



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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Harbor Island Oil Terminal Cleanups Remain on Track: 2010 – 2014 Review

Washington State Department of Ecology (Ecology) prepared Periodic Review Reports for the three petroleum terminals located on Harbor Island, Seattle, Washington. The three terminals represent one of the ten operable units within the Harbor Island Superfund site called Operable Unit #2 Petroleum Tank Farm Terminals. These reviews focus on 2010 through 2014 and provide information for the current US EPA Five-Year Review Report to be published September 2015.

Cleanup actions at the three terminals are part of the Superfund Site under agreement with Ecology and EPA following the Washington State Model Toxics Control Act regulations WAC 173-340. Each terminal has conducted major work to cleanup soil and groundwater contaminated by petroleum, petroleum substances and two metals –arsenic and lead in the 1990s through 2014. Some long-term cleanup strategies and monitoring continue. Each terminal is under its own legal agreement called a Consent Decree with a Cleanup Action Plan. Site details and Periodic Reports are available at:

- BP West Coast Products Terminal Harbor Island Site (former ARCO Harbor Island Terminal Site) –Cleanup Site ID 4426 and Facility Site ID 2024, at 1652 SW Lander St., Seattle and webpage:
<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=4426>
- Shell Oil Harbor Island Terminal Site (former Equilon Enterprises LLC; former Texaco Harbor Island Site) – Cleanup Site ID 5051 and Facility Site ID 2030, at 2555 – 13th Avenue SW, Seattle and webpage:
<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=5051>
- Kinder Morgan Liquids Terminal Harbor Island Site (former GATX Terminal Corporation Harbor Island) – Cleanup Site ID 6811 and Facility Site ID 88394523, at 2720 – 13th Avenue SW, Seattle and webpage:
<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=6811>
- Seattle Public Library, 1000 Fourth Avenue. Inquire at information desk.
- West Seattle Branch Library, 2306 42nd Avenue SW. Inquire at information desk.
- Ecology's Northwest Regional Office, 3190 160th Avenue SE, Bellevue. By appointment please contact Sally Perkins at 425-649-7190 or Sally.Perkins@ecy.wa.gov

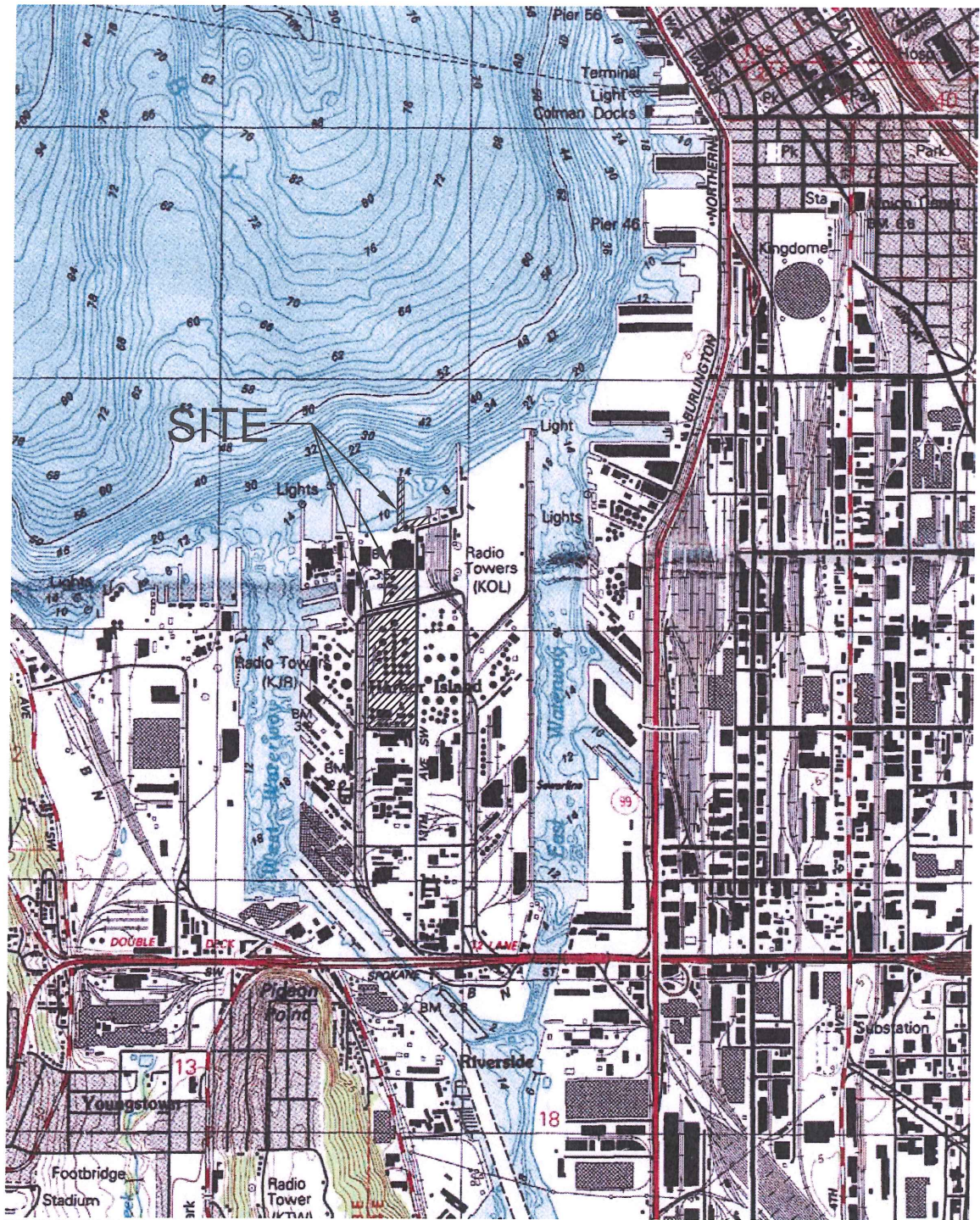
Currently, the three petroleum terminals are in compliance with the state MTCA requirements, and are protective of human health and the environment. The BP terminal shows shoreline benzene levels are decreasing and now in compliance (figure 5) and a new seawall will be installed in 2015-17. Shell conducted several cleanup action tests in the TX-03A Area and are evaluating results and if additional remediation is appropriate for this area. Kinder Morgan has implemented sulfate application to increase bioremediation at Yards B and D. Shell and KM have jointly monitored the SH-04 Area at 13th Ave SW and confirmed that the petroleum TPH-gasoline levels are contained and are decreasing. Ecology has approved Monitored Natural Attenuation as appropriate remediation for the SH-04 Area.

For OU-2 information contact Ecology's site manager, Maura O'Brien at Maura.O'Brien@ecy.wa.gov or 425-649-7249, or special accommodations or reports in alternative format, call 425-425-7117, 711 (relay service) or 877-833-6341 (TTY).

July 1, 2015



- Figure 1. Harbor Island Site Vicinity Map.
- Figure 2. Harbor Island Superfund Site with Operable Units.
- Figure 3. Tank Farm Operable Unit #2 Tank Farm Terminal Facility Boundaries.
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- Figure 11. Kinder Morgan Terminal Groundwater Elevation Contours –March 2015.
- Figure 12. Kinder Morgan Terminal First Semi-Annual 2015 Groundwater Results.
- Figure 13. Kinder Morgan Terminal First Quarter 2015 Performance Monitoring Groundwater Results.



SOURCE: SEATTLE SOUTH, WASHINGTON USGS TOPOGRAPHIC QUADRANGLE 1983.

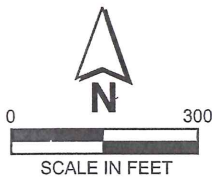
Figure 1. Harbor Island Site Vicinity Map.

FIGURE 1



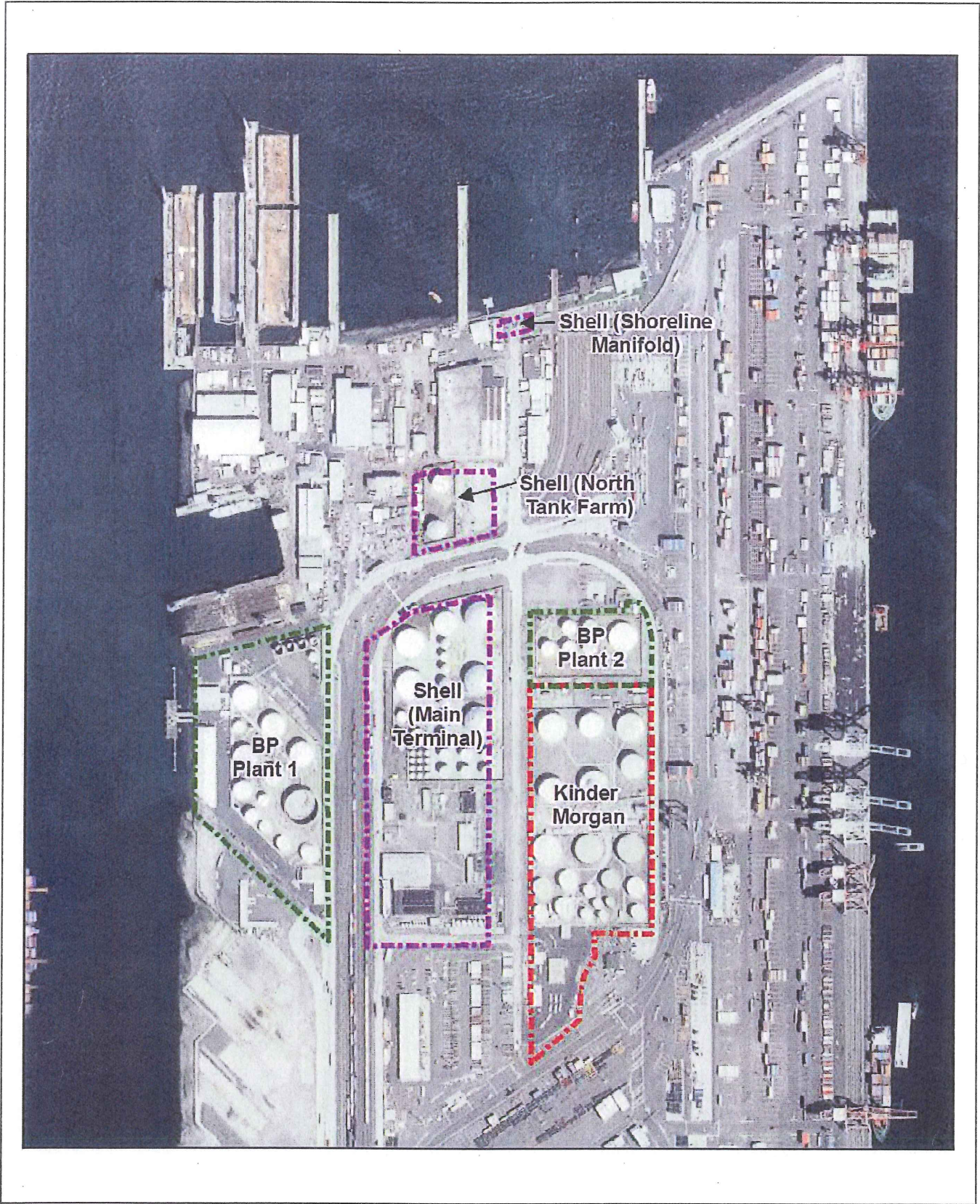


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Operable Unit Boundary

Figure 2. Harbor Island Superfund Site with Operable Units.



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Figure 3. Tank Farm Operable Unit #2
Tank Farm Terminal Facility Boundaries.

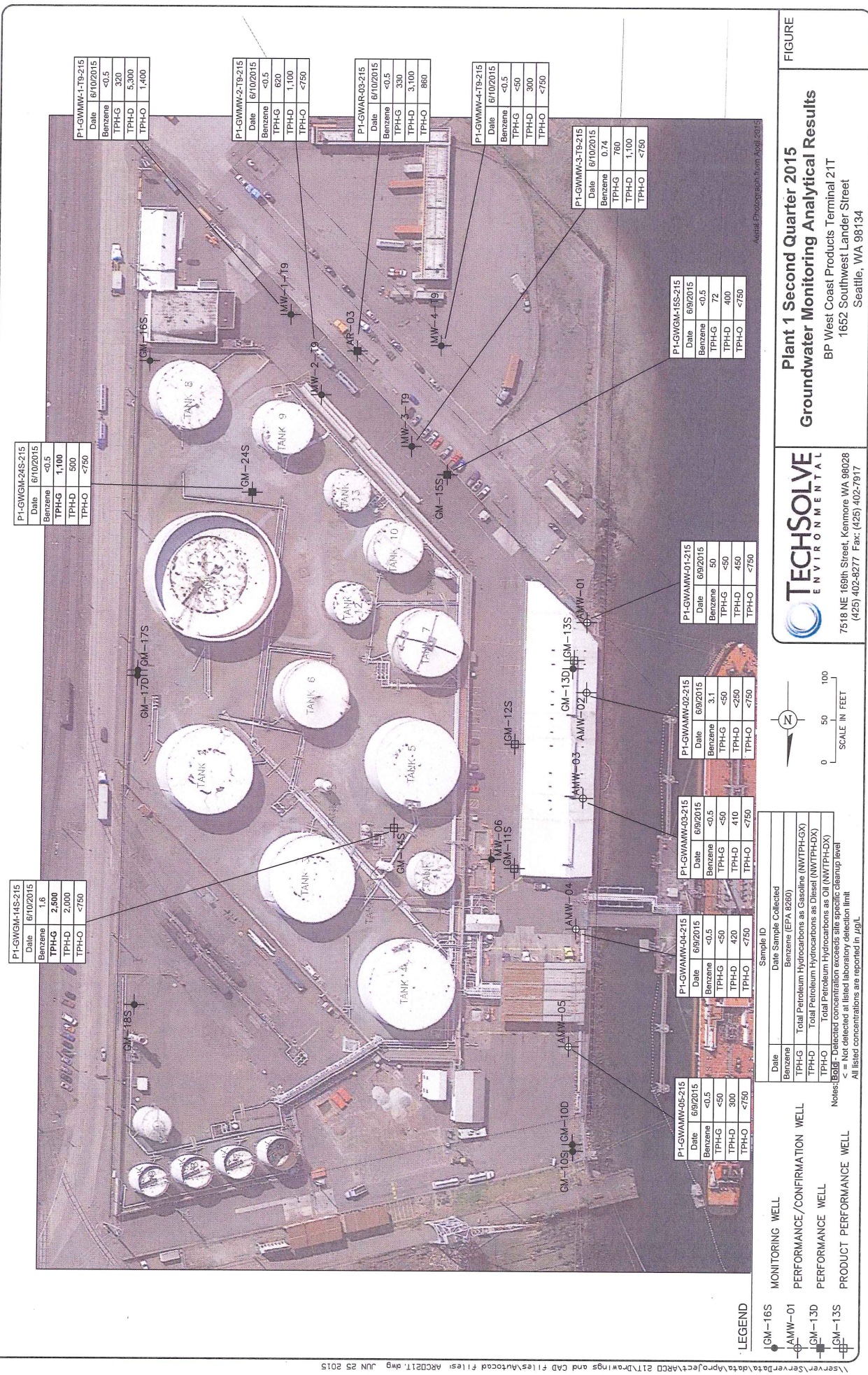
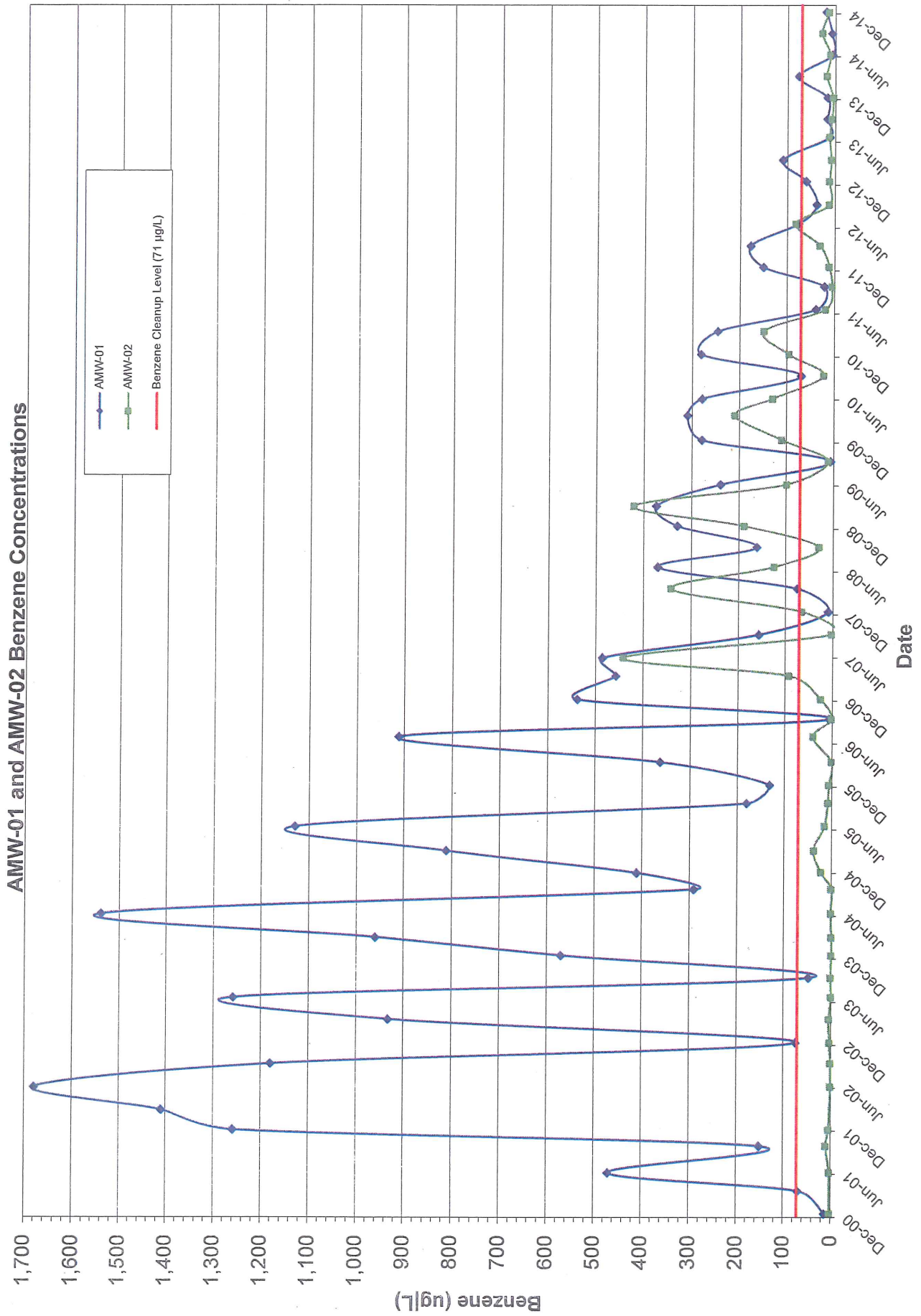


Figure 5. BP Terminal Groundwater Monitoring Analytical Results – Second Quarter 2015.

Figure 6. BP Near Shore Groundwater Compliance Monitoring Wells AMW-01 & AMW-02 Benzene Concentrations from December 2000 to December 2014.



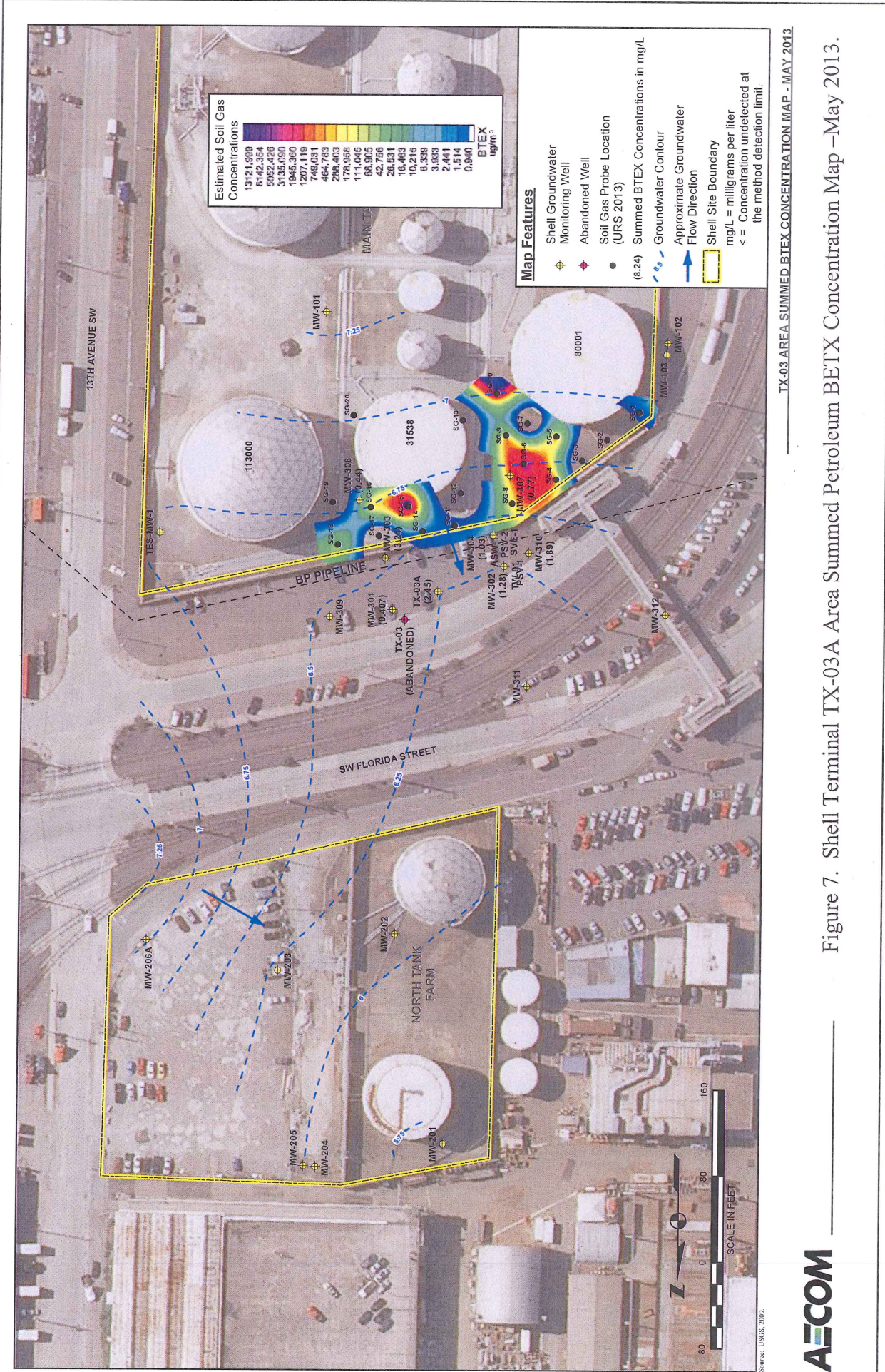


Figure 7. Shell Terminal TX-03A Area Summed Petroleum BTEX Concentration Map –May 2013.



Figure 8. Shell Terminal TX-03A Area Monitoring Well TX-03A Groundwater BTEX and Gasoline Concentrations from January 2004 to December 2014.

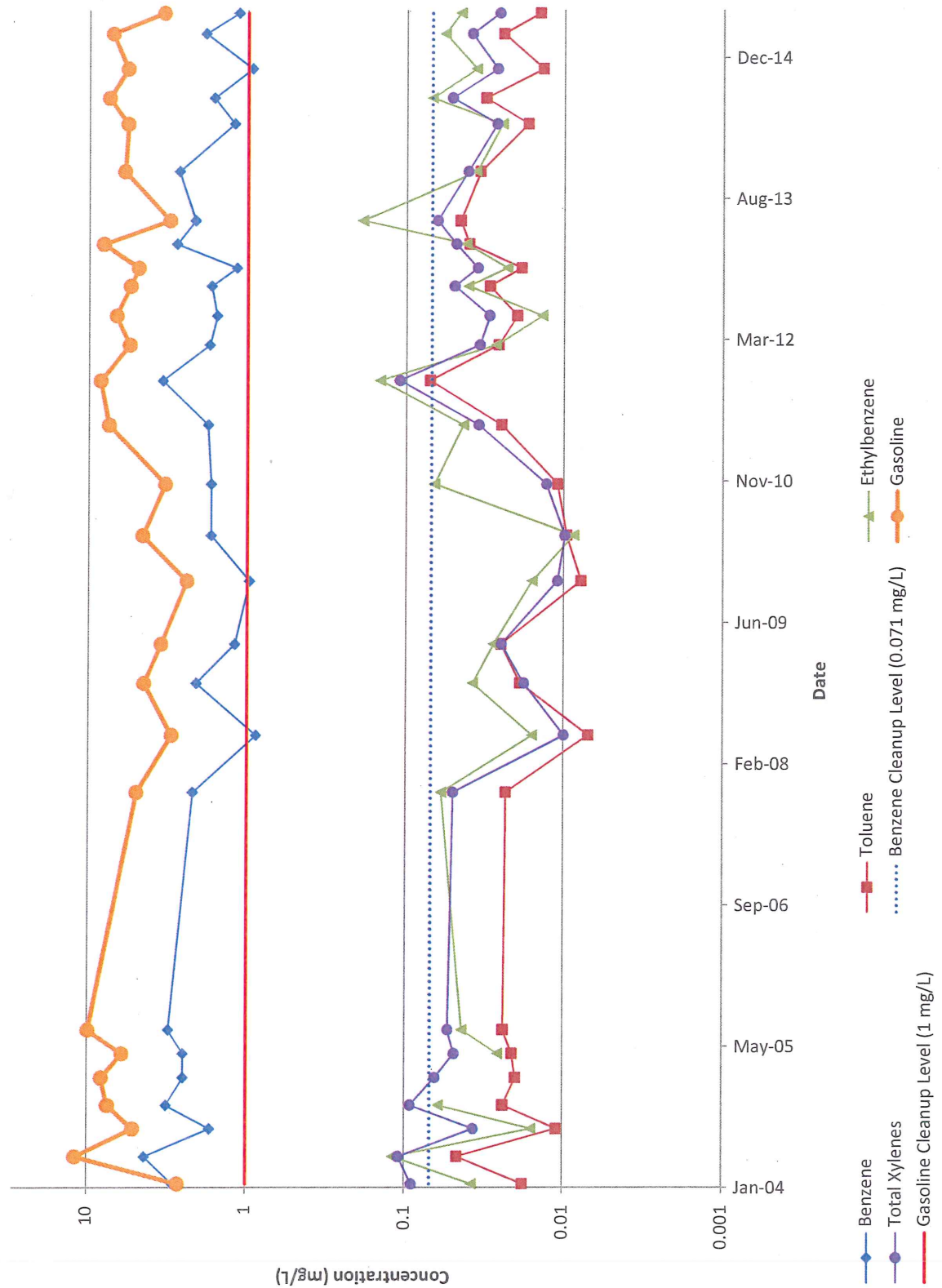


Figure 10. Shell with Kinder Morgan work at SH-04 Area at 13th Avenue SW Groundwater BTEX and Gasoline Concentrations from December 2003 to December 2014 prepared by Shell.

