

February 12, 2001

Ms. Patricia Martin
Environmental Specialist
Department of Ecology
SW Regional Office
P.O. Box 47775
Olympia, WA 98504-7775

RECEIVED

FEB 13 2000

Washington State
Department of Ecology

Re: Battle Ground School District
Battle Ground High School
650 Building

Dear Ms Martin:

Enclosed is a copy of the Fourth Quarter 2000 groundwater monitoring report for the 650 or Gymnasium Building on the campus of Battle Ground High School.

No groundwater was found in three of the four monitoring wells at a depth of approximately 25 feet below ground surface. The fourth well contained approximately 2 feet of water, but after bailing, failed to re-charge in three hours.

Water was found in the heating oil tank removal excavation in the spring of 1995 at a depth of 12 feet below ground surface. We have monitored the groundwater over the past year and have no reason to believe that the water in the excavation was indeed groundwater, or that the heating oil tanks impacted the groundwater.

We request closure of the site. Should any additional questions arise, please do not hesitate to call.

Sincerely,



Ronald E. Nowicki PE

Cc: Jim Bosisto, BGSD

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**BATTLE GROUND SCHOOL DISTRICT
HIGH SCHOOL 650 BUILDING (GYMNASIUM)
FOURTH QUARTER 2000 GROUNDWATER MONITORING REPORT**

Client:-

Battle Ground School District
204 West Main Street
Battle Ground, WA 98604
Contact: Jim Bosisto
(360) 885-6582

Consultant:

Nowicki & Associates, Inc.
33516 9th Ave S., Bldg. #6
Federal Way, WA 98003
Contact: Ronald E. Nowicki
(253) 927-5233

The purpose of this report is to document groundwater sampling conducted during the fourth quarter of 2000 at the Battle Ground High School 650 Building. The groundwater monitoring was conducted and report written in compliance with WAC 173-340, Model Toxics Control Act (MTCA). The prior report was dated June 2000.

EXECUTIVE SUMMARY

Well monitoring was conducted on Thursday, January 25, 2001. Approximately 23 inches of water was found in BG-MW-1, which was pumped dry using a Boart-Longyear submersible pump. No re-charge was found upon returning approximately 3 hours later. Monitoring wells BG-MW-2, 3 and 4 were found with less than one inch of water. As there was no re-charge and the down-gradient wells were found dry, no samples were collected.

We recommend that the site be closed. Prior monitoring has found no soil or groundwater contamination for over 4 quarters. It is our opinion that the original water in the excavation during the time of construction was due to ruptured piping systems and rainwater and is not indicative of the groundwater conditions on site.

GROUNDWATER MONITORING

Water Level Data:

On Thursday, January 25, 2001 water levels were measured to the top of the monument using water-finding paste. Monitoring wells BG-MW-2, BG-MW-3 and BG-MW-4 were essentially dry with less than one inch of water found within each well. Water was measured in BG-MW-1 at 23'3": the bottom of well is 25'1-3/4" resulting in 22-3/4 inches of water. The well was pumped dry using a Boart-Longyear submersible pump and allowed to re-charge. Returning to the site approximately three hours found less than six inches of re-charge water, consequently no sample was collected.

Lack of groundwater in the down-gradient wells has been the usual finding at this location. Prior samples have been collected from BG-MW-1 with no contaminants found over the past two years.

HISTORY

In the spring of 1995 three heating oil underground storage tanks were removed from one excavation located west of the 650 Building as part of the major school renovation. An additional tank was located under the current building footprint and was closed in place. After removal, water was present in the excavation at approximately 12 feet below grade. It was not determined if this water was in fact groundwater as a broken sewer line and a fire line emptied into the "three tank" excavation. Diesel contamination was detected in the water collected from the "closed-in-place" excavation. Since there was no definitive determination regarding the status of the water as groundwater, installation of monitoring wells was recommended to comply with WAC 173-340, Model Toxics Control Act.

All impacted soils were removed from the "three-tank" excavation. A seam of heavy oil contamination, found approximately seven feet below grade, was left in place along the north and west walls of the "closed-in-place tank excavation. Please refer to Heating oil Tank Removals report dated November 1995 as submitted to WA-DOE.

Four monitoring wells were installed on August 11, 1999 to a depth of approximately 25 feet. Soil samples were collected at five-foot intervals. Analysis found no petroleum contamination. Subsequent groundwater sampling has found no petroleum contamination.

Based upon the lack of measurable groundwater, and lack of petroleum contamination. It is reasonable to conclude that the water found within the excavation during the construction period, at approximately 12 feet below grade, was not groundwater and was due to extraneous activities.

CONCLUSIONS AND RECOMMENDATIONS

No groundwater was measured in down-gradient wells BG-MW2, BG-MW3, and BG-MW4. Therefore it is assumed that the water in the 1995 tank excavation came from the broken water line and rainwater.

We recommend closure of the site.

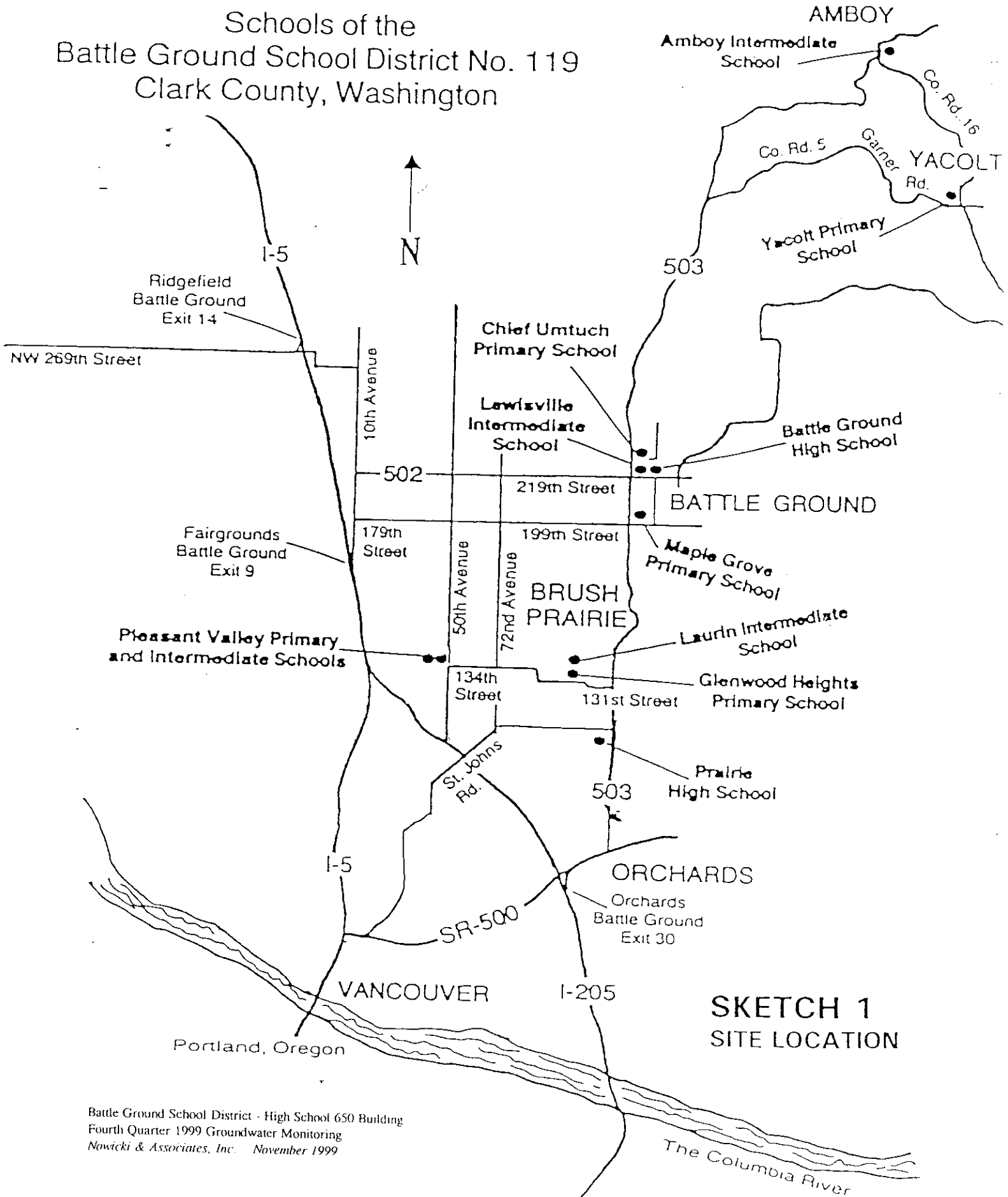


Ronald E. Nowicki PE
Environmental Engineer

Attached are:

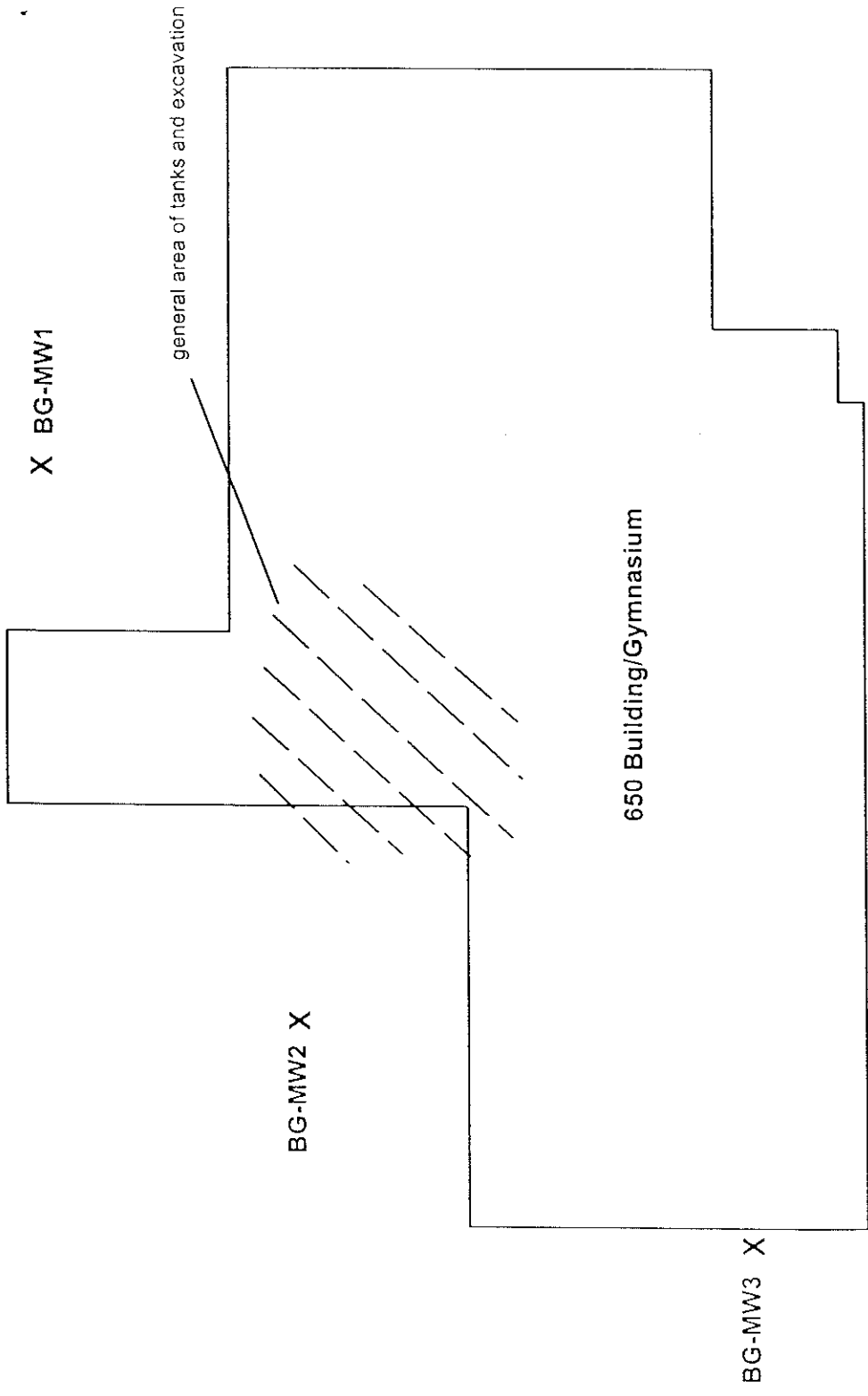
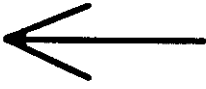
Sketches - Sketch 1: Site Location
 Sketch 2: Monitoring Well Locations

Schools of the Battle Ground School District No. 119 Clark County, Washington



**SKETCH 1
SITE LOCATION**

N



X BG-MW1

general area of tanks and excavation

BG-MW2 X

650 Building/Gymnasium

BG-MW3 X

X BG-MW4

BATTLE GROUND SCHOOL DISTRICT

Sketch 2: Monitoring Well Locations

Date: 11-17-99

Scale: 1" = 50'

Nowicki & Associates, Inc.

X - denotes monitoring well locations