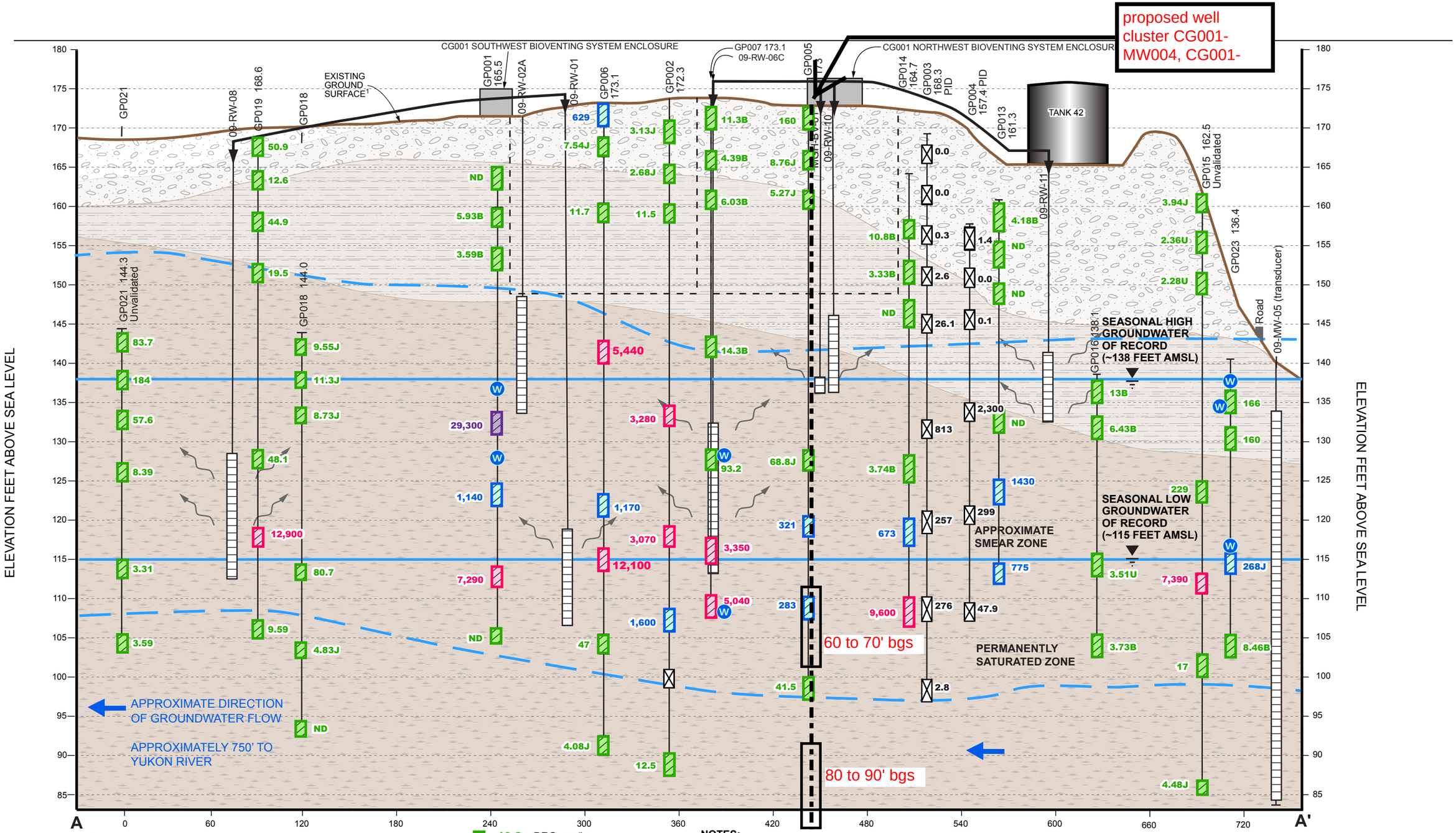

LEGEND

- AIR INJECTION PIPING
- VAPOR FLOW
- SCREENED INTERVAL
- 0.0 = PID (ppm)
- GROUNDWATER SAMPLE
- WELL GRADED GRAVEL GRAVEL-SAND MIX
- APPROXIMATE LOCATION OF ABANDONED-IN-PLACE USTs
- ML, SANDY SILT, SILT
- SP, SAND, GRAVELLY SAND, POORLY SORTED
- ESTIMATED HIGH/LOW GROUNDWATER BASED ON SOIL ANALYTICAL RESULTS
- GROUNDWATER ELEVATION (2004 TO 2010) EXTENT OF FLUCTUATION

10.8 = DRO, mg/kg
SAMPLE DOES NOT EXCEED SCREENING LEVEL <250

1,600 = DRO, mg/kg
EXCEEDS SCREENING LEVEL (1 to 10X ANALYTE SL) 250 TO 2,500

3,070 = DRO, mg/kg
EXCEEDS SCREENING LEVEL (GREATER THAN 10X ANALYTE SL) 2,500 TO 25,000

29,070 = DRO, mg/kg
EXCEEDS SCREENING LEVEL (GREATER THAN 100X ANALYTE SL)

NOTES:

1 THE "EXISTING GROUND SURFACE" SHOWN IS THE EXISTING GROUND SURFACE ELEVATION AT 09-VMP-08, 09-VMP-09, 09-VMP-11 (TOP OF THE HILL). LOCATIONS SHOWN AS UNDERGROUND ARE DOWNHILL/WEST OF THIS GROUND SURFACE.

2. BIOVENTING SYSTEM ENCLOSURES NOT TO SCALE

3. WELL DETAILS ARE PROJECTED ONTO THE CROSS-SECTION

4. SCREENING LEVEL FOR DRO = 250 mg/kg

HORIZONTAL SCALE: 1 INCH = 60 FEET

VERTICAL SCALE: 1 INCH = 12 FEET

DRAFT WORKING FIGURE
Site CG001 DRO in Soil, Cross Section A-A
Former Galena Forward Operating Location, Alaska
Triad Meeting 9-13-11

ES112910233825RDD_10_v6 09-12-11 cts

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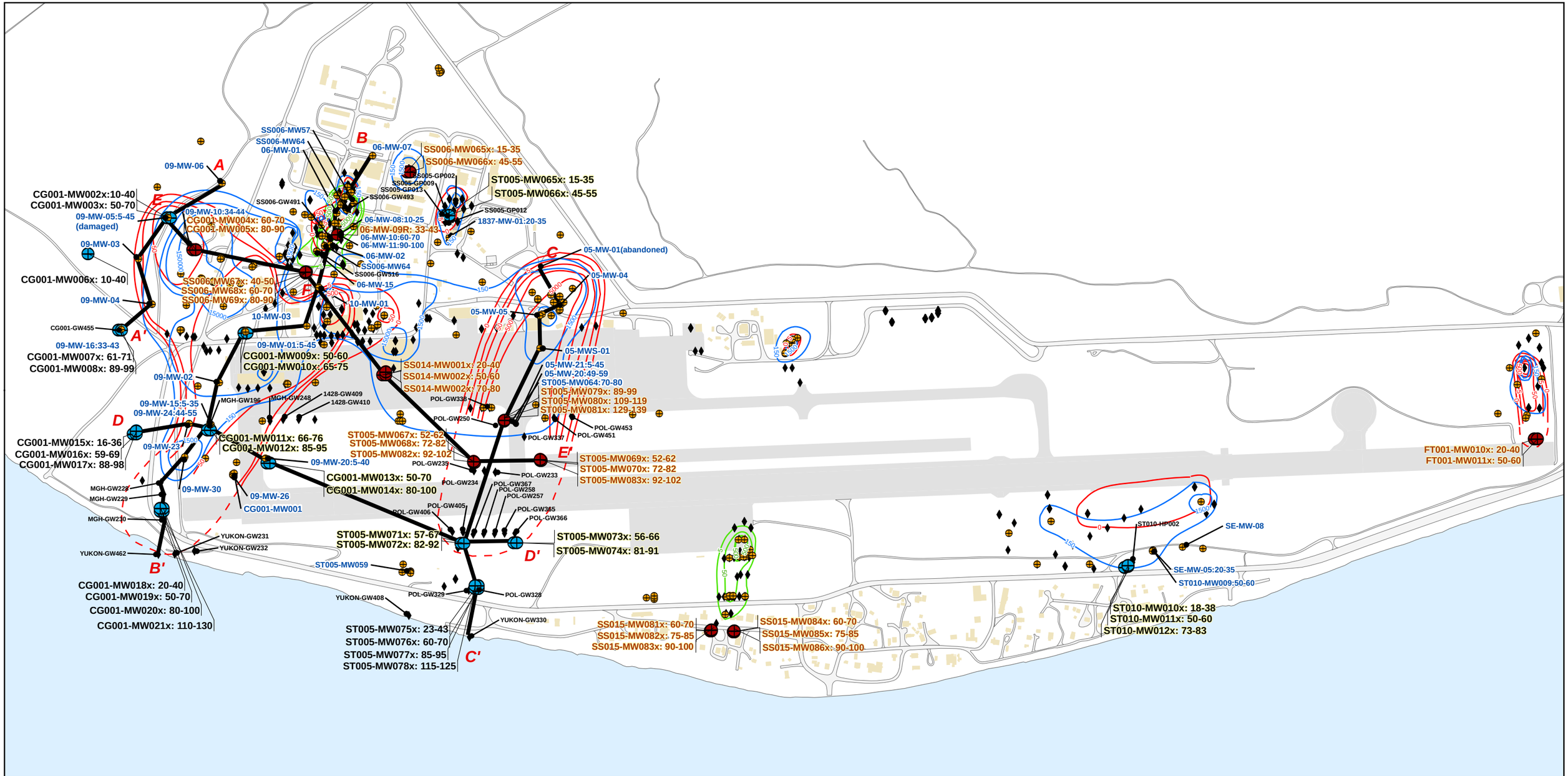

LEGEND

- Building
- Vehicle Driveway Area
- Airfield Surface
- Yukon River
- DRO Contours
- Benzene Contours
- TCE Contours
- Cross-Section Locations
- Current Monitoring Wells, with depth (ft) to screen interval
- 2004 - 2010 Groundwater Grab Sample Locations
- **Phase 1 Proposed 2011 Monitoring Wells, with depth (ft) to screen interval**
- **Phase 2 Proposed 2011 Monitoring Wells, with depth (ft) to screen interval**

Note:
1. Proposed well names have a subscript "x" that will be removed upon installation of the well.
2. For existing wells and previous borings, only those discussed in the text or shown in cross sections are labeled, and screen intervals are only included for existing wells that form a nest with proposed wells.

Projected coordinate system:
WGS84, UTM Zone 4N, Meters.

N

0 500 1,000
Feet

FIGURE D18-CC11
Proposed Monitoring Wells and Cross Section Locations

Work Plan for Site Inspection, Remedial Investigation and Site Characterization
Former Galena Forward Operating Location, Alaska

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\\BALDUR\PROJ\GALENATO184_394439\MAPFILES\QAPP\FORINTERNALUSE\2011\GWFSP2011\GCCM\FIGURE18_GCCM_PROPOSEDWELLS.MXD FIGURE18 BBOER 8/12/2011 14:24:20

SS015_GP007
SS015_GP008
SS015_GP019
SS015_GP001
SS015_GP004
SS015_GP002
SS015_GP003
SS015_GP005
SS015_GP021
SS015_GP006
SS015_GP016
SS015_GP010
SS015_GP009
SS015_GP017
SS015_GP018
SS015_GP011
SS015_GP012
SS015_GP013
SS015_GP014
SS015_GP015
SS015-MW46
SS015-MW43
SS015-MW45
SS015-MW42
SS015-MW44
SS015-EW02
SS015-EW01
SS015-BW01
SS015-BW02
SS015-MW076
SS015-MW075
SS015-MW074
SS015-MW077
SS015-MW078
SS015-MW079
SS015-MW080
SS015-MW48
SS015-MW47
SS015-MW50
SS015-MW49
SS015-MW73
03-GW-01
BIOR_GP005
BIOR_GP001
BIOR_GP002
BIOR_GP006
BIOR_GP003
BIOR_GP004
BIOR_GP007
PIPE
trail
Former Building
54 Retardent
Refill
South Dyke Road
Building 183
Abandoned Motel
Building 253
Residential
Building
220
Residential
Building 218
Residential
Building 219 Residential
Building 217
Residential
Building 113
Residential
Building 74 Yukon
Fuel Company
Building 159
Fuel Stand
Building
277 Laundry
Mat/Gas Station
Building 182
Galena Liquer Store
Building
281 Post
Office
Building 192
Residential
Building 231 Residential
Building 158 Residential
Building
230
Residential
Building 59 Residential
Building
196 Hobo's Bar
Building
221
Residential
Building
168
Residential
Building
118 Residential
Building
97 Storage
7th Avenue
8th
Avenue
J Street
G Street
Old
Galena Streets
42.5 m
42 m
41.5 m
40.5 m
40 m
39.5 m
41 m
43 m
47 m
47.5 m
46 m
45.5 m
45 m
44.5 m
44 m
43.5 m
46.5 m

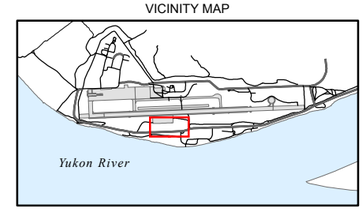
LEGEND

- SS015
- Adjacent Site
- Approximate Location of Former Feature
- Structure
- Airfield Surface or Road
- Bioreactor Installation Area (20' x 20' x 15' Deep)
- Proposed Solar Panel Array Area -- Maximum Height 4'
- Bioreactor piping 1/2" SCH 40 PVC
- Abandoned Fuel Line
- Main Fuel Line
- Index Contour
- Index Depression Contour
- Intermediate Contour
- Intermediate Depression Contour
- Monitoring Well
- Sample Exceeds Screening Level (Greater than 100X analyte SL)
- Sample Exceeds Screening Level (Greater than 10X analyte SL)
- Historical Sample Exceeds Screening Level (Greater than 10X analyte SL)

Proposed Sample Location - Step Out #1

- Proposed Soil Sample
- Proposed Groundwater Sample
- Proposed Soil/Groundwater Sample

VICINITY MAP



0 50 100
Feet

N

Step-Out Samples

Site Name: SS015\BIOR
Investigation Type: RI
Analytes: All Exceedences
Media: Soil
SLs: Soil Extent
Data Range: Historical and 2010

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LEGEND

- UST1428
- Adjacent Site
- Suspect Location of UST Observed in 2010 Geophysical Survey
- Approximate Location of Former Feature
- Structure
- Airfield Surface or Road
- Fence

Utility Locates - 2010

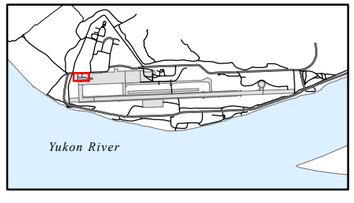
- Electrical Line
- Potable Water Main
- Sanitary Sewer Main
- Utility Vault

- Sample Exceeds Screening Level (Greater than 10X analyte SL)
- Sample Does Not Exceed Screening Level
- Historical Sample Exceeds Screening Level (Greater than 10X analyte SL)
- Historical Sample Does Not Exceed Screening Level

Proposed Sample Location - Step Out #1

- Proposed Soil Sample
- Proposed Soil/Groundwater Sample
- Proposed Groundwater Sample

VICINITY MAP



0 20 40
Feet

N

Step-Out Samples

Site Name: UST1428
Investigation Type: SC
Analytes: All Exceedences
Media: Soil
SLs: Soil Extent
Data Range: Historic and 2010

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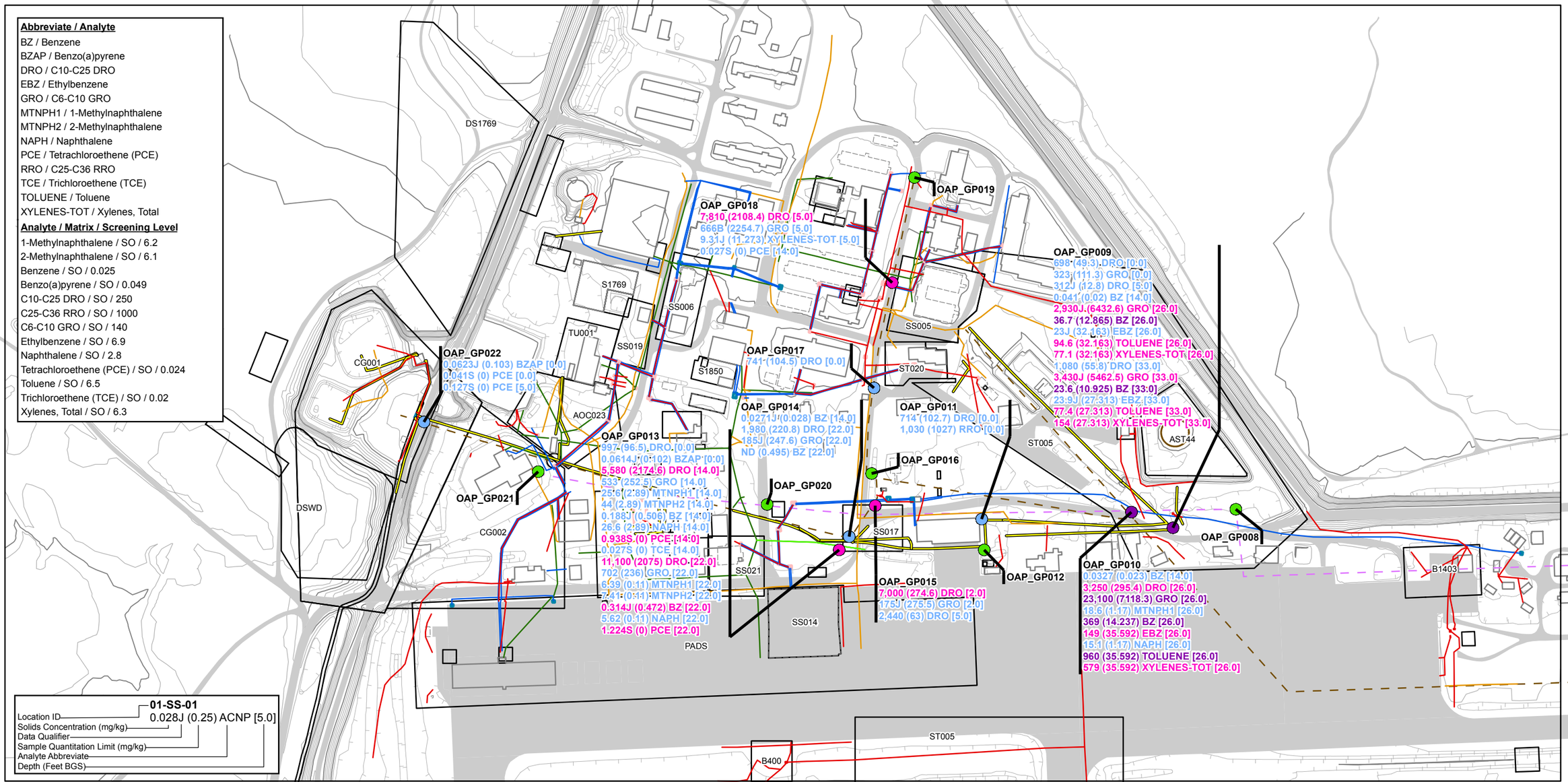
Abbreviate / Analyte
BZ / Benzene
BZAP / Benzo(a)pyrene
DRO / C10-C25 DRO
EBZ / Ethylbenzene
GRO / C6-C10 GRO
MTNPH1 / 1-Methylnaphthalene
MTNPH2 / 2-Methylnaphthalene
NAPH / Naphthalene
PCE / Tetrachloroethene (PCE)
RRO / C25-C36 RRO
TCE / Trichloroethene (TCE)
TOLUENE / Toluene
XYLENES-TOT / Xylenes, Total

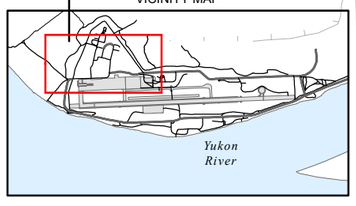
Analyte / Matrix / Screening Level
1-Methylnaphthalene / SO / 6.2
2-Methylnaphthalene / SO / 6.1
Benzene / SO / 0.025
Benzo(a)pyrene / SO / 0.049
C10-C25 DRO / SO / 250
C25-C36 RRO / SO / 1000
C6-C10 GRO / SO / 140
Ethylbenzene / SO / 6.9
Naphthalene / SO / 2.8
Tetrachloroethene (PCE) / SO / 0.024
Toluene / SO / 6.5
Trichloroethene (TCE) / SO / 0.02
Xylenes, Total / SO / 6.3



LEGEND
- Adjacent Site
- Approximate Location of Former Feature
- Structure
- Airfield or Road
- Index Contour
- Intermediate Contour Depression
- Intermediate Contour
- Abandoned Fuel Line (1962)
- Abandoned Fuel Line (1952)
- Active Fillstand Area
- Removed Fillstand Area
- Fuel Tank

Underground Utility Locates - 2010
- Electrical Line
- Communications Line
- Sanitary Sewer Main
- Potable Water Main
- Fuel/Gas Line
- Concrete Pad
- Utility Vault
- Sample Exceeds Screening Level (Greater than 100X analyte SL)
- Sample Exceeds Screening Level (Greater than 10X analyte SL)
- Sample Exceeds Screening Level (1 to 10X analyte SL)
- Sample Does Not Exceed Screening Level

VICINITY MAP



0 150 300
Feet
N

Notes:
1. B - The analyte was detected in the associated method and/or calibration blank.
   J - The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
   S - The sample results are unvalidated and should be used for screening purposes only.
2. Screening levels are presented in units of mg/kg for SO (soil) samples.
3. ND = Non-Detect
4. Only exceedence data is presented.
5. Purple Label = Sample Exceeds Screening Level (Greater than 100X analyte SL)
6. Scarlet Label = Sample Exceeds Screening Level (Greater than 10X analyte SL)
7. Blue Label = Sample Exceeds Screening Level (1 to 10X analyte SL)
8. SL = Screening Level
9. Depth shown is the TOP depth of the sample.
10. 2010 utilities shown are underground only.

Site Name: OAP
Investigation Type: SC
Analytes: All Exceedences
Media: Soil
SLs: Soil Extent
Data Range: 2011

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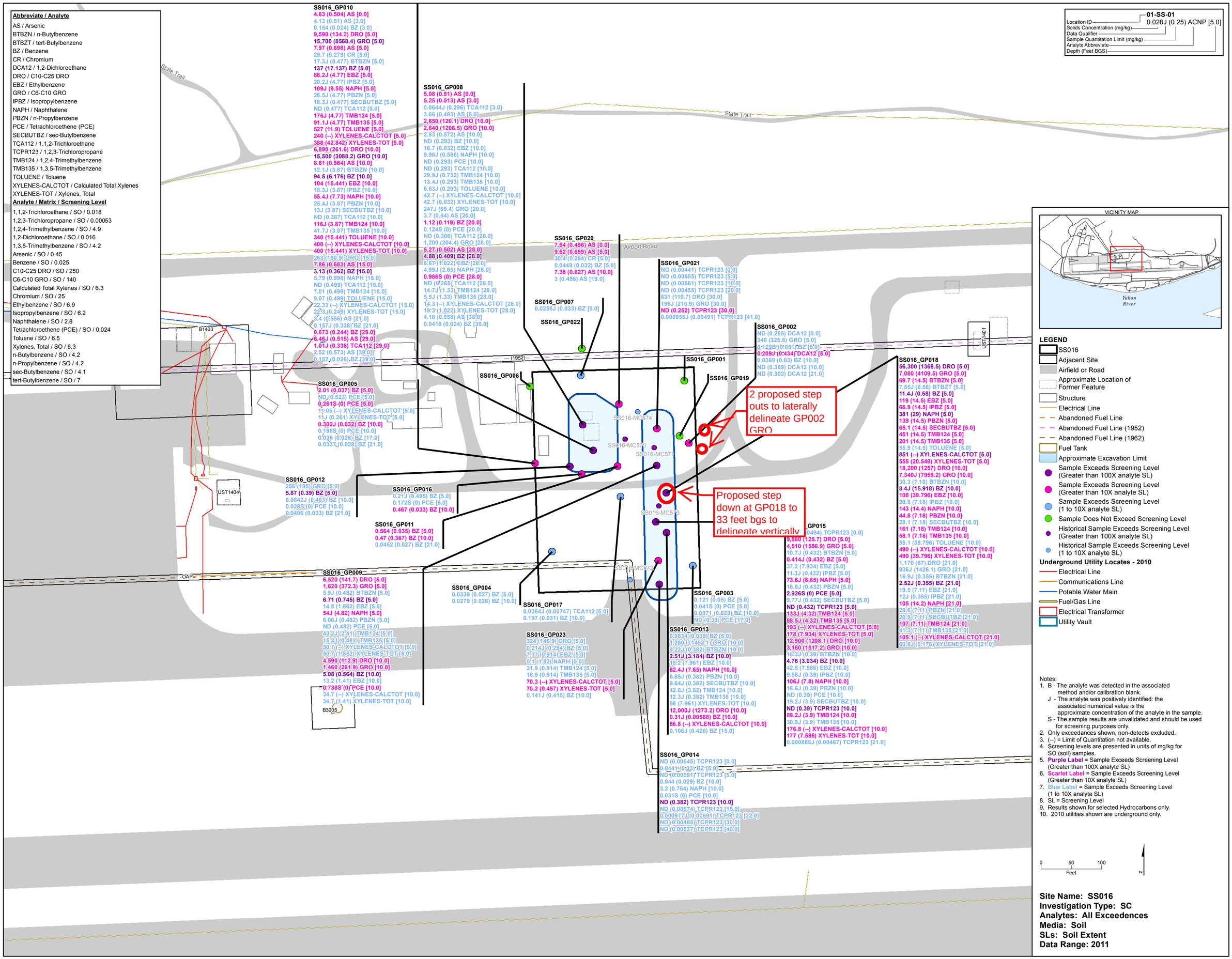

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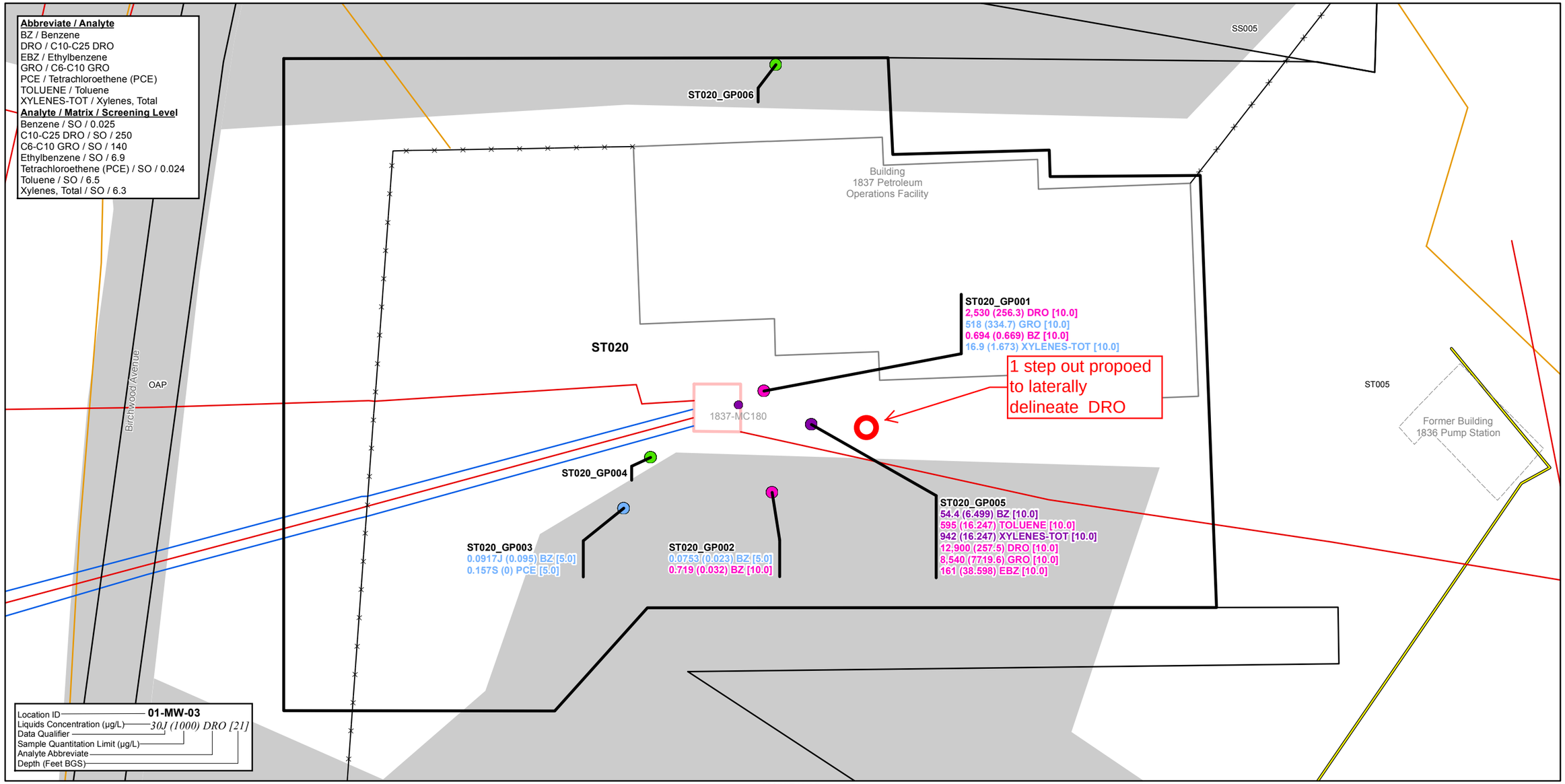


LEGEND

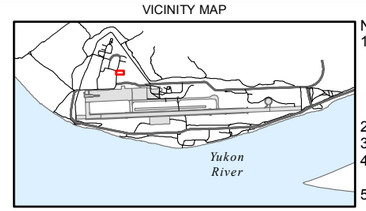
- ST020
- Adjacent Site
- Structure
- Approximate Location of Former Feature
- Airfield Surface or Road
- Fence
- Concrete Pad

Underground Utility Locates - 2010

- Communications Line
- Electrical Line
- Fuel/Gas Line
- Potable Water Main

- Sample Exceeds Screening Level (Greater than 100X analyte SL)
- Sample Exceeds Screening Level (Greater than 10X analyte SL)
- Sample Exceeds Screening Level (1 to 10X analyte SL)
- Sample Does Not Exceed Screening Level
- Historical Sample Exceeds Screening Level (Greater than 100X analyte SL)

VICINITY MAP



0 10 20
Feet

N

Notes:

1. B - The analyte was detected in the associated method and/or calibration blank.
   J - The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
   S - The sample results are unvalidated and should be used for screening purposes only.
2. Only exceedances shown, non-detects excluded.
3. Screening levels are presented in units of mg/kg for SO (soil) samples.
4. Purple Label = Sample Exceeds Screening Level (Greater than 100X analyte SL)
5. Scarlet Label = Sample Exceeds Screening Level (Greater than 10X analyte SL)
6. Blue Label = Sample Exceeds Screening Level (1 to 10X analyte SL)
7. SL = Screening Level
8. 2010 utilities shown are underground only.

Site Name: ST020
Investigation Type: SC
Analytes: All Exceedences
Media: Soil
SLs: Soil Extent
Data Range: 2011

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