MINE MANAGEMENT SERVICES

CLIENT REPRESENTATIVE

INTRODUCTION

- ***A well defined geological model, innovative and thoughtful mine planning, safe, well managed operations, and the careful systematic recovery of coal should be the requirements of any mine.***
- **Britmindo** believes it can provide the standards of service that responsible corporate entities with a long term mining strategy demand and which is in keeping with the international status of the Indonesian Coal Industry.
- **Britmindo** provides technical studies and due diligence for international and local companies, investors and financiers.
- **Britmindo** offers Mine Management Services and Operational Improvement Initiatives and Programs to the Mining Industry.
- **The Britmindo** team includes qualified expatriate and Indonesian Mining Engineers, Geologists and other key Professional disciplines with proven performance to advise and assist on any mine development or operation.

OPERATIONS SNAPSHOT

CURRENT CONDITIONS

- Cumulative 40 Years mine management experience for IUP mine owners & contractors since Britmindo establishment.
- 80 Qualified operational staff supporting the various sites.
- 15 AusIMM certified members.
- 5 current operational mines under Britmindo management.
- 2 Pre-production mines soon to commence operations.
- Production under management ramping up to >750,000 metric tonnes and >3,500,000bcm per month.
- Capability to design, construct, install coal stockpiles, coal crushing, coal washing & barge loading systems and provide contract operation & maintenance management
- Balikpapan based operations support facilities providing geo modeling, mine planning, survey, outsourcing and administrative services.

MINE MANAGEMENT SERVICE

- SITE VISIT TO REVIEW CURRENT SITUATION
  - Greenfield, pre-production or operational mines
- DATA REVIEW TO DETERMINE ADEQUACY, ACCURACY, QUALITY, QUANTITY TO BUILD MINE GEO MODEL.
- DEVELOPMENT OF MASTER PLAN INCLUDING :
  - Life of mine production
  - Production sequencing
  - Waste dump location/s and hauling routes to reduce costs
  - Equipment selection to achieve production targets
  - Coal product qualities
  - Haul road alignments and proposed design
  - Mine infrastructure, Coal processing & loading plus support requirements
  - CAPEX/OPEX estimations
  - Timeline strategy against defined tasks and KPI’s
  - Mine closure & Reporting
- CONTRACTOR SELECTION TENDER PROCESS
- CONSTRUCTION SUPERVISION OF MINE INFRASTRUCTURE
- PRODUCTION MINE MANAGEMENT
- DAILY, WEEKLY, MONTHLY, QUARTELY, ANNUALLY REPORTING SYSTEMS

CASE STUDY

PRE-PRODUCTION / MINE PLANNING CASE STUDY

- The following case study provides a simplistic idea of the various steps undertaken for the development of a green field mine site

Assuming:

- Mine XYZ, during August – January 2013, completed an exploration program covering an area of 1,000 ha and generated the following results:
  - Identification of 9 outcrops
  - 177 bore holes
  - 50 quality holes
- Based upon economic analysis has determined break even strip ratio (BESR) at 4.58.
- The parameters used for this case study are:

Bench Height : 6 m
Berm Width : 3 m – Highwall
Berm Width : 5 m – Lowwall @ weathering zone
Single Slope : 50° - Hard Ground - Highwall
Single Slope : 37° - Soft Material - Highwall
Overall slope : 32° (w/ layback)
Overall slope : 37° (w/ layback)

Topography : Topo Lidar
Reserving Method : Sample Polygon
Minimum Thickness : 0.3 m
Dilution : 0.05 m – of thickness
Losses due to mining activity : 0.1 m
Density Default for Dilution : 1.5 kg/cu.m

CASE STUDY – EQUIPMENT SELECTION

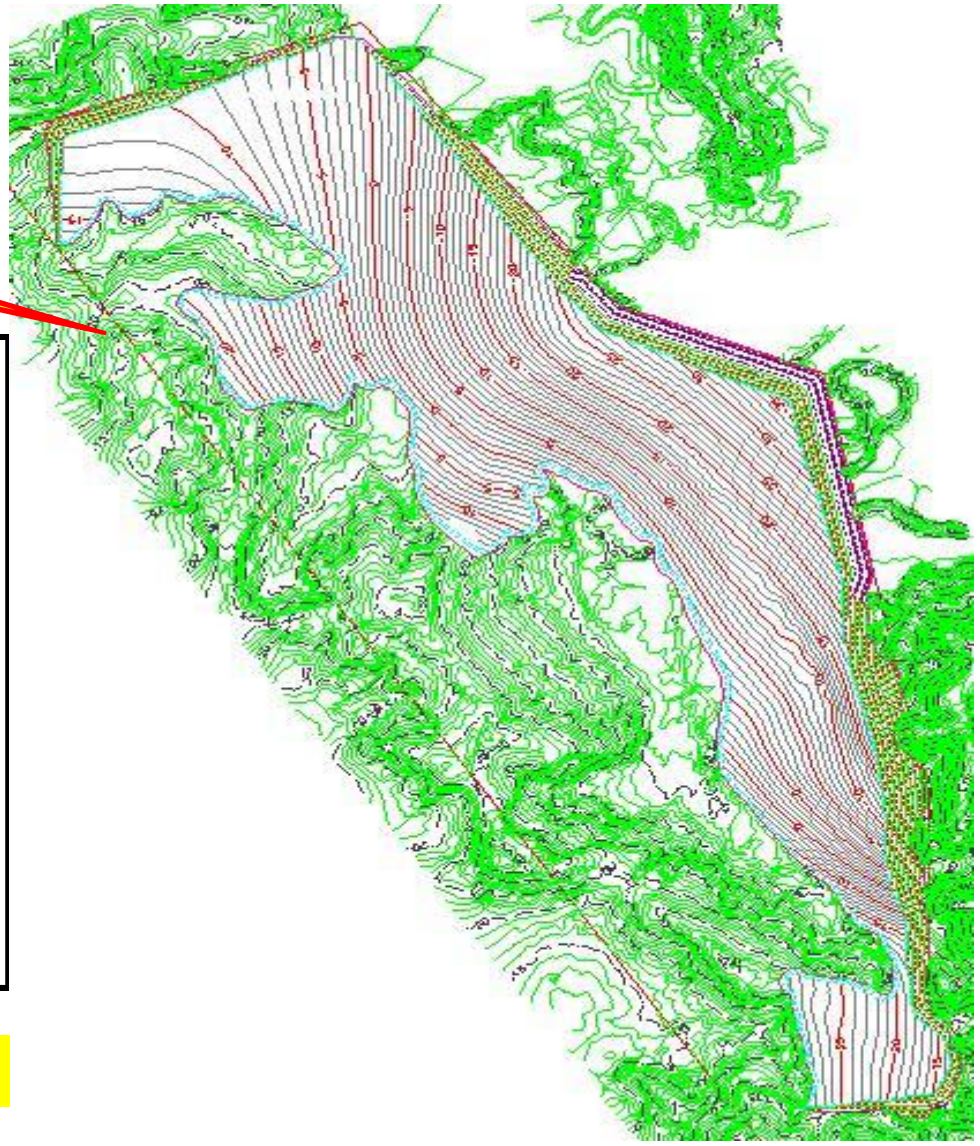
EQUIPMENT TYPE	MODEL	ESTIMATED PROD'ITY	No.	COMMENT
EXCAVATORS	PC 400	200bcm/hr	2	Loading to ADT-A35
	PC 300	180 ton/hr	1	Coal Getting
	PC 200	75bcm/hr	1	Coal cleaning
DUMP TRUCKS	VOLVO A35	60bcm/hr	6	Overburden/top soil
COAL HAUL TRUCKS	NISSAN CWB	35tonne/hr	4	Can be used for barge loading activities also
BULL DOZERS	D 85 SS		3	Face maintenance, Top soil, dumps
				Roads maintenace
MOTOR GRADERS	GD 705		2	Pit and road maintenance.
ANCILLARY ITEMS	WA 150 loader		1	Coal stockpiles, barge loading
	Compactor		2	Coal Road, pit access, stockpiles
	Water truck		2	Coal Road, pit access, stockpiles
	6" pumps		1	Pit
	Tower lamps		5	Pit lighting
MINE SUPPORT	Service trucks			
	Lube trucks			
	Fuel trucks			
	Light vehicles			
	Buses			

CASE STUDY - PRODUCTION SCHEDULE

Description	M-01	M-02	M-03	M-04	M-05	M-06	M-07	M-08	M-09	M-10	M-11	M-12	Y2	Y3	Y4	TOTAL
Waste Removal (KBcm)	206.05	202.71	201.85	201.36	204.69	203.71	205.77	205.12	204.33	205.50	196.24	209.63	2,144.37	1,849.95	1,501.41	7,942.69
Coal Mining (Ktonnes)	22.66	40.41	51.74	51.37	52.16	52.88	53.05	52.27	51.92	51.47	50.83	52.84	653.43	652.51	653.71	2,543.25
Total Moisture	47.39	47.37	47.86	47.82	47.70	47.89	47.93	47.93	47.89	47.87	47.86	47.89	47.99	48.19	48.52	48.18
Inherent Moisture	29.29	30.26	33.06	32.21	31.61	33.00	33.31	33.39	32.60	33.37	33.35	33.29	33.85	34.55	35.35	34.08
Ash	4.90	4.74	3.45	3.72	3.93	3.54	3.17	3.05	3.38	3.07	3.11	3.33	4.16	0.12	3.36	2.85
Sulphur	0.17	0.17	0.18	0.17	0.18	0.17	0.18	0.18	0.18	0.19	0.19	0.18	0.14	3.90	0.11	1.08
Fixed Carbon	30.43	30.53	30.84	30.73	30.68	30.78	30.81	30.88	30.81	30.98	30.97	30.72	29.54	29.28	29.07	29.55
Calorific Value	4,635.21	4,523.36	4,292.30	4,377.04	4,433.42	4,291.66	4,301.27	4,301.88	4,365.54	4,296.26	4,294.54	4,293.73	4,208.95	4,141.90	4,093.46	4,187.53
Stripping Ratio	9.09	5.02	3.90	3.92	3.92	3.85	3.88	3.92	3.94	3.99	3.86	3.97	3.28	2.84	2.30	3.12
C2A (Ktonnes)	2.36	14.32	16.60	9.19	10.02	15.40	9.91	9.16	3.24	11.20	12.49	10.10	91.99	86.83	67.28	370.84
Total Moisture	47.32	47.32	47.41	47.39	47.46	47.33	47.59	47.68	47.59	47.54	47.53	47.36	46.31	46.93	47.97	47.15
Inherent Moisture	32.83	32.83	32.94	32.92	33.02	32.85	33.19	33.30	33.18	33.12	33.11	32.88	31.50	32.35	33.76	32.63
Ash	4.22	4.23	4.00	4.06	3.83	4.21	3.44	3.19	3.44	3.60	3.62	4.10	7.05	0.13	3.27	3.65
Sulphur	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.19	0.19	0.18	0.18	0.18	0.16	5.75	0.11	1.45
Fixed Carbon	30.91	30.90	30.94	30.93	30.98	30.90	31.07	31.12	31.07	31.03	31.03	30.94	30.39	30.40	30.62	30.64
Calorific Value	4,236	4,233	4,242	4,239	4,250	4,234	4,268	4,279	4,269	4,261	4,260	4,242	4,127	4,122	4,159	4,175
C2 (Ktonnes)	15.26	19.99	0.48	8.14	14.68	0.21	3.56	2.64	6.56	-	-	5.34	316.54	285.91	435.06	1,109.58
Total Moisture	47.18	47.19	47.26	47.17	47.20	47.23	48.00	47.99	47.21			48.06	48.25	48.33	48.64	48.34
Inherent Moisture	27.45	27.53	28.01	27.40	27.60	27.82	33.14	33.14	27.69			33.64	35.49	37.07	36.28	35.62
Ash	5.58	5.56	5.44	5.59	5.54	5.49	4.23	4.23	5.52			4.12	3.73	0.11	3.33	2.79
Sulphur	0.17	0.17	0.17	0.17	0.17	0.17	0.13	0.13	0.17			0.13	0.12	3.45	0.10	0.96
Fixed Carbon	30.22	30.20	30.11	30.23	30.19	30.14	29.05	29.05	30.17			28.94	28.50	28.09	28.55	28.54
Calorific Value	4,803	4,796	4,756	4,807	4,790	4,772	4,325	4,325	4,783			4,283	4,133	4,008	4,049	4,117
C2B (Ktonnes)	5.04	6.10	34.66	34.05	27.46	37.26	39.58	40.47	42.12	40.27	38.33	37.40	244.90	279.77	151.36	1,062.83
Total Moisture	48.07	48.11	48.08	48.09	48.06	48.13	48.01	47.98	48.02	47.97	47.97	48.00	48.29	48.45	48.41	48.36
Inherent Moisture	33.20	33.14	33.19	33.17	33.25	33.09	33.36	33.43	33.33	33.45	33.43	33.35	32.60	32.66	33.38	32.97
Ash	3.14	3.20	3.16	3.18	3.11	3.25	3.01	2.95	3.04	2.93	2.94	3.00	3.62	0.13	3.49	2.64
Sulphur	0.18	0.17	0.18	0.17	0.18	0.17	0.18	0.19	0.18	0.19	0.19	0.18	0.16	3.79	0.12	1.07
Fixed Carbon	30.83	30.77	30.79	30.79	30.84	30.74	30.91	30.95	30.89	30.97	30.96	30.92	30.56	30.14	29.90	30.22
Calorific Value	4,314	4,311	4,310	4,311	4,310	4,313	4,307	4,306	4,308	4,306	4,306	4,309	4,338	4,285	4,191	4,266

CASE STUDY – LoM PIT DESIGN

LIMIT OF PINJAM PAKAI



Waste Removal (KBcm)	7,942.69
Coal Mining (Ktonnes)	2,543.25
Total Moisture	*48.18*
Inherent Moisture	*34.08*
Ash	*2.85*
Sulphur	*1.08*
Fixed Carbon	*29.55*
Calorific Value	*4,188*
Stripping Ratio	3.12

Values based upon air dried basis (adb)

CASE STUDY – HAUL ROAD CONSTRUCTION

Working Hours per Week		
1 Week =	**7**	**days**
Working Time :		
Day Shift (07.00 - 18.00)	11	hrs/shift
Night Shift (19.00 - 06.00)	11	hrs/shift
Available Hours per day	**22**	**hrs**
Delay Time :		
Rain	3	hrs/day
Slipperys	1.5	hrs/day
Meal Time	2	hrs/day
Refueling + Prestart Check	1	hrs/day
Total Delay Time	**7.5**	**hrs/day**
Mechanical Availability	**85%**	
Net Available Hours	**12.325**	**hrs/day**
Net Available Hours per Week	**86.275**	**hrs/week**

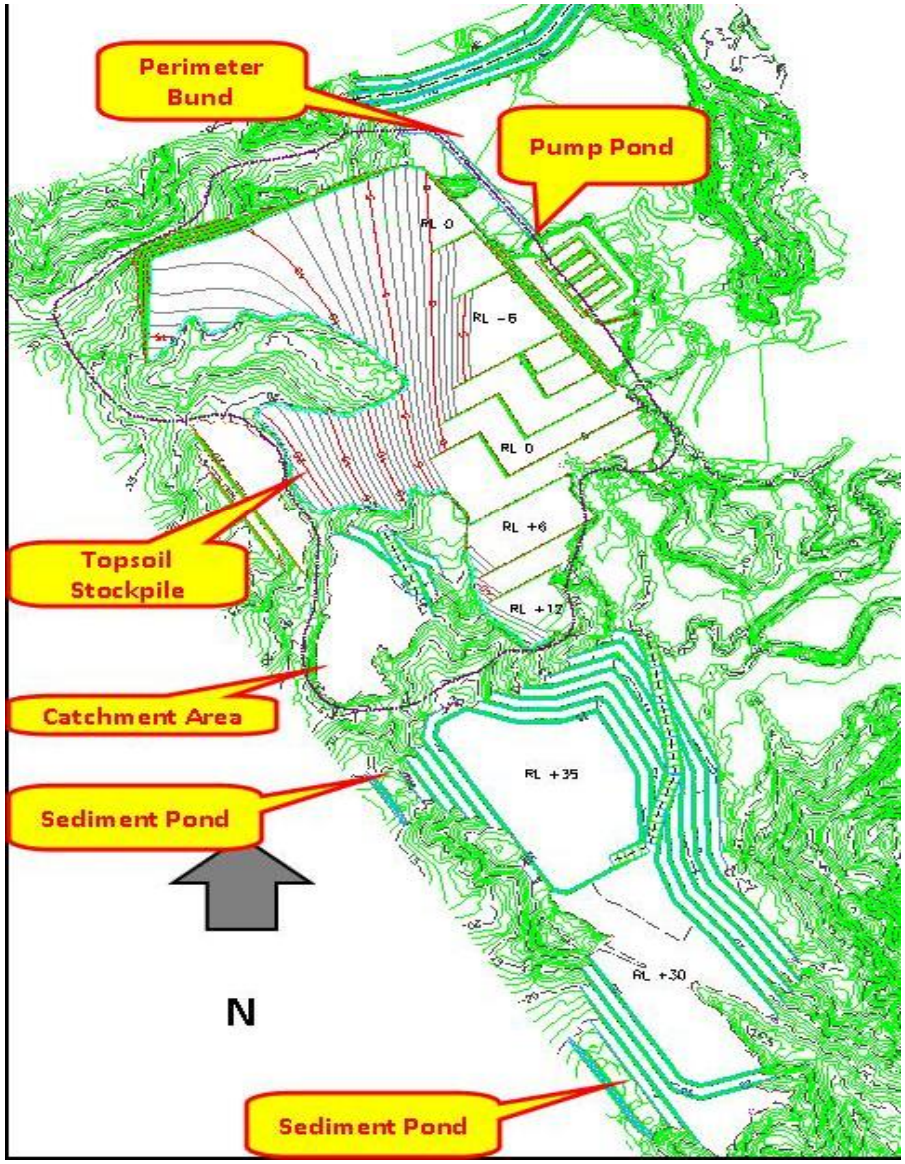
EQUIPMENT USED	QUANTITY	PROD'TY	WORK DURATION HOURS	WORK DURATION WEEKS
CUT AND FILL REMOVAL				
Excavator PC300	2	150 bcm/hrs	521	6
Bulldozer D85ESS	2	120 bcm/hrs	350	4
Trucks DT CWB	6	60 bcm/hrs	416	
	Sub Total		**871**	**10**
SMOOTHING, BED COMPACTING, LAMINATING & FINISHING				
Motor Grader GD705 / Cat 14H	1	5,205 m2/hrs	9	1
Vibro Compactor SV512 / Cat 531	2	650 m2/hrs	38	1
Sand+Gravel (Rp. 300,000/m3)	7,390 m3			
	Sub Total		**47**	**2**
SUPPORT EQUIPMENT				
Excavator PC200	2		345	4
Tower Lamp 4 kVA	2		435	5
Light Vehicle (LV) Triton	1		522	12
Fuel Truck	1		522	12
	Sub Total			

SUMMARY				
TOTAL ESTIMATION WORK DURATION		**12 Weeks**		**12 Weeks**
Total Cost of Rental	**Rp**	**1,588,785,626**	**$**	**176,532**
Total Cost of Fuel	**Rp**	**991,779,317**	**$**	**110,198**
Total Cost of Material	**Rp**	**2,216,880,000**	**$**	**246,320**
Est. Mob and Demob Cost	**Rp**	**360,000,000**	**$**	**40,000**
TOTAL COST	**Rp**	**5,157,444,943**	**$**	**573,049**
OVERHEAD COST 10%	**Rp**	**515,744,494**	**$**	**57,305**
GRAND TOTAL COST	**Rp**	**5,673,189,437**	**$**	**630,354**

CASE STUDY – CASH FLOWS

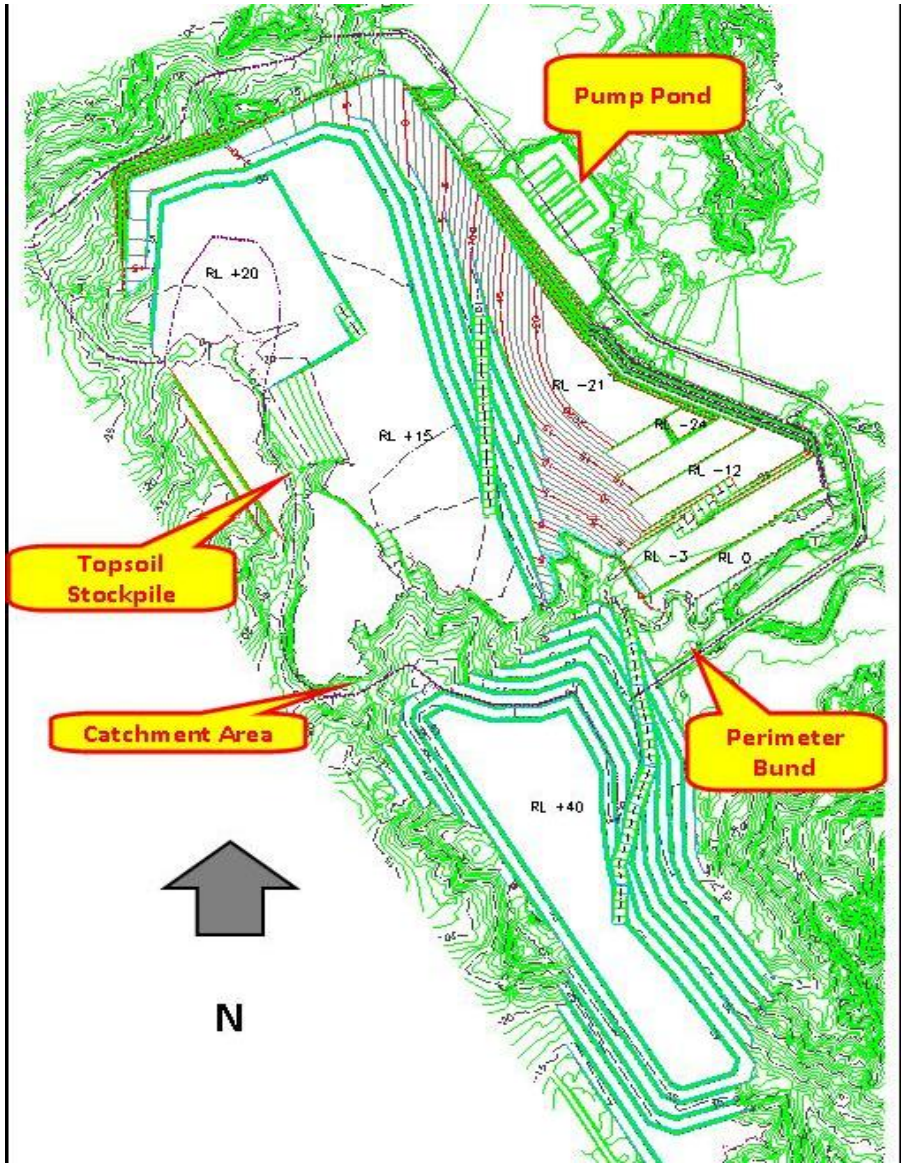
	Stripping Ratio =	3.5	Year - 1												
			Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	
	Operating Cash Flow	Units rates USD$													
A	Revenue	Coal output [t]		15,000.00	35,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	
	1 Coal Sales assume	$ 25.00		$ 375,000.00	$ 875,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,250,000.00	
	Cash Received			$ 375,000.00	$ 875,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,250,000.00	$ 1,250,000.00	
B	Royalties and Fees														
	1 Road Rent / Rehabilitation	$ 0.30		$ 4,500.00	$ 10,500.00	$ 15,000.00	$ 15,000.00	$ 15,000.00	$ 15,000.00	$ 15,000.00	$ 15,000.00	$ 15,000.00	$ 15,000.00	$ 15,000.00	
	2 Community Development	$ 1.00		$ 15,000.00	$ 35,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	
	3 Land fees/compensations	$ 2.00		$ 30,000.00	$ 70,000.00	$ 100,000.00	$ 100,000.00	$ 100,000.00	$ 100,000.00	$ 100,000.00	$ 100,000.00	$ 100,000.00	$ 100,000.00	$ 100,000.00	
	4 GCI Royalties 3 %	$ 0.75		$ 11,250.00	$ 26,250.00	$ 37,500.00	$ 37,500.00	$ 37,500.00	$ 37,500.00	$ 37,500.00	$ 37,500.00	$ 37,500.00	$ 37,500.00	$ 37,500.00	
	NET REVENUE			$ 314,250.00	$ 733,250.00	$ 1,047,500.00	$ 1,047,500.00	$ 1,047,500.00	$ 1,047,500.00	$ 1,047,500.00	$ 1,047,500.00	$ 1,047,500.00	$ 1,047,500.00	$ 1,047,500.00	
C	Mining costs														
	1 OB Removal (USD$/BCM)	(Indicative rates)													
	(I) Production rate (BCM)	BCM		52,500	122,500	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	
	(II) Cost on OB Removal	$ 2.00		$ 105,000.00	$ 245,000.00	$ 350,000.00	$ 350,000.00	$ 350,000.00	$ 350,000.00	$ 350,000.00	$ 350,000.00	$ 350,000.00	$ 350,000.00	$ 350,000.00	
	2 Coal Mining (USD$/t)														
	(II) Production Rate (tonnes)	Tonnes		15,000	35,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
	(II) Cost of Coal mining	$ 1.20		$ 18,000.00	$ 42,000.00	$ 60,000.00	$ 60,000.00	$ 60,000.00	$ 60,000.00	$ 60,000.00	$ 60,000.00	$ 60,000.00	$ 60,000.00	$ 60,000.00	
	(III) Cost of Coal Hauling	$ 1.40		$ 21,000.00	$ 49,000.00	$ 70,000.00	$ 70,000.00	$ 70,000.00	$ 70,000.00	$ 70,000.00	$ 70,000.00	$ 70,000.00	$ 70,000.00	$ 70,000.00	
	3 Stockpile fee														
	(I) Cost of stockpile management	$ 1.00		$ 15,000.00	$ 35,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	$ 50,000.00	
	4 Sampling	$ 0.23		$ 3,450.00	$ 8,050.00	$ 11,500.00	$ 11,500.00	$ 11,500.00	$ 11,500.00	$ 11,500.00	$ 11,500.00	$ 11,500.00	$ 11,500.00	$ 11,500.00	
	5 Technical operating expenses Tubindo	$ 0.50		$ 7,500.00	$ 17,500.00	$ 25,000.00	$ 25,000.00	$ 25,000.00	$ 25,000.00	$ 25,000.00	$ 25,000.00	$ 25,000.00	$ 25,000.00	$ 25,000.00	
D	Site costs and contingencies														
	1 Office furnishings	LS		$ 1,000.00	$ 1,000.00	$ 1,000.00	$ 1,000.00	$ 1,000.00	$ 1,000.00	$ 1,000.00	$ 1,000.00	$ 1,000.00	$ 1,000.00	$ 1,000.00	
	2 contingencies	LS		$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	
	3 Communications	LS		$ 750.00	$ 750.00	$ 750.00	$ 750.00	$ 750.00	$ 750.00	$ 750.00	$ 750.00	$ 750.00	$ 750.00	$ 750.00	
	4 Vehicle Hire x 4 units	Mth		$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00	$ 10,000.00	
	5 Fuel Generats and vehicles	Mth		$ 6,500.00	$ 6,500.00	$ 6,500.00	$ 6,500.00	$ 6,500.00	$ 6,500.00	$ 6,500.00	$ 6,500.00	$ 6,500.00	$ 6,500.00	$ 6,500.00	
	6 Stationery and office expenses	Mth		$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	$ 2,000.00	
	7 Food and miscellaneous	Mth		$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	
	8 Water supply ablutions	Mth		$ 500.00	$ 500.00	$ 500.00	$ 500.00	$ 500.00	$ 500.00	$ 500.00	$ 500.00	$ 500.00	$ 500.00	$ 500.00	
E	Mine management services Britmindo	$ 1.50		$ 22,500.00	$ 52,500.00	$ 75,000.00	$ 75,000.00	$ 75,000.00	$ 75,000.00	$ 75,000.00	$ 75,000.00	$ 75,000.00	$ 75,000.00	$ 75,000.00	
	NET INCOME BEFORE TAX		$ -	$ 98,000.00	$ 256,250.00	$ 376,250.00	$ 376,250.00	$ 376,250.00	$ 376,250.00	$ 376,250.00	$ 376,250.00	$ 376,250.00	$ 376,250.00	$ 376,250.00	
	Tax	28%	$ -	$ 28,210.00	$ 71,406.00	$ 105,910.00	$ 105,910.00	$ 105,910.00	$ 105,910.00	$ 105,910.00	$ 105,910.00	$ 105,910.00	$ 105,910.00	$ 105,910.00	
	NET INCOME AFTER TAX		$ -	$ 67,710.00	$ 184,844.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	
F	CapEx & Pre Operational Costs														
	1 Preparation Cost As per attachment		$ 893,239.98	$ 382,817.13											
	2 Mobilisation of Mining contractor		$ 250,000.00												
	3 Advance payments to contractor														
	Total pre operational costs		$ 1,143,239.98	$ 382,817.13											
G	Net operating monthly cash flows		$(1,143,239.98)	$ (315,107.13)	$ 184,844.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	
H	Repayment of loan facility (USD$1/ton)														
I	Sub total after repayment of loan		$(1,143,239.98)	$ (315,107.13)	$ 184,844.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	$ 272,340.00	
I	Overall accumulative cash flows		$(1,143,239.98)	$ (1,458,347.11)	$ (1,273,503.11)	$ (1,001,163.11)	$ (728,823.11)	$ (456,483.11)	$ (184,143.11)	$ 88,196.89	$ 360,536.89	$ 632,876.89	$ 905,216.89	$ 1,177,556.89	

CASE STUDY – YEAR 1 MINE LAYOUT



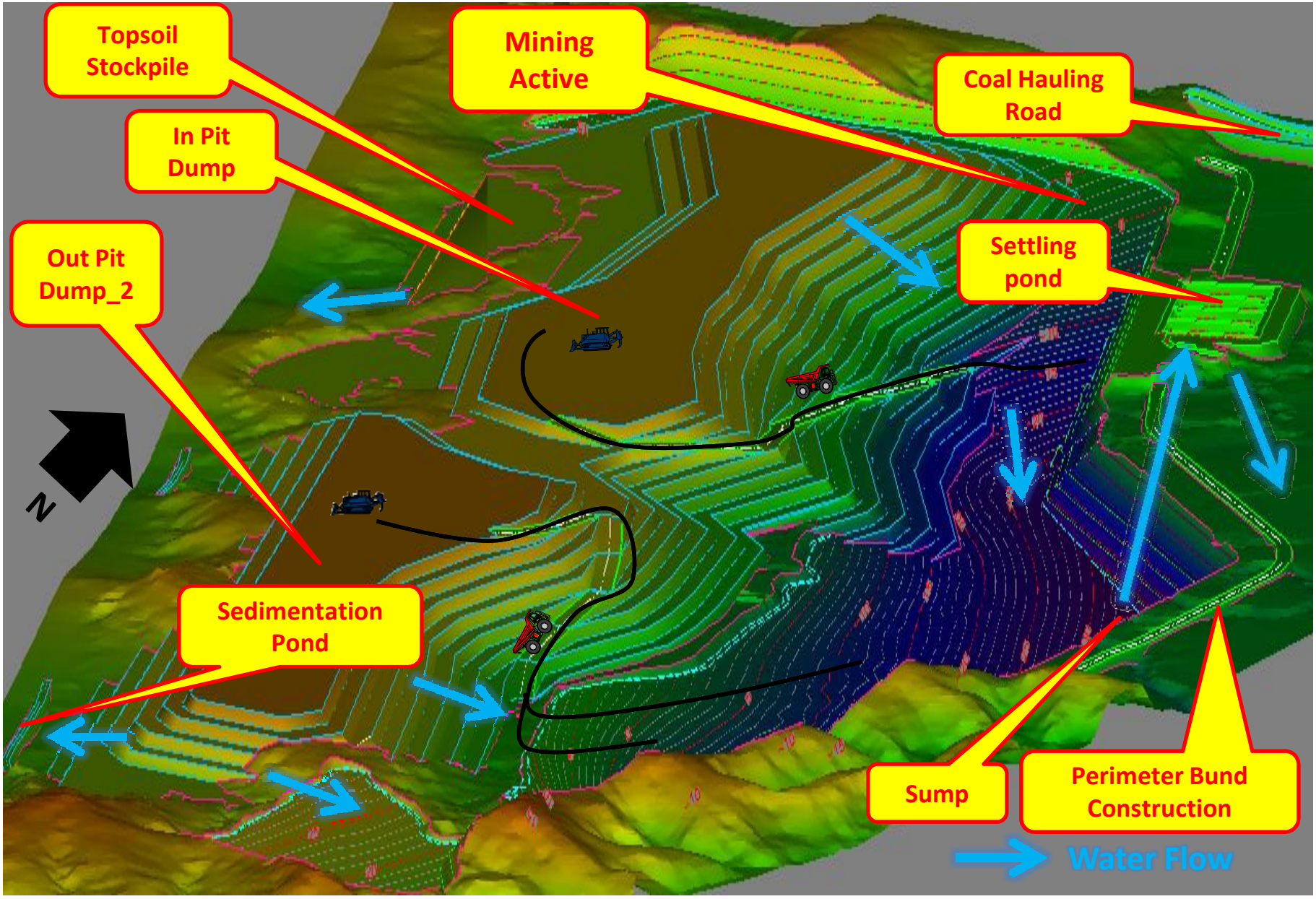
- Mining activity to start at the northern end
- Pit sump will be located in the high wall zone.
- Waste allocation : Coal Hauling Road Construction, OPD1, OPD2 & Topsoil Stockpile.
- Settling pond construction for pit area should be completed during 2nd Quarter.
- Sediment dam construction (sediment control) for OPD2 Area should be completed during 3rd & 4th Quarter.
- Perimeter bund construction at the northern end area should be finished end 1st Quarter.
- **Outstanding issue : need to construct final settling pond for run off treatment.**

CACE STUDY – YEAR 2 MINE LAYOUT



- Mining activity commenced from the northern area toward the southern zone.
- Pit sump will be allocated at the high wall zone.
- Waste allocation : Out Pit Dump2 & In Pit Dump Area at the northern area & Topsoil Stockpile .
- Perimeter bund construction to reduce catchment area at Year-2 mining boundary should be completed prior to swamp material removal.
- Direct run off surface water start from RL+30 at out pit dump area to the western area (sediment pond.)

CASE STUDY – FINAL LAYOUT



SAFE OPERATING PROCEDURES

DEVELOPMENT, SOCIALISATION & IMPLIMENTATION OF HEALTH AND SAFETY SOP - examples

No.	Procedure Management	Topics
1.	PM. SHE. 01	Communication, Participation and Consultation
2.	PM. SHE. 02	Contractors and suppliers
3.	PM. SHE. 03	Mine Roads and Traffic sign
4.	PM. SHE. 04	Personal Protective Equipment Control
5.	PM. SHE. 07	Investigation and Incident Report
6.	PM. SHE. 09	Unit standardization
7.	PM. SHE. 10	Mine Traffic Rules
8.	PM. SHE. 11	Coal Hauling
9.	PM. SHE. 12	ID- Simper
10	PM. SHE. 13	LOTO

SAFE OPERATING PROCEDURES

DEVELOPMENT, SOCIALISATION & IMPLIMENTATION OF PRODUCTION SOP'S - examples

No.	Procedure Management	Topics
1.	PM. PROD. 01	Working Near High wall
2.	PM. PROD. 02	Production Control
3.	PM. PROD. 03	Mud excavation and removal
4.	PM. PROD. 04	Moving and setting up pumps
5.	PM. PROD. 05	Determination of cropline
6.	PM. PROD. 06	Establishing mine sumps
7.	PM. PROD. 09	Disposal smoothing
8.	PM. PROD. 10	Soil Management
9.	PM. PROD. 11	Coal excavation and contamination

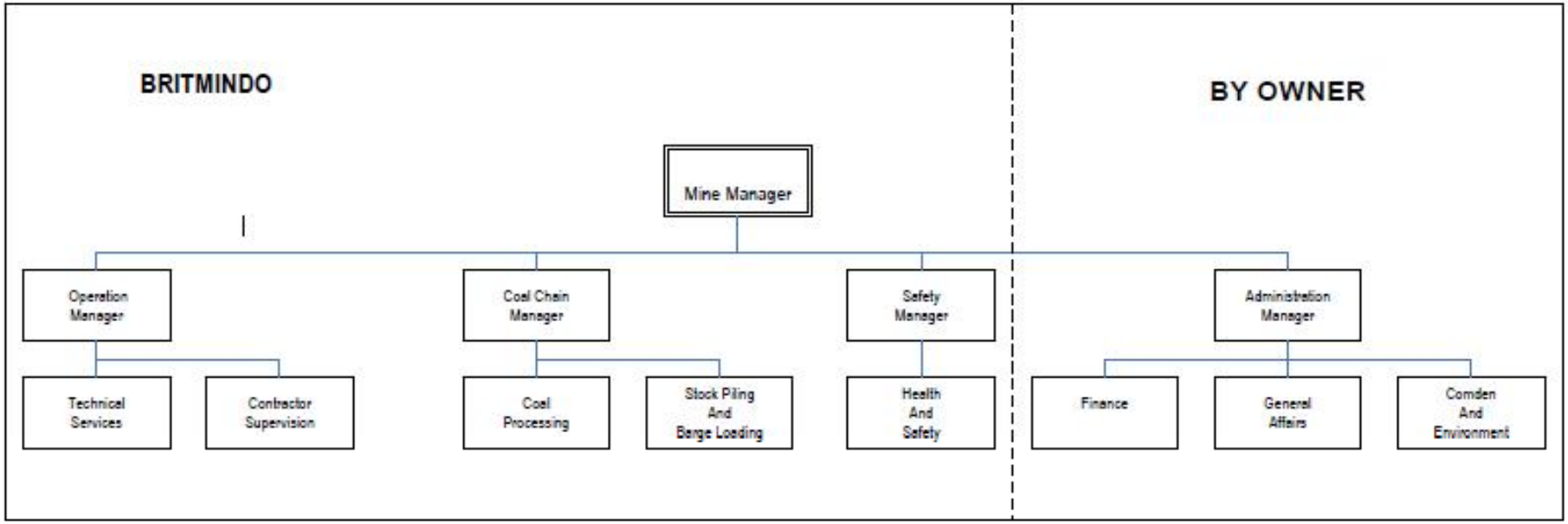
ORGANISATION STRUCTURE

THE ORGANISATION STRUCTURE AND COMPOSITION IS CRUCIAL TO ENSURE EFFECTIVE MANAGEMENT WITH DEFINED ROLES & RESPONSIBILITIES

BRITMINDO MINE MANAGMENT STRUCTURE IS VARIABLE AND SUBJECT TO:

- PRODUCTION TARGETS & MANNING LEVELS
- ROLES AND RESPONSIBILITIES – SHARED OR EXCLUSIVE
- ADDITIONAL TASKS AND SERVICES AGAINST:
  - Environmental
  - Operational health & safety
  - Coal haul road maintenance & management
  - Coal processing and stockpile management
  - Training programs
  - Mine closure

ORGANISATION STRUCTURE - TYPICAL



Included in the Services are:-	Excluded in the Service are:-
1. Personnel as stated	1. Office and Office supplies
2. Personnel mobilization and demobilization cost.	2. Light Vehicles and fuel
3. Salaries, THR, Annual bonus, Travel, Leave	3. Power, communications, radios.
4. Life & Medivac Insurance	4. Messing, meals and accommodation
5. Mine planning software/Survey equipments	5. Mess & Office Furnishings
6. Computer hardware	5. Payments to third parties
7. Personal safety Equipment	6. Security at the mine
8. Bedding, Personal Linen	7. Stationary and other operating Consumables
9. Topographic survey equipments	8. Relevant GOI PPn Tax

MINE MANAGEMENT SERVICES

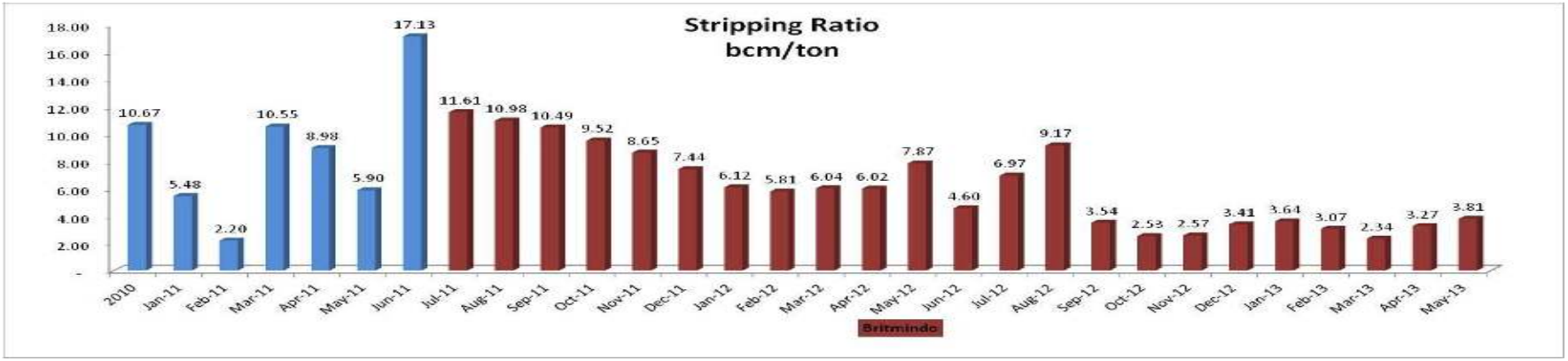
- PRE-PRODUCTION SERVICES ARE BASED UPON FIXED RATES AGAINST:
  - SITE VIST REVIEW
  - DATA COLLECTION & EVALUATION
  - PRE-PRODUCTION MINE PLANNING - LoM, ANNUAL, MONTHLY
  - EQUIPMENT SELECTION
  - CONTRACTOR TENDER PROCESS (IF REQUIRED)

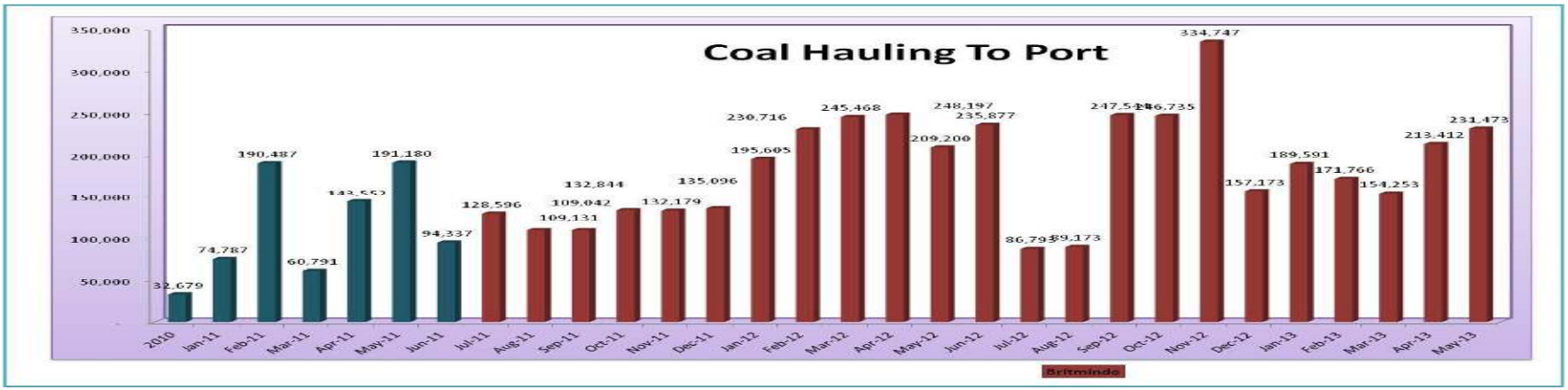
- MINE MANAGEMENT VARIABLE RATES CAN BE APPLIED AGAINST EITHER:
  - COAL PRODUCTION ACHIEVEMENT
  - OVERBURDEN REMOVAL ACHEIVEMENT
  - OR ALTERNATIVELY, AGREED FIXED MONTHLY FEE AGAINST MANPOWER AT SITE

- VARIATIONS AGAINST INCLUSIONS/EXCLUSIONS OF SERVICES
- GENERAL TERM IS MINIMUM 24 MONTHS FROM COMMENCEMENT OF PRODUCTION

MINE MANAGEMENT HIGHLIGHTS

- SUCCESSFULLY ESTABLISHED A GREENFIELD MINE FOR A LARGE INDONESIAN CONTRACTOR RAMPING PRODUCTION UP TO 2,500,000MT PER ANNUM
- SUCESSFULLY RAMPED UP PRODUCTION WHILST REDUCING STRIP RATIO AND NUMBER OF CONTRACTORS AFTER BEING APPOINTED TO TAKE OVER THE MANAGEMENT OF AN EXISTING OPERATION.





MINE MANAGEMENT HIGHLIGHTS

- SUCCESSFULLY IMPROVED THE PRODUCTIVITY OF APPOINTED CONTRACTORS AT A LARGE SCALE MINE IN EAST KALIMANTAN FOR MULTINATIONAL MINE OWNER
- ACTED AS TECHNICAL CONSULTANTS FOR LARGE CLIENT TO SECURE INVESTMENT CAPITAL FOR DEVELOPMENT OF DEDICATED PORT FACILITIES
- CONTINUES TO PROVIDE TRAINING SERVICES FOR MAINTENANCE PLANNING AND WORK SHOP MANAGEMENT FOR MEDIUM SIZE CONTRACTOR IN KALIMANTAN

OUR CLIENT LIST FOR MANAGEMENT/CPP SERVICES INCLUDE :-

PT MANDIRI INTI PERKASA
PT TRIDENT MANAGEMENT(AUSTRALIA)
PT INDOMINCO MANDIRI
PT ALASANIE
PT INDOASIA CEMERLANG
PT BHORUKA POWER
PT ROBINDO NATARAYA
INDOMINES LTD (AUSTRALIA)
PT GLOBALINDO INTI ENERGY
PT ARTAMULIA TATAPRATAMA
PT SAMAKTA NUSAPHALA
PT MORISS
PT BAMAS SEJAHTERA
PT MANDALA KARYA PERKASA
PT GOLDEN ENERGY MINES
APPOLONIUS (INDIA)
PT RATU SAMBAN
REA HOLDINGS LTD (UK)
PT TUNAS INTI ABADI
STX CORPORATION (KOREA)
KPF (KOREA)
TRIAS GROUP (CHINA)
PT SEW TRISULA GLOBAL (INDIA)
PT BERKAT TUJUH SAUDARA
PT PERMATA RESOURCES TBK
PT ENERGY ALAM

BENEFITS OF MINE MANAGEMENT

- ABILITY TO PROVIDE SKILLED, EDUCATED, EXPERIENCED MINING PERSONNNEL
- ABILITY TO PROVIDE CLEAR & CONCISE REPORTS TO THE CLIENT
- KNOWLEDGE AND IMPLIMENTATION OF MINING PRACTICES IN LINE WITH PREVAILING MINING LAWS AND REGULATIONS PERTAINING TO:-
  - KEPMEN 555
  - ENVIRONMENTAL REGULATIONS
  - FORSTRY REQUIREMENTS
  - GOVERNMENT REPORTING SYSTEMS
- ABLE TO ADJUST MINE PLANS AND PRODUCTION SCHEDULES TO SUIT MARKET CONDITIONS
- REDUCE HRD AND MANPOWER RECRUITMENT COSTS TO IUP MINE OWNERS & CONTRACTORS
- DUAL LANGUAGE REPORTING SYSTEMS TO CLIENT AGAINST DAILY, WEEKLY, MONTHLY AND ANNUAL PRODUCTION
- FLEXIBLE TERMS FOR CLIENTS
- SAFETY ORIENTATED AND FOCUSED ON ACHIEVEMENT OF PRODUCTION TARGETS
- ON SITE MINE PLANNING
- CONTRACT MANAGEMENT

QUESTIONS???

PLEASE FEEL FREE TO ASK QUESTIONS FOR PANEL DISCUSSION

THANKYOU