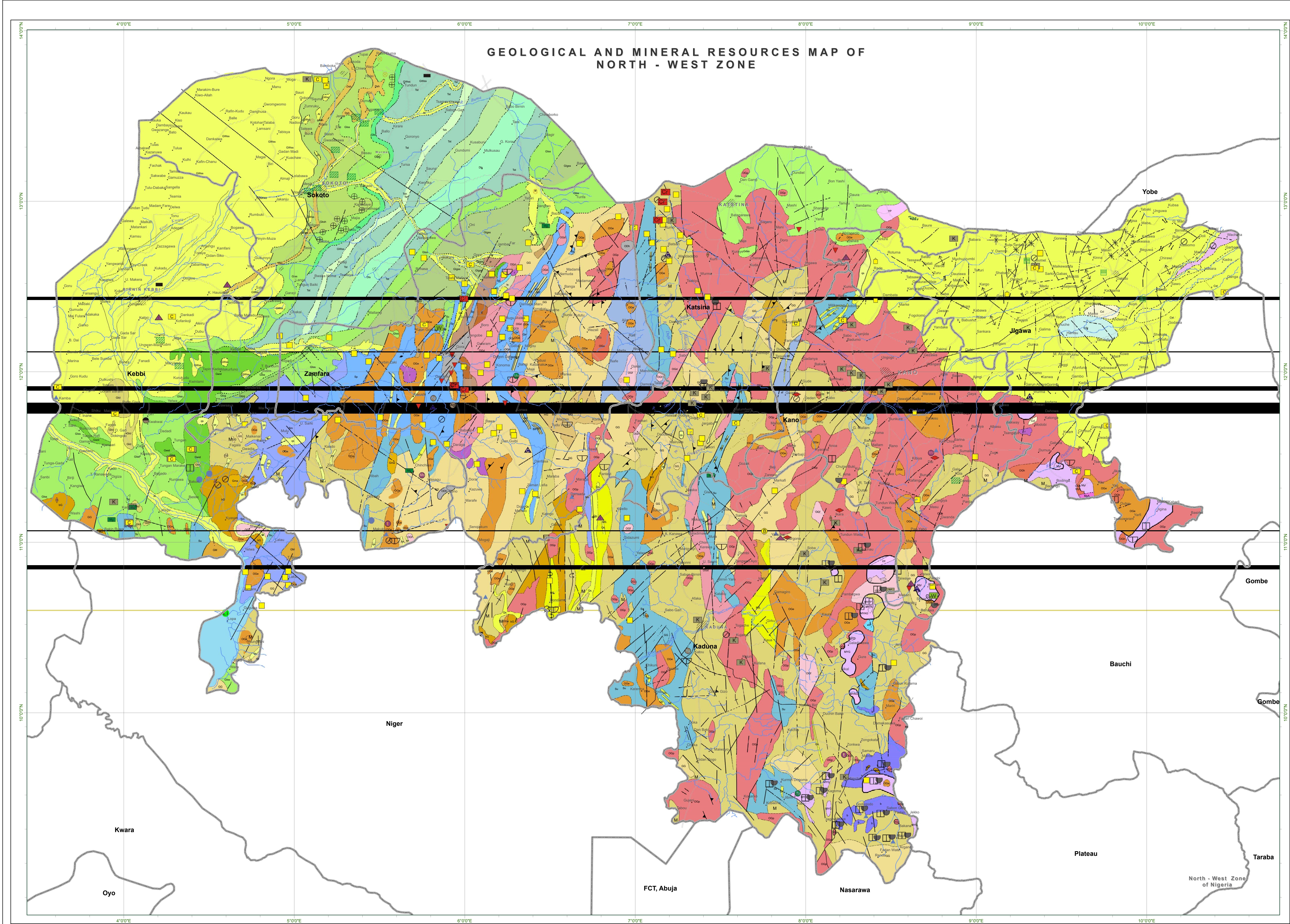




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MAP HISTORY

This first edition depicts the Geological and Mineral resources of South West Zone collated from the data compiled by NGS state offices. In 2004, the existing data on the geological and mineral resources of the zone was reviewed for each state under the permission of former Director General (Prof. Siyan Malomo), supervised by Mr. O. Ezewu (Zonal Coordinator). Detailed Geological mapping and field checks were carried out especially in areas suspected to be mineralized.

"ZONAL MINERAL RESOURCES MAP OF NIGERIA"
Data collection: Between 2019 - 2025, NGS has generated more recent mineral location database to update the map content. Supervised by Director Economic Geology (Mr. Isaac Okwor)

Compilation and Checking/ Cartographic Design and GIS Map Reproduction: Supervised by: Mr. Ayodele A. Omotehinise (Chief Technical Officer, Cartography)

Entire Project undertaken by NGS under the supervision of the Director General.

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PROF. OLUSEGUN O. IGE., FNMGS
Director General



EXPLANATIONS

- Al Alluvium
- Cst Sand and Clay
- Ccl Clay
- Cst Siltstone
- Clb Limestone
- B Basalt
- APG Applogranite
- GWst Sandstone and Clay
- Gksh Shale (Phosphate nodules)
- Dsh Limestone and shale
- Tst Shale, phosphate nodules and siltstone
- Tst Sandstone, Clays and Shale
- Dls Limestone and shale
- Tsh Shale
- Wst Sandstone, Siltstone and clay
- Gpgr Pebbles and Grit
- Glgc Clay and Grit
- Gls Clay Grit and pebbles
- Glsv Gravel and Sand
- r Rhyolite
- ts Tuff with Sandstone
- V Meta Volcanic, Meta Sediments with pebbly schist
- MYG Biotite granite
- MYGP Granite Porphyry
- MYFG Pyroxene fayalite granite
- MYFP Fayalite quartz porphyry
- MYAG Arfvedsonite granite
- YP Quartz Porphyry
- MyA Trachy-andesite
- MyS Syenite, Quartz-Syenite and Gabbro
- MyI Igneimbrite
- MyG Biotite granite
- MyP Porphyry Quartz Porphyry
- ODH Hypersthene Quartz- diorite
- OGd Biotite and biotite hornblende granodiorite
- OGs Syenite mainly of pyroxene diorite composition
- OGh Coarse - grained hornblende Granite
- OGp Porphyritic Granite/Coarse porphyritic biotite and biotite hornblende Granite
- OGf Fine grained biotite granite
- OGm Medium to coarse - grained biotite granite
- OGu Undifferentiated older Granite, migmatite and granite, gneisses
- SI Meta intrusives
- Sa Amphibole schist, Amphibolite
- BIF Banded Iron Formation
- Sp Slate, phyllite or meta - siltstone
- Sf Fine - grained flaggy quartzites and quartz schist
- Qs Quartzites
- Sm Pelitic Schist/Muscovite Schist
- MS Sand, Clay and Mangrove Swamps
- Su Undifferentiated schist including phyllite, and amphibolitic layers
- Sc Meta Conglomerate
- St Meta-Sandstone
- Opg Porphyroblastic gneiss
- GG Granite Gneiss
- Gh Biotite Gneiss
- Gma Migmatitic augen Gneiss
- Gm Migmatitic Gneiss
- M Migmatite
- P Pegmatite
- qs Silicified sheared rocks, large quartz veins

- Geological boundary definite
- Geological boundary approximate
- Geological boundary inferred
- Geological boundary transitional
- Strike and dip of bedding
- Anticlinal axis
- Synclinal axis
- Overtured Antiform
- Overtured Synform
- Fracture/Fault definite
- Fracture/Faults approximate
- Fault showing sense of movement
- Sand dunes showing probable direction of movement
- Fault showing dip direction from geophysical maps
- Fault with silicified dykes
- Ring Complex
- Roads
- Railway
- River

- | | | |
|------------------|------------------------|------------------------|
| Rutile | Phosphate | INDUSTRIAL |
| Almandine garnet | Baryte | |
| Silver | Bauxitic clay | |
| Tantalite | Feldspar | |
| Wolframite | Glass_sand | |
| Cassiterite | Kaolin/Kaolinitic clay | |
| Chromite | Limestone | |
| Columbite | Marl | |
| Copper Minerals | Mica | |
| Iron | Talc, Asbestos | |
| Manganese | Silliminite | PRECIOUS SEMI PRECIOUS |
| Molybdenite | Gold | |
| Quartz | Gemstone | |
| Sand | Topaz | |
| Talc, Asbestos | Lithium | BUILDING MATERIALS |
| Silliminite | | |
| Dimension stone | | |

- | | | |
|--|---------------------|------------------------------|
| Chad Formation | Chad Formation | NEOGENE |
| Swandu Fm., Gamba | Mid Eocene | PALEOGENE |
| Kalambama and Dange Fms (Sokoto Group) | Paleocene | |
| Taloka, Dukamaje and Wurno Formation | Maastrichtian | CRETACEOUS |
| Illo Formation | Pre - Maastrichtian | |
| Gundumi Formation | | |
| Volcanics / Sedimentary Series | Pre - Cretaceous | |
| Younger Granites series | Per Altah Grant | JURASSIC |
| Older Granitoids | | PAN AFRICAN (CAMBRIAN) |
| Meta -Sedimentary /meta Volcanic Complex | | CRYSTALLINE BASEMENT COMPLEX |
| Migmatite Gneiss Complex | | PRE - CAMBRIAN |

