PROJECT: Clancy-Unionville Date: 6/10/02

SITE_NAME: Whiteman Gulch

PLOT_ID: 02SF001
SLOPE:
ASPECT:

EXAMINERS:
Farley/Archer/Vangemert
UTM_N: 5149277
UTM_E: 416169
NAD 27

COMMENTS:
Plot samples harvest unit 31601001, with landtype 56A. One acre area sampled using grid spacing of 7 paces; 33 points taken. Roads bound upper and lower parts of unit, with the upper still traveled. Lower road remains compacted though is vegetated.

MANY ROOTS DEPTH (cm):	3
COMMON ROOTS DEPTH (cm):	12 +/- 0.83
A HORIZON DEPTH (cm):	23 +/- 1.06
BARE GROUND %:	+/- 4.95
DUFF DEPTH (cm):	+/-

DISTURBANCE LEVEL:	Low Disturbance
Bulk Density Ave Wt	347.47 +/- 18.83
Average Infiltration Rate	430 +/- 34

DISTURBANCE LEVEL:	Intermediate Disturbance
Bulk Density Ave Wt	390.70 +/- 18.31
Average Infiltration Rate	321 +/- 25

DISTURBANCE LEVEL:	High Disturbance
Bulk Density Ave Wt	456.57 +/- 12.71
Average Infiltration Rate	56 +/- 5

Clancy -Unionville

02SF001

Infiltration	Volume Measurement (ml)					
Undisturbed	1	2	3	4	5	6
1	4400	2860	3080	3160	3440	3300
2	2600	1670	1520	1600	1760	1560
3	2440	1600	1520	1800	1760	1800
Moderately Disturbed						
1	1160	1100	1380	1300	1200	
2	2000	2240	2100	2200	2220	
3	1480	1640	1820	1800	1960	
Disturbed						
1	560	400	460	360	260	340
2	480	340	380	200	400	300
3	180	220	120	140	140	180

Note: Measurements for the Moderately Disturbed site were recorded at 7:30 minute intervals for 35 minutes.

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02SF001

Bulk Density

		Dry Wt (g)	Volume (ml)	Density (g/ml)
Undisturbed				
	1	337.1		#DIV/0!
	2	321.3		#DIV/0!
	3	384.0		#DIV/0!
Moderately Disturbed				
	1	427.1		#DIV/0!
	2	369.0		#DIV/0!
	3	376.0		#DIV/0!
Disturbed				
	1	438.3		#DIV/0!
	2	481.0		#DIV/0!
	3	450.4		#DIV/0!

ØCSFC #1

6/10

Clancy Unionville

Disturbed MGT practice Area

Sampling

Impacted Middle Undisturbed

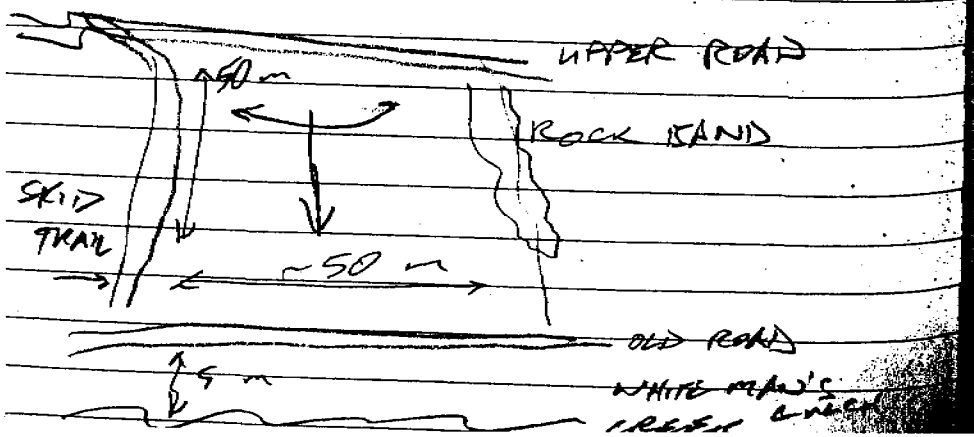
Compaction

	15	16	17	18	19	20	21	22	23	24
EROSION										
DISPLACEMENT								X	X	X
Compaction			X		X					X
NONE	X	X		X				X	X	
MASSIVE							X			
Soil		5						5	5	5
Veg Cov	25	30	35	40	15	5	10	40	40	45
LITTER	20	15	35	50	50	50	55	30	30	40
ROCK	40	20	15				5	10	5	
DWOOD <1										
1-3	5			10	5	5		5		
3-6	10		10					10	10	10
12-24									10	
24		30								
MOSS			5							
Density										
>1.4										
1-3										
1.6										

VA / TV

POINT	25	26	27	28	29	30	31	32	33
EROSION									
COMP			X	X (CULVERT)					X
DISPLACEMENT	X	X		X				X	X
MASSIVE	X								
NO EVIDENCE		X			X	X	X	X	
SOIL	5		5	10	5				
VEG COV.	45	70	40	45	50	60	75	75	40
LITTER	40	20	40	35	40	35	15	25	55
ROCK	5	5	5						
D. WOOD <4			5						
[illegible]					5	5			5
3→6		5							
6→12									
12→24									
>24	5						10		
							11		
MOSS			5	5/10					

OLD ROADS LOWER & UPPER PART OF SITE. LOWER RDS IS VEGETATED THOUGH STILL COMPACTED. BANKS VEGETATED.



6/12/02

LOCATION:

12T 0415097
(Zone 12)
N 5149597

12T 416169
N 5149277

Soil Type - 56A

FY02
CU monitoring plots:
025F001 → 025F005
and
025F007 → 025F042

5
+16
21 plots

0						
2	4^{30}	7^{30}	9^{30}	12	14^{30}	15
4						

Archer
Vangemert

START					
1 0	✓ 7^{30}	15	22^{30}	30	37^{30}
2 2	✓ 9^{30}	17	24^{30}	32	39^{30}
3 4	✓ 11^{30}	19	26^{30}	34	41^{30}

(mL)

	#1	#2	#3	#4	#5
1	1160	1100	1380	1300	1200
2	2000	2240	2100	2200	2220
3	1480	1640	1820	1800	1960

CU 6/12/02 31501001
[illegible] Moderately Disturbed sit

Samples IN: 0730 June 12
OUT: 1400 June 14

	10	12 30
	22^{30}	25
	35	T[illegible]

SAMPLES WT

	WT + TIN	TIN	ACTUAL (g)	AVE
U 1	357.3	20.2	337.1	
U 2	339.3	18.0	321.3	347.5
U 3	401.7	17.7	384.0	
I 1	445.4	18.3	427.1	
I 2	386.9	17.9	369.0	390.7
I 3	395.2	19.2	376.0	
D 1	457.4	19.1	438.3	
D 2	500.2	19.2	481.0	45[illegible]
D 3	468.2	17.8	450.4	

PROJECT: Clancy-Unionville Date: 6/17/02

SITE_NAME:

PLOT_ID: 02SF002
SLOPE:
ASPECT: 78

EXAMINERS:
Farley/Archer/Vangemert
UTM_N: 5142550
UTM_E: 408527
NAD 27

COMMENTS:
Plot samples stand 32101001 in lantype 136. Farley estimates area was precommercial thinned 8-12 years ago. Lower portions of unit have wet soils. Possibly, massive structure is attributable to this. Area was clearcut in 1973.

MANY ROOTS DEPTH (cm):	3
COMMON ROOTS DEPTH (cm):	13 +/- 0.92
A HORIZON DEPTH (cm):	7 +/- 1.00
BARE GROUND %:	+/- 0.97
DUFF DEPTH (cm):	+/-

DISTURBANCE LEVEL:	Low Disturbance
Bulk Density Ave Wt	+/-
Average Infiltration Rate	622 +/- 81

DISTURBANCE LEVEL:	Intermediate Disturbance
Bulk Density Ave Wt	+/-
Average Infiltration Rate	54 +/- 5

DISTURBANCE LEVEL:	High Disturbance
Bulk Density Ave Wt	+/-
Average Infiltration Rate	0 +/- 0

PROJECT: Clancy-Unionville Date: 6/18/02

SITE_NAME:

PLOT_ID: 02SF003
SLOPE: 16
ASPECT: 240

EXAMINERS:
Farley/Archer/Vangemert
UTM_N: 5141562
UTM_E: 408714
NAD 27

COMMENTS:
Treated area was clearcut in 1970's; treatments include tractor yarded and broadcast burned. 10 acres toe point sampled. Substantial surface water and runoff at site during sampling.

MANY ROOTS DEPTH (cm):	3
COMMON ROOTS DEPTH (cm):	13 +/- 0.57
A HORIZON DEPTH (cm):	10 +/- 1.22
BARE GROUND %:	+/- 1.15
DUFF DEPTH (cm):	+/-

DISTURBANCE LEVEL:	Low Disturbance
Bulk Density Ave Wt	287.60 +/- 36.94
Average Infiltration Rate	2428 +/- 1396

DISTURBANCE LEVEL:	Intermediate Disturbance
Bulk Density Ave Wt	276.97 +/- 9.95
Average Infiltration Rate	162 +/- 15

DISTURBANCE LEVEL:	High Disturbance
Bulk Density Ave Wt	410.10 +/- 38.95
Average Infiltration Rate	49 +/- 18

6/14 2:30p

Spoke with Jay (Range) about Whiteman Gulch private property area and he said that crossing the man's property would be difficult. He is very skeptical of anyone doing anything in the area. Also he is raising German Shepard dogs. Best to walk around the property

I mentioned Rosanna Finley (449-5475 x34) knew how to contact him. Jay said this was alright to go ahead and contact the land owner through her.

H_2O infiltration 025F003

Intermediate (moderately) Disturbed 6/18/02

Tyler Vandenberg

	START	(ml)				
1	0:00	930	1230	17^{30}	22^{30}	27^{30}
		1180	800	640	640	600
2	2:00	9^{30}	14^{30}	19^{30}	24^{30}	29^{30}
		2000	1720	1080	1160	1140
3	4:00	11^{30}	16^{30}	21^{30}	26^{30}	31^{30}
		720	540	480	620	600

1) 32^{30}
780

2) 34^{30}
1180

3) 36^{30}
340

PROJECT: Clancy-Unionville Date: 6/19/02

SITE_NAME:

EXAMINERS:
Farley/Archer/Vangemert

PLOT_ID: 02SF004
SLOPE: 25
ASPECT: 340

UTM_N: 5145542
UTM_E: 410845
NAD 27

COMMENTS:
Plot samples unit 32104029 on landtype 36. Site was clearcut and tractor yarded in the 1970's.

MANY ROOTS DEPTH (cm):	2
COMMON ROOTS DEPTH (cm):	13 +/- 0.67
A HORIZON DEPTH (cm):	17 +/- 1.28
BARE GROUND %:	+/- 1.61
DUFF DEPTH (cm):	+/-

DISTURBANCE LEVEL:	Low Disturbance
Bulk Density Ave Wt	324.17 +/- 18.48
Average Infiltration Rate	469 +/- 45

DISTURBANCE LEVEL:	Intermediate Disturbance
Bulk Density Ave Wt	331.97 +/- 17.95
Average Infiltration Rate	456 +/- 53

PROJECT: Clancy-UnionvilleDate: 6/19/02

SITE_NAME:

PLOT_ID: 02SF005
SLOPE: 35
ASPECT: 342

EXAMINERS:
Farley/Archer/Vangemert
UTM_N: 5145577
UTM_E:
NAD 27

COMMENTS:
Plot samples unit 32104028 on landtype 36B. Area was tractor clearcut and tractor yarded in the 1970's. Appears seed tree.

MANY ROOTS DEPTH (cm):	1
COMMON ROOTS DEPTH (cm):	8 +/- 0.44
A HORIZON DEPTH (cm):	21 +/- 1.18
BARE GROUND %:	+/- 1.19
DUFF DEPTH (cm):	+/-

DISTURBANCE LEVEL:	Low Disturbance
Bulk Density Ave Wt	+/-
Average Infiltration Rate	972 +/- 328
DISTURBANCE LEVEL:	Intermediate Disturbance
Bulk Density Ave Wt	334.87 +/- 24.94
Average Infiltration Rate	455 +/- 42
DISTURBANCE LEVEL:	High Disturbance
Bulk Density Ave Wt	+/-
Average Infiltration Rate	126 +/- 18

PROJECT: Clancy-Unionville Date: 7/15/02

SITE_NAME: Frohner

EXAMINERS:
Archer/Vangemert

PLOT_ID: 02SF027
SLOPE: 32
ASPECT: 187
UTM_N: 5144478
UTM_E: 408292
NAD 27

COMMENTS:
Landscape is moderate hillslope with many rock outcrops; seems like granite. Lodgepole pine forest here has many age classes including doghair thickets. Understory is beargrass and vaccinium, with lupine and pinegrass. Charcoal was found as deep as 5 cm from surface. Soils had some clayey dark surface layers, though were mostly light (10YR4/2) and sandy loam. LT

MANY ROOTS DEPTH (cm):	0
COMMON ROOTS DEPTH (cm):	9 +/- 0.13
A HORIZON DEPTH (cm):	12 +/- 1.06
BARE GROUND %:	+/- 1.41
DUFF DEPTH (cm):	+/-

DISTURBANCE LEVEL:	Soils are cool!
Bulk Density Ave Wt	+/-
Average Infiltration Rate	651 +/- 95

PROJECT: Clancy-Unionville Date: 7/16/02

SITE_NAME: Spruce Hills

EXAMINERS:
Archer/Vangemert

PLOT_ID: 02SF028
SLOPE: 30
ASPECT: 287
UTM_N: 5147320
UTM_E: 411677
NAD 27

COMMENTS:
The plot samples map unit 57, a silt loess/ash m.u. Transects and point sampling were done. Vegetation is very lush pinegrass with Spirea spp and snowberry with PINCON and PSEMEN overstory. The root mat was very thickin places, up to 5 cm. Some aspen also exist. Landscape is lateral undulation hillslope. Charcoal found in lower duff layer. This duff layer was roughly 2 cm in open grassy areas and deepened to greater than 10 cm in areas under the tree canopy. Textures were very sandy, roughly loamy sand. Not much

MANY ROOTS DEPTH (cm):	1
COMMON ROOTS DEPTH (cm):	7 +/- 0.42
A HORIZON DEPTH (cm):	9 +/- 0.89
BARE GROUND %:	+/- 0.64
DUFF DEPTH (cm):	+/-

PROJECT: Clancy-Unionville Date: 7/16/02

SITE_NAME: Chessman Lake

EXAMINERS:
Archer/Vangemert

PLOT_ID: 02SF029
SLOPE: 15
ASPECT: 15

UTM_N: 5146598
UTM_E: 409855
NAD 27

COMMENTS:
This plot references C-103 project unit and 36 landtype map unit. This area abuts the intersetion of Chessman Reservoir Rd. and Corral Gulch Rd. Lodgepole and Douglas-fir are canopy species, while understory is mostly pinegrass and moss. Landscape is undulating hillslope, at the upper third.

MANY ROOTS DEPTH (cm):	0
COMMON ROOTS DEPTH (cm):	5 +/- 0.00
A HORIZON DEPTH (cm):	6 +/- 0.69
BARE GROUND %:	+/- 0.76
DUFF DEPTH (cm):	+/-

DISTURBANCE LEVEL:	Soils are cool!
Bulk Density Ave Wt	+/-
Average Infiltration Rate	1111 +/- 30

Date: 7/18	Rooting Depth & Abundance/ Texture, Structure, & Color/ Ground Cover						
Crew: VAN Gomert Archer / Berg	Site Name: CHessman Res.				Plot ID: 02SF029		
	Root Abundance			Description: Proposed Logging Unit			
TRANSECT #	POINT SAMPLE	Depth Measures	Many >100	Common 10-100	"A" Horizon		10 POINT GROUND COVER
1	1					Texture 35CL Sandy Loam 65%S	
			0	6 cm	5 cm		
	2					Structure - 1 F SBK	
			0	3	8		
	3						
			0	1	7	Color	
	4					wet: 10YR 2/2	
			0	2	6		
	5					dry:	
			0	4	10		
2	1					Texture Sandy Loam	
			0	7cm	8cm		
	2					Structure 1 F SBK	
			0	10	10		
	3						
			0	5	5	Color	
	4					wet: 10YR 4/2	
			0	5cm	4		
	5					dry:	
			0	5	4		
3	1					Texture Sandy Loam	
			0	5	9		
	2					Structure 2 F SBK	
			0	1	4		
	3						
			0	4	4	Color	
	4					wet: 10YR 4/3	
			0	5	12		
	5					dry:	
			0	7	5		GROUND COVER

GPS- 429855E 5146596N

Aspect - 195°

Slope - 15%

PROJECT: Clancy-Unionville Date: 7/18/02

SITE_NAME: Lava Peak Trailhead

EXAMINERS:
Archer/Vangemert

PLOT_ID: 02SF030
SLOPE: 8
ASPECT: 6

UTM_N: 5146155
UTM_E: 409683
NAD 27

COMMENTS:
Site samples polygon with non-sensitive soil type. Area is residuum, at slope crown bordering an old harvest unit. The parent material weathers to sandy-fine sandy very thin soils. Litter accumulates 1 cm withmore decomposed duff of 1-3 cm. Old harvest unit has many exposed non-vegetated areas without duff, while proposed harvest unit has duff intact throughout. Vegetation is doghair lodgepole pine with sparse vaccinium and pinegrass. LT ?

MANY ROOTS DEPTH (cm):	0
COMMON ROOTS DEPTH (cm):	6 +/- 0.00
A HORIZON DEPTH (cm):	7 +/- 0.71
BARE GROUND %:	+/- 0.53
DUFF DEPTH (cm):	+/-

DISTURBANCE LEVEL:	Soils are cool!
Bulk Density Ave Wt	+/-
Average Infiltration Rate	116 +/- 19

SITE OVERVIEW

Site Name: LAVA PK TRHEAD Date: 7/18/02 Plot ID: 02SF030

GPS: Zone 12 T NAD-27 UTM: 409683 (easting), 5146155 (northing)

Slope: 5 - 10%	Aspect: 180° UPHILL

Notes:

SITE IS TREATMENT POLYGON W/ NON-SENSITIVE SOIL TYPE. AREA IS RESIDUUM, C SLOPE CROWN BORDERING OLD HARVEST UNIT. GEOLOGY WEATHERS TO SANDY → FINE SANDY VERY THIN SOILS. LITTER IS 1 cm W/ MORE DECOMPOSED DUFF 1 → 3 cm. OLD HARVEST UNIT HAS MANY EXPOSED NON-VEGETATED AREAS W/O DUFF, WHILE PROPOSED AREA HAS DUFF INTACT THROUGHOUT.

VEGETATION IS DOGHAIR LODGEPOLE W/ SPARSE VACCINIUM & PINEGRASS.

7 PACE-SAMPLE SPACING

Site: DESERT LAVA PK GRASSLANDS.																Date: 7/18/02																	
Observer: VA																Legal Location:																	
Topo Map #/Name:																Soil Map Unit: 120																	
Treatment:																Slope Gradient:																	
Sample Point #:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Compaction:																																				
No Evidence	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Penetration Resistance																																				
Platy Structure																																				
Massive Structure																																				
Rutting >2"																																				
Displacement >1" depth area>100 ft2																																				
Severely Burned	X																																			
Hydrophobic																																				
Surface Erosion	X																																			
Mass Movement																																				
Ground Cover																																				
Duff/Plant Litter		X		X		X	X	X			X	X	X	X				X			X	X	X		X		X	X	X	X	X		X		X	X
Rock >2"			X														X			X						X									
Woody <1"																																X		X		
Woody 1-3"																																				
Woody 3-6"									X															X												
Woody 6-12"					X					X									X																	
Woody 12-24"																																				
Live Plant	X														X	X				X																
Moss/Lichen																																				
Bare Soil																																				

Date: 7/18 | Rooting Depth & Abundance/ Texture, Structure, & Color/ Ground Cover

Crew: VanGemert, Archer, Berg | Site Name: Lava Trailhead | Plot ID: 02 SF 030

TRANSECT #	POINT SAMPLE	Depth Measures	Root Abundance: Many >100	Root Abundance: Common 10-100	Root Abundance: "A" Horizon	Description:
1	1	0	1 cm	6 cm		Texture: Loamy Sand (4% Clay, 80% Sand)
	2	0	3	7		Structure: 1 F SBK
	3	0	7	10		Color
	4	0	3	9		wet: 10YR 4/2
	5	0	6	9		dry:
2	1	0	4	6		Texture: Loamy Sand
	2	0	7	7		Structure: 1 F SBK
	3	0	5	7		Color
	4	0	9	6		wet: 10 YR 4/2
	5	0	5	4		dry:
3	1	0	4	4		Texture: Loamy Sand
	2	0	6	5		Structure: 1 VF SBK
	3	0	10	6		Color
	4	0	11	7		wet: 10YR 2/2
	5	0	7	11		dry:

10 POINT GROUND COVER

GROUND COVER

025F030

INFIL_TEST: Infiltration
Plot Name LAVA TRAILHEAD Date 7/18/02 Recorders VANGEMERT Berg

Plot Code

Test 1. Site Moisture ____ Microtopography ____

Residual Cover ____% Species 1 ____ Species 2 ____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
0:00	7:30	12:30	17:30	22:30	27:30	32:30
	740 ml	400 ml	360 ml	360 ml	340 ml	300 ml

Test 2. Site Moisture ____ Microtopography ____

Residual Cover ____% Species 1 ____ Species 2 ____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
2:00	9:30	14:30	19:30	24:30	29:30	34:30
	320/1 ml	880/1 ml	/240 ml	/280 ml	/340 ml	/320 ml

Test 3. Site Moisture ____ Microtopography ____

Residual Cover ____% Species 1 ____ Species 2 ____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
5:00	11:30	16:30	21:30	26:30	31:30	36:30
	380/ ml	1460 ml	1060 ml	1160 ml	1140 ml	1000 ml

Soil Moisture Scale by Touch:

1 = Warm dry; 2 = Cool dry; 3 = Moist; 4 = Wet; 5 = Wet sponge

Microtopography Features:

Coppice Dune = c, Interspace = i (space between coppice dunes) ; Desert pavement = p (gravel up to 3"), Hummocks = h, or None = n (if no feature present)

Residue Cover:

Percent of ground covered by standing live and down organic material within small cylinder.

Species 1 and 2:

Plant Species Alpha Code: Species with 1st and 2nd highest % basal cover within small cylinder or note if litter.

PROJECT: Clancy-Unionville Date: 7/18/02

SITE_NAME: Two for One

EXAMINERS:
Archer/Vangemert

PLOT_ID: 02SF031
SLOPE: 15
ASPECT: 325

UTM_N: 5145662
UTM_E: 410541
NAD 27

COMMENTS:
This site samples polygon 36B, a proposed management area, and serves as the undisturbed subplot for a plot in past harvest unit 32104028 and 32104029. Area has much downfall with uneven tree spacing and many age classes. Tree species are mostly lodgepole and Douglas-fir. Rich understory includes vaccinium and pinegrass. Area is lower portion of hillslope. Soils have a 3-8 cm duff layer above 1

Plot 02SF005

Plot 02SF004

MANY ROOTS DEPTH (cm):	2
COMMON ROOTS DEPTH (cm):	14 +/- 0.46
A HORIZON DEPTH (cm):	17 +/- 1.00
BARE GROUND %:	+/- 1.01
DUFF DEPTH (cm):	+/-

DISTURBANCE LEVEL:	Soils are cool!
Bulk Density Ave Wt	+/-
Average Infiltration Rate	972 +/- 295

SITE OVERVIEW

Site Name: 2 FOR 1 Date: 7/18/02 Plot ID: OC~~X~~031

GPS: *Zone 12 T* *NAD-27* UTM: 410541 (easting), 5145662 (northing)

Slope: 15%	Aspect: 145° UPHILL

Notes:

THIS SITE SAMPLES POLYGON 36E, A PROPOSED MANAGEMENT AREA, AND SERVES AS THE UNDISTURBED SUBPLOT FOR 1 PLOT IN PAST HARVEST UNIT 32104028 & 32104029.

AREA HAS MUCH DOWNFALL W/ UNEVEN TREE SPACING & MANY AGE CLASSES. TREE SPECIES MOSTLY LODGEPOLE & PONDEROSA. RICH HERBACEOUS UNDERSTORY IS VACCINIUM & PINEGRASS.

LANDSCAPE IS LOWER 1/3 OF HILLSLOPE. SOILS HAVE A ~~——~~ DUFF LAYER ABOVE 1 cm OF CHARCOAL. (~3→8cm)

AGAIN, MUCH DOWNFALL EXISTS.

Site: 02SF031																		Date: 7/18/02																		
Observer: VA																		Legal Location:																		
Topo Map #/Name:																		Soil Map Unit: 36B																		
Treatment:																		Slope Gradient:																		
Sample Point #:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Compaction:																																				
No Evidence	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
Penetration Resistance																																				
Platy Structure																																				
Massive Structure																																				
Rutting >2"																																				
Displacement >1" depth area>100 ft2																																				
Severely Burned																																				
Hydrophobic																																				
Surface Erosion																																				
Mass Movement																																				
Ground Cover:																																				
Duff/Plant Litter					X	X	X	X							X	X																				
Rock>2"																																				
Woody <1"													X																	X						
Woody 1-3"																											X									
Woody 3-6"																										X										
Woody 6-12"																									X											
Woody 12-24"											X	X						X	X				X	X												
Live Plant	X	X	X	X					X	X												X			X				X	X						
Moss/Lichen																																				
Bare Soil																																				

Date: 7/18/02	Rooting Depth & Abundance/ Texture, Structure, & Color/ Ground Cover

Crew: VanGrunen, Andrew Kern

Site Name: Twin [illegible]

Plot ID: 02SF 031

Description:

TRANSECT #	POINT SAMPLE	Depth Measures	Root Abundance: Many >100	Root Abundance: Common 10-100	"A" Horizon
1	1		0	16	12
	2		0	17	13
	3		0	16	16
	4		0	20	20
	5		5	14	19
2	1		3	10	15
	2		1	9	14
	3		2	9	14
	4		1	10	13
	5		0	10	17
3	1		2	14	14
	2		5	17	17
	3		3	18	18
	4		3	15	19
	5		1	11	28

Transect	Texture	Structure	Color wet	Color dry
1	Sandy Loam	1 F SBK	10YR 3/2	
2	Loamy Sand	1 F SBK	10YR 3/2	
3	Loamy Sand	1 F SBK	10YR 3/2	

10 POINT GROUND COVER

GROUND COVER

02SF031

INFIL_TEST: Infiltration
Plot Name 2 for 1 Date 7/18/02 Recorders VArgenbright RDay

Plot Code

Test 1. Site Moisture_____ Microtopography____

Residual Cover_____% Species 1_____ Species 2_____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
0:00	7:30	12:30	17:30	22:30	27:30	32:30
	16000 ml	8000 ml	8000 ml	8000 ml	_____ ml	_____ ml

Test 2. Site Moisture_____ Microtopography____

Residual Cover_____% Species 1_____ Species 2_____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
2:30	7:30	12:30	17:30	22:30	27:30	32:30
	1580 ml	1000 ml	920 ml	1220 ml	_____ ml	_____ ml

Test 3. Site Moisture_____ Microtopography____

Residual Cover_____% Species 1_____ Species 2_____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
5:00	7:30	12:30	17:30	22:30	27:30	32:30
	_____ ml	_____ ml	_____ ml	_____ ml	_____ ml	_____ ml

Soil Moisture Scale by Touch:

1 = Warm dry; 2 = Cool dry; 3 = Moist; 4 = Wet; 5 = Wet sponge

Microtopography Features:

Coppice Dune = c, Interspace = i (space between coppice dunes) ; Desert pavement = p (gravel up to 3"), Hummocks = h, or None = n (if no feature present)

Residue Cover:

Percent of ground covered by standing live and down organic material within small cylinder.

Species 1 and 2:

Plant Species Alpha Code: Species with 1st and 2nd highest % basal cover within small cylinder or note if litter.

PROJECT: Clancy-Unionville Date: 7/22/02

SITE_NAME: Orofino Pass

EXAMINERS:
Archer/Vangemert

PLOT_ID: 02SF032
SLOPE: 10
ASPECT: 250
UTM_N: 5151803
UTM_E: 414511
NAD 27

COMMENTS:
This plot samples landtype unit 260 off a ridge. Area is closed canopy of lodgepole pine and Douglas-fir. Understory is kinnick-kinnick, arnica, vaccinium and pinegrass. Site is at footslope, concave and a upland depression leading to a gulch. Currently, land is grazed. Roads predominate also. Platey structure occurs in some flatter depressions with higher cattle use. The area has moderate amount of downed wood from aspen and lodgepole.

MANY ROOTS DEPTH (cm):	1
COMMON ROOTS DEPTH (cm):	11 +/- 0.24
A HORIZON DEPTH (cm):	14 +/- 1.20
BARE GROUND %:	+/- 0.96
DUFF DEPTH (cm):	+/-

DISTURBANCE LEVEL:	Soils are cool!
Bulk Density Ave Wt	+/-
Average Infiltration Rate	1302 +/- 21

SITE OVERVIEW

Site Name: Grofino Pass Date: 7/22/02 Plot ID: 02SF032

GPS: Zone 12 T NAD-27 UTM: 414511 (easting), 5151803 (northing)

Slope: 10%	Aspect: 70°

Notes:

Plot samples LANDSCAPE UNIT VA.U. 260 OFF ^ DIVIDE RIDGE.
AREA IS CLOSED CANOPY LODGEPOLE W/ DOUGLAS-FIR. UNDERSTORY IS KINNICK-KINNICK, ARNICA & VACCINIUM W/ PINEGRASS.
LANDFORM IS FOOTSLOPE, CONCAVE & A UPLAND DEPRESSION LEADING TO A GULCH.
CURRENTLY, LAND IS GRAZED. ROADS PREDOMINATE LICO. FLAT STRUCTURE OCCURS IN SOME FLATTER DEPRESSIONS W/ & CATTLE USE.
FINALLY, AREA HAS MODERATE AMOUNT OF DOWNED WOOD FROM ASPEN & LODGEPOLE

414511, 5151803

Site: 02SEO32																Date: 7/22/02																		
Observer: VA																Legal Location:																		
Topo Map #/Name:																Soil Map Unit: 260																		
Treatment:																Slope Gradient:																		
Sample Point #:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Compaction:																																				
No Evidence	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X	X	X	X			X	X		X						
Penetration Resistance																																				
Platy Structure																	X		X	X					X	X			X							
Massive Structure					X										X																					
Rutting >2"																																				
Displacement >1" depth area>100 ft2																																				
Severely Burned																																				
Hydrophobic																																				
Surface Erosion																																				
Mass Movement																																				
Ground Cover																																				
Duff/Plant Litter	X									X	X		X					X				X														
Rock>2"									X																		X	X								
Woody <1"																																				
Woody 1-3"		X		X	X		X							X																						
Woody 3-6"						X															X									X						
Woody 6-12"																																				
Woody 12-24"																																				
Live Plant			X					X				X				X	X		X	X			X	X	X	X			X							
Moss/Lichen																																				
Bare Soil															X																					

P1 P1 P1 P1 NEAR P1

HIGHLY USED LOWLAND BY CATTLE - ASPEN

Date: 7/22/02 | Rooting Depth & Abundance/ Texture, Structure, & Color/ Ground Cover

Crew: VANGUARD | Site Name: OROFINO PASS | Plot ID: 02 S1 032

TRANSECT #	POINT SAMPLE	Depth Measures	Root Abundance: Many >100	Root Abundance: Common 10-100	"A" Horizon	Description
1	1					Texture: 10% C, 50% S — Silt Loam
					TXT	
			[illegible]	[illegible]	[illegible]	
	2					
					STR	Structure: 1 VF GR
			[illegible]	15	[illegible]	
	3					
					TXT	
			[illegible]	[illegible]	[illegible]	Color
	4					wet: 10YR 3/3
					CLR	
			[illegible]	[illegible]	[illegible]	
	5					dry:
					TXT	
			[illegible]	[illegible]	[illegible]	
2	1					Texture: 12% clay, 30% sand — Loam
					TXT	
			[illegible]	[illegible]	[illegible]	
	2					
					CLR	Structure: 1 F GR
			[illegible]	15	[illegible]	
	3					
					CLR/TXT	
			[illegible]	10	[illegible]	Color
	4					wet: 10 YR 3/3
					TXT	
			[illegible]	16	[illegible]	
	5					dry:
					TXT	
			[illegible]	12	[illegible]	
3	1					Texture: Loam
			0	10	[illegible]	
	2					
						Structure: 1 F GR
			0	10	[illegible]	
	3					
			0	6	[illegible]	Color
	4					wet: 10 YR 4/3
			0	5	[illegible]	
	5					dry:
			0	0	[illegible]	

10 POINT GROUND COVER

GROUND COVER

Fatbar Log

INFIL_TEST: Infiltration
Plot Name 035F032 Date 7-22-02 Recorders PD

Plot Code

Test 1. Site Moisture _____ Microtopography ____

Residual Cover _____% Species 1 _____ Species 2 _____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
0:00	7:30	12:30	17:30	22:30	27:30	32:30
	10,700 ml	6699 ml	6000 ml	6240 ml	6460 ml	6520 ml
	HH +700	1111+699	1111	1111+240	1111+460	1111+520

Test 2. Site Moisture _____ Microtopography ____

Residual Cover _____% Species 1 _____ Species 2 _____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
2:00	9:30	14:30	19:30	24:30	29:30	34:30
	10,000 ml	6402 ml	6000 ml	_____ ml	_____ ml	_____ ml
	HH	1111+402	1111			

Test 3. Site Moisture ____ Microtopography ____

Residual Cover _____% Species 1 _____ Species 2 _____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
5:00	17:30	22:30	27:30	32:30	37:30	42:30
	_____ ml	_____ ml	_____ ml	_____ ml	_____ ml	_____ ml

Soil Moisture Scale by Touch:

1 = Warm dry; 2 = Cool dry; 3 = Moist; 4 = Wet; 5 = Wet sponge

Microtopography Features:

Coppice Dune = c, Interspace = i (space between coppice dunes) ; Desert pavement = p (gravel up to 3"), Hummocks = h, or None = n (if no feature present)

Residue Cover:

Percent of ground covered by standing live and down organic material within small cylinder.

Species 1 and 2:

Plant Species Alpha Code: Species with 1st and 2nd highest % basal cover within small cylinder or note if litter.

PROJECT: Clancy-Unionville Date: 7/22/02

SITE_NAME: Orofino Pass Grassland

EXAMINERS:
Archer/Vangemert

PLOT_ID: 02SF033
SLOPE: 15
ASPECT: 180
UTM_N: 5151232
UTM_E: 414320
NAD 27

COMMENTS:
Plot samples open grassland area, landtype 36A. Vegetation is highly productive FESSCA, FESIDA grassland with buck wheat, yarrow, sedge, some lupine and patches of cheatgrass. Range condition is estimated as moderate ecostatus on the higher side given the productive fescues. The plot is on a hillslope. Infiltration was taken on a convex shoulder slope. Areea is south facing part of Orofino Pass ridge. Some vehicle disturbance is evident, though not as much as on the ridgetop. Cattle use seems low.

MANY ROOTS DEPTH (cm):	4
COMMON ROOTS DEPTH (cm):	11 +/- 0.22
A HORIZON DEPTH (cm):	12 +/- 0.88
BARE GROUND %:	11 +/- 0.76
DUFF DEPTH (cm):	+/-

DISTURBANCE LEVEL:	Soils are cool!
Bulk Density Ave Wt	+/-
Average Infiltration Rate	192 +/- 11

SITE OVERVIEW

Site Name:_____ Date: 7/22/02 Plot ID: 02SF033

GPS: *Zone 12 T* *NAD-27* UTM: 414320 (easting), 5151232 (northing)

Slope: 15→20%	Aspect: 0°

Notes:

PLOT SAMPLES OPEN GRASSLAND AREA, LANDSCAPE UNIT 36A. VEGETATION IS HIGHLY PRODUCTIVE FESSCA, FESID GRASSLAND w/ BUCKWHEAT, YARROW, SEDGE & SOME LUPINE STANDS & CHEATGRASS. RANGE CONDITION IS ESTIMATED AS MODERATE ECOSTATUS ON THE HIGHER SIDE GIVEN THE PRODUCTIVE FESCUES, BUT w/ CHEATGRASS & LUPINE EXPANSE.

LANDSCAPE IS HILLSLOPE w/ INFILTRATION ON CONVEX SHOULDER SLOPE. AREA IS SOUTH FACING PART OF OROFINO PASS RIDGE.

SOME VEHICLE DISTURBANCE EVIDENT, THOUGH NOT AS MUCH AS ON EDGETOA. CATTLE USE SEEMS LOW.

INFIL_TEST: Infiltration
Plot Name 02SF033 Date 7-22-02 Recorders PD

Plot Code

Test 1. Site Moisture 1 Microtopography ____

Residual Cover _____% Species 1 _____ Species 2 _____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
0:00	7:30	12:30	17:30	22:30	27:30	32:30
	_____ml	_____ml	_____ml	_____ml	_____ml	_____ml

Test 2. Site Moisture _____ Microtopography ____

Residual Cover _____% Species 1 _____ Species 2 _____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
2:00	9:30	14:30	19:30	24:30	29:30	34:30
	1280 ml	740 ml	800 ml	780 ml	640 ml	940 ml

Test 3. Site Moisture _____ Microtopography ____

Residual Cover _____% Species 1 _____ Species 2 _____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
5:00	12:30	17:30	22:30	27:30	32:30	37:30
	1680 ml	1040 ml	1300 ml	1120 ml	1020 ml	1140 ml

Soil Moisture Scale by Touch:

1 = Warm dry; 2 = Cool dry; 3 = Moist; 4 = Wet; 5 = Wet sponge

Microtopography Features:

Coppice Dune = c, Interspace = i (space between coppice dunes) ; Desert pavement = p (gravel up to 3"), Hummocks = h, or None = n (if no feature present)

Residue Cover:

Percent of ground covered by standing live and down organic material within small cylinder.

Species 1 and 2:

Plant Species Alpha Code: Species with 1st and 2nd highest % basal cover within small cylinder or note if litter.

Date: 7/22/02 | Rooting Depth & Abundance/ Texture, Structure, & Color/ Ground Cover

Crew: VAN GUNDY | Site Name: OROFINO PASS | Plot ID: 025F033

Description: COLOR CHANGE

TRANSECT #	POINT SAMPLE	Depth Measures	Root Abundance: Many >100	Root Abundance: Common 10-100	"A" Horizon		10 POINT GROUND COVER
1	1				CLR	Texture: SILT LOAM 10YR 2/1 2.5Y	2/10
			3	10	4		
	2				CLR	Structure: 1 VF GR	
			4	10	3		
	3				STONES		0/10
			4	10	5	Color	
	4				CLR	wet: 10YR 2/1	
			4	3	7		0/10
	5				CLR	dry: T	
			4	11	7		
2	1				STR	Texture: SIL LOAM	1/10
			4	11	6		
	2				TXT	Structure: 1F GR	0/10
			2	12	7		
	3				STR		
			3	9	12	Color	
	4				ROCK	wet: 10YR 2/1	3/10
			4	—	7		
	5				TXT	dry:	3/10
			3	10	17		
3	1					Texture: VF GR LOAM	0/10
			8	12	7		
	2					Structure: 1 VF GR	
			8	13	15		1/10
	3						
			4	15	12	Color	
	4					wet: 10YR 2/2	1/10
			3	14	12		
	5 Rock					dry:	GROUND COVER
			5	12	12		

PROJECT: Clancy-Unionville Date: 7/22/02

SITE_NAME: Orofino Pass II

EXAMINERS:
Archer/Vangemert

PLOT_ID: 02SF034
SLOPE: 8
ASPECT: 128
UTM_N: 5151072
UTM_E: 415540
NAD 27

COMMENTS:
Plot samples landtype 36 map unit. Area is lodgepole with Douglas-fir. Understory is mostly vaccinium, arnica and pinegrass. Much downed wood is present. Area is undulating wide ridgetop breaking to concave gully. Some rock outcrops exist. Disturbance from fire is evident through charcoal at bottom of the duff. Stumps indicate past harvest. Also, open flatter areas have platey structure.

MANY ROOTS DEPTH (cm):	1
COMMON ROOTS DEPTH (cm):	12 +/- 0.41
A HORIZON DEPTH (cm):	17 +/- 0.72
BARE GROUND %:	+/- 0.98
DUFF DEPTH (cm):	+/-

DISTURBANCE LEVEL:	Soils are cool!
Bulk Density Ave Wt	+/-
Average Infiltration Rate	603 +/- 19

SITE OVERVIEW

Site Name: _____ Plot ID: 025F034

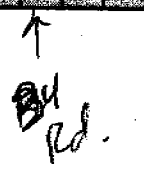
GPS: Zone 12 T NAD-27 UTM: 415540 (easting), 5151072 (northing)

Slope: 5% → 10%	Aspect: 308°

Notes:

PLOT SAMPLES LANDTYPE 36. AREA IS PINON / PSEMEN. UNDERSTORY IS MOSTLY VACCINIUM SPP. / ARNICA SP. & CALRUB. MUCH DOWNED WOOD IS PRESENT. LANDSCAPE IS UNDULATING WIDE RIDGETOP BREAKING TO CONCAVE GULLY. SOME ROCK OUTCROPS PRESENT. DISTURBANCE FROM FIRE EVIDENT THROUGH CHARCOAL LAYER IN BOTTOM DUFF. SOME STUMPS INDICATE PAST LOGGING. OPEN FLATTER AREAS HAVE PATCHY STRUCTURE.

Site: BESFOEA																Date: 7/22/02																			
Observer: VA																Legal Location:																			
Topo Map #/Name:																Soil Map Unit: 36																			
Treatment:																Slope Gradient:																			
Sample Point #:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Compaction:																																				
No Evidence	X	X	X	X	X	X	X	X	X	X		X	X					X	X	X		X	X	X	X		X	X	X	X						
Penetration Resistance																																				
Platy Structure	X													X	X	X	X									X										
Massive Structure											X										X															
Rutting >2"																																				
Displacement >1" depth area>100 ft2																																				
Severely Burned	X																																			
Hydrophobic																																				
Surface Erosion																																				
Mass Movement																																				
Ground Cover:																																				
Duff/Plant Litter	X			X					X															X		X		X								
Rock >2"																																				
Woody <1"																									X											
Woody 1-3"			X			X	X												X	X							X									
Woody 3-6"								X																												
Woody 6-12"																	X					X														
Woody 12-24"																													X							
Live Plant		X			X					X	X	X	X	X	X	X		X			X		X						X						
Moss/Lichen																																				
Bare Soil																																				



INFIL_TEST: Infiltration
Plot Name 025-034 Date 7-22-07 Recorders PD

Plot Code

Test 1. Site Moisture_____ Microtopography____

Residual Cover_____% Species 1_____ Species 2_____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
0:00	7:30	12:30	17:30	22:30	27:30	32:30
	4620 ml	2800 ml	2720 ml	2980 ml	2960 ml	3040 ml
	1+620	1	1	1	1	1

Test 2. Site Moisture_____ Microtopography____

Residual Cover_____% Species 1_____ Species 2_____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
2[illegible]0	9:30	1[illegible]:30	1[illegible]:30	2[illegible]:30	2[illegible]:30	3[illegible]:30
	6000 ml	2940 ml	3040 ml	2940 ml	2960 ml	3040 ml
	1+	1	1	1	1	1

Test 3. Site Moisture_____ Microtopography____

Residual Cover_____% Species 1_____ Species 2_____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
5:00	7:30	12:30	17:30	22:30	27:30	32:30
	_____ml	_____ml	_____ml	_____ml	_____ml	_____ml

Soil Moisture Scale by Touch:

1 = Warm dry; 2 = Cool dry; 3 = Moist; 4 = Wet; 5 = Wet sponge

Microtopography Features:

Coppice Dune = c, Interspace = i (space between coppice dunes) ; Desert pavement = p (gravel up to 3"), Hummocks = h, or None = n (if no feature present)

Residue Cover:

Percent of ground covered by standing live and down organic material within small cylinder.

Species 1 and 2:

Plant Species Alpha Code: Species with 1st and 2nd highest % basal cover within small cylinder or note if litter

Date: 7/22/02 | Rooting Depth & Abundance/ Texture, Structure, & Color/ Ground Cover

Crew: VAN GORMT | Site Name: CROFTON 4X4 | Plot ID: 025F034

TRANSECT #	POINT SAMPLE	Depth Measures	Root Abundance: Many >100	Root Abundance: Common 10-100	"A" Horizon	Description:
1	1					Texture: LOAM 14% GR 35% GR
	2					Structure: 1 F SBK
	3					Color
	4					wet: 10YR 3/2
	5					dry:
2	1					Texture: Loan 18% GR 50% GR
	2					Structure: 1 F SBK
	3					Color
	4					wet: 10 YR 3/2
	5					dry:
3	1		Decayed Tree			Texture: Loam
	2					Structure: 1 F GR
	3					Color
	4					wet: 10 YR 3/2
	5					dry:

10 POINT GROUND COVER

GROUND COVER

PROJECT: Clancy-Unionville Date: 7/22/02

SITE_NAME: Orofino Pass III

EXAMINERS:
Archer/Vangemert

PLOT_ID: 02SF035
SLOPE: 25
ASPECT: 300

UTM_N: 5150842
UTM_E: 413838
NAD 27

COMMENTS:
Plot samples landtype 26. Area is mostly Douglas-fir with aspen in deptresssions. The main difference between this plot and the last is greater Douglas-fir cover here. The understory is mostly snowberry. The area is a hillslope grading to a footlslope. Infiltration and transects were done at this transition. Disturbance includes current cattle grazing and old mining disturbance. Large stumps are very decayed, maybe dating harvest back to the 20's and 1930's.

MANY ROOTS DEPTH (cm):	1
COMMON ROOTS DEPTH (cm):	15 +/- 0.34
A HORIZON DEPTH (cm):	16 +/- 0.46
BARE GROUND %:	+/- 0.86
DUFF DEPTH (cm):	+/-

DISTURBANCE LEVEL:	Soils are cool!
Bulk Density Ave Wt	+/-
Average Infiltration Rate	245 +/- 17

SITE OVERVIEW

Site Name:_____ Date: 7/22/02 Plot ID: 02SF035

GPS: *Zone 12 T* *NAD-27* UTM: 413838 (easting), 5150842 (northing)

Slope: 25%	Aspect: 120°

Notes:

PLOT SAMPLES LANDSCAPE UNIT 26. AREA IS MOSTLY PSEMEN w/ ASPEN IN DEPRESSIONS. MAIN DIFFERENCE BETWEEN THIS PLOT AND LAST (02SF034) IS PSEMEN DOMINANCE/COVERAGE HERE. UNDERSTORY IS MOSTLY SNOWBERRY.

LANDSCAPE IS HILLSLOPE GRADING TO FOOTSLOPE. INTERMEDIATE TRANSECTS C THIS TRANSITION.

AREA HAS CURRENT CATTLE GRAZING & OLD MINING DISTURBANCE PREVALENT. LARGE STUMPS ARE VERY DECAYED & CLASS 4. ESTIMATE LOGGING WAS IN 1920-30's.

10 PACE SPACING

Site: OLSF055																Date: 7/22/02																			
Observer: VL																Legal Location:																			
Topo Map #/Name:																Soil Map Unit: 26																			
Treatment:																Slope Gradient:																			
Sample Point #:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Compaction:																																				
No Evidence	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X						
Penetration Resistance																																				
Platy Structure																												X								
Massive Structure														X																						
Rutting >2"																																				
Displacement >1" depth area>100 ft2																																				
Severely Burned																																				
Hydrophobic																																				
Surface Erosion																																				
Mass Movement																																				
Ground Cover																																				
Duff/Plant Litter										X											X							X	X							
Rock>2"						X													X					X												
Woody <1"																																				
Woody 1-3"				X	X		X					X																		X						
Woody 3-6"								X							X	X										X										
Woody 6-12"															X																					
Woody 12-24"																				X																
Live Plant	X	X	X	X	X				X		X			X				X	X			X	X		X		X									
Moss/Lichen																																				
Bare Soil													X																							

PA

OW PA

Date: 7/27/02 | Rooting Depth & Abundance/ Texture, Structure, & Color/ Ground Cover

Crew: VANDERHEIT | Site Name: [illegible] | Plot ID: 025F035

TRANSECT #	POINT SAMPLE	Depth Measures	Root Abundance: Many >100	Root Abundance: Common 10-100	"A" Horizon	Description:
1	1					Texture: SILT LOAM 10% CL 25% SA
			3	15	11	
	2					Structure: 1 F GR
			0	16	14	
	3					
			0	17	17	Color
	4					wet: 10YR 2/1
			1	19	17	
	5					dry: ROCK
			1	40	15	
2	1				STR	Texture: SANDY LOAM 10% CL 60% SA
			1	15	13	
	2					Structure: 1 F SBK
			1	17	19	
	3				CLR	
			1	16	16	Color
	4			14	STR	wet: 10YR 2/2
			0	16	24	
	5					dry:
			1	16	17	
3	1					Texture: Sandy loam
			0	18	18	
	2					Structure: 1 F SBK
			0	14	14	
	3					
			0	16	14	Color
	4					wet: 10YR 4/2
			0	14	18	
	5					dry:
			0	19	18	

10 POINT GROUND COVER

GROUND COVER

INFIL_TEST: Infiltration
Plot Name 025F035 Date 7-22-02 Recorders PD

Plot Code

Test 1. Site Moisture _____ Microtopography ____

Residual Cover _____% Species 1 _____ Species 2 _____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
0:00	7:30	12:30	17:30	22:30	27:30	32:30
	2000 ml	740 ml	880 ml	820 ml	1080 ml	820 ml

Test 2. Site Moisture _____ Microtopography ____

Residual Cover _____% Species 1 _____ Species 2 _____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
2:00	9:30	14:30	19:30	24:30	29:30	34:30
	2000 ml	1400 ml	[illegible] ml	1360 ml	1460 ml	1300 ml

Test 3. Site Moisture _____ Microtopography ____

Residual Cover _____% Species 1 _____ Species 2 _____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
~~8:00~~ 4:00	11:30	16:30	21:30	26:30	31:30	36:30
	3040 ml	1100 ml	1080 ml	1140 ml	1020 ml	1100 ml

Soil Moisture Scale by Touch:

1 = Warm dry; 2 = Cool dry; 3 = Moist; 4 = Wet; 5 = Wet sponge

Microtopography Features:

Coppice Dune = c, Interspace = i (space between coppice dunes) ; Desert pavement = p (gravel up to 3"), Hummocks = h, or None = n (if no feature present)

Residue Cover:

Percent of ground covered by standing live and down organic material within small cylinder.

Species 1 and 2:

Plant Species Alpha Code: Species with 1st and 2nd highest % basal cover within small cylinder or note if litter.

PROJECT: Clancy-Unionville Date: 7/23/02

SITE_NAME: Lump Gulch

EXAMINERS:
Archer/Vangemert

PLOT_ID: 02SF036
SLOPE: 25
ASPECT: 248

UTM_N: 5142376
UTM_E: 411554
NAD 27

COMMENTS:
Plot samples grassland in Lump gulch drainage. Vegetation composition represents moderate ecological status; veg includes abundant FESSCA and common FESIDA, though also contains high POTGRA, geranium, lupine, and CIRCAN. Trees adjacent to the area include PINPON, PINCON, POPTRE, and PSEMEN. Area is upper hillslope with ridgeline rock outcrop with thin soils. Lower on the slope, soils thicken and have deep dork color with depth down to 25 cm for A horizons. Roots penetrate below this top horizon. Grazing is evident through forb increases and dung. A large timber unit adjoins this grassland. Prairie dogs abound.

MANY ROOTS DEPTH (cm):	3
COMMON ROOTS DEPTH (cm):	12 +/- 0.17
A HORIZON DEPTH (cm):	11 +/- 1.10
BARE GROUND %:	6 +/- 0.73
DUFF DEPTH (cm):	+/-

SITE OVERVIEW

Site Name: _____ Date: 7/23/02 Plot ID: 02SF036

GPS: *Zone 12 T* *NAD-27* UTM: 411554 (easting), 5142376 (northing)

Slope: 25%	Aspect: 68°

Notes:

Plot samples grassland in lump gulch drainage. Vegetation composition represents moderate ecol. cond. Abundant Fesalt (SCA), though also containing high potgra %, Geranium, Lupine & Circan. Fesida also very common.

Landscape is upper hillslope w/ ridgeline rock outcrop, thin soils. Lower on slope, soils much thicker w/ deep dark color > 25 cm. Roots penetrate below A horizon.

Grazing evident through fence increases and dung. Large timber unit is adjacent.

Trees adjacent to grassland are pinpon, pinyon, poptree & pseven.

Many prairie dogs.

Date: 7/23/02	Rooting Depth & Abundance/ Texture, Structure, & Color/ Ground Cover						
Crew: VAN Gemert Donnelly	Site Name:				Plot ID: 025F036		
			Root Abundance		Description:		
TRANSECT #	POINT SAMPLE	Depth Measures	Many >100	Common 10-100	"A" Horizon		
1	1					Texture 10%CL 60%SA SANDY LOAM	10 POINT GROUND COVER
					STR		
		3	11	17	17		
	2	8					1/10
		13			STR	Structure 1 F GR	
		3	11	13	13		
	3	9					
		13					1/10
		3	10	13	13	Color	
	4	13				wet: 10 YR 2/2	
					STR		0/10
		3	10	13	10		
	5	8				dry:	
					STR		
		3	8	11	8		
3	1					Texture SANDY LOAM	0/10
		5			5		
		12	3	14	10		
	2	11					
		15			5	Structure 1 F GR	0/10
		3	15	18	15		
	3						
		12			5		
		16	4	18	12	Color	1/10
	4					wet: 10YR 2/2	
		11			5		
		19	4	14	11		
	5					dry:	0/10
		7			5		
		10	4	14	11		
2	1					Texture SANDY LOAM	1/10
		3	20	23	15		
	2						
					Rock	Structure 1 F GR	2/10
		3	9	12	9		
	3						
		2	7	9	9	Color	
	4					wet: 10 YR 2/2	0/10
		2	5	7	7		
	5					dry:	
							GROUND COVER
		2	7	9	7		

PROJECT: Clancy-Unionville Date: 7/23/02

SITE_NAME: Lump Gulch II

EXAMINERS:
Archer/Vangemert

PLOT_ID: 02SF037
SLOPE: 21
ASPECT: 328

UTM_N: 5143013
UTM_E: 411196
NAD 27

COMMENTS:
Plot samples landscape unit 76 on a north facing slope and shoulder. Area is mainly PINCON with some PSEMEN. Ridgetop has PINPON. Understory is dominantly JUNCOM. Area is ridgetop and shoulder slope, with common large rock outcrops. Soils are very shallow like my personality, and have loamy sand texture. Moderate amounts of downed wood are throughout.

MANY ROOTS DEPTH (cm):	0
COMMON ROOTS DEPTH (cm):	8 +/- 0.00
A HORIZON DEPTH (cm):	9 +/- 0.71
BARE GROUND %:	+/- 0.57
DUFF DEPTH (cm):	+/-

SITE OVERVIEW

Site Name: _____ Date: 7/23/02 Plot ID: 029F037

GPS: *Zone 12 T* *NAD-27* UTM: 411196 (easting), 5143013 (northing)

Slope: 21%	Aspect: 148° UPHILL

Notes:

PLOT SAMPLES LANDSCAPE UNIT 76 ON NORTH~~EAST~~ FACING SLOPE & SHOULDER. AREA IS MAINLY ~~PONCON~~ w/ SOME PSEMEN. RIDGETOP HAS PINYON. UNDERSTORY IS DOMINANTLY JUNCOM (JUNIPER).

LANDSCAPE IS RIDGETOP & SHOULDER SLOPE. SOILS ARE VERY SHALLOW. LARGE ROCK OUTCROPS ARE COMMON. SOILS ARE LOAMY SAND TEXTURE & VERY WELL DRAINED. DOWNED WOOD IS ~~LO~~ MODERATED THROUGHOUT THE SITE.

Site: 02SF037																Date: 7/23/02																		
Observer: VA																Legal Location:																		
Topo Map #/Name:																Soil Map Unit: 76																		
Treatment:																Slope Gradient:																		
Sample Point #:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Compaction:																																				
No Evidence	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
Penetration Resistance																																				
Platy Structure																																				
Massive Structure																																				
Rutting >2"																																				
Displacement >1" depth area>100 ft2																																				
Severely Burned																																				
Hydrophobic																																				
Surface Erosion																																				
Mass Movement																																				
Ground Cover:																																				
Duff/Plant Litter	X							X		X	X	X						X			X	X							X						
Rock >2"			X		X														X	X			X												
Woody <1"						X																														
Woody 1-3"				X																					X											
Woody 3-6"																										X		X								
Woody 6-12"															X																					
Woody 12-24"							X		X																											
Live Plant		X											X	X		X	X							X			X		X						
Moss/Lichen																																				
Bare Soil																																				

Date: 7/23/02 | Rooting Depth & Abundance/ Texture, Structure, & Color/ Ground Cover

Crew: VAN Gemert, Donnelly | Site Name: Loster | Plot ID: 02SF037

TRANSECT #	POINT SAMPLE	Depth Measures	Root Abundance: Many >100	Root Abundance: Common 10-100	"A" Horizon	Description
1	1				Color	Texture: LOAMY SAND 3%ci 85%SA
			0	7		
	2				Clr	Structure: 1 F SBK
			0	10	13	
	3				Clr	
			0	13	6	Color
	4				Clr	wet: 10YR 3/1
			0	11	11	
	5				STR/Clr	dry:
			0	10		
2	1					Texture: Loamy Sand
			0	6	8	
	2					Structure: 1 F SBF
			0	6	6	
	3					
			0	10	10	Color
	4				9	wet: 10YR 3/2
					15	
			0	0	13	
	5					dry:
			0	6	10	
3	1					Texture: SAND 95% Sand
			0	13	8	
	2					Structure: 1 F SBK
			0	9	10	
	3					
			0	9	9	Color
	4					wet: 10YR 4/2
			0	4	4	
	5				TXT	dry:
			0	9	1	

10 POINT GROUND COVER

GROUND COVER

PROJECT: Clancy-Unionville Date: 7/23/02

SITE_NAME: Lump Gulch III

EXAMINERS:
Archer/Vangemert

PLOT_ID: 02SF038
SLOPE: 35
ASPECT: 20

UTM_N: 5143103
UTM_E: 410897
NAD 27

COMMENTS:
Plot samples landtype 360. Area is north facing lodgepole forest with some sub-alpine fir. Area is footslope to lower hillslope. Plot is roughly 50 meters from the riparian plain. The understory is very mossy with vaccinium and patchy dense regeneration of Douglas-fir. Much rock and downed wood predominates. Soils have charcoal at base of thick duff layer.

MANY ROOTS DEPTH (cm):	1
COMMON ROOTS DEPTH (cm):	12 +/- 0.25
A HORIZON DEPTH (cm):	15 +/- 1.30
BARE GROUND %:	+/- 1.22
DUFF DEPTH (cm):	+/-

SITE OVERVIEW

Site Name:_____ Date: 7/23/02 Plot ID: 02SF018

GPS: *Zone 12 T* *NAD-27* UTM: 410897 (easting), 5143101 (northing)

Slope: 35%	Aspect: 200

Notes:

PLOT SAMPLES LANDSCAPE UNIT 360. AREA IS N. FACING PINYON FOREST w/ SOME ASPENS. PLOT IS ~50' FROM RIPARIAN PLAIN. UNDERSTORY IS VERY MOCKY w/ VACCINIUM & PATCHY DENSE REGENERATION OF ~~FERNS~~. MUCH ROCK & DOWNED WOOD PREDOMINATES.

SOILS HAVE CHARCOAL @ BASE OF ~~THE~~ THICK DUFF LAYER.

LANDSCAPE IS FOOTSLOPE TO LOWER HILLSLOPE.

Site: DCSF038																																			
Observer: VA																																			
Topo Map #/Name:																																			
Treatment:																																			
Date: 7/23/02																																			
Legal Location:																																			
Soil Map Unit: 136																																			
Slope Gradient:																																			
Sample Point #:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Compaction:																																			
No Evidence	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
Penetration Resistance																																			
Platy Structure																																			
Massive Structure																																			
Rutting >2"																																			
Displacement >1" depth area>100 ft2																																			
Severely Burned																																			
Hydrophobic																																			
Surface Erosion																																			
Mass Movement																																			
Ground Cover:																																			
Duff/Plant Litter								X							X				X		X														
Rock >2"						X								X									X		X										
Woody <1"																																			
Woody 1-3"					X												X					X						X							
Woody 3-6"			X																					X											
Woody 6-12"		X							X									X								X									
Woody 12-24"																		/												X					
Live Plant	X			X			X			X	X	X	X			X				X							X		X						
Moss/Lichen																																			
Bare Soil																																			

Date: 7/23/02	Rooting Depth & Abundance/ Texture, Structure, & Color/ Ground Cover						
Crew: Langmeier Donnelley	Site Name:				Plot ID: 025F038		
			Root Abundance		Description:		
TRANSECT #	POINT SAMPLE	Depth Measures	Many >100	Common 10-100	"A" Horizon		
1	1					Texture SANDY LOAM 5%Cl 20%SA	10 POINT GROUND COVER
	2				ROCK	Structure A 1 M GR / A 2 F SBK	
	3						
	4					Color wet: 10YR 4/3	
	5					dry:	
2	1				STR	Texture Silt Loam	
	2				CLR	Structure 1 F SBF	
	3				CLR		
	4				CLR	Color wet: 10YR 2/2	
	5				Rock	dry:	
3	1					Texture Loam	
	2					Structure 2 F SBK	
	3						
	4					Color wet: 10YR 2/2	
	5				STR Rock	dry:	GROUND COVER

PROJECT: Clancy-Unionville Date: 7/24/02

SITE_NAME: South Fork Quartz Creek

EXAMINERS:
Archer/Vangemert

PLOT_ID: 02SF039
SLOPE: 30
ASPECT: 134
UTM_N: 5169307
UTM_E: 407904
NAD 27

COMMENTS:
Plot samples landtype 12D. Area is closely spaced lodgepole on footslope, adjacent to drainage. Some small Englemann spruce and Douglas-fir are in drainage bottom. Understory is JUNCOM and vaccinium mostly, though some beargrass and pinegrass are present. Site has low amount od downed wood. The insects here are bloodthirsty. Many rocks predominate. Soils are coarse, with loamy fine texture. Duff is roughly 2 cm with charcoal on the bottom. The stand diameter of about 10 inches and charcoal suggest fire in the past

MANY ROOTS DEPTH (cm):	2
COMMON ROOTS DEPTH (cm):	15 +/- 0.41
A HORIZON DEPTH (cm):	16 +/- 1.02
BARE GROUND %:	+/- 1.07
DUFF DEPTH (cm):	+/-

DISTURBANCE LEVEL:	Soils are cool!
Bulk Density Ave Wt	+/-
Average Infiltration Rate	207 +/- 18

SITE OVERVIEW

Site Name:_____ Date: 7/24/02 Plot ID: 02SF039

GPS: *Zone 12 T* *NAD-27* UTM: 407904 (easting), 5139307 (northing)

Slope: 30%	Aspect: 314°

Notes: PLOT SAMPLES LANDSCAPE UNIT 12D. AREA IS CLOSELY SPACED PINON ON FOOTSLOPE, ADJACENT TO DRAINAGE. SOME SMALL PICEAN & PSEUDOTSUGA ARE IN DRAINAGE BOTTOM. UNDERSTORY IS JUNIPER (JUNIPERUS) & VACCINIUM MOSTLY. THOUGH SOME BEARGRASS & PINEGRASS IS PRESENT. SITE HAS LOW AMOUNT OF DOWNED WOOD. INSECTS ARE NOT SEEN.

LANDSCAPE IS FOOTSLOPE & LOWER PART OF HILLSLOPE. MANY ROCKS PREDOMINATE. TEXTURE IS LOAMY SAND ?. A VERY DRAINED SITE. ~~AREA~~ DUFF THICKNESS IS ~ 2cm w/ CHARCOAL ON THE BOTTOM. STAND 10" DBH & ~~THIN~~ CHARCOAL SUGGESTS FIRE HERE ~ 50 YRS. THIS CENTURY.

Site: 02SF039																Date: 7/24/02																			
Observer: VA																Legal Location:																			
Topo Map #/Name:																Soil Map Unit: 12D																			
Treatment:																Slope Gradient:																			
Sample Point #:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Compaction:																																				
No Evidence	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
Penetration Resistance																																				
Platy Structure																																				
Massive Structure																																				
Rutting >2"																																				
Displacement >1" depth area>100 ft2																																				
Severely Burned																																				
Hydrophobic																																				
Surface Erosion																																				
Mass Movement																																				
Ground Cover:																																				
Duff/Plant Litter				X			X					X	X	X													X	X								
Rock >2"								X	X																											
Woody <1"											X																									
Woody 1-3"																								X												
Woody 3-6"																													X							
Woody 6-12"															X																					
Woody 12-24"																																				
Live Plant	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
Moss/Lichen																																				
Bare Soil																																				

Date: 7/24/02 | Rooting Depth & Abundance/ Texture, Structure, & Color/ Ground Cover

Crew: VANBEMMEL | Site Name: ~~Round~~ Fork Quartz I | Plot ID: 025F039

TRANSECT #	POINT SAMPLE	Depth Measures	Root Abundance: Many >100	Root Abundance: Common 10-100	"A" Horizon	Description:
1	1				STR	Texture: LOAMY SAND 8% Cl 80% SL
	2		4	20	SBK	Structure: 1 F SBK
	3			7	CL	Color
	4				CLR	wet: 10 YR 3/2
	5			15		dry:
2	1			14		Texture: SANDY LOAM 7% Cl 60% SL
	2		1	15		Structure: 2F SBK
	3				INT	
	4		2	12		Color
	5		4	12	ROCK	wet: 2/2
			1		TXT	dry:
3	1		4	15		Texture: Sandy Loam
	2		1	17		Structure: 1 M GR
	3		1	15		Color
	4		0	17		wet: 10 YR 3/3
	5		0			dry:

10 POINT GROUND COVER

GROUND COVER

INFIL_TEST: Infiltration
Plot Name D2SF039 Date 7-24-02 Recorders PD

Plot Code

Test 1. Site Moisture _____ Microtopography ____

Residual Cover _____% Species 1 _____ Species 2 _____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
0:00	7:30	12:30	17:30	22:30	27:30	32:30
	2540 ml	1400 ml	1560 ml	1620 ml	1380 ml	1200 ml

Test 2. Site Moisture _____ Microtopography ____

Residual Cover _____% Species 1 _____ Species 2 _____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
2[illegible]0	[illegible]:30	1[illegible]:30	1[illegible]:30	2[illegible]:30	2[illegible]:30	3[illegible]:30
	1740 ml	1000 ml	620 ml	680 ml	900 ml	720 ml

Test 3. Site Moisture _____ Microtopography ____

Residual Cover _____% Species 1 _____ Species 2 _____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
[illegible]:00	1[illegible]:30	1[illegible]:30	2[illegible]:30	2[illegible]:30	3[illegible]:30	3[illegible]:30
	1040 ml	740 ml	680 ml	720 ml	1200 ml	640 ml

Soil Moisture Scale by Touch:

1 = Warm dry; 2 = Cool dry; 3 = Moist; 4 = Wet; 5 = Wet sponge

Microtopography Features:

Coppice Dune = c, Interspace = i (space between coppice dunes) ; Desert pavement = p (gravel up to 3"), Hummocks = h, or None = n (if no feature present)

Residue Cover:

Percent of ground covered by standing live and down organic material within small cylinder.

Species 1 and 2:

Plant Species Alpha Code: Species with 1st and 2nd highest % basal cover within small cylinder or note if litter.

PROJECT: Clancy-Unionville Date: 7/24/02

SITE_NAME: South Fork Quartz Creek II

EXAMINERS:
Archer/Vangemert

PLOT_ID: 02SF040
SLOPE: 37
ASPECT: 184

UTM_N: 5139247
UTM_E: 407800
NAD 27

COMMENTS:
Plot samples landtype 360. Area is grassland with high cover of FESIDA and Agropyron spp. Some aspen are also present. Lupine and buckwheat are also very common. Heuchera spp, galium and some ROSWOO are few. The area has large rock outcrops which dot the wide footslope of this ridge. Parent material is colluvium with granite bedrock. Area is convex and has many bare soil patches on steeper slopes. Vegetation has pedestals from sheet erosion. Also, many bare soil patches exist. No photo was taken here.

MANY ROOTS DEPTH (cm):	2
COMMON ROOTS DEPTH (cm):	12 +/- 0.29
A HORIZON DEPTH (cm):	12 +/- 0.61
BARE GROUND %:	20 +/- 0.63
DUFF DEPTH (cm):	+/-

DISTURBANCE LEVEL:	Soils are cool!
Bulk Density Ave Wt	+/-
Average Infiltration Rate	317 +/- 16

SITE OVERVIEW

Site Name:_____ Date: 7/24/06 Plot ID: 02SF040

GPS: *Zone 12 T* *NAD-27* UTM: 407600 (easting), 5159247 (northing)

Slope: 37%	Aspect: 4° UPHILL

Notes:

PLOT SAMPLES LANDSCAPE UNIT 360. AREA IS GRASSLAND w/ FESTUCA & ARROYOSAP. SOME ACAEN ARE ALSO PRESENT. LUPINE & ERIOGONUM (BUCKWHEAT) ARE VERY COMMON.

LARGE ROCK OUTCROPS SURFACE ON SLOPED WIDE FOOTSLOPE OF RIDGE. AREA IS CONVEX AND HAS MANY BARE SOIL PATCHES ON STEEPER SLOPES.

HERCHERA, GALIUM & SOME WOODY ROSE ARE FEW.

VEGETATION HAS "PEDISOLING" INDICATING SHEET EROSION. ALSO, BARE SOIL PATCHES INDICATE EROSION.

WHOLE LANDUNIT IS S → SW FACING.

NO PHOTO TAKEN.

P. MATERIAL = COLLUVIUM/ & P. ROCK = GRANITE

INFIL_TEST: Infiltration
Plot Name 0051041 Date 7-24-03 Recorders PO

Plot Code

Test 1. Site Moisture _____ Microtopography _____

Residual Cover _____% Species 1 _____ Species 2 _____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
0:00	7:30	12:30	17:30	22:30	27:30	32:30
	3640 ml	1620 ml	1740 ml	2000 ml	1400 ml	1800 ml

Test 2. Site Moisture _____ Microtopography _____

Residual Cover _____% Species 1 _____ Species 2 _____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
2:00	9:30	14:30	19:30	24:30	29:30	34:30
	2860 ml	1480 ml	1400 ml	1560 ml	1460 ml	1420 ml

Test 3. Site Moisture _____ Microtopography _____

Residual Cover _____% Species 1 _____ Species 2 _____

Initial Fill	Start Value	10 min Value	15 min Value	20 min Value	25 min Value	30 min Value
4:00	11:30	16:30	21:30	26:30	31:30	36:30
	2960 ml	1460 ml	940 ml	1560 ml	1120 ml	1300 ml

Soil Moisture Scale by Touch:

1 = Warm dry; 2 = Cool dry; 3 = Moist; 4 = Wet; 5 = Wet sponge

Microtopography Features:

Coppice Dune = c, Interspace = i (space between coppice dunes) ; Desert pavement = p (gravel up to 3"), Hummocks = h, or None = n (if no feature present)

Residue Cover:

Percent of ground covered by standing live and down organic material within small cylinder.

Species 1 and 2:

Plant Species Alpha Code: Species with 1st and 2nd highest % basal cover within small cylinder or note if litter

Date: 7/24/02 | Rooting Depth & Abundance/ Texture, Structure, & Color/ Ground Cover

Crew: VanGent | Site Name: | Plot ID: 025040

TRANSECT #	POINT SAMPLE	Depth Measures	Root Abundance: Many >100	Root Abundance: Common 10-100	Root Abundance: "A" Horizon	Description:	10 POINT GROUND COVER
1	1				STR	Texture: SANDY LOAM 95% CL 75% SL	3/10
			4	12	16		
	2					Structure: 2 F SBK	
			9	13	22		
	3						1/10
			1	12	13	Color	
	4					wet: 2/2	2/10
			7	13	20		
	5					dry:	
			1	12	13		
3	1					Texture: SANDY LOAM	4/10
			4	16	20		
	2				STR	Structure: 1 F SBK	2/10
			0	12	12		
	3						
			2	9	11	Color	2/10
	4					wet: 2/2	
			0	10	10		
	5					dry:	2/10
			2	10	12		
2	1					Texture: SANDY L.	2/10
			2	12	14		
	2					Structure: 1 F GR	
			2	12	14		1/10
	3						
			5	12	17	Color	
	4					wet: 10 YR 2/2	1/10
			1	15	16		
	5					dry:	
			0	5	5		GROUND COVER

PROJECT: Clancy-Unionville Date: 7/24/02

SITE_NAME: South Fork Quartz Creek III

PLOT_ID: 02SF041
SLOPE: 30
ASPECT: 206

EXAMINERS:
Archer/Vangemert
UTM_N: 5139930
UTM_E: 407542
NAD 27

COMMENTS:
Plot samples landtype 76A. Area is footslope of steep rocky outcrop, about 45% slope. Lower prtion grades to about 20%. Vegetation has common POTFRU on bottom slopes, grading to ARTTRI on steeper slopes. Grasses include FESIDA, KOEMAC, AGRCAN, STIPA, and BROCIL. Ecologic condition seems medium with higher annual cover and shrub cover. Parent material is mostly colluvium at plot location. Soils are very sandy. Lava Mtn. Trail is nearby.

MANY ROOTS DEPTH (cm):	4
COMMON ROOTS DEPTH (cm):	16 +/- 0.50
A HORIZON DEPTH (cm):	17 +/- 0.77
BARE GROUND %:	8 +/- 0.48
DUFF DEPTH (cm):	+/-

SITE OVERVIEW

Site Name:_____ Date: 7/24/02 Plot ID: 02SF044

GPS: *Zone 12 T* *NAD-27* UTM: 407542 (easting), 5139930 (northing)

Slope: 20 — 45 %	Aspect: 26°

Notes:

PLOT SAMPLES LANDSCAPE UNIT 76A. AREA IS FOOTSLOPE OF STEEP ROCKY OUTCROP ~ 45% SLOPE. LOWER PORTION GRADES TO 20%. VEGETATION HAS COMMON PATTERN ON BOTTOM SLOPES, GRADING TO MOSAIC ON STEEPER SLOPES. GRASSES ~~ARE~~ INCLUDE FESTUCA, KOELERIA, AGROPYRON (ANNUAL), STIPA SPP. & BROCUL. ECOLOGIC CONDITION SEEMS MEDIUM w/ ↑ ANNUAL COVER & SHRUB COVER.

LANDSCAPE IS FOOTSLOPE TO HILLSLOPE ON COLLUVIUM. VERY SANDY SOILS ~~EXIST~~ FROM GRANITE PARENT ROCK.

LAVA MTN. TRAIL ~~#~~ ~~GOES~~ PASSES BY THE UNIT, SAMPLE AREA.

Date: 7/29/02	Rooting Depth & Abundance/ Texture, Structure, & Color/ Ground Cover						
Crew: VAN Scoyoc Association	Site Name: Goshawk meadow					Plot ID: 025F041	
			Root Abundance			Description:	
TRANSECT #	POINT SAMPLE	Depth Measures	Many >100	Common 10-100	"A" Horizon		
1	1				5a/6b	Texture: Loamy Sand 0-1% Cl	10 POINT GROUND COVER
			4	15	15		
	2					Structure: 1 F SBK	9/10
			1	16	16		
	3						
			4	17	17	Color	1/10
	4					wet: 3/3	
			0	10	16		1/10
	5					dry:	
			1	19	19		
2	1					Texture: Loamy Sand	0/10
			4	16	16		
	2					Structure: 1 FGR	1/10
			5	17	17		
	3						
			7	19	19	Color	1/10
	4					wet: 3/2	
			4	10	15		
	5					dry:	1/10
			5	19	19		
3	1					Texture: Sandy Loam	1/10
			5	12	16		
	2					Structure: 1 F GR	0/10
			3	17	17		
	3						
			4	11	11	Color	
	4					wet: 10YR 3/2	2/10
			2	15	15		
	5					dry:	GROUND COVER
			6	19	19		

Color Change @ 53 cm

PROJECT: Clancy-Unionville Date: 7/25/02

SITE_NAME: Frohner II

EXAMINERS:
Archer/Vangemert

PLOT_ID: 02SF042
SLOPE: 8
ASPECT: 184
UTM_N: 5144255
UTM_E: 408491
NAD 27

COMMENTS:
Plot samples landtype 12C. Area is wide spaced lodgepole with understoryu beargrass and vaccinium. Downed wood is moderate to low abundance. This unit adjoins a thinned unit on the lower boundary with regeneration at roughly 30 years. ;Plot is on lower hillslope towards footslope break of Frohner basin. Soils have highly variable duff with a well developed humus layer. No charcoal was found in the duff. An ATV trail (244) bisects the unit.

MANY ROOTS DEPTH (cm):	0
COMMON ROOTS DEPTH (cm):	15 +/- 0.09
A HORIZON DEPTH (cm):	17 +/- 1.26
BARE GROUND %:	+/- 1.48
DUFF DEPTH (cm):	+/-

SITE OVERVIEW

Site Name:_____ Date: 07/25/02 Plot ID: 025F042

GPS: *Zone 12 T* *NAD-27* UTM: 408491 (easting), 5144255 (northing)

Slope: 5-10%	Aspect: 4°

Notes:

PLOT SAMPLES 12C LANDSCAPE UNIT. AREA IS WELL WIDE SPACED PINON W/ UNDERSTORY BEARGRASS & MACHINIUM SAP. DOWNED WOOD IS MODERATE TO LOW. THIS UNIT ADJOINS A THINNED UNIT ON LOWER BOUNDARY W/ REGENERATION EST. AGED @ 30 YRS.

LANDSCAPE IS LOWER HILLSLOPE TOWARDS FOOTSLOPE OF PROMONTORY SPUR. SOILS HAVE HIGHLY VARIABLE DUFF LAYER W/ A WELL DEVELOPED MINERAL LAYER. NO CHARCOAL WAS FOUND IN THE DUFF. AN ATV TRAIL (# 244) BISECTS UNIT.

Site: DESPOAZ																Date: 7/25/02																	
Observer: WA																Legal Location:																	
Topo Map #/Name:																Soil Map Unit: 12C																	
Treatment:																Slope Gradient:																	
Sample Point #:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Compaction:																																				
No Evidence	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X						
Penetration Resistance																																				
Platy Structure																					X															
Massive Structure																					X															
Rutting >2"																																				
Displacement >1" depth area>100 ft2																																				
Severely Burned																							X													
Hydrophobic																																				
Surface Erosion	X	X													X																					
Mass Movement																																				
Ground Cover:																																				
Duff/Plant Litter	X		X										X				X	X		X					X			X							
Rock >2"		X					X		X										X																	
Woody <1"				X																																
Woody 1-3"						X				X																										
Woody 3-6"					X							X			X																					
Woody 6-12"																																				
Woody 12-24"																																				
Live Plant	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X		X	X						
Moss/Lichen																																				
Bare Soil																					X															

↑
ATV TRAIL

Date: 7/25/12 | Rooting Depth & Abundance/ Texture, Structure, & Color/ Ground Cover

Crew: VANKOMMER | Site Name: FROHNER NORTH | Plot ID: 072SF042

TRANSECT #	POINT SAMPLE	Depth Measures	Root Abundance: Many >100	Root Abundance: Common 10-100	"A" Horizon	Description	10 POINT GROUND COVER
1 (Beg)	1					Texture: SANDY LOAM 15% CL 55% SN	
			0	12			
	2				Rock	Structure: 1 F GR	
			0	17			
	3						
						Color	
	4					wet: 10YR 3/3	
					color		
			0	17			
	5					dry:	
2 (Mid)	1					Texture: Sandy Loam 8% CL 65% SN	
					structure		
			0	18			
						Structure: 1 FGR	
	3						
			0	12	Rock	Color	
	4					wet: 10YR 3/3	
					Rock		
			1	20			
	5					dry:	
3 (Pad)	1					Texture: Sandy Loam	
			0	20			
	2				Rock	Structure: 1 FGR	
			0	9			
	3						
			0	13		Color	
	4					wet: 10YR 3/3	
					TRK		
			0	12			
	5					dry:	
			0	16			GROUND COVER