

**Geophysical Interpretation - Extractive Industries Technical Assistance Project Phase 2 - Sierra Leone**

Prepared for National Minerals Agency, Ministry of Mines and Mineral Resources, Sierra Leone

**Final Deliverables - October 2, 2020**

| Main Directory                      | Subdirectory         | Name                                    | Format                        | Units   | Description  |
|-------------------------------------|----------------------|---|-------------------------------|---|--|
| 01 Raw SRTM and Landsat8 Data       | Landsat8             | LC082000542019011601T1-SC20190703105907 | ZIP                           | -   | Landsat 8 EROS/USGS scene package, wrs path 200, row 054, scene date 2019-01-16  |
|                                     | Landsat8             | LC082000552019011601T1-SC20190703105717 | ZIP                           | -   | Landsat 8 EROS/USGS scene package, wrs path 200, row 055, scene date 2019-01-16  |
|                                     | Landsat8             | LC082010532013122401T1-SC20190703105754 | ZIP                           | -   | Landsat 8 EROS/USGS scene package, wrs path 201, row 053, scene date 2013-12-24  |
|                                     | Landsat8             | LC082010542013122401T1-SC20190703105707 | ZIP                           | -   | Landsat 8 EROS/USGS scene package, wrs path 201, row 054, scene date 2013-12-24  |
|                                     | Landsat8             | LC082010552013122401T1-SC20190703105722 | ZIP                           | -   | Landsat 8 EROS/USGS scene package, wrs path 201, row 055, scene date 2013-12-24  |
|                                     | Landsat8             | LC082020532013123101T1-SC20190703113007 | ZIP                           | -   | Landsat 8 EROS/USGS scene package, wrs path 202, row 053, scene date 2013-12-31  |
|                                     | Landsat8             | LC082020542013123101T1-SC20190703105655 | ZIP                           | -   | Landsat 8 EROS/USGS scene package, wrs path 202, row 054, scene date 2013-12-31  |
|                                     | Landsat8             | LC082020552013123101T1-SC20190703105643 | ZIP                           | -   | Landsat 8 EROS/USGS scene package, wrs path 202, row 055, scene date 2013-12-31  |
|                                     | SRTM                 | n06_w012_1arc_v3_bil                    | ZIP                           | -   | NASA SRTM Version 3.0 Global 1 arc second data package, tile location: North 6° West 12°   |
|                                     | SRTM                 | n07_w011_1arc_v3_bil                    | ZIP                           | -   | NASA SRTM Version 3.0 Global 1 arc second data package, tile location: North 7° West 11°   |
|                                     | SRTM                 | n07_w012_1arc_v3_bil                    | ZIP                           | -   | NASA SRTM Version 3.0 Global 1 arc second data package, tile location: North 7° West 12°   |
|                                     | SRTM                 | n07_w013_1arc_v3_bil                    | ZIP                           | -   | NASA SRTM Version 3.0 Global 1 arc second data package, tile location: North 7° West 13°   |
|                                     | SRTM                 | n07_w014_1arc_v3_bil                    | ZIP                           | -   | NASA SRTM Version 3.0 Global 1 arc second data package, tile location: North 7° West 14°   |
|                                     | SRTM                 | n08_w011_1arc_v3_bil                    | ZIP                           | -   | NASA SRTM Version 3.0 Global 1 arc second data package, tile location: North 8° West 11°   |
|                                     | SRTM                 | n08_w012_1arc_v3_bil                    | ZIP                           | -   | NASA SRTM Version 3.0 Global 1 arc second data package, tile location: North 8° West 12°   |
|                                     | SRTM                 | n08_w013_1arc_v3_bil                    | ZIP                           | -   | NASA SRTM Version 3.0 Global 1 arc second data package, tile location: North 8° West 13°   |
|                                     | SRTM                 | n08_w014_1arc_v3_bil                    | ZIP                           | -   | NASA SRTM Version 3.0 Global 1 arc second data package, tile location: North 8° West 14°   |
|                                     | SRTM                 | n09_w011_1arc_v3_bil                    | ZIP                           | -   | NASA SRTM Version 3.0 Global 1 arc second data package, tile location: North 9° West 11°   |
|                                     | SRTM                 | n09_w012_1arc_v3_bil                    | ZIP                           | -   | NASA SRTM Version 3.0 Global 1 arc second data package, tile location: North 9° West 12°   |
|                                     | SRTM                 | n09_w013_1arc_v3_bil                    | ZIP                           | -   | NASA SRTM Version 3.0 Global 1 arc second data package, tile location: North 9° West 13°   |
| SRTM                                | n09_w014_1arc_v3_bil | ZIP                                     | -                             | NASA SRTM Version 3.0 Global 1 arc second data package, tile location: North 9° West 14°  |  |
| SRTM                                | n10_w012_1arc_v3_bil | ZIP                                     | -                             | NASA SRTM Version 3.0 Global 1 arc second data package, tile location: North 10° West 12° |  |
| SRTM                                | n10_w013_1arc_v3_bil | ZIP                                     | -                             | NASA SRTM Version 3.0 Global 1 arc second data package, tile location: North 10° West 13° |  |
| 02 Geophysical grids                | Magnetics            | TMI                                     | Geosoft *.GRD, ERMapper *.ERS | nT  | Total magnetic intensity   |
|                                     | Magnetics            | ANS/AS                                  | Geosoft *.GRD, ERMapper *.ERS | nT/m  | Analytic signal  |
|                                     | Magnetics            | RTEI                                    | Geosoft *.GRD, ERMapper *.ERS | nT  | TMI reduced to the equator (inverted)  |
|                                     | Radiometrics         | Dose                                    | Geosoft *.GRD, ERMapper *.ERS | nGy/h   | Dose rate  |
|                                     | Radiometrics         | K                                       | Geosoft *.GRD, ERMapper *.ERS | %   | Potassium  |
|                                     | Radiometrics         | eTh                                     | Geosoft *.GRD, ERMapper *.ERS | ppm   | Equivalent uranium   |
|                                     | Radiometrics         | eU                                      | Geosoft *.GRD, ERMapper *.ERS | ppm   | Equivalent thorium   |
| 03 Processed SRTM and Landsat8 Data |                      | L8_b2_sr_cm                             | Geotiff *.TIF                 | -   | Mosaicked Landsat 8 band 2, surface reflectance, cloud masked  |
|                                     |                      | L8_b3_sr_cm                             | Geotiff *.TIF                 | -   | Mosaicked Landsat 8 band 3, surface reflectance, cloud masked  |
|                                     |                      | L8_b4_sr_cm                             | Geotiff *.TIF                 | -   | Mosaicked Landsat 8 band 4, surface reflectance, cloud masked  |
|                                     |                      | L8_b5_sr_cm                             | Geotiff *.TIF                 | -   | Mosaicked Landsat 8 band 5, surface reflectance, cloud masked  |
|                                     |                      | L8_b6_sr_cm                             | Geotiff *.TIF                 | -   | Mosaicked Landsat 8 band 6, surface reflectance, cloud masked  |
|                                     |                      | L8_b7_sr_cm                             | Geotiff *.TIF                 | -   | Mosaicked Landsat 8 band 7, surface reflectance, cloud masked  |
|                                     |                      | L8_NDWI_cm                              | Geotiff *.TIF                 | -   | Mosaicked Landsat normalized difference water index, cloud masked  |
|                                     |                      | L8_NDVI_cm                              | Geotiff *.TIF                 | -   | Mosaicked Landsat normalized difference vegetation index, cloud masked   |
|                                     |                      | L8_True_Color                           | Geotiff *.TIF                 | -   | Landsat 8 true colour composite (R:band 4, G: band 3, B: band 2), balanced contrast enhanced, cloud masked                       |
|                                     |                      | L8_B543                                 | Geotiff *.TIF                 | -   | Landsat 8 false colour composite, vegetation infrared (R:band 5, G: band 4, B: band 3), balanced contrast enhanced, cloud masked |
|                                     |                      | L8_B764                                 | Geotiff *.TIF                 | -   | Landsat 8 false colour composite, urban (R:band 7, G: band 6, B: band 4), balanced contrast enhanced, cloud masked               |
|                                     |                      | SRTM_DEM                                | Geotiff *.TIF                 | m   | NASA SRTM Version 3.0 Global digital elevation model   |
|                                     |                      | SRTM_Asp                                | Geotiff *.TIF                 | deg   | SRTM slope facing direction (aspect)   |
|                                     |                      | SRTM_Slp                                | Geotiff *.TIF                 | deg   | SRTM slope   |
| SRTM                                | SRTM_Curv            | Geotiff *.TIF                           | 1/m                           | SRTM profile curvature  |  |
| SRTM                                | SRTM_Geomorphon      | Geotiff *.TIF                           | -                             | SRTM geomorphic phonotype   |  |

| Main Directory                          | Subdirectory                     | Name                               | Format                         | Units   | Description  |
|---|----------------------------------|------------------------------------|--------------------------------|---|--|
| 04 Processed geophysical grids          | Magnetics                        | RTEI_1VD                           | Geosoft *.GRD, ERMapper *.ERS  | nT/m  | First vertical derivative of RTEI  |
|   | Magnetics                        | RTEI_2VD                           | Geosoft *.GRD, ERMapper *.ERS  | nT/m^2  | Second vertical derivative of RTEI   |
|   | Magnetics                        | RTEI_TDR                           | Geosoft *.GRD, ERMapper *.ERS  | radians                                       | Vertical tilt angle from RTEI  |
|   | Magnetics                        | RTEI_TDX                           | Geosoft *.GRD, ERMapper *.ERS  | radians                                       | Horizontal tilt angle from RTEI  |
|   | Magnetics                        | RTEI_HG                            | Geosoft *.GRD, ERMapper *.ERS  | nT/m  | Total horizontal derivative of RTEI  |
|   | Magnetics                        | RTEI_XGRAD                         | Geosoft *.GRD, ERMapper *.ERS  | nT/m  | X gradient of RTEI   |
|   | Magnetics                        | RTEI_YGRAD                         | Geosoft *.GRD, ERMapper *.ERS  | nT/m  | Y gradient of RTEI   |
|   | Magnetics                        | RTEI_Up200                         | Geosoft *.GRD, ERMapper *.ERS  | nT  | RTEI upward continuation, 200 m  |
|   | Magnetics                        | RTEI_Up1000                        | Geosoft *.GRD, ERMapper *.ERS  | nT  | RTEI upward continuation, 1000 m   |
|   | Magnetics                        | RTEI_Up5000                        | Geosoft *.GRD, ERMapper *.ERS  | nT  | RTEI upward continuation, 5000 m   |
|   | Radiometrics                     | rUTh                               | Geosoft *.GRD, ERMapper *.ERS  | -   | Equivalent uranium/equivalent Thorium  |
|   | Radiometrics                     | rUK                                | Geosoft *.GRD, ERMapper *.ERS  | X 10^-4                                       | Equivalent uranium/potassium   |
|   | Radiometrics                     | rThK                               | Geosoft *.GRD, ERMapper *.ERS  | X 10^-4                                       | Equivalent thorium/potassium   |
|   | Radiometrics                     | PCA1                               | Geosoft *.GRD, ERMapper *.ERS  | -   | Principal component analysis, first component                                      |
|   | Radiometrics                     | PCA2                               | Geosoft *.GRD, ERMapper *.ERS  | -   | Principal component analysis, second component                                     |
| Radiometrics                            | PCA3                             | Geosoft *.GRD, ERMapper *.ERS      | -                              | Principal component analysis, third component |  |
| 05 Processed geophysical images         | Magnetics                        | TMI                                | Geotiff *.TIF                  | nT  | Total magnetic intensity   |
|   | Magnetics                        | TMI_ss                             | Geotiff *.TIF                  | nT  | Total magnetic intensity, sun shaded inclination 45°, declination 45°              |
|   | Magnetics                        | AS                                 | Geotiff *.TIF                  | nT/m  | Analytic signal  |
|   | Magnetics                        | AS_ss                              | Geotiff *.TIF                  | nT/m  | Analytic signal, sun shaded inclination 45°, declination 45°                       |
|   | Magnetics                        | RTEI                               | Geotiff *.TIF                  | nT  | TMI reduced to the equator (inverted)  |
|   | Magnetics                        | RTEI_ss                            | Geotiff *.TIF                  | nT  | TMI reduced to the equator (inverted), sun shaded inclination 45°, declination 45° |
|   | Magnetics                        | RTEI_1VD                           | Geotiff *.TIF                  | nT/m  | First vertical derivative of RTEI  |
|   | Magnetics                        | RTEI_1VD_ss                        | Geotiff *.TIF                  | nT/m  | First vertical derivative of RTEI, sun shaded                                      |
|   | Magnetics                        | RTEI_1VD_bw                        | Geotiff *.TIF                  | nT/m  | First vertical derivative of RTEI, black and white                                 |
|   | Magnetics                        | RTEI_2VD                           | Geotiff *.TIF                  | nT/m^2  | Second vertical derivative of RTEI   |
|   | Magnetics                        | RTEI_2VD_ss                        | Geotiff *.TIF                  | nT/m^2  | Second vertical derivative of RTEI, sun shaded                                     |
|   | Magnetics                        | RTEI_2VD_bw                        | Geotiff *.TIF                  | nT/m^2  | Second vertical derivative of RTEI, black and white                                |
|   | Magnetics                        | RTEI_TDR                           | Geotiff *.TIF                  | radians                                       | Tilt derivative of RTEI  |
|   | Magnetics                        | RTEI_TDR_ss                        | Geotiff *.TIF                  | radians                                       | Tilt derivative of RTEI, sun shaded inclination 45°, declination 45°               |
|   | Magnetics                        | RTEI_XGRAD                         | Geotiff *.TIF                  | nT/m  | X gradient of RTEI   |
|   | Magnetics                        | RTEI_XGRAD_ss                      | Geotiff *.TIF                  | nT/m  | X gradient of RTEI, sun shaded inclination 45°, declination 45°                    |
|   | Magnetics                        | RTEI_YGRAD                         | Geotiff *.TIF                  | nT/m  | Y gradient of RTEI   |
|   | Magnetics                        | RTEI_YGRAD_ss                      | Geotiff *.TIF                  | nT/m  | Y gradient of RTEI, sun shaded inclination 45°, declination 45°                    |
|   | Magnetics                        | RTEI_Up200                         | Geotiff *.TIF                  | nT  | RTEI upward continuation, 200 m  |
|   | Magnetics                        | RTEI_Up1000                        | Geotiff *.TIF                  | nT  | RTEI upward continuation, 1000 m   |
|   | Magnetics                        | RTEI_Up5000                        | Geotiff *.TIF                  | nT  | RTEI upward continuation, 5000 m   |
|   | Magnetics                        | RTEI_Up200_resid                   | Geotiff *.TIF                  | nT  | Residual of RTEI upward continuation, 200 m  |
|   | Magnetics                        | RTEI_Up1000_resid                  | Geotiff *.TIF                  | nT  | Residual of RTEI upward continuation, 1000 m                                       |
|   | Magnetics                        | RTEI_Up5000_resid                  | Geotiff *.TIF                  | nT  | Residual of RTEI upward continuation, 5000 m                                       |
|   | Radiometrics                     | Ternary CMY                        | Geotiff *.TIF                  | -   | Radiometric ternary image, CMY colour model  |
|   | Radiometrics                     | Ternary RGB                        | Geotiff *.TIF                  | -   | Radiometric ternary image, RGB colour model  |
|   | Radiometrics                     | Dose                               | Geotiff *.TIF                  | nGy/h   | Dose rate  |
|   | Radiometrics                     | K                                  | Geotiff *.TIF                  | %   | Potassium  |
|   | Radiometrics                     | eU                                 | Geotiff *.TIF                  | ppm   | Equivalent uranium   |
|   | Radiometrics                     | eTh                                | Geotiff *.TIF                  | ppm   | Equivalent thorium   |
| Radiometrics                            | rUTh                             | Geotiff *.TIF                      | -                              | Equivalent uranium/equivalent thorium         |  |
| Radiometrics                            | rUK                              | Geotiff *.TIF                      | X 10^-4                        | Equivalent uranium/potassium                  |  |
| Radiometrics                            | rThK                             | Geotiff *.TIF                      | X 10^-4                        | Equivalent thorium/potassium                  |  |
| 06 Semi-automated interpretation layers | Magnetic Lineaments              | Sierra_Leone_CET_Lineament_Edges   | Shapefile *.SHP                | -   | Edges (contacts) derived from RTEI_TDX grid  |
|   | Magnetic Lineaments              | Sierra_Leone_CET_Lineament_Peaks   | Shapefile *.SHP                | -   | Peaks (positive responses) derived from RTEI_TDR grid                              |
|   | Magnetic Lineaments              | Sierra_Leone_CET_Lineament_Troughs | Shapefile *.SHP                | -   | Troughs (negative responses) derived from RTEI_TDR grid                            |
|   | Keating Correlation Coefficients | SL_Keating_Correlation_ASIG        | Shapefile *.SHP, Geosoft *.GDB | -   | Keating correlation results from the analytic signal grid                          |
|   | Keating Correlation Coefficients | SL_Keating_Correlation_TMI         | Shapefile *.SHP, Geosoft *.GDB | -   | Keating correlation results from the TMI grid                                      |
|   | Keating Correlation Coefficients | SL Keating Model Grids             | Geosoft *.GRD                  | -   | Keating correlation coefficient model grids (TMI and AS) used in each sub-block    |
|   | Keating Correlation Coefficients | SL_Keating.map                     | Geosoft *.Map                  | -   | Keating results as Geosoft MAP   |
|   | Keating Correlation Coefficients | SL_Keating_Readme_v3               | Word *.docx                    | -   | Keating README file  |
| Keating Correlation Coefficients        | Keating Channel Descriptions     | Text *.txt                         | -                              | channel descriptions for Keating GDB          |  |

| Main Directory           | Subdirectory                | Name                                     | Format                                       | Units  | Description  |
|--------------------------|-----------------------------|--|--|--|--|
| 07 Depth analysis layers | SPI                         | SierraLeone_SPI                          | Geosoft *.GDB                                | -  | Database of calculated depth values and altimeter adjustments  |
|                          | SPI                         | SPI Channel Descriptions                 | Text *.txt                                   | -  | channel descriptions for SPI GDB   |
|                          | SPI                         | SierraLeone_SPI_Depth                    | Geosoft *.GRD, ERMapper *.ERS, Geotiff *.tif | -  | Gridded SPI depth below ground surface   |
|                          | Euler                       | SierraLeone_Located_Euler                | Geosoft *.GDB                                | -  | Database of Located Euler depth solutions  |
|                          | Euler                       | SierraLeone_Located_Euler_SI1            | Shapefile *.SHP                              | -  | Shapefile of Located Euler depth solutions (SI=1)  |
|                          | Euler                       | SierraLeone_Located_Euler_SI2            | Shapefile *.SHP                              | -  | Shapefile of Located Euler depth solutions (SI=2)  |
|                          | Euler                       | Euler deconvolution analysis summary_v3  | Word *.docx                                  | -  | Euler README file  |
|                          | Euler                       | Euler deconvolution Channel Descriptions | Text *.txt                                   | -  | channel descriptions for Euler GDB   |
| 08 3D Inversions         |                             | SierraLeone_VOXI.map                     | Geosoft *.Map                                | -  | Packed Geosoft map of model block outlines and magnetic susceptibility at various depths and elevations                                      |
|                          |                             | SierraLeone_VOXI.geosoft_3dv             | Geosoft *.geosoft_3dv                        | -  | Geosoft packed map containing nine susceptibility models and MVI vectors, merged susceptibility model and isosurface                         |
|                          |                             | SierraLeone_VOXI_Block_Models.zip        | ZIP  | -  | VOXI MVI model sessions for each of the nine individual blocks   |
|                          |                             | SierraLeone_Nationwide_VOXI.map          | Geosoft *.Map                                | -  | Packed Geosoft map of the nationwide block outline and magnetic susceptibility at various depths and elevations                              |
|                          |                             | SierraLeone_Nationwide_VOXI.geosoft_3dv  | Geosoft *.geosoft_3dv                        | -  | Geosoft packed map containing the nationwide susceptibility model, MVI vectors, and isosurface   |
|                          |                             | SierraLeone_Nationwide.geosoft_voxi.data | ZIP  | -  | VOXI MVI model session for country wide inversion  |
|                          |                             | SL_VOXI_Regional_Readme_v3.docx          | Word *.docx                                  | -  | VOXI README file   |
|                          |                             | Bagbe Alkalic Complex.geosoft_3dv        | Geosoft *.geosoft_3dv                        | -  | Geosoft 3D packed map containing the susceptibility model, MVI vectors, and isosurface for the Bagbe Alkali Complex                          |
|                          |                             | Bagbe_Alkalic_Complex_VOXI.map           | Geosoft *.Map                                | -  | Geosoft 2D packed map containing the block outline and magnetic susceptibility at various depths and elevations for the Bagbe Alkali Complex |
|                          |                             | Freetown Layered Complex.geosoft_3dv     | Geosoft *.geosoft_3dv                        | -  | Geosoft 3D packed map containing the susceptibility model, MVI vectors, and isosurface for the Freetown Complex                              |
|                          |                             | Freetown_Layered_Complex_VOXI.map        | Geosoft *.Map                                | -  | Geosoft 2D packed map containing the block outline and magnetic susceptibility at various depths and elevations for the Freetown Complex     |
|                          |                             | Gori Hills.geosoft_3dv                   | Geosoft *.geosoft_3dv                        | -  | Geosoft 3D packed map containing the susceptibility model, MVI vectors, and isosurface for the Gori Hills                                    |
|                          |                             | Gori_Hills_VOXI.map                      | Geosoft *.Map                                | -  | Geosoft 2D packed map containing the block outline and magnetic susceptibility at various depths and elevations for the Gori Hills           |
|                          |                             | Kambui Hills E.geosoft_3dv               | Geosoft *.geosoft_3dv                        | -  | Geosoft 3D packed map containing the susceptibility model, MVI vectors, and isosurface for the Kambui Hills E                                |
|                          |                             | Kambui Hills W.geosoft_3dv               | Geosoft *.geosoft_3dv                        | -  | Geosoft 2D packed map containing the block outline and magnetic susceptibility at various depths and elevations for the Kambui Hills E       |
|                          |                             | Kambui_Hills_E_VOXI.map                  | Geosoft *.Map                                | -  | Geosoft 3D packed map containing the susceptibility model, MVI vectors, and isosurface for the Kambui Hills W                                |
|                          |                             | Kambui_Hills_W_VOXI.map                  | Geosoft *.Map                                | -  | Geosoft 2D packed map containing the block outline and magnetic susceptibility at various depths and elevations for the Kambui Hills W       |
|                          |                             | Lake Mabesi.geosoft_3dv                  | Geosoft *.geosoft_3dv                        | -  | Geosoft 3D packed map containing the susceptibility model, MVI vectors, and isosurface for Lake Mabesi                                       |
|                          |                             | Lake_Mabesi_VOXI.map                     | Geosoft *.Map                                | -  | Geosoft 2D packed map containing the block outline and magnetic susceptibility at various depths and elevations for Lake Mabesi              |
|                          |                             | Loko Hills.geosoft_3dv                   | Geosoft *.geosoft_3dv                        | -  | Geosoft 3D packed map containing the susceptibility model, MVI vectors, and isosurface for the Loko Hills                                    |
|                          |                             | Loko_Hills_VOXI.map                      | Geosoft *.Map                                | -  | Geosoft 2D packed map containing the block outline and magnetic susceptibility at various depths and elevations for the Loko Hills           |
|                          |                             | Magburaka.geosoft_3dv                    | Geosoft *.geosoft_3dv                        | -  | Geosoft 3D packed map containing the susceptibility model, MVI vectors, and isosurface for the Magburaka area                                |
|                          |                             | Magburaka_VOXI.map                       | Geosoft *.Map                                | -  | Geosoft 2D packed map containing the block outline and magnetic susceptibility at various depths and elevations for Magburaka area           |
|                          |                             | Nimini Hills.geosoft_3dv                 | Geosoft *.geosoft_3dv                        | -  | Geosoft 3D packed map containing the susceptibility model, MVI vectors, and isosurface for the Nimini Hills                                  |
|                          |                             | Nimini_Hills_VOXI.map                    | Geosoft *.Map                                | -  | Geosoft 2D packed map containing the block outline and magnetic susceptibility at various depths and elevations for the Nimini Hills         |
|                          |                             | Okra Hills.geosoft_3dv                   | Geosoft *.geosoft_3dv                        | -  | Geosoft 3D packed map containing the susceptibility model, MVI vectors, and isosurface for the Okra Hills                                    |
|                          |                             | Okra_Hills_VOXI.map                      | Geosoft *.Map                                | -  | Geosoft 2D packed map containing the block outline and magnetic susceptibility at various depths and elevations for the Okra Hills           |
|                          |                             | Pendembu.geosoft_3dv                     | Geosoft *.geosoft_3dv                        | -  | Geosoft 3D packed map containing the susceptibility model, MVI vectors, and isosurface for the Pendembu area                                 |
|                          | Pendembu_VOXI.map           | Geosoft *.Map                            | -  | Geosoft 2D packed map containing the block outline and magnetic susceptibility at various depths and elevations for the Pendembu area  |  |
|                          | Sembehun.geosoft_3dv        | Geosoft *.geosoft_3dv                    | -  | Geosoft 3D packed map containing the susceptibility model, MVI vectors, and isosurface for the Sembehun                                |  |
|                          | Sembehun_VOXI.map           | Geosoft *.Map                            | -  | Geosoft 2D packed map containing the block outline and magnetic susceptibility at various depths and elevations for the Sembehun area  |  |
|                          | Tonkolili.geosoft_3dv       | Geosoft *.geosoft_3dv                    | -  | Geosoft 3D packed map containing the susceptibility model, MVI vectors, and isosurface for the Tonkolili area                          |  |
|                          | Tonkolili_VOXI.map          | Geosoft *.Map                            | -  | Geosoft 2D packed map containing the block outline and magnetic susceptibility at various depths and elevations for the Tonkolili area |  |
|                          | High_Resolution_VOXI_Models | ZIP                                      | -  | VOXI MVI model sessions for each of the 17 individual blocks   |  |
|                          | SL_VOXI_Target_Readme_v3    | Word *.docx                              | -  | Target Area VOXI README file   |  |

| Main Directory                       | Subdirectory                      | Name  | Format                         | Units  | Description  |
|--------------------------------------|-----------------------------------|---|--------------------------------|--|--|
| 09 Interpretation Maps PDF           | 250k                              | Geophysical Interpretation - Basement Geology Freetown      | PDF                            | -  | Basement geology interpretation map, Freetown sheet, 1:250,000     |
|                                      | 250k                              | Geophysical Interpretation - Basement Geology Gbangbama     | PDF                            | -  | Basement geology interpretation map, Gbangbama sheet, 1:250,000    |
|                                      | 250k                              | Geophysical Interpretation - Basement Geology Pujehun       | PDF                            | -  | Basement geology interpretation map, Pujehun sheet, 1:250,000      |
|                                      | 250k                              | Geophysical Interpretation - Basement Geology Moyamba       | PDF                            | -  | Basement geology interpretation map, Moyamba sheet, 1:250,000      |
|                                      | 250k                              | Geophysical Interpretation - Surficial Geology Batkanu      | PDF                            | -  | Surficial geology interpretation map, Batkanu sheet, 1:250,000     |
|                                      | 250k                              | Geophysical Interpretation - Surficial Geology Daru         | PDF                            | -  | Surficial geology interpretation map, Daru sheet, 1:250,000        |
|                                      | 250k                              | Geophysical Interpretation - Surficial Geology Freetown     | PDF                            | -  | Surficial geology interpretation map, Freetown sheet, 1:250,000    |
|                                      | 250k                              | Geophysical Interpretation - Surficial Geology Gbangbama    | PDF                            | -  | Surficial geology interpretation map, Gbangbama sheet, 1:250,000   |
|                                      | 250k                              | Geophysical Interpretation - Surficial Geology Kabala       | PDF                            | -  | Surficial geology interpretation map, Kabala sheet, 1:250,000      |
|                                      | 250k                              | Geophysical Interpretation - Surficial Geology Kissidugu    | PDF                            | -  | Surficial geology interpretation map, Kissidugu sheet, 1:250,000   |
|                                      | 250k                              | Geophysical Interpretation - Surficial Geology Magburaka    | PDF                            | -  | Surficial geology interpretation map, Magburaka sheet, 1:250,000   |
|                                      | 250k                              | Geophysical Interpretation - Surficial Geology Moyamba      | PDF                            | -  | Surficial geology interpretation map, Moyamba sheet, 1:250,000     |
|                                      | 250k                              | Geophysical Interpretation - Surficial Geology Pendembu     | PDF                            | -  | Surficial geology interpretation map, Pendembu sheet, 1:250,000    |
|                                      | 250k                              | Geophysical Interpretation - Surficial Geology Pujehun      | PDF                            | -  | Surficial geology interpretation map, Pujehun sheet, 1:250,000     |
|                                      | 750k                              | Geophysical Interpretation - Basement Geology Sierra Leone  | PDF                            | -  | Basement geology interpretation map, countrywide, 1:750,000        |
|                                      | 750k                              | Geophysical Interpretation - Surficial Geology Sierra Leone | PDF                            | -  | Surficial geology interpretation map, countrywide, 1:750,000       |
|                                      | 500k                              | Favourability Map for Bauxite                               | PDF                            | -  | Bauxite Favourability Map, countrywide, 1:500,00                   |
|                                      | 500k                              | Favourability Map for Gold                                  | PDF                            | -  | Gold Favourability Map, countrywide, 1:500,00                      |
| 500k                                 | Favourability Map for Iron        | PDF   | -                              | Iron Favourability Map, countrywide, 1:500,00        |  |
| 500k                                 | Favourability Map for Kimberlites | PDF   | -                              | Kimberlites Favourability Map, countrywide, 1:500,00 |  |
| 500k                                 | Favourability Map for Nickel      | PDF   | -                              | Nickel Favourability Map, countrywide, 1:500,00      |  |
| 500k                                 | Favourability Map for Rutile      | PDF   | -                              | Rutile Favourability Map, countrywide, 1:500,00      |  |
| 10 Kimberlite Targets                |                                   | east_picks  | Geosoft *.GDB                  | -  | East block targets   |
|                                      |                                   | west_picks  | Geosoft *.GDB                  | -  | West block targets   |
|                                      |                                   | Kimberlite_Targets  | Shapefile *.SHP                | -  | Country wide targets   |
|                                      |                                   | Kimberlite Targets Channel Description                      | Text *.txt                     | -  | Channel descriptions for east/west/shapefile/appendix              |
|                                      |                                   | Kimberlite Targeting Report_v3a                             | Word *.docx, PDF               | -  | Targeting report (pdf)   |
|                                      | Appendix 1                        | Excel *.xlsx  | -                              | Targets  |  |
| 11 Mineral Favourability             |                                   | Bauxite_Favourability                                       | ERMMapper *.ERS, Geotiff *.TIF | %  | Bauxite favourability  |
|                                      |                                   | Gold_Favourability  | ERMMapper *.ERS, Geotiff *.TIF | %  | Gold favourability   |
|                                      |                                   | Nickel_Favourability  | ERMMapper *.ERS, Geotiff *.TIF | %  | Nickel favourability   |
|                                      |                                   | Rutile_Favourability  | ERMMapper *.ERS, Geotiff *.TIF | %  | Rutile favourability   |
|                                      |                                   | Fe_Targets  | Shapefile *.SHP                | -  | Iron targets   |
|                                      | README_v3                         | Word *.docx   | -                              | Mineral favourability readme                         |  |
| 12 Report                            |                                   | Sierra Leone Interpretation Report_v3                       | Word *.docx, PDF               | -  | Interpretation report  |
| 13 Interpretation                    |                                   | Interpretation Maps GIS                                     | ZIP                            | -  | ArcGIS MXD package   |
|                                      |                                   | SL Interpretation Maps GIS_Readme_v2                        | Word *.docx                    | -  | Readme file  |
| 14 Master GIS                        |                                   | Geology   | ZIP                            |  | Geology vector and geotiff images, NMA mineral occurrence database |
|                                      |                                   | Geophysical Grids   | ZIP                            |  | Geophysical grids  |
|                                      |                                   | Geophysical Images  | ZIP                            |  | Geophysical grid images  |
|                                      |                                   | Geophysical Interpretation - Master GIS Sierra Leone_10.0   | ESRI MXD                       |  | ArcGIS v10.0 MXD project file                                      |
|                                      |                                   | Geophysical Interpretation - Master GIS Sierra Leone_10.3   | ESRI MXD                       |  | ArcGIS v10.3 MXD project file                                      |
|                                      |                                   | Geophysical Interpretation - Master GIS Sierra Leone_10.8.1 | ESRI MXD                       |  | ArcGIS v10.8.1 MXD project file                                    |
|                                      |                                   | Geophysical Interpretation                                  | ZIP                            |  | Geophysical interpretation vectors                                 |
|                                      |                                   | Geophysical Layers  | ZIP                            |  | Manual and semi-automated geophysical interpretation vectors       |
|                                      |                                   | Index   | ZIP                            |  | Survey and sheet index maps  |
|                                      |                                   | Logos   | ZIP                            |  | Company logos  |
|                                      | Planimetry                        | ZIP   |                                | Planimetry   |  |
|                                      | SL_Master GIS_Readme              | Word *.docx   |                                | Readme file  |  |
| For more information, please contact |                                   |   |                                |  |  |
|                                      | Prince Cuffey                     | Joseph Lebbie   |                                |  |  |
|                                      | Director of Geological Survey     | Deputy Director of Geological Survey                        |                                |  |  |
|                                      | National Minerals Agency          | National Minerals Agency                                    |                                |  |  |
|                                      | New England Ville                 | New England Ville   |                                |  |  |
|                                      | Freetown, Sierra Leone            | Freetown, Sierra Leone                                      |                                |  |  |
|                                      | Email: pcuffey@nma.gov.sl         | Email: jlebbie@nma.gov.sl                                   |                                |  |  |