

 Downgradient Surface Soil Sampling Location

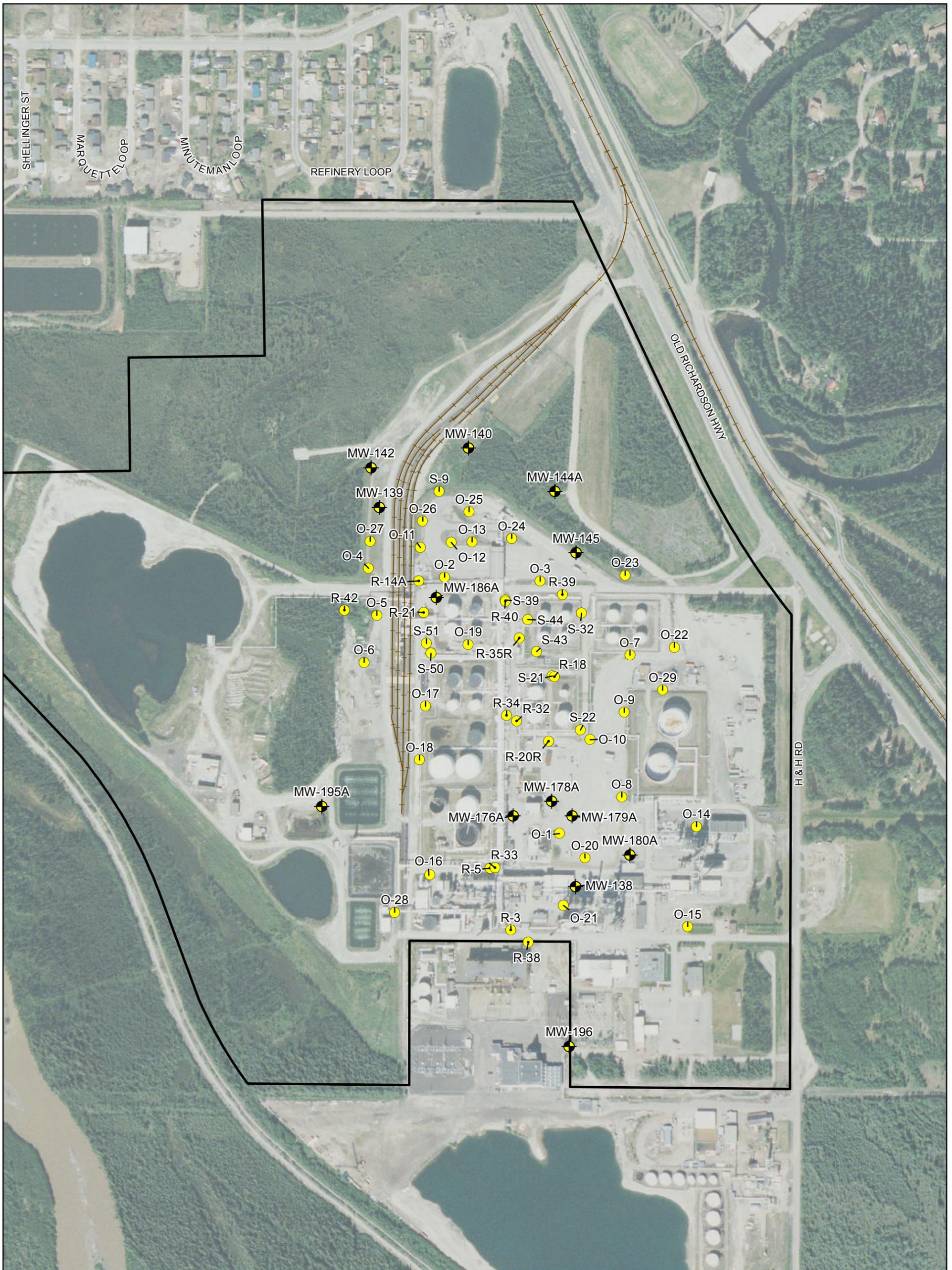
 FHRA Property Boundary



0 500 1,000 2,000

Feet

Figure 15
 DOWNGRADIANT SURFACE SOIL
 SAMPLING LOCATIONS
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



-  Monitoring Well
-  Observation Well
-  Recovery Well
-  FHRA Property Boundary

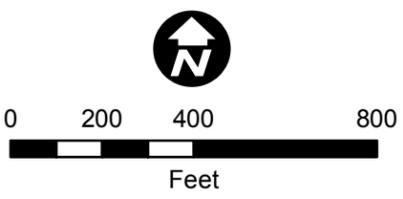
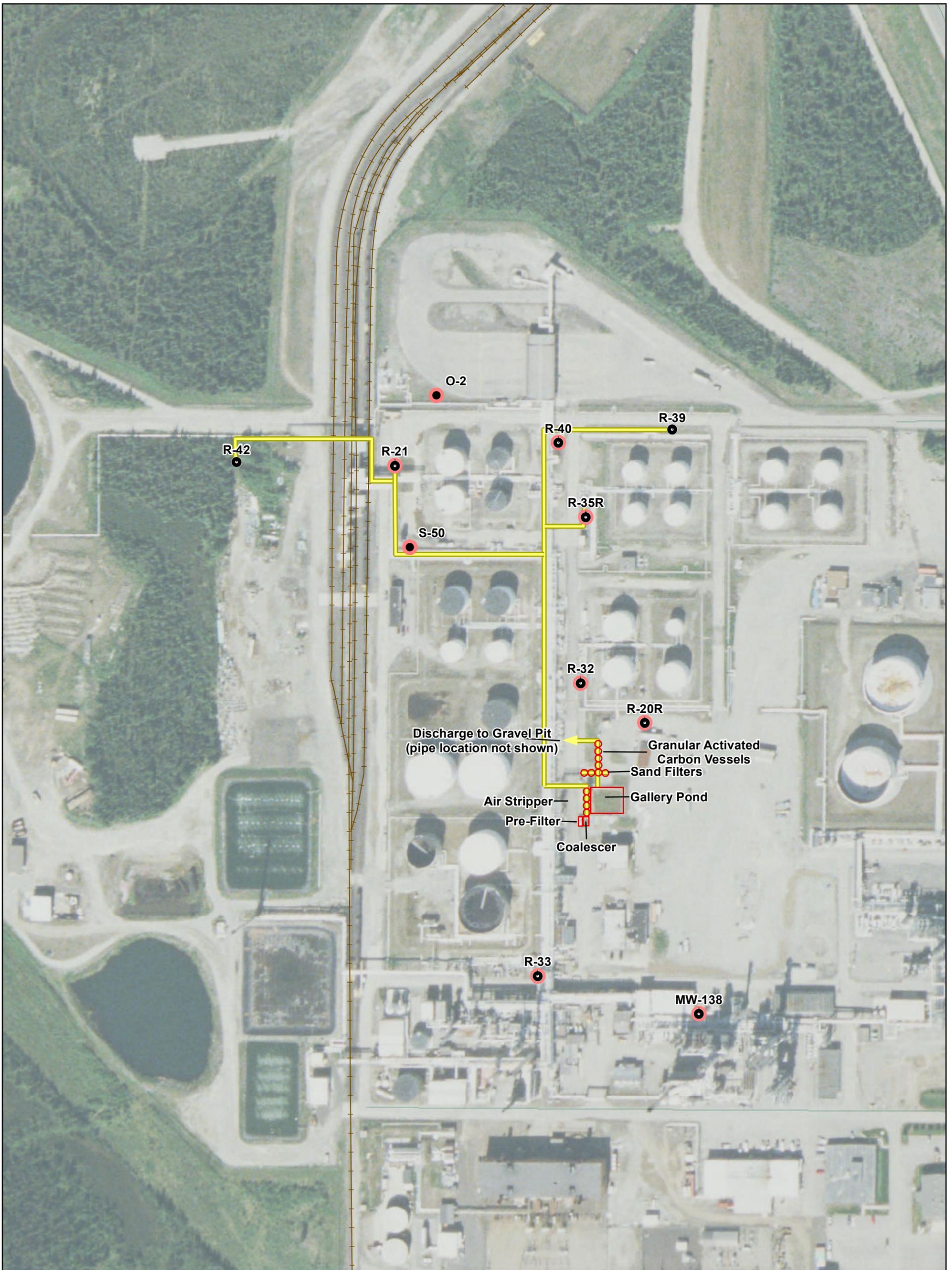


Figure 16
 LNAPL MONITORING NETWORK
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



- Observation Well
- Recovery Well
- Installed Product Recovery System
- Remediation System Piping

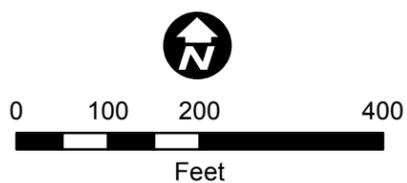
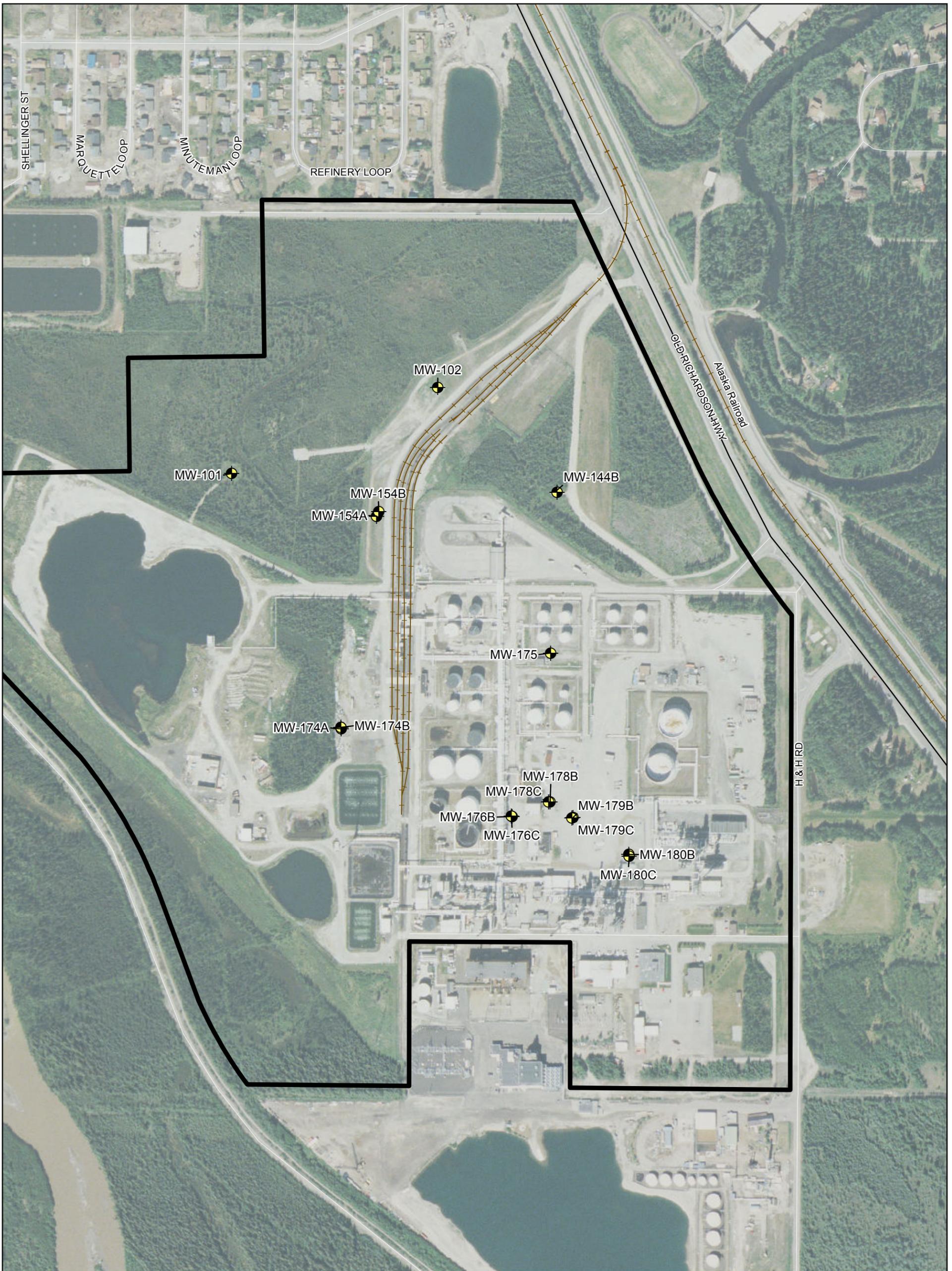


Figure 17
 GROUNDWATER REMEDIATION
 SYSTEM LAYOUT
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



 Monitoring Well
 FHRA Property Boundary

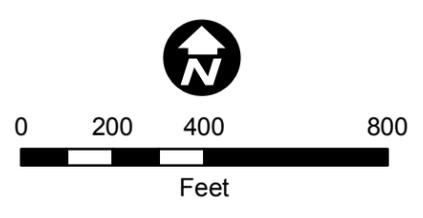
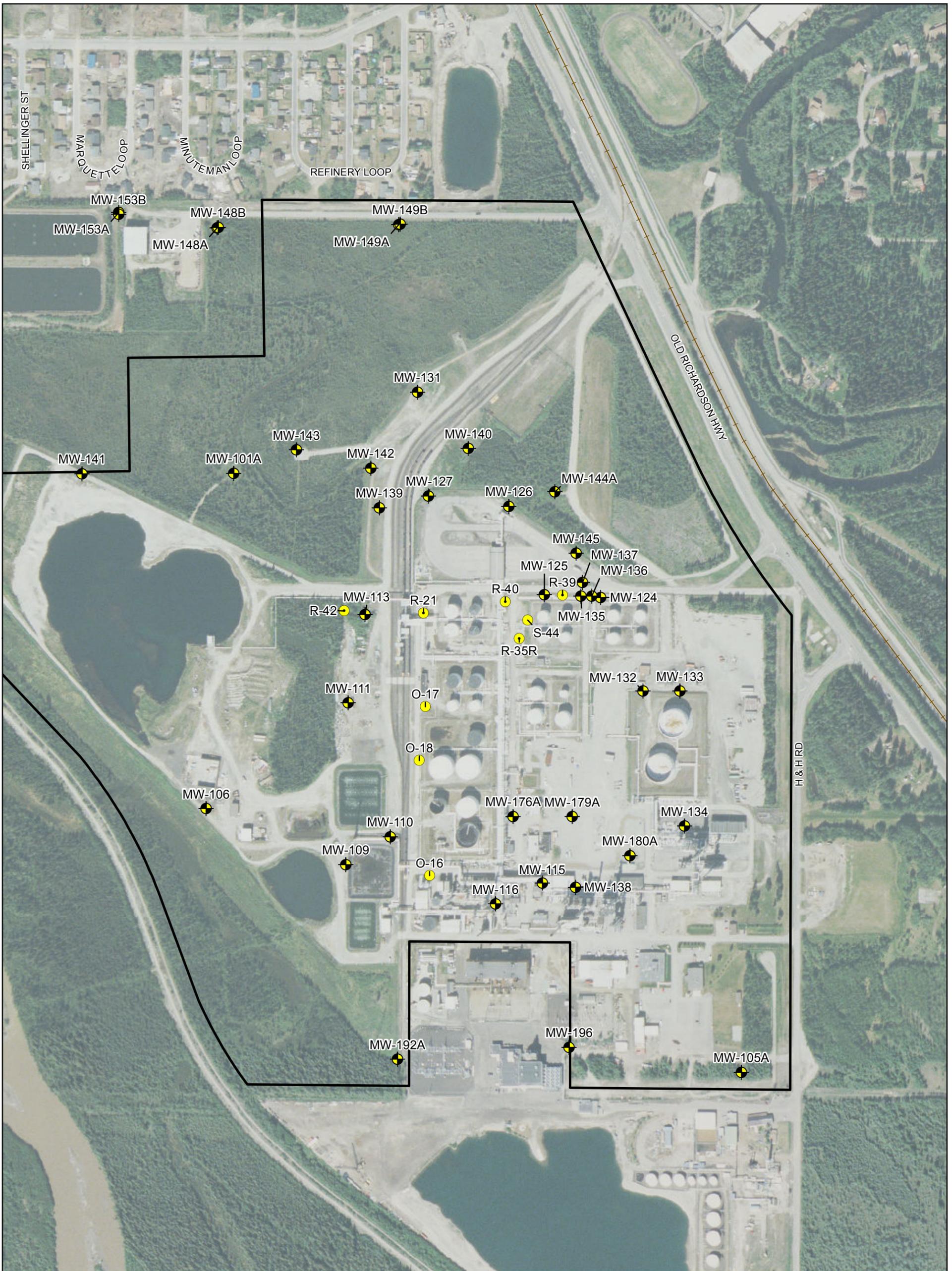


Figure 18
 DNAPL ASSESSMENT WELLS
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



-  Monitoring Well
-  Observation Well
-  Recovery Well
-  FHRA Property Boundary

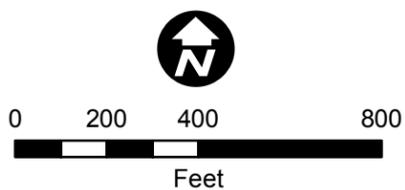
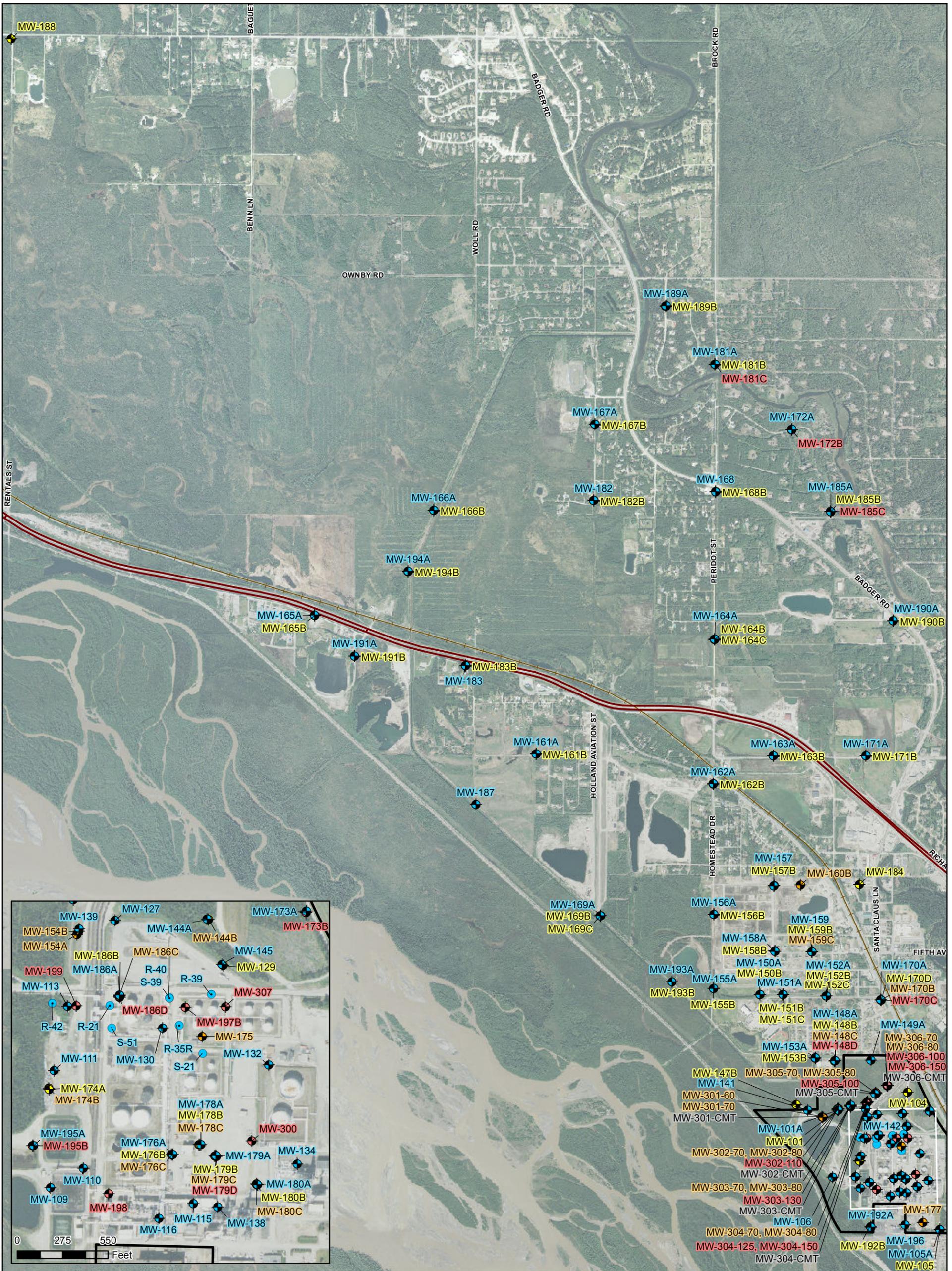


Figure 19
BTEX MONITORING NETWORK
North Pole Refinery
Flint Hills Resources Alaska, LLC



- ◆ Monitoring Well Within 10 Feet of the Water Table
- ◆ Monitoring Well 10 - 55 Feet Below the Water Table
- ◆ Monitoring Well 55 - 90 Feet Below the Water Table
- ◆ Monitoring Well 90 - 160 Feet Below the Water Table
- ◆ CMT Wells, Multiple Screens
- Recovery Well Within 10 Feet of the Water Table
- Observation Well Within 10 Feet of the Water Table
- FHRA Property Boundary

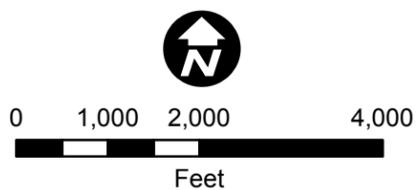
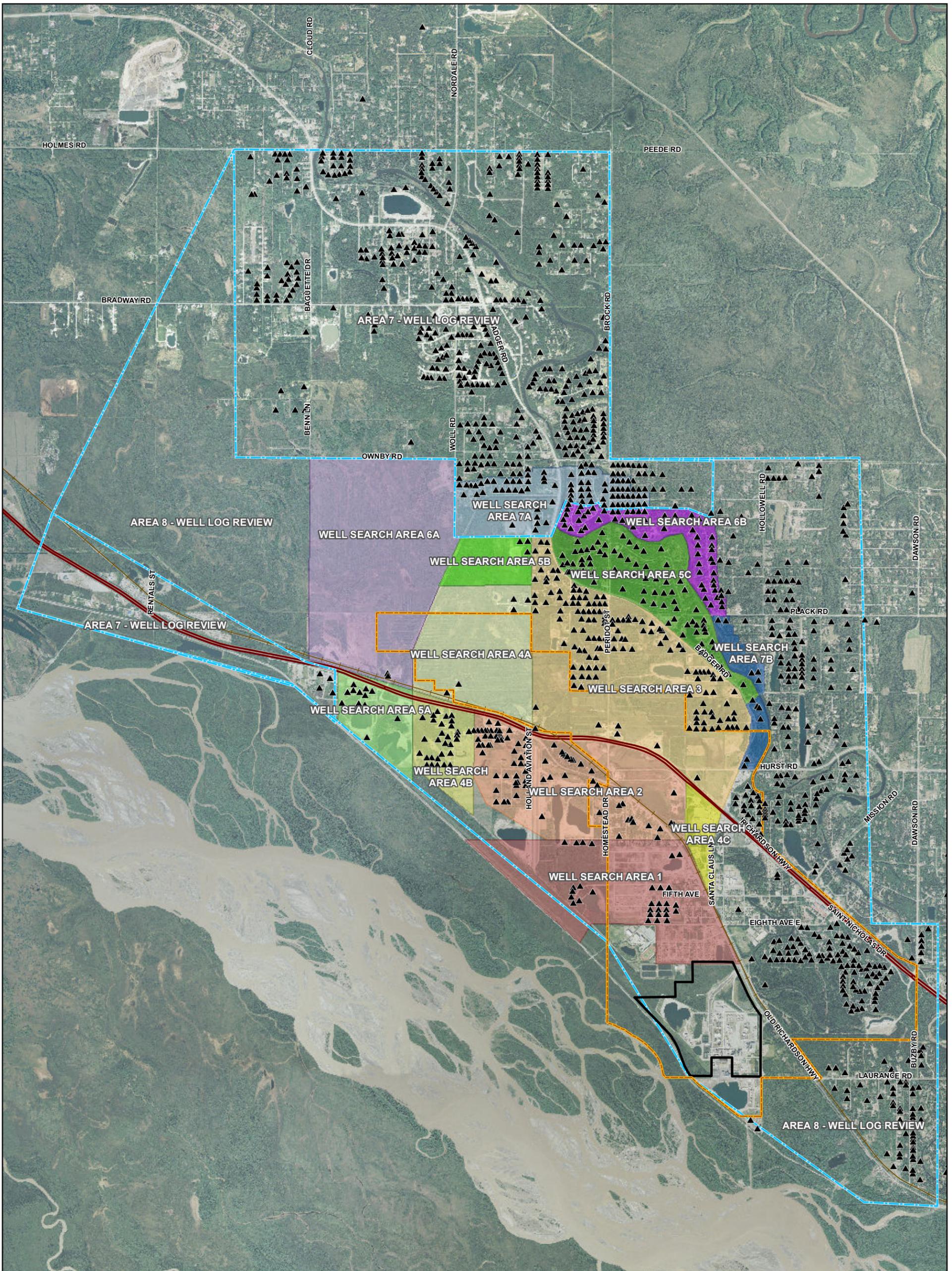


Figure 20
SULFOLANE MONITORING NETWORK
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



- ▲ Private Wells
- ▭ North Pole City Boundary
- ▭ Well Log Search Areas
- Well Search Areas
- ▭ 1
- ▭ 2
- ▭ 3
- ▭ 4a
- ▭ 4b

- ▭ 4c
- ▭ 5a
- ▭ 5b
- ▭ 5c
- ▭ 6a
- ▭ 6b
- ▭ 7a
- ▭ 7b

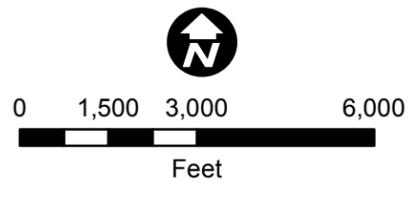


Figure 21
 PRIVATE WELL SEARCH AREAS
 AND SAMPLING LOCATIONS
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



 Monitoring Well
 FHRA Property Boundary

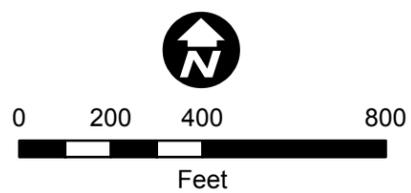


Figure 22
 OTHER COPCs IN GROUNDWATER
 SAMPLING LOCATIONS
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



-  Monitoring Well
-  FHRA Property Boundary

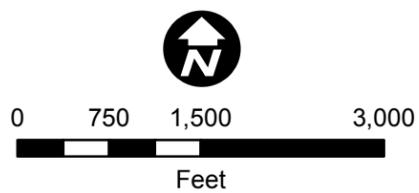


Figure 23
 MNA MONITORING NETWORK
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



-  Biotrap Sampler Installation Well - Phase 1
-  Proposed Biotrap Sampler Installation Well - Phase 2
-  Sulfolane Isopleth in µg/L from 4th Quarter 2011 (Dashed Where Approximate)
-  FHRA Property Boundary

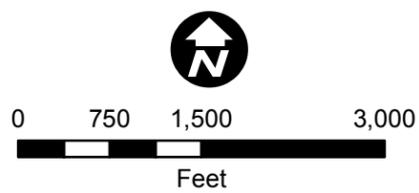
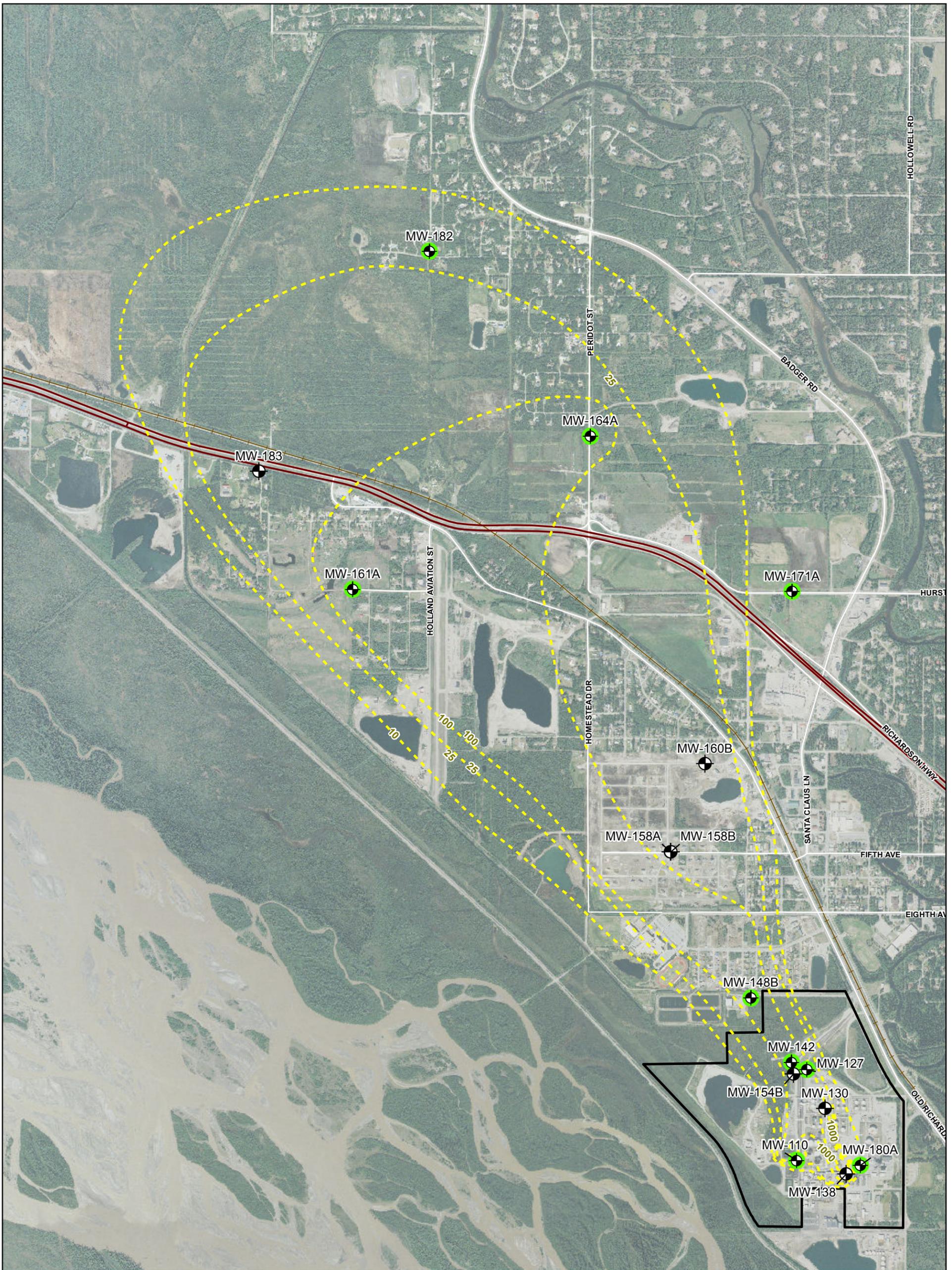


Figure 24
 MICROBIOLOGICAL
 CHARACTERIZATION
 MONITORING WELL NETWORK
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



- Isotope Investigation Monitoring Well - Phase 1
- ⊕ Proposed Isotope Investigation Monitoring Well - Phase 2
- - - Sulfolane Isopleth in µg/L from 4th Quarter 2011 (Dashed Where Approximate)
- FHRA Property Boundary

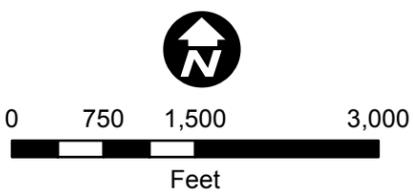


Figure 25
 STABLE ISOTOPE INVESTIGATION
 MONITORING WELL NETWORK
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



-  Residential Well
-  Monitoring Well
-  FHRA Property Boundary

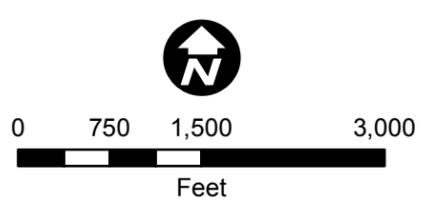


Figure 26
 GEOCHEMICAL EVALUATION OF
 PRIVATE WELL RESULTS
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



Figure 27
GRAVEL PIT AND SURFACE
WATER SAMPLE LOCATIONS
North Pole Refinery
Flint Hills Resources Alaska, LLC

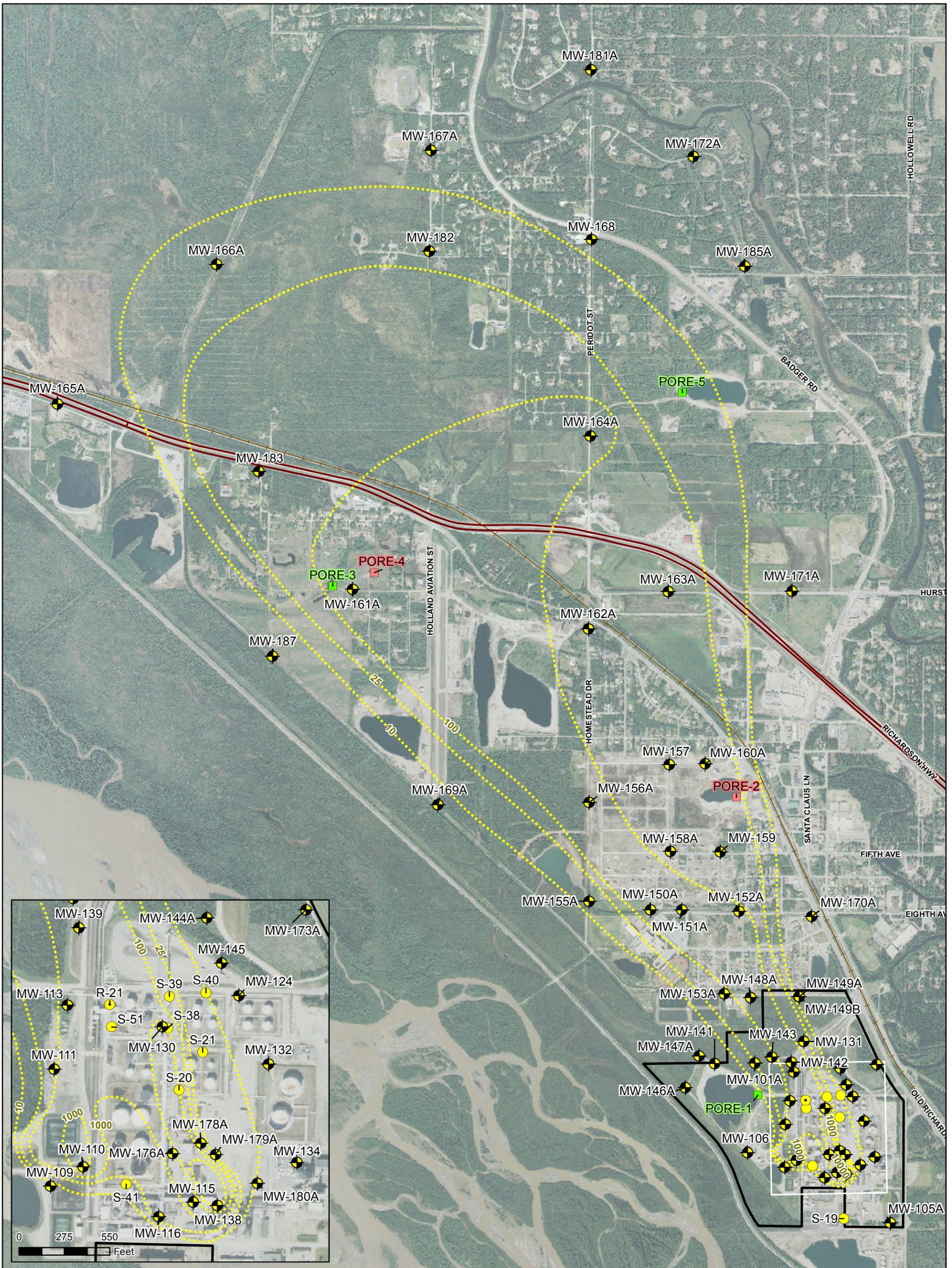


Figure 28
 PORE WATER
 SAMPLING LOCATIONS
 North Pole Refinery
 Flint Hills Resources Alaska, LLC

- Sampled Pore Water Locations
- Proposed Pore Water Sample Locations
- Monitoring Well
- Observation Well
- Recovery Well
- ⋯ Approximate Sulfolane Isopleth in $\mu\text{g/L}$
- FHRA Property Boundary

