

**Analytical Results of Primary Trench Samples in Bharatbahal Mangansese and Graphite (G3) Block,  
District - Balangir, Odisha**

Sl. No.	Trench No.	Sample No.	From (m)	To (m)	Thickness (m)	Mn %	SiO <sub>2</sub> %	P <sub>2</sub> O <sub>5</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	MnO <sub>2</sub> %	Acid Insoluble %	Moist %	Ash %	VM %	FC %
1	Trench 1	MBT 01/01	0.52	59.59	0.12	0.52	59.59	0.12	8.95	<0.10	78.81	2.00	92.70	5.00	0.30
2		MBT 01/02	1.25	57.30	0.16	1.25	57.30	0.16	10.09	0.30	80.04	2.10	92.60	5.00	0.30
3	Trench 2	MBT 02/01	11.99	54.01	0.08	11.99	54.01	0.08	12.77	8.17	67.78	0.80	93.80	5.10	0.30
4		MBT 02/02	11.67	43.07	0.14	11.67	43.07	0.14	14.30	12.86	58.83	2.10	90.30	7.40	0.20
5		MBT 02/03	25.63	32.89	0.12	25.63	32.89	0.12	13.39	18.99	43.03	1.50	91.00	7.40	0.10
6		MBT 02/04	11.58	47.79	0.12	11.58	47.79	0.12	19.14	7.53	62.52	1.10	93.40	5.10	0.40
7		MBT 02/05	13.67	51.91	0.07	13.67	51.91	0.07	15.03	10.37	64.99	0.80	94.10	4.90	0.20
8		MBT 02/06	10.87	46.33	0.10	10.87	46.33	0.10	15.11	9.70	62.02	1.70	91.30	6.80	0.20
9		MBT 02/07	9.07	47.68	0.08	9.07	47.68	0.08	14.41	6.37	58.03	2.10	91.10	6.60	0.20
10		MBT 02/08	10.07	48.02	0.11	10.07	48.02	0.11	14.56	11.57	60.92	1.70	91.90	6.20	0.20
11		MBT 02/09	8.26	50.66	0.12	8.26	50.66	0.12	13.88	10.77	63.58	2.30	91.80	5.70	0.20
12		MBT 02/10	10.14	42.84	0.08	10.14	42.84	0.08	15.08	9.33	55.44	3.20	89.60	6.90	0.30
13		MBT 02/11	5.51	45.76	0.07	5.51	45.76	0.07	14.53	5.72	57.40	2.90	89.30	7.70	0.10
14		MBT 02/12	7.40	48.36	0.07	7.40	48.36	0.07	13.41	9.20	61.59	2.60	91.00	6.00	0.40
15	Trench 3	MBT 03/01	9.09	36.71	0.55	9.09	36.71	0.55	20.06	6.08	53.37	4.50	83.80	8.80	2.90
16		MBT 03/02	12.44	34.93	0.15	12.44	34.93	0.15	16.53	10.75	50.15	5.30	83.30	11.20	0.20
17		MBT 03/03	11.71	40.12	0.08	11.71	40.12	0.08	15.47	9.46	56.21	4.40	85.30	10.10	0.20
18		MBT 03/04	5.77	53.37	0.05	5.77	53.37	0.05	8.14	4.86	74.13	2.90	91.00	5.80	0.30
19		MBT 03/05	6.80	48.91	0.07	6.80	48.91	0.07	10.05	7.73	69.79	2.90	90.50	6.30	0.30
20		MBT 03/06	6.10	45.99	0.08	6.10	45.99	0.08	15.06	5.89	65.99	3.90	89.40	6.40	0.30
21		MBT 03/07	14.92	38.19	0.59	14.92	38.19	0.59	20.50	11.29	50.73	3.20	89.00	7.60	0.20
22		MBT 03/08	11.81	41.99	0.79	11.81	41.99	0.79	20.56	7.19	52.61	3.30	89.70	6.70	0.30
23		MBT 03/09	4.48	39.25	0.41	4.48	39.25	0.41	28.69	1.66	52.17	3.90	88.00	7.90	0.20
24		MBT 03/10	4.68	47.33	0.33	4.68	47.33	0.33	23.82	<0.10	63.96	2.70	90.40	6.60	0.30
25		MBT 03/11	5.94	44.48	0.92	5.94	44.48	0.92	16.04	2.88	67.25	1.20	87.00	6.20	5.60

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26	Trench 4	MBT 03/12	3.57	42.09	0.32	3.57	42.09	0.32	27.03	<0.10	55.10	3.50	88.00	8.20	0.30
27		MBT 04/01	4.79	35.90	0.12	4.79	35.90	0.12	21.44	3.61	52.82	3.00	87.60	9.00	0.40
28		MBT 04/02	4.65	37.09	0.07	4.65	37.09	0.07	22.97	5.85	55.61	2.80	88.50	8.50	0.20
29	Trench 5	MBT 05/01	1.83	52.16	0.07	1.83	52.16	0.07	17.61	1.81	70.10	1.70	92.40	5.70	0.20
30		MBT 05/02	1.63	45.98	0.06	1.63	45.98	0.06	20.80	<0.10	66.33	1.90	91.30	6.50	0.30