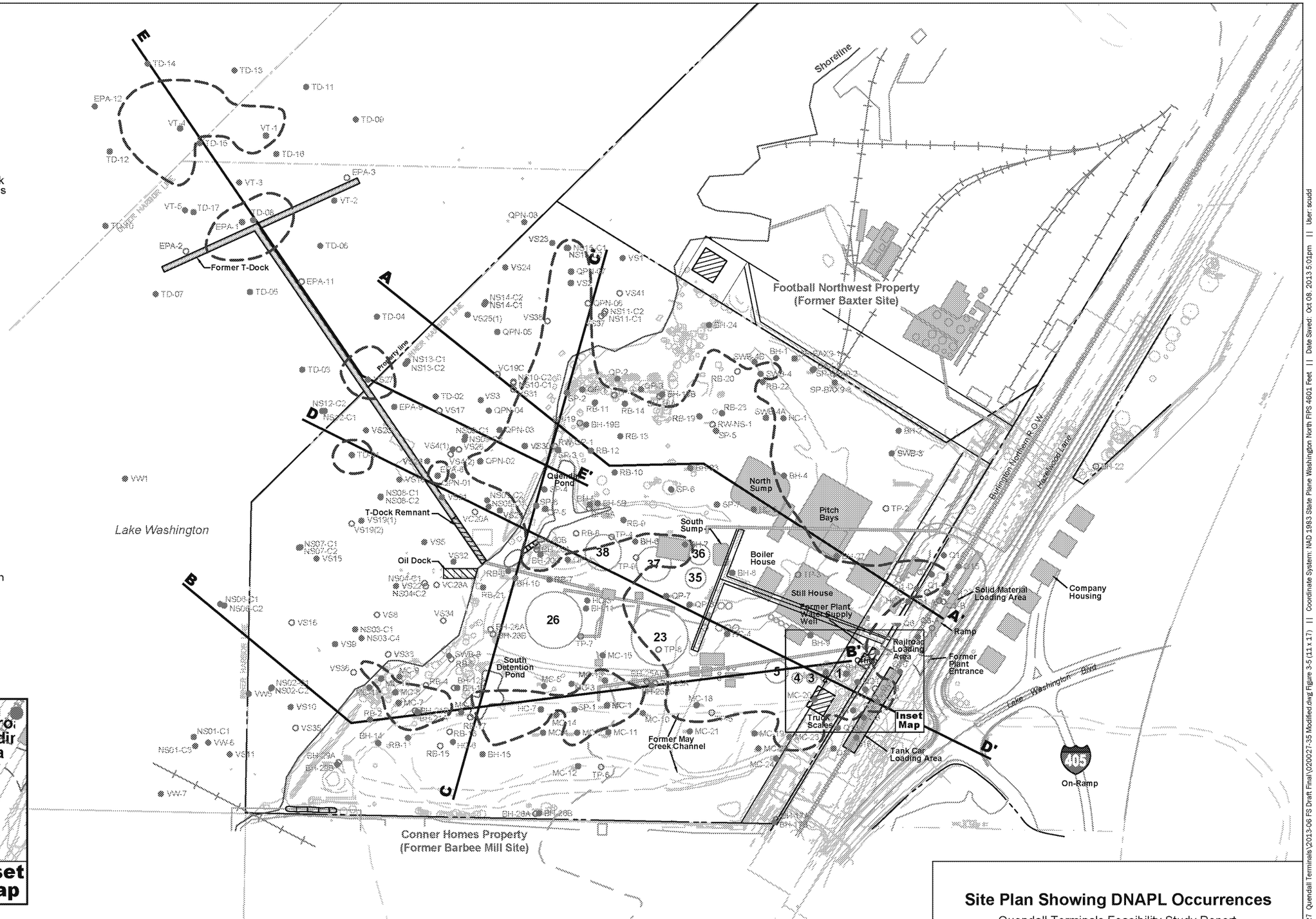
Legend

- TD-08 — Boring with DNAPL
- VT-3 — Boring with no DNAPL
- EPA-2 — Boring with no DNAPL but base is above adjacent occurrences, or lack of adequate soil sample descriptions
- Estimated Extent of DNAPL
- Detention Pond
- Existing Structure
- 23 — Historical Tank with Tank Number
- Other Historical Feature
- Current Shoreline
- 1916 Shoreline
- A A' — Cross Section Location and Designation

Notes

1. DNAPL occurrences based on observations of oil-coated or oil-wetted soil. Soil exhibiting only sheen or staining is not identified as containing DNAPL. See Attachment A-11 of the Data Collection Work Plan (Anchor QEA & Aspect 2009).
2. Boundaries generally based on midpoint between borings containing DNAPL and borings with no DNAPL (if sufficiently deep), adjusted based on Surfer modeling. Refer to Section 4.4 of RI Report (Anchor QEA and Aspect 2012).



Site Plan Showing DNAPL Occurrences

Quendall Terminals Feasibility Study Report

Renton, Washington

Aspect CONSULTING	ARCADIS	FIRM ASPECT	FIGURE NO.
		DRAWN BY: PMB/SCC	3-5

CAD Path: Q:\Quendall\020027 Quendall Terminals\2013-06 FS Draft Final\020027-35 Modified.dwg Figure 3-5 (11 x 17) || Coordinate System: NAD 1983 State Plane Washington North FIPS 4601 Feet || Date Saved: Oct 08, 2013 5:01pm || User: scudd

Legend

- Current Shoreline (Ordinary High Water)
- Property Line
- A — A' Cross Section Location and Designation
- Detention Pond
- Existing Structure
- 23 Historical Tank with Tank Number
- Other Historical Feature
- Estimated Extent of DNAPL
- Estimated Extent of PRG Exceedances in Groundwater (Subsurface Soil and Groundwater Area)
- Former May Creek Channel DNAPL Area
- Quendall Pond Upland DNAPL Area
- Quendall Pond Sediment DNAPL Area
- Former Railroad DNAPL Area
- T-Dock DNAPL Area
- Other Upland DNAPL Areas
- Other Aquatic DNAPL Areas
- Surface Soil Area*
- Surface and Subsurface Sediment Area*

* PRG Exceedance Areas

Notes

1. Refer to Section 4.4 for descriptions of the areas identified in the Legend.
2. Refer to Figure 3-5 for notes regarding delineation of DNAPL.

N

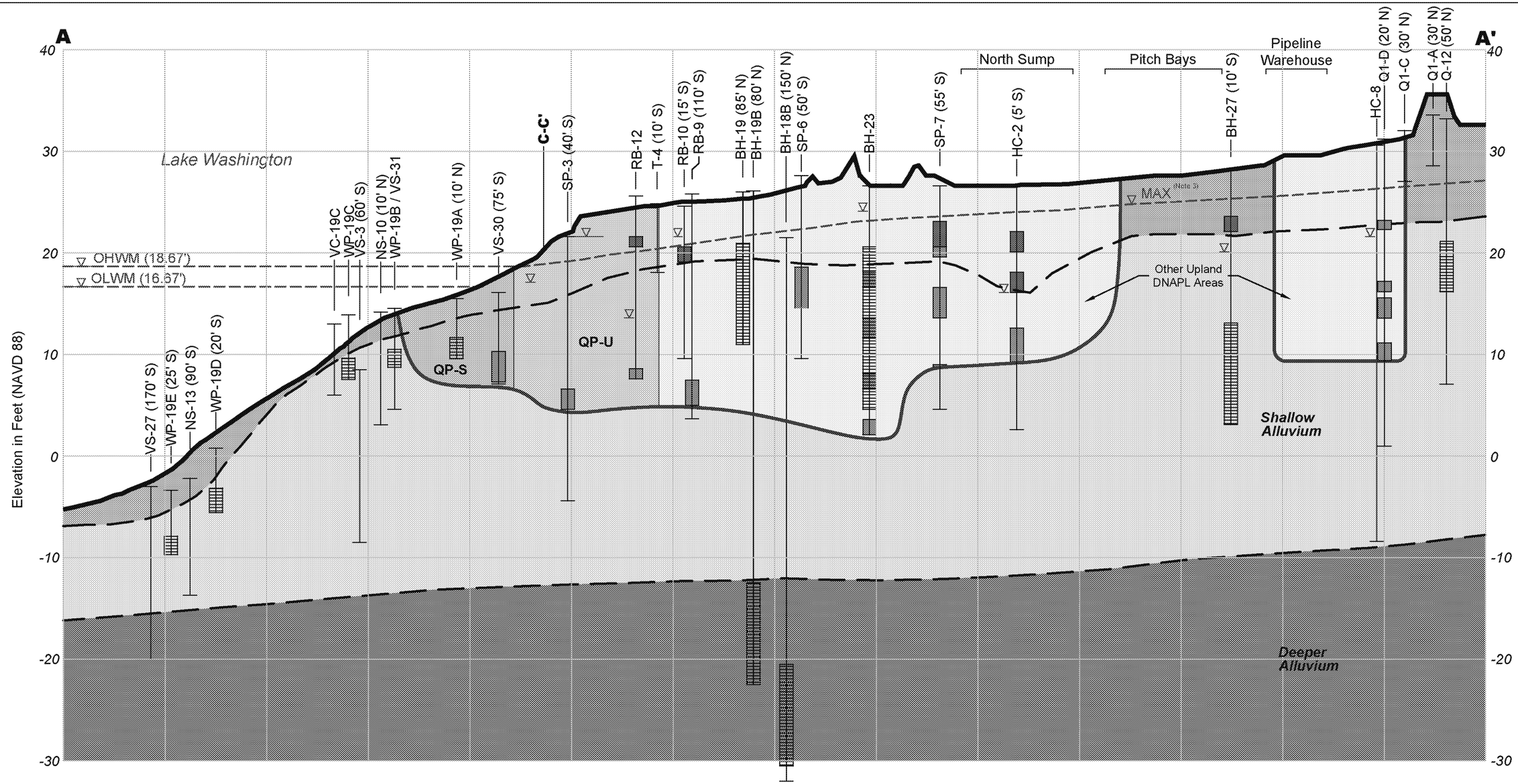
0 200 400
Feet

Areas Targeted for Remedial Action

Quendall Terminals Feasibility Study Report
Renton, Washington

Aspect CONSULTING | ARCADIS | FIRM ASPECT | DRAWN BY: JJP/DAH/SCC | FIGURE NO. 4-1

CAD Path: Q:\Quendall\020027 Quendall Terminals\2013-06 FS Draft Final\020027-41.dwg Figure 4-1 (11 x 17) || Date Saved: Oct 10, 2013 2:43pm || User: scudd



Legend

BH-27 (10' S) — Exploration ID and Offset from Cross Section

Water Level Observed at Time of Drilling

Solidified Tar Products

Non-Aqueous Phase Liquids

Well Screen

Fill or Surface Sediment: Silt, Sand, Gravel, Wood and Mixed Debris

Shallow Alluvium: Stratified Organic Silt, Peat, Sand

Deeper Alluvium: Sand and Gravels

Estimated Extent of DNAPL

Notes:
1. Refer to Figure 3-1 for exploration locations.
2. Figure 4-1 Notes and Legend also apply to this figure.
3. Maximum observed groundwater elevation based on periodic monitoring of shallow aquifer monitoring wells.

Horizontal Scale
0 100 200
Feet

Vertical Scale
0 10 20
Feet

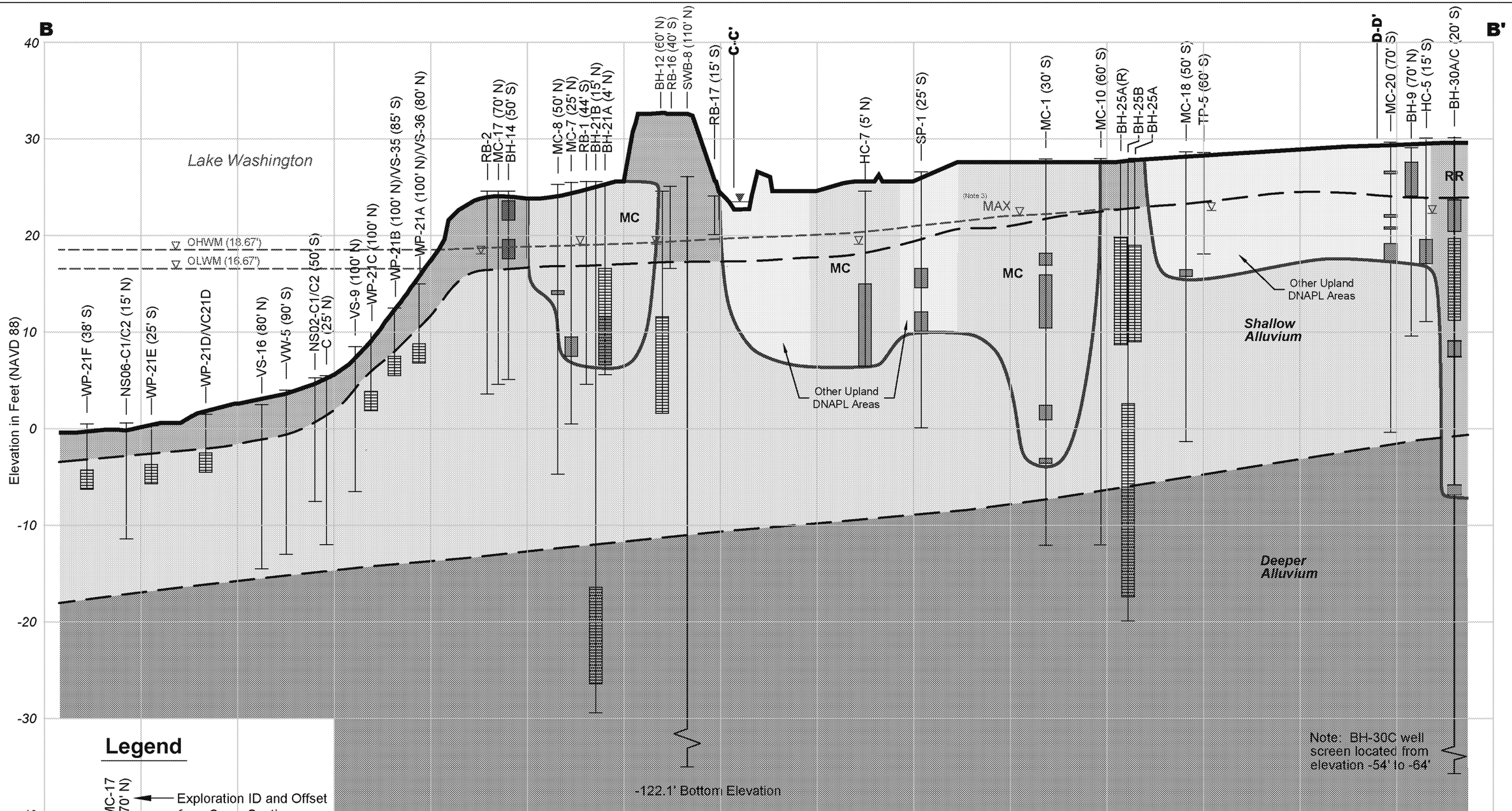
Vertical Exaggeration x10

Estimated Extent of DNAPL along Cross Section A-A'

Quendall Terminals Feasibility Study Report
Renton, Washington

Aspect CONSULTING | ARCADIS | FIRM ASPECT | DRAWN BY JJP/DAH/SCC | FIGURE NO. 4-2

CAD Path: Q:\Quendall\020027 Quendall Terminals\2013-06 FS Draft Final\020027-42.dwg Figure 4-2 (11 x 17) || Coordinate System: NAD 1983 State Plane Washington North FIPS 4601 Feet || Date Saved: Jun 27, 2013 3:41pm || User: scudd



Legend

MC-17 (70' N) — Exploration ID and Offset from Cross Section

Water Level Observed at Time of Drilling

Solidified Tar Products

Non-Aqueous Phase Liquids

Well Screen

Fill or Surface Sediment: Silt, Sand, Gravel, Wood and Mixed Debris

Shallow Alluvium: Stratified Organic Silt, Peat, Sand

Deeper Alluvium: Sand and Gravels

Estimated Extent of DNAPL

Notes:
1. Refer to Figure 3-1 for exploration locations.
2. Figure 4-1 Notes and Legend also apply to this figure.
3. Maximum observed groundwater elevation based on periodic monitoring of shallow aquifer monitoring wells.

Horizontal Scale

0 100 200 Feet

Vertical Scale

0 10 20 Feet

Vertical Exaggeration x10

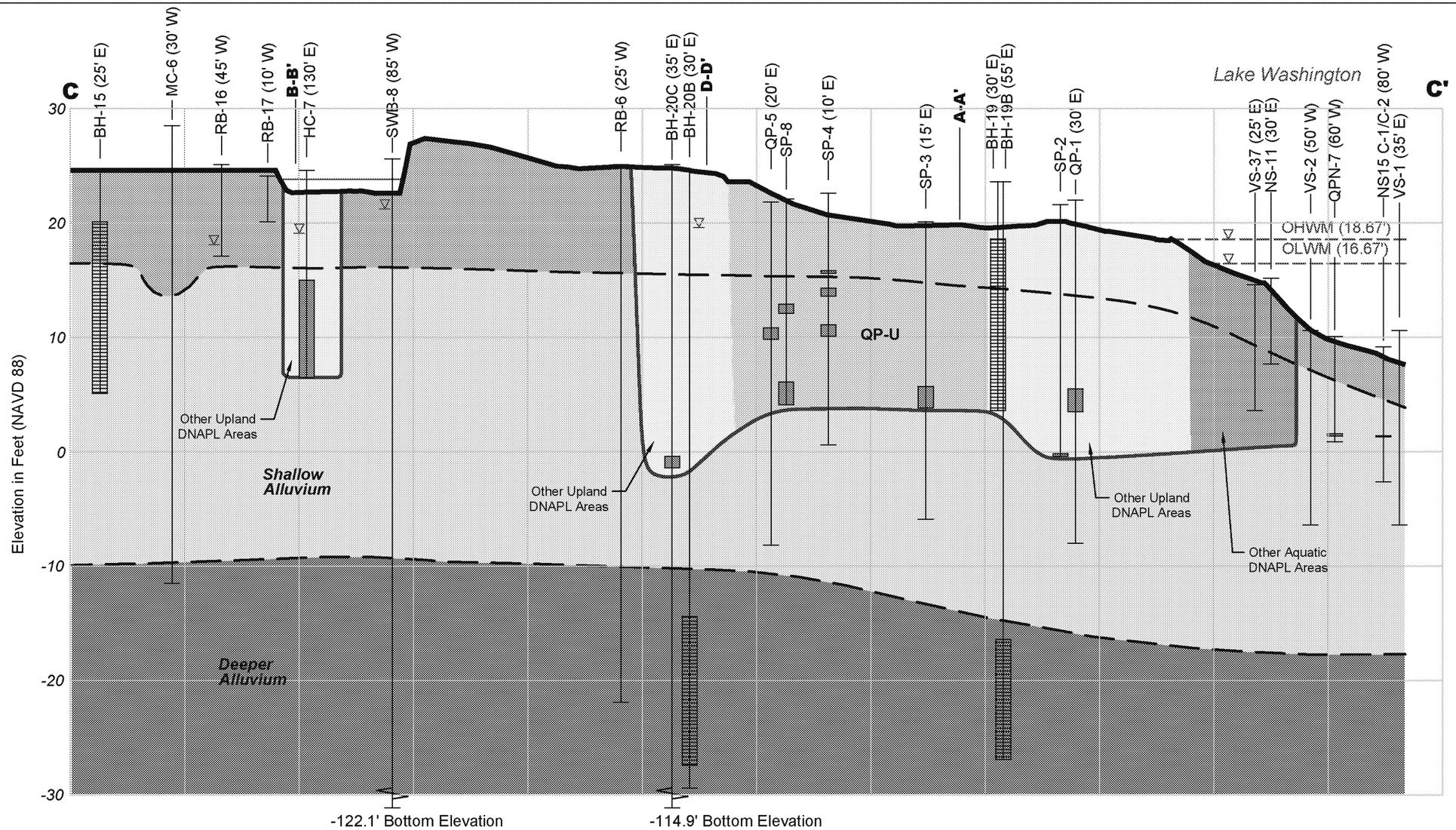
Estimated Extent of DNAPL along Cross Section B-B'

Quendall Terminals Feasibility Study Report

Renton, Washington

Aspect CONSULTING | ARCADIS | FIRM ASPECT | DRAWN BY JJP/DAH/SCC | FIGURE NO. 4-3

CAD Path: Q:\Quendall\020027 Quendall Terminals\2013-06 FS Draft Final\020027-43.dwg Figure 4-3 (11 x 17) || Coordinate System: NAD 1983 State Plane Washington North FIPS 4601 Feet || Date Saved: Aug 12, 2013 2:15pm || User: scudd



Legend

BH-15 (25' E) — Exploration ID and Offset from Cross Section

Water Level Observed at Time of Drilling

Non-Aqueous Phase Liquids

Well Screen

Fill or Surface Sediment: Silt, Sand, Gravel, Wood and Mixed Debris

Shallow Alluvium: Stratified Organic Silt, Peat, Sand

Deeper Alluvium: Sand and Gravels

Estimated Extent of DNAPL

Notes:
1. Refer to Figure 3-1 for exploration locations.
2. Figure 4-1 Notes and Legend also apply to this figure.

Horizontal Scale
0 100 200
Feet

Vertical Scale
0 10 20
Feet

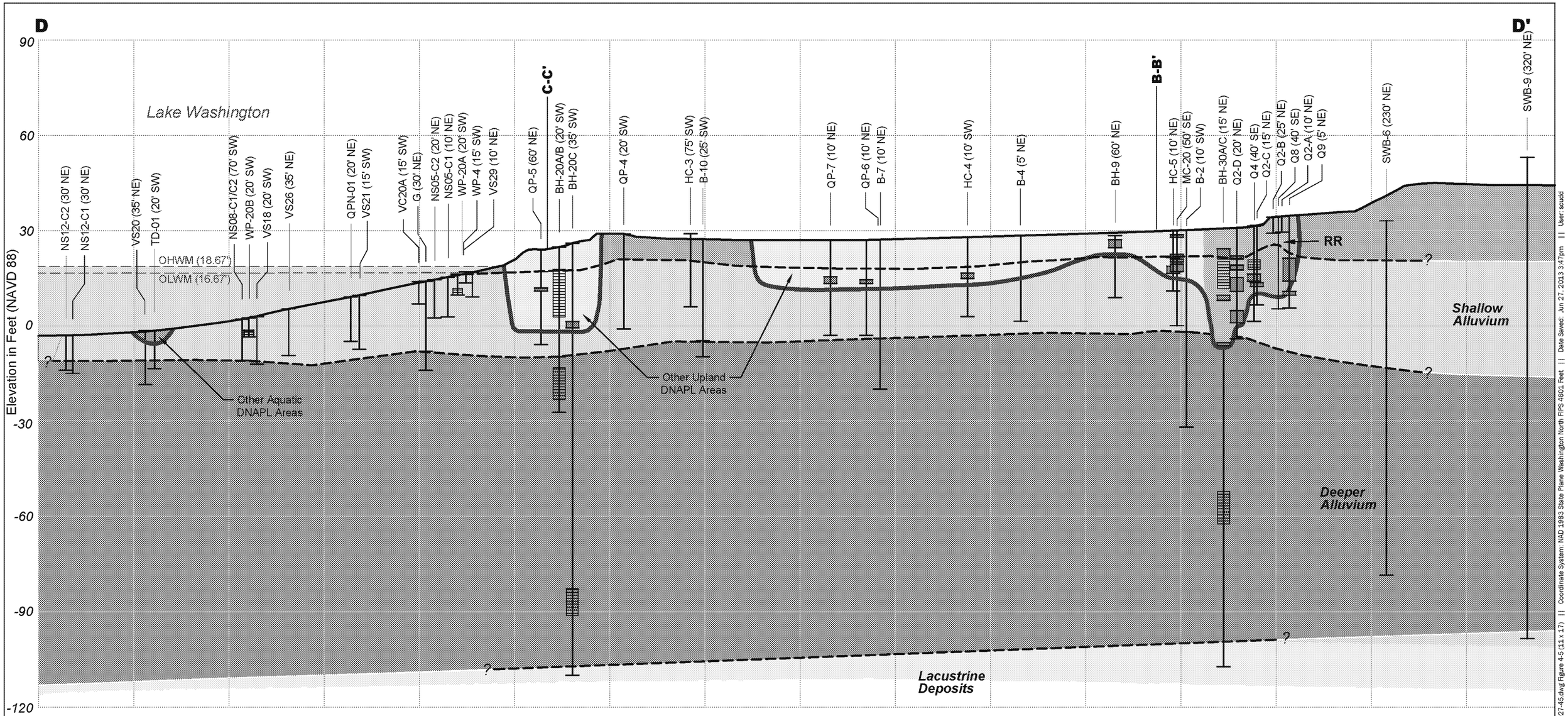
Vertical Exaggeration x10

Estimated Extent of DNAPL along Cross Section C-C'

Quendall Terminals Feasibility Study Report
Renton, Washington

Aspect CONSULTING | ARCADIS | FIRM ASPECT | DRAWN BY: JJP/DAH/SCC | FIGURE NO. 4-4

CAD Path: Q:\Quendall\020027 Quendall Terminals\2013-06 FS Draft Final\020027-44.dwg Figure 4-4 (11 x 17) || Coordinate System: NAD 1983 State Plane Washington North FIPS 4601 Feet || Date Saved: Jun 27, 2013 3:44pm || User: scudd



Legend

NS12-C2 (30' NE) — Exploration ID and Offset from Cross Section

Non-Aqueous Phase Liquid

Well Screen

Fill or Surface Sediment: Silt, Sand, Gravel, Wood and Mixed Debris

Shallow Alluvium: Stratified Organic Silt, Peat, Sand

Deeper Alluvium: Sand and Gravels

Lacustrine Deposits: Silt and Clay

Estimated Extent of DNAPL

Horizontal Scale

0 100 200 Feet

Vertical Scale

0 30 60 Feet

Vertical Exaggeration x3.33

Notes:
1. Refer to Figure 3-1 for exploration locations.
2. Figure 4-1 Notes and Legend also apply to this figure.

Estimated Extent of DNAPL along Cross Section D-D'

Quendall Terminals Feasibility Study Report

Renton, Washington

Aspect CONSULTING | ARCADIS | FIRM ASPECT | DRAWN BY JJP/DAH/SCC | FIGURE NO. 4-5

CAD Path: Q:\Quendall\020027 Quendall Terminals\2012-06 FS Report Revisions\020027-45.dwg Figure 4-5 (11 x 17) || Coordinate System: NAD 1983 State Plane Washington North FIPS 4601 Feet || Date Saved: Jun 27, 2013 3:47pm || User: scudd