PROVINCIAL FOREST

MINISTRY OF FORESTS
SUNSHINE COAST FOREST DISTRICT
Timber Sale Licence Major
Forest Development Plan 2001–2005

OVERVIEW MAP

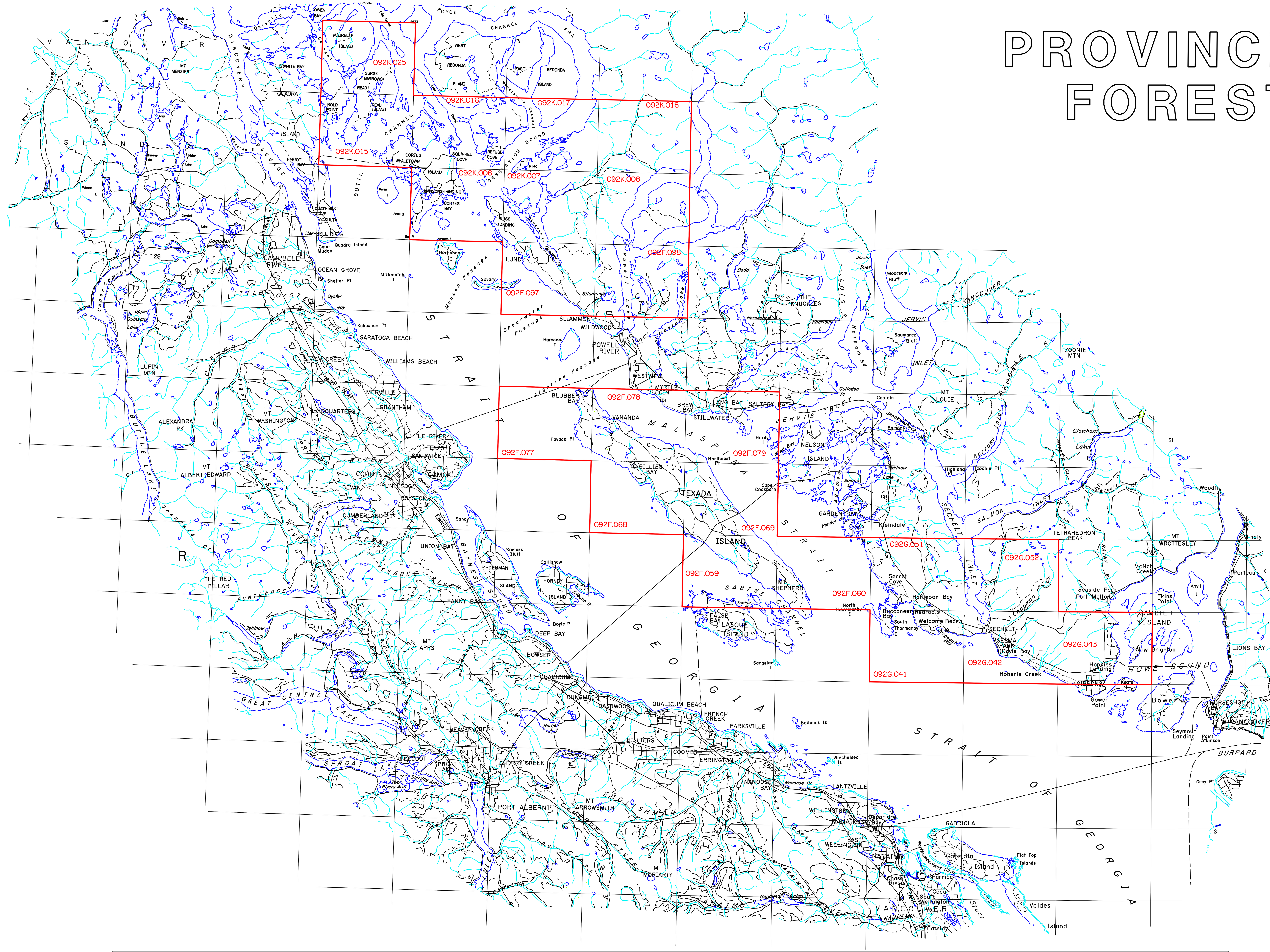
TIMBER SALE LICENCE MAJOR

A20487	A20492	A20495	A20507
A20489	A20493	A20496	A20508
A20490	A20494	A20503	

MAPS

MAP SHEETS AT 1:20 000

92F 059	92F 079	92G 043	92K 008
92F 060	92F 097	92G 051	92K 015
92F 068	92F 098	92G 052	92K 016
92F 069	92G 041	92K 006	92K 017
92F 077	92G 042	92K 007	92K 018
92F 078			92K 025



FOREST COVER MAP LEGEND

THIS IS NOT A LEGAL SURVEY MAP.

I. FOREST LAND

A. FOREST LAND (FORESTED)

SPECIES COMPOSITION

Species are listed in their order of pre-dominance. Major Species are listed first, followed by minor species in brackets.

SPECIES SYMBOLS

The standard symbols for some species are abbreviated. e.g. Fd is shown as F. Cw is shown as C.

F - Douglas-fir	Pl - Lodgepole pine
C - Western red-cedar	Pj - Jack pine
H - Hemlock	Py - Yellow pine
B - Balsam (True fir)	L - Larch
S - Spruce	Ac - Cottonwood
Sb - Black spruce	D - Red alder
Yc - Yellow cedar	Mb - Broadleaf maple
Pw - Western white pine	E - Birch
Pa - Whitebark pine	At - Aspen
Pf - Limber pine	

EXAMPLE OF A FOREST COVER LABEL

- 12 - SILVICULTURE SYMBOL AND OPENING NUMBER
- 123 - POLYGON NUMBER
- Es2w - E.S.A. CATEGORY
- L - MULTI-LAYER
- A - QUALIFIER
- CF(SH) - SPECIES COMPOSITION
- 2 - AGE CLASS CODE
- 1 - HEIGHT CLASS CODE
- 0 - STOCKING CLASS CODE
- 1 - CROWN CLOSURE CLASS CODE
- 20 - SITE INDEX
- B79-81 W77⊕L73 P80-81 - HISTORY SYMBOLS AND CODES

(123Es2w/LA, CF(SH), 2101-20, B79-81, W77⊕L78, P80-81)

AGE CLASS

CODE	LIMITS (years)
1	1 - 20
2	21 - 40
3	41 - 60
4	61 - 80
5	81 - 100
6	101 - 120
7	121 - 140
8	141 - 250
9	251 +

HEIGHT CLASS

CODE	LIMITS (metres)
1	0.1 - 10.4
2	10.5 - 19.4
3	19.5 - 28.4
4	28.5 - 37.4
5	37.5 - 46.4
6	46.5 - 55.4
7	55.5 - 64.4
8	64.5 +

STOCKING CLASS CODES

	CODE	APPLIES TO	LIMITS: No. trees/hectare, diameter - breast height (d.b.h.)
	0	all immature	N.A.
	1	all mature	≥76/ ha, 27.5 cm+ d.b.h.
	2	all mature	<76/ ha, 27.5 cm+ d.b.h.
Subdivision of 2	3	mature, with leading species Pl	≥311/ ha, 17.5 cm+ d.b.h., and ≥50% of stems 7.5 cm+ d.b.h. are ≥12.5 cm d.b.h.
Subdivision of 2	4	mature, with leading species Pl	<311/ ha, 17.5 cm+ d.b.h., or ≥311/ ha, 17.5 cm+ d.b.h., and <50% of stems 7.5 cm+ d.b.h. are ≥12.5 cm d.b.h.
	R	all mature all immature	stands disturbed 26-75% by area or volume

HISTORY RECORD OPENING NUMBER

◯12	- opening number valid for BCGS mapsheet
⊗12	- opening number valid for adjacent BCGS mapsheet
⊘12	- opening number valid for NTS mapsheet
blank	- opening number has not been assigned

SITE INDEX

All SI are shown to the nearest meter, referenced at 50 years Breast Height Age. SI is based on the age and height of the leading species. When an accurate SI cannot be obtained from age and height, Estimated SI is shown after, or replaces the SI.

ESTIMATED SITE INDEX

SI is estimated when suitable SI trees are not present, e.g., NSR, young stands (<30 years), stands released following suppression. It is denoted by a slash which always precedes it. Associated fields in the data base are Inventory Type Group and SI Estimated source code.

CROWN CLOSURE CLASS

CODE	LIMITS (percentage)
0	0 - 5
1	6 - 15
2	16 - 25
3	26 - 35
4	36 - 45
5	46 - 55
6	56 - 65
7	66 - 75
8	76 - 85
9	86 - 95
10	96 - 100

HISTORY SYMBOLS

CLASS, SYMBOL	CODE	HISTORY
Disturbance	B	Wildfire
	BE	Escaped Burn
	BG	Ground Burn
	BR	Range Burn
	BW	Wildlife Burn
	D	Disease
	F	Flooding
	I	Insect
	K	Fume Kill
	L	Logging
	LX	Logged(10% increments)
	R	Site rehabilitation
	S	Slide
	W	Windthrow
Regeneration		Artifical Regeneration with year(s) of planting
Stand Tending	F	Fertilization
	H	Hack and squirt
	J	Juvenile spacing
	M	Mistletoe control
	P	Pruning
	R	Conifer release
	S	Sanitation spacing
	T	Commercial thinning
	W	Brushing and weeding
Site Preparation	B	Broadcast burn
	C	Chemical
	G	Grass seeded
	H	Hand preparation
	RB	Range management burn
	S	Spot burn
	M	Mechanical
	MS	Mechanical and spot burn
	W	Windrow

MULTI-LAYER

L -Multi-layered stand (a separate description of each layer is available in the data base, i.e., 1, 2)
V -Veteran component
S -A separate silviculture description is available in the data base

ENVIRONMENTALLY SENSITIVE AREA (E.S.A.) CATEGORIES

E.S.A. CLASS	E.S.A. CATEGORY	E.S.A. DESCRIPTION
High	Es	Extremely fragile or unstable soils
	Ep	Severe regeneration problems caused by geoclimatic factors
	Ea	Severe snow chute and avalanche problems
	Er	Exceptionally high recreational values
	Ew	Of critical importance to wildlife (with or without species)
	Eh	Very high water values and extreme sensitivity to harvesting
Moderate	E2s	Significantly fragile or unstable soils but less than those for Es
	E2p	Severe regeneration problems caused by biotic factors
	E2r	High recreational values but less than those for Er
	E2w*	High value for wildlife but less than that for Ew (with or without species)
	E2h	Very high water values and high sensitivity but less sensitivity than Eh
	Ec	Specific limitations (forest regeneration, snow avalanche areas, water, and operability) - used from 1973 to 1975 inclusive
Nil		Management practices on these lands are subject only to operational constraints consistent with the policies of the Forest Region.

* Important areas for grizzly bears along salmon-producing streams are identified by E2wb

QUALIFIERS
/A - Complex stand (all-aged, uneven-aged)
/I - Inoperable

FISHERIES' CONSTRAINTS

SYMBOL	STREAM VALUE TO FISH AND STREAM SENSITIVITY TO HARVESTING
▲	Nil
▤	Low
⊗	Moderate
◆	High

NOTE: Absence of Fisheries Symbols indicates information is not available.

B. FOREST LAND (NON-FORESTED)

NSR -Not satisfactorily restocked (with or without species)
NCBr -Non-commercial brush (with or without non-commercial species)
NC -Non-commercial (with species)

NCBr GENUS SYMBOLS

D -Alder (Mountain, Green, Sitka)	K -Cascara
E -Birch (Water)	V -Cherry
W -Willow	J -Juniper
G -Dogwood	Q -Garry Oak
M -Maple (Vine, Rocky Mountain)	T -Western Yew
R -Arbutus	

C. FOREST LAND (NON-PRODUCTIVE)

A plus Forest description
NP plus Forest description

II. NON-FOREST LAND

A -Alpine	-Swamp
R -Rock	C -Cultivated, cleared
NP GB -Non-productive burn (NPBu)	U -Urban
	OR -Open Range
NPBr -Non-productive brush	M -Wild Hay Meadow
NP -Miscellaneous non-productive	

Note: Other categories of non-forest land are written in full, e.g. Claybank, Hayfield, Gravel Bar.

III. DATA SOURCES

- ● 5(68) -Ground sample, number (year), pre-1979
- ● 7(79)G -Growth sample, number (year), pre-1980 and 1989+
- ● 8(75)V -Volume and/or decay sample, pre-1979 and 1988+
- 18(79) -Phase 1 -70 mm sample
- 6(82) -Phase 2 -ground sample
- 7(80) -Phase 3-Growth sample, 1980-1985
- 8(79) -Phase 3-Decay sample, 1979-1987
- 9(86) -Phase 3-Growth sample, 1986-1988
- 5(88) -Phase 3-Silviculturally treated sample, 1986-1988

A multi-phase sample is shown by combining any of the above bar symbols:
- 5(87) -Phase 1, Phase 2, Phase 3, Growth and Decay sample

- 7(80)I -Intensive forestry installation
- 5(65)R -Rectangular growth sample
- E.P. 705(65)R -Experimental plot installation-Research

X 7(80)I	-Air call
XG (68)	-Ground observation w/measurements (pre-1979)
XGO 18(91)	-Ground observation w/measurements (1979+)
XG 284(83)	-Ground call with measurements
XE 2-9(77)	-E.S.A. air call
XGE 50(76)	-E.S.A. ground call
XGR 110(83)	-Regeneration survey ground call
XGB 7(85)	-Ecological research ground sample
XGC 2(85)	-Valuation cruise plots
XGF 16(80)	-Range ground call
XL 51-035(74)	-70 mm photography (pre-1979)
L66-261(79)	-70 mm photography (1979+)

IV. MAP LABEL DESCRIPTIONS

A separate forest cover attribute file is available for each mapsheet which shows individual polygon details. The history attributes show the year and type of activity associated with that polygon. Forest cover information is updated to the year shown in the map title block and matching attribute file.

EXAMPLES OF FOREST AND NON-FOREST MAP LABELS

1) 10 FH(C) 9416-19 -Polygon 10 is a stand with F (Douglas Fir) and H (Hemlock) as the major species and C (Western Red Cedar) as the minor species. The stand is age class 9 (251+ yrs), height class 4 (28.5-37.4 m) stocking class 1, crown closure code 6 (estimated area occupied by the canopy through vertical projection is 56-65%), and SI 19 metres.

2) 21 A-H 9222 -An alpine forest stand with H (Hemlock) as the only species. The stand is age class 9 (251+ yrs), height class 2 (10.5-19.4 m), stocking class 2, and crown closure code 2. Note that SI is not shown for all classes of non-productive forest types.

3) 8 NCBr W4-/15 -A non-commercial species of W (Willow) with a crown closure code 4, growing on a productive site, estimated SI 15 metres.

4) 7Es/s NSR-D 1102-/20 GL72 -A not satisfactorily restocked stand by Silviculture Branch standards, but with a forest cover of Red Alder, and an ESA description of extremely fragile or unstable soils. The stand is age class 1 (1-20 yrs), height class 1 (0-10.4 m) and has an estimated SI of 20. The polygon was logged in 1972.

5) 62 NSR-/30 GL78 -A not satisfactorily restocked area on a productive site (estimated SI 30 metres). See attribute file for SI reference species. The polygon was logged in 1978.

6) 48 NP GB71 -A non-productive site burned in 1971.

7) 8E2w/L FPy 83R3-13 GL6%62 -A multi-layered stand (L) with an environmentally sensitive area classification of E2w (wildlife, moderate constraint). The most important layer is described as F (Douglas Fir) and Py (Yellow Pine). The stand is age class 8 (141-250 yrs), height class 3 (19.5-28.4 m), stocking class R (residual), crown closure class 3 (26-35%), SI 13 meters and was selectively logged 60% in 1962.

8) 16 B 31046/13 GL6%72 -A released stand of B (Balsam), age class 3 (41-60 yrs), height class 1 (0-10.4 m), estimated SI, crown closure class 4 (36-45%), SI 6 metres (based on age and height) followed by estimated SI 13 metres, and selectively logged 60% in 1972. The estimated SI expresses the current rate of growth for a suppressed stand released after logging.

V. CARTOGRAPHIC SYMBOLS

- -Timber Supply Area boundary
- -Timber Supply Block boundary
- -P.S.Y.U. boundary
- -Forest Region boundary
- -Forest District boundary
- -Inventory Region boundary
- -Inventory Compartment boundary
- -Forest cover type line
- -Opening boundary
- -International boundary
- -Interprovincial boundary
- -Provincial Forest boundary
- -Land District boundary
- -Township boundary
- -Municipal boundary
- -Surveyed Lot
- -Park/Reserve/Unsurveyed Lot
- O^3 BC 85116 O^4 -Flight line, photo centres
- -Main road
- -Secondary road
- -Other:e.g. logging, industrial, etc.
- -Trail
- -Railroad
- -Flume, ditch
- -Pipe line
- -Power line
- -Mine
- -Lookout
- -Dam
- P.O. -Post office
- FS -Forest Service office
- PT -Plus Tree
- -Slide
- -Log Landing

BRITISH COLUMBIA GEOGRAPHIC SYSTEM
(Derived from a breakdown of the N.T.S. 1:250 000 sheet)
e.g. 82M

091	092	093	094	095	096	097	098	099	100
081									090
071	NW						NE		080
061									070
051									060
041				82M			048		050
031									040
021	SW						SE		030
011									020
001	002	003	004	005	006	007	008	009	010

WHEN ORDERIING MAPS, SHOW
Index no., Alphabet letter, Sheet no. 1:20 000, 1:10 000
e.g. 82 M .048 4
82M.048 (1:20 000)
82M.048.4 (1:10 000)

Maps are available at cost from:
Ministry of Forests
Technical and Administrative Services Branch
1450 Government Street
Victoria, B.C. V8W 3E7
Attention: Map Sales
(Make cheques payable to the Minister of Finance.)

SCALE 1:250 000
0 6.25 12.50 18.75Km

JCH FORESTRY LTD.

Plot File Generated On May 04, 2001

Submitted By: ____
Data Submitted: ____
Amendment : ____
Date: ____