABLE							
B2t	Ave S D Rng N	43.0	18.6	46.9	34.5			19.6				- - - - -	
B3t	Ave S D Rng N	  			-NO DATA A	VALLABLE							·
110	Ave S D Rng N	15.0		agan han ann ann aire ann ain ann ann	-NO DATA A	VAILABLE							
	Ave S D Rng N												
	Ave S D Rng N		·										
	Ave S D Rng N												
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02	RIES:	Ab1qua	Organic	Organic	١	C/N	Free	Avail.	AXONOMIC	NAME:	Cumulic	Ultic Ha	ploxerol:	i I	1	1	
ri zon	Stat.	pH	Matter	Carbon	N	Ratio	Fe <sub>2</sub> 0 <sub>3</sub>	P P	Ca	Mg	Na	K	8+	CEC	% Base Sat.	X Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		x			z	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(E Cat)	
Р	Ave S D Rng N	7.4			NO DATA	AVAILAE	LĘ		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	5.3	31.8	70. 2 25. 7 52-88 2		3.7 .6 3.3-4.1 2
	Ave S D Rng N	6.8	2.05		- NO DATA	AVAILAI	LE		13.7 12.4 5-23	4.45 2.2 3-6 2	.6 .5 .25-1.0	.65 .07 .67	19.4 19.8 5-33	29.7	57.1 39.1 30-85 2		3.8
	Ave S D Rng N	 			- NO DATA	AVAILAI	LE		13.0	6.7	1	.8		40.5	50.8		1.9
2t	Ave S D Rng N	5.1	1.6		- NO DAT	AVAILA	LE		8.1 4.8 5-12 2	5.2 1.1 4-6 2	.2 .09 .1-,3	.3 .2 .24 2	27.6	35.4 1.6 34-37 2	39.4 18.8 26-53		1.8
t	Ave S D Rng N				NO DAT	AVAILA	LE		11.3	6.0	.1	.35		42.6	41.7	 	1.9
С	Ave S D Rng N				NO DAT	AVAILA	LE	<del></del> -	11.3	5.9	1	.4		37.7	46.9		1.9
- 1	Ave S D Rng N																
	Ave S D Rng N		-														
	Ave S D Rng N		·														

SOIL SERI	ES:	Agate					TAXONOMIC	NAME: T	ypic Durocl	rept		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density		1	
Al	Ave	(cm)	32.9	47.0	20.1		<b>х н<sub>2</sub>0</b> 27.6	9.9	(g/cc)			
	S D Rng N	1	1	1	1		1	1	1			
В1	Ave S D Rng N	15.0	32.6	52.2	15.2	  		9.0				
B21t	Ave S D Rng N	20.0	32.1	44.8	23.1		23.7	9.9	1.8			
B22t	Ave S D Rng N	12.5	30.4	63.3	6.4			11.6			,	
IICI	Ave S D Rng -N	12.5	77.2		23.7			  				:
11C2	Ave S D Rng N	48.0	68.4	20.6	11.0	 	  		 			
	Ave S D Rng N				·							
·	Ave S D Rng N											
	Ave S D Rng N				1							

SOIL SE	ERIES:	Agat						7	:AXONOMIC	NAME:	Typic D	urochrept	<b>:</b> .				
Hori zon	Stat.	рН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.		Hg	Na:	K	H+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> O)					X.	(ppm)			·	00g			(NH <sub>4</sub> OAc)	<b></b>	
A1	Ave S D Rng N	6.4	2.9	NO AV	AILABLE	DATA	.08	21.0	10.1	1.4	.1	.5	5.5		68.7		
<b>B1</b>	Ave S D Rng N	6.3	1.1	NO AV	AILABLE	DATA	.08	9.0	9.1	9.1	.1	.25	4.4		71.2	 	
B21t	Ave S D Rng N	6.4		NO AV	AILABLE	DATA	.08	7.0	8.8	8.8	.2	.3	3.5		78.1		 
B22t	Ave S D Rng N	6.2	.5	NO A	AILABLE	DATA	.08	5.0	10.1	10.1	.1	.25	4.3		77.0		
1101	Ave S D Rng N	6.7	.4	NO A	AILABLE	DATA	.03	5.0				 					
11C2	Ave S D Rng N	6.8		NO A	AILABLE	DATA											
	Ave S D Rng N			•							·						
	Ave S D Rng N																
	Ave S D Rng N						·			:		1					

				1									
SOIL SER	IES:	Albee					TAXONOMIC	NAME:	Ultic Haplo	xeroll			
Horizon	Stat.	Horizon Thickness	Sand	Silt	Cl ay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density		-		
		(св)					х н <sub>2</sub> о		(g/cc)		· · · · · · · · · · · · · · · · · · ·		
							2		10.				
1	Ave	37.0											ĺ
	SD				NO DA	TA AVAILABI	£		<b>_</b>				
	Rng N	1							İ .				
	.,	i i					-						
2	Ave	37.0											
	S D Rng				NO DA	TA AVAILABI	E		<b>+</b>				
	N	<b>/</b> 1										ļ	
	_	92.0											
3	Ave S D	92.0	,		No no		6		1				
	Rng				NO DA	TA AVAILABI	E		1		]		
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	Į .	Albee	- ا	Organic	1	1	۱ ـ		AXONOMIC	NAME:	OTE1C	Haploxer	011	1			
Hori zon	Stat.	рH	Matter	Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)					Z	(ppm)			Meq/l	00g			(NH <sub>4</sub> OAc)	(E Cat)	
1	Ave S D Rng N	5.7	3.4		.2	12.0		16.0	10.6	3.0	.1	.9					3.6
2	Ave S D Rng N	5.7	1.8		.1	10.0	  	6.8	10.0	3.2	.1	.6				  	3.2
3	Ave S D Rng N	5.5	1.5		.09	10.0	 	10.0	9.7	3.4	.1	.5					2.9
	Ave S D Rng N				·							1				·	
	Ave S D Rng N																
- 1	Ave S D Rng N						i				1						
1	Ave S D Rng N										1						
1	Ave S D Rng N												:				
- 1:	Ave S D Rng N																
- 1:	SD													·			

SOIL SER	ES:	Alicel					TAXONOMIC	NAME: P	achic Haple	exeroll		•
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
Ар	Ave	(cm) 20.0	68.5	19.8	11.7	25.1	<b>х н<sub>2</sub>0</b> -	7.8	(g/cc)			
	S D Rng N	1	15.8 57-79 2	10.75 12-27 2	5.9 8-15 2	5.8 21-29 2	1.8 16-19 2	.7 7-8 2 7.6	.05 1.3-1.5 2 1.45			·
A12	Ave S D Rng N	22.5 3.5 20-25 2	62.75 4.7 60-66 2	23.7 2.8 21-26 2	13.6 2.3 12-15 2	25.7 5.1 22-29 2	1.2 15-17 2	7.6 .4 7-8 2	.1 1.3-1.5 2			
<b>B1</b>	Ave S D Rng N	29.0 5.6 25-33 2	60.45 .8 60-61 2	25.9  25.9 2	13.7 .8 13-14 2	26.7 1.5 25-28 2	17.3 .8 16-18 2	8.0 .2 7-8 2	1.4 .2 1.2-1.5 2			
B21t	Ave S D Rng N	39.5 9.2 33-46 2	62.1 4.2 57-65 3	22.9 3.5 19-26 3	15.0 2.3 12-16 3	28.5 3.8 25-32 3	21.9 4.6 16-26 3	8.3 .4 6.5-7.8 3	1.6 .2 1.4-1.7 3			
B22t	Ave S D Rng -N	22.5 3.5 20-25 2	58.8 4.5 55-62 2	24.9 3.7 22-28 2	16.4 .7 16-17 2		  					
B3Ca	Ave S D Rng N	27.5 10.6 20-35 2	53.9	29.2	16.9							
С	Ave S D Rng N	84.0	59.0 12.0 45-66 3	27.9 9.5 21-39 3	13.2 2.6 11-16 3							
	Ave S D Rng N											
	Ave S D Rng N											
		ļ										

SOIL SE	RIES:	Alicel						7	CAXONOMIC	NAME:	Pachic	: Haploxe	roll				
Horizon	Stat.	pН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Нg	Na	К	H+	CEC	% Base	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		z			z	(ppm)			<del> </del>	00g			(NH <sub>4</sub> OA <sub>C</sub> )		Ca/ng
Ар	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
<b>B1</b>	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	.5 .15 .47 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 .45 2	.3 .05 .23 2	Ť			9.0	7.8	5.6	.2	1.0		19.1			1.5
B3Ca	Ave S D Rng N	9.3	.3	.2				 						  		 	
ļ	Ave S D Rng N	8.7 .7 7.9-9.2 3	.2 .1 .13	.1 .07 .0620	T			6.5	6.6	5.0	.2	.7		16.5			1.3
ł	Ave S D Rng N																
	Ave S D Rng N										-		,				
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SOIL SER	IES:	Alsea					TAXONOMIC	NAME: Cu	mulic Haplo	ıdol1			
Hor1zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			1	
		(cm)		x			х н <sub>2</sub> о		(g/cc)				
All	Ave	15.0	33.1	40.0	27.0	[ 	NO DATA AV	AILABLE	<b> </b>				
	S D Rag N	1	1	1	1								
A12	Ave	12.0	29.1	39.8	31.2		-NO DATA AV	AI LABLE					
	S D Rng						·						
	N	1	1	1	<b>1</b>						·		
A3	Ave S D	7.0	30.5	38.8	30.7		-NO DATA AV	AILABLE				 	, ,
	Rng N	1	/1	1	1			-					
<b>B</b> 1	Ave S D	12.0	32.5	38.7	28.8		-NO DATA AV	AI LABLE					
	Rng N	1		1	1								
B21	Ave S D	25.0	36.6	37.6	25.8		-NO DATA AV	AILABLE					
	Rng .N		1	1	1								
в22	Ave	15.0	41.9,	35.2	23.0		-NO DATA AV	AI LABLE					
	S D Rng												
	N	1	1	1	1								
В23	Ave S D	25.0	53.0	29.1	17.8	~~~~~~	-NO DATA AV	ATLABLE					
	Rng N	1	1	1	1							i	
В3	Ave S D	25.0	62.2	25.4	12.4		-NO DATA AV	AILABLE					
	Rng N	1	1	1	1								
	Ave S D												
	Rng N				,							-	
	"												
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SOIL SE	ERIES:	· Alsea	۱	l	ı	1 .			TAXONOMIC	NAME:	Cumuli	c Haplud	o11				
Hor1 zon	Stat.	pH	Organic Matter	Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	ĸ	H <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/M
		(1:1 H <sub>2</sub> 0)					, x	(ppm)			Meq/l	00g			(NH <sub>4</sub> OAc)	(E Cat)	
All	Ave S D Rng N	6.0		7.6	1	27.1			16.2	9.5	1	1.2		40.1	67.5		1.7
A12	Ave S D Rng N	5.9		6.6	.2	30.0			15.6	9.5	.5	.5		42.1	62.0		1.6
<b>A3</b>	Ave S D Rng N	5.8		6.3	.2	28.6			15.6	10.0	.3	1		41.1	64.0		1.6
B1	Ave S D Rng N	5.8		5.6			, ,		16.2	10.3	.3	.3		40.7.	66.6	  	1.6
B21	Ave S D Rng N	5.9		1					15.9	10.3	.5	.3		39.4	68.5		1.5
В22	Ave S D Rng N	5.9		6.1					17.5	11.0	.3	.3		39.2	14.2		1.6
В23	Ave S D Rng N	6.0		1.5			  		16.5	10.8	1	.2		32.8	85.1		1.5
В3	Ave S D Rng N	6.0		1.2				 	17.5	10.3	1	1		28.4	100.0		1.7
	Ave S D Rng N										1			,			

TAXONOMIC NAME: Humic Hapludult

SOIL SEK	IES: AI	a han Ru					I WWOMOUTE .	Marie Hum	re umbinda	• <del>-</del>	1	4
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		x			% н <sub>2</sub> 0		(g/cc)			
A <sub>p</sub>	Ave S D Rng N	15.5 3.5 13-18 2	26.9 3.0 26~28 2	41.6 .57 41-42 2	31.5 1.34 30-32 2		37.6 1.56 37-39 2	19.9 2.6 18-22 2	1.04 .057 1-1.08 2	·		
<b>A</b> <sub>3</sub>	Ave S D Rng N	16.5 2.12 15-18 2	25.2 1.5 24-26 2	42.0 .85 41-43 2	32.9 2.3 31-35 2		31.3	18.25 0.5 17-19 2	1.15			
Bl	Ave S D Rng N	13.5 2.12 13-14 2	23.5 3.0 21-26 2	39.3 3.7 38-42 2	28.25 6.01 32-42 2		28.9 .63 28-29 2	18.3 .57 18-19 2	1.29 .04 1.2-1.3			
<sup>B</sup> 21t	Ave S D Rng N	16.0 2.8 14-18 2	21.7 6.22 17-26 2	36.8 4.5 34-40 2	41.8 11.2 34-50 2		31.8	18.9 2.3 17-21 2	1.28			
<sup>B</sup> 22t	Ave S D Rng N	23  23 2	20.25 2.9 18-22 2	36.6 2.5 35-38 2	43.2 5.4 39-47 2		29.8 1.34 29-31 2	19.2 1.5 18-20 2	1.32 .071 1.2-1.3			
B <sub>3</sub>	Ave S D Rng N	20.5 .071 20-21 2	16.25 3.6 14-19 2	37 3.5 34-40 2	146.8 .212 46-47 2		32.3	21.8 1.9 20-23 2	1.25			
С	Ave S D Rng N	23.0 4.2 20-26 2	30.25 3.18 28-32 2	35.25 6.0 31-40 2	34.5 9.19 28-41 2		35.0	21.2 .42 21-22 2	1.22			
	Ave S D Rng N			1								
	Ave S D Rng N											
						-					İ	

S D Rng

SOIL SER	IES:	Aloha					EAXONOMIC	NAME: Aqu	ic Xeroch	ept			
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
		(cm)		X			х н <sub>2</sub> о		(g/cc)				
Ар	Ave S D Rng N	20.0  20.0 2	30.2 11.4 18-41 3	53.8 8.9 45-64 3	15.9 2.6 13-19 3	  	20.2	7.9 .7 7.4-8.4 2	1.55		·		
А3	Ave S D Rng N	18.0	30.9 17.5 18-43 2	52.1 11.2 44-60 2	17.0 6.3 12-22 2	  	19.3	8.3 1.0 7.6-9.0 2	1.5				
Bl	Ave S D Rng N	20.0	24.6 9.3 18-31 2	54.9 7.2 49-60 2	22.5 2.1 19-22 2	  	  	9.2				·	
В21	Ave S D Rng N	19.0 1.4 18-20 2	35.4 6.0 31-40 2	46.5 4.4 43~50 2	18.1 1.6 17-20 2		  	 	1.5				
В22	Ave S D Rng -N	22.5 3.5 20-25 2	32.1 12.1 19-43 3	56.8 11.6 36-59 3	21.1 1.6 19-23 3		25.1	11.3 .6 11-12 2	1.45	·			·
в3	Ave S D Rng N	38.0	34.1 12.2 25-43 2	46.7 11.0 39-55 2	19.2 1.3 18-20 2	, 	2.7	11.0 .4 11-12 2	1.4				
C1	Ave S D Rng N	34.5 2.1 33-36 2	47.2 3.8 44-50 2	36.5 6.6 31-41 2	16.3 2.7 14-18 2	  	,	  	1.4				
C2	Ave S D Rng N	20.0	48.7 20.5 34-63 2	35.4 21.9 20-51 2	15.9 1.4 14-17 2			  					
	Ave S D Rng N												

SOIL SERIES: Aloha Aquic Xerochrept TAXONOMIC NAME: Organic Organic C/N Free Avail. % Base % Base Horizon Stat. ρĦ Matter | Carbon H+ N Ratio Fe<sub>2</sub>0<sub>3</sub> P Ca Mg Na K CEC Sat. Sat. Ca/Mg (1:1 H<sub>2</sub>0) z (ppm) --Meq/100g----(NH, OAc) (E Cat) Ave 2.5 Aр 5.8 54.4 6.0 1.7 . 1 10.9 14.25 \_\_\_ \_\_\_ \_\_\_ \_\_\_ .5 57.8 3.4 SD . 1 40.2 2.0 . 2 2.1 . 1 . 6 1.1 12.6 1.0 ---Rng 5.7-6.0 2.4-2.6 26-83 3-8 9-12 13-15 1.3-2.4 .1 .3-.7 43-68 \_\_\_ 2.9-5.0 4 2 . 2 3 3 2 ------3 2 2 3 3 ---Ave **A3** 6.0 . 8 77.2 4.3 1.6 . 1 . 4 10.5 ---54.3 2.7 \_\_\_ ---\_\_\_ S D \_---\_\_\_ \_\_\_ ---Rng 6.0 ---\_\_\_ \_\_\_ \_\_\_ ------1 1 2 1 ------Ave Bl 5.7 . 85 12.7 3.0 ---\_\_\_ 32.4 5.6 2.0 . 1 . 3 8.3 65.2 ---S D . 1 . 2 1.3 ---8.1 \_\_\_ \_------. 3 .1 ---Rng 5.6-5.8 .7-1.0 \_\_\_ ---\_\_\_ 4-7 1-3 . 1 .2-.4 8.3 59-71 ---2 .2 \_\_\_\_ ---1 2 2 2 2 2 2 1 ---Ave **B21** 5.7 . 7 7.2 . 2 8.1 80.7 2.2 3.3 . 2 13.5 ---S D \_\_\_ ---\_\_\_ \_\_\_ \_\_\_ \_\_\_ ~~~ Rng 5.7 ---1 1 2 1 1 1 1 1 1 ---\_\_\_ \_\_\_ ---. ---B22 Ave 8.9 5.9 . 35 27.1 3.8 . 1 . 4 8.6 88.7 2.3 SD . 2 ---\_\_\_ \_\_\_ \_\_\_ ------Rng 5.9 .2-.5 ---------2 1 1 1 1 1 3 \_\_\_ \_\_\_ 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 \_\_\_ \_\_\_ ------------1 2 1 1 ---C1 . 05 Ave 6.1 10.5 5.3 . 2 . 3 5.6 17.5 93.1 2.0 ---S D . 1 ---\_\_\_ ---\_\_\_ \_---\_\_\_ Rng 6.0 - 6.2------\_\_\_  $\mathbf{1}^{-1}$ ı 1 1 2 1 \_\_\_ 1 1 1 1 ---\_\_\_ \_\_\_ \_\_\_ \_\_\_ C2 6.15 . 2 حنت 10.8 5.3 . 2 . 3 5.4 17.6 94.3 2.0 Ave ------\_\_\_ ---. 2 S D ---\_\_\_ \_\_\_ 6.0-6.3 Rng \_\_\_ \_\_\_ ------\_\_\_ 2 1 1 1 1 1 \_\_\_ N Ave S D Rng

SOIL SERIES: Am1ty TAXONOMIC NAME: Argiaquic Xeric Argialboll Horizon Bulk Horizon Thickness Stat. Silt Sand Clay .10 Atm. .33 Atm. 15 Atm. Density (cm) ---X----% H<sub>2</sub>0--(g/cc) 22.0 13.7 61.6 24.7 27.4 26.2 11.0 1.4 Ave Ap/All SD 7.6 8.0 10.4 3.7 1.5 9-12 Rng 10-35 6-21 48-73 20-29 3 8 5 5 5 ... 16.8 9.9 Ave 23.7 11.4 \_\_\_ A12 S D 3.8 6.9 1.25 . 6 10-20 22-25 11-12 Rng 5-18 ---3 2 6 3 19.0 15.9 61.5 26.1 11.6 Ave 25.3 24.3 1.6 A2 3.5 12.8 10.1 29.2 S D .95 13-23 6-34 46-72 22-29 10-12 Rng 1 1 1 3 8 5 5 5 29.1 28.2 14.2 28.55 Ave 20.5 13.7 57.7 Bl S D 3.5 7.5 6.9 . 6 28-29 Rng 18-23 8-19 53-63 \_\_\_ 2 2 2 2 \_\_\_ 19.6 19.0 10.3 57.7 32.0 Ave \_\_\_ B21t S D 5.0 8.3 6.7 3.7 ---Rng 26-35 13-25 4-24 50-65 --------- $\prime_1$ 8 5 5 5 ---19.4 6.4 64.9 28.4 18.65 Ave B22t S D 5.9 5.1 7.1 6.4 2.3 \_\_\_ \_---13-25 3-14 59-72 24-38 17-20 Rng N 5 2 4 4 4 \_\_\_ 33.4 8.2 69.5 22.3 16.6 Ave ---В3 ---S D 14.4 6.2 4.4 7.8 \_\_\_ ---2.5 ---18-56 15-33 15-18 3-17 64-74 Rng 7 4 4 4 2 20.8 62.5 39.0 16.5 11.9 C Ave \_\_\_ SD 30.1 13.5 12.9 6.1 1.3 ---------18-102 47-78 9-22 11-13 Rng 5-37 8 5 5 5 2 ---Ave SD Rng

SOIL SE	RIES:	Amity						1	OIMONOXAT	' NAME .	Arateaut	lc Xeric	Aratalba	11				
Horizon	Stat.	рĦ	Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> O <sub>3</sub>	Avail.		Mg	Na Na	K	<sub> </sub> +	CEC	X Base Sat.	% Base Sat.	Ca/Mg	
		(1:1 H <sub>2</sub> O)		x			Z	(ppm)			<del> </del>	00g			(NH <sub>4</sub> OAc)		04/118	
Ap/All	Ave S D Rng N	5.4 .3 4.9-6.0 8	1.6	2.7 .8 1.6-3.0 4	.2 .05 .13	12.8 .4 12-13 4	1.7 .8 .8-2.4	14.6 18.2 2-28 3	7.3 1.3 5.1-9.4	2.3 .5 1.8-3.0	.12 .16 .015	.6 .3 .2-1.1	16.5 5.4 12-23	22.6 5.7 10-32 6	41.5 8.4 29-47 4		3.1 .7 2.6-4.3	
A12	Ave S D Rng N	5.6 .4 5.0-6.1 6		1.75 .7 1.3–2.2 2	.15 .05 .12 2	11.6 .9 11-12 2	1.75 .35 1.5-2.0 2		7.9 1.5 5.0-9.3	2.9 1.0 1.4-4.2 6	.17 .17 .065	.4 .65 .26 6	15.1 5.6 10-21 3	24.9 2.25 23-28 4	36.5 16.2 25-48 2		2.75 .5 2.2-3.5 6	
A2	Ave S D Rng N	5.7 .5 5.1-6.3 8	.9	.8 .2 .6-1.1 3	.08 .01 .0709	10.5 1.5 9-12 3	1.8 .2 1.5-2.0 4	14.7	7.8 1.9 4-11 8	3.1 1.0 1.7-4.6 8	.17 .13 .014 8	.25 .08 .135	10.1 3.8 7-14 3	20.2 3.2 16-23 6	50.9 14.7 32-63 4		. 2. 5 . 4 1. 9-3. 1 8	
В1	Ave S D Rng N	5.5 .1 5.4-5.6 2	.15	.3	.04	8.2	1.8	16.25	11.0	4.5	.13	.235		17.2 1.1 16-18 2	88.0		2.4	
B21t	Ave S D Rng N	5.85 .5 5.0-6.6 8	.3	.3 .08 .24 3	.03 .008 .0204	9.6 2.6 7-12 3	1.6 .3 1.4-2.0 4	15.75	14.6 3.2 10-19 8	7.6 1.2 6-9 8	.3 .2 .27	.4 .2 .26 8	8.0 2.6 6-11 3	29.0 6.5 22-37 6	81.0 14.7 63-99 4		1.9 .4 1.4-2.5 8	
B22t	Ave S D Rng N	5.9 .3 5.5-6.3		.2 .05 .13 2	.03	1.9	1.55 .07 1.5-1.6 2	9.8	16.7 2.6 13-19 5	9.7 1.7 7-12 5	.4 .3 .28 4	.4 .9 .35	5.8 .9 4.8-6.5 3	32.2 5.9 26-40 5	74.3 16.3 55-85 3		1.8 .5 1.3-2.5 5	
В3	Ave S D Rng N	6.5 .5 5.8-7.0 7		.1 .01 .0911			2.0 1.2 1.3-3.7		15.5 3.0 12-21 7	8.6 1.5 7-11 7	.4 .2 .28 6	.4 .07 .35	4.0 .5 3.5-4.4	28.4 5.7 21-39 5	86.3 3.2 84-90 3	 	1.9 .4 1.5-2.5	
С	Ave S D Rng N	6.4 .55 5.5-6.9 8	.2	.08 .02 .071 3	.02	5.5	2.1 .9 1.4-3.5 5		13.8 2.2 9.2-17 8	6.6 1.8 5.2-9.2 8	.3 .1 ' .25 7	.3 .09 .14	3.9 1.9 2.0-5.8 3	23.3 2.1 21-27 6	87.0 11.9 72-100 4		2.85 2.3 1.5-2.5	
	Ave S D Rng N																	
	i			,	ł	į						,		į			ţ	5

SOIL SER	IES;	Apt		ı			TAXONOMIC	NAME: T	ypic Haplo	humult		
Hor1zon	Stat.	Horizon Thickness	Sand	Silt	Clay	. 10 Atm.	. 33 Atm.	15 Atm.	Bulk Density			
		(cm)		2			х н <sub>2</sub> 0		(g/cc)			
All	Ave S D Rng N	5.0	18.4	38.5	43.1		-NO AVAILA	LE DATA				
A12	Ave S D Rng N	15.0	15.0	40.1	45.0		-NO AVAILAE	LE DATA				
В11	Ave S D Rng N	26.0	11.0	36.5	52.6	46.0	42.7	24.7	1.2			
В12	Ave S D Rng N	12.0	8.8	34.2	57.0		-NO AVAILAE	LE DATA				
B21	Ave S D Rng .N	32.0	8.5	42.3	48.2	49.1	45.9	24.0	1.2			i
в22	Ave S D Rng N	30.0	8.3	42.1	49.6		-NO AVAILAH	LE DATA				
В3	Ave S D Rng N	35.0	16.9	41.3	35.8		-NO AVAILAE	LE DATA				
	Ave S D Rng N											
	Ave S D Rng N											

SOIL SI	ERIES:	Apt						7	AXONOMIC	NAME:	Typic	: Haplohu	m., } +				
Horizon	Stat.	pН	Organic Matter	Organic Carbon	И	C/N Ratio	Free Fe <sub>2</sub> O <sub>3</sub>	Avail.		Mg	Na:	K	H+	CEC	X Base Sat.	X Base Sat.	Ca/Hg
		(1:1 H <sub>2</sub> 0)					Z	(ppm)			ļ	00g			(NH <sub>4</sub> OAc)	<del></del>	CE/ rig
A11	Ave S D Rng N	6.3		6.9	.3	21.6			31.1	12.4	.3	3.5		45.0	100.0		2.5
A12	Ave S D Rng N	6.5		5.1	.3	12.7			25.6	10.0	.2	3.0		41.9	92.6		2:6
B11	Ave S D Rog N	5.9		1.9	.1	16.9			8.0	5.0	.2	1.0		34.2	41.5		1.6
B12	Ave S D Rng N	5.6		.8	.1	13.7			6.1	1.2	.3	.4		34.2	32.2		1.5
B21	Ave S D Rng N	5.7		1	.03	13.0		 	4.0	2.9	1	.3		35.3	21.2		1.4
B22	Ave S D Rng N	5.8		.3	.03	9.0		 	3.4	2.9	.3	.3		32.6	21.2		1.2
В3	Ave S D Rng N	5.5		.5	.03	12.0			2.5	2.2	.2	.3		33.5	15.5		1.1
	Ave S D Rng N										ı						
	Ave S D Rng N												·				
	-		1								1						;

SOIL SER	IES: A	schoff					TAXONOMIC	NAME: An	dic Haplum	brept		
Hor1zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		X			<b>х</b> н <sub>2</sub> 0		(g/cc)			
Al	Ave S D Rng N	22.0 9.6 15-33 3	30.3 1.8 28-32 4	56.1 7.5 46-63 4	12.4 7.1 8-23 4							
А3	Ave S D Rng N	17.7 6.4 13-25 3	33.9 5.0 28-39 4	52.8 10.5 42-63 4	13.3 6.2 7-21 4	52.7	49.1	27.6				
<b>B</b> 1	Ave S D Rng N	19.0 12.7 10-28 2	30.6 4.5 27-34 2	54.7 11.8 46-63 2	14.9 7.4 10-20 2	  	  	  				
в2	Ave S D Rng N	29.6 5.0 23-36 5	35.4 7.9 26-43 5	42.7 15.9 22-60 5	21.0 6.8 13-30	46.7	43.7	21.4	  			
83	Ave SD Rng N	29.0 1.4 28-30 2	28.75 2.3 27-30 2	53.9 7.4 49-59 2	17.3 5.1 14-21 2	  		  				
С	Ave S D Rng N	21.5 9.5 8-30 4	35.6 15.2 23-56 4	52.4 14.9 39-73 4	12.1 8.4 5-20 4	 		  				
	Ave S D Rng N			1		·						
	Ave S:D Rng N	·										
	Ave S D Rng N											
					ı					·		

SOIL SE	RIES:	Aschoff						1	I MONOXAT	: NAMR:	Andic I	Haplumbre	nt				
Horizon	Stat.	рĦ	Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.		Mg	Na	K	H <sup>+</sup>	CEC	% Base	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)					*	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	<b></b>	54,118
A1	Ave S D Rng N	5.65 .5 5.2-6.3	11.05 3.8 8-16 4	6.4 2.2 4.6-9.2	. 25 . 05 . 2 3	25. Q 3. 7 23-29 4	4.2 1.1 3.4-5.0 2	6.3 4.95 2.8-9.8	2.6 3.8 .1-8.2	.85 1.1 .2-2.5	.15 .13 .0430	.4 .4 .1-1.0		30.7 6.2 23-38	12.2 16.1 2-36		4.65 1.9 3.3-6.0
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 .1926 4	28.2 4.2 24-34 4	4.2 .9 3.2-5.4	4.0 1.7 1.5-5.5 4	1.7 1.6 .4-4.0	.78 .4 .5-1.4	.275 J10 .24	.35 .25 .17		36.1 4.2 32-41 4	9.15 7.0 4-19 4		2.1 1.4 .8-3.6
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 .1016 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	.3 .1 .24 2	.45 .2 .36 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 .0216 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 .043	.3 .3 .19 5		21.6 5.7 15-27 5	12.1 12.3 4-33 5		2.1 1.7 .07-4.0
83	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 .0310	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 .46 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
1	Ave S D Rng N	5.8 .5 5.1-6.2	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 .28	.4 .2 .26 4		28.3 3.5 25-33 4	18.8 18.5 9-46 4		2.0 .4 .2-2.4
	Ave S D Rng N																
. !	Ave S D Rng N										. 1			·			
	Ave S D Ing N								·		1						
1	ı	1															

SOIL SERIES: Astoria

TAXONOMIC NAME: Andic Haplumbrept

Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		x			X H <sub>2</sub> 0	13 71	(g/cc)		e retire sage made representation payable projects (age money	
All	Ave S D Rng N	18.6 5.0 15-25 5	12.9 2.5 9.1-16 5	45.9 8.3 36-56 5	41.2 6.8 32-47 5			31.1 .49 30-32 2				
A12	Ave S D Rng N	17.8 4.2 15-25 4	14.1 3.7 9.8-19 4	48.2 8.8 36-58 4	37.7 5.5 30-45 4	82	12	27.2 2.3 24-29 4		·		
ВІ	Ave S D Rng N	18.0 7.0 10-23 3	16.2 3.2 12-20 4	42.0 7.4 35-53 4	41.7 4.8 34-45 4			28.5 .38 28-29 4			·	
B2 1	Ave S D Rng N	34.4 6.8 28-43 5	16.4 3.1 12-22 5	44.8 7.22 37-56 5	38.8 6.6 28-45 5	61	57	27.2 3.4 22-30 4				
B22	Ave S D Rng N	31.5 5.1 27-38 4	20.2 4.8 14-26 4	40.9 4.64 37~46 4	38.8 2.1 37-42 4			28.7				
B2 3	Ave S D Rng N	17.5 10.6 10-25 2	22.3 .14 22-23 2	37.9 1.6 37-39 2	39.9 1.5 39-41 2			28.95 1.48 28-30 2				
В24	Ave S D Rng N	35 7.07 30-40 2	20.9 6.08 16-25 2	35.8 3.89 33-39	43.3 2.19 42-45 2			28.45 .64 28-29 2	  			
В3	Ave S D Rng N	29.8 9.9 13-47 6	22.6 7.18 10-32 6	38.6 7.07 30-50 6	37.2 8.04 25-49 6			30.1 .38 29-31 3				
С	Ave S D Rng N	35.7 13.8 20-46 3	26.3 20.9 9-50 3	36.0 9.1 26-45 3	37.6 15.0 24-54 3			29.6				

SOIL SERIES: Astoria TAXONOMIC NAME: Andic Haplumbrept Hor1zon Bulk Horizon Thickness Silt Stat. Sand Clay .10 Atm. .33 Atm. 15 Atm. Density (cm) -% н<sub>2</sub>0--(g/cc) 33.7 11.56 22-46 ۸ve 34.5 15.0 Dr 22.7 32.1 2.5 12.0 S D 20-25 21-51 23-46 Rng 3 3 3 Ave S D Rng Ave S D Rng Ave S D Rng Ave S D Rng Ave SD Rng Ave S D Rng Ave S D Rng Ave S D Rng

SOIL SE	RIES:	Astoria						7	AXONOMIC	NAME:	Andic H	aplumbre	pt				
Hort zon	Stat.	pH		Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	к	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		x			Z	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(E Cat)	
All	Ave S D Rng N	5.1 .30 4.8-5.5 4	14.8 3.8 13-19 3	7.77 2.04 5.6-11 5	.1431 .07 .3555	17.9 1.92 16-20 5	5.05 .07 5.0~5.1		2.88 2.31 .4-4.4	2.36 1.62 .8-4.7	.51 .103 .465	1.1 .19 .8-1.3 5	44 6.5 39-49 2	49.8 5.3 45~55 3	5.5 .7 5-6 2	5.05 .07 5-5.1 2	1.2 .93 .1-2.7 5
A12	Ave S D Rng N	5.1 .16 4.9-5.3	2.4 4.5-9.2	3.83 1.2 2.5-4.7 5	.230 .093 .1033 5	17.7 4.6 14-26 5	5.2  5.2 2		2.18 4.26 .1-9.8 5	1.1 .78 .3-2.3	.422 .167 .361	.47 .22 .28 5	39.9 .14 39-40 2	33.5 7.8 26-41 3	3.5 .7 3-4 2	6 1.4 5-7 2	1.2 1.8 .2-4.3
<b>B1</b>	Ave S D Rng N	5.1 .14 5-5.3 4	9.9			22.25 20 9-52 4	5.0 .15 4.9-5.2 3		.32 .096 .2~.4 4	.73 .30 .3-1.0	.275 .10 .24	.375 .17 .26 4	40.7 1.4 39-43 3	34.2 11 26-42 2	4.5 .7 4-5 2	4.5 .7 4-5 2	.5 .14 .47
В2 1	Ave S D Rng N	5.12 .19 4.8-5.3 5	1.88 1.1 .6-2.5	1.29 .99 .3-2.8 5	.095 .05 .0518 5	13.1 6.22 6-22 5	5.15 .07 5.1-5.2 2		.254 .095 .174	1.3 1.4 .3-3.8 5	.32 .129 .25	.28 .08 .24 5	44.3 2.83 42-46 2	29.8 6.9 26-38 3	4.5 3.5 2-7 2	6.5 3.5 4-9 2	.34 .19 .054
В22	Ave S D Rng N	5.98 .096 4.9-5.1 4	1.34 .085 1.2-1.4 2	.58 .23 .3274 4	.015	3.72 10-17	4.95 .07 4.9-5 2		.30 .08 .24 4	2.45 2.06 .5-5 4	.34 .18 .257	.24 .05 .23	44.0 4.38 41-47 2	31.3 10.6 24-39 2	1	7.5 5 4-11 2	.13 .12 .043
B23	Ave S D Rng N	5.05 .21 4.9-5.2 2		.285 .007 .2829 2		,	4.9 .07 4.8-4.9 2		.35 .07 .34 2	1.95 1.63 .8-3.1 2	.2	.25 .07 .2~.3 2	43.5 6.2 39-48 2			6 2.8 4-8 2	.3 .28 .15 2
B24	Ave S D Rng N	5.05 .35 .4853 2		.31 .099 .2438 2			4.95 .07 4.9-5.0 2		.25 .07 .23	2.3 1.7 1.1-3.5 2	.22	.3 .14 .24 2	43.5 6.92 38-48 2			6.5 3.5 4-9 2	.15 .08 .092
В3	Ave S D Rng N	5.0 .117 4.8-5.1 6	.74 .25 .5-1.0 3	.32 .17 .116 6	.044 .011 .0305 3	3.9	5.6 1.4 4.5-7.2 3		. 25 . 37 . 1-1 6	2.37 1.75 .8-4.7 6	.29 .10 .24 6	.24 .08 .24 6	45.2 2.4 43-48 3	31.4 9.5 22-41 3	7.3 4.2 4-12 3	8 2.8 6-10 2	.067 .045 .0212
С	Ave S D Rng N	4.9 .2 4.7-5,1 3		.2 .1 .113 3		5.5 2.12 4-7 2	 		.5 .56 .19 2	1.2 .58 .9-1.9 3	.28 .04 .23-3	.27 .058 .23	1	38.3 2.3 37-40 2	4.0	1	.3 .28 .15 2

SOIL SE	RIES:	Astoria						1	'AXONOMIC	NAME:	Andic Ha	plumbrep	t				
Hori zon	Stat.	рН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Mg	Na	K	н <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		x			z	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	<del></del>	
. Dr	Ave S D Rng N	4.9 .14 4.8-5.0 2	.3	.18 .03 .162	.03	6	3.5		.26 .34 .025	1.15 .35 .9-1.4	.29 .014 .283	.3	42.7	45.9	3	6	.21 .27 .024
	Ave S D Rng N	,								-			·				
	Ave S D Rng N										ı						
	Ave S D Rng N			·													
:	Ave S D Rng N				·						١						·
:	Ave S D Rng N				·		·		l								
	Ave S D Rng N																
	Ave S D Rng N													·			
	Ave S D Rng N		·												·		
·											,						

SOIL SER	IES:	Athena					TAXONOMIC	NAME: Pa	chic Haplo	xeroll		
Horizon	Stat.	Harizon Thickness	Sand	Silt	Clay	.10 Atm.	. 33 Atm.	15 Atm.	Bulk Density			
		(cm)					х н <sub>2</sub> о		(g/cc)			
<b>A1</b>	Ave S D Rng N	20.0	13.9	68.9	18.2		NO DATA A	AILABLE ~-				
<b>A</b> 3	Ave S D Rng N	18.0	1 12.2	65.6	1 22.2		NO DATA A	/AILABLE				·
B1	Ave S D Rng N	28.0	11.6	68.1	20.3		NO DATA A	AILABLE				
в2	Ave S D Rng N	33.0	13.1	69.3	17.6		- NO DATA A	/AILABLE				
В3	Ave S D Rng N	18.0	10.3	73.3	16.4		- NO DATA A	/AYLABLE			·	
B3Cal	Ave S D Rng N	13.0	9.3	76.3	14.4		- NO DATA A	AILABLE -				
B3Ca2	Ave S D Rng N	5.0	6.5	80.8	12.7	<u> </u>	- NO DATA A	AILABLE				
C1	Ave S D Rng N	8.0	11.05 2.3 9-13 2	72.8 3.7 70-75 2	16.2 6.0 12-20 2		- NO DATA A	AILABLE -				
c2	Ave S D Rng N	10.0	7.3	73.6	19.1		- NO DATA A	/AILABLE -	······································			
	-											

SOIL SER	1	Athena					TAXONOMIC	MARIE: 1	Pachic Hap	TOXELOIT			
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	, Bulk Density				
		(cm)		X			<b>х</b> н <sub>2</sub> 0		(g/cc)		<del></del>		
C3	Ave	13.0	7.3	74.0	18.7		- NO DATA A	VAILABLE					
	S D Rng												
	N	1	1	1	1				,				
	Ave				l:								
	S D Rng								i		}	\	
	N												
	Ave S D												·
	Rng N								1				
	Ave				•								
	S D												
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SOIL SE	RIES:	Athena	1					1	CAXONOMIC	NAME:	Pachic :	Haploxero	oll				
Hori zon	Stat.	рН	Organic Matter	Organic	N	C/N	Free	Avail.	1	l	1	1	1		% Base	% Base	
		(1:1 H <sub>2</sub> O)				Ratio	Fe <sub>2</sub> 0 <sub>3</sub>	Р (ррш)	Ca	Mg	Na Meq/1	K	н+	CEC	Sat.	Sat.	Ca/Mg
		4					^	(66m)			meq/I	00g 			(NH <sub>4</sub> OAc)	(E Cat)	
Al	Ave S D	6.9 1.0	4.2 2.5	2.0				29.2 20.0		NO DA	TA AVAIL	BLE		25.0			
	Rng	5.8-7.7	2.4-6.0					15-43						1			
	И	3	2	1				2								i	
A3	Ave S D	6.9 1.0	3.55 2.5	.9				16.25 13.1		NO DA	TA AVAIL	ABLE		23.8			
	Rng N	6.1-8.0	1.8-5.3	$\left  \begin{array}{c} 1 \end{array} \right $				7-26 2						1			
B1		6.8		.5					TA AVAII	ARIF				21.9			
DT	Ave S D	0.0		.,				140 1/	IN AVAIL	ADLE							
	Rng N	1		$\langle 1 \rangle$					·					1			
В2	Ave	6.9		.3				NO D	TA AVAII	ABLE				19.4			
ļ	S D Rng											i					
	N	1		1	1	,								1			
В3	Ave	6.9		. 2				NO D	TA AVAII	ABLE				19.4			
•	S D Rng							,									
	N	1		1		. [								´1			
B3Cal	Ave	7.2		.1				NO D	TA AVAI	ABLE				18.7			
}	S D Rng					1		,									
	N	1		1		ł								1			
B3Ca2	Ave S D	8.0		. 2							.7	. 5		21.2			
	Rng										/	/		1			
	И	1		1							1	1		_		İ	
Cl	Ave S D	7.7		.15							.1	.6		21,9 6.2			
j	Rng N	7.2-8.2		.1218							1	1	'	18-26 2			
C2	Ave	8.1		. 2					13.9	6.3	.8	. 5		21.2	100.0		
	SD																
	Rng N	1		1					1	1	<b>1</b>	1		1	_1		
			ļ														
-	1			j		1											
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orizon	Stat.	pli	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	y_	N -		H+	1		% Base	_
		(1:1 H <sub>2</sub> 0)				MALIU	2	(ppm)		Mg	Na Meq/1	K	H	CEC	Sat.	Sat.	C
		•						(PP=)			neq/1	JOB			(NH <sub>4</sub> OAc)	(Σ Cat)	
C3	Ave S D	7.9		.2	N	DATA A	AILABLE		13.9	6.3	.8	.5		21.2	100.0		] :
	Rng N	1		1					1	1	1	1		1	1		-
l	Ave S D				·							·	·				
	Rng N																
	Ave												.!			·	
- 1	S D Rng N																
-	Ave			l													
i	S D Rng		ĺ		l												
	N				.	l											
- 1	Ave S D					į	·						,				
	Rng N																-
	Ave S D			1			1			į					·		
	Rng N					1								·			
	Ave					I		·			1						
	S D Rng		1	İ				1			'1						
	N	l	j							İ							
8	Ave S D	Ī															
	Rng N	-		}		1			1	1							
4	lve					l			ŀ		1						
S	gu 8			-	1					1							
	<sup>N</sup>														i		
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SOIL SER	IES:	Awbrey (Awb	rig)				TAXONOMIC	NAME: Vei	rtic Albaqu	alf			
Hor1zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
:		(cm)	~				<b>х</b> н <sub>2</sub> о		(g/cc)				
Αр	Ave S D	18.0	7.8	67.9	24.3		NO DATA AV	ATLABLE -		·			
	Rng N	1	1	1	1	<b>}</b>							
A2	Ave S D Rng	10.0	7.4	66.8	25.9		NO DATA AV	AILABLE -					
	N	1	1	1	<b>/</b> 1			:					
B21t	Ave S D	20.0	8.3	42.0	49.8		NO DATA AV	AILABLE -					,
	Rng N	1	1	1	1			٠			·		<b>من</b> د
B22t	Ave S D	40.0	12.1	41.4	46.5		NO DATA AV	AILABLE ~					
	Rng N	1	1	1	<b>/</b> 1							ı	
B3t	Ave S D	33.0	12.8	39.9	47.4		NO DATA AV	AILABLE -		'			
	Rng -N	1	1	1	1								
С	Ave S D	30.0	8.5	32.3	59.4		NO DATA AV	AILABLE -					
	Rng N	1	1	1	/1								
	Ave S D			i	,								:
	Rng N				1								
	Ave S D												
	Rng N												
	Ave S D												·
	Rng N												
i	, 1	f	l										

SOIL SE	RIES:	Awbrey	(Awbr	lg)				7	CAXONOMIC	NAME:	Vertic	Albaqual	f				
Hori zon	Stat.	pН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.		Mg	Na Na	l ĸ	H <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		x			7	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Ар	Ave S D Rng N	5.6 .1 5.5-5.7 2	3.4	2.1  2.1 2	.14 .05 .1017	21.0  21.0 2		15.25 8.1 10-21 2	10.35 1.8 9-12 2	5.0  5.0 2	.35 .07 .34	.45 .2 .36 2		19.6 5.4 16-23 2	93.7  93.7 2		2.05 .35 1.8-2.3 2
. A2	Ave S D Rng N	6.0 .4 5.7-6.3	2.2  2.2 2	1.7  1.7 2	.11			6.0 1.6 4.9-7.1 2	10.9 1.9 9.5-12.2 2	6.15 .2 6.0-6.3	.35 .2 .25	.3 .1 .24		18.7 3.3 16-21 2	98.7  98.7 2		1.75 .2 1.6–1.9 2
B21t	Ave S D Rng N	6.1 .1 6.0-6.2	1.0  1.0 2	.9  .9 2	.05  .05 2			2.45 .5 2.1-2.8 2	17.85 .35 17-18 2	13.25 2.5 11-15 2	1.1 .7 .6-1.6 2	.45 .07 .45		43.6 4.8 40-47 2	73.6  73.6 2		1.4 .3 1.2-1.6
B22t	Ave S D Rng N	6.65 .07 6.6-6.7 2	.5  .5 2	.4  .4 2	.08 .04 .051	4.0  4.0 2		1.6 .3 1.4-1.8	20.0 1.7 19-21 2	15.55 3.7 13-18 2	1.65 1.2 ' .8-2.5	.5		42.15 7.0 37-41 2	97.3  97.3 2		1.3 .4 1.0-1.6 2
B3t	Ave S D Rng N	6.8 .4 6.5-7.1 2	.2  .2 2	.3				4.1 2.8 2.1-6.0 2	19.5 3.3 17-22 2	14.9 2.1 13-16 2	1.4 .9 .8-2.0	.4		41.2 8.4 35-47	76.0  76.0 2		1.3 .4 1.0-1.6 2
С	Ave S D Rng N	7.0 1.0 6.3-7.7 2	.1  .1 2	.3  .3 2	.2	1.5  1.5 2		23.3 30.0 2-44 2	20.2 2.6 18-22 2	15.65 6.9 11-21 2	1.4 1.0 .7-2.1 2	.5 .3 .37		41.7 19.1 28-55 2	82.0  82.0 2		1.4 .4 1.1-1.7 2
	Ave S D Rng N	·				·					,						
	Ave S D Rng N																
	Ave S D Rng N					-						*1		·			
1													٠.				ų.

SOIL SER	IES:	Ayres					TAXONOMIC	NAME: X	erollic Du	rargid		
Hor1zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		<del>-</del> X+			х н <sub>2</sub> 0		(g/cc)			
A1	Ave S D Rng N	11.5 2.1 10-13 2	57.45 10.5 50-65 2	27.3 6.1 23-32 2	10.25 2.6 8-12 2	27.6 .6 27-28 2	20.2 1.6 19-21 2	8.95 1.2 8-10 2				
A3	Ave S D Rng N	9.0 1.4 8-10 2	55.0 7.8 49-60 2	30.2 8.5 24-36 2	14.85 .6 14-16 2	30.9 .6 30-31 2	22.9 1.8 21-24 2	11.2 .6 10-12 2				
В1	Ave S D Rng N	14.0 1.4 13-15 2	45.5 1.9 44-47 2	30.0 4.8 27-33 2	24.6 6.7 20-29 2	34.4 5.5 31-38 2	25.5 5.4 22-29 2	14.9 3.3 12-17 2				·
	Ave S D Rng N			·	·							
	Ave S D Rng N											
	Ave S D Rng N	·									-	
ļ	Ave S D Rng N											
	Ave S D Rng N				1							
	Ave S D Rng N						·			,		

Hori zon	Stat.	рН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca Ca	Mg	Na:	llic Dur	н+	CEC	Z Base Sat.	% Base Sat.	Ca/Hg
		(1:1 H <sub>2</sub> 0)		z			Z	(ppm)			Meq/l	00g			(NH <sub>4</sub> OAc)		
A1	Ave S D Rng N	6.7 .2 6.4-6.8 3	1.7	.7 .05 .6~.7	.06 .006 .0507	11.7 .4 11-12 2		14.5	8.5 1.6 7.3-9.6	5.7 1.3 4.7-6.6	.35 .07 .34 2	1.2 .4 .9-1.5	2.6  2.6 2	18.0 2.6 16-20 2	85.5 .7 85-86 2		1.6 .6 1.1-2.0 2
A3	Ave S D Rng N	6.9 .2 6.7-7.1	1.4	.6 .03 .56 2	.06 .001 .0607	9.5 .7 9-10 2		5.0	11.3 .35 11-12 2	6.1 .7 5.6-6.6 2	.4 .3 .26	1.0 .3 .8-1.2 2	3.2 .2 3.0-3.3 2	23.9 .4 23-24 2	85.5 .7 85-86 2	 	1.9 .3 1.7-2.1 2
B1	Ave S D Rng N	7.2 .07 7.1-7.2 2	 	.5 .2 .47 2	.06 .02 .0407 2	8.8 .35 8.5-9 2			17.7 5.8 13-22 2	10.2 1.9 8-12 2	.85 .07 .89	1.1 .5 .7-1.4 2	2.6 .35 2.3-2.8 2	33.8 9.2 27-40 2	92.0 1.4 91-93 2		1.7 .3 1.5-1.9
	Ave S D Rng N					·			•		-						
	Ave S D Rng N										1						
	Ave S D Rng N										l						,
3	Ave S D Rng N														·		
5	Ave S D Rng N																
S	Ave S D Rng N																

SOIL SERI	IES:	Baker					TAXONOMIC	NAME: Orti	hidic Duri:	keroll			
Hor1 zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				<u> </u> 
		(cm)		x			х н <sub>2</sub> 0		(g/cc)				
	Ave				NO AVAIL	ABLE DATA -					·		
	S D Rng N						:						
	Ave S D Rng N					-							
	Ave S D Rng N				1								·
	Ave S D Rng N	·		ţ			·						
	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				t .								
		<b>,</b>										• ,	

SOIL SE	KIES:	Baker 1			ı				'AXONOMIC	NAME:	Orthidic	Durixer	11		_		
Hori zon	Stat.	рH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	H+	CEC	% Base Sat.	% Base Sat.	Ca/M
		(1:1 H <sub>2</sub> 0)		x			X	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(E Cat)	
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			9.6 3.4 7-12 2	9.85	3.82		2.48		17.17			
A2 (15-30 cm)	Ave S D Rng N	8.4	3.5			 		5.0									
	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										<u> </u>						
	Ave S D Rng N																
	Ave S D Rng N																

SOIL SER	IES: B	Sarlow					TAXONOMIC	NAME: Ty	pic Cryort	hod		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	. 10 Atm,	. 33 Atm.	15 Atm.	Bulk Density			•
		(cm)					х н <sub>2</sub> 0		(g/cc)			
A2	Ave S D Rng N	4.0	45.9	50.2	4.0		NO AVAII	ABLE DATA-				
B21r	Ave S D Rng N	19.0	33.8	57.9	5.8		NO AVAII	ABLE DATA-				
B3ir	Ave S D Rng N	27.0	35.0	61.9	3.2		NO AVAII	ABLE DATA-				
110	Ave S D Rng N	25.0	58.8	36.4	4.8		NO AVAII	ABLE DATA-				
	Ave S D Rng N			·	'							
	Ave S D Rng N					·						
	Ave S D Rng N											
	Ave S D Rng N				ı							
	Ave S D Rng N					·						
	1	ļ										

SOIL S	ERIES:	Barlow	•						TAXONOMI	C NAME:	Typic	Cryortho	d	-			
Horizo	n Stat.	<u> </u>	Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.		Mg	Na	K	H+	CEC	X Base Sat.	% Base Sat.	Ca/H
		(1:1 H <sub>2</sub> 0)					x	(ppm)				100g	ļ		<del></del>	(E Cat)	00/1
<b>A</b> 2	Ave S D Rng N	4.7	4.0	2.3	.1	21.9	.1	14.8	.6	3	1	.1		7.1	19.2		2.0
B21r	Ave S D Rng N	5.1	6.0	3.5	.1	30.1	.3	6.8	.1	.1	.1	.1		17.1	2.4		1.0
B3ir	Ave S D Rng N	5.4	3.2	1.9	.6	29.8	.3	5.5	.1	.1	.1	.1		7.8	3.8		1.0
110	Ave S D Rng N	5.4	7.0	4.1	.1	33.2	.8	3.8	.1	.1	.1			1 18.5	1.8		1.0
	Ave S D Rng N		•	•	•		1		1	1	1.			1	1		1
	Ave S D Rng N									·							
	Ave S D Rng N										1						
	Ave S D Rng N																
:	Ave S D Rng N										1						

SOIL SERIES: Barron

TAXONOMIC NAME: Typic Xerochrept

SOIL SER	IES: Ba		_				TAXONOMIC	NAME: Typ	ic Xerochr	ept		
Hor1zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
	<b>.</b>	(cm)		×			х н <sub>2</sub> 0		(g/cc)			
A <sub>1</sub>	Ave S D Rng N	6 6 2		1,	21.3							
A <sub>2</sub>	Ave S D Rng N	8.0 2.8 6-10 2				 						
	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				1							
				,								

SOIL SE	RIES:	Barron						7	CAXONOMIC	NAME:	Typic Xe	rochrept	-				
Hori zon	Stat.	На	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Mg	Na	K	H+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		<b>z</b>		4	2	(ppm)			Meq/l	00g			(NH <sub>4</sub> OAc)	f	
<b>A</b> 1	Ave S D Rng N	5.85 .78 5.3-6.4 2	2.96 2.1 1.6-5.4 3		.21			22.4 23.5 6-39 2	8.1 5.0 5-12 2	2.9 2.3 1.3-4.6 2	.05	.40 .05 .35	2.5	13.2 9.9 6-20 2	100	· /	3.0 .71 2.5-3.5
A <sub>2</sub>	Ave S D Rng N	5.2	1.0					53.0	3.4	2.3	.07	.2	1.8	6.2	96.3	76.8	2.9
11.	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											4					
																·	

SOIL SER	TES:	Bashaw					TAXONOMIC	NAME: T	ypic Pello	xerert		
Hortzon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	. 33 Atm.	15 Atm.	Bulk Density			
		(cm)		%			х н <sub>2</sub> 0		(g/cc)		<u> </u>	<del> </del>
Ар	Ave S D Rng N	12.0 1.9 8-13 8	7.4 4.9 .9-12.6 12	39.2 11.6 19-55 12	52.6 9.7 37-61 12			26.3				
A12	Ave S D Rng N	24.5 17.0 13–48 8	5.3 3.8 1.8-10.7	33.7 10.2 16-48 6	62.7 11.7 50-82 6		45.7	27.5	1.8			
A13	Ave S D Rng N	28.2 11.8 15-40 6	5.3 3.8 .6-11.3 7	31.7 10.0 18-46 7	62.7 9.5 49-78 7	  	  ,					
A14	Ave S D Rng N	38.0	6.35 .5 6.0-6.7 2	31.8 5.1 28-35 2	56.9 1.5 56-58 2	 						
AC1	Ave S D Rng N	28.1 10.5 13-43 7	8.0 7.1 4-20 5	32.5 6.4 22-40 5	59.5 2.9 57-65 5	 	48.6	27.6	2.0			
AC2	Ave S D Rng N	33.6 12.8 15-50 7	7.25 .8 6.7-7.8 2	42.0 7.7 36-48 2	50.75 8.4 44-57 2	  		27.9				
Въ	Ave S D Rng N	20.0	7.0	50.0	42.0	 						
с1	Ave S D Rng N	46.0 23.1 33-73 3	5.9 4.4 1.3-12.7 8	27.0 11.5 11-39 8	63.6 8.7 57-82 8	  						
C2	Ave S D Rng N	41.5 12.0 33-50 2	16.5 10.9 12-32 4	32.0 13.5 15-47 4	52.1 13.9 41-72 4		  	25.5				

SOIL SE	RIES:	Basha						7	CAXONOMIC	NAME:	Typic	Pelloxere	rt				
Hori zon	Stat.	рН	Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Mg	Na	K	H+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		x			x	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(E Cat)	
Ар	Ave S D Rng N	5.5 .4 4.7-6.3	6.5 2.4 2.5–12.6 12	3.8 1.5 1.4-7.3				7.0	14.2 6.9 7-34 12	9.2 5.4 2-18 12	.2 .1 .14	.8 .6 .3-2.4	11.5	38.1 7.3 28-52 12	61.9 20.3 36-105 12		2.2 1.9 .7-5.9
A12	Ave S D Rng N	5.95 .4 5.4-6.6 6	2.6 .8 1.6-3.4 6	1.6 .4 1.0-2.0 4		 			16.4 9.0 9-34 6	13.3 5.9 8-21 6	.2 .2 .15	.5 .1 .37	9.0	42.8 9.5 27-53 6	66.7 11.8 52-85 6		1.3 .6 .6-2.3
A13	Ave S D Rng N	6.1 .6 5.5-6.9 7	1.9 .8 1.3-3.5 7	1.2 .5 .7-2.0 6	  				14.6 3.6 8-20 7	11.5 6.9 3-23 7	.1 .1 2	.6 .3 .3-1.3		41.2 7.3 33-52 7	63.7 12.8 38-76 7		1.8 1.3 .6-4.5
A14	Ave S D Rng N	5.4 .6 5.0-5.8 2	1.6 1.1 .8-2.4 2	.925 .7 .5-1.4 2					11.4 .6 11-11.8 2	6.75 1.2 5.9-7.6 2	.2	.65 .35 .49 2		34.4 1.1 33-35 2	55.1 2.1 34-57 2		1.7 .4 1.4-2.0 2
AC1	Ave S D Rng N	6.9 .4 6.5-7.4	1.25 .5 .7-2.2 5	.6 .1 .47 4				3.0	18.6 9.7 10-35 5	11.3 5.7 5-20 5	.3 .4 .17	.5 .1 .36 5	5.4	42.4 6.5 35-44 5	66.2 16.3 45-91 5		1.75 .6 1.2-2.4
AC2	Ave S D Rng N	7.65 .2 7.5-7.8 2	.955 .4 .7-1.2 2	1				2.0	27.4 13.9 17-37 2	16.2 5.3 12-20 2	.55 .6 .1-1.0 2	.45 .21 .36 2	1 .25	47.9 6.9 43-53 2	83.6 17.3 71-96 2		1.6 .3 1.4-1.8 2
₿b	Ave S D Rng N	7.5	.3	.2					18.0	11.6	.1	.5		37.6	80.0		1.6
C1	Ave S D Rng N	6.7 .9 5.0-7.7 8	.75 .35 .4-1.4 8	.5 .2 .28 7					16.4 4.8 11-24 8	10.3 6.3 5-25 8	.15 .06 .12 4	.6 .2 .49		45.4 9.7 34-60 8	60.1 14.7 41-85 8		1.9 .5 .7-2.4 8
C2	Ave S D Rng N	7.2 .7 6.3-8.0 4	.5 .15 .47 4	.3 .1 .24				2.0	21.25 8.7 17-33 4	13.5 4.4 10-20 4	.4 .6 .1-1.1 3	.5 .15 .3~.6 4	1.4	43.1 3.5 40-48 4	77.7 13.2 70-98 4		1.5 .15 1.4-1.7 3
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to an original property and the control of the cont

SOIL SERIES: Bellpine

TAXONOMIC NAME: Xeric Haplohumult

		•		i			1 MONOHOULE	interpretation in the second	abtour	wat r			
Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	. 33 Atm.	15 Atm.	Bulk Density			1	
	1	(cm)					2 н <sub>2</sub> 0		(g/cc)				
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	l l				ŀ	1				1			
Al	Ave	13.2	14.3	43.8	41.9						}	l	
	S D	3.2	4.2	7.4	4.0					1			
	Rng	3-18	8-21	35-55	36-47						ŀ	1	
	N	17	6	6	6		1					Į	l
	"	17	U		0						ì	· ·	
A3	Ave	16.7	11.0	50.1	20.0						i	1	1
6.5	S D	1.2			38.9						1	1	İ
			3.3	3.89	.63						ŀ		
	Rng	16-18	8~13	47-53	38-40						į	i	1
	N	3	2	2	2						1		I
	1 . 1											ĺ	<b>i</b> .
Bl	Ave	16									1	ļ	
	S D	7.6										1	
	Rng	8-26										ļ	
	N	6										İ	
	1											<b>(</b> )	
B21t	Ave	18.5	6.4	44.0	49.7						1	ļ	
	S D	2.1	.28	2.8	3.0								
	Rng	17-20	6.2-6.6	42-46	47-52						1		
	N	2	2	2	2								
			_	_	_						l		
B22t	Ave	19.0	12.5	39.2	48.3						ļ		
	S D	4.0	4.0	2.5	3.7					,	1		
	Rng	13-22	5-17	35-45	43-53						1		
	N	6	6	6	6								
	! " <b>!</b>		٠ ا		0								
B23t	Ave	21.3	14.8	33.9	63.2		1				]		
ne Ju	S D	3.4	2.1		51.3						1		
		18-26		2.3	3.7						ł		
	Rng	1	12-18	30-36	46-56						· ·		:
	N	4	4	4 ,	4								
IIB2t		20.											
11821	Ave	22.1											
	S D	5.0									1		
	Rng	18-30						]					
	N	7									1		
				1									
IIB3t	Ave	19.4									1		
	S D	6.4											
	Rng	13-25		i!, ]							1		
	N	3 ]											
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110	Ave	38	15.3	42.5	42.3					i	1	İ	
	SD	20.7	9.1	5.6	8.5								
	Rng	25-65	8-29	36-50	32-56						1		
	N	11	6	6	6						1		
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SOIL SE	RIES:	Bellpine						1	'AXONOMIC	NAME:	Xeric Ha	plohumul	t				
Horizon	Stat.	рН	Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 03	Avail. P	Са	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> O)					X '	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
<b>A1</b>	Ave S D Rng N	5.4 .32 4.8-5.7		4.3 1.6 2-8.5 16	. 25 . 02 . 22 27 6	18.1 2.7 15-22 6	8.4 2.5 5-11 6		10.3 8.1 1.4-32	5.1 2.9 1.3-9.2 18	. 12 . 23 0-1 18	1.26 1.19 .2-5.1	18.0 2.6 14-22 10	27.7 4.9 23-36 6	38 15 16-54 6	46.6 19 15-67 12	1.9 .77 .08-3.6
А3	Ave S D Rng N	5.45 .5 5.1-5.8 2	.81 4.2-6.1		.18 .04 .152	17.5 2.0 16-19 2	6.2 .70 5.7-6.7 2		9.5 5.6 3-17 4	4.9 2.3 2.8-7.4 4	. 34 . 44 . 1-1	1.6 .96 .9~3	19.8 .14 20-21 1	25.4 1.6 24-27 2	42.5 23 26-59 2	51.4 10 44-59 2	2.0 1.0 1.1-3.3 2
В1	Ave S D Rng N	4.8	3.49 1.1 1.8-4.8 7	1.88 .6 1-2.5 6		 			9.8 6.9 1-19 6	5.9 2.6 1.5~9 6	.03 .05 01 6	1.1 .8 .1-2.4	16.7 3.1 11-21 6	20	13	46.4 18.5 13-65 6	1.5 .63 .7-2.3
B21t	Ave S D Rng N	5.5 .42 5.2-5.8 2	.5	1.4 .28 1.2-1.6 2	.08 .014 .0709 2	16.95 .35 16-17 2	7.5 .14 7.4-7.6 2		5.85 4.9 2-9 2	3.8 .28 2.6-4 2	.115 .02 .113 2	.77 .18 .6489		27.1 4.4 24-30 2	37.8 13.7 28-48 2	  	1.5 1.1 .7-2.3 2
<b>B2</b> 2 t	Ave S D Rng N	.21 4.9-5.5	1.0 .8-3.3	1.2 .60 .4-1.9 6	.09 .04 .04~.12 6	13.2 2.2 11-16 6	9.8 2.0 7-12 6		2.5 2.0 .6-6.1 6	1.9 1.1 .6-3.4 6	.11 .02 .115 6	.28 .31 .0872		23.1 3.25 20-30 6	19.7 10.9 7-35	 	1.3 .41 .8-1.8
B23t	Ave S D Rng N	5.0 .17 4.8-5.2 4	1.7 .39 1.3-2.1 4	.98 .22 .9-1.2 4	.07 .014 .0609 4	1.7	10.7 .80 10-12 4		.98 1.0 .3-2.5 4	1.0 .59 .5-1.8 4	.12 .03 .0915 4	.06 .02 .0408		48 4.5 20-28 4	10 8.1 5-22 4		.9 .53 .3-1.4
IIB2t	Ave S D Rng N			.73 .37 .2-1.3 8					7.4 6.9 1-23 8		.15 .34 0-1 8	.40	19.6 7.0 13-33 8			38.1 16.9 20-71 8	1.0 .4 .6-1.8 8
IIB3t	Ave S D Rng N			.41 .17 .2964 4		  			12.3 9.0 6-16 4	11.25 4.3 7-16 4	.40 .42 .1-1 4	.096	25.5 10.6 16-39 4			48.4 20.4 27-71 4	1.0 .4 .8-1.6 4
IIC	Ave S D Rng N		.57 .47 0-1.7 12	.34 .28 0-1 6	.045 .02 .0207 6	12.9 6.8 3-24 6	9.5 2.8 5-13 	12	5.1 7.9 .3-28 12	5.6 7.0 .5-24 12	.47 .44 .09-1		20.9 11.5 11-42 6	25.3 6.7 17-36 6	12.4 8.9 4-26 6	44.5 24 23-79 6	.9 .5 .4-1.3 12
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SOIL SER	ies:	Blachly					TAXONOMIC	NAME: Um	bric Dystr	ochrept		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	. 33 Atm.	15 Atm.	Bulk Density			
	·	(cm)		z			<b>х</b> н <sub>2</sub> 0		(g/cc)			
A1.	Ave S D Rng N	12.8 7.2 6-25 5	20.8 8.8 11-32 5	40.4 10.4 30-57 5	39.0 14.1 24-50 5	57.3 8.2 46-66 4	46.2 5.6 40-50 3	27.6 6.3 19-35 4	.65 .07 .67 2			
А3	Ave S D Rng N	14.7 8.5 6-25 4	17.3 7.5 10~28 4	38.5   8.1 32-49 4	44.2 12.5 31-58 4	42.8 15.1 32-60 3	31.6 3.3 29-34 2	24.8 7.1 18-32 3				
B1	Ave S D Rng N	20.7 3.8 18-25 3	13.4 2.2 10-16 4	27.7 1.9 26-30 4	56.3 4.4 50-60 4	57.0 2.3 55-59 2	52.6	29.9	.9 .09 .8-1.0			
B21	Ave S D Rng N	24.2 8.1 17-33 5	15.1 5.5 10-26 5	32.1 8.6 22-45	53.0 11.6 39-65 5	36.3 6.6 30-43 3	33.1 5.5 27-38 3	22.5 3.8 18-25 3	1.0			
B22	Ave S D Rng .N	26.4 5.9 18-33 5	16.0 3.7 11-21 5	30.5 7.3 23-42 5	53.5 7.4 46-63 5	33.7 5.9 29-38 2	30.9 5.6 27-35 2	21.2 4.2 18-24 2				
B23	Ave S D Rng N	37.5 3.6 12-63 2	18.25 3.0 16-20 2	24.1 4.9 20–28 2	57.7 7.6 52-63 2	37.6		25.0	1.2			
в31	Ave S D Rng N	29.2 12.1 14-30 4	19.6 11.2 10-39 5	31.3 6.3 22-39 5	48.1 12.8 29-62 5	38.2 1.3 37-39 2	32.5 4.7 29-36 2	23.7 2.7 21-26 2	  		·	
В32	Ave S D Rng N	30.0 10.3 25-43 3	14.3 5.4 8-18 3	34.8 10.5 27-47 3	51.3 5.6 45-56 3	37.8 3.4 35-40 2	33.2 4.6 30-36 2	23.2 3.7 21-26 2				
В33	Ave S D Rng N	25. 7 4. 0 22-30 3	20.3 2.7 18-23 3	33.0 8.8 24-42 3	53.4 17.1 35-68 3	42.4 7.4 37-48 2	36.7 8.3 31-43 2	23.9 2.1 22-25 2				
										·		

SOIL SER	IES: B	lachly					TAXONOMIC	NAME: U	mbric Dyst	rochrept		
Hor1zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		X			х н <sub>2</sub> 0		(g/cc)		<u> </u>	
c	Ave S D Rng N	33.7 20.7 15-56 3	24.2 6.2 15-28 4	36.7 11.6 21-47	39.1 14.5 26-52 4	42.5 12.1 34-51 2	36.5 11.3 28-45 2	22.1 3.4 20-25 2				
	Ave S D Rng N								·			
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	Ave S D Rng N											
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TIÒ TOT À DE ENPERIMENTE DE LA CELLE AND LE ARTHUR EMERGE AND

SOIL SE	RIES:	Blachly						1	AXONOMIC	NAME:	Umbric	Dystrocl	nrept				
Hor1 zon	Stat.	рH	Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> O <sub>3</sub>	Avail. P	Ca	Mg	Na	ĸ	H+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> O)		<b>z</b>			x	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Al	Ave S D Rng N	5.3 .3 4.7-5.6 5		8.4 2.2 6.4-12 5	.4 .2 .27 5	26.2 12.2 14-45 5	5.7 2.3 4-8 2		5.8 3.2 2-9 5	2.7 1.2 1-4 5	.3 .1 .25	1.1 .5 .6-1.7 5	43.7 10.9 32-53 3	39.0 4.9 33-44 4	24.8 12.9 11-40 5		2.1 .65 1.3-3.1 5
A3	Ave S D Rng N	5.1 .4 4.7-5.5 4		4.25 2.9 1.1-6.9 4	.2 .08 .093 4	20.1 10.1 11-33 4	7.6 3.7 4-10 2		2.3 2.3 .7-5.6 4	1.4 .9 .65–2.7 4	.2 .1 .13	.7 .3 .29 4	30.7 4.7 27-36 3	28.7 9.1 23-39 3	14.9 8.3 5-24 4		1.5 .6 .7-2.1 4
B1	Ave S D Rng N	5.65 .3 5.4-6.0 4	  	2.1 1.0 1-3 4	.2 .02 .13 4	19.2 2.1 16-22 4		 	1.5 1.1 .4-3.1 4	.9 .6 .4-1.8 4	.3 .08 .153 4	.4 .35 .19 4	21.4	20.4 6.5 16-28 3	16.0 9.0 5-27 4	  	1.8 .7 .9-2.6 4
В21	Ave S D Rng N	5.4 .5 4.7-6.1 5		1.0 .5 .6-1.6 4	.08 .04 .041	12.2 1.8 10-15 4	7.7 3.5 5.2-10 2	  	1.8 1.8 .4-5.0 5	.9 .6 .2-1.8	.2 .2 .076	.5 .4 .07-1.0 5	21.4 4.5 18-27 3	19.8 2.6 16-22 4	16.8 12.6 4-38 5		3.4 3.7 1.3-10.0 5
B22	Ave S D Rng N	5.3 5.2 4.6-6.0 5		.6 .3 .39 4	.06 .03 .021 4	10.3 2.0 8-12 4	8.15 3.7 5-11 2		1.8 1.7 .6-4.8 5	1.1 .8 .4-2.5 5	.1 .05 .12 5	.3 .25 .17 5	20.8 6.3 15-28 3	17.8 4.1 12-22 4	18.4 14.1 7-43 5		1.6 .5 1.0-3.3
B23	Ave S D Rng N	5.65 .07 5.6-5.7 2		.25 .07 .23	.03	9.65 2.3 8-11 2		 	.85 .6 .4-1.3	.3 .1 .2540 2	.1 .1 2	.1 .08 .082 2	6.0	10.9	16.0 3.0 14-18 2		2.5 1.2 1.6-3.3
В31	Ave S D Rng N	5.2 .5 4.6-5.7 5		.295 ,15 .35 3	.03 .02 0207 4	7.8 1.6 6-10 4	8.9 3.8 6-12 2		1.6 1.2 .6-3.3 5	1.1 .75 .4-2.3 5	.2 .08 .13	.2 .2 .15 5	21.0 3.0 19-25 5	19.7 1.7 18-22 4	15.4 11.4 6-34 5		1.5 .5 .9-2.2 4
В32	Ave S D Rng N	4.8 .3 4.6-5.2 3		.195 .09 .13	.03 .03 .0105 2	6.9 2.5 5-9 2	9.1 3.4 6-12 2		1.7 1.0 .7-2.6 3	1.4 .6 .7-1.8 3	.2 .15 .14 3	.2 .1 .13	21.25 1.1 20-22 2	19.7 2.5 17-22 3	17.6 6.0 10-22 3	 	1.2 .35 1.0-1.6 3
В33	Ave S D Rng N	4.9 .6 4.4-5.5 3		.1 .06 .0816 2	.02 .02 .0104	5.7 1.4 4.7-6.7 2	10.1 4.8 7-14 2	  	1.4 .6 .8-1.9 3	1.2 .35 .8-1.4 3	.2 .1 .13	.2 .06 .13	21.7 2.2 20-23 2	18.2 1.7 16-20 3	16.2 3.2 13-19 3		1.2 .2 1.0-1.4 3
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L SEE	RIES:	Blachly	,					7	CAXONOMIC	NAME:	limbric	Dystroch	rent				
zon	Stat.	pH	Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.		Mg	Na	K	H+	CEC	% Base	% Base Sat.	Ca/Mg
	·	(1:1 H <sub>2</sub> 0)		x			X	(ppm)			Meq/1	00g I			(NH <sub>4</sub> OAc)	(E Cat)	
	Ave S D Rng N	4.8 .5 4.4-5.4 3		.095 .02 .0811 2	.02 .009 .0103 2	6.3 2.4 4.6–8.0 2	9.4 5.8 5-14 2		1.0 .7 .2-1.5 3	1.4 .6 .8-1.9	.2 .15 .14	.17 .06 .12	19.0 8.0 13-25 2	18.3 1.3 17-20 3	16.4 4.6 11-20 3		.8 .1 .79
	Ave S D Rng N		-								1						
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SOIL SER	IES:	Blacklock					TAXONOMIC	NAME: Ty	pic Sidera	quod		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	. 33 Atm.	15 Atm.	Bulk Density			
		(cm)		x			<b>х</b> н <sub>2</sub> 0		(g/cc)			
1	Ave S D Rng N	NO DATA AVAILABLE	73.2	22.8	3.8		`	11.6				·
2	Ave S D Rng N	NO DATA AVAILABLE		I								·
	Ave S D Rng N	NO DATA AVAILABLE	71.9	24.7	3.3		  	1.2		·		
4	Ave S D Rng N	NO DATA AVAILABLE	81.3	15.1	3.6	  		5.4				
5	Ave S D Rng N	NO DATA AVAILABLE	90.9	8.4	. 8	 	  	4.0				
6	Ave S D Rng N	NO DATA AVAILABLE	95.6	3.6	.8	 		1.4	 			
7	Ave S D Rng N	NO DATA AVAILABLE	73.2	23.1	3.6		 	4.6				
	Ave S.D Rng N											
·	Ave S D Rng N			ŀ								
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ri zon	Stat.		Matter	<del></del>	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na:	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/i
		(1:1 H <sub>2</sub> 0)		2			Z	(ppm)			Meq/1	00g			(NH <sub>4</sub> OA <sub>C</sub> )	(E Cat)	
	Ave S D																
	Rng N							N	DATA AV	AILABLE							
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SOIL SERIES: Boardtree

TAXONOMIC NAME: Typic Vitrandept

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Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Acm.	15 Atm.	Bulk Density			
		(cm)		2			х н <sub>2</sub> о		(g/cc)			
Al	Ave S D	4"	35.6	5.19	12.5			10.57				
	Rng N	1	1	1	1			1				
AC	Ave S D	5"	35.8	51.3	12.9			9.65				
	Rng N	1	1	1	1			1				
C1	Ave S D	7"	35.3	51.1	13.6			10.05				·
	Rng N	1	1	1	1			1				
C2	Ave S D Rng	15"	35.9	50.9	13.2			9.84				
	NP	1	1	1	1			1			·	
B2tb	Ave S D	11"	29.4	38.8	31.8			17.50				
	Rng N	1	1	1	1			1				
	Ave S D					,						
	Rng N											
	Ave S D Rng	:	,*									
	N			1			,					
	Ave S D Rng		3									
	N											
	Ave S D Rng			i								
	N											
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SOIL SE	RIES:	Boardtree	}					т	'AXONOMIC	NAME: T	ypic Vit	randept					
Horizon	Stat.		Organic Matter		N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na Na	ĸ	H <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
agramati Agramati Arriva		(1:1 H <sub>2</sub> 0)	*				Z	(ppm)			Meq/1				(NH <sub>4</sub> OAc)	<u> </u>	
A1	Ave S D Rng N	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
AC	Ave S D Rng N	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
C1	Ave S D Rng N	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
C2	Ave S D Rng N	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
B2tb	Ave S D Rng N	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
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SOIL SERIES: Bohannon

TAXONOMIC NAME: Typic Haplumbrent

	1	A		1			TAXONOMIC	NAME: Typ	ic Haplumb	rept		
Hortzon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		%			% н <sub>2</sub> 0		(g/cc)	<del></del>		1
Al	Ave S D Rng N	7.7 2.1 3-7 3	41.8 5.6 37-46 2	30.8 3.7 28-33 2	26.8 2.9 24-29 2	41.2	29.4	14.6	.93			
A3	Ave S D Rng N	7.7 1.2 7-9 3	43.5 4.9 39~49 3	36.9 7.6 32-46 3	19.9 8.4 12-29	49.5	45.6	 	.75			
В2	Ave S D Rng N	8 3.5 4-12 3	47.6 4.2 43-52 3	35.8 10.2 29-47 3	16.7 6.6 9-22 3	40.95 6.7 36-46 2	34.3 9.0 28-41 2	13.5	.955 .078 .9-1.01 2	·		
В3	Ave S D Rng N	9 2.8 7-11 2	44.8 5.34 41-49 2	35.5 7.8 30-41 2	19.6 2.5 18-22 2							
С	Ave S D Rng N	26.0 13.9 10-34 3	46.5 7.2 38-53 3	38.1 6.8 30-44 3	18.9 5.2 13-22 3							
Dr	Ave S D Rng N	62	58.2	32.4	9.3							!
	Ave S D Rng N			ı								:
	Ave S D Rng N				1						·	
	Ave S D Rng N			,								
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SOIL SE	RIES:	Bohannon						. 1	'AXONOMIC	NAME:	Typic Ha	plumbrep	t				
Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> O <sub>3</sub>	Avail. P	Ca	Mg	Na Na	l K	H <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Ng
		(1:1 H <sub>2</sub> 0)					2	(ppm)			ļ	00g			(NH <sub>4</sub> OAc)		04/118
Al	Ave S D Rng N	5.5 .6 4.8-5.9	11.9 4.0 7-16 3	6.98 2.3 4.6-9.2	.31 .16 .1444 3	24.7 7.3 20-33			4.0 1.9 2-6 3	2.75 2.3 1-5.4	.27 .14 .1943	.80 .13 .69	35.75 11.1 28-44 3	44.1	21.0 9.9	28.5 9.1	1.8 .75 1-2.5
A3	Ave S D Rng N	5.7 .35 5.3-6.0	7.4 2.1 4-9 3	4.3 1.26 2.9-5.3	.20 .06 .1325 3	21.5 2.2 19-23 3			2.2 1.95 .3-4.2	1.7 1.3 .3-2.8	.25 .14 .1239	.55 .26 .2572	30.6 10.5 23-38	29.6	16.5 13.3 4-30 3	18.1 7.4 13-23 2	1.3 .79 .7-2.2 3
В2	Ave S D Rng N	5.6 .35 5.4-6.0 3	4.54 3.0 2.7-8.0 3	2.65 1.73 1.6-4.7 3	.13 .06 .0819 3	20.1 4.5 15-25 3			1.2 1.2 .3-2.5	1.1 .7 .3-1.6 3	.14 .03 .117	.35 .15 .25 3	24.75 6.9 20-29.6 2	29.1	12.2 10.7 9-24 3	7.8 8-19	1.4 .35 1.0-1.6 3
. <b>B3</b>	Ave S D Rng N	5.65 .5 5.3-6.0 2	2.6 1.2 1.7-3.4 2		.07 .028 .0509 2	20.8 1.4 20-22 2			1.1 1.3 .2-2.0 2	1.8 1.4 .15-2.2 2	.195 .09 .1326 2	.3 .24 .1347 2	17.4	20.3	16.7 17.9 3-28 2	22.1	1.1 .28 .9-1.3 2
<b>c</b>	Ave S D Rng N	5.6 .6 5.2-6.0 2	2.36	1.1 .33 .9-1.4 2	.05 .01 .0406 2	21.9 .63 21-22 2			.65 .5 .3-1 2	1.2 1.5 .15-2.2 2	.23 .08 .1728 2	.20 .11 .1328 2	20.0	14.4	12.0 9.5 5-19 2		1.25 1.1 .5-2.0 2
Dr	Ave S D Rng N										1					  	
	Ave S D Rng N						;										
	Ave S D Rng N										,				·		
	Ave S D Rng N			·							1						
													·				

SOIL SER	IES:	Bornstedt					TAXONOMIC	NAME: Ty	pic Fragio	chrept			
Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	. 10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
Ар	Ave S D	(cm) 20.0	14.4	62.6	23.0		22.9	11.3	(g/cc)				
	Rng N	20.0	1.1 13-15 2	1.8 61-64 2	.6 22-24 2		3	.1 11.2-11.4 2	1.4-1.6	·			
B21	Ave S D Rng N	29.5 5.0 26-33 2	12.4 .9 11-13 2	59.1 .6 58-60 2	28.5 1.6 27-30 2		21.9 2.0 20-23 2	11.4 .4 11.1–11.7 2	1.4 .09 1.3-1.5 2	·	·		
В22	Ave S D Rng N	17.0 1.4 16-18 2	11.35 .35 11-12 2	57.7 1.6 56-59 2	30.9 1.9 29-33		22.9	11.85 .2 11-12 2	1.6	-			·
В3	Ave S D Rng N	17.5 6.4 13-22 2	12.5 1.7 11-14 2	53.4   .8 53-54 2	34.0 2.5 32-36 2		23.1 .8 22-24 2	13.3 .85 12-14 2	1.6 .04 1.5-1.7 2				
B×1	Ave S D Rng -N	32.0 8.5 26-38 2	10.5 .1 10-11 2	47.8 .5 47-48 2	41.75 .35 41-42 2		25.9 1.9 24-27 2	17.0 .7 16-18 2	1.6 .01 1.5-1.6 2				
Bx2	Ave S D Rng N	44.5 16.2 33-56 2	7.5 1.5 6.4-8.6 2	47.4 4.0 44-50 2	45.1 5.6 41-49 2		27.1	18.45 .2 18-19 2	1.5				
	Ave S D Rng N									·			
	Ave S D Rng N			1									
	Ave S D Rng N					·							,
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SOIL SE	RIES:	Bornste	dt					1	'AXONOMIC	NAME:	Typic	Fragioch	rept				
Horizon	Stat.	рĦ	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> O <sub>3</sub>	Avail.	Ca	Mg	Na:	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		z			x	(bbm)			Meq/1				(NH <sub>4</sub> OAc)		047.118
Ар	Ave S D Rng N	5.5 .3 5.3–5.7		2.3 .4 2.0-2.6 2	.2 .03 .13 2	14.0  14.0 2	2.1		4.65 1.9 3-7 2	1.6 1.0 .9-2.3 2	.1  .1 2	.6 .4 .39	15.0 3.1 13-17 2	16.2 .35 15-16 2	43.0 21.2 28-58 2	31.5 14.8 21-42 2	3.15 .8 2.6-3.7
B21	Ave S D Rng N	5.6 .2 5.5-5.7 2		.4 .1 .3-,5	.05 .009 .0405 2	8.0 1.4 7-9 2	2.9		3.1  3.1 2	1.05 .35 .8-1.3 2	.1 .1 2	.3	8.4 .85 7.8–9.0 2	10.75 .2 10-11 2	42.0 4.2 39-45 2		3.15 1.1 2.4-3.9 2
B22	Ave S D Rng N	5.4  5.4 2		.4 .4 .17	.04 .001 .0304 2	11.5 12.0 3-20 2	2.7		3.2  3.2 2	1.4  1.4 2	.1	.25 .07 .23	7.9 .3 7.7-8.1 2	10.8 .1 10-11 2	45.0 1.4 44-46 2		2.3  2.3 2
В3	Ave S D Rng N	5.4 .1 5.3-5.5 2		.08 .06 .0412 2			3.6		3.15 .5 2.8~3.5 2	1.45 .07 1.4-1.5 2	.1	.15 .07 .1~.2 2	8.8 .1 8.7-8.9 2	11.3 .4 11-12 2	42.0 4.2 39-45 2		2.2 .2 2.0-2.3 2
Bxl	Ave S D Rng N	5.35 .2 5.2-5.5 2		.11 .04 .08~.13			3.8		2.6 .4 2.3-2.9	1.9 .6 1.5-2.3 2	.1	.15 .07 .12 2	11.3 .85 10-12 2	13.75 1.5 12-15 2	34.0 4.2 31-37 2		1.4 .1 1.3-1.5 2
Bx2	Ave S D Rng N	5.05 .07 5.0-5.1 2		.04 .03 .0206 2			4.6	 	2.4 .1 2.3-2.5 2	1.95 .07 1.9-2.0 2	.1 .1 2	.1	11.7 .6 11-12 2	13.6 .7 13-14 2	33.0 2.8 31-35 2		1.25 .07 1.2-1.3
	Ave S D Rng N						ļ				·	I				:	
ł	Ave S D Rng N						-	·			,						
	Ave S D Rng N			·							·						

SOIL SERIES: Brallier

TAXONOMIC NAME: Typic Medihemiat

DOTE SER	igai ota						TAXONOMIC	NAME: 1919	ic neglitem	LBL		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		X			х н <sub>2</sub> 0		(g/cc)			
OEl	Ave S D Rng N	0-33			NO 1	ATA AVAILA	LE					
OA	Ave S D Rng N	33-64			NO I	ATA AVAILAI	LE					
OE	Ave S D Rng N	64-97			NO E	ATA AVAILA	LE					
IIC	Ave S D Rng N	97-122			NO E	ATA AVAILAI	LE			·		
	Ave S D Rng N				·						·	
	Ave S D Rng N					·					·	
	Ave S D Rng N	·										·
	Ave S D Rng N			ı						:		
	Ave S D Rng N											·
								:				

SOIL SERIES: Brallier TAXONOMIC NAME: Typic Medihemist Organic Organic C/N Avail. Free X Base | X Base H<sup>+</sup> Horizon Stat. Matter Carbon Fe<sub>2</sub>0<sub>3</sub> CEC pН Ratio Ca Mg Na K Sat. Ca/Mg Sat. (1:1 H<sub>2</sub>0) -Meq/100g--(NH OAc) (E Cat) (ppm) OE1 8.3 2.7 8.9 33.0 1.18 35.6 54.8 83.5 56.2 . 30 6 Ave \_\_\_ ---S D Rng ---\_\_\_ 1 \_\_\_ 1 1 1 1 1 1 1 1 1 1 47.2 8.9 19.0 0.95 53.5 .20 OA Ave 0.8 3 1.6 56.9 39.2 ---\_\_\_ S D \_\_\_ Rng \_\_\_ --- $\langle 1 \rangle$ **-**1 1 1 1 **1** 1 1 1 1 ------53.1 6.3 15.8 0.74 49.6 45.3 OE 5.7 32.7 .20 Ave 6 1.2 \_\_\_ S D ---\_\_\_ **1 \_1** Rng \_\_\_ ------1 ı 1 1 1 1 N --ı IIC 1.35 61.7 Ave 1.8 125 3.2 7.6 11.0 8.7 33,2 72.7 .40 ---\_\_\_ S D \_\_\_ Rng ---1 1 1 1 1 1 1 1 Ave SD Rng Ave S D Rng Ave SD Rng Ave S D Rng Ave S D Rng

TAXONOMIC NAME: Aeric Haplaquept

POLL PER	LES: Bra						TAXONOMIC	NAME: Aeri	ic Haplaque	Pt		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	. 10 Atm.	.33 Atm.	15 Atm.	Bulk Density		  -  -	
		(cm)		%			х н <sub>2</sub> о		(g/cc)			
1	Ave S D Rng N	0-6	26.8	47.2	58.4		NO DATA	AVAILABLE ·				·
2	Ave S D Rng N	6-10		  			NO DATA	AVAILABLE ·				
	Ave S D Rng N								·			
	Ave S D Rng N				1					,		
	Ave S D Rng N											
,	Ave S D Rng N			,					·			
	Ave S D Rng N			· .						·		
	Ave S D Rng N				1							
	Ave SD Rng N			,			·					
						,						

SOIL SE	RIES:	Brand				_		1	AXONOMIC	NAME:	Aeric Ha	plaquept					
Hori zon	Stat.		Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Mg	Na	K	H <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)					Z	(ppm)			Meq/ <sub> </sub> 10	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
1	Ave S D Rng N	4.7	4.73		.20			2	2.13	7.40	,213	.312		13.8	72.9		.29
2	Ave S D Rng	5.0	2.61		.14			2	2.38	5.80	.516	.333		16.7	54.1		.41
	Ave S D Rng N	1	1		1			1	1	1	1	1		1	1	<b></b>	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										1	·					
	Ave S D Rng N																
										·							

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SOIL SER	IES: BI						TAXONOMIC	NAME: Fluv	aquentic H	umaquept		
Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	. 33 Atm.	15 Atm.	Bulk Density			
		(cm)		·X			х н <sub>2</sub> 0		(g/cc)			
All	Ave S D Rng N	0-15	8.5	32.1	59.4			26.5				
A12	Ave S D Rng N	15-28	11.6	41.9	46.5	  		23.2		·		
A3	Ave S D Rng N	28-41	6.5	40.0	53.5			25.9		·		
B21g	Ave S D Rng N	41-64	6.9	44.6	48.5			24.7				
B22g	Ave S D Rng N	64-91	10.0	48.2	41.8	  		22.8				
B3g	Ave S D Rng N	91-109	10.0	45.1	44.9	  	  	24.9				
	Ave S D Rng N			1						·		
	Ave S D Rng N							·				
	Ave S D Rng N			ı								

SOIL SE	RIES:	Brenner						T	AXONOMIC	NAME: F	'luvaquen	tic Huma	quept				
Hori zon	Stat.	pН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	H <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)					Z	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
A11	Ave S D Rng N	4.7	4.71				 	11	0.23	1.6	0.35	0.33	27.46			8.4	.14
A12	Ave S D Rng N	5.1	9.52					10	1.8	1.5	0.33	0.27	21.66			15.3	1.2
A3	Ave S D Rng N	5.2	2.02				000 000 000 000 000 000 000 000 000	6	2.3	2.4	0.42	0.26	28.04			16.1	.99
B21g	Ave S D Rng N	5.3	1.15					6	2.7	3.1	0.35	0.16	17.29			26.7	.87
B22g	Ave S D Rng N	5.3	0.87					5	1	1	0.37	0.16	14.57	 		37.5	.95
B3g	Ave S D Rng N	5.3	0.82					1	5.1	5.3	0.39	0.16	13.69			1	.96
	Ave S D Rng N										,			:			
	Ave S D Rng N										. 1						
	Ave S D Rng N					: : :		·						·			
·		·	•	•		'	•		•	•		•	•	•	•	1 .	•

SOIL SERIES: Briedwell

TAXONOMIC NAME: Ultic Haploxeroli

	1	4					. I MADRONIL I	AUTE OIF	re nabroxe	, foff			
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density	CaCl <sub>2</sub> pH	KCl Extr. M	Citr. Extr. Al	
		(cm)	~~~~~	%			% н <sub>2</sub> 0		(g/cc)				
Al & Ap	Ave S D Rng N	14 8.5 8-20 2	29.4 4.9 26-33 2	60.7 5.5 57-64 2	9.9 .63 9.5-10.4 2		42.4 13.9 32-52 2	13.9 4.2 11-17 2	1.01 .18 .8-1.2 2	5.4 .14, 5.3-5.5	.35 .21 .25	1.8	·
B21	Ave S D Rng N	22 1.4 21-23 2	28.9 3.9 26~32 2	62.3 4.7 59-66 2	8.9 .78 8.3-9.4 2		29.7 4.0 27-33 2	10.6 .50 10-11 2	1.21 .17 1.0-1.3	5.45 .07 5.4-5.5 2	.3 .14 .24	.8	
B22	Ave S D Rng N	21 1.4 20-22 2	29.8 6.2 25-34 2	53.5 7.1 48-59 2	16.7 13.3 7-26 2		23.9	9.9 .85 9-11 2	1.24	5.3 .28 5.1-5.5 2	.3	.4	
Cl	Ave S D Rng N	42 8.5 36-48 2	38.8 2.7 37-41 2	53.6 1.1 52-54 2	7.6   1.6   6-9   2	  		9.6 .92 9-10 2	<del>-</del> -	5.4 .35 5.1-5.6 2	·	1	
C2	Ave S D Rng N	34.5 9.2 28-41 2	74.5 16.7 62-86 2	20.0 15 9-31 2	5.5 1.5 4.5-6.6 2			8.4 .14 8.3-8.5 2		5.5 .28 5.3-5.7 2		.3	
	Ave S D Rng N			ı									
	Ave S D Rng N												
	Ave S D Rng N				·								•
	Ave S D Rng N			1						·		·	
		•											

SOIL SERIES: Briedwell TAXONOMIC NAME: Utlic Haploxeroll Organic Organic C/N Avail. Free % Base % Base H<sup>+</sup> Horizon Stat. рĦ Matter Carbon N Ratio Fe<sub>2</sub>O<sub>3</sub> P Ca Mg CEC Na Sat. Sat. Ca/Mg (1:1 H<sub>2</sub>0) -Meq/100g---Z (NH,OAc) (ppm) (E Cat) Al & Ap 5.7 4.15 .23 17.5 Ave 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 2 2 2 2 2 2 2 2 B21 Ave 6.15 1.58 . 11 14 2.1 4.7 1.1 1.15 14.7 16.8 41 31.5 4.2 S D .07 . 28 .01 1.4 2.1 .49 . 14 1.13 1.41 12.7 10.6 1.41 6.1-6.2 Rng 1.3-1.8 . 10-. 12 13-15 3.2-6.2 1-1.2 .8-1.5 . 1 14-16 16-18 32.50 3.2-5.2 24-39 2 \_\_\_ 2 2 2 2 2 2 2 B22 5.95 Ave . 50 .065 7.5 2.2 3.25 1.2 11.5 . 1 1.15 13.45 32.0 2.7 32.0 S D .21 .099 .003 .78 .71 . 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 2 12 12 2 2 2 2 Cl Ave 5.95 . 31 .043 12 1.8 4.7 1.6 0.2 10.3 15.6 46.5 . 9 41.0 3.1 SD .07 .28 . 35 . 71 1.4 . 28 6.4 . 70 7.1 5.9-6.0 Rng \_\_\_ .11-.5 ---4.7 1.3-1.8 .2 9-12 .4-1.4 15-16 42-51 36-46 2.6-3.6 2 \_\_\_ 2 12 2 2 2 2 C2 6.0 Ave . 37 1.3 7.3 2.5 . 3 . 7 7.5 20.5 51.5 58.0 2.2 SD . 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 5.7-9.2 20-21 .6-.8 40-63 1.2-3.2 46-70 2 ---\_---2 2 2 Ave S D Rng Ave S D Rng Ave SD Rng N Ave S D Rng

SOIL SERIES: Brightwood

TAXONOMIC NAME: Typic Haplumbrept

SOLF SEK	ies: pr	1 gn twood					TAXONOMIC	NAME: Typi	c Haplumbr	ept		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density	:		
		(cm)		X			% н <sub>2</sub> 0		(g/cc)			
Al	Ave S D Rng N	12.0 1.7 10-13 3	63.2 11.0 50-70 3	31.3 6.8 26-40 3	5.6 4.8 1-11 3	34.8 5.6 30-39 2	22.6 3.3 20-25 2	11.9 1.6 10-13 2				
B2ir	Ave S D Rng N	25.5 8.2 15-33 4	55.0 8.9 47-68 4	37.4 4.9 31-42	7.7 4.3 1.4-11 4	27.0	19.5	9.4	1.0	·		
С	Ave S D Rng N	23.8 12.3 12-36 4	55 8.5 49-67 4	35.3 13.6 15-45 4	9.7 5.4 5-18 4	30.1	18.6	9.1				
	Ave S D Rng N											
	Ave SD Rng N									•		
	Ave S D Rng N			1.								
	Ave S D Rng N										·	
	Ave S D Rng N				·							·
	Ave S D Rng N						·					-

SOIL SERIES: Brightwood

TAXONOMIC NAME: Typic Haplumbrept

SOIL SEI	CLES:	. Brightwoo						1	'AXONOMIC	NAME:	Typic Ha	ıplumbrep	t				
Horizon	Stat.	рН		Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	ĸ	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		z		<b> </b> 	z	(ppm)			Meq/l	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Al	Ave S D Rng N	5.6 .15 5.5-5.8 3	2.6	3.9 1.5 2.6-5.6 3	.018	16.9	1.7 .2 1.5~1.9 3	19.6 23.7 5-47 3	3.7 3.0 6-7 3	2.1 .4 1.6-2.4	.13 .06 .12	.33 .06 .34		21.4 6.2 15-28 3	46 16 36-64 3		3.3 .55 3-4 3
B21r	Ave S D Rng N	5.9 .17 5.7-6.1 4	6.4 3.23 2.6-11 4	3.7 1.88 1.5-6.1	.047	30.7 5.9 23-36 4	1.8 .14 1.6-1.9	13.0 19.7 2.0-43	4.1 2.13 2.0-6.2	1.18 .74 .5-2.0	.15 .06 .1~.2	.15 .06 .12		18.8 2.29 17-21 4	31.3 19.3 13-49 4		3.35 .78 2.8-3.9 2
С	Ave S D Rng N	5.9 .096 5.8-6.0 4	4.1 1.6 2-6 4	2.4 .92 1-4 4	.078 .025 .0411 4	30.1 2.43 27-33 4	1.88 .25 1.6-2.2 4	6.7 7.1 1-17 4	3.0 2.0 1-6 4	.98 .74 .2-1.7	.175 .05 .12	.1		18.7 3.4 15-23 4	24.5 17.5 7-42 4		2.9 1.1 2~4 4
	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										1						

SOIL SERIES: Bull Run

TAXONOMIC NAME: Umbric Vitrandept

SOTI SEK	165. 84			4			TAXONOMIC	NAME: DIND!	tic Attrant	ept		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm,	.33 Atm.	15 Atm.	Bulk Density		,	
		(em)		x	+		% н <sub>2</sub> 0		(g/cc)			
Al	Ave S D Rng N	5.0 2.0 3-7 3	24.4 3.7 22-27 2	58.9 5.6 55-63 2	16.6 2.0 15-18 2	82.8	76.0	38.0	·	·		
А3	Ave S D Rng N	4.7 .6 4-5 3	22.1 1.7 20-24 3	60.4 5.1 56-66 3	17.5 4.5 12-20 3	82.8	76.0	38.0				
в2	Ave S D Rng N	6.0 1.0 5-7 3	22.0 1.8 20-24 3	63.7 5.3 58-69 3	14.4 3.9 10-18 3	  	  	  				
B3	Ave S D Rng N	22.25 19.9 10-52 4	22.9 6.0 17-31 4	61.0 3.2 57-64 4	16.2 3.1 12-19 4	55.7 4.9 52-59 2	50.5 3.6 48-53 2	17.6 .50 17–18 2				·
C	Ave S D Rng N	17.3 2.1 15-19 3	32.2 12.2 23-46 3	57.7 12.2 44~68 3	10.1 2.2 8-13 3	52.2	48.4	18.2				
	Ave S D Rng N		i						!			·
	Ave S D Rng N											
	Ave S D Rng N			1	l							
	Ave S D Rng N										·	
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SOIL SEI	RIES:	Bull Ru	n					Ţ	AXONOMIC	NAME:	Umbric	Vitrande	ept				
Hori zon	Stat.	рH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Mg	Na	K	H+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		X			7	(ppm)			Meq/10				(NH <sub>4</sub> OAc)		
A1	Ave S D	5.7 .3	16.4 13.8	9.7 7.9	. 37	24.6 3.9	2.55	4.8 .7	5.0 4.0	2.6 2.05	.2	.6		29.7 10.8	29.0 21.6		1.8 1.2
	Rng N	5.5-6.0 3	7-32 3	4-19 3	. 19 65 3	20-29 3	2.4-2.7 2	4.3-5.3 2	.6-8.4 3	.6-4.7 3	.045	.49		22-42 3	7-50 3		1.0-3.2 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 Rng	.3 5.2-5.7	15.4 8-33	8.4 8-22	.29 .1264	26.6	.07 2.6-2.7	2.0	2.2	2.0 .5-4.0	.2   .094	.05 .45		6.4 19-30	22.9 9-49		.8 1.4-2.7
	N	3	3	3	3	3	2	2	3	3	3	3		3	3		3
В2	Ave S D	5.7 .06	5.15 3.9	3.0 2.3	. 14 . 075	17.65 4.1	3.3 1.0	2.0	.9 .8	. 4	.2	.3		17.0 5.5	12.3 8.5		1.6 1.3
	Rng N	5.7-5.8 3	2.4-7.9 2	1.4-4.6	.0923 3	14-21 3	2.6-4.0 3	1.5-2.5 2	.3-1.8 3	.26 3	.093	.14 3		12-23	5-22		1.4-3.0 3
В3	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 Rng		1.4 1.0-4.3	. 8 . 6-2. 5	.033 .0614		.9 2.4-4.0			.05 .23	.1	.1 .164		3.3 15-23	2.3 5-10		. 5 1-2
	N	4	4	4	4	4	3	3	4	4	4	4		4	4		4
C	Ave S D	5.8 .06	1.03 .55	.6	.042 .018	12.7 4.4	3.6 1.8	2.7 1.0	. 2	.15	.2	.2 .1		15.6 5.3	4.7 1.0		1.5 .7
	Rng N	5.7-5.8 3	.4-1.4 3	.27	.0206 3	8–17 3	1.5-5.0 3	2.0-3.8 3	.14	.12	.13 3	.13 3		3	4.0-5.8		1-2 2
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	S D Rng		]								1				<u> </u>		[
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	Rng N																·
	Ave																
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	Rng N																
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SOIL SERIES: Burlington

TAXONOMIC NAME: Entic Ultic Haploxeroll

SOIL SER	IES: But	clington					TAXONOMIC	NAME: Enti	C DIETC HE	ploxeroll			
Horizon	Stat,	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				ļ. 1
		(cm)		%			<b>%</b> н <sub>2</sub> 0		(g/cc)				
Apl	Ave S D Rng N	0-10	66.6	26.3	7.1	 		8.1					
Ap2	Ave S D Rng N	10-30	67.3	25.8	6.9		  	7.6					
C1	Ave S D Rng N	30-71	71.6	23.8	5.6			5.3			·		
C2	Ave S D Rng N	71-152	12.2	22.0	4.8	 		5.8				÷	
	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			1									·
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lori zon	Stat.	pН	Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	NAME: Mg	Na	K	H+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)					X	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Ap1	Ave			,													
	S D Rng							NO DA	TA AVAIL	BLE							
Ap2	N																
np2	Ave S D Rng							NO DA	TA AVAIL	BLE							
	N		i					ļ									
Cl	Ave S D																
	Rng N							NO DA	TA AVAIL	BLE							
C2	Ave					·											
	S D Rng							NO DA	A AVAILA	BLE							
	N																
	Ave S D																
	Rng N																
	Ave S D										,						
	Rng N		ı								. 1						
	Ave																
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SOIL SERIES: Calimus

TAXONOMIC NAME: Pachic Haploxeroll

SUIL SER	ies. Ca			•			TAXONOMIC	NAME: PAC	ure umbrox	erati		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	, 10 Atm.	.33 Atm.	15 Atm.	Bulk Density	Bulk Density		
		(cm)		X			<b>х</b> н <sub>2</sub> 0		(g/cc)	(1/3 bar)		And the second s
Ар	Ave S D Rng N	14 1.4 13-15 2	56.6	27.2	16.2		19.8 6.1 16-24 2	9.3 3.2 7-12 2	1.49 .18 1.3-1.6	1.39 .19 1.2-1.5 2		
A12	Ave S D Rng N	14 1.4 13-15 2	50.3	32.8	16.9		26.6	10.2 4.2 7-13 2	1.46	1.36		·
В2	Ave S D Rng N	18 7.1 13-23 2	49.3	33.2	17.5		24.7 10.0 18-32 2	10.9 4.5 7-14 2	1.34 .18 1.2-1.5 2	1.24 .16 .1114 2		
B31	Ave S D Rng N	28.5 9.2 22~35 2	56.1	30.5	13.4		29.1	10.8 2.7 9-13 2	1.31	1.24		·
В32	Ave S D Rng N	38.0 1.4 37-39 2	52.8	33.1	14.1		26.7 8.4 21-33 2	13.3 .64 12-14 2	1.45 .28 1.2-1.7	1.27 .12 1.1-1.6		
R-C	Ave S D Rng N	25 7.1 20-30 2	69.4	25.2	5.4		59.7	14.5 12.8 5-24 2	. 98	.98		·
	Ave S D Rng N						·		·			
	Ave S D Rng N											·
	Ave S D Rng N											

SOIL SE	RTES:	Calimus  TAXONOMIC NAME: Pachic Haploxeroll  Organic Organic C/N Free Avail.															
Hori zon	Stat.	рH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> O <sub>3</sub>	Avail.	Ca	Mg	Na	k	<sub>H</sub> +	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)					2	(ppm)			Meq/1					(Σ Cat)	/6
Ар	Ave S D Rng N	6.85 .5 6.5-7.2 2		1.22 .22 1.0-1.4 2	.111 .019 .0912 2	 	.7		32.7	13.4	.3	6.1 7.1 1-11	2.6 .21 2.4-2.7	37.2 30 16-59 2	98	96	2.4
A12	Ave S D Rng N	6.6		.75 .38 .4-1.0 2	.059 I	  	. 8		43.1	12.9	.45 .07 .45 2	5.2 6.4 .6-10 2	3.5 1.6 2.4-4.6 2	36.4 29.7 15-58 2	100	93	3.3
В2	Ave S D Rng N	6.6		.595 .30 .38 2	.048		.8		38.8	14.0	1.3 1.13 .5-2.1 2	3.6 4.2 .6-6.5 2	2.8 .21 2.6-2.9	38.7 32.0 16-62 2	100	95	2.8
B31	Ave S D Rng N	1		.445 .09 .3851 2			.7		39.8	18.0	1.25 .78 .7-1.8	1.5 1.3 .6-2.4 2	2.6 .35 2.3-2.8	39.5 31.7 17-62 2	100	96	2.2
В32	Ave SD Rng N	7.3		.435 .16 .36 2			.7		33.0	19.5	.57	1.55 .07 1.5-1.6 2	5.1 3.0 2.9-7.2 2	41.9 23.1 26-58 2	96	95	1.7
R-C	Ave S D Rng N	7.2		.21 .14 .13 2			.6		29.1	19.8	1.6 1.34 .6-2.5 2	.95 .21 .8-1.1 2	1.0	29.7 18.1 16-43 2	100+	100+	1.5
	Ave S D Rng N																: :
	Ave S D Rng N					•					ı						
	Ave S D Rng N										1						

SOIL SERIES: Camas

TAXONOMIC NAME: Fluventic Haploxeroll

SUIL SER	teo. Ca	•					TAXONOMIC	NAME: Flu	ventic Hap	loxeroll		
Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	,33 Atm.	15 Atm.	Bulk Density			
		(cm)		X			% н <sub>2</sub> 0		(g/cc)			
<b>А</b> р	Ave S D Rng N	15.9 .5 15-18 4	56.1 9.4 55-73	24.7 4.0 21-31 4	11.7 4.3 5-15 4		  	7.5				
A12	Ave S D Rng N	16.5 .71 15-18 2	68.2	22.8	9.1		 	6.2				
HC	Ave S D Rng N	102	92	5.7	2.4			3.1				
	Ave S D Rng N											
	Ave S D Rng N						,					
	Ave S D Rng N				١				ŧ.			
	Ave S D Rng N								į			
	Ave S D Rng N			,								
	Ave S D Rng N										:	
						;	7					

SOIL SERIES: Camas TAXONOMIC NAME: Fluventic Haploxeroll Organic Organic C/N Free Avail. % Base % Base Matter Carbon Horizon Stat. Ratio Fe<sub>2</sub>O<sub>3</sub> рĦ Ca Mg Na CEC Sat. Sat. Ca/Mg (1:1 H<sub>2</sub>0) X (ppm) --Meq/100g---(NH<sub>Δ</sub>OAc) (Σ Cat) 12.0 .123 26.7 5.5 4.8 2.2 . 2 11 34.6 2.8 .67 93.0 6.3 Αp Ave ---2.0 17.0 .61 2.9 .05 \_\_\_ 4.3 S D ---.61 Rng 4-5.4 9-16 .8-5.2 .09-.2 .05~1.3 16-52 2.6-11.7 ---4 A12 1.95 81.5 5.75 . 7 . 1 7.0 41.2 11.4 4.7 .135 . 39 16.6 2.45 Ave ---\_\_\_ S D .35 4.9 2.0 .05 .13 2.8 .07 14-19 5.5-6 8-15 3.2-6.2 .1-.2 .3-.5 2.4-2.5 Rng \_\_\_ 2 2 2 2 ---1 2 \_\_\_ HC Т 4.6 1.9 0.1 , 0.3 8.0 86.5 Ave 6.0 . 1 5.0 2.4 S D ---\_\_\_ \_\_\_ Rng \_\_\_ ---\_\_\_ \_\_\_ \_\_\_ **1** 1 Ave S D Rng Ave S D Rng Ave S D Rng Ave S D Rng Ave S D Rng Ave S D Rng

SOIL SERIES: Carney

TAXONOMIC NAME: Typic Chromoxerest

JUIL JEK	165. 00	•					INVONOUTO	NAME: Typ:	ic Chromoxer	est		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)	~~~~~	X			% H <sub>2</sub> 0		(g/cc)			
Al	Ave S D Rng N	10.8 5.4 5-18 4	11.3 1.0 10-13 4	25.5 3.3 22-30 4	63.2 2.9 59-65 4		45.9	29.3 1.1 28-31 4	1.8			
A12	Ave S D Rng N	20.3 4.6 15-25 4	11.4 1.2 9-12 4	28.1 4.7 26-33 4	60.6 5.8 55-68 4	43.7	46.5 5.2 40-51 3	29.5 1.8 26-31 4	1.74 .36 1.3-2.0 3			
A13	Ave S D Rng N	28.5 2.6 25-31 4	11.4 1.3 10-13 4	27.9 5.5 31-33 4	61.5 5.3 57-67		49.6 1.4 48-51 2	29.3 2.5 26-33 4	1.9 .14 1.8-2.0 2			
A14	Ave S D Rng N	31.5 2.1 30-33 2	11.4 1.8 10-13 2	24.5 2.2 23-26 2	64.2 4.1 61-67 2	43.8	40.5	28.8 4.0 26-32 2	1.39			
AC	Ave S D Rng N	26.0 6.3 18-33 4	15.1 2.5 13-19 4	27.5 6.0 21-34 4	57.2 6.8 50-65 4		49.4	28.5 2.6 25-31 2	20			
C	Ave S D Rng N	27.0 7.9 18-33 3	18.3 4.9 13-23 3	31.3 5.3 26-36 3	50.4 9.5 44-61 3		 	28.9 5.0 23-33 3				
IIC	Ave S D Rng N	28+  28+ 2	37.0 32.0 14-60 2	26.3 .71 26-27 2	36.8 31.3 14-60 2		  	23.4 9.5 17-30 2				
	Ave S D Rng N			,			·					
	Ave S D Rng N				1							

OIL SEF	RIES:	Carney						•	TAXONOMI (	C NAME:	Typic Cl	romoxer	ert				
ori zon	Stat.	pH	Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		x			X	(ppm)			Meq/1	00g 	<del></del>		(NH <sub>4</sub> OAc)	(Σ Cat)	
Al	Ave S D Rng N	6.8 .37 6.3-7.2	1.1	2.4 .42 2.1-2.7 2	810.	17.7 5.3 14-22 2		22.3 11.0 14-30 2	32.4 10.0 18-41	19.0 2.2 17-22	.31 .18 .26	.25	5.2 .50 4.8-5.5	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
A12	Ave S D Rng N	6.83 .13 6.7-7.0 4	.90	1.2  1.2 2	.057 .001 .0506	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 .17	.27	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
A13	Ave S D Rng N	7.15 .24 7-7.5	.83 .1-1.9			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 .39	.29	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
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 .0407 2	17.9 3.6 15-20 2		4.8	34.5 2.8 32-37 2	21.6 4.2 18-25 2	1.0 .76 .5-1.6 2	.56 .16 .47 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 .56 2	.028 .005 .0203	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	.31	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
С	Ave S D Rng N	8.1 .06 8.1~8.2 3	.74 .16 .6-1 3	.35 .07 .34 2	.235 .04 .0203	14.9 .78 14-16 2		2.8	43.3 15.2 34-61	25.4 6.2 18-31 3	1.95 1.8 .3-4.0	.42 .17 .2558	3.0	61.8 11.8 50-73	100	96.8	1.7 .38 1.3-2.0
110	Ave S D Rng N	8.15 .07 8.1-8.2 2	.40 .28 .26 2	.2 .14 .13 2	.095 .121 .0102	13.9 4.0 11-17 2		2.2	34.5 .71 34-35 2	21.9 7.2 17-27 2	3.02 2.9 .95-5.0	. 34 . 14 . 2~. 5 2		47.0 11.7 28-55 2	00		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

DOLL DEK	LES: CH	radeto		4			TAXONOMIC	NAME: Typ	le Khodudul	i E		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		z			<b>х</b> н <sub>2</sub> 0		(g/cc)			
Ар	Ave S D Rng N	15  15 3	16.2 .95 15-17 3	49.6 .81 49-51 3	34.2 1.8 32-36 3		25.2 1.3 24-27 3	14.0 .32 13-14 3	1.47 .08 1.3-1.5			
Blt	Ave S D Rng N	21.5 2.1 20-23 2	16.8 1.3 16-18 2	49.0 .57 48-50 2	34.2 .70 33-35 2		24.5	14.2 .99 13-15 2	1.5			
B21c	Ave S D Rng N	12.0 1.4 11-13 2	12.8 .14 12-13 2	45.2 .21 45-46 2	.07 42-43 2		24.4 1.3 23-25 2	15.3 .35 15-16 2	1.57 .11 1.4-1.7 2			
B22t	Ave S D Rng N	25.5 3.5 23-28 2	11.2 1.7 10-13 2	39.2 .21 39-40 2	49.7 1.5 48-51 2	  	25.2	17.1 .50 16-18 2	1.61			
B23t	Ave S D Rng N	19 5.7 15-23 2	10.0 2.9 8-12 2	40.9 3.2 38-43 2	49.2 6.1 45-54 2		28.1 .70 27-29 2	18.2 2.4 16-20 2	1.5 .06 1.4-1.6 2			·
B3t	Ave S D Rng N	26 7.9 20-35 3	6.0 1.1 5.2-7.2 3	35.4 1.1 34-37	58.6 1.3 57-60 3		29.4 .07 29-30 3	22.0 .5 21-23 3	1.56 .014 1.5-1.6 2			
Cl	Ave S D Rng N	43	5.8	31.2	63.0		31.9	25.2	1.46			
C2	Ave S D Rng N	25	36.3	21.8	41.9		47.2	34.3	.99			
	Ave S D Rng N											

SOIL SERIES: Central Point

TAXONOMIC NAME: Pachic Haploxeroll

OCTE DER							TAXONOMIC	NAME: Paci	ire nabtox	eroll.		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		x			х н <sub>2</sub> 0		(g/cc)		 	
<b>А</b> р	Ave S D Rng N	7.0 1.4 6-8 2	57.3 10.3 50-65 2	28.4 9.8 21-35 2	14.3 .35 114-15 2	17.9	15.8	8.4 1.1 7.6-9.2 2		·		
A12	Ave S D Rng N	9 2.8 7-11 2	55.4 6.2 51-60 2	28.3 5.2 25-32 2	16.2 1.1 15-17 2	16.5	14.5	7.4		·		
A13	Ave S D Rng N	14.5 2.1 13-16 2	52.7 8.4 46-59 2	30.8 7.7 25-36 2	16.5 .85 16-17 2	15.7	13.8	7.9 1.3 7-9 2		·	,	
<b>A</b> C	Ave S D Rng N	14  14 2	44.9 10.7 37-53 2	35.1 9.3 28-42 2	20.0 1.6 19-21 2	14.8	12.6	8.85 2.1 7-10 2	 			
C1	Ave S D Rng N	6 1.4 5-7 2	49.5 18.2 37-62 2	31.1 15.7 20-42 2	19.3 2.5 17-21 2			8.7 2.9 6-11 2				
C2	Ave S D Rng N	10  10 2	53.5 21.8 38-69 2	30.2 19.9 16-44 2	16.5 1.9 15-18 2			7.95 2.3 6.3-9.6 2				
С3	Ave S D Rng N	8	82.1	9.8	8.1	 		3.9	 			
	Ave S D Rng N			ı					; ;			
ŕ	Ave S D Rng N		·									
				1								

SOIL SEI	RIES:	Central Po	oint				-	T	AXONOMIC	NAME:	Pachic I	laploxero	11				
Horizon	Stat	рН	Organic Matter	Organic	N	C/N Ratio	Free Fe <sub>2</sub> 03	Avail. P	Ca	Mg	Na	к	H+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
	J. Car.	(1:1 H <sub>2</sub> 0)		%		Nacio	7	(ppm)			Meq/10				(NH <sub>4</sub> OAc)	(Σ Cat)	Cartig
		2 '	İ					,,,,,,							4	`,	
Ар	Ave S D	6.3 .21	6.2	3.6 .78		24.3		15.2	11.2	2.8	. 18	.35		15.7	93.0		4.0
	Rng	6.1-6.4	1.3 5.2-7.1	3.0-4.1	.03 .1217				.42 11-12	.28 2-3	.04 .12	.10 .24		.21 15~16	5.3 89~97	1	.28 3.8-4.2
	N	2	2	2	2	2		1	2	2	2	2		2	2		2
A12	Ave S D	6.05 .07	4.8	2.75 .35	.109	25.4 .78		14.5	11.5 .42	3.2	.18	.30		16.4	92.6 .85		3.6 .14
	Rng N	6.0-6.1 2	4.3-5.2	2.5-3	.12 2	25-26 2		1	11-12 2	3.2	.126	.15		16.4	92-93		3.5-3.7
A13	Ave	6.45		1.55		25.8		17.0	10.1	4.15	. 19	.28		14.8	96.4		2.4
	S D	.07	.07	.07	.02	5.1		17.0	2.3	.07	.1	. 14		1.3	5.1		.6
	Rng N	2	2.6-2.7		2	22-30		1	8-12 2	4.1-4.2 2		.14 2		14-16 2	93-100 2		2-2.8 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 Rng	.14 6.6-6.8	.14 1.3-1.5	.07 .8~.9	.005 .0304	5.2 20-27			2.5 8-12	.57 4-6	.13	.13		3.1 12-17	100		.28 1.7-2.1
	N	2			2	2		1	2	2		2		2	2		2
C1	Ave S D	6.8	.75	.45		19.9		9.0	9.6	4.8	.23	.24		14.0	94.7		2.0
	Rng	.28 6.6-7	. 35 . 5-1	.21 .36	.0203				6-13	2.0 3-6		.13 .133		3.6 11-17	7.5 89-100		.07 1.9-2
	N	2	2	2	2	2		1 .	2	2	2 '	2		2	2		2
C2	Ave S D	7.0 .57	.6 .28	.35 .21		19.4 11.7		7.8	10.1 4.0	5.1 1.6	. 30	.22 .08		12.5 3.3	100		2.15 .50
	Rng N	6.6-7.4 2	.48 2	.25 2		11~28 2		1	7-13 2	4-6	.15	.13		10-15	100		1.8-2.5
сз	Ave	6.7	.3	. 2		20								2	2		
0,	S D	8.7			.010	20			4.1	2.5	.19	.12		6.9	100		1.6
	Rng N	1	1	1		1			1	1	1	1			1		
	Ave															1	
	S D Rng								i . I						ļ	<b>j</b>	
-	N														1		
	Ave S D											,					
	Rng																
	N																
												·					
•	•	•		'	'	•			•	•		١		•	1	,	ı

SOIL SERIES: Chehalis

TAXONOMIC NAME: Cumulic Ultic Haploxeroll

SUIL SER	LLD. OII	· cuatta					TAXONOMIC	NAME: COM	dite pitric	uabioxeto	1.1	
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	l5 Atm.	Bulk Density			
		(cm)		X			<b>%</b> н <sub>2</sub> 0		(g/cc)			
Ар	Ave S D Rng N	7.75 .96 7-9 4	9.6 7.0 4-18 4	60.3 7.4 50-66 4	30.2 .69 29-31 4			17.0				
A11-A13	Ave S D Rng N	10.0 3.4 6-14 4	8.9 4.1 3-12 4	56.3 5.3 51-62 4	34.8 3.4 30-38 4			19.35 .07 19-20 2				
AC	Ave S D Rng N	15	10.3	50.2	39.5		 	20.2				
А3	Ave S D Rng N	1	5.5	62.1	32.3							
B21-B22	Ave S D Rng N	8.25 2.0 6-11 4	4.1 1.5 2.2-5.9 4	65.1 1.9 62-66 4	30.7 2.2 28-33 4	 	 					
B 2 3-B 3	Ave S D Rng N	16.3 8.5 8-25 3	9.7 8.0 2-18 3	62.9 3.9 57-66 3	27.4 4.2 23-32 3		 					
Cl	Ave S D Rng N	9 1.4 8-10 2	17.4 5.9 13-22 2	57.0  57.0 2	25.6 5.9 21-30 2	 						
С	Ave S D Rng N	1.4 1.4 15-17 <sup>+</sup> 3	8.6 4.0 5-13 3	57.5 7.7 48~64 3	33.9 9.0 27-44 3			22.1				
	Ave S D Rng N				1							

TAXONOMIC NAME: Cumulic Ultic Haploxeroli

SOIL SE	KIES:	Chehalis		_				T	AXONOMIC	NAME:	Cumuiic	ortre Hat	proxecor	1			
Hori zon	Stat.	рН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		x			z	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Λр	Ave S D Rng N	6.23 1.9 6.1-6.5	3.3 .5 3-3.9	3.6	1.2	18.0			17.5 1.9 15-19 4	8.5 1.4 7-10 4	.324 .09 .24	.73 .30 .4-1.1		31.1 1.4, 29-32 4	86.7 5.8 79-92 4		2.1 .38 1.9-2.7
A11-A13	Ave S D Rng N	6.22 .30 5.8-6.4 4	5.23 2.0 3.8-6.7 2	2.93 .91 2.4-4 3	.197 .09 .13	16.6 6.5 12-24 3	5.0	9.7 .50 9.3-10 2	17.9 4.7 15-25 4	8.3 1.5 6-10 4	.31 .10 .24 4	.40 .25 .27 4		23.8 4.7 29-39 4	79.6 7.6 68-84 4		2.3 1.0 1.5-3.8
AC	Ave S D Rng N	6.1		2.4	.1	1		19.4	15.0	11.0	1	.2		31.4	84.7	  	1.4
<b>A</b> 3	Ave S D Rng N	6.0	2.03	1.25	.11	11.3	3.1		19.6	6.7	.28	. 18		31.2	86		2.9 I
в21-в22	Ave S D Rng N	6.63 .05 6.6-6.7	1.73 .63 .9-2.4						16.1 1.4 14-18 4	11.5 .41 11-12 4	.50 .12 .4~.6 4	.34 .04 .34 4		30.7 2.3 28-33 4	92.6 4.4 89-97 4		1.4 .18 1.2~1.6 4
в23~в3	Ave S D Rng N	6.7 .1 6.6-6.8 3	1.6 .45 1.1~2.0 3				  		14.8 1.4 13-16 3	11.7 1.2 10-13 3	.60 .10 .57	.23 .06 .23	  	28.8 2.6 28-32 3	94.9 3.2 91-98 3		1.3 .15 1.1-1.4 3
C1	Ave S D Rng N	6.35 .35 6.1-6.6 2	1.5 .28 1.3-1.7 2	1.07	.1	10.7	3.2		15.3 4.4 12-19 2	8.7 2.0 7.2-10 2	.4 .14 .35	.24 .08 .13		27.0 2.9 25-29 2	91.4 2.0 90-93 2		1.9 1.0 1.2-2.6 2
С	Ave S D Rng N	5.83 .76 5-6.5 3	1.36 .25 1.1-1.6 3		.045 .05 .0108 2	3.5	3.0	22.8	15.0 2.3 13-18 3	10.7 2.3 8-12 3	.44 .09 .35 3	.22 .07 .153		30.4 2.7 28-33 3	86.9 8.1 77-93 3		1.5 .6 1.1-2.2 3
	Ave S D Rng N															·	
•			:														

SOIL SERIES: Chenoweth

TAXONOMIC NAME: Typic Haploxeroll

SOIL SEK	ito: me	allowe Ell					TAXONOMIC	NAME: Typ1	c Haploxer	011			
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density	рН 1:10	Elect. Cond.	Moisture at Sat.	
		(cm)		%			<b>х</b> н <sub>2</sub> 0		(g/cc)				
Ар	Ave S D Rng N	15  15 2	51.6 3.7 49-54 2	37.2 1.3 36-38	11.3 2.4 9~13 2	29.6 .28 29-30 2	16.2 .85 15-17 2	6.45 .50 6-7		6.25 .35 6-6.5 2	.65 .21 .58	33.1 2.9 31~35 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 S D Rng N	16.5 2.1 15-18 2	54.6 10.5 47-62 2	33.3 8.1 27~39 2	12.1 2.4 10-14 2	27.3 1.8 26-29 2	16.4 1.8 15-18 2	6.8 .78 6-7 2		6.4 .14 6.3-6.5 2	.25 .07 .23	28.2 .28 28-29 2	
B2 I	Ave S D Rng N	27.5 9.2 21-34 2	51.9 4.1 49-55 2	35.8 2.9 33-38 2	12.4 1.2 11-13 2	27.1 3.5 24-30 2	16.0 2.1 14-18 2	7.0 1.1 6-8 2		6.45 .07 6.4-6.5	.23 .07 .23	29.0 .35 28-30 2	
B22	Ave S D Rng N	40.5 3.5 38-43 2	52.9 7.9 47-59 2	36.2 7.0 31-41 2	11.0 .92 10-12 2	28.5 3.8 25-31 2	15.8 2.8 13-18 2	6.7 .92 6-7 2		6.5  6.5 2	.2	28.9 .64 28-30 2	
В3	Ave S D Rng N	21.0 1.4 20-22 2	55.4 9.0 49-62 2	35.6 9.2 29-42 2	9.1 .21 8-10 2	28.5 3.6 26-31 2	15.3 2.3 13-17 2	6.3 .64 5-7 2		6.5  6.5 2	.1	28.2 2.3 26-30 2	
CH	Ave S D Rng N	45 8.5 39-51 2	59.5 6.9 54-64 2	32.8 7.8 27-38 2	7.8 .92 7-9 2	28.5 5.5 24-32 2	13.9 2.0 12-15 2	6.0 .35 5-6 2	 	6.5  6.5 2	.1	29.7 1.2 28-31 2	
C12	Ave S D Rng N	45.5 21.9 30-61 2	64.3 7.4 59-70 2	30.2 9.1 23-37 2	5.6 1.8 4-7 2	27.1 5.8 23-31 2	12.6 .57 12-13 2	5.7 .21 5-6 2		6.45 .07 6.4-6.5 2	.15 .07 .12 2	28.9 3.5 26-31 2	·
<b>C2</b>	Ave S D Rng N	65.5+ 43.1 35-96 2	71.7 11.7 63-80	35.4 13.0 16~35 2	3.0 1.3 2-4 2	23.6 10.6 16-31 2	9.9 2.5 8-12 2	4.4 .50 4-5 2		6.45 .07 6.4-6.5 2	.25 .07 .23	31.5 1.2 30-33 2	
						,					[		

SOIL SEI	RIES:	Chenoweth	ı					Т	'AXONOMIC	NAME:	Typic Ha	ploxerol	1				
Hori zon	Stat.	рĦ	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Mg	Na	ĸ	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		2			X	(ppm)			Meq/l	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Ар	Ave S D Rng N	6.3 .42 6-6.6 2	 	1.2 .70 .7-1.7 2	.09 .03 .0612 2	12.6 3.5 10-15 2			9.1 .14 9-9.2 2	2.85 .07 2.8-2.9	.25 .07 .23	1.65 .07 1.6-1.7	4.15 .21 4-4.3 2	17.9 .64 17-19 2	77.7 2.3 76-80 2	76.9 .99 76-78 2	3.2 .14 3.1-3.3
Alm	Ave S D Rng N	6.6		.75	.06	12.5			9.5	2.5	1	1.4	3.1	16.8	80.3	81.3	3.8
АВ	Ave S D Rng N	6.6 .14 6.5-6.7 2		.47 .21 .36 2	.046 .01 .03~.06 2	9.9 1.4 9-11 2			10.7 .85 10-11 2	2.3 .64 1-3 2	.25 .07 .23	1.1 .14 1-1.2 2	3.2 .14 3.1-3.3 2	18.4 1.4 17-20 2	77.9 5.2 74-82 2	81.7 .42 81-82 2	5.0 1.8 3.7-6.3
B2 1	Ave S D Rng N	6.8		 .1734 2	.044	1.7			10.4 2.1 8-12 2	2.45 .78 2-3 2	.3 .14 .24 2	.8 .14 .79 2	2.65 .21 2.5-2.8 2	17.6 2.2 16-19 2	79.6 .64 79-80 2	84.1 .50 83-85 2	4.7 2.3 3-6.3 2
В22	Ave S D Rng N	6.8 .07 6.7-6.8 2		.165 .05 .12 2					10.3 2.8 8-12 2	2.45 .50 2-3 2	.25 .07 .23 2	.70 .14 .68 2	2.9 1.0 2.2-2.6 2	16.9 3.0 14-19 2	81.0 .85 80-82 2	82.8 2.3 81-85 2	4.5 2.1 3-6 2
В3	Ave S D Rng N	6.8 .14 6.7-6.9 2		.11 .01 .12 2					11.3 2.8 9-13 2	1.7 .42 1.4-2 2	.2	.07 .4~.5	2.2 .28 2-2.4 2	16.6 2.8 14-19 2	82.2 .92 81-83 2	85.9 3.7 83-89 2	7.1 3.4 4-10 2
C11	Ave S D Rng N	6.7 .14 6.6-6.8 2		.09 .01 .081 2		**************************************			10.6 3.3 8-13 2	2.4 1.5 1-4 2	.3 .14 .24 2	.45 .07 .45 2	1.9 .14 1.8-2 2	15.9 2.1 14-18 2	86.2 .85 85-87 2	87.7 2.1 86-89 2	6.2 5.3 2-10 2
C12	Ave S D Rng N	7.05 .07 7-7.1 2		.085 .063 .0413 2					7.5 .85 7-8 2	4.5 .28 4-5 2	2 2 2	.3 2	1.4 .14 1.3-1.5 2	2	80.0 1.8 78-81 2	89.9 1.8 88-91 2	1.65 .07 1.6-1.7 2
C2	Ave S D Rng N	7.05 .07 7-7.1 2		.035 .02 .0205 2					5.6 .99 4.9~6.3 2	4.8 1.1 4-5.6 2	.70 .57 ' .3-1.1 <sub> </sub>	.15 .07 .12 2	.70 .71 .2-1.2 2	13.2 2.1 11-15 2	85.4 1.3 84-86 2	94.7 4.9 91-98 2	1.15 .07 1.1-1.2 2
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SOIL SERIES: Cherryhill

TAXONOMIC NAME: Ultic Haploxeralf

	SOLE SEK	ies. Ci	CITAUTII					TAXONOMIC	NAME: DIE	ic Haploxe	ralf		
Alp Ave SD Rog N Ave SD Rog N Ave SD Rog N Ave SD Rog N N Ave SD Rog N N Ave SD Rog Rog N N Ave S D Rog Rog N N Ave S D Rog Rog N N Ave S D Rog Rog N N Ave S D Rog Rog N N Ave S D Rog Rog N N Ave S D Rog Rog N N Ave S D Rog Rog N N Ave S D Rog Rog N N Ave S D Rog Rog N N Ave S D Rog Rog N N Ave S D Rog Rog N N Ave S D Rog Rog N N Ave S D Rog Rog N N Ave S D Rog Rog N N Ave S D Rog Rog N N Ave S D Rog Rog Rog N N Ave S D Rog Rog Rog N N Ave S D Rog Rog Rog N N Ave S D Rog Rog Rog N N Ave S D Rog Rog Rog N N Ave S D Rog Rog Rog Rog Rog Rog Rog Rog Rog Rog	Horizon	Stat.		Sand	1	Clay	. 10 Atm.	1	15 Atm.				!
S D   Rog			(çm)		X			х н <sub>2</sub> 0		(g/cc)			
B11 Ave 12.1 38.1 50-52 9-13 24-26 17-18 4.9-6 78 1.9 1.0 1.5 78 1.9 1.9 1.7 78 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	Alp	S D Rng	2.2 11-15	1.6 37-40	. 78 50-52	.85 9-11	.35 24.3-24.8	.14 17.6-17.8	.28 4.7-5.1				
S D   1.8   1.1   37-40   50-52   2   2   2   2   2   2   2   2   2	:	S D Rng	.71 13-15										
S D Rng 10-6 3.0 6.4 3.4 2.3 7 16-19 5-7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		S D Rng	1.8 9-15	1.1 37-40	.78 50-52	1.9 9-13	.91 24-26	.57 17-18	.78 4.9-6				
S D Rng N 2 2.8 41-45 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		S D Rng	10.6 10-25 2	3.0 38-42 2	6.4 43-52 2	3.4 10-15 2	2.3 23-27 2	1.6 16-19 2	1.5 5-7 2				
S D Rng N Ave S D Rng N Ave S D Rng N Ave S D Rng N		S D Rng	5.6 10-18	2.8 41-45 2	10.0 32-47 2	7.3 12-27 2	3.8 23-29 2	4.0 16-22 2	3.0 6-10				
S D Rng N  Ave S D Rng N  Ave S D Rng	B22	S D Rng	13			-							
S D Rng N  Ave S D Rng		S D Rng N											
S D Rng		S D Rng N			ı								
		S D Rng											

SOIL SE	RIES:	Cherryh11	1					7	CAXONOM1C	NAME:	Ultic Ha	ploxeral	£ .				
Hori zon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Mg	Na	l k	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)					2	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)		,
Alp	Ave S D Rng N	6.57 .15 6.4-6.7	1.1	.71 .099 .68	.051 .003 .0405	13.9 1.13 13-15 2		38.6	8.6 4.2 5-14 3	1.15 .35 .9-1.4	.2 .14 .13	.9 .14 .8-1.0	3.25 .35 3-3.5 2	12.4 1.6 11-14	81.4 17.6 68-94	72.5 .71 72-73 2	5.5 .96 4.8-6.2 2
A12	Ave S D Rng N	6.68 .07 6.6-6.7	.8	.31	.034	9.1		7.5	9.6 5.1 6-13 2	1.3	.2	.7	2.6	11.7	70.1	76	4.6
Bli	Ave S D Rng N	6.55 .07 6.5-6.6 2		.30 .18 .1743	.038	11.3			5.5 .14 5.4-5.6 2	1.15 .50 .8-1.5	.25   .21 .14	. 07	2.75 .35 2.5-3.0	11.5 .28 11-12 2	65.7 5.9 61-70 2	73.5 3.5 71-76 2	5.3 2.4 3.6-7.0 2
B12	Ave S D Rng N	6.5 .14 6.4-6.6 2		.18 .014 .1719 2					4.9	1.6 1.3 .7-2.5	.2 .2 .2		2.7 .42 2.4-3 2	11.4 1.1 10-12 2	63.8 4.8 60-67 2	73  73 2	4.5 3.5 2-7 2
B2 1	Ave S D Rng N	6.2 .28 6-6.4 2		. 12  . 12 2					.85 4.3-5.5		.25 .07 .33		3.1 .92 2.4-3.7	13.2 4.7 10-17 2	63.6 4.2 60-67 2	72 2.8 11-75 2	1.45 .35 1.2-1.7
В22	Ave S D Rng N	6.3		.08					4.7	1.6	.1	.6	3.1	12.7	55.1	69	2.9
	Ave S D Rng N													•		-	•
·	Ave S D Rng N																
	Ave S D Rng N						•										

	IES: Che	Horizon	ł	1	1	Water at	INVOINDITE	NAME: Calc	ic Argixer Bulk	Bulk	Carbonare .	Electrical	Coarse Fra
lorizon	Stat.	Thickness	Sand	Silt	Clay	Saturation	.33 Atm.	15 Atm.	Density	Density		Conductivity	
		(cm)					% н <sub>2</sub> 0		(g/cc)	(1/3 bar)			
Ар	Ave S D Rng N	16.5 2.1 15-18 2	31.0 7.8 25-36 2	49.5 5.8 45-54 2	19.6 2.1 18-21 2	53.5 8.6 47-60 2	30.9	12.9 2.5 11-15 2	1.34	1.24		.37 .07 .32~.42	5.0 1.4 4-6 2
B2t	Ave S D Rng N	15  15 2	28.3 3.6 26-31 2	42.7 8.3 37-49 2	29.1 4.7 26-32 2	56.3 1.7 55-58 2	26.0	15.1 .57 14-16 2	1.45	1.30		.145 .04 .1217	4.5 2.1 3-6 2
В3	Ave S D Rng N	22 15.6 11-33 2	32.2 5.4 28-36 2	44.3 4.5 41-48 2	23.6 .92 22-24 2	50.2 4.9 46-54 2	25.2	12.0 2.1 10-14 2	1.43	1.28	1.5 .71 1-2 2	.23 .01 .22-2.4 2	4.7 3.5 2-7 2
Clca	Ave S D Rng N	34 19.8 20-48 2	31.4 7.3 26-36 2	36.8 16.5 25-49	32.0 9.1 25-38 2	54.0 6.6 49-59 2	29.2	15.6 1.7 14~17 2	1.34	1.24	13.5 4.9 10-17 2	.275 .007 .2728	5.0 1.4 4-6 2
C2ca	Ave S D Rng N	27.0 12.7 18-36 2	49.3 4.2 46-52 2	33.0 1.7 31-34 2	17.8 2.5 16-20 2	48.4 1.6 47-50 2		14.5 3.3 12-16 2			30.5 .71 30-31 2	.46 .08 .452	20.5 17.6 8-33 2
11C3	Ave S D Rng N	15+  15+ 2	82.5	12.9	4.6	24.1	 	4.0			3	.38	52
	Ave S D Rng N								·				
	Ave S D Rng N	:							·				
	Ave S D Rng N			1									

pH (1:1 H <sub>2</sub> 0) 6.85 .07 6.8-6.9 2 7.1 .50 6.7-7.4	pН	Organic Carbon % 2.0 .52 1.6-2.4	.174 .04	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub> %	Avail. P (ppme)	Ca	Mg		K 00g	н <sup>+</sup>	CEC	% Base Sat. (NH <sub>4</sub> OAc)	% Base Sat. (Σ Cat)	Ca/Mg
6.85 .07 6.8-6.9 2 7.1 .50 6.7-7.4		2.0 .52 1.6-2.4	.04 .12	.71						00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
.07 6.8-6.9 2 7.1 .50 6.7-7.4		.52 1.6-2.4	.04 .12	.71	1.1		19.3								
.50 6.7-7.4	7.6		2	11-12 2	l		3.3 17-22 2	3.7 .21 3.5-3.8 2	.28 .07 .23	.8 .28 .6-1 2	3.3 .99 2.6-4.0 2	28.9 3.5 26-31 2	83.0 2.8 81-85 2	1.4 87-89	5.3 .57 4.9-5.7 2
		.615 .12 .57	.07 .01 .0608	9	1.2		23.0 .64 22-24 2	8.1 2.0 6.7-9.5 2	.35 .07 .34	.55 .07 .56 2	2.4 .99 1.7-3.1 2	34.8 .57 34-35 2	91.5 6.4 89-96 2	2.8 91-95	3.0 .64 2.5-3.4 2
8.0 .28 7.8-8.2 2			.05 .02 .0307 2	 8	1.1		29.8 3.0 27-32 2	8.0 .64 7.5-8.4 2	.3	.4  .4 2		31.3 5.0 28-34 2		100	3.8 .71 3.3-4.3
8.2  8.2 2	8.8  8.8 2	.285 .08 .24 2	 		1.6	  	34.2 4.2 31-37 2	8.9 1.8 7-10 2	.4	.30 .28 .15 2		32.9 4.4 30-36 2		100	3.9 .28 3.7-4.1 2
8.25 .21 8.1-8.4 2		.345 .12 .24 2		 	.3	 	27.3 5.4 23-31 2	5.9 2.8 4-8 2	.4	.15 .07 .12 2		3.7		100	5.5 3.5 3-8 2
8.5	8.9	.11	 		.7		18.2	4.5	0.4	0.2		16.6		160	4.0
	:														
							·								
	7.8-8.2 2 8.2 2 8.25 .21 8.1-8.4 2 8.5	7.8-8.2 8.4-8.7 2 8.2 8.8 8.2 2 8.8 2 2 8.25 14 8.7-8.9 2 8.5 8.9 1	7.8-8.2	7.8-8.2	7.8-8.2	7.8-8.2	7.8-8.2	7.8-8.2     8.4-8.7     26     .0307     8       2     8.8     .285       34.2       8.2     8.8     .24       1      34.2       8.2     8.8     .24       1      31-37       2     2     2       1      27.3       8.25     8.8     .14     .12        27.3       8.1-8.4     8.7-8.9     2     2       1      23-31       8.5     8.9     .11        1      1       1     1     1        1      1	7.8-8.2     8.4-8.7     26     .0307     8       8.2     8.8     .285       34.2     8.9       8.2     8.8     .24       1      34.2     8.9       8.25     8.8     .345        2     2       8.1-8.4     12        3      27.3     5.9       2     2     2       1      23-31     2       8.5     8.9     .11       1      2     2       8.5     8.9     .11        1     1     1	7.8-8.2     8.4-8.7     .26     .0307     8       8.2     8.8     .285       34.2     8.9     .4       8.2     8.8     .24       1      34.2     8.9     .4        8.8     .24       1      31-37      .4       2     2     2        2     2     2       8.25     .21     8.7-8.9     .24         2     27.3     5.9     .4            1      2     2.8       8.1-8.1-8.4     8.7-8.9     2     2     2     2     2       8.5     8.9     .11       1      2     2     2       8.5     8.9     .11       1      27.3     5.9     .4            1      2     2     2       8.5     8.9        1      1     1	7.8-8.2     8.4-8.7     .26     .0307     8     1	7.8-8.2	7.8-8.2   8.4-8.7   2-6   2   2   1     27-32   7.5-8.4   .3   .4     28-34   2     2	7.8-8.2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	7. 8-8.2         2

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SOIL SER	IES: Ch	ilcott					TAXONOMIC	NAME: Abr	uptic Xerol	lic Durar	31d		
Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
	<u>.</u>	(cm)					% н <sub>2</sub> о		(g/cc)				
Ар	Ave S D Rng N	13  13 2	12.3 1.7 11-14 2	65.4 3.5 63-68 2	22.3 5.2 18-26 2	  	  	10.6 1.2 9-12 2					
A2	Ave S D Rng N	5	10.9	64.9	24.2	  		9.8	  				
B2 t	Ave S D Rng N	21.5 2.1 20-23 2	7.75 1.1 7-9 2	52.0 5.5 48-56 2	40.3 6.6 36-45 2	  		19.6 2.1 18-21 2			·		
ВЗса	Ave S D Rng N	13	8.1	58.4	33.4			17.3					
c	Ave S D Rng N	8	38.1	50.3	11.6			15.6					
	Ave S D Rng N												
	Ave S D Rng N			1,									
	Ave S D Rng N			1									
	Ave S D Rng N					·			·				
						j							

SOLL	SERIES:	Chillent

TAXONOMIC NAME: Abruptic Xerollic Durargid

SOIL SE	RIES:	Chilcott						T	CAXONOMIC	NAME:	Abruptic	Xerolli	c Durarg	1d			
Hori zon	Stat.	рĦ	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Mg	Na	K	H <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		2			X	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Ар	Ave S D Rng N	6.45 .21 6.3-6.6 2	.865 .19 .7-1.0 2					15.5 6.4 11-20 2	9.6 .92 9-10 2	5.4 1.1 4-6 2	.25 .13 .14 2	. 16	. 14	7.7 1.2 6.8-8.6 2		2.1 82-86	1.75 .21 1.6-1.9
A2	Ave S D Rng N	6.9	.47					7	8.2	5.2	.71	1.38	2.7	6.28	100	85.2	1.6
B2 t	Ave S D Rng N	7.65 .21 7.5-7.8 2		  				3 1.4 2-4 2	16.2  16.2 2	11.6 .5 11-12 2	2.2 .26 2.0-2.4 2	1.9 .23 1.7-2.0 2	.99	8.8 1.3 7.9-9.7 2		2.7 92-96	1.4
ВЗса	Ave S D Rng N	8.5					 	6	1	13.9	3.3	1.52		13.7	100		2.9
С	Ave S D Rng N	8.6	 					1	30.2	10.6	2.5	1.23		14.8	100		2.8
	Ave S D Rng N					-											
	Ave S D Rng N								,								
	Ave S D Rng N	1.							-		1						
	Ave S D Rng N																

SOIL SERIES: Clatsop

TAXONOMIC NAME: Histic Humaquept

SUIL SER	TED: CI						TAXONOMIC	NAME: UTRI	tic Humadu	ep <b>c</b>		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		X			% н <sub>2</sub> 0		(g/cc)			
Al	Ave S D Rng N	14 1.8 13-15 2	1.4	57.7	40.9			25.4				
Cl	Ave S D Rng N	13 1.4 10-15 2	.6	50.4	49			27.2				
C2	Ave S D Rng N	19 15.6 8-30 2	8.5	48	43.5	  		  				
С3	Ave S D Rng N	18+	5.9 7.8 .5-11.4 2	54.7 1.3 53-56 2	39.5 6.4 34-44 2			27.0				
	Ave S D Rng N										·	
	Ave S D Rng N		·									
	Ave S D Rng N			·								
	Ave S D Rng N	·		ì	1		·					
	Ave S D Rng N											·

SOIL SEI	RIES:	Clatsop						т	AXONOMIC	NAME:	Histic H	umaquept					
Hori zon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		<b>z</b>			z	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Al	Ave S D Rng N	5.06 .22 4.8-6.5	24.6 11.5 16-33 5	19.01	1.07	17.8	4.0	3.55 1.2 2-4.5	6.5 5.8 2-18 6	11.5 12.9 3-37 6	34.2 46.8 1-67	1.3 1.8 .2-4.8		42.4 4.8 39-49 6	26.2 5.9 21-36 5		.85 .63 .2-2
Cl	Ave S D Rng N	5.7	8.7 1.0 6-12 2	6.69	.67	10	2.0		11.0 12.0 2-19 2	17.3 19.6 3-31	24.3 32.0 1.6-47	2.68 2.23 1-4 2		42.0 3.5 39-41 2	24.8		.67 .1 .674
C2	Ave S D Rng N	6.3	1.03	4.08	.33	12.25	2.0		5.9 4.5 2-9 2	13.4 13.6 3.8-23	20.1 25.3 2-38 2	2.7 2.4 1-4.4 2		48.4 12.2 40-47 2	17.0		.55 .21 .47 2
С3	Ave S D Rng N	6.5	7.7 2.2 6-9 2	3.55	.22	15.2	2.6		6.45 .21 6.3-6.6 2	18.5 3.6 16-21 2	16.5 18.0 4-29 2	2.9 2.7 1-5 2		36.9 .63 36-38 2	72	 	.35 .07 .34
	Ave S D Rng N																
	Ave S D Rng N										. 1						
	Ave S D Rng N																
·	Ave S D Rng N																
	Ave S D Rng N											1					
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	1	max		1		ı ı	INVONOMIC	uvur: CULO	mic Pellox	erert	1	1
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(ст)		X			<b>х</b> н <sub>2</sub> 0		(g/cc)			<b>†</b>
A11	Ave S D Rng N	0-4	12.84	43.22	43.94			22.60	1.38			
112	Ave S D Rng N	4-20	13.88	36.60	49.52	  		22.51	1.38			
C1	Ave S D Rng N	20~32	15.21	34.43	50.36			22.34	1.54			
C2	Ave S D Rng N	32+	23.08	34.76	42.36			21.30	1.41			
	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			,								

SOII. SEI	RIES:	Climax						Т	TAXONOMIC	NAME:	Chromic	Pelloxer	ert				
Hori zon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	К	H+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		<b>x</b>			Ž.	(ppm)			Meq/l	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
All	Ave S D Rng N	6.3	7.71	  	0.27	 		2.5	23.00	21.08		.24	 	53.38	83		1.1
A12	Ave S D Rng N	6.2	4.94		0.17	 		2.4	24.50	21.50		.18		51.10	90		1.1
C1	Ave S D Rng N	6.2	2.34		0.09			3.8	24.00	21.50		.21		47.94	87		1.1
C2	Ave S D Rng N	6.4	0.92		0.06			3.6	20.50	15.00		.10		44.91	81		1.4
:	Ave S D Rng N	·									· ·						
	Ave S D Rng N																i
İ	Ave S D Rng N					·					,						
	Ave S D Rng N																
	Ave S D Rng N														·		·
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SOIL SERIES: Cloquato

TAXONOMIC NAME: Cumulic Ultic Haploxeroll

DOIL DEN	,	oquato					TANOHOLITO	MARIE CUM	atte offic	"Habroxeror	. 1	
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)	~	%			% н <sub>2</sub> 0		(g/cc)			
<b>А</b> р	Ave S D Rng N	11.5 .70 11-12 2	17.3 12.6 8-26 2	61.6 10.2 54-69 2	21.1 2.4 19-23 2	  	25.4	12.9 3.0 10-15 2				
В2	Ave S D Rng N	9 1.0 8-10 3	18 2.6 15-20 3	63.3 3.8 61-68 3	19.7 2.9 17-23 3		31.8 .07 31-32 2	14.9 .70 14-16 3				
В31	Ave S D Rng N	10.0 2.8 8-12 2	27.2 7.9 21-33 2	54.9 12.0 46-64 2	17.9 4.1 15-21 2	  	27.3	12.8 .42 12-13 2		·		
В32	Ave S D Rng N	10 2.8 8-12 2	9.05 5.4 5-13 2	72.8 4.1 70-76 2	18.2 1.3 17-19 2	  		14.6 .71 14-15 2				·
С	Ave S D Rng N	12 2.8 10-14 2	32.7 31.7 10-55 2	53.4 27.6 34-73 2	13.9 4.1 11-17 2		22.4	12 2.8 10-14 2				
	Ave S D Rng N		. :	1								
	Ave S D Rng N								·			
	Ave S D Rng N											·
	Ave S D Rng N											

SOIL SERIES: Cloquato

SOIL SE	RIES:	Cloquato						T	'AXONOMIC	NAME: C	umulic U	ltic Hap	loxeroll				
Horizon	Stat.	рH	Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	H <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)					z	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Ар	Ave S D Rng N	5.9 5.9 2			.135 .007 1.3-1.4 2	11.5 .71 11-12 2	1.8		19.1 2.5 17-21 2	6.25 .50 6-7 2	.4 .14 .35	.65 .21 .58	8.4 .14 8.3~8.5 2			2.1 74-77	3.1 .21 2.9-3.2 2
В2	Ave S D Rng N	6.2 .17 6-6.3 3	  ,	.91 .22 .6-1.1	.091 .02 .0711 3	10 10 3	1.9  1.9 2		19.5 .95 18-21 3	6.7 .41 6.2-7 3	.5  .5 3	.23 .06 .23	7.1 1.1 6-8 3	  		2.6	3.0 .3 2.7-3.3 3
B31	Ave S D Rng N	6.4  6.4 2		.55 .11 .46 2	.057 .007 .0506 2	9.5 .71 9-10 2	1.8		18.3 1.8 17-20 2	6.4 .5 6-6.7 2	.45 .07 .45 2	. 2  . 2 2	5.7 1.1 5-6.4 2			2.1 80-83	3.0 .5 2.6-3.3 2
B32	Ave S D Rng N	6.35 .07 6.3-6.4 2		.73 .06 .68 2	.076 .008 .0708 2	10 10 2			19.5 .14 19-20 2	7.3 .85 6.7-7.9 2	.45 .07 .45 2	.22	5.35 .35 5.1-5.6 2			. 70 83-84	2.9 .57 2.5-3.3
С	Ave S D Rng N	6.45 .07 6.4-6.5 2		.47 .18 .36 2	. 062		1.7		16.7 2.8 14-19 2	7.25 1.6 6-8 2	.5  .5 2	.2	4.9 1.3 4-6 2			.71 83-84	2.3 .14 2.2-2.4 2
	Ave S D Rng N						·										
	Ave S D Rng N																
	Ave S D Rng N											: :					
	Ave S D Rng N		·														
		1	,	,	- 1	,	,	1		l į	J i		i I				

SOIL SERIES: Cobleigh

TAXONOMIC NAME: Typic Rhodoxeralf

JOIL JEN							TAXUNUMIC	NAME:					
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density		·		
		(cm)		%			х н <sub>2</sub> 0		(g/cc)				
Al	Ave S D Rng N	0-2	31.1	42.5	26.4			21.9	10 to				
A3	Ave S D Rng N	2-6	31.2	43.6	25.2		33.5	20.9	1.5				
В1	Ave S D Rng N	6-11	31.9	42.6	25.5		31.4	20.2	NSC 1				
B21t	Ave S D Rng N	11-20	29.0	44.5	26.5		34.8	22.3	1.5			·	
B22t	Ave S D Rng N	20-33	23.3	41.3	35.5	  		28.9					
B3t	Ave S D Rng N	33-42	23.2	37.4	39.4			29.4	  				
C1	Ave S D Rng N	42-54	14.7	50.6	34.7		  	31.4					
,	Ave S D Rng N			ı									
	Ave S D Rng N												
	,	]	1							<b>)</b>	1		

SOIL SE	RIES:	Cobleigh						7	CAXONOMIC	NAME: 1	Typic Rho	doxeralf					
Horizon	Stat.	рН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	к	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		%			z	(ppm)			Meq/1	00g			(Σ Cat)	NH <sub>4</sub> OAc	
Al	Ave S D Rng N	6.3	8.50	  				6	19.9	2.9	.10	1.43	17.3		58.4		6.9
A3	Ave S D Rng N	6.4	4.50					5	16.9	2.8	.10	1.81	15.8		57.8	 	6.0
В1	Ave S D Rng N	6.3	2.23					2	9.8	2.6	.10	1.16	12.3		52.6		3.8
B21t	Ave S D Rng N	6.3				 		2	7.8	3.1	10	1.37	10.6		53.9		2.5
B22t	Ave S D Rng N	5.9							8.5	6.0	19	1.26	12.2		56.7		1.4
B3t	Ave S D Rng N	5.3						1	4.1	5.8	1	.74	16.6		39.7		.71
CI	Ave S D Rng N	5.3						1	3.4	7.0	.43	.58	10.6	  	51.8		.50
	Ave S D Rng N						:				ı						
	Ave S D Rng N							:		·	1						
			1	- 1	I	ļ		,	- 1	Į.							

SOIL SERIES: Coburg

TAXONOMIC NAME: Pachic Ultic Argixeroll

POIL PEKI	res: Co	<u> </u>					TAXONOMIC	NAME: Paci	ule Affic	vkäixekoii		
llo ri zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)	********	X			х н <sub>2</sub> 0		(g/cc)			
Ар	Ave S D Rng N	0-7	15.7	54.6	29.8			14.9	~ ~ ~			
B1	Ave S D Rng N	7-18	13.6	47.9	38.7			18.9				
B21t	Ave S D Rng N	18-28	11.9	44.4	43.8	  	 	22.0				
IIB22t	Ave S D Rng N	28-41	21.6	1	37.6		 	20.5				
IIB3t	Ave S D Rng N	1-53	11.6	42.9	45.6		  	22.8			·	
1110	Ave S D Rng N	53-65	39.3	43.8	17.1	 	 	12.9	pro est est.			
	Ave S D Rng N	<u>.</u>										
	Ave S D Rng N			1								
	Ave S D Rng N											

SOIL SERIES: Coburg

TAXONOMIC NAME: Pachic Ultic Argixeroll

SOIL SE	RIES:	Coburg						Т	AXONOMIC	NAME: F	achie Ul	tic Argi	xeroll				
Hori zon	Stat.	рН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		2			X.	(ppm)			Meq/10	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Ар	Ave S D Rng N	5.9	  	2.4	0.1	24.0		16.4	12.2	5.6	0.2	0.7		24.7	75.7	  	2.2
В1	Ave S D Rng N	5.8		1.7	T 1			111.4	15.1	7.2	0.2	0:5		24.6	93.4		2.1
B21t	Ave S D Rng N	5.9		0.8	T			10.7	17.1	9.6	0.3	0.4		37.7	72.1		1.8
IIB22t	Ave S D Rng N	6.1		0.2	0.1	2.0	 	6.0	18.5	10.6	1	0.5		30.9	98.1		1.7
IIB3t	Ave S D Rng N	6.1		0.3	T			6.4	19.3	12.2	0.8	0.6		37.1	88.8		1.6
IIIC	Ave S D Rng N	6.5		0.1	T 1			4.3	16.1	9.7	0.7	0.4		27.0	99.6		1.6
	Ave S D Rng N																
	Ave S D Rng N						·				t						
	Ave S D Rng N									,							
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SOIL SERIES: Colestine

TAXONOMIC NAME: Typic Xerochrept

SOLL BEK	rest COI						TAVOROLIC	NAME: TABT	c verocure	hr			
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Arm.	, 33 Atm.	l5 Atm.	Bulk Density			,	
	1	(cm)		X			% II <sub>2</sub> 0		(g/cc)				
1	Ave S D Rng N	0-10			   NO D	ATA AVAILA							
2	Ave S D Rng	20-30		, :	NO D	ATA AVAILAE	LE					,	
	N	/ <sub>1</sub>											
	Ave S D Rng N	-	-	ı									
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SOIL SERIES: Colestine

TAXONOMIC NAME: Typic Xerochrept

SOIL SE	CLES:	corestine			_			1	AXONOMIC	NAME:	Typic Xe	rochrept					
<b>Hori</b> zon	Stat.	рH	Organic Matter	Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	H+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		%			X	(ppm)			Meq/l	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
1	Ave S D Rng N	6.6		1.66		  			11.6	4.5	0.10	0.36	7.0	13.2	100.0	70.3	2.6
2	Ave S D Rng N	6.8							13.5	5.6	0.15	0.22	6.4	12.2	100.0	75.3	2.4
	Ave S D Rng N							·			- -						
	Ave S D Rng N										ı						
	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: Concord

TAXONOMIC NAME: Typic Ochraqualf

2012 0011	1						TAXONOMIC	uvur: thbi	e ocutados	111		
Horizon	Stat.	Horizon Thickness	Sand	Silt '	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		X			х н <sub>2</sub> 0		(g/cc)			
Ap-1	Ave S D Rng N	6.2 1.3 5-8 5	3.7	76.8	19.5	  		  				
A2	Ave S D Rng N	7.4 1.1 6-9 5	4.5	75.5	20.0	  	  					
Bl	Ave S D Rng N	6.25 2.2 3-8 4	3.5	71.6	24.9							-
B2 t	Ave S D Rng N	8.0 1.4 6-9 4	3.2	52.1	44.7							
В3	Ave S D Rng N	8 4.5 4-14 4	2.6	57.6	39.8			  				
c	Ave S D Rng N	15.25+ 6.1 10-24+ 4	1.2	69.3	29.5						·	
	Ave S D Rng N									,		
	Ave S D Rng N						·					
	Ave S D Rng N				1							
ı										ı		

SOIL SE	RIES:	Concord						1	AXONOMIC	NAME:	Typic Oc	hraqualf	•			6	
Hori zon	Stat	рH		Organic Carbon	N	C/N Ratio	Free	Avail.	Ca	Mg	Na	к	H <sup>+</sup>	CEC	% Base	% Base	0. (4.
	Jeac.	(1:1 H <sub>2</sub> O)		%		Ratio	Fe <sub>2</sub> 0 <sub>3</sub>	(ppm)	Ca	mg .	Na Meq/l	ļ	п	CEC	<b></b> _	Sat.	Ca/Mg
		(111 1120)		•			^	(բթայ		[	rmeq/1	 		1	(NH <sub>4</sub> OA <sub>C</sub> )	(¿ Cat)	
Ap-1	Ave	5.24							5.3	2.2	.082	. 324		15.7			
	S D	. 30							1.8	.60	.03	.21		2.2	63		2.4
	Rng N	4.8-5.6 5							2.8-7.8 5	1.2-2.8 5	.0413 5	.27 5		13-29 5	1		2.0-3.3
A2	Ave	5.54									-						_
r.z.	S D	. 18							6.3 1.6	3.5 .73	. 16 . 07	. 204 . 006		15.7 2.0	76		1.8 .67
	Rng N	5.3-5.7 5							5-8.5	2.6-4.2	.125	.221		14-19			1.3-3.0
									5	5	5	5		5	1		5
Bl	Ave S D	5.7 .18							10.4	7.0 1.7	. 325	. 32		22.6 5.4	68		1.6
	Rng N	5.6-5.9							8-12	5-8.8	.253	. 29 35		18-30			.51 1.1-2.3
		4							4	4	4	4		4	ı		4
B2 t	Ave S D	5.9 .6							14.0 6.9	9.3	. 25	. 37		34.3	95		1.6
	Rng	5.4-6.7							4-20	4.7 2-13	.29 .14~.84	.12		7.6 28-45			. 31 1. 3-1.9
	N	4							4	4		4		4	1		4
В3	Ave S D	6.5							14.7	9.3	.55	. 32		31.9	91		1.5
	Rng	.73 5.6-7.1							7.6 4-23	3.8 3-12	.29 .29	.14 .15		5.4 25-38			. 36
	N	4							4			4		4	1		1.3-2.1 4
С	Ave	6.9							16.2	11.9	.64	. 36		26.2	100		1.4
	S D Rng	.53 6-7.3							2.9 13-21	3.6	. 30	.09		2.9			. 42
	N	6							6	8-18 6	.3-1.2 6	.2-,5 6		22-31 6	1		.97-2.1 6
	Ave																
	S D Rng										1		•				
	N								•						•		
	Ave														l		
	S D Rng													}			
	N					j											
	Ave										,						
	S D				Ì												
	Rng N																
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SOIL SERIES: Condon

TAXONOMIC NAME: Typic Haploxeroll

SOIL SERI		•				•	TAXONOMIC	NAME: Typ	ic Haplox	eroll		
llorizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Acm.	Bulk Density		Ì	
		(cm)	**	%			х н <sub>2</sub> о		(g/cc)	,		
Ар	Ave S D Rng N	5.2 2.0 3-7 6	22.9 5.9 13-29 6	60.3 5.8 54-70 6	16.8 1.2 15-18 6	35,0 3.2 30-37 6	26.6 1.8 24-30 6	9.1 .56 8.3-9.6				
A11 & 12	Ave S D Rng N	5.0 1.3 4.5-6.5 3	19.1 .83 18-20 3	64.4 3.1 61-68 3	16.6 2.6 13-19 3	42.3 7.0 38-50 3	27.6 3.2 24-30 3	9.4 .49 9-10 3				
A 3-B 1	Ave S D Rng N	4.0 2.0 3-7 4	20.3 5.9 12-22 4	61.1 6.7 52-69 4	18.7 1.1 17-20 4	37.6 2.2 35-40 4	26.2 2.0 23-28 4	9.8 .66 9-11 4				
B2-21-22	Ave S D Rng N	6.6 1.7 4-9 8	18.0 3.7 12-25 8	61.2 4.9 59-70 8	20.7 2.8 16-24 8	37.9 1.4 35-40 8	27.6 1.3 25-30 8	11.5 2.3 11-17 8			·	
B3	Ave S D Rng N	7.8 3.4 3-11 5	21.6 7.8 13-33 5	63.6 7.7 51-72 5	14.9 1.5 12-16 5	35.3 2.5 32-39 5	26.8 1.0 26-29 5	9.5 1.0 8-11 5				
c	Ave S D Rng N	1	41.9	38.1	20.0	34.8	26.1	12.0			·	
	Ave S D Rng N											
	Ave S D Rng N											
	Ave S D Rng N											
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SOIL SE	RIES:	Condon				1	4		AXONOMIC	NAME:	Typic Ha	ploxerol	1				
Horizon	Stat.	pll	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> O <sub>3</sub>	Avail. P	Ca	Mg	Na	К	н+	CEC	Sat.	% Base Sat.	Ca
		(1:1 H <sub>2</sub> 0)		x			Z ·	(ppm)			Meq/1	00g 			(NH <sub>4</sub> OAc)	(Σ Cat)	
Ар	Ave S D Rng N	6.4 .04 6.4-6.5		.98 .20 .6-1.2	.089 .014 .0710	11.0 .71 10-12 6			10.7 1.6 8-12 6	5,1 .65 4-6 6	.167 .082 .13	1.15 .30 .8-1.5	4.5 .69 3.6-5.1 6	22.8 2,1 21-27 6	75.6 9.8 65-90	79.5 2.1 76-81 6	2.1 .20 1.9-
A11 & 12	Ave S D Rng N	6.6 .26 6.4-6.9 3		1.51 .81 1.0-2.5 3	.049	11.3 1.6 10-13 3			12.2 .30 12-13 3	5.7 .76 4.8-6.2	.3 .1 .24 3	.62	.91	24.2 3.4 22-28 3	12.7	82.3 3.2 80-86 3	2.2 .30 1.9~
A3-B1	Ave S D Rng N	6.6 .20 6.3-6.7		.73 .13 .69 4	.077 .008 .06~.09 4	9.5 .91 9-10 4			11.4 1.5 9-13 4	6.3 1.1 5-8 4	.15 .1 .13	.98 .13 .8-1.1	.42	23.1 .98 21-24 4	9.5	2.4	1.8 .19 1.6-
B2-21-22	Ave S D Rng N	6.86 .15 6.6-7.0 8		.59 .17 .49 8	.068 .012 .0409 B	8.6 1.0 6-10 8			14.9 2.8 12~18 8	6.7 1.5 4-9 8	.26 .14 .15 8	.23	2.9 .53 2-4 8	26.1 2.7 22-30 8	8.6	88.5 1.9 86-91 8	2.4 1.1 1.6- 3
В3	Ave S D Rng N	7.02 .29 6.6-7.3 5		.514 .096 .37 5	.063 .01 .0407 4	8.2 .62 7-9 4			2.5	7.5 .66 7-9 5	.38 .13 .25 5	. 18	1.68 .54 1.2-2.6 5	25.3 3.0 21-29 5	90.4 11.6 77-102 5	93 1.4 91-95 5	1.9 .44 1.7-
C	Ave S D Rng N	7.0		. 38					16.7	9.5	0.4	0.5	2.5	27.0	100	2	1.8
	Ave S D Rng N																
	Ave S D Rng N			:							l						
	Ave S D Rng N																

SOIL SERIES: Coosbay

TAXONOMIC NAME: Andic Dystrochrept

	1	<b>.</b>		4			TAYONOMIC	NAME: And.	ic Dystroc	hrept			
Horizon	Stat.	Hortzon Thickness	Sand	Silt '	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			Ì	
		(cm)		}x	<del> </del>		% н <sub>2</sub> 0		(g/cc)				
Al	Ave S D Rng N	13  13 2	19.5 12.8 10-29 2	59.5 14.3 49-70 2	21.1 1.6 20-22 2			28.7 3.7 26-31 2					
А3	Ave	15	14.7	76.4	8.9			18.3					
	S D						Arr. 45-44-	10.3		•			
	Rng N	1	1									ļ	
								1					
81	Ave S D	22.5 3.5	25.6 4.7	56.6 4.3	17.9 9.1			25.0				1	
	Rng	20-25	22-29	53-60	11-24			1.8 23-26			•		
	N	2	2	2	2			1			į		
B2 I	Ave	29.5	32.3	43.2	24.6			24.4					
	S D Rng	1.5 28-31	18.5 19-45	.92 42-44	19.4 11-38			.99					
	N	2	2	2	2			23-25 2					
B22	Ave	26.5	31.1	56.8	22.1			22.0					
	S D	9.2	2.1	12.4	10.3			2.2					
	Rng N	20-33 2	29-33 2	38-56 2	14-30 2			20-24 2					
Cl	Ave S D	25 7.1	40.0 17.5	45.4 24.0	17.7 6.6			14.1 2.5					
	Rng	20-30	25-50	28-63	13-22			12-16					
	N	2	2	2	2			2	~				
C2	Ave	20.5	44.1	43.4	12.5			16.0					!
	S D Rng	3.5 18-23	34.2 20-68	33.7 20-67	.57 12-13			.42 15-16					
	N	2	2	2	2			2					
	Ave												
	S D												
	Rng N												
	Ave												
!	SD												
	Rng N				1								
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SO11.	SERIES:	Courtrock
901 L	354153!	Courtrock

TAXONOMIC NAME: Calciorthidic Haploxeroll

SOIL SER	165. (0		•				TAXONOMIC	NAME: Calc	iorthidle	Haploxeroll	i		
Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
		(cm)		·X			% H <sub>2</sub> 0		(g/cc)				
фA	Ave S D Rng N	7		 	 		  						
A11 & 12	Ave S D	6 4.2											
	Rng	3-9											
	N	2								İ			
B21	Ave	10	***		1								·
	S D	2.8 8-12											
	Rng N	2		!							į		
B22	Ave	7.5											
	S D	2.1											
	Rng	6-9											
	N	2			,								
В23	Ave	6											
	S D			·									
	Rng N	$\overline{}$											
	N	1 1											
	Ave S D Rng N												
	Ave S D Rng N								-				
	Ave S D Rng N			l									
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	Ave	1		1									
	SD			į						1	ł		
	Rng N			1						ł			
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SOIL SE	RIES:	Courtrock						Т	AXONOMIC	NAME:	Calciort	hidic Hap	loxerol	1			
Hori zon	Stat.	. pff	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Mg	Na	к	R <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
***************************************		(1:1 H <sub>2</sub> 0)		%			7	(ppm)				00g			(NH <sub>4</sub> OAc)		Ca/rig
		-					ı								4		
<b>А</b> р	Ave S D			1.19	.081	14.7											
. !	Rng					/											
				1	1	l						<del></del>					
A11 &12	Ave S D			.69 .06	.047 .0007	14.9 1.5											
	Rng N			.68 2	.0405 2	14-16 2											
201																	
B2 I	Ave S D			. 72 . 34	.017	14.7											
	Rng N			.4-1 2	.3~.6 2	13-16 2											
B22	Ave			.48	.029	17.3					<u> </u>		Milya mayir almah				
	S D			. 39	.024	1.3											
	Rng N		~~~	.28 2	.0105 2	2											
В23	Ave			.61	.040	15.3											
	S D Rng																
	N			i i	1	i											
	Ave																
	S D Rng					I											
	N																
	Ave S D	·											•				
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	Ave S D																
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	Rng N									,							
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SOIL SERIES: Couse

TAXONOMIC NAME: Typic Haploxeroll

	4	_					THYONOLITE	MULTER AND			
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	, 10 Atm.	.33 Atm.	15 Atm.	Bulk Density		
		(cm)		%			% н <sub>2</sub> 0		(g/cc)		
1	Ave S D Rng N	0-15	****		NO	DATA AVAILA	BLE				
2	Ave S D Rng N	15-30			NO	DATA AVAILA	BLE				·
3	Ave S D Rng N	30-60			NO	DATA AVAILA	BLE				·
4	Ave S D Rng N	60-90	******		NO 1	ATA AVAILA	BLE				
5	Ave SD Rng N	90-120			NO 1	ATA AVAILA	M.E		r man fain said sale day san yan		
	Ave S D Rng N										
	Ave S D Rng N			1							
	Ave S D Rng N							!	·		
	Ave S D Rng N										
					k						

SOIL SERIES: Crooked

TAXONOMIC NAME: Xerollic Durorthid

	1	A		4			TAYONOUTC	NAME: Mer	offic bata	renta			
llorizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
		(cm)		X	<b></b>		% н <sub>2</sub> 0		(g/cc)				
Ap	Ave	7.5	61.2	33.2		27.7							
ΛP	S D	2.1	10.9	11.9	5.6 1.1	37.7 4.9	22.1 2.8	12.5 5.7			1		
	Rng	6-9	53-69	25-42	5~6	34-41	20-24	8-17			l		
	N	2	2	2	2	2	2	2					
A3	Ave	11.0	63.2	32.0	4.9	38.1	23.5	14.2		1		İ	
	SD	5.7	11.4	14.0	2.6	8.8	4.5	5.4		j	Ī	ł	i
	Rng N	7~15 2	55-71 2	22-42	3-6.7	32-44	20-27	10-18					
200	]			2	2	2	2	2	m- 100 100	,			
B21	Ave S D	8.5 2.1	39.7 25.2	47.8	12.5	52.1	37.5	22.0					
	Rng	7-10	22-58	18.8 35-61	6.4 8-17	9.5 45-59	10.2 30-45	1.6 20-23					
	N	2	2	2	2	2	2	20-23					
В22	Ave	13.5	52.9	33.0	14.1	49.4	34.5	17.3					
	SD	.71	26.4	13.2	13.2	19.4	20.1	5.4				ļ	
	Rng	13-14	34-72	23-42	5-24	36-63	20-49	13-21					
	N	2	2	2	2	2	2	2	<del></del>				
Cl	Ave	13.5	55.6	33.7	10.8	45.4	32.7	15.6					
	S D Rng	2.12 12-15	11.9 47-64	2.1 32-35	9.9 4-18	8.4	11.0	2.2					
	N	2	2	2	2	39-51 2	25-41 2	14-17 2		:	!		
	Ave			*									
	SD				1			1		-			
	Rng N												
·	Ave									•			
	S D	1		1									
	Rng												
	N								:				
	Ave												
	S D Rng							1					
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SOIL SERIES: Crooked

TAXONOMIC NAME: Xerollic Durorthid

SOIL SEI	RIES:	Crooked						T	AXONOM I C	NAME:	Xerollic	Durorthi	.d				
llori zon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Мg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		%			X.	(ppm)			Meq/1	00g-∔			(NH <sub>4</sub> OAc)	(Σ Cat)	
Ар	Ave S D Rng N			.685 .163 .5~.8	.02 .0508	9.8 .57 9-10 2			14.2 4.8 11-18 2	2.1 .28 1.9-2.3	9.25 .35 9-9.5 2	4.9 .42 4.6-5.2 2		20.0 2.4 18-22 2	43.5 5.2 40-47 2		6.7 1.4 5.7-7.7
А3	Ave S D Rng N				.0007 .0304	8.0 1.3 7-9 2			9.5 9.5 2-16 2	2.35 1.62 1.2-3.5 2	13.7 3.5 11-16 2	3.2 2.1 1.7-4.6 2		20.7 1.8 19-22 2	44.5 2.4 42-46 2	l l	4.1 2.4 2.3-5.8 2
B2 l	Ave S D Rng N				.004 .0203	9.8 .28 9.6-10 2			11.8 8.6 5-18 2	8.2 4.7 5-12 2	24.9 9.9 18-32 2	4.9 2.9 2.8-6.9 2		42.4 2.8 40-44 2	54.1 3.9 51-57 2		1.4 .28 1.2-1.6 2
B22	Ave S D Rng N				.0014 .0102	8.7 2.7 6-11 2	  		14.5 4.9 11-18 2	9.5 2.8 7-12 2	23.6 8.1 18-29 2	4.7 3.2 2.4-6.9 2		43.7 4.6 40-47 2	56.4 7.2 51-62 2	] ]	1.6 .07 1.5-1.6 2
Cl	Ave S D Rng N			.125 .007 .1213 2					20.1 5.7 16-24 2	9.6 1.9 8-11 2	17.5 9.1 11-24 2	3.6 2.4 1.9-5.3 2		39.1 5.8 35-43 2	46.0 3.7 43-49 2		2.1 .14 2-2.2 2
	Ave S D Rng N				٠												
	Ave S D Rng N																
	Ave S D Rng N														÷		
	Ave S D Rng N		·								1						
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SOIL SERIES: Crutch

TAXONOMIC NAME: Duric Haplorthod

SOIL SER	iau. Ci				-		TAXONOMIC	NAME: Dur	ic Habtort	nod		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm,	15 Atm.	Bulk Density			
		(cm)		X			<b>х</b> н <sub>2</sub> о		(g/cc)			
<b>A</b> 2	Ave S D Rng N	1.75 .35 1.5-2 2	75.4 5.6 71-80 2	21.3 7.1 16-26 2	3.4 1.5 2.3-4.4 2	34.8	16.7	9.6				
B21r	Ave S D Rng N	6.1 3.9 1.5-11 4	80.8 4.8 75-87 4	15.6 6.4 8-24 4	3.52 1.9 .7-4.8 4	27.9	17.9	7.1				
B3ir	Ave S D Rng N	6.0 5.7 2-10 2	83.6 6.5 79-88 2	15.1 8.1 9-21 2	1.3 1.6 .2-2.5 2	17.1	9.5	1				
B321r	Ave S D Rng N	13	80.8	17.5	1.6	16.7	8.8	5.3				
	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				1							
									!	:		

SOTI. SE	RIES:	Crutch				_		T	CAXONOMIC	NAME:	Duric Ha	plorthod					
llor i zon	Stat.	рН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		2			, x	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
<b>A2</b>	Ave S D Rng N	5.0 .28 4.8-5.2 2	4.8 1.3 3.9-5.7 2	2.8 .71 2.3-3.3	.11	16.3	1.9 2.1 .4-3.4 2	14.8 4.9 11-18 2	3.1 2.9 1-5 2	.8 .42 .5-1.1 2	.45 .07 .45 2	.30 .14 .24 2		14.5 9.5 8-21 2	31.2 2.1 29-33 2		3.3 1.8 2-4.6 2
B2ir	Ave S D Rng N	5.55 .29 5.2-5.9 4	3.1 .91 1.9-4.0 4	1.8 .53 1.1-2.3	.03	53.3 21.4 27-74 4	1.63 1.4 .8-3.7	12.3 8.7 5-24 4	.53 .46 .2-1.2	.28 .22 .16 4	.35 .17 .26 4	.18 .05 .12		5.9 3.8 3-11 4	22.8 3.5 19-28 4		1.9 .25 1.5-2.0 4
B31r	Ave S D Rng N	2	1.7 1.4 .7-2.7 2	1.0 .85 .4-1.6 2	.026 .0106 2	2	1.95 1.5 .9-3.0 2	3.9 1.3 3-4.8 2	.45 .21 .36 2	.2 .14 .13	.14 .13	.15 .07 .1~.2 2		5.9 5.3 2-10 2	24.7 20.9 9-40 2		2.5 .71 2-3 2
B321r	Ave S D Rng N	1	2.7	1.6	1	33.7	1.1	7.0	.3	.3	.1	9.7		1.7	9.7		1.0
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N																
	S D Rng N										•			·			
	S D Rng N										1.						
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SOIL SERIES: Curant

TAXONOMIC NAME: Calcic Pachic Haploxeroll

DOLL DEK		<b>A</b>		4			TAXONOMIC	NAME: CAT	cic rachic	nabroxecor	<b>T</b>	
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)					<b>%</b> н <sub>2</sub> 0		(g/cc)			
A11	Ave S D Rng N	0-4	18.09	57.57	24.34			14.57				
A12	Ave S D Rng N	4-16	17.47	54.23	28.30			14.75				
В2	Ave S D Rng N	16-25	16.59	52.52	30.89	  	  	15.94				
В3	Ave S D Rng N	25-33	21.31	64.73	13.96	  		12.44				
C1	Ave S D Rng N	33-39	22.99	66.88	10.13		  	12.46				
C2	Ave S D Rng N	39-55	24.96	66.60	8.44		  	12.31	•			
	Ave S D Rng N											
	Ave S D Rng N			e e							,	
	Ave S D Rng N				Y			·				

SOIL SE	RIES:	Curant						1	AXONOMIC	NAME: C	alcic Pa	chic Hap	loxeroll				
Hori zon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		2			z	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
A11	Ave S D	6.8		4.4	0.20	22.0			13.9	7.6	0.11	2.09	5.4	28.1	84.3	82.8	1.83
	Rng	ı		1	1	1			1	1	1	1	1	1	1	1	1
A12	Ave S D	6.9		3.2	0.12	26.7			15.4	9.2	0.14	1.92	4.4	37.9	70.3	85.8	1.67
	Rng N	1		1	1	1			1	1	1	1	1	-1	1	1	1
В2	Ave S D Rng	7.2		1.0	0.07	14.3			17.3	11.5	0.28	1.80	5.9	36.5	84.6	84.0	1.50
	N	1		1	1	1			1	1	1	1	1	1	1	1	1
В3	Ave S D Rng	8.1		0.7	0.04	17.5			15.4	11.3	0.50	1.65	2.0	24.6	100.0	93.5	1.46
	N Ave	1		1	1	1			1	1	1	1	1	1	1	1	1
<b>C1</b>	S D Rng	8.5		0.5	0.04	12.5			16.1	10.9	0.65	1.47	1.1	25.2	100.0	96.4	1.48
C2	N , Ave	1		1	1	1			1	1	1	1	1	1	1	1	1
G2	S D Rng	8.7		0.5	0.04	12.5			35.2	10.6	1.26	1.21	0.7	23.6	100.0	98.6	3.32
	N Ave	1		1	1	1			1	1	1	1	1	1	1	1	1
	S D Rng N																
	Ave S D																
	Rng N																
	Ave S D											1	:				
	Rng N			:													
,	'	•	•	'	•	'		1	,	,	1		ı	1	ı	, ,	

SOIL SERIES: Day

TAXONOMIC NAME: Typic Chromoxerert

SOIL SER.	issi Du	Ā					TAXONOMIC	NAME: Typ	ic Unromox	erert		
Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Acm.	15 Atm.	Bulk Density		1	
		(cm)		X			х н <sub>2</sub> 0		(g/cc)			
Al	Ave S D Rng N	0-3	7.78	22.99	69.23			28.82				
AC1	Ave S D Rng N	3-17	8.19	23.06	68.75	  		29.71				
AC2	Ave S D Rng N	17-25		, 				  				
AC3	Ave S D Rng N	25-32	12.04	25.47	62.49		  	26.39				
AC4	Ave S D Rng N	32-40+			, ,							
	Ave S D Rng N											
	Ave S D Rng N									•		
	Ave S D Rng N											
	Ave S D Rng N											
									•			

SOIL SERIES: Day TAXONOMIC NAME: Typic Chromoxerert Organic Organic C/N Avail. Free % Base % Base H<sup>+</sup> Horizon Stat. рĤ Matter Carbon N Fe<sub>2</sub>O<sub>3</sub> Ratio Ca Mg Na Κ CEC Ca/Mg Sat. Sat. (1:1 H<sub>2</sub>0) ---%--z -Meq/100g----(NH<sub>4</sub>OAc) (ppm) (E Cat) Ave A1 7.5 0.58 0.04 14.5 42.6 3.9 3.62 1.34 46.9 10.92 ----\_\_\_ 100 ---S D ------\_\_\_ Rng 1 1 1 1 1 1 1 1 1 1 1 ---\_\_\_ \_\_\_ \_\_\_ \_\_\_ Ave AC1 7.0 0.53 0.04 13.3 45.4 3.4 5.70 1.28 13.35 ------\_\_\_ 42.9 100 \_\_\_ SD Rng ---\_\_\_ ------\_\_\_ N 1 1 1 1 1 1 1 1 \_\_\_ 1 1 \_\_\_ \_\_\_ Ave AC2 \_\_\_ \_\_\_ \_\_\_ S D ---------\_\_\_ ---\_\_\_ ------\_------Rng \_\_\_ ---\_\_\_ ------\_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ------\_\_\_ ---\_\_\_ \_\_\_ ---\_\_\_ \_\_\_ \_\_\_ ---\_\_\_ \_\_\_ 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 \_\_\_ 1 1 1 1 1 1 1 1 1 1 1 \_\_\_ \_\_\_ \_\_\_ Ave AC4 \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ---------S D \_\_\_ ---\_\_\_ \_\_\_ ---\_---\_\_\_ \_\_\_ ------Rng ---------------\_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ ------\_\_\_ ------\_\_\_ Ave S D Rng Ave S D Rng Ave SD Rng N Ave S D Rng

	SOIL SER	IES:	Dayton					TAXONOMIC	NAME: 1	ypic Albaq	ualf			
	Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
0	Ар	Ave S D Rng N	18.8 1.8 17-20 9	9.0 7.8 4-23 5	72.8 8.1 62-82 5	18.2 4.0 14-24 5	28.1	26.0 1.4 24-27 3	9.8 2.1 8-13 6	(g/cc)  1.4 .05 1.3-1.5				
/p	A12	Ave S D Rng N	10.75 2.9 7-13	10.5 12.5 3-25 3	71.3 9.7 60-78 3	18.2 3.0 15-21 3		24.7	10.15 1.9 9-12 2	1.5 .04 1.4-1.6 2				
<u></u>	A2	Ave S D Rng N	4 16.7 6.5 8-26 18 31.6	3-28	71.7 6.4 60-81 9	20.2 4.9 12-26 9	28.0 1.7 27-29 2	21.7 10.9 2-28 5	9.8 2.7 6-16 10	1.5 .05 1.4-1.6	·	:		
18	B21t	Ave S D Rng N	31.6 20.1 16-30 7	3.2 1.5 1.1-4.6 4	51.4 4.1 47-55 4	45.4 5.5 40-52 4	35.95	36.4 1.2 35-37 2	22.6 2.8 20-25 3	1.7 .3 1.5-1.9 2				
U9.96		Ave S D Rng N	23.1° 4.7	2.7 .2 2.4-2.8 4	55.4 1.4 54-57 4	42.0 1.5 40-43 4		37.4	24.35 .6 23-25 2	1.9				
\ 1	B3t	Ave S D Rng N	21-32 8 3,63	2.5-4.3 4	68.8 4.8 65-76 4	28.0 4.6 22-32 4		35.95 3.0 34-38 2	19.7 2.6 17-22 3	1.6 .06 1.5-1.7 2				
79.PC \ \	IIB2t	Ave S D Rng N	27.0 12.2 12-41 5 46.25 12.7	8.3	43.3 2.8 41-47 3	41.8 + 11.1 29-50 3		29.2	19.2 5.6 14-26 5	1.5 .2 1.4-1.7 3				
6.19	IIB3t	Ave S D Rng N	46.25 12.7 33-63 4	19.25 9.1 13-26 2	46.8 9.8 40-54 2	34.0 18.9 21-47 2		28.6	17.5 5.4 13-23 3	1.5 .1 1.4-1.6 2				
	C	Ave S D Rng N	35. 25 10. 2 25-55 8	7.3 3.5 2-11 7	66.6 15.6 32-76 7	25.7 16.0 13-59 7	  	28.0 .8 27-29 2	16.7 8.7 10-31 5	1.5 .007 1.4-1.6 2		V		
	'	'				, <b>!</b>			1		l	1	1	1

SOIL SE	RIES:	Dayton						. 1	AXONOMIC	NAME:	Typic /	Albaquali	Ē				
Hori zon	Stat.	рH		Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)					z	(ppm)			Meq/l	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Д	Ave S D Rng N	5. 2 . 5 4. 2~5. 7 8	3.4	2.1 .7 1.5-3.3	.16 .06 .1028 6	14.3 4.6 10-21 6	.85 .2 .7-1.0	22.3 13.5 10-37	6.5 3.6 3-13 10	3.4 3.6 1.3-13	.2 .2 .058	.3 .15 .16	12.9 2.8 10-17 4	17.8 4.6 13-27 10	52.3 27.3 19-100 10	34.7 2.1 32-37 4	2.5 .9 1.0-4.2 10
A12	Ave S D Rng N	5.0' .2 4.8-5.3	4.4 3.1 2.2-6.6 2	2.1 .9 1.1-3.4 4	.18 .06 .1125 4	11.3 1.5 8-13 4	1.3 .7 .7~2.0 3		4.4 .6 3.6-5.0	1.75 .6 1.2-2.4	.1 .01 .113	.3 .1 .14	12.6 1.7 11-14 2	15.1 2.1 13-17 4	43.4 4.9 37-48 4	33.3 2.7 32-35 2	2.7 1.1 1.8-4.1 4
A2	Ave S D Rng N	5.6 .3 5.2-6.3	1.45 1.1 7-2.2 2	.8 .5 .4-1.7 11	.07 .03 .0407	9.75 1.7 8-13 10	1.45 .3 1.2-1.9 4	4.7 1.9 2.5-7.1 4	5.7 3.5 1.5-15 19	3.4 3.0 .8-14 19	.2 .2 .069 17 /	.2 .2 .19 19	7.6 1.6 5.8-11	14.1 4.2 7-21 19	58.3 19.3 36-100 19	48.9 9.2 34-59 7	1.9 .6 1.1-3.3
B21t	Ave S D Rng N	5.7 .3 5.2-5.9 5	1	.3 .06 .2638	.04	6.5	1.6	4.5	14.5 2.2 12-18 7	12.5 2.0 10-16 7	.7 .3 .25-1.0	.4 .05 .3749	8.95 .4 8.7-9.2 2	38.8 5.3 27-44 5	75.5 8.7 60-80 5	78.0 2.2 76-80 2	1.2 .2 .9-1.5 5
B22t	Ave S D Rng N	6.2 .5 5.4-6.8 6	1	.2 .02 .1821	.03	6.0	2.0 1.0 1.3-2.7 2	3.5	15.85 4.0 8-21 8	13.4 3.2 7-18 8	.8 .4 .3-1.4	.4 .06 .35	6.05 1.06 5.3-6.8 2	34.4 6.6 29-44 8	87.7 11.6 61-97	88.2	1.2 .2 .9-1.5
B3t	Ave S D Rng N	6.8 .3 6.4-7.2 5		.1 .04 .0714			1.45 .07 1.4-1.5	2.0	14.3 5.0 7-21 8	10.4 5.5 1-15 8	.6 .4 .0595	.4 .08 .35	3.6 1.4 2.5-5.2 3	30.3 5.7 25-41 7	78.0 30.2 31-100 7	90.6 2.8 87-93 3	2.0 1.3 1.0-4.2
IIB2t	Ave S D Rng N	5.9 .6 5.2-6.7 7	.75 .4 .5-1.0 2	.3 .3 .19 5	.1	4.0	1.6	2.0 .5 1.4-2.8 5	15.3 4.6 10-19 7	12.1 3.5 9-18 7	.9 .8 .3-2.5 7 '1	.4 .07 .3~.5	6.6 .7 6.1-7.4	34.5 9.2 24-47 7	83.5 9.2 74-97 7	75.5 1.0 74-76 3	1.3 .2 1.0-1.6 7
IIB3t	Ave S D Rng N	5.8 .8 5.0-6.5 3		.15 .13 .053		1	1.5	6.0	13.0 3.6 11-17 3	11.1 4.5 8-16 3	.9 .9 .4-2.0	.3 .06 .34	5.25 1.6 4.1-6.4 2	31.3 13.8 22-47 3	81.6 9.6 76-93	83.0	1.2 .2 1.0-1.4
С	Ave S D Rng N	6.9 .5 6.3-7.7	. 2 . 2 . 1 3 2	.09 .10 .0330 6	.11 .13 .0220 2	3.0 2.1 1.5-4.5 2	1.7 .8 1.2-2.7	16.5 24.2 2-45 3	14.3 4.1 7-22 11	10.7 4.3 3-21 11	.8 .5 .1-2.1	.4 .1 .27	2.6 .6 2.1-3.4	28.7 9.6 20-55 11	90.1 14.3 51-100	90.5 .7 89-91 4	1.5 .5 .9-2.7

DUIL BERIES: Debende	SOIL.	SERIES:	Debenger
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TAXONOMIC NAME: Typic Xerochrept

SOIL SEK	ies: De	benger					TAXONOMIC	NAME: Typ1	c Xerochre	ρL		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		X			х н <sub>2</sub> 0		(g/cc)			
1	Ave S D Rng N	1-7			NO D	ATA AVAILAE	LE					
2	Ave S D Rng N	20-25			NO D	ATA AVAILAE	LE					
	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				· 1							
					, ,							

SOIL SE	RIES:	Debenger						т	AXONOMIC	NAME:	Typic Xe	rochrept					
Hori zon	Stat.	рĦ	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	к	н <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		z			2	(ppm)			Meq/10					(Σ Cat)	
1	Ave S D Rng N	6.6		2.35	  	  			7.7	2.7	0.07	0.40	4.9	12.5	87.0	68.9	2.9
2	Ave S D Rng N	6.5							11.3	4.7	0.14	0.31	4.5	12.8	100	78.95	1
	Ave S D Rng N										4						
:	Ave S D Rng N																
,	Ave S D Rng N			,							1						
•	Ave S D Rng N										l .						
	Ave S D Rng N																
	Ave S D Rng N											ı					
	Ave S D Rng N		·														
											1						

	ES: Del		ı	1 1		l .	TAXONOMIC	1	•	ucpt I	•	1	1
orizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
		(cm)		X			% н <sub>2</sub> 0		(g/cc)				
.11	Ave S D Rng N	0-5			NO D	TA AVAILAB	LE						
12	Ave S D Rng N	5-9			NO D	TA AVAILAB	LE						
2	Ave S D Rng N	9-15	*****	-	NO DA	TA AVAILAB	LE						
	Ave S D Rng N						· .			,	÷		
	Ave S D Rng N			1		-			•				
	Ave S D Rng N												
	Ave S D Rng N			. 1	!							·	
	Ave S D Rng N												
	Ave S D Rng N				<i>,</i>								

SOIL SERIES: Delena

TAXONOMIC NAME: Humic Fragiaquept

SOIL.	SERIES:	Delena						T	AXONOMIC	NAME:	Humic Fr	agiaquepi	t				
Horiz	on Stat.	pН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	ĸ	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		%		-	z	(ppm)			Meq/1	00g			(NH <sub>4</sub> OA <sub>C</sub> )	(Σ Cat)	
A11	Ave S D Rng N	6.0							13.9	3.7	0.3	0.4	20.8	27.5	66.6	46.8	3.8
A12	Ave S D Rng N	5.9					  		9.6	3.2	0.3	0.4	16.9	22.4	60.3	1	3.0
В2	Ave S D Rng N	6.0				  			7.1	2.3	0.3	0.3	12.3	14.3	70	44.8	3.1
	Ave S D Rng N	į								•							
	Ave S D Rng N										ı						
	Ave S D Rng N																
	Ave S D Rng N														4		
	Ave S D Rng N																
	Ave S D Rng N						,			·							·
	- 1	ı								I	1	1		1		1	l

SOIL SERIES: Dement

TAXONOMIC NAME: Umbric Dystrochrept

JOIL DER					. 1		TAXONOMIC	MATEL UMD	ric Dystro	chrept		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		x			<b>х</b> н <sub>2</sub> 0		(g/cc)	<del></del>	 	
Al	Ave S D Rng N	9.3 1.2 8-10 3	29.8 4.0 14-39 3	43. 1 13. 3 35-59 3	27.1 .78 26-28			27.6 12.5 20-42 3				
A3-81	Ave S D Rng N	20.5 .71 20-21 2	36.2 14.8 15-37 2	47.0 26.5 28-66 2	26.8 11.7 18-35 2		  	35.2 16.6 23-47				
B21	Ave S D Rng N	26.5 4.9 23-30 2	25.7 17.4 18-38 2	45.8 21.3 30-61 2	28.6 3.9 26-31			28.4 6.8 23-33 2				
B22	Ave S D Rng N	27 1.4 26-28 2	26.7 27.6 7-46 2	39.7 15.4 29-51 2	33.6 12.2 25-42 2		  	26.7 5.5 23-31 2	  		·	
B23t	Ave S D Rng N	25	8.2	52.2	39.6			29.2				
B24t-25t	Ave S D Rng N	24 5.7 20-28 2	24.5  24.5 2	42.0 .21 41-42 2	33.6 .14 33-34 2	 		30.6 1.3 29-32 2				·
C1	Ave S D Rng N	35	49.8	32.0	18.2		 	22.4				
C2	Ave S D Rng N	21	58.2	26.2	13.6	  		21.8	  			
	Ave S D Rng N											

SO (1.	SERIES:	Dement

TAXONOMIC NAME: Umbric Dystrochrept

		Dement						•	MONORIC	WATE.	OMOTIC D	ystrocare	:pt				
Horizon	Stat.	pĦ	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 03	Avail. P	Ca	Mg	Na	к	H <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
	1	(1:1 H <sub>2</sub> 0)		7			Z	(ppm)			Mag/11	00g			(NH <sub>4</sub> OAc)	(F Cat)	) are contracted and the state of the state
		-						-							,		
Al	Ave	5.3				·			6.6	3.9	.47	1.3		32.4	36.0		1.9
	S D Rng	.173 5.2-5.5							3.2 3-10	2.7 1.5-7.0	.06 .45	.45 .8-1.7		7.9 25-41	10.5 25-46		.50 1.4-2.4
	N	3.2-3.3							3	3	3	3		3	3		3
A3-B1	Ave	4.55							3.2	1.5	. 45	. 70		30.2	20.0		2.3
	SD	. 78							.21	. 35	.07	. 28		9.0	5.6		.71
	Rng	4-5.1							3-3.3	1.2-1.7		.59		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 Rng	.71 3.9-4.9							.07 2.3-2.4	. 35	.4	.14 .35		.21 23-24	.71 18-19		.50 1.6-2.3
	M	2							2.3-2.4	2	2.4	. 3=. 5 2		2	2		2
														l			
B22	Ave	4.75							2.0	1.45	.4	. 3		23.6	17		1.3
	SD	.07							.50	.07 1.4-1.5	.4	.14 .24		.57 23-24	1.4 16-18		.28 1.1-1.5
	Rng N	4.7-4.8							2	2	2 4	2 . 4		2 3-24	2		2
	•								_		_	_					
. B23t	Ave	4.8							ر 9.	1.2	.5	.3		21.9	13		.75
	SD																
	Rng N										1			1	1		
	"	1							1	1	1	1			ı		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							<b>'</b>	1.8	.4~.5	.23		22-25	13		,
	N	2							1	2	2	2		2	2		1
Cl	Ave	4.5							2.5	1.8	ار 5.	.3		24.6	21		1.4
	S D																
	Rng N	1							1	-	<b> </b>			1	1		
										<b> </b>	1	*		1			1
С2	Ave	4.4							1.6	1.5	.4	.2		24.6	15		1.1
	S D																
	Rng N									1	1	1					
	.,	1							l *	<b>'</b>	l .	1		'	l		•
	Ave																
	S D										Ï			1			
	Rng N									1				1	Ì		
	R						'			[	]			1			
		Į į							ĺ				1			1	

SOIL SERIES: Deschutes

TAXONOMIC NAME: Xerollic Camborthid

JOJE JER	ten. De	eschutes					TAXONOMIC	NAME: Xero	111c Cambo	rthid		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	. 33 Atm.	15 Atm.	Bulk Density		<u> </u>	
		(cm)		X			и н20		(g/cc)			
Al	Ave S D Rng N	4  4 2	73.4 5.3 70-77 2	20.9 3.3 18-23 2	5.7 2.1 4-7 2		14.8	6.0 .91 5.3-6.6	1.35			
AC1	Ave S D Rng N	5.5 .71 5-6 2	71.5 2.9 69-74 2	22.5 1.1 21-23 2	6.1 1.9 4-8 2					·		
AC2	Ave S D Rng N	8.5 .70 8-9 2	73.0 3.9 70-76 2	21.7 2.1 20-23 2	5.4 1.8 4-7 2				1.34			
IIC	Ave S D Rng N	7.5 .71 7-8 2	62.5 3.7 60-65 2	28.3 2.1 26-30 2	9.3 1.7 8-11 2		  		1.68			
	Ave S D Rng N											
	Ave S D Rng N				1							
:	Ave S D Rng N				,							
	Ave S D Rng N											
-	Ave S D Rng N	·										
·												

SOIL SEI	RIES:	Deschutes						7	TAXONOMIC	NAME:	Xerollic	Cambort	hid				
llo r í zon	Stat.	pli	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		%			x	(ppm)			Meg/l	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Al	Ave S D Rng N	7.0 .14 6.9-7.1 2		.515 .02 .56 2	.004	12  12 2			5.7 1.2 4.8-6.5 2	2.1 .35 1.8-2.3		1.0 .14 .9-1.1	2.4 .42 2.1-2.7 2	11.9 2.2 10-13	.57	.71	2.7 .11 2.6-2.8 2
AC1	Ave S D Rng N	7.2 .28 7.0-7.4 2		.43 .04 .45 2	.041 .003 .0405	10.5 .71 10-11 2			6.5 2.0 5.1-7.9 2	2.9 .50 2.5-3.2 2	.2	.8 .14 .79 2	1.85 .07 1.8-1.9 2	13.0 2.0 11-15 2	5.4	2.1	2.3 .30 2.0-2.5 2
AC2	Ave S D Rng N	7.4 .28 7.2-7.6 2		.40 .04 .3743 2	.047	9			6.7 2.5 5-9 2	3.5 .78 3-4 2	. 2	.8 .28 .6-1 2	1.15 .44 1.4-1.6 2	12.9 2.2 11-14 2	9.0		1.91 .30 1.7-2.1 2
110	Ave S D Rng N	8.75 .35 8.5-9.0 2		.31 .08 .24 2		  			9.3 1.1 8.5-10 2	6.3 1.1 5.5-7.1 2	1.0 .71 .5-1.5 2	1.3 .71 .8-1.8 2	.6  .6 2	16.8 1.2 16-18 2	106.9 .78 106-107 2		1.52 .45 1.2-1.8 2
	Ave SD Rng N					·											
	Ave S D Rng N													-			
	Ave S D Rng N											ı					
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	Ave S D Rng N										1						
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SOIL SERIES: Digger

TAXONOMIC NAME: Dystric Eutrochrept

DOTE DEN	, HO. PI	<b>A</b> .					INVONOUTE	NAME: Dys	tric Eutro	chrept		
Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		x			% н <sub>2</sub> 0		(g/cc)			
Ai	Ave S D Rng N	9.0 7.1 4-14 2	37.8 5.6 34-42 2	37.0 .63 36-38 2	25.3 5.1 21-29 2	37.6		32.45	1.1			
Bl	Ave S D Rng N	13.5 .71 13-14 2	38.1 5.6 34-42 2	36.1 114 36-37 2	25.9 5.5 22-30 2	  		  				
B2-B3	Ave S D Rng N	15.0 4.2 12-18 2	42.6 4.1 39-46 2	30.0	27.4 4.2 24-31 2		  				·	
Dr	Ave S D Rng N	10	44.4 2.8 42-47 2	36.6 3.5 34-39 2	19.0 .78 18-20 2				  			
	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				1						,	
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SOIL SERIES: Digger

TAXONOMIC NAME: Dystric Eutrochrept

SUIL SE	KIED:	Digger		_				1	AXONOM1C	NAME:	Dystric	Eutrochr	ept				
Horizon	Stat.	рĦ	Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		χ			z	(ppm)			Meq/l	00g			(NH <sub>4</sub> OA <sub>C</sub> )	(Σ Cat)	
Al	Ave S D Rng N	6.43 .60 5.8-6.0 2		2.85 .92 2~4 2	.57 .61 .1-1 2	23.4 1.7 22-25 2			13.9 2.2 12-16 2	7.0 .71 6.5-7.5 2	.31 .15 .24	1.3 .19 1.1-1.4 2		26.4 2.51 24-28 2	84.6 1.5 83-86 2		2.0 .57 1.6-2.4 2
<b>B1</b>	Ave S D Rng N	5.8 .28 5.6-6 2		1.45 .92 .8-2.1 2	.075 .035 .051 2	25.0 5.4 21-29 2			10.3 3.2 8-13 2	7.0 .78 6.4-7.5 2	.28 .11 .24 2	.77 .1 .79 2		24.1 .50 23-25 2	75.5 7.0 70-80 2		1.6 .64 1-2 2
B2-B3	Ave S D Rng N	5.85 .07 5.8-5.9 2		.50 .14 .46 2	.035 .007 .0304 2	19.1 6.0 15-23 2			10.9 3.8 8-14 2	8.9 .28 8-9 2	.31 .15 .24 2	.80 .28 .6-1		25.4 3.18 23-28 2	81.5 21.0 66-96 2		1.35 .64 .9-1.8 2
Dr	Ave S D Rng N													  			
	Ave S D Rng N										ĵ						
	Ave SD Rng N								<u> </u>  - 								
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N					-			·. ·								
									,								

SOIL SERIES: Dinzer

TAXONOMIC NAME: Typic Cryorthod

DOTE DEK	,	11261					TAXONOMIC	нами: Тур	ic Cryorth	nd			
Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			İ	
		(cm)					<b>х</b> н <sub>2</sub> 0		(g/cc)	<u> </u>			
	ļ			ļ			. *					Ì	
02	Ave	3.8									}		ŀ
	S D												
	Rng N												
		1											ľ
A2	Ave	.63											
	S D	.63											
	Rng N	2											
											Ì		
B21r	Ave	13.9	38.6	54.5	6.9								
	S D Rng	6.1 7-19	2.0 36-40	3.1	2.5						İ		l
	N	3	30-40	51-57 3	4.2-9.2 3								
в3	Ave S D	38.5 24.7	37.8	56.2	6.1						İ		
	Rng	24.7 21-56	6.6 33-43	9.3 50-63	2.6 4-8								
	N	2	2	2	2								
Α.	1 .	0.5											
C	Ave S D	35	46.5	45.9	7.6								
	Rng												
	N	<b>1</b>	<b>1</b>	1	1								
	Ave									•			
	S D										ľ		
	Rng			<u> </u>							ł	-	
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	Ave												
	S D												
	Rng									,	İ		
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	SD												-
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SOIL SE	RIES:	Dinzer						1	'AXONOMIC	NAME:	Typic Cr	yorthod					
Horizon	Stat.	рН		Organic Carbon	И	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	ĸ	н <b>+</b>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		%			%	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)		
02	Ave S D Rng N	4.1															  
A2	Ave S D Rng N	4.6 .71 4.1-5.1 2					1.6 .42 1.3-1.9 2										
B21r	Ave S D Rng N	5.6 .26 5.3-5.8 3	5.6 1.04 5.0-6.8		.006	6.2 35-47	3.0 .36 2.7-3.4 3	2.3 .93 1.5-3.3	.18 .19 .054 3	.17 .12 .13	.17 .06 .12	.23 .15 .14 3		20.9 .95 20-21 3	3.56 1.94 2.3-5.8 3	  	1.1 .17 1.0-1.3
В3	Ave S D Rng N	6.0 .21 5.8-6.1 2	2		.03 .061 2	4.2 21-28 2	3.65 .78 3-4 2	2.5	.1	.2 .14 .13 2	.2	.25 .21 .14 2		24.9 5.1 21-29 2	3.0 1.9 1.6-4.3		.65 .50 .3-1.0 2
c	Ave SD Rng N	5.6	1.4	.8	.02		3.3	3.8	.3	.1	.1	,1		18.2	3.5		3.0
	Ave S D Rng N					:			-								
	Ave S D Rng N	·	•												·		
	Ave S D Rng N								,					·			
	Ave S D Rng N									·				·			
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SOIL SERIES: Dixonville

TAXONOMIC NAME: Pachic Ultic Argixeroll

		•	•	1	1		TAMOROTIC	name: rac	ure prere	vidixeLoff		
Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)					х н <sub>2</sub> 0		(g/cc)			
Al	Ave S D Rng N	10.4 4.2 4-15 8	13.6 3.4 11-18 3	37.1 4.7 34-43	49.5 4.6 48-55			23.5 7.0 16-30 3	1.33 .03 1.3-1.4			
А3	Ave S D Rng N	13.3 4.4 8-18 6	13.5 3.0 11-16 2	35.2 5.5 31-39 2	50.3 1.1 49-51 2	  		19.8 4.5 16-23	1.37 .13 1.2-1.5 2		·	
BI	Ave S D Rng N	9  9 2	4.5	41.5	54.0			31.2	1.68			
В2	Ave S D Rng N	11.7 4.2 7-15 3	13.8 9.1 7-20 2	31.1 .71 30-32 2	55.2 9.9 48-62 2			26.0 9.1 19~33 2	1.43 .19 1.2-1.6 2		·	
B2tg	Ave S D Rng N	17.2 7.5 8-28 6	11.4 .63 11-12 2	34.0 .57 33-35 2	54.6 .07 54-55 2			25.8 .50 25-26 2	1.6 .007 1.5-1.6 2			
в3	Ave S D Rng N	16.8+ 5.7 13-23 6	18.2 4.7 15-22 2	33.7 5.4 30-38 2	48.2 .57 47-49 2			23.4 2.4 21-25 2	1.44 .01 1.4-1.5 2			
С	Ave S D Rng N	55.3+ 10.9 41-66+ 4	17.5 10.8 10-25 2	32.5 .21 32-33 2	48.6 8.9 42-55 2			27.8 5.4 24-32 2	1.44 .05 1.4-1.5 2			
	Ave S D Rng N		:									
	Ave S D Rng N											
									•		,	

SOIL SE	KIES:	. Di xonvill	e			_		7	AXONOMIC	NAME:	Pachic U	ltic Argi	xeroll				
Horizon	Stat.	рН	Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		%			x	(ppm)			Meq/10	00g	. And then then the the the the the the the the the the		(NH <sub>4</sub> OAc)	(Σ Cat)	
Al	Ave S D Rng N	5.84 .22 5.4-6.1 7	6.2 1.4 4.2-8.1	3.61 .85 4.7-2.4 7	.03	18.9 2.3 15-22 7	7.0 1.1 5.4-7.7	3.5 1.3 2.3-4.8 3	20.4 6.5 12-30 8	15.0 5.3 9-19 8	.20 .06 .1528	.87 .48 .2-1.6 8		44.4 8.6 40-56 8	82.6 2.7 79-86 5		1.5 .60 .7-2.3
А3	Ave S D Rng N	5.8 .25 5.5-6.1	.99 3.0-5.4	2.34 .56 1.7-3.1	.138 .039 .1121 6	3.0 13-22	6.8 1.1 5.3-7.7	1.75 .78 1.2-2.3	19.8 7.3 13-29 6	14.2 3.0 10-19 6	.215 .104 .14 4	.465 .293 .2-1 6		41.5 7.8 31-53 6	84.0 8.3 77-96 4		1.5 .51 .88-2.2 6
B1	Ave S D Rng N	5.1	2.85	1.65	.09	18.3		2.0	17.2 2.3 15-19 2	22.3 9.4 15-29 2	.21	.60 .42 .39 2		47.5 5.5 43-52 2	81.4	  	.87 .47 .5-1.2
В2	Ave S D Rng N	5.6 .56 5.2-6 2			.04 .03–.09 2	2		2.3 .14 2.2-2.4 2	3	21.4 10.1 14-33 3	.26	.38 .40 .18 3		42.3 9.0 32-49 3	83.7		.88 .37 .4-1.3
B2tg	Ave S D Rng N	5.85 .47 5.3-6.6	1.0 .7-3.3 6		.022 .0511 6	6		1.45 .07 1.4-1.5 2	6	20.4 7.5 13-32 6	.27 .05 .2133	.22 .10 .14 6		46.5 6.3 39-55 6	102.4 8.3 93-113 4		1.3 .62 .66-2.1
В3	Ave S D Rng N	6.12 .41 5.5-6.8 6	1.25 .60 .4-2.2		.048 .015 .0307 6	4.4 7–19	4.3 1.2 3.2-5.7 4	2.2 .14 2.1-2.3 2	26.6 9.4 14-35 6	7.2 15-34 6	.30 .059 .2639	.177 .066 .13		46.3 9.3 32-53 6	108.2 5.6 102-116 4	 	1.2 .74 .3-2.3
c	Ave S D Rng N	6.02 .53 6.1-6.7		.48 .27 .199 6	.03 .01 .0205 6	15.3 4.0 9-21 6	3.35 .94 2.2-4.3 4	1.9 .57 1.5-2.3 2	29.4 11.6 15-43 6	25.4 9.1 15-36 6	.37 .09 .2343	.148 .041 .12 6		55.7 6.6 45-62 6	100.5 10.1 88-113 4		1.1 .78 .4-2.1 6
	Ave S D Rng N																
	Ave S D Rng N				,		·				l						
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SOIL SERIES: Dupee

SOIL SEK	169: Da	pee					TAXONOMIC	NAME: Aqu	ultic Haplo	oxeralf		
Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)					% н <sub>2</sub> 0		(g/cc)			
Alp	Ave S D Rng N	19.0 5.4 15-23 2	30.1 9.2 34-37 2	53.8 1.9 49-59 2	16.1 2.3 14-18 2		24.9	6.4 2.7 4-8 2	1.52		·	
Bl	Ave S D Rng N	15.1 .35 15-16 2	27.3 9.9 20-34 2	48.2 6.3 44-53 2	24.5 3.6 22-27 2		28.5	10.5 .14 10-11 2	1.58			
B2 1	Ave S D Rng N	17.8 3.5 15-20 2	28.9 9.0 20-32 2	44.7 15.3 34-56	29.4 6.3 25-34 2		25.4	13.7 1.9 12-15 2	1.58			
В22	Ave S D Rng N	21.6 9.0 15-28 2	27.0 10.7 19-35 2	41.5 15.0 31-52 2	31.5 4.3 28-35 2		32.3	15.9 2.6 14-18 2	1.58	-		
в23	Ave S D Rng N	15.2  15.2 2	34.4 1.7 33-36 2	29.1 8.5 23-35 2	36.5 6.8 32-41 2		28.5	17.9 1.4 17-19 2	1.58			
CI	Ave S D Rng N	35.4 14.8 24-46 2	55.2 2.9 53-58 2	25.1 4.7 22-29 2	19.6 1.6 18-21 2	  	31.9	12.5 4.9 9-16 2	1.52		·	
C2	Ave S D Rng N	30.5 3.7 28-33 2	57.3 11.2 49-65 2	30.0 7.1 21-31 2	16.8 4.0 14-20 2	 	38.9	13.2 5.9 9-17 2	1.34			
	Ave S D Rng N				'			:	·	·	·	
	Ave S D Rng N											
				'								

SOIL SERIES: Dupee

SOLI, SEI	(162:	bubee.				_		1	AXONOMIC	NAME:	udnatrić	нартоже	Call				
	_		Organic	Organic		C/N	Free	Avail.			1		н+		% Base		
Horizon	Stat.	рН	Matter		N	Ratio	Fe <sub>2</sub> O <sub>3</sub>	Р	Ca	Mg	Na	K	Н	CEC	Sat.	Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		<b>x</b>			x	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Alp	Ave	5.45		1.18		12.5	1.25		4.5	1.2	. 15	. 3	8.1			43	3.8
	SD	.21 5.3-5.6		.05	.008	.71	. 35		.71	.14 1.1-1.3	.07	.3	1.4 7-9			1.4 42-44	.14 3.6-3.9
	Rng	2		1.1-1.2	2	12-13 2	1-1.5 2		4-5 2	2	2	2.3	2			2	3.6-3.9 2
B 1	Ave S D	5.4 .28		.46 .07	.051	9.0 1.4	1.4		5 .78	1.8	.2	.2	8.2 2.2			50 . 14	2.8
į	Rng	5.2-5.6		.45	.04~.05		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
B2 1	Ave	5.2		. 33			1.6		7.1	3.4	.2	. 25	8.5			57	2.1
DEI	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		.23	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 Rng	.42 4.7-5.3		.02 .2528			.21 1.5-1.8		.21	.85 4.3-5.5	.2	.07 .23	2.7 8-12			5.0 57-64	.30 1.7-2.2
	N	2		2			2		2	2	2	2	2			2	2
																	_
В23	Ave S D	4.85 .35		.195 .007			1.75		11.9 .64	6.3	.3 .07	.3 .07	10.1 2.5			64.0 5.7	1.9
	Rng	4.6-5.1		.192			1-2.5		11-12	6-7	.23	.23	8-12			61-69	1.7-2.1
	N	2		2			2		2	2	2	2	2			2	2
CI	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 N	4.8~5 2		.091 2			.5-2.8 2		6-12 2	3-7 2	. 4 2	.23	6-10 2			62-68	1.8-1.9
	.,			•					^		-	1				1	_
C2	Ave S D	4.9 .28		.06			1.3		9.0	5.2 3.3	.45	.2	8.0 3.5			63.5 5.0	1.7
	Rng	4.7-5.1		.014 .0507			1.4		6.1 4-13	3.3 2.9-7.5		.2	3.3 6-11			60-67	1.6-1.8
	N	2		2			2		2	2	2	2	2			2	2
	Ave	ł									} ,						
	S D					·	,				ļ '					1	
	Rng									<u>.</u>		İ					
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SOIL SERIES: Dufur

TAXONOMIC NAME: Calcic Haploxeroll

SUIL BER	ico. Du	LUE					TAXONOMIC	NAME: Cal	cic Hablox	eroll			
liori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
		(cm)		}z			<b>х</b> н <sub>2</sub> 0		(g/cc)				
Ар	Ave S D Rng N	7.0 1.4 6-8 2	33.1 .87 32-34 3	52.8 1.4 51-54 3	14.1 1.8 12-16 3	36.0 1.72 34-38 3	22.3 1.11 21-23 3	8.5 7.0 7-9 3					
Bl	Ave S D Rng N	1	33.0	50.9	16.1	38.0	22.8	8.9					
B2 1	Ave S D Rng N	9.5 4.9 6-13 2	33.25 .35 33-34 2	52.8 .99 52-54	14.0 .64 13-15 2	37.4 .42 37-38 2	22.2 .21 22-23 2	8.2 .28 8-8.4 2					
B22	Ave S D Rng N	12.0 2.8 10-14 2	33.8  33.8 2	53.1  53.1 2	13.1  13.1 2	35.0 1.5 34-36 2	22.1 .35 21-23 2	8.7 .91 8-9.3 2					
B23	Ave S D Rng N	8.5 2.1 7-10 2	38.4 5.4 34~42 2	53.1 3.2 51-55 2	8.5 2.2 7-10 2	34.1 1.9 33-35 2	22.2 .28 22-23 2	8.4 .64 8-9 2					
Сса	Ave S D Rng N	13.5 .7 13-14 2	36.4 .99 35-37 2	57.6 3.3 55~60 2	6.1 2.3 4-8 2	37.3 1.7 36-39 2	24.1 1.6 23-25 2	10.1 2.3 8-12 2					
Cca-Dr	Ave S D Rng N	19	56.2	37.8	6.0	35.8	25.0	12.4					
	Ave S D Rng N												
	Ave S D Rng N										·		
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SOIL SE	RIES:	Dufur					Т	AXONOMIC	NAME:	Calcic H	aploxero	11				
Hor1 zon	Stat.	pН	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	К	H+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)	 %			ž	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Ар	Ave S D Rng N	6.47 .06 6.4-6.5	 1.00 .14 .8-1.1	.085 .001 .0809	11.8 1.6 10-13 3			10.0 .4 9-11 3	3.0 .36 2.7-3.4	.17 .06 .12	1.4 .23 1.1-1.5	3.9 .35 3.6-4.3	19.0 .66 18-20 3	76.7 2.5 74-79 3	80.0 77-83 3.0 3	3.4 .34 3.1-3.7
B1	Ave S D Rng N	6.7	 .76	.075	10.1			10.1	3.4	0.3	1.3	3.3	19.4	78	82 1	3.0
B2 I	Ave S D Rng N	7.0  7.0 2	 .615 .007 .6162	.063 .003 .0607 2	9.8 .6 9-10 2			9.5 .5 9-10 2	4.1 .35 3.8-4.3 2	.15 .07 .12	1.2	2.7 .14 2.6-2.8 2	18.9 .14 18.8-19 2	3.5	1.4	2.4 .07 2.3-2.4 2
B22	Ave S D Rng N	7.35 .07 7.3-7.4 2	 .36 .24 .16 2	.061	8.7			9.4 .57 9-10 2	5.15 .21 5-5.3 2	.35 .07 .34	2.55 .21 2.4-2.7 2	1.35 .21 1.2-1.5 2	18.0 .92 17-19 2	8.5	1.4	1.8  1.8 2
B23	Ave S D Rng N	7.55 .21 7.4-7.7 2	 . 22 . 17 . 1 4 2					8.05 .07 8-8.1 2	5.0 .35 4.7-5.2 2	.07	2.7 .57 2.3-3.1 2	1.0 .56 .6-1.4 2	18.2 .28 18-18.4 2	3.5	2.8 92-96	1.6 .14 1.5-1.7 2
Cca	Ave S D Rng N	8.45 .50 8.1-8.8 2	 .145 .02 .1316 2					17.5 1.3 16-19 2	8.0 1.1 7.2-8.8 2	7.8 8.6 1-14 2	4.5 .92 3-5 2		22.1 4.9 18-26 2			2.25 .50 1.9-2.6 2
Cca-Dr	Ave S D Rng N	8.0	 .09					18.9	7.9	1.5	3.1	.7	25.8	100	98	2.4
:	Ave S D Rng N								·							
	Ave S D Rng N															
			-								·					

SOIL SERIES: Dumont

TAXONOMIC NAME: Typic Haploxerult

							IAAAMATIC	ատար, դայի	re nahroxe	uit			
Hor1 zon	Stat.	Horizon Thickness	Sand	Silt	Clay	. 10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
	ĺ	(cm)		} %			% II <sub>2</sub> 0		(g/cc)				
						Ì	<b>'</b>		-		ļ		
Al	Ave	6.3	38.9	41.2	19.9			17.0	.81		Ì		
	a a	3.2	4.6	6.1	1.6			1.4					·
	Rng	4-10	34-43	35-48	18-21			15-18			ļ		
	N	3	3	3	3			3	1				
A12	Ave	5.5	33.3	42.7	24.1			14.6					
	SD	.71	2.3	4.4	2.1			3.8			İ		ĺ
	Rng	5-6	31-35	39-56	22-26			12-17			ŀ	ļ	
	N	2	2	2	2			2				}	
A3-B1	Ave	7.0	34.3	38.1	27.6			16.1	. 88		l		
	SD	2.6	5.5	4.3	2.3			3.8	.00				]
	Rng N	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 N	8-10 2	24-28 2	33-42 2	30-43 2			13~21					
	•	, *	2	<b>'</b>	2			2					
B22€	Ave	12.3	23.1	32.1	44.8			21.4	1.21				
	S D Rng	6.0	1.7	4.4	2.7			4.1					
	N	6-18 3	21-25 3	27-35 3	43-48 3			17~25 3	1				
					,			د	1				
B23t	Ave	8.5	19.8	36.1	44.2			20.7					
	S D Rng	2.1 7-10	,57 19-20	2.5	1.9			3.7					
	N Kilk	2	2	34~38 2	43⊢46 2			18-23					
				1				•					
B24 t	Ave	7	15.7	32.4	51.9			21.8					
	S D Rng												
	N		í l	ì	1			1					
B31t	Ave S D	11.5 2.1	12.2	35.9	47.5			25.9	1.45				
	Rng	10-13	15.3 10-23	3.3 33~38	12.2 39-56			5.9 22-30					
	พั	2	2	2	2			2	1				
B32t	Ave	15.0	<u> </u>	1							1		
0321	S D	15.0 8.5	21.4 4.0	40.3 3.4	38.4 .64			26.0	1.47		[		
ł	Rng	9-21	18-24	38-43	38-39			1.3 25-27				ľ	
	N	2	2	2	2			2	ì				
	<b>\</b>												
	] ]										]		
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SOIL SERIES: Dumont

TAXONOMIC NAME: Typic Haploxerult

SOIL SER	IES: Du	mon t	_				TAXONOMIC	NAME: Typ	ic Haploxe	rult		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		X			% H <sub>2</sub> 0		(g/cc)			
Cl	Ave S D Rng N	24.7 11.5 13-36 3	31.6 4.4 27-36 3	44.9 8.9 38-55 3	23.5 5.0 18-27 3			21.2 2.3 18-23 3	1.20 .23 1.0-1.4 2			
C2	Ave S D Rng N	27 9.9 20-34 2	33.0 8.0 27-39 2	47.4 11.7 39-56 2	19.6 3.7 17-22 2			21.3 .28 21-22 2				
	Ave S D Rng N								1			
	Ave S D Rng N								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					i e						

SOIL SE	RIES:	Dumont					1	'AXONOM LC	NAME:	Typic Ha	ploxerul	t				
Horizon	Stat.	рН	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Са	Mg	вИ	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)	  z		!	χ.	(ppm)			Meq/l	00g			(Σ Cat)	(NH <sub>4</sub> OAc)	
Al	Ave S D Rng N	6.0 .40 5.6-6.4 3	 4.1 .57 3.6-4.5 2	.009	22.5 2.1 21-24 2	3.1 .28 2.9-3.3	4.6	13.8 1.2 12-15 3	2.4 .71 1.9-2.9 2	.1	.90 .1 .8-1.0	18.6 .14 18.5-19 2	34.3 4.4 30-39 3	49.5 .71 49-50 2	3.5	6.3 1.8 4-7.6 2
A12	Ave S D Rng N	5.8  5.8 2	 1.58 .11 1.5-1.7 2	.101 .03 .0812	16.0 2.8 14-18 2	3.6 .28 3.4-3.8 2		7.9 4.6 4-11 2	2.1 .71 1.6-2.6 2	.1	.6 .071 .6~.7	14.7 1.7. 13.5-16 2	26.6 7.6 21-32 2	41.0 9.9 34-48 2	8.5 33-45	3.6 .99 2.9-4.3
A3-B1	Ave S D Rng N	5.37 .25 5.1-5.6 3	 .85 .23 .7-1.0 2	.080 .028 .061 2	10.5 .71 10-11 2	3.9 .28 10-11 2	5.7	7.7 3.1 4-10 3	2.0 1.1 1.2-2.8 2	.1 .1 2	.61 .10 .57	13.3 3.0 11-15 2	25.5 6.5 18-30 3	40.0 4.2 37-43 3	3.5 30-41	3.4 .5 3-3.7
B21t	Ave S D Rng N	5.25 .21 5.1-5.4 2	 .50 .12 .46 2	.047 .009 .0406 2	10.5 .71 10-11 2	4.6 .64 4-5 2		5.5 .71 5-6 2	2.6 .71 2.1-3.1 2		.45 .07 .45 2	14.7 7.5 9.4-20 2	10.7 11.5 18-33 2	39.5 9.2 33-46 2	8.5 30-42	2.2 .35 1.9-2.4 2
B22t	Ave S D Rng N	5.1 .3 4.8-5.4 3	 .74 .76 .2-1.3	.032 .003 .0304 2		4.75 .64 4.3-5.2 2	1.0		2.8 .85 2.2-3.4 2		.40 .18 .36 3	16.2 3.7 14-19 2	26.3 5.7 20-33 3	36.5 6.4 32-41 2	31	1.75 .07 1.7-1.8 2
B23t	Ave S D Rng N	5.2 .14 5.1-5.3 2	 .15 .06 .11~.19 2			4.9 .78 4.3-5.4 2	  	5.6 2.4 3.9-7.3 2	3.4 1.4 2.4-4.4 2	.15 .07 .12 2	.3 .3 2	15.6 3.1 13.4–18 2	27.9 7.1 23-33 2	37.0 5.7 33-41 2	5.7	1.65 .07 1.6-1.7
B24t	Ave S D Rng N	5.3	 1 .08	1		4.6 1		3.9	2.8		0.3	19	34.1	27	21 1	1.4
B31c	Ave S D Rng N	5.2 .21 5-5.3 2	 .15 .04 .1218 2			5.7  5.7 2		2.5 4.8-8.4	4.8 .28 4.6-5 2	.15 .07 .12 2	.35 .07 .34 2	15	41.4 13.9 31~51 2	34 17 22-46 2	16	1.4 .57 1-1.8 2
B32€	Ave S D Rng N	4.9 .14 4.8-5.0 2	 .16 3.0 .1418 2			7.2 2.8 5-9 2		7.15 6.2 3-12 2	5.9 .21 5.7-6 2	.15 .07 .12 2	.3  .3 2	26.8 15.3 16-37.6 2	41.5 5.0 38-45 2	36 24.0 19-53 2	34 20 20–48 2	1.2 .99 .5~1.9 2

SOIL SERIES: Dumont

TAXONOMIC NAME: Typic Haploxerult

3011. 36		DUNIOUT								NAME:	туртс на	broxerar	L				
Hori zon	Stat.	pli	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Mg	Na Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
414 - 101 - 1		(1:1 H <sub>2</sub> 0)		%			ž	(ppm)			Meq/1	00g			(Σ Cat)	(NH <sub>4</sub> OAc)	
Cl	Ave S D Rng N	4.83 .15 4.7-5		.01			5.4 .91 4.4-6.2	2.2	3.8 3.9 .6-8 3	5.3 .64 4.8-5.7	.15 .07 .12	.25 .05 .23	26.2 12.7 17-35.2 2	6.8	32.0 17 20-44 2	30.5 15 20-41	1.1 .84 .4-1.7
C2	Ave S D Rng N	4.8 .14 4.7-4.9 2		.01  .01 2			5.35 .91 4.7-6.0 2		5.1 1.3 4.2-6 2	6.1 2.6 4.2-7.9	.15 .07 .12 2	.2 .14 .13	27.4 7.4 22-32.6 2	40.8 4.0 38-44 2	2.8	.7 28-29	1.0 .61 2
	Ave S D Rng N	·															
	Ave S D Rng N					-											
	Ave S D Rng N	·							·			1					
	Ave S D Rng N										ı						
·	Ave S D Rng N										į.						
	Ave S D Rng N			·													
	Ave S D Rng N																

SOIL SERIES: Elmore (Stony loam)

TAXONOMIC NAME: Pachic Ultic Argixeroll

	1									B. verest			
Hori zon	Stat.	Hortzon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
		(cm)		X			% н <sub>2</sub> 0		(g/cc)				
							2		-				
Al	Ave	10.8	39.9	44.6	16.0	43.7	27.8	11. 3					
A1	S D	2.5	4.2	44.6	2.0	7-6	2.5	11.2 1.3				·	
	Rng	7-13	35-44	38-48	13-18	36-50	26-31	9-12					
	N	4	4	4	4	4	4	4					
				·	·	·	·						
A3	Ave	13.4	37.3	34.8	27.9	44.6	26.1	13.1					
	SD	4.9	4.4	14.2	12.5	6.2	2.0	1.3					
	Rng	10-21	30-41	14-45	16-46	38-50	24-28	11-14					
	N	4	4	4	4	4	4	4		. ,			
Bl	Ave	17.8	34.2	29.9	35.0	47.4	20.0	16.0					
ь.	S D	6.7	10.4	15.2	35.9 15.7	1.5	30.0 8.0	16.8 6.3					
	Rng	12-25	22-43	14-45	17-47	46-49	24-39	12-24					
	N	3	3	3	3	3	3	3					
								-					
B2	Ave	19.7	35.1	33.5	31.4	44.9	30.8	21.4					
	S D	5.2	9.1	13.0	14.1	6.0	7.8	9.7					
	Rng N	15-25 4	23-45 4	17-49	14-38	39-53	26-42	11-32					
		4	4	4	4	4	4	4			i		
В3	Ave	26.0	39.0	32.6	28.4	44.6	30.4	18.0					
	S D	5.6	11.7	11.8	15.4	5.0	8.1	6.4					
	Rng	17-31	24-52	15-41	8-39	42-52	22-42	11-27					
	N	4	4	4	4	4	4	4			;		
Cca	Ave	50.7	43.7	29.4	26.9	44.1	31.6	20.4				į	
oca -	S D	14.6	9,2	9.9	7.7	6.2	5.4	3.8					
	Rng	38-64	33-53	15-37	17-34	36~50	26-38	16-25					
	N	4	4	4	4	4	4	4					
	Ave												
	S D			'									
	Rng N												
	"	i											
	Ave												
	SD												
	Rng							1					
	N												
	Ave			}									
	S D									*			
	Rng												
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	i (							i l					

Organic   Orga	OH, SEF	HES:	Elmore (S				1			CAXONOMIC	NAME:	Pachic U	itic Arg	ixeroll				
A1	ori zon	Stat.	рΗ							Ca	Mg	Na	K	н+	CEC			Ca/Mg
S. D.		1 14 14 14 14 14 14 14 14 14 14 14 14 14	(1:1 H <sub>2</sub> 0)		x			Z	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
S D   .22	Al	S D Rng	.30 6.2~6.8		.71 .9-2.4	.05 .0818	1.2 11-13			.9 10~13	.99 4.2-6.4	. 14 . 2 5	.19 1.4-1.8	1.7 3.1-6.7	3.3 19-27	6.2 73~86	5.5 74-86	.34 1.6-2.5
S D   C   C   C   C   C   C   C   C   C	А3	S D Rng	.22 6.3-6.8		.35 .9-1.7	.02 .0814	.93 10-12			2.0 11-15	.35 6.8-7.6	.17 .26	.28 1.5-2.1	1.1 3.2-5.7	1.9 25-30	4.8 75-86	3.9 80-89	.27 1.5-2.2
S D	B1	S D Rng	.21 6.4-6.8		.21 1.0-1.5	.009 .1113	1.0 9-12			6.1 12-24	4.1 8-14	.21 .26	.4 1.3-2.1	1.2 3.6-5.7	10.0 30-48	4.4 76-84	4.4 80-88	.18 1.3-1.7
S D Rng N Ave S D Rng N Rng N Rng N Ave S D Rng N	В2	S D Rng	. 17 6. 7-7. 1		.14 .7-1.1	.009 .0811	.82 8-11			4.9 13-25	3.0 10-16	.17 .48	. 14 1. 7-2	1.2 2.9-5.4	10.1 29-52	4.2 81-91	1.7 87-91	.17 1.3-1.8
S D	в3	S D Rng	.57 6.5-7.8		.37 .6-1.4	.03 .0614	.67 9-11			3.8 17-26	3.0 10-17	.75 .3-1	7.1 1.6-2.0	1.3 3.1-5.7	10.6 31~55	16.8 81-116	6.6 84-100	.17 1.4-1.9
S D Rng N Ave S D Rng N Ave S D	Cea	S D Rng	.43 7.0-7.9	-	.20 .36~.77	.03 .0309	1.4 8-11			7.8 15-33	6.1 17-23	.44 .5-1.5	.30 1.4-2.1	.81	8.3 35-55	23.4 86->100	3.5 92-100	.50 .5~1.6
S D Rng N		S D Rng										( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )						
		S D Rng										) 						
	. !	S D Rng										1						

SOIL SERIES: Enola

TAXONOMIC NAME: Andic Dystrochrept

		4					TAYONOLLIC	NAME: And	ic pastroc	nrept			
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	. 33 Acm.	15 Atm.	Bulk Density				
		(cm)		%			H <sub>2</sub> 0		(g/cc)				
01	Ave S D Rng N	1.3-0			NO	ATA AVAILA							
A2	Ave	0-1.3		]		1					ł		
·	S D Rng N	1			NO	DATA AVAILA	BLE						
B2 fr	Ave	1.3-10	53.6	39.8	6.6							Ī	
	SD										ļ		
	Rng N	1	1	1 ,	1								
B31ir	Ave	10-25	52.9	41.6	5.5	40.1	36.1	11.0	0.7				}
	SD											ļ	
	Rng N	1	1	1	1	1	1	1	1				
B321r	Ave	25-51	56.7	40.4	2.9				-				
	S D	/											
	Rng	1	1	1	1								
С	N	51-97	55.4	43.8									
	Ave S D	31-9/ /	33.4	43.8	0.8	44.2	40.7	17.7	0.9				
1	Rng	1	1	1	1	1		1					
	N	1	. 1	1	1	1	1	1	1				
	Ave S D	1											
	Rng N												
	Ave				+ -								
	S D Rng												
	И	}	!										
	Ave	]											
	S D												
	Rng N	- 1											
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Hor1zon	Stat.	pĦ	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	К	H <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		x			x	(ppm)			Meq/10	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
01	Ave S D Rng N	4.9						No	DATA AV	AILABLE	-						
.2	Ave S D Rng N	5.6						NO	DATA A	AILABLE							
32 ir	Ave S D Rng N	5.9	3.9	2.3	.085	26	1.5	6.3	1.7	0.4	0.3	0.3		16.0	16.6		4.25
331ir	Ave S D Rng N	5.8	2.5	1.5	.058	25	1.3	1.7	0.8	0.3	0.3	0.2		12.7	12.2		2.66
3321r	Ave S D Rng N	5.5	2.1	1.2	.066	19	1.9	2.5	0.7	0.3	0.4	0.2		14.2	10.8		2.33
C	Ave S D Rng N	5.8	0.9	0.5	.035	2	1.9	1.0	0.7	0.3	0.2	0.1		17.9	6.9		2.33
	Ave S D Rng N																
	Ave S D Rng N											,		·	,		
	Ave S D Rng N																

SOIL SERIES: Era

TAXONOMIC NAME: Calciorthidic Haploxeroll

	i El	•					TAXONOMIC	NAME: Cal	cioreniqie	нартожего.	11	
llorizon	Stat.	Hortzon Thickness	Sand	Silt	Clay	.10 Atm.	. 33 Atm.	15 Atm.	Bulk Density			
		(cm)		%			<b>х</b> н <sub>2</sub> 0		(g/cc)			<del> </del>
Ар	Ave S D Rng N	0-7.6	42.98	40.31	16.71			9.46				
A12	Ave S D Rng N	7.6-20	43.95	39.76	16.29			10.30				
в2	Ave S D Rng N	20-41	46.19	38.87	14.94			9.93				
Cl	Ave S D Rng N	41-58	47.31	40.34	12,35			9.50				
C2ca	Ave S D Rng N	58-94	51.67	40.13	8.20	  		8.37				
·	Ave S D Rng N	94-122	57.91	36.94	5.15			7.88				
	Ave S D Rng N											
	Ave S D Rng N										·	
	Ave S D Rng N											
Ī	l	1	1			}			-			

SOIL SE	RIES:	Era	Organic	Organic	1	C/Ñ	Free	T Avail.	AXONOMIC	NAME:	Calciorti 	nidic Hap	1	1 1	% Base	% Base	I
Hori zon	Stat.	рĦ	Matter	Carbon	N	Ratio	Fe <sub>2</sub> O <sub>3</sub>	Р	Ca	Mg	Na	К	н+ '	CEC	Sat.	Sat.	Ca/Mg
		(1:1 H <sub>2</sub> O)		X			z	(ppm)			Meq/1	00g 			(NH <sub>4</sub> OAc)	(E Cat)	
Ар	Ave S D	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
	Rng N	1		1	/	,			/	1	,	1	1	,	/	/	/
A12	Ave	7.6		0.8	0.05	1 16.0			10.8	7.4	0.15	1.74	2.4	18.8	100.0	1 89.3	1.46
****	S D Rng											./					
	N .	1		1	1	1			1	1	1	1	1	1	1	1	1
В2	Ave S D Rng	1.1		0.6	0.06	10.0			12.4	8.6	0.24	1.56	3.3	18.7	100,0	84.1	1.44
	N	1		1	1	1			1	1	1	1	1	1	1	1	1
C1	Ave S D	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
	Rng N	1		1	1	1			1	_1	1	1	1	1	1	1	1
C2ca	Ave S D	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
	Rng	/			/	/			1	1	1	1	1	1	1	/	/
i	Ave	9.2		1 0.2	1 0.30	1 6.7			30.2	11.5	3.22	0.86	0.1	15.4	100.0	1 100.0	2.63
	S D Rng					/							/		/	/	//
	N	1		1	1	1			1	1	1	1	1	1	1	1	1
	Ave S D Rng					٠.				-							
	N																
	Ave S D																
	Rng N										:						
	Ave S D						÷										
	Rng N																
														1			

SOII. SER	IES;	Fives					TAXONOMIC	NAME: U	ltic Haplor	keralf		•	
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	·15 Atm.	Bulk Density				
		(cw)		2			х н <sub>2</sub> 0		(g/cc)				
Al	Ave S D Rng N	10.0  10.0 2	39.55 .2 39-39.7 2	43.2 5.4 39-47 2	17.25 5.2 14-21 2			14.65 .5 14-15 2					
A3	Ave S D Rng N	13.0  13.0 2	38.5 2.1 37-40 2	41.45 5.2 38-45 2	20.05 7.3 15-25 2			16.4 1.8 15-18	  				
В1	Ave S D Rng N	15.0 7.1 10-20 2	37.05 2.1 36-39 2	38.25 6.4 34-43 2	24.7 8.5 19-31 2	  		18.8 2.0 17-20 2					
B21t	Ave S D Rng N	21.5 2.1 20-23 2	35.65 1.1 35-36 2	33.25 8.0 28-39 2	31.1 6.9 26-36 2			21.25 .5 21-21.6 2					
B22t	Ave S D Rng N	26.0 7.1 21-31 2	37.55 1.8 36-39 2	29.8 4.1 27-33 2	32.7 2.3 31-34 2	  	  	22.2 2.1 21-24 2					
В3	Ave S D Rng N	28.5 16.3 17-40 2	40.35 4.2 37-43 2	28.35 2.2 27-33 2	31.3 2.0 30-33 2	,		22.25 3.7 20-25 2					
C1	Ave S D Rng N	32.0 1.4 31-33 2	52.25 1.8 51-54 2	24.65 .6 24-25 2	23.1 2.4 21-25 2			19.95 4.0 17-23 2	  				
C2	Ave S D Rng N	32.0 1.4 31-33 2	51.0 3.9 48-54 2	25.15 2.05 23-27 2	23.8 1.8 23-25 2			19.75 2.6 18-22 2	  				
	Ave S D Rng N												
					•		•	•	•		,	•	

SOIL SEI	RIES:	fives	•					1	CAXONOMIC	NAME:	Ultic	Haploxera	1f				
Hor1 zon	Stat.	рН		Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)	~	%			Z	(ppm)		<b></b>	Meq/l	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Al	Ave S D Rng N	5.75 .07 5.7-5.8 2		2.2 .2 2.1-2.4 2	.10 .04 .0713	23.2 7.6 18-29 2	1.5 .14 1.4-1.6 2		15.0 .7 15-15.5 2	3.5 .3 3.3-3.7 2	.2	1.25 1.1 .5-2.0 2	13.1 1.8 12-14 2	35.2 5.7 31-39 2	57.1 4.9 54-61 2	60.45 1.6 59-62 2	4.3 .6 3.9-4.7
А3	Ave S D Rng N	5.25 .07 5.2~5.3 2	  	1.1 .01 1-1.13 2	.06 .02 .0508 2	19.3 6.8 14-24 2	1.45 .35 1.2-1.7 2		14.8 .7 14-15 2	4.15 .9 3.5-4.8	.2	1.1 .8 .5-1.7	11.25 1.3 10-12 2	34.15 4.0 31-37 2	59.8 9.4 53-66 2	64.35 3.6 62-67 2	3.6 .6 3.2-4.1 2
В1	Ave S D Rng N	5.1 .1 5.0-5.2 2		.6 .1 .5168 2	.04 .01 .0305	16.0 8.4 10-22 2	1.5 .3 1.3-1.7 2		15.9 .8 15-17 2	5.5 1.8 4.2-6.8 2	.2 .1 .13	.95 .6 .5-1.4	10.85 .6 10-11 2	33.95 .9 33-35 2	66.45 2.5 65-68 2	67.5 1.1 67-68 2	3. 1 1. 2 2. 3-3. 9 2
821t	Ave S D Rng N	4.95 .07 4.9-5.0 2	100 000 000 100 000 100 000 100 000	.45 .03 .4347 2	.03 .01 .0304 2	14.0 5.7 10-18 2	1.55 .21 1.4-1.7 2		16.55 5.1 13-20 2	5.9 1.3 5.0-6.8 2	.15 .07 .1~.2 2	.85 .35 .6-1.1 2	11.6 1.8 10-13 2	37.1 5.0 34-41 2	63.0 3.25 61-65 2	66.65 7.6 61-72	3.0 1.5 1.9-4.0 2
B22t	Ave S D Rng N	4.95 .07 4.9-5.0 2		.3 .1 .2441 2	1	13.7	1.45 .35 1.2-1.7 2		17.55 8.3 12-23 2	6.1 .3 5.9-6.3 2	.2 .2 .2	.75 .35 .5-1.0 2	11.6 .1 11.5-12 2	36.6 4.7 33-40 2	66.3 14.2 56-76 2	67.0 7.8 62-73 2	2.95 1.5 1.9-4.0 2
В3	Ave S D Rag N	4.9 .1 4.8-5.0 2		.2 .02 .1922 2			1.35 .35 1.1-1.6 2		18.3 9.5 12-25 2	6.9 .3 6.7-7.1 2	.3	.65 .4 .49 2	11.1 1.6 10-12 2	37.3 5.8 33-41 2	68.95 14.9 58-80 2	69.5 4.9 66-73 2	2.65 1.5 1.6-3.7 2
C1	Ave S D Rng N	4.85 .07 4.8-4.9 2		.135 .02 .1215 2			1.0 .4 .7-1.3 2		16.2 8.6 10-22 2	5.9 1.1 5.1~6.7 2	.25 .07 .23	.5 .4 .28	11.15 1.3 10-12 2	35.5 10.2 28-43 2	63. 75 4. 2 61-67 2	66.5 5.2 63-70 2	2.95 2.05 1.5-4.4 2
C2	Ave S D Rng N	4.8 .3 4.6-5.0 2		.175 .007 .17~.18 2			1.3 .4 1.0-1.6 2		15.1 6.9 10-20 2	5.65 2.15 4.2-7.1 2	.25 .07 .23	.4 .3 .26 2	11.15 2.9 9.1-13 2	35.65 -9.5 29-42 2	60. 2 1. 4 59-62 2	65.75 .4 60-66 2	3.1 2.4 1.4-4.8 2
	Ave S D Rng N		-								1						
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SOIL SERI	IES:	Flagstaff			'	_	TAXONOMIC	NAME: Ha	ploxeroll1	c Durargid		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	, 33 Atm.	15 Atm.	Bulk Density			
		(cm)		z			<b>х</b> н <sub>2</sub> 0		(g/cc)			
A1	Ave S D Rng N	14.0 17.4 5-45 5	66.7 25.8 29-88 5			21.3 6.1 17-32 5	16.4 6.6 12-28 5	7.7 3.1 5-13 5			,	
A3/B1	Ave S D Rng N	11.0 4.7 6-18 5	51.7 23.3 23-76 5			29.3 9.3 22-45 5	23.3 7.6 17-36 5	13.6 5.15 10-22 5				
В2	Ave S D Rng N	16.8 3.4 12-20 5	48.5 23.8 22-74 5	  		43.8 9.0 32-55 5	35.5 9.95 25-49 5	24.6 5.7 18-33 5				
B3	Ave S D Rng N	18.5 4.2 13-23 4	57.7 23.2 35-79 4	I. I.		53.1 9.8 44-67 4	40.5 12.3 28-56 4	27.3 5.6 21-34 4		ļ	·	
<b>C1</b>	Ave S D Rng N	31.0 13.5 18-53 5	44.0 19.25 18-65 5		,	84.4 24.3 42-102 5	72.1 22.6 33-92 5	33.9 9.2 21-46 5		,		
С2	Ave S D Rng N	52.2 17.8 28-73 5	27.3 16.6 10-49 5			94.4 34.5 44-102 5	81.3 35.8 31-132 5	32.1 12.6 19-52 5				
	Ave S D Rng N											
·	Ave S D Rng N			į							·	
į	Ave S D Rng N											
į												

SOIL SE	L SERIES: Flagstaff							Т	AXONOMIC	NAME:	Haplox	erollic D	urargid				
Hori zon	Stat.	рH		Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	мв	Na	к	H <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
And the second second		(1:1 H <sub>2</sub> O)		<b>x</b>			×	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	e e e des series de que com agramação dos e
<b>A</b> 1	Ave S D Rng N	8.2 1.0 7.4-9.5 5	  	.5 .2 .26 5	.05 .015 .0307	9.8 2.8 5.2-12 5			5.4 2.4 2.2-8.8 5	2.7 1.1 1.1-3.9 5	6.9 5.0 .6-25 5	4.2 2.5 1.5-8.0 5		19.3 12.9 10-42 5		  	1.9 1.1 1.2-3.7 5
A3/B1	Ave S D Rng N	8.6 .8 7.7-9.3		.45 .2 .27 5	.05 .015 .0307 5	6.5 3.8 4.2-11 5			8.0 3.2 5.6-14 5	5.0 1.7 2.7-7.0 5	13.5 13.6 1.4-32 5	5.7 2.9 3.5-11 5		33.6 18.1 19-63 5			1.8 1.1 .8-3.4 5
В2	Ave S D Rng N	9.1 .4 8.7-9.4 5		.6 .3 .39 5	.06 .02 .0409 5	8.8 .9 7.4-9.7 5			13.3 7.2 6-23 5	9.1 4.7 3-15 5	27.7 23.6 8-57 5	6.2 2.9 3-10 5		48.8 19.1 33-76 5			1.6 1.2 .5-3.6
в3	Ave S D Rng N	9.3 .4 8.9-9.7		.5 .2 .27 4	.06 .01 .0407	8.8 2.2 5.6-10 4			17.3 6.1 11-26 4	9.05 6.0 3-15 4	32.4 22.6 13-56	4.9 .85 3.8-5.7 4		47.95 35.7 32-77 4			2.8 1.8 .8-4.7
C1	Ave S D Rng N	9.2 .6 8.5-9.8		.3 .2 .16 5	.06 .02 .04~.07	6.15 .8 5.6-6.7 2			24.3 20.4 14-47 4	20.9 18.2 2-43 4	27.3 16.3 14-50 4	5.4 1.2 4.2-7.0		56.2 18.3 39-81 4			2.6 2.5 1.1-6.3 4
C2	Ave S D Rng N	9.0 .7 8.1-9.8 5		.3 .1 .14 5	.45	9.3			29.3 37.2 4-95 5	18.8 20.7 2-51 5	28.0 12.9 15-42 5	4.65 1.1 3.0-5.7 5		55.2 12.2 39-68 5			2.6 2.5 .5-6.7 5
	Ave S D Rng N																·
	Ave S D Rng N																
	Ave S D Rng N										l						
						!										1	135

SOIL SERIES: Floke

TAXONOMIC NAME: Abruptic Xerollic Durargid

	1	4	t	1	•	1	1	umm: Abt	uptic Xero	llic Durar	şi d		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density	Boron			
	İ	(cm)		X			<b>х</b> н <sub>2</sub> 0		(g/cc)				
					1	l	* " <sub>2</sub> 0		(8/66)	ļ		1	
Al	Ave	7.65	37.0	46.65	,,,	i							ļ
	S D	3.6	23.4	5.3	16.4 18.1			8.15		. 895			
	Rng	5.1-10	20-54	43-50	3.4-29			8.6 2.1-14		.785		İ	
	N	2	2	2	2			2.1-14		.34-1.5 2			
Bl				40.0						•			ļ
D1	Ave S D	6.3 1.8	22.7 8.8	40.3	37.0			16.8		1.16		1	i
	Rng	5-7.6	17-29	1.1 40-41	9.9			2.5		.042		Ì	
	N	2	2	2	30-44 2			15-18		1.1-1.2		ł	
			_	-	-			2		2		1	
B21t	Ave	10.2	16.5	33.95	49.55			26.6		6.52		ļ	
	SD		4.10	8.1	12.2			2.8		5.77			
	Rng	10.2	14-19	28-40	41-59			25~29		2.4-11			
	N	2	2	2	2			2		2		}	
B22 t	Ave	10.15	9.85	41.1	45.7			30.65		2.53			
	SD	.07	2.05	18.5	21.2			3.5		2.33			
	Rng	10-10.2	8.4-11	28-54	31-61	÷		28-33		1.01-4			*
	N	2	2	2	2			2		3			
CI	Ave	8.9	24.7	54.05	21.25		***	30.4					
(sim/ca)	S D	1.8	5.09	1.6	6.7			1.8		3.80 3.32			
	Rng	7.6-10	21-28	53-55	17-26			29-32		1.5-6.1			
	N	2	2	2	2			2		2			
Csim	Ave	8.85	53.9	34.15	12.0			29.6					
1	SD	1.8	3.0	4	3.3			29.6		2.84 1.70			
	Rng	7.6-10	52-56	34-34.4	9.6-14					1.63-4			
	N	2	2	2	2			2		2			
	Ave											ľ	
	SD						1						
	Rng							i					
	N					ŀ			,				
1	Ave	·		'				ļ		i			
	S D				1	j							
	Rng	Ĭ	i										
	N												
	Ave				j								
	S D	1		l	1	ì		l					
	Rng												
	N					1	İ						
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SOIL SEE	RIES:	Floke						т	AXONOMIC	NAME:	Abrupt1	: Xerolli	c Durarg	14			
Hori zon	Stat.	pН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	ĸ	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		%			x	(ppm)			Meq/10	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Al	Ave S D Rng N	7.55 1.2 6.7-8.4 2	1.4 1.7 .21-2.6	.825 1.0 .12-1.5 2		  		21.1 25.7 2.9-39 2	8.45 7.3 3.3-14 2	5.4 5.8 1.3-9.5 2	.7 .9 .6'7	1.5 1.1 .66-2.3		11.5 4.6 8.2-15 2	86.5 19.1 73-100 2		2.0 .8 1.4-2.5 2
В1	Ave S D Rng N	7.8 1.1 7-8.6 2	1.8 .9 1.2-2.5 2	1.07 .5 .68-1.5 2		 		9.0 11.7 .3-17 2	16.4  16.4 2	9.35 1.5 8.3-10 2	5.05 6.3 .6-9.5 2	1.4 .8 .81-2 2	900 000 900 000 000 000 000 000 000	30.6 9.8 24-38 2	96.7 4.7 93-100 2		1.8 .3 1.6-2 2
B21t	Ave S D Rng N	7.6 1.1 6.8-8.4 2	1.45 .3 1.2-1.7 2	.6 .5 .3296 2				4.3 5.1 .7-7.9 2	22.7 1.0 22-23 2	14.25 .9 14-15 2	9.7 12.1 1.1-18 2	1.4 .04 1.3-1.4 2		46.1 7.5 41-51 2	96.7 4.7 93-100 2		1.6 .03 1.57-1.6 2
B22t	Ave S D Rng N	7.7 .7 7.2-8.2 2	1.7 .5 1.3-2.1 2	.8 .6 .36-1.2 2				1.8 .6 1.4-2.2 2	31.75 1.06 31-33 2	17.95 2.2 16-20 2	15.2 19.2 1.6-29 2	1.5 .45 1.2-1.8 2		46.6 3.7 44-49 2	100  100 2	 	1.8 .2 1.7-1.9 2
Cl (sim/Ca)	Ave S D Rng N	8.4 .1 8.3-8.5 2	1.2 .1 1.1-1.2 2	.7 .06 .6472 2				3.8 .3 3.6-4.0 2	43.7 6.0 40-48 2	18.75 2.5 17-21 2	19.4 23.8 2.5-36	1.4 .5 1.0-1.8 2		45.8 4.8 42-49 2	100  100 2		2.4 .6 1.9-2.8 2
Csim	Ave S D Rng N	8.6 .3 8.4-8.8 2	1.4 .15 1.3-1.5 2	.9 .06 .8896 2				11.65 1.9 10-13 2	38.0 .7 38-39 2	14.8 1.7 14-16 2	13.4 16.0 2.1-25	1.0 .4 .69-1.3		51.5 3.3 49-54 2	100  100 2		2.6 .35 2.3-2.8 2
	Ave S D Rng N															,	
	Ave S D Rng N												a				
	Ave S D Rng N																
		ļ		'		1		1		ļ					1		

SOIL SERIES: Floke-like

TAXONOMIC NAME: Abruptic Xerollic Durargid

	1						INVONOUTE	name: Adri	uptic xero	ille Durar	gid	
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		z			% H <sub>2</sub> 0		(g/cc)			
Ai	Ave S D Rng N	4.0 2.1 2.5-5.5 2	46.9 5.6 43-51 2	48.2 4.7 45-52 2	5.0 .92 4.3-5.6			3.8 1.2 2.9-4.6			·	
BI	Ave S D Rng N	13.8 5.7 9-18 2	18.9 10.5 11-26 2	44.0 13.9 34-54 2	37.2 24.4 20-54 2		 	16.2 9.1 9-23 2				
В2	Ave S D Rng N	14.0 1.8 12-15 2	11.4 .14 11-12 2	29.7 8.4 24-36 2	59.0 8.6 53-65 2			31.5 .35 31-32 2				
В3	Ave S D Rng N	8.9 1.8 7-10 2	12.6 1.7 11-14 2	40.5 19.4 26-54 2	47.0 17.8 34-60 2			32.9 2.5 31-35 2				
Csim	Ave S D Rng N	8.9 5.4 5-13 2	75.5	19.6	1 4.9							
	Ave S D Rng N											
	Ave S D Rng N						·					
	Ave S D Rng N											
	Ave S D Rng N		·	. 1	ı							
				1								

SOIL SERIES: Floke-like

TAXONOMIC NAME: Abruptic Xerollic Durargid

DOLE DE									AXUNUMIC	NAME: A	pruptic .	veroffic	Durargi	a			
Horizon	Stat	pH	Organic Matter	Organic	N	C/N Ratio	Free		Ca	Mg	Na	к	н <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
110112011	July 1			<b></b>		Katto	Fe <sub>2</sub> 0 <sub>3</sub>	P	- Ca	ng .				CEC	L		Ca/rig
		(1:1 H <sub>2</sub> 0)		z			2	(ppm)			Meq/10	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
													,				
Al	Ave	8.1	. 69	.40				8.3	5.6	2.4		6.7		9.5	100		2.31
	S D	.50 7.7-8.4	.1	.06 .3644				3.5	1.6	.71 1.9-2.9	1.15	8.6		2.7	100		
	Rng N	2	2	2				5-11 2	4.4-6.7 2	2	.6990 2	.59-13		7-11 2	100		2.31
	-	_										-		~	-		
Bl	Ave	7.9	.80	.46				2.9	12.9	7.7	4.65	.69		21.8	99.0		1.70
	S D Rng	.14 7.8-8	.25 .6-1	.14				2.1 1-4	8.1 7-19	5.1 4-11	3.0 2-7	.26 .59		10.0 14-29	1.4 98-100		.08 1.6-1.8
	N	2	2	2				2	2	2	2	2		2	2		2
0														]			
В2	Ave S D	8.1 .21	1.6	.95 .07				1.3	22.8 3.5	16.8 .57	11.0 .92	1.2		36.4 5.4	100		1.4
	Rng	7.9-8.2						1.1-1.4		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
в3	Ave	8.2	1.63	.94				1.7	29.3	20.7	15.3	1.36		50.2	100	~	1.4
53	S D		.83	.48				.78	6.0	6.1	5.2	.13		8.7			.13
	Rng	8.2	1.0-2.2					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 N	7.6-8.9						4.9-5.8		14-23	9-21	1-1.3		29~54 2	100		2.4-2.7
	N	2	2	2				2	2	2	2	2		2	2		2
	Ave													l ·			
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	Rng																
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SOIL SERIES: Fopiano

TAXONOMIC NAME: Typic Argixeroll

SOIL SER	rea. Fo	<b>A</b>					TAXONOMIC	NAME: Typ:	ic Argixer	011		
Horizon	Stat.	Hortzon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		X		** - ** - ** - ** - ** - **	<b>х</b> н <sub>2</sub> 0		(g/cc)			
Al	Ave S D	0-7.6	28.53	44.61	26.86			15.13	******			
	Rng N	1	1	1	1			1				
A12	Ave S D	7.6-20	23.02	38.80	38.18			19.46				
	Rng N	1	1	1	1			1				
B2t	Ave S D	20-38	23.01	34.61	42.38			24.23	<del></del>			
	Rng N	1	1	1	1			1				
С	Ave S D Rng	Tuff	50.88	37.39	11.73			21.19				
	N	1	1	1	1			1				
	Ave S D Rng	•		1							·	
	N						·					
	Ave S D Rng	į										
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SOIL SE	RIES:	Fopiano						τ	AXONOMIC	NAME:	Typic Ar	gixeroll					
Hori zon	Stat.	ρll	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	ĸ	n <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		<b>z</b>			7	(ppm)			Meq/l	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
A1	Ave S D	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
	Rng N	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1
A12	Ave S D	7.0			0.14			10.3	24.7	7.6	0.3	1.7	5.6	35.9	95.5	86.0	3.25
	Rng N	1			1			1	1	1	1	1	1	1	1	1	1
B2t	Ave S D	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
	Rng N	1	1	1				1	1	1	1	<b>1</b>	1	1	1	1	1
С	Ave S D Rng																
	N																
	Ave S D Rng N										1						
	Ave															-	
	S D Rng N										i						
	Ave S D										; : . !						
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	Ave S D Rng N																
	Ave S D	·	·	:													
	Rng						,										
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SOIL SERIES: Fort Rock

TAXONOMIC NAME: Durixerollic Camborthid

GEN.							TAXUNUMIC	NVWE: not	recottic c	*#moot.ruta			
Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density	Exch. Na	CaCO <sub>3</sub> equiv.		
		(cm)		X	) 170 mm data (160 mps grap crap can		<b>х</b> н <sub>2</sub> 0		(g/cc)				
Al	Ave S D	0-7.6	48.6	51.4		33.9	26.1	12.7		0.7	2	: :	
	Rng N	1	1	1		1	1	1		1	1		
A3	Ave S D	7.6-13	38.6	61.4		39.8	29.9	16.0		0.6	2		
	Rng N	1	1	1		1	1	1		1	1		
B1	Ave S D	13-18	36.1	63.9		48.7	36.4	18.3		0.9	6		
	Rng N	1	1	1		1	1	1		1	1		
B2	Ave S D	18-28	36.7	63.3		58.7	45.6	19.5		1.1	15		
	Rng N	1	1	1		1	1	1		1	1		
83mca	Ave S D	28-48	34.9	65.1		68.4	\$7.1	19.2		1.6	32		
	Rng N	1	1	1		1	1	1		1	1		
C1	Ave S D	48-66	38.0	62.0		63.3	49.2	19.4		1.5	10		
	Rng N	1	1	1		1	1	1		1	1		
C2	Ave S D	66-99	52.5	47.5		53.4	40.0	20.5		1.4	2		٠
	Rng N	1	1	1	,	1	1	1		1	1		
C3	Ave S D Rng	99.0+	35.2	64.8		62.7	48.8	24.2		1.9	1		
	N Rug	1	1	1		1	1	1		1	1		
	Ave S D												
	Rng N											i	
								i					•
								•			-		,

TAXONOMIC NAME: Durixerollic Camborthid

SOIL SE	ERIES:	Fort Rock						T	AXONOMIC	NAME: D	urixerol	11c Camb	ortnia				
Horizon	Stat.	pli	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	ĸ	H <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		<b>z</b>			z	(ppm)			Meq/10	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Al	Ave S D Rng N	8.0		0.80	0.089	9.0		 	28.0	4.0	0.2	4.5		26.8	100		7.0
A3	Ave S D Rng N	8.1		0.76	0.093	8.2			31.5	4.5	0.2	3.5		31.8	100		7.0
B1	Ave S D Rng N	8.2		0.68	0.083	8.2			36.1	5.3	0.3	3.6		34.6	100		6.81
B3mca	Ave S D Rng N	8.2		0.51	0.057	1			31.6	6.1	0.5	2.5		32.2	100		5.18
C1	Ave S D Rng N	8.3		0.37	, 				33.6	7.9	0.5	1.4		33.5	100		4.25
C2	Ave S D Rng N	8.2		0.41					32.6	10.1	0.5	1.2		34.6	100		3.23
C3	Ave S D Rng N	8.2		0.52			100 qui ani		32.8	12.4	0.8	1.8		41.2	100		2.65
	Ave S D Rng N							·									
	Ave S D Rng N																
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SOIL SERIES: Freezener

SOIL SER	ies, ri	eezellet					TAXONOMIC	NAME: UTE	ic Haptoxe	ralt		
llori zon	Stat.	Hortzon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
:	<u> </u>	(cm)		X			% н <sub>2</sub> 0		(g/cc)			
Al	Ave S D Rng N	21.6 1.84 20-23 2	34.2 7.7 29-40 2	43.2 5.52 39-47 2	22.7 2.19 21-24 2			18.7 1 18-19 2			•	
А3	Ave S D Rng N	17.75 .07 17.7–18 2	28.3 12.59 19-37 2	43.9 4.03 41-47 2	27.9 8.49 22-34 2	 		20.1 3.39 18-23 2				
B22t	Ave S D Rng N	42 1.77 41-43 2	22.5 9.19 16-29 2	38.5 1.77 37-40 2	39.3 7.85 34-45 2			24.5 1.7 23-26 2	  			
B23t	Ave S D Rng N	30.5 3.54 28-33 2	27.6 15.98 16-39 2	36.2 4.67 33-40 2	36.2 11.31 28-44 2	  		24.5 3.32 22-27 2		•		
B3t+R	Ave S D Rng N	101.6 46.67 69-135 2	36.4 20.51 22-51 2	37.5 4.17 35-40 2	26.2 16.55 15-38 2			20.2 4.88 17-24 2				
	Ave S D Rng N				,							
	Ave S.D Rng N											
	Ave S D Rng N											
	Ave S D Rng N				1							
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SOIL SERIES: Freezener TAXONOMIC NAME: Ultic Haploxeralf Organic Organic C/N Free Avail. % Base | % Base H+ Horizon Stat. рĦ Matter Carbon Fe<sub>2</sub>O<sub>3</sub> K Ratio P Ca Na CEC Ca/Mg Mg Sat. Sat. (1:1 H<sub>2</sub>0) Z -Meq/100g----(NH, OAc) (E Cat) (ppm) Αi 5.15 Ave 2.78 .55 22.5 3.5 11.0 3.0 .13 1.05 19.1 44.3 38.0 41 3.73 SD .5 ---.71 .57 2.1 .9 \_\_\_ 1.8 .04 . 14 . 21 2.4 2.6 7.8 6 .78 Rng 5.4-6.1 2.3-3.3 .15-.96 21-24 2.9-4.1 \_\_\_ 9.8-12 2.9-3.1.1-.15 1.9-1.2 17-21 36-40 35-46 40-49 3.2-4.3 2 ---2 2 2 2 2 2 2 2 **A**3 Ave 5.5 1.0 \_\_\_ .567 14.5 3.8 8.75 3.55 .15 .8 17.9 33.5 39.3 42 2.48 S D .07 . 30 .024 .71 .50 ---2.05 .92 .07 1.13 5.52 1.5 4.24 .06 Rng 5.2-5.8 .77-1.2 .05-.08 14-15 ---3.4-4.1 \_\_\_ 7.3-10 2.9-4.2 .1-.2 . 8 17-19 30~37 38-41 39-45 2.4-2.5 2 \_\_\_ 2 2 \_\_\_ 2 2 12 2 2 2 B22t Ave 5.3 .253 .027 14 3.85 \_\_\_ 10.2 3.85 1.2 ---.15 13.6 32.13 48 53.8 2.71 S D .212 \_---. 149 .071 1.91 11.63 ---.283 4.81 8.27 2.8 4.6 .778 .15-.36 Rng 5.2-5.5 ---3.8-3.9 ---8.8-12 2.7-5 .15 1.0-1.4 10-17 46-50 26-38 51-57 2.2-3.3 2 ---2 2 2 2 2 2 2 B23t Ave 5.25 . 12 \_\_\_ ---3.4 \_\_\_ 9.55 4.3 . 2 1.2 13.9 35.5 43 52.5 2.3 .028 S D . 283 ---\_\_\_ .141 \_\_\_ 1.77 1.56 4.31 3.54 4.2 . 71 .417 5.1-5.5 Rng \_\_\_ .10-.14 3.3-3.5 \_\_\_ 8-11 3.2-5.4 . 2 1.2 40-46 11-16 32-39 52~53 2-2.59 2 \_\_\_ 12 2 2 2 2 2 2 2 B3c+R 5.28 Ave \_\_\_ . 11 2.6 7.6 3.78 . 2 1.05 ---14.8 32.3 38.5 45.8 2.06 S D . 141 ---.092 ---.849 ---2.97 1.84 \_\_\_ .212 3.11 7.43 5.3 .212 6.4 5.2-5.4 Rng ---.04-.17 ---2-3.2 \_\_\_ 5.5-9.7 2.5-5.1 . 2 .9-1.2 13-17 27-38 34-43 2~50 1.9-2.2 2 \_\_\_ ---12 \_\_\_ 12 2 2 2 Ave S D Rng Ave S D Rng Ave S D Rng

Ave S D Rng

SOIL SER	IES: F	rohman			1		TAXONOMIC	NAME:	Xerollic D	urorth1d			
Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	, 33 Atm.	15 Atm.	Bulk Density			1	
		(cm)		x			% н <sub>2</sub> 0		(g/cc)				
Ар	Ave S D Rng N	0-20	16.21	70.41	13.38			8.28					
В2	Ave S D Rng N	20-36	9.85	71.92	18.23			11.30	 		·		
CISIM	Ave S D Rng N	36-61	9.30	81.38	9.32		  	11.93					
	Ave S D Rng N									:		: :	
	Ave S D Rng N												
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	Ave S D Rng N									,			
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SOIL SEI	RIES:							1	'AXONOMIC	NAME:	Xero11	ic Duror	thid				
Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Mg	Na	К	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(l:1 H <sub>2</sub> 0)		x			Z	(ppm)				00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Ар	Ave S D Rng N	7.8	0.42					4	10.0	4.6	0.56	1.28	2.2	7.99	100	88.1	2.17
В2	Ave S D Rng N	7.8	0.41	  				2	10.8	8.4	1.38	0.92	2.3	10.84	100	90.3	1.29
Cisim	Ave S D Rng N	8.6			 			5	19.1	13.7	2.88	0.60			`		1.39
-	Ave S D Rng N										I.						•
	Ave SD Rng N																
	Ave S D Rng N			,				·			1						
	Ave S D Rng N								·								
	Ave S D Rng N									:							
	Ave S D Rng N																

SOIL SERIES: Goble

TAXONOMIC NAME: Andic Fragiumbrept

aott but				4			TAXONOMIC	NAME: And	ic Fragium	brept		
llorizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
:		(cm)		X			% н <sub>2</sub> 0		(g/cc)			•
Al	Ave S D	17.8	17.7	63.5	18.9			15.7				
	Rng N	1	1	1	1			1				
А3	Ave S D	15.2	18.3	70.0	14.8			13.3				
	Rng N	1	1	1	1			1			·	
Blt	Ave S D	38.1	18.6	65.9	15.6			12.0				
·	Rng N	1	1	1	1							
B2 t	Ave S D Rng	33.0	18.25	63.25	19.05			11.7				
	N	1	1	1	1			1				
IIB¢b	Ave S D Rng	22.9	15.3	59.0	25.7			13.2				
	N	1	1	1	1			1				
	Ave S D Rng										-	
	N Ave											
	S D Rng											
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	S D Rng											
	N Ave											
	S D Rng										,	
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SOIL SEI	RIES:	Goble						7	'AXONOMIC	NAME:	Andic Fr	aotumbre:	n r				
Hori zon		рН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
:		(1:1 H <sub>2</sub> O)		<b>z</b>			z	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	<del></del>
Al	Ave S D Rng N	5.95 .35 5.7-6.2 2	5.7 3.1 3.5-7.9 2					7	7.5 4.0 4-10 2	2.25 .50 1.9-2.6 2	.09 .01 .081	.81 .15 .7~.9 2	23.9	14.6	52.1	36.4	3.25 1.1 2.5-4 2
<b>A</b> 3	Ave S D Rng N	5.75 .49 5.4-6.1 2	3.5 3.15 1.2-5.7 2		 			5	2.95 1.6 1.8-4.1 2	1.25 .07 1.2-1.3		.47 .09 .4~.6 2	24.4	11.5	31.1	19.5	2.4 1.2 1.5-3.2 2
Blt	Ave S D Rng N	5.75 .35 5.5-6.0 2	1.2 .85 .6-1.8 2					2	1.7 1.6 .6-2.8 2	.75 .35 .5-1	.1	.34 .06 .34	16.3	15.1	32.2	8.4	2.0 1.1 1.2-2.8 2
B2 t	Ave S D Rng N	5.73 .25 5.5-5.9 2	.89 .87 .2-1.5 2			  		3	1.5 1.3 .6-2.4 2	1.0 .74 .5-1.6 2	.50 .53 .12 2	.43 .18 .16 2	16.4	11.6	36.8	8.4	1.4 .21 1.2-1.5 2
IIBtb	Ave SD Rng N	5.5  5.5 2	.41 .27 .27 2					1	3.1 1.4 2.1-4.1 2	2.7. .78 2.1-3.2 2	.13 .04 .1 <sub>7</sub> .2	.22 .02 .23	13.7	16.25	28.2	35.7	1.2 .21 1-1.3 2
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N											·					
	Ave S D Rng N																
								]									

SOIL SERIES: Goodlow

TAXONOMIC NAME: Typic Cryumbrept

		A	1				IMAUNUMIC	<b>намк:</b> Тур	ic Cryumbr	ept		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		}x			% н <sub>2</sub> 0		(g/cc)		,	
Al	Ave S D Rng N	7.6  7.6 2	38.2	45.1	16.7	77.5	67.2	26.1				
А3	Ave S D Rng N	22.8 7.21 17-28 2	40.6	39.6	19.8	44.7	39.8	24.0				
В2	Ave S D Rng N	57.2 5.4 53-61 2	41.0	42.9	16.1	58.8	50.4	22.7				
С	Ave S D Rng N	20.3 7.2 15-25 2	21.3	53.4	25.3	60.8	44.7	27.6				
	Ave S D Rng N				ŀ							
	Ave S D Rng N			1			·					
	Ave S D Rng N											
	Ave S D Rng N			ı						•		
	Ave S D Rng N									-		
					-							

SOIL SE	RIES:	Goodlow						1	'AXONOMIC	NAME:	Typic Cr	yumbrept					
Hori zon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		<b>X</b>			x	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Al	Ave S D Rng N	5.4 2.8 5.2-5.8 2	3.2	9.2 1.8 8-11 2	.278	28.3	4.4	3.8 .35 3.5-4 2	.75 .50 .4-1.1	.35 .35 .16 2	.075 1035 .051	.44 .06 .448 2		39.8 7.2 35-45 2	4.6 .64 4-5 2		1.3 .71 .8-1.8
А3	Ave S D Rng N	5.25 .35 5-5.5 2	5.9 4.2 3-9 2	3.4 2.4 1.7-5.1 2		27.0	6.1	1.5	.6 .42 .39 2	.40 .14 .35	.122 .11 .052 2	.38 .02 .364 2		26.0 6.3 21-31 2	5.1 .67 4.6-5.6 2		1.4 .57 1-1.8 2
В2	Ave S D Rng N	5.52 .46 5.2~5.9 2	1.7 1.7 .5-2.9 2	.99 .98 .31.7 2	.025	12.8	5.9	1.15 .21 1-1.3 2	.6 .14 .57 2	.40 .14 .35	.455 .49 .118 2	.225 .035 .225 2		27.7 4.4 24-31 2	6.5 3.6 4-9 2		1.6 .21 1.4-1.7 2
С	Ave S D Rng N	5.35 .35 5.1-5.6 2	.79 .12 .7~.9 2	.45 .07 .45 2	.022 I	18.6	5.6	1.4 .57 1-1.8 2	.5 .5 2	.45 .07 .45 2	.58 .59 .16-1 2	.18 .03 .162 2		27.1 2.3 25~29 2	6.5 3.3 4-9 2		1.1 .18 1-1.25 2
	Ave S D Rng N																
	Ave S D Rng N																
	Ave S D Rng N										1						
	Ave S D Rng N																
	Ave S D Rng N																
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SOIL SERIES: Gustin

		4					TAXONOMIC	NAME: Aqu	mittic wabi	oxerair		
Hori zon	Stat.	Hortzon Thickness	Sand	Silt	Clay	. 10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		%			<b>%</b> н <sub>2</sub> 0		(g/cc)			
Al	Ave S D Rng N	14.0 1.77 13-15 2	33.6 2.62 32-35° 2	49.2 1.13 48-50 2	17.3 1.56 16-18 2	  	 	14.7 .78 14-15 2			·	
A3	Ave S D Rng N	10.2 3.54 7.7-13 2	31.3 3.18 29-33.5 2	46.8 .50 46-47 2	22 3.68 19-25 2		  	15.1 .28 15-15.3 2				
Bl	Ave S D Rng N	16.5 1.84 15-18 2	22.7 1.91 21-24 2	45.3 1.63 44-46 2	32.1 .28 32-32.3 2		  	17.4 .71 17-18 2	1.45	·		
B21	Ave S D Rng N	30.5 21.57 15-46 2	19.2 1.41 18-20 2	34.5 6.65 30-39 2	46.4 8.56 40-52 2	  		23.8 4.95 20-27 2	1.45	·		
B22	Ave S D Rng N	30.5 7.21 25-36 2	14.8 2.69 13-17 2	30.4 1.84 29-32 2	54.8 4.53 52-58 2			28.4 4.74 25-32 2	1.44 .035 1.4-1.5 2			
В3	Ave S D Rng N	38.1 3.54 36-41 2	20.7 3.89 18-23 2	35.1 .636 35-36 2	44.3 4.53 41-48 2		  	25.2 2.9 23-27 2	1.37 .028 1.35-1.4 2			
C1	Ave S D Rng N	33.0 33.0 2	27.0 19.02 14-40 2	36 3.39 34-38 2	37.1 15.63 26-48 2	  		23.2 5.37 19-27 2	1.45		,	
	Ave S D Rng N							:				
	Ave S D Rng N			,								
		1										

SOIL SERIES: Gustin

SOIL SEE	HES:	Gustin						Т	AXONOM1 C	NAME:	Aquultic	Haploxe	ralf				
ilori zon	Stat.	рН	Organic Matter	Organic Carbon	И	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> O)		x			z	(ppm)			Meq/10	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	·
Al	Ave S D Rng N	5.9 5.9 2		2.76 .757 2.2-3.3	.152 .028 .1317 2	20.25 3.89 18-23 2	1.95 .495 1.6-2.3 2		12.0 .212 12-12.2 2	3.25 1.34 2.3-4.2 2	.15 .071 .12 2	.875 .177 .75-1 2	16.55 3.6 14-19 2	32.0 2.05 31-34 2	7.8	7.43	4.03 1.63 2.9-5.2 2
А3	Ave S D Rng N	5.7 .141 5.6-5.8 2		1.47 .573 1.1-1.9 2	.013	14 4.24 11-17 2	1.9 .141 1.8-2 2		10.3 2.9 8.2-12 2	3.6 1.13 2.8-4.4 2		.8 .141 .79 2	13.4 11.6 10-17 2	29 .85 28-30 2	14.9	14.85	2.87 .071 2.8-2.9 2
81	Ave S D Rng N	5.4 .495 5.0-5.7 2		.64 .092 .577 2	.06 .007 .0607 2	.707	2.0 .424 1.7-2.3 2		11.8 2.33 10-13 2	4.3 1.0 3.6-5 2	.22	.55 .071 .56 2	10.8 3.32 8.4-13 2	26.3 3.89 24-29 2	3.5	12.73 52-70 2	2.68
B2 I	Ave S D Rng N	4.7 .212 4.5-4.8 2		.30 .163 .1841 2	1	1	2.1 .636 1.6-2.5 2		16.0 8.132 10-22 2	6.8 4.1 3.9-9.7 2	.35 .212 .25 2	.35 .071 .34 2	14.5 1.77 13-16 2	38.8 10.61 31-46 2	16 47-70 2	6.26	2.72 .141 2.6~2.8 2
В22	Ave S D Rng N	4.2 .141 4.1-4.3 2				1	1.65 .071 1.6-1.7 2		2		.6 .283 .48 2	.3 .141 .24 2	16.2 1.0 16-17 2	43.1 7.64 38-49 2	18 52-78 2	12.02 54-71 2	2.36 .283 2.2-2.6 2
В3	Ave S D Rng N	4.1 .141 4.0-4.2 2		.095 .007 .0910 2			1.6 1.41 .2-2.3 2		18.1 3.39 16-21 2	7.6 1.98 6.2-9 2	.9  .9 2	.3 .141 .24 2	13.7 .636 13-14 2	41.5 6.93 37-46 2	65 2.0 63-66 2	3.54	2.41 .177 2.3-2.5 2
CI	Ave S D Rng N	2.45 .707 2.9-3.9 2		.08 .014 .0709 2			1.4 .141 1.3-1.5 2		16.8 5.45 13-21 2	7 3.111 4.8-9.2 2		.25 .071 .23	12.5 1.2 12-13 2	38.7 10.68 31-46 2	63 5.7 59-67 2	5.66	2.5 .325 2.2-2.7 2
	Ave S D Rng N						i										
	Ave S D Rng N			-						·		ı					
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SOIL SERIES: Hall Ranch

TAXONOMIC NAME: Ultic Haploxeroll

	1			1	1	1	· · · · · · · · · · · · · · · · · · ·	MARIE. UIL	te naproxe				
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
		(cm)		%			% н <sub>2</sub> 0		(g/cc)				
							1					į	
All	Ave	5.0	29.5	52.4	18.2			14.8	1.1		1		İ
	SD		2.5	4.8	2.3			.3	.09			1	l
	Rng N	5.0 2	28-31 2	49~56 2	16.5-20			14.6-15	1-1.1		ł		j
	"	2	2	2	2			2	2				•
A12	Ave	16.6	28,9	52.9	18.2			13.4	1.07				ŀ
	SD	1.84	1	4	3			1.7	.03			j	
	Rng N	15.3-18 2	28-30 2	50-56 2	16-20.3 2			12-14.6	1-1.1				
	-"			*	•			2	2		1	[	İ
Bl	Ave	19.1	30.7	50.1	19.3			13.4			ļ		
	SD	5.4 15-23	3.6	6.2	2.6			2.3					
	Rng N	2	28-33 2	46-54.5 2	17-21 2			12-15 2					
	-	_			1			-2		i		1	
B2	Ave	38.1	27.6	52.5	19.9			13.2		:	·		
	S D Rng	3.6 36-41	5.1 · 24-31	6.9 48-57	1.8 19-21			2.4				l	
	N	2	2	2	2			11.5-15 2					
				1				1					
B3&R	Ave S D	19.1 12.6	23.6	53.7	22.8			15.5					
	Ring	10-28	.9 23-24	9 47-60	9,9 16-30			3.2 13-18					
	N	2	2	2	2			2					
	Ave						İ						
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SOIL SERIES: Hall Ranch TAXONOMIC NAME: Ultic Haploxeroll Organic Organic C/N Free Avail. X Base | X Base H+ Ratio K CEC Sat. Horizon Stat. pН Matter Carbon N Fe<sub>2</sub>0<sub>3</sub> P Ca Mg Na Sat. Ca/Mg (1:1 H<sub>2</sub>0) Z -Meq/100g----(NH<sub>L</sub>OAc) (Σ Cat) (ppm) 89.5 27.9 62.5 4.25 . 20 21.5 1.4 17.9 4.2 .05 2.65 15.2 All 6.2 ---4.34 Ave .06 .07 12 7.8 1.21 3.5 . 14 . 7 .64 5.1 3.7 ------.42 S D 4.2 2.2-3.1 11.6-19 25-31 81-98 57-68 4.1-4.4 2.9-5.7 . 16-.24 19-24 1.3-1.5 17-18 Tr-. 1 6-6.5 \_\_\_ Rng 2 2 2 2 2 2 2 2 2 2 2 2 2 \_\_\_ 22.7 93.5 67 4.6 A12 6.45 2.09 . 12 17.5 1.45 15.6 3.5 .05 2.15 10.4 Ave 6.4 4.2 11.1 .71 .21 . 35 .07 .07 1.1 .64 . 11 .004 2.4 .21 \_\_\_ S D 64-70 . 12-. 13 17-18 14-17 3.2-3.7 Tr-.1 2.1-2.2 9.6-11 22-23 98-98 3.8-5.4 6.3-6.6 ---2-2.2 1.3-1.6 Rng 2 2 2 2 2 2 2 2 2 2 ---2 2 2 20.1 95 68 -3.8 Bl . 09 15.5 1.5 13.5 3.6 0.1 2 9.1 6.5 1.4 Ave 5.7 8.5 .7 .9 .002 3.5 2.3 . 2 2.7 . 3 . 3 S D . 3 ---. 4 62-74 3.1-4.4 1.1-1.7 .08-.09 13-18 19.6-21 91-99 \_\_\_ 1.3-1.7 12-15 3.4-3.8 .1 1.8-2 7-11 6.3-6.7 Rng 2 2 2 2 2 2 2 2 2 92.5 70.5 3.25 17.1 **B2** .655 . 29 12.5 1.3 10.8 3.25 0.1 1.7 6.7 6.6 Ave 2.3 2.1 2.1 .5 .007 . 33 .71 . 3 2.8 . 35 \_--.71 . 35 . 14 \_\_\_ S D 69-72 2.9-3.6 .65-.66 .05-.52 12-13 9-13 3-3.5 0.1 1.2-2.2 6.4-6.9 15.5-19 91-94 1.1-1.5 6.5-6.8 \_\_\_ Rng 2 2 12 2 2 2 2 2 2 2 \_\_\_ 2 76.5 5 16.9 95 2.9 **B3&R** 6.7 .68 1.2 11.3 3.9 . 15 .75 ---\_\_\_ \_\_\_ Ave .21 . 5 1.4 . 7 .6 1.6 . 14 .07 .02 S D ---4.6-5.3 16-18 76-77 2.5~3.5 .1-.2 95 6.7 66-.69 1.2 \_\_\_ 10-12.4 3.8-4 .6-.9 Rng \_\_\_ ---\_\_\_ 2 2 2 2 ------2 2 2 2 ---N Ave S D Rng N Ave S D Rng Ave S D Rng Ave S D Rng

SOIL SERIES: Hankins

TAXONOMIC NAME: Ultic Palexeroll

POIL DEK	163. "	4		4			TAXONOMIC	NAME: DIE	ic ralexer	211		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		X			<b>%</b> н <sub>2</sub> 0		(g/cc)			
All	Ave S D Rng N	20.3 4.4 15.2-23 3	47.5 11.9 39-56 2	31.7 .8 31-32 2	20.8 12.7 12-30 2			7.7				
A12	Ave S D Rng N	15.2 5.1 10-20 3	42.2 13.3 33-51.7 2	32.5 3.7 30-35 2	25.2 9.6 18.5-32 2			10.4			·	
А3	Ave S D Rng N	26.3 10.6 18-38 3	40.1 12.5 31-49 2	28.8 8.4 23-35 2	31.1 4.1 28-34			13.3				
В2	Ave S D Rng N	22.8 4.5 18-25 3	30.9 .3 30.7-31 2	29.1 1.7 28-30 2	40.0 1.5 39-41 2		 	21.8				
1182ь	Ave S D Rng N	27.95 10.8 20-36 2	29.1 7.5 24-35 2	28.1 2.5 26-30 2	42.9 10.1 36-50 2	 		19.8	  			
	Ave S D Rng N											
	Ave S D Rng N				1							·
	Ave S D Rng N							:		·		
	Ave S D Rng N								,			
	1											

SOIL SE	RIES:	Hankins						Т	AXONOMIC	NAME:	Ultic P	alexerol	1				
Hori zon	Stat.	рĦ	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)	<del></del>	%			%	(ppm)			Meq/10				(NH <sub>4</sub> OAc)	(Σ Cat)	
<b>A11</b>	Ave S D Rng N	6.05 .6 5.6~6.5	4.8	3.7 2.9 1.7-5.7	.16 .12 .083	22.4 .6 22-22.8 2		28.0	14.5 3.6 12-18 3	5.1 1.3 3.7-6.3	.1 .05	1.3 .3 1-1.6 3	5.8 2.1 4.3-7.3	24.2 10 18-36 3	98.6 14 74-100 3	6.2 72-81	2.9 .8 2.1-3.6
A12	Ave S D Rng N	6.6  6.6 2	2.5	2.3 1.8 1-3.6 2	.11 .08 .052 2	20.6 .8 20-21 2		15	15.0 2.0 13-16 3	6.0 1.04 4.8-6.7 3	.2 .04 .132 3	1.1 .35 .9-1.5 3	4.0 .4 3.7-4.3	24.6 7.3 20-33 3	90.9 14.7 74-100 3	. 8 84-85	2.6 .7 1.9-2.5
А3	Ave S D Rng N	6.5 .1 6.4-6.6 2	1.1	1.35 .9 .7-2 2	.09 .03 .071	14.1 6.0 10-18.5 2		11	20.1 8.0 14-29 3	9.4 1.5 8-11 3	.3 .1 .154 3	1.04 .2 .9-1.3	8.1 5.0 4.5-12 2	32.0 7.2 25-39 3	90.9 15.6 73-100 3	5.7 78-86	2.1 .5 1.7-2.6 3
В2	Ave S D Rng N	6.95 .2 6.8-7.1 2	.5	.85 .5 .5-1.2 2	.05 .03 .0307 2	16.9 .3 16.7-17 2		1	20.6 5.3 15-24 3	11.3 3.4 9.2-15 3	.3 .09 .244	1.0 .1 .8-1.1 3	3.7 1.8 2.4-5 2	30. 0 2. 7 27-32 3	93.03 12.07 79-100 3	3.2 89-93	1.9 .6 1.5~2.6 3
11В2Ъ	Ave S D Rng N	6.9		.55 .2 .47 2	.045 .007 .0405 2	12.0 2.8 10-15 2			23.2 5.7 19-27 2	14.3 .6 14-15 2	.4 .1 .35 2	.7 .03 .774 2	4.2	34.45 9.3 28-41 2	91.8 11.5 84-100 2	I /	1.6 .3 1.4-1.9 2
	Ave S D Rng N										l						
	Ave S D Rng N								l.		i						
	Ave S D Rng N																
	Ave S D Rng N																
		i	-					1	]	1	1			1		1	1

SOIL SERIES: Hatchery

TAXONOMIC NAME: Dystric Eutrochrept

worth our	1	<b>.</b>					TAXONOMIC	NAME: D)	CIAC DUCIO	citebe			
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	. 10 Atm.	. 33 Atm.	15 Atm.	Bulk Density				
		(cm)		%			% II <sub>2</sub> 0		(g/cc)				
Al	Ave S D	0-22.9	51.2	38.0	10.4						·		
	Rng N	1	1	1	1					,			
B21	Ave S D	30.4	58,8	31.0	10.2	27.6	23.7	17.9	1.0		·		
	Rng N	1	1	1	1	1	1	1	1	·			
B22	Ave S D	28.0	55.0	35.2	9.3								
•	Rng N	1	1	1	1								
Ci-Dr	Ave S D	33.0	60.6	31.3	8.1							·	
	Rng N	1	1	1	1								
·	Ave S D				·								
	Rng N			ļ		·							
	Ave S D				1							,	
	Rng N			. *									
	Ave S D												
	Rng N		·				·						
	Ave S D										:		
	Rng N												
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SOIL SEI	RIES:	Hatchery						. 1	AXONOMIC	NAME:	Dystric	Eutrochr	ept				
Horizon	Stat.		Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	к	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		X			x	(ppm)			Meq/10	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
A1	Ave S D Rng N	6.2	4.0	1	0.14	28.4			27.7	10.0	0.05	2.4			43.2	93.2	2.8
B21	Ave S D Rng N	6.5	1.5	1.5	0.07	21.9			21.2	8.2	0.05	1.9			35.1	90.5	2.6
B22	Ave S D Rng N	6.4	1.1	1.1	0.05	22.6		  	19.8	8.6	0.05	1.6	  		34.4	88.6	2.3
Ci-Dr	Ave S D Rng N	6.5	1.1	1.1	0.05	22.8			23.0	9.4	0.02	1.5			37.2	93.0	2.5
	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										,						
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SOIL SERIES: Hazelair

TAXONOMIC NAME: Aquultic Haploxeroll

oom our	1	•					FAXUNUMIC	NAME: Aqu	mitic Habi	oxeroll			
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	. 10 Atm.	.33 Atm.	15 Atm.	Bulk Density		·		
		(cm)		%			% н <sub>2</sub> 0		(g/cc)				
Al	Ave S D Rng N	19.1 1.8 18-20 2	9.5 6.5 5-14 2	48 .4 47.7-48 2	42.6 6.1 38-47 2			21.7 3.7 19-24 2					
ВІ	Ave S D Rng N	10.15 .07 10-10.2 2	8 6.8 3-12.8 2	36.6 10.3 29-44 2	55.4 17 43-68 2			26.8 11.5 19-35 2					
B21	Ave S D Rng N	14 5.4 10-18 2	5.1 2.9 3-7 2	30 .6 29.5-30 2	65 2.3 63-67 2			32.2 4.2 29-36 2				·	. •
B22	Ave S D Rng N	16.6 1.8 15-18 2	3.8 .6 3.4-4.2 2	33.4 1.1 33-34 2	62.8 1.7 62-64 2	  		33.3 6.1 29-38 2					
B23	Ave S D Rng N	26.7 5.5 23-31 2	2.9 .8 2.3-3.4 2	45.4 4.7 42-49 2	52 5.5 48-56 2	  		32.6 6.4 28-37 2					
R	Ave S D Rng N	15.3 3.6 13-18 2	16.8 19.5 3-31 2	47.2 4.9 44-51 2	36.1 14.6 26-46 2		  	35.1 .5 34.7-35 2					
	Ave S D Rng N		1		1								
	Ave S D Rng N												
	Ave S D Rng N			ı		·							
,									:				

SOIL SEI	RIES:	Hazelair						Т	'AXONOMIC	NAME:	Aquulti	c Haplox	eroll				
Hori zon	Stat.	Вq	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	k	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)	<del></del>	x			7.	(ppm)			Meq/1	  00g 			(NH <sub>4</sub> OAc)	(Σ Cat)	
Al	Ave S D Rng N	5.2 .14 5.1-5.3			1.3	11.3 .35 11-12 2	3 .4 2.7-3.3		18.2 3.7 16-21 2	7.3 1.8 6-9 2	.2 .2 .2	.83 .11 .89 2	14.3 .9 14-15 2			3.5	2.5 .1 2.4-2.6 2
В1	Ave S D Rng N	5.1 .2 4.9-5.2 2		1 .3 .8-1.3 2	.1 .035 .0813	10  10 2	2.6 .3 2.4-2.8 2		23.8 11.6 15.6-32 2	10.8 6.1 6.5-15 2	.25 .07 .23 2	.8 .3 .6-1 2	13.8 1.1 13-15 2			9.2	2.26 .2 2.1-2.4 2
B21	Ave S D Rng N	4.6 .14 4.5-4.7 2		.6 .014 .5961 2	.066 .008 .0607 2	9.5 .7 9-10 2	2.75 .5 2.4-3.1 2		28.7 5.7 25-33 2	13.6 2.5 12-15 2	.35 .07 .3~.4 2	.85 .07 .89 2	17.3 2.4 16-19 2			7.1	2.1 .02 2.09-2.1 2
в22	Ave S D Rng N	4.6  4.6 2		.41 .04 .3844 2	.042	10	2.6 .3 2.4-2.8 2		29.7 7.4 24-35 2	13.6 2.9 12-16 2	.5 .14 .46 2	.75 .07 .78 2	18.4 3.2 16-21 2			8.5	2.2 .12 2.1-2.2 2
В23	Ave S D Rng N	4.65 .07 4.6-4.7 2		.18 .06 .1322			2.45 .07 2.4-2.5 2		33 8.3 27-39 2	14.5 3 12-17 2	.5 .14 .46 2	.7 .14 .68 2	14.9 3 13-17 2			8.5	2.3 .1 2.2-2.3 2
R ·	Ave S D Rng N	5 .3 4.8-5.2 2		.165 .007 .1617 2			3 .14 2.9-3.1 2		46.1 5 43-50 2	16 5.6 12-20 2	.7 .14 .68 2	.6 .6 2	12.8 2.8 11-15 2			83.5 .71 83-84 2	3 .7 2.5-3.5 2
:	Ave S D Rng N																
	Ave S D Rng N	•															
:	Ave S D Rng N		·							·	1						
											<b>!</b>						

SOIL SERIES: Headley

TAXONOMIC NAME: Andic Dystrochrept

	1	· · · · · · · · · · · · · · · · · · ·					TAXONOMIC	NAME: And	ic Dystroc	hrept			
llorizon	Stat.	llorizon Thickness	Sand	Silt	Clay	.10 Atm,	1	15 Atm.	Bulk Density				
	·	(cm)		%		***************************************	% н <sub>2</sub> 0		(g/cc)				
Aoo + Ao	Ave S D	2.5-0			NO A	AILABLE DA	TA						
	Rng N	1											
A2	Ave S D	0-1.3			NO A	VAILABLE DA	ГА						
	Rng N	1			ı								
82 i r	Ave S D	1.3~3.8			NO A	/AILABLE DA	TA						
į	Rng N	1											
B3lir	Ave S D	3.8-20	25.6	60.3	14.0								
	Rng N	1	1	1	1								
B321r	Ave S D	20-38	20.7	59.8	19.5								
	Rng N	1	1	1	1		,						
B33ir	Ave S D	38-56	19.6	61.6	18.8								
	Rng N	1	1	1	1		 						
С	Ave S D	56-97	32.0	57.8	10.2								
	Rng N	1	1	1	1								
	Ave S D												
	Rng N								'				
	Ave S D												
	Rng N								,				
	l												
•	•	,		,	1	ı	ı	ŀ		1	l	f l	

SOIL SE	RIES:	Headley						T	AXONOMIC	NAME:	Andic D	ystrochre	ept				
Hori zon	Stat.	рН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Mg	Na	к	н <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> O)		x			X	(ppm)			Meq/10	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
A00 + A0	Ave S D Rng N	4.3							NO AVAIL	ABLE DAT							
A2	Ave S D Rng N	4.2					man dan dan dan dan dan dan d		O AVAIL	BLE DATA			<b></b>				`
B2ir	Ave S D Rng N	4.8				·		· · · · · ·	O AVAILA	BLE DATA							
B3lir	Ave S D Rng N	5.4	1	8.7	1	1	4.8	1.5	.2	1	.3	1		26.6	1	  	1.0
B321r	SD Rong N	5.6	1	4.8	1	1	1	2.8	1	.3	.3	1		1	5.5		1.3
B331r	Ave S D Rng N	5.7	1	2.3	1	1	5.1	3.3	1	1	1	.3		1	7.1		1.0
С	Ave S D Rng N	5.8	1.9	1.1	.064	18.0	5.4	1.5	.2	1	1	.3		1	7.3		1
	Ave S D Rng N										ţ						
	Ave S D Rng N																
				Ì	İ												

SOIL SERIES: Hebo

TAXONOMIC NAME: Typic Umbraquult

JOIL DER	1	<b>A</b>		4		•	TAXONOMIC	имк: Тур	ic Umbraqu	ult			
Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	. 33 Atm.	15 Atm.	Bulk Density				
		(cm)		}x			x 11 <sub>2</sub> 0		(g/cc)				<del>                                     </del>
			}		İ		<b>1</b>				Ī		
Apg	Ave	10.2	4.7	43.6	51.7		]		ļ	Í	Į		
··r6	S D		1.2	10.1	9.1						į	,	1
	Rng	10.2	3.8-5.5	36-51	45-58								
	N	2	2	2	2							İ	1
				1 .			•					1	
A3g	Ave	14	4.7	42.4	52.9					}			
	S D	1.8	1.6	11.4	10							1	
	Rng N	12.7-15	3.6~5.8	34-50.4	46-50								
		2 ,	2	2	2								
BG1	Ave	22.9	2.9	49.2	47.6							ļ.	Į
	S D	3.6		l " /	/ /							]	<del>}</del>
	Rng	20-25.4										l	
	N	2	1	1	1							•	•
BG2	Ave	28										i	
802	S D	3.5	4.9 1.6	33.1 8.8	62 10.5							1	
	Rng	26-30	3.8-6	27-39	55-69								
	N	2	2	2	2							į	
		i											
BG3	Ave	17.75	8.4	36.2	55.35								
	S D	.07	.5	. 35	.07					•		1	
j	Rng N	17.7-18 2	8-8.7 2	36~36.4	55-55.4								
		-	. 2	2	2						:		
С	Ave	17.8	22	34.2	43.7								
	S D		18.2	5.6	23.6								
	Rng		9.1~35	30.2-38	27-60.4								
	N	1	2	2	2			~					
	Ave				ľ			•					:
	S D												
	Rng					ļ		1	·				
	N												
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	Ave S D							ì				,	
	Rng												
	N				1								
	-"				l l						•		
	Ave				l i	l							l.
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	Rng							]					
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SOIL SERIES: Helvetia

TAXONOMIC NAME: Ultic Argixeroll

SOLT SEK	iga, nei	veria		,			TAXONOMIC	NAME: Ulti	c Argixero	11		
llori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Acm.	Bulk Density			
		(cm)		%			% н <sub>2</sub> 0		(g/cc)		 	
Ар	Ave S D Rng N	25.4  25.4 2	9.86	71.3	18.9			 				
B1	Ave S D Rng	20.4 3.6 18-23	6.97	69.9	23.1							
B21t	Ave S D Rng N	2 22.8  22.8 2	4.84	64.1	31.1							
B22t	Ave S D Rng N	22.9 10.8 15.3-31	3.84	61.7	34.5							
B3t	Ave S D Rng N	35.6 14.4 25-46 2	3.2	63.3	33.5							
C1	Ave S D Rng N	25.4 25.4 2	5.3	67.5	27.2							
	Ave S D Rng N											
	Ave S D Rng N											
·	Ave S D Rng N				,							
				ļ	1							

## SOIL SERIES: Helvetia

TAXONOMIC NAME: Ultic Argixeroll

SOIL SE	RIES:	Helvet1a			_			T	AXONOM1C	NAME: U	Ittic Arg	ixeroll					
Hori zon	Stat.	рН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		x			X	(ppm)			Meq/10	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Аp	Ave S D Rng N	6.1 .42 6-6.5 2	2.6 1.1 1.8~3.3 2	1.91	  	  			7.3 .14 7.2-7.4 2	1.35 .07 1.3-1.4	.15 .21 03 2	.75 .07 .78 2	11.4 2 10-12.8 2	17 2.1 16-18 2	7.9	4.2 43-49	5.4 .14 5.3-5.5
B1	Ave S D Rng N	6.1 .4 5.8-6.3 2	.7 .42 .4-1 2	.23	 	  		  	6 .3 5.8-6.2 2	1.85 .64 1.4-2.3 2	.1	.55 .07 .56 2	8.5 1.1 7.7-9.3 2	14.1 1.6 13-15.2 2	15.8		3.4 1 2.7-4 2
B21t	Ave S D Rng N	5.6 .5 5.2-5.9 2	.35 .21 .25 2	. 12					8.8 1.4 7.8-9.8 2	3.1 .3 2.9-3.3 2	.15 .07 .12 2	.8	1.9	32.2 16 21-43.5 2	77.3 16.5 65.6-89 2	7.8	2.9 .71 2.4-3.4 2
B22 t	Ave S D Rng N	5.7 .42 5.4-6 2	.20 .14 .13 2	.06	  				10.8 2.1 9.3-12 2	4.4 .71 3.9-4.9 2	2	.95 .07 .9-1 2	8-9.5 2	20.1 11.4 12-28 2	22.4	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 .23	.17					13.6 1.8 12.3-15 2	5 .5 4.6-5.3 2	.75 .78 .2-1.3	.98 .85 .9-1.1 2	1.4 8.2-10 2	27.6 6 23.4-32 2	4.2 71-76.8 2	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 .06					13.0 13 2	4.6 .4 4.3-4.9 2	.55 .49 .29 2	.8 .14 .79 2	1.4	23.8 1.8 22.5-25 2	79.7 1.7 79-81 2	4.24	2.85 .21 2.7-3 2
	Ave S D Rng N			. 1			-										
	Ave S D Rng N							·				,					
	Ave S D Rng N				,		•			·							

SOIL SERIES: Henley

TAXONOMIC NAME: Aquic Durorthid

SUIL SER	, 162: ua	_					TAXONOM1 C	NAME: Aqui	te Durorth	id .		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	. 10 Atm.	.33 Atm.	15 Atm.	Bulk Density		į	
		(cm)		X			% н <sub>2</sub> 0		(g/cc)			
Ар	Ave S D Rng N	15.5 3.5 13-18 2	54.8	28.0	17.2		32.2 .64 32-33 2	15.6 .6 15-16 2	1.25 .01 1.2-1.3			
Al	Ave S D Rng N	15						17				
в2	Ave S D Rng N	35  35 2	55.2	28.5	16.0		32.9 6.3 28.5-37 2	15.5 3.2 13~17.8 2	1.2 .15 1.1-1.3 2			 ·
В3	Ave S D Rng N	33 7 28-38 2	58.1	28.8	13.2		31.2	19.7 3.7 17-22 2	1.19			
<b>.</b> C	Ave S D Rng N	24 14.1 14-34 2	77.1	17	6		28.4 3.6 25.9-31 2	16.9 .6 16.5~17 2	1.32 .2 1.2-1.5 2			
	Ave S D Rng N		,	'								
	Ave S D Rng N						·					
	Ave S D Rng N	·			r				:			
	Ave S D Rng N				1	·						

TAXONOMIC	NAME:	Aguic	Durorthid
IMMUNITE	MARIE.	4 0	DG LO L CITA

SOIL SE	RIES:	Henley						Т	AXONOMIC	NAME:	Aquic Du	rorthid					
Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> O <sub>3</sub>	Avail.	Ca	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		%			z	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Ар	Ave S D Rng N	8.3 .9 7.7-8.9 2		1.2 .4 .9-1.5	. 12 .04 .0914		.5				9.4 11.4 1-17.5 2	6.3 1.5 5-7.3 2		30.4 8 25-36 2			
Al	Ave S D Rng N	8.9									14.6	5.0		28.4			
В2	Ave S D Rng N	8.4 .11 8.4-8.5 2		.69 .2 .5781	.087	 	.45				6.6 3.8 4-9.3 2	2.5 .8 2-3.1 2		31.7 2.3 30-33 2			
в3	Ave S D Rng N	8.33 .1 8.3-8.4 2		.58 .03 .5661 2			.25				5.7 .92 5-6.3 2	1.23 .32 1-1.5 2		36.3 3 34-38.5 2			
С	Ave S D Rng N	8.43 .04 8.4-8.5 2		.28 .06 .2432 2			1				7.4 4.5 4.2-11 2	.7 .11 .68 2		35.1 10.3 28-42.3 2			
	Ave S D Rng N										. ',						
	Ave S D Rng N									·							
	Ave S D Rng N										1						
	Ave S D Rng N																

SOIL SERIES: Holcomb

TAXONOMIC NAME: Mollic Albaqualf

D., 11, 1321	1	A		•			TAXONOMIC	NAME: MOT	tic Wibadn	att		1	
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	. 10 Atm.	.33 Atm.	15 Atm.	Bulk Density	Sulfur	Boron		
		(cm)		X			х н <sub>2</sub> 0		(g/cc)	(ppm)	, (ppm)		
1	Ave S D Rng N	0-5.1											
2	Ave S D Rng N	5.1-25	45.2	37.6	17.2		 			89.4	.34		
	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			ı								·	
	Ave S D Rng N	·											
	Ave S D Rng N						·						
												;	

SOIL SE	RIES:	Ho1comb						Т	CAXONOMIC	NAME:	Mollic A	lbaqualf					
llori zon	Stat.	рΗ	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	К	н+ -	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		%			7	(ppm)			Meq/1				(NH <sub>4</sub> OAc)		
1	Ave S D Rng N	6.8	3.57		.13			21.0	19.1	8.15	.157	.328		30.2			
2	Ave S D Rng N	5.9	2.22		.10			19.0	19.5	7.62	.182	.221		28.5			
	Ave S D Rng N										i . 'j						
	Ave S D Rng N	,													:		
	Ave S D Rng N																
	Ave S D Rng N										1						
	Ave S D Rng N	·	·					·			l l						
	Ave S D Rng N																
	Ave S D Rng N																
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SOIL SERIES: Holland

TAXONOMIC NAME: Ultic Haploxeralf

Serie DEK	res, No	•					TAXONOMIC	NAME: Ult	ic Haploxe	ralf		
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	. 10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		%			<b>х</b> н <sub>2</sub> 0		(g/cc)			
Al	Ave S D Rng N	0-10	56.3	30.0	13.7		23.7	6.8	1.6			
A2	Ave S D Rng N	10-20	54.5	32.9	12.5			6.0				
ВЪ	Ave S D Rng N	20-36	52.4	29.9	17.7		20.0	6.9	1.8		·	
B21 t	Ave S D Rng N	36-71	47.7	28.2	24.1		21.8	10.8	1.9			
B22t	Ave S D Rng N	71-86	53.0	28.2	18.9			10.1	 		·	
В3	Ave S D Rng N	86-125	61.4	27.0	11.6		 , 					
C1	Ave S D Rng N	125-152	60.1	28.6	11.3	  	  					
•	Ave S D Rng N											
	Ave S D Rng N											
1	, ,	1	Ī	•	•	j						

SOIL SERIES: Holland TAXONOMIC NAME: Ultic Haploxeralf Organic Organic % Base C/N Avail. % Base Free Horizon Stat. рH Matter | Carbon Ratio Fe<sub>2</sub>O<sub>2</sub> P Ca Mg Na K CEC Sat. Sat. Ca/Mg (NH,OAc) (E Cat) (1:1 H<sub>2</sub>0) ---2---X (ppm) --Meq/100g----Al Ave 6.3 3.64 . 10 ---- NO AVAILABLE DATA 63.0 6.4 1.4 .42 56.9 ----6.3 S D \_\_\_ Rng 1 1 1 1 1 1 1 1 **A**2 1.1 Ave 6.0 .96 ---- NO AVAILABLE DATA 21.0 3.7 .10 . 22 4.1 55.5 S D Rng 1 1 1 1 1 1 1 1 Bl 5.9 .71 Ave ---- NO AVAILABLE DATA -----9.0 3.4 1.5 . 10 4.1 55.5 .11 SD Rng 1 1 1 1 1 1 1 1 1 B21c Ave 5.6 ---- NO AVAILABLE DATA 2.0 4.7 3.6 . 14 .07 4.3 66.4 S D \_\_\_ ---Rng ---1 1 1 1 1 1 \_\_\_ \_\_\_ 1 ---B22t Ave 4.3 .24 5.7 ------- NO AVAILABLE DATA -----5.7 .07 4.2 11.1 S D \_\_\_ Rng 1 1 ---1 1 1 1 1 В3 5.5 ---- NO AVAILABLE DATA ----Ave ---2.0 7.4 5.1 .19 .03 3.1 80.4 S D ---\_\_\_ \_\_\_ Rng ---1 1 1 1 1 1 ---CI Ave 5.8 ---- NO AVAILABLE DATA -----4.9 8.1 . 24 .03 3.0 **B1.6** ---S D \_\_\_ Rng \_\_\_ 1 1 1 \_\_\_ 1 1 1 Ave SD Rng Ave S D Rng

SOIL SERIES: Honeygrove

TAXONOMIC NAME: Typic Haplohumult

BOTE DEN	tes. Holl	eygiove					TAXONOMIC	NAME: Typ	ic Haplohu	mult			
Horizon	Stat.	Hortzon Thickness	Sand	Silt	Clay	. 10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
		(cm)			<del> </del>		х н <sub>2</sub> 0		(g/cc)				
				1		ļ	1	İ	1				İ
Al	Ave	21.5	18.1	53.2	29.8					ļ	Ì		
	S D	5	8.8	5.4	14			37.1 11.9					ı
	Rng	18-25	11-23	49-57	20-40			29-45				l	1
	N	2	2	2	2			2		İ			
				•		!		_			1		
Bl	Ave	21.5	11.8	43.9	44.4			28			1		
	S D	2.12	1.6	4.6	· 3			1.1		ļ	[	l	
	Rng	20-23	11-13	41-47	42-47			27-29					
	N	2	2	2	2			2		1			
821c	Ave	23	11.4	40.1	48.5			20.7			l	Ì	
	S D	4.2	3.4	2	1.1			28.6 2.4					l
	Rng	20-26	9.2-14	39-42	48-49			2.4 27-30					į
	N	2	2	2	2			27-30			ł		I
					_					ļ		ł	
822t	Ave	28	10.1	38.2	51.8			31.5				ĺ	
	S D	11	5.8	11.5	17.3			.85		İ			İ
	Rng	20-36	6-14	30-46	40-64			31-32				ĺ	
	N	2	2	2	2			2					-
B23t	Ave	34	15.7	38.1	46.3								
2250	S D	5.7	1.8	13	14.8			32.4					
	Rng	30-38	14-17	29-47	36-56			.35 32-32.6					
	N	2	2	2	2			2					
В3	Ave	24.5	15.7	38.7	45.7			31.2					
1	S D Rng	2.1	7.6 10-21	12.8	20.4			1.7					
1	N MiR	23-26	2	30-48 2	31-60			30-32					
			•	-				2					
	Ave				Ī	1							
	S D	1						ŀ					
}	Rng	1				I		1					
	N												
1	Ave				1	1		j					
	S D					ł	1	1					
	Rng				ļ		İ	i					
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	S D	f			1	1		ŀ					
	Rng				i	1		}					
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SOIL SERIES: Honeygrove

TAXONOMIC NAME: Typic Haplohumult

SOIL SE	RIES:	.Honeygrov	e					T	AXONOMIC	NAME:	Typic Ha	plohumul	t				
Hori zon	Stat.	рĦ	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		2		,	x	(ppm)			Meq/10	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Αl	Ave S D Rng N	4.75 .4 4.5-5 2		NO DAT	A AVAILA	BLE			3.0 .7 2.5-3.5 2	3.2 2.2 1.6-4.7 2	.75 .07 .67	1.075 .04 1.05~1.		57.6 10 50-65 2	15.3 3.9 13-18 2		1.34 1.15 .5-2.2
ВІ	Ave S D Rng N	4.6 .14 4.5-4.7 2		NO DA	TA AVAIL	ABLE			2.1 .14 2-2.2 2	.9 .42 .6-1.2	.45 .07 .45 2	.55 .07 .56 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			ra avail				.5 1.4~2.1 2	1.1	.45 .21 .36 2	.5 .3 .37 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			LIAVA A					1.6 .4 1.3-1.9 2	.6 .6 2	.4 .3 .26 2		41.8 14.6 31-52 2	10 5.7 6-14 2		.72 .16 .68 2
B23t	Ave S D Rng N	4.6 .14 4.5-4.7 2			TA AVAIL	·			.14 1.4-1.6	1.65 .35 1.4-1.9 2		.35 .21 .25 2		47.6 14.7 37-58 2	9 1.4 8-10 2		.94 .29 .7-1.1 2
В3	Ave S D Rng N	4.55 .07 4.5-4.6 2		NO DA	A AVAIL	ABLE			.7 1-2	1.45 .21 1.3-1.6 2		.35 .21 .25 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																
		ŀ							,				1			!	1

SOIL SERIES: Hood

TAXONOMIC NAME: Ultic Haploxeralf

SUITE SER	1	•					TAXONOMIC	NAME: NIE	ic Haploxe	ralf			
Hori zon	Stat.	Hortzon Thickness	Sand	Silt	Clay	, 10 Atm.	. 33 Atm.	15 Atm.	Bulk Density				
		(cm)		x			<b>х</b> н <sub>2</sub> 0		(g/cc)				
Ар	Ave S D Rng N	11.8 3.9 7.6-15 3	40.2 9.7 33.3-47 2	50.3 9 44-57 2	9.6 .6 9.2-10 2	  		7.9 .85 7.3-8.5 2					
A3	Ave S D Rng N	10.4 4.3 7.6-15 3	39.6 9 33-46 2	51.5 8.9 45.2-58 2	8.95 .07 8.9-9 2		  	5.7 .2 5.5~5.8 2					·
Bl	Ave S D Rng N	25.1 .42 25-25.4 2	37.9 10.9 30-46 2	53.5 10.3 46-61 2	8.6 .57 8.2-9		  	5.25 .35 5-5.5 2					
B21	Ave S D Rng N	31.8 5.4 28-35.6 2	33.8 13.3 24.4-43 2	50.7 9.7 44-57.5 2	15.1 2.9 13-17 2			8.55 1.5 7.5-9.6 2					
B31	Ave S D Rng N	47 5.4 43-51 2	34.3 5 31-38 2	45.9 8.8 40-52 2	19.8 3.8 17-22.5 2	  		11.1 .14 11-11.2 2					
В32	Ave S D Rng N	38.1  38.1 2	36 7.9 30-42 2	48.7 10.1 41.5-56 2	15.4 2.2 14-17 2			10.6 1.2 10-11.4 2					
С	Ave S D Rng N	76.2 18 64-89 2	37.3 24.2 20-54 2	51.1 25 33-69 2	11.6 .9 11-12 2			8.6 .2 8.5-8.8 2					
	Ave S D Rng N			1									
	Ave S D Rng N				1						·		
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SOIL SERIES: Hood

TAXONOMIC NAME: Ultic Haploxeralf

SOIL SE	CLES:	Hood				_		Т	AXONOM1C	NAME:	OTETC HA	broxerar	I				
			Organic	Organic		C/N	Free	Avail.					+		% Base	% Base	
Hori zon	Stat.	pH	Matter	Carbon	N	Ratio	Fe <sub>2</sub> O <sub>3</sub>	P	Ca	Mg	Na	K	н+	CEC	Sat.	Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		x		Ì	χ	(ppm)			Meq/1	00g			(NH,OAc)	(E Cat)	
		2		i	İ										1 "		
Aρ	Ave	5.9	2.7	2.35	.19	13	1.1	64.5	9.4	1.35	. 25	1.05	8.3			57.5	
Ap	S D	.5	2.7	.5	.04	1.3	'''	04.3	2.9	.07	.07	.07	1.5			12	
	Rng	5.5-6.5		2-2.7	.1621				6.1-10	1.3-1.4	.23	1-1.1	7.2-9.3			49-66	
	N	3	1	2	2	2	ĺ	1	3	2	2	2	2			2	
A3	Ave	5.8	3.0	.99		12		53.1	6.9	1	.2	.6	7.6			49.5	
A3	S D	.15	3.0	.99	.08 .005	1.4	1.1	33.1	2.1	.14	.2	.14	.17			7	
	Rng	5.7-6		.95-1	.0809	11-13			5.3-9.3		.2	.57	7.5-7.7			49-50	
	N	3	í	2	2	2	ı ı	1	3	2	2	2	2			2	
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B 1	Ave S D	6.15 .07		.25	.03	8	1.1		4.9	1.1	.15 .07	.55 .21	5.1			56.5 2.1	
	Rng	6.1-6.2			.0305	8			.3 4.7-5.1	1-1.2	.12	.47	4.8-5.4			55-58	
	N	2		2	2 .03	2	1		2	2	2	2	2			2	
															1		
B21	Ave	6.1		.13			1.5		7.4	1.9	.2	.65	5.7			64	
	S D Rng	.21 5.9-6.2		.06 .0917					1.4	.5 1.5-2.2	.2	.2 .5~.8	.85 5.1-6.3			1.4 63~65	
	N	2		2			1		2	2	2 2	2	2			2	
B31	Ave	5.85		.09			1.6		11.75	3.05	.2	.55	6.2			72	
	SD	.07 5.8-5.9		.02 .071					.35	.8 2.5-3.6	.2	.07 .56	.6 5.7-6.6			1.4 71-73	
	Rng N	2		2			í		2	2.5-3.6	2 '	2	2			2	
	-,	•		-			•				-	_					
B32	Ave	5.9	~	.065			1.3		11.6	3.6	.25	.5	5.2			75.5	
	S D	.14		.007					.8 11-12.1	.6	.07	.5	.9 4.5-5.8			2.1 74-77	
	Rng N	5.8-6 2		.0607 2			1		2	2	.2- <sub> </sub> .3	2	2			2	
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С	Ave	5.95		.05			1.2		10.4	3.3	.3	.43	4			78.8	
	SD	.07		.01				~	.2	.9 2.7-3.9	.3	.11 .355	,			1.1 78-80	
	Rng N	5.9-6 2		.0406 2			1		10-11 2	2.7-3.9	2	2	2			2	
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SOIL SERIES: HOOPAL TAXONOMIC NAME:

	1	•		•			TAXONOMIC	NAME: T	ypic Duraq	uoll			
Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
	1	(cm)					х н <sub>2</sub> 0		(g/cc)			ļ	
	1	[			(		2		10,,	]			
Al	Ave	7.6	29.5	54.5	15.5			14.2			]		
	S D		4.9	4.9	.5			.1					
	Rng N	7.6 2	26-33 2	51-58 2	15-16 2			14.1-14.3				ĺ	
	"			}	Į,								
AC	Ave	14.1	33.5	52.5	14.0		32.0	12.5	1.2	}			1
	S D Rng	1.6 13-15	12.0 25-42	10.6 45-60	1.0 13-15		1.0 31-33	.5 12-13	.1 1.1-1.3				I
	N M	2	2	2	2		2	2	2				
									1				
C1	Ave	12.6 3.7	36.0 12.7	51.5 12.0	13.0 1.0		32.5	11.5	1.25				
	S D Rog	10-15	27-45	43-60	12-14		.5 32-33	.5 11-12	.05 1.2-1.3	1	1		
	N	2	2	2	2		2	2	2	İ		į	
C2	A	17.5	37.5	58.0	4.5		43.3	13.5	1.1				
	Ave S D	10.6	12.0	15.5	4.0		73.3	2.1	1			İ	
	Rng	10-25	29-46	47-69	1.7-7.4			12-15					
	N	2	2	2	2		1	2	1				
сз	Ave	29.0	25.5	69.0	5.4		46.5	8.8	1.05				
	S D	12.7	4.9	8.5	3.8		9.2	7.3	.07				
	Rng	20-38	22-29	63-75	2.7-8.1		40-53		1.0-1.1				ı
	-N	<b>'</b>	2	2	2		2	2	2				
C4	Ave	11.3	36.5	56.5	7.05			12.0					
•	S D	1.9	12.0	9.2	2.9			5.7					
j	Rng N	10-13	28-45	50-63	5.0-9.1			8-16					
	.,	2	2	2	2			2					
C5	Ave	29.0	62.5	31.5	6.1			9.6					
	S D Rng	12.7	10.6	9.2	1.6			3.3					
	N	20-38	55-70 2	25-38 2	5.0-7.3			7.3-12.0					
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C6	Ave S D	10.2	29.1	68.6	2.3			3.6					
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SOIL SE	RIES: !	Hoopal	1			ı			AXONOMIC	NAME:	Typic	Duraquol	1				
lort zon	Stat.	рĦ	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> O)					z	(ppm)			Meq/l	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Al	Ave S D	8.75 .07		1.65	.15 .01	11.0	.35			2.6 .6	10.0 1.0	10.5 3.5		27.1 .1			
	Rng	8.7-8.8 2		1.6-1.7	.1416		. 3 4			2.2-3.0 2	9-11 2	8-13 2		27-27.2 2			
AC	Ave	9.65 .07		.6 .1	. 07 . 01	9.5 .5	.4			1.0 .2	20.5 2.1	7.0 .5	- <b></b>	25.5 2.1			
	S D Rng N	9.6-9.7 2	·	.57	.0608 2		. 4 2			.8-1.2 2	19-22 2	6.7-7.4 2		24-27 2			
C1	Ave S D	10.15 .07		. 5 . 06	. 05 . 01	10.0	. 35			1.35 .35	21.5 3.5	3. 7 . 7		23.5 2.1			
	Rng N	10.1-10.2 2		.56 2	.0406		.34			1.1-1.6 2	19-24	3.2-4.2		22-25 2			
C2	Ave S D	10.15 .07		. 8 . 1	.06 .01	13.5 2.1	. 2			3.6 1.1	22.0 1.4	1.45 .9		19.5 .7			
	Rng N	10.1-10.2		.79 2	. 05 07 2	12-15 2	.2			2.8-4.4 2	21-23	.8-2.1 2		19-20 2			
<b>c</b> 3	Ave S D	9.95 .07		.5	.05	13.0	.15			5.2 1.4	10.6 7.7	. 5 . 6		11.2 6.7			
	Rng N	9.9-10.0		.37	1	1	.12			4.2-6.2 2	5-16 2	.19		6-16			
C4	Ave S D	9.45 .3		. 3 . 04			.45	 		12.0 9.9	6.9 2.5	. 35		17.7 10.8			
	Rng N	9.2-9.6		. 2 3			.27			5-19 2	5.2-8.7 2	.25		10-25			
	Ave S D	9.0 .1		.15 .08			.5			10.5	3.4 1.4	.4		16.5 9.2			
	Rng N	8.9-9.1		0921 2			. 3 7			5-16 2	2.4-4.4	.26		10-23			
l	Ave S D	9.8		.05			.1			1.0	1.6	.3		2.9			
	Rng N	1		<b>/</b> 1			1			1	1	1		1			
	Ave S D																
1	Rng N																

Horizon   Stat.   Horizon   Thickness   Sand   Silt   Clay   10 Atm.   13 Atm.   15 Atm.   Dunsity	SOIL SERI	IES:	Horeb					TAXONOMIC	NAME: Ty	pic Haplum	brept			
(cm)	Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	. 10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
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 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 Ave S D Rng N N N Ave S D Rng N N N N N N N N N N N N N N N N N N N			(cm)		<del></del>		<del></del>							
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3011. 361		•						ı	AXUNOMIC	NAME:	.,	ртишотер	•				
Hori zon	Stat.	рĦ	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> O <sub>3</sub>	Avail. P	Ca	Mg	Na	к	H <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		%			ž Ž	(ppm)				00g			(NH <sub>4</sub> OAc)		
All	Ave S D Rng N	5.6	26.51	15.37	NO AVA	ILABLE I	АТА	8.0	9.8	3.7	.15	1.25		57.93	25.7		
<b>A</b> 12	Ave S D Rng N	5.6	12.33	7.15	NO AV	AILABLE	DATA	4.0	2.3	.9	.31	.61		32.86	12.0		
A13	Ave S D Rng N	5.7	5.52	3.2	NO AV	ATLABLE	DATA	3.0	2.5	.6	.14	.33		31.70	11.3		
B1	Ave S D Rng N	5.9	4.60	2.67	NO AV	AILABLE	DATA	3.0	2.3	.8	.15	.30		26.23	13.5		
в2	Ave S D Rng N	5.6	3.03	1.76	NO AV	AILABLE	DATA	3.0	2.1	.9	.15	.35		24.63	14.2		
в3	Ave S D Rng N	5.8	.60	1	NO AV	AILABLE	DATA	4.0	1.4	1.2	.20	.40		22.73	14.1		
	Ave S D Rng N											,					
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SOIL SERIES: Hot Lake

TAXONOMIC NAME: Aquic Haploxeroli

	1	4	1				TAXONOMIC	MARIE. MAG	map rome				
Horl zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	. 33 Atm.	15 Atm.	Bulk Density				
		(cm)		%			х н <sub>2</sub> 0		(g/cc)			THE COURT OF STREET, AS A STREET, STRE	
Αp	Ave S D Rng N	26.7 12.6 21-26 2	23.3 3.2 21-26 2	51.65 7.6 46~57 2	25.0 4.4 22-28 2		46.65 2.1 45-48 2	22.8 2.5 21-25 2	1.01 .01 1-1.02 2				
Clca	Ave S D Rng N	16.5 5.4 13-20 2	37.25 24.0 20-54 2	51.5 25.6 33-70 2	11.3 1.6 10-12 2		41.5 .6 41-42 2	17.8 2.3 16-19 2	1.06 .014 1.05-1.1 2				
C2	Ave S D Rng N	24.1 5.4 20-28 2	50.85 16.2 39-62 2	44.15 16.8 32-56 2	5.05 .6 4.6-5.5 2		45.4 2.3 44-47 2	10.5 .6 10-11 2	1.01 .05 .97-1.04 2	ī			·
C4	Ave S.D Rng N	39.35 19.7 25-53 2	32.7 6.8 28-38 2	62.25 5.2 59-66 2	5.15 1.6 4-6 2			4.85 .07 4.8-4.9 2		•	·		
	Ave S D Rng N	·											
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SOIL SERIES: Hot Lake

TAXONOMIC NAME: Aquic Haploxeroll

SOIL SEI	RIES:	Hot Lake						T	AXONOMIC	NAME:	Aquic Ha	ploxerol	1				
Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Са	Mg	Na	ĸ	_ H+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
	•	(1:1 H <sub>2</sub> 0)		%			z	(ppm)			Meq/I	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Ар	Ave S D Rng N	7.9 .3 7.7-8.1 2		2.8 1.2 2-3.6 2	.25 .09 .1932 2	11.1 .6 10-12 2				13.3 2.7 11-15 2	2.08 1.6 1-3.2 2	.4 .3 .62 2	1.3 1.2 .5-2 2	35.8 2.4 34-38 2			
Clca	Ave S D Rng N	8.25 .07 8.2-8.3 2			.065 .004 .0107	8.6 .6 8-9 2				11.55 4.7 8-15 2	1.8 .3 1.6-2 2	. 2		25.5 1.7 24-27 2			
C2	Ave S D Rng N	8.25 .2 8.1-8.4 2		.3 .064 .213	.03 .004 .0203 2	9.05 .9 8-10 2				6.85 1.6 5.7-8 2	1.2 .7 .7-1.7 2	. 1	.6 .1 .57 2	16.5 1.6 15-18 2		  	
C4	Ave S D Rng N	8.4 .5 8.1-8.8 2		.08 .05 .1245 2					5.5 1.2 4.6-6.4 2	3.2 .4 2.9-3.5 2	1.1 1.0 .4-1.8 2	.1 .04 .115 2	.55	8.15 .1 8.1-8.3 2	100	94.7	1.75 .6 1.3-2.2 2
	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		-	,							i				·		

SOIL SERIES: Hullt

TAXONOMIC NAME: Typic Xerumbrept

Owin opki		•		4			TAXONOMIC	NAME: Typ.	ic xerumbr	ept			
llorizon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
Al	Ave	(cm) 0-13		X	NO A	AVAILABLE D	% II <sub>2</sub> 0		(g/cc)				
	S D Rng N	1											
Bl	Ave S D Rng N	13-25			NO	AVATLABLE D	ATA						
B21	Ave S D Rng N	25-36			NO	AVAILABLE D	ATA						
11822	Ave S D Rng N	36-64			NO .	AVAILABLE D	ATA	,			·		
1183	Ave S.D. Rng N	64-86			NO .	(VAILABLE D	ATA	· · · · · · · · · · · · · · · · · · ·					
110	Ave S D Rng N	86-137		,	NO .	(VAILABLE D	\TA						
	Ave S D Rng N				1								
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	Ave S D Rng N		·										
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SOIL SE	RTES:	Hullt				~		T	CAXONOMIC	NAME:	Typic X	erumbrept	:				
Hor1zon	Stat.	pН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	К	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		%			7	(ppm)			<b>{</b>	00g			(NH <sub>4</sub> OAc)		
Al	Ave S D Rng N	5.9		N	O AVAILA	BLE DATA			9.4	5.4	.2	1.5		32.7	50.5		1.7
B1	Ave S D Rng N	5.9		N	O AVAILA	BLE DATA			8.3	5.4	.2	.8	ware then day  with their their  can their their	30.6	48.0		1.5
B21	Ave S D Rng N	5.8		N	O AVAILA	BLE DATA			6.8	6.2	.2	.7		27.9	49.8	  	1.1
11822	Ave S D Rng N	5.6		N	O AVAILA	BLE DATA			5.8	7.8	.3	.7		29.2	50.5		1
1183	Ave S D Rng N	5.4		N	O AVAILA	BLE DATA			4.8	10.0	.7	.4		34.7	45.8		.5
110	Ave S D Rng N			N	Aliava o	BLE DATA											
	Ave S D Rng N										1						
	Ave S D Rng N									·							
	Ave S D Rng N																
										İ							

SOIL SERIES: Hurwal

TAXONOMIC NAME: Pachic Argineroll

SOLL SEK	irai ni	•					TAXONOMIC	NAME: Pac	hic Argixe	roll			
llort zon	Stat.	Horizon Thickness	Sand	Silt	Clay	. 10 Atm.	.33 Atm.	15 Atm.	Bulk Density				
		(cm)		%			% H <sub>2</sub> 0		(g/cc)		er men hager are desputation regularly an exchange value	**************************************	
Аp	Ave S D Kng N	24.8 4.3 20-31 4	15.65 4.8 13-23 4	61.45 4.1 56-66 4	23.1 +2.1 21-25 -4		40.3 8.3 34~46 2	15.5 .6 15-16	1.1 .1 1.1-1.2 2				
А3	Ave S D Rog N	26.2 6.4 20-33 3	13.7 .8 13-14 3	63.2 4.9 60-69 3	23.1 5.2 17-27 3		40.7	14.4 .4 14-14.7 3	1.09	·			
BI	Ave S D Rng N	22 8.9 13-31 3	11.2 1.6 9.4-12 3	59.7 3.0 57-63	29.1 1.6 28-31 3		25.9 2.1 24-27 2	14.9 .6 14-16 3	1.4 .04 1.4-1.43 2	·			
В2	Ave S D Rng N	54.6 19.3 36-74 4	14.1 5.8 8.4-22 4	57.2 1.2 56-59 4	28.7 5.1 22-34 4		24.8	16.1 .5 16-17 3	1.60				
83	Ave S D Rng N	33 26.7 5.1-58 3	15.2 6.1 8.7-21	60.2 4.8 57-66 3	24,6 10.2 14-34 3		29.25 .2 29-29.4 2	15 4.0 10.5-18 3	1.4 .1 1.3-1.5 2	-			
c	Ave S D Rng N	58.35 17.9 45.7-71 2	20.8 1.8 19.5-22.1 2	57.7 11.0 49.9-65.5 2	21.5 12.9 12.4-30.6 2	  		15.3					
	Ave S D Rng N						· .						
	Ave S D Rng N				l								
	Ave S D Rng N				1							·	
												·	

SOIL SEI	RIES:	Hurwal						7	CAXONOM I C	NAME:	Pachic A	rgixerol	1				
Hor1 zon	Stat.	рH		Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	К	н <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		%			z	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(E Cat)	A second description of the second se
<b>A</b> p	Ave S D Rng N	6.4 .1 6.3-6.6		3.5 .7 2.9-4.4	. 2 . 04 . 2 31 4	14.25 .3 14-15 4	1.3 .1 1.2-1.4 2		22.3 1.0 21-23.2	5.0 .3 5-5.4 3	.2	1.6 .6 1.1-2.2	7.9 .6 7.3-8.5	33.8 2.2 31-35.4 3	86.6 9.2 80-97 3	78.75 1.1 78-80 3	4.5 .3 4.2-4.8
А3	Ave S D Rng N	6.65 .09 6.6-6.8	 	1.7 .25 1.5-2 3	.1 .02 .1216 3	12.6 1.7 11-14 3	1.35 .07 1.3-1.4 2		19.6 1.9 18.4-22 3	5.4 .5 5~5.9 3	.2 .06 .23	1.0 .3 .8-1.35	5.3 .7 4.6-6	31.2 1.6 29-32.1 3	84.1 4.5 79~88 3	83.1 2.6 81-86 3	3.6 .45 3.1-4 3
Bl	Ave S D Rng N	6.8 .1 6.7-6.9 3		.8 .07 .89 3	.08 .008 .0809 3	10.0 .7 9-11 3	1.7  1.7 2		17.7 1.4 16.5-19 3	7.0 .6 6.6-7.7 3	.5 .35 .39 3	.7 .2 .59	4.2 .7 3.7-5 3	30.4 1.8 28.5-32 3	85.15 3.7 81-88 3	86 2.6 83-88 3	2.5  2.5 3
В2	Ave S D Rng N	7.1 .4 6.6-7.5 4		.6 .2 .3789 4	.07 .02 .0509 4	7.95 1.5 8-9.8 4	1.7 .1 1.6-1.8 2		18.3 .5 18-18.6 3	7.4 .2 7.2-7.6 3	1.4 1.4 .4-3 3	.4 .2 .36 3	3.8 .7 3-4.25 3	32.0 .09 31.8-32 3	86 2.9 84.5~89 3	87.8 2.3 86-90 3	2.5 .1 2.3-2.6 3
в3	Ave S D Rng N	7.7 1.0 6.6-8.5 3		.2 .1 .1233 3			1.8		22.3 5.4 19-28.5 3	7.3 2.1 5.1-7.3 3	2.3 2.5 .4-5.1 3	.2 .2 .14	2.9 2.0 1.5-4.3 2	31.0 3.4 27-34 3	93.3 7.1 86-100 3	90.5 5.7 86-94 2	3.1 .6 2.6-3.7 3
С	Ave S D Rng N	8.2 .4 7.9-8.5 2		.3 .3 .0844 2	.05	8.5	1.6		21.3	9.5	6.6	.2		31.6	100		2.2
	Ave S D Rng N									-	ı						
	Ave S D Rng N										i						
	Ave S D Rng N										1						
<b>!</b>			,	<b> </b>	! <b>!</b>			l ,	J		'						]

SOIL SER	IES: I	mbler					TAXONOMIC	NAME: Pac	chic Haplo	xeroll		
llo r i zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	. 33 Acm.	15 Acm.	Bulk Density			ļ.
make the same and		(cm)	T	%	The other data was part with the way		× II <sub>2</sub> 0		(g/cc)			
1	Ave S D Rng N	0-20.3	71.3	18.9	9.8			6.2				
2	Ave S D Rng N	51-76	65.3	25.8	9.0	  		6.4				
	Ave S D Rng N			l							·	
	Ave S D Rng N					-						·
	Ave S D Rng N											
	Ave S D Rng N											
	Ave S D Rng N			1			·					
	Ave S D Rng N				1							
	Ave S D Rng N	·										

S R A	lve : D ing	(1:1 H <sub>2</sub> 0)			N	Ratio	Free Fe2 <sup>0</sup> 3	Avail.	Ca	Mg	Na	ĸ	н+	CEC	% Base Sat.	Sat.	Ca/Mg
S R A	D						Z	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)	(E Cat)	pad i Falkaria.
S R A	D																
A S								N	AVAILAE	LE DATA		<b> </b>					
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SOIL SERIES: Izee

TAXONOMIC NAME: Pachic Haploxeroll

	1	4	1				INVINCULL	innie raci	ure nablox	erolf		
Horizon	Stat.	Hortzon Thickness	Sand	Silt	Clay	. 10 Atm.	.33 Atm.	15 Atm.	Bulk Density	Boron		
		(cm)		%			% н <sub>2</sub> 0		(g/cc)	(ppm)		
All	Ave S D	0-10.2	32.41	43.33	24.26		and the same	8.46		.54		
	Rng N	1	1	1	1			1		1		
A12	Ave S D	10-31	27.73	41.71	30.56			11.19		.46		
	Rng N	1	1		1			1		1		
B2 I	Ave S D	31-51	28.08	40.62	31.30			10.48				
	Rng N	1	1	1 ,	1		<u>-</u> -	1				
B22	Ave S D	51-71	32.89	37.31	29.80			11.44				
	Ring N	1	1	1	1			1				
	Ave S D	·						`				
	Rng N			Ì	i							
	Ave S D											
	Rng N											
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	Ave S D Rng						٠					
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SOIL SERIES: 1zee

TAXONOMIC NAME: Pachic Haploxeroll

SOIL SE	CLES:	izee						T	'AXONOMIC	NAME:	Pachic H	aploxero	11				
llori zon	Stat.	ρН	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	H <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		%			*	(ppm)			Meq/l	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
All	Ave S D	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
	Rng N	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1
A12	Ave S D	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
	Rng N	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1
B21	Ave S D	7.5	1.97	1.14				5.9	14.4	3.9	.3	.6	2.5	20.9	91.9	88.5	3.6
	Rng N	1	1	1				1	1	1	1	1	1	1	1	1	1
B22	Ave S D	7.5	1.63	.94				5.2	15.8	4.4	1.0	.6	2.3	21.7	100.0	90.4	3.5
	Rng N	1	1	1				1	1	1	1	1	1	1	1	1	1
	Ave S D									!	·						
	Rng N																
	Ave S D										t			:			
	Rng N											-					
	Ave S D																
	Rng																
	Ave S D								- -								
	Rng N											·					
	Ave S D																
	Rng N		:														

SOIL SERIES: Jimbo

TAXONOMIC NAME: Andic Haplumbrept

	1	1	ı			1	, monomit	NAPIE And	rc Habramp	rept			
Horizon	Stat.	Horizon Thickness	Sand	Silt	Clay	. 10 Atm.	. 33 Acm.	15 Atm.	Bulk Density				
		(cm)		X	***		% н <sub>2</sub> 0		(g/cc)				
A I	Ave S D	0-20	34.16	50.18	15.66			21.25				-	
	Rng N	1	1	1	1			1					
А3	Ave S D	20-36	36.16	51.58	12.66			19.03			·	. '	
	Rng N	1	1	1	1			1		·			
В2	Ave S D	36-79	42.31	44.94	12.75			17.77					
	Rug	1	1	1	1			1					
С	Ave S D Rng	79-109	40.37	46.10	13.53			18.84					
	N	ı	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			1									

TAXONOMIC NAME: Andic Haplumbrept

2011	SERIE	.s:	Jimbo				_			AXONOMIC	NAME:	Andic Ha	plumbrep	t				
Hori	zon St	at.	рH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	к	H <sup>+</sup>	CEC	% Base Sat.	% Base Sat.	Ca/Mg
			(1:1 H <sub>2</sub> 0)	******	x			Z	(ppm)			Meq/l	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Al	S R	ve D ng N	5.6	11.2	6.50		  			6.8	1.6	.2	.7	 	34.4	27.0		4.3
А3	S Ri	ve D ng N	5.7	2.5	1.45					3.8	1.2	.1	.5		22.6	24.8		3.2
В2	S Ra	ve D ng N	5.5	2.0	1.16					3.5	1.1	.1	.5		23.3	22.4		3.2
C	S Rr	ve D ng N	5.4	.6	.35					9.0	4.5	1	1		22.5	64.4		2.0
	S Rr	ve D ng N								·								
	S Rr	ve D ng	·															
	A v S Run N	D										1						
	S Rn N	D ng N					·					- T						
	S Rn N	D ng										4						
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Horizon S	Stat.	Horizon					TAXONOMIC	NAME:	Xeric Hapi	ohumult		
1	Stat.	Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density			
		(cm)		%			х н <sub>2</sub> 0		(g/cc)			
	Ave S D Rng N	14.2 2.6 8-15	14.3 5.9 4-27 11	43.5 8.6 32-59 11	42.2 13.4 14-63	45.0 .1 44-46 2	39.75 3.2 37-42 2	20.15 4.7 17-23 2				
	Ave S D Rng N	17.2 2.4 15-20 4	17.7 9.1 12-28 3	51.2 6.5 44-56 3	31.1 14.3 16-44 3	38.95 3.7 36-42 2	35.6 1.8 34-37 2	17.4 5.4 12-23 3				
	Ave S D Rng N	30.2 15.4 13-66 12	13.2 7.4 4-31 10	37.6 7.4 27-48 10	44.3 15.7 17-69 10	36.5 4.4 33-40 2	33.6 2.7 32-36 2	20.25 4.2 17-23 2				
	Ave S D Rng N	53.3 26.3 18-122 12	11.9 6.3 4-26 11	33.8 6.7 24-39 11	54.3 12.1 27-71 11	34.4 2.7 32-36 2	32.3 1.8 31-34 2	20.8 2.9 18-24 3				
	Ave S D Rng N	24.4 10.6 13-38 5	13. 2 12. 9 2-35 5	34.5 11.6 15-45 5	52.4 20.4 26-83 5	37.4 6.1 33-42 2	34.8 4.5 32~38 2	23.8 4.5 19-27 3				
	Ave S D Rng N	24.1 5.4 20-28 2	47.9 12.9 39-57 2	25.75 1.9 24-27 2	26.3 14.8 16-37 2	42.6	39.9	28.4				
5	Ave S D Rng N				ı							
S	Ave S D Rng N					·				-		
S	Ave S D Rng N								·			

SOIL SEI	RIES:	Jory						т	CAXONOMIC	NAME:	Xeric l	laplohumu	lŧ		_		
Horizon	Stat.	pH	Organic Matter		N	C/N Ratio	Free Fe <sub>2</sub> 03	Avail. P	Ca	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
Secretarion (s) 11 may states - ma		(1:1 H <sub>2</sub> 0)		<b>z</b>			× ×	(ppm)			Meq/l	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
Ар	Ave S D Rng N	5.7 .4 4.8-6.4 12	4.1	6.4 1.9 4.8-7.4	.3 .06 .23	21.1 4.5 16-25 3	8.65 2.9 7-11 2	33.0 43.9 2-64 2	8.0 4.5 2-15 14	2.6 1.8 .9-4.8 14	.4 .5 .1-1.3	1.3 1.3 .3-5.3	24.1 6.0 17-29 3	29.2 9.6 14-49 13	43.9 19.4 24-84 13	30.4 11.2 23-43	3.6 2.2 1.7-9.1 14
А3	Ave S D Rng N	5.7 .2 5.5-6.0 5	1.5	3.4 1.5 1.7-4.5 5	.16 .09 .13	16.4 2.1 14-18 3	9.25 3.2 7-12 2	32.4	8.35 3.6 2-12 6	3.3 1.9 1.2-6.3	.5 1 .1-1.2	1.1 .7 .4-2.3 6	19.2 8.5 11-28 3	34.3 15.1 13-55 5	47.9 19.3 33-79 5	36.2 3.3 33-39 3	2.7 .9 1.8-4.1
В1	Ave S D Rng N	5.6 .3 5.3-6.1 13	1.1	2.7 1.3 .8-3.7 4	.13 .10 .062 2	15.75 4.2 13-19 2	9.3 3.1 7-12 2	1.3	6.6 3.3 3-12 13	2.6 1.7 .35-6.6 13	.3 .4 .19	.4 .3 .05-1.2 13	20.7 8.0 12-27 3	25.4 7.5 17-43 12	40.3 19.7 17-91 12	34.7 4.6 30-39 3	3.1 2.0 1.8-9.4 13
B2	Ave S D Rng N	5.5 .4 4.8-6.0 12	1	.7 .6 .3-1.3	.07 .04 .031	9.5 5.8 4-15 3	10.0 4.0 7-13 2	19.1	5.0 2.4 2-10 12	2.8 1.2 1.0-4.6 12	.4 .5 .1-1.2	.3 .2 .0553 12	16.5 5.1 12-22 3	20.5 2.9 17-26 11	41.2 15.6 16-62 11	37.4 9.8 31-49 3	1.8 .5 1.5-2.6 12
в3	Ave S D Rng N	5.4 .5 4.8-6.1 7	.2	.6 .2 .38	.06 .04 .0310 3	10.2 2.6 8-13 3	11.45 4.6 8-15 2	14.4	5.3 3.2 1.3-9.9	3.0 1.6 .7-4.6	.8 1.1 .1-2.4 4	.3 .1 .15 5	21.7 9.8 12-32 3	32.6 8.6 24-45 4	37.3 8.1 22-45 4	30.8 7.4 28-39 3	1.7 .4 1.1-1.9 5
C	Ave S D Rng N	4.7 .3 4.5~4.9 2	20 00 00 20 00 00 20 00 00 20 00 00	.4 .1 .34	.02 .003 .0203 2	16.5 6.3 12-21 2	10.9 4.4 8-14 2		7.25 1.5 6.2-8.3	4.35 .2 4.2-4.5 2	.35 .07 .34 2	.3 .3 .15 2	26.4 7.4 21-32 2	30.7 .4 30-31 2	39.8 7.1 35-45 2	32.3 9.8 25-39 2	1.65 .2 1.5-1.8
	Ave S D Rng N																
	Ave S D Rng N											1					
	Ave S D Rng N				·												
										1							P2 25

SOIL SER	IES:	Kanutchan					TAXONOMIC	NAME: T	ypic Pello	(erert			
Hort zon	Stat.	Horizon Thickness	Sand	Silt	Clay	. 10 Atm.	. 33 Atm.	15 Atm.	Bulk Density				
		(cm)		%			X 11 <sub>2</sub> 0		(g/cc)		New or the contract of the con	The same of the sa	
Ар	Ave S D Rng N	10.2  10.2 2	10.9 1.1 10-12 2	24.8 .3 24.6-25.0 2	64.3 .8 64~65 2			29.0 .9 28-30 2		·			
Al	Ave S D Rng N	66.9 14.0 51-76 3	15.3 7.5 9.9-24 3	26.5 4.6 22-31 3	58. 2 12. 1 45-68 3	43.75	43.0 3.4 41-45 2	28.4 2.8 26-32 3	1.7				
AC	Ave S D Rng N	42.3 20.7 28-66 3	18.5 4.4 14-23 3	29.6 5.0 24-34 3	51.6 8.8 44-61 3			28.3 3.0 25-31 3	 				
С	Ave S D Rng N	45.7 21.6 31-61 2	18.1 6.2 14-23 2	29.0 3.8 26-32 2	52.8 10.3 46-60 2		777	27.3 5.8 23-31 2					
IIR	Ave S D Rng N	144.8+	59.6	25.8	14.6			16.7					
	Ave S D Rng N				i								
	Ave S D Rng N												
	Ave S D Rng N											,	
	Ave S D Rng N									·			

SOIL SEE	HES:	Kanute	han					Т	AXONOM1 C	NAME:	Typic P	elloxere	rt.				
ilo r í zon	Stat.	, pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	К	H	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		%			X	(ppm)			Meq/10	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	THE PERSON NAMED IN
Ар	Ave S D Rng N	6.6 .4 6.3-6.9	4.1 .8 3.6-4.7 2	2.4 .4 2.1-2.7 2	.14 .02 .1315	17.7 5.3 14-21 2		14.5	27.5 12.7 19-37 2	19.5 2.8 18-22 2	.38 .27 .1957	1.15 .27 .96-1.3 2	400 min un. 400 min un. 400 min un.	53.8 1.8 52-55 2	85.7 20.2 71-100 2		1.38 .45 1.0-1.7
A1	Ave S D Rng N	6.7 .6 6.1-7.1	3.4 2.8 1.8-6.6 3	1.1 .05 1.0-1.1 2	.05 .005 .0506 2	19.6 .9 19-20 2		4.5 .7 4.1-5.4	31.6 7.4 24-38 3	18.2 4.6 14-23 3	.61 .38 .36-1.1	.46 .21 .2768 3	12.3	54.1 11.5 41-63	93. 7 4. 7 90-97 3	75.7	1.74 .09 1.7-1.8
AC	Ave S D Rng N	7.7 .4 7.3-8.0 3	1.2 .5 .8-1.7	.55 .07 .56 2	.03 .005 .0203 2	20.1 1.0 19-21 2		2.75 1.06 2-3.5 2	31.9 7.4 24-39 3	20.6 5.7 16-27 3	1.59 1.71 .58-3.6	.43 .19 .2462	3.6	51.2 10.1 41-61 3	100  100 3	91.9	1.56 .16 1.4-1.8
С	Ave S D Rng N	8.15 .07 8.1-8.2 2	.65 .07 .67 2	. 35 . 07 . 3 4 2	.02 .005 .0203 .0203	15.4  15.4 2		2.5	34.5 .7 34-35 2	22.8 6.0 19-27 2	2.66 2.67 .77-4.5 2	.51 .11 .4358 2		54.3 6.3 50-59 2	100  100 2		1.57 .45 1.3-1.9
IIR	Ave S D Rng N	8.2	.2	.1	.01	11.1			35.0	16.8	.95	.24		38.7	100		2.08
	Ave S D Rng N					·	·							,			
	Ave S D Rng N										1						·
	Ave S D Rng N											·					
	Ave S D Rng N																·
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SOIL SERIES: Keel

TAXONOMIC NAME: Andic Cryumbrept

2011. 2641	res, Ke	A		4			TAXONOMIC	NAME: And	ic Cryumbr	ept		
Horizon	Stat.	Hortzon Thickness	Sand	Silt	Clay	. 10 Acm.	. 33 Atm,	15 Atm.	Bulk Density			
		(cm)		X			% II <sub>2</sub> 0		(g/cc)			
Al	Ave S D Rng N	0-25	21.92	55.80	22.29			25.44			·	
В2	Ave S D Rng N	25-48	25.56	50.96	23.48			21.77				
В3	Ave S D Rng N	48-61	31.61	46.97	21.42			20.59			·	
	Ave S D Rng N			,						·		
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	Ave S D Rng N											
	Ave S D Rng N			·								
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SOIL SERIES: Keel

TAXONOMIC NAME: Andic Cryumbrept

SOIL SEI	RUES:	•			_			T	AXONOM1C	NAME:	Andic Cr	yumbrept					
Hori zon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(1:1 H <sub>2</sub> 0)		%			z	(ppm)			Meq/l	00g			(NH <sub>4</sub> OAc)	(Σ Cat)	
۸1	Ave S D Rng N	5.2	12.0	N(	AVAILAE	LE DATA		13.0	1.15	.32	. 35	.46	40.6	36.0	6.23		
В2	Ave S D Rng N	5.15	2.91	N	AVAILAI	LE DATA		3.0	.55	.17	.18	.15	35.95	31.95	3.33	2-2	
В3	Ave S D Rug N	4.9	6.17	N(	AVAILA	LE DATA		3.0	.70	.39	.23	.27	32.8	28.6	5.56		
	Ave S D Rng N																
	Ave S D Rng N									÷	1						
	Ave S D Rng N										1						
	Ave S D Rng N								·								
	Ave S D Rng N		·								ı						
-	Ave S D Rng N						-				ì.						

SOIL SER	IES:	Kerby					TAXONOMIC	NAME: Typ	oic Xerochi	ept		
Hori zon	Stat.	Horizon Thickness	Sand	Silt	Clay	.10 Atm.	.33 Atm.	15 Atm.	Bulk Density	•	1	<b>.</b>
		(cm)		X			х н <sub>2</sub> о		(g/cc)	· · · · · · · · · · · · · · · · · · ·		
Ар	Ave S D Rng N	10.0	37.4	44.3	18.3		27.8	9.9				
A12	Ave S D Rng N	8.0	35.6	45.1	19.3			 				
Bł	Ave S D Rng N	28.0	36.1	44.9	19.0		21.7	8.2				
B21	Ave S D Rng N	28.0	37.5	1	20.1	  	22.4	9.2				
В22	Ave S D Rng N	30.0	45.5	34.8	19.6	  	22.6	9.6				
110	Ave S D Rng N	30.0	73.8	11.4	14.9		13.6	7.5				
	Ave S D Rng N											
	Ave S D Rng N											
	Ave S D Rng N											
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SOIL SE	RIES:	Kerby				•		Т	AXONOMIC	NAME:	Туріс	Xerochre	pt				
Horizon	Stat.	pH	Organic Matter	Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail. P	Ca	Mg	Na	к	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
		(l:1 н <sub>2</sub> 0)		z			7	(ppm)			Meq/10	00g			(NH <sub>4</sub> OAc)		
Ар	Ave S D Rng	6.1	5.9	N	O AVAILA	BLE DATA		13.0	4.5	1.8	.2	.4	13.0	15.1	45.7	34.0	
Λ12	N Ave S D Rng	5.7	2.2		O AVAILA	BLE DATA		1 10.0	1.9	.9	.1	.2	1 12.3	10.6	29.2	20.1	
B1	Ave S D	5.6	1 1.8	N	O AVAILA	BLE DATA		7.0	1 1.5	1 1.2	.2	1 .1	1 10.3	9.2	32.6	22.5	
B21	Rng N Ave S D	5.7	1 1.0		: O AVATLA	BLE DATA		1 1.0	2.7	3.0	.2	.1	8.4	1 11.4	52.6	41.7	
B22	Rng N Ave	5.9	1		O AVAILA	BLE DATA-	- <b></b>	2.0	3.5	1 4.9	.2	.1	8.3	1 13.0	66.9	1 40.1	
110	S D Rng N	1 6.1			O AVAILA	RIE DATA		3.0	1 2.4	1 4.5	1 .2	1 .1	1 6.4	1 10.8	66.7	52.9	
110	Ave S D Rng N	1			O AVAILA	DEE DATA		1	1	1	1	1	1	1	1	1	an an an
	Ave S D Rng N				ļ						,						
	Ave S D Rng N									:	1						
	Ave S D Rng N				,												
				,													t. 75 6.4

SOIL SERIES: Kiesel

TAXONOMIC NAME: Xerollic Natrargid

JOHN BUK	1	TAXONOMIC NAME: Xerollic Natrargid											
llorizon	Stat.	Horizon Thickness	Sand	Silt	Clay	. 10 Atm.	.33 Atm.	15 Atm.	-Bulk Density				
		(cm)		%			% н <sub>2</sub> 0		(g/cc)				-
Al	Ave S D	0-10	15.64	73.40	10.96			5.86					
	Kng N	1	1	1	1			1					
B21	Ave S D	10-18	7.53	57.80	34.67			14.76					
	Rng N	1	1	1	1			1					
В22	Ave S D	18-28	5.14	48.02	46.84			21.65					
	Rng N	1	1	1	1			1					
B23	Ave S D	28-56	7.60	54.59	37.81			19.80					
	Rng N	1	1	1	1		*** ***	1			i		
C	Ave S D Rng	56-102	23.85	59.77	16,38			11.19				·	
	N	1	1	1	1			1					
	Ave S D Rng			,									
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SOIL SERIES: Kiesel TAXONOMIC NAME: Xerollic Natrargid																	
lior i zon	Stat.	ρĦ		Organic Carbon	N	C/N Ratio	Free Fe <sub>2</sub> 0 <sub>3</sub>	Avail.	Ca	Mg	Na	K	н+	CEC	% Base Sat.	% Base Sat.	Ca/Mg
Anni da anti anti anti anti anti anti anti ant		(1:1 H <sub>2</sub> 0)		2			2	(ppm)			Meq/1	00g			(NH <sub>4</sub> OAc)		
Al	Ave S D Rng N	9.6	.52	<b>N</b> O	AVAILAE	LE DATA		7.0	13.0	1.5	7.54	2.17	1.1	6.85		95.7	
B21	Ave S D Rng N	9.9	.26	  t	O AVAILA	BLE DATA		4.0	13.3	1.1	27.0	1.57	.2	10.27		100.0	
В22	Ave S D Rng N	10.2	.47	t	O AVAILA	BLE DATA	<b>\</b>	23.0	31.8	1.6	38.2	1.62	T	17.12		100.0	
B23	Ave S D Rng N	10.4			O AVAILA	BLE DAT		30.0	31.4	1.6	34.1	1.20	T	27.11		100.0	
C	Ave S D Rng N	10.6		N	O AVAILA	BLE DATA		21.0	27.8	1.6	33.5	.62	T	10.27		100.0	
	Ave S D Rng N										l						
	Ave S D Rng N							·									
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