

DAFTAR PUSTAKA

- Abbaspour, H., Dresbenstedt, C., Badroddin, M., dan Maghaminik, A. 2018. Optimized Design of Drilling and Blasting Operations in Open Pit Mines Under Technical and Economic Uncertainties by System Dynamic Modelling. *International Journal of Mining Science and Technology*, 28(6): pp. 839-848.
- Ahmad, W. 2002. *Nickel Laterites- A Short Course on the Chemistry Mineralogy and Formation of Nickel Laterites*. Indonesia. PT. INCO.
- Ahmad, W. 2006. *Laterite: Fundamental of Chemistry, Mineralogy, Wathering Processes and Laterit Formation*. PT. International Nickel Indonesia: Sorowako, South Sulawesi.
- Amir, M.K., Dzakir, L.O., dan Kadar, M.I. 2022. Studi Pemetaan Distribusi Nikel Pada Kawasan Penambangan di Kecamatan Palangga, Kabupaten Konawe Selatan, Provinsi Sulawesi Tenggara. *Minetech Journal*, 1(2).
- Amstrong, F.S. 2012. *Struktur Geologi Sulawesi*. Perpus Sains Kebumihan Institut Teknologi Bandung: Bandung.
- Angela dan Catherina, S. 2005. *X-Rays Fluoresence for Industry Stainless Steel*. Brisbane: Camper International.
- Annels, A.E. 1991. *Mineral Deposits Evaluation: A Practical Approach*. Springer, Chapman & Hall: London.
- Astuti, W., Hijarima, T., Sasaki, K., and Okibe, N. 2016. Comparison of Effectiveness of Citric Acid and other Acids in Leaching of Low-Grade Indonesian Saprolitic Ores. *Minerals Engineering*. 85: 1-16.
- Atmadja, S. 1974. Mafic and Ultramafic Rock Associations in the East Arc of Sulawesi. *Proceedings ITB*. 8(2).
- Elias, M. 2002. *Nickel Laterite Deposits – Geological Overview, Resources and Exploration*. Special Publication 4 Nickel Elias Assotiation. CSA Australia Pty Ltd, 24p.
- Evans, A.M. 1993. *Ore Geology and Industrial Minerals*. Oxford: Blackwell Scientific Publications.
- Evans, E.H., Dawson, J.B., Fisher, A., Hill, S.J., Price, W.J., Smith, C.M.M., Sutton, K.L., and Tyson, J.F. 2001. Atomic Spectrometry Update. Advances in Atomic Emission, Absorption, and Fluorescence Spectrometry, and Related Techniques. *Journal of Analytical Atomic Spectrometry*. 13(16): 672-711.
- B., Dea, B.H., dan Subandrio, A.S. 2017. Klasifikasi Jenis Batuan Berdimen Berdasarkan Tekstur dengan Metode Gray Level Co-occurrence Matrix dan K-NN. *E-proceeding of Engineering*. 2(4).



- Gosseau. 2009. *Principle of X-Rays Fluorescence*. Singapore: Springer Briefs in Materials. Springer.
- Gusman, M., dan Octova, A. 2018. Estimasi Cadangan Insitu Melalui Kegiatan *Inpit Drill* pada Bukit Everest, Cherokee dan Strada SULTRA. *Bina Tambang*, 3(2): 722-735.
- Hammond, C. 2009. *The Basis of Crystallography and Diffraction*. 3rd. Ed. Oxford: Oxford University Press. P. 432.
- Hasria, Idrus, A., dan Warmada, I.W. 2021. Geology of the Mendoke Mountains, Shoutheast Arm of Sulawesi Island, Indonesia. *Journal of Geology and Mineral Resources*, 22(3).
- Jamaluddin, Darwis, A., Massinai, A.M. 2018. X-Ray Fluorescence (XRF) to identify chemical analysis of minerals in Buton island, Sulawesi, Indonesia. *Journal Global Colloquium on Geosciences and Engineering*. 118.
- Kishan, F., Juradi, M. I., dan Firdaus. 2022. Evaluasi Perbedaan Kadar Ni dan Fe pada Front Pengambangan dengan Stockpile pada PT. Generasi Agung Perkasa Kabupaten Konawe Selatan. *Jurnal Aneka Tambang*.
- Kusuma, R.A.I., Kamaruddin, H., Rosana, M.F., dan Yuningsih, E.T. 2019. Geokimia Endapan Nikel Laterit di Tambang Utara, Kecamatan Pomalaa, Kabupaten Kolaka, Provinsi Sulawesi Tenggara. *Jurnal Geologi dan Sumber Daya Mineral*. 20(2): 85-92.
- Leeuwen, V.T.M., Taylor, R., Coote, A., and Longstaffe, F.J. 1994. Porphyry Molibdenum Mineralization in a Continental Collision Setting at Malala, Nortwest Sulawesi, Indonesia. *Journal of Geochemical Exploration*. 50(1).
- Lintjewas, L., Setiawan, I., dan Kausar, A. 2019. Profil Endapan Nikel Laterit di Daerah Palangga, Provinsi Sulawesi Tenggara. *Geologi dan Pertambangan*. 1(29): 91-104.
- Masrukan. 2007. Studi Komparasi Hasil Analisis Komposisi Paduan Almagasi dengan Menggunakan Teknik X-Ray Fluorescence (XRF) dan Emission Spectroscopy. *Jurnal Batan Pusat Teknologi Bahan Bakar Nuklir*. 13(3): 109-110.
- Massinai, M.A. Mamudi, W., dan Massinai, M.F.I. 2021. Distribution Pattern Identification of Mineral using XRF and XRD Method in Jeneberang Watershed, Indonesia. *Journal of Hunan University*. 6(48).
- Maulana, A. 2017. *Endapan Mineral*. Ombak.



ough, William, F., Rudnick, dan Roberta, L. 1998. *Mineralogy and composition of the Upper Mantle*. Department of Earth and Planetary sciences Harvard University.

- NCGIA. 1997. *Interpolation: Inverse Distance Weighting*. Retrieved from Inverse Distance Weighting-NCGIA.
- Pathak, K. 2014. *Introduction to Drilling Technology for Surface Mining*.
- Pramono, G.H. 2008. Akurasi Metode IDW dan Kriging untuk Interpolasi Sebaran Sedimen Teruspensi di Maros, Sulawesi Selatan. *Jurnal Forum Geografi*. 22(1): 145-158.
- Raivel dan Firman. 2021. Eksplorasi Endapan Nikel Laterit Area IUP PT. Putra Mekongga Sejahtera Daerah Pomalaa Kabupaten Kolaka Provinsi Sulawesi Tenggara. *Jurnal GEOMining*. 2(1): 11-23.
- Ringwood, A. E. 1975. *Composition and Petrology of the Earth's Mantle*. MC Graw-Hill, Inc.: New York.
- Safrudin, R., dan Conoras, W. 2021. Estimasi Sumberdaya Nikel Laterit dengan Metode Geostatistik Ordinari Kriging pada PT. Dharma Rosadi Internasional Kabupaten Halmahera Tengah Provinsi Maluku Utara. *Jurnal GEOMining Teknik Pertambangan Unkhair*. 1(2): 38-48.
- Saputra, A., Anshai, E., Mili, M. Z., dan Firdaus. 2023. Pemodelan dan Estimasi Cadangan Nikel pada Blok A5 PT. Jagad Rayatama Provinsi Sulawesi Tenggara. *Jurnal Riset Teknologi Pertambangan (J-Ristam)*. 3(1):2621-3869.
- Sari, R. K. 2016. Potensi Mineral Batuan Tambang Bukit 12 dengan Metode XRD, XRF dan AAS. *Jurnal Eksakta*, 21(2).
- Sari, W.P., Akmam dan Hidayat. 2018. Analisis Struktur Batuan Berdasarkan Data Geolistrik Tahanan Jenis Konfigurasi Schlumberger dan Konfigurasi Dipole-dipole di Kecamatan Malalak Kabupaten Agam. *Journal Pillar of Physics*. 11(2).
- Simandjuntak, T. 1994. *Geologi Lembar Kolaka, Sulawesi, Skala 1:250.000*. Bandung: Pusat Penelitian dan Pengembangan Geologi.
- Sumantry, T. 2002. Aplikasi XRF untuk Identifikasi Lempung pada Kegiatan Penyimpanan Lestari Limbah Radioaktif. *Pusat Teknologi Limbah Radioaktif-BATAN*. 1410-6086.
- Sutisna, D.T., Deddy, Sunuhadi, D.N. 2006. Perencanaan Eksplorasi Cebakan Nikel Laterit di Daerah Wayamli, Teluk Buli, Halmahera Timur sebagai Model Perencanaan Eksplorasi Cebakan Nikel Laterit di Indonesia. *Buletin Sumber Daya Geologi*. 1(3).
- Sutisna, D.T., K., Anggayana, D., dan Guntoro. 2011. Karakterisasi Mineralogi Endapan Nikel Laterit di Daerah Tinanggea Kabupaten Konawe Selatan, Sulawesi Tenggara. *JTM*. 18(4): 211-220.
- Sutisna, D.T. 2019. Nikel Laterit di Indonesia. *Jurnal Geomine*. 10(3).



- Watson, D.F., dan Philip, G.M. 1985. Some Limitations in the Geostatistical Evaluation of ore Deposits. *Int. Journal Min. Engng.* 3: 155.
- Williams, H., Turner, F.J., dan Gilbert, C.M. 1954. *Petrography, an Introduction to the Study of Rock in Thin Sections*. W.H Freeman and Company, New York. USA.
- Wilson, M. 1989. *Igneous Petrogenesis, a global Tectonic Approach*. Departement of Earth Sciences, University of Leeds: Netherland.
- Yildirim, H., Turan, A., and Yucel, O. 2012. Nickel Pig Iron (NPI) Production from Domestic Lateritic Nickel Ores Using Induction Furnace. *Proceedings of International Iron & Steel Symposium*. 337-344.



L A M P I R A N



Lampiran 1. Hasil Analisis XRF

Titik Bor 1 (TB137)

Hole ID	Point Of Coordinat		Elevasi	Depth		Litologi	Ni	Fe
	X	Y		From	To			
TB137	122°23'43,34"	04°24'23,98"	33	0	1	TS	0.15	6.92
				1	2	TS	0.17	9.56
				2	3	TS	0.21	10.03
				3	4	TS	0.19	8.98
				4	5	TS	0.26	7.64
				5	6	TS	0.29	9.14
				6	7	TS	0.17	7.64
				7	8	TS	0.27	6.75
				8	9	TS	0.16	9.15
				9	10	LIM	0.21	16.35
				10	11	LIM	0.18	31.93
				11	12	LIM	0.34	20.87
				12	13	LIM	0.52	41.99
				13	14	LIM	0.39	21.38
				14	15	LIM	0.25	30.09
				15	16	LIM	0.24	21.32
				16	17	LIM	0.31	19.51
				17	18	SAP	1.51	21.23
				18	19	SAP	2.99	23.09
				19	20	SAP	2.87	16.98
				20	21	SAP	1.77	18.73
				21	22	SAP	2.92	15.15
				22	23	SAP	1.92	15.95
				23	24	SAP	1.75	18.35
				24	25	BR	0.13	15.13
				25	26	BR	0.23	13.76



Titik Bor 2 (TB138)

Hole ID	Point Of Coordinat		Elevasi	Depth		Litologi	Ni	Fe
	X	Y		From	To			
TB138	122°23'41,73"	04°24'23,97"	34	0	1	TS	0.15	8.42
				1	2	TS	0.21	9.45
				2	3	TS	0.17	7.58
				3	4	TS	0.19	10.03
				4	5	TS	0.21	9.64
				5	6	TS	0.16	7.93
				6	7	TS	0.21	9.92
				7	8	TS	0.15	8.93
				8	9	TS	0.19	9.7
				9	10	TS	0.18	6.93
				10	11	TS	0.15	9.82
				11	12	LIM	0.19	21.93
				12	13	LIM	0.32	27.54
				13	14	LIM	0.29	19.65
				14	15	LIM	0.51	22.96
				15	16	LIM	0.26	19.98
				16	17	LIM	0.39	20.64
				17	18	LIM	0.25	24.99
				18	19	SAP	1.56	15.57
				19	20	SAP	2.83	22.75
				20	21	SAP	2.98	19.78
				21	22	SAP	1.83	21.19
				22	23	SAP	2.77	19.15
				23	24	SAP	1.89	18.19
				24	25	SAP	1.22	16.23
				25	26	BR	0.24	19.34
				26	27	BR	0.32	15.03
				27	28	BR	0.19	14.02



Titik Bor 3 (TB139)

Hole ID	Point Of Coordinat		Elevasi	Depth		Litologi	Ni	Fe
	X	Y		From	To			
TB139	122°23'40,11"	04°24'23,98"	34	0	1	TS	0.18	7.37
				1	2	TS	0.19	8.92
				2	3	TS	0.23	9.97
				3	4	TS	0.15	10.04
				4	5	TS	0.29	7.65
				5	6	TS	0.15	9.84
				6	7	TS	0.17	9.93
				7	8	TS	0.28	6.94
				8	9	TS	0.19	7.39
				9	10	TS	0.17	9.52
				10	11	TS	0.26	10.09
				11	12	TS	0.19	9.93
				12	13	TS	0.17	7.94
				13	14	TS	0.18	8.63
				14	15	TS	0.15	7.03
				15	16	TS	0.25	9.84
				16	17	TS	0.21	8.65
				17	18	LIM	0.18	15.93
				18	19	LIM	0.19	21.03
				19	20	LIM	0.32	19.2
				20	21	LIM	0.47	29.98
				21	22	LIM	0.51	23.97
				22	23	LIM	0.27	19.52
				23	24	LIM	0.46	21.37
				24	25	LIM	0.37	29.29
				25	26	LIM	0.45	24.49
				26	27	SAP	2.42	19.46
				27	28	SAP	1.91	21.02
				28	29	SAP	2.51	20.62
				29	30	SAP	2.97	15.73
				30	31	SAP	1.76	19.41
				31	32	SAP	1.68	22.85
				32	33	SAP	2.96	17.84
				33	34	SAP	1.59	20.15
				34	35	BR	0.21	12.76
				35	36	BR	0.32	15.76



Titik Bor 4 (TB140)

Hole ID	Point Of Coordinat		Elevasi	Depth		Litologi	Ni	Fe
	X	Y		From	To			
TB140	122°23'38,50"	04°24'23,96"	35	0	1	TS	0.17	10.04
				1	2	TS	0.21	9.74
				2	3	TS	0.15	7.06
				3	4	TS	0.18	10.54
				4	5	TS	0.15	8.05
				5	6	TS	0.22	8.94
				6	7	TS	0.17	11.02
				7	8	TS	0.24	9.06
				8	9	TS	0.18	8.59
				9	10	TS	0.29	12.02
				10	11	TS	0.19	9.02
				11	12	TS	0.15	7.95
				12	13	TS	0.17	9.83
				13	14	TS	0.16	7.04
				14	15	TS	0.25	9.95
				15	16	LIM	0.19	17.93
				16	17	LIM	0.18	31.03
				17	18	LIM	0.26	29.94
				18	19	LIM	0.18	38.05
				19	20	LIM	0.20	30.78
				20	21	LIM	0.27	19.98
				21	22	LIM	0.22	12.04
				22	23	LIM	0.52	22.87
				23	24	LIM	0.45	20.54
				24	25	SAP	2.47	21.74
				25	26	SAP	1.79	17.22
				26	27	SAP	2.32	20.99
				27	28	SAP	2.14	19.32
				28	29	SAP	1.95	18.38
				29	30	SAP	2.96	15.65
				30	31	SAP	1.29	17.68
				31	32	SAP	1.92	18.04
				32	33	BR	0.31	14.87



Titik Bor 5 (TB141)

Hole ID	Point Of Coordinat		Elevasi	Depth		Litologi	Ni	Fe
	X	Y		From	To			
TB141	122°23'36,89"	04°24'23,97"	33	0	1	TS	0.19	9.04
				1	2	TS	0.26	7.94
				2	3	TS	0.17	9.86
				3	4	TS	0.18	10.96
				4	5	TS	0.19	8.05
				5	6	TS	0.28	9.94
				6	7	TS	0.15	11.03
				7	8	TS	0.18	10.95
				8	9	TS	0.21	9.03
				9	10	TS	0.25	8.99
				10	11	TS	0.17	9.96
				11	12	TS	0.25	8.9
				12	13	TS	0.18	7.04
				13	14	TS	0.16	11.97
				14	15	TS	0.21	9.83
				15	16	TS	0.23	12.94
				16	17	TS	0.17	9.84
				17	18	TS	0.27	10.94
				18	19	TS	0.19	9.87
				19	20	TS	0.25	10.65
				20	21	LIM	0.19	16.92
				21	22	LIM	0.21	29.87
				22	23	LIM	0.39	19.03
				23	24	LIM	0.22	21.04
				24	25	LIM	0.34	30.17
				25	26	LIM	0.28	19.14
				26	27	LIM	0.49	19.86
				27	28	SAP	1.9	18.12
				28	29	SAP	2.38	19.81
				29	30	SAP	2.42	20.34
				30	31	SAP	1.85	19.76
				31	32	SAP	2.18	17.36
				32	33	SAP	2.78	18.18
				33	34	SAP	1.96	16.37
				34	35	BR	0.27	16.87



Titik Bor 6 (TB142)

Hole ID	Point Of Coordinat		Elevasi	Depth		Litologi	Ni	Fe
	X	Y		From	To			
TB142	122°23'35,28"	04°24'23,98"	31	0	1	TS	0.18	9.84
				1	2	TS	0.17	6.99
				2	3	TS	0.15	10.95
				3	4	TS	0.19	9.72
				4	5	TS	0.26	8.77
				5	6	TS	0.22	9.52
				6	7	TS	0.18	11.93
				7	8	TS	0.21	9.64
				8	9	TS	0.19	7.91
				9	10	TS	0.17	11.92
				10	11	TS	0.23	12.01
				11	12	TS	0.19	10.95
				12	13	TS	0.28	8.93
				13	14	TS	0.18	9.65
				14	15	TS	0.22	10.75
				15	16	TS	0.16	9.63
				16	17	TS	0.19	9.02
				17	18	TS	0.17	11.93
				18	19	LIM	0.21	17.93
				19	20	LIM	0.23	20.03
				20	21	LIM	0.18	30.12
				21	22	LIM	0.21	29.03
				22	23	LIM	0.29	20.86
				23	24	LIM	0.26	21.87
				24	25	SAP	1.51	22.66
				25	26	SAP	2.29	19.32
				26	27	SAP	2.88	24.32
				27	28	SAP	1.92	15.93
				28	29	SAP	1.54	17.27
				29	30	BR	0.27	15.82



Titik Bor 7 (TB143)

Hole ID	Point Of Coordinat		Elevasi	Depth		Litologi	Ni	Fe
	X	Y		From	To			
TB143	122°23'41,59"	04°24'21,26"	34	0	1	TS	0.18	8.02
				1	2	TS	0.28	10.93
				2	3	TS	0.22	9.3
				3	4	TS	0.31	9.64
				4	5	TS	0.19	7.76
				5	6	TS	0.21	9.64
				6	7	TS	0.18	11.93
				7	8	TS	0.28	9.64
				8	9	TS	0.16	10.61
				9	10	TS	0.25	11.02
				10	11	TS	0.18	12.03
				11	12	TS	0.19	9.39
				12	13	TS	0.21	10.83
				13	14	TS	0.18	7.03
				14	15	TS	0.15	10.75
				15	16	TS	0.19	9.54
				16	17	TS	0.15	8.94
				17	18	TS	0.22	9.02
				18	19	TS	0.18	10.93
				19	20	LIM	0.19	15.91
				20	21	LIM	0.21	19.74
				21	22	LIM	0.34	28.04
				22	23	LIM	0.41	20.04
				23	24	LIM	0.39	21.91
				24	25	LIM	0.52	23.04
				25	26	SAP	1.79	15.45
				26	27	SAP	2.83	17.79
				27	28	SAP	2.53	11.98
				28	29	SAP	1.92	18.37
				29	30	BR	0.31	15.34



Titik Bor 8 (TB144)

Hole ID	Point Of Coordinat		Elevasi	Depth		Litologi	Ni	Fe
	X	Y		From	To			
TB144	122°23'39,97"	04°24'21,24"	34	0	1	TS	0.16	9.81
				1	2	TS	0.18	10.94
				2	3	TS	0.29	11.93
				3	4	TS	0.17	9.75
				4	5	TS	0.15	7.03
				5	6	TS	0.18	10.95
				6	7	TS	0.19	11.85
				7	8	TS	0.23	12.04
				8	9	TS	0.16	9.65
				9	10	TS	0.15	9.83
				10	11	TS	0.26	7.94
				11	12	TS	0.21	10.93
				12	13	TS	0.17	9.75
				13	14	TS	0.19	10.84
				14	15	TS	0.16	11.93
				15	16	TS	0.18	9.4
				16	17	TS	0.17	9.96
				17	18	TS	0.19	11.03
				18	19	TS	0.23	12.04
				19	20	LIM	0.21	19.04
				20	21	LIM	0.19	29.09
				21	22	LIM	0.39	17.95
				22	23	LIM	0.31	22.84
				23	24	LIM	0.49	21.06
				24	25	LIM	0.43	30.68
				25	26	LIM	0.34	20.49
				26	27	SAP	1.79	22.63
				27	28	SAP	1.54	19.75
				28	29	SAP	2.42	24.49
				29	30	SAP	1.49	21.74
				30	31	SAP	2.93	18.32
				31	32	SAP	0.94	15.75
				32	33	SAP	1.17	16.5
				33	34	BR	0.18	17.35
				34	35	BR	0.23	14.71



Titik Bor 9 (TB145)

Hole ID	Point Of Coordinat		Elevasi	Depth		Litologi	Ni	Fe
	X	Y		From	To			
TB145	122°23'38,35"	04°24'21,23"	33	0	1	TS	0.16	9.84
				1	2	TS	0.18	8.79
				2	3	TS	0.17	9.23
				3	4	TS	0.15	10.95
				4	5	TS	0.29	9.94
				5	6	TS	0.18	8.93
				6	7	TS	0.21	12.54
				7	8	TS	0.17	11.93
				8	9	TS	0.22	9.48
				9	10	TS	0.18	7.94
				10	11	TS	0.16	9.71
				11	12	TS	0.19	10.84
				12	13	TS	0.17	9.75
				13	14	TS	0.23	12.34
				14	15	LIM	0.49	20.13
				15	16	LIM	0.35	21.06
				16	17	LIM	0.51	23.54
				17	18	LIM	0.41	20.75
				18	19	SAP	0.91	19.99
				19	20	SAP	2.74	17.83
				20	21	SAP	1.33	18.59
				21	22	SAP	1.79	20.32
				22	23	BR	0.27	15.87



Titik Bor 10 (TB146)

Hole ID	Point Of Coordinat		Elevasi	Depth		Litologi	Ni	Fe
	X	Y		From	To			
TB146	122°23'36,74"	04°24'21,19"	32	0	1	TS	0.16	7.59
				1	2	TS	0.19	10.93
				2	3	TS	0.28	8.93
				3	4	TS	0.17	9.81
				4	5	TS	0.25	11.93
				5	6	TS	0.29	8.93
				6	7	TS	0.18	9.72
				7	8	TS	0.17	11.92
				8	9	TS	0.21	9.84
				9	10	TS	0.23	10.83
				10	11	LIM	0.22	19.47
				11	12	LIM	0.45	20.01
				12	13	LIM	0.34	23.09
				13	14	LIM	0.29	39.37
				14	15	LIM	0.35	21.29
				15	16	LIM	0.29	25.38
				16	17	LIM	0.35	23.09
				17	18	SAP	0.95	20.21
				18	19	SAP	1.48	21.27
				19	20	SAP	2.95	24.1
				20	21	SAP	2.76	15.99
				21	22	SAP	1.85	19.34
				22	23	SAP	1.91	18.99
				23	24	BR	0.14	17.17
				24	25	BR	0.19	12.47



Titik Bor 11 (TB147)

Hole ID	Point Of Coordinat		Elevasi	Depth		Litologi	Ni	Fe
	X	Y		From	To			
TB47	122°23'35,14"	04°24'21,20"	30	0	1	TS	0.16	7.94
				1	2	TS	0.18	8.61
				2	3	TS	0.19	10.63
				3	4	TS	0.21	11.39
				4	5	TS	0.16	7.83
				5	6	TS	0.18	9.54
				6	7	TS	0.23	9.32
				7	8	TS	0.29	10.84
				8	9	LIM	0.41	23.53
				9	10	LIM	0.24	20.93
				10	11	LIM	0.49	24.21
				11	12	LIM	0.31	19.45
				12	13	SAP	2.27	17.62
				13	14	SAP	1.79	21.86
				14	15	SAP	2.87	19.65
				15	16	SAP	2.99	15.92
				16	17	SAP	1.28	14.9
				17	18	BR	0.25	15.54

Titik Bor 12 (TB148)

Hole ID	Point Of Coordinat		Elevasi	Depth		Litologi	Ni	Fe
	X	Y		From	To			
TB148	122°23'33,53"	04°24'21,20"	32	0	1	TS	0.17	8.54
				1	2	TS	0.18	8.93
				2	3	TS	0.26	10.85
				3	4	TS	0.16	7.94
				4	5	TS	0.23	12.94
				5	6	TS	0.22	8.91
				6	7	TS	0.17	12.09
				7	8	TS	0.19	9.65
				8	9	TS	0.18	7.94
				9	10	TS	0.31	8.93
				10	11	TS	0.16	11.39
				11	12	TS	0.21	9.5
				12	13	TS	0.19	7.91
				13	14	TS	0.26	10.85



				14	15	TS	0.17	12.3
				15	16	TS	0.19	9.9
				16	17	TS	0.29	12.01
				17	18	TS	0.21	10.9
				18	19	TS	0.18	9.75
				19	20	LIM	0.23	29.96
				20	21	LIM	0.33	23.85
				21	22	LIM	0.22	17.93
				22	23	LIM	0.19	26.01
				23	24	LIM	0.37	19.87
				24	25	LIM	0.49	24.3
				25	26	LIM	0.42	21.34
				26	27	LIM	0.51	22.65
				27	28	LIM	0.45	19.97
				28	29	SAP	0.93	20.87
				29	30	SAP	1.34	19.81
				30	31	SAP	1.94	18.04
				31	32	SAP	2.7	21.89
				32	33	SAP	2.92	20.42
				33	34	SAP	2.82	18.78
				34	35	SAP	0.93	19.82
				35	36	SAP	1.9	19.63
				36	37	BR	0.18	17.61
				38	39	BR	0.16	14.54



Lampiran 2. Sampel Pengeboran Daerah Penelitian

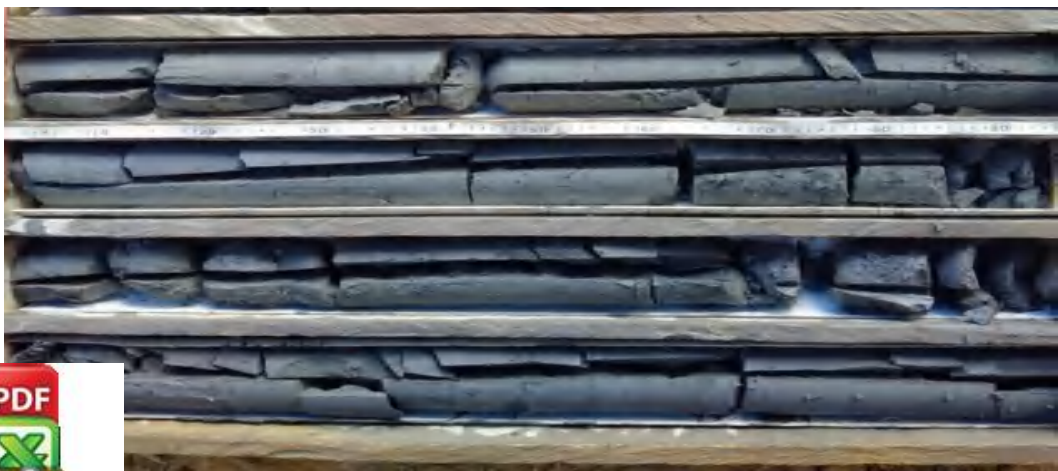
Sampel 1 (TB137)



Sampel 2 (TB138)



Sampel 3 (TB139)



Sampel 4 (TB140)



Sampel 5 (TB141)



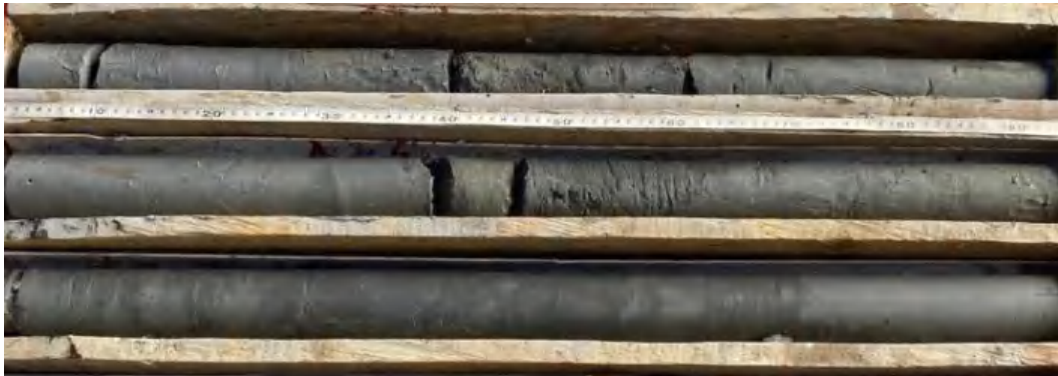
Sampel 6 (TB142)



Sampel 7 (TB143)



Sampel 8 (TB144)



Sampel 9 (TB145)



Sampel 10 (TB146)



Sampel 11 (TB147)



Sampel 12 (TB148)



Lampiran 3. Dokumentasi Penelitian





Optimized using
trial version
www.balesio.com