

UST DECOMMISSIONING REPORT

Narrows Marina
9007 South 19th Street
Tacoma, Washington 98466

Prepared for: Narrows Marina, LLC
9007 South 19th Street
Tacoma, Washington 98466



June 30, 2017

Project Number 01-10003



Environmental Scientists, Planners and Consultants

1823 Bremerton Ave NE
Renton, WA 98059-3954
phone (425) 271-5629
fax (425) 271-5629
www.ecocompliance.biz

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1. INTRODUCTION

Beginning Monday, November 28, 2016, two underground storage tanks (USTs) and an associated fuel dispenser were removed from the Narrows Marina property located at 9007 South 19th Street in Tacoma, Pierce County, Washington (Figure 1).

This project was conducted by Pacific Environmental and Bill Kane from Eco Compliance Corporation. Pacific Environmental is an International Code Council-licensed (ICC-licensed) UST decommissioner. Mr. Kane is an ICC-licensed UST site assessor.

2. UST LOCATION, DESCRIPTION AND USE

The 2 subject USTs were located beneath a concrete-paved area along the northeast side of the marina (see Figure 1) (Figure 2). The tanks were laid end-to-end and from north-to-south. Sections of underground double-wall fiberglass piping connected the tanks to a dispenser located immediately north of the north tank (see Figure 2). The tanks were reportedly placed into service in the mid-1970s.

Both tanks were made of single-wall steel. The northern tank contained diesel fuel, and had a diameter of approximately 6 feet and length of 17 feet (approximately 4,000-gallons) (see Figure 2). This tank contained approximately 250 gallons of fuel at the time of decommissioning. The southern tank contained gasoline, and had a diameter of approximately 8 feet and length of 17 feet (approximately 6,000 gallons). This tank contained approximately 500 gallons of fuel at the time of decommissioning.

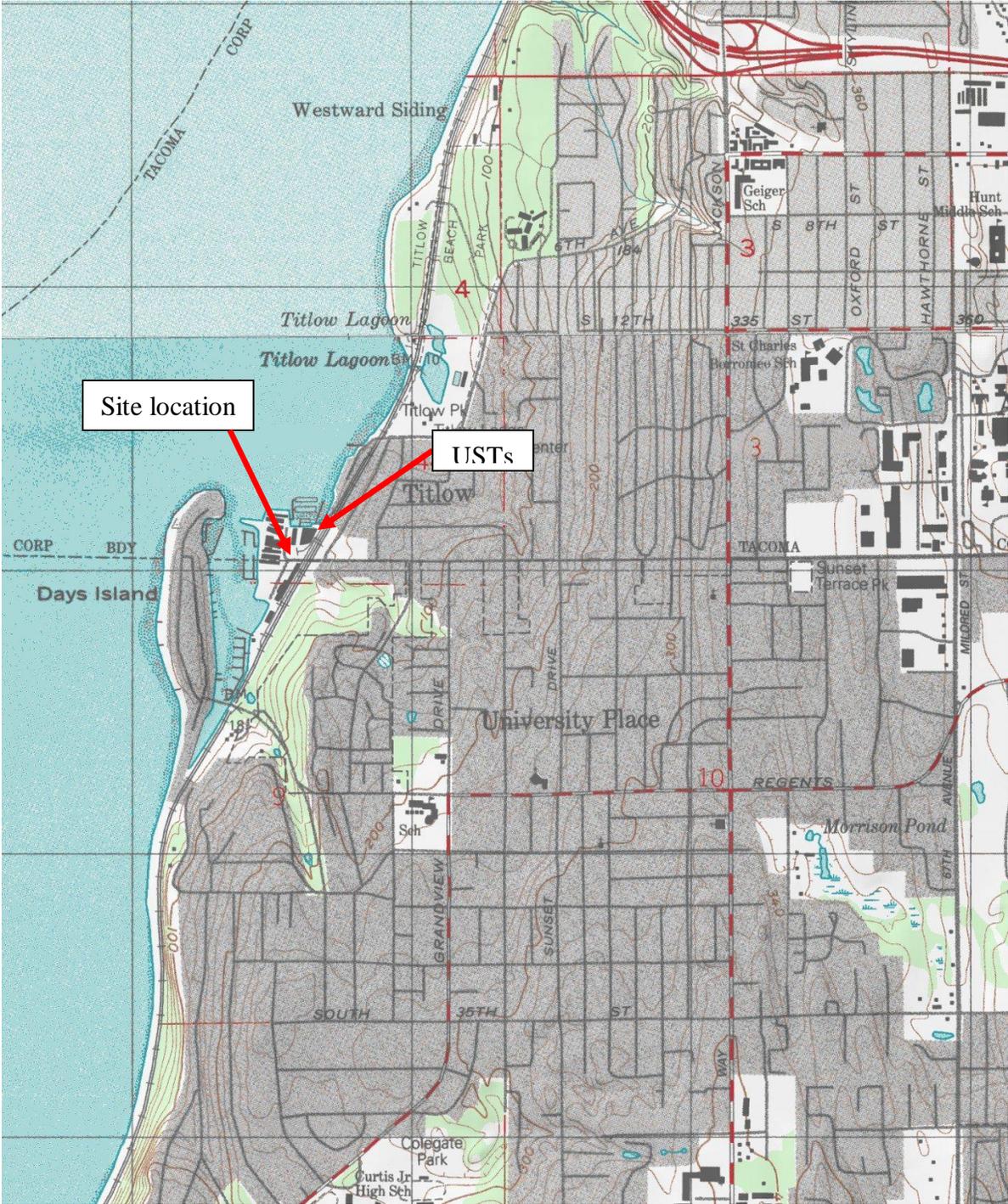
The underground double-wall fiberglass piping had interstitial monitoring connected to a leak detection system inside the office area of the adjacent building. The tanks had an internal liner and external cathodic protection. There have reportedly been no leaks from the piping, and the tanks have reportedly passed all tightness testing.

The subject property is gently-sloped to the west, while the surrounding area is moderately-to steeply-sloped to the west.

The surrounding area consists of single- and multi-family housing. A railroad track borders the property to the east, while Puget Sound borders the property to the west (see Figures 1 and 2). Based on topography, the general direction of shallow groundwater flow in the subject area is expected to be to the west. Based on proximity to Puget Sound, groundwater flow within and near the subject UST area may be tidally-influenced.



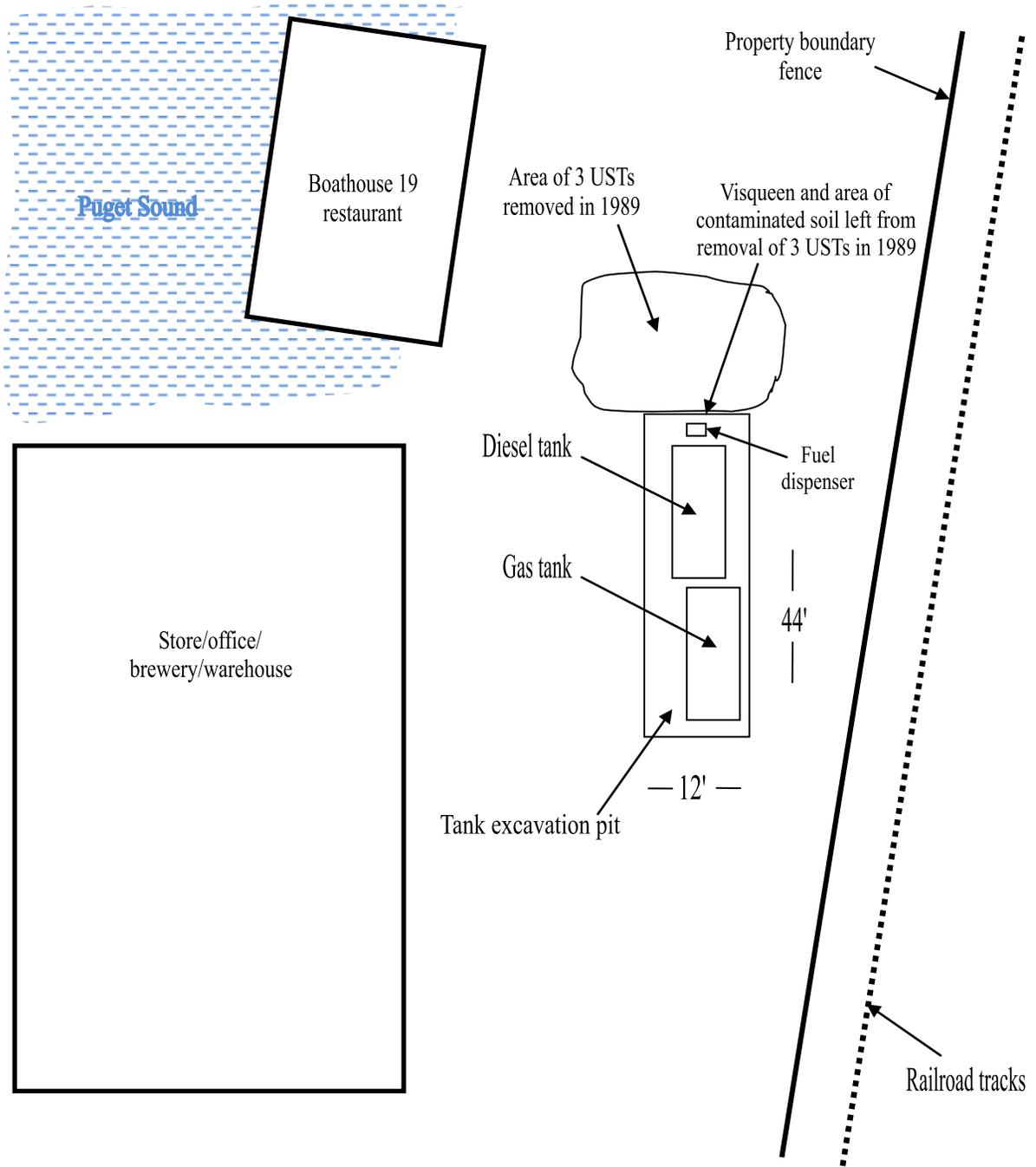
Figure 1. Site location map. Narrows Marina. 9007 South 19th Street, Tacoma, Washington.



Not to scale



Figure 2. Approximate UST and fuel dispenser locations. Narrows Marina. 9007 South 19th Street, Tacoma, Washington.



Not to scale



3. UST SITE ASSESSMENT ACTIVITIES

Removal of the 2 subject USTs began on Monday, November 28, 2016. Site photographs are attached as Appendix A.

Prior to removal, a 30-Day Notice was submitted to the Washington State Department of Ecology (Ecology), and tank removal permits were obtained from the Tacoma-Pierce County Health Department and the Tacoma Fire Department. Copies of this paperwork are attached as Appendix B.

3.1 EXCAVATION AND SAMPLING OF OVERBURDEN MATERIAL

On Tuesday, November 29, 2016, an area approximately 12 feet from west-to-east and 44 feet from north-to-south was excavated around the tanks (see Figure 2).

Soil and pea gravel surrounded the top and sidewalls of the tanks. The tops of both tanks were approximately 3 feet below grade.

During excavation of this overburden material, visqueen was encountered along the north wall of the tank pit (see Figure 2) (see Appendix A). From a report prepared by Applied Geotechnology, Inc. dated August 8, 1989 (Final Report, Hydrocarbon Contaminated Soil Remediation, Narrows Marina, Tacoma), 3 USTs were removed from an area located immediately to the north (see Figure 2). Contaminated soil was encountered during the removal of these tanks, and was cleaned up except along the mid-south end of the pit. The visqueen was placed in the hole to denote the location of this remaining soil contamination to the south.

The overburden material, including material south of the visqueen barrier left from removal of 3 adjacent USTs in 1989, was excavated and stockpiled onsite. Three discrete soil samples were collected from random locations within this stockpile and analyzed for gasoline, BETX (benzene, ethylbenzene, toluene and xylenes) compounds, MTBE (methyl tert-butyl ether), diesel, oil and total lead (samples OB-1, OB-2 and OB-3).

Analytical results from this stockpile are attached as Appendix C and summarized below in Table 1. Table 1 also lists Ecology's cleanup standards (Chapter 173-340 WAC) based on unrestricted (residential) land use.



Table 1. Analytical results for overburden material from the tank pit. Narrows Marina. 9007 South 19th Street, Tacoma, Washington. November 29, 2016.

Sample	Location/Description	Analytical Result (ppm)	Ecology Cleanup Standard (ppm)
OB-1	Overburden material from excavation from top and sidewalls of tank pit. Discrete, random sample from stockpile.	ND(2.5) gasoline ND(0.025) benzene ND(0.05) ethylbenzene ND(0.05) toluene ND(0.1) xylenes ND(0.05) MTBE ND(10) diesel ND(50) oil 5 lead	100 gasoline 0.03 benzene 6 ethylbenzene 7 toluene 9 xylenes 0.1 MTBE 2,000 diesel 2,000 oil 250 lead
OB-2	Overburden material from excavation from top and sidewalls of tank pit. Discrete, random sample from stockpile.	ND(2.5) gasoline ND(0.025) benzene ND(0.05) ethylbenzene ND(0.05) toluene ND(0.1) xylenes ND(0.05) MTBE ND(10) diesel ND(50) oil 72 lead	100 gasoline 0.03 benzene 6 ethylbenzene 7 toluene 9 xylenes 0.1 MTBE 2,000 diesel 2,000 oil 250 lead
OB-3	Overburden material from excavation from top and sidewalls of tank pit. Discrete, random sample from stockpile.	ND(2.5) gasoline ND(0.025) benzene ND(0.05) ethylbenzene ND(0.05) toluene ND(0.1) xylenes ND(0.05) MTBE 14.3 diesel ND(50) oil 26 lead	100 gasoline 0.03 benzene 6 ethylbenzene 7 toluene 9 xylenes 0.1 MTBE 2,000 diesel 2,000 oil 250 lead

ND(2.5) Not detected at the analytical detection limit of 2.5 parts-per-million (ppm) (mg/Kg).



From Table 1, diesel was detected in one soil sample collected from the stockpiled overburden material (sample OB-3), while lead was detected in all 3 samples. The concentrations of these contaminants are below Ecology's cleanup standards based on unrestricted (residential) land use.

There was no gasoline, BETX compounds, MTBE or oil detected in any of the samples collected from the overburden material.

3.2 TANK REMOVAL AND SOIL SAMPLING FROM PIT

After removal of the overburden material, the tanks were pumped and rinsed by Marine Vacuum Service. As noted above, the diesel tank contained approximately 250 gallons of fuel at the time of decommissioning, while the gas tank contained approximately 500 gallons. An additional approximate 500 gallons of rinsate liquid was used to clean the tanks. A copy of the disposal receipt for the tank contents/rinsate liquid is attached as Appendix D.

The tanks were inerted by a marine chemist, then removed from the ground. A copy of the marine chemist paperwork is attached as Appendix E.

The tanks were in good condition during the time of removal, with no obvious evidence of holes, cracks or unusual staining such as from leakage. The tanks were disposed of offsite as scrap. Copies of the disposal receipts for the tanks are attached as Appendix F.

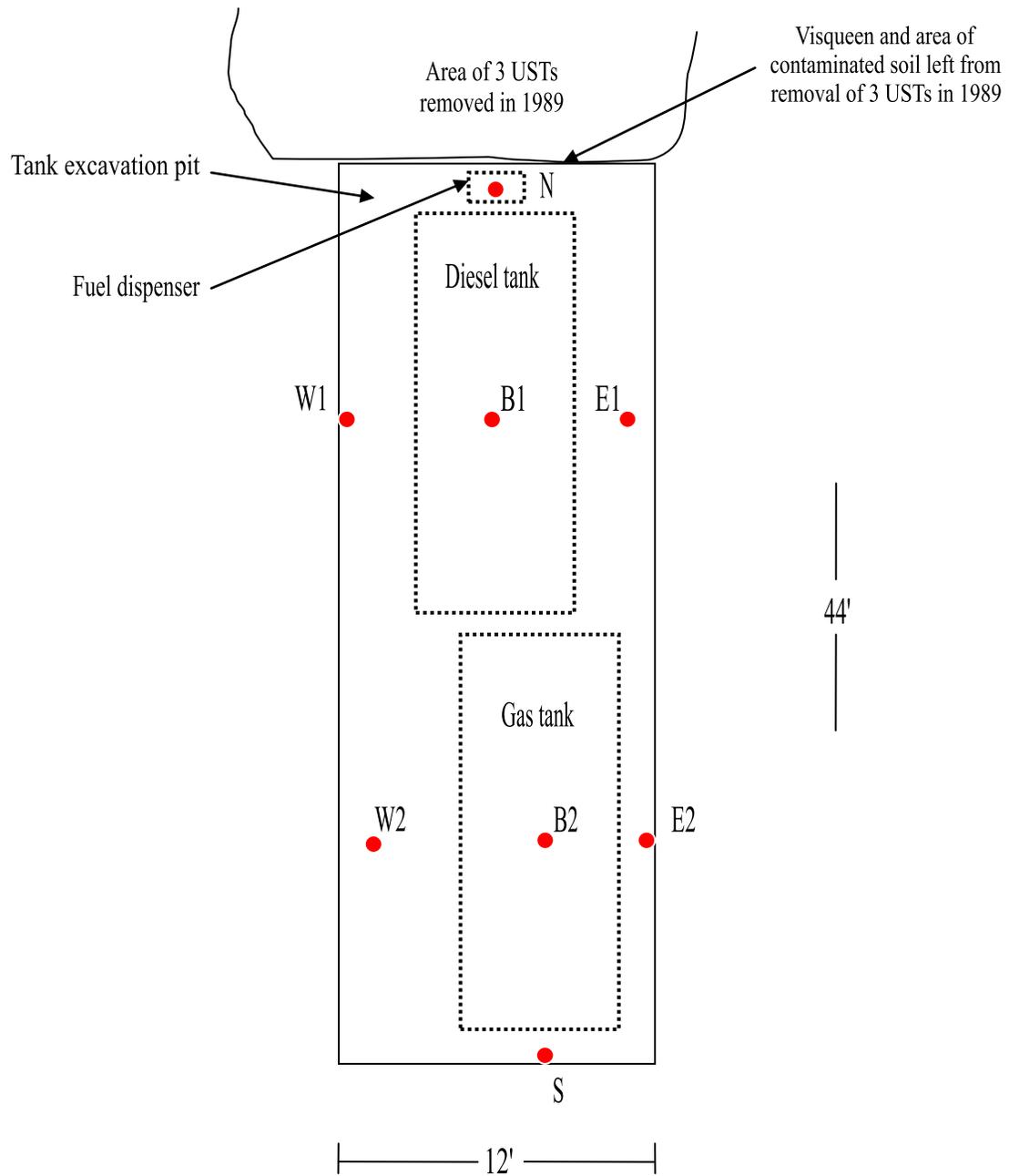
Groundwater was present in the bottom of the excavation pit at approximately 12 – 13 feet below grade.

A total of 8 soil samples were collected from the excavation pit (Figure 3). Samples B1 and B2 were collected beneath the tanks at the top of the water table approximately 12 – 13 feet below grade. Sample N was collected along the north end of the excavation pit north of the diesel (north) tank. This sample location is also beneath the former fuel dispenser for the tanks, and within the mid-south sidewall area of soil contamination left from removal of 3 adjacent USTs in 1989 (see Figures 2 and 3). There were no soil samples collected from between the 2 USTs.

All samples from the tank pit were analyzed for gasoline, BETX compounds, MTBE, diesel, oil and total lead. Analytical results are attached as Appendix G and summarized below in Table 2.



Figure 3. Approximate UST soil sampling locations. Narrows Marina. 9007 South 19th Street, Tacoma, Washington. November 29, 2016.



● N Approximate soil sampling location



Not to scale



Table 2. Soil analytical results from tank excavation pit. Narrows Marina. 9007 South 19th Street, Tacoma, Washington. November 29, 2016.

Sample	Location/Description	Analytical Result (ppm)	Ecology Cleanup Standard (ppm)
N	<p>North end of tank pit.</p> <p>Approximately 3 feet north of north end of diesel (north) tank. Directly beneath the fuel dispenser, and within the mid-south sidewall area of soil contamination left from removal of 3 adjacent USTs in 1989.</p> <p>Approximately 10 feet below grade (approximately 7 feet below the bottom of the fuel dispenser).</p> <p>Sandy clayey soil with some gravel.</p>	<p>ND(2.5) gasoline</p> <p>ND(0.025) benzene ND(0.05) ethylbenzene ND(0.05) toluene ND(0.1) xylenes ND(0.05) MTBE</p> <p>ND(10) diesel ND(50) oil</p> <p>ND(4) lead</p>	<p>30 gasoline</p> <p>0.03 benzene 6 ethylbenzene 7 toluene 9 xylenes 0.1 MTBE</p> <p>2,000 diesel 2,000 oil</p> <p>250 lead</p>
W1	<p>West sidewall of excavation pit, approximately 3 feet west of west sidewall of diesel (north) tank.</p> <p>Approximately 6 feet below grade.</p> <p>Clayey gravelly soil.</p>	<p>ND(2.5) gasoline</p> <p>ND(0.025) benzene ND(0.05) ethylbenzene ND(0.05) toluene ND(0.1) xylenes ND(0.05) MTBE</p> <p>ND(10) diesel ND(50) oil</p> <p>ND(4) lead</p>	<p>30 gasoline</p> <p>0.03 benzene 6 ethylbenzene 7 toluene 9 xylenes 0.1 MTBE</p> <p>2,000 diesel 2,000 oil</p> <p>250 lead</p>
E1	<p>East sidewall of excavation pit, approximately 2 feet east of east sidewall of diesel (north) tank.</p> <p>Approximately 6 feet below grade.</p> <p>Clayey gravelly soil with some wood.</p>	<p>ND(2.5) gasoline</p> <p>ND(0.025) benzene ND(0.05) ethylbenzene ND(0.05) toluene ND(0.1) xylenes ND(0.05) MTBE</p> <p>ND(10) diesel ND(50) oil</p> <p>10 lead</p>	<p>30 gasoline</p> <p>0.03 benzene 6 ethylbenzene 7 toluene 9 xylenes 0.1 MTBE</p> <p>2,000 diesel 2,000 oil</p> <p>250 lead</p>



Table 2 (continued). Soil analytical results from tank excavation pit. Narrows Marina. 9007 South 19th Street, Tacoma, Washington. November 29, 2016.

Sample	Location/Description	Analytical Result (ppm)	Ecology Cleanup Standard (ppm)
B1	<p>Approximately 3 feet below the bottom of the diesel (north) tank.</p> <p>At top of water table approximately 12 – 13 feet below grade.</p> <p>Wet gravelly sandy soil.</p>	<p>ND(2.5) gasoline</p> <p>ND(0.025) benzene ND(0.05) ethylbenzene ND(0.05) toluene ND(0.1) xylenes ND(0.05) MTBE</p> <p>ND(10) diesel ND(50) oil</p> <p>ND(4) lead</p>	<p>30 gasoline</p> <p>0.03 benzene 6 ethylbenzene 7 toluene 9 xylenes 0.1 MTBE</p> <p>2,000 diesel 2,000 oil</p> <p>250 lead</p>
W2	<p>West sidewall of excavation pit, approximately 3 feet west of west sidewall of gasoline (south) tank.</p> <p>Approximately 7 feet below grade.</p> <p>Clayey gravelly soil.</p>	<p>ND(2.5) gasoline</p> <p>ND(0.025) benzene ND(0.05) ethylbenzene ND(0.05) toluene ND(0.1) xylenes ND(0.05) MTBE</p> <p>ND(10) diesel ND(50) oil</p> <p>6 lead</p>	<p>30 gasoline</p> <p>0.03 benzene 6 ethylbenzene 7 toluene 9 xylenes 0.1 MTBE</p> <p>2,000 diesel 2,000 oil</p> <p>250 lead</p>
E2	<p>East sidewall of excavation pit, approximately one foot east of east sidewall of gasoline (south) tank.</p> <p>Approximately 7 feet below grade.</p> <p>Clayey gravelly soil.</p>	<p>ND(2.5) gasoline</p> <p>ND(0.025) benzene ND(0.05) ethylbenzene ND(0.05) toluene ND(0.1) xylenes ND(0.05) MTBE</p> <p>ND(10) diesel ND(50) oil</p> <p>12 lead</p>	<p>30 gasoline</p> <p>0.03 benzene 6 ethylbenzene 7 toluene 9 xylenes 0.1 MTBE</p> <p>2,000 diesel 2,000 oil</p> <p>250 lead</p>



Table 2 (continued). Soil analytical results from tank excavation pit. Narrows Marina. 9007 South 19th Street, Tacoma, Washington. November 29, 2016.

Sample	Location/Description	Analytical Result (ppm)	Ecology Cleanup Standard (ppm)
B2	<p>Approximately 2 feet below the bottom of the gasoline (south) tank.</p> <p>At top of water table approximately 12 – 13 feet below grade.</p> <p>Wet gravelly sandy soil.</p>	<p>ND(2.5) gasoline</p> <p>ND(0.025) benzene ND(0.05) ethylbenzene ND(0.05) toluene ND(0.1) xylenes ND(0.05) MTBE</p> <p>ND(10) diesel ND(50) oil</p> <p>13 lead</p>	<p>30 gasoline</p> <p>0.03 benzene 6 ethylbenzene 7 toluene 9 xylenes 0.1 MTBE</p> <p>2,000 diesel 2,000 oil</p> <p>250 lead</p>
S	<p>South end of tank pit.</p> <p>Approximately 2 feet south of south end of gasoline (south) tank.</p> <p>Approximately 7 feet below grade.</p> <p>Clayey soil with some sand.</p>	<p>ND(2.5) gasoline</p> <p>ND(0.025) benzene ND(0.05) ethylbenzene ND(0.05) toluene ND(0.1) xylenes ND(0.05) MTBE</p> <p>ND(10) diesel ND(50) oil</p> <p>8 lead</p>	<p>30 gasoline</p> <p>0.03 benzene 6 ethylbenzene 7 toluene 9 xylenes 0.1 MTBE</p> <p>2,000 diesel 2,000 oil</p> <p>250 lead</p>

ND(2.5) Not detected at the analytical detection limit of 2.5 parts-per-million (ppm) (mg/Kg).

From Table 2, lead was detected in several of the soil samples collected from the tank pit, but at concentrations that are below Ecology’s cleanup standard.

There was no gasoline, BETX compounds, MTBE, diesel or oil detected in any of the samples, including sample N from within the mid-south sidewall area of soil contamination left from removal of 3 adjacent USTs in 1989 (see Figures 2 and 3).



3.3 OVER-EXCAVATION OF BOTTOM OF TANK PIT

Future plans call for the installation of a new, larger UST in the same pit as the 2 former subject USTs. As part of this installation, the sidewalls and bottom of the pit were over-excavated to approximately 15 feet below grade to accommodate the larger diameter of the new tank. As noted above, groundwater was present in the bottom of the pit at approximately 12 – 13 feet below grade. As a result, this over-excavation required the use of shoring equipment along all sides of the pit, and equipment to de-water the hole.

On Tuesday, December 13, 2016, soil/mud was over-excavated from the pit and stockpiled onsite. This excavation included soil/mud south of the visqueen barrier left from removal of 3 adjacent USTs in 1989 (see Figures 2 and 3). Three discrete samples were collected from random locations within the stockpile and analyzed for gasoline, BETX compounds, MTBE, diesel, oil and total lead (samples SP1, SP2 and SP3).

Analytical results from this stockpile are attached as Appendix H and summarized below in Table 3.

Table 3. Analytical results of soil/mud from over-excavation of bottom of tank pit. Narrows Marina. 9007 South 19th Street, Tacoma, Washington. December 13, 2016.

Sample	Location/Description	Analytical Result (ppm)	Ecology Cleanup Standard (ppm)
SP1	Soil/mud from over-excavation of bottom of tank pit. Discrete, random sample from stockpile.	ND(5) gasoline ND(0.025) benzene ND(0.05) ethylbenzene ND(0.05) toluene ND(0.1) xylenes ND(0.05) MTBE ND(10) diesel 58 oil 7 lead	100 gasoline 0.03 benzene 6 ethylbenzene 7 toluene 9 xylenes 0.1 MTBE 2,000 diesel 2,000 oil 250 lead



Table 3 (continued). Analytical results of soil/mud from over-excavation of bottom of tank pit. Narrows Marina. 9007 South 19th Street, Tacoma, Washington. December 13, 2016.

Sample	Location/Description	Analytical Result (ppm)	Ecology Cleanup Standard (ppm)
SP2	Soil/mud from over-excavation of bottom of tank pit. Discrete, random sample from stockpile.	ND(5) gasoline ND(0.025) benzene ND(0.05) ethylbenzene ND(0.05) toluene ND(0.1) xylenes ND(0.05) MTBE ND(10) diesel ND(50) oil 7 lead	100 gasoline 0.03 benzene 6 ethylbenzene 7 toluene 9 xylenes 0.1 MTBE 2,000 diesel 2,000 oil 250 lead
SP3	Soil/mud from over-excavation of bottom of tank pit. Discrete, random sample from stockpile.	ND(5) gasoline ND(0.025) benzene ND(0.05) ethylbenzene ND(0.05) toluene ND(0.1) xylenes ND(0.05) MTBE 14.8 diesel 60 oil 12 lead	100 gasoline 0.03 benzene 6 ethylbenzene 7 toluene 9 xylenes 0.1 MTBE 2,000 diesel 2,000 oil 250 lead

ND(5) Not detected at the analytical detection limit of 5 parts-per-million (ppm) (mg/Kg).

From Table 3, diesel and/or oil were detected in 2 of the soil/mud samples collected from stockpile material, while lead was detected in all 3 samples. The concentrations of these contaminants are below Ecology's cleanup standards based on unrestricted (residential) land use.

There was no gasoline, BETX compounds or MTBE detected in any of the soil/mud samples.



3.4 GROUNDWATER SAMPLING

As noted above, groundwater was present in the bottom of the excavation pit at approximately 12 – 13 feet below grade. An approximate 12-inch diameter perforated pipe was installed in the water table along the north end of the pit to help de-water the hole during installation of the new UST. This pipe extended approximately 5 feet up from the bottom of the pit (approximately 15 feet below grade). A pump was placed inside the pipe, and used to pump the groundwater to an adjacent holding tank.

Using a hand bailer, a groundwater sample was collected from directly inside the perforated pipe (sample GW). Water had not been pumped from the pipe for approximately 16 hours prior to collection of this sample. Prior to sampling, approximately 2 gallons of water was purged from the pipe until pH and temperature appeared to have stabilized (7.08 and 46.2F respectively). The groundwater sample was clear, with no obvious discoloration or petroleum sheen or odor.

One water sample was also collected directly from the holding tank (sample Tank). This sample was also clear, with no obvious discoloration or petroleum sheen or odor.

The groundwater samples were analyzed for gasoline, BETX compounds, MTBE, 1,2-dibromoethane, 1,2-dichloroethane, diesel and oil. The water sample from the tank was also analyzed for total lead. Analytical results are attached as Appendix I and summarized below in Table 4.

Table 4. Groundwater samples from tank pit and holding tank. Narrows Marina. 9007 South 19th Street, Tacoma, Washington. December, 2016.

Sample	Location/Description	Analytical Result (ppb)	Ecology Cleanup Standard (ppb)
GW	Groundwater sample from inside perforated pipe along north end of tank pit. Collected approximately 16 hours after water had last been pumped from the pit.	ND(50) gasoline ND(1) benzene ND(1) ethylbenzene ND(1) toluene ND(2) xylenes ND(1) MTBE ND(0.4) 1,2-dibromoethane ND(1) 1,2-dichloroethane ND(100) diesel ND(500) oil	1,000 gasoline 5 benzene 700 ethylbenzene 1,000 toluene 1,000 xylenes 20 MTBE 0.01 1,2-dibromoethane 5 1,2-dichloroethane 500 diesel 500 oil



Table 4 (continued). Groundwater samples from tank pit and holding tank. Narrows Marina. 9007 South 19th Street, Tacoma, Washington. December, 2016.

Sample	Location/Description	Analytical Result (ppb)	Ecology Cleanup Standard (ppb)
Tank	Water sample from holding tank.	ND(50) gasoline ND(1) benzene ND(1) ethylbenzene ND(1) toluene ND(2) xylenes ND(1) MTBE ND(0.4) 1,2-dibromoethane ND(1) 1,2-dichloroethane ND(100) diesel ND(500) oil ND(15) lead	1,000 gasoline 5 benzene 700 ethylbenzene 1,000 toluene 1,000 xylenes 20 MTBE 0.01 1,2-dibromoethane 5 1,2-dichloroethane 500 diesel 500 oil 15 lead

ND(50) Not detected at the analytical detection limit of 50 parts-per-billion (ppb) (ug/L).

From Table 4, there was no gasoline, BETX compounds, MTBE, 1,2-dibromoethane, 1,2-dichloroethane, diesel, oil and/or lead detected in any of the groundwater samples collected from the site.

The analytical detection limit noted in Table 4 for 1,2-dibromoethane (0.4 ppb) is above the Ecology cleanup standard (0.01 ppb). Historically, 1,2-dibromoethane, 1,2-dichloroethane and MTBE were used as anti-knock compounds in leaded gasoline. Because gasoline, BETX compounds, MTBE and 1,2-dichloroethane were not detected in either water sample, and because gasoline, BETX compounds and MTBE were not detected in any of the soil samples collected from the site (overburden, tank pit, pit over-excavation stockpile), the potential for 1,2-dibromoethane to be present in the groundwater at concentrations below the analytical detection limit appears minimal.



4. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Beginning Monday, November 28, 2016, two underground storage tanks (USTs) and an associated fuel dispenser were removed from the Narrows Marina property located at 9007 South 19th Street in Tacoma, Pierce County, Washington.

Soil and pea gravel surrounded the top and sidewalls of the tanks. This overburden material, including material south of the visqueen barrier left from removal of 3 adjacent USTs in 1989, was excavated and stockpiled onsite. Three discrete soil samples were collected from random locations within this stockpile. Diesel was detected in one of these samples, while lead was detected in all 3 samples. The concentrations of these contaminants are below Ecology's cleanup standards based on unrestricted (residential) land use. There was no gasoline, BETX compounds, MTBE or oil detected in any of these soil samples.

The tanks were in good condition during the time of removal, with no obvious evidence of holes, cracks or unusual staining such as from leakage. A total of 8 soil samples were collected from the tank excavation pit. Lead was detected in several of these samples, but at concentrations that are below Ecology's cleanup standard. There was no gasoline, BETX compounds, MTBE, diesel or oil detected in any of these soil samples.

Future plans call for the installation of a new, larger UST in the same pit as the 2 former subject USTs. As part of this installation, the sidewalls and bottom of the pit had to over-excavated to approximately 15 feet below grade to accommodate the larger diameter of the new tank. Soil/mud was excavated from the bottom of the pit, including material south of the visqueen barrier left from removal of 3 adjacent USTs in 1989, and stockpiled onsite. Three discrete samples were collected from random locations within this stockpile. Diesel and/or oil were detected in 2 of these samples, while lead was detected in all 3 samples. The concentrations of these contaminants are below Ecology's cleanup standards. There was no gasoline, BETX compounds or MTBE detected in any of these soil/mud samples.

Groundwater was present in the bottom of the tank pit. An approximate 12-inch diameter perforated pipe was installed in the water table along the north end of the tank pit to help de-water the hole during installation of the new UST. This pipe extended approximately 5 feet up from the bottom of the pit. A pump was placed inside the pipe, and used to pump the groundwater to an adjacent holding tank. Using a hand bailer, a groundwater sample was collected directly from inside the perforated pipe. Water had not been pumped from the pipe for approximately 16 hours prior to collection of this sample. One water sample was also collected directly from the holding tank. There was no gasoline, BETX compounds, MTBE, 1,2-dibromoethane, 1,2-dichloroethane, diesel, oil and/or lead detected in any of these groundwater samples.



Overall and based on these sampling results, no further environmental investigation of the soil or groundwater within the subject tank area appears warranted. Furthermore, removal of these tanks has remediated soil contamination left from removal of 3 adjacent USTs in 1989.

Ecology paperwork is attached as Appendix J.

Narrows Marina should submit a copy of this report to Ecology's office in Olympia, and to the Tacoma-Pierce County Health Department office in Tacoma.

5. SIGNATURE

Bill Kane

Bill Kane

ICC-certified UST site assessor #ICC32000553, expires May 7, 2017



APPENDIX A
SITE PHOTOGRAPHS



Removal of concrete pavement above the tanks. Looking north. Fuel dispenser in background.



Removal of concrete pavement above the tanks. Looking south. Fuel dispenser in foreground.



Removal of fuel dispenser located immediately north of the north (diesel) tank. Looking northeast.



Exposure of top of diesel fuel (north) tank. Looking southeast. Location of former fuel dispenser in foreground.



Removal of diesel fuel (north) tank. Looking southeast. Location of former fuel dispenser in foreground.



Looking southwest.



Water beneath diesel fuel (north) tank. Looking south.



Visqueen barrier along north wall of tank pit, from removal of 3 adjacent USTs in 1989. Looking northwest.



Exposure of top of gasoline (south) tank. Looking southwest.



Removal of gasoline (south) tank. Looking southwest.



Looking southeast. Probable groundwater staining along bottom approximate 3 feet of tank.



Water beneath gasoline (south) tank. Looking southeast.



Bottom of both tanks in good condition with no obvious holes or leakage.



APPENDIX B
NOTICES AND PERMITS





30-DAY NOTICE FOR UNDERGROUND STORAGE TANKS

UST ID #: _____
County: _____

This form provides Ecology 30-days' advanced notice for the following projects, as required by Chapter 173-360 WAC. Instructions are found on the back page.

Please check the appropriate box: Intent to Install Intent to Close Change-in-Service

I. SITE INFORMATION	II. OWNER/OPERATOR INFORMATION
Tag or UBI # (if applicable): 602-192-083	Owner/Operator Name: Scott Wagner
UST ID # (if applicable): 4756	Business Name: Narrows Marina LLC
Site Name: Same as Business Name	Mailing Address: 9011 S. 19th Street Suite 100
Site Address: _____	City: Tacoma State: WA Zip: 98446
City: _____	Phone: 253-564-3032
Phone: _____	Email: SWAGNER@NARROWSMARINA.COM

III. CERTIFIED SERVICE PROVIDER(S)
Check the appropriate boxes. If more than one service provider is required for this project, fill out both sections.
Note: Individuals performing UST services MUST be ICC-certified or have passed another qualifying exam approved by the Department of Ecology.

1) Installer Decommissioner Site Assessor

Company Name: Pacific Environmental	Certification Type: ICC
Service Provider Name: Shawnette Hermann	Cert. No.: 50535187 Exp. Date: 8/2017
Provider Phone: 360-385-4221	Provider Email: _____

2) Installer Decommissioner Site Assessor

Company Name: Eco Compliance	Certification Type: _____
Service Provider Name: Bill Kave	Cert. No.: _____ Exp. Date: _____
Provider Phone: 425-271-5629	Provider Email: Bill@EcoCompliance.biz

IV. TANK INFORMATION				
TANK ID	SUBSTANCE STORED	TANK CAPACITY	DATE PROJECT IS EXPECTED TO BEGIN	COMMENTS
1	Diesel	4K	10-17-2016	Remove 2 Existing Underground Storage Tanks. Install 1-Compant tank New, 8K & 4K DWF Bagless See attached Scope of Work.
2	Gas	6K	10-17-2016	



UNDERGROUND STORAGE TANK REMOVAL/SITE CLOSURE PERMIT

This permit grants the individual/firm listed below permission to perform Underground Storage Tank (UST) work at the site listed below in accordance with Chapter 4 of the Tacoma Pierce County Environmental Health Code. The Site Owner and/or Operator are required to achieve Site Closure as defined in Chapter 4.

Site Location: 9007 S 19th ST, Tacoma, WA 98466

Facility Name: Narrow's Marina LLC

Removal/Consulting Firm: Pacific Environmental

Number of Tanks to be Removed (if applicable): 2



Approval Signature

Permit #: RO0004560

ATTENTION

- **All** work must be performed in accordance with Environmental Health Code, Chapter 4 Underground Storage Tanks, Board of Health Resolution, #2010-4225.
- **All** UST Site activity schedules must be approved by the Health Department at least five (5) working days prior to activity start date by calling (253) 798-2855 or emailing rolsen@tpchd.org.
- Reporting documents must be submitted within 90 days of UST Site activities, including UST removal, investigation and remedial actions.
- UST Removal/Site Closure permits must be renewed after 365 day if Site Closure is not achieved.

Permit must be accessible at site - DO NOT ALTER OR DEFACE
This permit expires 365 days from validation date.





Tacoma Fire Department

Fire Prevention Bureau 253.591.5740

FAX Number 253.594.7943

3471 S. 35th St. Tacoma, WA 98409

www.tacomafiredepartment.org

PERMIT

For inspection call (253) 591-5754 or

Inspection request form can be faxed or e-mailed to TFDPPermits@cityoftacoma.org

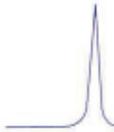
Permit Type: Underground Tank -Removal or Decommissioning Commercial		Permit Number: 1616520	
PERMIT INFORMATION			
Date Issued:	09/21/16	Event date: 11/01/16	Expiration date:
Issued to:	NARROWS MARINA LLC		
Address:	9001 S 19 TH ST, STE 100	City: Tacoma	State: WA Zip: 98466
Site Address:	(if different from above)		
Contact Name:	SCOTT WAGNER		
Phone:	(253) 564-3032	Alternate Phone/Cell: (253) 225-1718	
E-mail Address:	SWAGNER@NARROWSMARINA.COM		
ADDITIONAL CONDITIONS OF PERMIT			
1. Comply with conditions of permit.			
2. Remove Tanks, Install New Tank			
3.			
FPB OFFICIAL USE ONLY			
Issued By:	Lt. Mark Wagner		
INSPECTION RECORD			
Date:	9/21/16	Inspector:	<i>Mark Wagner</i> Passed <input type="checkbox"/> Fail <input type="checkbox"/>
Reason for inspection failure:			
RE-INSPECTION RECORD			
Date:		Inspector:	Passed <input type="checkbox"/> Fail <input type="checkbox"/>
Reason for inspection failure:			



APPENDIX C

ANALYTICAL RESULTS FOR TANK PIT OVERBURDEN MATERIAL





04/04/2017

Eco Compliance
 1823 Bremerton Ave NE
 Renton, WA 98059-3954
 Attn: Bill Kane

Project: Narrows
 Client ID: OB-1
 Sample Matrix: Soil
 Date Sampled: 11/29/2016
 Date Received: 11/29/2016
 Spectra Project: 2016110773
 Spectra Number: 10
 Rush

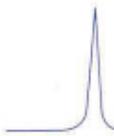
Analyte	Result	Units	Method
Diesel	<10.0	mg/Kg	NWTPH-D
Oil	<50.0	mg/Kg	NWTPH-D
Gasoline	<2.5	mg/Kg	NWTPH-G
Total Lead	5	mg/Kg	SW846 6010C
Benzene	<0.025	mg/Kg	SW846 8260C
Ethylbenzene	<0.05	mg/Kg	SW846 8260C
Methyl-tert-Butyl Ether	<0.05	mg/Kg	SW846 8260C
Toluene	<0.05	mg/Kg	SW846 8260C
Total Xylenes	<0.10	mg/Kg	SW846 8260C

Surrogate	% Recovery	Method
Toluene-d8	95	NWTPH-G
4-Bromofluorobenzene	79	NWTPH-G
p-Terphenyl	63	NWTPH-D

SPECTRA LABORATORIES


 Jeffrey Cooper, Laboratory Manager
 a5/jac





SPECTRA Laboratories

...Where experience matters

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838 • www.spectra-lab.com

04/04/2017

Eco Compliance
1823 Bremerton Ave NE
Renton, WA 98059-3954
Attn: Bill Kane

Project: Narrows
Client ID: OB-2
Sample Matrix: Soil
Date Sampled: 11/29/2016
Date Received: 11/29/2016
Spectra Project: 2016110773
Spectra Number: 11
Rush

Analyte	Result	Units	Method
Diesel	<10.0	mg/Kg	NWTPH-D
Oil	<50.0	mg/Kg	NWTPH-D
Gasoline	<2.5	mg/Kg	NWTPH-G
Total Lead	72	mg/Kg	SW846 6010C
Benzene	<0.025	mg/Kg	SW846 8260C
Ethylbenzene	<0.05	mg/Kg	SW846 8260C
Methyl-tert-Butyl Ether	<0.05	mg/Kg	SW846 8260C
Toluene	<0.05	mg/Kg	SW846 8260C
Total Xylenes	<0.10	mg/Kg	SW846 8260C

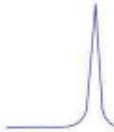
Surrogate	% Recovery	Method
Toluene-d8	95	NWTPH-G
4-Bromofluorobenzene	78	NWTPH-G
p-Terphenyl	65	NWTPH-D

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
as/jac

Page 11 of 12





04/04/2017

Eco Compliance
 1823 Bremerton Ave NE
 Renton, WA 98059-3954
 Attn: Bill Kane

Project: Narrows
 Client ID: OB-3
 Sample Matrix: Soil
 Date Sampled: 11/29/2016
 Date Received: 11/29/2016
 Spectra Project: 2016110773
 Spectra Number: 12
 Rush

Analyte	Result	Units	Method
Diesel	14.3	mg/Kg	NWTPH-D
Oil	<50.0	mg/Kg	NWTPH-D
Gasoline	<2.5	mg/Kg	NWTPH-G
Total Lead	26	mg/Kg	SW846 6010C
Benzene	<0.025	mg/Kg	SW846 8260C
Ethylbenzene	<0.05	mg/Kg	SW846 8260C
Methyl-tert-Butyl Ether	<0.05	mg/Kg	SW846 8260C
Toluene	<0.05	mg/Kg	SW846 8260C
Total Xylenes	<0.10	mg/Kg	SW846 8260C

Surrogate	% Recovery	Method
Toluene-d8	95	NWTPH-G
4-Bromofluorobenzene	79	NWTPH-G
p-Terphenyl	59	NWTPH-D

SPECTRA LABORATORIES


 Jeffrey Cooper, Laboratory Manager
 a5/jac

Page 12 of 12



APPENDIX D
DISPOSAL RECEIPT FOR TANK CONTENTS



This Shipping Order

must be legibly filled in, in ink indelible Pen or in Carbon, and retained by the agent

Shipper No. 14905

Carrier No. 126

Page 1 of 4

Marine Vacuum Service Inc.

Date 11-28-16

(Name of carrier) (SCAC)

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 431, Sec. 1

TO: Consignee Marine Vacuum Service Inc.

FROM: Shipper Narrows Marina

Street 9007 19 St.

Street 1516 South Graham Street

City TACOMA State WA Zip Code

City Seattle State WA Zip Code 98108

Chem Tel 1-800-255-3924
Contract MIS9627926

24 hr. Emergency Contact Tel. No.

Route

Vehicle Number 126

No. of Units & Container Type	HM	BASIC DESCRIPTION UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
1 TT	X	(DOT Spec Tank Required) UN1863 Fuel, Aviation, Turbin Engine, Class 3, PG I				
1 TT	X	(DOT Spec Tank Required) UN1203 Gasoline, Mixture Class 3, PG II	250 gals			
1 TT	X	(DOT Spec Tank Required) UN1203 Gasoline, Class 3, PG II				
1 TT	X	UN1863 Diesel, Class 3, PG III	500 gals			
1 TT	X	NA1983 Diesel, Class 3, PG III				
1 TT	X	NA1270 Petroleum Oil, Class 3, PG I				
1 TT	X	NA1270 Petroleum Oil, Mixture, Class 3, PG I				
1 TT		Oily Waste Water Non Reg by DOT				
1 TT		Waste Water Non Reg by DOT	500 gals			
1 TT		Marine Vessel Sewage Non Reg by DOT				
1 TT		Street Waste Storm Pipe Cleaning Non Reg by DOT				
		PO# 122970-1				

PLACARDS TENDERED: YES NO

Note: (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \$_____ per _____"
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provision. See NMIC Item 172.
(3) Continued for reference special or additional care or attention in handling or stowage must be so marked and packaged as to ensure safe transportation. See Section 200 of Item 500, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

REMIT C.O.D. TO: ADDRESS

COD Amt: \$

Signature

C.O.D. FEE: PREPAID COLLECT

TOTAL CHARGES \$

RECEIVED, subject to the identifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted in comments and condition of contents of packages unknown, marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on its route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to be-

Shipped and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bills of lading, terms and conditions in the governing declaration on the date of shipment.
Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for inland transit charges.

SHIPPER Pacific Environmental Services

CARRIER Marine Vacuum Services

PER Maria

PER Carl Kuehner

DATE

Permanent post-office address of shipper.

STYLE F375-4 © 2012 LABELMASTER® (800) 621-5806 www.labelmaster.com



Marine Vacuum Service, Inc.

GENERAL CONTRACTOR
CONTRACTORS LICENSE # MARINVS097JA

P.O. Box 24263 Seattle, Washington 98124

Telephone (206) 762-0240

FAX (206) 763-8084

1-800-540-7491

AST/UST STORAGE TANK PUMP & RINSE CERTIFICATE

Tank Size: 4,000 Gallons

Last Contents: Diesel, Red, off Road.

Tank Location: 9007 S 19th St.
Tacoma, WA

Marine Vacuum Service, Inc. certifies that the above mentioned tank(s) have been triple rinsed in accordance with the industry standard as outlined in 40 CFR PART 280.70, WAC 173-360-380(I), API 1604, API 2015 and that all residual product and rinsate has been disposed of in accordance with Federal, State and Local regulations. Tanks listed above are **NOT GAS FREE** or **NOT SAFE FOR HOT WORK**

Tank Owner: Narrows Marina
9007 S 19th St.
Tacoma, WA.

Contractor: Pacific Environmental Services

M.V.S. Representative: Carl Kirschner

Date: 11-28-16

Notes:

DBE # D4M1302341

EPA # WAD980974521

A MINORITY BUSINESS ENTERPRISE ID # D4M1302341



Marine Vacuum Service, Inc.

GENERAL CONTRACTOR
CONTRACTORS LICENSE # MARINVS097JA

P.O. Box 24263 Seattle, Washington 98124
Telephone (206) 762-0240
FAX (206) 763-8084
1-800-540-7491

AST/UST STORAGE TANK PUMP & RINSE CERTIFICATE

Tank Size: 6,000 Gallon

Last Contents Unleaded Gasoline

Tank Location: 9007 S. 19th St.
Tacoma, WA.

Marine Vacuum Service, Inc. certifies that the above mentioned tank(s) have been triple rinsed in accordance with the industry standard as outlined in 40 CFR PART 280.70, WAC 173-360-380(I), API 1604, API 2015 and that all residual product and rinsate has been disposed of in accordance with Federal, State and Local regulations. Tanks listed above are **NOT GAS FREE** or **NOT SAFE FOR HOT WORK**

Tank Owner: Narrows Marina
9007 19th St.
Tacoma WA.

Contractor: Pacific Environmental Services

M.V.S. Representative: Carl Kirschner

Date: 11-28-10

Notes:

DBE # D4M1302341

EPA # WAD980974521

A MINORITY BUSINESS ENTERPRISE ID # D4M1302341



APPENDIX E
TANK INERTING PAPERWORK



SOUND TESTING, INC.
 P.O. BOX 16204 SEATTLE, WA 98116
 (206) 932-0206 FAX (206) 937-3848
 WWW.SOUNDTESTINGINC.COM

MARINE CHEMIST CERTIFICATE

SERIAL NO: 46816

Survey Requested by: Pacific Environmental Vessel Owner (Agent): Pacific Environmental Date: 11/29/16
 Vessel: UST's PO# 122970 Type of Vessel: UST's Specific Location of Vessel: Narrow's Marina-Tie
 Load Three (3) Loadings: (1) Diesel Fuel (2) Gasoline Tests Performed: Dr. LEL, VOCs, VISUAL Time Survey Completed: 13:50

12:30 pm:
 (1) Diesel Tank - (3x Rinsed)
 [20.8% O₂, 0% LEL, 25 ppm VOCs - Water
 ~ 5% O₂ Bottom w/ Dry Ice - Resid. in Bottom]
 No Entry - Not Safe for Workers
 May be Safely Excavated & Transported
 * Safe for Limited Hot Work.
 (Saw-cutting for Access)

13:30: Initial: N 20% LEL w/ 1/4 PO₂
 Gasoline Tank - (3x Rinsed) -
 [Inerted with CO₂(g) to less than 6% Oxygen]
 No Entry - Not Safe for Workers
 May be Safely Excavated & Transported
 * Safe for Limited Hot Work.
 * May Saw Cut openings - M.C. Monitoring.

In the event of changes adversely affecting conditions in the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist.

Qualifications: Manipulation of valves or devices tending to alter conditions in pipe lines or tanks noted above, unless specifically approved in this certificate, will require re-inspection and a new Certificate for spaces so affected. All piping, heating coils, pumps and floating roof gaskets attached to or contained within spaces listed above shall be considered "NOT SAFE" unless otherwise specifically designated.

STANDARD SAFETY DESIGNATIONS

(These detail the minimum conditions for Safe Entry and Hot Work.) The Marine Chemist may request additional measures if workplace conditions so dictate.

ATMOSPHERE SAFE FOR WORKERS means that in a space (a) the oxygen content is between 19.5% and 22% by volume, and (b) combustible gas is less than 10% of the Lower Explosive Limit, and (c) airborne toxic materials are within permissible concentrations as listed in OSHA's Subpart Z or in ACGIH's current list of Threshold Limit Values.

SAFE FOR HOT WORK means that (a) oxygen within the space is less than 22% by volume; and (b) the combustible gas is less than 10% of the Lower Explosive Limit; and (c) cargo residues within the space will not combust during hot work; and (d) pipes that can deliver hazardous materials to the workspace have been separated, blanked, or locked out, and nearby hazardous spaces have been evaluated and noted on the certificate.

NOT SAFE FOR HOT WORK In the compartment or space so designated, hot work is not permitted.

"The undersigned acknowledges receipt of this Certificate and understands conditions and limitations under which it was issued."

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and restrictions.

Signed: [Signature] Pacific Env. 11/29/2016 Signed: [Signature] 711
 Name Date Marine Chemist Certificate No.



APPENDIX F
DISPOSAL RECEIPTS FOR USTS





1602 MARINE VIEW DRIVE
 TACOMA, WA 98422
 PH: 253-572-6800
 FAX: 253-572-5420
 WWW.CALBAG.COM

Purchase Ticket

Purchase Ticket # **156198**
 Purchase Date **11/29/16**

Customer:

PACIFIC ENVIROMENTAL
 8585 HW 20
 PORT TOWNSEND, WA

Terms Net 30
 12/29/16

Item Name	Gross	Tare	Net	Price	Total
Received: 11/29/2016	WT Ticket #S	11164184			
Unprepared	27,040.0	23,180.0	3,860.0 LB	\$50.00 N/Ton	\$96.50
Totals:	27,040.0	23,180.0	3,860.0		\$96.50

RECEIVED BY: _____

I, above signed, hereby declare that the property that is subject to this transaction is NOT, to the best of my knowledge, stolen property and is free of all hazardous or toxic substances including but not limited to oils, fuels, fluids, CFCs, HCFCs, PCBs, Mercury switches, ect. I understand that if this statement is made under penalty it may be used as evidence in court.

Payment Information

Date	Check / Ref	Application Amounts		Total Payment
		Check	Cash /EFT	
11/29/16	243443	\$96.50	\$0.00	\$262.00

Processed by: tacoma.cashier

11/29/2016

3:10:12PM





1602 MARINE VIEW DRIVE
 TACOMA, WA 98422
 PH: 253-572-6800
 FAX: 253-572-5420
 WWW.CALBAG.COM

Purchase Ticket

Purchase Ticket # **156196**
 Purchase Date **11/29/16**

Customer:

PACIFIC ENVIROMENTAL
 8585 HW 20
 PORT TOWNSEND, WA

Terms Net 30
 12/29/16

Item Name	Gross	Tare	Net	Price	Total
Received: 11/29/2016	WT Ticket #S	11164195			
Unprepared	30,220.0	23,100.0	6,620.0 LB	\$50.00 NTon	\$165.50
Weight Adjusted :	500.0	Dirt/Garbage			
Container Num 120			Chasis #		
Totals:	30,220.0	23,100.0	6,620.0		\$165.50

RECEIVED BY: _____

I, above signed, hereby declare that the property that is subject to this transaction is NOT, to the best of my knowledge, stolen property and is free of all hazardous or toxic substances including but not limited to oils, fuels, fluids, CFCs, HCFCs, PCBs, Mercury switches, ect. I understand that if this statement is made under penalty it may be used as evidence in court.

Payment Information

Date	Check / Ref	Application Amounts Check	Cash /EFT	Total Payment
11/29/16	243443	\$165.50	\$0.00	\$262.00

Processed by: tacoma.cashier

11/29/2016

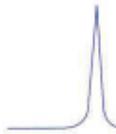
3:10:16PM



APPENDIX G

ANALYTICAL RESULTS FOR SOIL FROM TANK PIT





04/04/2017

Eco Compliance
 1823 Bremerton Ave NE
 Renton, WA 98059-3954
 Attn: Bill Kane

Project: Narrows
 Client ID: N
 Sample Matrix: Soil
 Date Sampled: 11/29/2016
 Date Received: 11/29/2016
 Spectra Project: 2016110773
 Spectra Number: 1

Rush

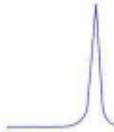
Analyte	Result	Units	Method
Diesel	<10.0	mg/Kg	NWTPH-D
Oil	<50.0	mg/Kg	NWTPH-D
Gasoline	<2.5	mg/Kg	NWTPH-G
Total Lead	< 4	mg/Kg	SW846 6010C
Benzene	<0.025	mg/Kg	SW846 8260C
Ethylbenzene	<0.05	mg/Kg	SW846 8260C
Methyl-tert-Butyl Ether	<0.05	mg/Kg	SW846 8260C
Toluene	<0.05	mg/Kg	SW846 8260C
Total Xylenes	<0.10	mg/Kg	SW846 8260C

Surrogate	% Recovery	Method
Toluene-d8	95	NWTPH-G
4-Bromofluorobenzene	76	NWTPH-G
p-Terphenyl	62	NWTPH-D

SPECTRA LABORATORIES


 Jeffrey Cooper, Laboratory Manager
 a5/jac





04/04/2017

Eco Compliance
1823 Bremerton Ave NE
Renton, WA 98059-3954
Attn: Bill Kane

Project: Narrows
Client ID: W1
Sample Matrix: Soil
Date Sampled: 11/29/2016
Date Received: 11/29/2016
Spectra Project: 2016110773
Spectra Number: 2

Rush

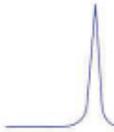
Analyte	Result	Units	Method
Diesel	<10.0	mg/Kg	NWTPH-D
Oil	<50.0	mg/Kg	NWTPH-D
Gasoline	<2.5	mg/Kg	NWTPH-G
Total Lead	< 4	mg/Kg	SW846 6010C
Benzene	<0.025	mg/Kg	SW846 8260C
Ethylbenzene	<0.05	mg/Kg	SW846 8260C
Methyl-tert-Butyl Ether	<0.05	mg/Kg	SW846 8260C
Toluene	<0.05	mg/Kg	SW846 8260C
Total Xylenes	<0.10	mg/Kg	SW846 8260C

Surrogate	% Recovery	Method
Toluene-d8	95	NWTPH-G
4-Bromofluorobenzene	78	NWTPH-G
p-Terphenyl	69	NWTPH-D

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a5/jac





04/04/2017

Eco Compliance
 1823 Bremerton Ave NE
 Renton, WA 98059-3954
 Attn: Bill Kane

Project: Narrows
 Client ID: E1
 Sample Matrix: Soil
 Date Sampled: 11/29/2016
 Date Received: 11/29/2016
 Spectra Project: 2016110773
 Spectra Number: 3

Rush

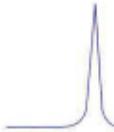
Analyte	Result	Units	Method
Diesel	<10.0	mg/Kg	NWTPH-D
Oil	<50.0	mg/Kg	NWTPH-D
Gasoline	<2.5	mg/Kg	NWTPH-G
Total Lead	10	mg/Kg	SW846 6010C
Benzene	<0.025	mg/Kg	SW846 8260C
Ethylbenzene	<0.05	mg/Kg	SW846 8260C
Methyl-tert-Butyl Ether	<0.05	mg/Kg	SW846 8260C
Toluene	<0.05	mg/Kg	SW846 8260C
Total Xylenes	<0.10	mg/Kg	SW846 8260C

Surrogate	% Recovery	Method
Toluene-d8	95	NWTPH-G
4-Bromofluorobenzene	80	NWTPH-G
p-Terphenyl	68	NWTPH-D

SPECTRA LABORATORIES


 Jeffrey Cooper, Laboratory Manager
 a5jac





04/04/2017

Eco Compliance
 1823 Bremerton Ave NE
 Renton, WA 98059-3954
 Attn: Bill Kane

Project: Narrows
 Client ID: B1
 Sample Matrix: Soil
 Date Sampled: 11/29/2016
 Date Received: 11/29/2016
 Spectra Project: 2016110773
 Spectra Number: 4

Rush

Analyte	Result	Units	Method
Diesel	<10.0	mg/Kg	NWTPH-D
Oil	<50.0	mg/Kg	NWTPH-D
Gasoline	<2.5	mg/Kg	NWTPH-G
Total Lead	< 4	mg/Kg	SW846 6010C
Benzene	<0.025	mg/Kg	SW846 8260C
Ethylbenzene	<0.05	mg/Kg	SW846 8260C
Methyl-tert-Butyl Ether	<0.05	mg/Kg	SW846 8260C
Toluene	<0.05	mg/Kg	SW846 8260C
Total Xylenes	<0.10	mg/Kg	SW846 8260C

Surrogate	% Recovery	Method
Toluene-d8	93	NWTPH-G
4-Bromofluorobenzene	74	NWTPH-G
p-Terphenyl	53	NWTPH-D

SPECTRA LABORATORIES


 Jeffrey Cooper, Laboratory Manager
 a5/jac





04/04/2017

Eco Compliance
1823 Bremerton Ave NE
Renton, WA 98059-3954
Attn: Bill Kane

Project: Narrows
Client ID: W2
Sample Matrix: Soil
Date Sampled: 11/29/2016
Date Received: 11/29/2016
Spectra Project: 2016110773
Spectra Number: 6

Rush

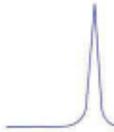
Analyte	Result	Units	Method
Diesel	<10.0	mg/Kg	NWTPH-D
Oil	<50.0	mg/Kg	NWTPH-D
Gasoline	<2.5	mg/Kg	NWTPH-G
Total Lead	6	mg/Kg	SW846 6010C
Benzene	<0.025	mg/Kg	SW846 8260C
Ethylbenzene	<0.05	mg/Kg	SW846 8260C
Methyl-tert-Butyl Ether	<0.05	mg/Kg	SW846 8260C
Toluene	<0.05	mg/Kg	SW846 8260C
Total Xylenes	<0.10	mg/Kg	SW846 8260C

Surrogate	% Recovery	Method
Toluene-d8	95	NWTPH-G
4-Bromofluorobenzene	82	NWTPH-G
p-Terphenyl	70	NWTPH-D

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
as/jac





04/04/2017

Eco Compliance
1823 Bremerton Ave NE
Renton, WA 98059-3954
Attn: Bill Kane

Project: Narrows
Client ID: E2
Sample Matrix: Soil
Date Sampled: 11/29/2016
Date Received: 11/29/2016
Spectra Project: 2016110773
Spectra Number: 7

Rush

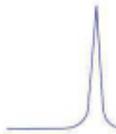
Analyte	Result	Units	Method
Diesel	<10.0	mg/Kg	NWTPH-D
Oil	<50.0	mg/Kg	NWTPH-D
Gasoline	<2.5	mg/Kg	NWTPH-G
Total Lead	12	mg/Kg	SW846 6010C
Benzene	<0.025	mg/Kg	SW846 8260C
Ethylbenzene	<0.05	mg/Kg	SW846 8260C
Methyl-tert-Butyl Ether	<0.05	mg/Kg	SW846 8260C
Toluene	<0.05	mg/Kg	SW846 8260C
Total Xylenes	<0.10	mg/Kg	SW846 8260C

Surrogate	% Recovery	Method
Toluene-d8	95	NWTPH-G
4-Bromofluorobenzene	77	NWTPH-G
p-Toplestyf	65	NWTPH-D

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a5/jac





04/04/2017

Eco Compliance
 1823 Bremerton Ave NE
 Renton, WA 98059-3954
 Attn: Bill Kane

Project: Narrows
 Client ID: B2
 Sample Matrix: Soil
 Date Sampled: 11/29/2016
 Date Received: 11/29/2016
 Spectra Project: 2016110773
 Spectra Number: 8

Rush

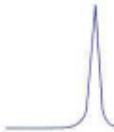
Analyte	Result	Units	Method
Diesel	<10.0	mg/Kg	NWTPH-D
Oil	<50.0	mg/Kg	NWTPH-D
Gasoline	<2.5	mg/Kg	NWTPH-G
Total Lead	13	mg/Kg	SW846 6010C
Benzene	<0.025	mg/Kg	SW846 8260C
Ethylbenzene	<0.05	mg/Kg	SW846 8260C
Methyl-tert-Butyl Ether	<0.05	mg/Kg	SW846 8260C
Toluene	<0.05	mg/Kg	SW846 8260C
Total Xylenes	<0.10	mg/Kg	SW846 8260C

Surrogate	% Recovery	Method
Toluene-d8	95	NWTPH-G
4-Bromofluorobenzene	80	NWTPH-G
p-Terphenyl	62	NWTPH-D

SPECTRA LABORATORIES


 Jeffrey Cooper, Laboratory Manager
 a5/jac





04/04/2017

Eco Compliance
1823 Bremerton Ave NE
Renton, WA 98059-3954
Attn: Bill Kane

Project: Narrows
Client ID: S
Sample Matrix: Soil
Date Sampled: 11/29/2016
Date Received: 11/29/2016
Spectra Project: 2016110773
Spectra Number: 5

Rush

Analyte	Result	Units	Method
Diesel	<10.0	mg/Kg	NWTPH-D
Oil	<50.0	mg/Kg	NWTPH-D
Gasoline	<2.5	mg/Kg	NWTPH-G
Total Lead	8	mg/Kg	SW846 6010C
Benzene	<0.025	mg/Kg	SW846 8260C
Ethylbenzene	<0.05	mg/Kg	SW846 8260C
Methyl-tert-Butyl Ether	<0.05	mg/Kg	SW846 8260C
Toluene	<0.05	mg/Kg	SW846 8260C
Total Xylenes	<0.10	mg/Kg	SW846 8260C

Surrogate	% Recovery	Method
Toluene-d8	93	NWTPH-G
4-Bromofluorobenzene	80	NWTPH-G
p-Terphenyl	57	NWTPH-D

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a5/jac





Communications Record

Internal Document

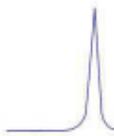
Client: Eco-Consultance
Client Contact: Bill Kovic 206-715-1396
Date: 11-30-16
Time: 8:50
Spectra Contact: Lori
Project: 2016110773

Sample ID # 1 - use N on report
Sample ID # 5 - use S on report
"No with ID on container"

APPENDIX H

ANALYTICAL RESULTS FOR SOIL/MUD FROM BOTTOM OF TANK PIT





04/04/2017

Eco Compliance
1823 Bremerton Ave NE
Renton, WA 98059-3954
Attn: Bill Kane

Project: Narrows
Client ID: SP1
Sample Matrix: Soil
Date Sampled: 12/13/2016
Date Received: 12/13/2016
Spectra Project: 2016120303
Spectra Number: 1

Rush

Analyte	Result	Units	Method
Diesel	<10.0	mg/Kg	NWTPH-D
Oil	58	mg/Kg	NWTPH-D
Gasoline	<5	mg/Kg	NWTPH-G
Total Lead	7	mg/Kg	SW846 6010C
Benzene	<0.025	mg/Kg	SW846 8260C
Ethylbenzene	<0.05	mg/Kg	SW846 8260C
Methyl-tert-Butyl Ether	<0.05	mg/Kg	SW846 8260C
Toluene	<0.05	mg/Kg	SW846 8260C
Total Xylenes	<0.10	mg/Kg	SW846 8260C

Surrogate	% Recovery	Method
Toluene-d8	91	NWTPH-G
4-Bromofluorobenzene	74	NWTPH-G
p-Terphenyl	64	NWTPH-D

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
u5/jac



04/04/2017

Eco Compliance
 1823 Bremerton Ave NE
 Renton, WA 98059-3954
 Attn: Bill Kane

Project: Narrows
 Client ID: SP2
 Sample Matrix: Soil
 Date Sampled: 12/13/2016
 Date Received: 12/13/2016
 Spectra Project: 2016120303
 Spectra Number: 2

Rush

Analyte	Result	Units	Method
Diesel	<10.0	mg/Kg	NWTPH-D
Oil	<50.0	mg/Kg	NWTPH-D
Gasoline	<5	mg/Kg	NWTPH-G
Total Lead	7	mg/Kg	SW846 6010C
Benzene	<0.025	mg/Kg	SW846 8260C
Ethylbenzene	<0.05	mg/Kg	SW846 8260C
Methyl-tert-Butyl Ether	<0.05	mg/Kg	SW846 8260C
Toluene	<0.05	mg/Kg	SW846 8260C
Total Xylenes	<0.10	mg/Kg	SW846 8260C

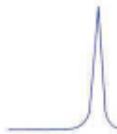
Surrogate	% Recovery	Method
Toluene-d8	89	NWTPH-G
4-Bromofluorobenzene	80	NWTPH-G
p-Terphenyl	66	NWTPH-D

SPECTRA LABORATORIES


 Jeffrey Cooper, Laboratory Manager
 a5/jac

Page 2 of 3





04/04/2017

Eco Compliance
 1823 Bremerton Ave NE
 Renton, WA 98059-3954
 Attn: Bill Kane

Project: Narrows
 Client ID: SP3
 Sample Matrix: Soil
 Date Sampled: 12/13/2016
 Date Received: 12/13/2016
 Spectra Project: 2016120303
 Spectra Number: 3

Rush

Analyte	Result	Units	Method
Diesel	14.8	mg/Kg	NWTPH-D
Oil	60	mg/Kg	NWTPH-D
Gasoline	<5	mg/Kg	NWTPH-G
Total Lead	12	mg/Kg	SW846 6010C
Benzene	<0.025	mg/Kg	SW846 8260C
Ethylbenzene	<0.05	mg/Kg	SW846 8260C
Methyl-tert-Butyl Ether	<0.05	mg/Kg	SW846 8260C
Toluene	<0.05	mg/Kg	SW846 8260C
Total Xylenes	<0.10	mg/Kg	SW846 8260C

Surrogate	% Recovery	Method
Toluene-d8	89	NWTPH-G
4-Bromofluorobenzene	73	NWTPH-G
p-Terphenyl	68	NWTPH-D

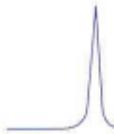
SPECTRA LABORATORIES


 Jeremy Cooper, Laboratory Manager
 a5/jac



APPENDIX I
GROUNDWATER ANALYTICAL RESULTS





04/04/2017

Eco Compliance
1823 Bremerton Ave NE
Renton, WA 98059-3954
Attn: Bill Kane

Project: Narrows
Client ID: GW
Sample Matrix: Water
Date Sampled: 12/20/2016
Date Received: 12/20/2016
Spectra Project: 2016120563
Spectra Number: 1

Analyte	Result	Units	Method
Diesel	<100	µg/L	NWTPH-D
Oil	<500	µg/L	NWTPH-D
Gasoline	<50	µg/L	NWTPH-G
1,2-Dibromoethane (EDB)	<0.4 J*	µg/L	SW846 8260C
1,2-Dichloroethane	<1	µg/L	SW846 8260C
Benzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C
Toluene	<1	µg/L	SW846 8260C
Total Xylenes	<2	µg/L	SW846 8260C

*Laboratory determined method detection limit (MDL) is 0.4 ug/L and practical quantitation limit (PQL) is 1 ug/L. Result has been reported to the MDL.

Surrogate	% Recovery	Method
4-Bromofluorobenzene	85	NWTPH-G
Toluene-d8	87	NWTPH-G
p-Terphenyl	81	NWTPH-D

SPECTRA LABORATORIES


Jeffrey Cooper, Laboratory Manager
a3/jac

Page 1 of 1



06/29/2017

Eco Compliance
 1823 Bremerton Ave NE
 Renton, WA 98059-3954
 Attn: Bill Kane

P.O.#: COD
 Project: Narrows
 Client ID: Tank
 Sample Matrix: Water
 Date Sampled: 12/21/2016
 Date Received: 12/21/2016
 Spectra Project: 2016120536
 Spectra Number: 1

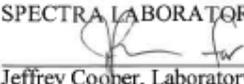
Rush

Analyte	Result	Units	Method
Lead	< 0.015	mg/L	EPA 200.8
Diesel	<100	µg/L	NWTPH-D
Oil	<500	µg/L	NWTPH-D
Gasoline	<50	µg/L	NWTPH-G
1,2-Dibromoethane (EDB)	<0.4 J*	µg/L	SW846 8260C
1,2-Dichloroethane	<1	µg/L	SW846 8260C
Benzene	<1	µg/L	SW846 8260C
Ethylbenzene	<1	µg/L	SW846 8260C
Methyl-tert-Butyl Ether	<1	µg/L	SW846 8260C
Toluene	<1	µg/L	SW846 8260C
Total Xylenes	<2	µg/L	SW846 8260C

*Laboratory determined method detection limit (MDL) is 0.4 ug/L and practical quantitation limit (PQL) is 1 ug/L. Result has been reported to the MDL.

Surrogate	% Recovery	Method
4-Bromofluorobenzene	80	NWTPH-G
Toluene-d8	91	NWTPH-G
p-Terphenyl	84	NWTPH-D

SPECTRA LABORATORIES


 Jeffrey Cooper, Laboratory Manager
 a5/scj

Page 1 of 1





SPECTRA Laboratories
 2221 Ross Way, Tacoma, WA 98421
 (253) 272-4850 Fax (253) 572-9838
 www.spectra-lab.com info@spectra-lab.com

SPECIAL INSTRUCTIONS/COMMENTS:

Due by 12-28-16

CHAIN OF CUSTODY

SPECTRA PROJECT #
2016120574

Return Samples: Y N Page 1 of 1

STANDARD

RUSH

CLIENT: *Eco Compliance* ADDRESS: ADDRESS CHANGE

PROJECT: *Martens*
 CONTACT: *Bill Kane*
 SAMPLED BY: *Bill Kane*
 PHONE: *206-215-9396* FAX:
 e-MAIL: *bill@ecocompliance.com* or e-MAIL
 PURCHASE ORDER #

HYDROCARBONS	ORGANICS	METALS	OTHER
NWTPH-HCID	TOTAL METALS RCRA 8	TOTAL METALS RCRA 8	TOTAL METALS RCRA 8
BTEX	TCP METALS (SPECIFY)	TCP METALS RCRA 8	TCP METALS (SPECIFY)
BTEX/NWTPH-G	8270 PAH/PNA	8270 PAH/PNA	8270 PAH/PNA
NWTPH-DX	8270 SEMI VOA	8270 SEMI VOA	8270 SEMI VOA
1664 SGT-HEM (TPH)	8290 CHLOR SOLVENTS	8290 CHLOR SOLVENTS	8290 CHLOR SOLVENTS
1664 HEM (FOG)	8260/824 VOA	8260/824 VOA	8260/824 VOA
NWTPH-G	8260/824 VOA	8260/824 VOA	8260/824 VOA
BTEX/NWTPH-G	8260/824 VOA	8260/824 VOA	8260/824 VOA
NWTPH-DX	8260/824 VOA	8260/824 VOA	8260/824 VOA
8082/608 PCB	8082/608 PCB	8082/608 PCB	8082/608 PCB
TOTAL METALS RCRA 8			
TCP METALS (SPECIFY)	TCP METALS (SPECIFY)	TCP METALS (SPECIFY)	TCP METALS (SPECIFY)
TCP METALS RCRA 8			
PH 9040/9045	PH 9040/9045	PH 9040/9045	PH 9040/9045
FLASH POINT	FLASH POINT	FLASH POINT	FLASH POINT
TURBIDITY	TURBIDITY	TURBIDITY	TURBIDITY
TX/TXO/EOX	TX/TXO/EOX	TX/TXO/EOX	TX/TXO/EOX
BOD	BOD	BOD	BOD
SOLIDS (SPECIFY)	SOLIDS (SPECIFY)	SOLIDS (SPECIFY)	SOLIDS (SPECIFY)

NUMBER OF CONTAINERS	DATE SAMPLED	TIME SAMPLED	MATRIX	LAB USE ONLY
1	12/21/16	AM	Water	
2				
3				
4				
5				
6				
7				
8				
9				
10				

LAB USE ONLY	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RELINQUISHED BY	<i>Bill Kane</i>	<i>Bill Kane</i>	<i>Eco Compliance</i>	<i>12-21-16</i>	<i>11:40 AM</i>
RECEIVED BY	<i>Marie Holt</i>	<i>MARIE HOLT</i>	<i>Spectra</i>	<i>12-21-16</i>	<i>11:40 PM</i>
RELINQUISHED BY					
RECEIVED BY					

Payment Terms: Net 30 days. Past due accounts subject to 1.12% per month interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other costs of collection regardless of whether suit is filed in Pierce Co., WA venue. Spectra Laboratories, LLC

APPENDIX J
ECOLOGY PAPERWORK





**PERMANENT CLOSURE NOTICE
FOR UNDERGROUND STORAGE TANKS**

UST ID #: _____
County: Pierce

This notice certifies that permanent closure activities were performed and conducted in accordance with Chapter 173-360 WAC. Instructions are found on the back page.

I. UST FACILITY		II. OWNER/OPERATOR INFORMATION					
Facility Compliance Tag #:	<u>A4319</u>	Owner/Operator Name:	<u>Narrows Marina, LLC</u>				
UST ID #:	<u>4756</u>	Business Name:	<u>Narrows Marina, LLC</u>				
Site Name:	<u>Narrows Marina</u>	Address:	<u>9007 South 19th Street</u>				
Site Address:	<u>9007 South 19th Street</u>	City:	<u>Tacoma</u>	State:	<u>WA</u>	Zip:	<u>98466</u>
City:	<u>Tacoma</u>	Phone:	<u>253-564-3032</u>				
Phone:	<u>253-564-3032</u>	Email:	<u>swagner@narrowsmarina.com</u>				
III. CERTIFIED UST DECOMMISSIONER							
Company Name:	<u>Pacific Environmental</u>	Service Provider Name:	<u>CARL ESCENE</u>				
Address:	<u>PO Box 2049</u>	Certification Type:	<u>ICC</u>				
City:	<u>Port Townsend</u>	State:	<u>WA</u>	Zip:	<u>98368</u>	Cert. No.:	Exp. Date:
Provider Phone:	<u>360-385-7221</u>	Provider Email:					
Provider Signature:	<u>C. Escene</u>	Date:	<u>11-29-16</u>				
IV. TANK INFORMATION							
TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	CLOSURE METHOD			CLOSURE DATE	
			removal	closed-in-place	change-in-service		
<u>1</u>	<u>4,000 gal</u>	<u>Diesel</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>11-29-16</u>	
<u>2</u>	<u>6,000 gal</u>	<u>Gasoline</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>11-29-16</u>	
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
V. REQUIRED SIGNATURE							
Signature acknowledges UST(s) comply with UST regulation WAC 173-360-380 Permanent Closure Requirements.							
<u>11/29/16</u>	<u>[Signature]</u>	<u>SCOTT WAGNER</u>					
Date	Signature of Tank Owner/Operator or Authorized Representative	Print or Type Name					

ECY 020-94 (October 2015)





**SITE CHECK/SITE ASSESSMENT CHECKLIST
FOR UNDERGROUND STORAGE TANKS**

UST ID #: _____
County: Pierce

This checklist certifies that site check or site assessment activities were performed in accordance with Chapter 173-360 WAC. Instructions are found on the last page.

I. UST FACILITY		II. OWNER/OPERATOR INFORMATION	
Facility Compliance Tag #:	<u>A4319</u>	Owner/Operator Name:	<u>Narrows Marina, LLC</u>
UST ID #:	<u>4756</u>	Business Name:	<u>Narrows Marina, LLC</u>
Site Name:	<u>Narrows Marina</u>	Address:	<u>9007 South 19th Street</u>
Site Address:	<u>9007 South 19th Street</u>	City:	<u>Tacoma</u> State: <u>WA</u> Zip: <u>98466</u>
City:	<u>Tacoma</u>	Phone:	<u>253-564-3032</u>
Phone:	<u>253-564-3032</u>	Email:	<u>swagner@narrowsmarina.com</u>
III. CERTIFIED SITE ASSESSOR			
Service Provider Name:	<u>Bill Kane</u>	Company Name:	<u>Eco Compliance Corporation</u>
Cell Phone:	<u>206-785-1396</u>	Email:	<u>bill@ecocompliance.biz</u>
		Address:	<u>1823 Bremerton Avenue NE</u>
Certification #:		City:	<u>Renton</u> State: <u>WA</u> Zip: <u>98059</u>
	Exp. Date:		
IV. TANK INFORMATION			
TANK ID	TANK CAPACITY	LAST SUBSTANCE STORED	DATE SITE CHECK OR ASSESSMENT CONDUCTED
<u>1</u>	<u>4000 gallons</u>	<u>Diesel</u>	<u>11-29-16</u>
<u>2</u>	<u>6000 gallons</u>	<u>Gasoline</u>	<u>11-29-16</u>
V. REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT (check one)			
<input checked="" type="checkbox"/> Release investigation following permanent UST system closure (i.e. tank removal or closure-in-place).			
<input type="checkbox"/> Release investigation following a failed tank and/or line tightness test.			
<input type="checkbox"/> Release investigation following discovery of contaminated soil and/or groundwater.			
<input type="checkbox"/> Release investigation directed by Ecology to determine if the UST system is the source of offsite impacts.			
<input type="checkbox"/> UST system is undergoing a "change-in-service", which is changing from storing a regulated substance (e.g. gasoline) to storing a non-regulated substance (e.g. water).			
<input type="checkbox"/> Directed by Ecology for UST system permanently closed or abandoned before 12/22/1988.			
<input type="checkbox"/> Other (describe):			

ECY 010-158 (Rev. Jan. 2015)



VI. CHECKLIST		
<p>The site assessor must check each of the following items and include it in the report. Sections referenced below can be found in the Ecology publication <i>Guidance for Site Checks and Site Assessments for Underground Storage Tanks.</i></p>	YES	NO
1. The location of the UST site is shown on a vicinity map.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. A brief summary of information obtained during the site inspection is provided (Section 3.2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. A summary of UST system data is provided (Section 3.1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. The soils characteristics at the UST site are described. (Section 5.2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Is there any apparent groundwater in the tank excavation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. A brief description of the surrounding land use is provided. (Section 3.1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. The name and address of the laboratory used to perform analyses is provided. The methods used to collect and analyze the samples, including the number and types of samples collected, are also documented in the report. The data from the laboratory is appended to the report.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. The following items are provided in one or more sketches:		
• Location and ID number for all field samples collected	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• If applicable, groundwater samples are distinguished from soil samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Location of samples collected from stockpiled excavated soil	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Tank and piping locations and limits of excavation pit	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Adjacent structures and streets	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Approximate locations of any on-site and nearby utilities	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. If sampling procedures are different from those specified in the guidance, has justification for using these alternative sampling procedures been provided? (Section 3.4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. A table is provided showing laboratory results for each sample collected including; sample ID number, constituents analyzed for and corresponding concentration, analytical method, and detection limit for that method. Any sample exceeding MTCA Method A cleanup standards are highlighted or bolded.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Any factors that may have compromised the quality of the data or validity of the results are described.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred. The requirements for reporting confirmed releases can be found in WAC 173-360-372.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VII. REQUIRED SIGNATURES		
<i>Signature acknowledges the Site Check or Site Assessment complies with UST regulations WAC 173-360-360 through -395.</i>		
<i>Bill Kane, Eco Compliance</i>	<i>Bill Kane</i>	<i>11-29-16</i>
Print or Type Name	Signature of Certified Site Assessor	Date

ECY 010-158 (Rev. Jan. 2015)

