

**ANALYTICAL RESULTS OF PRIMARY SAMPLES (FOR 10 RADICALS CaO, MgO, Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, Fe<sub>2</sub>O<sub>3</sub>, Na<sub>2</sub>O<sub>3</sub>, SO<sub>3</sub>, P<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O and LOI) OF BOREHOLE CORE SAMPLES GENERATED BY MECL (G-3 LEVEL), MALKHED-1 SOUTH BLOCK (MKML-01, 02 AND 05), DIST: KALABURGI (GULBARGA), KARNATAKA.**

**BOREHOLE No. MKML-01**

Sample Number	Depth (m)		Thick (m)	CaO %	MgO %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	Na <sub>2</sub> O <sub>3</sub> %	SiO <sub>3</sub> %	P <sub>2</sub> O <sub>5</sub> %	K <sub>2</sub> O %	LOI %
	From	To											
MKML-01/01	2.00	3.00	1.00	45.66	0.48	13.06	2.91	2.10	0.09	0.13	0.14	0.13	34.02
MKML-01/02	3.00	4.00	1.00	51.19	0.45	9.53	0.97	0.47	0.13	0.33	0.13	0.16	35.89
MKML-01/03	4.00	5.00	1.00	51.25	0.43	9.99	1.01	0.47	0.10	0.21	0.11	0.17	35.70
MKML-01/04	5.00	6.00	1.00	50.78	0.40	11.11	0.90	0.46	0.08	0.14	0.09	0.16	35.44
MKML-01/05	6.00	7.00	1.00	51.44	0.37	11.08	0.85	0.39	0.07	0.08	0.09	0.16	35.01
MKML-01/06	7.00	8.00	1.00	51.65	0.36	9.21	0.96	0.47	0.08	0.09	0.10	0.14	36.48
MKML-01/07	8.00	9.00	1.00	52.03	0.35	9.17	0.89	0.36	0.08	0.06	0.10	0.16	36.31
MKML-01/08	9.00	10.00	1.00	52.48	0.34	8.81	0.78	0.31	0.07	0.09	0.09	0.15	36.40
MKML-01/09	10.00	11.00	1.00	52.79	0.34	7.86	0.72	0.27	0.09	0.13	0.08	0.14	37.12
MKML-01/10	11.00	12.00	1.00	50.74	0.38	11.59	0.80	0.35	0.05	0.52	0.20	0.16	34.00
MKML-01/11	12.00	13.00	1.00	49.85	0.38	11.84	0.82	0.40	0.03	0.67	0.22	0.17	33.79
MKML-01/12	13.00	14.00	1.00	51.52	0.36	9.66	0.85	0.29	0.05	0.04	0.10	0.16	36.49
MKML-01/13	14.00	15.00	1.00	51.85	0.34	9.61	0.75	0.25	0.06	0.03	0.12	0.15	36.42
MKML-01/14	15.00	16.00	1.00	52.75	0.35	9.09	0.84	0.32	0.07	0.03	0.13	0.18	35.75
MKML-01/15	16.00	17.00	1.00	50.67	0.55	11.00	0.79	0.43	0.04	0.06	0.13	0.16	35.66
MKML-01/16	17.00	18.00	1.00	51.32	0.43	9.95	0.92	0.31	0.06	0.07	0.23	0.19	36.02
MKML-01/17	18.00	19.00	1.00	49.13	1.02	11.81	0.79	0.43	0.04	0.10	0.25	0.17	35.80
MKML-01/18	19.00	20.00	1.00	50.25	0.66	10.53	0.76	0.29	0.04	0.22	0.26	0.16	36.24
MKML-01/19	20.00	21.00	1.00	49.14	1.13	11.93	0.70	0.38	0.05	0.09	0.27	0.15	35.75
MKML-01/20	21.00	22.00	1.00	49.03	1.21	11.04	0.75	0.43	0.04	0.07	0.22	0.16	36.65
MKML-01/21	22.00	23.00	1.00	51.09	0.45	9.77	0.83	0.27	0.04	0.05	0.23	0.18	36.70
MKML-01/22	23.00	24.00	1.00	50.88	0.38	10.97	0.79	0.25	0.03	0.03	0.20	0.17	35.80
MKML-01/23	24.00	25.00	1.00	51.94	0.39	9.68	0.77	0.33	0.04	0.10	0.18	0.17	36.00
MKML-01/24	25.00	26.00	1.00	51.03	0.65	10.82	0.88	0.37	0.04	0.19	0.22	0.19	35.04
MKML-01/25	26.00	27.00	1.00	50.20	0.70	11.67	0.88	0.39	0.05	0.10	0.28	0.20	35.03
MKML-01/26	27.00	28.00	1.00	47.38	1.28	14.09	0.99	0.51	0.04	0.12	0.30	0.22	34.64
MKML-01/27	28.00	29.00	1.00	50.28	0.48	12.11	0.84	0.33	0.03	0.12	0.31	0.19	34.82
MKML-01/28	29.00	30.00	1.00	51.05	0.35	10.84	0.74	0.26	0.04	0.05	0.24	0.15	35.90
MKML-01/29	30.00	31.00	1.00	50.86	0.34	10.51	0.74	0.35	0.03	0.34	0.17	0.15	35.79
MKML-01/30	31.00	32.00	1.00	51.08	0.32	10.71	0.63	0.22	0.03	0.16	0.16	0.14	36.00
MKML-01/31	32.00	33.00	1.00	50.10	0.34	9.69	0.71	0.26	0.03	0.07	0.14	0.14	38.14
MKML-01/32	33.00	34.00	1.00	50.29	0.31	9.66	0.57	0.26	0.03	0.04	0.10	0.11	38.28
MKML-01/33	34.00	35.00	1.00	48.83	0.58	11.10	0.68	0.34	0.04	0.11	0.12	0.16	37.56
MKML-01/34	35.00	36.00	1.00	50.81	0.33	7.74	0.68	0.25	0.04	0.07	0.18	0.15	39.34
MKML-01/35	36.00	37.00	1.00	51.53	0.32	7.08	0.60	0.22	0.05	0.06	0.31	0.13	39.28
MKML-01/36	37.00	38.00	1.00	50.80	0.30	7.48	0.57	0.22	0.05	0.45	0.50	0.12	38.38
MKML-01/37	38.00	39.00	1.00	50.30	0.30	9.35	0.69	0.26	0.05	0.13	0.28	0.16	38.00
MKML-01/38	39.00	40.00	1.00	50.11	0.35	9.44	0.82	0.32	0.05	0.10	0.05	0.19	38.06
MKML-01/39	40.00	41.00	1.00	48.84	0.39	11.42	0.93	0.42	0.06	0.24	0.06	0.22	36.96
MKML-01/40	41.00	42.00	1.00	48.22	0.48	10.78	1.01	0.44	0.07	0.23	0.05	0.23	38.00
MKML-01/41	42.00	43.00	1.00	48.49	0.36	11.46	0.84	0.33	0.06	0.21	0.05	0.20	37.52
MKML-01/42	43.00	44.00	1.00	49.27	0.36	10.95	0.77	0.34	0.06	0.10	0.04	0.17	37.55
MKML-01/43	44.00	45.00	1.00	48.81	0.43	11.71	0.85	0.48	0.06	0.14	0.05	0.21	36.82

Sample Number	Depth (m)		Thick (m)	CaO %	MgO %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	Na <sub>2</sub> O <sub>3</sub> %	SiO <sub>3</sub> %	P <sub>2</sub> O <sub>5</sub> %	K <sub>2</sub> O %	LOI %
	From	To											
MKML-01/44	45.00	46.00	1.00	48.54	0.44	11.95	0.98	0.44	0.07	0.08	0.05	0.25	36.88
MKML-01/45	46.00	47.00	1.00	46.84	0.50	14.39	1.15	0.52	0.06	0.05	0.06	0.27	35.75
MKML-01/46	47.00	48.00	1.00	48.22	0.41	12.45	0.95	0.42	0.05	0.06	0.04	0.24	36.76
MKML-01/47	48.00	49.00	1.00	48.25	0.43	12.33	0.98	0.45	0.07	0.06	0.04	0.25	36.73
MKML-01/48	49.00	50.00	1.00	47.53	0.48	13.34	1.41	0.51	0.09	0.05	0.05	0.37	35.75

#### BOREHOLE No. MKML-02

MKML-02/01	1.00	2.00	1.00	49.77	0.32	10.88	0.77	0.32	0.07	0.03	0.09	0.17	37.22
MKML-02/02	2.00	3.00	1.00	50.23	0.33	9.13	0.78	0.29	0.07	0.01	0.09	0.16	38.48
MKML-02/03	3.00	4.00	1.00	51.48	0.34	7.65	0.83	0.31	0.07	0.04	0.11	0.18	38.60
MKML-02/04	4.00	5.00	1.00	51.46	0.35	7.24	0.80	0.27	0.06	0.02	0.11	0.18	39.09
MKML-02/05	5.00	6.00	1.00	49.45	0.39	10.09	0.97	0.35	0.03	0.29	0.25	0.21	37.12
MKML-02/06	6.00	7.00	1.00	47.53	0.62	11.53	0.99	0.42	0.03	0.32	0.27	0.22	37.20
MKML-02/07	7.00	8.00	1.00	49.15	0.36	11.29	0.94	0.35	0.04	0.05	0.12	0.21	37.02
MKML-02/08	8.00	9.00	1.00	50.38	0.38	9.65	0.90	0.31	0.05	0.02	0.13	0.19	37.60
MKML-02/09	9.00	10.00	1.00	50.62	0.33	8.56	0.79	0.25	0.05	0.02	0.13	0.17	38.73
MKML-02/10	10.00	11.00	1.00	49.02	0.32	6.68	0.72	0.25	0.04	0.03	0.12	0.14	41.58
MKML-02/11	11.00	12.00	1.00	48.67	0.39	11.65	0.87	0.34	0.04	0.07	0.18	0.18	37.12
MKML-02/12	12.00	13.00	1.00	49.50	0.51	10.03	0.74	0.30	0.05	0.04	0.22	0.16	38.04
MKML-02/13	13.00	14.00	1.00	47.01	0.56	13.04	0.77	0.31	0.04	0.25	0.30	0.17	37.10
MKML-02/14	14.00	15.00	1.00	48.40	0.99	10.10	0.87	0.32	0.05	0.10	0.27	0.19	38.28
MKML-02/15	15.00	16.00	1.00	46.33	1.28	12.05	0.78	0.32	0.03	0.20	0.27	0.16	38.07
MKML-02/16	16.00	17.00	1.00	49.35	0.83	9.92	0.64	0.35	0.05	0.07	0.21	0.14	38.08
MKML-02/17	17.00	18.00	1.00	52.85	0.29	6.00	0.52	0.19	0.07	0.04	0.19	0.10	39.40
MKML-02/18	18.00	19.00	1.00	48.19	0.29	5.74	0.51	0.17	0.05	0.03	0.17	0.10	43.68
MKML-02/19	19.00	20.00	1.00	49.85	0.27	10.26	0.72	0.27	0.02	0.02	0.20	0.15	37.90
MKML-02/20	20.00	21.00	1.00	48.84	0.29	11.54	0.85	0.30	0.02	0.01	0.22	0.18	37.33
MKML-02/21	21.00	22.00	1.00	48.44	0.59	11.37	0.89	0.39	0.01	0.01	0.20	0.18	37.53
MKML-02/22	22.00	23.00	1.00	47.51	1.02	11.43	0.95	0.42	0.02	0.01	0.24	0.21	37.80
MKML-02/23	23.00	24.00	1.00	46.36	0.93	13.10	1.33	0.61	0.01	0.02	0.31	0.23	36.64
MKML-02/24	24.00	25.00	1.00	48.27	0.56	11.82	0.92	0.40	0.02	0.01	0.30	0.19	37.12
MKML-02/25	25.00	26.00	1.00	48.83	0.42	11.72	0.76	0.28	0.03	0.01	0.26	0.16	37.12
MKML-02/26	26.00	27.00	1.00	49.67	0.34	10.55	0.72	0.29	0.03	0.01	0.19	0.15	37.66
MKML-02/27	27.00	28.00	1.00	47.05	0.36	10.99	0.80	0.28	0.02	0.14	0.18	0.16	39.56
MKML-02/28	28.00	29.00	1.00	49.43	0.34	10.60	0.67	0.28	0.02	0.05	0.14	0.13	37.77
MKML-02/29	29.00	30.00	1.00	49.35	0.33	10.96	0.67	0.28	0.03	0.20	0.11	0.13	37.45
MKML-02/30	30.00	31.00	1.00	48.73	0.57	11.55	0.80	0.41	0.03	0.02	0.17	0.16	37.16
MKML-02/31	31.00	32.00	1.00	49.59	0.35	10.51	0.63	0.25	0.03	0.01	0.16	0.13	38.00
MKML-02/32	32.00	33.00	1.00	50.45	0.30	8.82	0.60	0.21	0.05	0.03	0.12	0.13	38.79
MKML-02/33	33.00	34.00	1.00	51.14	0.29	7.35	0.65	0.21	0.05	0.16	0.34	0.14	39.24
MKML-02/34	34.00	35.00	1.00	51.10	0.29	8.27	0.63	0.27	0.05	0.17	0.57	0.13	38.16
MKML-02/35	35.00	36.00	1.00	50.40	0.29	9.00	0.70	0.27	0.05	0.03	0.26	0.16	38.49
MKML-02/36	36.00	37.00	1.00	49.79	0.37	10.17	0.93	0.48	0.05	0.23	0.06	0.21	37.30
MKML-02/37	37.00	38.00	1.00	48.54	0.37	10.80	0.98	0.43	0.07	0.25	0.05	0.22	37.66
MKML-02/38	38.00	39.00	1.00	47.84	0.51	11.38	1.15	0.57	0.07	0.38	0.05	0.26	37.03
MKML-02/39	39.00	40.00	1.00	48.73	0.38	11.25	1.13	0.44	0.08	0.13	0.06	0.26	37.18
MKML-02/40	40.00	41.00	1.00	49.48	0.33	10.00	0.87	0.38	0.07	0.08	0.05	0.20	38.16
MKML-02/41	41.00	42.00	1.00	49.05	0.38	11.29	0.89	0.51	0.06	0.14	0.05	0.22	37.05

Sample Number	Depth (m)		Thick (m)	CaO %	MgO %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	Na <sub>2</sub> O <sub>3</sub> %	SiO <sub>3</sub> %	P <sub>2</sub> O <sub>5</sub> %	K <sub>2</sub> O %	LOI %
	From	To											
MKML-02/42	42.00	43.00	1.00	44.48	0.53	14.94	2.87	1.18	0.07	0.08	0.06	0.46	34.85
MKML-02/43	43.00	44.00	1.00	47.90	0.39	12.74	0.88	0.40	0.07	0.01	0.04	0.20	37.00
MKML-02/44	44.00	45.00	1.00	47.26	0.44	13.29	1.09	0.48	0.07	0.07	0.05	0.26	36.49
MKML-02/45	45.00	46.00	1.00	47.78	0.38	12.54	0.96	0.40	0.06	0.04	0.04	0.23	37.12
MKML-02/46	46.00	47.00	1.00	47.22	0.39	13.37	1.11	0.44	0.09	0.03	0.04	0.28	36.60
MKML-02/47	47.00	48.00	1.00	48.10	0.39	13.40	1.08	0.54	0.08	0.05	0.04	0.30	35.65
MKML-02/48	48.00	49.00	1.00	45.33	0.46	16.45	1.71	0.98	0.09	0.47	0.06	0.46	33.52
MKML-02/49	49.00	50.00	1.00	44.34	0.60	17.68	1.64	0.75	0.11	0.05	0.05	0.42	33.85

### BOREHOLE No. MKML-05

MKML-05/01	2.40	3.00	0.60	50.55	0.28	9.14	0.57	0.21	0.02	0.01	0.26	0.11	38.80
MKML-05/02	3.00	4.00	1.00	51.95	0.31	6.49	0.57	0.29	0.03	0.06	0.39	0.11	39.59
MKML-05/03	4.00	5.00	1.00	50.67	0.28	9.55	0.59	0.32	<0.01	0.04	0.46	0.12	37.82
MKML-05/04	5.00	6.00	1.00	50.06	0.30	10.39	0.62	0.29	<0.01	0.01	0.13	0.13	37.99
MKML-05/05	6.00	7.00	1.00	49.77	0.31	9.69	0.81	0.41	0.01	0.04	0.04	0.18	38.56
MKML-05/06	7.00	8.00	1.00	48.96	0.31	10.99	0.85	0.41	0.02	0.10	0.05	0.18	37.77
MKML-05/07	8.00	9.00	1.00	48.78	0.31	10.91	0.97	0.54	0.02	0.08	0.05	0.21	37.81
MKML-05/08	9.00	10.00	1.00	48.95	0.29	10.78	0.89	0.48	0.02	0.20	0.04	0.19	37.47
MKML-05/09	10.00	11.00	1.00	49.51	0.29	10.60	0.71	0.35	0.02	0.06	0.04	0.15	38.06
MKML-05/10	11.00	12.00	1.00	48.95	0.32	11.62	0.90	0.46	0.02	0.01	0.05	0.20	37.38
MKML-05/11	12.00	13.00	1.00	49.20	0.30	12.11	0.70	0.40	0.02	0.02	0.03	0.16	36.97
MKML-05/12	13.00	14.00	1.00	49.55	0.29	10.82	0.69	0.33	0.02	0.03	0.04	0.16	37.98
MKML-05/13	14.00	15.00	1.00	48.23	0.34	13.26	0.87	0.42	0.02	0.02	0.04	0.20	36.42
MKML-05/14	15.00	16.00	1.00	48.10	0.34	12.98	0.85	0.43	0.03	0.03	0.04	0.20	36.85
MKML-05/15	16.00	17.00	1.00	47.72	0.34	13.68	0.96	0.46	0.04	0.03	0.04	0.24	36.33
MKML-05/16	17.00	18.00	1.00	47.74	0.39	13.54	0.91	0.42	0.03	0.01	0.04	0.22	36.59
MKML-05/17	18.00	19.00	1.00	45.96	0.48	15.68	1.60	0.64	0.04	0.02	0.05	0.40	34.92
MKML-05/18	19.00	20.00	1.00	46.58	0.35	15.84	0.98	0.41	0.03	0.01	0.04	0.24	35.38
MKML-05/19	20.00	21.00	1.00	42.14	0.96	18.99	2.70	1.49	0.04	0.36	0.24	0.69	31.95
MKML-05/20	21.00	22.00	1.00	43.63	0.56	21.09	1.40	0.78	0.04	0.02	0.46	0.29	31.58
MKML-05/21	22.00	23.00	1.00	42.04	0.77	22.23	1.92	1.13	0.03	0.02	0.58	0.40	30.65
MKML-05/22	23.00	24.00	1.00	42.50	0.39	23.76	1.16	0.57	0.03	0.02	0.42	0.27	30.68
MKML-05/23	24.00	25.00	1.00	42.43	0.51	23.66	1.54	0.84	0.04	0.05	0.53	0.36	29.84
MKML-05/24	25.00	26.00	1.00	42.77	0.56	21.73	1.64	0.87	0.04	0.03	0.57	0.39	31.12
MKML-05/25	26.00	27.00	1.00	45.30	0.52	17.35	1.50	0.76	0.04	0.02	0.41	0.35	33.54
MKML-05/26	27.00	28.00	1.00	43.76	0.41	21.27	1.41	0.58	0.04	0.05	0.53	0.38	31.31
MKML-05/27	28.00	29.00	1.00	43.22	0.64	20.43	1.79	0.99	0.05	0.09	0.61	0.42	31.42
MKML-05/28	29.00	30.00	1.00	44.69	0.59	17.75	1.87	0.83	0.05	0.02	0.56	0.46	32.96
MKML-05/29	30.00	31.00	1.00	44.45	0.66	16.85	2.50	1.15	0.07	0.20	0.80	0.69	32.47
MKML-05/30	31.00	32.00	1.00	42.31	0.83	18.45	3.40	1.19	0.10	0.05	1.01	0.91	31.22
MKML-05/31	32.00	33.00	1.00	44.60	0.65	16.24	2.75	0.95	0.09	0.05	0.72	0.75	32.93
MKML-05/32	33.00	34.00	1.00	46.53	0.44	15.28	1.37	0.79	0.06	0.29	0.38	0.36	34.18
MKML-05/33	34.00	35.00	1.00	44.03	0.62	18.10	2.20	1.12	0.07	0.16	0.57	0.56	32.34
MKML-05/34	35.00	36.00	1.00	44.91	0.42	19.04	1.29	0.64	0.08	0.03	0.36	0.32	32.75
MKML-05/35	36.00	37.00	1.00	44.58	0.46	19.62	1.39	0.77	0.06	0.06	0.30	0.36	32.32
MKML-05/36	37.00	38.00	1.00	45.67	0.44	17.40	1.18	0.77	0.06	0.08	0.30	0.27	33.70
MKML-05/37	38.00	39.00	1.00	41.73	0.63	20.97	2.64	1.83	0.10	0.21	0.52	0.55	30.42
MKML-05/38	39.00	40.00	1.00	43.77	0.39	20.95	1.21	0.63	0.07	0.04	0.28	0.30	32.23

Sample Number	Depth (m)		Thick (m)	CaO %	MgO %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	Na <sub>2</sub> O <sub>3</sub> %	SiO <sub>3</sub> %	P <sub>2</sub> O <sub>5</sub> %	K <sub>2</sub> O %	LOI %
	From	To											
MKML-05/39	40.00	41.00	1.00	42.58	0.48	22.18	1.79	0.77	0.09	0.02	0.33	0.49	31.08
MKML-05/40	41.00	42.00	1.00	42.51	0.43	22.82	1.42	0.70	0.07	0.02	0.27	0.35	31.25
MKML-05/41	42.00	43.00	1.00	40.36	0.65	23.91	2.49	1.12	0.11	0.04	0.48	0.65	29.87
MKML-05/42	43.00	44.00	1.00	40.76	0.66	23.89	2.41	1.20	0.10	0.04	0.42	0.60	29.73
MKML-05/43	44.00	45.00	1.00	39.93	0.76	24.23	2.63	1.35	0.10	0.04	0.52	0.64	29.49
MKML-05/44	45.00	46.00	1.00	41.08	0.62	23.58	2.14	1.01	0.09	0.03	0.46	0.54	30.23
MKML-05/45	46.00	47.00	1.00	39.27	0.76	24.28	3.11	1.16	0.11	0.02	0.64	0.82	29.52
MKML-05/46	47.00	48.00	1.00	42.15	0.47	22.61	1.69	0.68	0.07	0.01	0.47	0.43	31.16
MKML-05/47	48.00	49.00	1.00	40.34	0.60	24.21	2.27	0.99	0.08	0.08	0.51	0.56	30.04
MKML-05/48	49.00	50.00	1.00	41.07	0.54	23.74	2.07	0.90	0.09	0.03	0.51	0.52	30.30