

Details of XRD study carried out on surface bed rock samples of Sumarasar Area, District Kachchh, Gujarat

Sl. No.	Sample Name	Lithology	Major ($\geq 5\%$)	Minor ($\leq 5\%$ to $\geq 1\%$)	Trace, Faint Trace ($\leq 1\%$)
1	SMRXRD-1	Yellow Shale	Quartz, Kaolinite	Dickite, Birnessite	Anatase, Phlogopite, Magnetite, Goethite
2	SMRXRD-2	Kaolinite	Kaolinite, Quartz	Dickite, Illite, Anatase, Chamosite	Biotite
3	SMRXRD-3	Ferruginous Shale/yellow shale	Kaolinite, Quartz, Dickite, Microcline	Anorthoclase, Hematite	Biotite, Fluorapatite
4	SMRXRD-4	Yellow Shale	Kaolinite, Quartz, Microcline	_____	Biotite
5	SMRXRD-5	Black shale with thin red band	Quartz, Kaolinite, Illite	Dickite, Muscovite, Zeolite, Anatase	Xenotime
6	SMRXRD-6	Clay	Kaolinite, Quartz, Muscovite	Dickite, Microcline, Dolomite, Biotite	_____
7	SMRXRD-7	Shale	Quartz, Kaolinite, Illite	Muscovite, Dickite, Anatase	Chlorite
8	SMRXRD-8	feldspathic sst with kaolinitic clay	Quartz, Kaolinite, Microcline	Illite	Apatite, Zeolite, Monazite, Hematite
9	SMRXRD-9	Kaolinite	Kaolinite, Quartz, Muscovite	Anatase	Dolomite, Magnetite, Rutile
10	SMRXRD-10	Red ferruginous band	Kaolinite, Quartz, Dolomite	Dickite, Microcline, Illite	Biotite, Hematite, Zeolite
11	SMRXRD-11	yellowish Grey Shale	Kaolinite, Quartz	Orthoclase, Dolomite, Muscovite	Phlogopite
12	SMRXRD-12	altered sandstone	Kaolinite, Quartz, Microcline	Illite, Hematite	_____
13	SMRXRD-13	Kaolinite/altered sst	Quartz, Kaolinite	Dickite, Birnessite	Zeolite, Anorthite, Anatase, Illite
14	SMRXRD-14	yellow shale	Quartz, Kaolinite, Orthoclase	Calcite, Dickite, Illite	_____
15	SMRXRD-15	Grey Shale	Kaolinite, Quartz, Orthoclase	Dolomite, Muscovite	_____
16	SMRXRD-16	Yellow Shale	Quartz, Kaolinite	Dickite, Birnessite	Anatase, Phlogopite, Magnetite, Goethite
17	SMRXRD-17	Kaolinite	Kaolinite, Quartz	Dickite, Illite, Anatase, Chamosite	Biotite
18	SMRXRD-18	Ferruginous Shale/yellow shale	Kaolinite, Quartz, Dickite, Microcline	Anorthoclase, Hematite	Biotite, Fluorapatite
19	SMRXRD-19	Yellow Shale	Kaolinite, Quartz, Microcline	_____	Biotite
20	SMRXRD-20	Black shale with thin red band	Quartz, Kaolinite, Illite	Dickite, Muscovite, Zeolite, Anatase	Xenotime