



Post draining excavation condition prior to cleaning. Sediment and water covered foundation surface in former CNS Unit 2. View towards north, March 3, 2006.



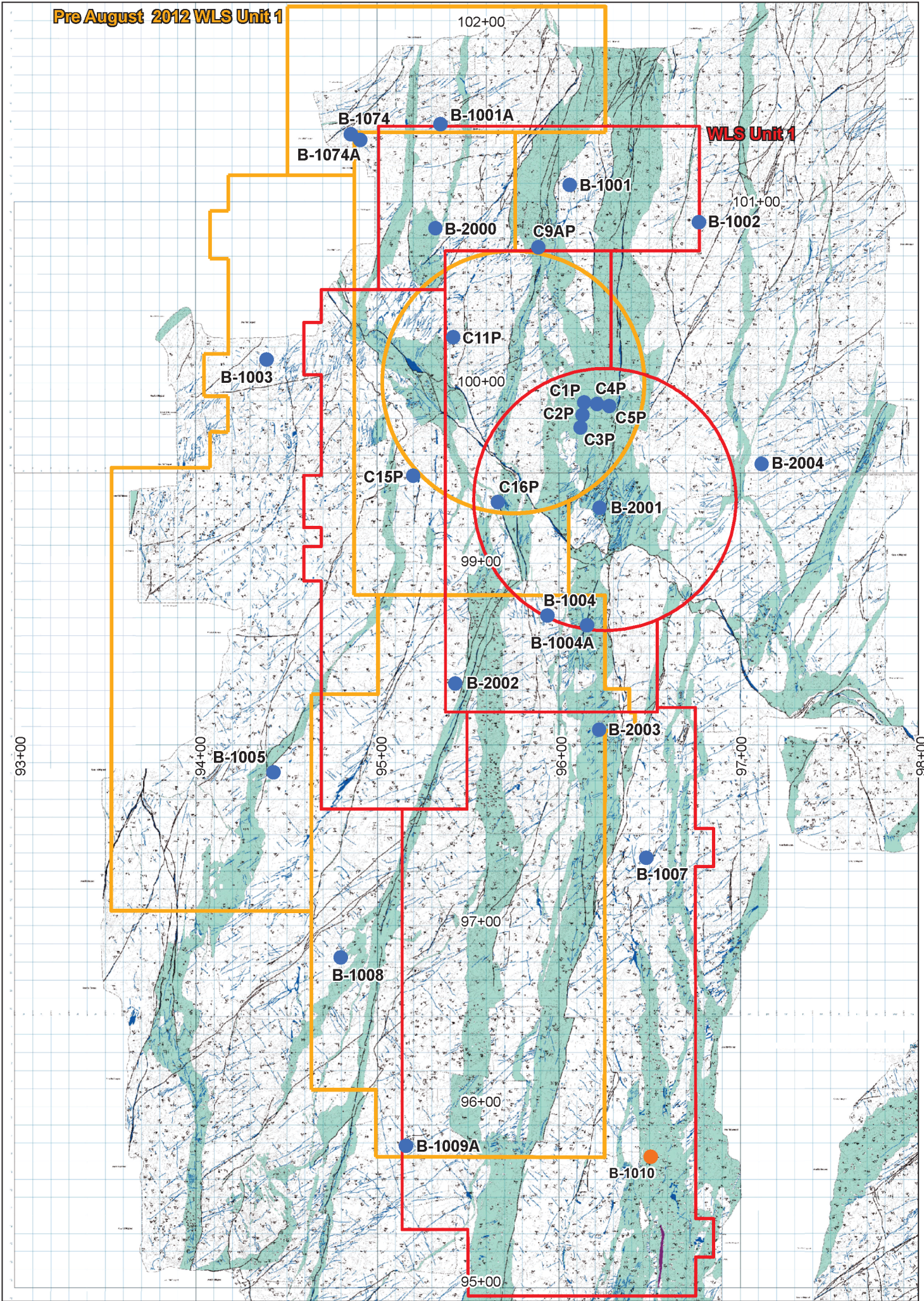
Example of rock cleaning in Unit 2. Water spray is used to remove excessive sediment from exposed rock surface. View towards west, January 3, 2006.

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NUCLEAR STATION UNITS 1 & 2

Site Conditions for WLA  
COLA Investigations

FIGURE 13





Boring	WLS Borehole Lithology	CNS Map Lithology
<i>Duke Lee COL Project Boring Comparison (Mactec, 2007)</i>		
B-1001	Meta-Quartz Diorite	Felsic Gneiss
B-1001A	Meta-Granodiorite	Felsic Gneiss
B-1002	Meta-Granodiorite	Felsic Gneiss
B-1003	Meta-Quartz Diorite	Felsic Gneiss
B-1004	Meta-Quartz Diorite	Felsic Gneiss
B-1004A	Meta-Diorite	Mafic Gneiss
B-1005	Meta-Granodiorite	Felsic Gneiss
B-1007	Meta-Granodiorite	Felsic Gneiss
B-1008	Meta-Diorite	Mafic Gneiss
B-1009A	Meta-Granodiorite	Felsic Gneiss
B-1010	Meta-Granodiorite to Meta-Quartz Diorite	Mafic Gneiss
B-1074	Meta-Granodiorite	Felsic Gneiss
B-1074A	Meta-Granodiorite	Felsic Gneiss
<i>Plant Relocation Boring Comparison (AMEC, 2012)</i>		
B-2000	Meta-Diorite	Mafic Gneiss
B-2001	Meta-Diorite	Mafic Gneiss
B-2002	Meta-Granodiorite	Felsic Gneiss
B-2003	Meta-Diorite	Mafic Gneiss
B-2004	Meta-Granodiorite	Felsic Gneiss
<i>Post-Demolition Boring Comparison (Enercon, 2009)</i>		
C-1P	Meta-Diorite*	Mafic Gneiss
C-2P	Meta-Diorite	Mafic Gneiss
C-3P	Meta-Diorite	Mafic Gneiss
C-4P	Meta-Diorite	Mafic Gneiss
C-5P	Meta-Diorite	Mafic Gneiss
C-9AP	Meta-Diorite	Mafic Gneiss
C-11P	Meta-Granodiorite	Felsic Gneiss
C-15P	Meta-Granodiorite	Felsic Gneiss
C-16P	Meta-Diorite	Mafic Gneiss

● WLS Boring and CNS Map Lithology in Agreement

● WLS Boring and CNS Map Lithology *not* in Agreement

— Pre August 2012 WLS nuclear island and adjacent structures

— WLS nuclear island and adjacent structures

CNS Lithology

Mafic gneiss

Felsic gneiss

Plant north

True north

0

100 ft

1.5 INCHES = 100 FEET

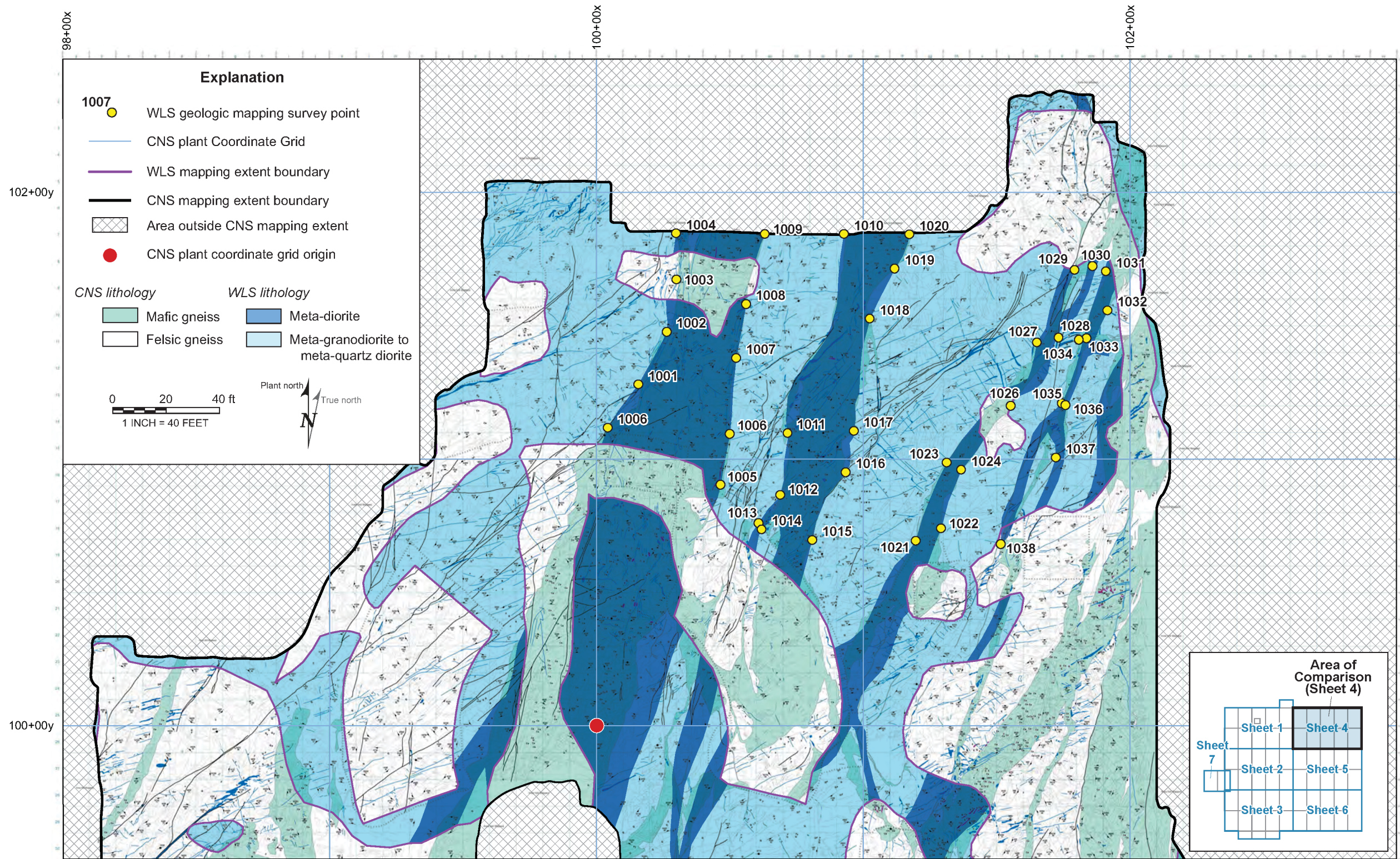
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WLS Boring Log and  
CNS Map Lithology Comparison

FIGURE 14

\*Classification based on  
core photo and boring data  
summary sheet



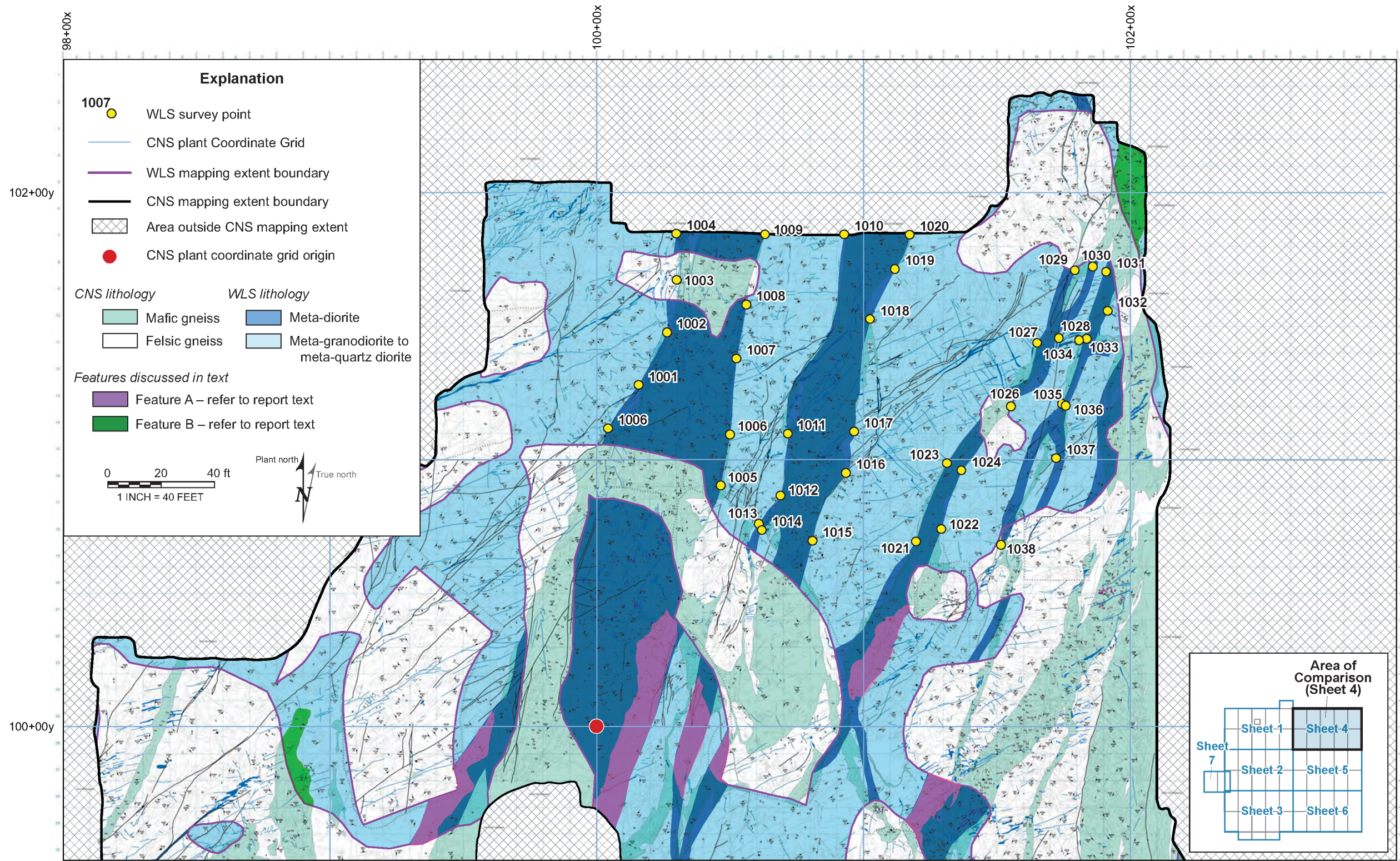


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NUCLEAR STATION UNITS 1 & 2

Comparison Foundation  
Level Geologic Mapping

FIGURE 15



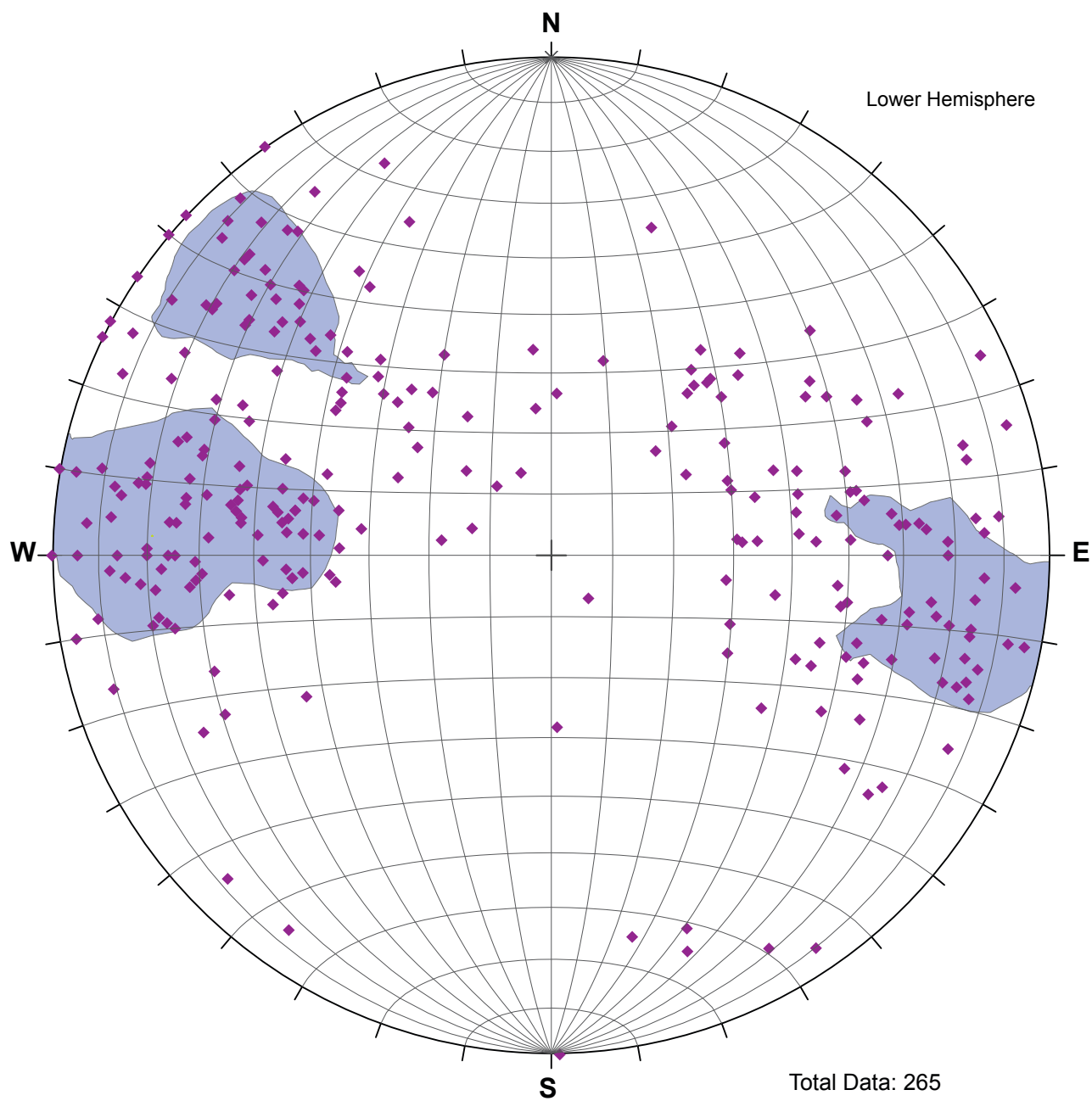


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NUCLEAR STATION UNITS 1 & 2

Comparison Geologic Map  
Showing Features A and B

FIGURE 16





Lower Hemisphere

Total Data: 265  
Equal Area  
Maximum concentration: 7.0%

### Explanation

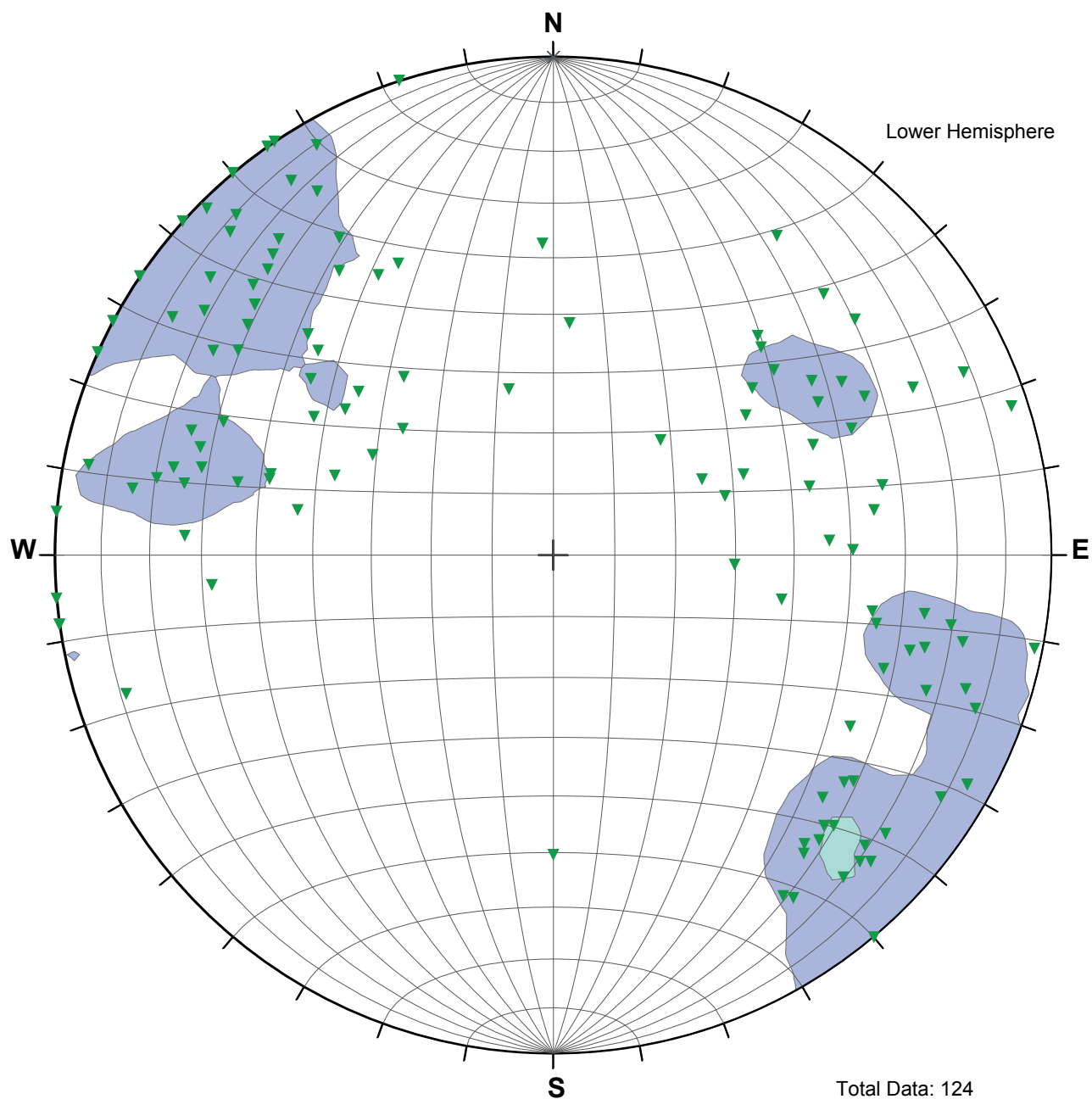
- ◆ Poles to shear plane CNS Unit 1
- Fisher concentration between 3%-8%

**WILLIAM STATES LEE III  
NUCLEAR STATION UNITS 1 & 2**

Stereonet Projections of Poles to  
Shear Planes - CNS Unit 1 Foundation

FIGURE 17





Total Data: 124  
Equal Area  
Max. Concentration: 8.8%

### Explanation

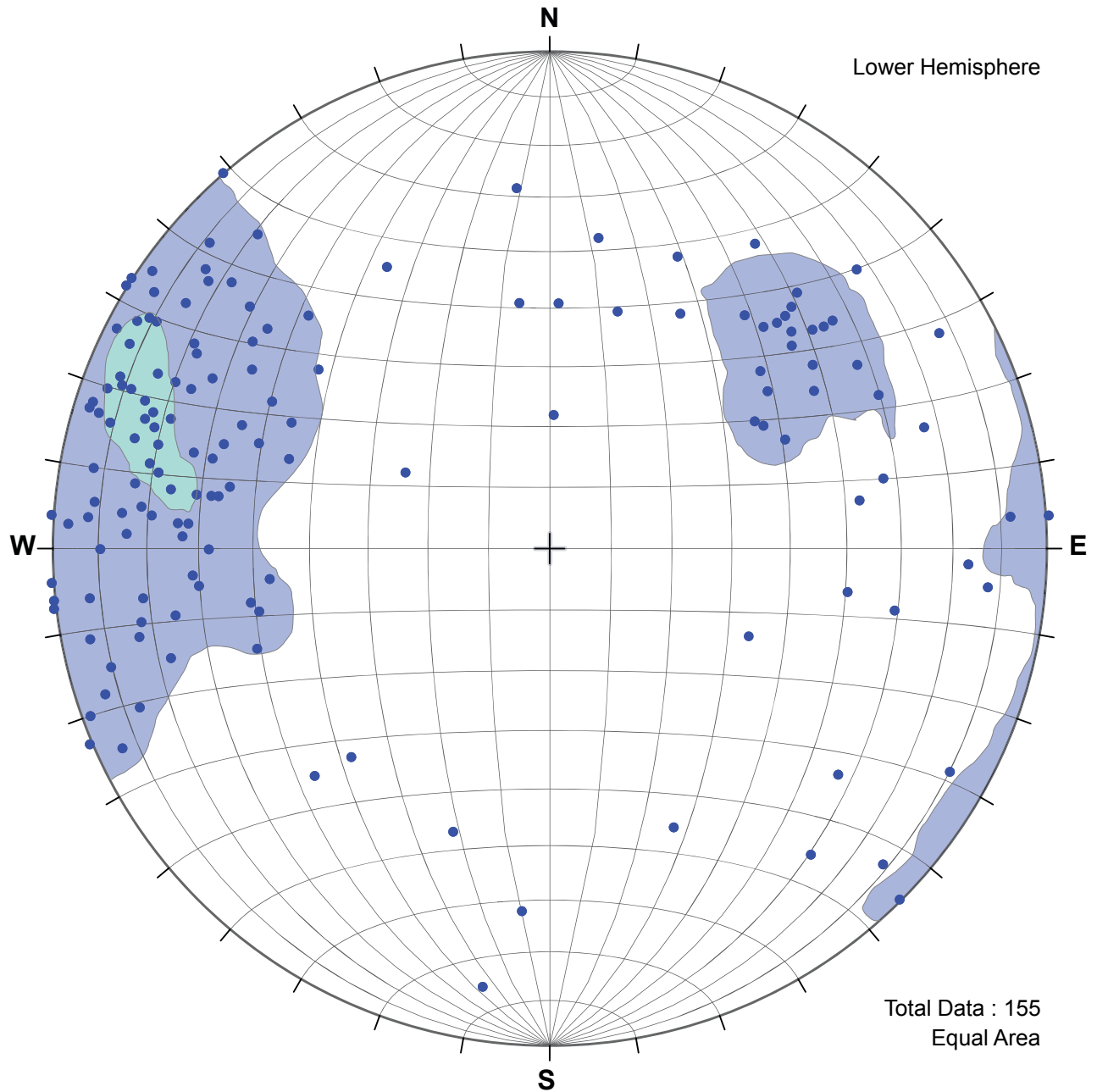
- ▼ Poles to shear plane CNS Unit 2
- Blue shaded area: Fisher concentration between 3%-8%
- Light blue shaded area: Fisher concentration greater than 8%

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NUCLEAR STATION UNITS 1 & 2

Stereonet Projections of Poles to  
Shear Planes - CNS Unit 2 Foundation

FIGURE 18





### Explanation

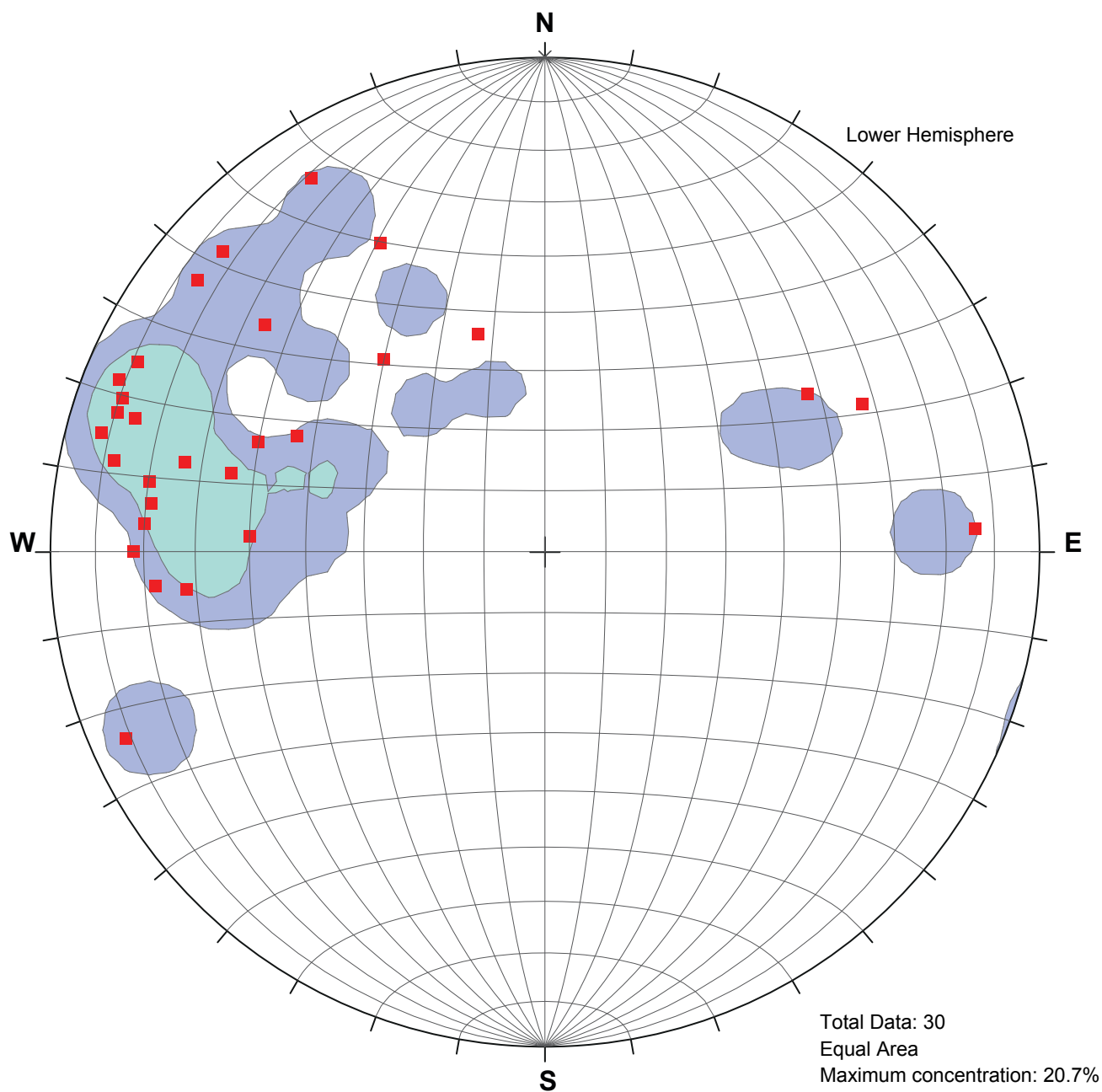
- Poles to shear planes CNS Units 1 and 2  
Selected Zone Mapping
- Fisher concentration between 3%-8%
- Fisher concentration greater than 8%

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NUCLEAR STATION UNITS 1 & 2

Stereonet Projections of Poles to  
Site Shear Planes

FIGURE 19





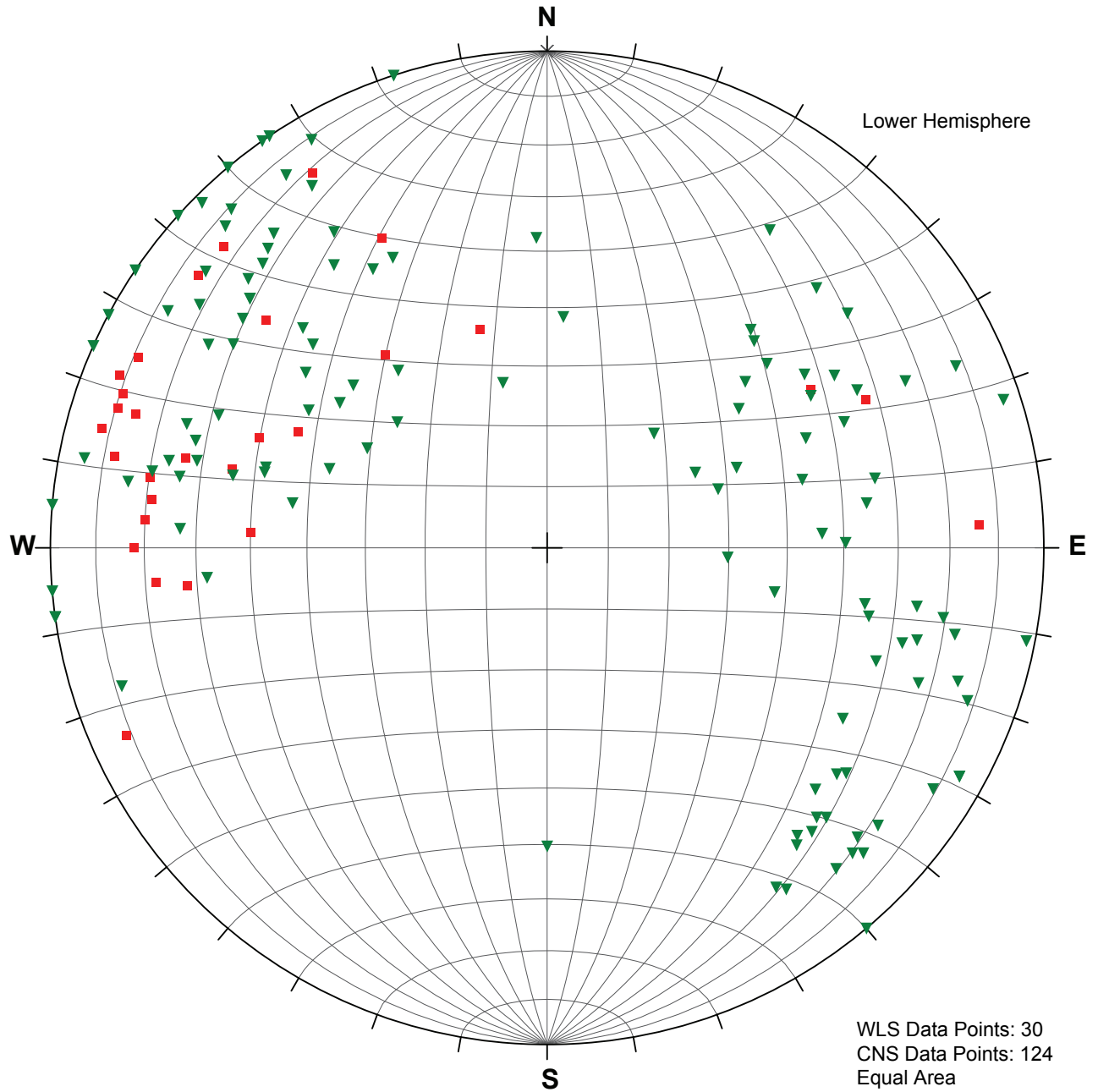
### Explanation

- Poles to shear plane WLS COLA mapping of CNS Unit 2
- Fisher concentration between 3%-8%
- Fisher concentration greater than 8%

**WILLIAM STATES LEE III  
NUCLEAR STATION UNITS 1 & 2**

Stereonet Projections of Poles to  
Shear Planes - WLS COLA Mapping  
at CNS Unit 2 Foundation  
**FIGURE 20**





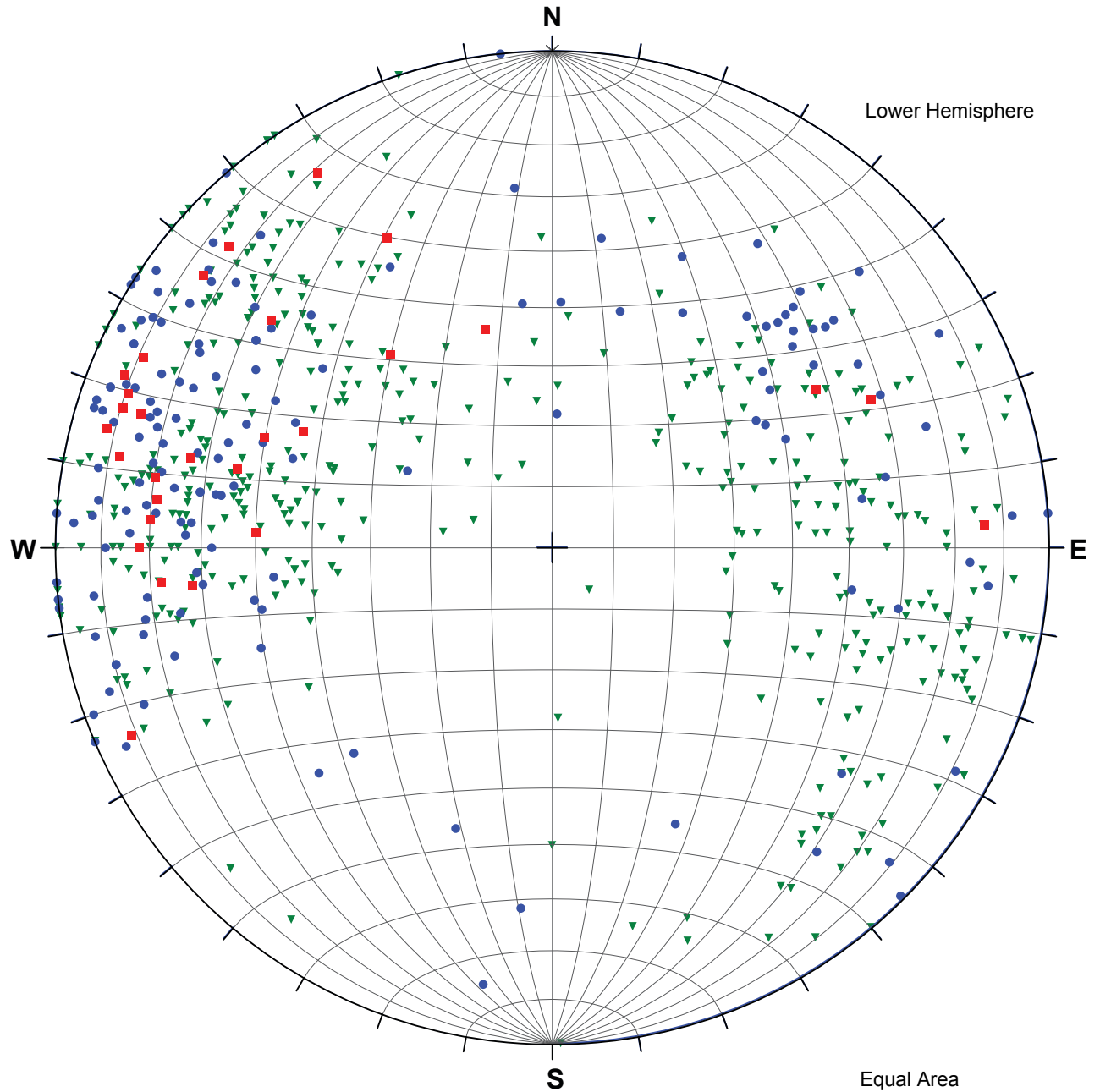
### Explanation

- Poles to shear plane WLS COLA Unit 2 mapping
- ▼ Poles to shear plane CNS Unit 2 mapping

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NUCLEAR STATION UNITS 1 & 2

Stereonet Projection of Poles to Shear  
Planes CNS Unit 2 and WLS COLA Mapping

FIGURE 21



### Explanation

- Poles to shear planes WLS COLA  
CNS Unit 2 foundation mapping  
(30 points)
- ▼ Poles to shear planes CNS Units 1 and 2  
and Service Building foundation mapping  
(418 points)
- Poles to shear planes CNS Units 1 and 2  
Selected Zone Mapping (155 points)

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NUCLEAR STATION UNITS 1 & 2**

Stereonet Projections of Poles to  
Shear Planes - All Foundation Mapping

FIGURE 22