



Public Health

Environmental Public Health Division

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June 7, 2013

Mr. Will Honea
Chief Civil Deputy, Skagit County
605 South 3rd Street
Mount Vernon, WA 98273

RE: Site Hazard Assessment – Mount Vernon Wash Rack
Ecology Facility Site I.D. No: 82434686/CSID 2891

Dear Mr. Honea:

The Skagit County Public Health Department completed the site hazard assessment (SHA) of the Mount Vernon Wash Rack site, located at 115 Kincaid Street in Mount Vernon, WA as required under the Model Toxics Control Act. This site's hazard ranking, an estimation of the potential threat to human health and/or the environment relative to all other Washington state sites assessed at this time, has been determined to be a 3, where 1 represents the highest relative risk and 5 the lowest.

For your information, Ecology will publish the ranking of this and other recently assessed sites in the August 2013 publication of the Site Register. The site hazard ranking will be used in conjunction with other site specific considerations in determining Ecology's priority for future actions.

Please contact me at 360-336-9474 if you have any inquiries/comments about the site scoring/ranking process. For inquiries regarding any further activities at your site now that it is on Ecology's Hazardous Sites List, please call Donna Musa at 425-649-7000.

Sincerely,

Corrina Marote
Environmental Health Specialist

Cc: Ted Benson, Ecology
Donna Musa, Ecology

SITE HAZARD ASSESSMENT WORKSHEET 1

Summary Score Sheet

SITE INFORMATION:

Name: **Wash Rack aka Martin Oil**
Address: **115 W. Kincaid Street**
City: **Mount Vernon** County: **Skagit** State: **WA** Zip: **98273**
Parcels: **P26480**
Section/Township/Range: **SE ¼, SE ¼, Section 19, Township 34 North, Range 4 East**
Latitude: **48.41778** Longitude: **-122.33588**
FSID #: **82434686**

Site scored/ranked for the August 2013 update of the Site Register by Corrina Marote, Skagit County Public Health Department, February 28, 2013.

SITE DESCRIPTION:

The Wash Rack site (Figures 1 and 2) has been owned by Skagit County since approximately 1990 and serves as a parking lot. The site is in downtown Mount Vernon and sits west of a main railroad line, north of Kincaid Street and large parking lot, east of the county administration building and courthouse, and south of the public safety building and jail between Interstate 5 and the Skagit River.

Prior to the acquisition by Skagit County, the site was owned by Martin Oil and operated as a gas station and presumably a car wash. The Assessor's information does not provide historical transfer history for this parcel so the length of time that this parcel was a gas station is unclear. The Public Utility District provides drinking water to most of the residences and businesses within two miles of the site. However, there are 6 individual wells that could affect approximately 18 people, within a two-mile radius of the site. The Skagit River is approximately 1000' west of the site (Figure 3). Water systems and wells on the opposite side of the river from the site were not included in this assessment.

In April 1989, the Mount Vernon Fire Department reported that three gasoline tanks were removed and contaminated soil was observed in the excavation pit. Four monitoring wells (MW-1 through MW-4) were installed. MW-1 was installed in the location of the south tank (Figure 4). The additional monitoring wells were located east and across the street to the south and west. The sample from MW-1 exceeded Model Toxics Control Act (MTCA) Method A Cleanup levels for benzene, toluene, ethylbenzene, xylenes (BTEX), and total petroleum hydrocarbons (TPH). The other monitoring wells exceeded MTCA Method A Cleanup levels for TPH.

Groundwater monitoring was conducted quarterly from April 1989 through May 1990. An air stripper remediation system was installed in July 1989. Groundwater samples from MW-1 continued to exceed MTCA Method A Cleanup levels for benzene during the four quarters of monitoring. Toluene and ethylbenzene groundwater sample results were below MTCA Method A Cleanup levels. The results for xylenes were below MTCA Method A Cleanup levels for two quarters then exceeded the cleanup levels the final two quarters of monitoring.

A memo from Skagit County Facility Management dated May 2, 1990 detailed the meeting between representatives from Skagit County (prospective buyer), the consulting firm, Martin Oil (prospective seller), and the Department of Ecology (Ecology). The air stripper reduced the amount of contamination significantly but not to below MTCA Method A Cleanup levels. The representative

from Ecology agreed that further monitoring would not be beneficial; however, he could not guarantee that further remediation would be required although thought it would be unlikely.

I visited the site on February 28, 2013. The site has been paved and used as a parking lot since 1990. The monitoring wells have been covered by landscaping and asphalt. I did not observe any contamination that may have come from the underground storage tank excavation (Figures 5, 6, 7). Since contamination exceeding MTCA Method A Cleanup Levels from benzene, xylenes, and TPH is documented from samples taken the excavated site in 1989, the groundwater route will be scored for benzene and xylenes.

ROUTE SCORES:

Surface Water/Human Health:	NS	Surface Water/Environmental:	NS
Air/Human Health:	NS	Air/Environmental:	NS
Groundwater/Human Health:	48.3		

OVERALL RANK: 3

WORKSHEET 2

Route Documentation

1. GROUNDWATER ROUTE

- a. List those substances to be considered for scoring:

Source: 3, 5

Benzene and xylenes

- b. Explain basis for choice of substance(s) to be used in scoring:

Documented groundwater contamination with benzene and xylenes exceeding MTCA Cleanup Levels.

Source: 3, 5

- c. List those management units to be considered for scoring:

Source: 1, 2, 3, 4, 5, 6, 7, 8, 9

Contaminated groundwater

- d. Explain basis for choice of unit to be used in scoring:

Documented ground water contamination with benzene and xylenes exceeding MTCA Cleanup Levels.

WORKSHEET 6

Groundwater Route

1.0 SUBSTANCE CHARACTERISTICS

1.2 Human Toxicity										
Substance		Drinking Water Standard (µg/L)	Value	Acute Toxicity (mg/ kg-bw)	Value	Chronic Toxicity (mg/kg/day)	Value	Carcinogenicity		Value
								WOE	PF*	
1	Benzene	5	8	3306, LD50, rat	3	-	-	A	0.029	1
2	Xylenes	1000	2	50, LDlo, hmn	10	2	3	-	-	X

* Potency Factor

Source: 1, 2, 3, 4, 5, 6, 7, 8, 9

Highest Value: 10

(Max = 10)

Plus 2 Bonus Points? 2

Final Toxicity Value: 12

(Max = 12)

1.2 Mobility (use numbers to refer to above listed substances)	
Cations/Anions [Coefficient of Aqueous Migration (K)]	OR Solubility (mg/L)
1= value=	1= 1800 value= 3
	4=200 value=2

Source: 1, 2, 3, 4, 5, 6, 7, 8, 9

Value: 3

(Max = 3)

1.3 Substance Quantity (volume):
<div> <div>Explain basis: quantity unknown, assume 500 gallon tank</div> <div> Source: <u>10</u> Value: <u>2</u> (Max=10) </div> </div>

2.0 MIGRATION POTENTIAL

		Source	Value
2.1	Containment (explain basis): Contaminated soil from leaking underground storage tank.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	10 (Max = 10)
2.2	Net precipitation: $(5.6+6.4+5.4+4.2+4.7+3.3)-(.9+.5+.4+.6+1.2+2.1) = 23.9''$	12	3 (Max = 5)
2.3	Subsurface hydraulic conductivity: gravelly loam	10, 16	3 (Max = 4)
2.4	Vertical depth to groundwater: Excavation on site <25' depth to ground water	1, 14	8 (Max = 8)

3.0 TARGETS

		Source	Value
3.1	Groundwater usage: private supply; alternate sources available	1, 14, 15	4 (Max = 10)
3.2	Distance to nearest drinking water well: ~4500 feet	1, 14, 15	2 (Max = 5)
3.3	Population served within 2 miles: $\sqrt{\text{pop.}} = \sqrt{18}=4.2$	1, 14, 15	5 (Max = 100)
3.4	Area irrigated by (groundwater) wells within 2 miles : $(0.75)*\sqrt{\# \text{ acres}} = \underline{0.75 * \sqrt{334.5} = 13.7}$	13	14 (Max = 50)

4.0 RELEASE

	Source	Value
Explain basis for scoring a release to groundwater: Contamination above MTCA Method A Clean Up Level found in groundwater.	1	5 (Max = 5)

SOURCES USED IN SCORING

1. Skagit County Health Department, Wash Rack files and field notes, February 2013.
2. April 21, 1989, Department of Ecology, Environmental Complaint Form.
3. April 3, 1990, Rittenhouse-Zeman & Associates, Inc., Petroleum Hydrocarbon Remediation.
4. May 2, 1990, Skagit County Facility Management, Letter.

5. May 30, 1990, Rittenhouse-Zeman & Associates, Inc., Summary of Analytical Laboratory Test Results.
6. July 11, 1990, Skagit County Facility Management, Letter.
7. August 29, 1990, Department of Ecology, Letter.
8. September 5, 1990, Skagit County Facility Management, Letter.
9. September 13, 1990, Department of Ecology, Letter.
10. Washington Department of Ecology, WARM Scoring Manual, April, 1992.
11. Washington Department of Ecology, Toxicology Database for Use in Washington Ranking Method Scoring, January, 1992.
12. National Weather Service, Washington Climate Data.
13. Washington Department of Ecology, Water Rights Explorer, 2012.
14. Washington Department of Ecology, Well Logs.
15. Skagit County Mapping, Skagit Explorer, Version 10.0.1750, 2012.
16. USDA Soil Conservation Service, Soil Survey of Skagit County Area, Washington, 1989.

Photo Album

Wash Rack aka Martin Oil

FSID 82434686

by Corrina L. Marote

Figure 1: FSID 82434686 Wash Rack aka Martin Oil



Figure 2: FSID 82434686



Figure 3: FSID 82434686

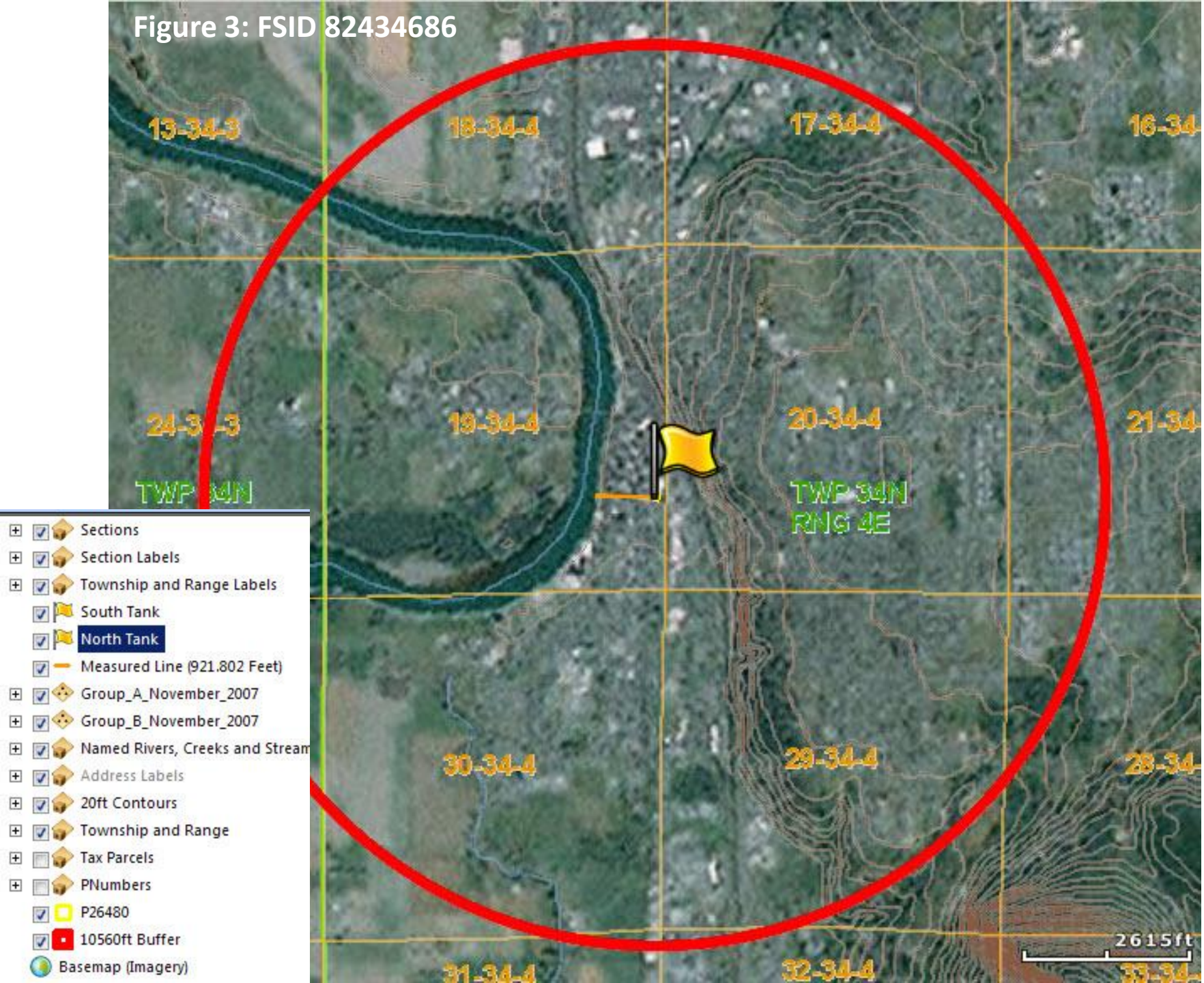


Figure 4: FSID 82434686

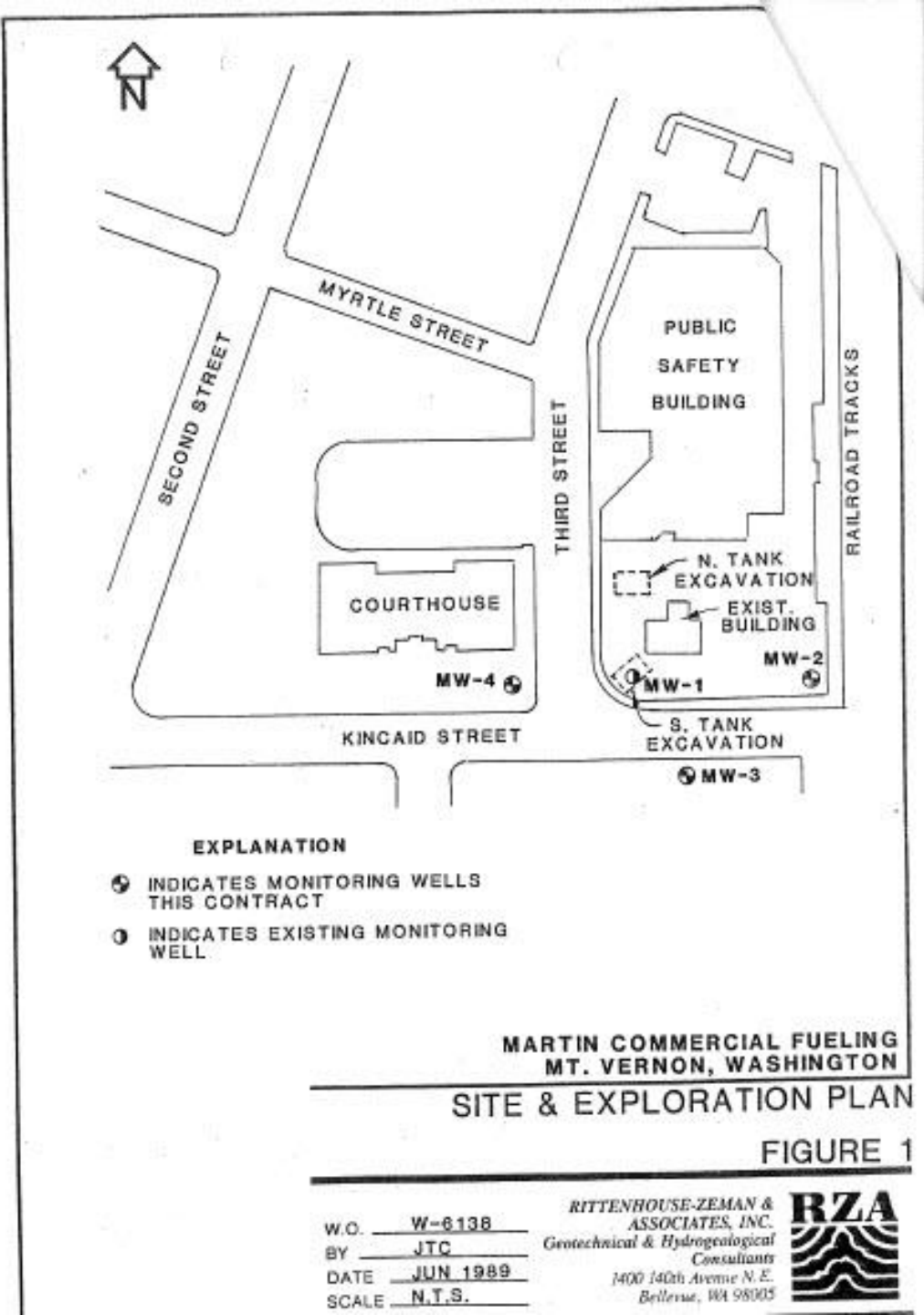


Figure 5: FSID 82434686 Site Visit



Figure 6: FSID 82434686 Site Visit



Figure 7: FSID: 82434686 Site Visit

