

Locality Map

1681 D3 Energy South Africa (Motuoane) ER386 EIA

Legend

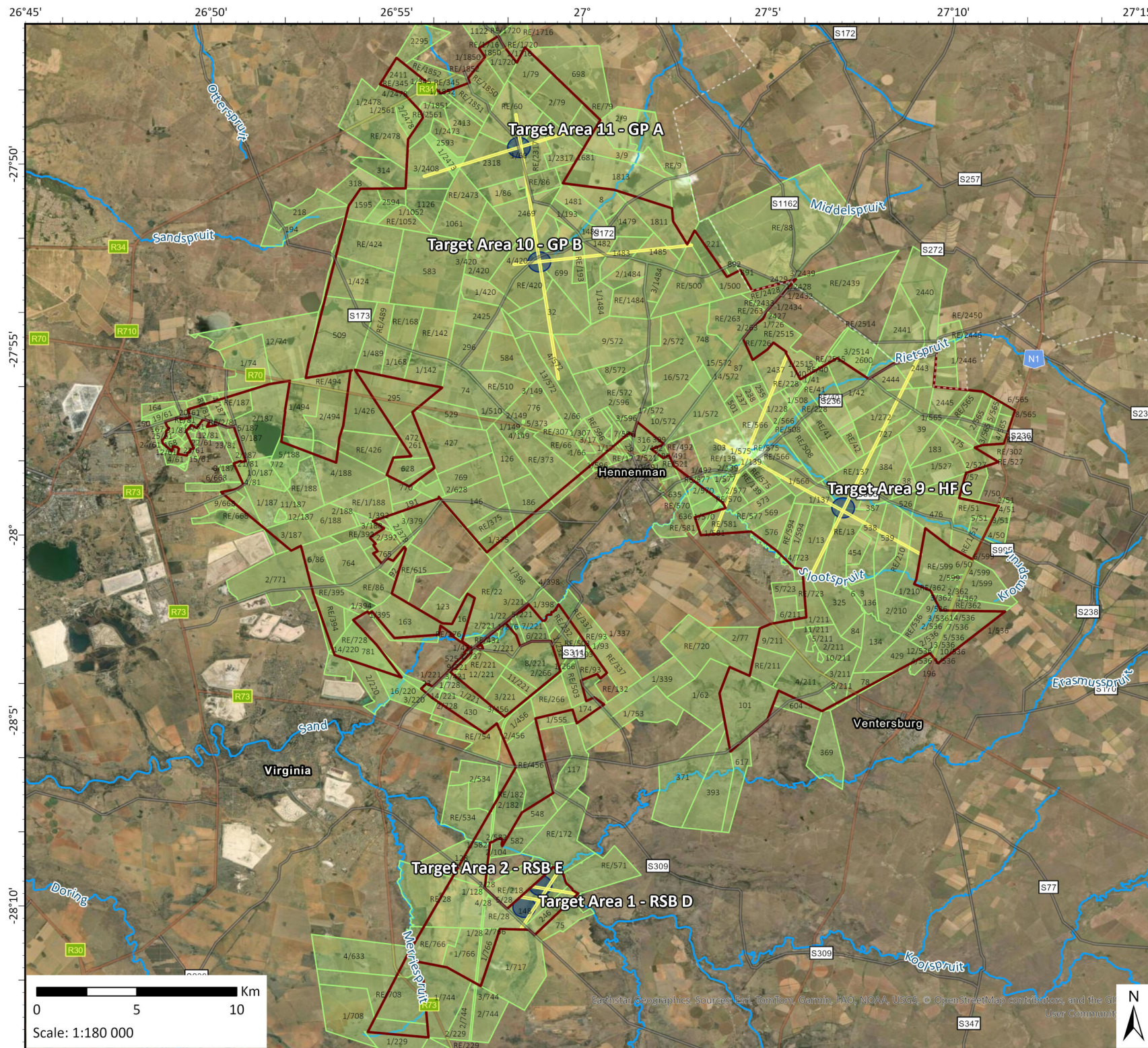
- Exploration Right 386 Area
- Proposed Seismic Transects 50m Corridor
- Target Areas (TA)
- District Municipality
- NFEPA Rivers
- Towns
- Railway Line

Roads

- National Road
- Arterial Road
- Main Road
- Secondary Road

Data Sources:
CSG; ESRI; MDB; CDNGI; SANBI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1681_Locality

Date: 2026/06/02
EIMS Ref: 1681
Compiled: JW
Reviewed: VM
Approved: LW

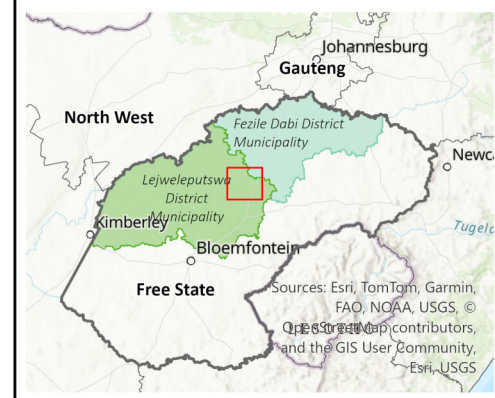


Properties Map

1681 D3 Energy South Africa (Motuoane) ER386 EIA

Legend

- Exploration Right 386 Area
- Proposed Seismic Transects 50m Corridor
- Target Areas (TA)
- Farm Portions
- NFEPA Rivers



Data Sources:

CSG; ESRI; MDB; CDNGI; SANBI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1681_Properties1

Date: 2026/06/03

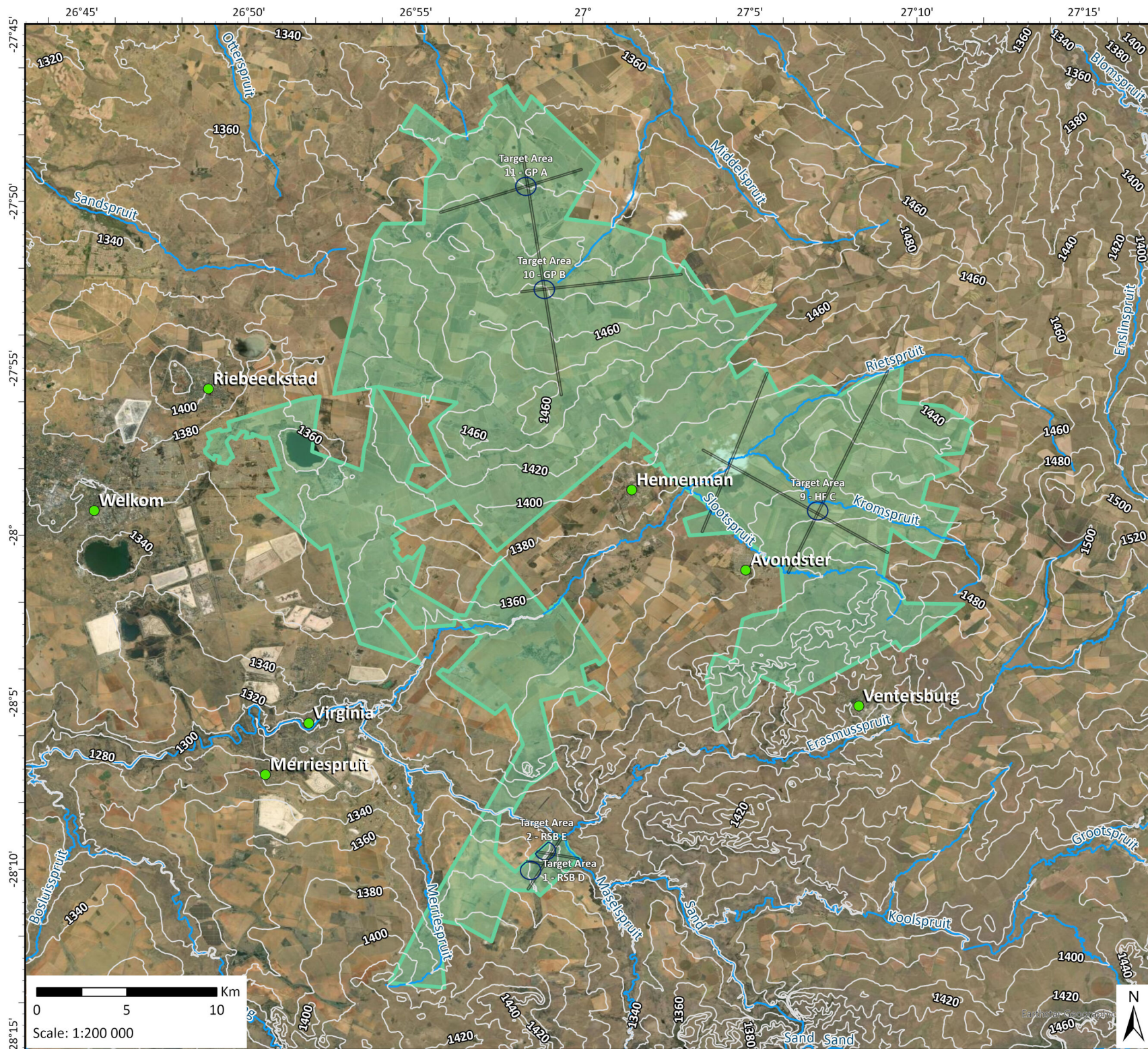
EIMS Ref: 1681

Compiled: JW

Reviewed: VM

Approved: LW









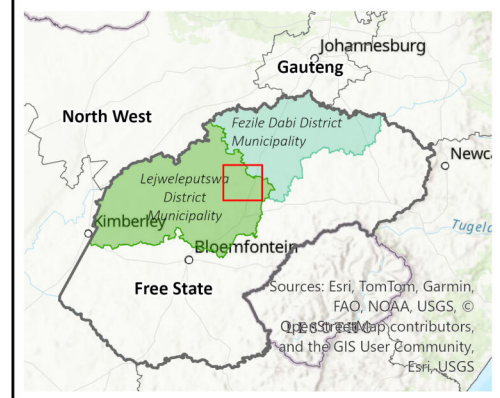


Topography Map

1681 D3 Energy South Africa (Motuoane) ER386 EIA

Legend

-  Exploration Right 386 Area
-  Proposed Seismic Transects 50m Corridor
-  Target Areas (TA)
-  NFEPA Rivers
-  Towns
-  Contour Lines (20m)



Data Sources:

CSG; ESRI; MDB; CDNGI; SANBI
 Coord System: GCS WGS 1984
 Datum: WGS 1984
 Units: Degree
 Ref: 1681_Topography

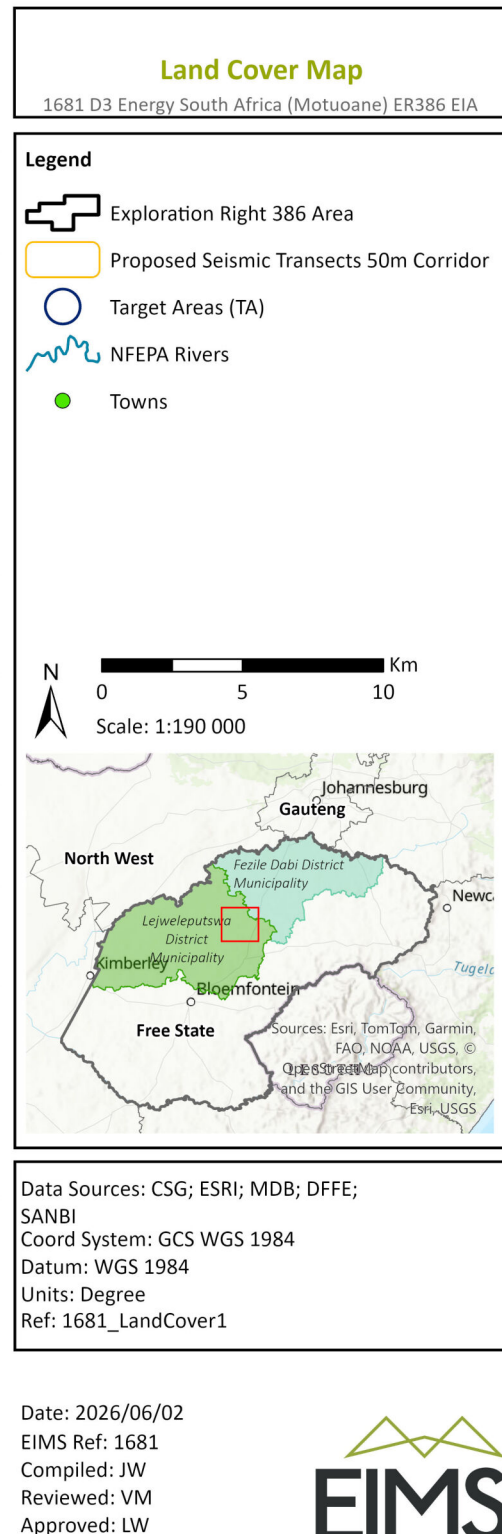
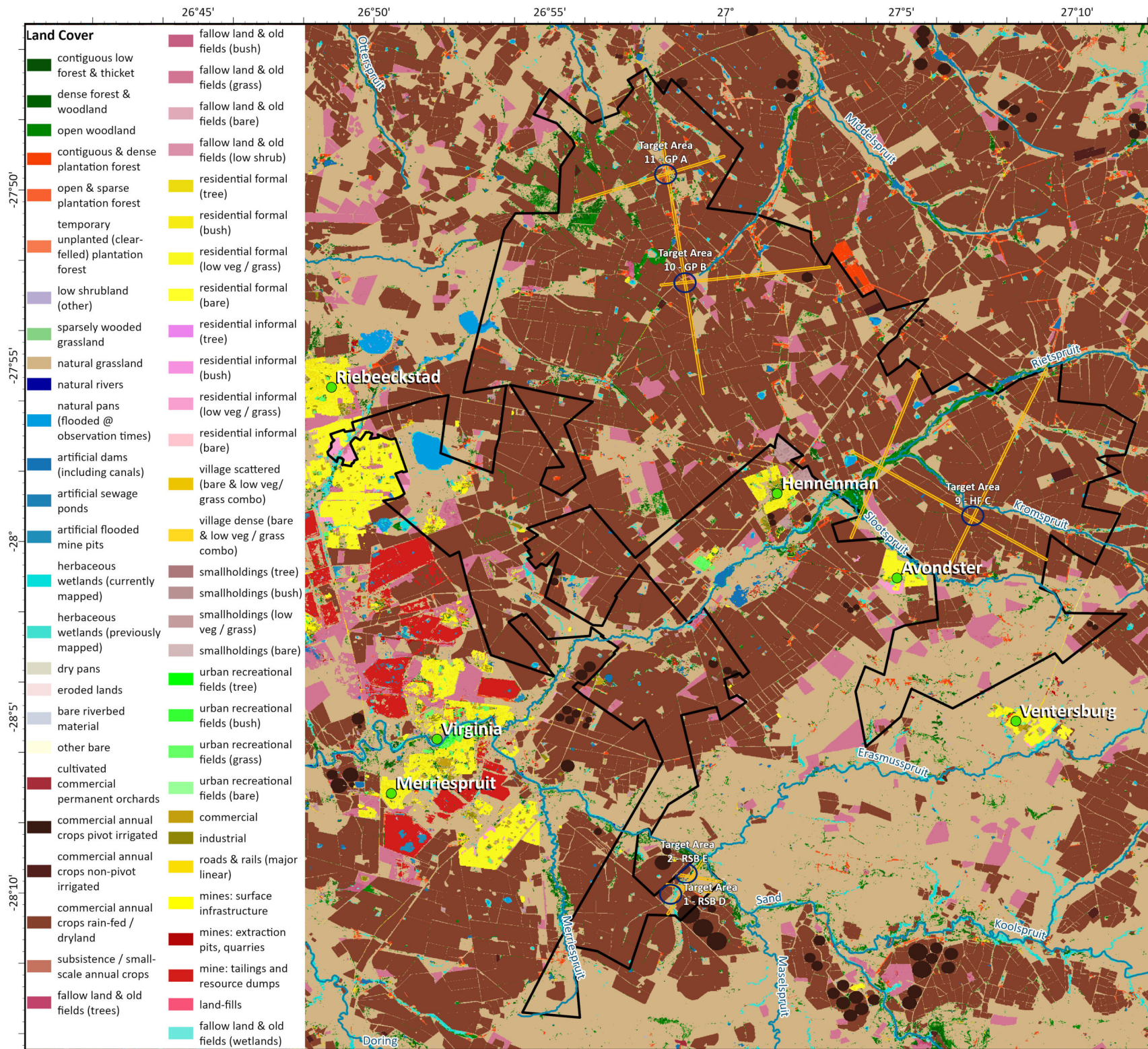
Date: 2026/06/02

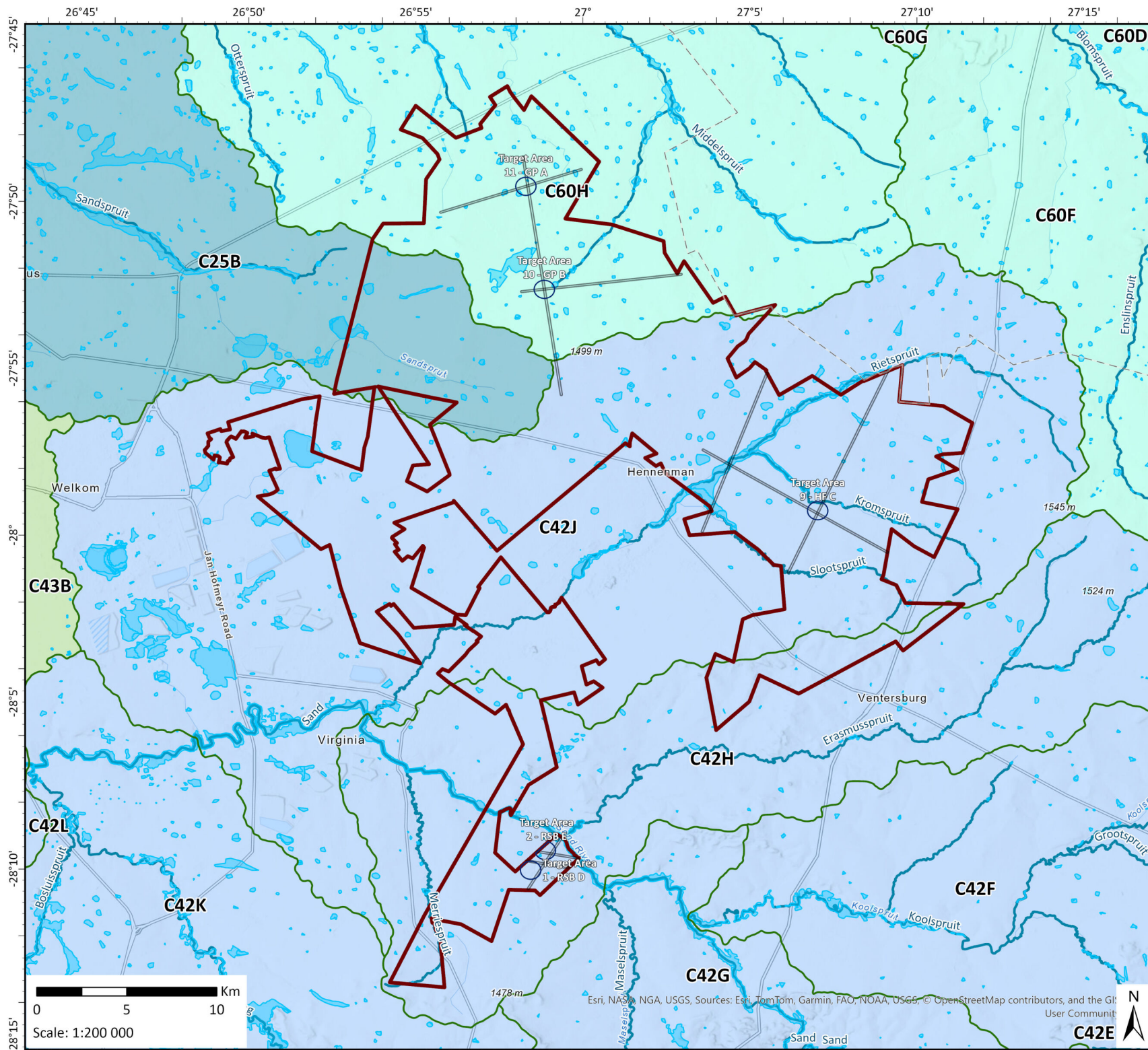
EIMS Ref: 1681

Compiled: JW

Reviewed: VM

Approved: LW



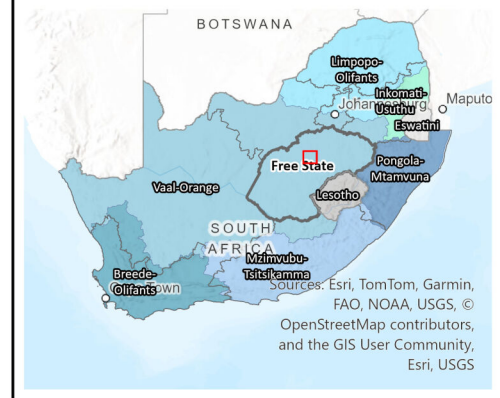


Surface Water Features

1681 D3 Energy South Africa (Motuoane) ER386 EIA

Legend

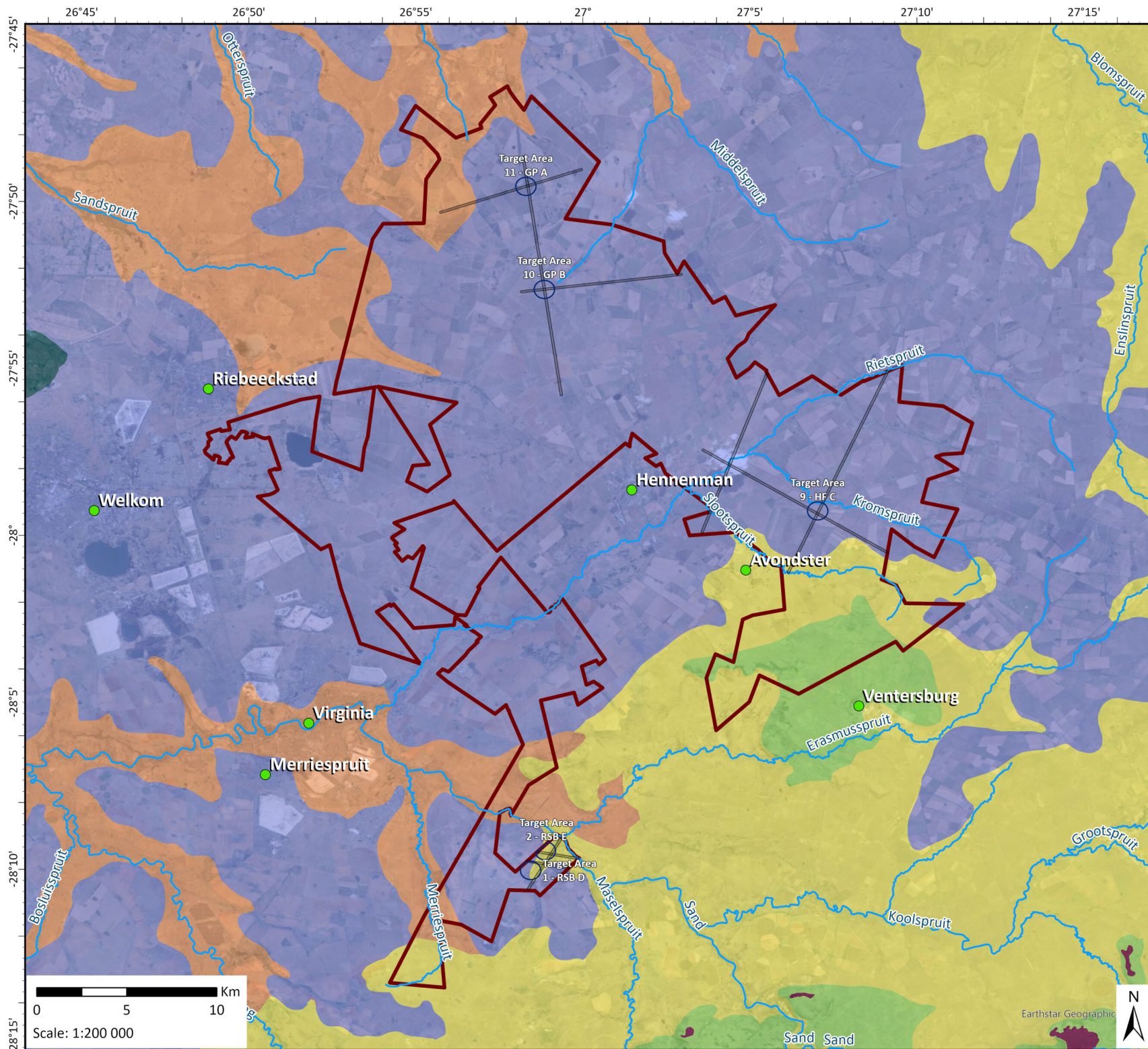
- Exploration Right 386 Area
- Proposed Seismic Transects 50m Corridor
- Target Areas (TA)
- NFEPA Wetlands
- NFEPA Rivers
- Tertiary Catchments**
 - C25
 - C42
 - C43
 - C60
- Quaternary Catchments



Data Sources: CSG; ESRI; MDB;
SANBI; DWS
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1681_SurfaceWater

Date: 2026/06/02
EIMS Ref: 1681
Compiled: JW
Reviewed: VM
Approved: LW





Vegetation Status Map

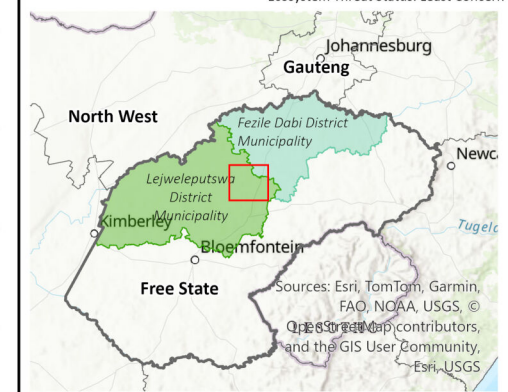
1681 D3 Energy South Africa (Motuoane) ER386 EIA

Legend

- Exploration Right 386 Area
- Proposed Seismic Transects 50m Corridor
- Target Areas (TA)
- NFEPA Rivers
- Towns

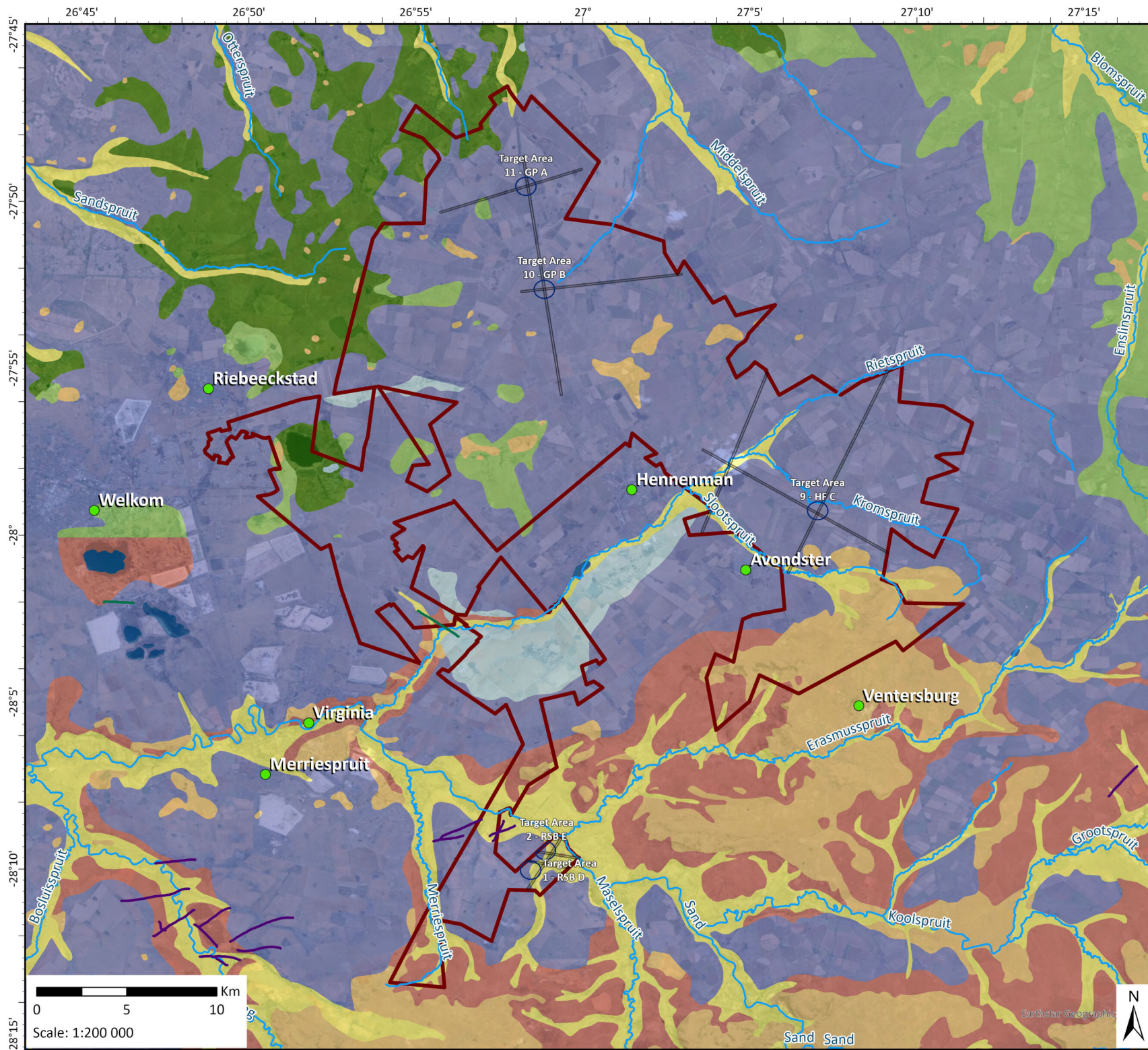
Vegetation Status

- | | |
|-----------------------------------|--|
| Bloemfontein Karroid Shrubland | Conservation Target: 28%
Protection Level: Moderately Protected
Ecosystem Threat Status: Least Concern |
| Central Free State Grassland | Conservation Target: 24%
Protection Level: Poorly Protected
Ecosystem Threat Status: Least Concern |
| Highveld Alluvial Vegetation | Conservation Target: 31%
Protection Level: Poorly Protected
Ecosystem Threat Status: Least Concern |
| Vaal-Vet Sandy Grassland | Conservation Target: 24%
Protection Level: Not Protected
Ecosystem Threat Status: Endangered |
| Western Free State Clay Grassland | Conservation Target: 24%
Protection Level: Poorly Protected
Ecosystem Threat Status: Least Concern |
| Winburg Grassy Shrubland | Conservation Target: 28%
Protection Level: Poorly Protected
Ecosystem Threat Status: Least Concern |



Data Sources: CSG; ESRI; MDB; CDNGI;
SANBI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1681_VegetationStatus

Date: 2026/06/02
EIMS Ref: 1681
Compiled: JW
Reviewed: VM
Approved: LW

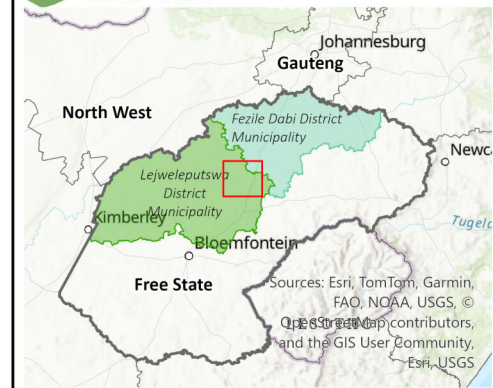


Simplified Geology Map

1681 D3 Energy South Africa (Motuoane) ER386 EIA

Legend

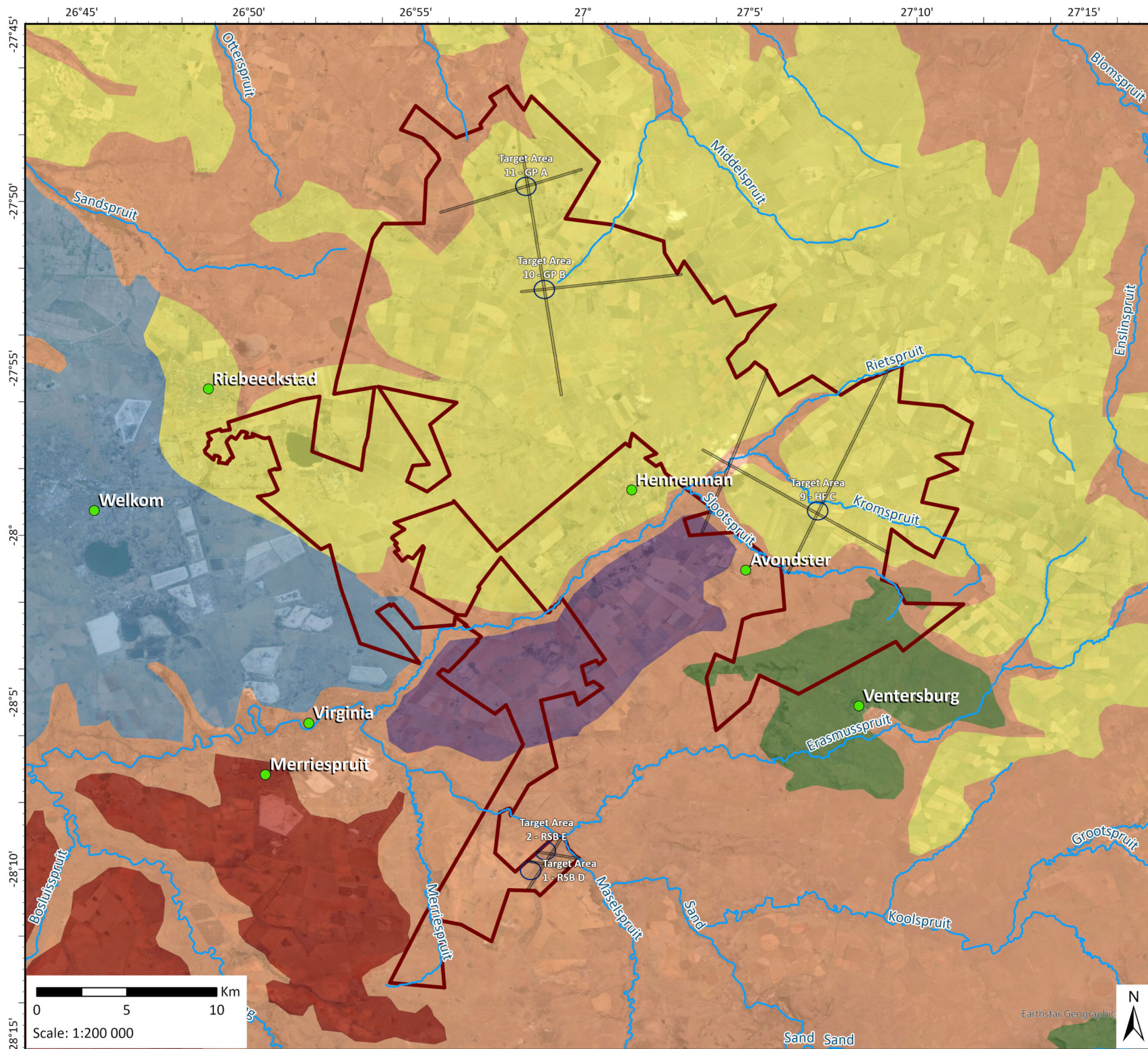
- Exploration Right 386 Area
 - Proposed Seismic Transects 50m Corridor
 - Target Areas (TA)
 - NFEPA Rivers
 - Towns
 - Dyke, dolerite
 - Dyke, kimberlite
- Geological Subgroup**
- Aeolian sand
 - Alluvium
 - Calcrete and surface limestone
 - Water
 - Adelaide - Mudrock, subordinate sandstone
 - Karoo Dolerite - Network of dolerite sills, sheets and dykes, mainly intrusive into the Karoo Supergroup
 - Normandien - Green-grey and (at the top) red mudstone and siltstone, grey shale and rhythmite, sandstone
 - Volskrust - Mudrock



Data Sources: CSG; ESRI; MDB; CDNGI;
SANBI; Council for Geoscience
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1681_SimplifiedGeology

Date: 2026/06/02
EIMS Ref: 1681
Compiled: JW
Reviewed: VM
Approved: LW





Simplified Soils Map

1681 D3 Energy South Africa (Motuoane) ER386 EIA

Legend

- Exploration Right 386 Area
- Proposed Seismic Transects 50m Corridor
- Target Areas (TA)
- NFEPA Rivers
- Towns

Dominant Soils

- Eutric Cambisols (CMe)**
Red, yellow and greyish soils with high base status (association of Lixisols, Cambisols, Luvisols and Plinthosols. In addition, other soils with plinthic and gleyic properties may also be present)
- Eutric Leptosols (LPe)**
Black and red, strongly structured clayey soils with high base status (association of Vertisols, Phaeozems, Kastanozems and Nitisols. In addition one or more Leptosols, Calcisols and Cambisols may be present)
- Ferric Luvisols (LVf)**
Red, massive or weakly structured soils with high base status (association of well drained Lixisols, Cambisols, Luvisols)
- Calcic Luvisols (LVk)**
Soils with a marked clay accumulation (association of Luvisols, Planosols and Solonetz. In addition one or more of Plinthosols, Vertisols and Cambisols may be present)
- Ferric Lixisols (LVf)**
Red, yellow and greyish soils with high base status (association of Lixisols, Cambisols, Luvisols and Plinthosols. In addition, other soils with plinthic and gleyic properties may also be present)
- Haplic Lixisols (LVh)**
Red, massive or weakly structured soils with high base status (association of well drained Lixisols, Cambisols, Luvisols)



Data Sources:

CSG; ESRI; MDB; SANBI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1681_SimplifiedSoils

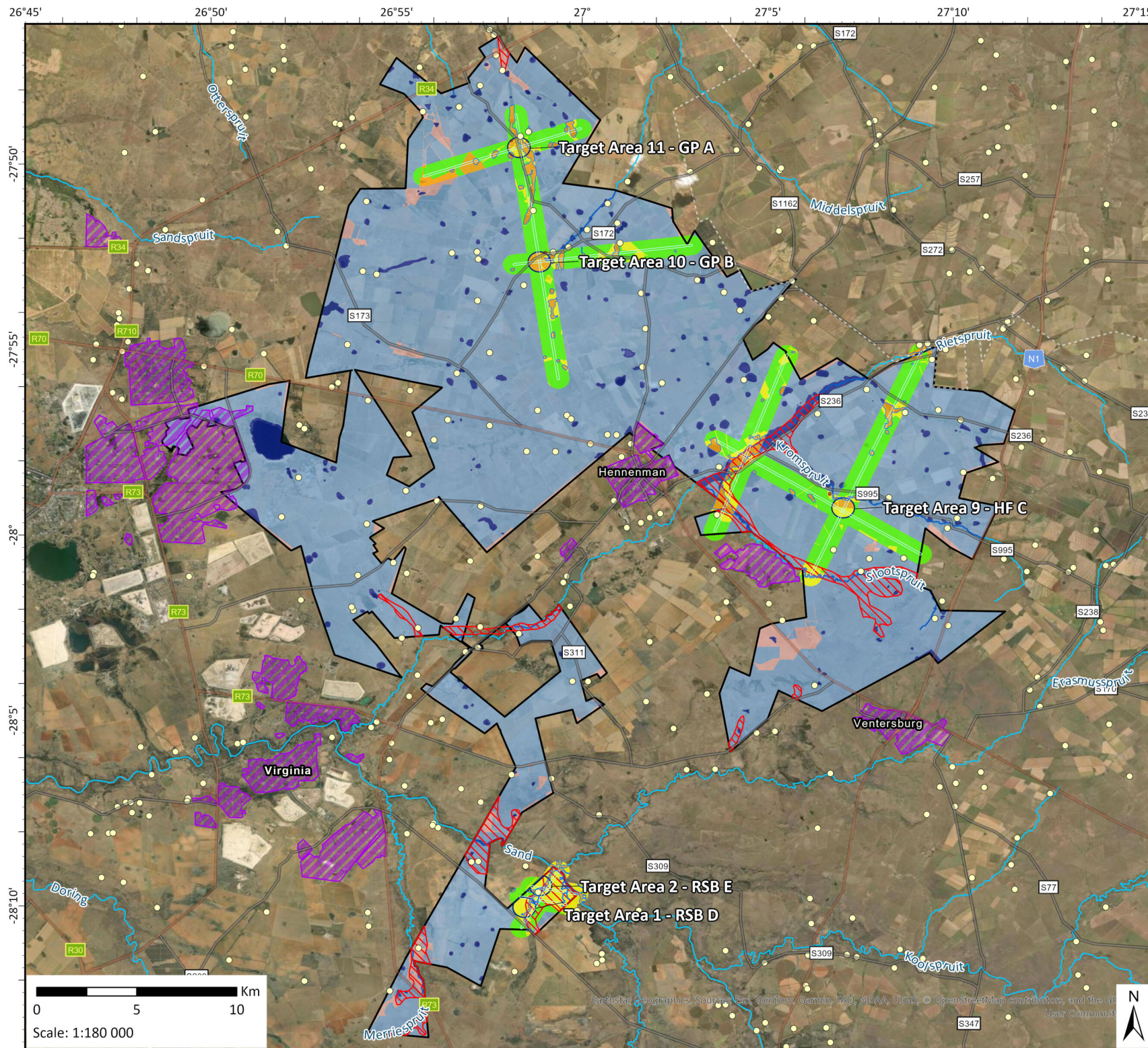
Date: 2026/06/02

EIMS Ref: 1681

Compiled: JW

Reviewed: VM

Approved: LW



Maximum Sensitivity Map

1681 D3 Energy South Africa (Motuoane) ER386 EIA

Legend

- Exploration Right 386 Area
- Proposed Seismic Transects 50m Corridor
- Target Areas (TA)
- NFEPA Rivers
- Sensitive Air Receptors
- Sensitive Air Receptors
- 15m Post-Mitigation Buffer (Freshwater)
- Riparian Zone Aquifers (High Sensitive)

Heritage Buffers

- 30m
- 50m

Maximum Sensitivity

- Least Concern
- Low
- Medium
- High

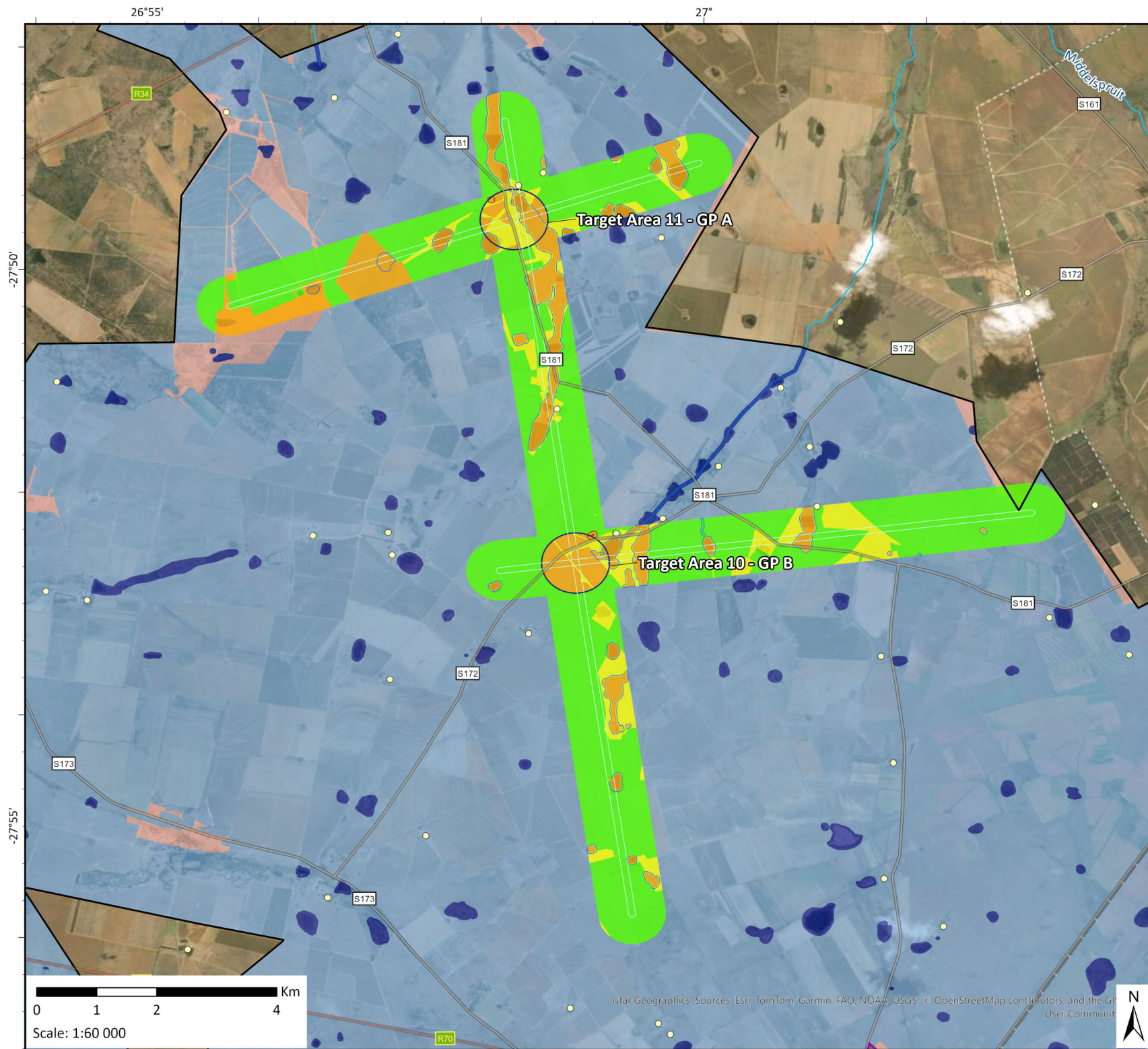
Desktop Sensitivity

- Medium
- High
- No-Go

Inset map showing the location of the study area within South Africa. The map highlights the North West, Free State, and Gauteng provinces. The study area is located in the North West province, near the border with the Free State and Gauteng provinces. The map also shows the location of the study area relative to the major cities of Johannesburg, Bloemfontein, and Kimberley.

Data Sources:
 CSG; ESRI; MDB; CDNGI; SANBI
 Coord System: GCS WGS 1984
 Datum: WGS 1984
 Units: Degree
 Ref: 1681_Sensitivity

Date: 2026/06/02
 EIMS Ref: 1681
 Compiled: JW
 Reviewed: VM
 Approved: LW



Maximum Sensitivity Map Inset 1

1681 D3 Energy South Africa (Motuoane) ER386 EIA

Legend

- Exploration Right 386 Area
- Proposed Seismic Transects 50m Corridor
- Target Areas (TA)
- NFEPA Rivers
- Sensitive Air Receptors
- Sensitive Air Receptors
- 15m Post-Mitigation Buffer (Freshwater)

Heritage Buffers

- 50m

Maximum Sensitivity

- Low
- Medium
- High

Desktop Sensitivity

- Medium
- High
- No-Go



Data Sources:

CSG; ESRI; MDB; CDNGI; SANBI
 Coord System: GCS WGS 1984
 Datum: WGS 1984
 Units: Degree
 Ref: 1681_Sensitivity

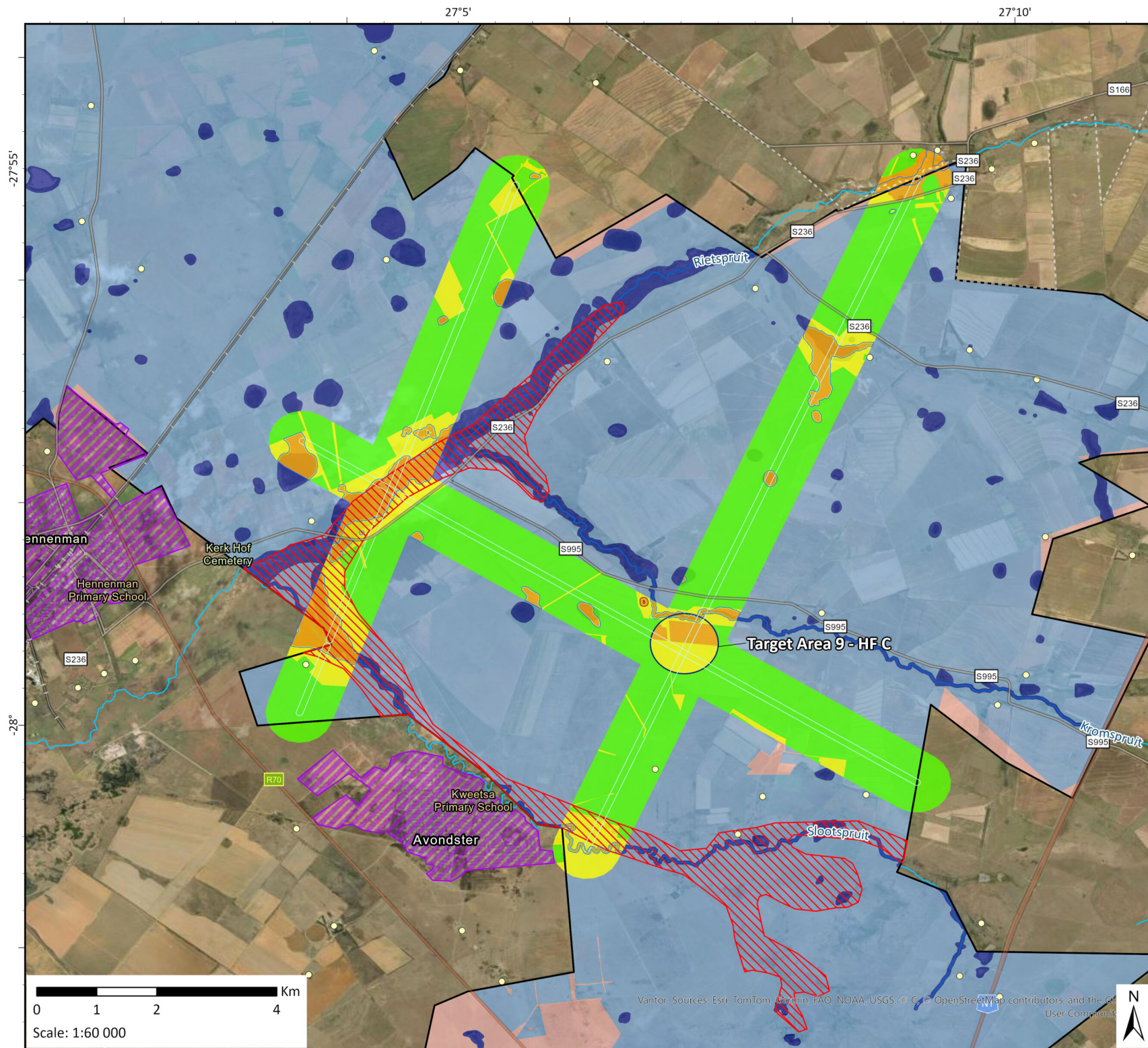
Date: 2026/06/02

EIMS Ref: 1681

Compiled: JW

Reviewed: VM

Approved: LW



Maximum Sensitivity Map Inset 2

1681 D3 Energy South Africa (Motuoane) ER386 EIA

Legend

- Exploration Right 386 Area
- Proposed Seismic Transects 50m Corridor
- Target Areas (TA)
- NFEPA Rivers
- Sensitive Air Receptors
- Sensitive Air Receptors
- Riparian Zone Aquifers (High Sensitive)
- 15m Post-Mitigation Buffer (Freshwater)

Heritage Buffers

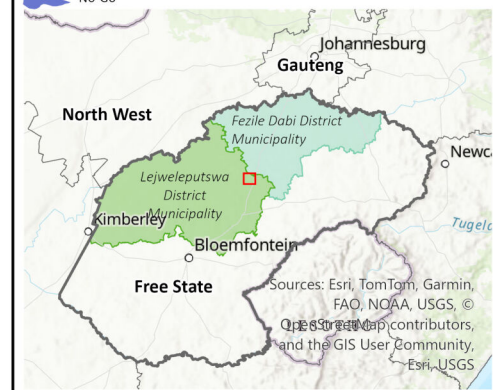
- 30m
- 50m

Maximum Sensitivity

- Low
- Medium
- High

Desktop Sensitivity

- Medium
- High
- No-Go



Data Sources:

CSG; ESRI; MDB; CDNGI; SANBI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1681_Sensitivity

Date: 2026/06/02

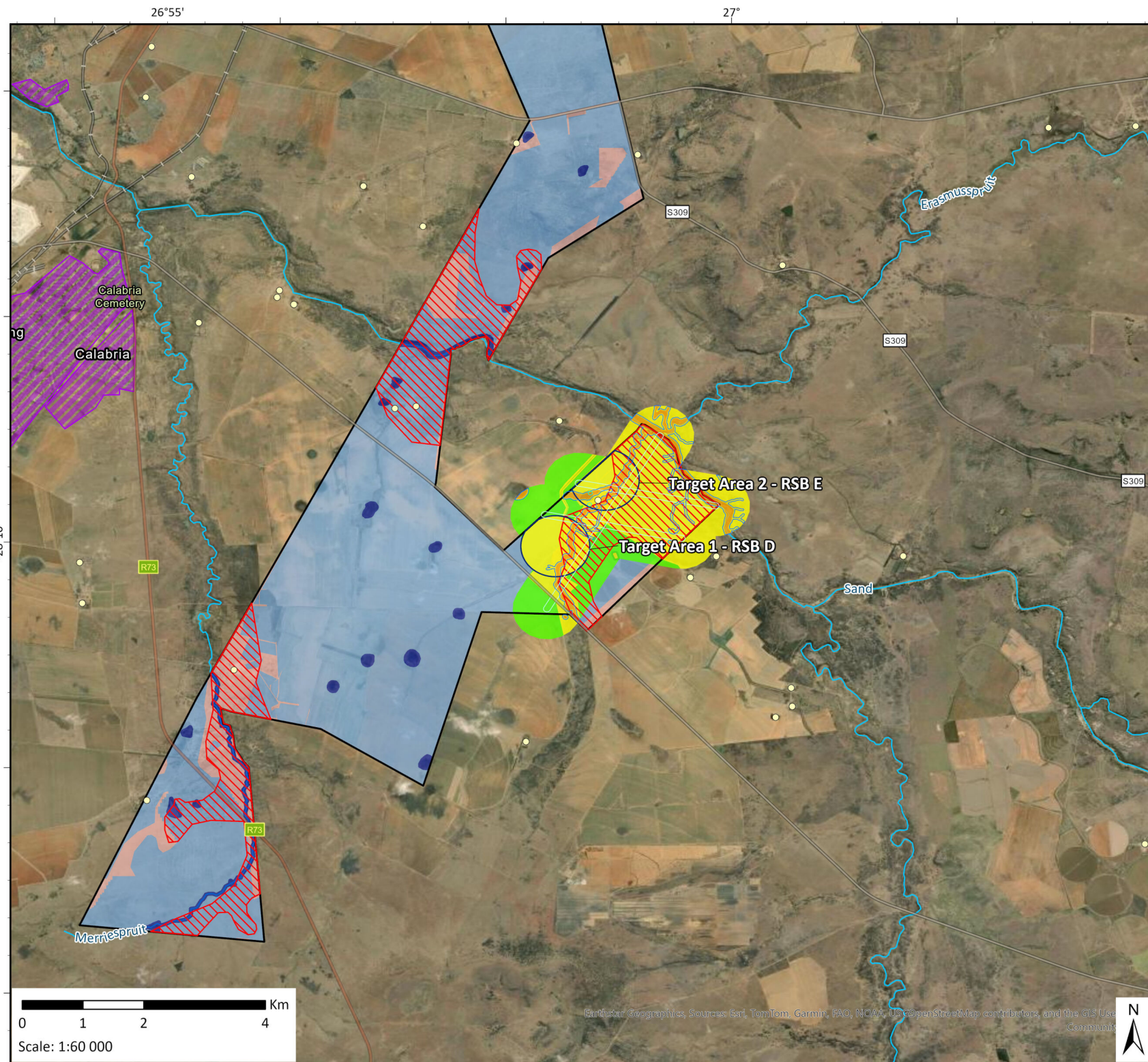
EIMS Ref: 1681

Compiled: JW

Reviewed: VM

Approved: LW





Maximum Sensitivity Map Inset 3

1681 D3 Energy South Africa (Motuoane) ER386 EIA

Legend

- Exploration Right 386 Area
- Proposed Seismic Transects 50m Corridor
- Target Areas (TA)
- NFEPA Rivers
- Sensitive Air Receptors
- Sensitive Air Receptors
- Riparian Zone Aquifers (High Sensitive)
- 15m Post-Mitigation Buffer (Freshwater)

Heritage Buffers

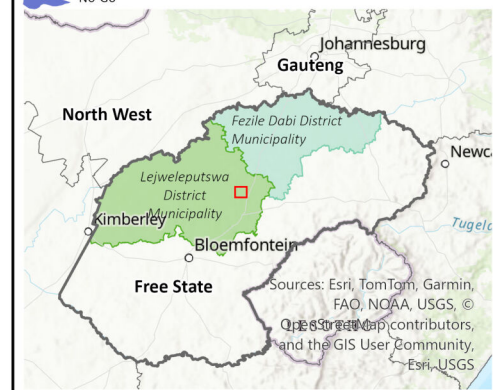
- 30m

Maximum Sensitivity

- Least Concern
- Low
- Medium
- High

Desktop Sensitivity

- Medium
- High
- No-Go



Data Sources:

CSG; ESRI; MDB; CDNGI; SANBI
 Coord System: GCS WGS 1984
 Datum: WGS 1984
 Units: Degree
 Ref: 1681_Sensitivity

Date: 2026/06/02

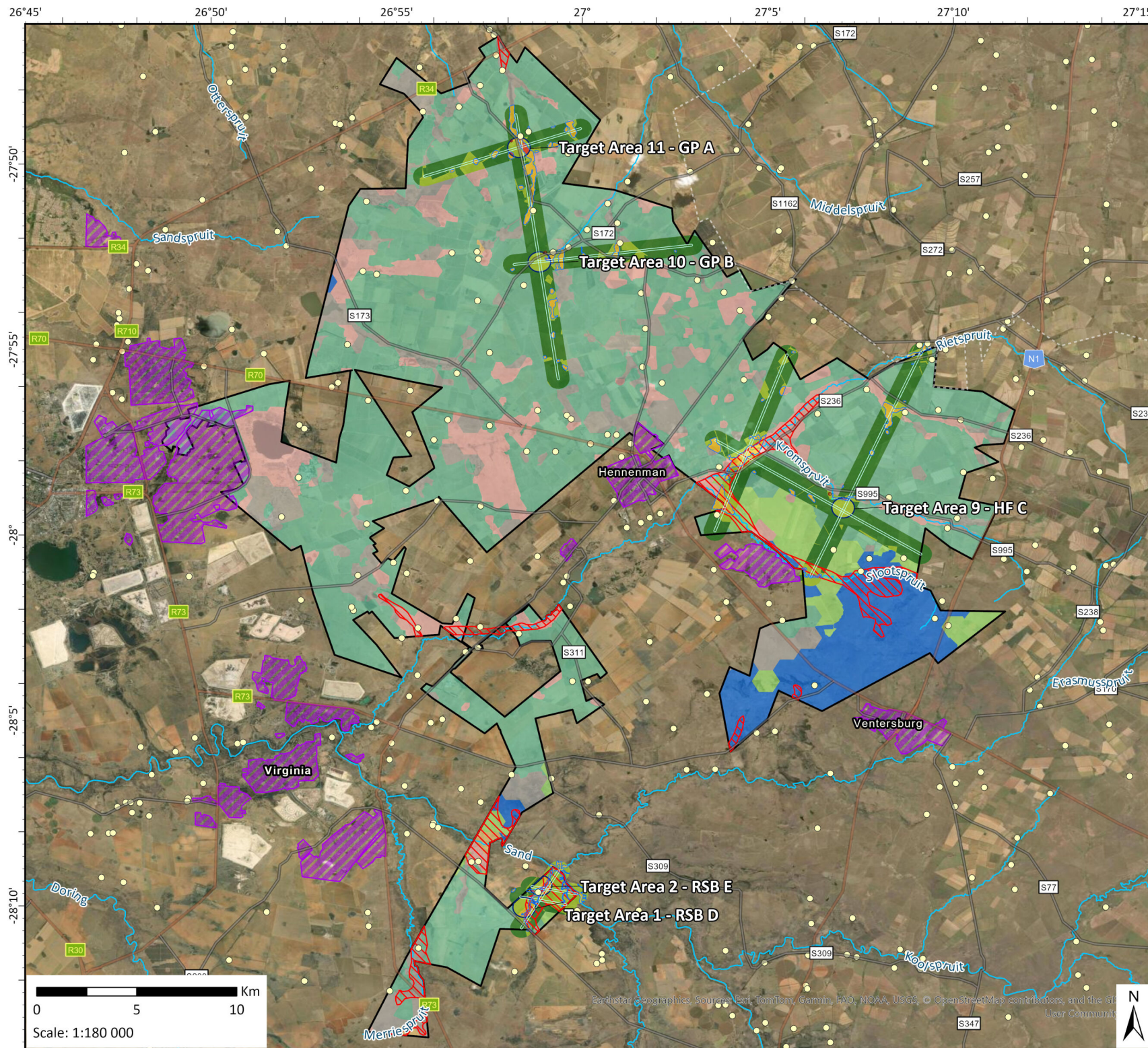
EIMS Ref: 1681

Compiled: JW

Reviewed: VM

Approved: LW





Sensitivity Intensity Map

1681 D3 Energy South Africa (Motuoane) ER386 EIA

Legend

- Exploration Right 386 Area
- Proposed Seismic Transects 50m Corridor
- Target Areas (TA)
- NFEPA Rivers
- Sensitive Air Receptors
- Sensitive Air Receptors
- 15m Post-Mitigation Buffer (Freshwater)
- Riparian Zone Aquifers (High Sensitive)
- Heritage Buffers
 - 30m
 - 50m

Sensitivity Intensity	
0.00 - 2.00	
2.01 - 4.00	
4.01 - 6.00	
6.01 - 10.00	

Free State Biodiversity Plan

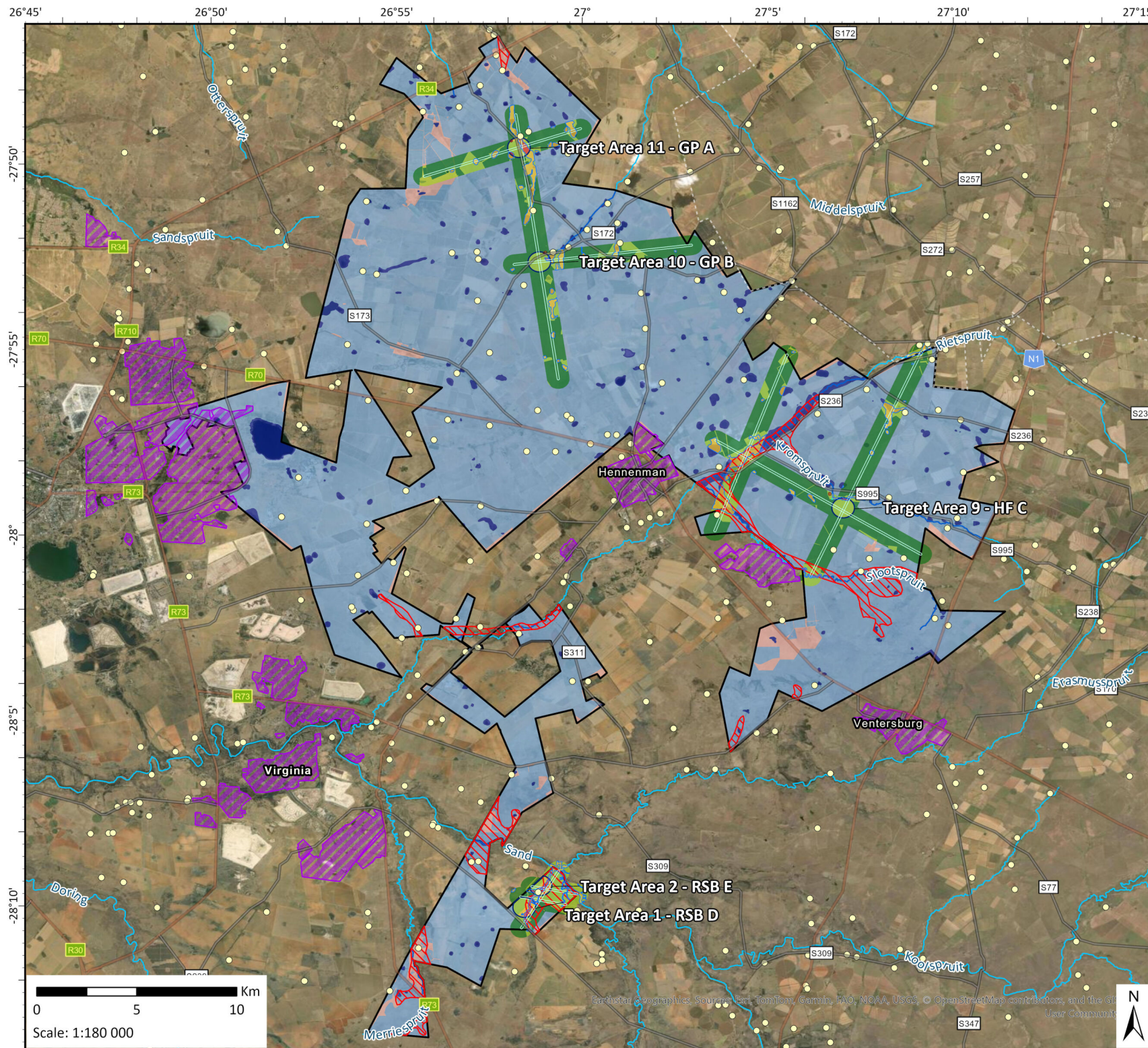
- CBA1
- CBA2
- Degraded
- ESA1
- ESA2
- Other

North West
Gauteng
Johannesburg
Newcastle
Free State
Kimberley
Bloemfontein
Tugela

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Esri, USGS

Data Sources:
CSG; ESRI; MDB; CDNGI; SANBI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1681_Sensitivity

Date: 2026/06/02
EIMS Ref: 1681
Compiled: JW
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Sensitivity Intensity Map

1681 D3 Energy South Africa (Motuoane) ER386 EIA

Legend

- Exploration Right 386 Area
- Proposed Seismic Transects 50m Corridor
- Target Areas (TA)
- NFEPA Rivers
- Sensitive Air Receptors
- Sensitive Air Receptors
- 15m Post-Mitigation Buffer (Freshwater)
- Riparian Zone Aquifers (High Sensitive)

Heritage Buffers

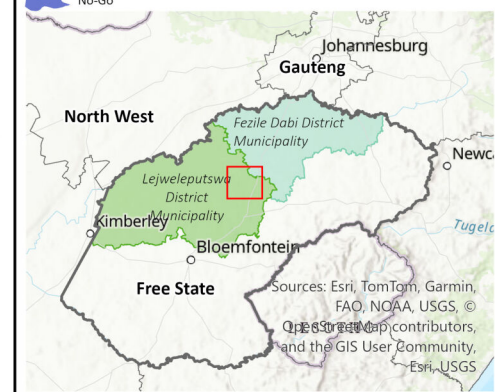
- 30m
- 50m

Sensitivity Intensity

- 0.00 - 2.00
- 2.01 - 4.00
- 4.01 - 6.00
- 6.01 - 10.00

Desktop Sensitivity

- Medium
- High
- No-Go



Data Sources:

CSG; ESRI; MDB; CDNGI; SANBI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1681_Sensitivity

Date: 2026/06/02

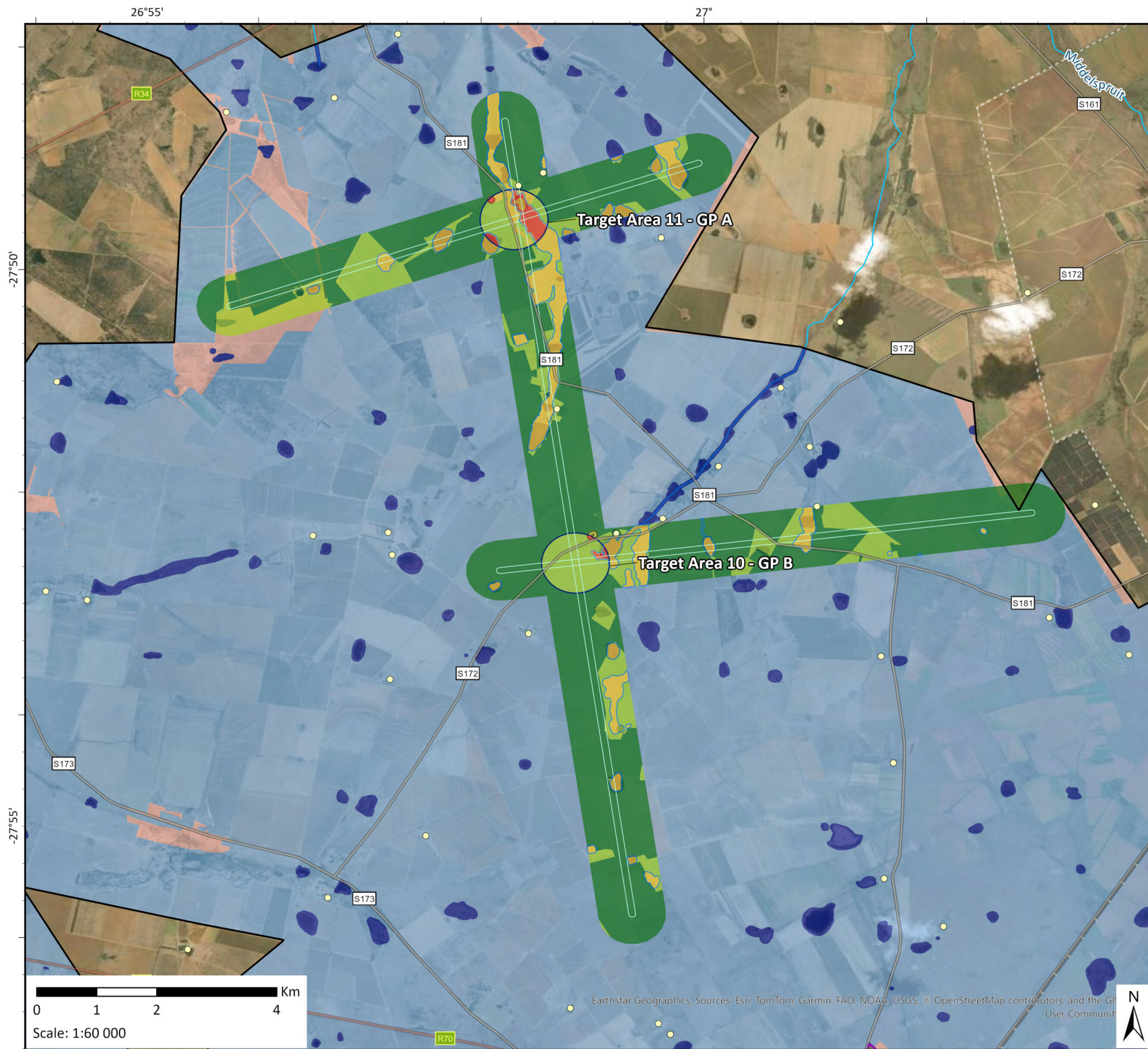
EIMS Ref: 1681

Compiled: JW

Reviewed: VM

Approved: LW





Sensitivity Intensity Map Inset 1

1681 D3 Energy South Africa (Motuoane) ER386 EIA

Legend

- Exploration Right 386 Area
- Proposed Seismic Transects 50m Corridor
- Target Areas (TA)
- NFEPA Rivers
- Sensitive Air Receptors
- Sensitive Air Receptors
- 15m Post-Mitigation Buffer (Freshwater)

Heritage Buffers

- 50m

Sensitivity Intensity

- 0.00 - 2.00
- 2.01 - 4.00
- 4.01 - 6.00
- 6.01 - 10.00

Desktop Sensitivity

- Medium
- High
- No-Go



Data Sources:

CSG; ESRI; MDB; CDNGI; SANBI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1681_Sensitivity

Date: 2026/06/02

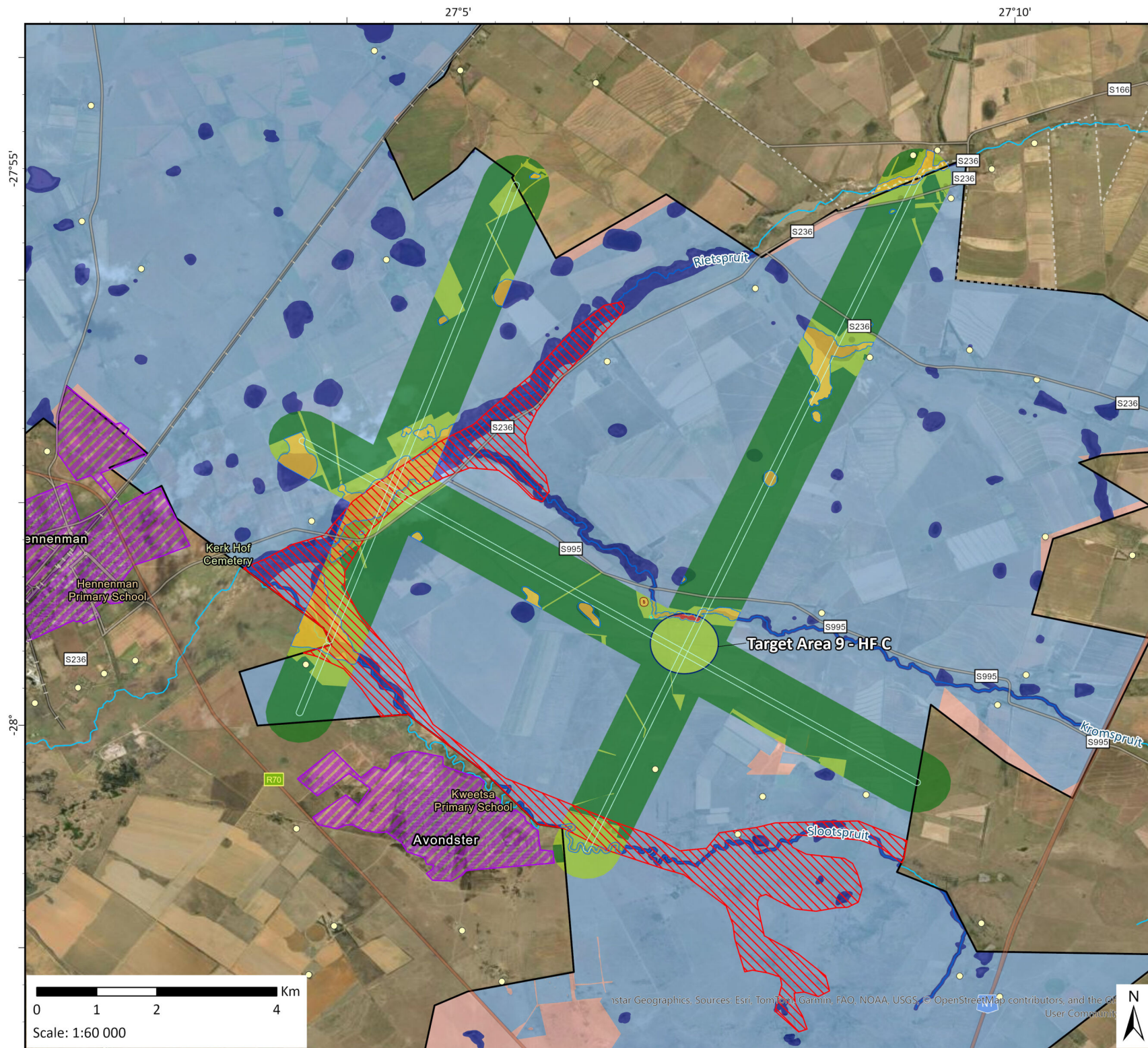
EIMS Ref: 1681

Compiled: JW

Reviewed: VM

Approved: LW





Sensitivity Intensity Map Inset 2

1681 D3 Energy South Africa (Motuoane) ER386 EIA

Legend

- Exploration Right 386 Area
- Proposed Seismic Transects 50m Corridor
- Target Areas (TA)
- NFEPA Rivers
- Sensitive Air Receptors
- Sensitive Air Receptors
- Riparian Zone Aquifers (High Sensitive)
- 15m Post-Mitigation Buffer (Freshwater)

Heritage Buffers

- 30m
- 50m

Sensitivity Intensity

- 0.00 - 2.00
- 2.01 - 4.00
- 4.01 - 6.00
- 6.01 - 10.00

Desktop Sensitivity

- Medium
- High
- No-Go



Data Sources:

CSG; ESRI; MDB; CDNGI; SANBI
 Coord System: GCS WGS 1984
 Datum: WGS 1984
 Units: Degree
 Ref: 1681_Sensitivity

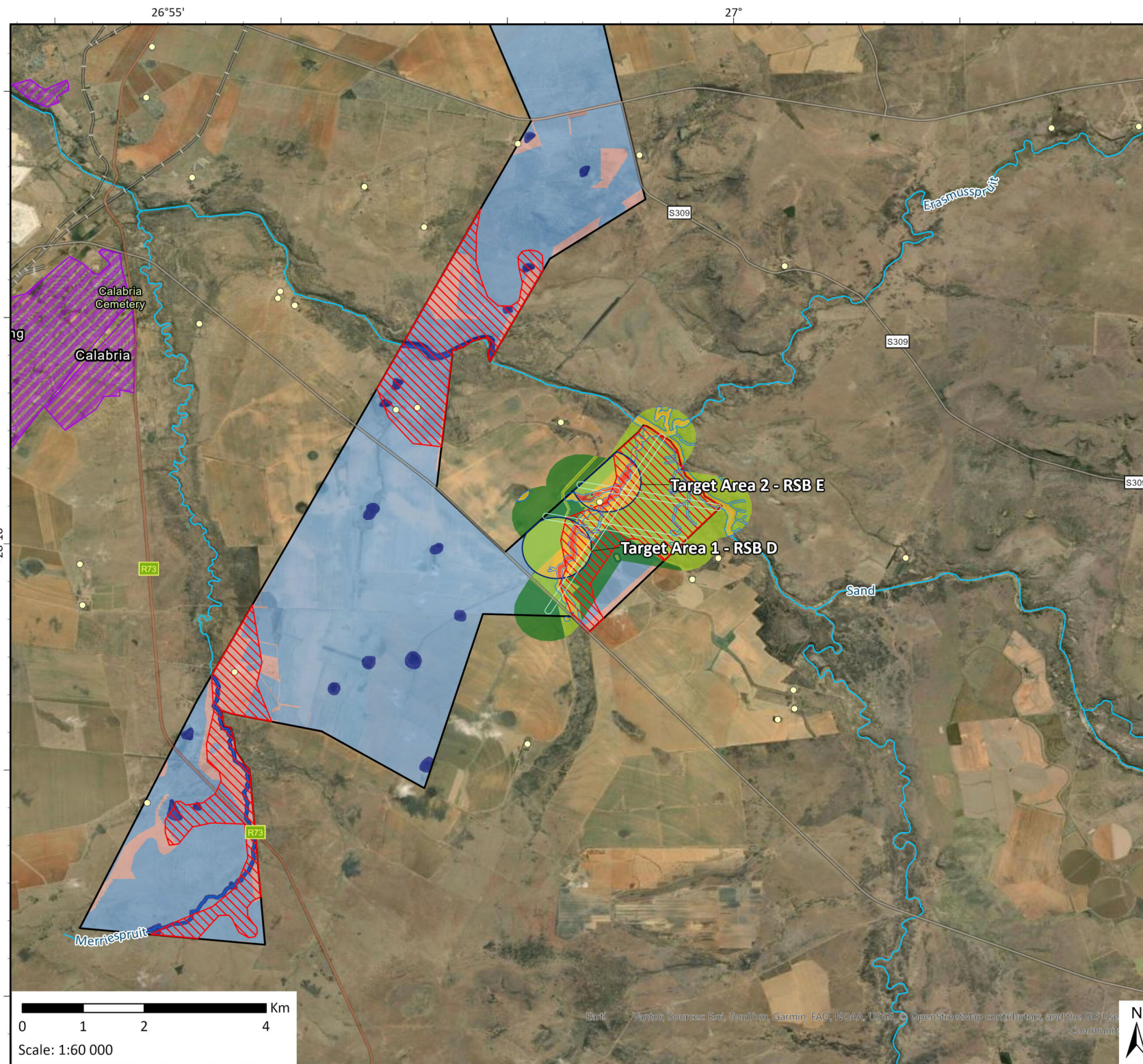
Date: 2026/06/02

EIMS Ref: 1681

Compiled: JW

Reviewed: VM

Approved: LW



Sensitivity Intensity Map

Inset 3

1681 D3 Energy South Africa (Motuoane) ER386 EIA

Legend

- Exploration Right 386 Area
- Proposed Seismic Transects 50m Corridor
- Target Areas (TA)
- NFEPA Rivers
- Sensitive Air Receptors
- Sensitive Air Receptors
- Riparian Zone Aquifers (High Sensitive)
- 15m Post-Mitigation Buffer (Freshwater)

Heritage Buffers

- 30m

Sensitivity Intensity

- 0.00 - 2.00
- 2.01 - 4.00
- 4.01 - 6.00
- 6.01 - 10.00

Desktop Sensitivity

- Medium
- High
- No-Go

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Data Sources:
 CSG; ESRI; MDB; CDNGI; SANBI
 Coord System: GCS WGS 1984
 Datum: WGS 1984
 Units: Degree
 Ref: 1681_Sensitivity

Date: 2026/06/02
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 Approved: LW