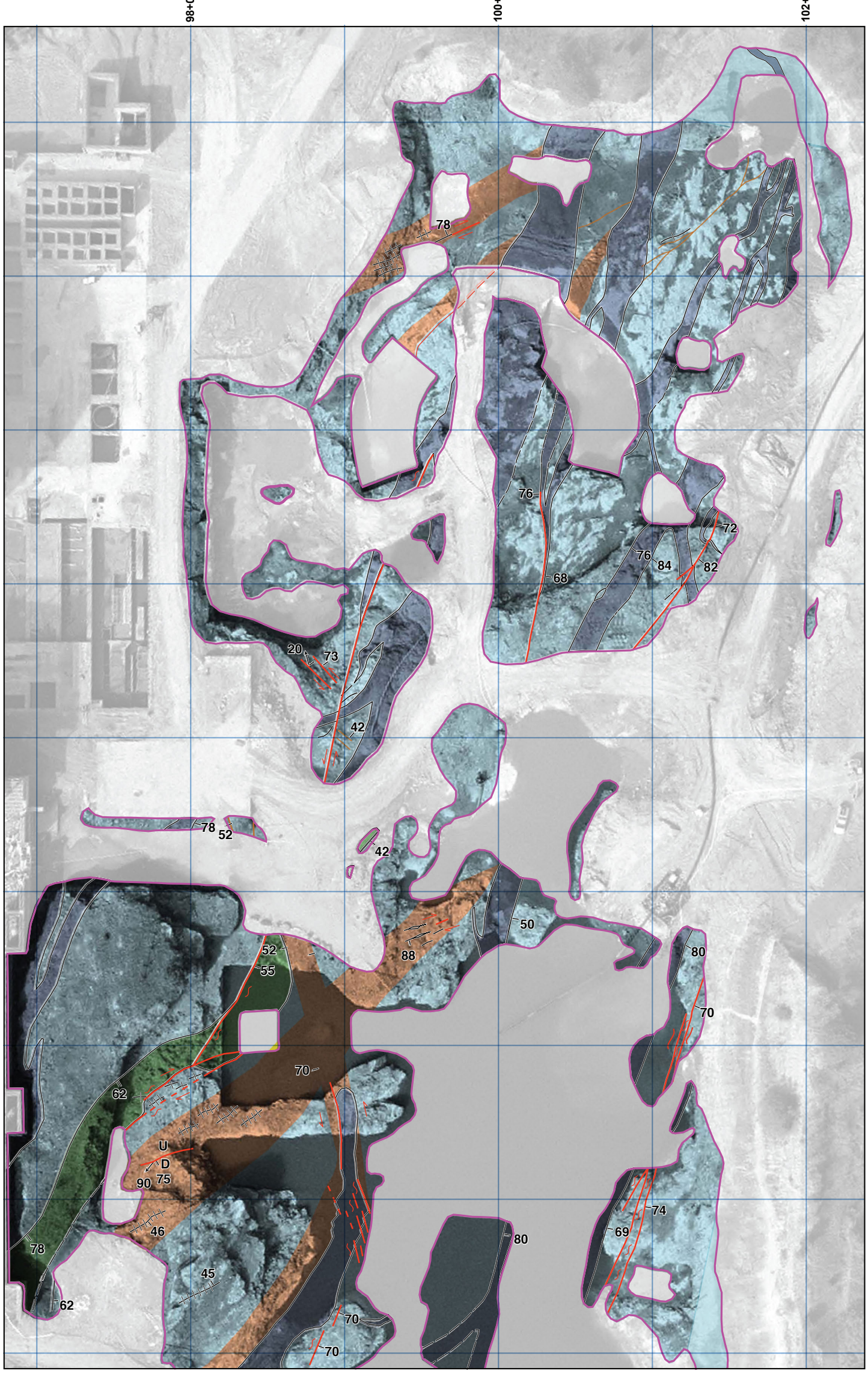


Explanation

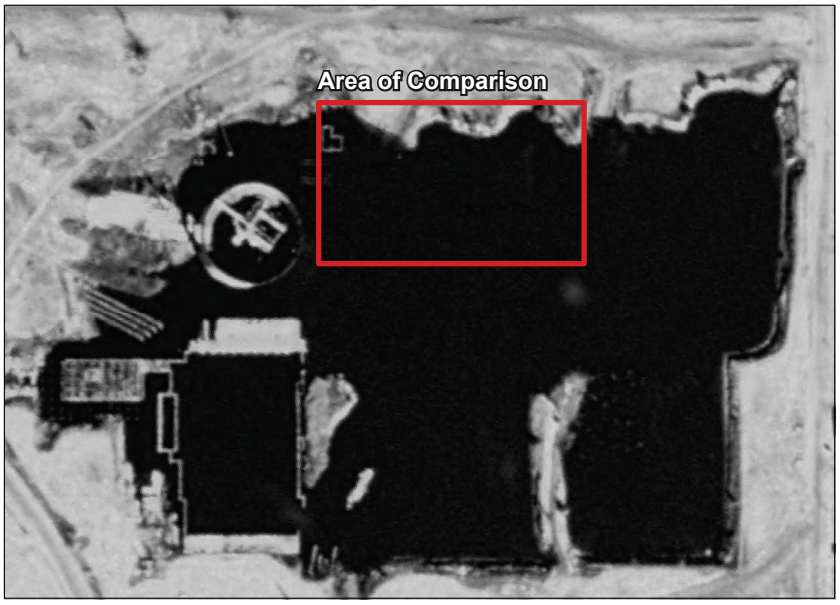
- Undifferentiated meta-granodiorite
- Intrusive amphibolite dike
- Intrusive meta-diorite dike
- Mapped area
- Ductile shear zone
- Brittle fault (<1m); arrows show direction of movement; U=upthrown side, D=downthrown side
- Shear fracture
- Shear fracture zone
- Lithologic contact
- Quartz vein
- 60 — Dip direction and magnitude
- 56 — Direction and rake of lineation on fault surface

Plant north
True north
N
0 25 50 75 ft
1 INCH = 75 FEET

WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 & 2

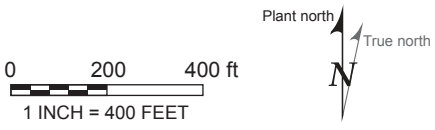
WLS Geologic Map of
Exposed Rock at CNS Unit 2

FIGURE 11



Pre-COLA site condition aerial imagery 1999 (South Carolina Dept. of Natural Resources).

COLA site condition aerial imagery 2006 (Cherokee County, SC, Sanborn Project 0600702, taken 2/26/2006).



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NUCLEAR STATION UNITS 1 & 2

Excavation Site Conditions
2003 Pre-COLA and 2006 During COLA Investigations
FIGURE 12

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. Water spray is used to remove excessive sediment from exposed rock surface. View towards west, March 3, 2006.

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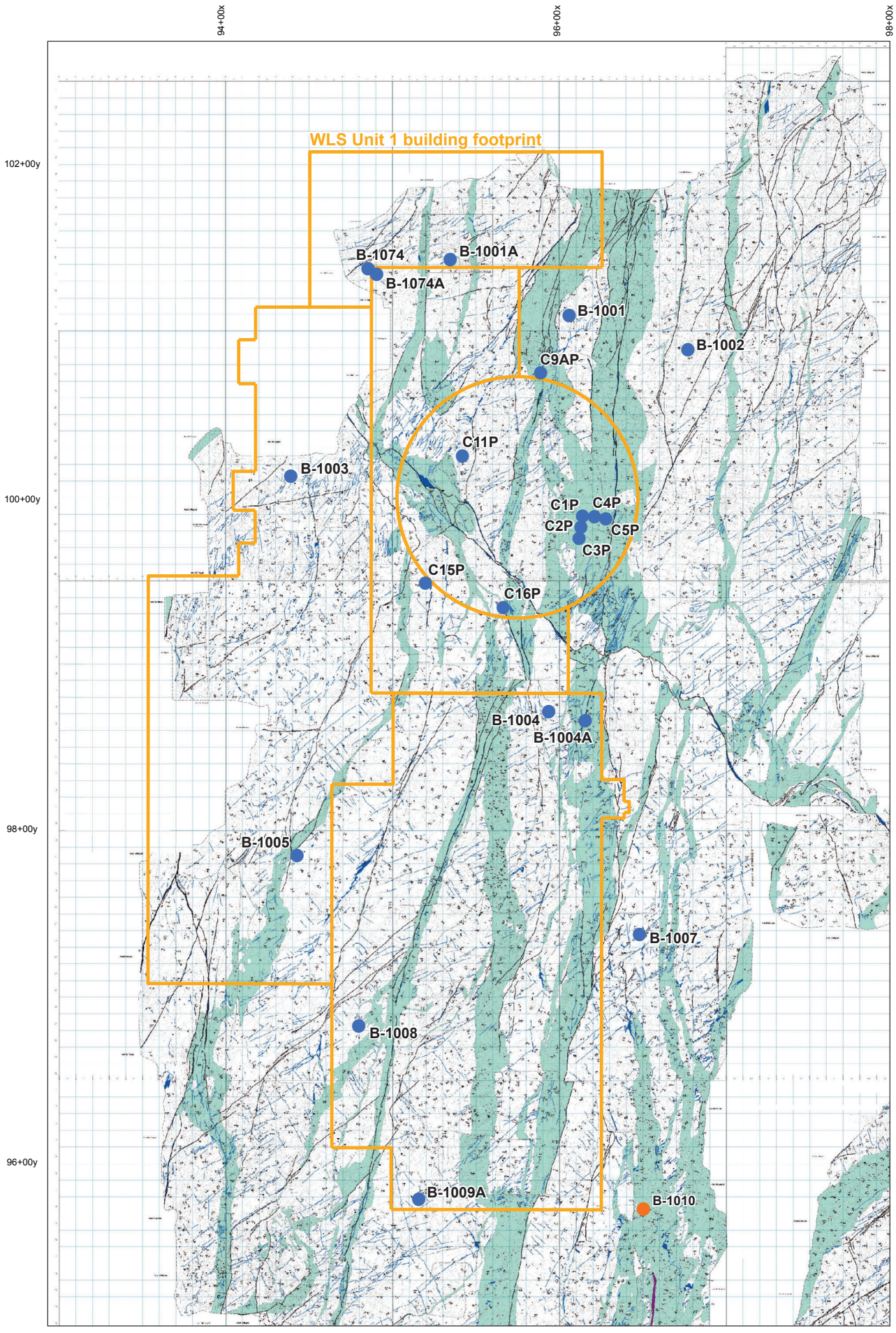
NUCLEAR STATION UNITS 1 & 2

Pre- and Post-Cleaning Site Conditions for WLS COLA Investigations

FIGURE 13



Boring	CNS Map Lithology	WLS Borehole Lithology	
Duke Lee COL Boring Comparison (MACTEC, 2007)			
B-1001	Felsic Gneiss	Meta-Quartz Diorite	●
B-1001A	Felsic Gneiss	Meta-Granodiorite	●
B-1002	Felsic Gneiss	Meta-Granodiorite	●
B-1003	Felsic Gneiss	Meta-Quartz Diorite	●
B-1004	Felsic Gneiss	Meta-Quartz Diorite	●
B-1004A	Mafic Gneiss	Meta-Diorite	●
B-1005	Felsic Gneiss	Meta-Granodiorite	●
B-1007	Felsic Gneiss	Meta-Granodiorite	●
B-1008	Mafic Gneiss	Meta-Diorite	●
B-1009A	Felsic Gneiss	Meta-Granodiorite	●
B-1010	Mafic Gneiss	Meta-Granodiorite to Meta-Quartz Diorite	●
B-1074	Felsic Gneiss	Meta-Granodiorite	●
B-1074A	Felsic Gneiss	Meta-Granodiorite	●
Duke Lee Post-Demolition Boring Comparison (Enercon, 2009)			
C-1P	Mafic Gneiss	Meta-Diorite*	●
C-2P	Mafic Gneiss	Meta-Diorite	●
C-3P	Mafic Gneiss	Meta-Diorite	●
C-4P	Mafic Gneiss	Meta-Diorite	●
C-5P	Mafic Gneiss	Meta-Diorite	●
C-9AP	Mafic Gneiss	Meta-Diorite	●
C-11P	Felsic Gneiss	Meta-Granodiorite	●
C-15P	Felsic Gneiss	Meta-Granodiorite	●
C-16P	Mafic Gneiss	Meta-Diorite	●

*Classification based on core photo and boring data summary sheet

Explanation

- ● WLS Boring and CNS Map Lithology in Agreement
- ● WLS Boring and CNS Map Lithology *not* in Agreement
- WLS Unit 1 building footprint

CNS lithology

- Mafic gneiss
- Felsic gneiss

Plant north
True north
N
0 40 80 ft
1 INCH = 80 FEET

WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 & 2

WLS Boring and CNS
Map Lithology Comparison

FIGURE 14

98+00x

100+00x

102+00x

102+00y

100+00y

Explanation

1007 WLS geologic mapping survey point

CNS plant Coordinate Grid

WLS mapping extent boundary

CNS mapping extent boundary

Area outside CNS mapping extent

CNS plant coordinate grid origin

CNS lithology

Mafic gneiss

Felsic gneiss

WLS lithology

Meta-diorite

Meta-granodiorite to meta-quartz diorite

0 20 40 ft

1 INCH = 40 FEET

Plant north

True north

N

1004 1009 1010 1020 1019 1029 1030 1031 1003 1008 1032 1018 1002 1027 1028 1007 1034 1033 1001 1026 1035 1036 1006 1006 1011 1017 1037 1023 1024 1016 1005 1012 1013 1014 1015 1022 1021 1038

Area of Comparison (Sheet 4)

Sheet 1 Sheet 4 Sheet 7 Sheet 2 Sheet 5 Sheet 3 Sheet 6

WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 & 2

Comparison Foundation
Level Geologic Mapping

FIGURE 15

98+00x

100+00x

102+00x

102+00y

100+00y

Explanation

1007 WLS survey point

CNS plant Coordinate Grid

WLS mapping extent boundary

CNS mapping extent boundary

Area outside CNS mapping extent

CNS plant coordinate grid origin

CNS lithology

Mafic gneiss

Felsic gneiss

WLS lithology

Meta-diorite

Meta-granodiorite to meta-quartz diorite

Features discussed in text

Feature A – refer to report text

Feature B – refer to report text

0 20 40 ft

1 INCH = 40 FEET

Plant north

True north

N

1004 1009 1010 1020 1019 1029 1030 1031 1003 1008 1018 1032 1002 1027 1028 1034 1033 1007 1001 1026 1035 1036 1006 1006 1011 1017 1037 1023 1024 1016 1005 1012 1013 1014 1015 1022 1021 1038

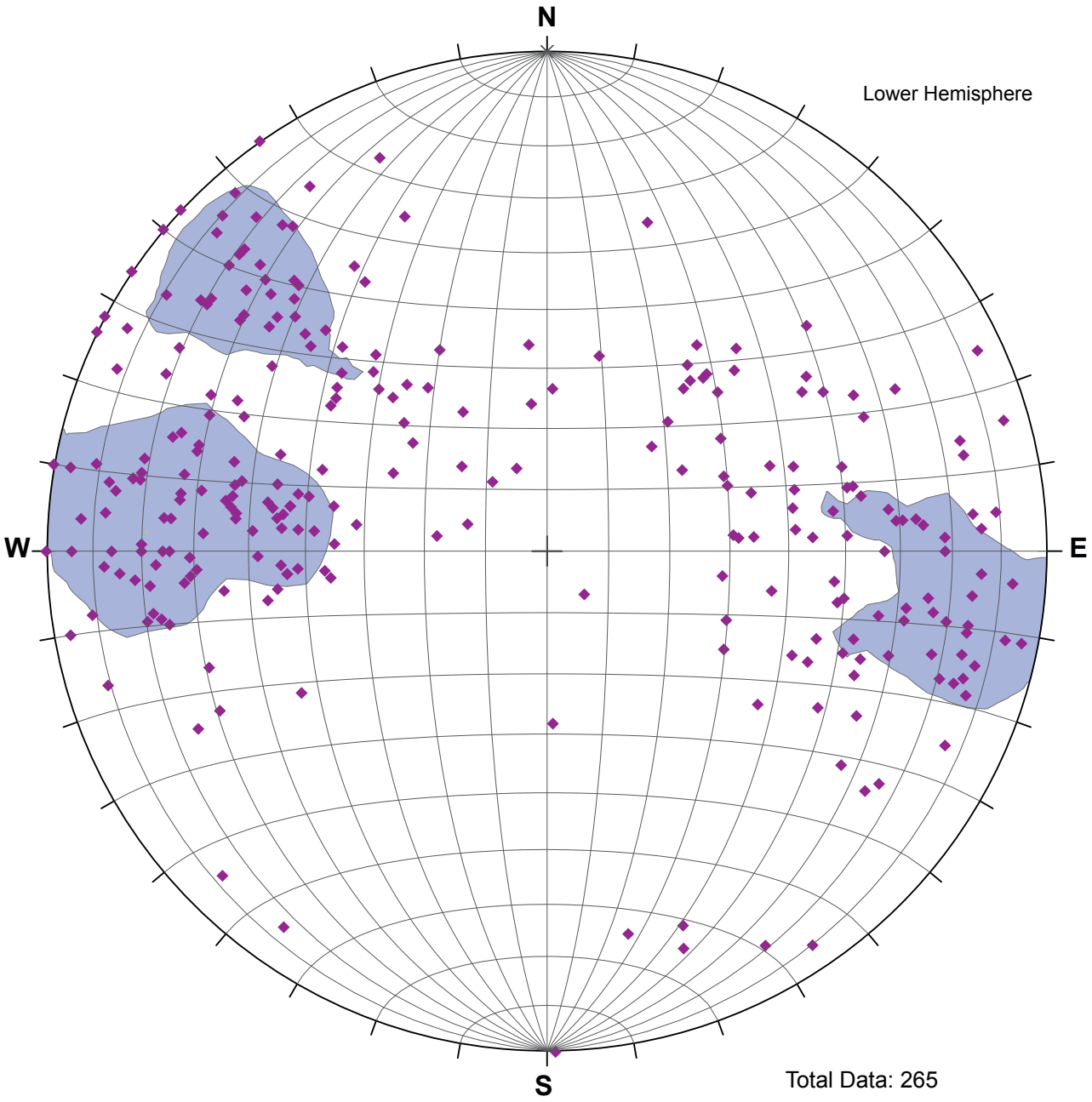
Area of Comparison (Sheet 4)

Sheet 1 Sheet 4 Sheet 7 Sheet 2 Sheet 5 Sheet 3 Sheet 6

WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 & 2

Comparison Geologic Map
Showing Features A and B

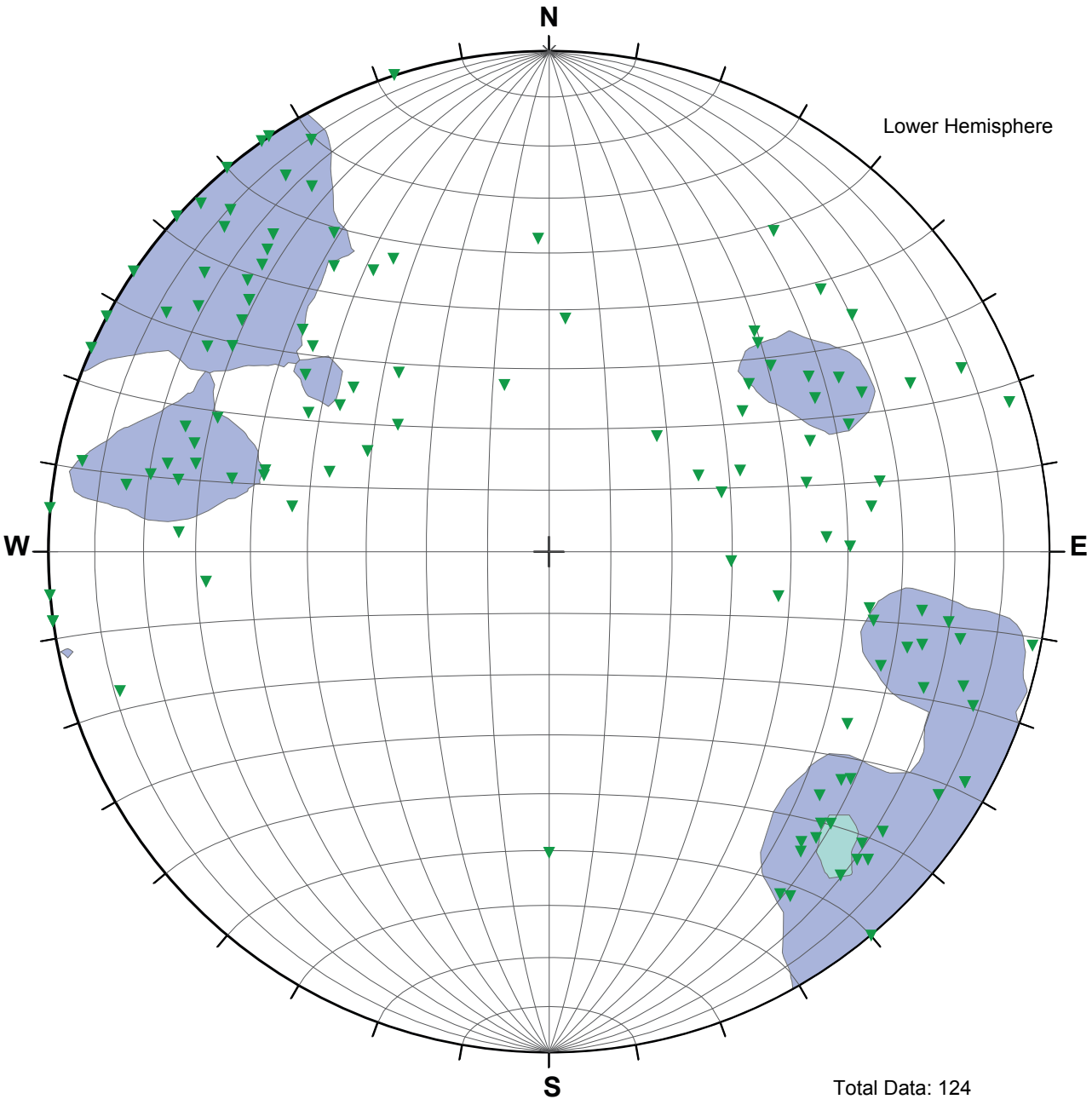
FIGURE 16



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%

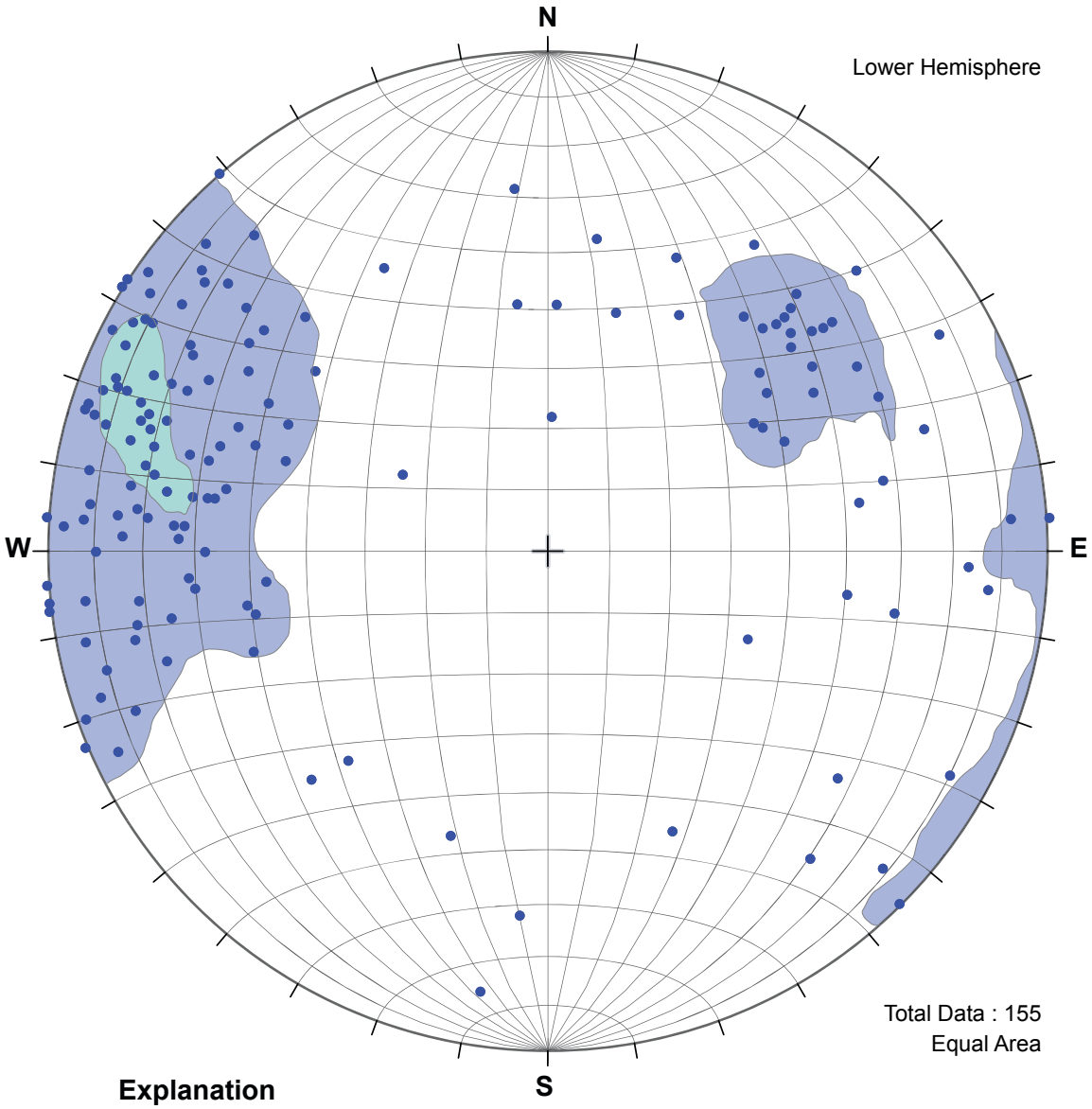
Explanation

- Poles to shear plane CNS Unit 2
- 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 - CNS Unit 2 Foundation

FIGURE 18



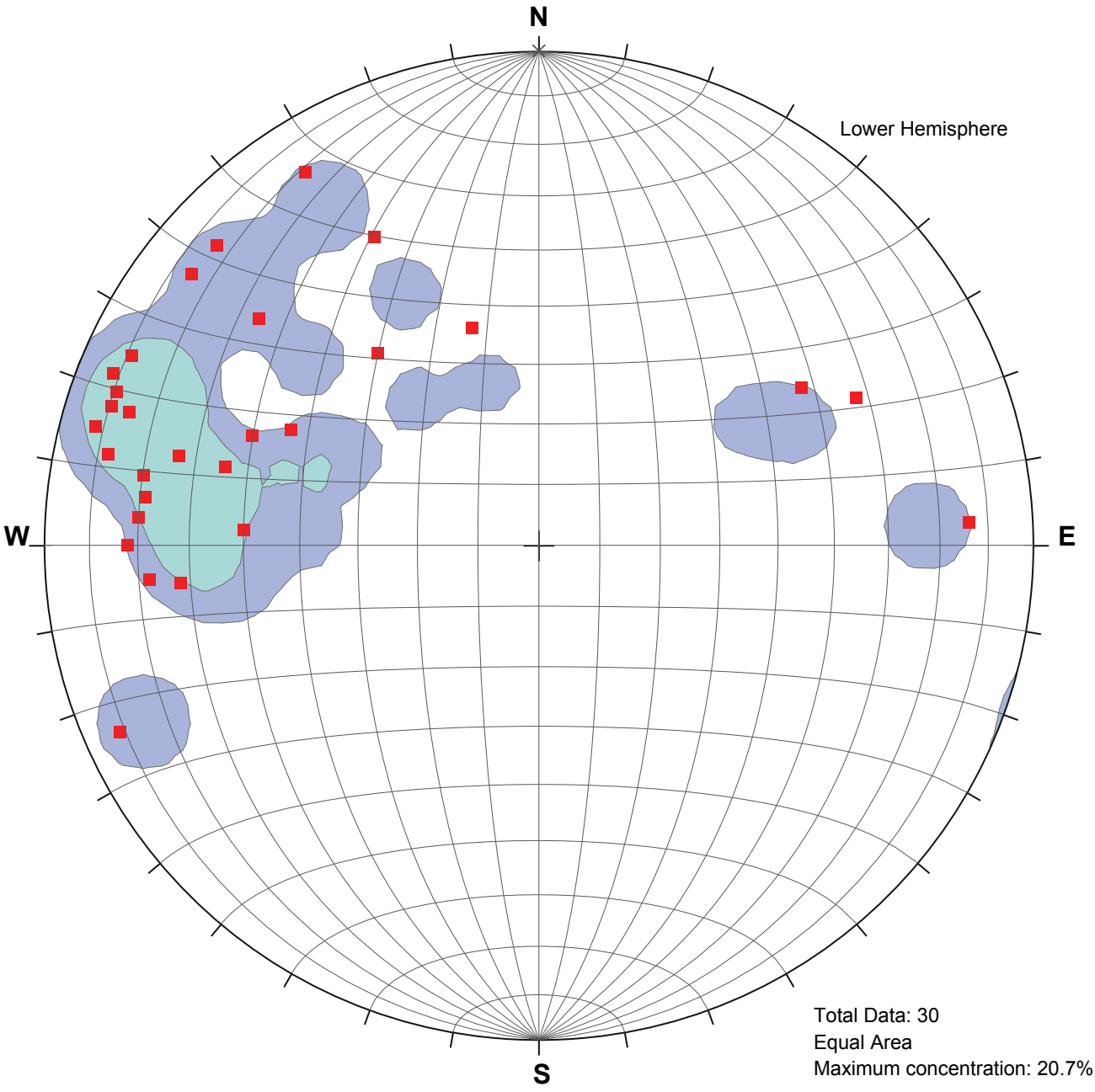
Explanation

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

WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 & 2

Stereonet Projections of Poles to Site Shear Planes

FIGURE 19



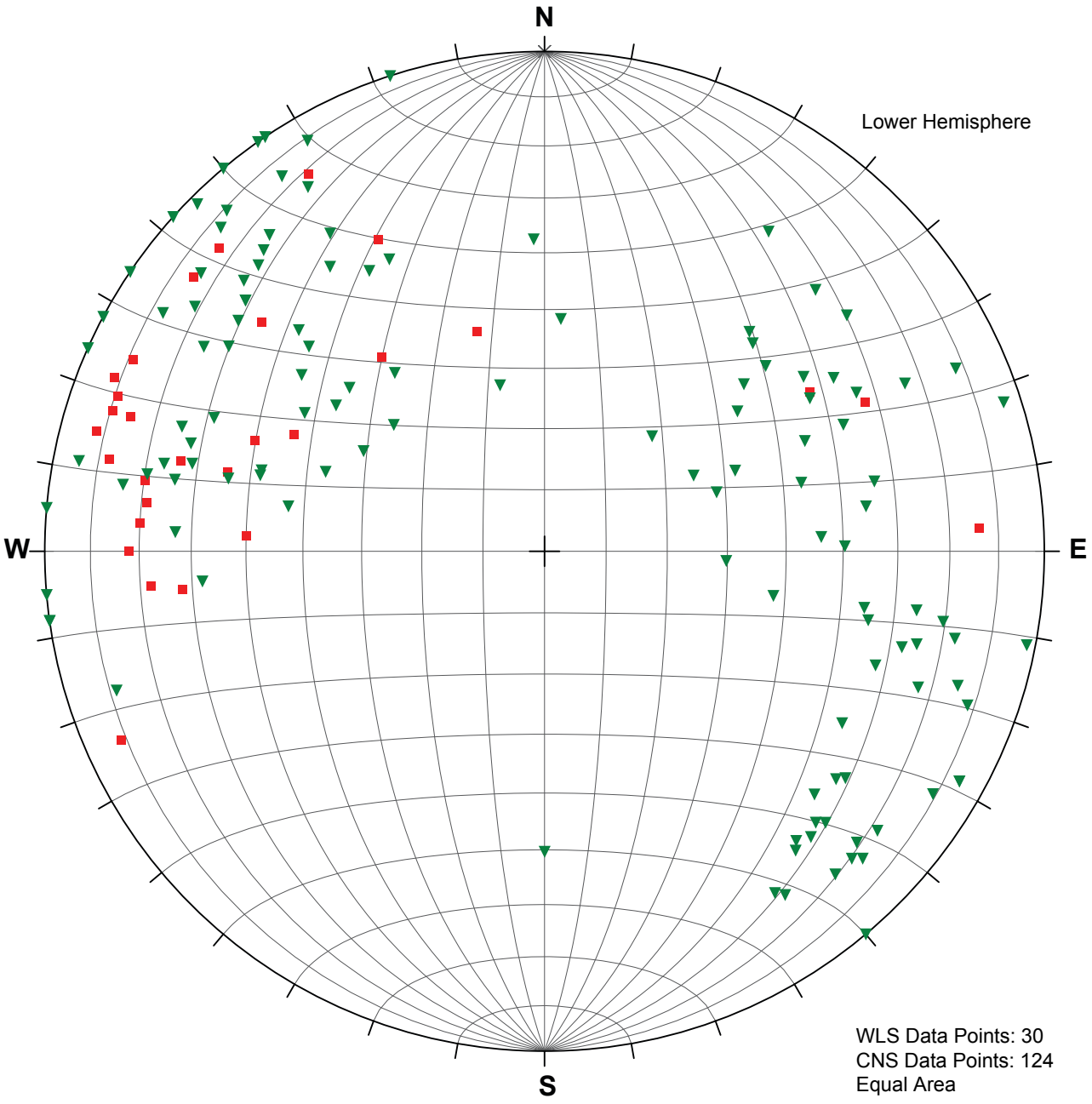
Explanation

- 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



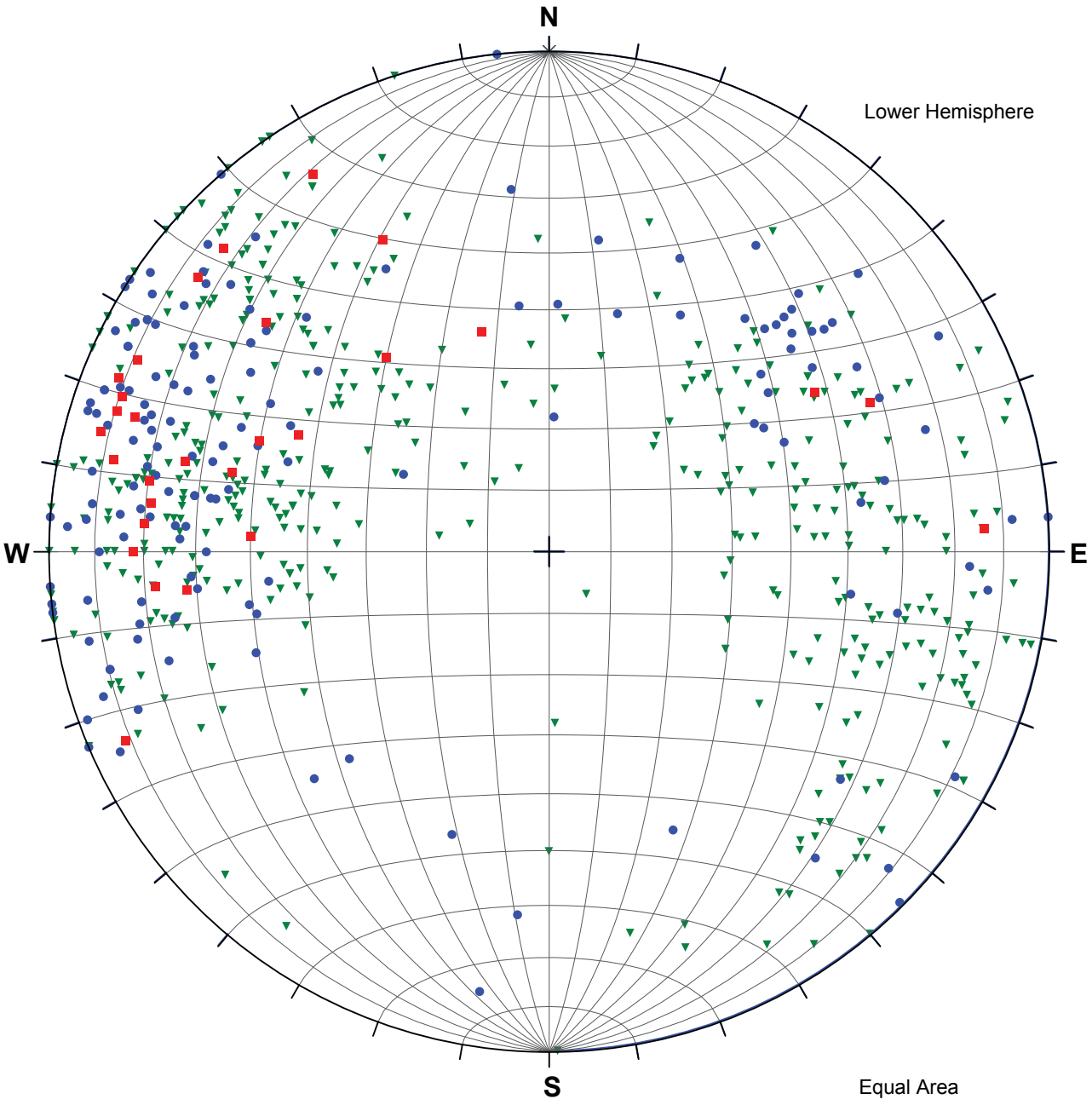
Explanation

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

WILLIAM STATES LEE III
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)

WILLIAM STATES LEE III
NUCLEAR STATION UNITS 1 & 2

Stereonet Projections of Poles to Shear Planes - All Foundation Mapping

FIGURE 22