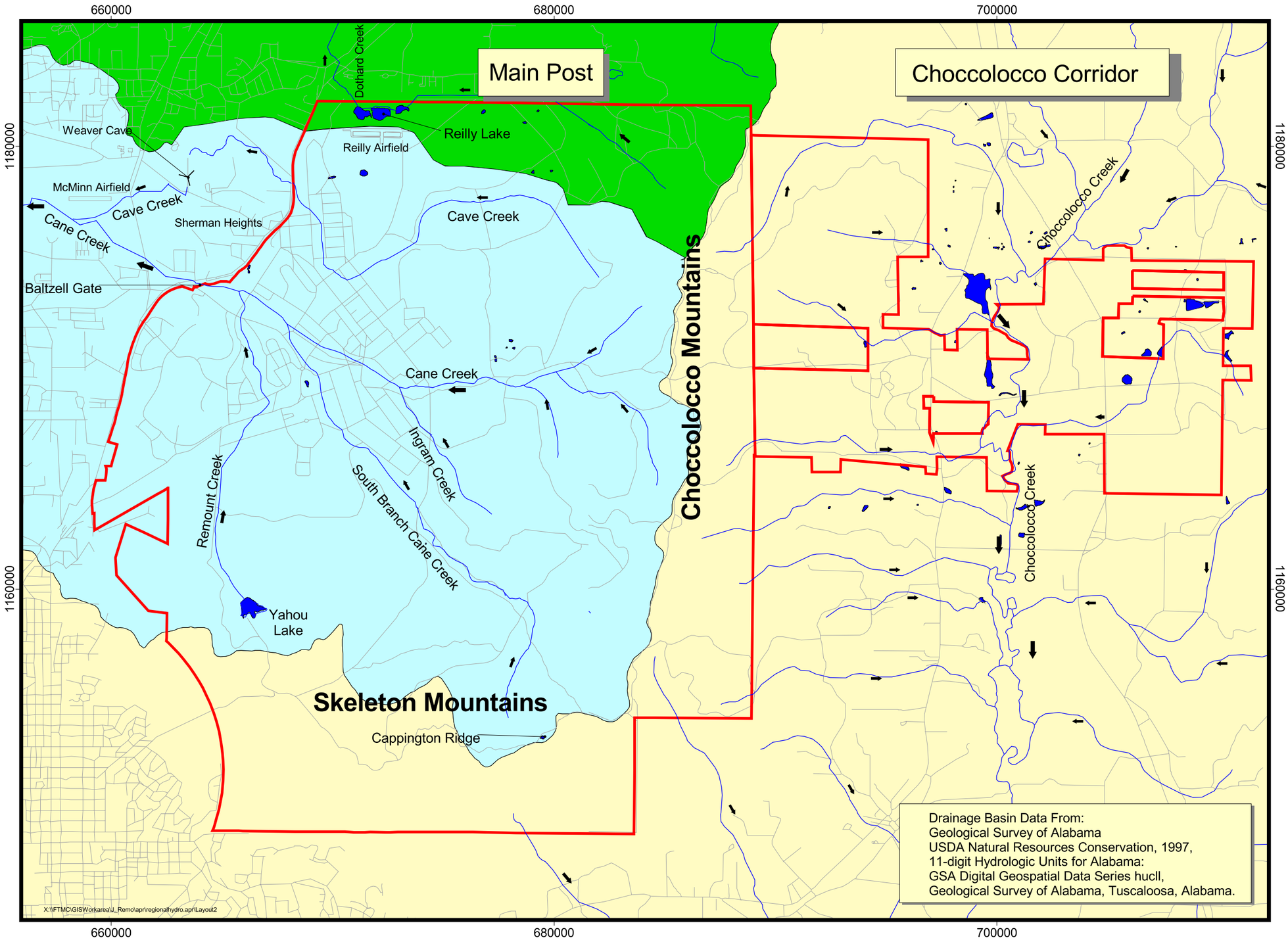

Drainage Basin Data From:
Geological Survey of Alabama
USDA Natural Resources Conservation, 1997,
11-digit Hydrologic Units for Alabama:
GSA Digital Geospatial Data Series hucll,
Geological Survey of Alabama, Tuscaloosa, Alabama.

Figure 2-11

Surface Water Hydrology and Drainage Basins Map

Fort McClellan
Calhoun County, Alabama

Legend

- Main Post and Choccolocco Corridor Boundries
- Major Streams
- Roads
- Ponds and Lakes
- Surface Water Flow Direction
- Cave
- Cane Creek Drainage Basin
- Tallasseehatchee Creek Drainage Basin
- Choccolocco Creek Drainage Basin

4500 0 4500 Feet

NAD 83 State Plane Coordinates

N

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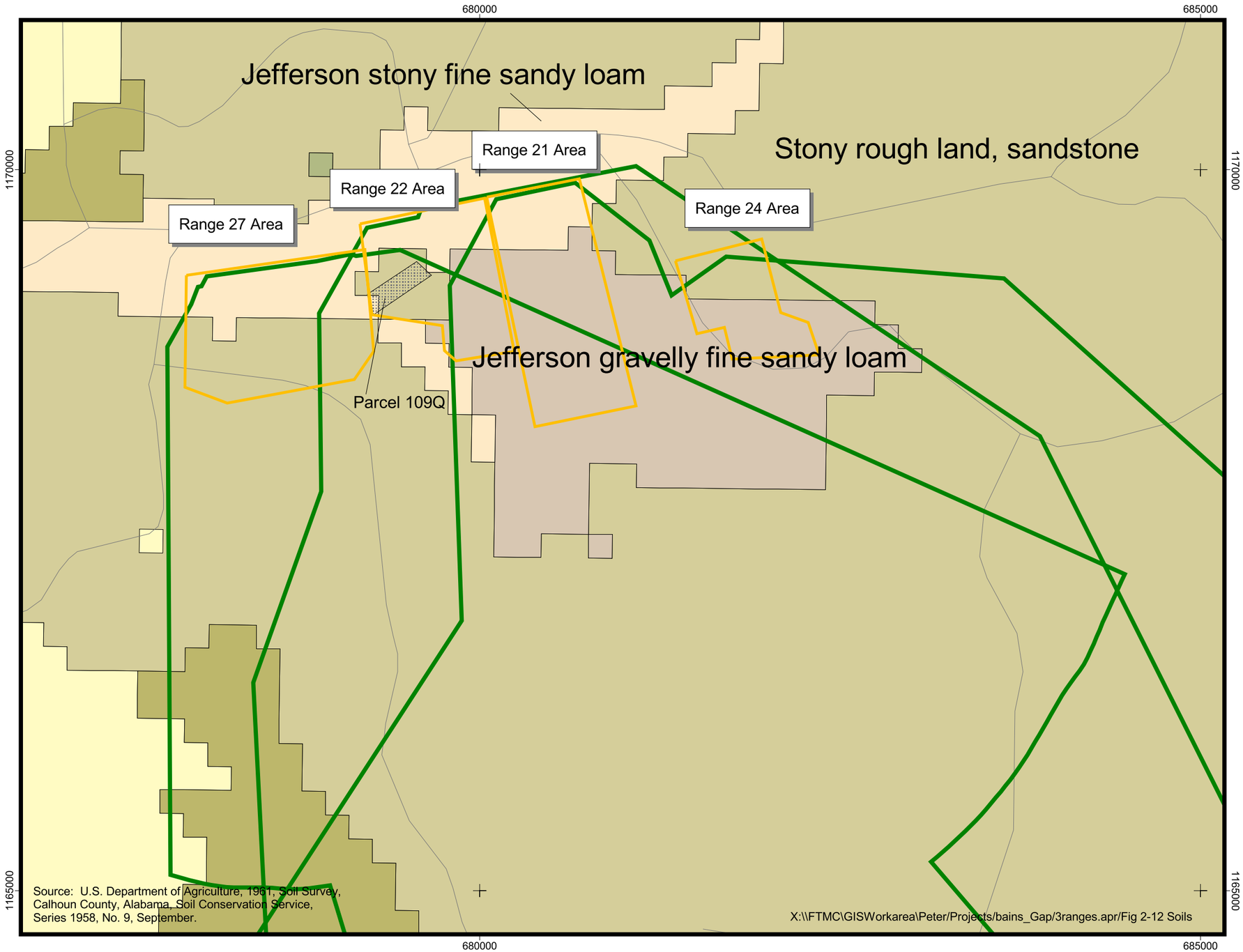

Figure 2-12

Map of Soil Types for BGR Ranges

Legend

- Roads
- Study Area
- CERFA Parcel Boundary

Soils

- Anniston and Allen gravelly loams
- Anniston and Allen stony loams
- Jefferson gravelly fine sandy loam
- Jefferson stony fine sandy loam
- Stony rough land, sandstone
- mine or quarry (D)

0 750 1500

State Plane feet, NAD83

N

August 2002

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Calhoun County, Alabama
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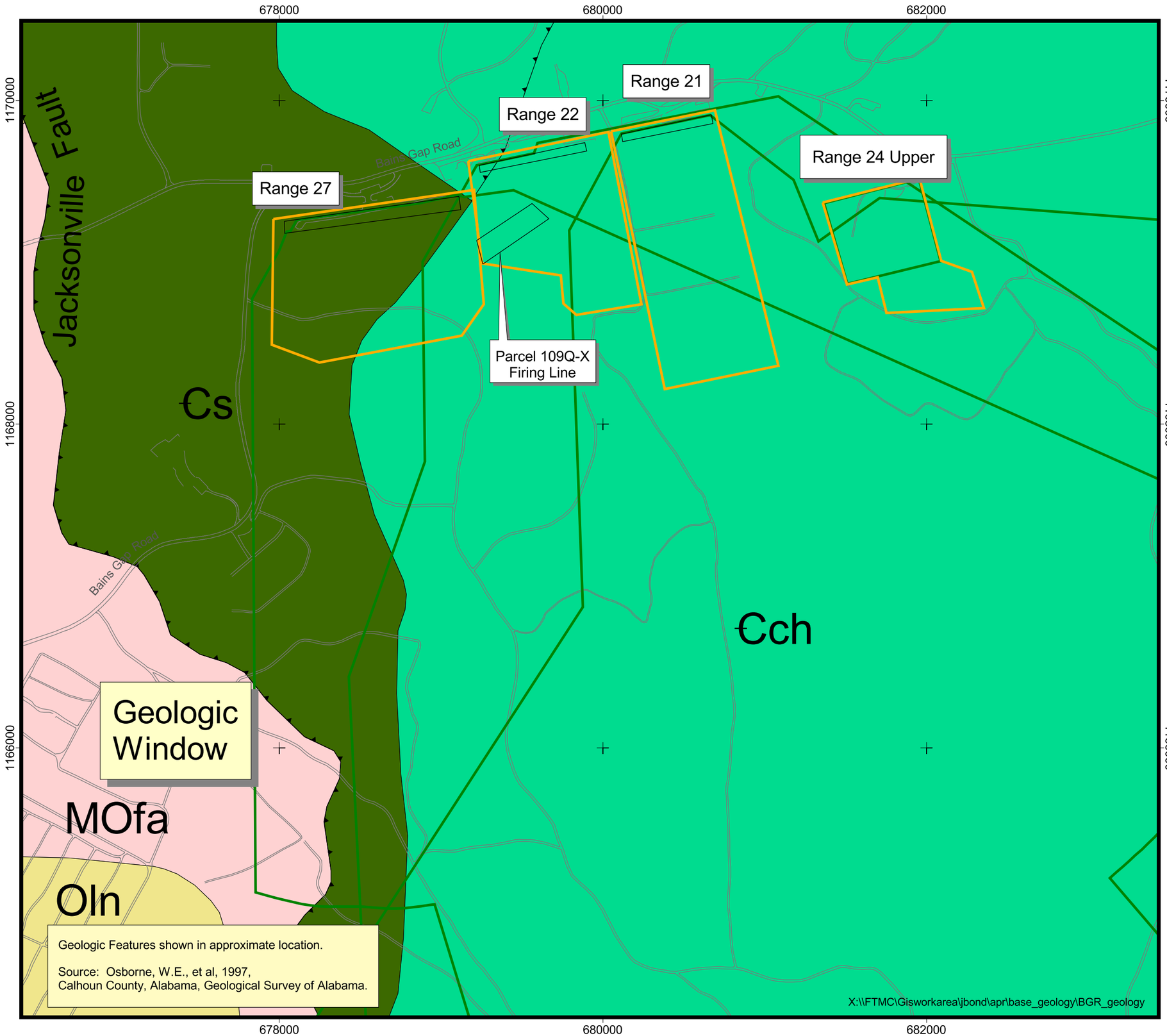

Figure 2-13

Site Geologic Map for BGR Ranges

Legend

- Study Area
- CERFA Parcel Boundary
- Firing Line
- Roads

Geology

- MOfa — Mississippian/Ordovician - Floyd & Athens Shale, Undifferentiated
- Oln — Ordovician - Little Oak and Newala Limestones, Undifferentiated
- Cs — Cambrian - Shady Dolomite
- Cch — Cambrian - Chilhowee Group, Undifferentiated
- Fault
- Fault (inferred)

0 600 1200 Feet

State Plane feet, NAD83

N

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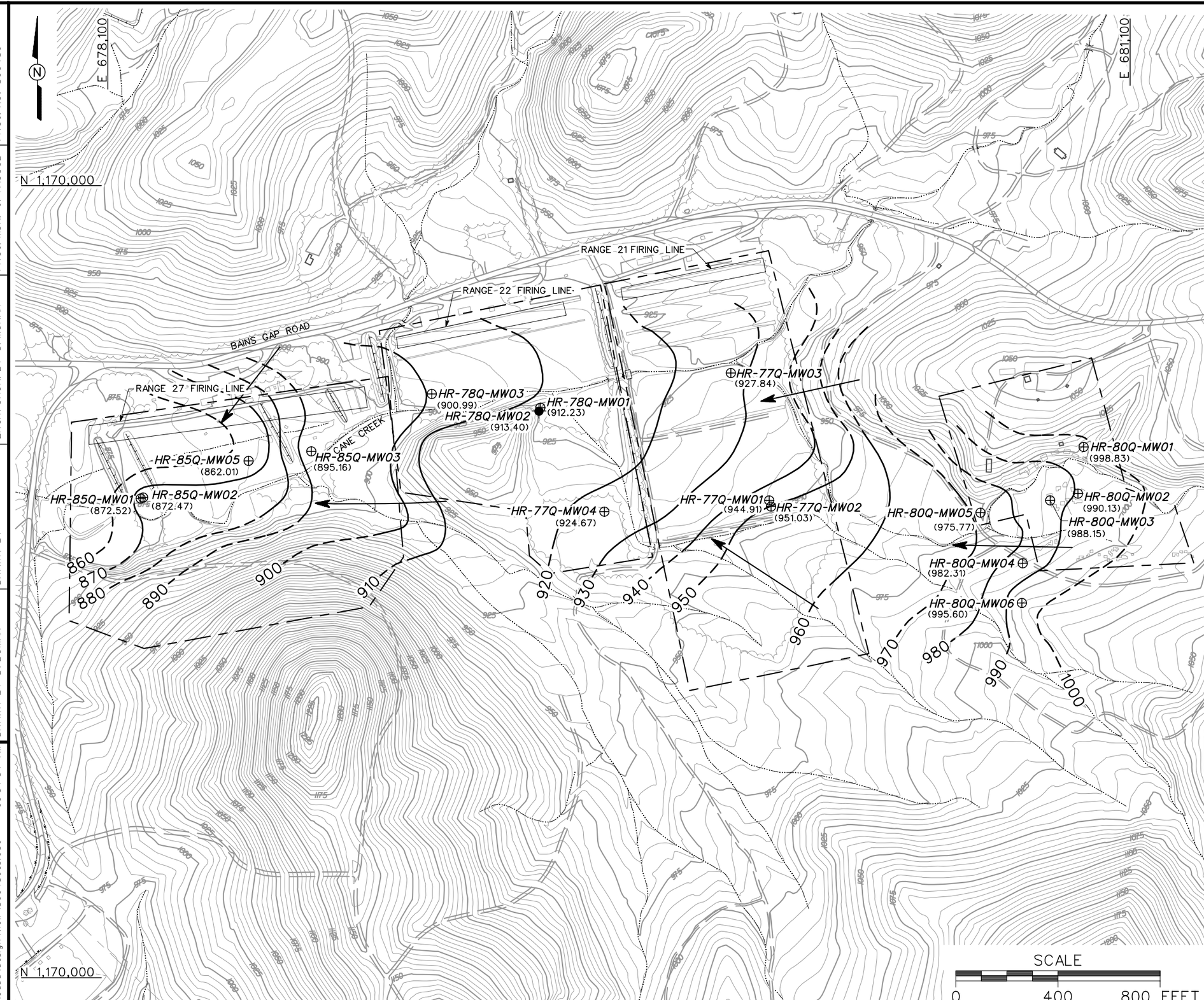

LEGEND

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TOPOGRAPHIC CONTOURS (CONTOUR INTERVAL - 5 FOOT)
- 940 GROUNDWATER ELEVATION CONTOURS (DASHED WHERE INFERRED)
- (944.91) GROUNDWATER ELEVATION (FT MSL) (JANUARY 2002)
- GROUNDWATER FLOW DIRECTION
- TREES / TREELINE
- STUDY AREA
- CULVERT WITH HEADWALL
- SURFACE DRAINAGE / CREEK
- MANMADE SURFACE DRAINAGE FEATURE
- BERM
- UTILITY POLE
- RESIDUUM MONITORING WELL LOCATION
- BEDROCK MONITORING WELL LOCATION

FIGURE 2-14
PIEZOMETRIC SURFACE MAP
BAINS GAP ROAD
PARCELS 77Q, 78Q, 80Q AND 85Q

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CALHOUN COUNTY, ALABAMA
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PROJ. NO.: 800486
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PROJ. MGR.: J. YACOUB
DRAFT. CHCK. BY:
ENGR. CHCK. BY: S. MORAN
DATE LAST REV.:
DRAWN BY:
STARTING DATE: 03/05/02
DRAWN BY: D. BOMAR
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LEGEND:

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TOPOGRAPHIC CONTOURS (CONTOUR INTERVAL - 5 FOOT)
- TREES / TREELINE
- STUDY AREA
- CULVERT WITH HEADWALL
- SURFACE DRAINAGE / CREEK
- MANMADE SURFACE DRAINAGE FEATURE
- FENCE
- UTILITY POLE
- BERM
- SURFACE SOIL SAMPLE LOCATION
- (817) LEAD CONCENTRATION (mg/kg)
- LOW CONCENTRATION
- 400 LEAD ISOPLETH IN (mg/kg) (DASHED WHERE INFERRED):
  - SURFACE SOIL ESV - (50 mg/kg)
  - SOIL RESIDENTIAL SSSL - (400 mg/kg)
  - SOIL INDUSTRIAL SSSL - (880 mg/kg)
  - SOIL RECREATIONAL SITE USER SSSL - (7,600 mg/kg)
- mg/kg MILLIGRAMS PER KILOGRAM
- SSSL SITE SPECIFIC SCREENING LEVELS
- J COMPOUND WAS POSITIVELY IDENTIFIED; REPORT VALUE IS THE ESTIMATED CONCENTRATION

SCALE
0 200 400 FEET

FIGURE 3-1
LEAD CONCENTRATION ISOPLETH MAP
IN SURFACE SOILS
BAINS GAP ROAD RANGES
PARCELS 77Q, 78Q, 80Q AND 85Q

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CALHOUN COUNTY, ALABAMA
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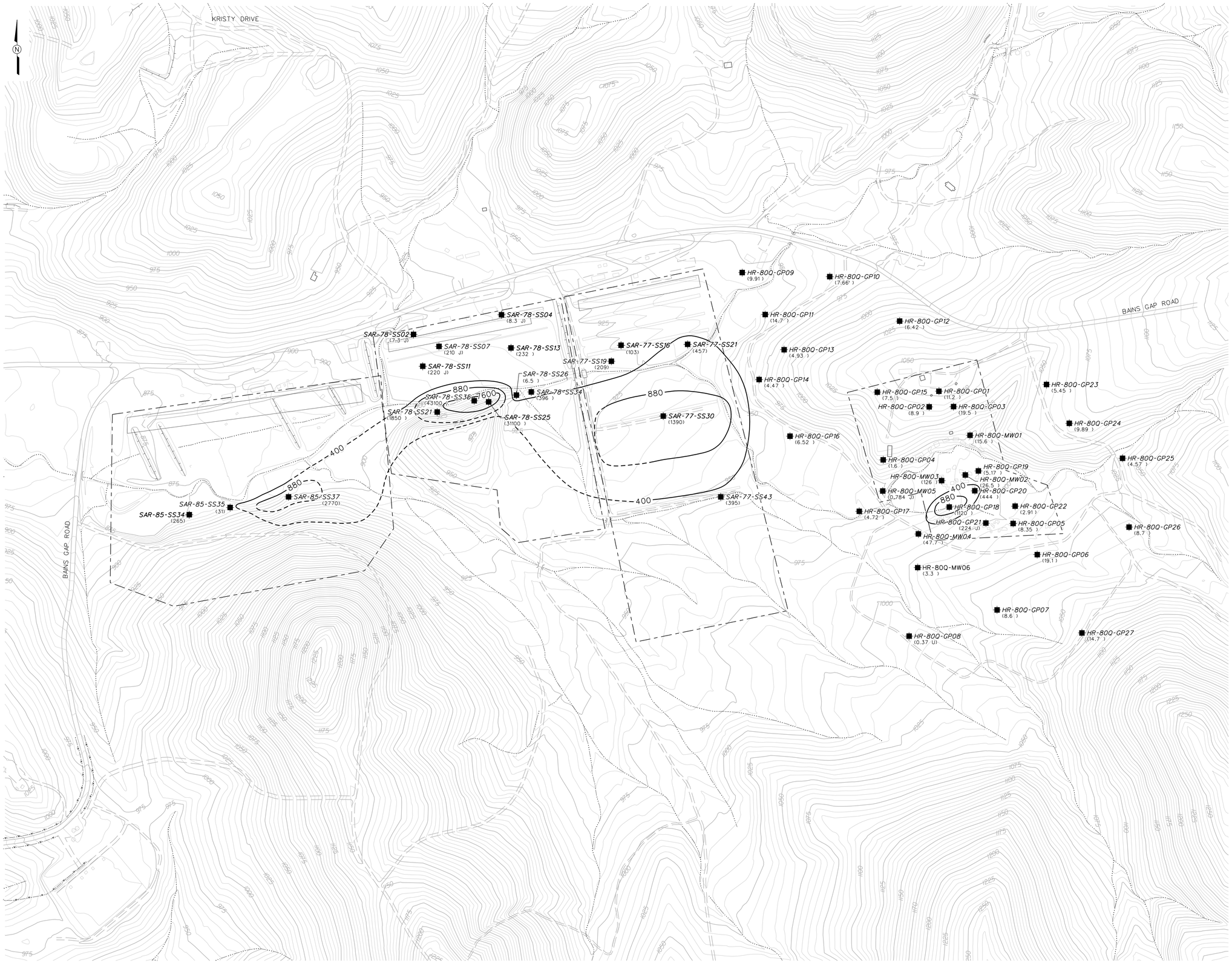

LEGEND:

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- BUILDING
- TOPOGRAPHIC CONTOURS (CONTOUR INTERVAL - 5 FOOT)
- TREES / TREELINE
- STUDY AREA
- CULVERT WITH HEADWALL
- SURFACE DRAINAGE / CREEK
- MANMADE SURFACE DRAINAGE FEATURE
- FENCE
- UTILITY POLE
- BERM
- SUBSURFACE SOIL SAMPLE LOCATION
- (817) LEAD CONCENTRATION (mg/kg)
- LEAD ISOPLETH IN (mg/kg) (DASHED WHERE INFERRED):
- 400 — SOIL RESIDENTIAL SSSL - (400 mg/kg) SOIL INDUSTRIAL SSSL - (880 mg/kg) SOIL RECREATIONAL SITE USER SSSL - (7,600 mg/kg)
- mg/kg — MILLIGRAMS PER KILOGRAM
- SSSL — SITE SPECIFIC SCREENING LEVELS
- U — DETECTION LIMIT
- J — COMPOUND WAS POSITIVELY IDENTIFIED: REPORT VALUE IS THE ESTIMATED CONCENTRATION

SCALE
0 200 400 FEET

FIGURE 3-2
LEAD CONCENTRATION ISOPLETH MAP
IN SUBSURFACE SOILS
BAINS GAP ROAD RANGES
PARCELS 77Q, 78Q, 80Q AND 85Q

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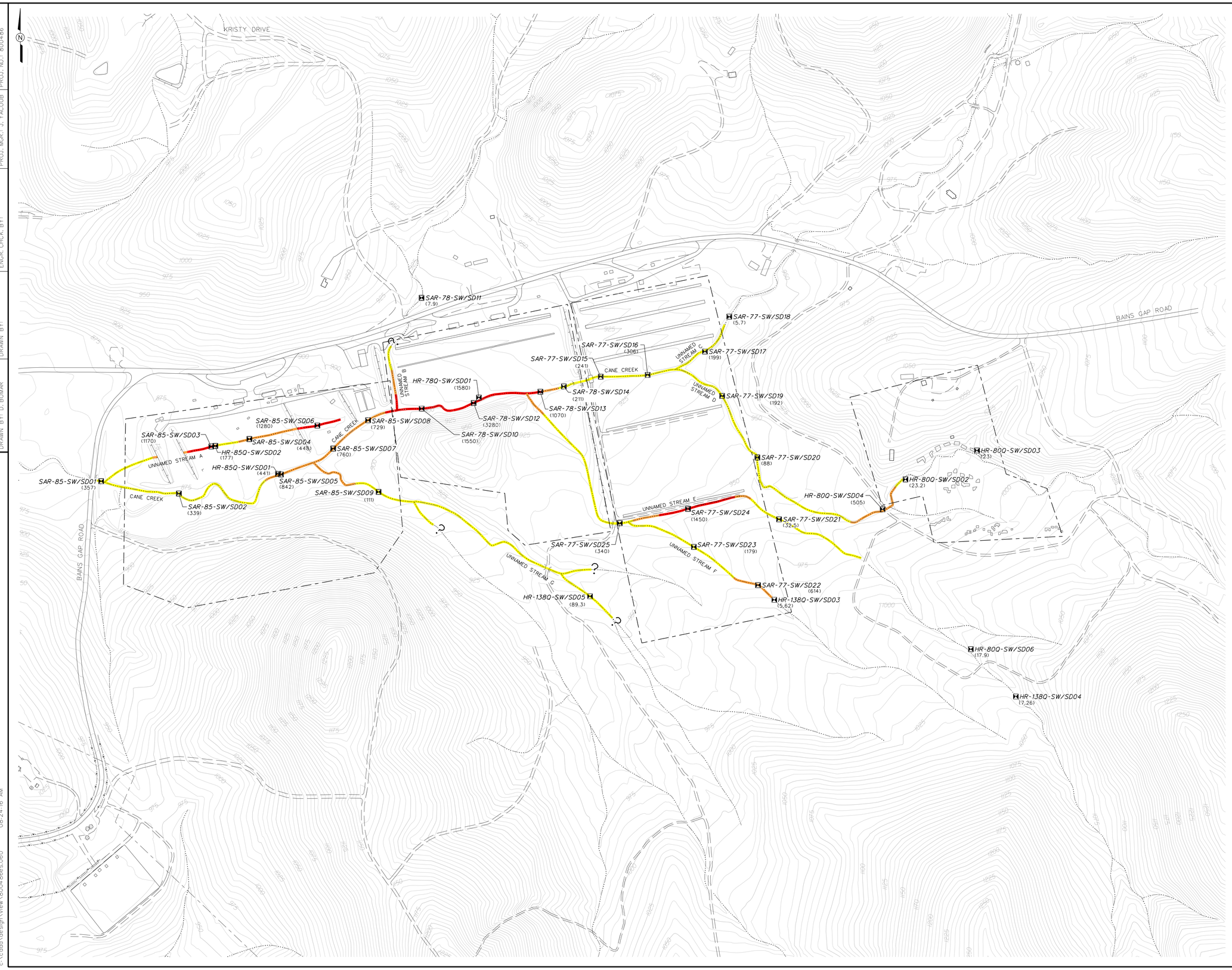

LEGEND:

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- FORMER BUILDING
- TOPOGRAPHIC CONTOURS (CONTOUR INTERVAL - 5 FOOT)
- TREES / TREELINE
- STUDY AREA
- CULVERT WITH HEADWALL
- SURFACE DRAINAGE / CREEK
- MANMADE SURFACE DRAINAGE FEATURE
- FENCE
- UTILITY POLE
- BERM
- SEDIMENT SAMPLE LOCATION
- (1580) LEAD CONCENTRATION (mg/kg)
- ≥ 30.2 mg/kg - ESV FOR LEAD (IT, 2000a)
- ≥ 400 mg/kg - RECREATIONAL SITE USER SSSL FOR LEAD (IT, 2000a)
- ≥ 880 mg/kg - INDUSTRIAL SSSL (IT, 2000a)
- mg/kg MILLIGRAMS PER KILOGRAMS
- ≥ GREATER THAN OR EQUAL TO
- SSSL SITE SPECIFIC SCREENING LEVELS
- ESV ECOLOGICAL SCREENING VALUE
- ? EXTENT UNKNOWN

SCALE
0 200 400 FEET

FIGURE 3-3
LEAD CONCENTRATION IN SEDIMENT
BAINS GAP ROAD RANGES
PARCELS 77Q, 78Q, 80Q AND 85Q

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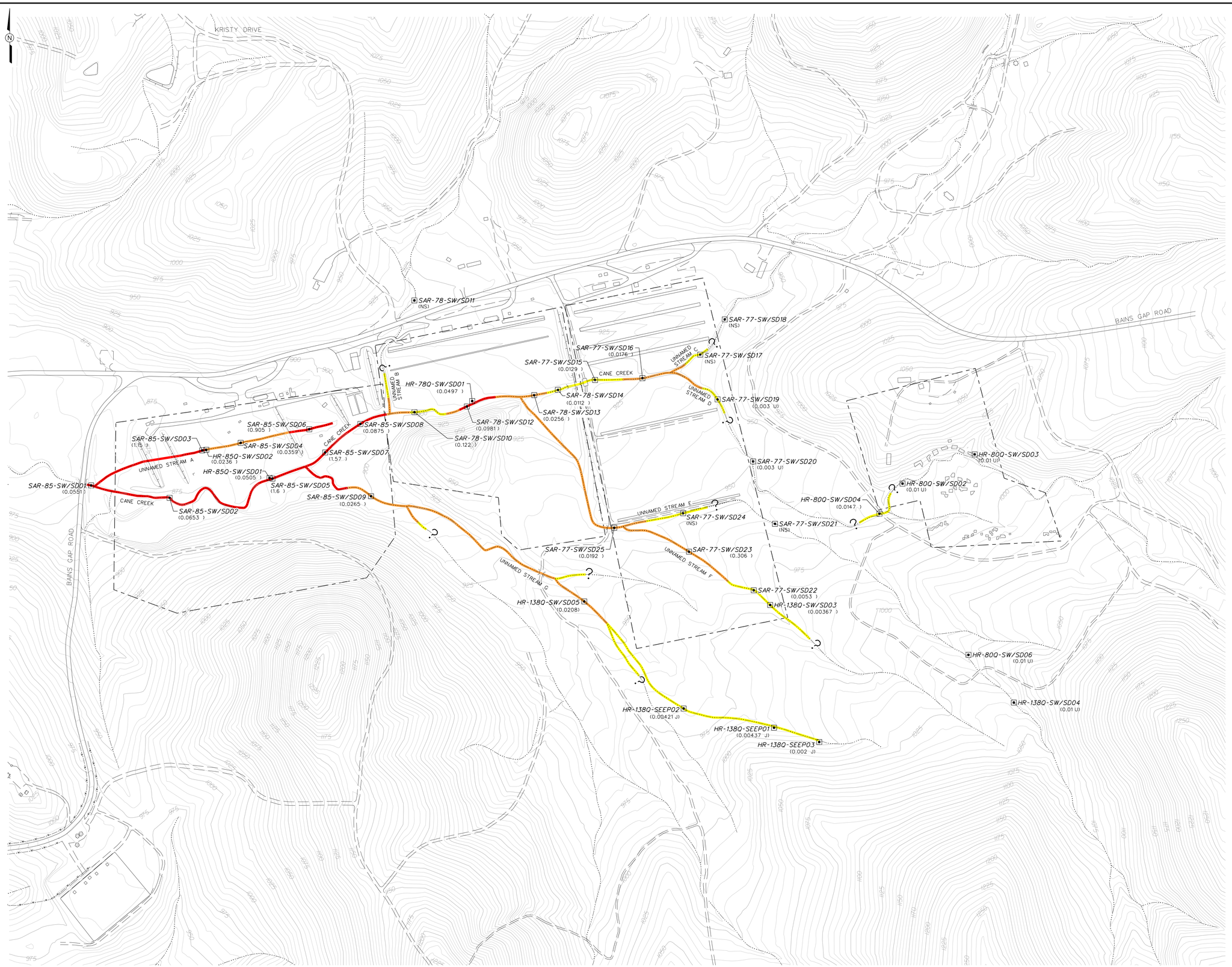

LEGEND:

- UNIMPROVED ROADS AND PARKING
- PAVED ROADS AND PARKING
- FORMER BUILDING
- TOPOGRAPHIC CONTOURS (CONTOUR INTERVAL - 5 FOOT)
- TREES / TREELINE
- STUDY AREA
- CULVERT WITH HEADWALL
- SURFACE DRAINAGE / CREEK
- MANMADE SURFACE DRAINAGE FEATURE
- FENCE
- UTILITY POLE
- BERM
- SURFACE WATER SAMPLE LOCATION
- (817) LEAD CONCENTRATION (mg/L)
- ≥ 0.00132 mg/L - ESV FOR LEAD (IT, 2000)
- ≥ 0.015 mg/L - RECREATIONAL SITE USER SSSL FOR LEAD (IT, 2000)
- ≥ 0.047 mg/L - UPPER BACKGROUND VALUE (SAIC, 1998)

mg/L	MILLIGRAMS PER LITER
≥	GREATER THAN OR EQUAL TO
SSSL	SITE SPECIFIC SCREENING LEVELS
ESV	ECOLOGICAL SCREENING VALUE
ND	NOT DETECTED
NS	NOT SAMPLED
?	EXTENT UNKNOWN
U	DETECTION LIMIT
J	COMPOUND WAS POSITIVELY IDENTIFIED: REPORT VALUE IS THE ESTIMATED CONCENTRATION

SCALE
0 200 400 FEET

FIGURE 3-4
LEAD CONCENTRATION IN SURFACE WATER
BAINS GAP ROAD RANGES
PARCELS 77Q, 78Q, 80Q AND 85Q

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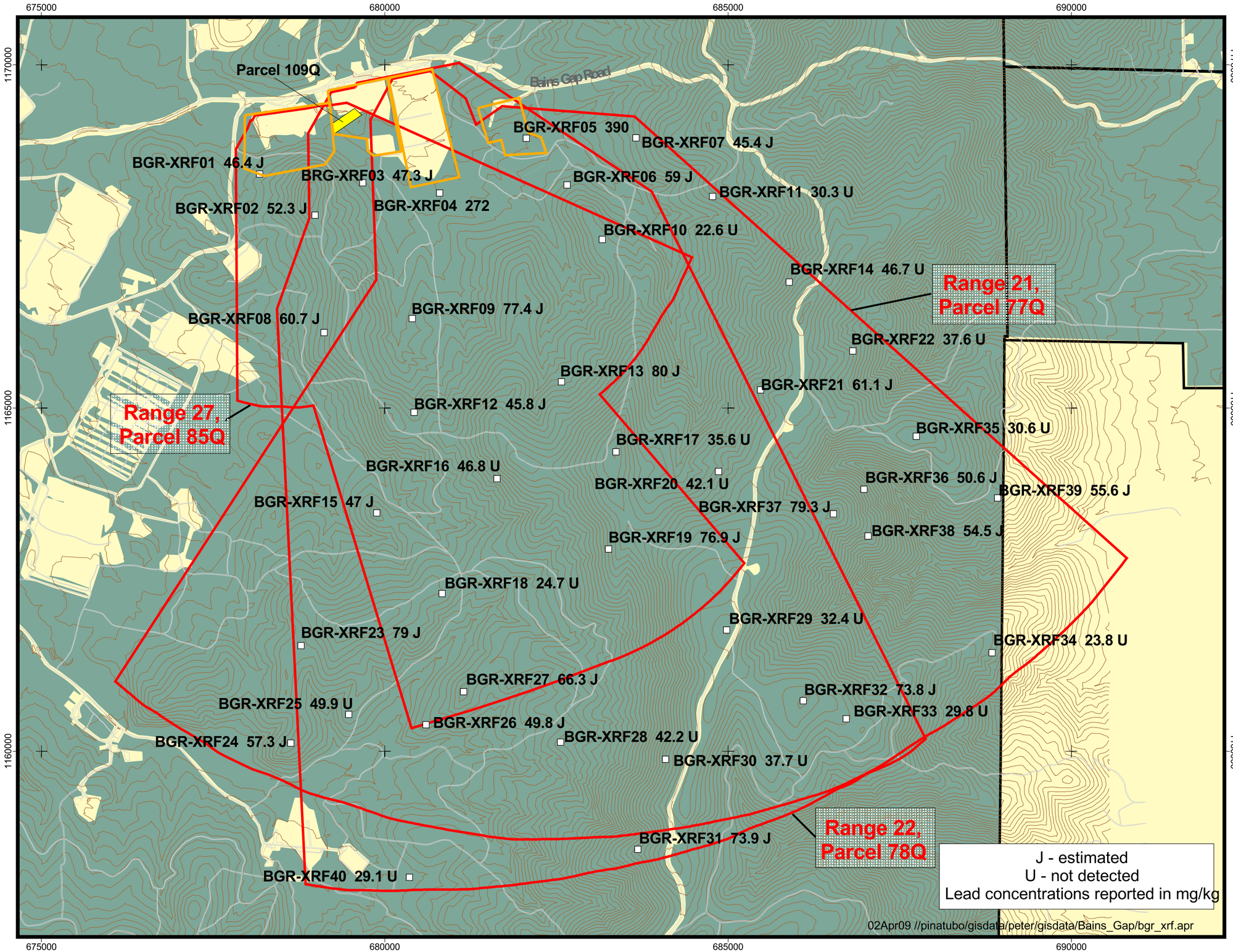

Figure 3-5

Safety Fan XRF Survey Results for Lead, Bains Gap Road Ranges

Legend

- XRF locations
- Roads
- 25' Contour
- Study Area
- Safety Fan
- FTMC Boundary
- Woods
- Cleared

0 1000 2000

State Plane feet, NAD83

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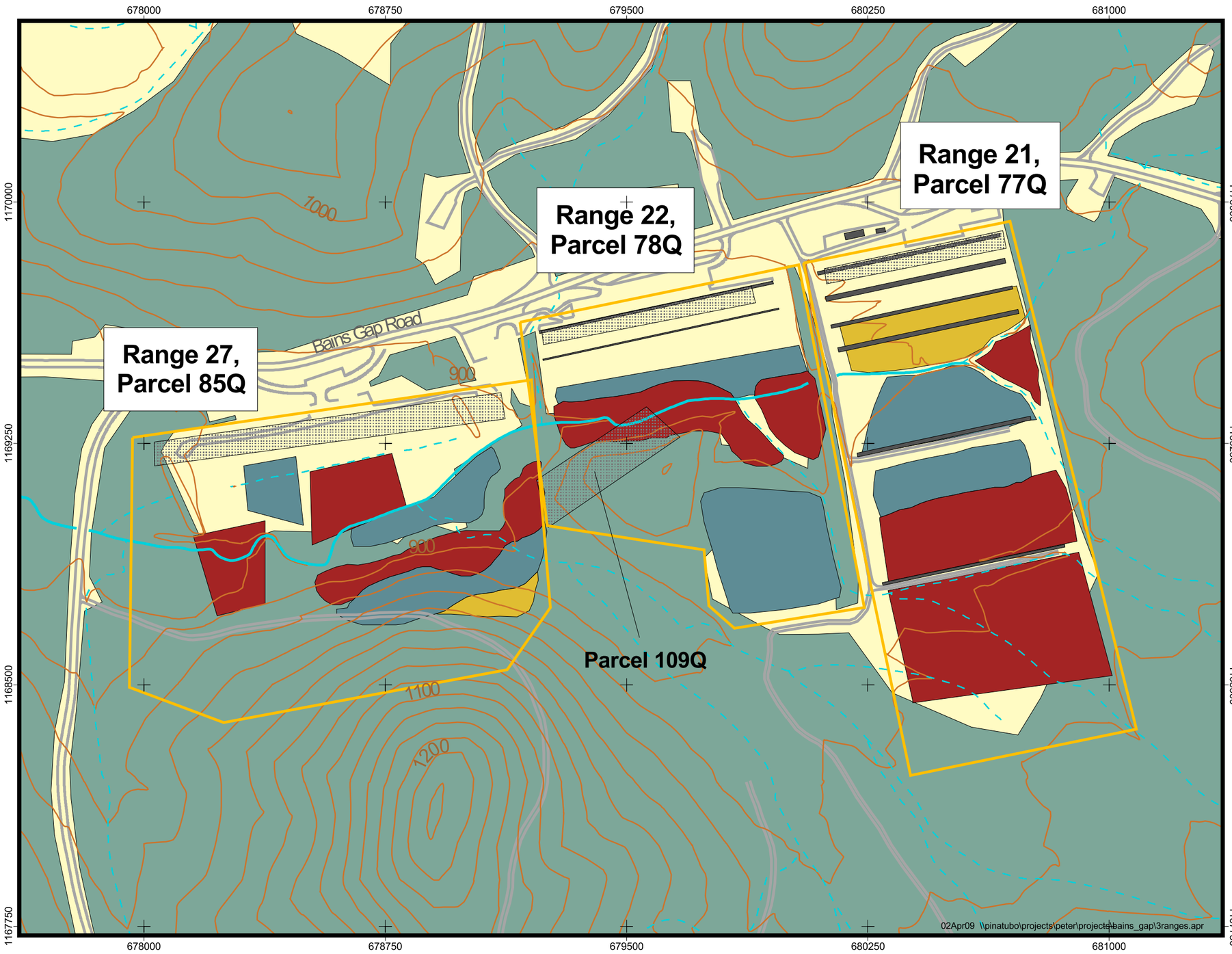

Figure 3-6

Results of Visual Survey, Range 21, Range 22, and Range 27

Legend

- Streams
- Concrete Slabs
- 25' Contours
- Firing Lines
- Roads

Lead Density

- Light
- Moderate
- Dense
- Wooded
- Not Wooded

0 250 500 750

State Plane feet, NAD83

N

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