

 FHRA Property Boundary

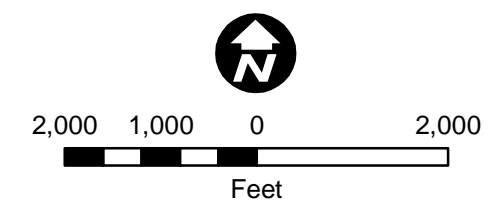
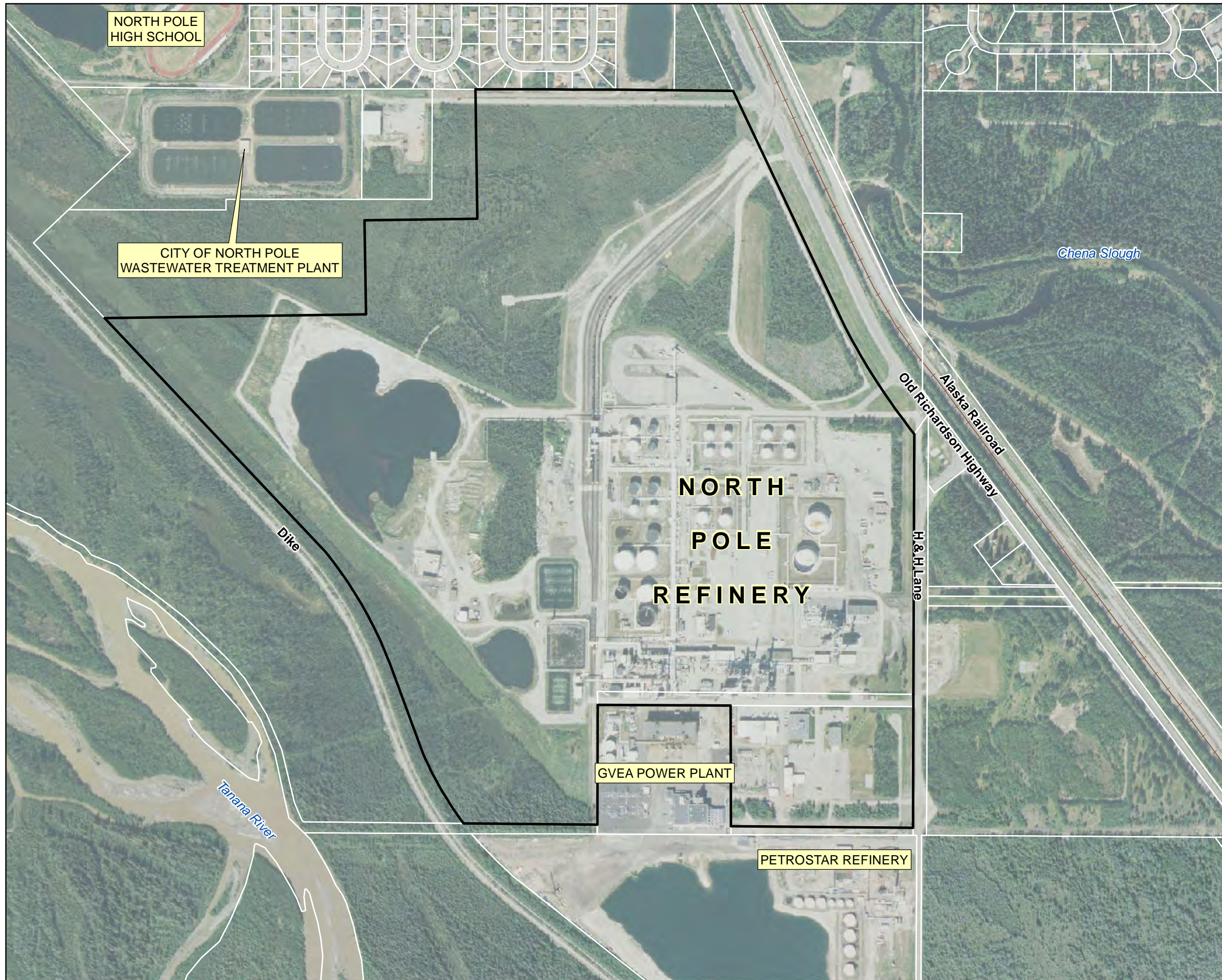



Figure 1
 SITE LOCATION
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



-  Parcel Boundaries
-  FHRA Property Boundary

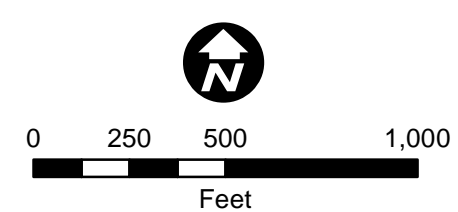
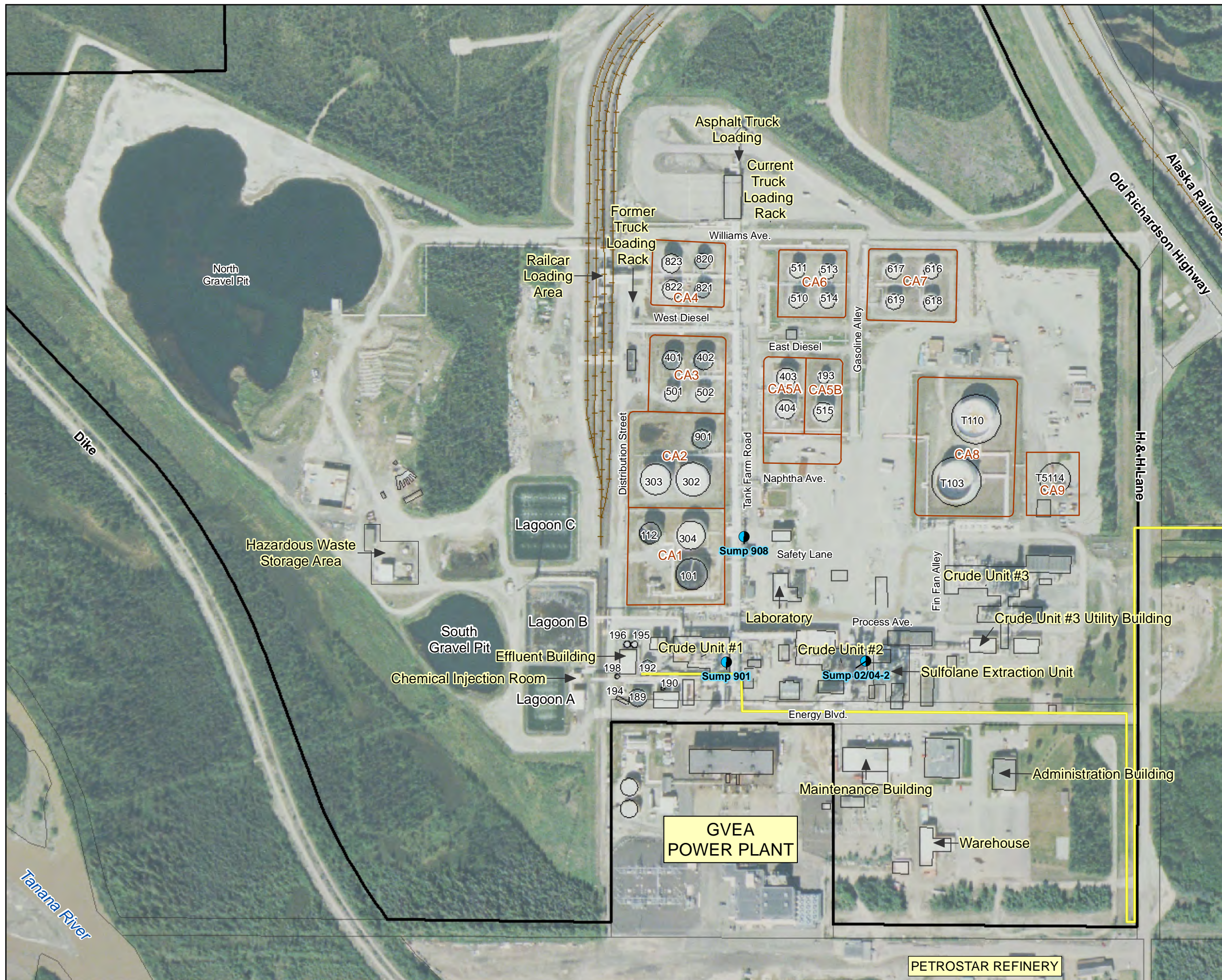


Figure 2
 SITE VICINITY
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



- Sumps
- Wastewater Discharge Line (Approximate)
- Bermed Containment Areas (CA)
- FHRA Property Boundary
- Parcel Boundaries

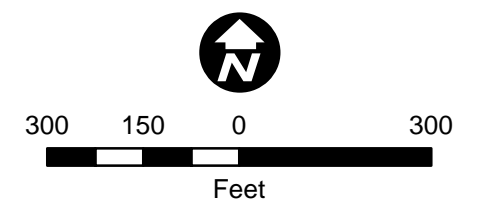
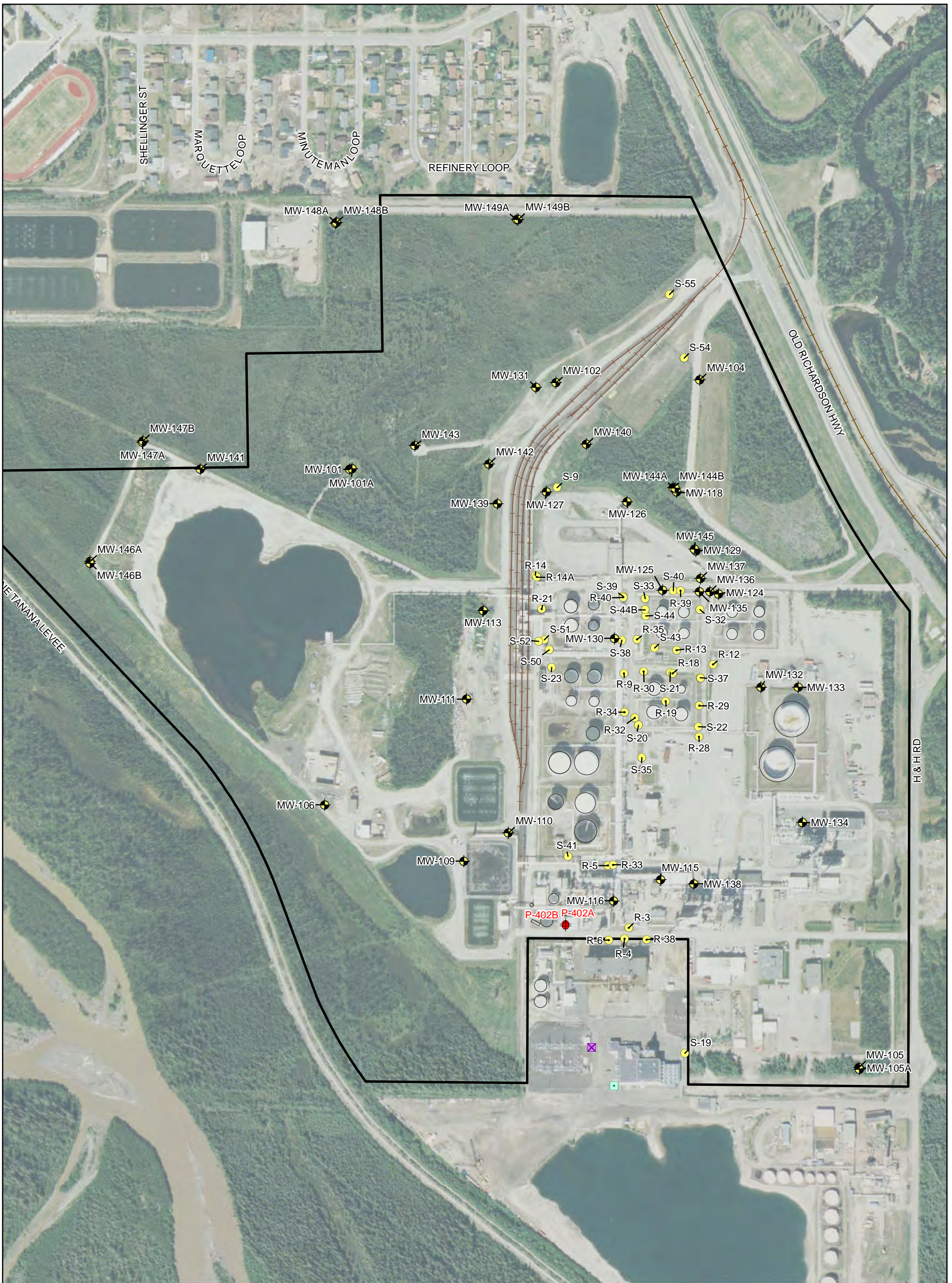


Figure 3
 SITE FEATURES
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



- ◆ Monitoring Well
- Observation Well
- Recovery Well
- ◆ Production Wells
- ✕ GVEA Injection Well (Approximate)
- GVEA Production Well (Approximate)
- ▭ FHRA Property Boundary

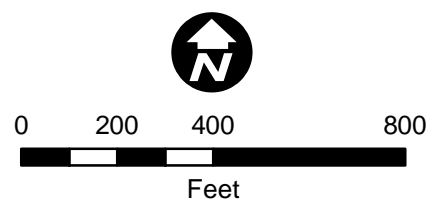
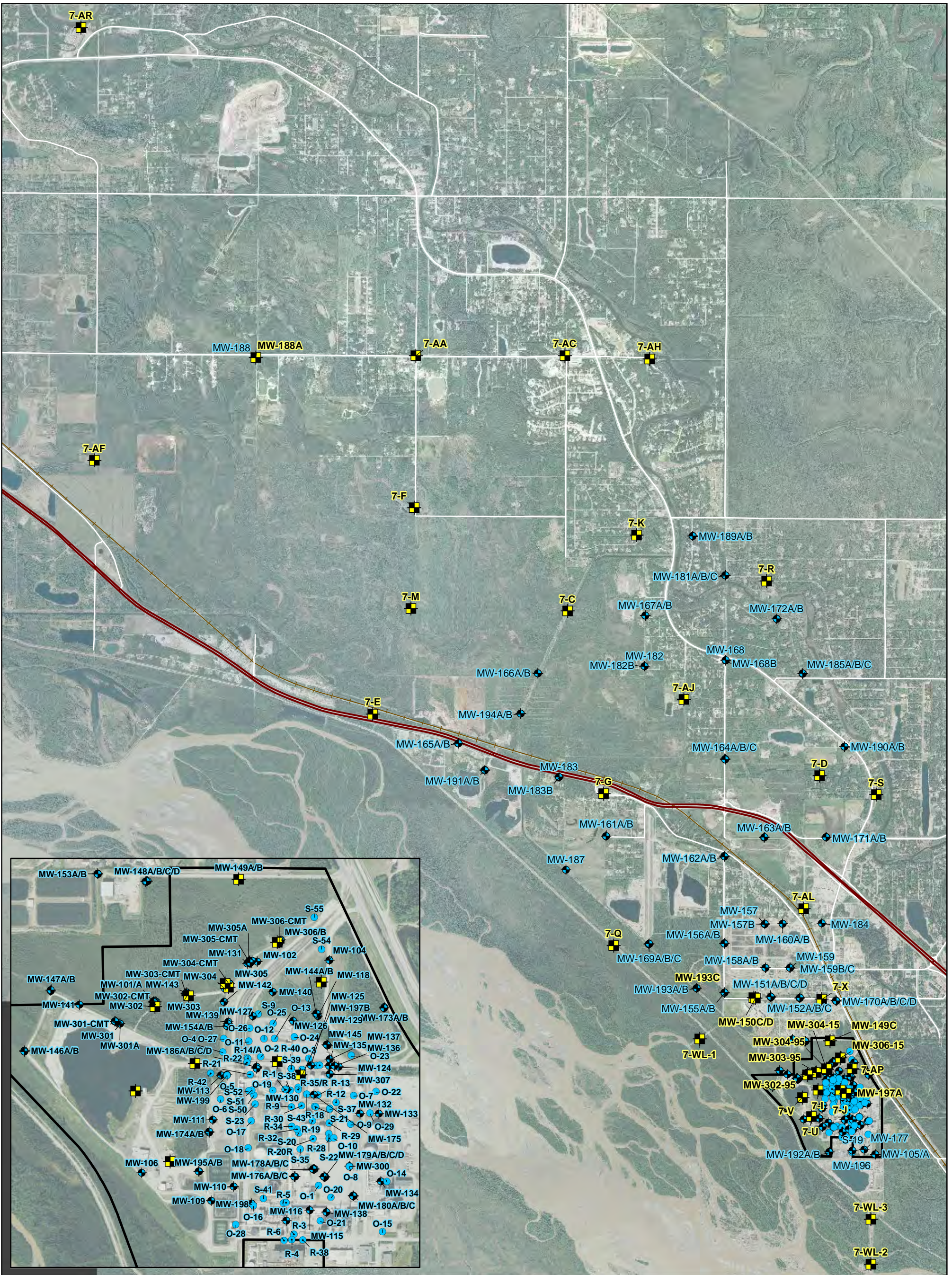







Figure 4
 WELL NETWORK PRIOR TO
 OCTOBER 2009
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



-  Proposed Phase 7 Well
-  Monitoring Well
-  Observation Well
-  Recovery Well
-  FHRA Property Boundary

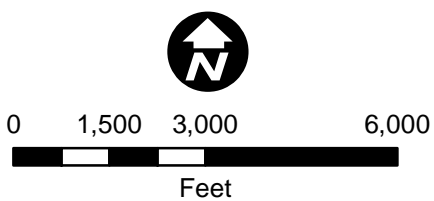
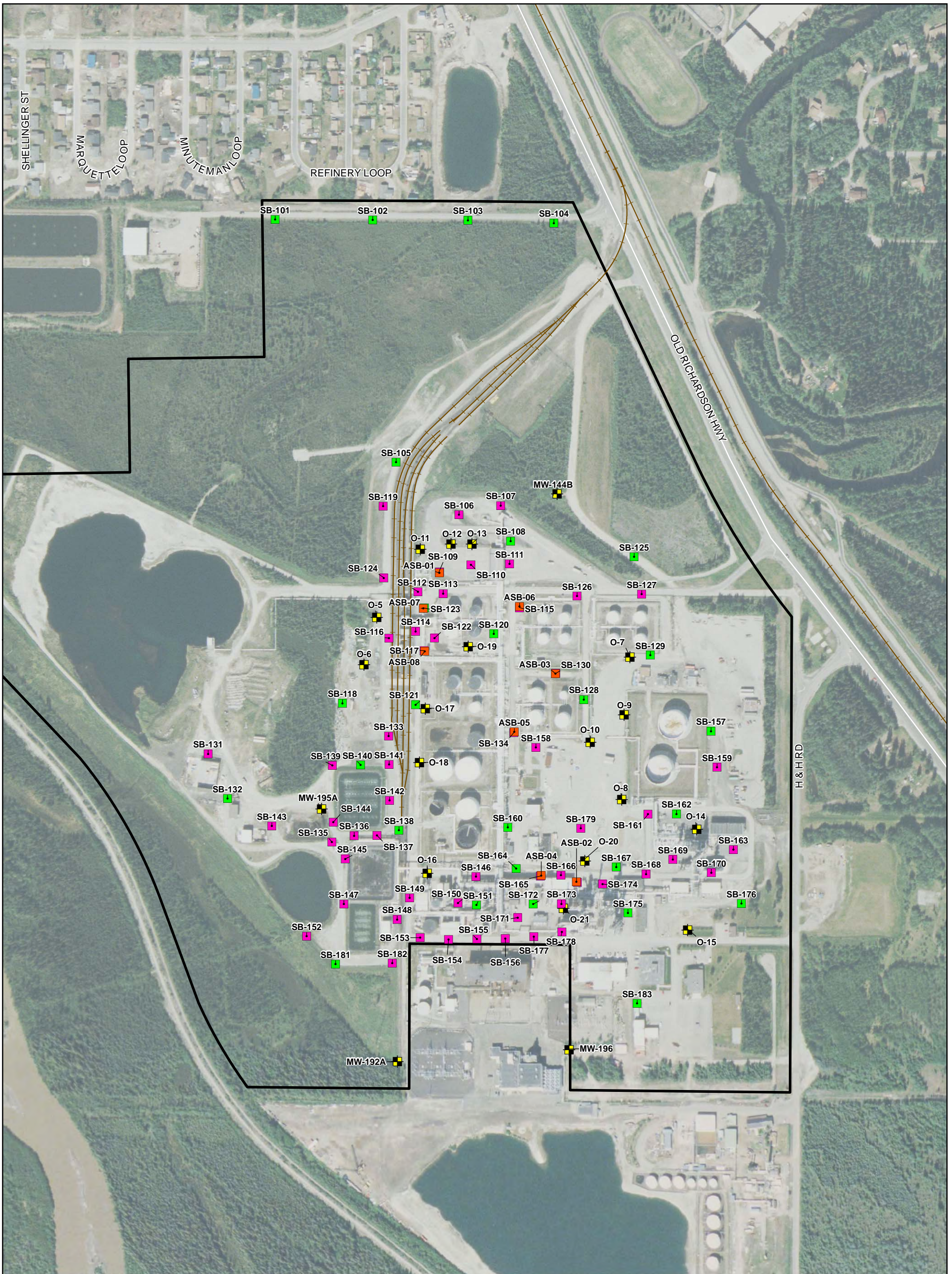


Figure 5
 EXISTING AND PROPOSED MONITORING,
 OBSERVATION AND RECOVERY WELLS
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



- COPC Soil Borings
- Standard Soil Borings
- LNAPL Mobility Assessment
- Soil Core Location
- New Well
- FHRA Property Boundary

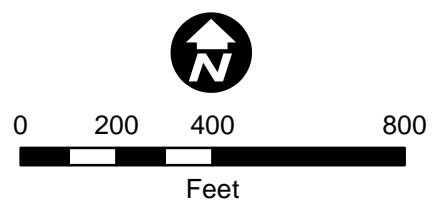
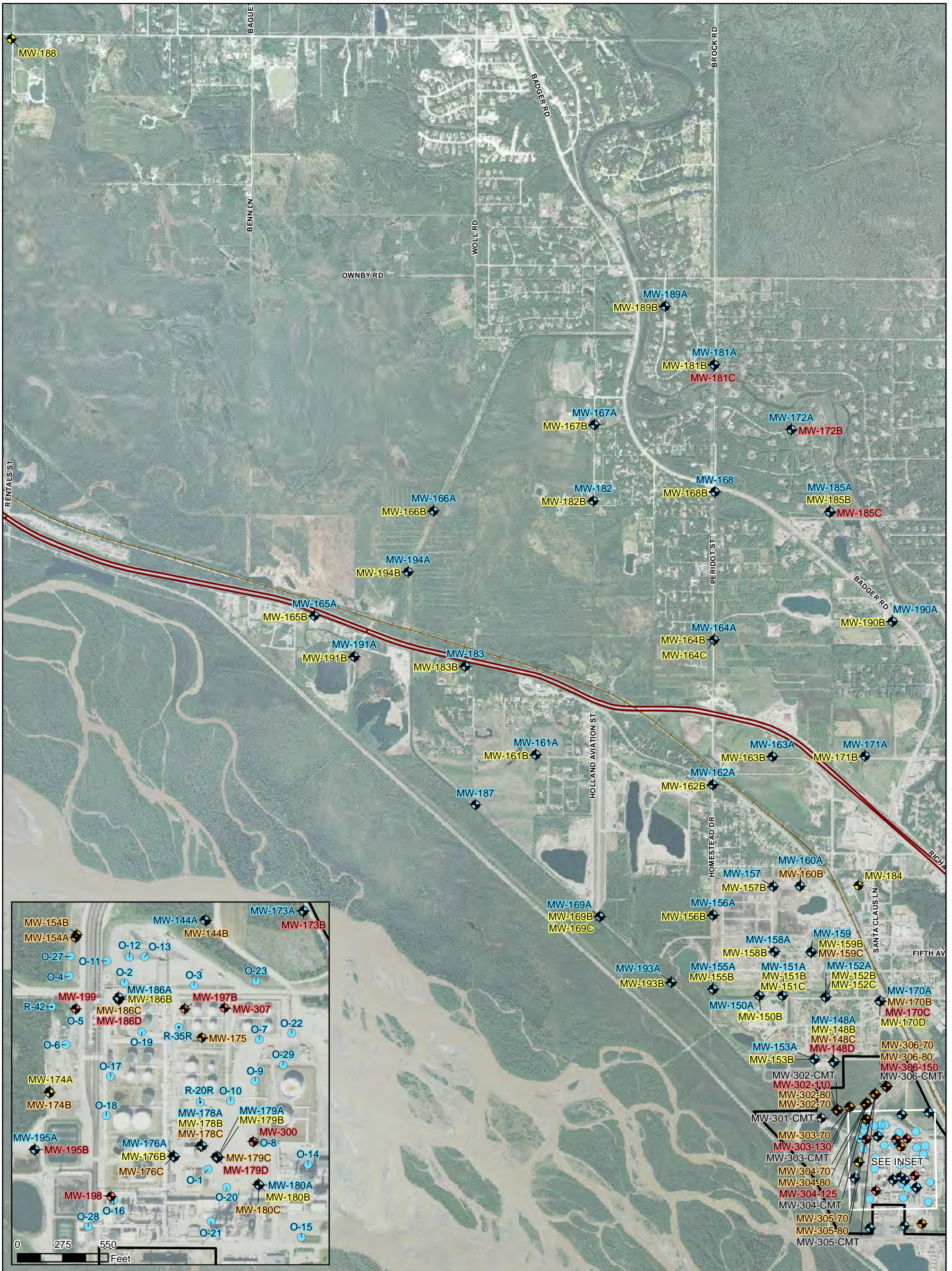


Figure 6
 SOIL BORING LOCATIONS
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



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

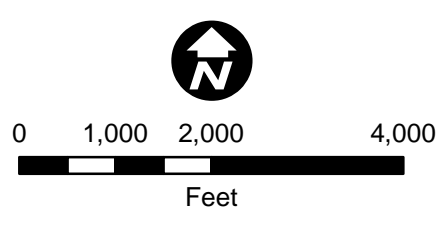
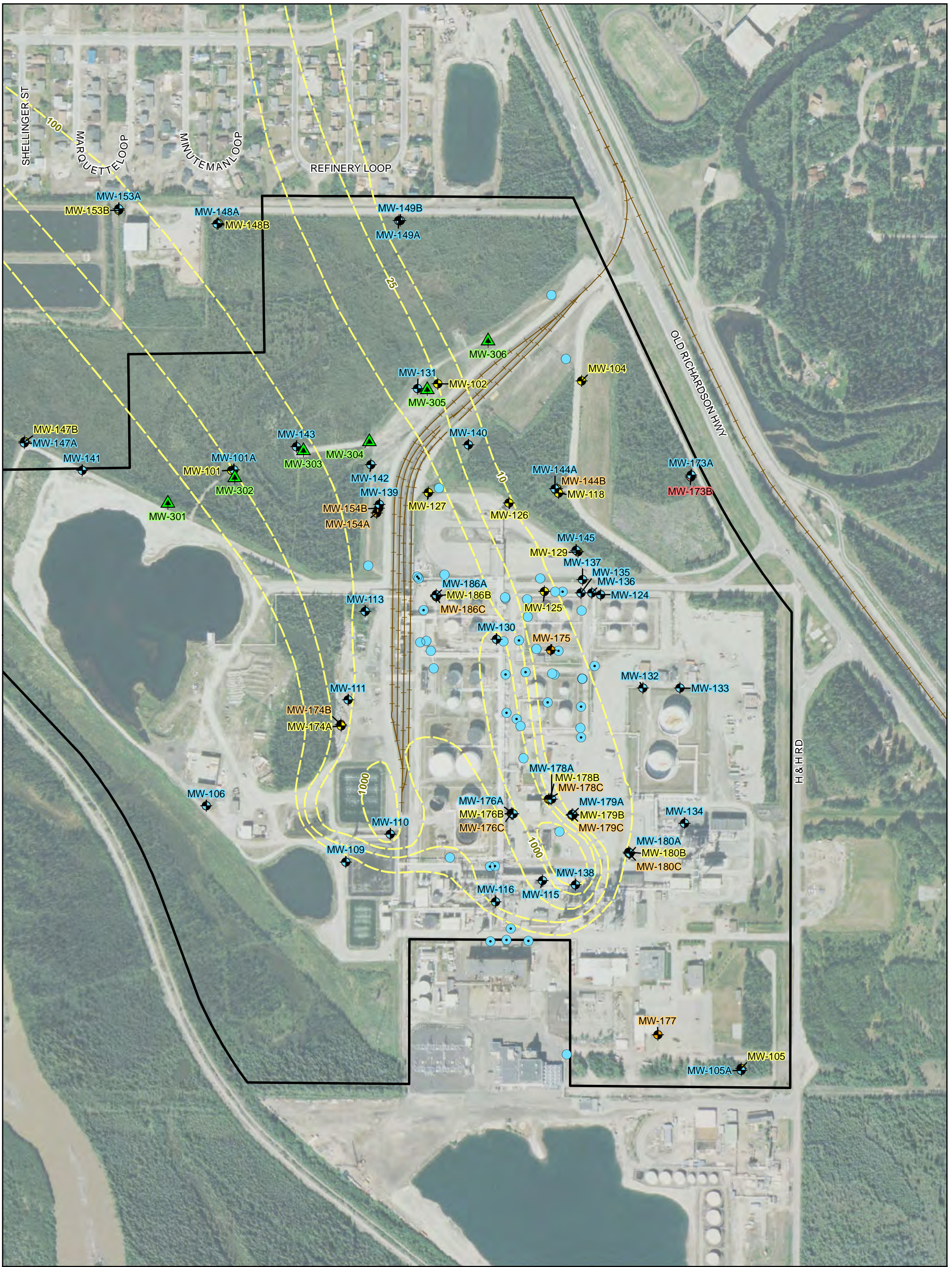


Figure 7
 NEW MONITORING AND
 OBSERVATION WELLS
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



- ▲ Vertical Profiling Locations
- ◆ Monitoring Wells at the Water Table
- ◆ Monitoring Wells 10-55' Below the Water Table
- ◆ Monitoring Wells 55-90' Below the Water Table
- ◆ Monitoring Wells 90-160' Below the Water Table
- Observation Wells at the Water Table
- Recovery Wells at the Water Table
- Approximate Sulfolane Plume at the Water Table, 4th Quarter 2011

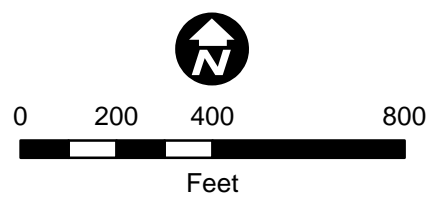


Figure 8
 VERTICAL PROFILING
 WELL CLUSTER LOCATIONS
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



- ◆ Monitoring Well Within 10 Feet of the Water Table
- ◆ Monitoring Well 10 to 55 Feet Below the Water Table
- ◆ Monitoring Well 55 to 90 Feet Below the Water Table
- ◆ Monitoring Well 90 to 160 Feet Below the Water Table
- Observation Well Within 10 Feet of the Water Table
- Recovery Well Within 10 Feet of the Water Table
- FHRA Property Boundary

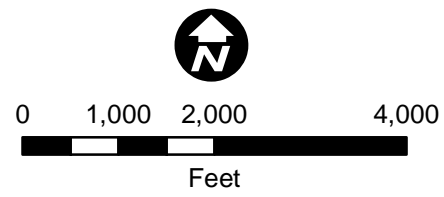
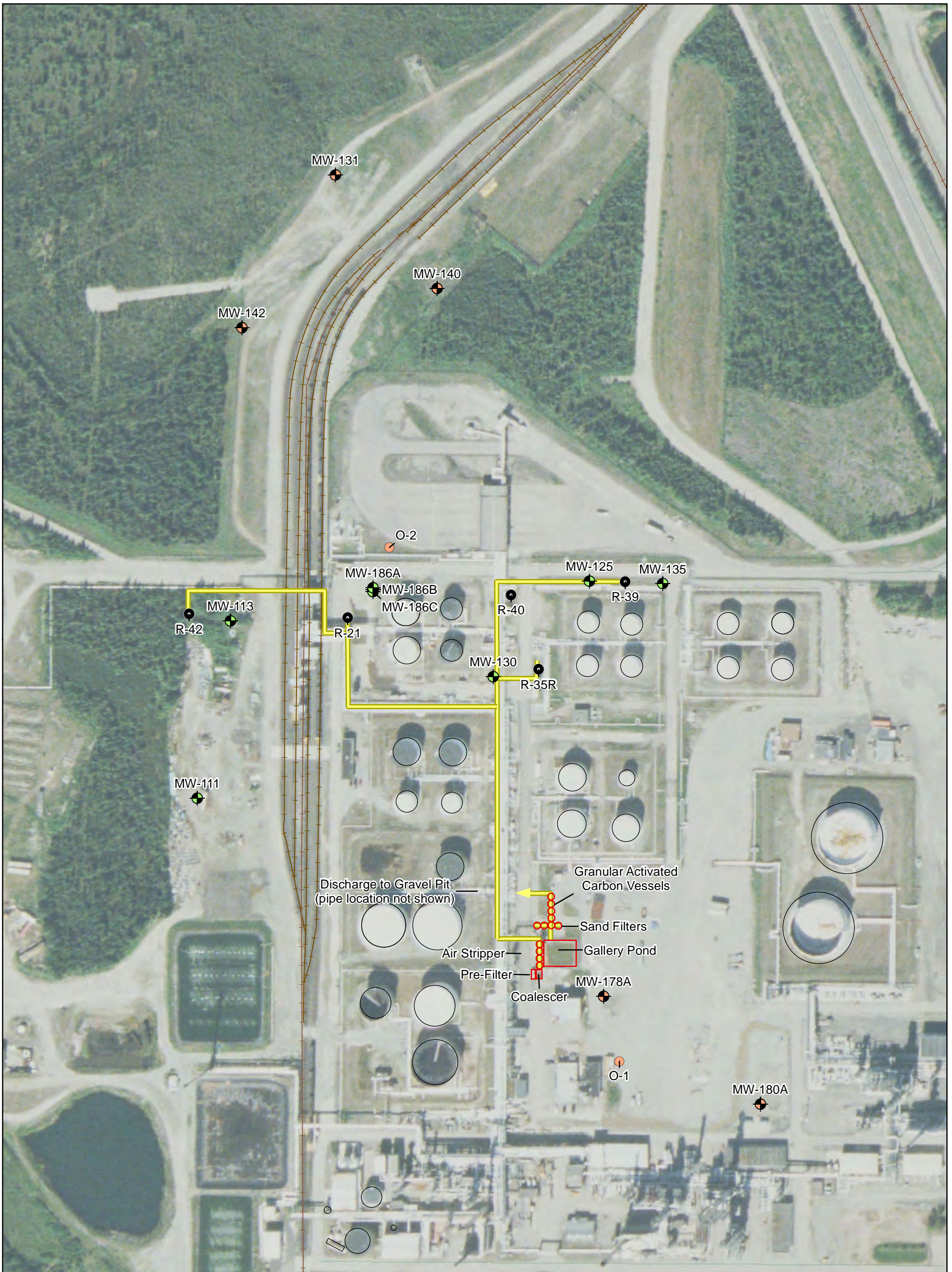


Figure 9
**GROUNDWATER ELEVATION
 MONITORING NETWORK**
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



- Datalogger Locations
- Manual Measurement, Monitoring Well
- Manual Measurement, Observation Well
- Recovery Well
- Remediation System Piping

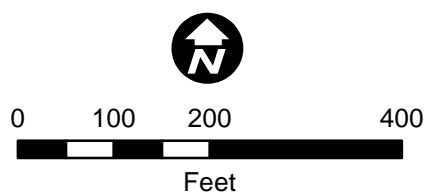








Figure 10
 RECOVERY WELL PUMPING
 TEST LAYOUT
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



Pumping Test Well Locations

-  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
-  Recovery Well Locations
-  Remediation System Piping

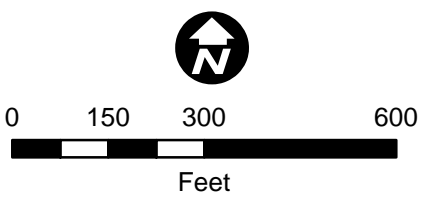


Figure 11
**SINGLE-WELL PUMPING
 LOCATIONS**
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



Pumping Test Well Locations

- ◆ 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

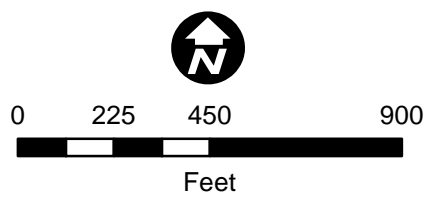
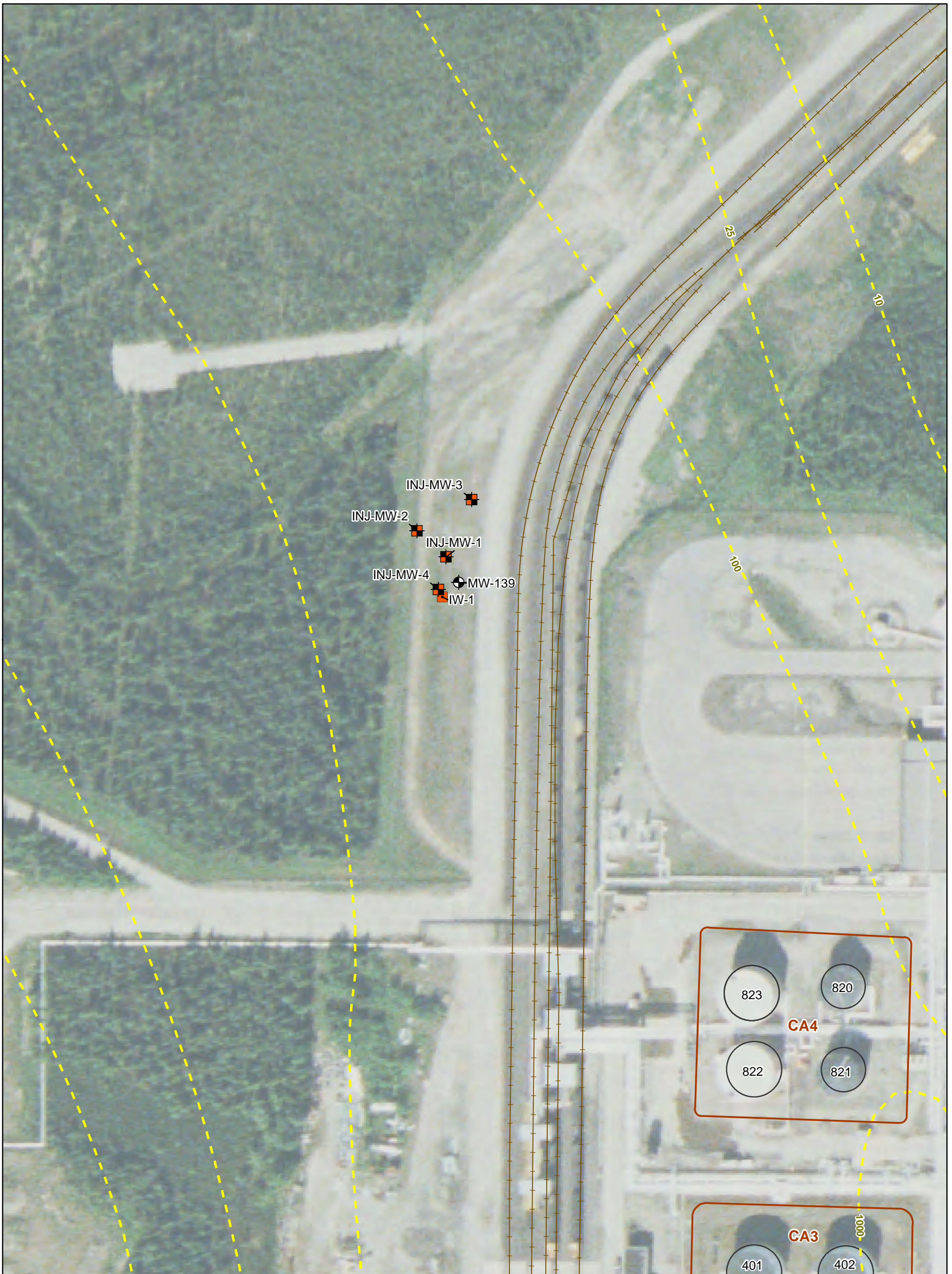


Figure 12
 TRACER TEST LOCATIONS
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



- Injection Well
- Injection Monitoring Well
- ⊕ Monitoring Well
- Bermed Containment Areas
- - - Sulfolane Isopleth in µg/L from 4th Quarter 2011

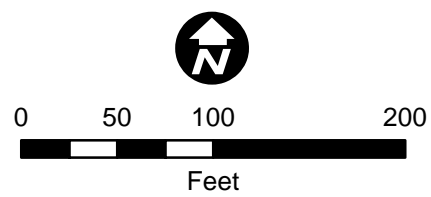






Figure 13
 INJECTION TEST LOCATIONS
 North Pole Refinery
 Flint Hills Resources Alaska, LLC



-  Sumps
-  Soil Boring
-  Monitoring Well
-  Observation Well

 FHRA Property Boundary

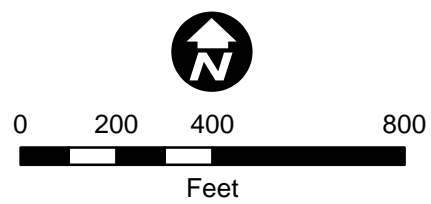


Figure 14
 HISTORICAL SOIL SAMPLING LOCATIONS
 North Pole Refinery
 Flint Hills Resources Alaska, LLC