



To: P.M. Brady, Director
Water Management Branch

Date: February 20, 1986

File: 0329563-A

RE: Groundwater Quality Monitoring and Assessment Program 1985/86,
Langley - Abbotsford Area

Preliminary analysis of available water quality data for the above area indicates there are a significant number of locations where nitrates above 10 mg/L have been found (see enclosed map). The bulk of this data was collected during the period 1974 to 1980. Where sites have been sampled consecutively by the Inland Waters Directorate for a number of years (Figure 1) it appears $\text{NO}_3\text{-N}$ levels are higher during the winter months presumably when nitrates are leached to the water table by infiltrating precipitation.

In light of the above findings it is recommended that a series of samples be collected this winter to determine the present magnitude of $\text{NO}_3\text{-N}$ concentrations in the high nitrate areas. Mr. Kwong's initial report on the situation based on the historic data is to be completed shortly.

It is proposed that Mr. Kohut and Mr. Kwong visit the area for two days (tentatively February 25 and February 26) to inspect the areas and plan a sampling program. A technician would then undertake the sampling during the two-week period in early March. Approximately 40 samples would be collected for analysis. Laboratory costs are estimated at \$8,000.00 of which sufficient funds have been budgeted. Travel and accommodation costs are estimated at \$800.00 for the staff involved.

J.C. Foweraker, Head
Groundwater Section

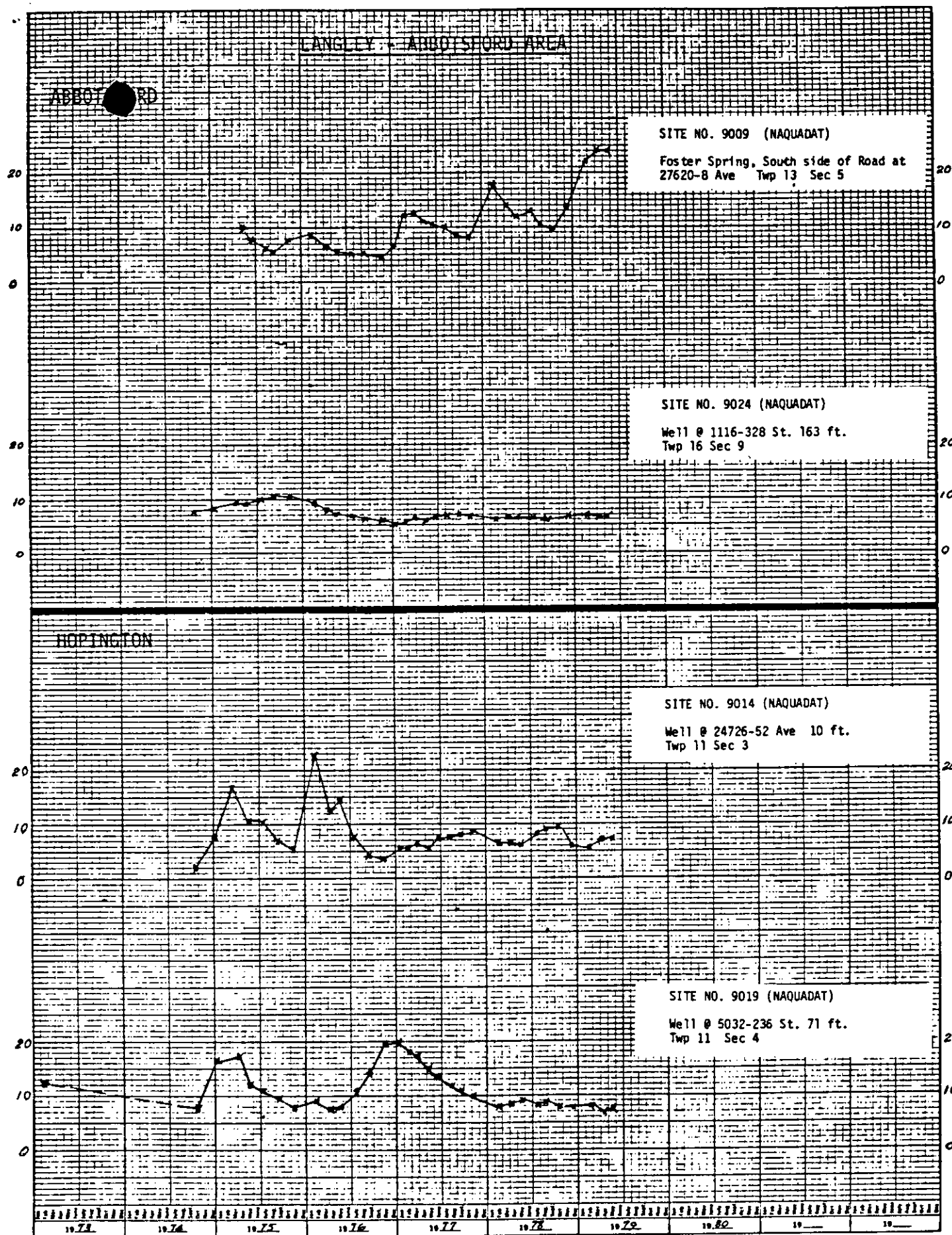
APPROVED:

APL

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Feb.

NITRATE - NITROGEN CONCENTRATION (mg / L)



NITRATE - NITROGEN CONCENTRATION (mg / L)

FIG. 1




REFERENCES			REVISIONS			<div><div></div><div>Province of British Columbia</div></div> <div><div>Ministry of Environment</div><div>WATER MANAGEMENT BRANCH</div></div>		FILE NO
DWG. No.	DESCRIPTION	DATE	No	DESCRIPTION	DATE	DESIGNED	DATE	C329563 - A
						DESIGNED	J. K.	<div>GROUNDWATER QUALITY MONITORING AND ASSESSMENT PROGRAM</div> <div>TO ACCOMPANY THE STUDY ON</div> <div>NITRATE-NITROGEN CONCENTRATIONS IN GROUNDWATER</div> <div>(LANGLEY - ABBOTSFORD AREA)</div>
						CHECKED	<i>J. K.</i>	
						DATE	JAN. 1986	
						DRAWN	<i>B. Wood</i>	
						APPROVED		
						HEAD DRAFTING SECTION	DATE	
							FEB 1986	
								<div>ENG. PROJECT NO</div> <div></div> <div>NTS MAP NO</div> <div>92 G/1 AND 2</div> <div>SCALE</div> <div>1:50 000</div> <div>NEGATIVE NO.</div> <div></div> <div>DRAWING NO.</div> <div>86-3-1</div> <div>SHEET</div> <div></div> <div>OF</div> <div></div> <div>REV.</div> <div></div>

FIGURE 2 D