

SUNSHINE SOILS _____(SS)

Location and Extent: Sunshine soils occupy scattered locations throughout the uplands of the map area but are most common in Delta, Surrey, Langley and Maple Ridge Municipalities. About 1650 ha of pure map units and 2700 ha of soil complexes dominated by Sunshine soils are mapped. Most complexes are with Heron and Summer soils although complexes with Whatcom, Defehr and Nicholson soils also occur.

Topography and Elevation: Sunshine soils are very gently undulating, undulating or gently sloping with slope gradients less than 5 percent. Elevations lie mostly between 20 and 150 m above sea level.

Parent Material and Texture: Sunshine soils have developed from coarse to moderately coarse textured (sandy), stone-free, littoral, glaciofluvial and fluvial deposits, usually 1 to 2 m thick, which overlie mainly moderately fine textured glaciomarine and marine deposits or sometimes, moderately coarse textured glacial till. Surface textures are usually sandy loam, varying occasionally to loamy sand or loam; subsurface and subsoil textures are sand containing, sometimes, loamy sand lenses. The underlying glaciomarine and marine materials range from silty clay loam to clay while the glacial till is either sandy loam or gravelly sandy loam.

Soil Moisture Characteristics: Sunshine soils are well to moderately well drained. They are rapidly to moderately pervious and have slow surface runoff and low to moderate water holding capacity. During heavy, prolonged rains a temporary perched watertable sometimes develops above the slowly permeable underlay and variable amounts of lateral seepage occur along this contact.

General Soil Description: The surface layer of Sunshine soils, when cultivated, consists of about 20 cm of very friable, dark brown to dark reddish brown, loamy material. Under natural conditions, the surface usually consists of about 5 cm of variably decomposed, organic forest litter underlain by a discontinuous, gray, strongly leached layer from 2 to 5 cm thick. The surface layer is underlain by about 20 cm of very friable, reddish-brown, sandy material which then grades to about 50 cm of sand that varies from strong brown in the upper part to yellowish-brown in the lower part. A few, reddish, prominent mottles may also be present in the lower part. Under this, variably coloured, loose sand occurs which sometimes contains thin, finer textured bands and few to common, reddish mottles. Below 1 to 2 m, dense, compact, gray or grayish-brown glaciomarine, marine or glacial till deposits are found. Soil reactions grade from strongly or very strongly acid in the upper part to medium or slightly acid near the bottom of the sandy material. Soil classification is *Orthic Humo-Ferric Podzol*.

Commonly Associated Soils: Summer, Heron, Bose, Whatcom, Nicholson and Defehr soils are often found in close association with Sunshine soils. Summer and Heron soils have textures similar to Sunshine soils but are, respectively, imperfectly and poorly drained. As well, Summer soils have strongly cemented subsurface layers. Bose soils differ by being gravelly rather than sandy in texture. Defehr soils are usually gravelly also, as well as being imperfectly drained. Whatcom and Nicholson soils are silty to clayey in texture and have developed from glaciomarine deposits similar to those that occur in the lower subsoil of Sunshine soils.

Vegetation: Most areas of Sunshine soils are cleared and used mainly for pasture or forage. Uncleared areas support a mixed, second-growth forest which includes coast Douglas-fir, western hemlock, western red cedar, red alder and others. Rooting depth is unrestricted to depths of 1 m or more.

General Land Use Comments: (1) Low moisture holding capacity is the main agricultural limitation of Sunshine soils. If irrigated (and adequately fertilized) most crops can be produced satisfactorily. (2) Sunshine soils are moderately suited for urban and related uses. Numerous septic tank disposal fields may cause perching of a groundwater table above the slowly permeable subsoil resulting in lateral seepage. (3) Forest growth is good although inadequate soil moisture limits growth during dry seasons. Limited plot data indicates annual wood production by Douglas-fir to be between 12 and 15 m³/ha.

SUNSHINE

UNIT TYPE: SERIES

DATE OF SURVEY: 68 SURVEYOR: MAL KELOWNA, B.C.M.A. & R.A.B.
 SAMPLING PURPOSE: DETAILED SURVEY

| | | | | | |
|------------------|-----------|---------------------------------|---|--------|------------|
| LOCATION | | CLASSIFICATION | | SLOPE | |
| LATITUDE(N): | 49 13 40 | URTHIC HUMU-FERRIC PODZOL(1978) | % | TYPE: | 2.0 |
| LONGITUDE(W): | 122 38 04 | | | CLASS: | COMPLEX |
| PRECISION (SEC): | 05 | STATUS: | | | UNDULATING |
| ELEVATION (M): | 25 | | | | |

PARENT MATERIAL & LANDFORM

UPPER STRATIGRAPHIC UNIT

SPEC. CLASTIC: SANDY
 GENETIC MAT.: MARINE
 SURFACE EXPRES.: BLANKET

DRAINAGE: WELL DRAINED
 RUNOFF: SLOW
 PERVIOUSNESS: RAPID

ADDITIONAL NOTES

SITE LOCATION NEAR CORNER OF 123 AVE. AND LAITY STREET, MAPLE RIDGE.

PROFILE DESCRIPTION

| HORIZON | THICKNESS DEPTH(CM) | HORIZON BOUNDARY | COLOUR 1 | TEXTURE | STRUCTURE 1 | STRUCTURE 2 |
|---------|---------------------|------------------|-------------------------------|------------|-------------------------------------|--------------|
| A P | 0- 20 | ABRUPT | 5.0YR3.0/2.0 MATRIX MOIST | SANDY LOAM | WEAK MEDIUM SUBANGULAR BLOCKY | |
| B F1 | 20- 37 | CLEAR | 5.0YR3.5/4.0 MATRIX MOIST | LOAMY SAND | WEAK FINE SUBANGULAR BLOCKY | |
| B F2 | 37- 57 | DIFFUSE | 5.0YR4.0/4.0 MATRIX MOIST | SAND | WEAK FINE SUBANGULAR BLOCKY | |
| B M1 | 57- 80 | DIFFUSE | 7.5YR5.0/6.0 MATRIX MOIST | SAND | WEAK FINE SUBANGULAR BLOCKY | SINGLE GRAIN |
| B M2 | 80-112 | DIFFUSE | 10.0YR5.0/6.0 MATRIX MOIST | SAND | WEAK FINE SUBANGULAR BLOCKY | SINGLE GRAIN |
| C | 112- | | | SAND | SINGLE GRAIN | |

| HORIZON | THICKNESS DEPTH(CM) | CONSISTENCE | ROOTS 1 | WOTTLES 1 | CEMENTATION AGENT/DESCRIP. |
|---------|---------------------|--------------|-----------|----------------------------|----------------------------------|
| A P | 0- 20 | VERY FRIABLE | ABUNDANT | | |
| B F1 | 20- 37 | VERY FRIABLE | ABUNDANT | | WEAKLY CEMENTED DISCONTINUOUS |
| B F2 | 37- 57 | LOOSE | PLENTIFUL | | WEAKLY CEMENTED DISCONTINUOUS |
| B M1 | 57- 80 | LOOSE | PLENTIFUL | | |
| B M2 | 80-112 | LOOSE | | FE# MEDIUM DISTINCT | |
| C | 112- | LOOSE | | FE# MEDIUM PROMINENT | |

PHYSICAL & CHEMICAL DATA

| HORIZON-DEPTH(CM.) | PH 1 | | PH 2 | | ORGANIC CARBON % | NITROGEN % | | |
|--------------------|--------------|--------|-------|--------------|------------------|------------|--------|-------|
| | SAMPLE STATE | METHOD | VALUE | SAMPLE STATE | | | METHOD | VALUE |
| A P | 0- 20 | 1 | 5.7 | 2 | 4 | 5.2 | 4.06 | .21 |
| B F1 | 20- 37 | 2 | 5.8 | 2 | 4 | 5.3 | 1.68 | .10 |
| B F2 | 37- 57 | 2 | 5.8 | 2 | 4 | 5.7 | .75 | .04 |
| B M1 | 57- 80 | 2 | 5.9 | 2 | 4 | 5.9 | .41 | .02 |
| B M2 | 80-112 | 2 | 5.9 | 2 | 4 | 5.9 | | |
| C | 112- | 2 | 5.9 | 2 | 4 | 5.9 | | |

| HORIZON-DEPTH(CM.) | EXCHANGEABLE CATIONS BUFF.(ME/100G) | | | | C. E. C. DETERMINED | EXTRACTABLE FE(%) | | | | |
|--------------------|-------------------------------------|------|-----|-----|---------------------|-------------------|--------|--------|--------|-----|
| | CA | MG | NA | K | | METHOD | RESULT | METHOD | RESULT | |
| A P | 0- 20 | 2.86 | .17 | .03 | .05 | 19.0 | 1 | 0.5 | 3 | 0.2 |
| B F1 | 20- 37 | .56 | .10 | .02 | .04 | 14.9 | 1 | 1.0 | 3 | 0.2 |
| B F2 | 37- 57 | .32 | .10 | .01 | .03 | 8.1 | 1 | 0.6 | 3 | 0.0 |
| B M1 | 57- 80 | | | | | | 1 | 0.3 | 3 | 0.0 |
| B M2 | 80-112 | | | | | | 1 | 0.3 | | |
| C | 112- | | | | | | 1 | 0.2 | | |

| HORIZON-DEPTH(CM.) | EXTRACTABLE AL(%) | | | | P1 PPM. | P2 PPM. | S PPM. | CU PPM. | ZN PPM. | |
|--------------------|-------------------|--------|--------|--------|---------|---------|--------|---------|---------|------|
| | METHOD | RESULT | METHOD | RESULT | | | | | | |
| A P | 0- 20 | 1 | 0.7 | 3 | 0.7 | 119.8 | 250.3 | 8.3 | 12.2 | 56.5 |
| B F1 | 20- 37 | 1 | 1.2 | 3 | 0.6 | 22.5 | 61.9 | 8.9 | 9.4 | 50.3 |
| B F2 | 37- 57 | 1 | 1.0 | 3 | 0.2 | 27.1 | 85.2 | 17.0 | 11.1 | 42.9 |
| B M1 | 57- 80 | 1 | 0.7 | 3 | 0.2 | 63.4 | 179.5 | 11.2 | 10.1 | 36.8 |
| B M2 | 80-112 | 1 | 0.7 | | | 74.3 | 202.2 | 18.5 | 10.1 | 29.3 |
| C | 112- | 1 | 0.4 | | | 56.9 | 96.7 | 8.3 | 10.8 | 27.4 |

SUNSHINE

UNIT TYPE: SERIES

DATE OF SURVEY: 60 SURVEYOR: PNS KELONNA, B.C.M.A. & R.A.B.
 SAMPLING PURPOSE: DETAILED SURVEY

LOCATION
 LATITUDE(N): 49 07 08
 LONGITUDE(W): 122 53 46
 PRECISION (SEC): 05

CLASSIFICATION
 ORTHIC HUMO-FERRIC PODZOL(1978)
 STATUS: MODAL SOIL

PARENT MATERIAL & LANDFORM

UPPER STRATIGRAPHIC UNIT

SPEC. CLASTIC: SANDY
 GENETIC MAT.: MARINE
 SURFACE EXPRES.: BLANKET

MIDDLE STRATIGRAPHIC UNIT

SPEC. CLASTIC: CLAYEY
 GENETIC MAT.: MARINE
 DESCRIPTOR: GLACIAL

DRAINAGE: WELL DRAINED

ADDITIONAL NOTES

THE EXCHANGEABLE CA VALUES INCLUDE MG.
 THE AE IS DISCONTINUOUS.

PROFILE DESCRIPTION

| HORIZON | THICKNESS DEPTH(CM) | RANGE | COLOUR 1 | TEXTURE | STRUCTURE 1 | CONSISTENCE | ROOTS 1 |
|---------|---------------------|-------|--|--------------------|--|-------------|----------------------|
| L | 6- 5 | | | | | | |
| F | 5- 0 | 3- 10 | | | | | |
| A E | 0- 3 | | 7.5YR4.0/2.0 MATRIX MOIST 7.5YR6.0/2.0 MATRIX DRY | SANDY LOAM | VERY WEAK FINE SUBANGULAR BLOCKY | FRIABLE | ABUNDANT ABUNDANT |
| B F1 | 3- 25 | | 5.0YR3.0/4.0 MATRIX MOIST 5.0YR5.0/6.0 MATRIX DRY | SANDY LOAM | VERY WEAK FINE SUBANGULAR BLOCKY | FRIABLE | ABUNDANT |
| B F2 | 25- 50 | | 10.0YR5.0/4.0 MATRIX MOIST 10.0YR7.0/4.0 MATRIX DRY | SAND | SINGLE GRAIN | LOOSE | FEW |
| B CJ | 50- 83 | | 10.0YR6.0/3.0 MATRIX MOIST 10.0YR7.0/3.5 MATRIX DRY | SAND | MASSIVE | | FEW |
| C GJ | 83-116 | | | SAND | MASSIVE | FRIABLE | |
| II C GJ | 116-126 | | 10.0YR6.0/3.0 MATRIX MOIST 10.0YR7.0/3.0 MATRIX DRY | SILTY CLAY LOAM | MASSIVE | FIRM | |

| HORIZON | THICKNESS DEPTH(CM) | MOTTLES 1 | CONCRETION AND NODULE DESCIP. 1 | CEMENTATION AGENT/DESCIP. |
|---------|---------------------|------------------------------------|---------------------------------|-------------------------------|
| L | 6- 5 | | | |
| F | 5- 0 | | | |
| A E | 0- 3 | | | |
| B F1 | 3- 25 | | FEW | |
| B F2 | 25- 50 | | | |
| B CJ | 50- 83 | FEW | | WEAKLY CEMENTED CONTINUOUS |
| C GJ | 83-116 | PROMINENT | FEW THROUGHOUT MATRIX | WEAKLY CEMENTED CONTINUOUS |
| II C GJ | 116-126 | MANY PROMINENT 10.0YR6.0/6.0 | | |

PHYSICAL & CHEMICAL DATA

| HORIZON-DEPTH(CM.) | SAMPLE STATE | METHOD | VALUE | ORGANIC CARBON % | NITROGEN % | EXCHANGEABLE CATIONS BUFF.(ME/100G) | | C. E. C. DETERMINED |
|--------------------|--------------|--------|-------|------------------|------------|-------------------------------------|--|---------------------|
| | | | | | | CA | | |
| L | 6- 5 | | | | | | | |
| F | 5- 0 | | | | | | | |
| A E | 0- 3 | 2 | 4.4 | 50.29 | 1.74 | | | |
| B F1 | 3- 25 | 2 | 4.7 | 1.04 | .06 | 1.73 | | 11.0 |
| B F2 | 25- 50 | 2 | 5.4 | 1.97 | .11 | .78 | | 26.0 |
| B CJ | 50- 83 | 2 | 5.7 | 1.28 | .07 | .37 | | 22.6 |
| C GJ | 83-116 | 2 | 5.9 | .52 | .02 | .26 | | 18.4 |
| II C GJ | 116-126 | 2 | 6.0 | .29 | .01 | .29 | | 7.4 |
| | | | | .06 | .01 | 4.63 | | 11.8 |

| HORIZON-DEPTH(CM.) | D1 PPM. |
|--------------------|---------|
| L | 6- 5 |
| F | 5- 0 |
| A E | 0- 3 |
| B F1 | 3- 25 |
| B F2 | 25- 50 |
| B CJ | 50- 83 |
| C GJ | 83-116 |
| II C GJ | 116-126 |

SUNSHINE

UNIT TYPE: SERIES

DATE OF SURVEY: 60 SURVEYOR: DNS KELOWNA, B.C.M.A. & R.A.B.
 SAMPLING PURPOSE: DETAILED SURVEY

| | | | | | |
|------------------|-----------|----------------------------------|--|-------------------|---------|
| LOCATION | | CLASSIFICATION | | SLOPE | |
| LATITUDE (N): | 49 09 34 | ORTHIC HUMO-FERRIC PODZOL (1978) | | % TYPE: | 1.0 |
| LONGITUDE (W): | 122 41 36 | | | CLASS: | COMPLEX |
| PRECISION (SEC): | 05 | STATUS: MODAL SOIL | | GENTLY UNDULATING | |
| ELEVATION (M): | 12 | | | | |

PARENT MATERIAL & LANDFORM

UPPER STRATIGRAPHIC UNIT

SPEC. CLASTIC !! SANDY
 GENETIC MAT.: MARINE
 SURFACE EXPRES.: BLANKET

MIDDLE STRATIGRAPHIC UNIT

SPEC. CLASTIC !! CLAYEY
 GENETIC MAT.: MARINE

DRAINAGE: WELL DRAINED
 RUNOFF: SLOW
 PERVIOUSNESS: MODERATE

PROFILE DESCRIPTION

| HORIZON | THICKNESS DEPTH(CM) | HORIZON BOUNDARY | COLOUR 1 | COLOUR 2 | TEXTURE | STRUCTURE 1 |
|---------|---------------------|------------------|-------------------------------|-------------------------------|-------------|---------------------------------------|
| LF | 3= 0 | ABRUPT | | | ORGANIC | |
| B F1 | 0= 25 | GRADUAL | 10.0YR3.0/4.0 MATRIX MOIST | | SANDY LOAM | WEAK MEDIUM SUBANGULAR BLOCKY |
| B F2 | 25= 50 | GRADUAL | 10.0YR4.0/4.0 MATRIX MOIST | | SANDY LOAM | VERY WEAK MEDIUM ANGULAR BLOCKY |
| B F3 | 50= 75 | ABRUPT | 10.0YR5.0/5.0 MATRIX MOIST | 10.0YR5.0/6.0 MATRIX MOIST | LOAMY SAND | WEAK MEDIUM SUBANGULAR BLOCKY |
| B M | 75= 95 | | 10.0YR4.5/4.0 MATRIX MOIST | | SAND | MASSIVE |
| C GJ | 95=165 | | 2.5Y5.0/4.0 MATRIX MOIST | 5.0Y4.5/3.0 MATRIX MOIST | SANDY LOAM | MASSIVE |
| C | 165= | | | | COARSE SAND | SINGLE GRAIN |

| HORIZON | THICKNESS DEPTH(CM) | STRUCTURE 2 | CONSISTENCE | ROOTS 1 | MOTTLES 1 | MOTTLES 2 |
|---------|---------------------|--------------|--------------------------|-----------|----------------------|---------------|
| LF | 3= 0 | | | | | |
| B F1 | 0= 25 | | VERY FRIABLE SOFT | PLENTIFUL | | |
| B F2 | 25= 50 | | VERY FRIABLE SOFT | PLENTIFUL | | |
| B F3 | 50= 75 | | FRIABLE SLIGHTLY HARD | FEW | | |
| B M | 75= 95 | SINGLE GRAIN | SLIGHTLY HARD | VERY FEW | | |
| C GJ | 95=165 | SINGLE GRAIN | SLIGHTLY HARD | | FEW 10.0YR3.5/4.0 | 10.0YR3.0/4.0 |
| C | 165= | | LOOSE | | | |

THICKNESS CEMENTATION
 HORIZON DEPTH(CM) AGENT/DESCRIP.

| | | |
|------|--------|----------------------------------|
| LF | 3= 0 | |
| B F1 | 0= 25 | |
| B F2 | 25= 50 | |
| B F3 | 50= 75 | |
| B M | 75= 95 | WEAKLY CEMENTED DISCONTINUOUS |
| C GJ | 95=165 | WEAKLY CEMENTED DISCONTINUOUS |
| C | 165= | |

PHYSICAL & CHEMICAL DATA

| HORIZON=DEPTH(CM.) | SAMPLE STATE | METHOD | VALUE | ORGANIC CARBON % | EXCHANGEABLE CATIONS BUFF. (ME/100G) | | | | C. E. C. DETERMINED | pH |
|--------------------|--------------|--------|-------|------------------|--------------------------------------|-----|-----|-----|---------------------|------|
| | | | | | CA | MG | NA | K | | |
| LF | 3= 0 | | | 21.50 | | | | | | 74.0 |
| B F1 | 0= 25 | 2 | 5.7 | 2.25 | 1.37 | .31 | .12 | .11 | 15.4 | 15.0 |
| B F2 | 25= 50 | 2 | 5.7 | 1.47 | .71 | .17 | .11 | .08 | 11.7 | 12.0 |
| B F3 | 50= 75 | 2 | 5.8 | .57 | .75 | .30 | .08 | .04 | 7.3 | 13.0 |
| B M | 75= 95 | 2 | 5.7 | .25 | .36 | .20 | .09 | .03 | 8.9 | 25.0 |
| C GJ | 95=165 | 2 | 6.0 | | | | | | | 21.0 |
| C | 165= | | | | | | | | | |

SUNSHINE

UNIT TYPE: SERIES

DATE OF SURVEY: 63 SURVEYOR: GGR KELOWNA, B.C.M.A. & R.A.B.
 SAMPLING PURPOSE: DETAILED SURVEY

| | | |
|-------------------------|---------------------------------|----------------------|
| LOCATION | CLASSIFICATION | SLOPE |
| LATITUDE(N): 49 03 06 | URTHIC HUMO-FERRIC PODZOL(1978) | % ASPECT (DEG): 15.0 |
| LONGITUDE(W): 122 27 25 | STATUS: MODAL SOIL | |
| PRECISION (SEC): 05 | | |
| ELEVATION (M): 110 | | |

PARENT MATERIAL & LANDFORM

UPPER STRATIGRAPHIC UNIT

SPEC. CLASTIC 1: SANDY
 GENETIC MAT.: FLUVIAL
 SURFACE EXPRES.: VENEER

MIDDLE STRATIGRAPHIC UNIT

SPEC. CLASTIC 1: CLAYEY
 GENETIC MAT.: MARINE
 DESCRIPTOR 1: GLACIAL

DRAINAGE: WELL DRAINED
 RUNOFF: SLOW

PROFILE DESCRIPTION

| HORIZON | THICKNESS DEPTH(CM) | HORIZON BOUNDARY | COLOUR 1 | COLOUR 2 | TEXTURE | STRUCTURE 1 |
|---------|---------------------|------------------|--|-----------------------------|------------|---|
| LH | 4- 0 | | | | ORGANIC | |
| B F1 | 0- 10 | CLEAR | 5.0YR3.0/2.0 MATRIX MOIST 7.5YR5.0/4.0 MATRIX DRY | | LOAM | WEAK FINE TO MEDIUM SUBANGULAR BLOCKY |
| B F2 | 10- 33 | GRADUAL | 5.0YR4.0/3.0 MATRIX MOIST 10.0YR5.0/4.0 MATRIX DRY | | LOAM | WEAK FINE SUBANGULAR BLOCKY |
| B F3 | 33- 55 | GRADUAL | 5.0YR4.0/4.0 MATRIX MOIST 10.0YR5.0/4.0 MATRIX DRY | 10.0YR5.0/6.0 MATRIX DRY | SANDY LOAM | WEAK FINE SUBANGULAR BLOCKY |
| II B M | 55- 77 | GRADUAL | 5.0YR4.0/2.0 MATRIX MOIST 5.0YR6.0/2.0 MATRIX DRY | | LOAMY SAND | WEAK FINE SUBANGULAR BLOCKY |
| II BC | 77-108 | ABRUPT | | | SAND | SINGLE GRAIN |
| III AB | 108- | | 10.0YR5.0/2.0 MATRIX MOIST 10.0YR6.0/2.0 MATRIX DRY | | SILTY CLAY | MODERATE MEDIUM SUBANGULAR BLOCKY |

| HORIZON | THICKNESS DEPTH(CM) | STRUCTURE 2 | CONSISTENCE | ROOTS 1 | CONCRETION AND NODULE DESCIP. 1 |
|---------|---------------------|--------------|--------------|-----------|---|
| LH | 4- 0 | | | | |
| B F1 | 0- 10 | | VERY FRIABLE | ABUNDANT | FEW FINE THROUGHOUT MATRIX SPHERICAL |
| B F2 | 10- 33 | | VERY FRIABLE | ABUNDANT | FEW FINE THROUGHOUT MATRIX SPHERICAL |
| B F3 | 33- 55 | | VERY FRIABLE | ABUNDANT | |
| II B M | 55- 77 | SINGLE GRAIN | VERY FRIABLE | PLENTIFUL | |
| II BC | 77-108 | | LOOSE | FEW | |
| III AB | 108- | | FRIABLE | FEW | |

PHYSICAL & CHEMICAL DATA

| HORIZON-DEPTH(CM.) | PH 1 | | METHOD | VALUE | ORGANIC CARBON % | NITROGEN % | EXCHANGEABLE CATIONS BUFF.(ME/100G) | | | | C. E. C. DETERMINED |
|--------------------|--------------|---|--------|-------|------------------|------------|-------------------------------------|-----|-----|-----|---------------------|
| | SAMPLE STATE | | | | | | CA | MG | NA | K | |
| LH | 4- 0 | 2 | 2 | 5.5 | 24.94 | .98 | | | | | |
| B F1 | 0- 10 | 2 | 1 | 5.8 | 2.55 | .13 | 1.50 | .90 | .00 | .30 | 17.9 |
| B F2 | 10- 33 | 2 | 1 | 5.9 | 1.45 | .08 | 1.00 | | .00 | .20 | 14.6 |
| B F3 | 33- 55 | 2 | 1 | 6.0 | .75 | .06 | .80 | | .00 | .20 | 9.6 |
| II B M | 55- 77 | 2 | 1 | 6.1 | .35 | .04 | .80 | | .00 | .10 | 5.7 |
| II BC | 77-108 | 2 | 1 | 6.1 | | .01 | .30 | | .00 | .10 | 2.7 |
| III AB | 108- | 2 | 1 | 5.0 | | .03 | | | | | |

| HORIZON-DEPTH(CM.) | P1 PPM. | |
|--------------------|---------|-------|
| LH | 4- 0 | 43.0 |
| B F1 | 0- 10 | 24.0 |
| B F2 | 10- 33 | 10.0 |
| B F3 | 33- 55 | 20.5 |
| II B M | 55- 77 | 38.0 |
| II BC | 77-108 | 130.5 |
| III AB | 108- | 8.5 |

SUNSHINE

UNIT TYPE: SERIES

DATE OF SURVEY: 72 SURVEYOR: MAL UBC

LOCATION

 LATITUDE (N): 49 15 22
 LONGITUDE (W): 123 13 59
 PRECISION (SEC): 05
 ELEVATION (M): 85

CLASSIFICATION

 ORTHIC HUMO-FERRIC PODZOL (1978)

PARENT MATERIAL & LANDFORM

UPPER STRATIGRAPHIC UNIT

MIDDLE STRATIGRAPHIC UNIT

SPEC. CLASTIC 1: SANDY
 GENETIC MAT. 1: MARINE
 SURFACE EXPRES. 1: VENEER

GENETIC MAT. 1: MORAINAL

PHYSICAL & CHEMICAL DATA

| HORIZON-DEPTH (CM.) | SAMPLE STATE | METHOD | VALUE | MOISTURE STATUS | | |
|---------------------|--------------|--------|-------|-----------------|---------|------------------|
| | | | | 1/3 BAR. | 15 BAR. | % FIELD MOISTURE |
| Ae | 0- 5 | | | | | 23.6 |
| Bf1 | 5- 46 | 2 | 4.7 | 17.6 | 8.2 | 36.1 |
| Bf2 | 46- 71 | 2 | 4.6 | 12.7 | 7.1 | 27.9 |
| Bm | 71- 81 | 2 | 4.9 | 15.8 | 5.0 | 18.2 |
| C | 81-101 | 2 | 5.1 | 15.7 | 4.2 | 25.1 |
| IIC | 101-127 | 2 | 5.5 | 20.1 | 7.1 | 13.8 |

| Horizon | Depth cm | Particle Density gm/cc | | | Shrinkage Limit % | | Optimum Moisture % | Particle Size % | | | | | | | | | | | | |
|---------|----------|------------------------|----------|----------|-------------------|----------|--------------------|-----------------|---------|---------|-------|-------|-----------|----------|-----------|--|-------|------|------|------|
| | | Air Dry | Oven Dry | Max. Dry | Air Dry | Oven Dry | | >5.1 cm | <5.1 cm | <2.5 cm | <5 mm | <1 mm | <0.074 mm | <0.05 mm | <0.002 mm | | | | | |
| Ae | 0- 5 | | | | | | | | | | | | | | | | 100.0 | | | |
| Bf1 | 5- 46 | 2.43 | 2.57 | 99.5 | | | 21.2 | | | | | | | | | | 100.0 | 22.5 | 20.0 | 3.0 |
| Bf2 | 46- 71 | 2.48 | 2.59 | 108.0 | | | 17.0 | | | | | | | | | | 100.0 | 11.6 | 8.0 | 2.0 |
| Bm | 71- 81 | 2.51 | 2.62 | 110.7 | | | 16.2 | | | | | | | | | | 100.0 | 14.5 | 14.0 | 2.0 |
| C | 81-101 | 2.64 | 2.71 | 114.0 | 20.0 | 21.2 | 13.2 | | | | | | | | | | 100.0 | 30.5 | 23.0 | 2.0 |
| IIC | 101-127 | 2.66 | 2.73 | 119.7 | 16.9 | 17.2 | 12.0 | | | | | | | | | | 100.0 | 73.0 | 65.0 | 13.0 |