

## DAFTAR ISI

|   |                                     |
|---|-------------------------------------|
| <b>HALAMAN JUDUL .....</b>                    | <b>i</b>                            |
| <b>HALAMAN PERSEMBAHAN .....</b>              | <b>Error! Bookmark not defined.</b> |
| <b>UCAPAN TERIMAKASIH .....</b>               | <b>Error! Bookmark not defined.</b> |
| <b>SARI.....</b>                              | <b>Error! Bookmark not defined.</b> |
| <b>DAFTAR ISI.....</b>                        | <b>1</b>                            |
| <b>DAFTAR TABEL .....</b>                     | <b>5</b>                            |
| <b>DAFTAR GAMBAR.....</b>                     | <b>6</b>                            |
| <b>DAFTAR LAMPIRAN.....</b>                   | <b>8</b>                            |
| <b>BAB 1 PENDAHULUAN .....</b>                | <b>Error! Bookmark not defined.</b> |
| 1.1. Latar Belakang .....                     | <b>Error! Bookmark not defined.</b> |
| 1.2. Rumusan Masalah .....                    | <b>Error! Bookmark not defined.</b> |
| 1.3. Maksud dan Tujuan.....                   | <b>Error! Bookmark not defined.</b> |
| 1.4. Lokasi dan Waktu Penelitian.....         | <b>Error! Bookmark not defined.</b> |
| 1.5. Hasil Penelitian .....                   | <b>Error! Bookmark not defined.</b> |
| 1.6. Manfaat Penelitian.....                  | <b>Error! Bookmark not defined.</b> |
| <b>BAB 2 METODOLOGI DAN DASAR TEORI .....</b> | <b>Error! Bookmark not defined.</b> |
| 2.1. Metode Penelitian.....                   | <b>Error! Bookmark not defined.</b> |
| 2.2. Data dan Peralatan Penelitian.....       | <b>Error! Bookmark not defined.</b> |
| 2.3. Kajian Pustaka.....                      | <b>Error! Bookmark not defined.</b> |
| 2.4. Dasar Teori.....                         | <b>Error! Bookmark not defined.</b> |
| 2.4.1. Batuan Ultrabasa.....                  | <b>Error! Bookmark not defined.</b> |
| 2.4.1.1. Klasifikasi Batuan Ultrabasa .....   | <b>Error! Bookmark not defined.</b> |
| 2.4.2. Batuan Basa .....                      | <b>Error! Bookmark not defined.</b> |
| 2.4.2.1. Klasifikasi Batuan Basa.....         | <b>Error! Bookmark not defined.</b> |
| 2.4.3. Keterdapatan Batuan Ultrabasa.....     | <b>Error! Bookmark not defined.</b> |
| 2.4.3.1. Orogenic Peridotite .....            | <b>Error! Bookmark not defined.</b> |
| 2.4.3.2. Peridotite Xenolith.....             | <b>Error! Bookmark not defined.</b> |
| 2.4.3.3. Oceanic Peridotite / Ofiolit.....    | <b>Error! Bookmark not defined.</b> |
| 2.4.4. Sikuen Ofiolit.....                    | <b>Error! Bookmark not defined.</b> |
| 2.4.5. Mineral Logam Nikel.....               | <b>Error! Bookmark not defined.</b> |

- 2.4.5.1. Nikel Sulfida..... **Error! Bookmark not defined.**
- 2.4.5.2. Nikel Laterit..... **Error! Bookmark not defined.**
- 2.4.6. Sistem Endapan Laterit ..... **Error! Bookmark not defined.**
  - 2.4.6.1. Profil Laterit ..... **Error! Bookmark not defined.**
  - 2.4.6.2. Faktor-faktor yang Mempengaruhi Endapan Laterit. **Error! Bookmark not defined.**

**BAB 3 GEOLOGI REGIONAL** ..... **Error! Bookmark not defined.**

- 3.1. Fisiografi Regional ..... **Error! Bookmark not defined.**
- 3.2. Stratigrafi Regional ..... **Error! Bookmark not defined.**
- 3.3. Struktur Geologi dan Tektonik Regional ..... **Error! Bookmark not defined.**

**BAB 4 GEOLOGI DAERAH PENELITIAN**..... **Error! Bookmark not defined.**

- 4.1. Geomorfologi Daerah Penelitian..... **Error! Bookmark not defined.**
  - 4.1.1. Dasar Pembagian Satuan Geomorfologi ..... **Error! Bookmark not defined.**
  - 4.1.2. Satuan Perbukitan Ofiolit..... **Error! Bookmark not defined.**
  - 4.1.3. Satuan Lembah Denudasi ..... **Error! Bookmark not defined.**
  - 4.1.4. Satuan Bukit Denudasi..... **Error! Bookmark not defined.**
  - 4.1.5. Satuan Dataran Pantai ..... **Error! Bookmark not defined.**
  - 4.1.6. Pola Pengaliran ..... **Error! Bookmark not defined.**
- 4.2. Stratigrafi Daerah Penelitian ..... **Error! Bookmark not defined.**
  - 4.2.1. Pembagian Litostratigrafi..... **Error! Bookmark not defined.**
  - 4.2.2. Satuan Harzburgit ..... **Error! Bookmark not defined.**
    - 4.2.2.1. Dasar Penamaan ..... **Error! Bookmark not defined.**
    - 4.2.2.2. Distribusi ..... **Error! Bookmark not defined.**
    - 4.2.2.3. Deskripsi Litologi ..... **Error! Bookmark not defined.**
  - 4.2.3. Satuan Dunit..... **Error! Bookmark not defined.**
    - 4.2.3.1. Dasar Penamaan ..... **Error! Bookmark not defined.**
    - 4.2.3.2. Distribusi ..... **Error! Bookmark not defined.**
    - 4.2.3.3. Deskripsi Litologi ..... **Error! Bookmark not defined.**
    - 4.2.3.4. Mekanisme Pembentukan..... **Error! Bookmark not defined.**
    - 4.2.3.5. Umur Satuan ..... **Error! Bookmark not defined.**
    - 4.2.3.6. Hubungan Dengan Batuan Lain ..... **Error! Bookmark not defined.**
  - 4.2.4. Satuan Basalt..... **Error! Bookmark not defined.**

|          |  |                                     |
|----------|--|-------------------------------------|
| 4.2.4.1. | Dasar Penamaan .....                     | <b>Error! Bookmark not defined.</b> |
| 4.2.4.2. | Distribusi .....                         | <b>Error! Bookmark not defined.</b> |
| 4.2.4.3. | Deskripsi Litologi .....                 | <b>Error! Bookmark not defined.</b> |
| 4.2.4.4. | Mekanisme Pembentukan .....              | <b>Error! Bookmark not defined.</b> |
| 4.2.4.5. | Umur Satuan .....                        | <b>Error! Bookmark not defined.</b> |
| 4.2.4.6. | Hubungan Dengan Batuan Lain .....        | <b>Error! Bookmark not defined.</b> |
| 4.2.5.   | Satuan Batupasir .....                   | <b>Error! Bookmark not defined.</b> |
| 4.2.5.1. | Dasar Penamaan .....                     | <b>Error! Bookmark not defined.</b> |
| 4.2.5.2. | Distribusi .....                         | <b>Error! Bookmark not defined.</b> |
| 4.2.5.3. | Deskripsi Litologi .....                 | <b>Error! Bookmark not defined.</b> |
| 4.2.5.4. | Mekanisme Pembentukan .....              | <b>Error! Bookmark not defined.</b> |
| 4.2.5.5. | Umur Satuan .....                        | <b>Error! Bookmark not defined.</b> |
| 4.2.5.6. | Hubungan Dengan Batuan Lain .....        | <b>Error! Bookmark not defined.</b> |
| 4.3.     | <i>Soil</i> Laterit .....                | <b>Error! Bookmark not defined.</b> |
| 4.4.     | Tanah Aluvial .....                      | <b>Error! Bookmark not defined.</b> |
| 4.5.     | Struktur Geologi .....                   | <b>Error! Bookmark not defined.</b> |
| 4.5.1.   | Sesar Mendatar Kanan Kalang Batang ..... | <b>Error! Bookmark not defined.</b> |
| 4.5.2.   | Sesar Mendatar Kiri Halaban .....        | <b>Error! Bookmark not defined.</b> |
| 4.5.3.   | Sesar Mendatar Kiri Kalang Batang .....  | <b>Error! Bookmark not defined.</b> |
| 4.5.4.   | Sesar Mendatar Kiri Halaban .....        | <b>Error! Bookmark not defined.</b> |
| 4.5.5.   | Kekar Arah N-S .....                     | <b>Error! Bookmark not defined.</b> |
| 4.5.6.   | Kekar Arah NW-SE .....                   | <b>Error! Bookmark not defined.</b> |
| 4.6.     | Sejarah Geologi .....                    | <b>Error! Bookmark not defined.</b> |
| 4.7.     | Terangkatnya Ophiolit Pulau Sebuku ..... | <b>Error! Bookmark not defined.</b> |

**BAB 5 GEOKIMIA LATERIT NIKEL BATUAN ULTRABASA DAN BASA.....** **Error! Bookmark not defined.**

|        |   |                                     |
|--------|---|-------------------------------------|
| 5.1.   | Lateritisasi Batuan Ultrabasa .....         | <b>Error! Bookmark not defined.</b> |
| 5.1.1. | CB 100007 .....                             | <b>Error! Bookmark not defined.</b> |
| 5.1.2. | CB 100010 .....                             | <b>Error! Bookmark not defined.</b> |
| 5.1.3. | CB 100042 .....                             | <b>Error! Bookmark not defined.</b> |
| 5.1.4. | Pembahasan Geokimia Laterit Ultrabasa ..... | <b>Error! Bookmark not defined.</b> |
| 5.2.   | Lateritisasi Batuan Basa .....              | <b>Error! Bookmark not defined.</b> |

|                                    |   |                                     |
|------------------------------------|---|-------------------------------------|
| 5.2.1.                             | SDD 0004.....                                 | <b>Error! Bookmark not defined.</b> |
| 5.2.2.                             | CB 100053 .....                               | <b>Error! Bookmark not defined.</b> |
| 5.2.3.                             | CB 100054 .....                               | <b>Error! Bookmark not defined.</b> |
| 5.2.4.                             | Pembahasan Geokimia Laterit Batuan Basa ..... | <b>Error! Bookmark not defined.</b> |
| <b>BAB 6 POTENSI GEOLOGI .....</b> |   | <b>Error! Bookmark not defined.</b> |
| 6.1.                               | Potensi Positif.....                          | <b>Error! Bookmark not defined.</b> |
| 6.2.                               | Potensi Negatif .....                         | <b>Error! Bookmark not defined.</b> |
| <b>BAB 7 KESIMPULAN .....</b>      |   | <b>Error! Bookmark not defined.</b> |
| <b>DAFTAR PUSTAKA.....</b>         |   | <b>Error! Bookmark not defined.</b> |

## DAFTAR TABEL

- Tabel 1.1.** Koordinat Daerah Penelitian ..... **Error! Bookmark not defined.**
- Tabel 1.2** Pencapaian Lokasi..... **Error! Bookmark not defined.**
- Tabel 1.3** Tabel Pelaksanaan Penelitian ..... **Error! Bookmark not defined.**
- Tabel 2.1.** Anggota Kelompok Mineral Nikel (Dalam BGS, 2008) .....**Error! Bookmark not defined.**
- Tabel 2.2.** Anggota Kelompok Mineral Nikel (Lanjutan) (Dalam BGS, 2008).....**Error! Bookmark not defined.**
- Tabel 4.1.** Hasil XRF..... **Error! Bookmark not defined.**
- Tabel 4.3.** Hasil Analisis Kekar LP 132..... **Error! Bookmark not defined.**
- Tabel 4.4.** Hasil Analisis Kekar LP 51 ..... **Error! Bookmark not defined.**

## DAFTAR GAMBAR

- Gambar 1.1** Pencapaian Lokasi dan Peta Indeks Daerah Penelitian .....**Error! Bookmark not defined.**
- Gambar 2.1** Diagram Alir Penelitian.....**Error! Bookmark not defined.**
- Gambar 2.2.** Klasifikasi Batuan Ultrabasa menurut Streckeisen (1973)..... **Error! Bookmark not defined.**
- Gambar 2.3.** Tipe Mantel Litosfer (Dalam Kadarusman, 2009) .....**Error! Bookmark not defined.**
- Gambar 2.4.** *Orogenic Peridotite* (Dalam Kadarusman, 2009) .....**Error! Bookmark not defined.**
- Gambar 2.5.** Batuan Ultrabasa Kimberlit yang ditemukan minimal 40 km sebagai mantle xenolith (Menzies & Chazot, dalam Kadarusman, 2009).....**Error! Bookmark not defined.**
- Gambar 2.6.** *Emplacement Ophiolite* (Menurut Wakabayashi dan Dilek (2001) dalam Kadarusman, 2009) .....**Error! Bookmark not defined.**
- Gambar 2.7.** Sikuen Ofiolit Lengkap (Menurut Monnier. dkk (1999) dalam Ishlah, 2012) .....**Error! Bookmark not defined.**
- Gambar 2.8.** Tipe- tipe Endapan Laterit (Menurut Gleeson. dkk, 2003) .... **Error! Bookmark not defined.**
- Gambar 3.1.** Fisiografi Regional Kalimantan (Menurut Van Bemmelen, 1949).....**Error! Bookmark not defined.**
- Gambar 3.2.** Stratigrafi Pulau Sebuku (Modifikasi Rustandi, E. dkk, 2009).....**Error! Bookmark not defined.**
- Gambar 4.1.** Satuan Geomorfologi Daerah Penelitian .....**Error! Bookmark not defined.**
- Gambar 4.2.** Sungai pada Daerah Penelitian .....**Error! Bookmark not defined.**
- Gambar 4.3.** Analisis Pola Pengaliran Daerah Penelitian .....**Error! Bookmark not defined.**
- Gambar 4.4.** Stratigrafi Daerah Penelitian .....**Error! Bookmark not defined.**
- Gambar 4.5.** Kenampakan Lapangan dan Mikrofoto Harzburgit daam Satuan Harzburgit .....**Error! Bookmark not defined.**
- Gambar 4.6.** Kenampakan Lapangan dan Mikrofoto Dunit pada Satuan Harzburgit .....**Error! Bookmark not defined.**
- Gambar 4.7.** Kenampakan Lapangan dan Mikrofoto Basalt dan Gabro dalam Satuan Harzburgit .....**Error! Bookmark not defined.**

**Gambar 4.8.** Kenampakan Lapangan dan Mikrofoto Dunit dalam Satuan Dunit .....**Error! Bookmark not defined.**

**Gambar 4.9.** Kenampakan Lapangan dan Mikrofoto Harzburgit pada Satuan Dunit ....**Error! Bookmark not defined.**

**Gambar 4.10.** Kenampakan Lapangan dan Mikrofoto Sekis Hornblende pada Satuan Dunit ..... **Error! Bookmark not defined.**

**Gambar 4.11.** Konkresi Besi pada Satuan Dunit..... **Error! Bookmark not defined.**

**Gambar 4.12.** Kenampakan Lapangan dan Mikrofoto Basalt pada Satuan Basalt.....**Error! Bookmark not defined.**

**Gambar 4.13.** Kenampakan Basalt pada Satuan Basalt..... **Error! Bookmark not defined.**

**Gambar 4.14.** *Plotting Data* Afinitas Basalt Daerah Penelitian (Diagram menurut Le Maitre. dkk (1989) dalam Rollinson, 1993). ..... **Error! Bookmark not defined.**

**Gambar 4.15.** Kenampakan Lapangan dan Mikrofoto Batupasir Satuan Batupasir .....**Error! Bookmark not defined.**

**Gambar 4.16.** *Soil* Laterit Daerah Penelitian..... **Error! Bookmark not defined.**

**Gambar 4.17.** Tanah Aluvial Daerah Penelitian..... **Error! Bookmark not defined.**

**Gambar 4.18.** Sesar Mendatar Kanan Kalang Batang ..... **Error! Bookmark not defined.**

**Gambar 4.19.** Sesar Mendatar Kanan Halaban ..... **Error! Bookmark not defined.**

**Gambar 4.20.** Sesar Mendatar Kiri Kalang Batang ..... **Error! Bookmark not defined.**

**Gambar 4.21.** Sesar Mendatar Kiri Kalang Batang..... **Error! Bookmark not defined.**

**Gambar 4.22.** Sesar Mendatar Kiri Halaban ..... **Error! Bookmark not defined.**

**Gambar 4.23.** Kekar LP 132..... **Error! Bookmark not defined.**

**Gambar 4.24.** Kekar LP 51..... **Error! Bookmark not defined.**

**Gambar 4.25.** Arah Umum Tegasan Berdasarkan Analisis Kekar.....**Error! Bookmark not defined.**

**Gambar 4.26.** Sejarah Geologi Daerah Penelitian (Modifikasi Soesilo. dkk, 2015).....**Error! Bookmark not defined.**

**Gambar 6.6.1.** Potensi Positif Daerah Penelitian ..... **Error! Bookmark not defined.**

**Gambar 6.6.2.** Potensi Negatif Daerah Penelitian..... **Error! Bookmark not defined.**

## **DAFTAR LAMPIRAN**

|            |  |
|------------|--|
| Lampiran 1 | Analisis Petrografi                        |
| Lampiran 2 | Analisis Stereografis Struktur Geologi     |
| Lampiran 3 | Peta Lintasan dan Lokasi Pengamatan        |
| Lampiran 4 | Peta Geomorfologi                          |
| Lampiran 5 | Peta Geologi                               |
| Lampiran 6 | Profil Laterit dan Grafik Geokimia Laterit |