

DEPARTMENT OF ECOLOGY
Environmental Assessment Program

October 5, 2006

TO: Marv Coleman, Project Manager, TCP, SWRO

FROM: Pam Marti, Hydrogeologist, EAP, HQ
Tanya Roberts, Environmental Specialist, EAP, HQ

THROUGH: Will Kendra, Section Manager, EAP, HQ
Darrel Anderson, Unit Supervisor, EAP, HQ

SUBJECT: ADDENDUM
QUALITY ASSURANCE PROJECT PLAN
MONTESANO GROUNDWATER INVESTIGATION OF
LEAKING UNDERGROUND STORAGE TANK SITES
STUDY TRACKER CODE: 05-046-03
PUBLICATION NO: 04-03-114Add

The purpose of this addendum is to document that this project is being extended another year to provide additional data on the three source areas that have been identified in the project area: (1) Tony's Short Stop/Grays Harbor Grange, (2) Key Bank (Sterling)/Whitney's Inc., and (3) Brumfield-Twidwell. Nine new monitoring wells (EDMW-1, ESMW-1 thru ESMW-8) have also been installed throughout the project area and have been added to the monitoring network. Sample locations are shown in the attached figure.

Groundwater beneath the city of Montesano has been contaminated by multiple leaking underground storage tank sources. The original goal of this project was to provide the Toxics Cleanup Program (TCP) with current groundwater data of known quality to help evaluate the extent of groundwater contamination in the downtown area. This was accomplished by sampling 18 to 32 monitoring wells in the project area semi-annually from October 2004 to March 2006, using consistent sampling techniques and analytical methods. Samples were primarily collected and analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) as well as total petroleum hydrocarbons like gasoline (TPH-Gx). Select wells were also sampled and analyzed for volatile organics (VOAs). The data provided from the last two years of monitoring has assisted TCP in conducting additional investigations, which included the installation of nine monitoring wells in May 2006.

Schedule

The monitoring period is being extended another year to continue to provide TCP with analytical data from the three source areas. The new monitoring wells will provide additional data between and downgradient of the source areas. Project milestones and projected dates of completion are listed below. At the end of the monitoring year, all data will be evaluated and summarized in a technical memorandum.

Milestone	Date
QAPP Addendum Approved	October 2006
Groundwater Sampling	October 2006 and March 2007
Draft Memo	July 2007
Final Memo	September 2007

All field measurements and analytical result data will be made available in electronic format on Ecology's EIM data management system: www.ecy.wa.gov/eim/index.htm

Environmental Information System (EIM) Data Set	
EIM Data Engineer	Tanya Roberts
EIM User Study ID	PMART004
EIM Study Name	Montesano Groundwater Study
EIM Completion Due	September 2007
Final Report	
Report Author Lead	Pam Marti
Schedule	
Report Supervisor Draft Due	Darrel Anderson: July 2007
Report Client/Peer Draft Due	Marv Coleman: August 2007
Report Final Due (Original)	September 2007

Budget

The estimated laboratory budget for one year of semi-annual sampling is approximately \$8,000, which covers the analytical costs for groundwater samples and laboratory quality assurance charges as shown in the following table. Estimates reflect the 50% discount that Ecology programs receive at Manchester Lab.

Estimated Laboratory Cost by Parameter for October 2006 and March 2007 Sampling

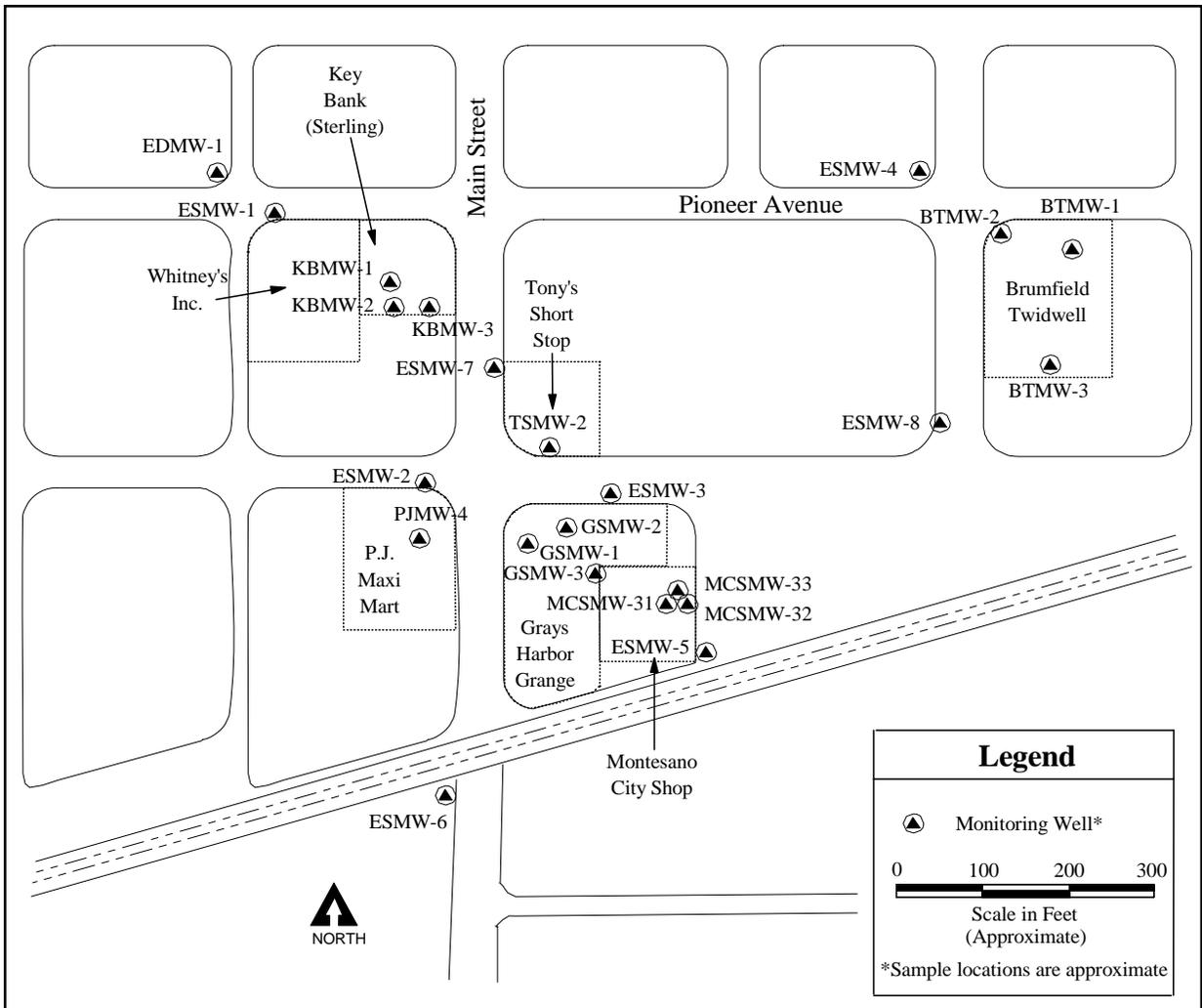
Parameter	Predicted Number of Samples ⁽¹⁾	Cost per Sample ⁽²⁾	Cost per Parameter
BTEX/THP-G	66	\$100.00	\$6,600
VOAs	10	\$150.00	\$1,500
Estimate Total Lab Cost			\$8,100

(1) Assume 27 monitoring wells, 3 duplicates for BTEX/TPH-H and 1 duplicate for VOAs, 3 quality assurance samples for 2 sample rounds.

(2) Assumes MEL *planned* price (50% discount).

PM:cn
Enclosure

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Montesano Groundwater Investigation, Sample Locations for October 2006 and March 2007