

HYDROGEOLOGICAL MAPPING USING WELL LOGS



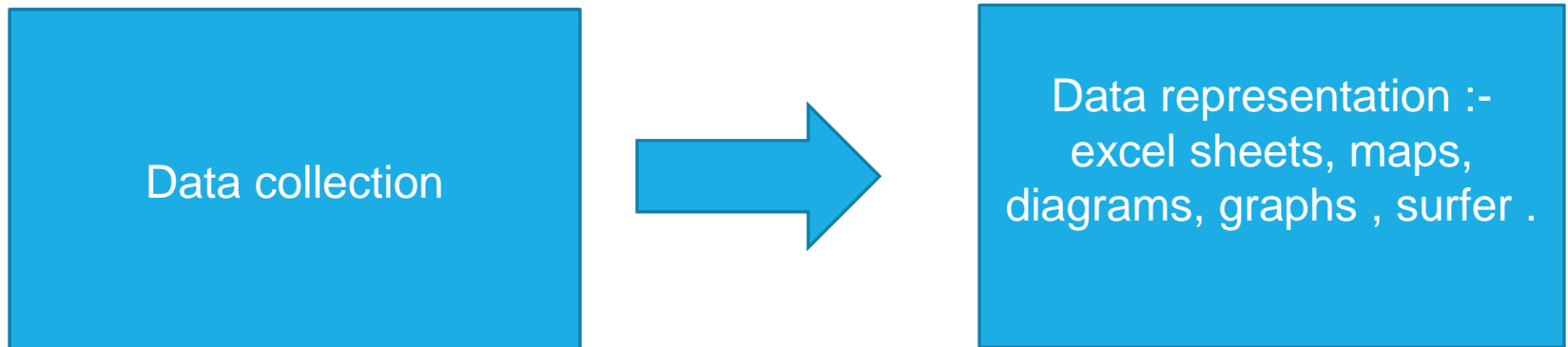
DATA COLLECTION AND REPRESENTATION

Data collection by using

GPS, Camera, Clinometers, Tracer, Hammer, Field diary.

Data representation by using

Field diary, well inventory sheets, Ms Excel , Corel Draw,
Google Earth, Surfer, ArcGIS.



Data collection by well inventory

Well inventory parameters

- Location of the well(GPS reading)

Depth of the well

Casing depth

Pump depth

Diameter measurement

Static water level

Water struck levels

Geologic section along the well

Pump discharge

Water quality analysis:-

pH , Salinity, TDS, EC, Temp.

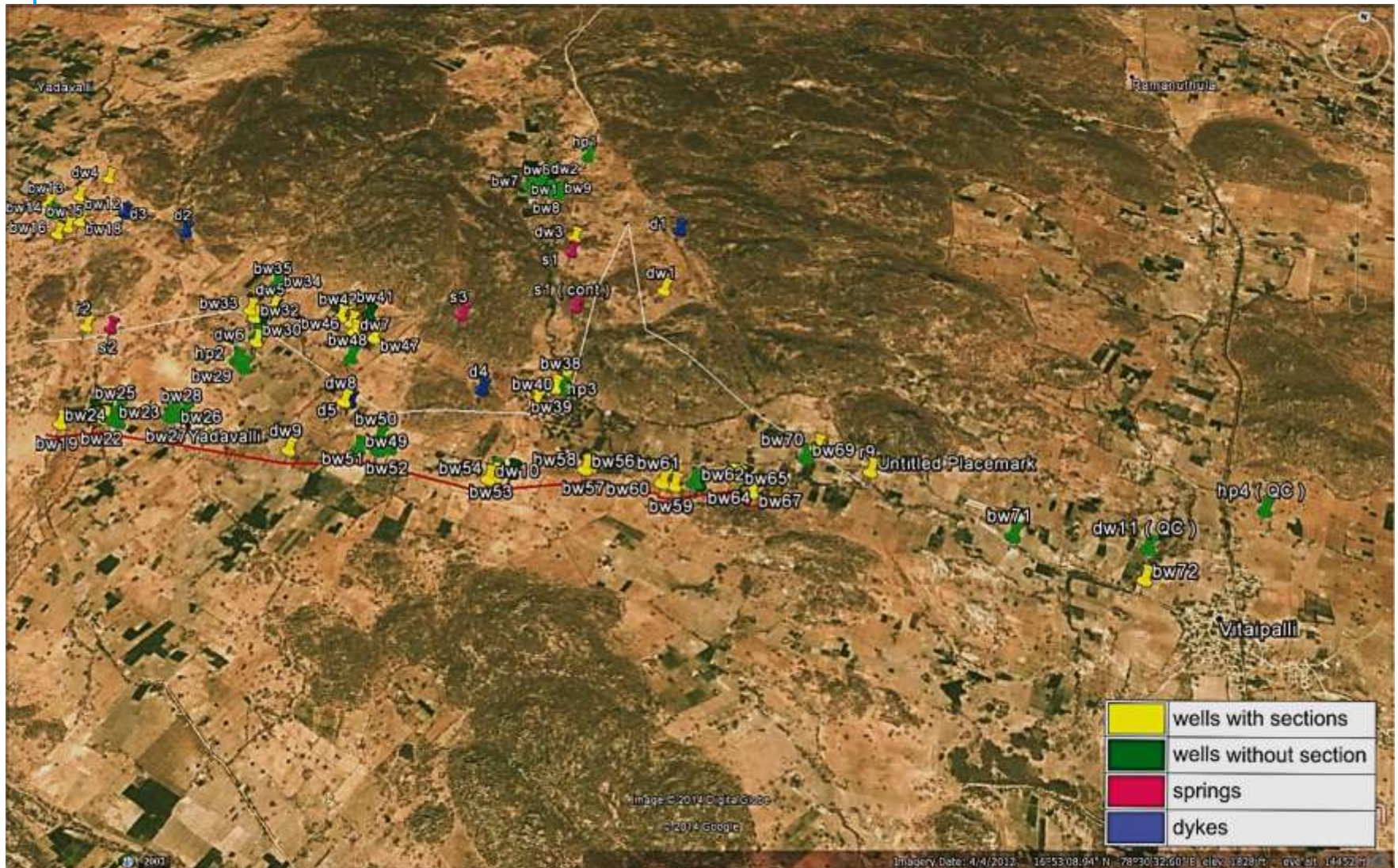


DATA REPRESENTATION

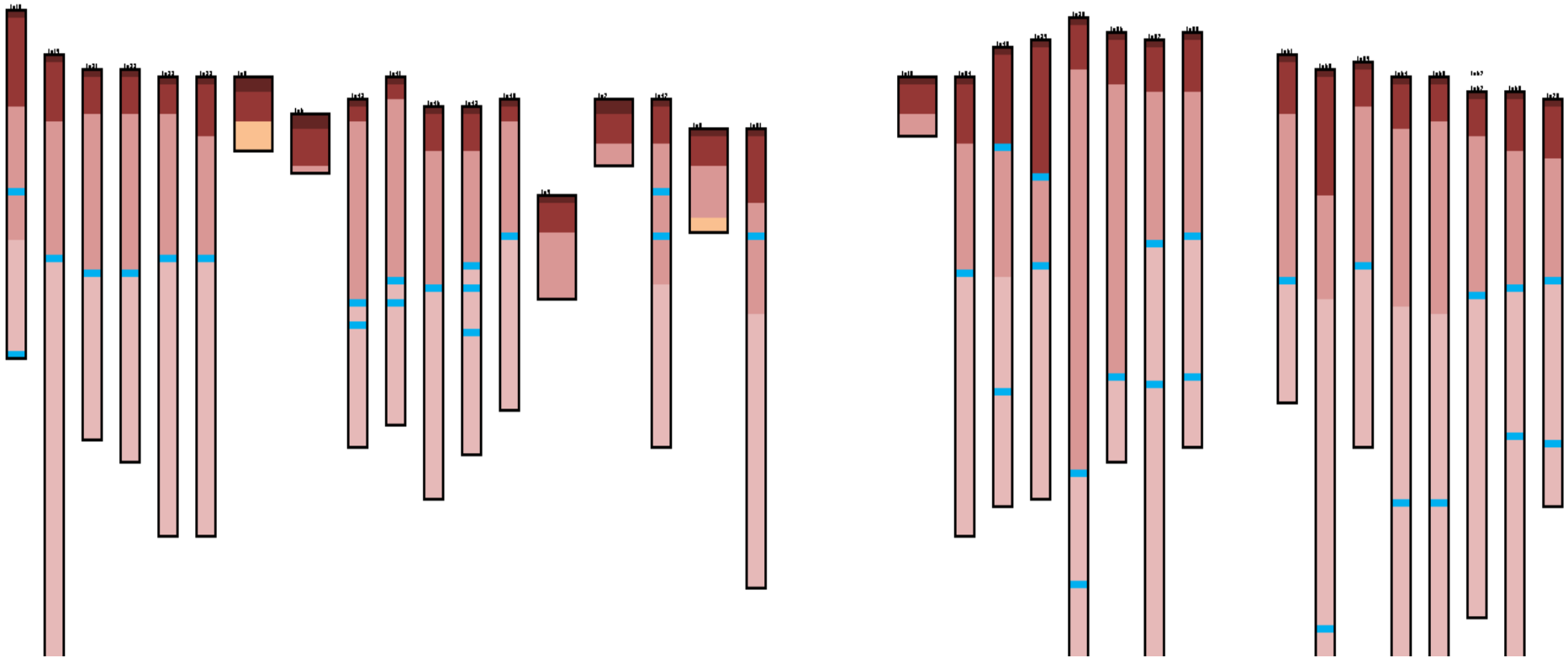
Classifying the data according to your needs in the excel sheet

Details of Selected Bore Wells												
Sr. No.	Name of farmer	Waypoint No.	Total Depth (m)	Pump Depth (m)	Water Level from bottom (m)	Ground Strata Detail (m)				GPS Location		Elevation (m)
						Soil	Morrum	Weathered Rock	Hard Rock	N	E	
1	G. Satyah	41	28.96	21.34	8	6	19.81	0	3	17.39'22.4"	78.07'36.6"	506
2	Gundigari Gopal	42	64.02	39.63	12					17.34'26.4"	78.07'48.6"	506
3	Vendikole Poche	43								17.39'02.4"	78.07'38.6"	503
4	Forest bore well	44	60.97		9					17.38'41.6"	78.07'28.6"	501
5	Venkatesh (Near Cotton Mill)	45	60.97	42.68	14	9.1	30.48	18.29	3.04	17.38'13.5"	78.07'25.6"	507
6	Ram Sabu K.	46	51.82	42.68	9					17.37'35.7"	78.06'58.7"	508
7	Narayana S/O Ramlu	47	60.97	42.68	24.39	12.19	36.58	12.19		17.37'30.6"	78.06'56.6"	520
8	Sriselam J.	48	64.02	36.58	18					17.37'42.3"	78.07'41.3	513
9	Narsingh Rao	49	76.21	42.68	30.48					17.37'03.3"	78.07'38.6"	519
10	Ramawat Sinu	50	91.46	60.97	42.68					17.36'36.1"	78.07'49.9"	523
11		51	60.97	36.58	24.39					17.37'45.3"	78.08'03.7"	513
12	Banjeash Waraih	52								17.38'11.4"	78.07'02.9"	506
13	P. Harigopal	53	45.73	36.58	24.39					17.38'24.5"	78.07'33.1	506
14	K. Sattelgah	54	53.35	21.34	21.34					17.38'53.7"	78.08'04.5	505
15	P. Manuhemma	55								17.38'22.3"	78.07'08.5	511
16	Palla Randu	56	45.73	33.53	19	12.19	33.53			17.41'207"	78.07'19.6"	505
17	Yelara Bhikshapati	57	45.73	33.53	5.79					17.40'59.3"	78.07'06.6"	508
18	Janaki Pochogud	58	45.73	36.58	5.95					17.40'46.9"	78.06'48.7"	505
19	Failed Bore well	59			3.35					17.40'38.8"	78.05'53.0"	519
20	Bhanuprasad Swami	60			5.79					17.41'25.5"	78.05'57.6"	524
21		61			2.7					17.40'21.7"	78.06'10.8"	514
22	Bagaih	62			9					17.39'49.5"	78.06'19.9"	513
23	V. Raj Narsingh Reddy	63	70.12	36.58	56.12	2.13	22.25		60.97	17.39'38.9"	78.06'40.1"	512
24	Vaginga Nair	64			16					17.37'15.0"	78.08'17.5"	515
25	B. Narsingh Mala	65	54.87	36.58	45.87					17.38'17.5"	78.06'49.3"	515
26	Failed Bore well (B. Narsigh)	66								17.38'17.9"	78.06'46.0"	512
27	Mallareddy	67			10.8					17.40'23.7"	78.05'46.2"	520

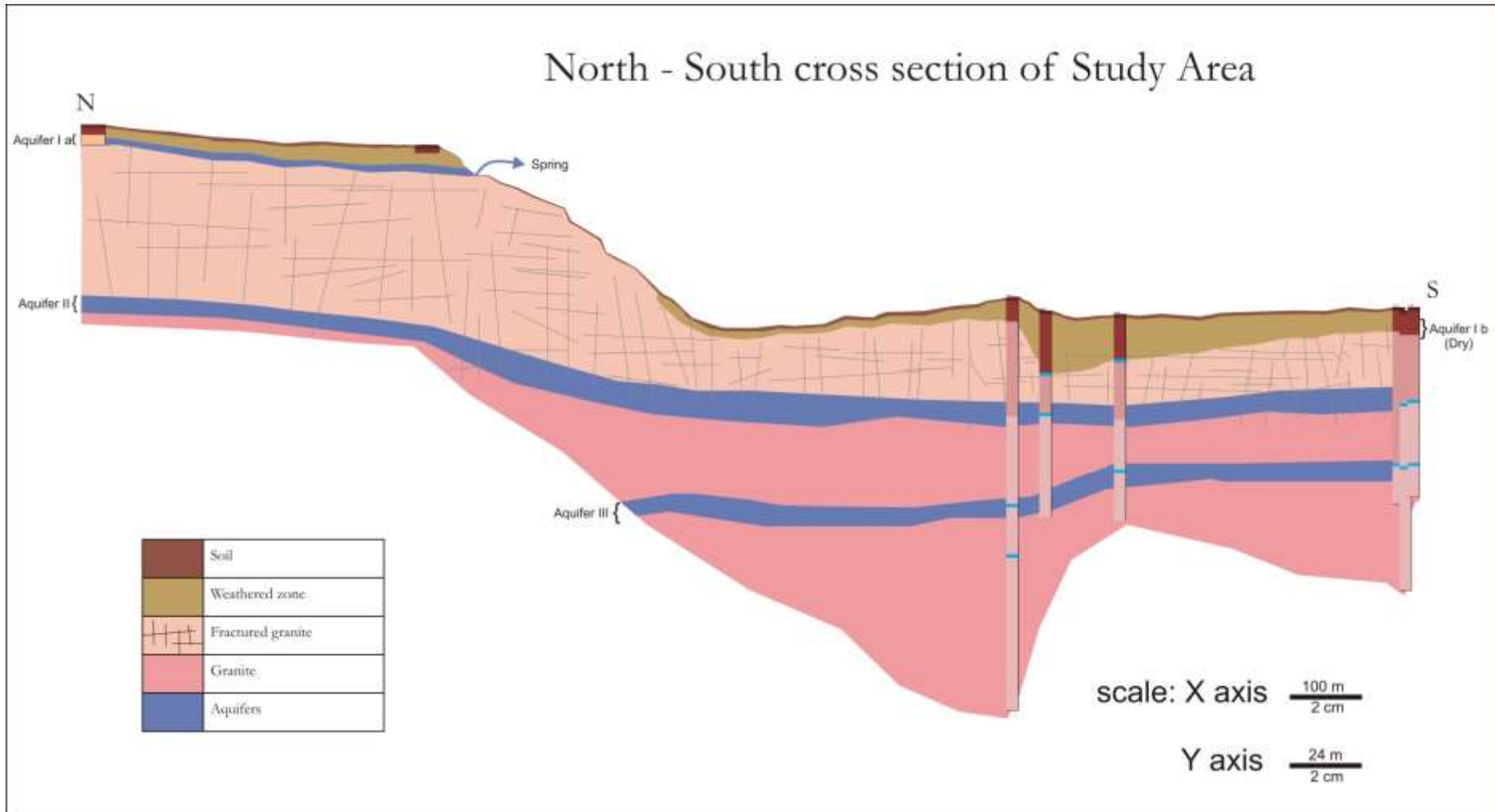
Plotting the wells on Google Earth so that one can know along which traverse, is it possible to make geologic sections.



Creating each well's cross section based on the well inventory data collected and arranging them as per the area's cross section you need

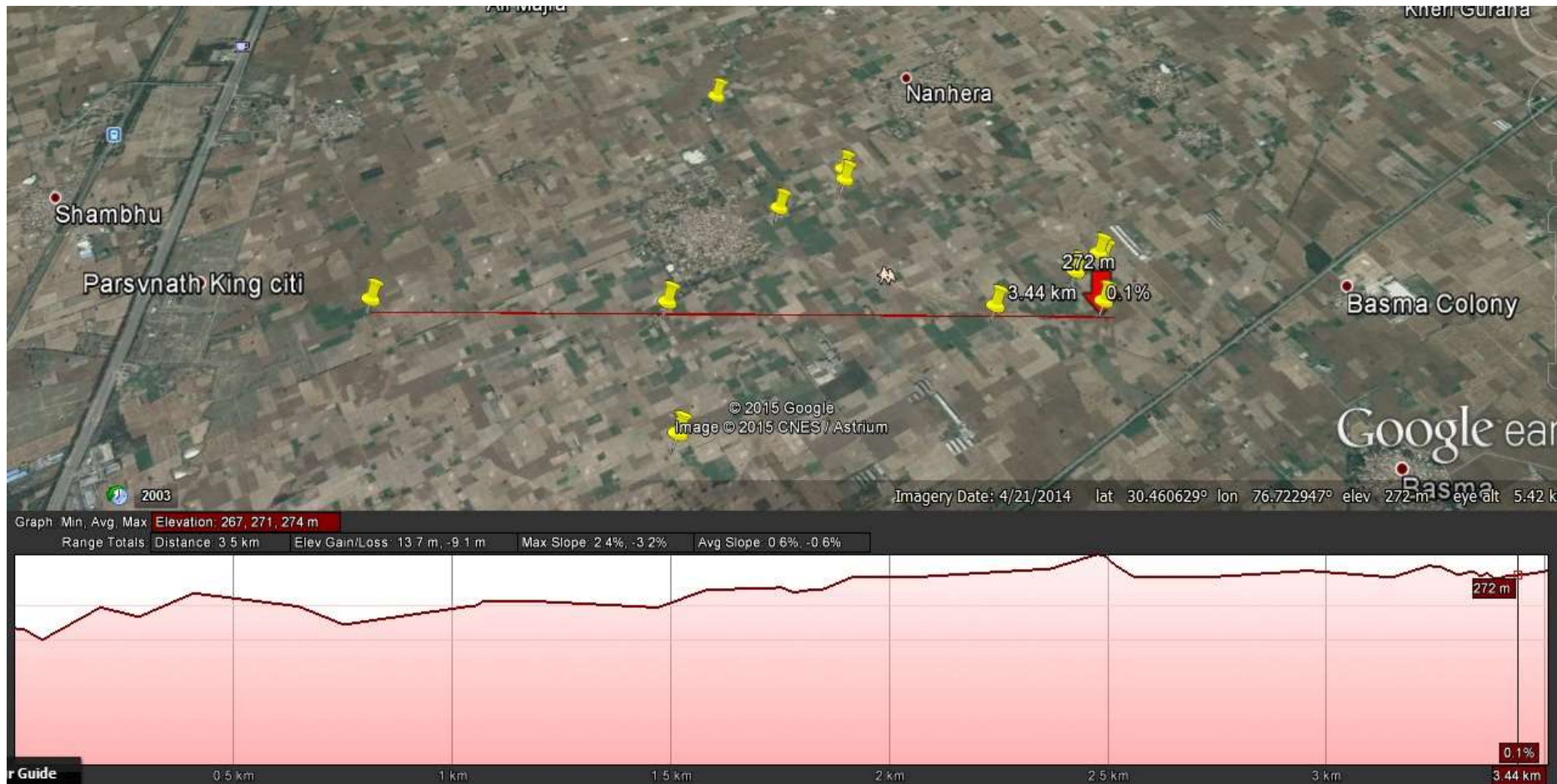


Geologic sections developed in Corel Draw along N-S direction on basis of well inventory data

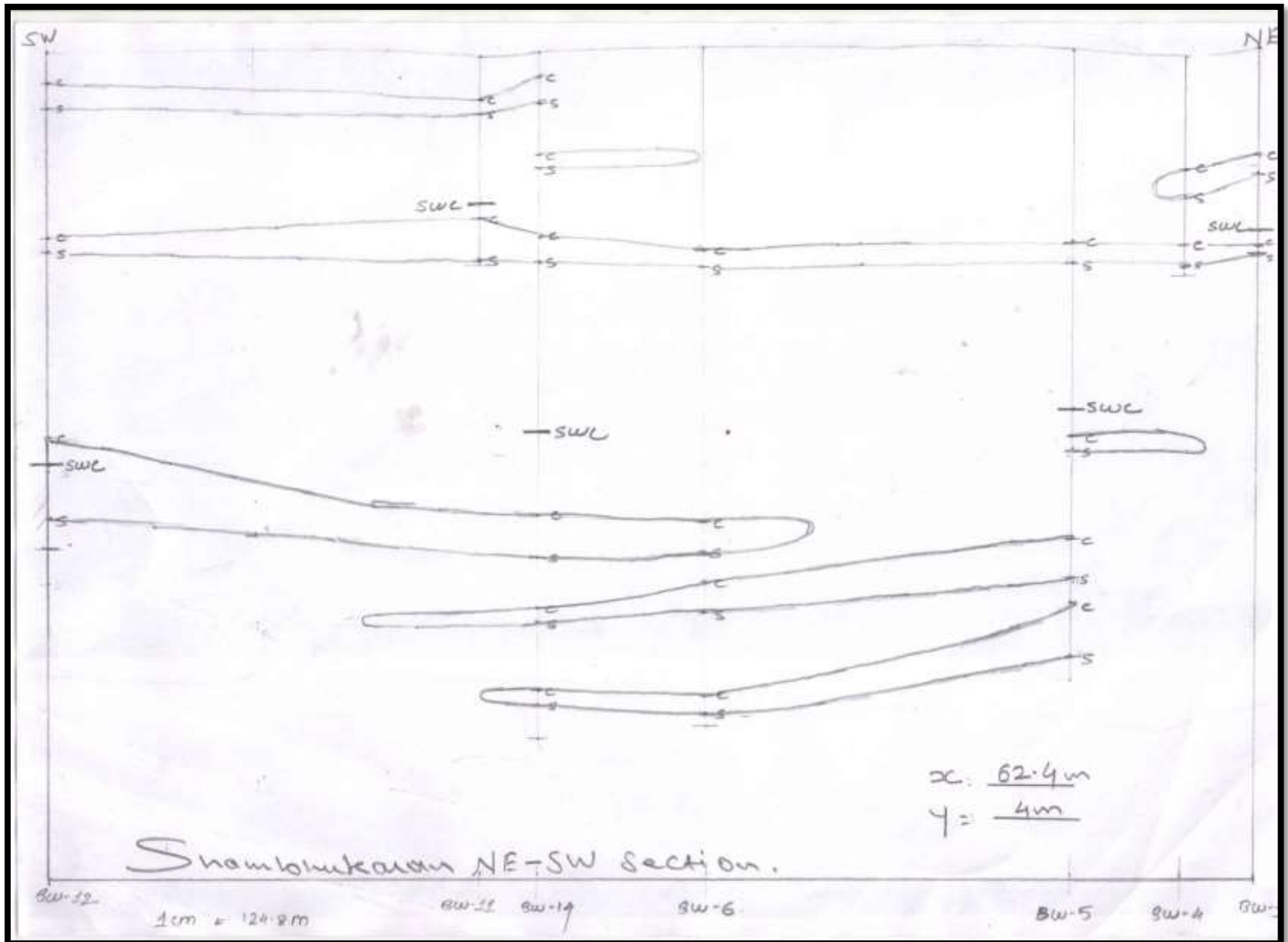


Punjab Section

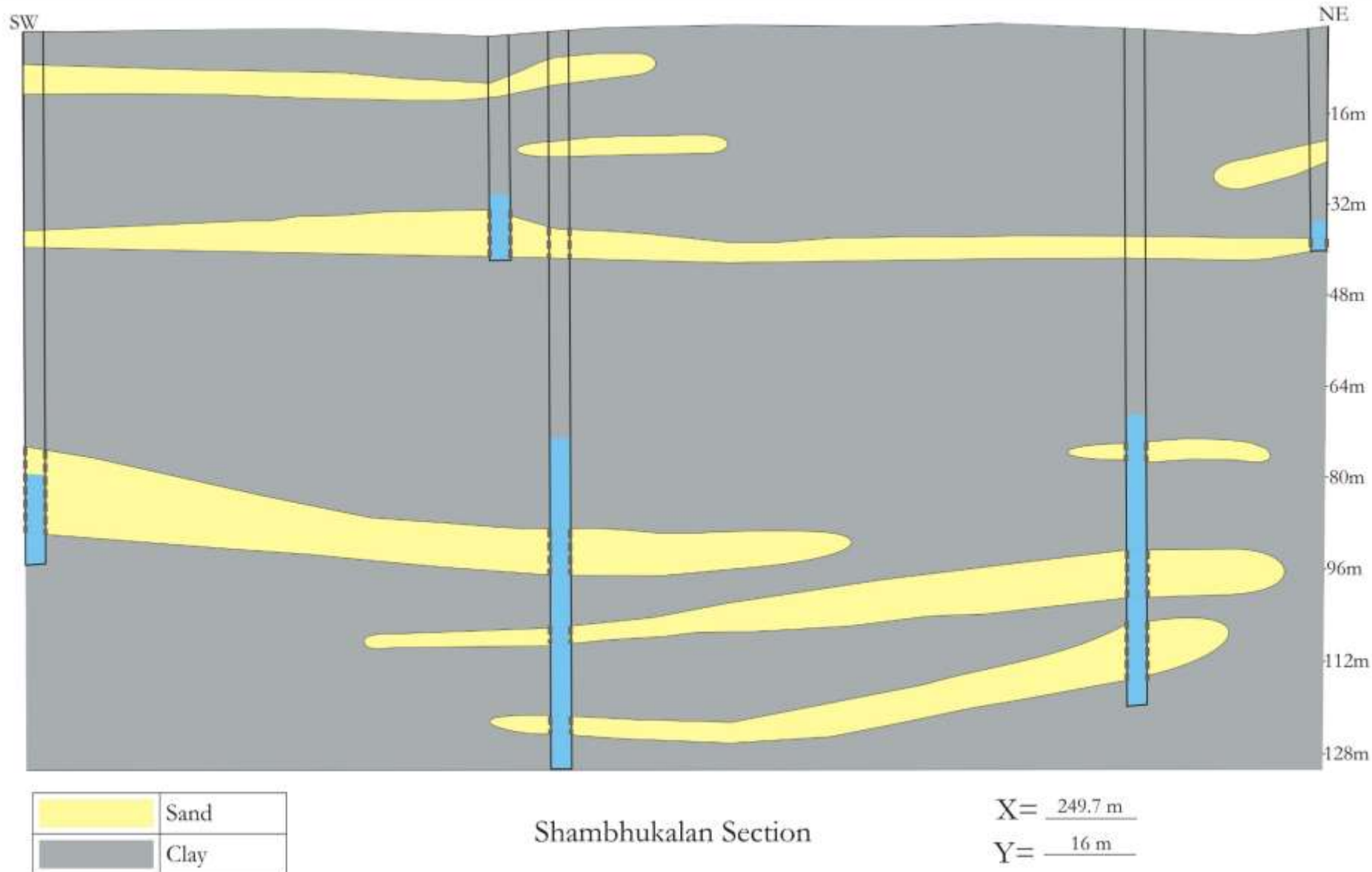
Google earth elevation profile of Shambhukalan village



Hand drawn cross section with precise scale



Preparing a final section using CorelDraw



Thank You