

MEMORANDUM

TO: A. P. Kohut
 Geological Engineer
 Groundwater Section
 Hydrology Division
 Water Investigations Branch

FROM: W. S. Hodge,
 N. T. Lomas,
 Groundwater Section

May 21 1976

SUBJECT: Groundwater Chemistry in Cordova Bay Area

OUR FILE: 0239013
 YOUR FILE:

A Water analysis survey was carried out during April 20, 1976 and April 23, 1976 and was centered around the abandoned Cordova Bay Municipal Wells. This survey included the recording of Conductivity and temperatures at various spring locations between the east shore of Elk Lake and Cordova Bay. Results of these analyses are below and expressed in units of milligrams per litre (parts per million) wherever possible. #1, #6, #9 wells have now been incorporated into the Observation Well Network and have been designated (WR) numbers.

#1 well - WR 122-76 (Abandoned Cordova Bay Municipal well)
 X3 Y19 D.L. 33, Lake District

Original Depth	=	55'
Plumbed Depth	=	52.2' (April 20, 1976)
Static Level	=	11.05 (April 20, 1976) 3.36 metres
Ph	=	6.7
Cond.	=	215.0
Temp.	=	10.3°C
Iron	=	5.0 ppm
Hardness	=	102.6 ppm

Note - Well was pumped for approximately 1 hour and sampled for complete water chemistry analysis - May 17, 1976

APK 25/5/76

J.C. FOWERAKER
J. PETRIE
 FILE

98 7 June 76

#6 well - WR 123-76 (Abandoned Cordova Bay Municipal well)
X3 Y19 D.L. 33, Lake District

Original Depth = 54.0'
Plumbed Depth = 53.7' (April 20, 1976)
Static Level = 7.95 (April 20, 1976) 2.42 metres
Ph = 7.0
Cond. = 550
Temp. = 10.9°C
Iron = 3.1
Hardness = 205.2

Note - Well was pumped for approximately 1 hour and sampled for complete water chemistry analysis

#9 well - WR 124-76 (Abandoned Cordova Bay Municipal well)
X3 Y19 D.L. 33, Lake District

Original Depth = 107.00
Plumbed Depth = 104.20 (April 20, 1976)
Static Level = 54.05 (April 20, 1976) 16.47 metres
Ph = 7.6
Cond. = 300.
Temp. = 10.7°C
Iron = 2.1
Hardness = 119.7

Trio Ready Mix Well (#1 Well X14 Y19 D.L. 42, Lake District)

Well Depth = 65'
Static Level = 51' (April 20, 1976)
Ph = 6.7
Cond. = 50
Temp. = 9.3°C
Iron = .1
Hardness = 34.2

Note - Water used for gravel pit operations.

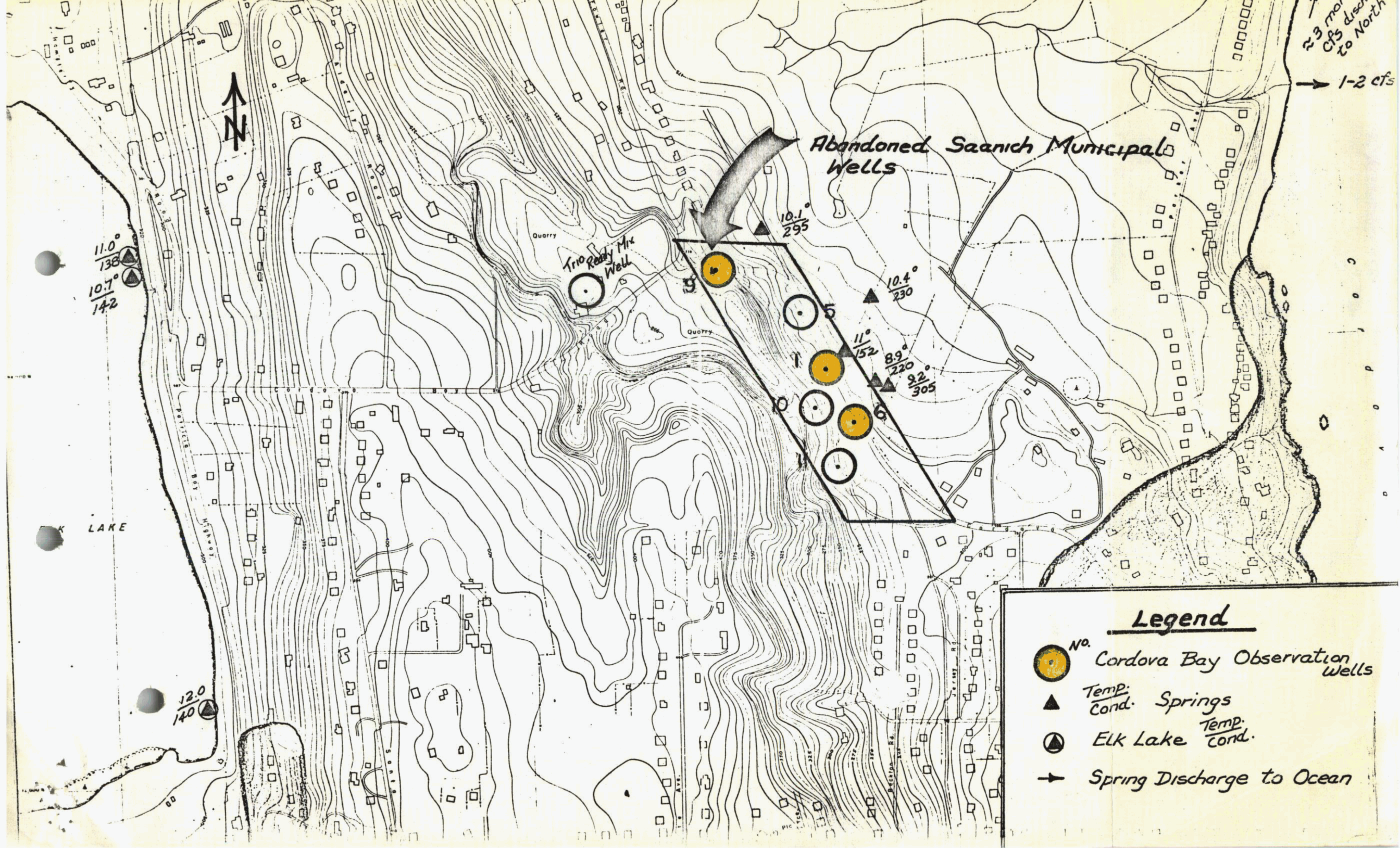
Conductivity and temperature readings were taken during April 23, 1976 at various spring locations in the Cordova Bay Area. Values have been plotted on the accompanying map.

W. S. Hodge

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N. T. Lomas

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Abandoned Saanich Municipal Wells

Ready Mix Well

Quarry

Quarry

2-3 mo
cfs disch
to North
→ 1-2 cfs

11.0°
138
10.7°
142

LAKE

12.0°
140

10.1°
295





10.4°
230

11°
152

8.9°
220

9.2°
305

Legend

-  No. 1 Cordova Bay Observation Wells
-  Temp. Cond. Springs
-  Elk Lake Temp. Cond.
-  Spring Discharge to Ocean