

Wisconsin Geological and Natural History Survey Open-File Report 2019-01  
Zambito, J.J., IV, Haas, L.D., Parsen, M.J., and McLaughlin, P.I.

## Appendix B. Data compilation

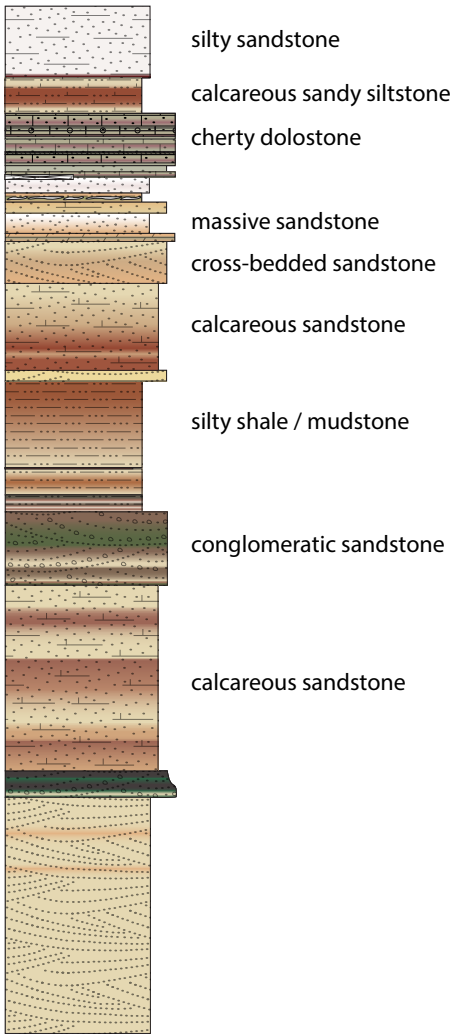
Combined lithostratigraphic, geochemical, and applicable geophysical data by site

# Appendix B

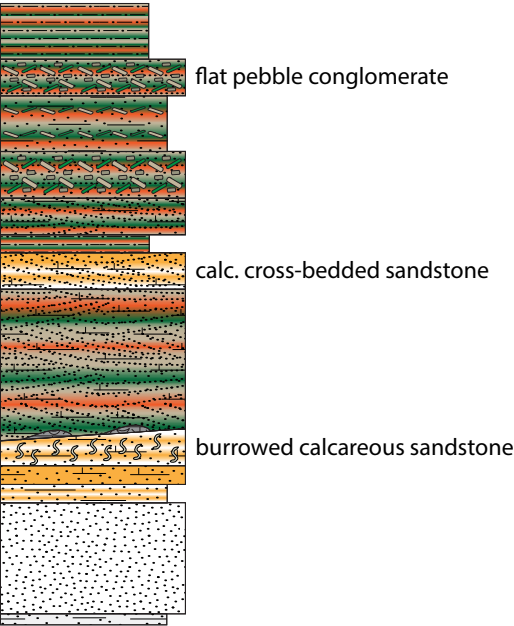
## KEY to Lithologic Logs

The level of detail presented in this appendix varies among sites. Below is a generalized guide. Colors and lithologic symbols used for core and outcrop represent the colors and lithologies observed, while those shown for sites where only well cuttings are available use representative colors and lithologies for each stratigraphic unit identified in the WGNHS Geologic Log (see Appendix C for detailed logs). Lithologic symbology is outlined below.

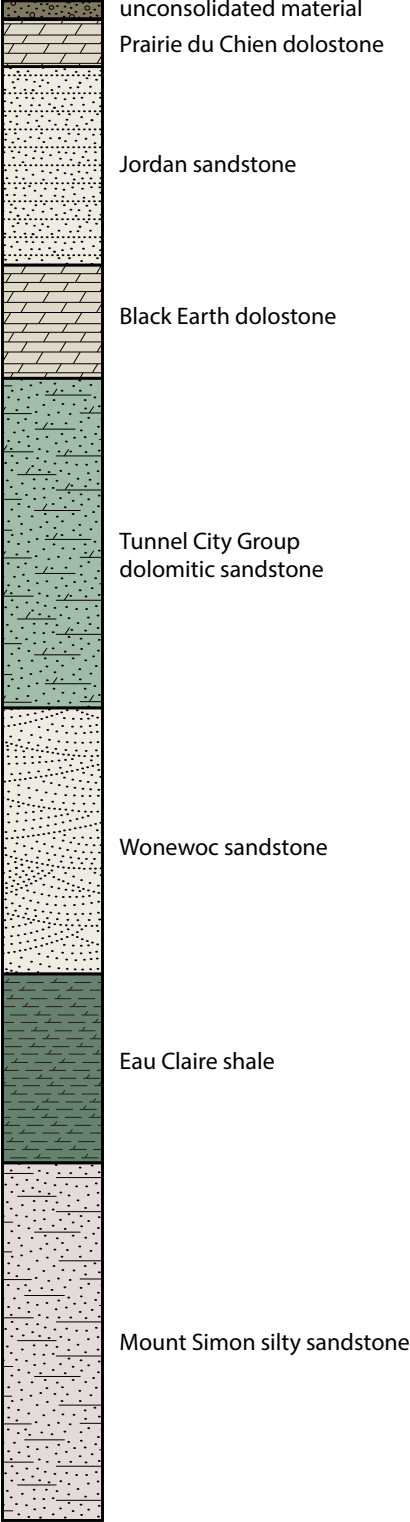
### Example Core



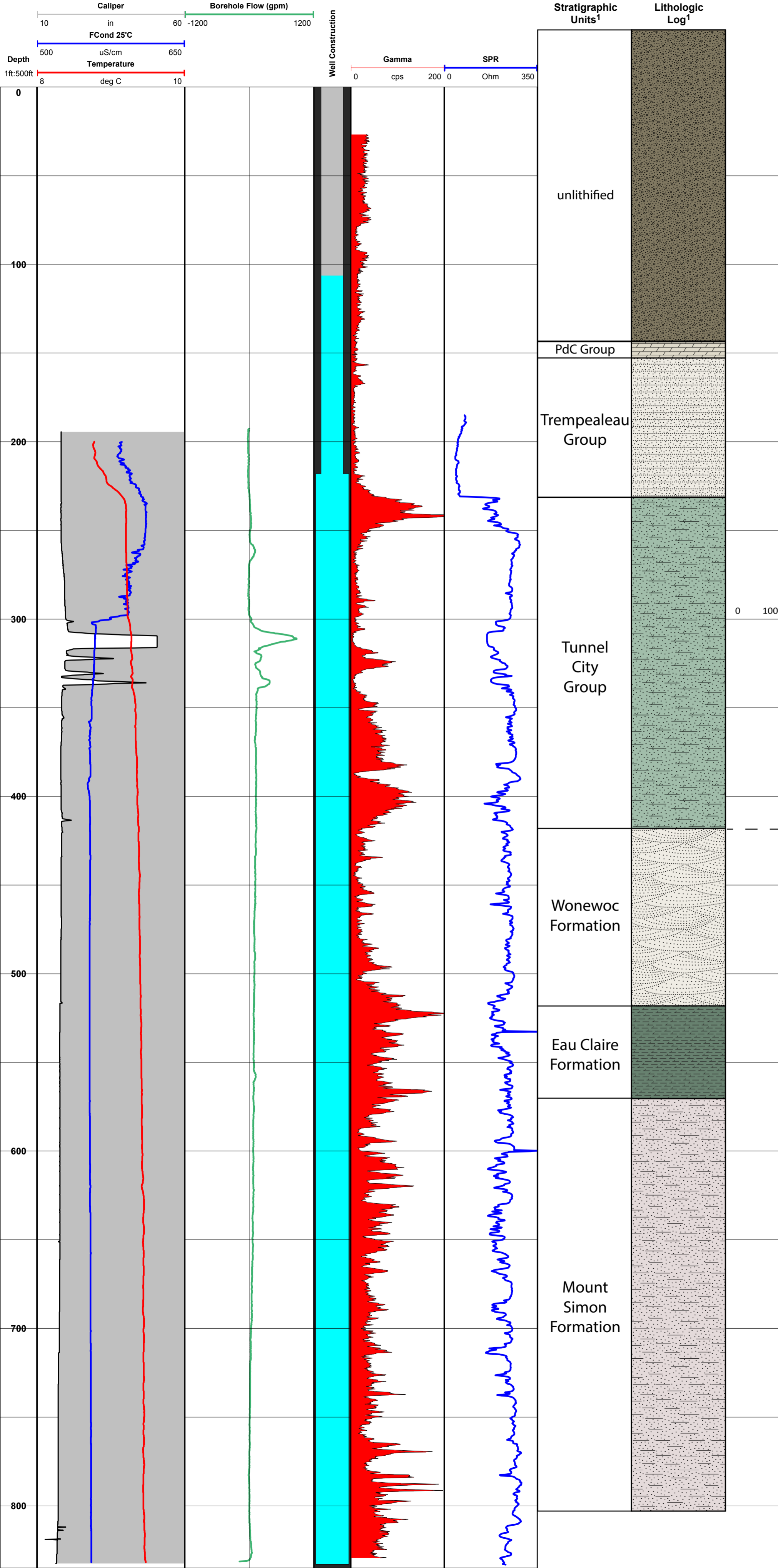
### Example Outcrop



### Example Cuttings Set



Site 1 - 3000515 Village of Turtle Lake Test Well 4 & 3000192 Village of Turtle Lake Well 2



**WGNHS Well ID** **3000515**

**DATE** 1/25/2013 **WELL NAME** Village of Turtle Lake - Test Well #4

**LOCATION** NE1/4SE1/4 Sec.30 T34N R14W

**COUNTY** Barron **LOGGED BY** PM Chase

**LATITUDE** 45.40077003 **LONGITUDE** -92.13724671

**LOCATION METHOD:** GPS ☒ **AIR PHOTO/TOPO** ☐ **PLSS** ☐ **OTHER** ☐

**ELEVATION** 1260 **ELEVATION METHOD:** DEM ☐ **TOPO** ☒ **OTHER** ☐

**WELL DEPTH** 833 **CASING DEPTH** 218 **DEPTH TO WATER** 106.3

**CASING STICK UP** 4.0 **File Created on:** 8/10/2016 **by:** MJP

**Comments:** SPR, SP, and Normal Resistivity profiles were collected for this well but only SPR is presented in this log. The Well Construction field depicts the well, casing, and water-level as measured on the day of logging. Spinner flow measurements taken under ambient conditions.

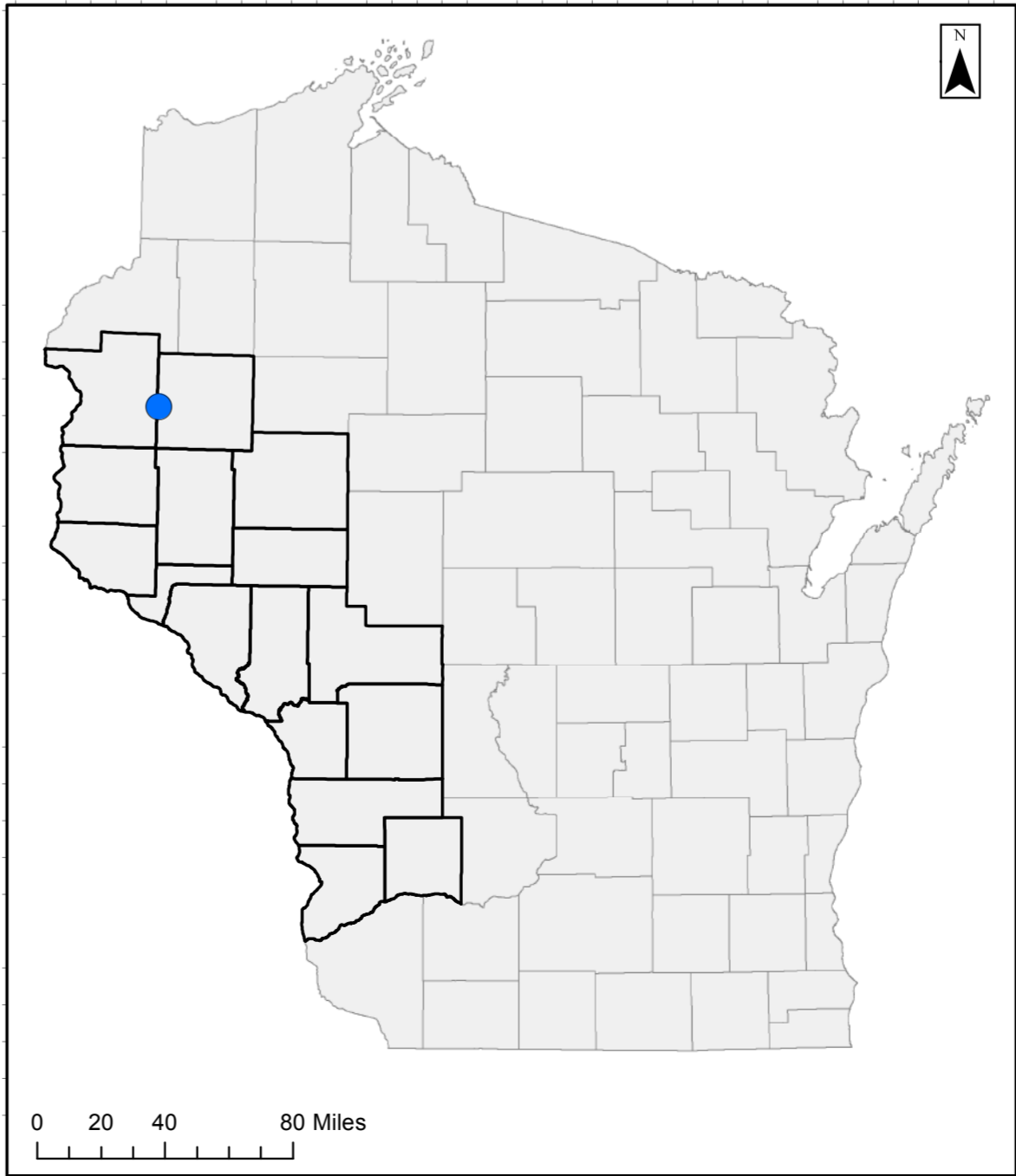
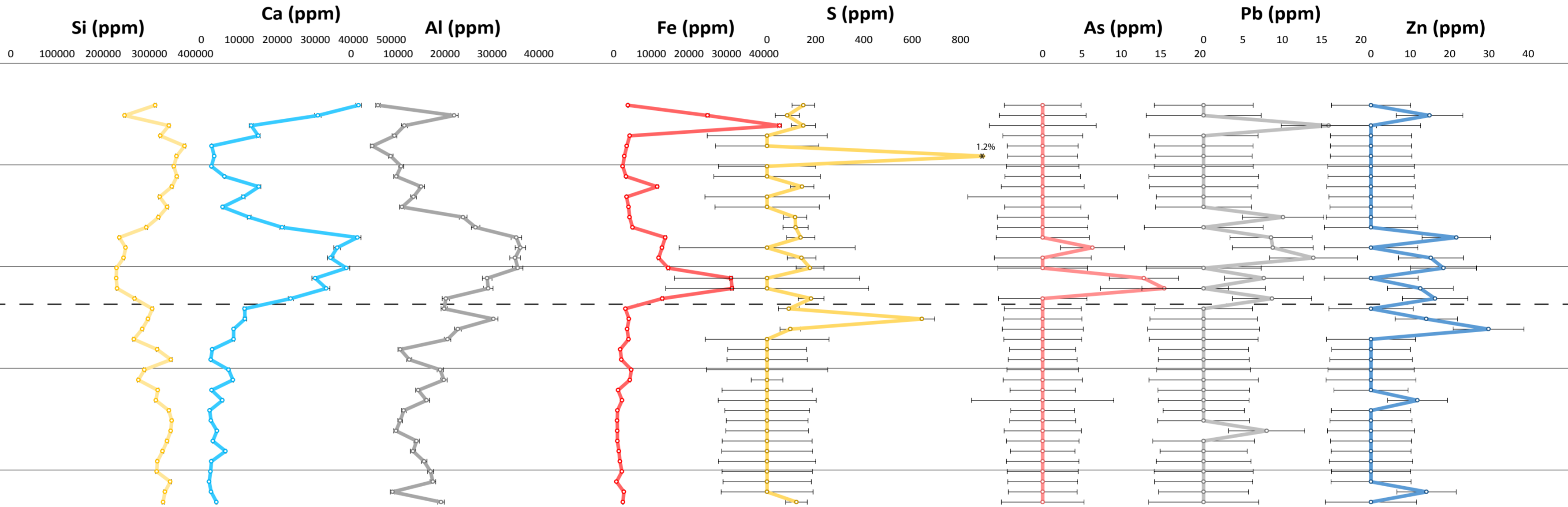
**LOGS COLLECTED:**

Gamma	<input checked="" type="checkbox"/>	Fluid Conductivity	<input checked="" type="checkbox"/>
Caliper	<input checked="" type="checkbox"/>	Flow Meter- HeatPulse	<input type="checkbox"/>
Single Point Resistivity	<input checked="" type="checkbox"/>	Flow Meter- Spinner	<input checked="" type="checkbox"/>
Self Potential	<input type="checkbox"/>	Optical Borehole Imager	<input type="checkbox"/>
Normal Resistivity	<input type="checkbox"/>	Acoustic Borehole Imager	<input type="checkbox"/>
Fluid Temperature	<input checked="" type="checkbox"/>	OTHER:	<input type="checkbox"/>

**Unless Noted:**

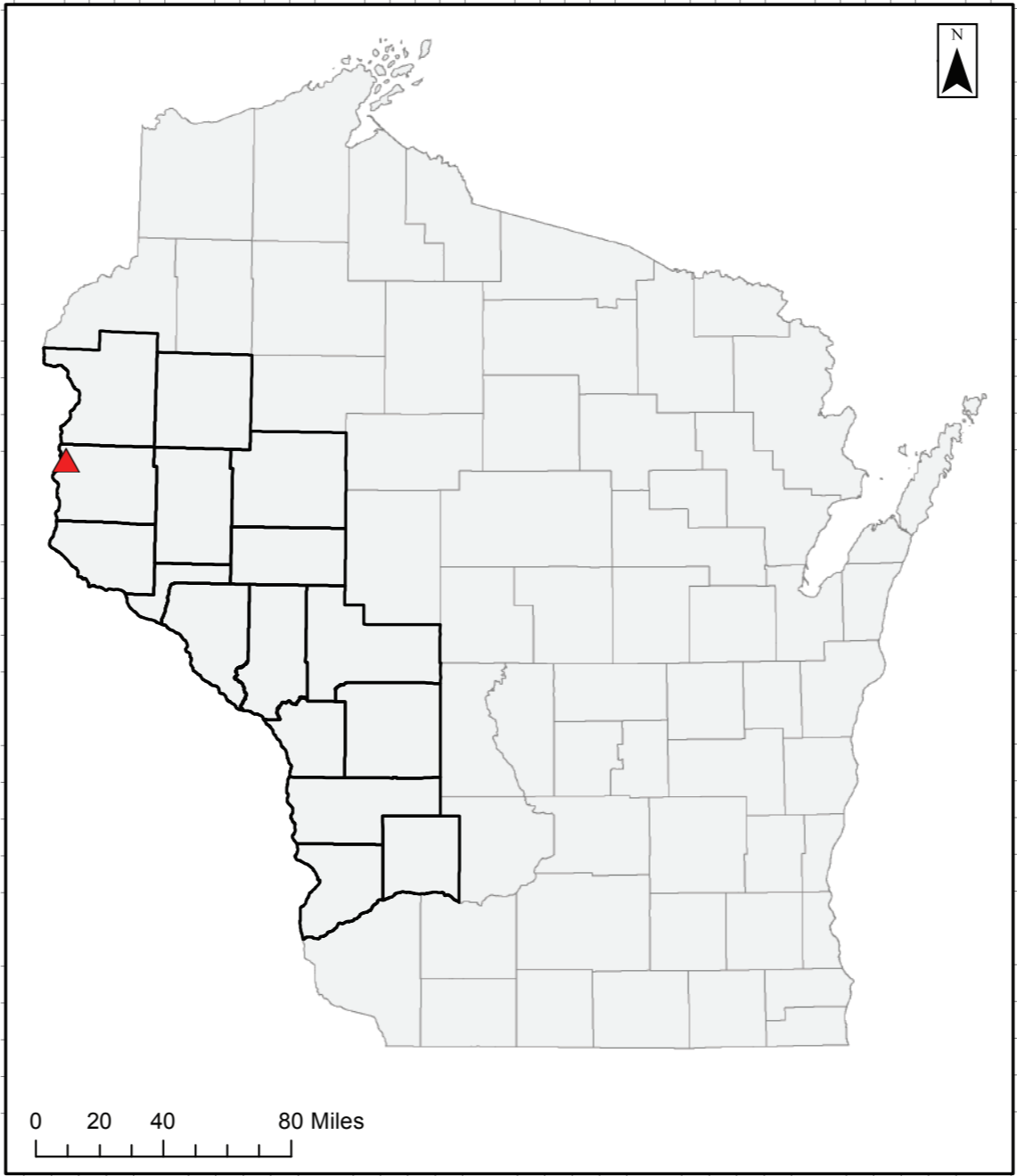
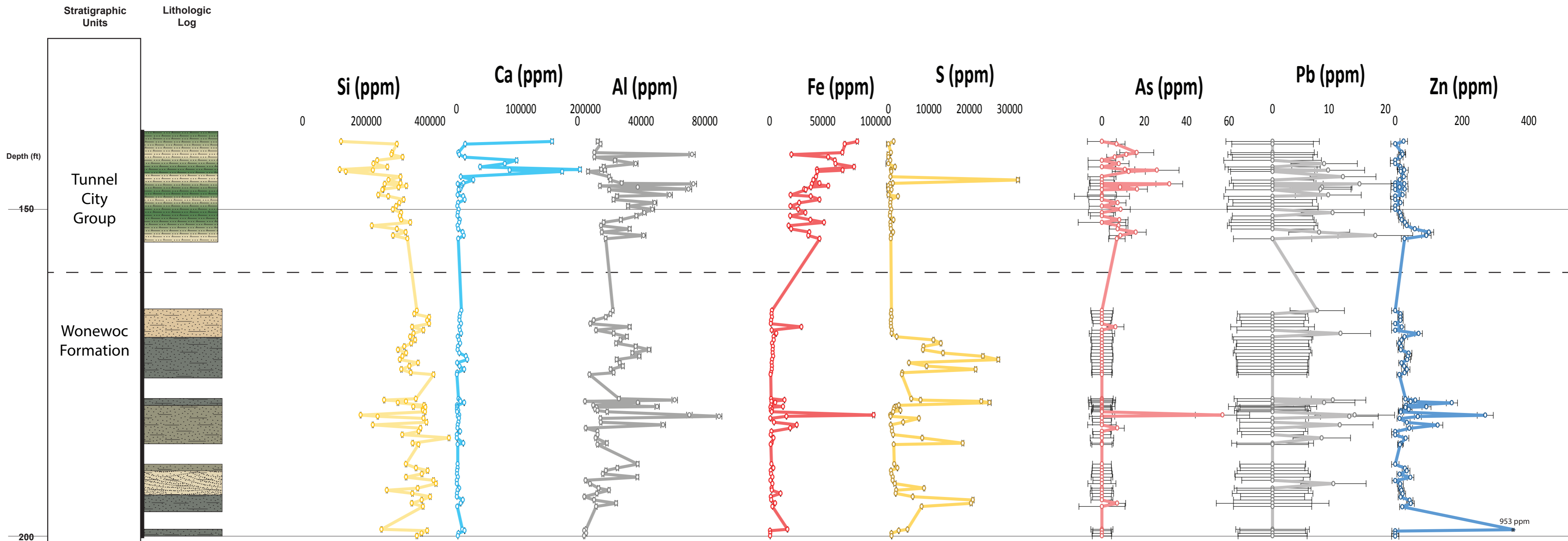
- all depths are in feet
- well depth, casing depth and depth to water are interpreted from geophysical log
- datum is the top of casing

**For more information or to obtain collected data not shown please contact us at** [geodata@uwex.edu](mailto:geodata@uwex.edu)

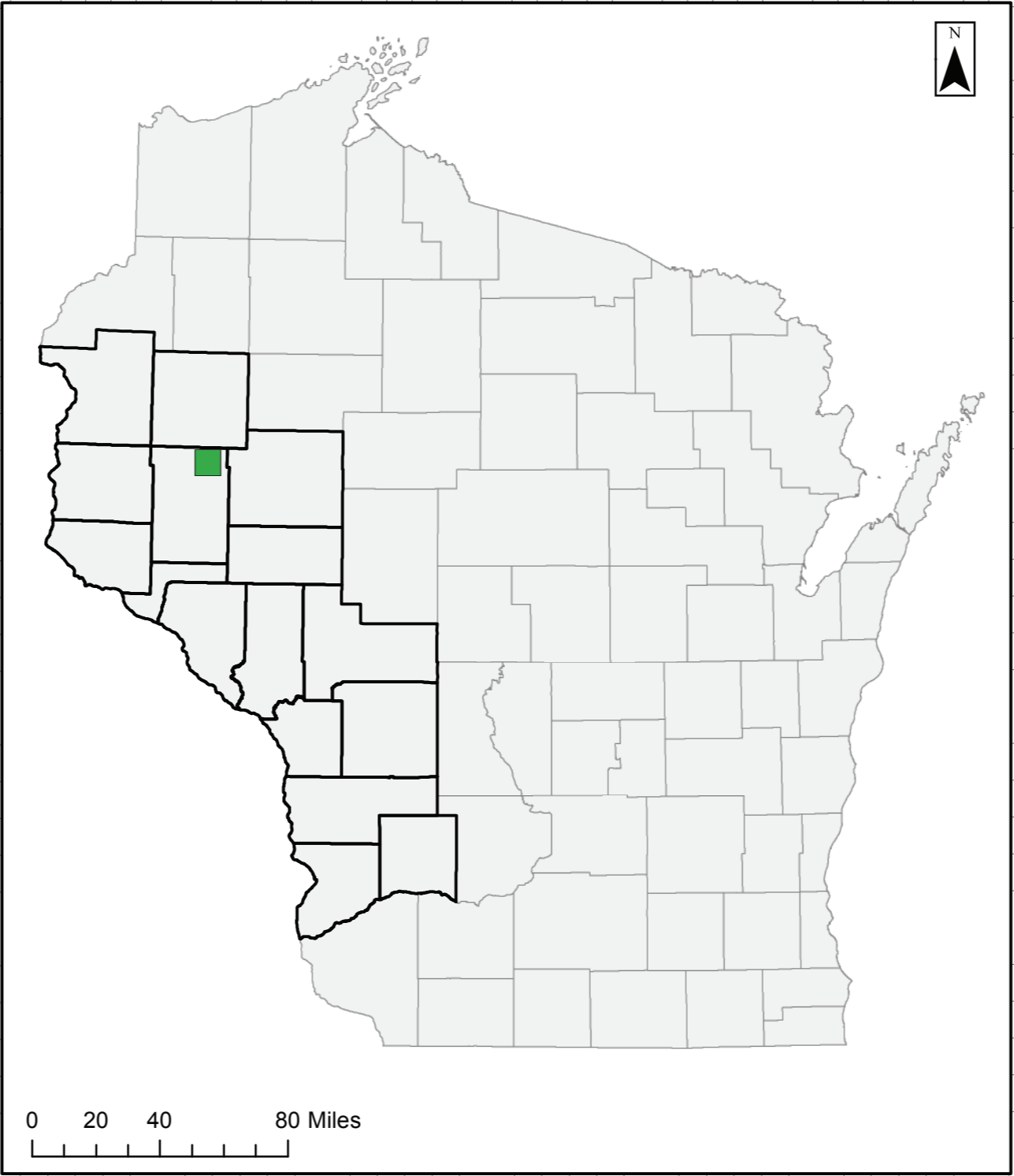
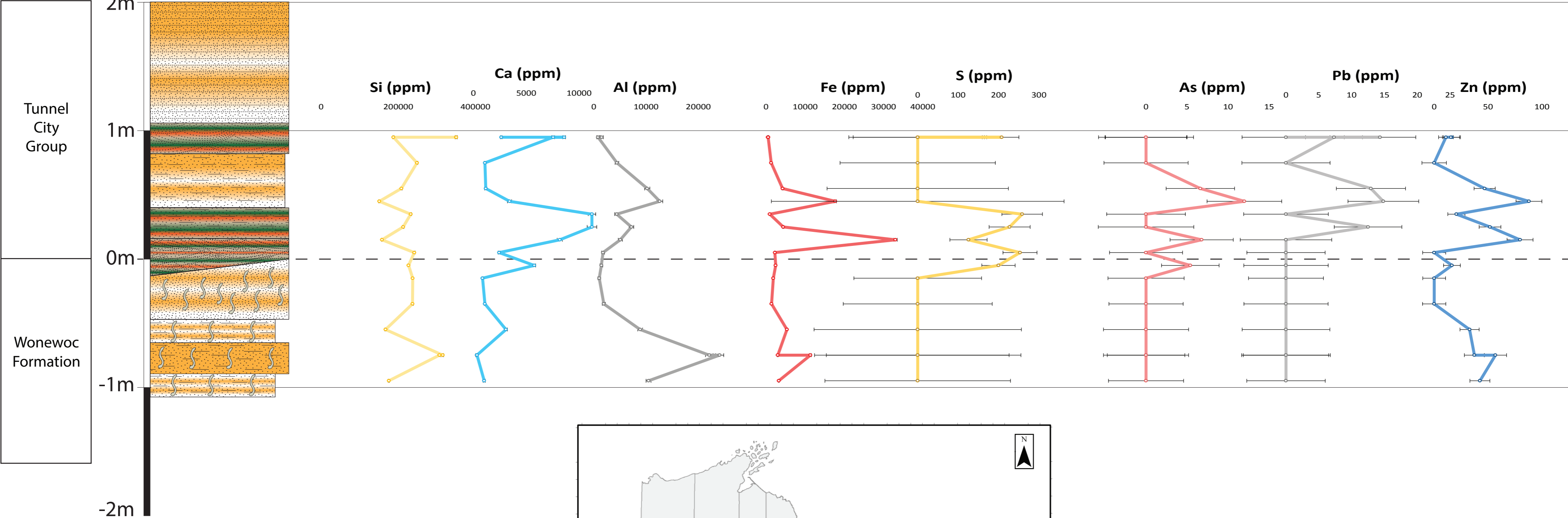


1: Stratigraphic Units and Lithologic Log adapted from WGNHS Geologic Log of Village of Turtle lake Well 2 (3000192)  
3000192 was estimated to start at 1270' elevation; a shift of ~25' made it comparable to gamma from 3000515 (gamma vs Al)  
pXRF data collected from 3000192

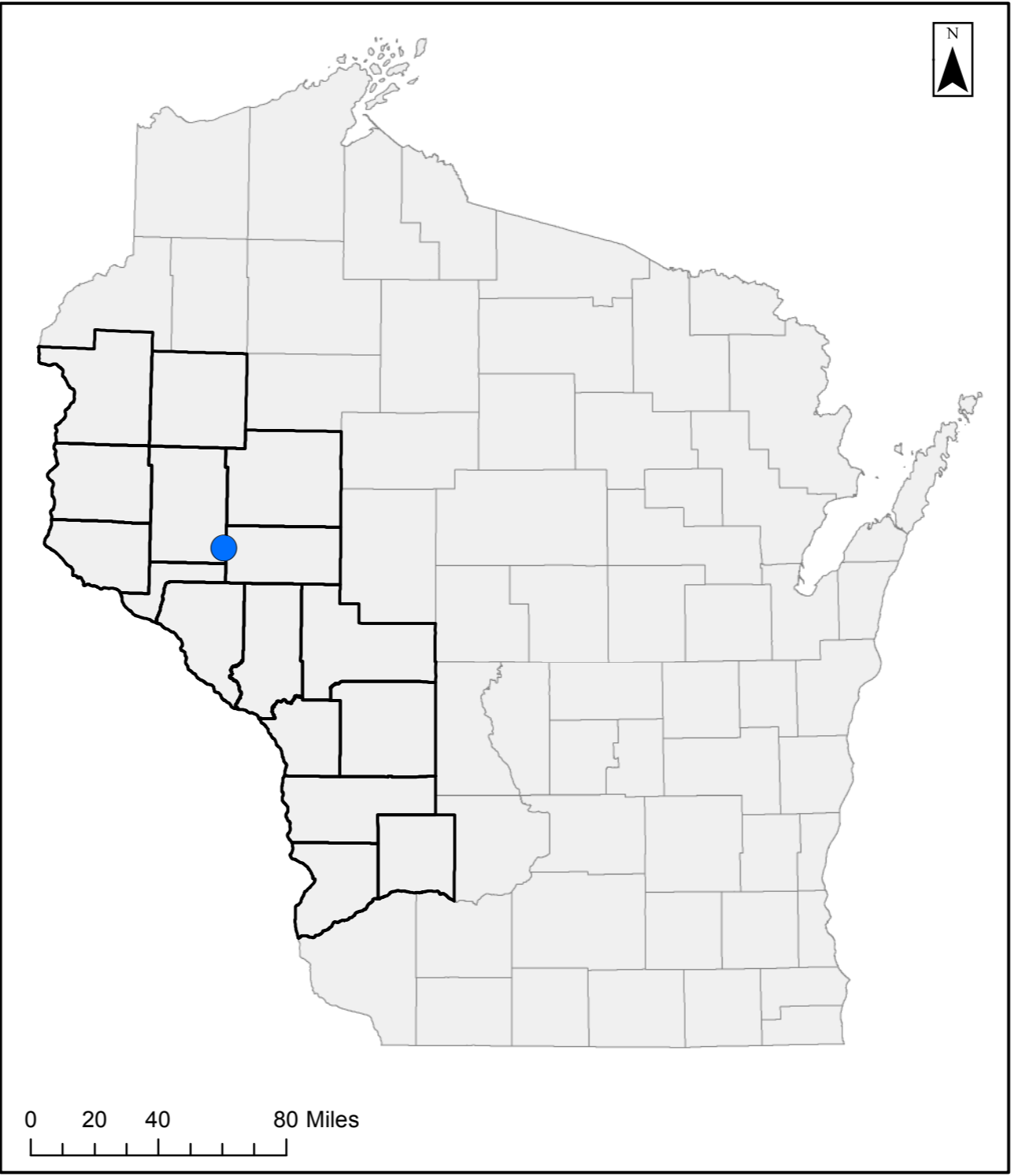
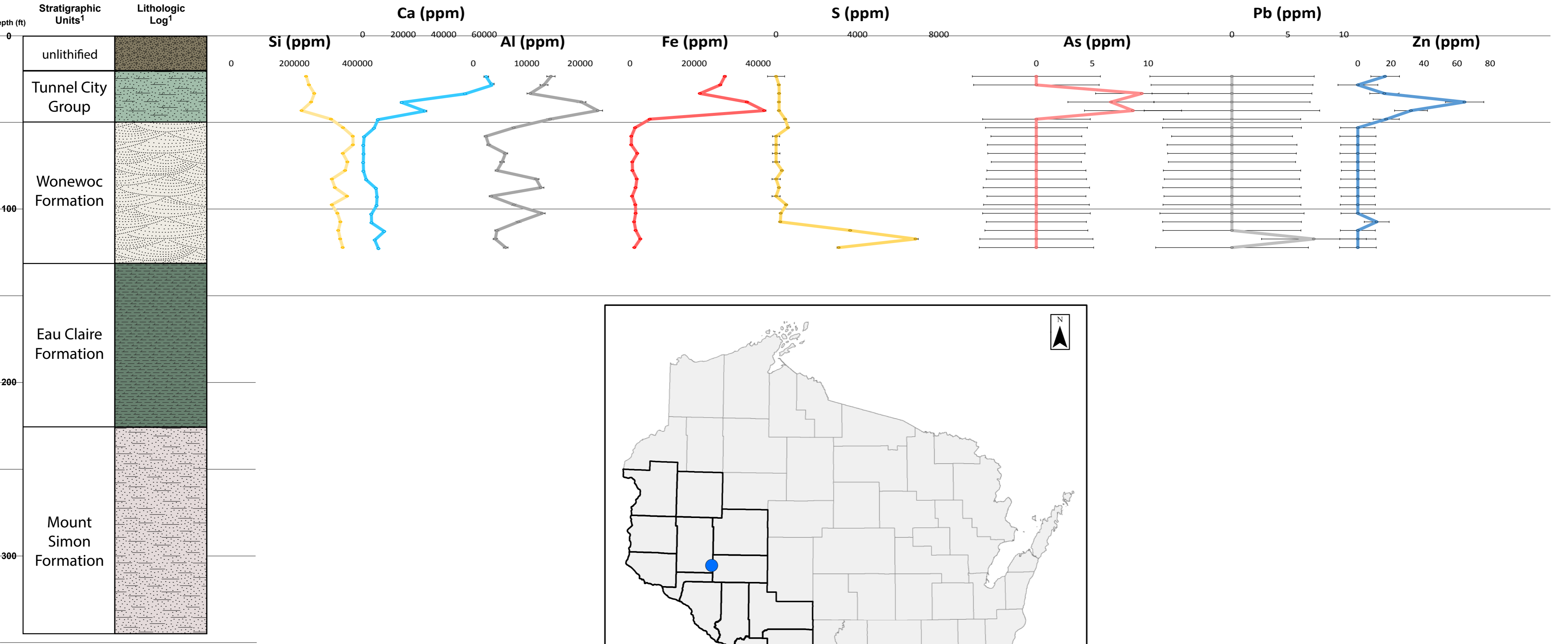
Site 2 - 56000829 WGNHS Belisle Quarry



Site 3 - Hwy W Hay Creek

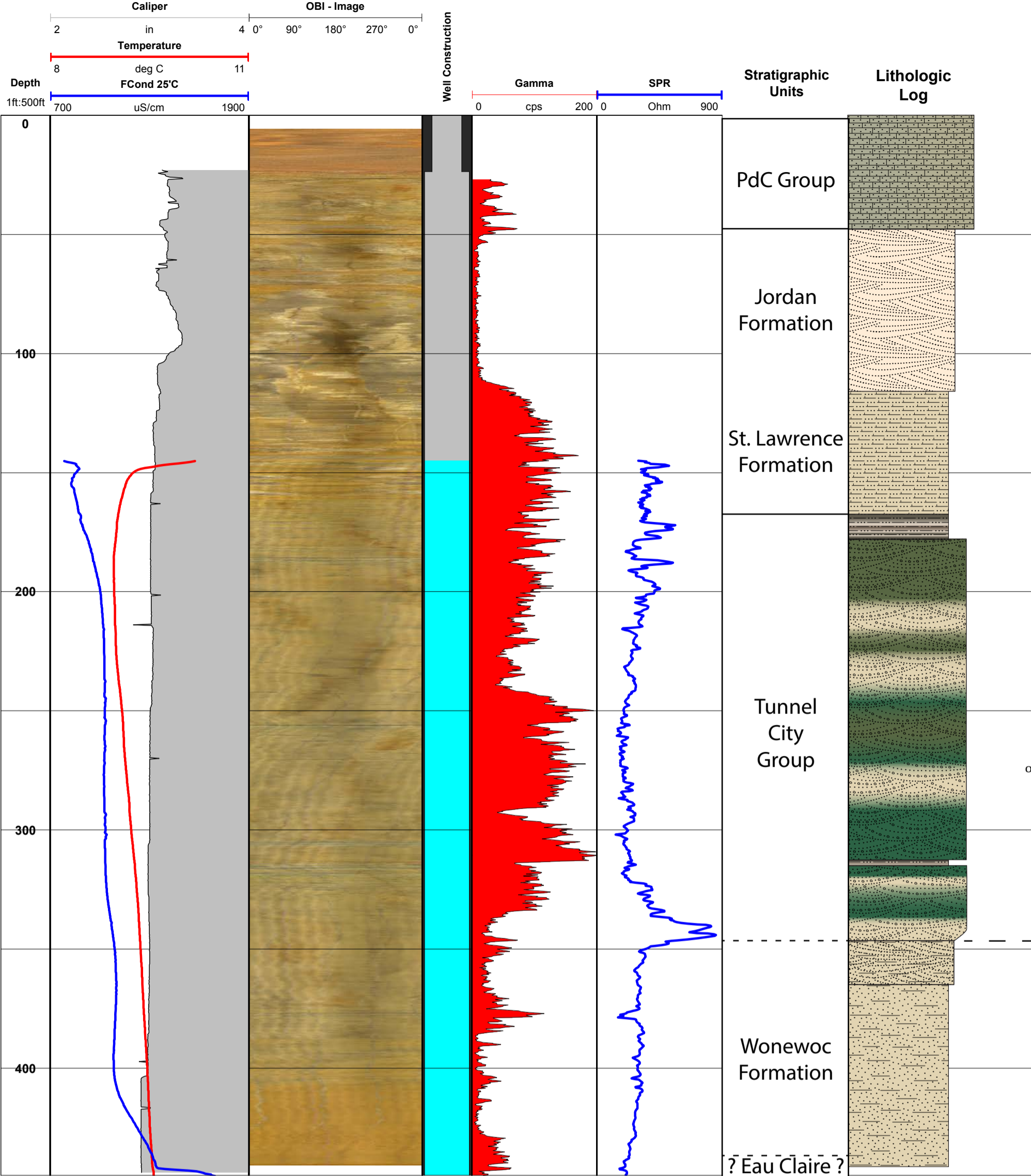


Site 4 - 17000274 Duane Welch Well



1: Stratigraphic Units and Lithologic Log adapted from WGNHS Geologic Log of Duane Welch Well (17000274)

Site 5 - 62000166 WGNHS Arcadia Quarry



**WGNHS Well ID 62000166**

DATE 8/4/15 WELL NAME WGNHS Arcadia Quarry

LOCATION The Kramer Company Quarry SE of Acadia

COUNTY Trempealeau LOGGED BY Bill Batten

LATITUDE 44.202276 LONGITUDE -91.459189

LOCATION METHOD: ☐ GPS ☐ AIR PHOTO/TOPO ☐ PLSS ☐ OTHER DEM

ELEVATION 1200 ELEVATION METHOD: DEM ☒ TOPO ☐ OTHER

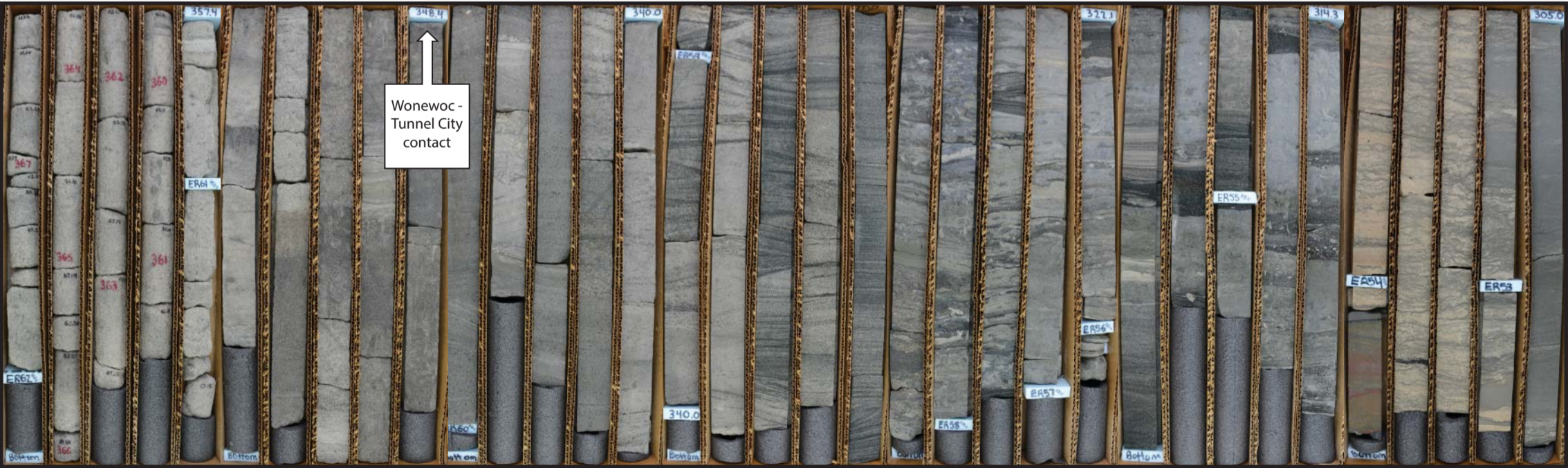
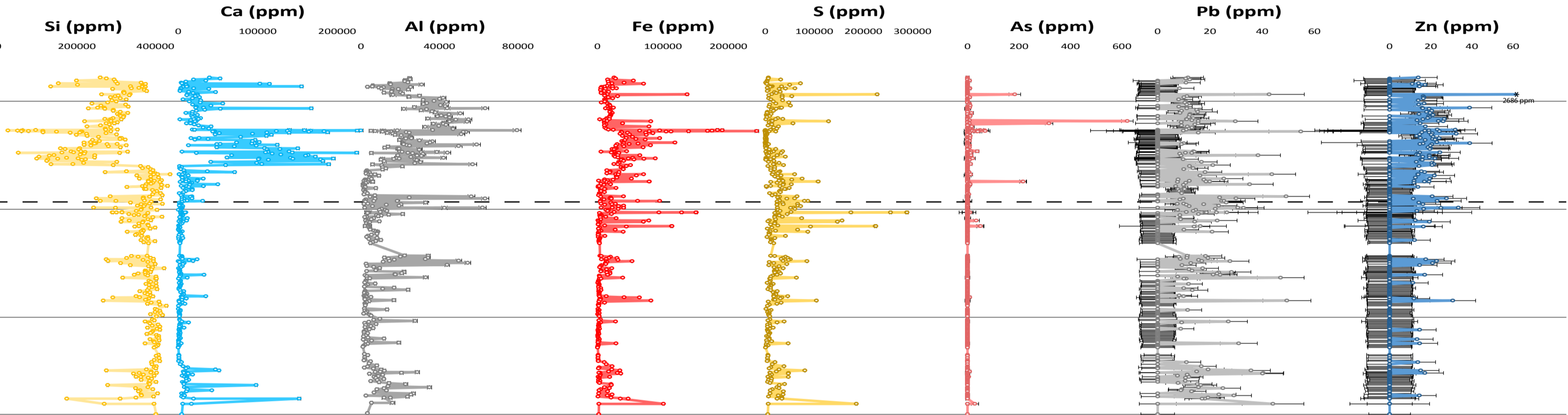
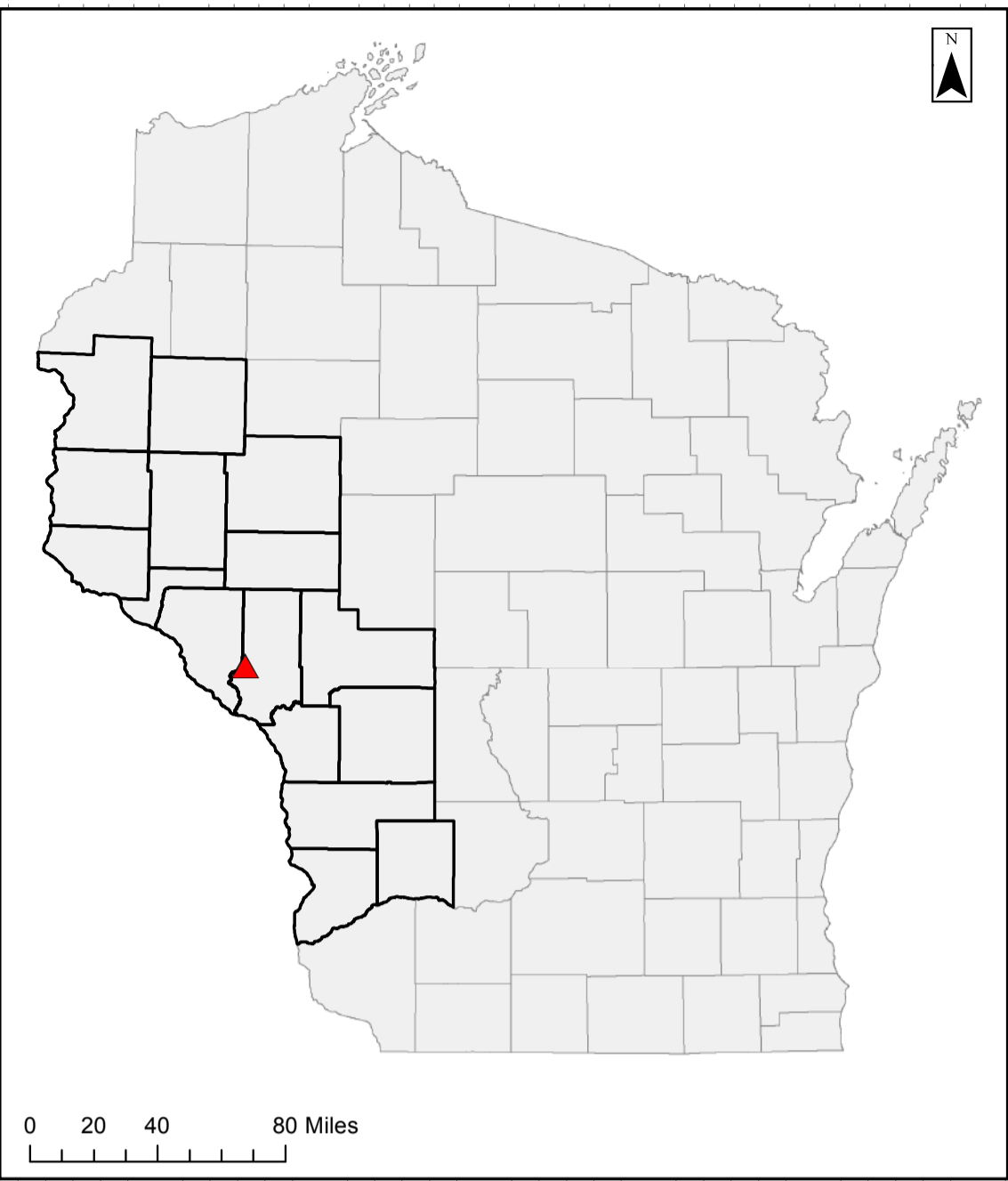
WELL DEPTH 445 CASING DEPTH 23.6 DEPTH TO WATER 145

CASING STICK UP 1.2 File Created on: 8/12/2016 by: MJP

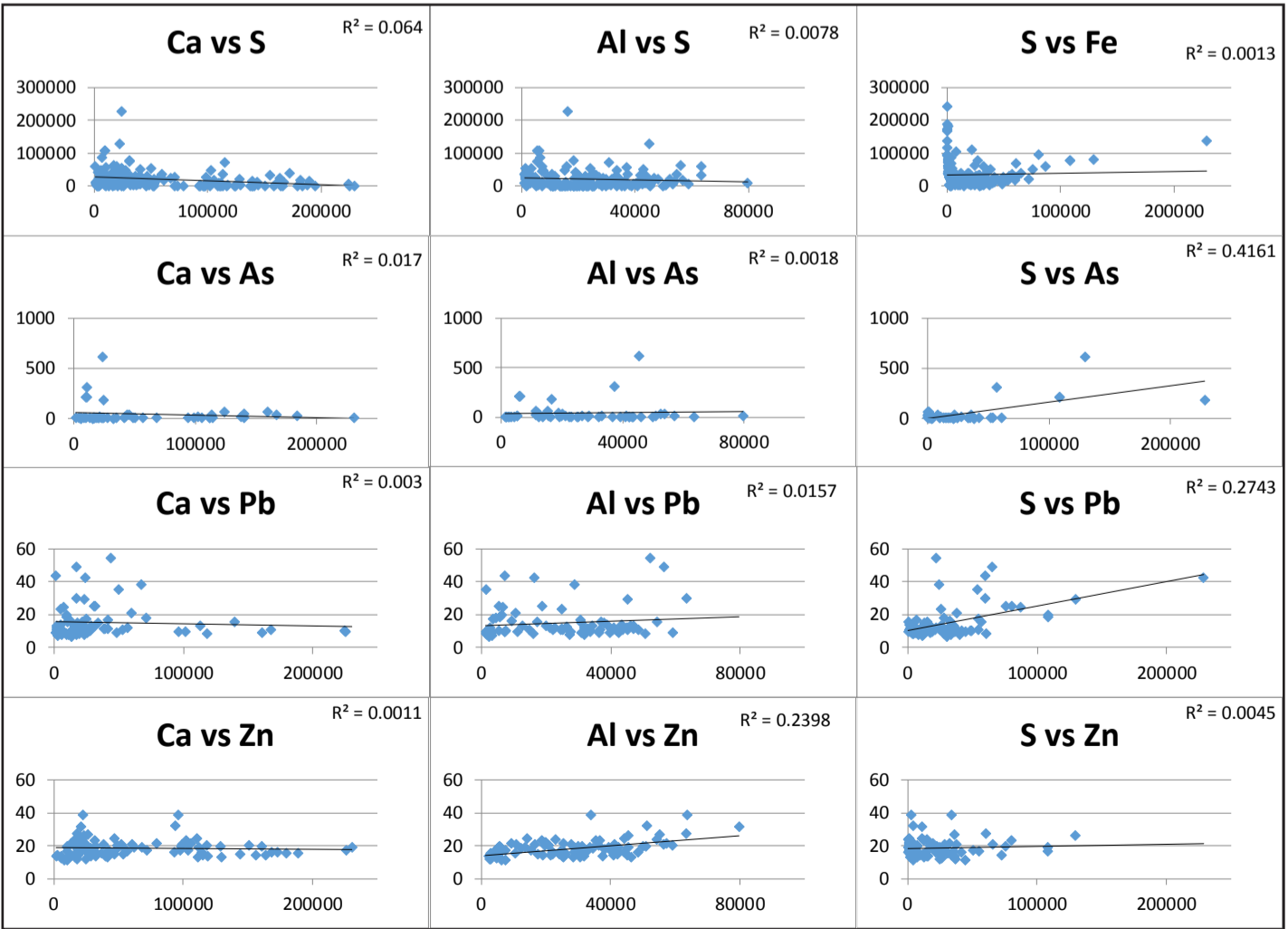
Comments: SPR, SP, and Normal Resistivity profiles were collected for this well but only SPR is presented in this log. The Well Construction field depicts the well, casing, and water-level as measured on the day of logging. Spinner flow measurements taken under ambient conditions

LOGS COLLECTED:

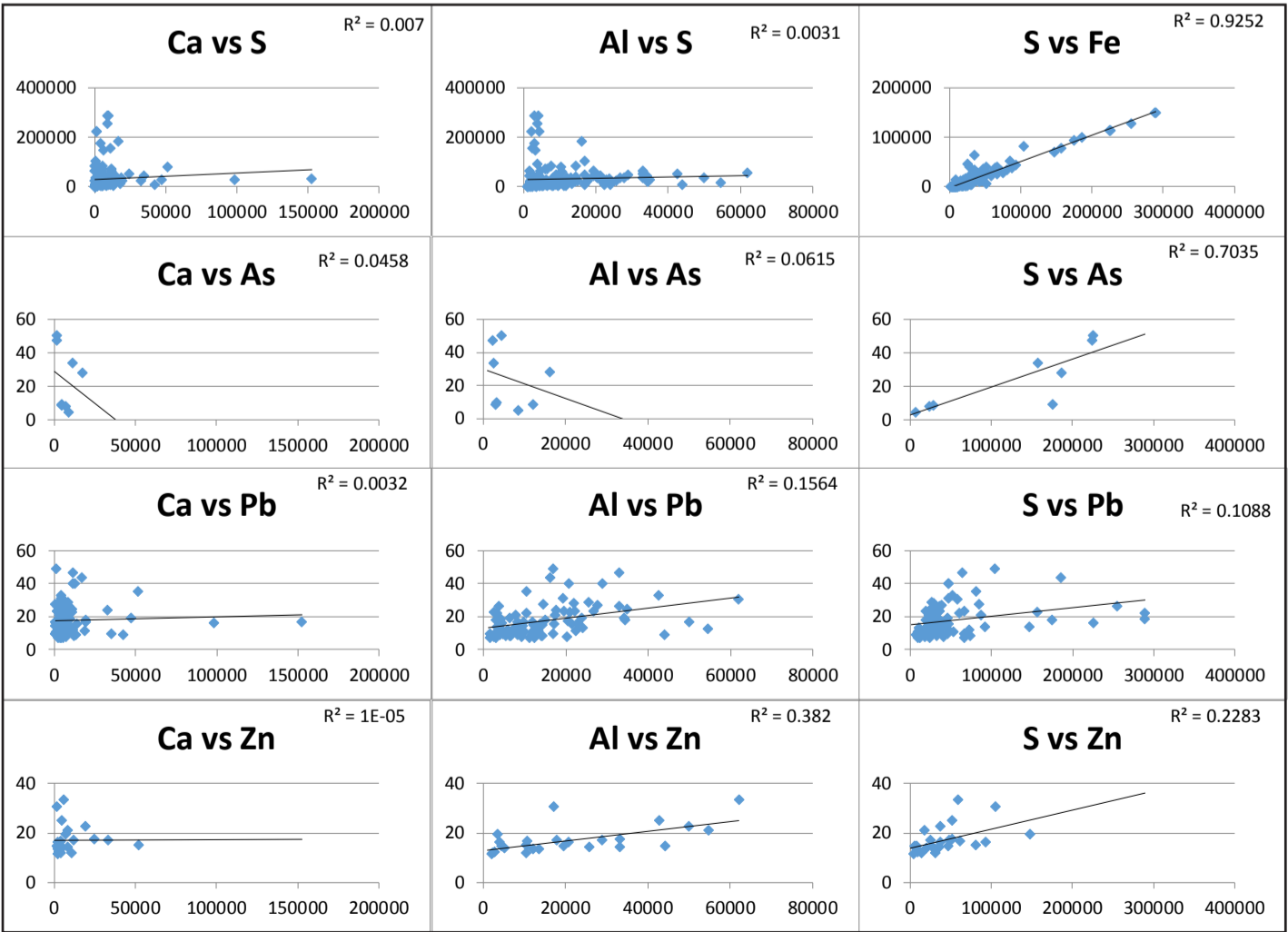
Gamma	<input checked="" type="checkbox"/>	Fluid Conductivity	<input checked="" type="checkbox"/>	Unless Noted: - all depths are in feet - well depth, casing depth and depth to water are interpreted from geophysical log - datum is the top of casing  For more information or to obtain collected data not shown please contact us at <a href="mailto:geodata@uwex.edu">geodata@uwex.edu</a>
Caliper	<input checked="" type="checkbox"/>	Flow Meter- HeatPulse	<input type="checkbox"/>	
Single Point Resistivity	<input checked="" type="checkbox"/>	Flow Meter- Spinner	<input type="checkbox"/>	
Self Potential	<input type="checkbox"/>	Optical Borehole Imager	<input checked="" type="checkbox"/>	
Normal Resistivity	<input type="checkbox"/>	Acoustic Borehole Imager	<input type="checkbox"/>	
Fluid Temperature	<input checked="" type="checkbox"/>	OTHER:	<input type="checkbox"/>	



WGNHS Arcadia Quarry 62000166. We tentatively place the contact between the Tunnel City Group and Wonewoc Formation at 348.4'.

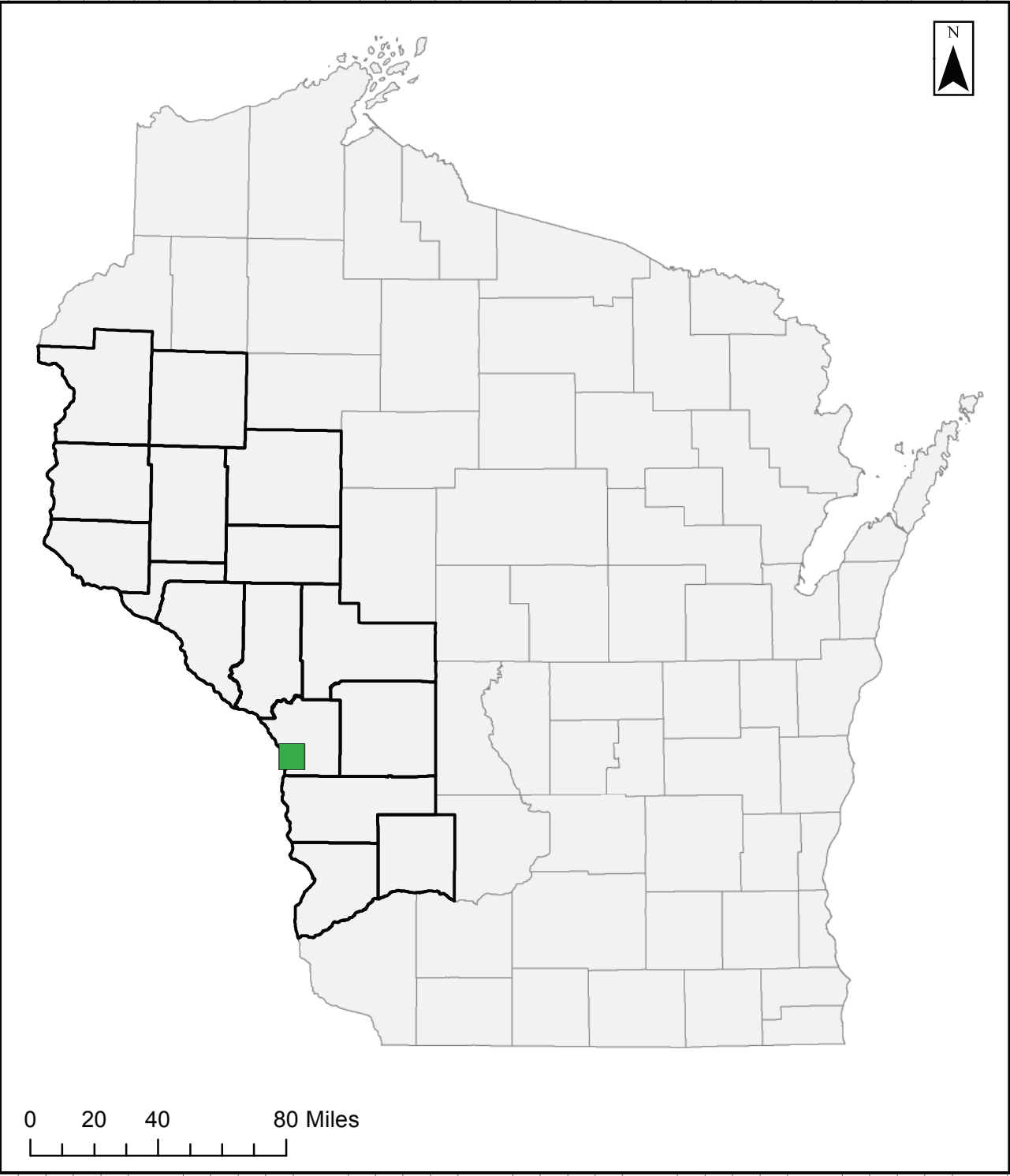
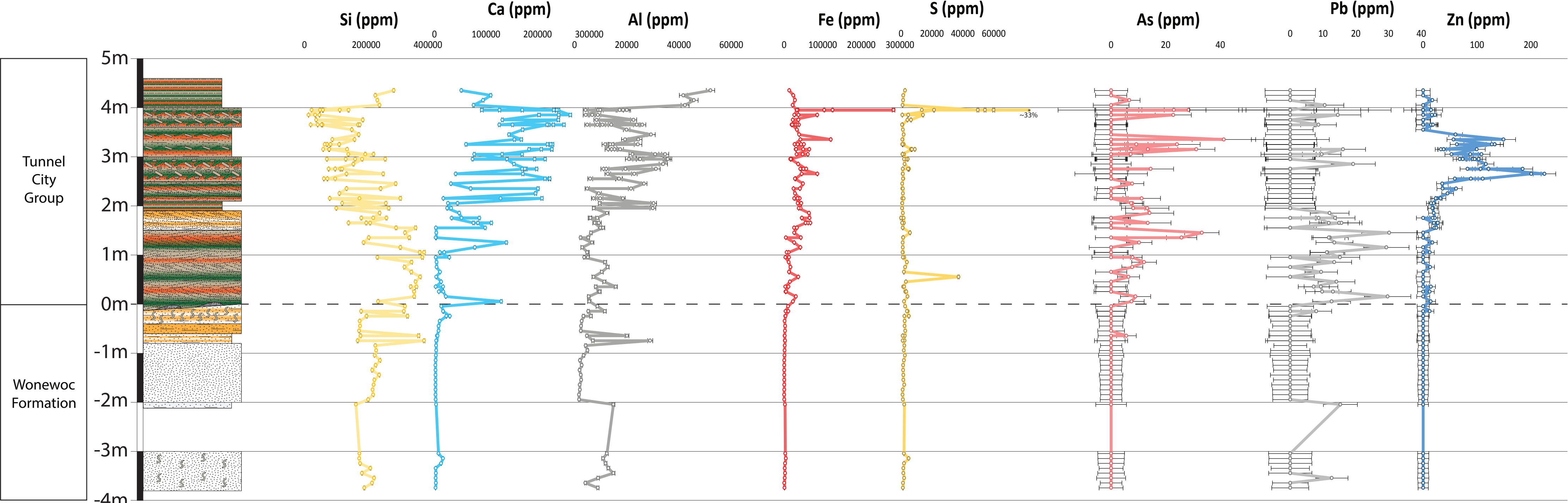


Select elemental cross-plots (in ppm) from Tunnel City Group strata, WGNHS Arcadia Quarry 62000166.

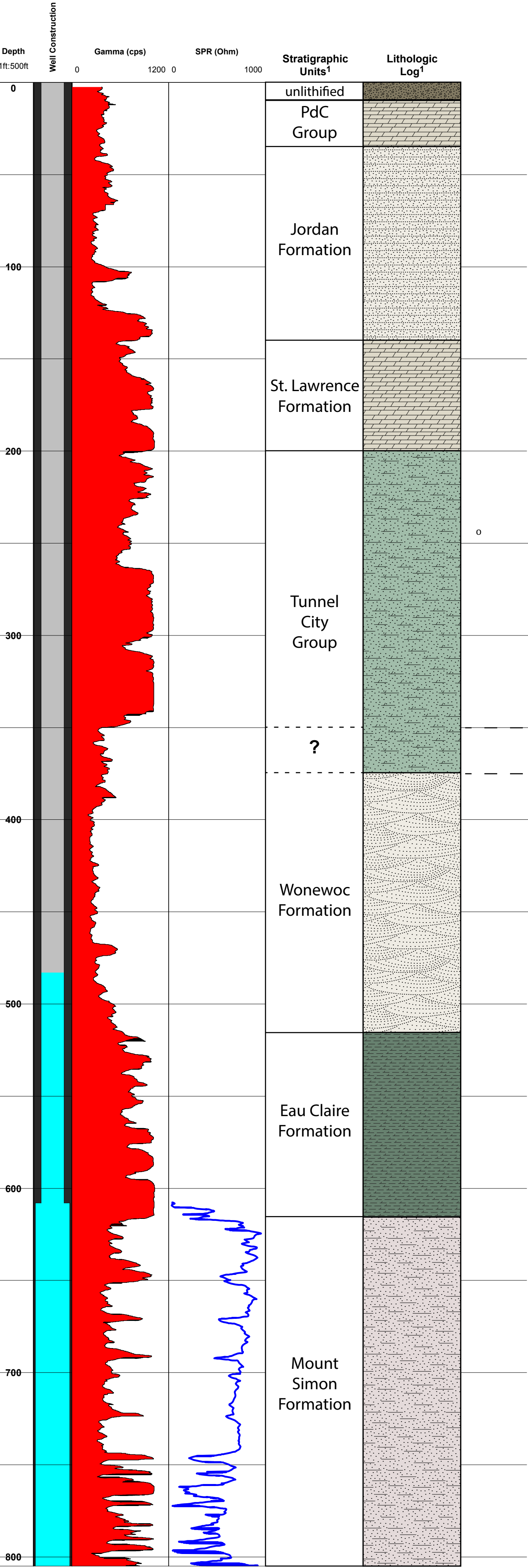



Select elemental cross-plots (in ppm) from Wonewoc Formation strata, WGNHS Arcadia Quarry 62000166.

Site 6 - Granddad Bluff La Crosse



Site 7 - 32000107 Arbor Hills Addition Well (Shelby S.D. 2)





WGNHS Well ID

32000107

DATE

10/14/1970

WELL NAME

Arbor Hills

LOCATION

NE1/4, NE1/4, NW1/4, Section 12, T2N, R22E

COUNTY

LaCrosse

LOGGED BY

R.M. Peters

LATITUDE

-

LONGITUDE

-

LOCATION METHOD:

GPS

AIR PHOTO/TOPO

PLSS

OTHER

Unknown

ELEVATION

1135.5

ELEVATION METHOD:

DEM

TOPO

OTHER

WELL DEPTH

805

CASING DEPTH

608

DEPTH TO WATER

483

CASING STICK UP

Unknown

File Created on:

8/12/2016

by:

MJP

Comments:

The Gamma and SPR data included in this log were measured in 1968 using methods of the day. Values shown should only be considered as relative estimates, not quantitative measures. SPR and SP profiles were collected for this well but only SPR is presented in this log. The Well Construction field depicts the well, casing, and water-level as measured on the day of logging.

LOGS COLLECTED:

Gamma

☒

Fluid Conductivity

☐

Caliper

☐

Flow Meter- HeatPulse

☐

Single Point Resistivity

☒

Flow Meter- Spinner

☐

Self Potential

☐

Optical Borehole Imager

☐

Normal Resistivity

☐

Acoustic Borehole Imager

☐

Fluid Temperature

☐

OTHER:

☐

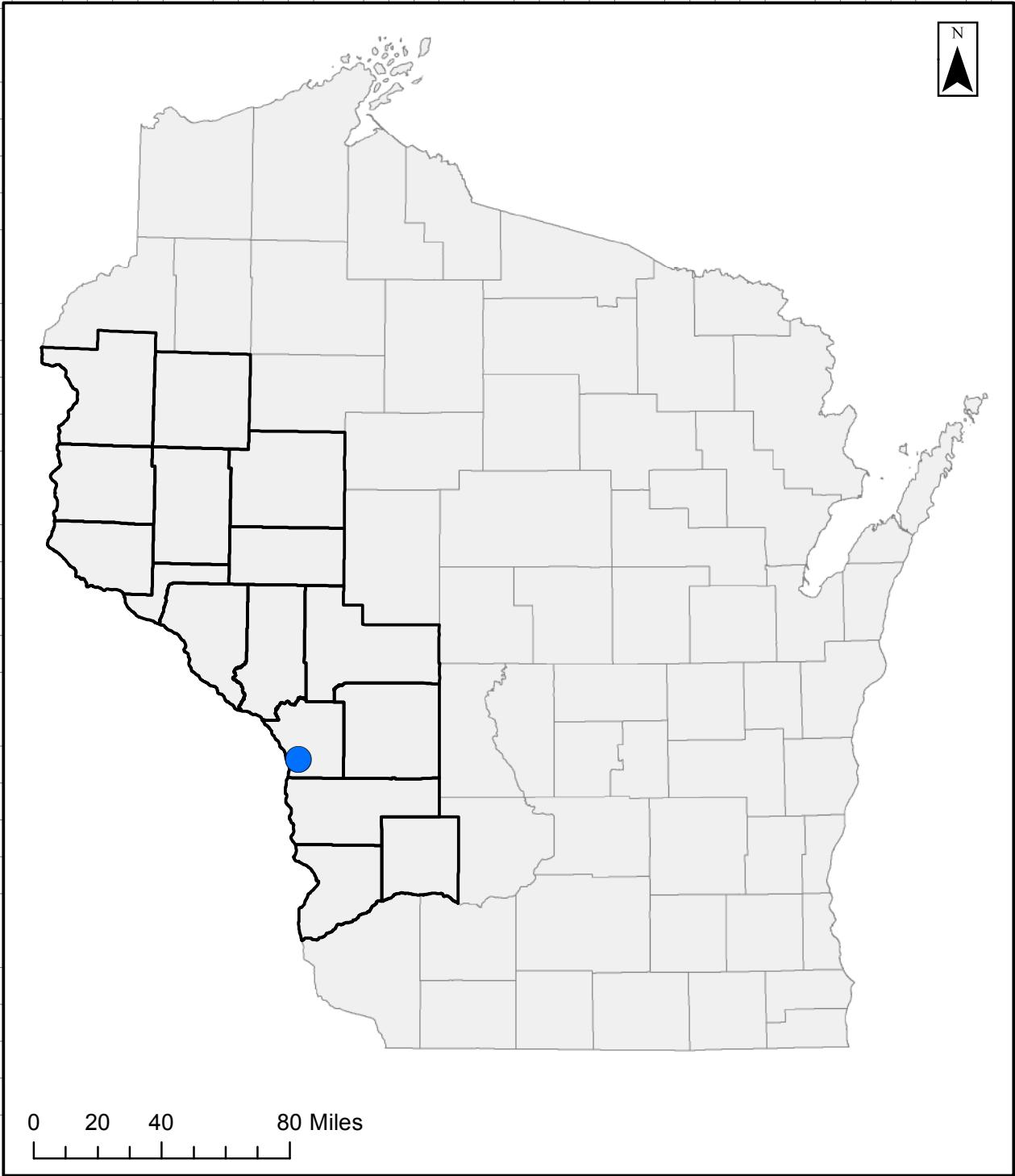
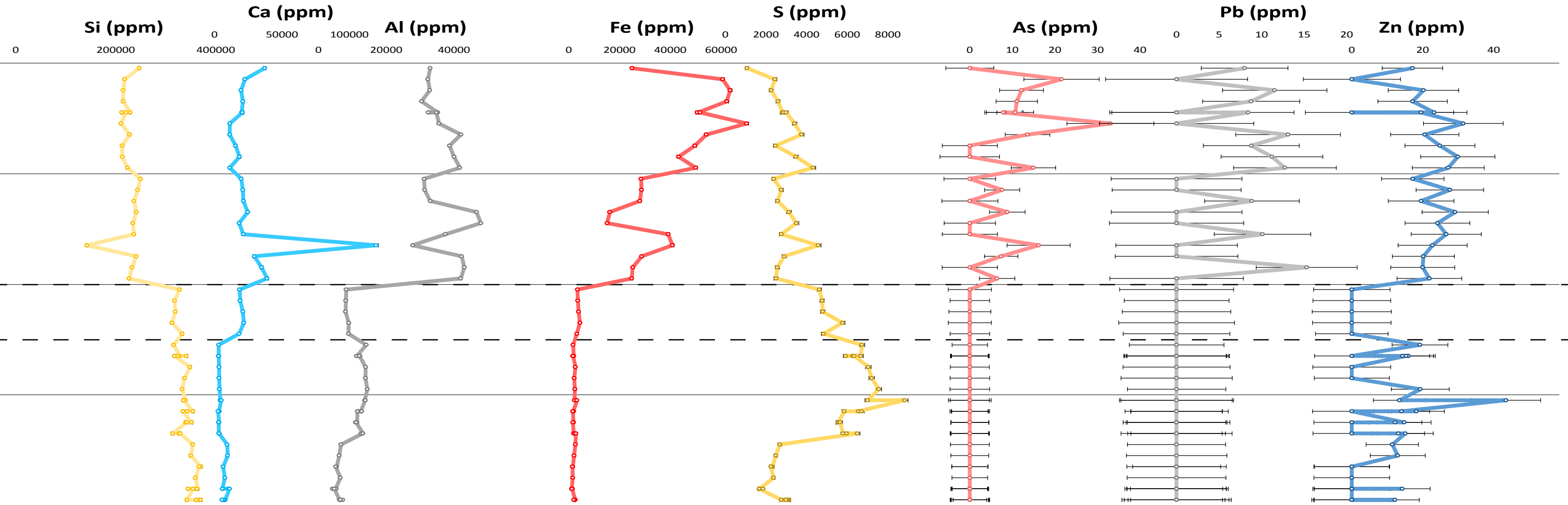
Unless Noted:

- all depths are in feet

- well depth, casing depth and depth to water are interpreted from geophysical log

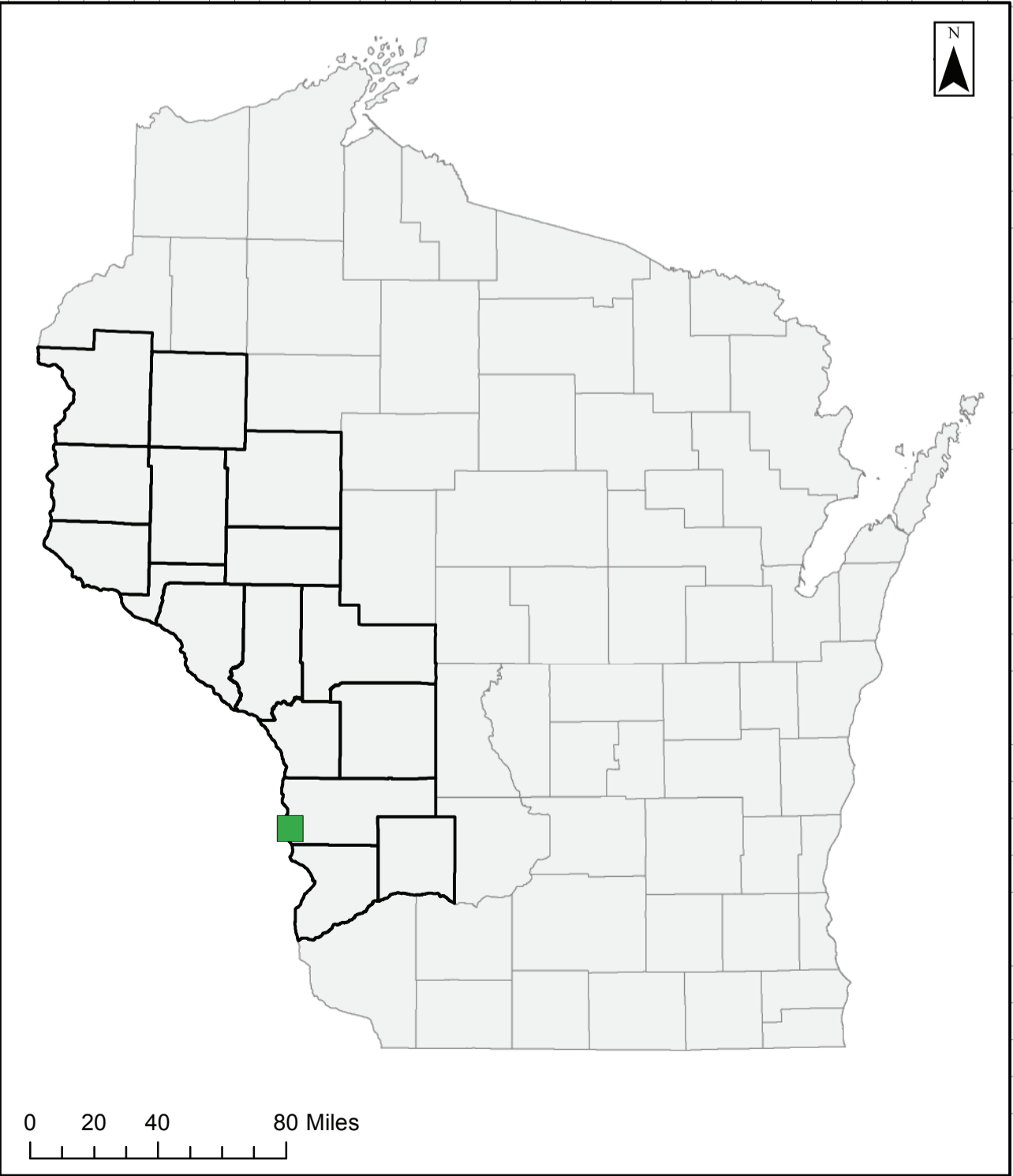
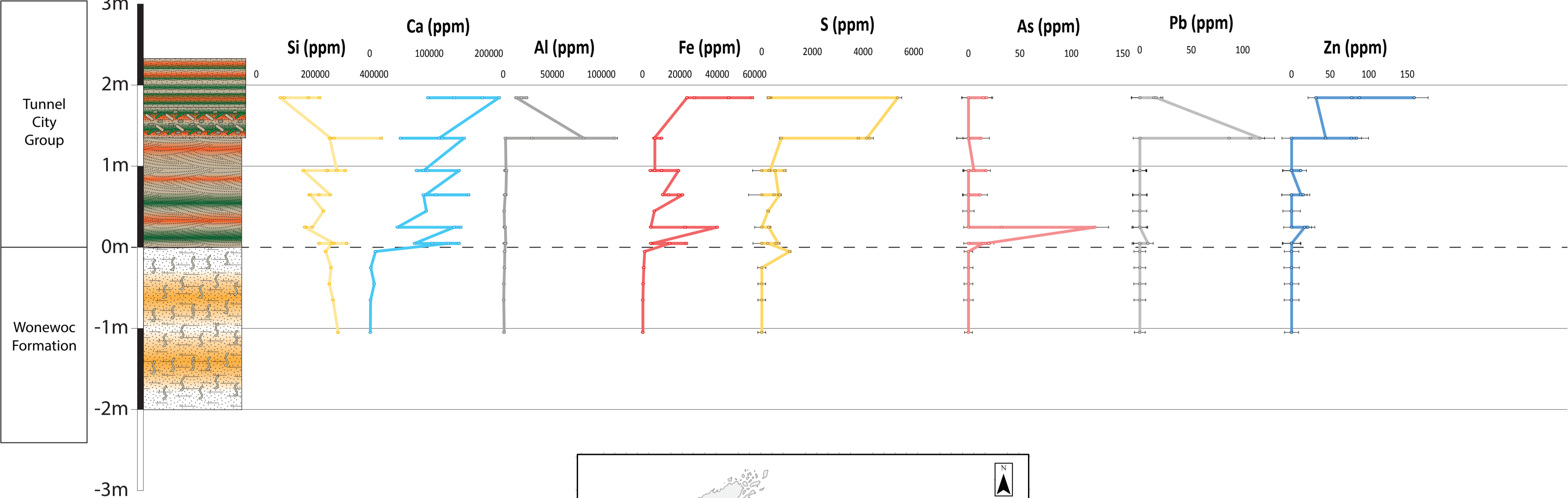
- datum is the top of casing

For more information or to obtain collected data not shown please contact us at geodata@uwex.edu

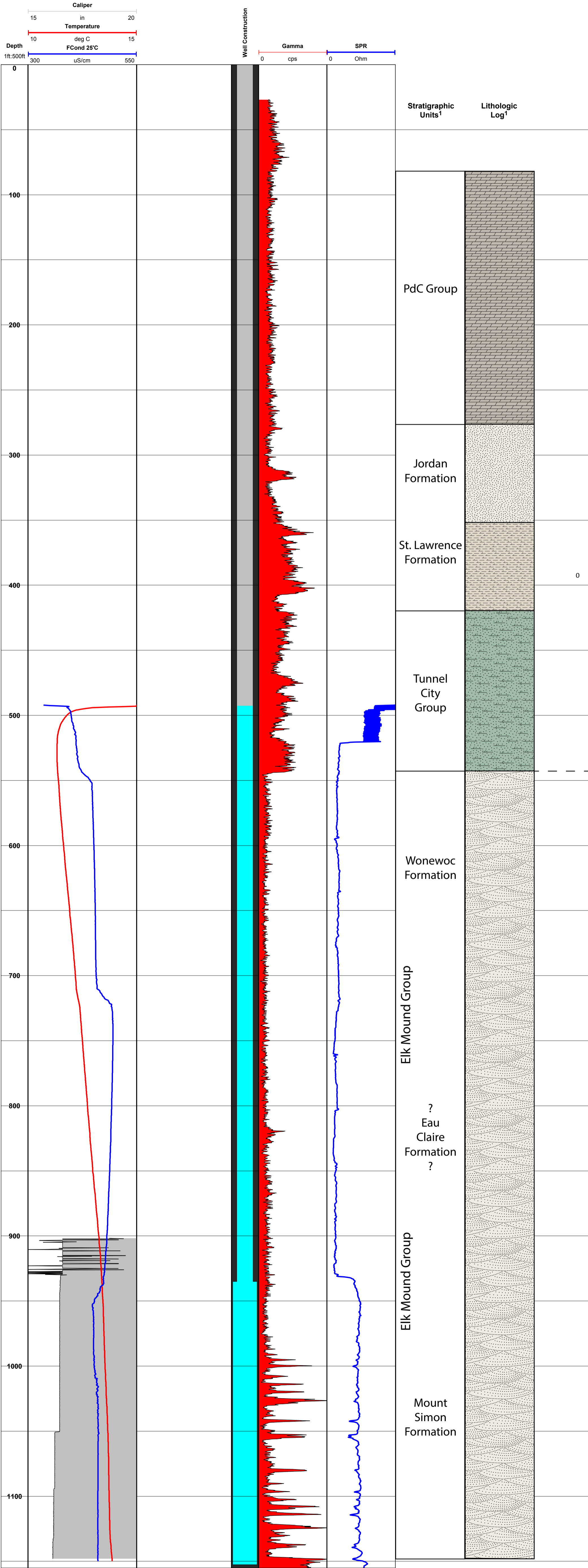


1: Stratigraphic Units and Lithologic Log adapted from WGNHS Geologic Log of Arbor Hills Addition Well (32000107)

Site 8 - Victory North



Site 9 - 63000165 Viroqua City Well 6



**WGNHS Well ID 63000165**

DATE 8/19/13 WELL NAME Viroqua Municipal Well #6

LOCATION S. Washington Ave. Viroqua

COUNTY Vernon LOGGED BY PMC

LATITUDE 43.544424 LONGITUDE -90.882292

LOCATION METHOD: GPS ☒ AIR PHOTO/TOPO ☐ PLSS ☐ OTHER ☐

ELEVATION 1275.6 ELEVATION METHOD: DEM ☐ TOPO ☐ OTHER 5ft LIDAR DEM

WELL DEPTH 1152.5 CASING DEPTH 935 DEPTH TO WATER 492.6

CASING STICK UP 1.4 File Created on: 8/12/2016 by: MJP

Comments: SPR, SP, and Normal Resistivity profiles were collected for this well but only SPR is presented in this log. ABI profiles were also collected but not presented here. The Well Construction field depicts the well, casing, and water-level as measured on the day of logging. Caliper tool was recalibrated with long arms for large diameter hole.

LOGS COLLECTED:

Gamma ☒ Fluid Conductivity ☒ Unless Noted:

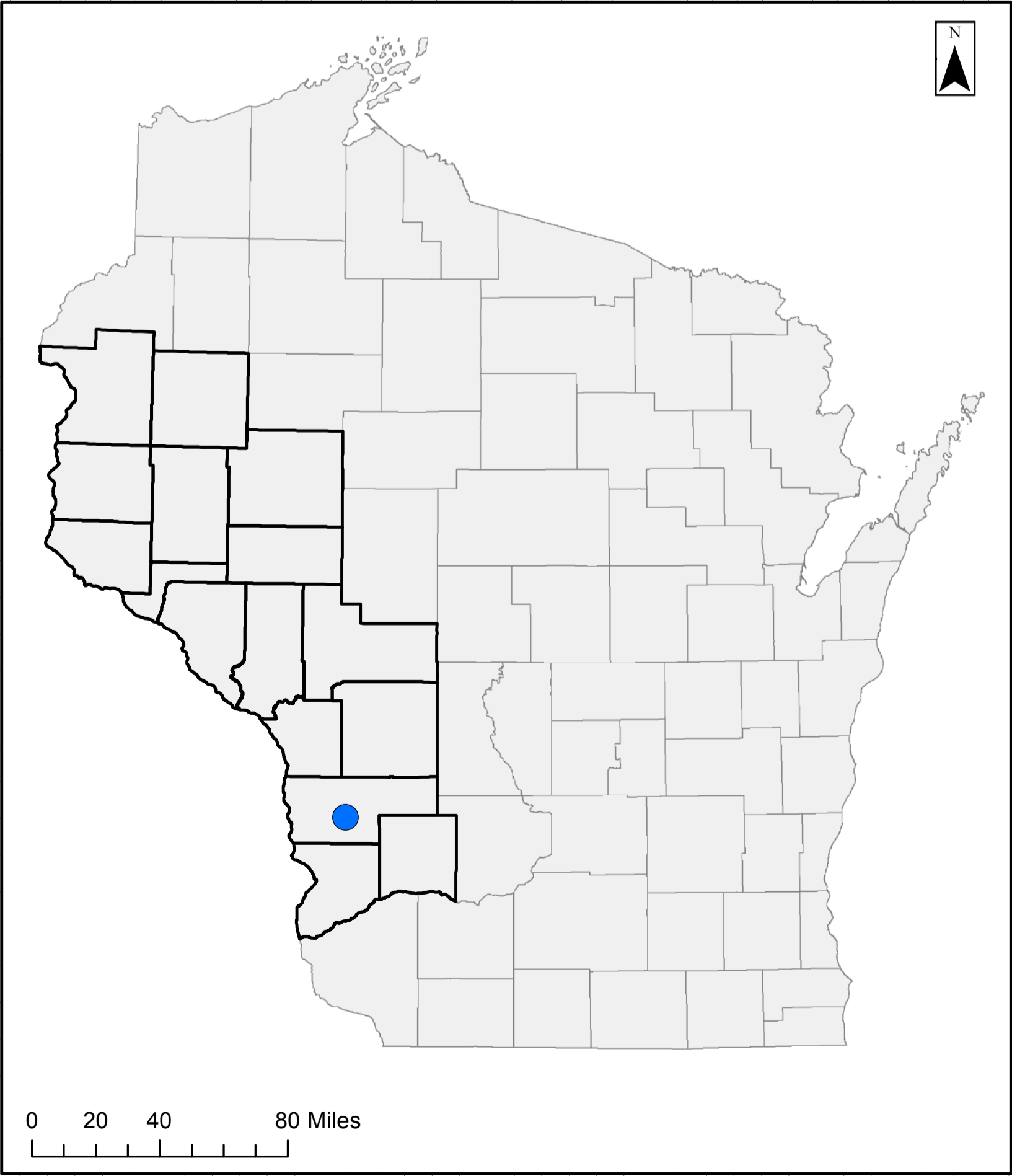
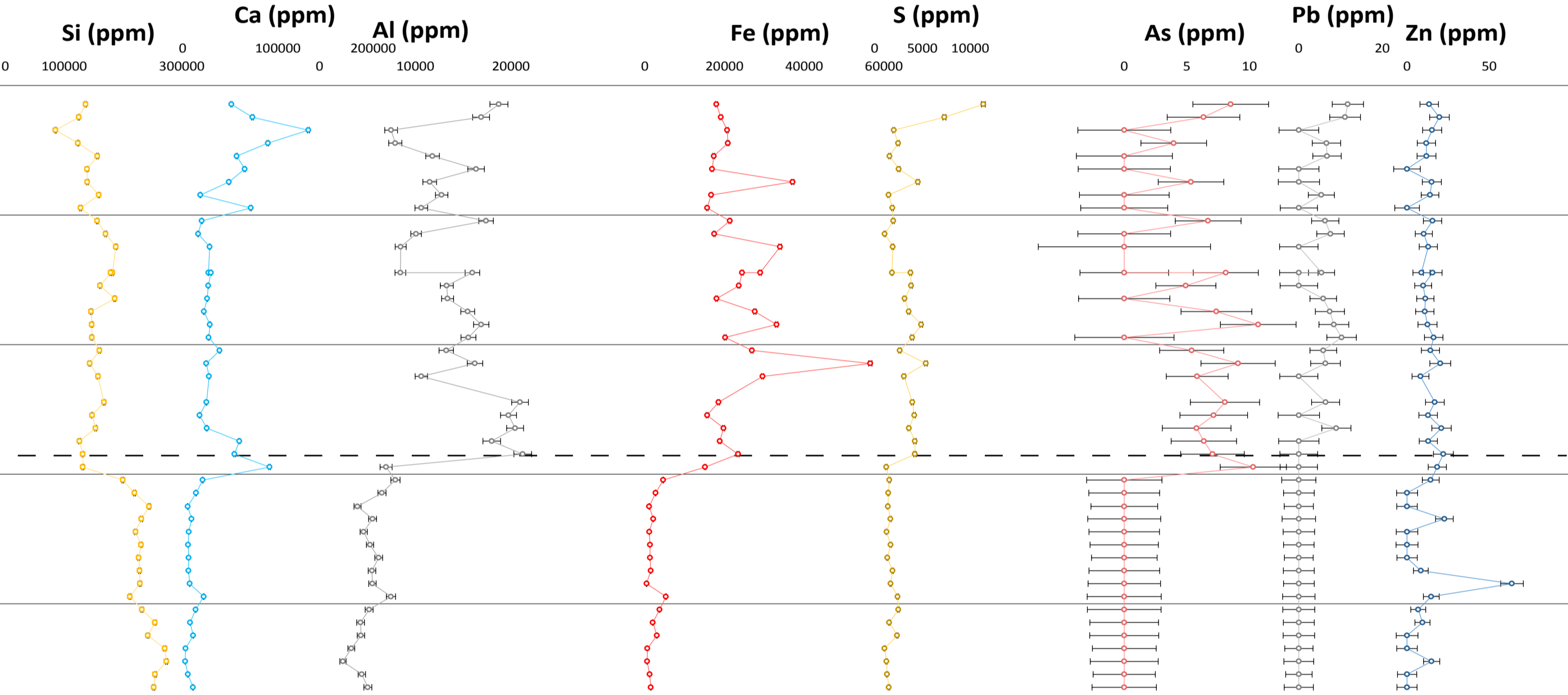
Caliper ☒ Flow Meter- HeatPulse ☐ - all depths are in feet

Single Point Resistivity ☒ Flow Meter- Spinner ☐ - well depth, casing depth and depth to water are interpreted from geophysical log

Self Potential ☐ Optical Borehole Imager ☐ - flow up is negative, flow down is positive

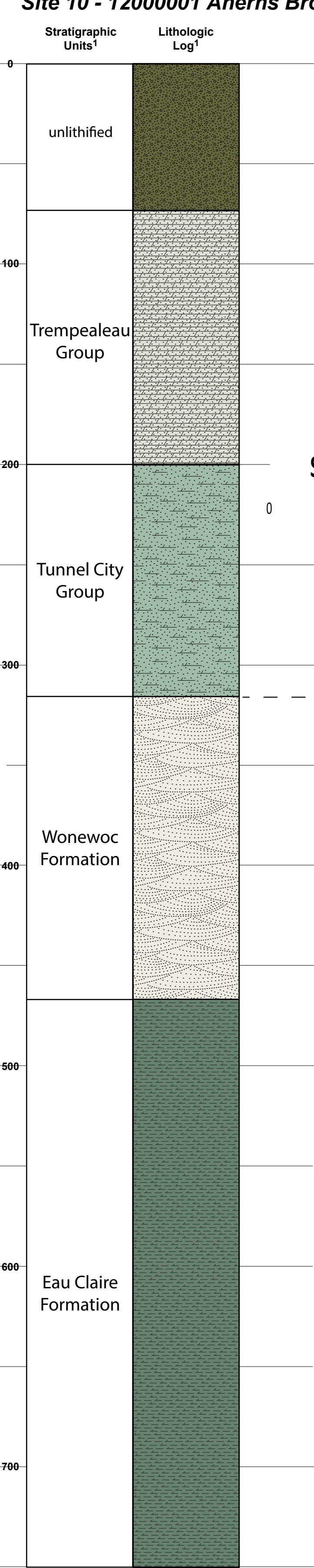
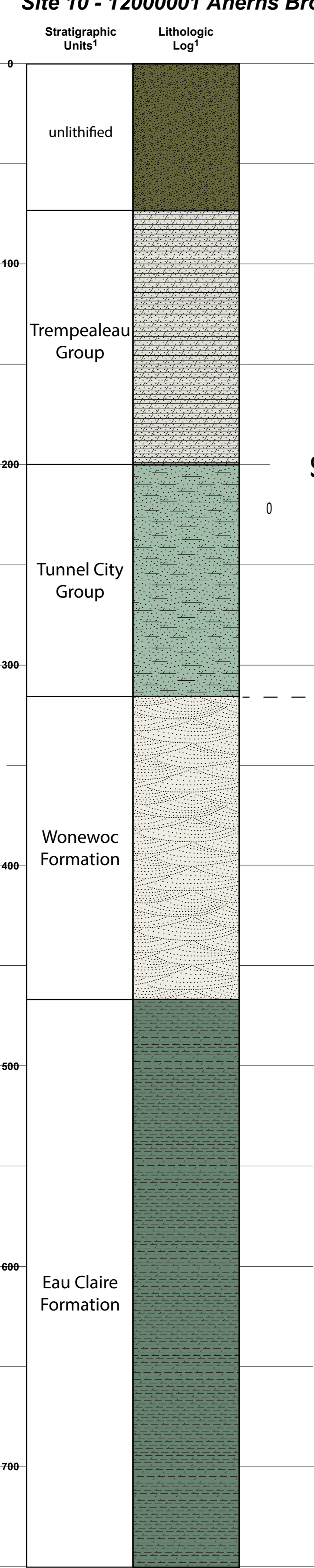
Normal Resistivity ☐ Acoustic Borehole Imager ☐ - datum is the top of casing

Fluid Temperature ☒ OTHER: ☐ For more information or to obtain collected data not shown please contact us at geodata@uwex.edu



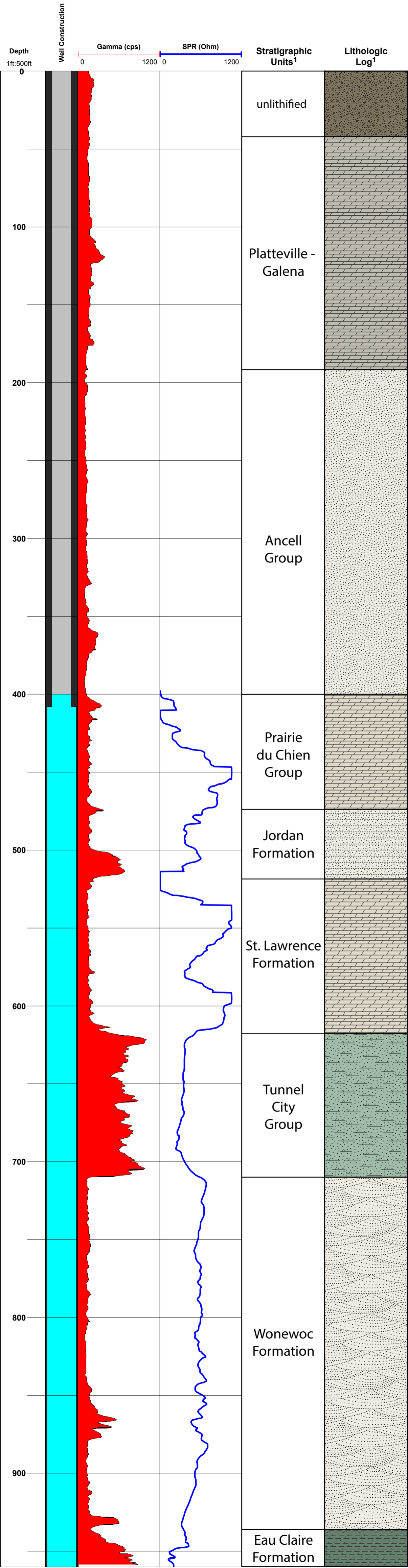
1: Stratigraphic Units and Lithologic Log interpreted from nearby Geologic Log Viroqua Well 4 63000053

Stratigraphic Units <sup>1</sup>	Lithologic Log <sup>1</sup>
unlithified	
Trempealeau Group	
Tunnel City Group	
Wonewoc Formation	
Eau Claire Formation	



Stratigraphic Units <sup>1</sup>	Lithologic Log <sup>1</sup>
unlithified	
Trempealeau Group	
Tunnel City Group	
Wonewoc Formation	
Eau Claire Formation	

Site 11 - 22000143 Platteville City Well 4



**WGNHS Well ID** 22000143

**DATE** 8/8/1968 **WELL NAME** Platteville Municipal Well #4

**LOCATION** SE1/4, SE1/4, Sect 9, T3N, R1W

**COUNTY** Grant **LOGGED BY** PO & FR

**LATITUDE** - **LONGITUDE** -

**LOCATION METHOD:** ☒ **GPS** ☐ **AIR PHOTO/TOPO** ☐ **PLSS** ☐ **OTHER** Unknown

**ELEVATION** 965 **ELEVATION METHOD:** ☐ **DEM** ☐ **TOPO** ☐ **OTHER**

**WELL DEPTH** 960 **CASING DEPTH** 408 **DEPTH TO WATER** 400 estimate

**CASING STICK UP** Unknown **File Created on:** 8/12/2016 **by:** MJP

**Comments:** *The Gamma and SPR data included in this log were measured in 1968 using methods of the day. Values shown should only be considered as relative estimates, not quantitative measures. SPR and SP profiles were collected for this well but only SPR is presented in this log. The Well Construction field depicts the well, casing, and water-level as measured on the day of logging.*

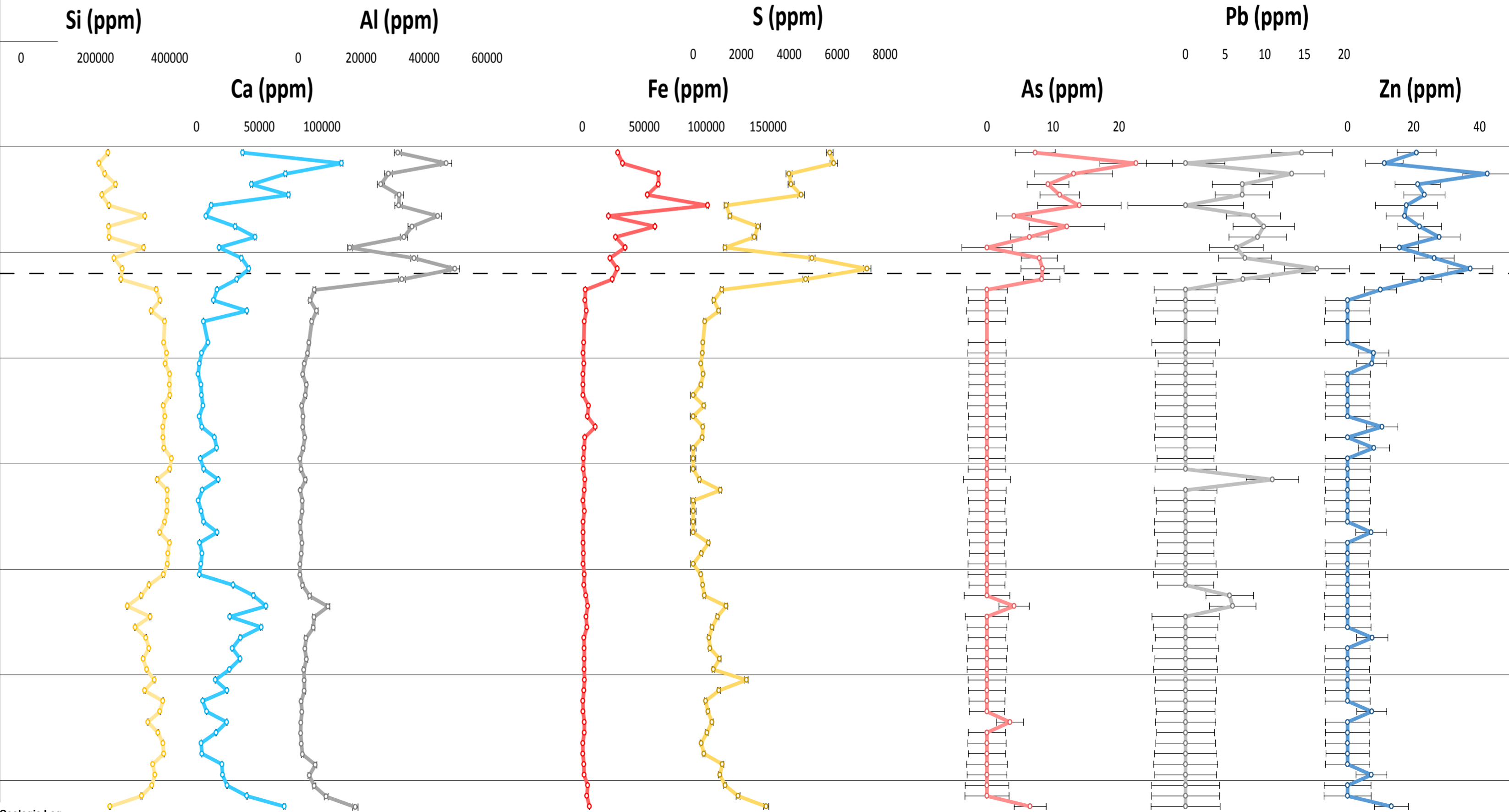
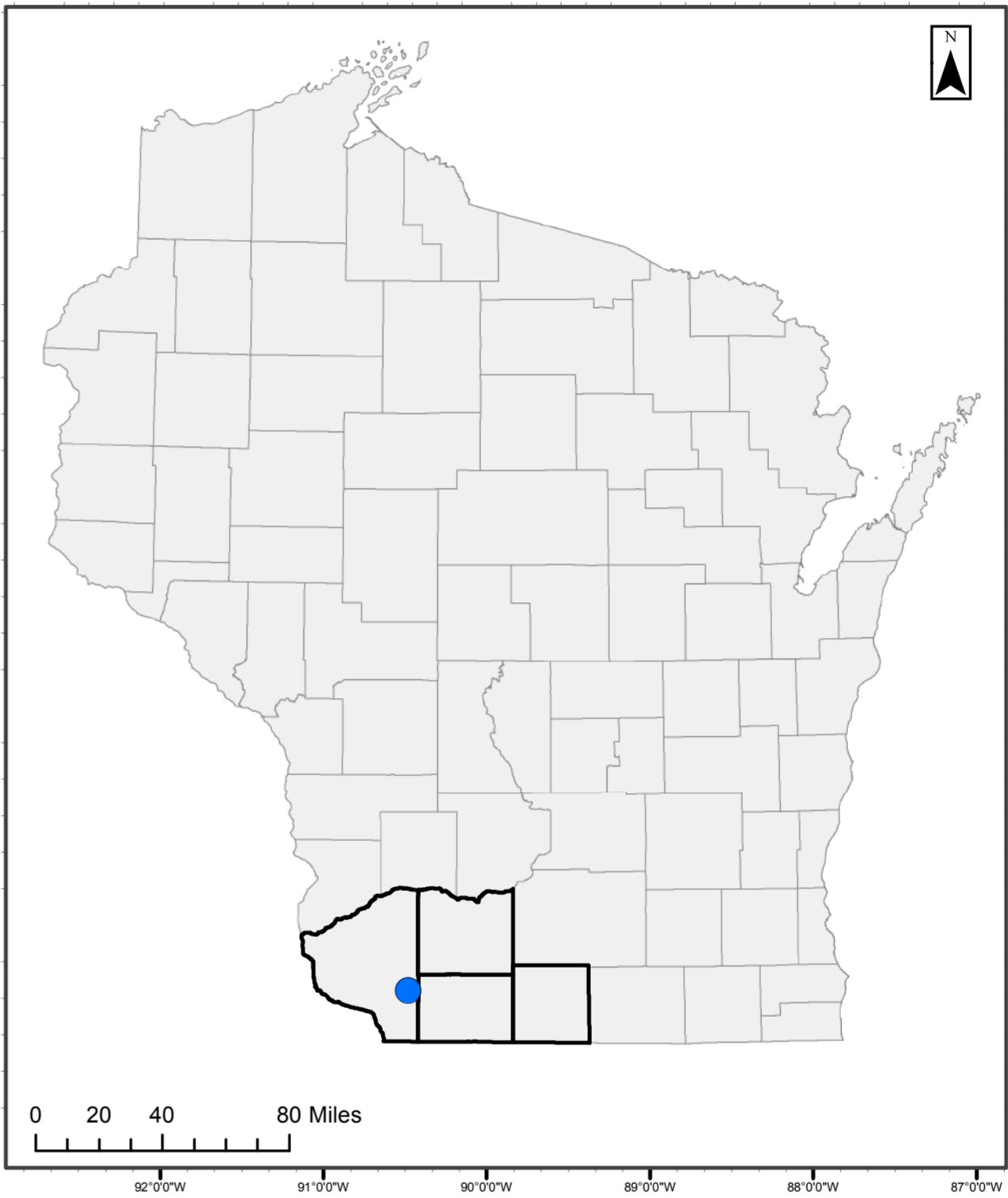
**LOGS COLLECTED:**

Gamma	<input checked="" type="checkbox"/>	Fluid Conductivity	<input type="checkbox"/>
Caliper	<input type="checkbox"/>	Flow Meter- HeatPulse	<input type="checkbox"/>
Single Point Resistivity	<input checked="" type="checkbox"/>	Flow Meter- Spinner	<input type="checkbox"/>
Self Potential	<input type="checkbox"/>	Optical Borehole Imager	<input type="checkbox"/>
Normal Resistivity	<input type="checkbox"/>	Acoustic Borehole Imager	<input type="checkbox"/>
Fluid Temperature	<input type="checkbox"/>	OTHER: _____	<input type="checkbox"/>

**Unless Noted:**

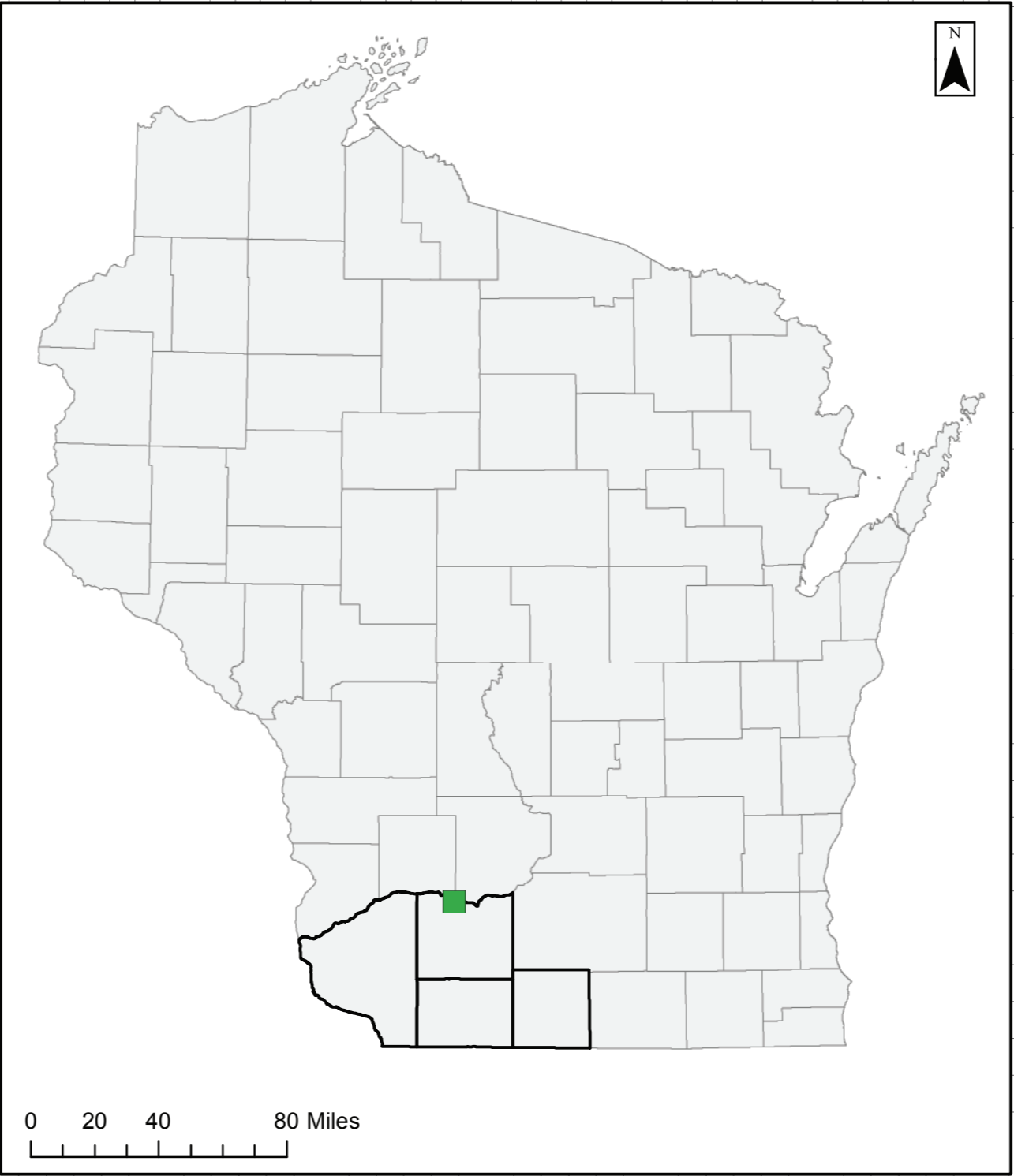
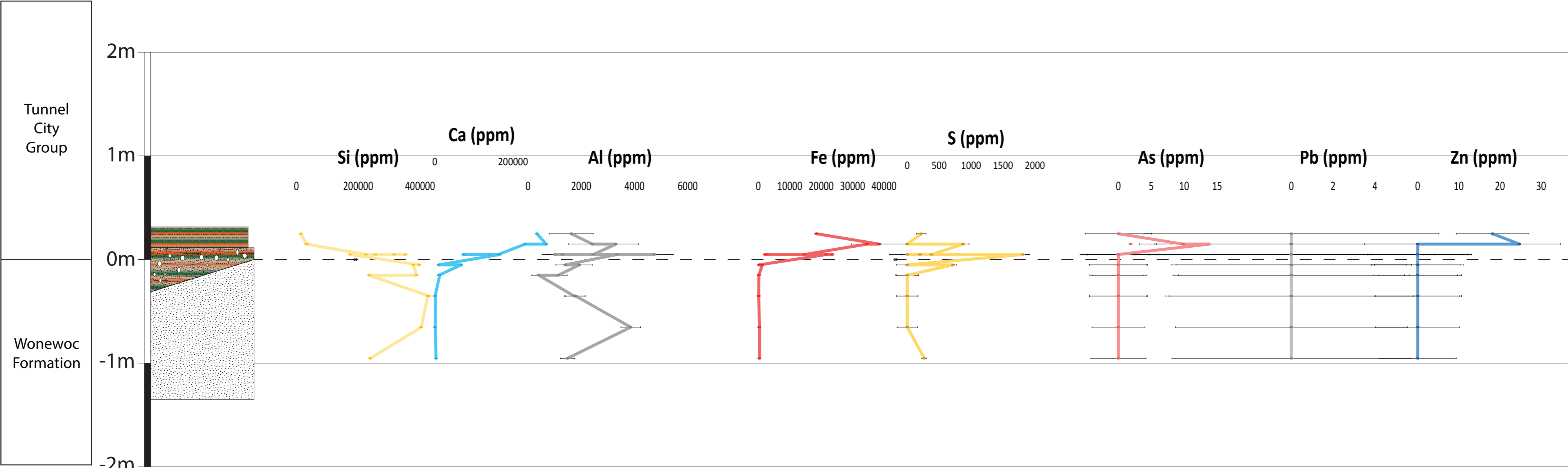
- all depths are in feet
- well depth, casing depth and depth to water are interpreted from geophysical log
- datum is the top of casing

*For more information or to obtain collected data not shown please contact us at geodata@uwex.edu*

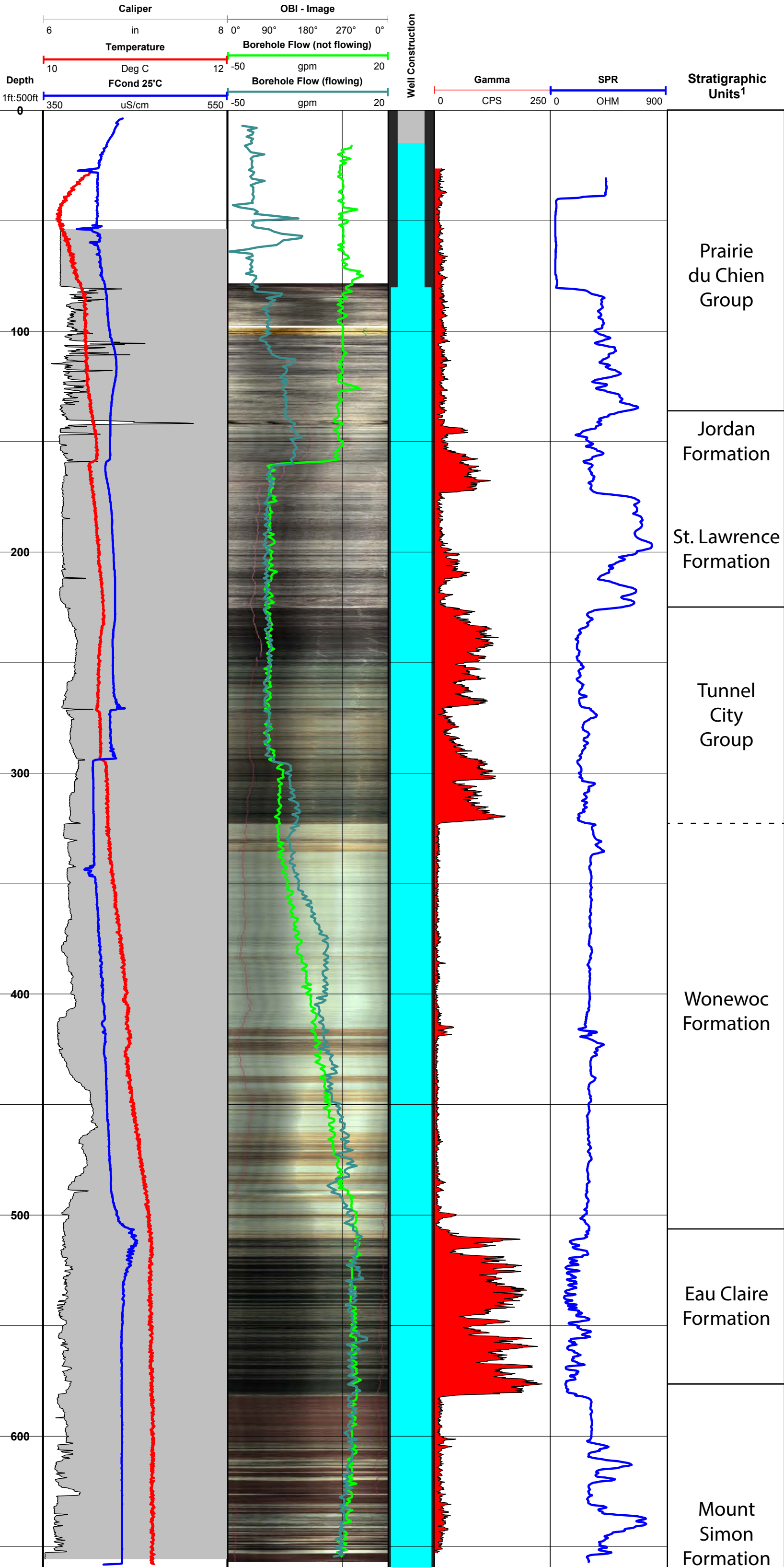



1: Stratigraphic Units and Lithologic Log adapted from WGNHS Geologic Log

Site 12 - Lone Rock Type Area



Site 13 - 25000512 WGNHS HWY A & 25000529 WGNHS HWY A 2





WGNHS Well ID

25000512

DATE

8/6-8/10/2009

WELL NAME

Highway A Quarry Test Hole

LOCATION

NW 1/4, SW 1/4, Sec 26 T5 R5 E

COUNTY

Iowa

LOGGED BY

Chase, Batten, Gotkowitz, Hart

LATITUDE

267209.91 (wtm-m)

LONGITUDE

530209.31 (wtm-m)

LOCATION METHOD:

GPS

AIR PHOTO/TOPO

PLSS

OTHER

ELEVATION

850

ELEVATION METHOD:

DEM

TOPO

OTHER

WELL DEPTH

660

CASING DEPTH

80

DEPTH TO WATER

15

CASING STICK UP

0

File Created on:

8/12/2016

by:

MJP

Comments:

SPR, SP, and Normal Resistivity profiles were collected for this well but only SPR is presented in this log. The Well Construction field depicts the well and casing as measured on the day of logging. The water-level depth of 15" was recorded on the day the well was not flowing (8/6/2009). Water-level when the well was flowing (8/10/2009), was above ground (artesian conditions)

LOGS COLLECTED:

Gamma

☒

Fluid Conductivity

☒

Unless Noted:

Caliper

☒

Flow Meter- HeatPulse

☐

- all depths are in feet

Single Point Resistivity

☒

Flow Meter- Spinner

☒

- well depth, casing depth and depth to water are interpreted from geophysical log

Self Potential

☐

Optical Borehole Imager

☒

- flow up is negative, flow down is positive

Normal Resistivity

☐

Acoustic Borehole Imager

☐

- datum is the top of casing

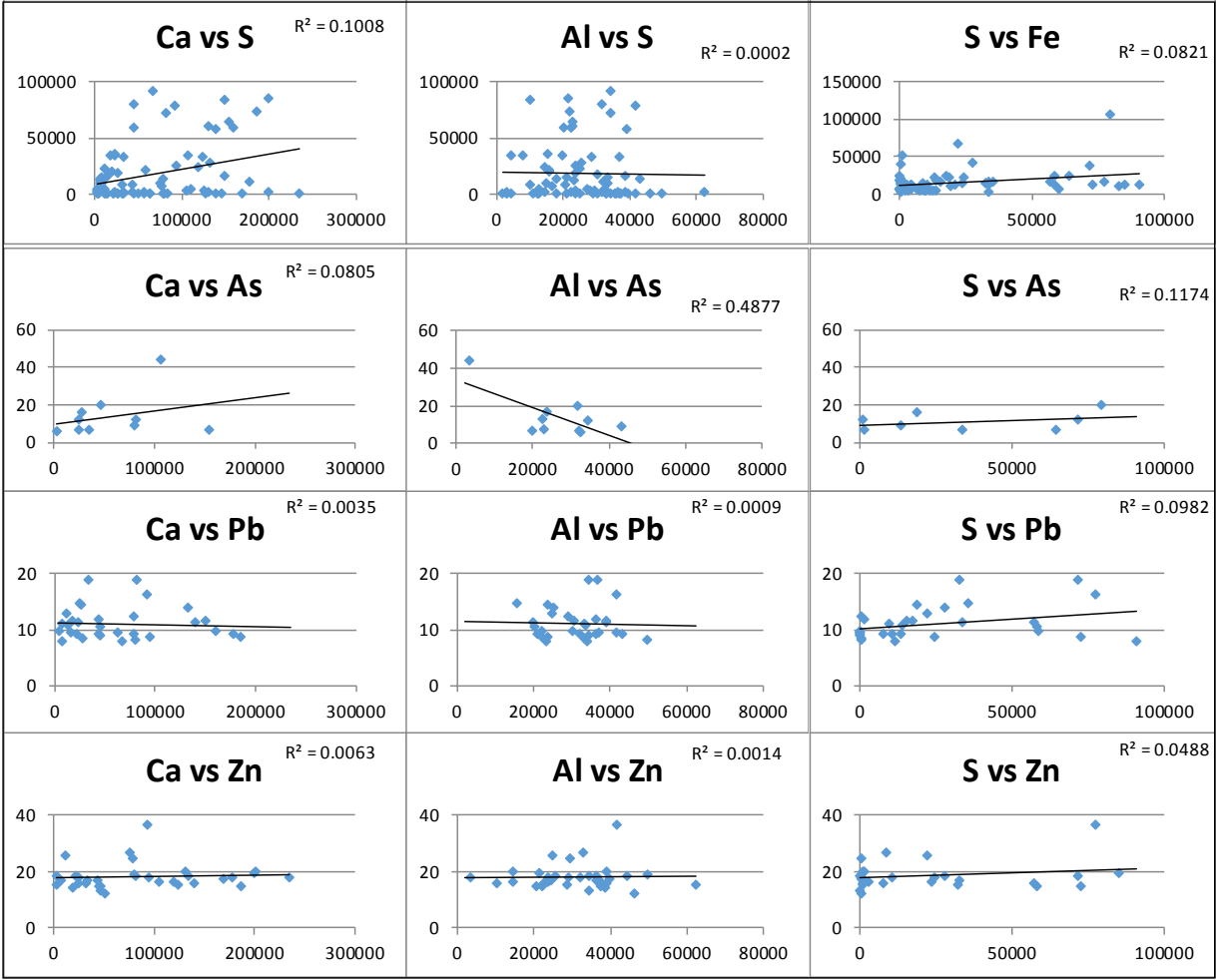
Fluid Temperature

☒

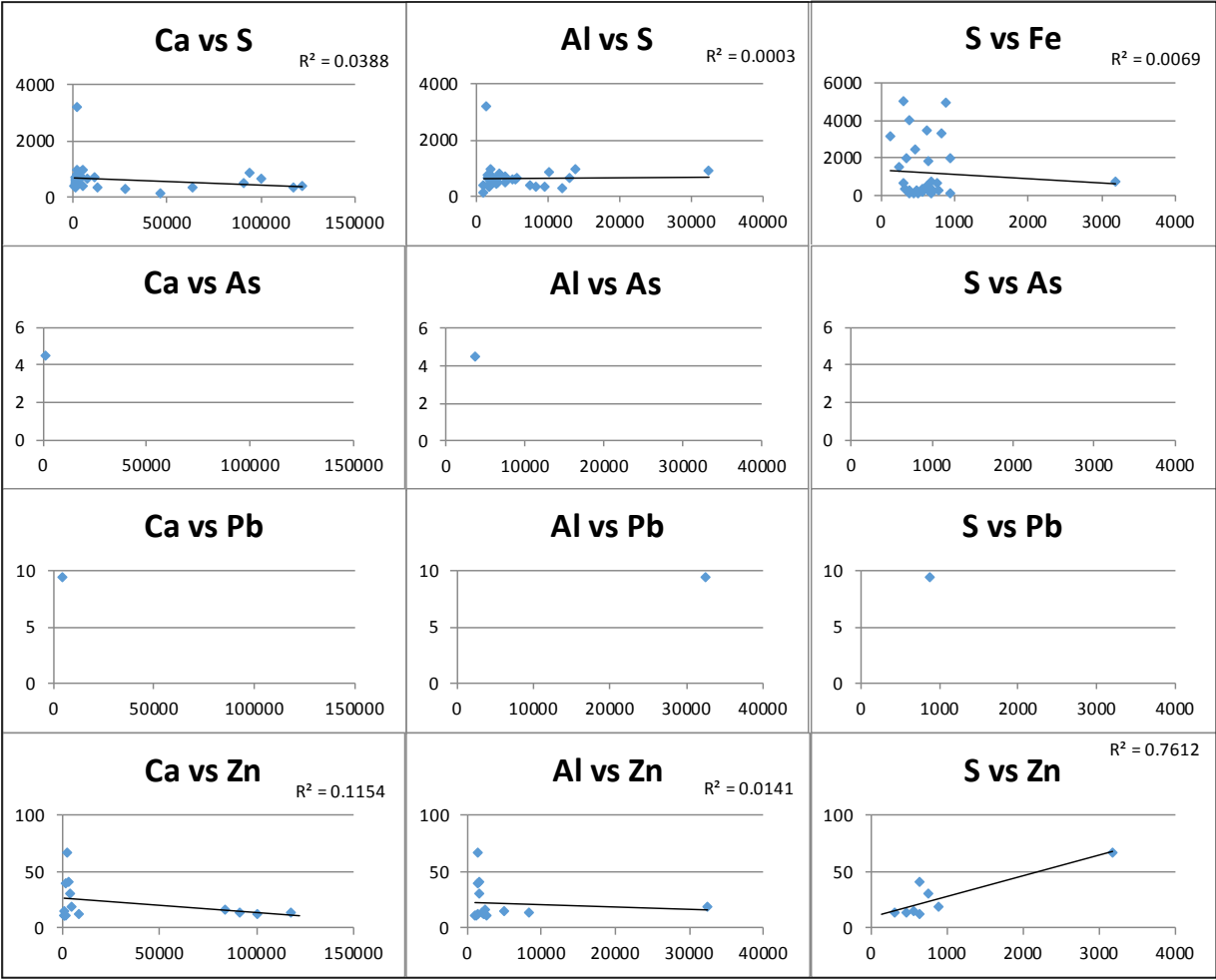
OTHER:

☐

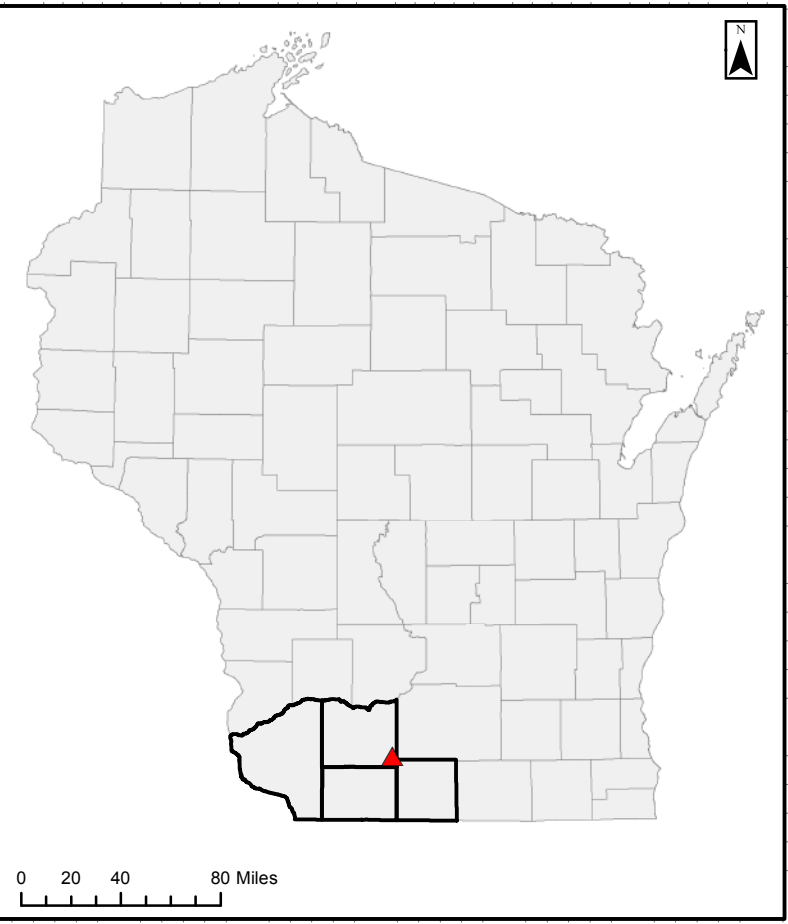
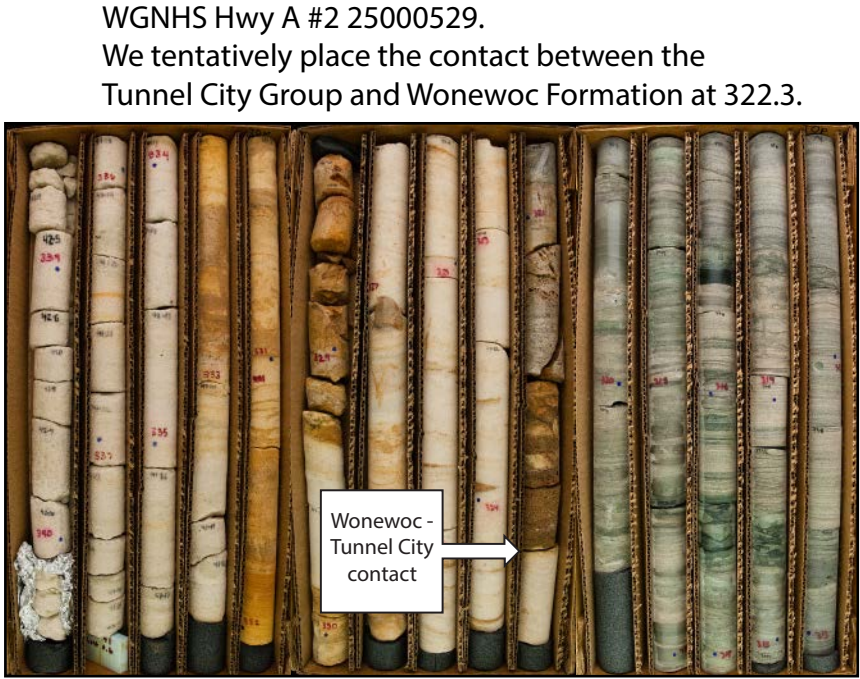
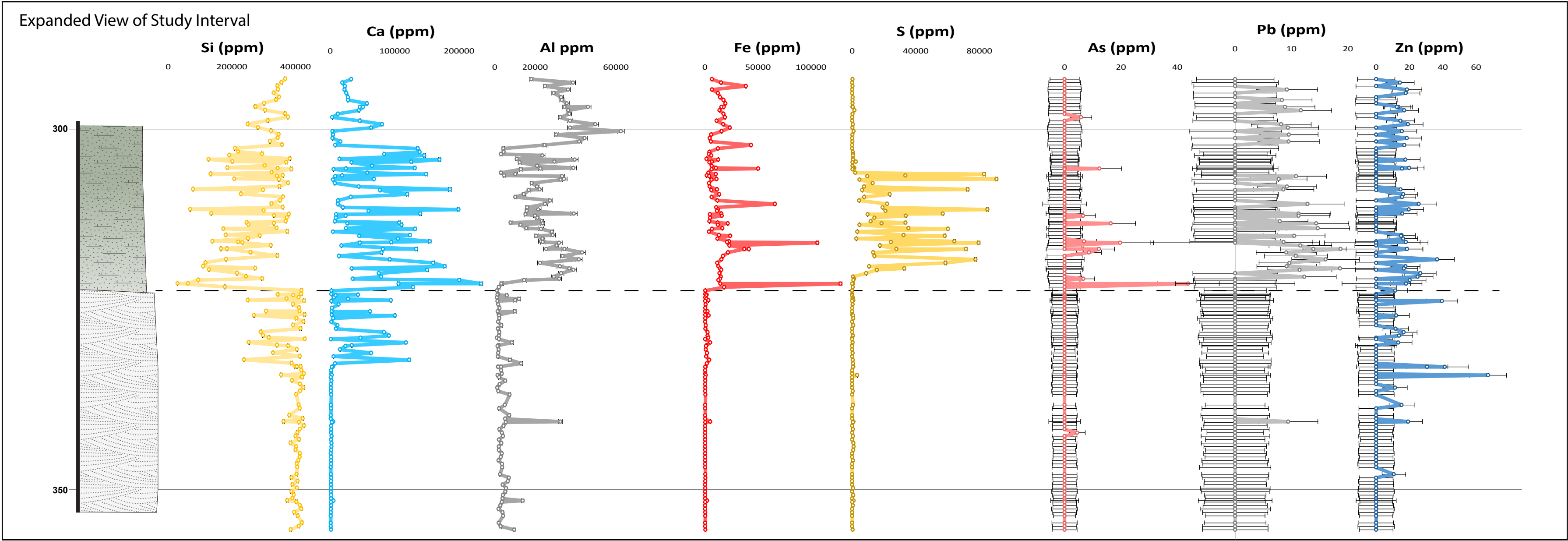
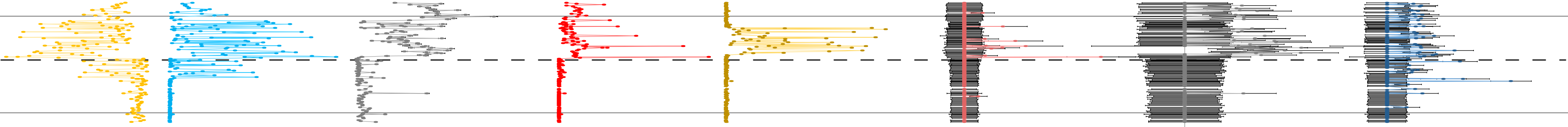
For more information or to obtain collected data not shown please contact us at geodata@uwex.edu



Select elemental cross-plots (in ppm) from Tunnel City Group strata, WGNHS Hwy A #2 25000529.

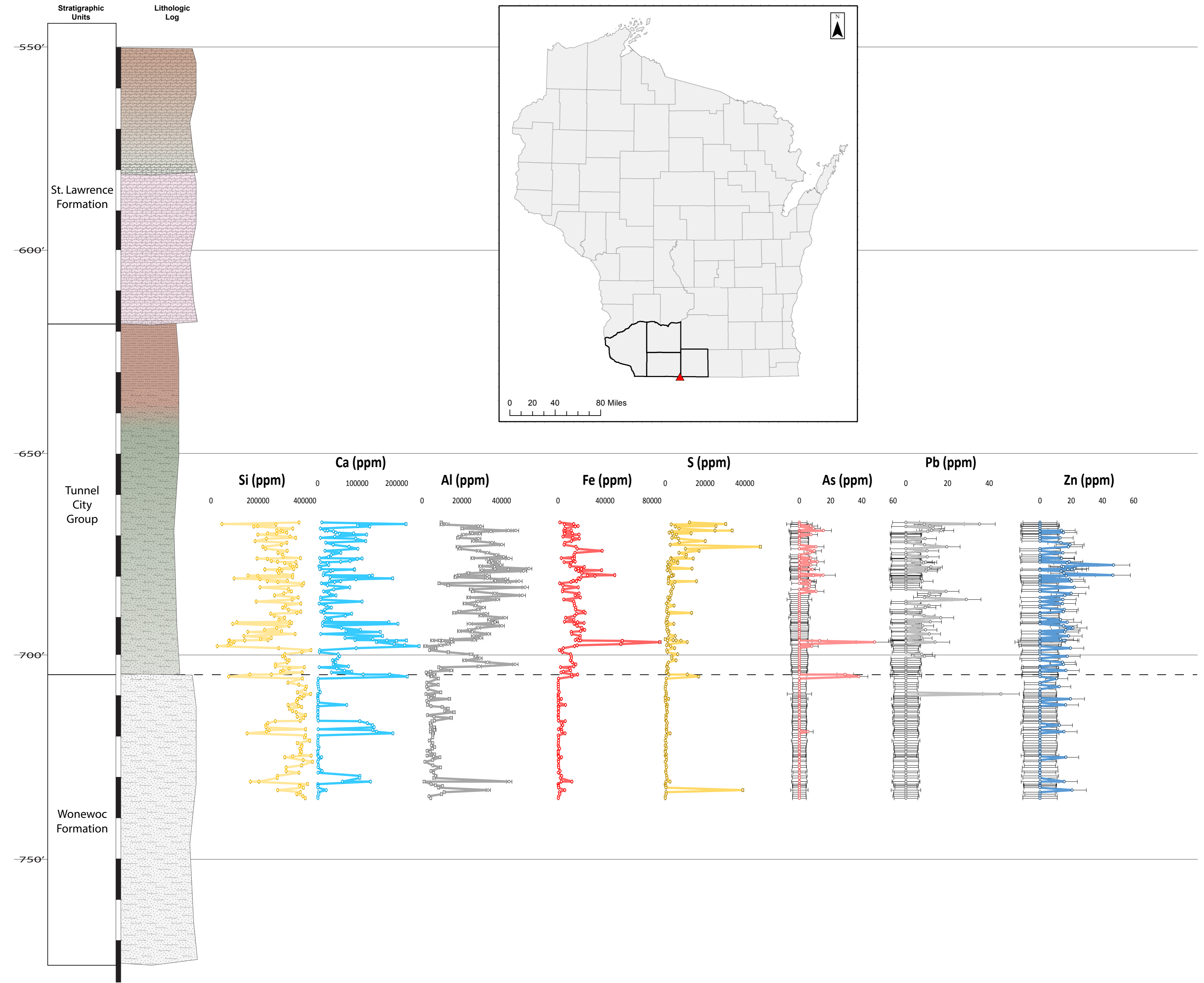


Select elemental cross-plots (in ppm) from Wonewoc Formation strata, WGNHS Hwy A #2 25000529.

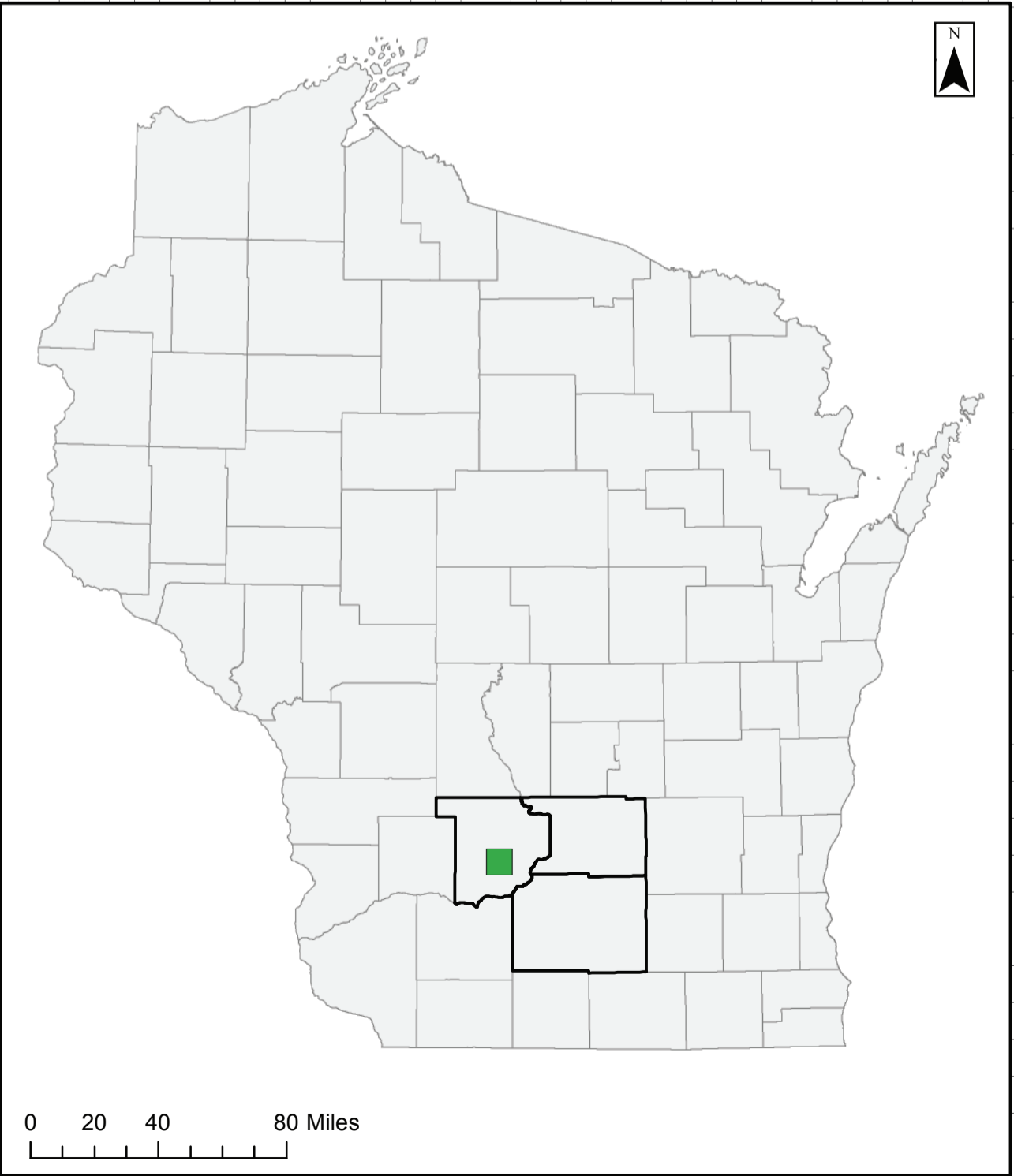
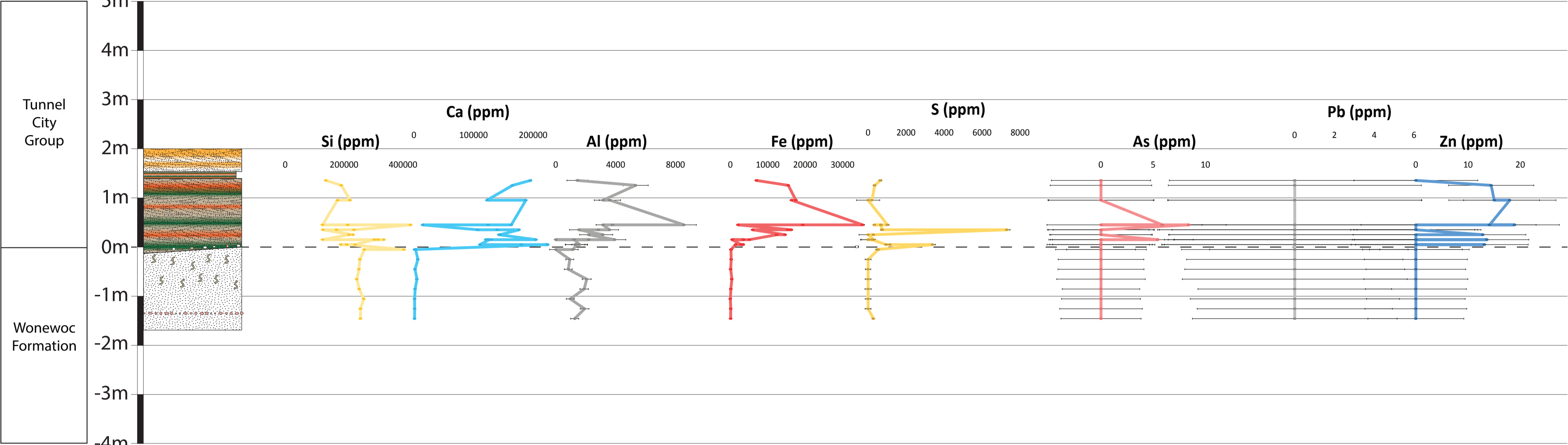


1: Stratigraphic Units and Lithologic Log interpreted from WGNHS Hwy A 2 core (25000529)  
These boreholes both start at the same elevation  
pXRF data from 25000529, gamma log from 25000512 WGNHS Hwy A

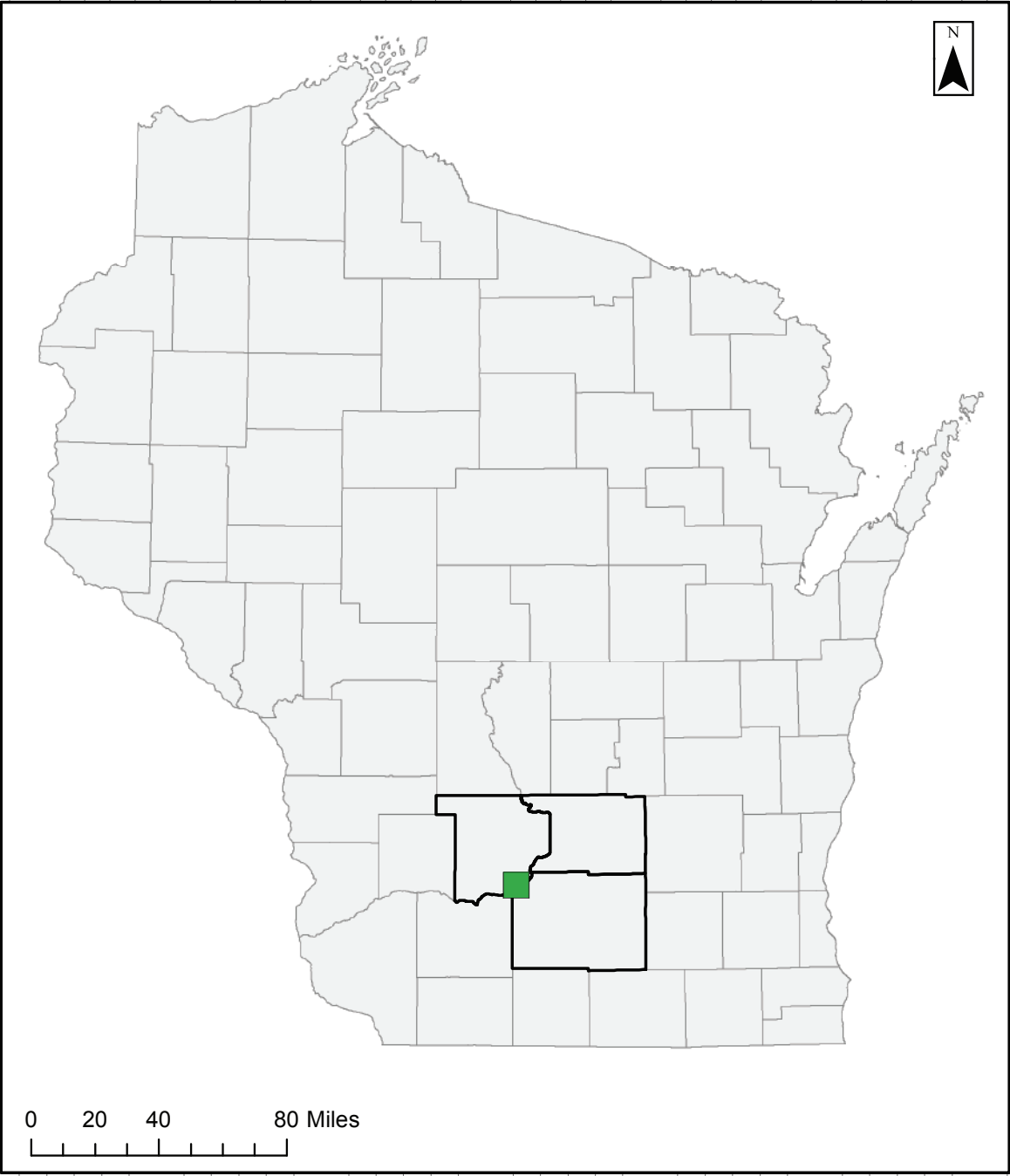
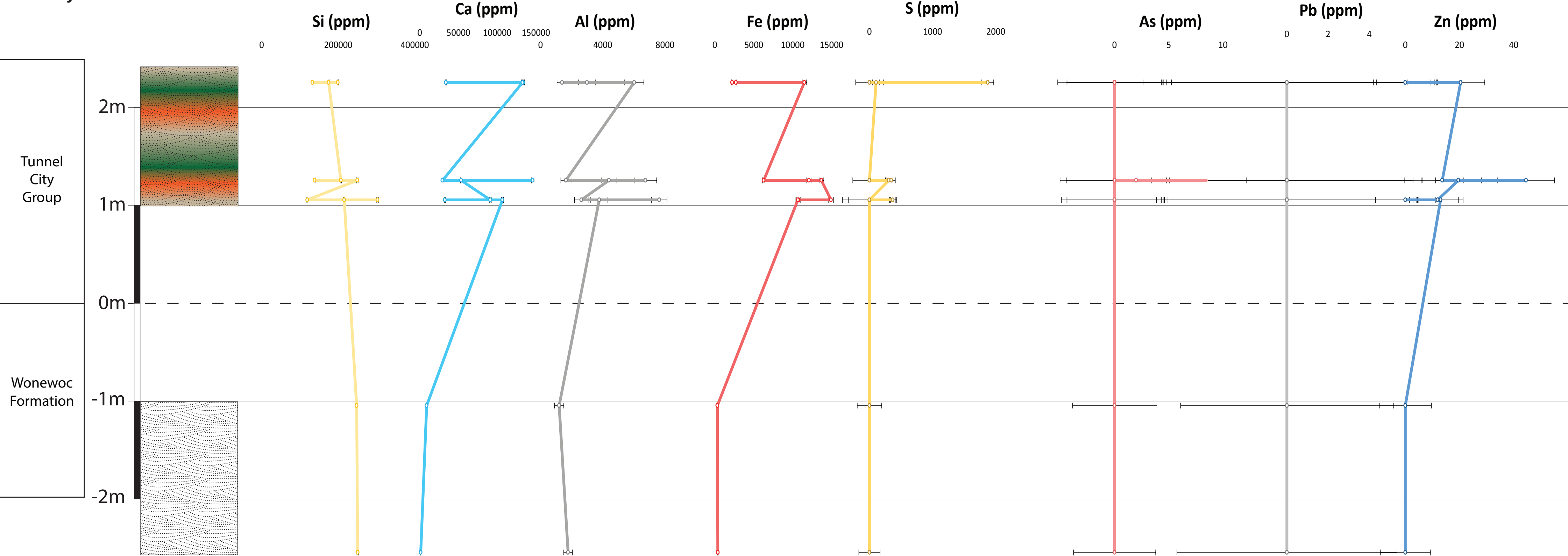
Site 14 - 33000331 Commonwealth Edison UPH-1



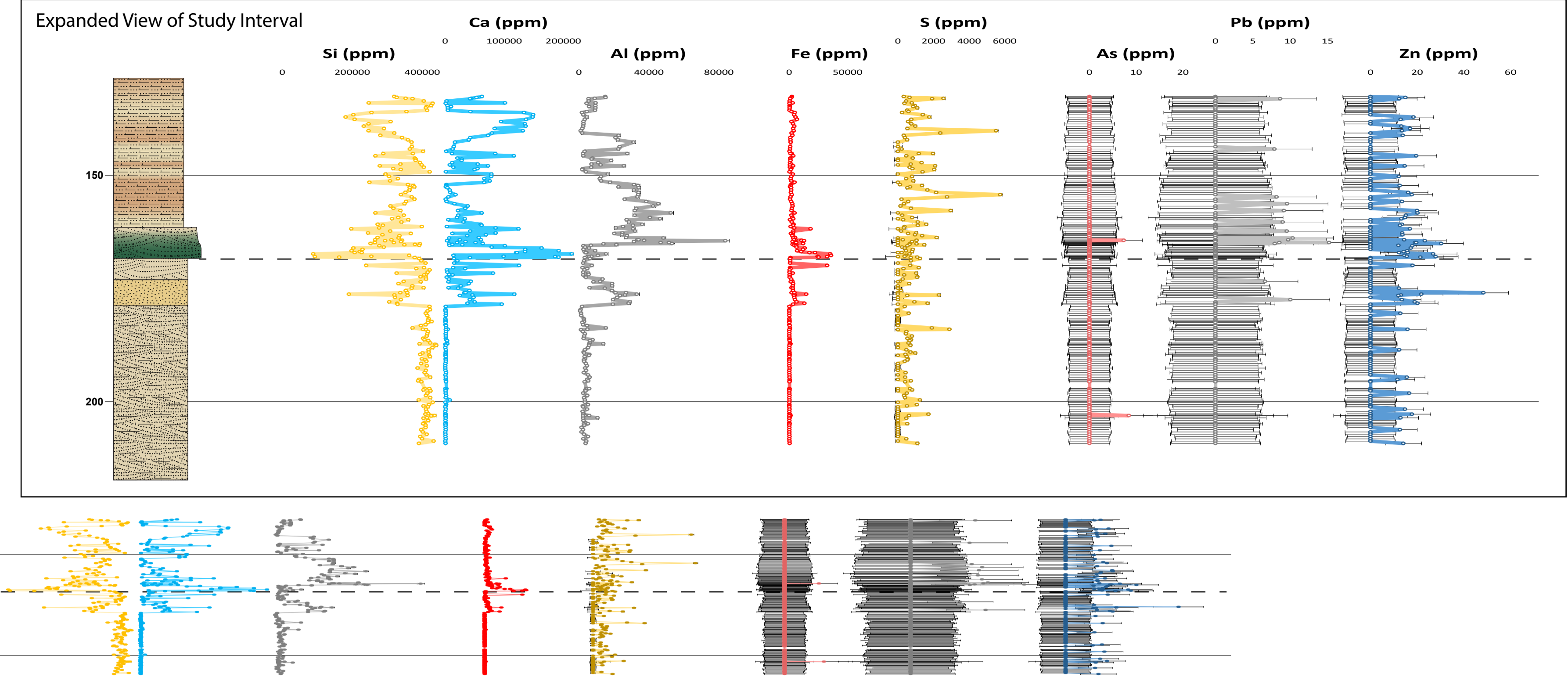
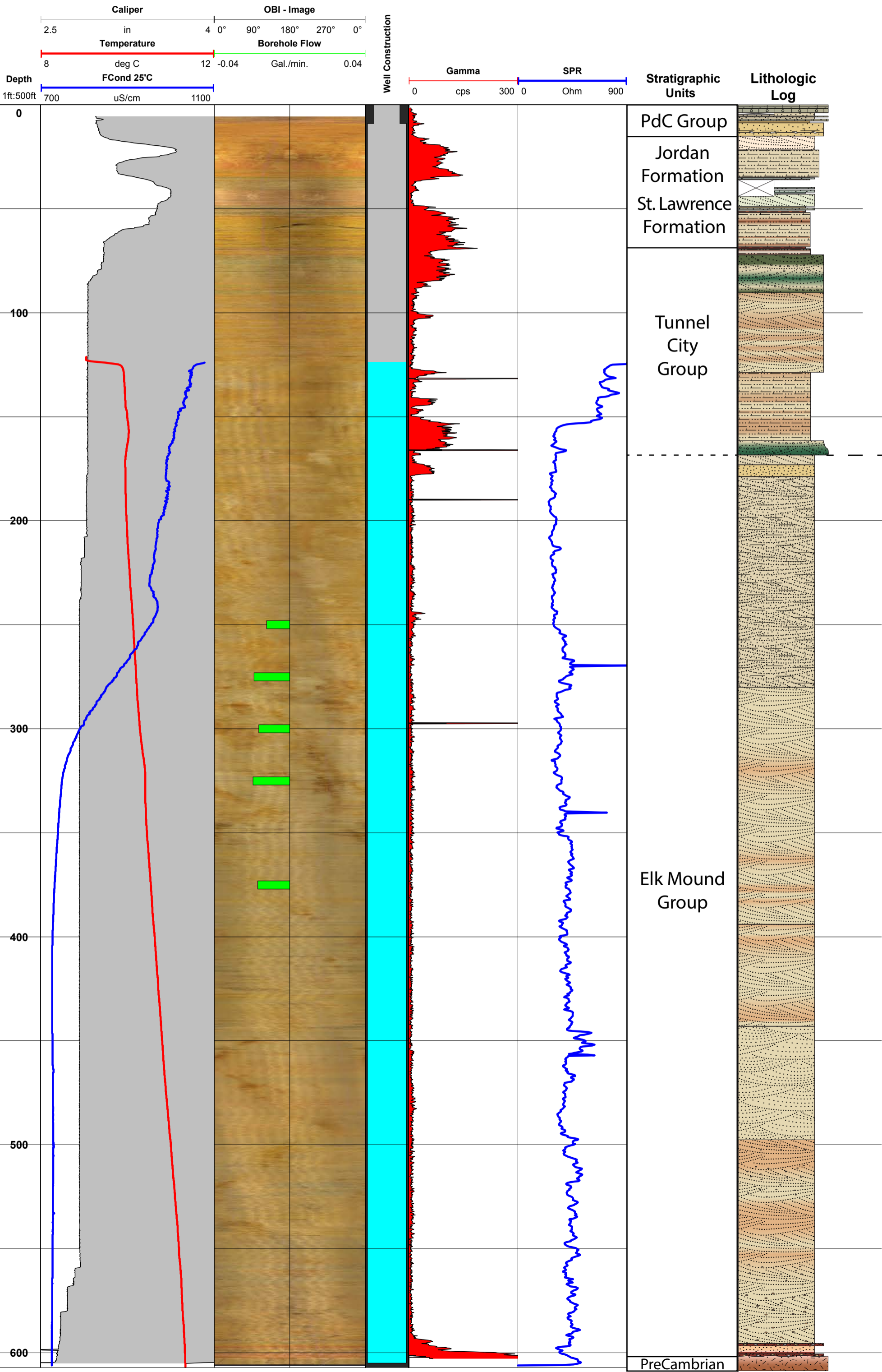
Site 15 - Hwy C Leland



Site 16 - Ferry Bluff West



Site 17 - 11005900 WGNHS Triemstra Quarry



WGNHS Well ID **11005900**

DATE **11/1-11/4/13** WELL NAME **Triemstra Quarry**

LOCATION **NW corner of quarry 1km W, .75km N of intersection of CTH EE & E**

COUNTY **Columbia** LOGGED BY **P. Chase**

LATITUDE **43.620585** LONGITUDE **-89.274949**

LOCATION METHOD: ☒ GPS ☐ AIR PHOTO/TOPO ☐ PLSS ☐ OTHER

ELEVATION **920** ELEVATION METHOD: ☐ DEM ☐ TOPO ☐ OTHER **10M DEM**

WELL DEPTH **605** CASING DEPTH **9** DEPTH TO WATER **123.8**

CASING STICK UP **0.4** File Created on: **8/10/2016** by: **MJP**

Comments: *SPR, SP, and Normal Resistivity profiles were collected for this well but only SPR is presented in this log. The Well Construction field depicts the well, casing, and water-level as measured on the day of logging. For the heat pulse flow meter, flow up is negative, flow down is positive.*

LOGS COLLECTED:

Gamma ☒ Fluid Conductivity ☒ Unless Noted:

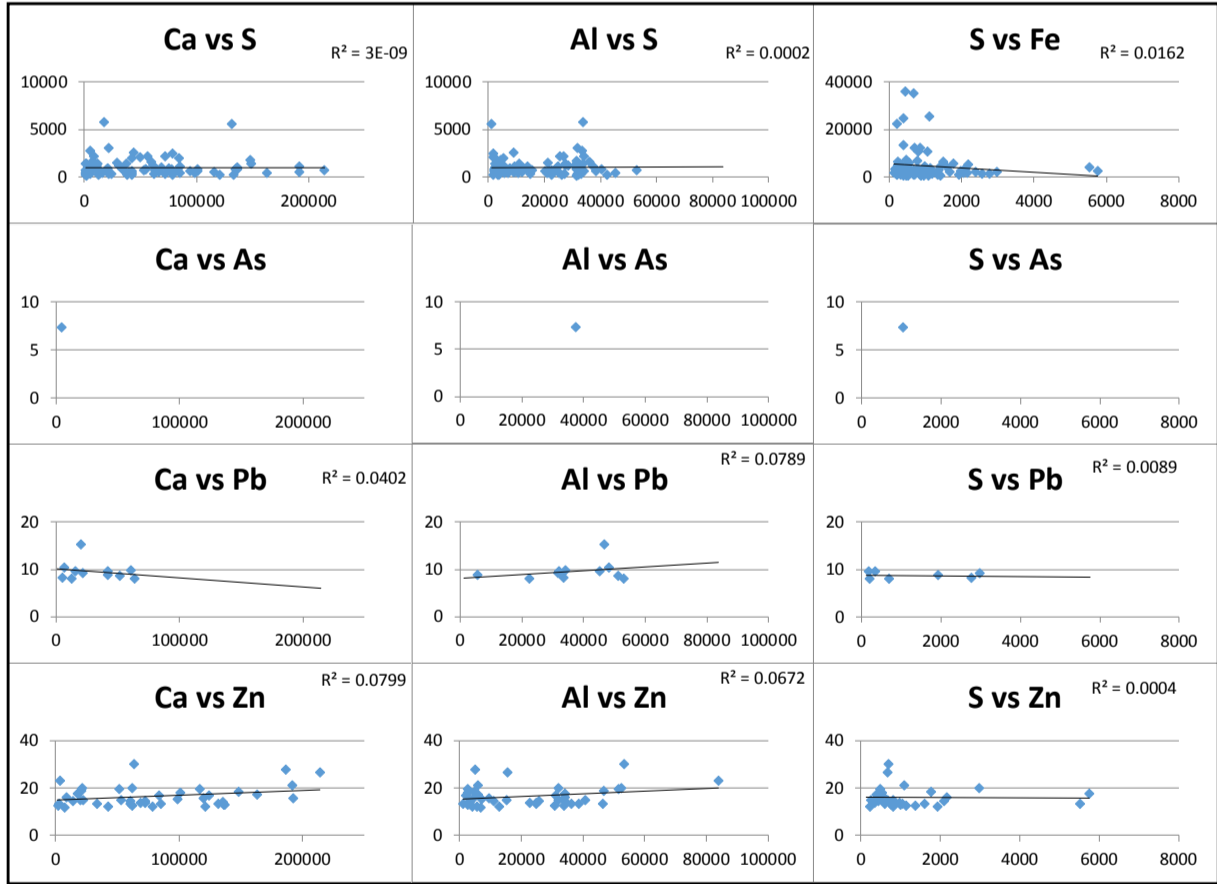
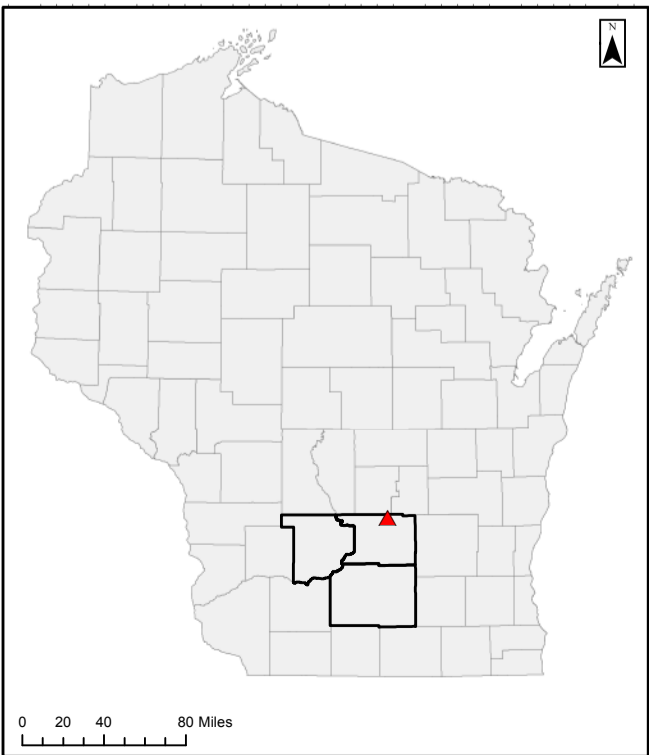
Caliper ☒ Flow Meter- HeatPulse ☒ - all depths are in feet

Single Point Resistivity ☒ Flow Meter- Spinner ☐ - well depth, casing depth and depth to water are interpreted from geophysical log

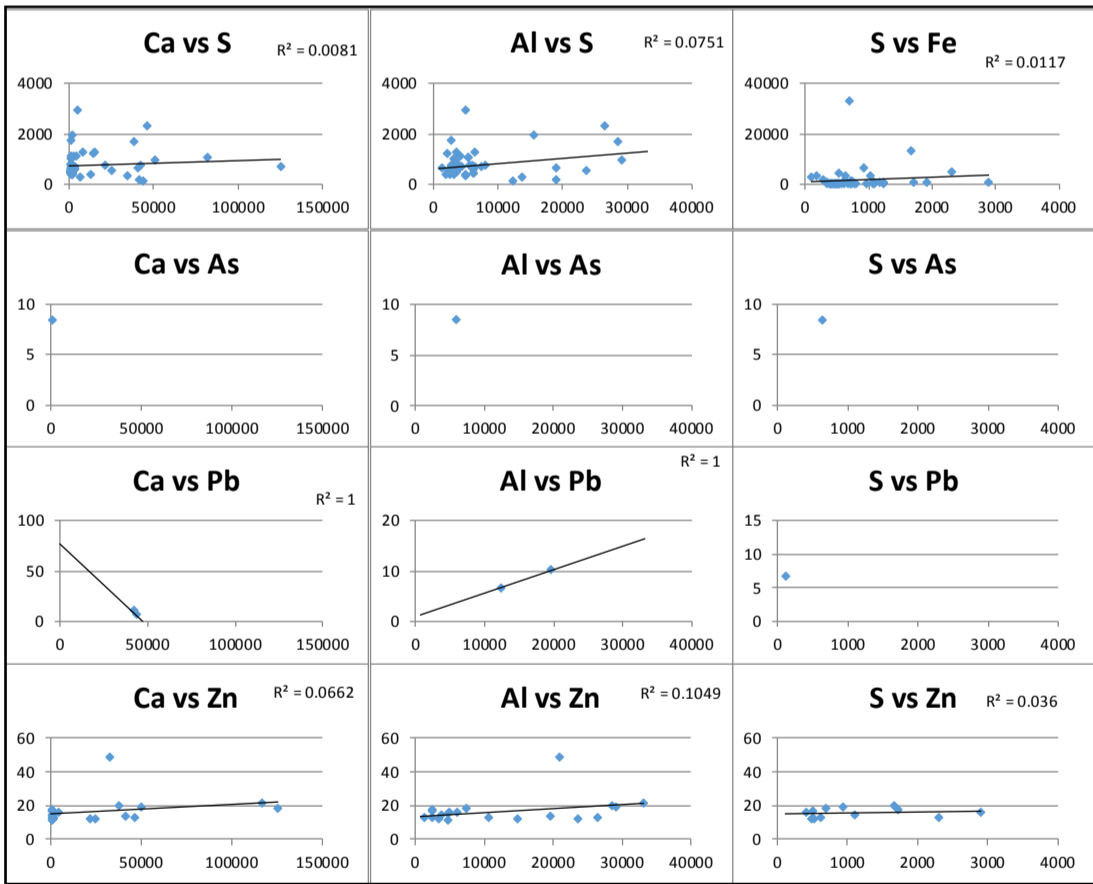
Self Potential ☐ Optical Borehole Imager ☒ - datum is the top of casing

Normal Resistivity ☐ Acoustic Borehole Imager ☐ For more information or to obtain collected data not shown please contact us at geodata@uwex.edu

Fluid Temperature ☒ OTHER: ☐



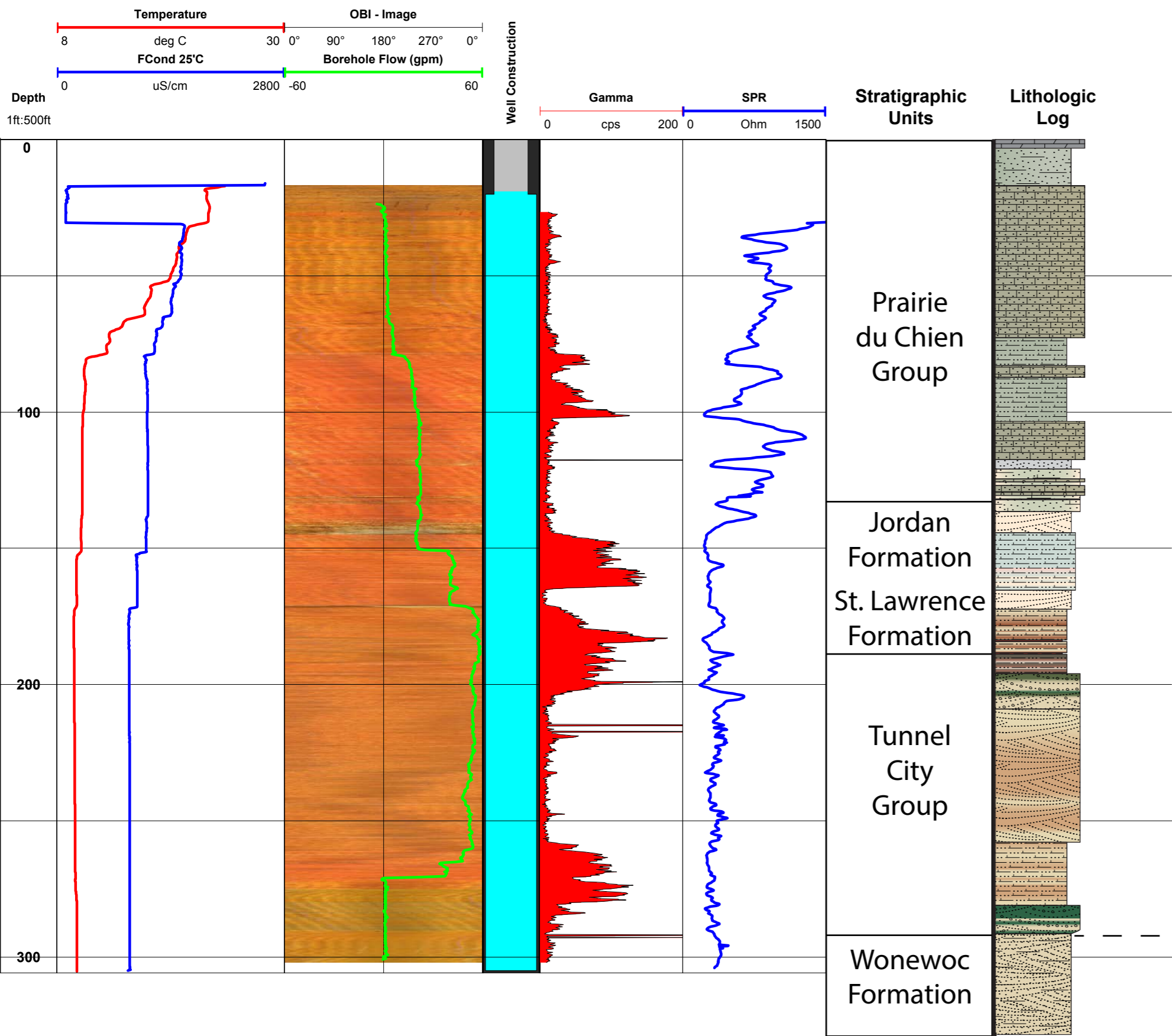
Select elemental cross-plots (in ppm) from Tunnel City Group strata, WGNHS Triemstra Quarry 11005900.



Select elemental cross-plots (in ppm) from Wonewoc Formation strata, WGNHS Triemstra Quarry 11005900.



WGNHS Triemstra Quarry 11005900. We tentatively place the contact between the Tunnel City Group and Wonewoc Formation at 168.2'.



**WGNHS Well ID** 14001384

**DATE** 8/15/2012 **WELL NAME** Alsum Quarry Corehole 4

**LOCATION** Randolph, WI

**COUNTY** Dodge **LOGGED BY** P. Chase, S. Sellwood

**LATITUDE** 43.593864 **LONGITUDE** -88.997651

**LOCATION METHOD:** GPS ☐ AIR PHOTO/TOPO ☐ PLSS ☐ OTHER ☐

**ELEVATION** 970 **ELEVATION METHOD:** DEM ☐ TOPO ☒ OTHER ☐

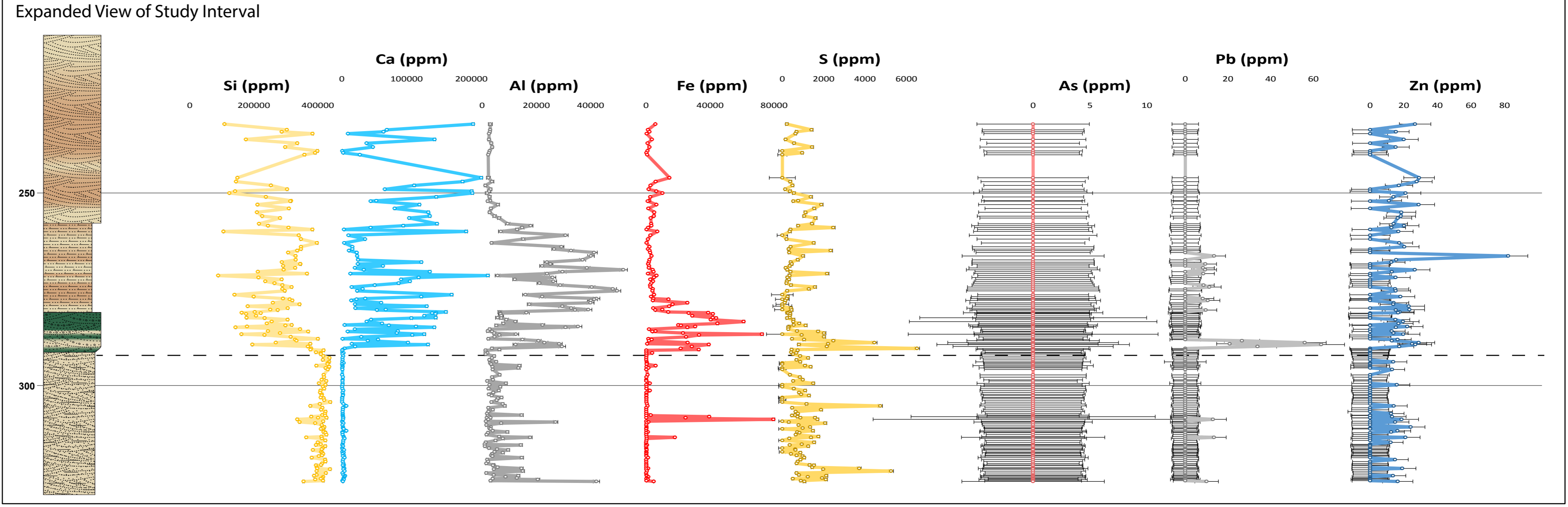
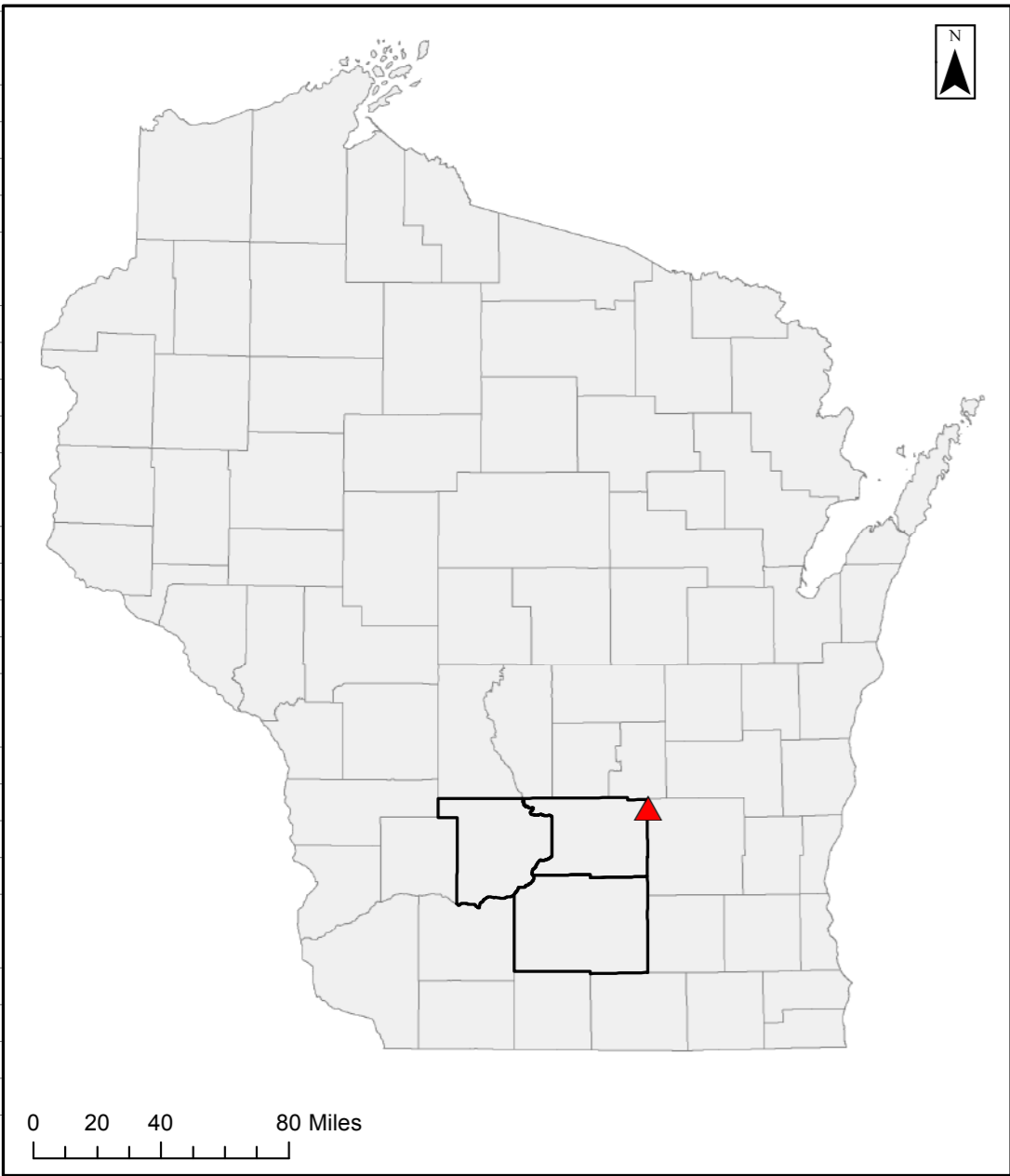
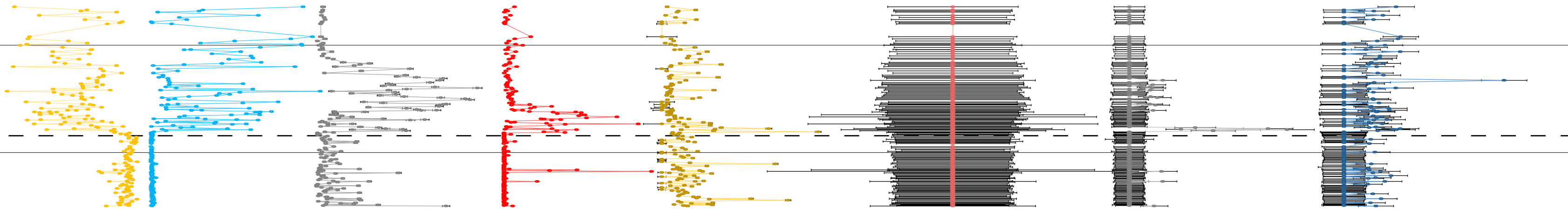
**WELL DEPTH** 305 **CASING DEPTH** 20 **DEPTH TO WATER** 19

**CASING STICK UP** 0 **File Created on:** 8/11/2016 **by:** MJP

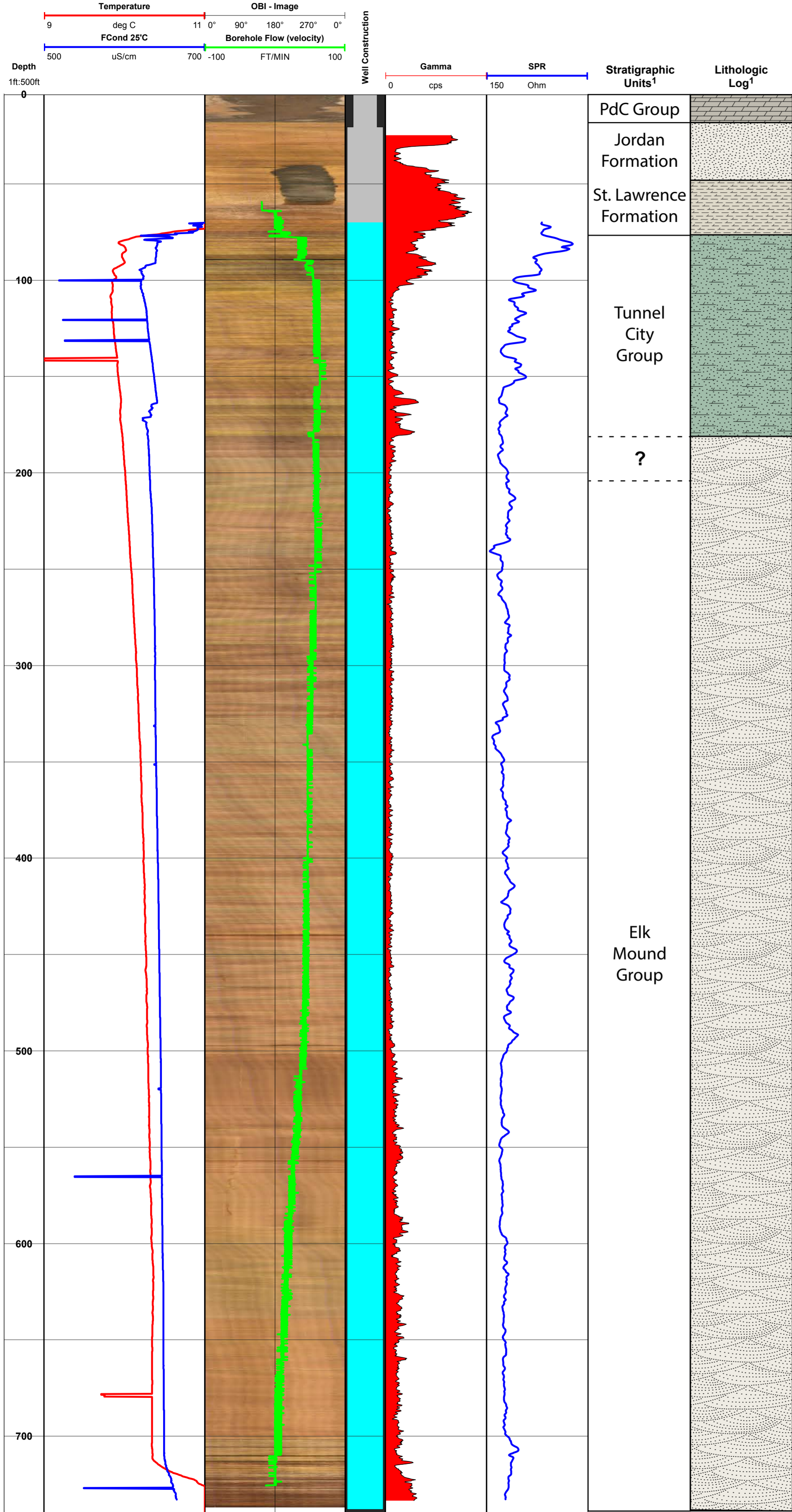
**Comments:** SPR, SP, and Normal Resistivity profiles were collected for this well but only SPR is presented in this log. The Well Construction field depicts the well, casing, and water-level as measured on the day of logging. Spinner flow collected under ambient conditions. Cascading water observed at approx. 30' during drilling, water-level rose by the time the well was logged. ABI also collected but not included.

**LOGS COLLECTED:**

Gamma	<input checked="" type="checkbox"/>	Fluid Conductivity	<input checked="" type="checkbox"/>	Unless Noted: - all depths are in feet - well depth, casing depth and depth to water are interpreted from geophysical log - datum is the top of casing
Caliper	<input type="checkbox"/>	Flow Meter- HeatPulse	<input type="checkbox"/>	
Single Point Resistivity	<input checked="" type="checkbox"/>	Flow Meter- Spinner	<input checked="" type="checkbox"/>	
Self Potential	<input type="checkbox"/>	Optical Borehole Imager	<input checked="" type="checkbox"/>	
Normal Resistivity	<input type="checkbox"/>	Acoustic Borehole Imager	<input type="checkbox"/>	For more information or to obtain collected data not shown please contact us at geodata@uwex.edu
Fluid Temperature	<input checked="" type="checkbox"/>	OTHER:	<input type="checkbox"/>	



Site 19 - 11000783 WGNHS Rio 1



Depth

1ft:500ft

0

100

200

300

400

500

600

700

Well Construction

Gamma

cps

0

150

SPR

Ohm

150

Stratigraphic Units<sup>1</sup>

PdC Group

Jordan Formation

St. Lawrence Formation

Tunnel City Group

?

Elk Mound Group

Lithologic Log<sup>1</sup>

Si (ppm)

0

200000

400000

Ca (ppm)

0

100000

200000

Al (ppm)

0

20000

40000

Fe (ppm)

0

10000

S (ppm)

0

500

1000

As (ppm)

0

2

4

Pb (ppm)

0

5

10

Zn (ppm)

0

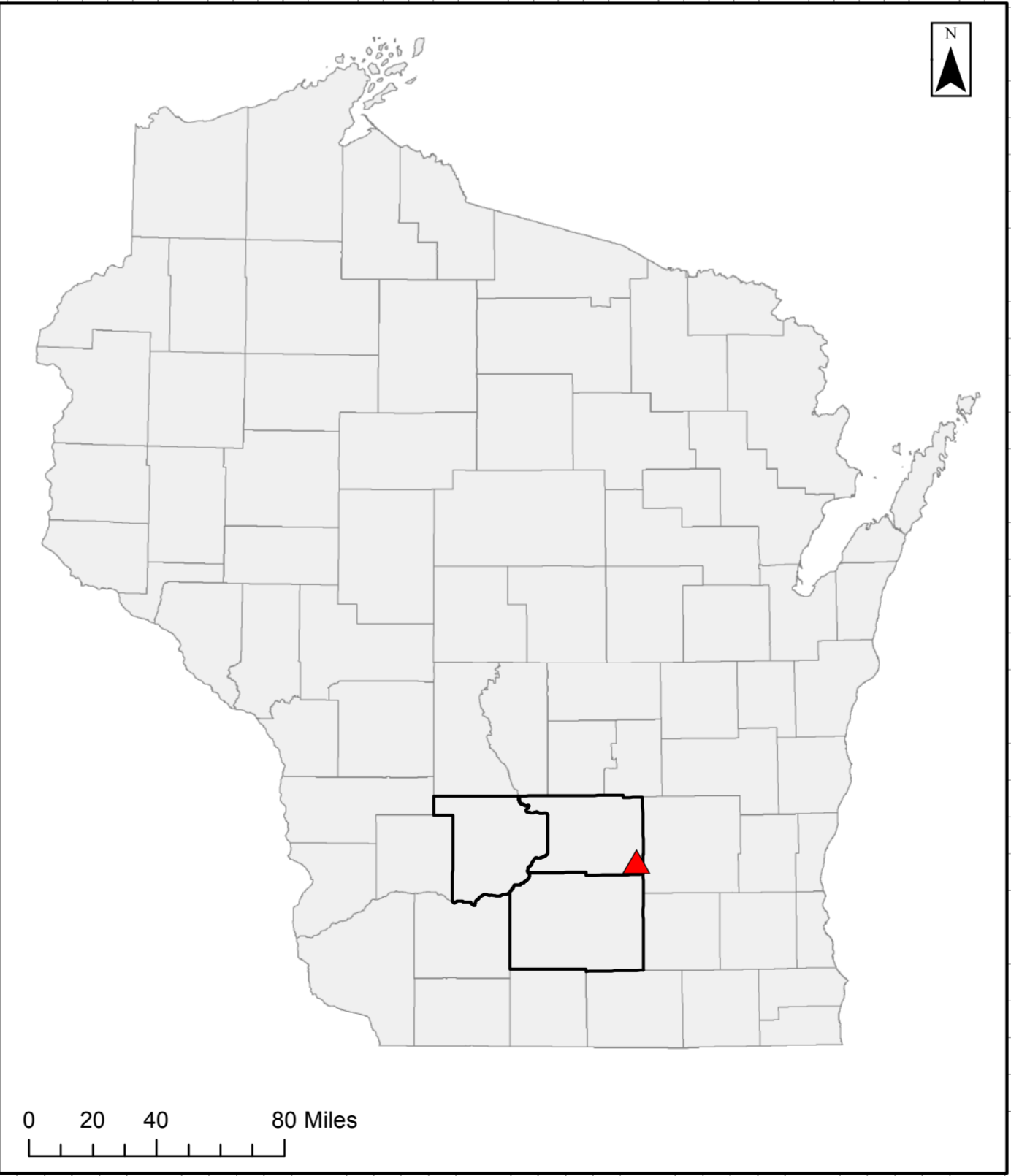
20


40

60

80

1: Stratigraphic Units and Lithologic Log adapted from WGNHS Geologic Log





WGNHS Well ID

11000783

DATE

9/25/2012

WELL NAME

Rio 1

LOCATION

Rio, WI

COUNTY

Columbia

LOGGED BY

PMC

LATITUDE

43.43739

LONGITUDE

-89.26045

LOCATION METHOD:

GPS

☒

AIR PHOTO/TOPO

☐

PLSS

☐

OTHER

☐

ELEVATION

1030.06

ELEVATION METHOD:

DEM

☒

TOPO

☐

OTHER

☐

WELL DEPTH

738 feet

CASING DEPTH

20.5

DEPTH TO WATER

70

CASING STICK UP

1

File Created on:

8/12/2016

by:

MJP

Comments:

Spinner flow measurement taken under ambient conditions. Borehole flow is reported as a velocity since the borehole diameter, which is needed for conversion to a flowrate, is not available. SPR, SP, and Normal Resistivity profiles were collected for this well but only SPR is presented in this log. The Well Construction field depicts the well, casing, and water-level as measured on the day of logging.

LOGS COLLECTED:

Gamma

☒

Fluid Conductivity

☒

Caliper

☐

Flow Meter- HeatPulse

☐

Single Point Resistivity

☒

Flow Meter- Spinner

☒

Self Potential

☐

Optical Borehole Imager

☒

Normal Resistivity

☐

Acoustic Borehole Imager

☐

Fluid Temperature

☒

OTHER:

☐

Unless Noted:

- all depths are in feet

- well depth, casing depth and depth to water are interpreted from geophysical log

- datum is the top of casing

For more information or to obtain collected data not shown please contact us at geodata@uwex.edu

WISCONSIN

WGNHS

GEOLOGICAL AND NATURAL HISTORY SURVEY

WGNHS Well ID

11005908

DATE

10/3/14

WELL NAME

Stevenson Quarry #2 core

LOCATION

1900' N of Richards Rd, 450' W of Pine Hollow Rd, Arlington, WI

COUNTY

Columbia

LOGGED BY

P. Chase

LATITUDE

43.357446

LONGITUDE

-89.444337

LOCATION METHOD:

GPS

AIR PHOTO/TOPO

PLSS

OTHER

ELEVATION

1091

ELEVATION METHOD:

DEM

TOPO

OTHER

WELL DEPTH

203

CASING DEPTH

4.7

DEPTH TO WATER

149.6

CASING STICK UP

1.2

File Created on:

8/11/2016

by:

MJP

Comments:

SPR and SP profiles were collected for this well but only SPR is presetned in this log. The Well Construction field depicts the well, casing , and water-level as measured on the day of logging.

LOGS COLLECTED:

Gamma

☒

Fluid Conductivity

☒

Caliper

☒

Flow Meter- HeatPulse

☐

Single Point Resistivity

☒

Flow Meter- Spinner

☐

Self Potential

☐

Optical Borehole Imager

☒

Normal Resistivity

☐

Acoustic Borehole Imager

☐

Fluid Temperature

☒

OTHER:

☐

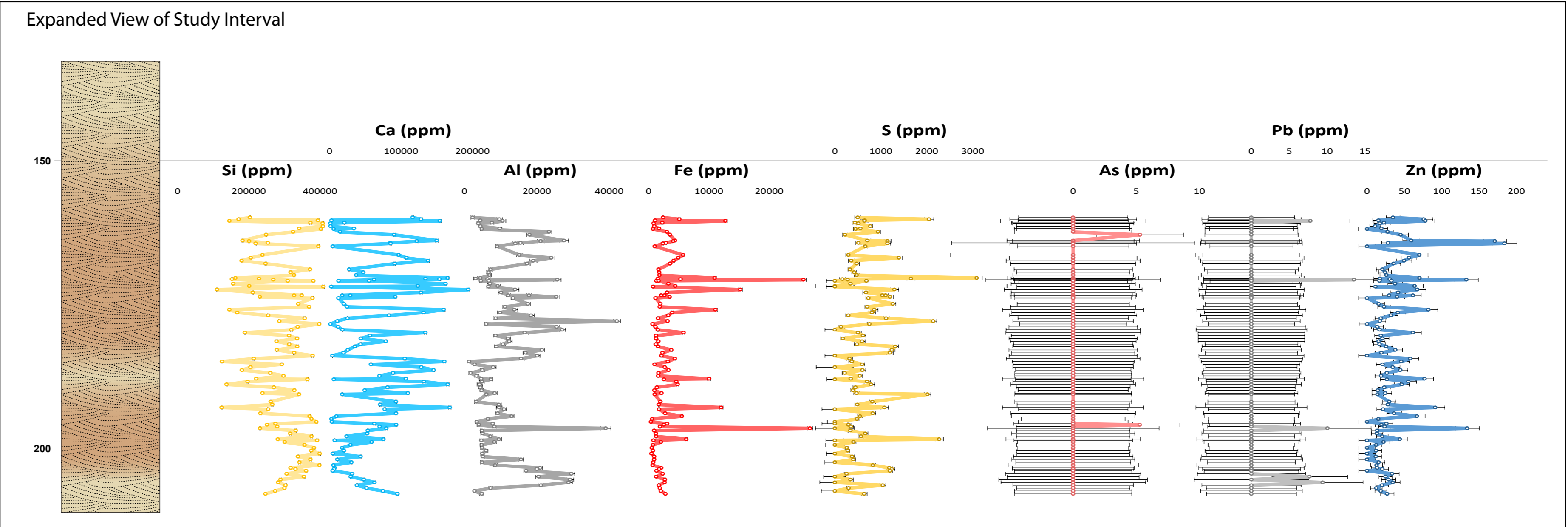
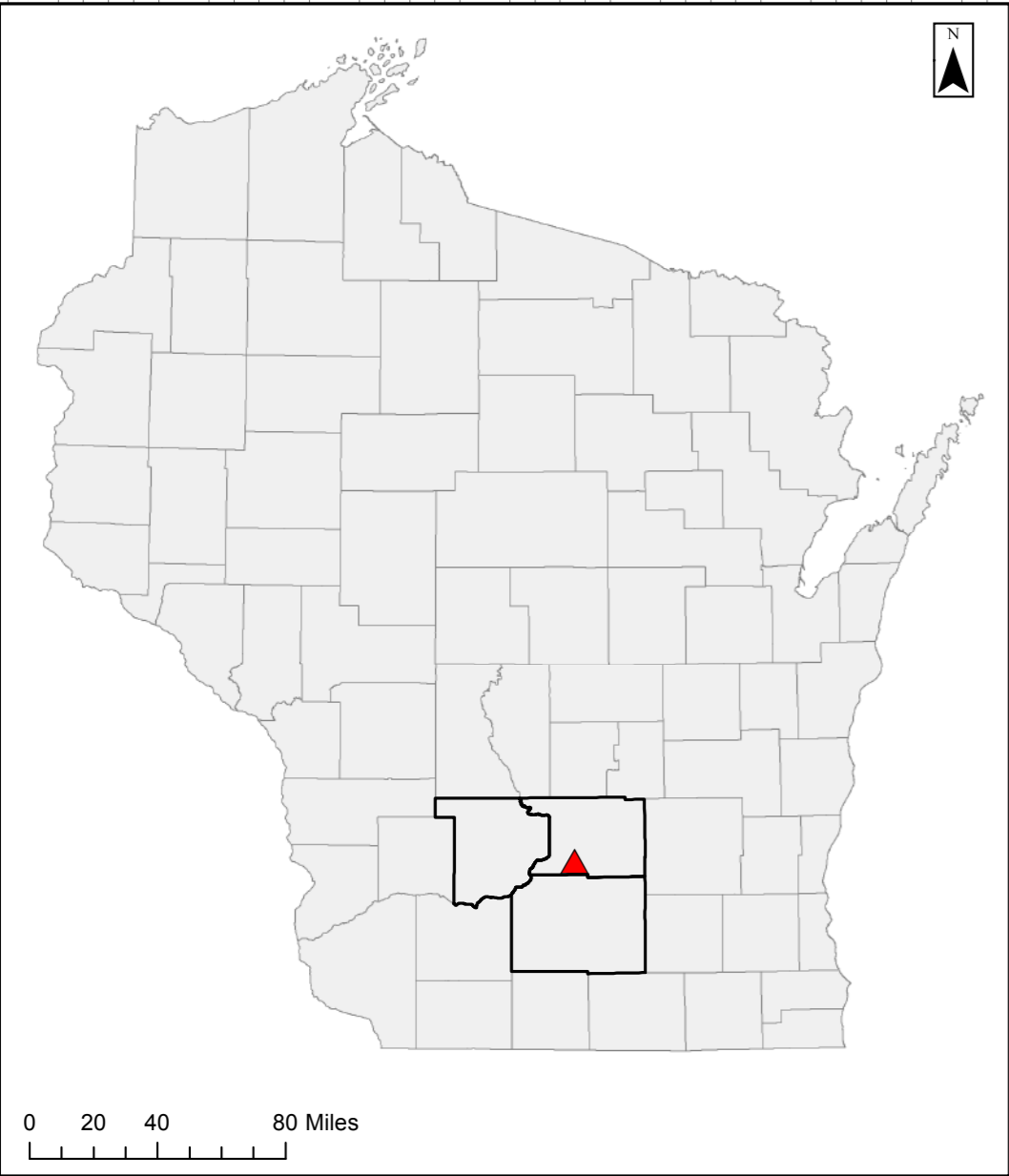
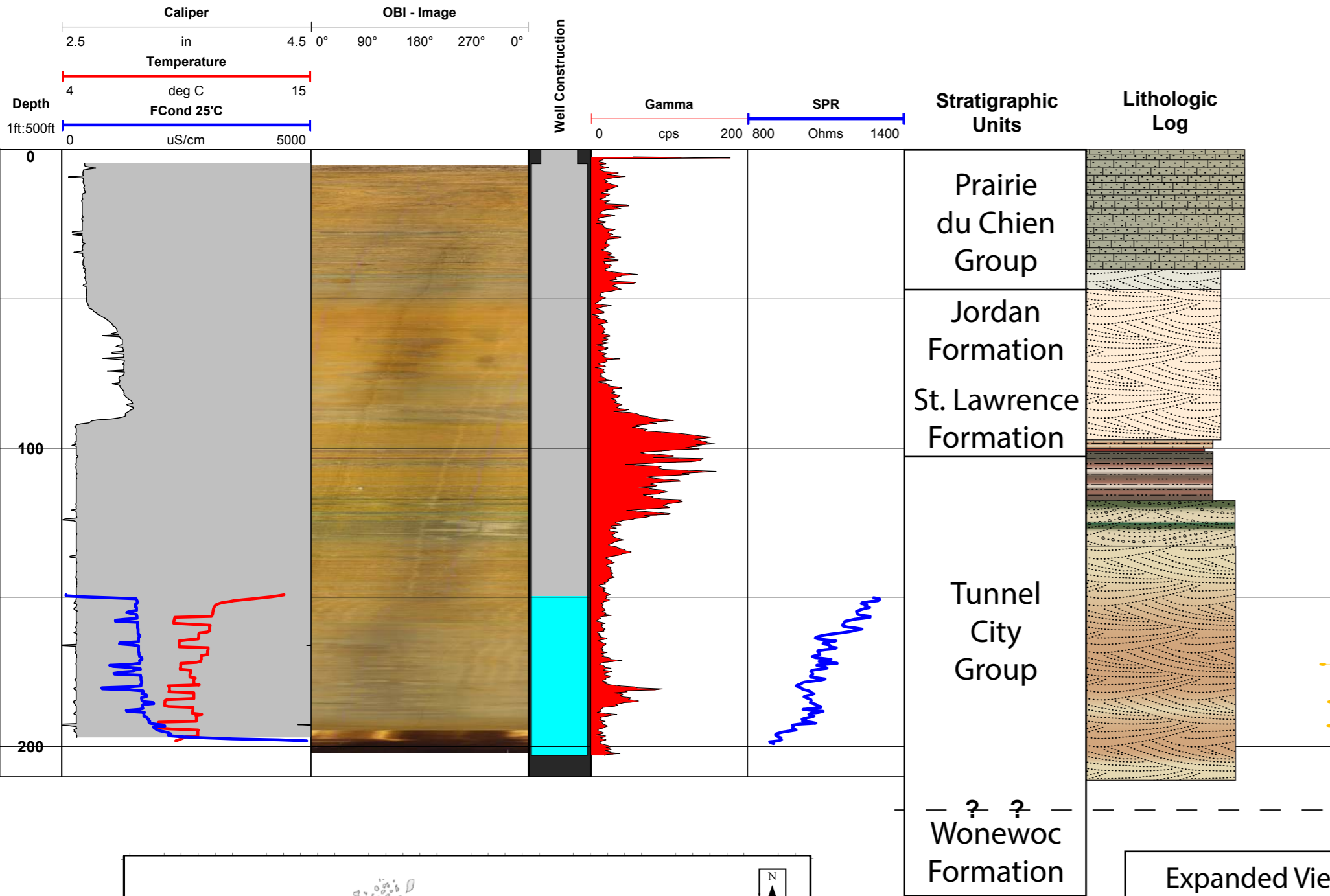
Unless Noted:

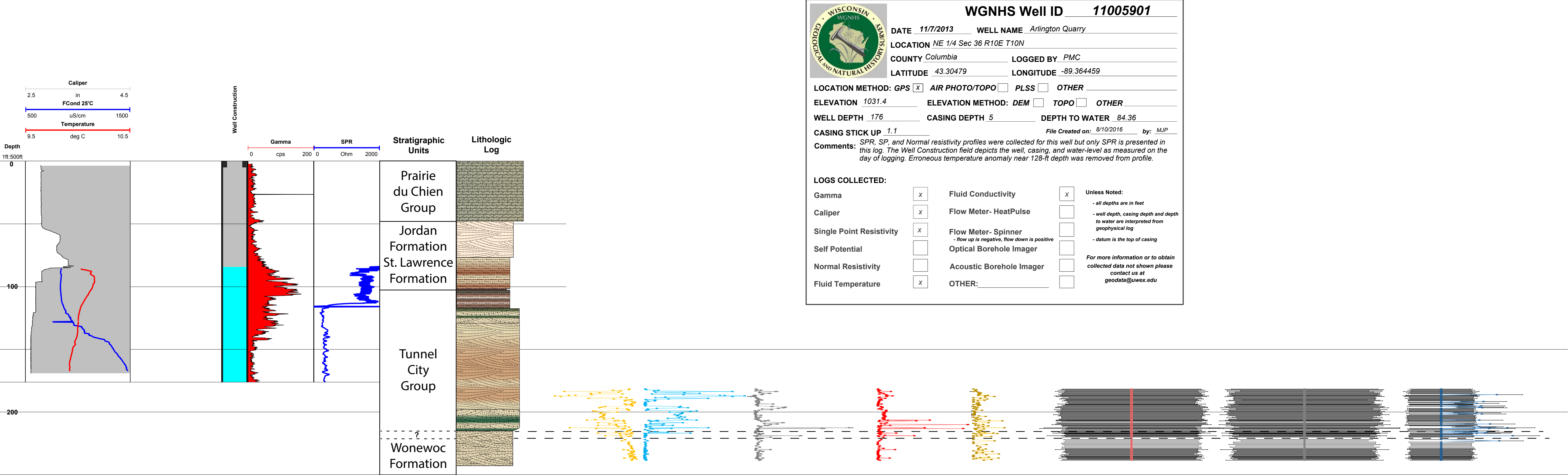
- all depths are in feet

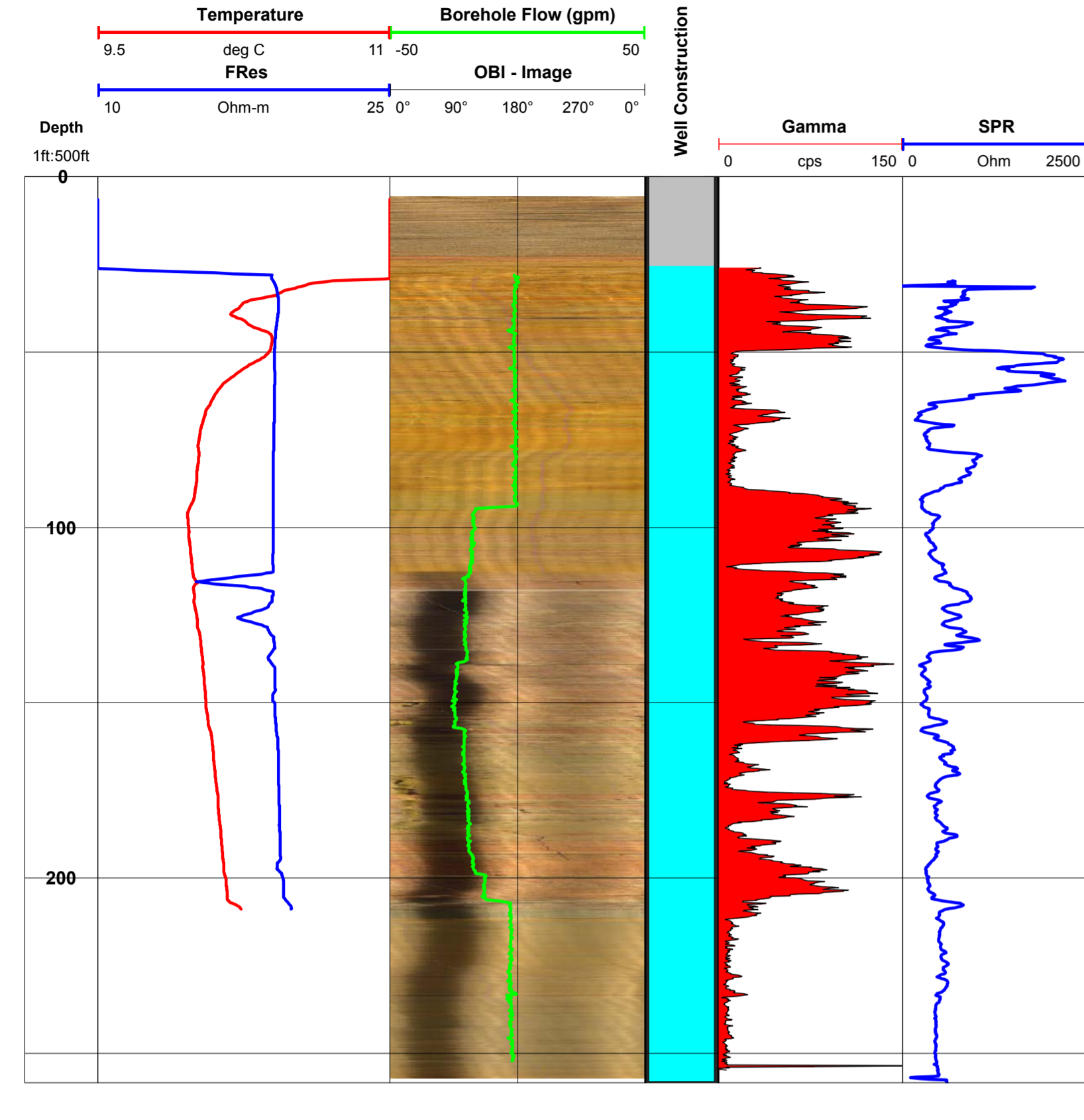
- well depth, casing depth and depth to water are interpreted from geophysical log

- datum is the top of casing

For more information or to obtain collected data not shown please contact us at geodata@uwex.edu







Stratigraphic Units

Ancell

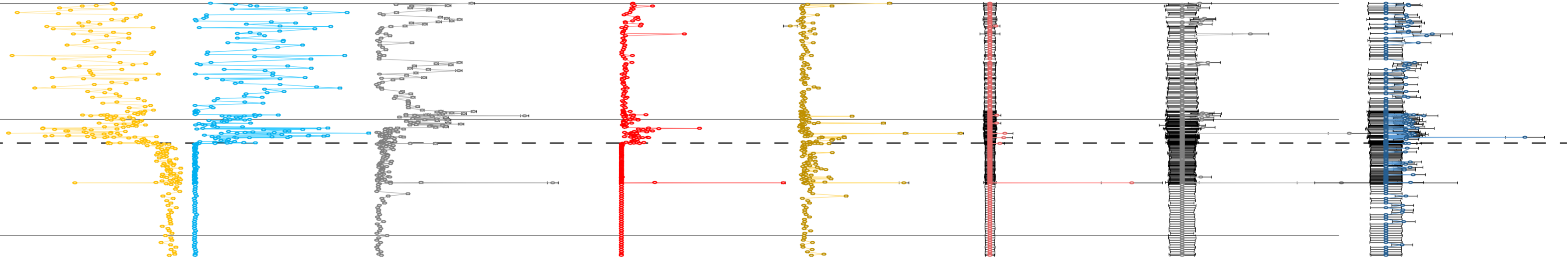
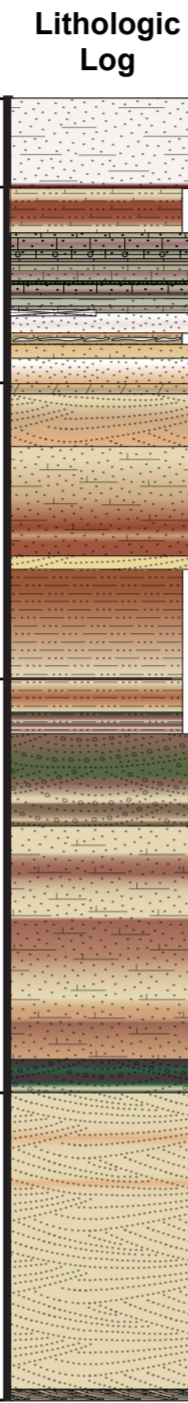
Prairie du Chien Group

Jordan Formation

St. Lawrence Formation

Tunnel City Group

Wonewoc Formation



WGNHS Well ID 11000782

DATE 6/25/2012 WELL NAME Columbus 2

LOCATION on top of a Quarry on highway 16 NW of Columbus, WI

COUNTY Columbia LOGGED BY M. Gotkowitz and S Sellwood

LATITUDE 43 deg 20' 32.44" N LONGITUDE 89 deg 2' 58.97" W

LOCATION METHOD: GPS ☐ AIR PHOTO/TOPO ☐ PLSS ☐ OTHER ☐

ELEVATION 880 ELEVATION METHOD: DEM ☐ TOPO ☒ OTHER +/- 5 feet

WELL DEPTH 258 CASING DEPTH None DEPTH TO WATER 25.4 feet

CASING STICK UP 1.4

File Created on: 8/10/2016 by: MJP

Comments: No casing placed since bedrock was near at land surface. Spinner flow measurement taken under ambient conditions. Spectral gamma, self potential, and normal resistivity profiles were collected for this well but only SPR is presented in this log. The Well Constructuion field depicts the well and water-level as measured on the day of logging.

LOGS COLLECTED:

Gamma ☒ Fluid Conductivity ☐ Unless Noted:

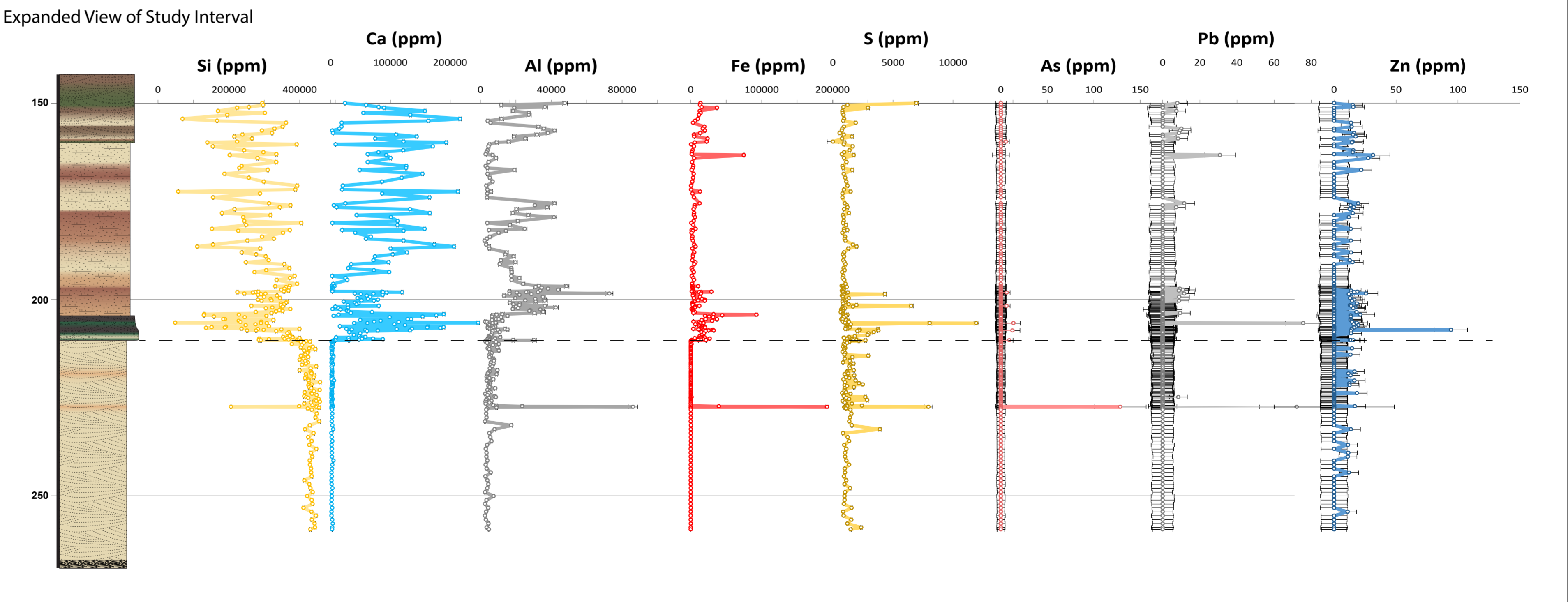
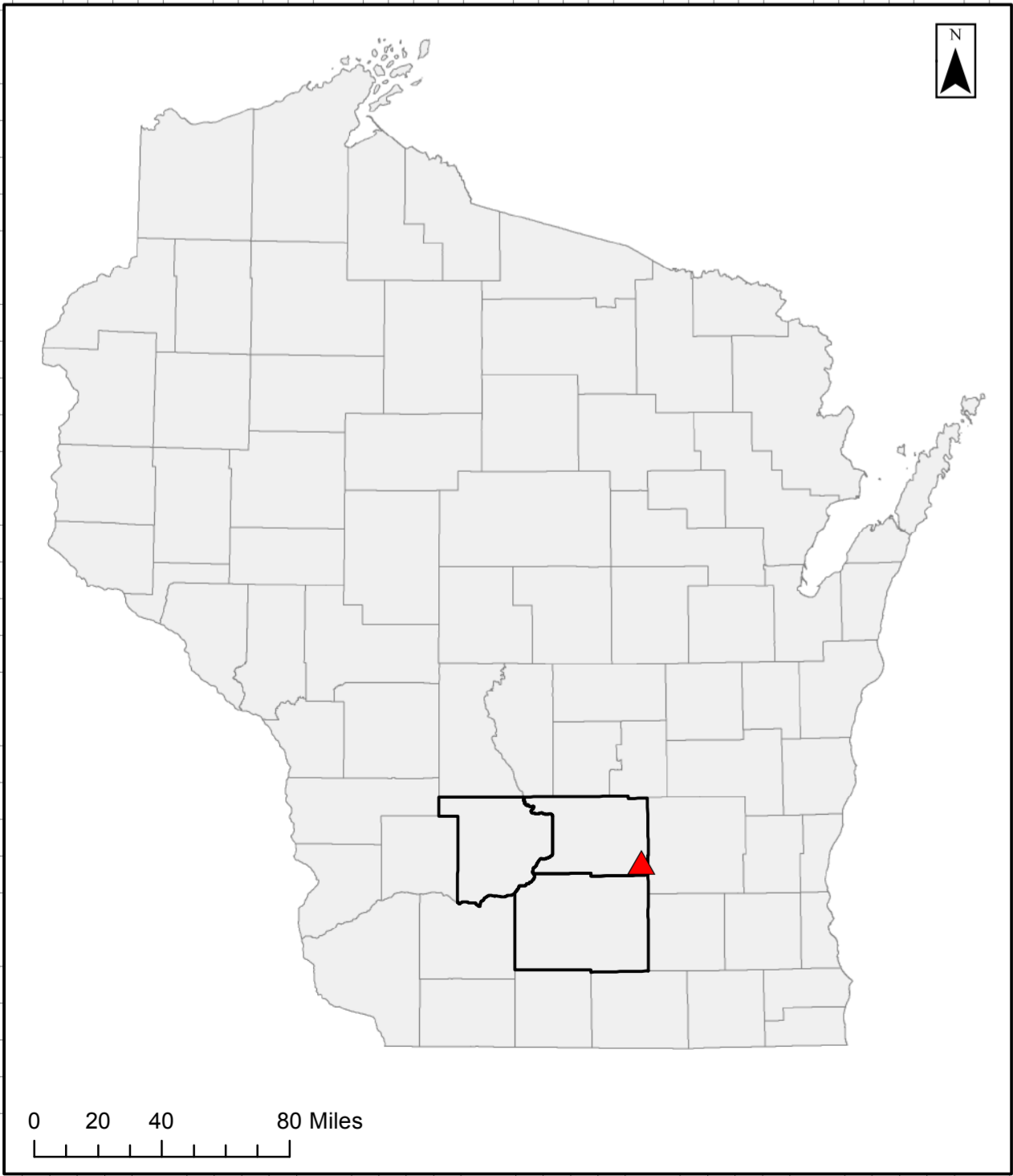
Caliper ☐ Flow Meter- HeatPulse ☐ - all depths are in feet

Single Point Resistivity ☒ Flow Meter- Spinner ☒ - well depth, casing depth and depth to water are interpreted from geophysical log

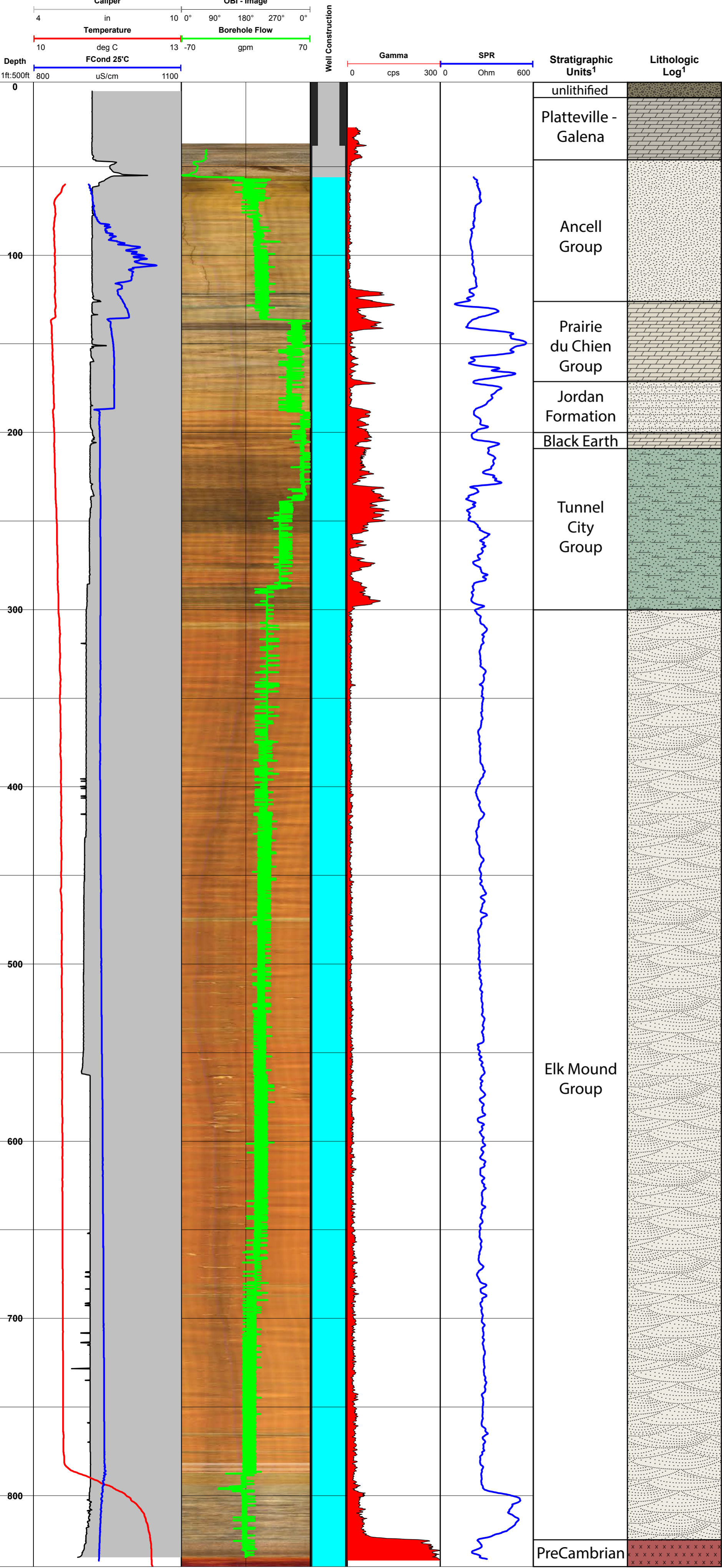
Self Potential ☐ Optical Borehole Imager ☒ - datum is the top of casing

Normal Resistivity ☐ Acoustic Borehole Imager ☐ For more information or to obtain collected data not shown please contact us at geodata@uwex.edu

Fluid Temperature ☒ OTHER: Fluid Resistivity ☒



Site 23 - 11000784 WGNHS Manke Farm Test Hole



WGNHS Well ID 11000784

DATE Oct - Nov 2012 WELL NAME Manke Farm

LOCATION Manke Rd. South of Wiener Rd.

COUNTY Columbia

LOGGED BY PMC

LATITUDE 43.288229

LONGITUDE -89.04474

LOCATION METHOD: GPS ☒ AIR PHOTO/TOPO ☐ PLSS ☐ OTHER ☐

ELEVATION 941 ELEVATION METHOD: DEM ☒ TOPO ☐ OTHER ☐

WELL DEPTH 840 CASING DEPTH 38 DEPTH TO WATER 56

CASING STICK UP 1.3

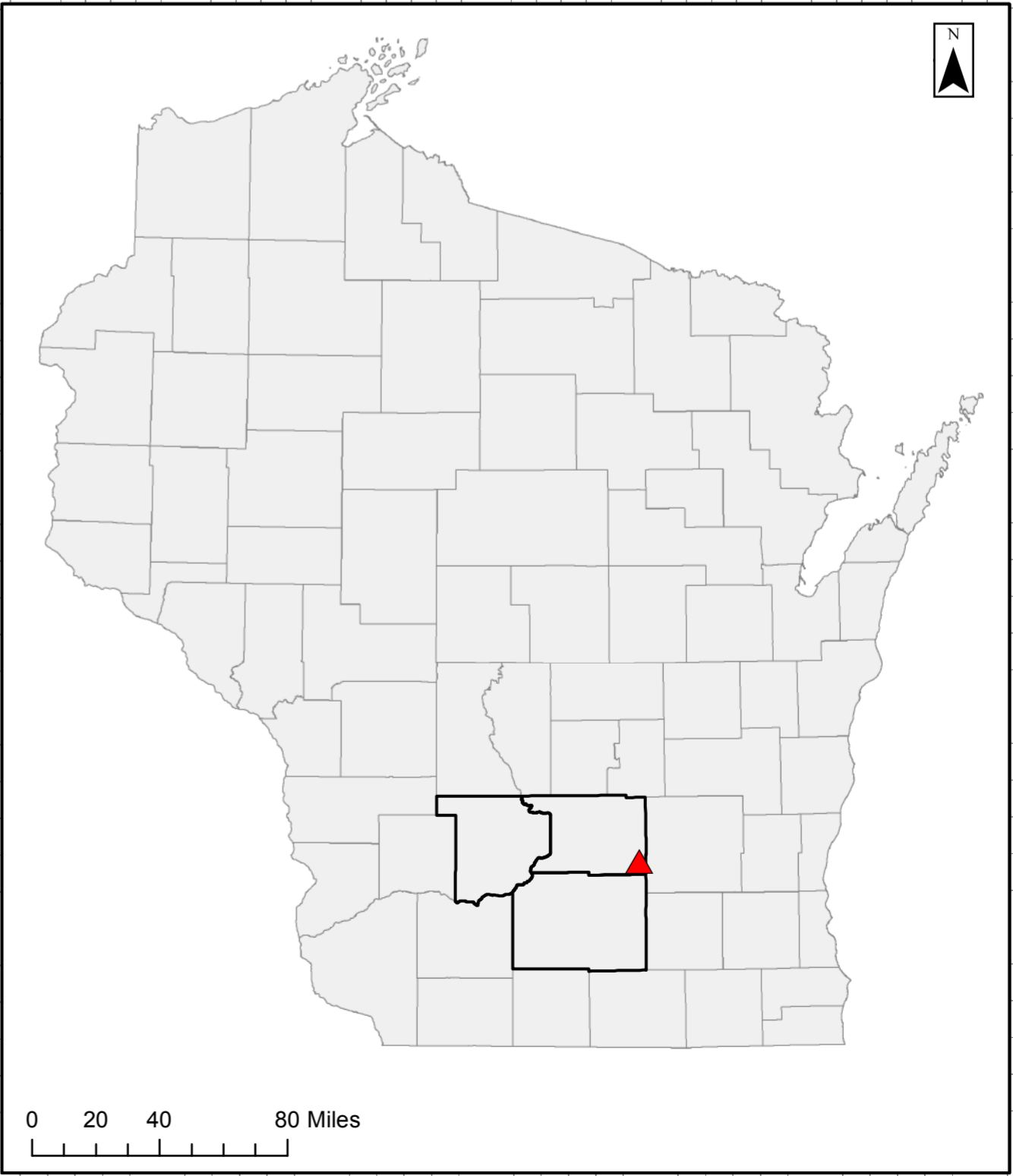
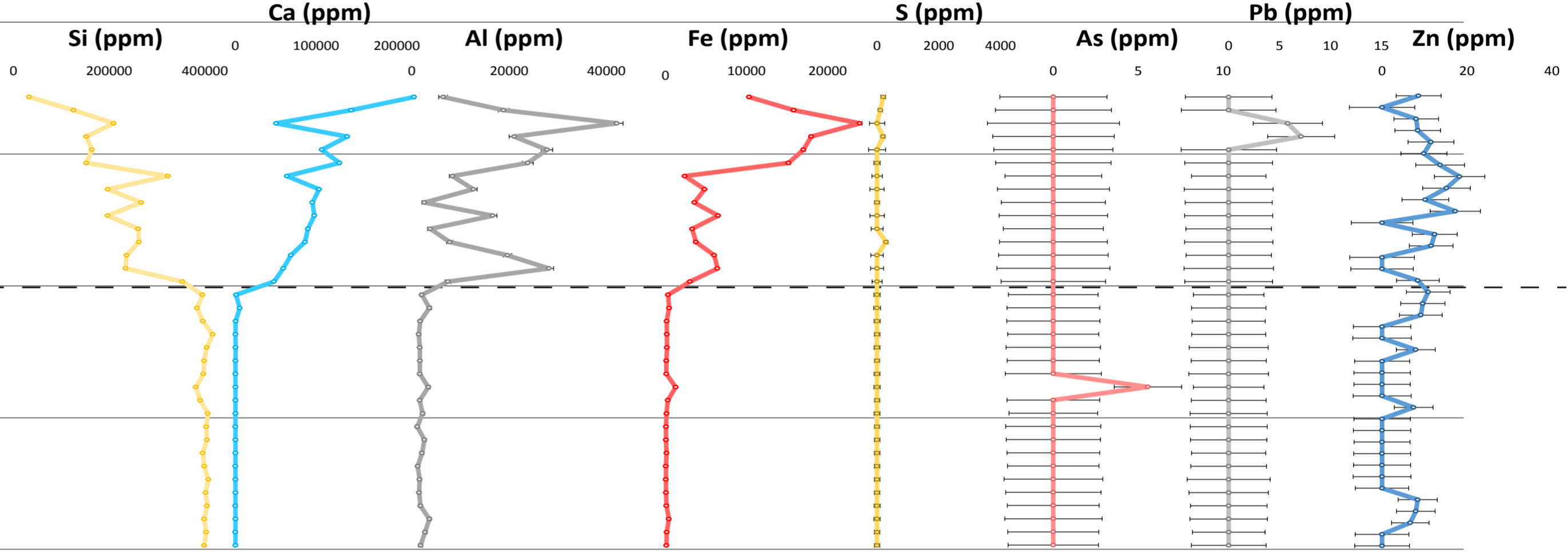
File Created on: 8/10/2016 by: MJP

Comments: SPR, SP, and Normal Resistivity profiles were collected for this well but only SPR is presented in this log. Flow logs taken in May 2013. Cascading water in well. Lots of iron bacteria settled to bottom. Spinner flow measurements taken under ambient conditions. The Well Construction field depicts the well, casing, and water-level as measured on the day of logging.

LOGS COLLECTED:

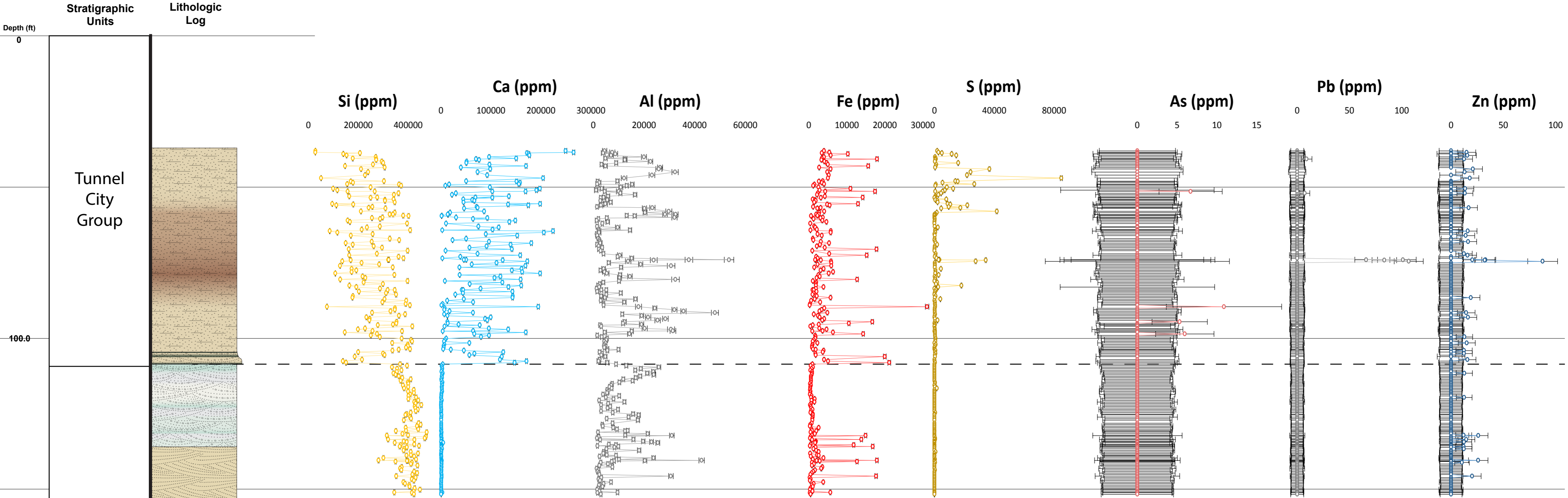
Gamma ☒ Fluid Conductivity ☒  
Caliper ☒ Flow Meter- HeatPulse ☐  
Single Point Resistivity ☒ Flow Meter- Spinner ☒  
Self Potential ☐ Optical Borehole Imager ☒  
Normal Resistivity ☐ Acoustic Borehole Imager ☐  
Fluid Temperature ☒ OTHER: ☐

Unless Noted:  
- all depths are in feet  
- well depth, casing depth and depth to water are interpreted from geophysical log  
- datum is the top of casing  
For more information or to obtain collected data not shown please contact us at geodata@uwex.edu

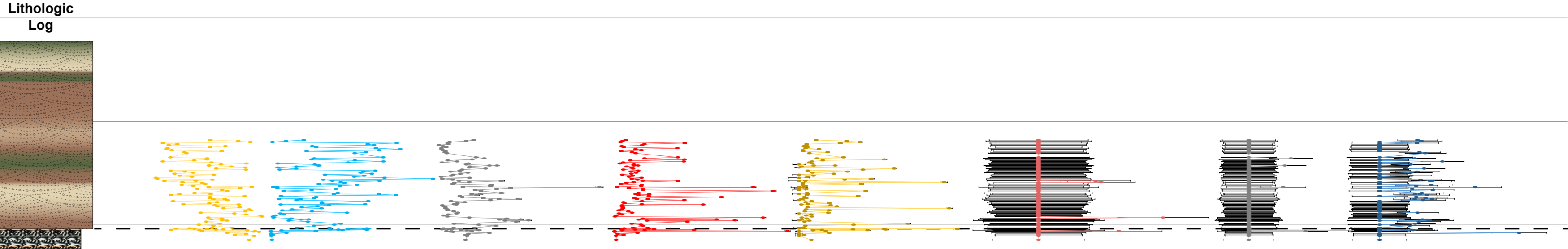
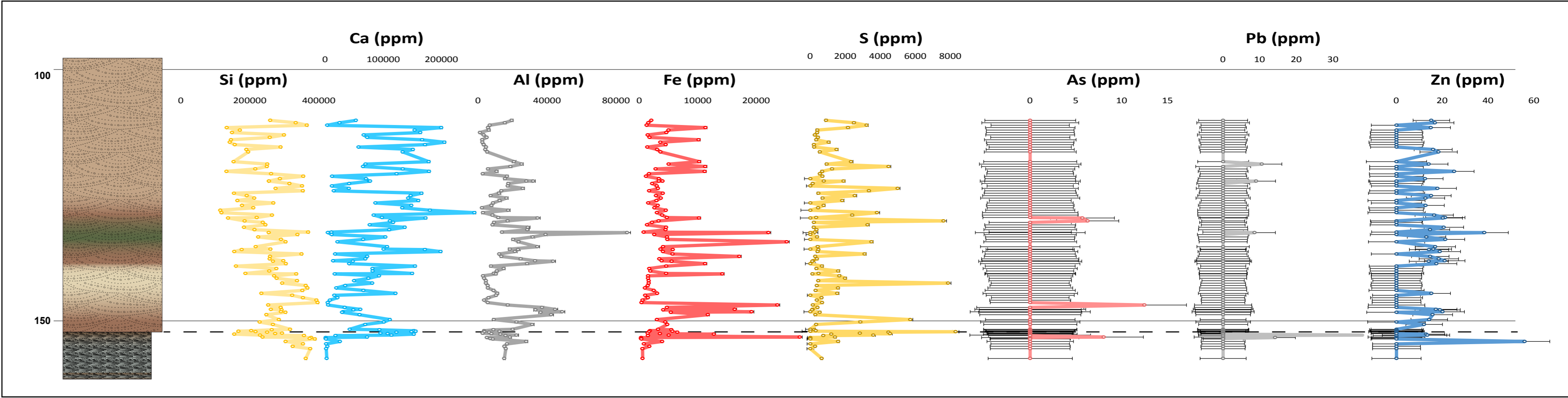
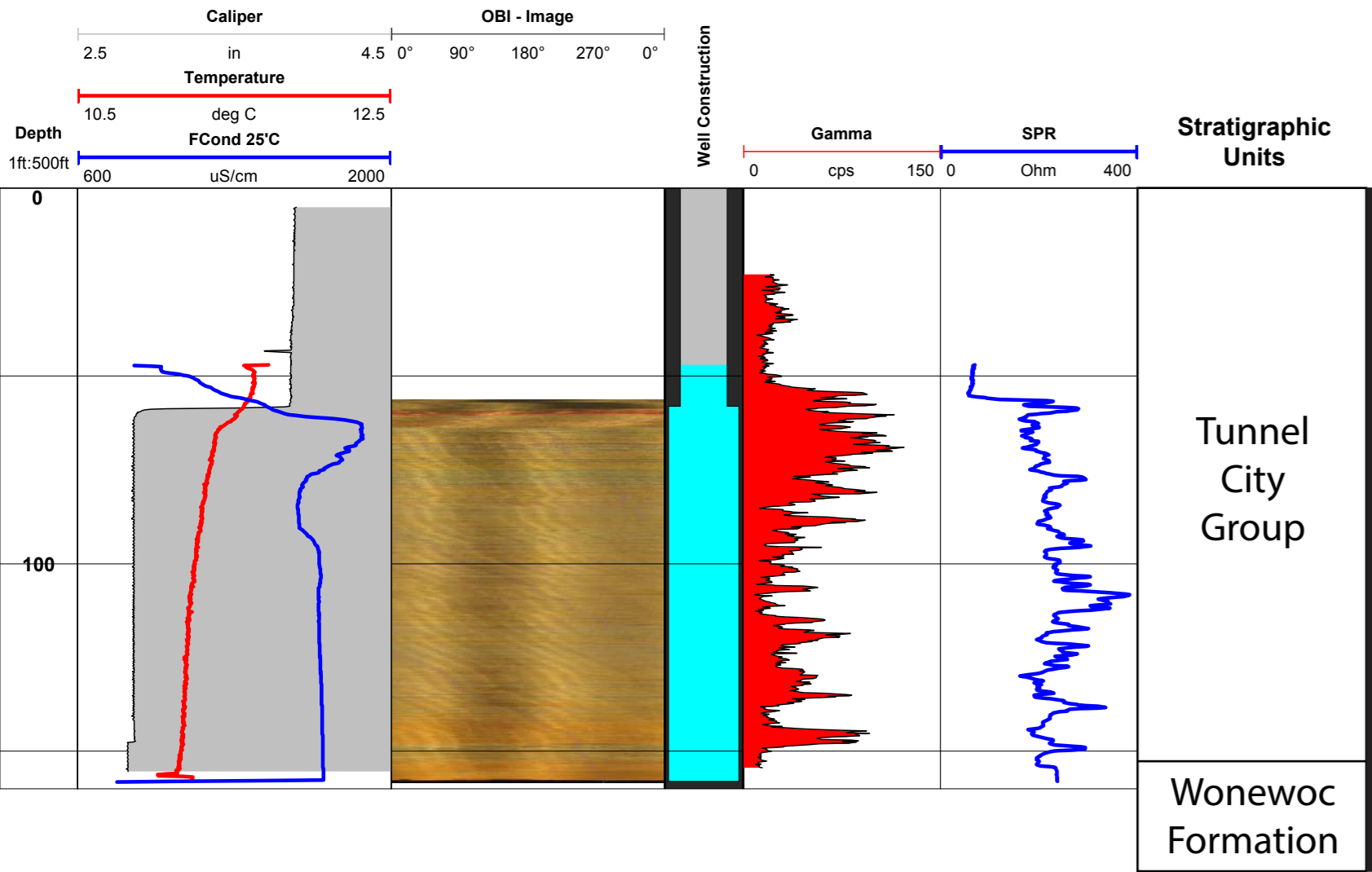


1: Stratigraphic Units and Lithologic Log adapted from WGNHS Geologic Log

Site 24 - 13005716 Arcadis Madison Kipp MW-5D3



Site 25 - 13001466 Nine Springs Core Hole (NS-2)



**WGNHS Well ID** 13001466

**DATE** 4/2012 **WELL NAME** Nine Springs 2

**LOCATION** Nine Springs - MMSD Facility

**COUNTY** Dane **LOGGED BY** D. Hart

**LATITUDE** 43.03639 **LONGITUDE** -89.35967

**LOCATION METHOD:** GPS ☒ **AIR PHOTO/TOPO** ☐ **PLSS** ☐ **OTHER** ☐

**ELEVATION** 863 **ELEVATION METHOD:** DEM ☒ **TOPO** ☐ **OTHER** ☐

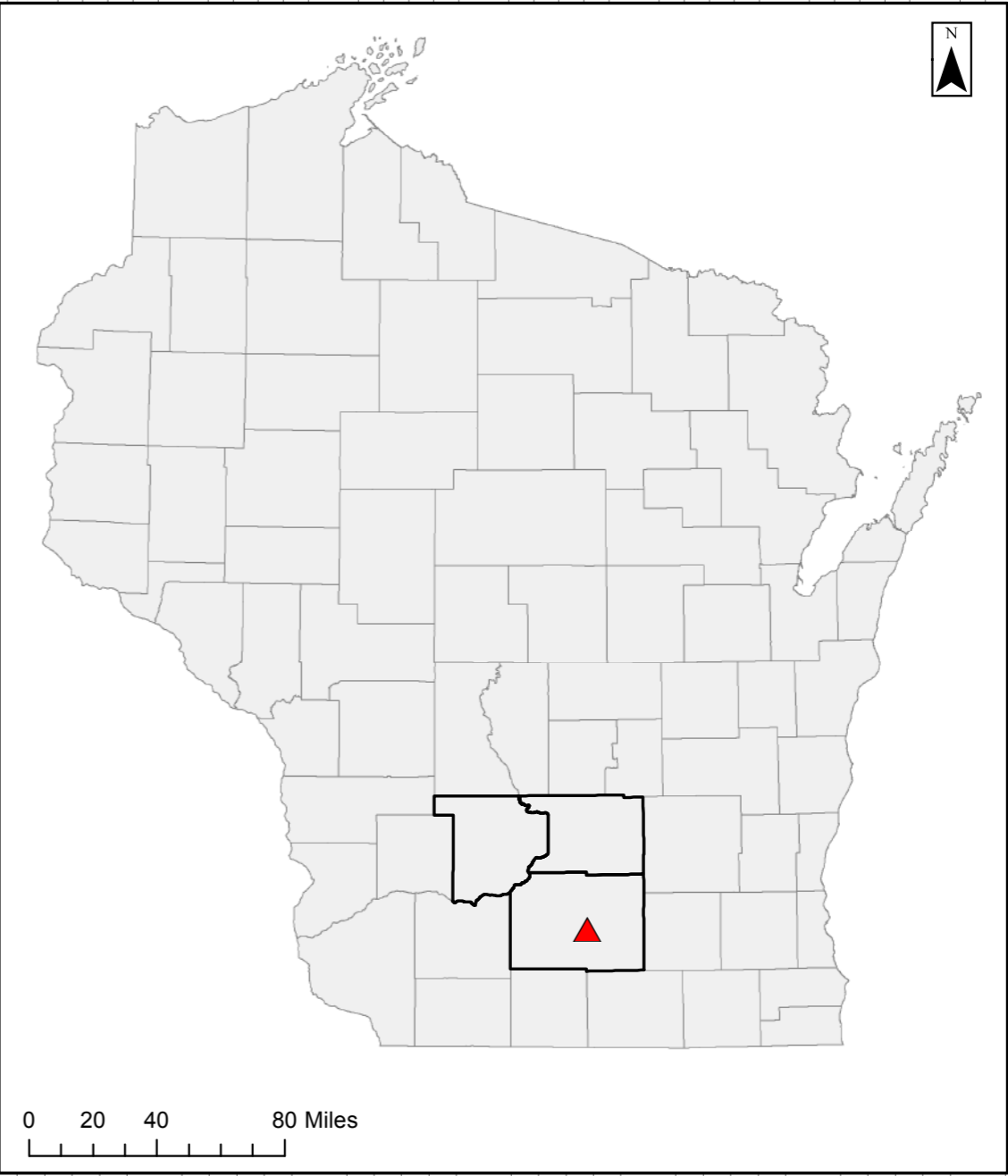
**WELL DEPTH** 158 **CASING DEPTH** 58 **DEPTH TO WATER** 47

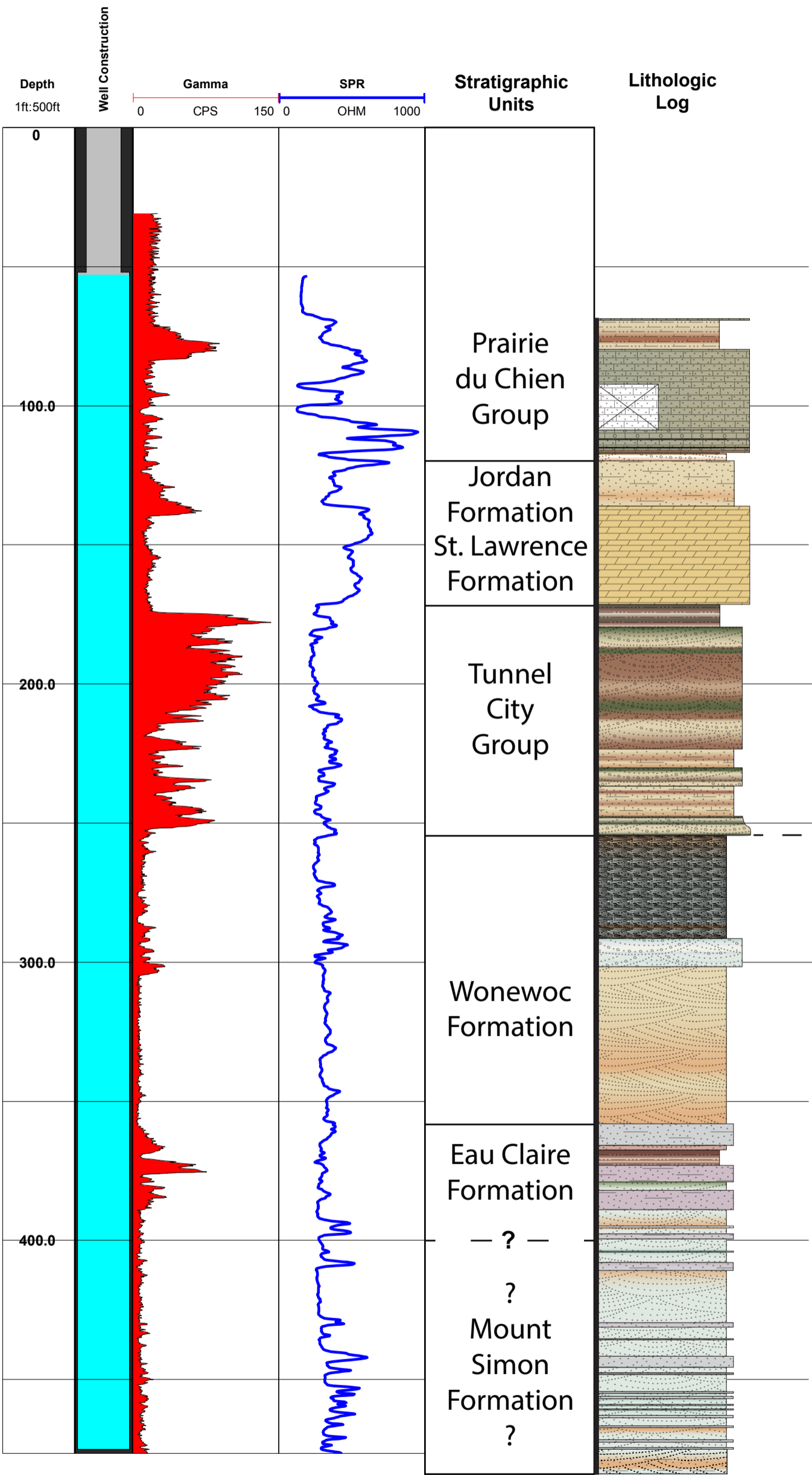
**CASING STICK UP** 2 **File Created on:** 8/11/2016 **by:** MJP

**Comments:** SPR, SP, and Normal Resistivity profiles were collected for this well but only SPR is presented in this log. The Well Construction field depicts the well, casing, and water-level as measured on the day of the logging. Acoustic Borehole Imaging (ABI) was also performed in this well but is not included in this log.

**LOGS COLLECTED:**

Gamma	<input checked="" type="checkbox"/>	Fluid Conductivity	<input checked="" type="checkbox"/>	Unless Noted: - all depths are in feet - well depth, casing depth and depth to water are interpreted from geophysical log - datum is the top of casing  For more information or to obtain collected data not shown please contact us at geodata@unwex.edu
Caliper	<input checked="" type="checkbox"/>	Flow Meter- HeatPulse	<input type="checkbox"/>	
Single Point Resistivity	<input checked="" type="checkbox"/>	Flow Meter- Spinner	<input type="checkbox"/>	
Self Potential	<input type="checkbox"/>	Optical Borehole Imager	<input checked="" type="checkbox"/>	
Normal Resistivity	<input type="checkbox"/>	Acoustic Borehole Imager	<input type="checkbox"/>	
Fluid Temperature	<input checked="" type="checkbox"/>	OTHER:	<input type="checkbox"/>	





**WGNHS Well ID** **13001216**

**DATE** 9/18/2007 **WELL NAME** Cottage Grove - Hydrite MP18

**LOCATION** NE, NE Sec. 14 T7N R11E

**COUNTY** Dane **LOGGED BY** Unknown

**LATITUDE** 289,742 (wtm-meters) **LONGITUDE** 588,870 (wtm-meters)

**LOCATION METHOD:** ☐ GPS ☐ AIR PHOTO/TOPO ☐ PLSS ☐ OTHER

**ELEVATION** 912.28 **ELEVATION METHOD:** ☐ DEM ☐ TOPO ☐ OTHER Unknown

**WELL DEPTH** 475 **CASING DEPTH** 52 **DEPTH TO WATER** 53 (estimate)

**CASING STICK UP** **File Created on:** 8/12/2016 **by:** MJP

**Comments:** *SPR, SP, and Normal Resistivity profiles were collected for this well but only SPR is presented in this log. The Well Construction field depicts the well and water-level as measured on the day of logging.*

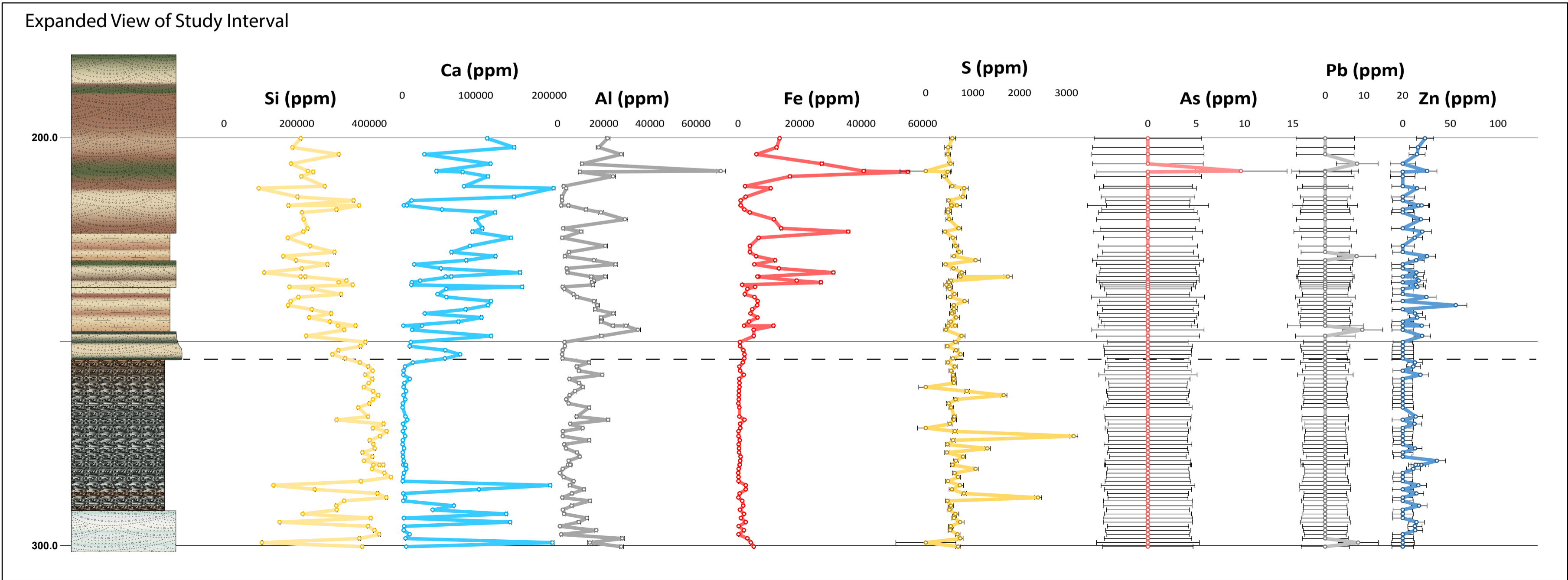
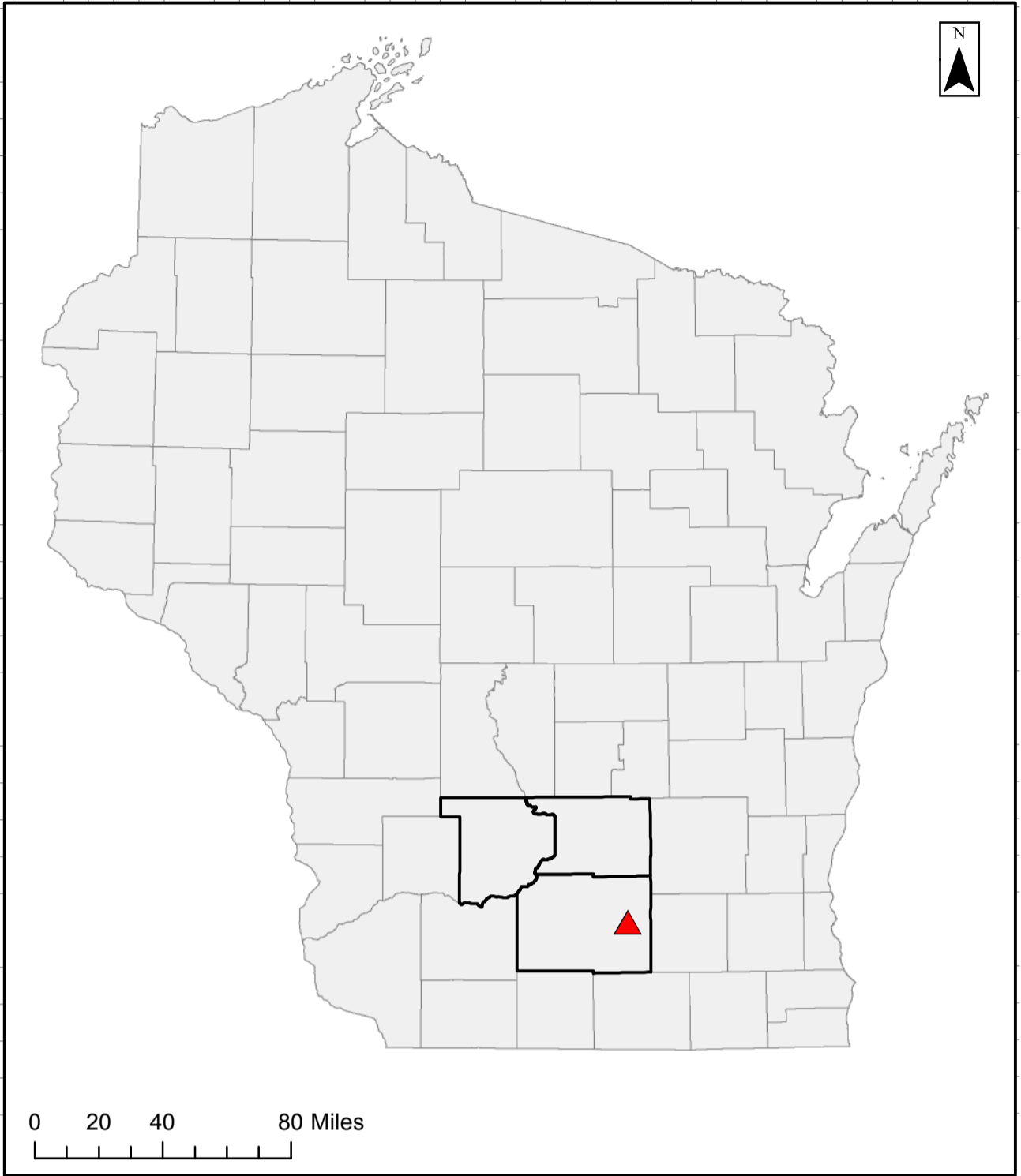
**LOGS COLLECTED:**

Gamma	<input checked="" type="checkbox"/>	Fluid Conductivity	<input type="checkbox"/>
Caliper	<input type="checkbox"/>	Flow Meter- HeatPulse	<input type="checkbox"/>
Single Point Resistivity	<input checked="" type="checkbox"/>	Flow Meter- Spinner	<input type="checkbox"/>
Self Potential	<input type="checkbox"/>	Optical Borehole Imager	<input type="checkbox"/>
Normal Resistivity	<input type="checkbox"/>	Acoustic Borehole Imager	<input type="checkbox"/>
Fluid Temperature	<input type="checkbox"/>	OTHER: _____	<input type="checkbox"/>

**Unless Noted:**

- all depths are in feet
- well depth, casing depth and depth to water are interpreted from geophysical log
- datum is the top of casing

*For more information or to obtain collected data not shown please contact us at [geodata@uwex.edu](mailto:geodata@uwex.edu)*



See also:  
Zambito, J., McLaughlin, P., and Bremmer, S. (2017)  
Elemental Chemostratigraphy of the Cottage Grove Hole MP-18 Core: Implications for Litho- and Hydrostratigraphy in Wisconsin,  
Wisconsin Geological and Natural History Survey Open-File Report 2017-03 7 p., 2 appendices.