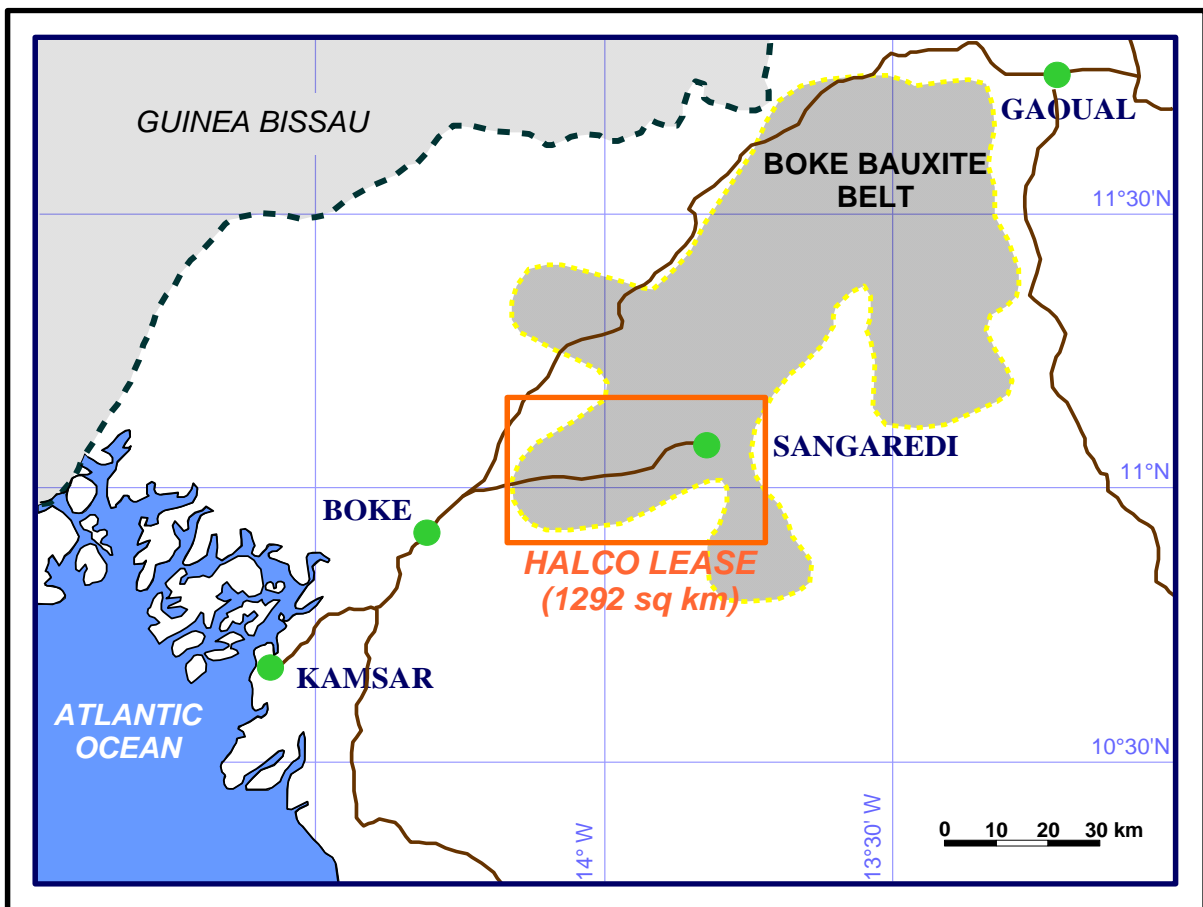


Images from Bauxite Mining Operations in Guinea

Images and information to assist with the Western Australian Curriculum 2A/ 2B Geography.



Exploration Drilling in Guinea

- regional 600 x 600 m to detailed 37.5 x 37.5 m drilling grids
- samples taken every 1 m
- Auger Drilling



Analytical Laboratory Testing

- samples analyzed by XRF and LECO to determine Al_2O_3 , SiO_2 , Fe_2O_3 , TiO_2 , LOI, trace elements



Overburden Stripping

- Caterpillar D-10 Bulldozers



Blasting



Loading and Transport

- Caterpillar 992 Front End Loader



Truck Hauling

- 11 CAT 777B & 5 CAT 777D (85 t -92 t cap)
- total installed capacity of 15 Mtpa
- average haul distance 10.6 km return

Rail to Port

- 900,000 tonnes product stockpile capacity
- 6 front-end loaders CAT 992 C
- average loading time 120 minutes / rake
- 6 trains per day @ 42 KT
- 100 to 120 cars per train
- 82 tonnes per car
- 135 kms to Kamsar



Rail Car Dumping

- dumps ore from rail cars into primary crusher
- 2 crushing lines at combined capacity of 3000 tph



Raw material Handling

- 2 stacker / reclaimers @ 2000 tph each
- 700,000 tonnes stockpile capacity



Processing Plant

- 3 x 900 tph rotary kilns dry at 950°C to reduce moisture from 12.5 to 6%
- 12 km of conveyor belts
- 1 micro-granulation plant (200 tph) makes pellets from the dust



Ship Loading

- 4500 tph loading rate
- total 280 ships per year
- “Panamax” ships - 50 to 70 kt capacity

Rehabilitation

- 147 ha reforested
- 94 ha at Bidikoum
- 42 ha at Sangarédi
- 11 ha at Silidara
- 40 ha planned in 2003 at Silidara



For more information about Alcoa's operations in Guinea visit:
<http://www.alcoa.com/guinea/en/home.asp>