Manchester Environmental Laboratory

7411 Beach Dr E, Port Orchard, Washington 98366

Case Narrative

November 17, 2008

Revised

Subject: Lake Union Sheen - 45 Project

Sample(s): 08454000

Officer(s): David Cline

Project#: 1798-08

By: Bob Carrell

Hydrocarbon Identification Analysis

Analytical Method(s)

The sample was extracted with methylene chloride then analyzed, along with a method blank and various petroleum product standards, by gas chromatography with flame ionization detection (GC/FID). This method is consistent with a modified EPA SW-846 Method 8015B and/or ASTM Method D-3328.

Holding Times

The sample was analyzed within the recommended method holding times.

Calibration

This is not applicable in the traditional sense since only various petroleum products standards are analyzed to establish chromatographic product "fingerprints".

Blanks

No analytically significant levels of any petroleum product or hydrocarbon were detected in the method blank associated with these samples.

Comments

The HCID analyses showed that sample 08454000 contained primarily a weathered hydrocarbon material in the diesel range but it is not a petroleum product. A GC/MS analysis of this extracted showed the bulk of the compounds in this mixture to be unsubstituted polyaromatic hydrocarbons (PAHs) which makes this material a coal derived product, probably some type of creosote. Creosote could be from fresh pier pilings or possibly from disturbed sediment of Gas Works Park.

Washington State Department of Ecology
Manchester Environmental Laboratory
Analysis Report for
Hydrocarbon Identification

Project Name: Lake Union Sheen - 45 **LIMS Project ID:** 1798-08

Project Officer: David Cline **Method:** HYDRO-ID

Date Reported: 11/06/08 **Analyte:** Hydrocarbon identification

Sample	QC	Field ID	Matrix	Result	Qualifier	Units	Collected	Analyzed
*08454000		LKU001	Other		NC	mg/Kg ww	11/01/08	11/03/08
*OB08308HC		Lab BLNK	Sediment/Soil		NC	mg/Kg ww		11/03/08

Comments:

08454000 This sample contains primarily hydrocarbons in the diesel range however this material does not represent a petroleum product. It is a weathered coal derived product that is possibly some type of creosote.

OB08308HC No detectable petroleum hydrocarbons or products found.

Authorized By: _____ Release Date: 11-6-08