

## SUBSECTION ATTRIBUTES

Symbol	PHYSIOGRAPHY			GEOLOGY			CLIMATE	
	Land- form	K	Elevation Range (ft)	1/ Slp%	Surficial Materials	Bedrock CD1	CD2	2/ Mean Ann. Precip(in)
331Aa	FH	.37		13	LO/AH	IE	BA	16
331Ab	FH	.37		7	LO/AH	IE	BA	22
331Ac	FH	.37		13	LO	IE	BA	19
331Ad	PT	.37		9	AH/LO	IE	BA	24
331Ae	PT	.37		10	AH/LO	SE/IE	GR/BA	39
331Af	BK	.37		20	LO	IE	BA	22
331Ag	PT/FH	.37		12	LO/AH	IE	BA	17
341Ea	MO	.32		7	AL/LC	II/SE	GR	8
341Eb	FH	.24		22	AL	SP/PY	SH	10
342Ba	MO	.24		15	RD	PY/SE	BA/SI	15
342Bb	FH	.32		7	AL/LC	II/SE		12
342Bc	FH	.20		29	RD	SP/SE	SH	25
342Bd	PL	.37		9	LO/AL	IE/SE	BA/SS	18
342Bg	MO	.20		13	RD	IE/PY	BA	12
342Bh	IB	.24		6	LC/AL	IE	BA	10
342Bi	MO	.20		19	RD	IE/PY	BA	16
342Bj	PT	.20		7	RD	IE/PY	BA	13
342Ca	PL	.37		7	AL/RD	IE/PY	BA/TU	12
342Cb	PL	.37		6	AL/RD	IE	BA	11
342Cc	PL	.20		8	AL/RD	IE/PY	BA/TU	14
342Cd	PL	.20		7	RD	IE/PY	BA/TU	9
342Ce	PL	.24		6	AL	SE	SS	11
342Cg	MO/FH	.24		14	RD	IE/PY	BA/TU	16
342Ch	FH	.20		10	RD	IE/SE	BA/SS	13
342Ci	PT	.20		7	RD	IE	BA	11
342Da	PL	.20		5	RD	IE	BA	11
342Db	PL	.24		6	AL/RD	IE	BA	12
342Dc	PL	.24		6	AL	IE	BA	10
342Dd	PL	.20		6	AL/RD	IE/PY	BA/TU	17
342De	PL	.20		5	RD/AL	IE	BA	10
342Df	PL	.20			RD	IE	BA	10
342Ha	PT/VA	.24		15	RD/AL	IE	BA	17
342Hb	PT/FH	.20		15	RD	PY/SP	BA/SH	14
342Hc	PL	.37		7	AH	IE/SE	BA/SS	11
342Hd	VA	.37			AH/LC	IE	BA	11

1/ area weighted midslope value for subsection  
 2/ from PRISM model

342Ia	IB	.20	6	GD/LC	IE	BA	10
342Ib	PT	.37	11	LO	IE	BA	11
342Ic	FH/PT	.37	8	LO	IE	BA	14
342Id	PT	.37	6	LO	IE	BA	11
342Ie	BK	.20	21	RD	IE	BA	12
342If	PT	.24	8	GD	IE/II	BA/GR	12
342Ig	PT	.24	8	LO/OW	IE	BA	15
M242Ca	MG	.37	44	AH/GT	II/ME	GR/GN	60
M242Cb	MG	.37	32	AH/GT	II/ME	GR/GN	35
M242Cc	MO	.37	14	AH	IE	BA	29
M242Cd	PL	.37	9	AH/CL	IE/PY	BA/TU	29
M242Ce	MG	.37	17	AH/GD	IE/PY	BA	55
M242Cf	MO	.20	7	CL	IE/PY	BA/TU	16
M242Cg	MG	.37	13	AH/GD	PY		50
M242Ci	VA	.20		RD	IE	BA	
M242Cm	FH	.37	26	AH	SE	SS	22
M242Cn	FH	.37	33	AH	SE/IE	SS/BA	41
M242Co	MG	.37	35	AH/GT	SC/PY	SS	70
M242Cp	MG	.37	26	AH/GT	PY/IE	BA/SS	53
M242Cq	FH	.37	28	AH	II	GR	24
M242Cs	MG	.37	34	AH/GT	SE/PY	SS/SI	31
M242Ct	MG	.37	39	AH/GT	SE/II	SS/GR	65
M242Cu	MG	.37	27	AH/GT	II	GR	33
M242Cv	IB	.37	6	LC	IE	BA	24
M261Da	VA	.24	10	AL/AH	IE/PY	BA	22
M261Db	PT	.24	9	RD/AH	IE/PY	BA	30
M261Dc	FH	.24		RD/AH	IE	BA	
M261Dd	MG	.24	16	RD/AH	IE/PY	BA	38
M261De	FH	.20	16	RD	IE/PY	BA/CO	31
M261Df	MO	.37	16	AH/CL	IE/PY	BA	43
M261Dg	MO	.24	16	RD	IE/PY	BA/TU	45
M261Dh	MO	.37	14	AH	PY/IE	BA	58
M261Ga	IB	.32	7	LC/AL	IE	BA	17
M261Gb	MO/PT	.20	11	RD	IE/PY	BA	22
M261Gc	MO/PT	.37	16	AH	PY/IE	TU/BA	22
M261Gd	FH	.20	7	RD/AL	IE	BA	20
M331Aa	IB	.37	7	LO/AL	IE/PY	BA	30
M331Ab	PT	.37		AL/AH	PY/IE	TU/BA	41
M331Ac	MO/VA	.20	25	RD/GT	SP/PY	CO/TU	44
M331Ad	MO/FH	.20		RD	SP	CO/SH	
M331Ae	MO/FH	.32		RD	SC/SE	LI/SS	
M331Af	PT	.20	10	RD/AL	IE	RH	42
M331Ag	MO/VA	.24		RD/AL	PY		31
M331Ah	MO	.24		RD	II	GR	39
M331Ai	FH	.24		RD	II/PY	GR	31
M331Aj	MO	.20		RD/AL	PY/ME	GN	32
M331Ak	IB	.24	21	AL/OW	ME/PY	GN	30
M331Al	VA/FH	.24		AL	PY/SE		19
M331Am	MO	.37		RD	ME/SA	GN/SH	33
M331An	FH/MO	.24		RD	ME	GN	21

M331Ao	MO	.37		RD	ME	GN	34
M331Ap	MO	.37		RD	SE	SH/SS	33
M331Da	VA/FH	.37	9	LC/AL	SE		17
M331Db	MO/VA	.37	20	RD	SE/SC	SS	25
M331Dc	MO	.37	28	RD/LC	SE/SC	SS	30
M331Dd	MG	.32	19	RD	SC/SE	SS	32
M331De	IB/FH	.37	10	AL	SE/SC	SS	18
M331Df	MO/FH	.37	24	RD/AL	SE	SS/SH	31
M331Dg	MO/VA	.37	18	RD/AL	SE/SC		27
M331Dh	IB/FH	.24		AL	SC/IE	BA	22
M331Di	MO/IB	.37	18	RD	SC/SE		22
M331Dj	IB/FH	.24	10	AL	SA/PY		18
M331Dk	MG	.24	28	LO/GT	SA/SC	SH	30
M331Dm	MG	.20	30	RD/GD	SC/ME	GN	52
M331Do	MG	.37	18	AL/LD	CO/PY	CO	42
M331Dp	MG	.37	21	GD/AL	SE	SS/SH	33
M331Dt	MG	.24	9	AL/GD	SE		27
M331Du	MO	.37	18	RD/AL	SC/SA	SS	22
M331Dv	IB	.20	12	OW/AL	SE	CO/SS	21
M331Dw	IB	.24	9	GT	SE	SS/SH	29
M331Ja	MG	.20		GT	II/ME	GR/GN	34
M331Jb	MG	.20		GT	II/ME	GR/GN	29
M331Jc	MG	.20		GT	II/ME	GR/GN	26
M331Jd	MG	.20		GT	II/ME	GR/GN	30
M331Je	MG	.20		GT	SC/ME	GR/GN	20
M332Aa	BK	.37	36	AH/RD	II/MS	GR/GN	39
M332Ab	MG	.37	29	AH/RD	II/ME	GR/GN	54
M332Ad	IB	.37	25	AH/RD	II/MS	GR	55
M332Ae	MG	.20	37	RD	II	GR	49
M332Af	MG	.20	28	GT/RD	II/ME	GR/GN	47
M332Ag	MO	.37	21	AH	MS		42
M332Ah	MO	.24	26	RD	ME/II	GN/GR	38
M332Ai	MO	.24	18	RD/AH	MS/II	GN/GR	38
M332Aj	IB/MO	.20	19	RD	II/MS	GR	47
M332Ak	MG	.20	29	RD/GT	II/MS	GR	48
M332Al	MO/MG	.20	22	RD	II/MS	GR/GN	41
M332Am	MG/VA	.20	29	RD/GT	ME/II	AM/GR	43
M332An	MO/BK	.20	30	RD	II/ME	GR/GN	38
M332Ao	BK	.24	41	RD	II/ME	GR/GN	32
M332Ap	PT	.20	28	RD	II/MS	GR/MI	35
M332Aq	BK	.20	36	RD	MS/ME	QU/GR	25
M332Ar	MG	.24	34	RD/GT	II/MS	GR/QU	31
M332As	MO	.20	36	RD	II	GR	36
M332At	MG	.24	35	GT	II	GR	41
M332Au	FH	.20	36	RD	II/ME	GR/GN	36
M332Av	MG	.20	29	RD	II/PY	GR	29
M332Aw	MO	.20	25	RD	II	GR	30
M332Ax	MO	.20	15	RD	II	GR	24
M332Ay	MO	.20	29	RD	II	GR	33
M332Az	MO	.20	23	RD	II/ME	GR/GN	27
M332Aaa	MO	.20	26	RD	II	GR	31

M332Abb	IB	.20	15	GT/AL	II	GR	29
M332Acc	FH	.20	34	RD	II	GR	39
M332Add	BK	.20	34	RD	II	GR	34
M332Aee	MO	.20	22	RD	II	GR	37
M332Aff	IB	.20	18	RD	II	GR	29
M332Agg	BK	.20	24	RD	II	GR	30
M332Ahh	MO/BK	.20	27	RD	II	GR	35
M332Aii	MG	.20	21	GD/RD	II	GR	45
M332Ajj	MO	.24	24	GT/AL	II	GR	42
M332Akk	IB	.24	13	AL/OW	II/IE	GR/BA	33
M332All	FH	.24	17	AL/OW	II	GR	38
M332Amm	MG	.20	31	GT	II	GR	44
M332Ann	MG	.20	25	GT	II	GR	41
M332Aoo	IB	.24	24	RD/GT	ME/II	GN/GR	46
M332App	BK	.20	29	RD	II	GR	30
M332Aqq	FH	.20	17	RD	II/IE	GR/BA	22
M332Arr	PT	.24	21	RD	IE/II	BA/GR	37
M332Axx	BK	.24	42	RD	MS/II	GR	19
M332Ayy	MO	.20	25	RD	II	GR	34
M332Azz	MO	.20	25	RD	SE/PY	SS	25
M332Ba	MG	.20	38	GT	II/ME	GR/GN	46
M332Bb	IB	.32		AL/LC	SE		16
M332Bc	MO	.20	23	RD	II/ME	GR/GN	29
M332Bd	MG	.24	21	GT/RD	MS/II	MI/GR	26
M332Be	IB	.32	14	AL/LC	MS/SE		17
M332Bf	MO/MG	.37	29	RD	ME/SC	GN	31
M332Bg	MO/MG	.37	19	RD/AL	MS/SE	MI/SH	21
M332Bh	MG	.37	29	RD	MS	MI	23
M332Bi	IB	.32	13	AL/LC	SE/MS		17
M332Bj	MO/TP	.24	23	GT/AL	MS	MI	31
M332Bk	MO	.37	18	AL/RD	SC/SE		23
M332Bl	MO	.20	29	RD	MS/II	MI/GR	34
M332Bm	IB	.24	6	AL	X		14
M332Bn	MO/MG	.37	24	GT/RD	MS	MI	43
M332Ca	MG	.37	18	RD	SE/MS	SH/AR	62
M332Cb	MG	.37	38	RD/GD	SE	SH/SS	41
M332Cc	MG	.37	43	RD/GD	SE/SA	LI/SH	37
M332Cd	MG	.37	28	GD/RD	SE/MS	SS/MI	33
M332Da	FH	.37		AL	SE	SH/SS	15
M332Db	MO	.37		RD	SE/SA	SS/SH	
M332Dc	MO	.37		RD	SA/SE	SH/LI	24
M332Dd	MO	.37		RD	SA/SE		25
M332De	MG	.24		AL/RD	PY		31
M332Df	MO/FH	.20		RD	PY/SE	SH	16
M332Dg	MO/BK	.37		RD	SA/SE	SH/SS	20
M332Dh	MO/MG	.37		RD	SC/MS	AR	27
M332Di	MO/FH	.37	27	RD	MS/SC	AR	22
M332Dj	MG	.20	21	RD	II/PY	GR	20
M332Dk	IB	.24		AL	SE		14
M332Dl	IB	.24		AL	SE		16
M332Dm	MO/FH	.37		RD/AL	SE/PY	AR	16

M332Dn	MO/FH	.37		RD	SE/SA	SH	14
M332Do	FH	.24		RD	ME/II	GN/GR	14
M332Dq	MO/FH	.37		RD	SE/SA	SH/AR	26
M332Dr	MO	.37		RD	MS/SE	SH/GN	39
M332Ds	MO/FH	.24		AL	PY		36
M332Dt	IB	.24		AL	PY		20
M332Ea	MO	.37	19	AL	SC/PY		25
M332Eb	MG	.20	20	GT/AL	PY		15
M332Ec	MO	.24	16	RD/AL	ME/II	GN/GR	17
M332Ed	MG	.37	28	AL/GT	SC/SP	LI/DO	19
M332Ee	MO	.24	32	RD	SE	SS	27
M332Ef	MO/MG	.24	27	AL	SC/SA	DO/SH	21
M332Eg	VA	.32	9	AL	SE		13
M332Eh	MG	.24	31	RD/GD	SE/PY	SS	22
M332Ei	MG	.37	31	AL/GT	SE		25
M332Ek	MO	.37	30	AL	SC		22
M332El	MO/MG	.37	32	RD	MS	MI	27
M332Em	MO	.24	23	RD	PY/SE	SS	15
M332En	MO	.24	27	RD/AL	SE/PY	SS/QU	16
M332Ep	MG	.37		RD	SE/II	SS/GR	22
M332Eq	IB	.37		AL	SE		12
M332Er	IB/MO	.24		AL/RD	MS/II	MI/GR	26
M332Es	MO	.20	31	RD/GT	II	GR	34
M332Et	MO	.37	19	RD	MS/SA	MI/SH	28
M332Eu	VA	.24	18	AL	SE/MS	MI	20
M332Ev	IB	.24		AL	SE		12
M332Ew	VA	.24		AL/RD	SE/ME	GN	16
M332Ex	MG	.24		RD/AL	ME	GN	27
M332Ey	MG	.24		AL/GT	SE/ME	SS/GN	26
M332Ez	MG	.37	11	AL	PY		13
M332Eaa	MO/VA	.24		AL/RD	SE/PY	GN	18
M332Ecc	IB	.24		AL	SE		17
M332Edd	MO	.37	24	RD	SE/SA	SS/SH	22
M332Eff	MG/MO	.20		RD	PY/II	GR	18
M332Fa	FH	.20	18	RD/AL	PY/SE		16
M332Fb	MO/VA	.32	28	GT/OW	SE/PY		25
M332Fc	MO/MG	.24	33	RD	SE/PY		23
M332Fd	MO/IB	.24	27	RD	PY/SE		24
M332Fe	MO	.24	38	RD	SE/PY		35
M332Fg	MO/BK	.20	35	RD	PY/II	GR	27
M332Fh	MO/BK	.24	26	RD/AL	PY/SC		20
M332Fi	MG	.20	37	RD/GT	PY/II	GR	34
M332Ft	MG	.20	34	RD	SE/II	GR	44
M332Ga	MO	.37	23	AH	IE	BA	35
M332Gb	FH	.37	12	AH	PY/IE	TU/BA	14
M332Gd	MG/BK	.20	30	RD	IE	BA	20
M332Gf	MO	.24	14	RD/AH	IE/PY	BA/TU	21
M332Gg	MO	.37	16	AH	PY/SP		25
M332Gh	MO	.37	19	RD	SE/MS	SH/UM	21
M332Gi	MO	.37	14	RD	SE/MS	SH	20
M332Gj	MO	.37	13	AH	IE	BA	24

M332Gk	MG	.37	30	AH	II/IE	GR/BA	42
M332Gl	VA	.37	9	AL/LC	IE	BA	18
M332Gm	PT	.37	15	AH	IE	BA	24
M332Gn	PT	.20	11	RD	IE	BA	18
M332Go	FH/VA	.24	14	AL	IE/SE	BA/SS	17
M332Gp	PT	.20	17	RD	IE	BA	35
M332Gq	MO	.20	26	RD	IE/SP	BA	27
M332Gr	FH/VA	.20	12	RD/AL	IE/SE	BA/ST	22
M332Gs	MO	.20	21	RD	IE/ME	BA/GN	36
M332Gt	VA	.20	18	RD	II/IE	GR/BA	29
M332Gu	FH	.20	15	RD/AL	IE/II	BA/GR	20
M332Gv	MO	.20	35	RD	IE/II	BA/GR	34
M333Aa	MG/VA	.37	14	AH/GT	II/MS	GR	31
M333Ab	MG	.37	28	AH/GT	ME	GN	45
M333Ac	IB/LP	.32	8	AL/LC	X		26
M333Ad	TP	.24	7	AL/GD	X		26
M333Ae	MG	.37	24	AH/GT	II/MS	GR/ST	45
M333Af	MO/VA	.37	25	AH/AL	ME/II	GN/GR	38
M333Ag	MO	.24	21	GT/AL	PY/MS	MI	28
M333Ah	MG	.24	22	GT/AH	II/MS	GR	27
M333Ai	MG	.37	18	AH/GT	II/MS	GR/ST	40
M333Aj	MG	.37	19	AL/AH	PY/II	GR	17
M333Ak	MG	.37	17	AH/GT	II	GR	17
M333Am	FH	.37	18	AH/OW	II	GR	13
M333Ao	MO/VA	.37	19	AH/GT	MS/II	QU/GR	21
M333Aq	MO/FH	.37	19	AH/GT	MS/II	ST/GR	30
M333Ar	VA	.37	11	AH/AL	II	GR	22
M333As	IB	.37	17	AH/GT	II/MS	GR	15
M333Ba	MG	.37	26	AH/GT	MS	AR/MI	40
M333Bb	MG/VA	.37	21	AH/GT	MS	MI	30
M333Bc	IB	.24	8	AL/GD	MS	MI	21
M333Be	MG	.37	35	RD	MS	AR/MI	56
M333Bf	MO/VA	.37	18	AH/RD	MS	MI/AR	20
M333Ca	MG/VA	.37	31	AH/GT	MS	AR/MI	53
M333Cb	MG/VA	.37	33	RD	MS	MI	50
M333Cd	MG/VA	.37	25	AH/AL	MS	AR/MI	46
M333Cg	MG/VA	.37	30	AH/AL	MS/SE	MI	45
M333Da	MO/VA	.37	27	AH	MS	AR/MI	43
M333Db	MO/VA	.37	31	AH	SA/II	GR	54
M333Dc	MO/IB	.37	28	AH/AL	MS/SC	MI/AR	37
M333Dd	MO	.37	17	AH/RD	MS/II	AR/GR	37
M333De	FH	.37	21	AH/RD	II	GR	58
M333Df	BK	.37	34	AH/RD	II/MS	GR	54
M333Dg	MO	.37	31	AH/GT	MS/SA	MI	51
M333Dh	MO	.37	32	AH/AL	SA/MS	MI	51
M333Di	MO	.37	29	AH/AL	MS	MI/AR	34
M333Dj	MO/MG	.37	31	RD	MS/SA	MI/AR	45

<u>SURFICIAL</u>	<u>CODE</u>
Alluvium	AL
Ash	AH
Colluvium	CL
Glacial Drift	GD
Lacustrine/Playa Sediments	LC
Landslide Deposits	LD
Loess	LO
Outwash	OW
Residuum	RD
Sand	SA
Till	GT
Volcanics, unconsolidated	VU

GEOLOGY - BEDROCK/SURFICIAL

<u>BEDROCK (GENERAL)</u> (Process)	<u>CODE</u>	<u>BEDROCK (SPECIFIC)</u> (Material)	<u>CODE</u>
Igneous, Intrusive (Phanerites)	II	Granitics (granite, monzonite)	GR
		Mafics (diorite, gabbro)	MF
Intrusive, Alkalic	IA		
Igneous, Extrusive (Aphanerites)	IE	Rhyolite	RH
		Basalt	BA
Pyroclastic & Glass	PY	Scoria	SO
		Tuff	TU
		Mudflow & Breccia	MU
		Glass (incl. pumice)	GL
Sedimentary, Quartz-rich	SE	Sandstone	SS
		Shale	SH
		Siltstone	SI
		Conglomerate	CO
Sedimentary, Quartz-poor	SP	Limestone	LI
Sedimentary, Carbonate	SC	Dolomite	DO
		Conglomerate	CO
Sedimentary, Calcareous	SA		
Metasedimentary	MS	Argillite	AR
		Quartzite	QU
		Schist	ST
		Meta-siltstone	MI
Metasedimentary, Calcareous	MC		
Metavolcanic	MV	Greenstone/Mafic Schist	GS
		Ultramafics	UM
Metamorphic	ME	Gneiss	GN
		Amphibolite	AM



LANDFORM	CODE
Breaks	BK
Foothills	FH
Glaciated Mountains	MG
Intermontane Basin	IB
Mountains	MO
Plain	PL
Plateau	PT
Till Plain	TP
Valley	VA

GEOMORPHOLOGY - LANDSCAPE/LANDFORM/POSITION

<u>LANDSCAPE</u>	<u>CODE</u>	<u>LANDFORM</u>	<u>CODE</u>
Mountains	MO	Avalanche Track	AV
Glaciated Mountains	MG	Basin Floor	BC
		Block Field	BF
		Caldera	CD
		Canyon	CA
		Cirque	CQ
		Dipslope	DS
		Drumlin	DR
		Escarpment	ES
		Fault-line Scarp	FS
		Floodplain	FP
		Graben	GB
		Headwall	HW
		Horst	HO
		Kame	KA
		Kettle	KE
		Landslide	LD
		Moraine	MR
		Mountainside	MS
		Nunatak	NU
		Ridge	RI
		Structural Bench	SB
		Trough	TR
		Volcanic Cone	VC
Foothills	FH	Hillside	HS
Hills	HI	Ridge	RI
		Draw	DW
		Drainageway	DN
		Landslide	LD
Breaks	BK	Steam Breaks	ST
		Structural Breaks	BS
Badlands	BA	Hillside	HS
		Fan	FN
		Draw	DW
		Butte	BU
		Drainageway	DN
		Landslide	LD

Intermontane Basin	IB	Alluvial Fan	AF
		Flood Plain	FP
		Fluvial Terrace	FT
		Outwash Plain	OP
		Outwash Terrace	OT
Plain	PL	Alluvial Fan	AF
Till Plain	TP	Butte	BU
Lacustrine Plain	LP	Drumlin	DR
Delta Plain	DE	Dune	DU
		Flood Plain	FP
		Fluvial Terrace	FT
		Kame	KA
		Kettle	KE
		Hummock	HU
		Swale	SW
		Draw	DW
		Drainageway	DN
		Knoll	KL
Plateau	PT	None	
Valley	VA	Valley Side	VS
		Valley Floor	VF
		Flood Plain	FP
		Fluvial Terrace	FT
		Alluvial Fan	AF
		Pediment	PE
		Abandoned Meander	AM
		Oxbow	OX
		Backwater Slough	BS
		Stream Channel	SC
		Stream Bar	SB
		Levee (natural)	LE
		Drainageway	DN

---

**SLOPE COMPONENT** (used to describe slope position on landforms such as hillsides and mountainsides)

Summit	SU
Shoulder	SH
Backslope	BP
Footslope	FS
Toeslope	TS
Depression	DP
Interfluve	IF

**SLOPE GRADIENT** (used to describe the general slope of landforms such as plains)

Level (0-3%)	LV
Undulating (4-8%)	UN
Rolling (9-16%)	RO
Hilly (17-30%)	HL

Steep (31-60%)	ST
Very Steep (>60%)	SV

**SLOPE SHAPE**

Concave	CC
Convex	CV
Plane	PL

**WIDTH** (used to describe width of landforms such as valley floors, benches, terraces, ridges, and drainageways)

Narrow (<100 ft)	NW
Intermediate (100-300 ft)	IT
Wide (>300 ft)	WI

REFERENCES:

- Bluemle, John P. 1991. The Face of North Dakota, Revised Edition. Educational Series 21. North Dakota Geological Survey. pp. 177.
- Montagne, Clifford, Larry C. Munn, Gerald A. Nielsen, Jack W. Rogers and Harold E. Hunter. 1982. Soils of Montana. Montana Agricultural Experiment Station Montana State University. Bulletin 744. pp 95.
- Patterson, D.D. and C.J. Heidt. 1987. A Taxonomic Guide to the Soils of North Dakota. Agricultural Experiment Station, North Dakota State University. Research Report No. 20. pp. 55.
- Veseth, Roger and Clifford Montagne. 1980. Geologic Parent Materials of Montana Soils. Montana Agricultural Exp. Station Bulletin 721. pp. 117.
- USDA-FS. 1970. Soils of the Sheyenne National Grasslands, Richland and Ransom Counties, North Dakota. USDA-FS, Northern Region. pp. 151.
- Holdorf, H. and John Donahue. 1990. Landforms for Soil Surveys in the Northern Rockies. Montana Forest and Conservation Experiment Station School of Forestry, University of Montana.
- USDA-FS. 1992 draft. Ecosystem Inventory and Analysis Guide. USDA-FS, Northern Region.
- Driscoll, R.S., D.L. Merkel, D.L. Radloff, D.E. Snyder and J.S. Hagihara. 1984. An Ecological Land Classification Framework for the United States. USDA-FS. Miscellaneous Publication No. 1439. pp. 56.
- Peterson, F.F. 1981. Landforms of the Basin and Range Province Defined for Soil Survey. Nevada Agricultural Exp Station. Max C. Fleischmann College of Agriculture, University of Nevada Reno. pp. 52.
- USDA-Soil Conservation Service. 1993. Glossary of landform and geologic terms. National Soil Survey Handbook. Part 629, pp. 1-59.