

PRESHIPMENT INSPECTION CERTIFICATE

Pemohon : **PT.Buwana Indonesia Subur**
Perihal : Pre Shipment Sampling And Analysis of Cargo Stockpile
Material : Nickel Ore
Jumlah : \pm 5000 MT
Lokasi : Stockpile PT. Buwana Indonesia Subur, Desa Ululere, Kec. Bungku Timur, Kab. Morowali, Prov. Sulawesi Tengah
Tanggal Sampling : 06 Agustus 2022
Tanggal Analisa : 07 Agustus 2022

Report ini di peruntukan atas permintaan pemohon atas nama PT.Buwana Indonesia Subur, dilakukan sampling di lokasi Stockpile PT. Buwana Indonesia Subur, Desa Ululere, Kec. Bungku Timur, Kab. Morowali, Prov. Sulawesi Tengah., Preparasi dan Analisa di Internal Laboratorium.

Hasil Analisa Sebagai berikut :

Quality Report :

No	Sample ID	Tonage	PARAMETERS (%)									
			Ni (%)	Fe (%)	SiO ₂ (%)	MgO (%)	Al ₂ O ₃ (%)	CaO (%)	Co (%)	Cr ₂ O ₃ (%)	MnO (%)	MC (%)
1	BUWANA DOME X.1	1,000	1.90	11.76	39.56	21.34	1.42	0.07	0.03	0.72	0.24	27.01
2	BUWANA DOME X.2	1,000	1.89	11.47	42.71	17.73	1.23	0.31	0.03	0.78	0.23	26.97
3	BUWANA DOME X.3	3,000	1.62	13.10	41.29	16.21	1.34	0.19	0.03	0.91	0.27	28.29
CUM Result		5,000	1.73	12.50	41.23	17.54	1.33	0.19	0.03	0.85	0.26	27.77

Ululere, 07 Agustus 2022

PT. MOROWALI INDUSTRI TEKNOLOGI



Ahmad Khamarudin

Senior Analyst

Our Ref : 019- 060822
Your Ref : 019/VIII/MIT-PT.BIS/PSI/2022

Contractor : PT.BUWANA INDONESIA SUBUR
Dome ID : DOME X.1

IDENT	Time Measuring	Ni (%)	Fe (%)	SiO2 (%)	MgO (%)	Al2O3 (%)	CaO (%)	Co (%)	Cr2O3 (%)	MnO (%)	Fe2O3 (%)	MC
UNIT		%	%	%	%	%	%	%	%	%	%	%
SCHEME		EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	
BUWANA DOME X.1/1	8/7/2022 11:39	2.17	13.32	39.29	21.97	1.71	0.06	0.03	0.89	0.27	18.95	25.81
BUWANA DOME X.1/2	8/7/2022 11:43	2.18	12.73	39.09	21.67	1.75	0.08	0.03	0.79	0.26	18.11	26.88
BUWANA DOME X.1/3	8/7/2022 11:47	1.64	9.57	39.18	22.90	1.51	0.08	0.02	0.51	0.19	13.61	28.31
BUWANA DOME X.1/4	8/7/2022 11:36	1.61	11.45	40.67	18.80	0.72	0.05	0.03	0.69	0.23	16.29	27.06
Average		1.90	11.76	39.56	21.34	1.42	0.07	0.03	0.72	0.24	16.74	27.01

Our Ref : 019- 060822
Your Ref : 019/VIII/MIT-PT.BIS/PSI/2022

Contractor : PT.BUWANA INDONESIA SUBUR
Dome ID : DOME X.2

IDENT	Time Measuring	Ni (%)	Fe (%)	SiO2 (%)	MgO (%)	Al2O3 (%)	CaO (%)	Co (%)	Cr2O3 (%)	MnO (%)	Fe2O3 (%)	MC
UNIT		%	%	%	%	%	%	%	%	%	%	%
SCHEME		EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	
BUWANA DOME X.2/1	8/7/2022 11:40	2.47	12.01	41.59	16.26	0.91	0.09	0.03	0.71	0.25	17.08	23.56
BUWANA DOME X.2/2	8/7/2022 11:43	1.68	11.17	42.35	18.37	0.83	0.16	0.03	0.66	0.22	15.90	25.26
BUWANA DOME X.2/3	8/7/2022 11:54	1.63	11.56	43.36	20.81	1.68	0.51	0.02	0.87	0.24	16.44	27.56
BUWANA DOME X.2/4	8/7/2022 11:46	1.80	11.14	43.55	15.48	1.49	0.49	0.03	0.88	0.23	15.85	31.49
Average		1.89	11.47	42.71	17.73	1.23	0.31	0.03	0.78	0.23	16.32	26.97

Our Ref : 019- 060822
Your Ref : 019/VIII/MIT-PT.BIS/PSI/2022

Contractor : PT.BUWANA INDONESIA SUBUR
Dome ID : DOME X.3

IDENT	Time Measuring	Ni (%)	Fe (%)	SiO2 (%)	MgO (%)	Al2O3 (%)	CaO (%)	Co (%)	Cr2O3 (%)	MnO (%)	Fe2O3 (%)	MC
UNIT		%	%	%	%	%	%	%	%	%	%	%
SCHEME		EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	
BUWANA DOME X.3/1	8/7/2022 12:03	1.62	13.38	42.40	15.50	1.12	0.18	0.03	0.98	0.28	19.04	27.43
BUWANA DOME X.3/2	8/7/2022 12:49	1.67	14.18	39.68	13.54	1.13	0.15	0.03	1.01	0.30	20.18	25.00
BUWANA DOME X.3/3	8/7/2022 11:56	1.90	13.39	41.23	15.90	1.23	0.11	0.03	0.82	0.28	19.05	29.28
BUWANA DOME X.3/4	8/7/2022 12:00	1.72	12.66	40.83	13.63	0.92	0.15	0.03	0.92	0.26	18.02	24.56
BUWANA DOME X.3/5	8/7/2022 11:53	1.49	12.06	42.90	16.26	0.84	0.17	0.03	0.88	0.25	17.16	26.51
BUWANA DOME X.3/6	8/7/2022 12:27	1.61	13.92	42.79	17.92	1.66	0.17	0.03	0.98	0.28	19.80	29.74
BUWANA DOME X.3/7	8/7/2022 12:01	1.51	12.81	40.76	16.75	1.58	0.24	0.03	0.87	0.26	18.23	26.26
BUWANA DOME X.3/8	8/7/2022 12:19	1.72	13.08	40.99	18.46	1.64	0.18	0.03	0.82	0.28	18.61	24.42
BUWANA DOME X.3/9	8/7/2022 12:23	1.61	13.94	38.49	15.09	1.61	0.13	0.03	0.89	0.29	19.84	30.76
BUWANA DOME X.3/10	8/7/2022 12:05	1.56	13.43	41.04	16.61	1.58	0.21	0.03	0.93	0.27	19.12	34.65
BUWANA DOME X.3/11	8/7/2022 11:50	1.62	13.12	41.08	14.19	0.96	0.14	0.03	0.90	0.27	18.67	30.46
BUWANA DOME X.3/12	8/7/2022 12:08	1.37	11.19	43.25	20.63	1.83	0.41	0.02	0.90	0.22	15.92	30.36
Average		1.62	13.10	41.29	16.21	1.34	0.19	0.03	0.91	0.27	18.64	28.29

QAQC Report :

Our Ref : 019- 060822
Yur Ref : 019/VIII/MIT-PT.BIS/PSI/2022

IDENT	Time Measuring	C (Ni)	C (Fe)	C (SiO ₂)	C (MgO)	C (Al ₂ O ₃)	C (CaO)	C (Co)	C (Cr ₂ O ₃)	C (MnO)	C (Fe ₂ O ₃)
UNIT		%	%	%	%	%	%	%	%	%	%
SCHEME		EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4	EPSILON4
MIT 041	8/7/2022 12:03	0.81	15.60	42.41	12.75	2.88	0.66	0.04	0.54	0.29	22.19
MIT 041 DUPLO	8/7/2022 12:10	0.81	15.59	42.33	12.83	2.85	0.66	0.04	0.54	0.29	22.19
OREAS 184	8/7/2022 11:50	0.97	25.34	40.82	3.98	4.03	0.25	0.10	1.47	0.61	36.06
OREAS 184 DUPLO	8/7/2022 11:56	0.96	25.35	40.97	3.77	4.02	0.25	0.10	1.46	0.61	36.08
OREAS 187	8/7/2022 11:55	1.35	13.07	45.64	18.56	2.54	0.34	0.05	0.87	0.33	18.60
OREAS 187 DUPLO	8/7/2022 11:58	1.36	13.06	46.04	18.88	2.58	0.34	0.05	0.87	0.33	18.58
BUWANA DOME X.1/3	8/7/2022 11:47	1.64	9.57	39.18	22.90	1.51	0.08	0.02	0.51	0.19	13.61
BUWANA DOME X.1/3 DUPLO	8/7/2022 11:50	1.65	9.45	40.18	23.88	1.19	0.08	0.02	0.55	0.19	13.44
BUWANA DOME X.3/5	8/7/2022 11:53	1.49	12.06	40.90	16.26	0.84	0.17	0.03	0.88	0.25	17.16
BUWANA DOME X.3/5 DUPLO	8/7/2022 12:30	1.50	12.20	43.67	20.27	1.47	0.21	0.03	0.89	0.25	17.36