Experience Example

- Nick Shakesby was the COO for the Berong Nickel Corporation for the start up of the Berong Nickel Mine in 2006 / 2007. The Mine is located on Palawan Island in the Philippines.
- Berong direct shipped FOB +/- 700 WMT of 1.8% Nickel ore in 2007.
- Nickel price at first shipment was US$45.00/WMT cost was US$18/WMT with cash surplus of +/- US$ 1.5 Million per vessel.
- Clients included BHP and Chines spot buyers
- LKI provided all on site expatriate management
- The following sets out to visually demonstrate experience

Mining Sequence; Working small, high grade areas to maximize start up cash flow and control sediment run off. Rehabilitate as we advance so as to mitigate NGO/Environmentalist position

Mine Area In Operation; 360° open faces to allow grade control to advance over multiple benches.

Mine Operations; Annual Ore Production Target 750,000 Wet Metric Tons Ore. 35 ton excavators, D8 Dozers, 40t 6x6 Articulated Trucks, 6x8 Trucks. 14H Grader. Free Dig Operation.

Wet Season In Pit Haulage

Wet Season In Pit Access Construction

Defined Rehabilitation Strategy; Created a project involving NGO. University to study sustainable fruit/nut growing over mined out areas. Rehabilitation process initiates immediately after mining, employs locals who will own the business.

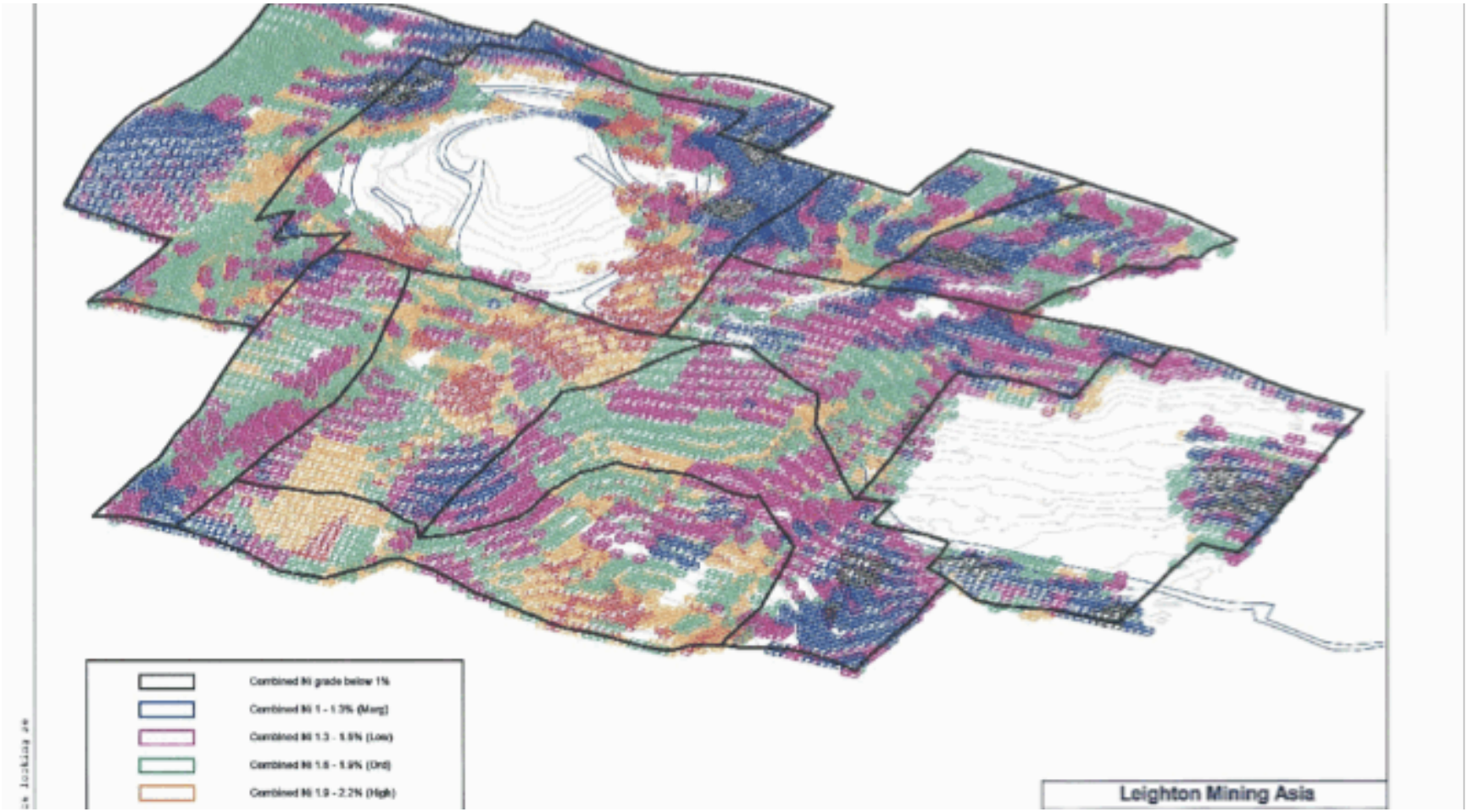
Rehabilitation Project

Stockpile Management; crusher located close, moisture control, separate grades for blending, close access to shiploading, Sediment control.

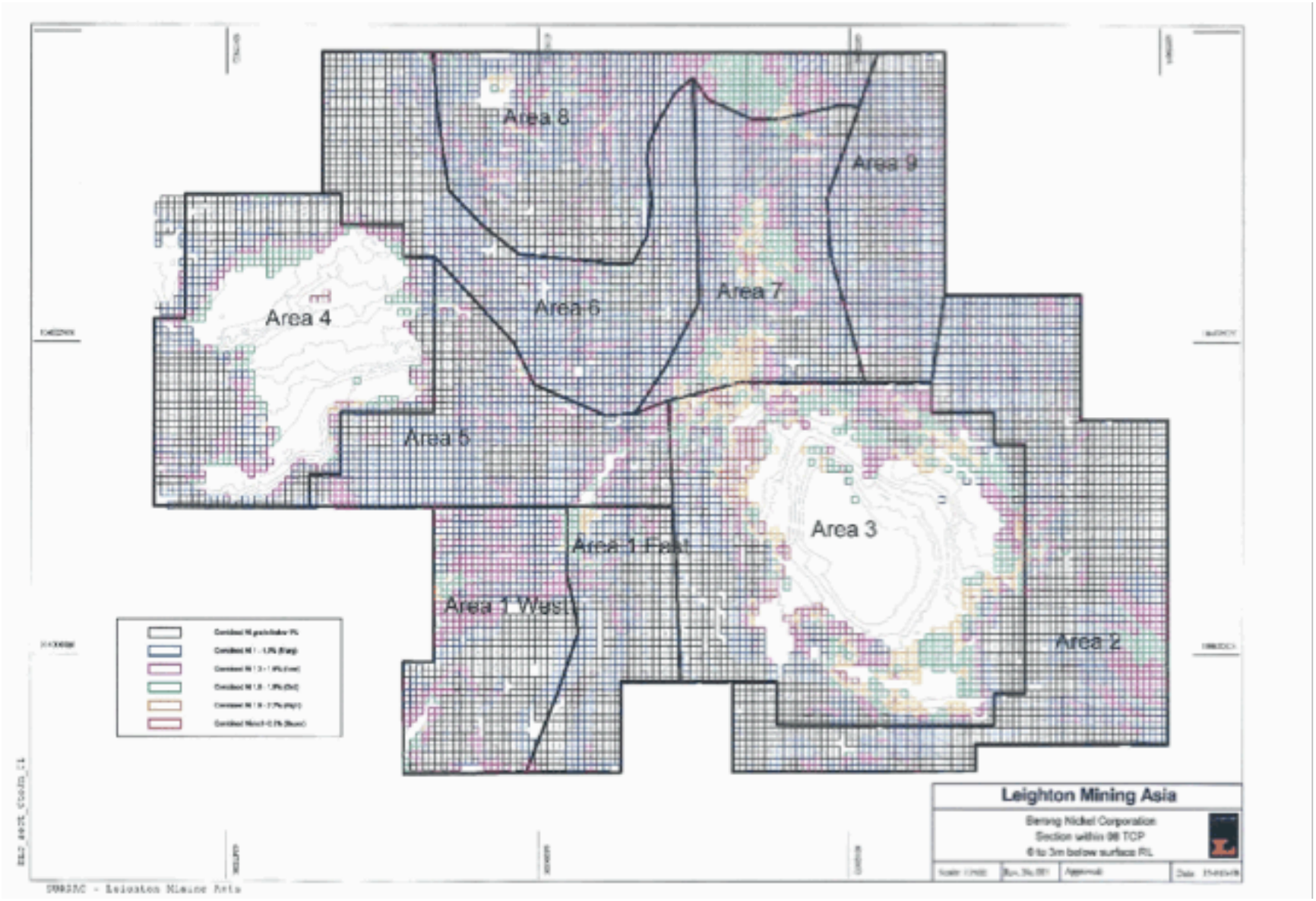
Sediment Control & Ore Drying; All mine run off directed to these ponds. Note bottom right – rice farmers use discharge for wet rice, position contra NGO's and Environmentalists.

Site Infrastructure

Mine Plan; High, medium and low grade ores determined from geological block model.

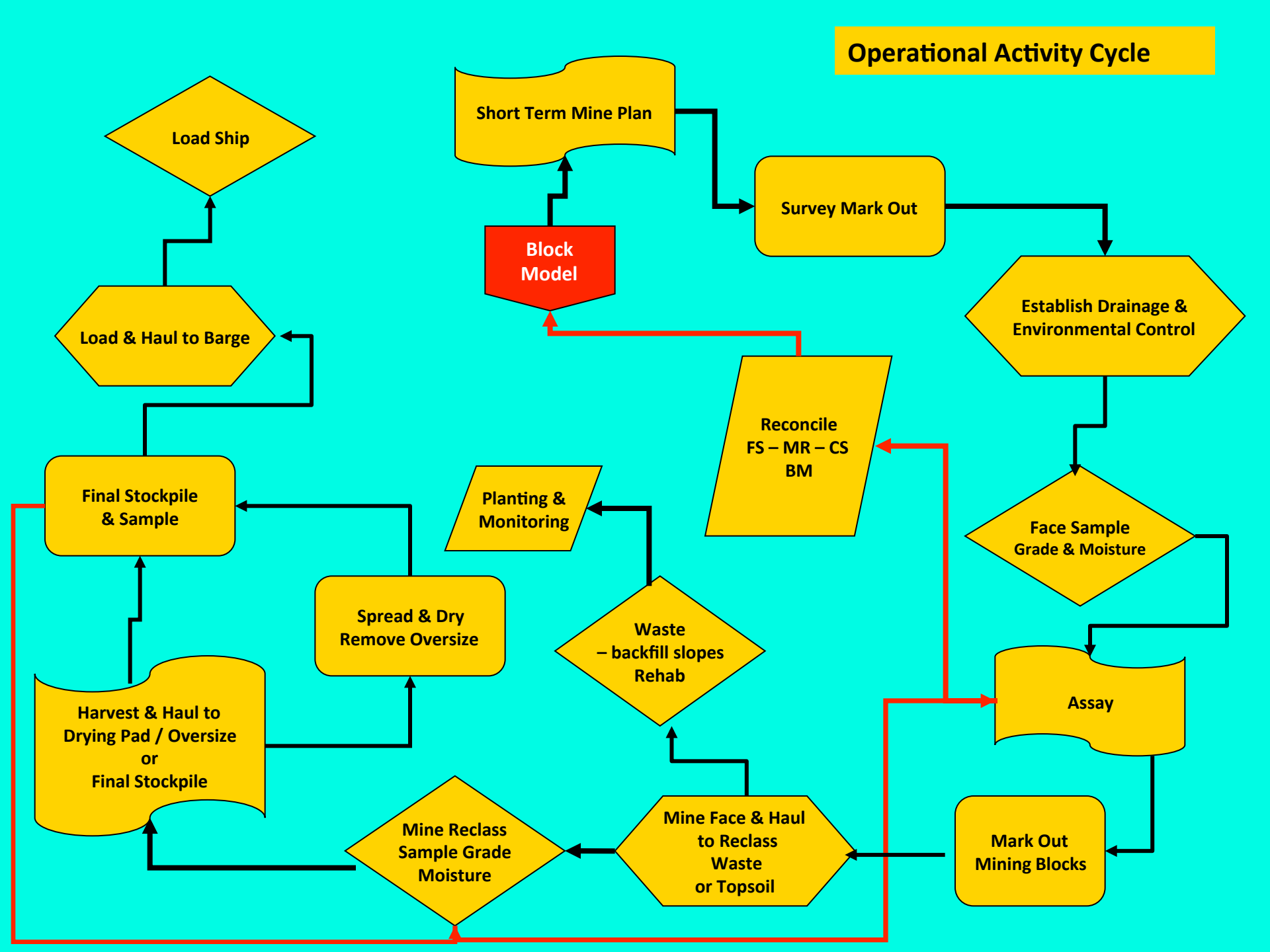


Mine Plan; Bench Plan determining high/medium/low grade locations



Mine Plan x Quantities (Note “Fe” is FeO2)

		LIM			SAP			SAP_RX		
		WMT	Ni%	Fe%	WMT	Ni%	Fe%	WMT	Ni%	Fe%
Area1_East	WST (Below 1.0% ni)	18,992	0.91	72.83	0	0.00	0.00	0	0.00	0.00
	M (1.0 - 1.3% ni)	45,119	1.18	72.97	347	1.21	29.08	137	1.21	29.08
	L (1.3 - 1.6% ni)	23,825	1.37	71.56	289	1.52	33.47	1,191	1.48	19.19
	N (1.6 - 1.9% ni)	388	1.63	69.61	13,888	1.76	37.19	12,497	1.79	27.05
	H (1.9 - 2.2% ni)	0	0.00	0.00	16,972	2.09	35.36	21,023	2.04	27.53
	S (Above 2.2% ni)	0	0.00	0.00	13,209	2.32	33.38	14,907	2.33	28.63
	Area Total	**88,324**	**1.17**	**72.55**	**44,705**	**2.05**	**35.28**	**49,755**	**2.05**	**27.54**
Area1_West	WST (Below 1.0% ni)	22,785	0.90	72.51	0	0.00	0.00	0	0.00	0.00
	M (1.0 - 1.3% ni)	37,657	1.16	71.64	3,200	1.26	40.31	2,454	1.19	22.28
	L (1.3 - 1.6% ni)	14,814	1.38	70.40	12,566	1.50	32.99	14,346	1.48	28.13
	N (1.6 - 1.9% ni)	375	1.67	69.07	18,037	1.75	32.42	26,220	1.74	30.06
	H (1.9 - 2.2% ni)	0	0.00	0.00	9,190	1.97	34.46	12,807	1.97	31.70
	S (Above 2.2% ni)	0	0.00	0.00	2,221	2.32	27.30	3,067	2.33	24.46
	Area Total	**75,631**	**1.13**	**71.65**	**45,214**	**1.72**	**33.30**	**58,894**	**1.73**	**29.33**
Area2	WST (Below 1.0% ni)	49,838	0.89	68.88	0	0.00	0.00	49	0.89	17.97
	M (1.0 - 1.3% ni)	148,017	1.17	69.71	392	1.25	23.67	2,561	1.16	19.34
	L (1.3 - 1.6% ni)	34,159	1.39	68.74	2,421	1.52	28.02	22,654	1.50	22.86
	N (1.6 - 1.9% ni)	329	1.69	68.73	60,037	1.80	31.45	91,832	1.79	25.67
	H (1.9 - 2.2% ni)	0	0.00	0.00	50,709	2.03	31.97	80,309	2.04	29.80
	S (Above 2.2% ni)	0	0.00	0.00	9,721	2.30	31.98	13,683	2.30	30.51
	Area Total	**232,343**	**1.14**	**69.39**	**123,280**	**1.93**	**31.61**	**211,088**	**1.88**	**27.17**
Area3	WST (Below 1.0% ni)	27,065	0.89	71.55	0	0.00	0.00	1,393	0.90	18.37
	M (1.0 - 1.3% ni)	80,026	1.17	71.37	8	1.08	20.10	5,282	1.15	19.71
	L (1.3 - 1.6% ni)	45,741	1.39	69.84	3,542	1.53	32.80	16,362	1.48	23.86
	N (1.6 - 1.9% ni)	2,941	1.69	67.11	10,061	1.78	28.43	34,107	1.78	24.34
	H (1.9 - 2.2% ni)	129	1.99	64.40	33,767	2.43	33.15	53,736	2.06	27.15
	S (Above 2.2% ni)	0	0.00	0.00	33,767	2.43	33.15	86,660	2.43	28.91
	Area Total	**155,902**	**1.20**	**70.87**	**81,145**	**2.31**	**32.55**	**197,540**	**2.09**	**26.90**


Operational Activity Cycle
Short Term Mine Plan
Survey Mark Out
Establish Drainage & Environmental Control
Face Sample Grade & Moisture
Assay
Mark Out Mining Blocks
Mine Face & Haul to Reclass Waste or Topsoil
Mine Reclass Sample Grade Moisture
Harvest & Haul to Drying Pad / Oversize or Final Stockpile
Spread & Dry Remove Oversize
Final Stockpile & Sample
Load & Haul to Barge
Load Ship
Block Model
Reconcile FS – MR – CS BM
Waste – backfill slopes Rehab
Planting & Monitoring

Infrastructure; All weather airfield.

Laboratory; 1 MM tpa

Camp Accommodation; Staff

Accommodation; Management, built with local material where possible with local labor.

Office; Converted sea containers.

Clinic; Serves Mine & Community

Clinic


ATION ROOM
DEPARTMENT OF HEALTH
Cough Manners
REMEMBER:
USAID
GLOVES

DSO Shipping; Barge Operation – Alternate to Building Port

Barges Along Side

Clam Shell Loading

Sling Net Loading

Sling nets

Causeway; Barge Loading Location

Challenges; Flood

Challenges; Wet Stockpiles

Challenges; Sediment Ponds Full

Challenges; Losing Stockpiles

Challenges; Mine Access Bridge in Typhoon

That’s where the bridge was…

Challenges; Changing & Improving Local Skills & Habits

Challenges; Changing & Improving Local Skills & Habits

Challenges……

BERONG NICKEL CORPORATION

INTERNAL MEMORANDUM

To: Berong Nickel Mine Personnel
Date: 9, October 2007
Subject: Animals in BNC Leighton Camp Area
Cc; Barangay Council

As of 0600 hrs today, any animals including dogs, cats, chickens, roosters and pigs found to be within our camp area will be exterminated and the carcass destroyed.

This action is being taken with the interests of hygiene and the well being of those people living in the camp.

Should anybody have an issue with this action, by appointment please present yourself to the undersigned.

I look forward to your support in working towards a clean and healthy prosperous camp.

And More Challenges

And More

LKI Moto

Nothing Will Surprise Us

Nothing Is Too Hard

Only Money May Stop Us