



Ministry of Natural Resources and Environmental Conservation



Department of Geological Survey and Mineral Exploration

Coal Exploration at Man Aung Area, Nga Phe Township , Magway Region

Han Naing Zaw

Assistant Geologist & Party

July, 2016

Field Party and Duration

Sr	Name	Designation	Duration
1	U Kay Khine Min	Assistant Geologist	14.5.2016 to 7.6. 2016
2	U Han Naing Zaw	Assistant Geologist	14.6. 2016 to Recent
3	U Kyaw Kyaw Oo	Assistant Geologist	8.5.2016 to Recent
4	U Chit Aung	Geology Assistant 1	8.5.2016 to Recent
5	U Zaw Htoo Naing	Geology Assistant 1	14.5 2016 to Recent

Previous Work

-In 1982 U Khin Mg Aye and parties carried out Regional Geological Mapping Field at Nga Phe, Min Tone Township, Magway Region.

-In 1994 U Khin Mg Myint and parties carried out Coal Exploration at Yin She area, Nga Phe Township, Magway Region.

-In 2015 U Kay Khine Min and parties carried out Regional Geological Mapping and Data Base Field at Nga Phe, Min Hla and Min Tone Township. Magway Region.

Work done

Regional Geological Mapping	-	194.4 km²
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Detail Geological Mapping	-	21.25 km²
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Collected Rock Sample	-	20 nos
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Collected Coal Sample	-	11 nos
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Collected fossil Sample	-	5 nos
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Regional Geology

<u>Formation</u>	<u>Age</u>	<u>Description</u>
Alluvial	Quaternary	Mostly Cultivated area
	Unconformity	
Padaung	Middle Oligocene	Blurish grey col; , laminated Mudstone inter-bedded ē S.st
Shwezettaw	Lower Oligocene	Yellowish brown col; fine to medium grained, thick bedded to massive fossi- liferous S.st inter-bedded ē minor Sandy Shale
	Unconformity	
Yaw	Upper Eocene	Brown col; laminated, thin bedded Shale inter-bedded ē minor S.st and bluish grey col; medium bedded mudstone
Pondaung	Upper Eocene	Grey to yellowish brown col; medium to thick bedded, hard medium grained S.st & grey to brown col; thin bedded carbonaceous mudstone ē coal seams. Somewhere fossil are noted

<u>Formation</u>	<u>Age</u>	<u>Description</u>
Tabyin	Middle Eocene	Grey col; thin bedded mudstone & minor S.st bed
Tilin	Lower Eocene	Brownish grey col; medium bedded medium grain S.st
Laungshe	Early Eocene	Grey to dark grey col; laminated Shale interbedded ē S.st
Paunggyi	Paleocene	Yellowish brown to grey col; medium bedded gritty S.st & brown col; rounded Conglomerates composed of quartz, S.st , black materials & Schist
	Unconformity	
Kabaw	Upper Cretaceous	Light grey col; medium bedded S.st ē ripple mark and interbedded ē grey col; thin bedded Mudstone



669463 E/ 2201162 N

Yellowish brown col; fossiliferous S.st
(Shwesattaw formation)

667015 E/ 2202583 N

Yellowish brown col;, fine to median
Grained, thick bedded S.st
350°/ 75° E (looking - 355°)

(Shwesattaw formation)





673048 E/ 2203179 N blueish grey col; Mudstone & buff col; micaceous Sst interbedded
340°/ 54° E (Looking 175 °) (Yaw formation)



672509 E/ 220680 N Buff col; medium grain Massive Sst ē Coal lenses
(Pondaung formation) Looking - 190°



673009 E/ 2203138 N buff col; S.st & Shale interbedded 350°/ 45° E
(Pondaung formation) Looking - 320°



661208 E/ 2200169 N Buff col; to reddish brown col; gritty Sandstone
and Conglomerate



660276 E/ 2208918 N buff col; fine to medium grained S.st & grey col;
mudstone interbedded 040°/ 25° E (**Kabaw formation**)
Looking – (170°)

Coal Exploration

- Coal occurrences were located around NE, E and SE of Man Aung village. (667751E, 2201611N).
- Coal seams were found in grey to yellowish brown color, thin bedded, carbonaceous mudstone and shaly mudstone of *Pondaung Formation (Upper Eocene)*.
- Generally, the trend of coal seams are NE-SW and the direction of dipping of coal seams is to East with 50° of amount.
- The average *thickness* of coal seam is about $0.6m$.
- Generally *2 coal seams* are noted in this exploration period.



Carried out Ushikata Survey in Padan Area



671258 E/ 2204931 N Coal Seam Zone 1 m ē Chocolate brown col; Shale
Zone I 355°/ 65° E Look. N



671353 E/ 2204183 N Coal Seam Zone 1 m with brown col; Shale
350°/65° E **Zone I** Looking – S



0671367 E/ 2203983 N Local old coal worksite Looking – North
Zone I



671462 E/ 2204302 N Coal seam 1m ē chocolate brown Shale at local test pit

360°/ 50° E **Zone I** Looking-North



671411 E/ 2204778 N coal seam 0.9 m ē brown col; shale lamination

350°/ Vertical Looking -North



671408 E/ 2204775 N Chocolate brown col; shale and coal seam 0.8 m

350°/ 75° W Looking – N **Zone I**



671876 E/ 2202283 N grey col mud and coal 0.6 m \bar{e} shale limination
at local worksite 340°/ 50 °E Looking –West **Zone I**



671876 E/ 2202283 N Local Coal worksite Looking – NE

Zone I



669598 E/ 2208568 E Coal seam 1.1 m ē brown col; mudstone at local test pit

340°/ 58° E Looking - East **Zone II**



670130 E/ 2207475 N Chocolate brown col; Shale ē Coal seam 0.3m at local
old test pit 340°/ 56° E **Zone II**

Tonnage Calculation Zone I Block 1,2,3,4

Coal Seam	l (m)	W (m)	thickne ss (m)	Voulme (m³)	Sp.gr	Tonnage (metric)	20% Deduction
BL 1 A	750	50	0.325	12187.5	1.27	15478.125	12382.5
BL 1 B	750	50	0.75	28125	1.27	35718.75	28575
BL 2 A	700	50	1	35000	1.27	44450	35560
BL 2 B	700	50	0.6	21000	1.27	26670	21336
BL 3 A	600	50	0.5	15000	1.27	19050	15240
BL 3 B	400	50	0.8	16000	1.27	20230	16256
BL 4 A	800	50	0.6	24000	1.27	30480	24384
BL 4 B	400	50	0.6	12000	1.27	15240	12192
					TOTAL	207406.875	165925.50

Tonnage Calculation Zone II, Block 1,2

Coal Saem	l (m)	w (m)	thickness (m)	volume (m ³)	Sp.gr	Tonnage (metric)	20% Deduction
BL 1	300	50	0.39	5850	1.27	7429.5	5943.6
BL 2	500	50	1.1	27500	1.27	34925	27940
					TOTAL	42354.5	33883.6

Total Tonnage of Zone I and Zone II

Zone	Tonnage	After 20% Deduction
I	207406.875	165925.5
II	42354.5	33883.6
TOTAL	249761.375	199809.1
	0.24 Million Ton	0.19 Million Ton

Tonnage Calculation Zone I, Worked Out Zone

Coal Seam	l (m)	W (m)	thickne ss (m)	Voulme (m³)	Sp.gr	Tonnage (metric)	20% Deduction
BL 1 A	200	35	0.32	2240	1.27	2844.80	2275.84
BL 1 B	200	35	0.75	5250	1.27	6667.50	5334
BL 2 A	200	35	1	7000	1.27	8890	7112
BL 2 B	150	35	0.6	3150	1.27	4000.5	3200.40
BL 3 A	200	35	0.5	3500	1.27	4445	3556
BL 3 B	100	35	0.8	1400	1.27	3556	2844.60
BL 4 A	150	35	0.6	3150	1.27	4000.5	3200.4
BL 4 B	300	35	0.6	6300	1.27	8001	6400.80
					TOTAL	42405.05	33924.04

Tonnage Calculation Zone II, Worked Out Zone

Coal Saem	l (m)	w (m)	thickness (m)	volume (m ³)	Sp.gr	Tonnage (metric)	20% Deduction
BL 1	30	35	0.39	409.5	1.27	520.06	416.05
BL 2	120	35	1.1	4620	1.27	5867.40	4693.92
					TOTAL	6387.46	5109.97

Total Tonnage of Zone I and II, Worked Out Zone

Zone	Tonnage	After 20% Deduction
I	42405.05	33924.04
II	6387.46	5109.97
TOTAL	48792.50	39034.01
	0.048 Million Ton	0.039 Million Ton

Total Tonnage After Deduction of Worked Out Zone

	Tonnage	After 20% Deduction
Total Area	249761.375	199809.10
Worked Out Zone	48972.50	39034.01
	200968.875	160775.09
	0.20 Million Ton	0.16 Million Ton

**THANK YOU FOR YOUR
ATTENTIONS**

