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October 2, 1998

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Winlock School District
C/o Ms. Ivie Chastain
311 NW Fir Street
Winlock, Washington 98596

DEPT. OF ECOLOGY
FIR STREET

Re: Groundwater Monitoring Report
Subject: Winlock School District Bus Garage

Dear Ms. Chastain:

This letter summarizes the results of the September 1998 sampling of the groundwater monitoring wells.

The analytical results indicate that the Benzene concentrations are above the Washington State Model Toxics Control Act (MTCA) Method A cleanup limits on Monitoring well #2 (MW02-10.8).

Based on previous results by AGI Technologies, it seems that the petroleum products are being naturally degraded. The existing contamination that is in well #2 is minimal and should continue to degrade over time.

We expect that the level of contamination will decrease as the groundwater level increases during the winter season. The second sampling should be conducted in February or March of 1999.

Associated Environmental Group, LLC



Michael S. Chun
Operations Manager

1.0 Quantitative Analysis

Independent laboratory analyses were performed by Transglobal Environmental Geochemistry, Inc. (TEG), 7110 38th Drive SE, Lacey, Washington 98503. All laboratory reports and chain-of-custody documents are enclosed with this report. Laboratory analysis were conducted on September 25, 1998. A total of four water samples were extracted on each sample sets to process and submit for laboratory analysis.

To reasonably ensure the purity of AEG's samples, the following actions were taken: (1) latex rubber gloves were used in handling all sampling jars and sampling devices, (2) the sampling equipment (back hoe bucket) was scrubbed with ADALOX detergent and triple-rinsed with distilled water prior to each sample extracted, and (3) all samples when gathered were immediately placed in a storage cooler packed with ice and transported to the TEG laboratories according to the Department of Ecology regulations for analysis.

1.1 Gasoline (NWTPH-Gx) & BTEX (EPA 8020) Analyses for Water

WELL	SAMPLE #	DATE	BENZENE (ug/l)	Toluene (ug/l)	Eth Benz (ug/l)	Xylene (ug/l)	Gasoline (ug/l)	Recovery (%)
	Meth. Blank	9/25/98	Nd	Nd	Nd	Nd	Nd	120
#1	MW01-12.5	9/25/98	1.5	Nd	Nd	Nd	Nd	104
#2	MW02-10.8	9/25/98	42	5.8	Nd	16	400	98
#3	MW3-9.0	9/25/98	Nd	Nd	Nd	Nd	Nd	107
#3	Duplicate	9/25/98	Nd	Nd	Nd	Nd	Nd	90
#4	MW4-10.5	9/25/98	Nd	Nd	Nd	Nd	Nd	115
	MDL		1	1	1	1	100	

"Nd" Indicates not detected at the listed detection limit.

2.0 Limitations

AEG has performed this groundwater sampling activity with accepted principals and practices in the field of environmental science and relevant governmental regulations, together with information obtained from the client, governmental agencies and other pertinent personnel. AEG shall not be responsible for conditions arising from concealed or incorrect information. AEG is not responsible for the independent conclusions, opinions, or recommendations made by others based on the field exploration and analysis presented in this report. AEG services were limited to the Scope of Work. No testing for specific gases, PCB testing, air monitoring, magnetic survey, asbestos, or radon sampling was included in this report.

This report was written only for, and may only be relied upon by Ms. Ivie Chastain representing Winlock School District and her designated representatives, Winlock, Washington.

QA/QC FOR ANALYTICAL METHODS

GENERAL

The TEG Northwest Laboratory quality assurance and quality control (QA/QC) procedures are conducted following the guidelines and objectives which meet or exceed certification/-accreditation requirements of California DOHS, Washington DOE, and Oregon DEQ. The Quality Control Program is a consistent set of procedures which assures data quality through the use of appropriate blanks, replicate analyses, surrogate spikes, and matrix spikes, and with the use of reference standards that meet or exceed EPA standards.

When analyses are taking place on-site with the mobile lab, the need for Field Blanks or Travel/Trip Blanks is eliminated. If there is going to be a delay before sample preparation for analysis, the sample is stored at 4⁰ C.

ANALYTICAL METHODS

TEG Northwest Labs use analytical methodologies which are in conformity with U. S. Environmental Protection Agency (EPA), Washington DOE, and Oregon DEQ methodologies. When necessary and appropriate due to the nature or composition of the sample, TEG may use variations of the methods which are consistent with recognized standards or variations used by the industry and government laboratories.

TPH-Gasoline, TPH-Diesel

(Gasoline and/or Diesel, Modified EPA 8015, NWTPH-Gx and NWTPH-Dx)

A check standard is run at the beginning of the day. 1) A close standard is run at the end of the day. 2) Both open and close standards must be within 15% of the continuing calibration curve value. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135% unless high sample concentrations interfere with the determination of the recovery percentage. A duplicate sample is run at a rate of 1 per 10 samples. At least 1 method blank is run per 20 samples analyzed.

Purgeable Volatile Aromatics
(BTEX, EPA 602/8020)

A check standard is run at the beginning of the day. The check standard is run at the end of the day. Both open and close standards must be within 15% of the continuing calibration curve value. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135% unless high sample concentrations interfere with the determination of the recovery percentage. At least 1 method blank is run per day.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

WINLOCK SCHOOL DISTRICT PROJECT

Winlock, Washington

Associated Environmental Group, Inc.

Project No. E98222

Gasoline (NWTPH-Gx), & BTEX (EPA 8020) Analyses for Water

Sample Number	Date Analyzed	Benzene ug/l	Toluene ug/l	Eth Benz ug/l	Xylene ug/l	Gasoline ug/l	Recovery (%)
Meth. Blank	09/25/98	nd	nd	nd	nd	nd	120
MW1-12.5	09/25/98	1.5	nd	nd	nd	nd	104
MW2-10.8	09/25/98	42	5.8	nd	16	400	98
MW3-9.0	09/25/98	nd	nd	nd	nd	nd	107
MW3-9.0 Dup	09/25/98	nd	nd	nd	nd	nd	90
MW4-10.5	09/25/98	nd	nd	nd	nd	nd	115
Detection Limits		1	1	1	1	100	

"nd" Indicates not detected at the listed detection limits.

"int" Indicates that interferences prevent determination.

DATE OF
COLLECT

[illegible]