

Details of 25 Nos of Channel samples collected from Pits along with analysis of 34 elements by ICP-MS of Sumarasar area, District: Kachchh, Gujarat

Pit No	Latitude	Longitude	Trench length (m)	Sample No	From (m)	To (m)	Lithology	Li	V	Cr	Co	Ni	Cu	Zn	Ga	Se	Rb	Sr	Zr	Nb	Mo	Hf	Pb	Th	U
Pit 1	562126	2574765	2	SMR/PIT/1A	0.00	0.40	Top Soil	20.03	168.48	166.10	35.57	131.91	87.43	73.65	14.65	0.96	39.97	440.80	360.66	14.95	0.61	9.63	6.79	11.45	1.51
				SMR/PIT/1B	0.40	2.00	Basalt	16.17	165.21	153.89	33.98	135.47	70.85	70.80	12.41	1.22	44.95	615.84	350.65	17.92	0.60	8.97	6.99	10.00	1.40
Pit 2	561968	2575474	2	SMR/PIT/2A	0.00	0.40	grey shale	39.67	158.27	114.47	22.54	62.48	42.70	102.49	24.18	1.17	96.30	140.79	298.30	11.59	0.71	9.30	19.76	25.39	3.00
Pit 3	562872	2577144	2	SMR/PIT/3A	0.00	2.00	ferruginous shale	50.11	127.05	110.93	20.04	51.41	39.73	121.27	27.09	1.33	78.52	242.87	551.59	14.11	0.58	16.45	18.31	29.17	4.65
Pit 4	562476	2578025	2	SMR/PIT/4A	0.00	1.00	Yellow shale	63.81	137.10	114.59	19.28	48.90	42.90	204.75	29.03	1.02	90.05	270.49	457.03	11.95	1.88	13.20	24.04	25.34	3.96
				SMR/PIT/4B	1.00	2.00	Grey Shale	73.43	167.17	132.03	24.12	64.95	49.39	134.76	32.38	0.88	94.00	203.36	467.77	14.13	0.99	14.06	30.69	22.91	4.38
Pit 5	556516	2574508	2	SMR/PIT/5A	0.00	0.22	Kaolinite	30.65	121.34	128.93	5.35	24.71	35.36	39.59	37.68	0.77	46.49	176.08	772.42	17.17	0.58	17.27	26.14	48.63	5.38
				SMR/PIT/5B	0.22	0.25	Ferruginized Shale	21.47	117.50	108.22	45.08	17.53	26.72	61.89	19.76	0.94	11.71	167.74	382.17	10.26	1.02	11.22	26.52	35.79	3.38
				SMR/PIT/5C	0.25	0.50	Kaolinite	30.75	121.80	152.29	4.13	22.50	30.91	30.17	38.47	1.30	49.10	763.83	686.38	15.01	0.63	14.85	43.46	29.57	4.92
				SMR/PIT/5D	0.50	0.93	Ferruginized Shale	20.08	79.29	209.26	4.67	29.95	23.60	30.36	19.58	0.61	8.24	169.25	362.02	11.88	0.82	10.26	26.32	26.82	2.64
				SMR/PIT/5E	0.93	2.00	Kaolinite/altere d sst	18.50	58.26	91.48	43.01	16.58	23.13	24.79	15.26	0.86	5.02	120.88	392.85	10.49	0.64	10.74	24.16	59.71	3.23
Pit 6	554382	2581273	2	SMR/PIT/6A	0.81	0.88	ferruginized shale	79.06	161.79	125.43	25.31	66.68	47.48	137.94	29.81	0.83	100.17	388.86	502.19	13.84	0.54	13.50	24.20	26.98	4.00
				SMR/PIT/6B	1.19	1.24	ferruginized shale	86.87	170.69	123.34	20.36	59.05	46.54	115.58	31.53	0.91	106.79	230.48	436.00	13.20	0.59	12.01	22.95	21.09	3.43
				SMR/PIT/6C	0.45	0.55	ferruginized shale	66.91	134.53	108.14	21.98	54.60	38.89	136.42	26.54	0.94	89.38	838.46	425.83	11.23	0.52	11.33	17.67	19.88	3.57
Pit 7	555757	2581254	2	SMR/PIT/7A	0.00	0.50	Grey shale with ferruginized and gypsaceous shale	74.64	159.91	115.96	26.23	58.59	50.33	120.51	28.19	0.88	92.54	572.92	433.34	11.94	0.60	11.76	27.50	24.09	3.76
				SMR/PIT/7B	0.50	0.86	Grey shale with ferruginized and gypsaceous shale	73.76	168.18	118.53	21.04	62.72	46.70	136.43	27.37	0.88	85.49	270.32	403.14	11.20	0.55	10.68	22.48	17.93	3.25
				SMR/PIT/7C	0.86	1.04	Grey and ferruginized shale	72.46	169.81	110.70	21.86	57.02	43.26	117.27	28.69	1.13	92.50	380.45	416.46	11.45	0.52	11.22	20.69	20.18	3.26
Pit 8	560159	2578318	2	SMR/PIT/8A	0.00	0.71	yellow shale	44.92	124.33	118.99	18.10	65.89	40.45	100.33	21.82	0.99	80.31	256.47	588.49	10.59	0.47	15.23	20.99	29.34	4.02
				SMR/PIT/8B	0.71	1.19	yellow shale	46.98	125.29	115.06	16.12	51.40	37.76	85.40	23.30	0.86	84.28	272.24	849.70	11.26	0.89	19.85	19.91	35.92	4.90
				SMR/PIT/8C	1.19	1.77	yellow shale	35.06	122.50	128.79	15.29	45.35	32.90	79.97	18.67	0.97	65.91	516.24	493.39	7.44	0.64	12.65	16.64	27.23	3.52
				SMR/PIT/8D	1.77	2.00	yellow shale	38.53	135.66	138.05	18.80	52.80	41.66	121.78	19.98	0.91	73.02	380.01	440.53	7.68	0.79	10.87	18.91	23.34	3.01
Pit 9	558687	2579316	2	SMR/PIT/9A	0.00	0.76	Grey Shale	61.15	145.55	119.99	21.95	56.45	43.75	185.91	28.52	1.21	88.40	277.23	636.42	13.33	0.52	15.40	19.78	27.51	3.81
				SMR/PIT/9B	0.77	1.21	Grey Shale	60.77	151.49	122.53	22.09	59.45	44.21	113.60	30.28	1.05	96.33	238.00	561.38	13.35	0.57	14.00	20.36	24.97	3.53
				SMR/PIT/9C	1.23	2.00	yellowish Grey Shale	66.45	160.71	126.30	25.90	68.89	47.11	137.43	32.63	0.88	96.41	390.51	632.45	14.20	0.74	14.70	20.89	25.49	3.69
Pit 10	563058	2578860	2	SMR/PIT/10A	0.00	0.81	altered sandstone	39.65	151.54	122.72	27.41	71.56	36.34	116.71	28.16	1.19	86.67	184.44	724.78	15.87	0.53	16.62	24.24	56.17	4.36

Pit No	Latitude	Longitude	Trench length (m)	Sample No	From (m)	To (m)	Lithology	Sc	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
Pit 1	562126	2574765	2	SMR/PIT/1A	0.00	0.40	Top Soil	25.55	38.24	48.73	82.64	9.94	37.61	6.83	1.93	6.73	1.19	7.03	1.47	3.97	0.65	3.58	0.52
				SMR/PIT/1B	0.40	2.00	Basalt	24.05	39.61	54.08	90.12	10.70	40.02	7.15	2.10	7.12	1.24	7.34	1.50	4.09	0.63	3.71	0.57
Pit 2	561968	2575474	2	SMR/PIT/2A	0.00	0.40	grey shale	16.66	37.08	59.51	122.42	13.82	51.34	9.57	1.79	8.64	1.43	7.84	1.49	3.83	0.55	3.32	0.50
Pit 3	562872	2577144	2	SMR/PIT/3A	0.00	2.00	ferruginous shale	19.48	51.59	71.26	139.96	15.80	57.40	10.67	1.78	9.40	1.63	9.60	1.95	5.33	0.84	5.15	0.79
Pit 4	562476	2578025	2	SMR/PIT/4A	0.00	1.00	Yellow shale	19.42	51.38	64.04	125.56	14.06	51.79	9.26	2.03	8.54	1.52	9.63	1.98	5.74	0.89	5.77	0.82
				SMR/PIT/4B	1.00	2.00	Grey Shale	20.67	47.26	59.72	122.89	13.54	49.59	9.28	2.02	8.43	1.48	9.20	1.91	5.47	0.87	5.32	0.79
Pit 5	556516	2574508	2	SMR/PIT/5A	0.00	0.22	Kaolinite	21.73	42.65	108.11	164.28	17.50	60.49	10.23	1.54	8.39	1.39	8.08	1.56	4.47	0.70	4.57	0.65
				SMR/PIT/5B	0.22	0.25	Ferruginized Shale	9.04	22.81	90.68	146.21	15.69	55.33	8.89	1.11	6.86	0.96	4.88	0.88	2.28	0.35	2.19	0.31
				SMR/PIT/5C	0.25	0.50	Kaolinite	18.77	40.15	95.03	167.18	18.90	71.71	13.39	3.63	11.38	1.63	8.69	1.52	4.10	0.63	3.98	0.60
				SMR/PIT/5D	0.50	0.93	Ferruginized Shale	7.71	18.60	60.39	111.71	12.31	44.05	7.35	1.16	5.72	0.77	3.90	0.64	1.70	0.26	1.74	0.26
				SMR/PIT/5E	0.93	2.00	Kaolinite/altere d sst	5.38	25.06	109.26	180.75	19.85	70.30	11.12	1.10	8.57	1.11	5.37	0.90	2.27	0.31	1.98	0.26
Pit 6	554382	2581273	2	SMR/PIT/6A	0.81	0.88	ferruginized shale	23.80	62.45	87.85	151.16	17.70	66.13	12.47	2.53	11.55	1.91	11.91	2.35	6.60	1.00	6.14	0.91
				SMR/PIT/6B	1.19	1.24	ferruginized shale	19.21	47.97	58.34	117.79	13.18	48.32	8.67	1.95	8.09	1.38	8.43	1.75	4.99	0.77	4.99	0.72
				SMR/PIT/6C	0.45	0.55	ferruginized shale	20.26	88.36	61.65	120.73	14.18	54.24	10.56	2.43	11.51	2.00	12.86	2.71	7.49	1.13	6.68	0.98
Pit 7	555757	2581254	2	SMR/PIT/7A	0.00	0.50	Grey shale with ferruginized and gypsaceous shale	22.43	62.83	69.15	131.09	15.10	55.72	10.55	2.24	9.98	1.73	10.43	2.15	6.16	0.99	5.93	0.83
				SMR/PIT/7B	0.50	0.86	Grey shale with ferruginized and gypsaceous shale	19.56	45.95	49.00	94.72	10.84	39.63	7.20	1.61	7.06	1.22	7.92	1.62	4.70	0.74	4.59	0.71
				SMR/PIT/7C	0.86	1.04	Grey and ferruginized shale	22.41	54.99	56.87	108.89	12.51	46.42	8.47	1.88	8.23	1.46	9.30	1.87	5.48	0.86	5.47	0.78
Pit 8	560159	2578318	2	SMR/PIT/8A	0.00	0.71	yellow shale	17.80	53.96	71.60	135.91	15.22	55.08	10.04	1.67	8.89	1.49	8.85	1.83	5.25	0.86	5.35	0.83
				SMR/PIT/8B	0.71	1.19	yellow shale	18.99	63.30	102.51	169.93	19.39	70.26	12.37	1.86	11.17	1.75	10.62	2.14	6.12	0.99	6.25	0.94
				SMR/PIT/8C	1.19	1.77	yellow shale	16.51	51.00	70.28	131.66	14.97	54.60	9.82	1.49	8.97	1.47	8.46	1.69	4.59	0.71	4.42	0.67
				SMR/PIT/8D	1.77	2.00	yellow shale	17.60	48.92	60.29	114.10	12.72	46.10	8.31	1.52	7.85	1.34	7.92	1.60	4.51	0.71	4.30	0.66
Pit 9	558687	2579316	2	SMR/PIT/9A	0.00	0.76	Grey Shale	22.74	65.51	87.72	142.60	16.28	60.08	10.83	2.08	10.47	1.74	10.26	2.12	5.91	0.95	5.76	0.87
				SMR/PIT/9B	0.77	1.21	Grey Shale	22.64	60.00	86.31	140.99	15.71	57.23	10.17	2.01	9.40	1.57	9.45	1.92	5.39	0.85	5.26	0.80
				SMR/PIT/9C	1.23	2.00	yellowish Grey Shale	24.18	62.09	90.62	144.34	16.29	59.37	10.73	2.04	9.72	1.62	9.58	1.99	5.65	0.89	5.67	0.83
Pit 10	563058	2578860	2	SMR/PIT/10A	0.00	0.81	altered sandstone	21.63	56.77	122.52	194.39	21.99	79.82	13.54	1.86	11.73	1.76	9.71	1.86	5.11	0.81	4.82	0.73