

---

## REMEDIAL INVESTIGATION REPORT

---

### ASKO HYDRAULIC PROPERTY



**Property:**

ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington

**Prepared for:**

TOC Holdings Co.  
2737 West Commodore Way  
Seattle, Washington

**Report Date:**

May 23, 2014

# Remedial Investigation Report

*Prepared for:*

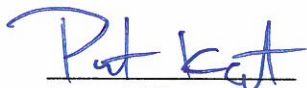
**TOC Holdings Co.**

2737 West Commodore Way  
Seattle, Washington 98199

ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington 98199

Project No.: 0440-004

*Prepared by:*

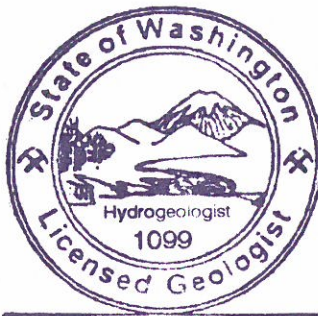


Peter J. Kingston, LG  
Associate Geologist

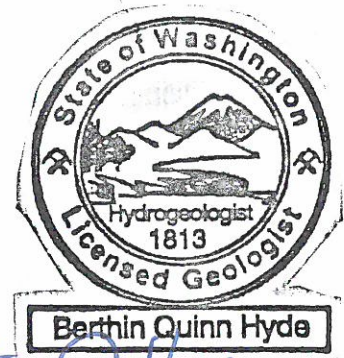
*Reviewed by:*



Timothy S. Brown, LHG  
Senior Hydrogeologist



Timothy Scott Brown



Berthin Q. Hyde, LHG  
Principal Hydrogeologist

May 23, 2014



## TABLE OF CONTENTS

<b>ACRONYMS AND ABBREVIATIONS.....</b>	<b>v</b>
<b>1.0 INTRODUCTION .....</b>	<b>1</b>
1.1 PURPOSE.....	1
1.2 PRELIMINARY SITE DEFINITION .....	2
1.3 PRELIMINARY CLEANUP LEVELS .....	2
1.4 REPORT ORGANIZATION.....	3
<b>2.0 BACKGROUND .....</b>	<b>3</b>
2.1 PROPERTY DESCRIPTION .....	3
2.2 PROPERTY LAND USE AND HISTORY.....	4
2.3 SURROUNDING PROPERTY DESCRIPTIONS, LAND USE, AND HISTORY .....	7
2.3.1 North.....	8
2.3.1.1 Northwest.....	9
2.3.1.2 Northeast .....	9
2.3.2 East.....	10
2.3.3 South .....	11
2.3.4 West .....	12
2.4 ENVIRONMENTAL SETTING AND REGULATORY CLASSIFICATION .....	13
2.4.1 Regional Topography .....	13
2.4.2 Surface Water and Sediments.....	13
2.4.2.1 Surface Water.....	13
2.4.2.2 Sediments.....	14
2.4.3 Soils and Geology .....	14
2.4.4 Hydrogeology .....	15
2.4.5 Air.....	16
<b>3.0 PREVIOUS INVESTIGATIONS, GROUNDWATER MONITORING EVENTS, AND INTERIM ACTIONS.....</b>	<b>16</b>
3.1 PREVIOUS INVESTIGATIONS .....	17
3.1.1 2000 Phase I Environmental Site Assessment.....	17
3.1.2 2000 Subsurface Investigation .....	17
3.1.3 2000 – 2001 Subsurface Investigations.....	18
3.1.4 July 2001 Subsurface Investigation .....	18
3.1.5 2000 – 2002 Subsurface Investigation .....	18
3.2 GROUNDWATER MONITORING EVENTS .....	19
3.3 PREVIOUS INVESTIGATIONS RESULTS .....	19
3.3.1 Soil.....	20
3.3.1.1 Total Petroleum Hydrocarbons and Volatile Petroleum Compounds .....	20
3.3.1.2 Carcinogenic Polycyclic Aromatic Hydrocarbons .....	20
3.3.1.3 Chlorinated Volatile Organic Compounds .....	20

## TABLE OF CONTENTS (CONTINUED)

3.3.1.4	Pentachlorophenol.....	21
3.3.1.5	Metals.....	21
3.3.2	Groundwater.....	21
3.3.2.1	Monitoring Observations .....	21
3.3.2.2	Total Petroleum Hydrocarbons and Volatile Petroleum Compounds .....	21
3.3.2.3	Pentachlorophenol.....	22
3.4	INTERIM ACTION .....	22
<b>4.0 REMEDIAL INVESTIGATION .....</b>		<b>22</b>
4.1	DATA GAPS .....	22
4.2	REMEDIAL INVESTIGATION FIELD PROGRAM.....	23
4.2.1	Utility Reconnaissance .....	23
4.2.2	Soil and Reconnaissance Groundwater Sample Collection .....	23
4.2.3	Soil Sampling Results.....	27
4.2.3.1	Soil Profile .....	27
4.2.3.2	Soil Sampling Results.....	27
4.2.4	Monitoring Well Installation and Development .....	28
4.2.5	Groundwater Monitoring.....	29
4.2.5.1	Reconnaissance Groundwater Results .....	31
4.2.5.2	Groundwater Results.....	31
4.2.5.3	Natural Attenuation Parameters.....	33
4.2.6	Aquifer Testing.....	34
4.2.6.1	Slug Tests.....	34
4.2.6.2	Tracer Study .....	36
4.2.6.3	Laboratory Analysis of Soil Physical Properties.....	37
4.2.6.4	Aquifer Testing Analysis .....	38
4.2.7	Management of Investigation-Derived Waste .....	39
<b>5.0 CONCEPTUAL SITE MODEL .....</b>		<b>39</b>
5.1	CONFIRMED AND SUSPECTED SOURCE AREAS .....	39
5.2	AFFECTED ENVIROMENTAL MEDIA .....	40
5.3	CONTAMINANT FATE AND TRANSPORT .....	40
5.3.1	Physical and Chemical Properties Affecting Fate and Transport .....	40
5.3.2	Contaminant Fate.....	41
5.3.3	Contaminant Transport.....	42
5.4	CHEMICAL SPECIFIC FATE AND TRANSPORT .....	42
5.4.1	Trichloroethene and Associated Chlorinated Ethenes.....	42
5.4.1.1	Site 1.....	43
5.4.1.2	Site 2.....	44
5.4.2	Total Petroleum Hydrocarbons and Volatile Petroleum Compounds.....	44
5.4.2.1	Site 1.....	45
5.4.2.2	Site 2.....	45
5.5	PRELIMINARY EXPOSURE ASSESSMENT .....	46
5.5.1	Soil.....	46

## TABLE OF CONTENTS (CONTINUED)

5.5.2	Groundwater.....	47
5.6	TERRESTRIAL ECOLOGICAL EVALUATION.....	49
<b>6.0</b>	<b>PLANNED WORK.....</b>	<b>49</b>
<b>7.0</b>	<b>BIBLIOGRAPHY.....</b>	<b>50</b>
<b>8.0</b>	<b>LIMITATIONS.....</b>	<b>53</b>
<b>FIGURES</b>		
1	Property Location Map	
2	Seattle Terminal Properties Property Plan	
3	Site 1 and Site 2 Location Map	
4	Historical Features	
5	Exploration Location Plan	
6	Cross Section A-A'	
7	Cross Section B-B'	
8	Cross Section C-C'	
9	Cross Section D-D'	
10	Cross Section E-E'	
11	Historical Soil Analytical Results for TCE	
12	Historical Soil Analytical Results for DRPH	
13	Historical Soil Analytical Results for GRPH and Benzene	
14	Groundwater Contour Map, Perched Water (June 4, 2013)	
15	Seattle Terminal Properties Groundwater Contour Map, Shallow Water-Bearing Zone (Second Quarter, 2013)	
16	Seattle Terminal Properties Groundwater Contour Map, Intermediate Water-Bearing Zone (Second Quarter, 2013)	
17	Seattle Terminal Properties, Rose Diagram, Shallow Water-Bearing Zone	
18	Groundwater Analytical Results for TCE (Second Quarter, 2013)	
19	TCE Isoconcentration Map, Perched Water (Elevation 40 to 50 feet ASL), Second Quarter, 2013	
20	TCE Isoconcentration Map, Shallow Water-Bearing Zone (Elevation 17 to 27 feet ASL), Second Quarter, 2013	
21	TCE Isoconcentration Map, Intermediate Water-Bearing Zone (Elevation 2.5 to 13 feet ASL), Second Quarter, 2013	
22	Groundwater Analytical Results for DRPH and ORPH (Second Quarter, 2013)	
23	Groundwater Analytical Results for GRPH and Benzene (Second Quarter, 2013)	
24	Conceptual Site Model	
25	Preliminary Exposure Assessment, Conceptual Site Model, Site 1	
26	Preliminary Exposure Assessment, Conceptual Site Model, Site 2	

## TABLE OF CONTENTS (CONTINUED)

### TABLES

- 1 Preliminary Cleanup Levels
- 2 Soil Analytical Results for TPH, BTEX, EDB, EDC, and MTBE
- 3 Soil Analytical Results for Selected VOCs
- 4 Soil Analytical Results for Selected Metals
- 5 Soil Analytical Results for Pentachlorophenol
- 6 Soil Analytical Results for Selected PAHs
- 7 Reconnaissance Groundwater Analytical Results for Chlorinated VOCs, BTEX, EDB, and EDC
- 8 Groundwater Analytical Results for TPH, BTEX, MTBE, EDB, EDC, and PCP
- 9 Groundwater Analytical Results for Selected VOCs
- 10 Groundwater Analytical Results for Selected Metals
- 11 Groundwater Analytical Results for Selected PAHs
- 12 Summary of Groundwater Elevations
- 13 Natural Attenuation Parameters
- 14 Geochemical and Water Quality Parameters
- 15 Soil Physical Properties

### PHOTOGRAPHS

Aerial Photographs  
Historical Photographs  
Property Photographs

### APPENDICES

- A King County Assessor Records
- B Side Sewer Cards and Maps
- C North Trunk Sewer
- D Sanborn Fire Insurance Maps
- E TOC Holdings Co. Historical Records
- F Previous Reports
- G Boring Logs
- H Laboratory Analytical Reports
- I Slug Test Data Summary

## ACRONYMS AND ABBREVIATIONS

ASKO Hydraulic Property	located at 2805 West Commodore Way, and encompasses King County Tax Parcel Number 423790-0405
API	American Petroleum Institute
AST	aboveground storage tank
ASTM	ASTM International
bgs	below ground surface
BINMIC	Ballard Interbay Northend Manufacturing and Industrial Center
BNSF	Burlington Northern Santa Fe Railway Company
BNSF Parcel	encompasses King County Tax Parcel Number 423790-0240
BTEX	benzene, toluene, ethylbenzene, and total xylenes
the Bulk Terminal Property	located at 2737 West Commodore Way, and is part of King County Tax Parcel Number 112503-9050
COPCs	chemicals of potential concern
cPAHs	carcinogenic polycyclic aromatic hydrocarbons
CSM	conceptual site model
CVOCs	chlorinated volatile organic compounds
DNAPL	depth-to-dense nonaqueous phase liquid
DNR	Washington State Department of Natural Resources
DPD	City of Seattle Department of Planning and Development
DRPH	diesel-range petroleum hydrocarbons
East Waterfront Property	located at 2750 West Commodore Way, and is part of King County Tax Parcel Number 112503-9120
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
°F	degrees Fahrenheit
Foster Wheeler	Foster Wheeler Environmental Corporation
ft/day	feet per day
GRPH	gasoline-range petroleum hydrocarbons
Hf	Holocene Fill

## ACRONYMS AND ABBREVIATIONS (CONTINUED)

Hdf	Holocene Depression Fillings
LNAPL	light nonaqueous phase liquid
NAVD88	North American Vertical Datum of 1988
mg/L	milligrams per liter
mg/kg	milligrams per kilogram
MTCA	Washington State Model Toxics Control Act
NWTPH	Northwest Total Petroleum Hydrocarbon
ORPH	oil-range petroleum hydrocarbons
PCE	tetrachloroethene
PCP	pentachlorophenol
PID	photoionization detector
ppb	parts per billion
PVC	polyvinyl chloride
Qpf	Pre-Fraser age glacial deposits
Qpff	Pre-Fraser age glacial deposits, fine grained
Qpfc	Pre-Fraser age glacial deposits, coarse grained
ORP	oxidation-reduction potential
RI Report	Remedial Investigation Report
ROW	right-of-way
RP	Recommended Practice
Seattle Terminal Properties	includes the Bulk Terminal Property, East Waterfront Property, ASKO Hydraulic Property, West Waterfront Property, and the Washington State DNR Aquatic Lease Land Property
Site 1	encompasses the northern, central, and southern portions of the ASKO Hydraulic Property and the northern portion of the south-adjointing property and the southern portion of the north-adjointing West Commodore Way ROW
Site 2	encompasses the northwest portion of the ASKO Hydraulic Property adjacent to the ASKO Industrial Repair building and the south portion of the north-adjointing West Commodore Way ROW
the Sites	includes Site 1 and Site 2



## ACRONYMS AND ABBREVIATIONS (CONTINUED)

SM	Standard Method
SoundEarth	SoundEarth Strategies, Inc.
SVE	soil vapor extraction
TCE	trichloroethene
TEE	Terrestrial Ecological Evaluation
TOC	TOC Holdings Co.
TPH	total petroleum hydrocarbons
µg/L	micrograms per liter
UST	underground storage tank
USCS	United Soil Classification System
VI	vapor intrusion
VOCs	volatile organic compounds
WAC	Washington Administrative Code
Washington State DNR Aquatic Lease Land Property	located directly north of the East and West Waterfront Properties and overlies Salmon Bay, and encompasses King County Tax Parcel Number 112503-9113
West Commodore Way ROW	runs from east to west, and separates the Bulk Terminal Property and ASKO Hydraulic Property from the East Waterfront Property and West Waterfront Property
West Waterfront Property	located at 2800 West Commodore Way, and encompasses King County Tax Parcel Number 112503-9081

### 1.0 INTRODUCTION

SoundEarth Strategies, Inc. (SoundEarth; formerly Sound Environmental Strategies Corporation) has prepared this Remedial Investigation Report (RI Report) on behalf of TOC Holdings Co. (TOC; formerly named Time Oil Co.) for the ASKO Hydraulic Property. The ASKO Hydraulic Property is located at 2805 West Commodore Way in Seattle, Washington (Figure 1). The ASKO Hydraulic Property is part of the Seattle Terminal Properties. The Seattle Terminal Properties include four real properties (King County Tax Parcel Numbers 112503-9050, 112503-9120, 423790-0405 [ASKO Hydraulic Property], and 112503-9081) and one parcel leased from the Washington State Department of Natural Resources (DNR; King County Tax Parcel Number 112503-9113). The Seattle Terminal Properties are identified as the Bulk Terminal Property, East Waterfront Property, ASKO Hydraulic Property, West Waterfront Property, and the DNR Aquatic Lease Land Property. The Seattle Terminal Properties and West Commodore Way are located in Section 11, Township 25 North, Range 3 East. The latitude and longitude of the Seattle Terminal Properties are approximately 47°39'41–51"North and 122°23'28–41"West. The layout of the Seattle Terminal Properties is shown on Figure 2. The City of Seattle West Commodore Way right-of-way (ROW) runs from east to west and separates the Bulk Terminal Property and ASKO Hydraulic Property from the East Waterfront Property and West Waterfront Property. The Seattle Terminal Properties are bounded to the south by King County Tax Parcel Number 423790-0240, which is owned by Burlington Northern Santa Fe Railway Company (BNSF Parcel). The Seattle Terminal Properties and West Commodore Way are located within the Ballard Interbay North Manufacturing Industrial Center (BINMIC) designated by the City of Seattle in 1994.

The remedial investigation was conducted to address data gaps identified from the data presented in previous subsurface investigations and interim actions conducted by others that had confirmed releases of the chemicals of potential concern (COPCs) to the environment at the ASKO Hydraulic Property. The releases of COPCs resulted in the contamination of environmental media, including soil and groundwater. The confirmed and suspected sources of COPCs are associated with historical facility operations; however, the release mechanisms are unknown.

The remedial investigation was performed as part of an ongoing cleanup action in accordance with Washington State Model Toxics Control Act (MTCA) Cleanup Regulation as established in Chapter 173-340 of the Washington Administrative Code (WAC 173-340). In accordance with WAC 173-340-360(2), the final cleanup action will meet the cleanup standards at the defined points of compliance, protect human health and the environment, comply with applicable state and federal laws, provide for compliance monitoring, and provide a permanent solution to the maximum extent practicable.

#### 1.1 PURPOSE

The objective of the remedial investigation was to collect sufficient data for affected environmental media to adequately assess the site and to sequentially develop and evaluate cleanup action alternatives for a future feasibility study.

The purpose of this RI Report is to provide a comprehensive conceptual understanding of the site using assembled and evaluated data collected from historical and regulatory research and to provide the results from investigations and interim actions performed by SoundEarth and others. The potential cleanup action

alternatives evaluated for the site and the proposed cleanup action selected are provided in the feasibility study and/or Cleanup Action Plan under a separate cover.

## **1.2 PRELIMINARY SITE DEFINITION**

According to the Washington State Department of Ecology's (Ecology) *Guidelines for Property Cleanups under the Voluntary Cleanup Program* dated July 2008, "a site is defined by the nature and extent of contamination associated with one or more releases of hazardous substances (such as the release of gasoline from a leaking underground storage tank [UST]) prior to any cleanup of that contamination" (Ecology 2008).

Based on the information gathered to date, there are two distinct and separate areas of COPCs associated with releases of hazardous substances at the ASKO Hydraulic Property and BNSF Parcel. These areas are identified as Site 1 and Site 2 (the Sites). Site 1 encompasses the north, central, and south portions of the ASKO Hydraulic Property and the north portion of the south-adjointing property referred to as the BNSF Parcel and the south portion of the north-adjointing West Commodore Way ROW. Site 2 encompasses the northwest portion of the ASKO Hydraulic Property adjacent to the building occupied by ASKO Industrial Repair and the southwest portion of the north-adjointing West Commodore Way ROW. The general boundaries for Site 1 and Site 2 are shown on Figure 3.

## **1.3 PRELIMINARY CLEANUP LEVELS**

Preliminary cleanup levels were established for individual hazardous substances in each medium during the scoping of the remedial investigation based on various phases of investigation performed by others. The preliminary cleanup levels have been refined during the remedial investigation. The final cleanup levels will be defined in the subsequent Cleanup Action Plan as additional information becomes available on the potential future land use.

The ASKO Hydraulic Property is zoned industrial. However, the City of Seattle will permit commercial uses in industrial areas to the extent that they reinforce the industrial character of the region and new residential uses will not be permitted except for special types of dwellings that are related to the industrial area and that would not restrict or disrupt industrial activity.

The preliminary cleanup levels for COPCs confirmed or suspected in environmental media of potential concern are provided in Table 1. These cleanup levels for individual hazardous substances are based on established MTCA Method A cleanup levels in accordance with WAC 173-340-720 through WAC 173-340-760. MTCA Method B cleanup levels are used for hazardous substances that are not considered indicator hazardous substances and where MTCA Method A cleanup levels were not established. For example, a MTCA Method A cleanup level has not been established for cis-1,2-dichloroethene, which is not considered an indicator hazardous substance; therefore, the MTCA Method B cleanup level will be used for cis-1,2-dichloroethene.

The final cleanup standards will be determined based on the selected cleanup action(s) and the current and potential future land and resource uses. The final cleanup standards for the Sites including cleanup levels, points of compliance, and remediation levels, if applicable, will be defined in the Cleanup Action Plan presented under separate cover, in accordance with WAC 173-340-700.

## 1.4 REPORT ORGANIZATION

This RI Report has been prepared to meet the general requirements under WAC 173-340-350 and has been organized into the following sections:

- **Section 2.0, Background.** This section provides a description of general facility information and site conditions for the AKSO Hydraulic Property and surrounding properties and a summary of the environmental setting including surface water and sediments, soils and geology, hydrogeology, and air.
- **Section 3.0, Previous Investigations, Groundwater Monitoring Events, and Interim Actions.** This section provides a summary of previous subsurface investigations, groundwater monitoring events, and interim actions conducted between 2000 and 2005. A brief description of the field work performed, and a discussion of the results from each phase of investigation. Details of field sampling procedures are provided in referenced documents prepared by others.
- **Section 4.0, Remedial Investigation.** This section provides a description of the remedial investigation field work program conducted between 2006 and 2013, including a summary of the prefield activities, scope of work, and results.
- **Section 5.0, Conceptual Site Model.** This section provides a summary of the conceptual site model (CSM) developed for the Sites based on the remedial investigation conducted by SoundEarth and previous investigations performed by others. This section includes a discussion of the confirmed and suspected sources of hazardous substances, types and concentrations of hazardous substances, primary release mechanisms for COPCs, affected environmental media and environmental media of potential concern, fate and transport mechanisms, environmental media of potential concern, and exposure pathways for potential receptors.
- **Section 6.0, Planned Work.** This section presents a description of work planned for the ASKO Hydraulic Property following completion of the remedial investigation.
- **Section 7.0, Bibliography.** This section provides a list of source materials used to prepare the RI Report.
- **Section 8.0, Limitations.** This section presents SoundEarth's standard limitations associated with conducting the work reported herein and preparing this RI Report.

## 2.0 BACKGROUND

This section provides a description of the general facility information and site conditions for the ASKO Hydraulic Property and surrounding properties and summary of the environmental setting, including topography, surface water and sediments, soil and geology, hydrogeology, and air. Copies of current and historical records for the ASKO Hydraulic Property are provided in Appendices A through E.

### 2.1 PROPERTY DESCRIPTION

The ASKO Hydraulic Property main address is 2805 West Commodore Way, Seattle, Washington. The ASKO Hydraulic Property is comprised of a single tax parcel (King County Tax Parcel Number 423790-0405) and encompasses a total area of 1.59 acres (69,283 square feet). The legal description of the ASKO Hydraulic Property is provided in Appendix A.

The west portion of the ASKO Hydraulic Property is developed with a 1964-vintage, 7,198-square-foot building, which is currently occupied by ASKO Industrial Repair, a hydraulic repair and machine shop (Figure 4). Additional structures include a 1952-vintage, 1,660-square-foot, open-sided building located near the southeast corner of the parcel; a reinforced concrete platform built in 1948; a portion of a 1947-vintage, 7,200-square-foot warehouse building, currently occupied by Marine Service & Supply, located on the southeast portion of the ASKO Hydraulic Property; an office trailer located west of the warehouse and occupied by Marine Service & Supply; and several container boxes and a trailer located west of the 1947-vintage warehouse building. The west portion of the 1947-vintage warehouse building described above extends onto the Bulk Terminal Property. The remainder of the parcel is covered with concrete, asphalt, gravel, or low-growing vegetation and surrounded by a chain-link fence.

The ASKO Hydraulic Property is serviced by overhead electrical, cable, and telephone utilities; and underground natural gas, water, sanitary sewer, and stormwater utilities. According to the City of Seattle Department of Planning and Development (DPD) Side Sewer Cards and Maps, sanitary and stormwater sewer connections enter the ASKO Hydraulic Property from the north. The sanitary sewer connects to the northeast corner of ASKO Industrial Repair and the stormwater sewer connects to three stormwater catch basins, which are located surrounding ASKO Industrial Repair. In addition, two stormwater catch basins are located west of the 1952-vintage building (DPD 2013).

## **2.2 PROPERTY LAND USE AND HISTORY**

The sources of historical data used to develop this section include previous reports by Foster Wheeler Environmental Corporation (Foster Wheeler); City of Seattle DPD, Seattle Public Utilities; Sanborn Fire Insurance Maps; Kroll and Baist Atlases; Polk and Cole City Directories; Puget Sound Regional Archives; aerial photographs; and historical records from Ecology and TOC. Historical documentation referenced in this section is provided in Appendices A through E. Pertinent historical features are shown on Figure 4. Aerial and historical photographs are included in this RI Report.

According to the *BINMIC Hydrogeologic and Environmental Settings Report* prepared by The Floyd Snider McCarthy Team (Floyd Snider McCarthy 2003), the ASKO Hydraulic Property is located within the BINMIC (Figure 2 of the 2003 BINMIC Report). The current land use of the ASKO Hydraulic Property is a mix of industrial and commercial.

According to the City of Seattle's zoning map, the ASKO Hydraulic Property is located within the Ballard Interbay Northend Manufacturing and Industrial Center and is zoned as Industrial General 2 Unlimited/65 and Industrial Buffer Unlimited/45. The Industrial General 2 Unlimited/65 zoning classification allows for a broad range of industrial and commercial uses. Typical land use includes general and heavy manufacturing, commercial, entertainment, transportation and utility services, and salvage and recycling. The intent of the Industrial Buffer Unlimited/45 zoning classification is to provide an appropriate transition between industrial areas and adjacent residential and/or commercial zones. Typical land use includes general and light manufacturing, commercial, limited transportation services, entertainment, and salvage and recycling uses. The City of Seattle will reportedly permit commercial uses in industrial areas to the extent that they reinforce the industrial character of the region (DPD 2013a). New residential uses will not be permitted by the City of Seattle except for special types of dwellings that are related to the industrial area and that would not restrict or disrupt industrial activity. In addition, the City of Seattle has designated portions of ASKO Hydraulic Property as environmentally critical areas for Heron Habitat and Wildlife Preservation Areas (DPD 2013b).

The earliest available records indicated that portions of the ASKO Hydraulic Property were developed with as many as two small structures in 1905. Reportedly, the land use was agricultural. In 1908, the ASKO Hydraulic Property consisted of smaller parcels that were combined after TOC purchased the parcels between 1946 and 1950. TOC operated a petroleum bulk storage facility at the Bulk Terminal Property between 1941 and October 2001, which utilized structures within the ASKO Hydraulic Property, East Waterfront Property, Washington State DNR Aquatic Lease Land Property, BNSF Parcel, and the West Commodore Way ROW.

Operations of the petroleum bulk storage facility included distribution of petroleum products, including gasoline and diesel, between transport ships, railroad tank cars, and trucks. Petroleum products were transported at the Seattle Terminal Properties via drums and distribution pipelines. Piping ran from aboveground storage tanks (ASTs) on the Bulk Terminal Property to barreling sheds where 5-gallon containers and 55-gallon drums were filled with petroleum products, which were then transported beneath the West Commodore Way ROW to the East Waterfront Property via inclined gravity conveyors (Former West and East Barrel Inclines). Historical records indicated that as many as three configurations of barreling sheds were formerly located at the Seattle Terminal Properties. The first configuration was located on the west portion of the Bulk Terminal Property immediately east of the ASKO Hydraulic Property (Former Barreling Shed #1). The second configuration was located on the southwest portion of the Bulk Terminal Property extending onto the ASKO Hydraulic Property (Former Barreling Shed #2) and the third configuration was operated on the southeast portion of the ASKO Hydraulic Property (Former Barreling Shed #3). The structure for Former Barreling Shed #3 is still present. The full extent of operations conducted at the barreling sheds is unknown. In addition, distribution piping ran between the Bulk Terminal Property, East Waterfront Property, and BNSF Parcel where petroleum products were pumped between ASTs, transport ships, and railroad tank cars.

Four rail spurs entered the south portion of the ASKO Hydraulic Property from the BNSF Parcel. One rail spur (Former Rail Spur #1) was located north of the reinforced concrete platform and was used in conjunction with the 1947-vintage warehouse. Three rail spurs (Former Rail Spurs #2 through #4) were located on the parcel boundary between the BNSF Parcel and the ASKO Hydraulic Property. Distribution piping ran from Former Rail Spurs #2, #3, and/or #4 to the barreling sheds and the Bulk Terminal Property. A historical map of the Seattle Terminal Properties indicated that Former Rail Spur #4 was owned by Great Northern Railway Company and that Former Rail Spurs #1, #2, and #3 were owned by TOC; however, a Spur Track Agreement between Great Northern Railway Company and TOC indicated that Great Northern Railway Company owned all the rail spurs. Aerial photographs indicated that the rail spurs were removed by 1985.

Three ASTs, which reportedly stored lube oil and/or used motor oil, were located on the eastern portion of the ASKO Hydraulic Property (Former AST Area). The capacity of each AST was reported to be 14,000 gallons. Piping ran from a blending shed located on the Bulk Terminal Property to the ASTs. Aerial photographs indicated that the ASTs were installed by 1953 and removed before 1978.

The ASKO Hydraulic Property was also used as a truck storage area and parking lot for the petroleum bulk storage facility from approximately 1960 to 1974. The 1964-vintage warehouse building on the northwest portion of the ASKO Hydraulic Property was used to service TOC vehicles and included a 550-gallon fuel oil UST located directly northeast of the building. A permit application dated 1964 on file with King County Department of Design, Construction, and Land Use indicated there was a permit for two 550-gallon USTs on file. It is unknown if a second UST was installed under this permit; however,

historical records provided by TOC showed two 550-gallon USTs used for the storage of waste oil and heating oil. Property features discussed below are also presented on Figure 4. A summary table (Table A) is provided below in chronological order that includes reference sources and development description based on available current and historical information.

**TABLE A**  
**CHRONOLOGICAL DEVELOPMENT AND USE HISTORY FOR THE ASKO HYDRAULIC PROPERTY**

Date(s)	Source(s)	Description
1905	Baist Atlas	The earliest available records indicated that the ASKO Hydraulic Property was separated into smaller parcels owned by G. Anderson. The 1905 Baist Atlas depicted two structures on the ASKO Hydraulic Property.
1908-1917	Sanborn Maps Baist Atlas Kroll Maps Foster Wheeler Phase I ESA	In a 1908 Baist Atlas, 29 <sup>th</sup> Avenue West was depicted trending north/south through the central portion of the ASKO Hydraulic Property. In a 1917 Sanborn Map, a single residence, listed as 2813 West Commodore Way, and a stable were depicted on the northern portion of the ASKO Hydraulic Property. The elevation of the ASKO Hydraulic Property adjacent to the West Commodore Way ROW was listed at 34 feet. Reportedly the land was agricultural.
1920-1924	Maps	The stable was removed from the ASKO Hydraulic Property. The street name, 29 <sup>th</sup> Avenue West, was changed to 28 <sup>th</sup> Place West.
1930	Sanborn Map Kroll Map	The residence was removed from the ASKO Hydraulic Property.
1936	Aerial Photograph	The ASKO Hydraulic Property is undeveloped.
1943-1950	Archived Tax Records Sanborn Map Kroll Map Aerial Photographs Historical Photographs TOC Records	TOC purchased the parcels between 1946 and 1950. A 1944 site plan depicted a barreling shed located directly east of the ASKO Hydraulic Property (Former Barreling Shed #1). Records indicated the following: empty 55-gallon drums were stored on the central and west portions of the ASKO Hydraulic Property; an elongated building (Former Barreling Shed #2) extended from the Bulk Terminal Property to the east portion of the ASKO Hydraulic Property; and four rail spurs entered the south portion of the ASKO Hydraulic Property from the BNSF Parcel with one rail spur (Former Rail Spur #1) located north of the reinforced concrete platform and three rail spurs (Former Rail Spurs #2 through #4) located on the parcel boundary between the BNSF Parcel and the ASKO Hydraulic Property. Rail tanker cars were visible on the rail spurs in aerial photographs. An agreement between TOC and Great Northern Railway Company, dated 1943, indicated that the rail spurs would be owned and maintained by Great Northern Railway Company. A one-story, steel-framed warehouse with an adjoining concrete platform was constructed on the Bulk Terminal Property and extended onto the east portion of the ASKO Hydraulic Property. The building was located between two rail spurs (Former Rail Spurs #1 and #2). Undated historical photographs from TOC depicted drum storage on the ASKO Hydraulic Property, a barreling shed (Former Barreling Shed #2), and a barrel incline (Former West and/or East Barrel Inclines). The 1950 Sanborn Map indicated that the 1947-vintage warehouse building was used as an oil warehouse.

Date(s)	Source(s)	Description
1952	Archived Tax Records Aerial Photographs Historical Photographs TOC Records	Aerial photographs depicted the central portion of the ASKO Hydraulic Property as a parking and truck storage area. Records indicated that a barreling shed (Former Barreling Shed #2) was removed from the ASKO Hydraulic Property. Tax records indicated that a one-story, steel-framed barreling shed (Former Barreling Shed #3) was constructed on the ASKO Hydraulic Property in 1952.
1953	TOC Records Foster Wheeler Phase I ESA Aerial Photographs Historical Photographs	Three ASTs, which reportedly stored lube oil and/or used motor oil, were located on the east portion of the ASKO Hydraulic Property (Former AST Area). The capacity of each AST was reported to be 14,000 gallons. An undated historical photograph depicted the ASTs on the east portion of the ASKO Hydraulic Property.
1953-1960	Aerial Photographs TOC Records Foster Wheeler Phase I ESA	Records and an aerial photograph from 1953 indicated that the East and West Barrel Inclines had been removed. Reportedly, the barrel inclines (Former East and West Barrel Inclines) were removed in 1960.
1964-1974	Archived Tax Records Sanborn Maps TOC Records Aerial Photographs Building Plans Kroll Maps	A 6,964-square foot warehouse building was constructed on the northwest portion of the ASKO Hydraulic Property. The building was reportedly constructed to service TOC vehicles and included a 550-gallon fuel oil UST located directly northeast of the building. A permit application dated 1964 on file with King County Department of Design, Construction, and Land Use indicated there was a permit for two 550-gallon USTs. In addition, records from TOC depicted two 550-gallon USTs used for the storage of waste oil and heating oil.
1974-1976	Foster Wheeler Phase I ESA	TOC leased the 1964-vintage warehouse to Precision Engineering Specialists, a marine and engine repair facility.
1976-1980	City Directories Foster Wheeler Phase I ESA	Select Industries leased the 1964-vintage warehouse and operated as a warehouse and machine shop.
1978	Aerial Photographs	The three ASTs were no longer present on the ASKO Hydraulic Property.
1985	Aerial Photograph	Rail spurs (Former Rails Spurs #1 through #4) were no longer depicted on the ASKO Hydraulic Property.
1980-2013	City Directories Foster Wheeler Phase I ESA	In 1989, Select Industries became ASKO Hydraulic Repair, a hydraulic repair shop, who has leased the 1964-vintage warehouse from 1980 to the present. At some point, ASKO Hydraulic Repair changed its operating name to ASKO Industrial Repair.

**NOTES:**

AST = aboveground storage tank  
 ESA = Environmental Site Assessment  
 Kroll Map = Kroll Map Company  
 ROW = right-of-way

Sanborn Map = Sanborn Fire Insurance Map  
 TOC = TOC Holdings Co.  
 UST = underground storage tank

### 2.3 SURROUNDING PROPERTY DESCRIPTIONS, LAND USE, AND HISTORY

The West Commodore Way ROW is located directly north of the ASKO Hydraulic Property and beyond is the West Waterfront Property and East Waterfront Property. The eastern portion of the ASKO Hydraulic Property is bounded by the Bulk Terminal Property and the southern portion by the BNSF Parcel. A commercial property is located directly to the west of the ASKO Hydraulic Property. Based on the



remediation investigation results, Site 1 is located on the BNSF Parcel, ASKO Hydraulic Property and West Commodore Way ROW and Site 2 is located on the ASKO Hydraulic Property and West Commodore Way ROW. A brief summary of the surrounding eastern and western parcels and a detailed summary of the surrounding properties that are part of the Sites, and their current and historical primary features and operations are provided below by direction.

### 2.3.1 North

The West Commodore Way ROW was completed by 1912. West Commodore Way ROW runs from east to west and is located directly north of the ASKO Hydraulic Property. The West Commodore Way ROW consists of a concrete and asphalt roadway with gravel easement. The North Trunk Sewer, operated by the King County Wastewater Treatment Division, was constructed beneath West Commodore Way by the City of Seattle between 1909 and 1913 (Converse Davis Dixon Associates, Inc. 1976). The tunneled portions of the North Trunk Sewer located within West Commodore Way were reportedly constructed as brick crown within a timber set and lagging tunnel. The North Trunk Sewer continues to the West Point Treatment Plant. The top of the North Trunk Sewer is located approximately 25 feet beneath West Commodore Way. The diameter of the North Trunk Sewer section running beneath West Commodore Way is reportedly 144 inches (12 feet), which equates to an approximate elevation of 8 to 20 feet above the North American Vertical Datum Of 1988 (NAVD88).

Sanitary sewer and stormwater lines servicing ASKO Industrial Repair connect to the North Trunk Sewer beneath West Commodore Way. Additional utilities located within the West Commodore Way ROW that service the ASKO Hydraulic Property include a natural gas main beneath the south shoulder of West Commodore Way, which approaches from the west and terminates with a service connection to the ASKO Hydraulic Property. A water main located beneath the north shoulder of West Commodore Way supplies potable water to the ASKO Hydraulic Property.

TOC operated a tunnel beneath the West Commodore Way ROW, which was used to convey 55-gallon drums from the ASKO Hydraulic Property to the East Waterfront Property. Property features discussed below are also presented on Figure 4. A summary table (Table B) is provided below in chronological order that includes dates, reference sources, and development description based on available current and historical information.

**TABLE B  
CHRONOLOGICAL DEVELOPMENT AND USE HISTORY FOR THE WEST COMMODORE WAY ROW**

Date(s)	Source(s)	Description
1905-1917	Sanborn Maps Baist Atlas Kroll Maps Converse Davis Dixon Associates, Inc. 1976	Historical records indicated that the land was owned by G. Anderson and the West Commodore Way ROW was completed by 1912. The 1917 Sanborn Map depicted a 12-inch water line in the West Commodore Way ROW. The North Trunk Sewer, operated by King County Wastewater Treatment Division, was constructed beneath West Commodore Way by the city of Seattle between 1909 and 1913. The tunneled portions of the North Trunk Sewer were reportedly constructed as brick crown within a timber set and lagging tunnel.

Date(s)	Source(s)	Description
1930	Sanborn Map	The West Commodore Way ROW is depicted as being 60 feet wide.
1944-1950	TOC Records Historical Photographs	TOC Holdings Co. records identified a tunnel beneath the West Commodore Way ROW used to deliver drums from the ASKO Hydraulic Property to the East Waterfront Property. Undated historical photographs depicted a tunnel beneath the West Commodore Way ROW.
1953	Sanborn Maps Aerial Photographs Historical Photographs TOC Records	Records indicated that the tunnel beneath the West Commodore Way ROW is no longer in use. There was no indication as to if the tunnel still exists.

**NOTES:**

Kroll Map = Kroll Map Company

ROW = right-of-way

Sanborn Map = Sanborn Fire Insurance Map

TOC = TOC Holdings Co.

The West Waterfront Property is located northwest of the West Commodore Way ROW and the East Waterfront Property is located northeast of the West Commodore Way ROW, relative to the ASKO Hydraulic Property.

**2.3.1.1 Northwest**

The northwest-adjointing property is part of the Seattle Terminal Properties owned by TOC and is identified as the West Waterfront Property. The West Waterfront Property is located at 2800 West Commodore Way and encompasses King County Tax Parcel Number 112503-9081 and a total area of 1.69 acres. The north portion of this parcel extends into Salmon Bay, while the south portion is covered with gravel in the parking lot and overgrown vegetation in landscaped or used areas. Three docks extend over Salmon Bay from the West Waterfront Property.

The West Waterfront Property was heavily vegetated in the 1930s and access to the shoreline was provided by an unpaved road that led to several docks. Most of vegetation was cleared by 1946. The West Waterfront Property was purchased by TOC between 1946 and 1950, during which time several sheds were constructed. According to TOC employees, the West Waterfront Property was not used for the historical operations of petroleum bulk storage plant facility. The historical and current use of the West Waterfront Property is primarily for recreational boat docking and storage.

**2.3.1.2 Northeast**

The northeast-adjointing property is part of the Seattle Terminal Properties owned by TOC and is identified as the East Waterfront Property. The East Waterfront Property is located at 2750 West Commodore Way and encompasses King County Tax Parcel Number 112503-9120 and a total area of 3.05 acres. The north portion of the East Waterfront Property extends into Salmon Bay, while the south portion extends to the West Commodore Way ROW. The East Waterfront Property is developed with several buildings including a 1950-vintage, 2,250-square-foot garage; a 1944-vintage, 1,518-square-foot building; a 1950-vintage, 226-square-foot building; and a

1970-vintage, 1,920-square-foot building, which is located on the west-central portion of the East Waterfront Property and currently occupied by ASKO Selective Plating. The remainder of the East Waterfront Property contains a portion of a large dock, a gravel driveway, a parking lot, and low-growing vegetation.

The East Waterfront Property was initially developed as part of the Rattan Furniture Manufacturing Co. by 1930. Operations on the East Waterfront Property consisted of a saw mill and dry kilns. Jobbers Petroleum Sales Co. purchased the East Waterfront Property in 1939 and reportedly removed the saw mill and dry kilns. According to historical records, TOC acquired the East Waterfront Property in approximately 1941.

The operation of the petroleum bulk storage facility included the following buildings: a 1932-vintage warehouse used by the Rattan Furniture Manufacturing Co. was cut in half and moved to the East Waterfront Property prior to 1944; a dock used for loading transport ships completed in 1943 and which extends north into the Washington State DNR Aquatic Lease Land Property and Salmon Bay; a 1944-vintage repair garage shop; a shed constructed in 1950; a 1950-vintage laboratory; and a 1970-vintage warehouse. The 1932-vintage warehouse was leased by George Broom's Sons, Inc. from 1972 to 2011. In 2012, the warehouse was demolished. Currently, ASKO Selective Plating leases the 1970-vintage warehouse.

Former features operated at the East Waterfront Property included an inclined gravity conveyor that transported drums from the ASKO Hydraulic Property to the East Waterfront property, a pipeline utilidor that transported petroleum products between the Bulk Terminal Property and the East Waterfront Property, and as many as two USTs, one of which was removed in 1991. In addition, a 2004-vintage shed are located on the East Waterfront Property. As many as three small docks have been located on the East Waterfront Property and removed. The date of removal is unknown.

### **2.3.2 East**

The east-adjointing property is part of the Seattle Terminal Properties owned by TOC and is identified as the Bulk Terminal Property. The Bulk Terminal Property is located at 2737 West Commodore Way and encompasses King County Tax Parcel Number 112503-9050 and a total area of 4.08 acres. Several buildings exist on the western portion of the Bulk Terminal Property, including a 13,662-square-foot office building, which is currently occupied by TOC; the eastern portion of a 1947-vintage, 7,200-square-foot warehouse building, currently occupied by Marine Service & Supply; and three smaller buildings encompassing 660 square feet, 528 square feet, and 892 square feet, which are currently used for storage and/or vacant. The remaining western portion of the Bulk Terminal Property is asphalt and/or concrete-paved and surrounded by a chain-link fence. The eastern portion of the Bulk Terminal Property is currently undeveloped and primarily covered with gravel surrounded by a concrete wall and chain-link fence.

The Bulk Terminal Property was originally occupied by three residences by 1905. Salmon Bay Manufacturing Company and Rattan Furniture Manufacturing Company occupied a portion of the Bulk Terminal Property in the 1920s and 1930s. Operations conducted on the Bulk Terminal Property by these companies are unknown. According to historical assessor records, the Bulk Terminal Property was initially developed by Jobbers Petroleum Sales Co. between 1939 and November 1941. TOC acquired the Bulk Terminal Property in approximately 1941 and operated a petroleum bulk storage facility between 1941 and October 2001.

The operation of the petroleum bulk storage facility included the following buildings: an office building constructed between 1939 and 1941 with numerous additions since construction, a 1946-vintage building used as part of the fire suppression system, a 1950-vintage boiler room, and a 1947-vintage warehouse building that extends onto the ASKO Hydraulic Property. Former features used at the Bulk Terminal Property as part of the petroleum bulk storage facility included AST yards, which included 14 former ASTs and associated piping located on the central and east portion of the parcel; a barreling shed located on the east portion of the parcel immediately east of the ASKO Hydraulic Property (Former Barreling Shed #1); a barreling shed located on the southwest portion of the parcel extending onto the ASKO Hydraulic Property (Former Barreling Shed #2); two overhead loading racks on the north portion on the parcel; and the southern ends of two barrel inclines (Former West and East Barrel Inclines) and an underground pipeline utilidor, all of which extended north beneath the West Commodore Way ROW to the East Waterfront Property.

Additional features included a former pentachlorophenol (PCP) mixing AST and associated piping system; three USTs and two sets of fuel-dispensing pumps located north of the northeast corner of the office building; two USTs located on the northern portion of the parcel, with one UST containing ethanol and toluene and the second with contents unknown; two USTs located east of the office building, with unknown contents; and four rail spurs (Former Rail Spurs #1 through #4) extending off the main railroad lines located south-southwest of the Bulk Terminal Property. A rail spur (Former Rail Spur #1) ran to the north of the 1947-vintage warehouse building, two rail spurs (Former Rail Spurs #2 and #3) ran to the southeast corner of the 1947-vintage warehouse building, and a rail spur (Former Rail Spur #4) extended to the southeast corner of the Bulk Terminal Property.

### **2.3.3 South**

The BNSF Parcel bounds the ASKO Hydraulic Property to the south. The BNSF Parcel is listed as King County Tax Parcel Number 423790-0240. The BNSF Parcel includes a grass vegetated area immediately south of the ASKO Hydraulic Property followed by a steep south facing vegetated slope that leads to the main rail lines. The south side of the main rail lines consists of a steep north-facing vegetated slope. The legal description of the BNSF Parcel is provided in Appendix A.

The BNSF Parcel was initially developed by the Great Northern Railway Company as part of the main railroad line between Minnesota and Seattle, Washington. Reportedly, the main railroad line was completed in 1893. The BNSF Parcel originally consisted of two main railroad lines with steep vegetated slopes located north and south of the main railroad lines. By 1944, five rail spurs originated from the main railroad lines. Four of the rail spurs (Former Rail Spurs #1 through #4) continue from the BNSF Parcel to the ASKO Hydraulic Property. The fifth rail spur (Former Rail Spur #5) was located next to the main railroad lines at the bottom of the vegetated slope. By 1985, the rail spurs had been removed from the BNSF Parcel and the ASKO Hydraulic Property.

The BNSF Parcel is currently owned by BNSF. Property features discussed below are also presented on Figure 4. A summary table (Table C) is provided below in chronological order that includes dates, reference sources, and development description based on available current and historical information.

**TABLE C  
CHRONOLOGICAL DEVELOPMENT AND USE HISTORY FOR THE BNSF PARCEL**

Date(s)	Source(s)	Description
1893	Historical Records	The BNSF Parcel was initially developed by the Great Northern Railway Company as part of the main railroad line between Minnesota and Seattle, Washington. Reportedly, the main railroad line was completed in 1893; however, Baist Atlases from 1905, 1908, and 1912 did not depict the railroad line.
1917-1924	Sanborn Maps Kroll Maps	Records depicted two railroad lines with a slope on each side as owned by Great Northern Railway Company.
1936	Aerial Photograph	A 1936 aerial photograph depicted two main railroad lines with steep vegetated slopes located north and south of the main railroad lines.
1944-1953	Aerial Photographs Historical Photographs TOC Records	Five rail spurs separate from the main railroad lines. Four of the rail spurs (Former Rail Spurs #1 through #4) continue from the BNSF Parcel to the ASKO Hydraulic Property. The fifth rail spur (Former Rail Spur #5) was located next to the main railroad lines and was reportedly used for extra storage of rail tanker cars. An aerial photograph from 1946 depicted rail tanker cars on the rail spurs (Former Rail Spurs #1 through #5). Historical records indicated that some of the rail spurs (Former Rail Spurs #2 through #4) had piping connections for loading and unloading rail tanker cars. Undated historical photographs depicted the rail spurs and rail tanker cars on the BNSF Parcel and the ASKO Hydraulic Property.
1985	Aerial Photograph	Rail spurs (Former Rails Spurs #1 through #5) were no longer visible on the BNSF Parcel.
2013	Archived Tax Records	The BNSF Parcel is owned by BNSF.

**NOTES:**

Kroll Map = Kroll Map Company  
 Sanborn Map = Sanborn Fire Insurance Map  
 TOC = TOC Holdings Co.

The BNSF Parcel is bounded to the south by the West Government Way ROW. The area of West Government Way is residential and has been residential since at least 1905.

**2.3.4 West**

The west-adjointing property is a single tax parcel (King County Tax Parcel Number 423790-0300) that covers approximately 17,400 square feet (0.40 acres) of land. The west-adjointing property is listed as 2901 West Commodore Way. Two warehouses, constructed in 1965 and 1968, occupy the property and are operated by carpentry and marine service industries.

A 1936 aerial photograph depicted the west-adjointing property as being undeveloped and vegetated. A 1946 aerial photograph depicted the west-adjointing property cleared of vegetation and being used for storage of 55-gallon drums. The parcel was developed in 1965 and has maintained industrial and commercial use since that time.

## **2.4 ENVIRONMENTAL SETTING AND REGULATORY CLASSIFICATION**

A summary of the environmental setting, including topography, surface water and sediments, soils and geology, hydrogeology, and air, for the ASKO Hydraulic Property and vicinity are provided below.

### **2.4.1 Regional Topography**

The ASKO Hydraulic Property is located within the Puget Trough or Puget Lowland portion of the Pacific Border Physiographic Province (USGS 2011). The Puget Lowland is a broad, low-lying region situated between the Cascade Range to the east and the Olympic Mountains and Willapa Hills to the west. In the north, the San Juan Islands form the division between the Puget Lowland and the Strait of Georgia in British Columbia. The province is characterized by roughly north-south-oriented valleys and ridges, with ridges that locally form an upland plain at elevations of up to about 500 feet above sea level. The moderately to steeply sloped ridges are separated by swales, which are often occupied by wetlands, streams, and lakes. The physiographic nature of the Puget Lowland was prominently formed by the last retreat of the Vashon Stade of the Fraser Glaciation, which is estimated to have occurred between 14,000 and 18,000 years before present (Waitt Jr. and Thorson 1983).

The ASKO Hydraulic Property is situated near the base of the northeast hillside of the Magnolia Bluff neighborhood within Seattle. The general topography of the upland surface slopes gently to the north from the north portion of the BNSF Parcel to the ASKO Hydraulic Property towards the shoreline of Salmon Bay. Portions of the upland surfaces at the ASKO Hydraulic Property were terraced to accommodate buildings and storage yards for the former petroleum bulk storage facility operations. The upland surface of the BNSF Parcel was cut to accommodate the main railroad lines. This resulted in two steep, vegetated slopes on the north and south sides of the main railroad lines. Upland surface elevations range from approximately 44.5 feet above sea level next to West Commodore Way at the ASKO Hydraulic Property to approximately 59 feet above sea level on the north portion of the BNSF Parcel.

### **2.4.2 Surface Water and Sediments**

Salmon Bay is located approximately 110 feet north of the ASKO Hydraulic Property. Salmon Bay is a man-made marine waterway located between the Hiram M. Chittenden Locks, operated by U.S. Army Corps of Engineers, to the west and Lake Union to the east. The Hiram M. Chittenden Locks were constructed to move boats between the freshwater Lake Washington Ship Canal to the east and the saltwater Elliot Bay to the west. Upstream of the Hiram M. Chittenden Locks, a submarine barrier was constructed to minimize the mixing of fresh water and saltwater and to limit the movement of saltwater upstream (Floyd Snider McCarthy 2003).

#### **2.4.2.1 Surface Water**

Saltwater intrudes into Salmon Bay as a result of the operation of the Hiram M. Chittenden Locks, which connect the Lake Washington Ship Canal with Puget Sound. Depending on the levels of salinity present, sediments in certain areas may be classified as marine, low-salinity, or freshwater (Ecology 2000a). It is unlikely that Salmon Bay would be used as a drinking water source because it is known to be mildly saline as a result of mixing with seawater at the Hiram M. Chittenden Locks (Floyd Snider McCarthy 2003).

Groundwater from Salmon Bay and the Lake Washington Ship Canal upland areas moves primarily laterally from topographically higher elevations towards the lower elevations adjacent

where it discharges to these surface water bodies. Locally, variations in soil conditions and engineering of shallow soils may cause groundwater to flow for short distances in other directions; however, eventually the groundwater discharges to the main surface water bodies (Floyd Snider McCarthy 2003).

The majority of the ASKO Hydraulic Property is paved. During storm events, the majority of surface water travels as sheet flow to catch basins on the ASKO Hydraulic Property and in the West Commodore Way ROW. Surface water that does not discharge to catch basins, infiltrates into the unpaved area on the ASKO Hydraulic Property and BNSF Parcel and/or evaporates to the ambient air. Runoff from the building rooftops is captured in gutters and flows down spouts that discharge to the surface.

#### **2.4.2.2 Sediments**

General deposition processes for Salmon Bay include eroded soils and discharged outfall sediments from Salmon Bay and the Lake Washington Ship Canal upland areas and associated sediment transport from the Lake Washington Ship Canal. The rate of sediment deposition for Salmon Bay is unknown.

The ground surface at the ASKO Hydraulic Property is paved, or covered with a thick layer of gravel, or densely vegetated. These control measures prevent the erosion of soil at the ASKO Hydraulic Property and minimize the potential migrations of sediments to Salmon Bay.

#### **2.4.3 Soils and Geology**

According to the Geologic Map of Northwestern Seattle (Booth et al. 2005), the surficial geology in the vicinity of the ASKO Hydraulic Property consists of deposits corresponding to the Vashon Stade of the Fraser Glaciation and pre-Fraser glacial and interglacial periods. In the immediate vicinity of the ASKO Hydraulic Property, surficial deposits consist of pre-Fraser Olympia beds, and modified land, which is characterized fill and/or graded natural deposits that obscure or alter the original deposit (Booth et al. 2005).

The youngest pre-Fraser deposits in the Seattle area, known as the Olympia beds, were deposited during the last interglacial period, approximately 18,000 to 70,000 years ago. The Olympia beds consist of very dense, fine to medium, clean to silty sands and intermittent gravel channel deposits, interbedded with hard silts and peats (Booth et al. 2005; Galster and Laprade 1991). Organic matter and localized iron-oxide horizons are common. The Olympia beds have known thicknesses of up to 80 feet. Beneath the Olympia beds are various older deposits of glacial and nonglacial origin. In general, deposits from older interglacial and glacial periods are similar to deposits from the most recent glacial cycle, due to similar topographic and climactic conditions (Booth et al. 2005).

The Vashon ice-contact deposits are located on the hillside above the ASKO Hydraulic Property and are generally discontinuous, highly variable in thickness and lateral extent, and consist of loose to very dense, intermixed glacial till and glacial outwash deposits. The till typically consists of sandy silts with gravel. The outwash consists of sands and gravels, with variable amounts of silt (Booth et al. 2005).

The Vashon advance outwash deposits are located on the hillside above the ASKO Hydraulic Property, and are generally discontinuous and consist of loose to very dense, layered sands and gravels, which are generally well-sorted (poorly graded). Layers of silty sands and silts are less

common. The Vashon recessional lacustrine deposits consist of layered silts and clays, which range in plasticity from low to high, and may contain localized intervals of sand or peat. The recessional lacustrine deposits may grade into recessional outwash deposits (Booth et al. 2005).

The undeveloped portions of the ASKO Hydraulic Property are either covered with grasses, small shrubs, or gravel. According to geologic cross sections in the 2003 BINMIC Report, Galster and Laprade (1991), Booth et al. (2005), boring logs and cross sections in the Fort Lawton Parallel Tunnel Project Geotechnical Report (Municipality of Metropolitan Seattle 1989), and subsurface investigations conducted at the Seattle Terminal Properties, the uppermost soil layer in the vicinity of the Seattle Terminal Properties and the West Commodore Way ROW typically consists of fine- to coarse-grained soils classified as the Holocene Fill (Hf) geologic unit. The Hf geologic unit ranges from approximately 5 to greater than 20 feet thick, and consists of very loose to very dense, highly variable engineered and non-engineered fill material. Underlying the Hf geologic unit is the Holocene Depression Fillings (Hdf) geologic unit that consists of very soft to medium stiff, fine grained sand, silt, and clay, with scattered organic particles and very soft peat deposits. The Hf and Hdf geologic units are not shown on the BINMIC geologic cross section B-B', which shows the Seattle Terminal Properties and the West Commodore Way ROW underlain by an approximate 35-foot thickness of "Unknown Outwash" that overlies clay or glacio-lacustrine deposits; however, based on boring logs from the vicinity of the Seattle Terminal Properties, the "unknown Outwash" could be interpreted as the Hf and Hdf geologic units. Underlying the Hf and Hdf geologic units are the pre-Fraser age glacial deposits (Qpf). The Qpf geologic unit consists of dense to hard, interbedded sand, gravel, and silt. These deposits can be further subdivided into fine- (Qpff) and coarse-grained (Qpfc) deposits.

#### **2.4.4 Hydrogeology**

The glacial and nonglacial deposits beneath the Seattle area comprise the unconsolidated Puget Sound aquifer system, which can extend from ground surface to depths of more than 3,000 feet. Coarse-grained units within this sequence generally function as aquifers, and alternate at some scale with fine-grained units which function as aquitards (Vaccaro et al. 1998). Above local or regional water table aquifers, discontinuous perched groundwater may be present in coarse-grained intervals seated above fine-grained intervals. Below the regional water table, the alternating pattern of coarse and fine-grained units results in a series of confined aquifers. Regional groundwater flow is generally from topographic highs toward major surface water bodies such as Puget Sound, Lake Union, Lake Washington Ship Canal, and Salmon Bay. Vertical hydraulic gradients are typically upward near the major surface water bodies, and downward inland (Floyd Snider McCarthy Team 2003; Vaccaro et al. 1998).

Regional groundwater flow typically discharges to the closest major surface water body. Salmon Bay is the nearest surface water body and located north of the ASKO Hydraulic Property. Perched water and three water-bearing zones are encountered beneath the ASKO Hydraulic Property. Discontinuous perched water is encountered beneath the BNSF Parcel and the southern portion of the ASKO Hydraulic Property at Site 1, and beneath the northwestern portion of the ASKO Hydraulic Property at Site 2. Perched water is encountered in poorly graded sand and silty sand lenses. The poorly graded sand and silty sand lenses with the perched water are underlain by a sequence of discontinuous clay and silt lenses. The shallow, intermediate, and deep water-bearing zones are encountered in deposits that consist of continuous layers of poorly-graded sand and silty sand. The shallow and intermediate water-bearing zones have been observed across the Seattle Terminal Properties and Sites. Beneath both the shallow and



intermediate water-bearing zones is a clay and silt layer that is approximately 4 feet thick and act as semi-confining units. Below the second semi-confining unit is the deep water-bearing zone observed in the boring advanced for monitoring well 01MW65. Underlying the deep water-bearing zone is the Qpff geologic unit that is greater than 38 feet thick and acts as a confining unit that restricts the vertical migration of groundwater and COPCs located at the Seattle Terminal Properties. Downward vertical gradients are observed by water level measurements in monitoring wells located in perched water, and in the shallow and intermediate water-bearing zones. A summary of groundwater conditions for the ASKO Hydraulic Property, including groundwater flow direction, gradient, and hydraulic conductivity is provided below.

According to the BINMIC Hydrogeologic and Environmental Settings Report (Floyd Snider McCarthy 2003), three water supply wells were located in the BINMIC area. Two of the wells are located north of Salmon Bay and the ASKO Hydraulic Property, and the third was reportedly located 0.85 miles southeast of the ASKO Hydraulic Property. The wells were reportedly all used for industrial or commercial purposes and are thought to be abandoned.

Seattle Public Utilities provides the potable water supply to Seattle. Seattle Public Utilities main source of water is derived from surface water reservoirs located within the Cedar and South Fork Tolt River watersheds. According to King County's Interactive Map for the County's Groundwater Program, there are no designated aquifer recharge or wellhead protection areas within several miles of the ASKO Hydraulic Property.

#### **2.4.5 Air**

Climate in the Seattle area is generally mild and experiences moderate seasonal fluctuations in temperature. Average temperatures range from 60s in the summer to 40s in the winter. The warmest month of the year is August, which has an average maximum temperature of 74.9 degrees Fahrenheit (°F). The coldest month of the year is January, which has an average minimum temperature of 36.0 °F. The annual average rainfall in the Seattle area is 38.25 inches. The wettest month of the year is December when the area receives an average rainfall total of 6.06 inches (IDcide 2013). The prevailing wind direction in the Seattle area is from the south with variation to the northwest during July, August, and September. The average wind velocity is less than 10 miles per hour (Western Regional Climate Center 2013).

The main underlying sources for ambient air pollutants in Seattle are motor vehicle traffic and residential wood burning (PSCA 2010). Airborne pollutants can reach the terrestrial surfaces and sediment directly, through the deposition of airborne chemicals, primarily in the form of particulate matter onto the water surface, and indirectly, through the deposition of particulate matter on terrestrial surfaces from which they are conveyed via surface water runoff and stormwater to water bodies (Anchor QEA 2012).

### **3.0 PREVIOUS INVESTIGATIONS, GROUNDWATER MONITORING EVENTS, AND INTERIM ACTIONS**

This section summarizes activities and results from previous investigations and groundwater monitoring events, and interim actions conducted by others. Additional information on the previous investigations and the groundwater monitoring and interim action activities, procedures, and results are provided in the referenced reports, which are included as Appendix F. Preliminary cleanup levels for affected environmental media identified from these previous activities are provided in Table 1. Affected

environmental media include soil and groundwater and are defined in Section 5.2. Historical site features are shown on Figure 4.

### **3.1 PREVIOUS INVESTIGATIONS**

Several of the previous investigations at the ASKO Hydraulic Property were performed in conjunction with investigations conducted at the Bulk Terminal Property and/or West Commodore Way ROW in an effort to improve efficiencies. Previous investigations conducted at the ASKO Hydraulic Property are discussed below.

#### **3.1.1 2000 Phase I Environmental Site Assessment**

Foster Wheeler completed a Phase I Environmental Site Assessment (ESA) for the ASKO Hydraulic Property (Foster Wheeler 2000). The Phase I ESA indicated that the parcel was acquired by TOC between 1946 and 1950 and used as a staging area for empty 55-gallon drums. Historical photographs indicated that the ASKO Hydraulic Property had been used for light industrial activities since the late 1960s. Interviews with personnel confirmed the removal of one UST, although a permit application dated 1964 on file with King County Department of Design, Construction, and Land Use indicated there was a permit for two 550-gallon USTs on file. It is unknown if a second UST was installed under this permit; however, historical records provided by TOC showed two 550-gallon USTs used for the storage of waste oil and heating oil. Additional investigation was recommended by Foster Wheeler to assess soil conditions in the steam cleaning area, the oil and solvent storage shed, and in the vicinity of the former heating oil UST. Based on these recommendations, Foster Wheeler performed the 2000 subsurface investigation summarized directly below.

#### **3.1.2 2000 Subsurface Investigation**

Foster Wheeler completed a Phase II at Seattle Terminal Properties, which reported the results of a subsurface investigation at the ASKO Hydraulic Property completed in November 2000 (Foster Wheeler 2001a). The subsurface investigation was performed to assess the subsurface conditions in three areas identified in the Phase I ESA on the ASKO Hydraulic Property, including the steam cleaning area, the oil and solvent storage shed, and the former heating oil and/or waste oil UST(s). The subsurface investigation included advancing six hollow-stem auger borings identified as follows:

- Boring SB-40 was advanced in the steam cleaning area to a depth of 15 feet below ground surface (bgs).
- Boring SB-46 was advanced in the West Commodore Way ROW, north of the former location of the heating oil and/or waste oil UST(s) on the ASKO Hydraulic Property to a depth of 25 feet bgs.
- Borings SB-47 and SB-48 were advanced in the center and east, respectively, of the former location of the heating oil and/or waste oil UST(s) to a depth of 25 feet bgs.
- Borings SB-49 and SB-50 were advanced west and east, respectively, of the oil and solvent storage area to a depth of 15 feet bgs.

Select soil samples were submitted for laboratory analyses of diesel-range petroleum hydrocarbons (DRPH); oil-range petroleum hydrocarbons (ORPH); gasoline-range petroleum

hydrocarbons (GRPH); benzene, toluene, ethylbenzene, and total xylenes (BTEX); volatile organic compounds (VOCs); and/or total metals including arsenic, cadmium, chromium, lead, mercury, selenium, and silver.

### **3.1.3 2000 – 2001 Subsurface Investigations**

Foster Wheeler completed a report titled *Final Limited Soil Removal Report at the Former PCP/Diesel Mixing Area* that reported the results of subsurface investigation activities completed at the ASKO Hydraulic Property in November 2000 (Foster Wheeler 2002b). The subsurface investigations were performed primarily on the Bulk Terminal Property; however, borings SB-06 and SB-30 were advanced on the ASKO Hydraulic Property in the vicinity of Former Barreling Sheds #1 through #3 and Former Rail Spurs #1 and #2 (Figure 5).

Soil samples collected from boring SB-06 were submitted for laboratory analysis of PCP. A soil sample collected from boring SB-30 was submitted for laboratory analysis of DRPH, ORPH, GRPH, benzene, ethylbenzene, and total xylenes.

### **3.1.4 July 2001 Subsurface Investigation**

Foster Wheeler conducted an additional subsurface investigation in July 2001 to further assess subsurface conditions identified during the Phase II investigations. According to the *Phase III Environmental Site Assessment* report, dated December 2001, boring SB-58 was advanced north of Former Barreling Shed #3 to a depth of 30 feet bgs and was converted to monitoring well 01MW15 (Foster Wheeler 2001b).

Selected soil samples were submitted for laboratory analysis of one or more of the following: DRPH, ORPH, GRPH, BTEX, carcinogenic polycyclic aromatic hydrocarbons (cPAHs), PCP, and/or total lead.

### **3.1.5 2000 – 2002 Subsurface Investigation**

This section provides a summary of the borings and soil sample analytical results not readily available from subsurface investigation reports but information that was compiled from various summaries prepared by Foster Wheeler for TOC. The subsurface investigations summarized in this section were completed between 2000 and 2002. A summary of the locations of borings advanced during these subsurface investigations is provided below:

- In 2000, well boring 01MW07 was advanced near the northeast corner of the ASKO Hydraulic Property based on the initial groundwater sampling date. No soil analytical results were available for review from well boring 01MW07.
- Borings SB-07 through SB-09 were advanced in the vicinity of Former Rail Spurs #2 through #4. No soil analytical results were available for review from boring SB-09.
- Borings SB-32 through SB-34, SB-43, and SB-45 were advanced north of Former Barreling Shed #3 in the vicinity of the Former AST Area. No soil analytical results were available for review from borings SB-33, SB-34, or SB-43.

Soil samples collected from borings SB-07, SB-08, SB-32, and SB-45 were analyzed for one or more of the following: DRPH, ORPH, GRPH, benzene, ethylbenzene, total xylenes, and/or PCP.

### **3.2 GROUNDWATER MONITORING EVENTS**

Monitoring wells located on the ASKO Hydraulic Property were monitored in conjunction with groundwater monitoring events at the Seattle Terminal Properties. A summary of groundwater monitoring events conducted by others before 2006 at the ASKO Hydraulic Property are provided below. The results of the groundwater monitoring events are provided in the following groundwater monitoring reports:

- Final Quarterly Groundwater Sampling Report for July 2004, dated November 2004, prepared by Tetra Tech, Inc.
- Draft Quarterly Groundwater Sampling Report for November 2004, dated March 2005, prepared by Tetra Tech, Inc.
- Annual Event/Fourth Quarter 2005, Groundwater Monitoring Event, dated December 20, 2005, prepared by Landau Associates.

In addition, several groundwater monitoring events were conducted as part of the previous subsurface investigations or interim actions and are included in the summary below. Detailed information regarding field activities, procedures, and results are provided in the referenced reports prepared by others (Appendix F).

Typical groundwater monitoring events included the following work elements:

- Measuring the depth to water from each monitoring well.
- Purging a minimum of three to five monitoring well casing volumes from each monitoring well, or purging groundwater using low-flow sampling method before sampling the monitoring wells.
- Measuring groundwater quality parameters, including temperature, pH, specific conductance, dissolved oxygen, turbidity, and oxidation-reduction potential, and collecting groundwater samples from each monitoring well for selected laboratory analysis.

Up to 10 monitoring events were conducted at the ASKO Hydraulic Property between December 2000 and October 2005. The number of wells sampled per event was based on individual groundwater monitoring event scopes of work. In general, each monitoring event included monitoring wells 01MW07 and 01MW15 at the ASKO Hydraulic Property, and groundwater samples were analyzed for one or more of the following: DRPH, ORPH, GRPH, BTEX, PCP, and/or total and dissolved lead.

### **3.3 PREVIOUS INVESTIGATIONS RESULTS**

This section presents a comprehensive summary of the soil and groundwater analytical results obtained during the previous investigations and groundwater monitoring events conducted by others. Soil boring and monitoring well locations are shown on Figure 5. Cross sections showing subsurface soil characteristics and geologic units encountered in the explorations are presented as Figures 6 through 10. Historical soil analytical results are shown on Figures 11, 12, and 13. Soil analytical results are summarized on Tables 2 through 6 and reconnaissance groundwater analytical results are summarized in Table 7. Groundwater analytical results are summarized on Tables 8 through 11. The groundwater elevation measurements are presented in Table 12.

### 3.3.1 Soil

The analytical results for specific COPCs from the previous investigations conducted from 2000 through 2002 indicated the following.

#### 3.3.1.1 Total Petroleum Hydrocarbons and Volatile Petroleum Compounds

Soil samples collected from 10 borings were analyzed for DRPH, ORPH, GRPH, and/or BTEX. Concentrations of benzene, toluene, and ethylbenzene were not detected at the laboratory reporting limit. Concentrations of DRPH, ORPH, GRPH, and total xylenes were detected in one or more of the selected soil samples collected from the boring locations. The highest detectable concentrations for DRPH, ORPH, GRPH, and total xylenes and the boring location where the soil sample was collected are tabulated below.

Chemicals of Potential Concern	Boring/Highest Detected Concentration (mg/kg)
DRPH	SB-49/2,720
ORPH	SB-49/4,350
GRPH	SB-49/467
Total xylenes	SB-49/23.7

**NOTE:**

DRPH = diesel-range petroleum hydrocarbons

GRPH = gasoline-range petroleum hydrocarbons

mg/kg = milligrams per kilogram

ORPH = oil-range petroleum hydrocarbons

#### 3.3.1.2 Carcinogenic Polycyclic Aromatic Hydrocarbons

Using the toxicity equivalency factor methodology in WAC 173-340-708(8), equivalent concentrations of the cPAHs (benz[a]anthracene, chrysene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, indeno[1,2,3-cd]pyrene, and dibenz[a,h]anthracene) were calculated for the analyzed soil samples. The soil toxic equivalent concentration for the cPAH mixtures ranged from 0.00755 to 0.18. Analytical results of the individual cPAHs were below the laboratory reporting limits for the soil samples analyzed with the exception of two samples collected from boring SB-58 at depths of 2 and 15 feet bgs. The soil samples collected from boring SB-58 had detectable concentrations of chrysene or benzo(a)pyrene; however, the concentrations were below the applicable MTCA Method B cleanup levels. Calculating the toxic equivalent concentrations when analytical results are below the laboratory reporting limit biases the toxic equivalent concentrations high; therefore, the toxic equivalent concentrations are irrelevant and cPAHs are not considered a COPC for the Sites.

#### 3.3.1.3 Chlorinated Volatile Organic Compounds

Select soil samples were analyzed for VOCs from borings SB-40, SB-49, and SB-50. A trichloroethene (TCE) concentration of 0.17 milligrams per kilogram (mg/kg) was detected in boring SB-40 at a depth of 10 feet bgs. Concentrations of TCE were not detected above the laboratory reporting limit in the remaining soil samples.

### 3.3.1.4 Pentachlorophenol

Soil samples were analyzed for PCP in borings SB-06, SB-07, SB-08, and SB-58 at depths ranging from 2 to 25 feet bgs. Concentrations of PCP were not detected at the laboratory reporting limit or were below the MTCA Method B cleanup level of 2.5 mg/kg.

### 3.3.1.5 Metals

Soil samples collected from 7 borings were analyzed for selected metals including arsenic, cadmium, chromium, lead, mercury, selenium, and silver. Concentrations of silver were not detected at the laboratory reporting limit for the selected soil samples analyzed for total metals. Concentrations of arsenic, cadmium, chromium, lead, mercury, and selenium were detected in one or more of the selected soil samples collected from boring locations. The highest detectable concentrations for the individual metals and the boring location where the soil samples were collected are tabulated in the table below.

Chemicals of Potential Concern	Boring/Highest Detected Concentration (mg/kg)
Arsenic	SB-49/7.98
Cadmium	SB-46/1.1
Chromium	SB-50/86.8
Lead	SB-46/11.1
Mercury	SB-50/0.118
Selenium	SB-50/1.44

NOTE:  
mg/kg = milligrams per kilogram

### 3.3.2 Groundwater

The general groundwater monitoring observations and analytical results for specific COPCs from the groundwater monitoring events performed from 2004 through 2005 is summarized below for the Sites.

#### 3.3.2.1 Monitoring Observations

Based on the groundwater reports listed above, depth to water measurements ranged from 22.57 (well 01MW15) to 23.55 (well 01MW07). The flow direction of the shallow water-bearing zone is generally to the northwest for the Seattle Terminal Properties and consistent with the measurements obtained by SoundEarth, as summarized in Section 4.2.

#### 3.3.2.2 Total Petroleum Hydrocarbons and Volatile Petroleum Compounds

Concentrations of DRPH were detected in groundwater samples during the 10 groundwater monitoring events. The highest detectable concentration of DRPH was 1,450 micrograms per liter ( $\mu\text{g/L}$ ) in the groundwater sample collected from monitoring well 01MW15 during the July 2001 groundwater monitoring event. Concentrations of OPRH, GRPH, and BTEX were not detected at the laboratory reporting limit in groundwater samples collected during the 10 groundwater monitoring events.

### **3.3.2.3 Pentachlorophenol**

PCP was detected at a concentration of 1.66 µg/L in the groundwater sample collected from monitoring well 01MW15 during the July 2001 groundwater monitoring event. In subsequent groundwater monitoring events, the concentrations of PCP were below the laboratory reporting limits. Therefore, PCP is not considered to be a COPC for the Sites.

## **3.4 INTERIM ACTION**

A 550-gallon heating oil or waste oil UST located adjacent to the northeast corner of ASKO Industrial Repair was reportedly removed before 2000. No information or analytical results are available for the removal of the UST or on the potential UST that was reportedly located adjacent to the removed UST. No additional interim actions have been conducted at the ASKO Hydraulic Property.

## **4.0 REMEDIAL INVESTIGATION**

SoundEarth performed several phases of remedial investigation field work at the ASKO Hydraulic Property between April 2006 and May 2013 to evaluate the data gaps identified during previous investigations, to assess the extent of COPCs, and to provide sufficient information to support the evaluation of technically feasible cleanup action alternatives for the Sites. The locations of the borings and wells advanced at the Sites are shown on Figure 5. Cross sections depicting subsurface soil characteristics, geologic units encountered in the explorations, and TCE concentrations are presented as Figures 6, 7, 8, 9, and 10. The analytical results for COPCs in soil are illustrated on Figures 11, 12, and 13. Groundwater contours from monitoring events conducted in Second Quarter 2013 are included in Figures 14, 15, and 16. A rose diagram depicting the general groundwater gradient and magnitude from groundwater monitoring events conducted between June 2006 and April 2013 is provided as Figure 17. Groundwater analytical results and TCE isoconcentration maps from monitoring events conducted in Second Quarter 2013 are illustrated on Figures 18, 19, 20, 21, 22, and 23.

Soil analytical results are presented in Tables 2 through 6. Analytical results for reconnaissance groundwater samples are presented in Table 7. Groundwater sample analytical results are presented in Tables 8 through 11. The survey and groundwater elevation data for the monitoring wells installed at the Seattle Terminal Properties are provided in Table 11. Results from the collection natural attenuation parameters are presented in Tables 13 and 14. Analytical results for samples collected for soil physical properties are included in Table 15. Photographs from remedial investigation field activities are included. Detailed boring logs from the remedial investigation are included as Appendix G. A digital copy of laboratory analytical reports is provided in Appendix H.

A summary of data gaps, and remedial investigation field activities and results are provided in the following sections.

### **4.1 DATA GAPS**

The previous investigations performed by others did not provide sufficient information to meet the requirements under MTCA for a remedial investigation. Specific data gaps include the following:

- The lateral and vertical extents of TCE in soil and groundwater at the ASKO Hydraulic Property, BNSF Parcel, and West Commodore Way ROW were not fully delineated.

- The lateral and vertical extents of TPH in soil and groundwater at the ASKO Hydraulic Property, BNSF Parcel, and West Commodore Way ROW were not fully delineated.

## **4.2 REMEDIAL INVESTIGATION FIELD PROGRAM**

The remedial investigation field program was performed between April 2006 and May 2013 was comprised of the following six work elements: utility reconnaissance, soil and reconnaissance groundwater sample collection, monitoring well installation and development, aquifer testing, groundwater monitoring, and management of investigation-derived waste. A summary of the scope of work completed for each work element, as well as the results of the remedial investigation activities, is provided below.

### **4.2.1 Utility Reconnaissance**

Underground Detection Service, Inc. of Seattle, Washington, or Applied Professional Service, Inc. of North Bend, Washington, performed a private utility locate survey before each subsurface investigation and located utilities in the vicinity of the proposed boring locations. Northwest Utility Notification Center was also contacted to locate utilities within the West Commodore Way ROW.

### **4.2.2 Soil and Reconnaissance Groundwater Sample Collection**

This work element included the advancement of direct-push and hollow-stem auger borings, the collection of soil samples from select borings, and the collection of a reconnaissance groundwater sample from direct-push boring B116. Field activities performed within the West Commodore Way ROW were performed in accordance with applicable permits issued by the City of Seattle before beginning work.

Drilling services were provided by Cascade Drilling, L.P. of Woodinville, Washington. A SoundEarth geologist observed drilling activities and collected soil and/or reconnaissance groundwater samples for potential laboratory analysis at each boring location. Field activities were conducted in accordance with a site-specific Health and Safety Plan as required by Part 1910 of Title 29 of the Code of Federal Regulations and WAC 296-843. A summary of the locations of the borings and associated monitoring wells completed during the remedial investigation, as well as the rationale for their locations, is provided below. The boring locations and wells are shown on Figure 5.

- Seven borings (B01 through B07) were advanced at the ASKO Hydraulic Property on April 17 through 20, 2006. Borings B01 through B06 were converted into monitoring wells MW01 through MW06, respectively. Monitoring well MW03 was screened within perched water and monitoring wells MW01, MW02, and MW04 through MW06 were screened within the shallow water-bearing zone. These boring and well locations were selected to assess the quality of soil and groundwater in the vicinity of the steam cleaning area, the oil and solvent storage shed, and the former heating oil and/or waste oil UST(s) adjacent to ASKO Industrial Repair.
- Three borings (SB65 through SB67) were advanced in the central and east portion of the ASKO Hydraulic Property on September 13, 2006, and converted into monitoring wells 01MW44 through 01MW46, respectively. The three monitoring wells were screened in the shallow water-bearing zone. The purpose of these monitoring wells



was to evaluate the quality of soil and groundwater in close proximity or west of the Former AST Area and downgradient of Former Barreling Shed #3.

- Three borings (B73 through B75) were advanced and converted into monitoring wells 01MW52, 02MW13, and 01MW53 on December 5, 2007. These wells were screened in the shallow water-bearing zone. Monitoring wells 01MW52 and 01MW53 were advanced in West Commodore Way to assess the quality of soil and groundwater downgradient of the ASKO Hydraulic Property and directly south of the North Trunk Sewer located beneath West Commodore Way. Monitoring well 02MW13 was located at the East Waterfront Property, downgradient of the North Trunk Sewer and ASKO Hydraulic Property, to evaluate the quality of soil and groundwater for select COPCs.
- Seven borings (B76 through B82) were advanced and converted into monitoring wells 01MW54 through 01MW59 and 02MW14 on November 13, 14, and 17, 2008. Monitoring wells 01MW54 and 01MW57 were installed as well pairs to monitoring wells 01MW44 and MW05, respectively. Monitoring wells 01MW54 and 01MW57 were screened in the intermediate water-bearing zone located approximately 4 feet below the shallow water-bearing zone. The remaining five monitoring wells were screened in the shallow water-bearing zone. The purpose of monitoring wells 01MW54 and 01MW57 was to assess the vertical extent of concentrations of TCE in groundwater near suspected source areas at the ASKO Hydraulic Property. The locations of the remaining monitoring wells were selected to further assess the lateral extent of concentrations of TCE in groundwater at the ASKO Hydraulic Property (01MW55, 01MW56, and 01MW58), near the western boundary of the Bulk Terminal Property (01MW59), and at the West Waterfront Property downgradient of the North Trunk Sewer and the ASKO Hydraulic Property (02MW14).
- On December 29 and 30, 2008, four borings (B83 through B86) were advanced at the ASKO Hydraulic Property. Borings B83 through B86 were converted into monitoring wells 01MW60 through 01MW63, respectively. These wells were screened in the shallow water-bearing zone. Monitoring wells 01MW60 through 01MW62 were advanced upgradient of Former Barreling Sheds #2 and #3 and downgradient of Former Rail Spurs #2 through #5 to assess the lateral extent of concentrations of total petroleum hydrocarbons (TPH) and TCE in soil and groundwater along the boundary of the ASKO Hydraulic Property and the BNSF Parcel. Monitoring well 01MW63 was advanced to further evaluate the lateral extent of concentrations of TCE in soil and groundwater adjacent to Former Barreling Shed #3 on the ASKO Hydraulic Property.
- Fifteen additional borings (B87 through B101) were advanced at the ASKO Hydraulic Property on December 29 and 30, 2008. The purpose of the borings was to assess the quality of unsaturated soil downgradient of Former Barreling Shed #3 and in close proximity to the Former AST Area.
- Two borings (B102 and B103) were advanced at the ASKO Hydraulic Property and converted into monitoring wells 01MW64 and 01MW65 on March 17 and 18, 2009. Monitoring well 01MW64 was installed in the vicinity of Former Rail Spurs #2, #3,

and #4 and screened in the shallow water-bearing zone to evaluate the lateral extent of concentrations of TPH and TCE in soil and groundwater west of monitoring well 01MW62, which had detectable concentrations of TCE and/or its degradation compounds and TPH. Monitoring well 01MW65 was screened in the deep water-bearing zone and installed to assess the vertical extent of concentrations of TCE in groundwater in close proximity to monitoring well 01MW55, which had the highest detectable concentrations of TCE in groundwater from the shallow water-bearing zone.

- Thirteen additional borings (B104 through B116) were advanced on March 17 and 18, 2009, at the ASKO Hydraulic Property. The purpose of the additional borings was to further evaluate the extent of concentrations of TCE in unsaturated soil downgradient of Former Barreling Shed #3 and in close proximity to the Former AST Area.
- Two borings (B131 and B132) were advanced at the ASKO Hydraulic Property on December 29, 2009. These borings were advanced in close proximity to monitoring well 01MW55 where elevated concentrations of TCE in soil and groundwater have been observed. The objective of these borings was to collect soil for a treatability study.
- Borings B133 and B134 were advanced at the ASKO Hydraulic Property on February 11, 2010, and converted into dual-use monitoring wells and soil vapor extraction (SVE) wells 01MW70/01SVE02 and 01MW71/01SVE03, respectively. The wells were screened in the vadose zone where perched water was observed. The purpose of these wells was to further assess the lateral extent of concentrations of TPH and TCE in soil and groundwater along the southern boundary of the ASKO Hydraulic Property and in the vicinity of Former Rail Spurs #2, #3, and #4 and for use during an SVE pilot test.
- Borings B135, B136, and B137 were advanced at the ASKO Hydraulic Property on February 11 and 12, 2010, and converted into SVE well 01SVE01, and injection wells 01IW09 and 01IW10, respectively. The SVE well was installed adjacent to well 01MW55, and the injection wells were installed directly upgradient of monitoring wells 01MW44 and 01MW54.
- Borings B171 through B175 were advanced at the ASKO Hydraulic Property on February 28 through March 3, 2011. Borings B171 through B173 were advanced to the intermediate water-bearing zone, adjacent to existing shallow water-bearing zone monitoring wells to create well pairs, and converted to monitoring wells 01MW76 through 01MW78, respectively. Monitoring well 01MW79 was advanced in perched water to assess the horizontal and vertical extent of contamination in groundwater in close proximity to monitoring well 01MW63. Perched water was not encountered in boring B175; therefore a monitoring well was not installed.
- On April 18 through 21, 2011, borings B188, B189, B190, B191, B193, and B197 were converted to monitoring wells 01MW80, 01MW81, 01MW82, 01MW83, 01MW85, and 01MW89, respectively. These monitoring wells were screened in the shallow water-bearing zone. The purpose of monitoring wells 01MW81 and 01MW82 was to create a monitoring well cluster to be used in the 2011 tracer study, which is

discussed below. Monitoring wells 01MW85 and 01MW89 were installed in the West Commodore Way ROW south of the North Trunk Sewer to further assess the lateral extent of concentrations of TPH and TCE in soil and groundwater downgradient of the ASKO Hydraulic Property. Monitoring well 01MW83 was installed on the southern boundary of the East Waterfront Property, downgradient of the North Trunk Sewer and the ASKO Hydraulic Property.

- Borings B258 through B261 were advanced and converted into monitoring wells 01MW92 through 01MW95, respectively, on August 16 and 17, 2012. The monitoring wells were installed to assess the quality of soil and groundwater and the potential presence of COPCs at the BNSF Parcel in the vicinity of Former Rail Spurs #2, #3, and #4. Monitoring well 01MW92 was screened in perched water located in the vadose zone, and monitoring wells 01MW93 through 01MW95 were screened in the shallow water-bearing zone.
- On May 7, 2013, borings B264 through B266 were advanced and converted into monitoring wells 01MW96 through 01MW98, respectively. The monitoring wells were screened in perched water. The wells were advanced to assess the lateral extent of concentrations of TPH and TCE in soil and groundwater at the BNSF Parcel in the vicinity of Former Rail Spurs #2, #3, and #4.

Direct-push borings were continually sampled from the ground surface to the maximum depth explored, typically using a 4-foot probe rod driven with a 140-pound-per-square-inch hydraulic hammer powered by pressurized hydraulic fluid. The sampler was lined with disposable polyvinyl chloride (PVC) or Teflon sleeves that were removed and opened to reveal the sample after each sample interval driven. Hollow-stem auger borings were sampled at varying intervals ranging from continuous to every 15 feet to the maximum depths explored using a California split-spoon or Dames and Moore sampler advanced through the hollow-stem augers. Blow counts and sample recovery percentages were logged at each sample interval. Upon completion, direct-push borings were backfilled with bentonite and completed with an appropriate surface seal.

Soil samples were described in accordance with the Unified Soil Classification System (USCS) and screened in the field for potential evidence of contamination by using visual observations and notations of odor and by conducting headspace analysis using a photoionization detector (PID) to detect the presence of volatile organic vapors. Headspace analysis was conducted by placing soil from each sample interval into a sealable plastic bag and allowing the sample to warm for at least 30 seconds. The probe of the PID was then inserted into the bag, and the highest reading obtained over an approximately 30-second interval was recorded. The USCS symbol, visual and olfactory notations for the samples, and PID readings were recorded on boring log forms. The boring log forms are provided in Appendix G.

Soil and reconnaissance groundwater samples were placed directly into laboratory-prepared sample containers. The containers were placed in an iced cooler and transported for laboratory analysis to Friedman & Bruya, Inc. of Seattle, Washington; Libby Environmental Incorporated of Olympia, Washington; or TestAmerica Laboratories, Inc., formerly North Creek Analytical, of Bothell, Washington, under standard chain-of-custody protocols.

Laboratory analyses for each soil and reconnaissance groundwater sample were selected, based on the boring locations, suspected COPCs, and suspected source areas associated with historical operations at the Sites. The remedial investigation soil and reconnaissance groundwater samples were submitted for laboratory analysis for one or more of the following: DRPH and ORPH by Northwest Total Petroleum Hydrocarbon (NWTPH) Method NWTPH-Dx; GRPH by Method NWTPH-Gx; BTEX by U.S. Environmental Protection Agency (EPA) Method 8021B, 8260B, or 8260C; VOCs including 1,2-dibromoethane, 1,2-dichloroethane, ethanol, and methyl tertiary-butyl ether by EPA Method 8260B or 8260C; chlorinated volatile organic compounds (CVOCs) by EPA Method 8260B or 8260C; cPAHs by GC/MS-SIM or EPA Method 8270C; and the Resource Conservation and Recovery Act 8 metals, including arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver by EPA Method 6020 and 7471A.

#### **4.2.3 Soil Sampling Results**

A summary of the soil profile observed from soil samples collected from borings advanced during the remedial investigation field program and the soil sample analytical data is provided below. Analytical results for soil samples are presented in Tables 2 through 6. The analytical results for COPCs in soil are illustrated on Figures 11 through 13. Laboratory analytical reports for the soil samples collected during the remedial investigation are included in Appendix H.

##### **4.2.3.1 Soil Profile**

The soil profile observed in borings advanced by SoundEarth and others consisted of fill material from ground surface to depths ranging from 11 to 25 feet bgs, underlain by native deposits to a depth greater than 99 feet bgs. The fill material and native deposits observed included fine- to coarse-grained soil layers comprised of varying amounts of silt and clay, silty sand, sand, and gravel.

There were two distinct soil layers consisting of fill material located throughout the ASKO Hydraulic Property. The upper-most soil layer consists of fine to coarse grain soils that include very loose to very dense silty sand, sand, and gravel from ground surface to up to 6 feet bgs. These soil types exhibit characteristics of the Holocene Fill (Hf) geologic unit. Underlying the Hf geologic unit is the Holocene Depression Fillings (Hdf) geologic unit that consists of very soft to medium stiff, fine grained sand, silt, and clay, with scattered organic particles from 3 to 25 feet bgs.

Underlying the Hf and Hdf geologic units appear to be pre-Fraser-age glacial deposits (Qpf) deposits. The Qpf geologic unit consists of dense to hard, interbedded gravel, sand, and silt. These deposits can be further subdivided into fine- (Qpff) and coarse-grained (Qpfc) deposits. Deposits observed at the ASKO Hydraulic Property are characterized as Qpff deposits, which consist of silt and clay with sandy interbeds. The Qpff geologic unit was encountered through the maximum depth explored of 99 feet bgs at the ASKO Hydraulic Property.

##### **4.2.3.2 Soil Sampling Results**

This section provides the analytical results for soil samples collected from the Sites during the remedial investigation. Analytical results for the soil samples collected during the remedial investigation indicated the following:

- Concentrations of TCE exceeding the preliminary cleanup level were detected in soil samples collected from 51 borings SB-40, MW05/B05, 01MW44/SB65,

01MW45/SB66, 01MW54/B076, 01MW55/B077, 01MW62/B85, 01MW63/B86, B87, B88, B90, B91, B92, B93, B94, B95, B96, B97, B98, B99, B100, B101, 01MW64/B102, 01MW65/B103, B104, B105, B106, B107, B108, B109, B110, B111, B112, B114, B115, B116, B131, 01MW70/01SVE02/B134, 01MW71/1SVE03//B133, 01SVE01/B135, 01IW09/B136, 01IW10/B137, 01MW76/B171, 01MW77/B172, 01MW78/B173, 01MW79/B174, B175, 01MW92/B258, 01MW93/B259, 01MW97/B265, and 01MW98/B266 at depths ranging from approximately 2.5 to 20 feet bgs at the BNSF Parcel and the ASKO Hydraulic Property.

- Concentrations of DRPH exceeding the preliminary cleanup level were detected in soil samples collected from borings B89 through B91, B97, and 01MW80/B188 on the ASKO Hydraulic Property and boring 01MW95/B261 on the BNSF Parcel at depths ranging from approximately 2 to 13 feet bgs.
- Concentrations of ORPH exceeding the preliminary cleanup level were detected in soil samples collected from borings B90 and B116 on the ASKO Hydraulic Property at a depth of approximately 3 feet bgs.
- Concentrations of GRPH exceeding the preliminary cleanup level were detected in soil samples collected from borings MW03/B03 through MW06/B06, B07, 01MW46/SB67, 01MW60/B83, 01MW61/B84, B89 through B91, B94, B97, B99, B100, 01MW64/B102, and 01MW80/B188 on the ASKO Hydraulic Property and boring 01MW95/B261 on the BNSF Parcel at depths ranging from approximately 0.5 to 13 feet bgs.
- Concentrations of benzene exceeding the preliminary cleanup level were detected in soil samples collected from borings 01MW60/B83, B89, B90, B95, B99, and 01SVE01/B135 on the ASKO Hydraulic Property at depths ranging from approximately 0.5 to 14 feet bgs.
- A concentration of toluene exceeding the preliminary cleanup level was detected in the soil sample collected from boring B89 on the ASKO Hydraulic Property at a depth of 13 feet bgs.
- Concentrations of ethylbenzene exceeding the preliminary cleanup level were detected in soil samples collected from borings 01MW60/B83, B89, B97, and B99 on the ASKO Hydraulic Property at depths ranging from approximately 0.5 to 13 feet bgs.
- Concentrations of total xylenes exceeding the preliminary cleanup level were detected in soil samples collected from borings 01MW60/B83, B89, B90, B97, and B99 on the ASKO Hydraulic Property at depths ranging from approximately 0.5 to 13 feet bgs.

#### **4.2.4 Monitoring Well Installation and Development**

A total of 45 new monitoring wells, two injection wells, and a single SVE well were installed and developed as part of the remedial investigation field program between April 2006 and May 2013. The monitoring wells included MW01 through MW06, 01MW07, 01MW15, 01MW44 through 01MW46, 01MW52 through 01MW65, 01MW70, 01MW71, 01MW76 through

01MW83, 01MW85, 01MW89, 01MW92 through 01MW98, 02MW13, and 02MW14; injection wells 01IW09 and 01IW10; and SVE well 01SVE01.

Wells were constructed inside boreholes drilled with augers. Well construction material for 2-inch-diameter wells consisted of Schedule 40 PVC with 0.010-inch slotted screens. The bottom and top of each of the wells were fitted with a threaded PVC bottom cap and a locking compression fit well cap. A filter pack consisting of 2/12 silica sand was placed around each well screen interval. Continuous depth measurements were taken during placement of the filter pack. Bentonite chips, 3/8-inch in diameter, were hydrated and placed above the filter pack up to approximately 2 feet bgs. All of the monitoring wells were completed at the surface with a flush-mounted, traffic-rated well box set in concrete. Monitoring wells 01MW65, 01MW76, 01MW77, and 01MW78 were installed with conductor casing from ground surface to between 28 and 39 feet bgs to prevent dissolved-phase concentrations of COPCs in groundwater within the shallow water-bearing zone from migrating to the intermediate water-bearing and deep water-bearing zones. The approximate screen intervals for the monitoring wells are provided in Table 12. Boring logs detailing well construction are provided in Appendix G.

The monitoring wells were developed with the use of a submersible pump or dedicated bailer. Monitoring well development consisted of surging and purging the wells until a minimum of five submerged well volumes was removed. All non-dedicated field sampling equipment was cleaned and decontaminated between uses and before leaving the ASKO Hydraulic Property.

The monitoring well locations and elevations were surveyed by Axis Survey and Mapping Consulting Engineers of Kirkland, Washington. The monitoring well top of casings and top of monument were surveyed to an accuracy of 0.01 to 0.02 foot using a NAVD88 benchmark. Building footprints and additional features were also surveyed.

#### **4.2.5 Groundwater Monitoring**

Groundwater monitoring and sampling events for the remedial investigation were conducted in April, June, August, September, and December 2006; October and December 2007; October and November 2008; January, April, July, August, and October 2009; January, April, and July 2010; January, April, August, and December 2011; April and October 2012; and April 2013. Each groundwater monitoring and sampling event consisted of a specific set of monitoring wells that were selected to further refine the extent of COPCs in groundwater at the Sites. Groundwater monitoring events consisted of opening the selected set of monitoring wells upon arrival and permitting fluid levels to equilibrate with atmospheric pressure for a minimum of 30 minutes before obtaining depth-to-groundwater, depth-to-light nonaqueous phase liquid (LNAPL), and/or depth-to-dense nonaqueous phase liquid (DNAPL) measurements. Fluid levels were measured to an accuracy of 0.01 feet, relative to the top of well casing, using electronic oil/water interface probes.

Groundwater samples were collected in accordance with SoundEarth's *Standard Operating Procedure (SOP) 007–Groundwater Sampling* and a site-specific work plan summary prepared before the sampling event. Purging and sampling of each monitoring well was performed using a peristaltic pump and dedicated polyethylene tubing at flow rates ranging from approximately 15 to 215 milliliters per minute. The tubing intake was generally placed at 3 feet below the water table in each monitoring well, or in the middle of the screen interval if the screen was submerged or there was less than 3 feet of water column present.

During purging, water quality was monitored using an YSI 556 water quality system, or equivalent water quality meter, equipped with a flow-through cell. A separate turbidimeter was used for turbidity readings. Water quality parameters monitored and recorded during purging included temperature, pH, specific conductance, dissolved oxygen, turbidity, and ORP. Following purging, groundwater samples were collected from the pump outlet tubing located upstream of the flow-through cell, and placed directly into laboratory-prepared sample containers. Each container was labeled with a unique sample identification number, placed on ice in a cooler, and transported for laboratory analysis to Friedman & Bruya, Inc. of Seattle, Washington or TestAmerica Laboratories, Inc., formerly North Creek Analytical, of Bothell, Washington, under standard chain-of-custody protocols.

Groundwater monitoring samples were submitted for laboratory analysis for one or more of the following: DRPH and ORPH by Method NWTPH-Dx; GRPH by Method NWTPH-Gx; BTEX by EPA Method 8021B, 8260B, or 8260C; VOCs, including 1,2-dibromoethane, 1,2-dichloroethane, and methyl tertiary-butyl ether by EPA Method 8260B or 8260C; CVOCs by EPA Method 8260B or 8260C; and/or the Resource Conservation and Recovery Act 8 metals, including arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver by EPA Method 6010 or 7000.

Monitoring wells 01MW07, 01MW44, 01MW45, 01MW52, 01MW53, 01MW55, 01MW60, 01MW62, and 01MW63, 01MW89, 01MW92, and 02MW13 were selected from the existing network of groundwater monitoring wells and sampled for natural attenuation parameters. The selection of monitoring wells for analysis of natural attenuation parameters was based on their location relative to the dissolved-phase TCE groundwater plume in the shallow water-bearing zone. The assessment of natural attenuation parameters was used to evaluate whether biodegradation is occurring and by what processes. Selected samples were submitted for laboratory analysis of one or more of the following natural attenuation parameters:

- Nitrate and nitrite by EPA Methods 300.0, 353.2, 375.4, or Standard Method (SM) 1845
- Sulfate by EPA Methods 300.0, 353.2, 375.4, or SM 1845
- Methane, ethane, and ethene by Method RSK 175
- Total iron and total manganese by EPA Method 200.7 or 200.8
- Ferrous iron by SM 3500FeD
- Total Kjeldahl nitrogen by EPA Method 351.1
- Sulfide by EPA Method 376.1 or SM 4500-S<sup>2-</sup>
- Total phosphorus by EPA Method 365.1 or 365.3
- Alkalinity by SM18 2320B
- Hardness by SM 2340C

In addition, total manganese, total iron, ferrous iron, ferric iron, and sulfate were analyzed using HACH field test kits.

Additional parameters were analyzed as indicators of the subsurface environment and included the following: oxidation-reduction potential (ORP), specific conductivity, turbidity, temperature, and pH.

#### 4.2.5.1 Reconnaissance Groundwater Results

Analytical results from the reconnaissance groundwater sample collected during the remedial investigation indicated the following:

- Concentrations of COPCs were not detected above the laboratory reporting limits and/or the preliminary cleanup levels in the reconnaissance groundwater sample collected from boring B116.

#### 4.2.5.2 Groundwater Results

Analytical results for the groundwater samples collected from perched water within the vadose zone and the three water-bearing zones during the remedial investigation are presented below. Considering the significant elevation changes and associated relative depths below ground surface across the Sites, discussion regarding elevation and depth are presented as NAVD88 elevations.

##### Perched Water

- A discontinuous area of perched water was encountered beneath the BNSF Parcel (monitoring wells 01MW92, 01MW96, and 01MW97) and the southern portion of the ASKO Hydraulic Property (monitoring wells 01MW70, 01MW71, and 01MW79) at depths ranging from approximately 6 to 12 feet bgs (approximate elevations ranging from 50 to 40 feet). Perched water was not encountered during the remedial investigation on the east-central portion of the ASKO Hydraulic Property. Borings B87, B88, B92, B104, B105, B108, and B175 were generally advanced to an elevation of 30 feet and did not encounter perched water. In addition, well 01SVE01 is screened at elevations from 45 to 37 feet and it has been dry since its installation in 2010. The general direction of groundwater flow in the perched water was toward the northeast with a hydraulic gradient of 0.043 feet per foot in June 2013. A contour map for the perched water is presented as Figure 14.
- Perched water was encountered beneath Site 2 in monitoring well MW03 at an elevation of approximately 33 to 35 feet. Based on advanced borings, it appears that the perched water in the vicinity of monitoring well MW03 is very localized.
- Concentrations of TCE exceeding the preliminary cleanup level were detected in the groundwater samples collected from monitoring wells 01MW70, 01MW71, 01MW79, 01MW92, 01MW97, and 01MW98 during one or more of the groundwater monitoring events.
- Concentrations of DRPH exceeding the preliminary cleanup level were detected in the groundwater samples collected from monitoring wells MW03, 01MW70, 01MW71, 01MW79, 01MW92, 01MW96, 01MW97, and 01MW98 during one or more of the groundwater monitoring events.
- Concentrations of ORPH exceeding the preliminary cleanup level were detected in the groundwater samples collected from monitoring wells 01MW70, 01MW71, 01MW79, 01MW92, 01MW97, and 01MW98 during one or more of the groundwater monitoring events.



- Concentrations of GRPH exceeding the preliminary cleanup level were detected in the groundwater samples collected from monitoring wells MW03 and 01MW71 during one or more of the groundwater monitoring events.
- Concentrations of dissolved and total arsenic exceeding the preliminary cleanup levels were detected in the groundwater samples collected from monitoring well MW03 during one or more of the groundwater monitoring events.

### **Shallow Water-Bearing Zone**

- A shallow water-bearing zone was encountered at depths ranging from approximately 20 to 30 feet bgs (approximate elevations ranging from 27 to 17 feet). The general direction of groundwater flow in the shallow water-bearing zone was towards the north-northwest with an average hydraulic gradient of 0.04 feet per foot. A contour map for the shallow water-bearing zone from the April 2013 groundwater monitoring event is presented as Figure 15.
- Concentrations of TCE exceeding the preliminary cleanup level were detected in the groundwater samples collected from monitoring wells MW04, MW05, 01MW07, 01MW15, 01MW44, 01MW45, 01MW55, 01MW60, 01MW62, 01MW63, 01MW64, and 01MW93 during one or more of the groundwater monitoring events.
- Concentrations of DRPH exceeding the preliminary cleanup level were detected in the groundwater samples collected from monitoring wells 01MW53, MW04, MW06, 01MW07, 01MW15, 01MW44, 01MW45, 01MW55, 01MW56, and 01MW63 during one or more of the groundwater monitoring events.
- Concentrations of ORPH exceeding the preliminary cleanup level were detected in the groundwater samples collected from monitoring wells 01MW07, 01MW15, 01MW55, and 01MW63 during one or more of the groundwater monitoring events.
- Concentrations of GRPH, benzene, and/or EDC exceeding the preliminary cleanup levels were detected in the groundwater samples collected from monitoring wells 01MW44, 01MW55, and 01MW63 during one or more of the groundwater monitoring events.

### **Intermediate Water-Bearing Zone**

- The intermediate water-bearing zone was encountered at depths ranging from approximately 26 to 38 feet bgs (approximate elevations ranging from 13 to 2.5 feet). The general direction of groundwater flow in the intermediate water-bearing zone was towards the northwest with an average hydraulic gradient of 0.017 feet per foot. A contour map for the intermediate water-bearing zone from the April 2013 groundwater monitoring event is presented as Figure 16.
- Concentrations of TCE exceeding the preliminary cleanup level were detected in the groundwater samples collected from monitoring wells 01MW54, 01MW76, and 01MW78 during one or more of the groundwater monitoring events. Monitoring wells 01MW54 and 01MW78 initially had concentrations of TCE above the preliminary cleanup level following well installation; however, concentrations of TCE in groundwater samples were below the preliminary cleanup level and/or the

laboratory reporting limit shortly following well installation and have remained below preliminary cleanup levels since 2009 (01MW54) and 2011 (01MW78).

#### **Deep Water-Bearing Zone**

- Concentrations of TCE, DRPH, ORPH, GRPH, and BTEX were not detected above the laboratory reporting limits and/or the preliminary cleanup levels in the groundwater samples collected from monitoring well 01MW65.

#### **4.2.5.3 Natural Attenuation Parameters**

The results for the natural attenuation parameters collected from July 2009 through April 2013 indicated that groundwater within the dissolved-phase TCE plume is both anoxic (iron reducing) and anaerobic (sulfate reducing and methanogenic). Both conditions are conducive to the biodegradation of TCE and its breakdown compounds. These conclusions are based on the following:

- Dissolved oxygen concentrations less than 0.5 milligrams per liter (mg/L) are typically associated with anoxic and anaerobic conditions that are conducive to the biodegradation of TCE (EPA 1998, Bradley 2012). The dissolved oxygen concentrations were typically less than 1 mg/L.
- Nitrate concentrations less than 1 mg/L are typically associated with anoxic and anaerobic conditions that are conducive to biodegradation of TCE (EPA 1998, USGS 2012). The nitrate concentrations were typically less than 1 mg/L.
- Ferrous iron concentrations greater than 1 mg/L are associated with anoxic and anaerobic conditions that can be conducive to the biodegradation of TCE but more suitable to the degradation of vinyl chloride (EPA 1998). Ferrous iron concentrations in monitoring well 01MW55, located in the vicinity of one of the suspected source areas, were typically less than 0.5 mg/L. Ferrous iron concentrations from the remaining monitoring wells were generally greater than 1 mg/L.
- Sulfate concentrations less than 20 mg/L are typically associated with anaerobic conditions that are most conducive to the biodegradation of TCE, cis-1,2-dichloroethene, and trans 1,2-dichloroethene (EPA 1998, USGS 2012). The sulfate concentrations from areas outside the suspected source areas were typically greater than 20 mg/L and may cause competitive exclusion of dechlorination. Within the suspected source area, sulfate concentrations are typically less than 20 mg/L which is more conducive to the degradation of TCE, cis-1,2-dichloroethene, and trans 1,2-dichloroethene.
- Methane concentrations less than 0.5 mg/L are typically associated with anoxic conditions that are most conducive to biodegradation of vinyl chloride (EPA 1998). Concentrations of methane greater than 0.5 mg/L typically lead to the accumulation of vinyl chloride as results of TCE degradation (USGS 2012). The methane concentrations from the monitoring wells are typically less than 0.5 mg/L.
- ORP readings less than 50 millivolts are associated with anoxic and anaerobic conditions that are generally conducive to the biodegradation of TCE and its breakdown compounds (EPA 1998). The ORP readings from the monitoring wells

were typically less than 50 millivolts; however, some anomalously higher ORP readings were measured.

- A pH range of 5 to 9 is optimal to support microbes that support the degradation of TCE and its breakdown compounds under anoxic and anaerobic conditions. The pH of the groundwater from the monitoring wells ranged from 6 to 10.
- GRPH and DRPH present in the groundwater are functioning as organic substrate for the microbes. The microbe's use organic substrate as an energy source which leads to the production of hydrogen. Chlorinated ethenes like TCE and its breakdown compounds act as an electron acceptor for hydrogen, which leads to the removal of chlorine atoms and the degradation of TCE and its breakdown compounds.

The nature and extent of natural attenuation parameters show that biodegradation of TCE is occurring in the shallow water-bearing zone. At one of the suspected source areas (Former Barreling Sheds #2 and #3), vinyl chloride is accumulating under primarily sulfate-reducing conditions. Downgradient of the suspected source area, iron-reducing conditions are dominant in the groundwater and vinyl chloride concentrations are decreasing relative to their concentrations in the source area. Under iron-reducing conditions, vinyl chloride can oxidize to carbon dioxide (mineralization) without degrading to ethene and ethane. Carbon dioxide mineralization appears to be occurring at the suspected source areas since ethene and ethane have not been detected in the shallow water-bearing zone at concentrations above laboratory reporting limits.

#### **4.2.6 Aquifer Testing**

Aquifer testing was conducted at the Seattle Terminal Properties including the ASKO Hydraulic Property between 2009 and 2011 to estimate the hydraulic characteristics of perched water, and the shallow, intermediate, and deep water-bearing zones. The aquifer testing at the ASKO Hydraulic Property included slug testing, a radius of influence tracer study, and laboratory analysis for soil physical properties and organic carbon data. The hydraulic parameters obtained from these tests were used for contaminant fate and transport and development of the CSM. Summary tables and charts of data collected and analyzed and figures from the slug tests are provided in Appendix I.

##### **4.2.6.1 Slug Tests**

In March 2009, SoundEarth conducted slug tests in monitoring wells 01MW44, 01MW57, 01MW62, and 01MW65 to estimate the hydraulic conductivities of the shallow, intermediate, and deep water-bearing zones encountered beneath and downgradient of the ASKO Hydraulic Property. Slug tests were also conducted on an additional five monitoring wells installed in the shallow water-bearing zone at the Bulk Terminal Property and the East Waterfront Property.

The slug used for testing was constructed from a piece of PVC pipe filled with clean sand to displace a known volume within the water column. Water levels were monitored during the slug tests using Aquistar PT2X vented pressure transducers that incorporate automatic logging of water level data using Aquistar Aqua4Plus software. The pressure transducer was programmed to record readings at intervals ranging from 1 second to 1 minute during the slug tests. An electronic water level indicator was also used to obtain periodic manual water level measurements during the slug tests.

The test wells were opened and allowed to equilibrate with the atmosphere for at least 30 minutes prior to conducting each test. The pressure transducer was placed at a depth of at least 2 feet below the targeted submergence depth of the slug. Water levels were monitored after placing the pressure transducer in the monitoring well to confirm that the water level had stabilized before inserting the slug. To start the slug test, the slug was lowered into the well until it was fully submerged. Following the introduction of the slug, water levels were allowed to equilibrate. After equilibration was reached, the slug was quickly removed from the monitoring well to test the rising head, and water levels were allowed to re-equilibrate.

Following field testing, the water level data were downloaded from the pressure transducers, compiled, and processed for analysis. Data processing included selecting the time interval of interest, reducing the measurement frequency where appropriate, and converting the water levels to displacements (change versus the initial water level). Time series files of the recorded displacements for each test were then exported to AquiferWin32 (Environmental Solutions, Inc.) for analysis.

The data were analyzed by the Bouwer and Rice (1976) method, using the procedures described by Bouwer (1989), which pertain to wells screened across the water table. Assumptions of the Bouwer and Rice method include the following (Todd and Mays 2005, Bouwer 1989):

- The aquifer is unconfined and has an apparently infinite areal extent.
- The aquifer is homogeneous, isotropic, and of uniform thickness over the area influenced by the slug test.
- Prior to the test, the water table is (nearly) horizontal over the area that will be influenced by the test.
- The head in the well is lowered instantaneously at time zero, the drawdown in the water table around the well is negligible, there is no flow above the water table.
- The inertia of the water column in the well and the linear and non-linear well losses are negligible.
- The well either partially or fully penetrates the saturated thickness of the aquifer.
- The flow to the well is in steady state.
- Because the water table in the aquifer is kept constant and is taken as a plane source of water, the Bouwer and Rice method can also be used for a leaky aquifer, provided that its lower boundary is an aquiclude and its upper boundary an aquitard.

The results from the slug tests indicated the following:

- The estimated hydraulic conductivity of the shallow water-bearing zone ranged from 3.4 feet per day (ft/day) in monitoring well 01MW62 to 5.7 ft/day in monitoring well 02MW14.
- The estimated hydraulic conductivity of the intermediate water-bearing zone was 2.8 ft/day in monitoring well 01MW57.
- The estimated hydraulic conductivity of the deep water-bearing zone was 6.2 ft/day in monitoring well 01MW65.

- The arithmetic mean hydraulic conductivity from the slug tests for the shallow bearing-zone conducted at the ASKO Hydraulic Property was 4.3 ft/day.

#### 4.2.6.2 Tracer Study

On July 12 and 13, 2011, a radius of influence tracer study was conducted on the ASKO Hydraulic Property. The purpose of the tracer study was to evaluate the radial transport of injectate, which could be used to support the selection of a future cleanup action.

A solution consisting of 2,500 gallons of water with a 10,000 parts per billion Rhodamine WT (fluorescent tracer dye) was mixed in a mixing tank. The solution was injected into monitoring well 01MW81, which was screened within the shallow water-bearing zone. Injection flow rates were estimated by periodic measurement of the water level in the injection tank. Flow was mostly steady during the radius of influence tracer study with an average flow rate of approximately 4 gallons per minute.

The injection was monitored in monitoring wells 01MW82 and MW05, which are screened in the shallow water-bearing zone, and in monitoring well 01MW57, which is screened in the intermediate water-bearing zone. Water levels and temperatures during the test were monitored in monitoring wells 01MW81, 01MW82, and MW05 using Aquistar PT2X vented pressure transducers that incorporate automatic logging of water level data using Aquistar Aqua4Plus software. The pressure transducers were programmed to record readings at intervals ranging from 1 second to 1 minute during the tracer study. An electronic water level indicator was also used to obtain periodic manual water level measurements in monitoring wells 01MW82 and MW05. Fluid conductivity and temperature were monitored in monitoring well 01MW82 using a Hydrolab downhole probe. Water samples were collected from 23 and 25 feet below the top of casing in monitoring wells 01MW82 and MW05, using peristaltic pumps with dedicated tubing. The water samples were analyzed for Rhodamine WT concentrations using an AquaFluor handheld fluorometer. As necessary, the water samples were diluted to achieve concentrations that did not exceed 300 parts per billion (ppb), as recommended by the fluorometer manufacturers. Dilutions were performed with a 10 milliliter handheld pipette.

Concentrations of Rhodamine WT reached a maximum concentration of approximately 5,200 ppb, which was 52 percent of the injectate concentration, in monitoring wells 01MW82 and MW05 between 7 and 8 hours of elapsed time. Fluid conductivity in 01MW82 reached a minimum of 0.154 millisiemens per centimeter, which was 89 percent of the difference between the ambient and injectate values, after 10 hours of elapsed time, which was approximately 19 percent of the ambient value (0.83 millisiemens per centimeters) and approximately 217 percent of injectate conductivity (0.071 millisiemens per centimeter). The fraction of injectate at the minimum measured conductivity value was 89 percent. At the end of the tracer study, fluid conductivity in monitoring well 01MW82 was very close to the injectate value.

The radius of influence parameter as it applies to solute injection describes the distance from the injection well at which a certain goal concentration is observed, after a given time or volume. A 4 to 4.5 foot radius of influence was measured in observation wells 01MW82 and MW05, indicating that with more time and/or a larger volume of injectate, a greater radius of influence may be achieved. No significant changes in water levels or geochemistry conditions were observed in monitoring well 01MW57 during the tracer study indicating the shallow water-bearing zone and intermediate water-bearing zone are separated by a semi-confining to

confining layer described above. The observation data collected and analyzed for the radius of influence tracer study will be provided as an appendix in the FS report.

#### **4.2.6.3 Laboratory Analysis of Soil Physical Properties**

Soil samples were collected from the shallow water-bearing zone in borings B172 and B193 for laboratory analysis of soil physical properties. The samples were collected during drilling activities for the remedial investigation using Dames and Moore samplers lined with 2-inch-long brass rings. The containers were placed in an iced cooler and transported for laboratory analysis to PTS Laboratories, Inc. of Santa Fe Springs, California, under standard chain-of-custody protocols. The samples were submitted for laboratory analysis of the following:

- Moisture content by American Petroleum Institute (API) Recommended Practice (RP) 40 and American Society for Testing and Materials International (ASTM) D2216.
- Bulk and grain density, total and air filled porosity, and total pore fluid saturation by API RP 40.
- Effective permeability to water and hydraulic conductivity by API RP 40 and U.S. Environmental Protection Agency (EPA) Method 9100.
- Total and effective porosity by Modified ASTM D425.
- Fraction organic carbon and total organic carbon by Walkley-Black.
- Particle size analysis by ASTM D422 and ASTM 4464.

Analytical results for the samples analyzed for soil physical properties indicated the following:

- Moisture content was measured at 20.7 percent by weight in the shallow water-bearing zone at 23.3 feet bgs in boring B172 and 20.5 percent by weight at 26.2 feet bgs.
- Dry bulk grain density was measured ranging from 1.43 to 1.55 grams per cubic centimeter ( $\text{g}/\text{cm}^3$ ) in the shallow water-bearing zone. Grain density was measured at  $2.72 \text{ g}/\text{cm}^3$  in the shallow water-bearing zone.
- The total porosity and air-filled porosity in B172 were measured at 47.5 and 18 percent bulk volume, respectively, in the shallow water-bearing zone at 23.3 feet bgs. The total porosity and air-filled porosity in B193 were measured at 43.1 and 11.2 percent bulk volume, respectively, in the shallow water-bearing zone at 26.2 feet bgs at the ASKO Hydraulic Property.
- Total pore fluid saturation was measured at 62.2 percent pore volume in the shallow water-bearing zone of boring B172 and 73.9 percent pore volume in the shallow water-bearing zone of boring B193 at the ASKO Hydraulic Property.
- Effective permeability to water was measured in the shallow water-bearing zone ranged from 201 to 1,082 millidarcys.
- Effective porosity ranged from 32.8 to 33.8 by percent bulk volume for the soil samples collected from the shallow water-bearing zone at the ASKO Hydraulic Property.

- Hydraulic conductivity was measured at  $1.07 \times 10^{-3}$  centimeters per second (cm/sec) in the sample collected from boring B172 in the shallow water-bearing zone and  $1.96 \times 10^{-3}$  cm/sec in the sample collected boring B193 in the shallow water-bearing zone, both of which are consistent with values obtained from slug tests.
- Total organic carbon in the shallow water-bearing zone at the ASKO Hydraulic Property was measured at 520 mg/kg in boring B172.
- Fraction organic carbon in the shallow water-bearing zone at the ASKO Hydraulic Property was measured at 0.000520 grams per gram in the shallow water-bearing zone in B172.
- The particle size distributions are consistent with the visual estimates recorded in the boring logs, which indicate fine to medium sand with total silt and clay contents ranging from approximately 5 to 20 percent in the shallow water-bearing zone.

The values for the soil physical properties correspond to the range of typical values for soils with similar particle size distributions and densities (Freeze and Cherry 1979).

#### **4.2.6.4 Aquifer Testing Analysis**

SoundEarth conducted aquifer testing in the shallow, intermediate, and deep water-bearing zones to analyze contaminant fate and transport. Aquifer properties of water storage include porosity and water transmission includes hydraulic conductivity, hydraulic gradient, and seepage velocity.

The effective porosity ranged from 32.8 and 33.8 by percent bulk volume for soil samples collected from borings B172 and B193 in the shallow water-bearing zone. The soil observed at these borings is representative from the shallow water-bearing zone. Specific yield was not calculated based on limitations associated with the testing methods.

Hydraulic conductivity is the capacity to transmit water. The shallow water-bearing zone hydraulic conductivity values calculated from the slug test and laboratory testing for most of the locations are relatively consistent. Based on the studies, the hydraulic conductivity in the shallow water-bearing zone at the ASKO Hydraulic Property ranges from about 3.4 to 5.7 ft/day. Hydraulic conductivity in the intermediate zone was 2.8 ft/day and the hydraulic conductivity in the deep water-bearing zone was 6.2 ft/day. The hydraulic conductivity values calculated from the slug test results correspond to the soil characteristics observed in explorations completed in monitoring wells on the ASKO Hydraulic Property.

The hydraulic conductivity values analyzed by laboratory samples collected from the shallow water-bearing zone compare favorably to those obtained from the slug tests. This range of hydraulic conductivity values correspond to the range of published values for similar silty sand materials (Coduto 1999). This supports a conceptualization of the water-bearing zones as mostly homogenous at scales ranging from inches to feet. The values for the soil physical properties correspond to the range of typical values for soils with similar particle size distributions and densities (Freeze and Cherry 1979).

The average hydraulic gradient of the shallow water-bearing zone at the Seattle Terminal Properties is 0.07 feet per foot as presented in RI Report. Seepage velocity is calculated by multiplying hydraulic conductivity by the hydraulic gradient and dividing by the porosity. Based

on the results of this aquifer testing analyses, estimated range of groundwater seepage velocity for the shallow water-bearing zone at the ASKO Hydraulic Property is 0.72 to 1.07 ft/day.

#### **4.2.7 Management of Investigation-Derived Waste**

Soil cuttings and wastewater were placed into appropriately labeled, U.S. Department of Transportation-approved vessels and transported to a temporary accumulation area on an asphalt- or concrete-paved area at the Seattle Terminal Properties pending proper disposal to a permitted treatment, storage, and disposal facility. In addition, wastewater generated during 2011 and 2012 remedial investigation field activities was placed into the groundwater pretreatment system located on the Bulk Terminal Property. The pretreatment system treated and discharged to the sanitary sewer system in accordance with the applicable King County Industrial Waste Discharge Permit.

## **5.0 CONCEPTUAL SITE MODEL**

A CSM identifies confirmed and suspected source areas of hazardous substances, primary release mechanisms of COPCs, affected media, transport mechanisms, fate of hazardous substances in the environment, environmental media of potential concern, and exposure pathways for potential receptors. The CSM is the basis for developing technically feasible cleanup alternatives from which a final cleanup action approach is selected. A CSM is dynamic and may be refined when additional information becomes available during the implementation of the feasibility study and cleanup action. Figure 24 is a schematic drawing showing the conceptual site model based on the preliminary exposure assessment. Preliminary exposure assessments for Site 1 and Site 2 are presented on Figures 25 and 26.

This section presents the components of the CSM developed for Site 1 and Site 2 based on the completion of the remedial investigation conducted by SoundEarth and others. This section also includes a discussion of the confirmed and suspected source areas, affected media, contaminant fate and transport, and the preliminary exposure assessment.

### **5.1 CONFIRMED AND SUSPECTED SOURCE AREAS**

A source area is the location of a release of a hazardous substance (i.e., TCE, TPH, and arsenic) that has affected one or more of the following at a site: soil, surface water, groundwater, or air quality. The historical mechanical systems used for facility operations and processes, and unknown releases including spills and leaks are identified as confirmed and suspected sources of releases of hazardous substances. The confirmed and suspected source areas for Site 1 are listed below:

- Former Rail Spurs #1 through #5
- Former underground distribution pipelines
- Former Barreling Sheds #2 and #3
- Former West and East Barrel Inclines
- Former ASTs

The confirmed and suspected source areas for Site 2 are listed below:

- Former vehicle maintenance facility



- ASKO Industrial Repair machine shop
- Steam cleaning area
- General waste storage including oils and solvents
- Former heating oil and/or waste oil UST(s)

Confirmed and suspected source areas for the Site 1 and 2 are located in the vicinity of the historical mechanical systems and operational areas and where the highest concentrations of COPCs are present at the Sites.

## **5.2 AFFECTED ENVIRONMENTAL MEDIA**

The affected environmental media consists of soil and groundwater with COPCs that were detected at concentrations exceeding their respective preliminary cleanup levels. Soil vapor and outdoor air has been retained as a medium of potential concern based on the concentrations of TCE and TPH in soil and groundwater. The cleanup of the affected soil and groundwater is expected to result in the elimination of soil vapor and outdoor air as a future medium of concern for the Sites. Based on the results of the remedial investigation, the primary COPCs at Site 1 are TPH and TCE and at Site 2 are TPH, TCE, and arsenic (groundwater only).

## **5.3 CONTAMINANT FATE AND TRANSPORT**

Fate and transport of COPCs in affected environmental media are dependent on the physical and chemical properties of the COPC and the geochemical and hydraulic properties of the subsurface environment. Contaminants may exist in four phases in a subsurface environment from a release of a hazardous substance. The four phases include: free-phase (nonaqueous-phase liquid [NAPL]), sorbed-phase (adsorbed to organics or clay soil particles), aqueous-phase (dissolved in water) and gaseous-phase (volatilization from soil or water to air). Commonly, contaminants exist in multiple phases with some degree of partitioning between phases. The contaminant phase depends not only on the properties of the COPC and the site-specific geological properties, but also on the magnitude and extent of release. The physical and chemical properties that control the fate and transport of COPCs include specific gravity, solubility, vapor pressure, Henry's Law constant, and the octanol-water partition coefficient.

### **5.3.1 Physical and Chemical Properties Affecting Fate and Transport**

Specific gravity (SG) is a dimensionless number relating the density of a compound to the density of water. Density is the ratio of mass to volume and is a predictor of whether the compound will sink or float in the subsurface. Compounds that are less dense than water (SG less than 1) will tend to float and the free-phase will create a layer of LNAPL. Conversely, compounds that have a SG greater than 1 will tend to sink and collect as dense nonaqueous-phase liquid.

Solubility is a measure of the extent to which a compound dissolves in water and is defined as the maximum concentration of the compound that will dissolve in water at a given temperature. A compound with high water solubility would be expected to exist at higher aqueous-phase concentrations than a compound with low water solubility. For example, gasoline may exist as free-phase or NAPL layer because of its limited water solubility, while miscible (i.e., capable of being and remaining soluble in water) compounds such as methanol would not form a NAPL layer. The solubility of a chemical compound is a function of attractive forces between the

solute and water and the size and shape of the molecule. Solubility is inversely proportional to molar volume. The presence of functional groups (e.g. halogens) decreases the chemical compounds water solubility.

The vapor pressure ( $P_v$ ) is a measure of the pressure exerted by the compound on the atmosphere and is an indication of volatility or the transfer of the compound from the liquid to the gaseous phase. Henry's Law constant (H) is the best indicator of a chemical's propensity to volatilize from water. Henry's law constant is the ratio of a compound's concentration in air to the concentration in water, or the ratio of vapor pressure to solubility. The potential for volatilization from water increases with increasing vapor pressure and decreases with increasing water solubility. However, compounds with low vapor pressures may have a tendency to volatilize if the water solubility is sufficiently low.

A sample set of ranges of Henry's Law constants from Watts 1998 and what the ranges indicate is provided herein. A Henry's Law number less than  $10^{-7}$  atmosphere-cubic meters/mole would indicate that a pollutant is less volatile than water or a pollutant concentration may increase. A Henry's Law constant between approximately  $3 \times 10^{-7}$  to  $2 \times 10^{-5}$  atmosphere-cubic meters/mole could indicate that a pollutant tends to partition into water where the transfer is gaseous-phase controlled, a pollutant may volatilize slowly, or volatilization may be significant in shallow rivers. A range of  $2 \times 10^{-5}$  to  $10^{-2}$  atmosphere-cubic meters/mole could indicate that volatilization of pollutants may not be rapid but will possibly be significant, volatilization of pollutants may be significant in all water, or the liquid phase may control pollutant volatilization.

Sorption is primarily driven by the hydrophobicity of a chemical compound. The octanol-water partition coefficient ( $K_{ow}$ , unitless) is an effective indicator of hydrophobic partitioning and an important predictor of a compounds behavior in the environment.  $K_{ow}$  has been correlated to bioaccumulation, toxicity, and tendency to sorb to soil organic matter and clay.  $K_{ow}$  is usually reported as  $\log K_{ow}$  because values range from 0.001 to over  $10^8$ . Generally, the higher the  $\log K_{ow}$ , the more hydrophobic the compound is and the greater the tendency for the chemical to be sorbed to soil rather than dissolved in water.

In addition, geochemical parameters, such as the amount of soil organic matter, clay, and metals and their oxidation states, also impact the fate and transport of contaminants in the subsurface environment. Examples include:

- Soils with more organic matter and clay content are more likely to cause contaminants to adsorb.
- Ferrous iron (Fe[II]) present in soils serves as a very important abiotic reductant that can reduce a wide variety of organic pollutants.

### **5.3.2 Contaminant Fate**

Once a released COPC is present in the environment, each phase is subject to abiotic and/or biotic transformation processes. Abiotic transformation processes include hydrolysis, oxidation-reduction reactions by soil minerals, and elimination reactions. Hydrolysis is the addition of hydrogen and hydroxyl ions of water to a molecule which causes the compound to split into simpler molecules which are easily biodegraded. Iron oxides present in the soil can serve as a reductant and reduce oxidized organics. Generally, abiotic degradation plays a limited role in degradation compared to the biologically mediated degradation of organic compounds. Biotic

transformation processes are oxidation-reduction reactions mediated by microorganisms. Microorganisms present in the subsurface have the capacity to oxidize reduced compounds (petroleum hydrocarbons) and/or reduce oxidized compounds (chlorinated hydrocarbons and phenols), thereby degrading the contaminants.

### **5.3.3 Contaminant Transport**

Contaminant transport is the processes by which COPCs move through porous soil media. The principal transport mechanisms for COPCs in affected environmental media include advection, dispersion, diffusion, and adsorption. Advection is the process by which moving water carries dissolved-phase contaminants or air transports vapor-phase contaminants through porous media. Typically, advection is the primary transport mechanism for contaminant mass to move in groundwater. Mechanical dispersion is the different flow paths that contaminants take through porous media and it is a result of the advection and dispersion of water or air. Dispersion and the direction of flow is controlled by the permeability of soil media and pressure gradients. Mechanical dispersion may dilute contamination by mixing with non-contaminated water or air.

Diffusion is the process where contamination in water or air moves from areas of higher concentration to areas of lower concentration. Initially, contamination travels through the porous soil media where the permeability is highest. Over time, the contamination may diffuse into low permeability areas based on proximity, pore openings, and relatively lower concentrations of COPCs. It is possible for the COPCs to move through a porous media by diffusion even if the water and air is not moving. When water or air is moving very slowly, diffusion may become the primary transport process. Adsorption occurs when dissolved-phase contaminants interact with soil with high organic matter or clay particles and temporarily adsorb on the surface of the soil. Adsorption is caused by an imbalance in electrical charge in the soil particles which may be satisfied by adsorbing a charged ion from dissolved-phase contamination. This process results in the retardation of the contamination.

## **5.4 CHEMICAL SPECIFIC FATE AND TRANSPORT**

The contaminant fate and transport of COPCs in affected environmental media is dependent on the physical and chemical properties of individual components, such as specific gravity, solubility, vapor pressure, Henry's Law constant, and sorption. The chemical-specific fate and transport of the primary COPCs at the ASKO Hydraulic Property are discussed below.

### **5.4.1 Trichloroethene and Associated Chlorinated Ethenes**

The environmental fate for TCE in groundwater is similar to that of TPH, except that due to its high specific gravity ( $SG = 1.464$ ), TCE tends to sink while TPH will float. The low water solubility ( $S=1,312$  mg/L) and high vapor pressure (58 mm Hg @ 20°C) yield a Henry's Law constant of 0.0091 which indicates that TCE will rapidly volatilize from water and exist in soil gas. A log  $K_{ow}$  of 2.33 suggests TCE is relatively mobile in the subsurface.

TCE is a highly oxidized compound that undergoes both abiotic and biotic degradation processes. Abiotic processes typically include hydrogenolysis, dihaloelimination, and/or hydrolysis of a contaminant. Biodegradation of TCE proceeds anaerobically through a reductive dechlorination pathway. During reductive dechlorination, bacteria gain energy by transferring electrons from an electron donor ( $H_2$ ) to an electron acceptor (TCE). The chlorine atoms of TCE

are sequentially replaced with hydrogen atoms. This process can often be mediated by indigenous bacterial cultures, but is susceptible to stalling at the ci-1,2-DCE or VC dechlorination step. To date, *Dehalococcoides* is the only species known to be capable of complete reductive dechlorination of chlorinated ethenes to ethene.

The principal fate and transport mechanisms for TCE in affected environmental media at the Sites are summarized below:

- The lateral distribution of TCE concentrations in soil is likely a result of transport via direct contact from historical surface releases of TCE and transport over time via movement of dissolved-phase TCE in groundwater and sorptive capacity of the soil matrix.
- Dissolved-phase TCE in groundwater will migrate with the horizontal and vertical groundwater gradients. The lateral groundwater flow direction at the ASKO Hydraulic Property is to the northwest. Concentrations of TCE in groundwater are typically highest in the source areas and decrease along the groundwater flow path due to dilution with unaffected groundwater and sorption onto soil particles.
- The transport of vapor-phase TCE in the subsurface is a result of volatilization of TCE released in confirmed and suspected source areas to the subsurface and dispersion through the unsaturated subsurface via natural mechanisms, such as barometric fluctuations.
- Release(s) of TCE from unknown historical facility operations and processes to the subsurface environment may result in an accumulation of DNAPL and/or the contamination of the environmental media of potential concern via phase partitioning. No DNAPL has been observed at Site 1 or Site 2 in the monitoring well network.

The results from the remedial investigation indicate the presence of TCE at concentrations that exceed the preliminary cleanup levels in soil and groundwater beneath the Sites. The site-specific results from the remedial investigation for soil and groundwater are summarized below by site.

#### **5.4.1.1 Site 1**

The remedial investigation conducted by SoundEarth and historical investigations conducted by others at Site 1 have demonstrated the following:

- The highest concentrations of TCE were in soil samples collected in the vicinity of the Former Rail Spurs #1 through #4 and Former Barreling Shed #2. These confirmed and suspected source areas are located on the south portion of the ASKO Hydraulic Property and on the north portion of the BNSF Parcel. Concentrations of TCE in soil exceeding the preliminary cleanup levels were present approximately 2 to 30 feet bgs at Site 1 (Figures 6, 7, 8, 9, and 11).
- The highest concentrations of TCE in groundwater are present in the perched water and shallow water-bearing zone in the vicinity of the Former Rail Spurs #1 through #4 and Former Barreling Shed #2. Additional concentrations of TCE exceeding the preliminary cleanup levels in groundwater have been observed in the shallow water-bearing zone and intermediate water-bearing zone in the vicinity of the Former AST

Area. The deep water-bearing zone has not been impacted by TCE (Figures 18 through 21).

#### 5.4.1.2 Site 2

The remedial investigation conducted by SoundEarth and historical investigations conducted by others at Site 2 have demonstrated the following:

- The highest concentrations of TCE were in soil samples collected in the vicinity of the general waste storage area. This confirmed and suspected source area is located in the northwest portion of the ASKO Hydraulic Property. Concentrations of TCE in soil exceeding the preliminary cleanup levels were present approximately 10 to 22.5 feet bgs at Site 2 (Figures 9, 10, and 11).
- The highest concentrations of TCE in groundwater are present in the shallow water-bearing zone in the vicinity of the general waste storage area. The intermediate water-bearing zone has not been impacted by TCE (Figures 18 through 21).

#### 5.4.2 Total Petroleum Hydrocarbons and Volatile Petroleum Compounds

In general, petroleum hydrocarbons with lower carbon numbers (e.g., GRPH and BTEX) are more soluble, and have lower log  $K_{ow}$  values and higher vapor pressures than petroleum hydrocarbons with higher carbon numbers (e.g., DRPH and ORPH). Therefore, GRPH and BTEX are more mobile, have less affinity to sorb to soil organic matter, are more likely to exist in vapor form, and are more easily biodegraded than heavy fuel fraction. For example, benzene is moderately water soluble (1,770 mg/L), tends to rapidly volatilize from water ( $H = 5.48 \times 10^{-3}$ ), is quite hydrophobic and will sorb to soil ( $\log K_{ow} = 2.05$ ). Dodecane (a 12 carbon compound in DRPH) is nearly insoluble in water ( $S = 0.008$  mg/L), may volatilize from water ( $H = 24.2$ ), but not as free-phase ( $P_v = 0.3$  mm Hg), and will strongly sorb to soil ( $\log K_{ow} = 6.44$ ).

Biodegradation of TPH in groundwater is dependent on the oxidation-reduction conditions of the groundwater, which is a function of the presence or absence of electron acceptors that support biologically mediated degradation. Biologically mediated oxidation of TPH occurs most effectively under aerobic conditions. Aerobic metabolism occurs when microorganisms transfer electrons from the electron donor (TPH) to an electron acceptor ( $O_2$ ) in order to gain energy.  $O_2$  is the most energetically favored electron acceptor followed by nitrate ( $NO_3^-$ ), manganese or ferric oxides ( $MnO_2$ ), sulfate ( $SO_4^{2-}$ ) and carbon dioxide ( $CO_2$ , methanogenesis). Aerobic metabolism tends to be the quickest form of biodegradation of TPH. Biodegradation occurs when the contaminants are in the dissolved-phase in groundwater or in the capillary fringe. TPH biodegrades at faster rates under aerobic conditions, which are typically found at dissolved-phase plume boundaries. Aerobic biodegradation occurs first in the source area, depleting oxygen levels and creating a predominantly anaerobic environment.

The principal fate and transport mechanisms for TPH and BTEX at Site 1 and Site 2 in affected environmental media are summarized below:

- The lateral distribution of concentrations of TPH and BTEX in soil is a result of transport via adsorption of the soil matrix and direct contact of LNAPL.

- Surface erosion may transport contaminated soil to surface water. The direct contact of contaminated soil with surface water and groundwater may result in soil to water partitioning via leaching.
- The lateral distribution of concentrations of TPH and BTEX in groundwater is a result of direct contact with historical releases of LNAPL and associated LNAPL to water partitioning, and leaching of adsorbed-phase petroleum-contaminated soil via soil-to-water partitioning, and the natural attenuation processes, such as advection/dispersion, diffusion, sorption, and biodegradation.
- Natural mechanisms, including temperature, groundwater, and barometric pressure fluctuations, may result in the volatilization of TPH and BTEX in soil and groundwater to soil vapor via soil and/or groundwater to air partitioning. Soil vapor with concentrations of TPH and BTEX may transport to the surface with barometric pressure fluctuations.
- Release(s) of TPH from historical facility operations and processes to the subsurface environment may result in an accumulation of LNAPL and/or the contamination of the environmental media of potential concern via phase partitioning. No LNAPL has been observed at Site 1 or Site 2 in the monitoring well network.

The results from this remedial investigation indicate the presence of TPH and BTEX at concentrations that exceed the preliminary cleanup levels in soil and groundwater beneath the Sites. The site-specific results from the remedial investigation for soil and groundwater are summarized below by site.

#### **5.4.2.1 Site 1**

The remedial investigation conducted by SoundEarth and historical investigations conducted by others at Site 1 have demonstrated the following:

- The highest concentrations of TPH were in soil samples collected in the vicinity of the Former Rail Spurs #1 through #4 and Former Barreling Shed #2. These confirmed and suspected source areas are located on the south portion of the ASKO Hydraulic Property and the north portion of the BNSF Parcel. Concentrations of TPH in soil exceeding the preliminary cleanup levels were present approximately 2 to 13 feet bgs Site 1 (Figures 12 and 13).
- The highest concentrations of TPH in groundwater are present in the perched water and shallow water-bearing zone in the vicinity of the Former Rail Spurs #1 through #4 and Former Barreling Shed #2. Detectable concentrations of TPH in groundwater above the preliminary cleanup levels are not present in the intermediate water-bearing zone and the deep water-bearing zone (Figures 22 and 23).

#### **5.4.2.2 Site 2**

The remedial investigation conducted by SoundEarth and historical investigations conducted by others at Site 2 have demonstrated the following:

- The highest concentrations of TPH were in soil samples collected in the vicinity of the general waste storage area. These confirmed and suspected source areas are located in the northwest portion of the ASKO Hydraulic Property. Concentrations of

TPH in soil exceeding the preliminary cleanup levels were present approximately 1 to 7.5 feet bgs at Site 2 (Figures 12 and 13).

- The highest concentrations of TPH in groundwater are present in the perched water and the shallow water-bearing zone in the vicinity of the general waste storage area. Detectable concentrations of TPH in groundwater above the preliminary cleanup levels are not present in the intermediate water-bearing zone (Figures 22 and 23).

## 5.5 PRELIMINARY EXPOSURE ASSESSMENT

The preliminary exposure assessment identifies potential receptors for exposure pathways for environmental media of potential concern from contaminant fate and transport mechanisms. Potential receptors at risk from exposure associated with the presence of COPCs at the Sites are human and ecological receptors. The two potential receptors were segregated into subcategories to better identify the potential receptors at risk of exposure from the presence of COPCs in environmental media of potential concern. The subcategories for human health include workers, recreational use, drinking water consumption, and fish and shellfish consumption and for ecological include terrestrial and aquatic biota.

The objective of the preliminary exposure assessment is to assess the completeness of exposure pathways from environmental media of potential concern and associated contaminant fate and transport mechanisms for the potential receptors for the Sites. The results from the preliminary exposure assessment will assist with the evaluation of potential feasible cleanup alternatives that are protective of the potential receptors for the Sites. The results from the preliminary exposure assessment will assist with the evaluation of potential feasible cleanup alternatives that are protective of the potential receptors identified as complete. The preliminary exposure assessment for the Sites is illustrated in flow diagrams (Figures 25 and 26). The preliminary exposure assessment for each exposure pathway and associated environmental media of potential concern is summarized below by affected environmental media.

### 5.5.1 Soil

Soil with concentrations of COPCs above the preliminary cleanup levels may present a potential exposure pathway to human and/or ecological receptors. The principal contaminant fate and transport mechanisms for soil at the Sites include sorption, erosion, leaching, and volatilization (Figures 25 and 26). Leaching of TCE and TPH from soil by dissolution and desorption to groundwater is discussed below:

- **Direct Contact (Dermal Contact and Ingestion) with Subsurface Adsorbed-Phase Contaminated Soil.** This exposure pathway is complete for subsurface soil at Site 1 and Site 2 via dermal contact or ingestion. The standard point of compliance for the direct contact exposure pathway for soil is 15 feet bgs for human health and 6 feet bgs for terrestrial receptors, which represents a reasonable depth that could be excavated during normal redevelopment activities and distributed at the ground surface (WAC 173-340-[6][d] and WAC 173-340-7490[4][b]). COPCs above the preliminary cleanup levels are present in shallow subsurface soil within 6 feet bgs at Site 1 and Site 2. Areas where subsurface contaminated soil is present are covered by paved surfaces or with crushed rock or low growing vegetation to prevent the migration of material by erosion transport mechanisms.

COPCs above the preliminary cleanup levels are present in near surface soil within 2 feet bgs at Site 1. Areas where near surface contaminated soil is present are covered with grass and low growing vegetation, which may not prevent the migration of material by erosion transport mechanisms.

- **Direct Contact of Surface Water Runoff.** Surface water runoff does not come in contact with soil with concentrations of COPCs at Sites 1 or 2, which presents a leaching pathway of COPCs by dissolution or desorption. This exposure pathway is considered incomplete for potential receptors for Site 1 and Site 2.
- **Inhalation of Soil Vapor/Outdoor Air.** This exposure pathway is considered complete for worker and terrestrial receptors by potential inhalation of volatile COPCs originating in the vadose zone and ambient air for Sites 1 and 2. The air-filled pore space between soil grains in the unsaturated zone or partially saturated zone is referred to as soil gas or soil vapor. TCE and low molecular weight aromatic and aliphatic TPH fractions are highly volatile due to their relative low vapor pressures. The volatilization of TCE from potential DNAPL and TPH fractions from LNAPL, and from adsorbed-phase contaminated soil can accumulate the concentrations of TCE and TPH in soil vapor and migrate to the surface to locally impact outdoor air quality near the unpaved surfaces. Once in the atmosphere, the vapors are unlikely to result in an exposure pathway to the general public due to the vapors being dispersed and/or degraded.

### 5.5.2 Groundwater

Groundwater is affected by surface and subsurface releases of COPCs and the leaching of potential DNAPL or LNAPL directly into a groundwater-bearing zone and the leaching of TCE and TPH into infiltrating surface water that passes through unsaturated adsorbed-phase soil and migrates to groundwater. Groundwater with concentrations of COPCs above the preliminary cleanup levels may present a potential risk to human and/or ecological receptors. The primary contaminant fate and transport mechanism for groundwater at the Sites include sorption, advection/dispersion, diffusion, and volatilization (Figures 24, 25, and 26). Other contaminant fate and transport processes, such as biodegradation and oxidation or reduction, are expected to have minor to no influences in reducing potential exposures of COPCs to receptors. The biodegradation and oxidation or reduction processes appear to be occurring at a naturally slow rate to significantly contribute to the fate and transport processes of COPCs for Site 1 and Site 2.

- **Direct Contact of Surface Water.** This exposure pathway is considered incomplete for potential receptors. The discharge of dissolved-phase TCE and TPH from groundwater hydraulically connected to Salmon Bay sediments is unlikely based on empirical evidence showing that concentrations of TCE and TPH at compliance monitoring wells located downgradient of Site 1 and Site 2 do not contain concentrations of TCE and TPH above laboratory reporting limits and/or the preliminary cleanup levels.
- **Direct Contact and Inhalation of Groundwater.** The perched water and the shallow and intermediate water-bearing zones at Site 1 and the perched water and shallow water-bearing zone at Site 2 have detectable concentrations of COPCs above the preliminary cleanup levels. Current access to the perched water, shallow water-



bearing zone, and intermediate water-bearing zone (Site 1) is limited to workers via environmental sampling. There is no drinking water supply wells located in the vicinity of the Sites. A potential receptor at risk from this exposure pathway, if groundwater beneath the Sites is developed for use, is drinking water. It is unlikely that water beneath the Sites would be used for drinking water because of the availability of municipal water supplies and current land use of the Sites; however, there is a potential that future land use could allow for use of groundwater beneath the Sites as a drinking water source with approval from Ecology. Therefore, the exposure pathways for direct contact with dissolved-phase contaminated groundwater and inhalation of vapors from dissolved-phase groundwater is considered complete for workers and could be complete for drinking water receptors for the perched water (workers only), shallow water-bearing zone, and intermediate water-bearing zone (Site 1 only).

The exposure pathway for the deep water-bearing zone at Site 1 is considered incomplete for potential receptors. Deep zone well 01MW65 is installed next to shallow zone monitoring well 01MW55. Monitoring well 01MW55 has had some of the highest detectable concentrations of TCE and other COPCs in groundwater for Site 1. Monitoring well 01MW65 was installed to assess the potential vertical migration of TCE and its degradation compounds in groundwater for Site 1. Groundwater sample analytical results collected from deep zone monitoring well 01MW55 indicate that concentrations of TCE and other COPCs are below the preliminary cleanup levels. These groundwater analytical results also indicate that the concentrations of TCE and other COPCs in groundwater within the shallow water-bearing and intermediate water-bearing zones are not migrating vertically to the deep water-bearing zone and the semi-confining unit above the deep zone is acting as an attenuation barrier for the dissolved-phase TCE and TPH plumes.

The exposure pathway for the intermediate water-bearing zone at Site 2 is considered incomplete for potential receptors. Intermediate zone well 01MW57 is installed next to shallow zone monitoring well MW05, which has had some of highest detectable concentrations of TCE and other COPCs in groundwater. This monitoring well was installed as a well pair to MW05 to assess the potential vertical migration of TCE and its degradation compounds in groundwater for Site 2. Groundwater sample analytical results collected from intermediate zone monitoring well 01MW57 show that concentrations of COPCs are below the preliminary cleanup levels, and indicate that the concentrations of TCE and other COPCs in groundwater within the shallow water-bearing zone are not migrating vertically to the intermediate water-bearing zone and the semi-confining unit above the intermediate zone is acting as an attenuation barrier for the dissolved-phase TCE and TPH plumes.

- **Inhalation of Soil Vapor/Outdoor Air.** This exposure pathway is considered complete for worker and terrestrial receptors via volatilization of the COPCs in groundwater to the vadose zone and outdoor air with subsequent inhalation by potential receptors. TCE and low-range fuel fraction TPH tend to be highly volatile due to their relative low vapor pressures. The volatilization of TCE from potential DNAPL and TPH from LNAPL, sorbed-phase soil, and dissolved-phase groundwater

can accumulate the concentrations of TCE and TPH in soil vapor and migrate to the surface to locally impact outdoor air quality near the unpaved surfaces. Once in the atmosphere, the vapors are unlikely to result in an exposure pathway to the general public due to the vapors being dispersed, diluted, and/or degraded by photolysis.

## **5.6 TERRESTRIAL ECOLOGICAL EVALUATION**

A Terrestrial Ecological Evaluation (TEE) is required by WAC 173-340-7940 at locations where a release of a hazardous substance to soil has occurred. The TEE is intended to assess potential risk to plants and animals that live entirely or primarily on affected land. A simplified TEE was required under MTCA to assess the potential ecological risks posed by contamination at the Sites, and to evaluate whether a more detailed investigation of potential ecological risk would be required. SoundEarth conducted a simplified TEE in accordance with Table 749-1 of WAC 173-340-900 and the protocols established in WAC 173-340-7492 to assess the potential ecologic risk associated with the presence of COPCs at the Sites.

The Sites do not qualify for a TEE exclusion based on WAC 173-340-7491. A site-specific TEE shall be conducted in accordance with WAC 173-340-7493 under consultation from Ecology per WAC 173-340-7493(1)(c).

## **6.0 PLANNED WORK**

The information collected during the remedial investigation is sufficient to provide a refined conceptual site model and meets the specific MTCA requirements in WAC 173-340-350. Based on the refined conceptual site model, a feasibility study will be conducted for the ASKO Hydraulic Property to develop and evaluate feasible cleanup action alternatives in accordance with WAC 173-340-360 through 173-340-390.

## 7.0 BIBLIOGRAPHY

- American Society for Testing and Materials International. 2006. *ASTM D-2488-06, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*. November.
- Anchor QEA. 2012. *Supplemental Remedial Investigation Report DRAFT East Waterway Operable Unit SRI/FS*. March.
- Booth, Derek B., Kathy Goetz Troost, Scott A. Shimel (Booth et al.). 2005. Geologic Map of Northwestern Seattle (Part of the Seattle North 7.5' X 15' Quadrangle), King County, Washington. U.S. Geological Survey Scientific Investigations Map 2903.
- Bradley, P.M. 2012. Microbial Mineralization of cis-Dichloethene and Vinyl chloride as Component of Natural Attenuation of Chloroethene Contaminants under Conditions Identified in Field as Anoxic. United State Geological Survey Scientific Investigation Report 2012-5032, 30 p.
- Bouwer, H. 1989. The Bouwer and Rice Slug Test—An Update. *Ground Water* 27(3):304-309.
- City of Seattle Department of Planning and Development (DPD). 2001. Side Sewer Card #s 3724-3 and 3724-5. Reviewed online at the City of Seattle Department of Planning and Development Website <<http://www.seattle.gov/dpd/>>.
- \_\_\_\_\_. 2013a. Seattle's Industrial Zones reviewed online at the City of Seattle Department of Planning and Development Website <[http://www.seattle.gov/dpd/cs/groups/pan/@pan/documents/web\\_informational/dpds021569.pdf](http://www.seattle.gov/dpd/cs/groups/pan/@pan/documents/web_informational/dpds021569.pdf)>. October.
- \_\_\_\_\_. 2013b. Environmentally Critical Areas reviewed online at the City of Seattle Department of Planning and Development Website <<http://web1.seattle.gov/dpd/parceldata/parcel.aspx?pin=4237900405#>>.
- Converse Davis Dixon Associates, Inc. 1976. *Report of Geotechnical Exploration, North Truck Sewer – Rehab IV, Seattle, Washington*. Reviewed at the King County Transportation and Natural Resources Library. June 14.
- \_\_\_\_\_. 2003. *North BINMIC Hydrogeologic and Environmental Settings Report, Ballard Interbay North Manufacturing Industrial Center USEPA Brownfields Pilot Project*. August.
- Foster Wheeler Environmental Corporation (Foster Wheeler). 2000. *Environmental Site Assessment: Phase I at 2805 West Commodore Way, Seattle, Washington*. August 25.
- \_\_\_\_\_. 2001a. *Final Environmental Site Assessment: Phase II at 2805 West Commodore Way, Seattle, Washington*. April 6.
- \_\_\_\_\_. 2001b. *Phase III Environmental Site Assessment, 2737 and 2750 West Commodore Way Properties, Seattle, Washington*. December.

- \_\_\_\_\_. 2002a. *Final Environmental Site Assessments and RBCA Evaluation at 2805 West Commodore Way, Seattle, Washington*. October.
- \_\_\_\_\_. 2002b. *Final Limited Soil Removal Report at the Former PCP/Diesel Mixing Area at 2737 West Commodore Way, Seattle, Washington*. December 18.
- Freeze, Allan and John A. Cherry (Freeze and Cherry). 1979. *Groundwater*. Prentice-Hall, Inc., Englewood, Cliffs, NJ.
- Galster, R.W and W.T. Laprade (Galster and Laprade). 1991. "Geology of Seattle, Washington, United States of America." *Bulletin of the Association of Engineering Geologists* v 28 (no. 3): p 235–302.
- Idcide.com (Idcide). 2013. Seattle, Washington Weather. <<http://www.idcide.com/weather/wa/seattle.htm>>. Viewed on July 3<sup>rd</sup>.
- Municipality of Metropolitan Seattle. 1989. *Fort Lawton Parallel Tunnel Project, Contract w/F16-89, Part E – Geotechnical Report, Vol. 4*. October.
- King County Assessor. 2009a. Assessor Property Characteristics Reports for Parcel Numbers 1125039050, 1125039081, 1125039113, and 4237900405. Reviewed online at the King County GIS Center Website <<http://www5.kingcounty.gov/kcgisreports>>.
- \_\_\_\_\_. 2009b. Historical Appraisal Records for the Property and Adjacent Parcels. Obtained from Puget Sound Regional Archives, Bellevue College, Bellevue, Washington. December.
- Tetra Tech. 2004. *Final Quarterly Groundwater Sampling Report for July 2004 at 2737 West Commodore Way and 2750 West Commodore Way, Seattle, Washington*. November.
- \_\_\_\_\_. 2005. *Draft Quarterly Groundwater Sampling Report for November 2004 at 2737 West Commodore Way and 2750 West Commodore Way, Seattle, Washington*. March.
- Todd, D.K. and L.W. Mays (Todd and Mays). 2005. "Groundwater Hydrology." John Wiley & Sons, Inc. 636p.
- U.S. Environmental Protection Agency. 1998. Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Groundwater. Office of Research and Development. EPA/600/R-98/128. September.
- U.S. Geological Survey (USGS). 2011. Shilshole Bay Quadrangle, Washington, 7.5-Minute Series.
- Waitt Jr., Richard B. and Robert M. Thorson (Waitt Jr. and Thorson). 1983. "The Cordilleran Ice Sheet in Washington, Idaho, and Montana." IN: H.E. Wright, Jr., (ed.), 1983, Late-Quaternary Environments of the United States, Volume 1: The Late Pleistocene (Stephen C. Porter [ed.]): University of Minnesota Press, 407p., Chapter 3, p.53-70.

Vaccaro, J.J., A.J. Hansen, Jr., and M.A. Jones. 1998. Hydrogeologic Framework of the Puget Sound Aquifer System, Washington and British Columbia. US Geological Survey Professional Paper 1424-D. 77p.

Washington State Department of Ecology (Ecology). 2008. *Guidelines for Property Cleanups under the Voluntary Cleanup Program*. Toxics Cleanup Program Publication No. 08-09-044. July.

\_\_\_\_\_. 2009. *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action*. Publication No. 09-09-47. (Draft) October.

Western Regional Climate Center. 2013. Climate of Washington. <<http://www.wrcc.dri.edu/narratives/washington/>>. Viewed on July 3<sup>rd</sup>.

## **8.0 LIMITATIONS**

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

## FIGURES



0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 miles  
 0 1 2 3 4 5 km  
 Printed from TOPO! ©2001 National Geographic Holdings (www.topo.com)

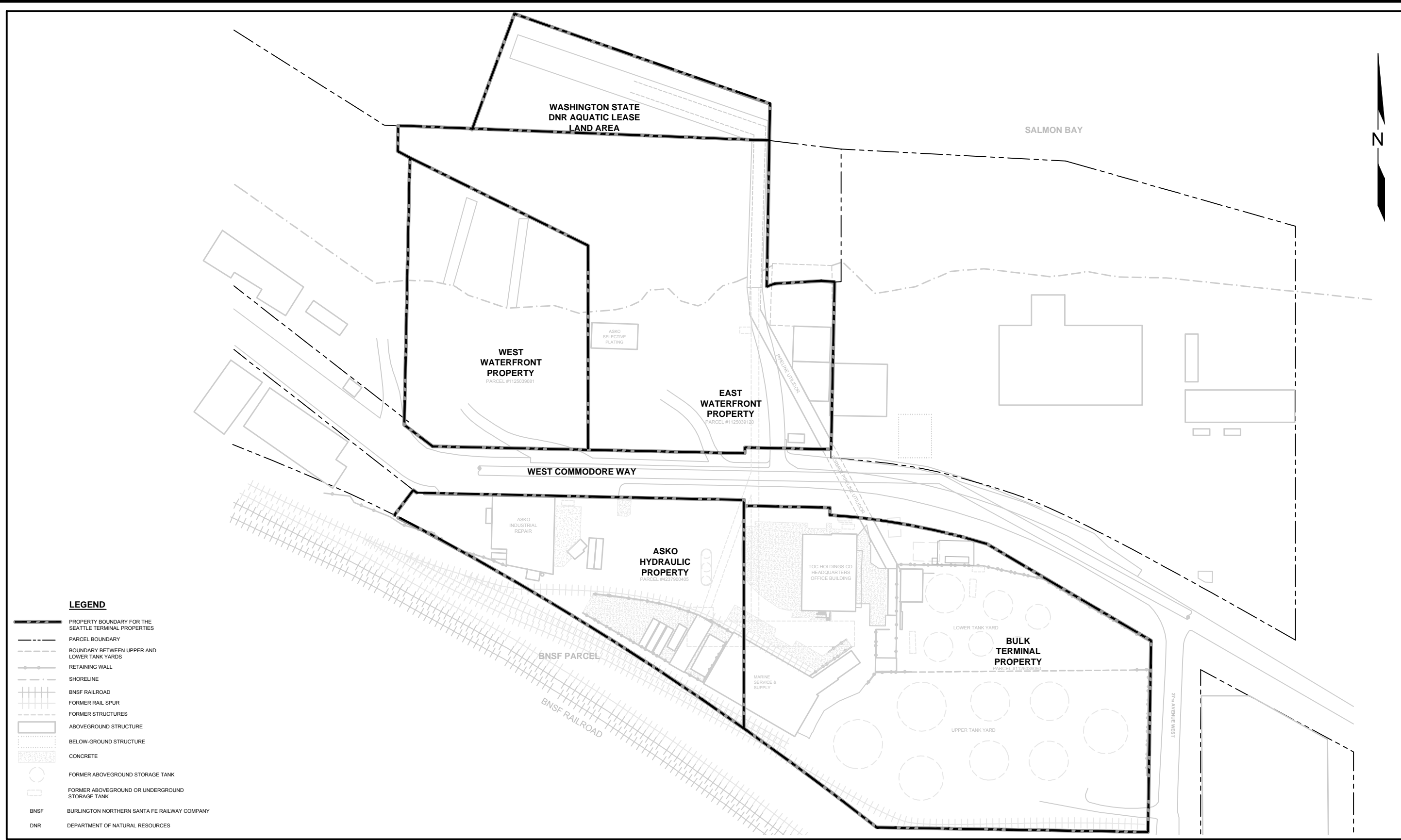


DATE: \_\_\_\_\_05/14/14  
 DRAWN BY: \_\_\_\_\_NAC  
 CHECKED BY: \_\_\_\_\_PJK/TSB  
 CAD FILE: \_\_\_\_\_0600\_FIG1\_VICINITY\_ASKO

PROJECT NAME: \_\_\_\_\_ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: \_\_\_\_\_0440-004  
 STREET ADDRESS: \_\_\_\_\_2805 WEST COMMODORE WAY  
 CITY, STATE: \_\_\_\_\_SEATTLE, WASHINGTON

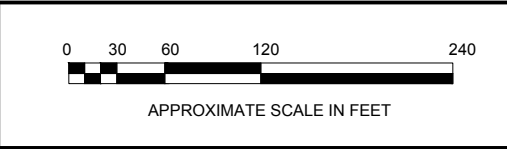
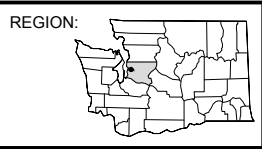
**FIGURE 1**  
 PROPERTY LOCATION MAP



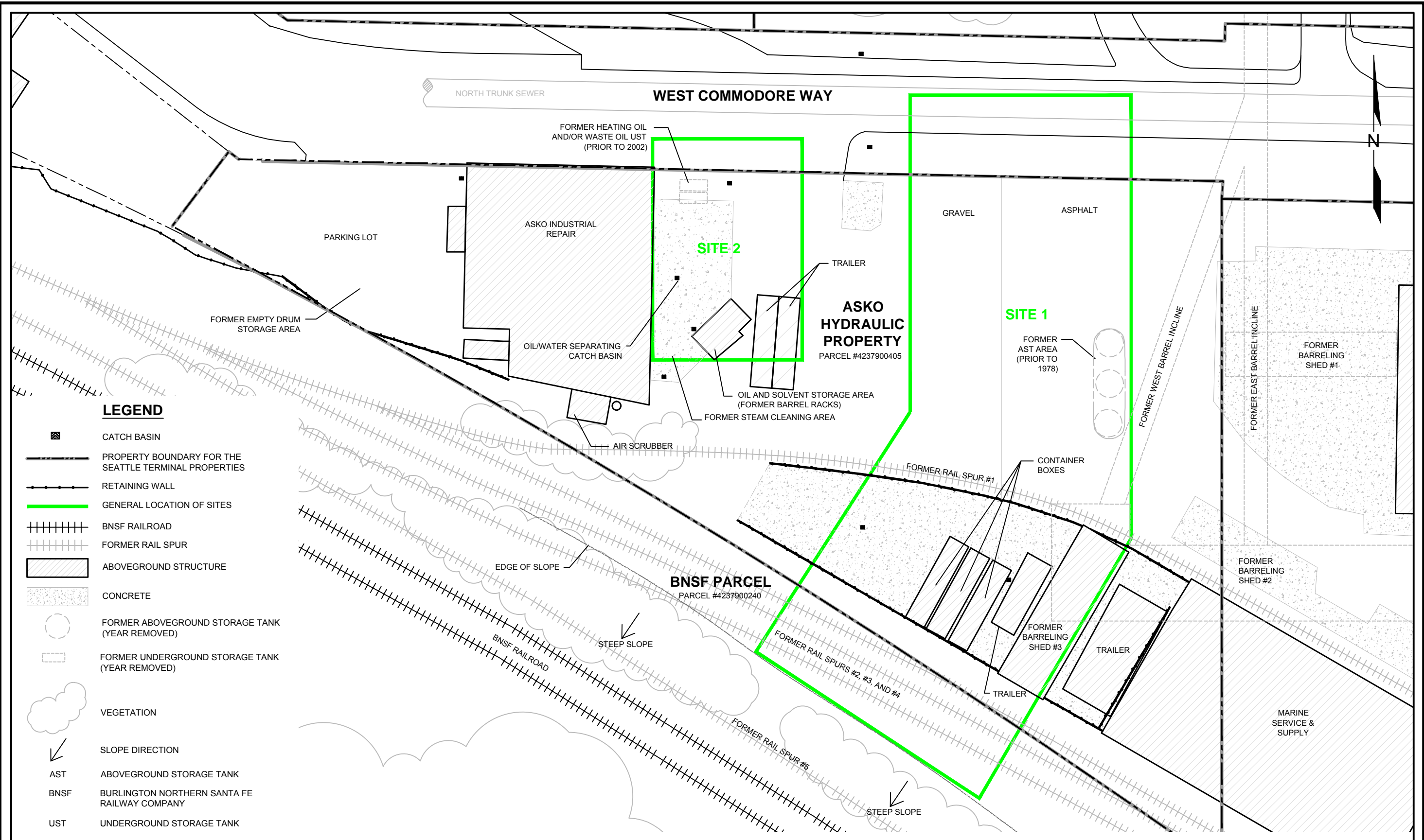


DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_PP

PROJECT NAME: TOC HOLDINGS CO. SEATTLE TERMINAL PROPERTIES  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2737, 2750, 2800, AND 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON



**FIGURE 2**  
 SEATTLE TERMINAL PROPERTIES  
 PROPERTY PLAN



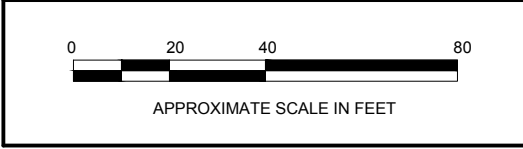
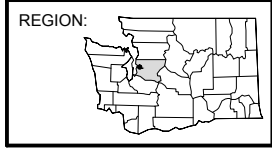
**LEGEND**

- CATCH BASIN
- PROPERTY BOUNDARY FOR THE SEATTLE TERMINAL PROPERTIES
- RETAINING WALL
- GENERAL LOCATION OF SITES
- BNSF RAILROAD
- FORMER RAIL SPUR
- ABOVEGROUND STRUCTURE
- CONCRETE
- FORMER ABOVEGROUND STORAGE TANK (YEAR REMOVED)
- FORMER UNDERGROUND STORAGE TANK (YEAR REMOVED)
- VEGETATION
- SLOPE DIRECTION
- AST ABOVEGROUND STORAGE TANK
- BNSF BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY
- UST UNDERGROUND STORAGE TANK

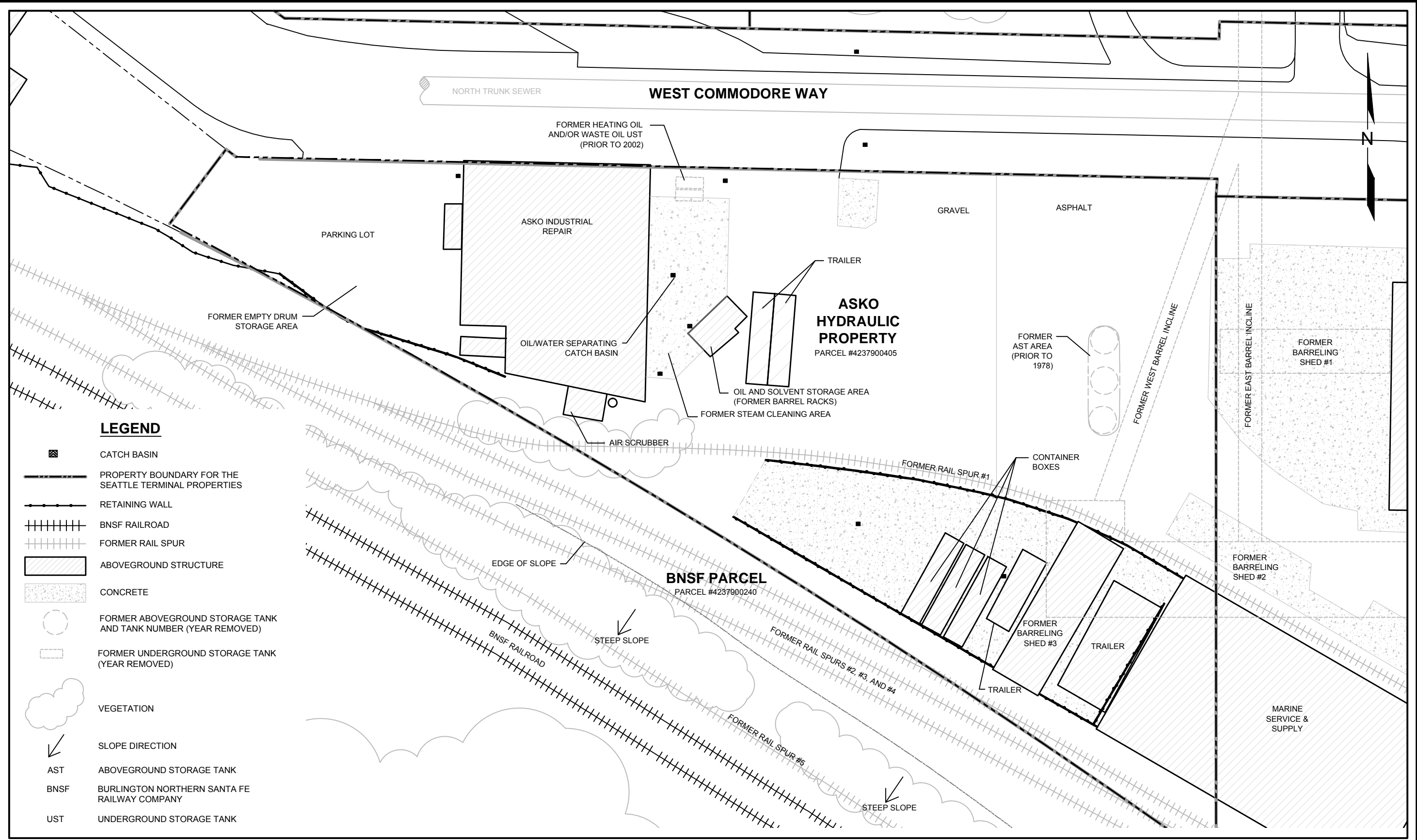


DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_SITES

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, SEATTLE: SEATTLE, WASHINGTON



**FIGURE 3**  
 SITE 1 AND SITE 2 LOCATION MAP



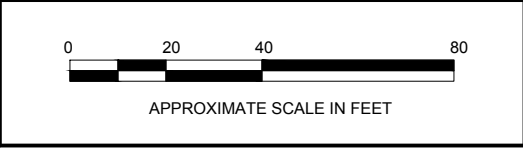
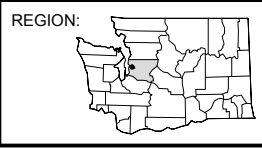
**LEGEND**

- CATCH BASIN
- PROPERTY BOUNDARY FOR THE SEATTLE TERMINAL PROPERTIES
- RETAINING WALL
- BNSF RAILROAD
- FORMER RAIL SPUR
- ABOVEGROUND STRUCTURE
- CONCRETE
- FORMER ABOVEGROUND STORAGE TANK AND TANK NUMBER (YEAR REMOVED)
- FORMER UNDERGROUND STORAGE TANK (YEAR REMOVED)
- VEGETATION
- SLOPE DIRECTION
- AST ABOVEGROUND STORAGE TANK
- BNSF BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY
- UST UNDERGROUND STORAGE TANK

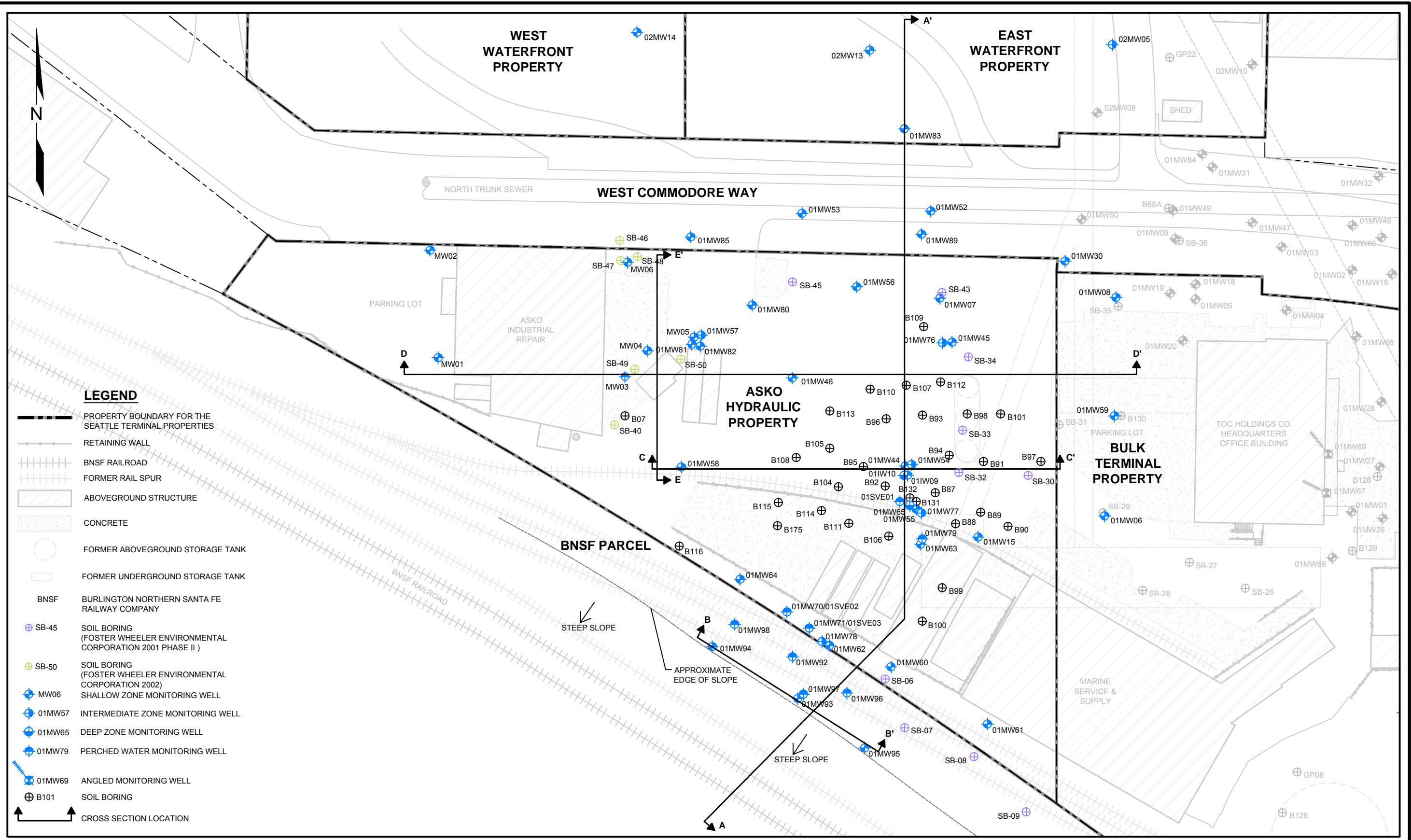


DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_HF

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, SEATTLE: SEATTLE, WASHINGTON



**FIGURE 4**  
 HISTORICAL FEATURES



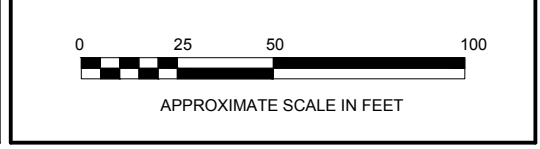
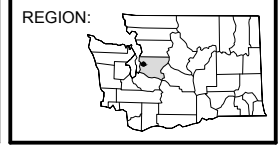
**LEGEND**

- PROPERTY BOUNDARY FOR THE SEATTLE TERMINAL PROPERTIES
- RETAINING WALL
- BNSF RAILROAD
- FORMER RAIL SPUR
- ABOVEGROUND STRUCTURE
- CONCRETE
- FORMER ABOVEGROUND STORAGE TANK
- FORMER UNDERGROUND STORAGE TANK
- BNSF BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY
- SB-45 SOIL BORING (FOSTER WHEELER ENVIRONMENTAL CORPORATION 2001 PHASE II)
- SB-50 SOIL BORING (FOSTER WHEELER ENVIRONMENTAL CORPORATION 2002)
- MW06 SHALLOW ZONE MONITORING WELL
- 01MW57 INTERMEDIATE ZONE MONITORING WELL
- 01MW65 DEEP ZONE MONITORING WELL
- 01MW79 PERCHED WATER MONITORING WELL
- 01MW69 ANGLED MONITORING WELL
- B101 SOIL BORING
- CROSS SECTION LOCATION



DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_BASE\_ASKO

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON

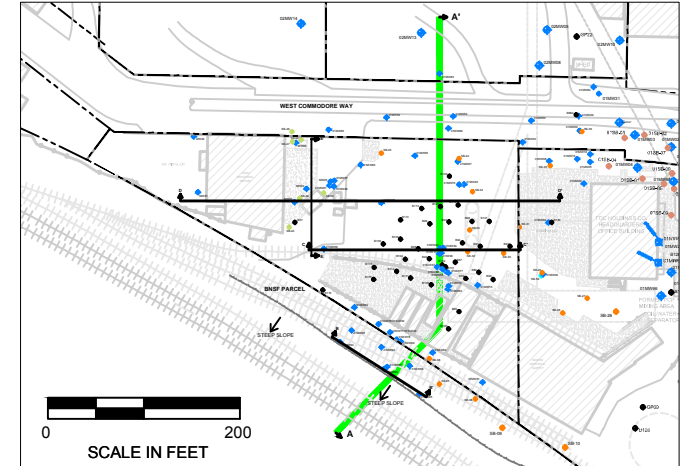
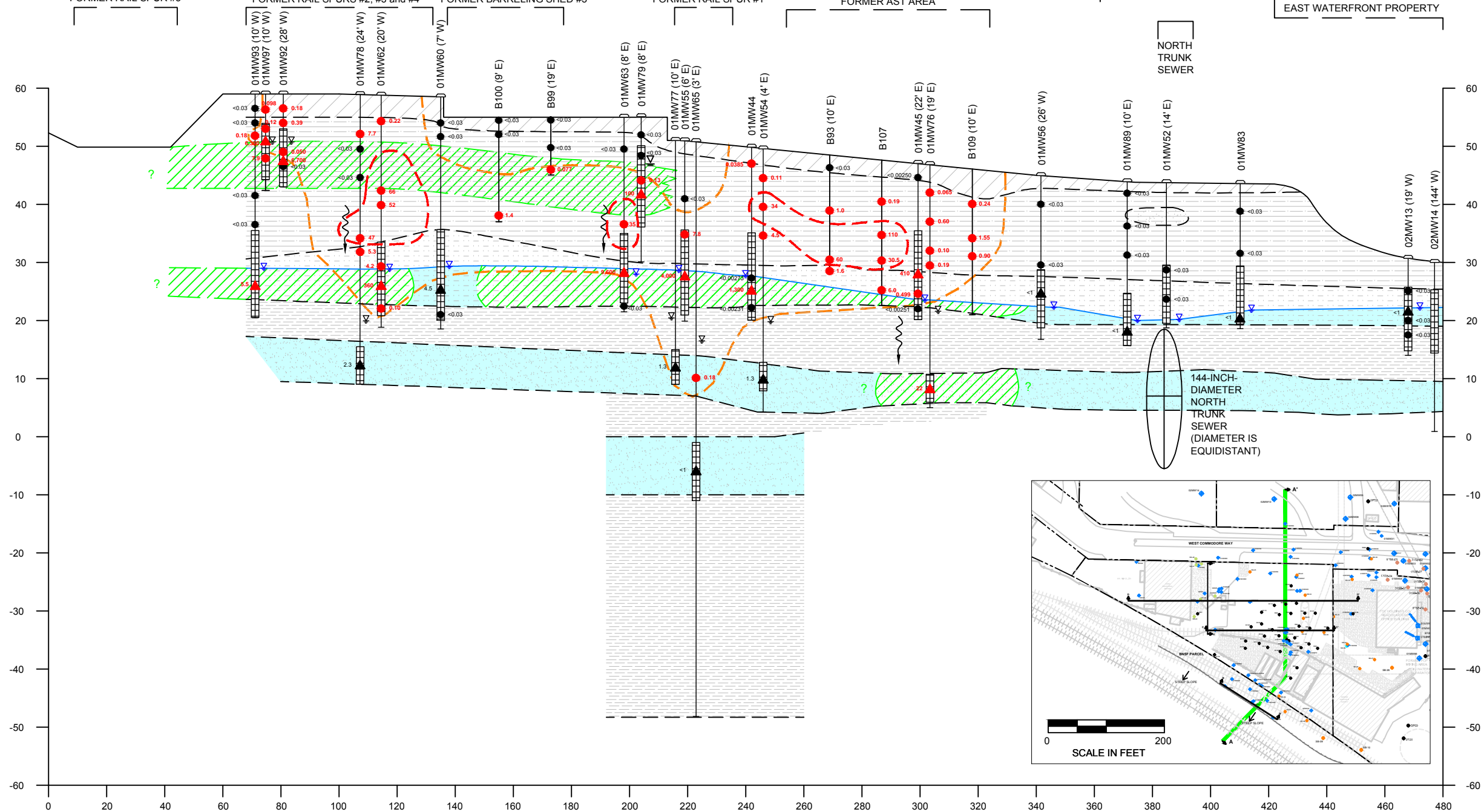


**FIGURE 5**  
EXPLORATION LOCATION PLAN

5/14/2014

P:\0440 TOC HOLDINGS CO\01-600 SEATTLE TERMINAL\TECHNICAL\CAD\2013\ASKO\RI\01-600\_2013RI\_XAA\_F.DWG

A (SOUTH) BNSF PARCEL BEND IN CROSS SECTION ASKO HYDRAULIC PROPERTY WEST COMMODORE WAY EAST WATERFRONT PROPERTY A' (NORTH)



**LEGEND**

- (6' W) OFFSET 6' WEST FROM SECTION LINE
- MONITORING WELL
- SCREEN INTERVAL
- PERCHED WATER, INTERMEDIATE, OR DEEP ZONE GROUNDWATER LEVEL (MAY 2013)
- SHALLOW ZONE GROUNDWATER LEVEL (MAY 2013)

**HISTORICAL CONCENTRATIONS OF TCE IN SOIL (mg/kg):**

- CONCENTRATION BELOW MTCA METHOD A CLEANUP LEVEL
- CONCENTRATION ABOVE MTCA METHOD A CLEANUP LEVEL

**CONCENTRATIONS OF TCE IN GROUNDWATER IN G97CB8 E1 5FH9F288% 1E1 #3:**

- ▲ CONCENTRATION BELOW MTCA METHOD A CLEANUP LEVEL
- ▲ CONCENTRATION ABOVE MTCA METHOD A CLEANUP LEVEL

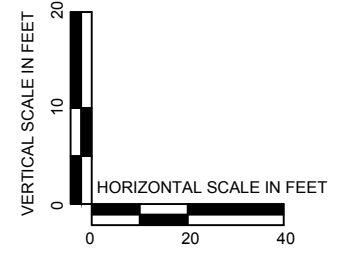
- TCE IN SOIL ABOVE MTCA METHOD A CLEANUP LEVEL
- TCE IN SOIL ABOVE MTCA METHOD B CLEANUP LEVEL
- TCE CONTAMINATION IN GROUNDWATER
- GROUNDWATER
- LEAKAGE THROUGH HETEROGENEOUS SOIL MATRIX OR THE SEMI-CONFINING UNIT

- SAND, SILTY SAND, AND GRAVEL (Hf)
- SAND AND SILTY SAND (Hdf)
- SAND, SILT AND CLAY (Hdf)
- SILT AND CLAY (Qpf)
- SAND AND SILTY SAND (Qpf)
- INFERRED CONTACT

- AST ABOVEGROUND STORAGE TANK
- TCE TRICHLOROETHENE
- < RESULT BELOW LABORATORY REPORTING LIMIT
- mg/kg MILLIGRAMS PER KILOGRAM
- µg/L MICROGRAMS PER LITER
- MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT

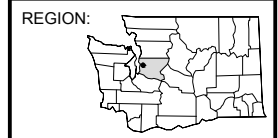
- 47 TCE
- RED DENOTES CONCENTRATION EXCEEDS MTCA METHOD A CLEANUP LEVEL
- Hf HOLOCENE FILL
- Hdf HOLOCENE DEPRESSION FILLINGS
- Qpf PRE-FRASER DEPOSITS

NOTE: ALL LOCATIONS ARE APPROXIMATE.



DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_XAA

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON

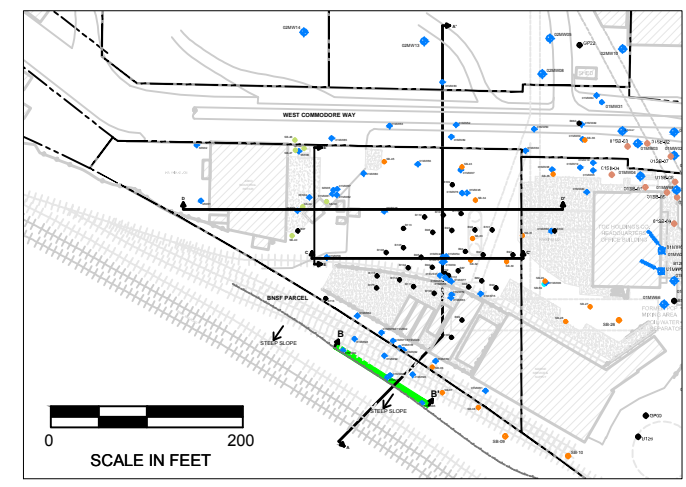
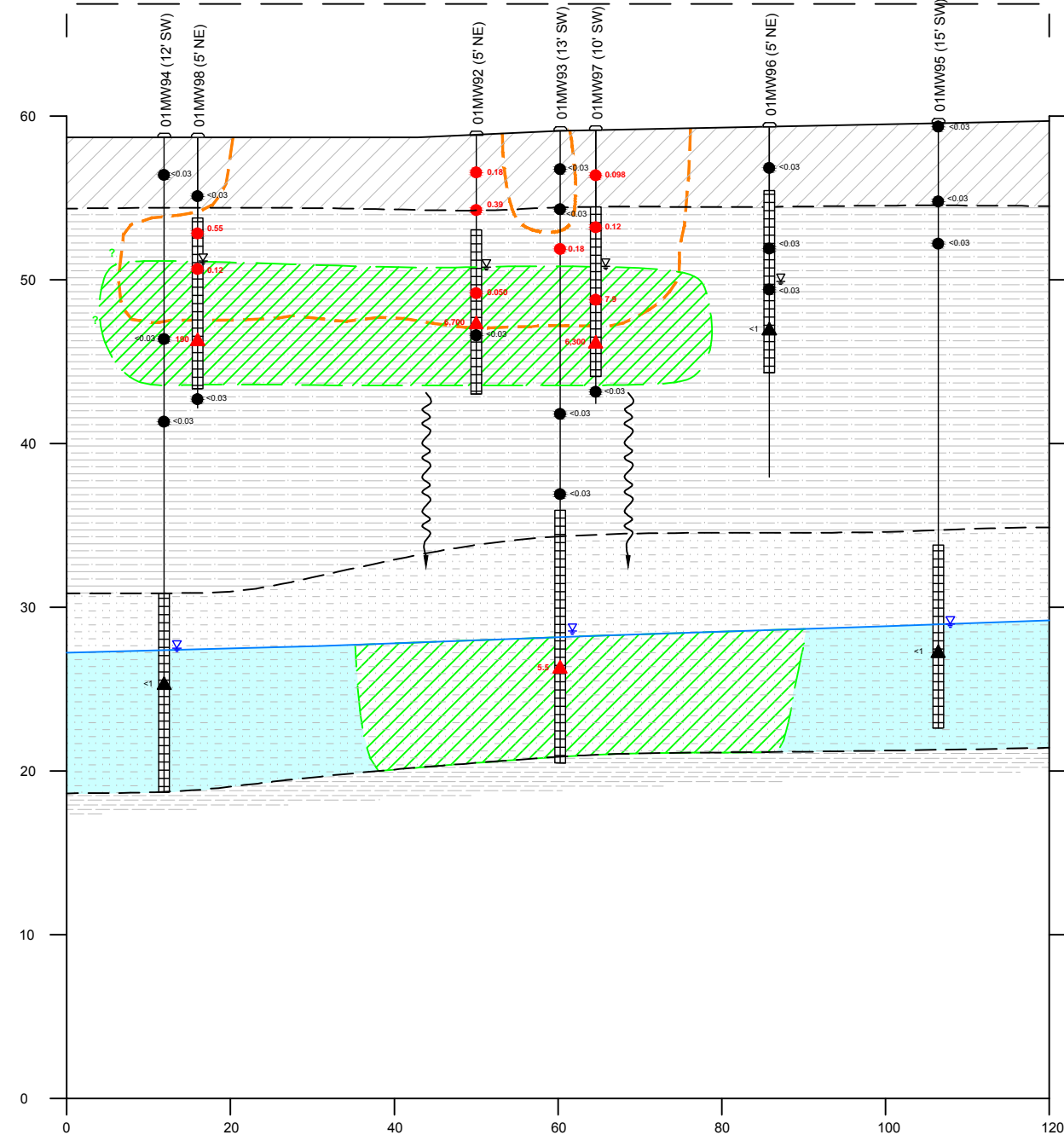


SCALE DEPICTED ABOVE

FIGURE 6 CROSS SECTION A-A'

BOUNDARY INC.

B (NORTHWEST) BNSF PARCEL FORMER RAIL SPURS #2, #3, AND #4 B' (SOUTHEAST)



**LEGEND**  
(6' W) OFFSET 6' WEST FROM SECTION LINE  
MONITORING WELL  
SCREEN INTERVAL  
PERCHED WATER, INTERMEDIATE, OR DEEP ZONE GROUNDWATER LEVEL (MAY 2013)  
SHALLOW ZONE GROUNDWATER LEVEL (MAY 2013)

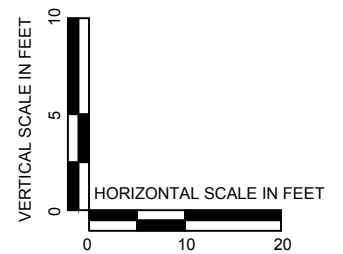
**HISTORICAL CONCENTRATIONS OF TCE IN SOIL (mg/kg):**  
● CONCENTRATION BELOW MTCA METHOD A CLEANUP LEVEL  
● CONCENTRATION ABOVE MTCA METHOD A CLEANUP LEVEL  
**CONCENTRATIONS OF TCE IN GROUNDWATER IN G97CB8'E15FH9F268%R1#3:**  
▲ CONCENTRATION BELOW MTCA METHOD A CLEANUP LEVEL  
▲ CONCENTRATION ABOVE MTCA METHOD A CLEANUP LEVEL

○ TCE IN SOIL ABOVE MTCA METHOD A CLEANUP LEVEL  
■ TCE CONTAMINATION IN GROUNDWATER  
■ GROUNDWATER  
~ LEAKAGE THROUGH HETEROGENEOUS SOIL MATRIX OR THE SEMI-CONFINING UNIT

□ SAND, SILTY SAND, AND GRAVEL (Hf)  
□ SAND AND SILTY SAND (Hdf)  
□ SAND, SILT AND CLAY (Hdf)  
□ SILT AND CLAY (Qpf)  
□ SAND AND SILTY SAND (Qpf)  
--- INFERRED CONTACT

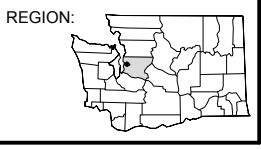
TCE TRICHLOROETHENE  
< RESULT BELOW LABORATORY REPORTING LIMIT  
mg/kg MILLIGRAMS PER KILOGRAM  
µg/L MICROGRAMS PER LITER  
MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT  
BNSF BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY

7.9 TCE  
RED DENOTES CONCENTRATION EXCEEDS MTCA METHOD A CLEANUP LEVEL  
Hf HOLOCENE FILL  
Hdf HOLOCENE DEPRESSION FILLINGS  
Qpf PRE-FRASER DEPOSITS  
NOTE: ALL LOCATIONS ARE APPROXIMATE.



DATE: 05/14/14  
DRAWN BY: NAC/BLR  
CHECKED BY: PJK/TSB  
CAD FILE: 01-600\_2013RI\_XBB

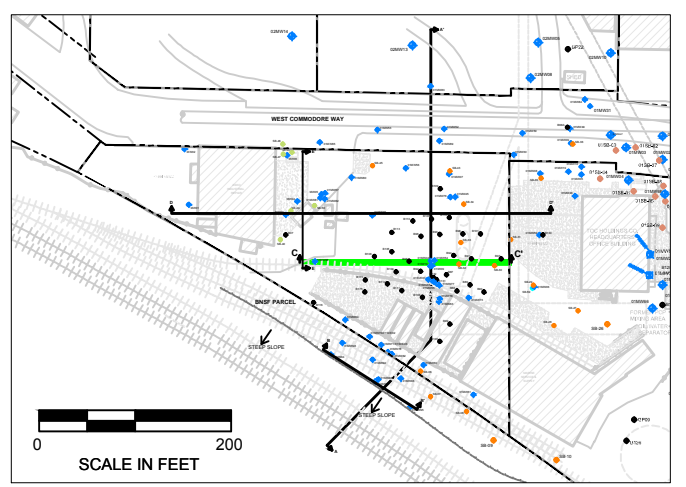
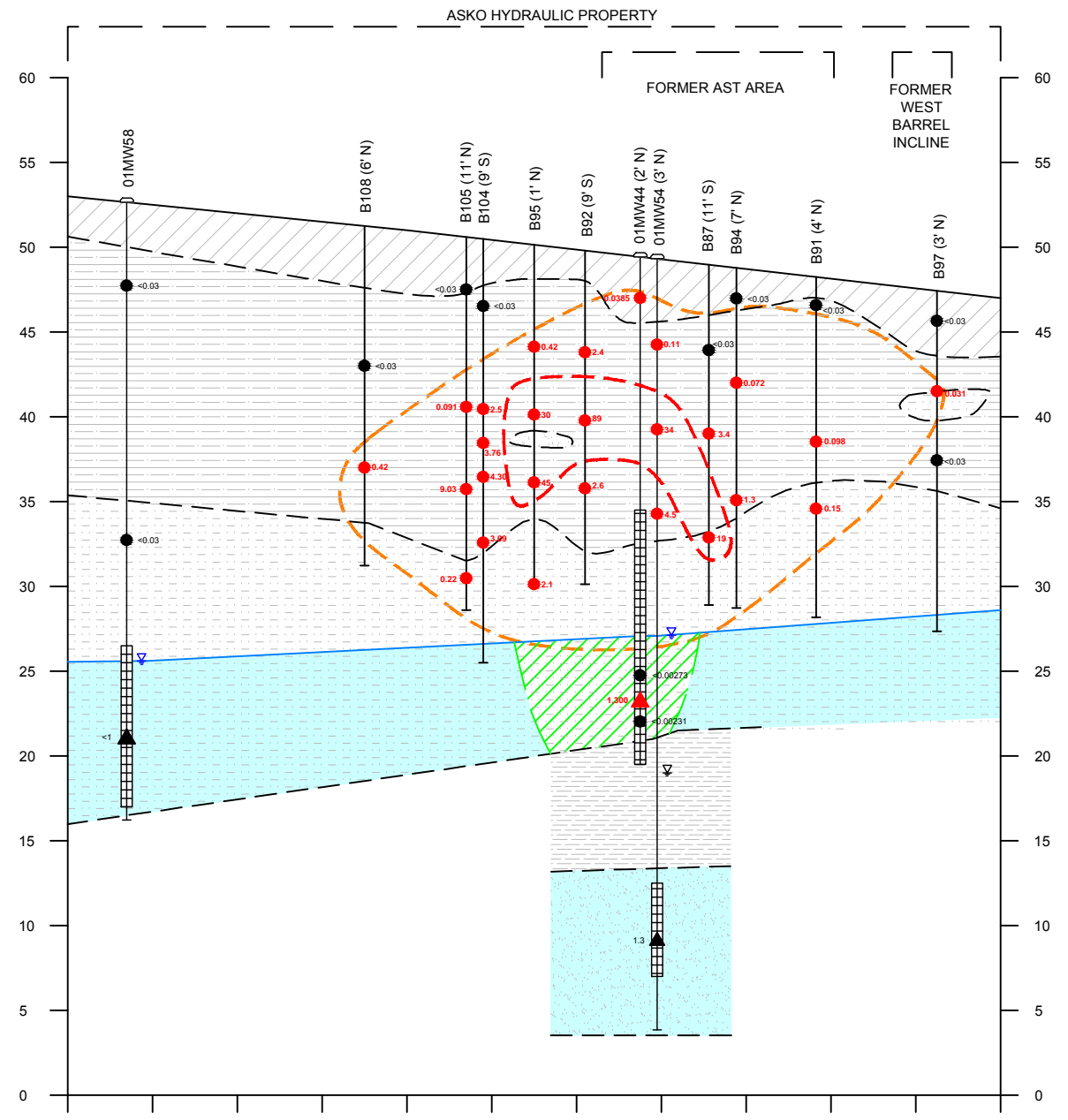
PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
PROJECT NUMBER: 0440-004  
STREET ADDRESS: 2805 WEST COMMODORE WAY  
CITY, STATE: SEATTLE, WASHINGTON



SCALE DEPICTED ABOVE

**FIGURE 7**  
CROSS SECTION B-B'

C (WEST) C' (EAST)



**LEGEND**

(6' W) OFFSET 6' WEST FROM SECTION LINE

MONITORING WELL

SCREEN INTERVAL

PERCHED WATER, INTERMEDIATE, OR DEEP ZONE GROUNDWATER LEVEL (MAY 2013)

SHALLOW ZONE GROUNDWATER LEVEL (MAY 2013)

**HISTORICAL CONCENTRATIONS OF TCE IN SOIL (mg/kg):**

- CONCENTRATION BELOW MTCA METHOD A CLEANUP LEVEL
- CONCENTRATION ABOVE MTCA METHOD A CLEANUP LEVEL

**CONCENTRATIONS OF TCE IN GROUNDWATER IN 097 CB8 EI 5 F H F Z 85% TCE #9:**

- ▲ CONCENTRATION BELOW MTCA METHOD A CLEANUP LEVEL
- ▲ CONCENTRATION ABOVE MTCA METHOD A CLEANUP LEVEL

○ TCE IN SOIL ABOVE MTCA METHOD A CLEANUP LEVEL

○ TCE IN SOIL ABOVE MTCA METHOD B CLEANUP LEVEL

■ TCE CONTAMINATION IN GROUNDWATER

■ GROUNDWATER

▨ SAND, SILTY SAND, AND GRAVEL (H)

▨ SAND AND SILTY SAND (Hdf)

▨ SAND, SILT AND CLAY (Hdf)

▨ SILT AND CLAY (Qpf)

▨ SAND AND SILTY SAND (Qpf)

--- INFERRED CONTACT

AST ABOVEGROUND STORAGE TANK

TCE TRICHLOROETHENE

< RESULT BELOW LABORATORY REPORTING LIMIT

mg/kg MILLIGRAMS PER KILOGRAM

µg/L MICROGRAMS PER LITER

MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT

45 TCE

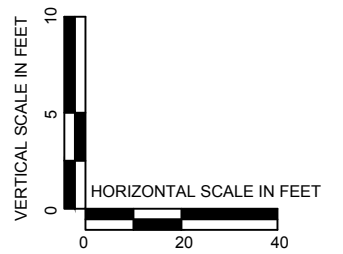
RED DENOTES CONCENTRATION EXCEEDS MTCA METHOD A CLEANUP LEVEL

Hf HOLOCENE FILL

Hdf HOLOCENE DEPRESSION FILLINGS

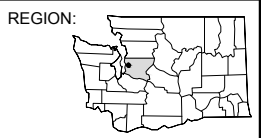
Qpf PRE-FRASER DEPOSITS

NOTE: ALL LOCATIONS ARE APPROXIMATE.



DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013R1\_XCC

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON



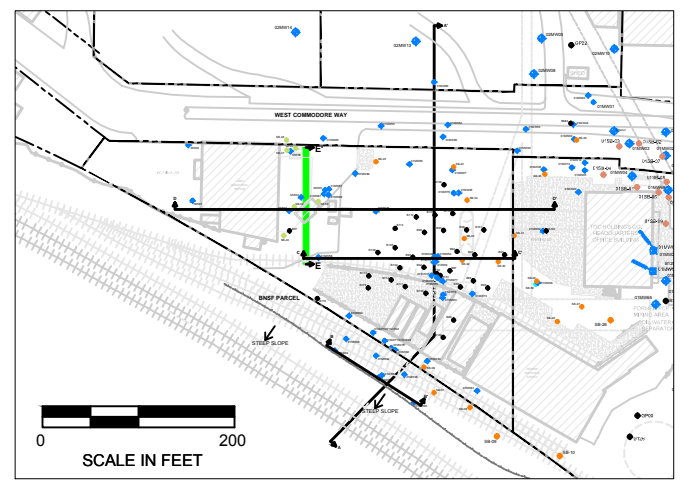
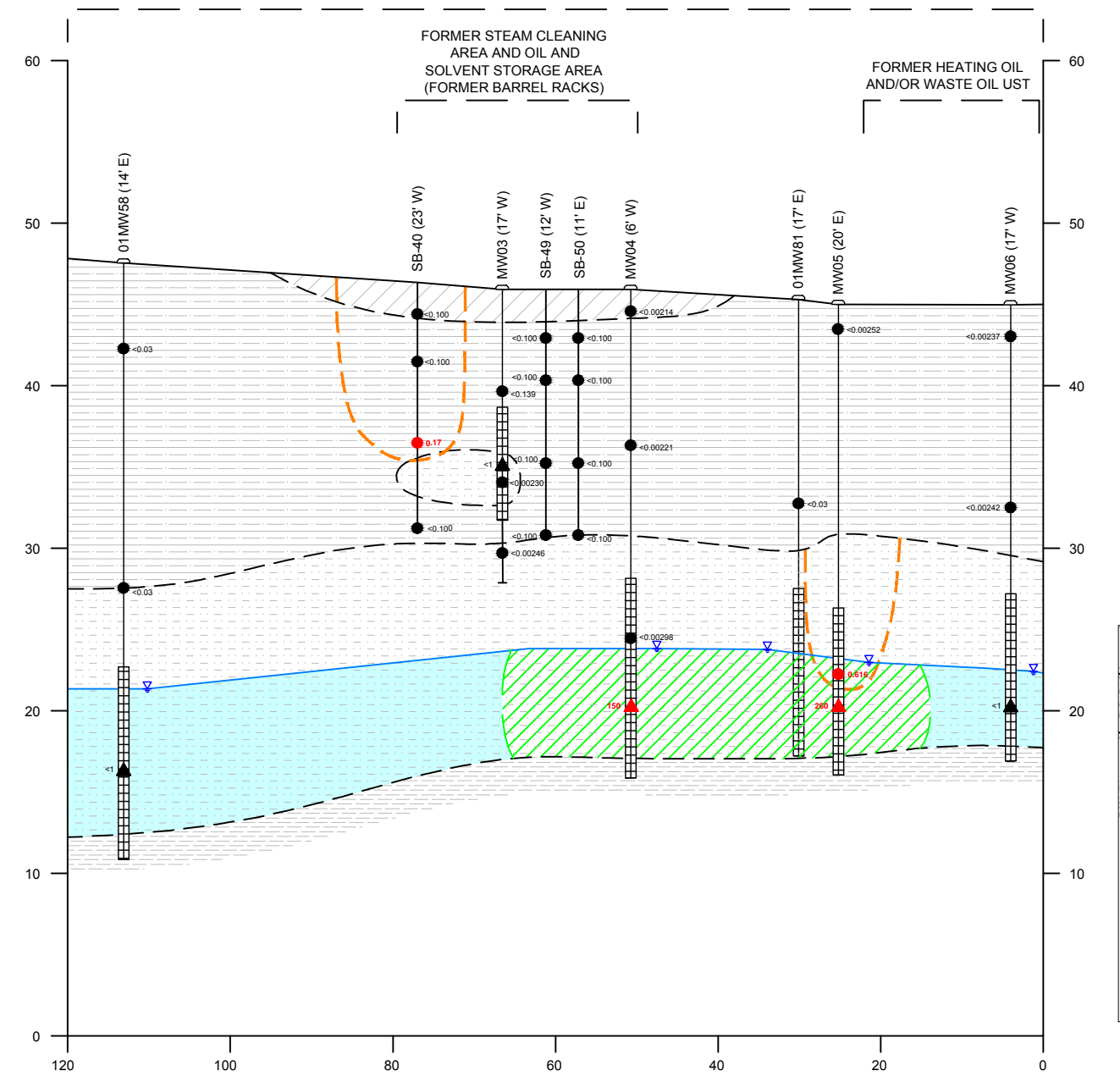
SCALE DEPICTED ABOVE

**FIGURE 8**  
CROSS SECTION C-C'





E (SOUTH) ASKO HYDRAULIC PROPERTY E' (NORTH)



**LEGEND**

(6' W) OFFSET 6' WEST FROM SECTION LINE

MONITORING WELL

SCREEN INTERVAL

PERCHED WATER, INTERMEDIATE, OR DEEP ZONE GROUNDWATER LEVEL (MAY 2013)

SHALLOW ZONE GROUNDWATER LEVEL (MAY 2013)

**HISTORICAL CONCENTRATIONS OF TCE IN SOIL (mg/kg):**

● CONCENTRATION BELOW MTCA METHOD A CLEANUP LEVEL

● CONCENTRATION ABOVE MTCA METHOD A CLEANUP LEVEL

**CONCENTRATIONS OF TCE IN GROUNDWATER IN 097CB8 E1 5FH0F285% #1 #2**

▲ CONCENTRATION BELOW MTCA METHOD A CLEANUP LEVEL

▲ CONCENTRATION ABOVE MTCA METHOD A CLEANUP LEVEL

○ TCE IN SOIL ABOVE MTCA METHOD A CLEANUP LEVEL

▨ TCE CONTAMINATION IN GROUNDWATER

■ GROUNDWATER

~ LEAKAGE THROUGH HETEROGENEOUS SOIL MATRIX OR THE SEMI-CONFINING UNIT

▨ SAND, SILTY SAND, AND GRAVEL (Hf)

▨ SAND AND SILTY SAND (Hdf)

▨ SAND, SILT AND CLAY (Hdf)

▨ SILT AND CLAY (Qpf)

▨ SAND AND SILTY SAND (Qpf)

--- INFERRED CONTACT

UST UNDERGROUND STORAGE TANK

TCE TRICHLOROETHENE

< RESULT BELOW LABORATORY REPORTING LIMIT

mg/kg MILLIGRAMS PER KILOGRAM

µg/L MICROGRAMS PER LITER

MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT

150 TCE

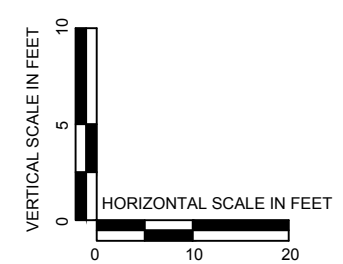
RED DENOTES CONCENTRATION EXCEEDS MTCA METHOD A CLEANUP LEVEL

Hf HOLOCENE FILL

Hdf HOLOCENE DEPRESSION FILLINGS

Qpf PRE-FRASER DEPOSITS

NOTE: ALL LOCATIONS ARE APPROXIMATE.



DATE: .....05/14/14

DRAWN BY: .....NAC/BLR

CHECKED BY: .....PJK/TSB

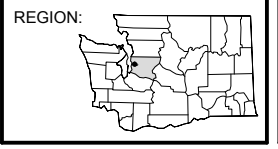
CAD FILE: .....01-600\_2013RI\_XEE

PROJECT NAME: .....TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY

PROJECT NUMBER: .....0440-004

STREET ADDRESS: .....2805 WEST COMMODORE WAY

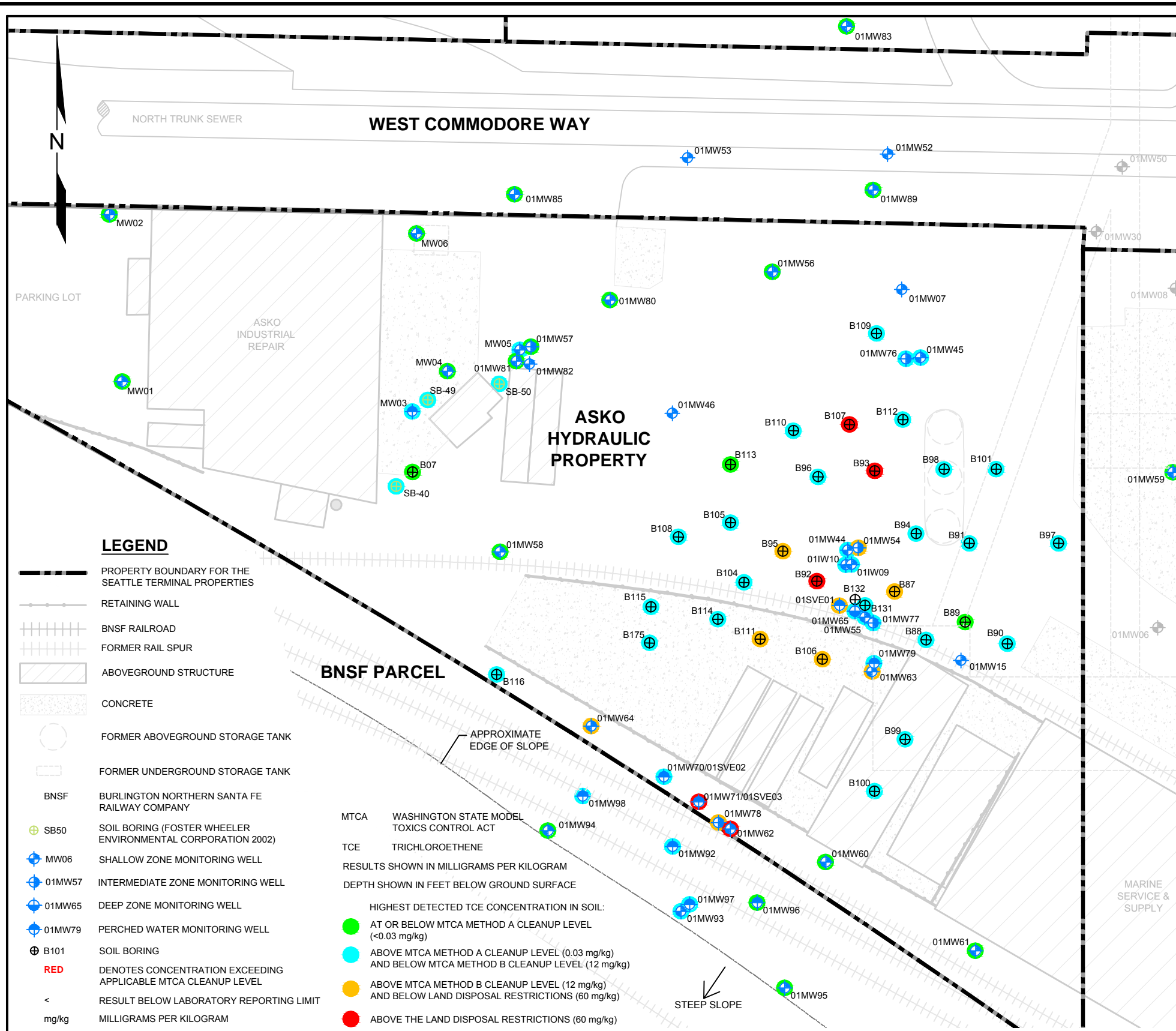
CITY, STATE: .....SEATTLE, WASHINGTON



SCALE DEPICTED ABOVE

**FIGURE 10**  
CROSS SECTION E-E'

P:\0440 TOC HOLDINGS CO\01-600 SEATTLE TERMINAL\TECHNICAL\CAD\2013\ASKOR\01-600\_2013RI\_SD\_TCE\_F.DWG 5/14/2014

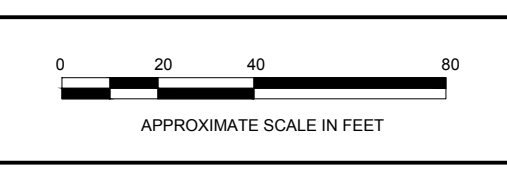
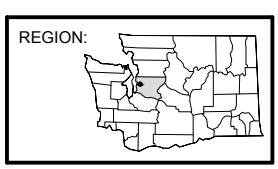


Sample Location	Date Sampled	Sample Depth	TCE	Sample Location	Date Sampled	Sample Depth	TCE	Sample Location	Date Sampled	Sample Depth	TCE
SB-40	11/21/00	2	<0.100	B92	12/30/08	6	2.4	B116	03/18/09	3	0.21
		5	<0.100			10	<0.03			B131	12/29/09
		10	0.17			14	2.6	03/29/10	14.5-15		
		15	<0.100			18	<0.03	03/29/10	15-15.5	0.66	
SB-49	11/29/00	2	<0.100	B93	12/30/08	2	<0.03	01MW70/01SVE02/ B134	02/11/10	2.5	0.033
		5	<0.100			10	1.0			01MW71/01SVE03/ B133	02/11/10
		10	<0.100			15	1.6	01SVE01/B135	02/11/10		
		15	<0.100			20	<0.03	01MW09/B136	02/12/10	11.5	0.86
SB-50	11/29/00	2	<0.100	B94	12/30/08	2	0.072	01MW10/B137	02/12/10	23	2.6
		5	<0.100			6	0.42			01MW76/B171	02/28/11
		10	<0.100			10	3.0	01MW77/B172	03/01/11		
		15	<0.100			14	1.3	01MW78/B173	03/02/11	15	3.8
MW01/B01	04/17/06	11	<0.00290	B95	12/30/08	10	30	01MW78/B173	03/02/11	15	<0.03
		15	<0.00215			14	45			25	47
		20	2.1			20	0.043	01MW79/B174	03/03/11	27.5	5.3
		25	0.139			20	0.53			01MW80/B188	04/18/11
MW02/B02	04/17/06	6	<0.100	B96	12/30/08	10	0.96	01MW81/B189	04/18/11	12.5	<0.03
		12	<0.00230			2	<0.03	01MW83/B191	04/19/11	5	<0.03
		16	<0.00248			3	<0.03	01MW85/B193	04/20/11	7.5	<0.03
		20	<0.00221			5	0.031	01MW88/B197	04/21/11	7.5	<0.03
MW03/B03	04/18/06	1	<0.00214	B97	12/30/08	6	0.065	01MW89/B197	04/21/11	12.5	<0.03
		10	<0.00221			9	0.077	01MW92/B258	08/18/12	2.5	0.18
		22	<0.00298			10	0.37			5	0.39
		22.5	<0.00252			20	0.16	10	<0.03	01MW93/B259	08/18/12
MW04/B04	04/18/06	1	<0.00214	B98	12/30/08	6	0.065	01MW94/B260	08/17/12	12.5	<0.03
		10	<0.00221			5	<0.03			01MW95/B261	08/17/12
		22	<0.00298			10	0.37	01MW96/B264	05/07/13	7.5	<0.03
		22.5	<0.00252			20	0.16	01MW97/B265	05/07/13	10	<0.03
MW05/B05	04/19/06	2	<0.00237	B99	12/30/08	0.5	<0.03	01MW98/B268	05/07/13	6	0.55
		21.5	<0.00242			5	<0.03	01MW99/B082	11/17/08	2.5	<0.03
		25	0.11			9	0.077			10	<0.03
		27.5	<0.00231			10	0.31	01MW59/B082	11/17/08	5	<0.03
MW06/B06	04/19/06	21.5	<0.00242	B100	12/30/08	3	<0.03	MTCA Method A Cleanup Level			
		25	0.11			5	<0.03	MTCA Method A Cleanup Level			
		27.5	<0.00231			10	0.31	MTCA Method A Cleanup Level			
		25	<0.00251			14	0.14	MTCA Method A Cleanup Level			
B07	04/21/06	2	<0.00214	01MW84/B102	03/17/09	2.5	44	MTCA Method A Cleanup Level			
		2.5	0.0385			7.5	15	MTCA Method A Cleanup Level			
		25	<0.00273			17.5	1.25	MTCA Method A Cleanup Level			
		27.5	<0.00231			20	<0.03	MTCA Method A Cleanup Level			
01MW44/SB65	09/13/06	2.5	<0.00250	01MW85/B103	03/17/09	4	<0.03	MTCA Method A Cleanup Level			
		2.5	<0.00250			10	2.5	MTCA Method A Cleanup Level			
		22.5	0.499			14	3.76	MTCA Method A Cleanup Level			
		25	<0.00251			14	4.30	MTCA Method A Cleanup Level			
01MW45/SB66	09/13/06	2.5	<0.00250	B104	03/17/09	14	3.09	MTCA Method A Cleanup Level			
		5	0.11			18	3.09	MTCA Method A Cleanup Level			
		5	0.11			3	<0.03	MTCA Method A Cleanup Level			
		5	0.11			10	0.091	MTCA Method A Cleanup Level			
01MW54/B076	11/13/08	10	34	B105	03/17/09	15	9.03	MTCA Method A Cleanup Level			
		15	4.5			20	0.22	MTCA Method A Cleanup Level			
		15	4.5			20	0.22	MTCA Method A Cleanup Level			
		15	4.5			20	0.22	MTCA Method A Cleanup Level			
01MW55/B077	11/13/08	5	<0.03	B106	03/17/09	16	5.17	MTCA Method A Cleanup Level			
		5	<0.03			20	36.0	MTCA Method A Cleanup Level			
		5	<0.03			7	0.19	MTCA Method A Cleanup Level			
		5	<0.03			13	11.0	MTCA Method A Cleanup Level			
01MW56/B078	11/14/08	5	<0.03	B107	03/17/09	17	30.5	MTCA Method A Cleanup Level			
		5	<0.03			22	6.0	MTCA Method A Cleanup Level			
		5	<0.03			22	6.0	MTCA Method A Cleanup Level			
		5	<0.03			30	4.2	MTCA Method A Cleanup Level			
01MW57/B079	11/14/08	32.5	<0.03	B108	03/17/09	8	<0.03	MTCA Method A Cleanup Level			
		40	<0.03			14	0.42	MTCA Method A Cleanup Level			
		40	<0.03			6	0.24	MTCA Method A Cleanup Level			
		40	<0.03			12	1.55	MTCA Method A Cleanup Level			
01MW58/B080	11/14/08	5	<0.03	B109	03/17/09	15	0.90	MTCA Method A Cleanup Level			
		5	<0.03			15	0.90	MTCA Method A Cleanup Level			
		5	<0.03			15	0.90	MTCA Method A Cleanup Level			
		5	<0.03			15	0.90	MTCA Method A Cleanup Level			
01MW60/B83	12/29/08	7.5	<0.03	B110	03/17/09	4	<0.03	MTCA Method A Cleanup Level			
		37.5	<0.03			10	4.2	MTCA Method A Cleanup Level			
		37.5	<0.03			18	0.80	MTCA Method A Cleanup Level			
		37.5	<0.03			7	0.032	MTCA Method A Cleanup Level			
01MW61/B84	12/29/08	5	<0.03	B111	03/18/09	3	0.040	MTCA Method A Cleanup Level			
		5	<0.03			18	20.3	MTCA Method A Cleanup Level			
		5	<0.03			7	0.23	MTCA Method A Cleanup Level			
		5	<0.03			13	1.08	MTCA Method A Cleanup Level			
01MW62/B85	12/30/08	5	<0.03	B112	03/18/09	16	3.26	MTCA Method A Cleanup Level			
		5	<0.03			18	0.35	MTCA Method A Cleanup Level			
		5	<0.03			18	0.35	MTCA Method A Cleanup Level			
		5	<0.03			18	0.35	MTCA Method A Cleanup Level			
01MW63/B86	12/30/08	17.5	35	B113	03/18/09	11.5	<0.03	MTCA Method A Cleanup Level			
		32.5	<0.03			4	<0.03	MTCA Method A Cleanup Level			
		30	4.2			21	2.29	MTCA Method A Cleanup Level			
		37.5	0.10			3	<0.03	MTCA Method A Cleanup Level			
B87	12/29/08	5	<0.03	B114	03/18/09	4	<0.03	MTCA Method A Cleanup Level			
		18	19			18	2.82	MTCA Method A Cleanup Level			
		7	<0.03			21	2.29	MTCA Method A Cleanup Level			
		10	0.16			3	<0.03	MTCA Method A Cleanup Level			
B88	12/29/08	16	0.82	B115	03/18/09	12	0.037	MTCA Method A Cleanup Level			
		2	<0.03			18	0.43	MTCA Method A Cleanup Level			
		5	<0.03			18	0.43	MTCA Method A Cleanup Level			
		11	<0.03			18	0.43	MTCA Method A Cleanup Level			
B89	12/29/08	5	<0.03								
		11	<0.03								
		13	<0.03								
		3	4.4								
B90	12/29/08	10	<0.03								
		18	<0.03								
		2	<0.03								
		14	0.15								
B91	12/29/08	10	0.098								
		14	0.15								
		14	0.15								
		14	0.15								



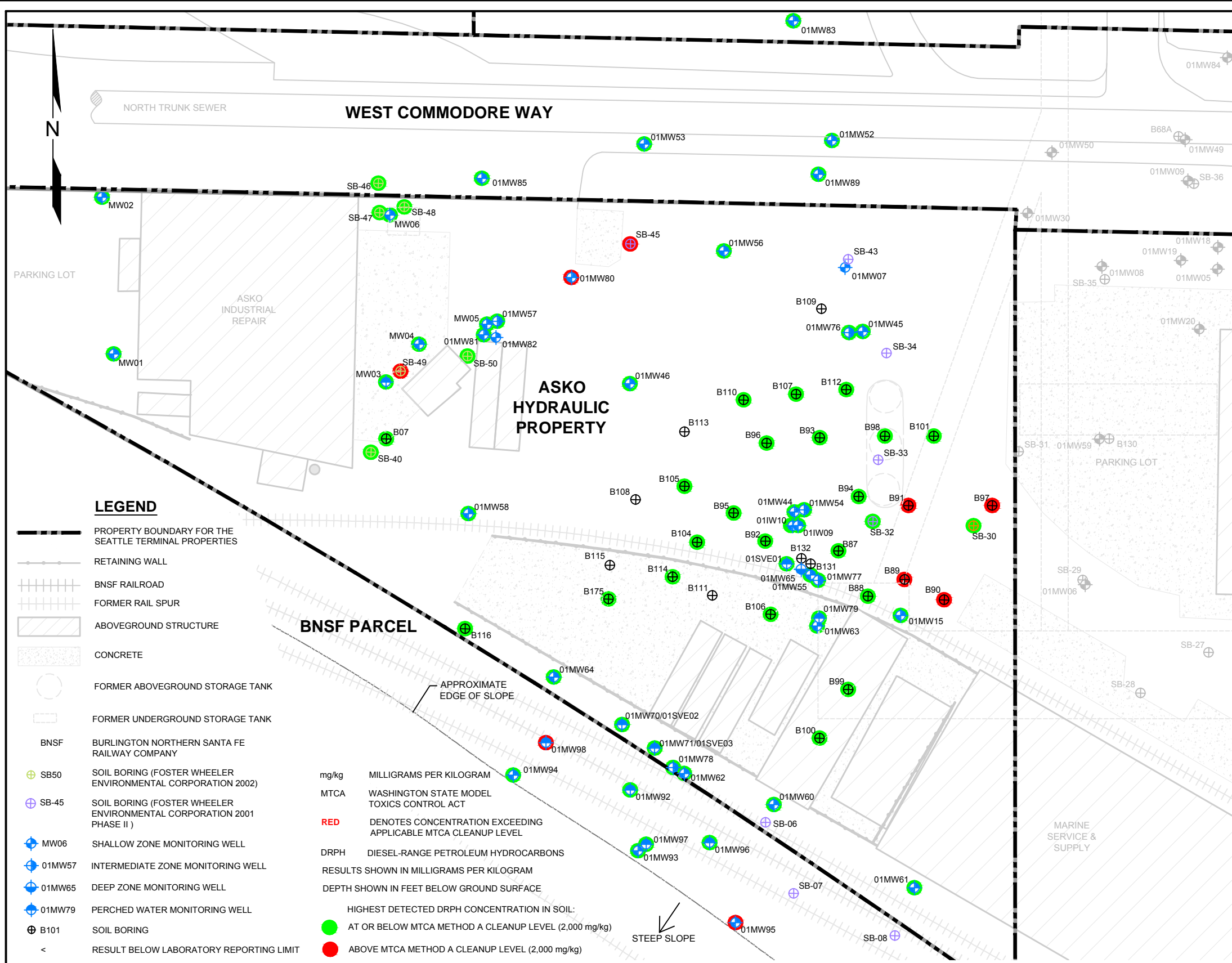
DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_SD\_TCE

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON



**FIGURE 11**  
 HISTORICAL SOIL ANALYTICAL RESULTS  
 FOR TCE

SOUND EARTH INC.

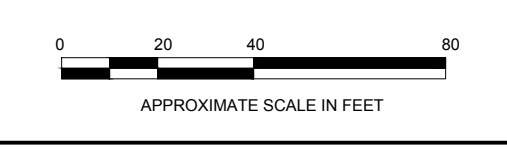
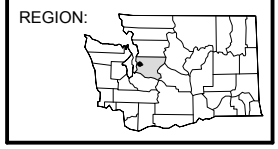


Sample Location	Date Sampled	Sample Depth	DRPH	Sample Location	Date Sampled	Sample Depth	DRPH
SB-46	11/28/00	2	90.8	01MW58/B080	11/14/08	5	<50
		5	<10.0			20	<50
		10	10.7			5	1,200
		15	<10.0			7.5	1,500
		20	<10.0			5	220
01MW52/B73	12/05/07	1.5	<50	01MW61/B84	12/29/08	5	<50
		2.0	<50			5	<50
		1.5	<50			17.5	<50
		2.0	<50			20	<50
		3.5	<50			5	<50
01MW53/B75	12/06/07	4.0	<50	01MW62/B85	12/30/08	5	<50
		5	<50			17.5	<50
		12.5	<50			20	<50
		2.5	<50			5	<50
		12.5	<50			17.5	<50
01MW83/B191	04/19/11	5	<50	B87	12/29/08	16	<50
		12.5	<50			10	<50
		2.5	<50			11	110
		7.5	<50			13	4,300
		12.5	<50			3	10,000
01MW85/B193	04/20/11	12.5	<50	B90	12/29/08	2	8,300
		2.5	<50			10	<50
		7.5	<50			10	<50
		12.5	<50			10	<50
		2.5	<50			10	<50
01MW89/B197	4/21/11	12.5	<50	B94	12/30/08	7	140
		5	<10.0			14	<50
		5	<10.0			20	<50
		1.0	80.5			6	2,900
		1.5	<10.0			6	<50
SB-40	11/21/00	5	87.9	B99	12/30/08	0.5	970
		10	<10.0			5	120
		1.0	<10.0			0.5	<50
		2.5	<10.0			3	610
		2.5	<10.0			2	<50
SB-47	11/28/00	2	<10.0	01MW64/B102	03/17/09	2.5	320
		5	<10.0			5	<50
		1.0	<10.0			7.5	<50
		1.5	<10.0			14	<50
		2.5	<10.0			15	<50
SB-48	11/29/00	2	2,770	B104	03/17/09	14	<50
		5	339			15	<50
		10	<10.0			20	<50
		1.5	<10.0			13	<50
		5	339			11	<50
SB-49	11/29/00	10	<10.0	B107	03/17/09	18	<50
		1.5	<10.0			16	<50
		2	<10.0			18	<50
		5	<10.0			3	1,900
		10	<10.0			7	<50
SB-50	11/29/00	5	<10.0	01MW70/01SVE02/B134	02/11/10	10.5	<50
		10	<10.0			5.5	<50
		1.5	<10.0			10.5	<50
		2	2,900			11.5	<50
		5	2,200			11	<50
SB-30	2001	2	832	01MW10/B137	02/12/10	11	<50
		5	15.7			22.5	<50
		2	2,900			20	<50
		5	2,200			7.5	<50
		10	<10.0			27.5	<50
SB-32	2001	5	15.7	01MW78/B171	02/28/11	22.5	<50
		2	2,900			20	<50
		5	2,200			7.5	<50
		10	<10.0			2.5	<50
		15	<10.0			2.5	<50
SB-45	2001	2	2,900	01MW79/B174	03/03/11	7.5	<50
		5	2,200			10.5	<50
		2	118			2.5	<50
		5	21.4			7.5	<50
		10	<10.0			11	<50
01MW15/SB-58	07/19/01	15	<10.0	B175	03/03/11	11	<50
		25	<10.0			15	<50
		5	1,300			2.5	<50
		12	<12.3			7.5	<50
		1.5	<12.8			15	<50
MW01/B01	04/17/06	11	<10.5	01MW80/B188	04/18/11	2.5	2,300
		4.5	<11.6			12.5	<50
		11	<11.2			12.5	<50
		6	1,300			2.5	<50
		1.2	<12.3			7.5	<50
MW02/B02	04/17/06	11	<11.2	01MW81/B189	04/18/11	12.5	<50
		6	1,300			2.5	<50
		1.2	<12.3			5	<50
		1.5	<12.8			10	<50
		1.5	<12.8			2.5	<50
MW03/B03	04/18/06	1	706	01MW92/B258	08/16/12	2.5	<50
		1.0	<12.1			5	<50
		2.2	<11.5			10	<50
		1.5	86.4			2.5	<50
		22.5	<12.1			7.5	<50
MW04/B04	04/18/06	2	897	01MW93/B259	08/16/12	7.5	<50
		12.5	<11.2			17.5	<50
		1.5	394			2.5	<50
		2.5	<11.4			0.5	140
		22.5	<11.8			2.5	<50
01MW44/S865	09/13/06	25	<12.1	01MW94/B260	08/17/12	2.5	<50
		2.5	32.0			12.5	<50
		22.5	<11.5			17.5	<50
		25	<12.3			0.5	140
		2.5	182			2.5	<50
01MW45/S866	09/13/06	22.5	<11.8	01MW95/B261	08/17/12	5	3,000
		2.5	<10.9			7.5	<50
		27.5	<11.9			11	<50
		5	<50			3.5	<50
		22.5	<11.5			6	<50
01MW46/S867	09/13/06	27.5	<11.9	01MW96/B264	05/07/13	7.5	68
		5	<50			10	<50
		10	<50			3	<50
		5	91			6	<50
		15	<50			11	<50
01MW54/B076	11/13/08	5	<50	01MW97/B265	05/07/13	3.5	<50
		10	<50			6	<50
		5	91			11	<50
		15	<50			3.5	<50
		5	<50			6	4,100
01MW55/B077	11/13/08	5	<50	01MW98/B266	05/07/13	8	<50
		15	<50			2,000	2,000
		5	<50			2,000	2,000
		5	<50			2,000	2,000
		32.5	<50			2,000	2,000
01MW56/B078	11/14/08	5	<50				
		15	<50				
		5	<50				
		5	<50				
		32.5	<50				
01MW57/B079	11/14/08	5	<50				
		5	<50				
		5	<50				
		5	<50				
		32.5	<50				
MTCA Method A Cleanup Level			2,000	MTCA Method A Cleanup Level			2,000

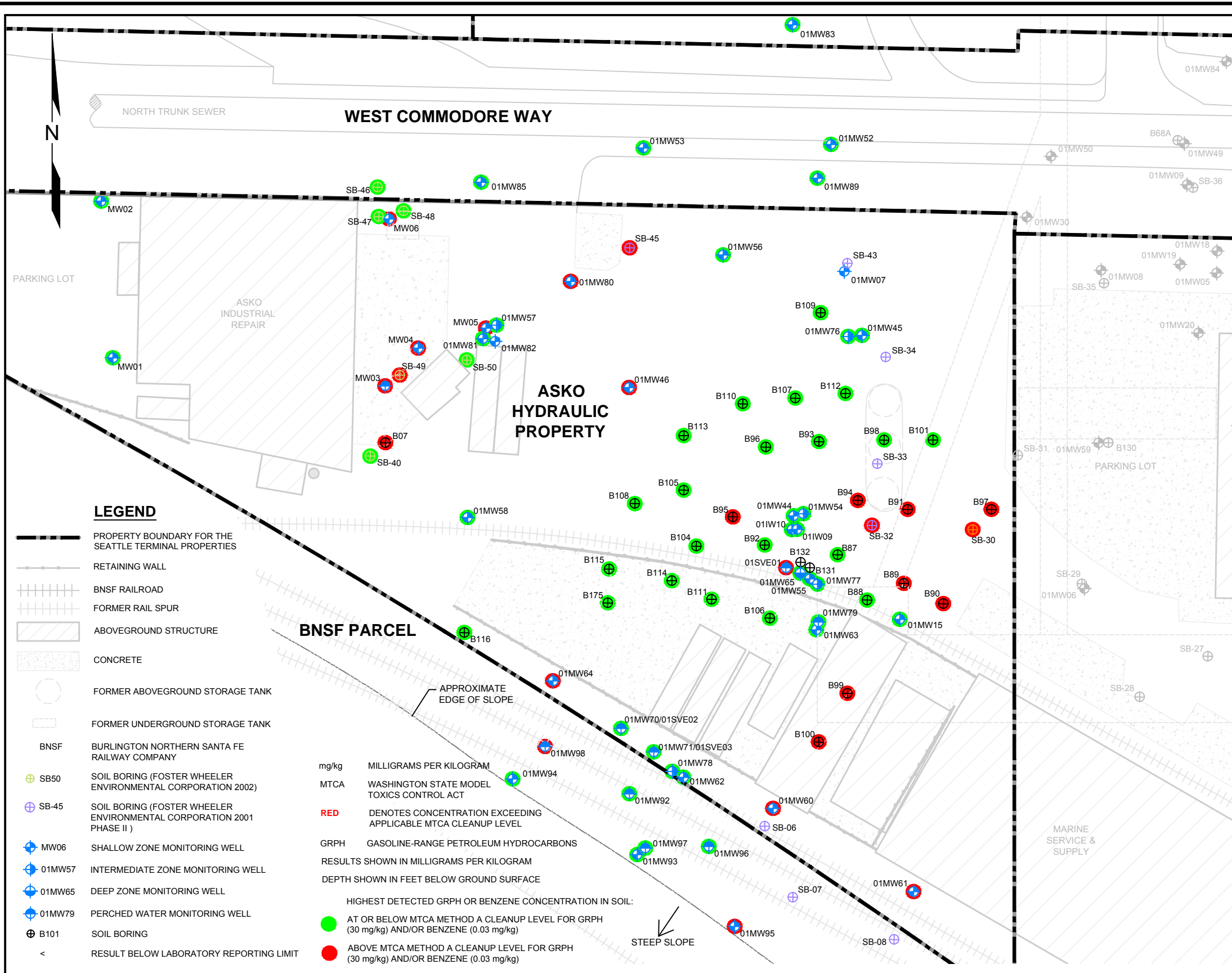


DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_SD\_DRPH

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON



**FIGURE 12**  
 HISTORICAL SOIL ANALYTICAL RESULTS FOR DRPH



Sample Location	Date Sampled	Sample Depth	GRPH	Benzene	Sample Location	Date Sampled	Sample Depth	GRPH	Benzene		
SB-46	11/28/00	2	<0.00	<0.00	01MW53/898	12/30/08	3	<2	<0.03		
		5	<0.00	<0.00			17.5	2.2	<0.03		
		10	<0.00	<0.00			887	12/29/08	18	8	<0.03
		15	<0.00	<0.00			888	12/29/08	10	6	<0.03
		20	<0.00	<0.00			889	12/29/08	11	42.0	<0.03
01MW52/878	12/03/07	20	<2	<0.03	13	8,700	0.25	<0.03			
		35	<2	<0.03	890	12/29/08	3	88.0	0.81		
		40	<2	<0.03	891	12/29/08	2	80.0	<0.03		
		15	<2	<0.03	892	12/29/08	10	1.9	<0.03		
		20	<2	<0.03	893	12/29/08	10	<2	<0.03		

LEGEND

- PROPERTY BOUNDARY FOR THE SEATTLE TERMINAL PROPERTIES
- RETAINING WALL
- BNSF RAILROAD
- FORMER RAIL SPUR
- ABOVEGROUND STRUCTURE
- CONCRETE
- FORMER ABOVEGROUND STORAGE TANK
- FORMER UNDERGROUND STORAGE TANK
- BNSF BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY
- SB50 SOIL BORING (FOSTER WHEELER ENVIRONMENTAL CORPORATION 2002)
- SB-45 SOIL BORING (FOSTER WHEELER ENVIRONMENTAL CORPORATION 2001 PHASE II)
- MW06 SHALLOW ZONE MONITORING WELL
- 01MW57 INTERMEDIATE ZONE MONITORING WELL
- 01MW65 DEEP ZONE MONITORING WELL
- 01MW79 PERCHED WATER MONITORING WELL
- B101 SOIL BORING
- < RESULT BELOW LABORATORY REPORTING LIMIT

mg/kg MILLIGRAMS PER KILOGRAM  
 MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT  
 RED DENOTES CONCENTRATION EXCEEDING APPLICABLE MTCA CLEANUP LEVEL  
 GRPH GASOLINE-RANGE PETROLEUM HYDROCARBONS  
 RESULTS SHOWN IN MILLIGRAMS PER KILOGRAM  
 DEPTH SHOWN IN FEET BELOW GROUND SURFACE  
 HIGHEST DETECTED GRPH OR BENZENE CONCENTRATION IN SOIL:  
 AT OR BELOW MTCA METHOD A CLEANUP LEVEL FOR GRPH (30 mg/kg) AND/OR BENZENE (0.03 mg/kg)  
 ABOVE MTCA METHOD A CLEANUP LEVEL FOR GRPH (30 mg/kg) AND/OR BENZENE (0.03 mg/kg)



DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_SD\_GB

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON

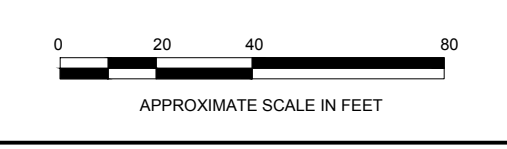
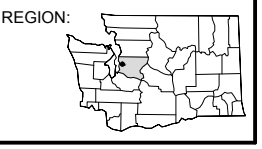
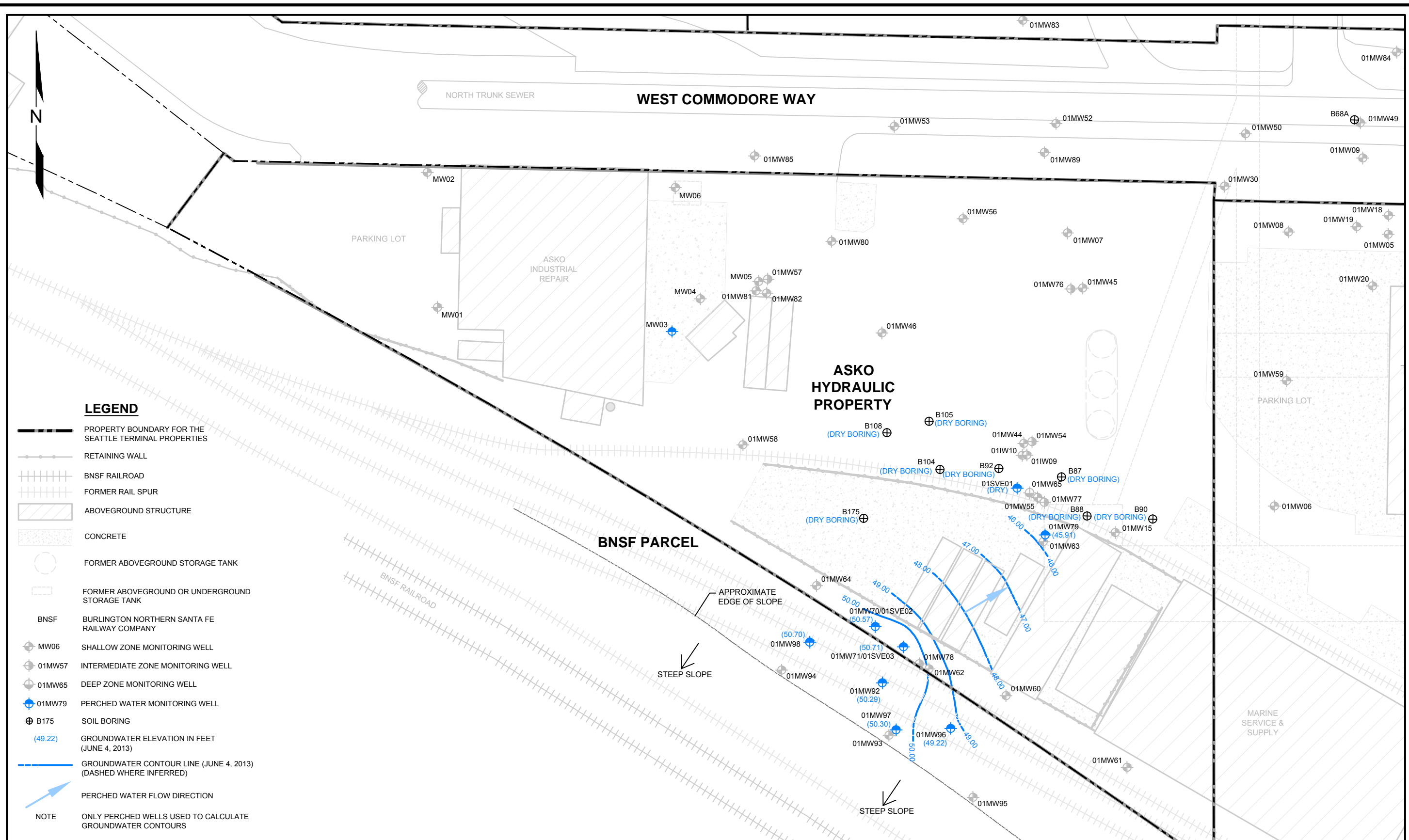
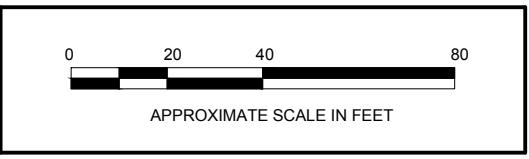
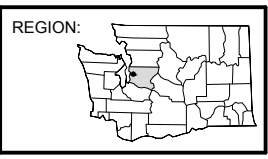


FIGURE 13  
 HISTORICAL SOIL ANALYTICAL RESULTS FOR GRPH AND BENZENE

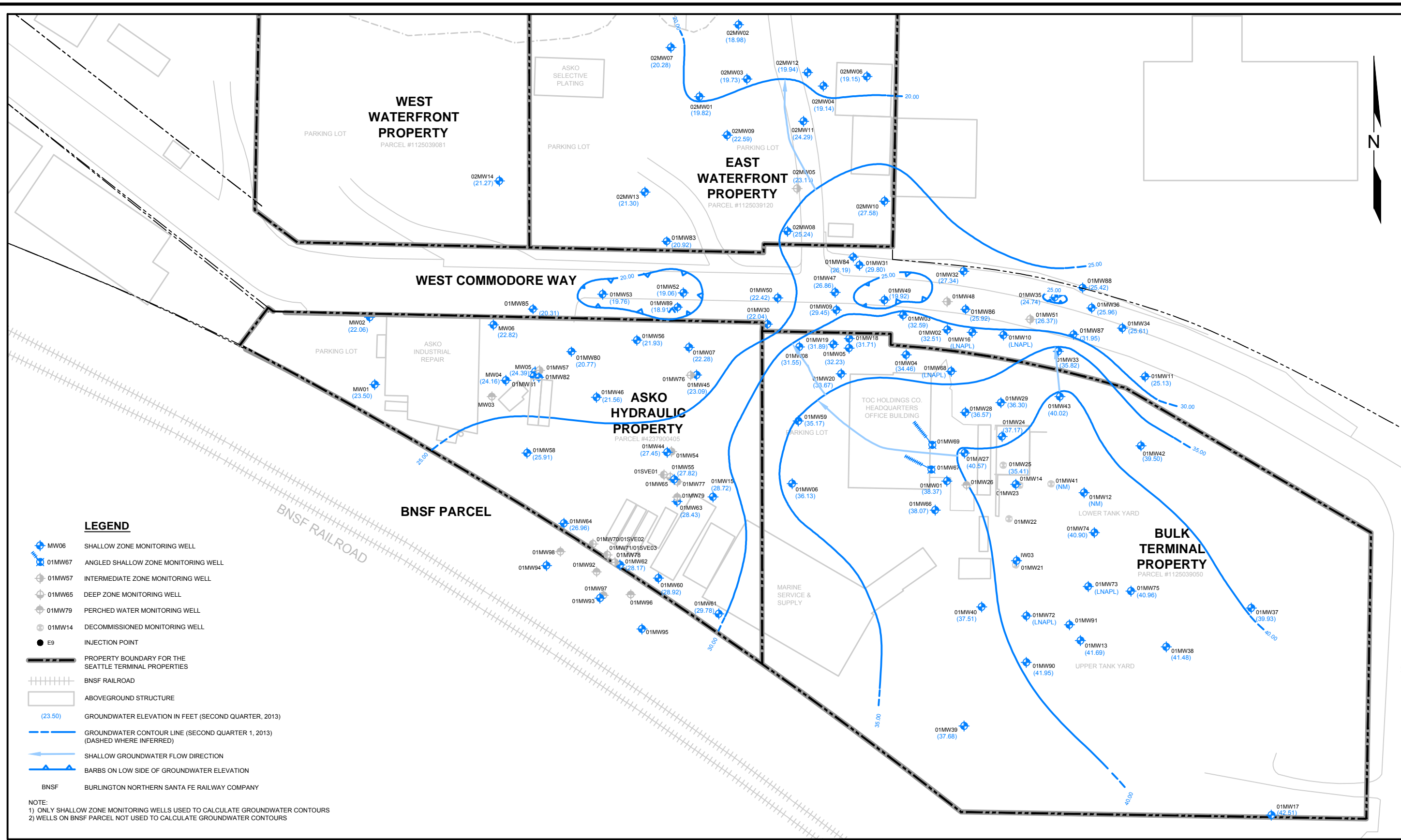


DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_CM\_PER

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 SES PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON



**FIGURE 14**  
 GROUNDWATER CONTOUR MAP  
 PERCHED WATER  
 (JUNE 4, 2013)



**LEGEND**

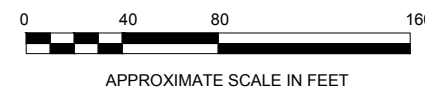
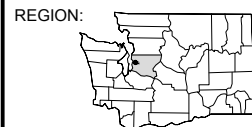
- MW06 SHALLOW ZONE MONITORING WELL
- 01MW67 ANGLED SHALLOW ZONE MONITORING WELL
- 01MW57 INTERMEDIATE ZONE MONITORING WELL
- 01MW65 DEEP ZONE MONITORING WELL
- 01MW79 PERCHED WATER MONITORING WELL
- 01MW14 DECOMMISSIONED MONITORING WELL
- E9 INJECTION POINT
- PROPERTY BOUNDARY FOR THE SEATTLE TERMINAL PROPERTIES
- BNSF RAILROAD
- ABOVEGROUND STRUCTURE
- (23.50) GROUNDWATER ELEVATION IN FEET (SECOND QUARTER, 2013)
- GROUNDWATER CONTOUR LINE (SECOND QUARTER 1, 2013) (DASHED WHERE INFERRED)
- SHALLOW GROUNDWATER FLOW DIRECTION
- BARBS ON LOW SIDE OF GROUNDWATER ELEVATION
- BNSF BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY

NOTE:  
 1) ONLY SHALLOW ZONE MONITORING WELLS USED TO CALCULATE GROUNDWATER CONTOURS  
 2) WELLS ON BNSF PARCEL NOT USED TO CALCULATE GROUNDWATER CONTOURS



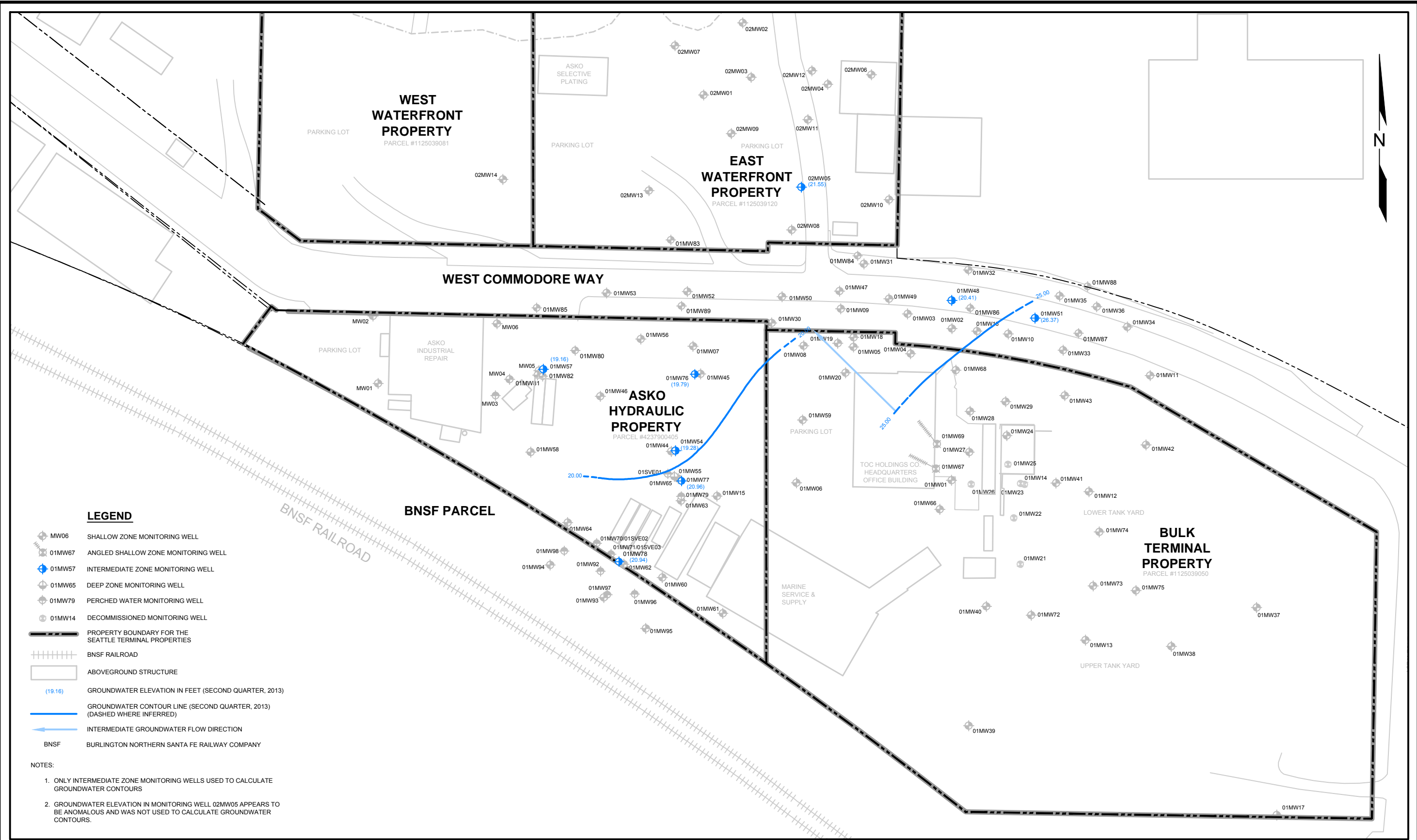
DATE: 05/14/14  
 DRAWN BY: JQC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_CM\_SHAL

PROJECT NAME: TOC HOLDINGS CO. SEATTLE TERMINAL PROPERTIES  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2737, 2750, 2800, AND 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON



**FIGURE 15**  
 SEATTLE TERMINAL PROPERTIES  
 GROUNDWATER CONTOUR MAP,  
 SHALLOW WATER-BEARING ZONE  
 (SECOND QUARTER, 2013)

P:\0440 TOC HOLDINGS CO\01-600 SEATTLE TERMINAL\TECHNICAL\CAD\2013\ASKOR\01-600\_2013R1\_CM\_INT\_E.DWG 5/22/2014



**LEGEND**

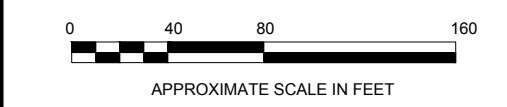
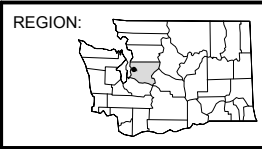
- MW06 SHALLOW ZONE MONITORING WELL
- 01MW67 ANGLED SHALLOW ZONE MONITORING WELL
- 01MW57 INTERMEDIATE ZONE MONITORING WELL
- 01MW65 DEEP ZONE MONITORING WELL
- 01MW79 PERCHED WATER MONITORING WELL
- 01MW14 DECOMMISSIONED MONITORING WELL
- PROPERTY BOUNDARY FOR THE SEATTLE TERMINAL PROPERTIES
- BNSF RAILROAD
- ABOVEGROUND STRUCTURE
- (19.16) GROUNDWATER ELEVATION IN FEET (SECOND QUARTER, 2013)
- GROUNDWATER CONTOUR LINE (SECOND QUARTER, 2013) (DASHED WHERE INFERRED)
- INTERMEDIATE GROUNDWATER FLOW DIRECTION
- BNSF BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY

- NOTES:**
1. ONLY INTERMEDIATE ZONE MONITORING WELLS USED TO CALCULATE GROUNDWATER CONTOURS
  2. GROUNDWATER ELEVATION IN MONITORING WELL 02MW05 APPEARS TO BE ANOMALOUS AND WAS NOT USED TO CALCULATE GROUNDWATER CONTOURS.



DATE: 05/14/14  
 DRAWN BY: JQC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013R1\_CM\_INT

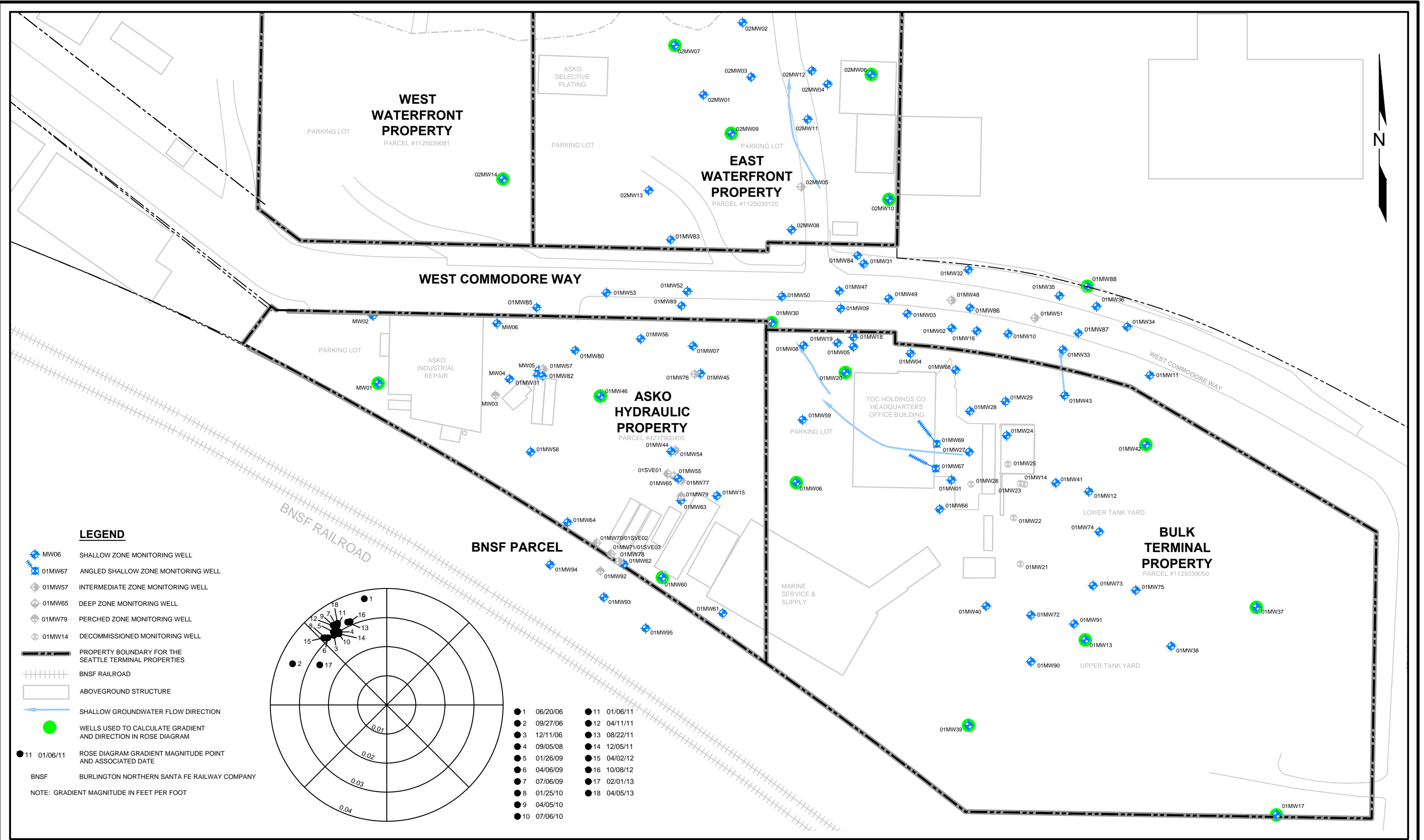
PROJECT NAME: TOC HOLDINGS CO. SEATTLE TERMINAL PROPERTIES  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2737, 2750, 2800, AND 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON



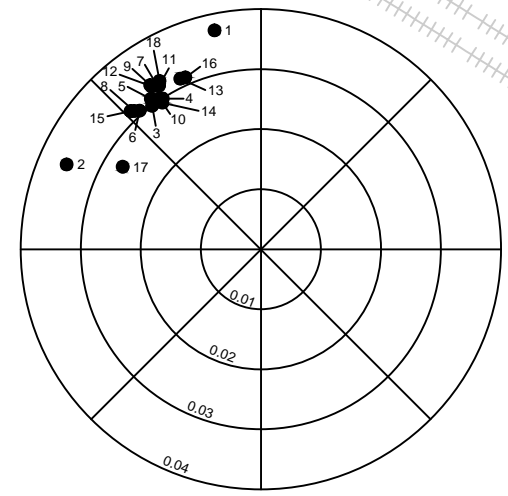
**FIGURE 16**  
 SEATTLE TERMINAL PROPERTIES  
 GROUNDWATER CONTOUR MAP,  
 INTERMEDIATE WATER-BEARING ZONE  
 (SECOND QUARTER, 2013)

www.soundearthinc.com

7/22/2014  
 P:\0440 TOC HOLDINGS CO\01-600 SEATTLE TERMINAL\TECHNICAL\CAD\2013\ASKO\RI\01-600\_2014RI\_ROSE\_F.DWG



- LEGEND**
- MW06 SHALLOW ZONE MONITORING WELL
  - 01MW67 ANGLED SHALLOW ZONE MONITORING WELL
  - 01MW57 INTERMEDIATE ZONE MONITORING WELL
  - 01MW65 DEEP ZONE MONITORING WELL
  - 01MW79 PERCHED ZONE MONITORING WELL
  - 01MW14 DECOMMISSIONED MONITORING WELL
  - PROPERTY BOUNDARY FOR THE SEATTLE TERMINAL PROPERTIES
  - BNSF RAILROAD
  - ABOVEGROUND STRUCTURE
  - SHALLOW GROUNDWATER FLOW DIRECTION
  - WELLS USED TO CALCULATE GRADIENT AND DIRECTION IN ROSE DIAGRAM
  - 11 01/06/11 ROSE DIAGRAM GRADIENT MAGNITUDE POINT AND ASSOCIATED DATE
  - BNSF BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY
- NOTE: GRADIENT MAGNITUDE IN FEET PER FOOT

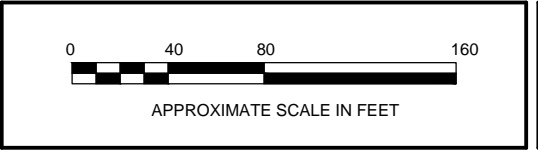
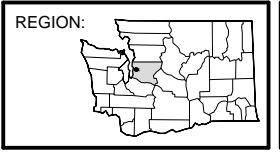


● 1 06/20/06	● 11 01/06/11
● 2 09/27/06	● 12 04/11/11
● 3 12/11/06	● 13 08/22/11
● 4 09/05/08	● 14 12/05/11
● 5 01/26/09	● 15 04/02/12
● 6 04/06/09	● 16 10/08/12
● 7 07/06/09	● 17 02/01/13
● 8 01/25/10	● 18 04/05/13
● 9 04/05/10	
● 10 07/06/10	



DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2014RI\_ROSE

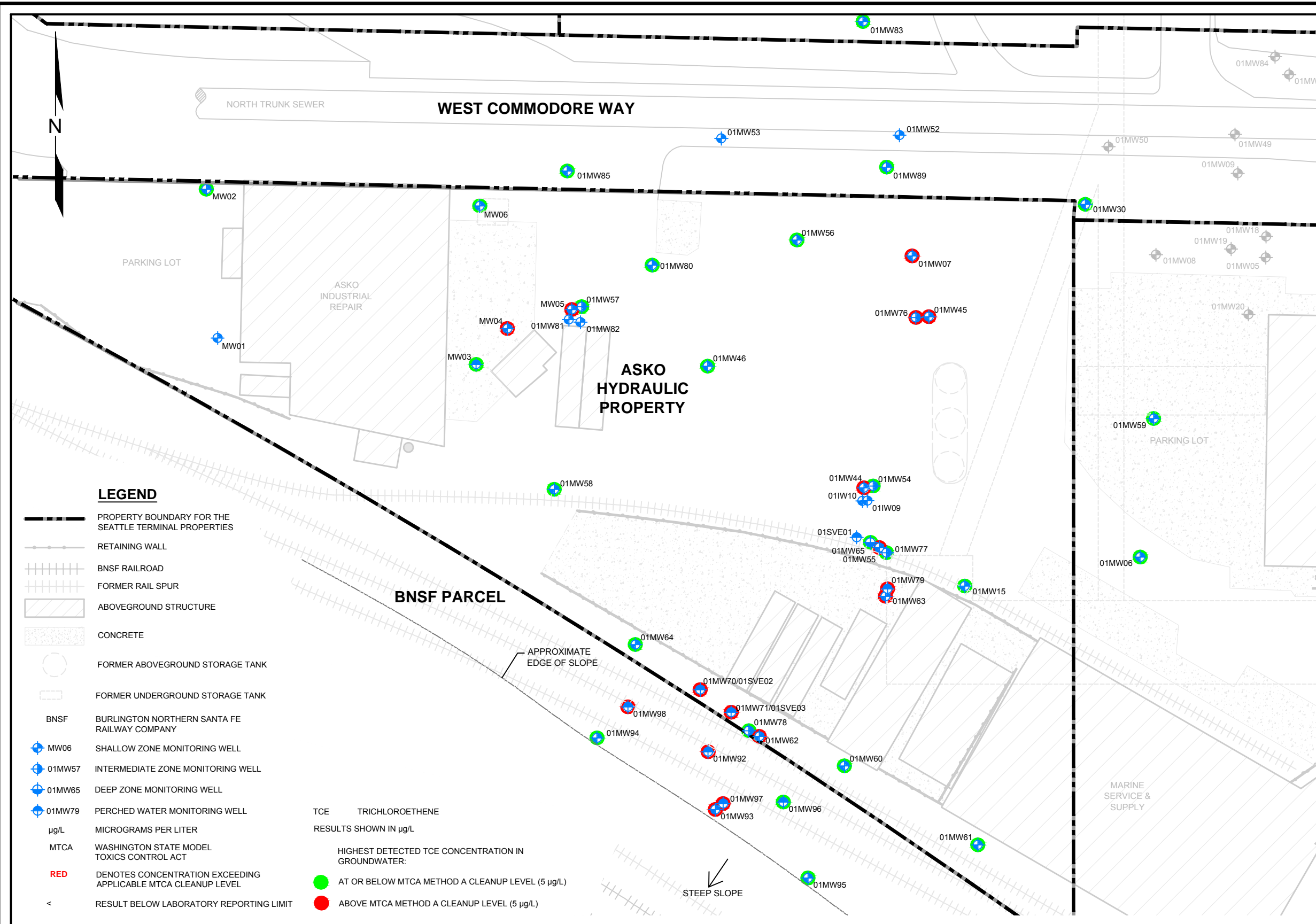
PROJECT NAME: TOC HOLDINGS CO. SEATTLE TERMINAL PROPERTIES  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2737, 2750, 2800, AND 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON



**FIGURE 17**  
 SEATTLE TERMINAL PROPERTIES,  
 ROSE DIAGRAM,  
 SHALLOW WATER-BEARING ZONE

SOUND EARTH INC.



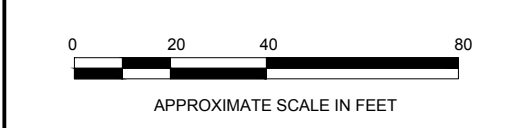
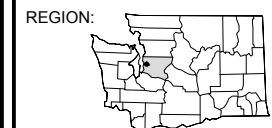


Sample Location	Date Sampled	TCE
<b>West Commodore Way</b>		
<b>Shallow Water-Bearing Zone</b>		
01MW30	04/04/13	<1
01MW83	04/01/13	<1
01MW85	04/01/13	<1
01MW89	04/01/13	<1
<b>ASKO Hydraulic Property</b>		
<b>Perched Water</b>		
MW03	04/01/13	<1
01MW70	04/02/13	360
01MW71	04/02/13	3,600
01MW79	04/02/13	100
<b>Shallow Water-Bearing Zone</b>		
MW02	04/01/13	<1
MW04	04/02/13	130
MW05	04/02/13	260
MW06	04/01/13	<1
01MW07	04/02/13	7.9
01MW15	04/03/13	1.9
01MW44	04/03/13	1,300
01MW45	04/03/13	410
01MW46	04/03/13	<1
01MW55	04/03/13	4,000
01MW56	04/02/13	<1
01MW58	04/02/13	<1
01MW60	04/02/13	4.5
01MW61	04/02/13	<1
01MW62	04/02/13	890
01MW63	04/03/13	9,000
01MW64	04/02/13	<1
01MW80	04/03/13	<1
<b>Intermediate Water-Bearing Zone</b>		
01MW54	04/01/13	1.3
01MW57	04/01/13	<1
01MW76	04/03/13	22
01MW77	04/01/13	<1
01MW78	04/01/13	2.3
<b>Deep Water-Bearing Zone</b>		
01MW65	04/01/13	<1
<b>BNSF Parcel</b>		
<b>Perched Water</b>		
01MW92	05/10/13	6,700
01MW96	05/10/13	<1
01MW97	05/10/13	6,300
01MW98	05/10/13	190
<b>Shallow Water-Bearing Zone</b>		
01MW93	05/13/13	5.5
01MW94	05/10/13	<1
01MW95	05/10/13	<1
<b>Bulk Terminal Property</b>		
<b>Shallow Water-Bearing Zone</b>		
01MW06	04/03/13	<1
01MW59	04/03/13	<1
<b>MTCA Method A Cleanup Level</b>		5



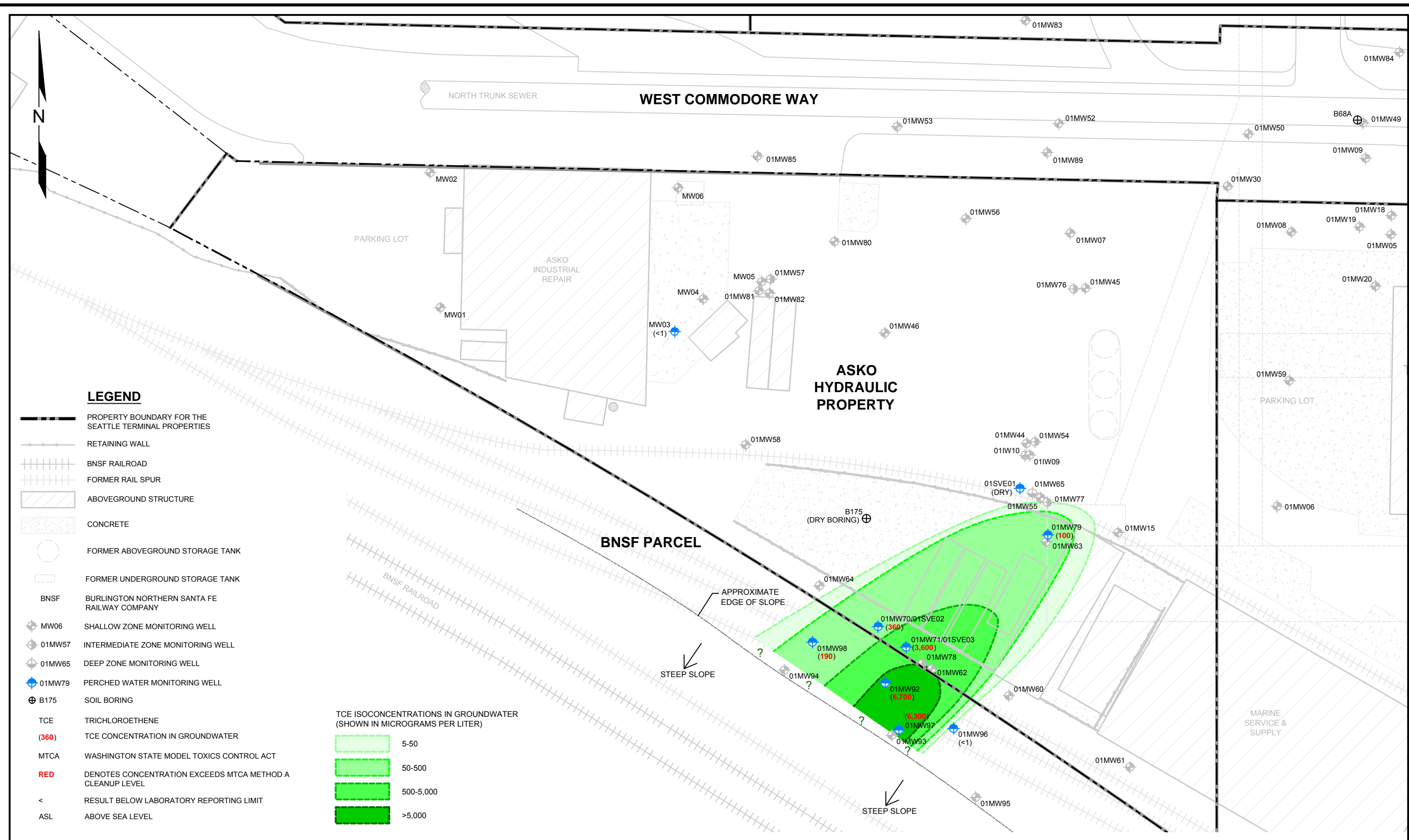
DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_GD\_TCE

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON



**FIGURE 18**  
 GROUNDWATER ANALYTICAL RESULTS  
 FOR TCE  
 (SECOND QUARTER, 2013)

5/22/2014  
 P:\0440 TOC HOLDINGS CO\01-600 SEATTLE TERMINAL\TECHNICAL\CAD\2013\ASKOR\01-600\_2013RI\_GDISO\_TCE\_P.F.DWG



**LEGEND**

- PROPERTY BOUNDARY FOR THE SEATTLE TERMINAL PROPERTIES
- RETAINING WALL
- BNSF RAILROAD
- FORMER RAIL SPUR
- ABOVEGROUND STRUCTURE
- CONCRETE
- FORMER ABOVEGROUND STORAGE TANK
- FORMER UNDERGROUND STORAGE TANK
- BNSF BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY
- MW06 SHALLOW ZONE MONITORING WELL
- 01MW57 INTERMEDIATE ZONE MONITORING WELL
- 01MW65 DEEP ZONE MONITORING WELL
- 01MW79 PERCHED WATER MONITORING WELL
- B175 SOIL BORING
- TCE TRICHLOROETHENE
- (360) TCE CONCENTRATION IN GROUNDWATER
- MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT
- RED DENOTES CONCENTRATION EXCEEDS MTCA METHOD A CLEANUP LEVEL
- < RESULT BELOW LABORATORY REPORTING LIMIT
- ASL ABOVE SEA LEVEL

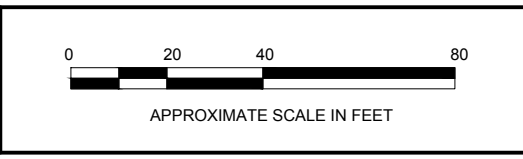
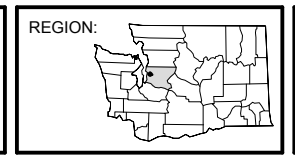
TCE ISOCONCENTRATIONS IN GROUNDWATER (SHOWN IN MICROGRAMS PER LITER)

	5-50
	50-500
	500-5,000
	>5,000



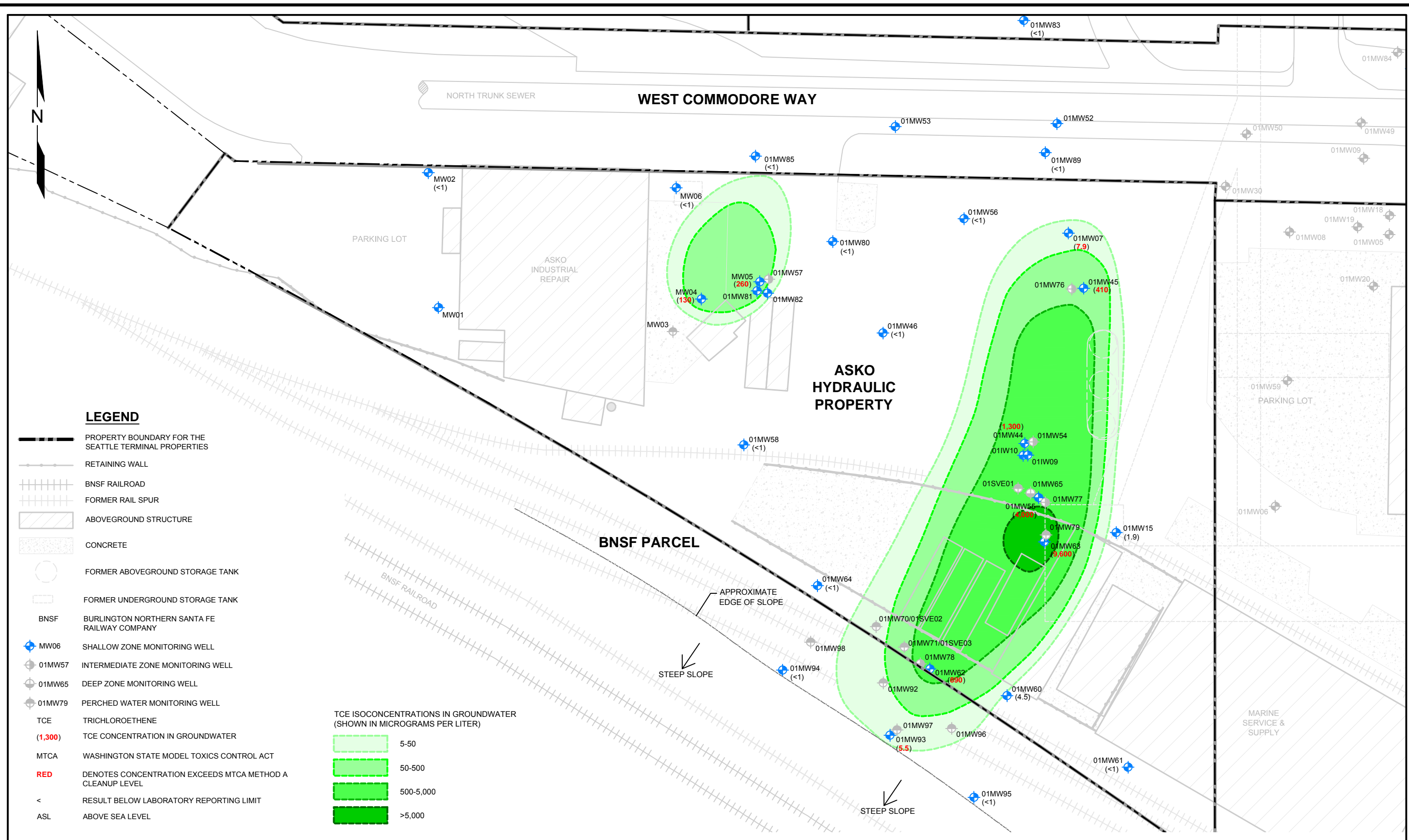
DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_GDISO\_TCE\_P

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON



**FIGURE 19**  
 TCE ISOCONCENTRATION MAP,  
 PERCHED WATER  
 (ELEVATION 40 TO 50 FEET ASL),  
 SECOND QUARTER, 2013

SOURCE: RTRM.COM



**LEGEND**

- PROPERTY BOUNDARY FOR THE SEATTLE TERMINAL PROPERTIES
- RETAINING WALL
- BNSF RAILROAD
- FORMER RAIL SPUR
- ABOVEGROUND STRUCTURE
- CONCRETE
- FORMER ABOVEGROUND STORAGE TANK
- FORMER UNDERGROUND STORAGE TANK
- BNSF BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY
- MW06 SHALLOW ZONE MONITORING WELL
- 01MW57 INTERMEDIATE ZONE MONITORING WELL
- 01MW65 DEEP ZONE MONITORING WELL
- 01MW79 PERCHED WATER MONITORING WELL
- TCE TRICHLOROETHENE
- (1,300) TCE CONCENTRATION IN GROUNDWATER
- MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT
- RED DENOTES CONCENTRATION EXCEEDS MTCA METHOD A CLEANUP LEVEL
- < RESULT BELOW LABORATORY REPORTING LIMIT
- ASL ABOVE SEA LEVEL

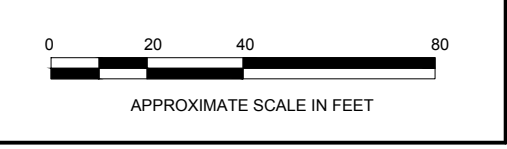
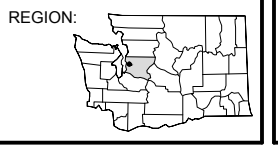
TCE ISOCONCENTRATIONS IN GROUNDWATER (SHOWN IN MICROGRAMS PER LITER)

	5-50
	50-500
	500-5,000
	>5,000

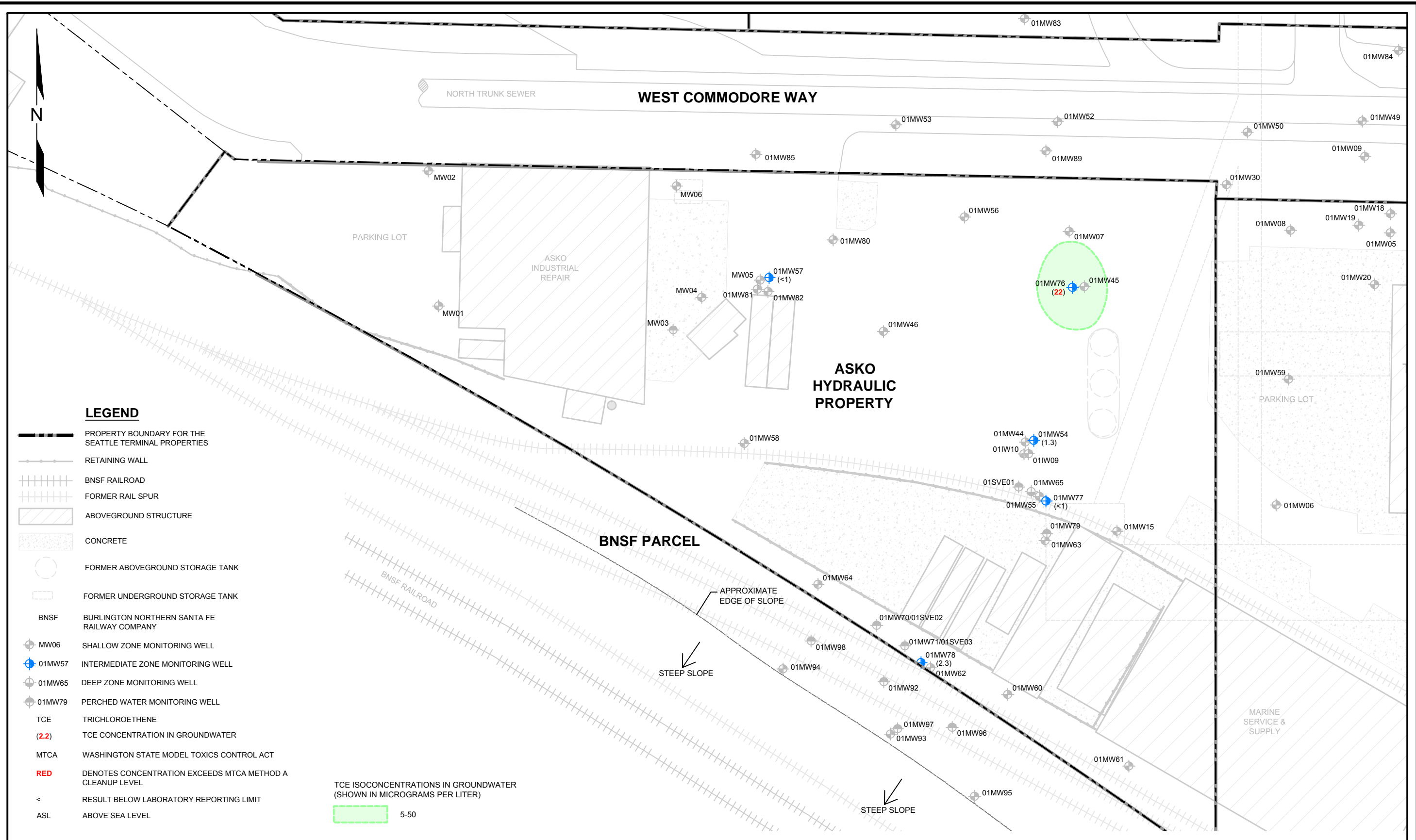


DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_GDISO\_TCE\_S

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON



**FIGURE 20**  
 TCE ISOCONCENTRATION MAP,  
 SHALLOW WATER-BEARING ZONE  
 (ELEVATION 17 TO 27 FEET ASL),  
 SECOND QUARTER, 2013



**LEGEND**

- PROPERTY BOUNDARY FOR THE SEATTLE TERMINAL PROPERTIES
- RETAINING WALL
- BNSF RAILROAD
- FORMER RAIL SPUR
- ABOVEGROUND STRUCTURE
- CONCRETE
- FORMER ABOVEGROUND STORAGE TANK
- FORMER UNDERGROUND STORAGE TANK
- BNSF BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY
- MW06 SHALLOW ZONE MONITORING WELL
- 01MW57 INTERMEDIATE ZONE MONITORING WELL
- 01MW65 DEEP ZONE MONITORING WELL
- 01MW79 PERCHED WATER MONITORING WELL
- TCE TRICHLOROETHENE
- (2.2) TCE CONCENTRATION IN GROUNDWATER
- MTCA WASHINGTON STATE MODEL TOXICS CONTROL ACT
- RED DENOTES CONCENTRATION EXCEEDS MTCA METHOD A CLEANUP LEVEL
- < RESULT BELOW LABORATORY REPORTING LIMIT
- ASL ABOVE SEA LEVEL

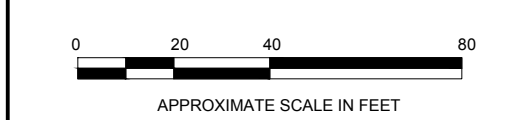
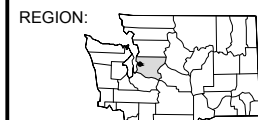
TCE ISOCONCENTRATIONS IN GROUNDWATER  
(SHOWN IN MICROGRAMS PER LITER)

5-50

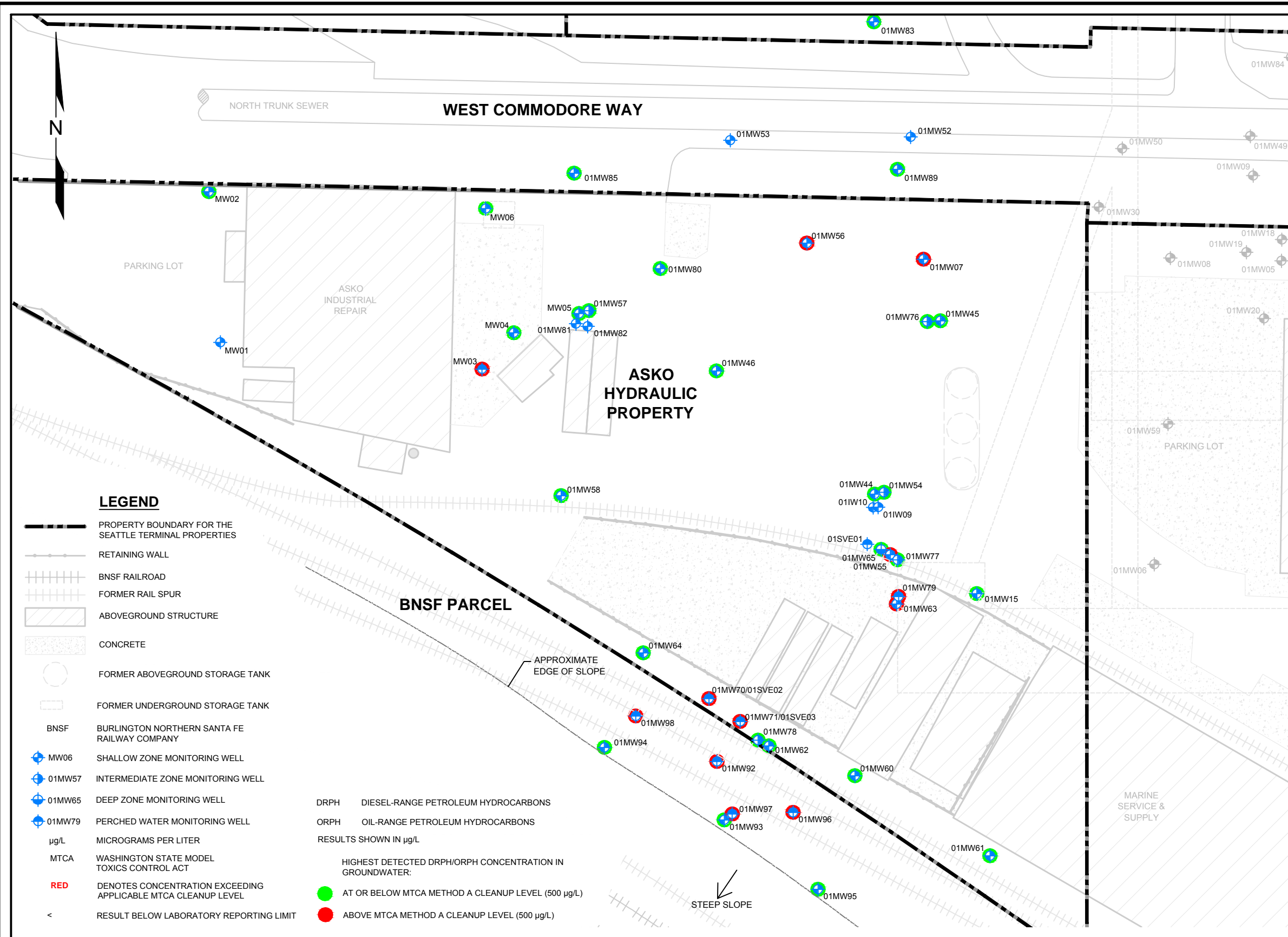


DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_GDISO\_TCE\_I

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON



**FIGURE 21**  
 TCE ISOCONCENTRATION MAP,  
 INTERMEDIATE WATER-BEARING ZONE  
 (ELEVATION 2.5 TO 13 FEET ASL),  
 SECOND QUARTER, 2013

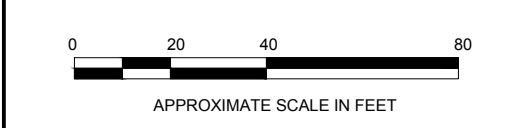
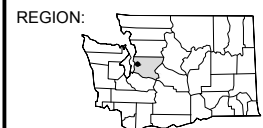


Sample Location	Date Sampled	DRPH	ORPH
<b>East Waterfront Property</b>			
<b>Shallow Water-Bearing Zone</b>			
01MW83	04/01/13	<50	<250
<b>West Commodore Way</b>			
<b>Shallow Water-Bearing Zone</b>			
01MW85	04/01/13	140	<250
01MW89	04/01/13	310	<250
<b>ASKO Hydraulic Property</b>			
<b>Perched Water</b>			
MW03	04/01/13	1,000	<250
01MW70	04/02/13	1,200	1,000
01MW71	04/02/13	1,500	1,400
01MW79	04/02/13	1,200	660
<b>Shallow Water-Bearing Zone</b>			
MW02	04/01/13	460	<250
MW04	04/02/13	240	<250
MW05	04/02/13	290	<250
MW06	04/01/13	310	<250
01MW07	04/02/13	860	<250
01MW15	04/03/13	240	<250
01MW44	04/03/13	290	<250
01MW45	04/03/13	380	<250
01MW46	04/03/13	130	<250
01MW55	04/03/13	630	370
01MW56	04/02/13	1,000	<250
01MW58	04/02/13	250	<250
01MW60	04/02/13	120	<250
01MW61	04/02/13	230	<250
01MW62	04/02/13	110	<250
01MW63	04/03/13	800	340
01MW64	04/02/13	120	<250
01MW80	04/03/13	240	<250
<b>Intermediate Water-Bearing Zone</b>			
01MW54	04/01/13	<50	<250
01MW57	04/01/13	<50	<250
01MW76	04/03/13	<50	<250
01MW77	04/01/13	79	<250
01MW78	04/01/13	<50	<250
<b>Deep Water-Bearing Zone</b>			
01MW65	04/01/13	<50	<250
<b>BNSF Parcel</b>			
<b>Perched Water</b>			
01MW92	05/10/13	3,400	770
01MW96	05/10/13	2,000	380
01MW97	05/10/13	3,200	740
01MW98	05/10/13	4,000	820
<b>Shallow Water-Bearing Zone</b>			
01MW93	05/13/13	<50	<250
01MW94	05/10/13	56	<250
01MW95	05/10/13	<50	<250
<b>MTCA Method A Cleanup Level</b>		<b>500</b>	<b>500</b>

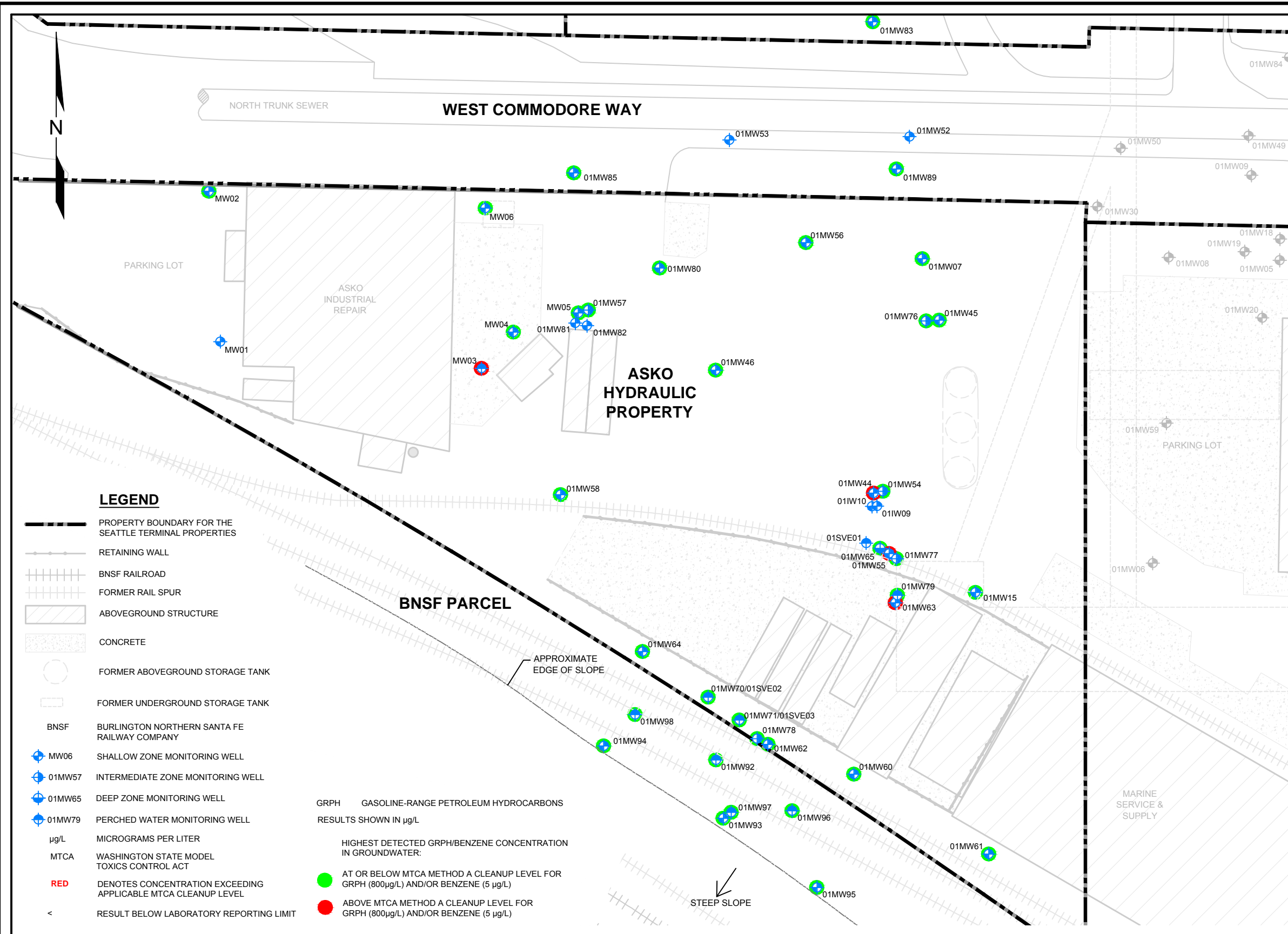


DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_GD\_DO

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON



**FIGURE 22**  
 GROUNDWATER ANALYTICAL RESULTS  
 FOR DRPH AND ORPH  
 (SECOND QUARTER, 2013)

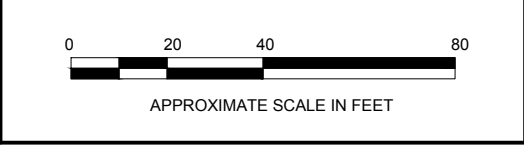
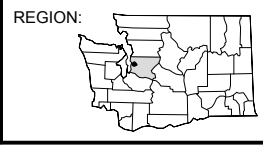


Sample Location	Date Sampled	GRPH	Benzene
<b>East Waterfront Property</b>			
<b>Shallow Water-Bearing Zone</b>			
01MW83	04/01/13	<100	<1
<b>West Commadore Way</b>			
<b>Shallow Water-Bearing Zone</b>			
01MW85	04/01/13	<100	<1
01MW89	04/01/13	<100	<1
<b>ASKO Hydraulic Property</b>			
<b>Perched Water</b>			
MW03	04/01/13	810	3.4
01MW70	04/02/13	160	<1
01MW71	04/02/13	330	<1
01MW79	04/02/13	<100	<1
<b>Shallow Water-Bearing Zone</b>			
MW02	04/01/13	<100	<1
MW04	04/02/13	<100	<1
MW05	04/02/13	<100	<1
MW06	04/01/13	<100	<1
01MW07	04/02/13	<100	<1
01MW15	04/03/13	<100	<1
01MW44	04/03/13	290	13
01MW45	04/03/13	200	2.2
01MW46	04/03/13	<100	<1
01MW55	04/03/13	1,100	2.0
01MW56	04/02/13	<100	<1
01MW58	04/02/13	<100	<1
01MW60	04/02/13	<100	<1
01MW61	04/02/13	<100	<1
01MW62	04/02/13	290	<1
01MW63	04/03/13	2,200	5.6
01MW64	04/02/13	<100	<1
01MW80	04/03/13	<100	<1
<b>Intermediate Water-Bearing Zone</b>			
01MW54	04/01/13	<100	<1
01MW57	04/01/13	<100	<1
01MW76	04/03/13	<100	<1
01MW77	04/01/13	<100	<1
01MW78	04/01/13	<100	<1
<b>Deep Water-Bearing Zone</b>			
01MW65	04/01/13	<100	<1
<b>BNSF Parcel</b>			
<b>Perched Water</b>			
01MW92	05/10/13	770	<1
01MW96	05/10/13	<100	<1
01MW97	05/10/13	620	<1
01MW98	05/10/13	170	<1
<b>Shallow Water-Bearing Zone</b>			
01MW93	05/13/13	<100	<1
01MW94	05/10/13	<100	<1
01MW95	05/10/13	<100	<1
<b>MTCA Method A Cleanup Level</b>		<b>800</b>	<b>5</b>

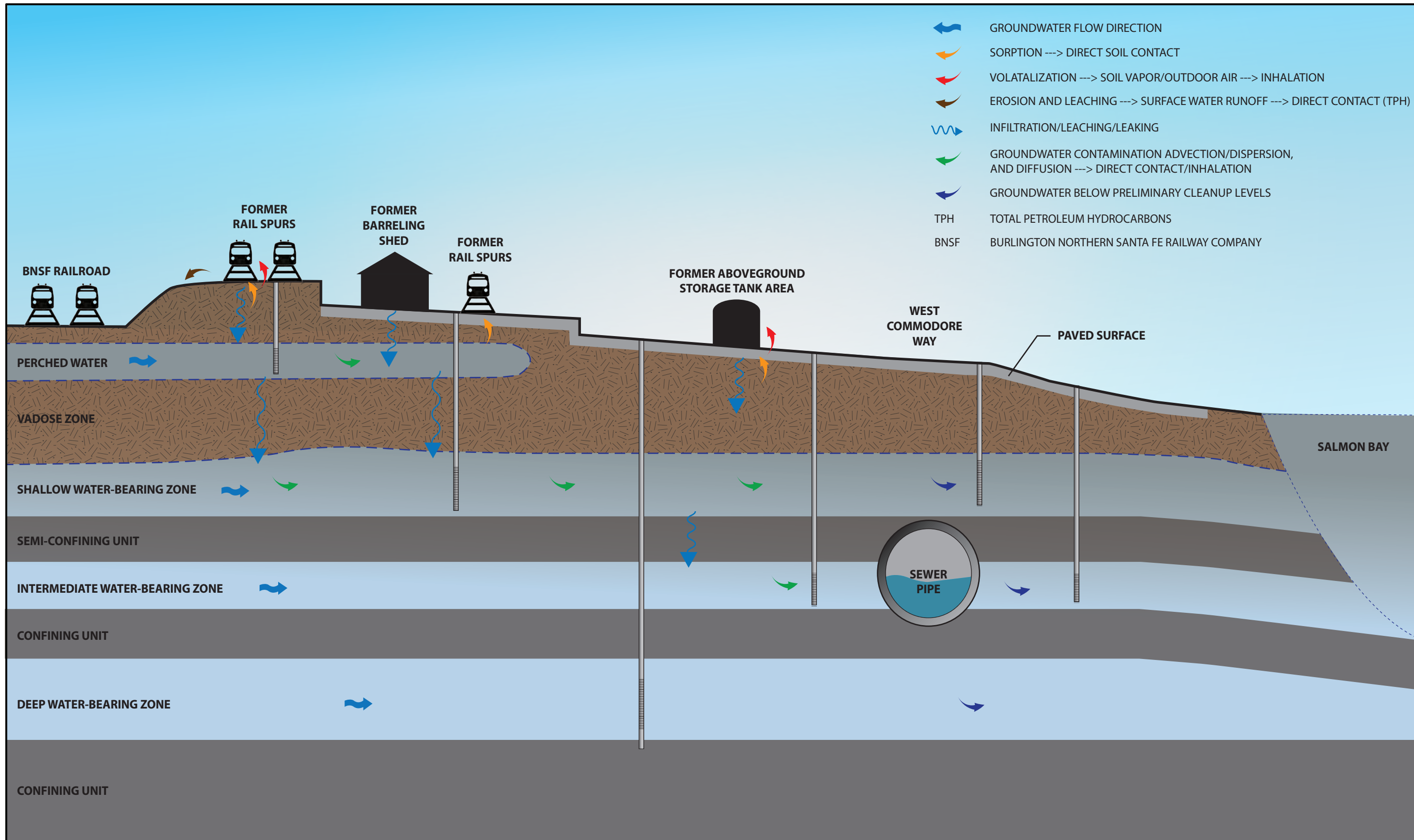


DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_GD\_GB

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON

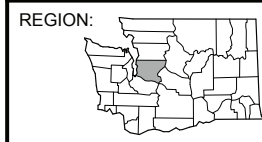


**FIGURE 23**  
 GROUNDWATER ANALYTICAL RESULTS  
 FOR GRPH AND BENZENE  
 (SECOND QUARTER, 2013)



DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: ASKO-CSM

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON



NO SCALE

**FIGURE 24**  
 CONCEPTUAL SITE MODEL

**SITE 1  
(AFFECTED  
PROPERTIES)**

**CONFIRMED AND  
SUSPECTED  
SOURCE AREAS**

**PRIMARY RELEASE  
MECHANISM OF  
COPCs**

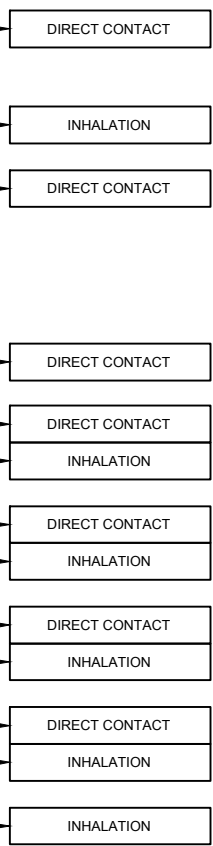
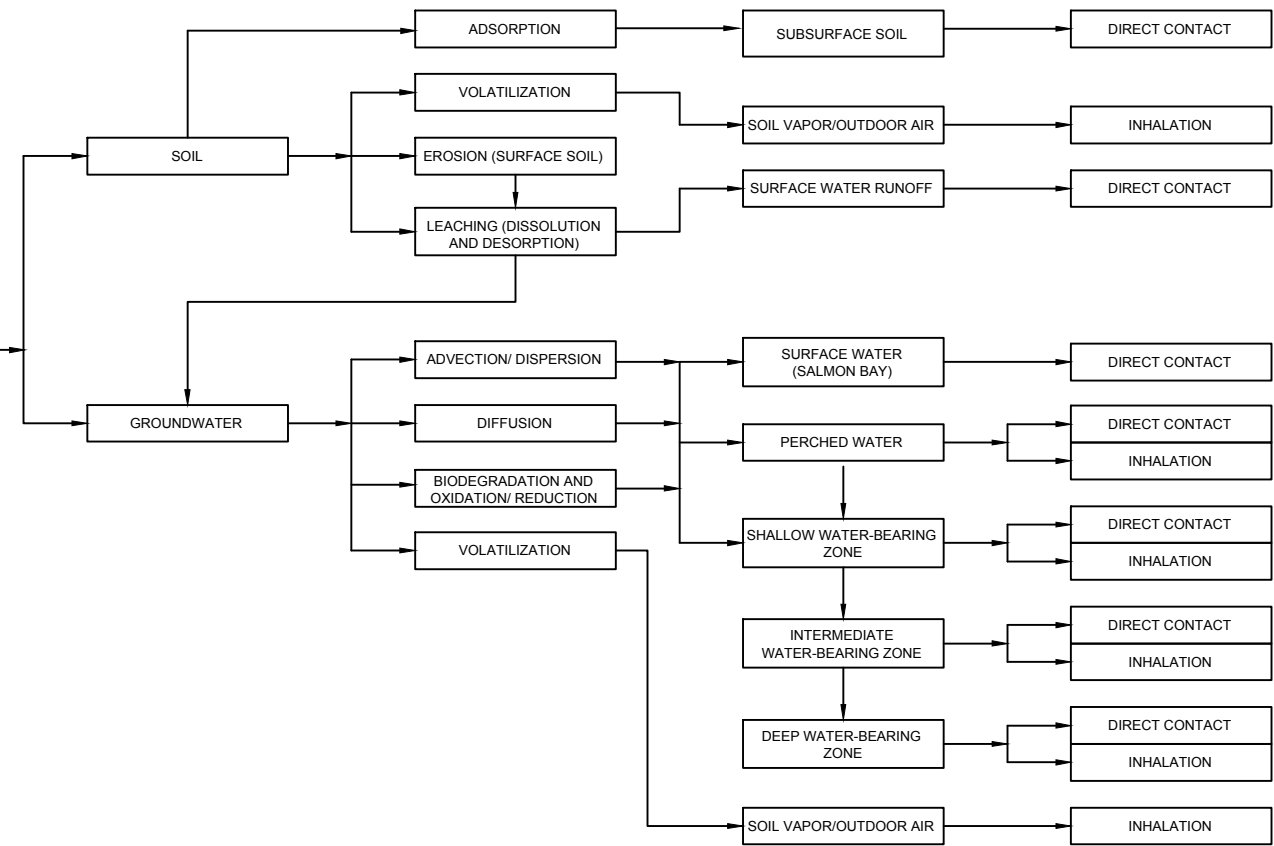
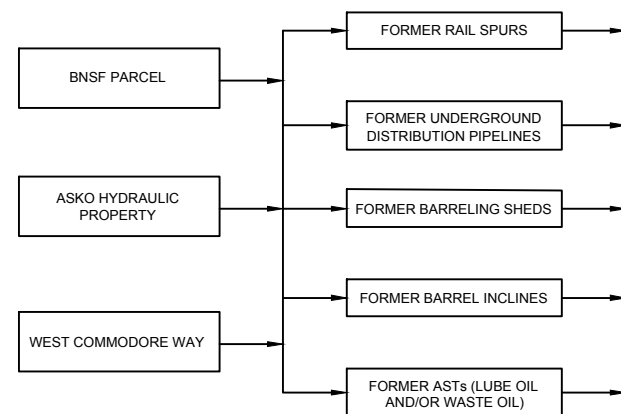
**AFFECTED  
ENVIRONMENTAL  
MEDIA**

**FATE AND  
TRANSPORT  
MECHANISMS**

**POTENTIALLY  
EXPOSED  
ENVIRONMENTAL  
MEDIA**

**EXPOSURE  
PATHWAY**

**POTENTIAL  
RECEPTORS**



	HUMAN				ECOLOGICAL	
	WORKERS	RECREATIONAL	DRINKING WATER	FISH AND SHELLFISH CONSUMPTION	TERRESTRIAL	AQUATIC BIOTA

●	X	NA	X	●	X
●	X	NA	X	●	X
X	X	NA	X	X	X
X	X	X	X	X	X
●	X	X	X	X	X
●	X	X	X	X	X
●	X	X	X	X	X
●	X	X	X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
●	X	X	X	●	X

**LEGEND**

- EXPOSURE PATHWAY COMPLETE FOR POTENTIAL RECEPTOR
- EXPOSURE PATHWAY COULD BE COMPLETE, BUT THE POTENTIAL RECEPTOR IS UNLIKELY
- X EXPOSURE PATHWAY INCOMPLETE
- NA NOT APPLICABLE

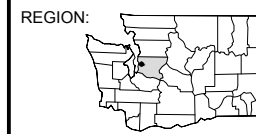
- AST ABOVEGROUND STORAGE TANK
- COPCs CHEMICALS OF POTENTIAL CONCERN
- BNSF BURLINGTON NORTHERN SANTA FE RAILWAY COMPANY

NOTE: DIRECT CONTACT INCLUDES DERMAL AND INGESTION



DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_CSM1

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON



NOT TO SCALE

**FIGURE 25**  
 PRELIMINARY EXPOSURE ASSESSMENT,  
 CONCEPTUAL SITE MODEL,  
 SITE 1



**SITE 2  
(AFFECTED  
PROPERTIES)**

**CONFIRMED AND  
SUSPECTED  
SOURCE AREAS**

**PRIMARY RELEASE  
MECHANISM OF  
COPCs**

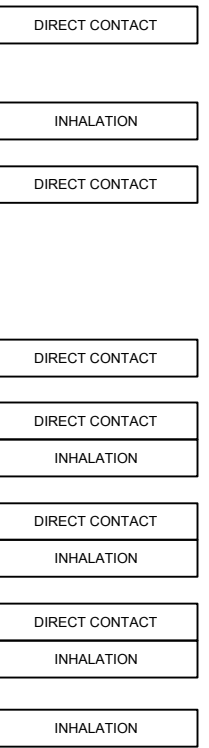
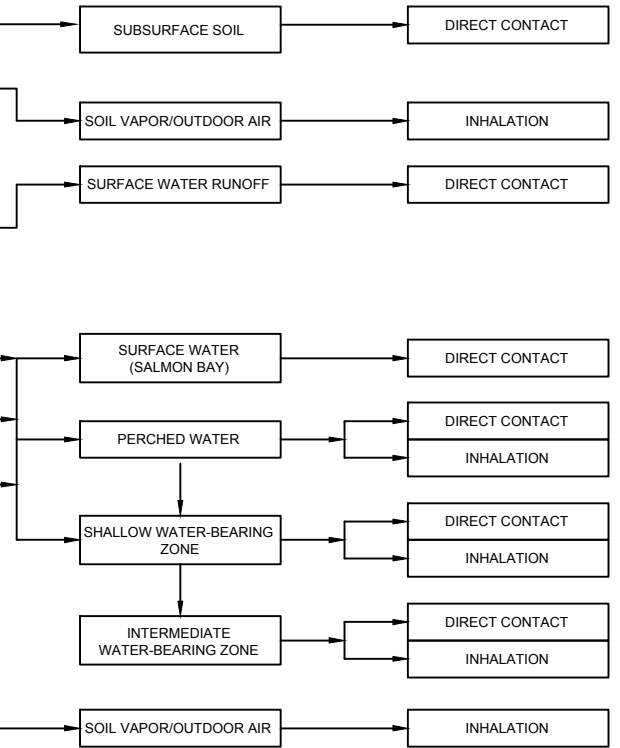
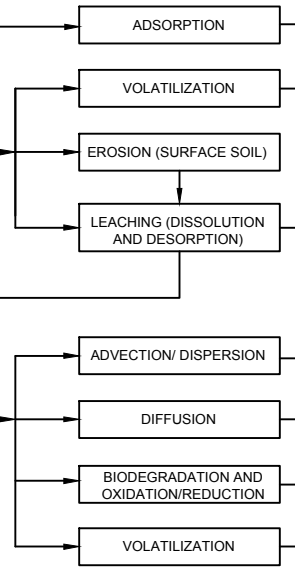
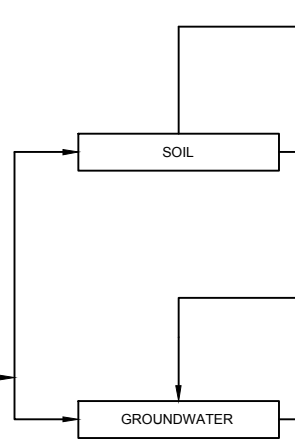
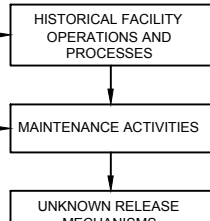
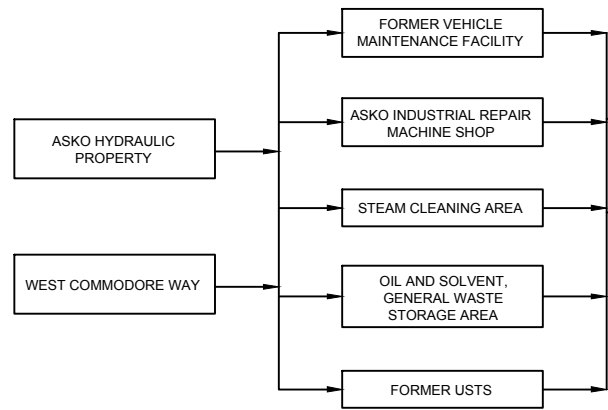
**AFFECTED  
ENVIRONMENTAL  
MEDIA**

**FATE AND  
TRANSPORT  
MECHANISMS**

**POTENTIALLY  
EXPOSED  
ENVIRONMENTAL  
MEDIA**

**EXPOSURE  
PATHWAY**

**POTENTIAL  
RECEPTORS**



	HUMAN				ECOLOGICAL	
	WORKERS	RECREATIONAL	DRINKING WATER	FISH AND SHELLFISH CONSUMPTION	TERRESTRIAL	AQUATIC BIOTA

●	X	NA	X	X	X
●	X	NA	X	●	X
X	X	NA	X	X	X
X	X	X	X	X	X
●	X	X	X	X	X
●	X	X	X	X	X
●	X		X	X	X
●	X		X	X	X
X	X	X	X	X	X
X	X	X	X	X	X
●	X	X	X	●	X

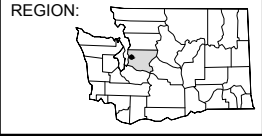
**LEGEND**

- EXPOSURE PATHWAY COMPLETE FOR POTENTIAL RECEPTOR
- EXPOSURE PATHWAY COULD BE COMPLETE, BUT THE POTENTIAL RECEPTOR IS UNLIKELY
- X EXPOSURE PATHWAY INCOMPLETE
- NA NOT APPLICABLE
- UST UNDERGROUND STORAGE TANK
- COPCs CHEMICALS OF POTENTIAL CONCERN
- NOTE: DIRECT CONTACT INCLUDES DERMAL AND INGESTION



DATE: 05/14/14  
 DRAWN BY: NAC/BLR  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_CSM2

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON



NOT TO SCALE

**FIGURE 26**  
 PRELIMINARY EXPOSURE ASSESSMENT,  
 CONCEPTUAL SITE MODEL,  
 SITE 2

## **TABLES**



**Table 1**  
**Preliminary Cleanup Levels**  
**TOC Holdings Co. Facility No. 01-600**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

SOIL	
Chemicals of Concern	Cleanup Levels (mg/kg)
Gasoline-Range Petroleum Hydrocarbons	30 <sup>(1)</sup>
Diesel-Range Petroleum Hydrocarbons	2,000 <sup>(1)</sup>
Oil-Range Petroleum Hydrocarbons	2,000 <sup>(1)</sup>
Benzene	0.03 <sup>(1)</sup>
Toluene	7 <sup>(1)</sup>
Ethylbenzene	6 <sup>(1)</sup>
Total Xylenes	9 <sup>(1)</sup>
PCE	0.05 <sup>(1)</sup>
TCE	0.03 <sup>(1)</sup>
cis-1,2-Dichloroethene	160 <sup>(2)</sup>
trans-1,2-Dichloroethene	1,600 <sup>(2)</sup>
1,1-Dichloroethene	4,000 <sup>(2)</sup>
1,2-Dichloroethane	11 <sup>(3)</sup>
Vinyl Chloride	0.67 <sup>(3)</sup>
MTBE	0.1 <sup>(1)</sup>
1,2-Dibromoethane	0.005 <sup>(1)</sup>
1,2,4-Trimethyl-benzene	NE
1,3,5-Trimethyl-benzene	800 <sup>(2)</sup>
Acetone	72,000 <sup>(2)</sup>
Isopropylbenzene	8,000 <sup>(2)</sup>
Naphthalene	5 <sup>(1)</sup>
n-Butylbenzene	NE
n-Propylbenzene	NE
p-Isopropyltoluene	NE
sec-Butylbenzene	NE
tert-Butylbenzene	NE
2-Butanone	48,000 <sup>(2)</sup>
Arsenic	20 <sup>(1)</sup>
Barium	16,000 <sup>(2)</sup>
Cadmium	2 <sup>(1)</sup>
Chromium	2,000 <sup>(1)</sup>
Lead	250 <sup>(1)</sup>
Mercury	2 <sup>(1)</sup>
Selenium	400 <sup>(2)</sup>
Silver	400 <sup>(2)</sup>
Ethanol	NE
Pentachlorophenol	2.5 <sup>(3)</sup>
1-Methylnaphthalene	5 <sup>(1)</sup>
2-Methylnaphthalene	5 <sup>(1)</sup>
Acenaphthene	4,800 <sup>(2)</sup>
Acenaphthylene	NE
Fluorene	3,200 <sup>(2)</sup>
Phenanthrene	NE
Anthracene	24,000 <sup>(2)</sup>
Fluoranthene	3,200 <sup>(2)</sup>
Pyrene	2,400 <sup>(2)</sup>
Benzo(g,h,i)perylene	NE
Benzo(a) anthracene	NE
Chrysene	NE
Benzo(a)pyrene	0.1 <sup>(1)</sup>
Benzo(b) fluoranthene	NE
Benzo(k) fluoranthene	NE
Indeno(1,2,3-cd)pyrene	NE
Dibenz(a,h) anthracene	NE



**Table 1**  
**Preliminary Cleanup Levels**  
**TOC Holdings Co. Facility No. 01-600**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

GROUNDWATER	
Chemicals of Concern	Cleanup Levels (µg/L)
Gasoline-Range Petroleum Hydrocarbons	800 <sup>(4)</sup>
Diesel-Range Petroleum Hydrocarbons	500 <sup>(4)</sup>
Oil-Range Petroleum Hydrocarbons	500 <sup>(4)</sup>
Benzene	5 <sup>(4)</sup>
Toluene	1,000 <sup>(4)</sup>
Ethylbenzene	700 <sup>(4)</sup>
Total Xylenes	1,000 <sup>(4)</sup>
PCE	5 <sup>(4)</sup>
TCE	5 <sup>(4)</sup>
cis-1,2-Dichloroethene	16 <sup>(5)</sup>
trans-1,2-Dichloroethene	160 <sup>(5)</sup>
1,1-Dichloroethene	400 <sup>(5)</sup>
1,2-Dichloroethane	5 <sup>(4)</sup>
Pentachlorophenol	2.2 <sup>(6)</sup>
Vinyl Chloride	0.2 <sup>(4)</sup>
Total and Dissolved Lead	15 <sup>(4)</sup>
MTBE	20 <sup>(4)</sup>
1,2-Dibromoethane	0.01 <sup>(4)</sup>
Tetrachloroethene	5 <sup>(4)</sup>
Trichloroethene	5 <sup>(4)</sup>
1,2,4 Trimethylbenzene	NE
1,3,5 Trimethylbenzene	80 <sup>(5)</sup>
Naphthalene	160 <sup>(4)</sup>
Acetone	7,200 <sup>(5)</sup>
Isopropylbenzene	800 <sup>(5)</sup>
n-Butylbenzene	NE
n-Hexane	480 <sup>(5)</sup>
n-Propylbenzene	NE
p-Isopropyltoluene	NE
sec-Butylbenzene	NE
tert-Butylbenzene	NE
2-Butanone	4,800 <sup>(5)</sup>
Ethanol	NE
Total and Dissolved Arsenic	5 <sup>(4)</sup>
Total and Dissolved Barium	3,200 <sup>(5)</sup>
Total and Dissolved Cadmium	5 <sup>(4)</sup>
Total and Dissolved Chromium	50 <sup>(4)</sup>
Total and Dissolved Mercury	2 <sup>(4)</sup>
Total and Dissolved Selenium	80 <sup>(5)</sup>
Total and Dissolved Silver	80 <sup>(5)</sup>
1-Methylnaphthalene	160 <sup>(4)</sup>
2-Methylnaphthalene	160 <sup>(4)</sup>
Acenaphthene	960 <sup>(5)</sup>
Acenaphthylene	NE
Fluorene	640 <sup>(5)</sup>
Phenanthrene	NE
Anthracene	4,800 <sup>(5)</sup>
Fluoranthene	640 <sup>(5)</sup>
Pyrene	480 <sup>(5)</sup>
Benzo(g,h,i)perylene	NE
Benzo(a) anthracene	0.1 <sup>(4)</sup>
Chrysene	0.1 <sup>(4)</sup>
Benzo(a)pyrene	0.1 <sup>(4)</sup>



**Table 1**  
**Preliminary Cleanup Levels**  
**TOC Holdings Co. Facility No. 01-600**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

GROUNDWATER	
Chemicals of Concern	Cleanup Levels (µg/L)
Benzo(b) fluoranthene	0.1 <sup>(4)</sup>
Benzo(k) fluoranthene	0.1 <sup>(4)</sup>
Indeno(1,2,3-cd)pyrene	0.1 <sup>(4)</sup>
Dibenz(a,h) anthracene	0.1 <sup>(4)</sup>

**NOTES:**

<sup>(1)</sup>MTCA Method A Soil Cleanup Levels for Unrestricted Land Uses, Table 740-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, revised November 2007.

<sup>(2)</sup>CLARC, Soil, Method B Cleanup Levels, Non-Carcinogen, Standard Formula Value, Direct Contact (ingestion only), CLARC website <<https://fortress.wa.gov/ecy/clarc/CLARHome.aspx>>.

<sup>(3)</sup>CLARC, Soil, Method B Cleanup Levels, Carcinogen, Standard Formula Value, Direct Contact (ingestion only), CLARC website <<https://fortress.wa.gov/ecy/clarc/CLARHome.aspx>>.

<sup>(4)</sup>MTCA Method A Cleanup Levels for Ground Water, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, revised November 2007.

<sup>(5)</sup>CLARC, Groundwater, Method B Cleanup Levels, Non-Carcinogen, Standard Formula Value, CLARC website <<https://fortress.wa.gov/ecy/clarc/CLARHome.aspx>>.

<sup>(6)</sup>MTCA Cleanup Regulation, CLARC, Ground Water Method C, Carcinogen, Standard Formula Value, CLARC website <<https://fortress.wa.gov/ecy/clarc/CLARHome.aspx>>.

µg/L = micrograms per liter

CLARC = Cleanup Levels and Risk Calculation

mg/kg = milligrams per kilogram

MTCA = Model Toxics Control Act

MTBE = methyl t-butyl ether

NE = not established

PCE = tetrachloroethene

TCE = trichloroethene



**Table 2**  
**Soil Analytical Results for TPH, BTEX, EDB, EDC, and MTBE**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)										
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)(4)</sup>	Toluene <sup>(3)(4)</sup>	Ethylbenzene <sup>(3)(4)</sup>	Total Xylenes <sup>(3)(4)</sup>	MTBE <sup>(4,5)</sup>	EDB <sup>(5)</sup>	EDC <sup>(5)</sup>	Ethanol <sup>(5)</sup>
<b>West Commodore Way</b>															
SB-46	SB-46-2	FW	11/28/00	2	90.8	147	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-46-5			5	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-46-10			10	10.7	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-46-15			15	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-46-20			20	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-46-25			25	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
01MW52/B73	B73-15	SoundEarth	12/05/07	15	<50	<250	<2	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<50
	B73-20			20	<50	<250	<2	<0.03	<0.05	<0.05	<0.15	<0.05	<0.05	<0.05	<50
01MW53/B75	B75-15	SoundEarth	12/06/07	15	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<50
	B75-20			20	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<50
	B75-35			35	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<50
	B75-40			40	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	<0.05	<0.05	<0.05	<50
01MW85/B193	B193-02.5	SoundEarth	04/20/11	2.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B193-07.5			7.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B193-12.5			12.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
01MW89/B197	B197-02.5	SoundEarth	4/21/11	2.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B197-07.5			7.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B197-12.5			12.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
<b>MTCA Cleanup Level for Soil<sup>(6)</sup></b>					<b>2,000</b>	<b>2,000</b>	<b>30</b>	<b>0.03</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>0.1</b>	<b>0.005</b>	<b>11<sup>(7)</sup></b>	<b>NE</b>



**Table 2**  
**Soil Analytical Results for TPH, BTEX, EDB, EDC, and MTBE**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)										
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)(4)</sup>	Toluene <sup>(3)(4)</sup>	Ethylbenzene <sup>(3)(4)</sup>	Total Xylenes <sup>(3)(4)</sup>	MTBE <sup>(4,5)</sup>	EDB <sup>(5)</sup>	EDC <sup>(5)</sup>	Ethanol <sup>(5)</sup>
<b>ASKO Hydraulic Property</b>															
SB-40	SB-40-2	FW	11/21/00	2	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-40-5			5	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-40-10			10	8.05	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-40-15			15	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
SB-47	SB-47-5	FW	11/28/00	5	87.9	160	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-47-10			10	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-47-15			15	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-47-20			20	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-47-25			25	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
SB-48	SB-48-2	FW	11/29/00	2	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-48-5			5	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-48-10			10	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-48-15			15	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-48-20			20	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
	SB-48-25			25	<10.0	<25.0	<5.00	<0.050	<0.050	<0.050	<0.100	--	--	--	--
SB-49	SB-49-2	FW	11/29/00	2	<b>2,770</b>	<b>4,350</b>	<b>264</b>	--	--	--	<b>18.6</b>	--	--	--	--
	SB-49-5			5	339	485	<b>467</b>	--	--	--	<b>23.7</b>	--	--	--	--
	SB-49-10			10	<10.0	<25.0	<5.00	--	--	--	<0.100	--	--	--	--
	SB-49-15			15	<10.0	<25.0	<5.00	--	--	--	<0.100	--	--	--	--
SB-50	SB-50-2	FW	11/29/00	2	<10.0	<25.0	<5.00	--	--	--	<0.100	--	--	--	--
	SB-50-5			5	<10.0	<25.0	<5.00	--	--	--	<0.100	--	--	--	--
	SB-50-10			10	<10.0	<25.0	<5.00	--	--	--	<0.100	--	--	--	--
	SB-50-15			15	<10.0	<25.0	<5.00	--	--	--	<0.100	--	--	--	--
<b>MTCA Cleanup Level for Soil<sup>(6)</sup></b>					<b>2,000</b>	<b>2,000</b>	<b>30</b>	<b>0.03</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>0.1</b>	<b>0.005</b>	<b>11<sup>(7)</sup></b>	<b>NE</b>



**Table 2**  
**Soil Analytical Results for TPH, BTEX, EDB, EDC, and MTBE**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)										
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)(4)</sup>	Toluene <sup>(3)(4)</sup>	Ethylbenzene <sup>(3)(4)</sup>	Total Xylenes <sup>(3)(4)</sup>	MTBE <sup>(4,5)</sup>	EDB <sup>(5)</sup>	EDC <sup>(5)</sup>	Ethanol <sup>(5)</sup>
<b>ASKO Hydraulic Property</b>															
SB-30	SB-30-2	FW	2001	2	832	<275	<b>5,120</b>	<1.0	--	<9.12	<33.0	--	--	--	--
SB-32	SB-32-5	FW	2001	5	15.7	<25.0	<b>216</b>	<0.2	--	<0.2	<0.508	--	--	--	--
SB-45	SB-45-2	FW	2001	2	<b>2,500</b>	<b>2,800</b>	<b>3,940</b>	<2.5	--	<25.0	<85.0	--	--	--	--
	SB-45-5			5	<b>2,200</b>	<75.0	<b>577</b>	<0.5	--	<0.5	<1.30	--	--	--	--
01MW15/SB-58	SB-58-2	FW	07/19/01	2	116	180	<5.00	<0.0500	<0.0500	<0.0500	<0.100	--	--	--	--
	SB-58-5			5	21.4	29.6	<5.00	<0.0500	<0.0500	<0.0500	<0.100	--	--	--	--
	SB-58-10			10	<10.0	<25.0	<5.00	<0.0500	<0.0500	<0.0500	<0.100	--	--	--	--
	SB-58-15			15	<10.0	<25.0	<5.00	<0.0500	<0.0500	<0.0500	<0.100	--	--	--	--
	SB-58-25			25	<10.0	<25.0	<5.00	<0.0500	<0.0500	<0.0500	<0.100	--	--	--	--
MW01/B01	B01-11	SoundEarth	04/17/06	11	<10.5	<26.4	<4.87	<0.00174	<0.00174	<0.00464	<0.0116	<0.00116	<0.00580	<0.00145	--
MW02/B02	B02-4.5	SoundEarth	04/17/06	4.5	<11.6	<29.1	<5.61	<0.00129	<0.00129	<0.00344	<0.00860	<0.000860	<0.00430	<0.00107	--
	B02-11			11	<11.2	<28.1	<5.11	<0.00138	<0.00138	<0.00368	<0.00921	<0.000921	<0.00460	<0.00115	--
MW03/B03	B03-6	SoundEarth	04/18/06	6	1,300	868	<b>4,720</b>	<1.39	<0.139	1.30	2.30	<0.696	<0.139	<0.139	--
	B03-12			12	<12.3	<30.7	<5.41	<0.00138	<0.00138	<0.00368	<0.00920	<0.000920	<0.00460	<0.00115	--
	B03-16			16	<12.8	<32.0	<5.23	<0.00148	<0.00148	<0.00393	<0.00983	<0.000983	<0.00492	<0.00123	--
MW04/B04	B04-1	SoundEarth	04/18/06	1	706	588	<b>306</b>	<0.00128	<0.00128	<0.00342	0.0119	<0.000856	<0.00428	<0.00107	--
	B04-10			10	<12.1	<30.3	<4.71	<0.00133	<0.00133	<0.00354	<0.00885	<0.000885	<0.00442	<0.00111	--
	B04-22			22	<11.5	<28.7	<5.02	<0.00179	<0.00179	<0.00477	<0.0119	<0.00119	<0.00596	<0.00149	--
<b>MTCA Cleanup Level for Soil<sup>(6)</sup></b>					<b>2,000</b>	<b>2,000</b>	<b>30</b>	<b>0.03</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>0.1</b>	<b>0.005</b>	<b>11<sup>(7)</sup></b>	<b>NE</b>





**Table 2**  
**Soil Analytical Results for TPH, BTEX, EDB, EDC, and MTBE**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)										
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)(4)</sup>	Toluene <sup>(3)(4)</sup>	Ethylbenzene <sup>(3)(4)</sup>	Total Xylenes <sup>(3)(4)</sup>	MTBE <sup>(4,5)</sup>	EDB <sup>(5)</sup>	EDC <sup>(5)</sup>	Ethanol <sup>(5)</sup>
<b>ASKO Hydraulic Property</b>															
MW05/B05	B05-1.5	SoundEarth	04/19/06	1.5	86.4	112	57.3	<0.00151	<0.00151	<0.00403	<0.0101	<0.00101	<0.00504	<0.00126	--
	B05-22.5			22.5	<12.1	<30.2	<4.78	0.00459	<0.00147	<0.00392	<0.00979	<0.000979	<0.00489	<0.00122	--
MW06/B06	B06-2	SoundEarth	04/19/06	2	897	1,390	140	<0.00142	<0.00142	<0.00379	<0.00948	<0.000948	<0.00474	<0.00119	--
	B06-21.5			12.5	<11.2	<27.9	<5.28	<0.00145	<0.00145	<0.00388	<0.00969	<0.000969	<0.00484	<0.00121	--
B07	B07-1.5	SoundEarth	04/21/06	1.5	394	952	143	<0.00128	<0.00128	0.00923	0.386	<0.000856	<0.00428	<0.00257	--
	B07-3			3	--	--	57.3	<0.0160	<0.0798	<0.0798	1.74	--	--	--	--
01MW44/SB65	SB65-2.5'	SoundEarth	09/13/06	2.5	<11.4	<28.4	<5.65	<0.00143	<0.00143	<0.00383	<0.00957	<0.000957	<0.00478	<0.00120	--
	SB65-22.5'			22.5	<11.8	<29.6	<6.48	--	--	--	--	--	--	--	--
	SB65-25'			25	<12.1	<30.3	<5.90	<0.00164	<0.00164	<0.00437	<0.0109	<0.00109	<0.00546	<0.00137	--
	SB65-27.5'			27.5	--	--	<4.70	<0.00139	<0.00139	<0.00370	<0.00924	<0.00924	<0.00462	<0.00116	--
01MW45/SB66	SB66-2.5'	SoundEarth	09/13/06	2.5	32.0	<27.3	26.5	<0.00150	<0.00150	<0.00400	<0.00999	<0.000999	<0.00500	<0.00125	--
	SB66-22.5'			22.5	<11.5	<28.7	<4.70	0.00238	<0.00157	<0.00419	<0.0105	<0.00105	<0.00524	<0.00131	--
	SB66-25'			25	<12.3	<30.7	<5.11	<0.00150	<0.00150	<0.00401	<0.0100	<0.00100	<0.00501	<0.00125	--
01MW46/SB67	SB67-2.5'	SoundEarth	09/13/06	2.5	182	<29.7	95.6	<0.00159	<0.00159	<0.00423	<0.0106	<0.00106	<0.00529	<0.00132	--
	SB67-22.5'			22.5	<10.9	<27.2	<5.64	<0.00123	<0.00123	<0.00327	<0.00818	<0.000818	<0.00409	<0.00102	--
	SB67-27.5'			27.5	<11.9	<29.7	<5.29	<0.00168	<0.00168	<0.00447	<0.0112	<0.00112	<0.00559	<0.00140	--
01MW54/B076	B076-05	SoundEarth	11/13/08	5	<50	<250	<2	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
	B076-10			10	<50	<250	9	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
	B076-15			15	--	--	--	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
01MW55/B077	B077-05	SoundEarth	11/13/08	5	91	<250	21	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
	B077-15			15	<50	<250	3	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
01MW56/B078	B078-05	SoundEarth	11/14/08	5	<50	<250	<2	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
	B078-15			15	<50	<250	<2	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
01MW57/B079	B079-05	SoundEarth	11/14/08	5	<50	<250	<2	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
	B079-32.5			32.5	<50	<250	<2	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
	B079-40			40	--	--	--	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
01MW58/B080	B080-05	SoundEarth	11/14/08	5	<50	<250	<2	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
	B080-20			20	<50	<250	<2	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
01MW60/B83	B083-05	SoundEarth	12/29/08	5	1,200	1,700	240	<0.03	<0.05	1.2	1.652	--	--	<0.05	--
	B083-07.5			7.5	1,500	1,700	1,600	0.61	0.88	14	19.1	--	--	<0.05	--
	B083-15			15	--	--	<2	<0.02	0.03	<0.02	<0.06	--	--	--	--
	B083-37.5			37.5	--	--	--	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
<b>MTCA Cleanup Level for Soil<sup>(6)</sup></b>					<b>2,000</b>	<b>2,000</b>	<b>30</b>	<b>0.03</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>0.1</b>	<b>0.005</b>	<b>11<sup>(7)</sup></b>	<b>NE</b>



**Table 2**  
**Soil Analytical Results for TPH, BTEX, EDB, EDC, and MTBE**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)											
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)(4)</sup>	Toluene <sup>(3)(4)</sup>	Ethylbenzene <sup>(3)(4)</sup>	Total Xylenes <sup>(3)(4)</sup>	MTBE <sup>(4,5)</sup>	EDB <sup>(5)</sup>	EDC <sup>(5)</sup>	Ethanol <sup>(5)</sup>	
<b>ASKO Hydraulic Property</b>																
01MW61/B84	B084-05	SoundEarth	12/29/08	5	220	<250	<b>30</b>	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--	
	B084-07.5			7.5	<50	<250	<2	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--	
	B084-27.5			27.5	--	--	--	--	--	--	--	--	--	--	<0.05	--
01MW62/B85	B085-05	SoundEarth	12/30/08	5	<50	<250	<2	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--	
	B085-17.5			17.5	<50	<250	27	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--	
	B085-20			20	<50	<250	11	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--	
	B085-30			30	--	--	--	--	--	--	--	--	--	--	<0.05	--
	B085-37.5			37.5	--	--	--	--	--	--	--	--	--	--	<0.05	--
01MW63/B86	B086-05	SoundEarth	12/30/08	5	<50	<250	<2	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--	
	B086-17.5			17.5	<50	<250	22	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--	
	B086-032.5			32.5	--	--	--	--	--	--	--	--	--	--	<0.05	--
B87	B87-05	SoundEarth	12/29/08	5	--	--	--	--	--	--	--	--	--	<0.05	--	
	B87-10			10	--	--	--	--	--	--	--	--	--	--	<0.05	--
	B87-16			16	<50	<250	8	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--	
B88	B88-07	SoundEarth	12/29/08	7	--	--	--	--	--	--	--	--	--	<0.05	--	
	B88-10			10	<50	<250	6	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--	
	B88-16			16	--	--	--	--	--	--	--	--	--	--	<0.05	--
B89	B89-02	SoundEarth	12/29/08	2	--	--	--	--	--	--	--	--	--	<0.05	--	
	B89-05			5	--	--	--	--	--	--	--	--	--	--	<0.05	--
	B89-11			11	110 <sup>x</sup>	<250	<b>420</b>	<0.03	<0.05	1.7	5.6	--	--	<0.05	--	
	B89-13			13	<b>4,300</b>	1,700	<b>9,700<sup>p</sup></b>	<b>0.25</b>	<b>77</b>	<b>22</b>	<b>65</b>	--	--	<0.05	--	
B90	B90-03	SoundEarth	12/29/08	3	<b>10,000</b>	<b>14,000</b>	<b>380</b>	<b>0.081</b>	2.8	3.0	<b>16.7</b>	--	--	<0.05	--	
	B90-10			10	--	--	--	--	--	--	--	--	--	--	<0.05	--
	B90-16			16	--	--	--	--	--	--	--	--	--	--	<0.05	--
B91	B91-02	SoundEarth	12/29/08	2	<b>8,300</b>	<250	<b>800</b>	<0.03	<0.05	0.67	0.90	--	--	<0.05	--	
	B91-10			10	--	--	--	--	--	--	--	--	--	--	<0.05	--
	B91-14			14	--	--	--	--	--	--	--	--	--	--	<0.05	--
B92	B92-06	SoundEarth	12/30/08	6	--	--	--	--	--	--	--	--	--	<0.05	--	
	B92-10			10	<50	<250	19	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--	
	B92-14			14	--	--	--	--	--	--	--	--	--	--	<0.05	--
<b>MTCA Cleanup Level for Soil<sup>(6)</sup></b>					<b>2,000</b>	<b>2,000</b>	<b>30</b>	<b>0.03</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>0.1</b>	<b>0.005</b>	<b>11<sup>(7)</sup></b>	<b>NE</b>	



**Table 2**  
**Soil Analytical Results for TPH, BTEX, EDB, EDC, and MTBE**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)										
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)(4)</sup>	Toluene <sup>(3)(4)</sup>	Ethylbenzene <sup>(3)(4)</sup>	Total Xylenes <sup>(3)(4)</sup>	MTBE <sup>(4,5)</sup>	EDB <sup>(5)</sup>	EDC <sup>(5)</sup>	Ethanol <sup>(5)</sup>
<b>ASKO Hydraulic Property</b>															
B93	B93-2	SoundEarth	12/30/08	2	--	--	--	--	--	--	--	--	--	<0.05	--
	B93-10			10	<50	<250	<2	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
	B93-18			18	--	--	--	--	--	--	--	--	--	<0.05	--
	B93-20			20	--	--	--	--	--	--	--	--	--	<0.05	--
B94	B94-2	SoundEarth	12/30/08	2	--	--	--	--	--	--	--	--	--	<0.05	--
	B94-07			7	140	<250	52 <sup>ip</sup>	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
	B94-14			14	--	--	--	--	--	--	--	--	--	<0.05	--
B95	B95-6	SoundEarth	12/30/08	6	--	--	--	--	--	--	--	--	--	<0.05	--
	B95-10			10	--	--	--	--	--	--	--	--	--	<0.05	--
	B95-14			14	<50	<250	9	0.041	<0.05	<0.05	<0.15	--	--	<0.05	--
	B95-20			20	--	--	--	--	--	--	--	--	--	<0.05	--
B96	B96-2	SoundEarth	12/30/08	2	--	--	--	--	--	--	--	--	--	<0.05	--
	B96-10			10	--	--	--	--	--	--	--	--	--	<0.05	--
	B96-20			20	<50	<250	<2	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
B97	B97-02	SoundEarth	12/30/08	2	--	--	--	--	--	--	--	--	--	<0.05	--
	B97-06			6	2,900	310	1,600 <sup>ip</sup>	<0.03	1.2	6.9	27	--	--	<0.05	--
	B97-10			10	--	--	--	--	--	--	--	--	--	<0.05	--
B98	B98-06	SoundEarth	12/30/08	6	<50	<250	<2	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
	B98-10			10	--	--	--	--	--	--	--	--	--	<0.05	--
	B98-20			20	--	--	--	--	--	--	--	--	--	<0.05	--
B99	B99-0.5	SoundEarth	12/30/08	0.5	970	1,200	54 <sup>ip</sup>	0.21	1.3	6.9	20	--	--	<0.05	--
	B99-05			5	120	<250	<2	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
	B99-09			9	--	--	--	--	--	--	--	--	--	<0.05	--
B100	B100-0.5	SoundEarth	12/30/08	0.5	<50	<250	<2	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
	B100-03			3	610	<250	96 <sup>ip</sup>	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
	B100-17			17	--	--	--	--	--	--	--	--	--	<0.05	--
B101	B101-02	SoundEarth	12/30/08	2	<50	<250	10	<0.03	<0.05	<0.05	<0.15	--	--	<0.05	--
	B101-10			10	--	--	--	--	--	--	--	--	--	<0.05	--
	B101-14			14	--	--	--	--	--	--	--	--	--	<0.05	--
<b>MTCA Cleanup Level for Soil<sup>(6)</sup></b>					<b>2,000</b>	<b>2,000</b>	<b>30</b>	<b>0.03</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>0.1</b>	<b>0.005</b>	<b>11<sup>(7)</sup></b>	<b>NE</b>



**Table 2**  
**Soil Analytical Results for TPH, BTEX, EDB, EDC, and MTBE**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)										
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)(4)</sup>	Toluene <sup>(3)(4)</sup>	Ethylbenzene <sup>(3)(4)</sup>	Total Xylenes <sup>(3)(4)</sup>	MTBE <sup>(4,5)</sup>	EDB <sup>(5)</sup>	EDC <sup>(5)</sup>	Ethanol <sup>(5)</sup>
<b>ASKO Hydraulic Property</b>															
01MW64/B102	B102-02.5	SoundEarth	03/17/09	2.5	320	350	68	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B102-05			5	--	--	<2	<0.02	<0.02	<0.02	<0.06	--	--	--	--
	B102-07.5			7.5	<50	<250	3	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B102-17.5			17.5	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
	B102-20			20	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
01MW65/B103	B103-40	SoundEarth	03/17/09	40	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
B104	B104-04	SoundEarth	03/17/09	4	--	--	--	--	--	--	--	--	--	<0.05	--
	B104-10			10	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
	B104-14			14	<50	<250	3	<0.02	<0.02	<0.03	<0.06	--	<0.005	<0.03	--
	B104-14 (dup)			14	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
	B104-18			18	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
B105	B105-03	SoundEarth	03/17/09	3	--	--	--	--	--	--	--	--	--	<0.05	--
	B105-10			10	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
	B105-15			15	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	<0.005	<0.03	--
	B105-20			20	--	--	--	--	--	--	--	--	--	<0.05	--
B106	B106-12	SoundEarth	03/17/09	12	--	--	--	--	--	--	--	--	--	<0.05	--
	B106-16			16	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
	B106-20			20	<50	<250	<2	<0.02	<0.02	<0.03	<0.06	--	<0.005	<0.03	--
B107	B107-07	SoundEarth	03/17/09	7	--	--	--	--	--	--	--	--	--	<0.05	--
	B107-13			13	<50	<250	3	<0.02	<0.02	<0.03	<0.06	--	<0.005	<0.03	--
	B107-17			17	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
	B107-22			22	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
B108	B108-08	SoundEarth	03/17/09	8	--	--	--	--	--	--	--	--	--	<0.05	--
	B108-14			14	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
B109	B109-06	SoundEarth	03/17/09	6	--	--	--	--	--	--	--	--	--	<0.05	--
	B109-12			12	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
	B109-15			15	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
<b>MTCA Cleanup Level for Soil<sup>(6)</sup></b>					<b>2,000</b>	<b>2,000</b>	<b>30</b>	<b>0.03</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>0.1</b>	<b>0.005</b>	<b>11<sup>(7)</sup></b>	<b>NE</b>



**Table 2**  
**Soil Analytical Results for TPH, BTEX, EDB, EDC, and MTBE**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)										
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)(4)</sup>	Toluene <sup>(3)(4)</sup>	Ethylbenzene <sup>(3)(4)</sup>	Total Xylenes <sup>(3)(4)</sup>	MTBE <sup>(4,5)</sup>	EDB <sup>(5)</sup>	EDC <sup>(5)</sup>	Ethanol <sup>(5)</sup>
<b>ASKO Hydraulic Property</b>															
B110	B110-04	SoundEarth	03/17/09	4	--	--	--	--	--	--	--	--	--	<0.05	--
	B110-10			10	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
	B110-11			11	<50	<250	<2	<0.02	<0.02	<0.02	--	--	--	--	--
	B110-16			16	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
B111	B111-03	SoundEarth	03/17/10	3	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
	B111-03 (dup)			3	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
	B111-18			18	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
B112	B112-07	SoundEarth	03/18/09	7	--	--	--	--	--	--	--	--	--	<0.05	--
	B112-13			13	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
	B112-16			16	<50	<250	<2	<0.02	<0.02	<0.03	<0.06	--	<0.005	<0.03	--
	B112-18			18	--	--	--	--	--	--	--	--	--	--	<0.05
B113	B113-11.5	SoundEarth	03/18/09	11.5	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
B114	B114-04	SoundEarth	03/18/09	4	--	--	--	--	--	--	--	--	--	<0.05	--
	B114-18			18	<50	<250	<2	<0.02	<0.02	<0.03	<0.06	--	<0.005	<0.03	--
	B114-21			21	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
B115	B115-03	SoundEarth	03/18/09	3	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
	B115-12			15	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
	B115-18			18	--	--	--	--	--	--	--	--	--	--	<0.05
B116	B116-03	SoundEarth	03/18/09	3	1,900	2,200	<2	<0.02	<0.02	<0.03	<0.06	--	<0.005	<0.03	--
	B116-07			7	<50	<250	--	--	--	--	--	--	--	--	--
	B116-16			16	--	--	--	<0.02	<0.02	<0.03	<0.03	--	<0.005	<0.03	--
B131	B131-10	SoundEarth	12/29/09	10	--	--	--	--	--	--	--	--	--	<0.05	--
	B131-14.5-15		03/29/10	14.5-15	--	--	--	--	--	--	--	--	--	<0.05	--
	B131-15-15.5		03/29/10	15-15.5	--	--	--	--	--	--	--	--	--	<0.05	--
01MW70/01SVE02/ B134	B134-02.5	SoundEarth	02/11/10	2.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B134-10.5			10.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.02	<0.06	--	--	<0.05
01MW71/01SVE03/ B133	B133-05.5	SoundEarth	02/11/10	5.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B133-20			20	--	--	--	--	--	--	--	--	--	--	<0.05
<b>MTCA Cleanup Level for Soil<sup>(6)</sup></b>					<b>2,000</b>	<b>2,000</b>	<b>30</b>	<b>0.03</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>0.1</b>	<b>0.005</b>	<b>11<sup>(7)</sup></b>	<b>NE</b>



**Table 2**  
**Soil Analytical Results for TPH, BTEX, EDB, EDC, and MTBE**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)											
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)(4)</sup>	Toluene <sup>(3)(4)</sup>	Ethylbenzene <sup>(3)(4)</sup>	Total Xylenes <sup>(3)(4)</sup>	MTBE <sup>(4,5)</sup>	EDB <sup>(5)</sup>	EDC <sup>(5)</sup>	Ethanol <sup>(5)</sup>	
<b>ASKO Hydraulic Property</b>																
01SVE01/B135	B135-10.5	SoundEarth	02/11/10	10.5	<50	<250	<2	0.04	<0.02	<0.02	<0.06	--	--	<0.05	--	
	B135-15			15	--	--	--	--	--	--	--	--	--	--	<0.05	--
01IW09/B136	B136-05	SoundEarth	02/12/10	5	--	--	--	--	--	--	--	--	--	<0.05	--	
	B136-11.5			11.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--	
	B136-16			16	--	--	--	--	--	--	--	--	--	--	<0.05	--
01IW10/B137	B137-11	SoundEarth	02/12/10	11	<50	<250	2	<0.02	0.03	<0.02	<0.06	--	--	<0.05	--	
	B137-23			23	--	--	--	--	--	--	--	--	--	--	<0.05	--
01MW76/B171	B171-05	SoundEarth	02/28/11	5	--	--	--	--	--	--	--	--	--	<0.05	--	
	B171-10			10	--	--	--	--	--	--	--	--	--	--	<0.05	--
	B171-15			15	--	--	--	--	--	--	--	--	--	--	<0.05	--
	B171-17.5			17.5	--	--	--	--	--	--	--	--	--	--	<0.05	--
	B171-22.5			22.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	--	--	--
01MW77/B172	B172-20	SoundEarth	03/01/11	20	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--	
01MW78/B173	B173-07.5	SoundEarth	03/02/11	7.5	<50	<250	4.4 <sup>x</sup>	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--	
	B173-10			10	--	--	--	--	--	--	--	--	--	--	<0.05	--
	B173-15			15	--	--	--	--	--	--	--	--	--	--	<0.05	--
	B173-25			25	--	--	--	--	--	--	--	--	--	--	<0.05	--
	B173-27.5			27.5	<50	<250	3.8 <sup>x</sup>	<0.02	<0.02	<0.02	<0.06	--	--	--	<0.05	--
01MW79/B174	B174-02.5	SoundEarth	03/03/11	2.5	<50	<250	<2	0.027	<0.02	0.039	<0.06	--	--	<0.05	--	
	B174-07.5			7.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--	
	B174-10.5			10.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--	
B175	B175-02.5	SoundEarth	03/03/11	2.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--	
	B175-07.5			7.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--	
	B175-11			11	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--	
	B175-15			15	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--	
01MW80/B188	B188-02.5	SoundEarth	04/18/11	2.5	2,300	<250	95	<0.02	<0.02	0.16	0.22	--	--	<0.05	--	
	B188-07.5			7.5	2,300	<250	260	<0.02	<0.02	0.78	1.1	--	--	<0.05	--	
	B188-12.5			12.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--	
01MW81/B189	B189-12.5	SoundEarth	04/18/11	12.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--	
<b>MTCA Cleanup Level for Soil<sup>(6)</sup></b>					<b>2,000</b>	<b>2,000</b>	<b>30</b>	<b>0.03</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>0.1</b>	<b>0.005</b>	<b>11<sup>(7)</sup></b>	<b>NE</b>	



**Table 2**  
**Soil Analytical Results for TPH, BTEX, EDB, EDC, and MTBE**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)										
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)(4)</sup>	Toluene <sup>(3)(4)</sup>	Ethylbenzene <sup>(3)(4)</sup>	Total Xylenes <sup>(3)(4)</sup>	MTBE <sup>(4,5)</sup>	EDB <sup>(5)</sup>	EDC <sup>(5)</sup>	Ethanol <sup>(5)</sup>
<b>BNSF Parcel</b>															
01MW92/B258	B258-02.5	SoundEarth	08/16/12	2.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B258-05			5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B258-10			10	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
01MW93/B259	B259-02.5	SoundEarth	08/16/12	2.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B259-07.5			7.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B259-17.5			17.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
01MW94/B260	B260-02.5	SoundEarth	08/17/12	2.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B260-12.5			12.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B260-17.5			17.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
01MW95/B261	B261-0.5	SoundEarth	08/17/12	0.5	140	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B261-02.5			2.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	--	--
	B261-05			5	<b>3,000</b>	<250	<b>240</b>	<0.02	0.046	1.6	4.3	--	--	<0.05	--
	B260-07.5			7.5	<50	<250	8.7	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
01MW96/B264	B264-02.5	SoundEarth	05/07/13	2.5	<50	<250	30	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B264-07.5			7.5	68	<250	16	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B264-10			10	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
01MW97/B265	B265-03	SoundEarth	05/07/13	3	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B265-06			6	<50	<250	2.2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B265-11			11	<50	<250	3.2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
01MW98/B266	B266-03.5	SoundEarth	05/07/13	3.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B266-06			6	<b>4,100</b>	1,100	<b>130</b>	<0.02	<0.02	0.33	0.56	--	--	<0.05	--
	B266-08			8	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
<b>MTCA Cleanup Level for Soil<sup>(6)</sup></b>					<b>2,000</b>	<b>2,000</b>	<b>30</b>	<b>0.03</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>0.1</b>	<b>0.005</b>	<b>11<sup>(7)</sup></b>	<b>NE</b>



**Table 2**  
**Soil Analytical Results for TPH, BTEX, EDB, EDC, and MTBE**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)										
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)(4)</sup>	Toluene <sup>(3)(4)</sup>	Ethylbenzene <sup>(3)(4)</sup>	Total Xylenes <sup>(3)(4)</sup>	MTBE <sup>(4,5)</sup>	EDB <sup>(5)</sup>	EDC <sup>(5)</sup>	Ethanol <sup>(5)</sup>
<b>East Waterfront Property</b>															
01MW83/B191	B191-05	SoundEarth	04/19/11	5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
	B191-12.5			12.5	<50	<250	<2	<0.02	<0.02	<0.02	<0.06	--	--	<0.05	--
<b>MTCA Cleanup Level for Soil<sup>(6)</sup></b>					<b>2,000</b>	<b>2,000</b>	<b>30</b>	<b>0.03</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>0.1</b>	<b>0.005</b>	<b>11<sup>(7)</sup></b>	<b>NE</b>

**NOTES:**

**Red** denotes concentration exceeds MTCA cleanup level.

**Bold** denotes concentration below laboratory detection limit, but exceeding the MTCA cleanup level for soil; the detection limit has been raised due to high concentrations of associated analytes requiring dilution and/or historical cleanup levels that historical detection limits were based upon.

Soil samples collected in 2011 were submitted for laboratory analysis by Method NWTPH-Dx following a silica gel cleanup sample preparation.

Data prior to April 2006 from previous consultants. All other sample analyses conducted by TestAmerica Laboratories, Inc. of Bothell, Washington or Friedman & Bruya, Inc. of Seattle, Washington.

<sup>(1)</sup>Analyzed by Method NWTPH-Dx.

<sup>(2)</sup>Analyzed by Method NWTPH-Gx.

<sup>(3)</sup>Analyzed by EPA Method 8021B or 8260B.

<sup>(4)</sup>BTEX and MTBE also analyzed by Washington Volatile Petroleum Hydrocarbon Method. Most conservative concentration listed.

<sup>(5)</sup>Analyzed by EPA Method 8260B.

<sup>(6)</sup>MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Soil Cleanup Levels for Unrestricted Land Uses.

<sup>(7)</sup>MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Carcinogen, Standard Formula Value, CLARC Website <<https://fortress.wa.gov/ecy/clarc/CLARHome.aspx>>.

**Laboratory Notes:**

<sup>9</sup>Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

\*The pattern of peaks present is not indicative of diesel or the sample chromatographic pattern does not resemble the fuel standard used for quantitation.

-- = not analyzed

< = not detected at a concentration exceeding the laboratory reporting limit

bgs = below ground surface

BTEX = benzene, toluene, ethylbenzene, and total xylenes

CLARC = Cleanup Levels and Risk Calculations

DRPH = diesel-range petroleum hydrocarbons

EDB = 1, 2-dibromoethane

EDC = 1,2-dichloroethane

EPA = U.S. Environmental Protection Agency

FW = Foster Wheeler Environmental Corporation

GRPH = gasoline-range petroleum hydrocarbons

MTBE = methyl tertiary-butyl ether

MTCA = Washington State Model Toxics Control Act

NE = not established

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH = oil-range petroleum hydrocarbons

SoundEarth = SoundEarth Strategies, Inc.

TPH = total petroleum hydrocarbons

WAC = Washington Administrative Code





**Table 3**  
**Soil Analytical Results for Selected VOCs**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results <sup>(1)</sup> (milligrams per kilogram)															
					Tetrachloroethene	Trichloroethene	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,2,4 Trimethyl-benzene	1,3,5 Trimethyl-benzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	p-Isopropyltoluene	sec-Butyl-benzene	tert-Butyl-benzene	2-Butanone
<b>West Commodore Way</b>																				
01MW52/B73	B73-15	SoundEarth	12/05/07	15	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05	<0.05	<0.05	<0.5	
	B73-20			20	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05	<0.05	<0.05	<0.5
01MW53/B75	B75-15	SoundEarth	12/06/07	15	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	
	B75-20			20	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05	<0.05	<0.05	<0.5	
	B75-35			35	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05	<0.05	<0.05	<0.5	
	B75-40			40	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05	<0.05	<0.05	<0.5	
01MW85/B193	B193-02.5	SoundEarth	04/20/11	2.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B193-07.5			7.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B193-12.5			12.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
01MW89/B197	B197-02.5	SoundEarth	4/21/11	2.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B197-07.5			7.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B197-12.5			12.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
<b>ASKO Hydraulic Property</b>																				
SB-40	SB-40-2	FW	11/21/00	2	--	<0.100	--	--	--	--	--	--	--	--	--	--	--	--	--	
	SB-40-5			5	--	<0.100	--	--	--	--	--	--	--	--	--	--	--	--	--	
	SB-40-10			10	--	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	
	SB-40-15			15	--	<0.100	--	--	--	--	--	--	--	--	--	--	--	--	--	
SB-49	SB-49-2	FW	11/29/00	2	--	<0.100	--	--	--	--	--	--	--	--	--	--	--	--		
	SB-49-5			5	--	<0.100	--	--	--	--	--	--	--	--	--	--	--	--		
	SB-49-10			10	--	<0.100	--	--	--	--	--	--	--	--	--	--	--	--		
	SB-49-15			15	--	<0.100	--	--	--	--	--	--	--	--	--	--	--	--		
SB-50	SB-50-2	FW	11/29/00	2	--	<0.100	--	--	--	--	--	--	--	--	--	--	--	--		
	SB-50-5			5	--	<0.100	--	--	--	--	--	--	--	--	--	--	--	--		
	SB-50-10			10	--	<0.100	--	--	--	--	--	--	--	--	--	--	--	--		
	SB-50-15			15	--	<0.100	--	--	--	--	--	--	--	--	--	--	--	--		
MW01/B01	B01-11	SoundEarth	04/17/06	11	<0.00202	<0.00290	<0.00348	<0.00290	<0.00348	<0.00290	<0.00580	<0.00580	<0.0348	<0.00580	<0.00580	<0.00580	<0.00580	<0.00580	<0.0174	
<b>MTCA Cleanup Level for Soil</b>					<b>0.05<sup>(2)</sup></b>	<b>0.03<sup>(2)</sup></b>	<b>160<sup>(3)</sup></b>	<b>1,600<sup>(3)</sup></b>	<b>4,000<sup>(3)</sup></b>	<b>0.67<sup>(4)</sup></b>	<b>NE</b>	<b>800<sup>(3)</sup></b>	<b>72,000<sup>(3)</sup></b>	<b>8,000<sup>(3)</sup></b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>48,000<sup>(3)</sup></b>



**Table 3**  
**Soil Analytical Results for Selected VOCs**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results <sup>(1)</sup> (milligrams per kilogram)															
					Tetrachloroethene	Trichloroethene	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,2,4 Trimethyl-benzene	1,3,5 Trimethyl-benzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	p-Isopropyltoluene	sec-Butyl-benzene	tert-Butyl-benzene	2-Butanone
<b>ASKO Hydraulic Property</b>																				
MW02/B02	B02-4.5	SoundEarth	04/17/06	4.5	<0.00172	<0.00215	<0.00258	<0.00215	<0.00258	<0.00215	<0.00215	<0.00430	<0.00430	<0.0258	<0.00430	<0.00430	<0.00430	<0.00430	<0.0129	
	B02-11			11	<0.00184	0.0031	<0.00276	<0.00230	<0.00276	<0.00230	<0.00460	<0.00460	<0.0276	<0.00460	<0.00460	<0.00460	<0.00460	<0.00460	<0.00460	<0.0138
MW03/B03	B03-6	SoundEarth	04/18/06	6	<b>&lt;0.139</b>	<b>&lt;0.139</b>	<0.139	<0.139	<0.139	<0.139	19.5	7.86	<1.39	0.898	6.61	3.32	1.01	2.84	0.159	<1.39
	B03-12			12	<0.00184	<0.00230	<0.00276	<0.0230	<0.00276	<0.00230	<0.00460	<0.00460	<0.0276	<0.00460	<0.00460	<0.00460	<0.00460	<0.00460	<0.00460	<0.0138
	B03-16			16	<0.00197	<0.00246	<0.00295	<0.0246	<0.00295	<0.0246	<0.00492	<0.00492	<0.0295	<0.00492	<0.00492	<0.00492	<0.00492	<0.00492	<0.00492	<0.00492
MW04/B04	B04-1	SoundEarth	04/18/06	1	<0.00171	<0.00214	<0.00257	<0.00214	<0.00257	<0.00214	0.00479	<0.00428	<0.0257	<0.00428	<0.00428	<0.00428	<0.00428	<0.00428	<0.00428	<0.0128
	B04-10			10	<0.00177	<0.00221	<0.00265	<0.00221	<0.00265	<0.00221	<0.00442	<0.00442	<0.0265	<0.00442	<0.00442	<0.00442	<0.00442	<0.00442	<0.00442	<0.0133
	B04-22			22	<0.00238	<0.00298	<0.00358	<0.00298	<0.00358	<0.00298	<0.00596	<0.00596	<0.0358	<0.00596	<0.00596	<0.00596	<0.00596	<0.00596	<0.00596	<0.0179
MW05/B05	B05-1.5	SoundEarth	04/19/06	1.5	<0.00202	<0.00252	<0.00302	<0.00252	<0.00302	<0.00252	0.00561	<0.00504	0.212	<0.00504	<0.00504	<0.00504	<0.00504	<0.00504	<0.00504	0.0561
	B05-22.5			22.5	<0.00196	<b>0.616</b>	0.0423	<0.00245	<0.00294	<0.00245	<0.00489	<0.00489	<0.0294	<0.00489	<0.00489	<0.00489	<0.00489	<0.00489	<0.00489	<0.00489
MW06/B06	B06-2	SoundEarth	04/19/06	2	<0.00190	<0.00237	<0.00284	<0.00237	<0.00284	<0.00237	0.0214	<0.00474	0.0479	0.00519	0.00721	0.00529	0.0183	0.0164	<0.00474	<0.0142
	B06-21.5			21.5	<0.00194	<0.00242	<0.00291	<0.00242	<0.00291	<0.00242	<0.00484	<0.00484	<0.0291	<0.00484	<0.00484	<0.00484	<0.00484	<0.00484	<0.00484	<0.00484
B07	B07-1.5	SoundEarth	04/21/06	1.5	<0.00171	<0.00214	<0.00257	<0.00214	<0.00257	<0.00214	0.0747	0.0142	<0.0257	0.00586	0.00491	0.00918	0.00842	<0.00428	<0.00428	<0.0128
01MW44/SB65	SB65-2.5'	SoundEarth	09/13/06	2.5	<0.00191	<b>0.0385</b>	0.00900	<0.00239	<0.00287	<0.00239	<0.00478	<0.00478	<0.0287	<0.00478	<0.00478	<0.00478	<0.00478	<0.00478	<0.00478	<0.0143
	SB65-25'			25	<0.00218	<0.00273	<0.00328	<0.00273	<0.00328	<0.00273	<0.00546	<0.00546	<0.0328	<0.00546	<0.00546	<0.00546	<0.00546	<0.00546	<0.00546	<0.0164
	SB65-27.5'			27.5	<0.00185	<0.00231	<0.00277	<0.00231	<0.00277	<0.00231	<0.00462	<0.00462	<0.0277	<0.00462	<0.00462	<0.00462	<0.00462	<0.00462	<0.00462	<0.0139
01MW45/SB66	SB66-2.5'	SoundEarth	09/13/06	2.5	<0.00200	<0.00250	<0.00300	<0.00250	<0.00300	<0.00250	0.00663	<0.00500	0.135	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0194
	SB66-22.5'			22.5	<0.00210	<b>0.499</b>	0.0368	<0.00262	<0.00314	<0.00262	<0.00524	<0.00524	<0.0314	<0.00524	<0.00524	<0.00524	<0.00524	<0.00524	<0.00524	<0.0157
	SB66-25'			25	<0.00201	<0.00251	<0.00301	<0.00251	<0.00301	<0.00251	<0.00501	<0.00501	0.134	<0.00501	<0.00501	<0.00501	<0.00501	<0.00501	<0.00501	<0.00501
01MW46/SB67	SB67-2.5'	SoundEarth	09/13/06	2.5	<0.00212	<0.00264	<0.00317	<0.00264	<0.00317	<0.00264	<0.00529	<0.00529	0.0393	<0.00529	<0.00529	<0.00529	<0.00529	0.0322	<0.00529	0.0159
	SB67-22.5'			22.5	<0.00164	<0.00205	<0.00245	<0.00205	<0.00245	<0.00205	<0.00409	<0.00409	<0.0245	<0.00409	<0.00409	<0.00409	<0.00409	<0.00409	<0.00409	<0.0123
	SB67-25'			25	<0.00224	<0.00280	<0.00336	<0.00280	<0.00336	<0.00280	<0.00559	<0.00559	<0.0336	<0.00559	<0.00559	<0.00559	<0.00559	<0.00559	<0.00559	<0.00559
01MW54/B076	B076-05	SoundEarth	11/13/08	5	<0.025	<b>0.11</b>	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	--
	B076-10			10	<b>0.24</b>	<b>0.34</b>	1.7	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--
	B076-15			15	<0.025	<b>4.5</b>	0.14	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	--
01MW55/B077	B077-05	SoundEarth	11/13/08	5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	--
	B077-15			15	<0.025	<b>7.8</b>	0.10	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--
01MW56/B078	B078-05	SoundEarth	11/14/08	5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	--
	B078-15			15	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	--
01MW57/B079	B079-05	SoundEarth	11/14/08	5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	--
	B079-32.5'			32.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	--
	B079-40			40	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	--
01MW58/B080	B080-05	SoundEarth	11/14/08	5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	--
	B080-20			20	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	--
<b>MTCA Cleanup Level for Soil</b>					<b>0.05<sup>(2)</sup></b>	<b>0.03<sup>(2)</sup></b>	<b>160<sup>(3)</sup></b>	<b>1,600<sup>(3)</sup></b>	<b>4,000<sup>(3)</sup></b>	<b>0.67<sup>(4)</sup></b>	<b>NE</b>	<b>800<sup>(3)</sup></b>	<b>72,000<sup>(3)</sup></b>	<b>8,000<sup>(3)</sup></b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>48,000<sup>(3)</sup></b>



**Table 3**  
**Soil Analytical Results for Selected VOCs**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results <sup>(1)</sup> (milligrams per kilogram)															
					Tetrachloroethene	Trichloroethene	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,2,4 Trimethyl-benzene	1,3,5 Trimethyl-benzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	p-Isopropyltoluene	sec-Butyl-benzene	tert-Butyl-benzene	2-Butanone
<b>ASKO Hydraulic Property</b>																				
01MW60/B83	B83-05	SoundEarth	12/29/08	5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
	B83-07.5			7.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--
	B083-37.5			37.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--
01MW61/B84	B84-05	SoundEarth	12/29/08	5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
	B84-07.5			7.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
	B84-27.5			27.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--
01MW62/B85	B85-05	SoundEarth	12/30/08	5	<0.025	<b>0.22</b>	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B85-17.5			17.5	<0.025	<b>66</b>	0.12	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
	B85-20			20	<0.025	<b>52</b>	0.14	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
	B85-30			30	<0.025	<b>4.2</b>	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
	B85-37.5			37.5	<0.035	<b>0.10</b>	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
01MW63/B86	B86-05	SoundEarth	12/30/08	5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B86-17.5			17.5	<0.025	<b>35</b>	0.079	<0.050	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
	B86-32.5			32.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
B87	B87-05	SoundEarth	12/29/08	5	<0.025	<0.03	0.071	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B87-10			10	<0.025	<b>3.4</b>	0.43	<0.05	<0.05	<0.05	--	--	--	--	--	--	--			
	B87-16			16	<0.025	<b>19</b>	0.59	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--			
B88	B88-07	SoundEarth	12/29/08	7	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B88-10			10	<0.025	<b>0.16</b>	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--			
	B88-16			16	<0.025	<b>0.82</b>	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--			
B89	B89-02	SoundEarth	12/29/08	2	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B89-05			5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--			
	B89-11			11	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--			
	B89-13			13	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--			
B90	B90-03	SoundEarth	12/29/08	3	<b>0.17</b>	<b>4.4</b>	0.85	<0.05	<0.05	<0.05	--	--	--	--	--	--	--			
	B90-10			10	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--				
	B90-16			16	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--				
B91	B91-02	SoundEarth	12/29/08	2	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--			
	B91-10			10	<0.025	<b>0.098</b>	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--				
	B91-14			14	<0.025	<b>0.15</b>	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--				
<b>MTCA Cleanup Level for Soil</b>					<b>0.05<sup>(2)</sup></b>	<b>0.03<sup>(2)</sup></b>	<b>160<sup>(3)</sup></b>	<b>1,600<sup>(3)</sup></b>	<b>4,000<sup>(3)</sup></b>	<b>0.67<sup>(4)</sup></b>	<b>NE</b>	<b>800<sup>(3)</sup></b>	<b>72,000<sup>(3)</sup></b>	<b>8,000<sup>(3)</sup></b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>48,000<sup>(3)</sup></b>	



**Table 3**  
**Soil Analytical Results for Selected VOCs**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results <sup>(1)</sup> (milligrams per kilogram)															
					Tetrachloroethene	Trichloroethene	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,2,4 Trimethyl-benzene	1,3,5 Trimethyl-benzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	p-Isopropyltoluene	sec-Butyl-benzene	tert-Butyl-benzene	2-Butanone
<b>ASKO Hydraulic Property</b>																				
B92	B92-06	SoundEarth	12/30/08	6	<0.025	2.4	0.13	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B92-10			10	<0.025	89	1.0	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	--
	B92-14			14	<0.025	2.6	0.084	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	--
B93	B93-2	SoundEarth	12/30/08	2	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B93-10			10	<0.025	1.0	0.1	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B93-18			18	0.12	60	1.3	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B93-20			20	<0.025	1.6	0.064	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
B94	B94-2	SoundEarth	12/30/08	2	<0.025	<0.03	0.22	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B94-7			7	<0.025	0.072	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B94-14			14	<0.025	1.3	0.083	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
B95	B95-06	SoundEarth	12/30/08	6	<0.025	0.42	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B95-10			10	<0.025	30	0.76	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B95-14			14	<0.025	45	0.87	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B95-20			20	<0.025	2.1	0.072	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
B96	B96-02	SoundEarth	12/30/08	2	<0.025	0.043	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B96-10			10	<0.025	0.53	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B96-20			20	<0.025	0.96	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
B97	B97-02	SoundEarth	12/30/08	2	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B97-06			6	<0.025	0.031	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B97-10			10	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
B98	B98-6	SoundEarth	12/30/08	6	<0.025	0.065	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B98-10			10	<0.025	0.37	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B98-20			20	<0.025	0.16	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
B99	B99-0.5	SoundEarth	12/30/08	0.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B99-05			5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B99-09			9	<0.025	0.077	0.70	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
B100	B100-0.5	SoundEarth	12/30/08	0.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B100-03			3	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B00-17			17	<0.025	1.4	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
<b>MTCA Cleanup Level for Soil</b>					<b>0.05<sup>(2)</sup></b>	<b>0.03<sup>(2)</sup></b>	<b>160<sup>(3)</sup></b>	<b>1,600<sup>(3)</sup></b>	<b>4,000<sup>(3)</sup></b>	<b>0.67<sup>(4)</sup></b>	<b>NE</b>	<b>800<sup>(3)</sup></b>	<b>72,000<sup>(3)</sup></b>	<b>8,000<sup>(3)</sup></b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>48,000<sup>(3)</sup></b>



**Table 3**  
**Soil Analytical Results for Selected VOCs**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results <sup>(1)</sup> (milligrams per kilogram)															
					Tetrachloroethene	Trichloroethene	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,2,4 Trimethyl-benzene	1,3,5 Trimethyl-benzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	p-Isopropyltoluene	sec-Butyl-benzene	tert-Butyl-benzene	2-Butanone
<b>ASKO Hydraulic Property</b>																				
B101	B101-02	SoundEarth	12/30/08	2	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B101-10			10	<0.025	<b>0.31</b>	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--
	B101-14			14	<0.025	<b>0.14</b>	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--
01MW64/B102	B102-02.5	SoundEarth	03/17/09	2.5	<b>0.070</b>	<b>44</b>	0.18	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B102-07.5			7.5	< <b>0.05</b>	<b>15</b>	0.12	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B102-17.5			17.5	<0.02	<b>1.26</b>	<0.02	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	
	B102-20			20	<0.02	<0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.02	--	<0.08	<0.02	<0.02	--	<0.02	<0.02	
01MW65/B103	B103-40	SoundEarth	03/17/09	40	<0.02	<b>0.18</b>	<0.02	<0.02	<0.05	<0.02	<0.02	<0.02	--	<0.08	<0.02	<0.02	--	<0.02	<0.02	
B104	B104-04	SoundEarth	03/17/09	4	<0.05	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B104-10			10	<0.02	<b>2.5</b>	0.061	<0.02	<0.05	<0.02	<0.02	<0.02	--	<0.08	<0.02	<0.02	--	<0.02	<0.02	
	B104-14			14	<0.02	<b>3.76</b>	0.16	<0.02	<0.05	<0.02	<0.02	<0.02	--	<0.08	<0.02	<0.02	--	<0.02	<0.02	
	B104-14 (dup)			14	<0.02	<b>4.30</b>	0.15	<0.02	<0.05	<0.02	<0.02	<0.02	--	<0.08	<0.02	<0.02	--	<0.02	<0.02	
	B104-18			18	<0.02	<b>3.09</b>	0.11	<0.02	<0.05	<0.02	<0.02	<0.02	--	<0.08	<0.02	<0.02	--	<0.02	<0.02	
B105	B105-03	SoundEarth	03/17/09	3	<0.05	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B105-10			10	<0.02	<b>0.091</b>	<0.02	<0.02	<0.05	<0.02	<0.02	<0.02	--	<0.08	<0.02	<0.02	--	<0.02	<0.02	
	B105-15			15	<0.02	<b>9.03</b>	0.27	<0.02	<0.05	<0.02	<0.02	<0.02	--	<0.08	<0.02	<0.02	--	<0.02	<0.02	
	B105-20			20	<0.025	<b>0.22</b>	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
B106	B106-12	SoundEarth	03/17/09	12	<0.025	<b>0.067</b>	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B106-16			16	<0.02	<b>5.17</b>	0.078	<0.02	<0.05	<0.02	<0.02	<0.02	--	<0.08	<0.02	<0.02	--	<0.02	<0.02	
	B106-20			20	<0.02	<b>36.0</b>	0.99	<0.02	<0.05	0.13	<0.02	<0.02	--	<0.08	<0.02	<0.02	--	<0.02	<0.02	
B107	B107-07	SoundEarth	03/17/09	7	<0.05	<b>0.19</b>	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B107-13			13	<0.02	<b>110</b>	0.55	<0.02	<0.05	0.02	<0.02	<0.02	--	<0.08	<0.02	<0.02	--	<0.02	<0.02	
	B107-17			17	<0.02	<b>30.5</b>	0.51	<0.02	<0.05	<0.02	<0.02	<0.02	--	<0.08	<0.02	<0.02	--	<0.02	<0.02	
	B107-22			22	<0.02	<b>6.0</b>	0.17	<0.02	<0.05	<0.02	<0.02	<0.02	--	<0.08	<0.02	<0.02	--	<0.02	<0.02	
B108	B108-08	SoundEarth	03/17/09	8	<0.05	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B108-14			14	<0.02	<b>0.42</b>	<0.02	<0.02	<0.05	<0.02	<0.02	<0.02	--	<0.08	<0.02	<0.02	--	<0.02	<0.02	
B109	B109-06	SoundEarth	03/17/09	6	<0.05	<b>0.24</b>	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B109-12			12	<0.02	<b>1.55</b>	0.12	<0.02	<0.05	<0.02	<0.02	<0.02	--	<0.08	<0.02	<0.02	--	<0.02	<0.02	
	B109-15			15	<0.02	<b>0.90</b>	0.032	<0.02	<0.05	<0.02	<0.02	<0.02	--	<0.08	<0.02	<0.02	--	<0.02	<0.02	
<b>MTCA Cleanup Level for Soil</b>					<b>0.05<sup>(2)</sup></b>	<b>0.03<sup>(2)</sup></b>	<b>160<sup>(3)</sup></b>	<b>1,600<sup>(3)</sup></b>	<b>4,000<sup>(3)</sup></b>	<b>0.67<sup>(4)</sup></b>	<b>NE</b>	<b>800<sup>(3)</sup></b>	<b>72,000<sup>(3)</sup></b>	<b>8,000<sup>(3)</sup></b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>48,000<sup>(3)</sup></b>



**Table 3**  
**Soil Analytical Results for Selected VOCs**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results <sup>(1)</sup> (milligrams per kilogram)															
					Tetrachloroethene	Trichloroethene	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,2,4 Trimethyl-benzene	1,3,5 Trimethyl-benzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	p-Isopropyltoluene	sec-Butyl-benzene	tert-Butyl-benzene	2-Butanone
<b>ASKO Hydraulic Property</b>																				
B110	B110-04	SoundEarth	03/17/09	4	<0.05	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
	B110-10			10	<0.02	<b>4.2</b>	0.21	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	B110-16			16	<0.02	<b>0.80</b>	0.026	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
B111	B111-03	SoundEarth	03/18/09	3	<0.02	<b>0.032</b>	0.037	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	
	B111-03 (dup)			3	<0.02	<b>0.040</b>	0.035	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	
	B111-18			18	<0.02	<b>20.3</b>	0.35	<0.02	<0.05	0.039	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	
B112	B112-07	SoundEarth	03/18/09	7	<0.05	<b>0.23</b>	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B112-13			13	<0.02	<b>1.08</b>	0.098	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
	B112-16			16	<0.02	<b>3.26</b>	0.22	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
	B112-18			18	<0.025	<b>0.35</b>	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
B113	B113-11.5	SoundEarth	03/18/09	11.5	<0.02	<0.03	0.035	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
B114	B114-04	SoundEarth	03/18/09	4	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B114-18			18	<0.02	<b>2.82</b>	0.11	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			
	B114-21			21	<0.02	<b>2.29</b>	0.042	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			
B115	B115-03	SoundEarth	03/18/09	3	<0.02	<0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		
	B115-12			12	<0.02	<b>0.037</b>	<0.02	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			
	B115-18			18	<0.05	<b>0.43</b>	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--			
B116	B116-03	SoundEarth	03/18/09	3	<0.02	<b>0.21</b>	<0.02	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02			
	B116-16			16	<0.02	<0.03	0.2	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02				
B131	B131-10	SoundEarth	12/29/09	10	<0.025	<b>0.23</b>	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--			
	B131-14.5-15		03/29/10	14.5-15	<0.025	<b>0.50</b>	0.075	<0.05	<0.05	<0.05	--	--	--	--	--	--				
	B131-15-15.5		03/29/10	15-15.5	<0.025	<b>0.66</b>	0.14	<0.05	<0.05	<0.05	--	--	--	--	--	--				
01MW70/ 01SVE02/B134	B134-02.5	SoundEarth	02/11/10	2.5	<0.025	<b>0.033</b>	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--				
	B134-10.5			10.5	<0.025	<b>1.7</b>	<0.05	0.15	<0.05	<0.05	<0.05	--	--	--	--	--				
01MW71/ 01SVE03/B133	B133-05.5	SoundEarth	02/11/10	5.5	<0.025	<b>0.80</b>	0.068	<0.05	<0.05	<0.05	--	--	--	--	--	--				
	B133-20			20	<0.025	<b>120</b>	0.34	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--				
<b>MTCA Cleanup Level for Soil</b>					<b>0.05<sup>(2)</sup></b>	<b>0.03<sup>(2)</sup></b>	<b>160<sup>(3)</sup></b>	<b>1,600<sup>(3)</sup></b>	<b>4,000<sup>(3)</sup></b>	<b>0.67<sup>(4)</sup></b>	<b>NE</b>	<b>800<sup>(3)</sup></b>	<b>72,000<sup>(3)</sup></b>	<b>8,000<sup>(3)</sup></b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>48,000<sup>(3)</sup></b>	



**Table 3**  
**Soil Analytical Results for Selected VOCs**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results <sup>(1)</sup> (milligrams per kilogram)															
					Tetrachloroethene	Trichloroethene	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,2,4 Trimethyl-benzene	1,3,5 Trimethyl-benzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	p-Isopropyltoluene	sec-Butyl-benzene	tert-Butyl-benzene	2-Butanone
<b>ASKO Hydraulic Property</b>																				
01SVE01/B135	B135-10.5	SoundEarth	02/11/10	10.5	<0.025	16	0.47	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B135-15			15	<0.025	3.8	0.28	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	--
01IW09/B136	B136-05	SoundEarth	02/12/10	5	<0.025	0.17	0.063	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B136-11.5			11.5	<0.025	0.86	0.091	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B136-16			16	<0.025	4.3	0.16	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
01IW10/B137	B137-11	SoundEarth	02/12/10	11	<0.025	1.4	0.11	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B137-23			23	<0.025	2.6	0.081	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
01MW76/B171	B171-05	SoundEarth	02/28/11	5	<0.025	0.065	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B171-10			10	<0.025	0.60	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B171-15			15	<0.025	0.10	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B171-17.5			17.5	<0.025	0.19	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
01MW77/B172	B172-20	SoundEarth	03/01/11	20	<0.025	3.1	0.058	<0.05	<0.05	<0.05	--	--	0.058	<0.05	<0.05	--	--	--	--	
01MW78/B173	B173-07.5	SoundEarth	03/02/11	7.5	<0.025	7.7	0.065	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B173-10			10	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B173-15			15	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B173-25			25	<0.025	47	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
01MW79/B174	B174-02.5	SoundEarth	03/03/11	2.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B174-07.5			7.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B174-10.5			10.5	<0.025	0.13	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
B175	B175-02.5	SoundEarth	03/03/11	2.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B175-07.5			7.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B175-11			11	<0.025	0.72	0.56	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B175-15			15	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
01MW80/B188	B188-02.5	SoundEarth	04/18/11	2.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B188-07.5			7.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B188-12.5			12.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
01MW81/B189	B189-12.5	SoundEarth	04/18/11	12.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
<b>MTCA Cleanup Level for Soil</b>					<b>0.05<sup>(2)</sup></b>	<b>0.03<sup>(2)</sup></b>	<b>160<sup>(3)</sup></b>	<b>1,600<sup>(3)</sup></b>	<b>4,000<sup>(3)</sup></b>	<b>0.67<sup>(4)</sup></b>	<b>NE</b>	<b>800<sup>(3)</sup></b>	<b>72,000<sup>(3)</sup></b>	<b>8,000<sup>(3)</sup></b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>48,000<sup>(3)</sup></b>



**Table 3**  
**Soil Analytical Results for Selected VOCs**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results <sup>(1)</sup> (milligrams per kilogram)															
					Tetrachloroethene	Trichloroethene	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,2,4 Trimethyl-benzene	1,3,5 Trimethyl-benzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	p-Isopropyltoluene	sec-Butyl-benzene	tert-Butyl-benzene	2-Butanone
<b>BNSF Parcel</b>																				
01MW92/B258	B258-02.5	SoundEarth	08/16/12	2.5	<0.025	<b>0.18</b>	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B258-05			5	<0.025	<b>0.39</b>	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--
	B258-10			10	<0.025	<b>0.050</b>	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--
	B258-12.5			12.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--
01MW93/B259	B259-02.5	SoundEarth	08/16/12	2.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B259-05			5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
	B259-07.5			7.5	<0.025	<b>0.18</b>	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
	B259-17.5			17.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
01MW94/B260	B260-02.5	SoundEarth	08/17/12	2.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B260-12.5			12.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
	B260-17.5			17.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
01MW95/B261	B261-0.5	SoundEarth	08/17/12	0.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B261-05			5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
	B260-07.5			7.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
01MW96/B264	B264-02.5	SoundEarth	05/07/13	2.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B264-07.5			7.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
	B264-10			10	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--		
01MW97/B265	B265-03	SoundEarth	05/07/13	3	<0.025	<b>0.098</b>	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B265-06			6	<0.025	<b>0.12</b>	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--			
	B265-11			11	<0.025	<b>7.9</b>	0.071	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--			
	B265-16			16	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--			
01MW98/B266	B266-03.5	SoundEarth	05/07/13	3.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--		
	B266-06			6	<0.025	<b>0.55</b>	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--				
	B266-08			8	<0.025	<b>0.12</b>	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--				
	B266-16			16	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--				
<b>MTCA Cleanup Level for Soil</b>					<b>0.05<sup>(2)</sup></b>	<b>0.03<sup>(2)</sup></b>	<b>160<sup>(3)</sup></b>	<b>1,600<sup>(3)</sup></b>	<b>4,000<sup>(3)</sup></b>	<b>0.67<sup>(4)</sup></b>	<b>NE</b>	<b>800<sup>(3)</sup></b>	<b>72,000<sup>(3)</sup></b>	<b>8,000<sup>(3)</sup></b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>48,000<sup>(3)</sup></b>	





**Table 3**  
**Soil Analytical Results for Selected VOCs**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results <sup>(1)</sup> (milligrams per kilogram)															
					Tetrachloroethene	Trichloroethene	Cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	1,2,4 Trimethyl-benzene	1,3,5 Trimethyl-benzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	p-Isopropyltoluene	sec-Butyl-benzene	tert-Butyl-benzene	2-Butanone
<b>West Waterfront Property</b>																				
02MW13/B74	B74-05	SoundEarth	12/05/07	5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
	B74-10			10	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	B74-12.5			12.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
<b>East Waterfront Property</b>																				
01MW83/B191	B191-05	SoundEarth	04/19/11	5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B191-12.5			12.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
<b>Bulk Terminal Property</b>																				
01MW59/B082	B082-2.5	SoundEarth	11/17/08	2.5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	--	
	B082-05			5	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
	B082-10			10	<0.025	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	--	--	--	--	--	--	--	--	
<b>MTCA Cleanup Level for Soil</b>					<b>0.05<sup>(2)</sup></b>	<b>0.03<sup>(2)</sup></b>	<b>160<sup>(3)</sup></b>	<b>1,600<sup>(3)</sup></b>	<b>4,000<sup>(3)</sup></b>	<b>0.67<sup>(4)</sup></b>	<b>NE</b>	<b>800<sup>(3)</sup></b>	<b>72,000<sup>(3)</sup></b>	<b>8,000<sup>(3)</sup></b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>48,000<sup>(3)</sup></b>

**NOTES:**

**Red** denotes concentration exceeds MTCA cleanup level.

**Bold** denotes concentration below laboratory detection limit, but exceeding the MTCA cleanup level for soil; the detection limit has been raised due to high concentrations of associated analytes requiring dilution and/or historical cleanup levels that historical detection limits were based upon.

Data prior to April 2006 from previous consultants. All other sample analyses conducted by TestAmerica Laboratories, Inc. of Bothell, Washington, Libby Environmental Inc., of Olympia, Washington, or Friedman & Bruya, Inc. of Seattle, Washington.

<sup>(1)</sup>Samples analyzed by United States Environmental Protection Agency Method 8260B or 8260C.

<sup>(2)</sup>MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Soil Cleanup Levels for Unrestricted Land Uses.

<sup>(3)</sup>MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Non-Carcinogen, Standard Formula Value, CLARC Website <<https://fortress.wa.gov/ecy/clarc/CLARHome.aspx>>.

<sup>(4)</sup>MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Carcinogen, Standard Formula Value, CLARC Website <<https://fortress.wa.gov/ecy/clarc/CLARHome.aspx>>.

-- = not analyzed

< = not detected at a concentration exceeding the laboratory reporting limit

bgs = below ground surface

CLARC = Cleanup Levels and Risk Calculations

FW = Foster Wheeler Environmental Corporation

MTCA = Washington State Model Toxics Control Act

NE = not established

SoundEarth = SoundEarth Strategies, Inc.

VOCs = volatile organic compounds

WAC = Washington Administrative Code



**Table 4**  
**Soil Analytical Results for Selected Metals**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results <sup>(1)</sup> (milligrams per kilogram)							
					Arsenic	Barium	Cadmium	Chromium	Lead	Mercury <sup>(2)</sup>	Selenium	Silver
<b>West Commodore Way</b>												
SB-46	SB-46-2	FW	11/28/00	2	5.31	--	1.1	30.7	11.1	<1.00	<0.407	<0.407
	SB-46-5			5	3.9	--	0.895	42.5	4.81	<1.00	<0.376	<0.376
	SB-46-10			10	3.1	--	0.693	36.5	3.21	<1.00	0.459	<0.407
	SB-46-15			15	3.52	--	<0.362	37.5	2.99	<1.00	<0.362	<0.362
	SB-46-20			20	1.81	--	0.59	33.9	2.48	<1.00	<0.352	<0.352
	SB-46-25			25	4.27	--	<0.275	27.1	2.01	<1.00	<0.275	<0.275
01MW52/B73	B73-15	SoundEarth	12/05/07	15	--	--	--	--	2.61	--	--	--
	B73-20			20	--	--	--	--	2.39	--	--	--
01MW53/B75	B75-15	SoundEarth	12/06/07	15	--	--	--	--	2.34	--	--	--
	B75-20			20	--	--	--	--	2.25	--	--	--
	B75-35			35	--	--	--	--	1.66	--	--	--
	B75-40			40	--	--	--	--	4.20	--	--	--
<b>ASKO Hydraulic Property</b>												
SB-40	SB-40-2	FW	11/21/00	2	2.82	--	<0.355	34.9	2.3	<1.00	<0.355	<0.355
	SB-40-5			5	2.6	--	<0.373	35.5	2.33	<1.00	<0.373	<0.373
	SB-40-10			10	7.23	--	0.487	45.6	4.41	<1.00	0.589	<0.350
	SB-40-15			15	5.52	--	0.877	77.4	8.51	<1.00	0.713	<0.373
SB-47	SB-47-5	FW	11/28/00	5	6.66	--	1.08	37.1	19.3	<1.00	<0.500	<0.500
	SB-47-10			10	1.55	--	0.689	32.3	3.53	<1.00	<0.350	<0.350
	SB-47-15			15	2.21	--	0.812	35.4	3.36	<1.00	<0.431	<0.431
	SB-47-20			20	1.6	--	0.816	36.1	2.54	<1.00	<0.352	<0.352
	SB-47-25			25	2.85	--	0.932	27.2	2.34	<0.427	<0.427	<0.427
SB-48	SB-48-2	FW	11/29/00	2	2.52	--	<0.327	37.4	3.07	<1.00	<0.327	<0.327
	SB-48-5			5	3.19	--	<0.318	35.2	3.67	<1.00	0.351	<0.318
	SB-48-10			10	4.66	--	0.389	46.5	5.2	<1.00	0.437	<0.316
	SB-48-15			15	1.91	--	<0.329	39.6	3.06	<1.00	<0.329	<0.329
	SB-48-20			20	1.61	--	<0.355	36.1	2.1	<1.00	<0.355	<0.355
	SB-48-25			25	2.09	--	<0.345	25.2	2.01	<1.00	<0.345	<0.345
SB-49	SB-49-2	FW	11/29/00	2	6.4	--	<0.312	48.3	5.07	<1.00	0.496	<0.312
	SB-40-5			5	7.98	--	<0.362	61.9	6.56	<1.00	<0.362	<0.362
	SB-49-10			10	1.44	--	<0.333	44	2.93	<1.00	<0.333	<0.333
	SB-49-15			15	1.81	--	<0.352	35.5	3.53	<1.00	<0.352	<0.352
<b>MTCA Cleanup Level for Soil</b>					<b>20<sup>(3)</sup></b>	<b>16,000<sup>(4)</sup></b>	<b>2<sup>(3)</sup></b>	<b>2,000<sup>(3)</sup></b>	<b>250<sup>(3)</sup></b>	<b>2<sup>(3)</sup></b>	<b>400<sup>(4)</sup></b>	<b>400<sup>(4)</sup></b>



**Table 4**  
**Soil Analytical Results for Selected Metals**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results <sup>(1)</sup> (milligrams per kilogram)							
					Arsenic	Barium	Cadmium	Chromium	Lead	Mercury <sup>(2)</sup>	Selenium	Silver
<b>ASKO Hydraulic Property</b>												
SB-50	SB-50-2	FW	11/29/00	2	5.62	--	<0.342	59.3	5.84	0.118	<0.343	<0.342
	SB-50-5			5	6.3	--	<0.345	49.7	5.13	0.104	<0.345	<0.345
	SB-50-10			10	5.85	--	0.357	86.8	7.27	<1.00	1.44	<0.342
	SB-50-15			15	1.37	--	<0.362	37.4	2.81	<1.00	<0.362	<0.362
01MW15/SB-58	SB-58-2	FW	07/19/01	2	--	--	--	--	4.49	--	--	--
	SB-58-5			5	--	--	--	--	5.12	--	--	--
	SB-58-10			10	--	--	--	--	2.49	--	--	--
	SB-58-15			15	--	--	--	--	3.98	--	--	--
	SB-58-25			25	--	--	--	--	2.27	--	--	--
MW01/B01	B01-11	SoundEarth	04/17/06	11	5.58	62.1	<0.499	33.9	2.43	<0.334	<0.499	<0.499
MW02/B02	B02-4.5	SoundEarth	04/17/06	4.5	6.71	114	<0.606	52.7	5.66	<0.388	<0.606	<0.606
	B02-11			11	4.29	67	<0.571	38.1	2.81	<0.350	<0.571	<0.571
MW03/B03	B03-6	SoundEarth	04/18/06	6	9.82	119	<0.540	59.9	5.98	<0.406	<0.540	<0.540
	B03-12			12	1.37	56.1	<0.655	36.5	2.49	<0.410	<0.655	<0.655
	B03-16			16	1.98	102	<0.611	39	3.45	<0.428	<0.611	<0.611
MW04/B04	B04-1	SoundEarth	04/18/06	1	3.23	69.7	<0.533	28.7	5.85	<0.323	<0.533	3.27
	B04-10			10	2.12	69.2	<0.605	35.8	2.66	<0.442	<0.605	<0.605
	B04-22			22	2.38	60.4	<0.558	30.9	2.29	<0.379	<0.558	<0.558
MW05/B05	B05-1.5	SoundEarth	04/19/06	1.5	8.13	215	<0.723	34.5	27.3	<0.443	<0.723	<0.723
	B05-22.5			22.5	3.14	59.9	<0.529	29.5	2.21	<0.394	<0.529	<0.529
MW06/B06	B06-2	SoundEarth	04/19/06	2	4.22	96.5	<0.637	39.2	23.7	<0.470	<0.637	<0.637
	B06-21.5			12.5	2.24	60.3	<0.558	33.9	2.38	<0.429	<0.558	<0.558
B07	B07-1.5	SoundEarth	04/21/06	1.5	3.57	86	<0.653	44.2	6.13	<0.358	<0.653	<0.653
<b>MTCA Cleanup Level for Soil</b>					<b>20<sup>(3)</sup></b>	<b>16,000<sup>(4)</sup></b>	<b>2<sup>(3)</sup></b>	<b>2,000<sup>(3)</sup></b>	<b>250<sup>(3)</sup></b>	<b>2<sup>(3)</sup></b>	<b>400<sup>(4)</sup></b>	<b>400<sup>(4)</sup></b>

**NOTES:**

Data prior to April 2006 from previous consultants. All other sample analyses conducted by TestAmerica Laboratories, Inc. of Bothell, Washington or Friedman & Bruya, Inc. of Seattle, Washington.

<sup>(1)</sup>Analyzed by EPA Method 6020.

<sup>(2)</sup>Analyzed by EPA Method 7471A.

<sup>(3)</sup>MTCA Cleanup Regulation, Chapter 173-340-900, Table 740-1 Method A Soil Cleanup Levels for Unrestricted Land Uses.

<sup>(4)</sup>MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Non-Carcinogen, Standard Formula Value, CLARC Website <<https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>>.

-- = not analyzed

< = not detected at a concentration exceeding the laboratory reporting limit

bgs = below ground surface

CLARC = Cleanup Levels and Risk Calculations

EPA = U.S. Environmental Protection Agency

FW = Foster Wheeler Environmental Corporation

MTCA = Washington State Model Toxics Control Act

SoundEarth = SoundEarth Strategies, Inc.

WAC = Washington Administrative Code



**Table 5**  
**Soil Analytical Results for Pentachlorophenol**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results <sup>(1)</sup> (mg/kg)
					Pentachlorophenol
<b>ASKO Hydraulic Property</b>					
SB-06	SB-06-5	FW	2001	5	<0.250
	SB-06-10			10	0.0548
	SB-06-15			15	0.0548
SB-07	SB-07-5	FW	2001	5	<0.250
	SB-07-10			10	<0.250
	SB-07-15			15	0.0572
SB-08	SB-08-5	FW	2001	5	0.0560
01MW15/SB-58	SB-58-2	FW	07/19/01	2	<0.500
	SB-58-5			5	<0.0500
	SB-58-10			10	<0.0500
	SB-58-15			15	0.159
	SB-58-25			25	<0.0500
<b>MTCA Cleanup Level for Soil<sup>(2)</sup></b>					<b>2.5</b>

**NOTES:**

Sample analyses conducted by TestAmerica Laboratories, Inc. of Bothell, Washington or Friedman & Bruya, Inc. of Seattle, Washington.

<sup>(1)</sup>Analyzed by EPA Method 8270 Modified or 8270C-SIM.

<sup>(2)</sup>MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Carcinogen, Standard Formula Value, CLARC Website <<https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>>.

< = not detected at a concentration exceeding the laboratory reporting limit

bgs = below ground surface

CLARC = Cleanup Levels and Risk Calculations

EPA = U.S. Environmental Protection Agency

FW = Foster Wheeler Environmental Corporation

mg/kg = milligrams per kilogram

MTCA = Washington State Model Toxics Control Act

WAC = Washington Administrative Code



**Table 6**  
**Soil Analytical Results for Selected PAHs**  
 TOC Holdings Co.  
 ASKO Hydraulic Property  
 2805 West Commodore Way  
 Seattle, Washington

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)													cPAHs Toxicity Equivalency <sup>(1)</sup> (milligrams per kilogram)							TEQ <sup>(1)</sup> (milligrams per kilogram)		
					Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(g,h,i)perylene	Benzo(a)anthracene TEF: 0.1	Chrysene TEF: 0.01	Benzo(a)pyrene TEF: 1	Benzo(b)fluoranthene TEF: 0.1	Benzo(k)fluoranthene TEF: 0.1	Indeno(1,2,3-cd)pyrene TEF: 0.1	Dibenz(a,h)anthracene TEF: 0.1					
<b>West Commodore Way</b>																											
01MW52/B73	B73-15	SoundEarth	12/05/07	15	<0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	B73-20			20	<0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01MW53/B75	B75-15	SoundEarth	12/06/07	15	<0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	B75-20			20	<0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	B75-35			35	<0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B75-40			40	<0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>ASKO Hydraulic Property</b>																											
SB-30	SB-30-2	FW	2001	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.18 <sup>(2)</sup>		
01MW15/SB-58	SB-58-2	FW	07/19/01	2	--	--	--	--	--	--	--	--	--	--	0.221	0.122	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	0.0933		
	SB-58-5			5	--	--	--	--	--	--	--	--	--	--	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	0.00755	
	SB-58-10			10	--	--	--	--	--	--	--	--	--	--	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	0.00755	
	SB-58-15			15	--	--	--	--	--	--	--	--	--	--	--	< 0.0100	< 0.0100	0.102	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	0.105	
	SB-58-20			20	--	--	--	--	--	--	--	--	--	--	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	0.00755	
SB-58-25	25	--	--	--	--	--	--	--	--	--	--	--	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	0.00755				
MW01/B01	B01-11	SoundEarth	04/17/06	11	<0.00580	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	<0.355	< 0.355	< 0.355	< 0.355	< 0.355	< 0.355	< 0.355	< 0.355	< 0.355	< 0.355	< 0.355	0.268		
MW02/B02	B02-4.5	SoundEarth	04/17/06	4.5	<0.00430	<0.384	<0.384	<0.384	<0.384	<0.384	<0.384	<0.384	<0.384	<0.384	< 0.384	< 0.384	< 0.384	< 0.384	< 0.384	< 0.384	< 0.384	< 0.384	< 0.384	< 0.384	0.290		
	B02-11			11	<0.00460	<0.373	<0.373	<0.373	<0.373	<0.373	<0.373	<0.373	<0.373	<0.373	<0.373	< 0.373	< 0.373	< 0.373	< 0.373	< 0.373	< 0.373	< 0.373	< 0.373	< 0.373	< 0.373	0.282	
MW03/B03	B03-6	SoundEarth	04/18/06	6	1.71	0.790	0.838	<0.385	<0.385	0.441	0.690	<0.385	<0.385	<0.385	< 0.385	< 0.385	< 0.385	< 0.385	< 0.385	< 0.385	< 0.385	< 0.385	< 0.385	< 0.385	0.291		
	B03-12			12	<0.00460	<0.417	<0.417	<0.417	<0.417	<0.417	<0.417	<0.417	<0.417	<0.417	<0.417	< 0.417	< 0.417	< 0.417	< 0.417	< 0.417	< 0.417	< 0.417	< 0.417	< 0.417	< 0.417	0.315	
	B03-16			16	<0.00492	<0.425	<0.425	<0.425	<0.425	<0.425	<0.425	<0.425	<0.425	<0.425	<0.425	< 0.425	< 0.425	< 0.425	< 0.425	< 0.425	< 0.425	< 0.425	< 0.425	< 0.425	< 0.425	< 0.425	0.321
MW04/B04	B04-1	SoundEarth	04/18/06	1	<0.00428	<0.381	<0.381	<0.381	<0.381	<0.381	<0.381	<0.381	<0.381	<0.381	< 0.381	< 0.381	< 0.381	< 0.381	< 0.381	< 0.381	< 0.381	< 0.381	< 0.381	< 0.381	0.288		
	B04-10			10	<0.00442	<0.406	<0.406	<0.406	<0.406	<0.406	<0.406	<0.406	<0.406	<0.406	<0.406	< 0.406	< 0.406	< 0.406	< 0.406	< 0.406	< 0.406	< 0.406	< 0.406	< 0.406	< 0.406	0.307	
	B04-22			22	<0.00596	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387	<0.387	< 0.387	< 0.387	< 0.387	< 0.387	< 0.387	< 0.387	< 0.387	< 0.387	< 0.387	< 0.387	< 0.387	0.292
MW05/B05	B05-1.5	SoundEarth	04/19/06	1.5	<0.00504	<0.451	<0.451	<0.451	<0.451	<0.451	<0.451	<0.451	<0.451	<0.451	< 0.451	< 0.451	< 0.451	< 0.451	< 0.451	< 0.451	< 0.451	< 0.451	< 0.451	< 0.451	0.341		
	B05-22.5			22.5	<0.00489	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391	<0.391	< 0.391	< 0.391	< 0.391	< 0.391	< 0.391	< 0.391	< 0.391	< 0.391	< 0.391	< 0.391	0.295	
MW06/B06	B06-2	SoundEarth	04/19/06	2	0.00713	<1.94	<1.94	<1.94	<1.94	<1.94	<1.94	<1.94	<1.94	<1.94	< 1.94	< 1.94	< 1.94	< 1.94	< 1.94	< 1.94	< 1.94	< 1.94	< 1.94	< 1.94	1.46		
	B06-21.5			21.5	<0.00484	<0.362	<0.362	<0.362	<0.362	<0.362	<0.362	<0.362	<0.362	<0.362	<0.362	< 0.362	< 0.362	< 0.362	< 0.362	< 0.362	< 0.362	< 0.362	< 0.362	< 0.362	< 0.362	0.273	
B07	B07-1.5	SoundEarth	04/21/06	1.5	<0.00428	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
01MW44/SB65	SB65-2.5'	SoundEarth	09/13/06	2.5	<0.00957	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	SB65-25'			25	<0.0109	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	SB65-27.5'			27.5	<0.00924	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<b>MTCA Cleanup Level for Soil</b>					5 <sup>(3)</sup>	4,800 <sup>(4)</sup>	NE	3,200 <sup>(4)</sup>	NE	24,000 <sup>(4)</sup>	3,200 <sup>(4)</sup>	2,400 <sup>(4)</sup>	NE	NE	NE	0.1 <sup>(3)</sup>	NE	NE	NE	NE	NE	NE	NE	0.1 <sup>(3)</sup>			



**Table 6**  
**Soil Analytical Results for Selected PAHs**  
 TOC Holdings Co.  
 ASKO Hydraulic Property  
 2805 West Commodore Way  
 Seattle, Washington

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)											cPAHs Toxicity Equivalency <sup>(3)</sup> (milligrams per kilogram)							TEQ <sup>(1)</sup> (milligrams per kilogram)	
					Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(g,h,i)perylene	Benzo(a)anthracene TEF: 0.1	Chrysene TEF: 0.01	Benzo(a)pyrene TEF: 1	Benzo(b)fluoranthene TEF: 0.1	Benzo(k)fluoranthene TEF: 0.1	Indeno(1,2,3-cd)pyrene TEF: 0.1	Dibenz(a,h)anthracene TEF: 0.1		
<b>ASKO Hydraulic Property</b>																								
01MW45/SB66	SB66-2.5'	SoundEarth	09/13/06	2.5	0.0268	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	SB66-22.5'			22.5	<0.0105	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	SB66-25'			25	<0.0100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B87	B87-16	SoundEarth	12/29/08	16	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
01MW64/B102	B102-17.5	SoundEarth	03/17/09	17.5	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	B102-20			20	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
01MW65/B103	B103-40	SoundEarth	03/17/09	40	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	B104-10			10	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	B104-14			14	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	B104-14 (dup)			14	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B104	B104-18	SoundEarth	03/17/09	18	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	B105-10			10	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
B105	B105-15	SoundEarth	03/17/09	15	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	B106-16			16	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
B106	B106-20	SoundEarth	03/17/09	20	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	B107-13			13	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
B107	B107-17	SoundEarth	03/17/09	17	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	B107-22			22	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
B108	B108-14	SoundEarth	03/17/09	14	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B109	B109-12	SoundEarth	03/17/09	12	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	B109-15			15	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
B110	B110-10	SoundEarth	03/17/09	10	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	B110-16			16	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
B111	B111-03	SoundEarth	03/18/09	3	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	B111-03 (dup)			3	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
	B111-18			18	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
B112	B112-13	SoundEarth	03/18/09	13	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	B112-16			16	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
B113	B113-11.5	SoundEarth	03/18/09	11.5	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
B114	B114-18	SoundEarth	03/18/09	18	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	B114-21			21	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
<b>MTCA Cleanup Level for Soil</b>					<b>5<sup>(3)</sup></b>	<b>4,800<sup>(4)</sup></b>	<b>NE</b>	<b>3,200<sup>(4)</sup></b>	<b>NE</b>	<b>24,000<sup>(4)</sup></b>	<b>3,200<sup>(4)</sup></b>	<b>2,400<sup>(4)</sup></b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>0.1<sup>(3)</sup></b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>0.1<sup>(3)</sup></b>			



**Table 6**  
**Soil Analytical Results for Selected PAHs**  
 TOC Holdings Co.  
 ASKO Hydraulic Property  
 2805 West Commodore Way  
 Seattle, Washington

Well/Boring ID	Sample ID	Sampled by	Date Sampled	Depth (feet bgs)	Analytical Results (milligrams per kilogram)													cPAHs Toxicity Equivalency <sup>(1)</sup> (milligrams per kilogram)							TEQ <sup>(1)</sup> (milligrams per kilogram)
					Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(g,h,i)perylene	Benzo(a)anthracene TEF: 0.1	Chrysene TEF: 0.01	Benzo(a)pyrene TEF: 1	Benzo(b)fluoranthene TEF: 0.1	Benzo(k)fluoranthene TEF: 0.1	Indeno(1,2,3-cd)pyrene TEF: 0.1	Dibenz(a,h)anthracene TEF: 0.1			
<b>ASKO Hydraulic Property</b>																									
B115	B115-03	SoundEarth	03/18/09	3	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B115-12			12	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B116	B116-03	SoundEarth	03/18/09	3	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	B116-16			16	<0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>MTCA Cleanup Level for Soil</b>					5 <sup>(3)</sup>	4,800 <sup>(4)</sup>	NE	3,200 <sup>(4)</sup>	NE	24,000 <sup>(4)</sup>	3,200 <sup>(4)</sup>	2,400 <sup>(4)</sup>	NE	NE	NE	0.1 <sup>(3)</sup>	NE	NE	NE	NE	NE	NE	0.1 <sup>(3)</sup>		

**NOTES:**

Red denotes concentration exceeds MTCA cleanup level.

Samples analyzed by GC/MS-SIM or EPA Method 8270C.

<sup>(1)</sup>Analytical result for each individual cPAH is multiplied by the TEF and all seven cPAH values are added. When analytical results are reported as less than the LRL, half of the LRL is used for the calculation, as shown.

<sup>(2)</sup>Method of calculating cPAH value unknown.

<sup>(3)</sup>MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 740-1 Method A Soil Cleanup Levels for Unrestricted Land Uses.

<sup>(4)</sup>MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Soil, Method B, Non-Carcinogen, Standard Formula Value, CLARC Website <<https://fortress.wa.gov/ecy/clarc/CLARHome.aspx>>.

-- = not analyzed/not applicable

< = not detected at a concentration exceeding the laboratory reporting limit

bgs = below ground surface

CLARC = Cleanup Levels and Risk Calculations

cPAH = carcinogenic polycyclic aromatic hydrocarbon

EPA = U.S. Environmental Protection Agency

FW = Foster Wheeler Environmental Corporation

LRL = laboratory reporting limit

MTCA = Washington State Model Toxics Control Act

NE = not established

PAH = polycyclic aromatic hydrocarbon

SoundEarth = SoundEarth Strategies, Inc.

TEF = toxicity equivalency factor

TEQ = toxicity equivalent

WAC = Washington Administrative Code



**Table 7**  
**Reconnaissance Groundwater Analytical Results for Chlorinated VOCs, BTEX, EDB, and EDC**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Boring ID	Sample ID	Sampled By	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)											
				PCE	TCE	Cis-1,2-DCE	Trans-1,2-DCE	1,1-DCE	Vinyl Chloride	Benzene	Toluene	Ethylbenzene	Total Xylenes	EDB	EDC
<b>ASKO Hydraulic Property</b>															
B116	B116-20090318	SoundEarth	03/18/09	<1.0	<1.0	<1.0	<1.0	<2.0	<0.2	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0
<b>MTCA Cleanup Level for Groundwater</b>				<b>5<sup>(2)</sup></b>	<b>5<sup>(2)</sup></b>	<b>16<sup>(3)</sup></b>	<b>160<sup>(3)</sup></b>	<b>400<sup>(3)</sup></b>	<b>0.2<sup>(2)</sup></b>	<b>5<sup>(2)</sup></b>	<b>1,000<sup>(2)</sup></b>	<b>700<sup>(2)</sup></b>	<b>1,000<sup>(2)</sup></b>	<b>0.01<sup>(2)</sup></b>	<b>5<sup>(2)</sup></b>

NOTES:

Sample analyses conducted by Libby Environmental Chemistry Laboratory, Olympia, Washington.

<sup>(1)</sup>Analyzed by EPA Method 8260B.

<sup>(2)</sup>MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 720-1 Method A Cleanup Levels for Groundwater.

<sup>(3)</sup>MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Groundwater, Method B, Non-Carcinogen, Standard Formula Value, CLARC Website <<https://fortress.wa.gov/ecy/clarc/CLARHome.aspx>>.

< = not detected at a concentration exceeding the laboratory reporting limit

BTEX = benzene, toluene, ethylbenzene, and total xylenes

CLARC = Cleanup Levels and Risk Calculations

DCE = dichloroethene

EDB = 1,2-dibromoethane

EDC = 1,2-dichloroethane

EPA = U.S. Environmental Protection Agency

MTCA = Washington State Model Toxics Control Act

PCE = tetrachloroethene

SoundEarth = SoundEarth Strategies, Inc.

TCE = trichloroethene

Trans-1,2-DCE = Trans-1,2-dichloroethene

VOCs = volatile organic compounds

WAC = Washington Administrative Code





**Table 8**  
**Groundwater Analytical Results for TPH, BTEX, MTBE, EDB, EDC, and PCP**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Shallow Water-Bearing Zone	Sample Identification	Sampled By	Sample Type	Date Sampled	Analytical Results (micrograms per liter)											
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	MTBE <sup>(3)</sup>	EDB <sup>(3)</sup>	EDC <sup>(3)</sup>	Ethanol <sup>(3)</sup>	PCP <sup>(4)</sup>
<b>West Commodore Way</b>																
<b>Shallow Water-Bearing Zone</b>																
01MW30	01-MW-30-20060621	SoundEarth	LF	06/21/06	908	<505	<50	<0.200	<0.200	<0.200	<0.750	<1.00	<0.200	<0.200	<250	--
	01MW30-20061212	SoundEarth	LF	12/12/06	600	<250	<50	<1	<1	<1	<3	<1	<1	<1	<1,000	--
	01MW30-20081103	SoundEarth	LF	11/03/08	--	--	--	--	--	--	--	--	--	--	--	--
	01MW30-20090128	SoundEarth	LF	01/28/09	510*	<280	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW30-20090408	SoundEarth	LF	04/08/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW30-20090707	SoundEarth	LF	07/07/09	460*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW30-20100126	SoundEarth	LF	01/26/10	610*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW30-20100407	SoundEarth	LF	04/07/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW30-20100713	SoundEarth	LF	07/13/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW30-20110111	SoundEarth	LF	01/11/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW30-20110414	SoundEarth	LF	04/14/11	380*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW30-20111206	SoundEarth	LF	12/06/11	290*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW30-20120405	SoundEarth	LF	04/05/12	340*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW30-20121012	SoundEarth	LF	10/12/12	200*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW30-20130404	SoundEarth	LF	04/04/13	310*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW52	01MW52-20100125	SoundEarth	LF	01/25/10	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW53	01MW53-20071207	SoundEarth	LF	12/07/07	130	<250	<100	<1	<1	<1	<3	<1	<1	<1	<1,000	--
	01MW53-20090408	SoundEarth	LF	04/08/09	<50	<250	<100	<1	<1	<1	<3	--	--	--	--	--
	01MW53-20090707	SoundEarth	LF	07/07/09	630	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW53-20100706	SoundEarth	LF	07/06/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW53-20110113	SoundEarth	LF	01/13/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW53-20110413	SoundEarth	LF	04/13/11	420*	300*	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW85	01MW85-20110422	SoundEarth	LF	04/22/11	74*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW85-20110823	SoundEarth	LF	08/23/11	140*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW85-20111208	SoundEarth	LF	12/08/11	100*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW85-20120403	SoundEarth	LF	04/03/12	110*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW85-20121009	SoundEarth	LF	10/09/12	160	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW85-20130401	SoundEarth	LF	04/01/13	140*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW89	01MW89-20110425	SoundEarth	LF	04/25/11	310*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW89-20110823	SoundEarth	LF	08/23/11	430	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW89-20111212	SoundEarth	LF	12/12/11	180	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW89-20120403	SoundEarth	LF	04/03/12	230*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW89-20121009	SoundEarth	LF	10/09/12	270	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW89-20130401	SoundEarth	LF	04/01/13	310*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
<b>MTCA Cleanup Level for Groundwater<sup>(6)</sup></b>					<b>500</b>	<b>500</b>	<b>800</b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>1,000</b>	<b>20</b>	<b>0.01</b>	<b>5</b>	<b>NE</b>	<b>2.2<sup>(7)</sup></b>



**Table 8**  
**Groundwater Analytical Results for TPH, BTEX, MTBE, EDB, EDC, and PCP**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Shallow Water-Bearing Zone	Sample Identification	Sampled By	Sample Type	Date Sampled	Analytical Results (micrograms per liter)											
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	MTBE <sup>(3)</sup>	EDB <sup>(3)</sup>	EDC <sup>(3)</sup>	Ethanol <sup>(3)</sup>	PCP <sup>(4)</sup>
<b>ASKO Hydraulic Property</b>																
<b>Perched Water</b>																
MW03	MW03-20060426	SoundEarth	LF	04/25/06	1,560	<481	721	3.93	0.56	<0.500	1.81	<1.00	<0.500	<0.500	<150	--
	MW03-20060817	SoundEarth	LF	08/17/06	--	--	--	3.05	0.960	5.48	7.61	<1.00	<1.00	0.360	<250	--
	MW03-20061214	SoundEarth	LF	12/14/06	1,800	350	<50	2.9	1.2	3.9	5.6	<1	<1	<1	<1,000	--
	MW03-20090127	SoundEarth	LF	01/27/09	400 <sup>a</sup>	<250	630	4	3	7	15	--	--	<1	--	--
	MW03-20090407	SoundEarth	LF	04/07/09	270	<250	530	5	2	4	18	--	--	<1	--	--
	MW03-20110823	SoundEarth	LF	08/23/11	1,400 <sup>a</sup>	330 <sup>a</sup>	920	2.9	8.1	7.9	56	--	--	<1	--	--
	MW03-20111207	SoundEarth	LF	12/07/11	1,000 <sup>a</sup>	<250	840	3.2	3.6	2.0	28	--	--	<1	--	--
	MW03-20120403	SoundEarth	LF	04/03/12	4,700	330 <sup>a</sup>	1,100	4.7	6.9	4.0	47	--	--	<1	--	--
MW03-20121010	SoundEarth	LF	10/10/12	1,300 <sup>a</sup>	290 <sup>a</sup>	750	3.7	1.9	4.1	36	--	--	<1	--	--	
MW03-20130401	SoundEarth	LF	04/01/13	1,000 <sup>a</sup>	<250	810	3.4	1.8	4.7	31	--	--	<1	--	--	
01MW70	01MW70-20100408	SoundEarth	LF	04/08/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	200	<1	<1	<1	<3	--	--	<1	--	--
	01MW70-20100709	SoundEarth	LF	07/09/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	320	<1	1.3	<1	<3	--	--	<1	--	--
	01MW70-20110111	SoundEarth	LF	01/11/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	170 <sup>a</sup>	<1	<1	<1	<3	--	--	<1	--	--
	01MW70-20110413	SoundEarth	LF	04/13/11	980 <sup>a</sup>	760 <sup>a</sup>	190 <sup>a</sup>	<1	<1	<1	<3	--	--	<1	--	--
	01MW70-20110825	SoundEarth	LF	08/25/11	830 <sup>a</sup>	530 <sup>a</sup>	170 <sup>a</sup>	<1	<1	<1	<3	--	--	<1	--	--
	01MW70-20111209	SoundEarth	LF	12/09/11	830 <sup>a</sup>	680 <sup>a</sup>	220 <sup>a</sup>	<1	<1	<1	<3	--	--	<1	--	--
	01MW70-20120403	SoundEarth	LF	04/03/12	1,500 <sup>a</sup>	900 <sup>a</sup>	120 <sup>a</sup>	<1	<1	<1	<3	--	--	<1	--	--
	01MW70-20121012	SoundEarth	LF	10/12/12	710 <sup>a</sup>	480 <sup>a</sup>	200 <sup>a</sup>	<1	1.5	<1	<3	--	--	<1	--	--
01MW70-20130402	SoundEarth	LF	04/02/13	1,200 <sup>a</sup>	1,000 <sup>a</sup>	160 <sup>a</sup>	<1	<1	<1	<3	--	--	<5	--	--	
01MW71	01MW71-20100408	SoundEarth	LF	04/08/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	450	<1	1	<1	<3	--	--	<1	--	--
	01MW71-20100709	SoundEarth	LF	07/09/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	170 <sup>a</sup>	<1	<1	<1	<3	--	--	<1	--	--
	01MW71-20110111	SoundEarth	LF	01/11/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	460 <sup>a</sup>	<1	<1	<1	<3	--	--	<1	--	--
	01MW71-20110413	SoundEarth	LF	04/13/11	1,100 <sup>a</sup>	860 <sup>a</sup>	900 <sup>a</sup>	<1	1.4	<1	<3	--	--	<1	--	--
	01MW71-20110825	SoundEarth	LF	08/25/11	1,400 <sup>a</sup>	730 <sup>a</sup>	270 <sup>a</sup>	<1	<1	<1	<3	--	--	<1	--	--
	01MW71-20111209	SoundEarth	LF	12/09/11	1,100 <sup>a</sup>	820 <sup>a</sup>	540 <sup>a</sup>	<1	<1	<1	<3	--	--	<1	--	--
	01MW71-20120404	SoundEarth	LF	04/04/12	1,400 <sup>a</sup>	980 <sup>a</sup>	740 <sup>a</sup>	<1	<1	1.1	<3	--	--	<1	--	--
	01MW71-20121011	SoundEarth	LF	10/11/12	1,100 <sup>a</sup>	780 <sup>a</sup>	380 <sup>a</sup>	<1	<1	<1	<3	--	--	<1	--	--
01MW71-20130402	SoundEarth	LF	04/02/13	1,500 <sup>a</sup>	1,400 <sup>a</sup>	330 <sup>a</sup>	<1	<1	<1	<3	--	--	<10	--	--	
01MW79	01MW79-20110307	SoundEarth	LF	03/07/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	280 <sup>a</sup>	<1	<1	<1	<3	--	--	<1	--	--
	01MW79-20110413	SoundEarth	LF	04/13/11	800 <sup>a</sup>	400 <sup>a</sup>	190 <sup>a</sup>	1.2	<1	<1	<3	--	--	<1	--	--
	01MW79-20110825	SoundEarth	LF	08/25/11	1,000 <sup>a</sup>	560 <sup>a</sup>	140 <sup>a</sup>	<1	<1	<1	<3	--	--	<1	--	--
	01MW79-20111209	SoundEarth	LF	12/09/11	860 <sup>a</sup>	410 <sup>a</sup>	140 <sup>a</sup>	<1	<1	<1	<3	--	--	<1	--	--
	01MW79-20120403	SoundEarth	LF	04/03/12	1,200 <sup>a</sup>	400 <sup>a</sup>	120 <sup>a</sup>	<1	<1	<1	<3	--	--	<1	--	--
	01MW79-20121010	SoundEarth	LF	10/10/12	1,100 <sup>a</sup>	710 <sup>a</sup>	130 <sup>a</sup>	<1	<1	<1	<3	--	--	<1	--	--
01MW79-20130402	SoundEarth	LF	04/02/13	1,200 <sup>a</sup>	660 <sup>a</sup>	<100	<1	<1	<1	<3	--	--	<5	--	--	
MTCA Cleanup Level for Groundwater <sup>(6)</sup>					500	500	800	5	1,000	700	1,000	20	0.01	5	NE	2.2 <sup>(7)</sup>



**Table 8**  
**Groundwater Analytical Results for TPH, BTEX, MTBE, EDB, EDC, and PCP**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Shallow Water-Bearing Zone	Sample Identification	Sampled By	Sample Type	Date Sampled	Analytical Results (micrograms per liter)											
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	MTBE <sup>(3)</sup>	EDB <sup>(3)</sup>	EDC <sup>(3)</sup>	Ethanol <sup>(3)</sup>	PCP <sup>(4)</sup>
<b>ASKO Hydraulic Property</b>																
<b>Shallow Water-Bearing Zone</b>																
MW01	MW01-20060426	SoundEarth	LF	04/26/06	<243	<485	<50.0	<0.200	<0.200	<0.200	<0.750	<1.00	<0.500	<0.500	<150	--
	MW01-20060817	SoundEarth	LF	08/17/06	<245	<490	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<250	--
	MW01-20061213	SoundEarth	LF	12/13/06	91	<250	<50	<1	<1	<1	<3	<1	<1	<1	<1,000	--
	MW01-20090127	SoundEarth	LF	01/27/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
MW02	MW02-20060426	SoundEarth	LF	04/26/06	<240	<481	<50.0	<0.500	<0.500	<0.500	<0.750	<1.00	<0.500	<0.500	<150	--
	MW02-20060817	SoundEarth	LF	08/17/06	<243	<485	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<250	--
	MW02-20061213	SoundEarth	LF	12/13/06	<50	<250	<100	<1	<1	<1	<3	<1	<1	<1	<1,000	--
	MW02-20090127	SoundEarth	LF	01/27/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW02-20090707	SoundEarth	LF	07/07/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW02-20100125	SoundEarth	LF	01/25/10	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW02-20100405	SoundEarth	LF	04/05/10	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW02-20100707	SoundEarth	LF	07/07/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW02-20110111	SoundEarth	LF	01/11/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW02-20110411	SoundEarth	LF	04/11/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW02-20110823	SoundEarth	LF	08/23/11	83 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW02-20111206	SoundEarth	LF	12/06/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW02-20120403	SoundEarth	LF	04/03/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW02-20121009	SoundEarth	LF	10/09/12	<55	<280	<100	<1	<1	<1	<3	--	--	<1	--	--
MW02-20130401	SoundEarth	LF	04/01/13	460 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
MW04	MW04-20060426	SoundEarth	LF	04/25/06	673	<485	<50.0	<0.500	<0.500	<0.500	<0.750	<1.00	<0.500	<0.500	<150	--
	MW04-20060817	SoundEarth	LF	08/17/06	645	<490	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<250	--
	MW04-20061213	SoundEarth	LF	12/13/06	210	<250	<50	<1	<1	<1	<3	<1	<1	<1	<1,000	--
	MW04-20090128	SoundEarth	LF	01/28/09	59 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW97-20090128 (DUP)	SoundEarth	LF	01/28/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW04-20090407	SoundEarth	LF	04/07/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW98-20090407 (DUP)	SoundEarth	LF	04/07/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW04-20090707	SoundEarth	LF	07/07/09	87 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW98-200707 (DUP)	SoundEarth	LF	07/07/09	120 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW04-20100126	SoundEarth	LF	01/26/10	82 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW99-20100126 (DUP)	SoundEarth	LF	01/26/10	75 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW04-20100406	SoundEarth	LF	04/06/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	250	3	<1	<1	<3	--	--	<1	--	--
	01MW99-20100406 (DUP)	SoundEarth	LF	04/06/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	280	3	2	<1	<3	--	--	<1	--	--
	MW04-20100713	SoundEarth	LF	07/13/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW99-20100713 (DUP)	SoundEarth	LF	07/13/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW04-20110111	SoundEarth	LF	01/11/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	FD03-20110111 (DUP)	SoundEarth	LF	01/11/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW04-20110411	SoundEarth	LF	04/11/11	52 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	FD03-20110411 (DUP)	SoundEarth	LF	04/11/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW04-20110824	SoundEarth	LF	08/24/11	290 <sup>x</sup>	<250	120 <sup>x</sup>	2.5	<1	<1	<3	--	--	<10	--	--
	FD03-20110824 (DUP)	SoundEarth	LF	08/24/11	240 <sup>x</sup>	<250	120 <sup>x</sup>	2.3	<1	<1	<3	--	--	<1	--	--
	MW04-20111207	SoundEarth	LF	12/07/11	81 <sup>x</sup>	<250	150 <sup>x</sup>	1.0	<1	<1	<3	--	--	<1	--	--
	FD03-20111207 (DUP)	SoundEarth	LF	12/07/11	170 <sup>x</sup>	<250	140 <sup>x</sup>	1.1	1.1	<1	<3	--	--	<1	--	--
	MW04-20120403	SoundEarth	LF	04/03/12	71 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	FD03-20120403 (DUP)	SoundEarth	LF	04/03/12	61 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW04-20121010	SoundEarth	LF	10/10/12	160 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
FD03-20121010 (DUP)	SoundEarth	LF	10/10/12	190 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
MW04-20130402	SoundEarth	LF	04/02/13	240 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
FD03-20130402 (DUP)	SoundEarth	LF	04/02/13	250 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<5	--	--	
<b>MTC Cleanup Level for Groundwater<sup>(5)</sup></b>					<b>500</b>	<b>500</b>	<b>800</b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>1,000</b>	<b>20</b>	<b>0.01</b>	<b>5</b>	<b>NE</b>	<b>2.2<sup>(7)</sup></b>



**Table 8**  
**Groundwater Analytical Results for TPH, BTEX, MTBE, EDB, EDC, and PCP**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Shallow Water-Bearing Zone	Sample Identification	Sampled By	Sample Type	Date Sampled	Analytical Results (micrograms per liter)											
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	MTBE <sup>(3)</sup>	EDB <sup>(3)</sup>	EDC <sup>(3)</sup>	Ethanol <sup>(3)</sup>	PCP <sup>(4)</sup>
<b>ASKO Hydraulic Property</b>																
<b>Shallow Water-Bearing Zone</b>																
MW05	MW05-20060426	SoundEarth	LF	04/25/06	324	<485	<50.0	<0.500	<0.500	<0.500	<0.750	<1.00	<0.500	<0.500	<150	--
	MW05-20060817	SoundEarth	LF	08/17/06	449	<485	<50.0	2.01	<0.500	<0.500	<1.00	<1.00	<1.00	0.370	<250	--
	MW05-20061213	SoundEarth	LF	12/13/06	190	<250	110	1.8	<1	<1	<3	<1	<1	<1	<1,000	--
	MW05-20090128	SoundEarth	LF	01/28/09	84 <sup>x</sup>	<250	<100	1	<1	<1	<3	--	--	<1	--	--
	MW05-20090408	SoundEarth	LF	04/08/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW05-20090707	SoundEarth	LF	07/07/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW05-20100126	SoundEarth	LF	01/26/10	110 <sup>x</sup>	<250	<100	1	<1	<1	<3	--	--	<1	--	--
	MW05-20100406	SoundEarth	LF	04/06/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	1	<1	<1	<3	--	--	<1	--	--
	MW05-20100713	SoundEarth	LF	07/13/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	1.0	<1	<1	<3	--	--	<1	--	--
	MW05-20110112	SoundEarth	LF	01/12/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW05-20110412	SoundEarth	LF	04/12/11	110 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW05-20110824	SoundEarth	LF	08/24/11	150 <sup>x</sup>	<250	<500	<5	<5	<5	<15	--	--	<10	--	--
	MW05-20111207	SoundEarth	LF	12/07/11	130 <sup>x</sup>	<250	120 <sup>x</sup>	1.6	<1	<1	<3	--	--	<1	--	--
	MW05-20120403	SoundEarth	LF	04/03/12	180	<250	<100	1.2	<1	<1	<3	--	--	<1	--	--
MW05-20121010	SoundEarth	LF	10/10/12	230 <sup>x</sup>	<280	<100	1.0	<1	<1	<3	--	--	<1	--	--	
MW05-20130402	SoundEarth	LF	04/02/13	290 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
MW06	MW06-20060425	SoundEarth	LF	04/25/06	708	<481	<50.0	<0.500	<0.500	<0.500	<0.750	<1.00	<0.500	<0.500	<150	--
	MW99-20060425 (DUP)	SoundEarth	LF	04/25/06	698	<481	<50.0	<0.200	<0.200	<0.200	<0.750	<1.00	<0.500	<0.200	--	--
	MW06-20060817	SoundEarth	LF	08/17/06	648	<472	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<250	--
	MW99-20060817 (DUP)	SoundEarth	LF	08/17/06	701	<505	<50.0	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	--	--
	MW06-20061213	SoundEarth	LF	12/13/06	180	<250	<50	<1	<1	<1	<3	<1	<1	<1	<1,000	--
	MW06-20090127	SoundEarth	LF	01/27/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW06-20090407	SoundEarth	LF	04/07/09	<50	<250	<100	1	<1	<1	<3	--	--	<1	--	--
	MW06-20090708	SoundEarth	LF	07/08/09	180 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW06-20100125	SoundEarth	LF	01/25/10	310 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW06-20100406	SoundEarth	LF	04/06/10	110 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW06-20100707	SoundEarth	LF	07/07/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW06-20110111	SoundEarth	LF	01/11/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW06-20110412	SoundEarth	LF	04/12/11	200 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW06-20110824	SoundEarth	LF	08/24/11	440 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW06-20111206	SoundEarth	LF	12/06/11	180 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW06-20120403	SoundEarth	LF	04/03/12	130 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	MW06-20121009	SoundEarth	LF	10/09/12	200	<280	<100	<1	<1	<1	<3	--	--	<1	--	--
MW06-20130401	SoundEarth	LF	04/01/13	310 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW07	01MW-07	FW	--	12/01/00	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--
	01MW-07	FW	--	07/26/01	1,450	<500	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--
	01MW-07	FW	--	10/01/01	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	--	<0.500
	01MW-07	FW	--	01/02/02	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	--	<0.500
	01MW-07	FW	--	04/02/02	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	--	<0.500
	01MW-07	FW	--	07/02/02	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	--	<0.500
	01MW-07	FW	--	10/02/02	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	--	<0.500
	01MW-07	TetraTech	--	08/01/03	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--
01MW-07	TetraTech	--	07/14/04	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	
MTCA Cleanup Level for Groundwater <sup>(6)</sup>					500	500	800	5	1,000	700	1,000	20	0.01	5	NE	2.2 <sup>(7)</sup>



**Table 8**  
**Groundwater Analytical Results for TPH, BTEX, MTBE, EDB, EDC, and PCP**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Shallow Water-Bearing Zone	Sample Identification	Sampled By	Sample Type	Date Sampled	Analytical Results (micrograms per liter)											
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	MTBE <sup>(3)</sup>	EDB <sup>(3)</sup>	EDC <sup>(3)</sup>	Ethanol <sup>(3)</sup>	PCP <sup>(4)</sup>
<b>ASKO Hydraulic Property</b>																
<b>Shallow Water-Bearing Zone</b>																
01MW07 (continued)	01MW-07	Landau	--	10/24/05	<248	<495	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<0.485	
	01-MW-07-20060620	SoundEarth	LF	06/20/06	1,540	<515	<50	<0.200	<0.200	<0.200	<0.750	<1.00	<0.200	<0.200	<250	--
	01MW07-20061212	SoundEarth	LF	12/12/06	1,000	540*	<50	<1	<1	<1	<3	<1	<1	<1	<1,000	--
	01MW07-20090128	SoundEarth	LF	01/28/09	770*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW07-20090407	SoundEarth	LF	04/07/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW07-20090707	SoundEarth	LF	07/07/09	930*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW07-20100128	SoundEarth	LF	01/28/10	820*	<250	<100	<1	2	<1	<3	--	--	<1	--	--
	01MW07-20100407	SoundEarth	LF	04/07/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	2	1	3	--	--	<1	--	--
	01MW07-20100708	SoundEarth	LF	07/08/10	<250 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW07-20110111	SoundEarth	LF	01/11/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW07-20110412	SoundEarth	LF	04/12/11	730*	<250	<100	<1	2.2	<1	<3	--	--	<1	--	--
	01MW07-20110823	SoundEarth	LF	08/23/11	1,000	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW07-20111206	SoundEarth	LF	12/06/11	790*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW07-20120403	SoundEarth	LF	04/03/12	510*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW07-20121010	SoundEarth	LF	10/10/12	700*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW07-20130402	SoundEarth	LF	04/02/13	860*	<250	<100	<1	1.1	<1	<3	--	--	<1	--	--	
01MW15	01MW-15	FW	--	07/27/01	484	<500	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	1.66	
	01MW-15	FW	--	10/01/01	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<0.500	
	01MW-15	FW	--	01/02/02	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<0.500	
	01MW-15	FW	--	04/02/02	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<0.500	
	01MW-15	FW	--	07/02/02	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<0.500	
	01MW-15	FW	--	08/01/03	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<0.500	
	01MW-15	TetraTech	--	07/16/04	<250	<500	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<0.500	
	01MW-15	Landau	--	10/25/05	<272	<543	<50.0	<0.500	<0.500	<0.500	<1.00	--	--	--	<0.500	
	01-MW-15-20060620	SoundEarth	LF	06/20/06	629	<500	<50	0.22	<0.200	<0.200	<0.750	<1.00	<0.200	<0.200	<250	--
	01MW15-20061212	SoundEarth	LF	12/12/06	220	<250	<50	<1	<1	<1	<3	<1	<1	<1	<1,000	--
	01MW15-20090127	SoundEarth	LF	01/27/09	<50	<250	130	1	<1	<1	<3	--	--	<1	--	--
	01MW15-20090407	SoundEarth	LF	04/07/09	1,600	10,000	110	<1	<1	<1	<3	--	--	<1	--	--
	01MW15-20090708	SoundEarth	LF	07/08/09	220*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW15-20100127	SoundEarth	LF	01/27/10	280*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW15-20100407	SoundEarth	LF	04/07/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	120	<1	<1	<1	<3	--	--	<1	--	--
	01MW15-20100713	SoundEarth	LF	07/13/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW15-20110111	SoundEarth	LF	01/11/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW15-20110412	SoundEarth	LF	04/12/11	270*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW15-20110824	SoundEarth	LF	08/24/11	300*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW15-20111206	SoundEarth	LF	12/06/11	170*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW15-20120404	SoundEarth	LF	04/04/12	230*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW15-20121011	SoundEarth	LF	10/11/12	210*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW15-20130403	SoundEarth	LF	04/03/13	240*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	<b>MTCA Cleanup Level for Groundwater<sup>(6)</sup></b>					<b>500</b>	<b>500</b>	<b>800</b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>1,000</b>	<b>20</b>	<b>0.01</b>	<b>5</b>	<b>NE</b>



**Table 8**  
**Groundwater Analytical Results for TPH, BTEX, MTBE, EDB, EDC, and PCP**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Shallow Water-Bearing Zone	Sample Identification	Sampled By	Sample Type	Date Sampled	Analytical Results (micrograms per liter)											
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	MTBE <sup>(3)</sup>	EDB <sup>(3)</sup>	EDC <sup>(3)</sup>	Ethanol <sup>(3)</sup>	PCP <sup>(4)</sup>
<b>ASKO Hydraulic Property</b>																
<b>Shallow Water-Bearing Zone</b>																
01MW44	01MW44-20060927	SoundEarth	LF	09/27/06	<255	<510	217	14.6	<0.200	<0.200	<0.750	<1.00	<1.00	5.96	<250	--
	01MW44-20061212	SoundEarth	LF	12/12/06	480	<250	1,300 <sup>(k,l)</sup>	16	<1	<1	<3	<1	<1	4.7	<1,000	--
	MW-99-20061211	SoundEarth	LF	12/11/06	480	<250	1,300 <sup>(k,l)</sup>	15	<1	<1	<3	<1	<1	4.2	--	--
	01MW44-20090127	SoundEarth	LF	01/27/09	<50	<250	570	<1	<1	<1	<3	--	--	4.8	--	--
	01MW44-20090407	SoundEarth	LF	04/07/09	<50	<250	550	17	2	<1	<3	--	--	4.1	--	--
	01MW44-20090708	SoundEarth	LF	07/08/09	420 <sup>*</sup>	<250	670	18	3	<1	<3	--	--	4.7 <sup>(a)</sup>	--	--
	01MW44-20100126	SoundEarth	LF	01/26/10	510 <sup>*</sup>	<250	890	22	4	<1	<3	--	--	4.8	--	--
	01MW44-20100408	SoundEarth	LF	04/08/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	680	15	2	<1	<3	--	--	4.1	--	--
	01MW44-20100708	SoundEarth	LF	07/08/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	760	14	2.5	<1	<3	--	--	3.3	--	--
	01MW44-20110111	SoundEarth	LF	01/11/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	520 <sup>*</sup>	15	<1	<1	<3	--	--	5.0	--	--
	01MW44-20110412	SoundEarth	LF	04/12/11	380 <sup>*</sup>	<250	410 <sup>*</sup>	13	<1	<1	<3	--	--	4.5	--	--
	01MW44-20110824	SoundEarth	LF	08/24/11	280 <sup>*</sup>	<250	310 <sup>*</sup>	6.8	<1	<1	<3	--	--	2.8	--	--
	01MW44-20111212	SoundEarth	LF	12/12/11	240	<250	570 <sup>*</sup>	17	1.5	<1	<3	--	--	5.6	--	--
	01MW44-20120404	SoundEarth	LF	04/04/12	380 <sup>*</sup>	<250	450 <sup>*</sup>	13	1.0	<1	<3	--	--	5.2	--	--
01MW44-20120919	SoundEarth	LF	09/19/12	--	--	--	--	--	--	--	--	--	3.6	--	--	
01MW44-20121011	SoundEarth	LF	10/11/12	340 <sup>*</sup>	<250	710 <sup>*</sup>	15	1.7	<1	<3	--	--	<10	--	--	
01MW44-20130403	SoundEarth	LF	04/03/13	290 <sup>*</sup>	<250	290 <sup>*</sup>	13	<1	<1	<3	--	--	4.5	--	--	
01MW45	01MW45-20060927	SoundEarth	LF	09/27/06	<258	<515	<50.0	0.670	0.330	<0.200	<0.750	<1.00	<1.00	<1.00	<250	--
	01MW45-20061212	SoundEarth	LF	12/12/06	440	<250	470 <sup>(j)</sup>	1.9	<1	<1	<3	<1	<1	<1	<1,000	--
	01MW45-20090128	SoundEarth	LF	01/28/09	450 <sup>*</sup>	<250	210	2	3	<1	3	--	--	<1	--	--
	01MW45-20090407	SoundEarth	LF	04/07/09	<50	<250	190	3	1	<1	<3	--	--	<1	--	--
	01MW45-20090707	SoundEarth	LF	07/07/09	550 <sup>*</sup>	<250	200	3	<1	<1	<3	--	--	<1	--	--
	01MW45-20100128	SoundEarth	LF	01/28/10	620 <sup>*</sup>	<250	200	3	2	<1	<3	--	--	<1	--	--
	01MW45-20100408	SoundEarth	LF	04/08/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	160	3	<1	<1	<3	--	--	<1	--	--
	01MW45-20100708	SoundEarth	LF	07/08/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	320	<1	1.5	<1	<3	--	--	<1	--	--
	01MW45-20110111	SoundEarth	LF	01/11/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	260 <sup>*</sup>	2.9	<1	<1	<3	--	--	<1	--	--
	01MW45-20110412	SoundEarth	LF	04/12/11	470 <sup>*</sup>	<250	170 <sup>*</sup>	2.5	1.1	<1	<3	--	--	<1	--	--
	01MW45-20110824	SoundEarth	LF	08/24/11	510 <sup>*</sup>	<250	240 <sup>*</sup>	3.0	<1	<1	<3	--	--	<1	--	--
	01MW45-20111209	SoundEarth	LF	12/09/11	380 <sup>*</sup>	<250	240 <sup>*</sup>	2.7	1.6	<1	<3	--	--	<1	--	--
	01MW45-20120404	SoundEarth	LF	04/04/12	500 <sup>*</sup>	<250	180 <sup>*</sup>	2.3	1.1	<1	<3	--	--	<1	--	--
	01MW45-20121011	SoundEarth	LF	10/11/12	540 <sup>*</sup>	<250	250 <sup>*</sup>	2.7	<1	<1	<3	--	--	<1	--	--
01MW45-20130403	SoundEarth	LF	04/03/13	380 <sup>*</sup>	<250	200 <sup>*</sup>	2.2	<1	<1	<3	--	--	<1	--	--	
01MW46	01MW46-20060927	SoundEarth	LF	09/27/06	<255	<510	<50.0	<0.200	<0.200	<0.200	<0.750	<1.00	<1.00	<1.00	<250	--
	01MW46-20061212	SoundEarth	LF	12/12/06	230	<250	<50.0	<1	<1	<1	<3	<1	<1	<1	<1,000	--
	01MW46-20090127	SoundEarth	LF	01/27/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW46-20090407	SoundEarth	LF	04/07/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW46-20090706	SoundEarth	LF	07/06/09	310 <sup>*</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW46-20100126	SoundEarth	LF	01/26/10	210 <sup>*</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW46-20100406	SoundEarth	LF	04/06/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW46-20100713	SoundEarth	LF	07/13/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW46-20110112	SoundEarth	LF	01/12/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW46-20110411	SoundEarth	LF	04/11/11	160 <sup>*</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW46-20110825	SoundEarth	LF	08/25/11	190 <sup>*</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW46-20111206	SoundEarth	LF	12/06/11	150 <sup>*</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW46-20120404	SoundEarth	LF	04/04/12	180 <sup>*</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW46-20121011	SoundEarth	LF	10/11/12	190 <sup>*</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW46-20130403	SoundEarth	LF	04/03/13	130 <sup>*</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
MTCA Cleanup Level for Groundwater <sup>(6)</sup>					500	500	800	5	1,000	700	1,000	20	0.01	5	NE	2.2 <sup>(7)</sup>



**Table 8**  
**Groundwater Analytical Results for TPH, BTEX, MTBE, EDB, EDC, and PCP**  
 TOC Holdings Co.  
 ASKO Hydraulic Property  
 2805 West Commodore Way  
 Seattle, Washington

Shallow Water-Bearing Zone	Sample Identification	Sampled By	Sample Type	Date Sampled	Analytical Results (micrograms per liter)												
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	MTBE <sup>(3)</sup>	EDB <sup>(3)</sup>	EDC <sup>(3)</sup>	Ethanol <sup>(3)</sup>	PCP <sup>(4)</sup>	
<b>ASKO Hydraulic Property</b>																	
<b>Shallow Water-Bearing Zone</b>																	
01MW55	01MW55-20081125	SoundEarth	LF	11/25/08	910 <sup>x</sup>	320	6,100	27	<1	<1	<3	--	--	1.6	--	--	
	01MW55-20090127	SoundEarth	LF	01/27/09	<50	<250	8,000	34	<1	2	5	--	--	1.4	--	--	
	01MW55-20090407	SoundEarth	LF	04/07/09	<50	<250	7,700	34	<1	1	<3	--	--	1.4	--	--	
	01MW55-20090707	SoundEarth	LF	07/07/09	810 <sup>x</sup>	330 <sup>x</sup>	7,900	43	14	2	5	--	--	1.1	--	--	
	01MW55-20100126	SoundEarth	LF	01/26/10	950 <sup>x</sup>	540 <sup>x</sup>	8,000	30	<1	2	5	--	--	<1	--	--	
	01MW55-20100408	SoundEarth	LF	04/08/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	3,000	15	3	<1	3	--	--	<1	--	--	
	01MW55-20100709	SoundEarth	LF	07/09/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	2,600	9.8	3.0	1.2	<3	--	--	<1	--	--	
	01MW55-20110112	SoundEarth	LF	01/12/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	770 <sup>x</sup>	6.3	<1	1.4	<3	--	--	<1	--	--	
	01MW55-20110413	SoundEarth	LF	04/13/11	680 <sup>x</sup>	410 <sup>x</sup>	2,200 <sup>x</sup>	3.5	1.3	<1	<3	--	--	<1	--	--	
	01MW55-20110825	SoundEarth	LF	08/25/11	950 <sup>x</sup>	460 <sup>x</sup>	530 <sup>x</sup>	2.0	<1	<1	<3	--	--	<1	--	--	
	01MW55-20111209	SoundEarth	LF	12/09/11	650 <sup>x</sup>	320 <sup>x</sup>	1,500 <sup>x</sup>	3.6	<1	1.7	<3	--	--	<1	--	--	
	01MW55-20120404	SoundEarth	LF	04/04/12	680 <sup>x</sup>	390 <sup>x</sup>	870 <sup>x</sup>	1.6	1.2	1.2	<3	--	--	<1	--	--	
	01MW55-20121011	SoundEarth	LF	10/11/12	330 <sup>x</sup>	280 <sup>x</sup>	1,400 <sup>x</sup>	2.2	2.6	<1	<3	--	--	<10	--	--	
01MW55-20130403	SoundEarth	LF	04/03/13	630 <sup>x</sup>	370 <sup>x</sup>	1,100 <sup>x</sup>	2.0	1.3	1.4	<3	--	--	<100	--	--		
01MW56	01MW56-20081125	SoundEarth	LF	11/25/08	400 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW56-20090127	SoundEarth	LF	01/27/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW56-20110412	SoundEarth	LF	04/12/11	790 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW56-20110825	SoundEarth	LF	08/25/11	1,100 <sup>x</sup>	<250	<100	<1	2.1	<1	<3	--	--	<1	--	--	
	01MW56-20111206	SoundEarth	LF	12/06/11	840 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW56-20120403	SoundEarth	LF	04/03/12	970 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW56-20121010	SoundEarth	LF	10/10/12	1,000 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW56-20130402	SoundEarth	LF	04/02/13	1,000 <sup>x</sup>	<250	<100	<1	1.3	<1	<3	--	--	<1	--	--		
01MW58	01MW58-20081125	SoundEarth	LF	11/25/08	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW58-20090128	SoundEarth	LF	01/28/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW58-20090407	SoundEarth	LF	04/07/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW58-20090706	SoundEarth	LF	07/06/09	64 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW58-20100126	SoundEarth	LF	01/26/10	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW58-20100407	SoundEarth	LF	04/07/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW58-20100713	SoundEarth	LF	07/13/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW58-20110111	SoundEarth	LF	01/11/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW58-20110412	SoundEarth	LF	04/12/11	80 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW58-20111206	SoundEarth	LF	12/06/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW58-20120404	SoundEarth	LF	04/04/12	110 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW58-20121010	SoundEarth	LF	10/10/12	110 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW58-20130402	SoundEarth	LF	04/02/13	250 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
	01MW60	01MW60-20090108	SoundEarth	LF	01/08/09	270	<250	390	1.2	<1	1.2	<3	--	--	<1	--	--
		01MW60-20090129	SoundEarth	LF	01/29/09	<50	<250	190	<1	<1	<1	<3	--	--	<1	--	--
01MW60-200904007		SoundEarth	LF	04/07/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW60-20090709		SoundEarth	LF	07/09/09	130	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW60-20100128		SoundEarth	LF	01/28/10	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW60-20100408		SoundEarth	LF	04/08/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW60-20100713		SoundEarth	LF	07/13/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW60-20110113		SoundEarth	LF	01/13/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW60-20100415		SoundEarth	LF	04/15/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW60-20110824		SoundEarth	LF	08/24/11	60 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW60-20111207		SoundEarth	LF	12/07/11	78 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW60-20120404		SoundEarth	LF	04/04/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW60-20121010		SoundEarth	LF	10/10/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW60-20130402		SoundEarth	LF	04/02/13	120 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
<b>MTCA Cleanup Level for Groundwater<sup>(6)</sup></b>					<b>500</b>	<b>500</b>	<b>800</b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>1,000</b>	<b>20</b>	<b>0.01</b>	<b>5</b>	<b>NE</b>	<b>2.2<sup>(7)</sup></b>	



**Table 8**  
**Groundwater Analytical Results for TPH, BTEX, MTBE, EDB, EDC, and PCP**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Shallow Water-Bearing Zone	Sample Identification	Sampled By	Sample Type	Date Sampled	Analytical Results (micrograms per liter)											
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	MTBE <sup>(3)</sup>	EDB <sup>(3)</sup>	EDC <sup>(3)</sup>	Ethanol <sup>(3)</sup>	PCP <sup>(4)</sup>
<b>ASKO Hydraulic Property</b>																
<b>Shallow Water-Bearing Zone</b>																
01MW61	01MW61-20090108	SoundEarth	LF	01/08/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW61-20090129	SoundEarth	LF	01/29/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW61-20090407	SoundEarth	LF	04/07/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW61-20090709	SoundEarth	LF	07/09/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW61-20100128	SoundEarth	LF	01/28/10	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW61-20100408	SoundEarth	LF	04/08/10	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW61-20100708	SoundEarth	LF	07/08/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW61-20110111	SoundEarth	LF	01/11/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW61-20110414	SoundEarth	LF	04/14/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW61-20110823	SoundEarth	LF	08/23/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW61-20111208	SoundEarth	LF	12/08/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW61-20120403	SoundEarth	LF	04/03/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW61-20121009	SoundEarth	LF	10/09/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW61-20130402	SoundEarth	LF	04/02/13	230 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW62	01MW62-20090108	SoundEarth	LF	01/08/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW62-20090129	SoundEarth	LF	01/29/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW62-20090407	SoundEarth	LF	04/07/09	<50	<250	280	<1	<1	<1	<3	--	--	<1	--	--
	01MW97-20090407 (DUP)	SoundEarth	LF	04/07/09	<50	<250	600	<1	2	<2	<3	--	--	<1	--	--
	01MW62-20090709	SoundEarth	LF	07/09/09	58	<250	130	<1	<1	<1	<3	--	--	<1	--	--
	01MW62-20100128	SoundEarth	LF	01/28/10	<50	<250	270	<1	2	<1	<3	--	--	<1	--	--
	01MW62-20100407	SoundEarth	LF	04/07/10	<50	<250	540	<1	2	<1	<3	--	--	<1	--	--
	01MW62-20100708	SoundEarth	LF	07/08/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	240	3.2	<1	<1	<3	--	--	<1	--	--
	01MW62-20110113	SoundEarth	LF	01/13/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	520 <sup>x</sup>	<1	<1	<1	<3	--	--	<1	--	--
	01MW62-20110415	SoundEarth	LF	04/15/11	<50	<250	510 <sup>x</sup>	<1	<1	<1	<3	--	--	<10	--	--
	01MW62-20110824	SoundEarth	LF	08/24/11	<50	<250	430 <sup>x</sup>	<1	<1	<1	<3	--	--	<1	--	--
	01MW62-20111208	SoundEarth	LF	12/08/11	<50	<250	150 <sup>x</sup>	<1	<1	<1	<3	--	--	<1	--	--
	01MW62-20120404	SoundEarth	LF	04/04/12	<50	<250	130 <sup>x</sup>	<1	<1	<1	<3	--	--	<1	--	--
01MW62-20121011	SoundEarth	LF	10/11/12	57 <sup>x</sup>	<250	260 <sup>x</sup>	<1	<1	<1	<3	--	--	<1	--	--	
01MW62-20130402	SoundEarth	LF	04/02/13	110 <sup>x</sup>	<250	290 <sup>x</sup>	<1	1.9	<1	<3	--	--	<50	--	--	
<b>MTCA Cleanup Level for Groundwater<sup>(6)</sup></b>					<b>500</b>	<b>500</b>	<b>800</b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>1,000</b>	<b>20</b>	<b>0.01</b>	<b>5</b>	<b>NE</b>	<b>2.2<sup>(7)</sup></b>





**Table 8**  
**Groundwater Analytical Results for TPH, BTEX, MTBE, EDB, EDC, and PCP**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Shallow Water-Bearing Zone	Sample Identification	Sampled By	Sample Type	Date Sampled	Analytical Results (micrograms per liter)											
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	MTBE <sup>(3)</sup>	EDB <sup>(3)</sup>	EDC <sup>(3)</sup>	Ethanol <sup>(3)</sup>	PCP <sup>(4)</sup>
<b>ASKO Hydraulic Property</b>																
<b>Shallow Water-Bearing Zone</b>																
01MW63	01MW63-20090108	SoundEarth	LF	01/08/09	1,500	290	3,300	6.3	<1	<1	<3	--	--	6.9	--	--
	MW99-20090108 (DUP)	SoundEarth	LF	01/08/09	1,100	<430	3,500	6.5	<1	<1	<3	--	--	6.9	--	--
	01MW63-20090129	SoundEarth	LF	01/29/09	<50	<250	3,700	9	<1	<1	<3	--	--	7.2	--	--
	01MW96-20090129 (DUP)	SoundEarth	LF	01/29/09	<50	<250	4,900	8	<1	<1	<3	--	--	7.5	--	--
	01MW63-20090407	SoundEarth	LF	04/07/09	<50	<250	4,800	13	8	1	<3	--	--	8.8	--	--
	01MW63-20090708	SoundEarth	LF	07/08/09	1,400 <sup>a</sup>	530 <sup>a</sup>	5,100	15	2	1	<3	--	--	8.0 <sup>ca</sup>	--	--
	01MW97-20090708 (DUP)	SoundEarth	LF	07/08/09	1,300 <sup>a</sup>	460 <sup>a</sup>	5,000	15	2	1	<3	--	--	8.0 <sup>ca</sup>	--	--
	01MW63-10200127	SoundEarth	LF	01/27/10	1,300 <sup>a</sup>	520 <sup>a</sup>	6,000	12	<1	1	<3	--	--	5.8	--	--
	01MW97-20100127 (DUP)	SoundEarth	LF	01/27/10	1,300 <sup>a</sup>	440 <sup>a</sup>	6,100	12	<1	1	<3	--	--	5.7	--	--
	01MW63-20100408	SoundEarth	LF	04/08/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	6,000	15	4	2	<3	--	--	4.4	--	--
	01MW97-20100408 (DUP)	SoundEarth	LF	04/08/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	6,000	15	4	2	<3	--	--	--	--	--
	01MW63-20100709	SoundEarth	LF	07/09/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	5,800	12	3.7	1.3	<3	--	--	4.0	--	--
	01MW97-20100709 (DUP)	SoundEarth	LF	07/09/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	5,800	12	4.5	1.2	<3	--	--	3.9	--	--
	01MW63-20110111	SoundEarth	LF	01/11/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	990 <sup>a</sup>	10	1.0	<1	<3	--	--	4.9	--	--
	FD04-20110111 (DUP)	SoundEarth	LF	01/11/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	960 <sup>a</sup>	9.9	<1	<1	<3	--	--	4.3	--	--
	01MW63-20110414	SoundEarth	LF	04/14/11	740 <sup>a</sup>	430 <sup>a</sup>	5,700 <sup>a</sup>	7.2	<1	<1	<3	--	--	3.3	--	--
	FD04-20110414 (DUP)	SoundEarth	LF	04/14/11	850 <sup>a</sup>	510 <sup>a</sup>	5,800 <sup>a</sup>	7.1	<1	<1	<3	--	--	1.7	--	--
	01MW63-20110825	SoundEarth	LF	08/25/11	1,100 <sup>a</sup>	400 <sup>a</sup>	820 <sup>a</sup>	2.1	<1	<1	<3	--	--	4.4	--	--
	FD04-20110825 (DUP)	SoundEarth	LF	08/25/11	1,100 <sup>a</sup>	410 <sup>a</sup>	810 <sup>a</sup>	2.2	<1	<1	<3	--	--	4.5	--	--
	01MW63-20111209	SoundEarth	LF	12/09/11	810 <sup>a</sup>	270 <sup>a</sup>	2,200 <sup>a</sup>	5.1	3.5	1.3	<3	--	--	4.9	--	--
	FD04-20111209 (DUP)	SoundEarth	LF	12/09/11	760 <sup>a</sup>	270 <sup>a</sup>	2,100 <sup>a</sup>	5.0	3.5	<1	<3	--	--	4.9	--	--
	01MW63-20120404	SoundEarth	LF	04/04/12	830 <sup>a</sup>	400 <sup>a</sup>	1,200 <sup>a</sup>	3.5	1.9	<1	<3	--	--	2.8	--	--
	FD04-20120404 (DUP)	SoundEarth	LF	04/04/12	790 <sup>a</sup>	360 <sup>a</sup>	1,200 <sup>a</sup>	3.6	1.9	<1	<3	--	--	2.7	--	--
	01MW63-20121011	SoundEarth	LF	10/11/12	900 <sup>a</sup>	400 <sup>a</sup>	680 <sup>a</sup>	4.7	<1	<1	<3	--	--	<100	--	--
FD04-20121011 (DUP)	SoundEarth	LF	10/11/12	1,100 <sup>a</sup>	490 <sup>a</sup>	740 <sup>a</sup>	4.2	<1	<1	<3	--	--	<100	--	--	
01MW63-20130403	SoundEarth	LF	04/03/13	800 <sup>a</sup>	340 <sup>a</sup>	2,200 <sup>a</sup>	5.6	<1	<1	<3	--	--	<100	--	--	
FD04-20130403 (DUP)	SoundEarth	LF	04/03/13	840 <sup>a</sup>	380 <sup>a</sup>	2,200 <sup>a</sup>	5.5	<1	<1	<3	--	--	<100	--	--	
01MW64	01MW64-20090409	SoundEarth	LF	04/07/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW64-20090709	SoundEarth	LF	07/09/09	170	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW64-20100127	SoundEarth	LF	01/27/10	180 <sup>a</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW64-20100406	SoundEarth	LF	04/06/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW64-20100708	SoundEarth	LF	07/08/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW64-20110112	SoundEarth	LF	01/12/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW64-20110414	SoundEarth	LF	04/14/11	110 <sup>a</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW64-20110823	SoundEarth	LF	08/23/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW64-20111208	SoundEarth	LF	12/08/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW64-20120404	SoundEarth	LF	04/04/12	50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW64-20121010	SoundEarth	LF	10/10/12	88 <sup>a</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW64-20130402	SoundEarth	LF	04/02/13	120 <sup>a</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW80	01MW80-20110422	SoundEarth	LF	04/22/11	230 <sup>a</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW80-20110824	SoundEarth	LF	08/24/11	320 <sup>a</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW80-20111209	SoundEarth	LF	12/09/11	180 <sup>a</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW80-20120403	SoundEarth	LF	04/03/12	240 <sup>a</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW80-20121010	SoundEarth	LF	10/10/12	290 <sup>a</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW80-20130403	SoundEarth	LF	04/03/13	240 <sup>a</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
<b>MTCA Cleanup Level for Groundwater<sup>(6)</sup></b>					<b>500</b>	<b>500</b>	<b>800</b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>1,000</b>	<b>20</b>	<b>0.01</b>	<b>5</b>	<b>NE</b>	<b>2.2<sup>(7)</sup></b>



**Table 8**  
**Groundwater Analytical Results for TPH, BTEX, MTBE, EDB, EDC, and PCP**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Shallow Water-Bearing Zone	Sample Identification	Sampled By	Sample Type	Date Sampled	Analytical Results (micrograms per liter)											
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	MTBE <sup>(3)</sup>	EDB <sup>(3)</sup>	EDC <sup>(3)</sup>	Ethanol <sup>(3)</sup>	PCP <sup>(4)</sup>
<b>ASKO Hydraulic Property</b>																
<b>Intermediate Water-Bearing Zone</b>																
01MW54	01MW54-20081125	SoundEarth	LF	11/25/08	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW54-20090129	SoundEarth	LF	01/29/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW54-20090408	SoundEarth	LF	04/08/09	--	--	--	--	--	--	--	--	--	<1	--	--
	01MW54-20090709	SoundEarth	LF	07/09/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW54-20100126	SoundEarth	LF	01/26/10	<62	<310	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW54-20100406	SoundEarth	LF	04/06/10	<50	<250	<100	<1	2	<1	<3	--	--	<1	--	--
	01MW54-20100709	SoundEarth	LF	07/09/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW54-20110112	SoundEarth	LF	01/12/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW54-20110413	SoundEarth	LF	04/13/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW54-20110823	SoundEarth	LF	08/23/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW54-20111206	SoundEarth	LF	12/06/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW54-20120403	SoundEarth	LF	04/03/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW54-20121009	SoundEarth	LF	10/09/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW54-20130401	SoundEarth	LF	04/01/13	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW57	01MW57-20081125	SoundEarth	LF	11/25/08	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW57-20090128	SoundEarth	LF	01/28/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW57-20090408	SoundEarth	LF	04/08/09	--	--	--	--	--	--	--	--	--	<1	--	--
	01MW57-20090707	SoundEarth	LF	07/07/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW57-20100126	SoundEarth	LF	01/26/10	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW57-20100406	SoundEarth	LF	04/06/10	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW57-20100713	SoundEarth	LF	07/13/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW57-20110111	SoundEarth	LF	01/11/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW57-20110412	SoundEarth	LF	04/12/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW57-20110823	SoundEarth	LF	08/23/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW57-20111206	SoundEarth	LF	12/06/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW57-20120403	SoundEarth	LF	04/03/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW57-20121009	SoundEarth	LF	10/09/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW57-20130401	SoundEarth	LF	04/01/13	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
<b>MTCA Cleanup Level for Groundwater<sup>(6)</sup></b>					<b>500</b>	<b>500</b>	<b>800</b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>1,000</b>	<b>20</b>	<b>0.01</b>	<b>5</b>	<b>NE</b>	<b>2.2<sup>(7)</sup></b>



**Table 8**  
**Groundwater Analytical Results for TPH, BTEX, MTBE, EDB, EDC, and PCP**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Shallow Water-Bearing Zone	Sample Identification	Sampled By	Sample Type	Date Sampled	Analytical Results (micrograms per liter)											
					DRPH <sup>(4)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	MTBE <sup>(3)</sup>	EDB <sup>(3)</sup>	EDC <sup>(3)</sup>	Ethanol <sup>(3)</sup>	PCP <sup>(4)</sup>
<b>ASKO Hydraulic Property</b>																
<b>Intermediate Water-Bearing Zone</b>																
01MW76	01MW76-20110307	SoundEarth	LF	03/07/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW76-20110412	SoundEarth	LF	04/12/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW76-20110824	SoundEarth	LF	08/24/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW76-20111208	SoundEarth	LF	12/08/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW76-20120404	SoundEarth	LF	04/04/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW76-20121011	SoundEarth	LF	10/11/12	52 <sup>*</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW76-20130403	SoundEarth	LF	04/03/13	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW77	01MW77-20110307	SoundEarth	LF	03/07/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	1	<1	<3	--	--	<1	--	--
	01MW77-20110413	SoundEarth	LF	04/13/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW77-20110823	SoundEarth	LF	08/23/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW77-20111207	SoundEarth	LF	12/07/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW77-20120403	SoundEarth	LF	04/03/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW77-20121009	SoundEarth	LF	10/09/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW77-20130401	SoundEarth	LF	04/01/13	79 <sup>*</sup>	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
01MW78	01MW78-20110307	SoundEarth	LF	03/07/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW78-20110414	SoundEarth	LF	04/14/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW78-20110824	SoundEarth	LF	08/24/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW78-20111208	SoundEarth	LF	12/08/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW78-20120404	SoundEarth	LF	04/04/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW78-20121010	SoundEarth	LF	10/10/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW78-20130401	SoundEarth	LF	04/01/13	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
<b>ASKO Hydraulic Property</b>																
<b>Deep Water-Bearing Zone</b>																
01MW65	01MW65-20090408	SoundEarth	LF	04/08/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW65-20090709	SoundEarth	LF	07/09/09	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW65-20100126	SoundEarth	LF	01/26/10	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW65-20100406	SoundEarth	LF	04/06/10	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW65-20100709	SoundEarth	LF	07/09/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW65-20110112	SoundEarth	LF	01/12/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW65-20110414	SoundEarth	LF	04/14/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW65-20110823	SoundEarth	LF	08/23/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW65-20111206	SoundEarth	LF	12/06/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW65-20120403	SoundEarth	LF	04/03/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW65-20121009	SoundEarth	LF	10/09/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW65-20130401	SoundEarth	LF	04/01/13	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--	
MTCA Cleanup Level for Groundwater <sup>(6)</sup>					500	500	800	5	1,000	700	1,000	20	0.01	5	NE	2.2 <sup>(7)</sup>



**Table 8**  
**Groundwater Analytical Results for TPH, BTEX, MTBE, EDB, EDC, and PCP**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Shallow Water-Bearing Zone	Sample Identification	Sampled By	Sample Type	Date Sampled	Analytical Results (micrograms per liter)											
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	MTBE <sup>(3)</sup>	EDB <sup>(3)</sup>	EDC <sup>(3)</sup>	Ethanol <sup>(3)</sup>	PCP <sup>(4)</sup>
<b>BNSF Parcel</b>																
<b>Perched Water</b>																
01MW92	01MW92-20120823	SoundEarth	LF	08/23/12	2,300	640*	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW92-20120905	SoundEarth	LF	09/05/12	3,100*	1,100*	220*	<1	<1	<1	<3	--	--	<1	--	--
	01MW92-20130510	SoundEarth	LF	05/10/13	3,400*	770*	770*	<1	<1	<1	<3	--	--	<1	--	--
01MW96	01MW96-20130510	SoundEarth	LF	05/10/13	2,000*	380*	<100	<1	<1	<1	<3	--	--	<1	--	--
	FD01-20130510 (DUP)	SoundEarth	LF	05/10/13	1,800*	340*	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW97	01MW97-20130510	SoundEarth	LF	05/10/13	3,200*	740*	620*	<1	<1	<1	<3	--	--	<1	--	--
01MW98	01MW98-20130510	SoundEarth	LF	05/10/13	4,000*	820*	170*	<1	<1	<1	<3	--	--	<1	--	--
<b>BNSF Parcel</b>																
<b>Shallow Water-Bearing Zone</b>																
01MW93	01MW93-20120823	SoundEarth	LF	08/23/12	62	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW93-20120905	SoundEarth	LF	09/05/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW93-20130513	SoundEarth	LF	05/13/13	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW94	01MW94-20120823	SoundEarth	LF	08/23/12	89	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW94-20120905	SoundEarth	LF	09/05/12	120*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW94-20130510	SoundEarth	LF	05/10/13	56*	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
01MW95	01MW95-20120823	SoundEarth	LF	08/23/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW95-20120905	SoundEarth	LF	09/05/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW95-20130510	SoundEarth	LF	05/10/13	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
<b>West Waterfront Property</b>																
<b>Shallow Water-Bearing Zone</b>																
02MW14	02MW14-20081125	SoundEarth	LF	11/25/08	<50	<250	<100	<1	<1	<1	<3	--	--	--	--	--
	02MW14-20090127	SoundEarth	LF	01/27/09	<50	<250	<100	<1	<1	<1	<3	--	--	--	--	--
	02MW14-20090407	SoundEarth	LF	04/07/09	<50	<250	<100	<1	<1	<1	<3	--	--	--	--	--
	02MW14-20090706	SoundEarth	LF	07/06/09	<50	<250	<100	<1	<1	<1	<3	--	--	--	--	--
	02MW14-20100125	SoundEarth	LF	01/25/10	<50	<250	<100	<1	<1	<1	<3	--	--	--	--	--
	02MW14-20100405	SoundEarth	LF	04/05/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	--	--	--
	02MW14-20100708	SoundEarth	LF	07/08/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	--	--	--
	02MW14-20110112	SoundEarth	LF	01/12/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	--	--	--
02MW14-20110414	SoundEarth	LF	04/14/11	<50	<250	<100	<1	<1	<1	<3	--	--	--	--	--	
<b>MTCA Cleanup Level for Groundwater<sup>(6)</sup></b>					<b>500</b>	<b>500</b>	<b>800</b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>1,000</b>	<b>20</b>	<b>0.01</b>	<b>5</b>	<b>NE</b>	<b>2.2<sup>(7)</sup></b>



**Table 8**  
**Groundwater Analytical Results for TPH, BTEX, MTBE, EDB, EDC, and PCP**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Shallow Water-Bearing Zone	Sample Identification	Sampled By	Sample Type	Date Sampled	Analytical Results (micrograms per liter)											
					DRPH <sup>(1)</sup>	ORPH <sup>(1)</sup>	GRPH <sup>(2)</sup>	Benzene <sup>(3)</sup>	Toluene <sup>(3)</sup>	Ethylbenzene <sup>(3)</sup>	Total Xylenes <sup>(3)</sup>	MTBE <sup>(3)</sup>	EDB <sup>(3)</sup>	EDC <sup>(3)</sup>	Ethanol <sup>(3)</sup>	PCP <sup>(4)</sup>
<b>East Waterfront Property</b>																
<b>Shallow Water-Bearing Zone</b>																
01MW83	01MW83-20110422	SoundEarth	LF	04/22/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW83-20110823	SoundEarth	LF	08/23/11	360 <sup>x</sup>	<250 <sup>(7)</sup>	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW83-20111209	SoundEarth	LF	12/09/11	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW83-20120403	SoundEarth	LF	04/03/12	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
	01MW83-20130401	SoundEarth	LF	04/01/13	<50	<250	<100	<1	<1	<1	<3	--	--	<1	--	--
02MW13	02MW13-20071207	SoundEarth	LF	12/07/07	<50	<250	<100	<1	<1	<1	<3	--	--	--	--	--
	02MW13-20090127	SoundEarth	LF	01/27/09	<50	<250	<100	<1	<1	<1	<3	--	--	--	--	--
	02MW13-20090407	SoundEarth	LF	04/07/09	<50	<250	<100	<1	<1	<1	<3	--	--	--	--	--
	02MW13-20090706	SoundEarth	LF	07/06/09	65 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	--	--	--
	02MW13-20100125	SoundEarth	LF	01/25/10	87 <sup>x</sup>	320	<100	<1	<1	<1	<3	--	--	--	--	--
	02MW13-20100406	SoundEarth	LF	04/06/10	100 <sup>(5),x</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	--	--	--
	02MW13-20100708	SoundEarth	LF	07/08/10	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	--	--	--
	02MW13-20110112	SoundEarth	LF	01/12/11	<50 <sup>(5)</sup>	<250 <sup>(5)</sup>	<100	<1	<1	<1	<3	--	--	--	--	--
	02MW13-20110414	SoundEarth	LF	04/14/11	54 <sup>x</sup>	<250	<100	<1	<1	<1	<3	--	--	--	--	--
<b>MTCA Cleanup Level for Groundwater<sup>(6)</sup></b>					<b>500</b>	<b>500</b>	<b>800</b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>1,000</b>	<b>20</b>	<b>0.01</b>	<b>5</b>	<b>NE</b>	<b>2.2<sup>(7)</sup></b>

**NOTES:**

Red denotes concentration exceeds MTCA cleanup level for groundwater.

Data prior to 2006 was obtained from previous consultants. All other sample analyses conducted by TestAmerica Laboratories, Inc. of Bothell, Washington or Friedman & Bruya, Inc. of Seattle, Washington.

<sup>(1)</sup>Analyzed by Method NWTPH-Dx.

<sup>(2)</sup>Analyzed by Method NWTPH-Gx.

<sup>(3)</sup>Analyzed by EPA Method 8021B or 8260B.

<sup>(4)</sup>Analyzed by EPA Method 8270C SIM.

<sup>(5)</sup>Analyzed by Method NWTPH-Dx following a silica gel cleanup sample preparation.

<sup>(6)</sup>MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 720-1 Method A Cleanup Levels for Groundwater, revised November 2007.

<sup>(7)</sup>MTCA Cleanup Regulation, CLARC, Ground Water, Method C, Carcinogen, Standard Formula Value, CLARC Website <<https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>>.

**Laboratory Notes:**

<sup>1</sup>The result is below normal reporting limits. The value reported is an estimate.

<sup>2</sup>The reported percent difference for this analyte is out of control limits. The reported concentration is an estimate.

<sup>3</sup>The pattern of peaks present is not indicative of diesel or motor oil or the sample chromatographic pattern does not resemble the fuel standard used for quantitation.

<sup>4</sup>The pattern of peaks present is not indicative of diesel or motor oil or the sample chromatographic pattern does not resemble the fuel standard used for quantitation.

-- = not analyzed/not applicable

< = not detected at a concentration exceeding the laboratory reporting limit

BNSF = Burlington Northern Santa Fe Railway Company

BTEX = benzene, toluene, ethylbenzene, and total xylenes

DRPH = diesel-range petroleum hydrocarbons

EDB = 1,2-dibromoethane

EDC = 1,2-dichloroethane

EPA = U.S. Environmental Protection Agency

FW = Foster Wheeler Environmental Corporation

GRPH = gasoline-range petroleum hydrocarbons

Landau = Landau Associates, Inc.

LF = low flow

MTBE = methyl tertiary-butyl ether

MTCA = Washington State Model Toxics Control Act

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH = oil-range petroleum hydrocarbons

PCP = pentachlorophenol

SoundEarth = SoundEarth Strategies, Inc.

TetraTech = TetraTech EC, Inc.

TPH = total petroleum hydrocarbon

WAC = Washington Administrative Code



Table 9  
Groundwater Analytical Results for Selected VOCs  
TOC Holdings Co.  
ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)																	
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Hexane	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene	2-Butanone	
<b>West Commodore Way</b>																				
<b>Shallow Water-Bearing Zone</b>																				
01MW30	01-MW-30-20060621	06/21/06	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.500	<10.0	<0.500	<0.200	<1.00	<0.500	<0.200	<0.200	<0.500	<2.00	
	01MW30-20061212	12/12/06	<1	<1	<1	<1	<1	<0.2	<1	<1	<10	<1	-	-	<1	<1	<1	<1	<10	
	01MW30-20090128	01/28/09	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
	01MW30-20090408	04/08/09	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
	01MW30-20090707	07/07/09	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
	01MW30-20100126	01/26/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
	01MW30-20100407	04/07/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
	01MW30-20100713	07/13/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
	01MW30-20110111	01/11/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
	01MW30-20110414	04/14/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
	01MW30-20111206	12/06/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
01MW30-20120405	04/05/12	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	
01MW30-20121012	10/12/12	<1	<1	<1	<1	<1	<0.2	<100	<1	<1	<1	<3	-	-	<1	-	-	-	-	
01MW30-20130404	04/04/13	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	
01MW52	01MW52-20100125	01/25/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
01MW53	01MW53-20071207	12/07/07	<1	<1	<1	<1	<1	<0.2	<1	<1	13	<1	-	<1	<1	<1	<1	<1	<10	
	01MW53-20090707	07/07/09	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW53-20100706	07/06/10	<1	<1	<1	<1	<1	0.38	-	-	-	-	-	-	-	-	-	-	-	
	01MW53-20110113	01/13/11	<1	<1	<1	<1	<1	0.57	-	-	-	-	-	-	-	-	-	-	-	
	01MW53-20110413	04/13/11	<1	<1	<1	<1	<1	0.22	-	-	-	-	-	-	-	-	-	-	-	
01MW85	01MW85-20110422	04/22/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW85-20110823	08/23/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW85-20111208	12/08/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW85-20120403	04/03/12	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW85-20121009	10/09/12	<1	<1	<1	<1	<1	0.33	-	-	-	-	-	-	-	-	-	-	-	
	01MW85-20130401	04/01/13	<1	<1	<1	<1	<1	0.39	-	-	-	-	-	-	-	-	-	-	-	
01MW89	01MW89-20110425	04/25/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW89-20110823	08/23/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW89-20111212	12/12/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW89-20120403	04/03/12	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW89-20121009	10/09/12	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW89-20130401	04/01/13	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
<b>MTCA Cleanup Level for Groundwater</b>			5 <sup>(2)</sup>	5 <sup>(2)</sup>	16 <sup>(3)</sup>	160 <sup>(3)</sup>	400 <sup>(3)</sup>	0.2 <sup>(2)</sup>	NE	80 <sup>(3)</sup>	7,200 <sup>(3)</sup>	800 <sup>(3)</sup>	NE	480 <sup>(3)</sup>	NE	NE	NE	NE	4,800 <sup>(3)</sup>	



Table 9  
Groundwater Analytical Results for Selected VOCs  
TOC Holdings Co.  
ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)																		
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Hexane	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene	2-Butanone		
<b>ASKO Hydraulic Property</b>																					
<b>Perched Water</b>																					
MW03	MW03-20060425	04/25/06	<0.200	0.370	14.3	<0.200	<0.200	0.500	3.54	<0.500	<10.0	1.36	1.14	<1.00	<0.500	<0.200	2.87	<0.500	<2.00		
	MW03-20060817	08/17/06	<0.200	3.12	24.3	<0.500	<0.500	0.480	6.65	2.77	<20.0	1.16	0.760	<1.00	1.59	0.650	1.74	<0.500	<10.0		
	MW-03-20061214	12/14/06	<1	2.1	21	<1	<1	<0.2	3.6	<1	<10	<1	--	--	1.1	<1	<1	<1	<10		
	MW03-20090127	01/27/09	<1	<1	16	<1	<1	0.51	--	--	--	--	--	--	--	--	--	--	--		
	MW03-20090407	04/07/09	<1	1.3	23	<1	<1	0.58	--	--	--	--	--	--	--	--	--	--	--		
	MW03-20110823	08/23/11	<1	<1	14	<1	<1	0.66	--	--	--	--	--	--	--	--	--	--	--	--	
	MW03-20111207	12/07/11	<1	<1	11	<1	<1	0.28	--	--	--	--	--	--	--	--	--	--	--	--	
	MW03-20120403	04/03/12	<1	<1	20	<1	<1	0.44	--	--	--	--	--	--	--	--	--	--	--	--	
MW03-20121010	10/10/12	<1	<1	14	<1	<1	0.49	--	--	--	--	--	--	--	--	--	--	--	--		
MW03-20130401	04/01/13	<1	<1	13	<1	<1	0.50	--	--	--	--	--	--	--	--	--	--	--	--		
01MW70	01MW70-20100408	04/08/10	<1	400	37	16	<1	0.46	--	--	--	--	--	--	--	--	--	--	--		
	01MW70-20100709	07/09/10	<1	560	51	20	<1	0.99	--	--	--	--	--	--	--	--	--	--	--		
	01MW70-20110111	01/11/11	<1	410	41	29	<1	0.93	--	--	--	--	--	--	--	--	--	--	--		
	01MW70-20110413	04/13/11	<1	330	38	19	<1	1.1	--	--	--	--	--	--	--	--	--	--	--		
	01MW70-20110825	08/25/11	<1	400	94	180	<1	1.3	--	--	--	--	--	--	--	--	--	--	--		
	01MW70-20111209	12/09/11	<1	560	51	20	<1	1.4	--	--	--	--	--	--	--	--	--	--	--		
	01MW70-20120403	04/03/12	<1	300	32	18	<1	0.81	--	--	--	--	--	--	--	--	--	--	--		
	01MW70-20121012	10/12/12	<1	370	78	140	<1	0.76	--	--	--	--	--	--	--	--	--	--	--		
01MW70-20130402	04/02/13	<5	360	36	19	<5	0.8	--	--	--	--	--	--	--	--	--	--	--			
01MW71	01MW71-20100408	04/08/10	<1	1,100	99	3.3	2.8	6.7	--	--	--	--	--	--	--	--	--	--	--		
	01MW71-20100709	07/09/10	<1	290	23	2.1	<1	3.8	--	--	--	--	--	--	--	--	--	--	--		
	01MW71-20110111	01/11/11	<1	1,100	79	5.5	2.5	5.1	--	--	--	--	--	--	--	--	--	--	--		
	01MW71-20110413	04/13/11	<1	1,700	95	5.5	2.0	4.9	--	--	--	--	--	--	--	--	--	--	--		
	01MW71-20110825	08/25/11	<1	820	62	11	1.9	6.7	--	--	--	--	--	--	--	--	--	--	--		
	01MW71-20111209	12/09/11	<1	1,400	92	7.7	3.2	7.0	--	--	--	--	--	--	--	--	--	--	--		
	01MW71-20120404	04/04/12	<1	3,600	94	8.2	3.9	6.3	--	--	--	--	--	--	--	--	--	--	--		
	01MW71-20121011	10/11/12	<1	790	51	7.0	1.5	1.4	--	--	--	--	--	--	--	--	--	--	--		
01MW71-20130402	04/02/13	<1 <sup>1</sup>	3,600	110	11	<10	8.8	--	--	--	--	--	--	--	--	--	--	--			
01MW79	01MW79-20110307	03/07/11	<1	590	33	3.2	1.3	6.9	--	--	--	--	--	--	--	--	--	--	--		
	01MW79-20110413	04/13/11	<1	290	24	3.4	<1	3.8	--	--	--	--	--	--	--	--	--	--	--		
	01MW79-20110825	08/25/11	<1	250	29	3.8	1.3	5.8	--	--	--	--	--	--	--	--	--	--	--		
	01MW79-20111209	12/09/11	<1	230	30	3.2	1.1	7.5	--	--	--	--	--	--	--	--	--	--	--		
	01MW79-20120403	04/03/12	<1	130	27	2.9	<1	7.6	--	--	--	--	--	--	--	--	--	--	--		
	01MW79-20121010	10/10/12	<1	180	31	3.0	1.1	6.4	--	--	--	--	--	--	--	--	--	--	--		
	01MW79-20130402	04/02/13	<5	100	24	<5	<5	5.7	--	--	--	--	--	--	--	--	--	--	--		
<b>MTCA Cleanup Level for Groundwater</b>			5 <sup>(2)</sup>	5 <sup>(2)</sup>	16 <sup>(1)</sup>	160 <sup>(1)</sup>	400 <sup>(1)</sup>	0.2 <sup>(2)</sup>	NE	80 <sup>(1)</sup>	7,200 <sup>(1)</sup>	800 <sup>(1)</sup>	NE	480 <sup>(1)</sup>	NE	NE	NE	NE	4,800 <sup>(1)</sup>		



Table 9  
Groundwater Analytical Results for Selected VOCs  
TOC Holdings Co.  
ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)																		
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Hexane	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene	2-Butanone		
ASKO Hydraulic Property																					
Shallow Water-Bearing Zone																					
MW01	MW01-20060426	04/26/06	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.500	<10.0	<0.500	<0.200	<1.00	<0.500	<0.200	<0.200	<0.500	<2.00	
	MW01-20060817	08/17/06	<0.200	<0.500	<0.500	<0.500	<0.500	<0.200	<0.500	<0.500	<20.0	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<10.0	
	MW01-20061213	12/13/06	<1	<1	<1	<1	<1	<1	<0.2	1.2	<1	<10	<1	--	--	<1	<1	<1	<1	<10	
	MW01-20090127	01/27/09	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	--	
MW02	MW02-20060426	04/26/06	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.500	<10.0	<0.500	<0.200	<1.00	<0.500	<0.200	<0.200	<0.500	<2.00	
	MW02-20060817	08/17/06	<0.200	<0.500	<0.500	<0.500	<0.500	<0.200	<0.500	<0.500	<20.0	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<10.0	
	MW02-20061213	12/13/06	<1	<1	<1	<1	<1	<0.2	<1	<1	<10	<1	--	--	<1	<1	<1	<1	<10		
	MW02-20090127	01/27/09	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--		
	MW02-20090707	07/07/09	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--		
	MW02-20100125	01/25/10	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--		
	MW02-20100405	04/05/10	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--		
	MW02-20100707	07/07/10	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--		
	MW02-20110111	01/11/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--		
	MW02-20110411	04/11/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--		
	MW02-20110823	08/23/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--		
	MW02-20111206	12/06/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--		
	MW02-20120403	04/03/12	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--		
MW02-20121009	10/09/12	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--			
MW02-20130401	04/01/13	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--			
MW04	MW04-20060425	04/25/06	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.500	<10.0	<0.500	<0.200	<1.00	<0.500	<0.200	<0.200	<0.500	<2.00		
	MW04-20060817	08/17/06	<0.200	<0.500	<0.500	<0.500	<0.500	<0.200	<0.500	<0.500	<20.0	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<10.0		
	MW04-20061213	12/13/06	<1	<1	<1	<1	<1	0.8	<1	<1	<10	<1	--	--	<1	<1	<1	<1	<10		
	MW04-20090128	01/28/09	<1	5.2	<1	<1	<1	0.59	--	--	--	--	--	--	--	--	--	--	--		
	MW97-20090128 (DUP)	01/28/09	<1	4.5	<1	<1	<1	0.57	--	--	--	--	--	--	--	--	--	--	--		
	MW04-20090407	04/07/09	<1	31	2.1	<1	<1	0.83	--	--	--	--	2.1	--	--	--	--	--	--		
	MW98-20090407 (DUP)	04/07/09	<1	31	2.0	<1	<1	0.86	--	--	--	--	--	--	--	--	--	--	--		
	MW04-20090707	07/07/09	<1	13	1.3	<1	<1	0.60	--	--	--	--	--	--	--	--	--	--	--		
MW98-20090707 (DUP)	07/07/09	<1	14	1.2	<1	<1	0.72	--	--	--	--	--	--	--	--	--	--	--			
MTCA Cleanup Level for Groundwater			5 <sup>(2)</sup>	5 <sup>(2)</sup>	16 <sup>(3)</sup>	160 <sup>(3)</sup>	400 <sup>(3)</sup>	0.2 <sup>(2)</sup>	NE	80 <sup>(3)</sup>	7,200 <sup>(3)</sup>	800 <sup>(3)</sup>	NE	480 <sup>(3)</sup>	NE	NE	NE	NE	4,800 <sup>(3)</sup>		





Table 9  
Groundwater Analytical Results for Selected VOCs  
TOC Holdings Co.  
ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)																
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Hexane	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene	2-Butanone
<b>ASKO Hydraulic Property</b>																			
<b>Shallow Water-Bearing Zone</b>																			
MW04 (continued)	MW04-20100126	01/26/10	<1	20	2.5	<1	<1	0.56	--	--	--	--	--	--	--	--	--	--	--
	MW99-20100126 (DUP)	01/26/10	<1	20	2.3	<1	<1	0.52	--	--	--	--	--	--	--	--	--	--	--
	MW04-20100406	04/06/10	<1	600	23	<1	1.6	3.0	--	--	--	--	--	--	--	--	--	--	--
	01MW99-20100406 (DUP)	04/06/10	<1	610	21	<1	1.5	3.1	--	--	--	--	--	--	--	--	--	--	--
	MW04-20100713	07/13/10	<1	100	8.4	<1	<1	1.4	--	--	--	--	--	--	--	--	--	--	--
	01MW99-20100713 (DUP)	07/13/10	<1	28	2.1	<1	<1	0.49	--	--	--	--	--	--	--	--	--	--	--
	MW04-20110111	01/11/11	<1	100	6.7	<1	<1	1.2	--	--	--	--	--	--	--	--	--	--	--
	FD03-20110111 (DUP)	01/11/11	<1	150	7.8	<1	<1	1.5	--	--	--	--	--	--	--	--	--	--	--
	MW04-20110411	04/11/11	<1	120	7.8	<1	<1	0.88	--	--	--	--	--	--	--	--	--	--	--
	FD03-20110411 (DUP)	04/11/11	<1	100	6.4	<1	<1	0.77	--	--	--	--	--	--	--	--	--	--	--
	MW04-20110824	08/24/11	<10	250	18	<10	<10	<2	--	--	--	--	--	--	--	--	--	--	--
	FD03-20110824 (DUP)	08/24/11	<1	270	19	<1	1.1	2.0	--	--	--	--	--	--	--	--	--	--	--
	MW04-20111207	12/07/11	<1	330	9.3	<1	<1	1.4	--	--	--	--	--	--	--	--	--	--	--
	FD03-20111207 (DUP)	12/07/11	<1	310	9.8	<1	<1	1.3	--	--	--	--	--	--	--	--	--	--	--
	MW04-20120403	04/03/12	<1	120	4.8	<1	<1	0.62	--	--	--	--	--	--	--	--	--	--	--
	FD03-20120403 (DUP)	04/03/12	<1	120	4.9	<1	<1	0.64	--	--	--	--	--	--	--	--	--	--	--
	MW04-20121010	10/10/12	<1	110	4.0	<1	<1	0.64	--	--	--	--	--	--	--	--	--	--	--
FD03-20121010 (DUP)	10/10/12	<1	150	5.0	<1	<1	0.77	--	--	--	--	--	--	--	--	--	--	--	
MW04-20130402	04/02/13	<1	130	3.9	<1	<1	0.63	--	--	--	--	--	--	--	--	--	--	--	
FD03-20130402 (DUP)	04/02/13	<5	150	3.9 <sup>l</sup>	<5	<5	<1	--	--	--	--	--	--	--	--	--	--	--	
MW05	MW05-20060425	04/25/06	<0.200	1.18	1.54	<0.200	<0.200	1.56	<0.200	<0.500	<10.0	<0.500	<0.200	<1.00	<0.500	<0.200	<0.500	<0.500	<2.00
	MW05-20060817	08/17/06	<0.200	59.2	14.6	<0.500	<0.500	1.27	<0.500	<0.500	<20.0	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<10.0
	MW05-20061213	12/13/06	<1	76	15	<1	<1	1.2	<1	<1	<10	<1	--	--	<1	<1	<1	<1	<10
	MW05-20090128	01/28/09	<1	100	<1	<1	<1	1.2	--	--	--	--	--	--	--	--	--	--	--
	MW05-20090408	04/08/09	<1	82	7.4	<1	<1	1.0	--	--	--	--	--	--	--	--	--	--	--
	MW05-20090707	07/07/09	<1	62	2.5	<1	<1	0.94	--	--	--	--	--	--	--	--	--	--	--
	MW05-20100126	01/26/10	<1	150	12	<1	<1	1.4	--	--	--	--	--	--	--	--	--	--	--
	MW05-20100406	04/06/10	<1	110	5.1	<1	<1	0.89	--	--	--	--	--	--	--	--	--	--	--
	MW05-20100713	07/13/10	<1	120	12	<1	<1	1.8	--	--	--	--	--	--	--	--	--	--	--
	MW05-20110112	01/12/11	<1	66	6.3	<1	<1	1.1	--	--	--	--	--	--	--	--	--	--	--
	MW05-20110412	04/12/11	<1	79	7.7	<1	<1	1.2	--	--	--	--	--	--	--	--	--	--	--
	MW05-20110824	08/24/11	<10	140	<10	<10	<10	<2	--	--	--	--	--	--	--	--	--	--	--
	MW05-20111207	12/07/11	<1	340	21	<1	<1	1.2	--	--	--	--	--	--	--	--	--	--	--
	MW05-20120403	04/03/12	<1	140	11	<1	<1	1.5	--	--	--	--	--	--	--	--	--	--	--
MW05-20121010	10/10/12	<1	120	9.2	<1	<1	1.9	--	--	--	--	--	--	--	--	--	--	--	
MW05-20130402	04/02/13	<1	260	12	<1	<1	3.0	--	--	--	--	--	--	--	--	--	--	--	
MTCA Cleanup Level for Groundwater			5 <sup>(2)</sup>	5 <sup>(2)</sup>	16 <sup>(3)</sup>	160 <sup>(3)</sup>	400 <sup>(3)</sup>	0.2 <sup>(2)</sup>	NE	80 <sup>(3)</sup>	7,200 <sup>(3)</sup>	800 <sup>(3)</sup>	NE	480 <sup>(3)</sup>	NE	NE	NE	NE	4,800 <sup>(3)</sup>



Table 9  
Groundwater Analytical Results for Selected VOCs  
TOC Holdings Co.  
ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)																
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Hexane	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene	2-Butanone
<b>ASKO Hydraulic Property</b>																			
<b>Shallow Water-Bearing Zone</b>																			
MW06	MW06-20060425	04/25/06	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.500	<10.0	<0.500	<0.200	<1.00	<0.500	<0.200	<0.500	<2.00
	MW99-20060425 (DUP)	04/25/06	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	0.360	--	--	--	--	--	--	--	--	--	--
	MW06-20060817	08/17/06	<0.200	<0.200	<0.500	<0.500	<0.500	<0.200	<0.500	<0.500	<20.0	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<10.0
	MW99-20060817 (DUP)	08/17/06	<0.200	<0.200	<0.500	<0.500	<0.500	0.8	--	--	--	--	--	--	--	--	--	--	--
	MW06-20061213	12/13/06	<1	<1	<1	<1	<1	0.5	<1	<1	<10	<1	--	<1	<1	<1	<1	<1	<10
	MW06-20090127	01/27/09	<1	<1	<1	<1	<1	1.0	--	--	--	--	--	--	--	--	--	--	--
	MW06-20090407	04/07/09	<1	<1	<1	<1	<1	0.82	--	--	--	--	--	--	--	--	--	--	--
	MW06-20090708	07/08/09	<1	<1	<1	<1	<1	0.93	--	--	--	--	--	--	--	--	--	--	--
	MW06-20100125	01/25/10	<1	<1	<1	<1	<1	1.1	--	--	--	--	--	--	--	--	--	--	--
	MW06-20100406	04/06/10	<1	<1	<1	<1	<1	4.1	--	--	--	--	--	--	--	--	--	--	--
	MW06-20100707	07/07/10	<1	<1	<1	<1	<1	1.1	--	--	--	--	--	--	--	--	--	--	--
	MW06-20110111	01/11/11	<1	<1	<1	<1	<1	2.2	--	--	--	--	--	--	--	--	--	--	--
	MW06-20110412	04/12/11	<1	<1	<1	<1	<1	0.84	--	--	--	--	--	--	--	--	--	--	--
	MW06-20110824	08/24/11	<1	<1	<1	<1	<1	0.42	--	--	--	--	--	--	--	--	--	--	--
	MW06-20111206	12/06/11	<1	<1	<1	<1	<1	1.2	--	--	--	--	--	--	--	--	--	--	--
	MW06-20120403	04/03/12	<1	<1	<1	<1	<1	0.99	--	--	--	--	--	--	--	--	--	--	--
MW06-20121009	10/09/12	<1	<1	<1	<1	<1	1.4	<1	<1	<3	--	--	<1	--	--	--	--	--	
MW06-20130401	04/01/13	<1	<1	<1	<1	<1	1.1	--	--	--	--	--	--	--	--	--	--	--	
01MW07	01-MW-07-20060620	06/20/06	<0.200	3.58	<0.200	<0.200	<0.200	0.50	<0.200	<0.500	<10.0	<0.500	<0.200	<1.00	<0.500	<0.200	<0.200	<0.500	<2.00
	01MW07-20061212	12/12/06	<1	12	<1	<1	<1	<0.2	<1	<1	<10	<1	--	--	<1	<1	<1	<1	<10
	01MW07-20090128	01/28/09	<1	<1	<1	<1	<1	0.64	--	--	--	--	--	--	--	--	--	--	
	01MW07-20090407	04/07/09	<1	4.1	<1	<1	<1	0.79	--	--	--	--	--	--	--	--	--	--	
	01MW07-20090707	07/07/09	<1	1.4	<1	<1	<1	0.71	--	--	--	--	--	--	--	--	--	--	
	01MW07-20100128	01/28/10	<1	4.8	<1	<1	<1	0.58	--	--	--	--	--	--	--	--	--	--	
	01MW07-20100407	04/07/10	<1	2.5	<1	<1	<1	0.68	--	--	--	--	--	--	--	--	--	--	
	01MW07-20100708	07/08/10	<1	5.0	<1	<1	<1	0.63	--	--	--	--	--	--	--	--	--	--	
	01MW07-20110111	01/11/11	<1	<1	<1	<1	<1	0.86	--	--	--	--	--	--	--	--	--	--	
	01MW07-20110412	04/12/11	<1	2.1	<1	<1	<1	0.62	--	--	--	--	--	--	--	--	--	--	
	01MW07-20110823	08/23/11	<1	3.5	<1	<1	<1	0.72	--	--	--	--	--	--	--	--	--	--	
	01MW07-20111206	12/06/11	<1	5.5	<1	<1	<1	0.68	--	--	--	--	--	--	--	--	--	--	
	01MW07-20120403	04/03/12	<1	3.9	<1	<1	<1	0.67	--	--	--	--	--	--	--	--	--	--	
	01MW07-20121010	10/10/12	<1	2.2	<1	<1	<1	0.84	--	--	--	--	--	--	--	--	--	--	
	01MW07-20130402	04/02/13	<1	7.9	<1	<1	<1	0.75	--	--	--	--	--	--	--	--	--	--	
	MTCA Cleanup Level for Groundwater			5 <sup>(2)</sup>	5 <sup>(2)</sup>	16 <sup>(3)</sup>	160 <sup>(3)</sup>	400 <sup>(3)</sup>	0.2 <sup>(2)</sup>	NE	80 <sup>(3)</sup>	7,200 <sup>(3)</sup>	800 <sup>(3)</sup>	NE	480 <sup>(3)</sup>	NE	NE	NE	NE



Table 9  
Groundwater Analytical Results for Selected VOCs  
TOC Holdings Co.  
ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)																		
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Hexane	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene	2-Butanone		
ASKO Hydraulic Property																					
Shallow Water-Bearing Zone																					
01MW15	01-MW-15-20060620	06/20/06	<0.200	7.13	3.13	<0.200	<0.200	5.47	<0.200	<0.500	<10.0	<0.500	<0.200	<1.00	<0.500	<0.200	<0.200	<0.500	<2.00		
	01MW15-20061212	12/12/06	<1	5.9	9.2	<1	<1.00	5.6	<1	<1	<10	<1	--	--	<1	<1	<1	<1	<10		
	01MW15-20090127	01/27/09	<1	23	14	<1	<1	3.8	--	--	--	--	--	--	--	--	--	--	--		
	01MW15-20090407	04/07/09	<1	34	17	<1	<1	4.9	--	--	--	--	--	--	--	--	--	--	--		
	01MW15-20090708	07/08/09	<1	<1	<1	<1	<1	5.6	--	--	--	--	--	--	--	--	--	--	--		
	01MW15-20100127	01/27/10	<1	3.6	7.4	<1	<1	5.4	--	--	--	--	--	--	--	--	--	--	--		
	01MW15-20100407	04/07/10	<1	3.0	2.1	<1	<1	6.8	--	--	--	--	--	--	--	--	--	--	--		
	01MW15-20100713	07/13/10	<1	3.6	2.9	<1	<1	6.5	--	--	--	--	--	--	--	--	--	--	--		
	01MW15-20110111	01/11/11	<1	2.1	5.2	<1	<1	7.4	--	--	--	--	--	--	--	--	--	--	--		
	01MW15-20110412	04/12/11	<1	2.7	2.2	<1	<1	6.7	--	--	--	--	--	--	--	--	--	--	--		
	01MW15-20110824	08/24/11	<1	1.8	3.7	<1	<1	11	--	--	--	--	--	--	--	--	--	--	--		
	01MW15-20111206	12/06/11	<1	1.3	1.8	<1	<1	6.9	--	--	--	--	--	--	--	--	--	--	--		
	01MW15-20120404	04/04/12	<1	2.1	2.2	<1	<1	6.5	--	--	--	--	--	--	--	--	--	--	--		
01MW15-20121011	10/11/12	<1	1.3	1.5	<1	<1	7.7	--	--	--	--	--	--	--	--	--	--	--			
01MW15-20130403	04/03/13	<1	1.9	5.1	<1	<1	12	--	--	--	--	--	--	--	--	--	--	--			
01MW44	01MW44-20060927	09/27/06	<0.200	440	41.7	1.23	0.770	8.02	<0.200	<0.500	<10.0	<0.500	<0.200	<1.00	<0.500	<0.200	<0.200	<0.500	<2.00		
	01MW44-20061212	12/12/06	<1	720 <sup>98</sup>	69	<1	1.2	7.6	<1	<1	<10	<1	--	--	<1	<1	<1	<1	<10		
	MW-99-20061211	12/12/06	<1	690 <sup>98</sup>	67	<1	1.1	7.2	--	--	--	--	--	--	--	--	--	--	--		
	01MW44-20090127	01/27/09	<1	1,200	86	<1	1.4	11	--	--	--	--	--	--	--	--	--	--	--		
	01MW44-20090407	04/07/09	<1	1,200	70	<1	<1	10	--	--	--	--	--	--	--	--	--	--	--		
	01MW44-20090708	07/08/09	<1	1,300	68	<1	<1	6.9	--	--	--	--	--	--	--	--	--	--	--		
	01MW44-20100126	01/26/10	<1	1,500	120	1.6	1.9	11	--	--	--	--	--	--	--	--	--	--	--		
	01MW44-20100408	04/08/10	<1	1,300	94	1.1	1.6	11	--	--	--	--	--	--	--	--	--	--	--		
	01MW44-20100708	07/08/10	<1	1,500	100	1.5	1.6	9.4	--	--	--	--	--	--	--	--	--	--	--		
	01MW44-20110111	01/11/11	<1	1,400	83	1.5	1.6	12	--	--	--	--	--	--	--	--	--	--	--		
	01MW44-20110412	04/12/11	<1	780	60	<1	<1	11	--	--	--	--	--	--	--	--	--	--	--		
	01MW44-20110824	08/24/11	<1	750	49	<1	<1	7.2	--	--	--	--	--	--	--	--	--	--	--		
	01MW44-20111212	12/12/11	<1	1,300	92	2.2	1.3	12	--	--	--	--	--	--	--	--	--	--	--		
	01MW44-20120404	04/04/12	<1	1,200	95	1.4	1.3	11	--	--	--	--	--	--	--	--	--	--	--		
	01MW44-20120919	09/19/12	<1	630	67	<1	<1	7.7	--	--	--	--	--	--	--	--	--	--	--		
01MW44-20121011	10/11/12	<10	1,400	99	<10	<10	12	--	--	--	--	--	--	--	--	--	--	--			
01MW44-20130403	04/03/13	<1	1,300	90	1.9	<1	12	--	--	--	--	--	--	--	--	--	--	--			
MTCA Cleanup Level for Groundwater			5 <sup>(2)</sup>	5 <sup>(2)</sup>	16 <sup>(3)</sup>	160 <sup>(3)</sup>	400 <sup>(3)</sup>	0.2 <sup>(2)</sup>	NE	80 <sup>(3)</sup>	7,200 <sup>(3)</sup>	800 <sup>(3)</sup>	NE	480 <sup>(3)</sup>	NE	NE	NE	NE	4,800 <sup>(3)</sup>		



Table 9  
Groundwater Analytical Results for Selected VOCs  
TOC Holdings Co.  
ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)																	
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Hexane	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene	2-Butanone	
<b>ASKO Hydraulic Property</b>																				
<b>Shallow Water-Bearing Zone</b>																				
01MW45	01MW45-20060927	09/27/06	<0.200	97.6	16.3	0.24	<0.200	2.36	<0.200	<0.500	<10.0	<0.500	<0.200	<1.00	<0.500	<0.200	<0.200	<0.500	<2.00	
	01MW45-20061212	12/12/06	<1	270 <sup>ns</sup>	41	<1	<1	2.4	<1	<1	<10	<1	--	--	<1	<1	<1	<1	<10	
	01MW45-20090128	01/28/09	<1	380	53	<1	<1	2.3	--	--	--	--	--	--	--	--	--	--	--	--
	01MW45-20090407	04/07/09	<1	440	74	<1	<1	3.1	--	--	--	--	--	--	--	--	--	--	--	--
	01MW45-20090707	07/07/09	<1	400	63	<1	<1	2.4	--	--	--	--	--	--	--	--	--	--	--	--
	01MW45-20100128	01/28/10	<1	360	80	<1	<1	2.4	--	--	--	--	--	--	--	--	--	--	--	--
	01MW45-20100408	04/08/10	<1	290	130	<1	<1	2.6	--	--	--	--	--	--	--	--	--	--	--	--
	01MW45-2010708	07/08/10	<1	430	110	<1	<1	2.3	--	--	--	--	--	--	--	--	--	--	--	--
	01MW45-20110111	01/11/11	<1	550	83	<1	<1	3.6	--	--	--	--	--	--	--	--	--	--	--	--
	01MW45-20110412	04/12/11	<1	310	75	<1	<1	2.2	--	--	--	--	--	--	--	--	--	--	--	--
	01MW45-20110824	08/24/11	<1	440	86	<1	<1	2.3	--	--	--	--	--	--	--	--	--	--	--	--
	01MW45-20111209	12/09/11	<1	490	98	<1	<1	2.5	--	--	--	--	--	--	--	--	--	--	--	--
	01MW45-20120404	04/04/12	<1	410	88	<1	<1	2.1	--	--	--	--	--	--	--	--	--	--	--	--
	01MW45-20121011	10/11/12	<1	360	72	<1	<1	2.2	--	--	--	--	--	--	--	--	--	--	--	--
01MW45-20130403	04/03/13	<1	410	76	<1	<1	2.5	--	--	--	--	--	--	--	--	--	--	--	--	
01MW46	01MW46-20060927	09/27/06	<0.200	0.31	15.9	<0.200	<0.200	6.05	<0.200	<0.500	<10.0	<0.500	<0.200	<1.00	<0.500	<0.200	<0.200	<0.500	<2.00	
	01MW46-20061212	12/12/06	<1	2.90	<1	<1	<1	4.0	<1	<1	<10	<1	--	--	<1	<1	<1	<1	<10	
	01MW46-20090127	01/27/09	<1	1.1	<1	<1	<1	8.0	--	--	--	--	--	--	--	--	--	--	--	
	01MW46-20090407	04/07/09	<1	1.9	<1	<1	<1	8.5	--	--	--	--	--	--	--	--	--	--	--	
	01MW46-20090706	07/06/09	<1	1.7	<1	<1	<1	8.0	--	--	--	--	--	--	--	--	--	--	--	
	01MW46-20100126	01/26/10	<1	4.6	<1	<1	<1	6.9	--	--	--	--	--	--	--	--	--	--	--	
	01MW46-20100406	04/06/10	<1	2.9	<1	<1	<1	7.1	--	--	--	--	--	--	--	--	--	--	--	
	01MW46-20100713	07/13/10	<1	2.4	1.7	<1	<1	6.5	--	--	--	--	--	--	--	--	--	--	--	
	01MW46-20110112	01/12/11	<1	1.4	4.5	<1	<1	8.7	--	--	--	--	--	--	--	--	--	--	--	
	01MW46-20110411	04/11/11	<1	1.0	7.1	<1	<1	7.5	--	--	--	--	--	--	--	--	--	--	--	
	01MW46-20110825	08/25/11	<1	1.1	13	<1	<1	8.5	--	--	--	--	--	--	--	--	--	--	--	
	01MW46-20111206	12/06/11	<1	<1	16	<1	<1	8.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW46-20120404	04/04/12	<1	1.2	22	<1	<1	9.3	--	--	--	--	--	--	--	--	--	--	--	
	01MW46-20121011	10/11/12	<1	<1	33	<1	<1	9.7	--	--	--	--	--	--	--	--	--	--	--	
01MW46-20130403	04/03/13	<1	<1	50	<1	1.1	8.8	--	--	--	--	--	--	--	--	--	--	--		
01MW55	01MW55-20081125	11/25/08	<1	15,000	980	12	17	170	--	--	--	--	--	--	--	--	--	--	--	
	01MW55-20090127	01/27/09	1.9	20,000	1,500	11	15	220	--	--	--	--	--	--	--	--	--	--	--	
	01MW55-20090407	04/07/09	2.1	19,000	1,400	12	<1	210	--	--	--	--	--	--	--	--	--	--	--	
	01MW55-20090707	07/07/09	2.2	18,000	1,300	11	15	210 <sup>ns</sup>	--	--	--	--	--	--	--	--	--	--	--	
	01MW55-20100126	01/26/10	2.7	17,000	1,600	11	14	140	--	--	--	--	--	--	--	--	--	--	--	
	01MW55-20100408	04/08/10	3.2	6,800	740	13	14	170	--	--	--	--	--	--	--	--	--	--	--	
	01MW55-20100709	07/09/10	5.0	4,900	600	15	14	140	--	--	--	--	--	--	--	--	--	--	--	
	01MW55-20110112	01/12/11	6.2	5,500	580	16	13	150	--	--	--	--	--	--	--	--	--	--	--	
	01MW55-20110413	04/13/11	4.3	4,100	440	13	7.4	98	--	--	--	--	--	--	--	--	--	--	--	
	01MW55-20110825	08/25/11	4.2	4,800	460	14	11	130	--	--	--	--	--	--	--	--	--	--	--	
	01MW55-20111209	12/09/11	4.4	6,200	530	16	13	140	--	--	--	--	--	--	--	--	--	--	--	
	01MW55-20120404	04/04/12	4.5	4,100	340	12	9.8	87	--	--	--	--	--	--	--	--	--	--	--	
	01MW55-20121011	10/11/12	<10	3,000	260	<10	<10	3.6	--	--	--	--	--	--	--	--	--	--	--	
	01MW55-20130403	04/03/13	<10	4,000	370	<100	<100	87	--	--	--	--	--	--	--	--	--	--	--	
MTCA Cleanup Level for Groundwater			5 <sup>(2)</sup>	5 <sup>(2)</sup>	16 <sup>(3)</sup>	160 <sup>(3)</sup>	400 <sup>(3)</sup>	0.2 <sup>(2)</sup>	NE	80 <sup>(3)</sup>	7,200 <sup>(3)</sup>	800 <sup>(3)</sup>	NE	480 <sup>(3)</sup>	NE	NE	NE	NE	4,800 <sup>(3)</sup>	



Table 9  
Groundwater Analytical Results for Selected VOCs  
TOC Holdings Co.  
ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)																
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Hexane	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene	2-Butanone
ASKO Hydraulic Property																			
Shallow Water-Bearing Zone																			
01MW56	01MW56-20081125	11/25/08	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW56-20090127	01/27/09	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW56-20110412	04/12/11	<1	<1	<1	<1	<1	0.20	--	--	--	--	--	--	--	--	--	--	--
	01MW56-20110825	08/25/11	<1	<1	<1	<1	<1	0.30	--	--	--	--	--	--	--	--	--	--	--
	01MW56-20111206	12/06/11	<1	<1	<1	<1	<1	0.22	--	--	--	--	--	--	--	--	--	--	--
	01MW56-20120403	04/03/12	<1	<1	<1	<1	<1	0.28	--	--	--	--	--	--	--	--	--	--	--
	01MW56-20121010	10/10/12	<1	<1	<1	<1	<1	0.27	--	--	--	--	--	--	--	--	--	--	--
01MW58	01MW58-20081125	11/25/08	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW58-20090128	01/28/09	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW58-20090407	04/07/09	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW58-20090706	07/06/09	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW58-20100126	01/26/10	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW58-20100407	04/07/10	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW58-20100713	07/13/10	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW58-20110111	01/11/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW58-20110412	04/12/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW58-20111206	12/06/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW58-20120404	04/04/12	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW58-20121010	10/10/12	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW58-20130402	04/02/13	<1	<1	<1	<1	<1	0.33	--	--	--	--	--	--	--	--	--	--	--
01MW60	01MW60-20090108	01/08/09	<1	41	1.6	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW60-20090129	01/29/09	<1	6.3	<1	<1	<1	0.32	--	--	--	--	--	--	--	--	--	--	--
	01MW60-20090407	04/07/09	<1	17	<1	<1	<1	0.23	--	--	--	--	--	--	--	--	--	--	--
	01MW60-20090709	07/09/09	<1	7.6	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW60-20100128	01/28/10	<1	8.9	<1	<1	<1	0.30	--	--	--	--	--	--	--	--	--	--	--
	01MW60-20100408	04/08/10	<1	42	<5	<1	<1	0.31	--	--	--	--	--	--	--	--	--	--	--
	01MW60-20100713	07/13/10	<1	18	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW60-20110113	01/13/11	<1	26	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW60-20100415	04/15/11	<1	4.9	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW60-20110824	08/24/11	<1	4.0	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW60-20111207	12/07/11	<1	29	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW60-20120404	04/04/12	<1	6.5	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW60-20121010	10/10/12	<1	2.6	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
01MW60-20130402	04/02/13	<1	4.5	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
MTCA Cleanup Level for Groundwater			5 <sup>(2)</sup>	5 <sup>(2)</sup>	16 <sup>(3)</sup>	160 <sup>(3)</sup>	400 <sup>(3)</sup>	0.2 <sup>(2)</sup>	NE	80 <sup>(3)</sup>	7,200 <sup>(3)</sup>	800 <sup>(3)</sup>	NE	480 <sup>(3)</sup>	NE	NE	NE	NE	4,800 <sup>(3)</sup>



Table 9  
Groundwater Analytical Results for Selected VOCs  
TOC Holdings Co.  
ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)																	
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Hexane	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene	2-Butanone	
ASKO Hydraulic Property																				
Shallow Water-Bearing Zone																				
01MW61	01MW61-20090108	01/08/09	<1	<1	<1	<1	<1	0.37	-	-	-	-	-	-	-	-	-	-	-	
	01MW61-20090129	01/29/09	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW61-20090407	04/07/09	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW61-20090709	07/09/09	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW61-20100128	01/28/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW61-20100408	04/08/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
	01MW61-20100708	07/08/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
	01MW61-20110111	01/11/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
	01MW61-20110414	04/14/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
	01MW61-20110823	08/23/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
	01MW61-20111208	12/08/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
	01MW61-20120403	04/03/12	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-
01MW61-20121009	10/09/12	<1	<1	<1	<1	<1	<0.2	<1	<1	<3	-	-	<1	-	-	-	-	-	-	
01MW61-20130402	04/02/13	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	
01MW62	01MW62-20090108	01/08/09	<1	59	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW62-20090129	01/29/09	<1	75	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW62-20090407	04/07/09	<1	1,300	1.7	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW97-20090407 (DUP)	04/07/09	<1	3,900	4.7	<1	<1	0.26 <sup>(3)</sup>	-	-	-	-	-	-	-	-	-	-	-	
	01MW62-20090709	07/09/09	<1	220	1.8	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW62-20100128	01/28/10	<1	570	4.5	<1	<1	0.36	-	-	-	-	-	-	-	-	-	-	-	
	01MW62-20100407	04/07/10	<1	1,200	10	<1	<1	0.5	-	-	-	-	-	-	-	-	-	-	-	
	01MW62-20100708	07/08/10	<1	450	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW62-20110113	01/13/11	<1	1,400	6.1	<1	<1	0.53	-	-	-	-	-	-	-	-	-	-	-	
	01MW62-20110415	04/15/11	24	1,600	<10	<10	<10	<2	-	-	-	-	-	-	-	-	-	-	-	
	01MW62-20110824	08/24/11	<1	2,500	5.2	<1	<1	0.28	-	-	-	-	-	-	-	-	-	-	-	
	01MW62-20111208	12/08/11	<1	330	1.8	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW62-20120404	04/04/12	<1	390	2.9	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW62-20121011	10/11/12	<1	390	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
	01MW62-20130402	04/02/13	<4.3 <sup>1</sup>	890	<4.5 <sup>1</sup>	<50	<50	<3.5 <sup>1</sup>	-	-	-	-	-	-	-	-	-	-	-	
01MW62-20130510	05/10/13	<1	360	2.1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-		
MTCA Cleanup Level for Groundwater			5 <sup>(2)</sup>	5 <sup>(2)</sup>	16 <sup>(3)</sup>	160 <sup>(3)</sup>	400 <sup>(3)</sup>	0.2 <sup>(2)</sup>	NE	80 <sup>(3)</sup>	7,200 <sup>(3)</sup>	800 <sup>(3)</sup>	NE	480 <sup>(3)</sup>	NE	NE	NE	NE	4,800 <sup>(3)</sup>	



Table 9  
Groundwater Analytical Results for Selected VOCs  
TOC Holdings Co.  
ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)																	
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Hexane	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene	2-Butanone	
<b>ASKO Hydraulic Property</b>																				
<b>Shallow Water-Bearing Zone</b>																				
01MW63	01MW63-20090108	01/08/09	<1	7,400	140	4.0	3.3	23	--	--	--	--	--	--	--	--	--	--	--	
	MW99-20090108 (DUP)	01/08/09	<1	7,700	140	4.0	3.8	24	--	--	--	--	--	--	--	--	--	--	--	
	01MW63-20090129	01/29/09	<1	8,800	200	3.8	<1	15	--	--	--	--	--	--	--	--	--	--	--	
	01MW96-20090129 (DUP)	01/29/09	<1	8,700	190	3.8	2.2	15	--	--	--	--	--	--	--	--	--	--	--	
	01MW63-20090407	04/07/09	<1	12,000	330	3.6	<1	77	--	--	--	--	--	--	--	--	--	--	--	
	01MW63-20090708	07/08/09	<1	9,500	470	3.9	7.5	100	--	--	--	--	--	--	--	--	--	--	--	
	01MW96-20090708 (DUP)	07/08/09	<1	9,500	470	3.8	7.7	100	--	--	--	--	--	--	--	--	--	--	--	
	01MW63-20100127	01/27/10	<1	13,000	490	5.0	11	100	--	--	--	--	--	--	--	--	--	--	--	
	01MW97-20100127 (DUP)	01/27/10	<1	13,000	480	5.1	10	110	--	--	--	--	--	--	--	--	--	--	--	
	01MW63-20100408	04/08/10	<1	14,000	440	5.8	12	130	--	--	--	--	--	--	--	--	--	--	--	
	01MW63-20100709	07/09/10	<1	11,000	590	5.2	11	110	--	--	--	--	--	--	--	--	--	--	--	
	01MW97-20100709 (DUP)	07/09/10	<1	11,000	550	5.4	10	110	--	--	--	--	--	--	--	--	--	--	--	
	01MW63-20110111	01/11/11	<1	10,000	590	5.9	12	150	--	--	--	--	--	--	--	--	--	--	--	
	FD04-20110111 (DUP)	01/11/11	<1	10,000	550	5.5	9.9	110	--	--	--	--	--	--	--	--	--	--	--	
	01MW63-20110414	04/14/11	<1	11,000	610	5.0	7.5	82	--	--	--	--	--	--	--	--	--	--	--	
	FD04-20110414 (DUP)	04/14/11	<1	11,000	620	4.0	7.1	65	--	--	--	--	--	--	--	--	--	--	--	
	01MW63-20110825	08/25/11	<1	10,000	580	5.9	9.5	120	--	--	--	--	--	--	--	--	--	--	--	
	FD04-20110825 (DUP)	08/25/11	<1	9,900	570	6.0	9.2	110	--	--	--	--	--	--	--	--	--	--	--	
	01MW63-20111209	12/09/11	<1	9,700	460	5.8	7.8	89	--	--	--	--	--	--	--	--	--	--	--	
	FD04-20111209 (DUP)	12/09/11	<1	10,000	440	5.7	8.1	94	--	--	--	--	--	--	--	--	--	--	--	
01MW63-20120404	04/04/12	<1	8,800	460	5.5	8.1	76	--	--	--	--	--	--	--	--	--	--	--		
FD04-20120404 (DUP)	04/04/12	<1	9,100	460	5.6	7.9	75	--	--	--	--	--	--	--	--	--	--	--		
01MW63-20121011	10/11/12	<100	8,300	430	<100	<100	80	--	--	--	--	--	--	--	--	--	--	--		
FD04-20121011 (DUP)	10/11/12	<100	8,700	460	<100	<100	80	--	--	--	--	--	--	--	--	--	--	--		
01MW63-20130403	04/03/13	<100	9,000	530	<100	<100	96	--	--	--	--	--	--	--	--	--	--	--		
FD04-20130403 (DUP)	04/03/13	<100	9,600	540	<100	<100	110	--	--	--	--	--	--	--	--	--	--	--		
01MW64	01MW64-20090407	04/07/09	<1	9.0	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW64-20090709	07/09/09	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW64-20100127	01/27/10	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW64-20100406	04/06/10	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW64-20100708	07/08/10	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW64-20110112	01/12/11	<1	1.1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW64-20110414	04/14/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW64-20110823	08/23/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW64-20111208	12/08/11	<1	12	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW64-20120404	04/04/12	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW64-20121010	10/10/12	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW64-20130402	04/02/13	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
<b>MTCA Cleanup Level for Groundwater</b>			5 <sup>(2)</sup>	5 <sup>(2)</sup>	16 <sup>(3)</sup>	160 <sup>(3)</sup>	400 <sup>(3)</sup>	0.2 <sup>(2)</sup>	NE	80 <sup>(3)</sup>	7,200 <sup>(3)</sup>	800 <sup>(3)</sup>	NE	480 <sup>(3)</sup>	NE	NE	NE	NE	4,800 <sup>(3)</sup>	



Table 9  
Groundwater Analytical Results for Selected VOCs  
TOC Holdings Co.  
ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)																
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Hexane	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene	2-Butanone
<b>ASKO Hydraulic Property</b>																			
<b>Shallow Water-Bearing Zone</b>																			
01MW80	01MW80-20110422	04/22/11	<1	<1	<1	<1	<1	4.8	-	-	-	-	-	-	-	-	-	-	
	01MW80-20110824	08/24/11	<1	<1	<1	<1	<1	6.0	-	-	-	-	-	-	-	-	-	-	
	01MW80-20111209	12/09/11	<1	<1	<1	<1	<1	6.7	-	-	-	-	-	-	-	-	-	-	
	01MW80-20120403	04/03/12	<1	<1	<1	<1	<1	6.5	-	-	-	-	-	-	-	-	-	-	
	01MW80-20121010	10/10/12	<1	<1	<1	<1	<1	9.1	-	-	-	-	-	-	-	-	-	-	
01MW80-20130403	04/03/13	<1	<1	2.5	<1	<1	8.5	-	-	-	-	-	-	-	-	-	-	-	
<b>ASKO Hydraulic Property</b>																			
<b>Intermediate Water-Bearing Zone</b>																			
01MW54	01MW54-20081125	11/25/08	<1	1.2	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW54-20090129	01/29/09	<1	32	3.0	<1	<1	0.89	-	-	-	-	-	-	-	-	-	-	
	01MW54-20090408	04/08/09	<1	1.0	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW54-20090709	07/09/09	<1	1.5	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW54-20100126	01/26/10	<1	1.3	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW54-20100406	04/06/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW54-20100709	07/09/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW54-20110112	01/12/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW54-20110413	04/13/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW54-20110823	08/23/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW54-20111206	12/06/11	<1	1.3	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW54-20120403	04/03/12	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW54-20121009	10/09/12	<1	<1	<1	<1	<1	<0.2	<1	<1	<3	-	-	<1	-	-	-	-	
01MW54-20130401	04/01/13	<1	1.3	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-		
01MW57	01MW57-20081125	11/25/08	<1	1.9	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW57-20090128	01/28/09	<1	1.8	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW57-20090408	04/08/09	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW57-20090707	07/07/09	<1	1.1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW57-20100126	01/26/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW57-20100406	04/06/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW57-20100713	07/13/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW57-20110111	01/11/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW57-20110412	04/12/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW57-20110823	08/23/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW57-20111206	12/06/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW57-20120403	04/03/12	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	
	01MW57-20121009	10/09/12	<1	<1	<1	<1	<1	<0.2	<1	<1	<3	-	-	<1	-	-	-	-	
01MW57-20130401	04/01/13	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-		
<b>MTCA Cleanup Level for Groundwater</b>			5 <sup>(2)</sup>	5 <sup>(2)</sup>	16 <sup>(3)</sup>	160 <sup>(3)</sup>	400 <sup>(3)</sup>	0.2 <sup>(2)</sup>	NE	80 <sup>(3)</sup>	7,200 <sup>(3)</sup>	800 <sup>(3)</sup>	NE	480 <sup>(3)</sup>	NE	NE	NE	NE	4,800 <sup>(3)</sup>





Table 9  
Groundwater Analytical Results for Selected VOCs  
TOC Holdings Co.  
ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)																
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Hexane	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene	2-Butanone
<b>ASKO Hydraulic Property</b>																			
<b>Intermediate Water-Bearing Zone</b>																			
01MW76	01MW76-20110307	03/07/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW76-20110412	04/12/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW76-20110824	08/24/11	<1	6.2	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW76-20111208	12/08/11	<1	36	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW76-20120404	04/04/12	<1	33	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW76-20121011	10/11/12	<1	14	1.6	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
01MW76-20130403	04/03/13	<1	22	3.1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
01MW77	01MW77-20110307	03/07/11	<1	1.3	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW77-20110413	04/13/11	<1	1.2	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW77-20110823	08/23/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW77-20111207	12/07/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW77-20120403	04/03/12	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW77-20121009	10/09/12	<1	<1	<1	<1	<1	<0.2	<1	<1	<3	--	--	<1	--	--	--	--	--
01MW77-20130401	04/01/13	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
01MW78	01MW78-20110307	03/07/11	<1	16	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW78-20110414	04/14/11	<1	11	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW78-20110824	08/24/11	<1	3.1	3.6	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW78-20111208	12/08/11	<1	1.1	2.2	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW78-20120404	04/04/12	<1	<1	1.5	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW78-20121010	10/10/12	<1	1.2	1.6	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
01MW78-20130401	04/01/13	<1	2.3	1.0	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
<b>ASKO Hydraulic Property</b>																			
<b>Deep Water-Bearing Zone</b>																			
01MW65	01MW65-20090408	04/08/09	<1	3.5	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW65-20090709	07/09/09	<1	3.5	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW65-20100126	01/26/10	<1	2.3	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW65-20100406	04/06/10	<1	1.1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW65-20100709	07/09/10	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW65-20110112	01/12/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW65-20110414	04/14/11	<1	1.4	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW65-20110823	08/23/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW65-20111206	12/06/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW65-20120403	04/03/12	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW65-20121009	10/09/12	<1	<1	<1	<1	<1	<0.2	<1	<1	<3	--	--	<1	--	--	--	--	--
	01MW65-20130401	04/01/13	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
<b>MTCA Cleanup Level for Groundwater</b>			5 <sup>(2)</sup>	5 <sup>(2)</sup>	16 <sup>(3)</sup>	160 <sup>(3)</sup>	400 <sup>(3)</sup>	0.2 <sup>(2)</sup>	NE	80 <sup>(3)</sup>	7,200 <sup>(3)</sup>	800 <sup>(3)</sup>	NE	480 <sup>(3)</sup>	NE	NE	NE	NE	4,800 <sup>(3)</sup>



Table 9  
Groundwater Analytical Results for Selected VOCs  
TOC Holdings Co.  
ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)																
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acetone	Isopropylbenzene	n-Butyl-benzene	n-Hexane	n-Propylbenzene	p-Isopropyltoluene	sec-Butyl-benzene	tert-Butyl-benzene	2-Butanone
<b>BNSF Parcel</b>																			
<b>Perched Water</b>																			
01MW92	01MW92-20120823	08/23/12	<1	110	100	2.2	3.0	9.3	--	--	--	--	--	--	--	--	--	--	--
	01MW92-20120905	09/05/12	<1	300	120	3.8	3.3	9.4	--	--	--	--	--	--	--	--	--	--	--
	01MW92-20130510	05/10/13	<1	6,700	420	43	6.2	5.8	--	--	--	--	--	--	--	--	--	--	--
01MW96	01MW96-20130510	05/10/13	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	FD01-20130510 (DUP)	05/10/13	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
01MW97	01MW97-20130510	05/10/13	<1	6,300	300	14	6.5	2.0	--	--	--	--	--	--	--	--	--	--	--
01MW98	01MW98-20130510	05/10/13	<1	190	19	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
<b>BNSF Parcel</b>																			
<b>Shallow Water-Bearing Zone</b>																			
01MW93	01MW93-20120823	08/23/12	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW93-20120905	09/05/12	<1	1.5	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW93-20130513	05/13/13	<1	5.5	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
01MW94	01MW94-20120823	08/23/12	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW94-20120905	09/05/12	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW94-20130510	05/10/13	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
01MW95	01MW95-20120823	08/23/12	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW95-20120905	09/05/12	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	01MW95-20130510	05/10/13	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
<b>West Waterfront Property</b>																			
<b>Shallow Water-Bearing Zone</b>																			
02MW14	02MW14-20081125	11/25/08	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	02MW14-20090127	01/27/09	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	02MW14-20090407	04/07/09	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	02MW14-20090706	07/06/09	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	02MW14-20100125	01/25/10	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	02MW14-20100405	04/05/10	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	02MW14-20100708	07/08/10	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	02MW14-20110112	01/12/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
	02MW14-20110414	04/14/11	<1	<1 <sup>ht</sup>	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--
MTCA Cleanup Level for Groundwater			5 <sup>(2)</sup>	5 <sup>(2)</sup>	16 <sup>(3)</sup>	160 <sup>(3)</sup>	400 <sup>(3)</sup>	0.2 <sup>(2)</sup>	NE	80 <sup>(3)</sup>	7,200 <sup>(3)</sup>	800 <sup>(3)</sup>	NE	480 <sup>(3)</sup>	NE	NE	NE	NE	4,800 <sup>(3)</sup>



Table 9  
Groundwater Analytical Results for Selected VOCs  
TOC Holdings Co.  
ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)																
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Hexane	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene	2-Butanone
<b>East Waterfront Property</b>																			
<b>Shallow Water-Bearing Zone</b>																			
01MW83	01MW83-20110422	04/22/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	01MW83-20110823	08/23/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	01MW83-20111209	12/09/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	01MW83-20120403	04/03/12	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
02MW13	01MW83-20130401	04/01/13	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	02MW13-20071207	12/07/07	<1	<1	<1	<1	<1	<0.2	<1	<1	<10	<1	-	<1	<1	<1	<1	<1	<10
	02MW13-20090127	01/27/09	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	02MW13-20090407	04/07/09	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	02MW13-20090706	07/06/09	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	02MW13-20100125	01/25/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	02MW13-20100406	04/06/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	02MW13-20100708	07/08/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	02MW13-20110112	01/12/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	02MW13-20110414	04/14/11	<1	<1 <sup>nt</sup>	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
<b>Bulk Terminal Property</b>																			
<b>Shallow Water-Bearing Zone</b>																			
01MW06	01-MW-06-20060620	06/20/06	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.500	<10.0	0.680	<0.200	<1.00	<0.500	<0.200	<0.200	<0.500	<2.00
	01MW06-20061212	12/12/06	<1	<1	<1	<1	<1	<0.2	<1	<1	<10	<1	-	-	<1	<1	<1	<1	<10
	01MW06-20090128	01/28/09	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	01MW06-20090407	04/07/09	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	01MW06-20090706	07/06/09	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	01MW06-20100125	01/25/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	01MW06-20100407	04/07/10	<1	<1	<1	<1	<1	0.40	-	-	-	-	-	-	-	-	-	-	-
	01MW06-20100713	07/13/10	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	01MW06-20110110	01/10/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	01MW06-20110413	04/13/11	<1	<1 <sup>β</sup>	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	01MW06-20111206	12/06/11	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	01MW06-20120405	04/05/12	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-
	01MW06-20121012	10/12/12	<1	<1	<1	<1	<1	<0.2	<100	<1	<1	<1	<3	-	-	<1	-	-	-
01MW06-20130403	04/03/13	<1	<1	<1	<1	<1	<0.2	-	-	-	-	-	-	-	-	-	-	-	
01MW08	01-MW-08-20060620	06/20/06	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.500	<10.0	<0.500	<0.200	<1.00	<0.500	<0.200	<0.200	<0.500	<2.00	
MTCA Cleanup Level for Groundwater			5 <sup>(2)</sup>	5 <sup>(2)</sup>	16 <sup>(3)</sup>	160 <sup>(3)</sup>	400 <sup>(3)</sup>	0.2 <sup>(2)</sup>	NE	80 <sup>(3)</sup>	7,200 <sup>(3)</sup>	800 <sup>(3)</sup>	NE	480 <sup>(3)</sup>	NE	NE	NE	NE	4,800 <sup>(3)</sup>



**Table 9**  
**Groundwater Analytical Results for Selected VOCs**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)																	
			PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Acetone	Isopropylbenzene	n-Butylbenzene	n-Hexane	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	tert-Butylbenzene	2-Butanone	
<b>Bulk Terminal Property</b>																				
<b>Shallow Water-Bearing Zone</b>																				
01MW59	01MW59-20081125	11/25/08	<1	<1	1.1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW59-20090129	01/29/09	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW59-20090706	07/06/09	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW59-20100125	01/25/10	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW59-20100407	04/07/10	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	
	01MW59-20100713	07/13/10	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	--
	01MW59-20110111	01/11/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	--
	01MW59-20110414	04/14/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	--
	01MW59-20111207	12/07/11	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	--
	01MW59-20120409	04/09/12	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	--
01MW59-20121012	10/12/12	<1	<1	<1	<1	<1	<0.2	<100	<1	<1	<1	<3	--	--	<1	--	--	--	--	
01MW59-20130403	04/03/13	<1	<1	<1	<1	<1	<0.2	--	--	--	--	--	--	--	--	--	--	--	--	
<b>MTCA Cleanup Level for Groundwater</b>			5 <sup>(2)</sup>	5 <sup>(2)</sup>	16 <sup>(3)</sup>	160 <sup>(3)</sup>	400 <sup>(3)</sup>	0.2 <sup>(2)</sup>	NE	80 <sup>(3)</sup>	7,200 <sup>(3)</sup>	800 <sup>(3)</sup>	NE	480 <sup>(3)</sup>	NE	NE	NE	NE	4,800 <sup>(3)</sup>	

**NOTES:**

**Red** denotes concentration exceeds MTCA cleanup level for groundwater.  
**Bold** denotes concentration below laboratory detection limit, but exceeding the MTCA cleanup level for groundwater; The detection limit has been raised due to associated analytes requiring dilution and/or historical cleanup levels that historical detection limits were based upon.

Sample analyses conducted by TestAmerica Laboratories, Inc. of Bothell, Washington, or Friedman & Bruya, Inc. of Seattle, Washington.

<sup>(1)</sup>Samples analyzed by EPA Method 8260B or 8260C.

<sup>(2)</sup>MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 720-1 Method A Cleanup Levels for Groundwater, revised November 2007.

<sup>(3)</sup>MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Groundwater, Method B, Non-Carcinogen, Standard Formula Value, CLARC Website. <https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>

**Laboratory Notes:**

<sup>\*\*</sup>The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

<sup>†</sup>The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

-- = not analyzed/not applicable

< = not detected at a concentration exceeding the laboratory reporting limit

BNSF = Burlington Northern Santa Fe Railway Company

CLARC = Cleanup Levels and Risk Calculations

DCE = dichloroethene

EPA = U.S. Environmental Protection Agency

MTCA = Washington State Model Toxics Control Act

NE = not established

PCE = tetrachloroethene

TCE = trichloroethene

VOCs = volatile organic compounds

WAC = Washington Administrative Code



**Table 10**  
**Groundwater Analytical Results for Selected Metals**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)																
			Arsenic		Barium		Cadmium		Chromium		Lead		Mercury		Selenium		Silver		
			Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	
<b>ASKO Hydraulic Property</b>																			
<b>Perched Water</b>																			
MW03	MW03-20060426	04/25/06	90.4	17.2	11.6	<10.0	<1.00	<1.00	4.11	2.68	<1.00	<1.00	<0.200	<0.200	<1.00	<1.00	<1.00	<1.00	
	MW03-20061214	12/14/06	14.5	15.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW03-20110825	08/25/11	54.0	61.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>Shallow Water-Bearing Zone</b>																			
MW01	MW01-20060426	04/26/06	4.65	3.88	16.0	12	<1.00	<1.00	<1.00	1.00	<1.00	<1.00	<0.200	<0.200	<1.00	<1.00	<1.00	<1.00	
	MW01-20060817	08/17/06	4.68	4.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW01-20061213	12/13/06	4.46	4.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW02	MW02-20060426	04/26/06	4.49	3.91	11.9	<10.0	<1.00	<1.00	<1.00	1.06	<1.00	<1.00	<0.200	<0.200	<1.00	<1.00	<1.00	<1.00	
	MW02-20060817	08/17/06	3.83	3.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW02-20061213	12/13/06	3.91	4.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW04	MW04-20060426	04/25/06	1.91	<1.00	35.2	22.6	<1.00	<1.00	<1.00	1.02	<1.00	<1.00	<0.200	<0.200	<1.00	<1.00	<1.00	<1.00	
	MW04-20060817	08/17/06	1.44	1.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW04-20061213	12/13/06	1.36	1.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW05	MW05-20060426	04/25/06	2.00	1.03	24.9	19.3	<1.00	<1.00	<1.00	1.13	<1.00	<1.00	<0.200	<0.200	<1.00	<1.00	<1.00	<1.00	
	MW05-20060817	08/17/06	1.52	1.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW05-20061213	12/13/06	1.68	1.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW06	MW06-20060425	04/25/06	1.79	1.01	16.8	10.9	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<0.200	<0.200	<1.00	<1.00	<1.00	<1.00	
	MW99-20060425	04/25/06	1.89	<1.00	15.9	11.8	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<0.200	<0.200	<1.00	<1.00	<1.00	<1.00	
	MW06-20060817	08/17/06	1.12	1.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW99-20060817	08/17/06	1.23	1.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW06-20061213	12/13/06	3.16	1.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01MW07	01MW-07	12/01/00	--	--	--	--	--	--	--	--	<0.00100	--	--	--	--	--	--	--	
	01MW-07	07/26/01	--	--	--	--	--	--	--	--	<1.00	--	--	--	--	--	--	--	
	01MW-07	10/01/01	--	--	--	--	--	--	--	--	1.11	<1.00	--	--	--	--	--	--	
	01MW-07	01/02/02	--	--	--	--	--	--	--	--	<1.00	<1.00	--	--	--	--	--	--	
	01MW-07	04/02/02	--	--	--	--	--	--	--	--	<1.00	<1.00	--	--	--	--	--	--	
	01MW-07	07/02/02	--	--	--	--	--	--	--	--	<1.00	<1.00	--	--	--	--	--	--	
<b>MTCA Cleanup Level for Groundwater</b>			5 <sup>(2)</sup>		3,200 <sup>(3)</sup>		5 <sup>(2)</sup>		50 <sup>(2)</sup>		15 <sup>(2)</sup>		2 <sup>(2)</sup>		80 <sup>(3)</sup>		80 <sup>(3)</sup>		



**Table 10**  
**Groundwater Analytical Results for Selected Metals**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)															
			Arsenic		Barium		Cadmium		Chromium		Lead		Mercury		Selenium		Silver	
			Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
<b>ASKO Hydraulic Property</b>																		
<b>Shallow Water-Bearing Zone</b>																		
<b>01MW015</b>	01MW-15	07/27/01	--	--	--	--	--	--	--	--	<1.00	--	--	--	--	--	--	--
	01MW-15	10/01/01	--	--	--	--	--	--	--	--	<1.00	<1.00	--	--	--	--	--	--
	01MW-15	01/02/02	--	--	--	--	--	--	--	--	<1.00	<1.00	--	--	--	--	--	--
	01MW-15	04/02/02	--	--	--	--	--	--	--	--	<1.00	<1.00	--	--	--	--	--	--
	01MW-15	07/02/02	--	--	--	--	--	--	--	--	<1.00	<1.00	--	--	--	--	--	--
<b>MTCA Cleanup Level for Groundwater</b>			<b>5<sup>(2)</sup></b>		<b>3,200<sup>(3)</sup></b>		<b>5<sup>(2)</sup></b>		<b>50<sup>(2)</sup></b>		<b>15<sup>(2)</sup></b>		<b>2<sup>(2)</sup></b>		<b>80<sup>(3)</sup></b>		<b>80<sup>(3)</sup></b>	

**NOTES:**

**Red** denotes concentration exceeds MTCA cleanup level for groundwater.

Data prior to 2006 from previous consultants. All other sample analyses conducted by TestAmerica Laboratories, Inc. of Bothell, Washington, or Friedman & Bruya, Inc. of Seattle, Washington.

<sup>(1)</sup>Samples analyzed by EPA Method 6010/7000.

<sup>(2)</sup>MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 720-1 Method A Cleanup Levels for Groundwater, revised November 2007.

<sup>(3)</sup>MTCA Cleanup Regulation, CLARC, Groundwater, Method B, Non-Carcinogen, Standard Formula Value, CLARC Website <<https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>>.

-- = not analyzed

< = not detected at a concentration exceeding the laboratory reporting limit

CLARC = Cleanup Levels and Risk Calculations

EPA = U.S. Environmental Protection Agency

MTCA = Washington State Model Toxics Control Act

WAC = Washington Administrative Code



**Table 11**  
**Groundwater Analytical Results for Selected PAHs**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)											cPAHs Toxicity Equivalency (micrograms per liter)						Total TEQ Groundwater Concentration <sup>(2)</sup> (micrograms per liter)					
			Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(g,h,i)perylene	Benzo(a)anthracene TEF 0.1	Chrysene TEF 0.01	Benzo(a)pyrene TEF 1	Benzo(b)fluoranthene TEF 0.1	Benzo(k)fluoranthene TEF 0.1	Indeno(1,2,3-cd)pyrene TEF 0.1		Dibenz(a,h)anthracene TEF 0.1				
<b>West Commodore Way</b>																									
<b>Shallow Water-Bearing Zone</b>																									
01MW53	01MW53-20071207	12/07/07	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
<b>ASKO Hydraulic Property</b>																									
<b>Perched Water</b>																									
MW03	MW03-20060425	04/25/06	1.29	<9.71	13.0	<9.71	<9.71	<9.71	<9.71	<9.71	<9.71	<9.71	<9.71	< 9.71	< 9.71	< 9.71	< 9.71	< 9.71	< 9.71	< 9.71	<9.71				
	MW03-20060817	08/17/06	<5.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
	MW03-20061214	12/14/06	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
<b>Shallow Water-Bearing Zone</b>																									
MW01	MW01-20060426	04/26/06	<0.500	<9.80	<9.80	<9.80	<9.80	<9.80	<9.80	<9.80	<9.80	<9.80	<9.80	< 9.80	< 9.80	< 9.80	< 9.80	< 9.80	< 9.80	< 9.80	<9.80				
	MW01-20060817	08/17/06	<0.500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
	MW01-20061213	12/13/06	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
MW02	MW02-20060426	04/26/06	<0.500	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	<10				
	MW02-20060817	08/17/06	<5.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
	MW02-20061213	12/13/06	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
MW04	MW04-20060425	04/25/06	<0.500	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	<10				
	MW04-20060817	08/17/06	<5.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
	MW04-20061213	12/13/06	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
MW05	MW05-20060425	04/25/06	<0.500	<9.90	<9.90	<9.90	<9.90	<9.90	<9.90	<9.90	<9.90	<9.90	<9.90	< 9.90	< 9.90	< 9.90	< 9.90	< 9.90	< 9.90	< 9.90	<9.90				
	MW05-20060817	08/17/06	<5.00	<9.62	<9.62	<9.62	<9.62	<9.62	<9.62	<9.62	<9.62	<9.62	<9.62	< 9.62	< 9.62	< 9.62	< 9.62	< 9.62	< 9.62	< 9.62	<9.62				
	MW05-20061213	12/13/06	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
MW06	MW06-20060425	04/25/06	<0.500	<9.71	<9.71	<9.71	<9.71	<9.71	<9.71	<9.71	<9.71	<9.71	<9.71	< 9.71	< 9.71	< 9.71	< 9.71	< 9.71	< 9.71	< 9.71	<9.71				
	MW06-20060817	08/17/06	<5.00	<9.80	<9.80	<9.80	<9.80	<9.80	<9.80	<9.80	<9.80	<9.80	<9.80	< 9.80	< 9.80	< 9.80	< 9.80	< 9.80	< 9.80	< 9.80	<9.80				
	MW06-20061213	12/13/06	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
01MW07	01-MW-07-20060620	06/20/06	<0.500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
	01MW07-20061212	12/12/06	<1.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
01MW15	01MW15	07/27/01	--	--	--	--	--	--	--	--	--	--	--	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	<0.100				
	01-MW-15-20060620	06/20/06	<0.500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
	01MW15-20061212	12/12/06	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
<b>MTCA Cleanup Level for Groundwater</b>			<b>160<sup>(3)</sup></b>			<b>960<sup>(4)</sup></b>		<b>NE</b>		<b>640<sup>(4)</sup></b>		<b>NE</b>		<b>4,800<sup>(4)</sup></b>			<b>640<sup>(4)</sup></b>			<b>480<sup>(4)</sup></b>		<b>NE</b>		<b>0.1<sup>(3)</sup></b>	



**Table 11**  
**Groundwater Analytical Results for Selected PAHs**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well Identification	Sample Identification	Date Sampled	Analytical Results <sup>(1)</sup> (micrograms per liter)										cPAHs Toxicity Equivalency (micrograms per liter)							Total TEQ Groundwater Concentration <sup>(2)</sup> (micrograms per liter)	
			Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(g,h,i)perylene	Benz(a) anthracene TEF 0.1	Chrysene TEF 0.01	Benzo(a)pyrene TEF 1	Benzo(b) fluoranthene TEF 0.1	Benzo(k) fluoranthene TEF 0.1	Indeno(1,2,3-cd)pyrene TEF 0.1		Dibenz(a,h) anthracene TEF 0.1
<b>ASKO Hydraulic Property</b>																					
<b>Shallow Water-Bearing Zone</b>																					
01MW44	01MW44-20060927	09/27/06	<2.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW44-20061212	12/12/06	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01MW45	01MW45-20060927	09/27/06	<2.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW45-20061212	12/12/06	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01MW46	01MW46-20060927	09/27/06	<2.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW46-20061212	12/12/06	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>MTCA Cleanup Level for Groundwater</b>			<b>160<sup>(3)</sup></b>	<b>960<sup>(4)</sup></b>	<b>NE</b>	<b>640<sup>(4)</sup></b>	<b>NE</b>	<b>4,800<sup>(4)</sup></b>	<b>640<sup>(4)</sup></b>	<b>480<sup>(4)</sup></b>	<b>NE</b>	<b>0.1<sup>(3)</sup></b>									

**NOTES:**

<sup>(1)</sup>Samples analyzed by EPA Method 8260B or 8270D unless otherwise noted.

<sup>(2)</sup>Analytical result for each individual cPAH is multiplied by the TEF and all seven cPAH values are added. When analytical results are reported as less than the LRL, half of the LRL is used for the calculation, as shown.

<sup>(3)</sup>MTCA Cleanup Regulation, Chapter 173-340-900 of WAC, Table 720-1 Method A Cleanup Levels For Groundwater.

<sup>(4)</sup>MTCA Cleanup Regulation, Chapter 173-340 of WAC, CLARC, Groundwater, Method B, Non-Carcinogen, Standard Formula Value, CLARC Website <<https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx>>.

-- = not analyzed

< = not detected at a concentration exceeding the laboratory reporting limit

CLARC = Cleanup Levels and Risk Calculations

cPAH = carcinogenic polycyclic aromatic hydrocarbon

EPA = U.S. Environmental Protection Agency

LRL = laboratory reporting limit

MTCA = Washington State Model Toxics Control Act

NE = not established

PAHs = polycyclic aromatic hydrocarbons

TEF = toxicity equivalency factor

TEQ = toxicity equivalent

WAC = Washington Administrative Code





**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>Bulk Terminal Property</b>									
<b>Shallow Water-Bearing Zone</b>									
01MW01	Northwest of Former Tank Yard	46.48	10	25	06/20/06	--	14.13	--	32.35
		46.39			12/11/06	--	13.60	--	32.88
					09/05/08	--	14.85	--	31.63
					01/26/09	--	13.45	--	32.94
					04/06/09	--	12.90	--	33.49
					07/06/09	--	13.72	--	32.67
					10/06/09	--	14.85	--	31.54
					01/25/10	--	12.86	--	33.53
					04/05/10	--	12.70	--	33.69
					07/06/10	--	13.43	--	32.96
					09/22/10	--	13.76	--	32.63
					01/06/11	--	11.50	--	34.89
					04/11/11	--	11.82	--	34.57
					08/22/11	--	13.72	--	32.67
					12/05/11	--	13.85	--	32.54
					04/02/12	--	12.05	--	34.34
					10/08/12	--	15.30	--	31.09
					01/28/13	--	7.20	--	39.19
					02/01/13	--	6.13	--	40.26
					04/05/13	--	8.02	--	38.37
01MW04	Former HQ USTs	45.08	10	25	06/20/06	--	14.91	--	30.17
		45.01			12/11/06	--	13.15	--	31.93
					09/05/08	--	14.62	--	30.46
					01/26/09	--	14.06	--	30.95
					04/06/09	--	10.34	--	34.67
					07/06/09	--	14.74	--	30.27
					10/06/09	--	15.58	--	29.43
					01/25/10	--	11.60	--	33.41
					04/05/10	--	8.52	--	36.49
					07/06/10	--	14.32	--	30.69
					01/06/11	--	11.81	--	33.20
					04/11/11	--	12.39	--	32.62
					08/22/11	--	14.96	--	30.05
					12/05/11	--	13.95	--	31.06
					04/02/12	--	8.03	--	36.98
					10/08/12	--	15.41	--	29.60
					01/28/13	--	9.25	--	35.76
					02/01/13	--	6.79	--	38.22
					04/05/13	--	10.55	--	34.46
					01MW05	Former HQ USTs	45.40	10	25
04/01/04	15.47	19.57	4.10	29.11					
07/15/04	15.47	19.57	4.10	29.11					
11/17/04	16.25	18.65	2.40	28.67					
10/24/05	16.38	19.45	3.07	28.41					
06/20/06	15.67	18.43	2.76	29.18					
12/11/06	15.94	15.94	0.00	29.46					
09/05/08	15.56	19.09	3.53	29.13					
01/26/09	15.15	16.71	1.56	29.82					
04/06/09	13.85	15.35	1.50	31.13					
07/06/09	15.60	18.16	2.56	29.17					
01/25/10	13.73	15.90	2.17	31.12					
04/05/10	13.21	14.67	1.46	31.78					
07/06/10	15.12	17.89	2.77	29.61					
01/06/11	13.14	16.81	3.67	31.41					
04/11/11	14.63	17.70	3.07	30.04					
08/22/11	15.43	20.00	4.57	28.94					
12/05/11	14.69	18.92	4.23	29.74					
04/02/12	12.77	15.04	2.27	32.06					
10/08/12	15.69	20.76	5.07	28.58					
10/08/12	10.03	15.06	5.03	34.24					
04/05/13	12.26	16.20	3.94	32.23					



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>Bulk Terminal Property</b>									
<b>Shallow Water-Bearing Zone</b>									
01MW06	New Barrel Shed	47.74	10	25	06/20/06	--	15.92	--	31.82
		47.73			12/11/06	--	15.24	--	32.50
					09/05/08	--	15.85	--	31.89
					01/26/09	--	15.50	--	32.23
					04/06/09	--	14.64	--	33.09
					07/06/09	--	15.59	--	32.14
					01/25/10	--	14.47	--	33.26
					04/05/10	--	14.05	--	33.68
					07/06/10	--	15.23	--	32.50
					01/06/11	--	13.41	--	34.32
					04/11/11	--	13.85	--	33.88
					08/22/11	--	15.57	--	32.16
					12/05/11	--	15.51	--	32.22
					04/02/12	--	13.86	--	33.87
					09/04/12	--	15.83	--	31.90
					10/08/12	--	16.18	--	31.55
					02/01/13	--	9.76	--	37.97
04/05/13	--	11.60	--	36.13					
01MW08	Former HQ USTs	45.21	10	25	06/20/06	--	16.43	--	28.78
		45.15			12/11/06	--	15.70	--	29.51
					09/05/08	--	16.33	--	28.88
					01/26/09	--	15.82	--	29.33
					04/06/09	--	14.76	--	30.39
					07/06/09	--	16.31	--	28.84
					01/25/10	--	14.76	--	30.39
					04/05/10	--	14.35	--	30.80
					07/06/10	--	15.94	--	29.21
					01/06/11	--	14.31	--	30.84
					04/11/11	--	14.84	--	30.31
					08/22/11	--	16.40	--	28.75
					12/05/11	--	15.84	--	29.31
					04/02/12	--	14.10	--	31.05
					09/04/12	--	16.36	--	28.79
					10/08/12	--	16.74	--	28.41
					02/01/13	--	11.93	--	33.22
04/05/13	--	13.60	--	31.55					
01MW12	Former Tank Yard	45.84	5	20	06/20/06	--	6.82	--	39.02
		45.78			12/11/06	--	5.49	--	40.35
					09/05/08	--	6.49	--	39.35
					01/26/09	--	6.22	--	39.56
					04/06/09	--	3.88	--	41.90
					07/06/09	--	7.11	--	38.67
					10/06/09	--	7.62	--	38.16
					01/25/10	--	4.42	--	41.36
					04/05/10	--	3.99	--	41.79
					07/06/10	--	9.05	--	36.73
					09/22/10	--	10.02	--	35.76
					01/06/11	--	6.33	--	39.45
					04/11/11	--	5.23	--	40.55
					08/22/11	--	9.37	--	36.41
					12/05/11	--	7.61	--	38.17
					04/02/12	Not measured; wellhead submerged			
					10/08/12	Not measured; inaccessible			
04/05/13	Well damaged								
01MW13	Former Tank Yard	46.36	15	20	06/20/06	--	6.62	--	39.74
		46.35			12/11/06	--	6.65	--	39.71
					09/05/08	--	--	--	--
					01/26/09	--	6.64	--	39.71
					04/06/09	--	5.08	--	41.27
					07/06/09	--	6.77	--	39.58
					10/06/09	--	7.78	--	38.57
					01/25/10	--	4.79	--	41.56
					04/05/10	--	4.09	--	42.26



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>Bulk Terminal Property</b>									
<b>Shallow Water-Bearing Zone</b>									
01MW13 (continued)	Former Tank Yard	46.35	15	20	07/06/10	--	7.68	--	38.67
					09/22/10	--	8.75	--	37.60
					01/06/11	--	6.13	--	40.22
					04/11/11	--	4.99	--	41.36
					08/22/11	--	8.35	--	38.00
					12/05/11	--	7.59	--	38.76
					04/02/12	--	4.30	--	42.05
					10/08/12	--	9.09	--	37.26
					02/01/13	--	4.25	--	42.10
04/05/13	--	4.66	--	41.69					
01MW14	Former PCP Mixing AST	46.15	5	15	07/01/01	--	--	6.7	--
<b>D E C O M M I S S I O N E D 2 0 0 2</b>									
01MW17	Upgradient (27th Avenue West and West Fort Street)	59.42	15	30	07/02/01	--	19.21	--	40.21
					12/11/06	--	19.31	--	40.11
					09/05/08	--	19.81	--	39.61
					01/26/09	--	19.51	--	39.82
					04/06/09	--	18.47	--	40.86
					07/06/09	--	19.24	--	40.09
					10/06/09	--	20.32	--	39.01
					01/25/10	--	17.86	--	41.47
		04/05/10			--	16.97	--	42.36	
		07/06/10			--	18.71	--	40.62	
		01/06/11			--	17.90	--	41.43	
		04/11/11			--	16.92	--	42.41	
		08/22/11			--	19.49	--	39.84	
		12/05/11			--	19.64	--	39.69	
		04/02/12			--	17.68	--	41.65	
		10/08/12			--	19.83	--	39.50	
02/01/13	--	17.09	--	42.24					
04/05/13	--	16.82	--	42.51					
01MW18	Former HQ USTs	45.18	5	20	07/02/02	--	--	0.01 <sup>(3)</sup>	--
					06/20/06	--	16.33	--	28.85
					12/11/06	--	15.42	--	29.76
					09/05/08	--	16.15	--	29.03
					01/26/09	--	15.65	--	29.44
					04/06/09	--	14.25	--	30.84
					07/06/09	--	16.17	--	28.92
					01/25/10	--	14.33	--	30.76
		04/05/10			--	13.70	--	31.39	
		07/06/10			--	15.78	--	29.31	
		01/06/11			--	13.99	--	31.10	
		04/11/11			--	14.57	--	30.52	
		08/22/11			--	16.34	--	28.75	
		12/05/11			--	15.58	--	29.51	
		04/02/12			--	13.42	--	31.67	
		10/08/12			--	16.67	--	28.42	
02/01/13	--	11.37	--	33.72					
04/05/13	--	13.38	--	31.71					
01MW19	Former HQ USTs	45.35	5	20	06/20/06	--	16.40	--	28.95
					12/11/06	--	15.58	--	29.77
					09/05/08	--	16.23	--	29.12
					01/26/09	--	15.69	--	29.58
					04/06/09	--	14.49	--	30.78
					07/06/09	--	16.22	--	29.05
					01/25/10	--	14.49	--	30.78
					04/05/10	--	14.00	--	31.27
		07/06/10			--	15.85	--	29.42	
		01/06/11			--	14.12	--	31.15	
		04/11/11			--	14.63	--	30.64	
		08/22/11			--	16.34	--	28.93	
		12/05/11			--	15.66	--	29.61	
		04/02/12			--	13.71	--	31.56	
		10/08/12			--	16.69	--	28.58	
		02/01/13			--	11.55	--	33.72	
04/05/13	--	13.38	--	31.89					



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)					
<b>Bulk Terminal Property</b>														
<b>Shallow Water-Bearing Zone</b>														
01MW20	Former HQ USTs	46.27	5	20	06/20/06	--	16.24	--	30.03					
		46.18			12/11/06	--	15.31	--	30.96					
					09/05/08	--	16.09	--	30.18					
					01/26/09	--	15.59	--	30.59					
					04/06/09	--	14.28	--	31.90					
					07/06/09	--	16.05	--	30.13					
					01/25/10	--	14.14	--	32.04					
					04/05/10	--	13.77	--	32.41					
					07/06/10	--	15.66	--	30.52					
					01/06/11	--	13.79	--	32.39					
					04/11/11	--	14.34	--	31.84					
					08/22/11	--	16.21	--	29.97					
					12/05/11	--	15.55	--	30.63					
					04/02/12	--	13.46	--	32.72					
					10/08/12	--	16.60	--	29.58					
					02/01/13	--	10.53	--	35.65					
					04/05/13	--	12.51	--	33.67					
01MW21	Former PCP Mixing AST	46.21	5	22	06/20/06	--	6.60	--	39.61					
		46.14			12/11/06	--	6.12	--	40.09					
					09/05/08	--	6.69	--	39.52					
					01/26/09	--	6.24	--	39.90					
					04/06/09	--	5.33	--	40.81					
					07/06/09	--	6.78	--	39.36					
					10/07/09	--	7.68	--	38.46					
					01/25/10	--	4.51	--	41.63					
					04/05/10	3.86	3.90	0.04	42.27					
					07/06/10	--	8.96	--	37.18					
					09/22/10	--	10.39	--	35.75					
					01/06/11	--	7.43	--	38.71					
					04/11/11	--	4.94	--	41.20					
					08/22/11	--	9.19	--	36.95					
					<b>DECOMMISSIONED 2011</b>									
					01MW22	Former PCP Mixing AST	46.11	5	24	10/01/03	8.35	8.43	0.08	37.74
										01/01/04	6.66	6.86	0.20	39.41
04/01/04	5.88	6.38	0.50	40.13										
07/15/04	7.15	7.17	0.02	38.96										
11/17/04	6.95	6.97	0.02	39.16										
10/24/05	8.05	8.30	0.25	38.01										
06/20/06	7.79	7.94	0.15	38.29										
12/11/06	5.99	6.04	0.05	40.11										
09/05/08	--	--	--	--										
46.05	01/26/09	6.13	6.44	0.31			39.86							
	04/06/09	4.05	4.40	0.35			41.93							
	07/06/09	7.25	7.54	0.29			38.74							
	10/06/09	7.75	7.82	0.07			38.29							
	01/25/10	3.99	4.12	0.13			42.03							
	04/05/10	3.71	3.75	0.04			42.33							
	07/06/10	9.70	9.84	0.14			36.32							
	01/06/11	--	6.90	--			39.15							
04/11/11	--	5.49	--	40.56										
08/22/11	--	9.76	--	36.29										
<b>DECOMMISSIONED 2011</b>														



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)		
<b>Bulk Terminal Property</b>											
<b>Shallow Water-Bearing Zone</b>											
01MW23	Former PCP Mixing AST	45.81	5	19	04/01/04	5.40	5.45	0.05	40.40		
					07/15/04	7.64	7.74	0.10	38.15		
					11/17/04	7.37	7.48	0.11	38.42		
					10/24/05	--	8.45	--	37.24		
					06/20/06	7.81	7.82	0.01	38.00		
					12/11/06	Not measured; skimmer in well					
					09/05/08	6.53	6.91	0.38	39.20		
					01/26/09	6.26	6.76	0.50	39.45		
					04/06/09	Not measured; skimmer in well					
					07/06/09	7.29	8.15	0.86	38.35		
					10/06/09	7.57	8.09	0.52	38.14		
					01/25/10	4.20	4.41	0.21	41.57		
					04/05/10	4.03	4.56	0.53	41.67		
					07/06/10	9.43	10.20	0.77	36.23		
					01/06/11	--	6.42	--	39.39		
					04/11/11	5.36	5.43	0.07	40.44		
					08/22/11	9.92	9.93	0.01	35.89		
					12/05/11	--	7.50	--	38.31		
					04/02/12	Not measured; wellhead submerged					
					D E C O M M I S S I O N E D 2 0 1 2						
01MW24	Former Valve Pit	--	5	19	10/01/03	--	--	0.11	--		
					01/01/04	--	--	0.39	--		
					04/01/04	--	--	0.15	--		
					07/15/04	7.85	8.15	0.30	--		
					11/17/04	--	--	--	--		
					10/24/05	9.10	9.37	0.27	--		
					06/20/06	Not measured; wellhead submerged					
					12/11/06	13.13	--	--	--		
					09/05/08	Not measured; wellhead submerged					
					01/26/09	Not measured; wellhead submerged					
		04/06/09	Not measured; wellhead submerged								
		07/06/09	7.87	8.40	0.53	36.09					
		10/06/09	6.86	7.01	0.15	37.18					
		01/25/10	Not measured; wellhead submerged								
		04/05/10	1.85	4.82	2.97	41.63					
		07/06/10	8.89	9.40	0.51	35.08					
		09/22/10	8.91	9.56	0.65	35.03					
		04/11/11	Not measured; wellhead submerged								
		08/22/11	9.07	9.13	0.06	34.99					
		12/05/11	--	6.09	--	37.98					
04/02/12	Not measured; wellhead submerged										
10/08/12	Not measured; inaccessible										
02/01/13	--	3.90	--	40.17							
04/05/13	--	6.90	--	37.17							
01MW25	Former Valve Pit	--	5	17	07/01/04	--	--	0.01 <sup>(3)</sup>	--		
					10/24/05	8.54	10.21	1.67	--		
					06/20/06	Not measured; wellhead submerged					
					12/11/06	5.83	--	--	--		
					09/05/08	Not measured; wellhead submerged					
					01/26/09	Not measured; wellhead submerged					
					04/06/09	Not measured; wellhead submerged					
					07/06/09	6.30	9.14	2.84	37.11		
					10/06/09	5.91	8.21	2.30	37.61		
					01/25/10	Not measured; rising LNAPL					
		04/05/10	3.43	3.59	0.16	40.52					
		07/06/10	7.51	11.44	3.93	35.68					
		09/22/10	8.54	9.85	1.31	35.18					
		04/11/11	Not measured; wellhead submerged								
		08/22/11	8.42	8.43	0.01	35.56					
		12/05/11	--	8.47	--	35.51					
		04/02/12	Not measured; wellhead submerged								
		07/09/12	--	8.90	--	35.08					
		D E C O M M I S S I O N E D 2 0 1 2									



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>Bulk Terminal Property</b>									
<b>Shallow Water-Bearing Zone</b>									
01MW26	Northwest of Former Tank Yard	46.24	5	19	06/20/06	--	13.83	--	32.41
					12/11/06	--	13.38	--	32.86
					09/05/08	--	13.73	--	32.51
					01/26/09	--	13.16	--	33.01
					04/06/09	--	12.62	--	33.55
					07/06/09	--	13.40	--	32.77
					10/09/09	--	14.56	--	31.61
		01/25/10			--	12.59	--	33.58	
		04/05/10			--	12.39	--	33.78	
		07/06/10			--	13.14	--	33.03	
		09/22/10			--	13.68	--	32.49	
		01/06/11			--	11.26	--	34.91	
		04/11/11			--	11.44	--	34.73	
		08/22/11			--	13.40	--	32.77	
		12/05/11			--	13.57	--	32.60	
		04/02/12			--	11.76	--	34.41	
		D E C O M M I S S I O N E D 2 0 1 2							
01MW27	Northwest of Former Tank Yard	46.33	5	20	06/20/06	--	14.32	--	32.01
					12/11/06	--	13.69	--	32.64
					09/05/08	--	14.19	--	32.14
					01/26/09	--	13.52	--	32.74
					04/06/09	--	12.78	--	33.48
					07/06/09	--	13.91	--	32.35
					10/06/09	--	15.10	--	31.16
		01/25/10			--	12.83	--	33.43	
		04/05/10			--	12.67	--	33.59	
		07/06/10			--	13.63	--	32.63	
		09/22/10			--	14.06	--	32.20	
		01/06/11			11.45	11.47	0.02	34.81	
		04/11/11			--	11.76	--	34.50	
		08/22/11			--	13.97	--	32.29	
		12/05/11			--	13.96	--	32.30	
		04/02/12			--	11.95	--	34.31	
		10/08/12			--	15.56	--	30.70	
01/28/13	6.95	6.96	0.01	39.31					
02/01/13	--	5.08	--	41.18					
04/05/13	--	5.69	--	40.57					
01MW28	Northwest of Former Tank Yard	45.54	5	24	10/01/03	14.82	15.11	0.29	30.66
					01/01/04	13.15	14.08	0.93	32.20
					04/01/04	13.70	14.78	1.08	31.62
					07/15/04	14.13	15.51	1.38	31.13
					11/17/04	14.03	15.58	1.55	31.20
					10/24/05	14.54	16.50	1.96	30.61
					06/20/06	13.76	--	--	--
					12/11/06	13.02	13.55	0.53	32.41
					09/05/08	13.60	14.31	0.71	31.80
					01/26/09	12.96	13.42	0.46	32.43
					04/06/09	11.96	12.30	0.34	33.45
					07/06/09	13.47	13.94	0.47	31.92
					10/06/09	14.68	15.14	0.46	30.71
		01/25/10			12.03	12.51	0.48	33.35	
		04/05/10			11.89	12.30	0.41	33.51	
		07/06/10			13.25	13.75	0.50	32.13	
		09/22/10			13.40	14.21	0.81	31.92	
		01/06/11			11.01	11.17	0.16	34.44	
		04/11/11			11.31	12.19	0.88	33.99	
		08/22/11			13.67	14.14	0.47	31.72	
		12/05/11			--	13.49	--	31.99	
		04/02/12			11.34	11.42	0.08	34.12	
		10/08/12			14.28	14.59	0.31	31.14	
		02/01/13			6.40	6.42	0.02	39.08	
		04/05/13			8.85	9.15	0.30	36.57	



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)				
<b>Bulk Terminal Property</b>													
<b>Shallow Water-Bearing Zone</b>													
01MW29	Northwest of Former Tank Yard	45.57	5	19	10/01/03	16.00	16.01	0.01	29.57				
					01/01/04	--	--	--	--				
					04/01/04	14.27	14.30	0.03	31.29				
					07/15/04	15.26	15.32	0.06	30.30				
					11/17/04	--	--	--	--				
					10/25/05	15.46	16.72	1.26	29.86				
					06/20/06	13.90	--	--	--				
					12/11/06	Not measured; skimmer in well							
					09/05/08	14.61	16.23	1.62	30.64				
					01/26/09	13.04	13.58	0.54	32.34				
					04/06/09	11.58	11.91	0.33	33.84				
		07/06/09			13.50	14.10	0.60	31.87					
		10/06/09			14.70	15.50	0.80	30.63					
		01/25/10			12.00	12.40	0.40	33.41					
		04/05/10			11.81	12.19	0.38	33.60					
		07/06/10			13.40	14.08	0.68	31.95					
		09/22/10			13.55	14.25	0.70	31.80					
		01/06/11			10.94	11.00	0.06	34.54					
		04/11/11			11.36	11.68	0.32	34.07					
		08/22/11			13.79	14.10	0.31	31.64					
		12/05/11			13.51	13.52	0.01	31.98					
		04/02/12			10.85	11.14	0.29	34.58					
		07/09/12			12.33	12.44	0.11	33.14					
10/08/12	14.38	14.65	0.27	31.06									
02/01/13	--	6.53	--	38.96									
04/05/13	--	9.19	--	36.30									
01MW37	Former Tank Yard	48.65	7.5	22.5	09/27/06	--	11.30	--	37.35				
					12/11/06	--	10.39	--	38.26				
					09/05/08	--	10.70	--	37.95				
					01/26/09	--	10.34	--	38.24				
					04/06/09	--	9.45	--	39.13				
					07/06/09	--	10.14	--	38.44				
					10/06/09	--	11.18	--	37.40				
					01/25/10	--	9.22	--	39.36				
					04/05/10	--	7.50	--	41.08				
					07/06/10	--	9.92	--	38.66				
					09/22/10	--	10.87	--	37.71				
		01/06/11			--	9.37	--	39.21					
		04/11/11			--	8.58	--	40.00					
		08/22/11			--	10.78	--	37.80					
		12/05/11			--	10.81	--	37.77					
		04/02/12			--	9.05	--	39.53					
		10/08/12			--	11.30	--	37.28					
		02/01/13			--	8.65	--	39.93					
		04/05/13			--	8.65	--	39.93					
		01MW38			Former Tank Yard	47.60	7.5	22.5	09/27/06	--	10.40	--	37.20
									12/11/06	--	8.51	--	39.09
									09/05/08	--	9.43	--	38.17
									01/26/09	--	9.01	--	39.56
04/06/09	--		7.72	--					40.85				
07/06/09	--		9.13	--					39.44				
01/25/10	--		7.37	--					41.20				
04/05/10	--		6.65	--					41.92				
07/06/10	--		9.50	--					39.07				
09/22/10	--		10.41	--					38.16				
01/06/11	--		8.42	--					40.15				
04/11/11	--		7.21	--		41.36							
08/22/11	--		10.28	--		38.29							
12/05/11	--		9.82	--		38.75							
04/02/12	--		7.06	--		41.51							
10/08/12	--		10.90	--		37.67							
02/01/13	--		6.62	--		41.95							
04/05/13	--		7.09	--		41.48							



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>Bulk Terminal Property</b>									
<b>Shallow Water-Bearing Zone</b>									
01MW39	Former Tank Yard	48.80	7	22	09/27/06	--	14.81	--	33.99
		48.79			12/11/06	--	14.37	--	34.43
					09/05/08	--	14.45	--	34.35
					01/26/09	--	14.44	--	34.35
					04/06/09	--	14.04	--	34.75
					07/06/09	--	14.05	--	34.74
					01/25/10	--	13.84	--	34.95
					04/05/10	--	13.30	--	35.49
					07/06/10	--	13.68	--	35.11
					01/06/11	--	12.61	--	36.18
					04/11/11	--	12.57	--	36.22
					08/22/11	--	13.64	--	35.15
					12/05/11	--	14.39	--	34.40
					04/02/12	--	13.49	--	35.30
					10/08/12	--	14.17	--	34.62
					02/01/13	--	11.00	--	37.79
					04/05/13	--	11.11	--	37.68
01MW40	Former Tank Yard	49.13	7	22	09/27/06	--	16.10	--	33.03
		49.01			12/11/06	--	15.64	--	33.49
					09/05/08	--	15.64	--	33.49
					01/26/09	--	15.44	--	33.57
					04/06/09	--	15.04	--	33.97
					07/06/09	--	15.21	--	33.80
					10/06/09	--	16.14	--	32.87
					01/25/10	--	15.00	--	34.01
					04/05/10	--	14.46	--	34.55
					07/06/10	--	14.96	--	34.05
					09/22/10	--	15.52	--	33.49
					01/06/11	--	13.25	--	35.76
					04/11/11	--	13.50	--	35.51
					08/22/11	--	14.88	--	34.13
					12/05/11	--	15.52	--	33.49
					04/02/12	--	14.35	--	34.66
					10/08/12	--	15.94	--	33.07
02/01/13	--	10.06	--	38.95					
04/05/13	--	11.50	--	37.51					
01MW41	Former Tank Yard	48.06	7	22	09/27/06	--	11.47	--	36.59
		48.02			12/11/06	7.68	7.90	0.22	40.34
					09/05/08	8.38	11.01	2.63	39.15
					01/26/09	8.36	8.39	0.03	39.65
					04/06/09	5.19	9.68	4.49	41.93
					07/06/09	9.40	12.11	2.71	38.08
					10/06/09	9.81	11.18	1.37	37.94
					01/25/10	6.41	6.93	0.52	41.51
					04/05/10	6.01	6.38	0.37	41.94
					07/06/10	11.53	13.00	1.47	36.20
					09/22/10	12.98	13.67	0.69	34.90
					01/06/11	8.26	8.56	0.30	39.70
					04/11/11	7.51	7.54	0.03	40.50
					08/22/11	Encountered	11.99	Encountered	--
					12/05/11	--	9.73	--	38.29
					04/02/12	--	5.54	--	42.48
					07/09/12	--	9.38	--	38.64
					10/08/12	Not measured; inaccessible			
					02/01/13	--	7.94	--	40.08
					04/05/13	Well damaged			
01MW42	Former Tank Yard	47.93	7	22	09/27/06	--	12.17	--	35.76
		47.89			12/11/06	--	6.72	--	41.21
					09/05/08	--	8.64	--	39.29
					01/26/09	--	8.62	--	39.27
					04/06/09	--	7.48	--	40.41
					07/06/09	--	10.30	--	37.59
					10/06/09	--	10.08	--	37.81
					01/25/10	--	5.92	--	41.97
					04/05/10	--	5.64	--	42.25





**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)				
<b>Bulk Terminal Property</b>													
<b>Shallow Water-Bearing Zone</b>													
01MW42 (continued)	Former Tank Yard	47.89	7	22	07/06/10	--	11.13	--	36.76				
					09/22/10	--	10.13	--	37.76				
					01/06/11	--	7.02	--	40.87				
					04/11/11	--	6.39	--	41.50				
					08/22/11	--	12.09	--	35.80				
					12/05/11	--	9.09	--	38.80				
					04/02/12	--	5.01	--	42.88				
					10/08/12	--	13.82	--	34.07				
					02/01/13	--	6.22	--	41.67				
					04/05/13	--	8.39	--	39.50				
01MW43	Former Loading Racks	45.64	7	22	09/27/06	--	11.52	--	34.12				
		12/11/06			6.80	7.10	0.30	38.78					
		09/05/08			6.58	6.68	0.10	39.04					
		01/26/09			6.51	7.35	0.84	38.97					
		04/06/09			3.73	4.20	0.47	41.83					
		07/06/09			9.75	10.40	0.65	35.77					
		10/06/09			7.80	8.47	0.67	37.72					
		01/25/10			4.75	5.24	0.49	40.80					
		04/05/10			4.30	4.72	0.42	41.27					
		07/06/10			9.72	10.20	0.48	35.83					
		09/22/10			Unknown	5.90	--	39.75					
		01/06/11			4.90 <sup>(4)</sup>	5.53	0.63	40.62					
		04/11/11			4.75	--	--	--					
		08/22/11			11.02	11.51	0.49	34.53					
		12/05/11			5.88	6.29	0.41	39.69					
		04/02/12			Not measured; wellhead submerged								
		10/08/12			12.49	13.68	1.19	32.92					
		04/05/13			5.55	5.96	0.41	40.02					
		01MW59			Former HQ USTs	46.49	13	28.5	11/25/08	--	14.90	--	31.59
									01/26/09	--	15.13	--	31.36
04/06/09	--		14.01	--					32.48				
07/06/09	--		15.37	--					31.12				
01/25/10	--		13.88	--					32.61				
04/05/10	--		13.43	--					33.06				
07/06/10	--		14.98	--					31.51				
01/06/11	--		13.04	--					33.45				
04/11/11	--		13.54	--					32.95				
08/22/11	--		15.44	--					31.05				
12/05/11	--		15.08	--					31.41				
04/02/12	--		13.21	--					33.28				
09/04/12	--		15.56	--					30.93				
10/08/12	--		15.98	--					30.51				
02/01/13	--		9.59	--					36.90				
04/05/13	--		11.32	--					35.17				
01MW66	Southeast of TOC Headquarters		47.33	12					22	08/06/09	--	14.86	--
		10/06/09			--	15.50	--	31.83					
		01/25/10			--	13.59	--	33.74					
		04/05/10			--	13.33	--	34.00					
		07/06/10			--	14.12	--	33.21					
		09/22/10			--	14.51	--	32.82					
		01/06/11			--	12.29	--	35.04					
		04/11/11			--	12.93	--	34.40					
		08/22/11			--	14.41	--	32.92					
		12/05/11			--	14.62	--	32.71					
		04/02/12			--	12.93	--	34.40					
		10/08/12			--	15.74	--	31.59					
		01/28/13			--	8.28	--	39.05					
		02/01/13			--	7.30	--	40.03					
		04/05/13			--	9.26	--	38.07					



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>Bulk Terminal Property</b>									
<b>Shallow Water-Bearing Zone</b>									
01MW67 <sup>(S)</sup>	East of TOC Headquarters	47.94	11	36	08/06/09	--	18.10	--	29.84
		44.40			10/06/09	--	18.93	--	29.01
					01/25/10	--	13.66	--	34.28
					04/05/10	--	15.40	--	29.00
					07/06/10	--	16.81	--	27.59
					09/22/10	--	17.07	--	27.33
					01/06/11	--	13.46	--	30.94
					04/11/11	--	14.60	--	29.80
					08/22/11	--	17.32	--	27.08
					12/05/11	--	17.29	--	27.11
					04/02/12	--	14.52	--	29.88
					10/08/12	--	18.58	--	25.82
					01/28/13	--	9.20	--	35.20
					02/01/13	--	7.33	--	37.07
					04/05/13	--	10.09	--	34.31
01MW68	Northeast of TOC Headquarters	47.46	7	22	08/06/09	--	14.71	--	32.75
					10/09/09	15.18	15.56	0.38	32.20
					01/25/10	11.99	13.11	1.12	35.25
					04/05/10	11.54	12.55	1.01	35.72
					07/06/10	13.46	15.18	1.72	33.66
					09/22/10	Unknown	14.43	--	33.03
					01/06/11	13.74 <sup>(4)</sup>	13.84	0.10	33.70
					04/11/11	11.64	14.04	0.30	33.66
					08/22/11	14.02	15.80	1.78	33.08
					12/05/11	13.51	14.86	1.35	33.68
					04/02/12	11.20	11.54	0.34	36.19
					07/09/12	12.76	13.37	0.61	34.58
					10/08/12	14.63	16.11	1.48	32.53
					04/05/13	9.81	12.94	3.13	37.02
					01MW69 <sup>(S)</sup>	East of TOC Headquarters	47.67	11	36
44.14	10/06/09	--	18.78	--			28.89		
	01/25/10	--	15.41	--			32.26		
	04/05/10	--	15.48	--			28.66		
	07/06/10	--	16.46	--			27.68		
	09/22/10	--	16.43	--			27.71		
	01/06/11	--	13.55	--			30.59		
	04/11/11	--	14.05	--			30.09		
	08/22/11	--	16.67	--			27.47		
	12/05/11	--	16.38	--			27.76		
	04/02/12	--	13.52	--			30.62		
	10/08/12	--	17.57	--			26.57		
	01/28/13	--	9.05	--			35.09		
	02/01/13	--	7.08	--			37.06		
	04/05/13	--	9.93	--			34.21		
01MW72	Former Tank Yard	46.33	3	23	03/15/10	4.39	4.80	0.41	41.86
					04/05/10	4.10	4.27	0.17	42.20
					07/06/10	8.25	9.25	1.00	37.88
					09/22/10	Unknown	11.50	--	34.83
					01/06/11	6.53	6.54	0.01	39.80
					04/11/11	5.25	5.42	0.17	41.05
					08/22/11	8.72	9.46	0.74	37.46
					12/05/11	7.74	8.00	0.26	38.54
					04/02/12	Encountered	4.00	Encountered	42.33
					10/08/12	9.83	9.89	0.06	36.49
					02/01/13	3.75	3.81	0.06	42.57
					04/05/13	4.53	5.16	0.63	41.67



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)					
<b>Bulk Terminal Property</b>														
<b>Shallow Water-Bearing Zone</b>														
01MW73	Former Tank Yard	46.25	3	21	03/31/10	4.48	4.51	0.03	41.76					
					04/05/10	4.01	5.30	1.29	41.98					
					07/06/10	8.45	10.38	1.93	37.41					
					09/22/10	Unknown	10.70	--	35.55					
					01/06/11	9.05	10.55	1.50	36.90					
					04/11/11	4.97	8.74	3.77	40.53					
					08/22/11	8.73	11.28	2.55	37.01					
					12/05/11	7.94	8.85	0.91	38.13					
					04/02/12	3.43	7.60	4.17	41.99					
					10/08/12	10.25	10.93	0.68	35.86					
					02/01/13	3.46	7.37	3.91	42.01					
					04/05/13	4.53	8.85	4.32	40.86					
					01MW74	Former Tank Yard	46.17	4	21	03/15/10	--	4.61	--	41.56
										04/05/10	--	4.38	--	41.79
07/06/10	--	9.26	--	36.91										
09/22/10	--	10.46	--	35.71										
01/06/11	--	7.01	--	39.16										
04/11/11	--	5.76	--	40.41										
08/22/11	9.45	9.65	0.20	36.68										
12/05/11	--	8.14	--	38.03										
04/02/12	--	4.09	--	42.08										
10/08/12	--	11.49	--	34.68										
01/28/13	--	5.06	--	41.11										
02/01/13	--	4.58	--	41.59										
04/05/13	--	5.27	--	40.90										
01MW75	Former Tank Yard	46.30	3	18						03/15/10	--	4.72	--	41.58
					04/05/10	--	4.80	--	41.50					
					07/06/10	--	8.03	--	38.27					
					09/22/10	--	9.09	--	37.21					
					01/06/11	--	6.53	--	39.77					
					04/11/11	--	5.35	--	40.95					
					08/22/11	--	8.66	--	37.64					
					12/05/11	--	8.00	--	38.30					
					04/02/12	--	4.71	--	41.59					
					10/08/12	--	9.59	--	36.71					
					02/01/13	--	4.50	--	41.80					
					04/05/13	--	5.34	--	40.96					
					01MW90	Former Tank Yard	46.66	3	18	01/30/12	--	5.69	--	40.97
										04/02/12	--	4.41	--	42.25
10/08/12	--	9.33	--	37.33										
02/01/13	--	4.02	--	42.64										
04/05/13	--	4.71	--	41.95										
01MW91	Former Tank Yard	46.52	3.5	18.5	01/30/12	--	5.72	--	40.80					
					04/02/12	--	4.37	--	42.15					
					10/08/12	--	9.70	--	36.82					
					02/01/13	--	4.07	--	42.45					
					04/05/13	--	4.92	--	41.60					
A6IW01	Injection Grid	46.64	11.5	21.5	01/28/13	--	7.18	--	39.46					
					02/01/13	--	6.06	--	40.58					
					04/05/13	--	8.27	--	38.37					
B3IW01	Injection Grid	47.18	11.5	21.5	04/05/13	--	10.25	--	36.93					
C3IW01	Injection Grid	47.26	11	21	07/12/10	--	15.00	--	32.26					
					04/11/11	--	12.97	--	34.29					
					08/22/11	--	--	--	--					
					12/05/11	--	15.12	--	32.14					
					04/02/12	--	11.85	--	35.41					
					07/09/12	--	13.86	--	33.40					
					10/08/12	Not measured; inaccessible								



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>Bulk Terminal Property</b>									
<b>Shallow Water-Bearing Zone</b>									
E9IW01	Injection Grid	46.97	6	21	07/08/10	--	11.21	--	35.76
					09/22/10	--	11.50	--	35.47
					04/11/11	--	6.49	--	40.48
					08/22/11	--	--	--	--
					12/05/11	--	8.44	--	38.53
					04/02/12	--	4.67	--	42.30
					07/09/12	--	8.67	--	38.30
					10/08/12	Not measured; inaccessible			
F4IW01	Injection Grid	47.93	10	20	07/12/10	--	15.29	--	32.64
					04/11/11	--	13.20	--	34.73
					08/22/11	--	--	--	--
					12/05/11	--	15.49	--	32.44
					04/02/12	--	11.60	--	36.74
					07/09/12	--	14.64	--	33.70
		48.34							
<b>D E C O M M I S S I O N E D 2 0 1 2</b>									
G7IW01	Injection Grid	47.11	6	21	04/11/11	6.64	7.35	0.71	40.33
					08/22/11	--	--	--	--
					12/05/11	--	8.86	--	38.25
					04/02/12	--	4.84	--	42.27
<b>D E C O M M I S S I O N E D 2 0 1 2</b>									
G10IW01	Injection Grid	47.00	6	21	01/28/13	--	5.39	--	41.61
					02/01/13	--	4.58	--	42.42
					04/05/13	--	6.36	--	40.64
J7IW01	Injection Grid	47.13	6	21	12/05/11	--	8.89	--	38.24
					04/02/12	--	3.99	--	43.14
					<b>D E C O M M I S S I O N E D 2 0 1 2</b>				
J10IW01	Injection Grid	47.22	6.5	21.5	07/08/10	--	10.97	--	36.25
					09/22/10	--	12.22	--	35.00
					04/11/11	--	6.86	--	40.36
					08/22/11	--	--	--	--
					12/05/11	--	9.18	--	38.04
					04/02/12	--	4.64	--	42.58
					07/09/12	--	8.44	--	38.78
					<b>D E C O M M I S S I O N E D 2 0 1 2</b>				
K3IW01	Injection Grid	51.90	15	25	07/12/10	--	18.54	--	33.36
					09/22/10	--	19.17	--	32.73
					04/11/11	--	16.81	--	35.09
					08/22/11	--	--	--	--
					12/05/11	--	18.91	--	32.99
					04/02/12	--	17.32	--	34.58
					07/09/12	--	17.61	--	34.29
<b>D E C O M M I S S I O N E D 2 0 1 2</b>									
L2IW01	Injection Grid	51.21	15	25	08/31/10	--	18.46	--	32.75
					04/11/11	--	16.14	--	35.07
					08/22/11	--	--	--	--
					12/05/11	--	18.19	--	33.02
					04/02/12	--	16.65	--	34.56
					07/09/12	--	16.93	--	34.28
					10/08/12	Not measured; inaccessible			
					01/28/13	--	11.63	--	39.58
					02/01/13	--	10.85	--	40.36
					04/05/13	--	12.71	--	38.50
M5IW01	Injection Grid	47.13	6.5	21.5	07/08/10	--	13.61	--	33.52
					09/22/10	--	14.14	--	32.99
					04/11/11	--	11.74	--	35.39
					08/22/11	--	--	--	--
					12/05/11	12.35	13.90	1.55	34.47
					04/02/12	--	12.49	--	34.64
					07/09/12	--	12.69	--	34.44
					10/08/12	--	11.20	--	35.93
					01/28/13	--	8.25	--	38.88
					02/01/13	--	7.60	--	39.53
					04/05/13	--	9.37	--	37.76



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)					
<b>Bulk Terminal Property</b>														
<b>Shallow Water-Bearing Zone</b>														
N7IW01 (Formerly IW04)	Injection Grid	47.43	6	23	12/05/11	--	9.12	--	38.31					
					04/02/12	--	--	--	--					
					07/09/12	--	8.40	--	39.03					
					10/08/12	--	12.00	--	35.43					
					01/28/13	--	4.88	--	42.55					
					02/01/13	--	4.59	--	42.84					
					04/05/13	--	5.57	--	41.86					
N10IW01	Injection Grid	47.40	6.5	21.5	07/08/10	--	10.88	--	36.52					
					09/22/10	--	12.14	--	35.26					
					04/11/11	--	6.91	--	40.49					
					08/22/11	--	--	--	--					
					12/05/11	Dry								
					04/02/12	--	4.93	--	42.47					
					07/09/12	--	8.36	--	39.04					
					10/08/12	--	12.27	--	35.13					
					01/28/13	--	4.92	--	42.48					
					02/01/13	--	4.57	--	42.83					
					04/05/13	--	5.70	--	41.70					
					O5IW01	Injection Grid	47.45	6	21	08/31/10	--	14.44	--	33.01
										04/11/11	--	10.78	--	36.67
08/22/11	--	--	--	--										
12/05/11	--	11.93	--	35.52										
04/02/12	--	9.84	--	37.61										
07/09/12	--	10.78	--	36.67										
10/08/12	Not measured; inaccessible													
O6IW01	Injection Grid	47.30	6	21	01/28/13	--	7.34	--	40.11					
					02/01/13	--	6.88	--	40.57					
					01/28/13	--	4.61	--	42.69					
Q9IW01	Injection Grid	47.24	6	21	02/01/13	--	4.41	--	42.89					
					04/05/13	--	5.28	--	42.02					
					07/07/10	--	9.89	--	37.35					
					09/22/10	--	11.40	--	35.84					
					04/11/11	--	6.51	--	40.73					
					08/22/11	--	--	--	--					
					12/05/11	Inaccessible - Pump in well								
IW03	Former PCP Mixing AST	47.03	6	23	04/02/12	--	4.82	--	42.42					
					07/09/12	--	8.19	--	39.05					
					10/08/12	--	10.92	--	36.32					
					01/28/13	--	5.33	--	41.91					
					02/01/13	--	5.05	--	42.19					
					04/05/13	--	6.00	--	41.24					
					12/13/11	--	8.85	--	38.18					
IW05	Former PCP Mixing AST	47.03	6	23	04/09/12	--	4.14	--	42.89					
					10/08/12	--	11.54	--	35.49					
IW07	Former PCP Mixing AST	47.03	6	23	02/01/13	--	4.44	--	42.59					
					02/01/13	4.36	4.51	0.15	42.64					
IW08	Former PCP Mixing AST	47.03	6	23	02/01/13	4.36	4.51	0.15	42.64					
					02/01/13	4.36	4.51	0.15	42.64					
<b>East Waterfront Property</b>														
<b>Shallow Water-Bearing Zone</b>														
O1MW83	North Shoulder	42.67	14	24	04/22/11	--	21.22	--	21.45					
					04/25/11	--	21.24	--	21.43					
					08/22/11	--	22.44	--	20.23					
					12/05/11	--	22.31	--	20.36					
					04/02/12	--	20.96	--	21.71					
					10/08/12	--	22.83	--	19.84					
					04/05/13	--	21.75	--	20.92					
O2MW01	West of Parking Lot	24.19	10	20	06/20/06	--	5.16	--	19.03					
		24.07			12/11/06	--	5.08	--	19.11					
					09/05/08	--	5.60	--	18.59					
					01/26/09	--	5.64	--	18.55					
					04/06/09	--	4.49	--	19.58					
					07/06/09	--	5.33	--	18.74					
					01/25/10	--	4.30	--	19.77					
					04/05/10	--	4.43	--	19.64					
					07/06/10	--	4.90	--	19.17					
					01/06/11	--	4.75	--	19.32					
					04/11/11	--	4.53	--	19.54					
					08/22/11	--	5.65	--	18.42					
					12/05/11	--	5.41	--	18.66					
					04/02/12	--	4.09	--	19.98					
					10/08/12	--	6.16	--	17.91					
04/05/13	--	4.25	--	19.82										



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>East Waterfront Property</b>									
<b>Shallow Water-Bearing Zone</b>									
02MW02	Shoreline	20.02	5	10	06/20/06	--	1.21	--	18.81
		19.98			12/11/06	--	1.92	--	18.10
					09/05/08	--	1.93	--	18.09
					01/26/09	--	2.68	--	17.34
					04/06/09	--	1.07	--	18.91
					07/06/09	--	1.77	--	18.21
					01/25/10	--	1.65	--	18.33
					04/05/10	--	1.08	--	18.90
					07/06/10	--	1.28	--	18.70
					01/06/11	--	1.95	--	18.03
					04/11/11	--	1.05	--	18.93
					08/22/11	--	2.19	--	17.79
					12/05/11	--	2.41	--	17.57
					04/02/12	--	0.91	--	19.07
					10/08/12	--	2.89	--	17.09
					04/05/13	--	1.00	--	18.98
02MW03	Parking Lot	27.86	10	20	06/20/06	--	8.79	--	19.07
		27.78			12/11/06	--	8.53	--	19.33
					09/05/08	--	9.19	--	18.67
					01/26/09	--	9.25	--	18.61
					04/06/09	--	8.05	--	19.73
					07/06/09	--	8.99	--	18.79
					01/25/10	--	8.00	--	19.78
					04/05/10	--	8.00	--	19.78
					07/06/10	--	8.51	--	19.27
					01/06/11	--	8.34	--	19.44
					04/11/11	--	8.05	--	19.73
					08/22/11	--	9.26	--	18.52
					12/05/11	--	9.00	--	18.78
					04/02/12	--	7.76	--	20.02
					10/08/12	--	9.84	--	17.94
					04/05/13	--	8.05	--	19.73
02MW04	Garage Entrance	27.17	10	20	06/20/06	--	8.36	--	18.81
		27.07			12/11/06	--	8.46	--	18.71
					09/05/08	--	8.80	--	18.37
					01/26/09	--	10.40	--	16.77
					04/06/09	--	8.44	--	18.63
					07/06/09	--	8.81	--	18.26
					01/25/10	--	8.65	--	18.42
					04/05/10	--	8.24	--	18.83
					07/06/10	--	8.29	--	18.78
					01/06/11	--	9.00	--	18.07
					04/11/11	--	8.23	--	18.84
					08/22/11	--	9.12	--	17.95
					12/05/11	--	9.10	--	17.97
					04/02/12	--	7.45	--	19.62
					10/08/12	--	9.83	--	17.24
					04/05/13	--	7.93	--	19.14
02MW06	Inside Garage	26.54	10	20	06/20/06	--	7.73	--	18.81
		26.55			12/11/06	--	8.18	--	18.36
					09/05/08	--	8.13	--	18.41
					01/26/09	--	8.77	--	17.77
					04/06/09	--	7.72	--	18.83
					07/06/09	--	8.17	--	18.38
					01/25/10	--	8.10	--	18.45
					04/05/10	--	7.70	--	18.85
					07/06/10	--	7.64	--	18.91
					01/06/11	--	8.48	--	18.07
					04/11/11	--	7.65	--	18.90
					08/22/11	--	8.45	--	18.10
					12/05/11	--	6.55	--	20.00
					04/02/12	--	7.51	--	19.04
					10/08/12	--	9.18	--	17.37
					04/05/13	--	7.40	--	19.15



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>East Waterfront Property</b>									
<b>Shallow Water-Bearing Zone</b>									
02MW07	Shoreline	20.85	2	12	06/20/06	--	2.01	--	18.84
					12/11/06	--	1.17	--	19.68
		20.78			09/05/08	--	2.65	--	18.20
					01/26/09	--	3.11	--	17.74
					04/06/09	--	1.73	--	19.05
					07/06/09	--	4.91	--	15.87
					01/25/10	--	1.00	--	19.78
					04/05/10	--	1.46	--	19.32
					07/06/10	--	1.96	--	18.82
					01/06/11	--	2.25	--	18.53
					04/11/11	--	1.33	--	19.45
					08/22/11	--	2.91	--	17.87
					12/05/11	--	2.95	--	17.83
					04/02/12	--	1.35	--	19.43
					10/08/12	--	3.64	--	17.14
					04/05/13	--	0.50	--	20.28
02MW08	Next to West Commodore Way	39.69	13	22	06/20/06	--	16.27	--	23.42
					12/11/06	--	14.63	--	25.06
		39.62			09/05/08	--	16.19	--	23.50
					01/26/09	--	9.65	--	30.04
					04/06/09	--	13.19	--	26.43
					07/06/09	--	15.92	--	23.70
					01/25/10	--	13.75	--	25.87
					04/05/10	--	13.92	--	25.70
					07/06/10	--	15.32	--	24.30
					01/06/11	--	13.74	--	25.88
					04/11/11	--	14.03	--	25.59
					08/22/11	--	16.25	--	23.37
					12/05/11	--	14.51	--	25.11
					04/02/12	--	13.33	--	26.29
					10/08/12	--	16.39	--	23.23
					04/05/13	--	14.38	--	25.24
02MW09	West of Parking Lot	30.27	7	12	01/26/09	--	9.36	--	20.91
					04/06/09	--	7.99	--	22.28
					07/06/09	--	9.16	--	21.11
					01/25/10	--	6.78	--	23.49
					04/05/10	--	7.71	--	22.56
					07/06/10	--	8.86	--	21.41
					01/06/11	--	7.46	--	22.81
					04/11/11	--	7.57	--	22.70
					08/22/11	--	9.45	--	20.82
					12/05/11	--	8.76	--	21.51
					04/02/12	--	7.04	--	23.23
					10/08/12	--	9.90	--	20.37
					04/05/13	--	7.68	--	22.59
02MW10	Former Pipeline Utilidor	28.62	2.5	7.5	01/26/09	--	3.50	--	25.12
					04/06/09	--	1.81	--	26.81
					07/06/09	--	4.81	--	23.81
					01/25/10	--	2.70	--	25.92
					04/05/10	--	2.52	--	26.10
					07/06/10	--	3.94	--	24.68
					01/06/11	--	3.04	--	25.58
					04/11/11	--	3.00	--	25.62
					08/22/11	--	5.28	--	23.34
					12/05/11	--	3.05	--	25.57
					04/02/12	--	2.04	--	26.58
					10/08/12	--	4.98	--	23.64
					04/05/13	--	1.04	--	27.58



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>East Waterfront Property</b>									
<b>Shallow Water-Bearing Zone</b>									
02MW11	Entrance Driveway	30.32	6	11	01/26/09	Not measured; unable to remove slip cap			
					04/06/09	Not measured; unable to remove slip cap			
					07/06/09	--	7.40	--	22.92
					01/25/10	--	5.64	--	24.68
					04/05/10	--	5.78	--	24.54
					07/06/10	--	6.67	--	23.65
					01/06/11	--	5.76	--	24.56
					04/11/11	--	5.84	--	24.48
					08/22/11	--	7.60	--	22.72
					12/05/11	--	5.97	--	24.35
					04/02/12	--	5.50	--	24.82
					10/08/12	--	7.93	--	22.39
					04/05/13	--	6.03	--	24.29
02MW12	South of Former Warehouse	26.79	8.5	13.5	01/26/09	--	9.34	--	17.45
					04/06/09	--	7.00	--	19.79
					07/06/09	--	8.90	--	17.89
					01/25/10	--	7.44	--	19.35
					04/05/10	--	7.61	--	19.18
					07/06/10	--	7.69	--	19.10
					01/06/11	--	7.74	--	19.05
					04/11/11	--	7.23	--	19.56
					08/22/11	--	7.35	--	19.44
					12/05/11	--	7.73	--	19.06
					04/02/12	--	6.42	--	20.37
					10/08/12	--	8.96	--	17.83
					04/05/13	--	6.85	--	19.94
02MW13	West of Parking Lot	30.05	5	15	01/26/09	--	8.88	--	21.17
					04/06/09	--	8.56	--	21.49
					07/06/09	--	10.06	--	19.99
					01/25/10	--	7.47	--	22.58
					04/05/10	--	8.24	--	21.81
					07/06/10	--	9.18	--	20.87
					01/06/11	--	7.77	--	22.28
					04/11/11	--	7.88	--	22.17
					08/22/11	--	9.70	--	20.35
					12/05/11	--	9.70	--	20.35
					04/02/12	--	7.70	--	22.35
					10/08/12	--	10.26	--	19.79
					04/05/13	--	8.75	--	21.30
<b>East Waterfront Property</b>									
<b>Intermediate Water-Bearing Zone</b>									
02MW05	Entrance Driveway	36.59	20	35	06/20/06	--	15.24	--	21.35
		36.45			12/11/06	--	14.00	--	22.59
					09/05/08	--	15.03	--	21.56
					01/26/09	--	14.44	--	22.01
					04/06/09	--	12.65	--	23.80
					07/06/09	--	15.59	--	20.86
					01/25/10	--	13.16	--	23.29
					04/05/10	--	13.22	--	23.23
					07/06/10	--	14.31	--	22.14
					01/06/11	--	13.19	--	23.26
					04/11/11	--	13.29	--	23.16
					08/22/11	--	15.18	--	21.27
					12/05/11	--	13.62	--	22.83
					04/02/12	--	12.59	--	23.86
					10/08/12	--	15.60	--	20.85
					04/05/13	--	13.34	--	23.11





**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>West Commodore Way</b>									
<b>Shallow Water-Bearing Zone</b>									
01MW02	Former HQ USTs	44.78	10	25	06/20/06	--	15.33	0.01	29.46
		44.77			12/11/06	--	14.25	0.01	30.54
					09/05/08	--	15.03	--	29.75
					01/26/09	--	14.43	--	30.34
					04/06/09	--	12.54	--	32.23
					07/06/09	--	13.18	--	31.59
					01/25/10	--	12.82	--	31.95
					04/05/10	--	12.28	--	32.49
					07/06/10	--	14.72	--	30.05
					01/06/11	--	12.76	--	32.01
					04/11/11	--	13.25	--	31.52
					08/22/11	--	15.51	--	29.26
					12/05/11	--	14.20	--	30.57
					04/02/12	--	11.70	--	33.07
					10/08/12	--	15.82	--	28.95
					02/01/13	--	9.73	--	35.04
					04/05/13	--	12.26	--	32.51
01MW03	Former HQ USTs	44.35	10	25	06/20/06	--	14.99	--	29.36
		44.22			12/11/06	--	13.65	--	30.70
					09/05/08	--	14.74	--	29.61
					01/26/09	--	14.26	--	29.96
					04/06/09	--	12.15	--	32.07
					07/06/09	--	14.88	--	29.34
					01/25/10	--	12.38	--	31.84
					04/05/10	--	11.23	--	32.99
					07/06/10	--	14.47	--	29.75
					01/06/11	--	12.40	--	31.82
					04/11/11	--	13.08	--	31.14
					08/22/11	--	15.15	--	29.07
					12/05/11	--	14.13	--	30.09
					04/02/12	--	10.90	--	33.32
					10/08/12	--	15.40	--	28.82
					02/01/13	--	9.05	--	35.17
					04/05/13	--	11.63	--	32.59
01MW09	Former HQ USTs	43.91	10	25	10/01/02	--	--	0.01 <sup>(3)</sup>	--
		43.87			06/20/06	--	16.68	--	27.23
					12/11/06	Not measured; skimmer in well			
					09/05/08	16.52	16.53	0.01	27.39
					01/26/09	--	15.95	--	27.92
					04/06/09	--	14.90	--	28.97
					07/06/09	--	16.55	--	27.32
					01/25/10	--	14.89	--	28.98
					04/05/10	--	14.53	--	29.34
					07/06/10	--	16.06	--	27.81
					01/06/11	--	14.60	--	29.27
					04/11/11	--	15.17	--	28.70
					08/22/11	--	16.69	--	27.18
					12/05/11	--	15.97	--	27.90
					04/02/12	--	14.40	--	29.47
					10/08/12	--	16.93	--	26.94
					02/01/13	--	12.90	--	30.97
04/05/13	--	14.42	--	29.45					



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>West Commodore Way</b>									
<b>Shallow Water-Bearing Zone</b>									
01MW10	Former Loading Racks	44.02	10	24.9	10/01/03	--	23.50	0.49	20.91
					01/01/04	--	22.50	1.65	22.84
					04/01/04	--	22.98	0.90	21.76
					07/15/04	22.32	23.03	0.71	21.56
					11/17/04	21.95	23.35	1.40	21.79
					10/24/05	21.18	23.47	2.29	22.38
					06/20/06	18.84	22.63	3.79	24.42
					12/11/06	17.57	22.73	5.16	25.42
					09/05/08	18.62	20.49	1.87	25.03
					01/26/09	17.11	21.21	4.10	27.02
		04/06/09	14.47	14.90	0.43	30.39			
		07/06/09	17.95	20.06	2.11	26.58			
		10/07/09	19.18	21.47	2.29	25.31			
		01/25/10	15.61	20.52	4.91	28.36			
		04/05/10	16.48	19.99	3.51	27.77			
		07/06/10	17.20	20.01	2.81	27.19			
		01/06/11	19.85 <sup>(4)</sup>	19.95	0.10	25.08			
		04/11/11	15.08	20.35	5.27	28.82			
		08/22/11	17.93	19.35	1.42	26.74			
		12/05/11	16.39	16.40	0.01	28.56			
04/02/12	13.79	14.84	1.05	30.95					
07/09/12	14.16	17.29	3.13	30.16					
10/08/12	16.25	19.94	3.69	27.96					
04/05/13	10.70	16.75	6.05	33.04					
01MW11	Former Loading Racks	46.10	15	30	06/20/06	--	22.63	--	23.47
					12/11/06	--	22.39	--	23.71
					09/05/08	--	22.44	--	23.66
					01/26/09	--	22.26	--	23.78
					04/06/09	--	20.85	--	25.19
		07/06/09			--	22.31	--	23.73	
		01/25/10			--	21.26	--	24.78	
		04/05/10			--	21.44	--	24.60	
		07/06/10			--	19.59	--	26.45	
		01/06/11			--	19.80	--	26.24	
		04/11/11			--	19.68	--	26.36	
		08/22/11			--	21.67	--	24.37	
		12/05/11			--	21.30	--	24.74	
		04/02/12			--	20.36	--	25.68	
		10/08/12			--	21.70	--	24.34	
		02/01/13			--	20.41	--	25.63	
		04/05/13			--	20.91	--	25.13	
01MW16	Former Loading Racks	44.95	10	20	04/02/02	--	--	0.01 <sup>(3)</sup>	--
					07/02/02	--	--	0.01 <sup>(3)</sup>	--
					10/02/02	--	--	0.01 <sup>(3)</sup>	--
		10/01/03			18.38	19.74	1.36	26.30	
		01/01/04			16.73	19.16	2.43	27.73	
		04/01/04			17.40	19.64	2.24	27.10	
		07/15/04			17.93	19.20	1.27	26.77	
		11/17/04			17.67	17.97	0.30	27.22	
		10/24/05			18.03	19.40	1.37	26.65	
		06/20/06			18.82	18.83	0.01	26.13	
		12/11/06			16.57	17.31	0.74	28.23	
		09/05/08			16.93	18.31	1.38	27.74	



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)					
<b>West Commodore Way</b>														
<b>Shallow Water-Bearing Zone</b>														
01MW16 (continued)	Former Loading Racks	44.86	10	20	01/26/09	16.32	17.75	1.43	28.25					
					04/06/09	14.40	16.95	2.55	29.95					
					07/06/09	17.16	18.55	1.39	27.42					
					10/09/09	17.99	18.65	0.66	26.74					
					01/25/10	15.28	15.80	0.52	29.48					
					04/05/10	15.31	16.00	0.69	29.41					
					07/06/10	16.91	17.42	0.51	27.85					
					01/06/11	15.83 <sup>(4)</sup>	15.93	0.10	29.01					
					04/11/11	15.60	15.98	0.38	29.18					
					08/22/11	17.65	18.02	0.37	27.14					
					12/05/11	17.13	17.14	0.01	27.73					
					04/02/12	15.03	15.29	0.26	29.78					
					07/09/12	16.61	16.66	0.05	28.24					
					10/08/12	17.88	18.14	0.26	26.93					
					04/05/13	15.01	16.92	1.91	29.47					
					01MW30	Barrel Incline	44.50	15	28	06/20/06	--	22.37	--	22.13
							44.42			12/11/06	--	22.81	--	21.69
09/05/08	--	23.51	--	20.99										
01/26/09	--	22.92	--	21.50										
04/06/09	--	22.78	--	21.64										
07/06/09	--	23.24	--	21.18										
01/25/10	--	22.15	--	22.27										
04/05/10	--	22.49	--	21.93										
07/06/10	--	22.85	--	21.57										
01/06/11	--	21.86	--	22.56										
04/11/11	--	22.09	--	22.33										
08/22/11	--	23.14	--	21.28										
12/05/11	--	22.95	--	21.47										
04/02/12	--	22.38	--	22.04										
09/04/12	--	23.10	--	21.32										
10/08/12	--	23.30	--	21.12										
02/01/13	--	21.95	--	22.47										
04/05/13	--	22.38	--	22.04										
01MW31	North Shoulder	43.80	5	15	07/13/06	Dry								
					12/11/06	Dry								
					09/05/08	Dry								
					01/26/09	Dry								
					04/06/09	Dry								
					07/06/09	Dry								
					01/25/10	Dry								
					04/05/10	--	14.95	--	28.85					
					07/06/10	Dry								
					01/06/11	Dry								
					04/11/11	Dry								
					08/22/11	--	14.93	--	28.87					
					12/05/11	--	14.85	--	28.95					
					04/02/12	--	14.80	--	29.00					
					10/08/12	Dry								
					04/05/13	--	14.00	--	29.80					
					01MW32	North Shoulder	44.40	17	27	07/13/06	--	25.03	--	19.37
44.33	12/11/06	--	23.15	--			21.25							
	09/05/08	--	24.67	--			19.73							
	01/26/09	--	21.82	--			22.51							
	04/06/09	--	20.44	--			23.89							
	07/06/09	--	23.40	--			20.93							
	01/25/10	--	19.84	--			24.49							
	04/05/10	--	20.64	--			23.69							
	07/06/10	--	20.68	--			23.65							
	01/06/11	--	19.25	--			25.08							
	04/11/11	--	19.18	--			25.15							
	08/22/11	--	21.12	--			23.21							
	12/05/11	--	20.16	--			24.17							
	04/02/12	--	18.39	--			25.94							
	10/08/12	--	17.82	--			26.51							
	04/05/13	--	16.99	--			27.34							



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commadore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)				
<b>West Commadore Way</b>													
<b>Shallow Water-Bearing Zone</b>													
01MW33	Former Loading Rack	45.14	5	20	07/13/06	--	11.31	--	33.83				
					12/11/06	--	8.35	--	36.79				
		09/05/08			7.65	7.72	0.07	37.48					
		01/26/09			8.20	8.80	0.60	36.75					
		04/06/09			5.75	5.95	0.20	39.28					
		07/06/09			10.40	10.90	0.50	34.57					
		10/06/09			9.08	9.44	0.36	35.92					
		01/25/10			6.70	6.76	0.06	38.36					
		04/05/10			6.39	6.52	0.13	38.65					
		07/06/10			10.31	10.82	0.51	34.66					
		01/06/11			6.50 <sup>(4)</sup>	6.61	0.11	38.55					
		04/11/11			6.59	7.53	0.94	38.29					
		08/22/11			11.12	11.35	0.23	33.90					
		12/05/11			7.41	7.60	0.19	37.62					
		04/02/12			5.35	5.36	0.01	39.72					
		10/08/12			12.43	12.86	0.01	32.22					
		04/05/13			9.25	9.26	0.01	35.82					
01MW34	North Shoulder	45.29	11	21	07/13/06	Dry							
					12/22/06	--	19.66	--	25.63				
		09/05/08			Dry								
		01/26/09			--	19.59	--	25.62					
		04/06/09			--	19.15	--	26.06					
		07/06/09			--	19.96	--	25.25					
		01/25/10			--	19.44	--	25.77					
		04/05/10			--	19.59	--	25.62					
		07/06/10			--	19.79	--	25.42					
		01/06/11			19.47	19.48	0.01	25.74					
		04/11/11			--	19.41	--	25.80					
		08/22/11			--	20.74	--	24.47					
		12/05/11			--	19.60	--	25.61					
		04/02/12			--	19.29	--	25.92					
		10/08/12			--	20.73	--	24.48					
		04/05/13			--	20.80	--	24.41					
		01MW35			North Shoulder	44.63	10	20	07/13/06	Dry			
12/11/06	--		19.48	--					25.15				
09/05/08	--		19.89	--		24.74							
01/26/09	--		19.74	--		24.81							
04/06/09	--		17.80	--		26.75							
07/06/09	Dry												
01/25/10	--		18.53	--		26.02							
04/05/10	--		19.13	--		25.42							
07/06/10	--		19.36	--		25.19							
04/11/11	--		18.44	--		26.11							
08/22/11	--		19.92	--		24.63							
12/05/11	--		19.74	--		24.81							
04/02/12	--		18.05	--		26.50							
10/08/12	--		19.93	--		24.62							
04/05/13	--		19.81	--		24.74							
01MW36	North Shoulder		45.27	10		20			07/13/06	--	19.18	--	26.09
									12/11/06	--	18.76	--	26.51
		09/05/08	--		19.05		--	26.22					
		01/26/09	--		18.93		--	26.26					
		04/06/09	--		18.23		--	26.96					
		07/06/09	--		19.39		--	25.80					
		01/25/10	--		18.90		--	26.29					
		04/05/10	--		19.44		--	25.75					
		07/06/10	--		19.12		--	26.07					
		01/06/11	--		18.62		--	26.57					
		04/11/11	--		18.50		--	26.69					
		08/22/11	--		19.58		--	25.61					
		12/05/11	--		19.02		--	26.17					
		04/02/12	--		18.42		--	26.77					
		10/08/12	--		19.77		--	25.42					
		04/05/13	--		19.23		--	25.96					



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>West Commodore Way</b>									
<b>Shallow Water-Bearing Zone</b>									
01MW47	Eastbound Lane	43.90	6	21	12/22/06	--	18.76	--	25.14
		43.87			09/05/08	--	18.42	--	25.48
					01/26/09	--	18.27	--	25.60
					04/06/09	--	16.79	--	27.08
					07/06/09	18.35	18.63	0.28	25.46
					01/25/10	16.73	17.20	0.47	27.05
					04/05/10	16.46	16.73	0.27	27.36
					07/06/10	17.82	18.46	0.64	25.92
					01/06/11	16.59	17.09	0.50	27.18
					04/11/11	17.06	17.57	0.51	26.71
					08/22/11	18.52	19.14	0.62	25.23
					12/05/11	18.18	18.19	0.01	25.69
					04/02/12	16.52	16.53	0.01	27.35
					10/08/12	18.65	19.26	0.61	25.10
					04/05/13	--	17.01	--	26.86
					01MW49	Eastbound Lane	45.95	15	25
44.17	09/05/08	--	25.12	--			20.83		
	01/26/09	--	25.15	--			19.02		
	04/06/09	--	24.50	--			19.67		
	07/06/09	--	24.90	--			19.27		
	01/25/10	--	24.41	--			19.76		
	04/05/10	--	24.50	--			19.67		
	07/06/10	--	24.23	--			19.94		
	01/06/11	24.05	24.06	0.01			20.12		
	04/11/11	--	24.19	--			19.98		
	08/22/11	--	19.10	--			25.07		
	12/05/11	--	24.49	--			19.68		
	04/02/12	--	23.62	--			20.55		
	10/08/12	--	24.28	--			19.89		
	04/05/13	--	24.25	--			19.92		
	01MW50	Eastbound Lane	43.51	15			25		
43.48			09/05/08		--	22.44		--	21.07
			01/26/09		--	21.71		--	21.77
			04/06/09		--	21.33		--	22.15
			07/06/09		--	22.13		--	21.35
			01/25/10		--	20.86		--	22.62
			04/05/10		--	23.31		--	20.17
			07/06/10		--	21.65		--	21.83
			01/06/11		--	20.54		--	22.94
			04/11/11		--	20.86		--	22.62
			08/22/11		--	22.00		--	21.48
			12/05/11		--	21.62		--	21.86
			04/02/12		--	20.94		--	22.54
			10/08/12		--	22.23		--	21.25
			04/05/13		--	21.06		--	22.42
			01MW52		Eastbound Lane	43.50		14	24
01/26/09	--	23.94		--			19.56		
04/06/09	--	23.88		--			19.62		
07/06/09	--	24.23		--			19.27		
01/25/10	--	23.35		--			20.15		
04/05/10	--	23.58		--			19.92		
07/06/10	--	23.82		--			19.68		
01/06/11	--	23.27		--			20.23		
04/11/11	--	23.32		--			20.18		
08/22/11	--	24.02		--			19.48		
12/05/11	--	24.19		--			19.31		
04/02/12	--	23.61		--			19.89		
09/04/12	--	24.11		--			19.39		
10/08/12	--	24.24		--			19.26		
04/05/13	--	24.44		--			19.06		



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>West Commodore Way</b>									
<b>Shallow Water-Bearing Zone</b>									
01MW53	Eastbound Lane	43.11	16	26	09/05/08	--	23.52	--	19.59
					01/26/09	--	23.56	--	19.55
					04/06/09	--	23.53	--	19.58
					07/06/09	--	23.50	--	19.61
					01/25/10	--	23.72	--	19.39
					04/05/10	--	23.30	--	19.81
					07/06/10	--	23.37	--	19.74
					01/06/11	--	23.26	--	19.85
					04/11/11	--	23.19	--	19.92
					08/22/11	--	23.33	--	19.78
					12/05/11	--	23.53	--	19.58
					04/02/12	--	23.46	--	19.65
					09/04/12	--	23.56	--	19.55
					10/08/12	--	23.54	--	19.57
					04/05/13	--	23.35	--	19.76
01MW84	North Shoulder	43.62	13	23	04/22/11	--	18.05	--	25.57
					04/25/11	--	18.10	--	25.52
					08/22/11	--	18.23	--	25.39
					12/05/11	--	18.12	--	25.50
					04/02/12	--	16.95	--	26.67
					10/08/12	--	19.47	--	24.15
01MW85	South Shoulder	44.05	18	27	04/22/11	--	23.57	--	20.48
					08/22/11	--	23.74	--	20.31
					12/05/11	--	23.95	--	20.10
					04/02/12	Not measured; inaccessible			
					09/04/12	--	23.94	--	20.11
01MW86	Eastbound Lane	44.80	14.5	24.5	10/08/12	--	24.02	--	20.03
					04/05/13	--	23.74	--	20.31
					04/22/11	--	18.93	--	25.87
					04/25/11	--	18.97	--	25.83
					08/22/11	--	19.02	--	25.78
					12/05/11	--	19.74	--	25.06
					04/02/12	--	18.82	--	25.98
					10/08/12	--	19.95	--	24.85
					01/28/13	--	18.28	--	26.52
					04/05/13	--	18.88	--	25.92
01MW87	Eastbound Lane	45.27	11	21	04/25/11	--	13.95	--	31.32
					08/22/11	--	13.97	--	31.30
					12/05/11	--	13.32	--	31.95
					04/02/12	--	11.55	--	33.72
					10/08/12	--	18.08	--	27.19
					01/28/13	--	15.19	--	30.08
					04/05/13	--	16.09	--	29.18
01MW88	North Shoulder	45.1	11	21	04/25/11	--	18.75	--	26.35
					08/22/11	--	18.92	--	26.18
					12/05/11	--	19.47	--	25.63
					04/02/12	--	18.15	--	26.95
					10/08/12	--	19.55	--	25.55
					04/05/13	--	19.68	--	25.42
01MW89	South Shoulder	43.26	18	26	04/22/11	--	23.25	--	20.01
					04/25/11	--	23.25	--	20.01
					08/22/11	--	23.77	--	19.49
					12/05/11	--	23.96	--	19.30
					04/02/12	--	23.52	--	19.74
					09/04/12	--	23.89	--	19.37
					10/08/12	--	23.99	--	19.27
04/05/13	--	24.35	--	18.91					



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>West Commodore Way</b>									
<b>Intermediate Water-Bearing Zone</b>									
01MW48	Eastbound Lane	44.73	27	32	12/22/06	--	26.85	--	17.88
		44.72			09/05/08	--	26.25	--	18.48
					01/26/09	--	25.76	--	18.96
					04/06/09	--	24.80	--	19.92
					07/06/09	--	25.95	--	18.77
					01/25/10	--	24.10	--	20.62
					04/05/10	--	24.26	--	20.46
					07/06/10	--	24.32	--	20.40
					01/06/11	--	24.85	--	19.87
					04/11/11	--	23.48	--	21.24
					08/22/11	--	24.70	--	20.02
					12/05/11	--	24.66	--	20.06
					04/02/12	--	23.75	--	20.97
					10/08/12	--	24.45	--	20.27
					04/05/13	--	24.31	--	20.41
01MW51	Eastbound Lane	44.20	29	39	12/22/06	--	26.48	--	17.72
		44.93			09/05/08	--	25.20	--	19.00
					01/26/09	--	19.90	--	25.03
					04/06/09	--	18.42	--	26.51
					07/06/09	--	20.19	--	24.74
					01/25/10	--	18.72	--	26.21
					04/05/10	--	19.25	--	25.68
					07/06/10	--	16.58	--	28.35
					01/06/11	--	16.01	--	28.92
					04/11/11	--	16.92	--	28.01
					08/22/11	--	24.69	--	20.24
					12/05/11	--	18.53	--	26.40
					04/02/12	17.52	17.53	0.01	27.41
					10/08/12	--	19.24	--	25.69
					04/05/13	--	18.56	--	26.37
<b>ASKO Hydraulic Property</b>									
<b>Perched Water</b>									
MW03	Former Steam Cleaning Area	46.27	7	14	04/25/06	--	9.69	--	36.58
		46.2			08/17/06	--	11.41	--	34.86
					12/14/06	--	12.61	--	33.66
					09/05/08	--	10.71	--	35.56
					01/26/09	--	9.99	--	36.21
					04/06/09	--	9.50	--	36.70
					07/06/09	--	10.15	--	36.05
					01/25/10	--	9.84	--	36.36
					04/05/10	--	9.54	--	36.66
					07/06/10	--	9.84	--	36.36
					01/06/11	--	9.53	--	36.67
					04/11/11	--	9.49	--	36.71
					08/22/11	--	10.26	--	35.94
					12/05/11	--	9.90	--	36.30
					04/02/12	--	9.49	--	36.71
					09/04/12	--	10.51	--	35.69
					10/08/12	--	10.82	--	35.38
					04/05/13	--	9.61	--	36.59
01SVE01	New Barrel Shed	50.18	5	13	04/05/10	--	--	--	--
					07/06/10	--	--	--	--
					01/06/11	--	--	--	--
					04/11/11	--	--	--	--
					08/22/11	Dry			
					12/05/11	Dry			
					04/02/12	--	--	--	--
					09/04/12	Dry			
					10/08/12	Dry			
					04/05/13	Dry			
06/04/13	Dry								



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)					
<b>ASKO Hydraulic Property</b>														
<b>Perched Water</b>														
01MW70/01SVE02	New Barrel Shed	58.14	5.00	20.00	04/05/10	--	3.29	--	54.85					
					07/06/10	--	7.62	--	50.52					
					01/06/11	--	6.58	--	51.56					
					04/11/11 <sup>(6)</sup>	--	6.16	--	51.98					
					08/22/11 <sup>(6)</sup>	--	10.33	--	47.81					
					12/05/11	--	7.83	--	50.31					
					04/02/12	--	6.08	--	52.06					
					09/04/12	--	9.60	--	48.54					
					10/08/12	--	11.68	--	46.46					
					04/05/13	--	6.41	--	51.73					
					06/04/13	--	7.57	--	50.57					
					01MW71/01SVE03	New Barrel Shed	58.38	5.00	20.00	04/05/10	--	6.26	--	52.12
										07/06/10	--	7.58	--	50.80
01/06/11	--	6.70	--	51.68										
04/11/11 <sup>(6)</sup>	--	6.21	--	52.17										
08/22/11 <sup>(6)</sup>	--	9.36	--	49.02										
12/05/11	--	7.94	--	50.44										
04/02/12	--	6.20	--	52.18										
09/04/12	--	9.42	--	48.96										
10/08/12	--	11.34	--	47.04										
04/05/13	--	8.62	--	49.76										
06/04/13	--	7.67	--	50.71										
01MW79	New Barrel Shed	54.36	5.00	19.00						04/11/11 <sup>(6)</sup>	--	8.06	--	46.30
										08/22/11 <sup>(6)</sup>	--	9.23	--	45.13
					12/05/11	--	8.70	--	45.66					
					04/02/12	--	8.16	--	46.20					
					09/04/12	--	9.43	--	44.93					
					10/08/12	--	10.03	--	44.33					
					04/05/13	--	8.30	--	46.06					
					06/04/13	--	8.45	--	45.91					
<b>ASKO Hydraulic Property</b>														
<b>Shallow Water-Bearing Zone</b>														
MW01	West Side	46.53	18	28	04/26/06	--	23.26	--	23.27					
					08/17/06	--	23.31	--	23.22					
					12/13/06	--	23.30	--	23.23					
					09/05/08	--	23.31	--	23.22					
					01/26/09	--	23.46	--	22.98					
					04/06/09	--	23.37	--	23.07					
					07/06/09	--	23.29	--	23.15					
					01/25/10	--	23.17	--	23.27					
					04/05/10	--	23.12	--	23.32					
		07/06/10			--	23.15	--	23.29						
		01/06/11			--	23.06	--	23.38						
		04/11/11			--	23.05	--	23.39						
		08/22/11			--	23.01	--	23.43						
		12/05/11			--	23.18	--	23.26						
		04/02/12			--	23.00	--	23.44						
		09/04/12			--	23.12	--	23.32						
		10/08/12			--	23.11	--	23.33						
		04/05/13			--	22.94	--	23.50						
		MW02			West Side	46.81	18	28	04/26/06	--	25.01	--	21.80	
08/17/06	--		25.03	--					21.78					
12/13/06	--		25.02	--					21.79					
09/05/08	--		25.03	--					21.78					
01/26/09	--		25.16	--					21.57					
04/06/09	--		25.08	--					21.65					
07/06/09	--		24.98	--					21.75					
01/25/10	--		24.77	--					21.96					
04/05/10	--		24.77	--					21.96					
07/06/10	--		24.84	--		21.89								
01/06/11	--		24.68	--		22.05								
04/11/11	--		24.63	--		22.10								
08/22/11	--		24.83	--		21.90								
12/05/11	--		24.97	--		21.76								
04/02/12	--		24.68	--		22.05								
09/04/12	--		24.88	--		21.85								
10/08/12	--		24.92	--		21.81								
04/05/13	--		24.67	--		22.06								





**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>ASKO Hydraulic Property</b>									
<b>Shallow Water-Bearing Zone</b>									
MW04	Former Steam Cleaning Area	46.33	18	28	04/25/06	--	22.38	--	23.95
					08/17/06	--	22.52	--	23.81
					12/13/06	--	22.51	--	23.82
					09/05/08	--	22.47	--	23.86
					01/26/09	--	22.63	--	23.64
					04/06/09	--	22.50	--	23.77
					07/06/09	--	22.45	--	23.82
					01/25/10	--	22.35	--	23.92
					04/05/10	--	22.29	--	23.98
		07/06/10			--	22.32	--	23.95	
		01/06/11			--	22.25	--	24.02	
		04/11/11			--	22.22	--	24.05	
		08/22/11			--	22.19	--	24.08	
		12/05/11			--	22.36	--	23.91	
		04/02/12			--	22.23	--	24.04	
		09/04/12			--	22.27	--	24.00	
		10/08/12			--	22.81	--	23.46	
		04/05/13			--	22.11	--	24.16	
		MW05			Former Steam Cleaning Area	45.88	19	29	04/25/06
08/17/06	--		21.89	--					23.99
12/13/06	--		21.84	--					24.04
09/05/08	--		21.81	--					24.07
01/26/09	--		21.99	--					23.83
04/06/09	--		21.86	--					23.96
07/06/09	--		21.81	--					24.01
01/25/10	--		21.72	--					24.10
04/05/10	--		21.63	--					24.19
07/06/10	--		21.69	--		24.13			
01/06/11	--		22.62	--		23.20			
04/11/11	--		21.58	--		24.24			
08/22/11	--		21.53	--		24.29			
12/05/11	--		21.68	--		24.14			
04/02/12	--		21.57	--		24.25			
09/04/12	--		21.63	--		24.19			
10/08/12	--		21.63	--		24.19			
04/05/13	--		21.43	--		24.39			
MW06	Former Heating Fuel UST		45.82	18		28			04/25/06
		08/17/06			--		23.33	--	22.49
		12/13/06			--		23.32	--	22.50
		09/05/08			--		23.27	--	22.55
		01/26/09			--		23.35	--	22.41
		04/06/09			--		23.25	--	22.51
		07/06/09			--		23.18	--	22.58
		01/25/10			--		23.00	--	22.76
		04/05/10			--		22.95	--	22.81
		07/06/10	--		23.08		--	22.68	
		01/06/11	--		22.99		--	22.77	
		04/11/11	--		22.92		--	22.84	
		08/22/11	--		23.02		--	22.74	
		12/05/11	--		23.21		--	22.55	
		04/02/12	--		23.01		--	22.75	
		09/04/12	--		23.14		--	22.62	
		10/08/12	--		23.17		--	22.59	
		04/05/13	--		22.94		--	22.82	
		01MW07	Barrel Incline		45.17		15	30	06/20/06
12/11/06	--			23.32		--			21.85
09/05/08	--			23.35		--			21.82
01/26/09	--			23.33		--			21.76
04/06/09	--			23.28		--			21.81
07/06/09	--			23.24	--	21.85			
01/25/10	--			22.16	--	22.93			
04/05/10	--			23.12	--	21.97			
07/06/10	--			23.09	--	22.00			
01/06/11	--			22.94	--	22.15			
01/06/11	--			22.94	--	22.15			



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>ASKO Hydraulic Property</b>									
<b>Shallow Water-Bearing Zone</b>									
01MW07 (continued)	Barrel Incline	45.09	15	30	04/11/11	--	22.90	--	22.19
					08/22/11	--	22.88	--	22.21
					12/05/11	--	23.01	--	22.08
					04/02/12	--	23.05	--	22.04
					09/04/12	--	23.01	--	22.08
					10/08/12	--	23.04	--	22.05
					04/05/13	--	22.81	--	22.28
01MW15	New Barrel Shed	50.89	10	30	06/20/06	--	22.90	--	27.99
					12/11/06	--	23.71	--	27.18
					09/05/08	--	22.79	--	28.10
		50.83			01/26/09	--	25.50	--	25.33
					04/06/09	--	22.84	--	27.99
					07/06/09	--	22.73	--	28.10
					01/25/10	--	22.80	--	28.03
					04/05/10	--	22.55	--	28.28
					07/06/10	--	22.65	--	28.18
					01/06/11	--	22.55	--	28.28
					04/11/11	--	22.56	--	28.27
					08/22/11	--	22.28	--	28.55
					12/05/11	--	22.49	--	28.34
					04/02/12	--	22.60	--	28.23
					09/04/12	--	22.45	--	28.38
10/08/12	--	22.37	--	28.46					
04/05/13	--	22.11	--	28.72					
01MW44	West of Barrel Incline	49.50	15	30	09/27/06	--	22.63	--	26.87
					12/12/06	--	22.52	--	26.98
					09/05/08	--	22.56	--	26.94
		49.46			01/26/09	--	22.76	--	26.70
					04/06/09	--	22.61	--	26.85
					07/06/09	--	22.56	--	26.90
					01/25/10	--	22.56	--	26.90
					04/05/10	--	22.38	--	27.08
					07/06/10	--	22.42	--	27.04
					01/06/11	--	22.33	--	27.13
					04/11/11	--	22.32	--	27.14
					08/22/11	--	22.13	--	27.33
					12/05/11	--	22.29	--	27.17
					04/02/12	--	22.28	--	27.18
					09/04/12	--	22.28	--	27.18
10/08/12	--	22.22	--	27.24					
04/05/13	--	22.01	--	27.45					
01MW45	West of Barrel Incline	45.83	12	27	09/27/06	--	26.30	--	19.53
					12/12/06	--	24.30	--	21.53
					09/05/08	--	24.22	--	21.61
		45.89			01/26/09	--	24.28	--	21.61
					04/06/09	--	24.18	--	21.71
					07/06/09	--	24.15	--	21.74
					01/25/10	--	24.10	--	21.79
					04/05/10	--	24.04	--	21.85
					07/06/10	--	24.00	--	21.89
					01/06/11	--	23.90	--	21.99
					04/11/11	--	23.91	--	21.98
					08/22/11	--	23.77	--	22.12
					12/05/11	--	23.90	--	21.99
					04/02/12	--	24.00	--	21.89
					09/04/12	--	23.91	--	21.98
10/08/12	--	23.96	--	21.93					
04/05/13	--	23.80	--	22.09					



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>ASKO Hydraulic Property</b>									
<b>Shallow Water-Bearing Zone</b>									
01MW46	West of Barrel Incline	47.70	13	28	09/27/06	--	26.89	--	20.81
		46.68			12/12/06	--	25.46	--	22.24
					09/05/08	--	25.51	--	22.19
					01/26/09	--	25.55	--	21.13
					04/06/09	--	25.45	--	21.23
					07/06/09	--	25.44	--	21.24
					01/25/10	--	25.38	--	21.30
					04/05/10	--	25.31	--	21.37
					07/06/10	--	25.28	--	21.40
					01/06/11	--	25.18	--	21.50
					04/11/11	--	25.17	--	21.51
					08/22/11	--	25.00	--	21.68
					12/05/11	--	25.22	--	21.46
					04/02/12	--	25.26	--	21.42
					09/04/12	Not measured; inaccessible			
					10/08/12	--	25.30	--	21.38
		04/05/13			--	25.12	--	21.56	
01MW55	New Barrel Shed	50.37	14.8	29.8	11/25/08	--	22.54	--	27.83
					01/26/09	--	23.38	--	26.99
					04/06/09 <sup>(6)</sup>	--	23.33	--	27.04
					07/06/09 <sup>(6)</sup>	--	23.25	--	27.12
					01/25/10 <sup>(6)</sup>	--	23.22	--	27.15
					04/05/10 <sup>(6)</sup>	--	22.35	--	28.02
					07/06/10 <sup>(6)</sup>	--	22.91	--	27.46
					01/06/11 <sup>(6)</sup>	--	22.59	--	27.78
					04/11/11 <sup>(6)</sup>	--	22.47	--	27.90
					08/22/11 <sup>(6)</sup>	--	22.71	--	27.66
					12/05/11	--	22.82	--	27.55
					04/02/12	--	22.29	--	28.08
					09/04/12	--	22.90	--	27.47
					10/08/12	--	22.89	--	27.48
					04/05/13	--	22.55	--	27.82
01MW56	West of Barrel Incline	44.50	16.5	26.5	11/25/08	--	23.05	--	21.45
					01/26/09	--	23.08	--	21.42
					04/06/09	--	23.00	--	21.50
					07/06/09	--	22.98	--	21.52
					01/25/10	--	22.88	--	21.62
					04/05/10	--	22.82	--	21.68
					07/06/10	--	22.80	--	21.70
					01/06/11	--	22.65	--	21.85
					04/11/11	--	22.65	--	21.85
					08/22/11	--	22.56	--	21.94
					12/05/11	--	22.72	--	21.78
					04/02/12	--	22.76	--	21.74
					09/04/12	--	22.71	--	21.79
					10/08/12	--	22.75	--	21.75
					04/05/13	--	22.57	--	21.93
01MW58	Former Steam Cleaning Area	52.00	25.9	36	11/25/08	--	26.55	--	25.45
					01/26/09	--	26.78	--	25.22
					04/06/09	--	26.59	--	25.41
					07/06/09	--	26.55	--	25.45
					01/25/10	--	26.52	--	25.48
					04/05/10	--	26.38	--	25.62
					07/06/10	--	26.40	--	25.60
					01/06/11	--	26.34	--	25.66
					04/11/11	--	26.40	--	25.60
					08/22/11	--	26.15	--	25.85
					12/05/11	--	26.28	--	25.72
					04/02/12	--	26.39	--	25.61
					09/04/12	--	26.30	--	25.70
					10/08/12	--	26.22	--	25.78
					04/05/13	--	26.09	--	25.91



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>ASKO Hydraulic Property</b>									
<b>Shallow Water-Bearing Zone</b>									
01MW60	North of Former Rail Spurs	58.01	24	39	01/26/09	--	30.12	--	27.89
					04/06/09	--	29.97	--	28.04
					07/06/09	--	29.81	--	28.20
					01/25/10	--	29.89	--	28.12
					04/05/10	--	29.56	--	28.45
					07/06/10	--	29.78	--	28.23
					01/06/11	--	29.64	--	28.37
					04/11/11	--	29.69	--	28.32
					08/22/11	--	29.28	--	28.73
					12/05/11	--	29.59	--	28.42
					04/02/12	--	29.80	--	28.21
					09/04/12	--	29.55	--	28.46
					10/08/12	--	29.40	--	28.61
					04/05/13	--	29.09	--	28.92
01MW61	North of Former Rail Spurs	58.93	22.5	37.5	01/26/09	--	30.29	--	28.64
					04/06/09	--	30.12	--	28.81
					07/06/09	--	29.96	--	28.97
					01/25/10	--	30.00	--	28.93
					04/05/10	--	29.68	--	29.25
					07/06/10	--	29.93	--	29.00
					01/06/11	--	29.82	--	29.11
					04/11/11	--	29.81	--	29.12
					08/22/11	--	29.42	--	29.51
					12/05/11	--	29.82	--	29.11
					04/02/12	--	29.98	--	28.95
					09/04/12	--	29.77	--	29.16
					10/08/12	--	29.55	--	29.38
					04/05/13	--	29.15	--	29.78
01MW62	North of Former Rail Spurs	58.54	24	39	01/26/09	--	31.24	--	27.30
					04/06/09	--	31.10	--	27.44
					07/06/09	--	31.00	--	27.54
					01/25/10	--	31.00	--	27.54
					04/05/10	--	30.83	--	27.71
					07/06/10	--	31.91	--	26.63
					01/06/11	--	30.81	--	27.73
					04/11/11	--	30.83	--	27.71
					08/22/11	--	30.55	--	27.99
					12/05/11	--	30.75	--	27.79
					04/02/12	--	30.90	--	27.64
					09/04/12	--	30.73	--	27.81
					10/08/12	--	30.62	--	27.92
					04/05/13	--	30.37	--	28.17
01MW63	New Barrel Shed	54.38	19.5	32	01/26/09	--	27.09	--	27.29
					04/06/09 <sup>(6)</sup>	--	26.86	--	27.52
					07/06/09 <sup>(6)</sup>	--	26.83	--	27.55
					01/25/10 <sup>(6)</sup>	--	26.82	--	27.56
					04/05/10 <sup>(6)</sup>	--	26.48	--	27.90
					07/06/10 <sup>(6)</sup>	--	26.65	--	27.73
					01/06/11 <sup>(6)</sup>	--	26.49	--	27.89
					04/11/11 <sup>(6)</sup>	--	26.37	--	28.01
					08/22/11 <sup>(6)</sup>	--	26.22	--	28.16
					12/05/11	--	26.49	--	27.89
					04/02/12	--	26.26	--	28.12
					09/04/12	--	26.37	--	28.01
					10/08/12	--	26.35	--	28.03
					04/05/13	--	25.95	--	28.43



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>ASKO Hydraulic Property</b>									
<b>Shallow Water-Bearing Zone</b>									
01MW64	North of Former Rail Spurs	57.74	25	40	04/06/09	--	31.32	--	26.42
					07/06/09	--	31.27	--	26.47
					01/25/10	--	31.28	--	26.46
					04/05/10	--	31.14	--	26.60
					07/06/10	--	31.14	--	26.60
					01/06/11	--	31.05	--	26.69
					04/11/11	--	31.10	--	26.64
					08/22/11	--	30.90	--	26.84
					12/05/11	--	31.01	--	26.73
					04/02/12	--	31.09	--	26.65
					09/04/12	--	30.99	--	26.75
					10/08/12	--	30.97	--	26.77
					04/05/13	--	30.78	--	26.96
01MW80	Former Steam Cleaning Area	44.83	20	28	04/22/11	--	23.96	--	20.87
					04/25/11	--	23.95	--	20.88
					08/22/11	--	24.00	--	20.83
					12/05/11	--	24.21	--	20.62
					04/02/12	--	24.14	--	20.69
					09/04/12	--	24.22	--	20.61
					10/08/12	--	24.27	--	20.56
01MW81	Former Steam Cleaning Area	45.86	19.5	28.5	04/05/13	--	24.06	--	20.77
					04/25/11	--	21.35	--	24.51
					08/22/11	--	--	--	--
					12/05/11	--	21.78	--	24.08
					04/02/12	--	21.68	--	24.18
					09/04/12	--	21.72	--	24.14
					10/08/12	--	21.73	--	24.13
01MW82	Former Steam Cleaning Area	45.68	19	27	04/05/13	--	21.53	--	24.33
					04/25/11	--	21.06	--	24.62
					08/22/11	--	--	--	--
					12/05/11	--	21.34	--	24.34
					04/02/12	--	21.25	--	24.43
					09/04/12	--	21.28	--	24.40
					10/08/12	--	21.27	--	24.41
<b>ASKO Hydraulic Property</b>									
<b>Intermediate Water-Bearing Zone</b>									
01MW54	West of Barrel Incline	49.25	37	42	11/25/08	--	30.34	--	18.91
					01/26/09	--	30.32	--	18.93
					04/06/09 <sup>(6)</sup>	--	29.96	--	19.29
					07/06/09 <sup>(6)</sup>	--	30.73	--	18.52
					01/25/10 <sup>(6)</sup>	--	30.13	--	19.12
					04/05/10 <sup>(6)</sup>	--	31.57	--	17.68
					07/06/10 <sup>(6)</sup>	--	30.02	--	19.23
					01/06/11 <sup>(6)</sup>	--	29.83	--	19.42
					04/11/11 <sup>(6)</sup>	--	29.96	--	19.29
					08/22/11 <sup>(6)</sup>	--	30.13	--	19.12
					12/05/11	--	30.39	--	18.86
					04/02/12	--	30.31	--	18.94
					10/08/12	--	30.44	--	18.81
					04/05/13	--	29.97	--	19.28
					01MW57	Former Steam Cleaning Area	45.77	35.5	41
01/26/09	--	26.73	--	19.04					
04/06/09	--	26.57	--	19.20					
07/06/09	--	26.58	--	19.19					
01/25/10	--	26.43	--	19.34					
04/05/10	--	26.39	--	19.38					
07/06/10	--	26.42	--	19.35					
01/06/11	--	26.31	--	19.46					
04/11/11	--	26.48	--	19.29					
08/22/11	--	26.51	--	19.26					
12/05/11	--	26.72	--	19.05					
04/02/12	--	26.90	--	18.87					
10/08/12	--	26.85	--	18.92					
04/05/13	--	26.61	--	19.16					



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>ASKO Hydraulic Property</b>									
<b>Intermediate Water-Bearing Zone</b>									
01MW76	West of Barrel Incline	45.79	35	40	04/11/11 <sup>(6)</sup>	--	25.89	--	19.90
					08/22/11 <sup>(6)</sup>	--	26.25	--	19.54
					12/05/11	--	26.30	--	19.49
					04/02/12	--	26.23	--	19.56
					10/08/12	--	26.45	--	19.34
					04/05/13	--	26.00	--	19.79
01MW77	New Barrel Shed	50.3	36	41	04/11/11 <sup>(6)</sup>	--	29.85	--	20.45
					08/22/11 <sup>(6)</sup>	--	29.57	--	20.73
					12/05/11	--	30.07	--	20.23
					04/02/12	--	29.99	--	20.31
					10/08/12	--	29.66	--	20.64
					04/05/13	--	29.34	--	20.96
01MW78	North of Former Rail Spurs	58.17	45	50	04/11/11 <sup>(6)</sup>	--	37.77	--	20.40
					08/22/11 <sup>(6)</sup>	--	37.45	--	20.72
					12/05/11	--	37.98	--	20.19
					04/02/12	--	37.92	--	20.25
					10/08/12	--	37.52	--	20.65
					04/05/13	--	37.23	--	20.94
<b>ASKO Hydraulic Property</b>									
<b>Deep Water-Bearing Zone</b>									
01MW65	New Barrel Shed	50.42	52	62	04/06/09	--	34.15	--	16.27
					07/06/09	--	33.88	--	16.54
					01/25/10	--	33.88	--	16.54
					04/05/10	--	33.52	--	16.90
					07/06/10	--	33.90	--	16.52
					01/06/11	--	34.12	--	16.30
					04/11/11	--	34.02	--	16.40
					08/22/11	--	33.72	--	16.70
					12/05/11	--	34.43	--	15.99
					04/02/12	--	34.03	--	16.39
					10/08/12	--	33.94	--	16.48
					04/05/13	--	33.56	--	16.86
					<b>BNSF Parcel</b>				
<b>Perched Water</b>									
01MW92	BNSF Property	58.47	6	16	08/23/12	--	9.53	--	48.94
					09/04/12	--	10.99	--	47.48
					09/05/12	--	10.00	--	48.47
					05/10/13	--	7.57	--	50.90
					06/04/13	--	8.18	--	50.29
01MW96	BNSF Property	59.51	5	15	05/10/13	--	11.30	--	48.21
					06/04/13	--	10.29	--	49.22
01MW97	BNSF Property	58.73	5	15	05/10/13	--	7.95	--	50.78
					06/04/13	--	8.43	--	50.30
01MW98	BNSF Property	57.73	5	15	05/10/13	--	6.53	--	51.20
					06/04/13	--	7.03	--	50.70
<b>Shallow Water-Bearing Zone</b>									
01MW93	BNSF Property	58.92	23.5	38.5	08/23/12	--	30.82	--	28.10
					09/04/12	--	30.89	--	28.03
					09/05/12	--	30.71	--	28.21
					05/10/13	--	30.56	--	28.36
01MW94	BNSF Property	58.5	28	40	08/23/12	--	31.32	--	27.18
					09/04/12	--	31.41	--	27.09
					09/05/12	--	31.19	--	27.31
					05/10/13	--	31.21	--	27.29
01MW95	BNSF Property	59.29	27	37	08/23/12	--	30.44	--	28.85
					09/04/12	--	30.48	--	28.81
					09/05/12	--	30.32	--	28.97
					05/10/13	--	30.14	--	29.15



**Table 12**  
**Summary of Groundwater Elevations**  
**TOC Holdings Co.**  
**Seattle Terminal Properties**  
**2737, 2750, 2800, and 2805 West Commodore Way**  
**Seattle, Washington**

Soil Boring/ Well Identification	Well Location	Top of Casing Elevation <sup>(1)</sup> (feet above MSL)	Depth to Top of Well Screen (feet approximate)	Depth to Bottom of Well Screen (feet approximate)	Date	Depth to LNAPL <sup>(2)</sup> (feet)	Depth to Groundwater <sup>(2)</sup> (feet)	LNAPL Thickness (feet)	Groundwater Elevation <sup>(1)</sup> (feet above MSL)
<b>West Waterfront Property</b>									
<b>Shallow Water-Bearing Zone</b>									
02MW14	Parking Lot	30.97	4	15	11/25/08	--	11.16	--	19.81
					01/26/09	--	11.08	--	19.89
					04/06/09	--	11.77	--	19.20
					07/06/09	--	10.41	--	20.56
					01/25/10	--	8.48	--	22.49
					04/05/10	--	9.24	--	21.73
					07/06/10	--	10.09	--	20.88
					01/06/11	--	9.01	--	21.96
					04/11/11	--	8.94	--	22.03
					08/22/11	--	10.69	--	20.28
					12/05/11	--	10.85	--	20.12
					04/02/12	--	9.05	--	21.92
					10/08/12	--	11.24	--	19.73
					04/05/13	--	9.70	--	21.27

**NOTES:**

On 8/22/11 LNAPL was encountered in well 01MW41 but could not be measured due to interference with probe; therefore the LNAPL thickness and groundwater elevation could not be calculated.

<sup>(1)</sup>Initial elevation data for wells 01MW01 through 01MW29 obtained from the *Final Cleanup Action Plan* prepared by Foster Wheeler and dated May 2003. Foster Wheeler survey based on North American Vertical Datum of 1988. Additional elevations obtained from surveys completed by Axis Survey and Mapping or SoundEarth between January 23, 2009 and June 7, 2012, and based on North American Vertical Datum of 1988. The specific gravity for LNAPL is estimated at 0.80 for petroleum hydrocarbon mixtures.

<sup>(2)</sup>As measured from a fixed spot on the well casing rim.

<sup>(3)</sup>LNAPL thickness not reported by previous consultant.

<sup>(4)</sup>Estimate for LNAPL.

<sup>(5)</sup>Wells installed at 45 degree angle. Measurements based off of auger length, not actual depth.

<sup>(6)</sup>DNAPL measurements were conducted, however, DNAPL was not encountered.

-- = not applicable/not measured

AST = aboveground storage tank

BNSF = Burlington Northern Santa Fe Railway Company

DNAPL = dense non-aqueous phase liquid

Dry = measurable groundwater not encountered in well

HQ = headquarters

LNAPL = light non-aqueous phase liquid

MSL = mean sea level

PCP = pentachlorophenol

UST = underground storage tank



**Table 13**  
**Natural Attenuation Parameters**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	Water Quality Meter	Analytical Results (milligrams per liter)																	
				Dissolved Oxygen <sup>(1)</sup>	Nitrate <sup>(2)</sup>	Nitrite <sup>(2)</sup>	Total Manganese		Total Iron		Ferrous Iron		Ferric Iron <sup>(8)</sup>		Sulfate		Sulfide <sup>(10)</sup>	Sulfite <sup>(11)</sup>	Methane <sup>(12)</sup>	Ethane <sup>(12)</sup>	Ethene <sup>(12)</sup>
							Lab <sup>(3)</sup>	Field <sup>(4)</sup>	Lab <sup>(3)</sup>	Field <sup>(5)</sup>	Lab <sup>(6)</sup>	Field <sup>(7)</sup>	Lab	Field	Lab <sup>(2)</sup>	Field <sup>(9)</sup>					
<b>West Commodore Way</b>																					
<b>Shallow Water-Bearing Zone</b>																					
01MW30	01MW30-20090128	01/28/09	--	0.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW30-20090408	04/08/09	--	0.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW30-20100126	01/26/10	YSI	0.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW30-20110111	01/11/11	HQ20	0.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01MW52	01MW52-20100125	01/25/10	Hanna	1.03	24	--	--	0.0	--	0.0	--	0.0	--	0.0	45	--	--	--	0.012	<0.005	<0.005
01MW53	01MW53-20090408	04/08/09	--	1.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW53-20090707	07/07/09	--	0.26	<0.1	--	--	0.3	--	4.6	--	1.5	--	3.1	12	--	--	--	0.065	<0.005	<0.005
	01MW53-20100706	07/06/10	YSI	0.80	0.14	--	--	0.3	--	3.2	--	0.0	--	3.2	9.8	--	--	--	0.087	<0.005	<0.005
	01MW53-20110113	01/13/11	YSI	0.84	0.014	0.002	--	--	4.54	--	--	--	--	--	17.5	--	<0.05	--	0.00987	<0.005	<0.005
01MW89	01MW53-20110413	04/13/11	YSI	5.19	<0.010	0.005	--	0.2	8.59	3.0	--	2.6	6.0	0.4	13.3	55	<0.05	--	0.0396	<0.00500	<0.00500
	01MW89-20110823	08/23/11	YSI	1.29	0.182	0.005	--	0.3	1.20	1.8	--	1.8	0.0	0.0	30.3	65	0.10	--	0.189	<0.00500	<0.00500
	01MW89-20111212	12/12/11	YSI	2.03	0.102	0.007	--	0.3	4.32	3.8	--	1.0	3.3	2.8	28.1	30	0.18	--	0.898	<0.00500	<0.00500
	01MW89-20120403	04/03/12	Quanta	0.40	0.537	0.013	--	0.0	2.34	5.0	--	2.2	0.1	2.8	28.9	39	0.14	--	0.0468	<0.00500	<0.00500
	01MW89-20121009	10/09/12	YSI	0.93	0.156	0.009	1.92	--	7.73	--	--	4.78	--	2.95	--	30.3	--	0.30	--	0.0509	<0.00500
<b>ASKO Hydraulic Property</b>																					
<b>Perched Water</b>																					
MW03	MW03-20090127	01/27/09	--	0.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW03-20090407	04/07/09	--	2.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01MW70	01MW70-20110111	01/11/11	Quanta	0.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01MW71	01MW71-20110111	01/11/11	Quanta	0.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>ASKO Hydraulic Property</b>																					
<b>Shallow Water-Bearing Zone</b>																					
MW01	MW01-20090127	01/27/09	--	0.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW02	MW02-20090127	01/27/09	--	0.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW02-20100125	01/25/10	Hanna	1.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW02-20110111	01/11/10	YSI	0.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW04	MW04-20090128	01/28/09	--	1.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW04-20090407	04/07/09	--	1.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW04-20100125	01/25/10	YSI	1.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW04-20110111	01/11/11	YSI	0.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW05	MW05-20090128	01/28/09	--	0.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW05-20090408	04/08/09	--	2.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW05-20100126	01/26/10	YSI	2.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW05-20110112	01/12/11	YSI	0.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW06	MW06-20090127	01/27/09	--	0.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW06-20090407	04/07/09	--	2.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW06-20100125	01/25/10	Hanna	0.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW06-20110111	01/11/11	YSI	0.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--





**Table 13**  
**Natural Attenuation Parameters**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	Water Quality Meter	Analytical Results (milligrams per liter)																	
				Dissolved Oxygen <sup>(1)</sup>	Nitrate <sup>(2)</sup>	Nitrite <sup>(2)</sup>	Total Manganese		Total Iron		Ferrous Iron		Ferric Iron <sup>(8)</sup>		Sulfate		Sulfide <sup>(10)</sup>	Sulfite <sup>(11)</sup>	Methane <sup>(12)</sup>	Ethane <sup>(12)</sup>	Ethene <sup>(12)</sup>
							Lab <sup>(3)</sup>	Field <sup>(4)</sup>	Lab <sup>(3)</sup>	Field <sup>(5)</sup>	Lab <sup>(6)</sup>	Field <sup>(7)</sup>	Lab	Field	Lab <sup>(2)</sup>	Field <sup>(9)</sup>					
<b>ASKO Hydraulic Property</b>																					
<b>Shallow Water-Bearing Zone</b>																					
01MW07	01MW07-20090128	01/28/09	--	1.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW07-20090407	04/07/09	--	2.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW07-20090707	07/07/09	--	0.00	<0.1	--	--	0.0	--	4.0	--	2.0	--	2.0	34	--	--	--	0.129	<0.005	<0.005
	01MW07-20100128	01/28/10	YSI	1.17	<0.1	--	--	0.0	--	4.4	--	3.5	--	0.9	34	--	--	--	0.072	<0.005	<0.005
	01MW07-20100407	04/07/10	Horiba	0.00	<0.1	--	--	0.0	--	4.6	--	3.8	--	0.8	40	--	--	--	0.10	<0.005	<0.005
	01MW07-20100708	07/08/10	YSI	0.29	<0.1	--	--	0.2	--	4.0	--	3.2	--	0.8	33	55	--	--	0.093	<0.005	<0.005
	01MW07-20110111	01/11/11	YSI	0.38	0.016	<0.002	--	0.0	6.12	5.0	--	1.4	4.7	3.6	30.9	60	<0.05	--	0.0440	<0.005	<0.005
	01MW07-20110412	04/12/11	YSI	1.9	<0.010	0.007	--	0.0	6.15	6.2	--	4.2	2.0	2.0	43.9	50	<0.05	--	0.0604	<0.00500	<0.00500
	01MW07-20110823	08/23/11	YSI	0.71	0.038	0.003	--	0.0	6.51	5.5	--	2.8	3.7	2.7	30.9	55	0.10	--	0.0711	<0.00500	<0.00500
	01MW07-20111206	12/06/11	YSI	0.88	0.026	0.005	--	0.0	5.97	5.0	--	2.2	3.8	2.8	38.2	70	0.30	--	0.112	<0.00500	<0.00500
	01MW07-20120403	04/03/12	Quanta	0.50	<0.010	0.006	--	0.0	6.54	4.2	--	3.2	3.3	1.0	33.1	41	0.14	--	0.0611	<0.00500	<0.00500
01MW07-20121010	10/10/12	YSI	0.33	<0.010	0.006	0.129	--	6.17	--	7.96	--	0.00	--	31.3	--	0.30	--	0.0342	<0.00500	<0.00500	
01MW07-20130402	04/02/13	Quanta	0.35	0.045	0.008	0.117	--	5.87	--	2.77	--	3.1	--	37.2	--	0.12	--	0.016	<0.005	<0.005	
01MW15	01MW15-20090127	01/27/09	--	3.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW15-20090407	04/07/09	--	1.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW15-20100127	01/27/10	Hanna	0.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW15-20110111	01/11/11	Quanta	0.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01MW44	01MW44-20090127	01/27/09	--	4.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW44-20090407	04/07/09	--	0.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW44-20090708	07/08/09	--	0.00	<0.1	--	--	0.0	--	4.0	--	0.0	--	4.0	36	--	--	0.27	<0.005	<0.005	
	01MW44-20100126	01/26/10	Hanna	1.97	<0.1	--	--	0.0	--	3.9	--	3.1	--	0.8	27	--	--	--	0.24	<0.005	<0.005
	01MW44-20100408	04/08/10	Horiba	1.79	<0.1	--	--	0.02	--	3.4	--	2.8	--	0.6	39	--	--	--	0.041	<0.005	<0.005
	01MW44-20100708	07/08/10	YSI	0.63	<0.1	--	--	0.1	--	2.8	--	2.2	--	0.6	38	60	--	--	0.17	<0.005	<0.005
	01MW44-20110111	01/11/11	YSI	0.33	0.015	<0.002	--	0.6	4.88	2.20	--	1.8	3.1	0.4	29.1	65	<0.05	--	0.144	<0.005	<0.005
	01MW44-20110412	04/12/11	YSI	3.36	0.279	0.007	--	0.0	4.95	4.0	--	2.0	3.0	2.0	27.5	200	<0.05	--	0.0504	<0.00500	<0.00500
	01MW44-20110824	08/24/11	YSI	0.46	<0.010	0.004	--	0.2	4.75	4.2	--	2.0	2.8	2.2	52.2	50	0.22	--	0.248	<0.00500	<0.00500
	01MW44-20111212	12/12/11	YSI	0.35	<0.010	0.003	--	0.0	4.36	1.8	--	0.8	3.6	1.0	24.5	25	0.18	--	0.839	<0.00500	<0.00500
	01MW44-20120404	04/04/12	Quanta	0.32	<0.010	0.006	--	0.2	5.39	4.6	--	3.6	1.8	1.0	33.1	34	0.18	--	0.143	<0.00500	0.000254 <sup>†</sup>
	01MW44-20121011	10/11/12	YSI	0.71	1.15	<0.002	0.731	--	4.84	--	6.75	--	0.00	--	28.3	--	0.32	--	0.141	<0.00500	<0.00500
	01MW44-20130403	04/03/13	YSI	0.59	0.013	<0.002	0.0709	--	5.11	--	0.14	--	4.97	--	31.0	--	0.16	--	0.0035	<0.005	<0.005



**Table 13**  
**Natural Attenuation Parameters**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	Water Quality Meter	Analytical Results (milligrams per liter)																	
				Dissolved Oxygen <sup>(1)</sup>	Nitrate <sup>(2)</sup>	Nitrite <sup>(2)</sup>	Total Manganese		Total Iron		Ferrous Iron		Ferric Iron <sup>(8)</sup>		Sulfate		Sulfide <sup>(10)</sup>	Sulfite <sup>(11)</sup>	Methane <sup>(12)</sup>	Ethane <sup>(12)</sup>	Ethene <sup>(12)</sup>
							Lab <sup>(3)</sup>	Field <sup>(4)</sup>	Lab <sup>(3)</sup>	Field <sup>(5)</sup>	Lab <sup>(6)</sup>	Field <sup>(7)</sup>	Lab	Field	Lab <sup>(2)</sup>	Field <sup>(9)</sup>					
ASKO Hydraulic Property																					
Shallow Water-Bearing Zone																					
01MW45	01MW45-20090128	01/28/09	YSI	0.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW45-20090409	04/07/09	YSI	0.247	--	--	--	0.0805	--	--	--	0.93	--	--	--	--	--	1.0	11	<0.1	<0.1
	01MW45-20090707	07/07/09	--	0.00	<0.1	--	--	0.0	--	5.0	--	0.0	--	5.0	26	--	--	--	0.189	<0.005	<0.005
	01MW45-20100128	01/28/10	YSI	0.71	<0.1	--	--	0.0	--	3.8	--	2.4	--	1.4	27	--	--	--	0.094	<0.005	<0.005
	01MW45-20100408	04/08/10	YSI	0.42	<0.1	--	--	0.0	--	6.0	--	4.8	--	1.2	32	--	--	--	0.025	<0.005	<0.005
	01MW45-20100708	07/08/10	YSI	0.19	<0.1	--	--	0.0	--	4.0	--	3.6	--	0.4	28	<50	--	--	0.13	<0.005	<0.005
	01MW45-20110111	01/11/11	YSI	0.31	0.018	<0.002	--	0.0	6.92	6.80	--	4.6	2.3	2.2	28.7	65	<0.05	--	0.138	<0.005	<0.005
	01MW45-20110412	04/12/11	YSI	1.32	<0.010	0.005	--	0.0	6.77	6.1	--	5.8	1.0	0.3	32.0	<50	<0.05	--	0.0938	<0.00500	<0.00500
	01MW45-20110824	08/24/11	YSI	0.51	1.40	0.002	--	0.0	7.02	5.2	--	1.8	5.2	3.4	30.4	22	<0.05	--	0.193	<0.00500	<0.00500
	01MW45-20111209	12/09/11	YSI	0.86	--	--	--	0.0	6.38	6.2	--	2.2	4.2	4.0	28.2	55	0.24	--	0.341	<0.00500	<0.00500
	01MW45-20111213	12/13/11	YSI	0.43	<0.010	0.008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW45-20120404	04/04/12	Quanta	0.23	<0.010	0.003	--	0.0	7.23	5.0	--	4.0	3.2	1.0	28.5	33	0.16	--	0.112	<0.00500	0.000266 <sup>1</sup>
01MW45-20121011	10/11/12	YSI	0.34	0.019	<0.002	0.099	--	6.29	--	8.77	--	0	--	18.5	--	0.32	--	0.0402	<0.00500	<0.00500	
01MW45-20130403	04/03/13	YSI	0.63	0.053	<0.002	0.0958	--	6.47	--	1.10	--	5.37	--	30.1	--	0.14	--	0.0024	<0.005	<0.005	
01MW46	01MW46-20090127	01/27/09	--	3.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW46-20090407	04/07/09	--	2.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW46-20010126	01/26/10	YSI	0.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW46-20110112	01/12/11	YSI	0.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
01MW55	01MW55-20090127	01/27/09	--	4.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW55-20090407	04/07/09	YSI	0.209	--	--	--	1.13	0.42	--	--	<0.250	0.42	--	--	--	1.0	4.4	0.1	<0.1	
	01MW55-20090707	07/07/09	--	0.79	<0.1	--	--	0.3	--	--	--	0.0	--	--	10	--	--	--	0.110	<0.005	0.005
	01MW55-20100126	01/26/10	Hanna	3.29	<0.1	--	--	0.0	--	0.0	--	0.0	--	0.0	21	--	--	--	0.020	<0.005	<0.005
	01MW55-20100408	04/08/10	YSI	0.69	<0.1	--	--	0.0	--	0.0	--	0.0	--	0.0	24	--	--	--	0.005	<0.005	<0.005
	01MW55-20100709	07/09/10	YSI	0.41	<0.1	--	--	0.0	--	1.0	--	0.4	--	0.6	15	<50	--	--	0.062	<0.0005	0.005
	01MW55-20110112	01/12/11	Hach HQ20	0.29	<0.010	<0.002	--	0.6	0.133	0.6	--	0.0	0.1	0.6	20.5	19	<0.05	--	0.135	<0.005	<0.005
	01MW55-20110413	04/13/11	YSI	2.29	0.973	0.003	--	0.2	0.268	0.0	--	0.0	0.3	0.0	16.9	33	<0.05	--	0.187	0.00653	<0.00500
	01MW55-20110825	08/25/11	YSI	0.77	<0.010	0.002	--	0.3	0.296	0.4	--	0.2	0.1	0.2	19.5	21	0.12	--	0.378	<0.00500	<0.00500
	01MW55-20111209	12/09/11	YSI	0.49	--	--	--	0.0	0.249	0.3	--	0.2	0.0	0.1	24.0	25	<0.05	--	0.581	<0.00500	0.00590
	01MW55-20111212	12/12/11	YSI	0.61	0.016	0.002	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW55-20120404	04/04/12	YSI	0.27	<0.010	<0.002	--	0.2	0.158	0.2	--	0.2	0.0	0.0	16.1	25	0.14	--	0.388	0.00124 <sup>1</sup>	0.00128 <sup>1</sup>
01MW55-20121011	10/11/12	YSI	0.51	14.0	<0.002	0.676	--	0.180	--	0.01	--	0.17	--	24.2	--	0.28	--	0.0210	<0.00500	<0.00500	
01MW55-20130403	04/03/13	Quanta	0.49	0.010	<0.002	1.07	--	0.0791	--	0.02	--	0.059	--	13.5	--	0.12	--	0.015	<0.005	<0.005	
01MW56	01MW56-20090127	01/27/09	--	3.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
01MW58	01MW58-20090128	01/28/09	--	1.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW58-20090407	04/07/09	--	0.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW58-20100126	01/26/10	Hanna	2.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW58-20110111	01/11/11	Quanta	0.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	



**Table 13**  
**Natural Attenuation Parameters**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	Water Quality Meter	Analytical Results (milligrams per liter)																	
				Dissolved Oxygen <sup>(1)</sup>	Nitrate <sup>(2)</sup>	Nitrite <sup>(2)</sup>	Total Manganese		Total Iron		Ferrous Iron		Ferric Iron <sup>(8)</sup>		Sulfate		Sulfide <sup>(10)</sup>	Sulfite <sup>(11)</sup>	Methane <sup>(12)</sup>	Ethane <sup>(12)</sup>	Ethene <sup>(12)</sup>
							Lab <sup>(3)</sup>	Field <sup>(4)</sup>	Lab <sup>(3)</sup>	Field <sup>(5)</sup>	Lab <sup>(6)</sup>	Field <sup>(7)</sup>	Lab	Field	Lab <sup>(2)</sup>	Field <sup>(9)</sup>					
<b>ASKO Hydraulic Property</b>																					
<b>Shallow Water-Bearing Zone</b>																					
01MW60	01MW60-20090129	01/29/09	--	0.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW60-20090407	04/07/09	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW60-20090708	07/08/09	--	0.00	<0.1	--	--	0.1	--	2.2	--	1.8	--	0.4	54	--	--	--	0.24	<0.005	<0.005
	01MW60-20100128	01/28/10	Hanna	7.35	<0.1	--	--	0.0	--	2.9	--	2.1	--	0.8	50	--	--	--	0.098	<0.005	<0.005
	01MW60-20100408	04/08/10	YSI	0.16	<0.1	--	--	0.3	--	2.6	--	0.2	--	2.4	49	--	--	--	0.03	<0.005	<0.005
	01MW60-20100713	07/13/10	YSI	0.72	<0.1	--	--	0.2	--	--	--	2.4	--	--	49	75	--	--	0.094	<0.005	<0.005
	01MW60-20110113	01/13/11	YSI	0.95	<0.010	0.006	--	--	--	3.18	--	--	--	--	57.7	--	--	<0.05	0.0218	<0.005	<0.005
	01MW60-20110415	04/15/11	Hach HQ20	0.13	<0.010	0.007	--	0.03	3.56	2.8	--	2.8	0.8	0.0	52.4	75	<0.05	--	0.0380	<0.00500	<0.00500
	01MW60-20110824	08/24/11	YSI	0.78	<0.010	0.015	--	0.3	3.68	2.5	--	0.4	3.3	2.1	54.5	100	<0.05	--	0.186	<0.00500	<0.00500
	01MW60-20111207	12/07/11	YSI	0.53	0.107	0.003	--	0.0	5.87	3.0	--	1.1	4.8	1.9	51.9	150	<0.05	--	0.203	<0.00500	<0.00500
	01MW60-20120404	04/04/12	YSI	0.78	<0.010	0.004	--	0.3	3.78	3.0	--	2.4	1.4	0.6	53.9	50	0.18	--	0.0393	<0.00500	<0.00500
	01MW60-20121010	10/10/12	YSI	1.2	0.012	0.004	0.956	--	2.65	--	3.58	--	0	--	50.9	--	0.32	--	0.0158	<0.00500	<0.00500
01MW60-20130402	04/02/13	Quanta	0.31	<0.010	0.007	0.962	--	3.12	--	<0.01	--	3.1	--	36.9	--	0.12	--	0.0052	<0.005	<0.005	
01MW61	01MW61-20090129	01/29/09	--	0.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW61-20090407	04/07/09	--	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW61-20090708	07/08/10	--	0.00	--	--	--	0.2	--	3.0	--	2.0	--	1.0	--	--	--	--	--	--	
	01MW61-20100128	01/28/10	Hanna	2.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW61-20110111	01/11/11	HQ20	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
01MW62	01MW62-20090129	01/29/09	--	0.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW62-20090409	04/09/09	YSI	0.194	--	--	--	1.05	<0.25	--	--	--	--	--	--	--	<1	1.2	<0.1	<0.1	
	01MW62-20090708	07/08/10	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW62-20100128	1/28/2010	Hanna	0.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
01MW62-20110113	1/13/2011	YSI	1.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
01MW63	01MW63-20090129	01/29/09	--	5.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW63-20090407	04/07/09	--	0.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW63-20090708	07/08/09	--	0.00	<0.1	--	--	0.3	--	4.0	--	2.2	--	1.8	<0.1	--	--	0.23	<0.005	<0.005	
	01MW63-20100127	01/27/10	Hanna	1.59	<0.1	--	--	0.2	--	4.0	--	3.5	--	0.5	12	--	--	0.556	<0.005	<0.005	
	01MW63-20100408	04/08/10	YSI	0.46	<0.1	--	--	0.3	--	3.0	--	0.1	--	2.9	15	--	--	0.15	0.004	<0.005	
	01MW63-20100709	07/09/10	YSI	0.30	<0.1	--	--	0.4	--	3.2	--	2.8	--	0.4	15.0	<50	--	0.52	<0.005	0.009	
	01MW63-20110111	01/11/11	YSI	0.32	<0.010	0.005	--	0.8	3.72	3.8	--	1.8	1.9	2.0	12.5	15	<0.05	--	0.531	<0.005	<0.005
	01MW63-20110414	04/14/11	YSI	1.03	<0.010	0.003	--	0.2	2.42	1.9	--	2.1	0.3	0	13.6	8	<0.05	--	0.122	<0.00500	<0.00500
	01MW63-20110825	08/25/11	YSI	0.76	<0.010	0.003	--	0.3	3.22	3.5	--	2.7	0.5	0.8	16.5	17	<0.05	--	0.803	<0.00500	0.00763
	01MW63-20111209	12/09/11	YSI	0.52	--	--	--	0.0	2.96	1.6	--	1.0	2.0	0.6	13.3	17	0.36	--	1.23	<0.00500	0.00683
	01MW63-20111213	12/13/11	YSI	0.59	<0.010	0.002	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW63-20120404	04/04/12	YSI	0.41	<0.010	0.003	--	0.2	1.83	2.0	--	1.6	0.2	--	14.5	14	0.14	--	0.258	0.000245 <sup>1</sup>	0.000735 <sup>1</sup>
01MW63-20121011	10/11/12	YSI	0.87	0.020	<0.002	0.887	--	3.80	--	3.63	--	0.17	--	18.5	--	0.32	--	0.158	<0.00500	<0.00500	
01MW63-20130403	04/03/13	Quanta	0.58	<0.010	0.003	0.832	--	3.13	--	2.28	--	0.85	--	15.6	--	0.12	--	0.065	<0.005	<0.005	
01MW64	01MW64-20090409	04/07/09	--	0.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW64-20100127	01/27/10	Hanna	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW64-20100406	04/06/10	YSI	1.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW64-20110112	01/12/11	HQ20	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	



Table 13  
 Natural Attenuation Parameters  
 TOC Holdings Co.  
 ASKO Hydraulic Property  
 2805 West Commodore Way  
 Seattle, Washington

Well Identification	Sample Identification	Sample Date	Water Quality Meter	Analytical Results (milligrams per liter)																	
				Dissolved Oxygen <sup>(1)</sup>	Nitrate <sup>(2)</sup>	Nitrite <sup>(2)</sup>	Total Manganese		Total Iron		Ferrous Iron		Ferric Iron <sup>(8)</sup>		Sulfate		Sulfide <sup>(10)</sup>	Sulfite <sup>(11)</sup>	Methane <sup>(12)</sup>	Ethane <sup>(12)</sup>	Ethene <sup>(12)</sup>
							Lab <sup>(3)</sup>	Field <sup>(4)</sup>	Lab <sup>(3)</sup>	Field <sup>(5)</sup>	Lab <sup>(6)</sup>	Field <sup>(7)</sup>	Lab	Field	Lab <sup>(2)</sup>	Field <sup>(9)</sup>					
ASKO Hydraulic Property																					
Intermediate Water-Bearing Zone																					
01MW54	01MW54-20090129	01/29/09	--	0.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW54-20090408	04/08/09	--	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW54-20100126	01/26/10	Hanna	3.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW54-20100406	04/06/10	YSI	2.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW54-20110112	01/12/11	HQ20	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
01MW57	01MW57-20090128	01/28/09	--	0.83	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW57-20090408	04/08/09	--	1.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW57-20100126	01/26/10	YSI	12.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW57-20110110	01/10/11	YSI	0.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
ASKO Hydraulic Property																					
Deep Water-Bearing Zone																					
01MW65	01MW65-20090408	04/08/09	--	0.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW65-20100126	01/26/10	Hanna	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01MW65-20110112	01/12/11	HQ20	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
BNSF Parcel																					
Perched Water																					
01MW92	01MW92-20120905	09/05/12	YSI	0.42	--	--	--	0.1	--	0.7	--	0.6	--	0.1	--	--	--	--	--	--	
BNSF Parcel																					
Shallow Water-Bearing Zone																					
01MW93	01MW93-20120905	09/05/12	YSI	0.39	--	--	--	0.2	--	0.8	--	0.1	--	0.7	--	--	--	--	--	--	
01MW94	01MW94-20120905	09/05/12	YSI	0.86	--	--	--	0.1	--	0.6	--	0.0	--	0.6	--	--	--	--	--	--	
01MW95	01MW95-20120905	09/05/12	YSI	0.39	--	--	--	0.8	--	1.6	--	1.0	--	0.6	--	--	--	--	--	--	
West Waterfront Property																					
Shallow Water-Bearing Zone																					
02MW13	02MW13-20090127	01/27/09	--	4.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	02MW13-20090407	04/07/09	--	7.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	02MW13-20100125	01/25/10	Horiba	5.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	02MW13-20110112	01/12/11	Hach HQ20	6.35	0.538	<0.002	--	0.0	<0.020	0.2	--	0.0	<0.020	0.2	11.8	13	<0.05	--	<0.005	<0.005	<0.005
	02MW13-20110414	04/14/11	YSI	6.68	0.534	<0.002	--	0.0	<0.100	<0.2	--	0.0	<0.100	<0.2	12.1	11	<0.05	--	<0.00500	<0.00500	<0.00500
02MW14	02MW14-20090127	01/27/09	--	1.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	02MW14-20090407	04/07/09	--	1.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	02MW14-20100125	01/25/10	Horiba	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	02MW14-20100405	04/05/10	YSI	2.08	--	--	--	0.0	--	1.2	0.2	--	--	1.0	--	--	--	--	--	--	
	02MW14-20110112	01/12/11	HQ20	1.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	02MW14-20110414	04/14/11	YSI	1.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	



**Table 13**  
**Natural Attenuation Parameters**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	Water Quality Meter	Analytical Results (milligrams per liter)																	
				Dissolved Oxygen <sup>(1)</sup>	Nitrate <sup>(2)</sup>	Nitrite <sup>(2)</sup>	Total Manganese		Total Iron		Ferrous Iron		Ferric Iron <sup>(8)</sup>		Sulfate		Sulfide <sup>(10)</sup>	Sulfite <sup>(11)</sup>	Methane <sup>(12)</sup>	Ethane <sup>(12)</sup>	Ethene <sup>(12)</sup>
							Lab <sup>(3)</sup>	Field <sup>(4)</sup>	Lab <sup>(3)</sup>	Field <sup>(5)</sup>	Lab <sup>(6)</sup>	Field <sup>(7)</sup>	Lab	Field	Lab <sup>(2)</sup>	Field <sup>(9)</sup>					
<b>Bulk Terminal Property</b>																					
<b>Shallow Water-Bearing Zone</b>																					
01MW06	01MW06-20090128	01/28/09	--	0.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW06-20090407	04/07/09	--	0.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW06-20100125	01/25/10	YSI	5.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW06-20110110	01/10/11	Hach HQ20	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01MW08	01MW08-20090129	01/29/09	--	8.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01MW59	01MW59-20090129	01/29/09	--	0.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW59-20090408	04/08/09	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW59-20100125	01/25/10	YSI	8.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01MW59-20110111	01/11/11	Hach HQ20	0.3	--	--	--	--	--	--	--	--	--	--	2.78	--	--	--	--	--	--
	01MW59-20110415	04/14/11	Quanta	2.22	--	--	--	--	--	--	--	--	--	--	3.10	--	--	--	--	--	--
	01MW59-20111207	12/07/11	YSI	0.43	--	--	--	--	--	--	--	--	--	--	11.3	--	--	--	--	--	--
	01MW59-20120409	04/09/12	YSI	0.2	--	--	--	--	--	--	--	--	--	--	4.72	--	--	--	--	--	--
	01MW59-20121012	10/12/12	Hach HQ20	0.28	--	--	--	--	--	--	--	--	--	--	1.04	--	--	--	--	--	--
01MW59-20130403	04/03/13	Quanta	0.20	--	--	--	--	--	--	--	--	--	--	6.04	--	--	--	--	--	--	

**NOTES:**

Analyses performed by Friedman and Bruya, Inc., Fremont Analytical Inc., or Aquatic Research Inc., of Seattle, Washington; or Amtest Inc. of Kirkland, Washington.

<sup>(1)</sup>Parameter is measured in the field using water quality meter with flow-through cell. The reported value is the last reading prior to sampling groundwater.

<sup>(2)</sup>Analyzed by EPA Methods 300.0, 353.2, 375.4, or SM 1845.

<sup>(3)</sup>Analyzed by EPA Method 200.7 or 200.8.

<sup>(4)</sup>Analyzed in the field by SoundEarth personnel using a Hach<sup>®</sup> Manganese kit, EPA Periodate Oxidation Method 8034, except where noted.

<sup>(5)</sup>Analyzed in the field by SoundEarth personnel using Hach<sup>®</sup> Total Iron Kit, FerroVer Method 8008.

<sup>(6)</sup>Analyzed by Standard Method 3500FeD.

<sup>(7)</sup>Analyzed in the field by SoundEarth personnel using Hach<sup>®</sup> Ferrous Iron Kit, 1-10 Phenanthroline Method 8146, unless otherwise noted.

<sup>(8)</sup>Ferric iron concentration equals total iron concentration minus ferrous iron concentration.

<sup>(9)</sup>Analyzed in the field by SoundEarth personnel using Hach<sup>®</sup> Sulfate Kit, Extinction Method.

<sup>(10)</sup>Analyzed by Standard Method 4500-S<sup>2</sup>-F.

<sup>(11)</sup>Analyzed by EPA Method 377.1.

<sup>(12)</sup>Analyzed by method RSK-175.

**Laboratory Note:**

<sup>1</sup>Analyte detected below quantitation limits. Value is estimated.

-- not measured or not analyzed

< not detected at a concentration exceeding the laboratory reporting limit

EPA = United States Environmental Protection Agency

SoundEarth = SoundEarth Strategies, Inc.



**Table 14**  
**Geochemical and Water Quality Parameters**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	ORP <sup>(1)</sup> (mV)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	pH <sup>(1)</sup>	TKN <sup>(2)</sup> (mg/L)	Total Phosphorous <sup>(3)</sup> (mg/L)	Alkalinity <sup>(4)</sup> (mg/L CaCO <sub>3</sub> )	Hardness <sup>(5)</sup> (mg equivalent CaCO <sub>3</sub> /L)
<b>West Commodore Way</b>											
<b>Shallow Water-Bearing Zone</b>											
01MW52	01MW52-20100125	01/25/10	91.6	0.783	15	14.33	6.47	--	--	--	--
01MW53	01MW53-20090408	04/08/09	-61.40	0.987	>200	16.66	6.99	--	--	--	--
	01MW53-20090707	07/07/09	-67.00	1.026	660	16.78	7.26	--	--	--	--
	01MW53-20100706	07/06/10	-0.7	0.964	274	22.61	7.30	--	--	--	--
	01MW53-20110113	01/13/11	101.8	2.717	34.5	13.08	6.50	1.49	7.39	533	431
01MW89	01MW53-20110413	04/13/11	44.6	0.942	174	12.57	6.89	0.997	4.47	537	463
	01MW89-20110823	08/23/11	36.7	0.925	1.7	22.41	6.46	0.681	0.068	488	517
	01MW89-20111212	12/12/11	-18.1	0.95	1.02	12.1	6.49	1.79	0.115	530	418
	01MW89-20120403	04/03/12	42	0.752	1.4	11.64	6.41	1.07	0.050	454	396
	01MW89-20121009	10/09/12	53.5	0.78	11.5	16.5	6.47	2.39	0.092	465	459
<b>ASKO Hydraulic Property</b>											
<b>Perched Water</b>											
MW03	MW03-20090127	01/27/09	-177	0.662	3.7	10.46	6.65	--	--	--	--
	MW03-20090407	04/07/09	-423.8	0.729	4.5	12.40	6.21	--	--	--	--
<b>ASKO Hydraulic Property</b>											
<b>Shallow Water-Bearing Zone</b>											
MW01	MW01-20090127	01/27/09	-222	0.756	3.3	11.22	7.65	--	--	--	--
MW02	MW02-20090127	01/27/09	-209	0.817	0.0	12.65	7.64	--	--	--	--
	MW02-20100125	01/25/10	-140.2	0.847	2	13.51	7.53	--	--	--	--
MW04	MW04-20090128	01/28/09	-188	0.819	0.7	11.86	7.14	--	--	--	--
	MW04-20090407	04/07/09	-319	0.852	1.1	13.20	6.81	--	--	--	--
	MW04-20100125	01/25/10	185.4	0.890	--	12.75	7.43	--	--	--	--
MW05	MW05-20090128	01/28/09	-179	0.808	1.9	12.40	7.25	--	--	--	--
	MW05-20090408	04/08/09	-320.1	0.844	1.3	12.81	6.67	--	--	--	--
	MW05-20100126	01/26/10	181.3	0.901	--	13.04	7.44	--	--	--	--
MW06	MW06-20090127	01/27/09	-180	0.778	16.4	13.25	7.29	--	--	--	--
	MW06-20090407	04/07/09	-429.9	0.829	3.0	13.25	6.68	--	--	--	--
	MW06-20100125	01/25/10	-112.7	0.821	19	13.99	7.25	--	--	--	--
01MW07	01MW07-20090128	01/28/09	-136	0.885	2.3	14.20	6.77	--	--	--	--
	01MW07-20090407	04/07/09	-348	0.937	7.6	13.90	6.41	--	--	--	--
	01MW07-20090707	07/07/09	-36.8	0.841	4.73	16.28	6.74	--	--	--	--
	01MW07-20100128	01/28/10	-1.1	0.780	6.40	14.44	8.63	--	--	--	--
	01MW07-20100407	04/07/10	-28	0.736	2.8	14.44	6.67	--	--	--	--
	01MW07-20100708	07/08/10	-61.6	1.892	5.04	17.5	6.53	--	--	--	--
	01MW07-20110111	01/11/11	-82	1.432	1.01	13.55	6.87	0.760	0.057	496	454
	01MW07-20110412	04/12/11	-57	0.888	1	14.99	6.76	0.491	0.062	497	394
	01MW07-20110823	08/23/11	-56.1	0.917	0.33	21.21	6.64	0.465	0.063	491	431
	01MW07-20111206	12/06/11	-89.3	0.88	0.7	14.8	6.84	0.946	0.086	526	436
	01MW07-20120403	04/03/12	-76	0.822	1.7	13.46	6.74	0.782	0.067	505	435
	01MW07-20121010	10/10/12	-77.9	0.82	0.3	15.7	6.73	0.603	0.063	489	479
01MW07-20130402	04/02/13	26	0.6316	0.0	14.80	6.62	0.520	0.062	180	432	



**Table 14**  
**Geochemical and Water Quality Parameters**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	ORP <sup>(1)</sup> (mV)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	pH <sup>(1)</sup>	TKN <sup>(2)</sup> (mg/L)	Total Phosphorous <sup>(3)</sup> (mg/L)	Alkalinity <sup>(4)</sup> (mg/L CaCO <sub>3</sub> )	Hardness <sup>(5)</sup> (mg equivalent CaCO <sub>3</sub> /L)
<b>ASKO Hydraulic Property</b>											
<b>Shallow Water-Bearing Zone</b>											
<b>01MW15</b>	01MW15-20090127	01/27/09	-116.0	0.829	15.2	3.50	10.82	--	--	--	--
	01MW15-20090407	04/07/09	-145	0.741	3.9	16.65	7.39	--	--	--	--
	01MW15-20100127	01/27/10	-119.1	0.724	3	10.46	6.92	--	--	--	--
<b>01MW44</b>	01MW44-20090127	01/27/09	-124	0.837	19.0	11.00	10.89	--	--	--	--
	01MW44-20090407	04/07/09	-155	0.809	39.9	14.86	7.37	--	--	--	--
	01MW44-20090708	07/08/09	-104.1	0.739	62.0	15.22	7.08	--	--	--	--
	01MW44-20100126	01/26/10	-133.2	0.786	8	13.19	6.52	--	--	--	--
	01MW44-20100408	04/08/10	-140	1.210	1.24	14.14	7.03	--	--	--	--
	01MW44-20100708	07/08/10	-114.4	1.644	16.1	18.82	7.10	--	--	--	--
	01MW44-20110111	01/11/11	-139	1.217	0.88	12.98	7.26	0.600	0.184	402	403
	01MW44-20110412	04/12/11	-102	0.653	10	15.18	7.1	0.292	0.188	448	390
	01MW44-20110824	08/24/11	111.3	0.763	4.6	17.57	7.02	0.295	0.188	395	376
	01MW44-20111212	12/12/11	-80.5	0.79	1.73	12.5	7.00	1.44	0.200	461	362
	01MW44-20120404	04/04/12	-117	0.687	7.6	13.46	7.00	0.689	0.183	434	357
	01MW44-20121011	10/11/12	-90.9	0.696	0.7	14.26	6.69	0.553	0.243	429	401
01MW44-20130403	04/03/13	-86.6	0.575	3.91	14.66	6.98	0.647	0.258	446	383	
<b>01MW45</b>	01MW45-20090128	01/28/09	-42.2	1.241	--	13.70	6.89	--	--	--	--
	01MW45-20090409	04/07/09	-359.7	0.860	--	15.08	6.33	--	--	--	--
	01MW45-20090707	07/07/09	-71.7	0.831	6.43	16.29	6.80	--	--	--	--
	01MW45-20100128	01/28/10	-3.6	0.767	9.05	14.29	8.21	--	--	--	--
	01MW45-20100409	04/09/10	150.4	0.995	4.60	14.02	6.68	--	--	--	--
	01MW45-20100708	07/08/10	-86.3	1.881	3.76	19.08	6.61	--	--	--	--
	01MW45-20110111	01/11/11	-94	1.405	0.71	14.22	6.87	1.07	0.093	515	449
	01MW45-20110412	04/12/11	-73	0.708	1.0	15.56	6.75	0.520	0.094	511	404
	01MW45-20110824	08/24/11	-73.7	0.911	1.0	18.54	6.64	0.527	0.095	491	425
	01MW45-20111209	12/09/11	-54.4	0.88	3.5	14.1	6.78	1.14	0.097	534	414
	01MW45-20111213	12/13/11	-68.6	0.69	3.0	13.3	6.52	--	--	--	--
	01MW45-20120404	04/04/12	-81	0.790	4.2	15.14	6.62	0.822	0.088	515	414
01MW45-20121011	10/11/12	-65.8	0.84	1.3	15.3	6.61	0.345	0.110	485	469	
01MW45-20130403	04/03/13	-39.2	0.647	0.72	15.08	6.72	0.957	0.124	519	420	
<b>01MW46</b>	01MW46-20090127	01/27/09	-101	0.904	1.4	12.20	10.15	--	--	--	--
	01MW46-20090407	04/07/09	-412.1	0.884	1.2	14.26	6.51	--	--	--	--
	01MW46-20010126	01/26/10	192.6	0.904	--	13.40	7.12	--	--	--	--



**Table 14**  
**Geochemical and Water Quality Parameters**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	ORP <sup>(1)</sup> (mV)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	pH <sup>(1)</sup>	TKN <sup>(2)</sup> (mg/L)	Total Phosphorous <sup>(3)</sup> (mg/L)	Alkalinity <sup>(4)</sup> (mg/L CaCO <sub>3</sub> )	Hardness <sup>(5)</sup> (mg equivalent CaCO <sub>3</sub> /L)	
<b>ASKO Hydraulic Property</b>												
<b>Shallow Water-Bearing Zone</b>												
<b>01MW55</b>	01MW55-20090127	01/27/09	43	0.587	6.5	8.80	8.61	--	--	--	--	
	01MW55-20090407	04/07/09	-363.1	0.542	--	13.11	6.15	--	--	290	270	
	01MW55-20090707	07/07/09	15.06	0.562	--	14.33	6.77	--	--	--	--	
	01MW55-20100126	01/26/10	-11.1	0.564	2	12.41	6.02	--	--	--	--	
	01MW55-20100408	04/08/10	184.5	0.594	8.0	13.47	6.48	--	--	--	--	
	01MW55-20100709	07/09/10	86.3	0.535	1.68	16.68	6.37	--	--	--	--	
	01MW55-20110112	01/12/11	33.1	0.48	0.68	11.2	6.83	0.442	0.028	264	217	
	01MW55-20110413	04/13/11	66	0.464	5	12.46	6.69	0.151	0.030	268	198	
	01MW55-20110825	08/25/11	82.1	0.482	2.1	19.39	6.54	0.368	0.037	254	209	
	01MW55-20111209	12/09/11	29.3	0.494	0.8	8.3	6.80	0.674	0.033	285	213	
<b>01MW56</b>	01MW55-20111212	12/12/11	51.0	0.508	1.3	9.4	6.83	--	--	--	--	
	01MW55-20120404	04/04/12	47.5	0.463	0.5	13.2	6.65	0.401	0.031	266	203	
	01MW55-20121011	10/11/12	90.6	0.491	7.3	13.57	6.43	0.384	0.085	305	303	
	01MW55-20130403	04/03/13	158.0	0.352	2.1	13.38	6.63	0.439	0.064	264	223	
	01MW56-20090127	01/27/09	-80	0.942	4.8	12.60	9.76	--	--	--	--	
	<b>01MW58</b>	01MW58-20090128	01/28/09	-194	0.836	8.8	13.08	7.38	--	--	--	--
		01MW58-20090407	04/07/09	-141	0.827	4.3	13.08	7.44	--	--	--	--
		01MW58-20100126	01/26/10	-15.11	0.809	6	11.63	6.69	--	--	--	--
	<b>01MW60</b>	01MW60-20090129	01/29/09	-157	1.060	661	15.70	7.46	--	--	--	--
		01MW60-20090407	04/07/09	-124	0.907	305	13.90	7.28	--	--	--	--
01MW60-20090708		07/08/09	-111	0.874	225	13.13	6.93	--	--	--	--	
01MW60-20100128		01/28/10	-105.9	0.800	7	10.86	6.89	--	--	--	--	
01MW60-20100408		04/08/10	137.4	0.881	4.9	12.63	7.07	--	--	--	--	
01MW60-20100713		07/13/10	175.8	0.685	1.24	17.55	6.94	--	--	--	--	
01MW60-20110113		01/13/11	-131	1.423	3.9	11.49	7.06	1.151	0.264	418	364	
01MW60-2010415		04/15/11	-85.8	0.787	11.4	10.9	7.05	1.119	0.320	378	391	
01MW60-20110824		08/24/11	-120.2	0.78	9.2	14.8	7.17	0.761	0.394	411	362	
01MW60-20111207		12/07/11	-97.9	0.74	78.9	10.4	7.08	1.85	0.530	444	369	
01MW60-20120404		04/04/12	-113.7	0.795	10	15.20	7.02	1.119	0.369	414	362	
01MW60-20121010		10/10/12	-74.8	0.595	12.3	14.08	7.42	0.991	0.265	398	401	
01MW60-20130402	04/02/13	-9	0.620	39.1	12.48	7.11	0.788	0.223	424	367		
<b>01MW61</b>	01MW61-20090129	01/29/09	-116	0.890	60.3	14.38	7.13	--	--	--	--	
	01MW61-20090407	04/07/09	-100	0.811	851	19.20	6.99	--	--	--	--	
	01MW61-20090708	07/08/10	-98	0.808	20	13.97	6.75	--	--	--	--	
	01MW61-20100128	01/28/10	-103.9	0.795	9	11.87	6.80	--	--	--	--	
<b>01MW62</b>	01MW62-20090129	01/29/09	-127	0.895	78.6	14.20	7.16	--	--	--	--	
	01MW62-20090409	04/09/09	-361.4	0.789	--	13.78	6.68	--	--	--	--	
	01MW62-20090708	07/08/10	-99	0.814	27.6	13.24	6.68	--	--	--	--	
	01MW62-20100128	01/28/10	-125.6	0.787	5	11.73	6.85	--	--	--	--	





**Table 14**  
**Geochemical and Water Quality Parameters**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	ORP <sup>(1)</sup> (mV)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	pH <sup>(1)</sup>	TKN <sup>(2)</sup> (mg/L)	Total Phosphorous <sup>(3)</sup> (mg/L)	Alkalinity <sup>(4)</sup> (mg/L CaCO <sub>3</sub> )	Hardness <sup>(5)</sup> (mg equivalent CaCO <sub>3</sub> /L)
<b>ASKO Hydraulic Property</b>											
<b>Shallow Water-Bearing Zone</b>											
01MW63	01MW63-20090129	01/29/09	58	0.478	28.8	10.90	6.54	--	--	--	--
	01MW63-20090407	04/07/09	-48	0.463	9.8	11.46	6.67	--	--	--	--
	01MW63-20090708	07/08/09	-32.0	0.438	6.51	16.76	6.65	--	--	--	--
	01MW63-20100127	01/27/10	-34	0.439	4	10.29	6.34	--	--	--	--
	01MW63-20100408	04/08/10	181.5	0.511	5.4	12.54	6.50	--	--	--	--
	01MW63-20010709	07/09/10	-24.9	0.484	2.81	16.04	6.39	--	--	--	--
	01MW63-200110111	01/11/11	-49	0.721	--	10.97	6.79	0.306	0.055	246	215
	01MW63-20110414	04/14/11	0.9	0.453	8.7	11.91	6.59	<0.200	0.320	246	201
	01MW63-20110825	08/25/11	-20.3	0.467	0.8	18.02	6.54	<0.200	0.054	251	215
	01MW63-20111209	12/09/11	-30.1	0.461	3.28	10.1	6.73	0.705	0.055	257	213
	01MW63-20111213	12/13/11	-13.8	0.349	1.6	10.3	6.47	--	--	--	--
01MW63-20120404	04/04/12	-0.5	0.442	0.2	11.1	6.47	0.357	0.032	252	198	
01MW63-20121011	10/11/12	-60.5	0.375	2.55	13.60	6.89	0.309	0.047	248	239	
01MW63-20130403	04/03/13	-13	0.359	2.3	12.84	6.56	0.457	0.022	261	215	
01MW64	01MW64-20090409	04/07/09	-96	0.852	>999	27.30	7.06	--	--	--	--
	01MW64-20100127	01/27/10	-132.6	0.807	29	11.91	7.01	--	--	--	--
	01MW64-20100406	04/06/10	27.8	0.907	8	12.42	7.11	--	--	--	--
<b>ASKO Hydraulic Property</b>											
<b>Intermediate Water-Bearing Zone</b>											
01MW54	01MW54-20090129	01/29/09	-153	0.549	110	11.30	7.18	--	--	--	--
	01MW54-20090408	04/08/09	-113	0.478	9.4	14.30	6.84	--	--	--	--
	01MW54-20100126	01/26/10	-127.8	0.437	6	9.31	6.70	--	--	--	--
	01MW54-20100406	04/06/10	-4.9	0.516	7	11.90	7.06	--	--	--	--
01MW57	01MW57-20090128	01/28/09	-173	0.698	9.3	12.36	7.44	--	--	--	--
	01MW57-20090408	04/08/09	-310.1	0.661	5.4	11.98	6.77	--	--	--	--
	01MW57-20100126	01/26/10	172.5	0.685	--	12.33	7.41	--	--	--	--
<b>ASKO Hydraulic Property</b>											
<b>Deep Water-Bearing Zone</b>											
01MW65	01MW65-20090408	04/08/09	-83	0.825	257	15.30	6.81	--	--	--	--
	01MW65-20100126	01/26/10	-147.7	0.600	3	12.44	6.36	--	--	--	--
<b>BNSF Parcel</b>											
<b>Perched Water</b>											
01MW92	01MW92-20120905	09/05/12	74.5	0.451	1.6	18.04	6.58	--	--	--	--
<b>BNSF Parcel</b>											
<b>Shallow Water-Bearing Zone</b>											
01MW93	01MW93-20120905	09/05/12	-40.3	0.765	7.1	14.76	6.72	--	--	--	--
01MW94	01MW94-20120905	09/05/12	2.3	0.722	4.2	14.56	6.67	--	--	--	--
01MW95	01MW95-20120905	09/05/12	-56.2	0.746	4.2	12.68	6.78	--	--	--	--



**Table 14**  
**Geochemical and Water Quality Parameters**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well Identification	Sample Identification	Sample Date	ORP <sup>(1)</sup> (mV)	Specific Conductivity <sup>(1)</sup> (mS/cm)	Turbidity <sup>(1)</sup> (NTU)	Temperature <sup>(1)</sup> (°C)	pH <sup>(1)</sup>	TKN <sup>(2)</sup> (mg/L)	Total Phosphorous <sup>(3)</sup> (mg/L)	Alkalinity <sup>(4)</sup> (mg/L CaCO <sub>3</sub> )	Hardness <sup>(5)</sup> (mg equivalent CaCO <sub>3</sub> /L)
<b>West Waterfront Property</b>											
<b>Shallow Water-Bearing Zone</b>											
<b>02MW13</b>	02MW13-20090127	01/27/09	166	0.180	0.3	9.64	5.95	--	--	--	--
	02MW13-20090407	04/07/09	372	0.194	9.5	11.50	5.25	--	--	--	--
	02MW13-20110112	01/12/11	119	0.17	0.4	10.9	5.81	0.305	0.012	82.5	87.5
	02MW13-20110414	04/14/11	187	0.172	1.1	10.34	6	<0.200	0.013	81.0	88.4
<b>02MW14</b>	02MW14-20090127	01/27/09	136	0.527	0.5	8.44	6.64	--	--	--	--
	02MW14-20090407	04/07/09	312	0.472	0.6	10.20	5.74	--	--	--	--
	02MW14-20100125	01/25/10	258	0.196	1.2	11.08	6.30	--	--	--	--
	02MW14-20110414	04/14/11	97	0.230	5.6	9.76	6.22	--	--	--	--
<b>Bulk Terminal Property</b>											
<b>Shallow Water-Bearing Zone</b>											
<b>01MW06</b>	01MW06-20090128	01/28/09	-177	0.788	5.8	13.01	7.15	--	--	--	--
	01MW06-20090407	04/07/09	-169	0.936	8.8	14.66	7.51	--	--	--	--
	01MW06-20100125	01/25/10	121.7	1.000	1.61	14.48	7.39	--	--	--	--
<b>01MW08</b>	01MW08-20090129	01/29/09	-108	0.818	44.3	14.20	7.21	--	--	--	--
<b>01MW59</b>	01MW59-20090129	01/29/09	-50	0.601	0.0	13.70	8.04	--	--	--	--
	01MW59-20090408	04/08/09	-93	0.540	1.7	13.80	6.79	--	--	--	--
	01MW59-20100125	01/25/10	133.1	0.558	2.38	15.10	6.80	--	--	--	--
	01MW59-20110111	01/11/11	-36	0.400	1.23	13.70	6.46	--	--	--	--
	01MW59-20111207	12/07/11	-20.4	0.404	1.62	14.36	6.68	--	--	--	--
	01MW59-20121012	10/12/12	-73.1	0.44	0.7	16.2	5.05	--	--	--	--
	01MW59-20130403	04/03/13	-36	0.447	3.4	14.96	6.60	--	--	--	--

**NOTES:**

Analyses performed by Friedman and Bruya, Inc., Fremont Analytical Inc., or Aquatic Research Inc., of Seattle, Washington; or Amtest Inc. of Kirkland, Washington.

<sup>(1)</sup>Parameter is measured in the field using water quality meter with flow-through cell. The reported value is the last reading prior to sampling groundwater.

<sup>(2)</sup>Analyzed by EPA Method 351.1.

<sup>(3)</sup>Analyzed by EPA Method 365.1.

<sup>(4)</sup>Analyzed by SM18 2320B.

<sup>(5)</sup>Analyzed by SM18 2340C.

-- = not measured or not analyzed

< = not detected at a concentration exceeding the laboratory reporting limit

\*C = degrees Celsius

BNSF = Burlington Northern Santa Fe Railway Company

CaCO<sub>3</sub> = calcium carbonate

CaCO<sub>3</sub>/L = calcium carbonate per liter

EPA = U.S. Environmental Protection Agency

mg/L = milligrams per liter

mS/cm = millisiemens per centimeter

mV = millivolts

NTU = nephelometric turbidity units

ORP = oxidation reduction potential

TKN = Total Kjeldahl Nitrogen



**Table 15**  
**Soil Physical Properties**  
**TOC Holdings Co.**  
**ASKO Hydraulic Property**  
**2805 West Commodore Way**  
**Seattle, Washington**

Well/Boring ID	Sample ID	Date Sampled	Analysis Depth (feet bgs)	Moisture Content <sup>(1)(2)</sup> (% weight)	Density <sup>(1)</sup> (g/cc)		Porosity <sup>(1)</sup> (%Vb)		Porosity <sup>(3)</sup> (%Vb)		Total Pore Fluid Saturations <sup>(1)</sup> (% Pv)	Effective Permeability <sup>(1)(4)</sup> to Water (millidarcy)	Hydraulic Conductivity <sup>(1)(4)</sup> (cm/s)	Particle Size Distribution <sup>(5)</sup> (% by weight)						Fraction Organic Carbon <sup>(6)</sup> (g/g)	Total Organic Carbon <sup>(6)</sup> (mg/kg)		
					Bulk	Grain	Total	Air Filled	Total	Effective				Gravel	Sand Size			Silt	Clay			Silt and Clay	
															Coarse	Medium	Fine						
01MW76/B172	B172-23-23.5	3/1/2011	23.15	--	--	--	--	38.4	32.8	--	--	--	--	--	--	--	--	--	--	--	--	--	
			23.3	20.7	1.43	2.72	47.5	18	--	--	62.2	1,082	1.07E-03	0.00	0.03	12.58	66.71	16.39	4.24	20.63	--	--	
			23-23.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.20E-04	520
01MW85/B193	B193-25-25.5 B193-26-26.5	04/20/11	25.1	--	--	--	--	--	--	--	--	--	--	0.00	0.00	32.65	58.34	7.18	1.83	9.01	--	--	
			26.1	--	--	--	--	--	38.8	33.8	--	--	--	--	--	--	--	--	--	--	--	--	--
			26.2	20.5	1.55	2.72	43.1	11.2	--	--	73.9	201	1.96E-03	--	--	--	--	--	--	--	--	--	--

**NOTES:**

Samples collected by SoundEarth Strategies, Inc.

All sample analyses conducted by PTS Laboratories, Inc. of Santa Fe Springs, California.

<sup>(1)</sup>Analyzed by American Petroleum Institute Recommended Practice 40.

<sup>(2)</sup>Analyzed by ASTM D2216.

<sup>(3)</sup>Analyzed by Modified ASTM D425.

<sup>(4)</sup>Analyzed by EPA Method 9100.

<sup>(5)</sup>Analyzed by ASTM D422/D4464M.

<sup>(6)</sup>Analyzed by Walkley-Black.

-- = not measured or not analyzed

% = percent

ASTM = ASTM International

bgs = below ground surface

cm/s = centimeters per second

EPA = U.S. Environmental Protection Agency

g/cc = grams per centimeter

g/g = gram per gram

mg/kg = milligrams per kilogram

psi = pounds per square inch

Pv = pore volume

Vb = bulk volume

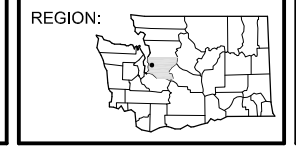
## **PHOTOGRAPHS**

## ***Aerial Photographs***



DATE: 06/19/13  
 DRAWN BY: NAC  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_HIST

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 SES PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON

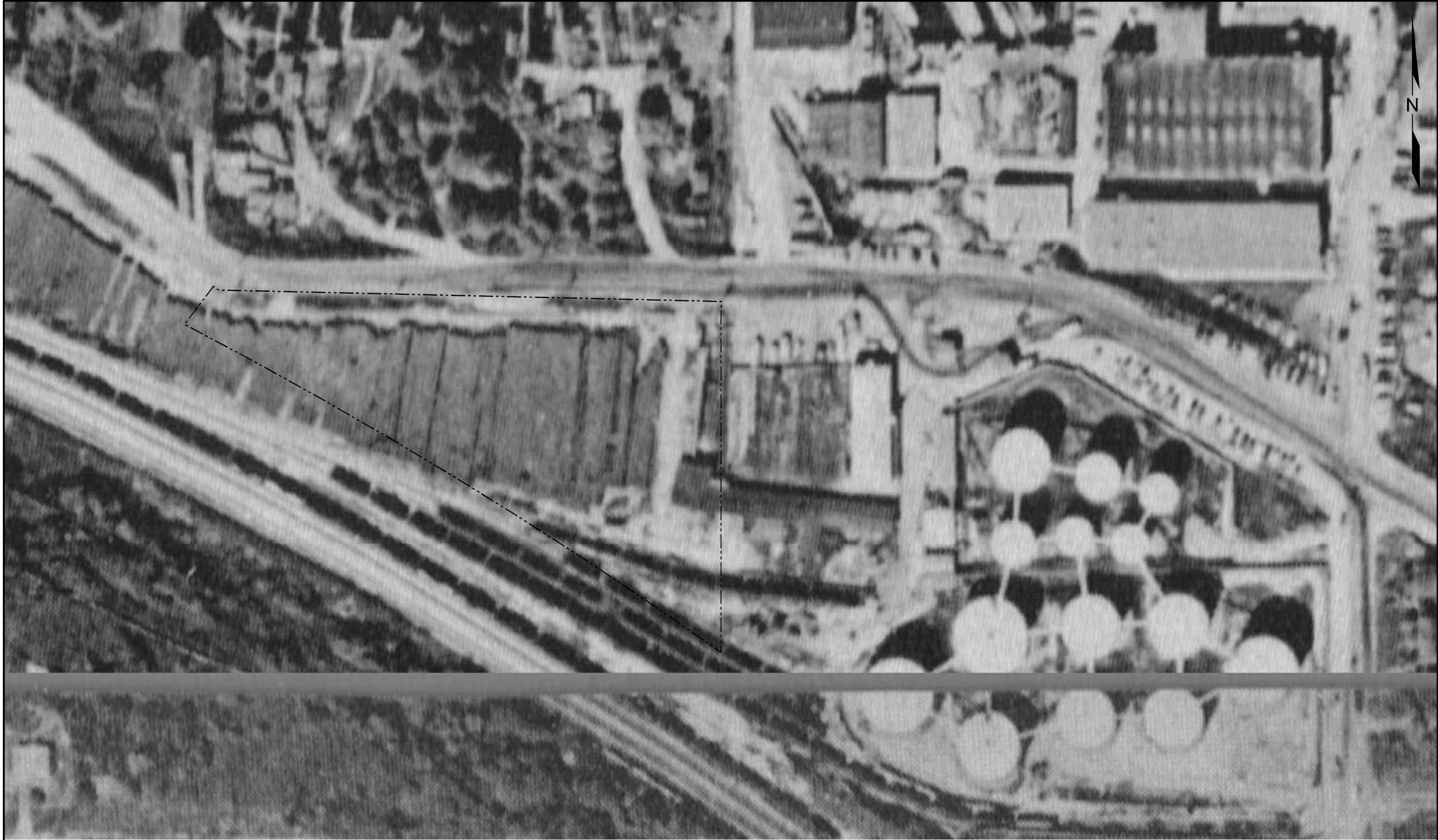


NOT TO SCALE

**AERIAL 1936**

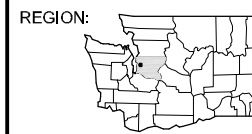
6/19/2013

P:\0440 TOC HOLDINGS CO\01-600 SEATTLE TERMINAL\TECHNICAL\CAD\2013\ASKO\RI\AERIAL\01-600\_2013RI\_HIST.DWG



DATE: \_\_\_\_\_ 06/19/13  
 DRAWN BY: \_\_\_\_\_ NAC  
 CHECKED BY: \_\_\_\_\_ PJK/TSB  
 CAD FILE: \_\_\_\_\_ 01-600\_2013RI\_HIST

PROJECT NAME: \_\_\_\_\_ TOC HOLDINGS CO, ASKO HYDRAULIC PROPERTY  
 SES PROJECT NUMBER: \_\_\_\_\_ 0440-004  
 STREET ADDRESS: \_\_\_\_\_ 2805 WEST COMMODORE WAY  
 CITY, STATE: \_\_\_\_\_ SEATTLE, WASHINGTON



NOT TO SCALE

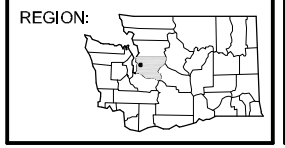
**AERIAL 1946**

SOUNDEARTHINC.COM



DATE: \_\_\_\_\_ 06/19/13  
 DRAWN BY: \_\_\_\_\_ NAC  
 CHECKED BY: \_\_\_\_\_ PJK/TSB  
 CAD FILE: \_\_\_\_\_ 01-600\_2013RI\_HIST

PROJECT NAME: \_\_\_\_\_ TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 SES PROJECT NUMBER: \_\_\_\_\_ 0440-004  
 STREET ADDRESS: \_\_\_\_\_ 2805 WEST COMMODORE WAY  
 CITY, STATE: \_\_\_\_\_ SEATTLE, WASHINGTON



NOT TO SCALE

**AERIAL 1961**



6/19/2013

P:\0440 TOC HOLDINGS CO\01-600 SEATTLE TERMINAL\TECHNICAL\CAD\2013\ASKO\RI\AERIALS\01-600\_2013RI\_HIST.DWG



**SoundEarth**  
Strategies  
WWW.SOUNDEARTHINC.COM

DATE: 06/19/13  
 DRAWN BY: NAC  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_HIST

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 SES PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON

REGION:

NOT TO SCALE

**AERIAL 1965**

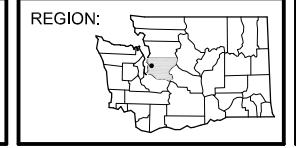
SOUNDEARTHINC.COM

P:\0440 TOC HOLDINGS CO\01-600 SEATTLE TERMINAL\TECHNICAL\CAD\2013\ASKO\RI\AERIALS\01-600\_2013RI\_HIST.DWG 6/19/2013



DATE: 06/19/13  
DRAWN BY: NAC  
CHECKED BY: PJK/TSB  
CAD FILE: 01-600\_2013RI\_HIST

PROJECT NAME: TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
SES PROJECT NUMBER: 0440-004  
STREET ADDRESS: 2805 WEST COMMODORE WAY  
CITY, STATE: SEATTLE, WASHINGTON



NOT TO SCALE

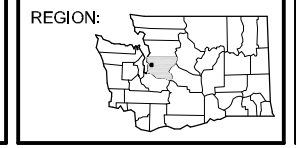
**AERIAL 1970**

SOUNDEARTHINC.COM



DATE: \_\_\_\_\_ 06/19/13  
 DRAWN BY: \_\_\_\_\_ NAC  
 CHECKED BY: \_\_\_\_\_ PJK/TSB  
 CAD FILE: \_\_\_\_\_ 01-600\_2013RI\_HIST

PROJECT NAME: \_\_\_\_\_ TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 SES PROJECT NUMBER: \_\_\_\_\_ 0440-004  
 STREET ADDRESS: \_\_\_\_\_ 2805 WEST COMMODORE WAY  
 CITY, STATE: \_\_\_\_\_ SEATTLE, WASHINGTON



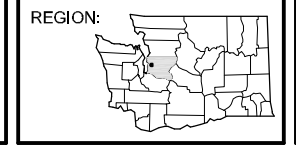
NOT TO SCALE

**AERIAL 1989**



DATE: \_\_\_\_\_ 06/19/13  
 DRAWN BY: \_\_\_\_\_ NAC  
 CHECKED BY: \_\_\_\_\_ PJK/TSB  
 CAD FILE: \_\_\_\_\_ 01-600\_2013RI\_HIST

PROJECT NAME: \_\_\_\_\_ TOC HOLDINGS CO. ASKO HYDRAULIC PROPERTY  
 SES PROJECT NUMBER: \_\_\_\_\_ 0440-004  
 STREET ADDRESS: \_\_\_\_\_ 2805 WEST COMMODORE WAY  
 CITY, STATE: \_\_\_\_\_ SEATTLE, WASHINGTON



NOT TO SCALE

**AERIAL 2001**



www.soundearthinc.com

DATE: 06/19/13  
 DRAWN BY: NAC  
 CHECKED BY: PJK/TSB  
 CAD FILE: 01-600\_2013RI\_HIST

PROJECT NAME: TOC HOLDINGS CO, ASKO HYDRAULIC PROPERTY  
 SES PROJECT NUMBER: 0440-004  
 STREET ADDRESS: 2805 WEST COMMODORE WAY  
 CITY, STATE: SEATTLE, WASHINGTON

REGION:

NOT TO SCALE

**AERIAL 2009**

## ***Historical Photographs***



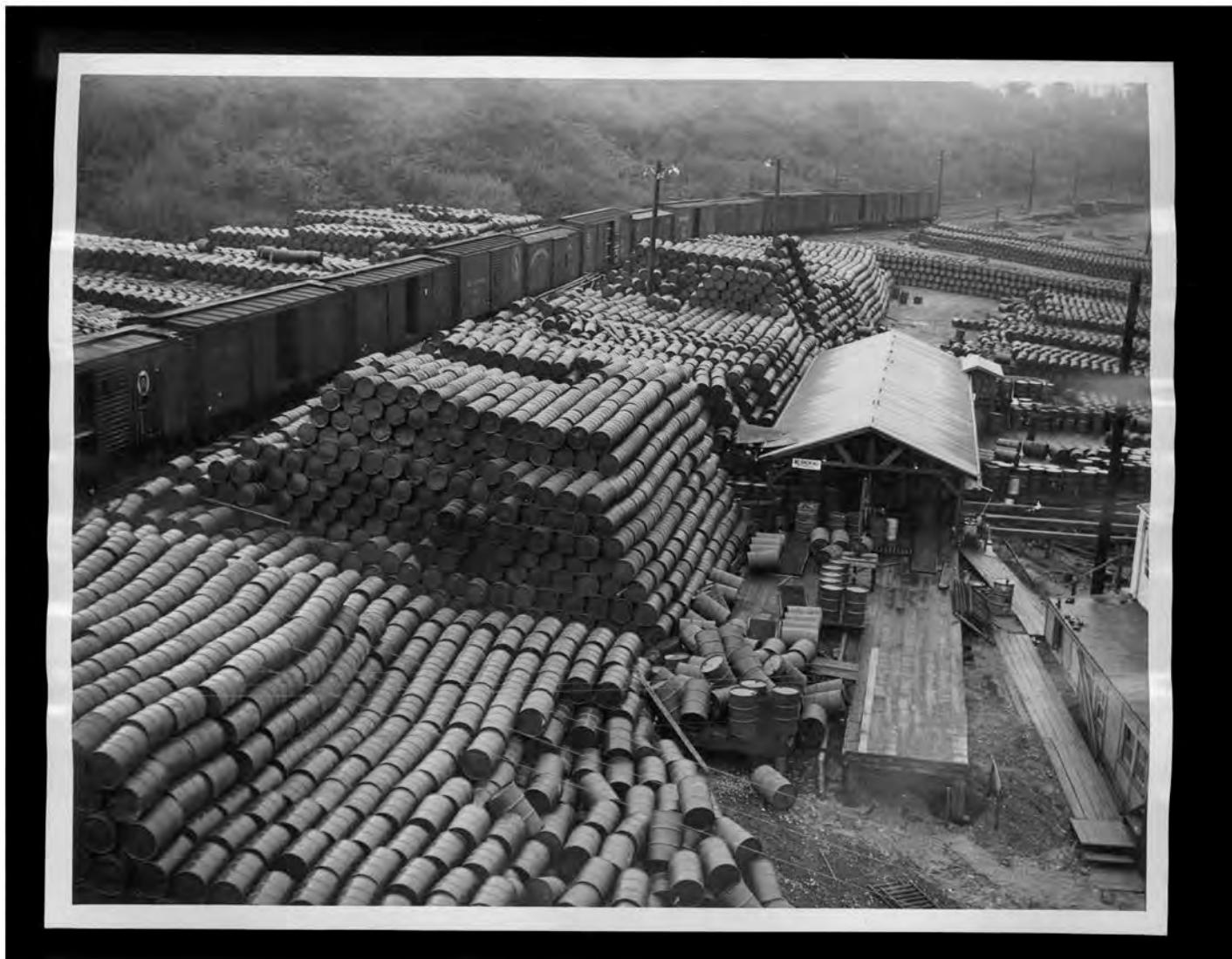
Photograph 1. Aerial photograph of the Seattle Terminal Properties viewing north. Configuration of Barreling Shed #1 and Rail Spurs #1 through #4 are visible. Photo undated.



Date: June 17, 2013  
Drawn By: P. Kingston  
Chk By: T. Brown  
Project No: 0440-004

**HISTORICAL PHOTOGRAPHS**

ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington



Photograph 2. Barreling Shed #1, with empty drums being received and unloaded from the Rail Spurs. Photo undated.



Date: June 17, 2013  
Drawn By: P. Kingston  
Chk By: T. Brown  
Project No: 0440-004

**HISTORICAL PHOTOGRAPHS**

ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington





Photograph 3. Rail Spurs on the ASKO Hydraulic Property and BNSF Parcel. Photo undated.



Date: June 17, 2013  
Drawn By: P. Kingston  
Chk By: T. Brown  
Project No: 0440-004

**HISTORICAL PHOTOGRAPHS**

ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington



Photograph 4. Delivery truck with AST Area visible in background. Photo undated.



Date: June 17, 2013  
Drawn By: P. Kingston  
Chk By: T. Brown  
Project No: 0440-004

**HISTORICAL PHOTOGRAPHS**  
ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington



Photograph 5. Aerial photograph of the Seattle Terminal Properties viewing southeast. AST Area and Rail Spurs #1 through #5 are visible. Photo undated.



Date: June 17, 2013  
Drawn By: P. Kingston  
Chk By: T. Brown  
Project No: 0440-004

**HISTORICAL PHOTOGRAPHS**  
ASKO Hydraulic Property  
2805 West Commodore Way  
Seattle, Washington

## ***Property Photographs***



Photograph 1. North portion of ASKO Hydraulic Property and the West Commodore Way ROW viewing north.



Photograph 2. Central portion of the ASKO Hydraulic Property viewing northeast.



Photograph 3. South portion of the ASKO Hydraulic Property and the BNSF Parcel viewing east.



Photograph 4. Advancing borings on the interior of Former Barreling Shed #3 viewing west.



Photograph 5. Drilling in the vicinity of Former Rail Spur #1 and Former Barreling Shed #3 viewing southwest.



Photograph 6. Drilling on the south portion of the ASKO Hydraulic Property viewing north.



Photograph 7. Drilling on the BNSF Parcel in the vicinity of Former Rail Spurs #1 through #4 viewing southwest.



Photograph 8. Drilling south of Former Barreling Shed #3 viewing north



Photograph 9. Drilling in the vicinity of ASKO Industrial Repair viewing southwest.



Photograph 10. Drilling in the vicinity of the Former AST Area at the ASKO Hydraulic Property viewing north.



Photograph 11. Collecting groundwater samples during a monitoring event at the Seattle Terminal Properties.



Photograph 12. Conducting a tracer study at the ASKO Hydraulic Property.

**APPENDIX A**  
**KING COUNTY ASSESSOR RECORDS**

## King County Department of Assessments

Fair, Equitable, and Understandable Property Valuations

You're In: [Assessments >>](#) [Online Services >>](#) [eReal Property](#)

- Home
- Quick answers
- Property assessments
- Taxpayer assistance
- Online services
- Reports, data
- Forms
- News room
- Contact us
- About us
- Site map

Department of Assessments  
500 Fourth Avenue,  
Suite ADM-AS-0708,  
Seattle, WA 98104

Office Hours:  
Mon - Fri  
8:30 a.m. to 4:30 p.m.

TEL: 206-296-7300  
FAX: 206-296-5107  
TTY: 206-296-7888

[Send us mail](#)

- [New Search](#)
- [Property Tax Bill](#)
- [Map This Property](#)
- [Glossary of Terms](#)
- [Area Report](#)
- [Print Property Detail](#)

### PARCEL DATA

Parcel	423790-0240	Jurisdiction	SEATTLE
Name	BNSF	Levy Code	0010
Site Address	GILMAN AVE W 98199	Property Type	C
Geo Area	20-50	Plat Block / Building Number	1-5 &
Spec Area	0-0	Plat Lot / Unit Number	PORTION
Property Name	GN RY OPERATING PROPERTY	Quarter-Section-Township-Range	SW-11-25-3

### Legal Description

LAWTON PARK ADD PORTION BURLINGTON NORTHERN & SANTA FE (FORMERLY GN RAILWAY) SEATTLE TO EVERETT BRANCH LINE R/W OVER PORTION BLKS 1 THRU 5 LAWTON PARK ADDITION & OVER PORTION GOVT LOT 5 STR 11-25-03 TGW PORTION VACATED STREETS & ALLEYS ADJOINING & WITHIN SD BLKS 1 THRU 5 LAWTON PARK ADD BOUNDED ON WEST BY CENTERLINE VACATED 32ND AVE W & ON SOUTH BY NORTH LINE OF W. FORT ST  
**PLat Block:** 1-5 &  
**Plat Lot:** PORTION

### LAND DATA

Highest & Best Use As If Vacant	REGIONAL LAND USE
Highest & Best Use As Improved	INTERIM USE
Present Use	Right of Way/Utility, Road
Base Land Value SqFt	65
Base Land Value	18,925,200
% Base Land Value Impacted	100
Base Land Valued Date	11/5/2013
Base Land Value Tax Year	2015
Land SqFt	291,157
Acres	6.68

Percentage Unusable	0
Unbuildable	NO
Restrictive Size Shape	YES
Zoning	IB U/45
Water	WATER DISTRICT
Sewer/Septic	PUBLIC
Road Access	PUBLIC
Parking	ADEQUATE
Street Surface	PAVED

### Views

Rainier	
Territorial	
Olympics	
Cascades	
Seattle Skyline	
Puget Sound	
Lake Washington	
Lake Sammamish	
Lake/River/Creek	
Other View	

### Waterfront

Waterfront Location	
Waterfront Footage	
Lot Depth Factor	
Waterfront Bank	
Tide/Shore	
Waterfront Restricted Access	
Waterfront Access Rights	NO
Poor Quality	
Proximity influence	NO

### Designations

Historic Site	
Current Use	
Nbr Bldg Sites	
Adjacent to Golf Fairway	NO
Adjacent to Greenbelt	NO
Other Designation	NO
Deed Restrictions	NO
Development Rights Purchased	NO
Easements	NO
Native Growth Protection Easement	NO
DNR Lease	NO

### Nuisances

Topography	YES
Traffic Noise	
Airport Noise	
Power Lines	NO
Other Nuisances	NO

### Problems

Water Problems	NO
Transportation Concurrency	NO
Other Problems	NO

### Environmental

Environmental	NO
---------------	----

### BUILDING

### Reference Links:

- [King County Tax Links](#)
- [Property Tax Advisor](#)
- [Washington State Department of Revenue \(External link\)](#)
- [Washington State Board of Tax Appeals \(External link\)](#)
- [Board of Appeals/Equalization](#)
- [Districts Report](#)
- [iMap](#)
- [Recorder's Office](#)

[Scanned images of surveys and other map documents](#)

[Scanned images of plats](#)



**TAX ROLL HISTORY**

Account	Valued Year	Tax Year	Omit Year	Levy Code	Appraised Land Value (\$)	Appraised Imps Value (\$)	Appraised Total Value (\$)	New Dollars (\$)	Taxable Land Value (\$)	Taxable Imps Value (\$)	Taxable Total Value (\$)	Tax Value Reason
423790024008	2013	2014		0010	17,469,400	0	17,469,400	0	0	0	0	OP
423790024008	2012	2013		0010	16,013,600	0	16,013,600	0	0	0	0	OP
423790024008	2011	2012		0010	19,839,100	0	19,839,100	0	0	0	0	OP
423790024008	2010	2011		0010	21,365,100	0	21,365,100	0	0	0	0	OP
423790024008	2009	2010		0010	22,891,200	0	22,891,200	0	0	0	0	OP
423790024008	2008	2009		0010	21,365,100	0	21,365,100	0	0	0	0	OP
423790024008	2007	2008		0010	16,786,900	0	16,786,900	0	0	0	0	OP
423790024008	2006	2007		0010	15,260,800	0	15,260,800	0	0	0	0	OP
423790024008	2005	2006		0010	10,682,500	0	10,682,500	0	0	0	0	OP
423790024008	2004	2005		0010	9,156,500	0	9,156,500	0	0	0	0	OP
423790024008	2003	2004		0010	9,156,500	0	9,156,500	0	0	0	0	OP
423790024008	2002	2003		0010	7,630,400	0	7,630,400	0	0	0	0	OP
423790024008	2001	2002		0010	7,630,400	0	7,630,400	0	0	0	0	OP
423790024008	2000	2001		0010	5,188,600	0	5,188,600	0	0	0	0	OP
423790024008	1999	2000		0010	4,578,200	0	4,578,200	0	0	0	0	OP
423790024008	1997	1998		0010	0	0	0	0	1,997,000	0	1,997,000	
423790024008	1996	1997		0010	0	0	0	0	1,997,000	0	1,997,000	
423790024008	1994	1995		0010	0	0	0	0	1,997,000	0	1,997,000	
423790024008	1992	1993		0010	0	0	0	0	1,997,000	0	1,997,000	
423790024008	1990	1991		0010	0	0	0	0	1,197,900	0	1,197,900	
423790024008	1989	1990		0010	0	0	0	0	1,059,200	0	1,059,200	
423790024008	1988	1989		0010	0	0	0	0	1,059,200	0	1,059,200	
423790024008	1986	1987		0010	0	0	0	0	137,700	0	137,700	
423790024008	1984	1985		0010	0	0	0	0	137,700	0	137,700	
423790024008	1982	1983		0010	0	0	0	0	12,600	0	12,600	

**SALES HISTORY**

**REVIEW HISTORY**

**PERMIT HISTORY**

**HOME IMPROVEMENT EXEMPTION**

[New Search](#) [Property Tax Bill](#) [Map This Property](#) [Glossary of Terms](#) [Area Report](#) [Print Property Detail](#) 

Updated: Dec. 4, 2013

**Information for...**

Healthcare enrollment  
Residents  
Businesses  
Job seekers  
Volunteers  
King County employees

**Do more online**

Trip Planner  
Property tax information & payment  
Jail inmate look up  
Parcel viewer or iMap  
Public records  
More online tools...

**Contact us**

206-296-0100  
Email us   
Staff directory  
Customer service  
Report a problem  
Subscribe to alerts

Stay connected! View King County social media



© King County 2014 Privacy Accessibility Terms of use

**Information for...**

**Contact us**

**Do more online**

FOLIO

660

ADDITION

Section 11 Twp. 25 Range 3 Ewm Block Tract or Lot

7150

PERMIT No. 411675

DATE

12-11-51

2737 Commodore Way

Fee Owner TIME OIL CO

Condition of Exterior Interior OPEN Foundation CONC

USE BARRELLING SHED

No. Stories

No. Stores

No. Rooms

Basement

No. Offices

No. Apartments

1 rm. 2 rm. 3 rm.

4 rm. 5 rm. 6 rm.

ROOF CONSTRUCTION

Frame Lam

Mill Construction

Rein. Concrete

No. Trusses STEEL

Wood  Steel

FLOOR FINISHES

Fir  Maple

Oak  2" x 6" T&G

Lino.  3" x 6" T&G

Cement

Terrazzo

Raeolith

Tile

Tile  Lino.

Baths  Fl  Walls

Sq. Ft. Floors

Sq. Ft. Walls

Lin. Ft. Dr. Bds.

Sq. Ft. Floors

Sq. Ft. Walls

Lin. Ft. Dr. Bds.

Kit's.  Fl  Walls

PLUMBING

No. Fixtures

Toilets

Tubs, Leg or Pem.

Basins, Ped.

Sinks *Edg + falling*

Urinals *falling*

Showers (Tub) (Stall) *Shower*

Laundry Trays

H.W. Tank Fl. Drains

Sprink. Sys. No. Hds.

TYPE OF CONSTRUCTION

Frame

Single  Double

Ordinary Masonry

Mill Construction

Class A Rein. Con.

Stru. Steel and Con.

Tile  Brick

Con.  Rein. Con.

Good Med. Cheap

Date Built 52  Finished  Unfinished  Remodeled

Effective Age \_\_\_\_\_ Years Future Life \_\_\_\_\_ Years

Dep. for Cond. \_\_\_\_\_ Dep. for Ob. \_\_\_\_\_ Dep. for Es. \_\_\_\_\_ Total 5%



FOUNDATION

Mud Sills

Post and Pier

Brick

Concrete

Pile

BASEMENT

Full  %

Sub-Basement

Size \_\_\_\_\_

Garage  No. Cars \_\_\_\_\_

Floors \_\_\_\_\_

Plastered

Living Rooms

Service Rooms

Other Buildings \_\_\_\_\_ \$

Total \_\_\_\_\_ \$

Assessed Value 50% \_\_\_\_\_ \$

Sup. Building A. V. \_\_\_\_\_ \$

Total \_\_\_\_\_ \$

HEATING

Stove

Pipeless Furnace

Gravity H. A.

Air Cond., Fan

Arcola

1-Pipe Steam

2-Pipe St. or Vapor

Hot Water

Oil Burner

Coal Stoker

WIRING

Knobe & Tube

Flex Cable

Conduit

Power Wiring

Range Wiring

No. Outlets

ELEVATORS

Pass.  Freight

Auto.  Elec.

Man.  Hyd.

Man.  Man.

EXTERIOR WALL CONSTR.

Single  Double

2" x 4" Stud Walls

2" x 6" Stud Walls

Brick Walls

Brick With Filasters

Concrete Walls

Con. With Pilasters

Tile Walls

Rein. Con. Skel.

Filler Walls

Laminated Walls

INTERIOR WALLS

Stud and Plaster

Lam.  Plastered

Ply Wood

Ceiled OPEN

Plaster Board

Painted

Stain  Varnish

Kalsomine

Whitewashed

Unfinished

GAS STATIONS

Frame

Metal

Masonry

Plastered or Ceiled

Floors

C. H. GROUND FLOOR AREA

TOTAL FLOOR AREA 1600

EXTERIOR FACING

Siding  Shingles

Shakes  Stucco

Brick/Veneer

Kind \_\_\_\_\_

Stone  Cast S.

Terra Cotta

Struct. Glass

Trim

INTERIOR TRIM

Fir

Mah.  Oak

Metal

Doors \_\_\_\_\_

Windows \_\_\_\_\_

Stained

Varnished

Painted

Unfinished

SERVICE BUILDING

Frame

Metal

Masonry

Plastered or Ceiled

Floors

TANKS, ETC., LIST

Hoists: Elect. Hyd.

DOCKS AND PIERS

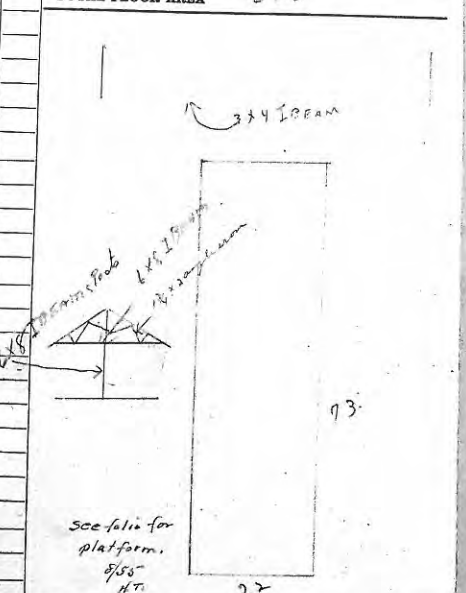
Treated Piles and Timbers

Untreated

Treated Piles only

Average Length

Paved



FLOOR CONSTRUCTION

Joint Con. Size \_\_\_\_\_

O. C. In Bridge

Mill Construction

Rein. Con.

Other Buildings	Construction	Floor	Roof	Stories	Dimensions	S.F. Area	Factor	Value	% Dep.	Deprec.	Net Value
Garage											

FOLIO 660

ADDITION TAX LOT 50  
Section 11 Twp. 25 Range 3

PERMIT NO.

Form Block Lot or Tract  
Tax Lot 50

DATE

Address 2737 COMMODORE WAY

Fee Owner Time Oil Co

Blg "B"

Architect

Contractor

Condition of Exterior

Interior

Foundation 9221

Floor Plan: Good

Accept. X

Good

USE TANKS, PIPING & STAIRWAYS

No. Stories  
No. Rooms  
Basement  
No. Offices  
No. Apartments  
1 rm. 2 rm. 3 rm.  
4 rm. 5 rm. 6 rm.

ROOF CONSTRUCTION  
Frame Lam.  
Mill Construction  
Rein. Concrete  
No. Trusses  
Wood Steel

FLOOR FINISHES  
Fir Maple  
Oak 2"x5" T&G  
Lino. 3"x6" T&G  
Cement  
Terrazzo  
Rascolith  
Tile

Tile Lino.  
Baths Fl. Walls  
Sq. Ft. Floors  
Sq. Ft. Walls  
Lin. Ft. Dr. Bds.  
Sq. Ft. Floors  
Sq. Ft. Walls  
Lin. Ft. Dr. Bds.  
Kit's Fl. Walls

PLUMBING  
No. Fixtures  
Toilets  
Tub, Leg or Pan.  
Basins, Ped.  
Sinks  
Urinals  
Showers (Tub) (Stall)  
Laundry Trays  
H. W. Tank Fl. Drains  
Sprink. Sys. No. Hds.

TYPE OF CONSTRUCTION  
Frame  
Single Double  
Ordinary Masonry  
Mill Construction  
Class A Rein. Con.  
Stru. Rein. Con.  
Tile Brick  
Con. Rein. Con.  
Good Med. Cheap

Date Built 1941 & 1944  
Effective 1941  
Future Life 50 Years  
Finished Unfinished Remodeled



HEATING  
Stove  
Pipeless Furnace  
Gravity H. A.  
Air Cond., Fan  
Suspended Gas, Hot Water  
Steam Heat  
Hot Water  
Oil Burner  
Year Assessed Value  
1951 42,850 5/15  
1964 54,700 1/12  
108,000

FOUNDATION  
Mud Sills  
Post and Pier  
Brick  
Concrete  
Pile

BASEMENT  
Full %  
Sub-Basement  
Size  
Garage No. Cars  
Floors  
Plastered  
Living Rooms  
Service Rooms

HOISTS: Elec. Hyd.

Pass. Freight  
Auto. Elec.  
Man. Hyd.  
Man.

WIRING  
Treated Piles, Timb  
Untreated  
Treated Piles only  
Average Length  
Paved  
Knob & Tube  
Flex. Cable  
Conduit  
Power Wiring  
Range Wiring  
No. Outlets

EXTERIOR WALL CONST.  
Single Double  
2" x 4" Stud Walls  
2" x 6" Stud Walls  
Brick Walls  
Brick with Pilasters  
Concrete Walls  
Con. with Pilasters  
Tile Walls  
Rein. Con. Skol.  
Filler Walls  
Laminated Walls

INTERIOR WALLS  
Stud and Plaster  
Lam. Plastered  
Plywood  
Ceiled  
Plaster Board  
Painted  
Stain Varnish  
Kalsomine  
Whitewashed  
Unfinished

C. H.  
B  
1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22

GROUND FLOOR AREA  
TOTAL FLOOR AREA

TANKS, PIPING & STAIRWAYS.  
(DETAILS IN OFFICE FILE.)

EXTERIOR FACING  
Siding Shingles  
Shakes Stucco  
Brick Veneer  
Kind  
Stones Cast S.  
Terra Cotta  
Struc. Glass  
Trim

INTERIOR TRIM  
Fir  
Mah. Oak  
Metal  
Doors  
Windows  
Stained  
Varnished  
Painted  
Unfinished

FLOOR CONSTRUCTION  
Joist Con. Size  
O.C. In Bridg.  
Mill Construction  
Rein. Con.

Other Buildings	Construction	Floor	Roof	Stories	Dimensions	S. F. Area	Factor	Value	% Dep.	Deprec.	Net Value
Garage											



King County  
Always at your service

# King County Department of Assessments

Fair, Equitable, and Understandable Property Valuations

You're in: [Assessments](#) >> [Online Services](#) >> [eReal Property](#)

- [New Search](#)
- [Property Tax Bill](#)
- [Map This Property](#)
- [Glossary of Terms](#)
- [Area Report](#)
- [Print Property Detail](#)

## PARCEL DATA

Parcel	423790-0405	Jurisdiction	SEATTLE
Name	TOC HOLDINGS CO	Levy Code	0010
Site Address	2805 W COMMODORE WAY 98199	Property Type	C
Geo Area	20-50	Plat Block / Building Number	3 &
Spec Area	0-0	Plat Lot / Unit Number	10
Property Name	WAREHOUSES	Quarter-Section-Township-Range	<a href="#">SW-11-25-3</a>

## Legal Description

LAWTON PARK ADD POR LOT 10 BLK 3 & POR VAC ST ADJ LY NELY OF GN RR R/W & SELY OF LN PLW & 190 FT SELY OF NWLY LN OF LOT 1 BLK 6 POR BLKS 4 & 5 & VAC STS & ALLEY ADJ LY NELY OF GN RR R/W

## LAND DATA

Highest & Best Use As If Vacant	COMMERCIAL SERVICE	Percentage Unusable	0
Highest & Best Use As Improved	PRESENT USE	Unbuildable	NO
Present Use	Warehouse	Restrictive Size Shape	NO
Base Land Value SqFt	50	Zoning	IG2 U/65
Base Land Value	3,238,000	Water	WATER DISTRICT
% Base Land Value Impacted	100	Sewer/Septic	PUBLIC
Base Land Valued Date	11/14/2011	Road Access	PUBLIC
Base Land Value Tax Year	2013	Parking	ADEQUATE
Land SqFt	64,760	Street Surface	PAVED
Acres	1.49		

## Views

Rainier	
Territorial	
Olympics	
Cascades	
Seattle Skyline	
Puget Sound	
Lake Washington	
Lake Sammamish	
Lake/River/Creek	
Other View	

## Waterfront

Waterfront Location	
Waterfront Footage	
Lot Depth Factor	
Waterfront Bank	
Tide/Shore	
Waterfront Restricted Access	
Waterfront Access Rights	NO
Poor Quality	
Proximity Influence	NO

## Designations

Historic Site	
Current Use	
Nbr Bldg Sites	
Adjacent to Golf Fairway	NO
Adjacent to Greenbelt	NO
Other Designation	NO
Deed Restrictions	NO
Development Rights Purchased	NO
Easements	NO
Native Growth Protection Easement	NO
DNR Lease	NO

## Nuisances

Topography	NO
Traffic Noise	
Airport Noise	
Power Lines	NO
Other Nuisances	NO

## Problems

Water Problems	NO
Transportation Concurrency	NO
Other Problems	NO

## Environmental

Environmental	YES
---------------	-----

Environmental Type	Information Source	Delineation study	Percentage Affected
Contamination			0

## BUILDING

## Reference Links:

- [King County Tax Links](#)
- [Property Tax Advisor](#)
- [Washington State Department of Revenue](#) (External link)
- [Washington State Board of Tax Appeals](#) (External link)
- [Board of Appeals/Equalization](#)
- [Districts Report](#)
- [iMap](#)
- [Recorder's Office](#)
- [Scanned images of surveys and other map documents](#)
- [Scanned images of plats](#)

Building Number	1
Building Description	garage service
Number Of Buildings Aggregated	1
Predominant Use	GARAGE, SERVICE REPAIR (528)
Shape	Rect or Slight Irreg
Construction Class	PREFAB STEEL
Building Quality	AVERAGE
Stories	1
Building Gross Sq Ft	7,198
Building Net Sq Ft	7,198
Year Built	1964
Eff. Year	1985
Percentage Complete	0
Heating System	ELECTRIC WALL
Sprinklers	
Elevators	



Click the camera to see more pictures.

Picture of Building 1



**Section(s) Of Building Number: 1**

Section Number	Section Use	Description	Stories	Height	Floor Number	Gross Sq Ft	Net Sq Ft
1	GARAGE, SERVICE REPAIR (528)		1	14	0	6,730	6,730
2	WAREHOUSE OFFICE (810)		1	8	0	234	234

**Section Feature(s) Of Section Number: 1**

Feature Type	Gross Sq Ft	Net Sq Ft
MEZZANINES-OFFICE (761)	234	234



**TAX ROLL HISTORY**

Account	Valued Year	Tax Year	Omit Year	Levy Code	Appraised Land Value	Appraised Imps Value	Appraised Total Value	New Dollars	Taxable Land Value	Taxable Imps Value	Taxable Total Value	Tax Value Reason
423790040509	2012	2013		0010	\$2,755,000	\$1,000	\$2,756,000	\$0	\$2,755,000	\$1,000	\$2,756,000	
423790040509	2011	2012		0010	\$3,561,800	\$1,000	\$3,562,800	\$0	\$3,561,800	\$1,000	\$3,562,800	
423790040509	2010	2011		0010	\$2,617,700	\$1,000	\$2,618,700	\$0	\$2,617,700	\$1,000	\$2,618,700	
423790040509	2009	2010		0010	\$2,617,700	\$1,000	\$2,618,700	\$0	\$2,617,700	\$1,000	\$2,618,700	
423790040509	2008	2009		0010	\$3,885,600	\$1,000	\$3,886,600	\$0	\$3,885,600	\$1,000	\$3,886,600	
423790040509	2007	2008		0010	\$3,238,000	\$1,000	\$3,239,000	\$0	\$3,238,000	\$1,000	\$3,239,000	
423790040509	2006	2007		0010	\$2,914,200	\$1,000	\$2,915,200	\$0	\$2,914,200	\$1,000	\$2,915,200	
423790040509	2005	2006		0010	\$2,266,600	\$1,000	\$2,267,600	\$0	\$2,266,600	\$1,000	\$2,267,600	
423790040509	2004	2005		0010	\$1,764,100	\$1,000	\$1,765,100	\$0	\$1,764,100	\$1,000	\$1,765,100	
423790040509	2003	2004		0010	\$0	\$0	\$0	\$0	\$1,752,400	\$1,000	\$1,753,400	
423790040509	2002	2003		0010	\$863,400	\$500	\$863,900	\$0	\$863,400	\$500	\$863,900	
423790040509	2001	2002		0010	\$818,200	\$104,100	\$922,300	\$0	\$818,200	\$104,100	\$922,300	

**SALES HISTORY**

**REVIEW HISTORY**

Tax Year	Review Number	Review Type	Appealed Value	Hearing Date	Settlement Value	Decision	Status
2011	1000442	Local Appeal	\$2,618,700	1/1/1900	\$0		Completed
2010	0900080	Local Appeal	\$4,210,400	8/11/2010	\$2,618,700	REVISE, ASSESSOR RECOMMENDED	Completed
2005	0402722	Local Appeal	\$1,943,800	1/1/1900	\$0		Completed
2004	62445	State Appeal	\$1,943,800	3/7/2005	\$1,753,400	REVISE, ASSESSOR RECOMMENDED	Completed
2004	0307789	Local Appeal	\$1,943,800	11/29/2004	\$1,943,800	SUSTAIN	Completed

**PERMIT HISTORY**

**HOME IMPROVEMENT EXEMPTION**



King County  
Always at your service

# King County Department of Assessments

Fair, Equitable, and Understandable Property Valuations

You're in: Assessments >> Online Services >> eReal Property

SHARE

- [New Search](#) | 
 [Property Tax Bill](#) | 
 [Map This Property](#) | 
 [Glossary of Terms](#) | 
 [Area Report](#) | 
 [Print Property Detail](#)


## PARCEL DATA

Parcel	423790-0240	Jurisdiction	SEATTLE
Name	BNSF	Levy Code	0010
Site Address	GILMAN AVE W 98199	Property Type	C
Geo Area	20-50	Plat Block / Building Number	1-5 &
Spec Area	0-0	Plat Lot / Unit Number	PORTION
Property Name	GN RY OPERATING PROPERTY	Quarter-Section-Township-Range	SW-11-25-3

## Legal Description

LAWTON PARK ADD PORTION BURLINGTON NORTHERN & SANTA FE (FORMERLY GN RAILWAY) SEATTLE TO EVERETT BRANCH LINE R/W OVER PORTION BLKS 1 THRU 5 LAWTON PARK ADDITION & OVER PORTION GOVT LOT 5 STR 11-25-03 TGW PORTION VACATED STREETS & ALLEYS ADJOINING & WITHIN SD BLKS 1 THRU 5 LAWTON PARK ADD BOUNDED ON WEST BY CENTERLINE VACATED 32ND AVE W & ON SOUTH BY NORTH LINE OF W. FORT ST  
 PLat Block: 1-5 &  
 Plat Lot: PORTION

## LAND DATA

Highest & Best Use As If Vacant	REGIONAL LAND USE	Percentage Unusable	0
Highest & Best Use As Improved	INTERIM USE	Unbuildable	NO
Present Use	Right of Way/Utility, Road	Restrictive Size Shape	YES
Base Land Value SqFt	60	Zoning	IB U/45
Base Land Value	17,469,400	Water	WATER DISTRICT
% Base Land Value Impacted	100	Sewer/Septic	PUBLIC
Base Land Valued Date	10/31/2012	Road Access	PUBLIC
Base Land Value Tax Year	2014	Parking	ADEQUATE
Land SqFt	291,157	Street Surface	PAVED
Acres	6.68		

## Views

Rainier	
Territorial	
Olympics	
Cascades	
Seattle Skyline	
Puget Sound	
Lake Washington	
Lake Sammamish	
Lake/River/Creek	
Other View	

## Waterfront

Waterfront Location	
Waterfront Footage	
Lot Depth Factor	
Waterfront Bank	
Tide/Shore	
Waterfront Restricted Access	
Waterfront Access Rights	NO
Poor Quality	
Proximity Influence	NO

## Designations

Historic Site	
Current Use	
Nbr Bldg Sites	
Adjacent to Golf Fairway	NO
Adjacent to Greenbelt	NO
Other Designation	NO
Deed Restrictions	NO
Development Rights Purchased	NO
Easements	NO
Native Growth Protection Easement	NO
DNR Lease	NO

## Nuisances

Topography	YES
Traffic Noise	
Airport Noise	
Power Lines	NO
Other Nuisances	NO

## Problems

Water Problems	NO
Transportation Concurrence	NO
Other Problems	NO

## Environmental

Environmental	NO
---------------	----

## BUILDING



## Reference Links:

- [King County Tax Links](#)
- [Property Tax Advisor](#)
- [Washington State Department of Revenue \(External link\)](#)
- [Washington State Board of Tax Appeals \(External link\)](#)
- [Board of Appeals/Equalization](#)
- [Districts Report](#)
- [iMap](#)
- [Recorder's Office](#)

[Scanned images of surveys and other map documents](#)

[Scanned images of plats](#)

**TAX ROLL HISTORY**

Account	Valued Year	Tax Year	Omit Year	Levy Code	Appraised Land Value	Appraised Imps Value	Appraised Total Value	New Dollars	Taxable Land Value	Taxable Imps Value	Taxable Total Value	Tax Value Reason
423790024008	2013	2014		0010	\$17,469,400	\$0	\$17,469,400	\$0	\$0	\$0	\$0	OP
423790024008	2012	2013		0010	\$16,013,600	\$0	\$16,013,600	\$0	\$0	\$0	\$0	OP
423790024008	2011	2012		0010	\$19,839,100	\$0	\$19,839,100	\$0	\$0	\$0	\$0	OP
423790024008	2010	2011		0010	\$21,365,100	\$0	\$21,365,100	\$0	\$0	\$0	\$0	OP
423790024008	2009	2010		0010	\$22,891,200	\$0	\$22,891,200	\$0	\$0	\$0	\$0	OP
423790024008	2008	2009		0010	\$21,365,100	\$0	\$21,365,100	\$0	\$0	\$0	\$0	OP
423790024008	2007	2008		0010	\$16,786,900	\$0	\$16,786,900	\$0	\$0	\$0	\$0	OP
423790024008	2006	2007		0010	\$15,260,800	\$0	\$15,260,800	\$0	\$0	\$0	\$0	OP
423790024008	2005	2006		0010	\$10,682,500	\$0	\$10,682,500	\$0	\$0	\$0	\$0	OP
423790024008	2004	2005		0010	\$9,156,500	\$0	\$9,156,500	\$0	\$0	\$0	\$0	OP
423790024008	2003	2004		0010	\$9,156,500	\$0	\$9,156,500	\$0	\$0	\$0	\$0	OP
423790024008	2002	2003		0010	\$7,630,400	\$0	\$7,630,400	\$0	\$0	\$0	\$0	OP
423790024008	2001	2002		0010	\$7,630,400	\$0	\$7,630,400	\$0	\$0	\$0	\$0	OP
423790024008	2000	2001		0010	\$5,188,600	\$0	\$5,188,600	\$0	\$0	\$0	\$0	OP
423790024008	1999	2000		0010	\$4,578,200	\$0	\$4,578,200	\$0	\$0	\$0	\$0	OP
423790024008	1997	1998		0010	\$0	\$0	\$0	\$0	\$1,997,000	\$0	\$1,997,000	
423790024008	1996	1997		0010	\$0	\$0	\$0	\$0	\$1,997,000	\$0	\$1,997,000	
423790024008	1994	1995		0010	\$0	\$0	\$0	\$0	\$1,997,000	\$0	\$1,997,000	
423790024008	1992	1993		0010	\$0	\$0	\$0	\$0	\$1,997,000	\$0	\$1,997,000	
423790024008	1990	1991		0010	\$0	\$0	\$0	\$0	\$1,197,900	\$0	\$1,197,900	
423790024008	1989	1990		0010	\$0	\$0	\$0	\$0	\$1,059,200	\$0	\$1,059,200	
423790024008	1988	1989		0010	\$0	\$0	\$0	\$0	\$1,059,200	\$0	\$1,059,200	
423790024008	1986	1987		0010	\$0	\$0	\$0	\$0	\$137,700	\$0	\$137,700	
423790024008	1984	1985		0010	\$0	\$0	\$0	\$0	\$137,700	\$0	\$137,700	
423790024008	1982	1983		0010	\$0	\$0	\$0	\$0	\$12,600	\$0	\$12,600	

**SALES HISTORY**

**REVIEW HISTORY**

**PERMIT HISTORY**

**HOME IMPROVEMENT EXEMPTION**

[New Search](#)
[Property Tax Bill](#)
[Map This Property](#)
[Glossary of Terms](#)
[Area Report](#)
[Print Property Detail](#)


Updated: April 24, 2013

[Quick answers](#) | 
 [Property assessments](#) | 
 [Taxpayer assistance](#) | 
 [Online services](#) | 
 [Reports, data](#) | 
 [Forms](#) | 
 [News room](#) | 
 [Contact us](#) | 
 [About us](#) | 
 [Site map](#)

[Home](#) | 
 [Privacy](#) | 
 [Accessibility](#) | 
 [Terms of use](#) | 
 [Search](#)

Links to external sites do not constitute endorsements by King County. By visiting this and other King County web pages, you expressly agree to be bound by terms and conditions of the site.

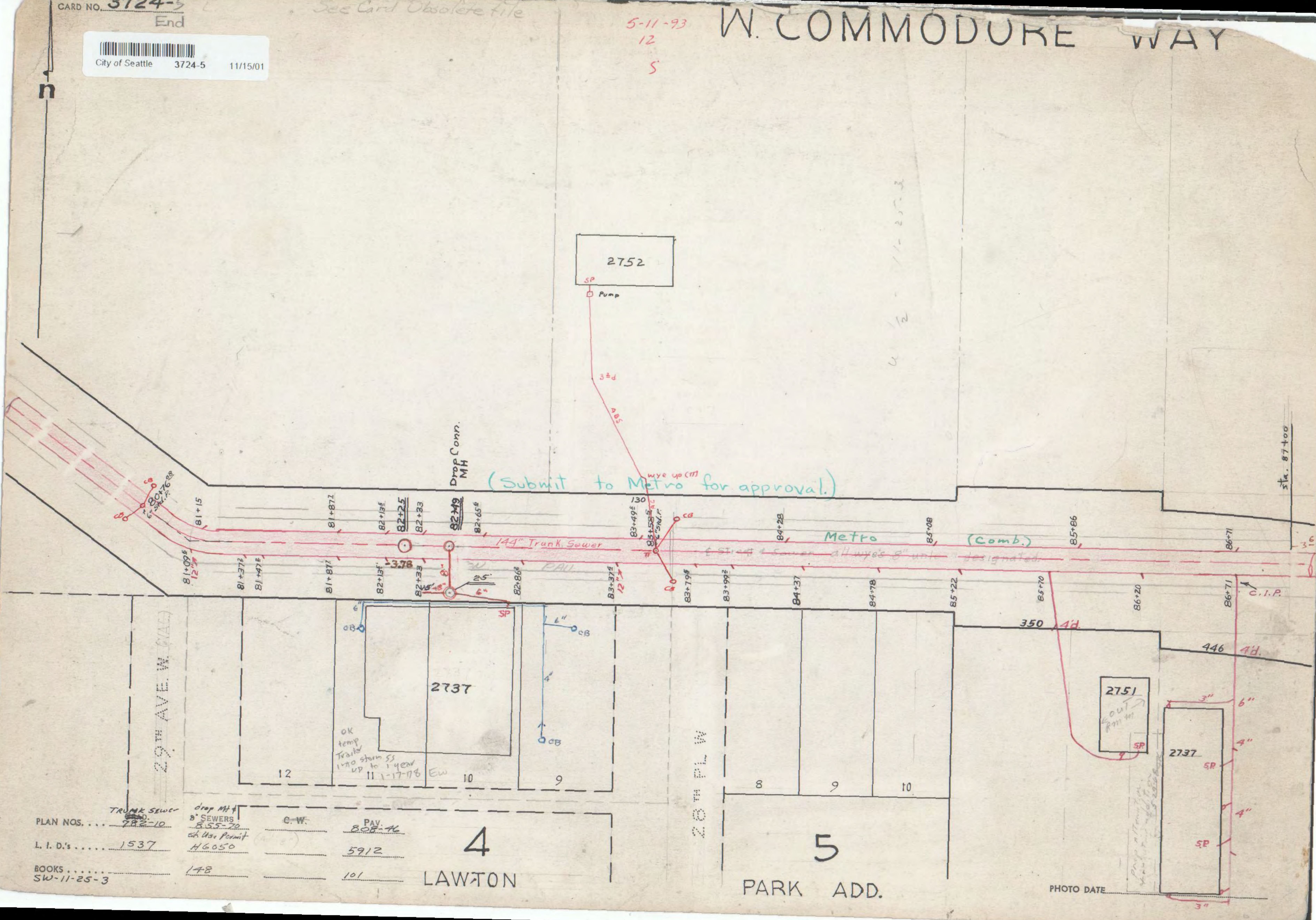
**APPENDIX B**  
**SIDE SEWER CARDS AND MAPS**



See Card Absolute file

5-11-93  
 12  
 5

W. COMMODORE WAY



(Submit to Metro for approval.)

Metro (Comb.)

144" Trunk Sewer

29th Ave. W. (V.I.C.)

28th Pl. W

4  
 LAWTON

5  
 PARK ADD.

PLAN NOS. ....	TRUNK SEWER 782-10	Drop MH 8-55-70	C.W.	PAV. 808-46
L. I. D.'s .....	1537	City Use Permit H6050		5912
BOOKS .....	SW-11-25-3	148		101

PHOTO DATE

Sta. 87+00

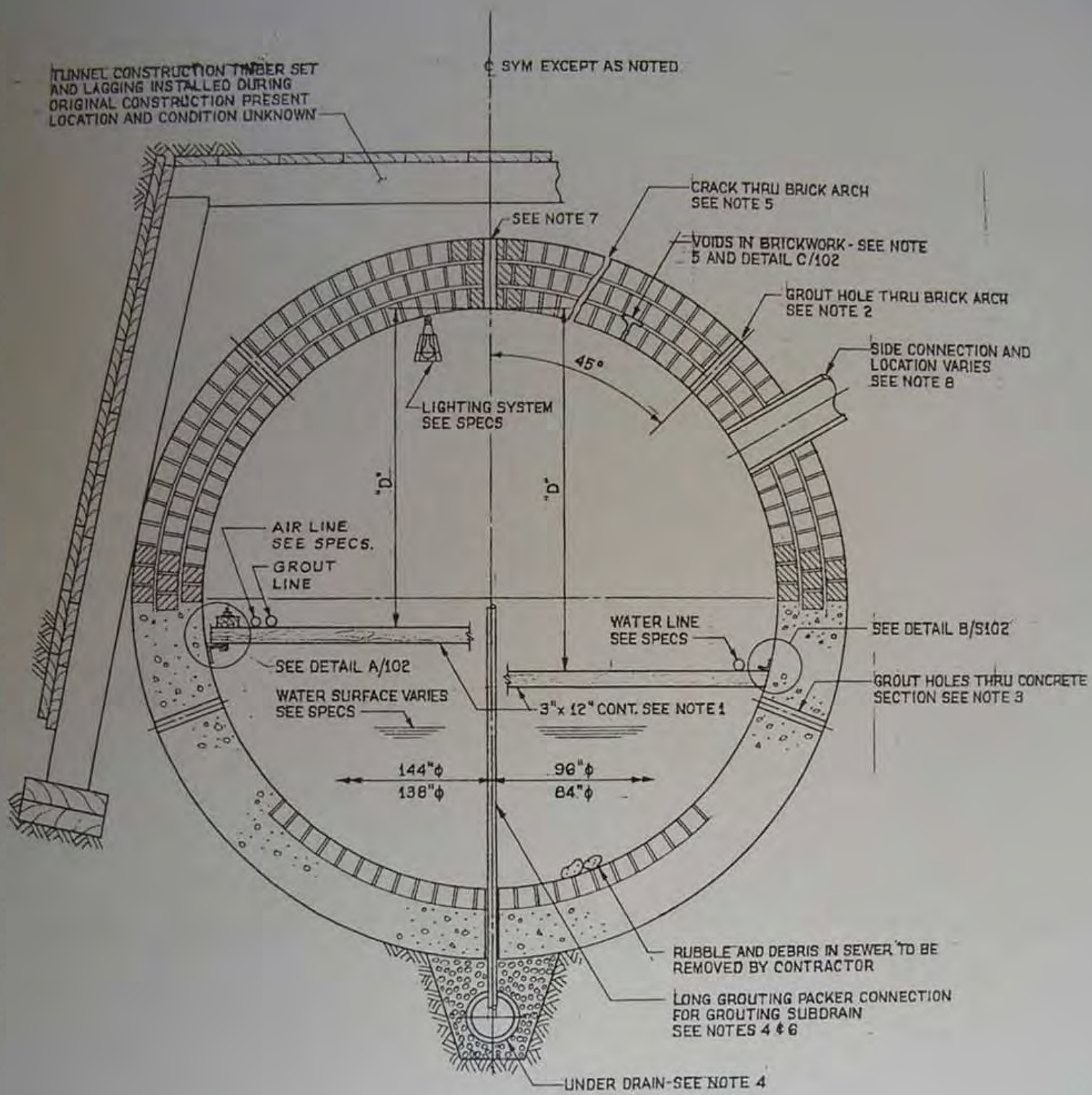
City of Seattle 3724-5-B 11/15/01

THE CITY OF SEATTLE  
DEPARTMENT OF ENGINEERING  
MAINTENANCE DIVISION

FORM 55-196-1M 8-47 L&H CO. 99701

HOUSE NUMBER	PERMIT AND PLAT NO.	DATE ISSUED	ISSUED BY	OWNER	CONTRACTOR	INSPECTOR	DATE INSPECTION	REMARKS
2751	A-2740	4-2-19	F.N.H.	C.F. Anderson	Fred Carlson	H.A. Cameron	2-22-19	
2737	E-3408	1-27-41	C.E.H.	Jobbers Oil Co.	Thos. St. John	B.L. Owen	2-11-41	
2737	M-3291	3-23-64	L.W.	Time Oil Co.	Atco Mech.	Walin	6-23-64	# 98 <sup>00</sup> + 25¢ LNS Incl 3 CB's
2737	N-3882	8-7-68	Duessche	Time Oil Co.	Owner			20 <sup>00</sup> Add'l. conn.
2737	P-4990	10-1-73	White	" " "	Deeny	Tenerelli	10-15-73	25 <sup>00</sup> 25 <sup>00</sup> Ins Repair
2737	P6505	11-13-74	L.White	Time Oil Co.	Owner			80 <sup>00</sup> 2 CB'S Double Fee - Started Work Without Permit
2752	R3697	11-1-78	MERRITT	" " "	ATCO SERVICES	E. L. Jensen	11-9-78	50 <sup>00</sup> NEW SAN. CONN. JO # 800342 - Graft JO # 800343 - B/F

**APPENDIX C**  
**NORTH TRUNK SEWER**



SECTION 1  
102

		DIMENSION D (MAX.)*
144"	CONDUIT B 21	6.0'
138"	CONDUIT B 20 & N 25	6.0'
96"	CONDUIT N 15	5.0'
84"	CONDUIT LU 11	4.5'

\* APPLIES AFTER REMOVAL OF DEBRIS DEPOSITS

RUBB  
CONN

**APPENDIX D**  
**SANBORN FIRE INSURANCE MAPS**



**TOC Seattle Terminal**

2737 W Commodore Way  
Seattle, WA 98199

Inquiry Number: 2757993.1  
April 29, 2010

# Certified Sanborn® Map Report

# Certified Sanborn® Map Report

4/29/10

**Site Name:**

TOC Seattle Terminal  
2737 W Commodore Way  
Seattle, WA 98199

**Client Name:**

Sound Environmental  
2811 Fairview Avenue East  
Seattle, WA 98102-0000



EDR Inquiry # 2757993.1

Contact: Daniel Krause

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by Sound Environmental Strategies were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn) and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

## Certified Sanborn Results:

**Site Name:** TOC Seattle Terminal  
**Address:** 2737 W Commodore Way  
**City, State, Zip:** Seattle, WA 98199  
**Cross Street:**  
**P.O. #** NA  
**Project:** NA  
**Certification #** BFEA-46E6-9519



Sanborn® Library search results  
Certification # BFEA-46E6-9519

**Maps Provided:**

1966  
1950  
1930  
1917

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

*The Sanborn Library LLC Since 1866™*

## Limited Permission To Make Copies

Sound Environmental Strategies (the client) is permitted to make up to THREE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

### Disclaimer - Copyright and Trademark notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2010 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

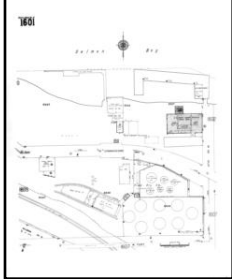
EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

## Sanborn Sheet Thumbnails

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



### 1966 Source Sheets



Volume 11, Sheet 1601



Volume 11, Sheet 1602



Volume 11, Sheet 1607

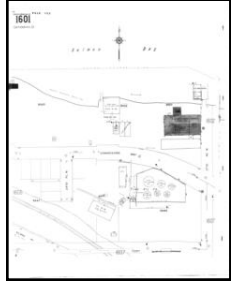
### 1950 Source Sheets



Volume 5, Sheet 587



Volume 5, Sheet 599c



Volume 11, Sheet 1601



Volume 11, Sheet 1602



Volume 11, Sheet 1607

### 1930 Source Sheets

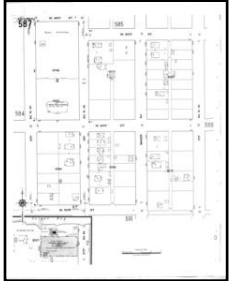


Volume 11, Sheet 1601



Volume 11, Sheet 1607

### 1917 Source Sheets



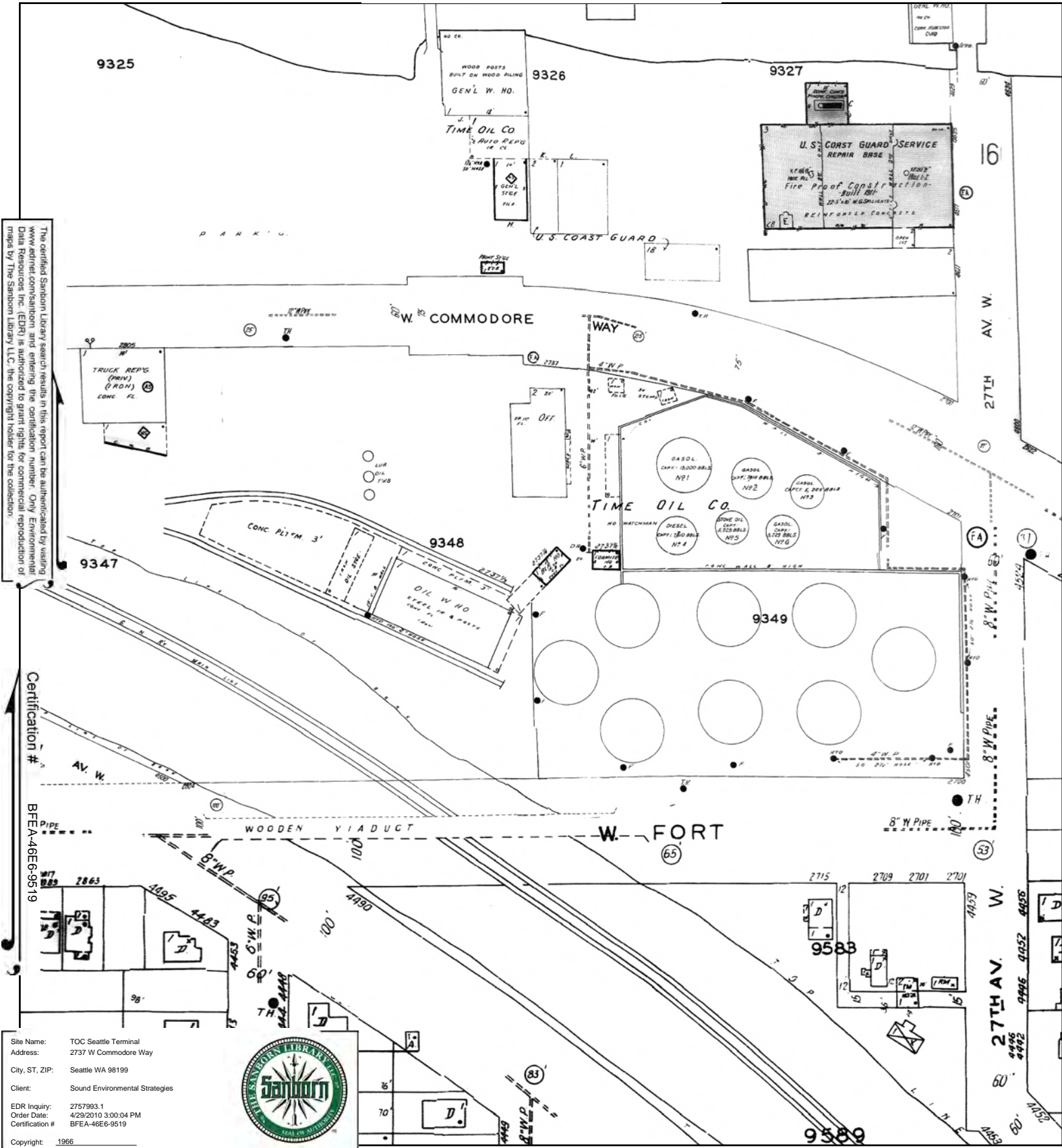
Volume 5, Sheet 587



Volume 5, Sheet 599c



# 1966 Certified Sanborn Map



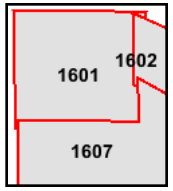
The certified Sanborn Library search results in this report can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn) and entering the certification number. Only Environmental Data Resources, Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification # BFEA-46E6-9519

Site Name: TOC Seattle Terminal  
 Address: 2737 W Commodore Way  
 City, ST, ZIP: Seattle WA 98199  
 Client: Sound Environmental Strategies  
 EDR Inquiry: 2757993.1  
 Order Date: 4/29/2010 3:00:04 PM  
 Certification # BFEA-46E6-9519  
 Copyright: 1966



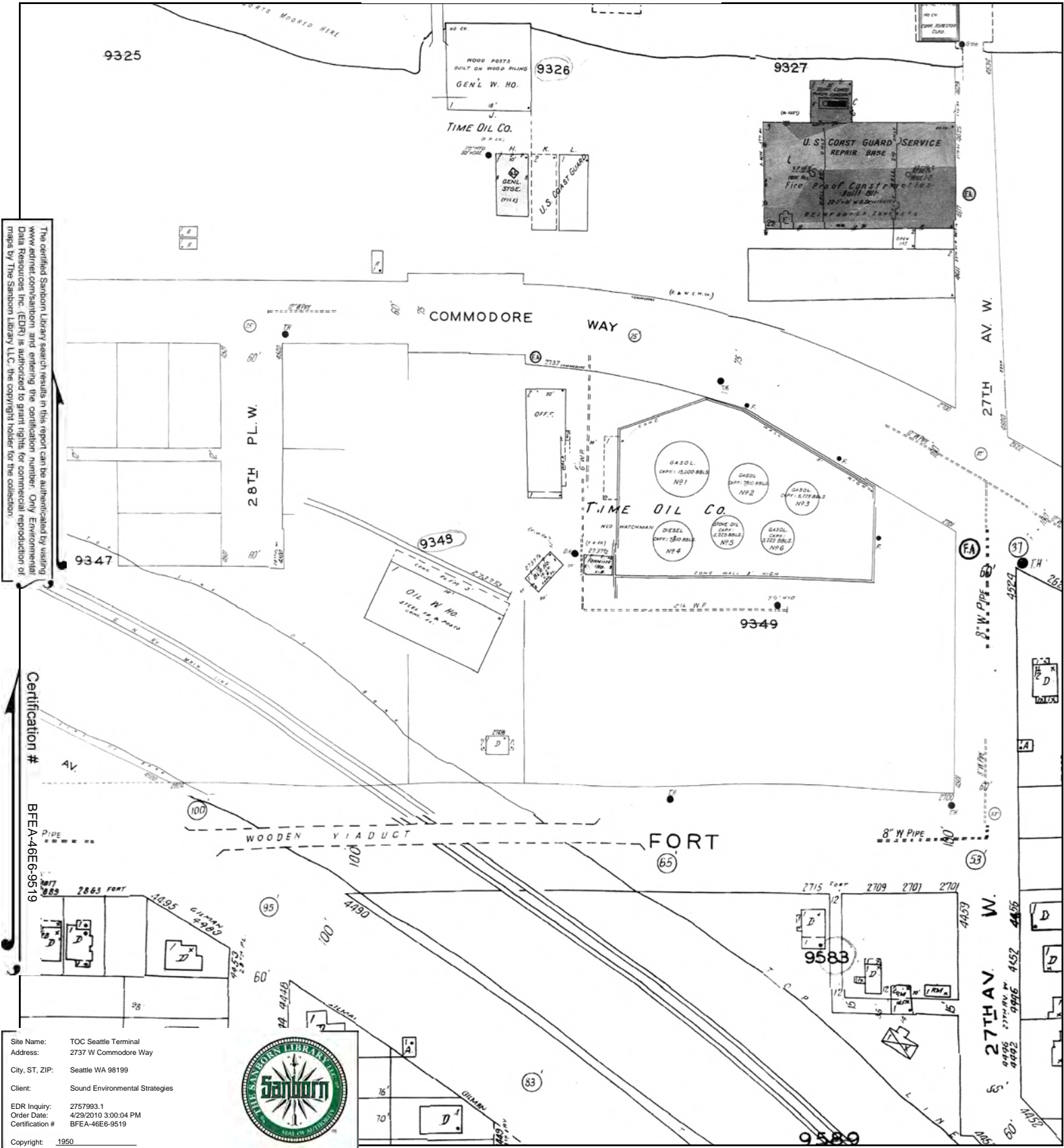
This Certified Sanborn Map combines the following sheets.  
 Outlined areas indicate map sheets within the collection.



Volume 11, Sheet 1601  
 Volume 11, Sheet 1602  
 Volume 11, Sheet 1607



# 1950 Certified Sanborn Map



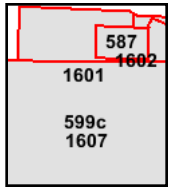
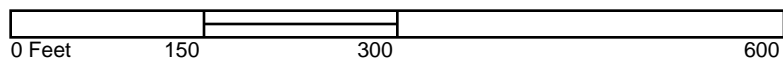
The certified Sanborn Library search results in this report can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn) and entering the certification number. Only Environmental Data Resources, Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification # BFEA-46E6-9519

Site Name: TOC Seattle Terminal  
 Address: 2737 W Commodore Way  
 City, ST, ZIP: Seattle WA 98199  
 Client: Sound Environmental Strategies  
 EDR Inquiry: 2757993.1  
 Order Date: 4/29/2010 3:00:04 PM  
 Certification #: BFEA-46E6-9519  
 Copyright: 1950



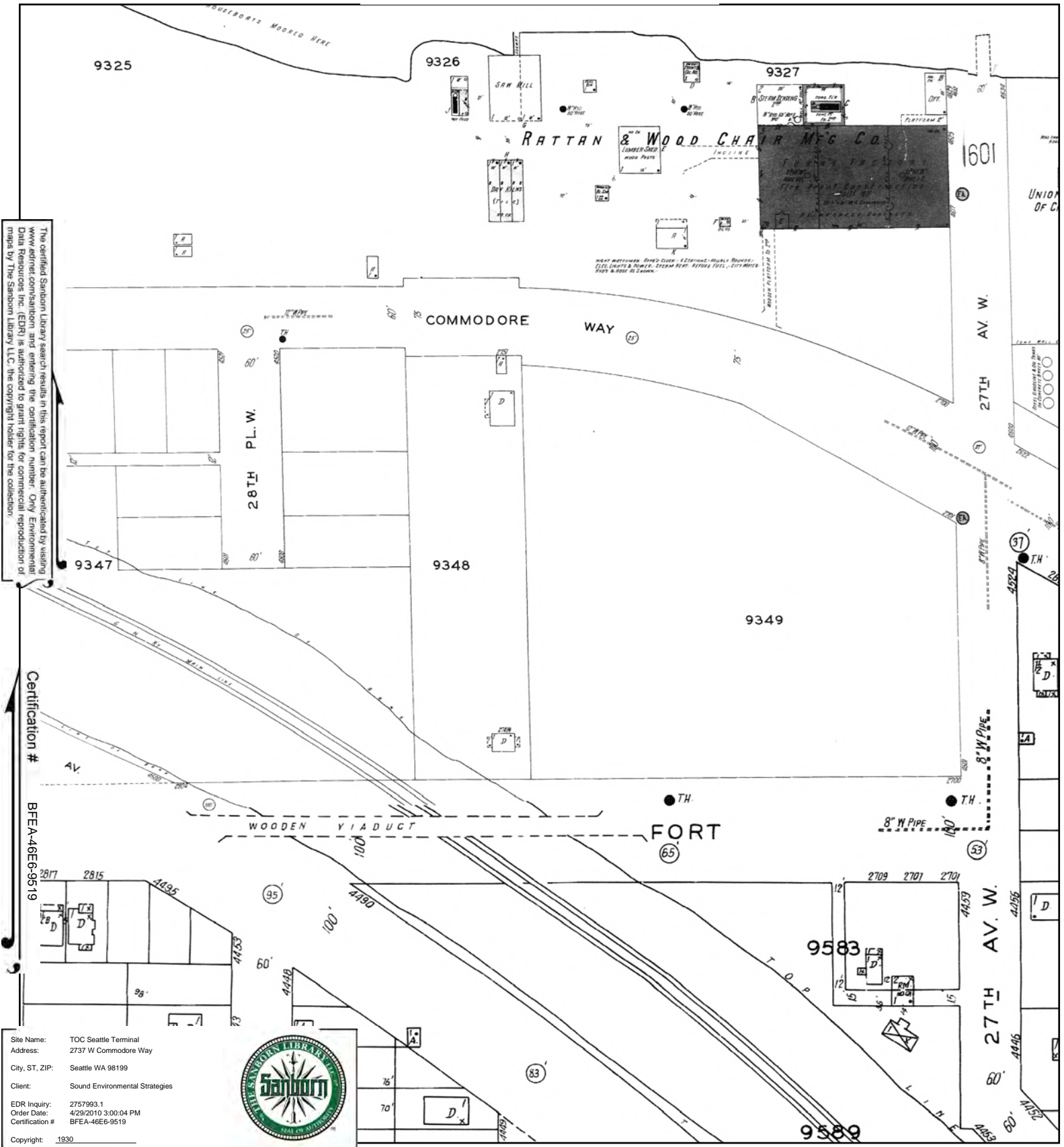
This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection.



- Volume 5, Sheet 587
- Volume 5, Sheet 599c
- Volume 11, Sheet 1601
- Volume 11, Sheet 1602
- Volume 11, Sheet 1607



# 1930 Certified Sanborn Map



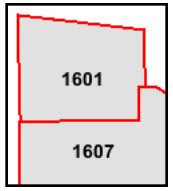
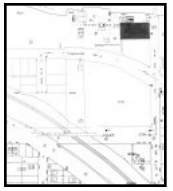
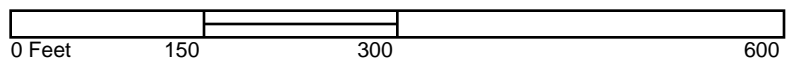
The certified Sanborn Library search results in this report can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn) and entering the certification number. Only Environmental Data Resources, Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification #  
BFEA-46E6-9519

Site Name: TOC Seattle Terminal  
 Address: 2737 W Commodore Way  
 City, ST, ZIP: Seattle WA 98199  
 Client: Sound Environmental Strategies  
 EDR Inquiry: 2757993.1  
 Order Date: 4/29/2010 3:00:04 PM  
 Certification # BFEA-46E6-9519  
 Copyright: 1930



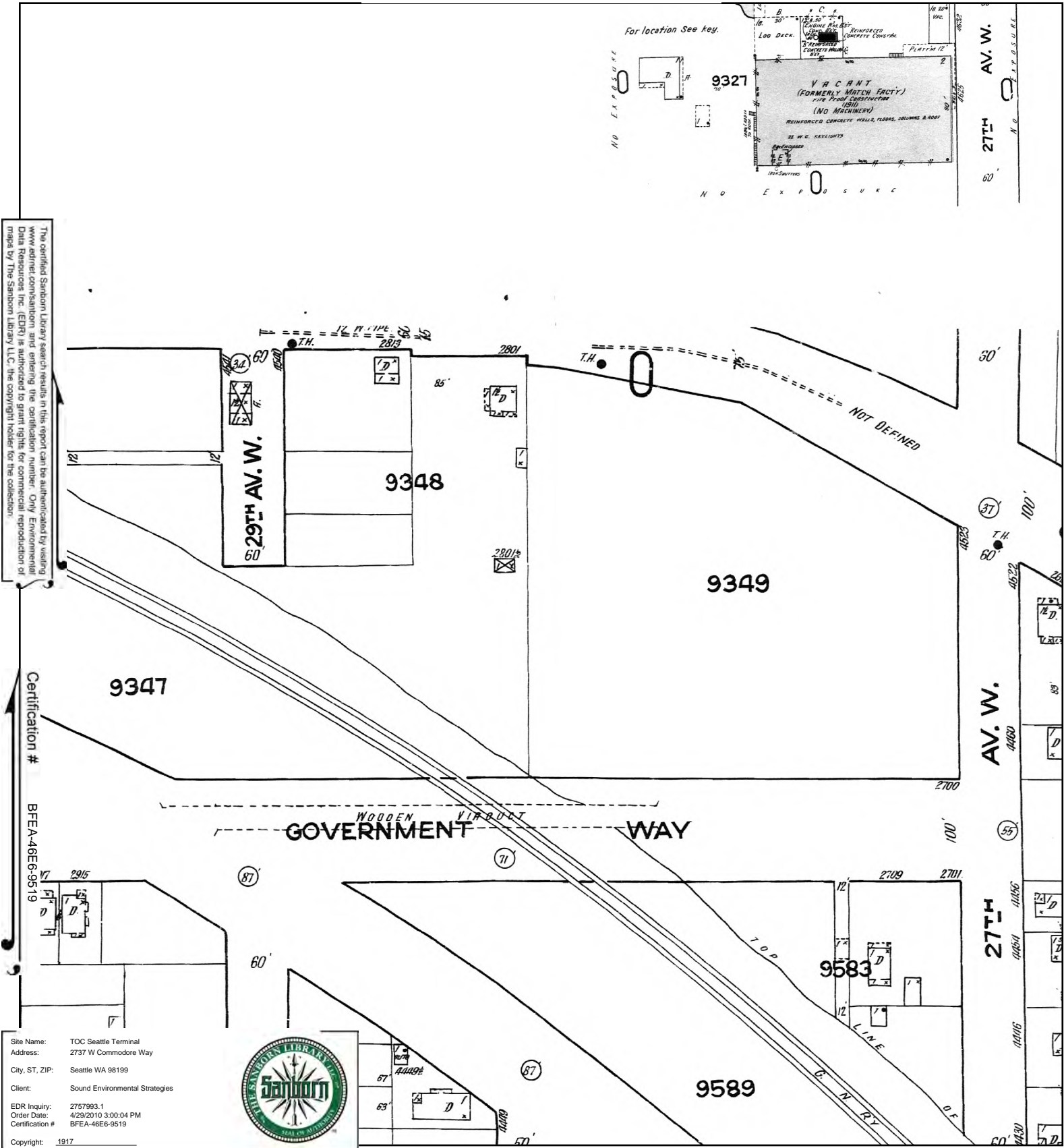
This Certified Sanborn Map combines the following sheets.  
 Outlined areas indicate map sheets within the collection.



Volume 11, Sheet 1601  
 Volume 11, Sheet 1607



# 1917 Certified Sanborn Map



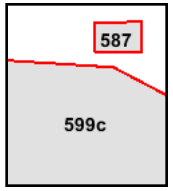
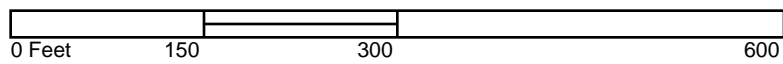
The certified Sanborn Library search results in this report can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn) and entering the certification number. Only Environmental Data Resources, Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification # BFEA-46E6-9519

Site Name: TOC Seattle Terminal  
 Address: 2737 W Commodore Way  
 City, ST, ZIP: Seattle WA 98199  
 Client: Sound Environmental Strategies  
 EDR Inquiry: 2757993.1  
 Order Date: 4/29/2010 3:00:04 PM  
 Certification # BFEA-46E6-9519  
 Copyright: 1917



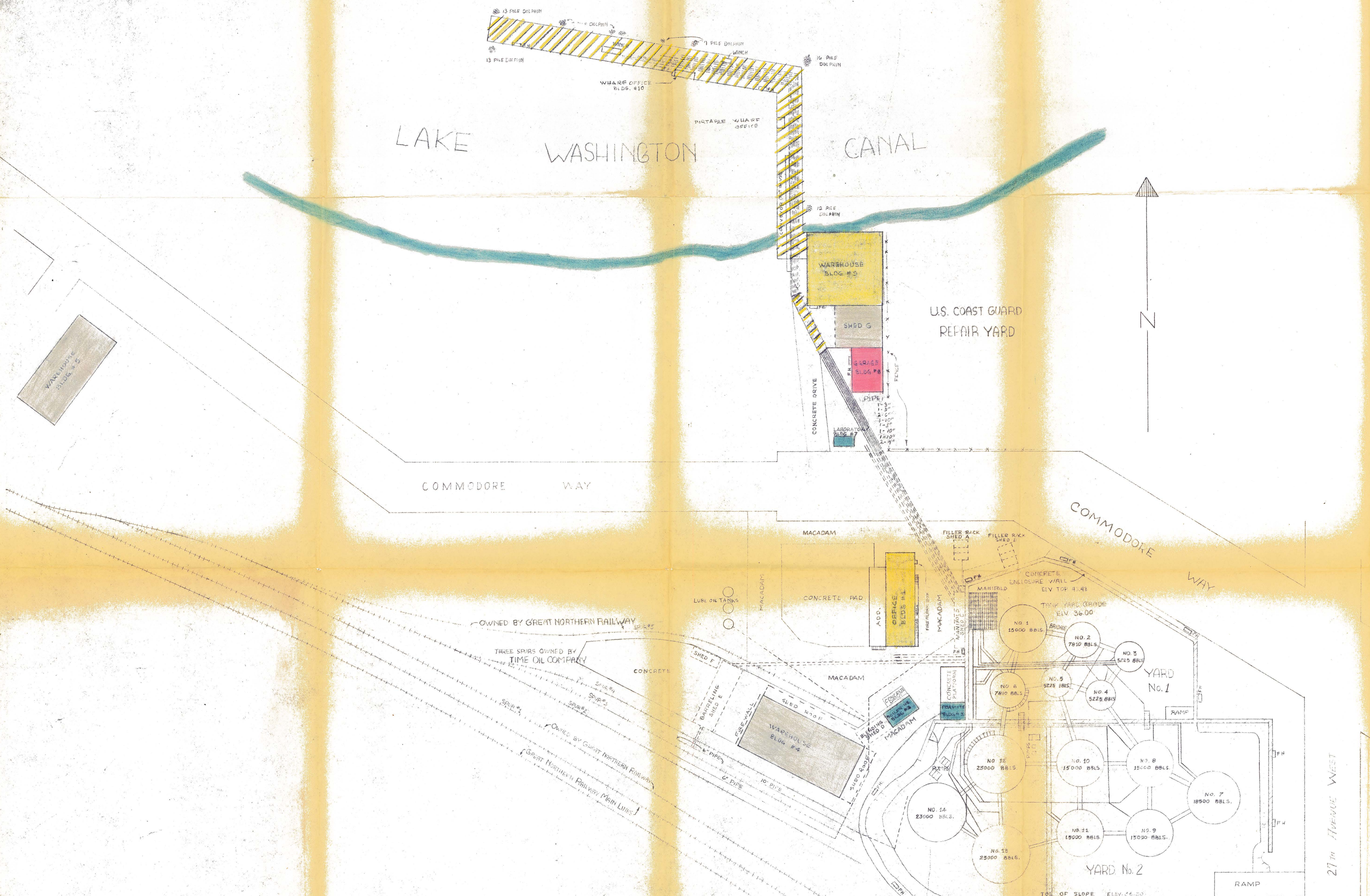
This Certified Sanborn Map combines the following sheets.  
 Outlined areas indicate map sheets within the collection.



Volume 5, Sheet 387  
 Volume 5, Sheet 599c



**APPENDIX E**  
**TOC HOLDINGS CO. HISTORICAL RECORDS**

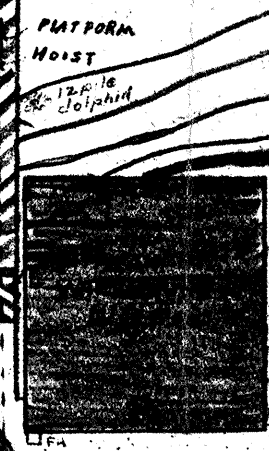
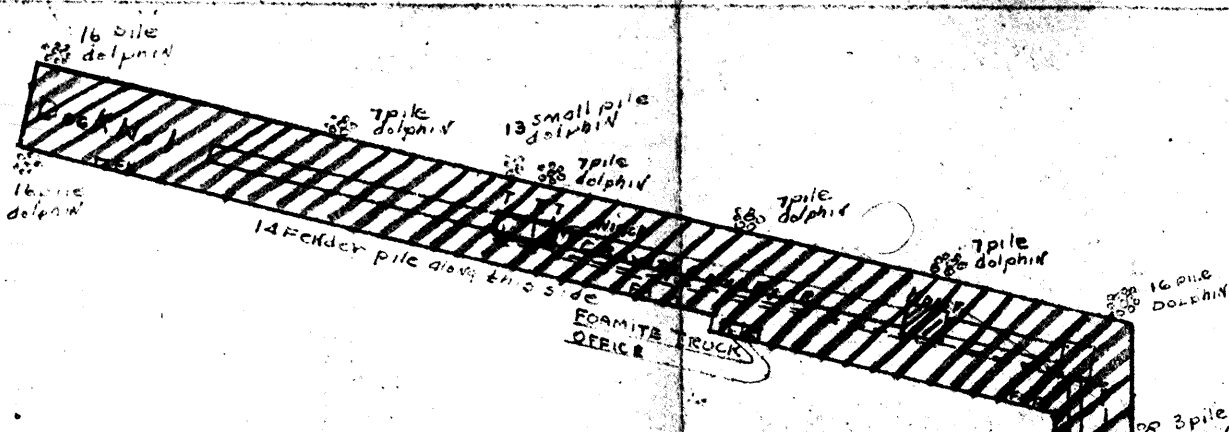


APPRAISAL MAP		
TIME OIL COMPANY		
SEATTLE BULK PLANT SEATTLE, WASH.		
DATE 2-53	U. S. APPRAISAL CO.	MADE BY C O N E
REVISIONS 4-53 1-57	SEATTLE - SAN FRANCISCO - PORTLAND	SCALE 1" = 50'
	SEATTLE DEXTER HORTON BLDG. Rm. #224	SHEET No. 1 of 1

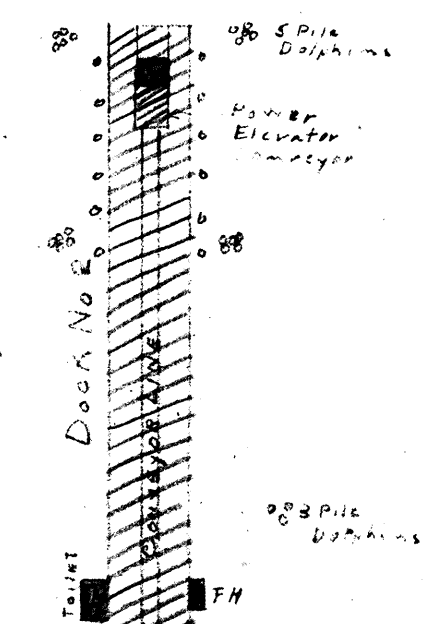


LAKE WASHINGTON

CANAL



U.S. COAST GUARD  
REPAIR YARD



ROADWAY

AREA B

COMMODORE WAY

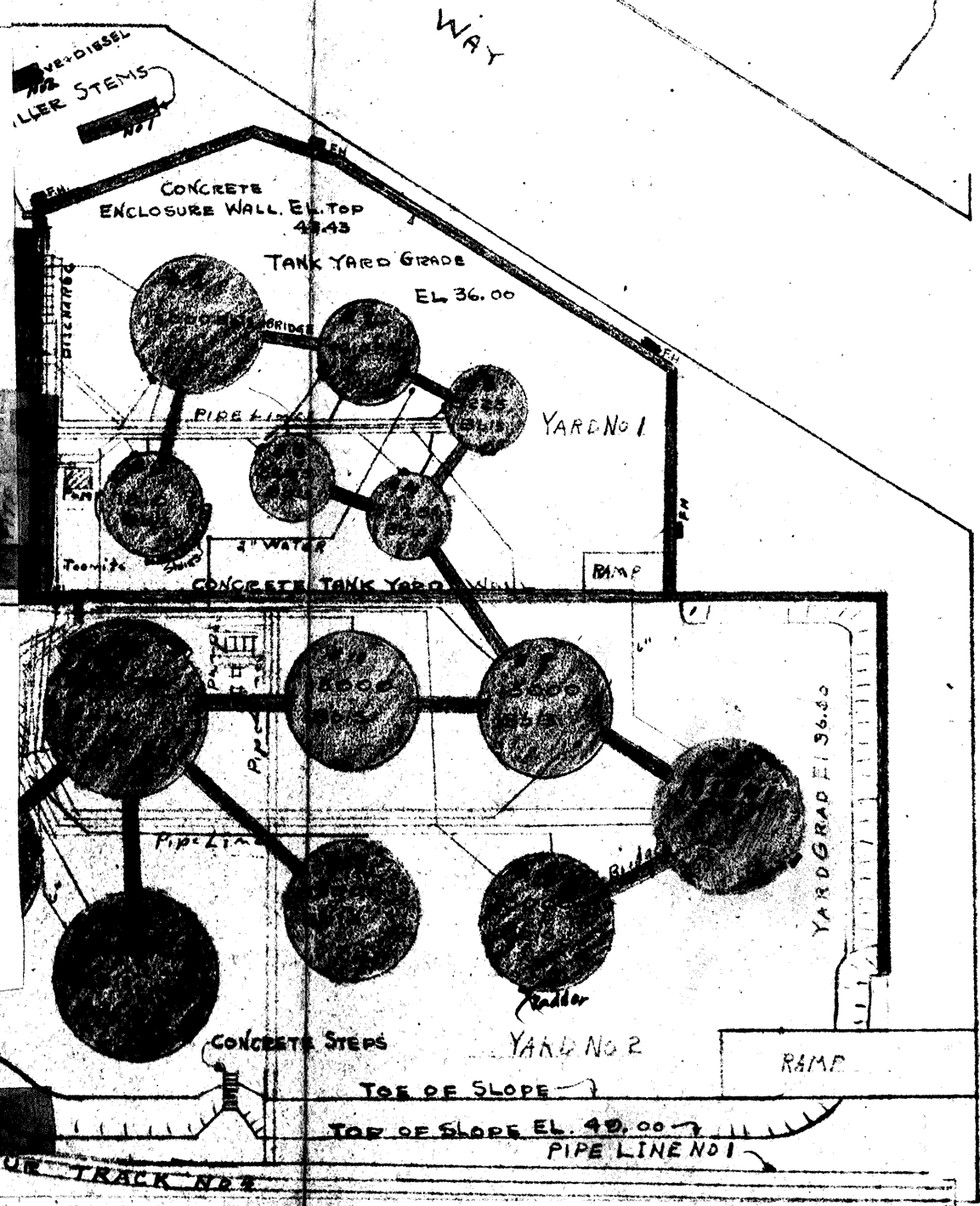
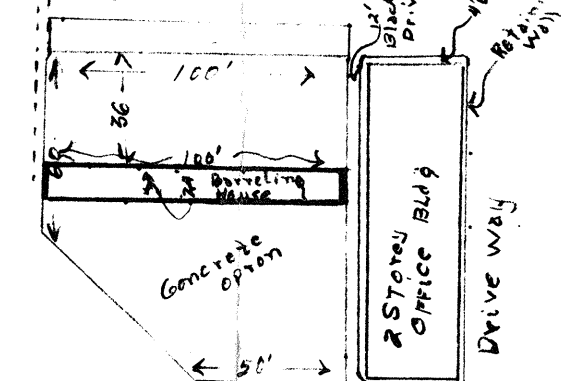
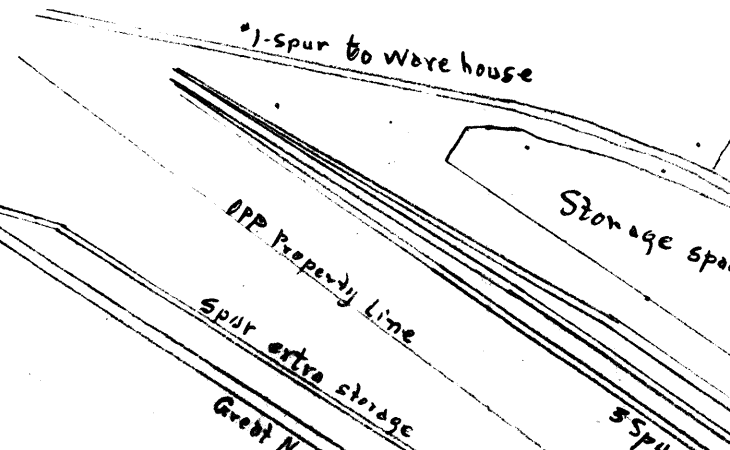
COMMODORE WAY

WAY

COMMODORE WAY

Barreling house 24'x100'  
With 50' concrete apron

Property extends .800' to the  
west - Can hold 100,000 drums



TIME  
2:37 PM  
SEATTLE  
SCALE 1/4" = 5'  
AUG. 24 - 1944

Scale app 50' to 1"

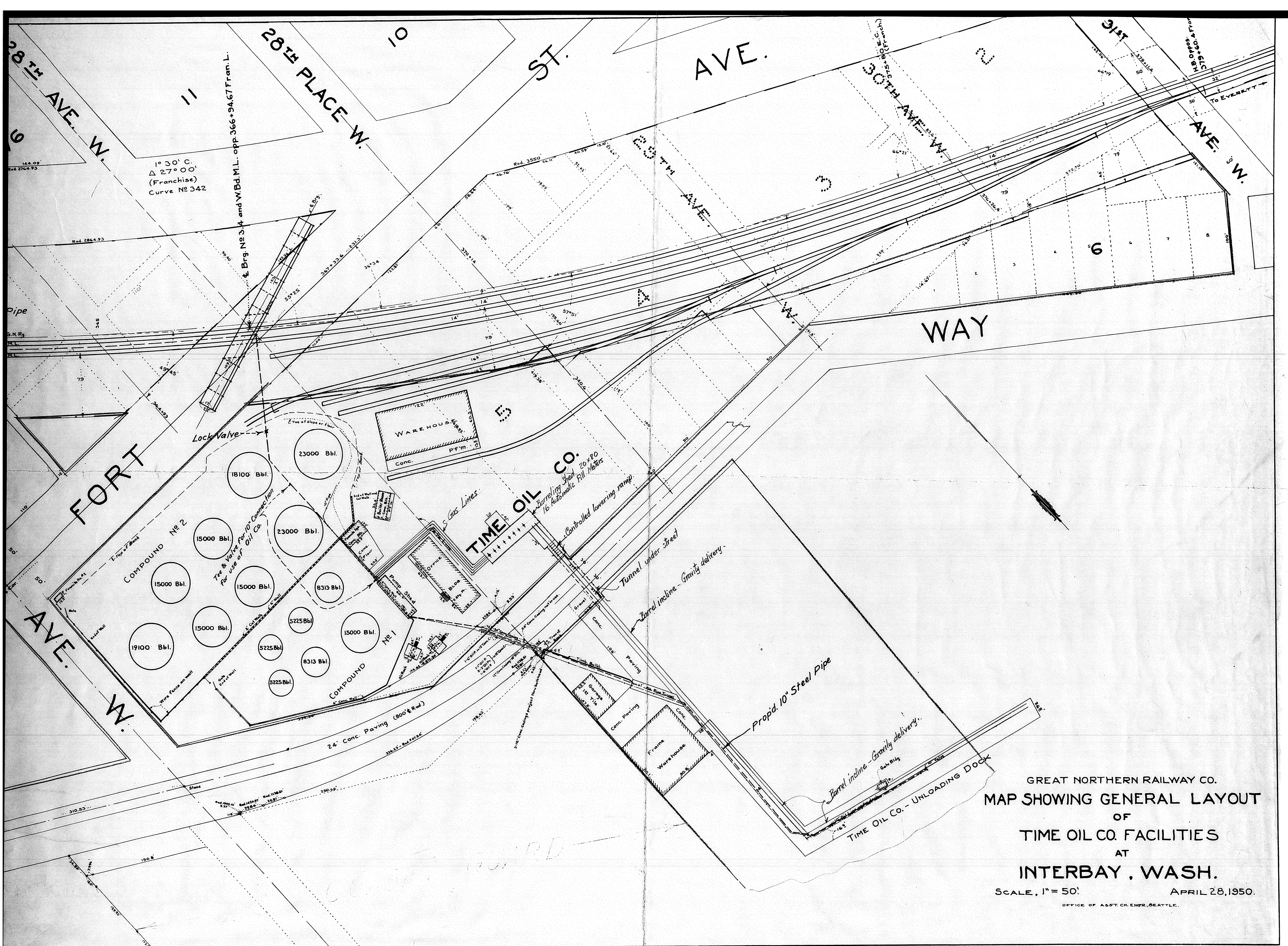
W.M.S.K.  
ENGINEERS AND APPRAISERS  
SEATTLE, WASH.

FORT

ST.

191341 866  
8036377 Jd.

William S. Kellin  
7/16/44



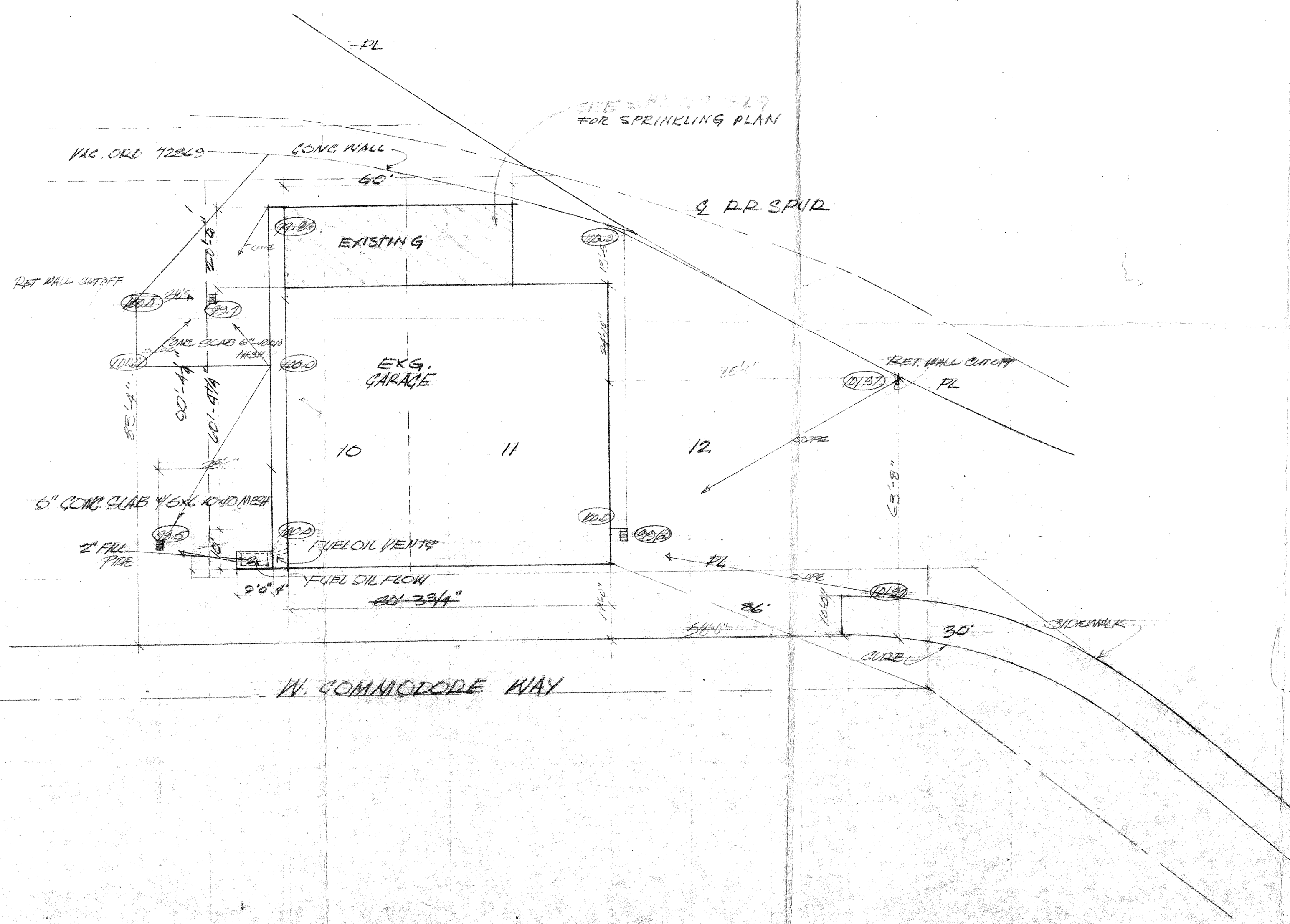
1° 30' C.  
 Δ 27° 00'  
 (Franchise)  
 Curve No 342

Brig. No. 34 and W. Bd. M.L. opp. 366 + 94.67 Fran. L.

**TIME OIL CO.**  
 Barrelling Shed 20x80  
 16 Automatic Fill Meters

GREAT NORTHERN RAILWAY CO.  
**MAP SHOWING GENERAL LAYOUT**  
 OF  
**TIME OIL CO. FACILITIES**  
 AT  
**INTERBAY, WASH.**  
 SCALE, 1" = 50' APRIL 28, 1950.  
 OFFICE OF ASST. CH. ENGR., SEATTLE.





**NOTES**

1. LEGAL  
 LOTS 11 & 12 BLOCK 4  
 LANTON PARK ADD.  
 SEATTLE W.A.
2. WASTE OIL & FUEL TANKS
  - TANKS 550 GAL. EA.
  - TANK #1 WASTE OIL; TANK #2 FUEL OIL
  - TANKS COVERED WITH 6" SLAB - CIRCUMFERED TO CENTER w/ 6x6 - 10-10 MESH
  - FILL DIKE 2" = VENT LINE 1"
  - SLAB SIZE = 9'6" X 10'-0"

**APPROVED**  
 SUBJECT TO COMPLETION OF PLAN  
 REVIEW REQUIREMENTS AND FINAL  
 SITE INSPECTION  
 CHIEF OF FIRE DEPARTMENT  
*[Signature]* DATE 8/24/70

**PLOT PLAN**  
 REPAIR GARAGE  
 TIME OIL COMPANY  
 2737 W. COMMODORE WAY SEATTLE

DRAWN BY	DATE 11/14/63	DWG NO
	SCALE 1" = 20'	PT 1156



**NOTES**

- 1. LEGAL<sub>0</sub>  
 LOTS 11 & 12 BLOCK 4  
 LANTON PARK ADD.  
 SEATTLE W.N.
- 2. WASTE OIL & FUEL TANKS
  - ▣ TANKS 550 GAL. EA.
  - ▣ TANK #1 WASTE OIL; TANK #2 FUEL OIL
  - ▣ TANKS COVERED WITH 6" SLAB - CROWNED TO CENTER w/ 6x6-10-10 MESH
  - ▣ FILL PIPE 2" - VENT LINE 1"
  - ▣ SLAB SIZE 9'6" X 10'-0"
  - ▣ 18" COVER OVER TANKS

**PLOT PLAN**

REPAIR GARAGE  
 TIME OIL COMPANY  
 2805  
 W COMMODORE WAY SEATTLE

DRAWN BY	DATE 11/14/23	ENGINEER NO
	SCALE 1" = 20'	PGT. 1156



# SPUR TRACK AGREEMENT

**Parties.** AGREEMENT, made this 18th day of December, 19 43, between GREAT NORTHERN RAILWAY COMPANY, a corporation hereinafter called the "Railroad", and TIME OIL COMPANY, a corporation, hereinafter called the "Industry".

**Location.** WHEREAS, the Industry desires the construction, maintenance and operation of a track to be located at Seattle, Washington, shown colored red, between the letters A and C on the plan hereto attached and made a part hereof, marked "Exhibit A", the Railroad agrees to the construction, maintenance and operation of said track on the following terms and conditions:

**Right of Way.** Section 1. The Industry shall first procure and furnish without expense to the Railroad all necessary right of way, including all necessary public authority and permission for the construction, maintenance and operation of the track.

**Construction, Ownership and Maintenance.** Section 2. Industry, at its expense, shall do the grading necessary for the construction of the track shown colored red between the letters A and C on said exhibit.

Railroad, at its expense, shall construct the said track, exclusive of switch and track ties which shall be furnished by Railroad at the expense of Industry.

Railroad shall maintain the track between the letters A and B at its expense and shall maintain the track between the letters B and C at Industry's expense.

Railroad shall own the entire track.

The Industry shall pay for all present and future changes in, or additions to, the Railroad's line, or construction, made necessary by the installation, maintenance and operation of the track.

In the event of separation of the grade of said track and of any highway being ordered by public authority, the Industry will indemnify the Railroad against any expense in connection therewith or consent to the removal of the track.

**Payment.** Section 3. The Industry shall, before any construction is begun, pay to the Railroad, the sum of One thousand two hundred forty-five and no/100 dollars, the agreed cost of the work and materials to be furnished by the Railroad at the expense of the Industry.

The Industry shall pay to the Railroad from time to time the cost of the maintenance, additions and betterments, done by the Railroad, herein agreed to be borne by the Industry, within twenty days after bills are rendered therefor.

Should the Industry do any work of construction, maintenance, or of additions and betterments, it shall do such work in substantial and workmanlike manner, and in accordance with the Railroad's standards. If the Industry fails to properly maintain the track or to pay the bills therefor within the prescribed time the Railroad may disconnect the track, or refuse to operate over it.

**Definition of Cost.** Section 4. "Cost" for the purpose of this agreement shall be all assignable costs, plus 10% to cover elements of expense not capable of exact ascertainment. Material to be charged at its current value where used.

**Right of Railroad to use.** Section 5. The Railroad shall have the right to use the track when not to the detriment of the Industry.

**Clearances.** Section 6. The Industry shall not place, or permit to be placed, or to remain, any material, structure, pole or other obstruction within 8 feet laterally of the center or within 22 feet vertically from the top of the rail of said track.

**Public Assessments.** Section 7. The Industry shall pay all compensation and assessments required at any time by any municipality, public authority, corporation or person, for the privilege of constructing, maintaining and operating said track.

**Traffic.** Section 8. The Industry shall deliver to the Railroad for transportation over its line of railway all freight consigned to or by businesses and industries served by or located upon or along said track which the industry can control, provided the rates of the Railroad for the transportation thereof be as reasonable and low as rates over competing railway lines; and in the event of the Industry's failure or refusal so to do the Railroad may cease to operate said track and may remove the portion thereof owned by the Railroad track.

**Liability.** Section 9. It is understood that the movement of railroad locomotives involves some risk of fire, and the Industry assumes all responsibility for and agrees to indemnify the Railroad against loss or damage to property of the Industry or to property upon its premises, regardless of railroad negligence, arising from fire caused by locomotives operated by the Railroad on said track, or in its vicinity for the purpose of serving said Industry, except to the premises of the Railroad and to rolling stock belonging to the Railroad or to others, and to shipments in the course of transportation.

The Industry also agrees to indemnify and hold harmless the Railroad for loss, damage or injury from any act or omission of the Industry, its employes, or agents, to the person or property of the parties hereto and their employes, and to the person or property of any other person or corporation, while on or about said track; and if any claim or liability other than from fire shall arise from the joint or concurring negligence of both parties hereto it shall be borne by them equally.

**Right to Disconnect.** Section 10. The Railroad shall have the right to take up and remove so much of said track as is owned by it if the Industry shall cease to use it or to perform any covenant or condition of this agreement.

**Assignment.** Section 11. The Industry shall not assign this agreement or any interest therein without the written consent of the Railroad, and for any departure in this respect the Railroad may terminate this agreement.

In presence of:

*[Handwritten signatures of representatives of the Industry]*

GREAT NORTHERN RAILWAY COMPANY

By *[Signature]*  
Vice President.

TIME OIL COMPANY

By *[Signature]*  
President.

*[Handwritten notes and signatures on the left margin]*

**APPENDIX F**  
**PREVIOUS REPORTS**

**This appendix is included at the end of the report on the attached CD.**

**APPENDIX G**  
**BORING LOGS**

**This appendix is included at the end of the report on the attached CD.**

**APPENDIX H**  
**LABORATORY ANALYTICAL REPORTS**



**This appendix is included at the end of the report on the attached CD.**

**APPENDIX I**  
**SLUG TEST DATA SUMMARY**



**Table I-1**  
**Slug Testing - Field Methods and Data Analysis**  
**TOC Holdings Co. Facility No. 01-600**  
**2737 W. Commodore Way**  
**Seattle, Washington**

Date of Test	Well ID <sup>(1)</sup>	Water-Bearing Zone	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Initial DTW (ft btoc)	Screen Submerged	Saturated Screen Length <sup>(2)</sup> (ft)	Estimated K-value <sup>(3)</sup> (cm/sec)	Estimated K-Value <sup>(3)</sup> (ft/day)
<b>ASKO Hydraulic Property</b>									
3/27/2009	01MW44	Shallow	15	30	22.63	No	15	1.8E-03	5.1
3/27/2009	01MW44 (Test 2)	Shallow	15	30	22.63	No	15	1.6E-03	4.5
3/26/2009	01MW62	Shallow	24	39	31.16	No	15	1.2E-03	3.4
<b>Bulk Terminal Property</b>									
3/27/2009	01MW03	Shallow	10	25	12.70	No	15	7.1E-04	2.0
8/10/2009	01MW21	Shallow	5	22.5	7.49	No	15	3.0E-05	0.085
3/27/2009	01MW38	Shallow	7.5	22.5	7.94	No	15	1.8E-03	5.1
3/27/2009	01MW40	Shallow	7	22	15.16	No	15	1.3E-03	3.7
3/27/2009	01MW59	Shallow	13	29	14.37	No	15.5	9.1E-04	2.6
<b>East Waterfront Property</b>									
3/26/2009	02MW14	Shallow	4	15	10.10	No	11	2.0E-03	5.7
Geometric mean for shallow water-bearing zone								8.8E-04	2.5
<b>ASKO Hydraulic Property</b>									
3/26/2009	01MW57	Intermediate	35.5	41	26.75	Yes	5.5	1.0E-03	2.8
3/26/2009	01MW65	Deep	52	62	34.35	Yes	10	2.2E-03	6.2

**NOTES:**

Testing procedure used was Rising Head.

Analytical Method used was Bouwer and Rice, 1976.

Bouwer 1989. The Bouwer and Rice Slug Test - An Update. *Groundwater* 27 no 3: 304-309.

<sup>(1)</sup>All wells are 2-inch diameter, with 8.25-inch diameter sandpacks.

<sup>(2)</sup>All wells were assumed to be fully penetrating (Aquifer thickness=length of saturated screen). For the 01MW65 and 01MW57, the screened interval fully penetrates a sand layer bounded above and below by silt.

<sup>(3)</sup>For wells screened across the water table, the sand-pack recovery correction in the Bouwer and Rice analysis was used. Following Bouwer (1989), the first semi-log linear slope in the recovery data was assumed to represent sand pack drainage, and the immediately following curved portion of the data was interpreted to represent an intermediate transition into drainage from native material. The subsequent middle-time semi-log linear slope in the recovery data was used to estimate aquifer hydraulic conductivity. For wells 01MW65 and 01MW57 (submerged screens), the first semi-log slope was used to estimate hydraulic conductivity.

bgs = below ground surface

btoc = below top of casing

cm/sec = centimeters per second

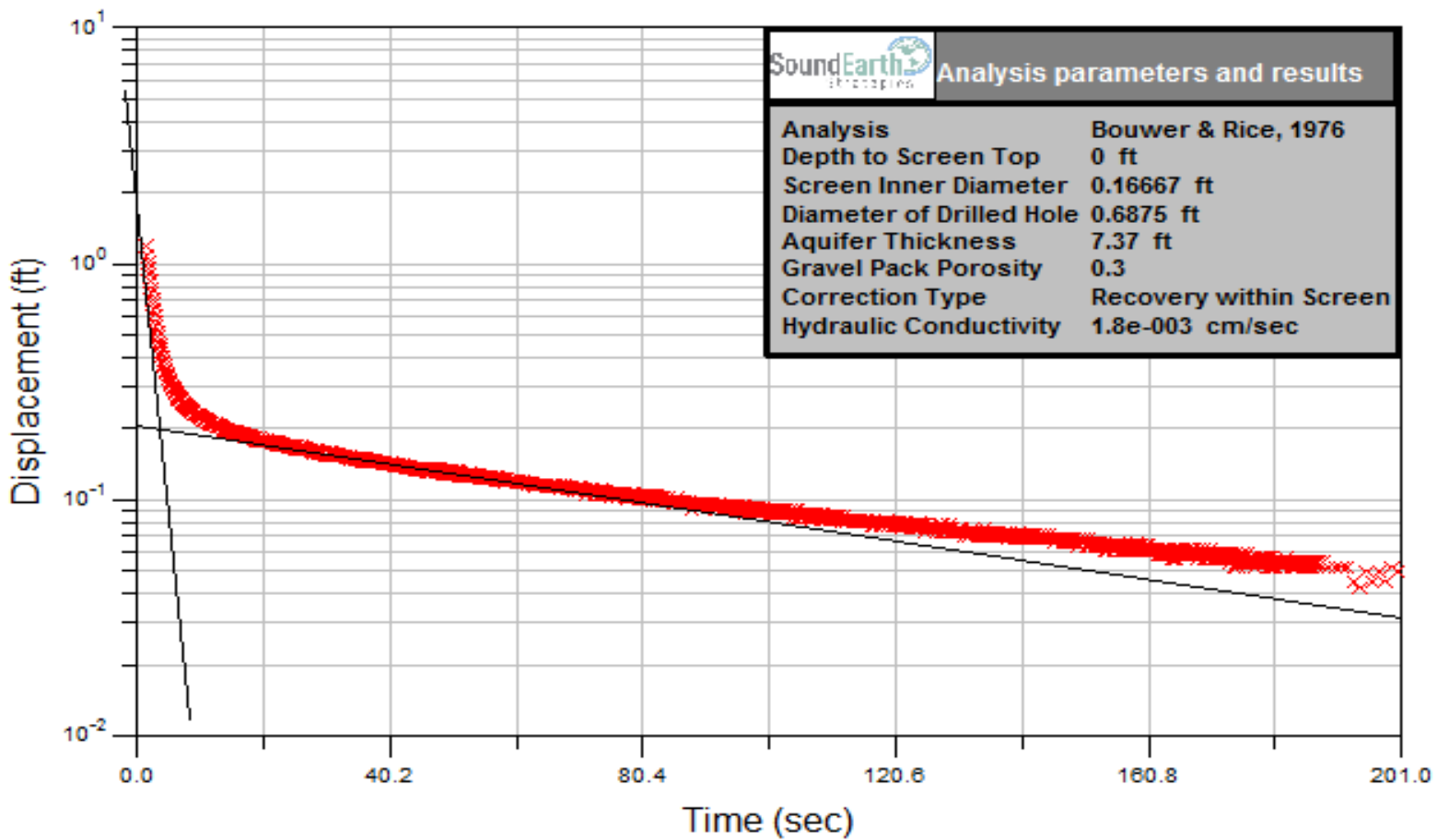
DTW = depth to water

K = hydraulic conductivity

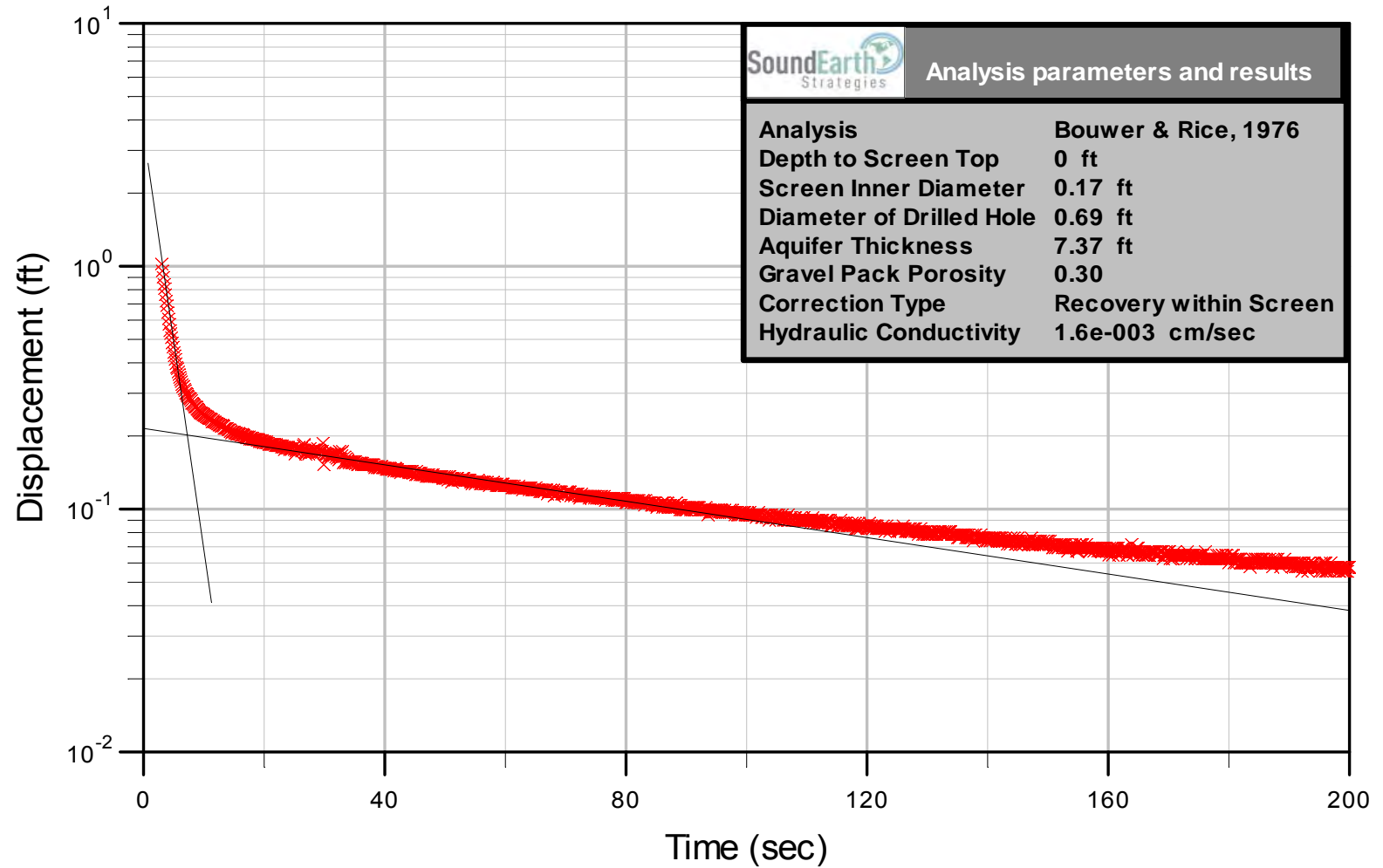
ft = feet

ft/day = feet per day

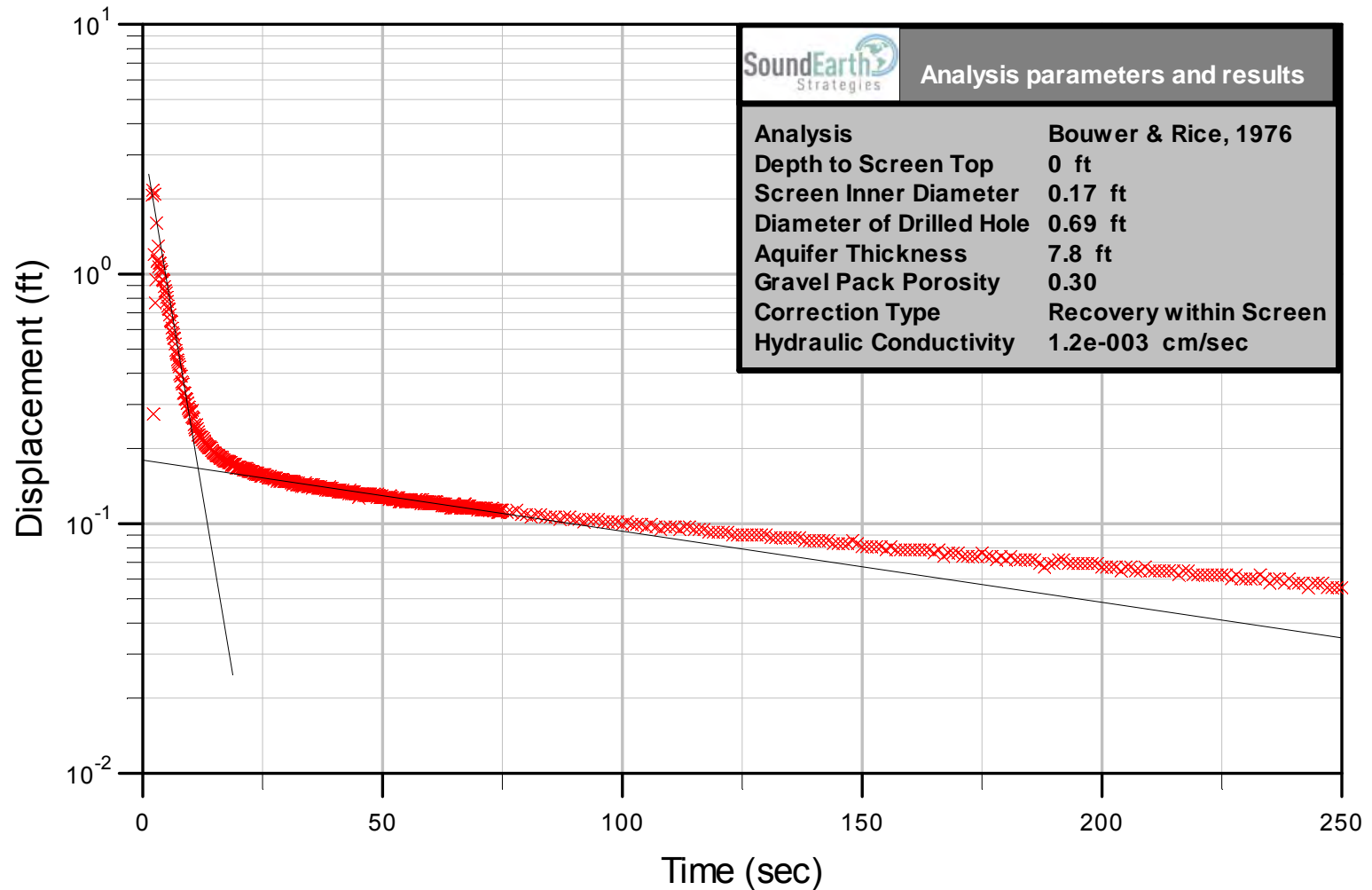
## 01MW44\_Rising



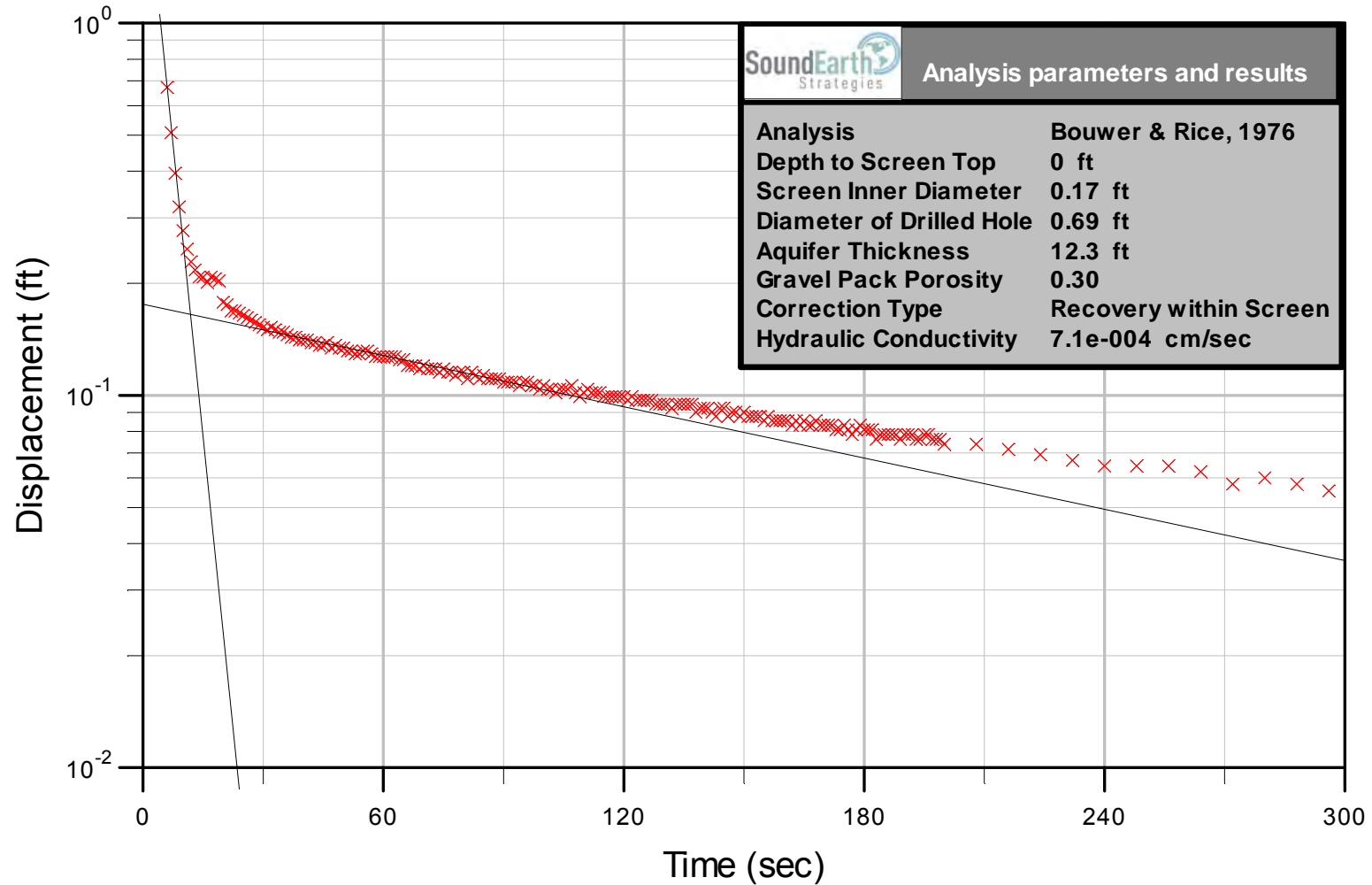
## Well 01MW44 (Rising head 2)



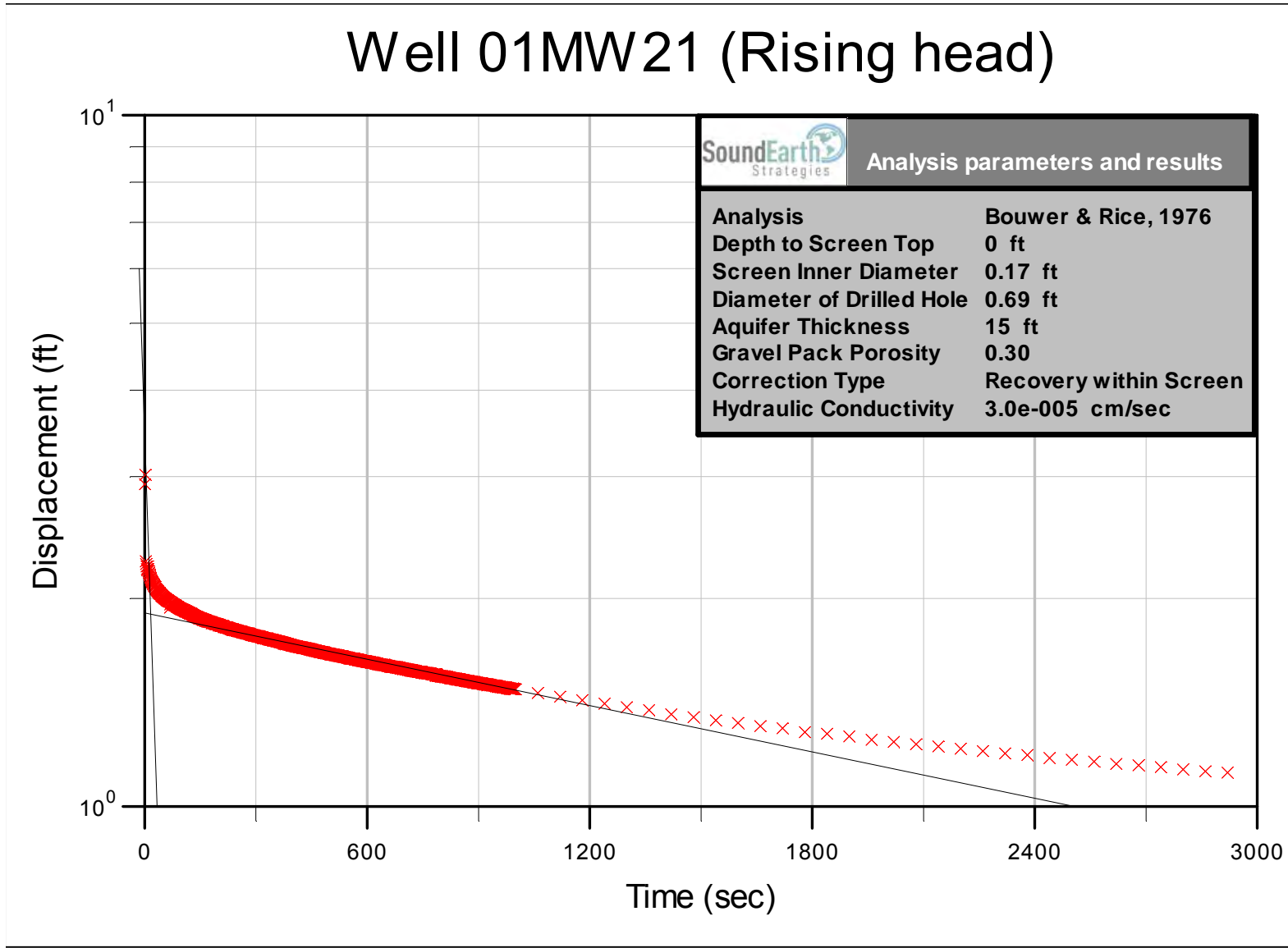
## Well 01MW62 (Rising head)



## Well 01MW03 (Rising head)

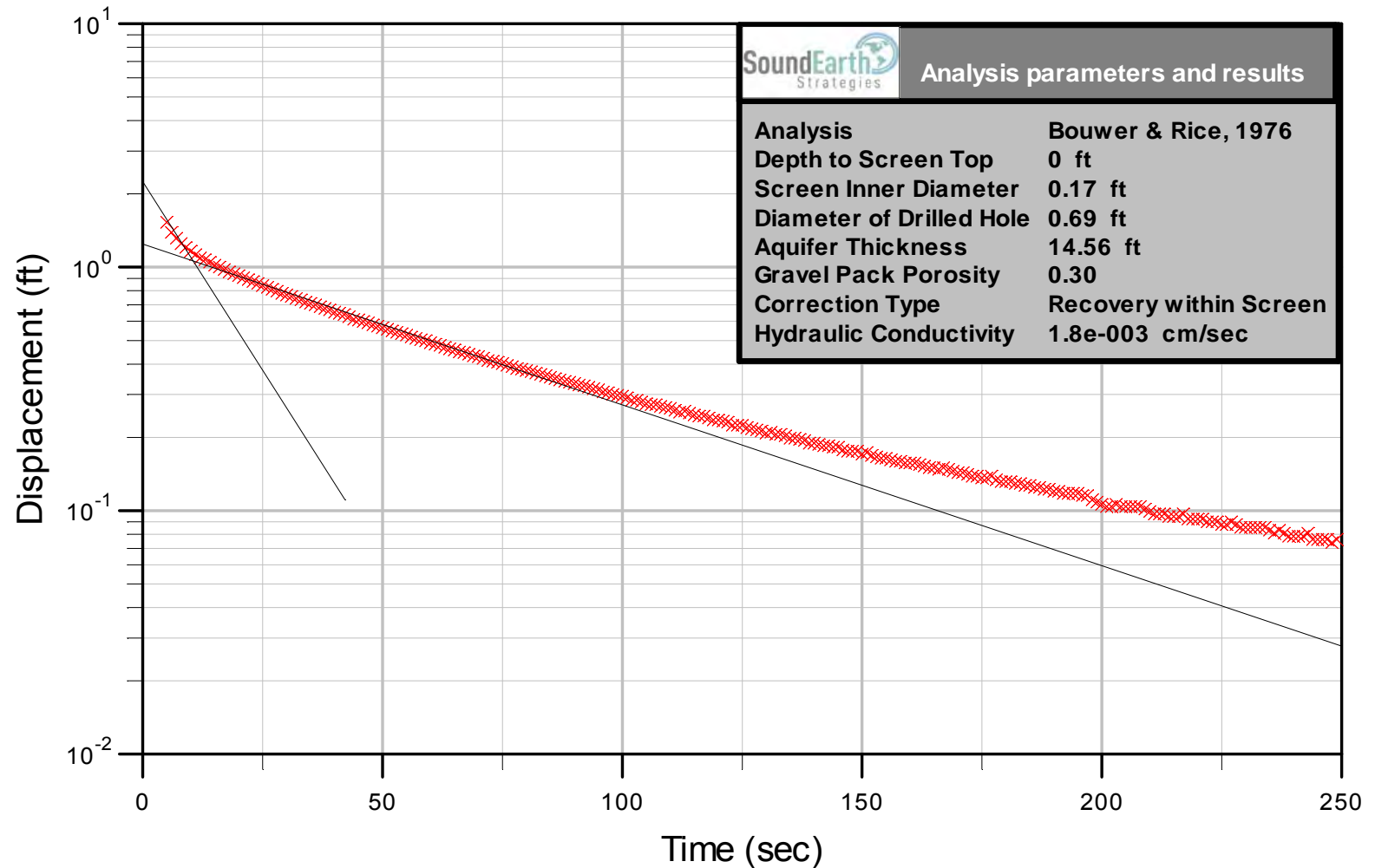


## Well 01MW21 (Rising head)

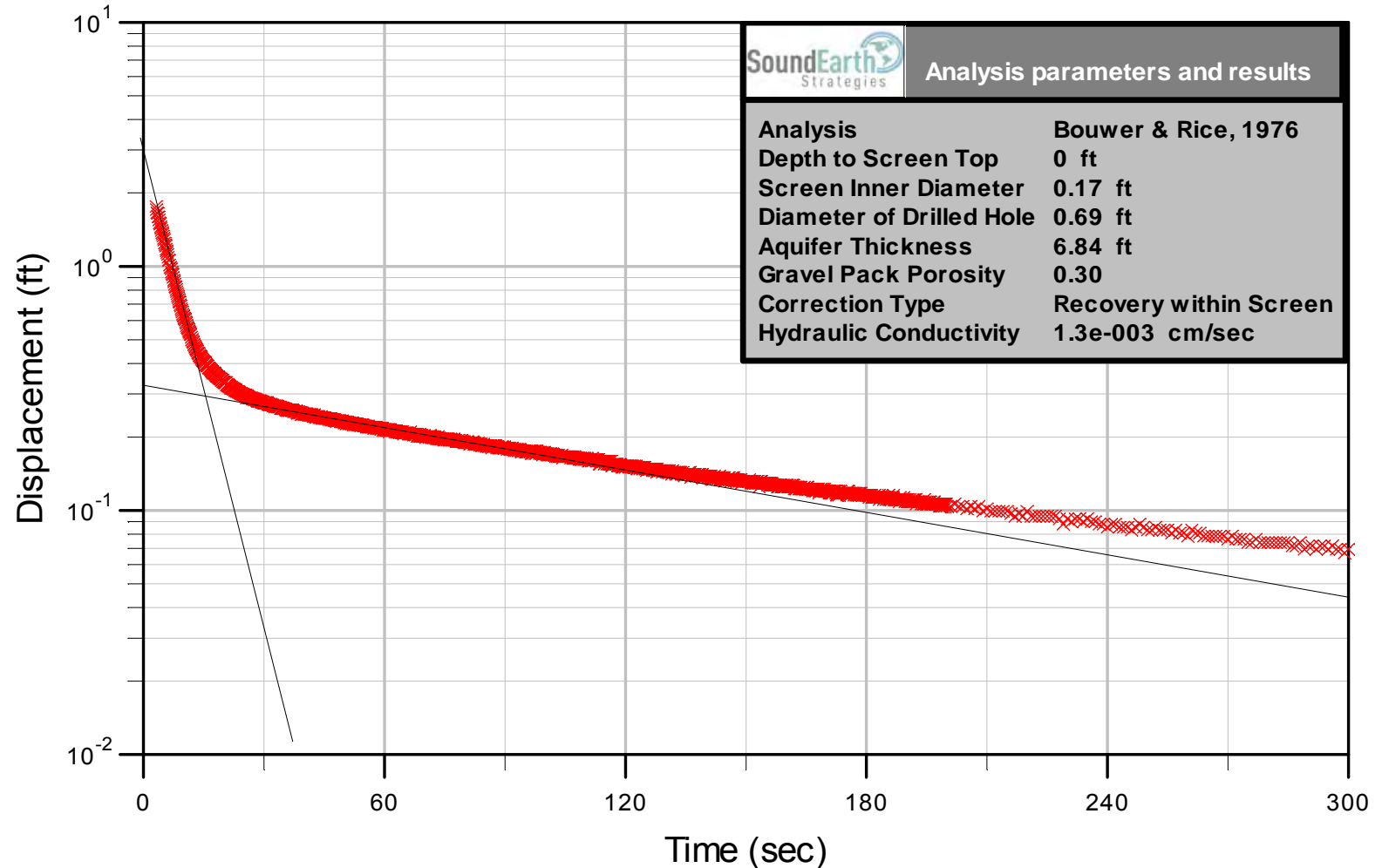




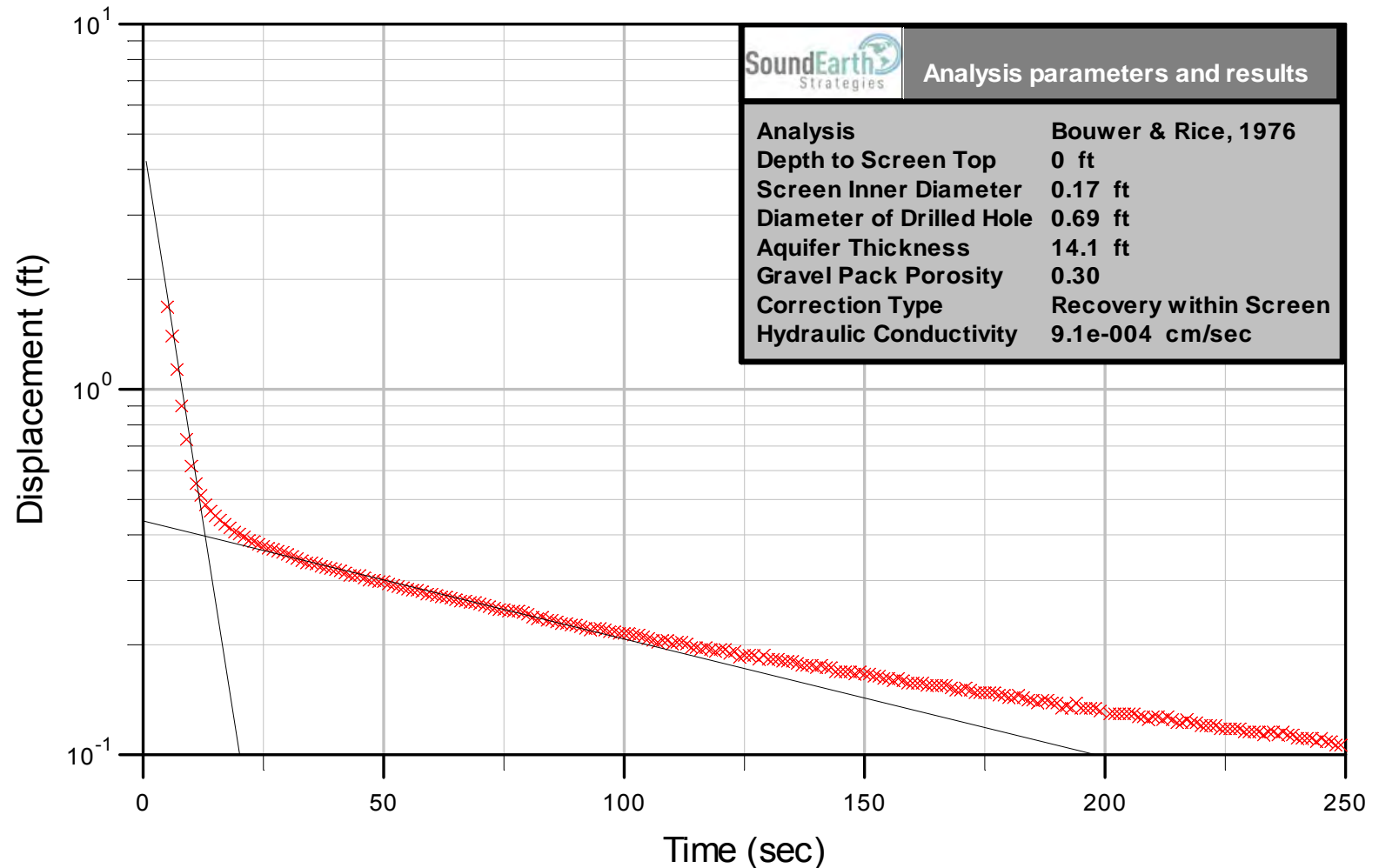
## Well 01MW38 (Rising head)



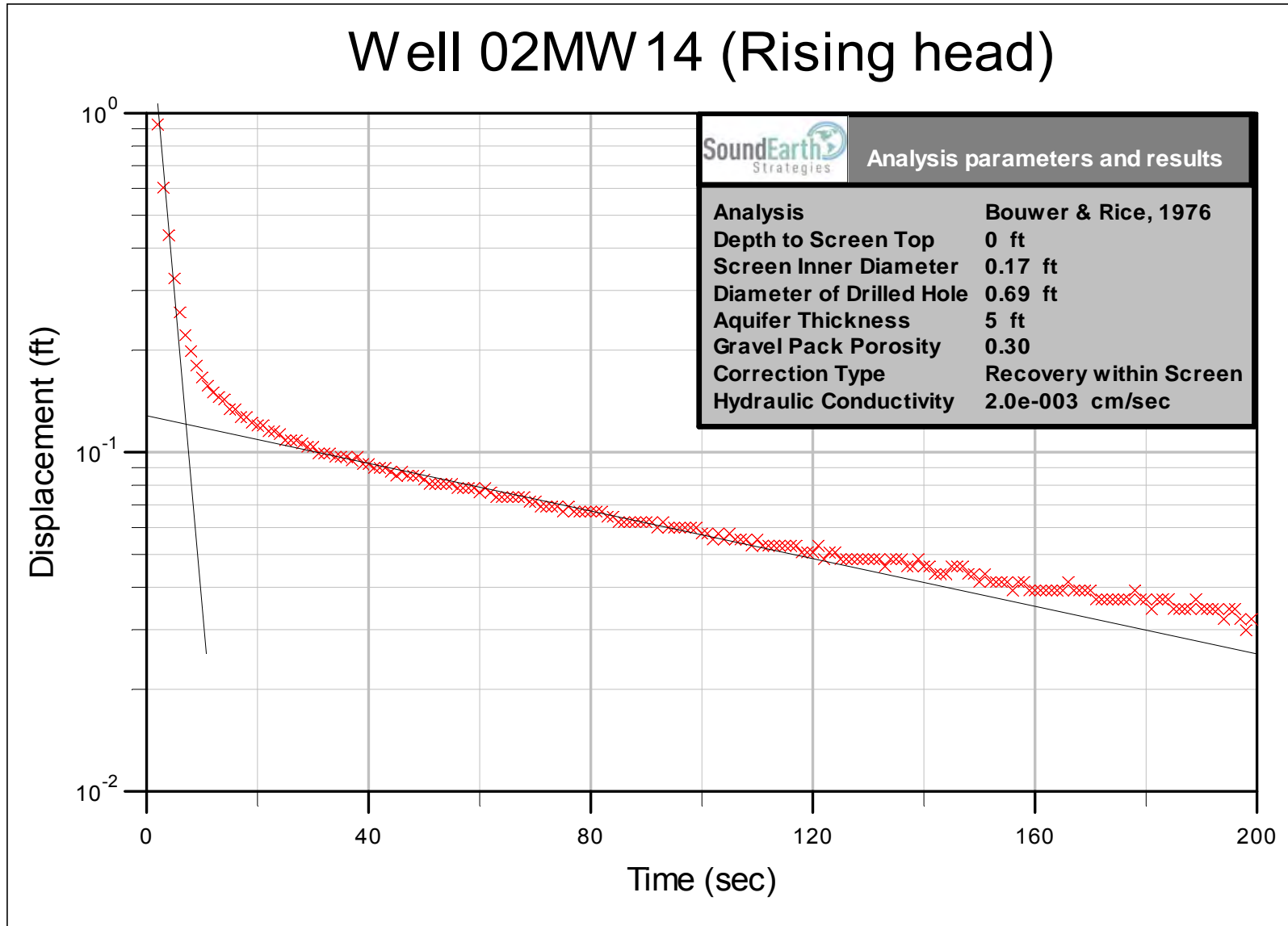
## Well 01MW40 (Rising head)



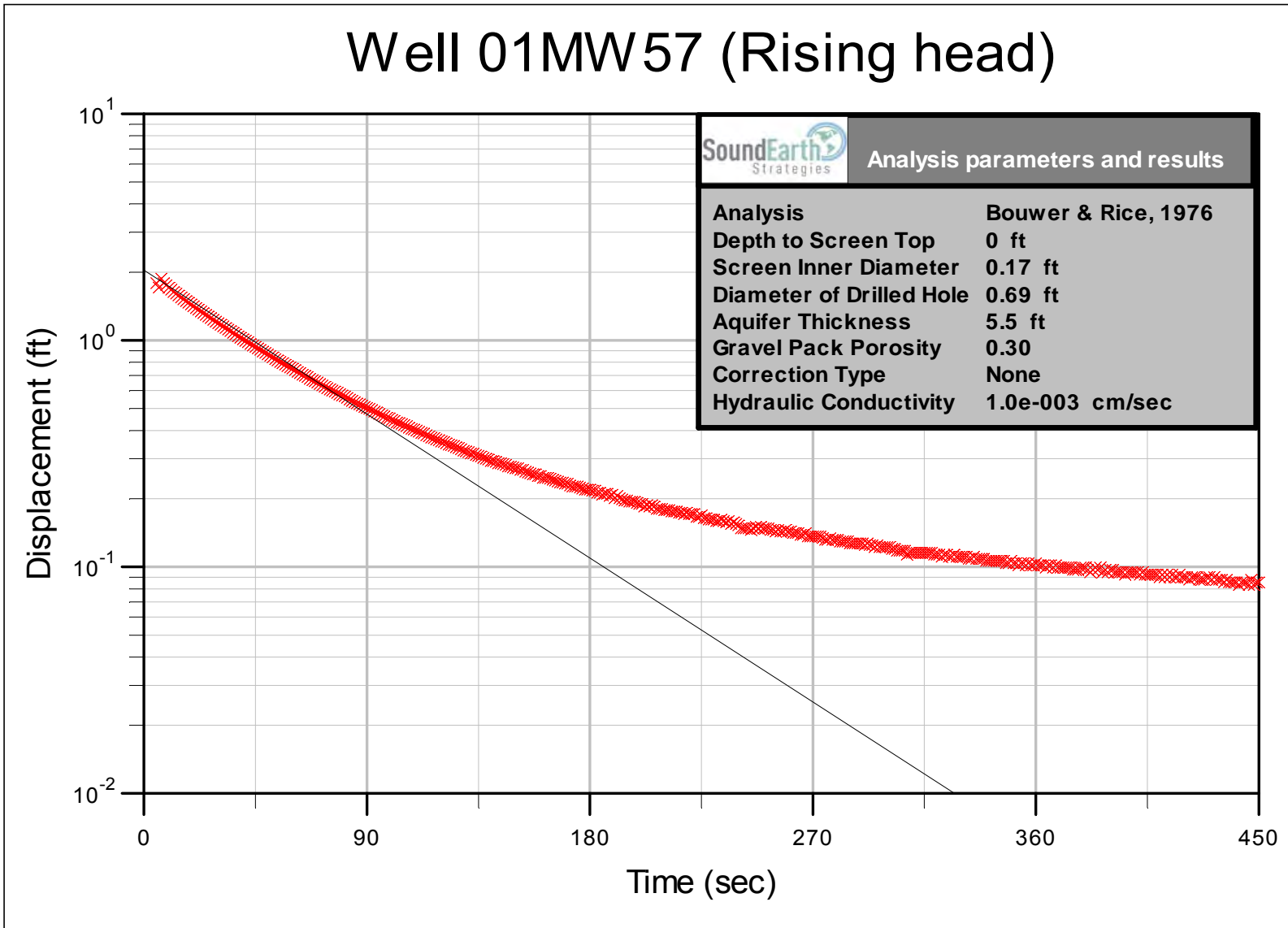
## Well 01MW59 (Rising head)



## Well 02MW 14 (Rising head)



## Well 01MW57 (Rising head)



## Well O1MW65 (Rising head)

