



MEMORANDUM

D. Roberts
Regional Water Manager
Water Management Branch
Prince George, B.C.

Date: May 26, 1989

Our File: 93 ~~E~~F / 13 - 01

Re: Groundwater Information, Ootsa Lake Area 93 E/F

Further to your request for a compilation of available groundwater information in the above area, please find enclosed the following:

1. List of well records on file and summarized data as of May 23, 1989;
2. Copies of 1:250,000 topographic maps showing general locations of wells on file;
3. List of available geology and consultant reports on file for the area.

Although the majority of existing wells are located along the north side of Ootsa Lake, available geologic mapping (Duffell, 1959) suggests the probable existence of undeveloped aquifers located in the unconsolidated deposits between Ootsa Lake and Whitesail Lake, along the St. Thomas River east of Eutsuk Lake and areas at the south end of Eutsuk Lake. Significant aquifers within glacio-fluvial deposits also probably occur in the Entiako River Valley. Potential aquifers in the regions could be defined through more detailed analysis of existing geological mapping and air photograph interpretation.

A.P. Kohut
Acting Head
Groundwater Section
Water Management Branch
387-9465

APK/sz
AES/W3477

Enclosure

F. Chwojka
W. Hodge
FILE

Ministry of Environment and Parks - Water Management Branch - Groundwater Section
Groundwater Database System
Data Summary

BCGS Map Area	Well No.	Owner's Name	Date Constructed (dmy)	Well Depth (ft.)	Well Diam. (in.)	Well Yld. Unt.	Yld. to Water (ft.)	Depth to Bedrk (ft.)	Aquif Litho	Screen Interval (ft.)
093F.044.2.3.4	001	L & M LUMBER	29-09-78	115.0	6.0	10.0 GPM	40	UNK	UNC	
093F.066.1.4.3	001	DEPT OF FISHERIES; E	01-11-78	95.0	8.0	45.0 IGM	UNK	UNK	UNC	
093F.066.1.4.3	002	DEPT OF FISHERIES; E	16-03-79	115.0	8.0	737.0 USGM	4	103	UNC	72-94
093F.066.1.4.3	003	DEPT OF FISHERIES; E	03-06-79	170.0	8.0	900.0 USGM	6	152	UNC	95-140
093F.066.1.4.3	004	DEPT OF FISHERIES; E	26-02-79	101.0	8.0	120.0 USGM	5	UNK	UNC	89-101
093F.066.1.4.3	005	DEPT OF FISHERIES; E	01-02-79	54.0	8.0		UNK	49	UNC	
093F.066.1.4.3	006	DEPT OF FISHERIES; E	01-02-79	20.0	8.0		UNK	10	UNC	
093F.066.1.4.3	007	DEPT OF FISHERIES; E	01-11-78	135.0	8.0		UNK	UNK	UNC	
093F.066.1.4.3	008	DEPT OF FISHERIES; E	01-11-78	146.0	8.0		UNK	127	UNC	67-98
093F.071.1.4.4	001	INCE WILLIAM & S	01-01-81	300.0	6.0		UNK	70	UNC	
093F.071.2.1.4	001	BARRY DAVIES	01-10-76	82.0	6.0	55.0 GPH	UNK	50	BED	
093F.071.2.3.4	001	MURPHY JOHN	01-01-81	200.0	0.0		UNK	125	UNC	
093F.081.2.1.2	001	CHESLATTA SCHOOL DIS	01-01-50	159.0	0.0	2.0 GPM	100	UNK	UNC	
093F.081.2.2.2	001	DON RENOLDS	06-04-70	232.0	6.0	8.0 GPM	108	UNK	UNC	
093F.081.2.2.2	002	DUSAN KOGEN	06-11-86	155.0	6.0	40.0 GPM	UNK	UNK	UNC	
093F.081.2.3.2	001	DAVID & KAREN GRUEN	01-06-87	316.0	0.0	25.0 GPH	UNK	263	UNC	
093F.081.2.3.3	001	DARRYL CRITCHLOW	01-01-86	206.0	0.0	25.0 GPH	40	UNK	UNC	
093F.081.4.1.4	001	WIEBE	01-08-71	325.0	0.0		UNK	UNK	UNC	
093F.081.4.2.2	001	BARBARA ANCHETTA	01-01-85	177.0	0.0	5.0 GPM	UNK	UNK	UNC	
093F.088.4.4.1	001	JIM WILLIAMS	01-01-84	12.0	0.0		8	UNK	UNC	
093F.087.3.3.1	000	BEN BISANZ	01-01-86	15.0	0.0		12	UNK	UNC	
093F.089.4.4.1	001	DOUG WEAVER	01-09-86	220.0	5.5	20.0 GPM	40	UNK	UNC	
093F.090.3.3.3	001	JOHN HOLLANDER	01-09-85	160.0	6.0	6.0 GPM	50	120	BED	
093F.090.4.3.3	001	SIMROSE	01-01-50	8.0	0.0		5	UNK	UNC	
093F.090.4.3.3	002	AL SIMROSE	01-01-79	200.0	6.0		1	195	BED	
093F.090.4.3.4	001	JAMES CASTLE		120.0	0.0		UNK	UNK	UNC	
093F.090.4.4.3	001	GEORGE SIMROSE	09-03-78	55.0	0.0	20.0 GPM	21	UNK	UNC	
093F.091.1.4.4	001	A E BIGLER	01-01-79	110.0	6.0	7.0 GPM	5	60	BED	
093F.091.2.3.3	001	LYNN REDY	01-01-87	95.0	0.0	150.0 GPH	10	20	BED	
093F.091.3.1.4	001	MACKENZIE	10-03-78	140.0	0.0	2.0 GPM	20	80	BED	
093F.091.3.2.4	001	CHARLES BIGLER	09-07-77	125.0	0.0	5.0 GPM	80	76	BED	
093F.091.4.1.1	001	GRASSY PLAINS GOSPEL	30-01-81	400.0	6.0		6	60	BED	
093F.091.4.1.1	002	W FEHR	01-06-70	250.0	6.0		100	190	UNC	
093F.091.4.1.3	001	GRASSY PLAINS SCHOOL	01-01-50	150.0	6.0	10.0 GPM	UNK	66	BED	
093F.091.4.1.3	002	DEPT INDIAN AFFAIRS	30-03-72	135.0	6.0	6.0 GPM	42	46	BED	
093F.091.4.1.3	003	DEPT INDIAN AFFAIRS	30-03-72	110.0	6.0	8.0 GPM	22	54	BED	
093F.091.4.2.3	001	FRANK ROBERTSON	01-11-78	160.0	6.0	1.5 GPM	50	90	BED	
093F.091.4.2.3	002	UNCHA VALLEY RANCH	13-07-70	350.0	6.0	200.0 GPH	100	UNK	BED	
093F.091.4.2.4	001	BERT WATSON	01-10-78	125.0	0.0	15.0 GPM	70	35	BED	
093F.091.4.3.1	001	DAVIS	31-08-66	105.0	0.0	5.0 GPH	72	100	BED	
093F.091.4.4.3	001	DIETER JILGE	07-11-86	280.0	6.0	6.0 GPM	UNK	112	BED	
093F.091.4.4.3	002	GEORGE ROSS	01-01-79	160.0	6.0	3.0 GPM	40	70	BED	
093F.091.4.4.4	001	JOHN WEINS	09-06-77	600.0	0.0	1.0 GPM	30	4	BED	
093F.092.2.3.2	001	DEPT INDIAN AFFAIRS	18-10-73	200.0	6.0	5.0 GPM	20	45	BED	
093F.092.3.2.3	001	DEPT INDIAN AFFAIRS	25-03-72	143.0	6.0	6.0 GPM	8	UNK	UNC	138-143
093F.092.3.3.1	001	RICK PROBE	01-07-87	220.0	0.0	3.0 GPH	UNK	58	UNC	
093F.092.3.3.1	002	JOHN WIEBE	01-01-71	112.0	0.0	160.0 GPH	16	8	BED	
093F.092.3.3.1	003	JOHN WIENS	01-10-76	173.0	6.0	36.0 GPH	UNK	27	BED	
093F.092.3.3.2	001	C & N DOGLIONE	01-08-87	93.0	0.0	3.0 GPM	+	UNK	UNC	

Ministry of Environment and Parks - Water Management Branch - Groundwater Section
Groundwater Database System
Data Summary

BCGS Map Area	Well No.	Owner's Name	Date Constructed (dmy)	Well Depth (ft.)	Well Diam. (in.)	Well Yld. Unt.	Yld. to Water (ft.)	Depth to Bedrk (ft.)	Aquif Litho	Screen Interval (ft.)
093F.092.3.3.3	001	MENDNITE CHURCH OF D	09-06-77	175.0	6.0	5.0 GPM	60	95	BED	
093F.092.3.3.3	002	RALPH EMMETT	01-01-71	105.0	0.0	450.0 GPM	8	UNK	UNC	
093F.092.3.3.3	003	ISACC FEHR	09-08-77	275.0	0.0	3.0 GPM	55	55	BED	
093F.092.3.3.3	004	ROBERT GROSS	14-10-71	166.0	0.0	120.0 GPH	20	0	BED	
093F.092.4.1.2	001	DEPT OF INDIAN AFFAI	01-04-72	185.0	6.0	10.0 GPM	61	69	BED	
093F.092.4.3.3	001	DEPT INDIAN AFFAIRS	30-03-72	243.0	6.0	8.0 GPM	25	136	UNC	
093F.096.3.3.2	001	KURT JECHOW	20-08-70	294.0	6.0	400.0 GPH	140	UNK	UNC	
093F.098.1.2.3	001	ARVON BEETY	12-06-78	57.0	0.0	20.0 GPM	22	UNK	UNC	
093F.098.3.2.1	001	M C GUMM	01-01-67	175.0	0.0		60	UNK	UNC	
093F.098.3.2.1	002	WILL ROGERS	01-09-85	82.0	6.0		40	UNK	UNC	63-71
093F.098.4.3.1	001	RON RAY	01-07-86	160.0	4.0	3.0 GPM	40	17	BED	
093F.099.2.2.3	001	ERIC WEINHART	01-08-79	160.0	6.0	14.0 GPM	34	20	BED	
093F.099.2.2.3	002	DARREL WEAVER	01-01-78	80.0	6.0	30.0 GPM	UNK	39	BED	
093F.099.2.2.4	001	DREW WEAVER	08-06-74	227.0	4.5	10.0 GPM	42	UNK	UNC	
093F.099.2.4.1	001	JOHN ZILER	02-08-79	108.0	6.0	5.0 GPM	UNK	UNK	UNC	
093F.099.3.1.2	001	WERNER GUANOT	10-06-80	420.0	6.0	3.0 GPM	240	245	BED	
093F.099.3.2.2	001	TACHUCK CREEK RANCH	01-01-78	260.0	0.0	20.0 GPM	76	UNK	UNC	
093F.099.3.3.4	001	GARLAND JOHNSON	01-01-77	400.0	0.0		302	38	BED	
093F.099.3.4.1	001	ANNE DYKE	01-01-77	350.0	6.0	2.0 GPM	302	40	BED	
093F.099.3.4.3	001	ED DOMHOF	01-10-84	495.0	4.0	5.0 GPM	200	61	BED	
093F.099.3.4.3	002	RALPH DAVIS	26-10-77	400.0	0.0	10.0 GPM	48	55	BED	
093F.099.3.4.4	001	ROY KELLS	03-05-83	180.0	4.5		93	95	BED	
093F.100.1.1.3	001	DEPARTMENT OF INDIAN	23-03-73	210.0	6.0	18.0 GPM	14	UNK	UNC	
093F.100.1.2.3	001	NULKI LAKE LODGE	01-01-50	115.0	6.0	12.0 GPM	50	UNK	UNC	
093F.100.1.4.1	001	STONEY CREEK ELDERS	01-05-86	104.0	6.0	25.0 GPM	25	UNK	UNC	
093F.100.1.4.4	001	DEPT OF INDIAN AFFAI	30-09-66	80.0	6.0	20.0 GPM	48	40	BED	
093F.100.1.4.4	002	DEPT OF INDIAN AFFAI	18-01-67	114.0	6.0	20.0 GPM	20	18	BED	
093F.100.1.4.4	003	DEPT OF INDIAN AFFAI	13-12-66	172.0	6.0	20.0 GPM	45	24	BED	
093F.100.1.4.4	004	DEPT OF INDIAN AFFAI	25-11-66	81.0	6.0	10.0 GPM	40	58	BED	
093F.100.1.4.4	005	DEPT OF INDIAN AFFAI	10-01-67	226.0	6.0	20.0 GPM	20	210	BED	
093F.100.1.4.4	006	DEPT OF INDIAN AFFAI	15-11-66	83.0	6.0	25.0 GPM	40	UNK	UNC	
093F.100.1.4.4	007	STONY CR I R	01-01-32	102.0	4.0		30	66	BED	
093F.100.2.1.2	001	A SIMROSE	01-01-47	16.0	0.0		UNK	UNK	UNC	
093F.100.2.1.2	002	C WEEKS	01-01-61	200.0	4.0		22	UNK	UNC	
093F.100.2.1.2	003	GORDON LAHUE	25-07-81	280.0	6.0	5.0 GPM	UNK	260	BED	
093F.100.2.1.2	004	MARVIN POOLE	26-11-69	190.0	6.0	20.0 GPM	18	UNK	UNC	
093F.100.2.1.3	001	A DICKSON	01-01-61	190.0	4.0		20	UNK	UNC	
093F.100.2.1.4	001	BERT WHEELER	01-12-69	179.0	0.0	20.0 GPM	68	UNK	UNC	
093F.100.2.1.4	002	WHEELER	01-01-22	150.0	4.0		50	UNK	UNC	
093F.100.2.1.4	003	RICHARD BLAKE	01-01-57	200.0	4.0		6	UNK	UNC	
093F.100.2.2.1	001	H BRADLEY	01-01-50	12.0	0.0		5	UNK	UNC	
093F.100.2.2.1	002	GEORGE EVANS	01-06-76	185.0	6.0	1.0 GPM	UNK	UNK	UNC	
093F.100.2.2.1	003	GEORGE EVANS	01-03-76	302.0	6.0		UNK	UNK	UNC	
093F.100.2.2.2	001	GEORGE EVANS	01-01-61	14.0	0.0		10	UNK	UNC	
093F.100.2.2.2	002	GEORGE EVANS	15-09-83	120.0	6.0	15.0 GPM	25	UNK	UNC	
093F.100.2.2.3	001	ARTHUR CURL	17-03-74	291.0	6.0	15.0 GPM	21	182	BED	
093F.100.2.2.4	001	TOM CURL	01-01-63	250.0	0.0		20	UNK	UNC	
093F.100.2.2.4	002	HAROLD JONES	01-01-62	30.0	0.0		UNK	UNK	UNC	
093F.100.2.2.4	003	JIM LANSTON	01-01-63	350.0	4.0	70.0 GPH	95	UNK	UNC	

Ministry of Environment and Parks - Water Management Branch - Groundwater Section
Groundwater Database System
Data Summary

BCGS Map Area	Well No.	Owner's Name	Date Constructed (dmy)	Well Depth (ft.)	Well Diam. (in.)	Well Yld. Yield Unt. Water	Depth to (ft.)	Depth to Bedrk (ft.)	Aquif Litho	Screen Interval (ft.)
093F.100.2.3.1	001	STONE CREEK INDIAN	01-09-71	110.0	0.0	30.0 GPM	35	UNK	UNC	105-110
093F.100.2.4.4	001	GARY McDONALD	01-01-72	170.0	6.0	15.0 GPM	148	UNK	UNC	
093F.100.2.4.4	002	CHARLES LAHUE	01-10-85	220.0	0.0	3.0 GPM	100	160	BED	
093F.100.3.3.3	001	C WEAVER	01-07-86	120.0	5.5	20.0 GPM	30	60	BED	
093F.100.4.1.2	001	JACK BANGS	11-06-83	180.0	5.5	20.0 GPM	40	120	BED	
093F.100.4.1.3	001	TOM STEWART	01-01-60	82.0	3.0		35	UNK	UNC	
093F.100.4.1.3	002	DWIGHT DAVIS	17-07-75	75.0	4.5	10.0 GPM	40	UNK	UNC	
093F.100.4.1.4	001	JIM HARDING	16-11-77	169.0	6.0	6.0 GPM	UNK	88	UNC	
093F.100.4.2.1	001	JOHN V BANGS	01-08-67	60.0	6.0		24	UNK	UNC	
093F.100.4.2.1	002	DINGWALL	01-01-50	220.0	3.0		30	UNK	UNC	
093F.100.4.2.3	001	RICHARD KOCH	01-01-63	0.0	3.0		UNK	UNK	UNC	
093F.100.4.3.4	001	A F MCCALMAN	01-01-50	150.0	4.0	400.0 GPH	40	UNK	UNC	
093F.100.4.3.4	002	RALPH BRYAN	01-01-69	255.0	5.0	8.0 GPM	150	157	BED	
093F.100.4.3.4	003	7TH DAY ADVENTIST CH	01-03-75	255.0	0.0	25.0 GPM	121	126	BED	
093F.100.4.4.3	001	DAVE FUNK	01-05-79	216.0	6.0	1200.0 GPH	130	135	BED	
093F.100.4.4.3	002	KEN HOPFNER	02-06-74	165.0	6.0	12.0 GPM	130	136	BED	
093F.100.4.4.4	001	BRUND TRAMPLIK	27-09-75	260.0	6.0	10.0 GPM	140	140	BED	

1989/05/23

Page 1

Ministry of Environment and Parks - Water Management Branch - Groundwater Section
Groundwater Database System
Data Summary

BOGS Map Area	Well No.	Owner's Name	Date Constructed (dmy)	Well Depth (ft.)	Well Diam. (in.)	Well Yld. (gpm)	Yld. to Water (ft.)	Depth to Bedrk (ft.)	Aquif. Litho	Screen Interval (ft.)
093E.088.4.4.1	001	ALBERT E DRANSTON JR	30-08-66	340.0	6.0	0.2 GPM	58	81	BED	
093E.089.2.4.2	001	DOUG MCGINNIS	01-01-84	120.0	6.0	7.0 GPM	UNK	50	BED	
093E.089.3.2.2	001	BRIAN WALKER	01-10-76	120.0	6.0		UNK	UNK	UNC	
093E.090.2.1.3	001	B C FOREST SERVICE	01-06-70	290.0	6.0	30.0 GPM	16	UNK	UNC	
093E.090.2.2.1	001	OOTSJA LAKE SCHOOL	01-01-50	153.0	6.0	5.0 GPM	UNK	UNK	UNC	

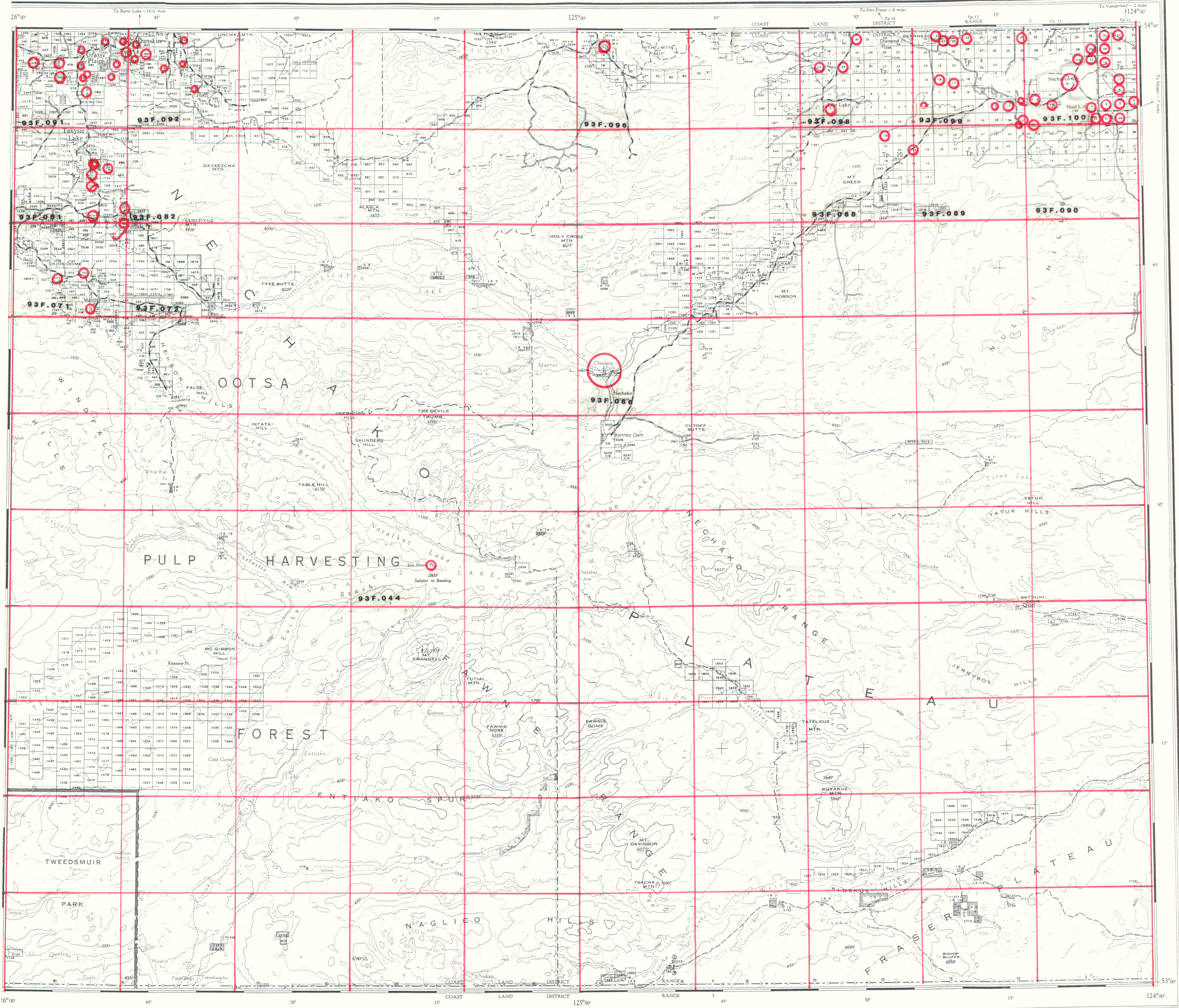
OOTSA LAKE
GROUNDWATER INFORMATION
GROUNDWATER SECTION

Geology Reports

1. Duffell, S. 1959 Whitesail Lake Map - Area British Columbia, Geological Survey of Canada Memoir 299.
2. Stuart, R.A. 1960 Geology of the Kemano-Tahtsa Area. B.C. Dept. of Mines and Petroleum Resources Bulletin No. 42.
3. Woodsworth, G.J. 1980 Geology of Whitesail Lake (93 E) Map - Area B.C. Geological Survey of Canada O.F. 708.
4. Howes, D.E. 1977 Terrain Inventory and Late Pleistocene History of the Southern Part of The Nechako Plateau. Resource Analysis Branch, B.C. Ministry of the Environment. Bulletin No. 1.

Consultant Reports

1. Pacific Hydrology Consultants Ltd. 1979 Groundwater Exploration Nechako River Hatchery Site. Report for Department of Fisheries, Environment Canada by A. Badry, Vancouver. B.C.
2. Brown, Erdman and Associates Ltd. 1981 Groundwater Test Drilling Program, Alcan Smelters and Chemicals Ltd. Kemano Completion Project. Report For Crippen Consultants by H.W. Reed, Vancouver, B.C.
3. Robinson, Roberts and Brown Ltd. 1974 Groundwater Development Nechako River Hatchery Site. Report for Fisheries Operations, by W.L. Brown, Vancouver, B.C.



tion, compiled and produced by Geographic Division, Surveys and
nd, Department of Lands, Forests, and Water Resources, Victoria.
artially revised for Second Status Edition, 1968.

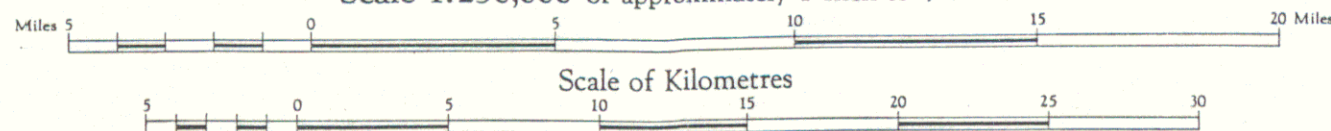
RELIABILITY
implied from B. C. Prov. Govt. air surveys interim
5-56. B.C. air photos 1949, 1953 and 1954.
implied from mapping by Dept. of Energy, Mines
a, Ottawa, 1949, air photos 1947-49.
nd from B. C. air photos, 1962-66.

REFERENCE

Lands alienated or covered by application
under the Land Act
Surveyed Crown land in flooded area
Surveyed land in flooded area which has been alienated
Surveyed Timber Lease, Licence, or Deed
Indian Reserve
Government Reserve
Land District Boundary
Provincial Forest Boundary
Time Farm Licence
Municipality
Park
Park less than 40 acres
Campground
Forest Service Lookout
Settlement or Locality
Post Office
School
Hospital
Mine
Dike
Historic Monument

NECHAKO RIVER
BRITISH COLUMBIA

Scale 1:250,000 or approximately 1 Inch to 4 Miles



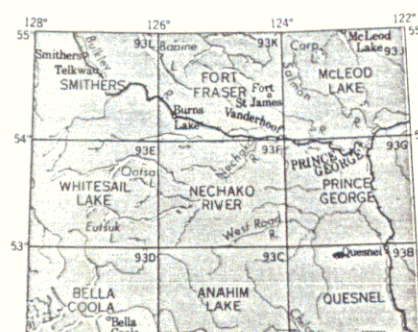
Magnetic Declination approximately 2°12' East at Centre of sheet, 1968.
Decreasing approximately 3" annually.

Maps and indexes with price lists may be obtained
from the Map Production Division, British Columbia
Lands Service, Parliament Buildings, Victoria, B.C.

LITHOGRAPHED IN CANADA BY A. H. MACDONALD, QUEEN'S PRINTER, VICTORIA, BRITISH COLUMBIA

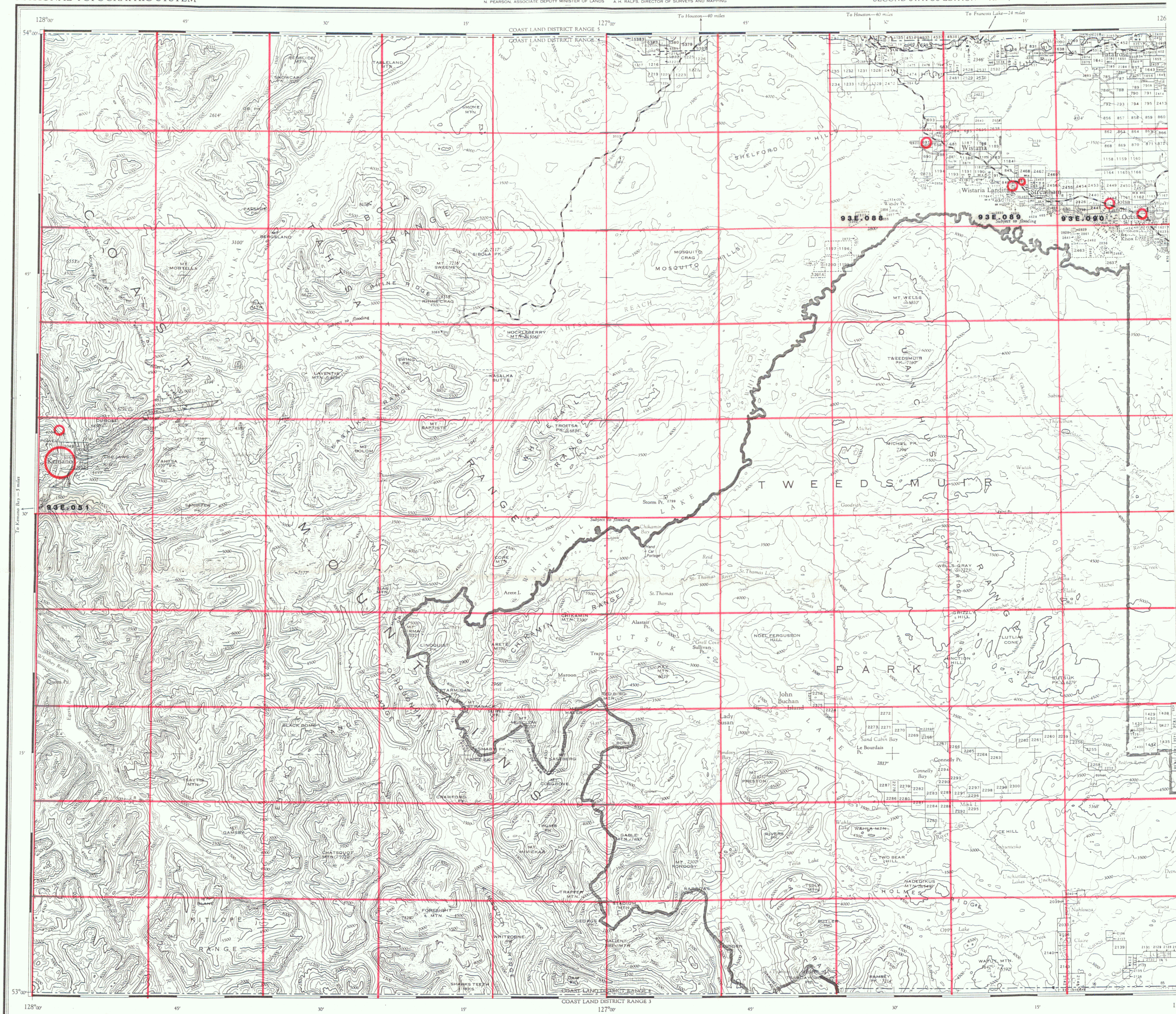
REFERENCE

Road, Hard Surface, All Weather
Loose Surface, All Weather
Loose Surface, Less than 2 lanes
Private (Longing, Mining etc.)
Four Wheel Drive
Trail
Railway
Main Telephone Line
Main Electric Power Line
Horizontal Control Station
Contours (Interval 500 feet)
Elevation in feet above mean sea level
Intermittent Stream
Swamp or Marsh
Dam
Mile Post
Spring
Lighthouse (occupied)
Customs Office
Airport or Airway
Airbus or Seaplane Anchorage



On the above index, maps published with district line
status are coloured yellow.
Land Commissioners' Offices are located in Bulkley Lake,
Quesnel and Prince George.
Mineral Claims are not shown on this sheet.
District land less 5 acres or less may not be
shown due to the scale of this map.

NECHAKO RIVER, B. C.
SHEET 93F
SECOND STATUS EDITION



Surveyed by the Topographical Survey, Dept. of Mines and Technical Surveys, 1947-48.
 Air photos by R. C. A. F., 1946.
 Compiled, drawn and printed by the Army Survey Establishment R. C. E., 1949-1951.
 Revised 1962: First Status Edition overprinted by Geographic Division, Surveys and Mapping Branch, Dept. of Lands, Forests, and Water Resources, Victoria, B.C., 1963.
 Second Status Edition and roads revised, 1966.

REFERENCE

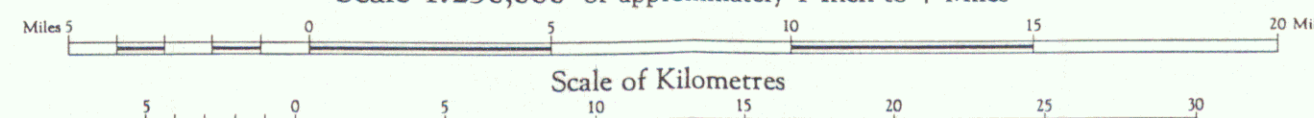
Land alienated or covered by application under the Land Act
 Surveyed Crown land in flooded areas
 Surveyed land in flooded areas which has been alienated
 Surveyed Timber Lease, Licence, or Berth
 Indian Reserve
 Government Reserve
 Land District Boundary
 Provincial Forest Boundary
 Tree Farm Licence
 Municipality
 Water Supply Area
 Park
 Park less than 30 acres
 Campsite or Picnic Site
 Forest Service Lookout
 Settlement or Locality
 Post Office
 School
 Hospital
 Mine
 Dyke
 Historic Monument
 Mile Post

WHITESAIL LAKE

BRITISH COLUMBIA

COAST LAND DISTRICT RANGE 4

Scale 1:250,000 or approximately 1 Inch to 4 Miles



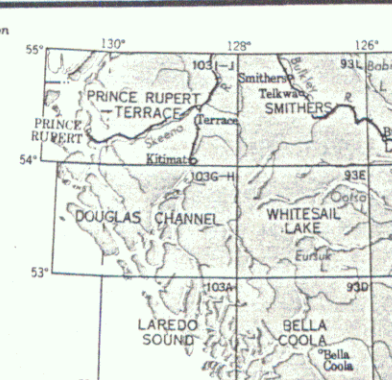
Magnetic Declination approximately 25°27' East at centre of sheet, 1966.
 Decreasing approximately 3'25" annually

W. R. YOUNG, CHIEF DRAFTER

REFERENCE

Road, Hard Surface, All Weather
 Loose Surface, All Weather
 Loose Surface, Less than 2 Lanes
 Logging, Mining etc.
 Four Wheel Drive
 Trail
 Railway
 Main Telephone Line
 Main Electric Power Line
 Horizontal Control Station
 Contour (Interval 500 feet)
 Elevation in feet above mean sea level
 Interim Survey
 Interim Lake or Seasonal Inundation
 Swamp or Marsh
 Glacier or Icefield
 Spring
 Dam
 Customs Office
 Navigation Light
 Airport or Airstrip
 Anchorage or Seaplane Anchorage
 Abandoned Railway

Universal Transverse Mercator Projection



On 1:50,000 scale maps published as shown
 "B" series for land status
 "W" series for water status
 Nearest Government Agents at Burns Lake,
 Mineral Claims are not shown on this sheet

Copies of this map may be obtained from Geographic Division, Surveys and Mapping Branch, Department of Lands, Forests, and Water Resources, Victoria, B.C.