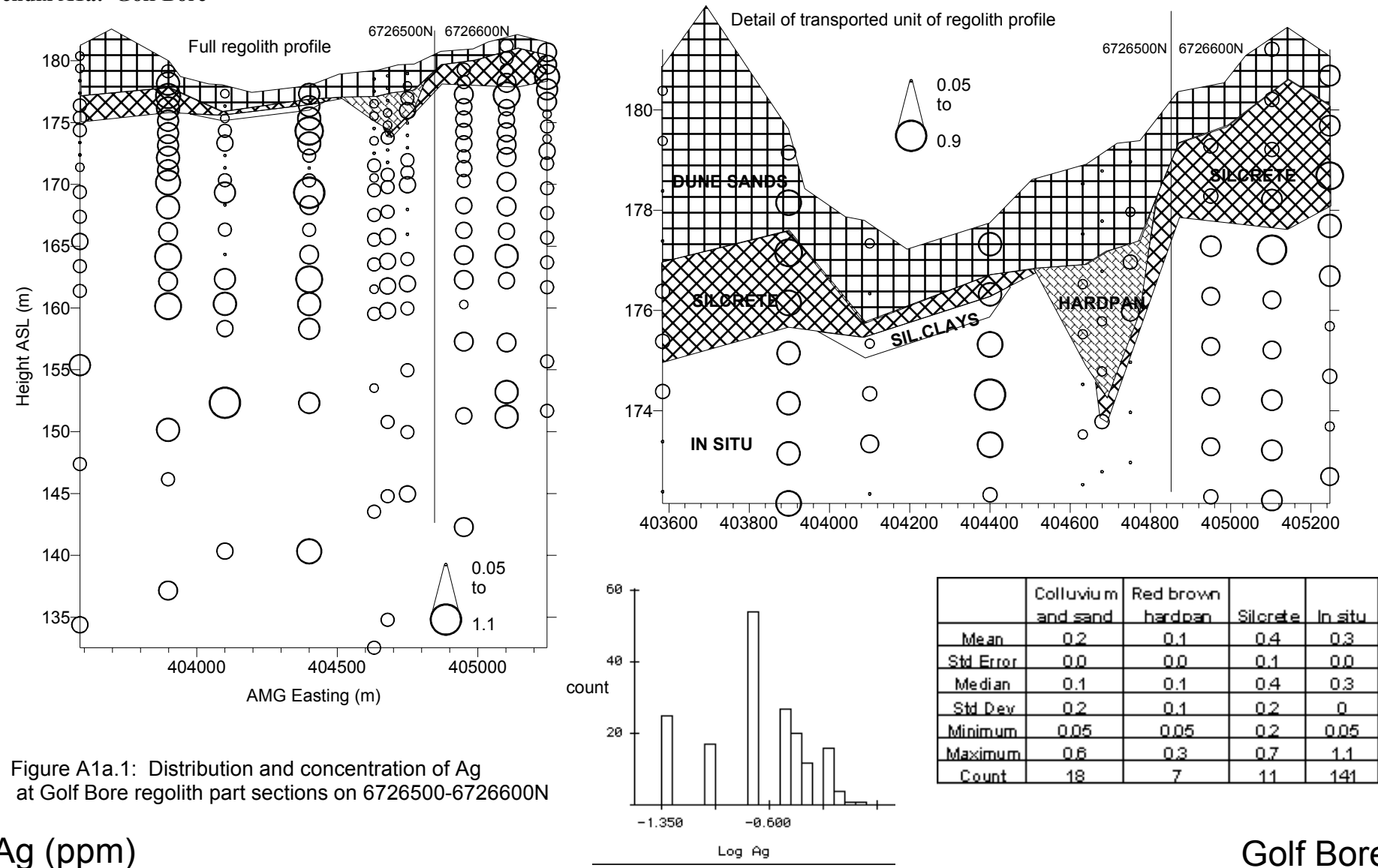
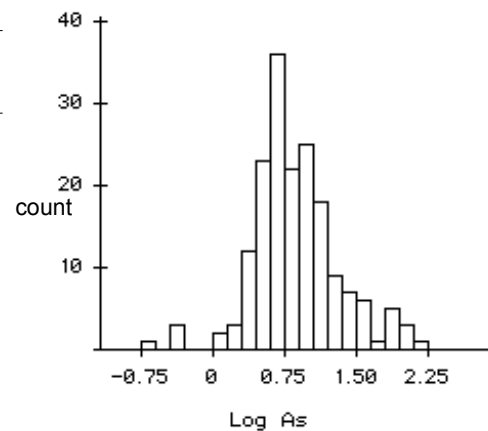
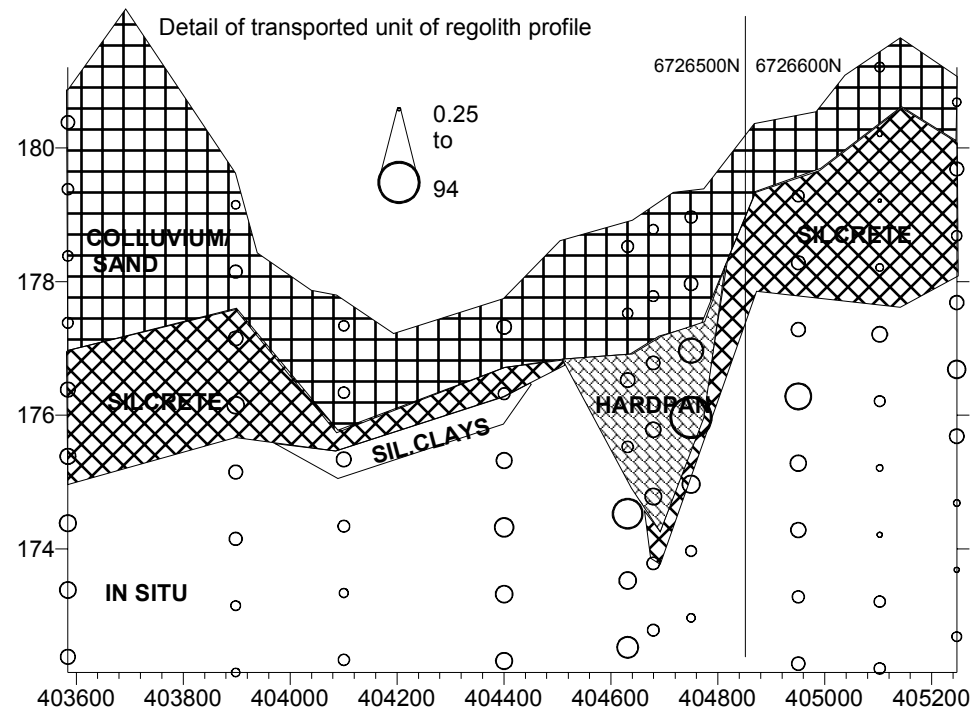
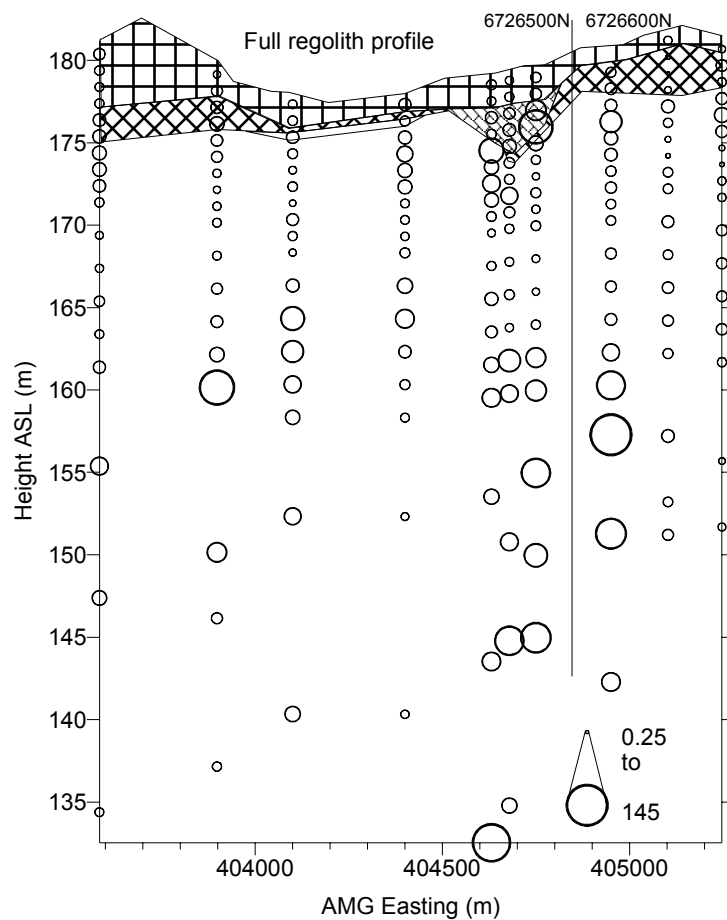


APPENDIX 1

Regolith Sections

Appendix A1a: Golf Bore





	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	5	24	6	14
Std Error	0.4	12	1	2
Median	4	10	8	7
Std Dev	2	32	4	22
Minimum	2	4.5	0.25	0.5
Maximum	8.5	94	13	145
Count	18	7	11	141

Figure A1a.2: Distribution and concentration of As at Golf Bore regolith part sections on 6726500-6726600N

As (ppm)

Golf Bore

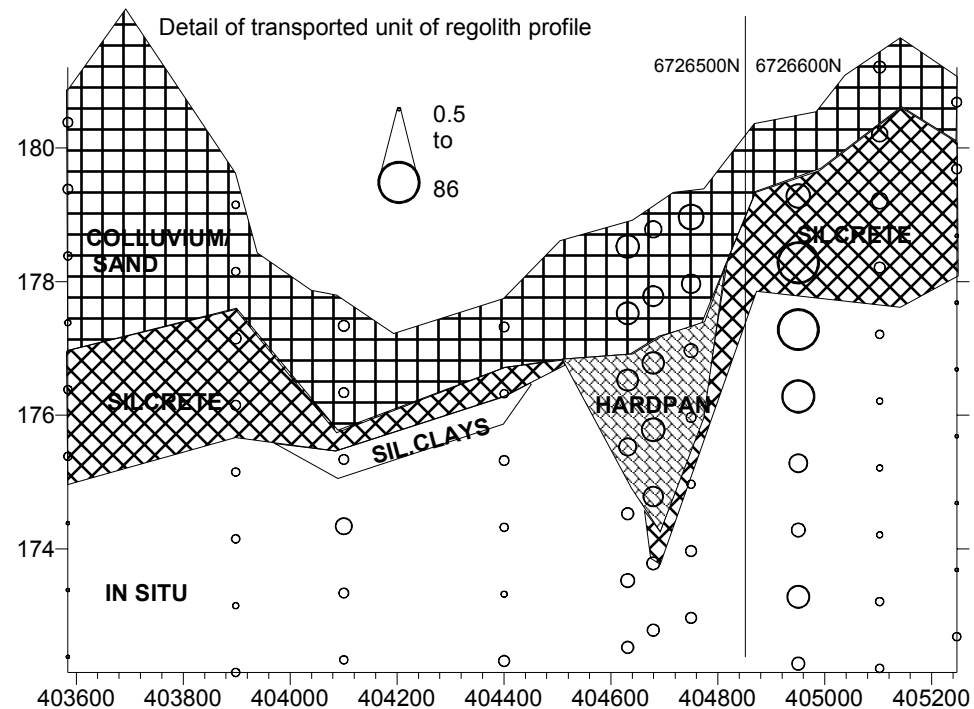
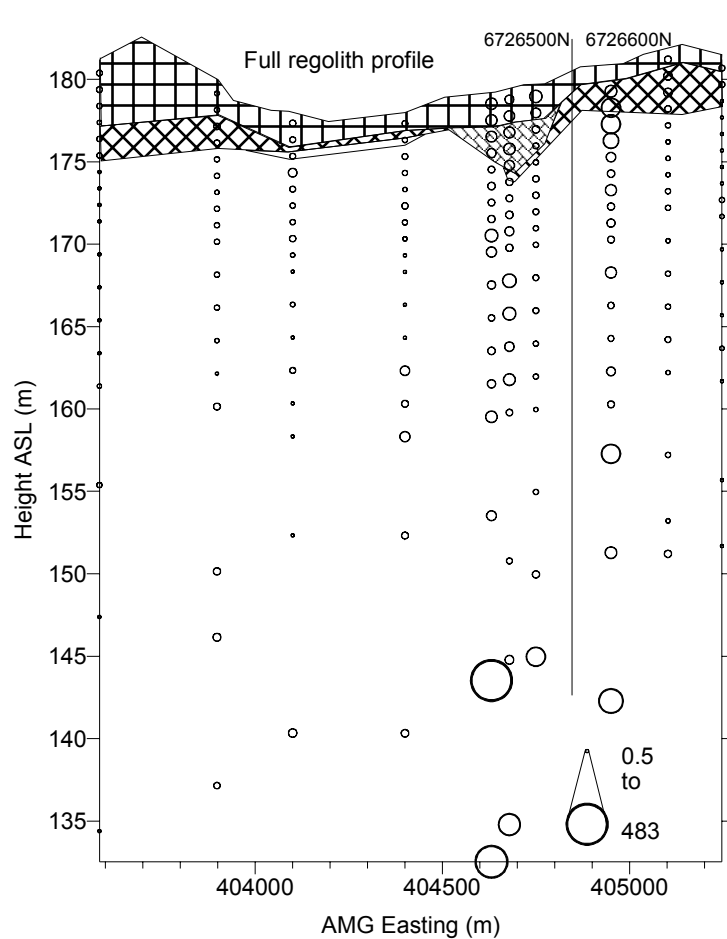
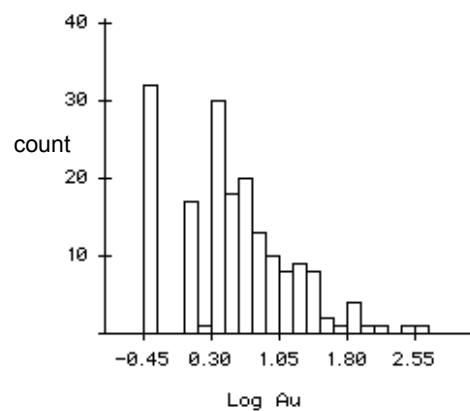


Figure A1a.3: Distribution and concentration of Au at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	10	15	19	14
Std Error	2	3	10	4
Median	4	17	4	2
Std Dev	10	8	33	50
Minimum	1	3	0.5	0.5
Maximum	29	24	86	483
Count	18	7	11	141

Au (ppb)

Golf Bore

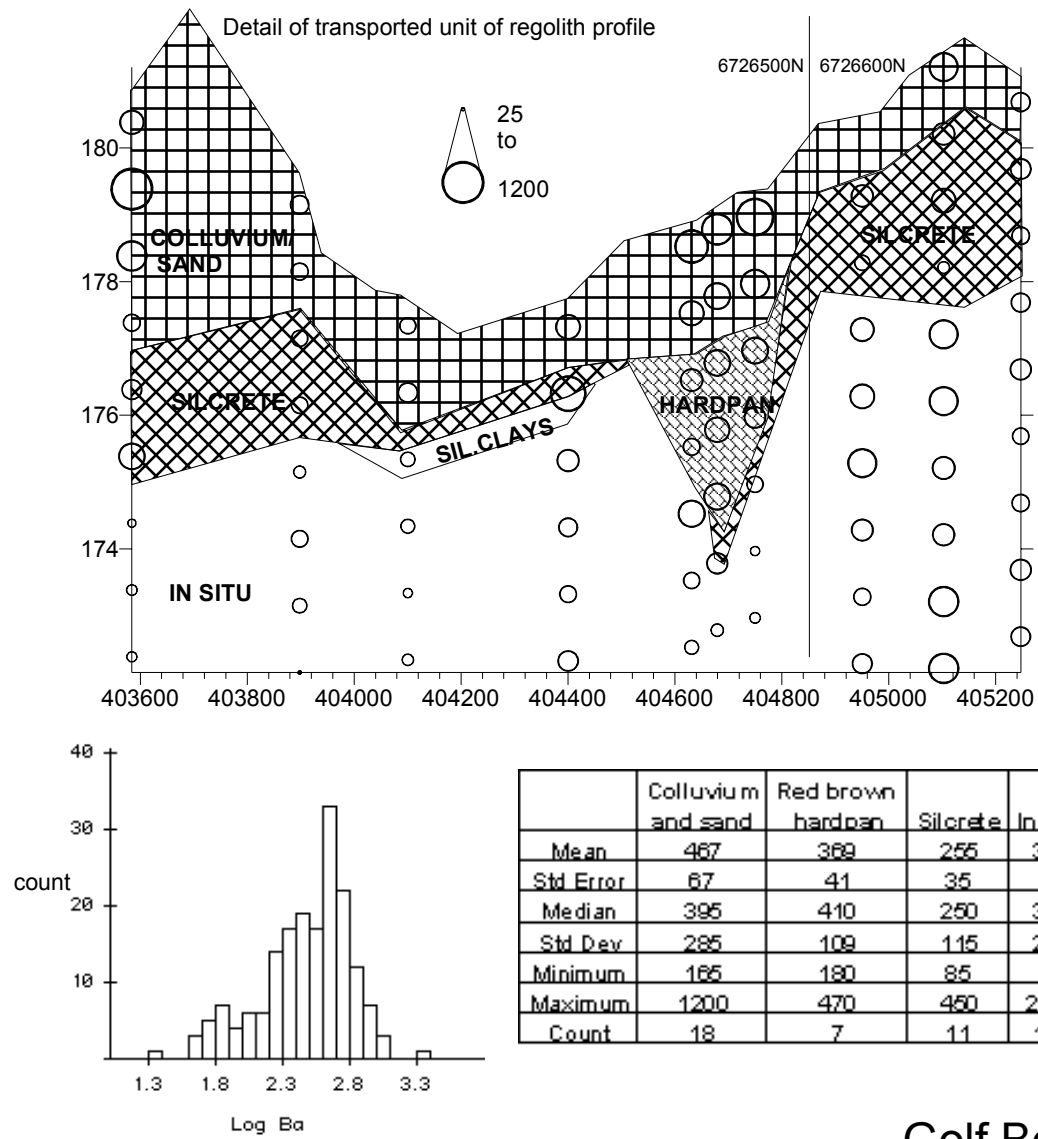
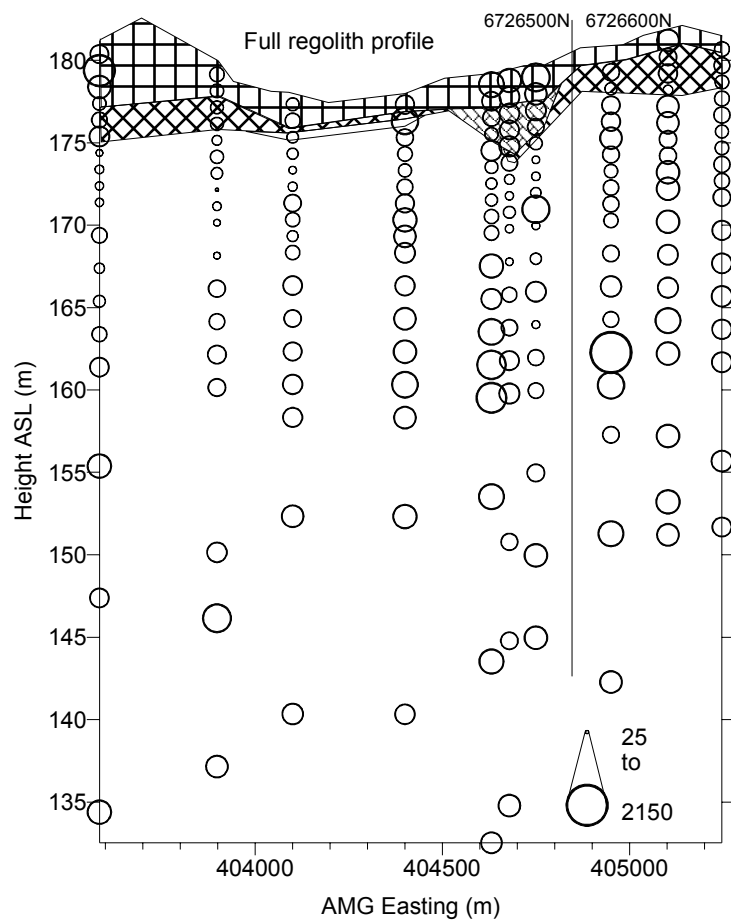


Figure A1a.4: Distribution and concentration of Ba at Golf Bore regolith part sections on 6726500-6726600N

Ba (ppm)

Golf Bore

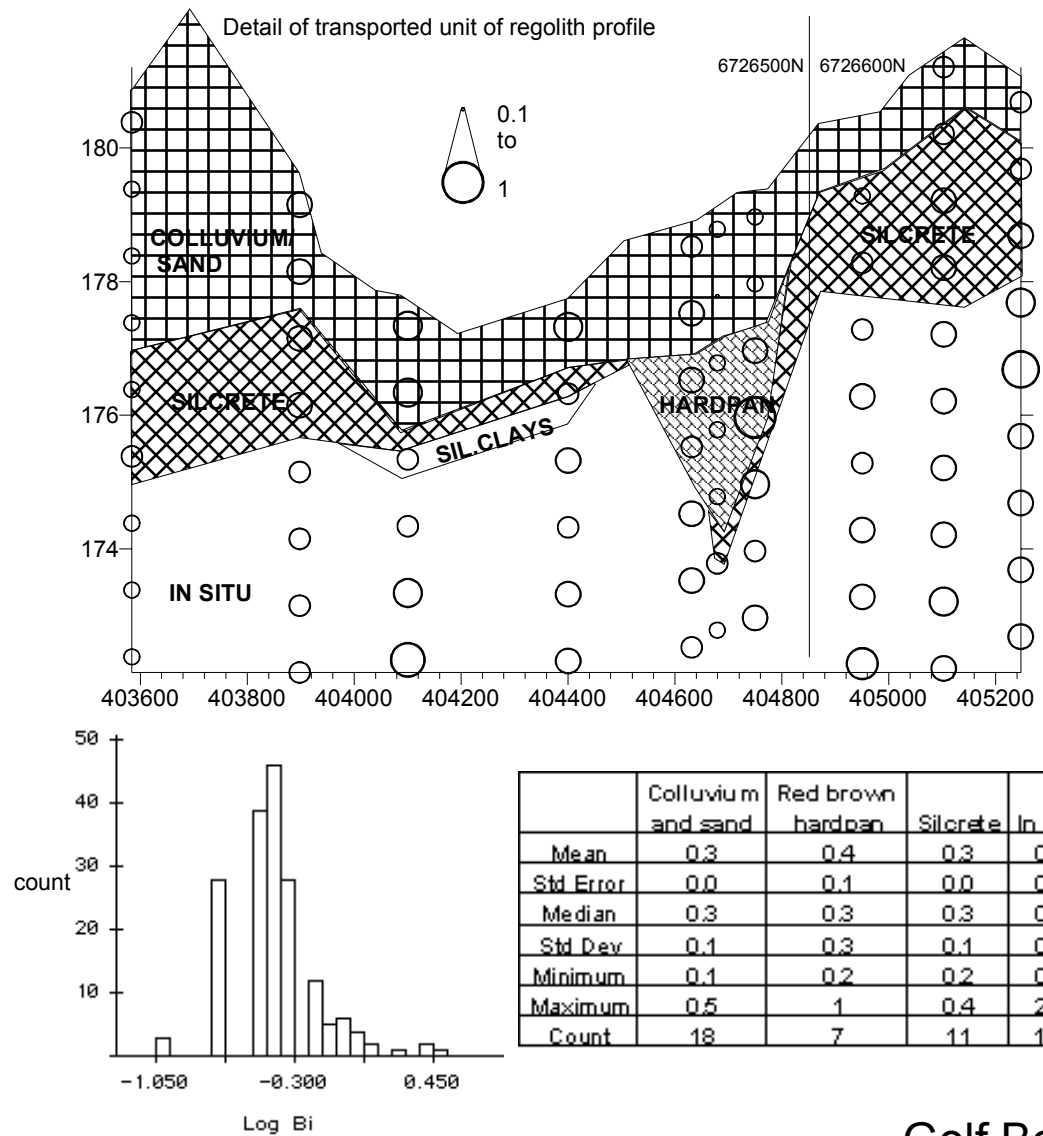
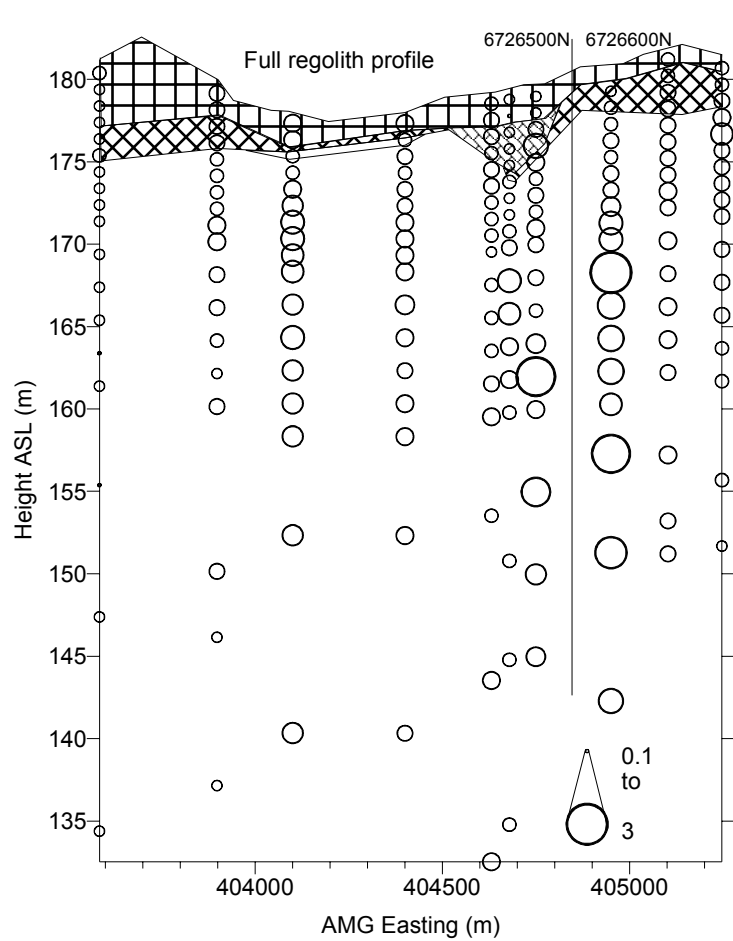


Figure A1a.5: Distribution and concentration of Bi at Golf Bore regolith part sections on 6726500-6726600N

Bi (ppm)

Golf Bore

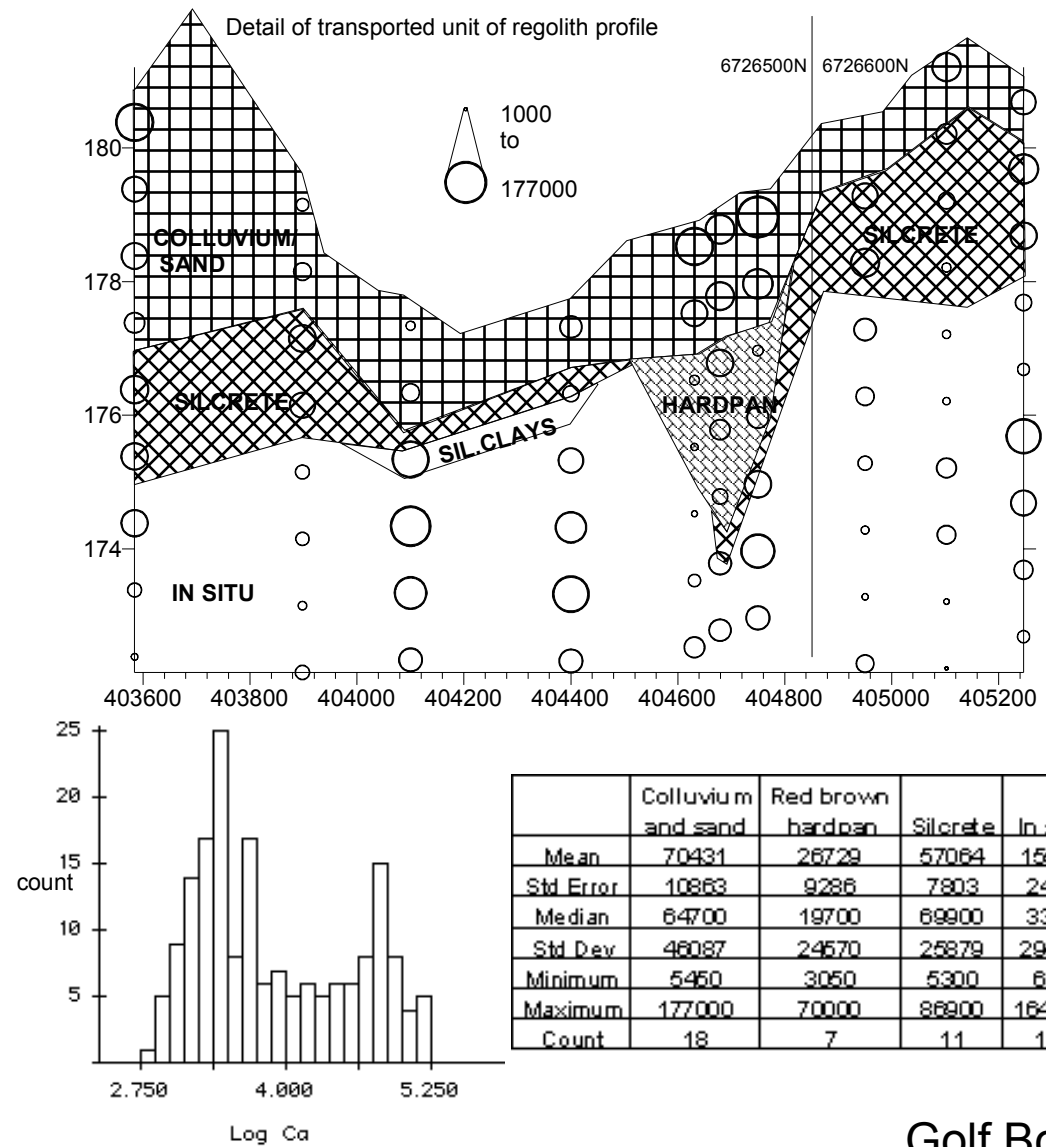
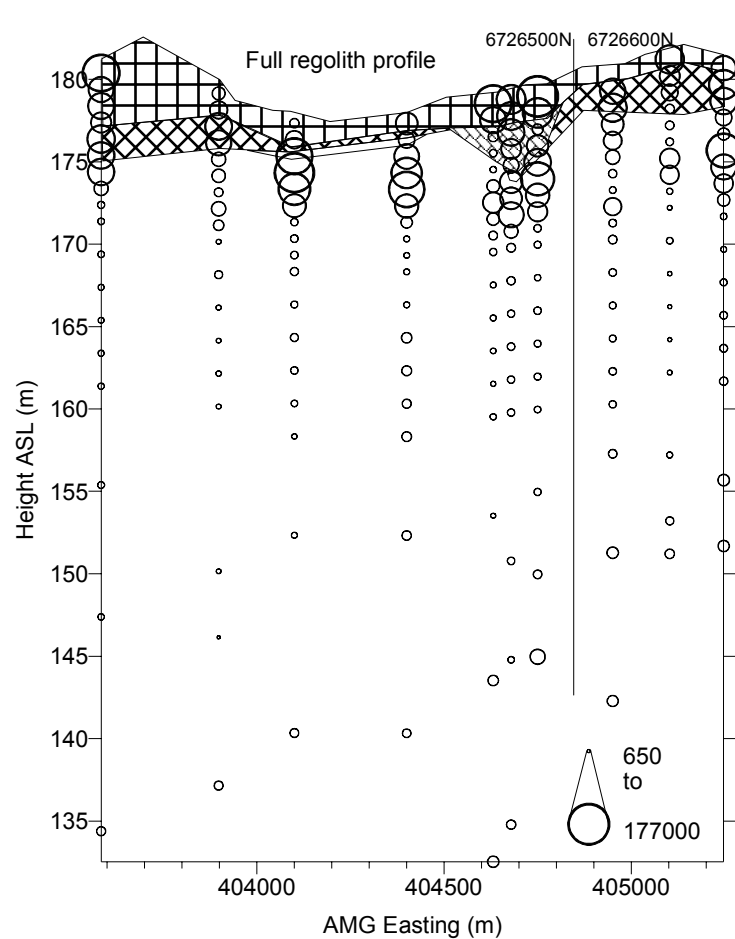


Figure A1a.6: Distribution and concentration of Ca at Golf Bore regolith part sections on 6726500-6726600N

Ca (ppm)

Golf Bore

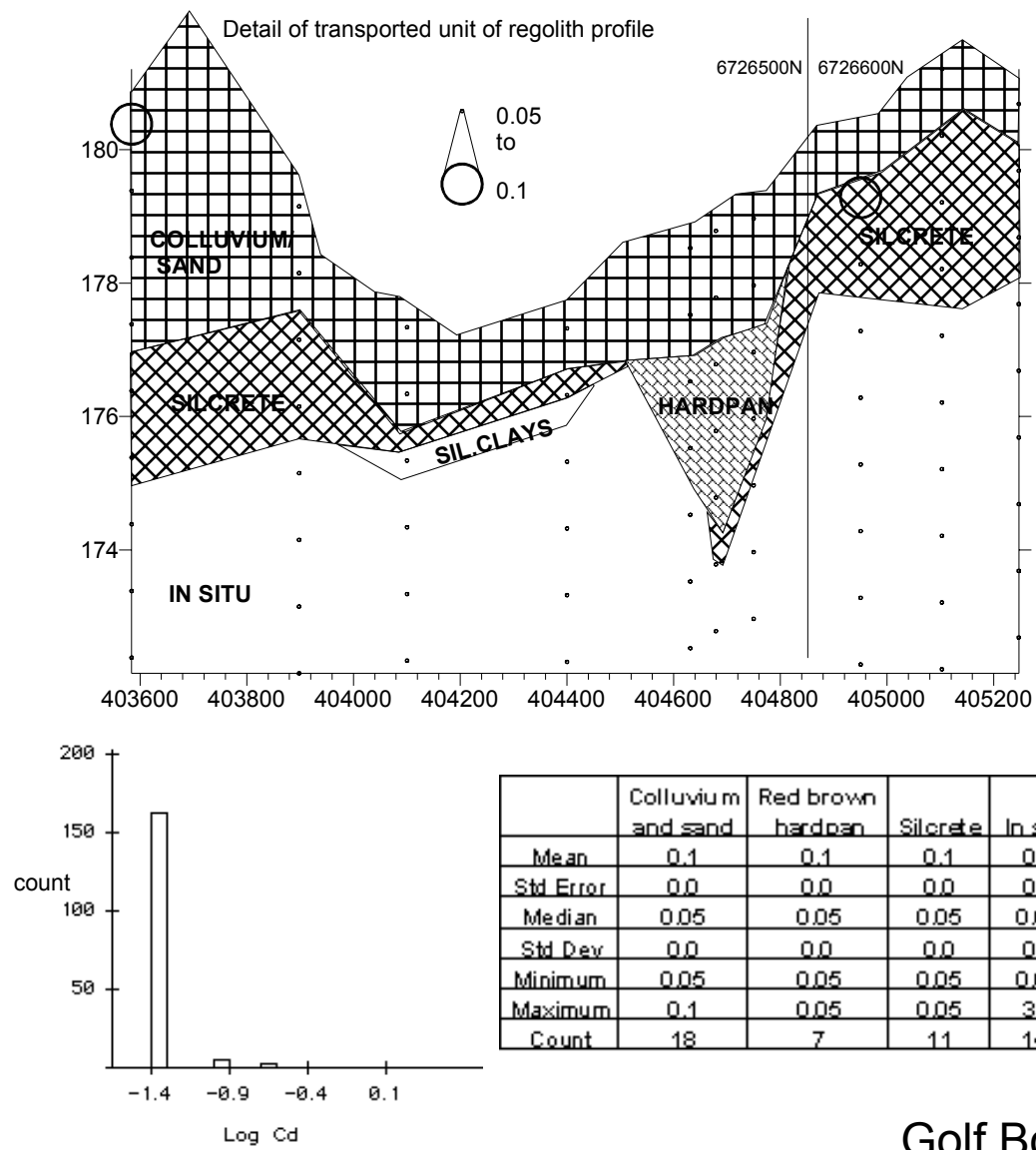
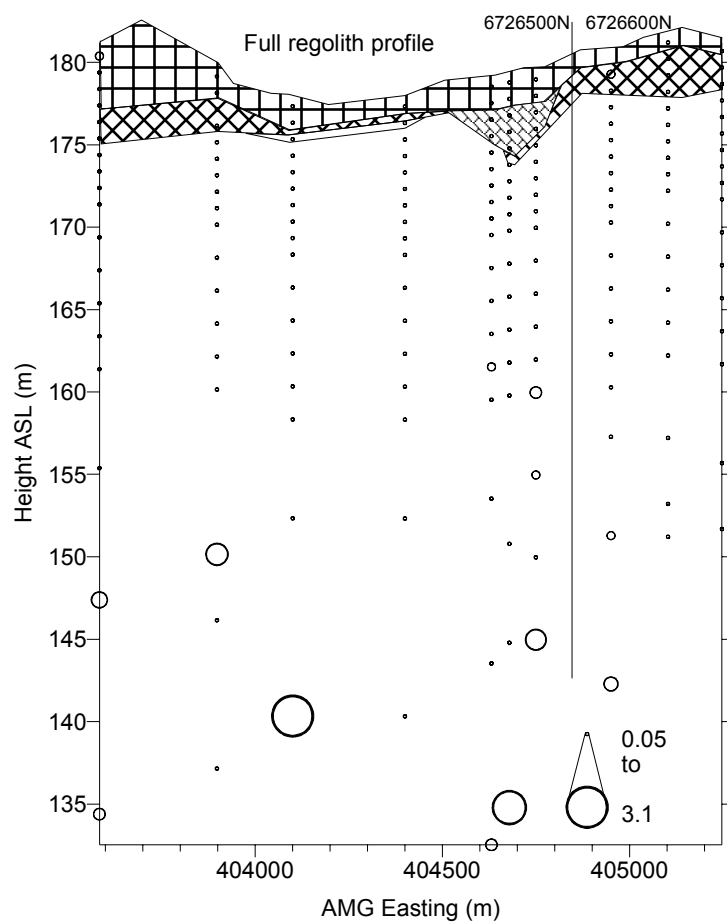


Figure A1a.7: Distribution and concentration of Cd at Golf Bore regolith part sections on 6726500-6726600N

Cd (ppm)

Golf Bore

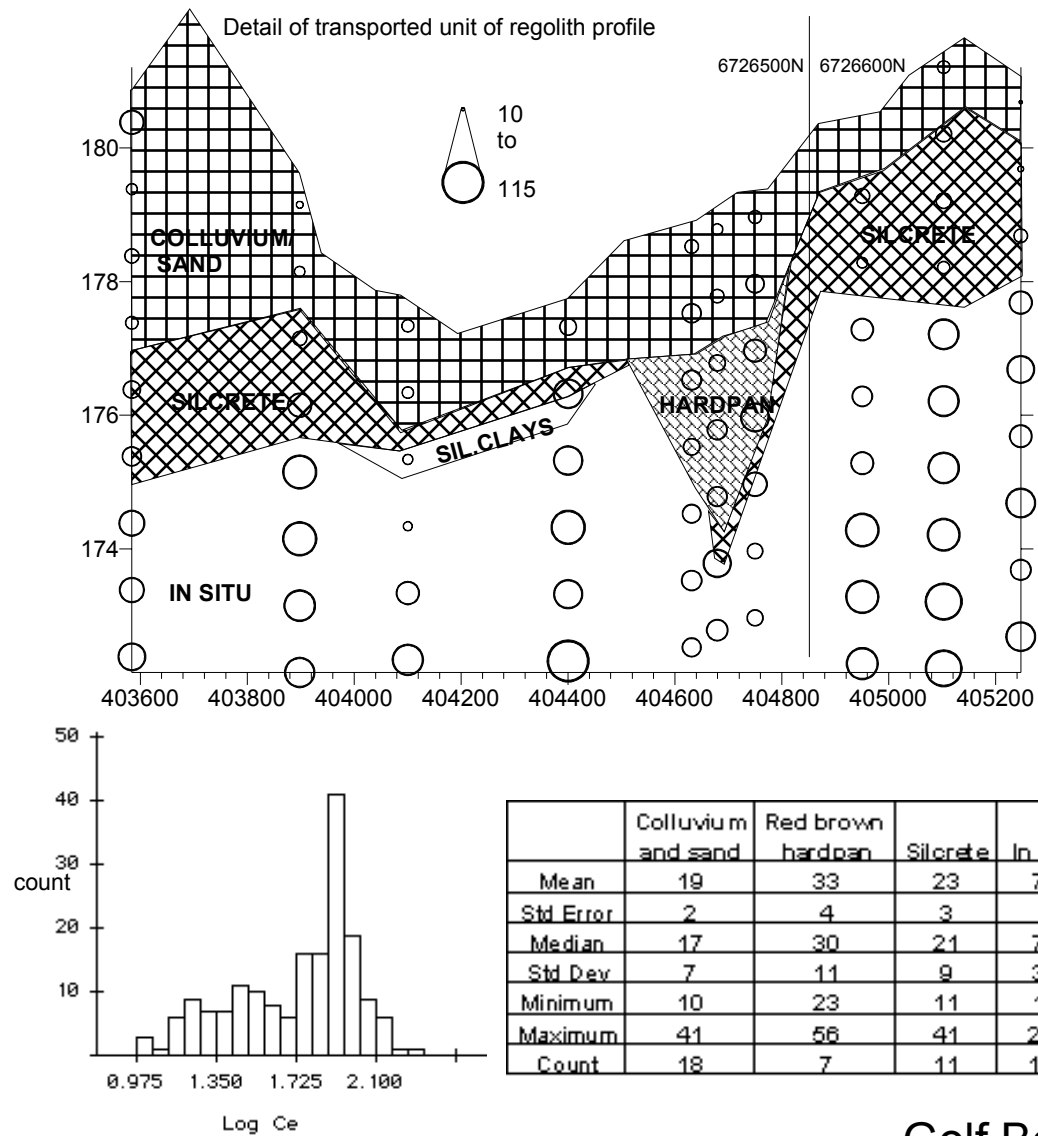
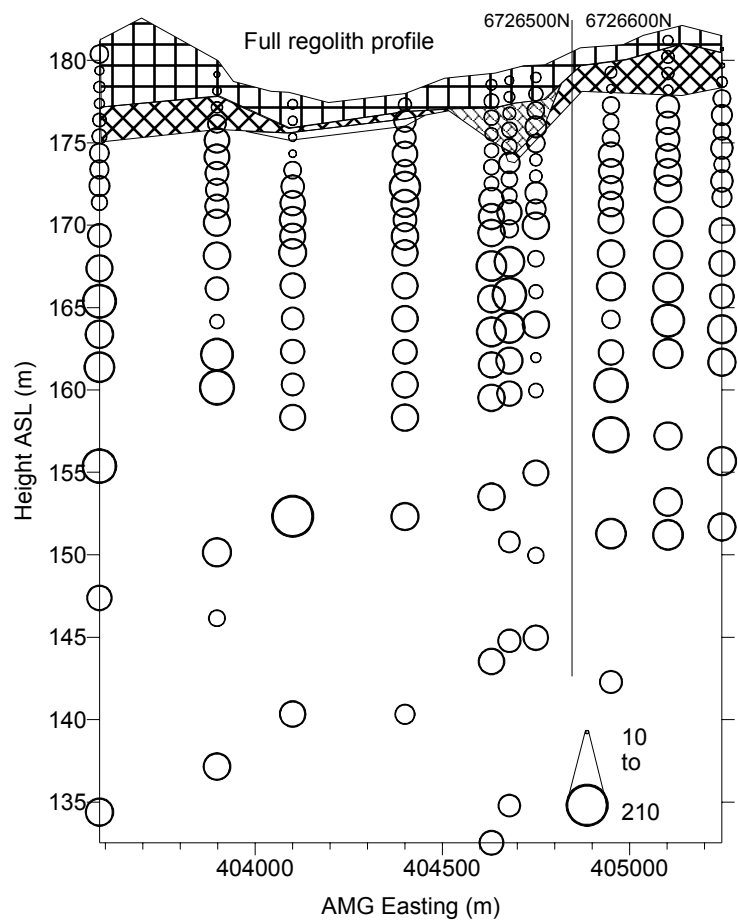
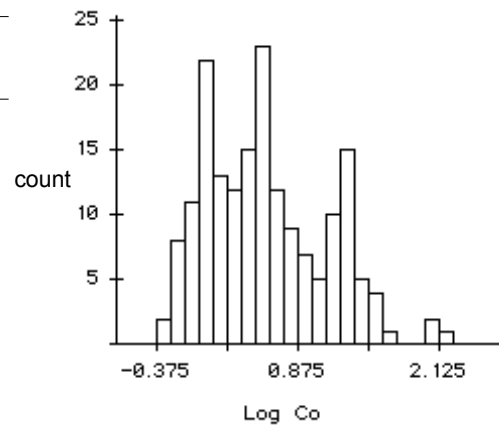
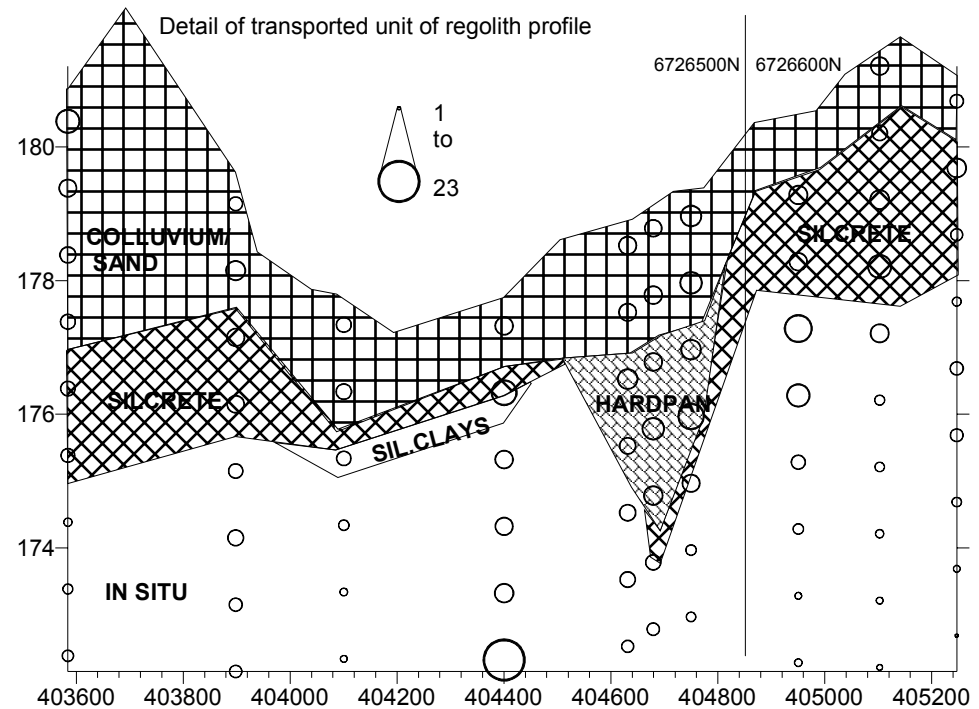
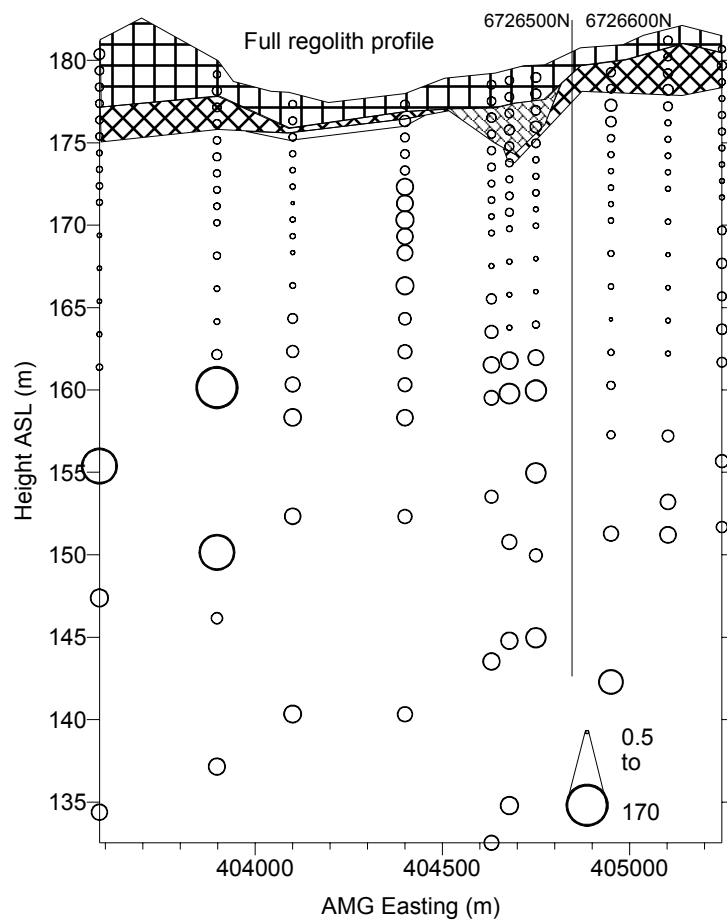


Figure A1a.8: Distribution and concentration of Ce at Golf Bore regolith part sections on 6726500-6726600N

Ce (ppm)

Golf Bore



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	4	5	4	11
Std Error	0.3	0.6	0.7	2
Median	4.0	5	4	3
Std Dev	1	2	2	21
Minimum	2	3	2	0.5
Maximum	7	9	10	170
Count	18	7	11	141

Figure A1a.9: Distribution and concentration of Co at Golf Bore regolith part sections on 6726500-6726600N

Co (ppm)

Golf Bore

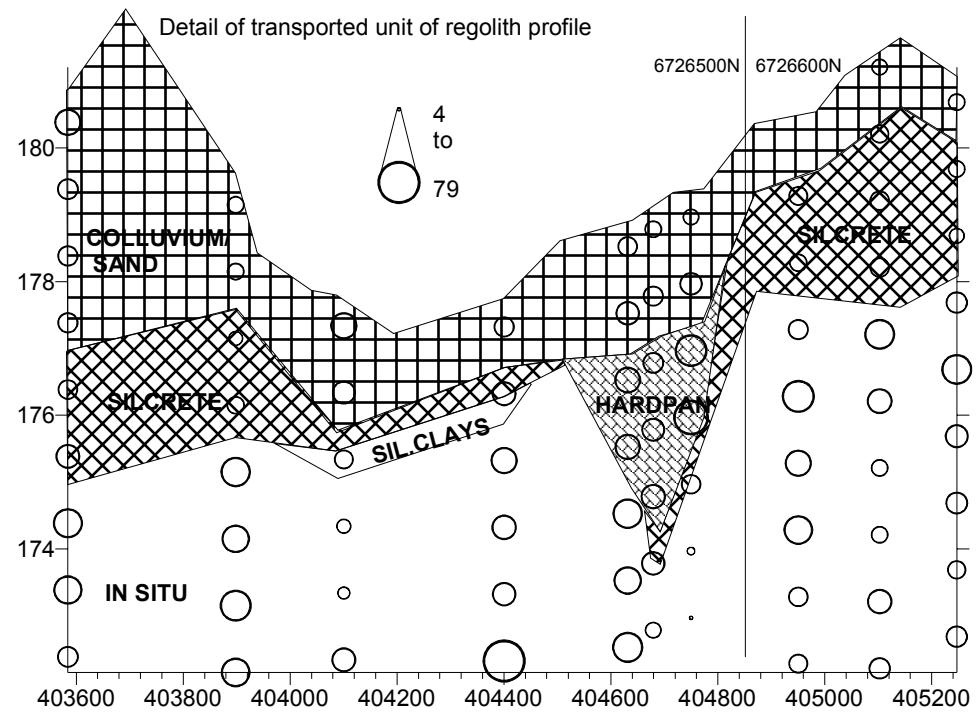
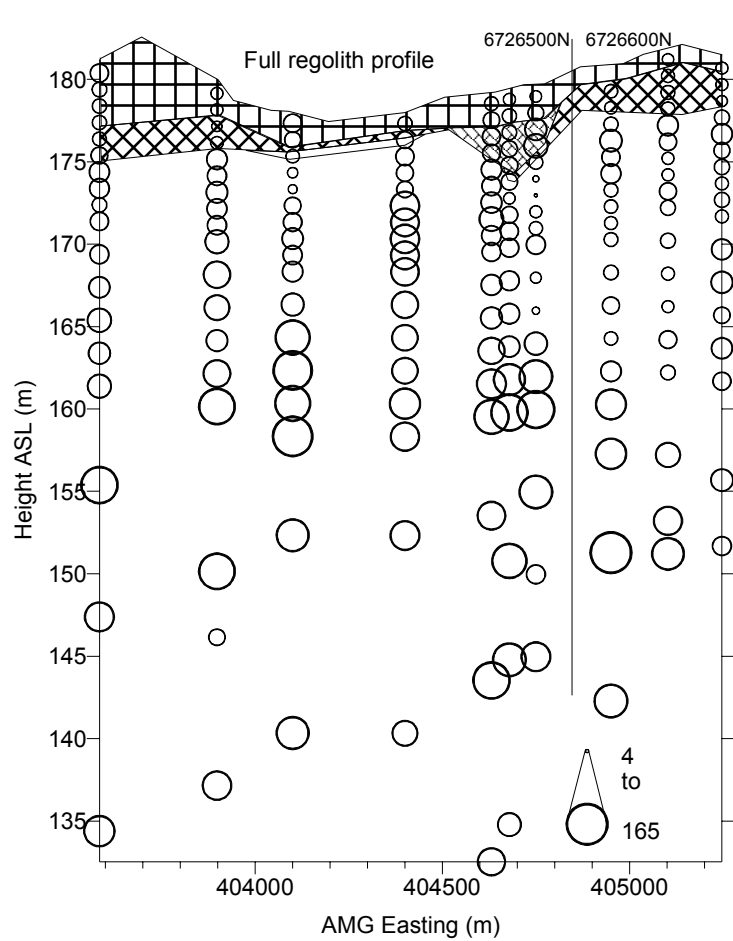
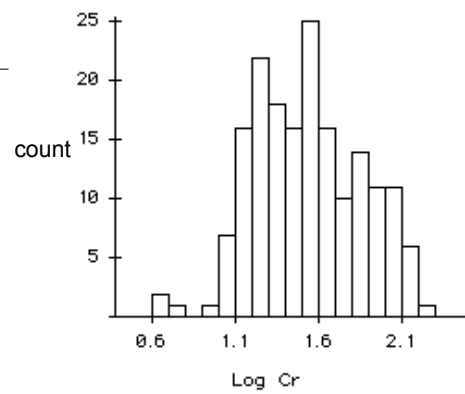


Figure A1a.10: Distribution and concentration of Cr at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	18	32	16	51
Std Error	1	5	1	3
Median	18	28	15	39
Std Dev	6	12	4	36
Minimum	12	19	10	4
Maximum	30	53	25	165
Count	18	7	11	141

Cr (ppm)

Golf Bore

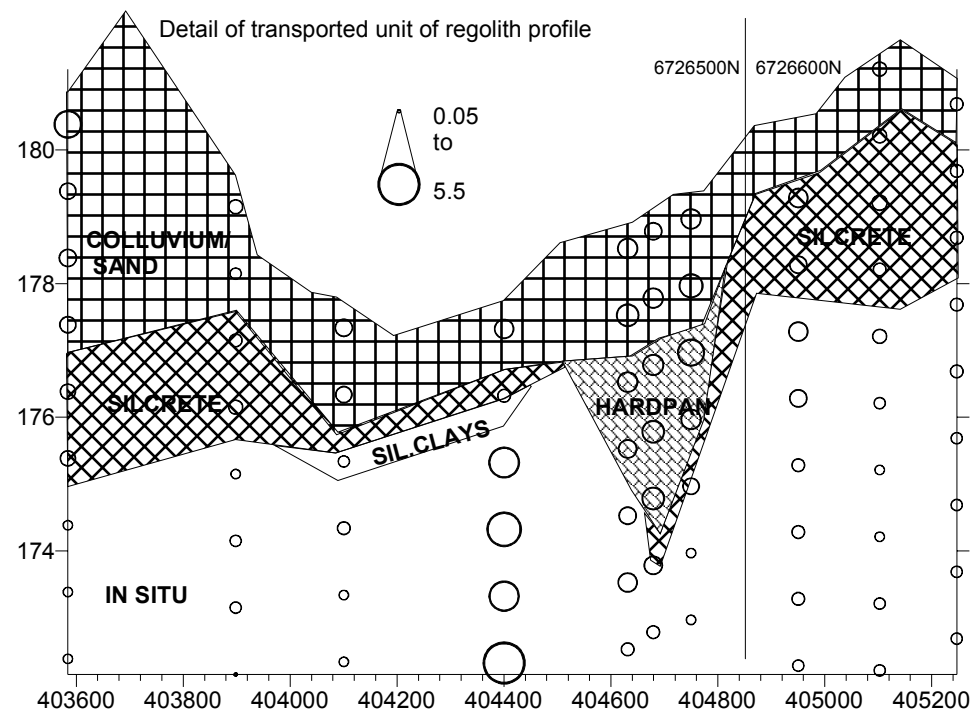
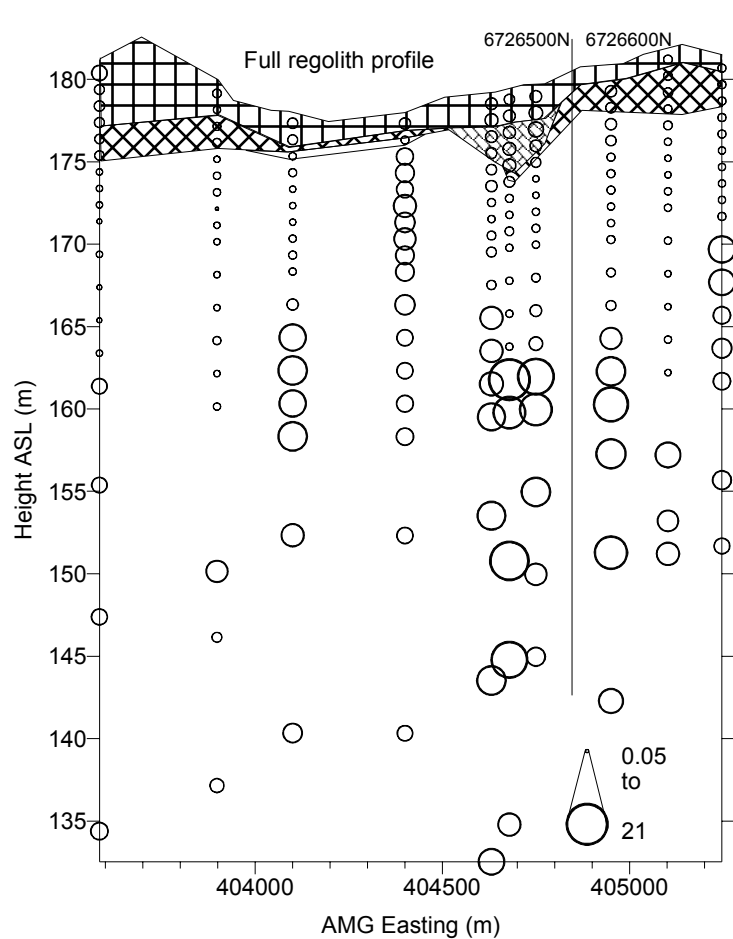
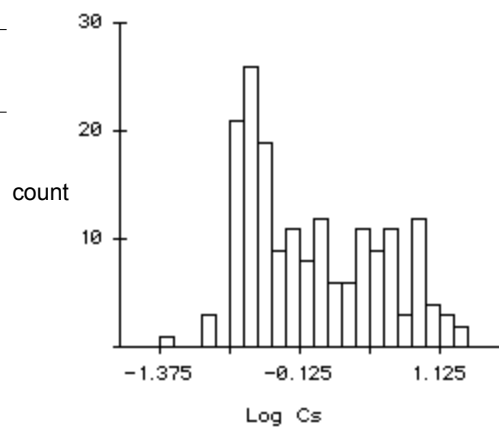


Figure A1a.11: Distribution and concentration of Cs at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	0.9	1.3	0.6	3
Std Error	0.1	0.1	0.1	0.3
Median	0.8	1.2	0.5	0.7
Std Dev	0.5	0.4	0.2	4
Minimum	0.3	0.9	0.4	0.05
Maximum	2.2	2.1	1	21
Count	18	7	11	141

Cs (ppm)

Golf Bore

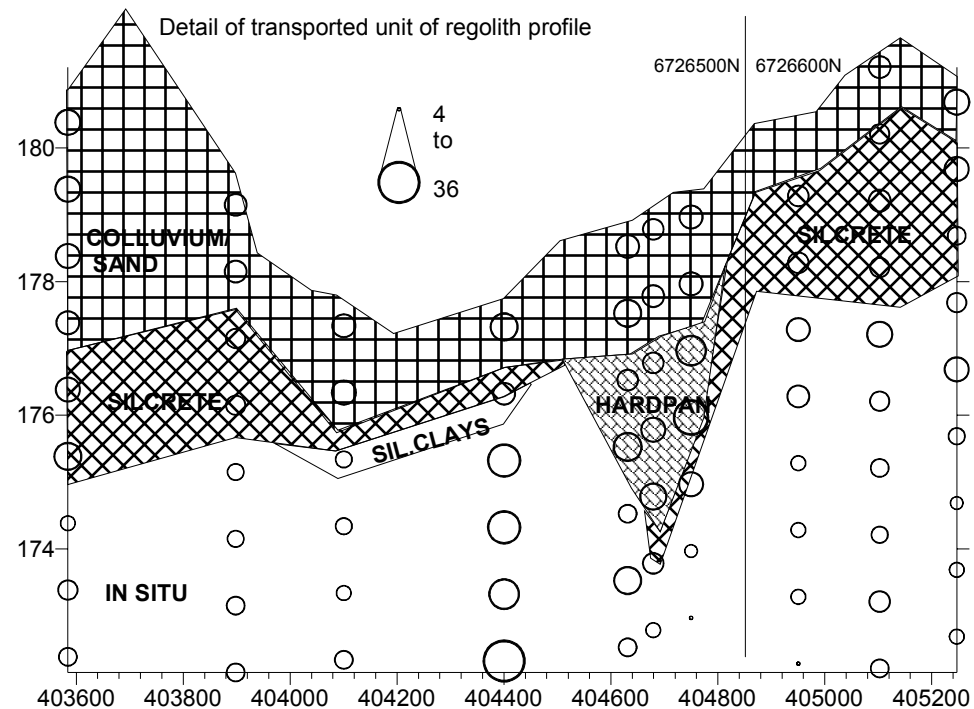
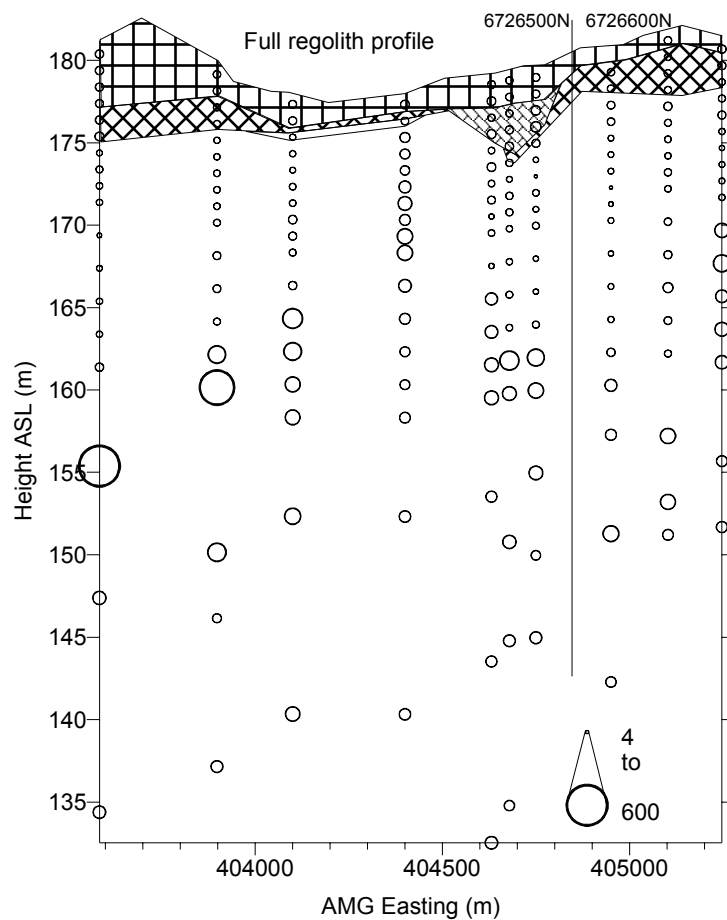
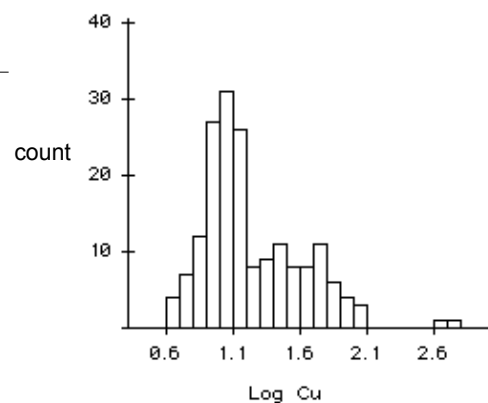


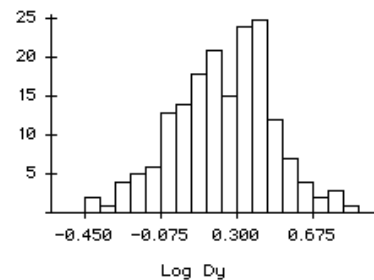
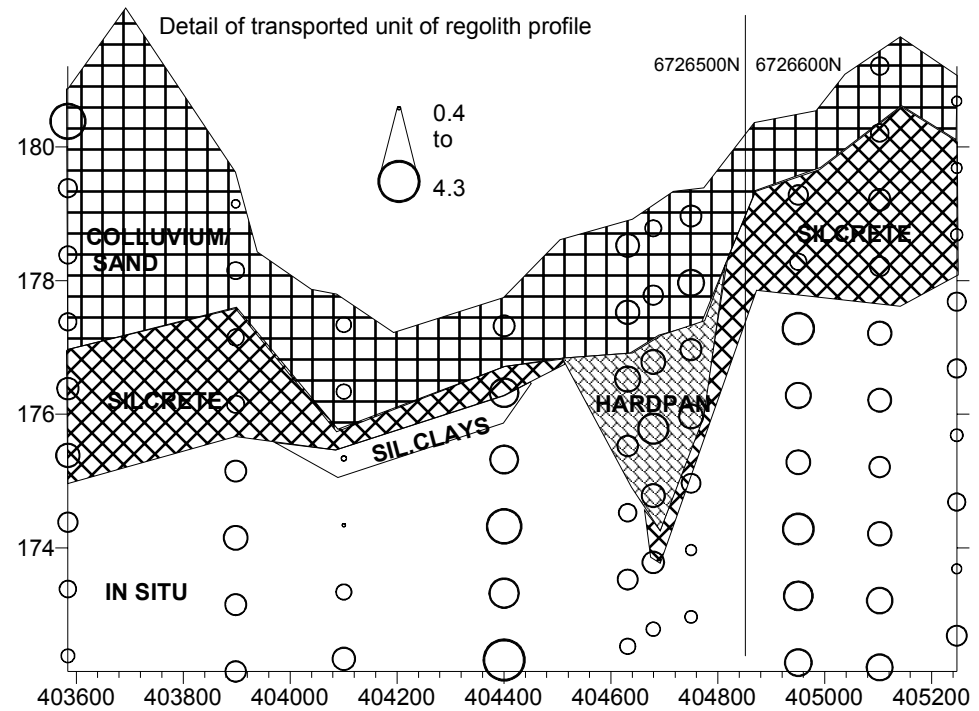
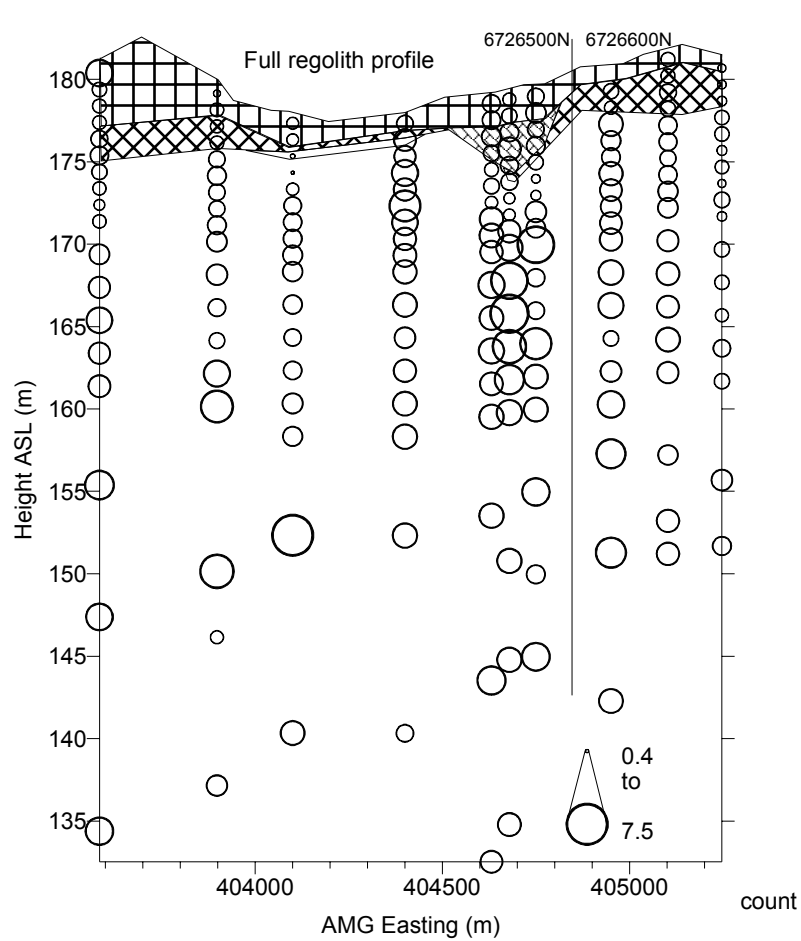
Figure A1a.12: Distribution and concentration of Cu at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	13	17	12	33
Std Error	0.4	2	0.7	5
Median	13	16	11	14
Std Dev	1.8	5	2.4	63
Minimum	11	11	9	4
Maximum	17	26	17	600
Count	18	7	11	141

Cu (ppm)

Golf Bore



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	1.2	1.6	1.2	2.2
Std Error	0.1	0.1	0.2	0.1
Median	1.025	1.6	1	2
Std Dev	0.6	0.4	0.6	1.2
Minimum	0.48	1.25	0.56	0.41
Maximum	3.2	2.4	2.6	7.5
Count	18	7	11	141

Figure A1a.13: Distribution and concentration of Dy at Golf Bore regolith part sections on 6726500-6726600N

Dy (ppm)

Golf Bore

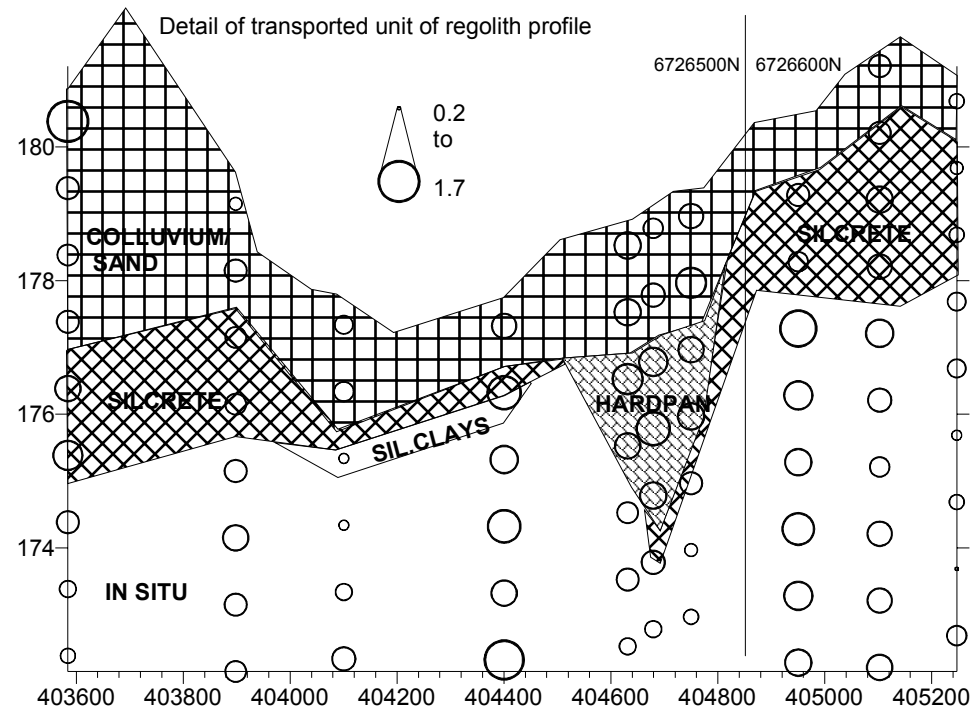
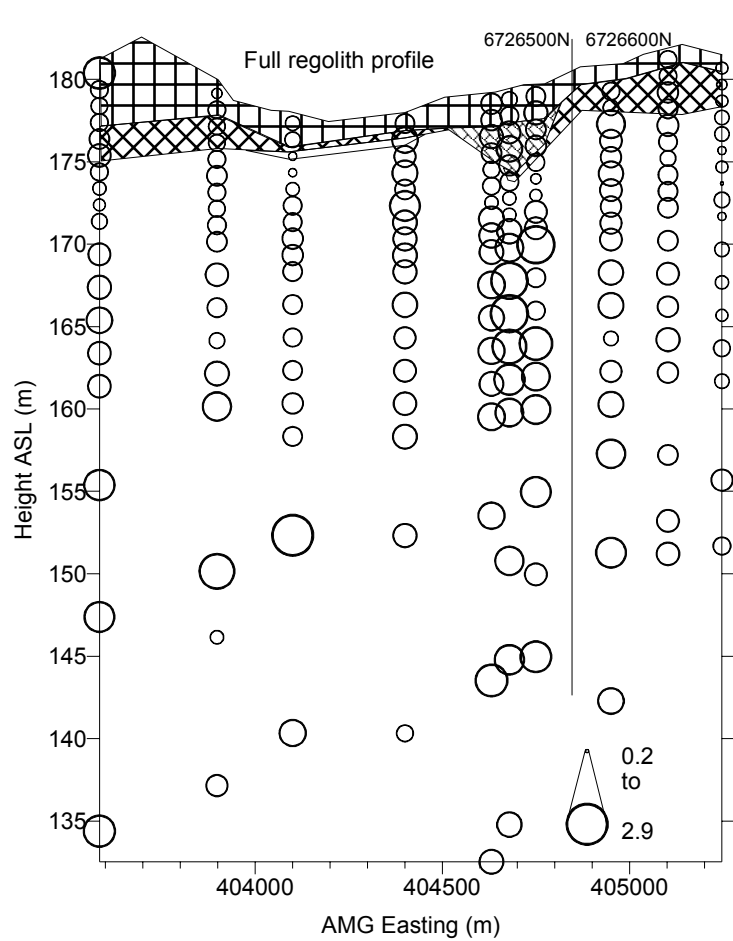
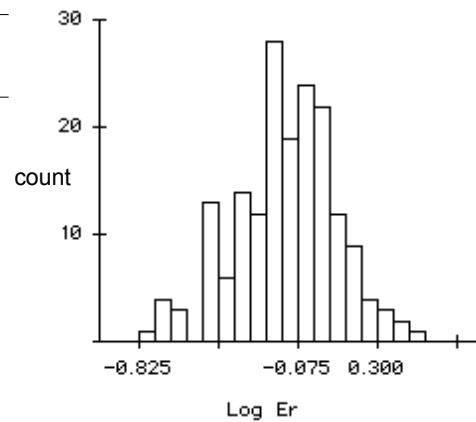


Figure A1a.14: Distribution and concentration of Er at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	0.6	0.8	0.6	0.9
Std Error	0.1	0.1	0.1	0.0
Median	0.55	0.75	0.55	0.8
Std Dev	0.3	0.2	0.3	0.5
Minimum	0.25	0.7	0.25	0.15
Maximum	1.7	1.15	1.35	2.9
Count	18	7	11	141

Er (ppm)

Golf Bore

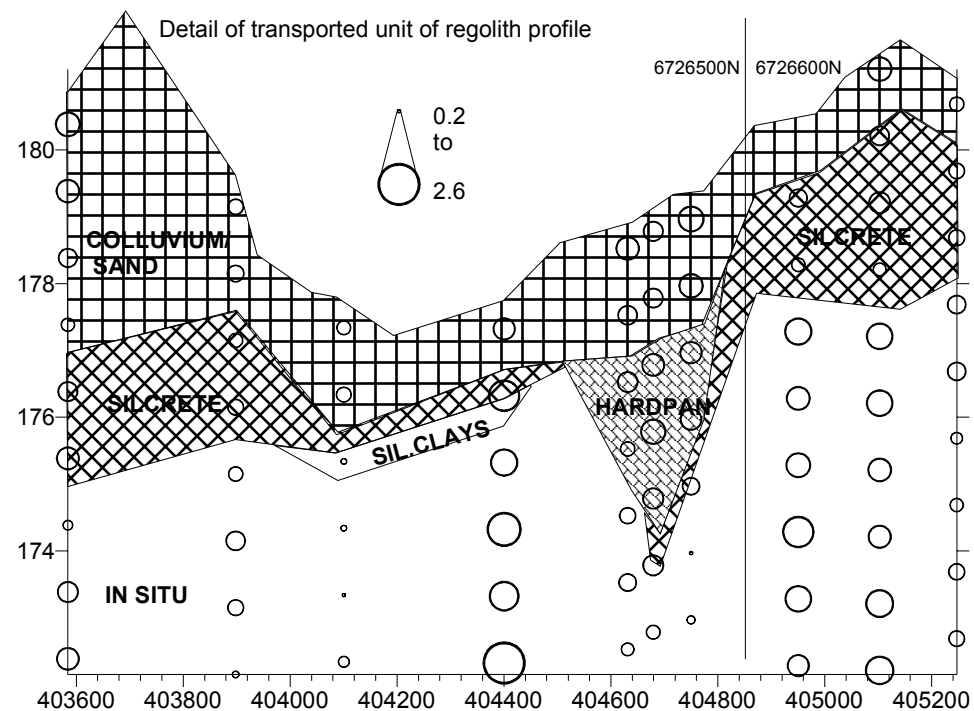
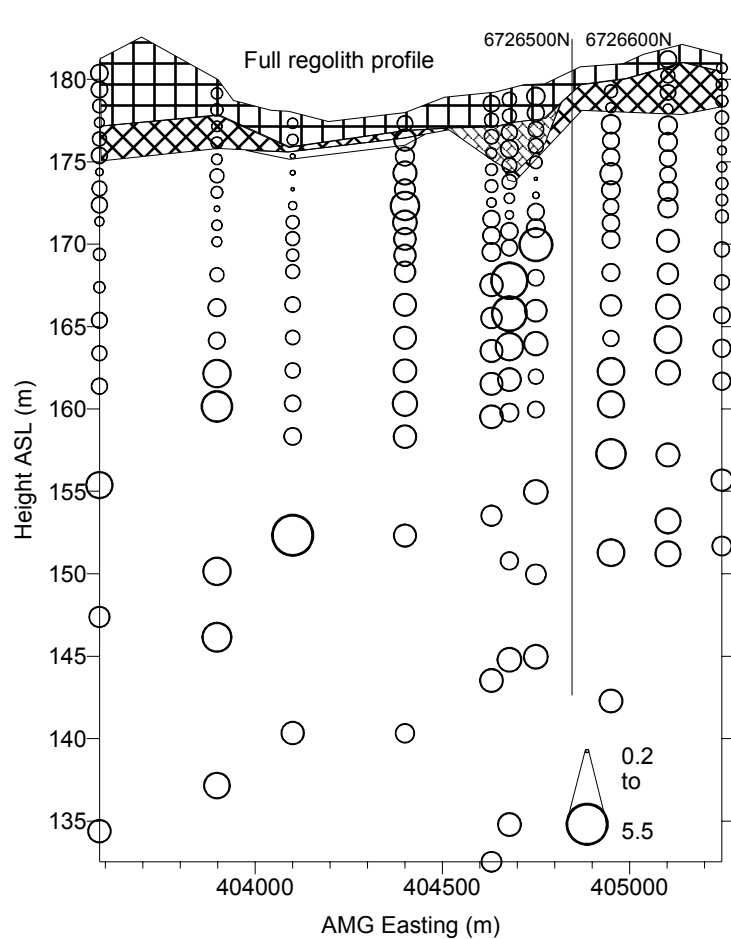
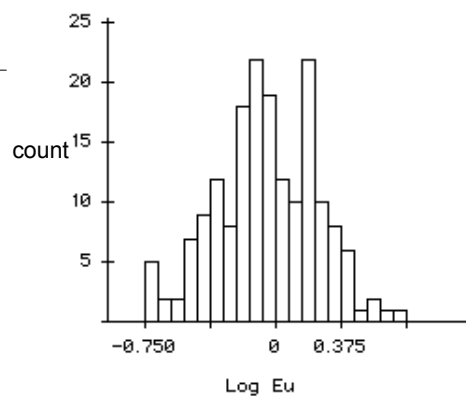


Figure A1a.15: Distribution and concentration of Eu at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	0.6	0.7	0.6	1.2
Std Error	0.1	0.1	0.1	0.1
Median	0.615	0.71	0.46	1.05
Std Dev	0.2	0.2	0.2	0.8
Minimum	0.35	0.39	0.34	0.18
Maximum	1	0.95	1.1	5.5
Count	18	7	11	141

Eu (ppm)

Golf Bore

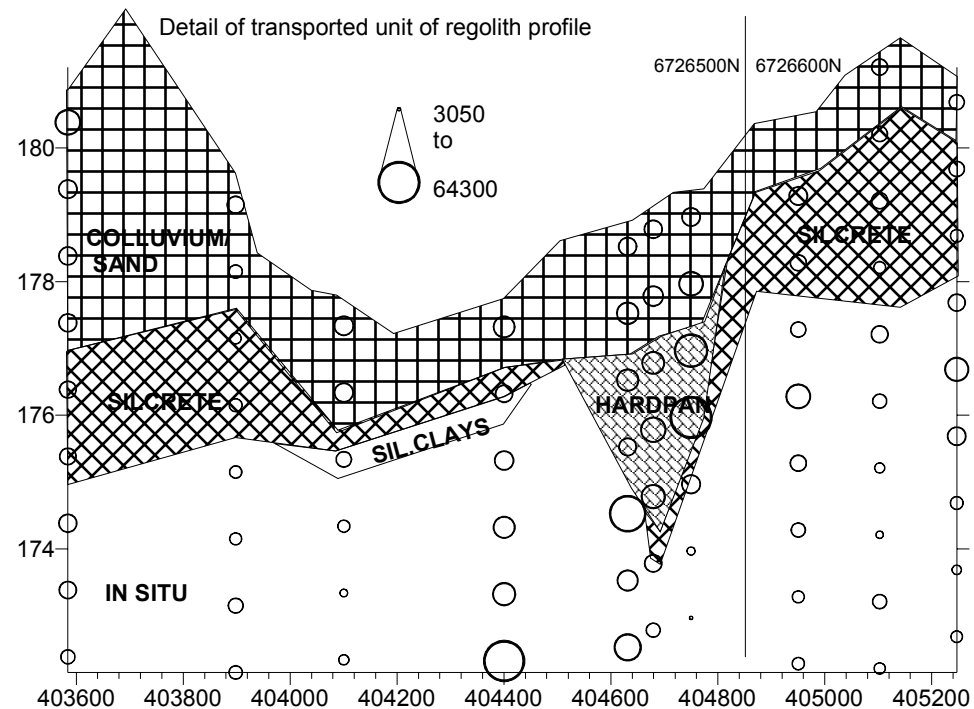
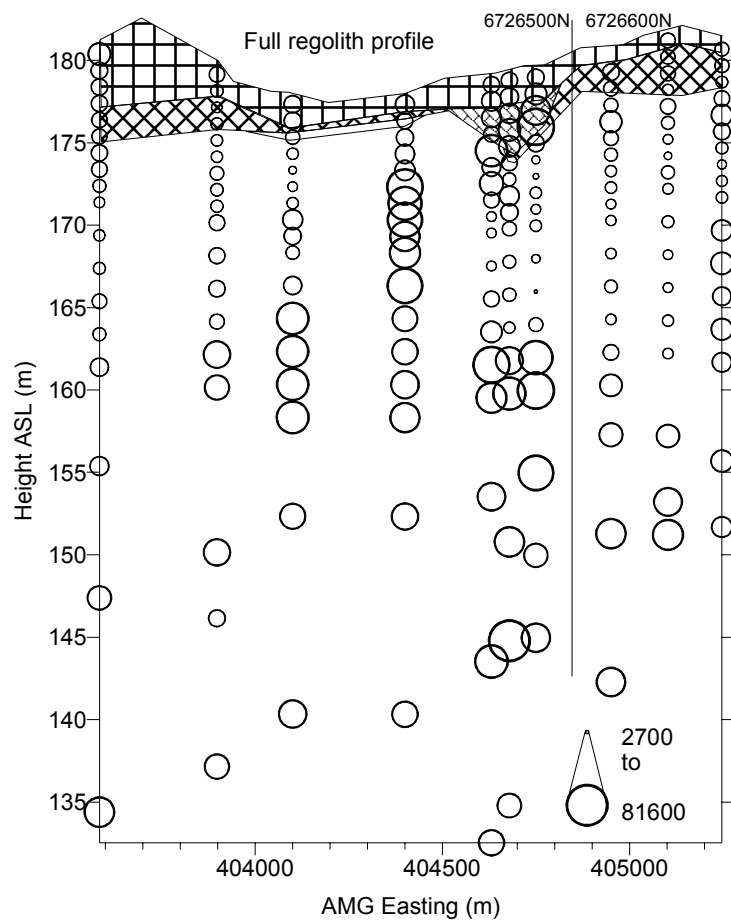
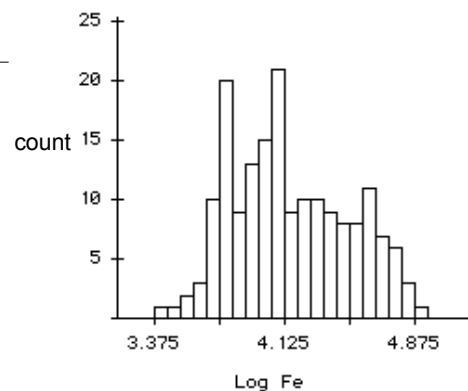


Figure A1a.16: Distribution and concentration of Fe at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	13792	28014	8791	20713
Std Error	934	6912	569	1445
Median	12850	20800	9450	12900
Std Dev	3961	18287	1886	17159
Minimum	7500	11700	5800	2700
Maximum	23300	64300	11000	81600
Count	18	7	11	141

Fe (ppm)

Golf Bore

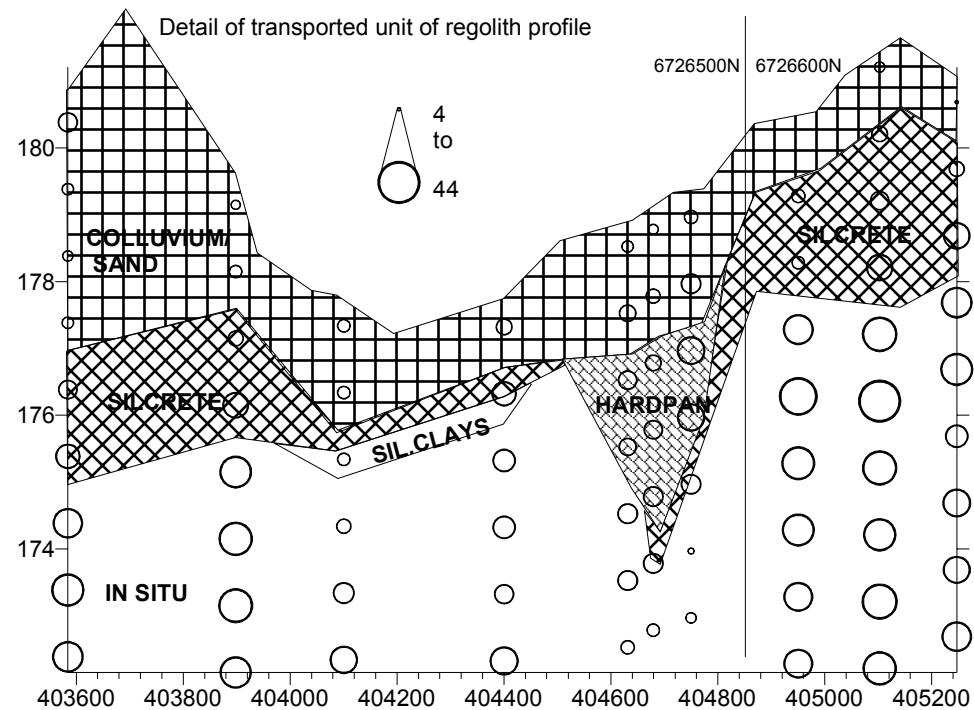
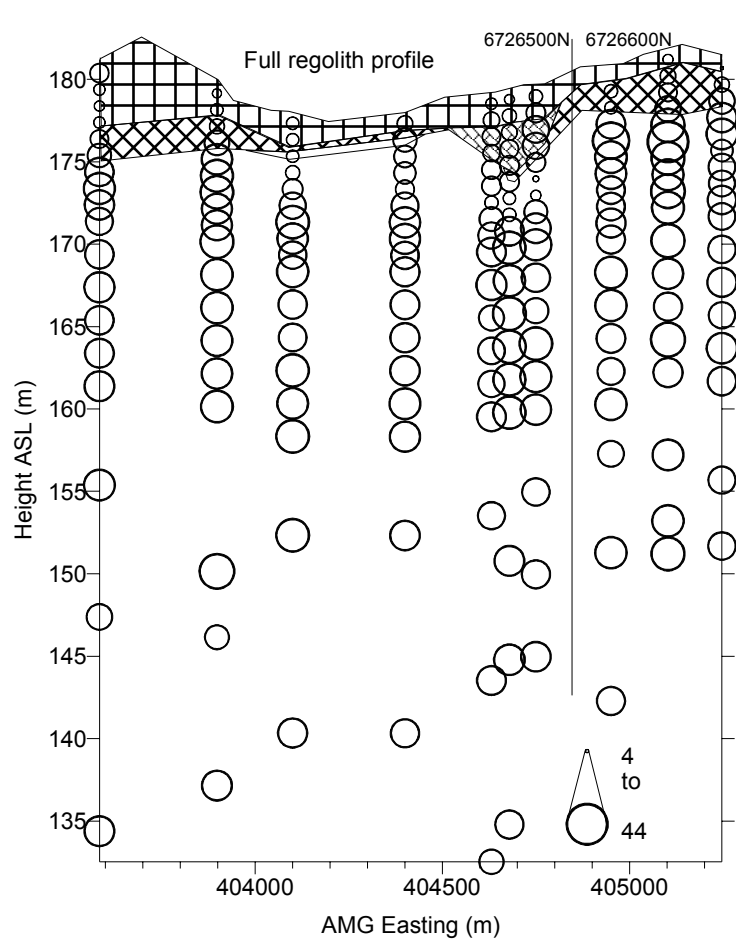
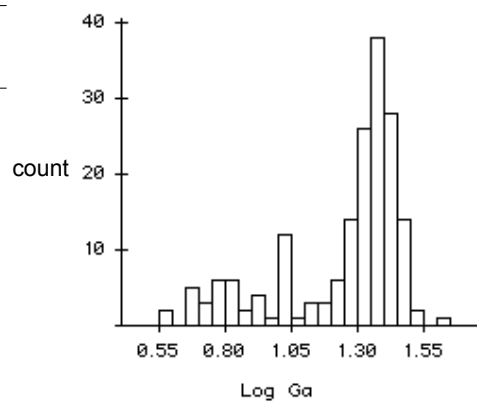


Figure A1a.17: Distribution and concentration of Ga at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	6	12	13	22
Std Error	0.5	1.8	1.7	0.5
Median	6	10	10	23
Std Dev	2	5	6	6
Minimum	4	8	6	38
Maximum	11	20	23	44
Count	18	7	11	141

Ga (ppm)

Golf Bore

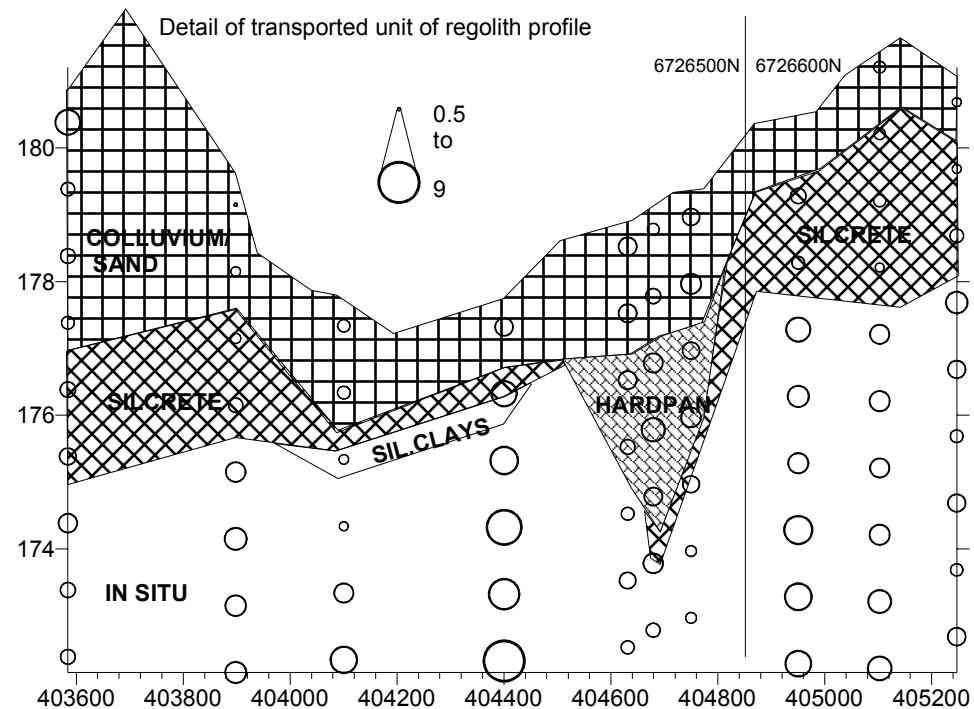
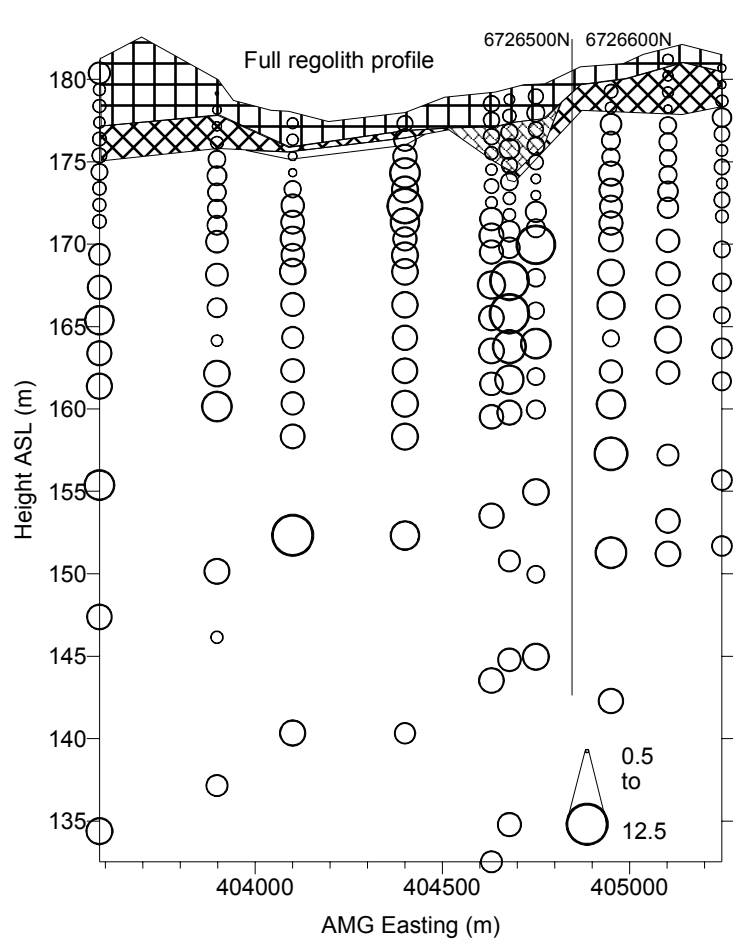
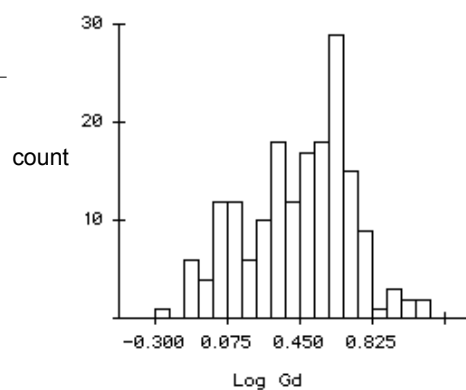


Figure A1a.18: Distribution and concentration of Gd at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	1	2	1	4
Std Error	0.2	0.2	0.2	0.2
Median	1	2	1	4
Std Dev	0.7	0.5	0.7	2.1
Minimum	0.55	1.35	0.75	0.75
Maximum	3	3	3	13
Count	18	7	11	141

Gd (ppm)

Golf Bore

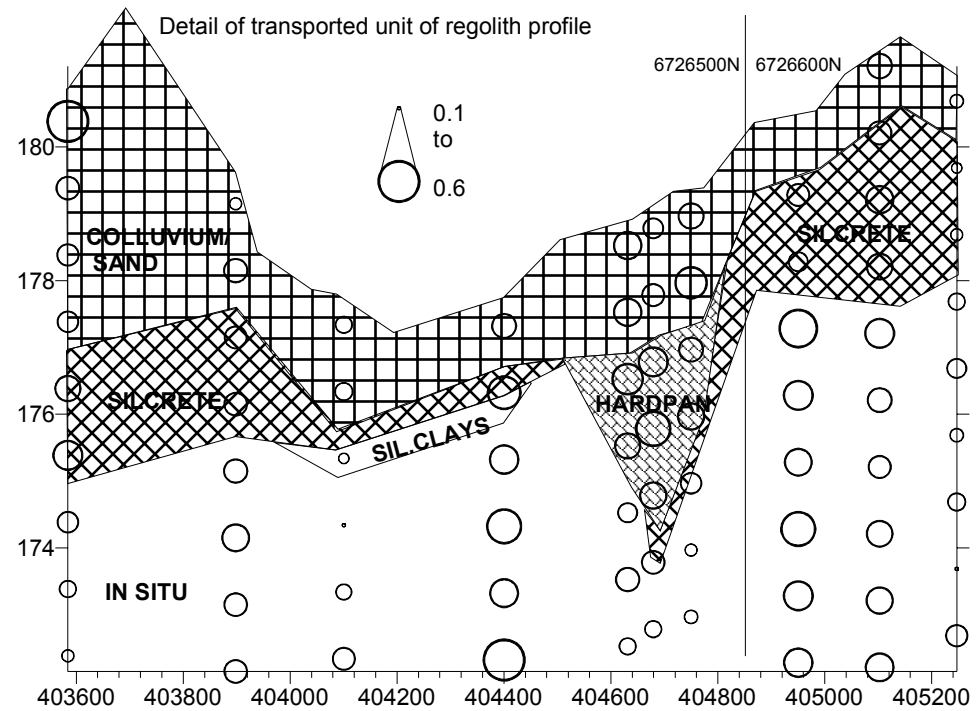
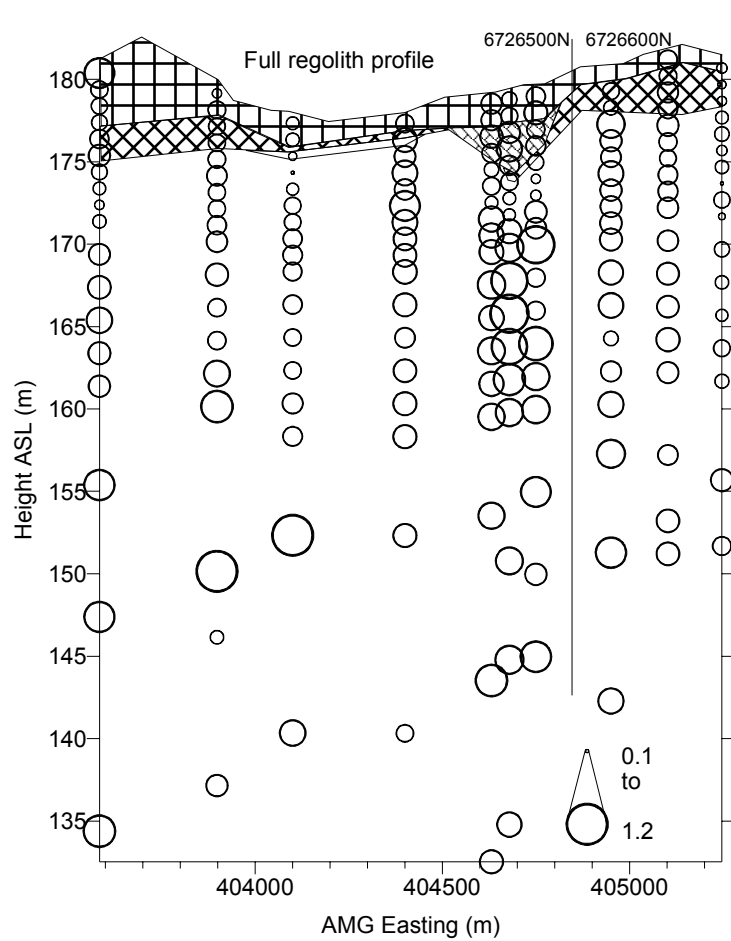
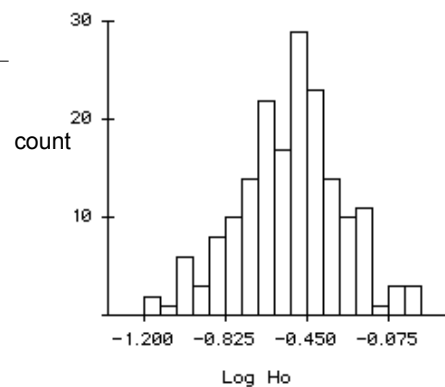


Figure A1a.19: Distribution and concentration of Ho at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	0.2	0.3	0.2	0.4
Std Error	0.0	0.0	0.0	0.0
Median	0.2	0.3	0.2	0.3
Std Dev	0.1	0.1	0.1	0.2
Minimum	0.1	0.24	0.09	0.07
Maximum	0.6	0.5	0.5	1.2
Count	18	7	11	141

Ho (ppm)

Golf Bore

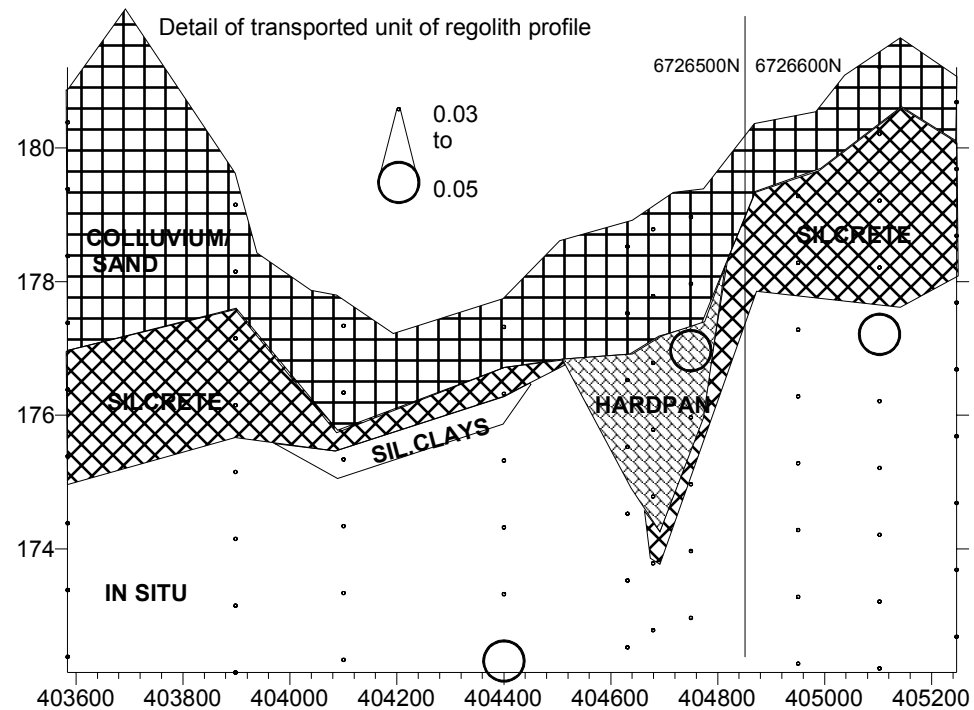
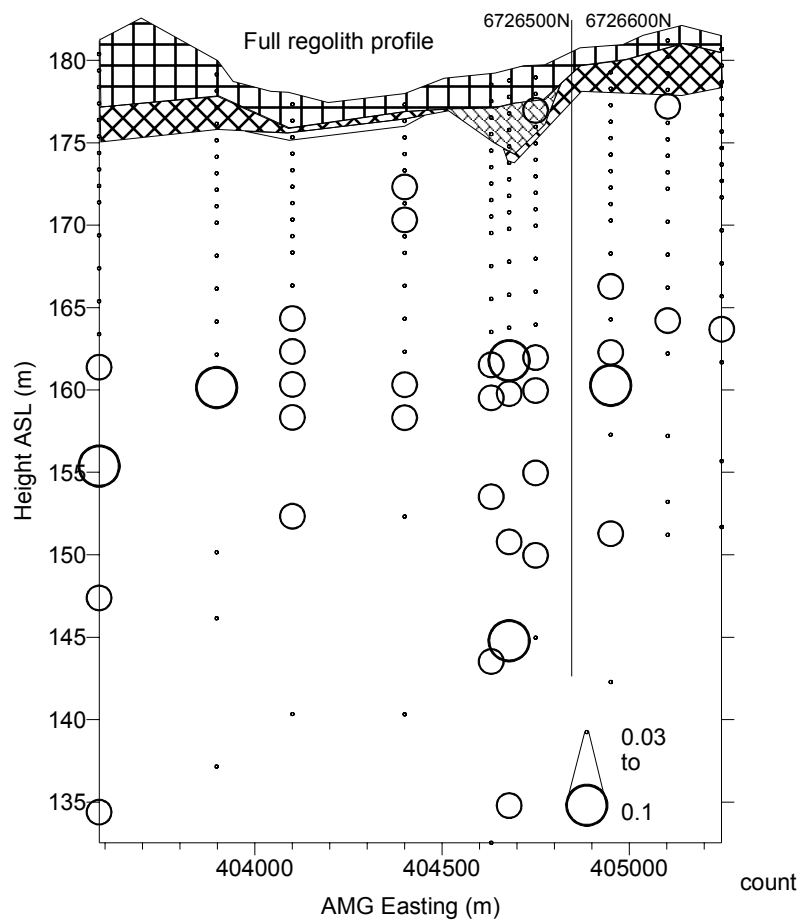
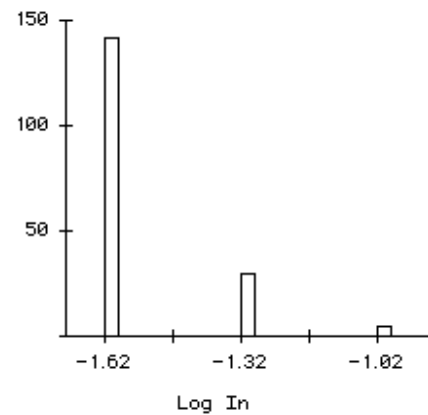


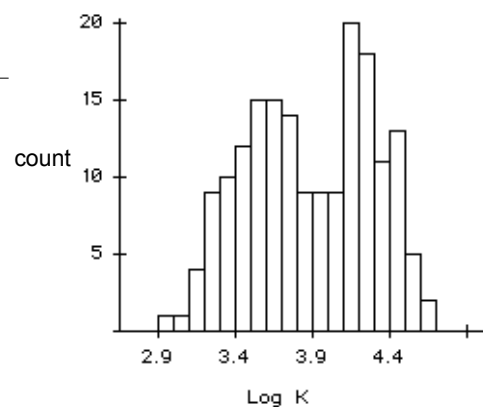
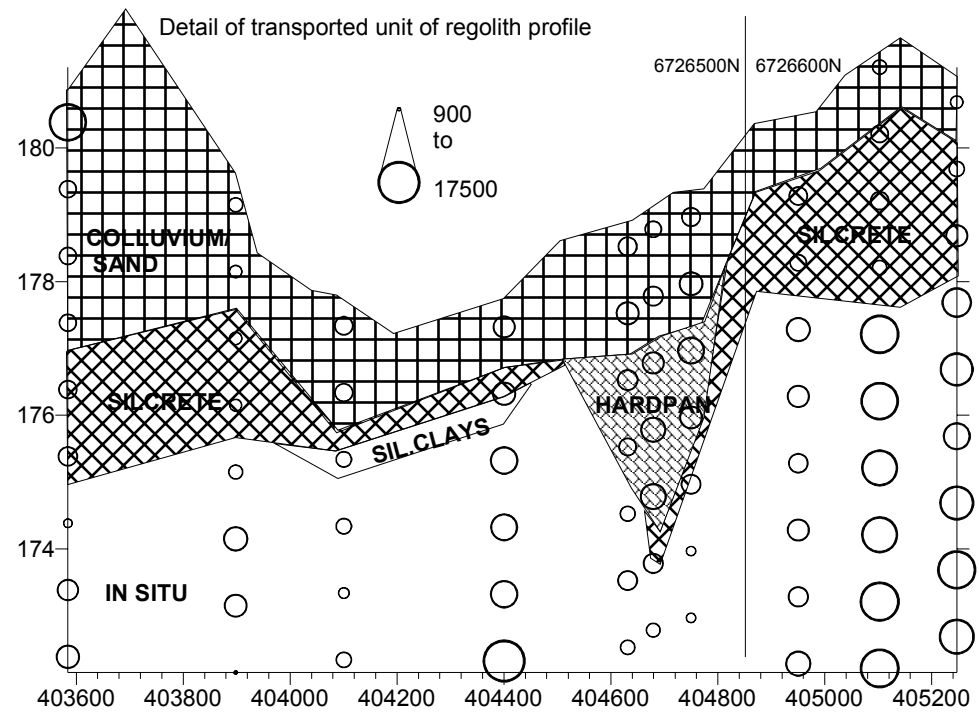
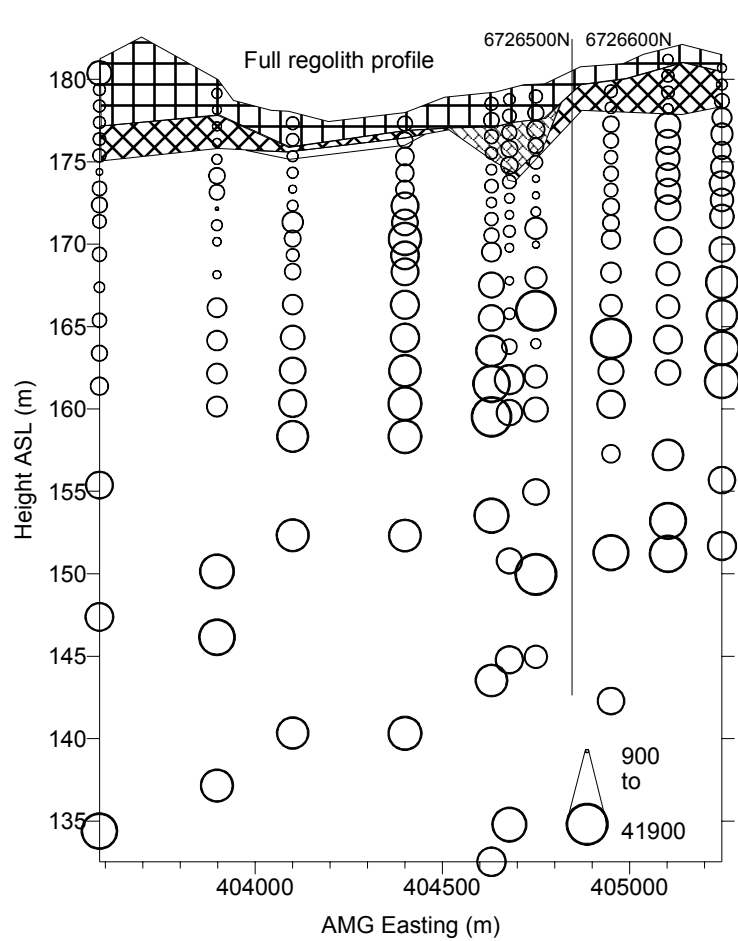
Figure A1a.20: Distribution and concentration of In at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	0.0	0.0	0.0	0.0
Std Error	0.0	0.0	0.0	0.0
Median	0.025	0.025	0.025	0.025
Std Dev	0.0	0.0	0.0	0.0
Minimum	0.025	0.025	0.025	0.025
Maximum	0.025	0.05	0.025	0.1
Count	18	7	11	141

In (ppm)

Golf Bore



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	3975	5279	3250	13282
Std Error	619	512	352	835
Median	3450	5100	3200	11800
Std Dev	2628	1354	1166	9918
Minimum	1900	3200	1800	900
Maximum	13700	7000	5850	41900
Count	18	7	11	141

Figure A1a.21: Distribution and concentration of K at Golf Bore regolith part sections on 6726500-6726600N

K (ppm)

Golf Bore

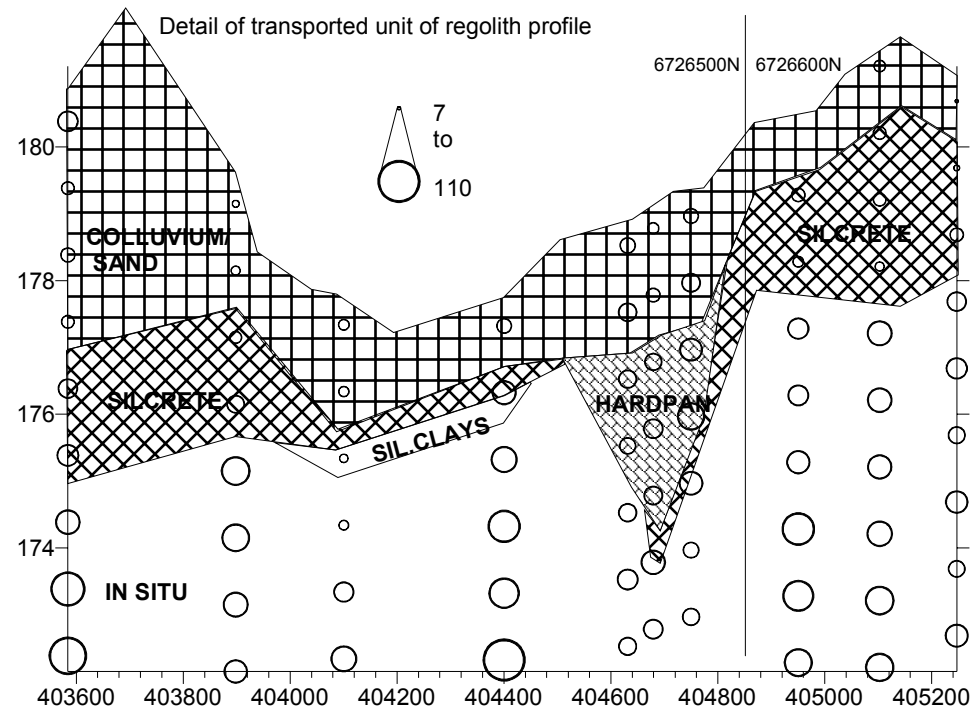
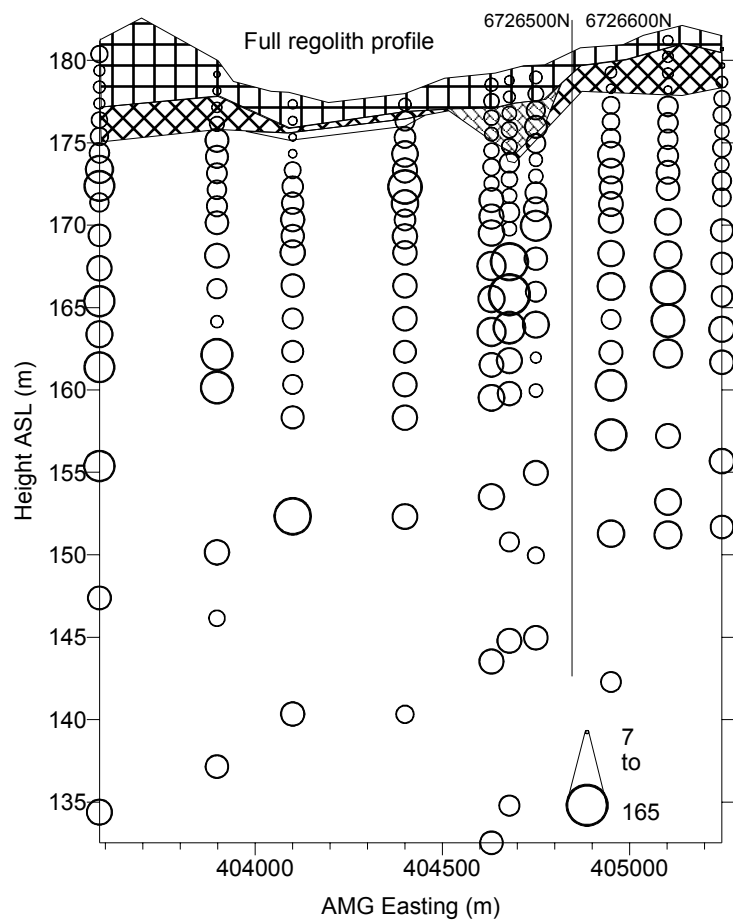
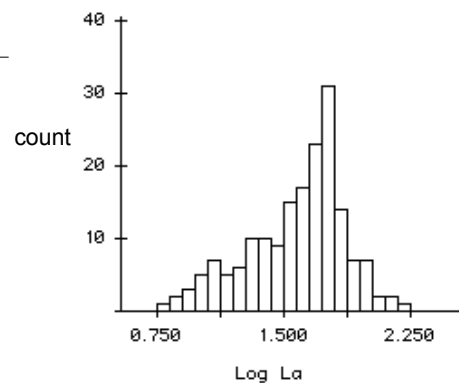


Figure A1a.22: Distribution and concentration of La at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	14	27	17	53
Std Error	1	4	2	2
Median	14	23	13	51
Std Dev	5	10	8	25
Minimum	7	19	7	9
Maximum	27	46.5	30	165
Count	18	7	11	141

La (ppm)

Golf Bore

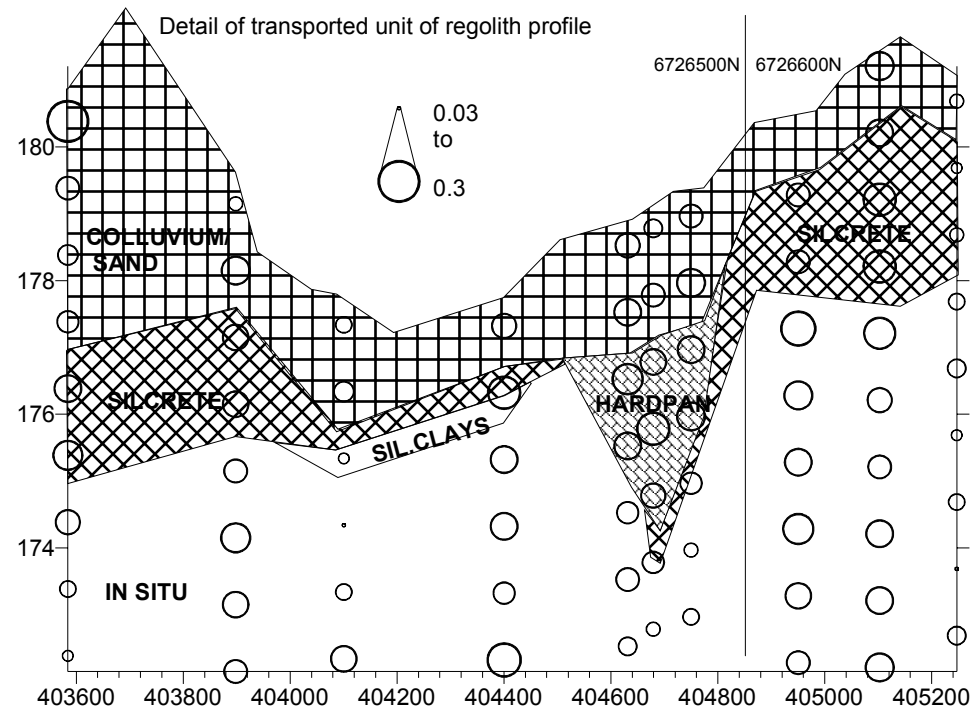
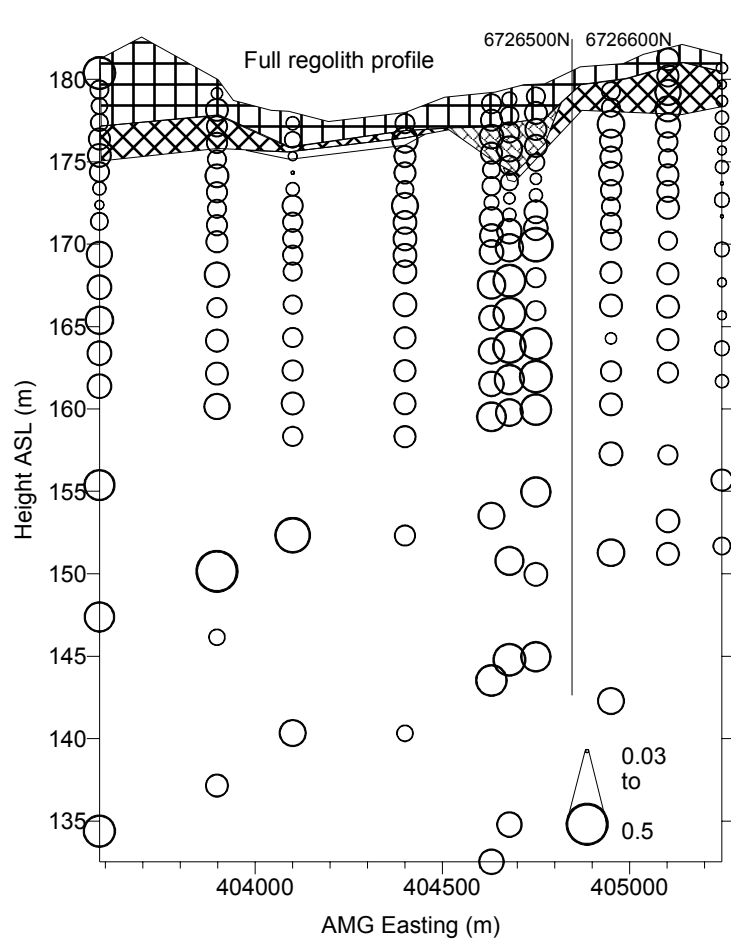
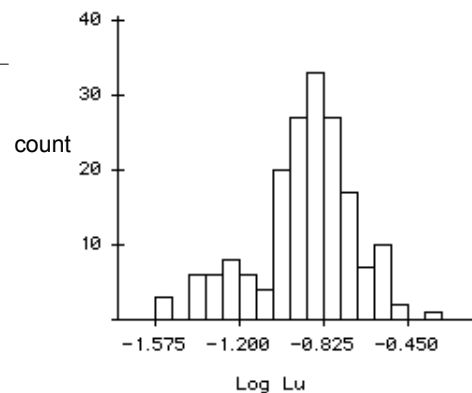


Figure A1a.23: Distribution and concentration of Lu at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	0.1	0.1	0.1	0.1
Std Error	0.0	0.0	0.0	0.0
Median	0.1	0.13	0.13	0.13
Std Dev	0.1	0.0	0.1	0.1
Minimum	0.05	0.11	0.04	0.03
Maximum	0.28	0.18	0.2	0.46
Count	18	7	11	141

Lu (ppm)

Golf Bore

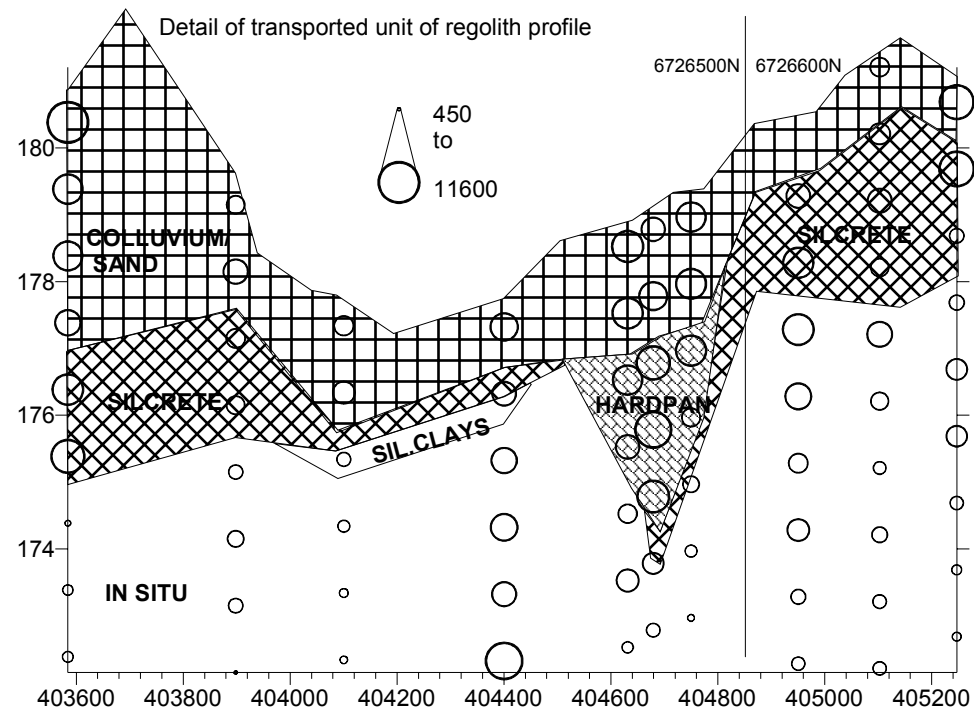
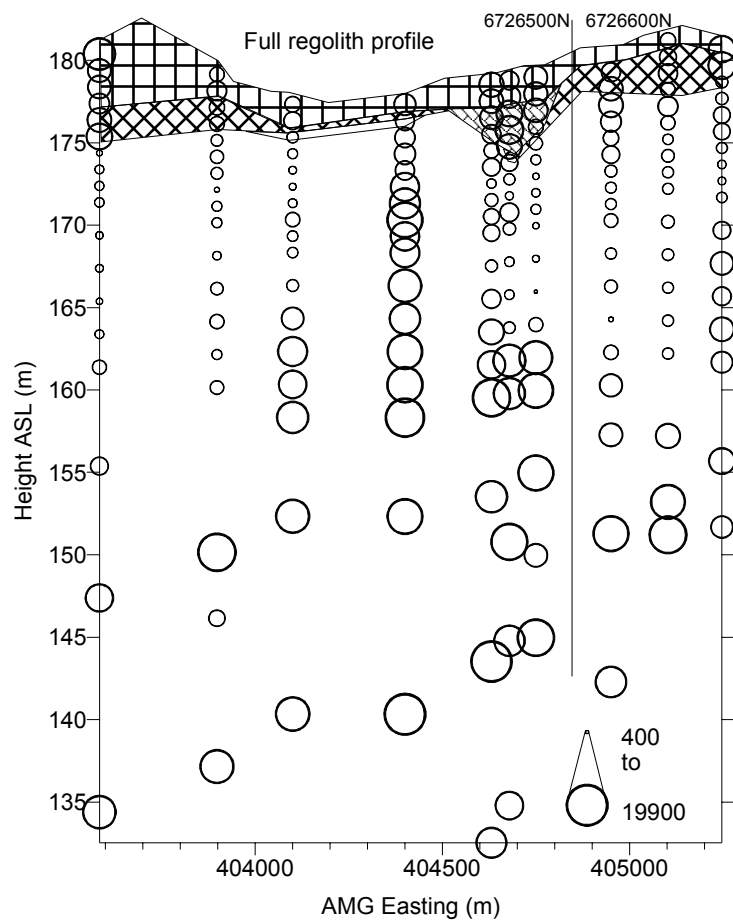
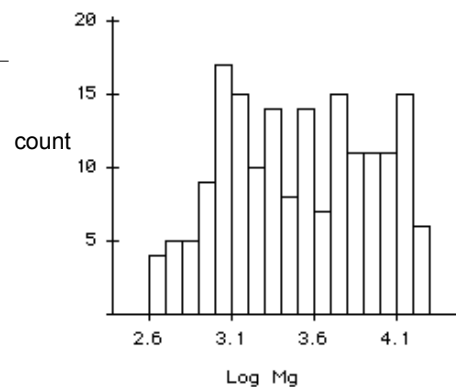


Figure A1a.24: Distribution and concentration of Mg at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	5197	5986	4586	5141
Std Error	536	863	749	441
Median	5250	6300	3900	2350
Std Dev	2274	2282	2485	5234
Minimum	2200	2300	1450	400
Maximum	11600	9000	8350	19900
Count	18	7	11	141

Golf Bore

Mg (ppm)

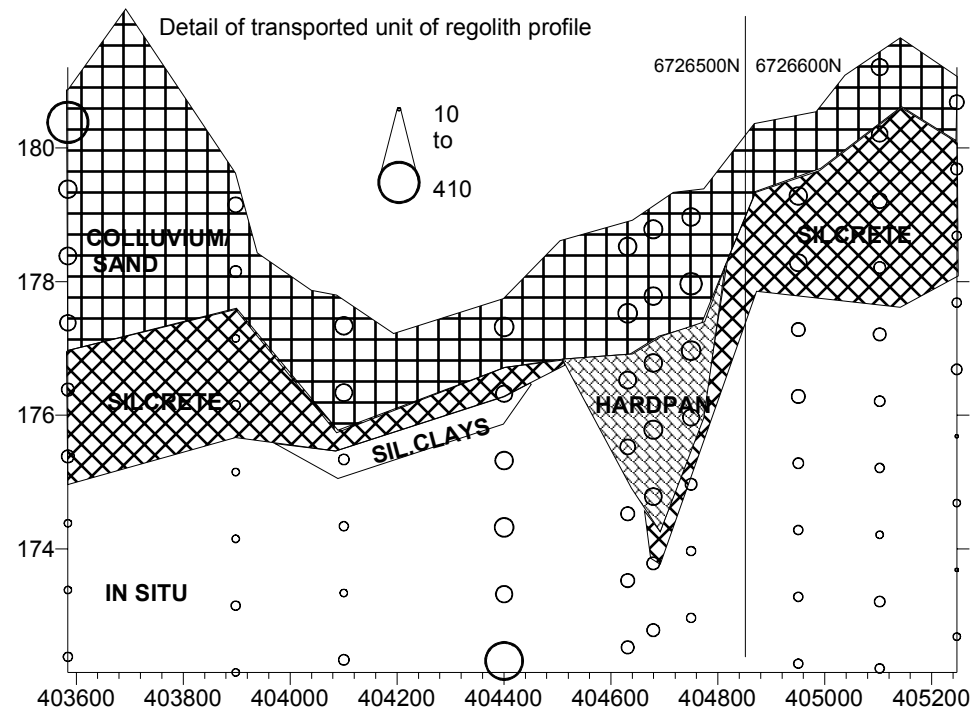
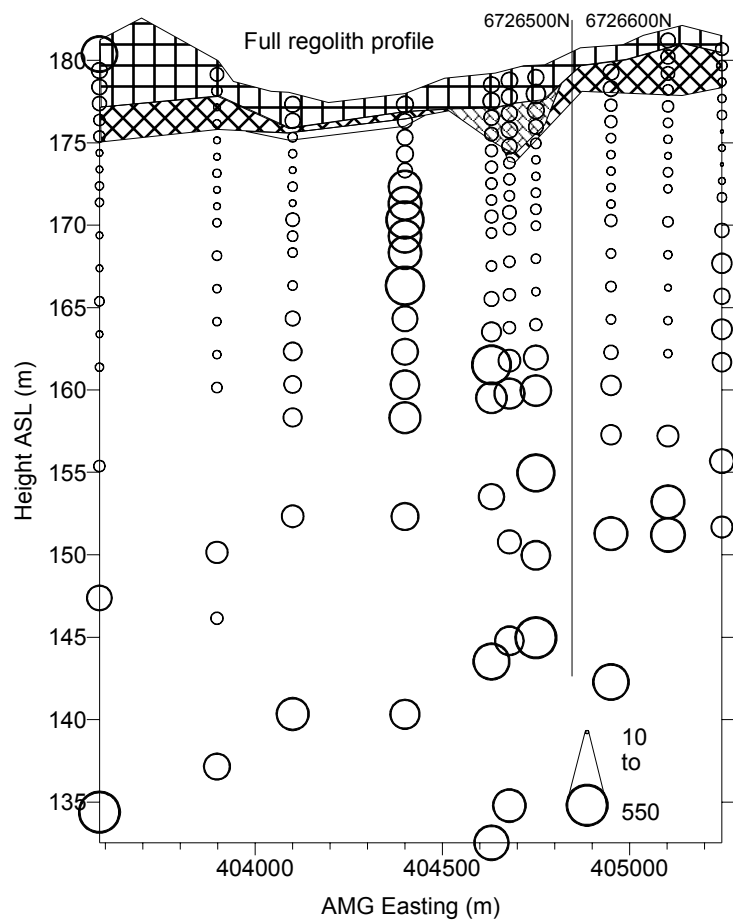
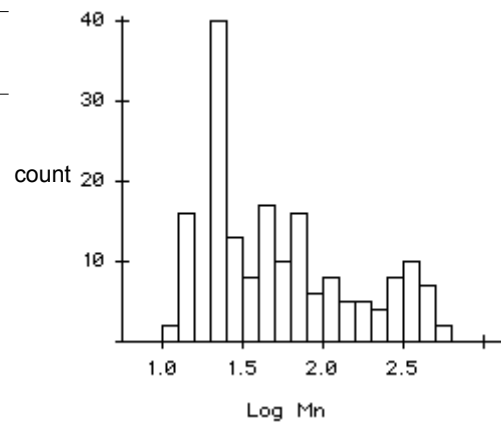


Figure A1a.25: Distribution and concentration of Mn at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	86	66	36	111
Std Error	19	4	5	11
Median	70	65	35	35
Std Dev	82	10	16	136
Minimum	30	50	15	10
Maximum	410	80	65	550
Count	18	7	11	141

Mn (ppm)

Golf Bore

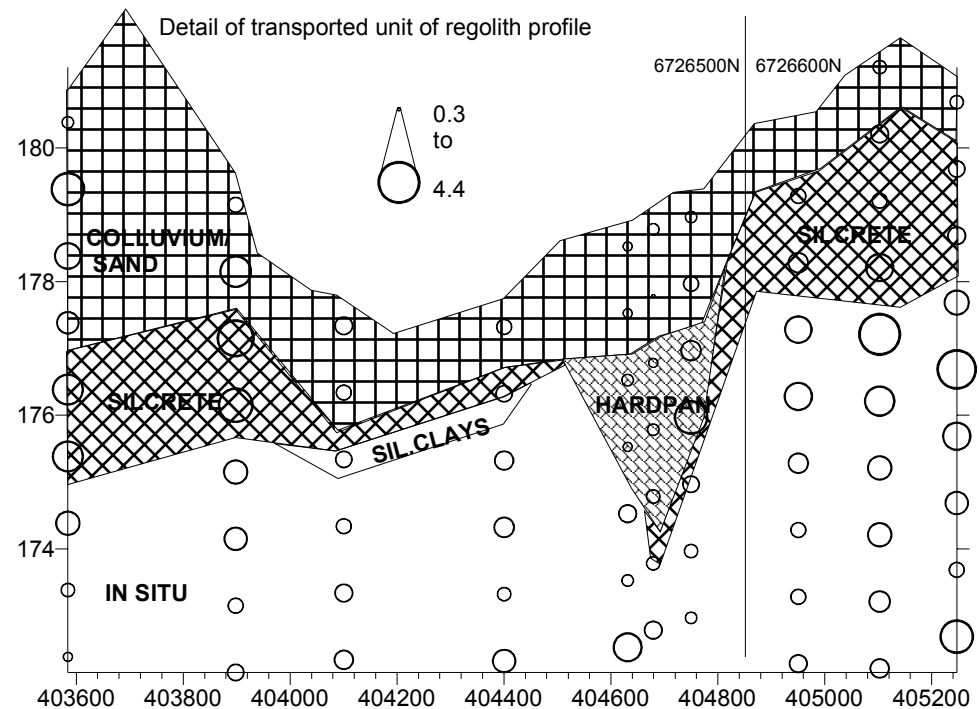
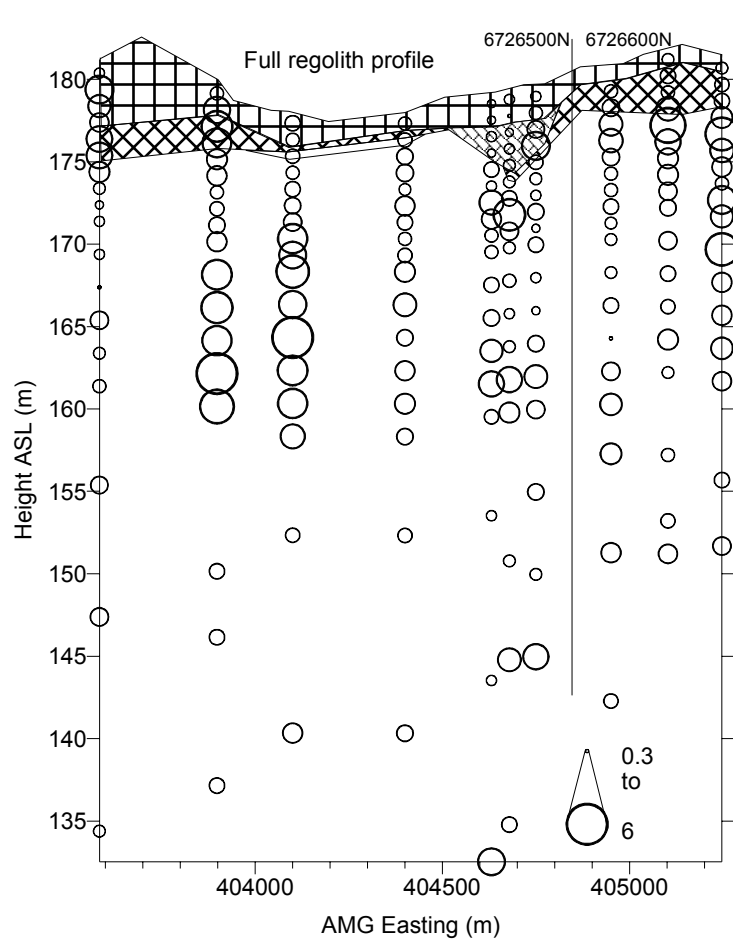
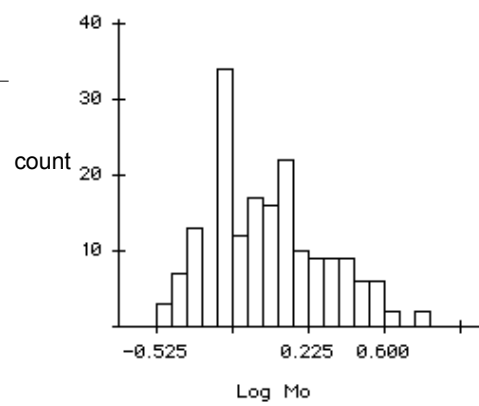


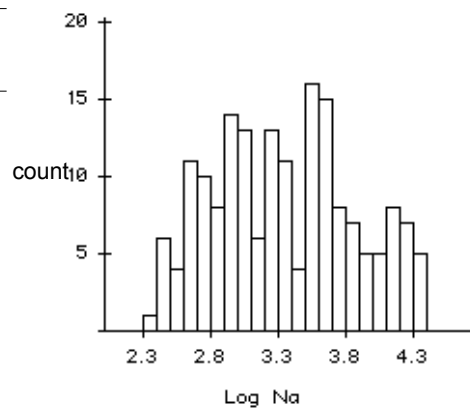
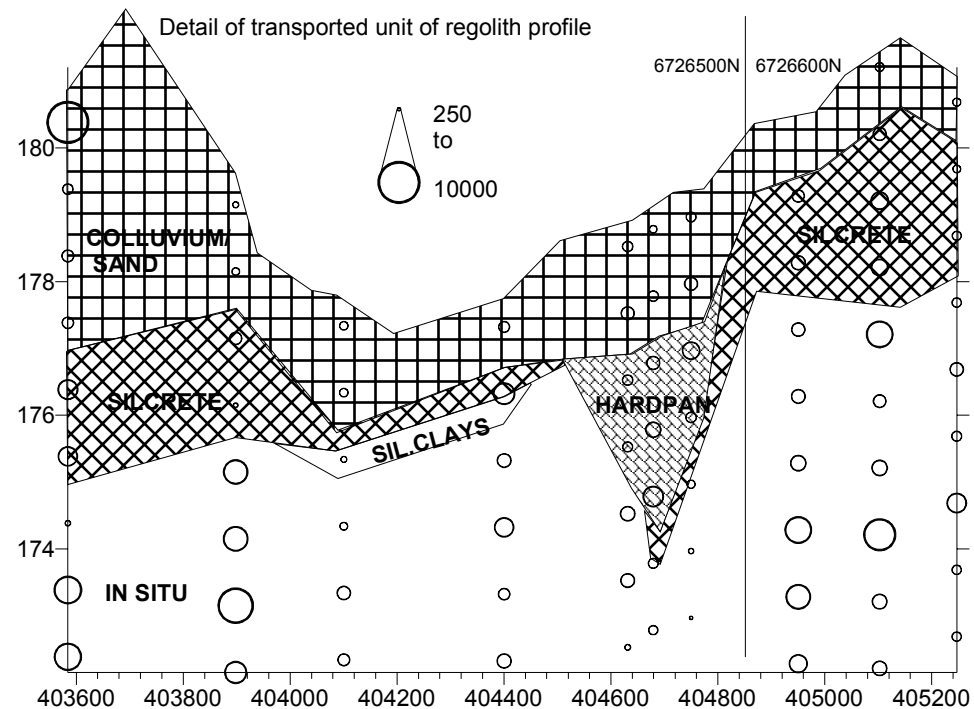
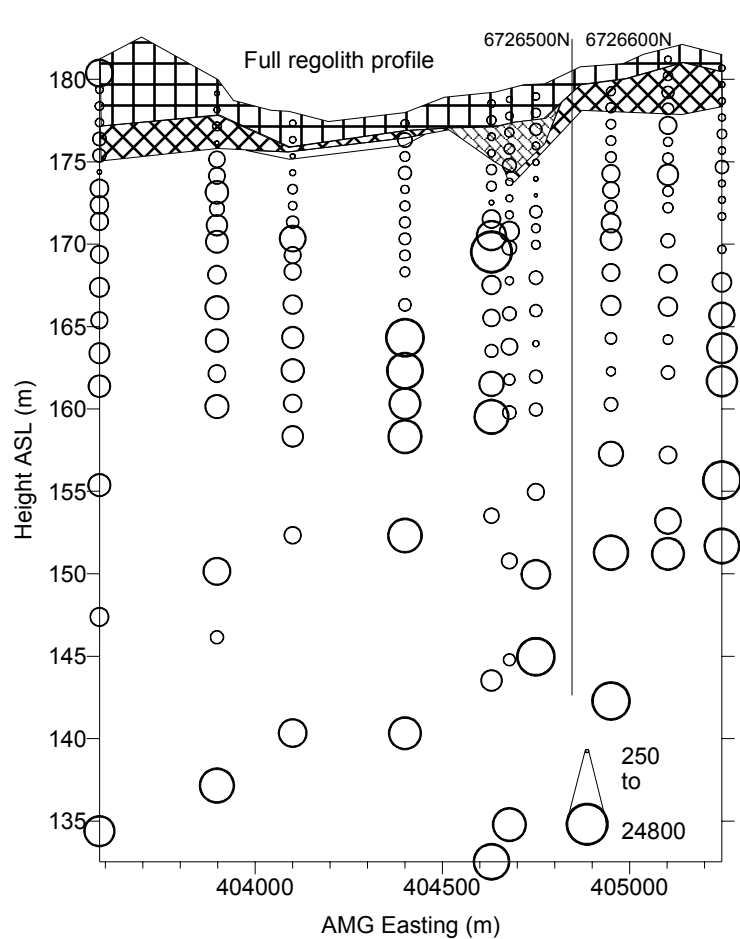
Figure A1a.26: Distribution and concentration of Mo at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	0.9	0.9	1.8	1.4
Std Error	0.2	0.3	0.3	0.1
Median	0.7	0.5	1.9	1
Std Dev	0.7	0.9	1.0	1.0
Minimum	0.3	0.4	0.7	0.3
Maximum	2.8	2.8	3.4	6
Count	18	7	11	141

Mo (ppm)

Golf Bore



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	1104	1093	1080	5176
Std Error	525	235	184	470
Median	600	900	950	3350
Std Dev	2227	621	612	5582
Minimum	300	550	260	250
Maximum	10000	2200	2050	24800
Count	18	7	11	141

Figure A1a.27: Distribution and concentration of Na at Golf Bore regolith part sections on 6726500-6726600N

Na (ppm)

Golf Bore

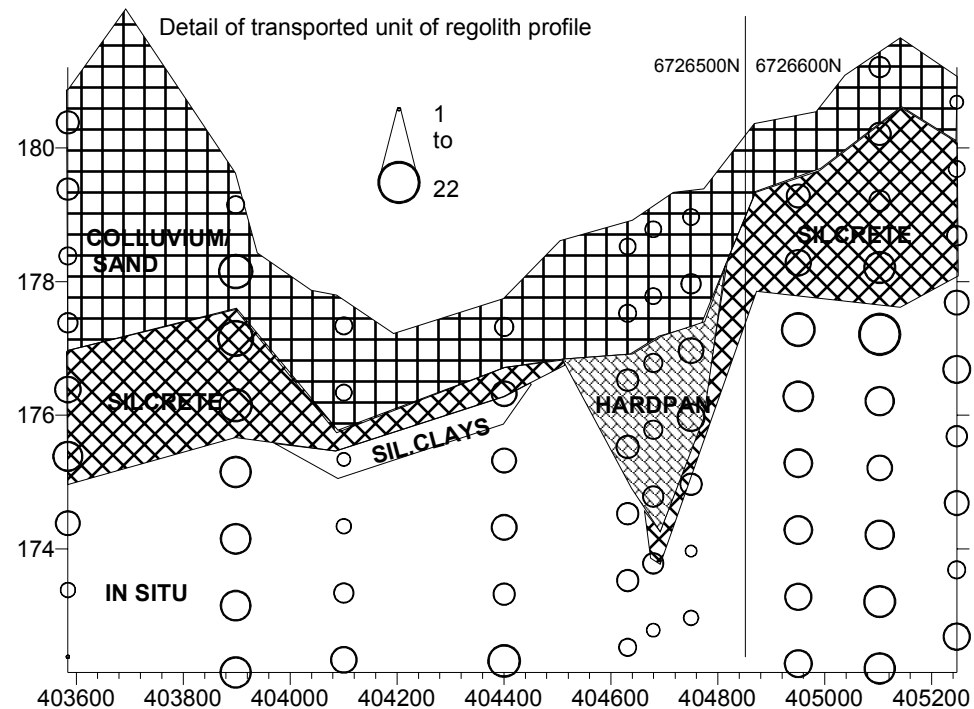
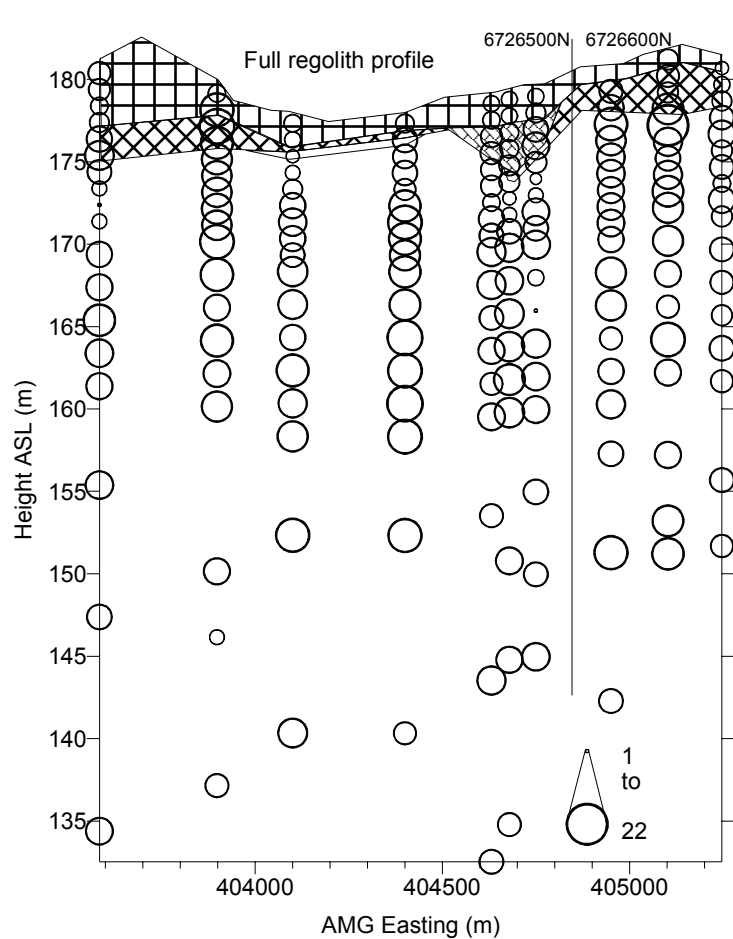
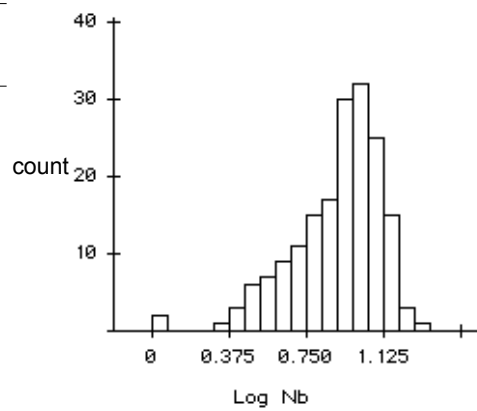


Figure A1a.28: Distribution and concentration of Nb at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	5	6	10	9
Std Error	0.6	0.7	1.3	0.3
Median	4	6	9	9
Std Dev	3	2	4	3
Minimum	3	5	4	1
Maximum	14.5	9.5	16	22
Count	18	7	11	141

Nb (ppm)

Golf Bore

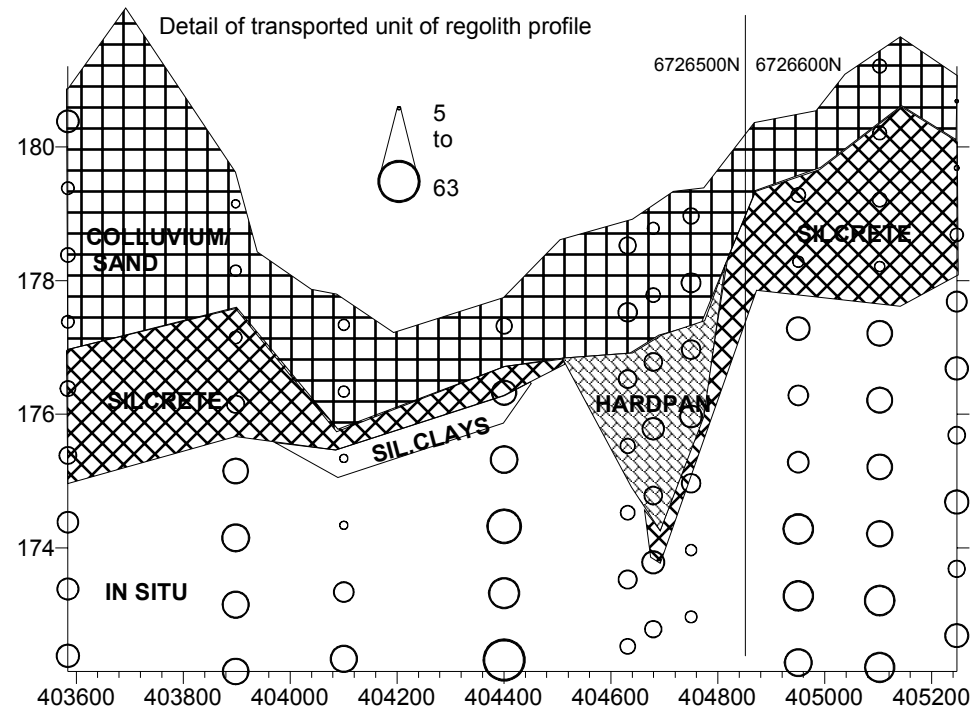
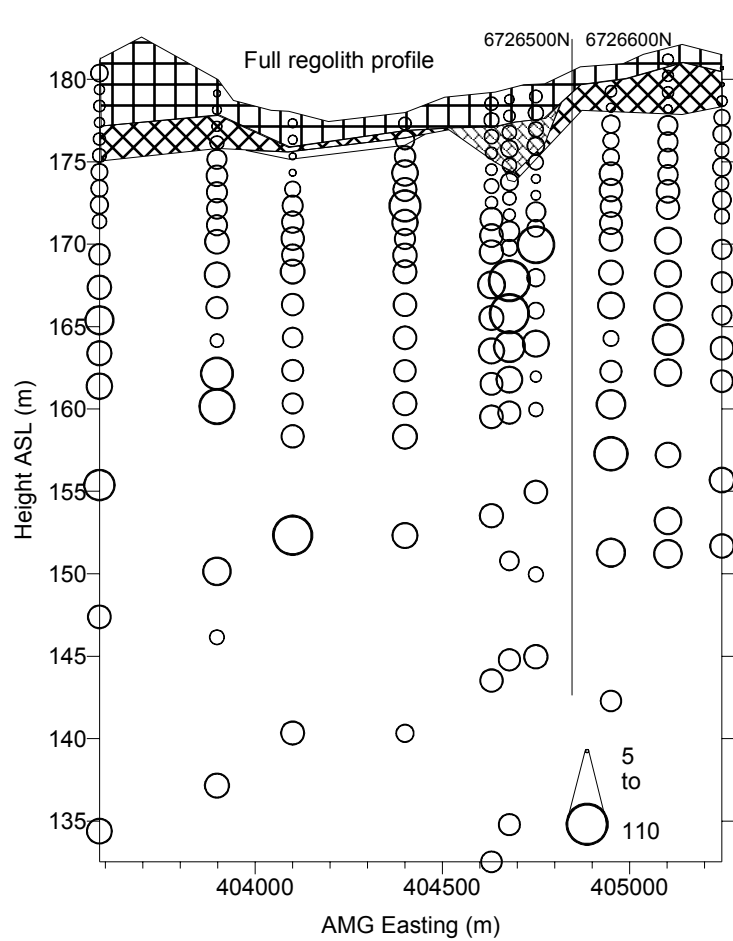
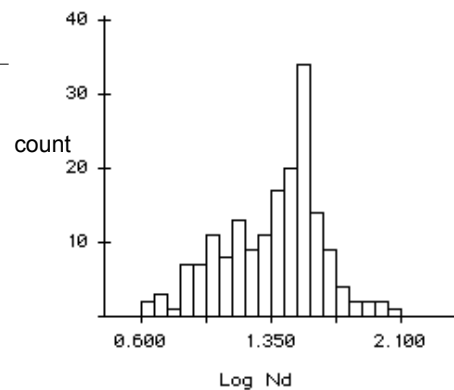


Figure A1a.29: Distribution and concentration of Nd at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	10	15	10	32
Std Error	0.9	1	1	1
Median	9	14	9	31
Std Dev	4	3	4	18
Minimum	5	10	4.6	5.5
Maximum	19	19	21	110
Count	18	7	11	141

Nd (ppm)

Golf Bore

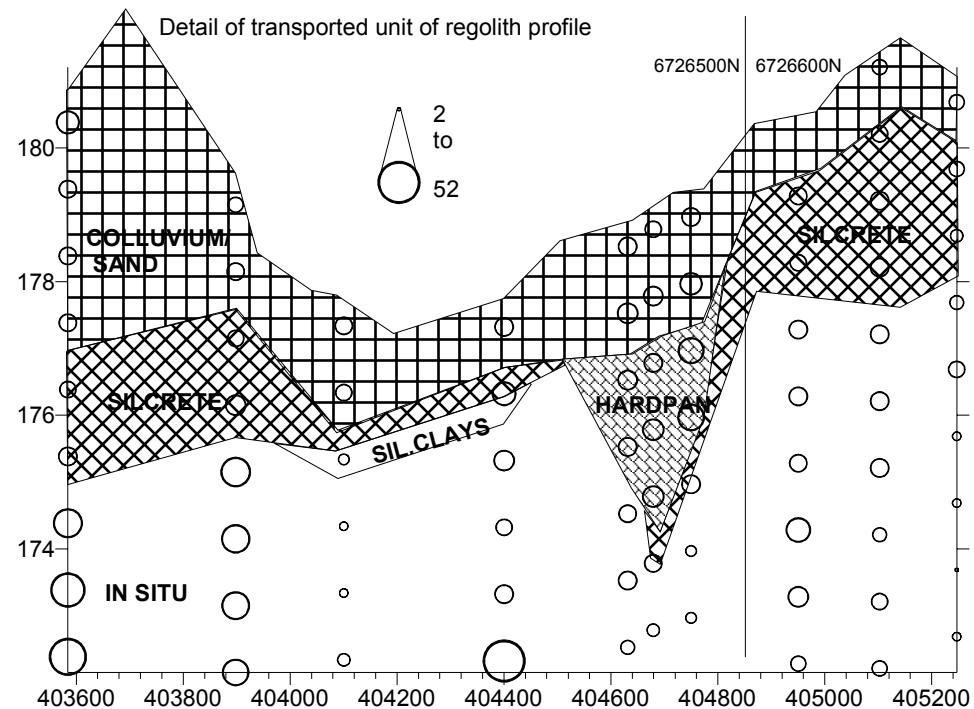
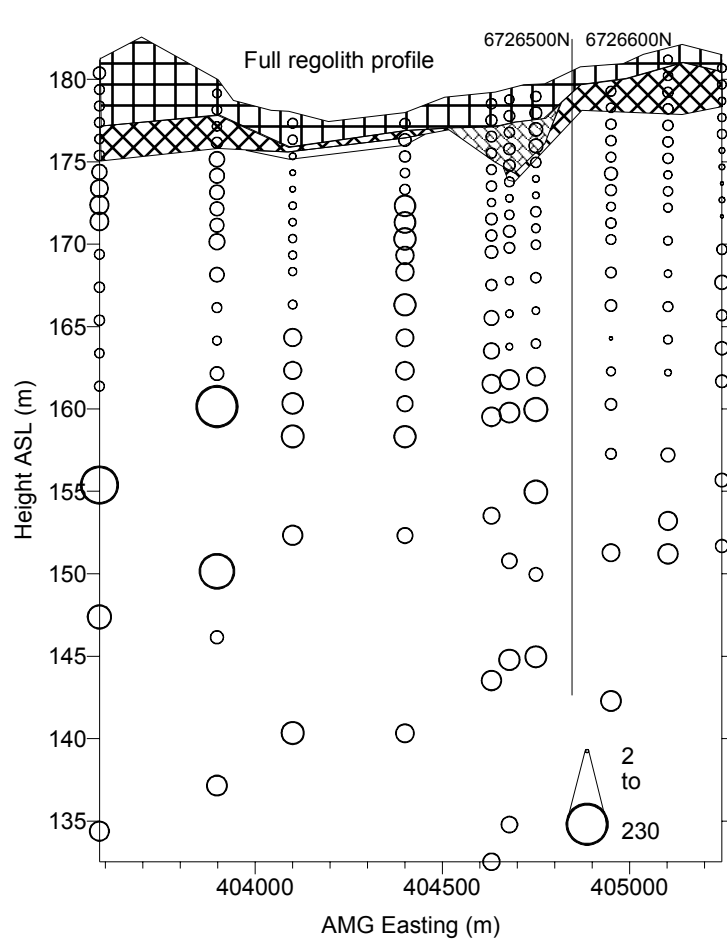
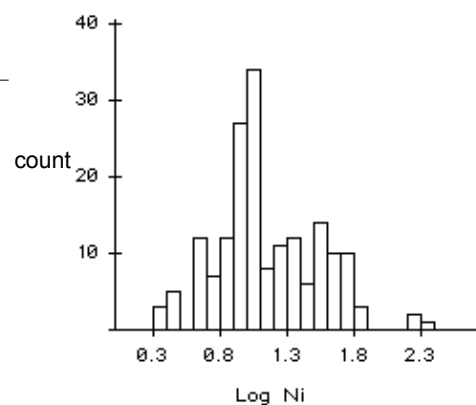


Figure A1a.30: Distribution and concentration of Ni at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	10	14	9	24
Std Error	0.5	1.6	0.6	2.6
Median	9	13	8	13
Std Dev	2	4	2	30
Minimum	7	10	5	2
Maximum	15	20	12	230
Count	18	7	11	141

Ni (ppm)

Golf Bore

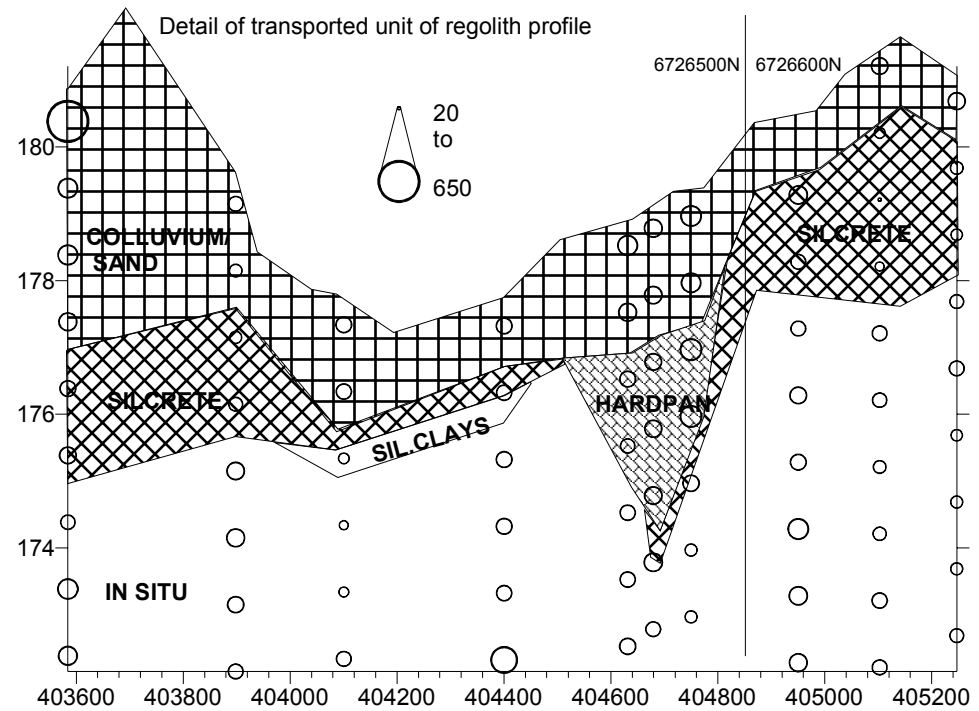
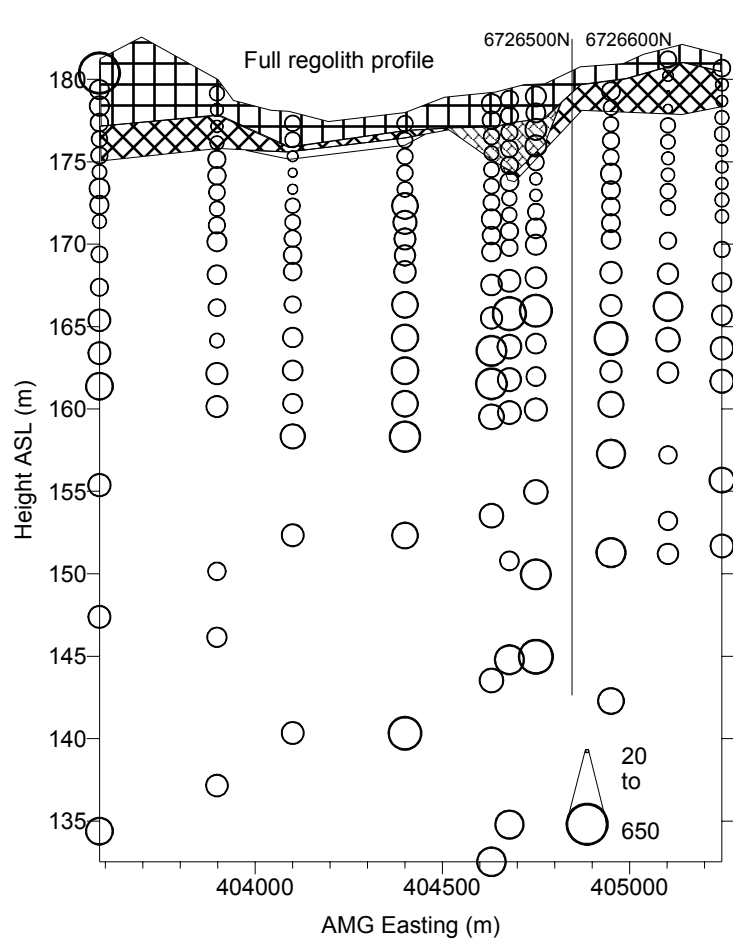
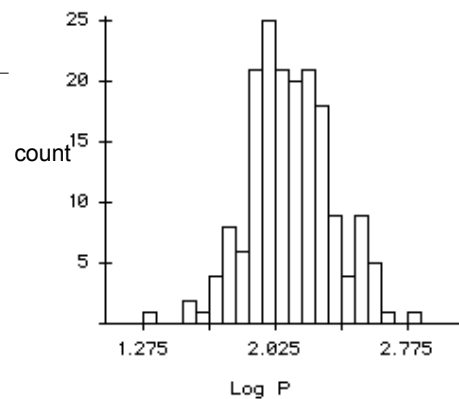


Figure A1a.31: Distribution and concentration of P at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	141	116	62	160
Std Error	30	13	7	7
Median	115	105	60	140
Std Dev	129	36	24	88
Minimum	60	75	20	35
Maximum	650	165	100	440
Count	18	7	11	141

P (ppm)

Golf Bore

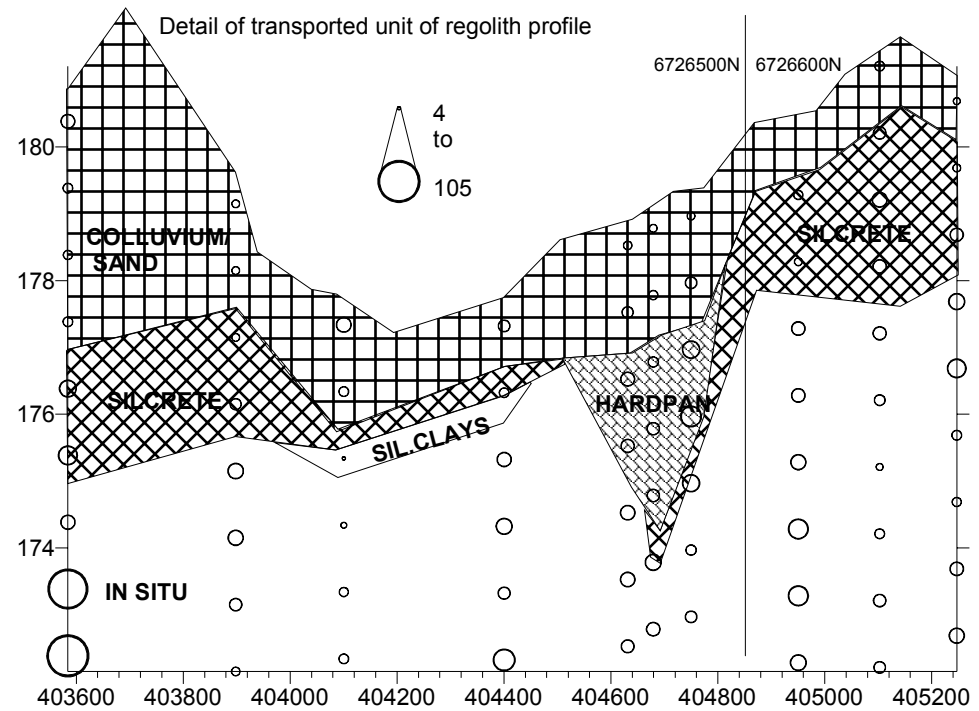
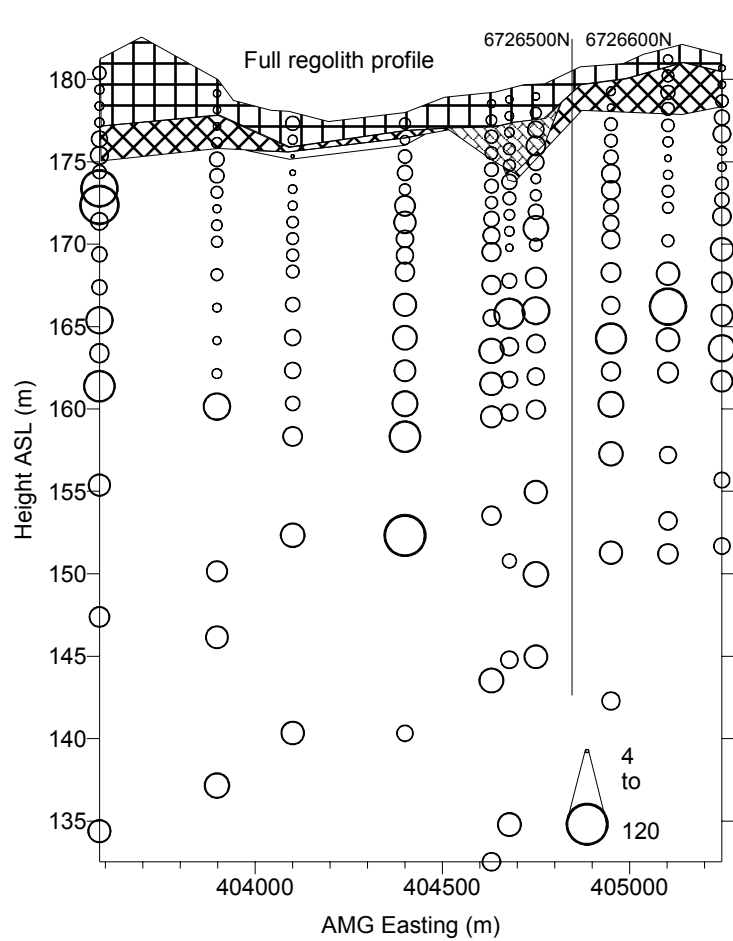
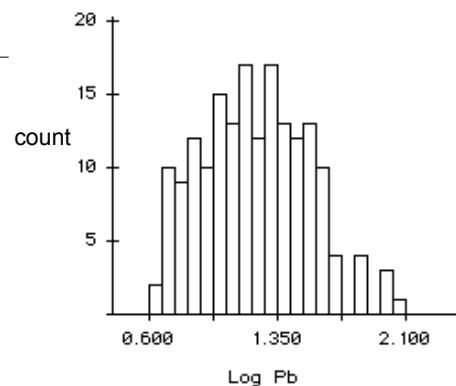


Figure A1a.32: Distribution and concentration of Pb at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	7	13	11	25
Std Error	0.5	2	1	2
Median	7	11	11	20
Std Dev	2	6	5	19
Minimum	5	8	6	4
Maximum	14	25	21	120
Count	18	7	11	141

Pb (ppm)

Golf Bore

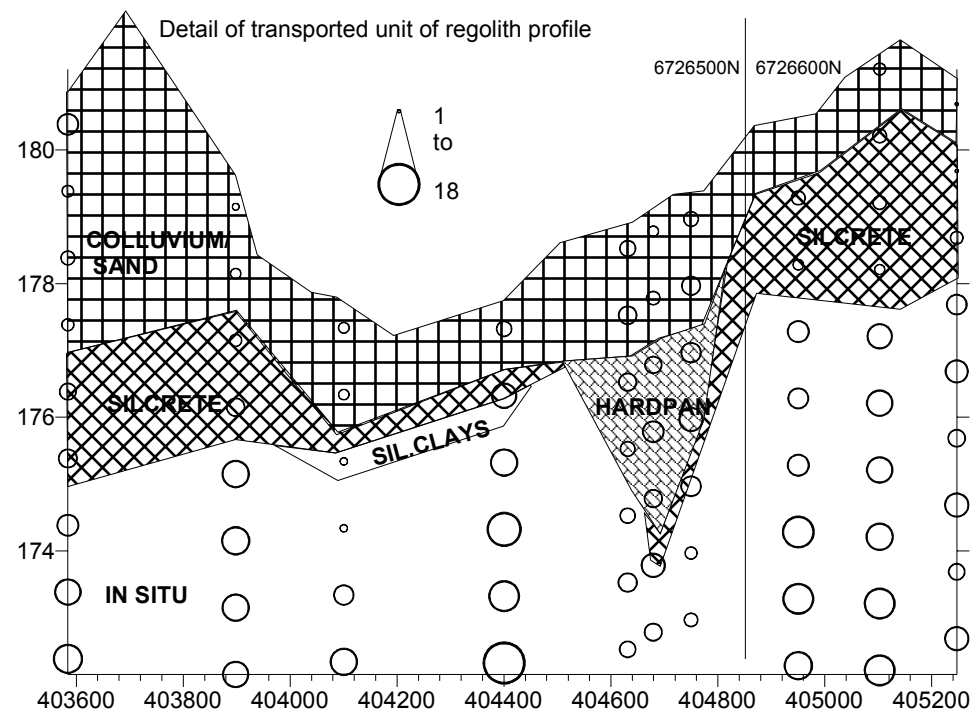
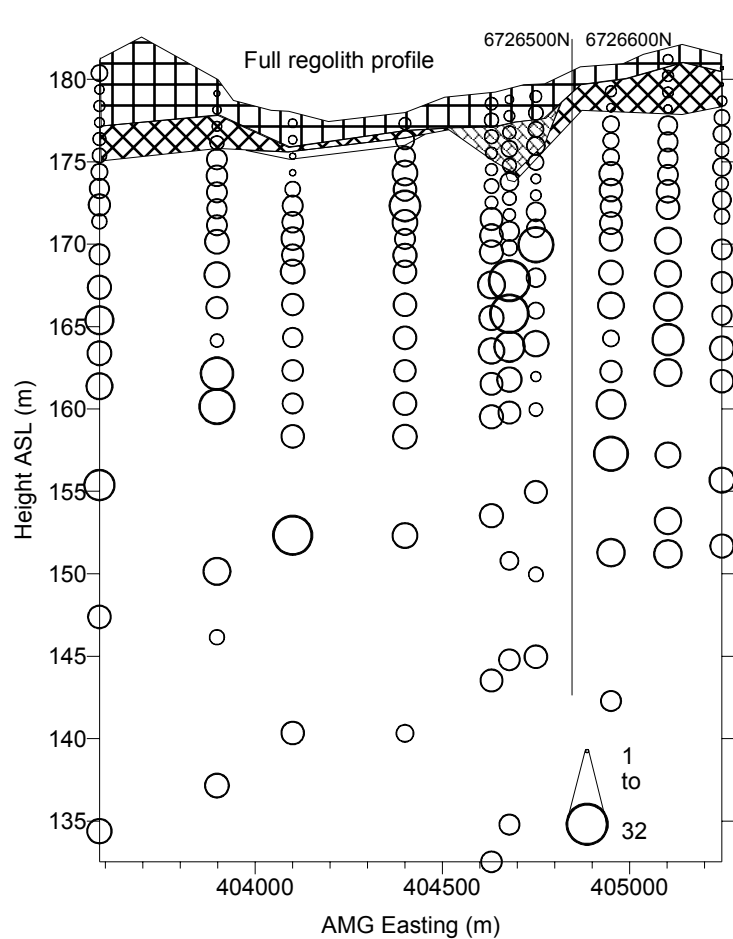
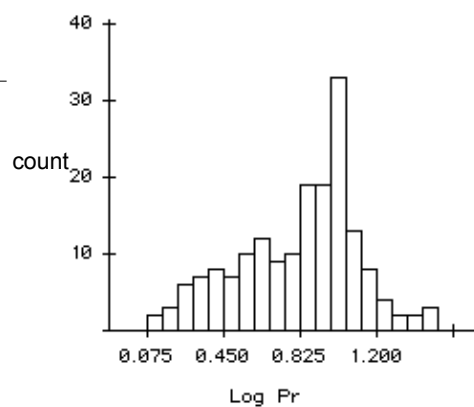


Figure A1a.33: Distribution and concentration of Pr at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	2.6	4.1	2.8	9.3
Std Error	0.2	0.4	0.3	0.4
Median	2.35	3.7	2.5	9
Std Dev	0.9	1.1	1.1	5.0
Minimum	1.3	2.8	1.3	1.5
Maximum	4.9	6	5	31.5
Count	18	7	11	141

Pr (ppm)

Golf Bore

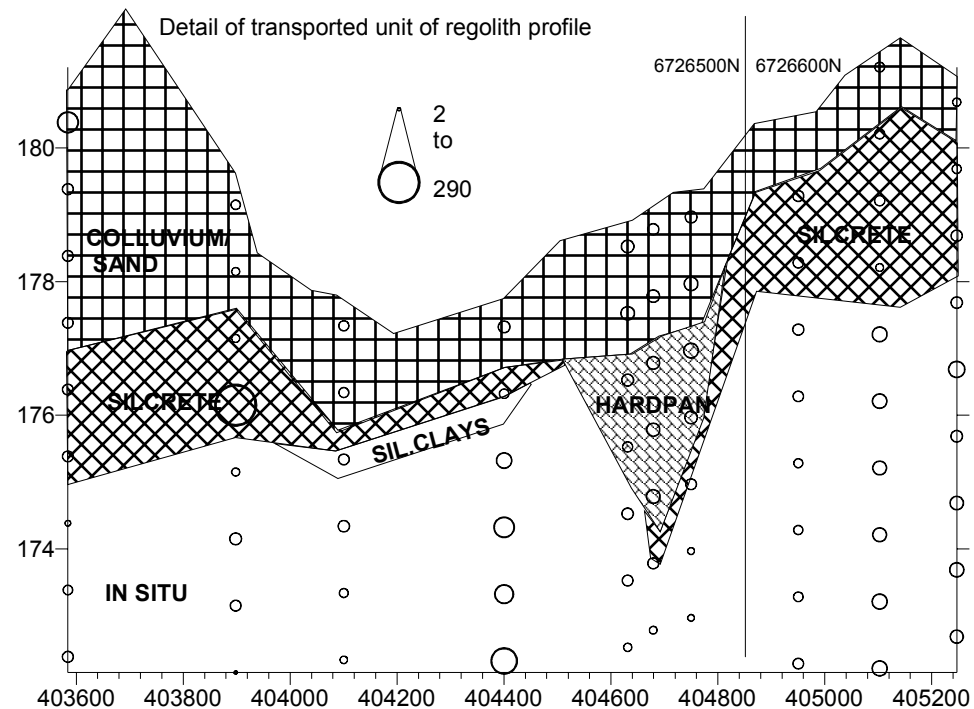
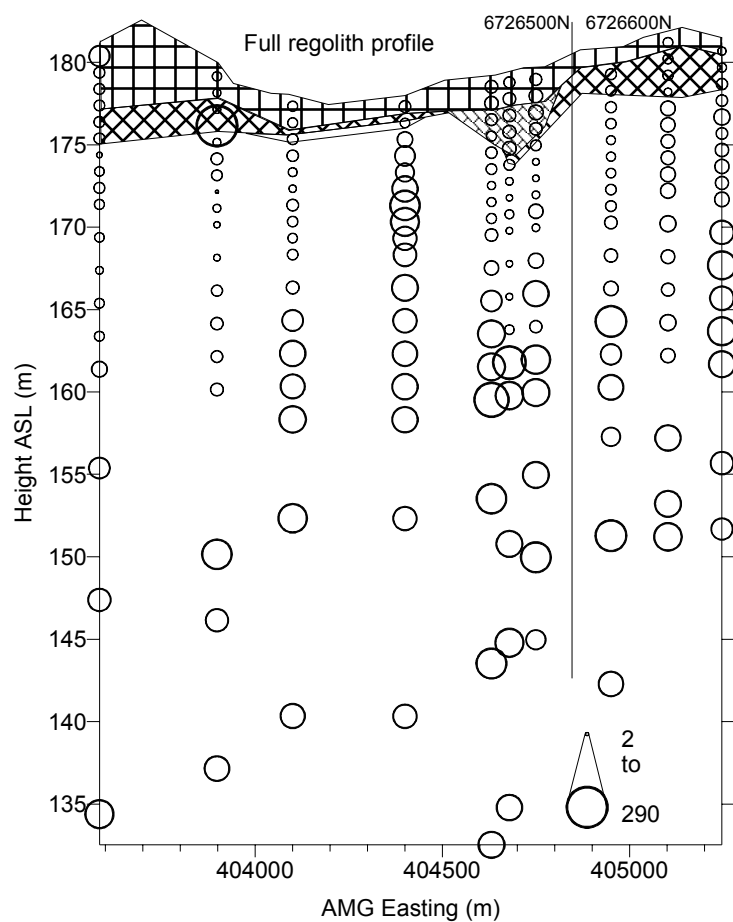
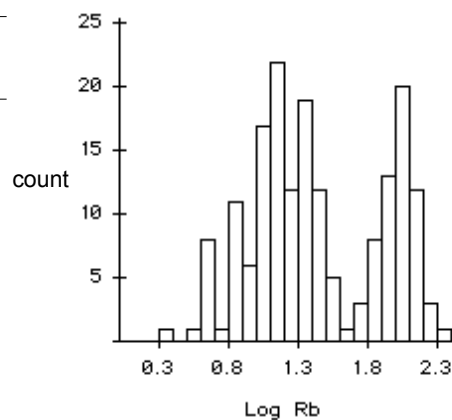


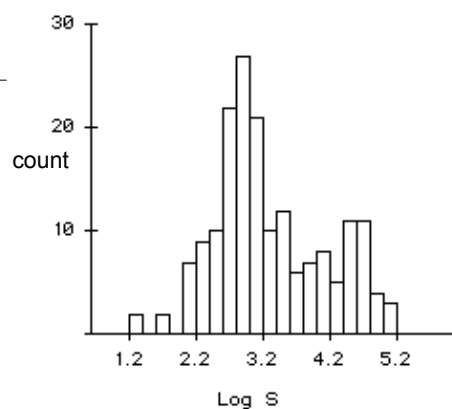
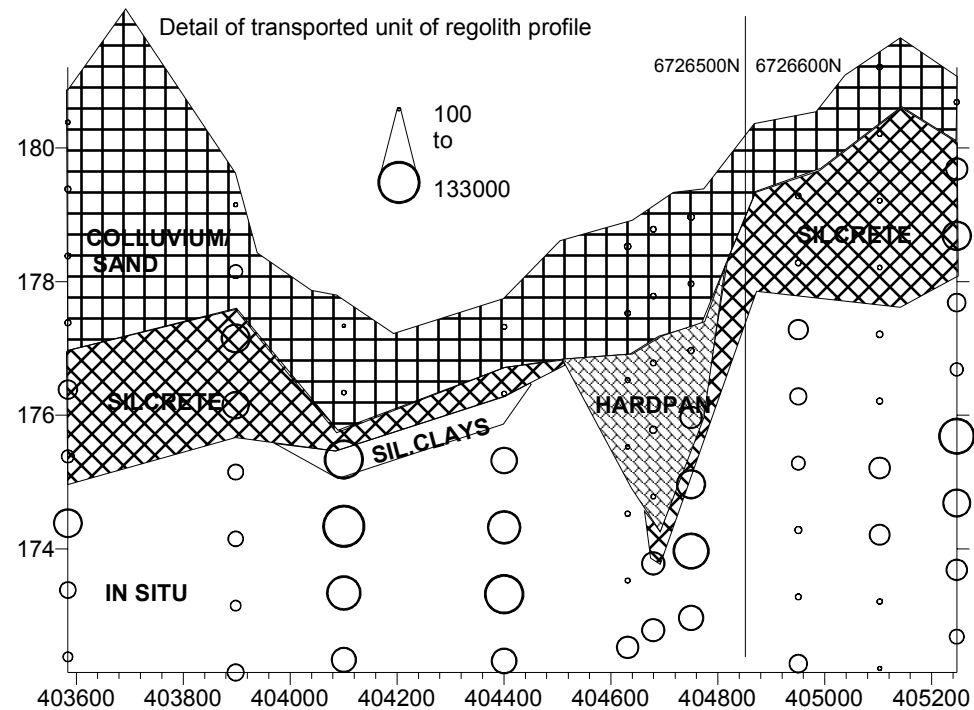
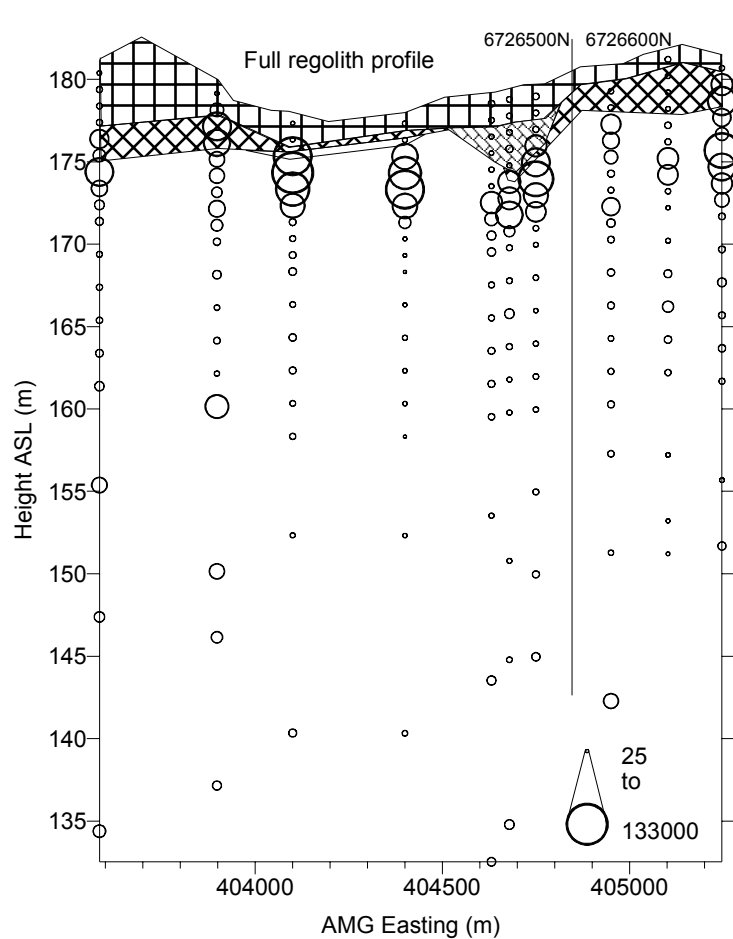
Figure A1a.34: Distribution and concentration of Rb at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	18	21	37	55
Std Error	3	2	25	4
Median	15	21	13	29
Std Dev	13	5	84	50
Minimum	7	12	7	2
Maximum	64	30	290	200
Count	18	7	11	141

Rb (ppm)

Golf Bore



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	1094	5107	23518	12206
Std Error	528	4452	7206	2082
Median	625	650	22600	1450
Std Dev	2240	11780	23898	24720
Minimum	100	200	250	25
Maximum	10000	31800	60000	133000
Count	18	7	11	141

Figure A1a.35: Distribution and concentration of S at Golf Bore regolith part sections on 6726500-6726600N

S (ppm)

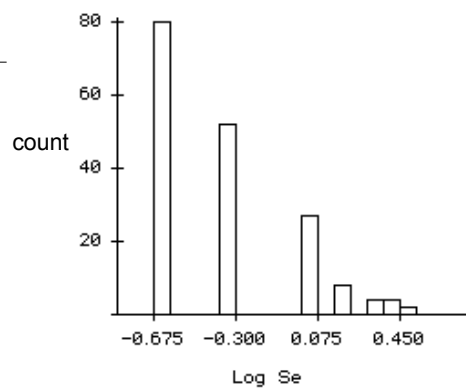
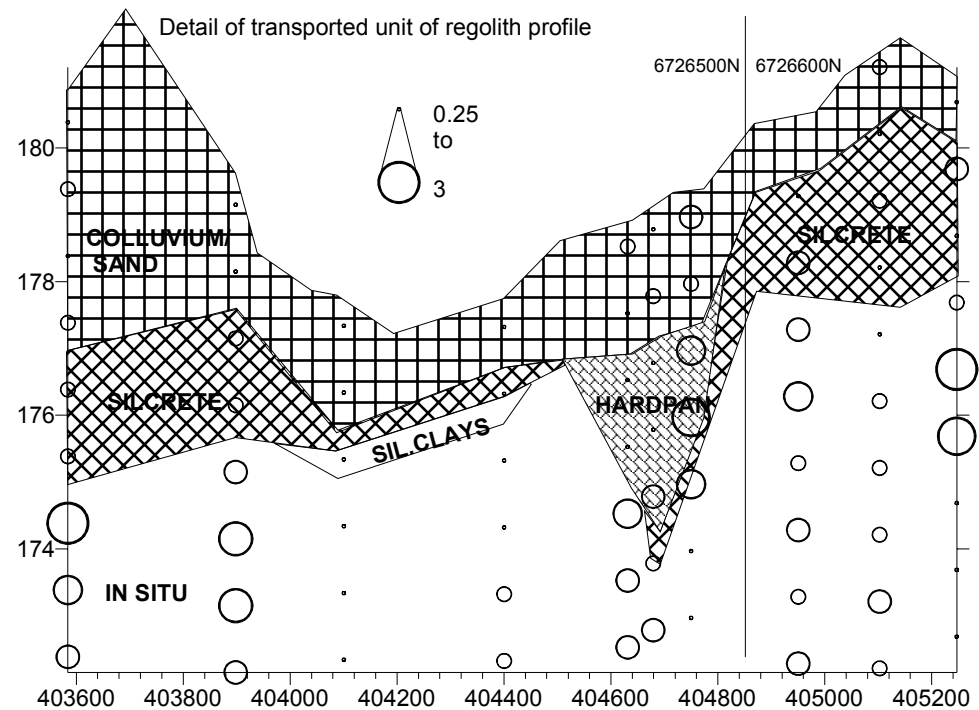
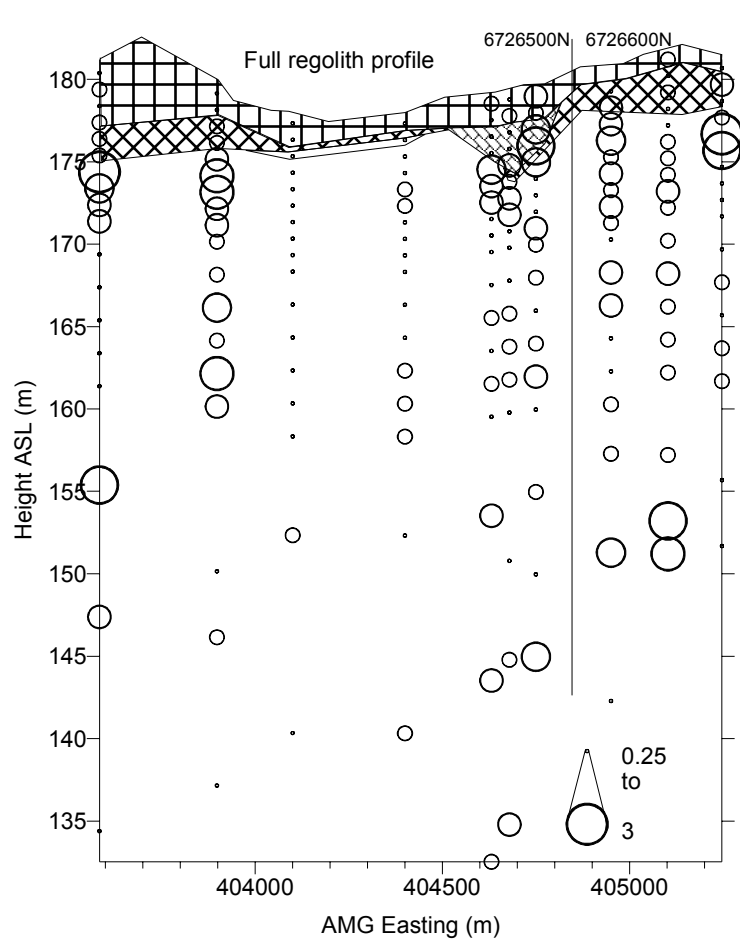
Golf Bore

All data below detection limit of 0.5 ppm

Figure A1a.36: Distribution and concentration of Sb
at Golf Bore regolith part sections on 6726500-6726600N

Sb (ppm)

Golf Bore



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	0.4	0.9	0.6	0.6
Std Error	0.0	0.3	0.1	0.0
Median	0.25	0.25	0.5	0.5
Std Dev	0.2	0.9	0.3	0.6
Minimum	0.25	0.25	0.25	0.25
Maximum	1	2.5	1	3
Count	18	7	11	141

Figure A1a.37: Distribution and concentration of Se at Golf Bore regolith part sections on 6726500-6726600N

Se (ppm)

Golf Bore

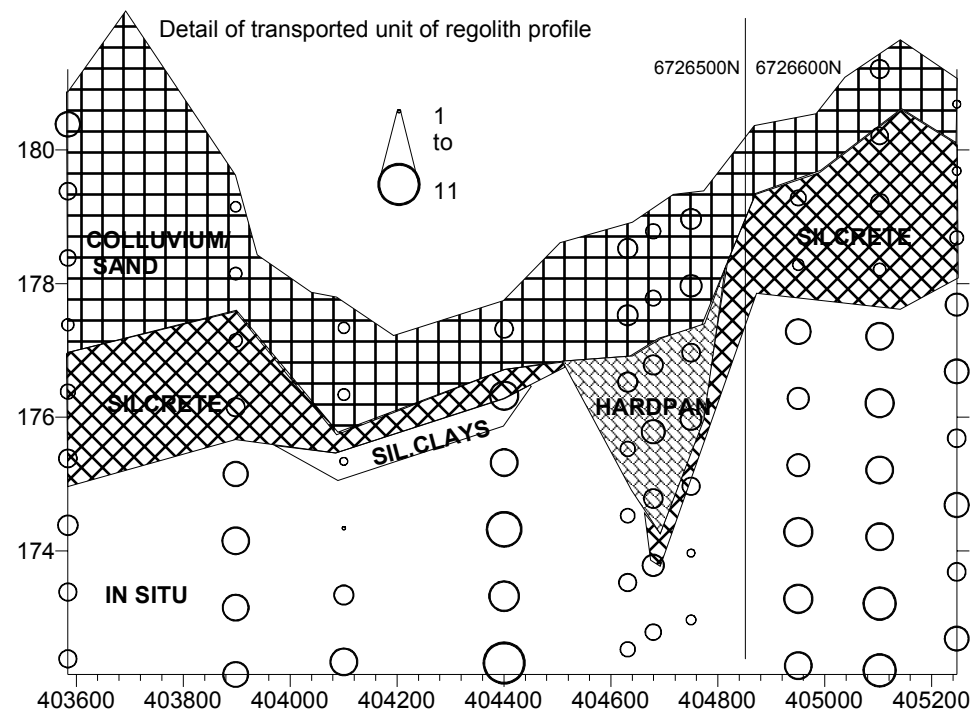
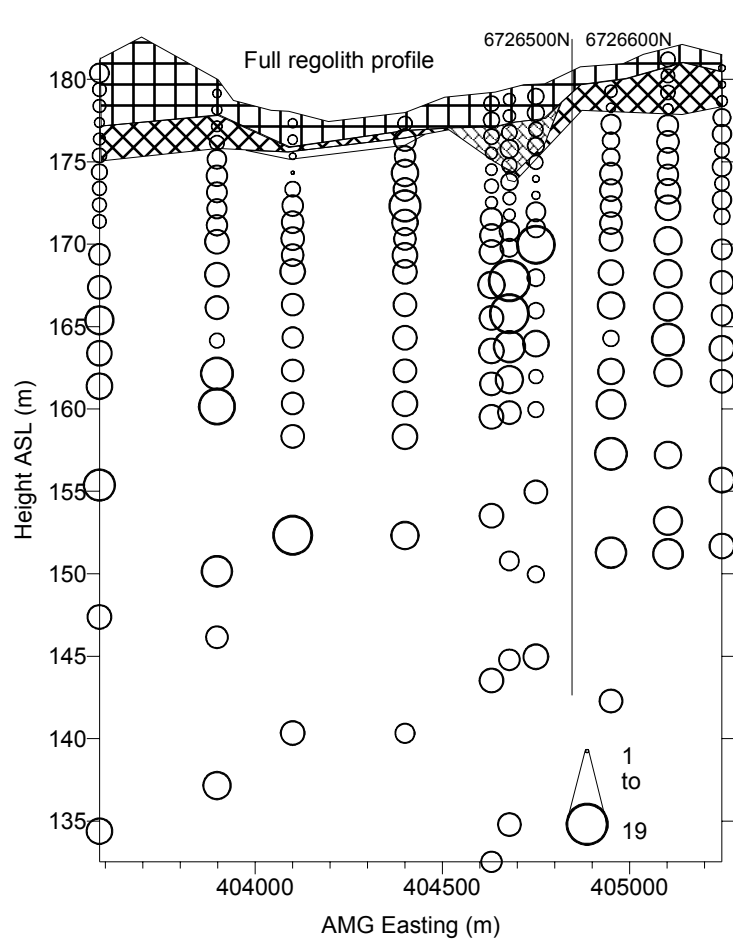
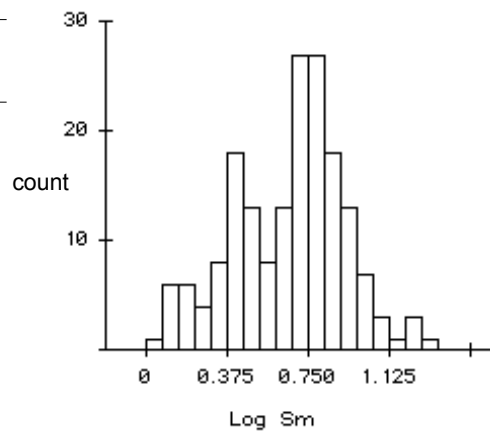


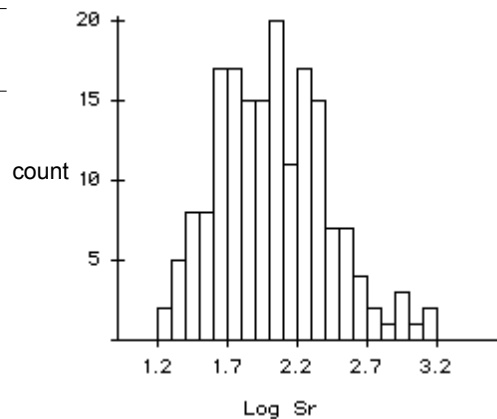
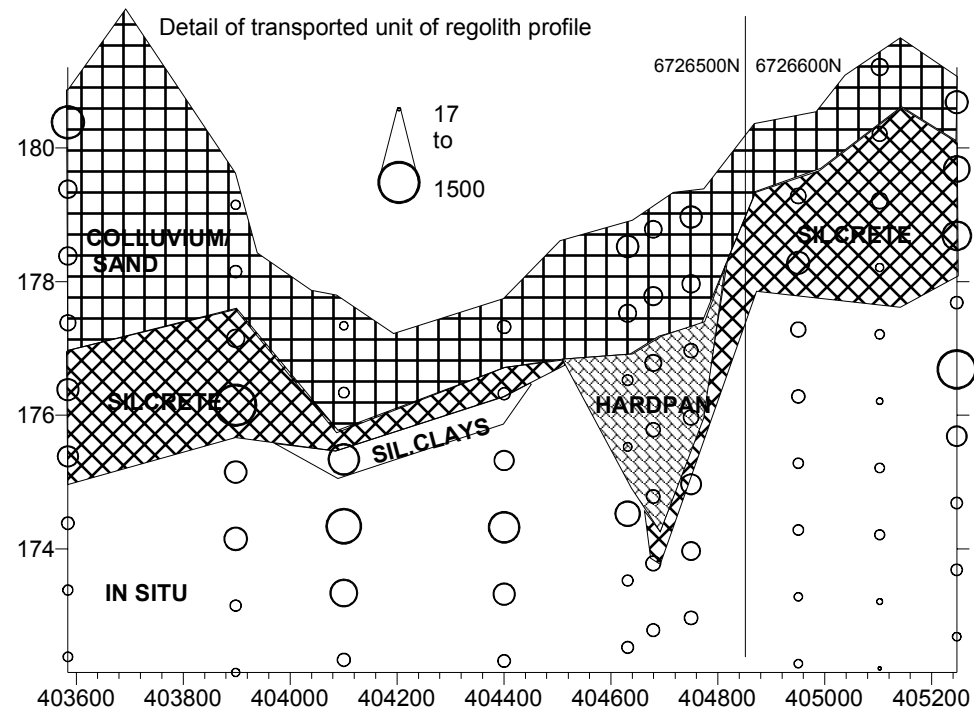
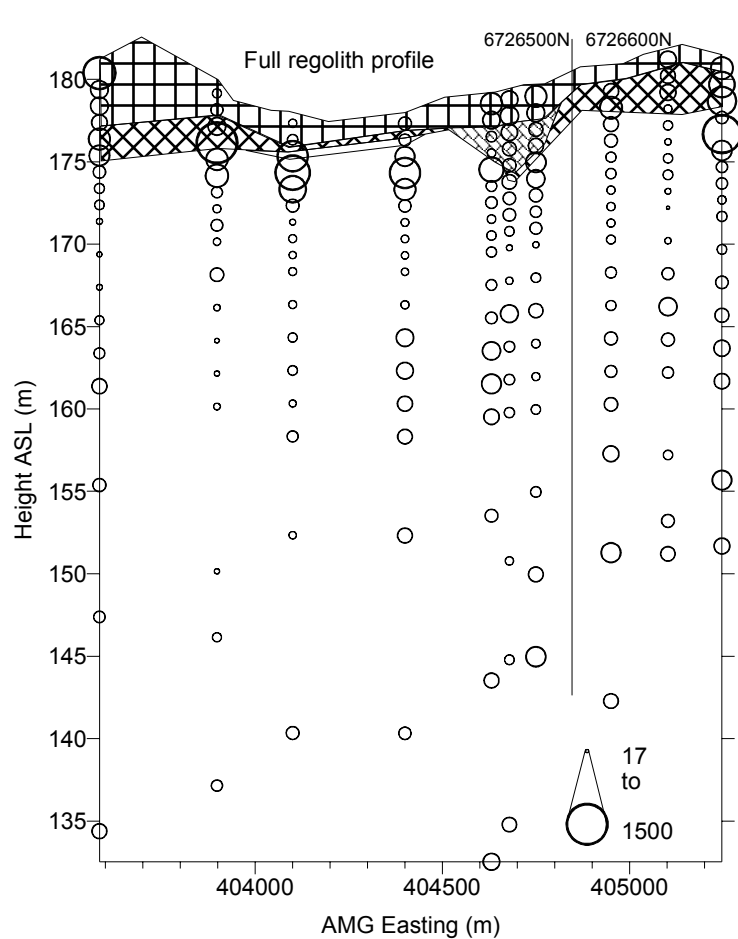
Figure A1a.38: Distribution and concentration of Sm at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	2.3	2.9	2.2	6.1
Std Error	0.2	0.2	0.3	0.3
Median	2.15	2.9	2	6
Std Dev	0.8	0.6	0.9	3.1
Minimum	1.2	2	1.25	1.05
Maximum	4.3	3.9	4.4	19
Count	18	7	11	141

Sm (ppm)

Golf Bore



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	246	127	422	139
Std Error	46	20	122	15
Median	225	140	330	85
Std Dev	194	52	404	179
Minimum	45	47	43	17
Maximum	900	200	1500	1300
Count	18	7	11	141

Figure A1a.39: Distribution and concentration of Sr at Golf Bore regolith part sections on 6726500-6726600N

Sr (ppm)

Golf Bore

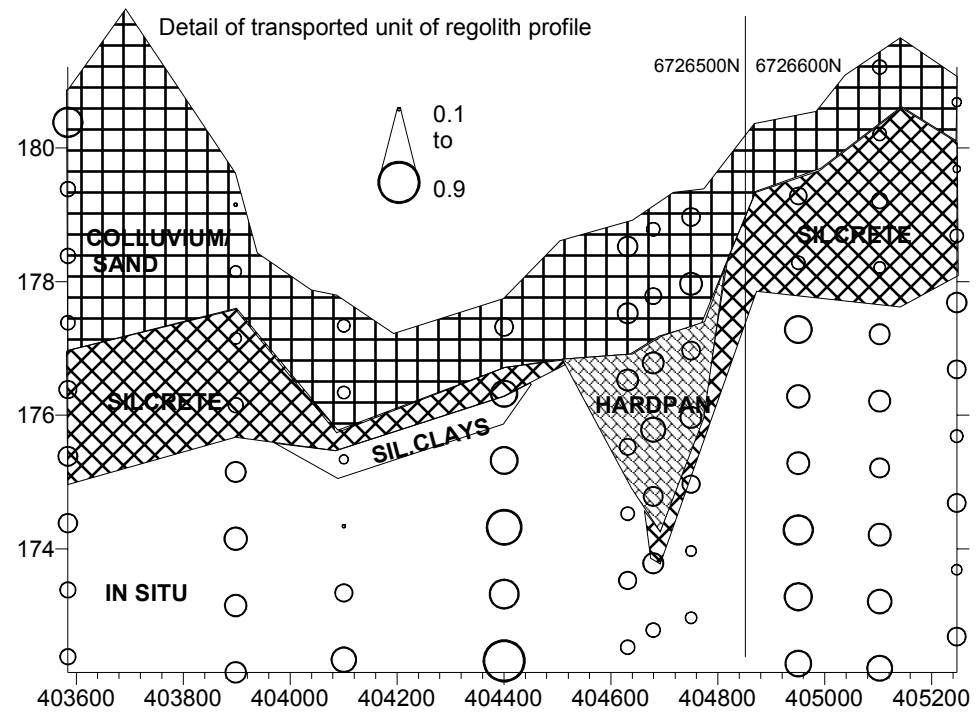
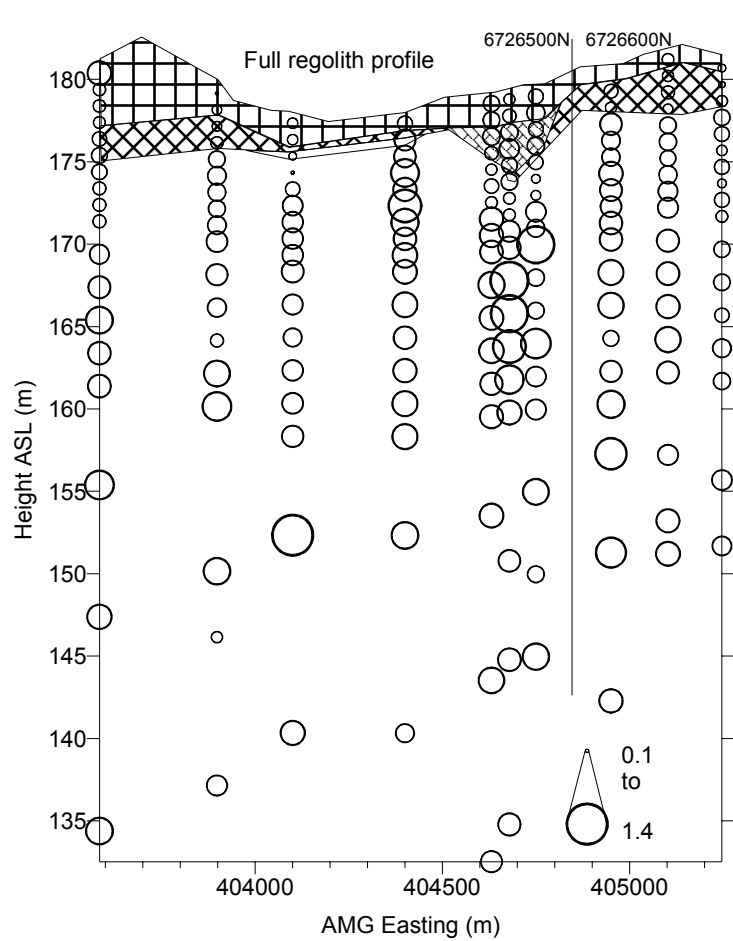
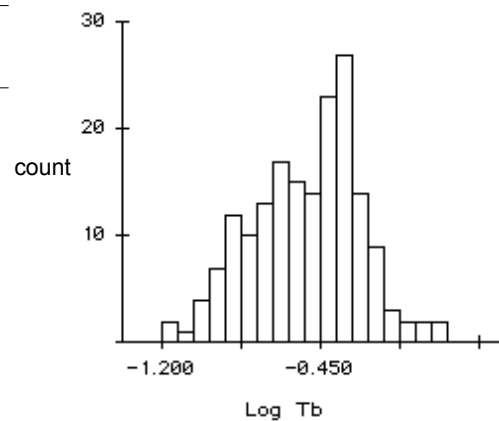


Figure A1a.40: Distribution and concentration of Tb at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	0.2	0.2	0.2	0.4
Std Error	0.0	0.0	0.0	0.0
Median	0.15	0.26	0.13	0.38
Std Dev	0.1	0.1	0.1	0.2
Minimum	0.07	0.17	0.08	0.07
Maximum	0.47	0.33	0.4	1.4
Count	18	7	11	141

Tb (ppm)

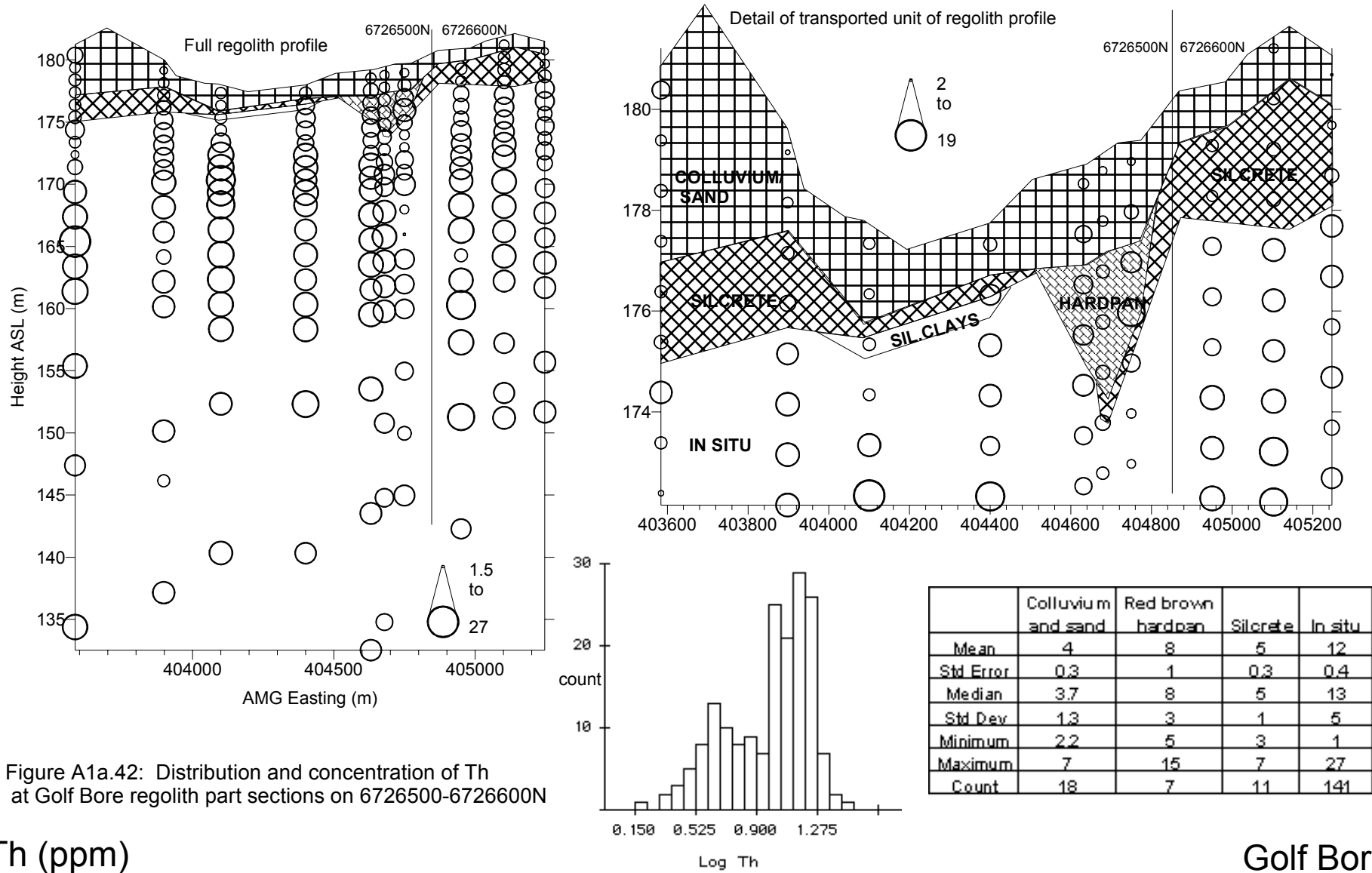
Golf Bore

All data below detection limit of 0.2 ppm

Figure A1a.41: Distribution and concentration of Te
at Golf Bore regolith part sections on 6726500-6726600N

Te (ppm)

Golf Bore



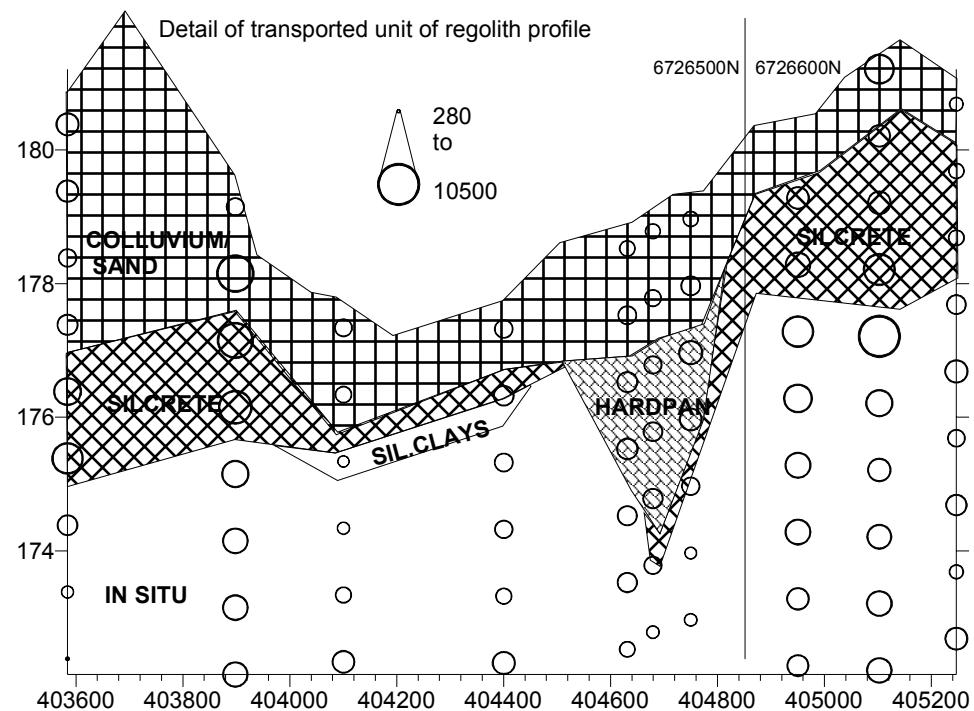
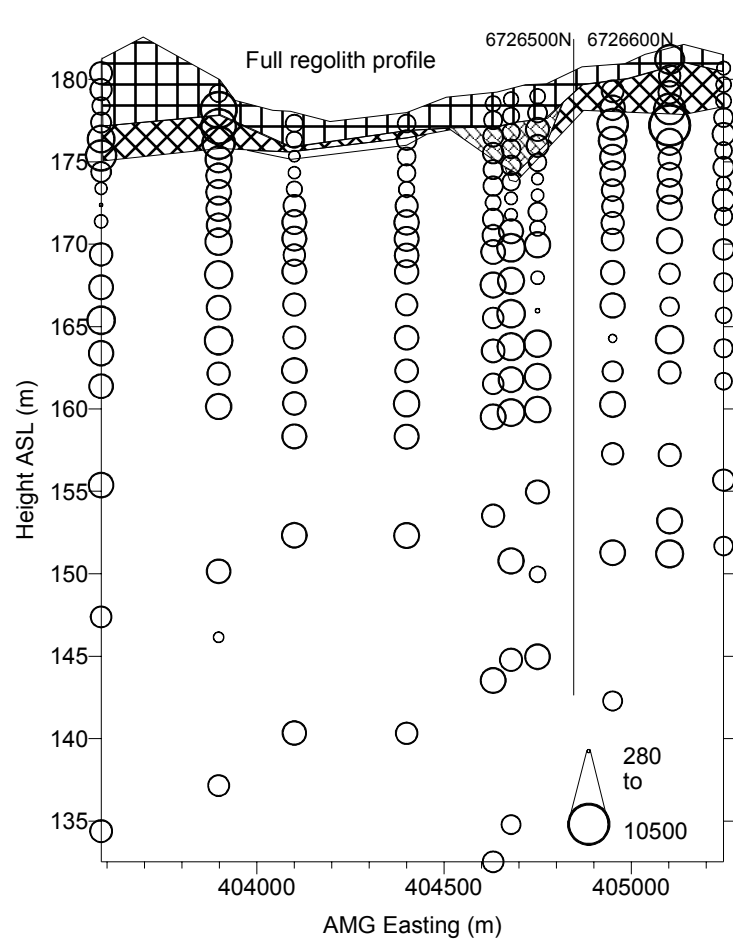
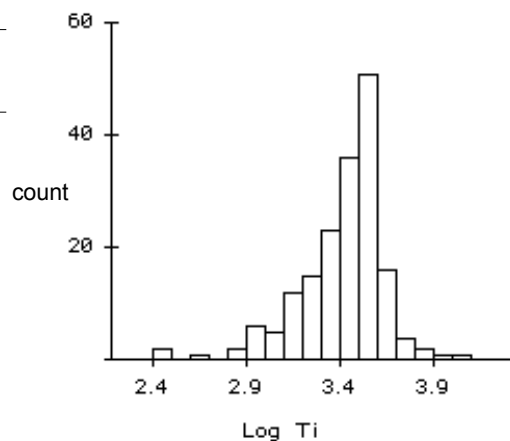


Figure A1a.43: Distribution and concentration of Ti at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	2397	2414	4332	2920
Std Error	403	185	633	104
Median	1825	2350	4350	2950
Std Dev	1711	490	2100	1241
Minimum	1050	1750	1300	280
Maximum	8150	3200	7550	10500
Count	18	7	11	141

Ti (ppm)

Golf Bore

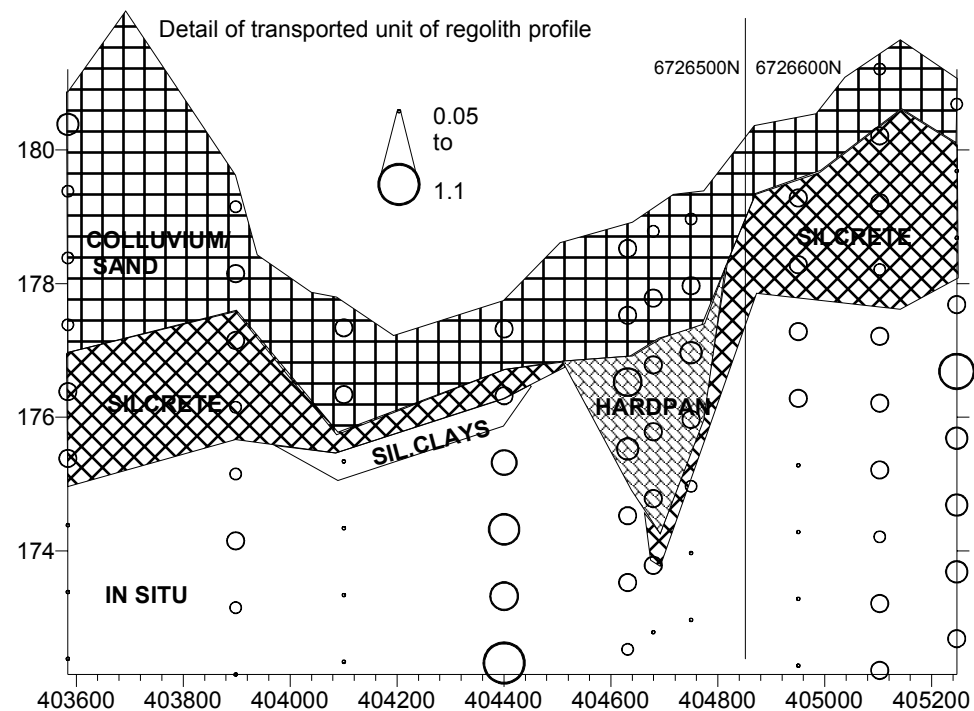
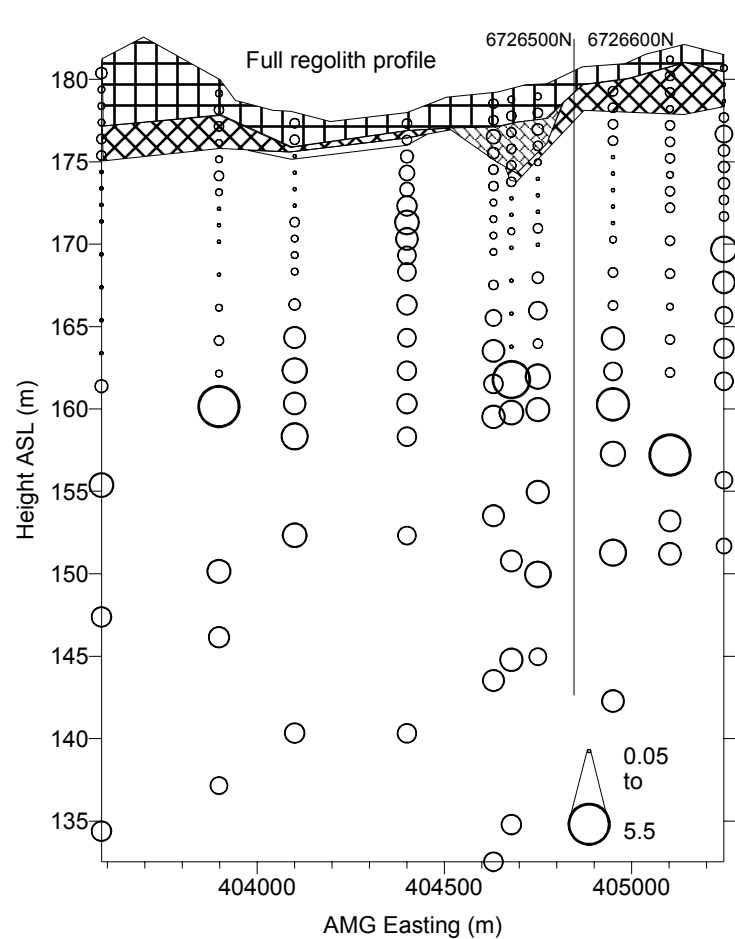
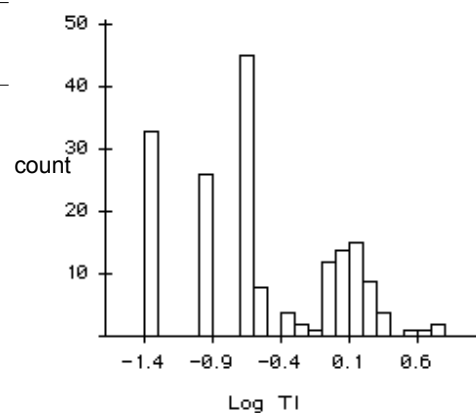


Figure A1a.44: Distribution and concentration of TI at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	0.2	0.3	0.2	0.7
Std Error	0.0	0.0	0.0	0.1
Median	0.2	0.2	0.2	0.2
Std Dev	0.1	0.1	0.1	0.9
Minimum	0.1	0.2	0.05	0.05
Maximum	0.3	0.5	0.2	5.5
Count	18	7	11	141

TI (ppm)

Golf Bore

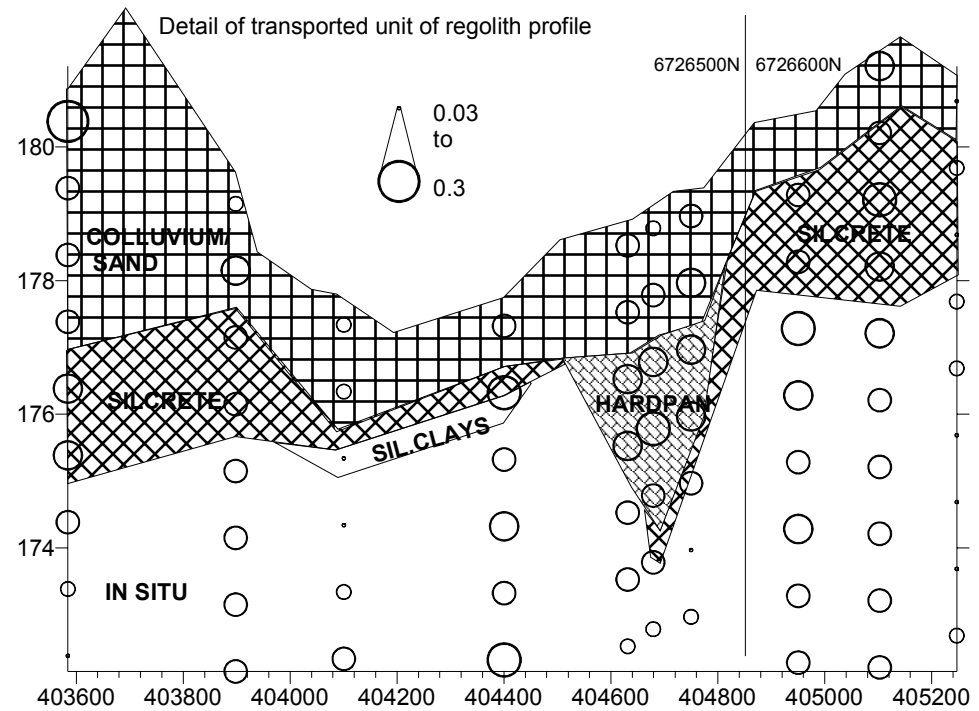
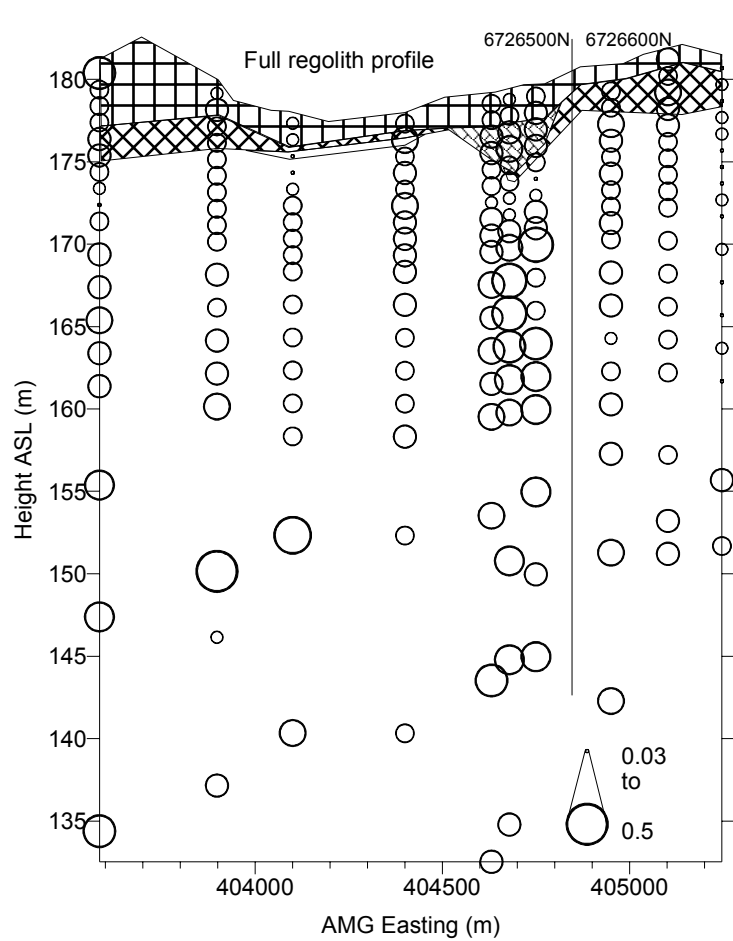
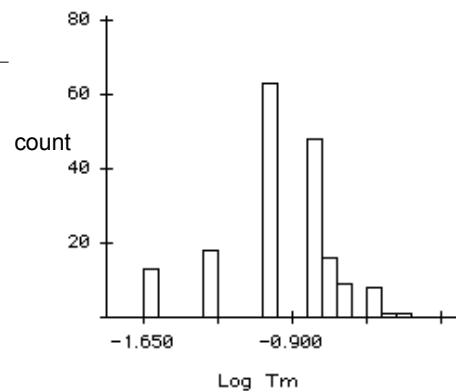


Figure A1a.45: Distribution and concentration of Tm at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	0.1	0.2	0.1	0.1
Std Error	0.0	0.0	0.0	0.0
Median	0.1	0.15	0.1	0.1
Std Dev	0.1	0.0	0.1	0.1
Minimum	0.025	0.1	0.025	0.0
Maximum	0.3	0.2	0.2	0.5
Count	18	7	11	141

Tm (ppm)

Golf Bore

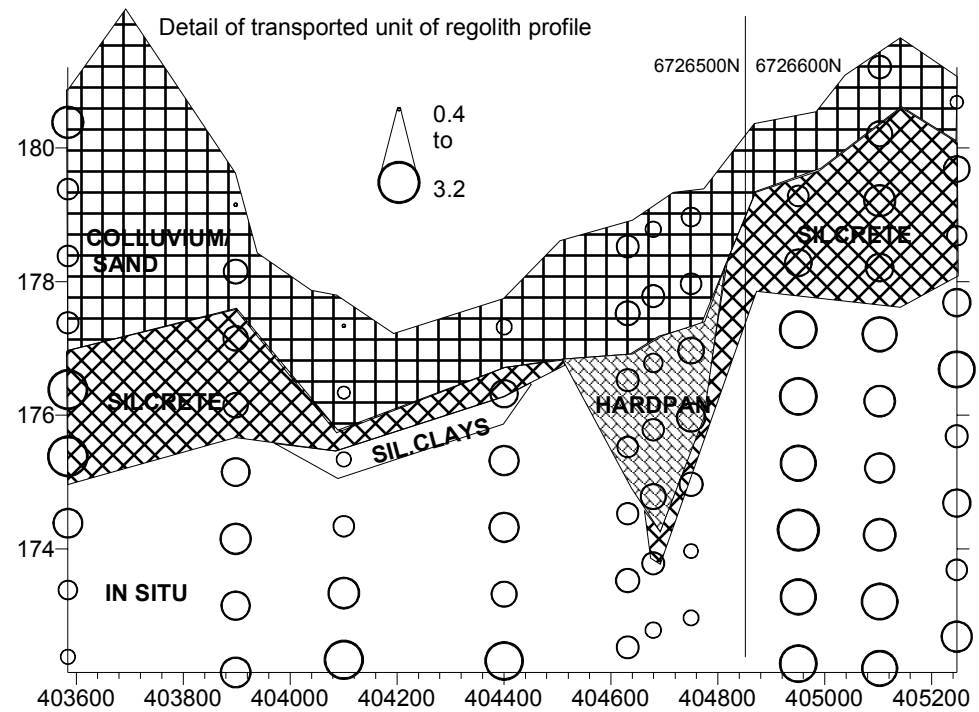
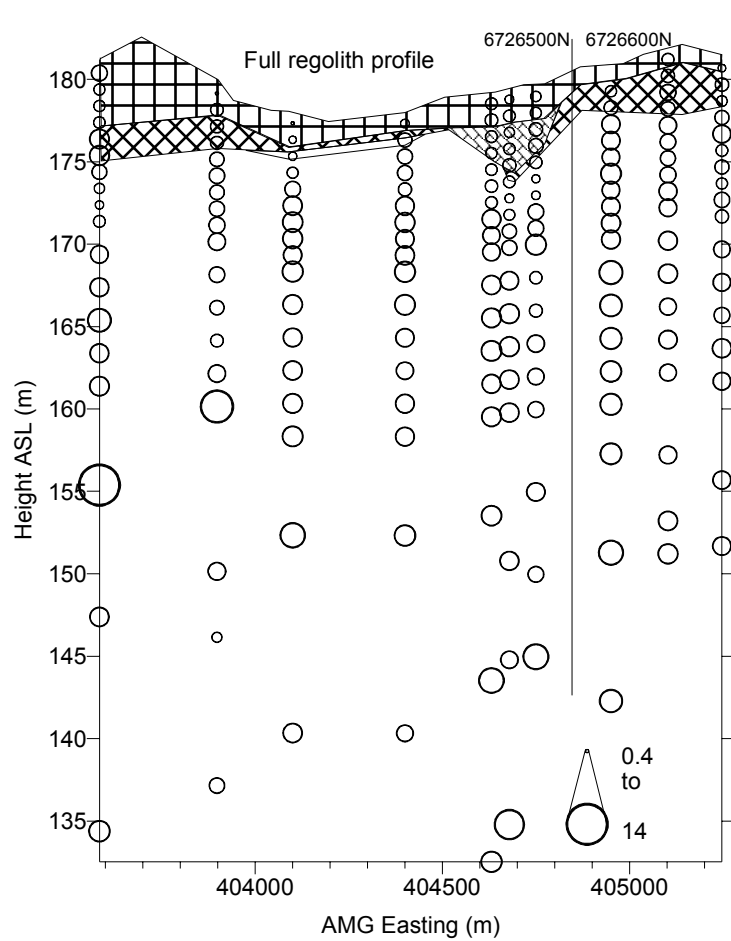
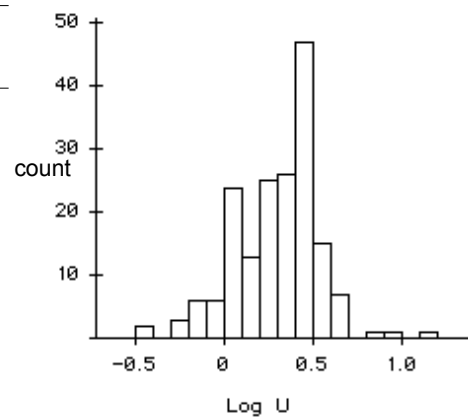


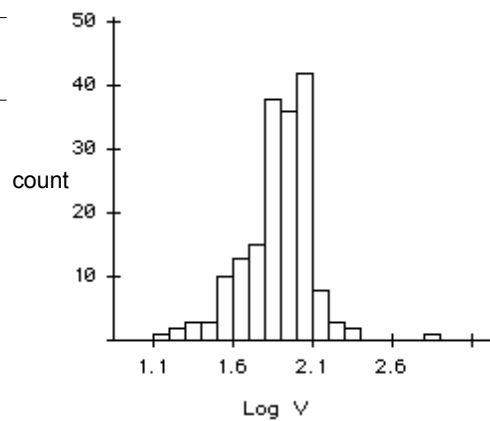
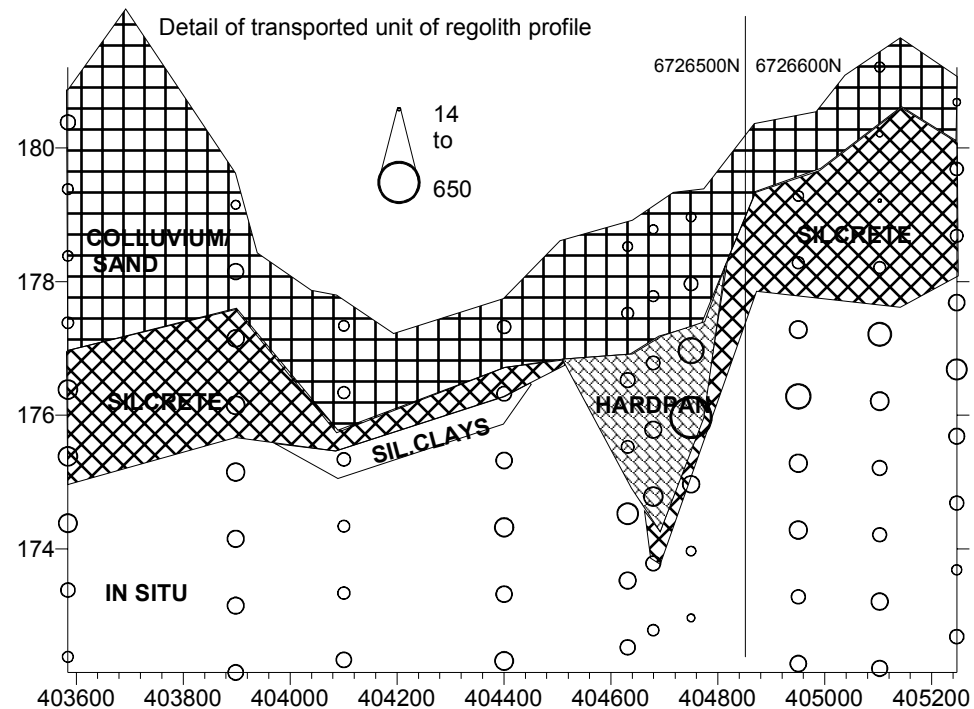
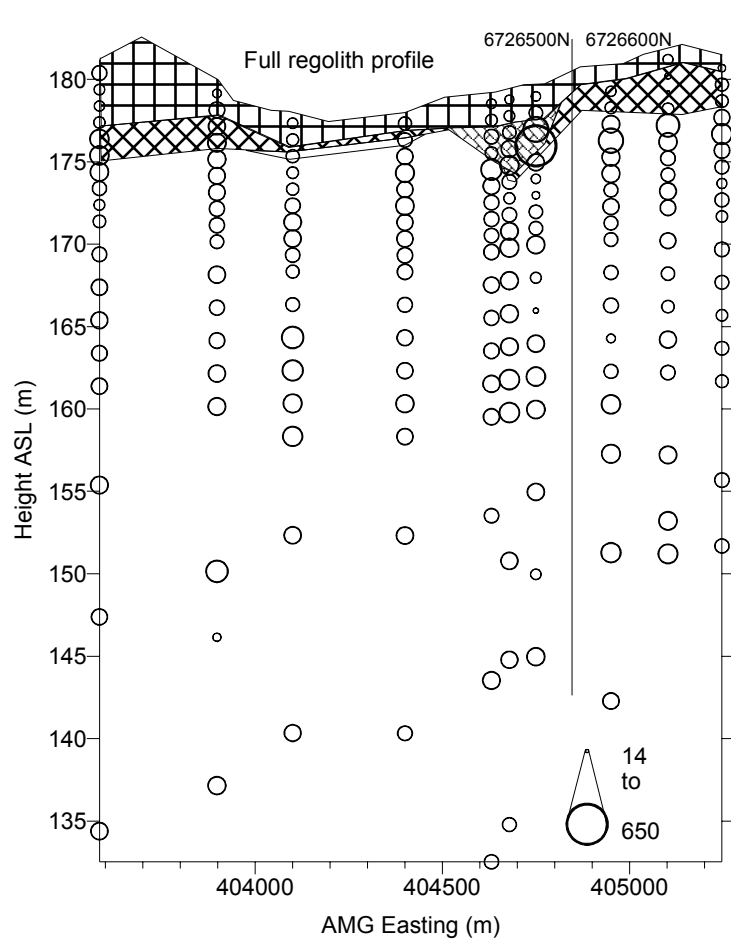
Figure A1a.46: Distribution and concentration of U at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	0.9	1.2	1.8	2.5
Std Error	0.1	0.1	0.2	0.1
Median	1	1.1	1.5	2.5
Std Dev	0.4	0.3	0.7	1.5
Minimum	0.4	0.9	0.9	0.6
Maximum	1.95	1.65	3	14
Count	18	7	11	141

U (ppm)

Golf Bore



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	44	184	73	88
Std Error	4	81	13	3
Median	39	95	58	88
Std Dev	17	214	42	32
Minimum	22	53	14	16
Maximum	85	650	125	220
Count	18	7	11	141

Figure A1a.47: Distribution and concentration of V at Golf Bore regolith part sections on 6726500-6726600N

V (ppm)

Golf Bore

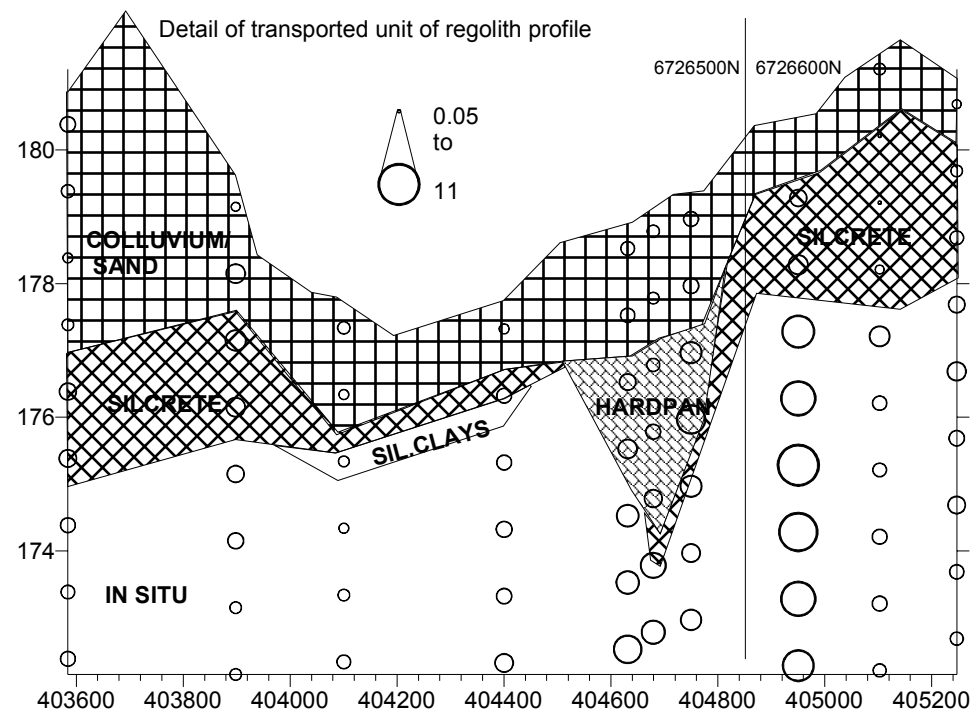
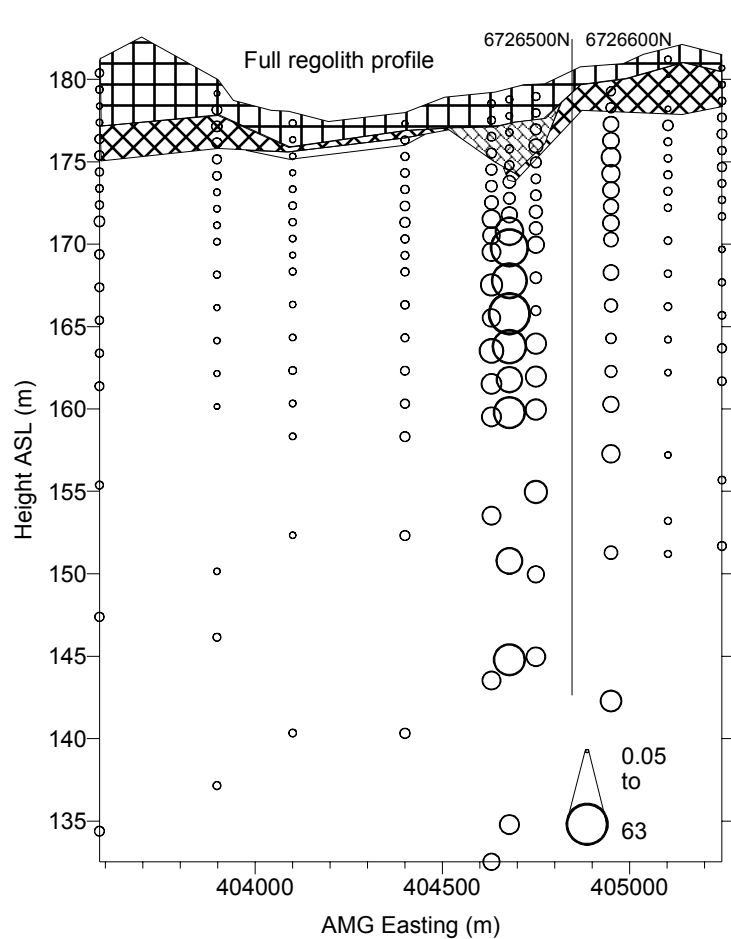
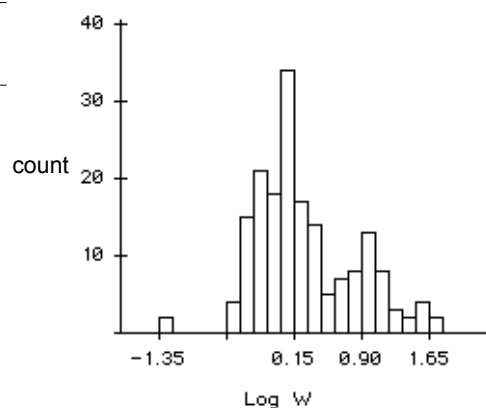


Figure A1a.48: Distribution and concentration of W at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	0.8	2.1	1.6	5.6
Std Error	0.1	0.5	0.5	0.8
Median	0.7	1.7	1.5	1.5
Std Dev	0.5	1.4	1.8	9.9
Minimum	0.3	0.8	0.05	0.3
Maximum	2	5	6.5	63
Count	18	7	11	141

W (ppm)

Golf Bore

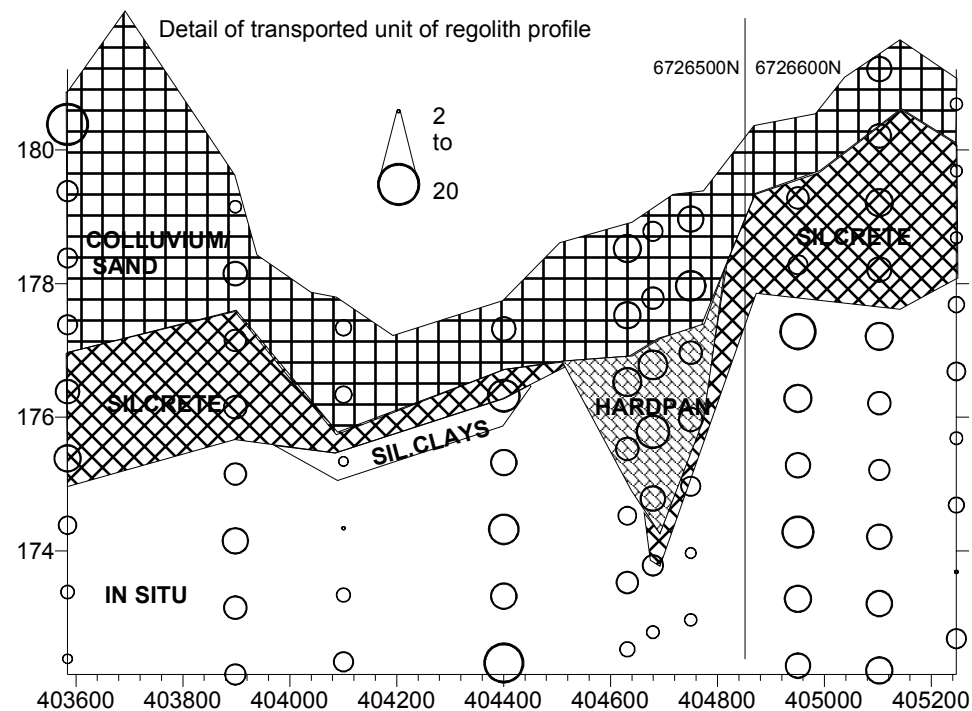
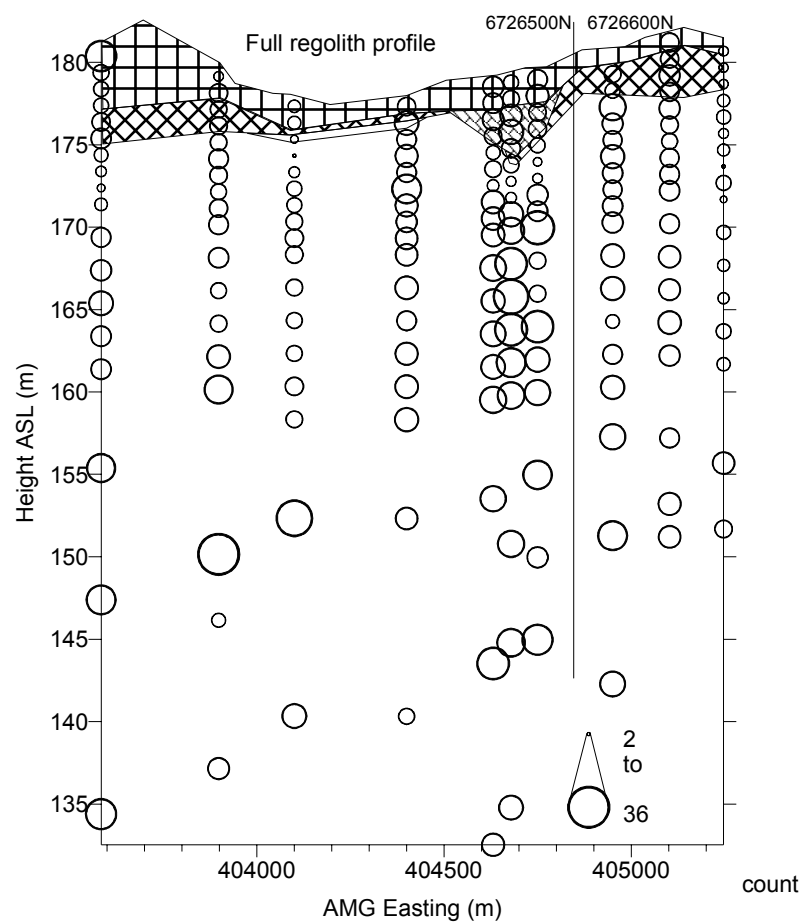
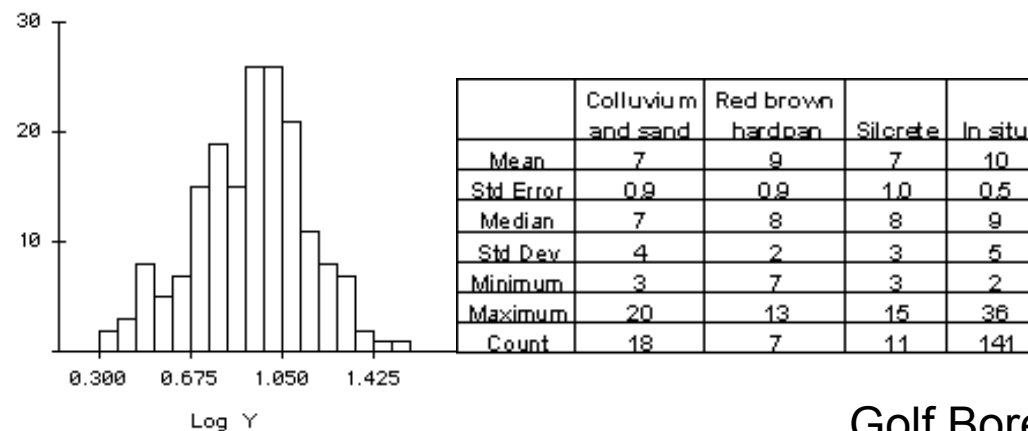


Figure A1a.49: Distribution and concentration of Y at Golf Bore regolith part sections on 6726500-6726600N



Y (ppm)

Golf Bore

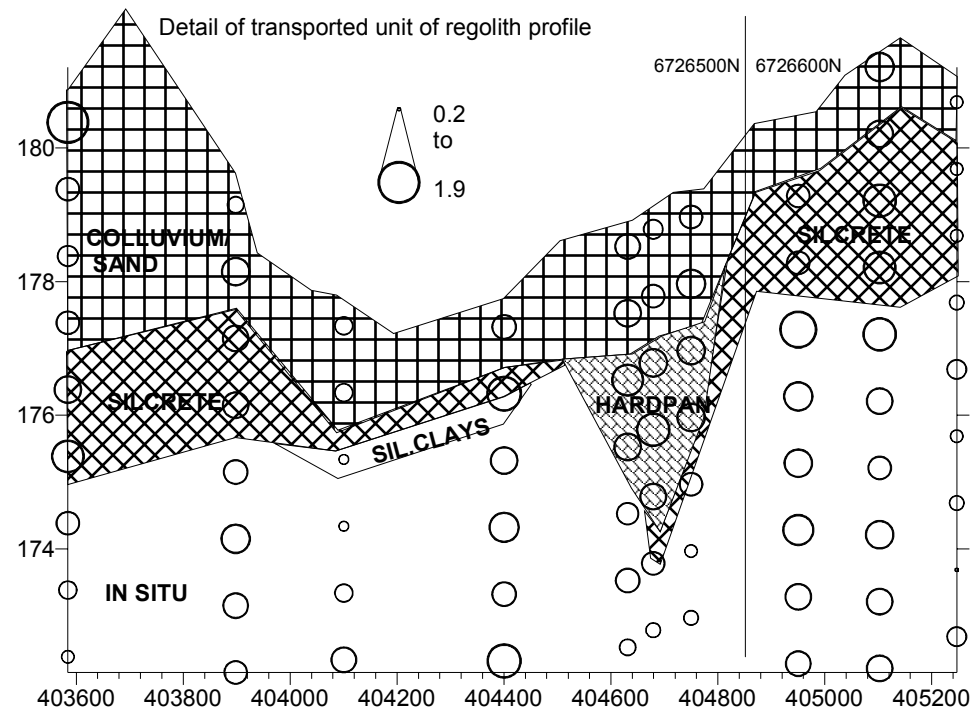
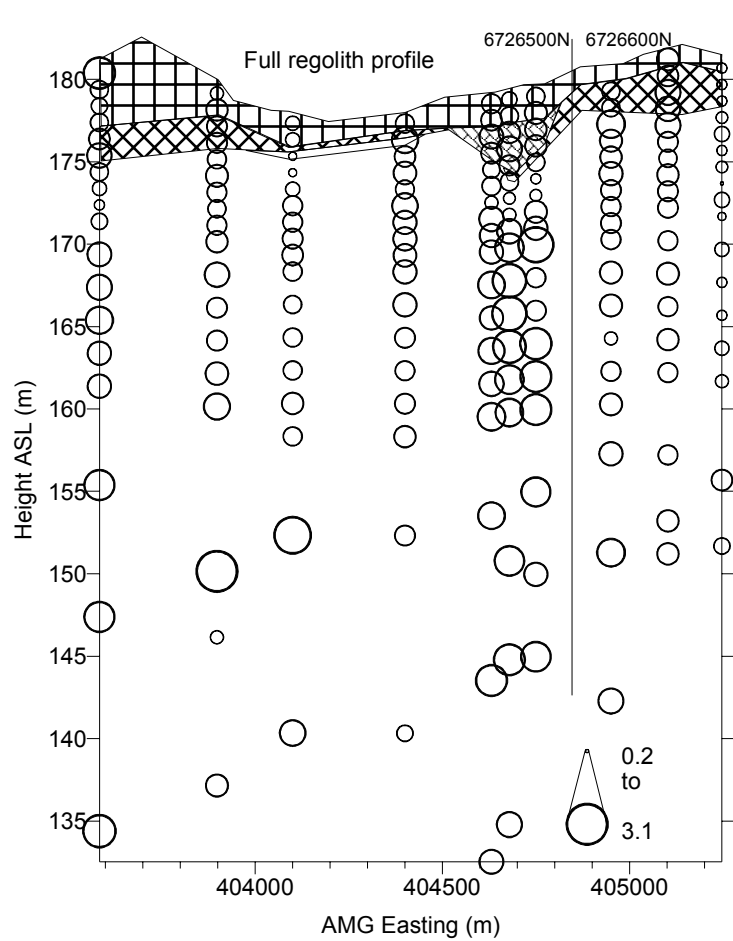
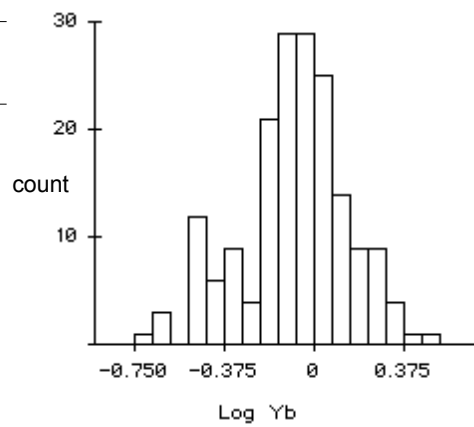


Figure A1a.50: Distribution and concentration of Yb at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	0.7	1.0	0.9	1.0
Std Error	0.1	0.1	0.1	0.0
Median	0.7	0.9	0.9	0.9
Std Dev	0.3	0.1	0.4	0.5
Minimum	0.3	0.8	0.3	0.2
Maximum	1.9	1.2	1.5	3.1
Count	18	7	11	141

Yb (ppm)

Golf Bore

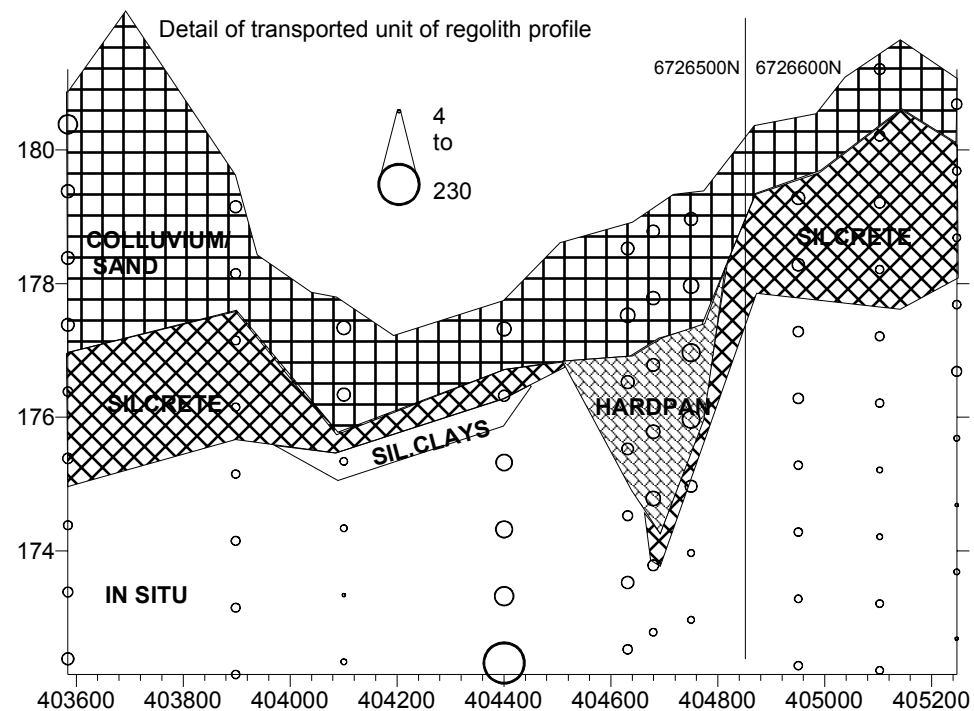
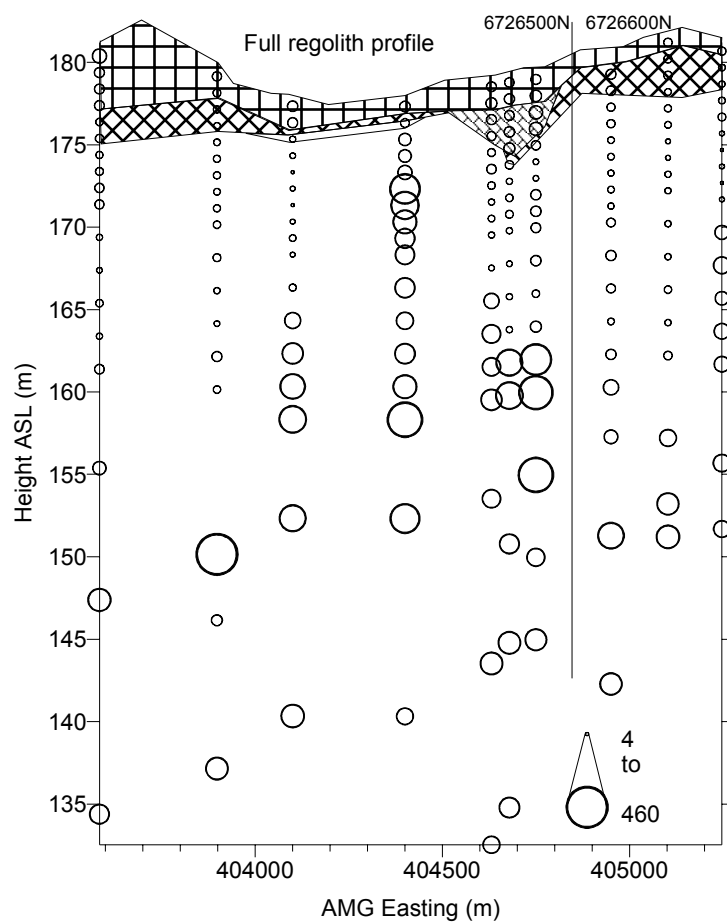
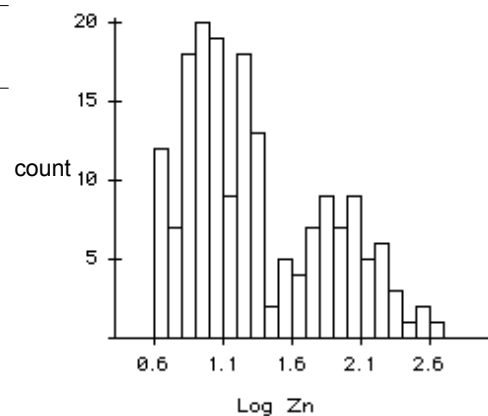


Figure A1a.51: Distribution and concentration of Zn at Golf Bore regolith part sections on 6726500-6726600N



	Colluvium and sand	Red brown hardpan	Silcrete	In situ
Mean	20	24	11	54
Std Error	2	3	1	6
Median	19	21	10	15
Std Dev	7	9	3	76
Minimum	11	15	7	4
Maximum	43	37	17	460
Count	18	7	11	141

Zn (ppm)

Golf Bore

Appendix A1b: Jumbuck

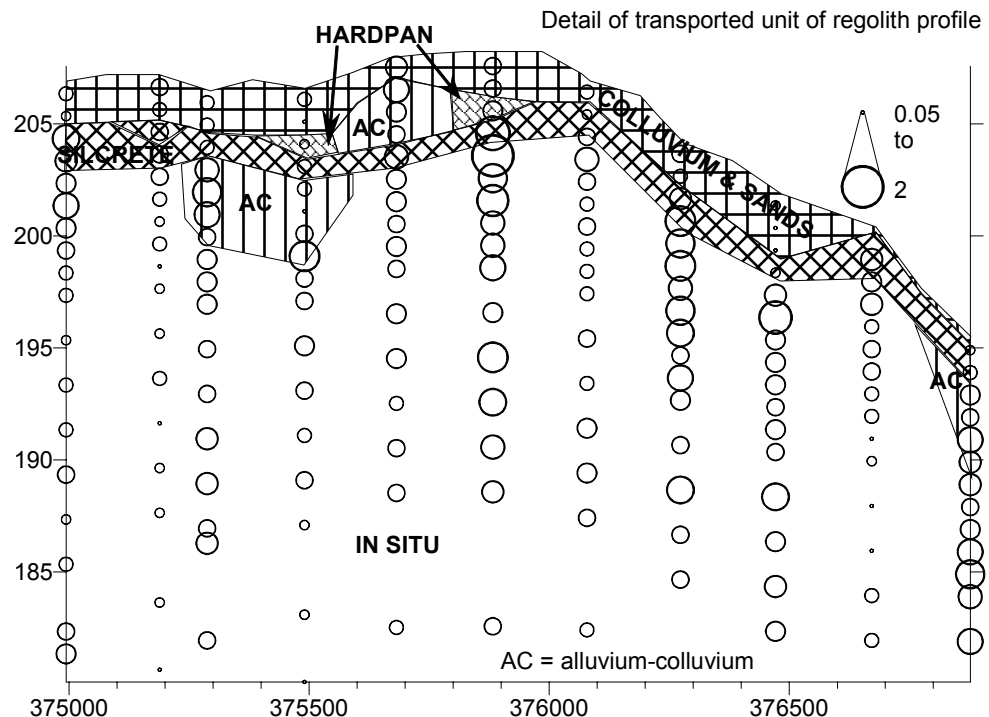
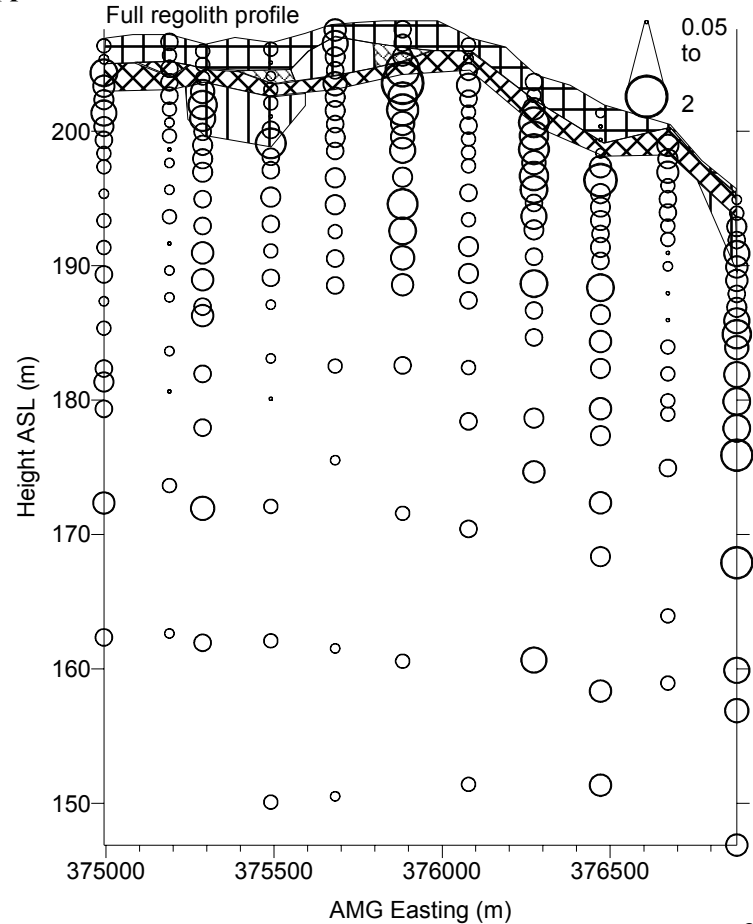
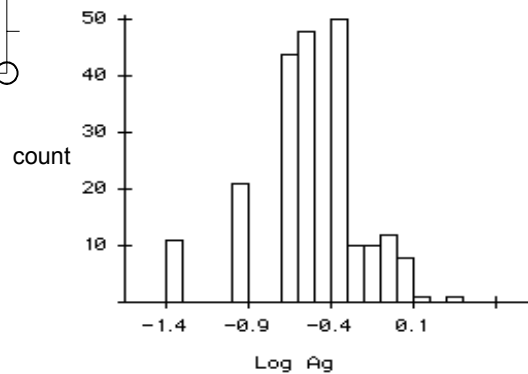


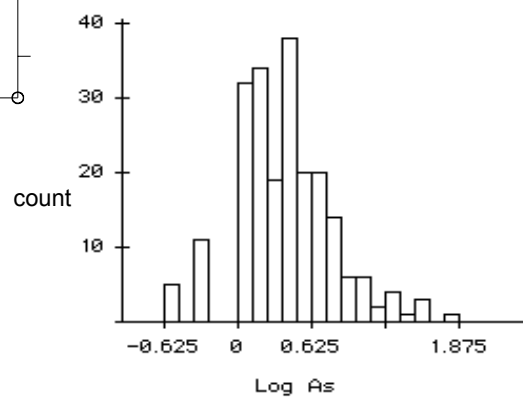
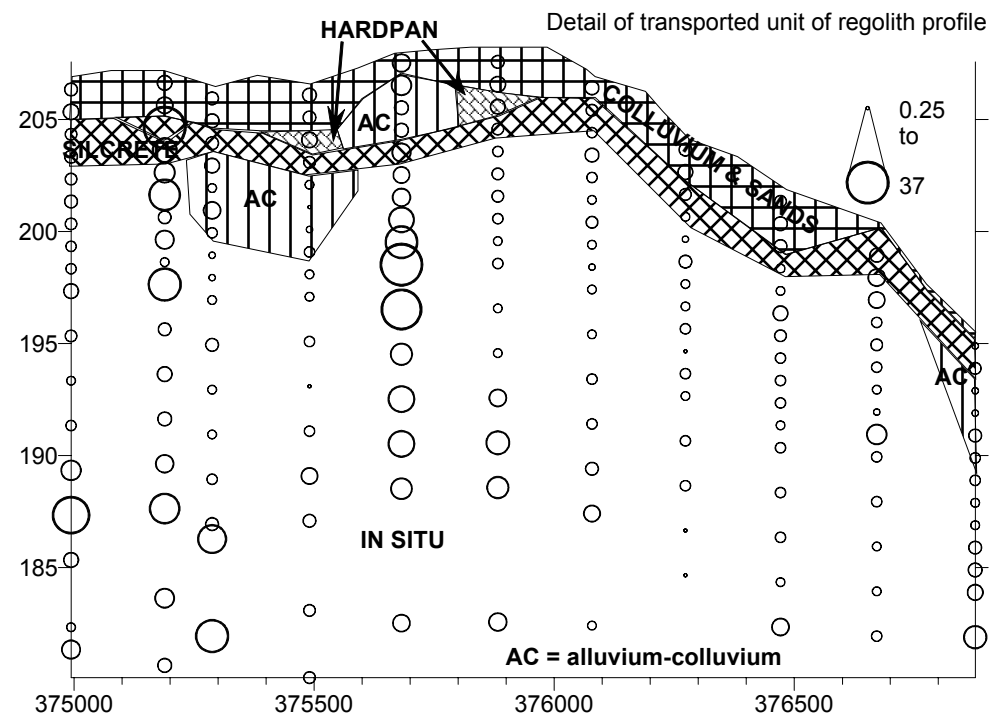
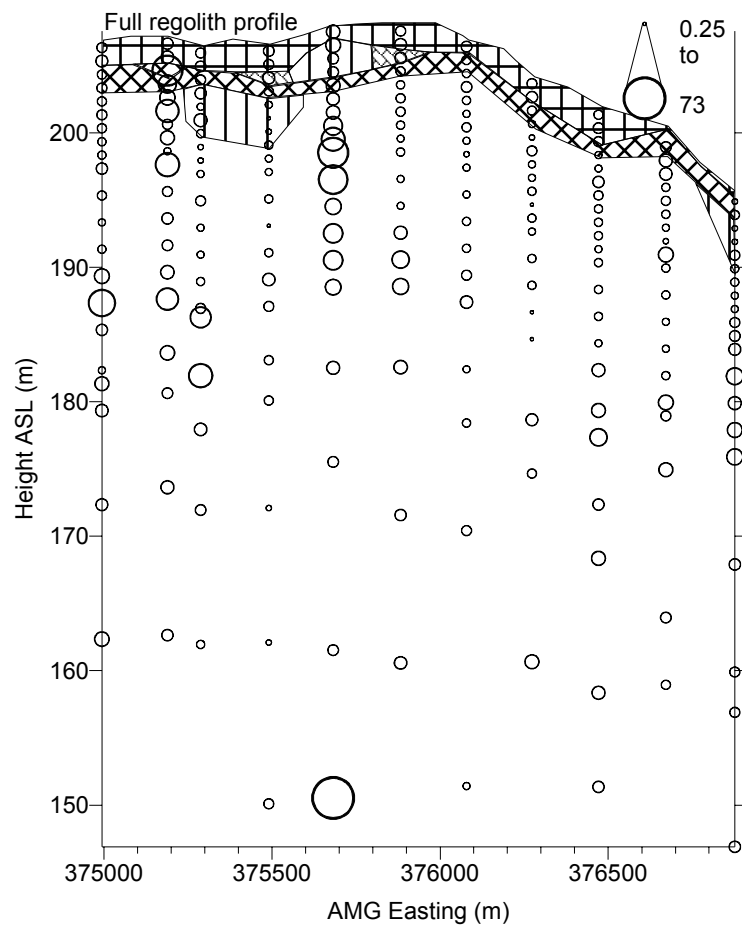
Figure A1b.01: Distribution and concentration of Au at Jumbuck regolith section on 6690450N.



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	0.49	0.39	0.20	0.44
Std Error	0.07	0.02	0.03	0.08
Median	0.4	0.3	0.2	0.3
Std Dev	0.28	0.27	0.12	0.34
Minimum	0.05	0.05	0.05	0.1
Maximum	1	2	0.5	1.3
Count	14	166	17	17

Ag (ppm)

Jumbuck

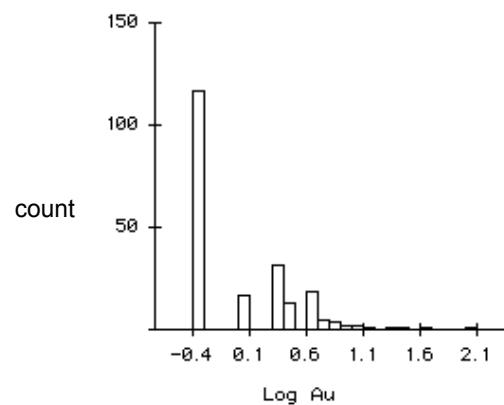
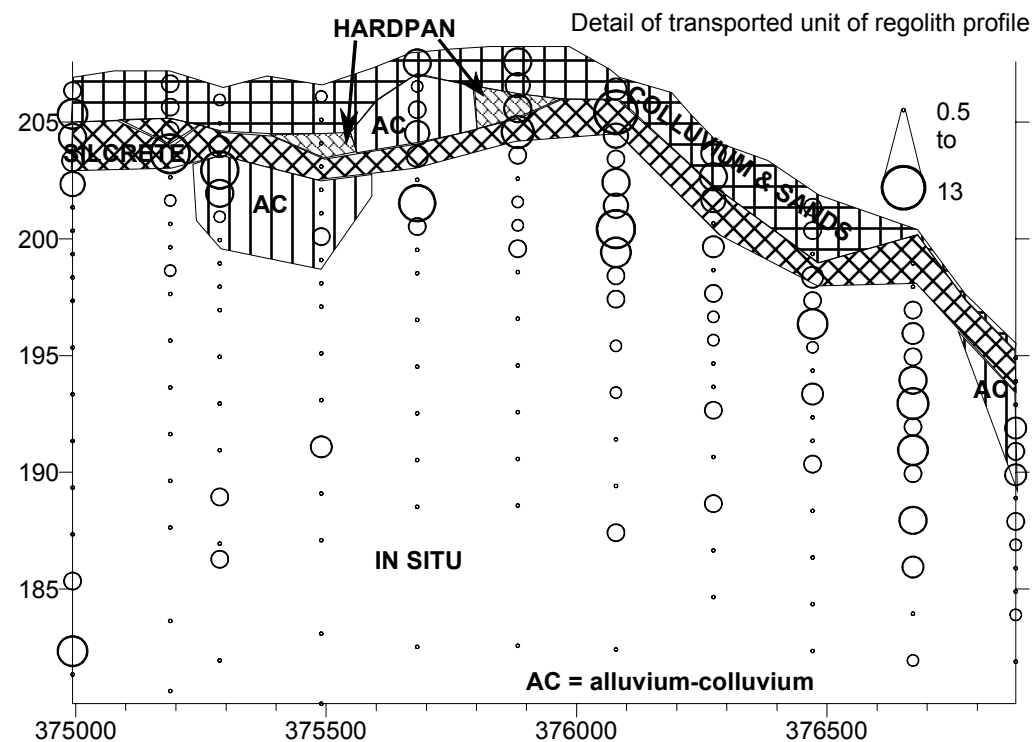
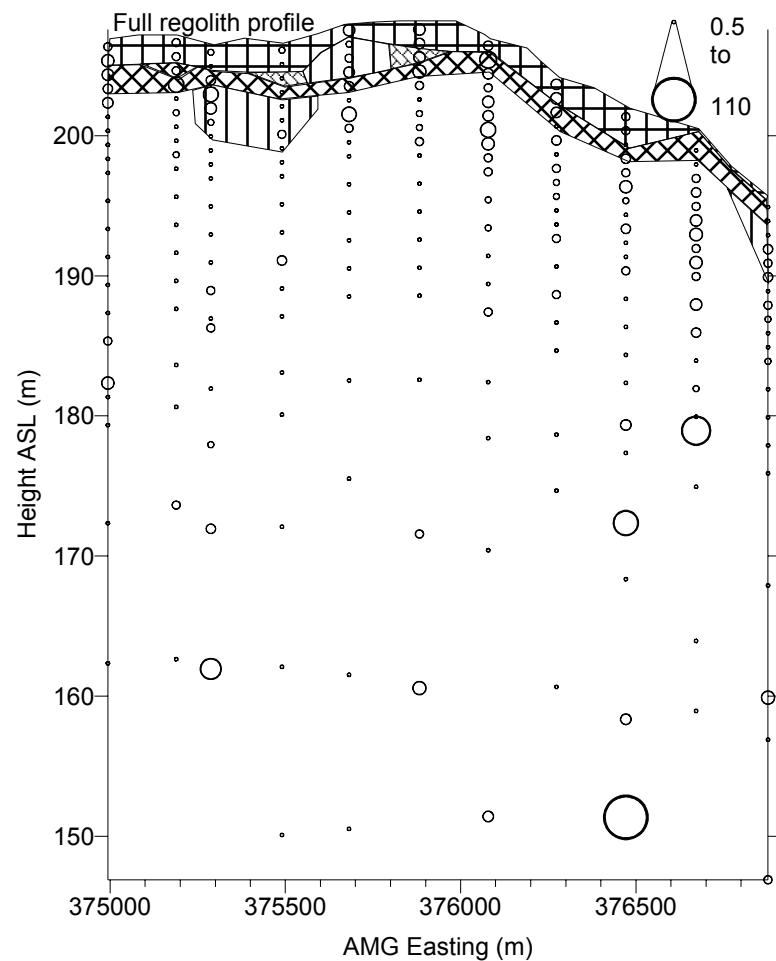


	Colluvium -alluvium	In situ	Colluvium -sand	Silicate
Mean	2.2	4.6	3.2	4.9
Std Error	0.5	0.6	0.2	2.1
Median	1.5	2.5	3	2
Std Dev	2.0	7.7	0.9	8.5
Minimum	0.25	0.25	2	0.5
Maximum	7	73	5.5	36.5
Count	14	166	17	17

Figure A1b.02: Distribution and concentration of As at Jumbuck regolith section on 6690450N.

As (ppm)

Jumbuck

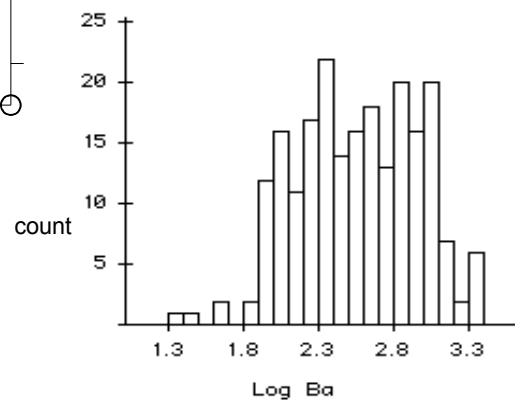
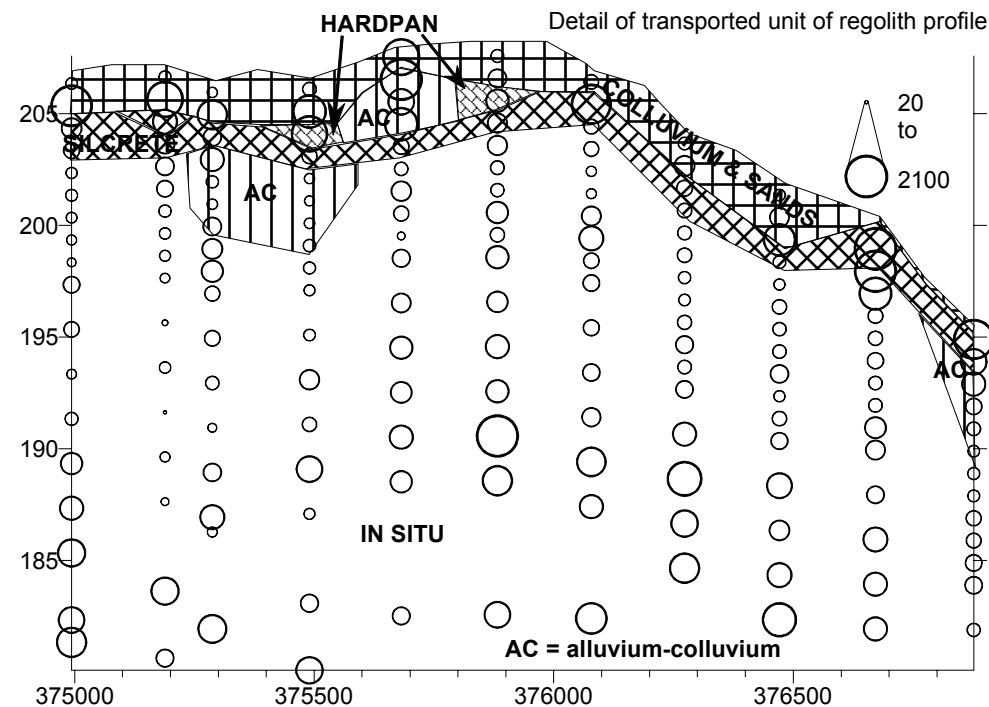
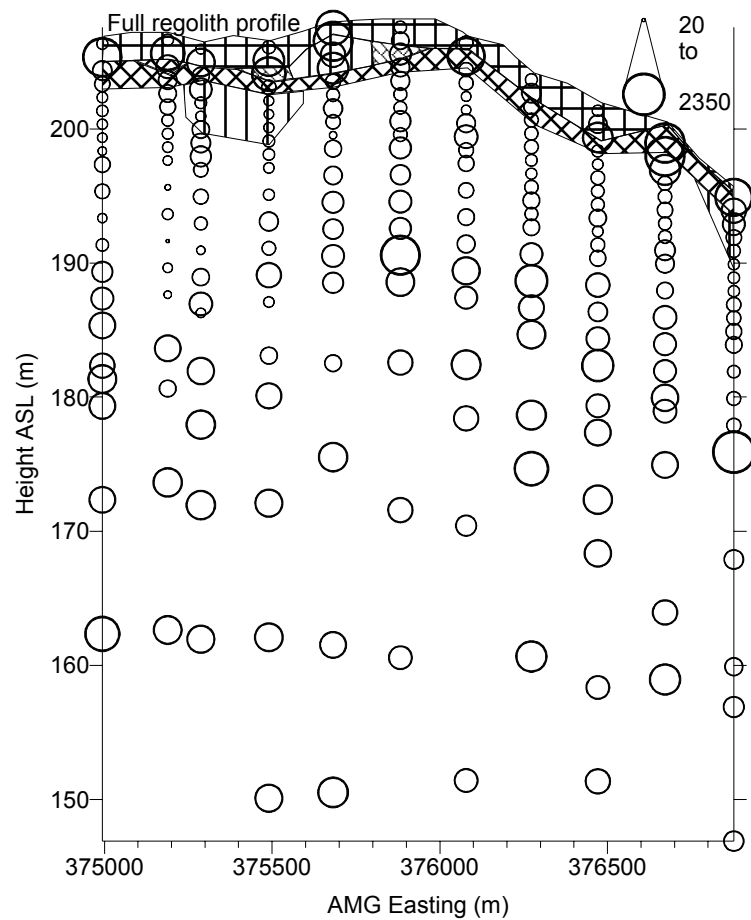


	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	2.3	2.6	2.7	3.6
Std Error	0.7	0.7	0.4	0.9
Median	1.5	0.5	2	3
Std Dev	2.5	9.6	1.8	3.6
Minimum	0.5	0.5	0.5	0.5
Maximum	9.5	110	6	13
Count	14	166	17	17

Figure B3: Distribution and concentration of Au at Jumbuck regolith section on 6690450N.

Au (ppb)

Jumbuck

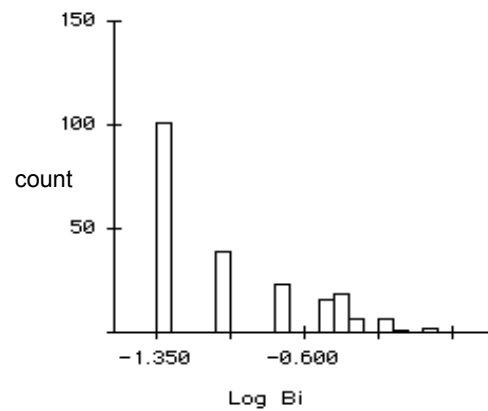
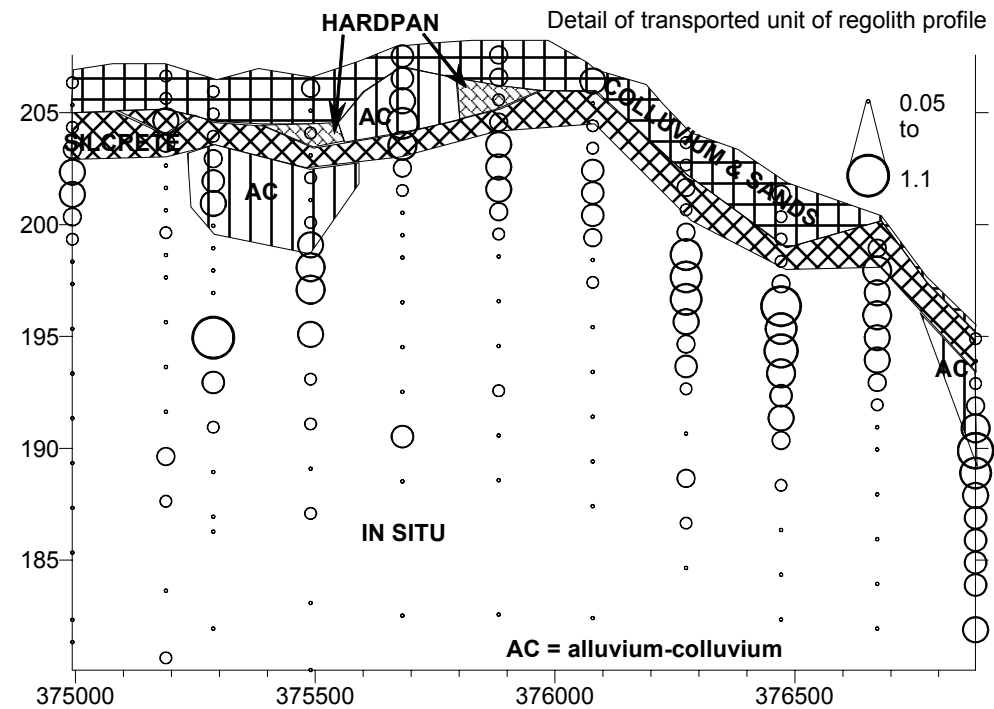
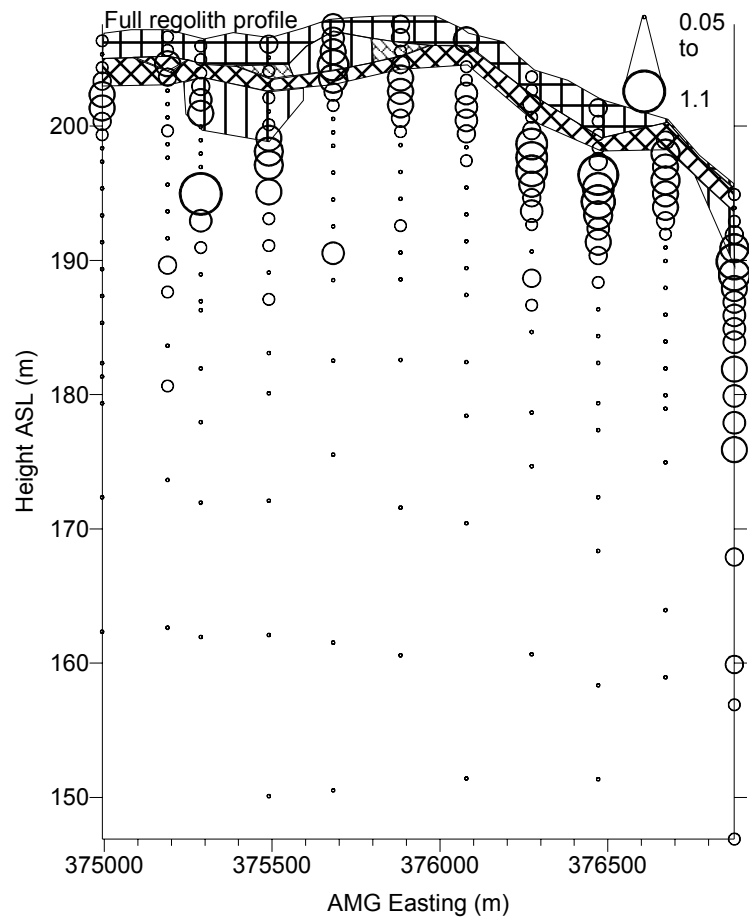


	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	476	498	631	724
Std Error	151	31	153	176
Median	218	385	340	390
Std Dev	566	401	631	728
Minimum	85	20	90	145
Maximum	2050	2350	2000	2100
Count	14	166	17	17

Figure A1b.04: Distribution and concentration of Ba at Jumbuck regolith section on 6690450N.

Ba (ppm)

Jumbuck

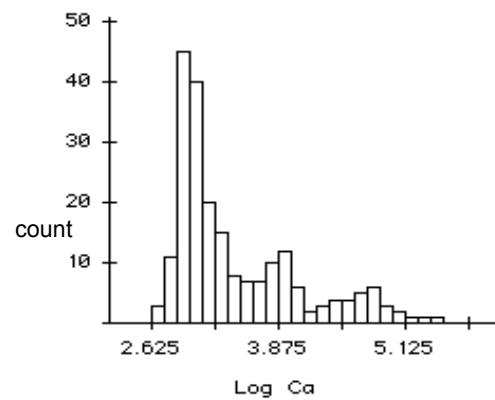
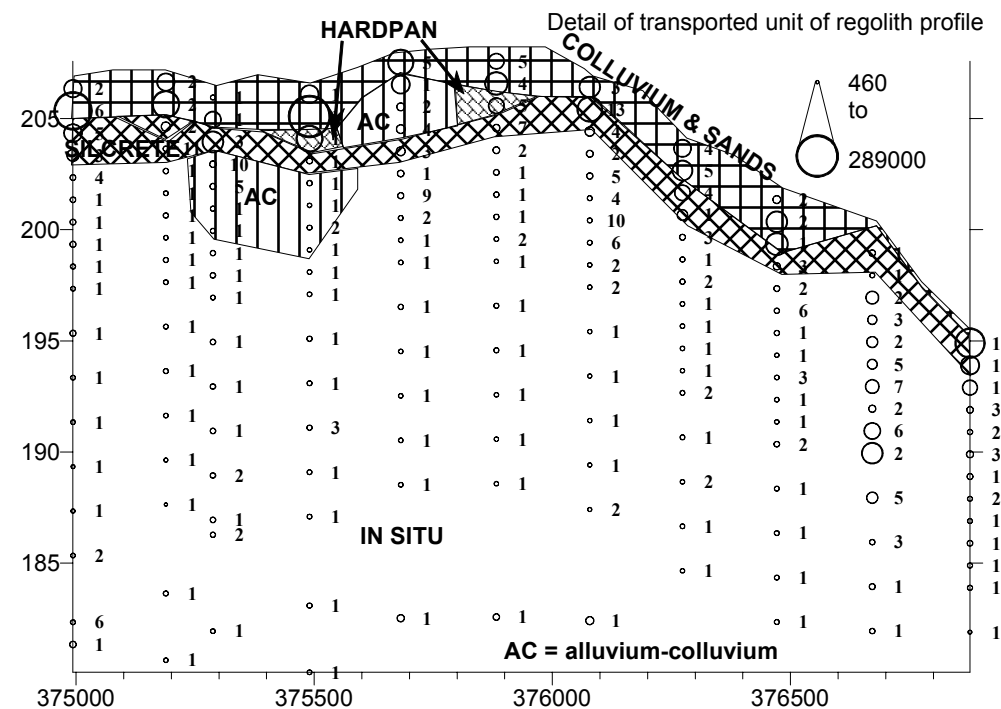
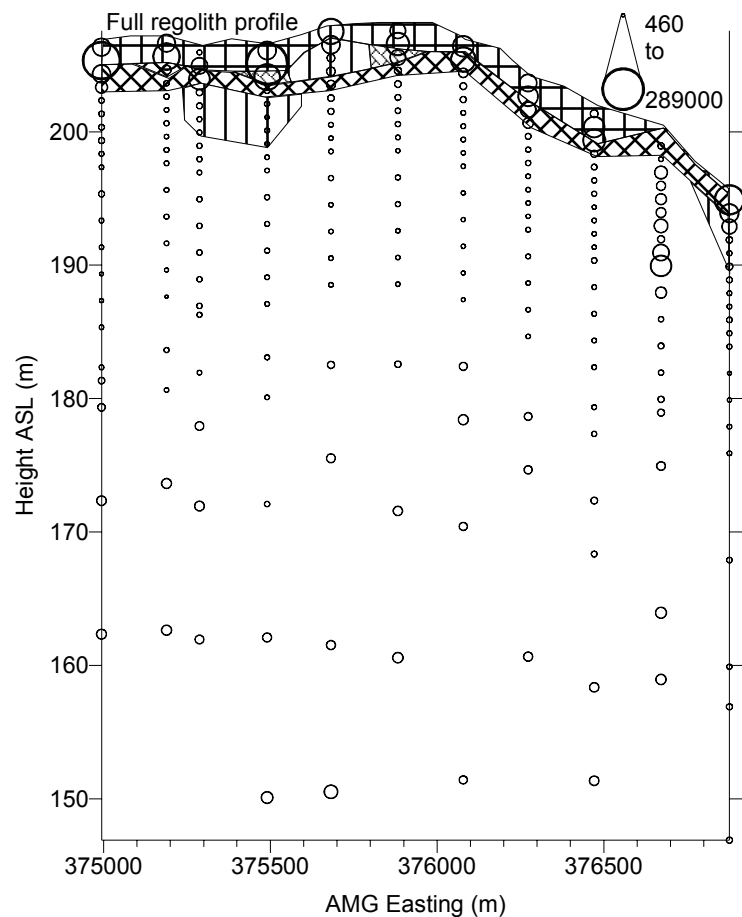


	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	0.26	0.16	0.15	0.19
Std Error	0.05	0.01	0.02	0.04
Median	0.25	0.05	0.1	0.1
Std Dev	0.18	0.19	0.09	0.15
Minimum	0.05	0.05	0.05	0.05
Maximum	0.6	1.1	0.4	0.5
Count	14	166	17	17

Figure A1b.05: Distribution and concentration of Bi at Jumbuck regolith section on 6690450N.

Bi (ppm)

Jumbuck

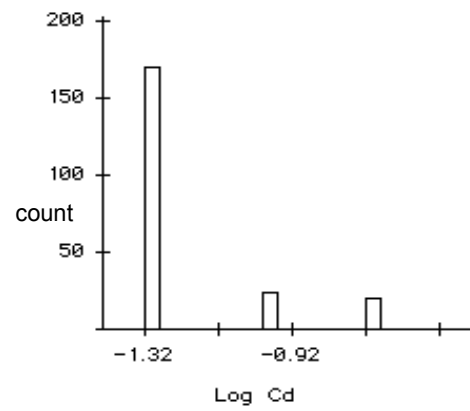
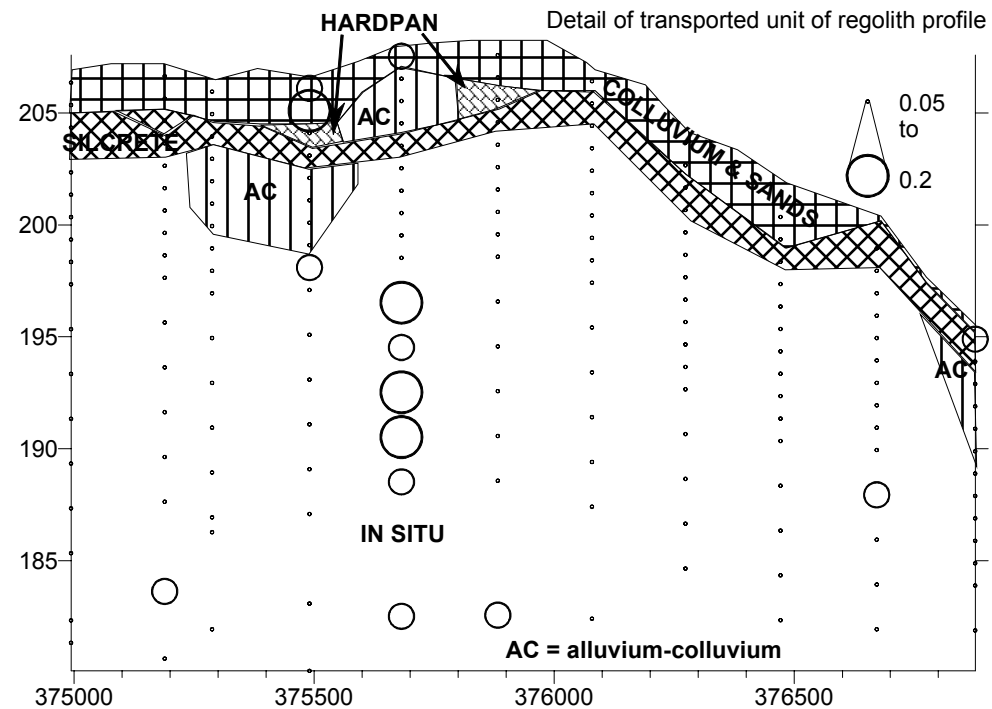
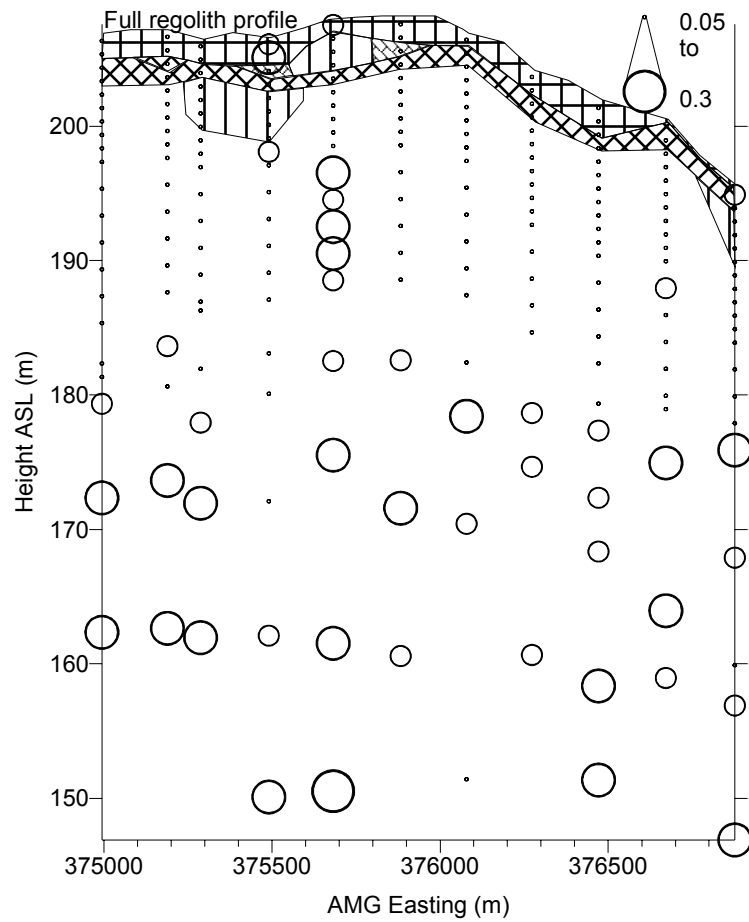


	Colluvium -alluvium	In-situ	Colluvium -sand	Silcrete
Mean	6982	3422	76326	28053
Std Error	3455	500	18287	9326
Median	1600	1200	56300	7950
Std Dev	12929	6448	75400	38450
Minimum	700	480	1100	950
Maximum	44800	62300	289000	137000
Count	14	166	17	17

Jumbuck

Figure A1b.06: Distribution and concentration of Ca at Jumbuck regolith section on 6690450N.

Ca (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	0.05	0.08	0.06	0.05
Std Error	0.00	0.00	0.01	0.00
Median	0.05	0.05	0.05	0.05
Std Dev	0.00	0.05	0.04	0.01
Minimum	0.05	0.05	0.05	0.05
Maximum	0.05	0.3	0.2	0.1
Count	14	166	17	17

Figure A1b.07: Distribution and concentration of Cd at Jumbuck regolith section on 6690450N.

Cd (ppm)

Jumbuck

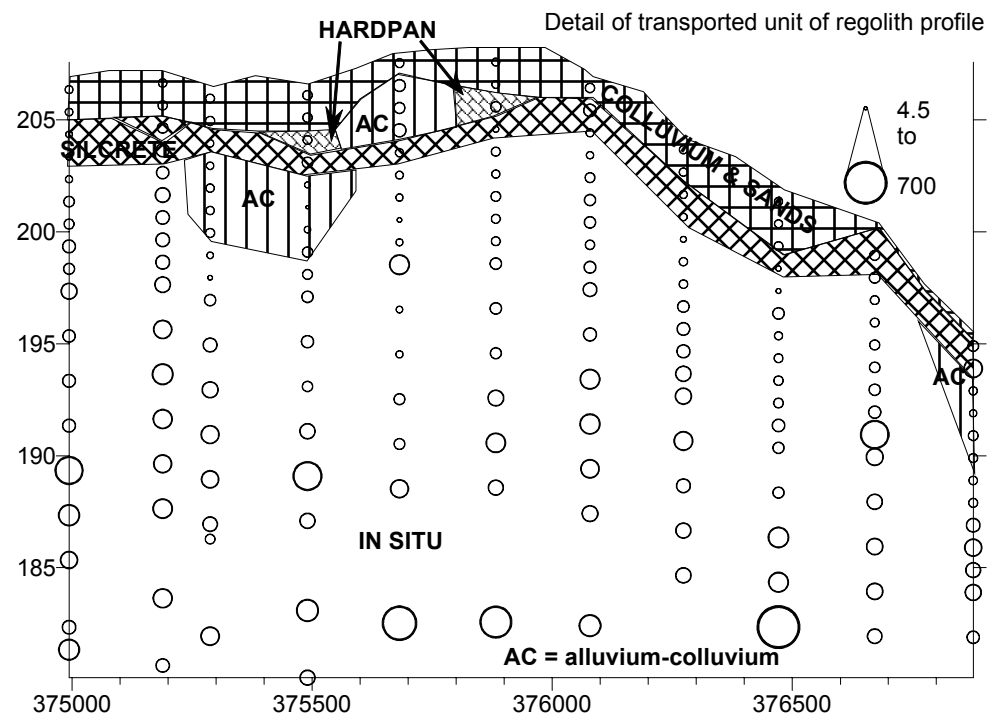
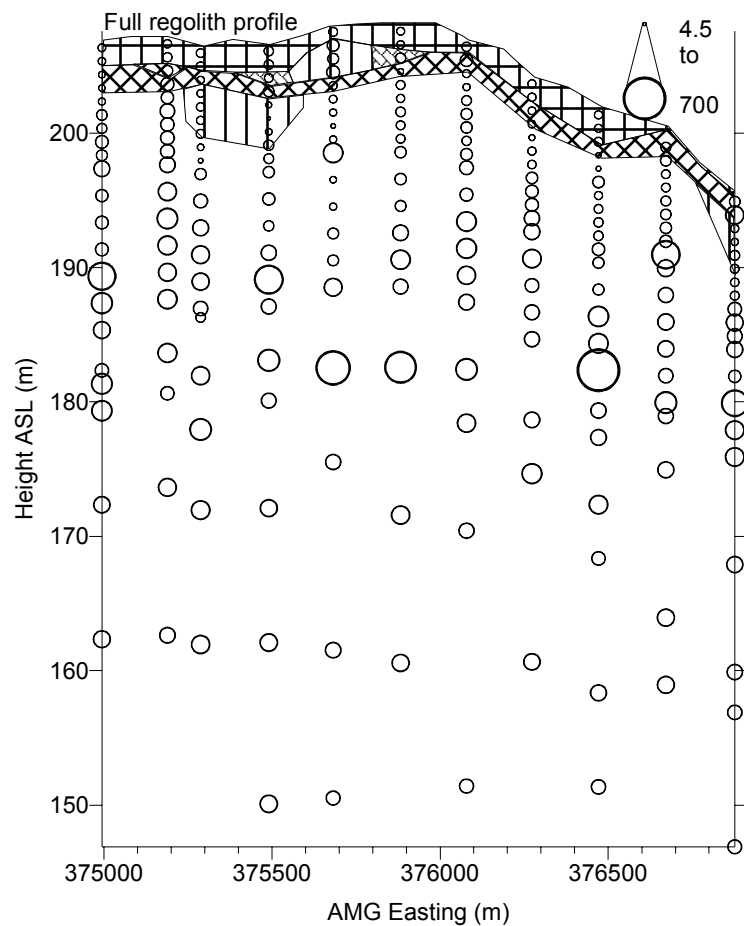
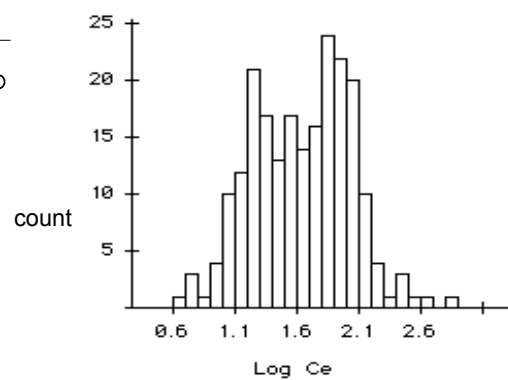


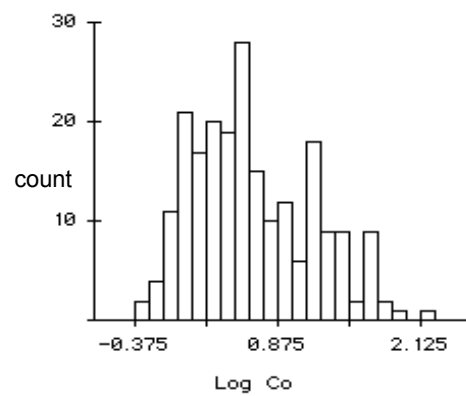
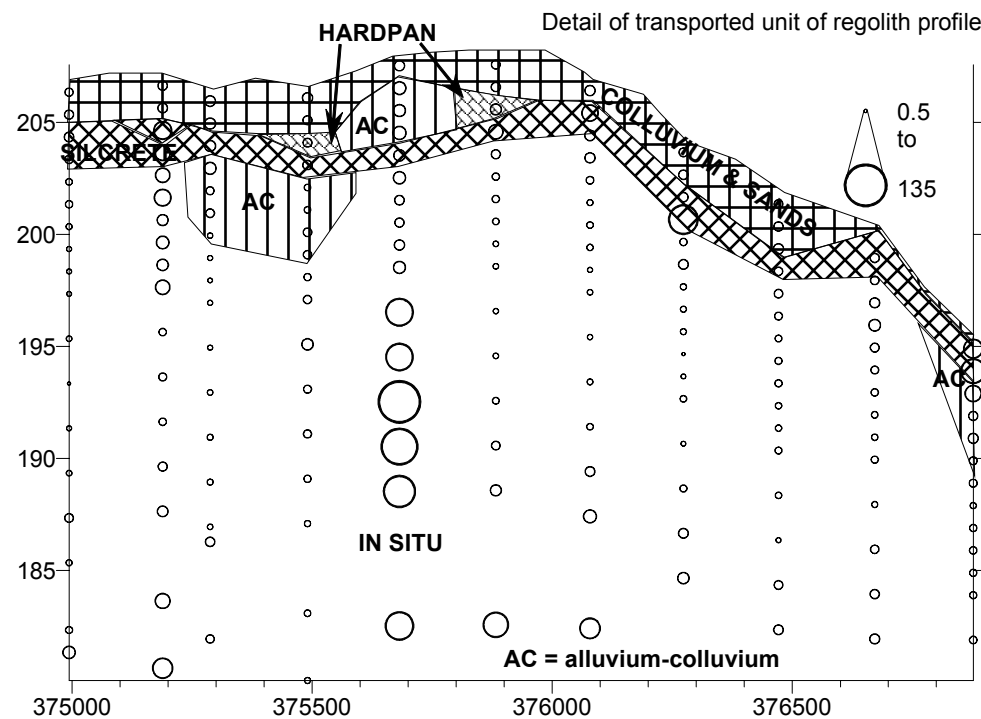
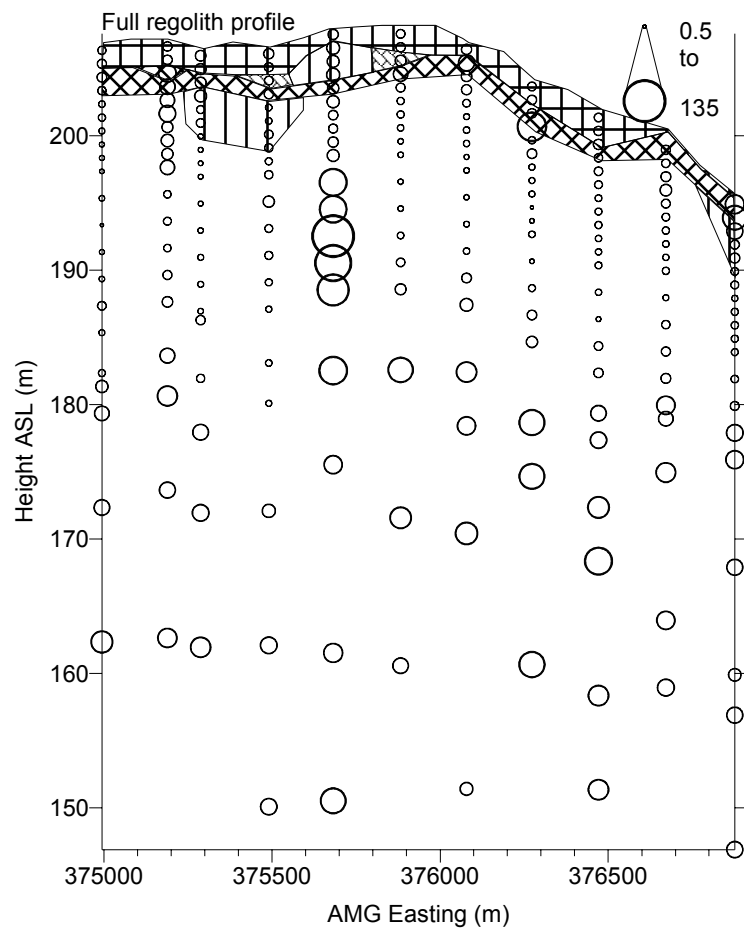
Figure A1b.08: Distribution and concentration of Ce at Jumbuck regolith section on 6690450N.

Ce (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	21	79	18	27
Std Error	3	6	1	6
Median	17	67	17	16
Std Dev	13	80	3	25
Minimum	5	6	14	7
Maximum	50	700	23	110
Count	14	166	17	17

Jumbuck

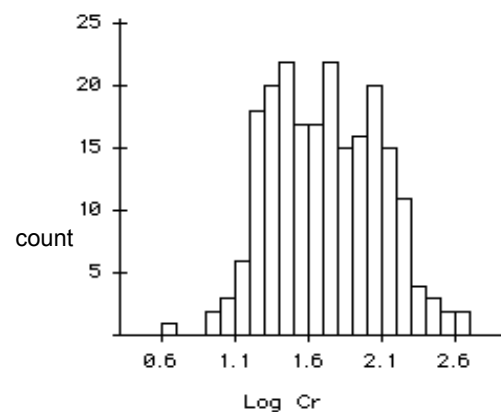
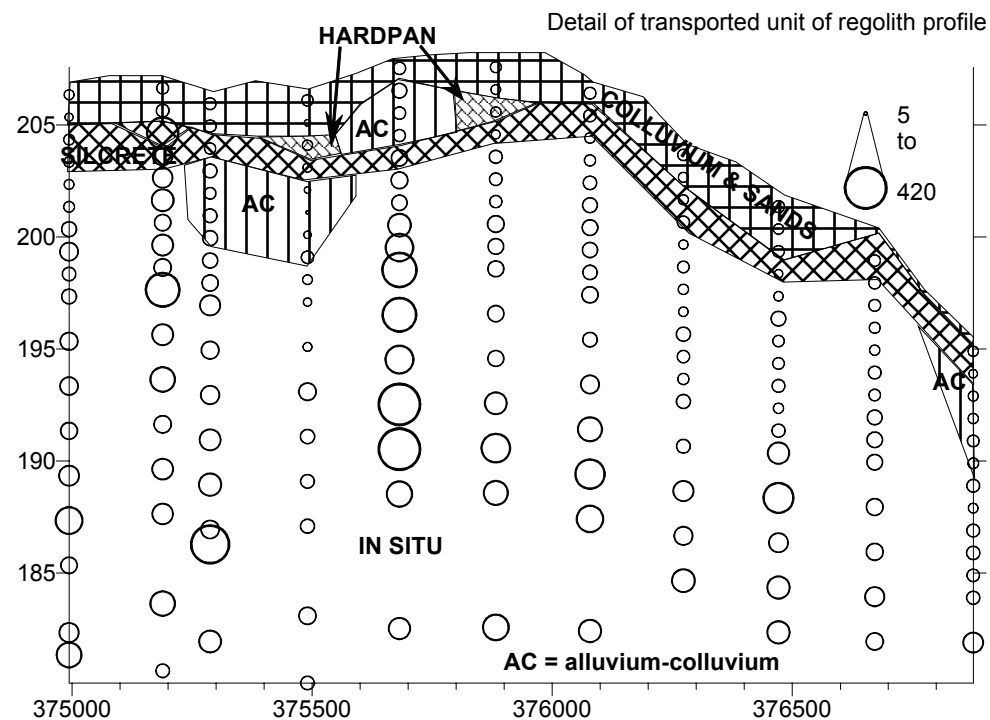
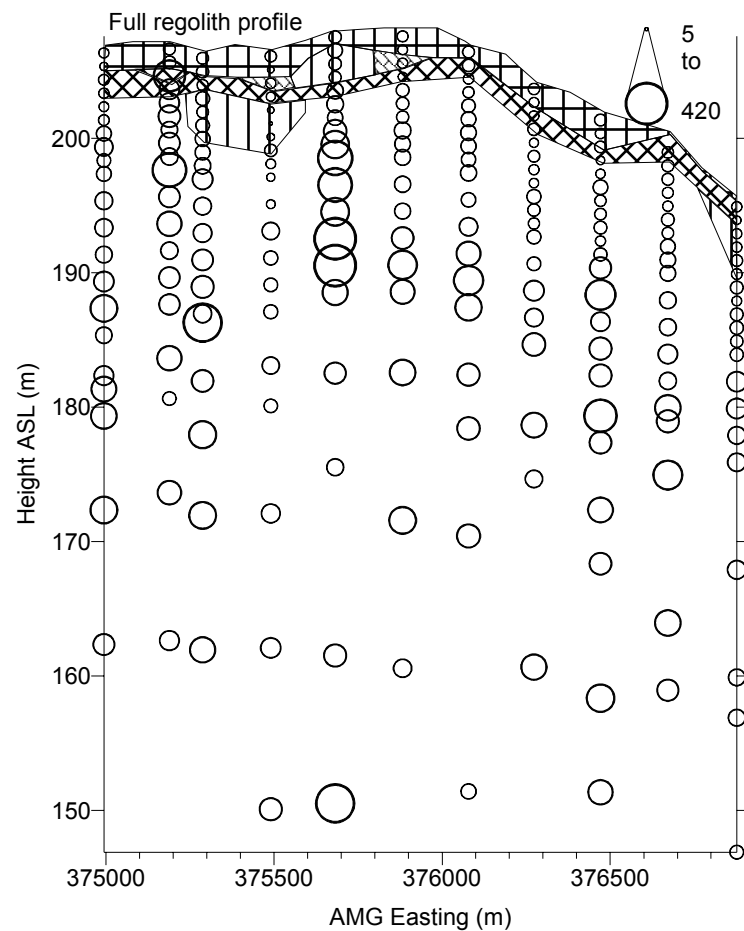


	Colluvium -alluvium	In-situ	Colluvium -sand	Silcrete
Mean	5	11	4	13
Std Error	1	1.4	0.2	3.8
Median	3	3	4	6
Std Dev	4	18	1	16
Minimum	0.9	0.5	2.7	2.8
Maximum	16	135	6	61
Count	14	166	17	17

Figure A1b.09: Distribution and concentration of Co at Jumbuck regolith section on 6690450N.

Co (ppm)

Jumbuck

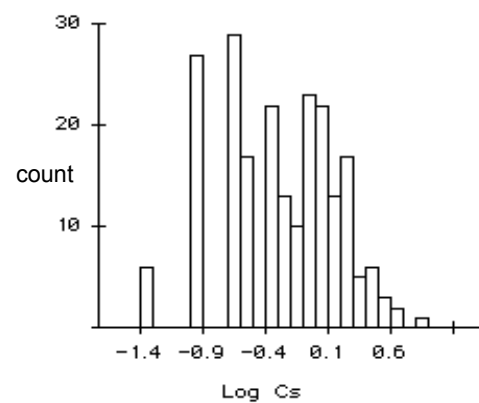
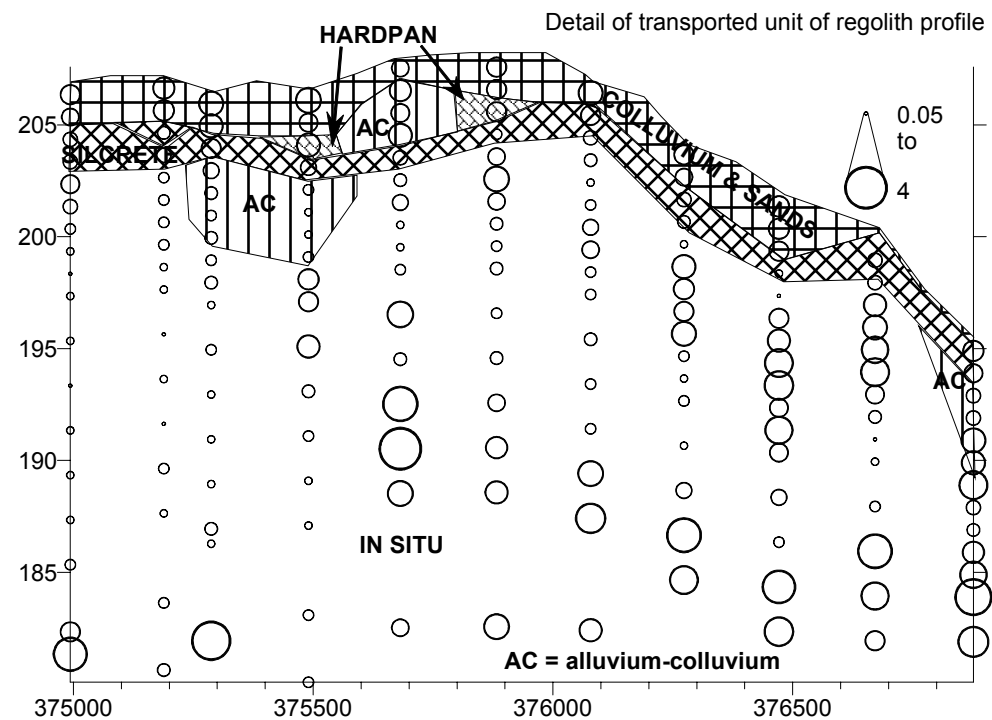
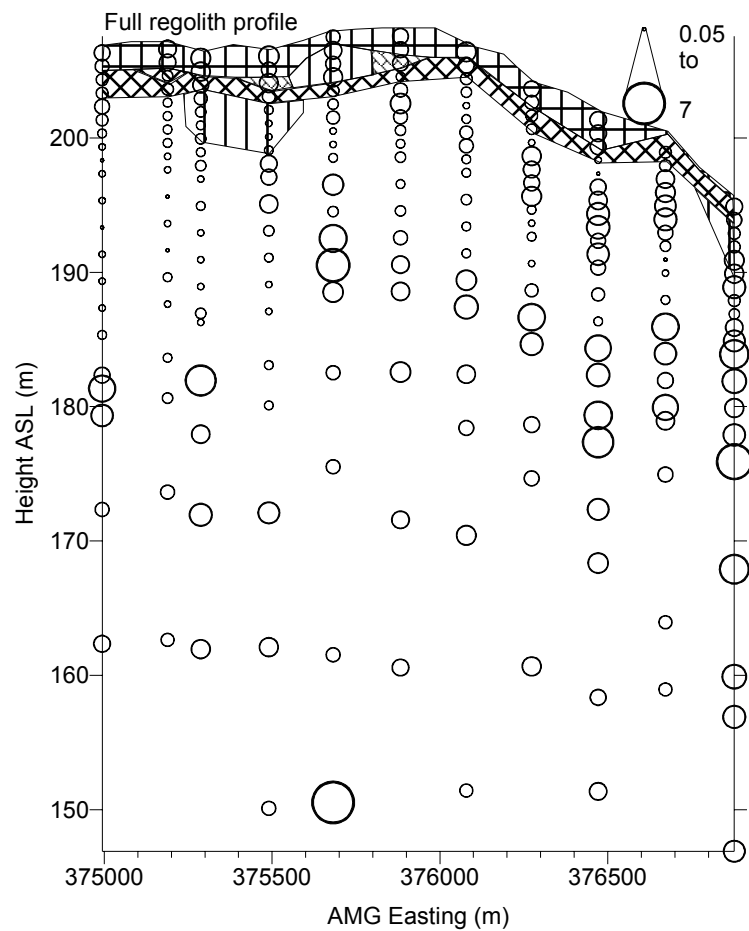


	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	25	88	22	38
Std Error	3.3	6	1	13
Median	26	66	24	21
Std Dev	12	73	6	53
Minimum	5	12	8	13
Maximum	44	420	31	230
Count	14	166	17	17

Figure A1b.10: Distribution and concentration of Cr at Jumbuck regolith section on 6690450N.

Cr (ppm)

Jumbuck

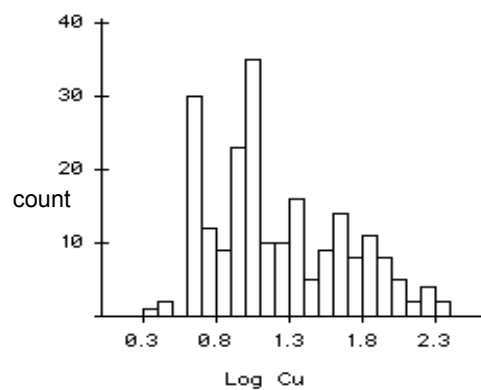
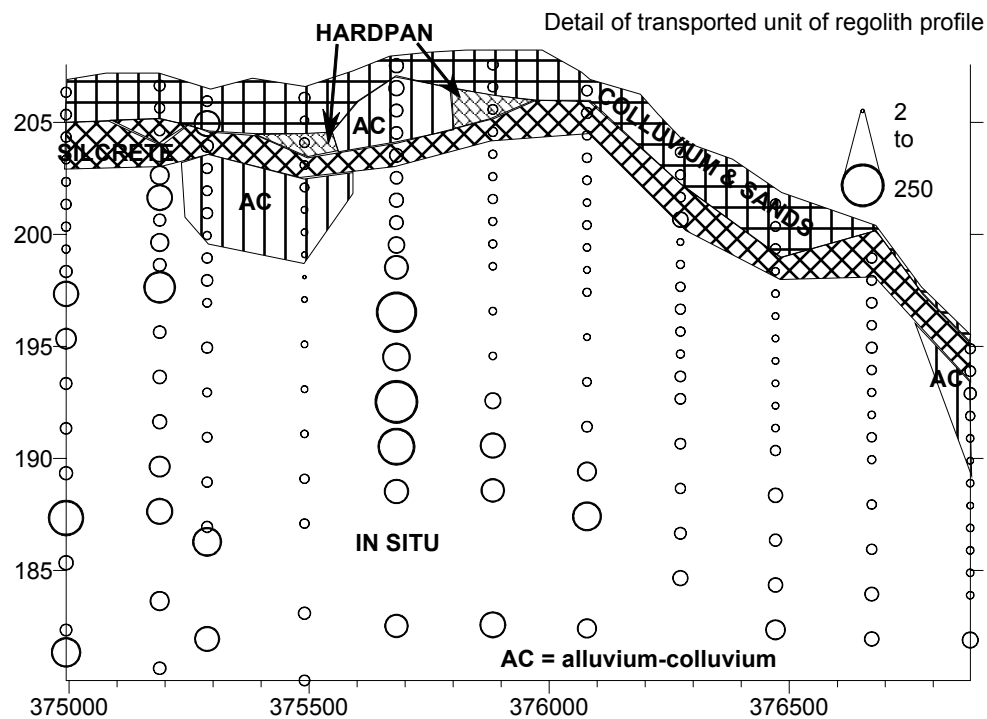
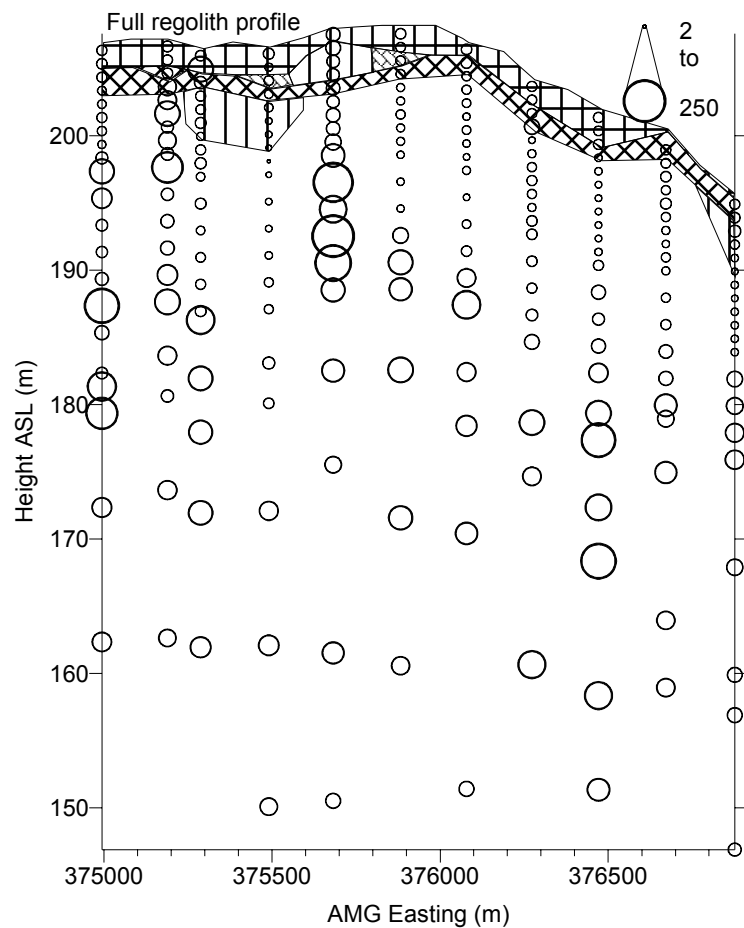


	Colluvium -alluvium	In situ	Colluvium -sand	Siltstone
Mean	0.49	0.91	0.91	0.46
Std Error	0.11	0.08	0.06	0.05
Median	0.35	0.6	0.8	0.4
Std Dev	0.40	1.01	0.25	0.22
Minimum	0.1	0.05	0.6	0.1
Maximum	1.3	7	1.4	0.9
Count	14	166	17	17

Figure A1b.11: Distribution and concentration of Cs at Jumbuck regolith section on 6690450N.

Cs (ppm)

Jumbuck

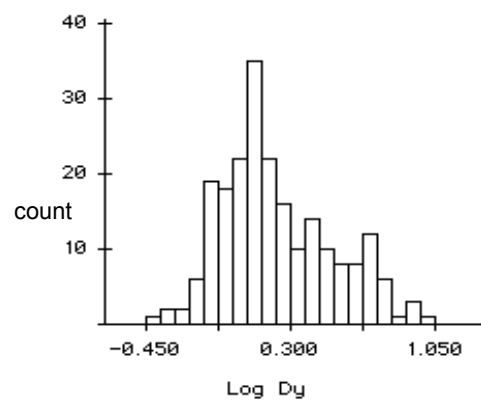
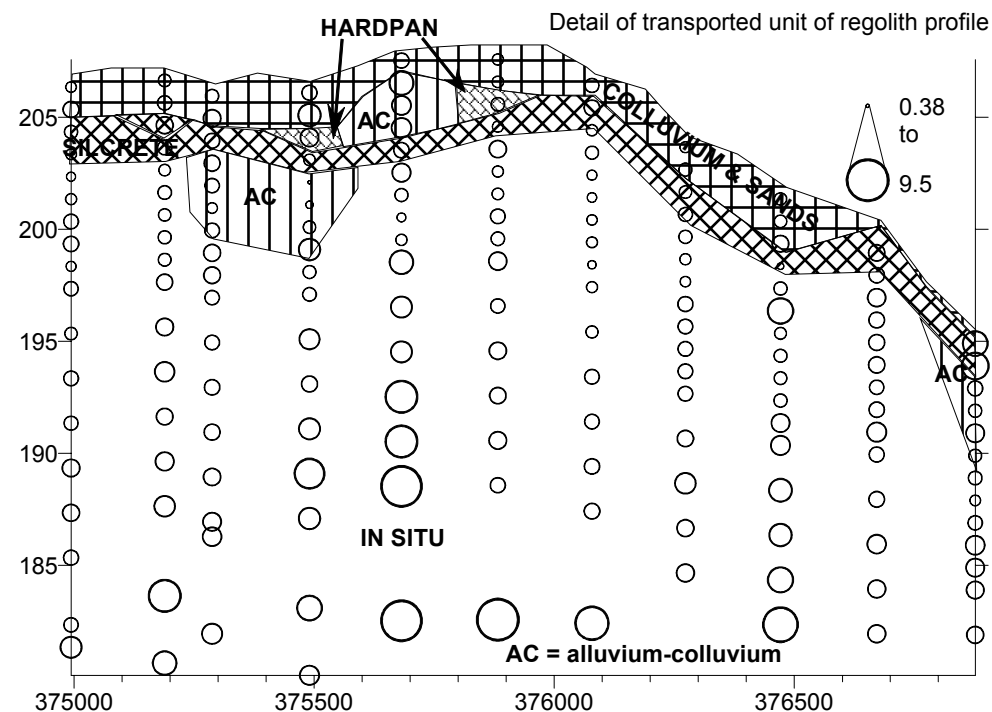
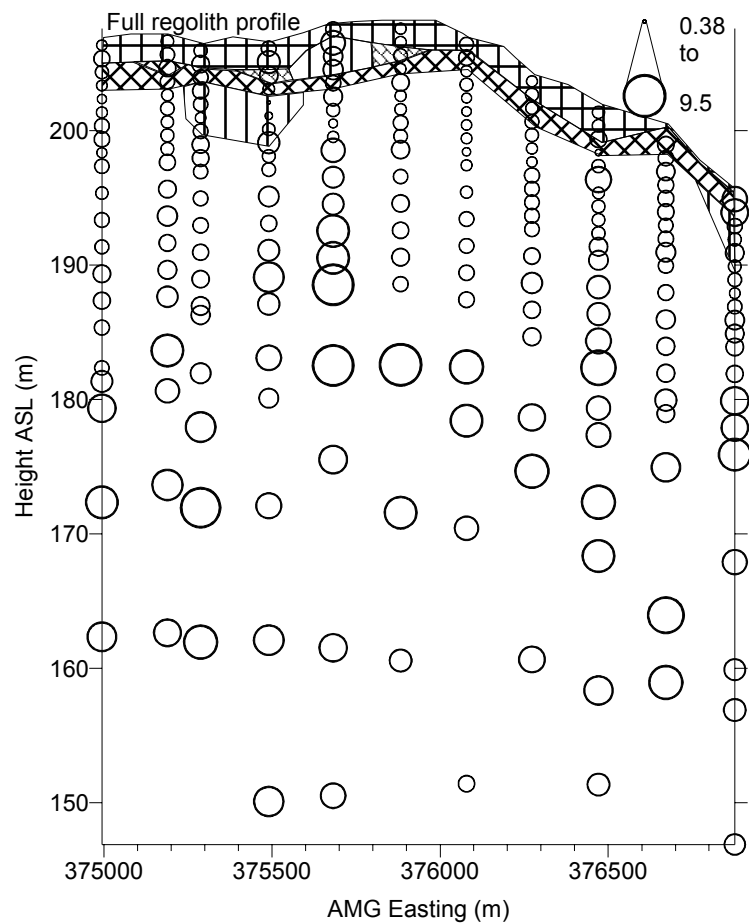


	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	10	35	15	13
Std Error	2	3	4	2
Median	8.5	16	10	10
Std Dev	6	43	18	8
Minimum	3	2	6	5
Maximum	25	250	84	38
Count	14	166	17	17

Figure A1b.12: Distribution and concentration of Cu at Jumbuck regolith section on 6690450N.

Cu (ppm)

Jumbuck



	Colluvium -alluvium	In situ	Colluvium -sand	Silicate
Mean	1	2.41	1.16	1.36
Std Error	0.2	0.14	0.12	0.22
Median	1	1.65	1	1.15
Std Dev	1	1.86	0.48	0.90
Minimum	0.4	0.54	0.71	0.45
Maximum	3.1	9.5	2.7	3.9
Count	14	166	17	17

Jumbuck

Figure A1b.13: Distribution and concentration of Dy at Jumbuck regolith section on 6690450N.

Dy (ppm)

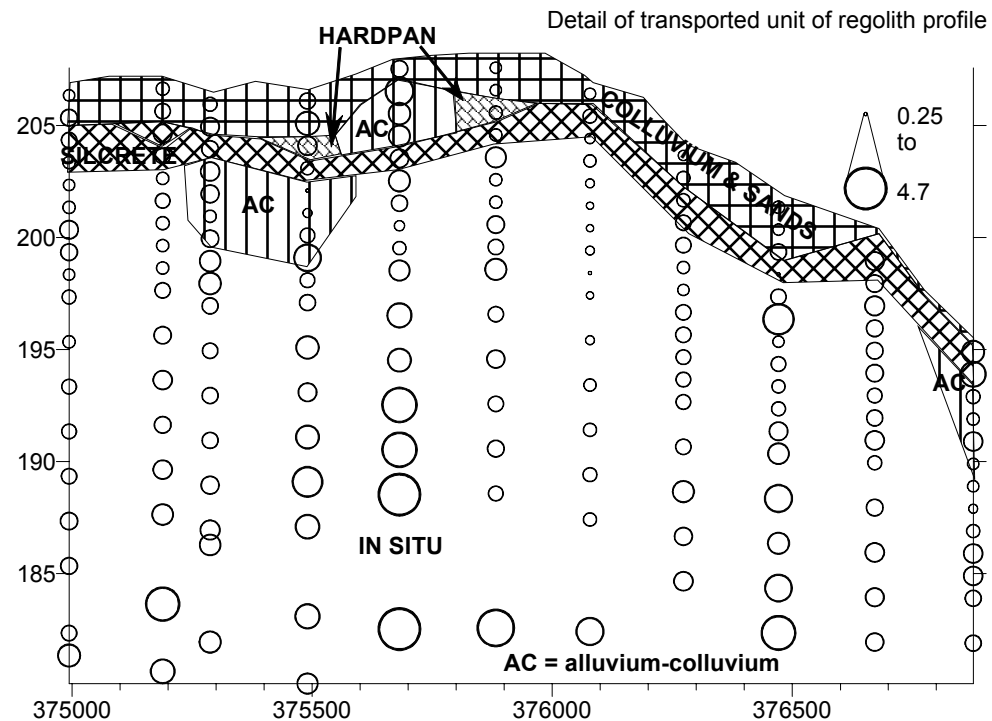
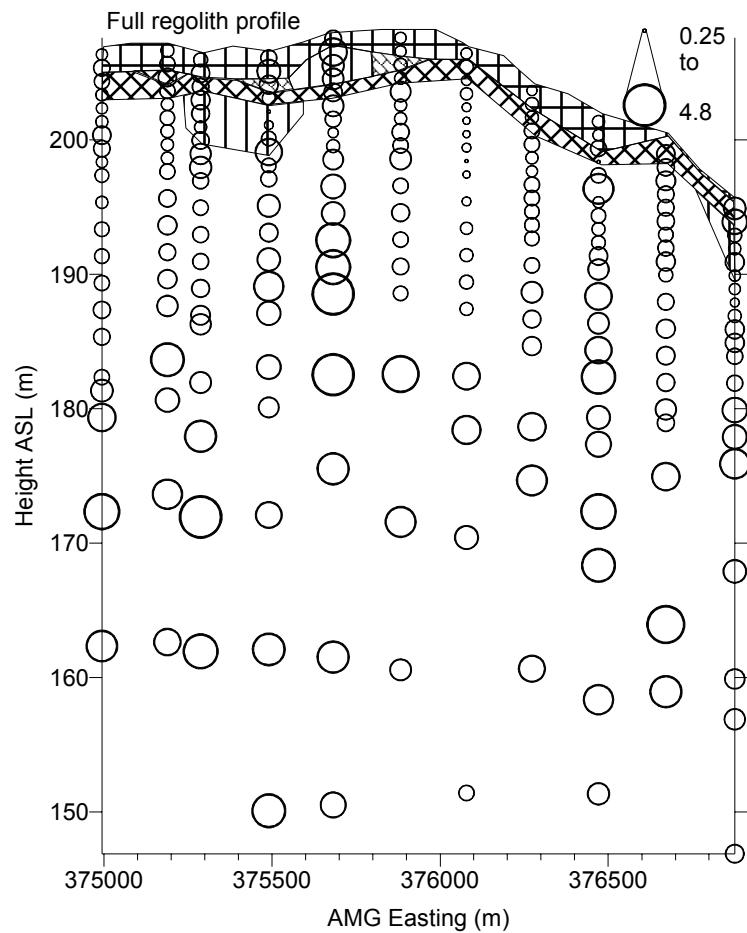
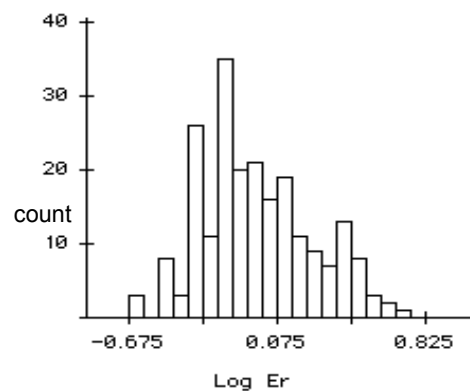


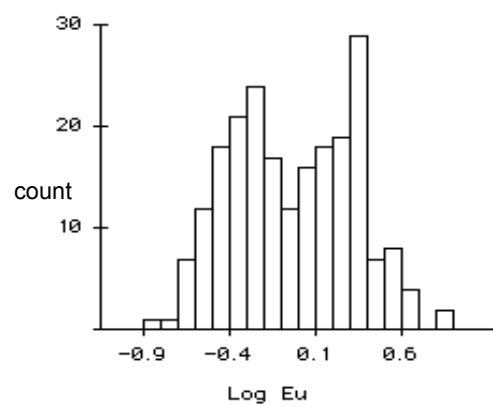
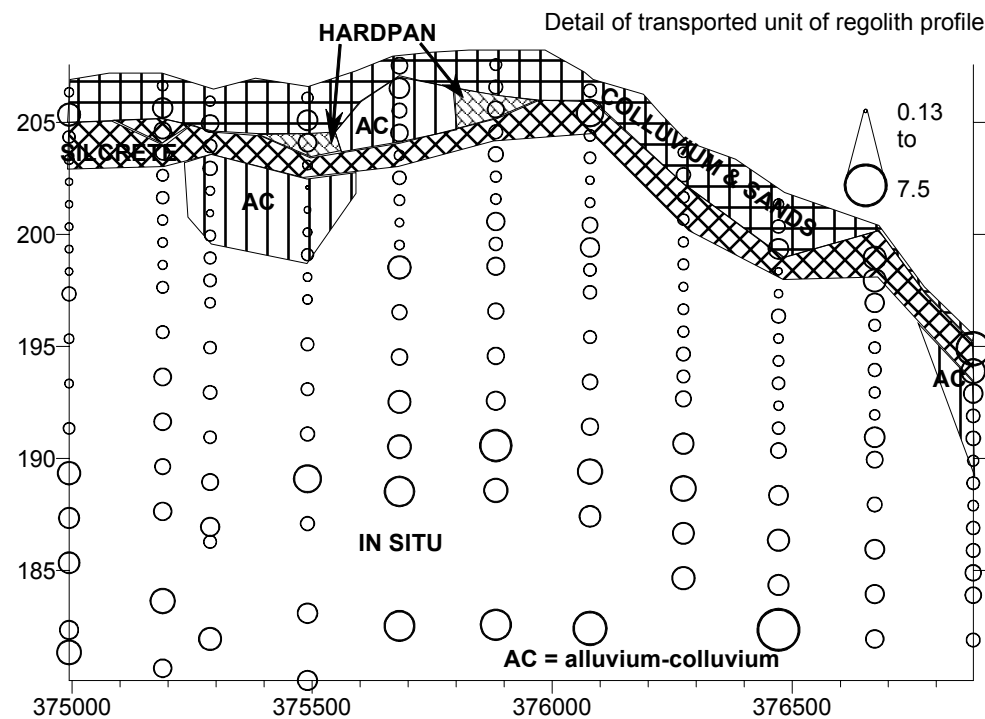
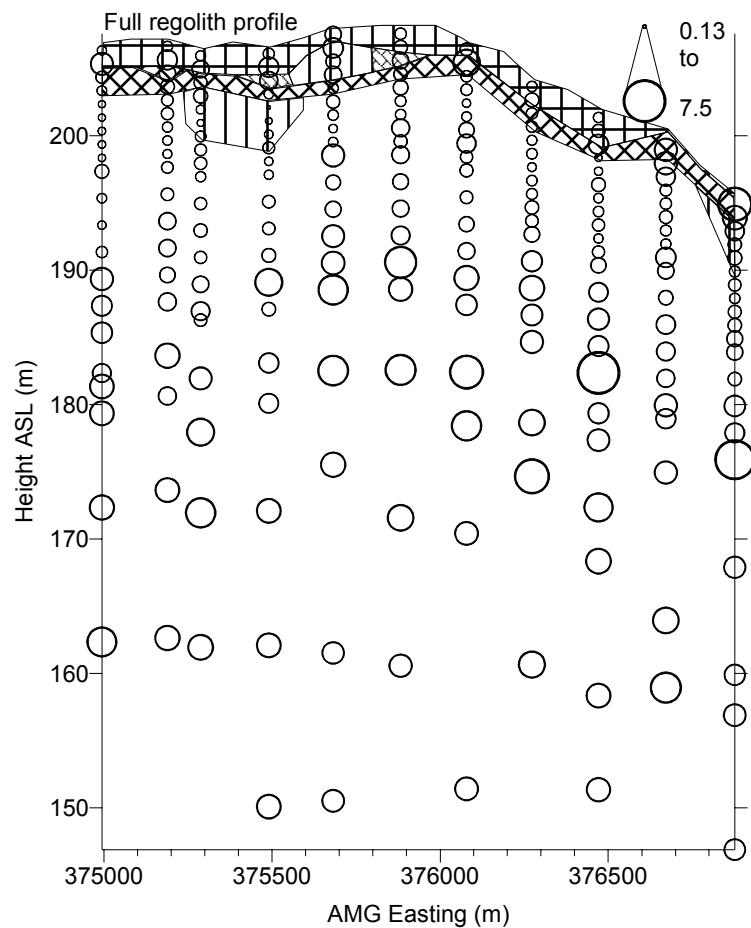
Figure A1b.14: Distribution and concentration of Er at Jumbuck regolith section on 6690450N.

Er (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	0.94	1.29	0.65	0.76
Std Error	0.15	0.07	0.07	0.09
Median	0.875	0.95	0.55	0.7
Std Dev	0.56	0.94	0.27	0.35
Minimum	0.25	0.25	0.4	0.25
Maximum	2.1	4.8	1.5	1.7
Count	14	166	17	17

Jumbuck



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	0.63	1.41	0.82	1.18
Std Error	0.12	0.09	0.13	0.30
Median	0.575	1.075	0.62	0.62
Std Dev	0.44	1.19	0.52	1.22
Minimum	0.13	0.21	0.31	0.21
Maximum	1.55	7.5	1.95	4.7
Count	14	166	17	17

Jumbuck

Figure A1b.15: Distribution and concentration of Eu at Jumbuck regolith section on 6690450N.

Eu (ppm)

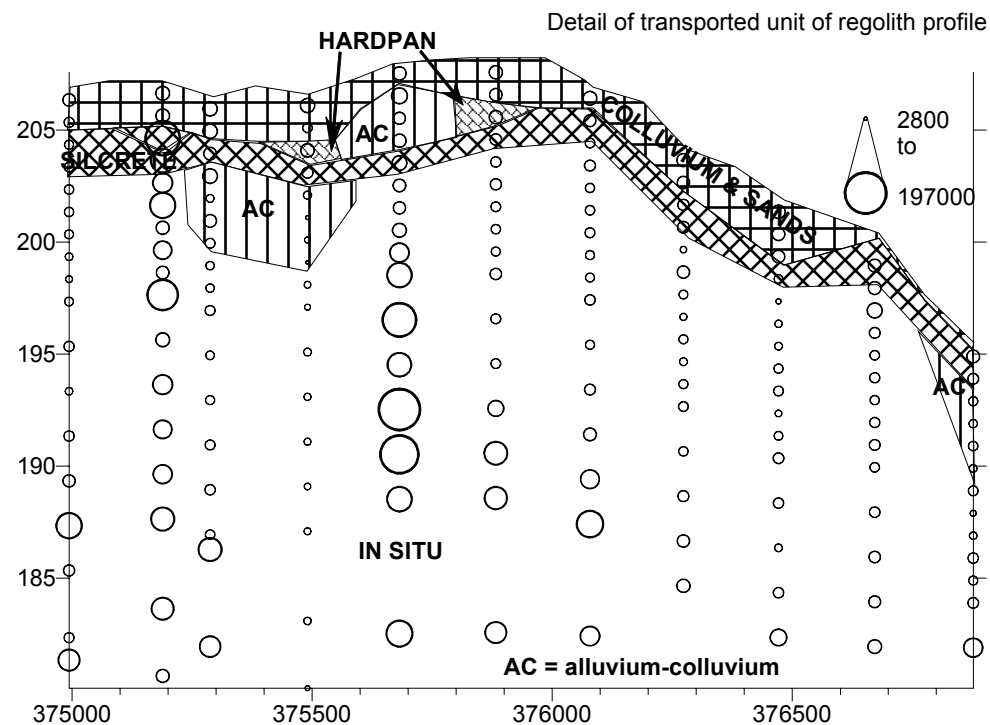
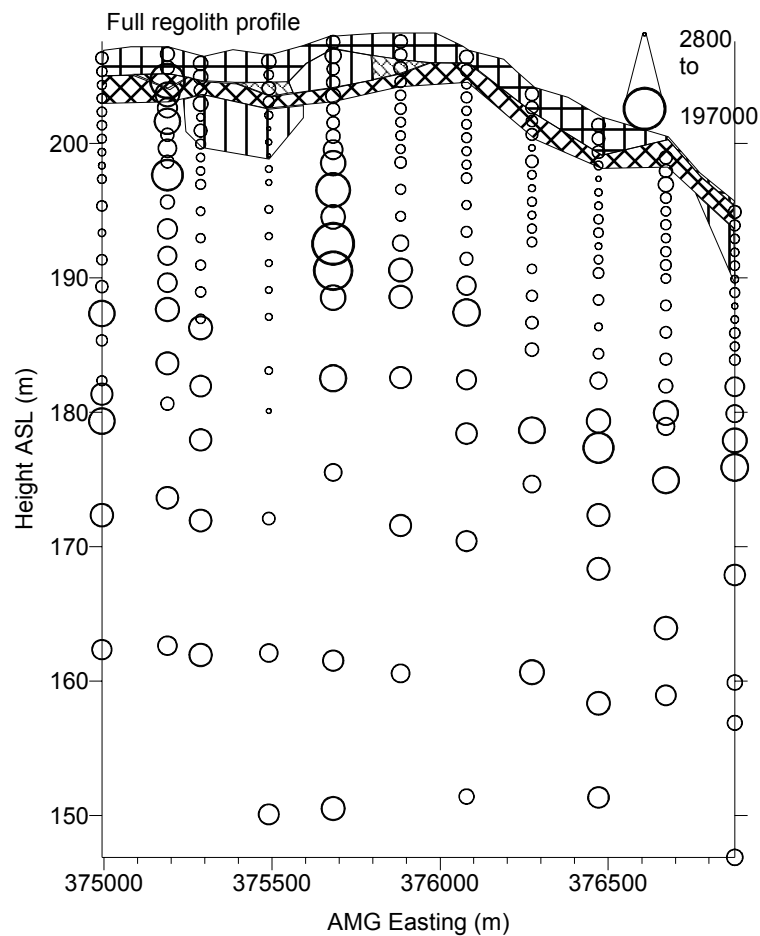
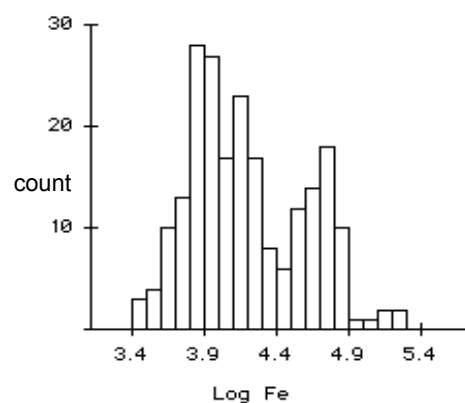


Figure A1b.16: Distribution and concentration of Fe at Jumbuck regolith section on 6690450N.

Fe (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	9939	27273	15382	21859
Std Error	1770	2271	760	7496
Median	7675	13550	16200	12400
Std Dev	6625	29260	3135	30909
Minimum	2800	3150	7900	6800
Maximum	24000	2E+05	19100	132000
Count	14	166	17	17

Jumbuck

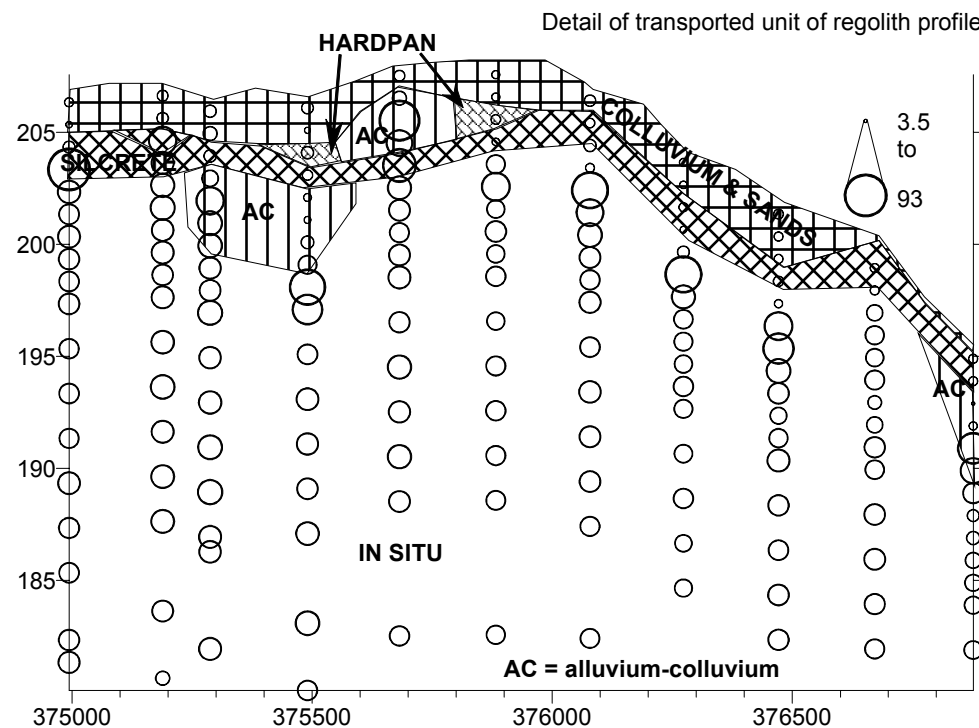
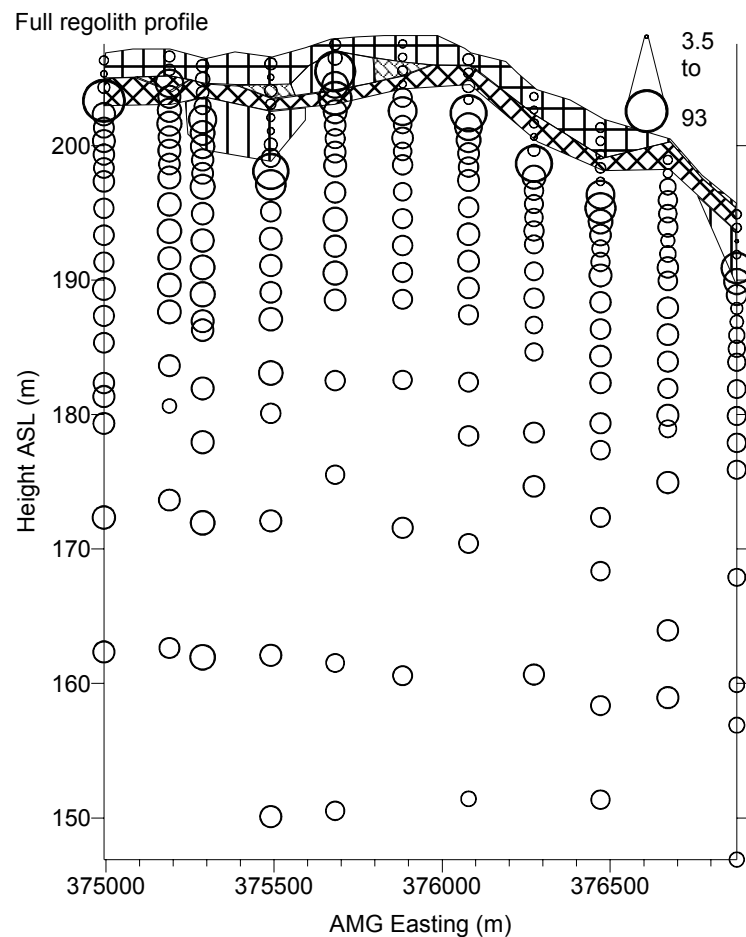
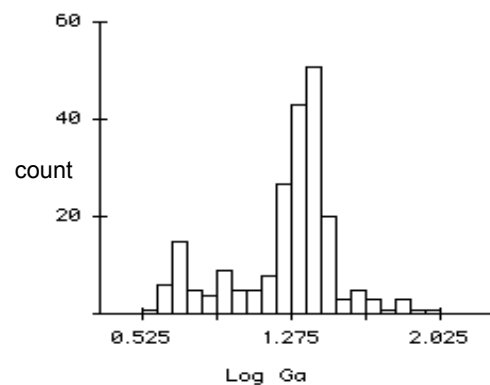


Figure A1b.17: Distribution and concentration of Ga at Jumbuck regolith section on 6690450N.

Ga (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	24	23	6	17
Std Error	6	0.7	0.4	6
Median	16	22	6	7
Std Dev	23	9	2	24
Minimum	3.5	5	4	4.2
Maximum	85	69	10.5	93
Count	14	106	17	17

Jumbuck

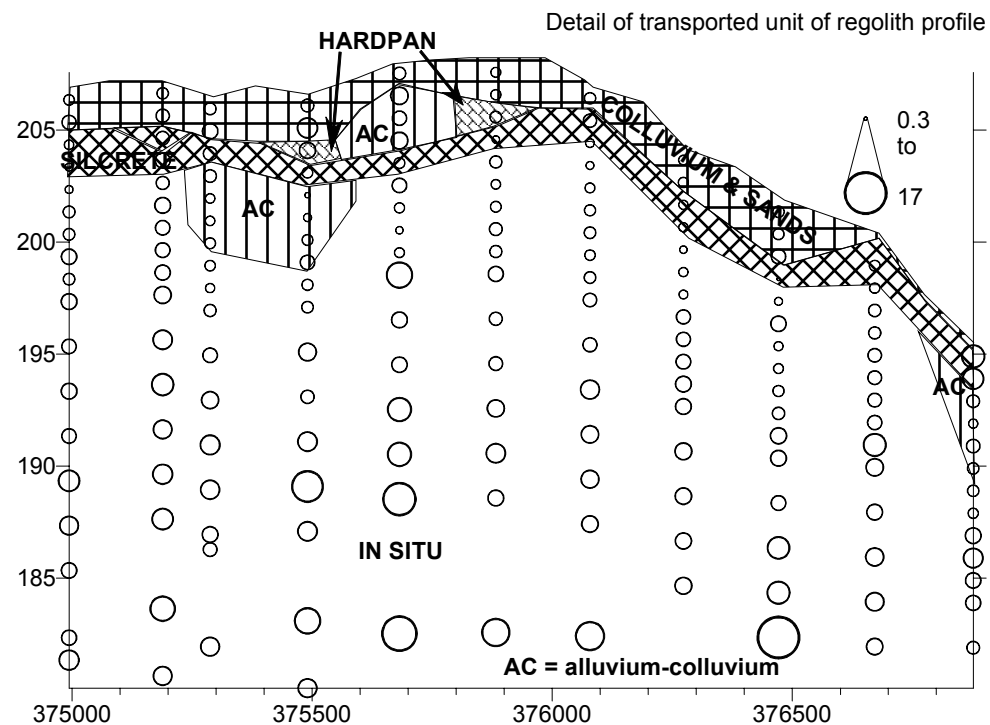
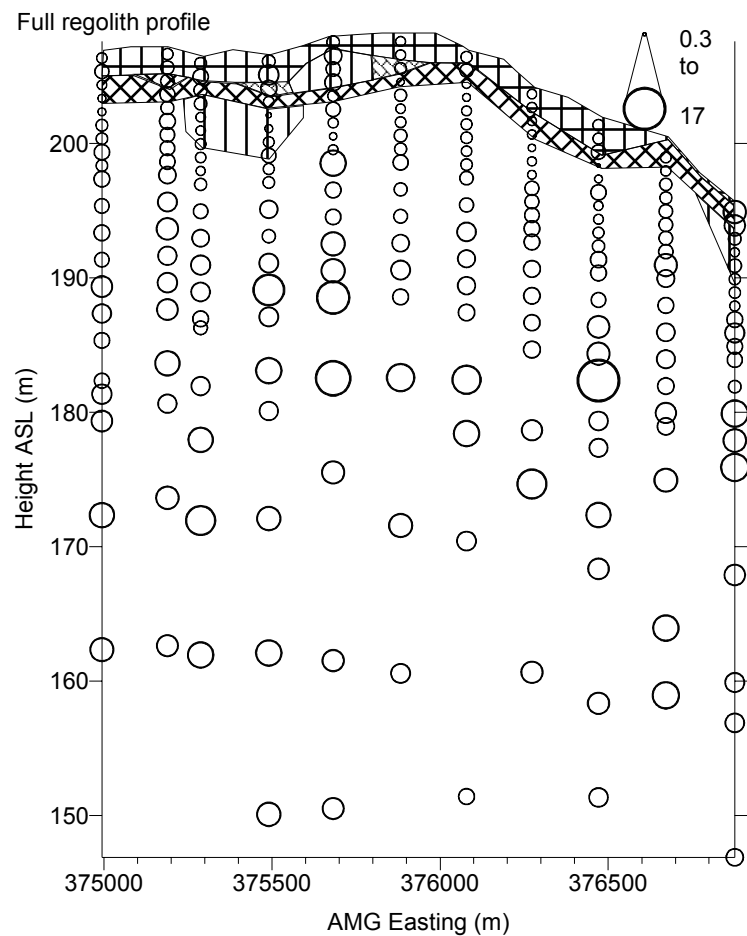
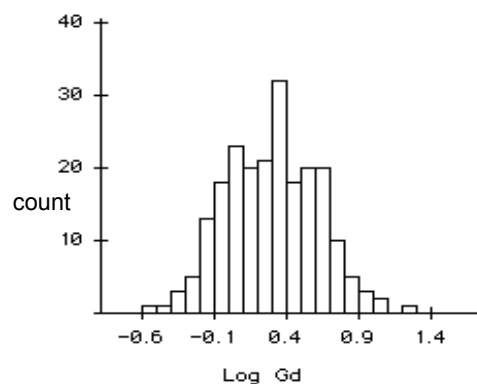


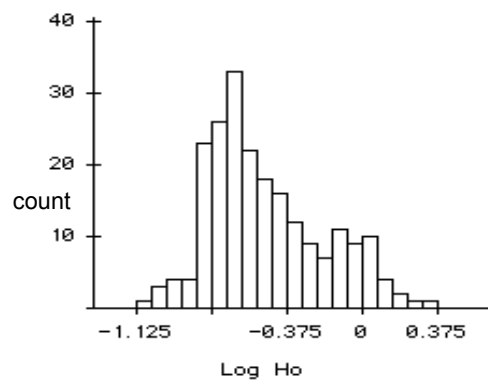
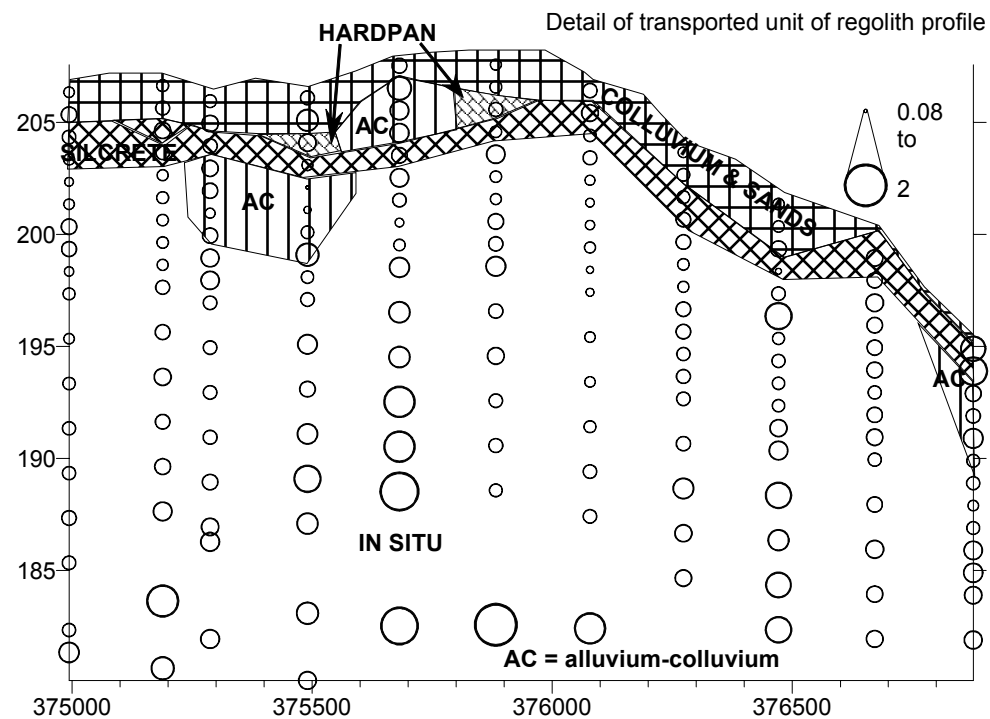
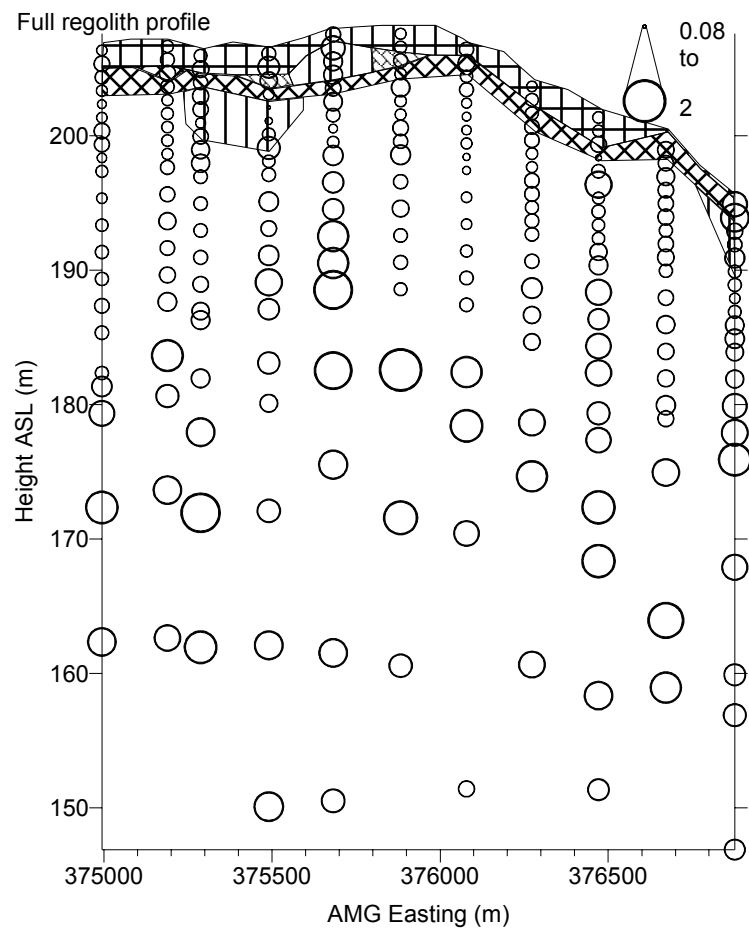
Figure A1b.18: Distribution and concentration of Gd at Jumbuck regolith section on 6690450N.

Gd (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	1.3	3.0	1.3	1.3
Std Error	0.2	0.2	0.2	0.3
Median	1.13	2.30	1.05	0.90
Std Dev	0.68	2.25	0.67	1.17
Minimum	0.35	0.5	0.75	0.3
Maximum	2.6	17	3.5	4.6
Count	14	166	17	17

Jumbuck



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	0.31	0.46	0.23	0.29
Std Error	0.04	0.03	0.02	0.05
Median	0.28	0.32	0.2	0.24
Std Dev	0.16	0.36	0.09	0.20
Minimum	0.08	0.1	0.15	0.09
Maximum	0.63	2	0.52	0.88
Count	14	166	17	17

Jumbuck

Figure A1b.19: Distribution and concentration of Ho at Jumbuck regolith section on 6690450N.

Ho (ppm)

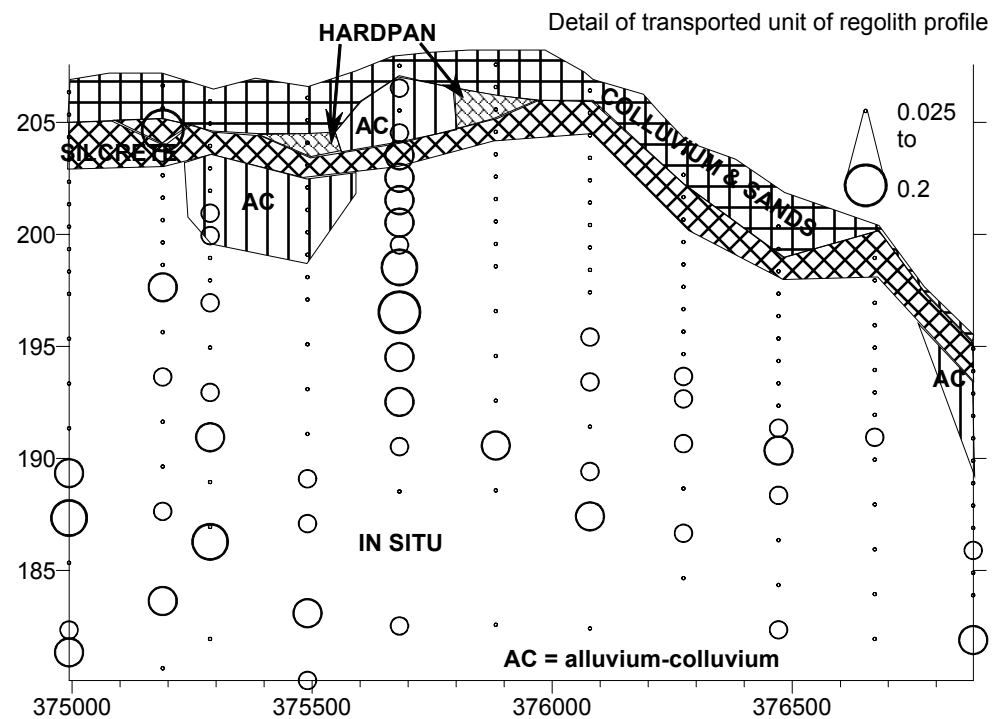
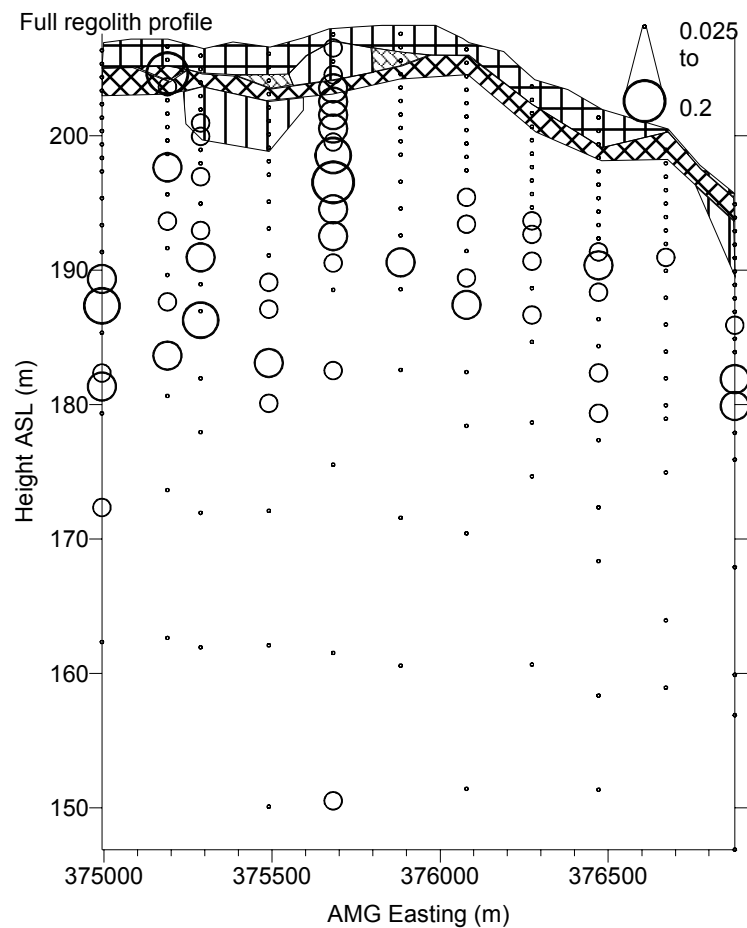
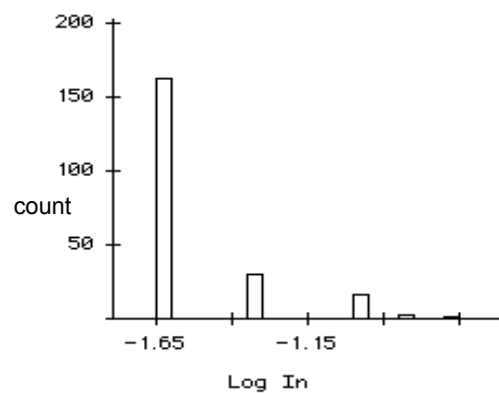


Figure A1b.20: Distribution and concentration of In at Jumbuck regolith section on 6690450N.

In (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	0.03	0.04	0.03	0.04
Std Error	0.00	0.00	0.00	0.01
Median	0.025	0.03	0.03	0.03
Std Dev	0.01	0.03	0.00	0.05
Minimum	0.025	0.03	0.03	0.03
Maximum	0.05	0.2	0.025	0.2
Count	14	166	17	17

Jumbuck

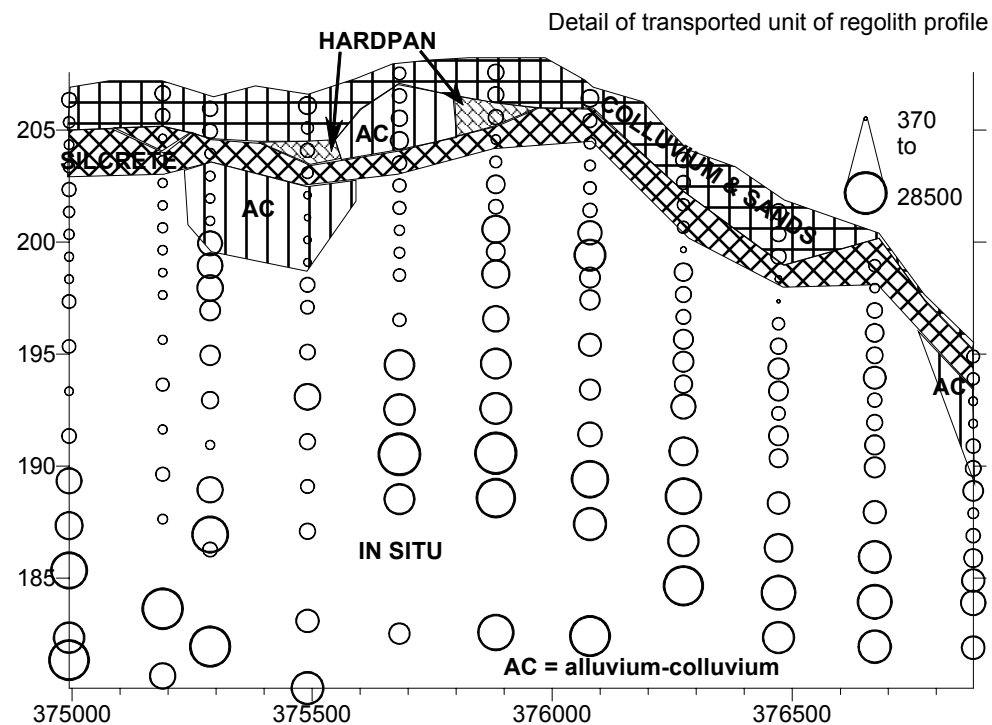
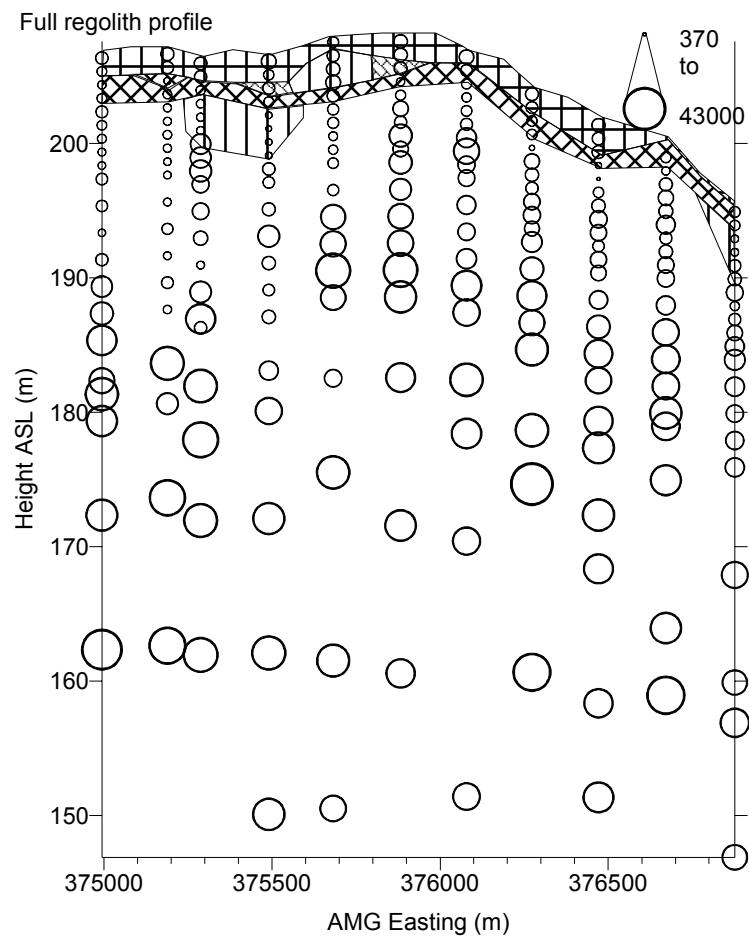
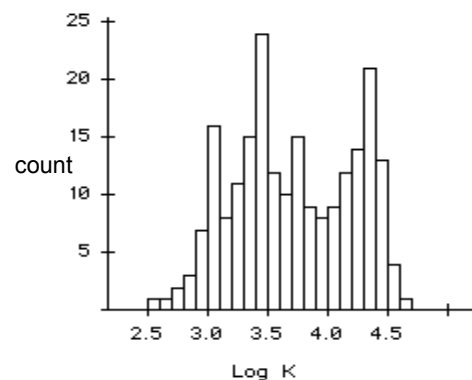


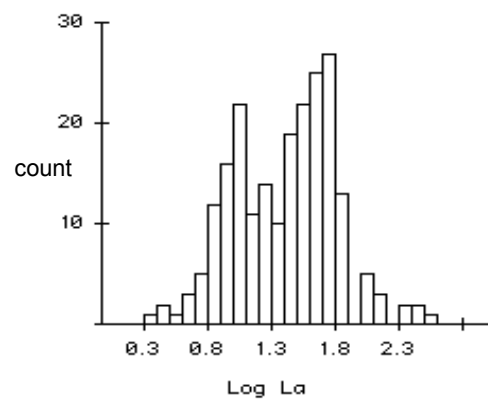
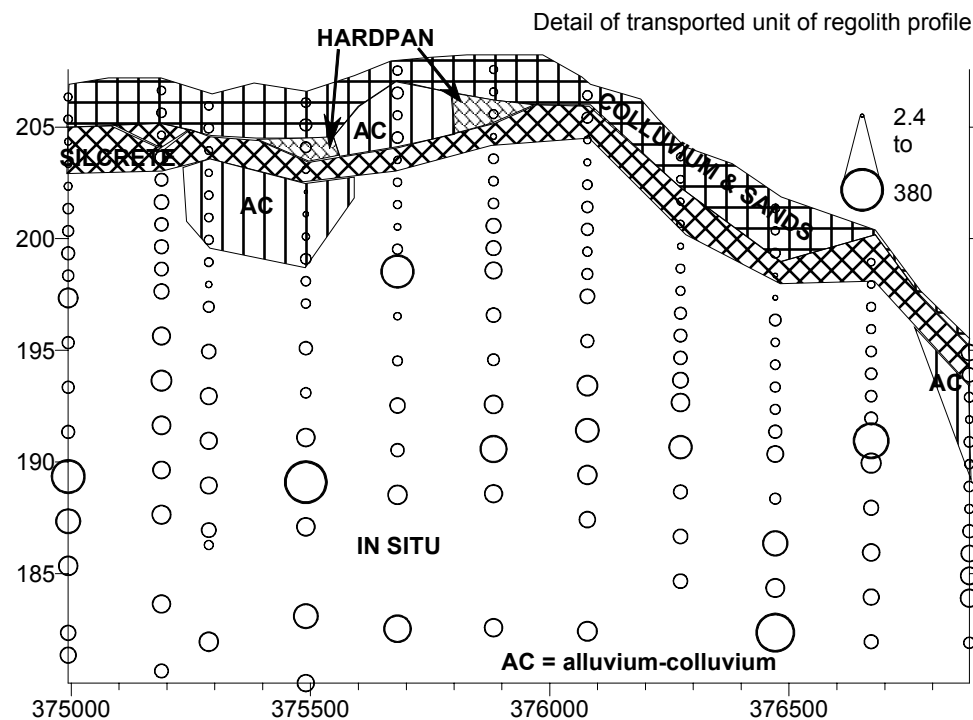
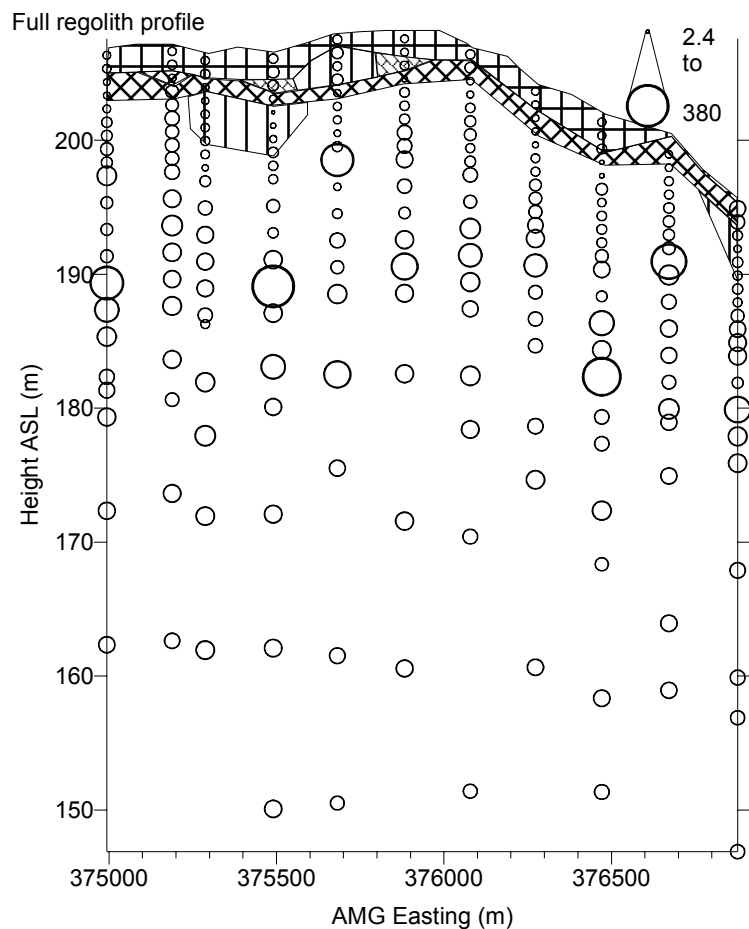
Figure A1b.21: Distribution and concentration of K at Jumbuck regolith section on 6690450N.

K (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	2132	11375	2959	1582
Std Error	603	751	173	133
Median	1075	7650	3000	1650
Std Dev	2254	9680	711	549
Minimum	550	370	1600	600
Maximum	8800	43000	4350	2650
Count	14	166	17	17

Jumbuck



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	11	47	11	12
Std Error	1	4	1	3
Median	10	37	10	7
Std Dev	6	50	3	12
Minimum	2.4	3	7.5	2.8
Maximum	20.5	380	21.5	44.5
Count	14	166	17	17

Figure A1b.22: Distribution and concentration of La at Jumbuck regolith section on 6690450N.

La (ppm)

Jumbuck

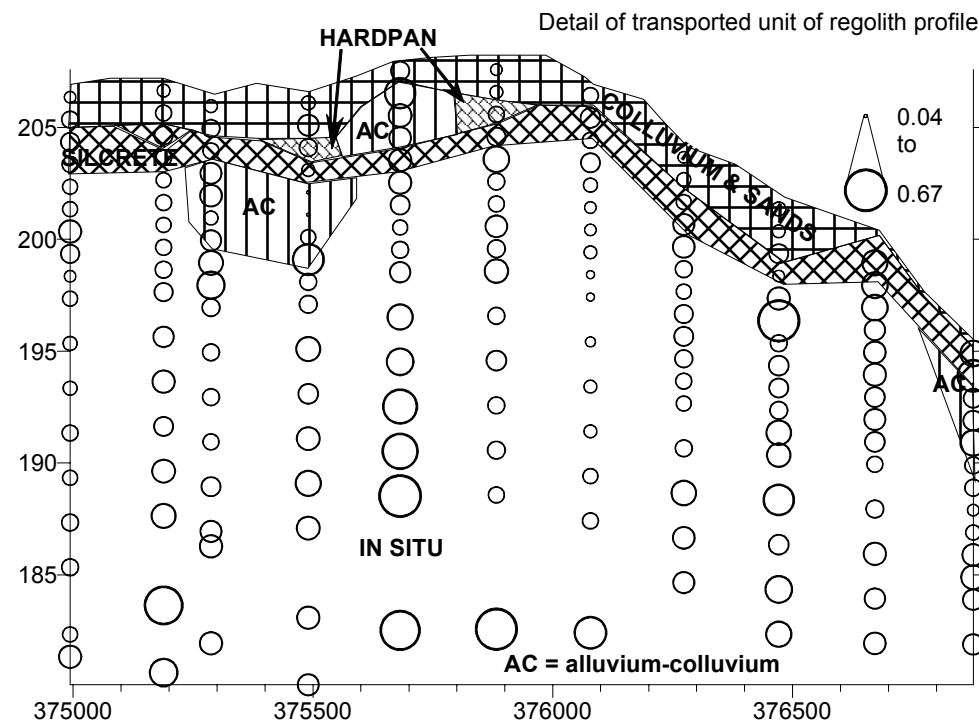
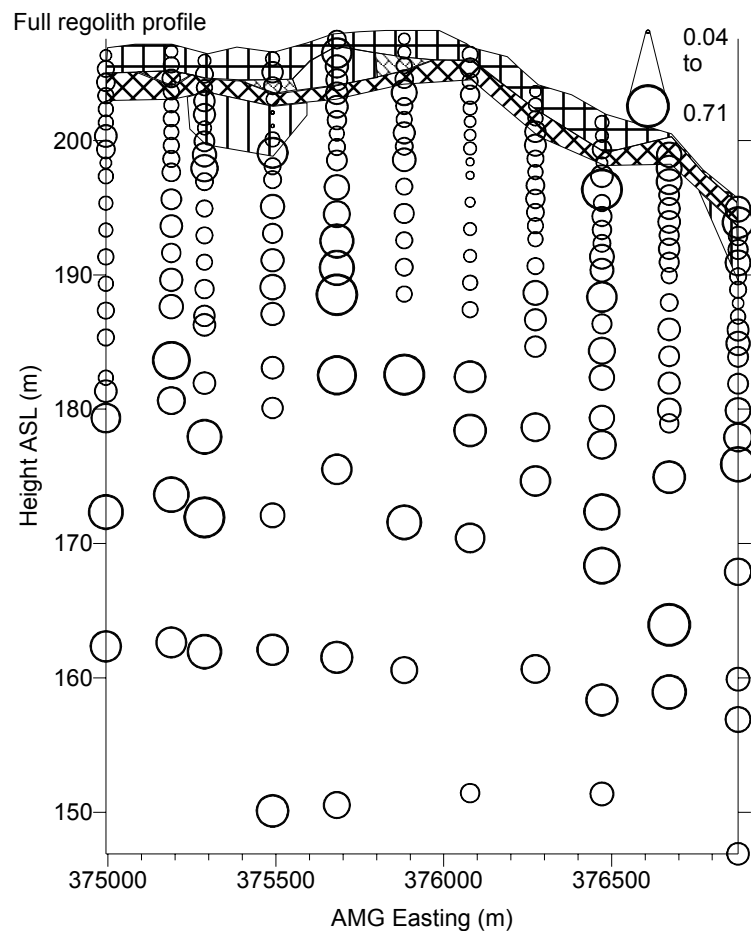
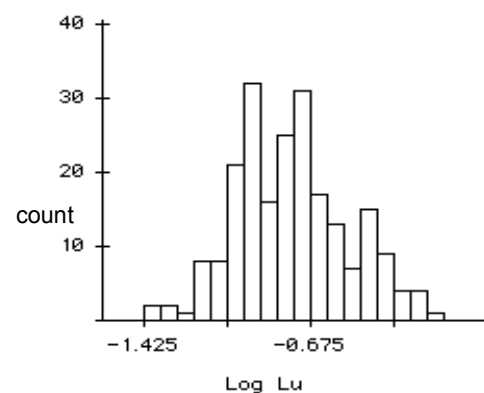


Figure A1b.23: Distribution and concentration of Lu at Jumbuck regolith section on 6690450N.

Lu (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	0.18	0.22	0.10	0.17
Std Error	0.03	0.01	0.01	0.02
Median	0.18	0.19	0.09	0.14
Std Dev	0.10	0.14	0.03	0.08
Minimum	0.04	0.05	0.07	0.07
Maximum	0.37	0.71	0.18	0.39
Count	14	166	17	17

Jumbuck

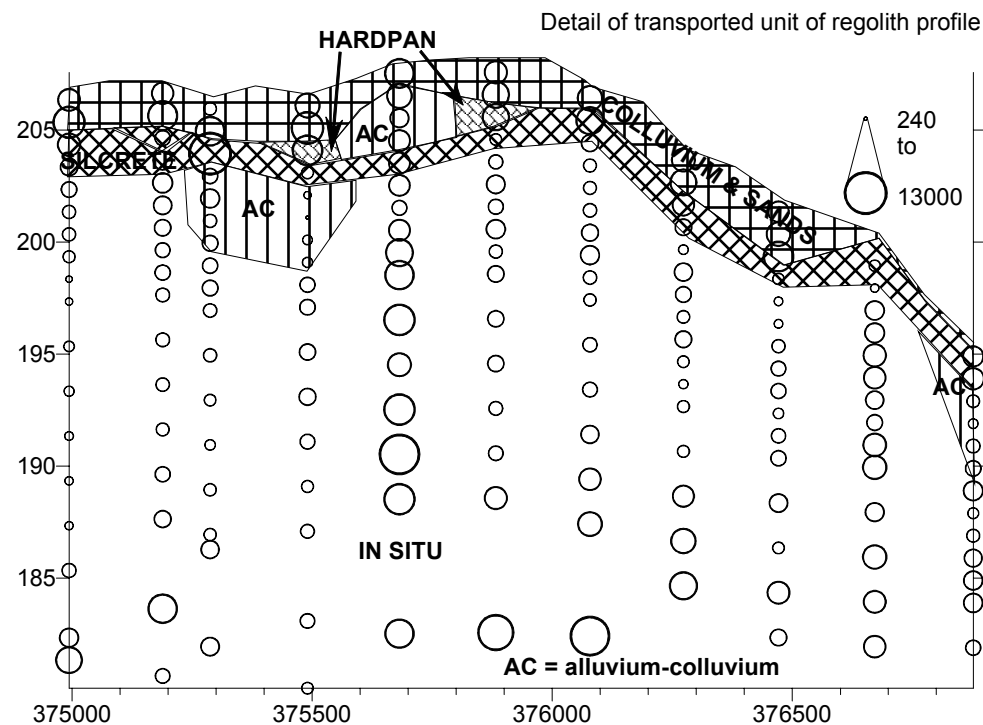
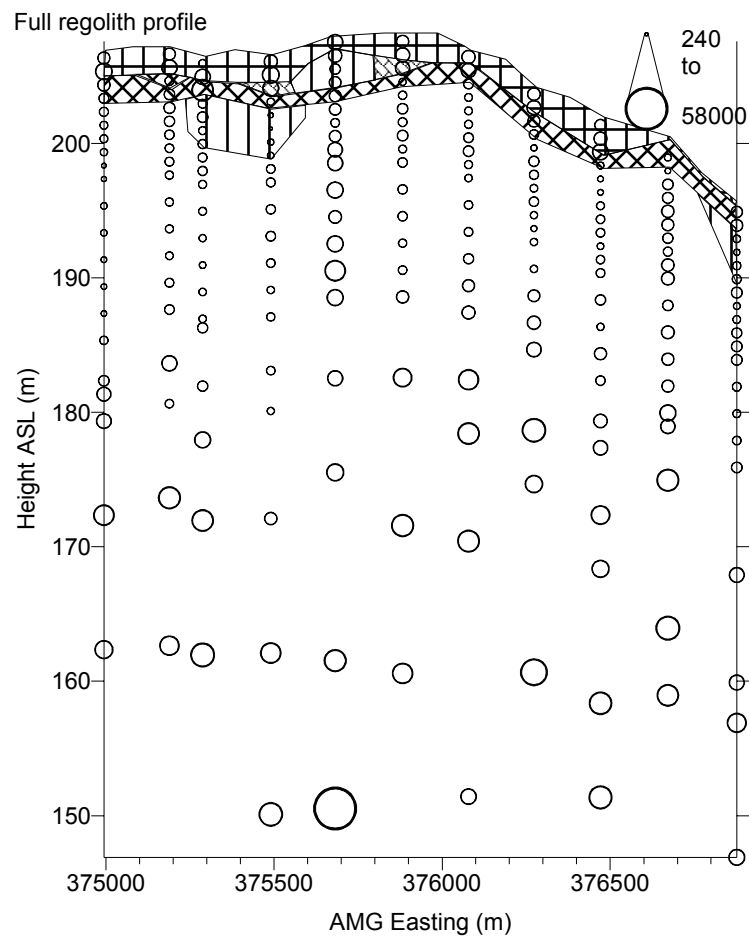
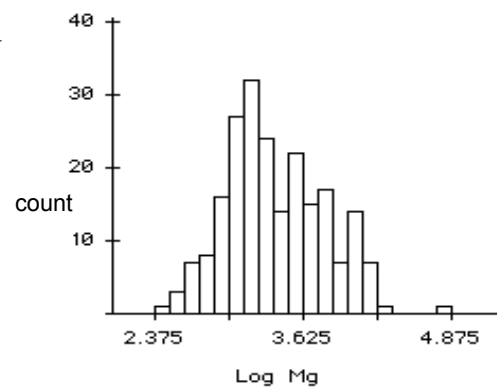


Figure A1b.24: Distribution and concentration of Mg at Jumbuck regolith section on 6690450N.

Mg (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	1488	4280	4612	2778
Std Error	306	462	408	708
Median	1150	2100	4250	1950
Std Dev	1143	5952	1684	2918
Minimum	240	330	1000	470
Maximum	4250	58000	7350	13000
Count	14	166	17	17

Jumbuck

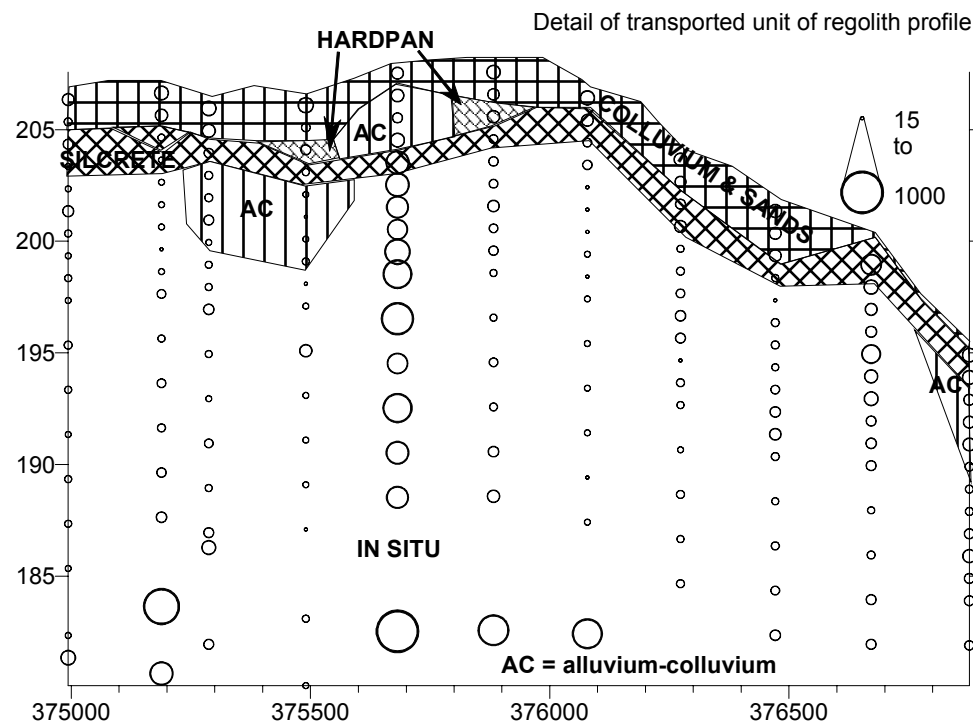
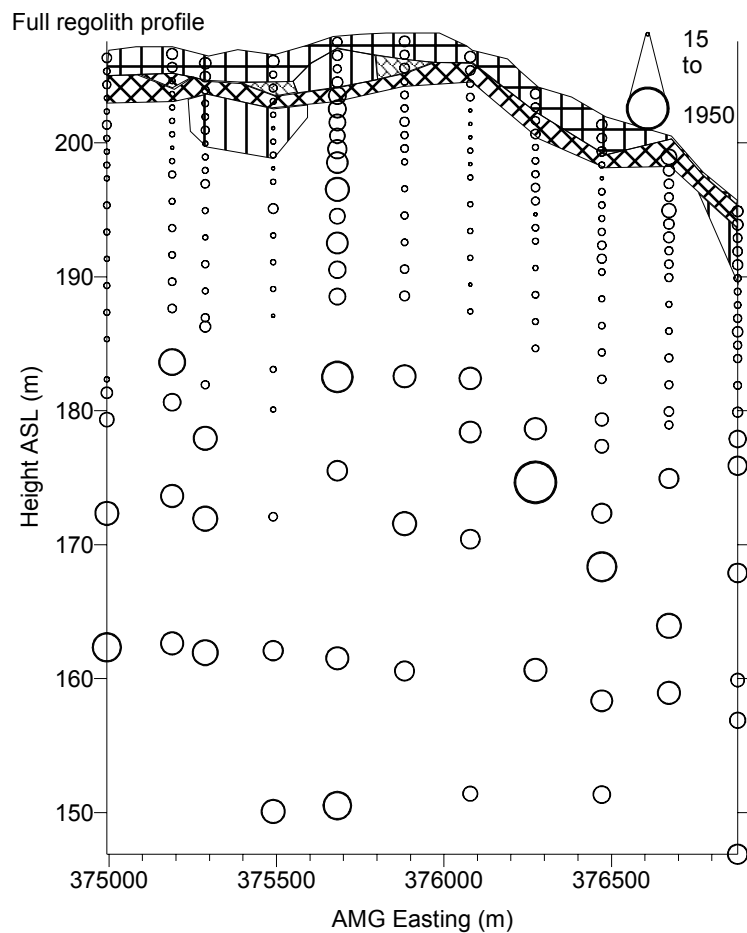
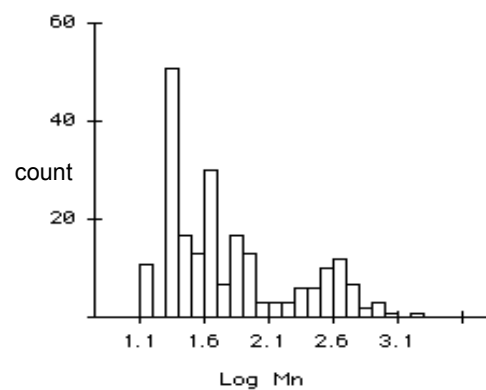


Figure A1b.25: Distribution and concentration of Mn at Jumbuck regolith section on 6690450N.

Mn (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	44	165	72	71
Std Error	7	20	5	17
Median	38	45	70	45
Std Dev	25	252	21	69
Minimum	15	15	30	20
Maximum	90	1950	110	270
Count	14	166	17	17

Jumbuck

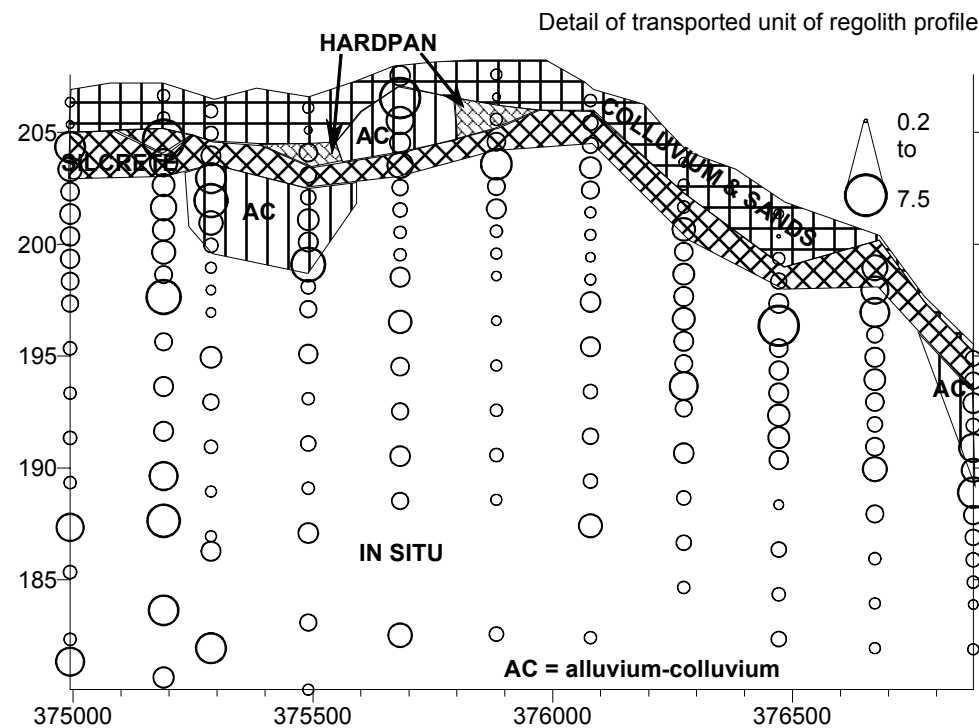
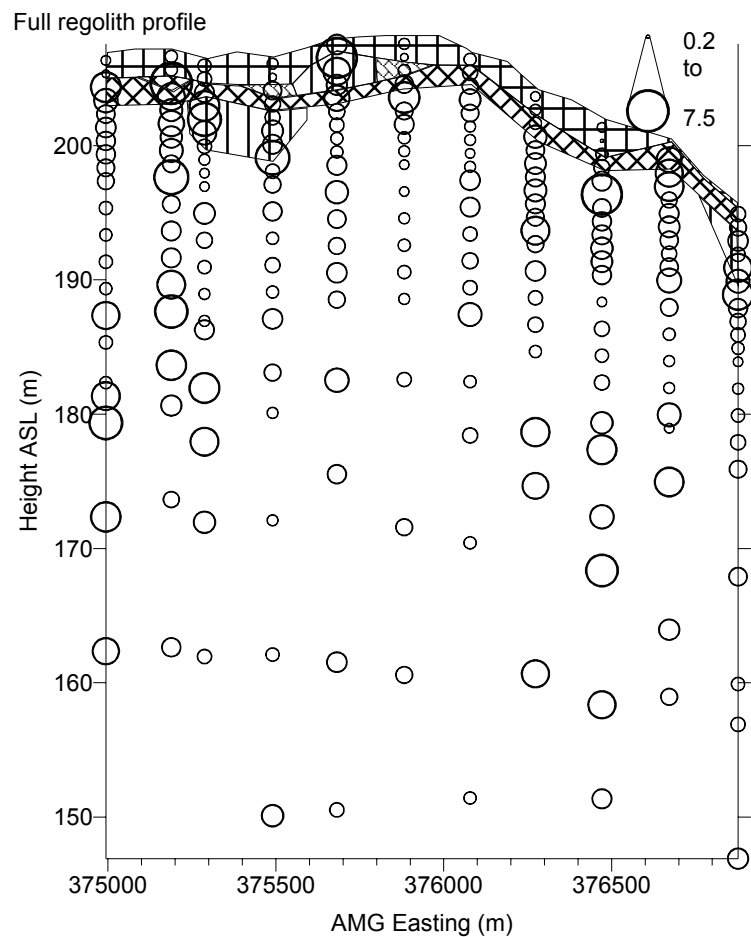
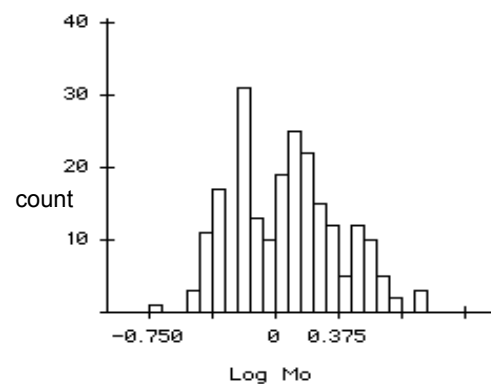


Figure A1b.26: Distribution and concentration of Mo at Jumbuck regolith section on 6690450N.

Mo (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	2.7	1.5	0.5	2.1
Std Error	0.5	0.1	0.1	0.4
Median	2.1	1.2	0.5	1.5
Std Dev	1.8	1.1	0.3	1.7
Minimum	0.8	0.4	0.2	0.6
Maximum	7	7	1.6	7.5
Count	14	166	17	17

Jumbuck

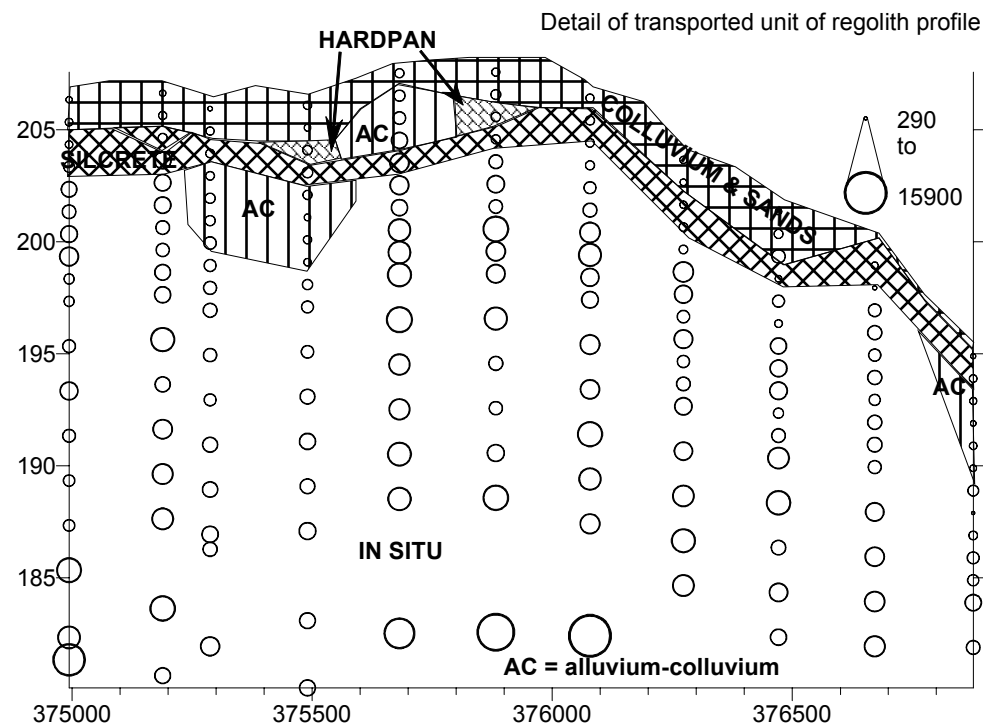
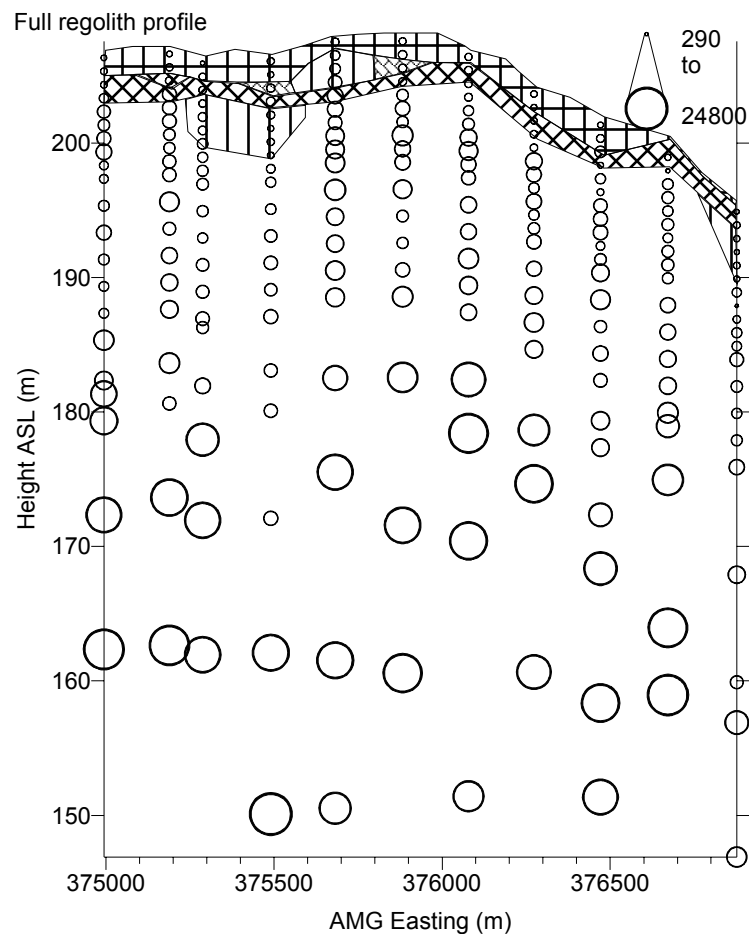
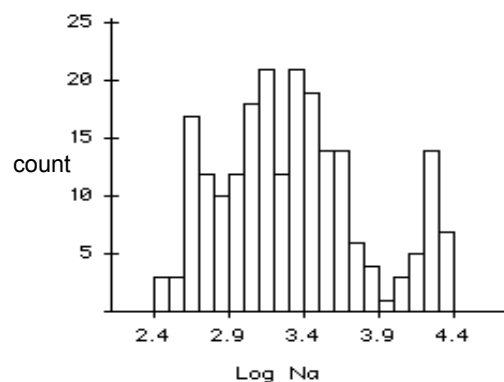


Figure A1b.27: Distribution and concentration of Na at Jumbuck regolith section on 6690450N.

Na (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	785	5183	559	802
Std Error	122	473	59	171
Median	625	2625	550	600
Std Dev	455	6095	244	706
Minimum	350	290	310	300
Maximum	2050	24800	1400	2950
Count	14	166	17	17

Jumbuck

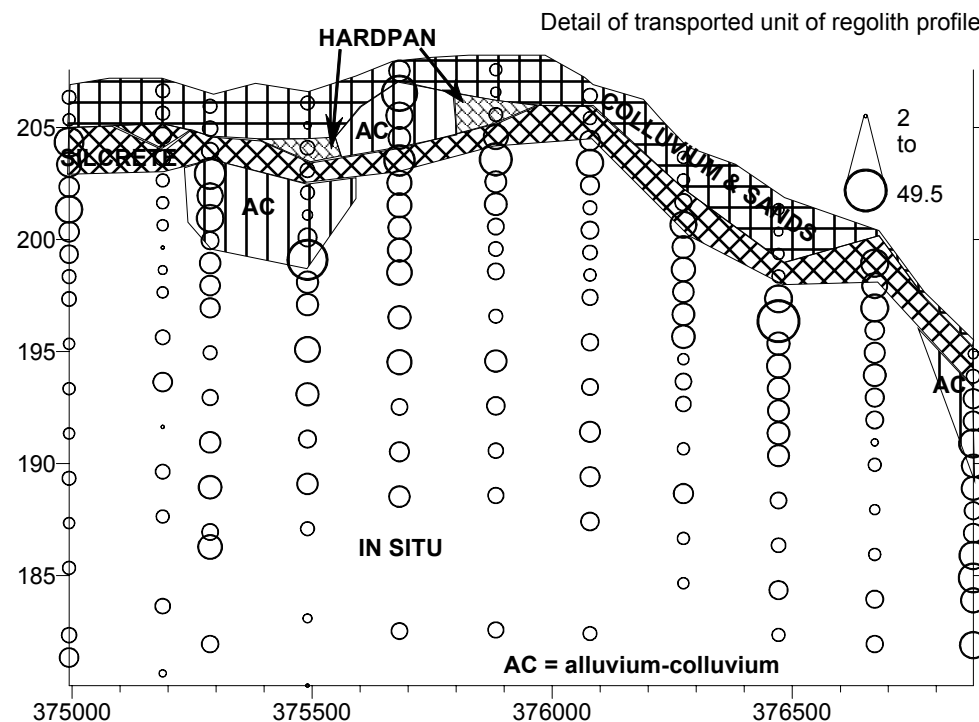
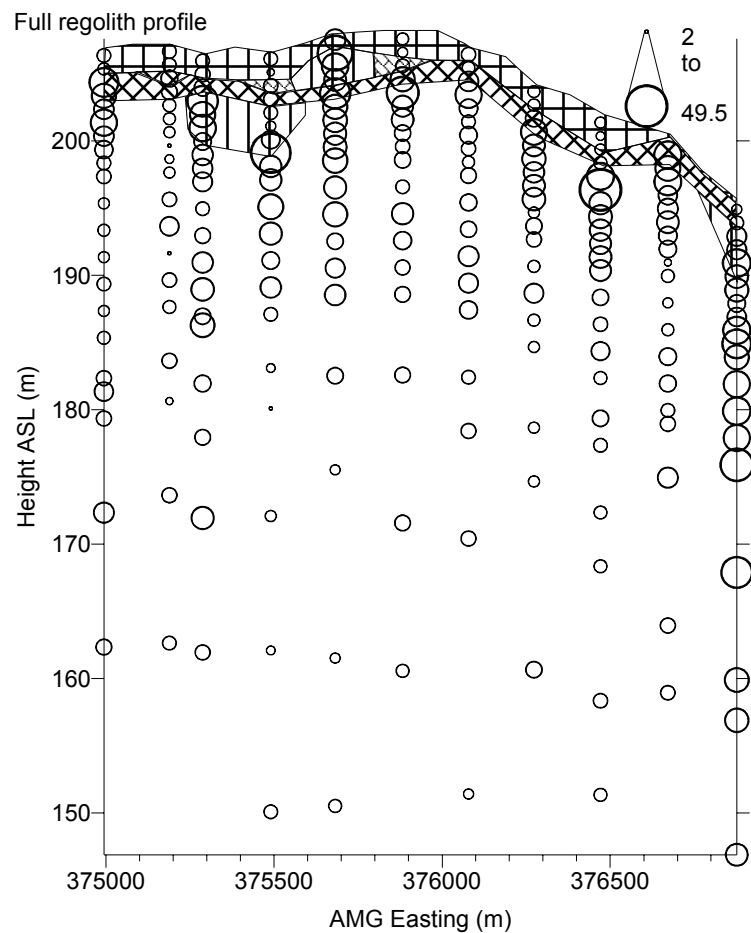
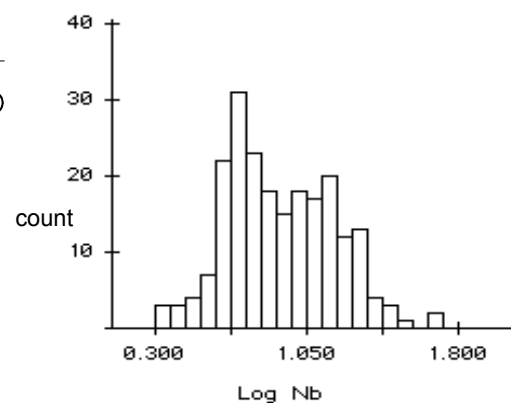


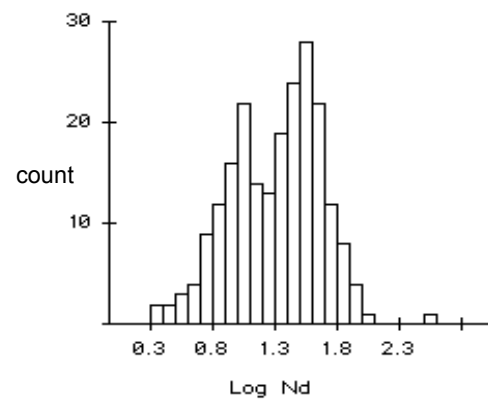
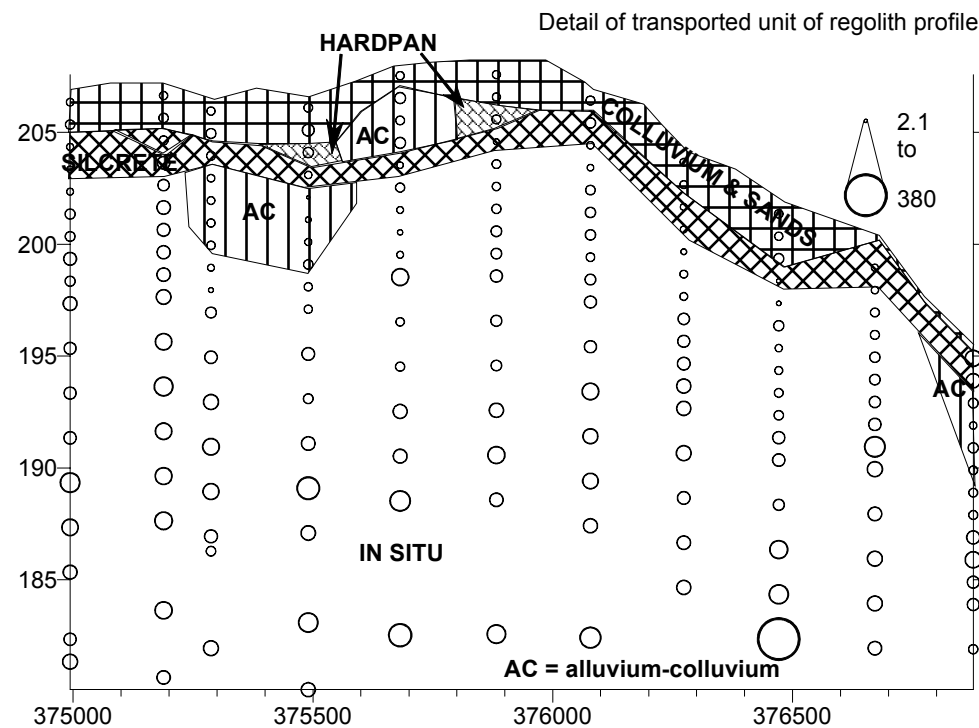
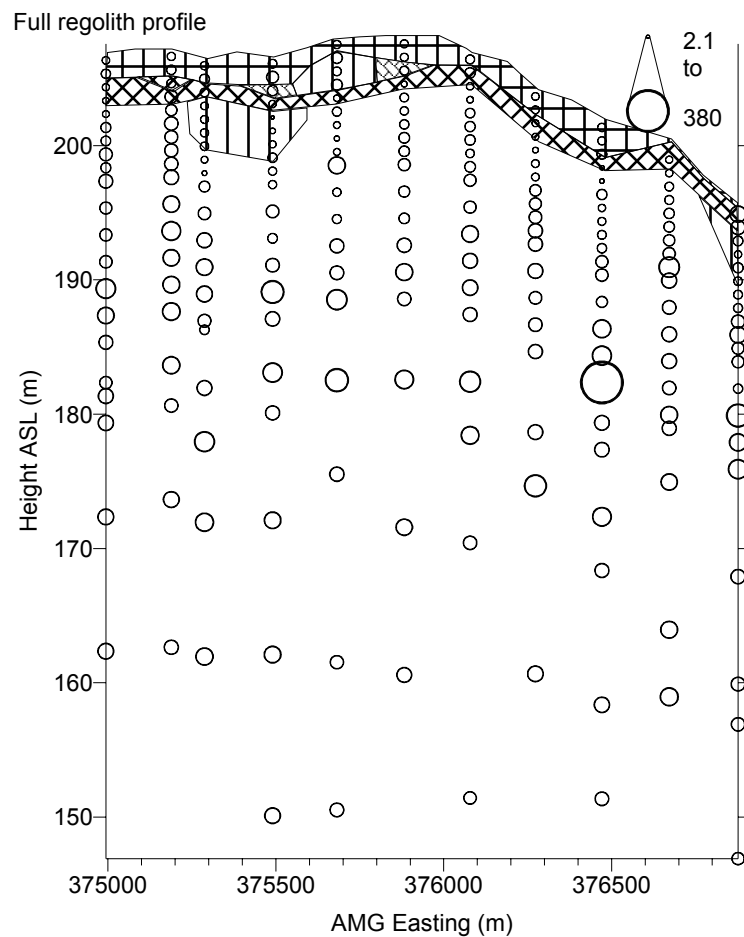
Figure A1b.28: Distribution and concentration of Nb at Jumbuck regolith section on 6690450N.

Nb (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	17.7	9.7	5.1	12.2
Std Error	3.1	0.5	0.5	1.8
Median	15.8	7.5	4.5	8.0
Std Dev	11.7	6.2	2.1	7.3
Minimum	3.5	2	2.5	3.5
Maximum	45	49.5	12	26
Count	14	166	17	17

Jumbuck



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	10	34	10	12
Std Error	1	3	1	3
Median	9	30	9	7
Std Dev	5	34	4	12
Minimum	2.1	2.6	7	2.5
Maximum	17.5	380	21.5	45
Count	14	166	17	17

Jumbuck

Figure A1b.29: Distribution and concentration of Nd at Jumbuck regolith section on 6690450N.

Nd (ppm)

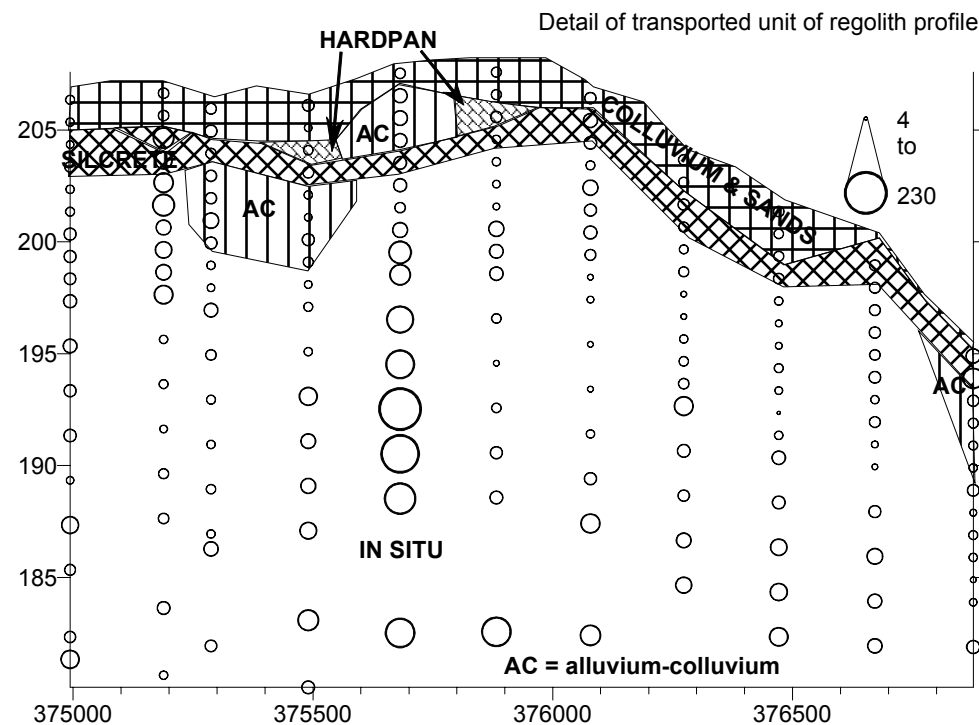
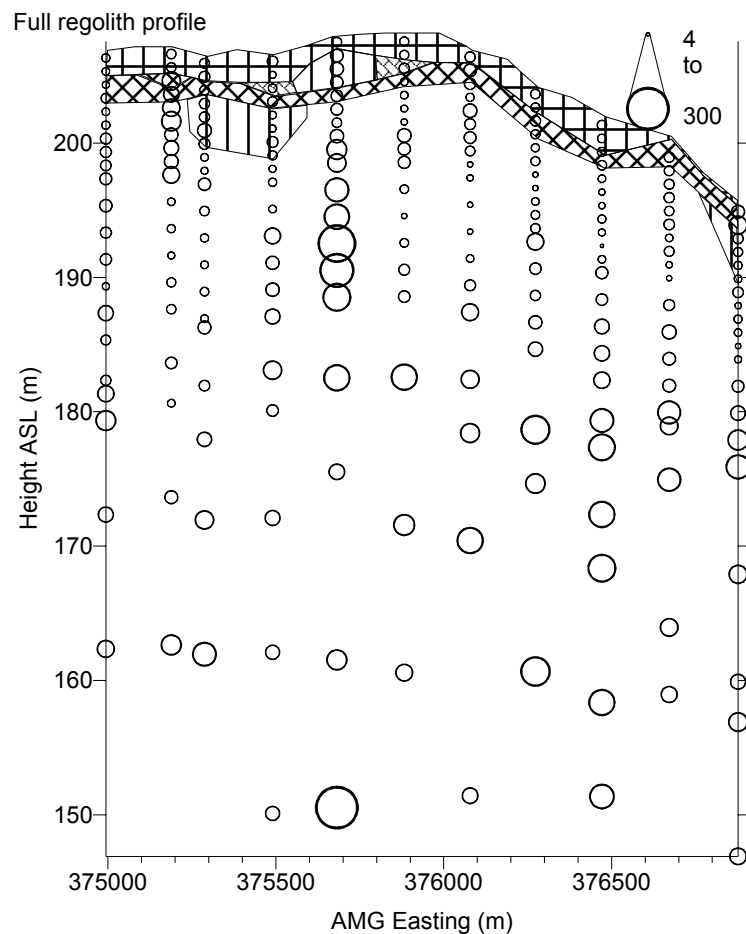
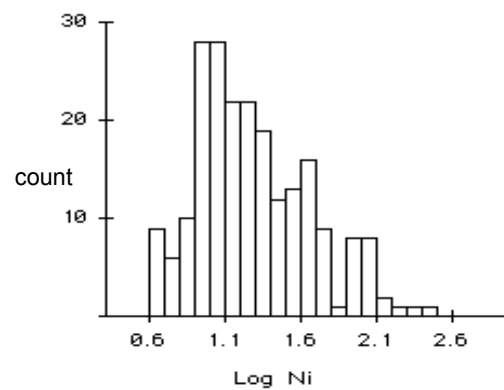


Figure A1b.30: Distribution and concentration of Ni at Jumbuck regolith section on 6690450N.

Ni (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silicate
Mean	15	34	12	19
Std Error	2	3	1	3
Median	14	19	12	13
Std Dev	6	41	2	13
Minimum	7	4	7	7
Maximum	27	300	16	50
Count	14	166	17	17

Jumbuck

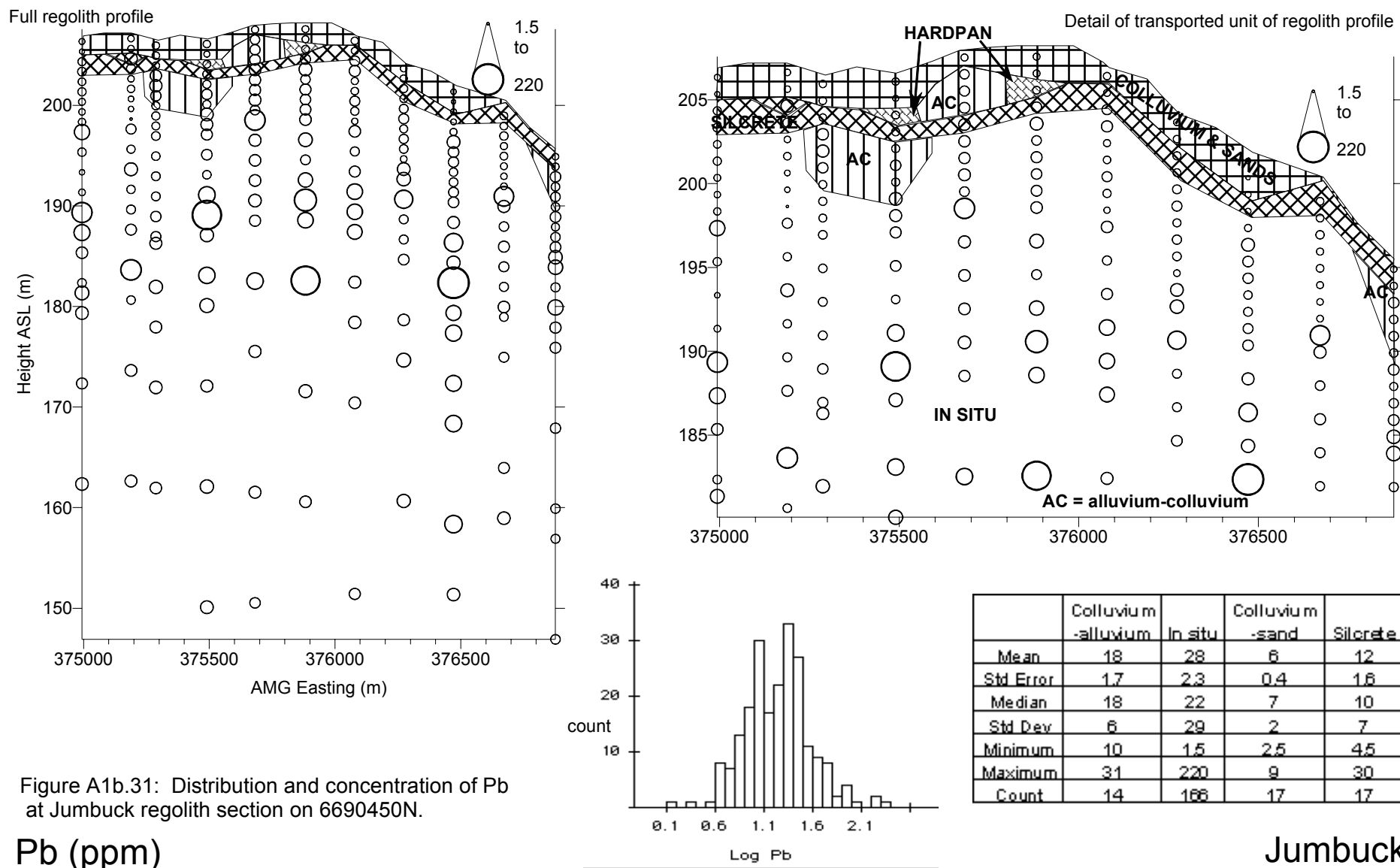


Figure A1b.31: Distribution and concentration of Pb at Jumbuck regolith section on 6690450N.

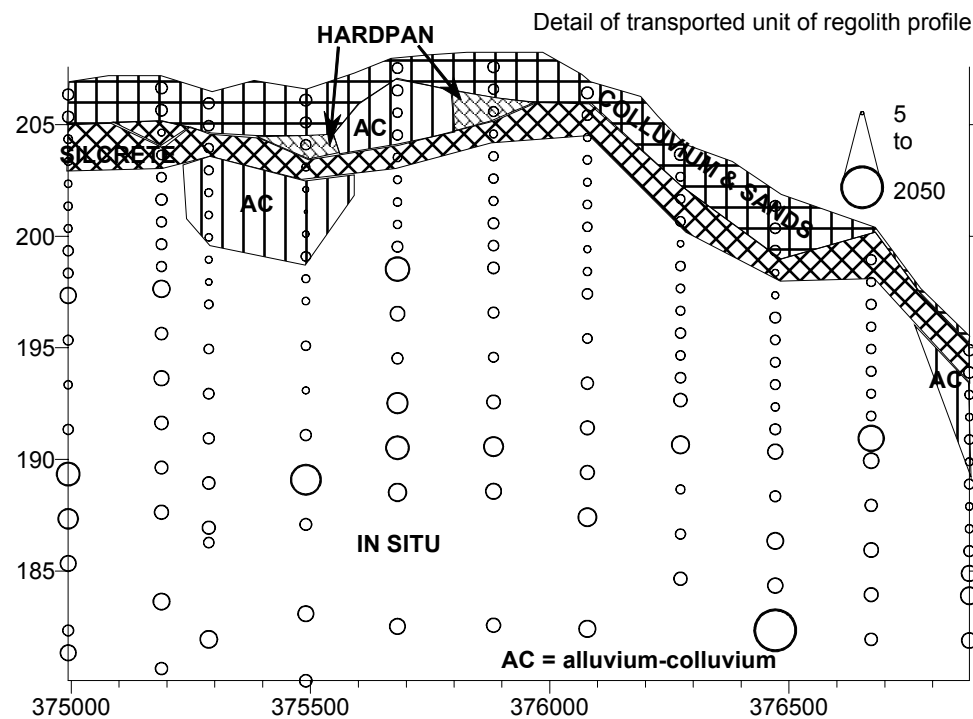
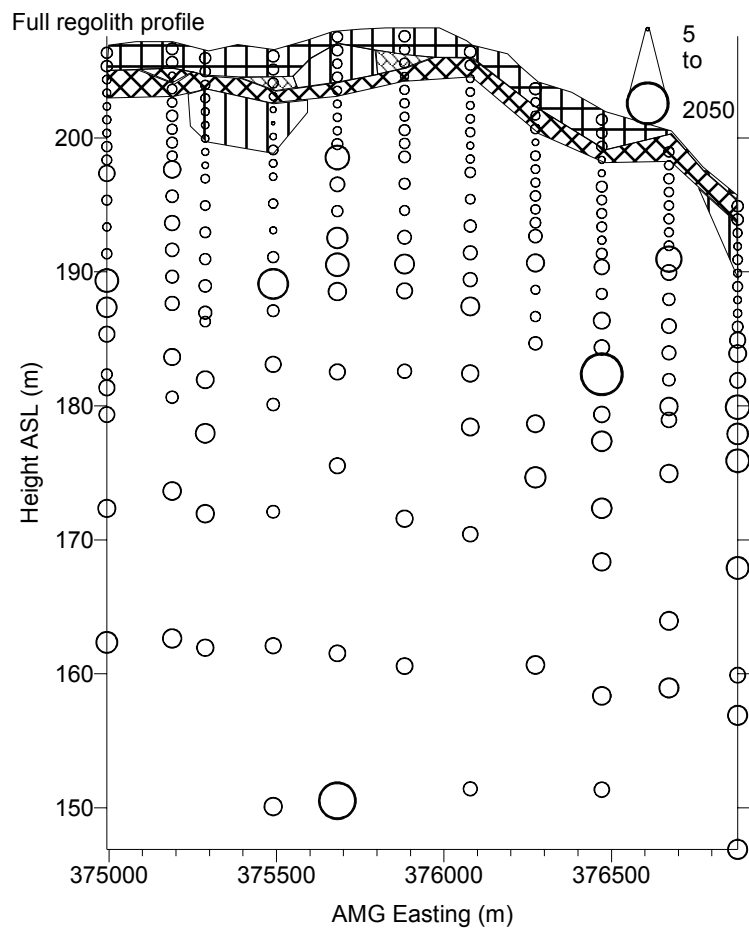
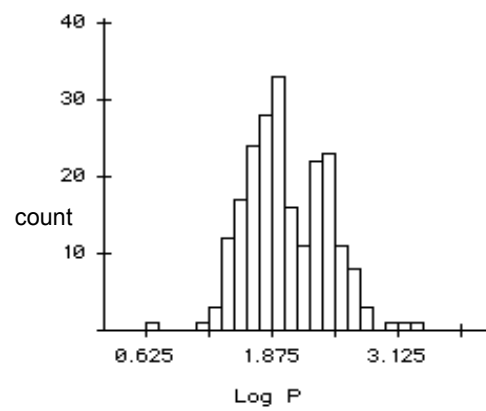


Figure A1b.32: Distribution and concentration of P at Jumbuck regolith section on 6690450N.

P (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	43	197	88	52
Std Error	6	18	4	5
Median	43	123	90	50
Std Dev	23	237	16	22
Minimum	5	20	50	25
Maximum	85	2050	110	95
Count	14	166	17	17

Jumbuck

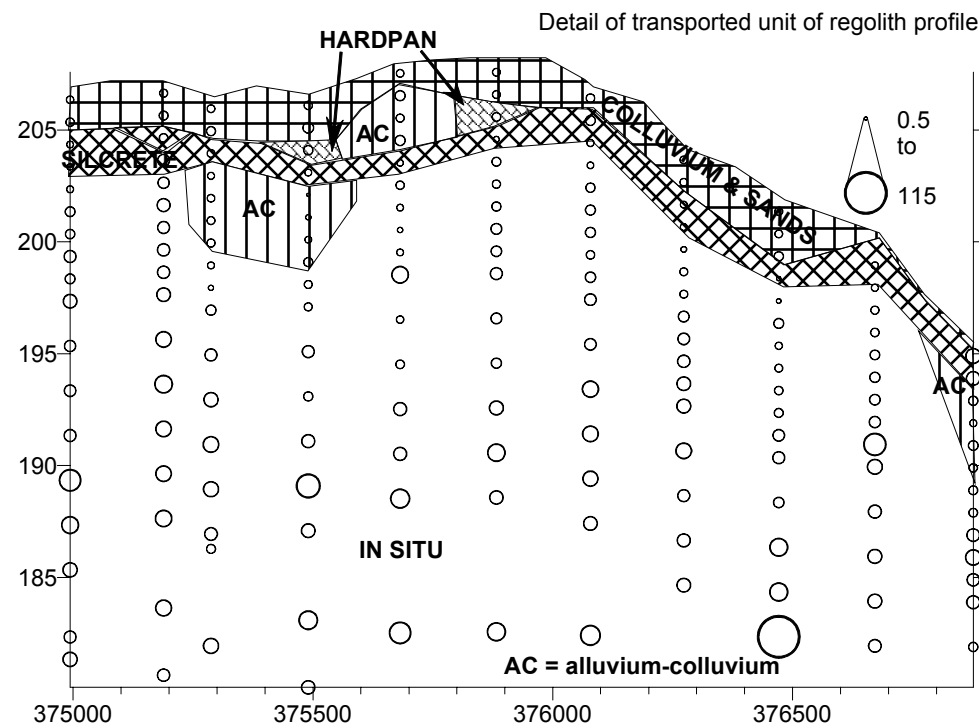
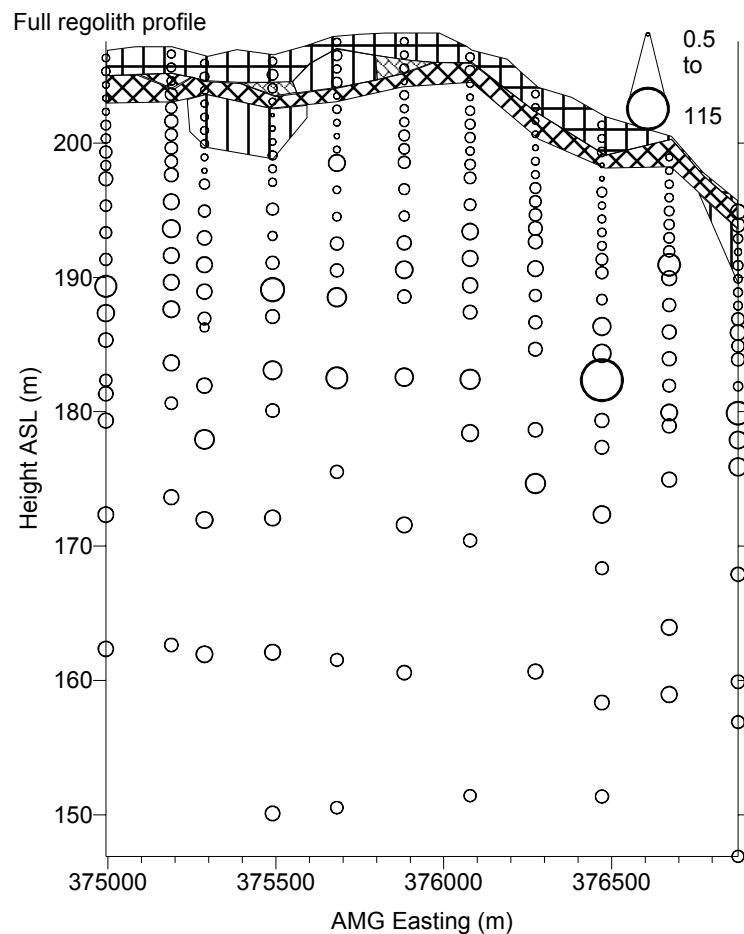
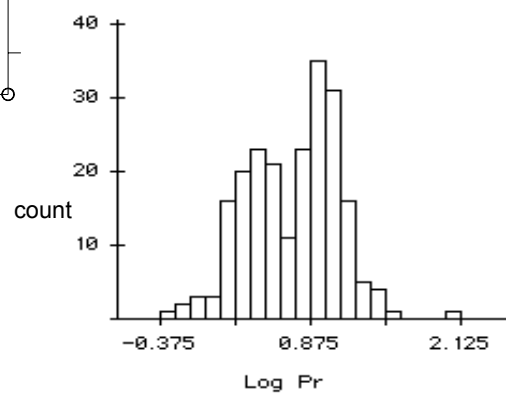


Figure A1b.33: Distribution and concentration of Pr at Jumbuck regolith section on 6690450N.

Pr (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	2	9	3	3
Std Error	0.3	0.8	0.2	0.7
Median	2.3	8	2.2	1.6
Std Dev	1	10	1	3
Minimum	0.5	0.65	1.9	0.6
Maximum	42	115	48	11
Count	14	166	17	17

Jumbuck

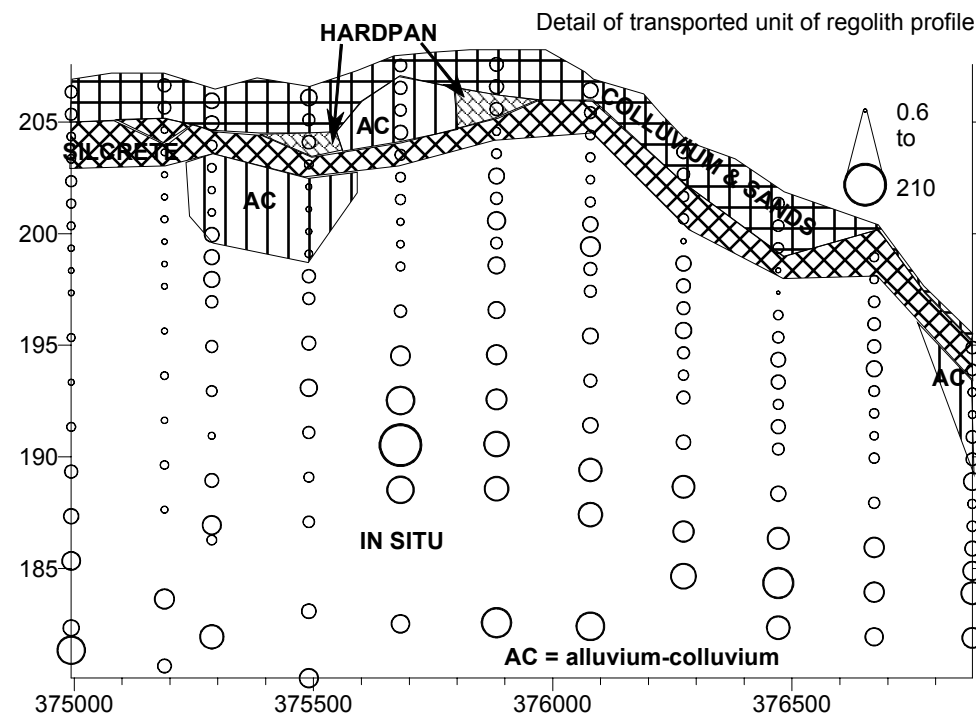
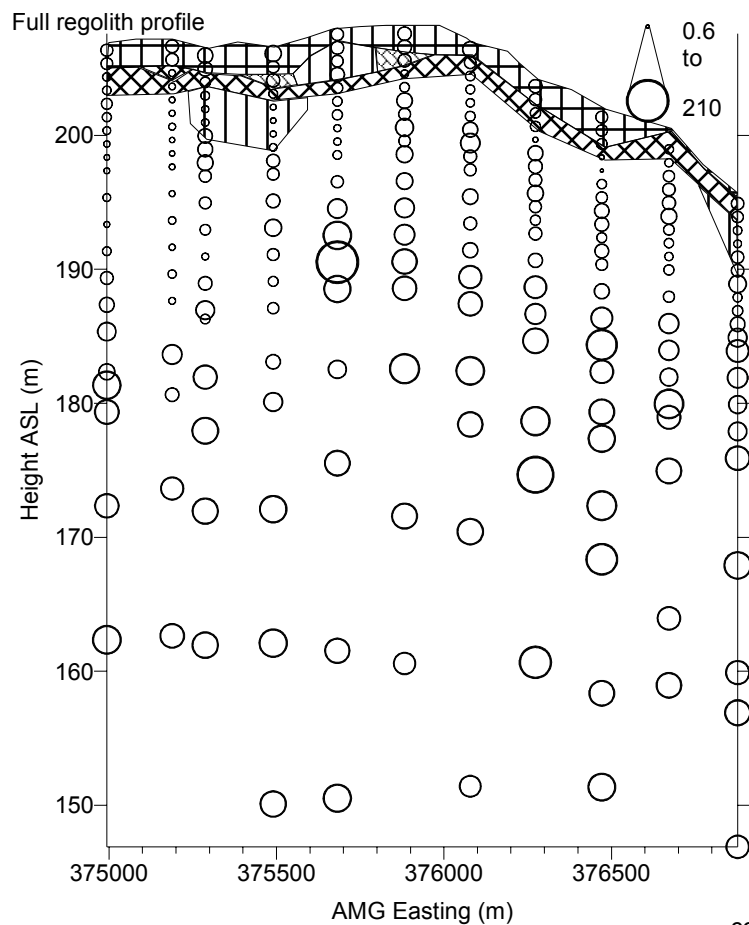
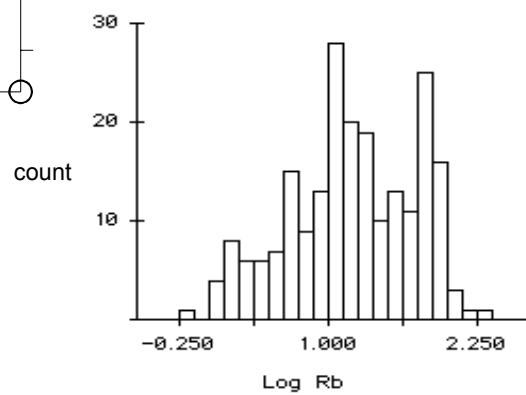


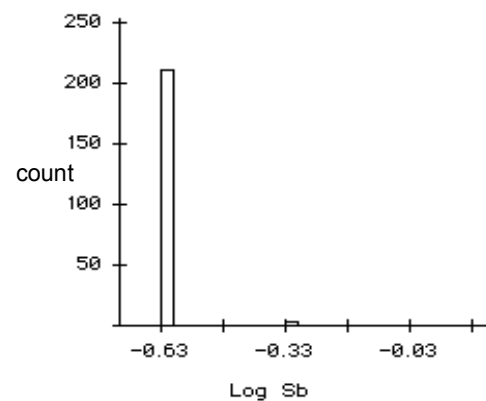
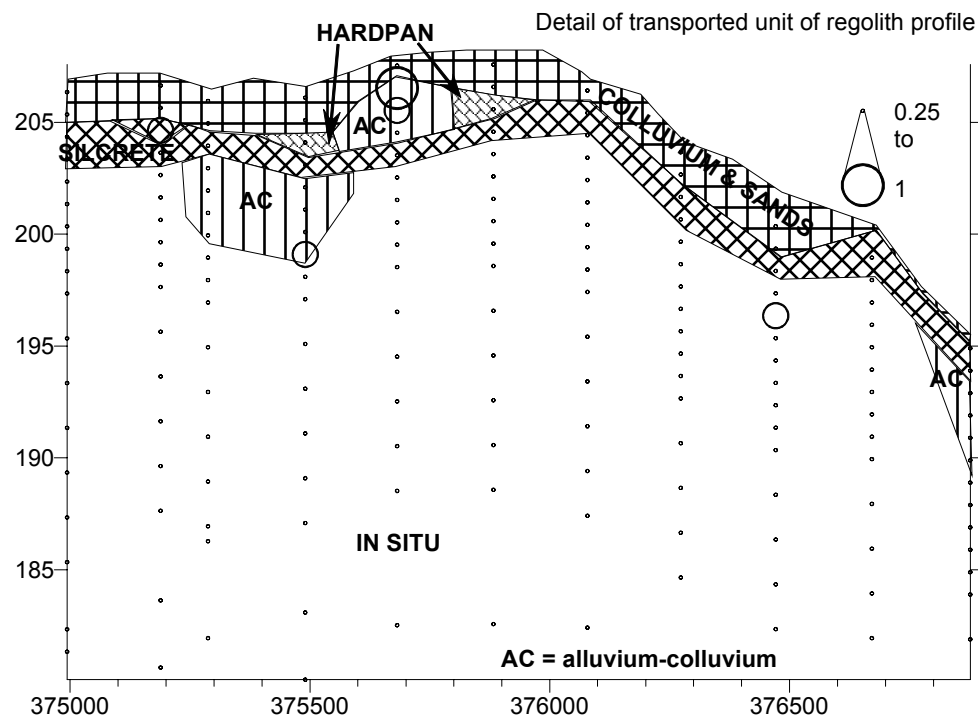
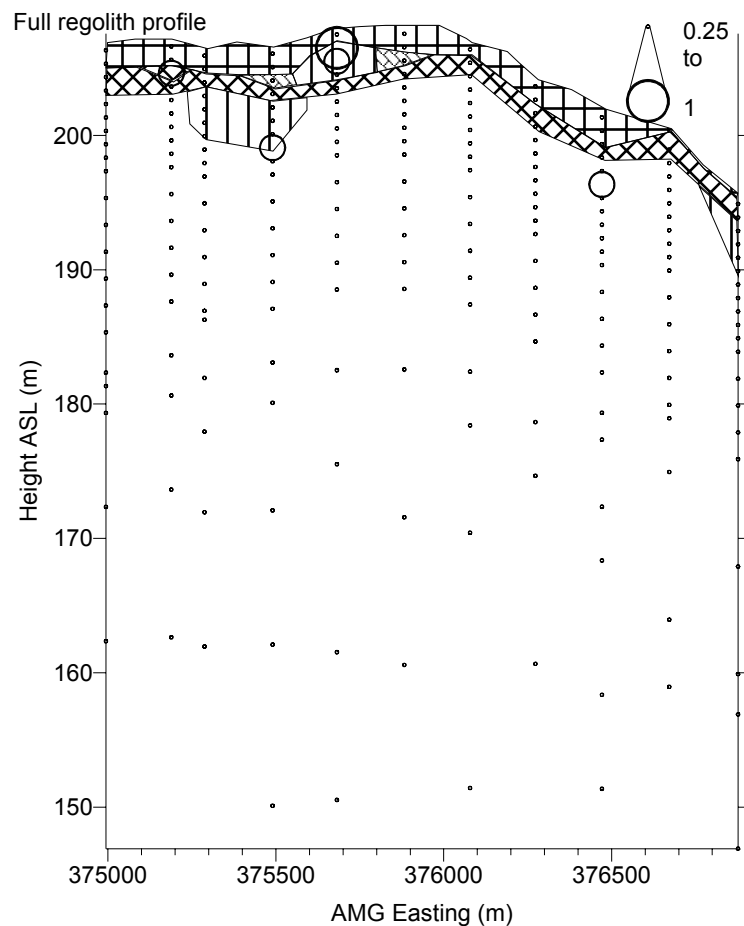
Figure A1b.34: Distribution and concentration of Rb at Jumbuck regolith section on 6690450N.

Rb (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	7	35	15	6
Std Error	1.7	2.6	1.1	0.8
Median	4	22	13	6
Std Dev	6	34	5	3
Minimum	1.4	0.6	8.5	1
Maximum	18.5	210	25	13
Count	14	166	17	17

Jumbuck

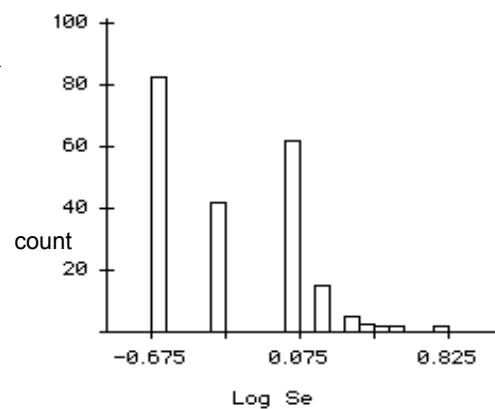
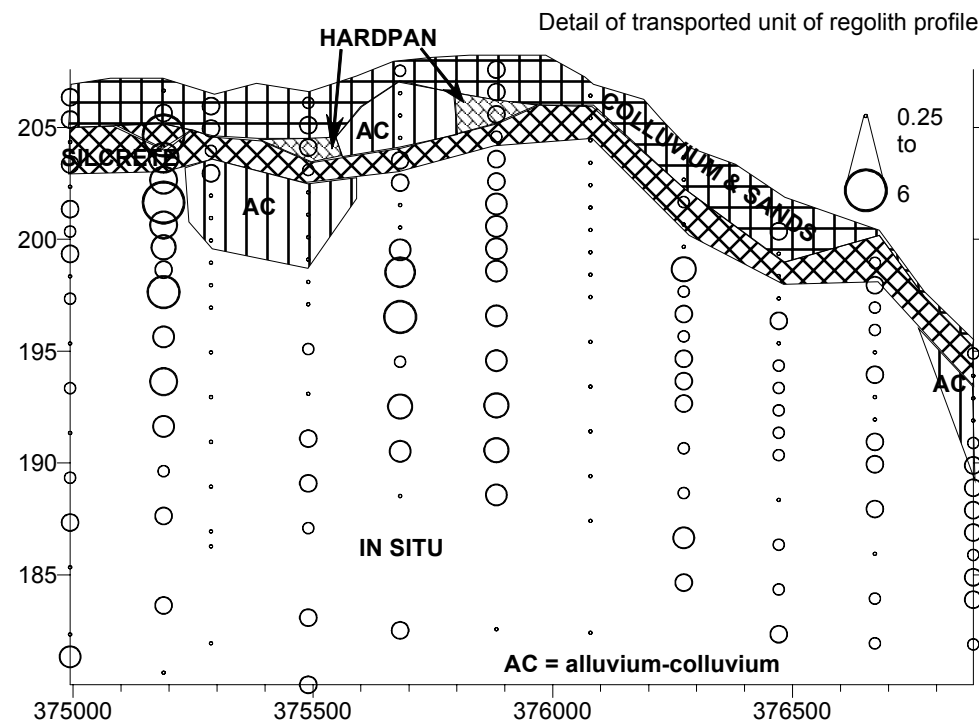
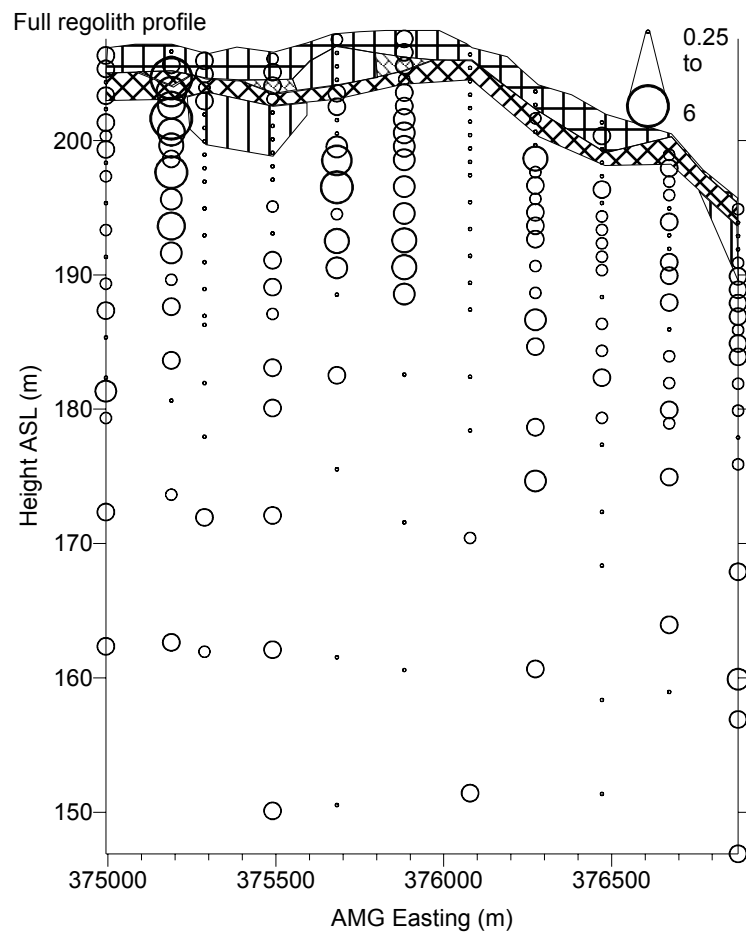


	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	0.34	0.25	0.25	0.26
Std Error	0.06	0.00	0.00	0.01
Median	0.25	0.25	0.25	0.25
Std Dev	0.21	0.02	0.00	0.06
Minimum	0.25	0.25	0.25	0.25
Maximum	1	0.5	0.25	0.5
Count	14	166	17	17

Jumbuck

Figure A1b.35: Distribution and concentration of Sb at Jumbuck regolith section on 6690450N.

Sb (ppm)

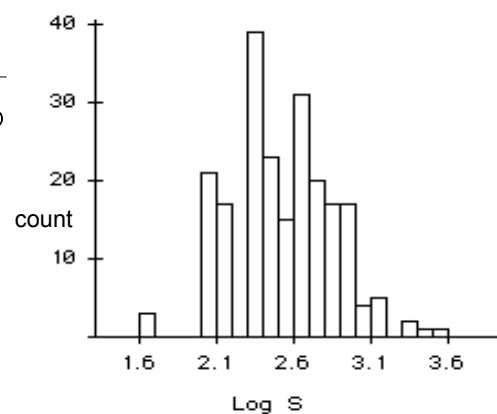
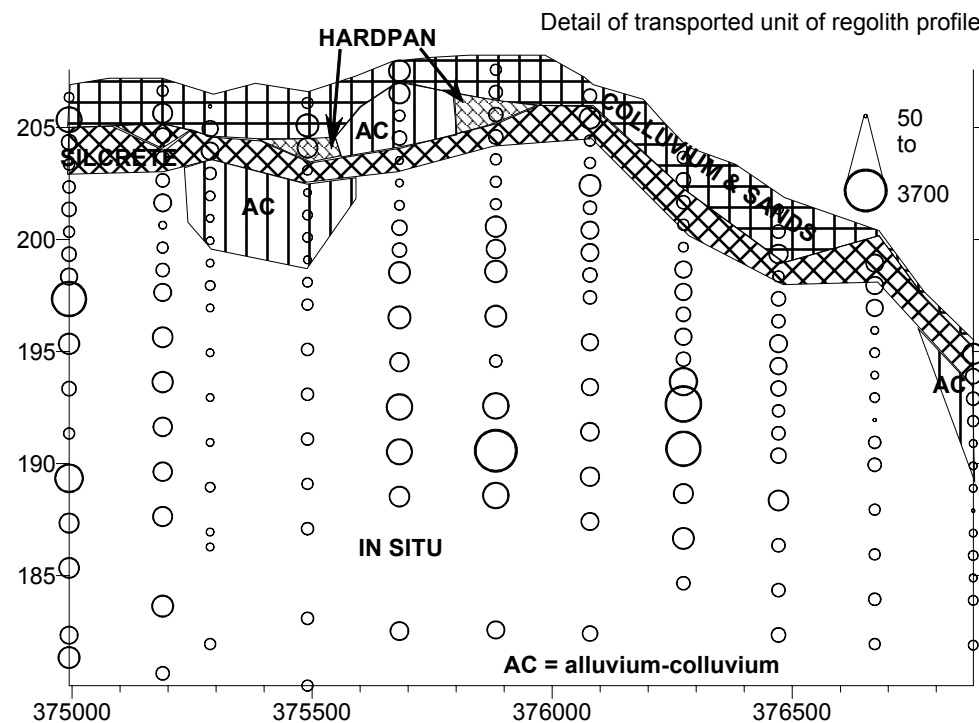
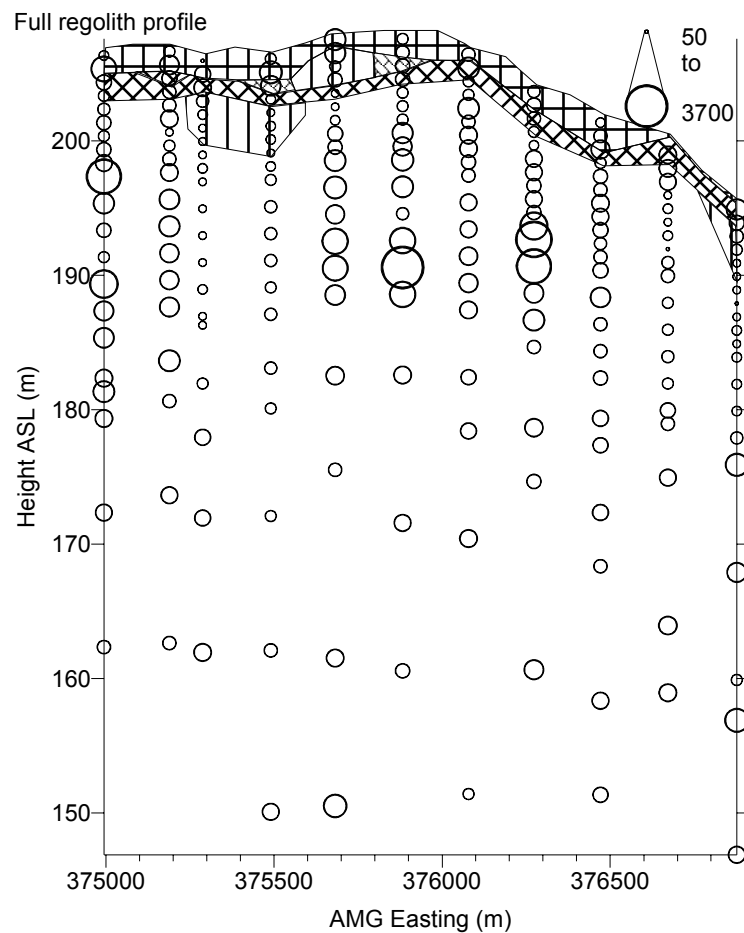


	Colluvium -alluvium	In situ	Colluvium -sand	Silicate
Mean	0.32	0.81	0.68	0.97
Std Error	0.06	0.06	0.09	0.35
Median	0.25	0.5	1	0.5
Std Dev	0.21	0.75	0.36	1.45
Minimum	0.25	0.25	0.25	0.25
Maximum	1	6	1	6
Count	14	166	17	17

Figure A1b.36: Distribution and concentration of Se at Jumbuck regolith section on 6690450N.

Se (ppm)

Jumbuck

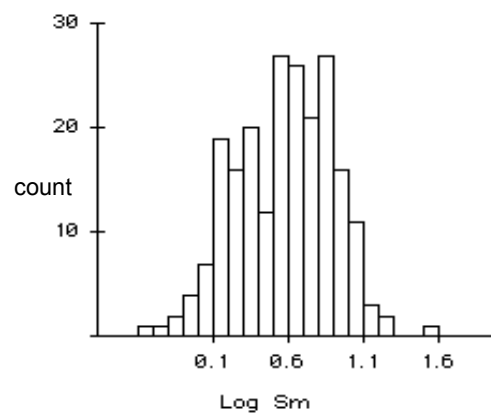
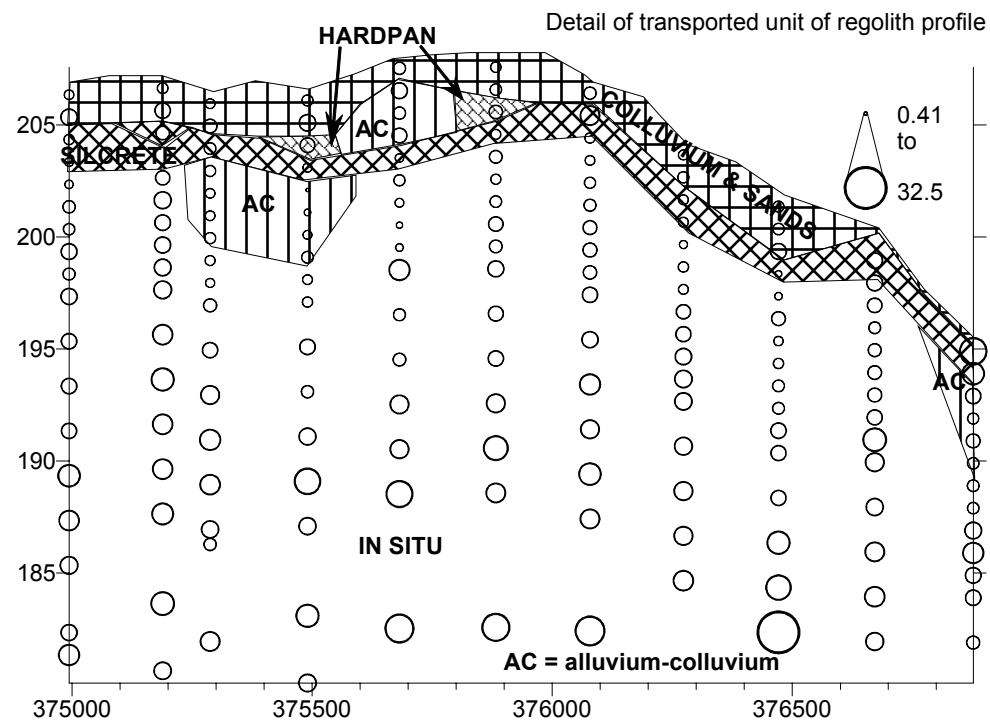
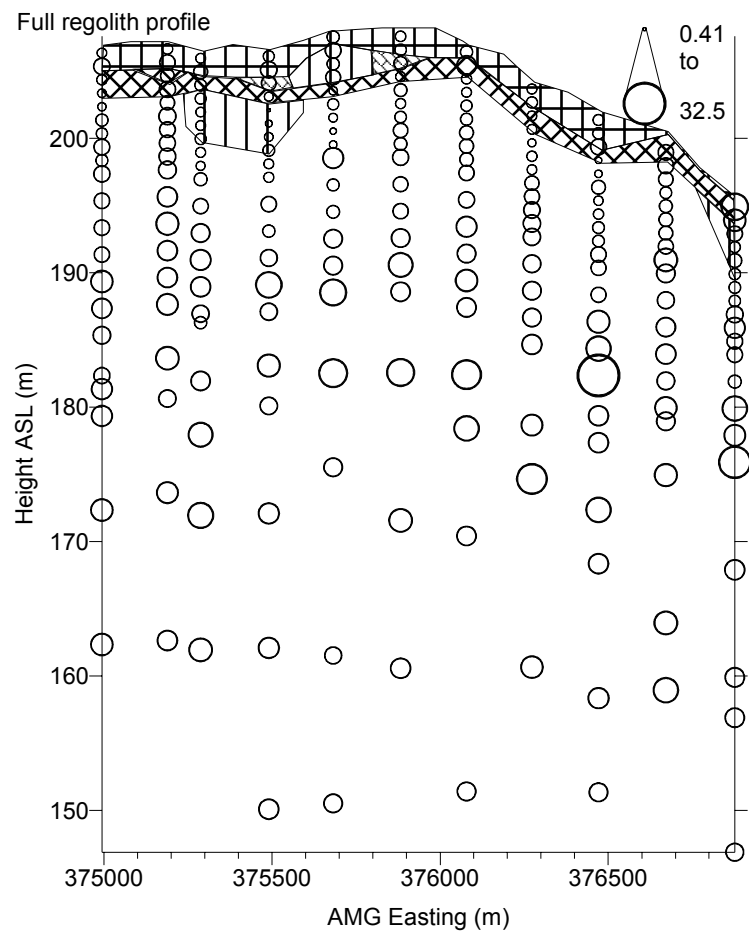


	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	218	494	429	382
Std Error	50	37	81	53
Median	150	350	300	350
Std Dev	186	475	335	218
Minimum	100	50	50	100
Maximum	800	3700	1250	850
Count	14	166	17	17

Figure A1b.37: Distribution and concentration of S at Jumbuck regolith section on 6690450N.

S (ppm)

Jumbuck



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	2.01	5.43	2.33	3.17
Std Error	0.29	0.29	0.25	0.76
Median	1.775	4.85	1.9	1.5
Std Dev	1.08	3.79	1.05	3.13
Minimum	0.41	0.63	1.3	0.65
Maximum	3.9	32.5	4.3	12.5
Count	14	166	17	17

Jumbuck

Figure A1b.38: Distribution and concentration of Sm at Jumbuck regolith section on 6690450N.

Sm (ppm)

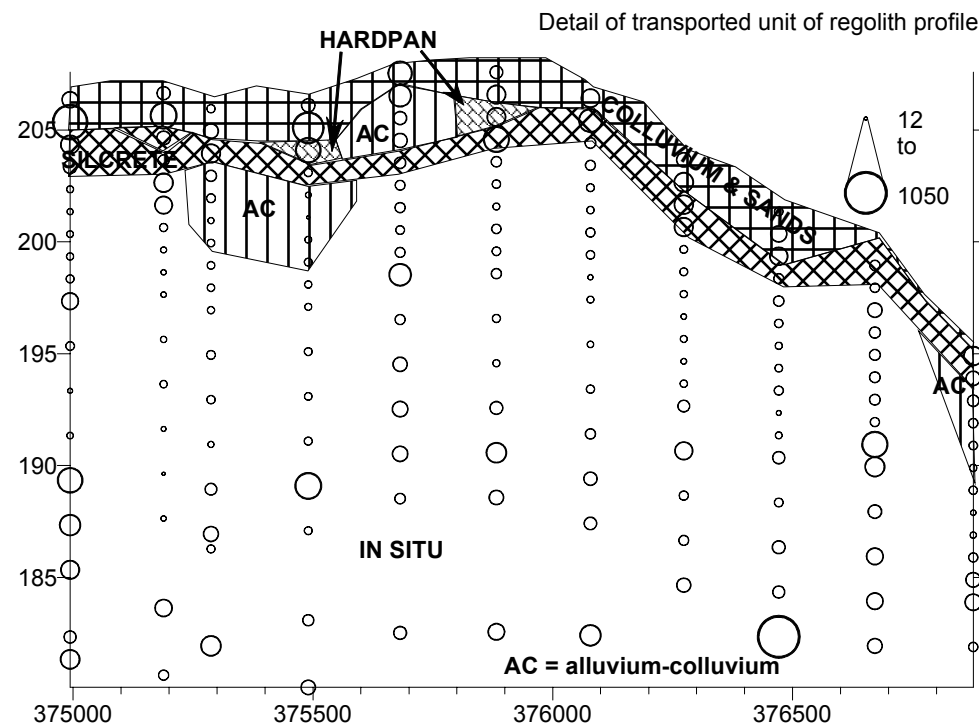
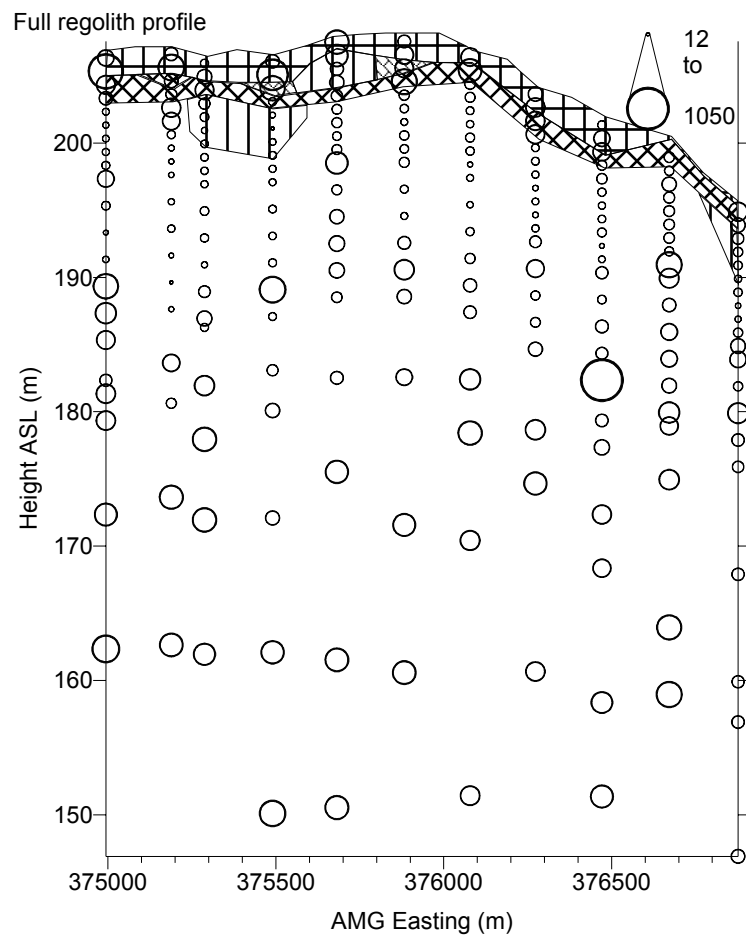
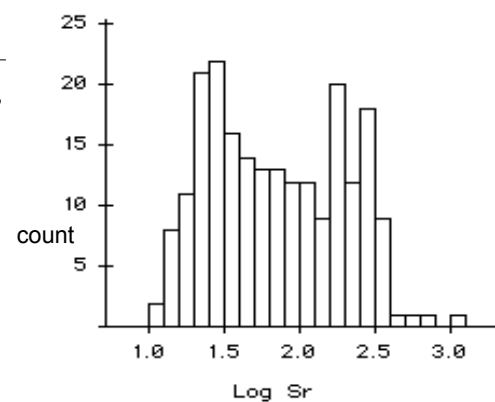


Figure A1b.39: Distribution and concentration of Sr at Jumbuck regolith section on 6690450N.

Sr (ppm)



	Colluvium -alluvium	In-situ	Colluvium -sand	Silcrete
Mean	56	111	201	127
Std Error	17	10	45	23
Median	33	56	130	90
Std Dev	64	126	185	96
Minimum	12	12	30	29
Maximum	260	1050	700	360
Count	14	166	17	17

Jumbuck

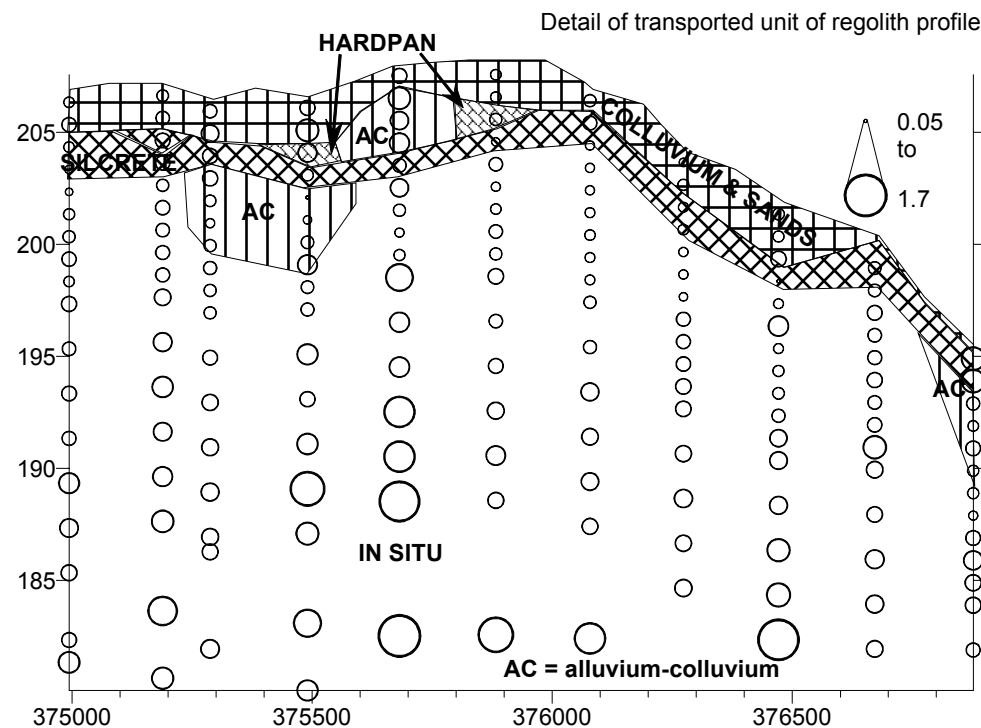
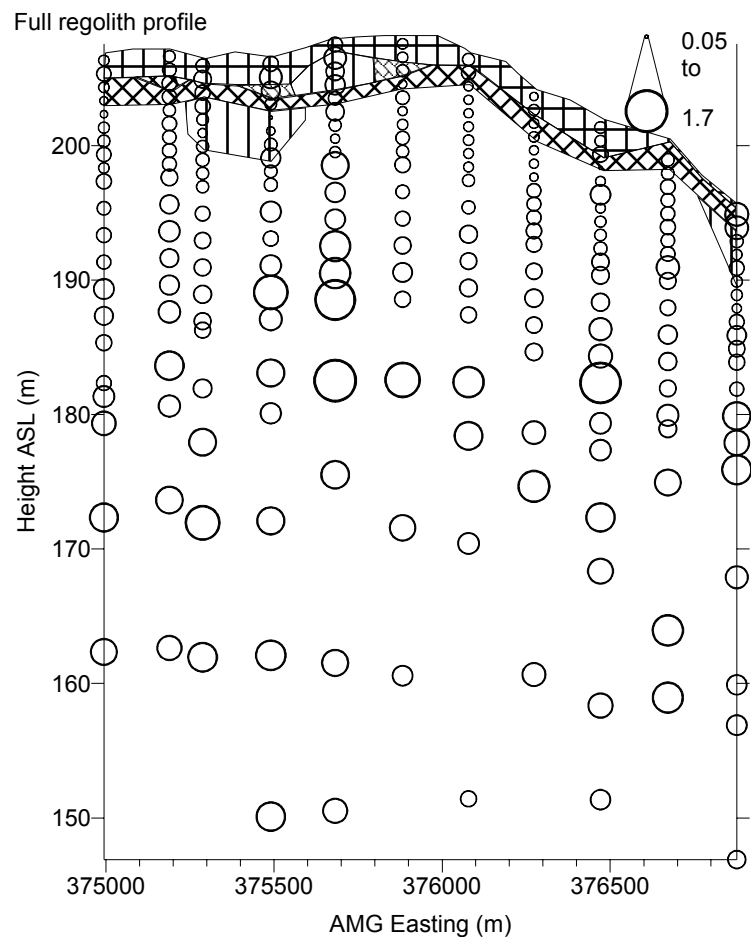
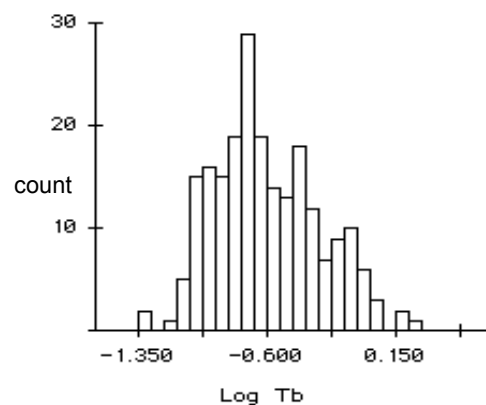


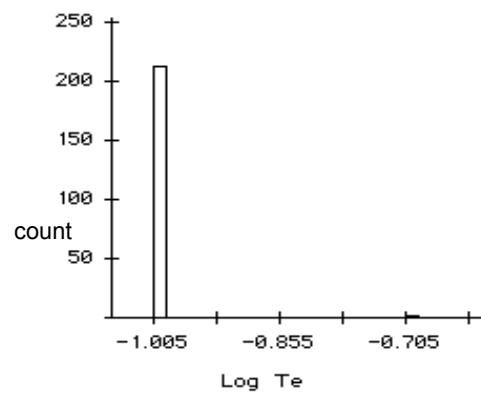
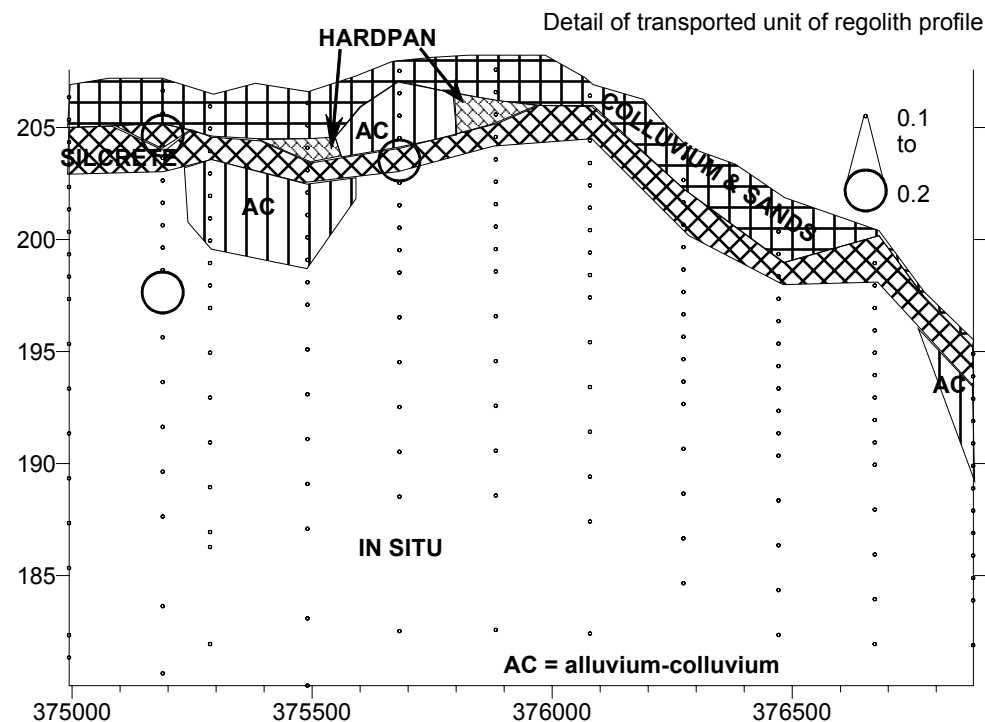
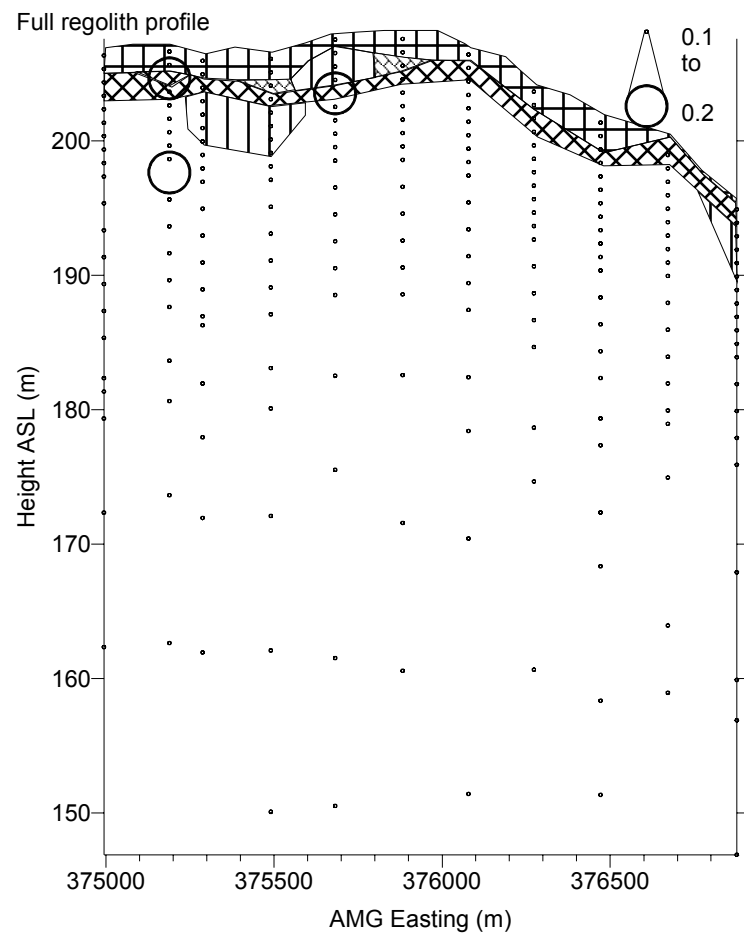
Figure A1b.40: Distribution and concentration of Tb at Jumbuck regolith section on 6690450N.

Tb (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	0.20	0.37	0.17	0.18
Std Error	0.03	0.02	0.02	0.03
Median	0.16	0.27	0.14	0.15
Std Dev	0.12	0.30	0.09	0.13
Minimum	0.05	0.07	0.08	0.05
Maximum	0.45	1.7	0.46	0.5
Count	14	166	17	17

Jumbuck

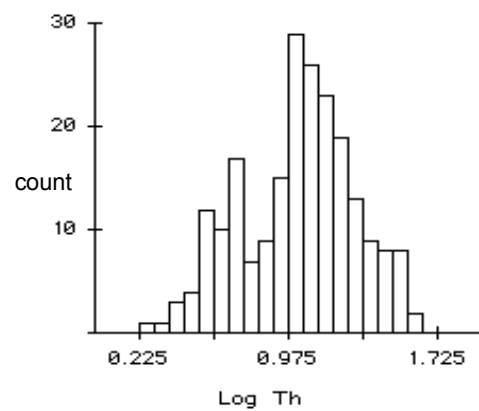
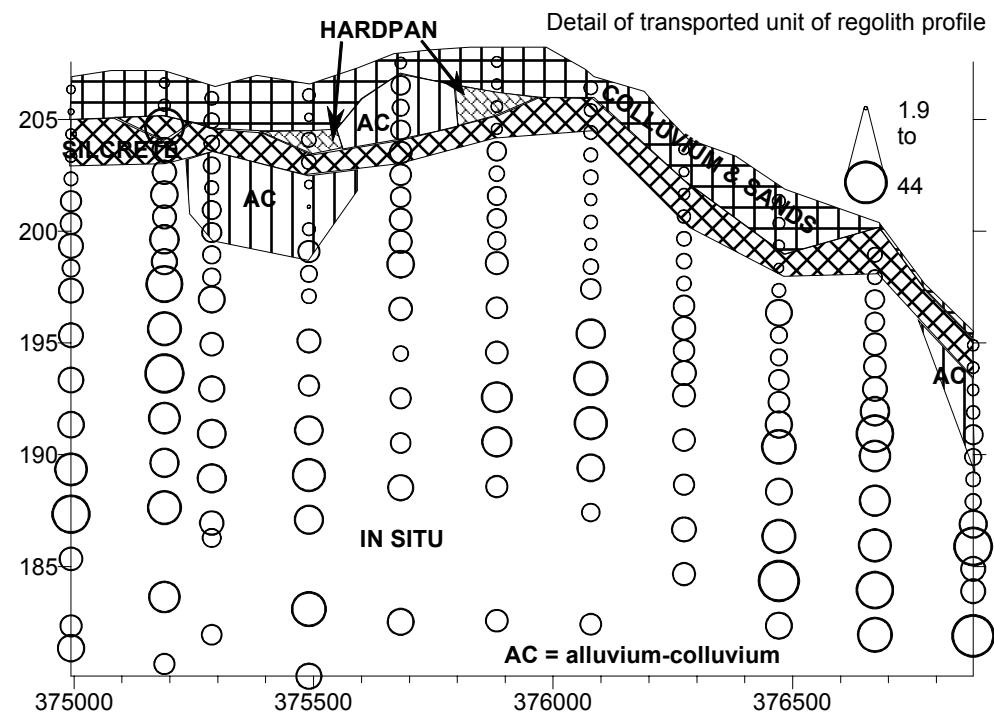
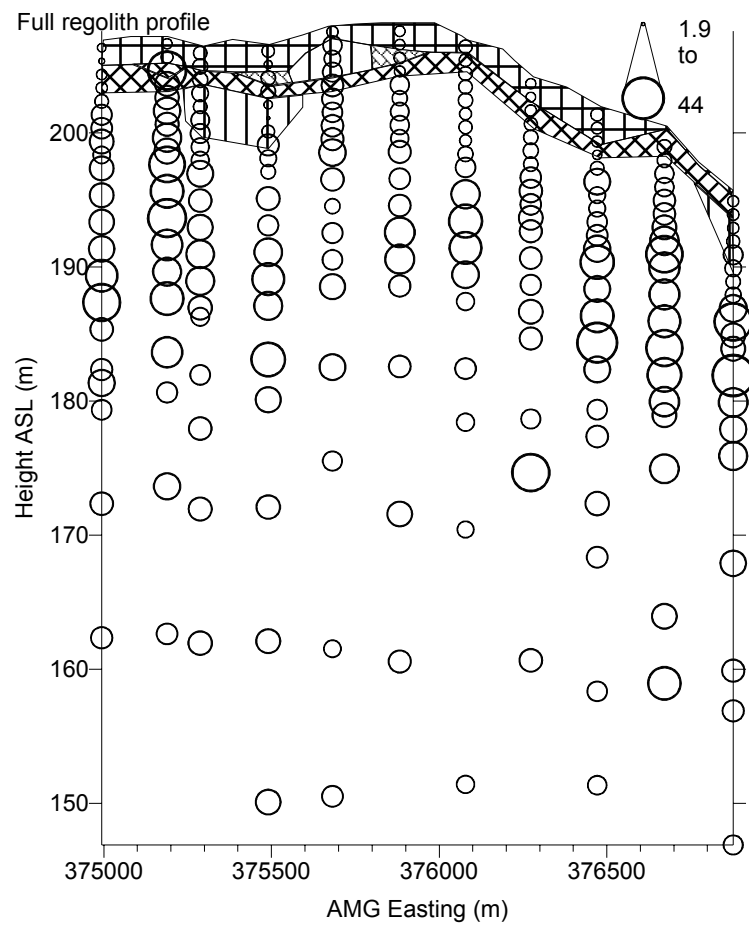


	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	0.10	0.10	0.10	0.11
Std Error	0.00	0.00	0.00	0.01
Median	0.1	0.1	0.1	0.1
Std Dev	0.00	0.01	0.00	0.03
Minimum	0.1	0.1	0.1	0.1
Maximum	0.1	0.2	0.1	0.2
Count	14	106	17	17

Figure A1b.41: Distribution and concentration of Te at Jumbuck regolith section on 6690450N.

Te (ppm)

Jumbuck

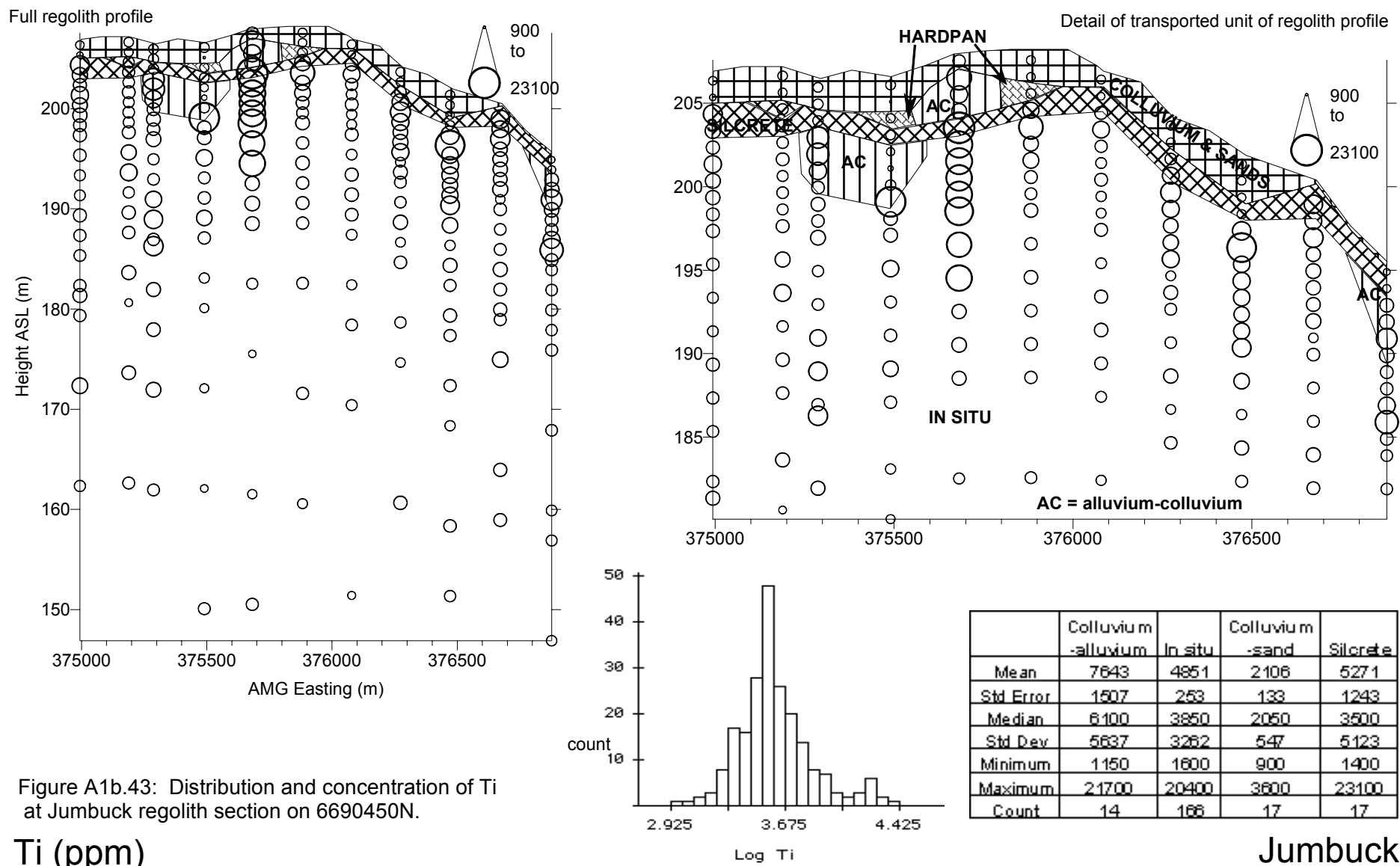


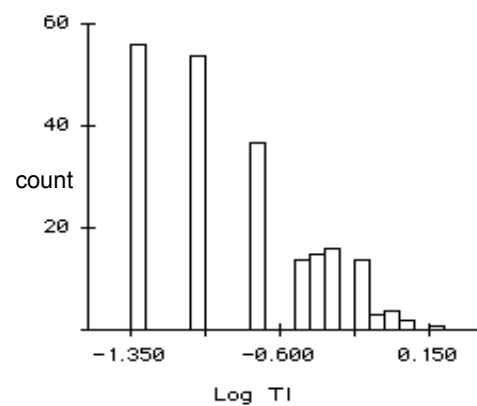
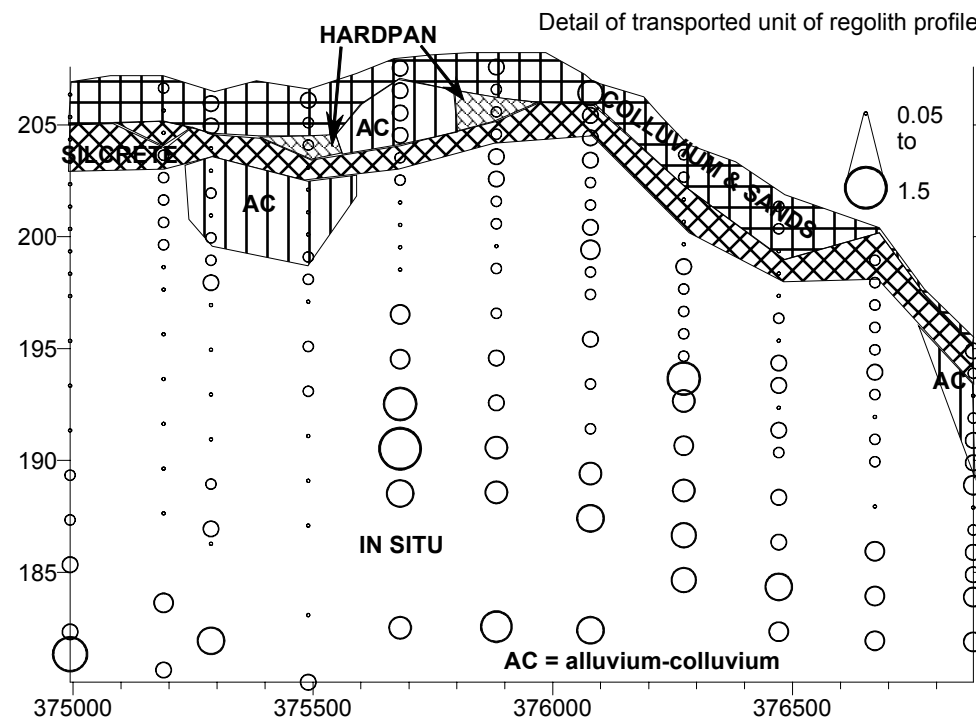
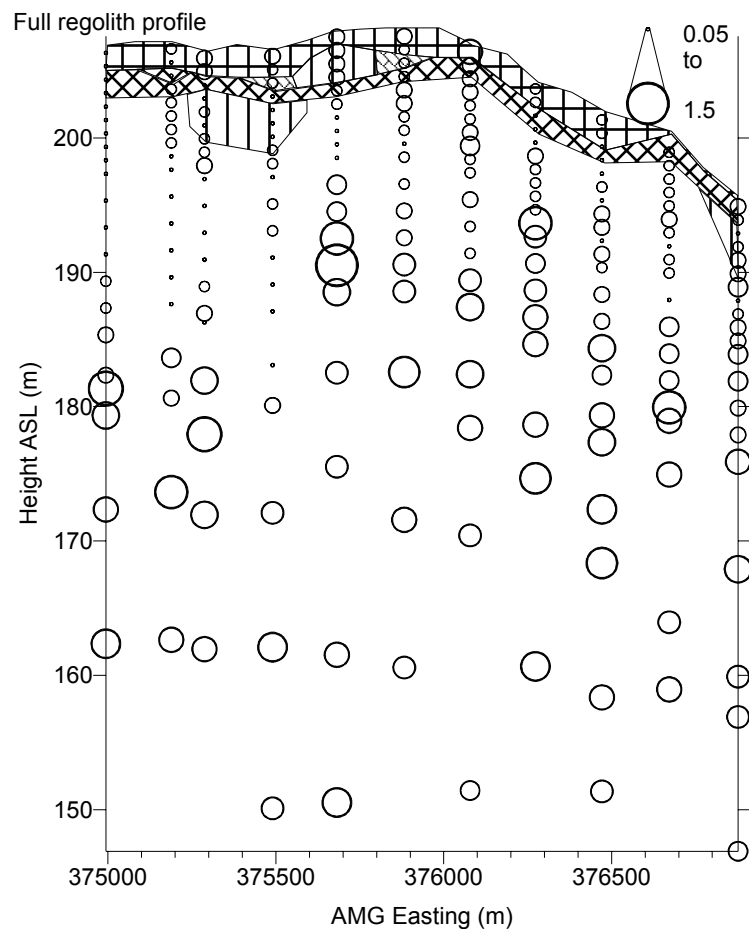
	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	7	15	4	7
Std Error	0.8	0.6	0.2	2.0
Median	7	13	4	5
Std Dev	3	8	1	8
Minimum	1.9	4	2.1	3
Maximum	11.5	44	6	38
Count	14	166	17	17

Figure A1b.42: Distribution and concentration of Th at Jumbuck regolith section on 6690450N.

Th (ppm)

Jumbuck





	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	0.11	0.28	0.14	0.09
Std Error	0.02	0.02	0.03	0.01
Median	0.1	0.2	0.1	0.1
Std Dev	0.06	0.26	0.11	0.06
Minimum	0.05	0.05	0.05	0.05
Maximum	0.2	1.5	0.5	0.2
Count	14	166	17	17

Figure A1b.44: Distribution and concentration of TI at Jumbuck regolith section on 6690450N.

TI (ppm)

Jumbuck

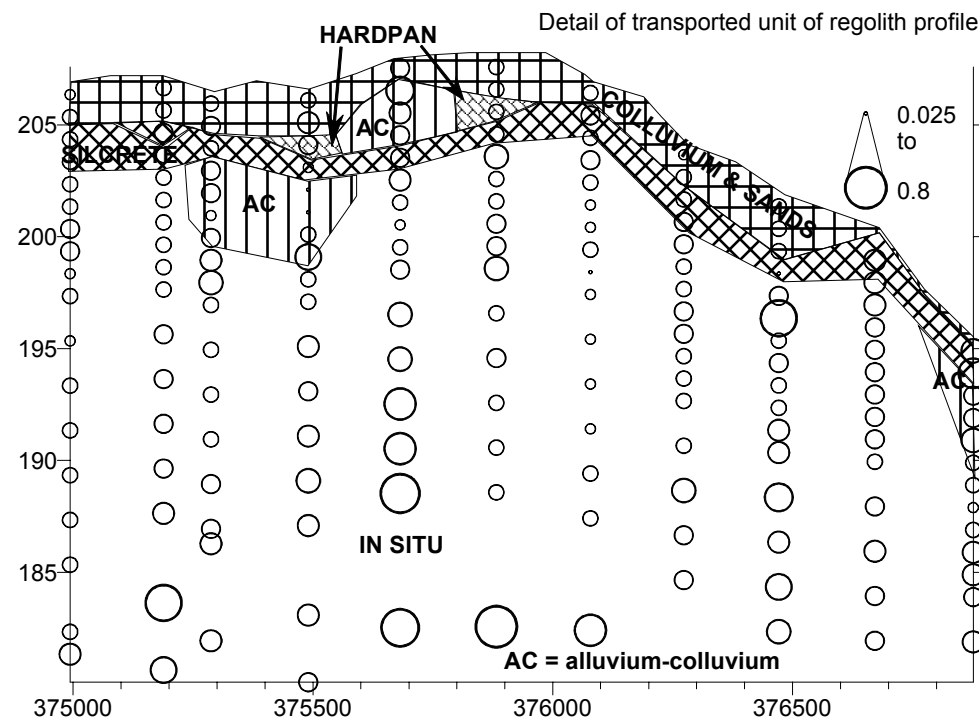
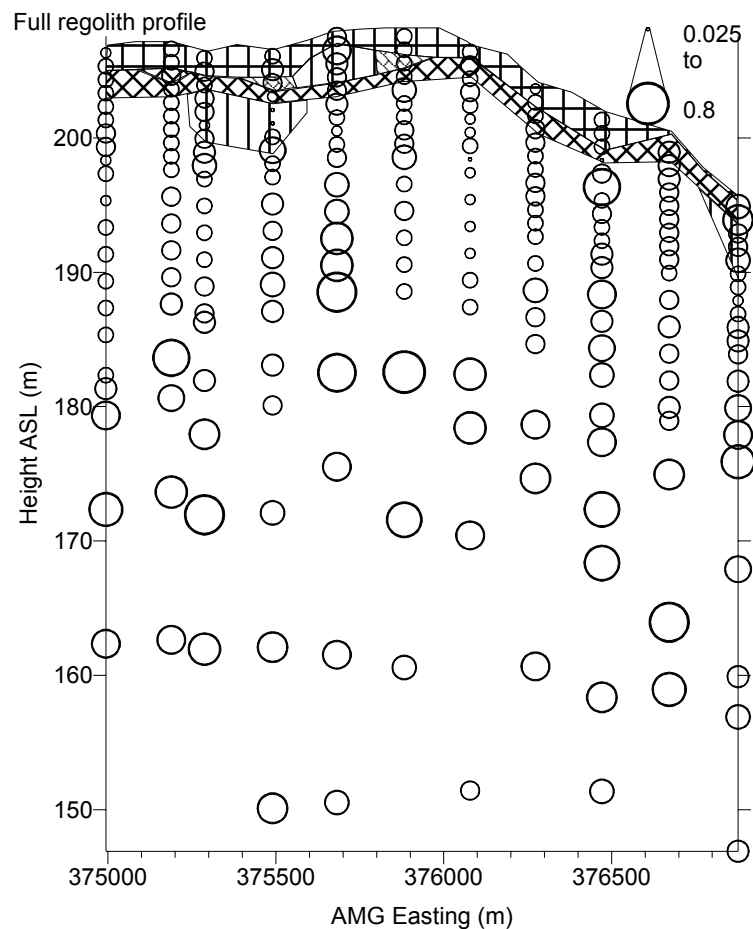
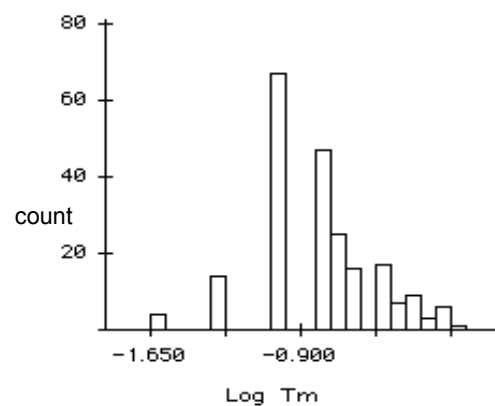


Figure A1b.45: Distribution and concentration of Tm at Jumbuck regolith section on 6690450N.

Tm (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	0.16	0.22	0.11	0.14
Std Error	0.03	0.01	0.01	0.02
Median	0.15	0.15	0.1	0.1
Std Dev	0.10	0.15	0.03	0.09
Minimum	0.025	0.025	0.05	0.025
Maximum	0.35	0.8	0.2	0.4
Count	14	166	17	17

Jumbuck

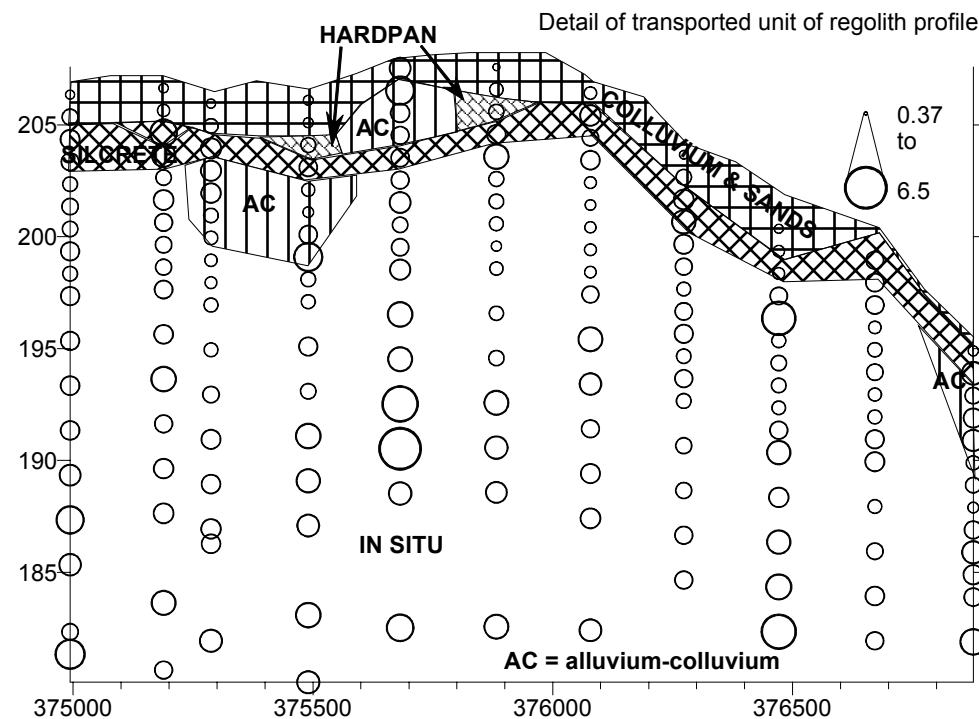
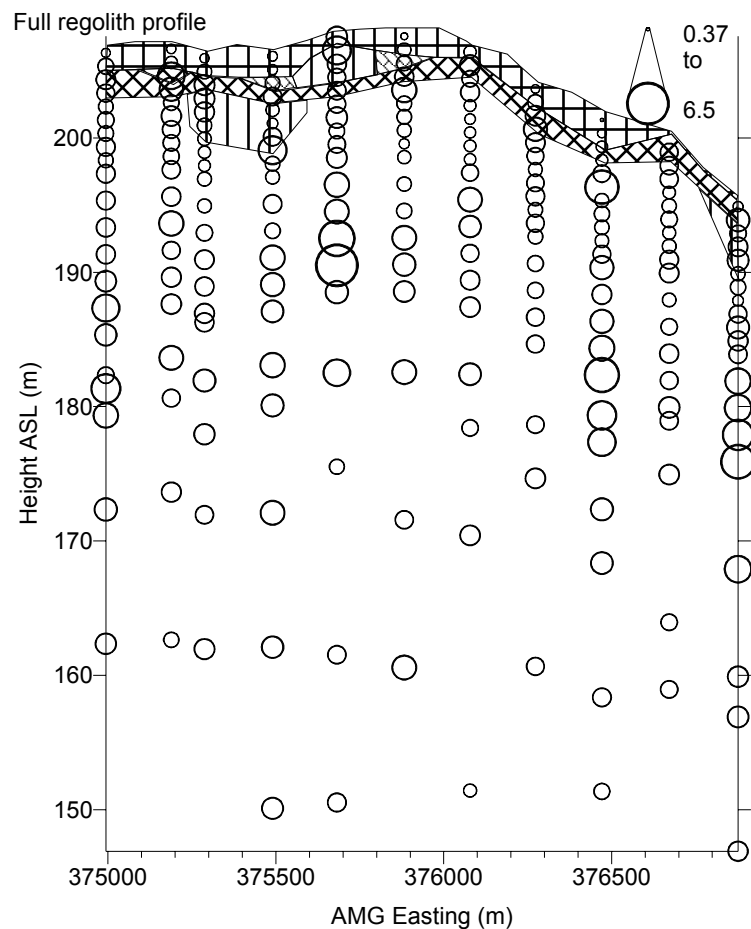
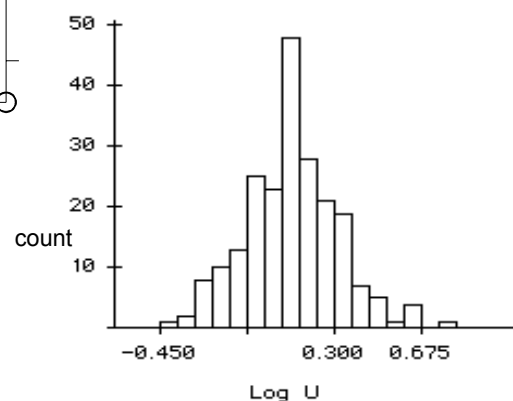


Figure A1b.46: Distribution and concentration of U at Jumbuck regolith section on 6690450N.

U (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silicate
Mean	1.5	1.5	0.7	1.5
Std Error	0.2	0.1	0.1	0.1
Median	1.4	1.4	0.6	1.4
Std Dev	0.7	0.8	0.3	0.5
Minimum	0.6	0.6	0.4	0.6
Maximum	3	6.5	1.7	2.7
Count	14	166	17	17

Jumbuck

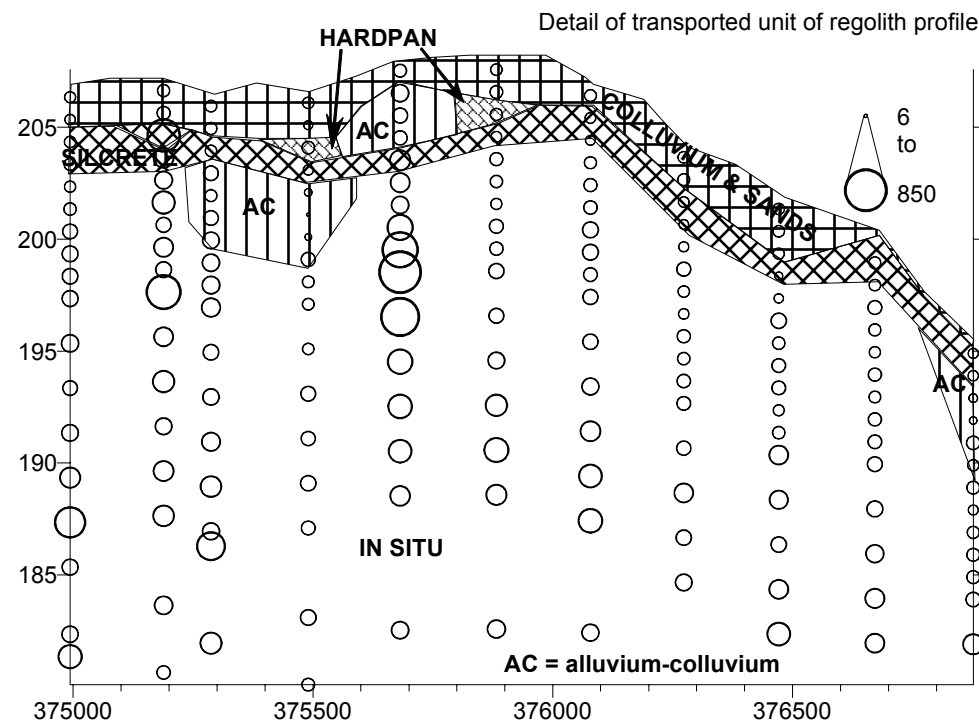
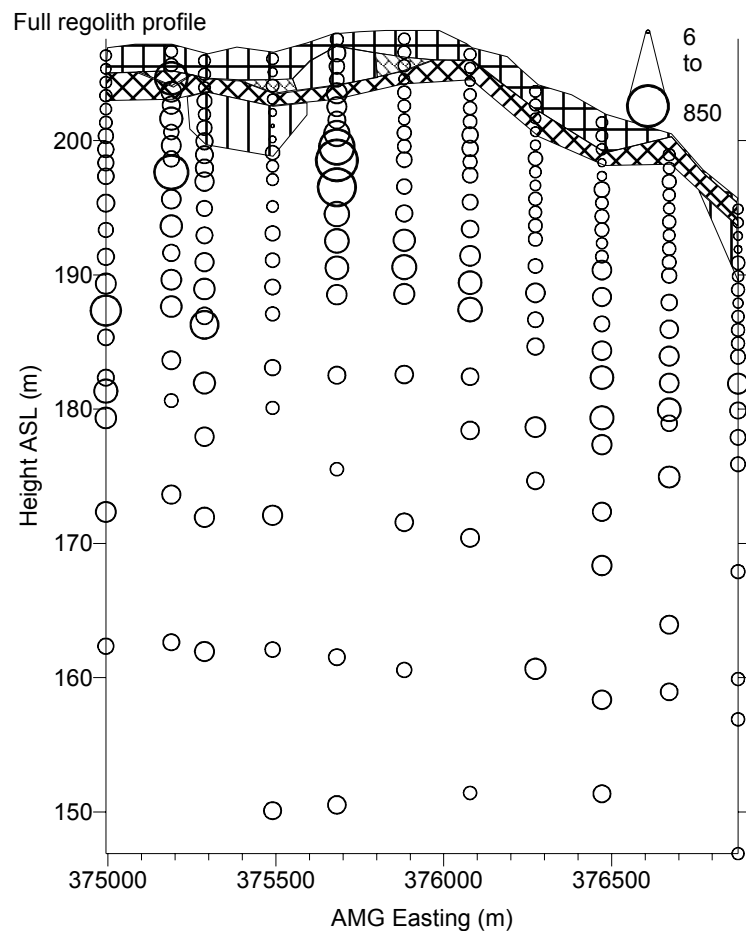
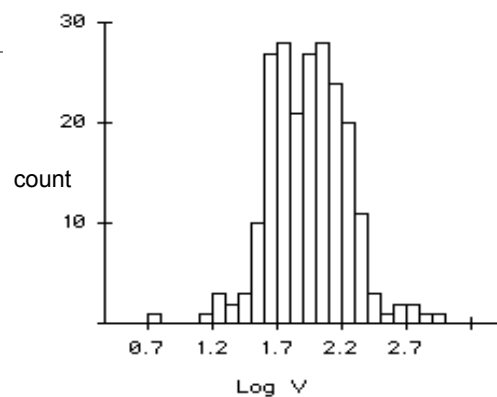


Figure A1b.47: Distribution and concentration of V at Jumbuck regolith section on 6690450N.

V (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	59	130	47	81
Std Error	10	8	2	28
Median	71	105	46	38
Std Dev	38	108	9	117
Minimum	6	27	25	19
Maximum	120	850	63	500
Count	14	166	17	17

Jumbuck

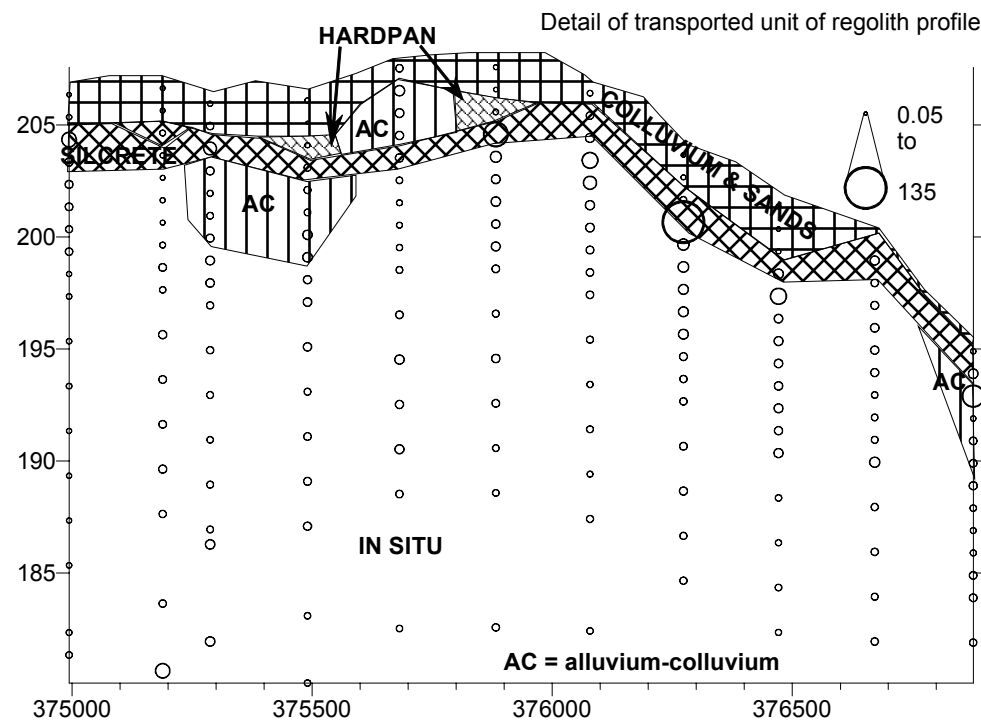
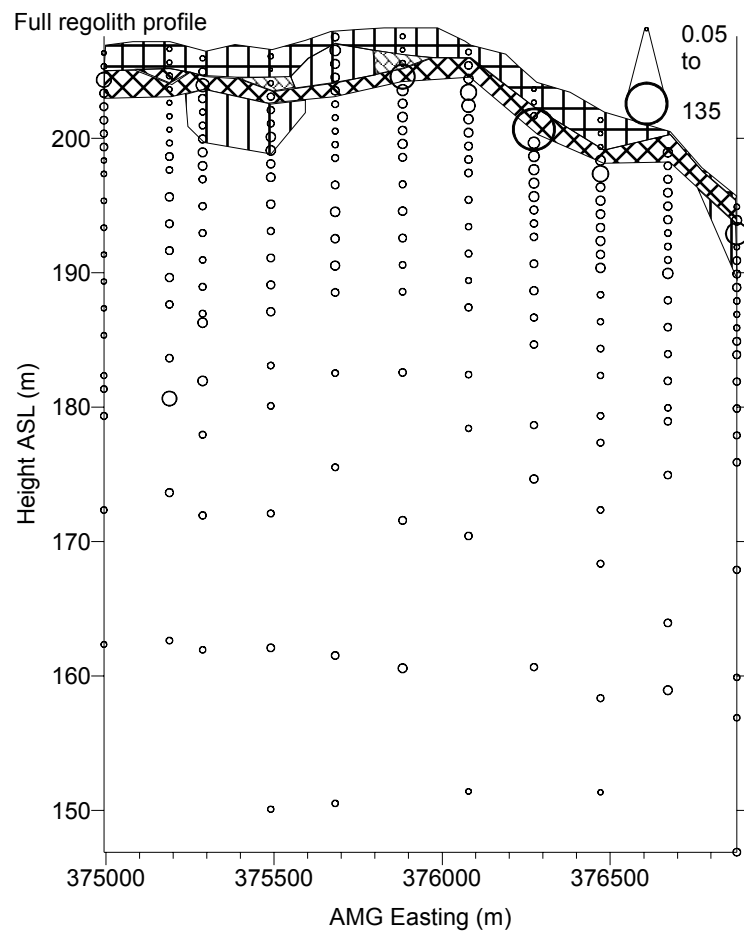
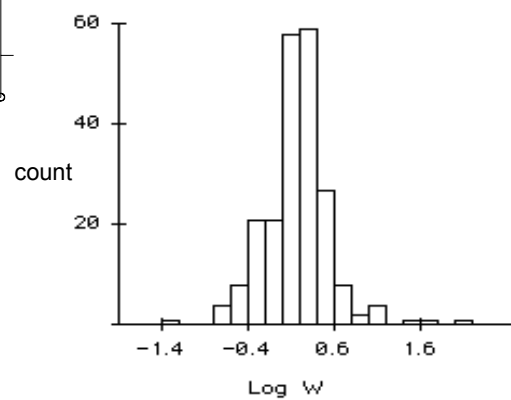


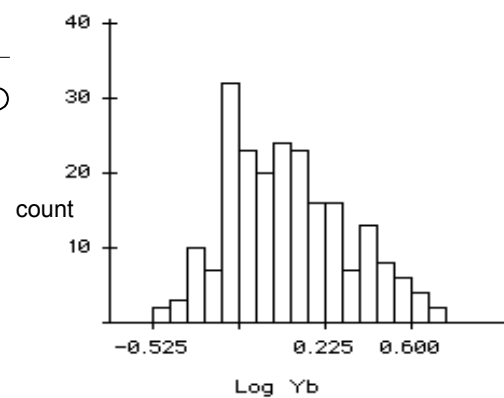
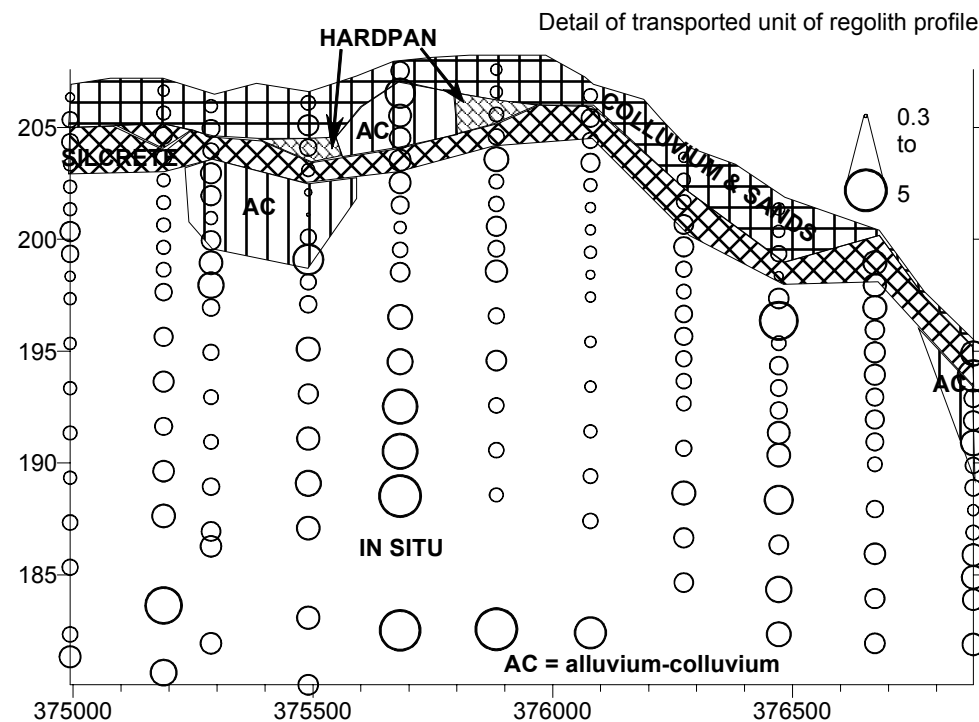
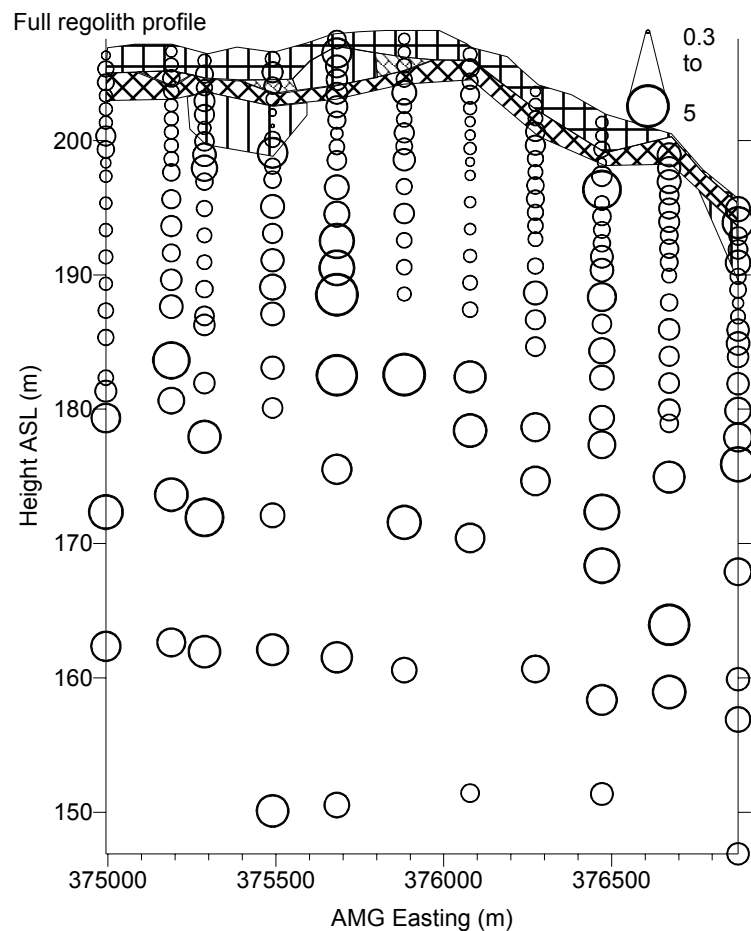
Figure A1b.48: Distribution and concentration of W at Jumbuck regolith section on 6690450N.

W (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	4	2	0.5	13
Std Error	2.1	0.2	0.1	8.0
Median	2.2	1.5	0.3	2.3
Std Dev	7.9	2.0	0.5	33
Minimum	0.5	0.3	0.05	0.4
Maximum	32	15	2	135
Count	14	106	17	17

Jumbuck



	Colluvium -alluvium	In-situ	Colluvium -sand	Silcrete
Mean	1.2	1.5	0.7	1.1
Std Error	0.2	0.1	0.1	0.1
Median	1.1	1.2	0.6	0.9
Std Dev	0.7	1.0	0.2	0.6
Minimum	0.3	0.4	0.4	0.4
Maximum	2.8	5	1.25	2.8
Count	14	166	17	17

Figure A1b.49: Distribution and concentration of Yb at Jumbuck regolith section on 6690450N.

Yb (ppm)

Jumbuck

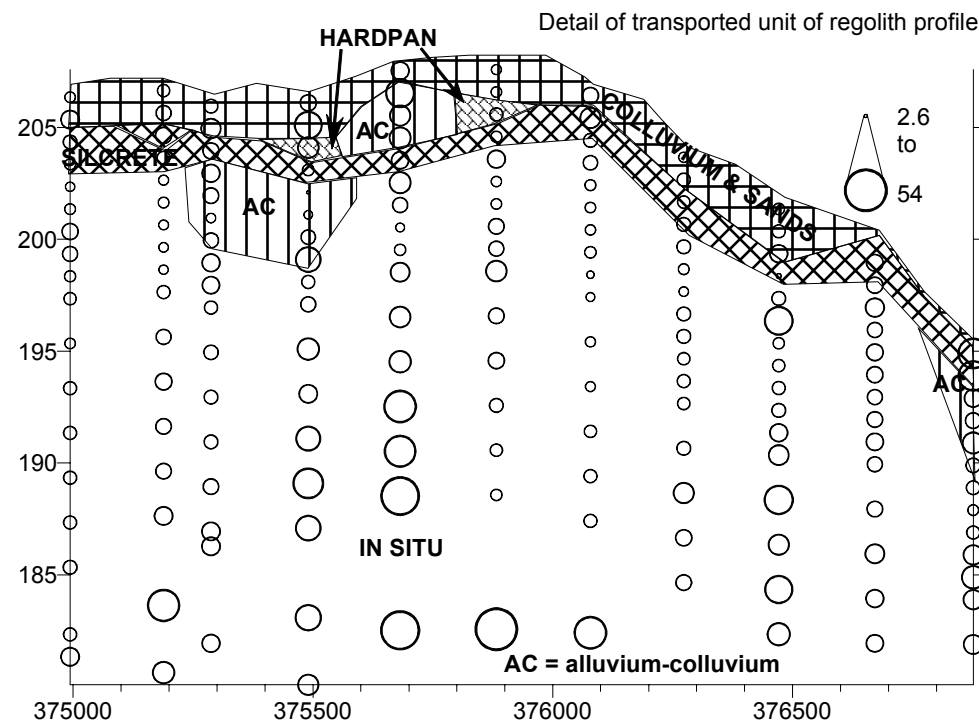
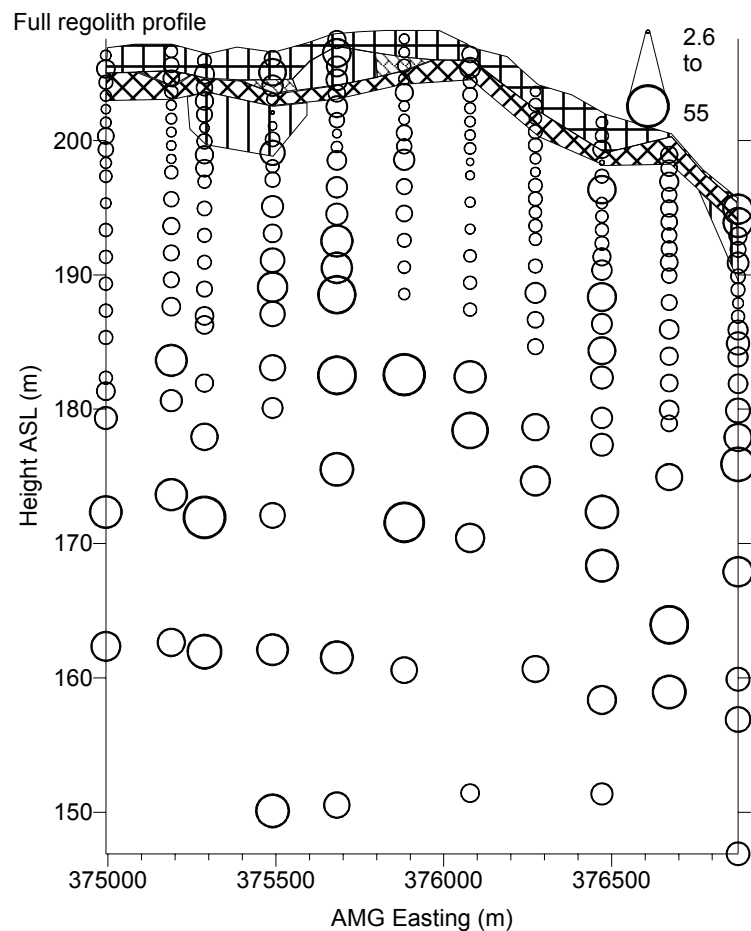
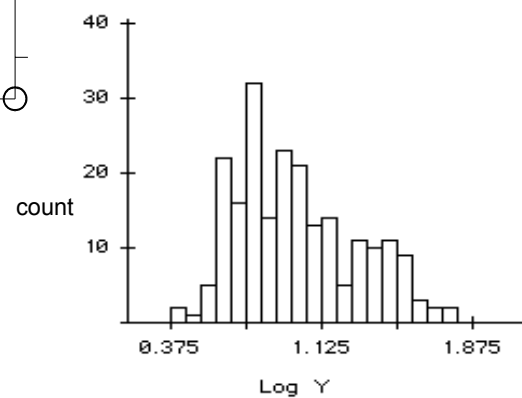


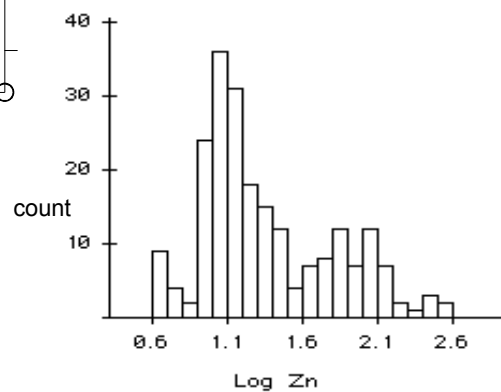
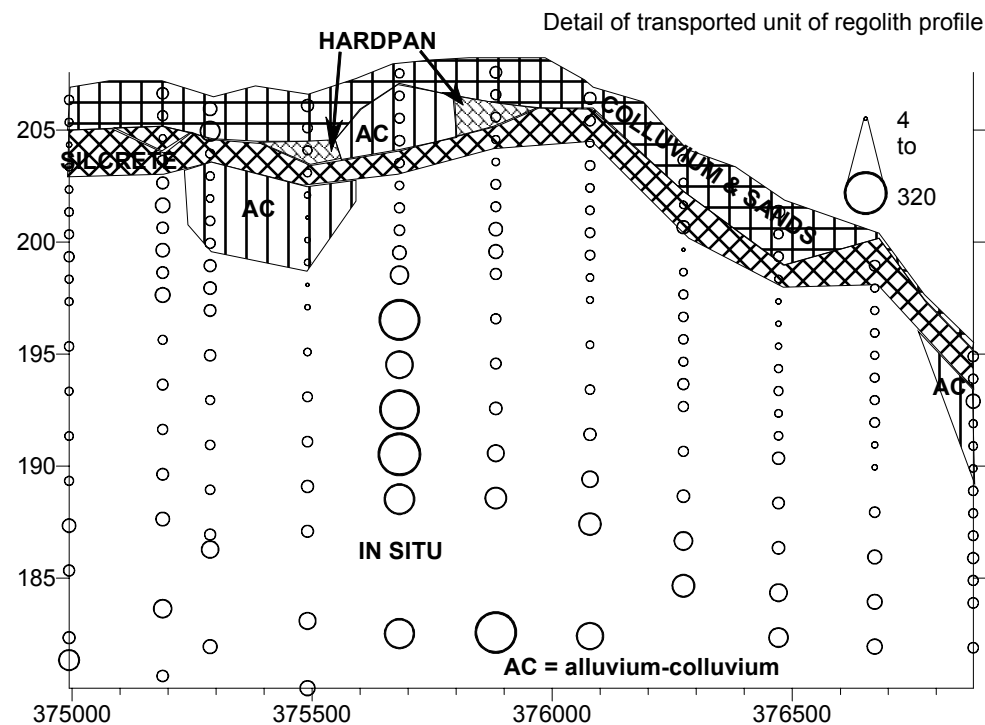
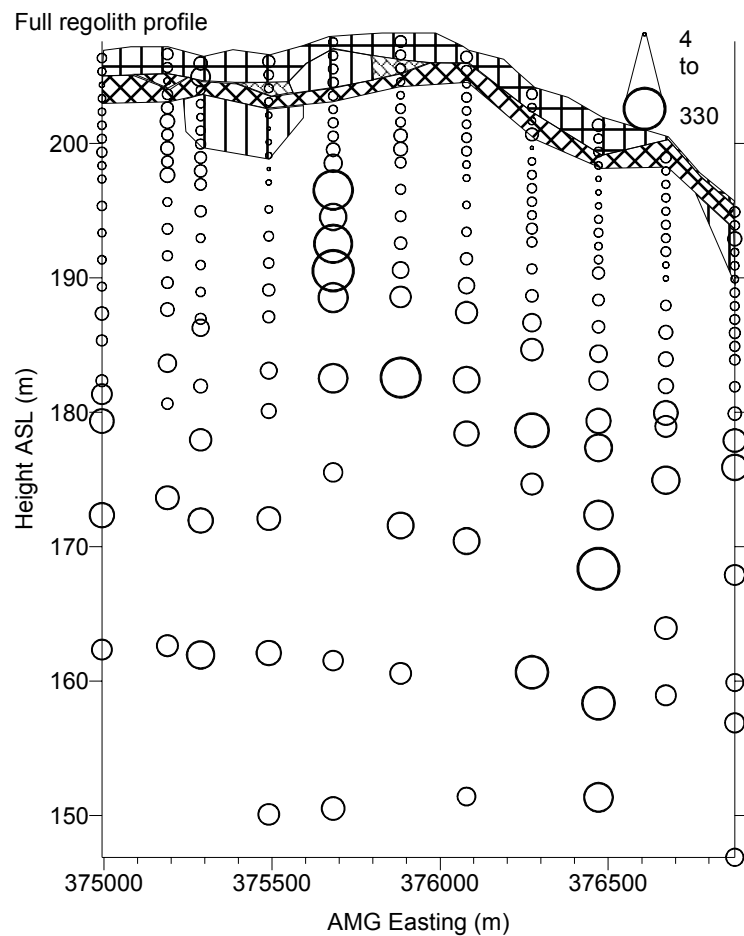
Figure A1b.50: Distribution and concentration of Y at Jumbuck regolith section on 6690450N.

Y (ppm)



	Colluvium -alluvium	In situ	Colluvium -sand	Silcrete
Mean	10	14	8	9
Std Error	1.6	0.9	1.1	1.7
Median	9	10	7	7
Std Dev	6	11	4	7
Minimum	3	3	4	3
Maximum	25	55	23	28
Count	14	166	17	17

Jumbuck



	Colluvium -alluvium	In situ	Colluvium -sand	Silicate
Mean	11	49	18	11
Std Error	2	5	3	1
Median	10	20	14	9
Std Dev	6	63	12	5
Minimum	4	4	9	5
Maximum	29	330	61	24
Count	14	166	17	17

Figure A1b.51: Distribution and concentration of Zn at Jumbuck regolith section on 6690450N.

Zn (ppm)

Jumbuck

Appendix A1c: Monsoon

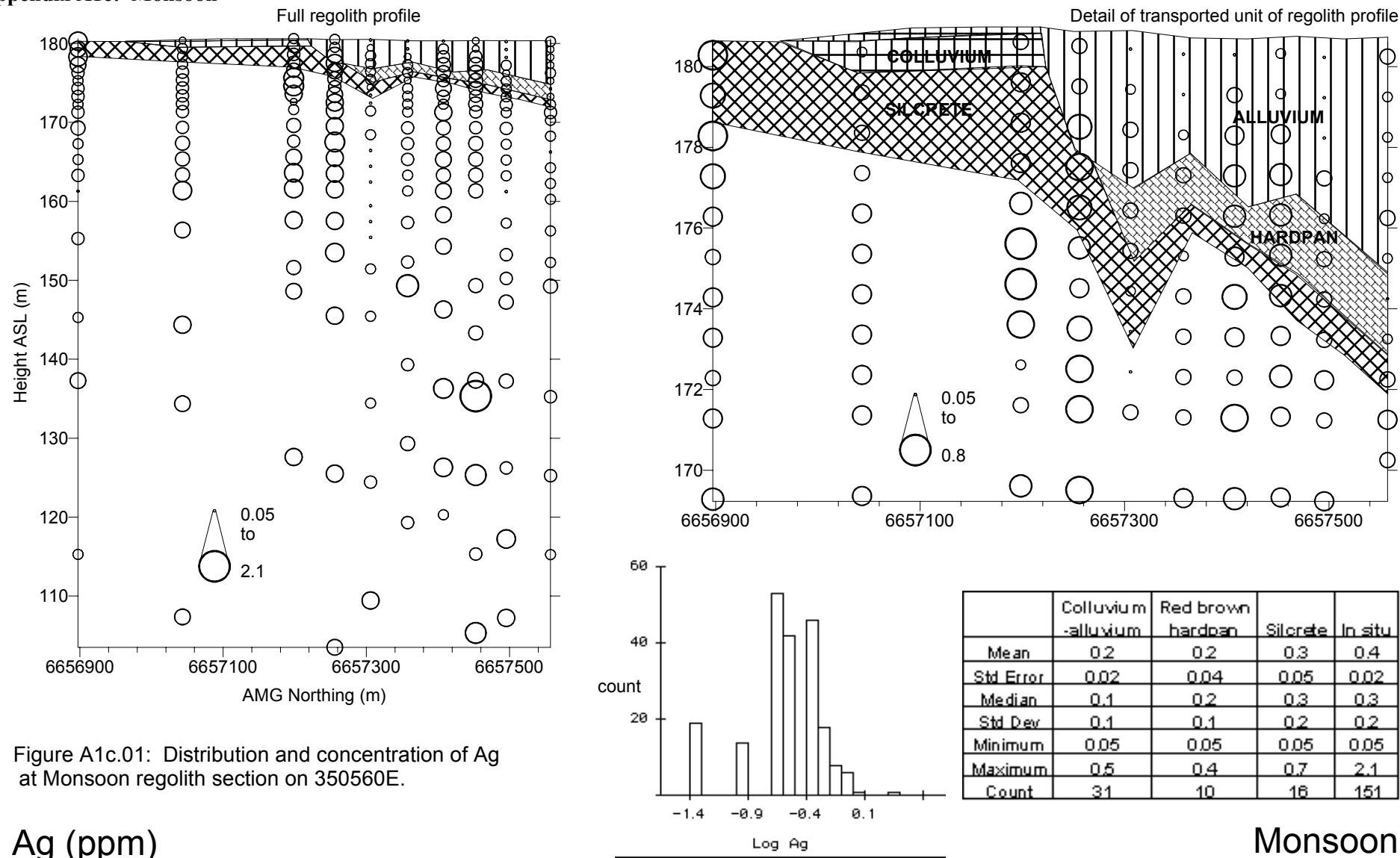


Figure A1c.01: Distribution and concentration of Ag at Monsoon regolith section on 350560E.

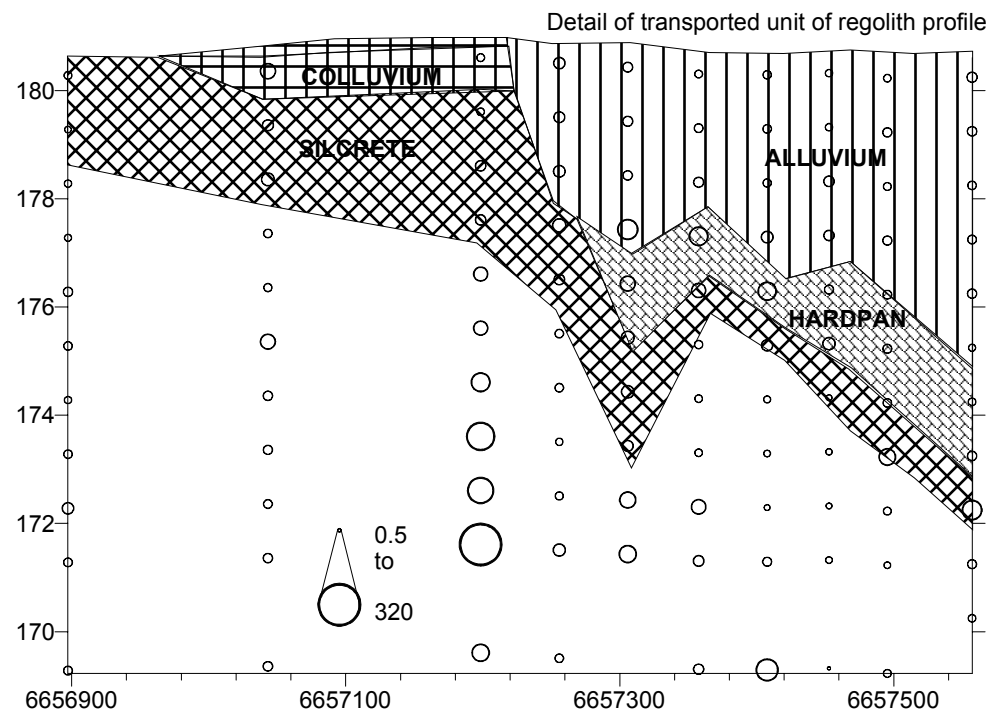
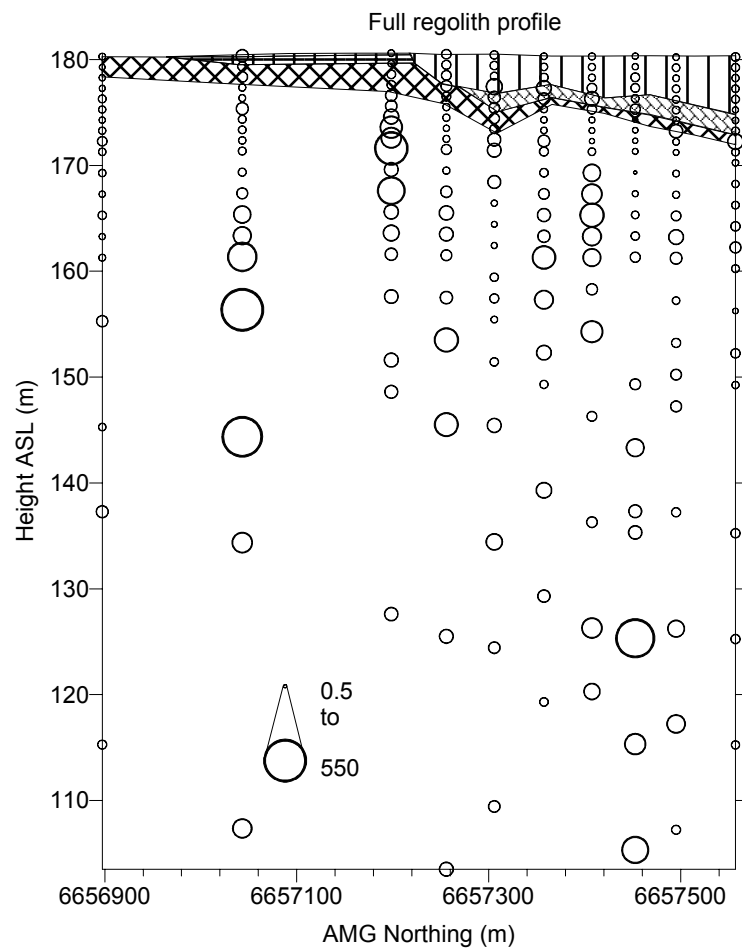
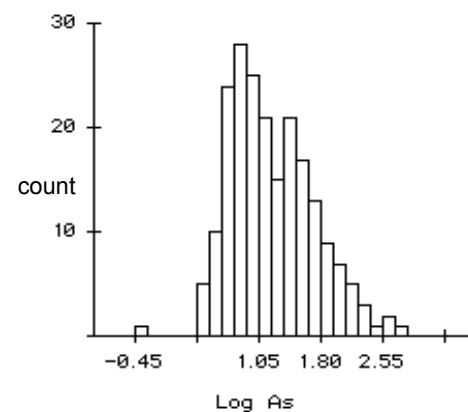


Figure A1c.02: Distribution and concentration of As at Monsoon regolith section on 350560E.



	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	11	20	17	46
Std Error	2	5	4	7
Median	8	14	13	18
Std Dev	11	17	14	81
Minimum	4	5	2	0.5
Maximum	61	51	57	550
Count	31	10	16	151

As (ppm)

Monsoon

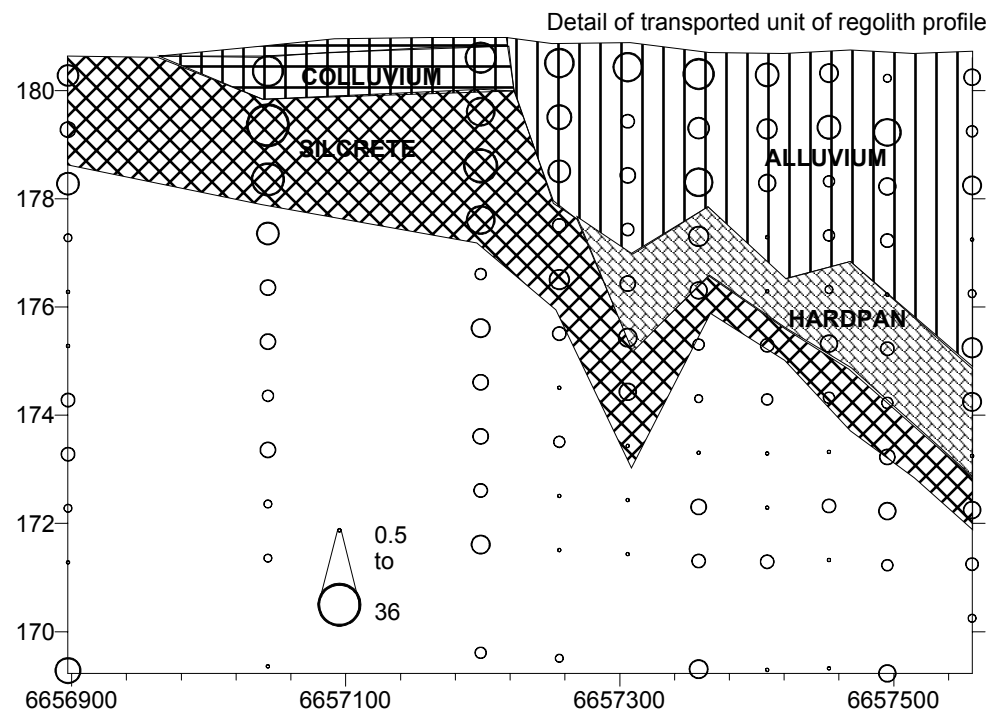
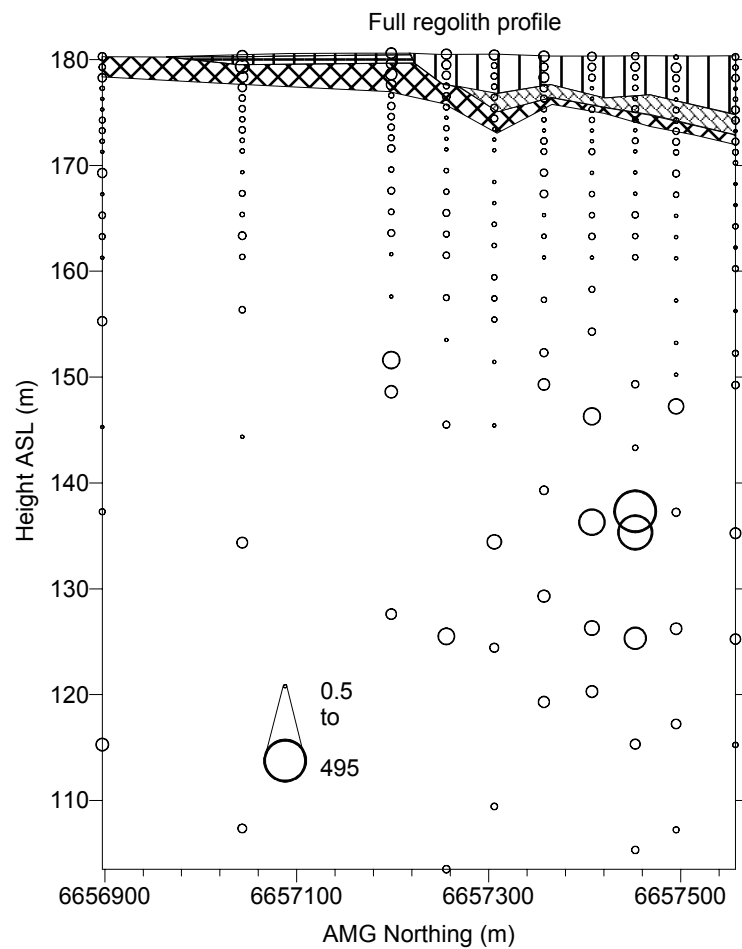
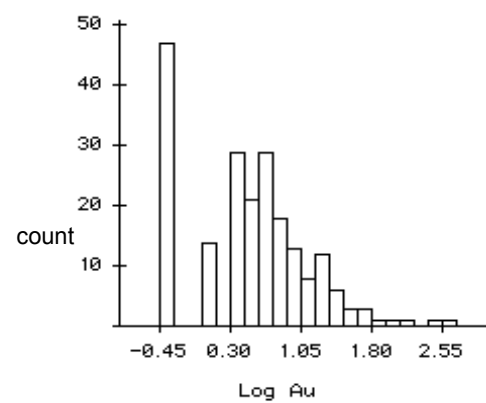


Figure A1c.03: Distribution and concentration of Au at Monsoon regolith section on 350560E.



	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	7	4	10	14
Std Error	1	1	2	4
Median	6	4	5	3
Std Dev	6	2	10	51
Minimum	0.5	0.5	0.5	0.5
Maximum	18	7	36	495
Count	31	10	16	151

Au (ppb)

Monsoon

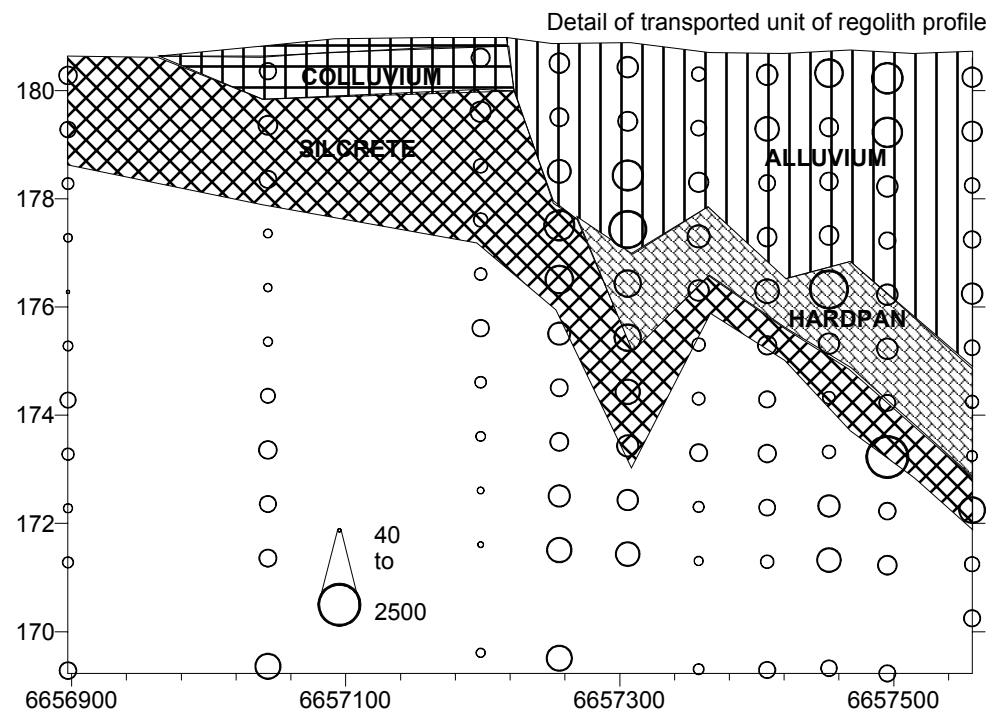
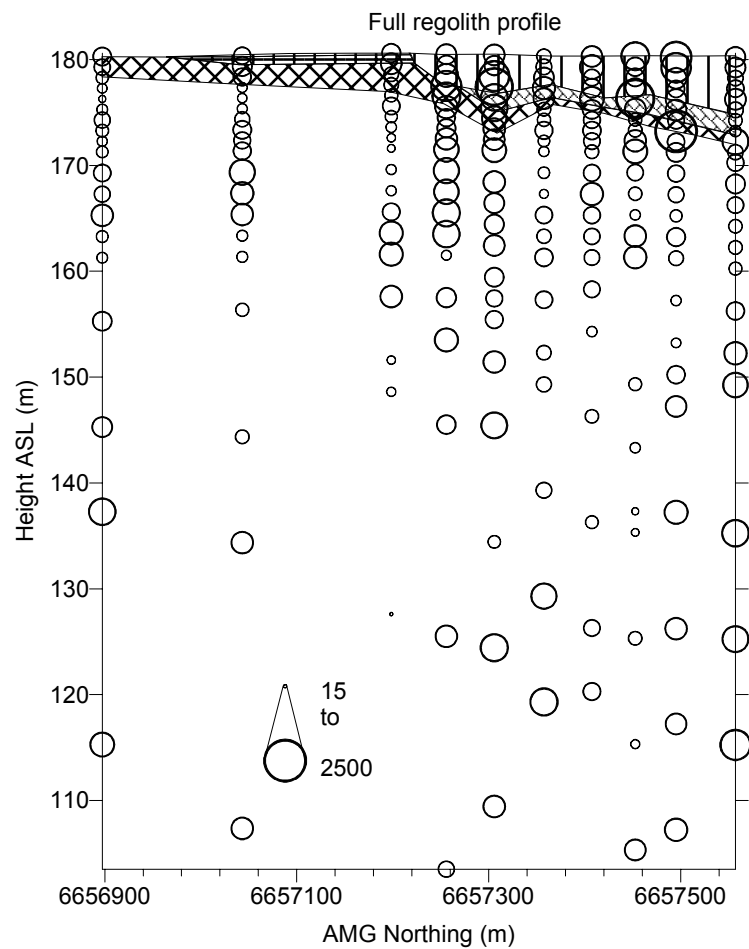
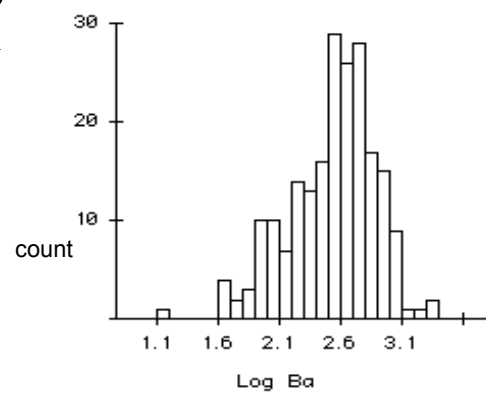


Figure A1c.04: Distribution and concentration of Ba at Monsoon regolith section on 350560E.



	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	593	709	676	384
Std Error	68	174	144	22
Median	490	600	505	330
Std Dev	379	550	575	265
Minimum	230	125	180	15
Maximum	1950	2050	2500	1250
Count	31	10	16	151

Ba (ppm)

Monsoon

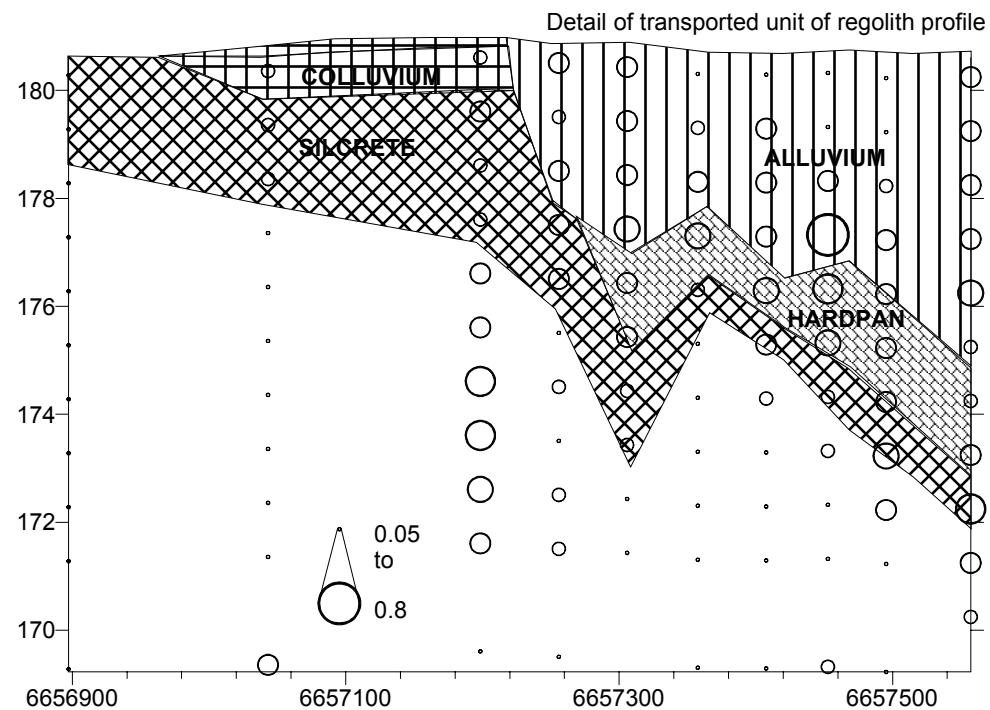
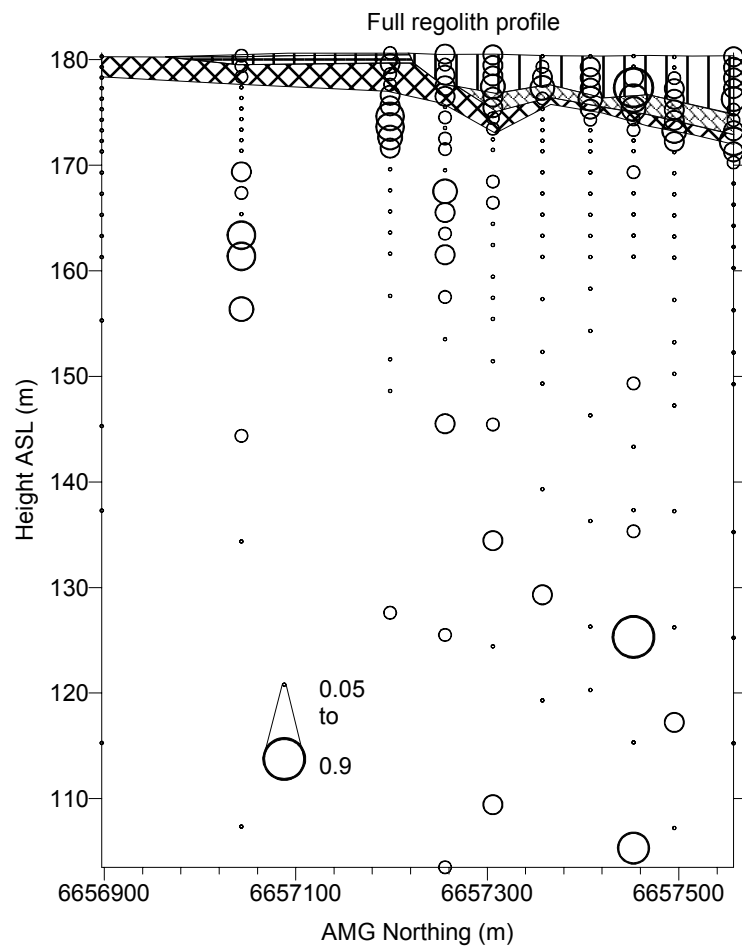
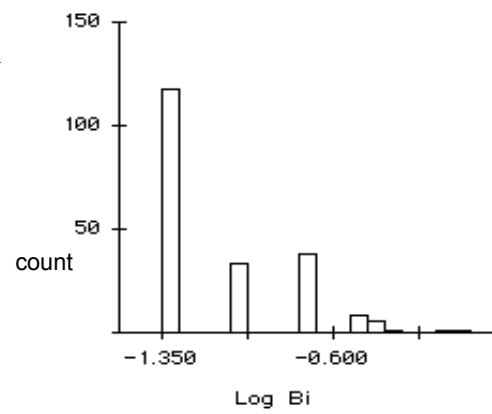


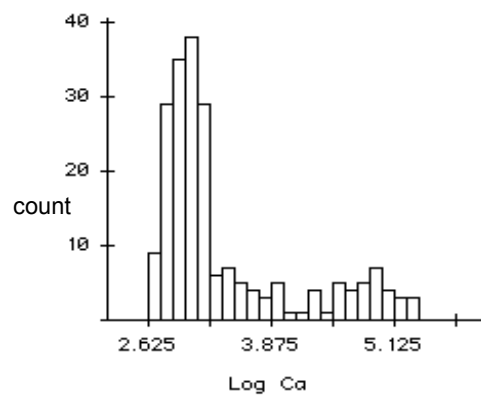
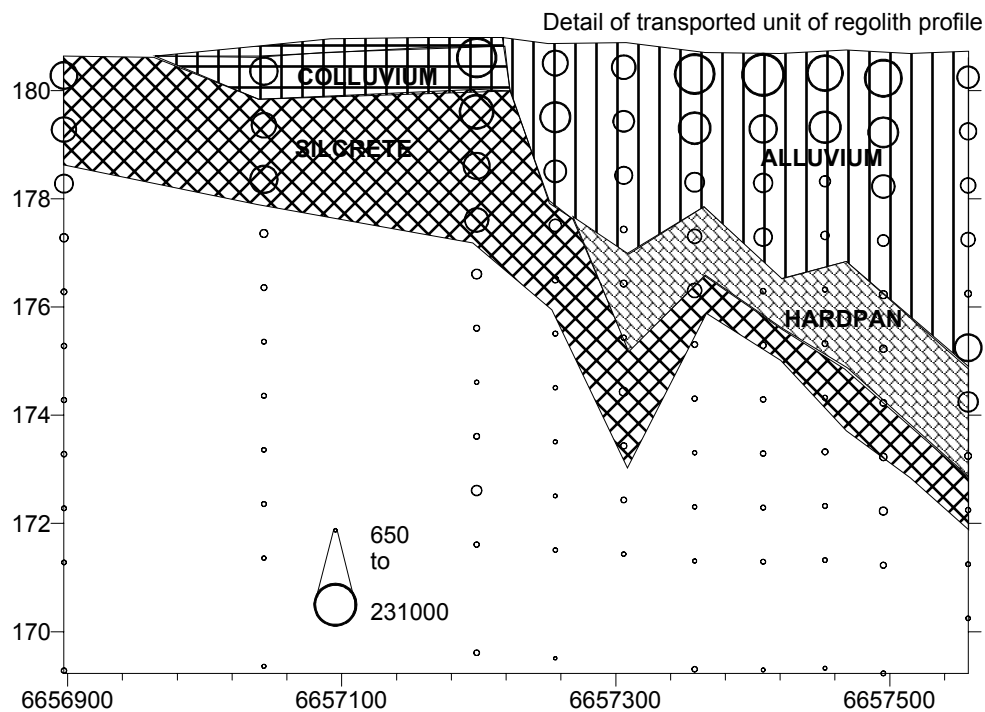
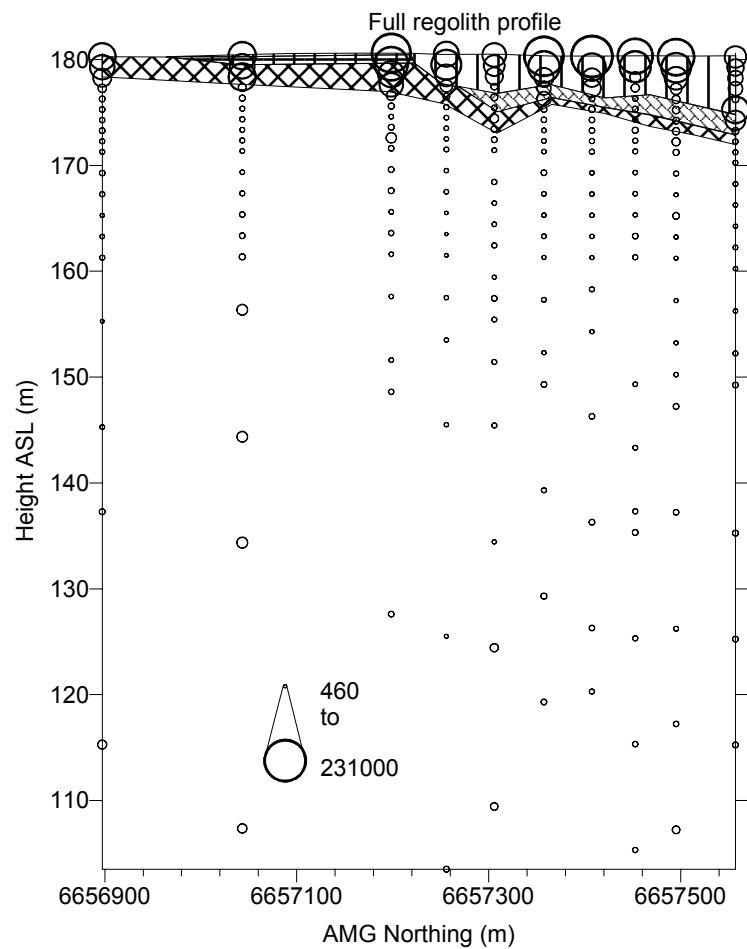
Figure A1c.05: Distribution and concentration of Bi at Monsoon regolith section on 350560E.



	Colluvium -alluvium	Red brown hardpan	Silcrete	In situ
Mean	0.2	0.2	0.2	0.1
Std Error	0.0	0.0	0.0	0.0
Median	0.2	0.2	0.1	0.05
Std Dev	0.1	0.1	0.1	0.1
Minimum	0.05	0.1	0.05	0.05
Maximum	0.8	0.4	0.4	0.9
Count	31	10	16	151

Monsoon

Bi (ppm)



	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	75694	7850	42272	1671
Std Error	11753	4339	11635	265
Median	56000	2425	16400	1000
Std Dev	65436	13721	46540	3257
Minimum	2300	1150	1100	480
Maximum	231000	43800	147000	36300
Count	31	10	16	151

Figure A1c.06: Distribution and concentration of Ca at Monsoon regolith section on 350560E.

Ca (ppm)

Monsoon

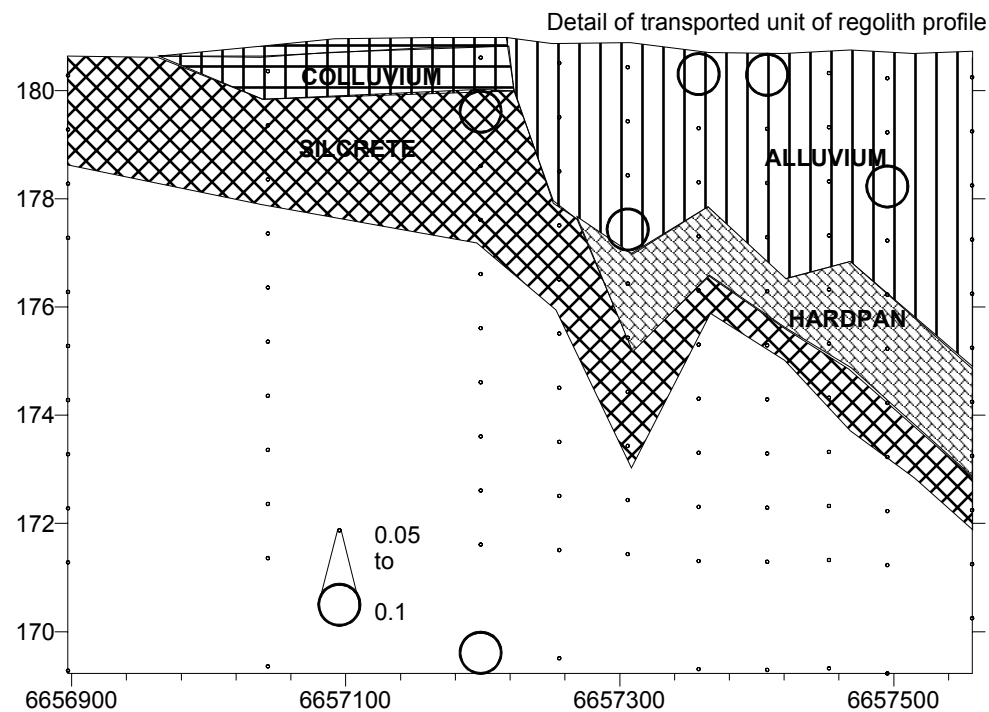
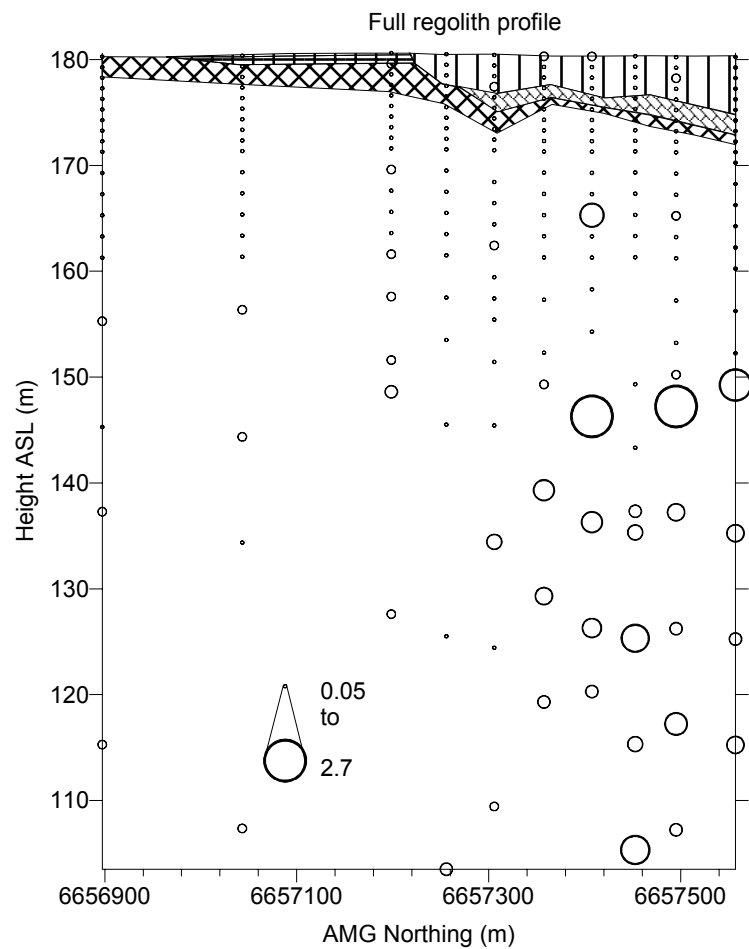
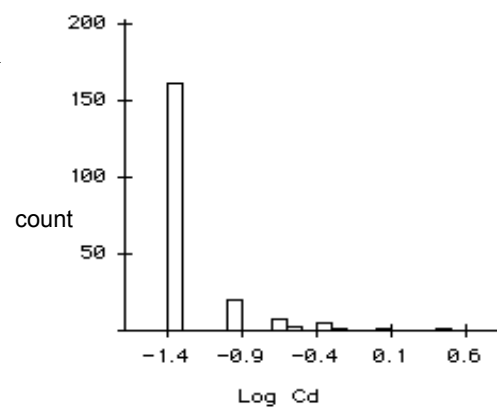


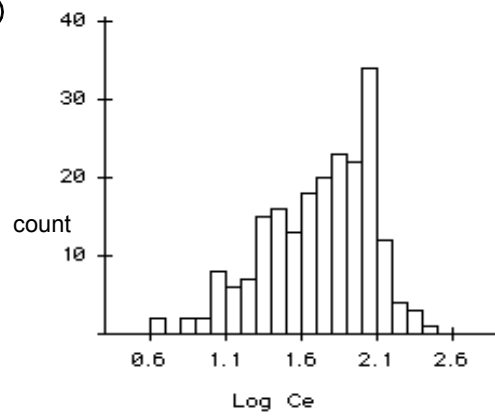
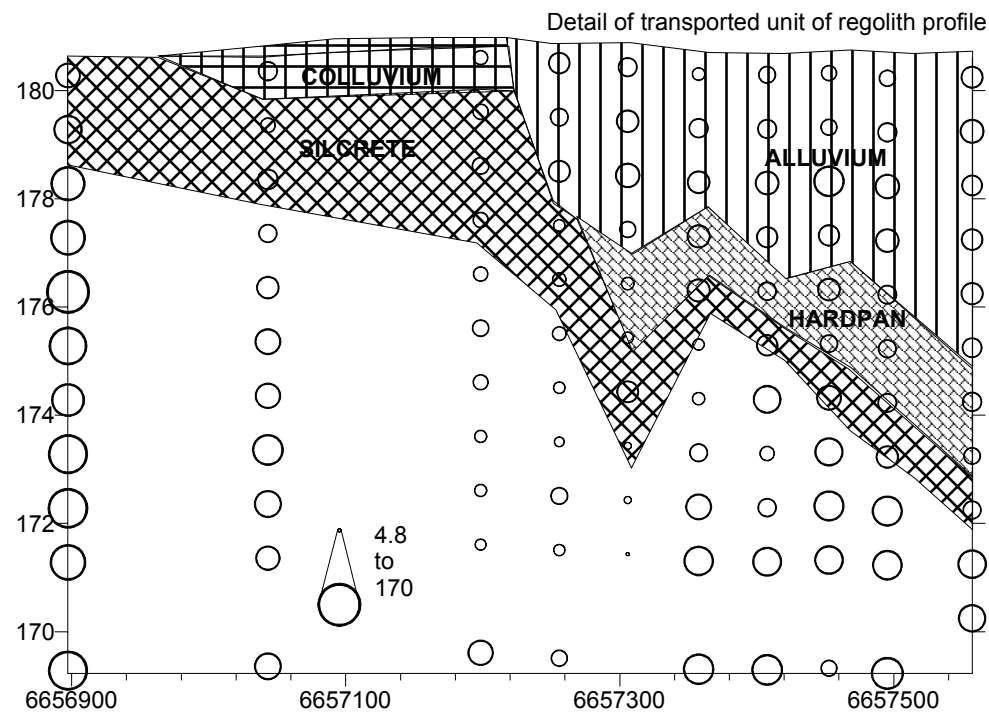
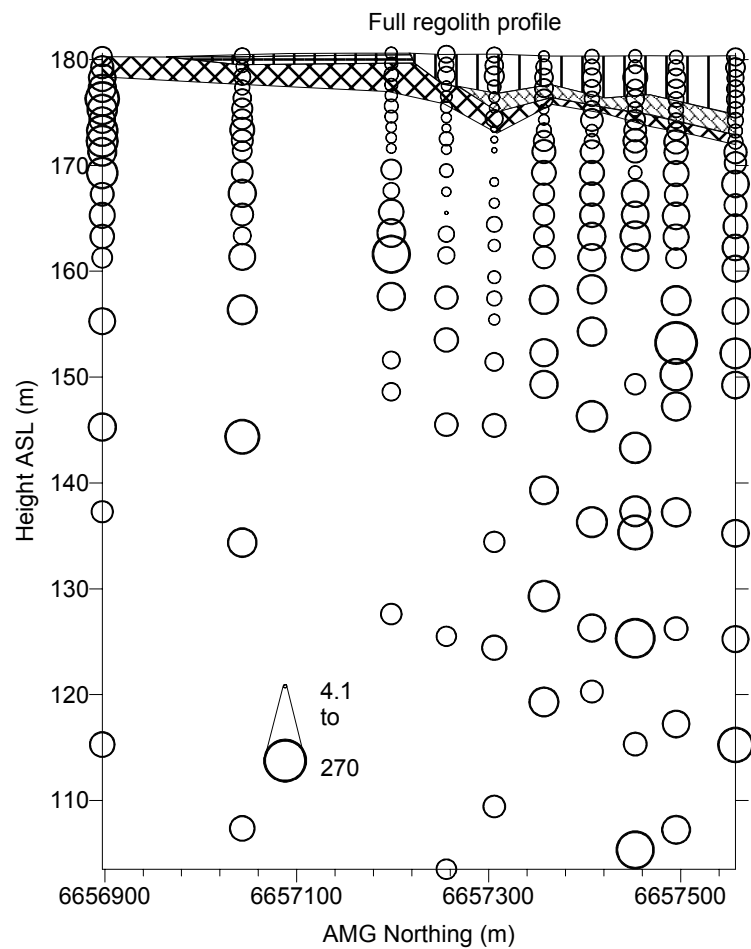
Figure A1c.07: Distribution and concentration of Cd at Monsoon regolith section on 350560E.



	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	0.1	0.1	0.1	0.2
Std Error	0.0	0.0	0.0	0.0
Median	0.05	0.05	0.05	0.05
Std Dev	0.0	0.0	0.0	0.4
Minimum	0.05	0.05	0.05	0.05
Maximum	0.1	0.05	0.1	2.7
Count	31	10	16	151

Cd (ppm)

Monsoon



	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	37	29	33	81
Std Error	2	3	4	4
Median	37	29	32	78
Std Dev	13	11	18	48
Minimum	15	12	7	4
Maximum	83	46	71	270
Count	31	10	16	151

Figure A1c.08: Distribution and concentration of Ce at Monsoon regolith section on 350560E.

Ce (ppm)

Monsoon

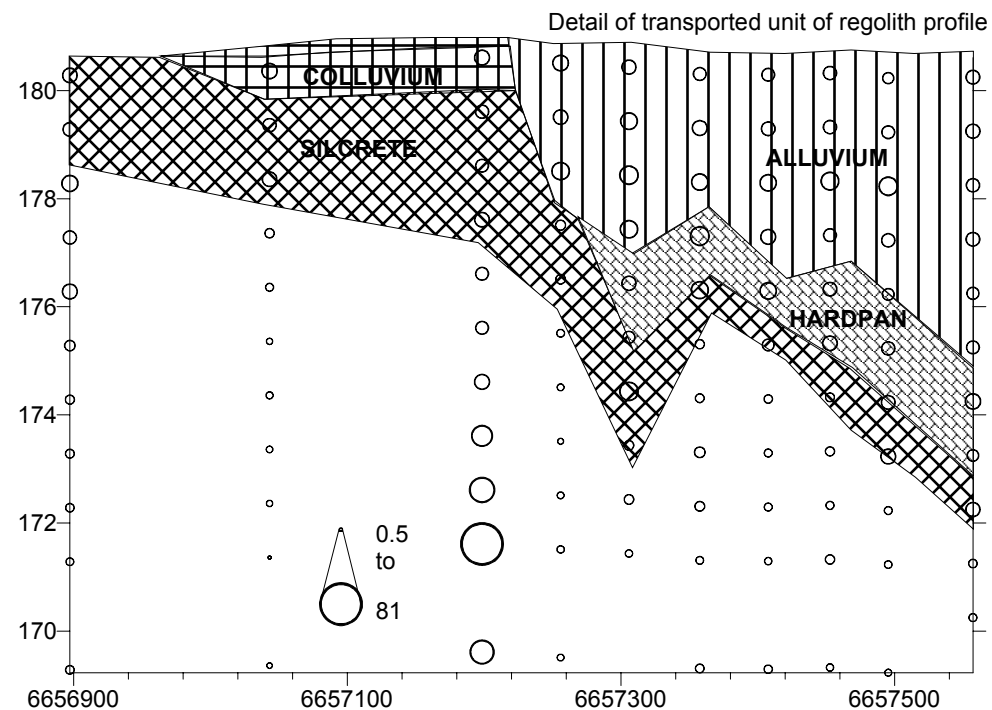
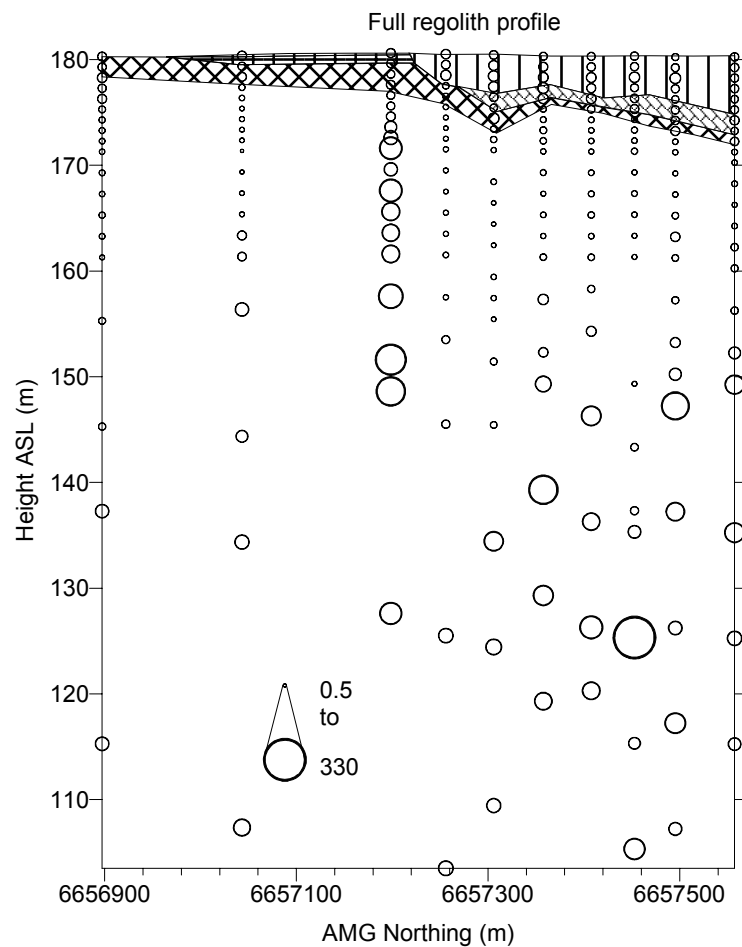
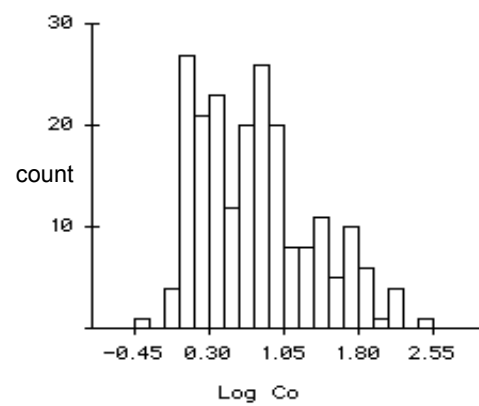


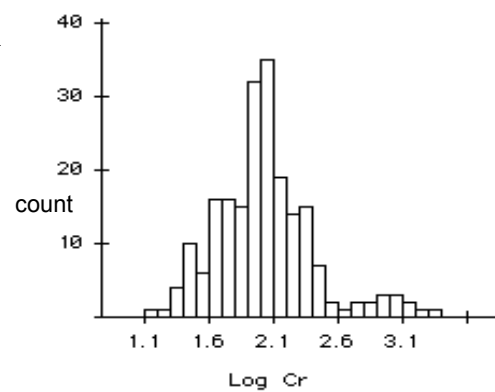
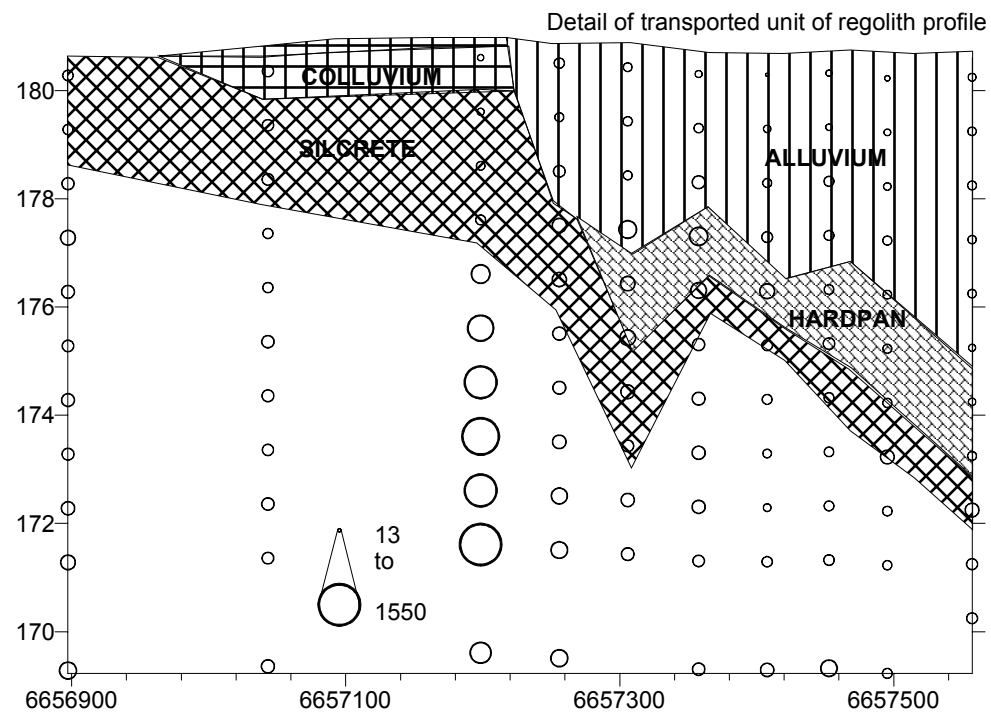
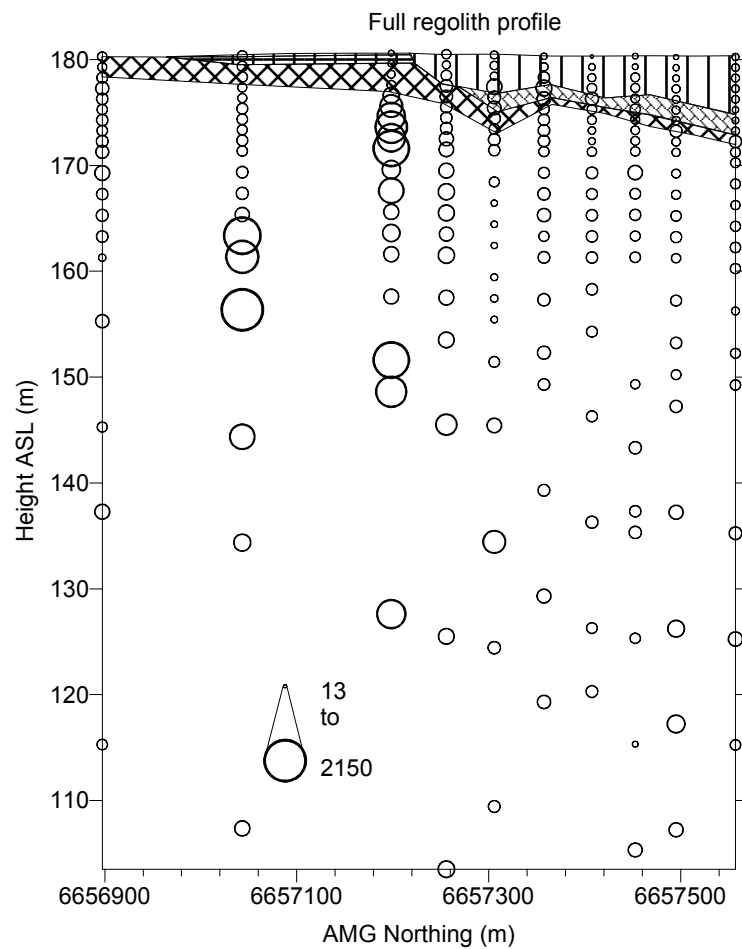
Figure A1c.09: Distribution and concentration of Co at Monsoon regolith section on 350560E.



	Colluvium -alluvium	Red brown hardpan	Silcrete	In situ
Mean	8	7	6	19
Std Error	0.5	0.9	0.7	3.2
Median	7	7	6	3
Std Dev	3	3	3	39
Minimum	4	4	2	1
Maximum	13	14	13	330
Count	31	10	16	151

Co (ppm)

Monsoon



	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	52	104	94	219
Std Error	7	23	10	27
Median	45	71	85	115
Std Dev	39	73	42	328
Minimum	13	31	29	23
Maximum	230	250	175	2150
Count	31	10	16	151

Figure A1c.10: Distribution and concentration of Cr at Monsoon regolith section on 350560E.

Cr (ppm)

Monsoon

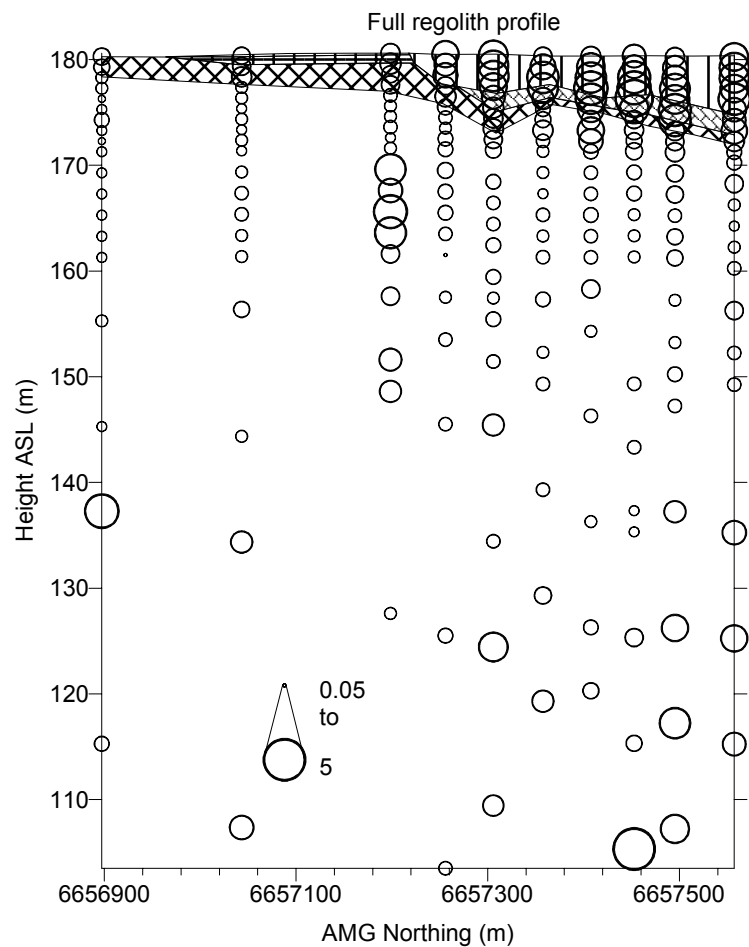
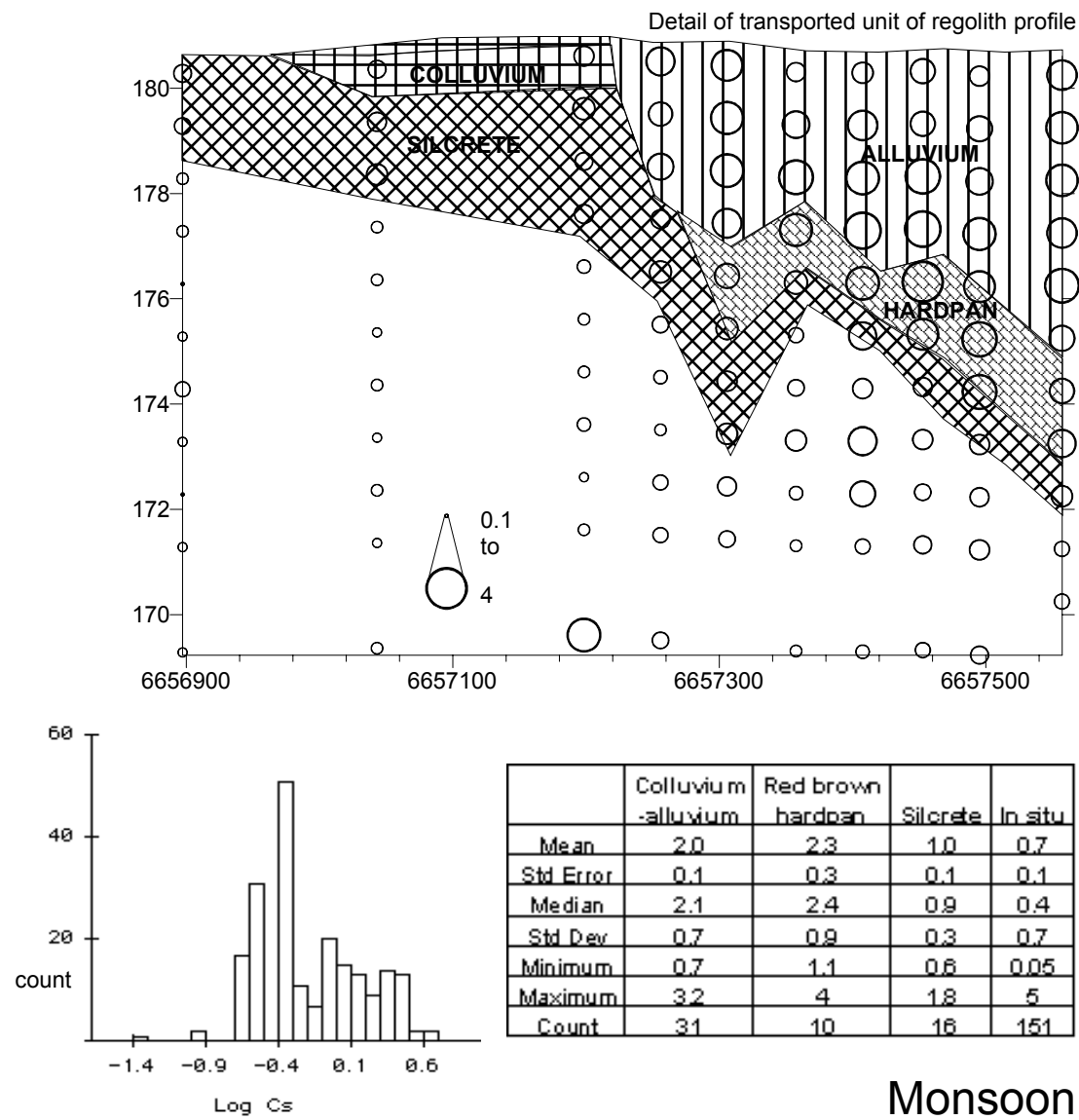


Figure A1c.11: Distribution and concentration of Cs at Monsoon regolith section on 350560E.

Cs (ppm)



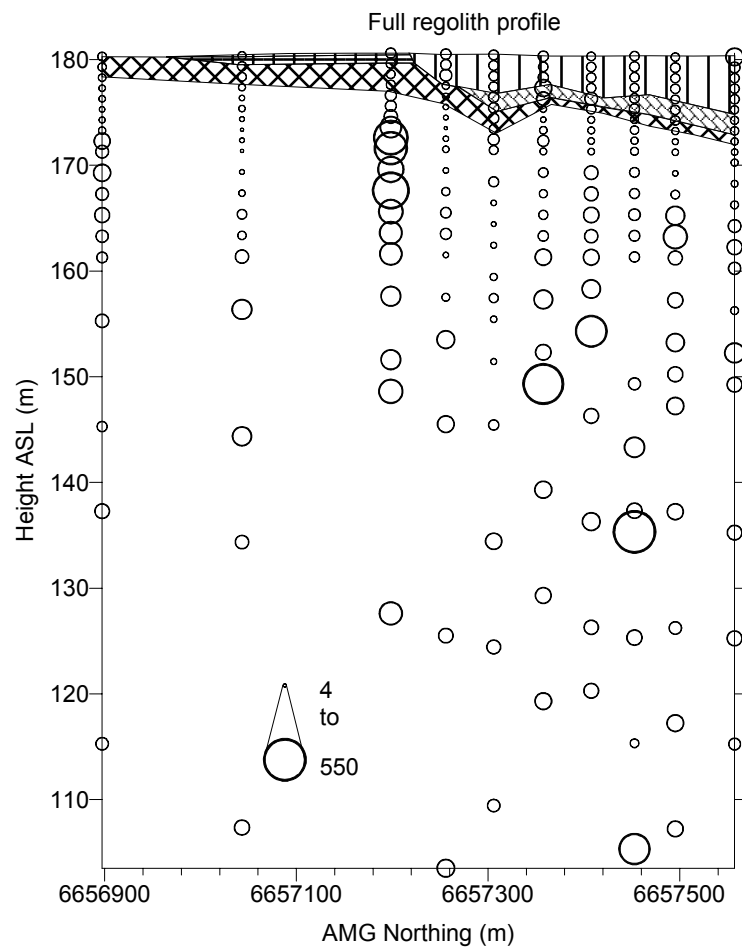
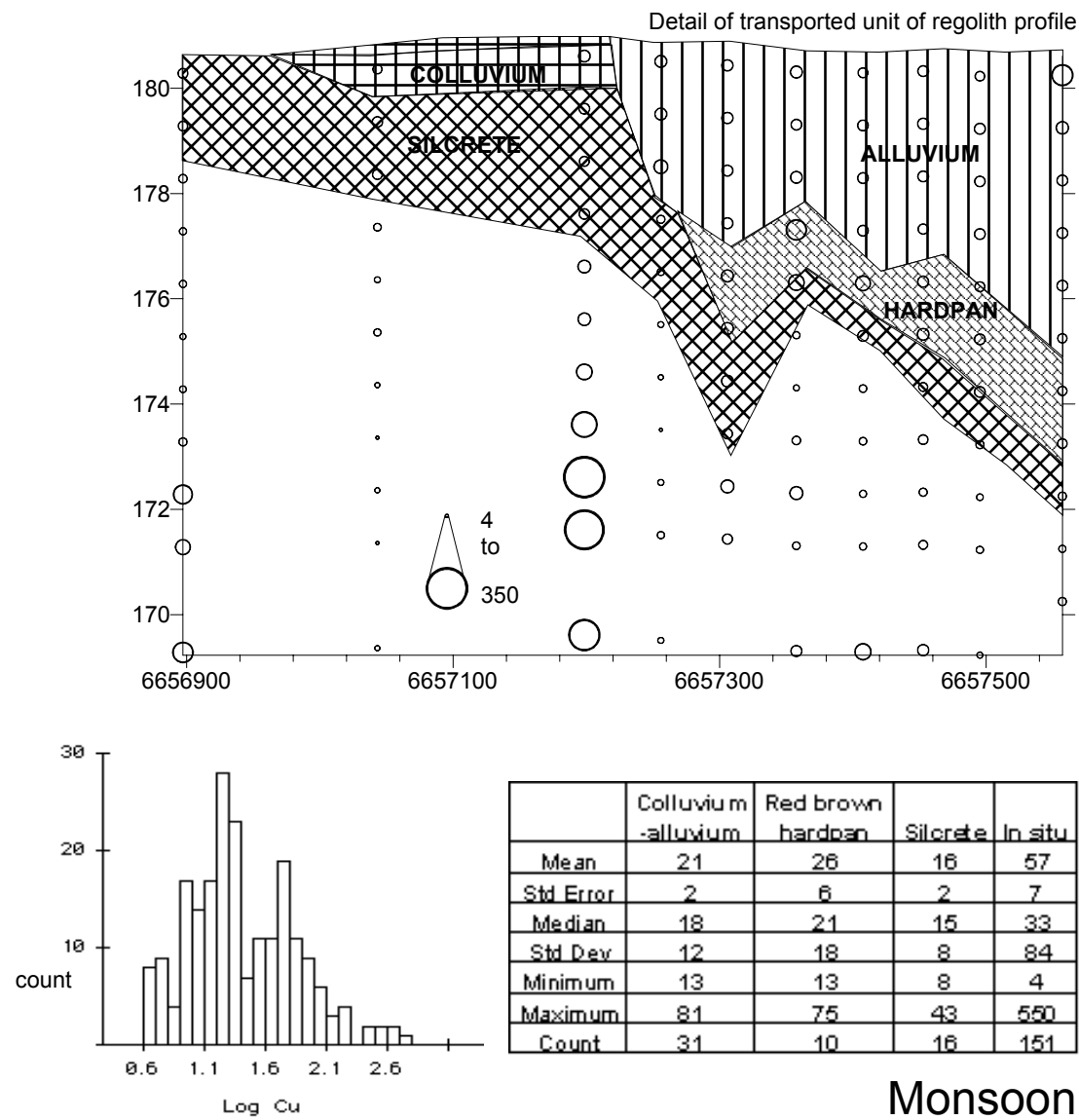
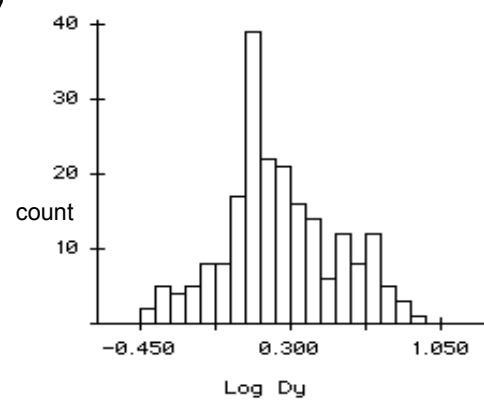
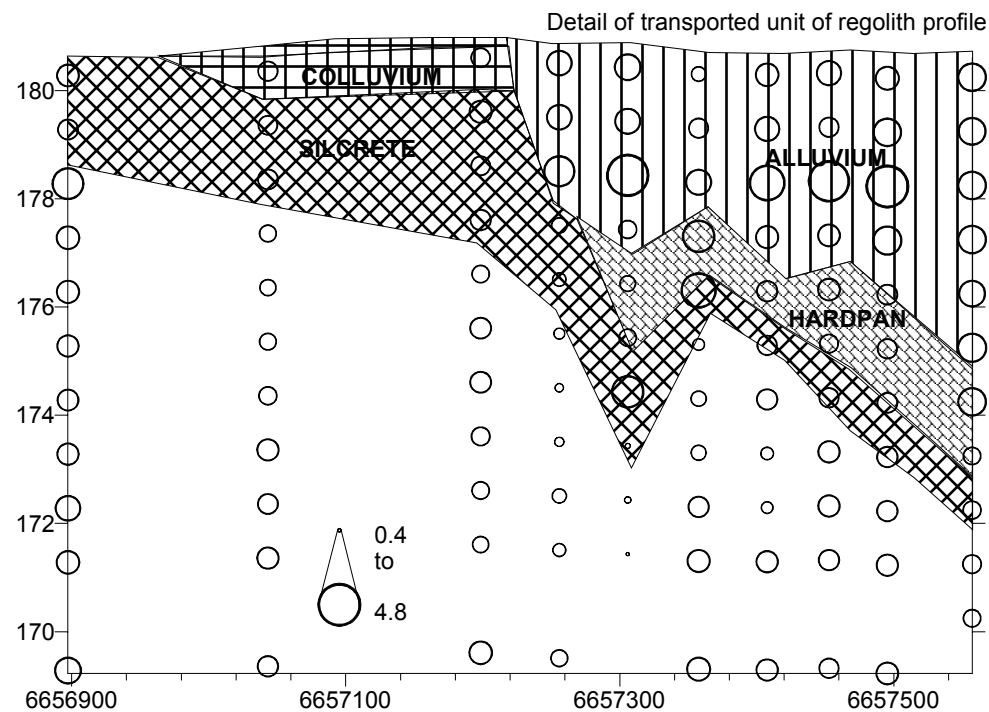
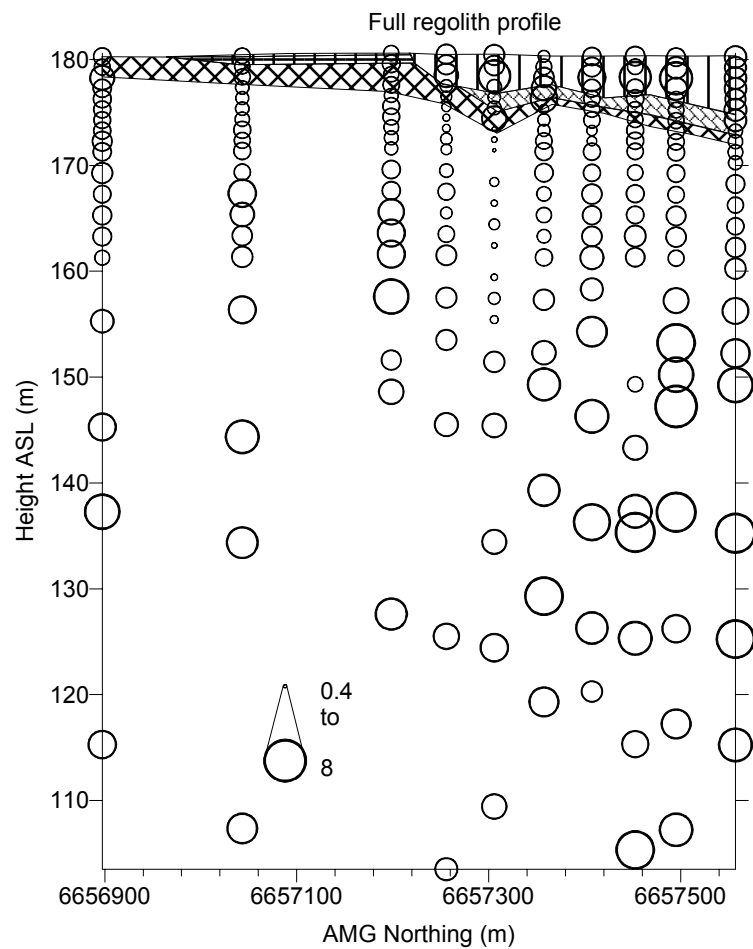


Figure A1c.12: Distribution and concentration of Cu at Monsoon regolith section on 350560E.

Cu (ppm)





	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	2.1	1.4	1.4	2.3
Std Error	0.2	0.2	0.2	0.1
Median	1.9	1.2	1.2	1.7
Std Dev	1.0	0.6	0.7	1.7
Minimum	0.8	0.9	0.4	0.4
Maximum	4.8	2.8	3.3	8
Count	31	10	16	151

Figure A1c.13: Distribution and concentration of Dy at Monsoon regolith section on 350560E.

Dy (ppm)

Monsoon

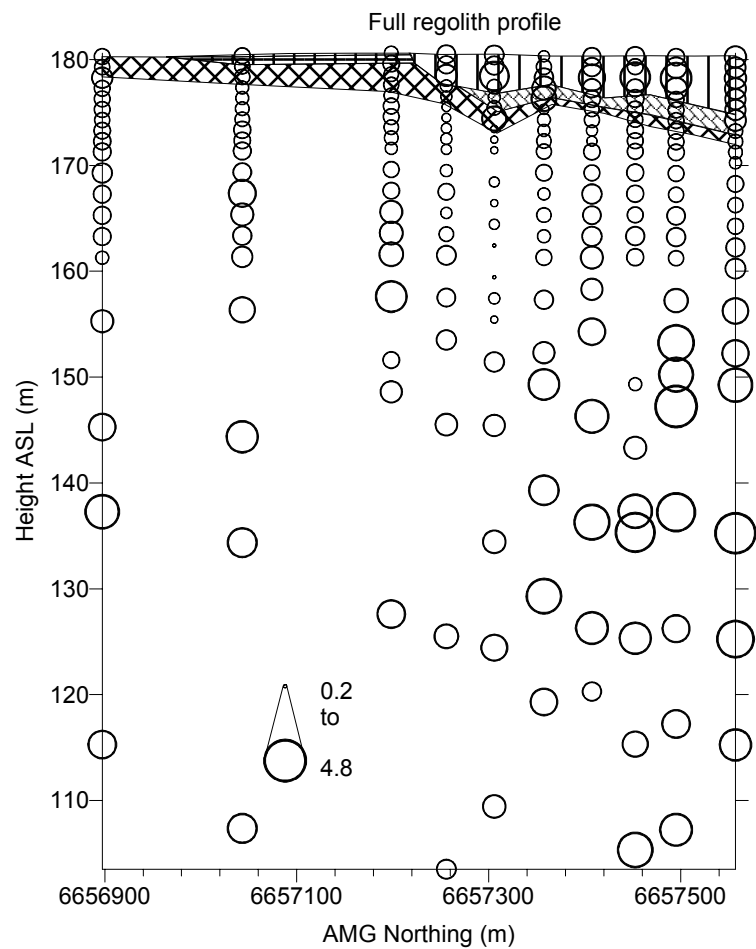
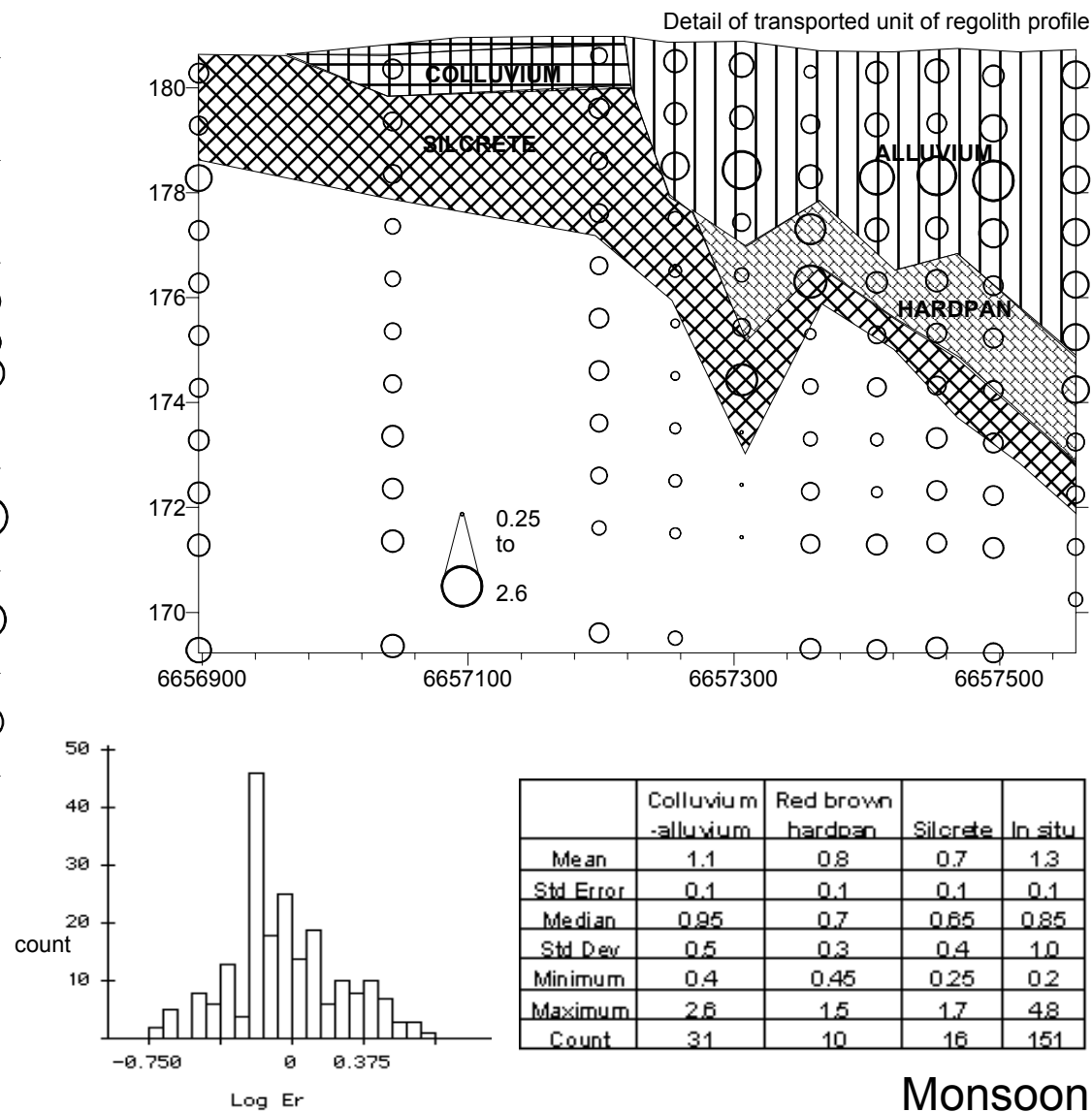


Figure A1c.14: Distribution and concentration of Er at Monsoon regolith section on 350560E.



Er (ppm)

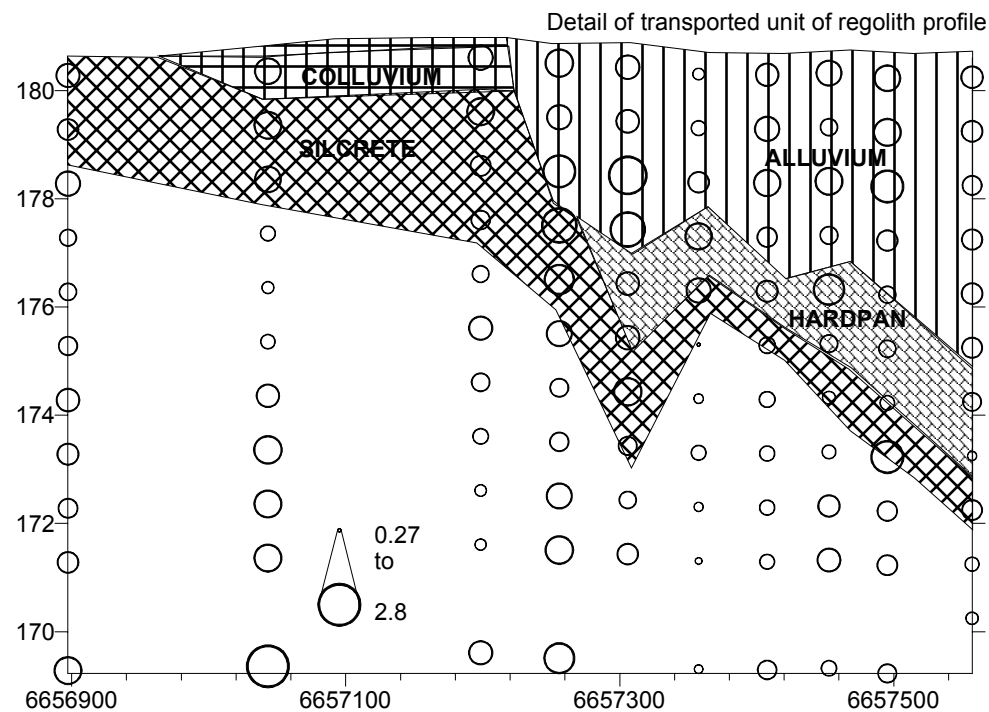
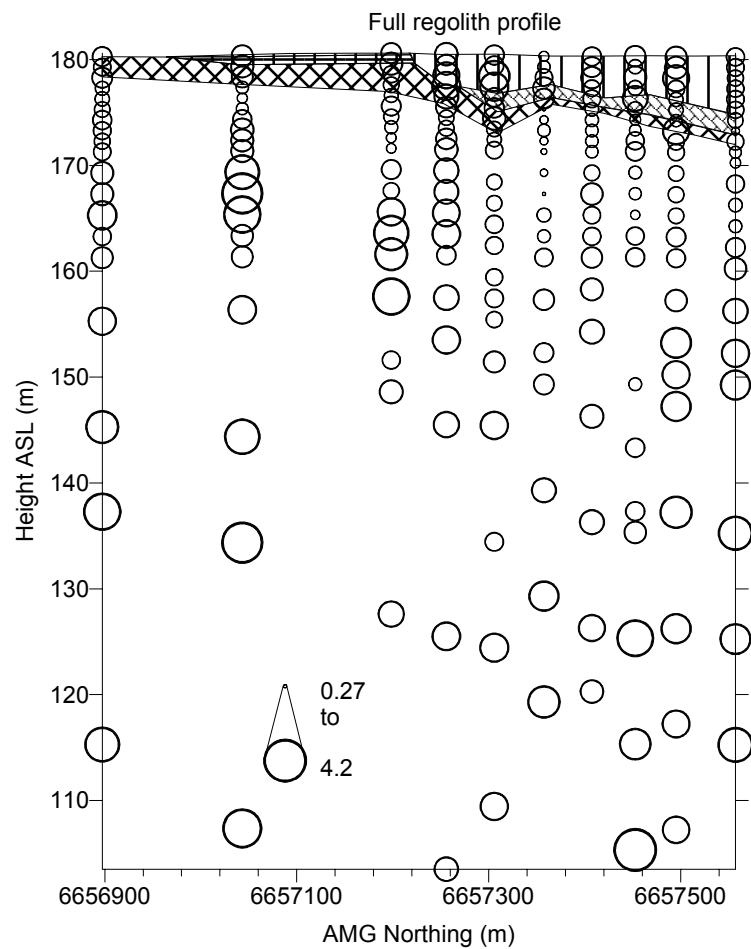
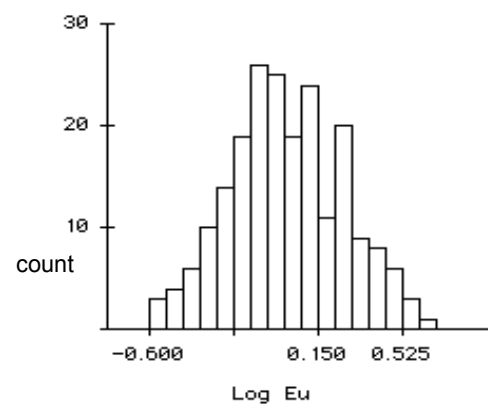


Figure A1c.15: Distribution and concentration of Eu at Monsoon regolith section on 350560E.

Eu (ppm)



	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	1.0	0.8	1.0	1.3
Std Error	0.1	0.1	0.1	0.1
Median	0.94	0.745	1.01	0.97
Std Dev	0.4	0.4	0.4	0.8
Minimum	0.39	0.33	0.43	0.27
Maximum	2.3	1.55	1.95	4.2
Count	31	10	16	151

Monsoon

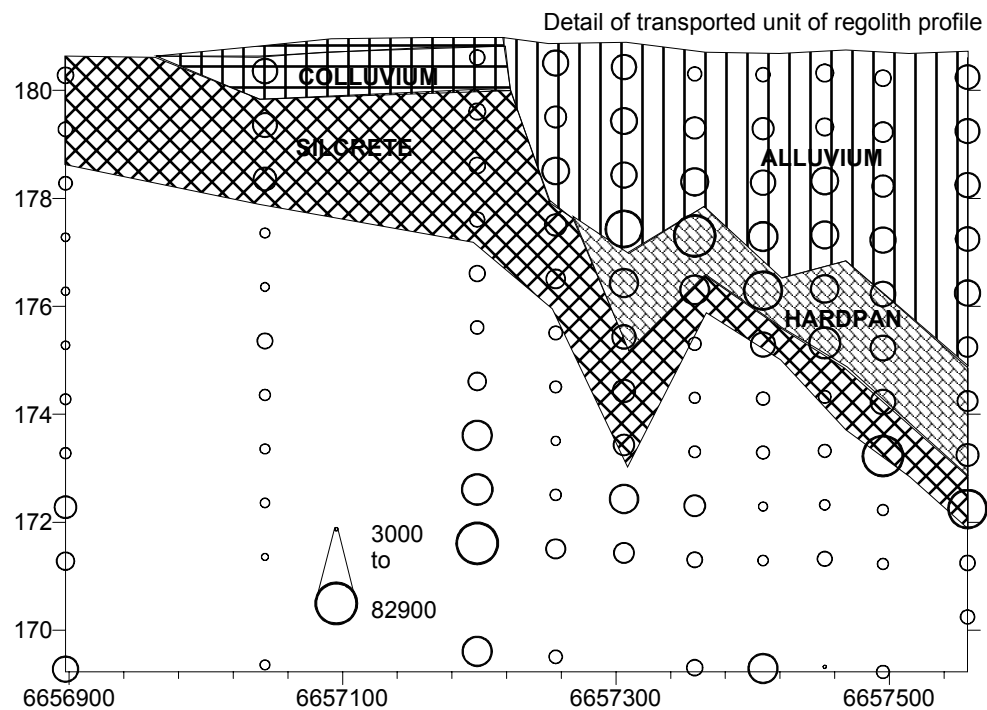
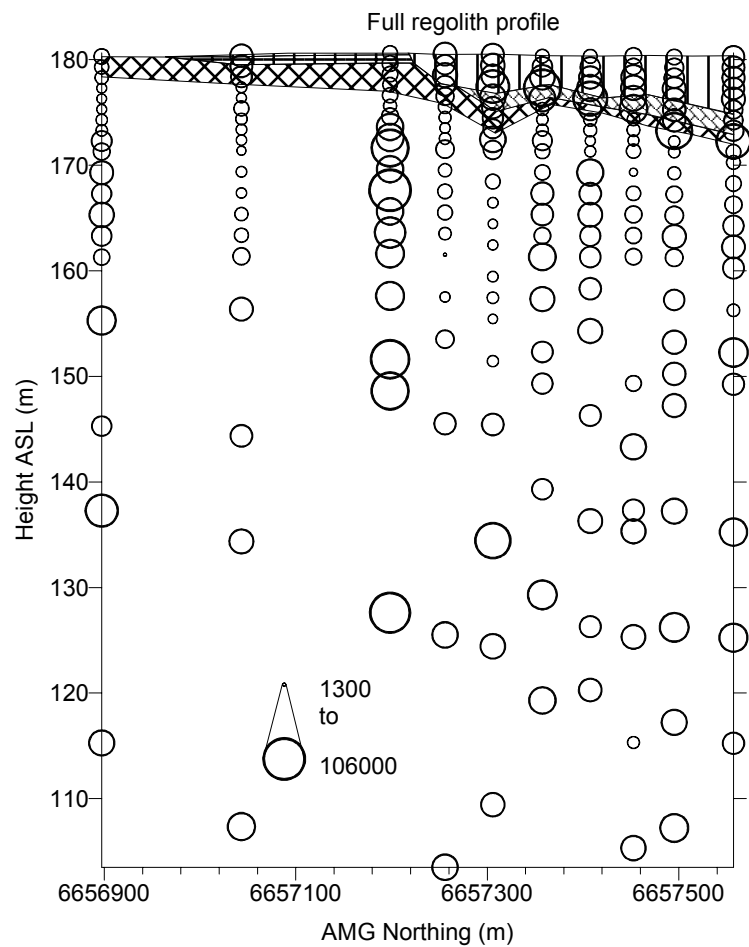
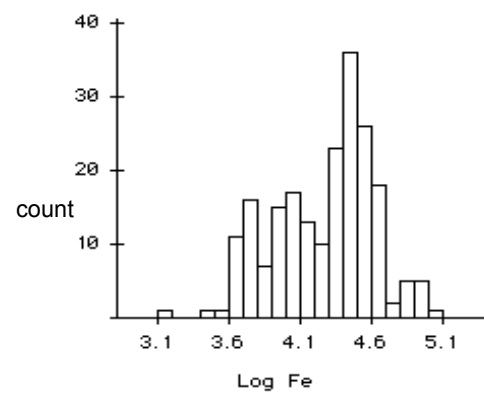


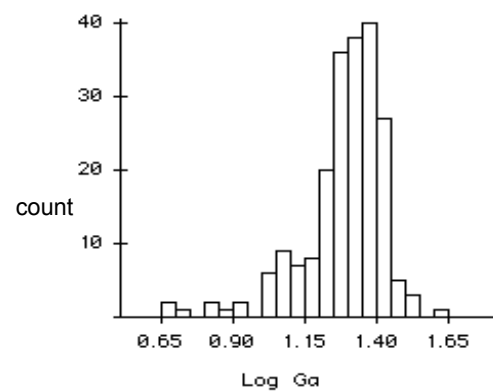
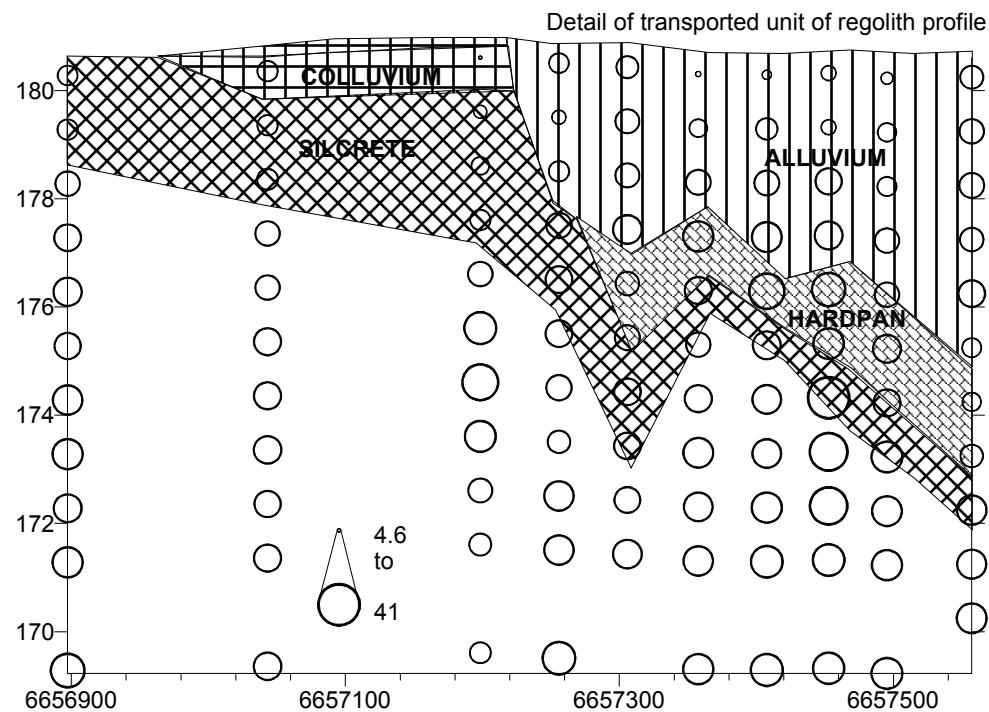
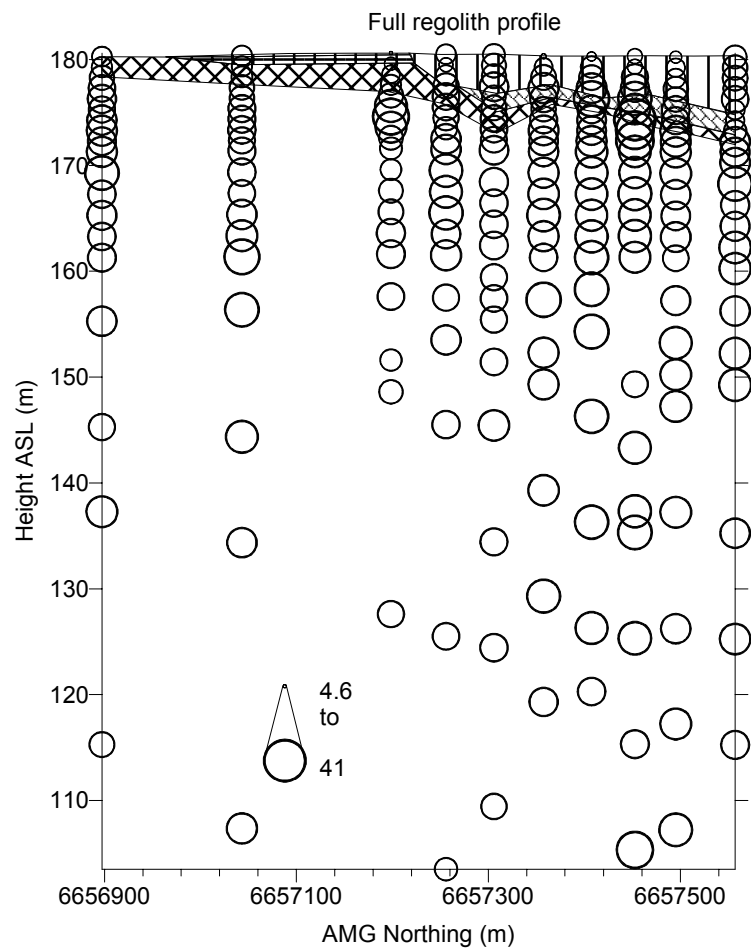
Figure A1c.16: Distribution and concentration of Fe at Monsoon regolith section on 350560E.



	Colluvium -alluvium	Red brown hardpan	Silcrete	In situ
Mean	25948	39570	25863	23396
Std Error	1940	6597	5210	1585
Median	27800	32450	20750	20400
Std Dev	10801	20863	20840	19474
Minimum	9250	18800	7700	1300
Maximum	64100	82200	78700	106000
Count	31	10	16	151

Fe (ppm)

Monsoon



	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	13	20	17	22
Std Error	0.9	2.0	2.0	0.3
Median	14	20	18	22
Std Dev	5	6	8	4
Minimum	5	11	7	13
Maximum	23	31	41	35
Count	31	10	16	151

Figure A1c.17: Distribution and concentration of Ga at Monsoon regolith section on 350560E.

Ga (ppm)

Monsoon

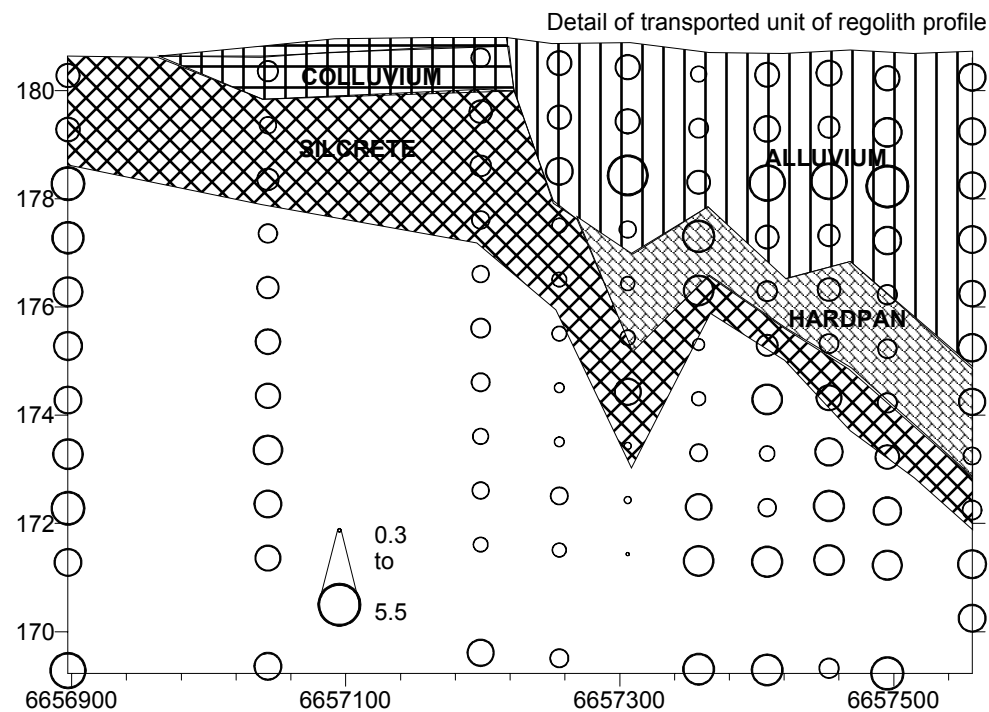
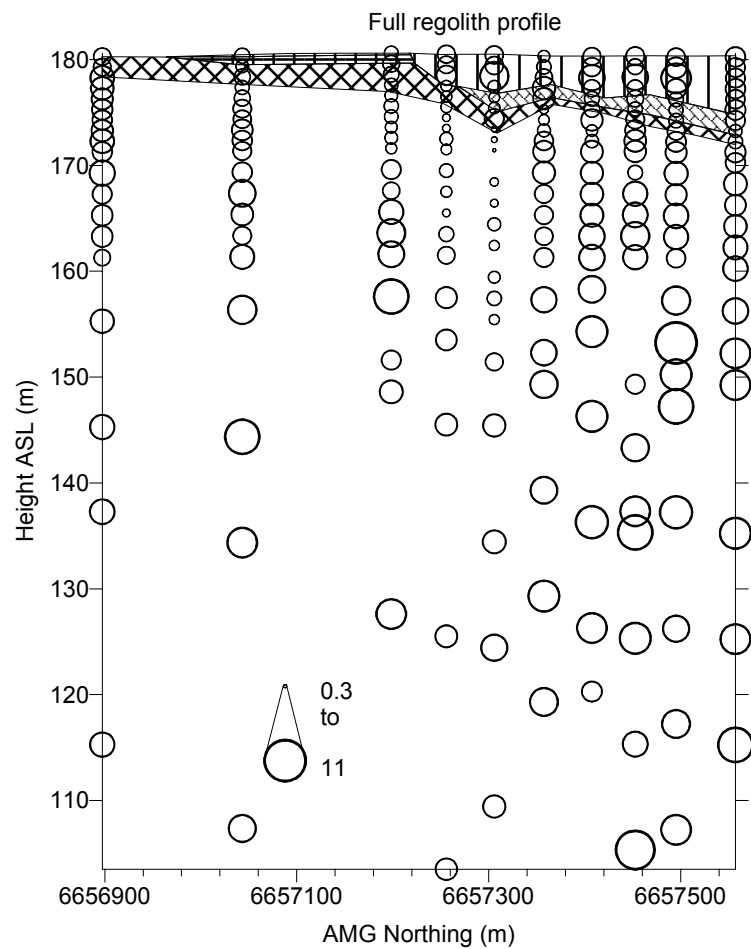
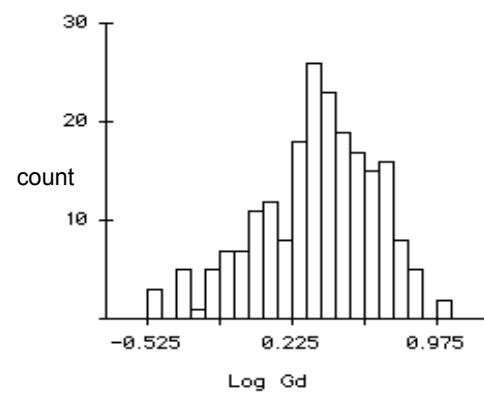


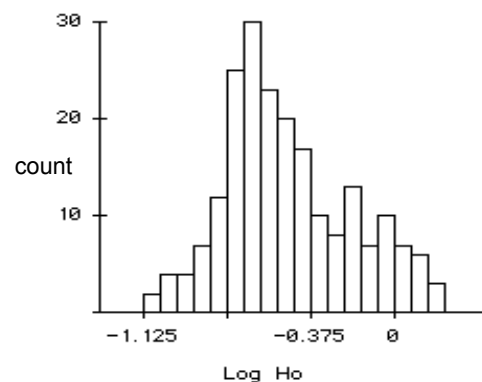
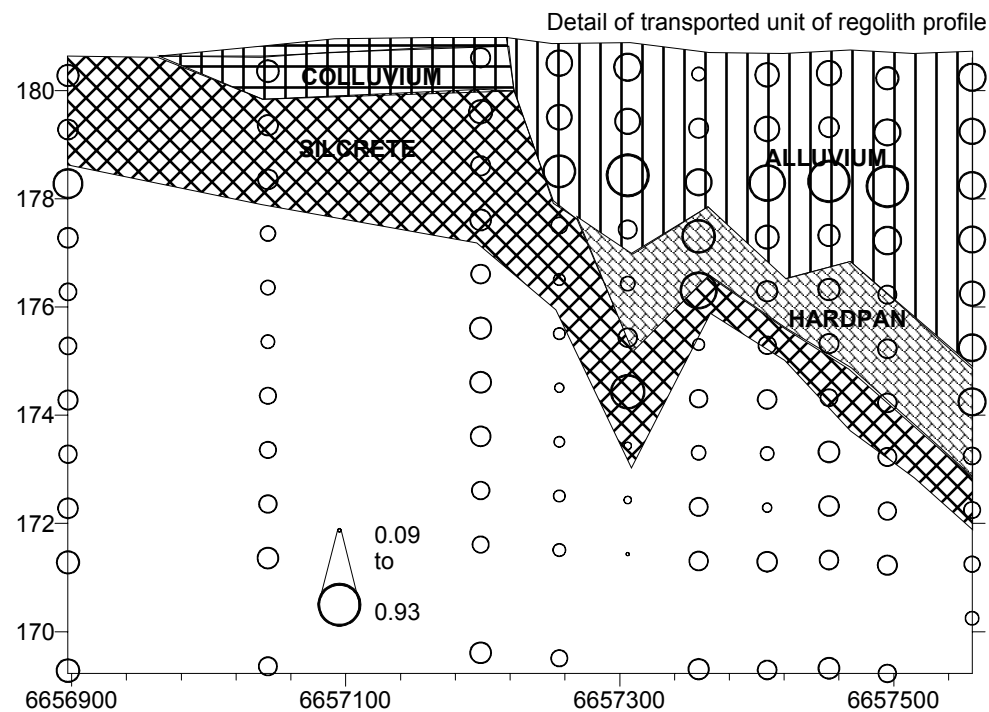
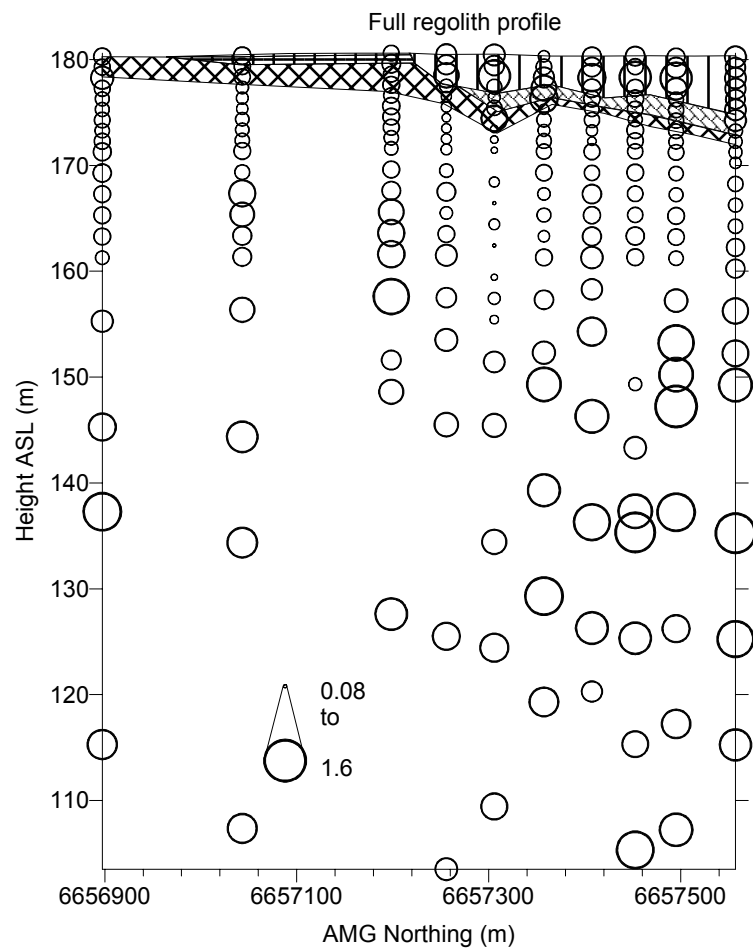
Figure A1c.18: Distribution and concentration of Gd at Monsoon regolith section on 350560E.



	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	2	1	1	3.2
Std Error	0.2	0.2	0.2	0.2
Median	1.9	1.2	1.5	2.9
Std Dev	1.1	0.7	0.6	1.9
Minimum	0.9	0.7	0.4	0.3
Maximum	6	3	3	11
Count	31	10	16	151

Gd (ppm)

Monsoon

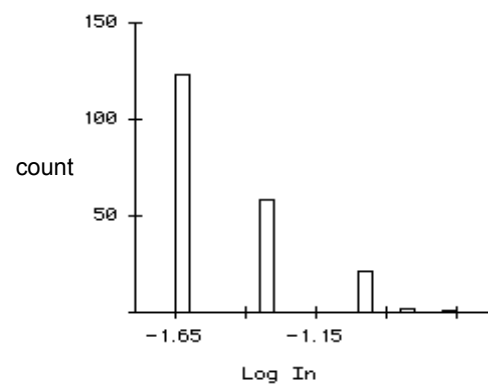
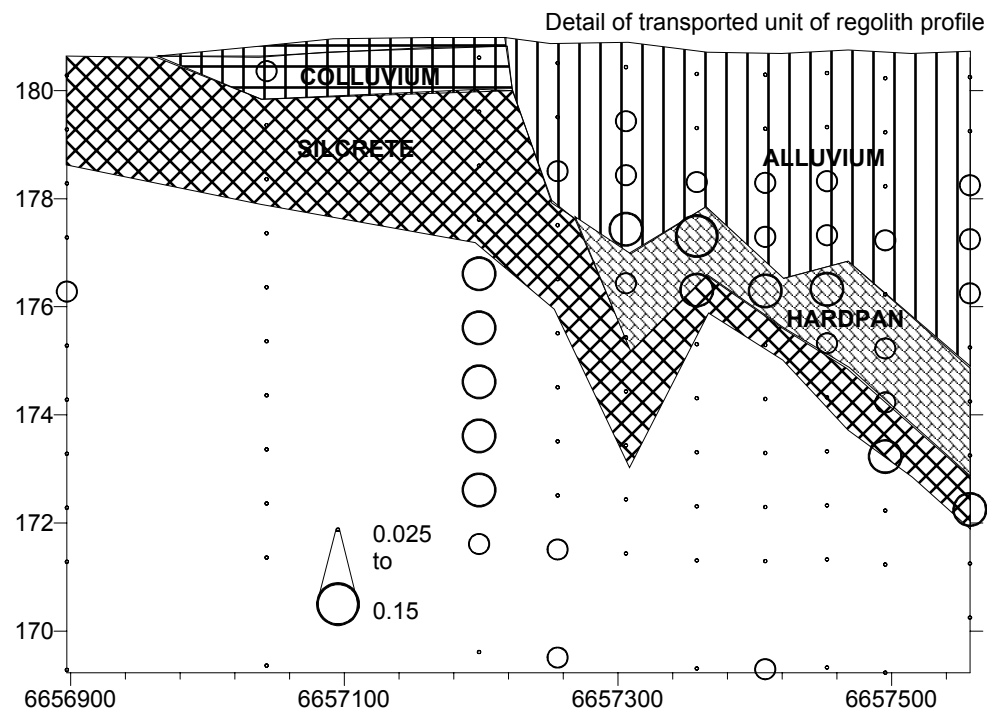
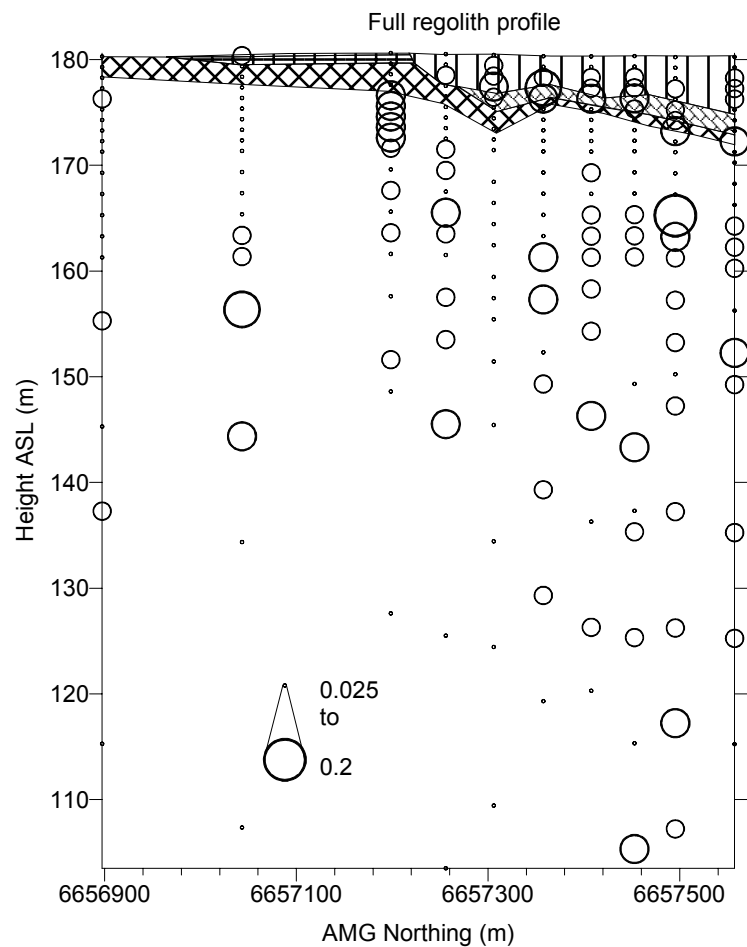


	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	0.4	0.3	0.3	0.4
Std Error	0.0	0.0	0.0	0.0
Median	0.4	0.2	0.2	0.3
Std Dev	0.2	0.1	0.2	0.3
Minimum	0.15	0.16	0.1	0.08
Maximum	0.93	0.58	0.7	1.6
Count	31	10	16	151

Figure A1c.19: Distribution and concentration of Ho at Monsoon regolith section on 350560E.

Ho (ppm)

Monsoon

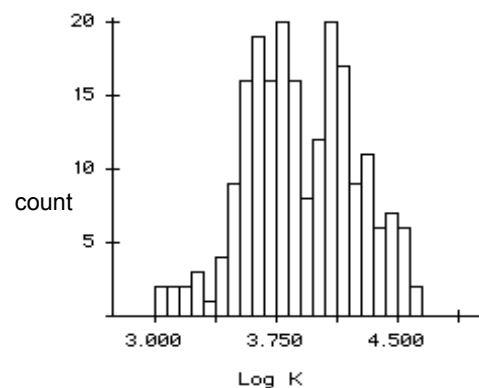
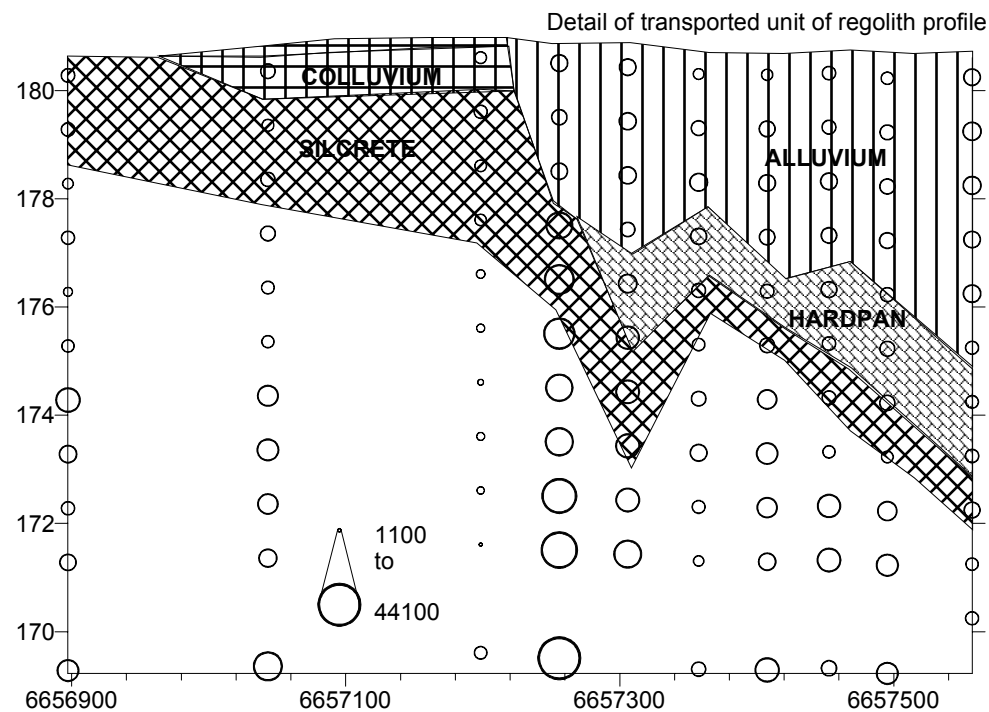
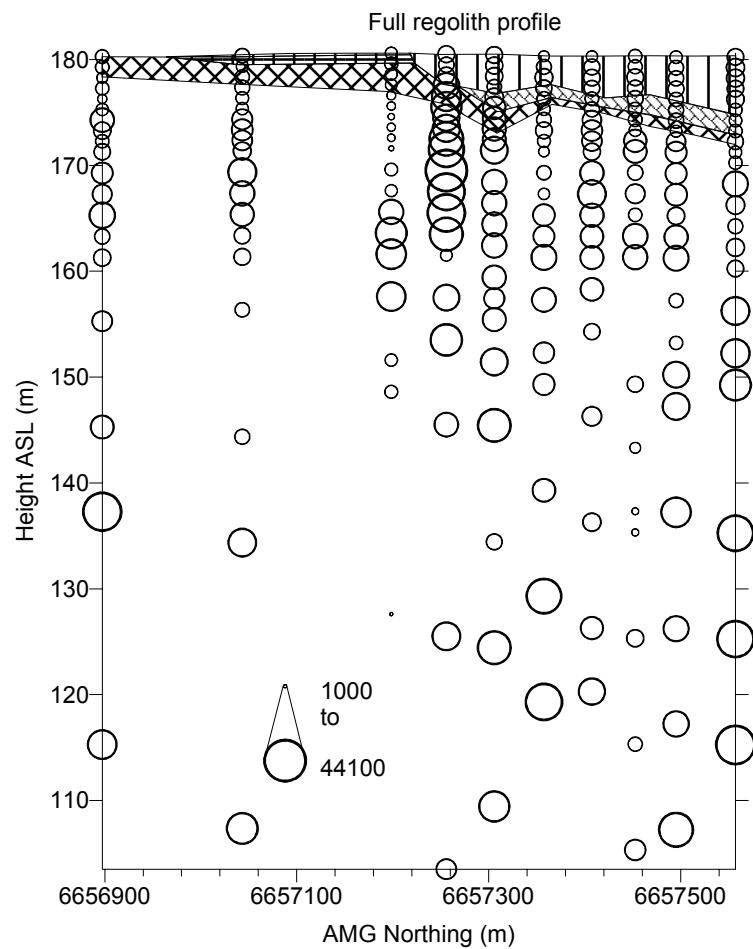


	Colluvium -alluvium	Red brown hardpan	Silcrete	In situ
Mean	0.0	0.1	0.0	0.0
Std Error	0.0	0.0	0.0	0.0
Median	0.025	0.05	0.025	0.025
Std Dev	0.0	0.0	0.0	0.0
Minimum	0.025	0.025	0.025	0.025
Maximum	0.1	0.15	0.1	0.2
Count	31	10	16	151

Figure A1c.20: Distribution and concentration of In at Monsoon regolith section on 350560E.

In (ppm)

Monsoon

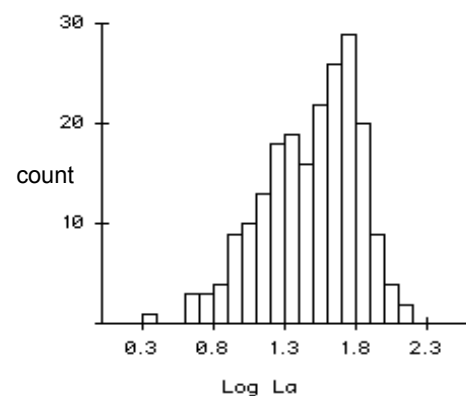
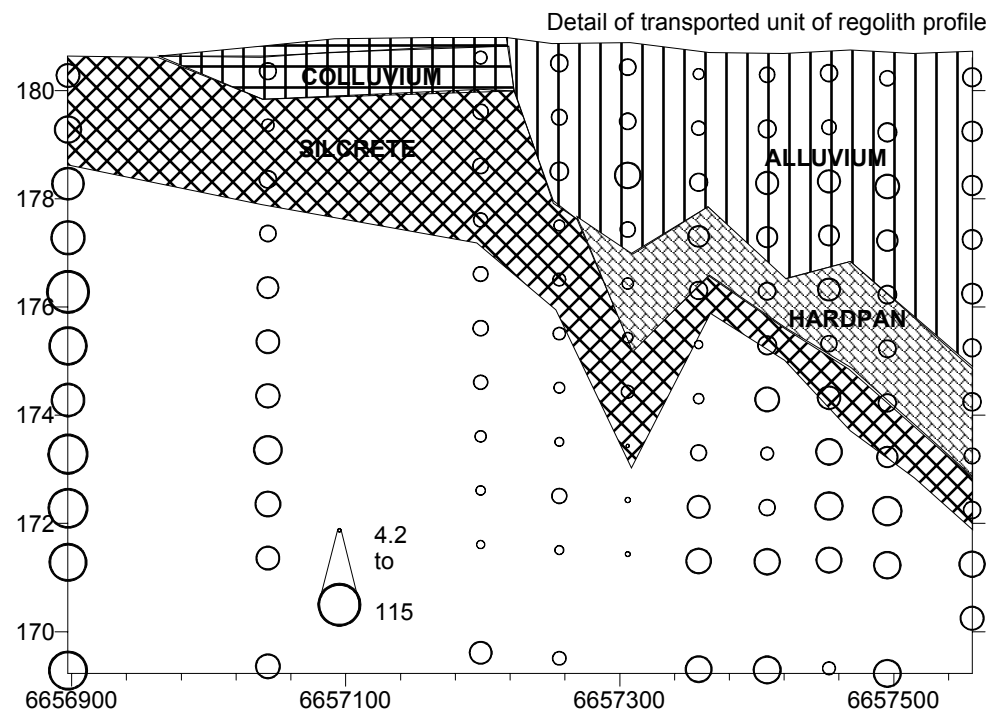
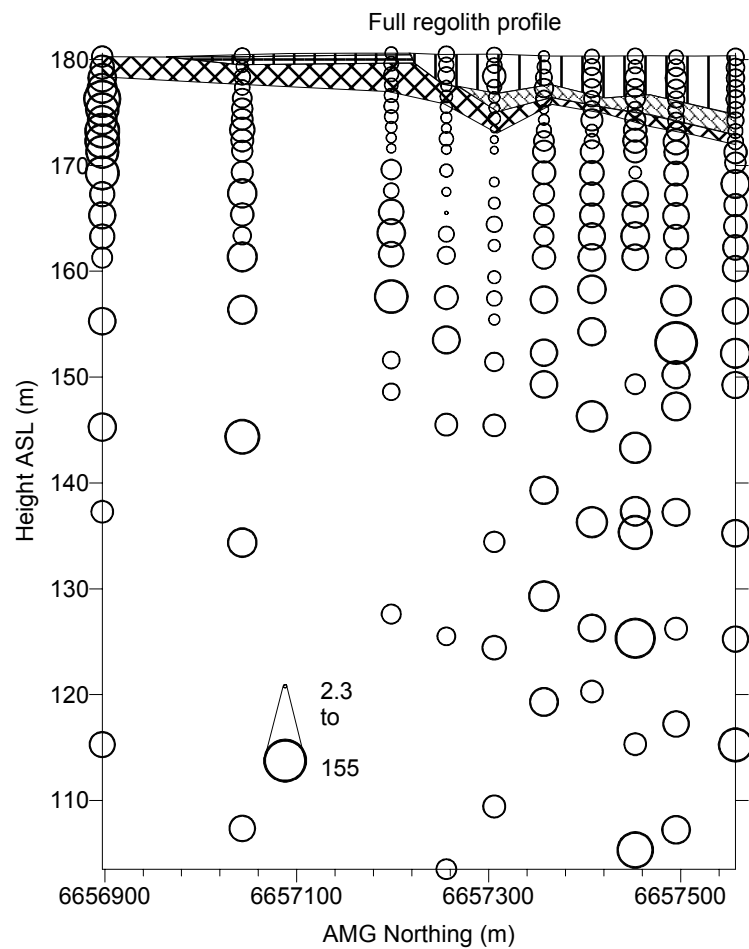


	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	5437	5800	7000	12421
Std Error	234	798	1369	734
Median	5550	5175	4375	10700
Std Dev	1302	2524	5474	9021
Minimum	2750	3650	3100	1000
Maximum	7500	12100	20600	44100
Count	31	10	16	151

Figure A1c.21: Distribution and concentration of K at Monsoon regolith section on 350560E.

K (ppm)

Monsoon

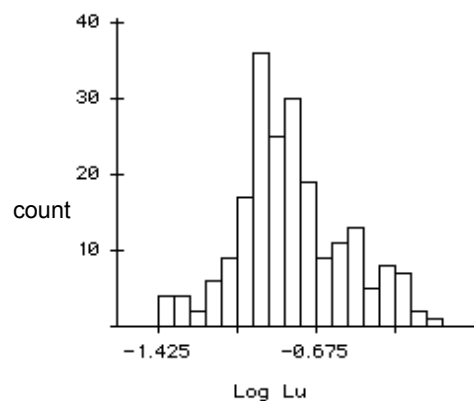
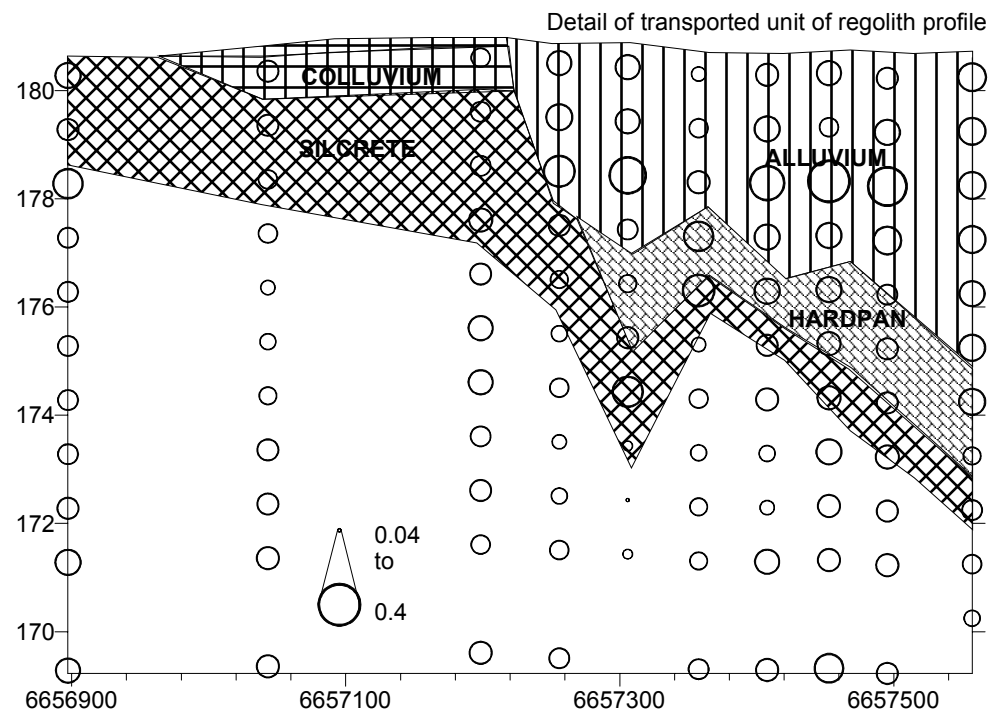
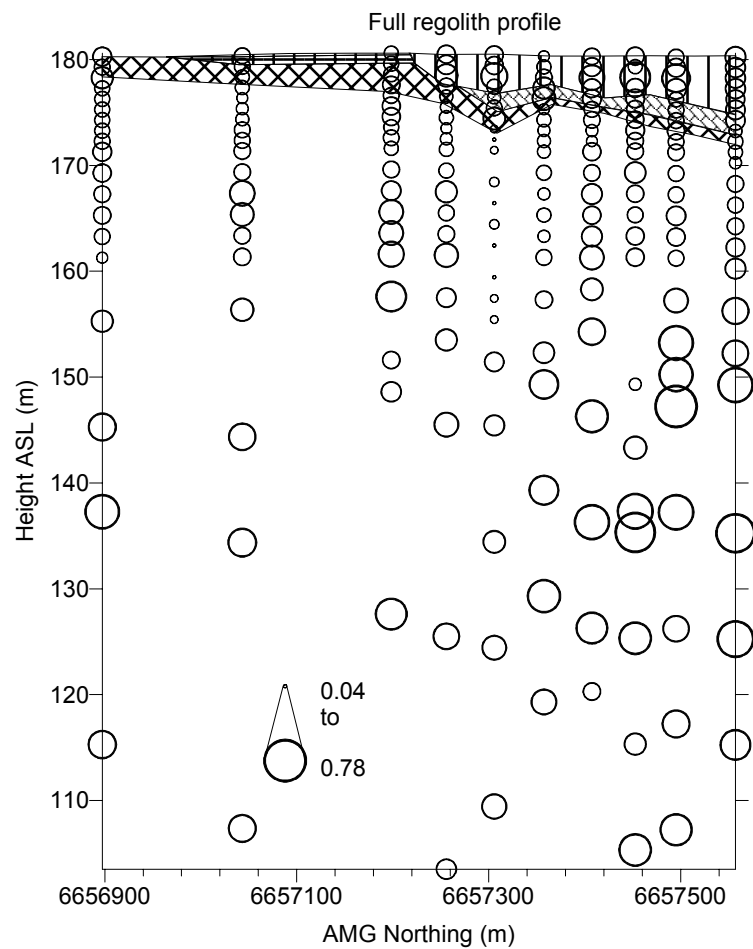


	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	21	19	19	46
Std Error	1	2	3	2
Median	20	19	17	44
Std Dev	7	7	11	28
Minimum	9	8	4	2
Maximum	43	31	45	155
Count	31	10	16	151

Figure A1c.22: Distribution and concentration of La at Monsoon regolith section on 350560E.

La (ppm)

Monsoon

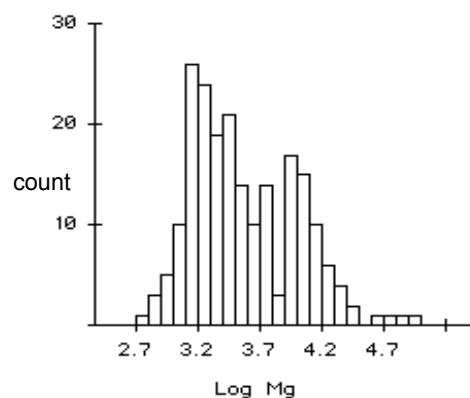
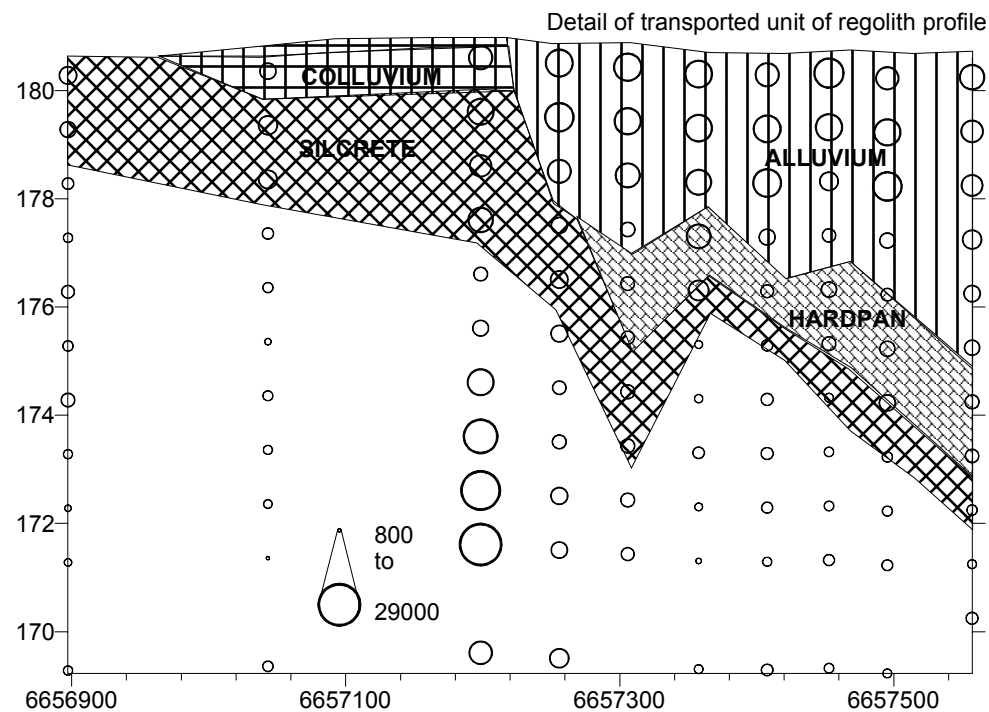
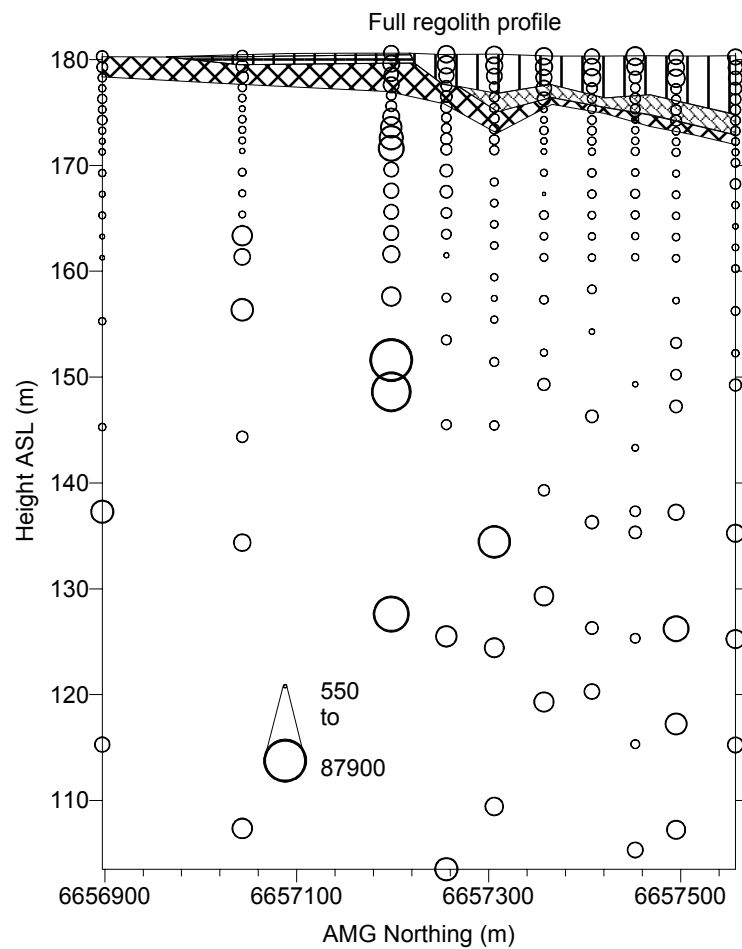


	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	0.2	0.1	0.1	0.2
Std Error	0.0	0.0	0.0	0.0
Median	0.16	0.13	0.12	0.15
Std Dev	0.1	0.0	0.0	0.1
Minimum	0.07	0.09	0.05	0.04
Maximum	0.4	0.21	0.24	0.78
Count	31	10	16	151

Figure A1c.23: Distribution and concentration of Lu at Monsoon regolith section on 350560E.

Lu (ppm)

Monsoon

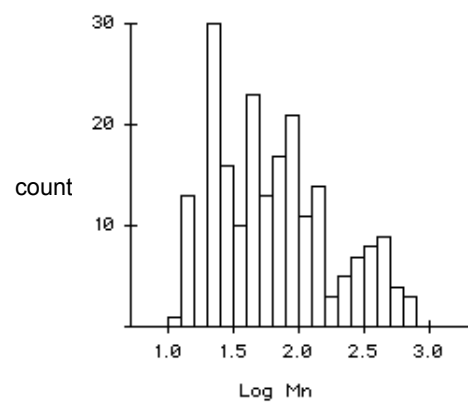
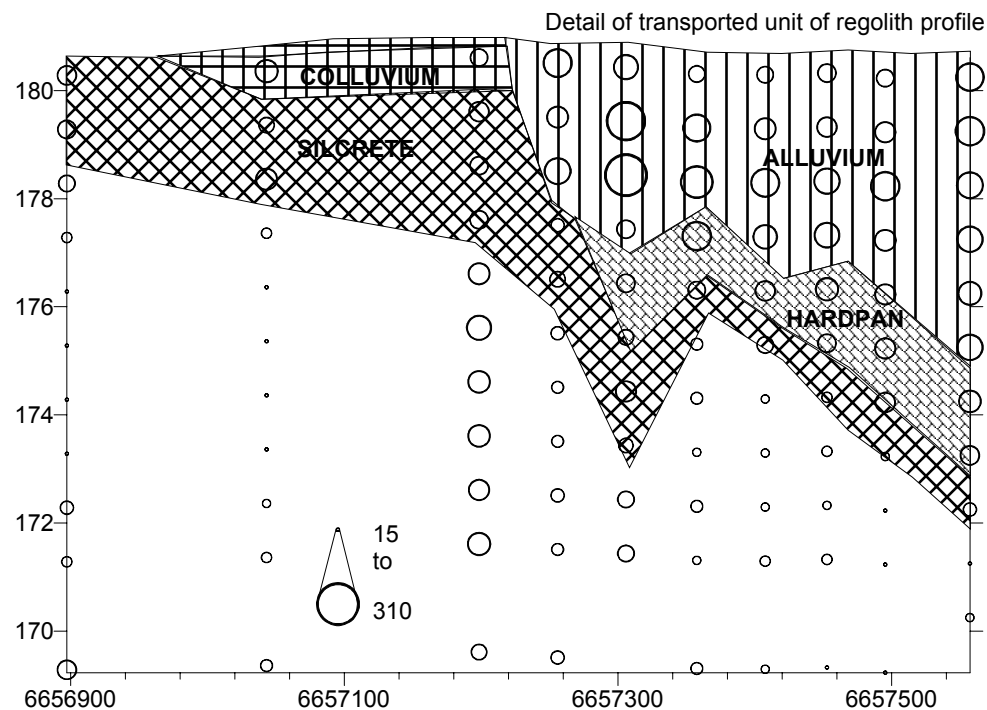
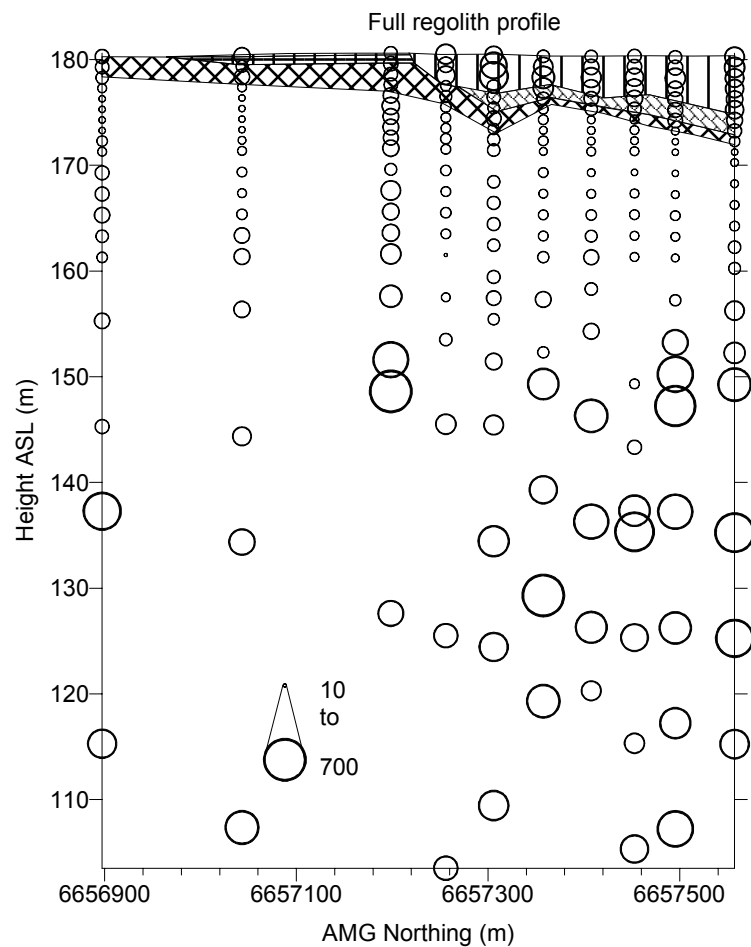


	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	8406	3715	4678	6672
Std Error	656	621	694	974
Median	8750	2950	4275	2300
Std Dev	3654	1954	2774	11969
Minimum	2500	2550	1400	550
Maximum	14000	9150	10900	87900
Count	31	10	16	151

Figure A1c.24: Distribution and concentration of Mg at Monsoon regolith section on 350560E.

Mg (ppm)

Monsoon



	Colluvium -alluvium	Red brown hardpan	Silcrete	In situ
Mean	112	77	51	131
Std Error	10	9	4	14
Median	105	70	53	50
Std Dev	57	27	17	168
Minimum	50	45	20	10
Maximum	310	145	80	700
Count	31	10	16	151

Figure A1c.25: Distribution and concentration of Mn at Monsoon regolith section on 350560E.

Mn (ppm)

Monsoon

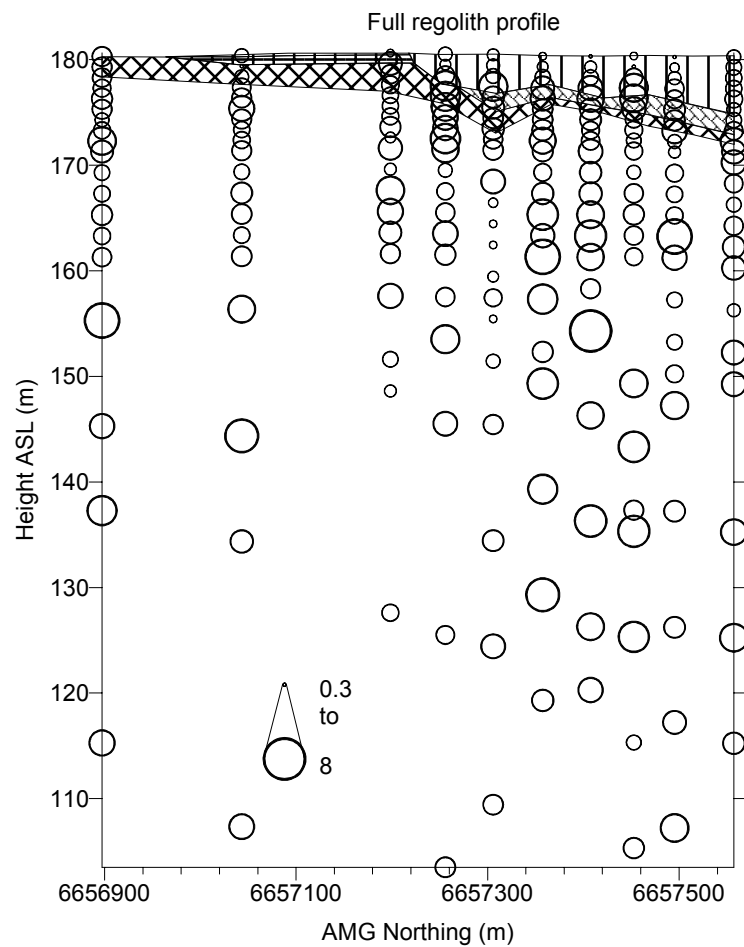
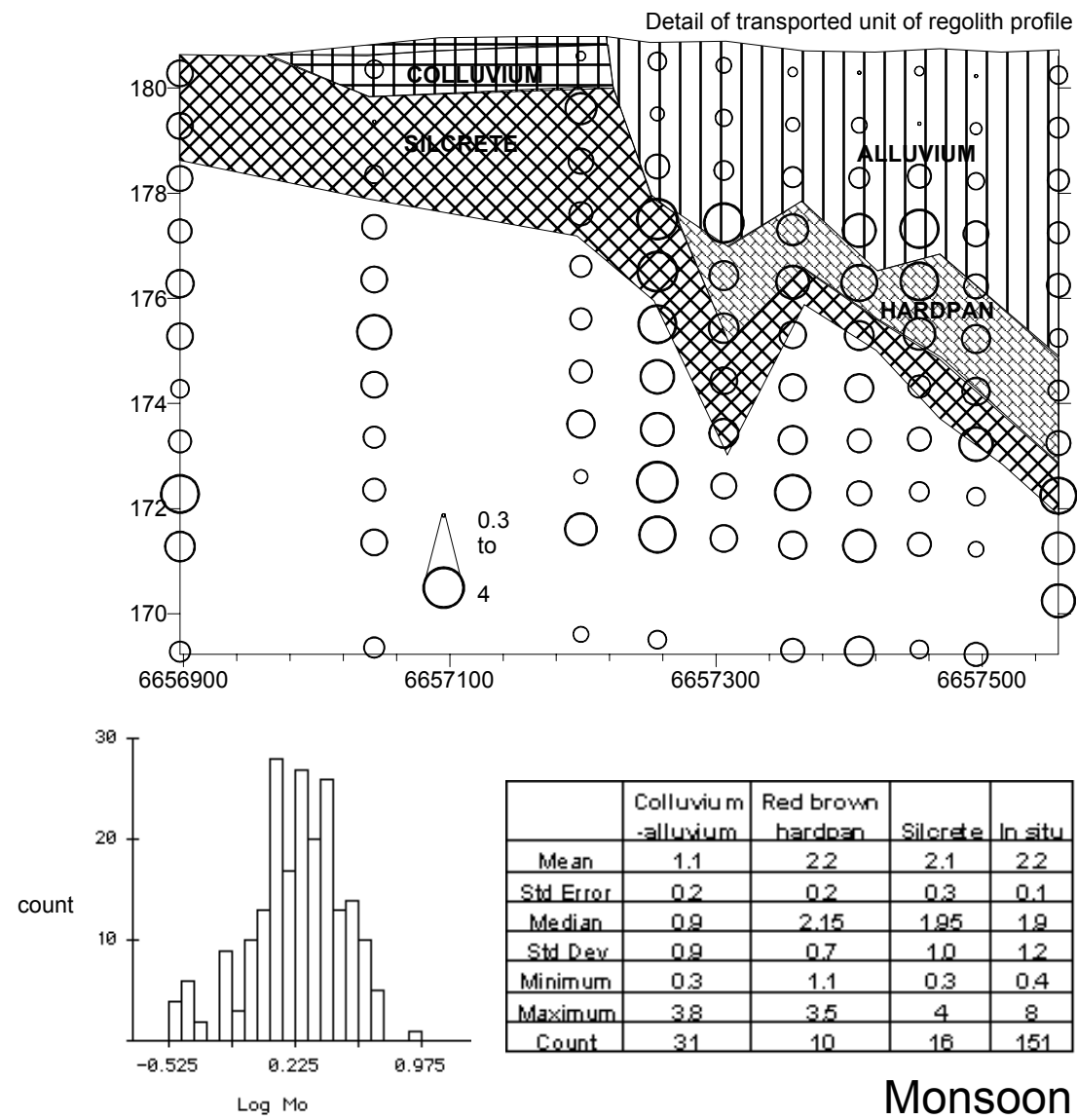
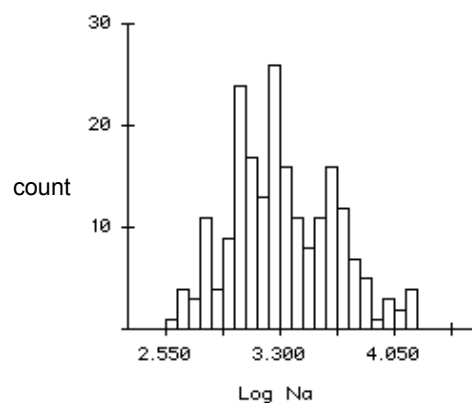
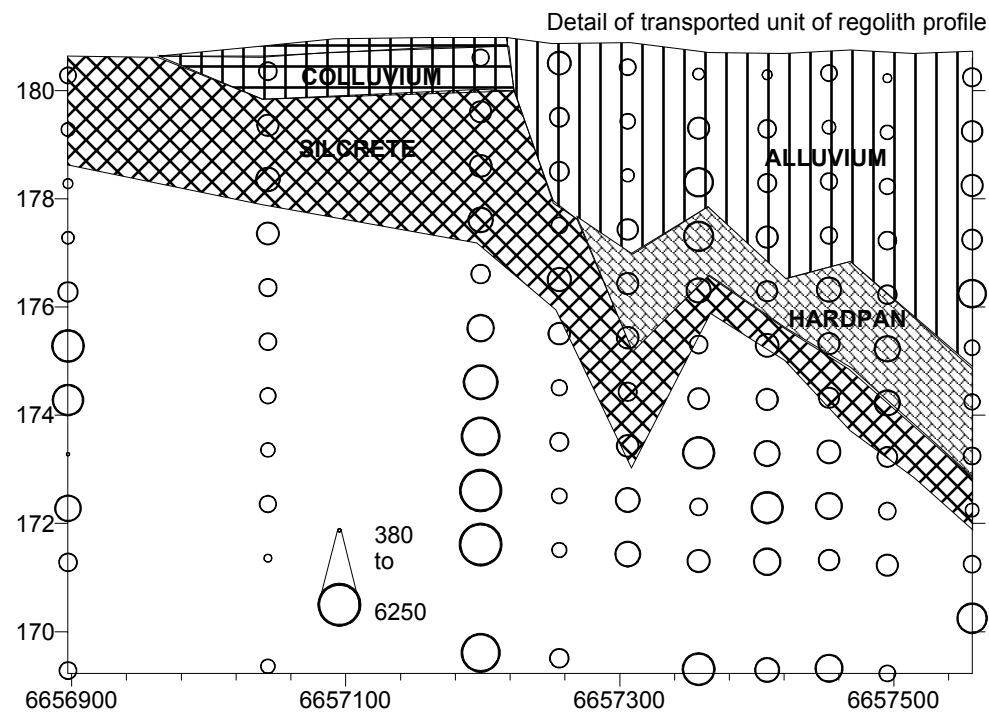
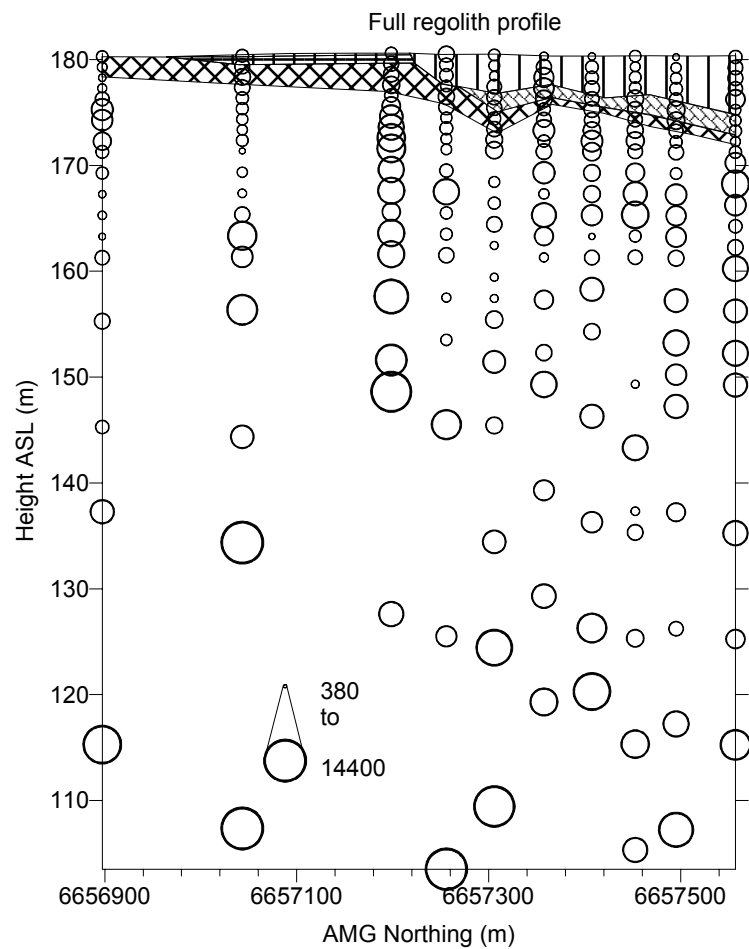


Figure A1c.26: Distribution and concentration of Mo at Monsoon regolith section on 350560E.

Mo (ppm)





	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	1302	1875	1584	3381
Std Error	98	196	116	242
Median	1250	1725	1700	2450
Std Dev	546	620	463	2971
Minimum	500	1000	800	380
Maximum	2950	3100	2200	14400
Count	31	10	16	151

Figure A1c.27: Distribution and concentration of Na at Monsoon regolith section on 350560E.

Na (ppm)

Monsoon

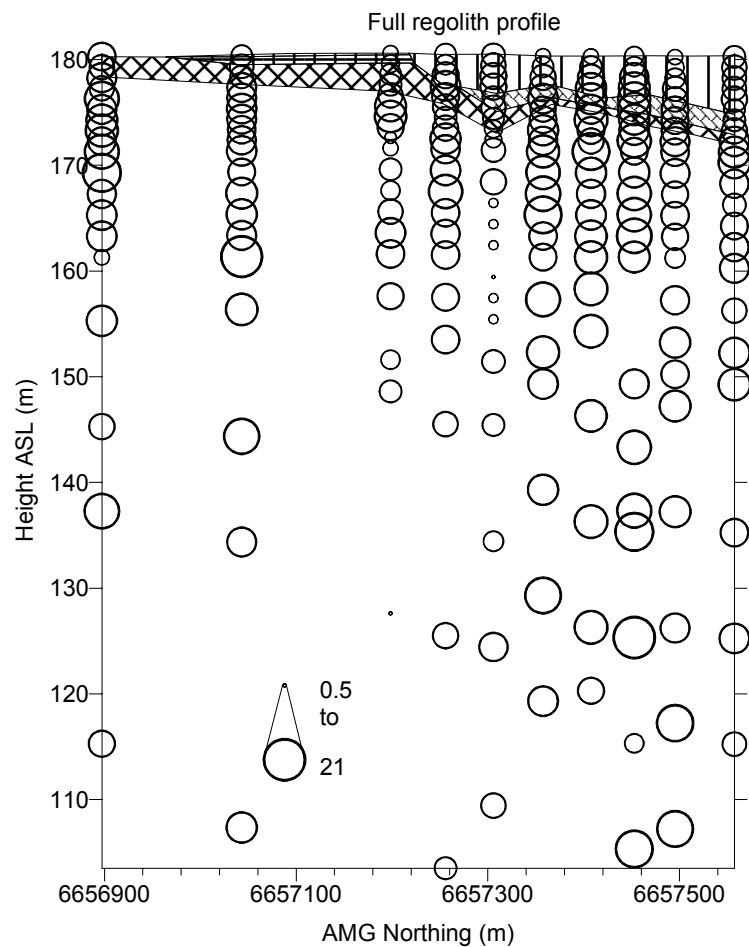
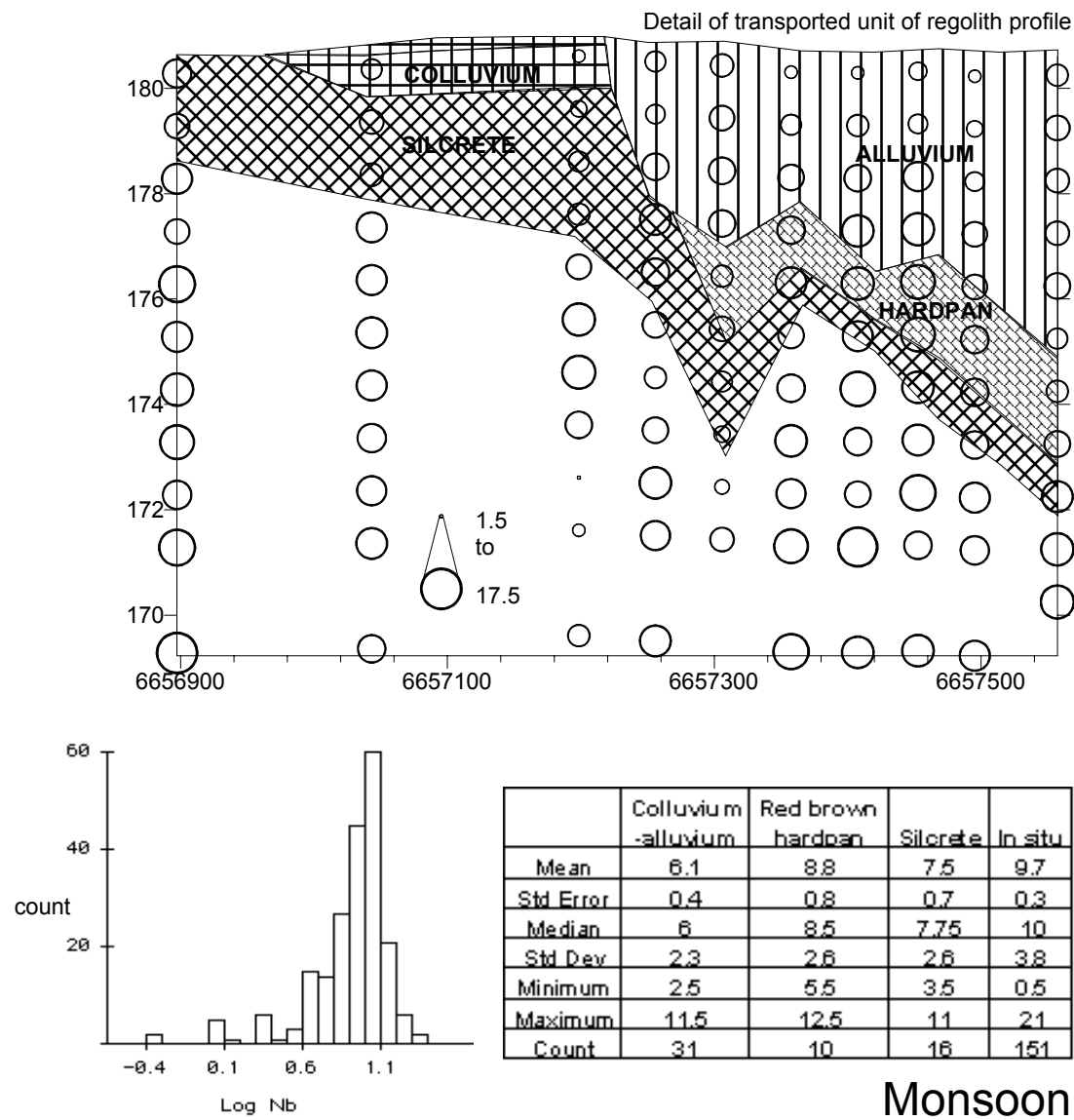


Figure A1c.28: Distribution and concentration of Nb at Monsoon regolith section on 350560E.

Nb (ppm)



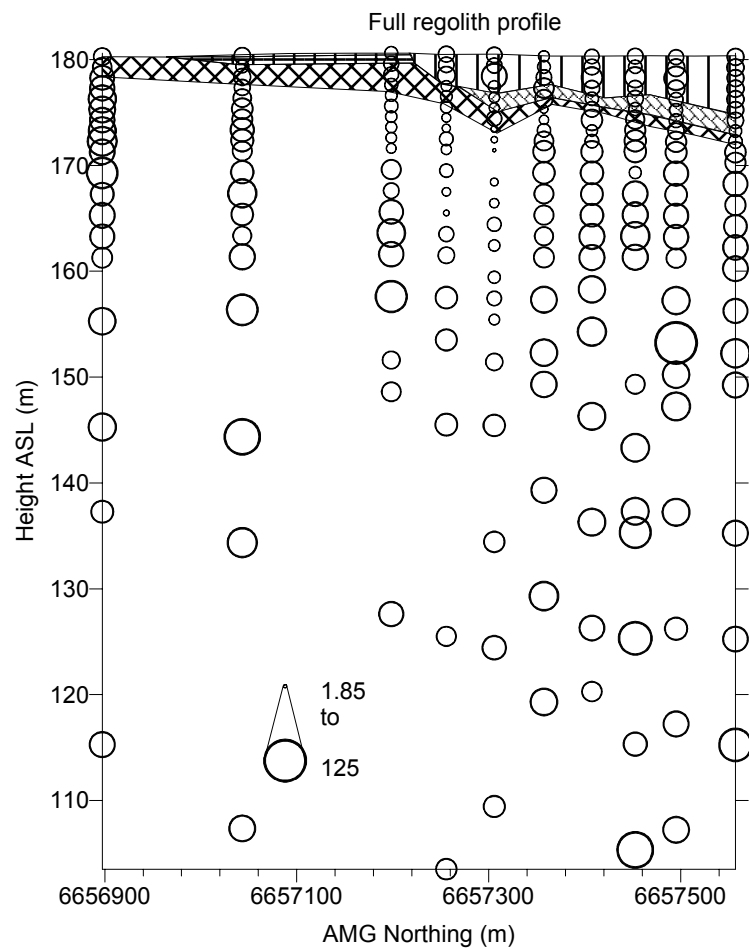
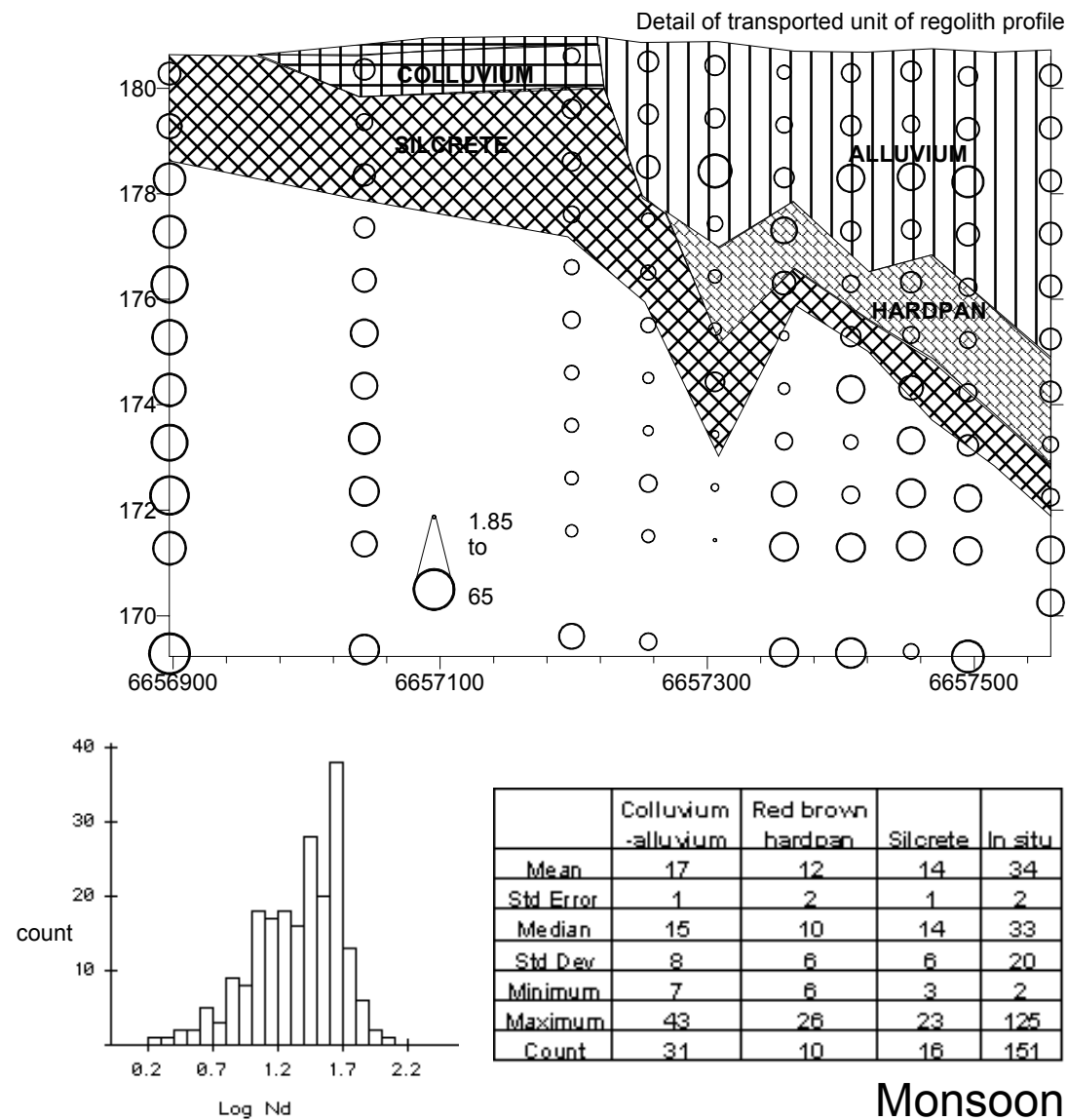
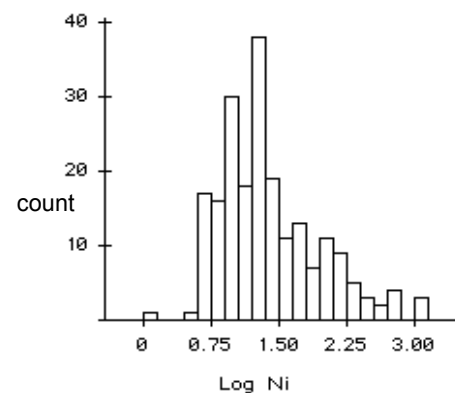
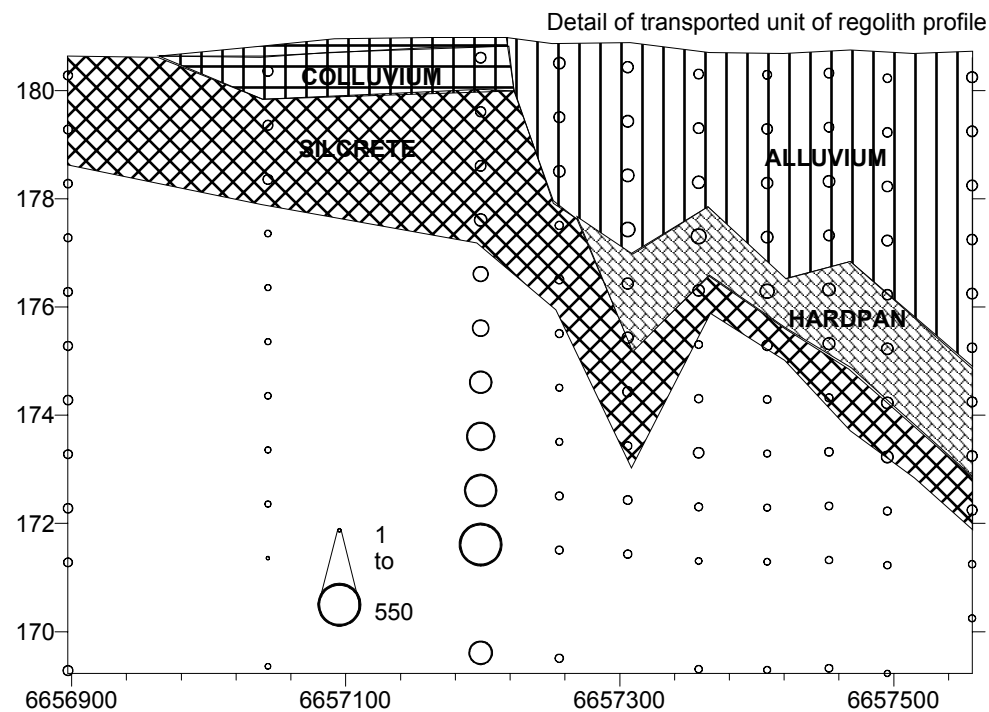
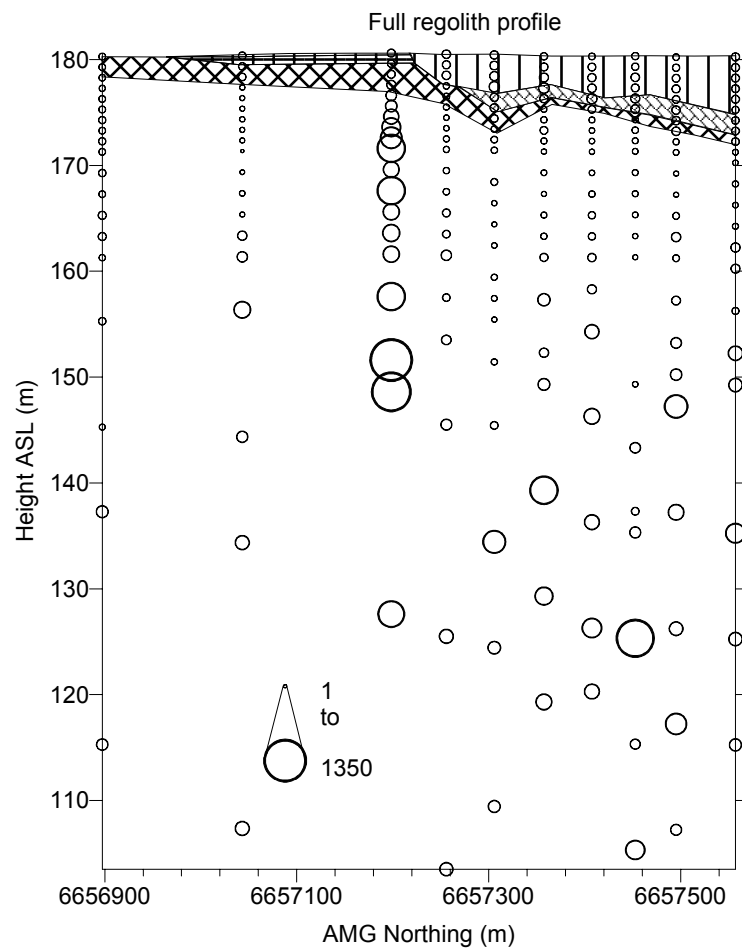


Figure A1c.29: Distribution and concentration of Nd at Monsoon regolith section on 350560E.

Nd (ppm)



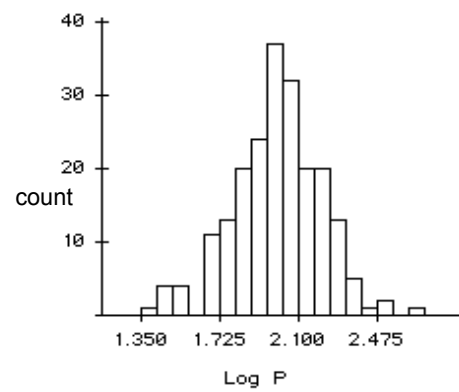
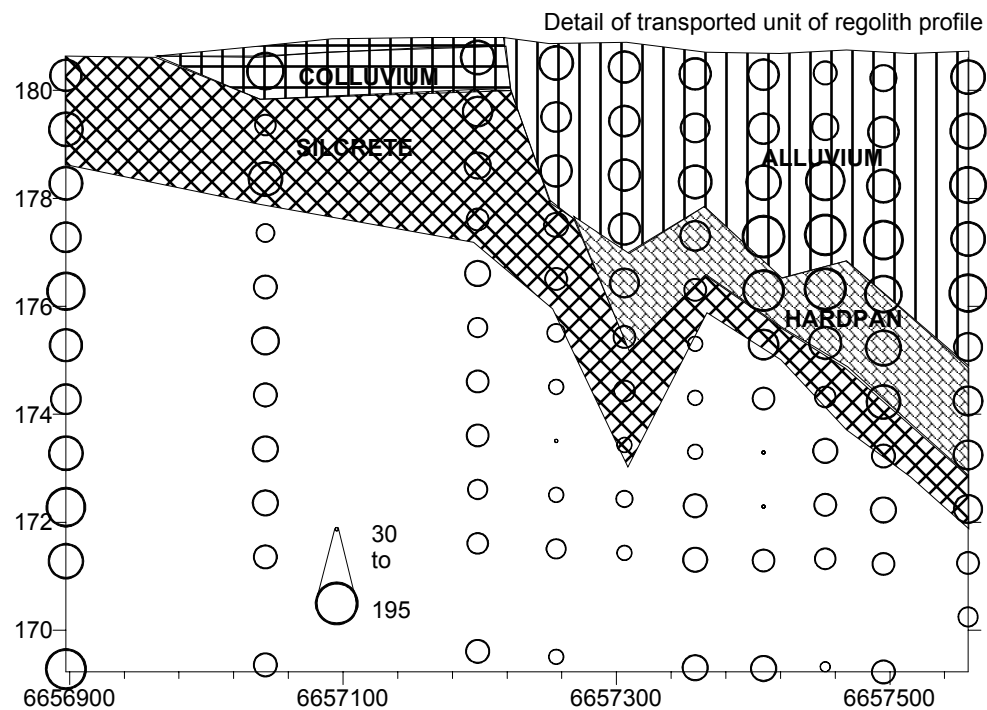
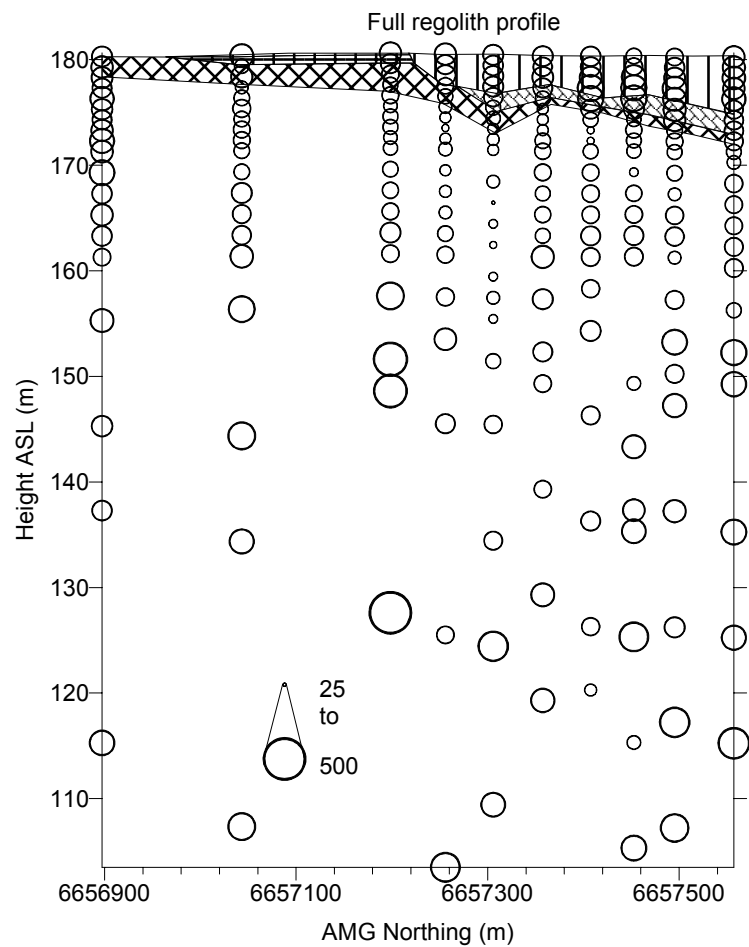


	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	22	29	17	89
Std Error	1	3	2	16
Median	21	26	18	17
Std Dev	7	11	7	193
Minimum	11	17	9	1
Maximum	46	51	32	1350
Count	31	10	16	151

Figure A1c.30: Distribution and concentration of Ni at Monsoon regolith section on 350560E.

Ni (ppm)

Monsoon



	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	131	128	88	109
Std Error	5	12	7	5
Median	130	118	78	90
Std Dev	28	38	27	65
Minimum	75	70	45	25
Maximum	195	190	135	500
Count	31	10	16	151

Figure A1c.31: Distribution and concentration of P at Monsoon regolith section on 350560E.

P (ppm)

Monsoon

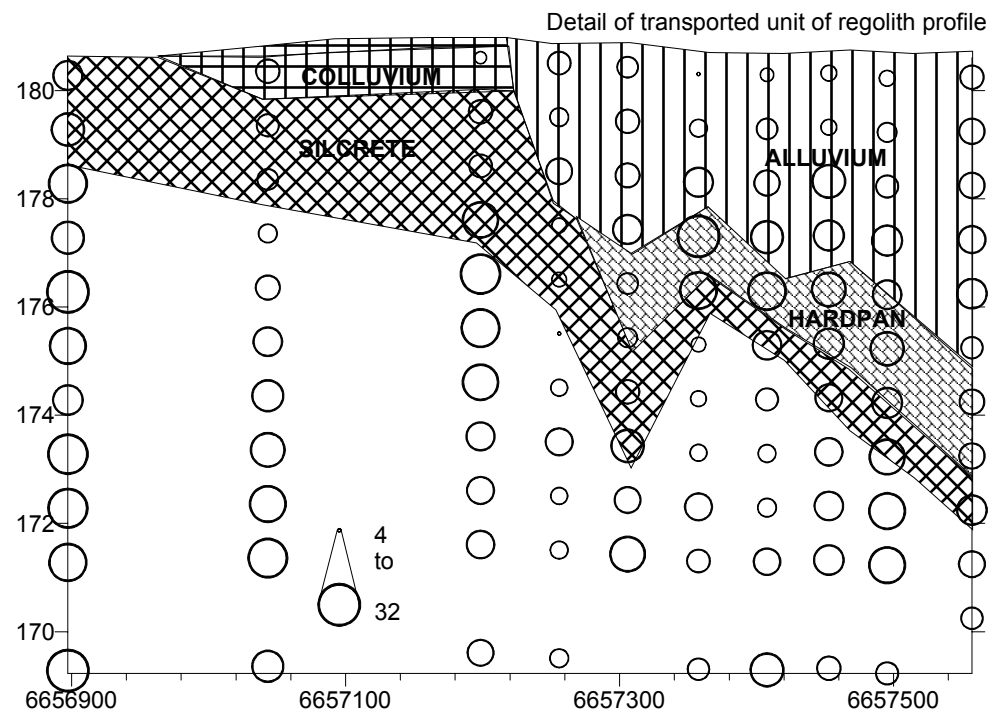
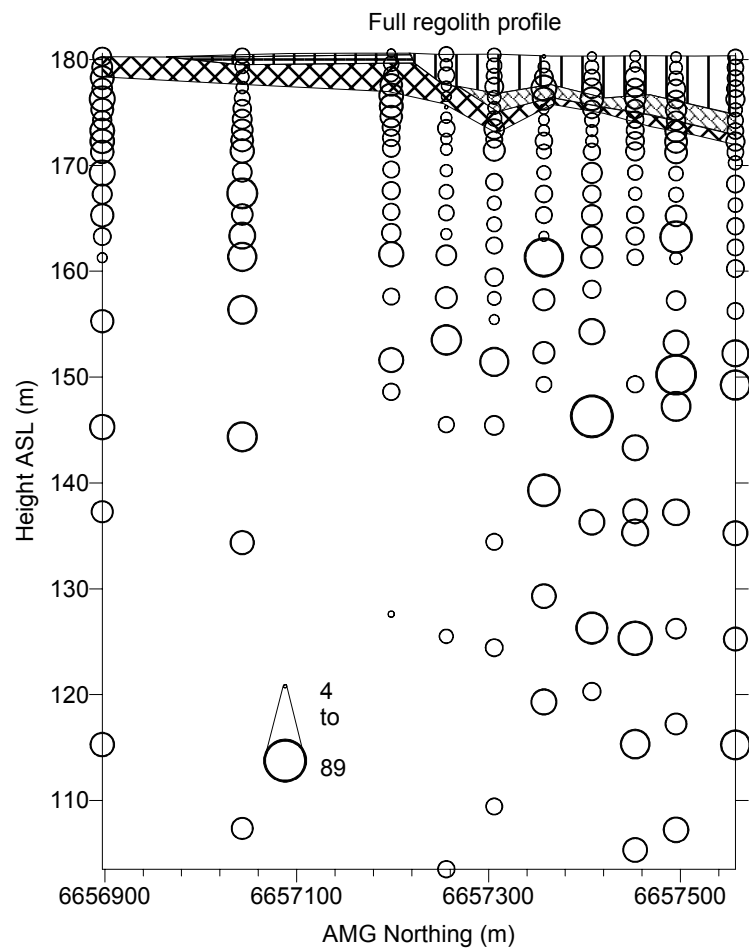
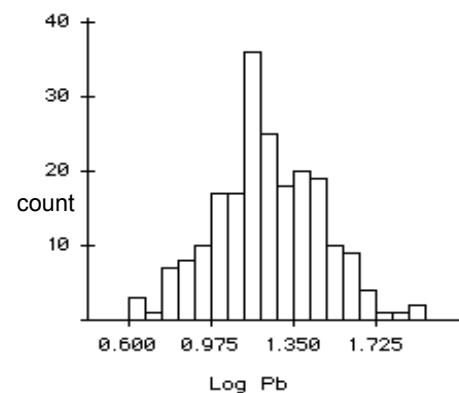


Figure A1c.32: Distribution and concentration of Pb at Monsoon regolith section on 350560E.



	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	12	18	16	22
Std Error	0.8	2.3	1.5	1.1
Median	12	18	16	18
Std Dev	4	7	6	14
Minimum	4	9	7	4
Maximum	21	32	26	89
Count	31	10	16	151

Pb (ppm)

Monsoon

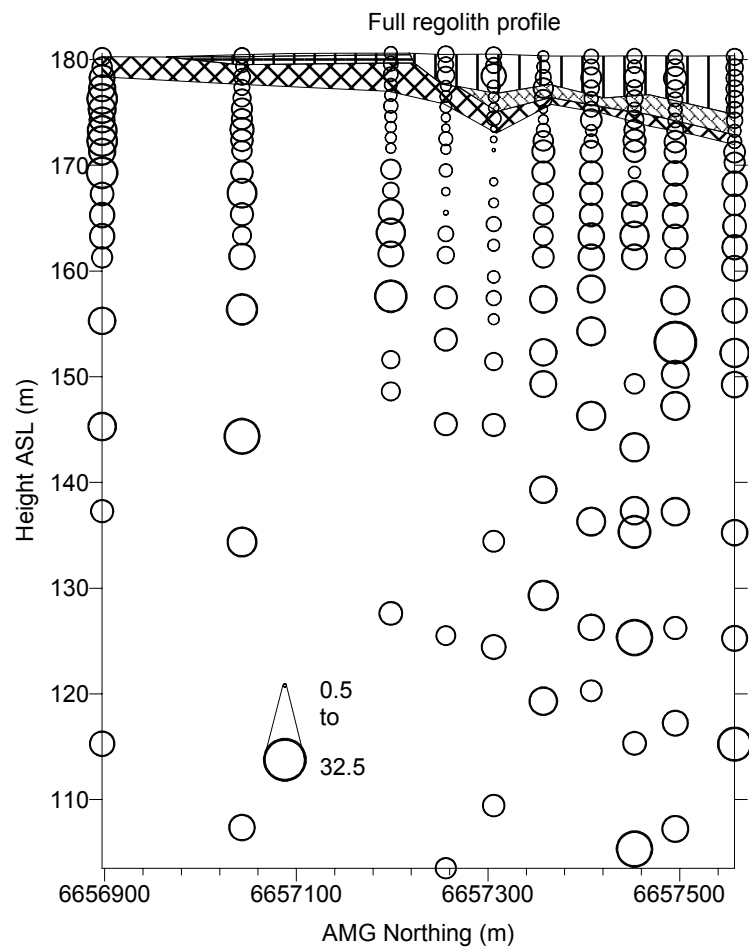
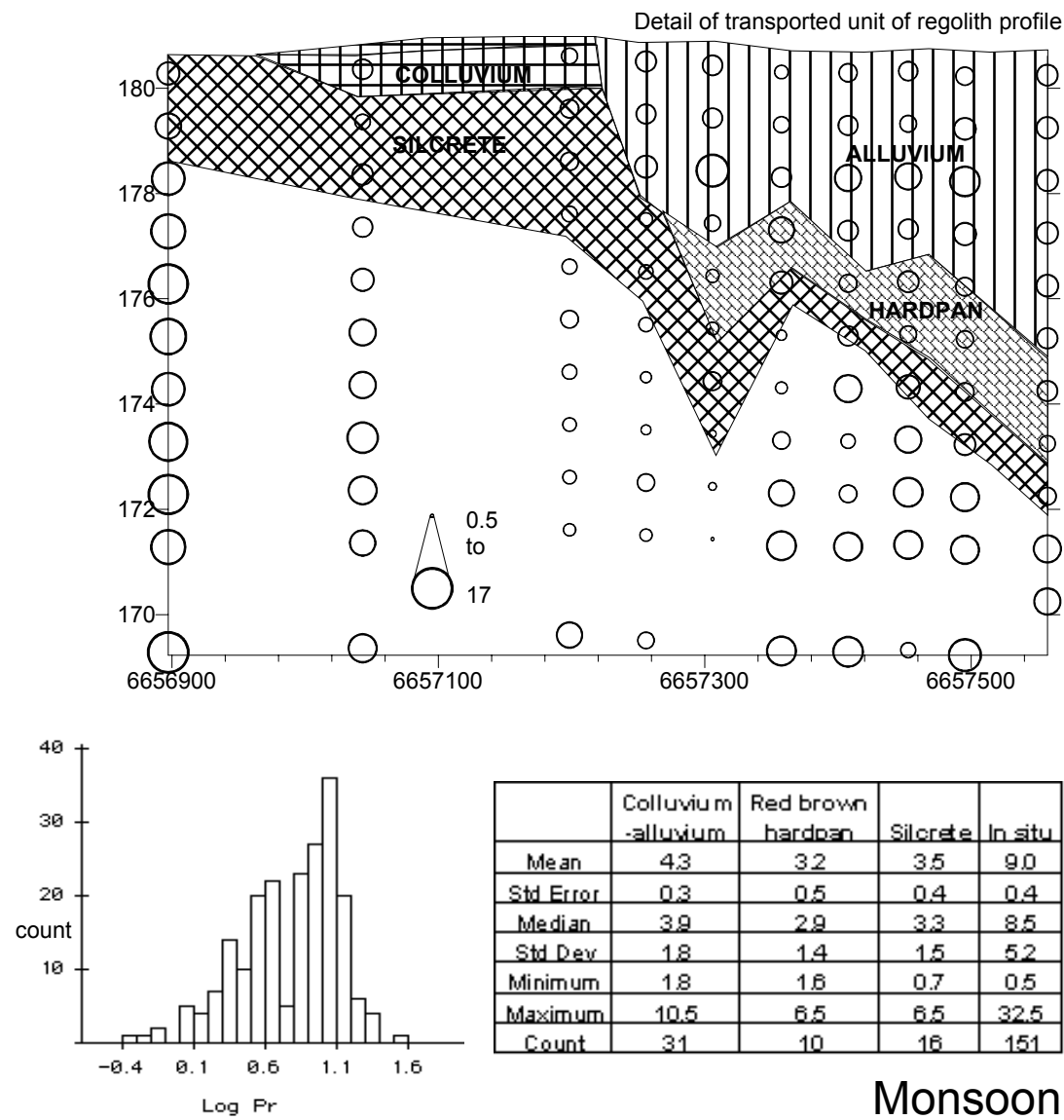


Figure A1c.33: Distribution and concentration of Pr at Monsoon regolith section on 350560E.

Pr (ppm)



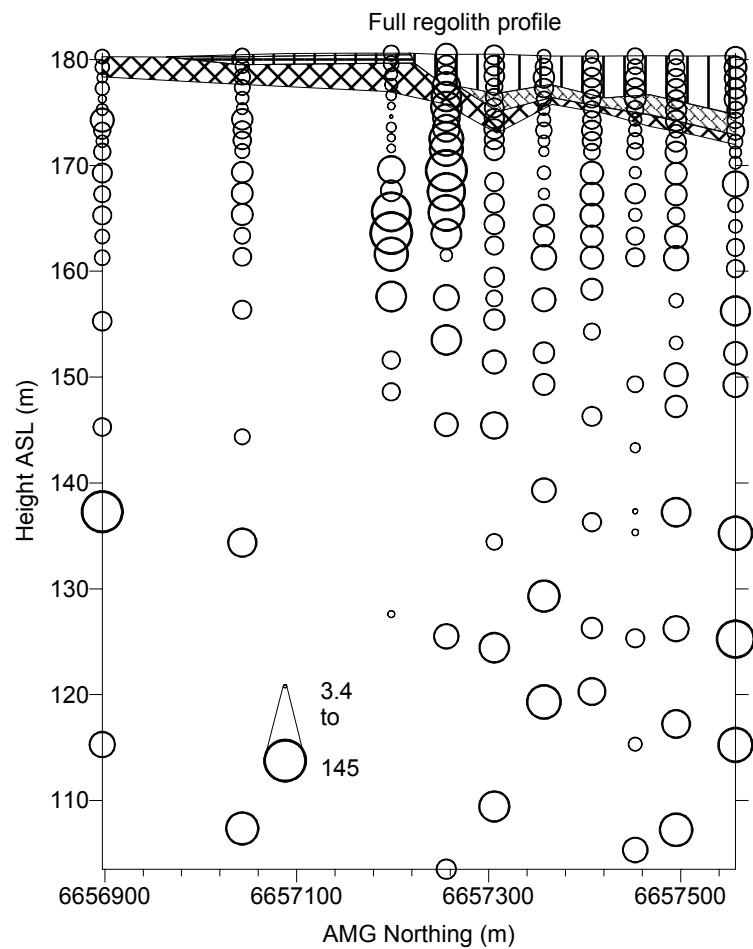
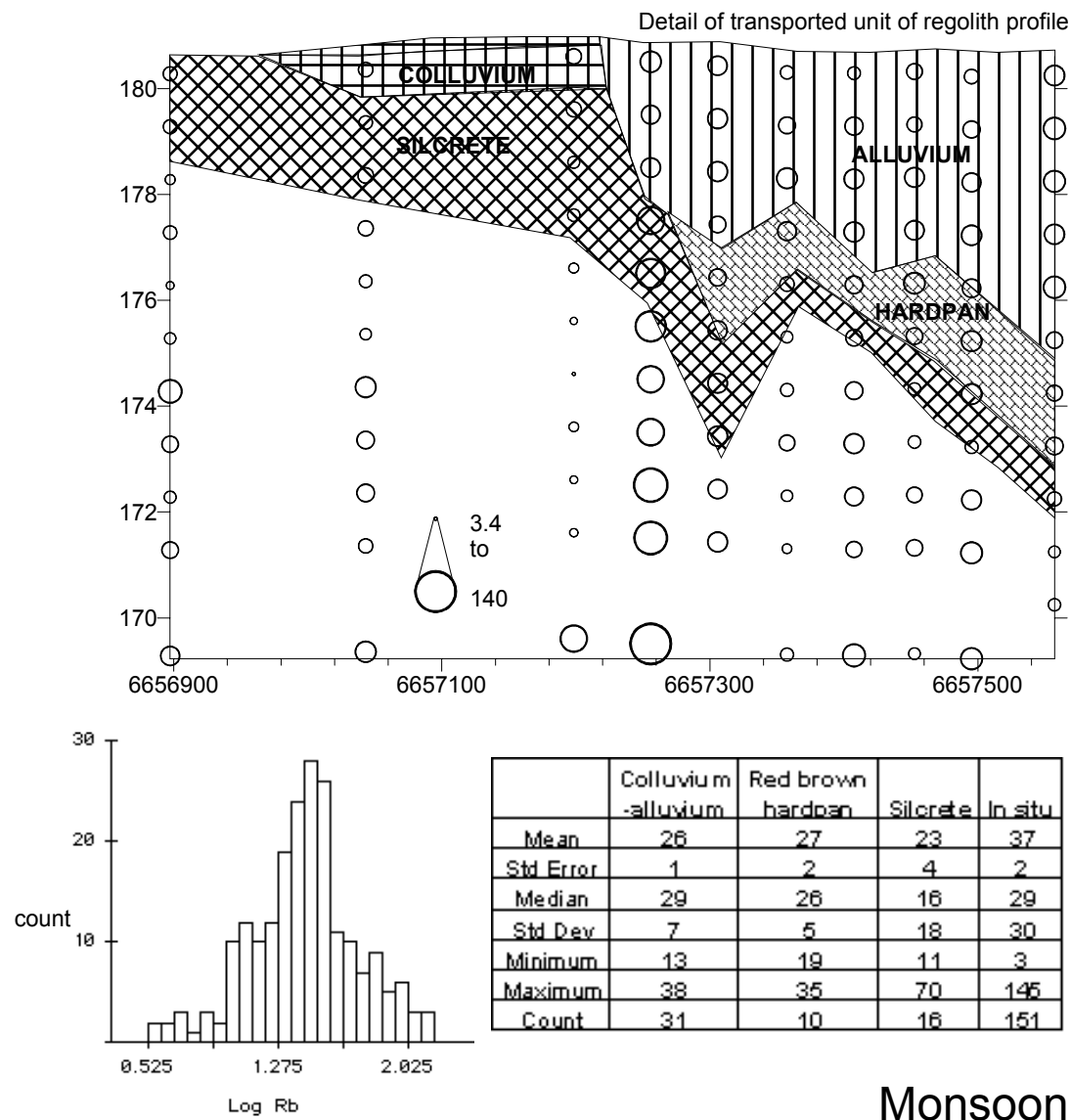


Figure A1c.34: Distribution and concentration of Rb at Monsoon regolith section on 350560E.

Rb (ppm)



Monsoon

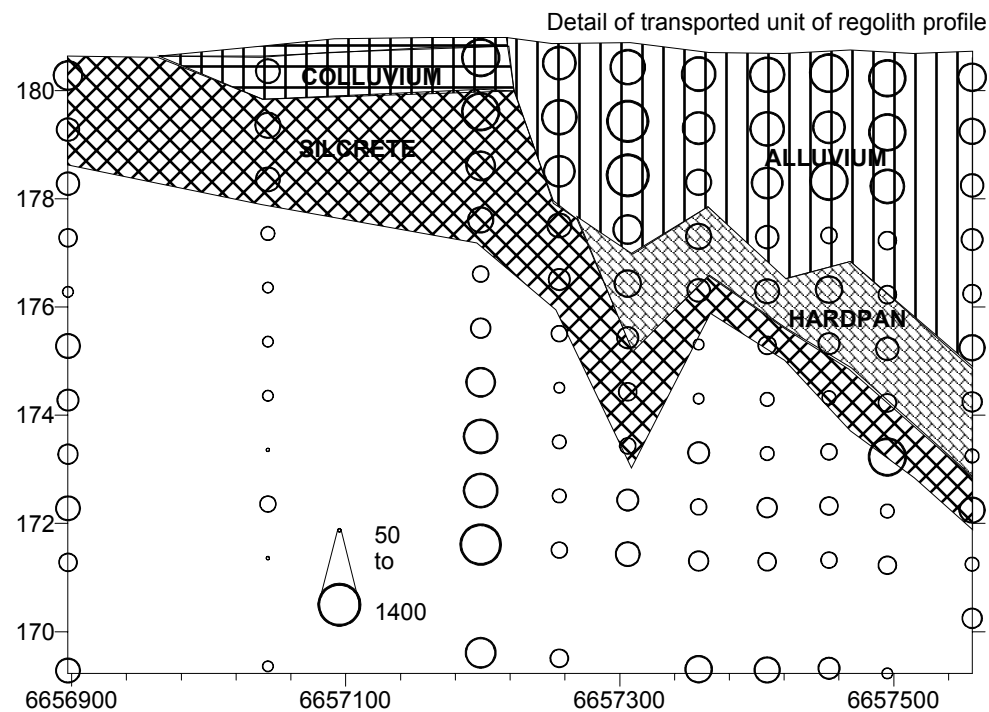
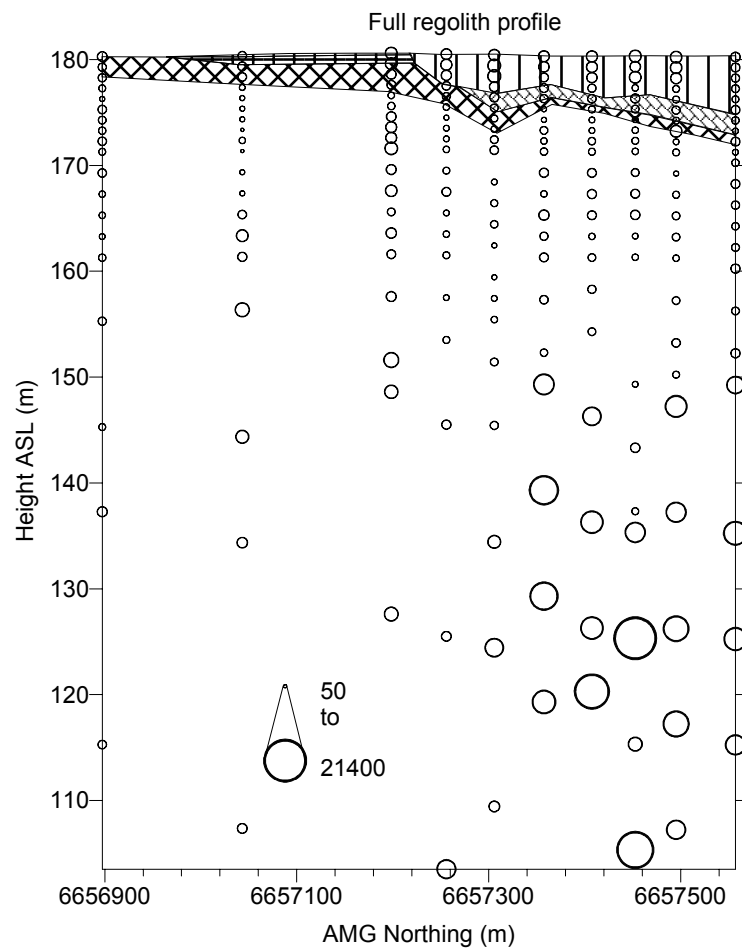
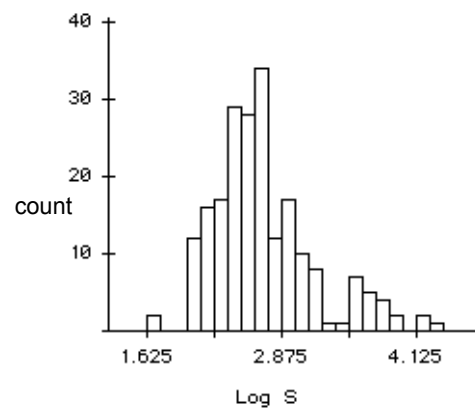


Figure A1c.35: Distribution and concentration of S at Monsoon regolith section on 350560E.



	Colluvium -alluvium	Red brown hardpan	Silcrete	In situ
Mean	742	385	494	1341
Std Error	60	42	69	232
Median	800	375	450	350
Std Dev	333	131	277	2852
Minimum	200	150	150	50
Maximum	1400	550	1100	21400
Count	31	10	16	151

S (ppm)

Monsoon

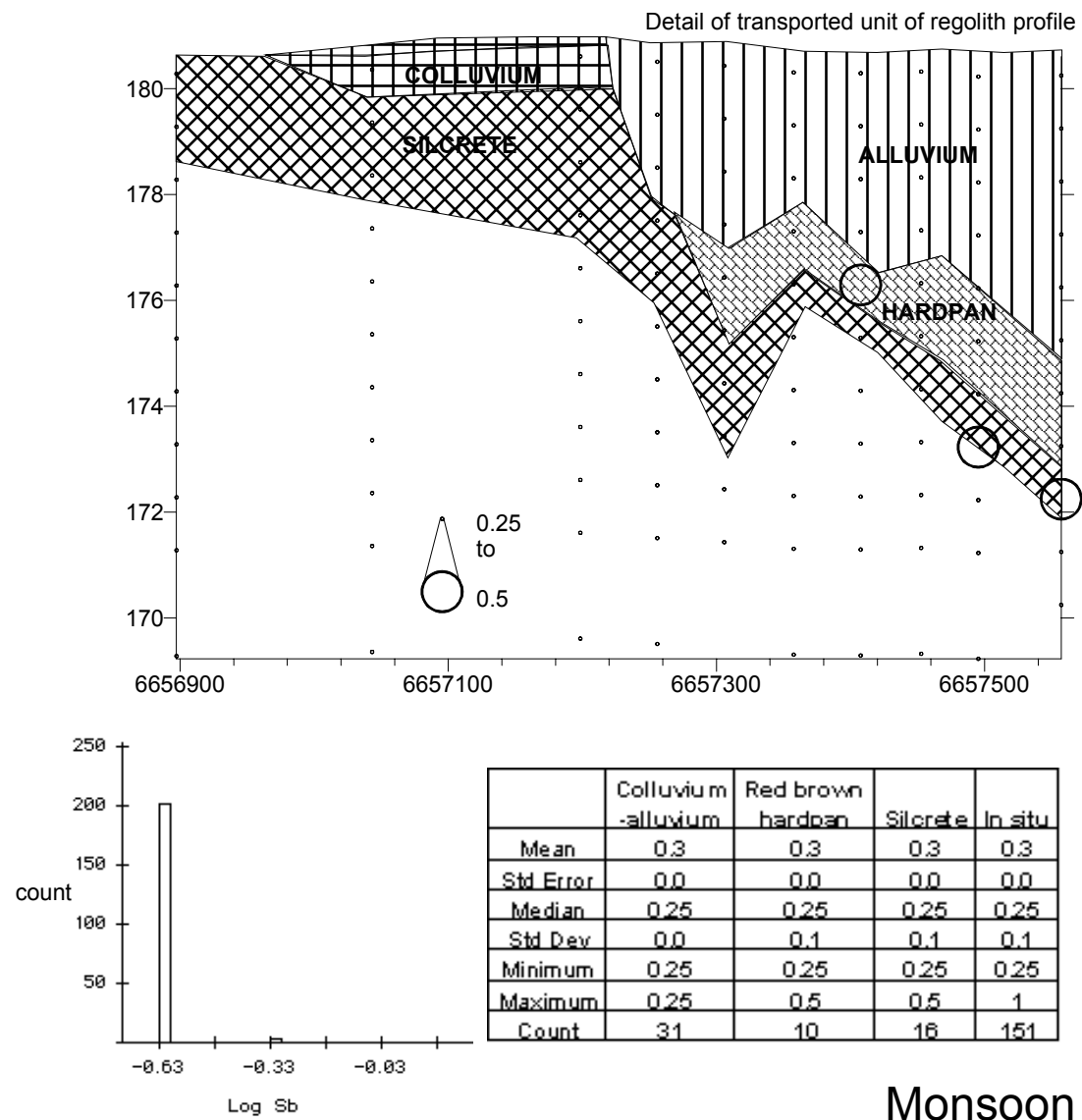
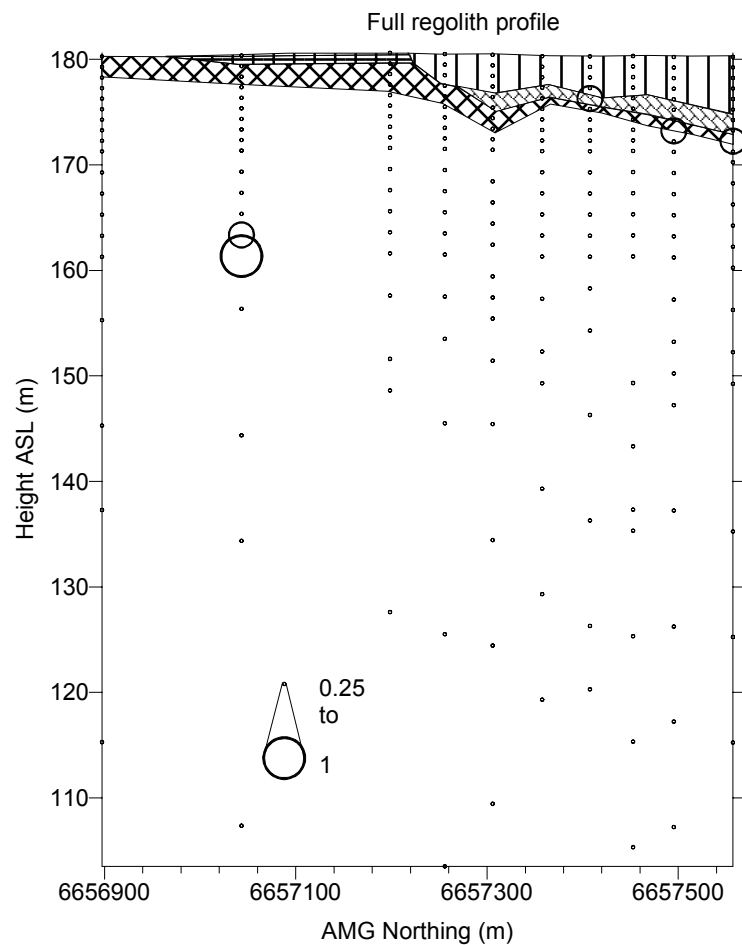
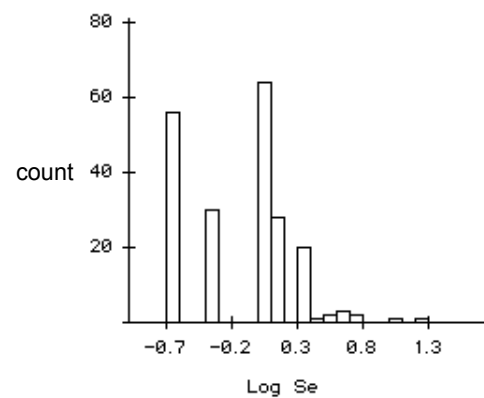
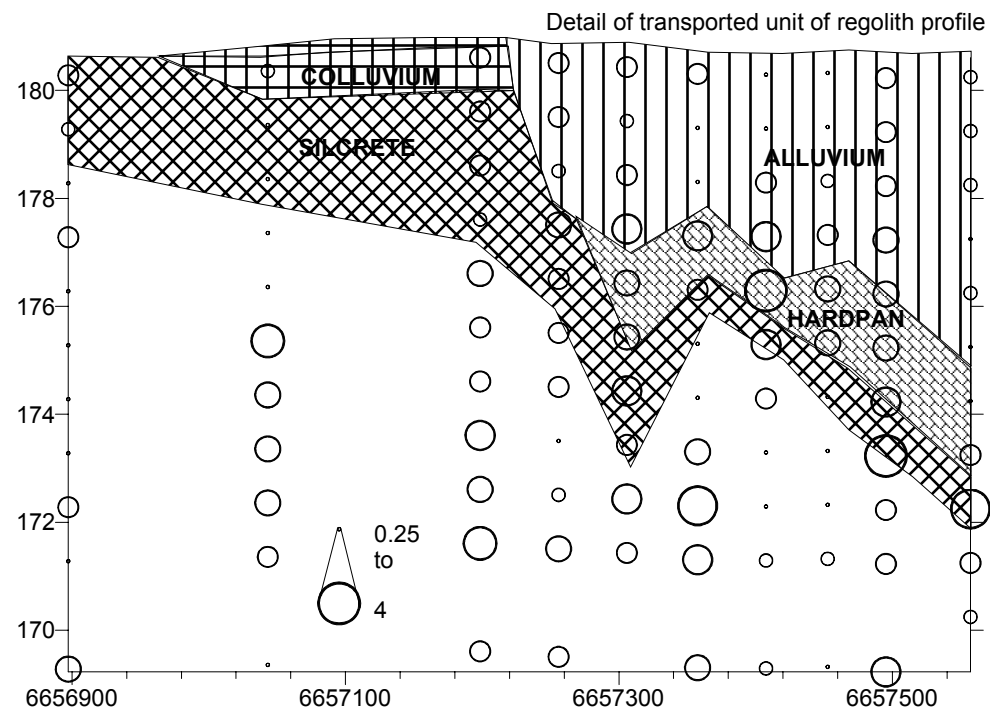
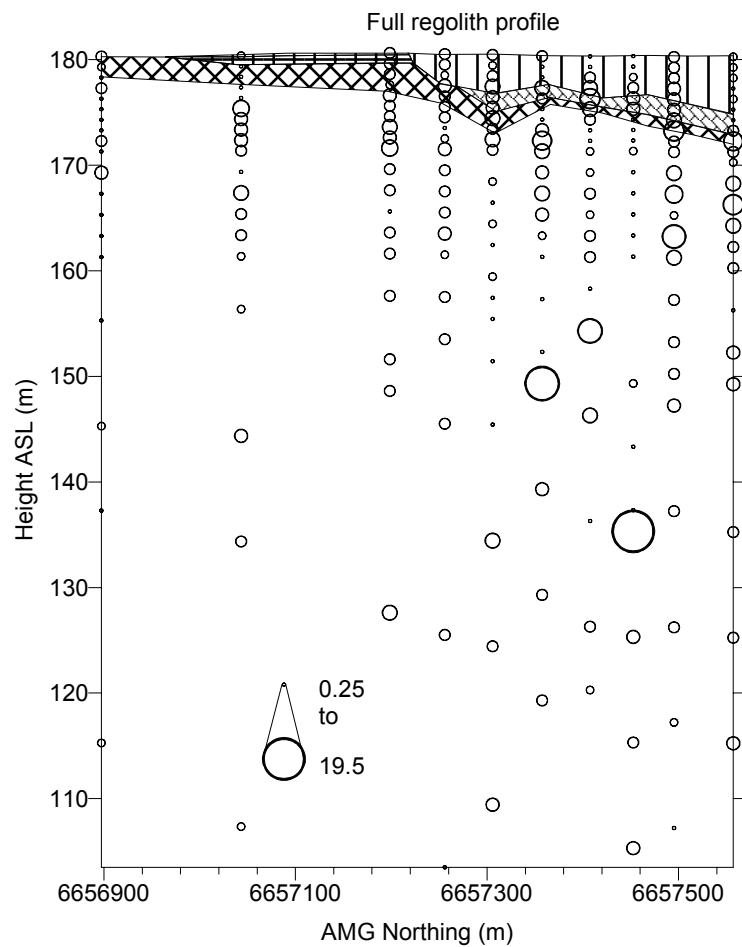


Figure A1c.36: Distribution and concentration of Sb at Monsoon regolith section on 350560E.

Sb (ppm)

Monsoon

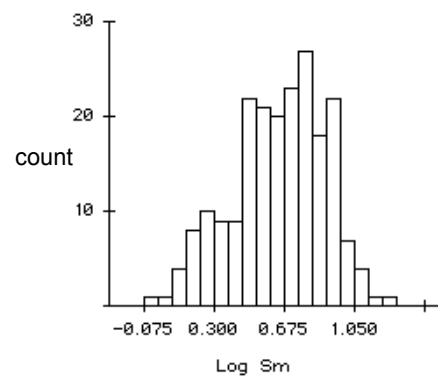
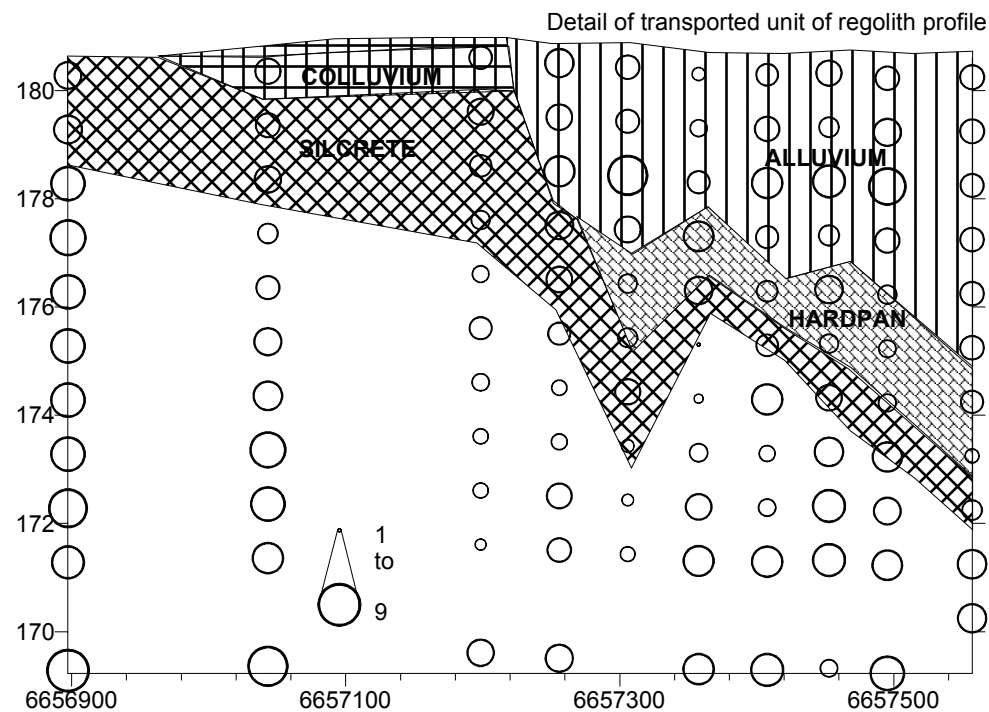
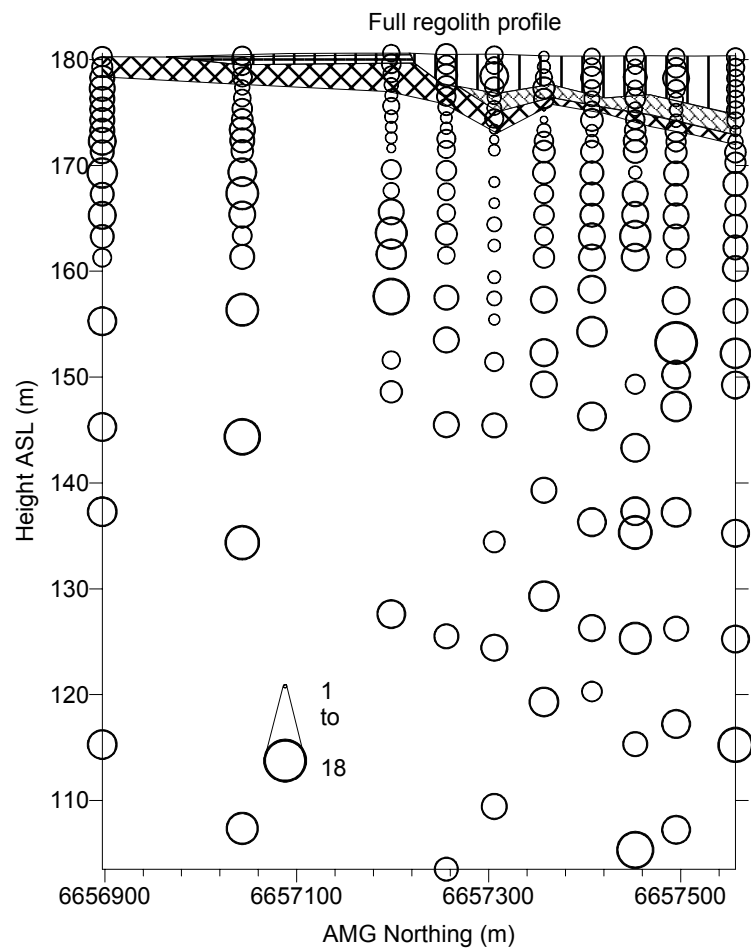


	Colluvium -alluvium	Red brown hardpan	Silcrete	In situ
Mean	0.8	1.7	1.3	1.2
Std Error	0.1	0.3	0.3	0.2
Median	0.5	1.5	1	1
Std Dev	0.5	1.0	1.1	2.0
Minimum	0.25	0.25	0.25	0.25
Maximum	2	4	4	19.5
Count	31	10	16	151

Figure A1c.37: Distribution and concentration of Se at Monsoon regolith section on 350560E.

Se (ppm)

Monsoon

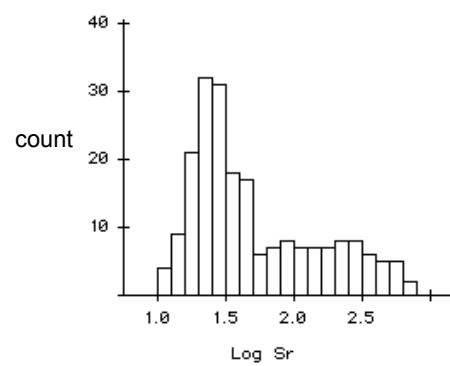
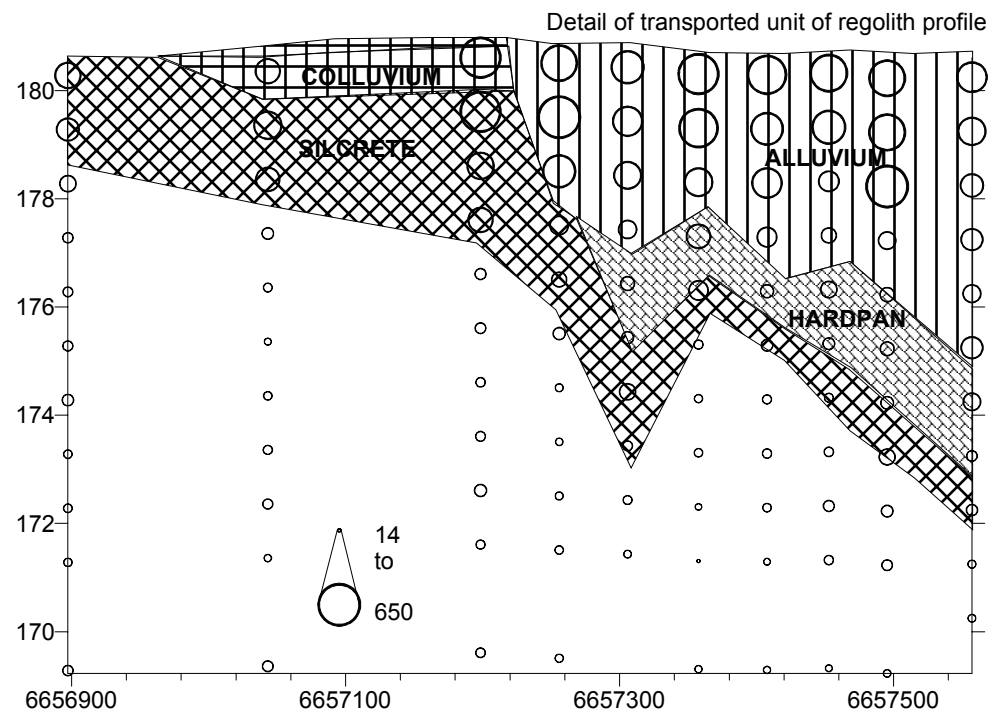
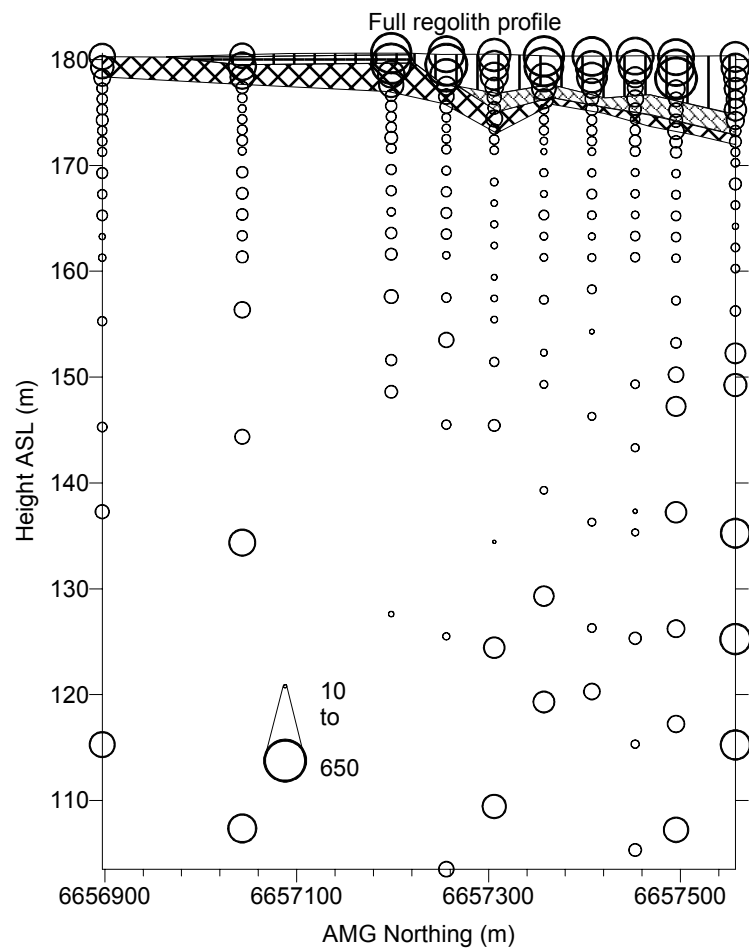


	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	3.6	2.7	3.4	5.8
Std Error	0.2	0.3	0.2	0.2
Median	3.2	2.25	3.7	6
Std Dev	1.4	1.0	0.9	2.9
Minimum	1.4	1.5	1.35	0.86
Maximum	8	4.8	4.7	18
Count	31	10	16	151

Figure A1c.38: Distribution and concentration of Sm at Monsoon regolith section on 350560E.

Sm (ppm)

Monsoon



	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	330	75	160	47
Std Error	33	15	36	5
Median	320	59	120	27
Std Dev	184	48	143	59
Minimum	66	37	27	10
Maximum	650	200	600	330
Count	31	10	16	151

Figure A1c.39: Distribution and concentration of Sr at Monsoon regolith section on 350560E.

Sr (ppm)

Monsoon

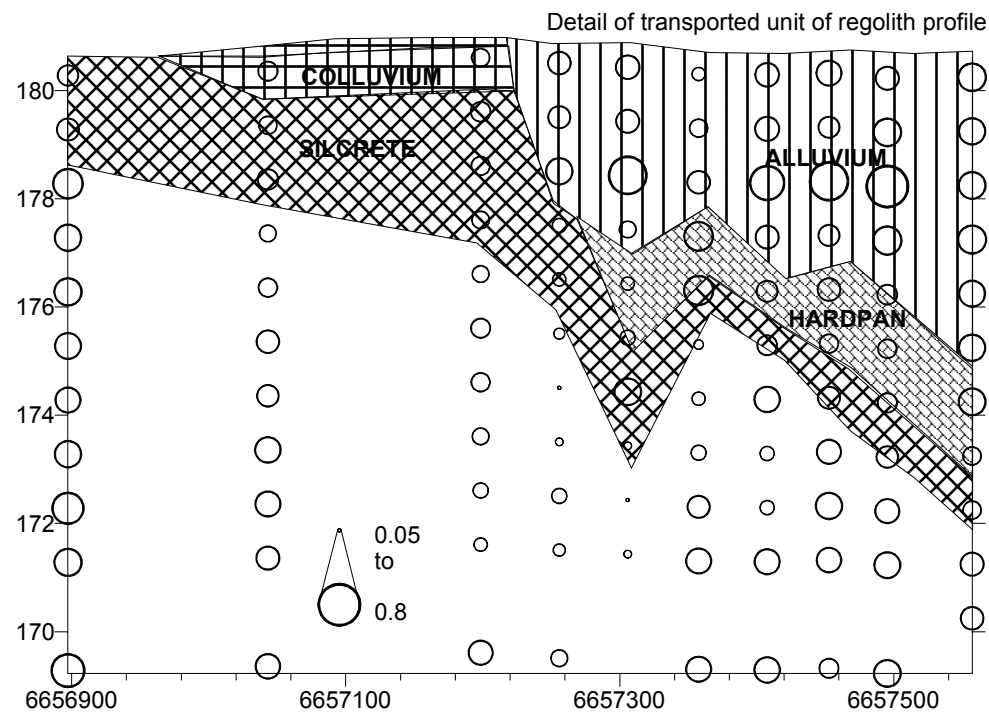
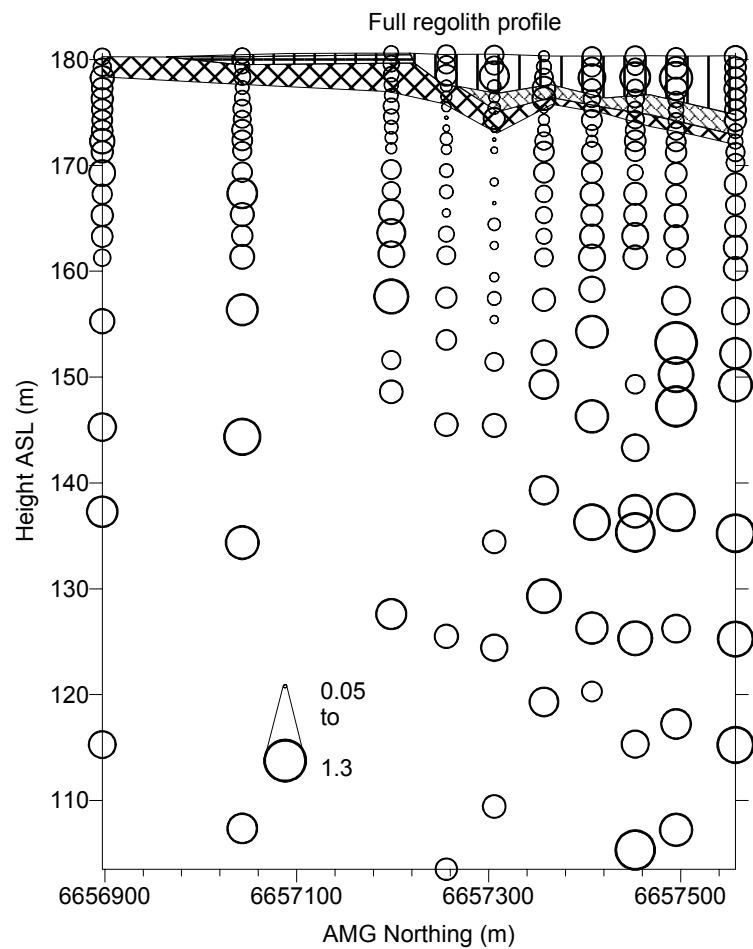
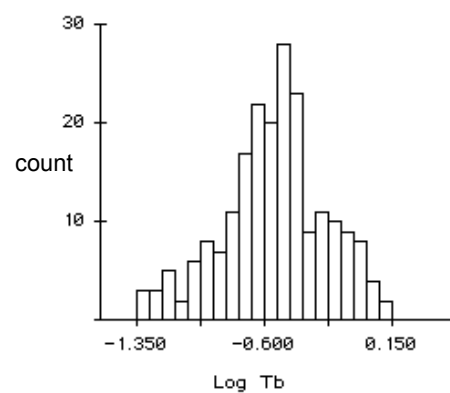


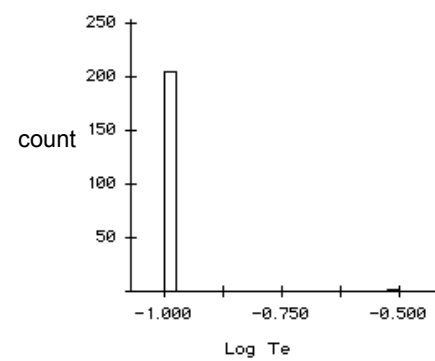
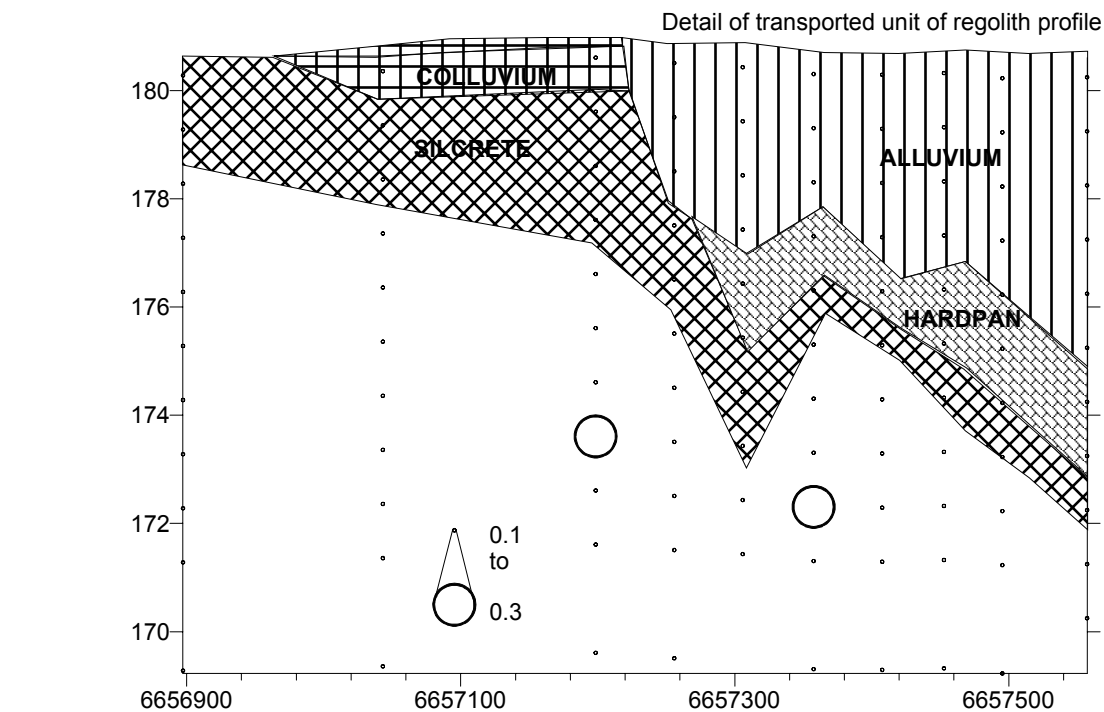
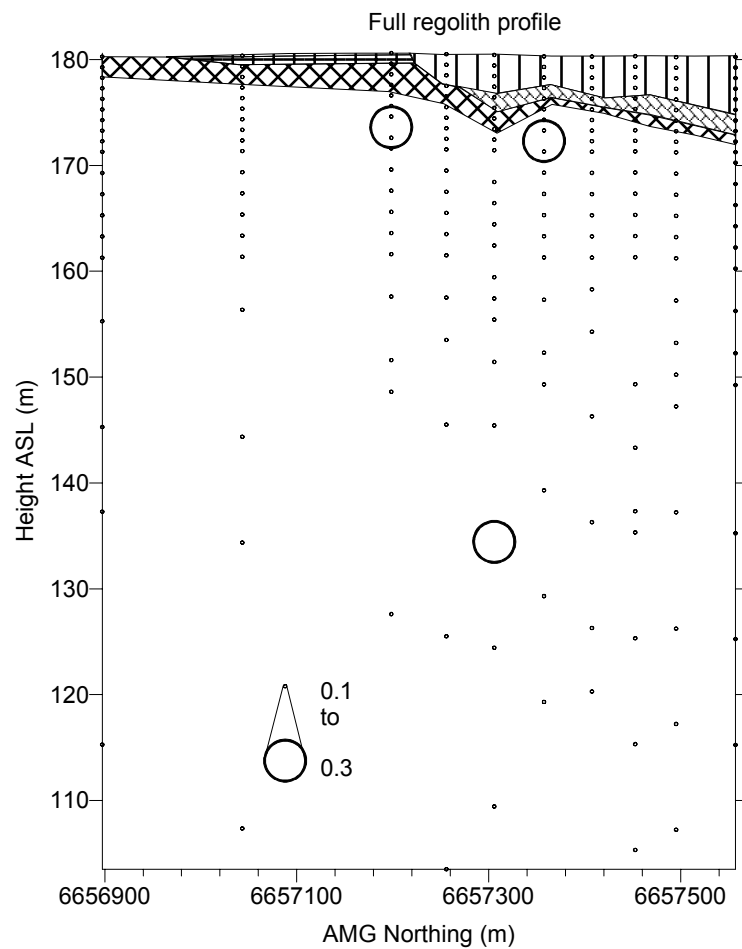
Figure A1c.40: Distribution and concentration of Tb at Monsoon regolith section on 350560E.



	Colluvium -alluvium	Red brown hardpan	Silcrete	In situ
Mean	0.3	0.2	0.2	0.4
Std Error	0.0	0.0	0.0	0.0
Median	0.26	0.175	0.19	0.32
Std Dev	0.2	0.1	0.1	0.3
Minimum	0.1	0.1	0.06	0.05
Maximum	0.78	0.38	0.39	1.3
Count	31	10	16	151

Tb (ppm)

Monsoon

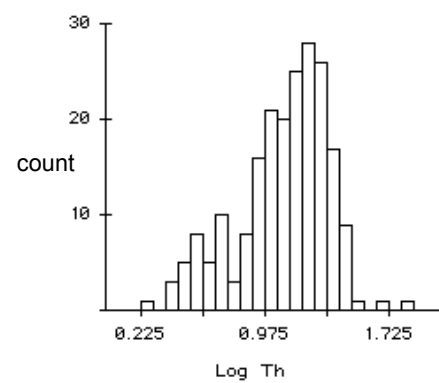
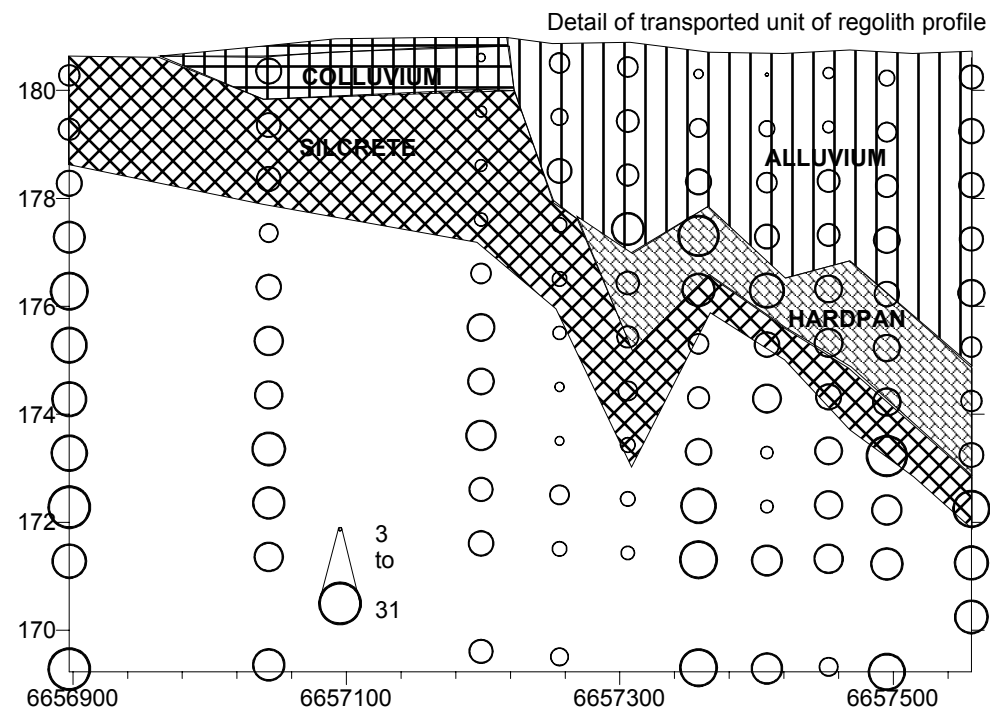
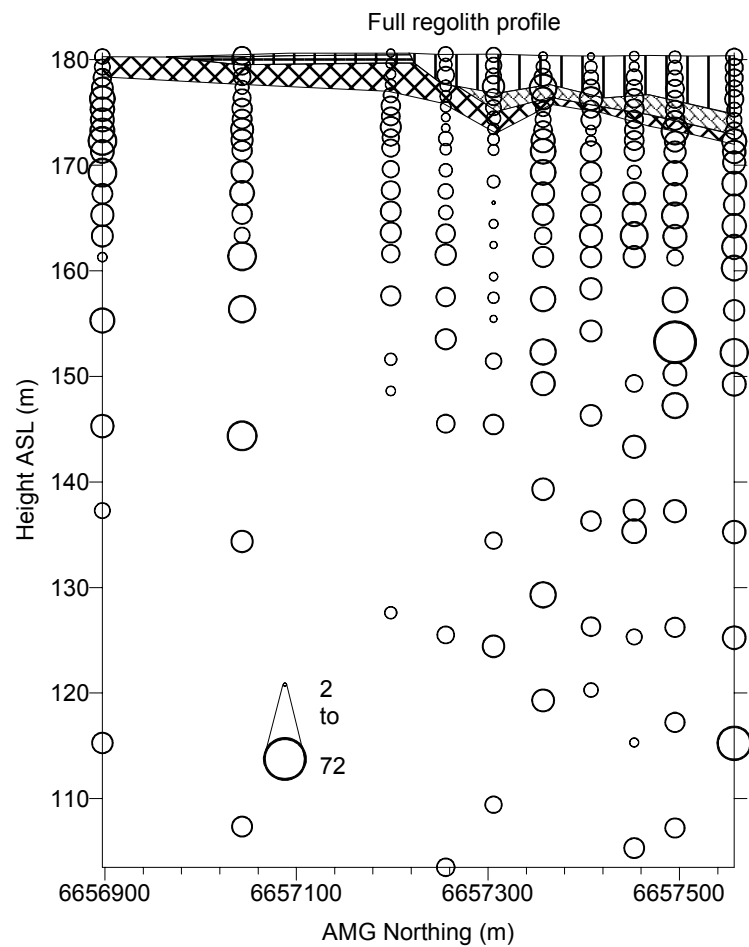


	Colluvium -alluvium	Red brown hardpan	Silcrete	In situ
Mean	0.1	0.1	0.1	0.1
Std Error	0.0	0.0	0.0	0.0
Median	0.1	0.1	0.1	0.1
Std Dev	0.0	0.0	0.0	0.0
Minimum	0.1	0.1	0.1	0.1
Maximum	0.1	0.1	0.1	0.3
Count	31	10	16	151

Figure A1c.41: Distribution and concentration of Te at Monsoon regolith section on 350560E.

Te (ppm)

Monsoon

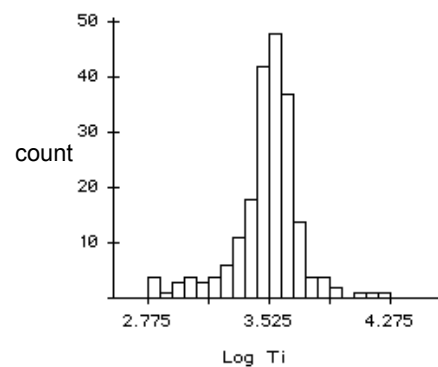
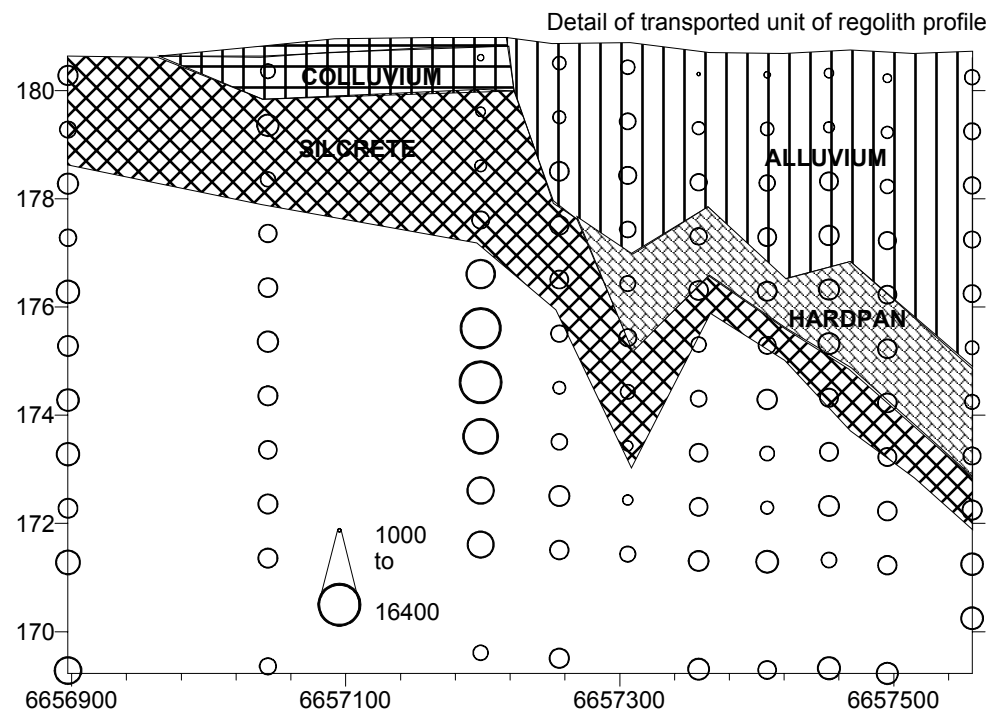
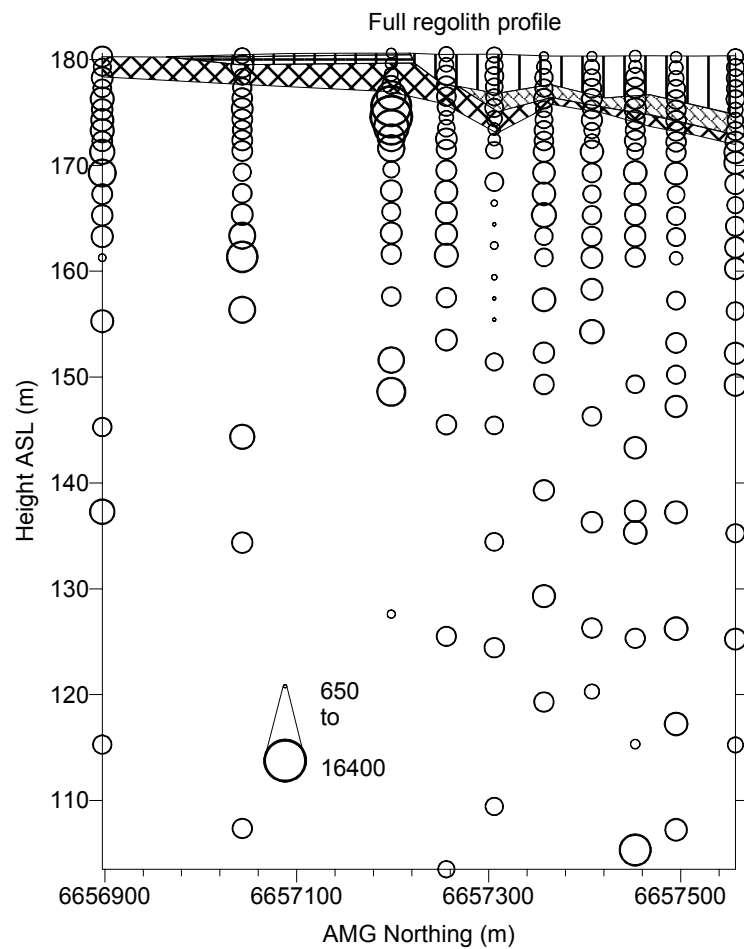


	Colluvium alluvium	Red brown hardpan	Silcrete	In situ
Mean	9	14	11	16
Std Error	0.6	2.0	1.8	0.7
Median	10	13	9	16
Std Dev	4	6	7	9
Minimum	3	9	4	2
Maximum	19	29	29	72
Count	31	10	16	151

Figure A1c.42: Distribution and concentration of Th at Monsoon regolith section on 350560E.

Th (ppm)

Monsoon



	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	2413	3325	2972	3936
Std Error	139	204	222	166
Median	2400	3325	3200	3700
Std Dev	776	645	888	2045
Minimum	1000	2350	1400	650
Maximum	3850	4400	4550	16400
Count	31	10	16	151

Figure A1c.43: Distribution and concentration of Ti at Monsoon regolith section on 350560E.

Ti (ppm)

Monsoon

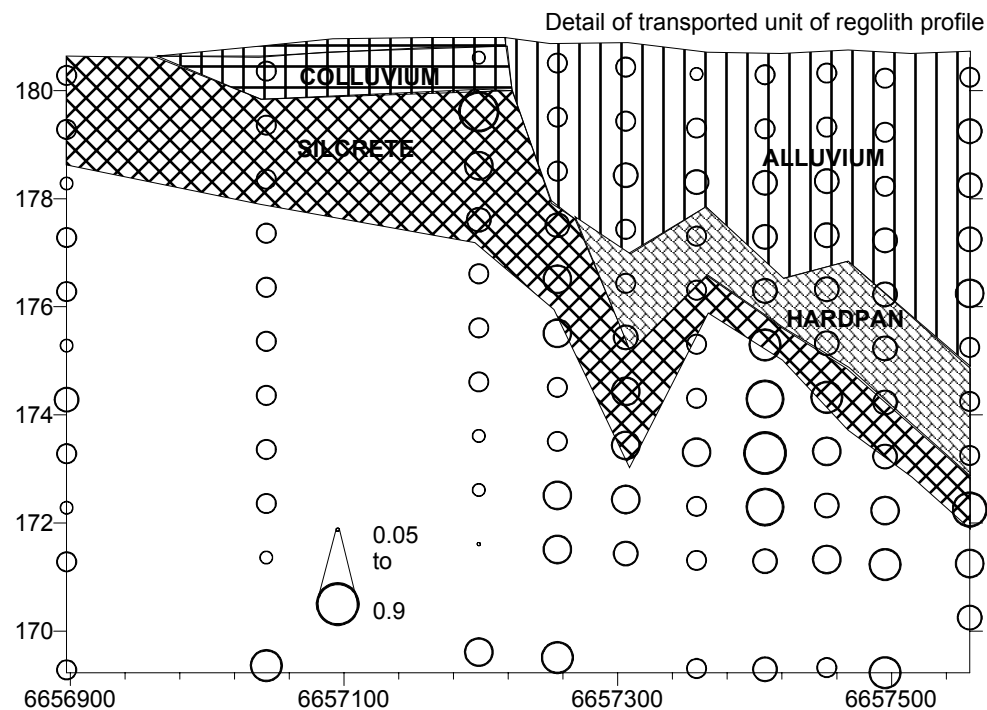
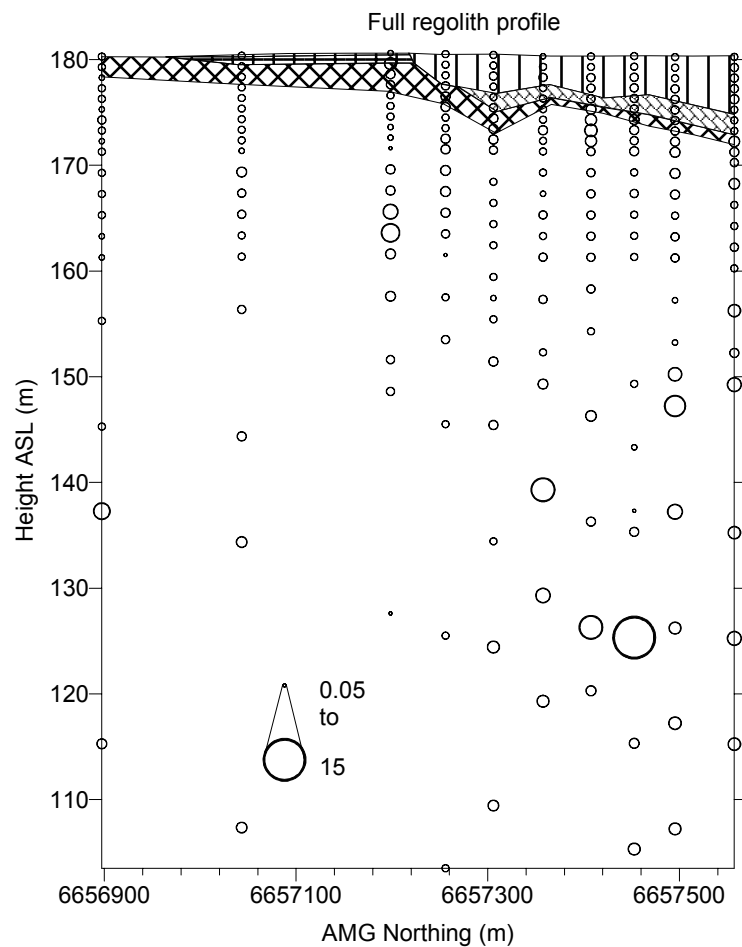
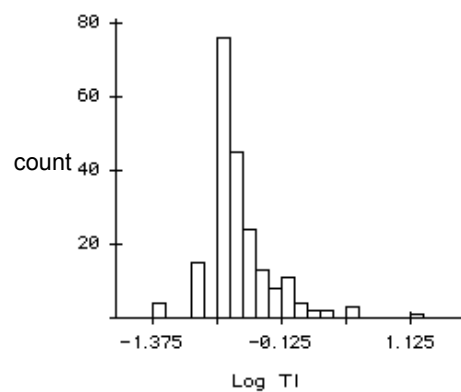


Figure C44: Distribution and concentration of TI at Monsoon regolith section on 350560E.

TI (ppm)



	Colluvium -alluvium	Red brown hardpan	Silicate	In situ
Mean	0.2	0.3	0.4	0.6
Std Error	0.0	0.0	0.0	0.1
Median	0.2	0.3	0.35	0.3
Std Dev	0.1	0.1	0.2	1.3
Minimum	0.1	0.2	0.2	0.05
Maximum	0.4	0.3	0.8	15
Count	31	10	16	151

Monsoon

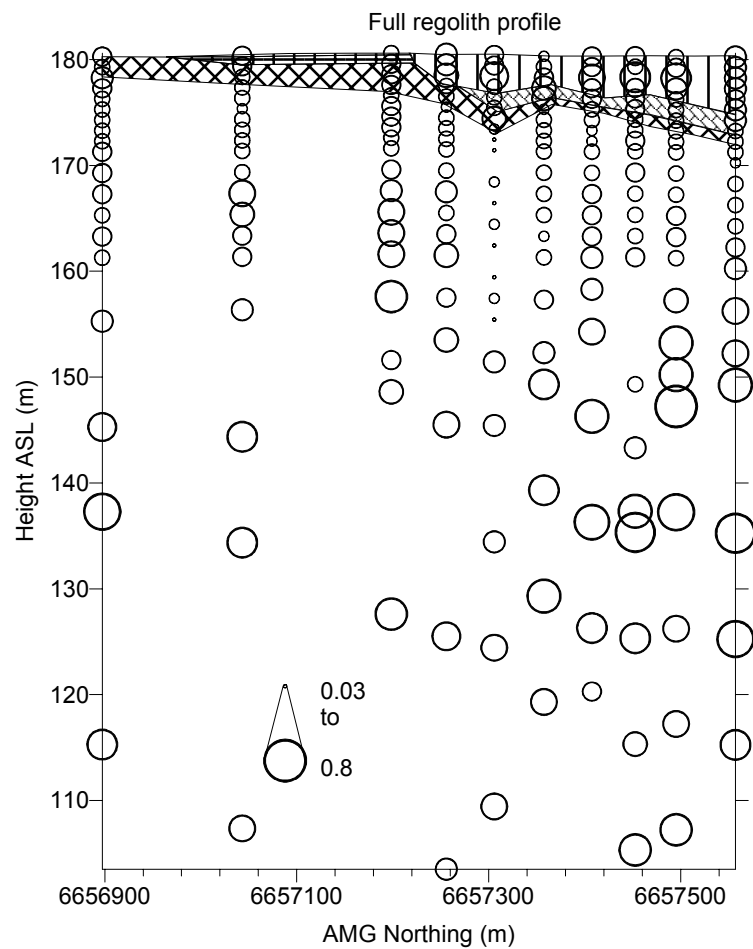
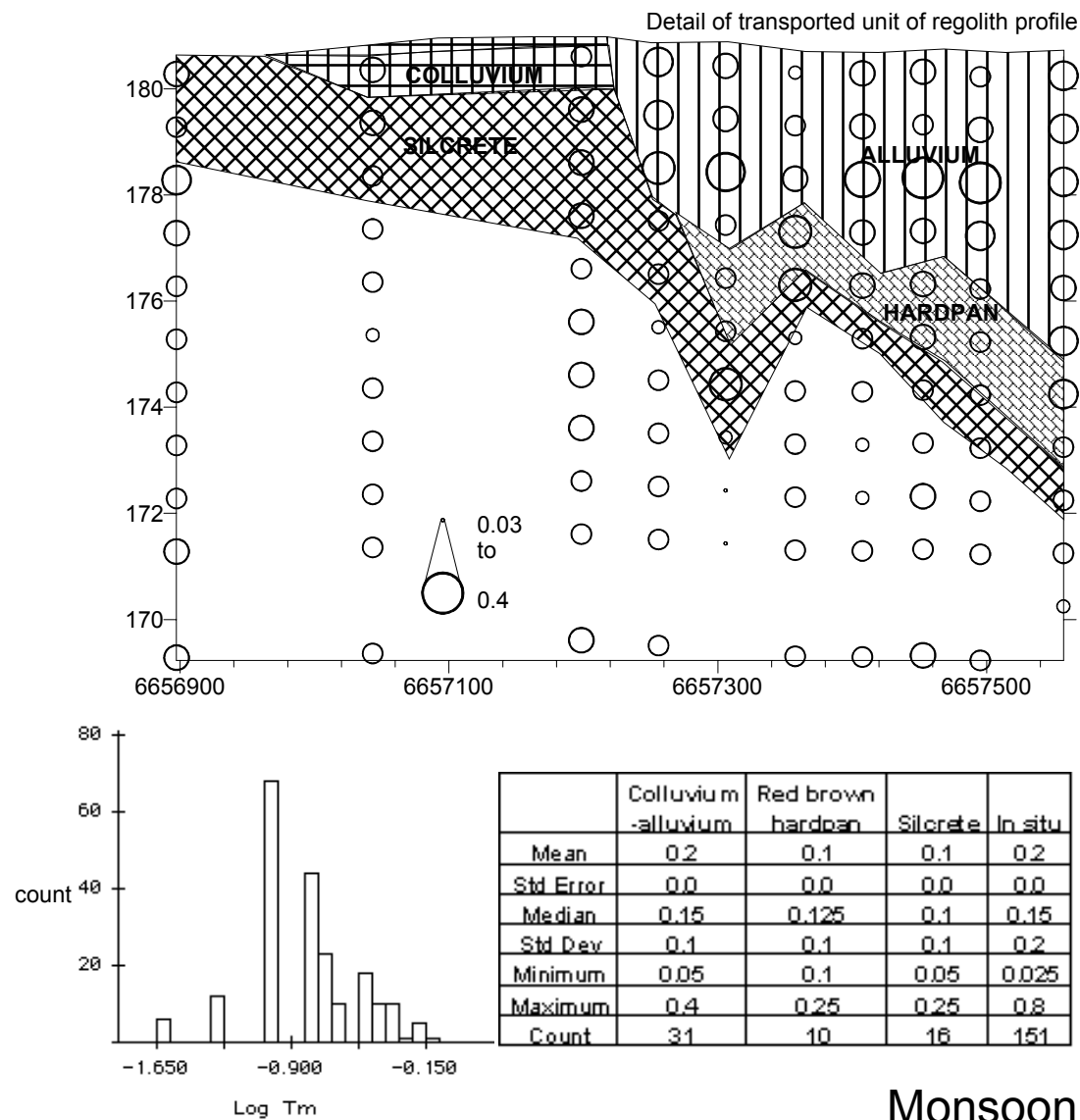


Figure A1c.45: Distribution and concentration of Tm at Monsoon regolith section on 350560E.

Tm (ppm)



Monsoon

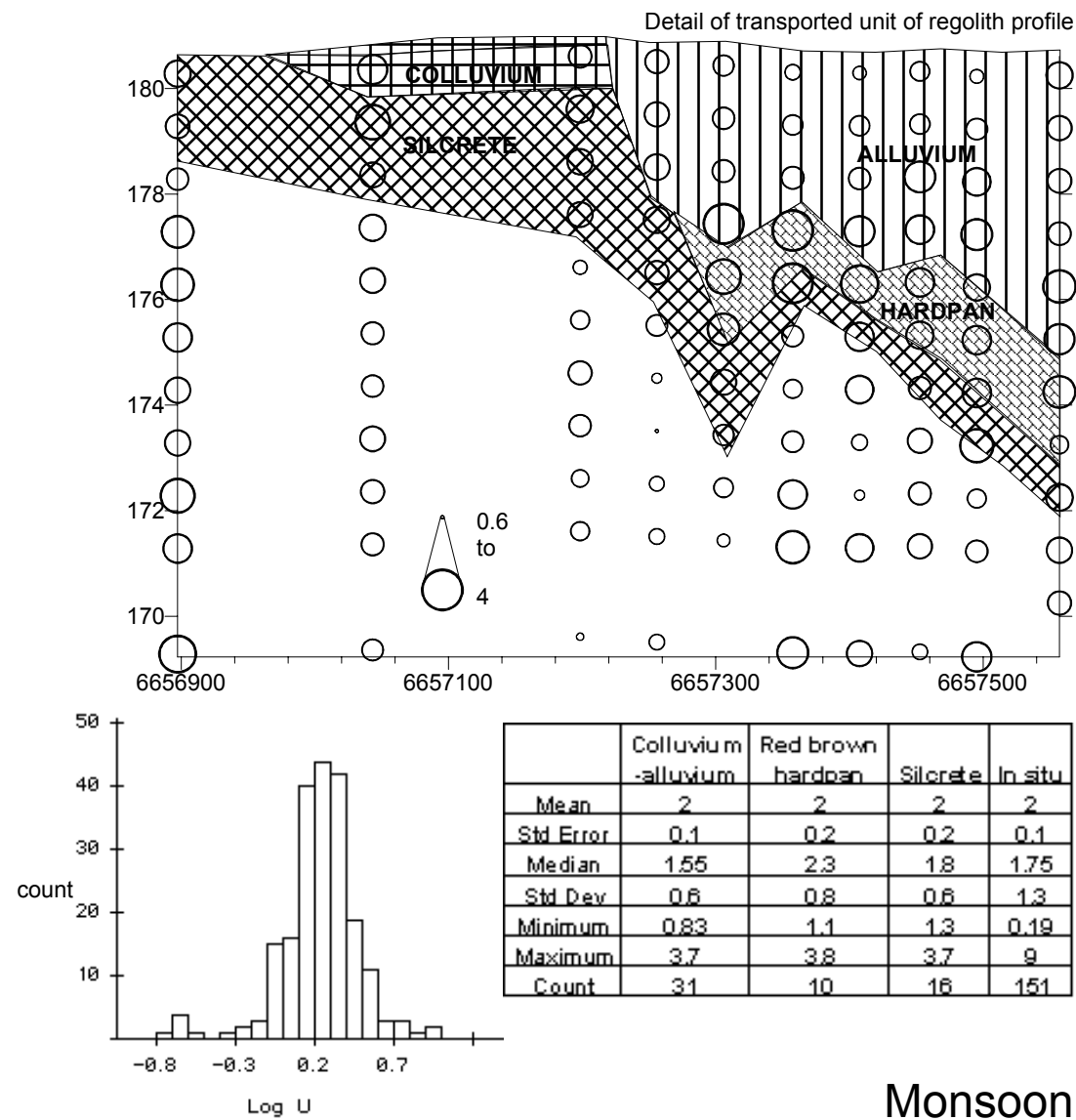
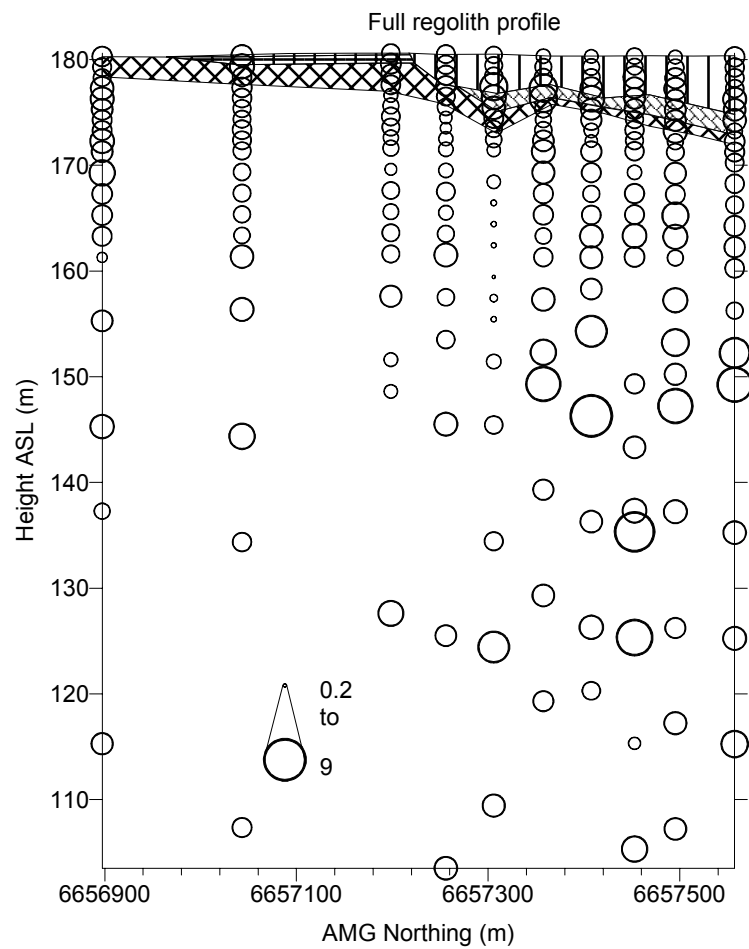


Figure A1c.46: Distribution and concentration of U at Monsoon regolith section on 350560E.

U (ppm)

Monsoon

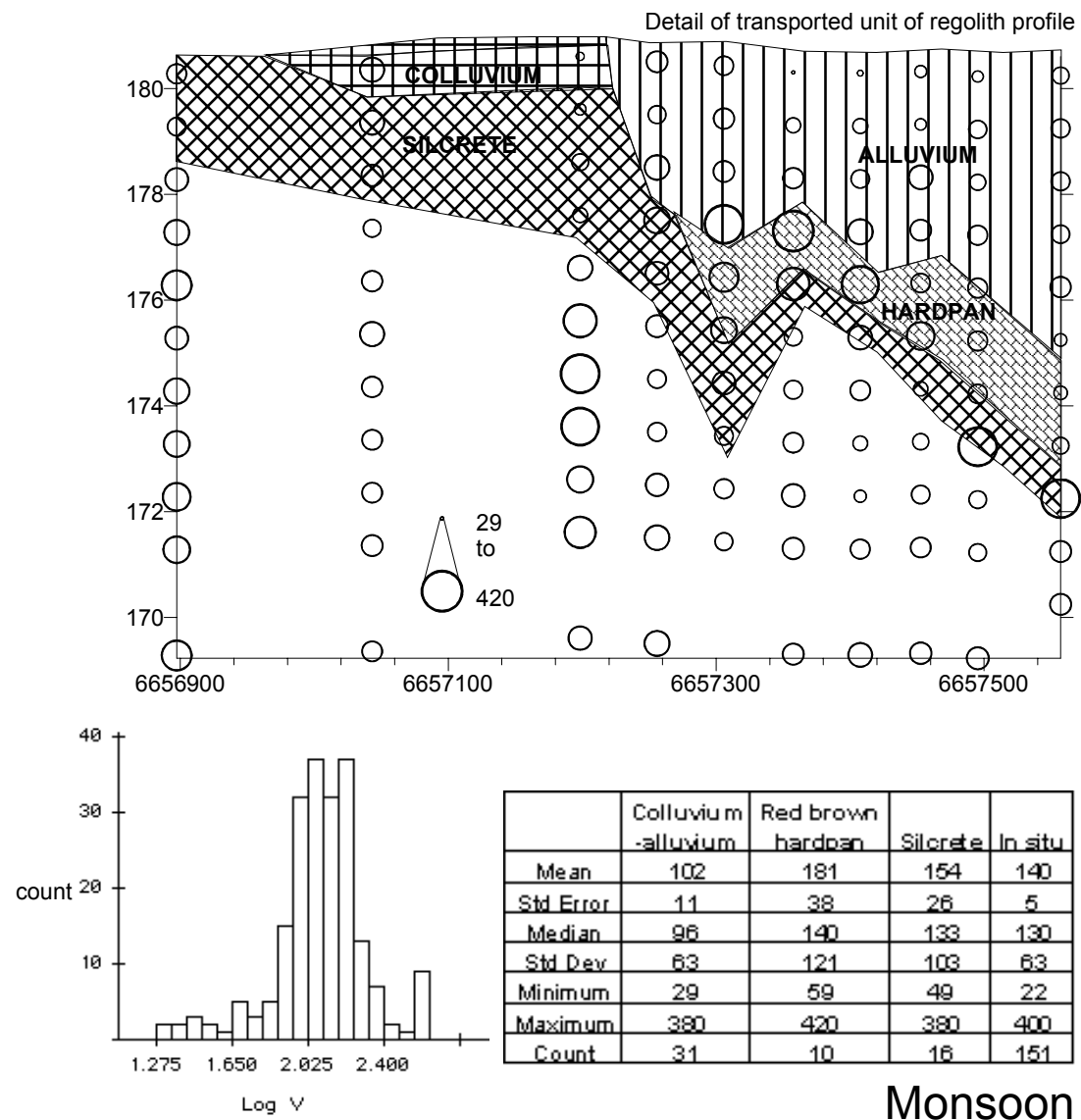
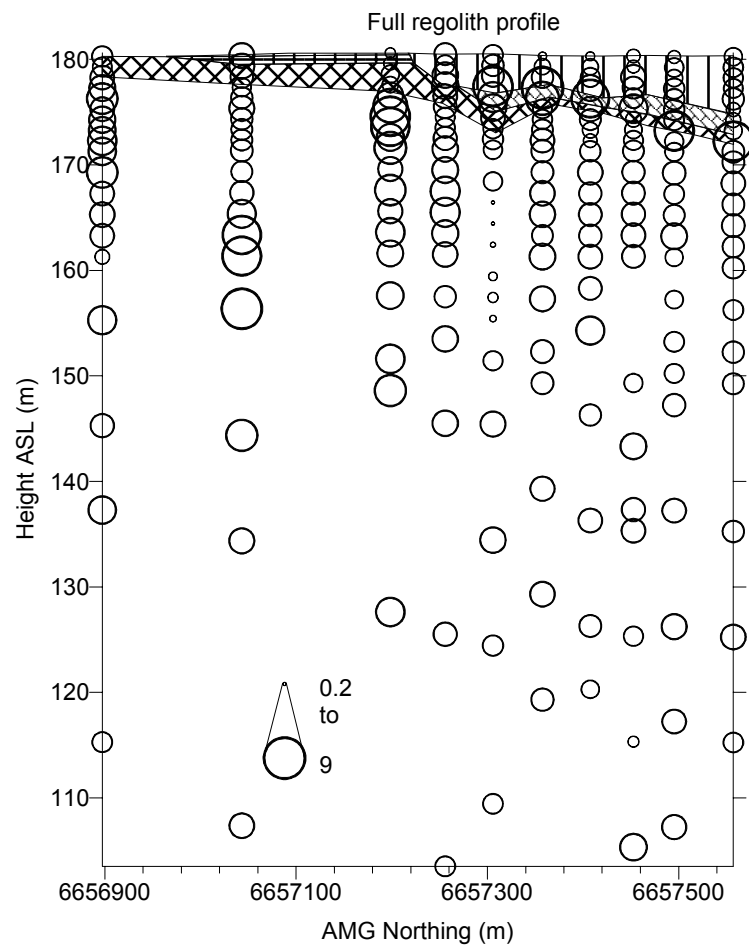


Figure A1c.47: Distribution and concentration of V at Monsoon regolith section on 350560E.

V (ppm)

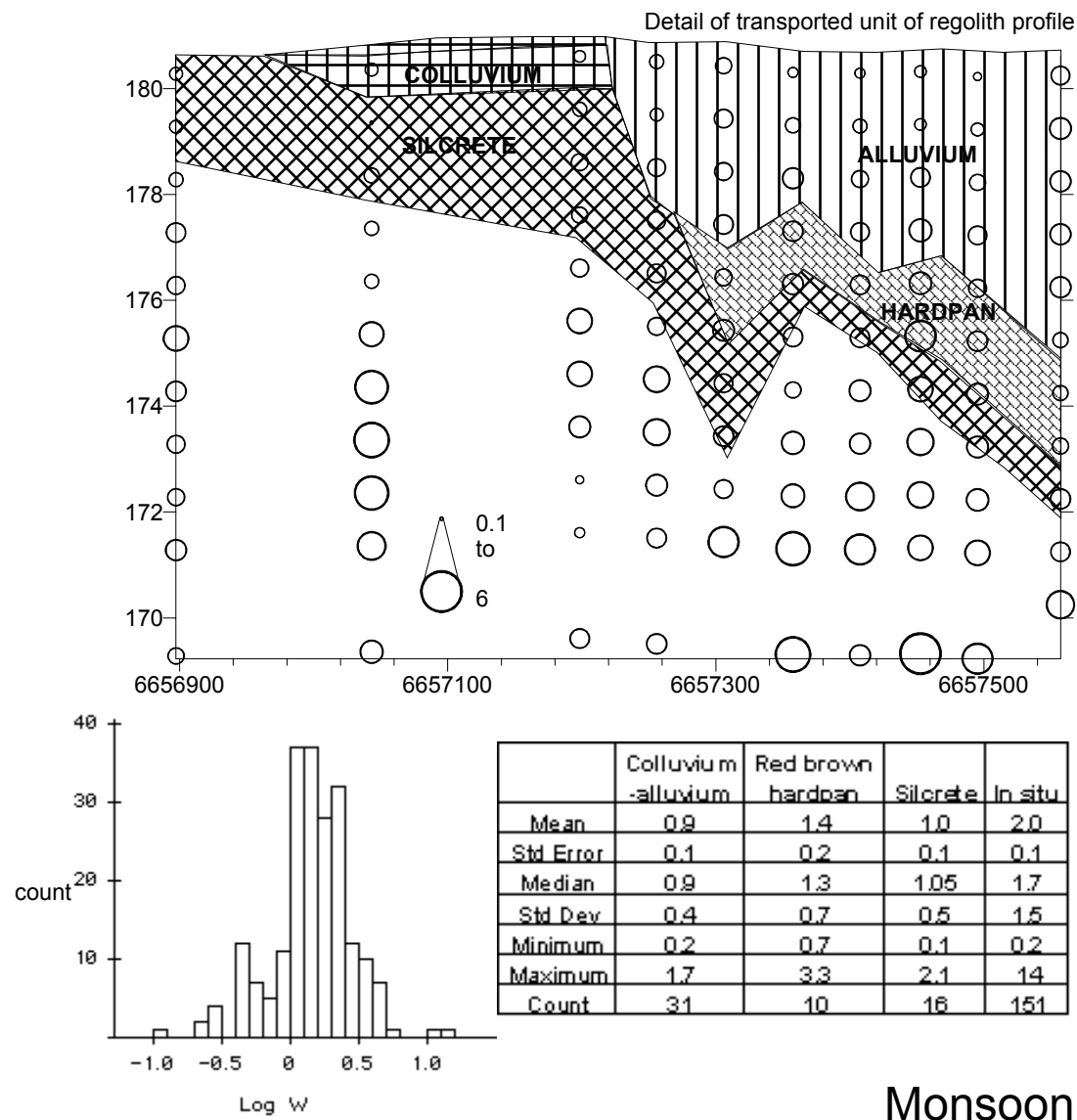
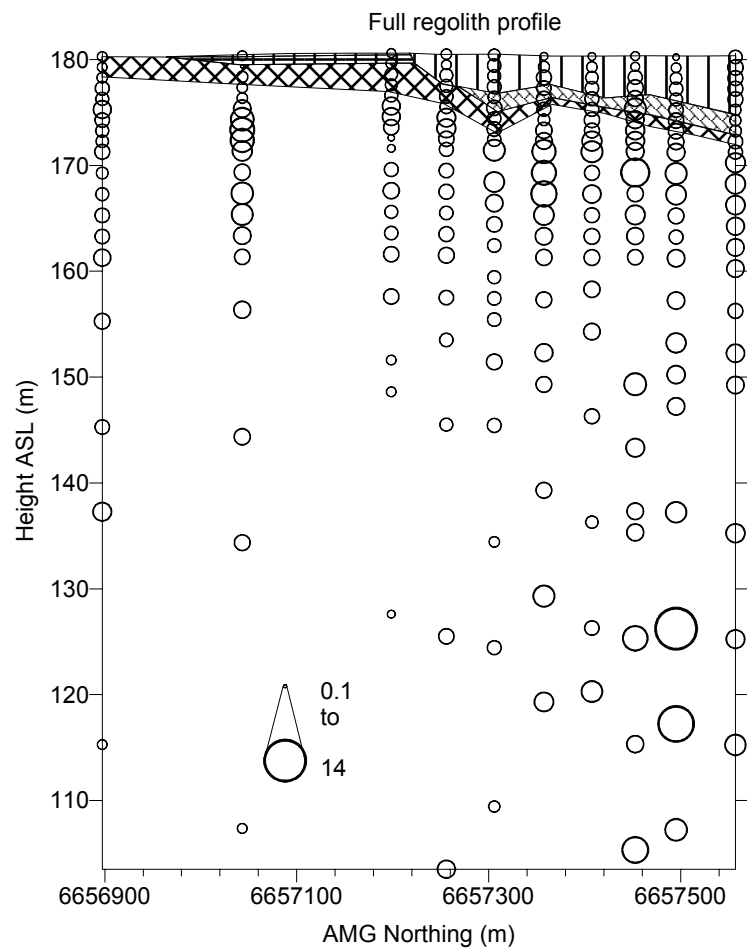


Figure A1c.48: Distribution and concentration of W at Monsoon regolith section on 350560E.

W (ppm)

Monsoon

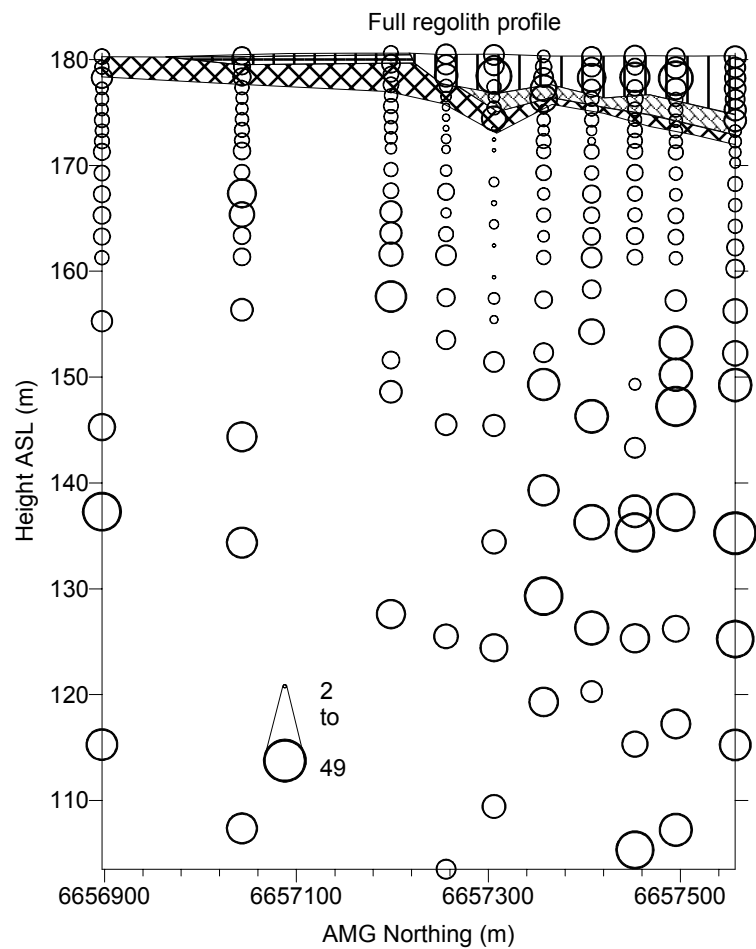
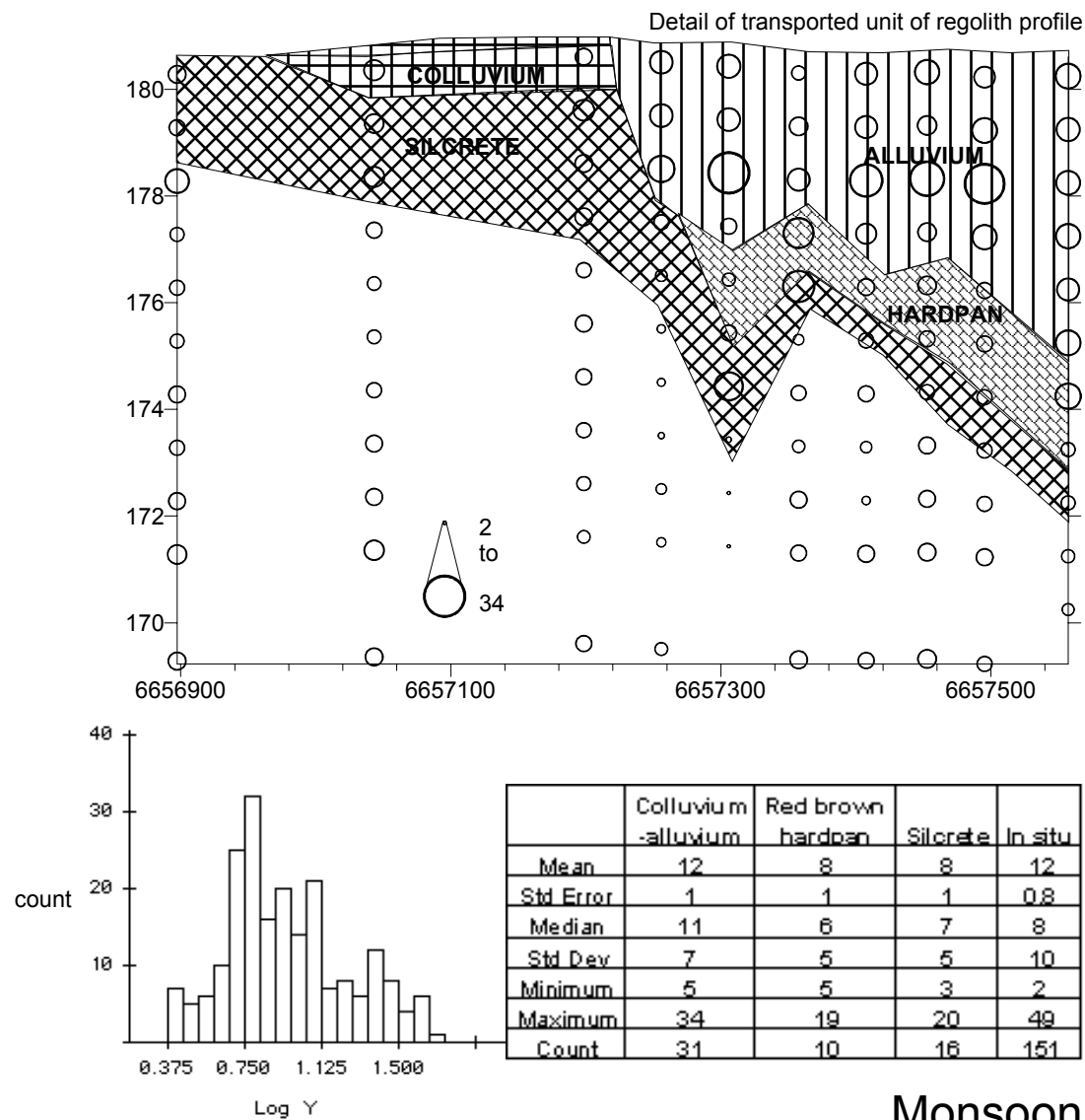


Figure A1c.49: Distribution and concentration of Y at Monsoon regolith section on 350560E.

Y (ppm)



Monsoon

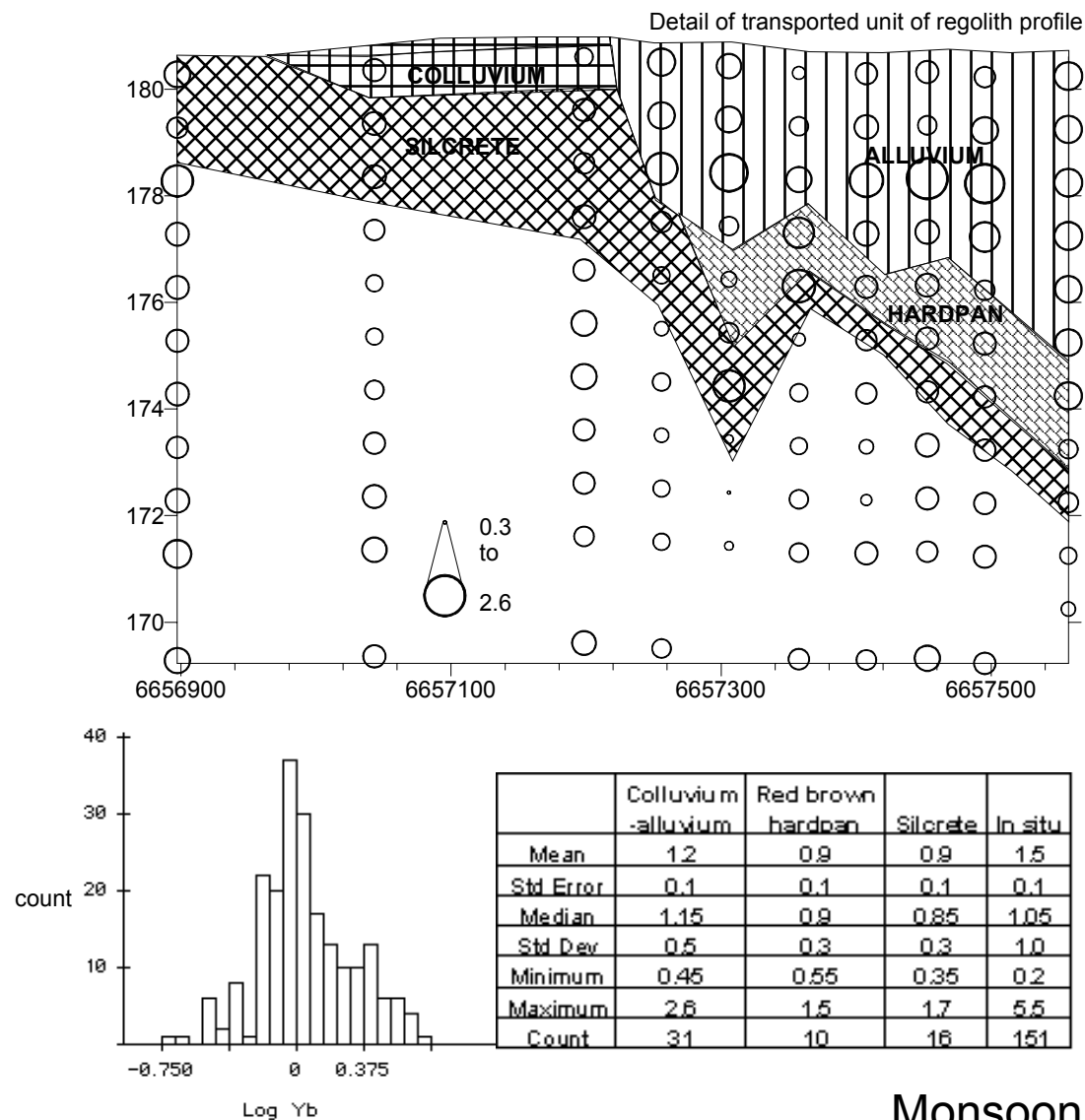
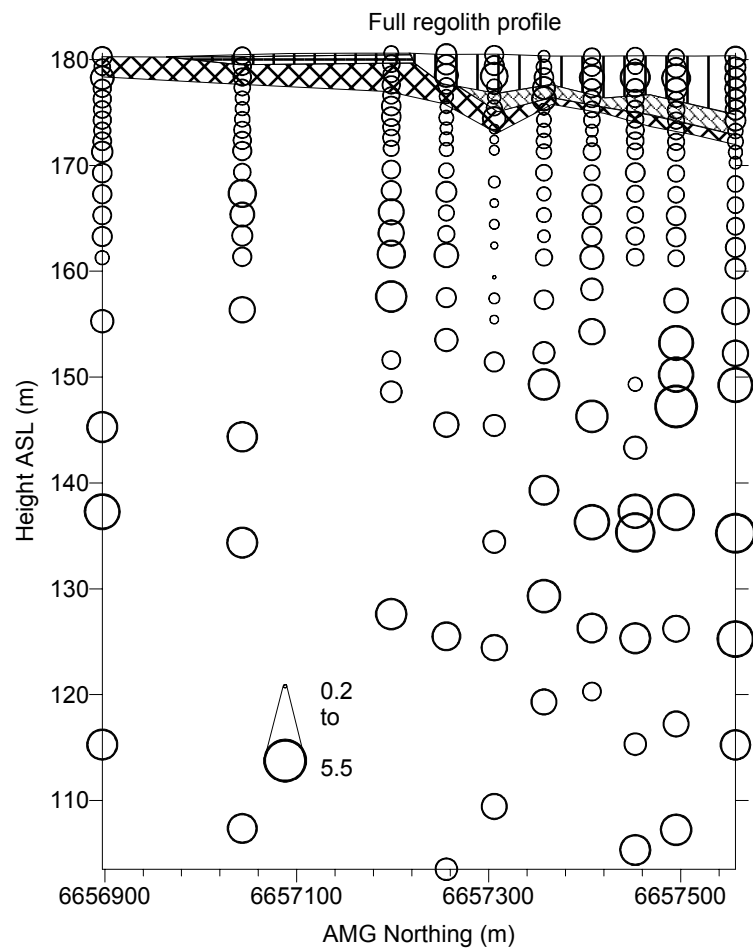
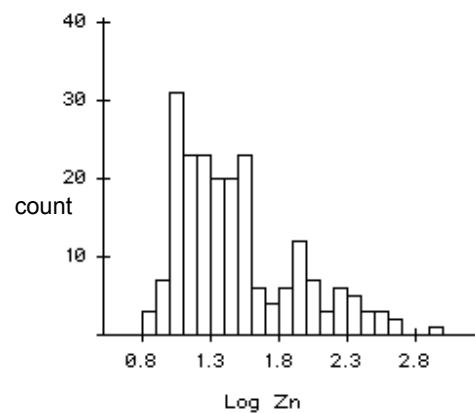
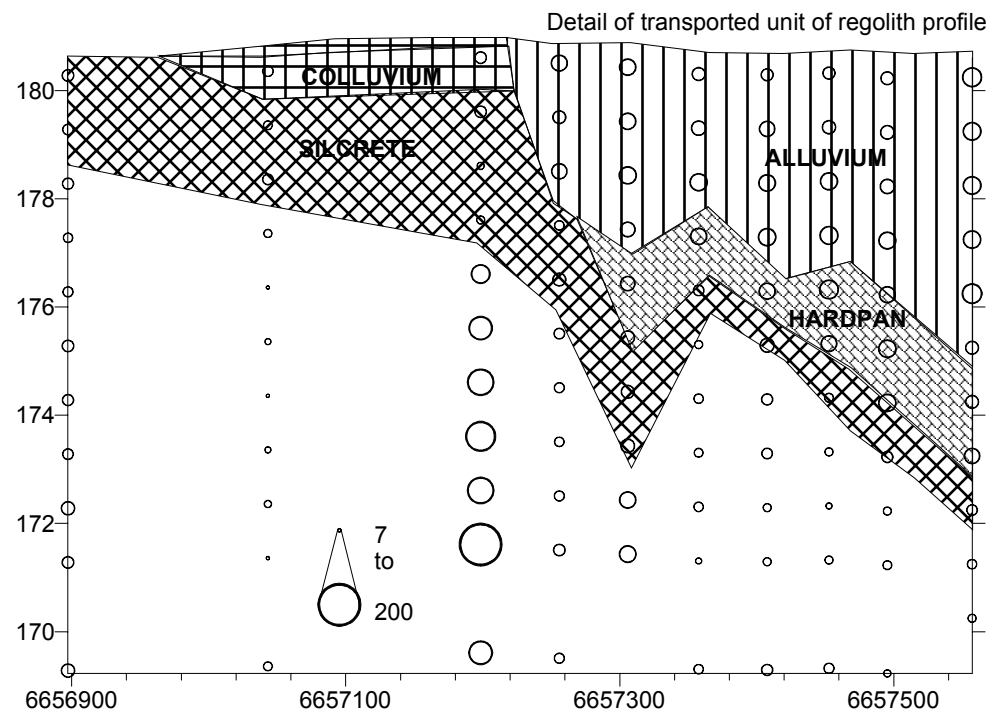
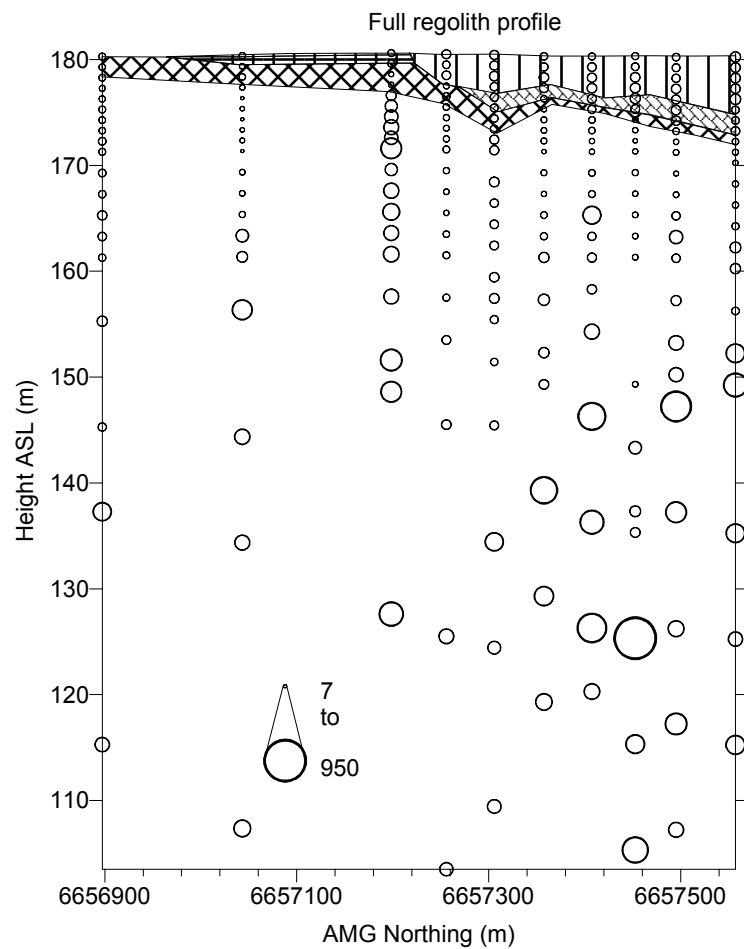


Figure A1c.50: Distribution and concentration of Yb at Monsoon regolith section on 350560E.

Yb (ppm)

Monsoon



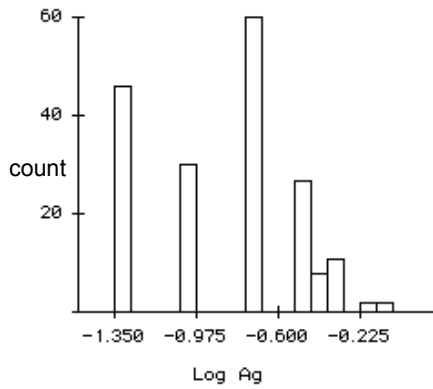
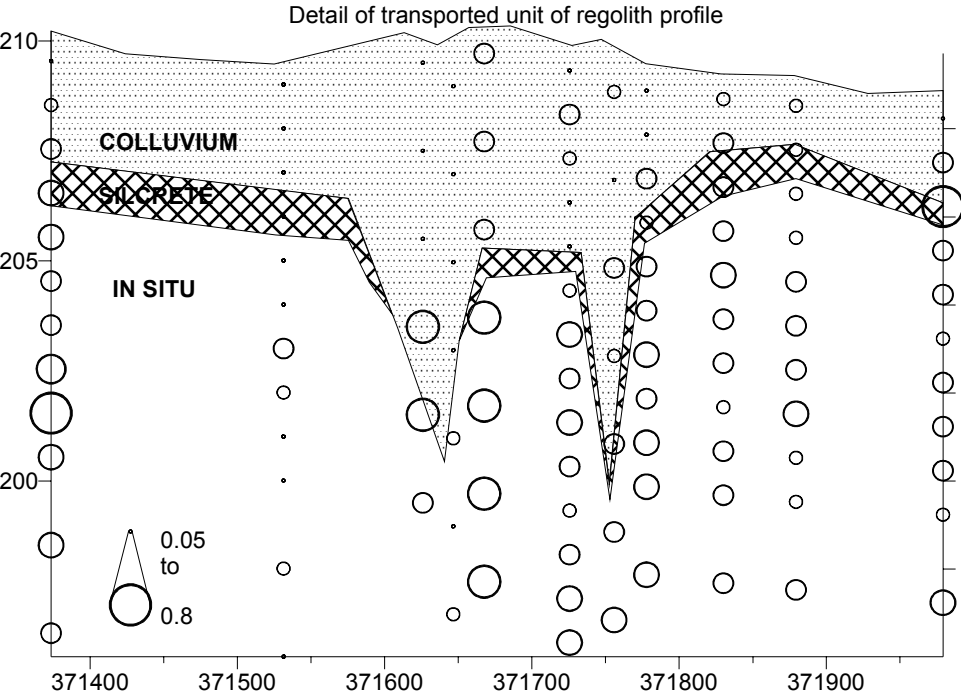
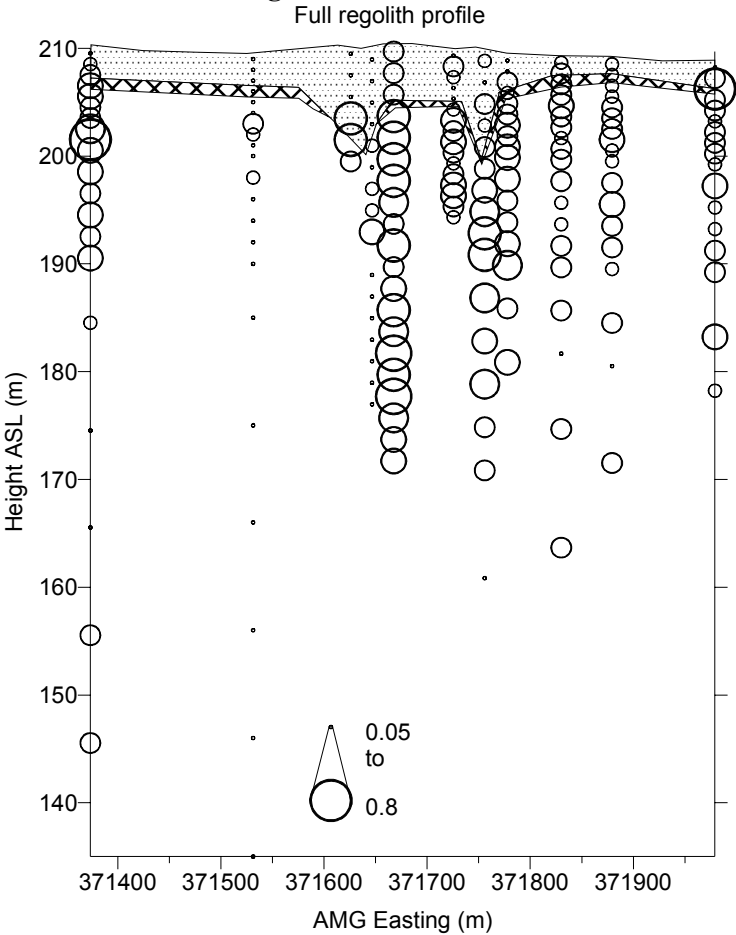
	Colluvium alluvium	Red brown hardpan	Silicate	In situ
Mean	27	28	15	71
Std Error	1	2	1	9
Median	28	28	14	27
Std Dev	7	6	4	112
Minimum	14	19	9	7
Maximum	41	38	22	950
Count	31	10	16	151

Figure A1c.51: Distribution and concentration of Zn at Monsoon regolith section on 350560E.

Zn (ppm)

Monsoon

Appendix A1d: South Hilga

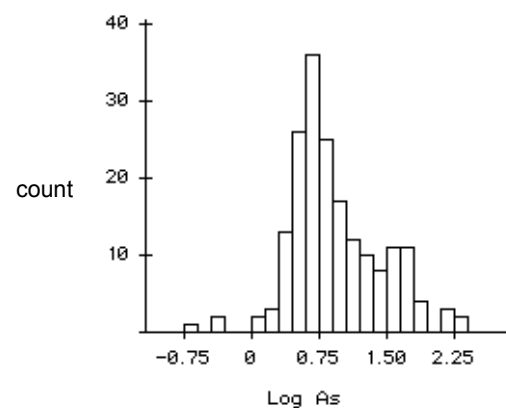
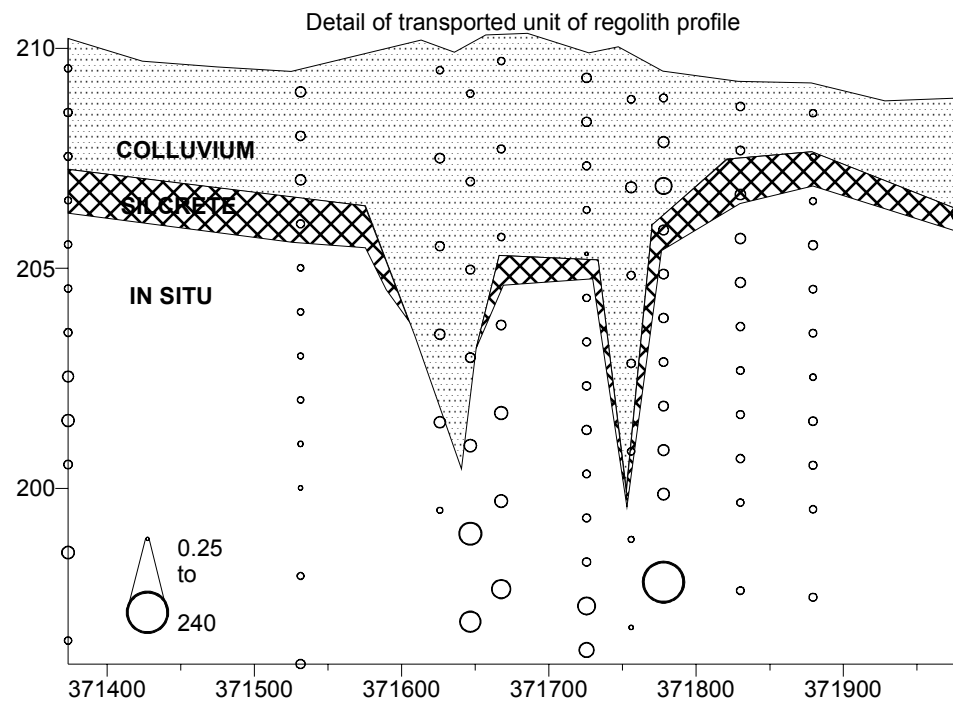
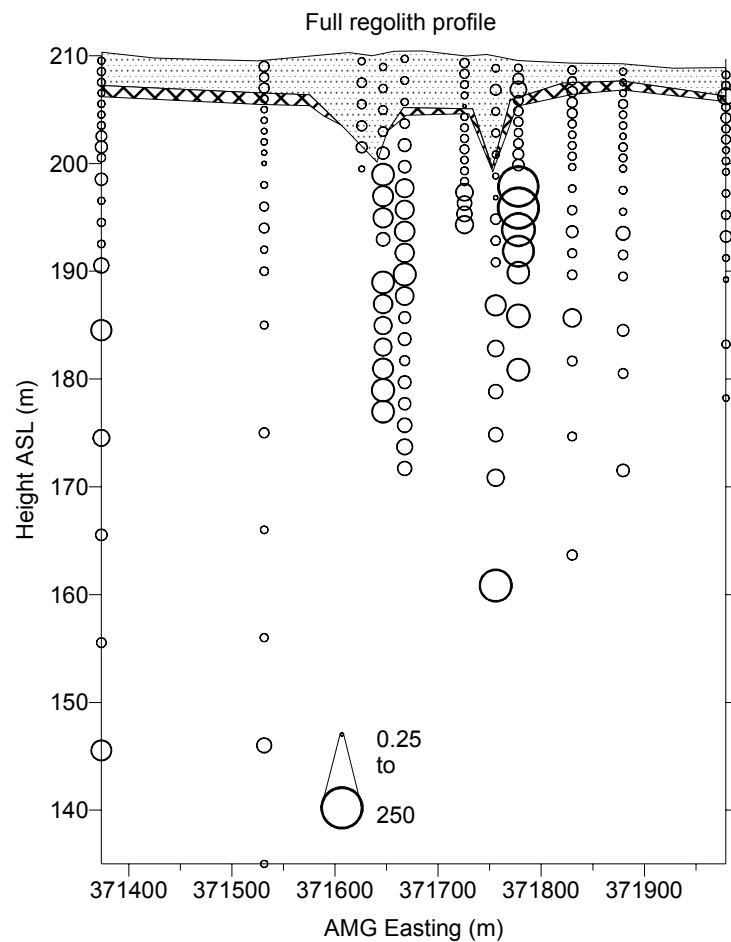


	Silcrete	Colluvium	In situ
Mean	0.28	0.11	0.22
Std Error	0.09	0.02	0.01
Median	0.20	0.10	0.20
Std Dev	0.26	0.09	0.14
Minimum	0.05	0.05	0.05
Maximum	0.8	0.5	0.8
Count	8	35	143

Figure A1d.01: Distribution and concentration of Ag at South Hilga regolith section on 6660300N.

Ag (ppm)

South Hilga

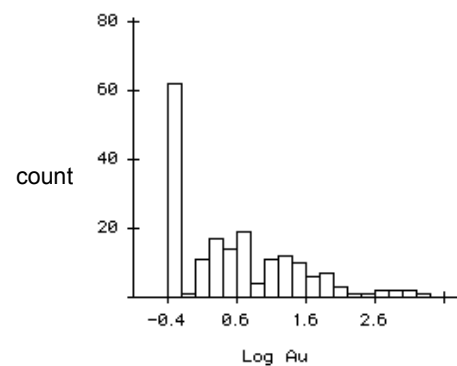
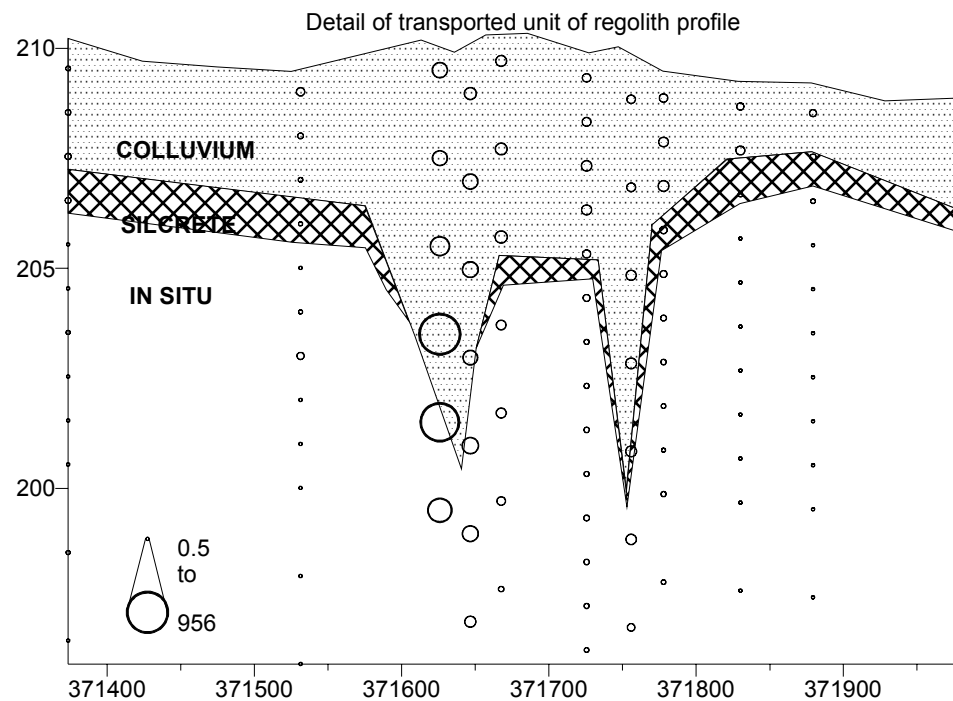
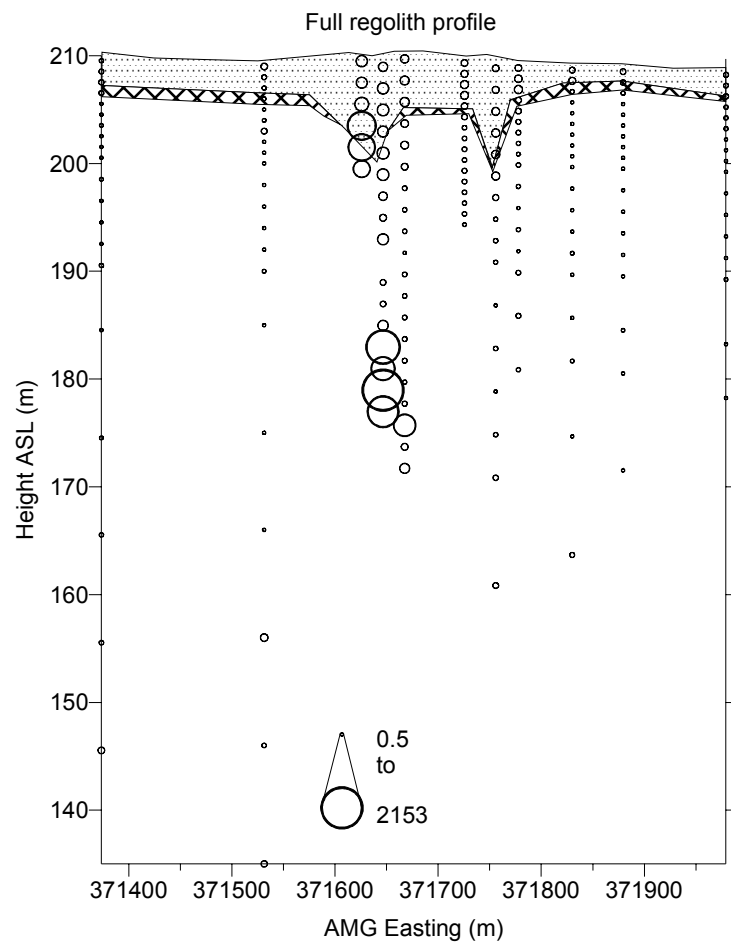


	Silcrete	Colluvium	In situ
Mean	8	6	22
Std Error	4	1	3
Median	4	5	7
Std Dev	10	5	37
Minimum	0.25	2.5	0.5
Maximum	31	30	250
Count	8	35	143

Figure A1d.02: Distribution and concentration of As at South Hilga regolith section on 6660300N.

As (ppm)

South Hilga

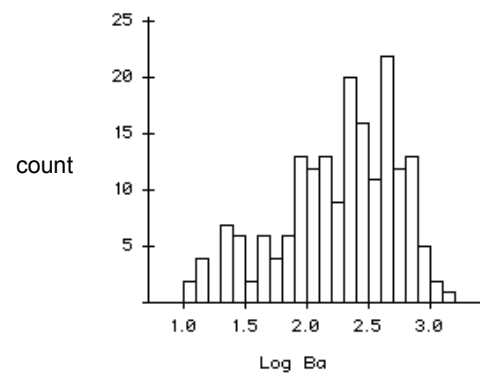
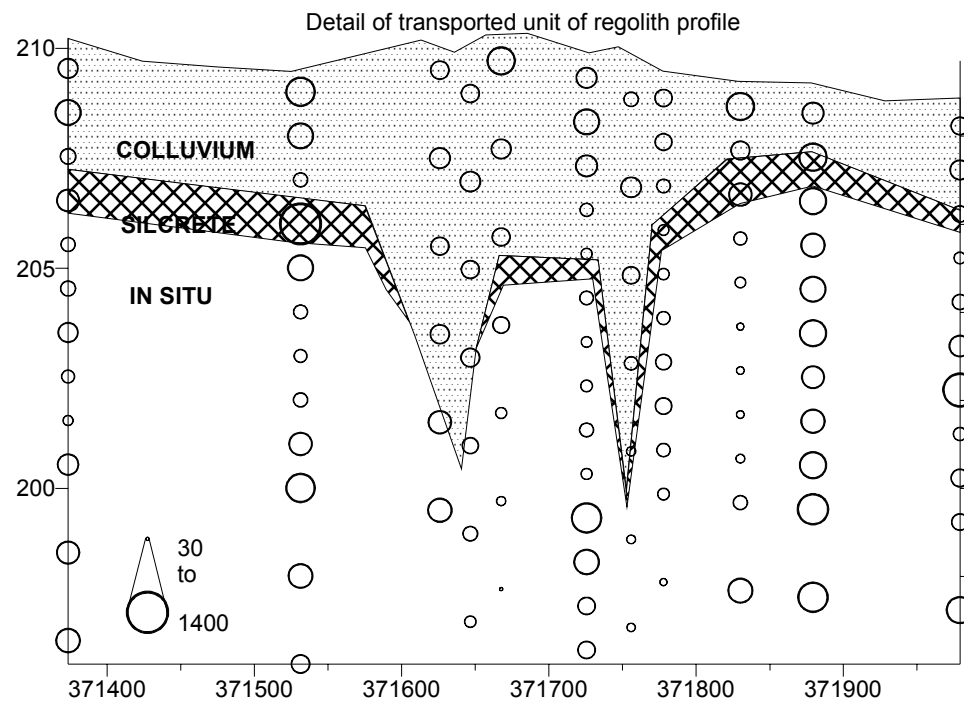
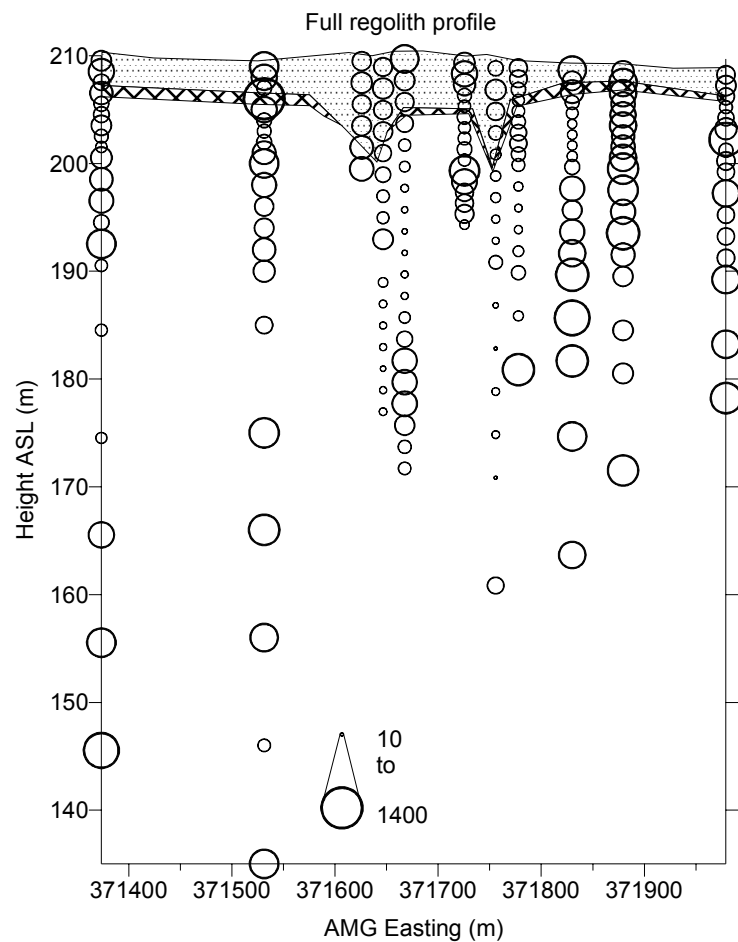


	Silcrete	Colluvium	In situ
Mean	116	66	49
Std Error	103	27	20
Median	7	29	1
Std Dev	292	160	243
Minimum	1	2	0.5
Maximum	837	956	2153
Count	8	35	143

Figure A1d.03: Distribution and concentration of Au at South Hilga regolith section on 6660300N.

Au (ppb)

South Hilga

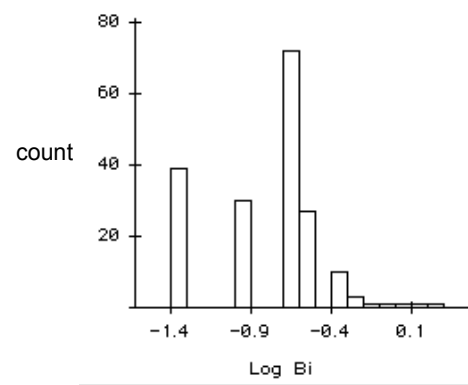
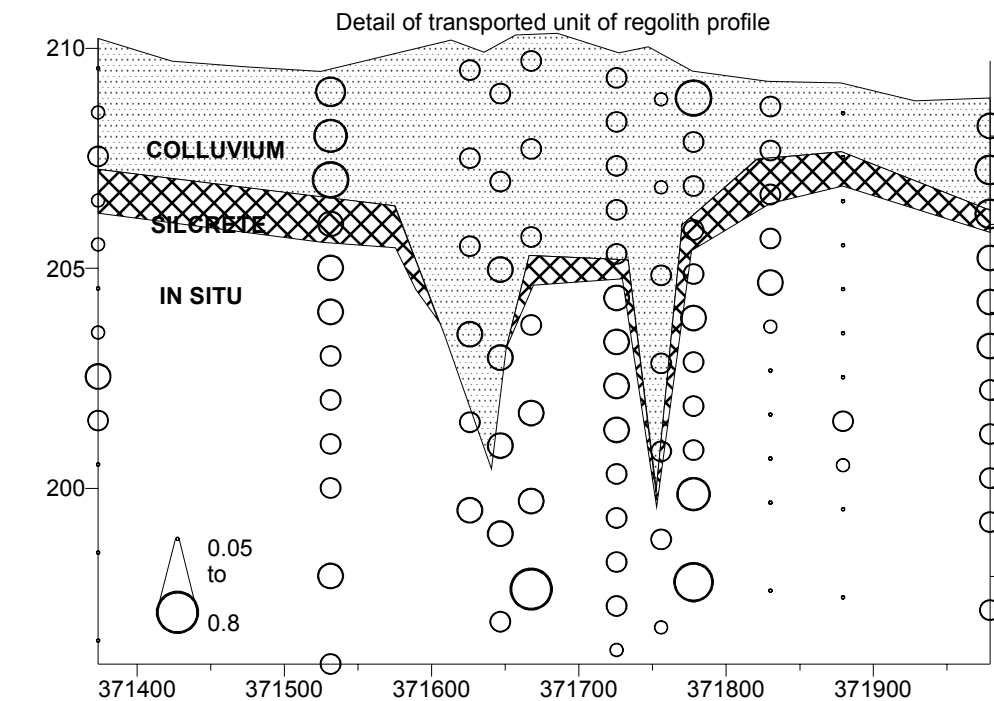
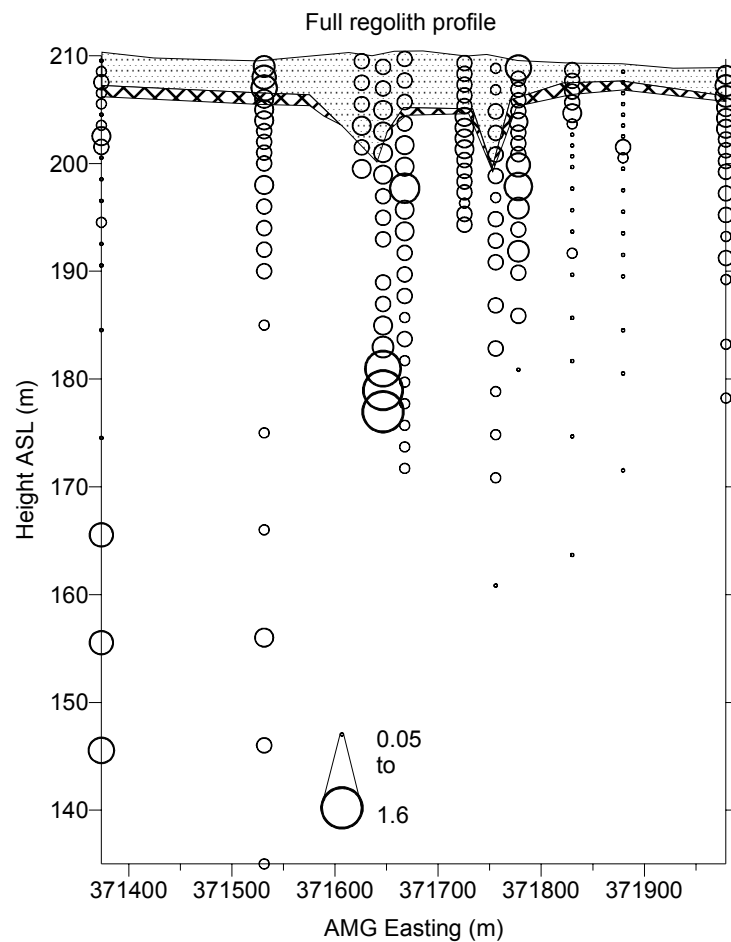


	Silcrete	Colluvium	In situ
Mean	463	286	281
Std Error	145	25	21
Median	390	260	185
Std Dev	409	146	254
Minimum	90	65	10
Maximum	1400	650	1000
Count	8	35	143

Figure A1d.04: Distribution and concentration of Ba at South Hilga regolith section on 6660300N.

Ba (ppm)

South Hilga



	Silcrete	Colluvium	In situ
Mean	0.2	0.2	0.2
Std Error	0.0	0.0	0.0
Median	0.2	0.2	0.2
Std Dev	0.11	0.1	0.2
Minimum	0.05	0.05	0.05
Maximum	0.4	0.8	1.6
Count	8	35	143

Figure A1d.05: Distribution and concentration of Bi at South Hilga regolith section on 6660300N.

Bi (ppm)

South Hilga

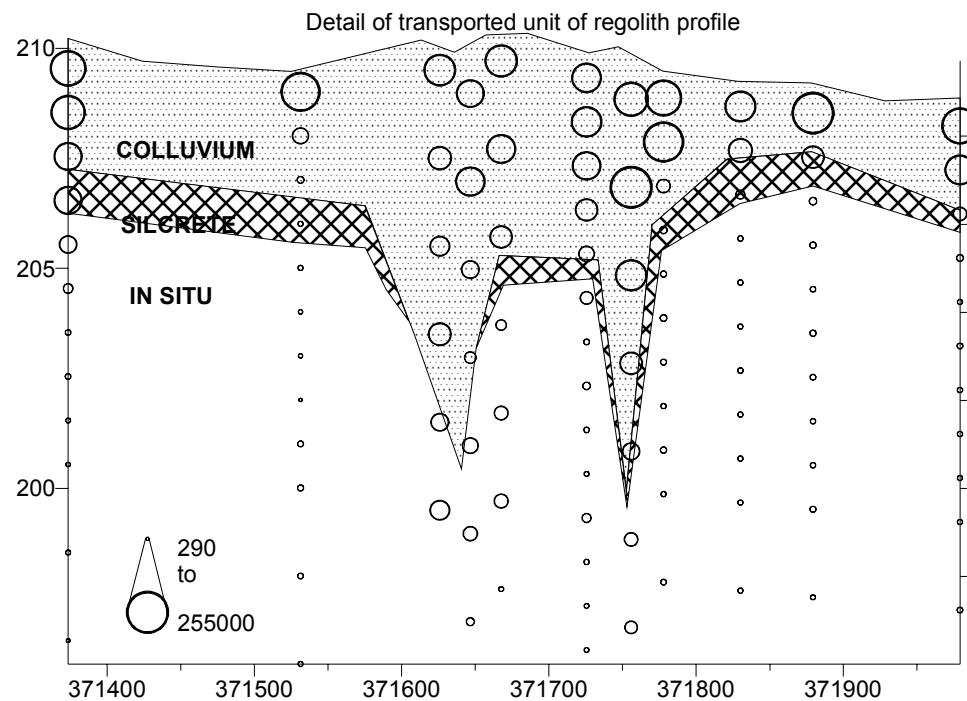
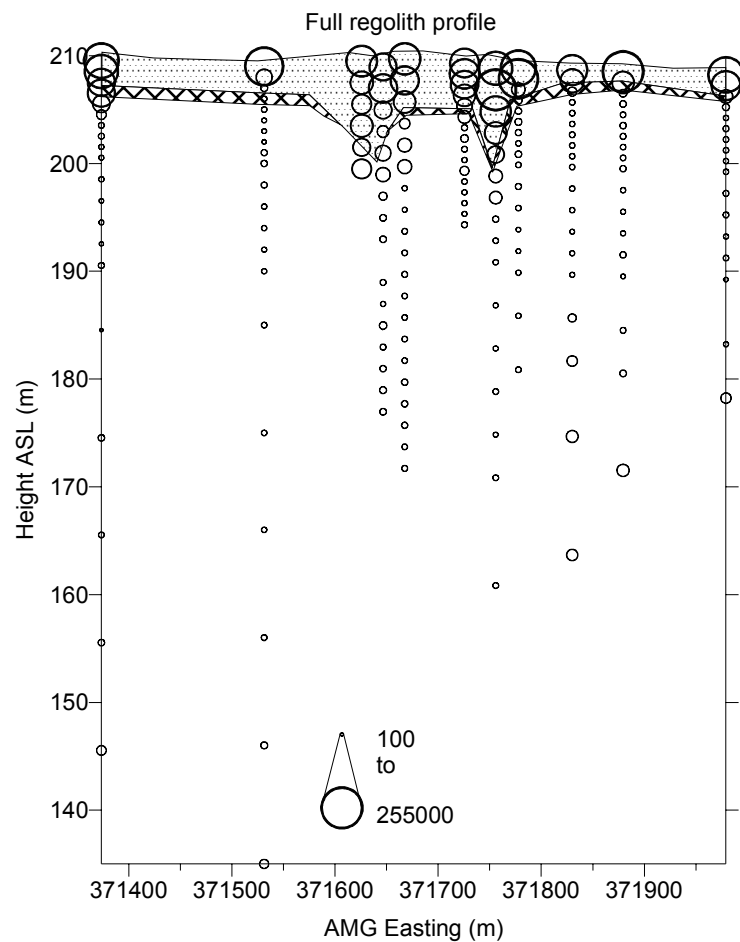
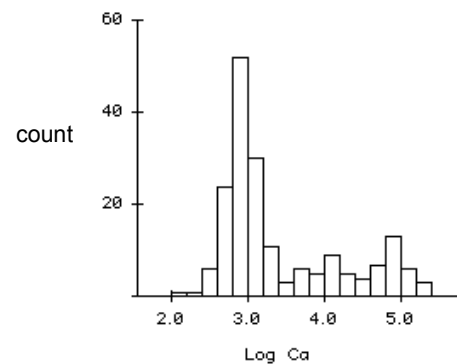


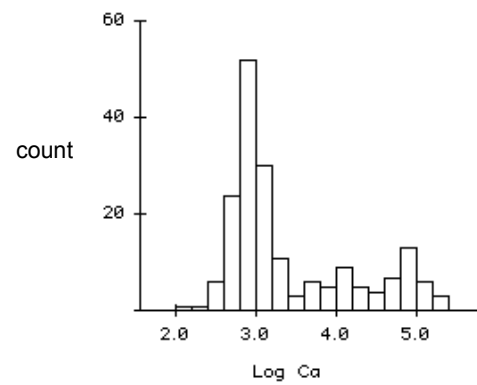
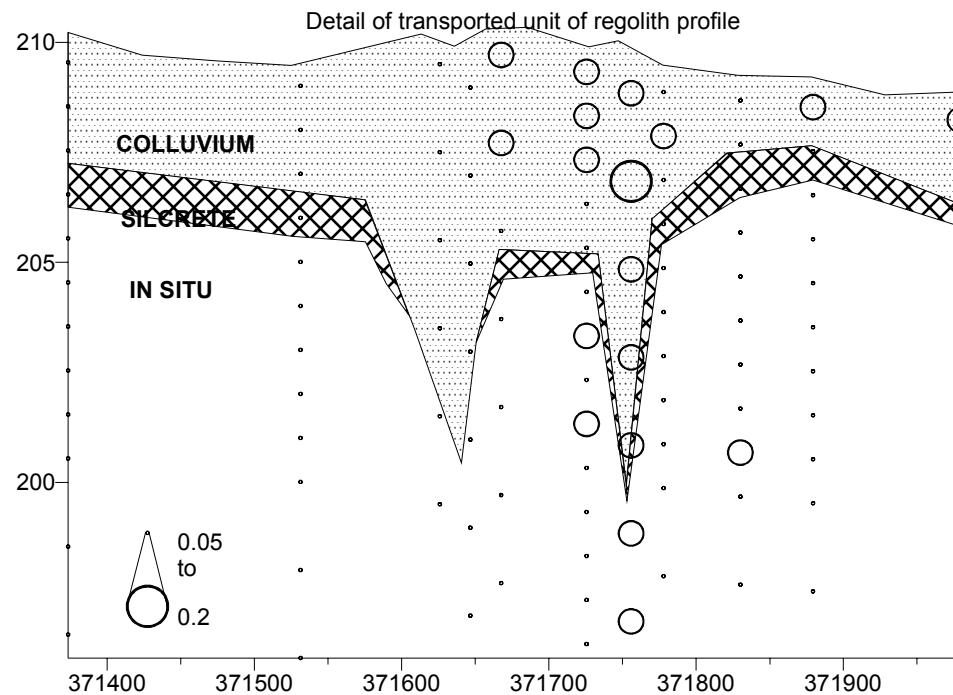
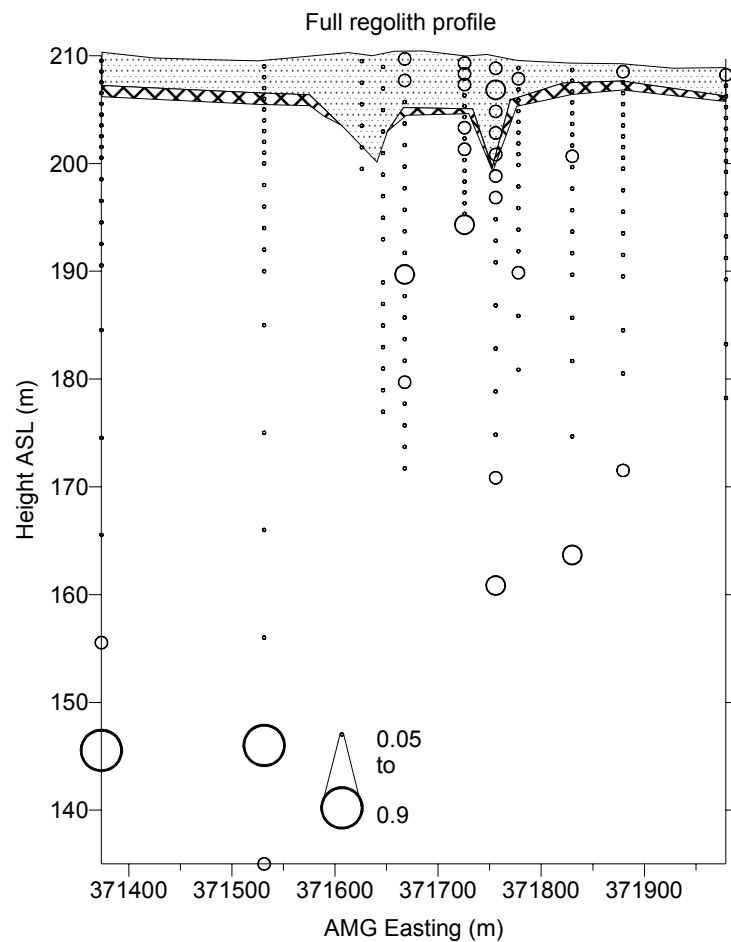
Figure A1d.06: Distribution and concentration of Ca at South Hilga regolith section on 6660300N.

Ca (ppm)



	Silcrete	Colluvium	In situ
Mean	27806	75271	2228
Std Error	8491	8213	358
Median	21900	78000	850
Std Dev	24016	48587	4276
Minimum	750	1900	100
Maximum	72000	174000	32400
Count	8	35	143

South Hilga

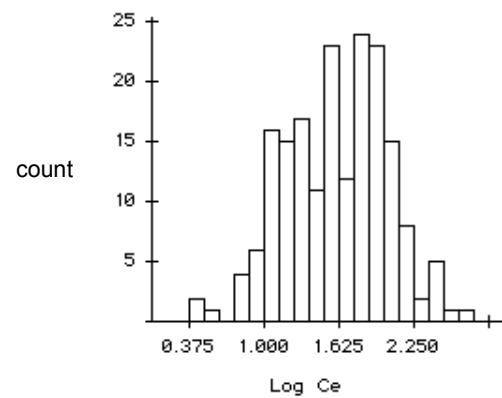
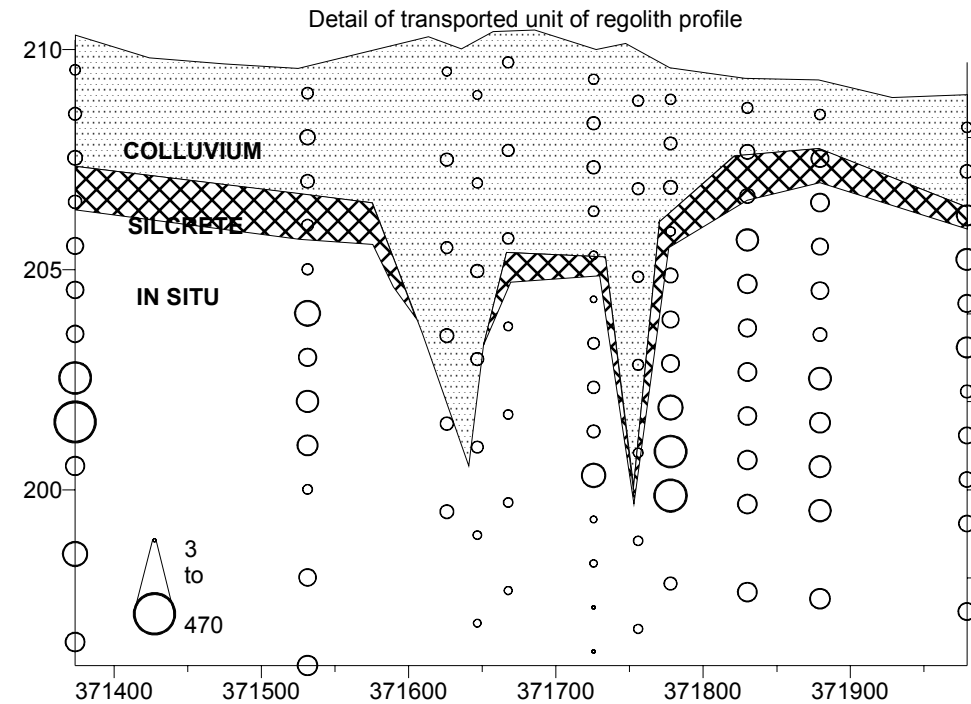
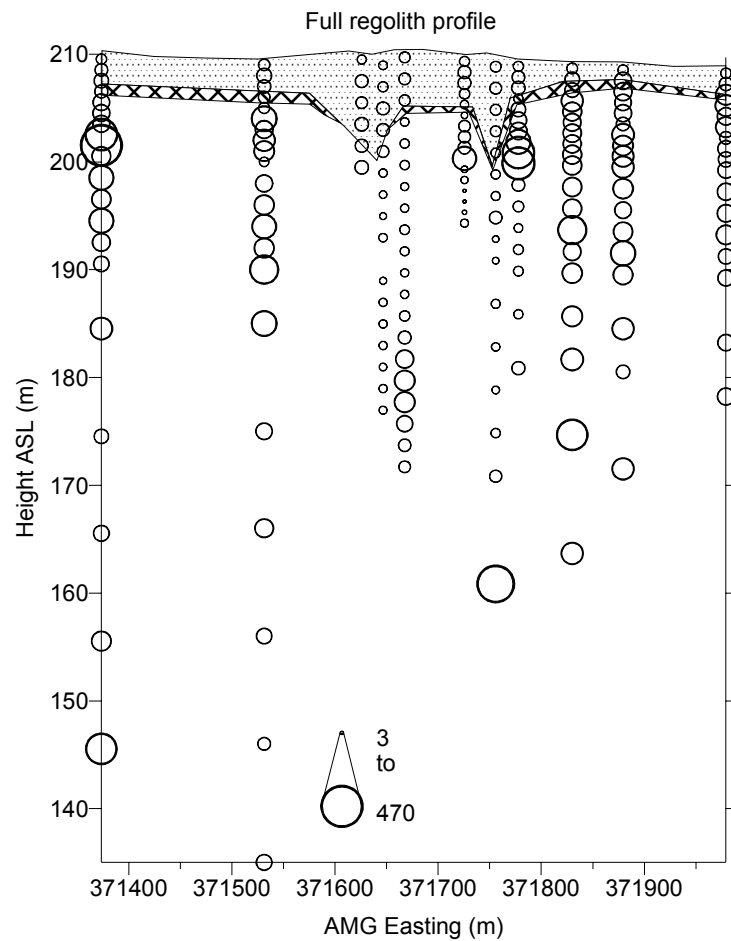


	Silcrete	Colluvium	In situ
Mean	0.1	0.1	0.1
Std Error	0.0	0.0	0.0
Median	0.05	0.1	0.05
Std Dev	0.00	0.0	0.1
Minimum	0.05	0.05	0.05
Maximum	0.05	0.2	0.9
Count	8	35	143

Figure A1d.07: Distribution and concentration of Cd at South Hilga regolith section on 6660300N.

Cd (ppm)

South Hilga

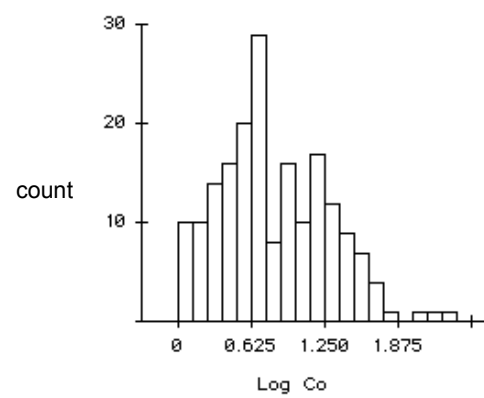
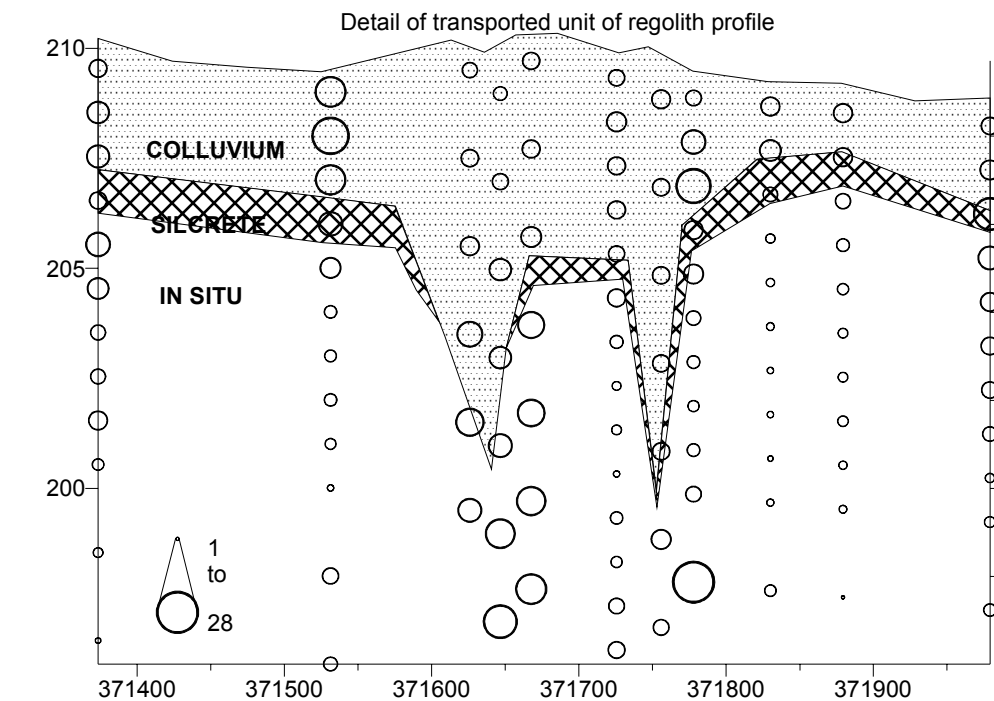
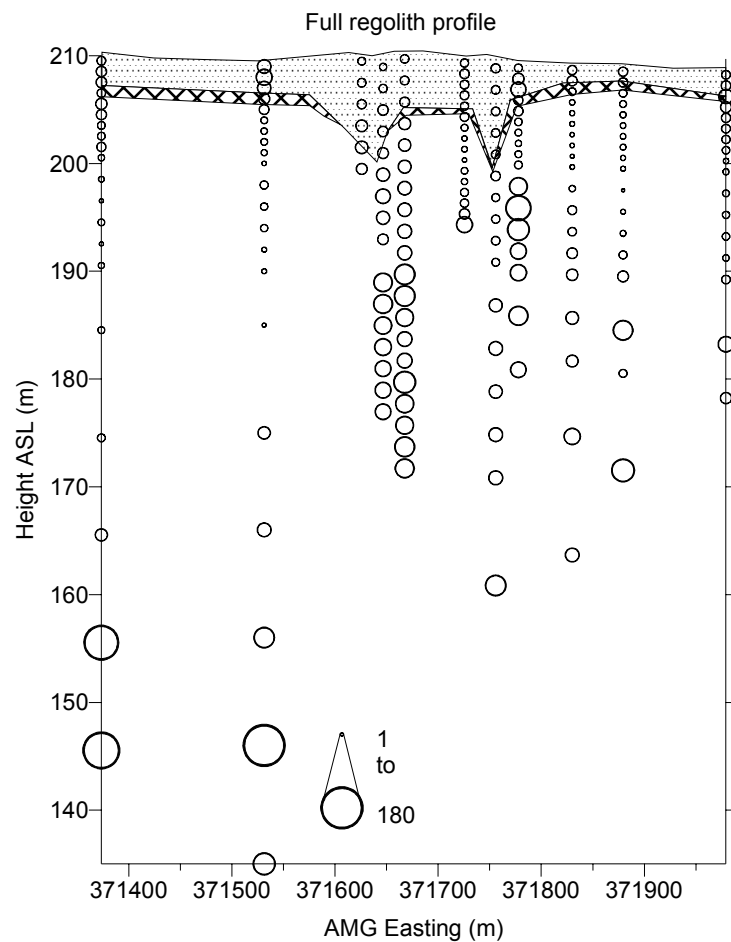


	Silcrete	Colluvium	In situ
Mean	43	27	72
Std Error	10	2	6
Median	35	27	61
Std Dev	28	9	72
Minimum	12	13	3
Maximum	100	48	470
Count	8	35	143

Figure A1d.08: Distribution and concentration of Ce at South Hilga regolith section on 6660300N.

Ce (ppm)

South Hilga

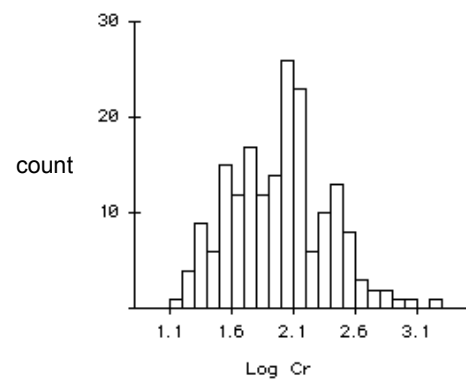
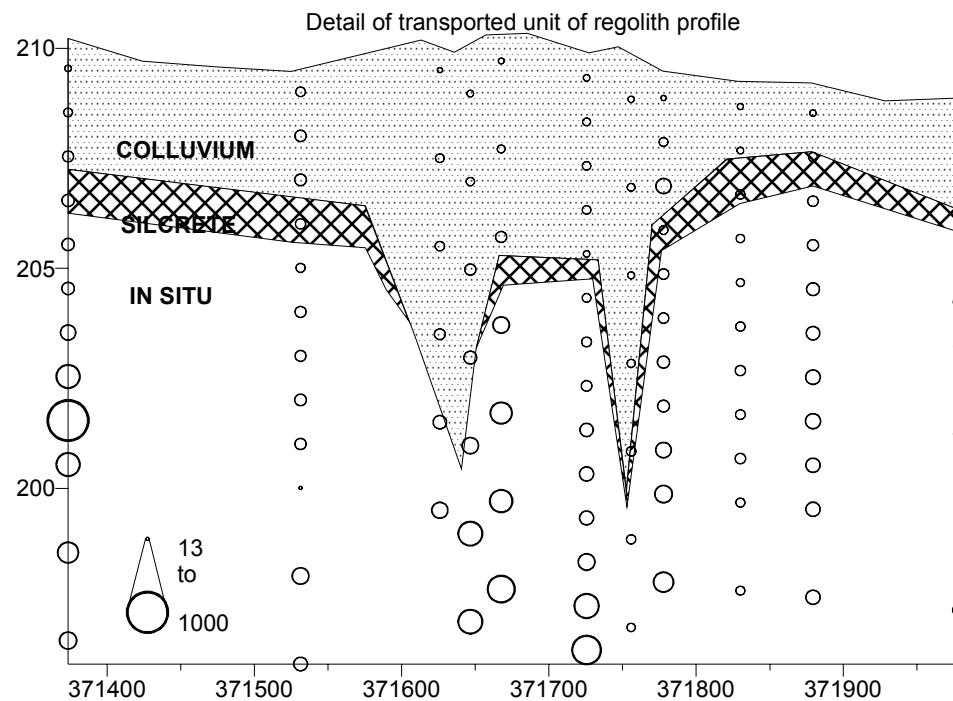
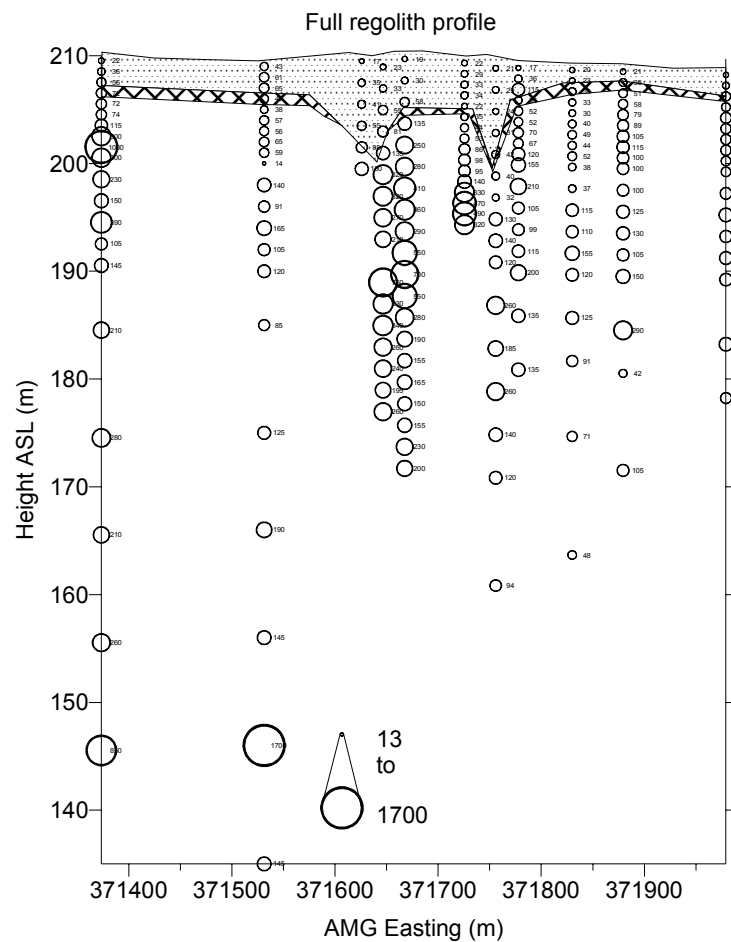


	Silcrete	Colluvium	In situ
Mean	8	7	14
Std Error	2	1	2
Median	6	6	5
Std Dev	5	4	23
Minimum	3	3	1
Maximum	17	22	180
Count	8	35	143

Figure A1d.09: Distribution and concentration of Co at South Hilga regolith section on 6660300N.

Co (ppm)

South Hilga

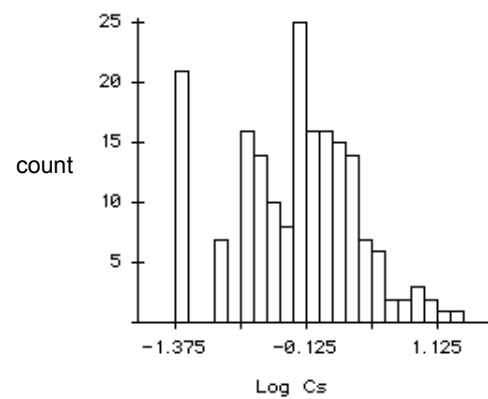
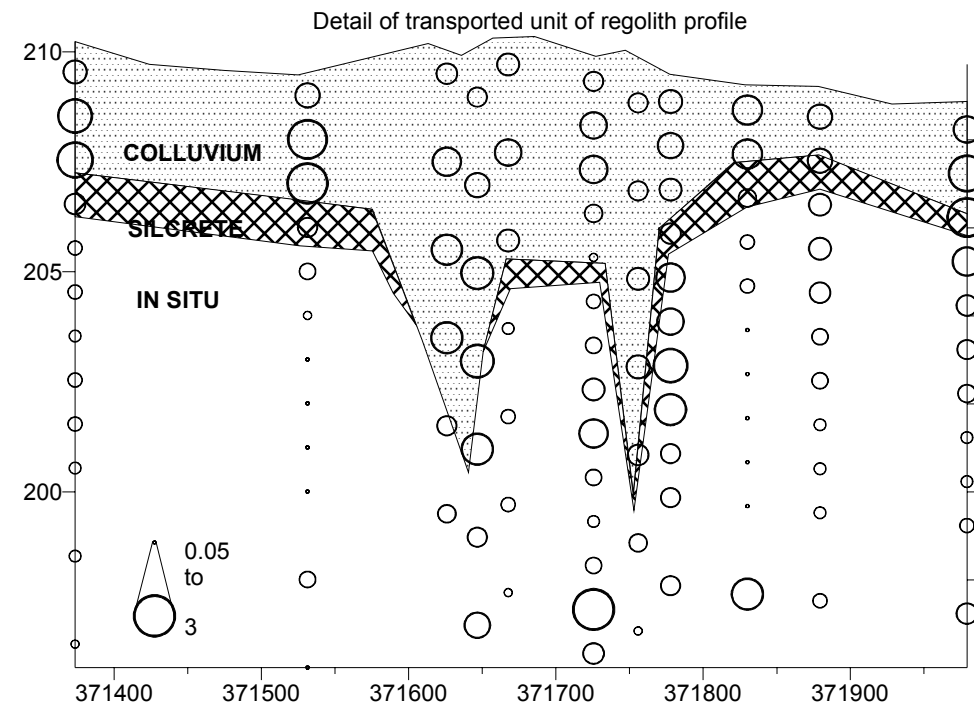
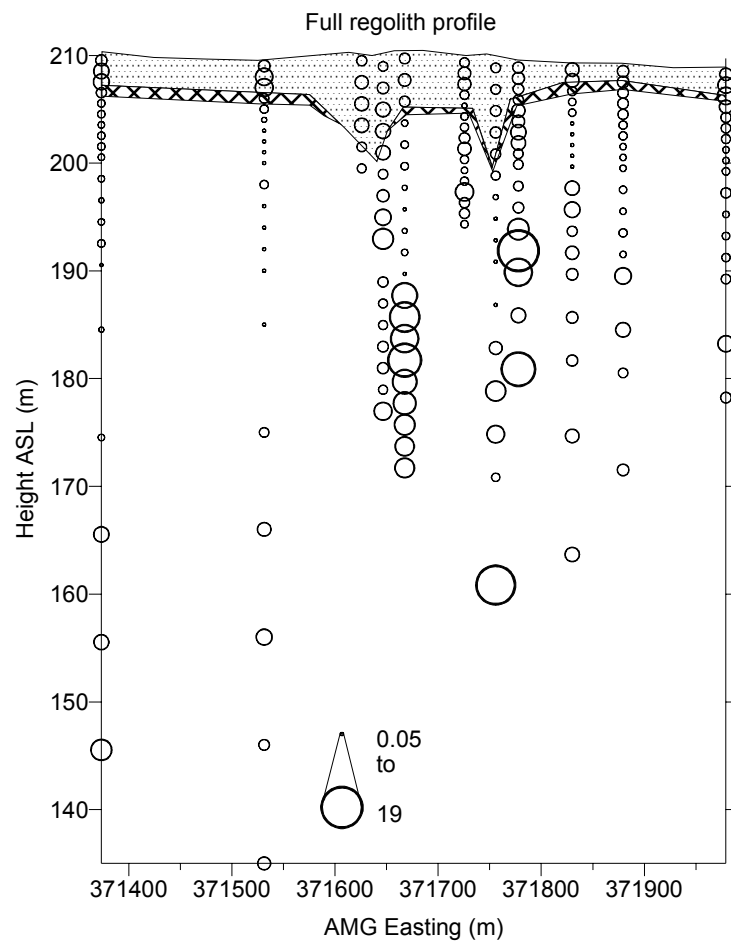


	Silcrete	Colluvium	In situ
Mean	53	40	182
Std Error	7	4	17
Median	53	33	125
Std Dev	21	26	201
Minimum	22	17	14
Maximum	88	135	1700
Count	8	35	143

South Hilga

Figure A1d.10: Distribution and concentration of Cr at South Hilga regolith section on 6660300N.

Cr (ppm)

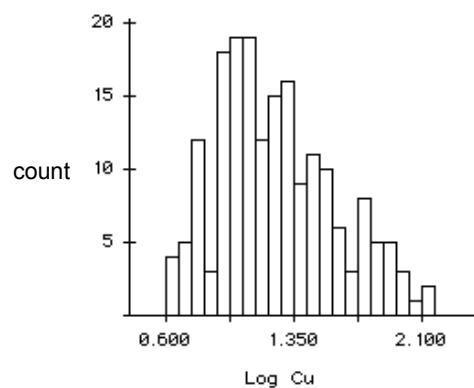
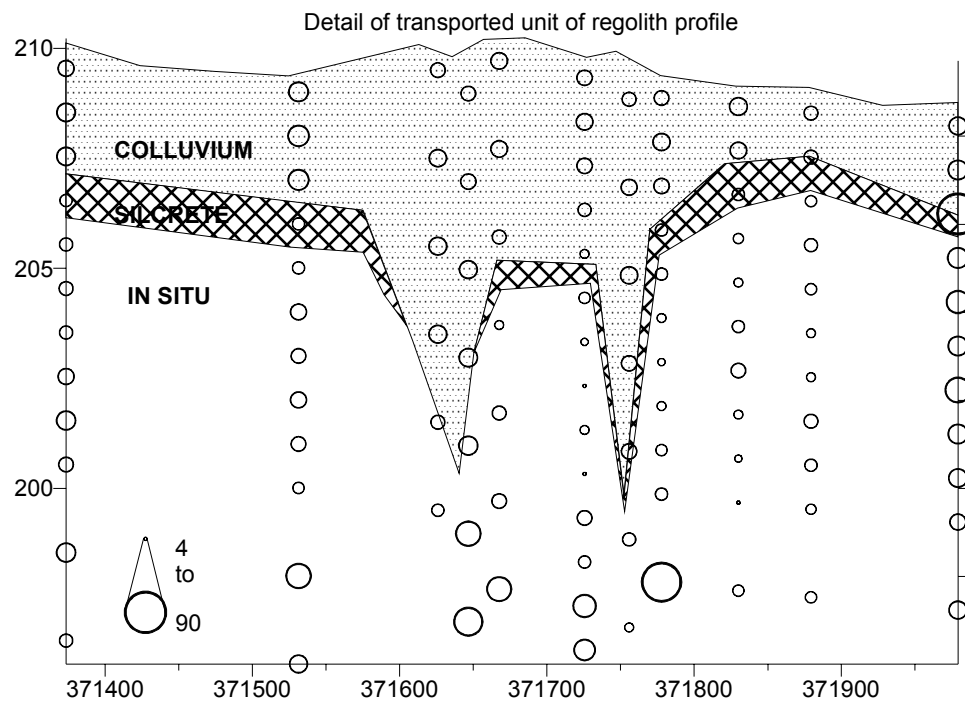
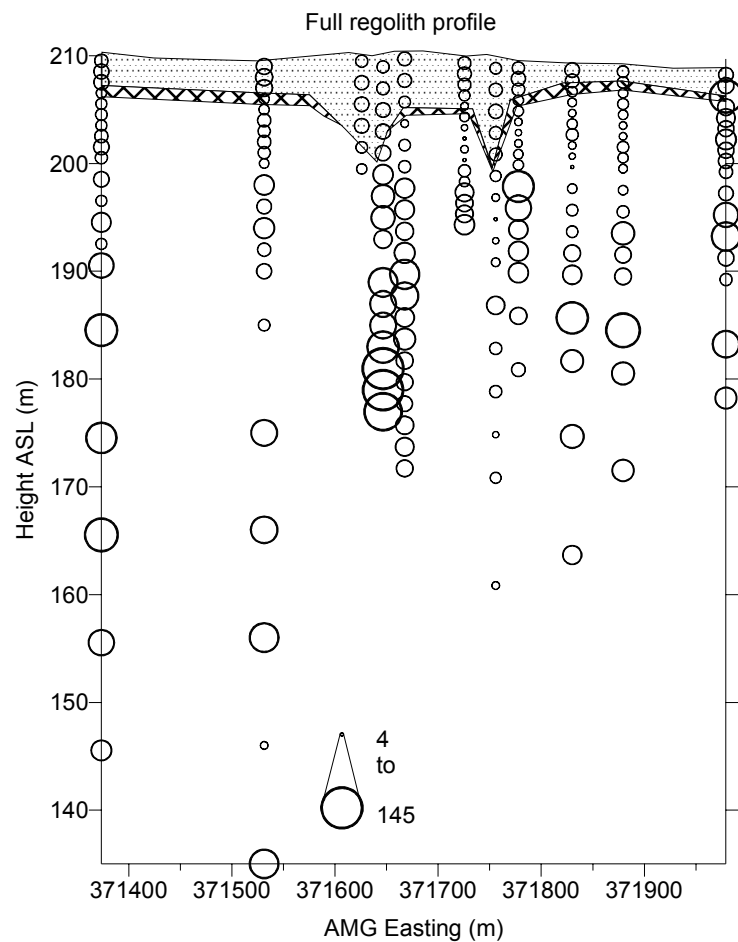


	Silcrete	Colluvium	In situ
Mean	0.9	1.3	1.5
Std Error	0.3	0.1	0.2
Median	0.65	1.1	0.5
Std Dev	0.78	1	2.9
Minimum	0.1	0.5	0.05
Maximum	2.7	2.9	19
Count	8	35	143

Figure A1d.11: Distribution and concentration of Cs at South Hilga regolith section on 6660300N.

Cs (ppm)

South Hilga

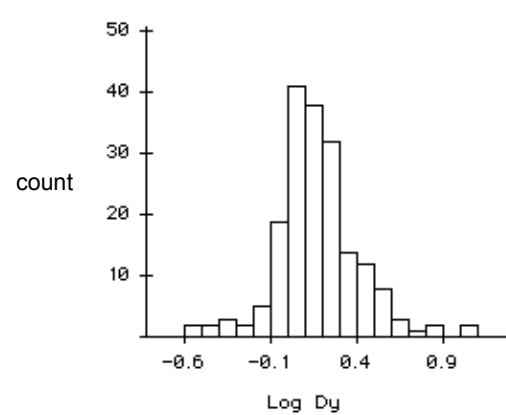
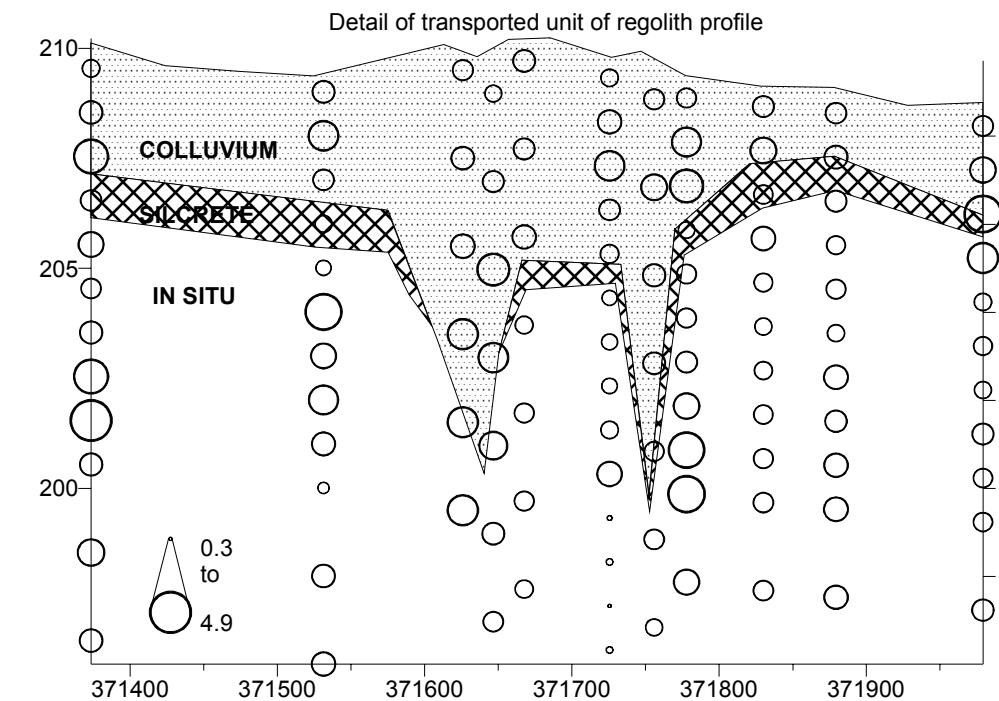
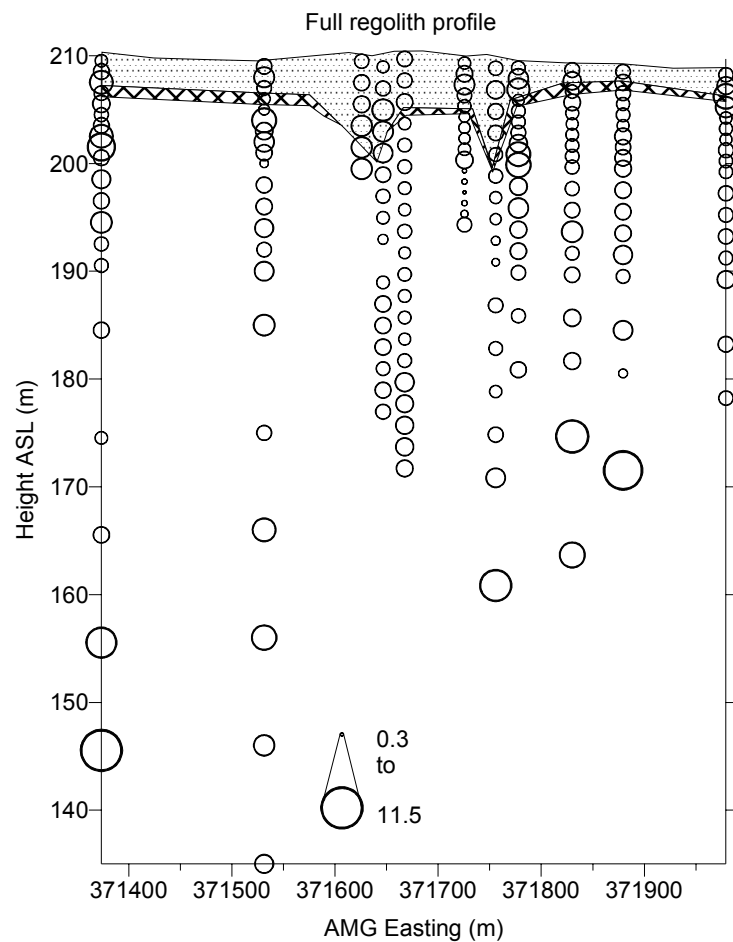


	Silcrete	Colluvium	In situ
Mean	20	15	28
Std Error	10	1	2
Median	10	15	19
Std Dev	29	3	27
Minimum	6	9	4
Maximum	90	23	145
Count	8	35	143

Figure A1d.12: Distribution and concentration of Cu at South Hilga regolith section on 6660300N.

Cu (ppm)

South Hilga

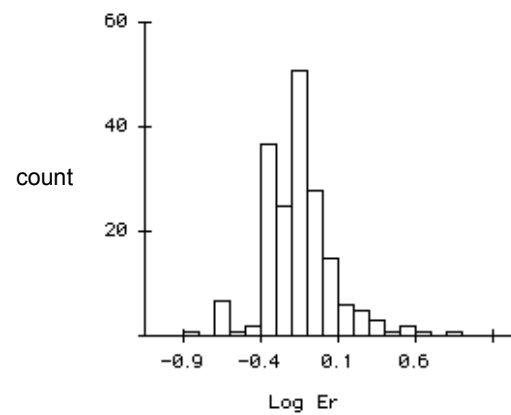
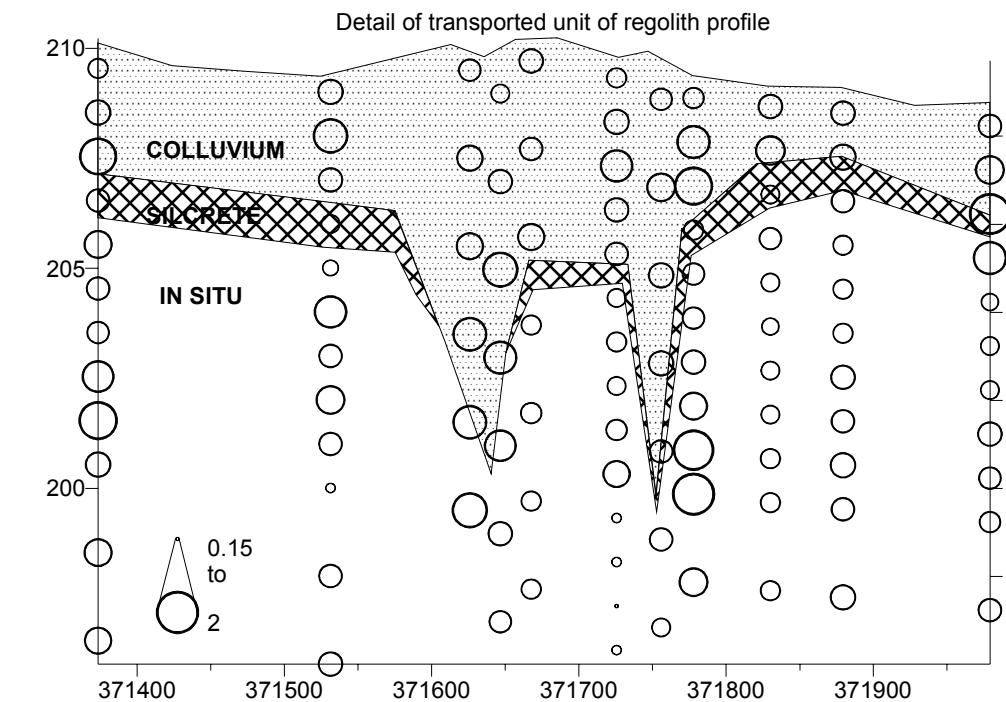
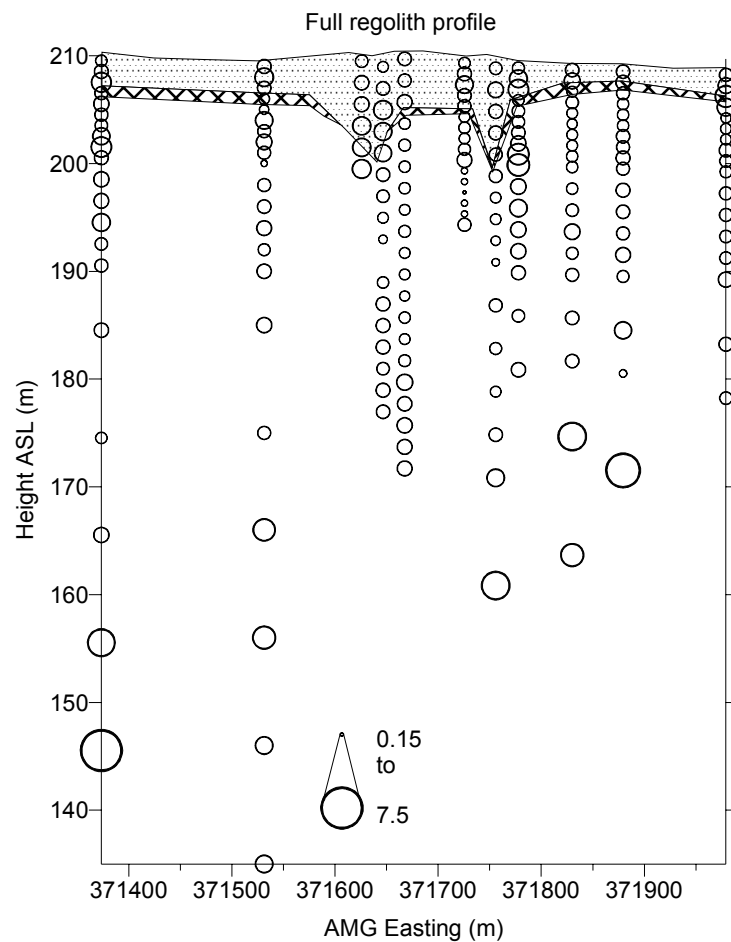


	Silcrete	Colluvium	In situ
Mean	1.8	1.7	1.8
Std Error	0.4	0.1	0.1
Median	1.45	1.5	1.35
Std Dev	1.06	1	1.5
Minimum	0.9	0.86	0.28
Maximum	4	3.4	11.5
Count	8	35	143

Figure A1d.13: Distribution and concentration of Dy at South Hilga regolith section on 6660300N.

Dy (ppm)

South Hilga



	Silcrete	Colluvium	In situ
Mean	0.9	0.9	0.8
Std Error	0.2	0.1	0.1
Median	0.7	0.8	0.7
Std Dev	0.5	0.3	0.8
Minimum	0.5	0.5	0.2
Maximum	1.9	1.7	7.5
Count	8	35	143

Figure A1d.14: Distribution and concentration of Er at South Hilga regolith section on 6660300N.

Er (ppm)

South Hilga

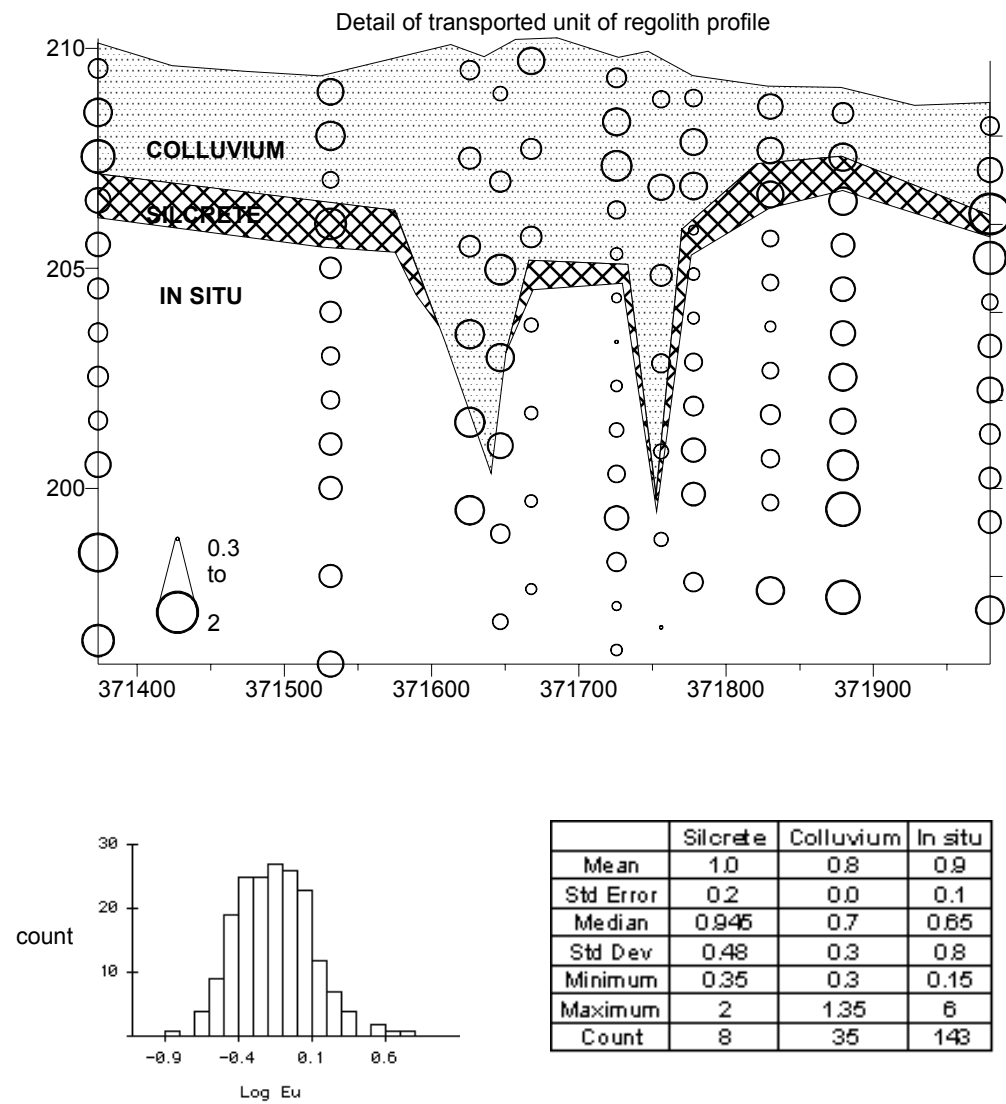
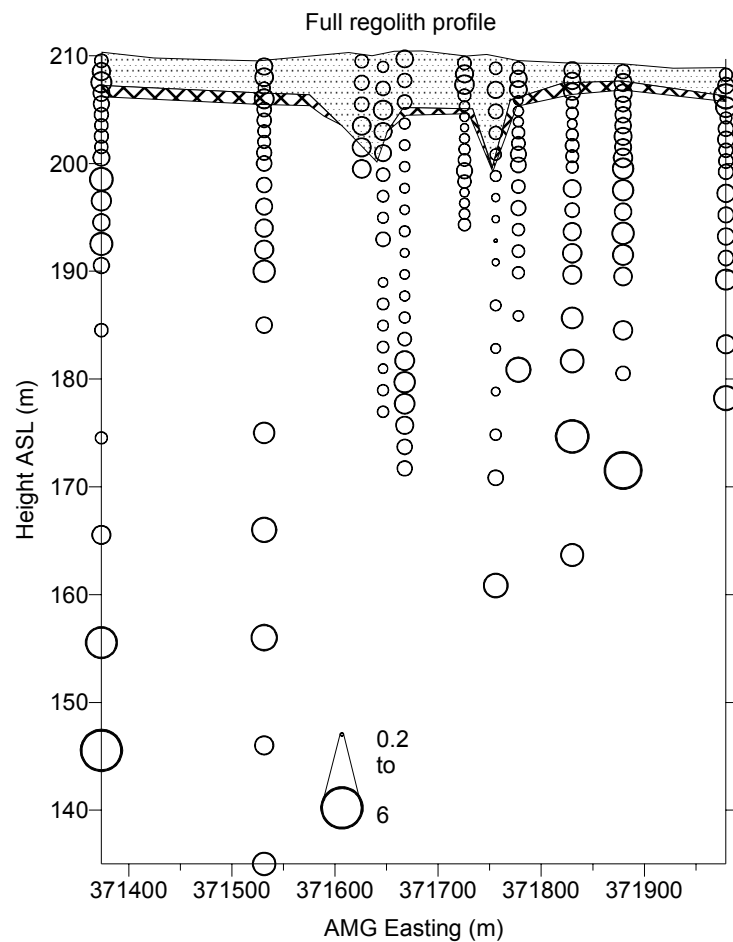
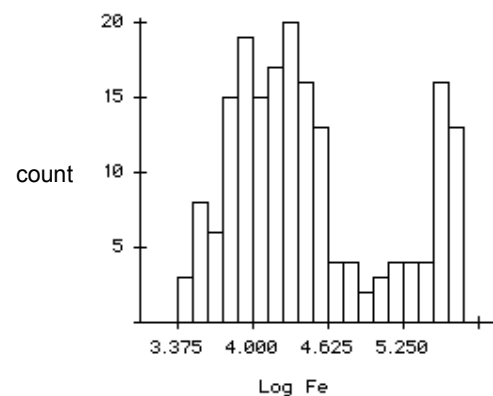
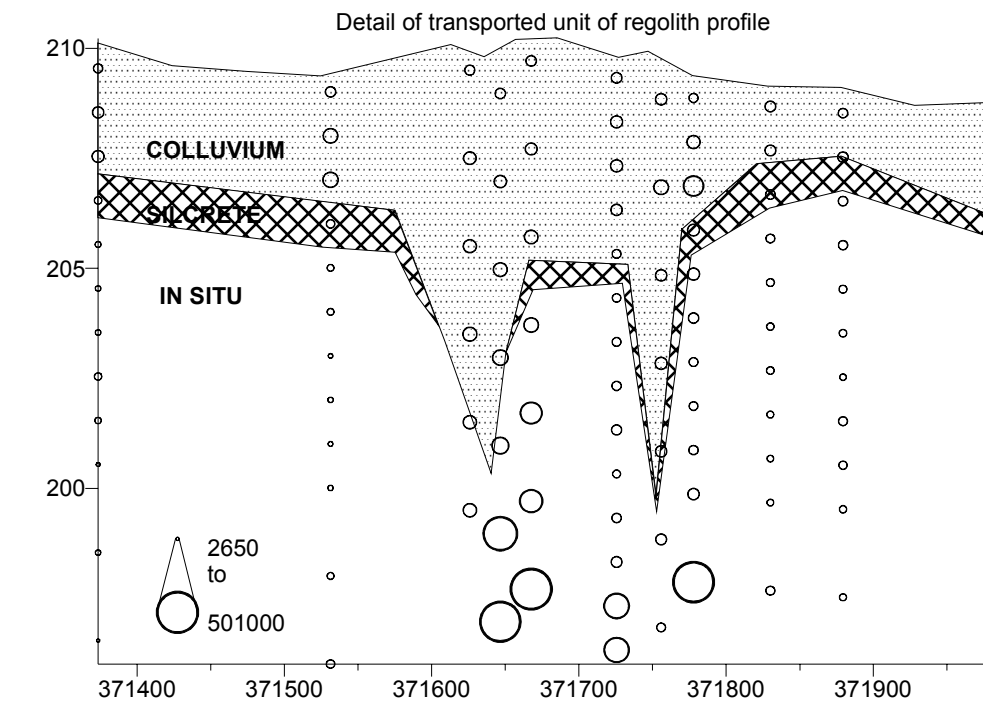
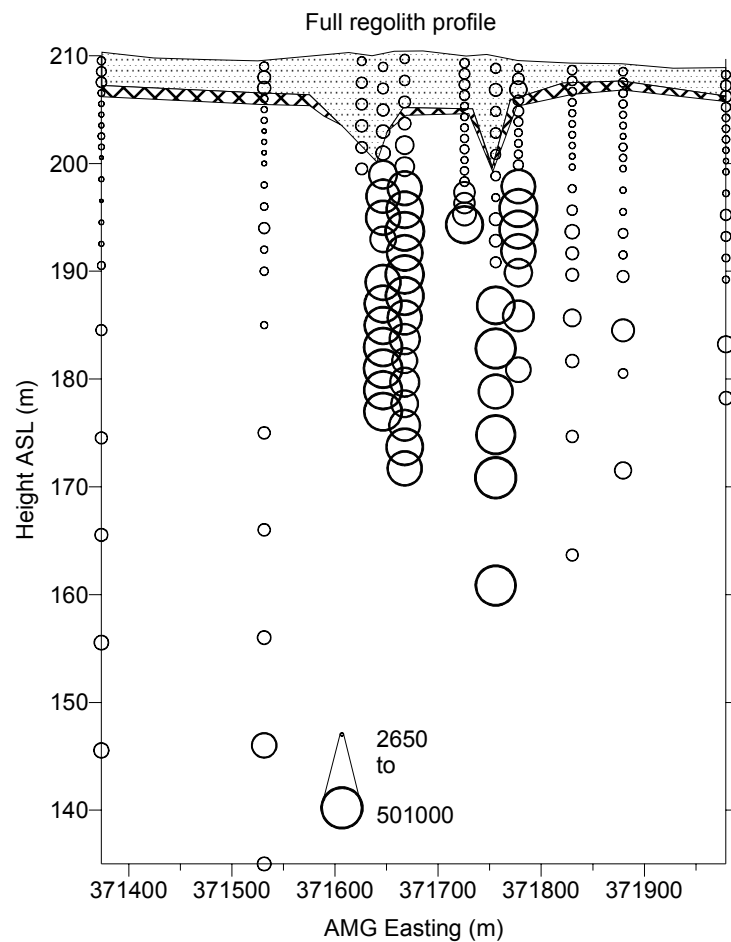


Figure A1d.15: Distribution and concentration of Eu at South Hilga regolith section on 6660300N.

Eu (ppm)

South Hilga

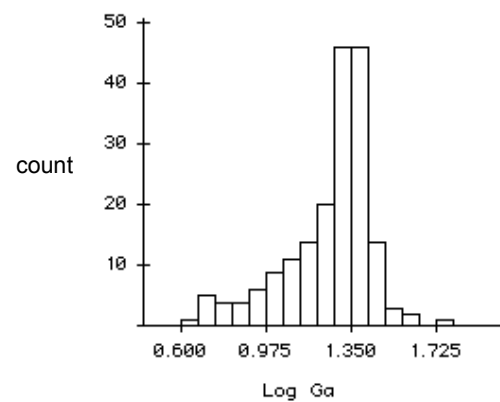
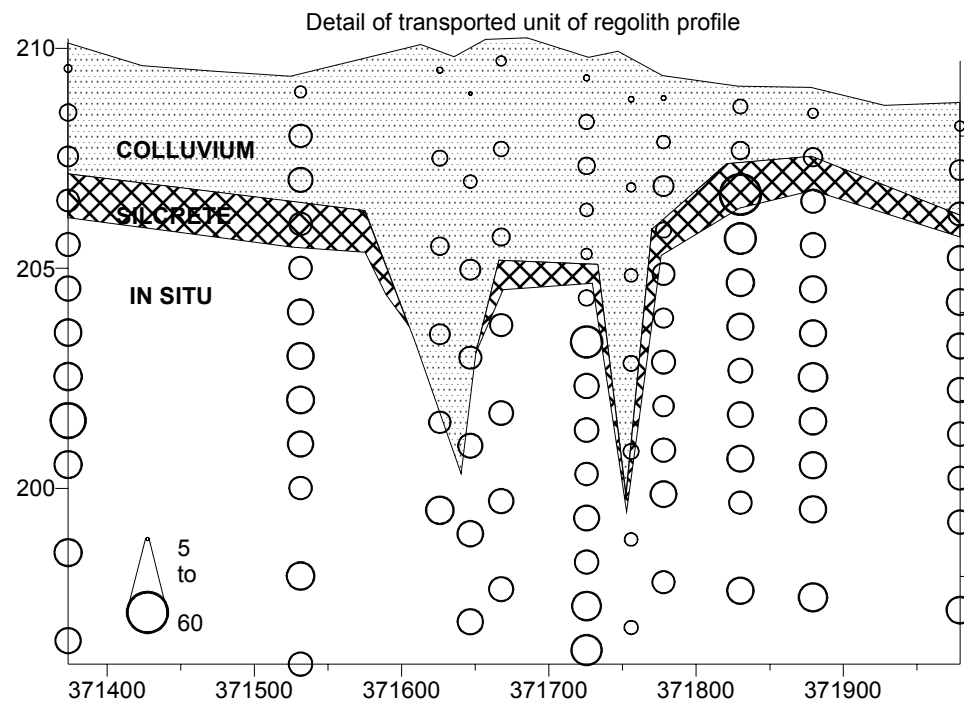
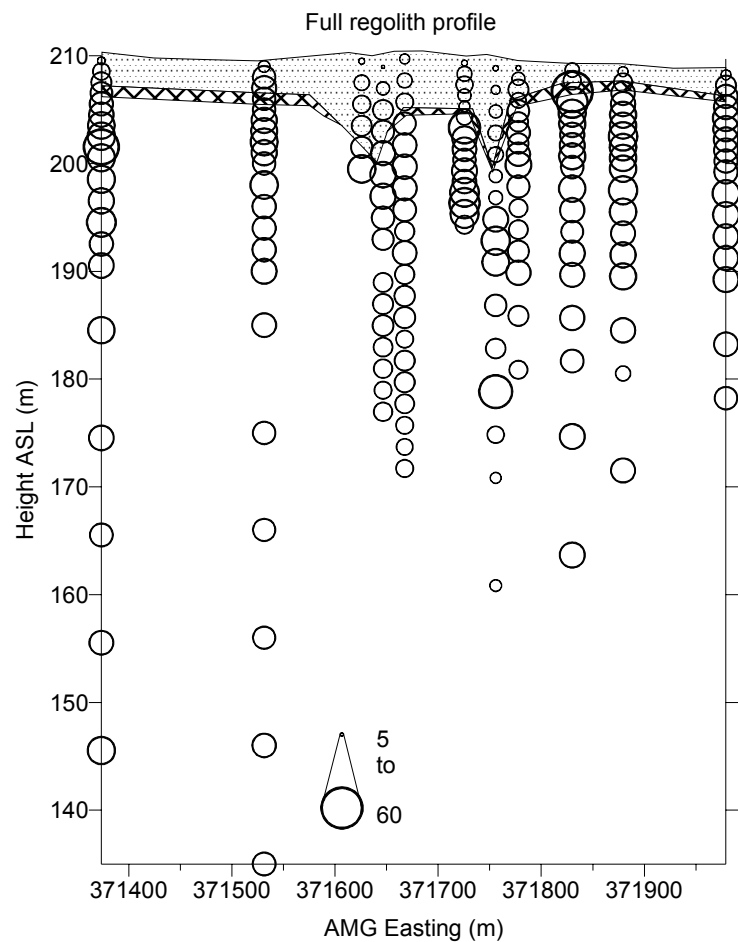


	Silcrete	Colluvium	In situ
Mean	16744	22929	113588
Std Error	3132	1934	13160
Median	13400	20300	23100
Std Dev	8857	11439	157372
Minimum	6900	10800	2650
Maximum	27800	69300	501000
Count	8	35	143

Figure A1d.16: Distribution and concentration of Fe at South Hilga regolith section on 6660300N.

Fe (ppm)

South Hilga

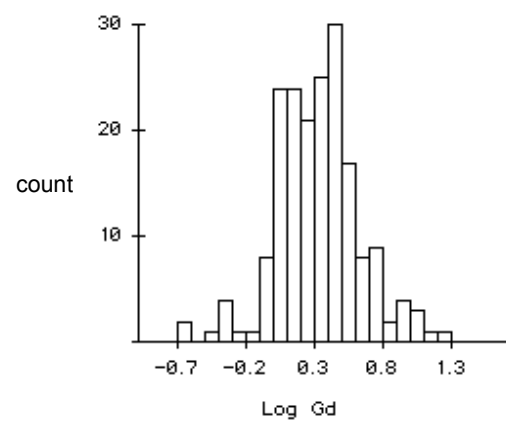
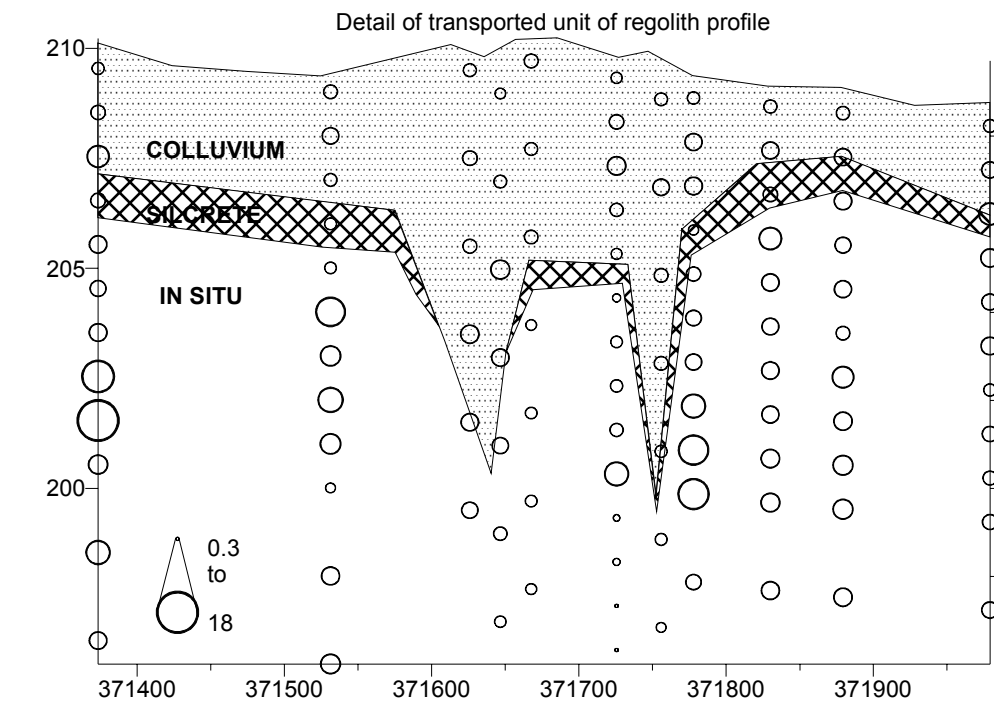
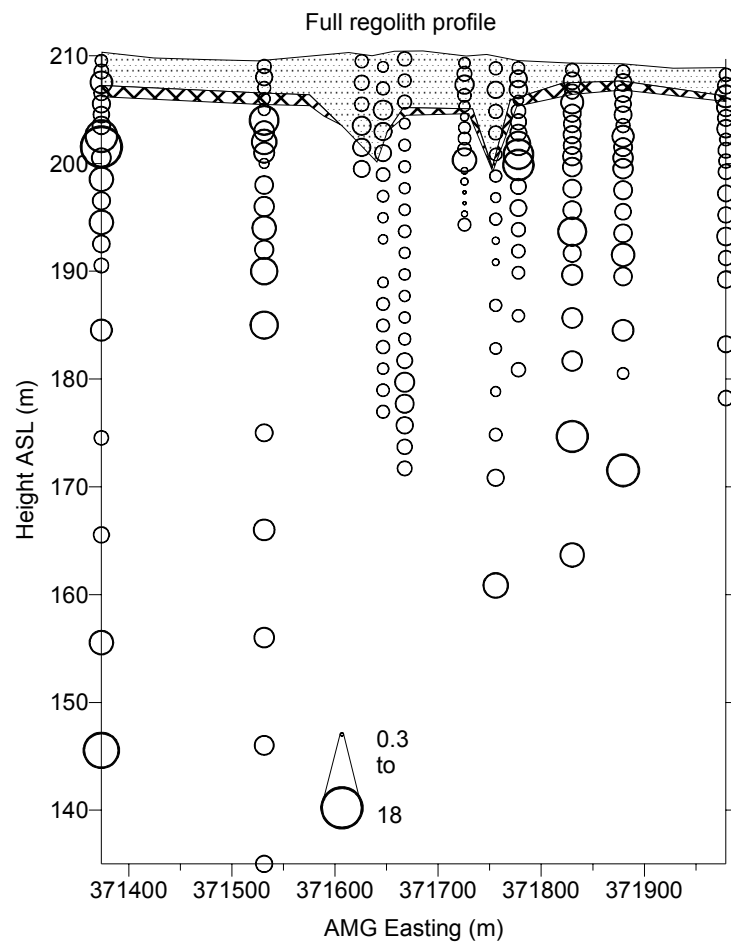


	Silcrete	Colluvium	In situ
Mean	21	11	21
Std Error	5.8	0.8	0.5
Median	18	10	22
Std Dev	16	5	6
Minimum	7	5	7
Maximum	60	22	45
Count	8	35	143

Figure A1d.17: Distribution and concentration of Ga at South Hilga regolith section on 6660300N.

Ga (ppm)

South Hilga



	Silcrete	Colluvium	In situ
Mean	2.2	2.0	3.0
Std Error	0.4	0.1	0.2
Median	1.9	1.7	2.4
Std Dev	1.2	0.8	2.6
Minimum	1.0	0.9	0.3
Maximum	4.7	4.6	18
Count	8	35	143

Figure A1d.18: Distribution and concentration of Gd at South Hilga regolith section on 6660300N.

Gd (ppm)

South Hilga

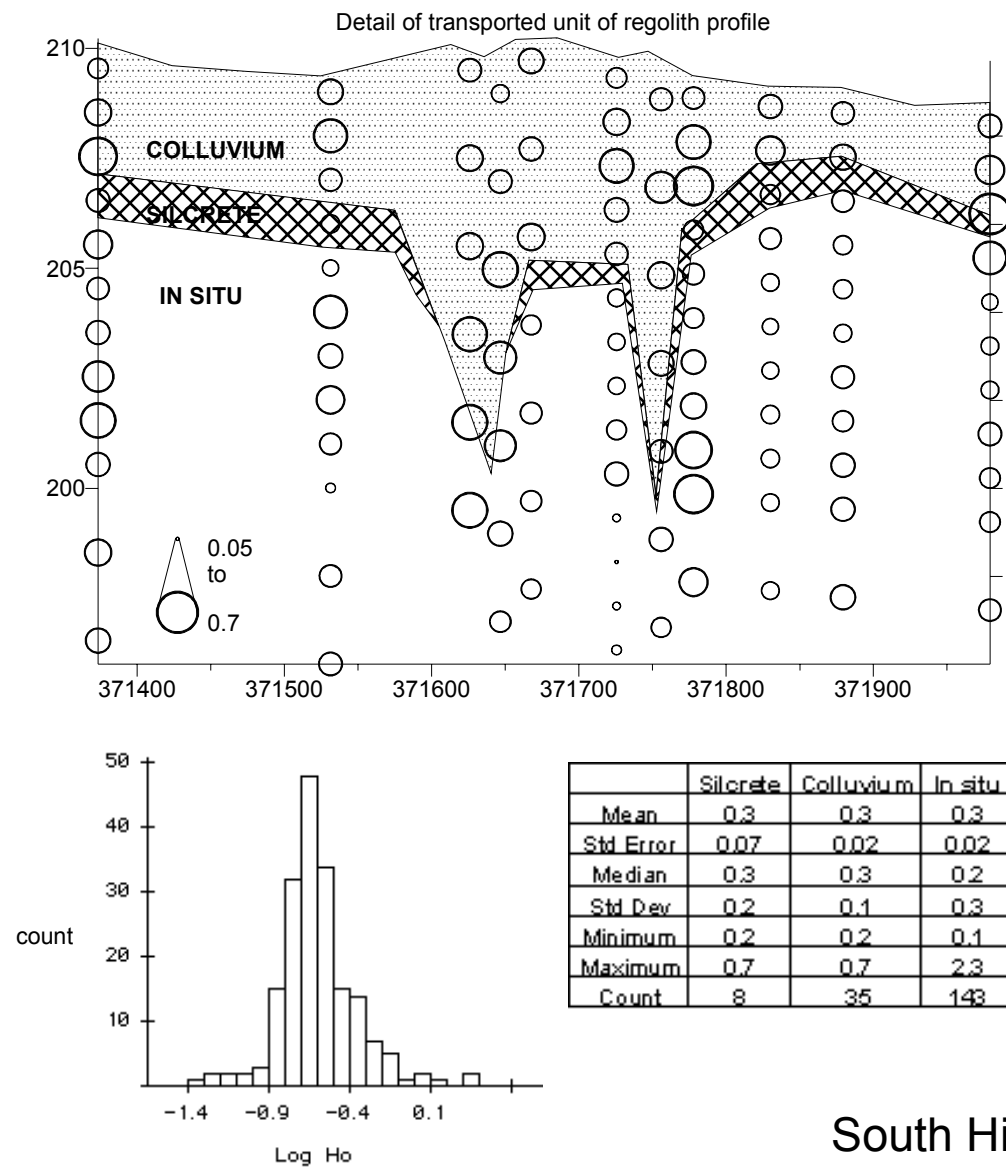
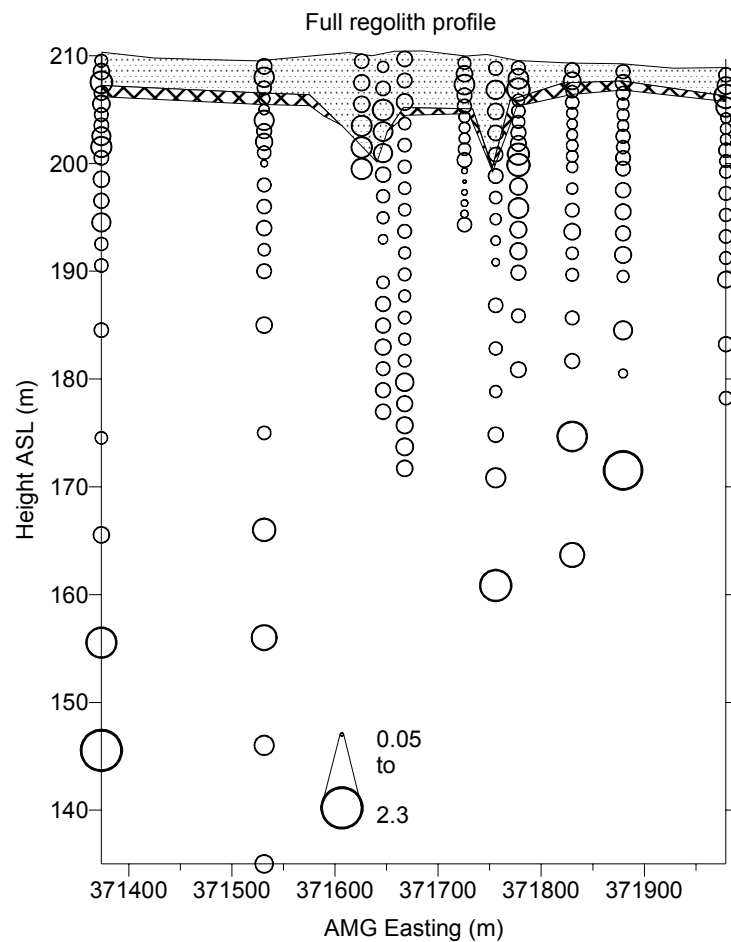
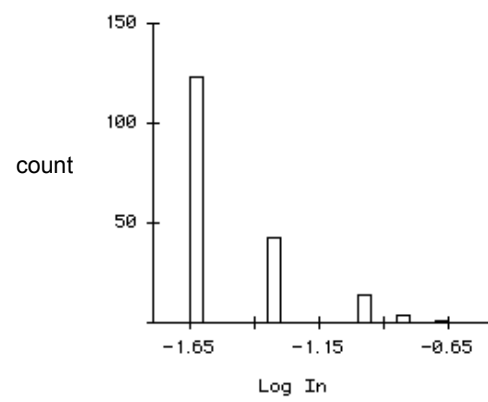
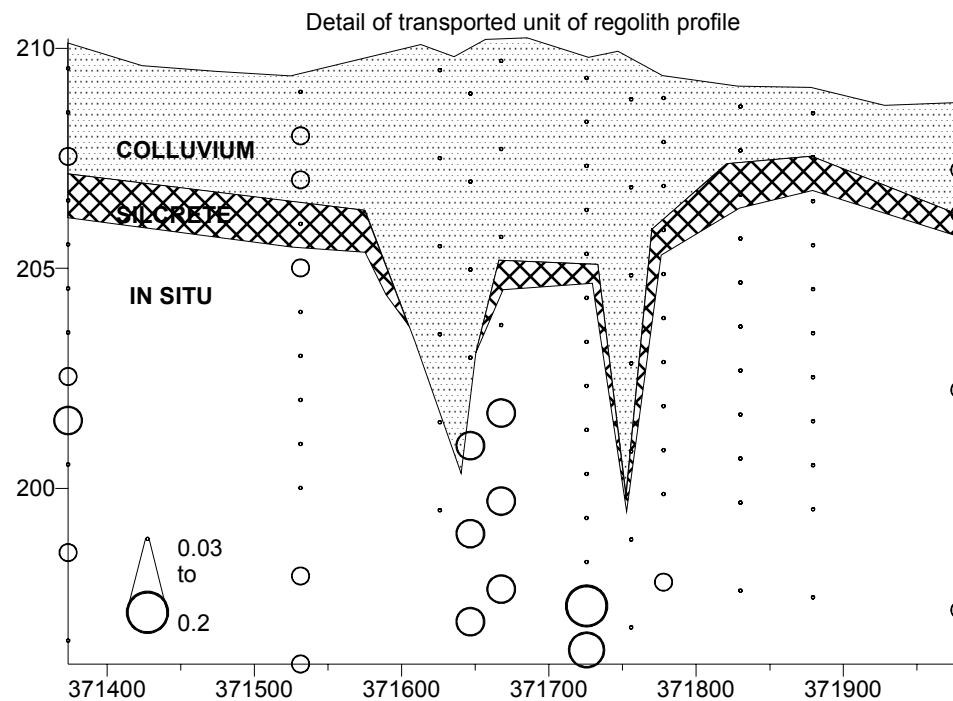
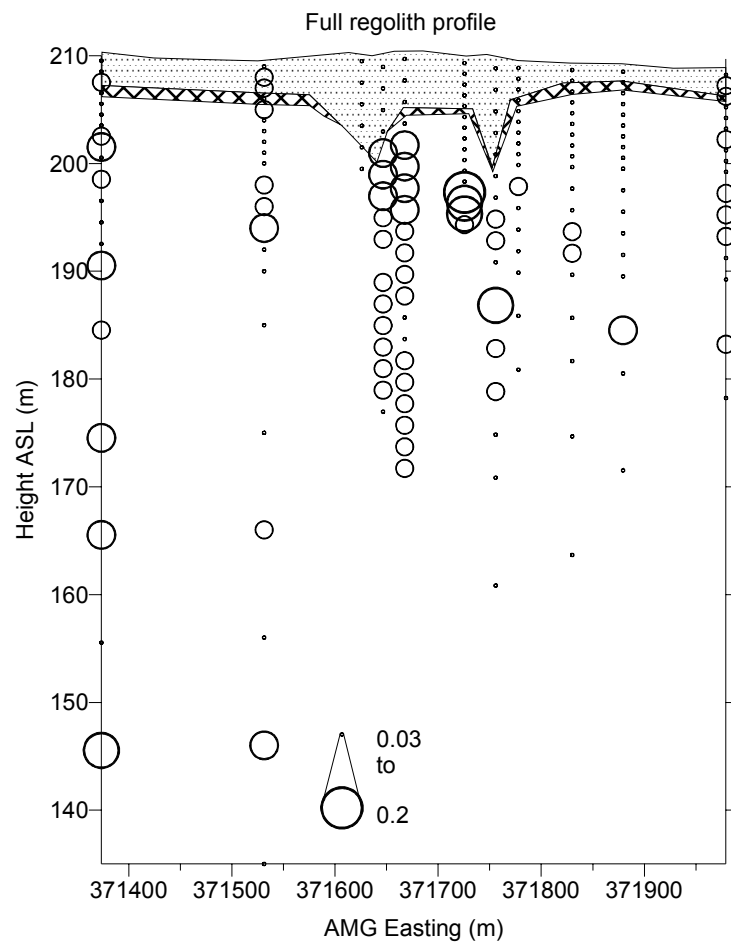


Figure A1d.19: Distribution and concentration of Ho at South Hilga regolith section on 6660300N.

Ho (ppm)

South Hilga

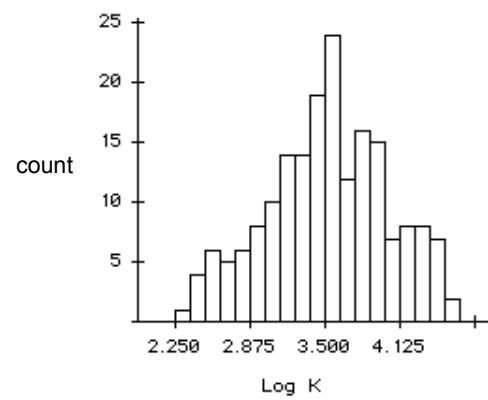
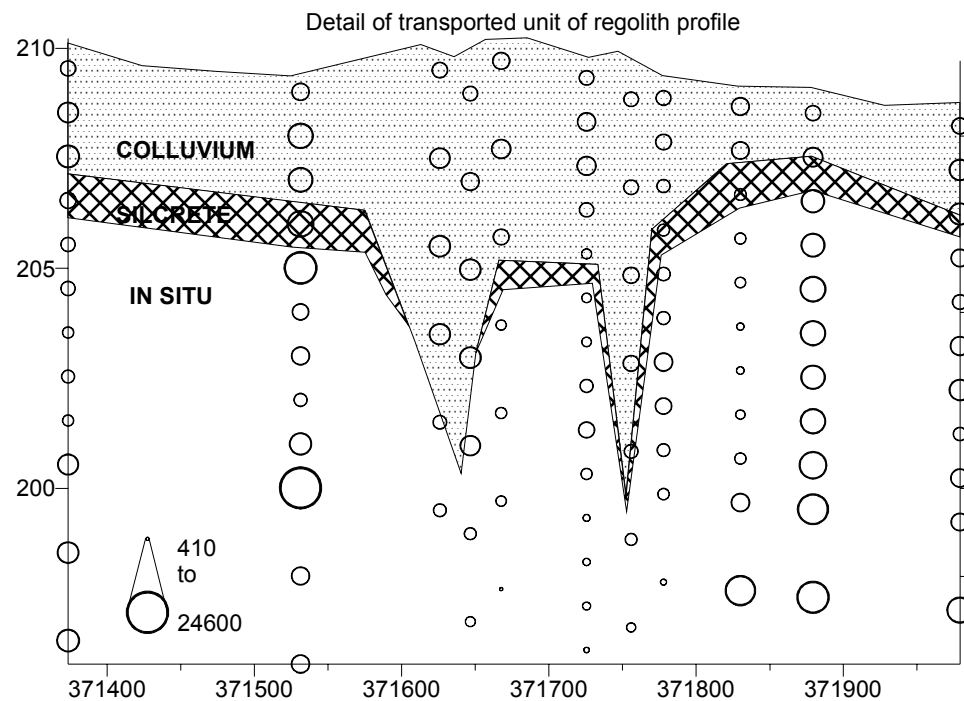
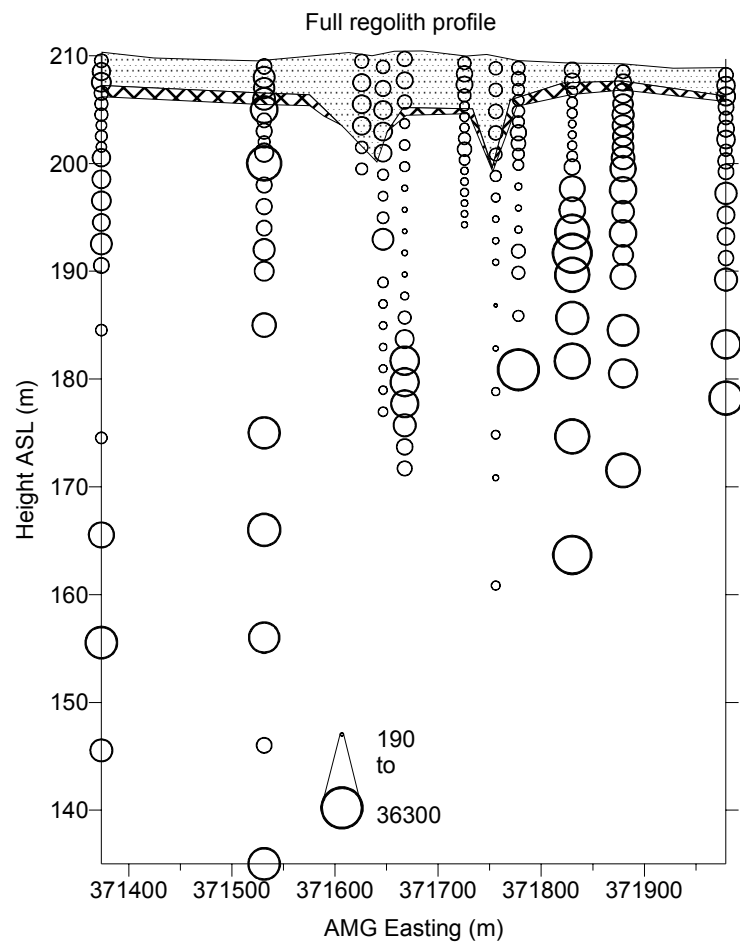


	Silcrete	Colluvium	In situ
Mean	0.03	0.03	0.04
Std Error	0.003	0.002	0.003
Median	0.025	0.0	0.025
Std Dev	0.01	0.01	0.03
Minimum	0.025	0.025	0.025
Maximum	0.05	0.1	0.2
Count	8	35	143

Figure A1d.20: Distribution and concentration of In at South Hilga regolith section on 6660300N.

In (ppm)

South Hilga

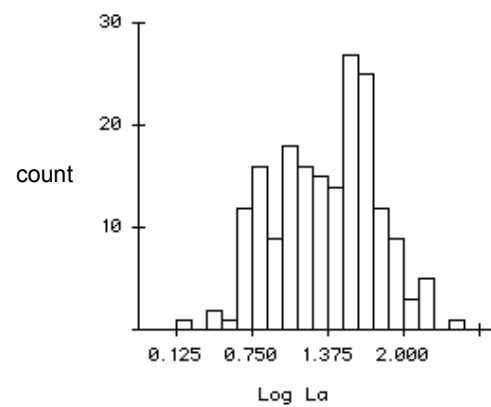
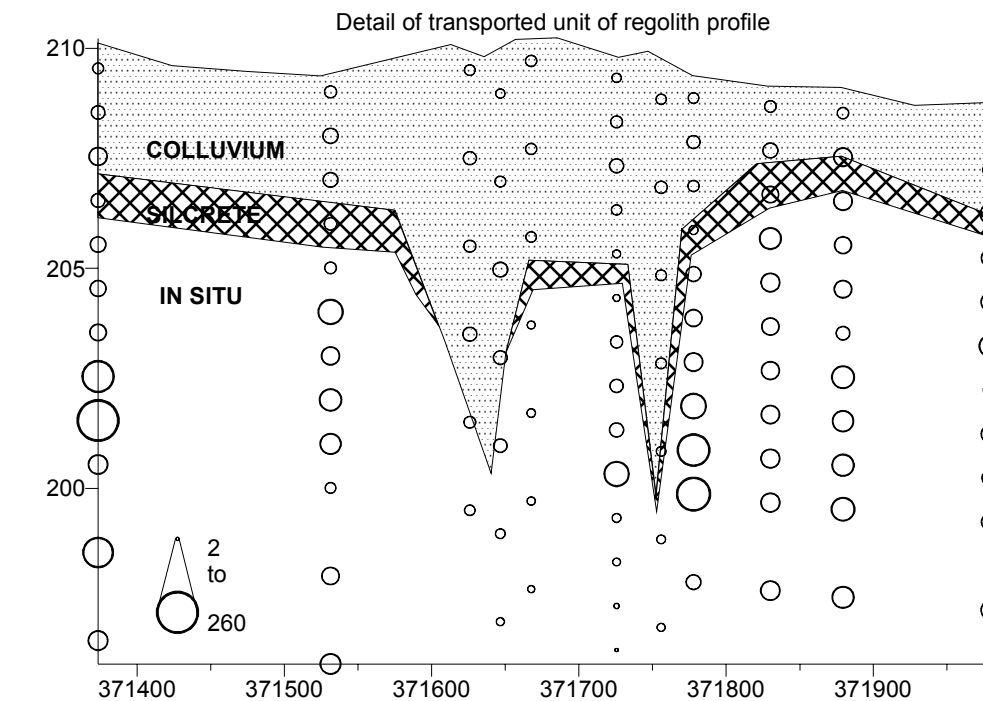
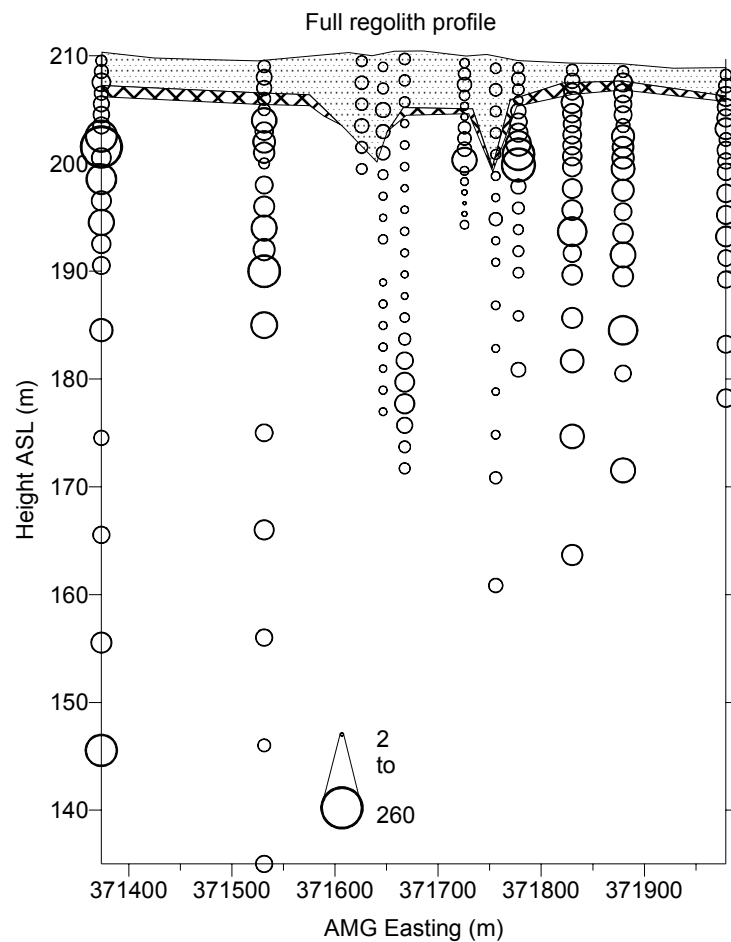


	Silcrete	Colluvium	In situ
Mean	3944	4093	6707
Std Error	946	277	659
Median	3150	3750	3450
Std Dev	2677	1638	7883
Minimum	1200	1750	190
Maximum	9200	8350	36300
Count	8	35	143

Figure A1d.21: Distribution and concentration of K at South Hilga regolith section on 6660300N.

K (ppm)

South Hilga

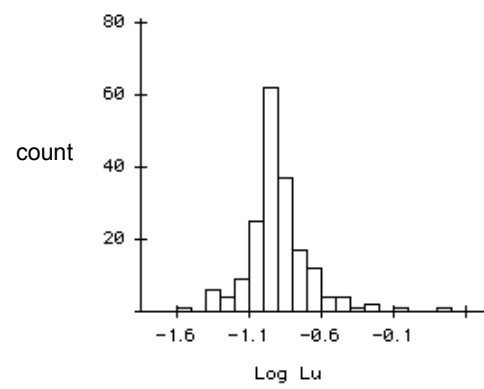
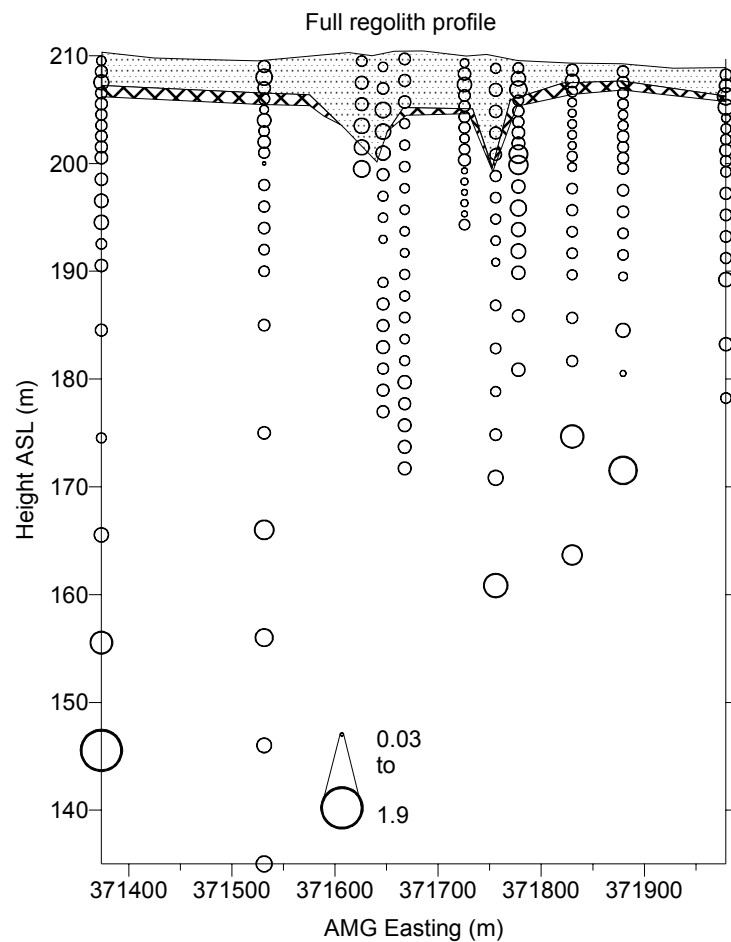


	Silcrete	Colluvium	In situ
Mean	25	17	40
Std Error	6	1	3
Median	20	15	36
Std Dev	16	7	39
Minimum	6	8	2
Maximum	50	42	260
Count	8	35	143

Figure A1d.22: Distribution and concentration of La at South Hilga regolith section on 6660300N.

La (ppm)

South Hilga

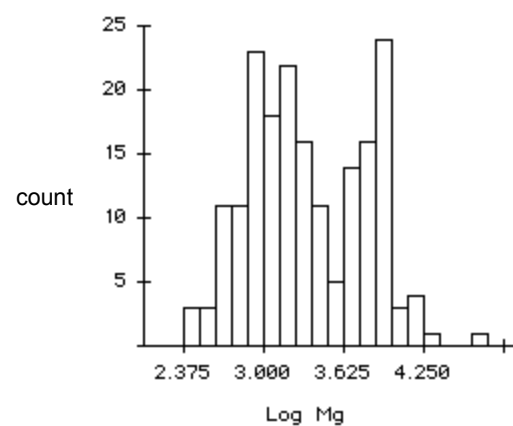
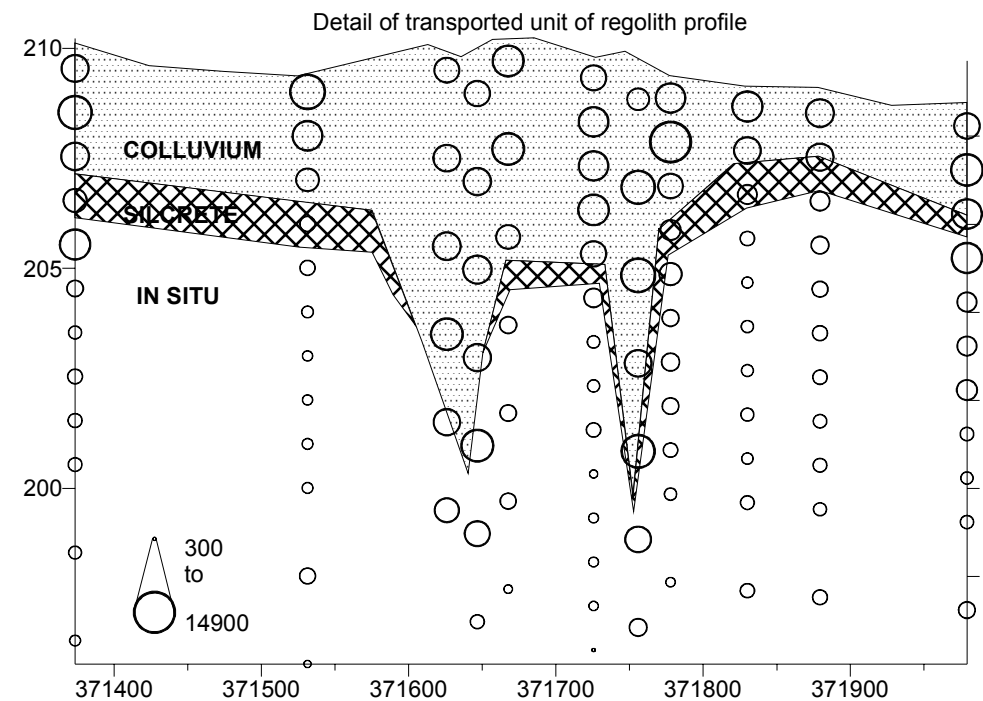
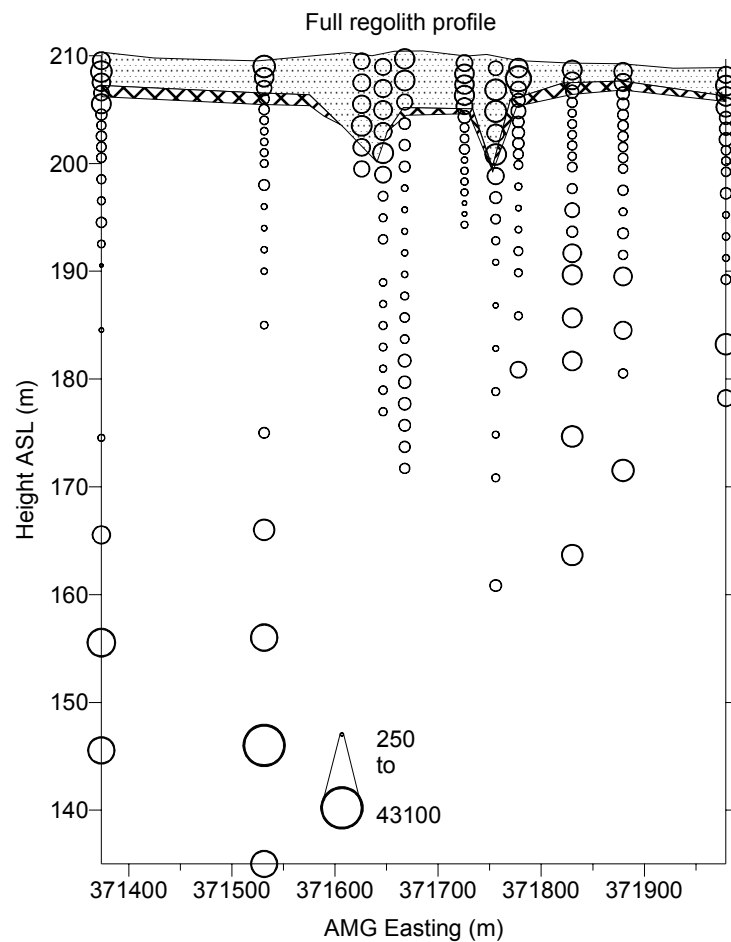


	Silcrete	Colluvium	In situ
Mean	0.2	0.1	0.1
Std Error	0.02	0.01	0.01
Median	0.13	0.13	0.11
Std Dev	0.06	0.05	0.18
Minimum	0.1	0.07	0.03
Maximum	0.3	0.3	1.9
Count	8	35	143

Figure A1d.23: Distribution and concentration of Lu at South Hilga regolith section on 6660300N.

Lu (ppm)

South Hilga

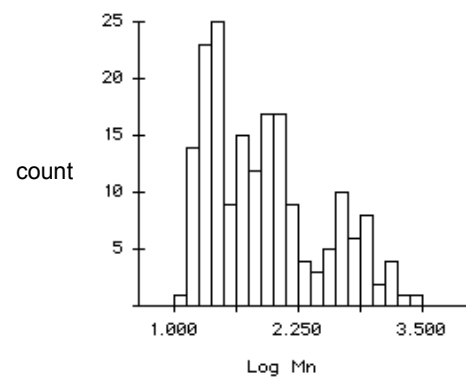
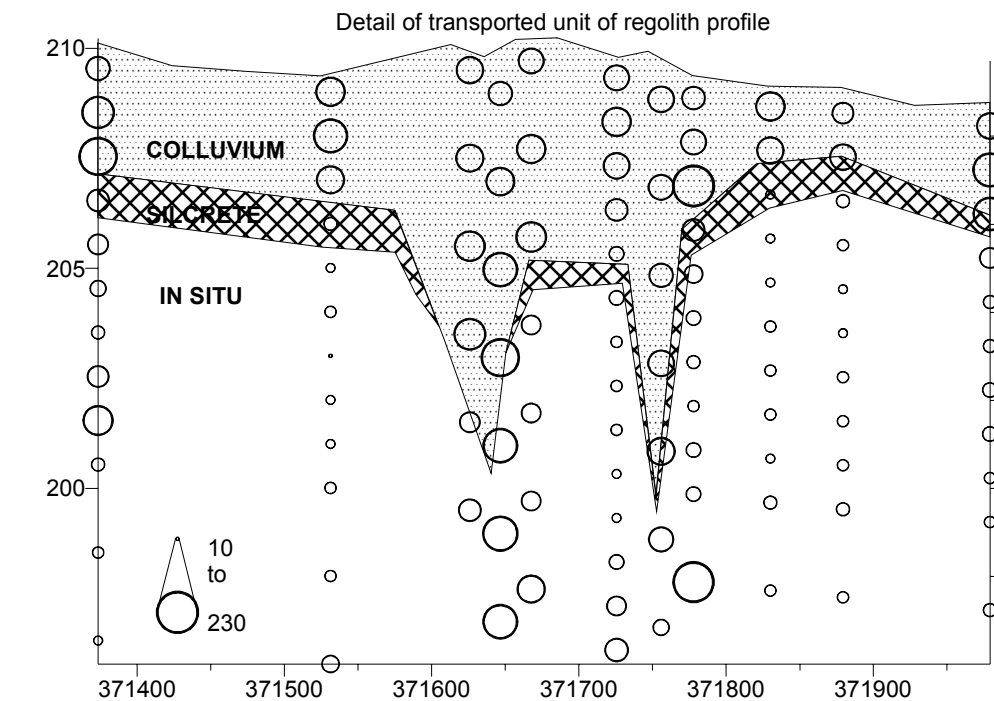
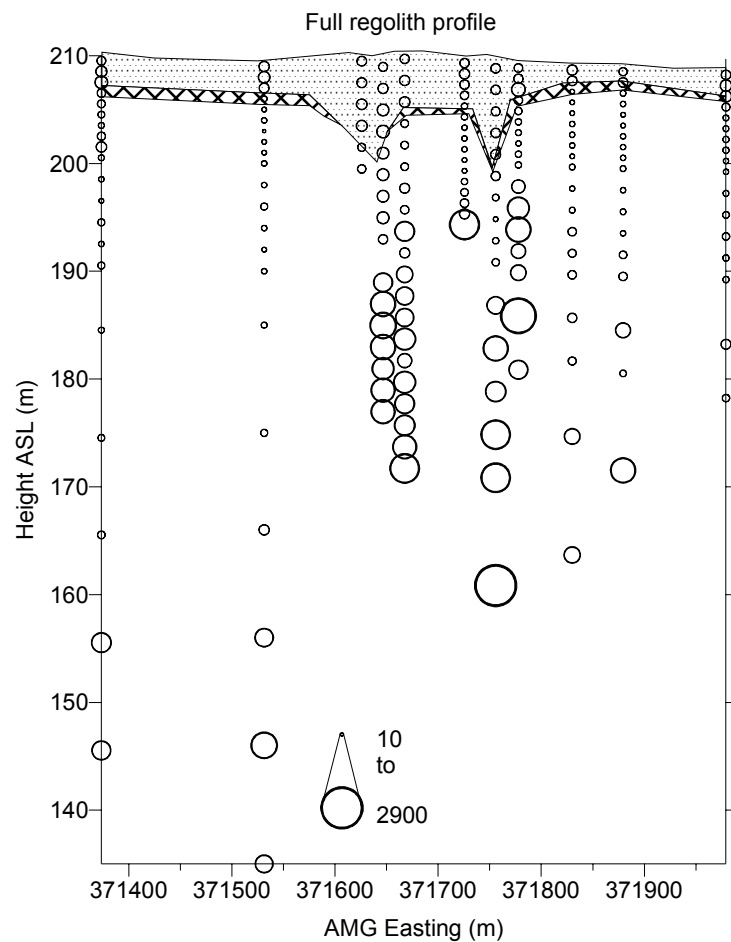


	Silcrete	Colluvium	In situ
Mean	4931	7349	2890
Std Error	663	375	398
Median	5100	6900	1400
Std Dev	1875	2220	4759
Minimum	1800	3350	250
Maximum	7700	14900	43100
Count	8	35	143

Figure A1d.24: Distribution and concentration of Mg at South Hilga regolith section on 6660300N.

Mg (ppm)

South Hilga

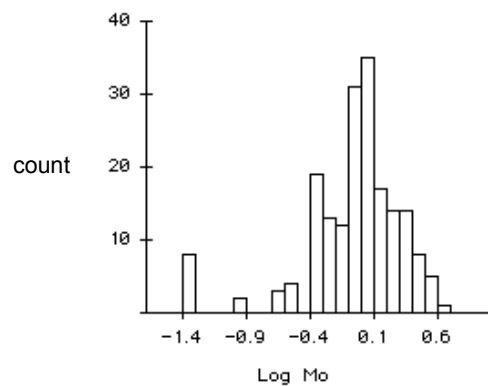
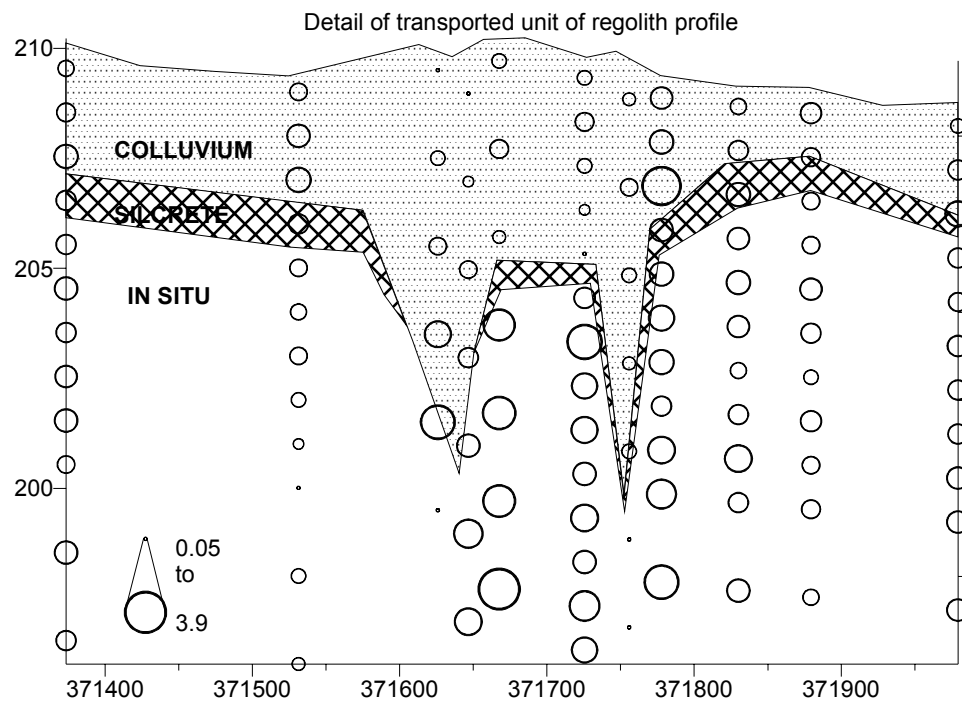
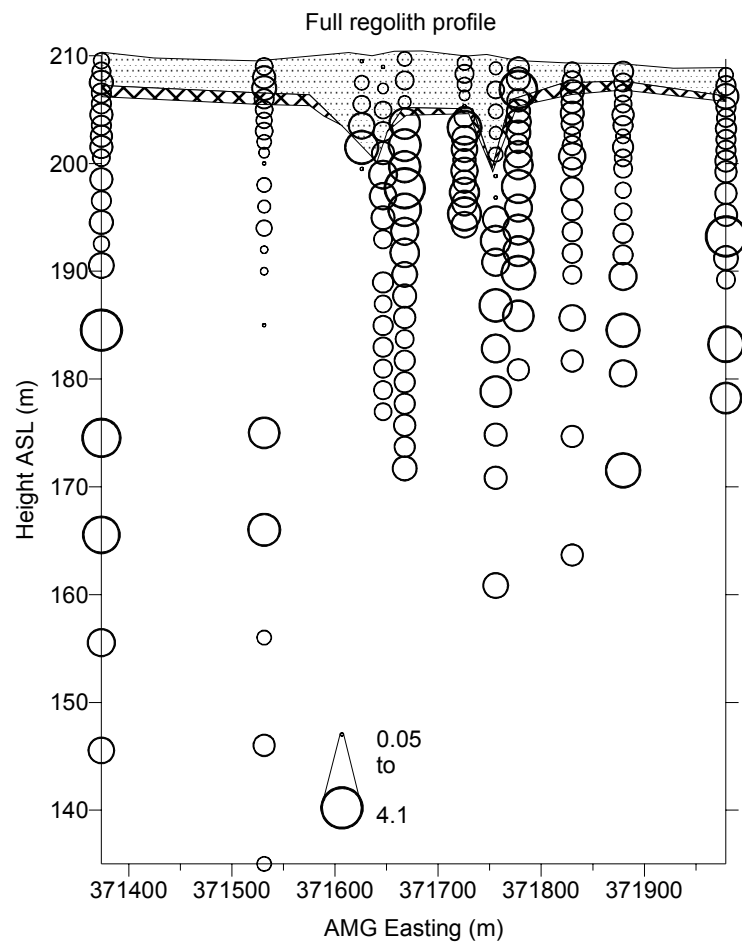


	Silcrete	Colluvium	In situ
Mean	68.1	109.3	249.7
Std Error	16.6	6.6	36.0
Median	60	100.0	45
Std Dev	46.90	39	430.7
Minimum	15	60	10
Maximum	145	230	2900
Count	8	35	143

Figure A1d.25: Distribution and concentration of Mn at South Hilga regolith section on 6660300N.

Mn (ppm)

South Hilga



	Silcrete	Colluvium	In situ
Mean	1.0	0.7	1.3
Std Error	0.3	0.1	0.1
Median	0.8	0.6	1
Std Dev	0.79	1	0.8
Minimum	0.05	0.05	0.05
Maximum	2.6	3.4	4.1
Count	8	35	143

Figure A1d.26: Distribution and concentration of Mo at South Hilga regolith section on 6660300N.

Mo (ppm)

South Hilga

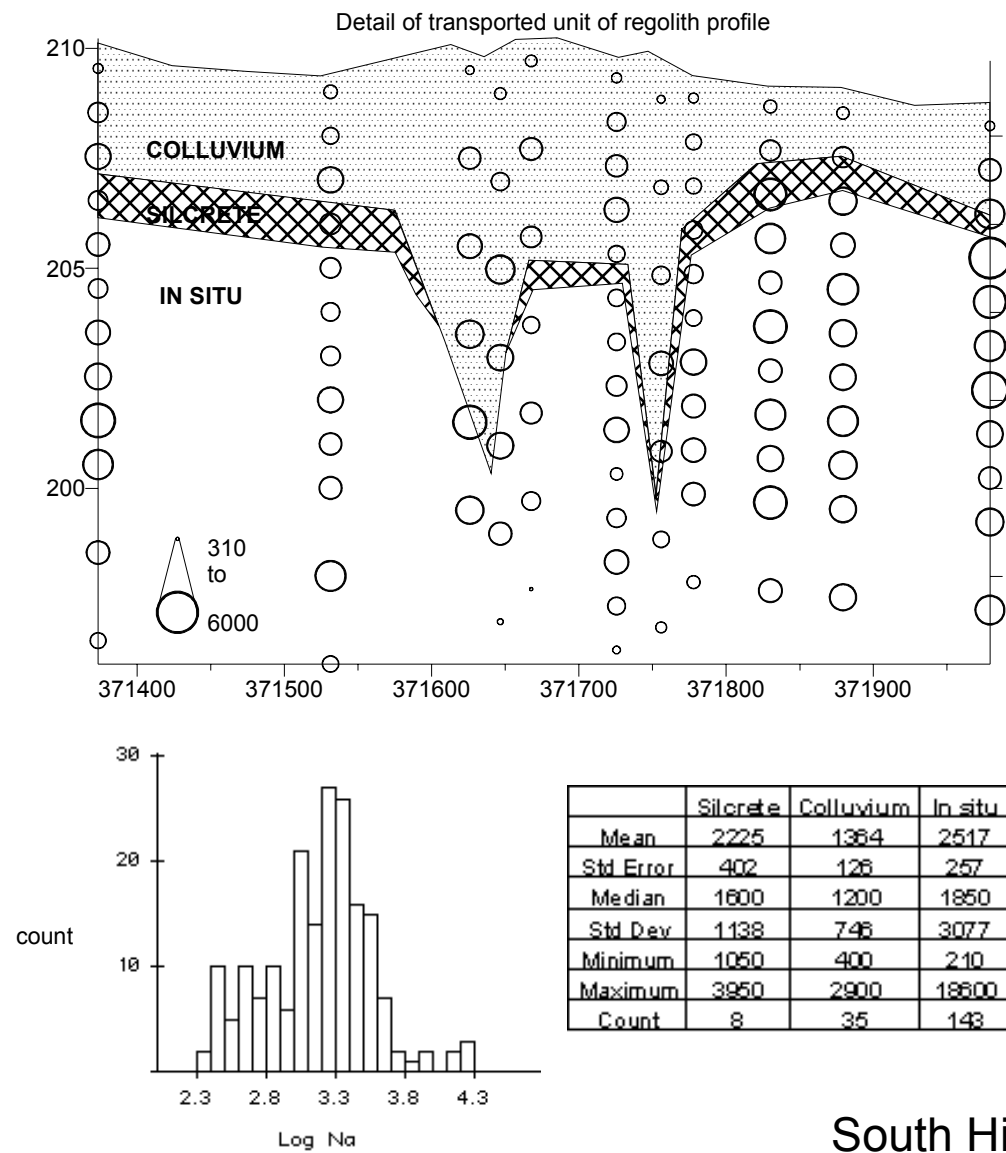
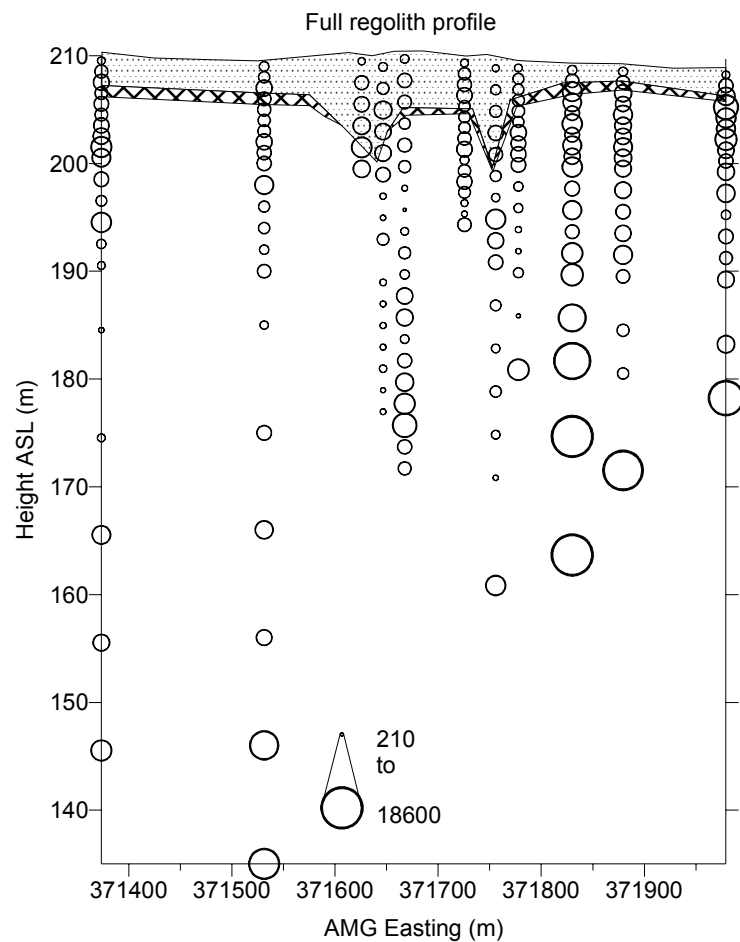
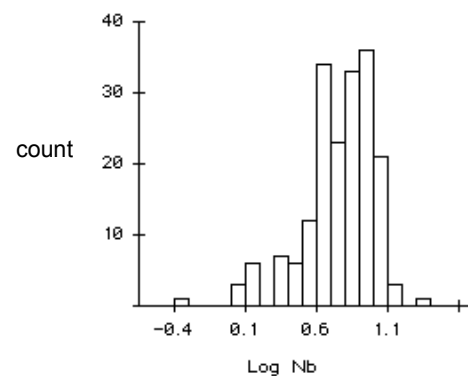
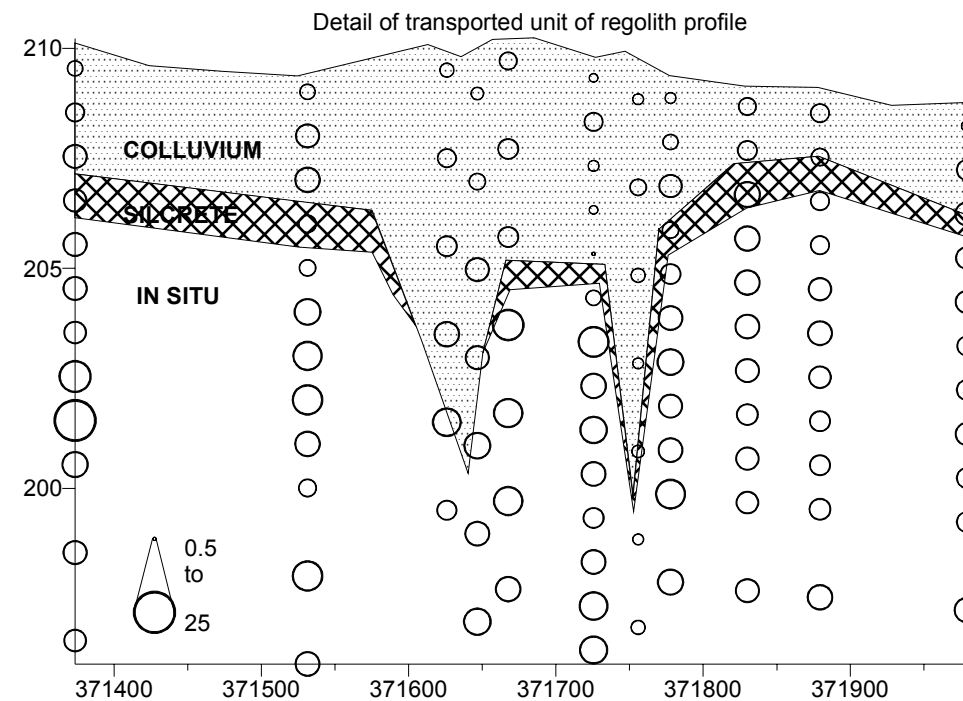
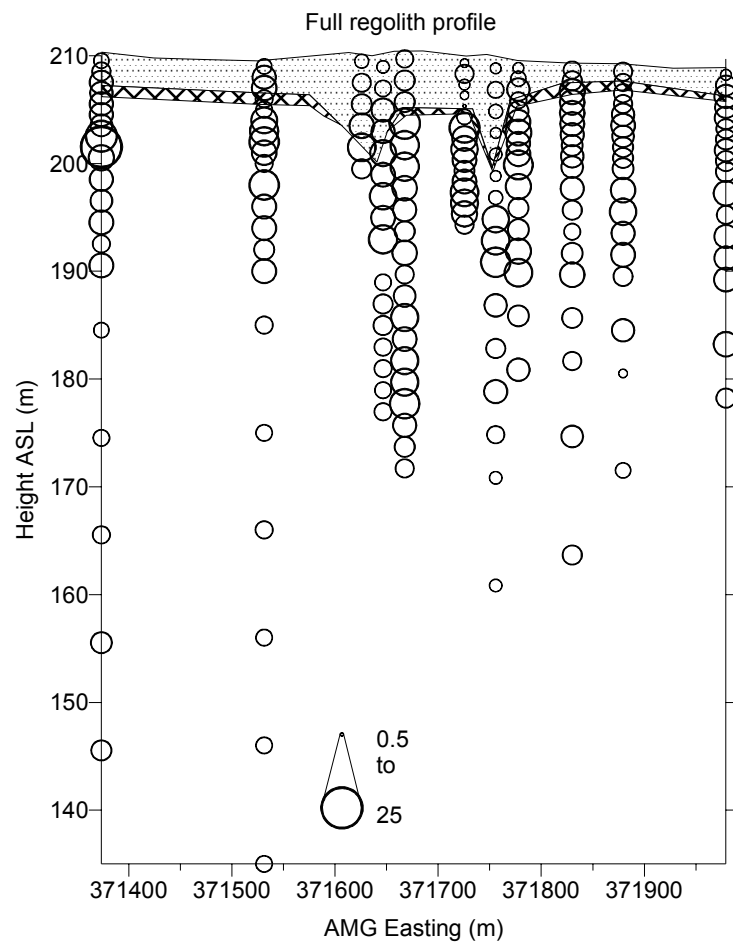


Figure A1d.27: Distribution and concentration of Na at South Hilga regolith section on 6660300N.

Na (ppm)

South Hilga

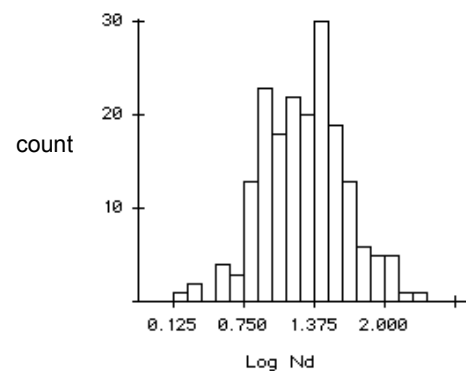
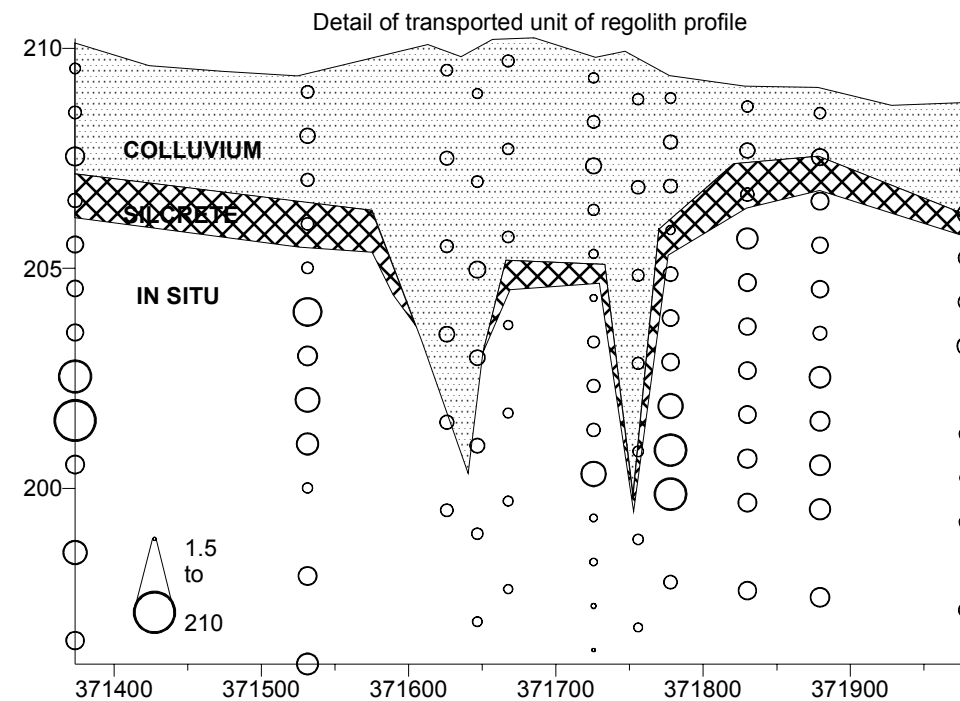
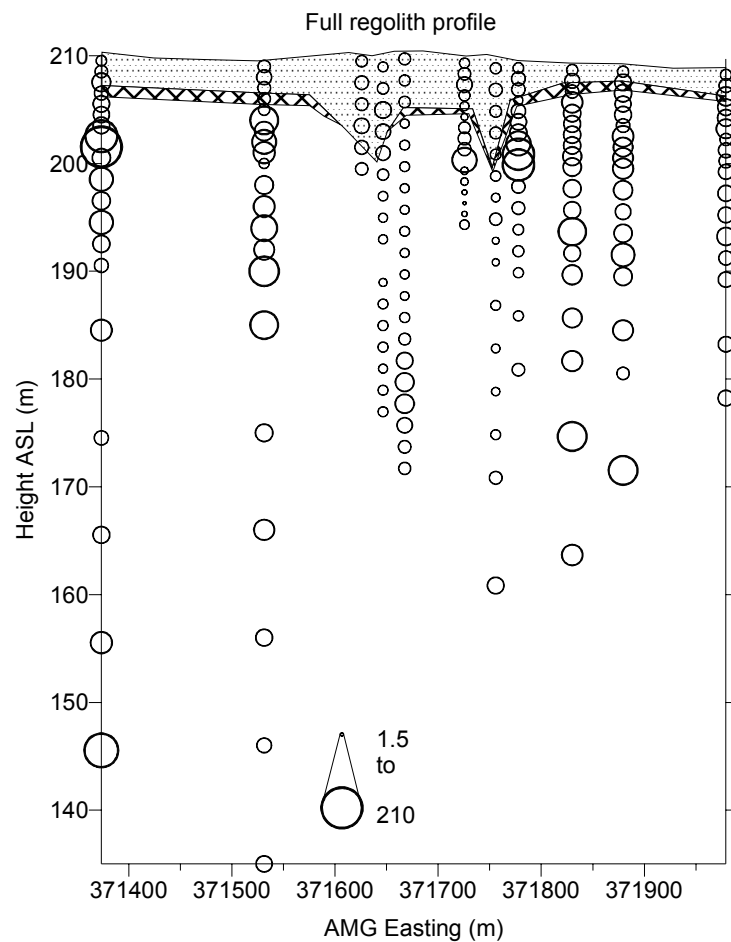


	Silcrete	Colluvium	In situ
Mean	6.1	4.3	7.1
Std Error	1.2	0.4	0.3
Median	6.25	4.0	7
Std Dev	3.29	2	3.1
Minimum	0.5	1	1
Maximum	11	9.5	25
Count	8	35	143

Figure A1d.28: Distribution and concentration of Nb at South Hilga regolith section on 6660300N.

Nb (ppm)

South Hilga

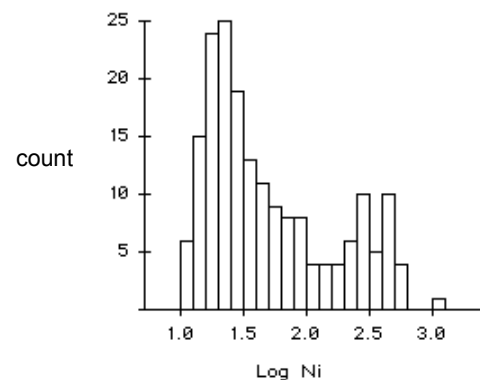
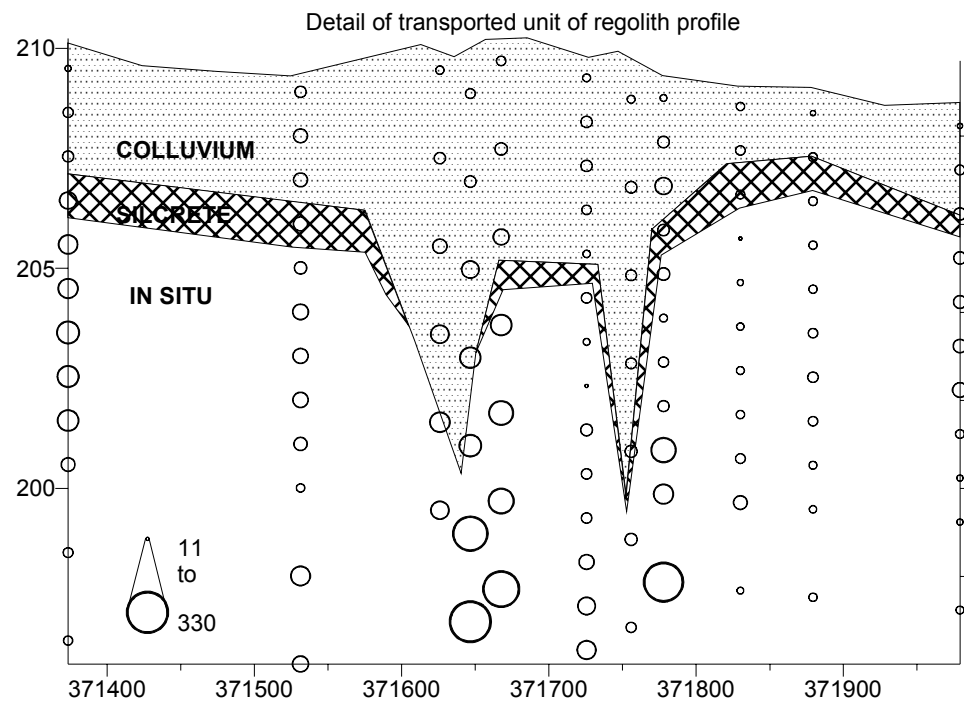
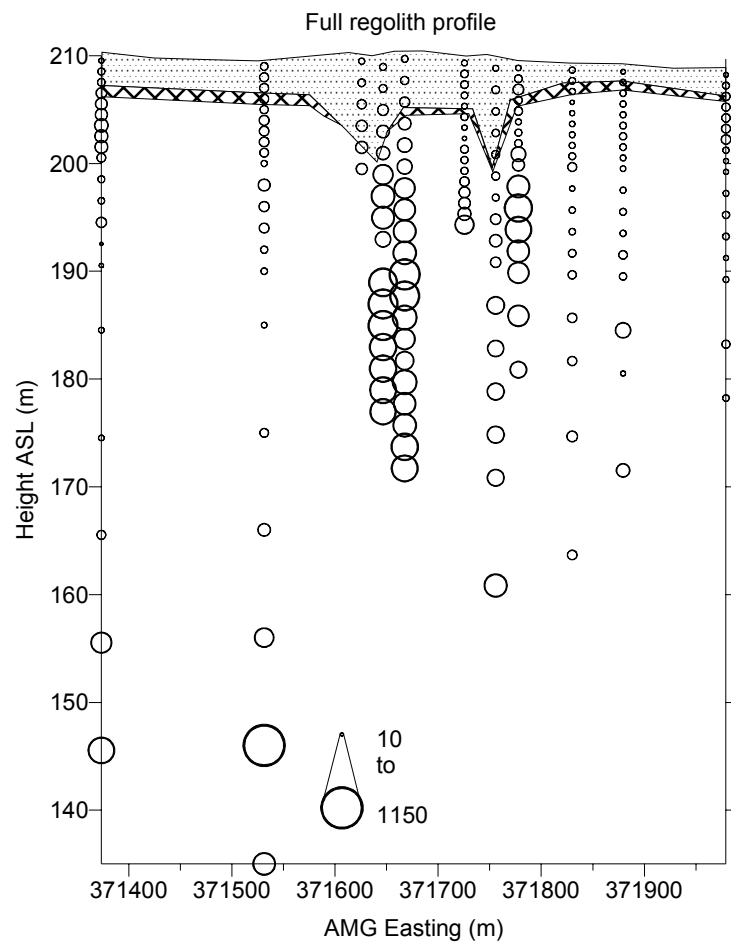


	Silcrete	Colluvium	In situ
Mean	19	15	31
Std Error	4	1	3
Median	17	14	26
Std Dev	10	6	31
Minimum	7	7	2
Maximum	38	37	210
Count	8	35	143

Figure A1d.29: Distribution and concentration of Nd at South Hilga regolith section on 6660300N.

Nd (ppm)

South Hilga

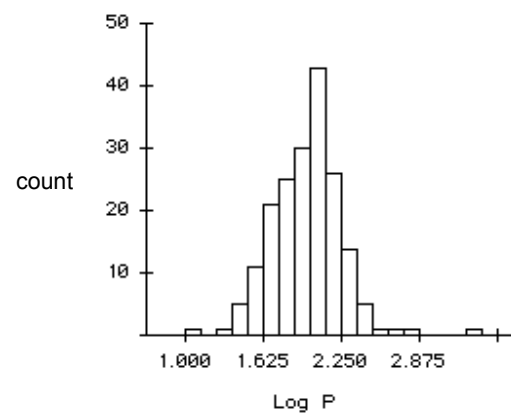
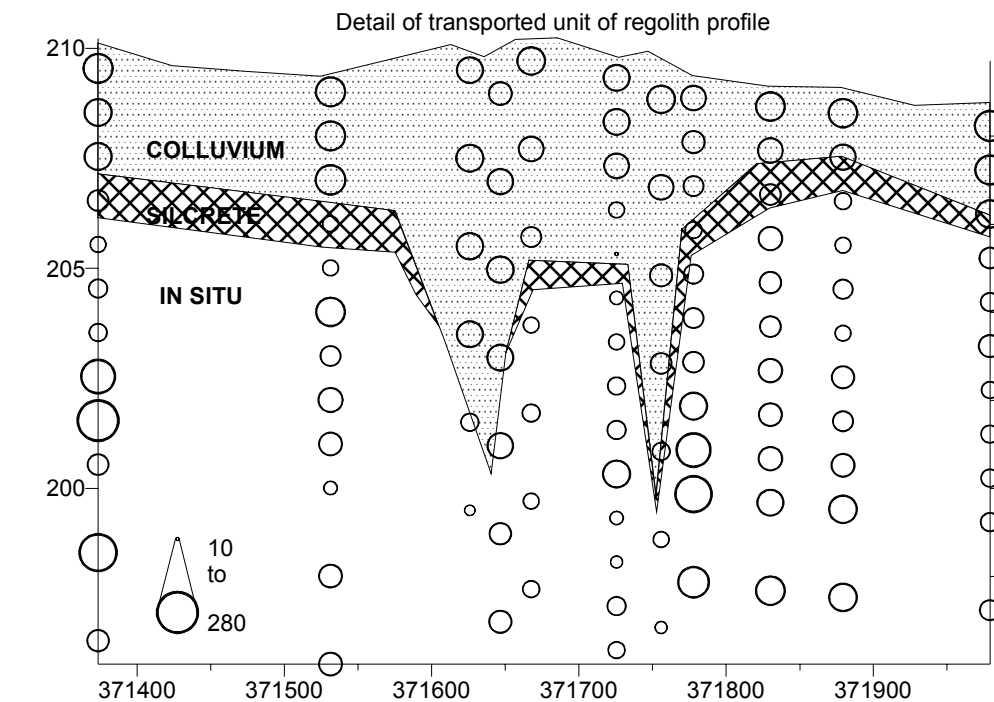
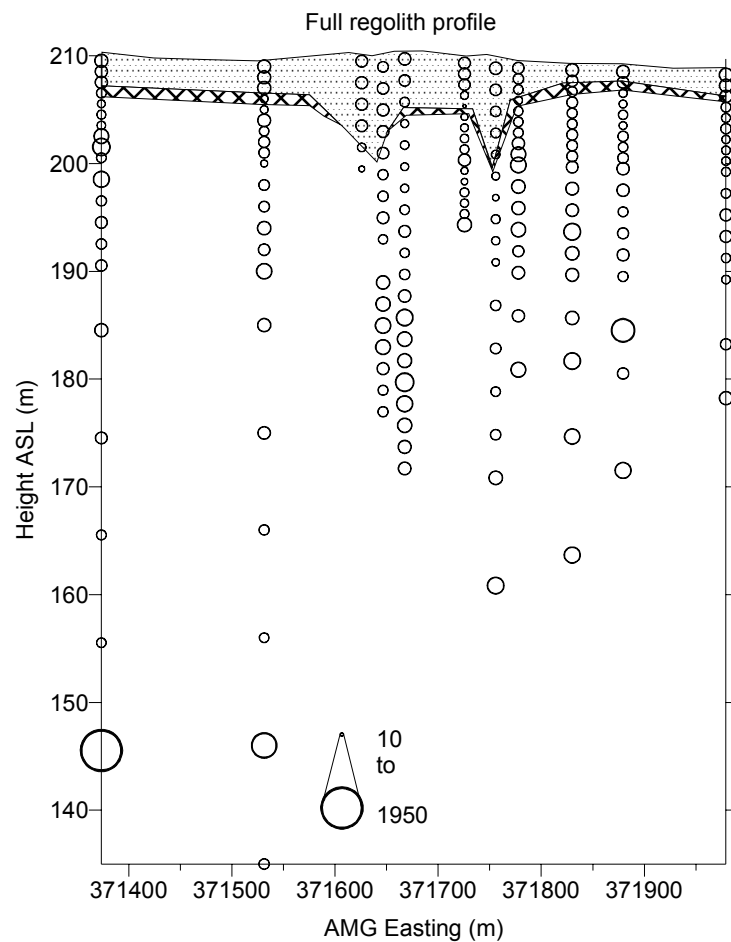


	Silcrete	Colluvium	In situ
Mean	37	30	131
Std Error	7	3	14
Median	34	26	43
Std Dev	21	18	173
Minimum	15	12	10
Maximum	74	90	1150
Count	8	35	143

Figure A1d.30: Distribution and concentration of Ni at South Hilga regolith section on 6660300N.

Ni (ppm)

South Hilga



	Silcrete	Colluvium	In situ
Mean	67	107	125
Std Error	13	5	15
Median	68	110	85
Std Dev	36	28	176
Minimum	10	40	20
Maximum	125	150	1950
Count	8	35	143

Figure A1d.31: Distribution and concentration of P at South Hilga regolith section on 6660300N.

P (ppm)

South Hilga

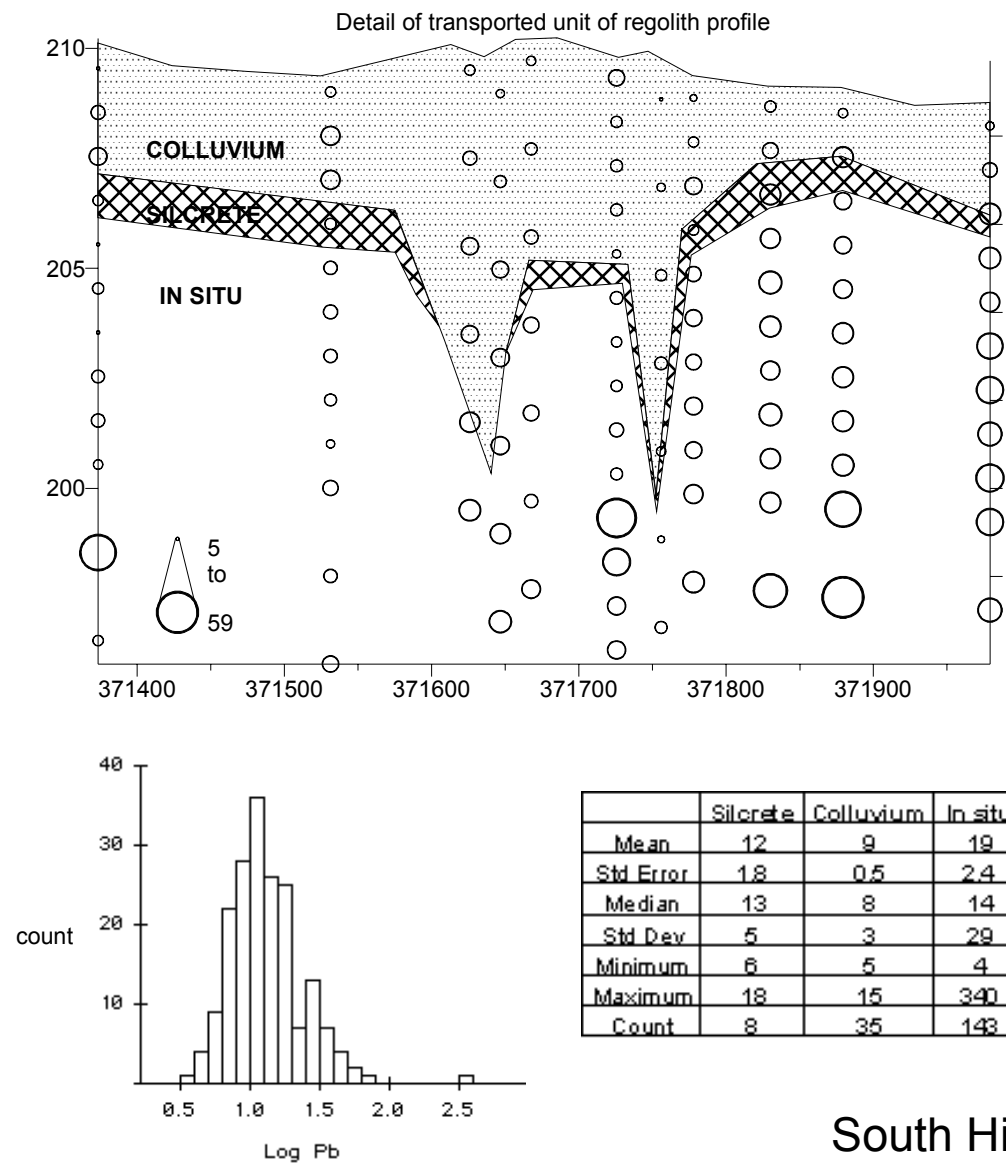
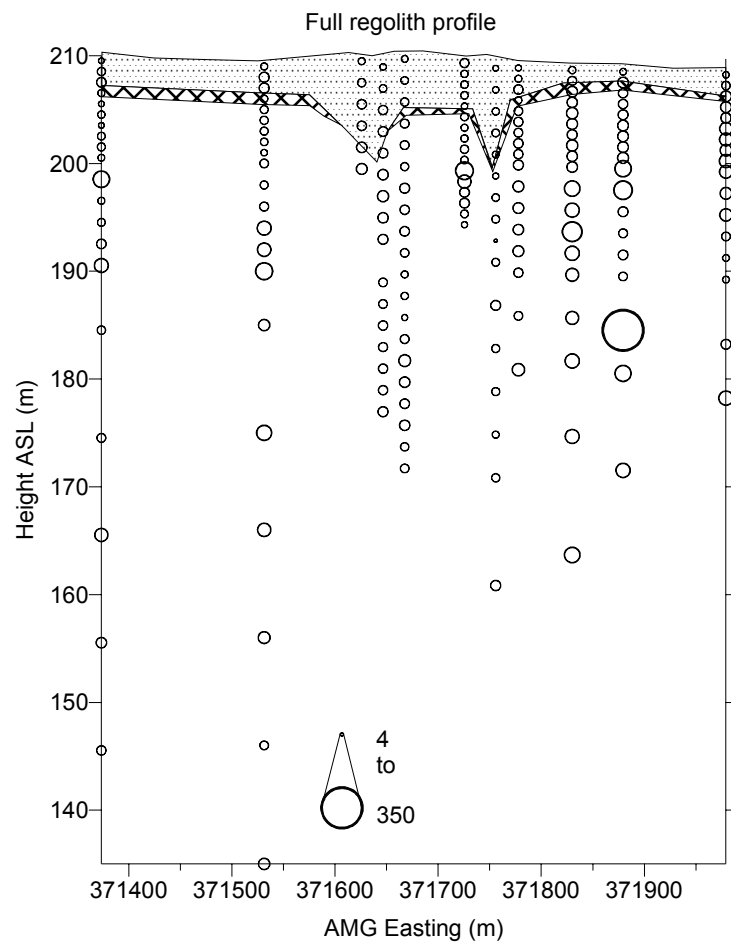
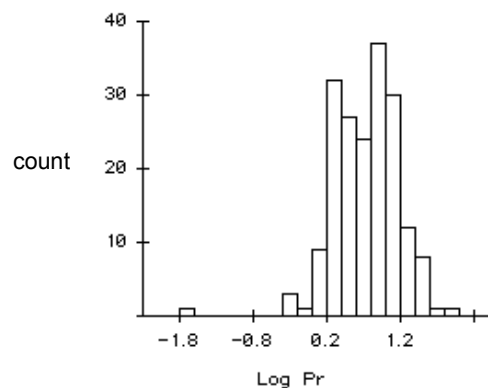
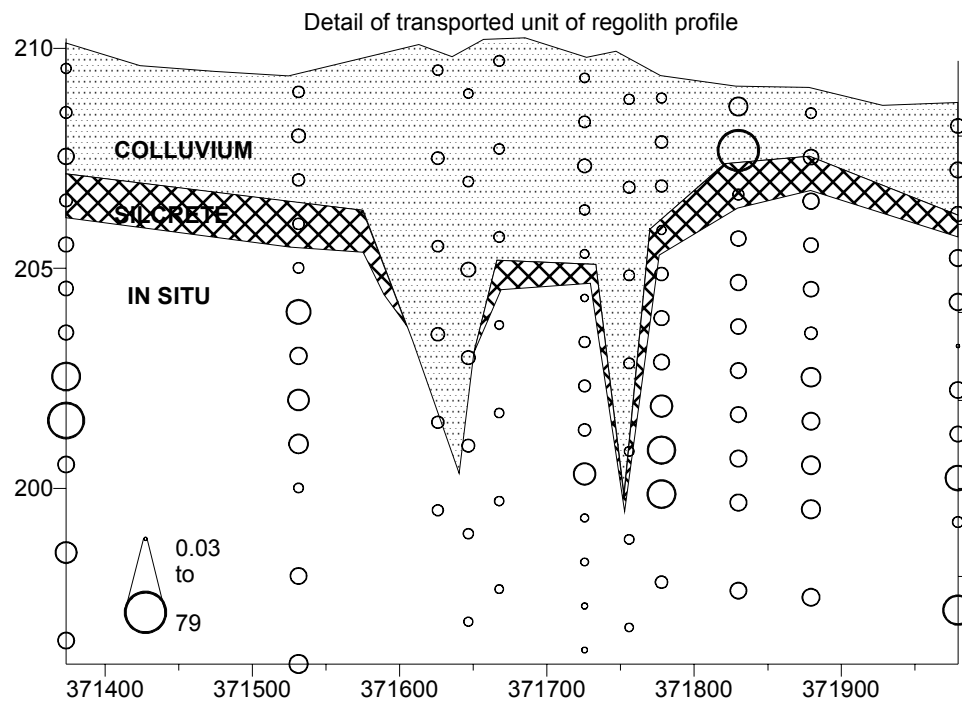
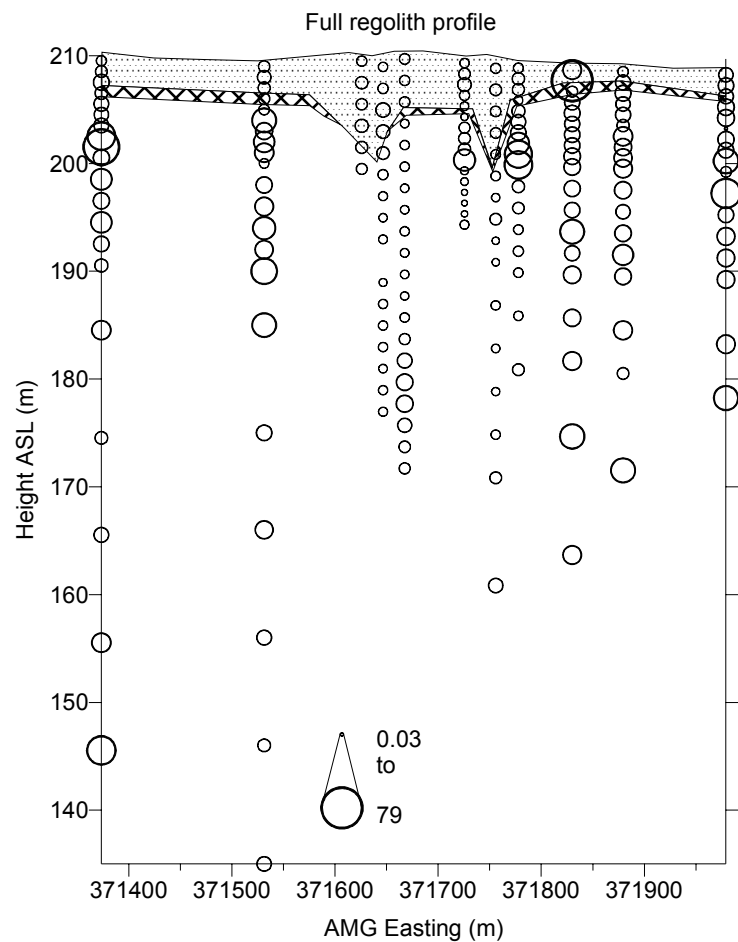


Figure A1d.32: Distribution and concentration of Pb at South Hilga regolith section on 6660300N.

Pb (ppm)

South Hilga

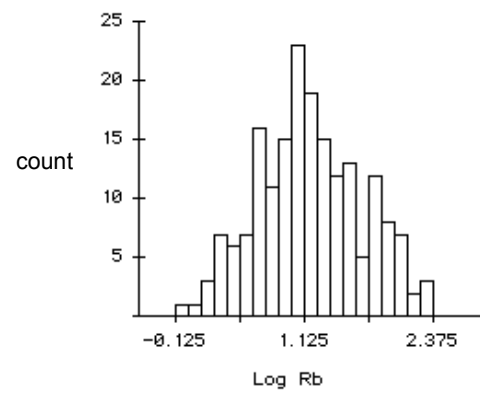
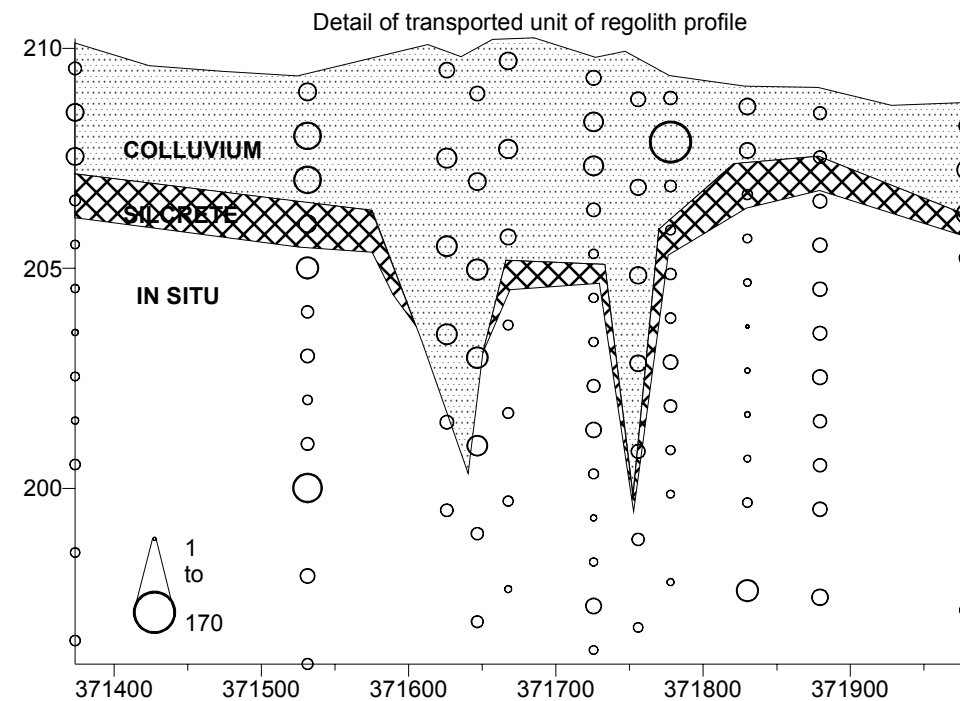
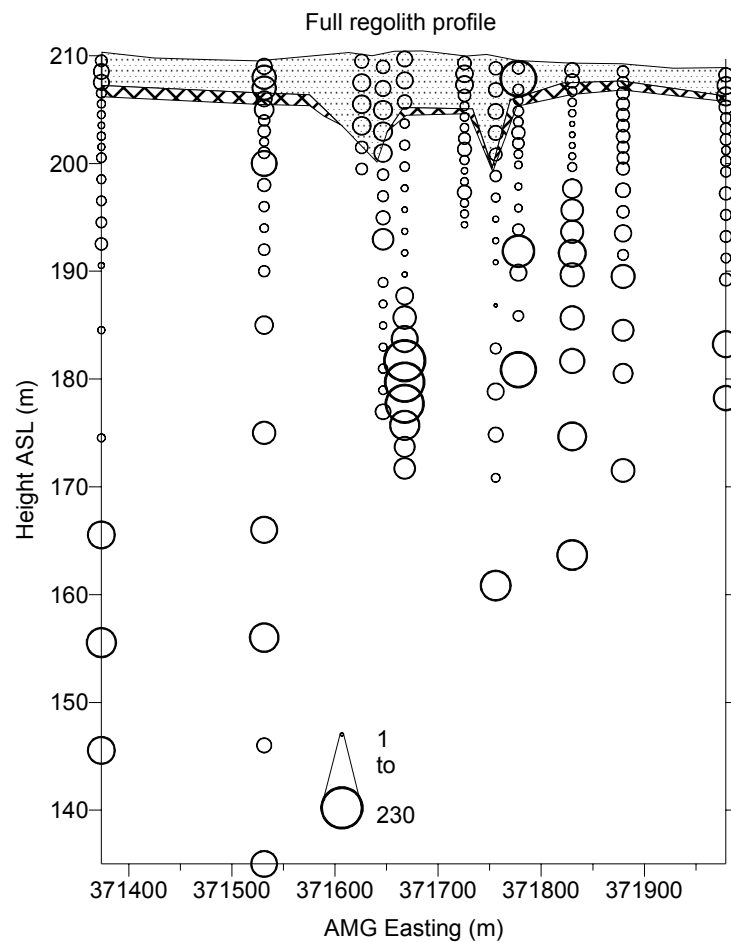


	Silcrete	Colluvium	In situ
Mean	5	7	9
Std Error	1	2	1
Median	4	4	8
Std Dev	2	13	9
Minimum	2	2	0
Maximum	8	79	59
Count	8	35	143

Figure A1d.33: Distribution and concentration of Pr at South Hilga regolith section on 6660300N.

Pr (ppm)

South Hilga

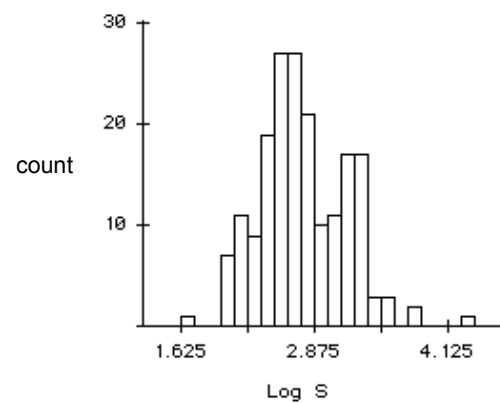
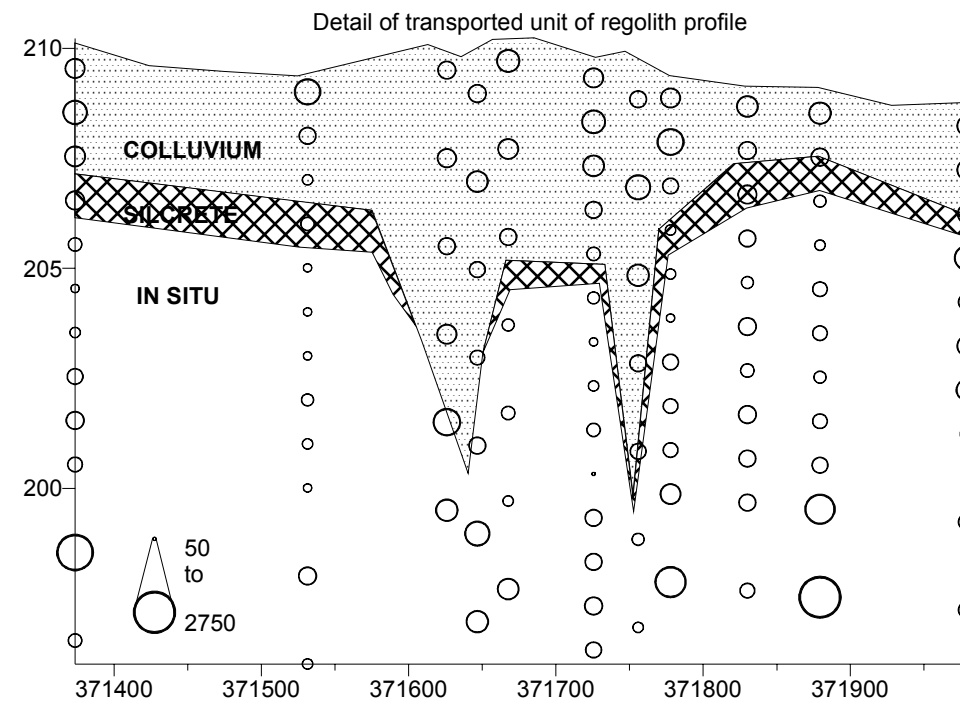
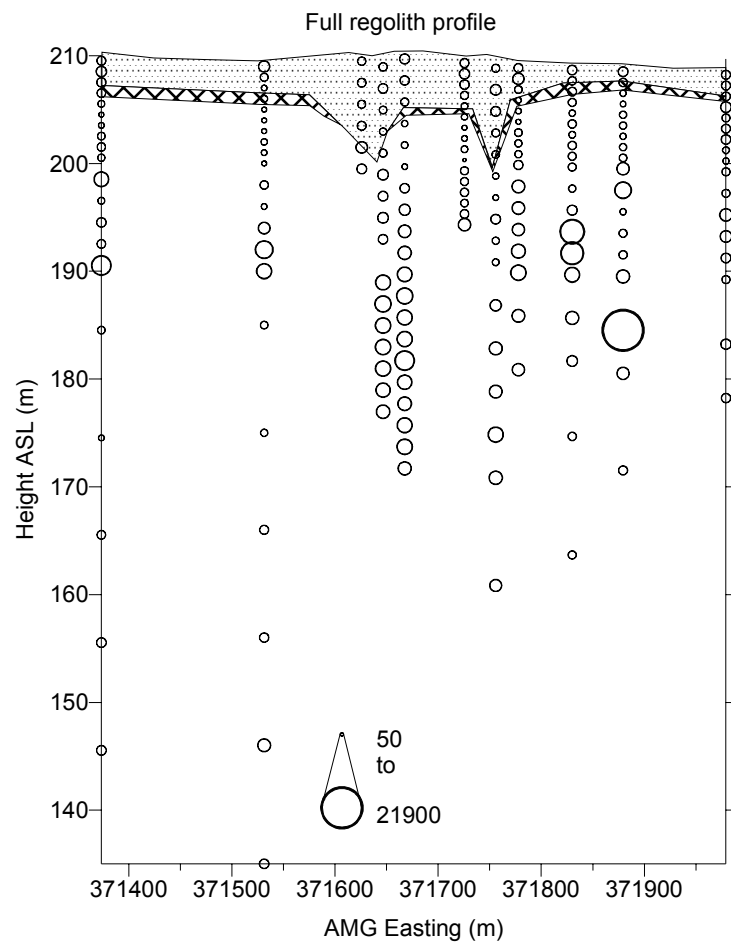


	Silcrete	Colluvium	In situ
Mean	16	30	30
Std Error	4	5	4
Median	13	25	12
Std Dev	11	28	42
Minimum	6	7	1
Maximum	38	170	230
Count	8	35	143

Figure A1d.34: Distribution and concentration of Rb at South Hilga regolith section on 6660300N.

Rb (ppm)

South Hilga

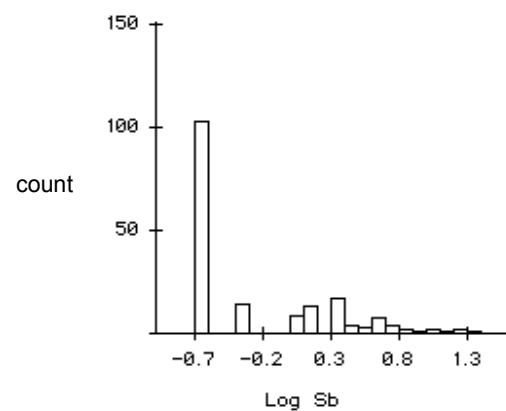
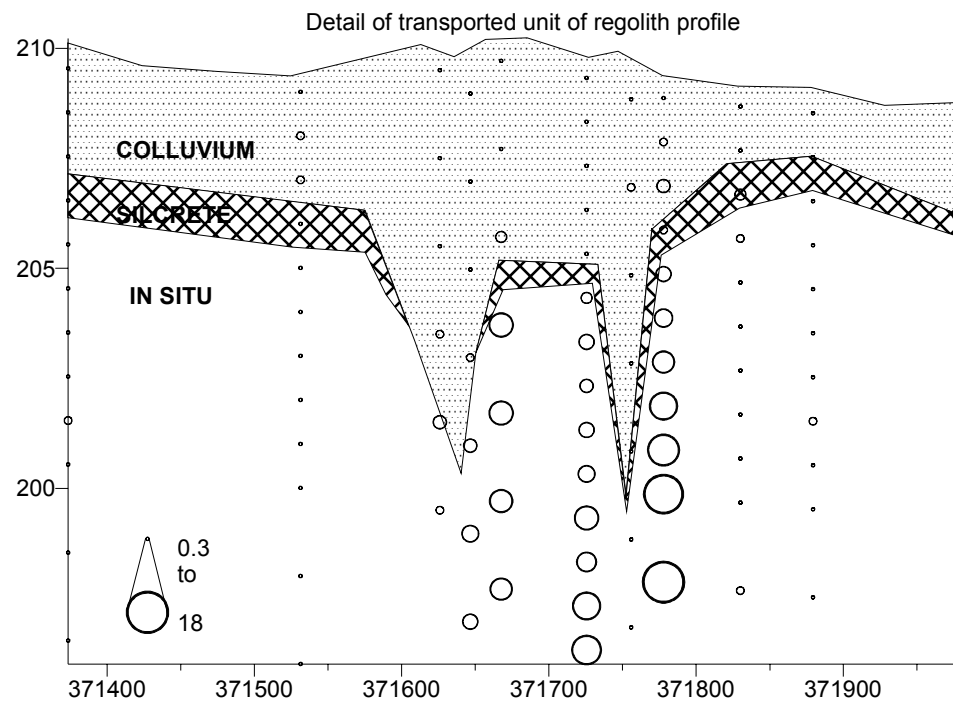
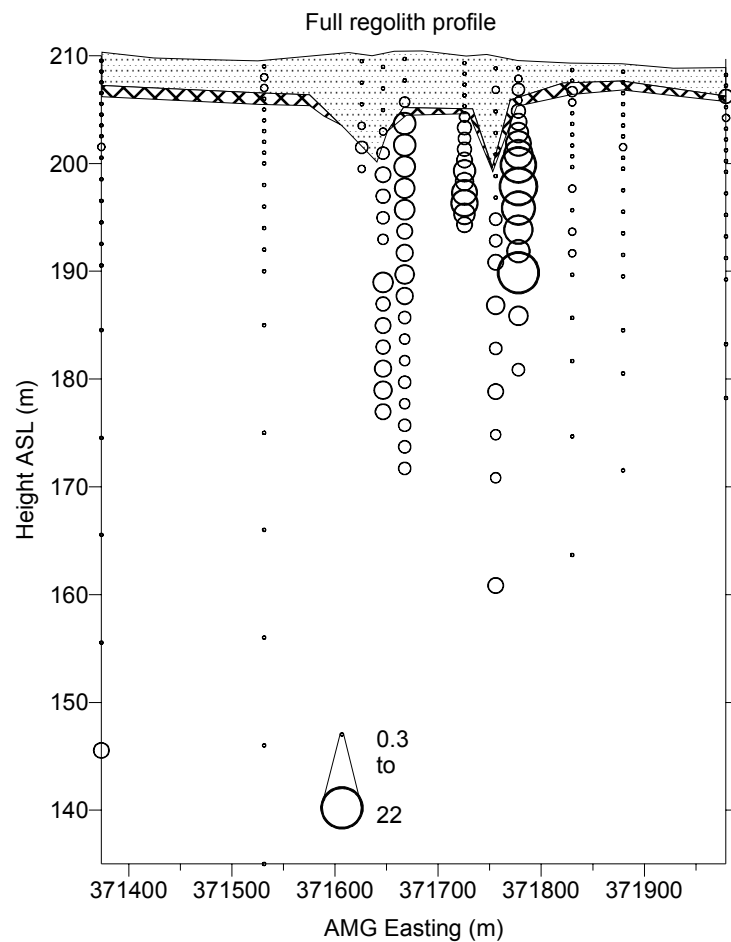


	Silcrete	Colluvium	In situ
Mean	494	546	1122
Std Error	94	36	170
Median	475	550	550
Std Dev	267	211	2035
Minimum	250	150	50
Maximum	1100	1050	21900
Count	8	35	143

Figure A1d.35: Distribution and concentration of S at South Hilga regolith section on 6660300N.

S (ppm)

South Hilga

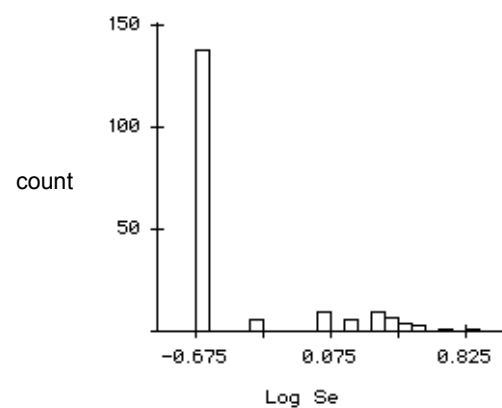
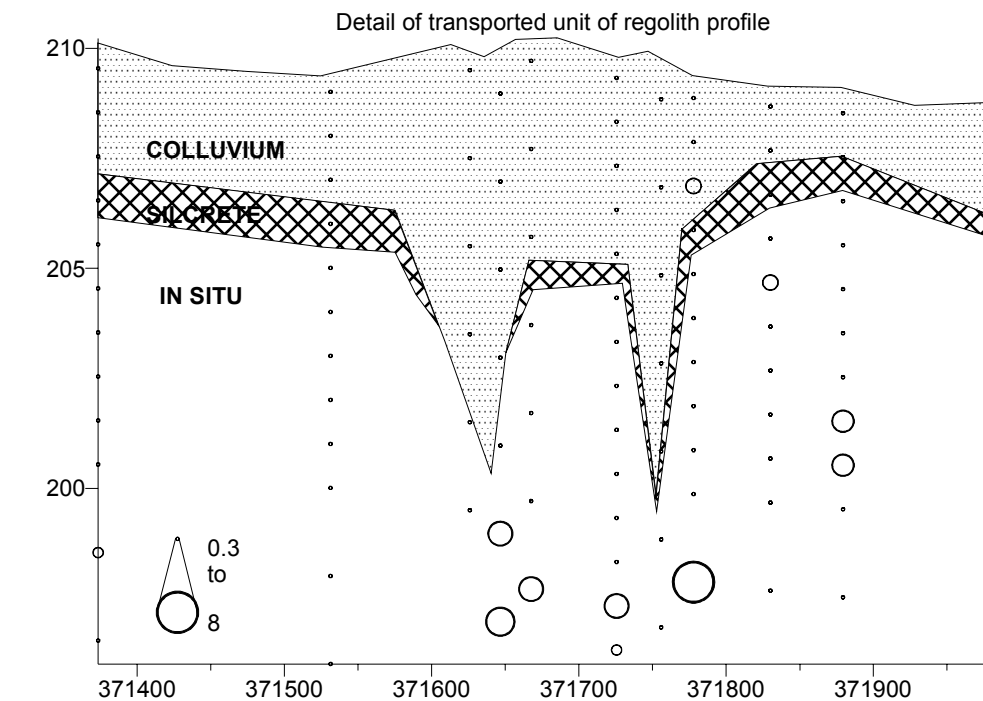
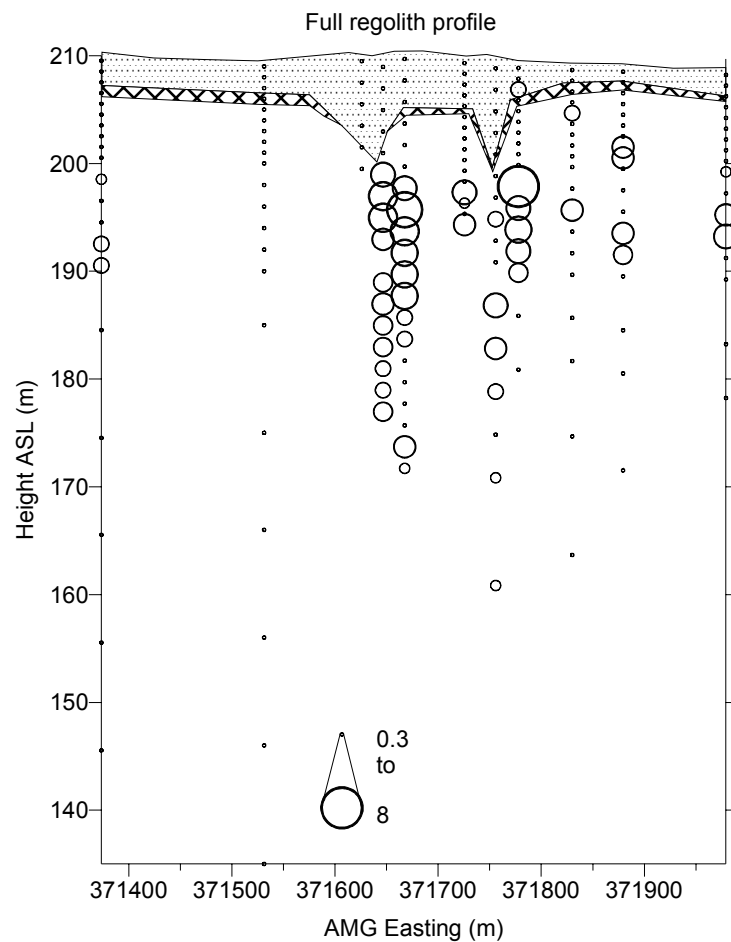


	Silcrete	Colluvium	In situ
Mean	0.8	0.4	1.9
Std Error	0.2	0.1	0.3
Median	0.63	0.3	0.25
Std Dev	0.68	0.3	3.4
Minimum	0.25	0.25	0.25
Maximum	2	1.5	22
Count	8	35	143

Figure A1d.36: Distribution and concentration of Sb at South Hilga regolith section on 6660300N.

Sb (ppm)

South Hilga

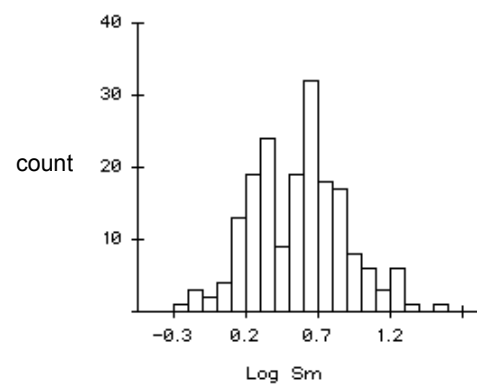
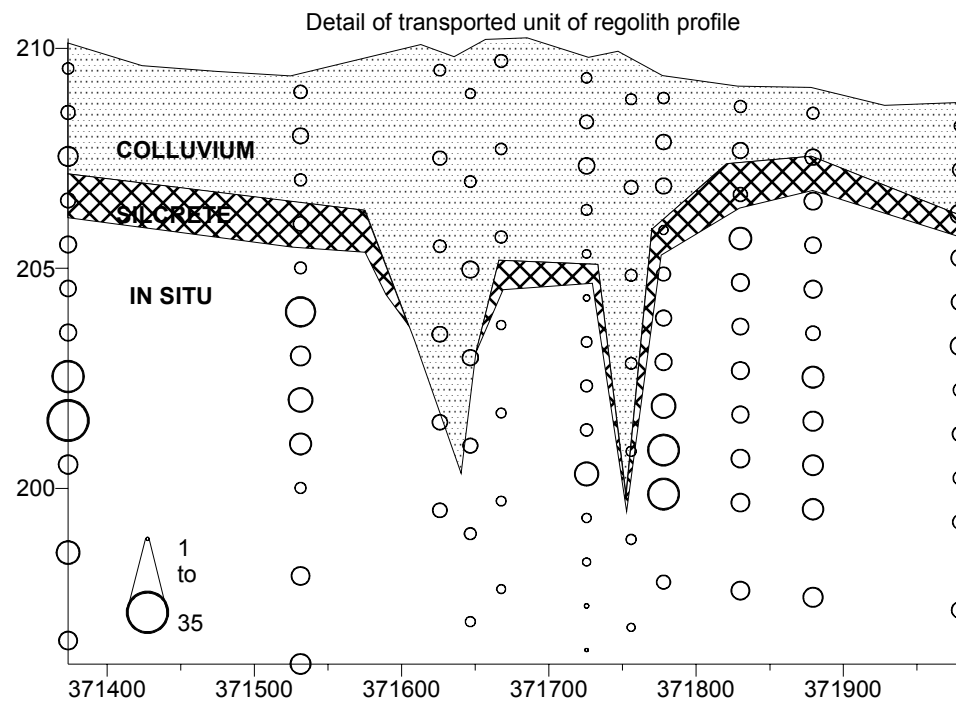
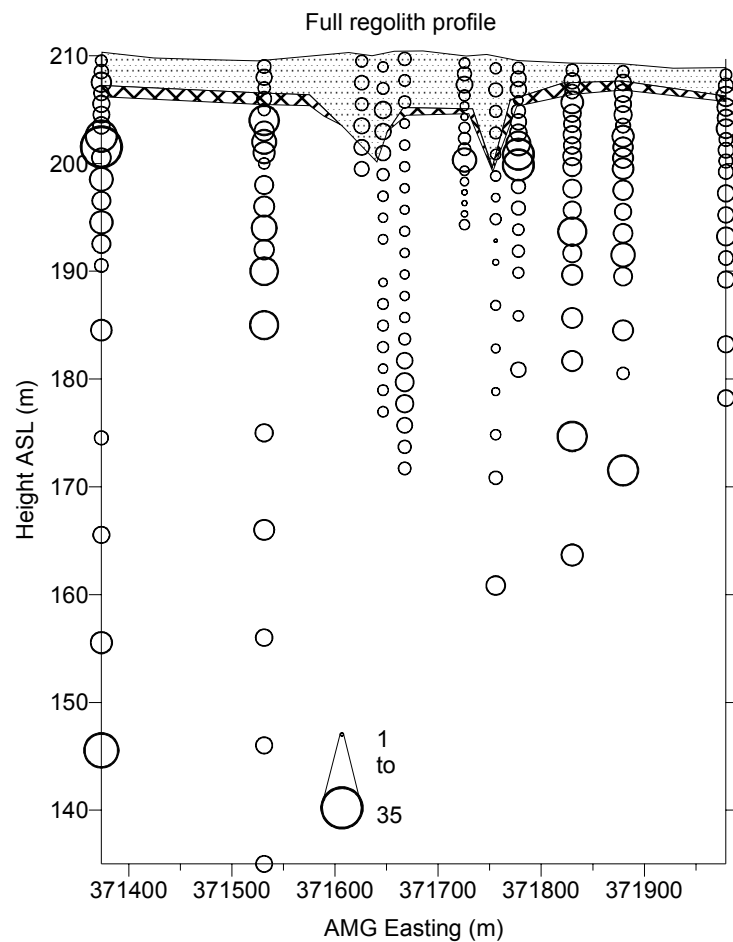


	Silcrete	Colluvium	In situ
Mean	0.3	0.3	0.8
Std Error	0.0	0.0	0.1
Median	0.25	0.3	0.25
Std Dev	0.00	0.1	1.1
Minimum	0.25	0.25	0.25
Maximum	0.25	1	7.5
Count	8	35	143

Figure A1d.37: Distribution and concentration of Se at South Hilga regolith section on 6660300N.

Se (ppm)

South Hilga

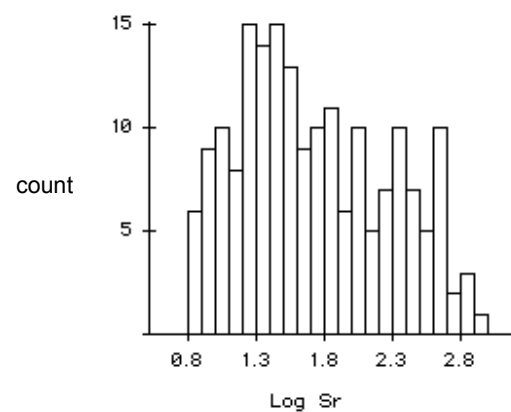
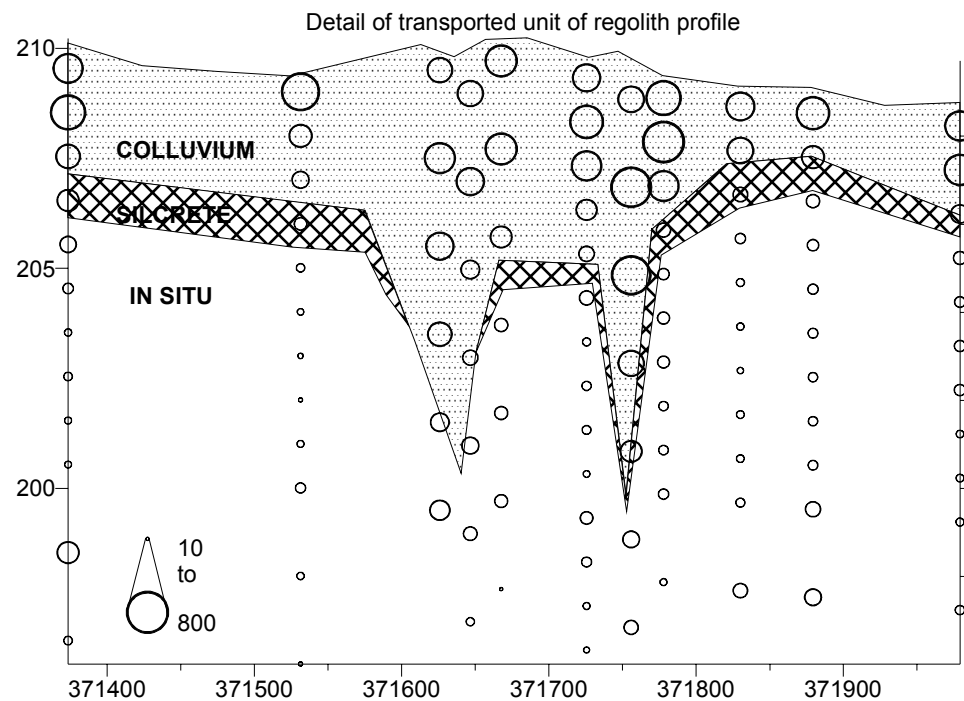
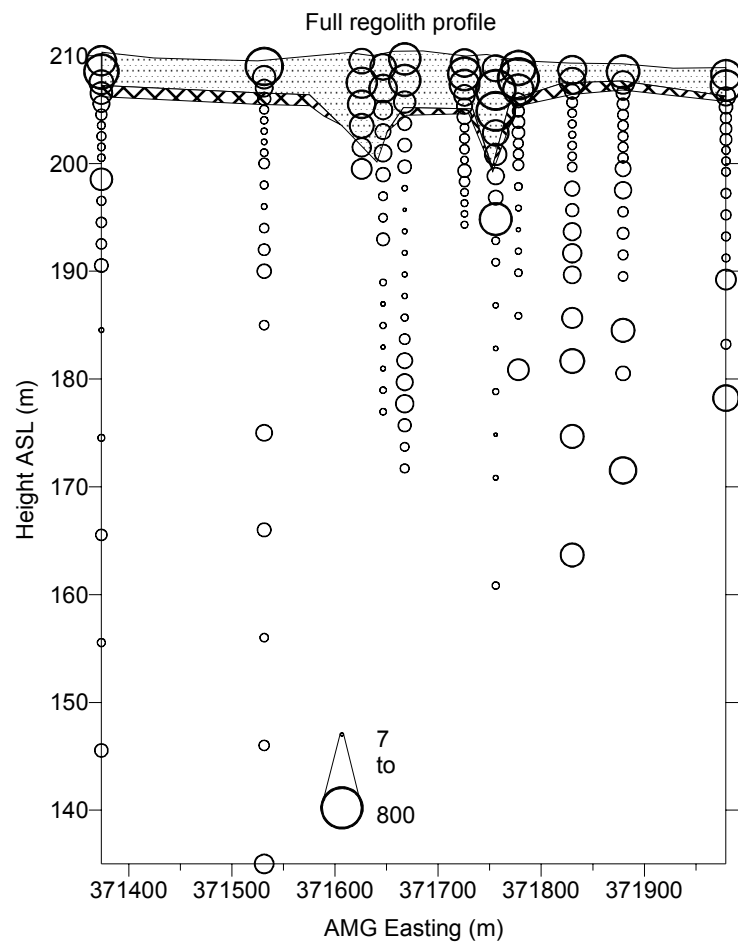


	Silcrete	Colluvium	In situ
Mean	3.8	3.1	5.5
Std Error	0.6	0.2	0.4
Median	3.7	2.7	4.7
Std Dev	1.6	1	5.0
Minimum	1.3	1.45	0.6
Maximum	7	7	34.5
Count	8	35	143

Figure A1d.38: Distribution and concentration of Sm at South Hilga regolith section on 6660300N.

Sm (ppm)

South Hilga

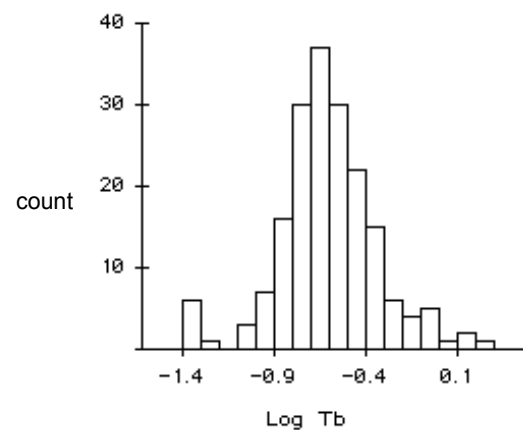
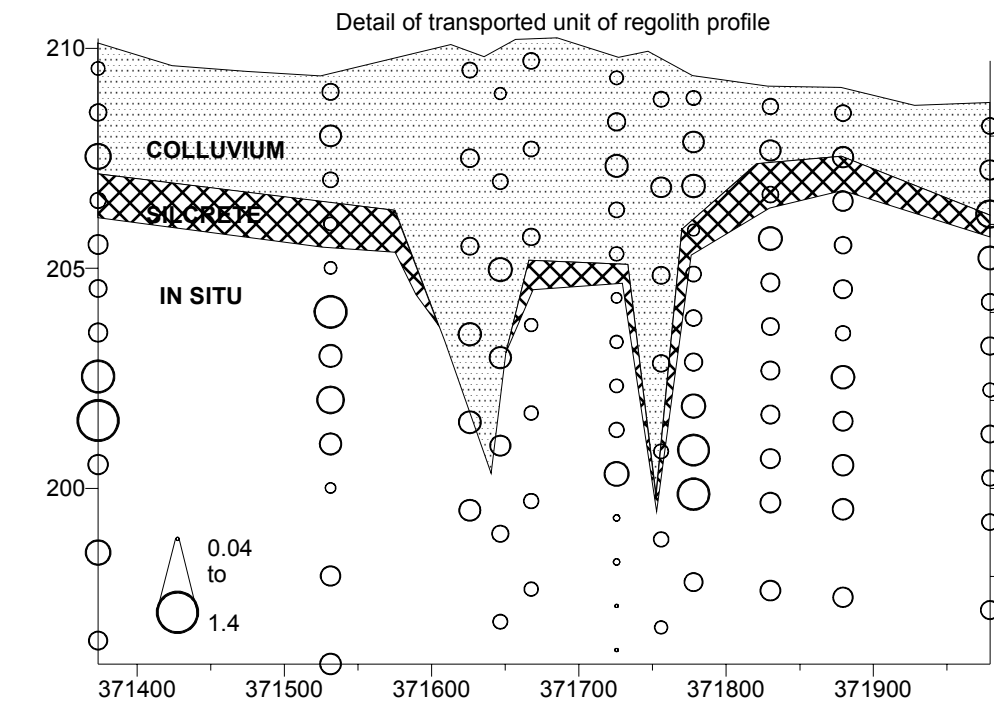
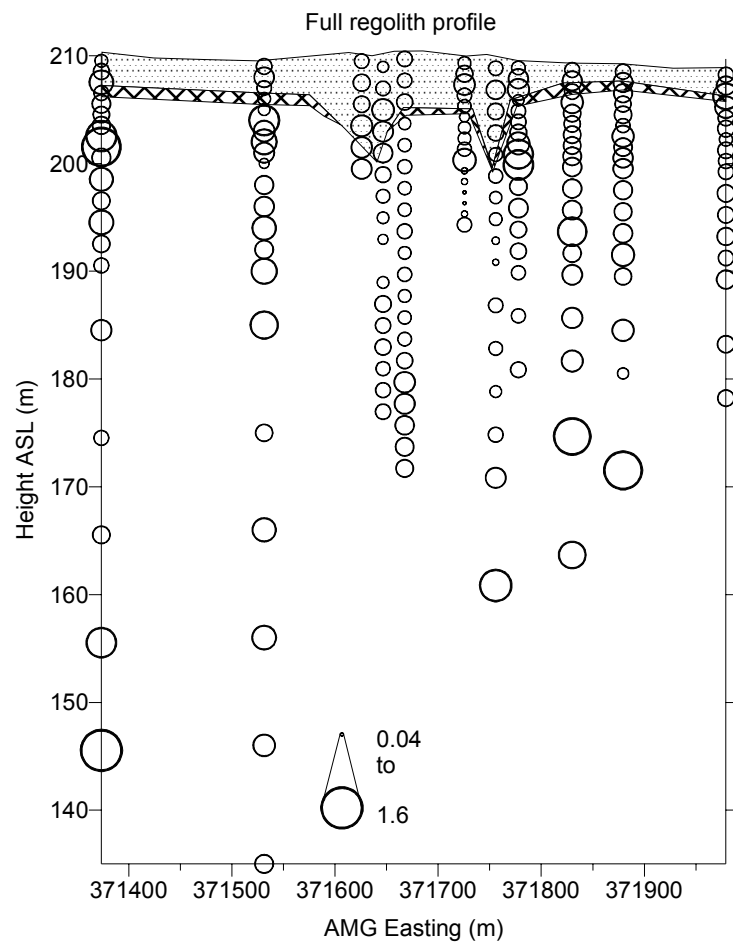


	Silcrete	Colluvium	In situ
Mean	141	366	54
Std Error	21	31	6
Median	140	340	31
Std Dev	60	183	68
Minimum	59	77	7
Maximum	220	800	470
Count	8	35	143

Figure A1d.39: Distribution and concentration of Sr at South Hilga regolith section on 6660300N.

Sr (ppm)

South Hilga

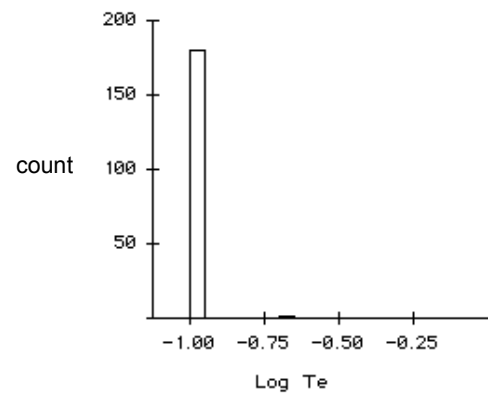
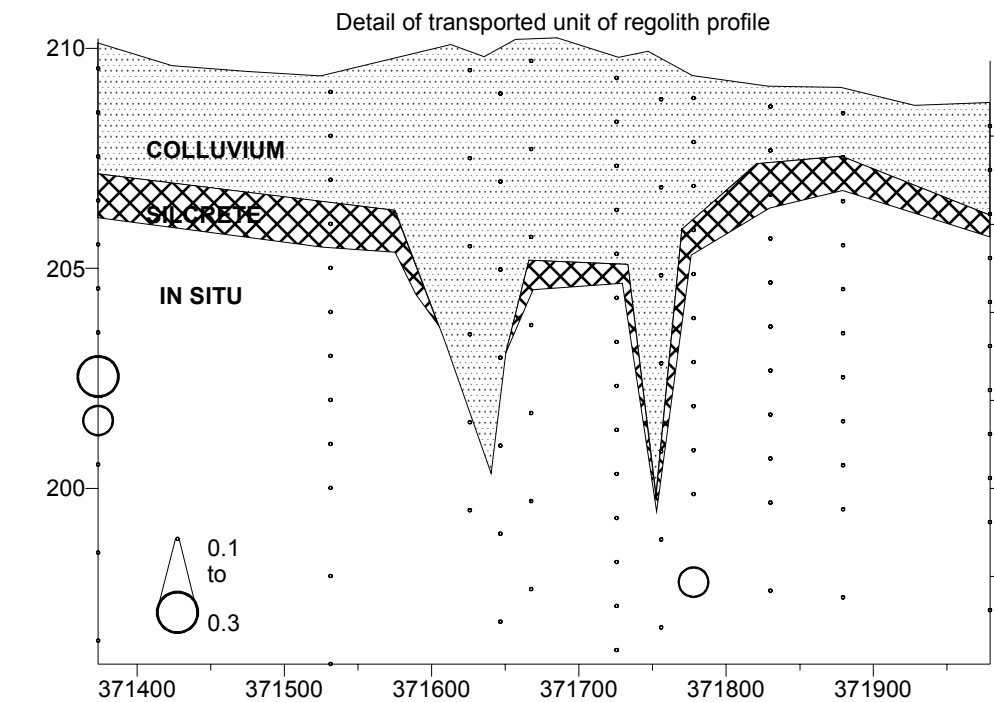
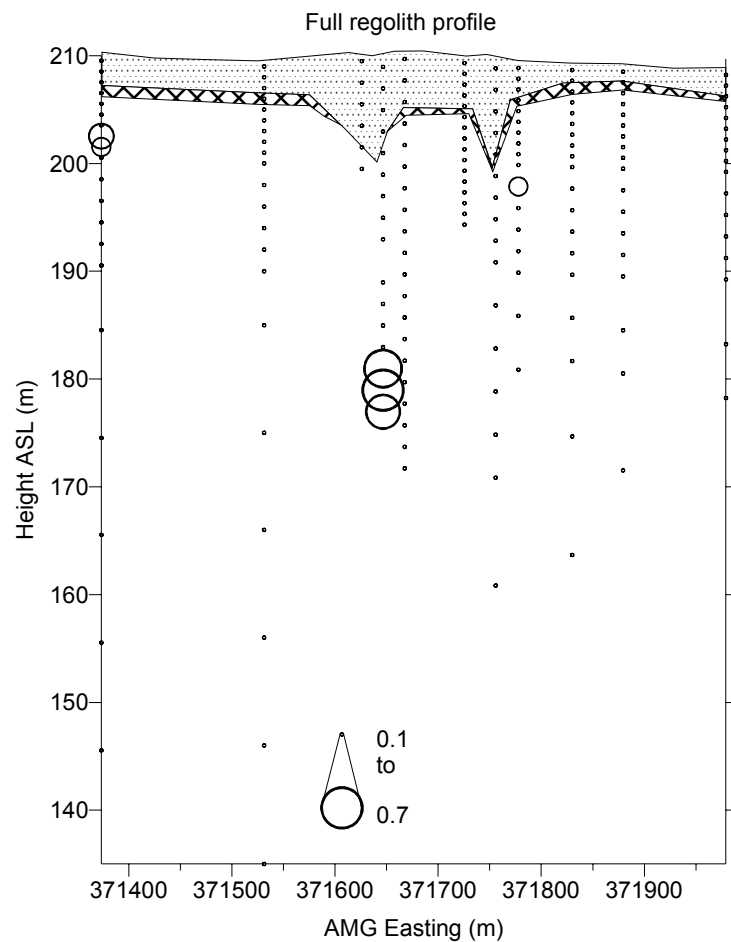


	Silcrete	Colluvium	In situ
Mean	0.3	0.2	0.3
Std Error	0.05	0.02	0.02
Median	0.21	0.2	0.25
Std Dev	0.16	0.1	0.3
Minimum	0.14	0.11	0.04
Maximum	0.6	0.5	1.6
Count	8	35	143

Figure A1d.40: Distribution and concentration of Tb at South Hilga regolith section on 6660300N.

Tb (ppm)

South Hilga

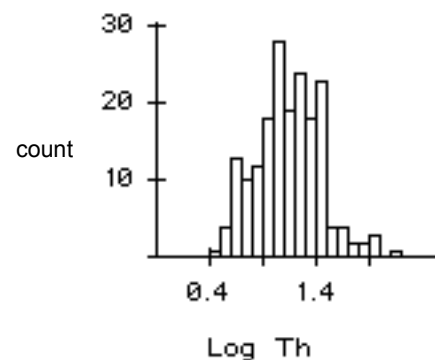
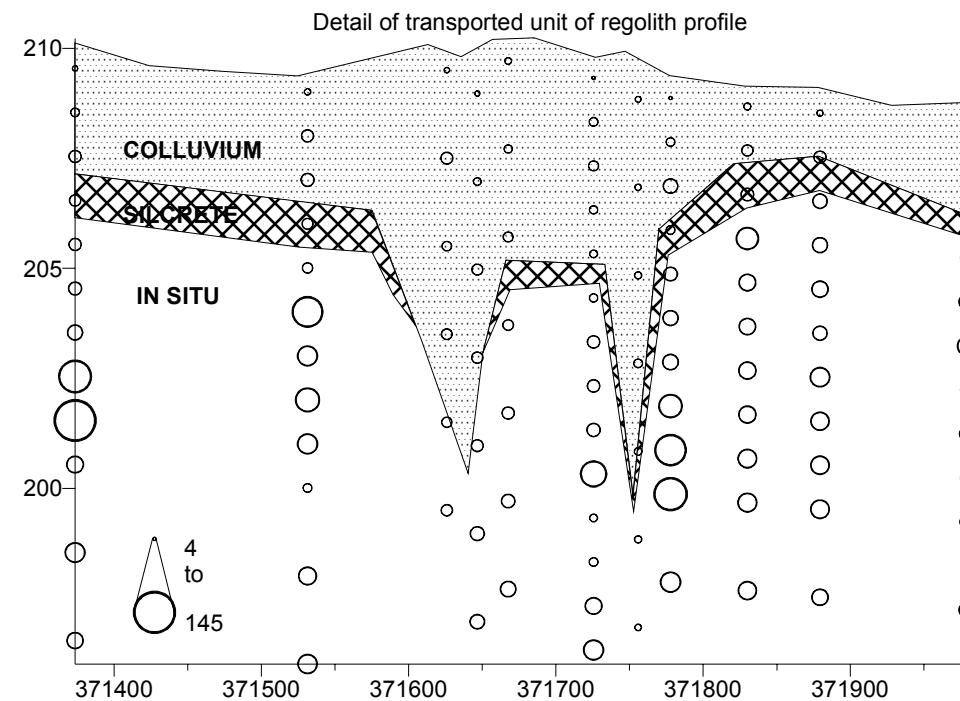
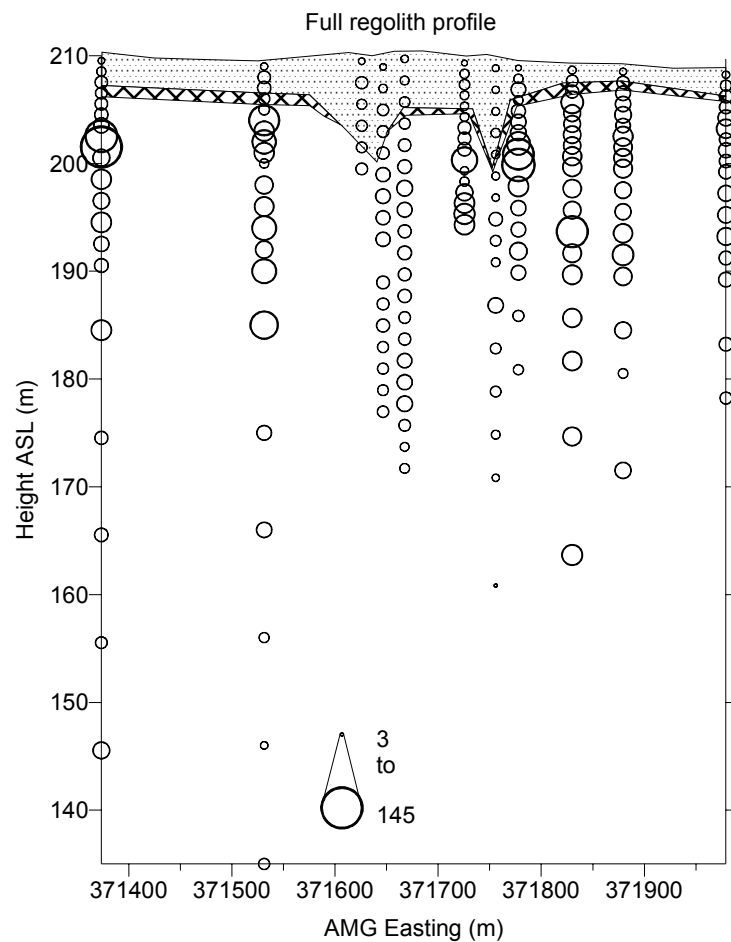


	Silcrete	Colluvium	In situ
Mean	0.1	0.1	0.1
Std Error	0.0	0.0	0.0
Median	0.1	0.1	0.1
Std Dev	0.00	0.0	0.1
Minimum	0.1	0.1	0.1
Maximum	0.1	0.1	0.7
Count	8	35	143

Figure A1d.41: Distribution and concentration of Te at South Hilga regolith section on 6660300N.

Te (ppm)

South Hilga

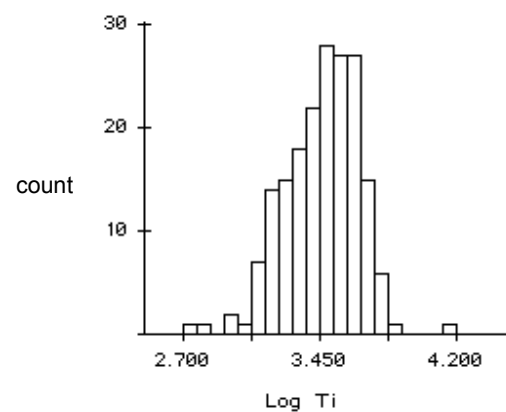
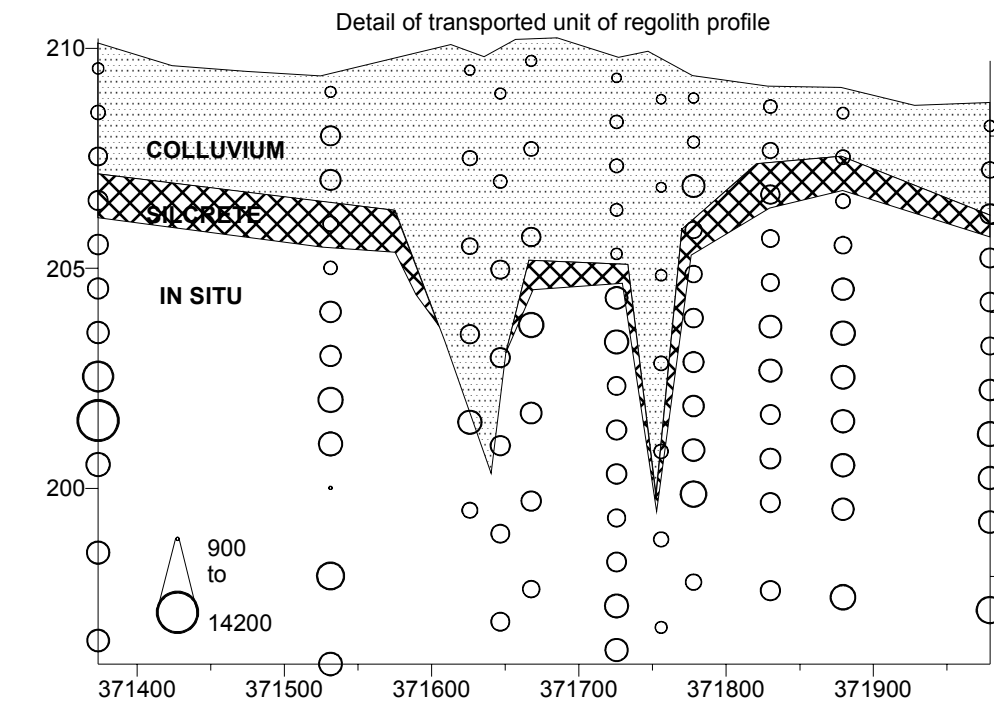
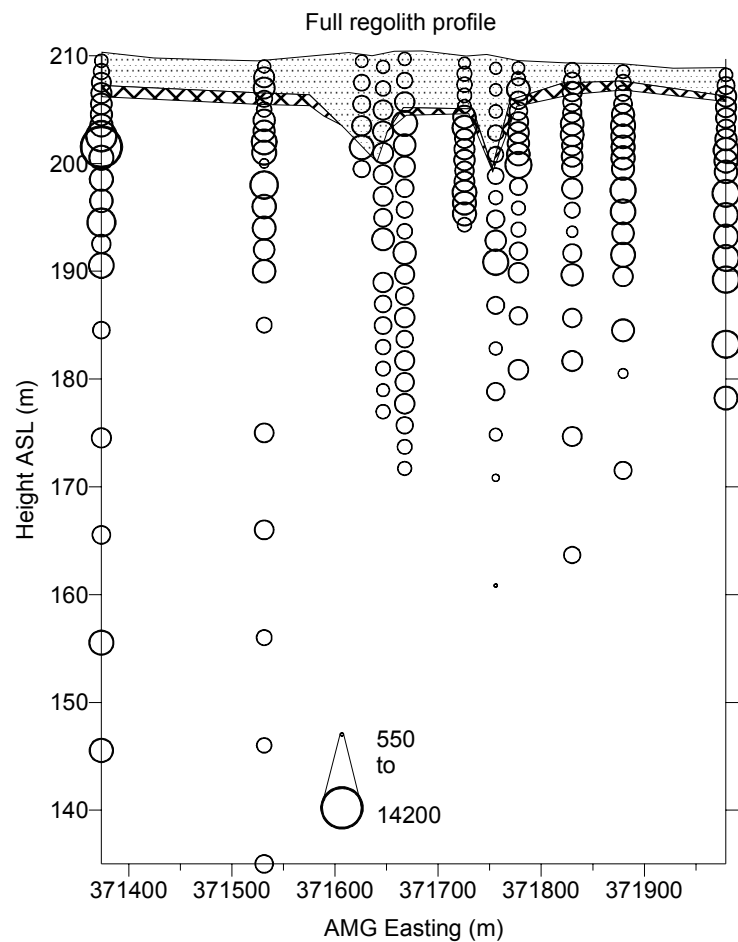


	Silcrete	Colluvium	In situ
Mean	9.8	7.1	21.6
Std Error	0.9	0.5	1.6
Median	9.75	6.5	17
Std Dev	2.42	3	18.7
Minimum	5.5	3.5	2.8
Maximum	12.5	16	145
Count	8	35	143

Figure A1d.42: Distribution and concentration of Th at South Hilga regolith section on 6660300N.

Th (ppm)

South Hilga

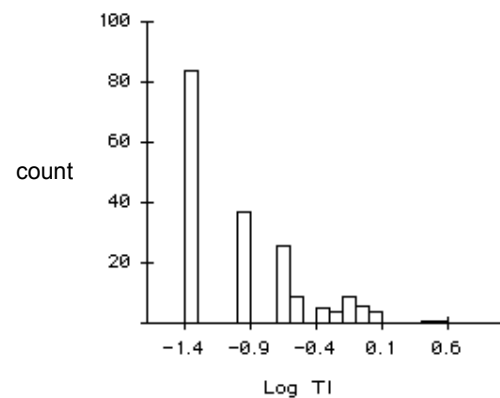
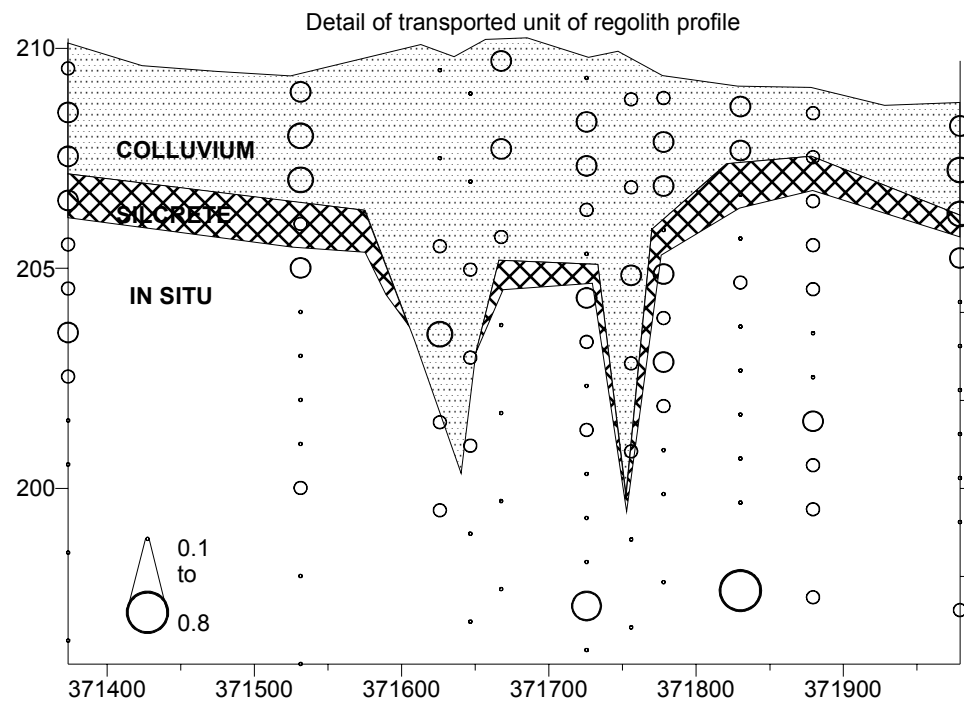
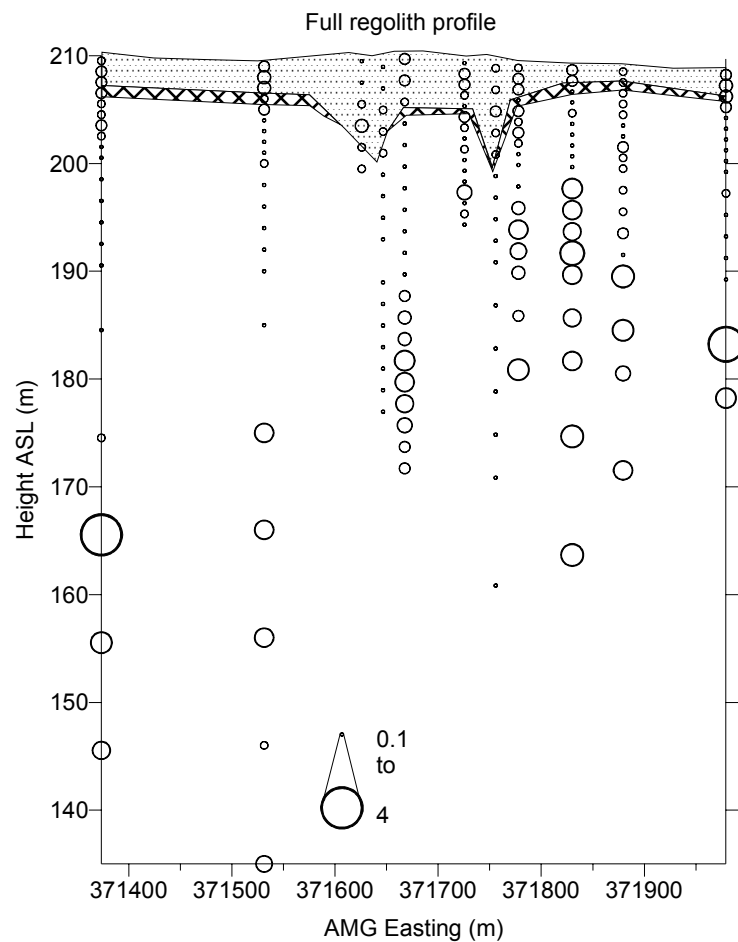


	Silcrete	Colluvium	In situ
Mean	2956	2141	3451
Std Error	360	135	131
Median	3150	1900	3250
Std Dev	1018	801	1572
Minimum	1500	1250	550
Maximum	4750	4300	14200
Count	8	35	143

Figure A1d.43: Distribution and concentration of Ti at South Hilga regolith section on 6660300N.

Ti (ppm)

South Hilga

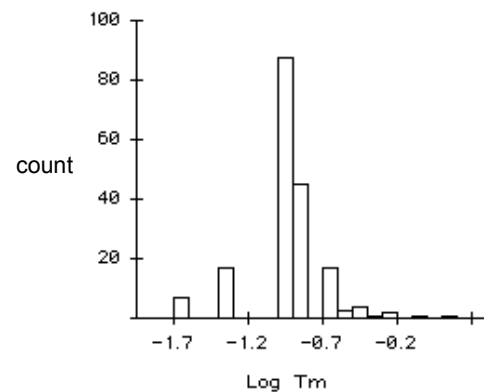
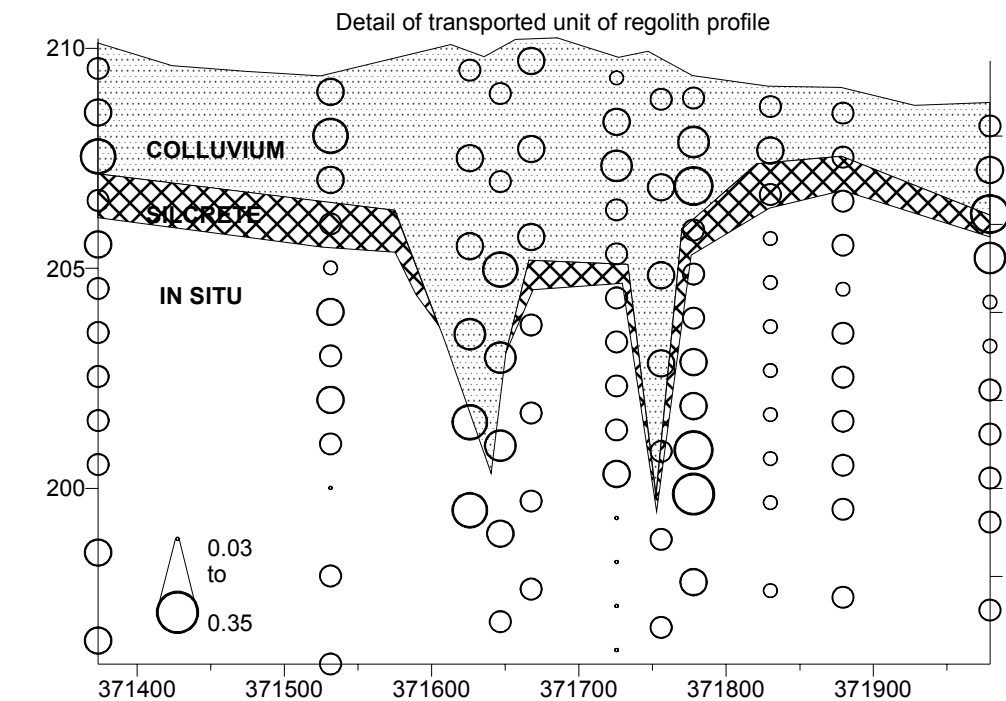
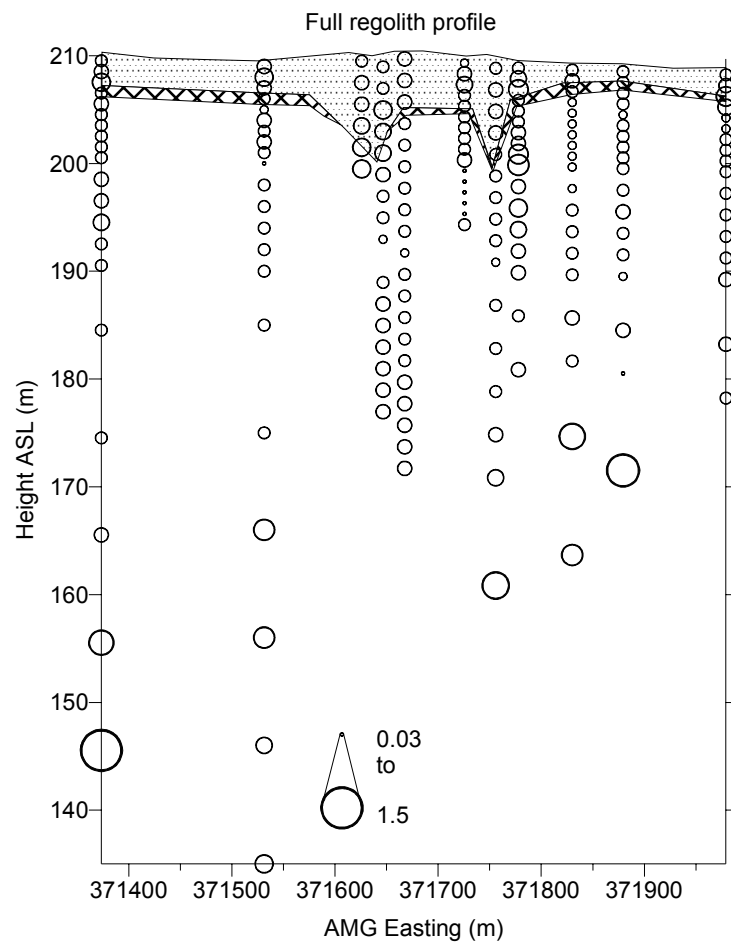


	Silcrete	Colluvium	In situ
Mean	0.1	0.2	0.3
Std Error	0.0	0.0	0.0
Median	0.1	0.1	0.05
Std Dev	0.08	0.1	0.5
Minimum	0.05	0.05	0.05
Maximum	0.3	0.3	3.8
Count	8	35	143

Figure A1d.44: Distribution and concentration of TI at South Hilga regolith section on 6660300N.

TI (ppm)

South Hilga

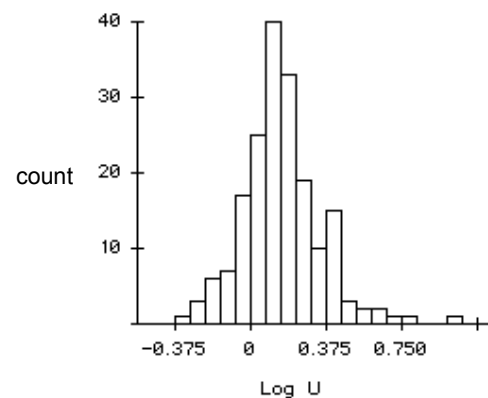
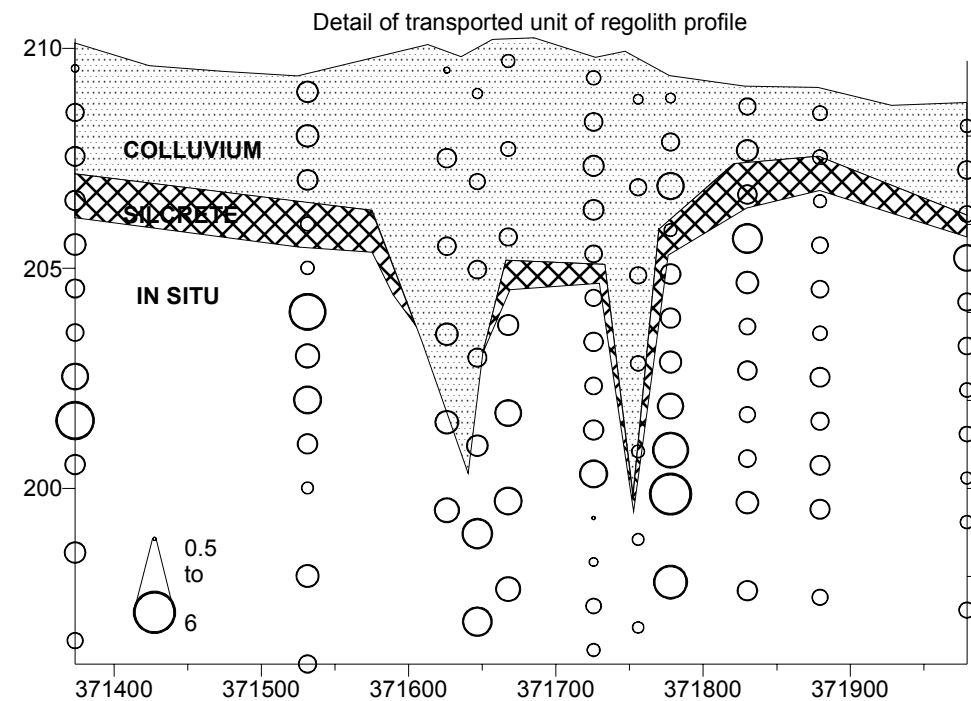
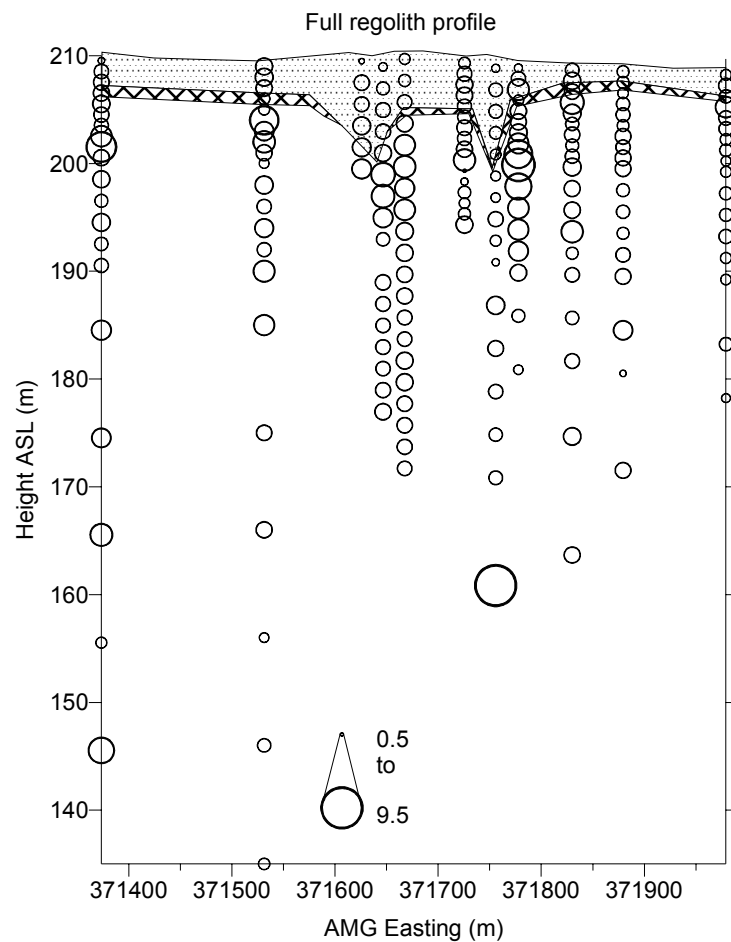


	Silcrete	Colluvium	In situ
Mean	0.2	0.2	0.1
Std Error	0.0	0.0	0.0
Median	0.1	0.2	0.1
Std Dev	0.08	0.1	0.2
Minimum	0.1	0.05	0.025
Maximum	0.3	0.3	1.5
Count	8	35	143

Figure A1d.45: Distribution and concentration of Tm at South Hilga regolith section on 6660300N.

Tm (ppm)

South Hilga



	Silcrete	Colluvium	In situ
Mean	1.3	1.3	1.7
Std Error	0.1	0.1	0.1
Median	1.3	1.3	1.5
Std Dev	0.3	0.4	1.1
Minimum	0.9	0.5	0.5
Maximum	2	2.6	9.5
Count	8	35	143

Figure A1d.46: Distribution and concentration of U at South Hilga regolith section on 6660300N.

U (ppm)

South Hilga

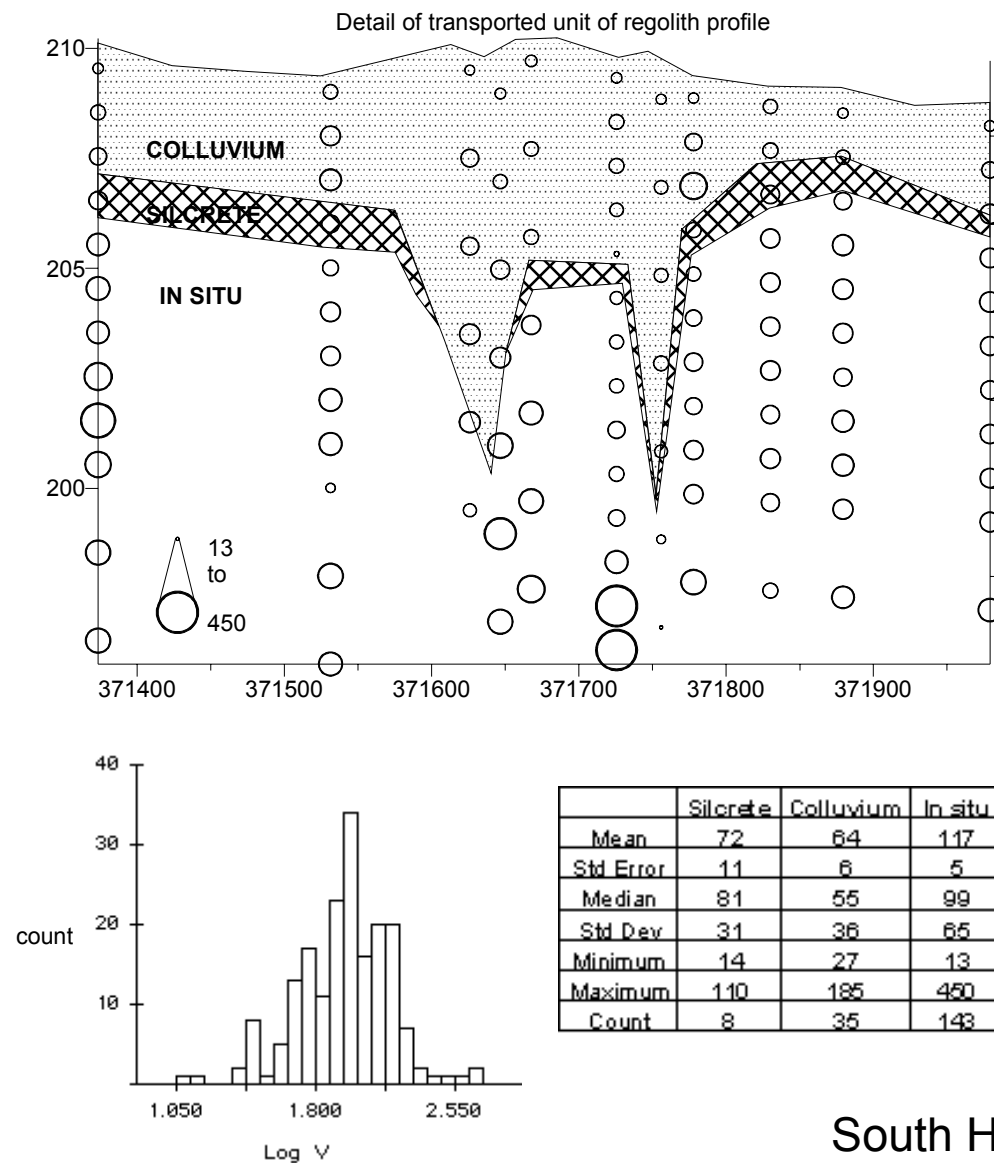
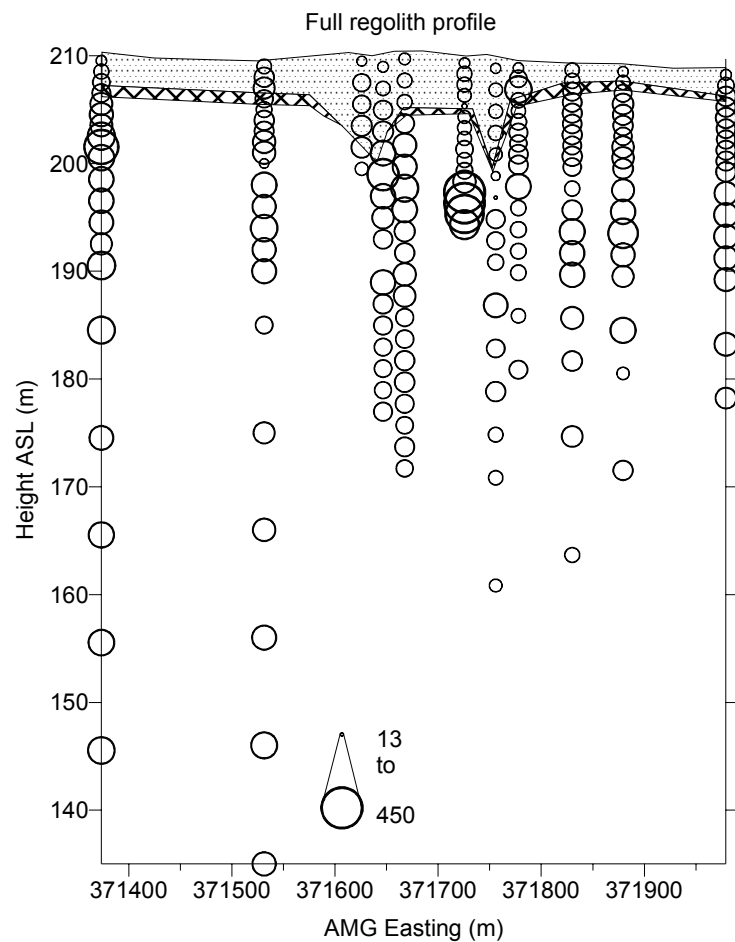
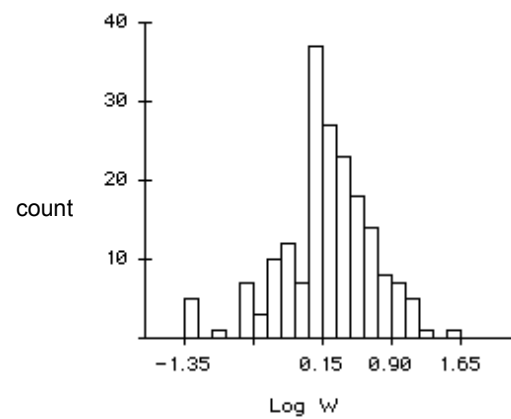
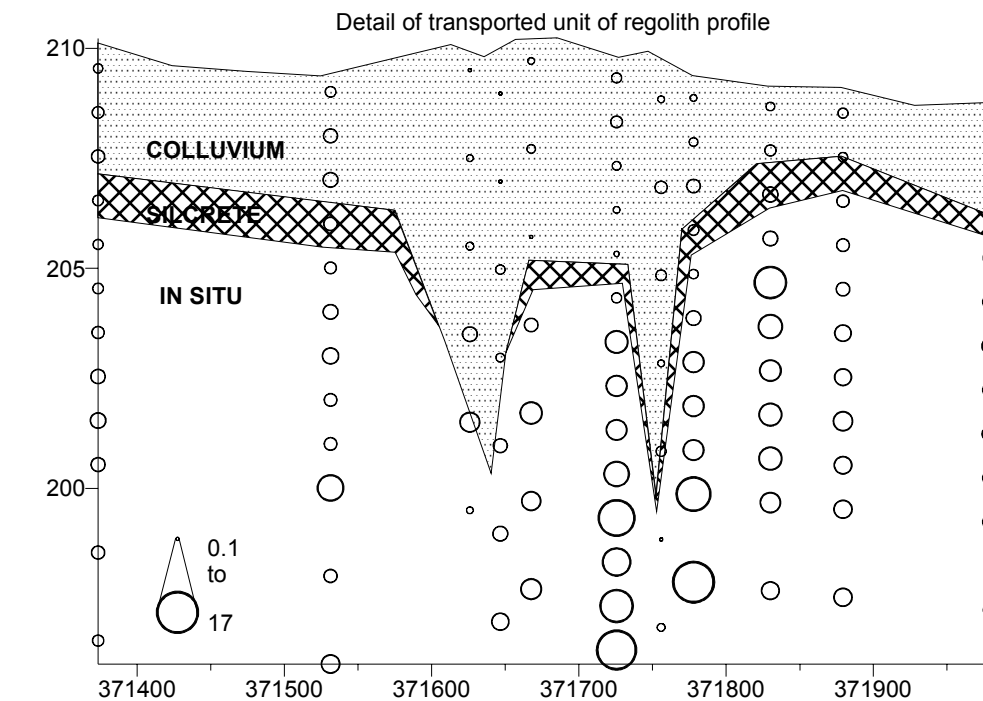
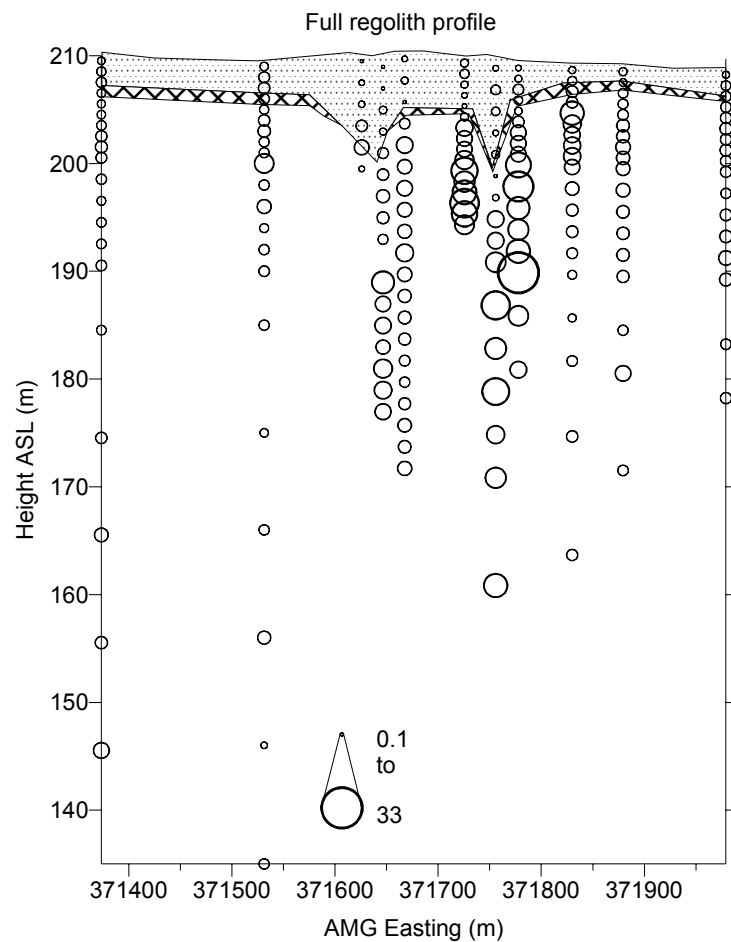


Figure A1d.47: Distribution and concentration of V at South Hilga regolith section on 6660300N.

V (ppm)

South Hilga

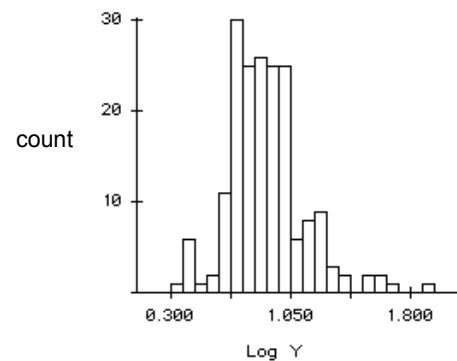
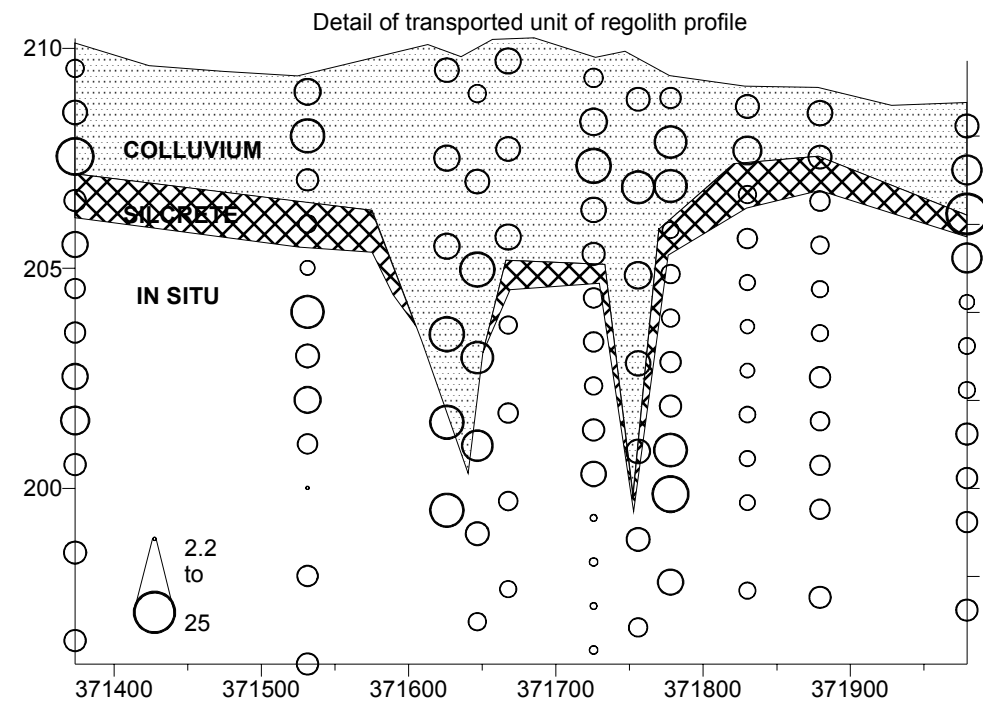
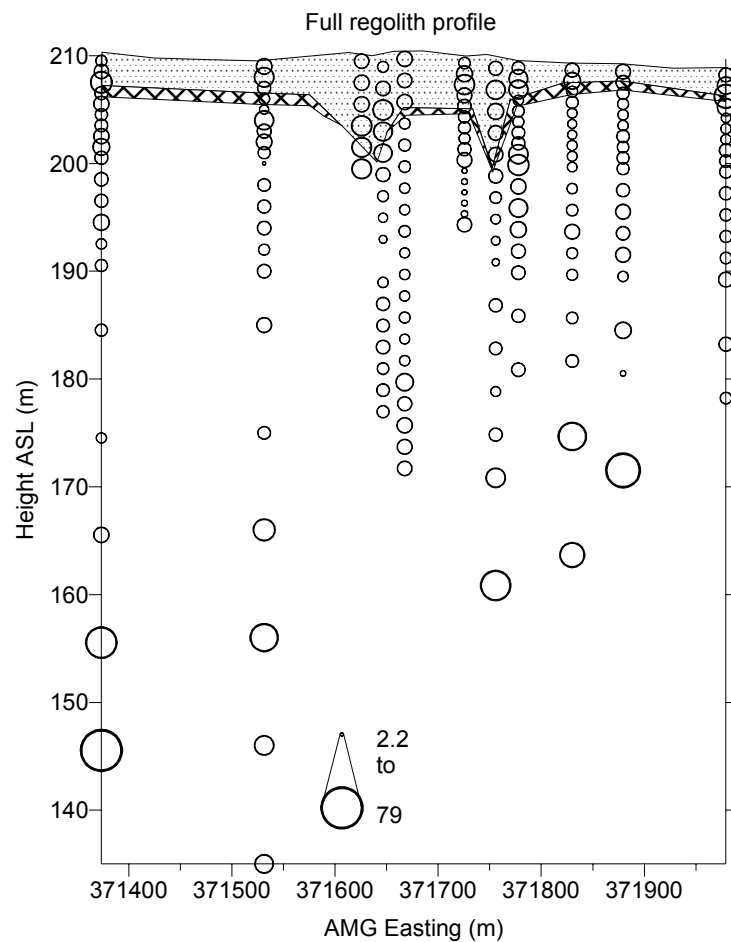


	Silcrete	Colluvium	In situ
Mean	1.1	0.6	3.5
Std Error	0.4	0.1	0.3
Median	1.0	0.5	2.1
Std Dev	1.03	0.5	4
Minimum	0.05	0.05	0.05
Maximum	3.2	1.6	32.5
Count	8	35	143

Figure A1d.48: Distribution and concentration of W at South Hilga regolith section on 6660300N.

W (ppm)

South Hilga

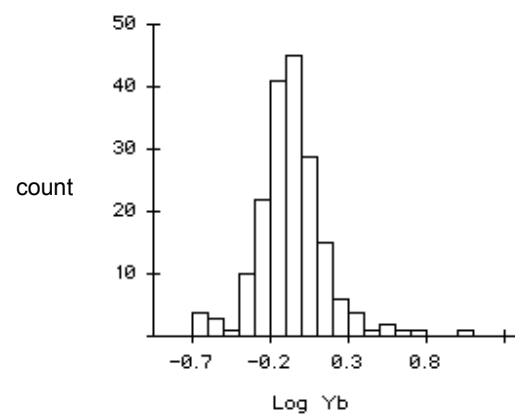
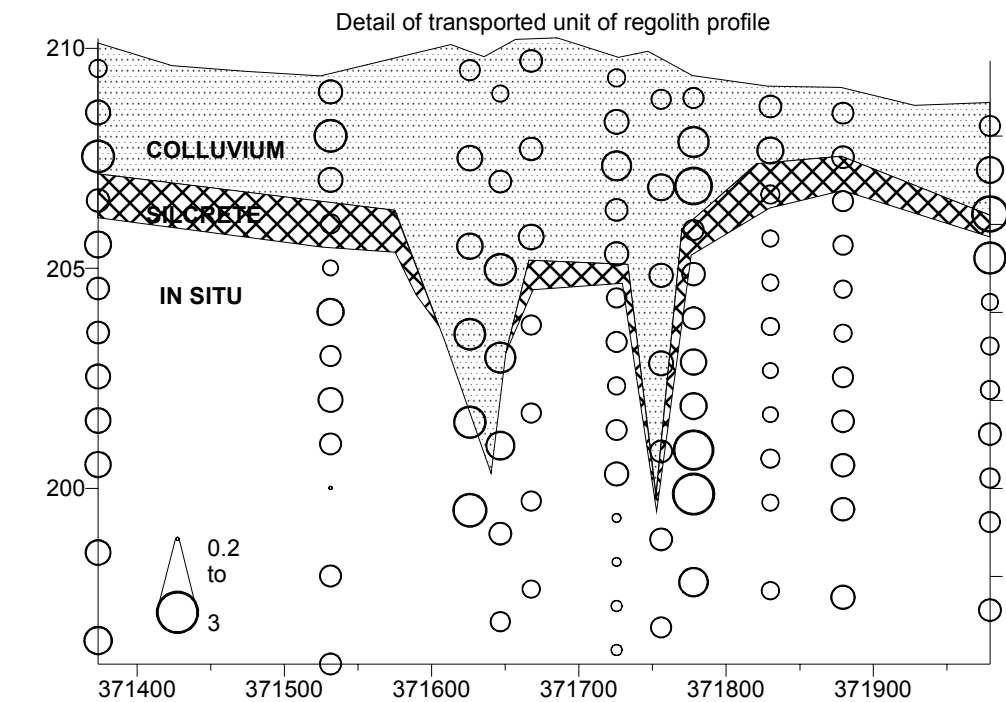
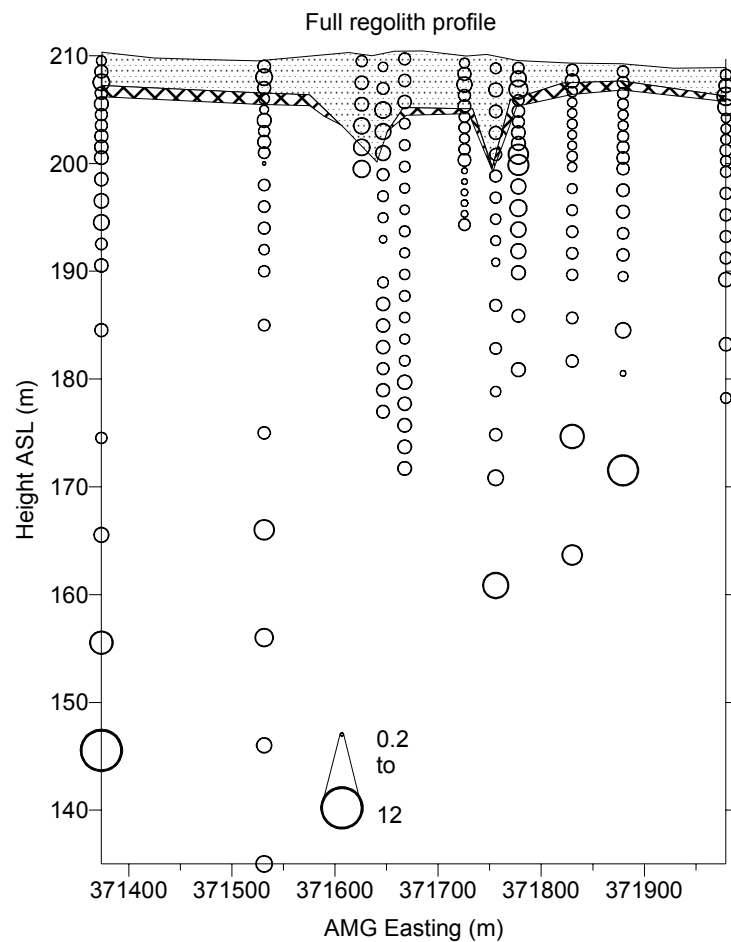


	Silcrete	Colluvium	In situ
Mean	11	11	9
Std Error	2	1	1
Median	8	10	7
Std Dev	7	4	9
Minimum	6	5	2
Maximum	25	20	79
Count	8	35	143

Figure A1d.49: Distribution and concentration of Y at South Hilga regolith section on 6660300N.

Y (ppm)

South Hilga

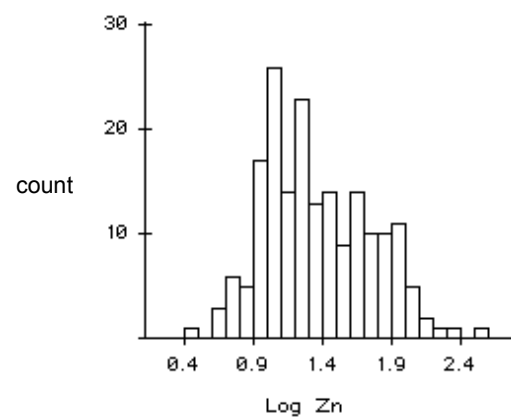
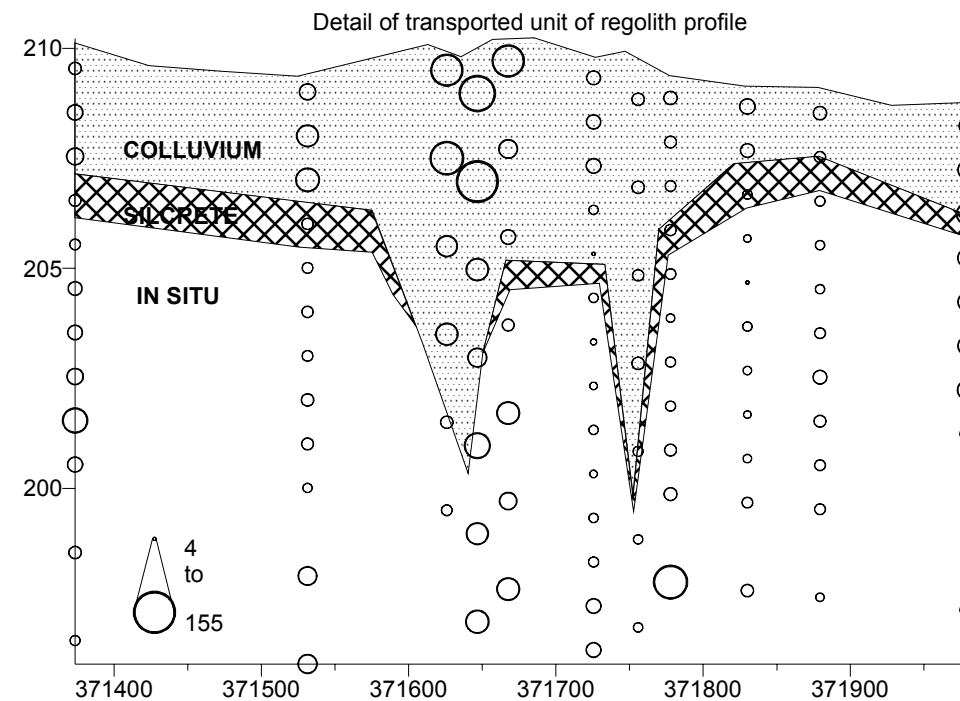
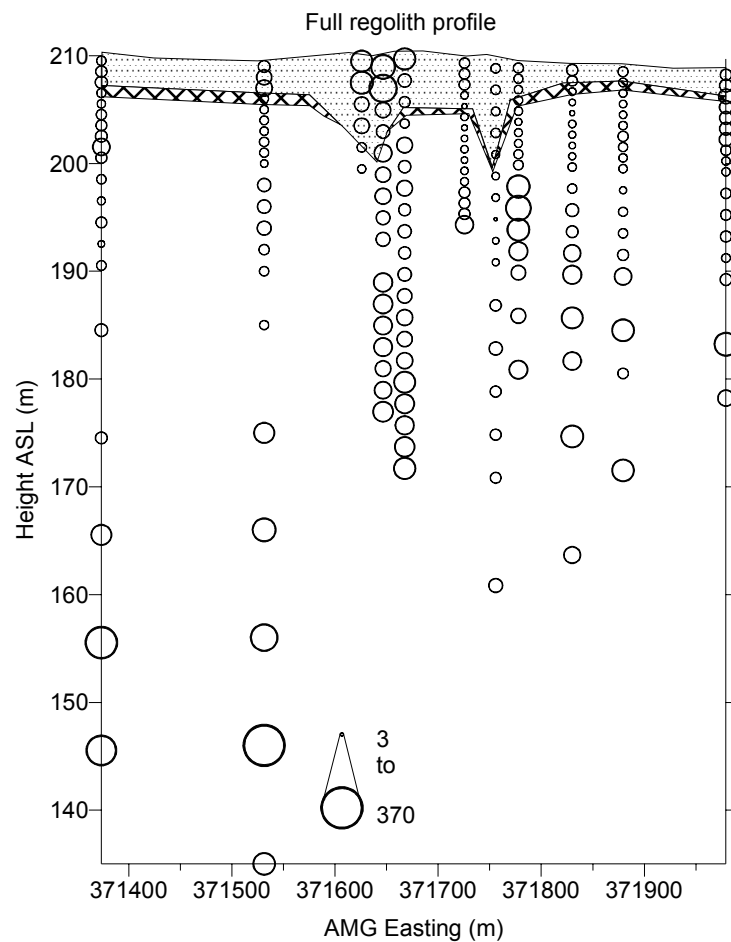


	Silcrete	Colluvium	In situ
Mean	1.0	1.0	1.0
Std Error	0.2	0.1	0.1
Median	0.9	1.0	0.8
Std Dev	0.5	0.4	1.1
Minimum	0.6	0.5	0.2
Maximum	2	2	12
Count	8	35	143

Figure A1d.50: Distribution and concentration of Yb at South Hilga regolith section on 6660300N.

Yb (ppm)

South Hilga



	Silcrete	Colluvium	In situ
Mean	14	35	37
Std Error	4	6	4
Median	12	20	19
Std Dev	10	34	45
Minimum	4	8	3
Maximum	37	155	370
Count	8	35	143

Figure A1d.51: Distribution and concentration of Zn at South Hilga regolith section on 6660300N.

Zn (ppm)

South Hilga

APPENDIX 2

Regolith Study Logs.

In-Field Descriptions of pre-existing RAB drilling samples.

Appendix 2.1: Regolith logging of reconnaissance line at E.T.

Hole: 96 ETAR 178 Pilot Regolith Line, E.T. Prospect. <u>In-Field Descriptions</u> Location: 340215.4 E, 6637341 N, AHD: 192.168 m. Site: Vegetation : Low Open <i>Acacia aneura</i> Woodland over <i>Acacia aneura</i> Shrubland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 3	Reddish dune siliceous sand
3 – 4	Reddish dune siliceous sand with calcrete
4 – 5	Silcrete with calcrete down hole contamination
5 – 8	Pale brown saprolite with calcrete & silcrete down hole contamination
8 – 18	Pallid zone, saprolite, quartz + kaolin, yellowish grey from 17 m
18 – 22	Cream to pale yellow saprolite
22 – 25	Bright yellow to orange saprolite
25 – 32	Pale creamy brown saprolite, greyish vein quartz @ 27-28 m
32 – 41	Strong yellowish khaki saprolite, greyish vein quartz @ 35-36 m
41 – 45	Pale greyish brown to pale medium brown saprolite with relic lithic fragments.

Hole: 96 ETAR 182 Pilot Regolith Line, E.T. Prospect. <u>In-Field Descriptions</u> Location: 340219 E, 6636949 N, AHD: 188.482 m. Site: Vegetation: Open <i>Casuarina pauper</i> Woodland over <i>Acacia aneura</i> Low Open Woodland over <i>Acacia aneura</i> and <i>Senna artemisioides</i> subsp. <i>petiolaris</i> Shrubland over <i>Maireana pentatropis</i> , <i>Maireana georgei</i> and <i>Sclerolaena</i> Low Shrubland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular & platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 3	Reddish dune siliceous sand, redder @ 3 m, 2 calcrete zones, 1 st @ 1 m is nodular, 2 nd @ 2 m is platy
3 – 4	Brownish grey silcrete with calcrete down hole contamination
4 – 5	Creamy brown saprolite with calcrete & silcrete down hole contamination
6 – 18	Pallid saprolite, mostly kaolin + some quartz & vein quartz (very thin veins)
18 – 23	Cream to pale yellow saprolite, quartz + kaolin, Fe oxide segregations @ 19-22 m.
23 – 35	Pale yellow-olive clay-rich saprolite, ?smectitic
35 – 40	Brown saprolite, clay + quartz + relic lithic fragments (?mafic)
40 – 55	Khaki saprolite, clay + quartz + relic lithic fragments (?mafic & still highly weathered @ 55 m).

A2.1 (continued): Regolith logging of reconnaissance line at E.T.

Hole: 96 ETAR 185 Pilot Regolith Line, E.T. Prospect. <u>In-Field Descriptions</u> Location: 340228.6 E, 6636654 N, AHD: 191.171 m. Site: Vegetation: Low <i>Acacia aneura</i> Woodland over <i>Senna artemisioides</i> subsp. <i>petiolaris</i> Open Shrubland over <i>Atriplex vesicaria</i> Low Open Shrubland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular & platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 8	Reddish dune siliceous sand, redder @ 3 m (?palaeosol), 2 calcrete zones, 1 st @ 2 m is nodular, 2 nd @ 8 m is platy, Fe & Mn oxide segregations @ 4-6 m
8 – 11	Red hard-pan palaeosol
11 – 12	Silcrete, yellowish & grey
13 – 23	Pallid saprolite, very pale pinky browns to white & then to pale grey-brown, clay + quartz
23 – 29	Pale brown saprolite, clay + quartz & grey vein quartz @ 27-28 m
23 – 33	Bright yellow saprolite, clay-rich
33 – 39	Pallid clay-rich saprolite with pink stains & smears
39 – 50	Brown saprolite, clay-rich (?mafic)
50 – 56	Pale brown saprolite, clay + quartz.

Hole: 96 ETAR 186 Pilot Regolith Line, E.T. Prospect. <u>In-Field Descriptions</u> Location: 340226.8 E, 6636545 N, AHD: 189.436 m. Site: Vegetation: <i>Casuarina pauper</i> Open Woodland over <i>Senna cardiosperma</i> subsp. <i>gawlerensis</i> and <i>Senna artemisioides</i> subsp. <i>petiolaris</i> Open Shrubland over <i>Ptilotus obovatus</i> , <i>Atriplex vesicaria</i> and <i>Senna artemisioides</i> subsp. <i>petiolaris</i> Low Open Shrubland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular, multiple zones Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 6.5	Reddish dune siliceous sand, 4 calcrete zones @ 1, 2, 4-5, ~6.5 m, sand is cemented between 3-4 m
6.5 – >9	Red hard-pan palaeosol
>9 – 12	Silcrete, Fe-silcrete & silicified pallid saprolite
12 – 14	Brown saprolite, clay-rich
13 – 23	Saprolite, browns to pink-browns, clay-rich (?mafic)
23 – >26	Yellowish saprolite, clay-rich (?mafic)
>26 – 32	Pink-brown saprolite, clay-rich (?mafic)
32 – 39	khaki clay-rich saprolite (?mafic)
39 – 49	Bright yellowish saprolite, clay-rich with some yellow-olive to olive-grey relic lithic fragments (?mafic)
49 – 56	Pale brown saprolite, clay + quartz with hard relic lithic fragments, ?silicified (?mafic).

A2.1 (continued): Regolith logging of reconnaissance line at E.T.

Hole: 96 ETAR 187 Pilot Regolith Line, E.T. Prospect. <u>In-Field Descriptions</u> Location: 340237.3 E, 6636441 N, AHD: 187.830 m. Site: Vegetation: <i>Acacia aneura</i> and <i>Alectryon oleifolius</i> subsp. <i>canescens</i> Tall Shrubland over <i>Senna artemisioides</i> subsp. <i>petiolaris</i> and <i>Acacia aneura</i> Open Shrubland over <i>Acacia aneura</i> and <i>Sclerolaena</i> Low Open Shrubland. (vehicle track disturbance). (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – >6	Reddish dune siliceous sand, 2 calcrete zones @ ~1, 6 m
>6 – 8	Red hard-pan palaeosol
8 – 9	Silcrete + quartz on/in saprolite
9 – 11	Silicified saprolite, cream to brown
11 – 14	Brown clay-rich saprolite (?mafic) grey vein quartz @ 11-12 m
14 – 17	Bright yellow saprolite, relic granulate texture, quartz + clays + FeOH (?mafic)
17 – >18	Pale reddish brown, clays + quartz (?mafic)
>18 – 24	Brown to pale saprolite with white kaolin flecks, clays + quartz (?mafic)
24 – 30	Yellow-brown saprolite with white kaolin flecks, clay-rich (?mafic)
30 – 34	khaki clay-rich saprolite with darker coloured relic lithic fragments (?mafic).

Hole: 96 ETAR 188 Pilot Regolith Line, E.T. Prospect. <u>In-Field Descriptions</u> Location: 340240 E, 6636344 N, AHD: 188.181 m. Site: Vegetation: <i>Casuarina pauper</i> Open Woodland over <i>Senna cardiosperma</i> subsp. <i>gawlerensis</i> Open Shrubland over <i>Cratystylis conocephala</i> and <i>Atriplex vesicaria</i> Low Shrubland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 5	Reddish dune siliceous sand, 2 calcrete zones @ 1, 4-5 m
5 – ~8	Red hard-pan palaeosol, sandy
~8 – 10	Silcrete, brownish to grey, + quartz on saprolite
10 – 12	Pallid saprolite, kaolin + quartz
12 – 14	Very pale brown saprolite, clay-rich
14 – 17	Brown clay-rich saprolite (?mafic)
17 – 18	Yellow to yellow-brown saprolite (mafic)
18 – 29	Variably reddish brown, clay-rich (?mafic)
29 – 34	Khaki-grey saprolite, clay-rich (?mafic)
34 – 39	Pale reddish brown saprolite, clay-rich (?mafic)
39 – 55	Khaki clay-rich saprolite (?mafic)
55 – 60	Pale yellowish grey saprolite, clay-rich.

A2.1 (continued): Regolith logging of reconnaissance line at E.T.

Hole: 96 ETAR 189 Pilot Regolith Line, E.T. Prospect. <u>In-Field Descriptions</u> Location: 340239 E, 6636246 N, AHD: 188.833 m. Site: Vegetation: <i>Senna artemisioides</i> subsp. <i>petiolaris</i> Open Shrubland over <i>Atriplex vesicaria</i> Low Open Shrubland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – >5	Reddish dune siliceous sand & calcretes @ ~1 & 2-4 m
>5 – 8	Dark red sandy hard-pan palaeosol
8 – <9	Thin silcrete & Fe-silcrete with abundant greyish vein quartz, on pallid saprolite
<9 – 10	Pallid silicified saprolite, quartz fragment-rich
10 – 21	Pallid saprolite, pinkish between 10-14 m, kaolin + quartz
21 – 26	Yellowish clay-rich saprolite (?mafic)
26 – 31	Khaki saprolite ?smectitic (mafic)
31 – 39	Pale khaki-grey saprolite, clay-rich (?mafic)
39 – 44	Pale brown saprolite, clay-rich.

Hole: 96 ETAR 190 Pilot Regolith Line, E.T. Prospect. <u>In-Field Descriptions</u> Location: 340245.2 E, 6636148 N, AHD: 187.436 m. Site: Vegetation: <i>Casuarina pauper</i> Open Woodland over <i>Eucalyptus</i> Very Open Tree Mallee over Tall Open Shrubland over <i>Senna artemisioides</i> subsp. <i>petiolaris</i> Open Shrubland over <i>Atriplex vesicaria</i> Low Open Shrubland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – <5	Reddish dune siliceous sand & calcretes @ 2 & 4 m
<5 – ~6	Dark red sandy hard-pan palaeosol
~6 – 7	Thin silcrete & Fe-silcrete + quartz on pallid saprolite
7 – 10	Pale creamy to very pale brown saprolite, clays + quartz.
10 – 18	Pallid saprolite, clays + quartz
18 – 22	Pale brown saprolite, vein quartz @ 19-20 m, kaolin + quartz
22 – 27	Yellowish brown clay-rich saprolite (?mafic)
27 – 31	Pale brown saprolite ?smectitic (mafic)
31 – 39	Yellow-brown saprolite, clay-rich, ?smectitic, dark greenish lithic relics (?mafic)
39 – 44	Pale khaki saprolite, clay-rich.

A2.1 (continued): Regolith logging of reconnaissance line at E.T.

Hole: 96 ETAR 193 Pilot Regolith Line, E.T. Prospect. <u>In-Field Descriptions</u> Location: 340259.4 E, 6635573 N, AHD: 186.895 m. Site: Vegetation: <i>Casuarina pauper</i> Woodland over <i>Acacia aneura</i> and <i>Acacia</i> sp. Tall Open Shrubland over <i>Senna cardiosperma</i> subsp. <i>gawlerensis</i> Shrubland over Low Open Shrubland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: massive Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 2	Reddish dune siliceous sand & nodular calcrete @ ~1 m & massive @ ~2 m
2 – 3	Calcrete – massive, on silcrete
3 – 4	Silcrete on saprolite
4 – 6	Saprolite, very pale brownish grey, partly silicified
6 – 10	Pale pink (6-8) to stronger pink (8-10) saprolite, clays + quartz.
10 – >22	Pallid saprolite, clays + quartz
>22 – >25	Cream to pale yellow saprolite, kaolin + quartz
>25 – 44	Pale khaki saprolite, clay-rich. ?smectitic (?mafic)

Hole: 96 ETAR 196 Pilot Regolith Line, E.T. Prospect. <u>In-Field Descriptions</u> Location: 340267.2 E, 6635267 N, AHD: 185.135 m. Site: Outcrop area with surface lag Vegetation: <i>Casuarina pauper</i> Woodland over <i>Acacia aneura</i> Tall Shrubland over <i>Eremophila latrobei</i> and <i>Senna cardiosperma</i> subsp. <i>gawlerensis</i> Low Open Shrubland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0	Outcrop area with surface lag, rounded quartz clasts observed, silcrete is greenish with granule quartz clasts
0 – 1	Thin red sandy soil skin on silcrete with calcrete coatings & joint infill
1 – 2	Silcrete on/in saprolite
2 – 5	Variably partly silicified pallid saprolite
5 – 12	Pallid saprolite, kaolin-rich + some quartz
12 – 14	Creamy saprolite, ?partly silicified, has a faint greenish tint
14 – 20	Yellow & becoming a strong yellow with depth, clay-rich saprolite
20 – >23	Strong brown saprolite, clays + quartz
25 – 32	Pale khaki saprolite, ?smectitic
32 – 44	Khaki to brown ?mafic (Fe-rich) saprolite with dark grey fragment coatings @ 34-35 m.

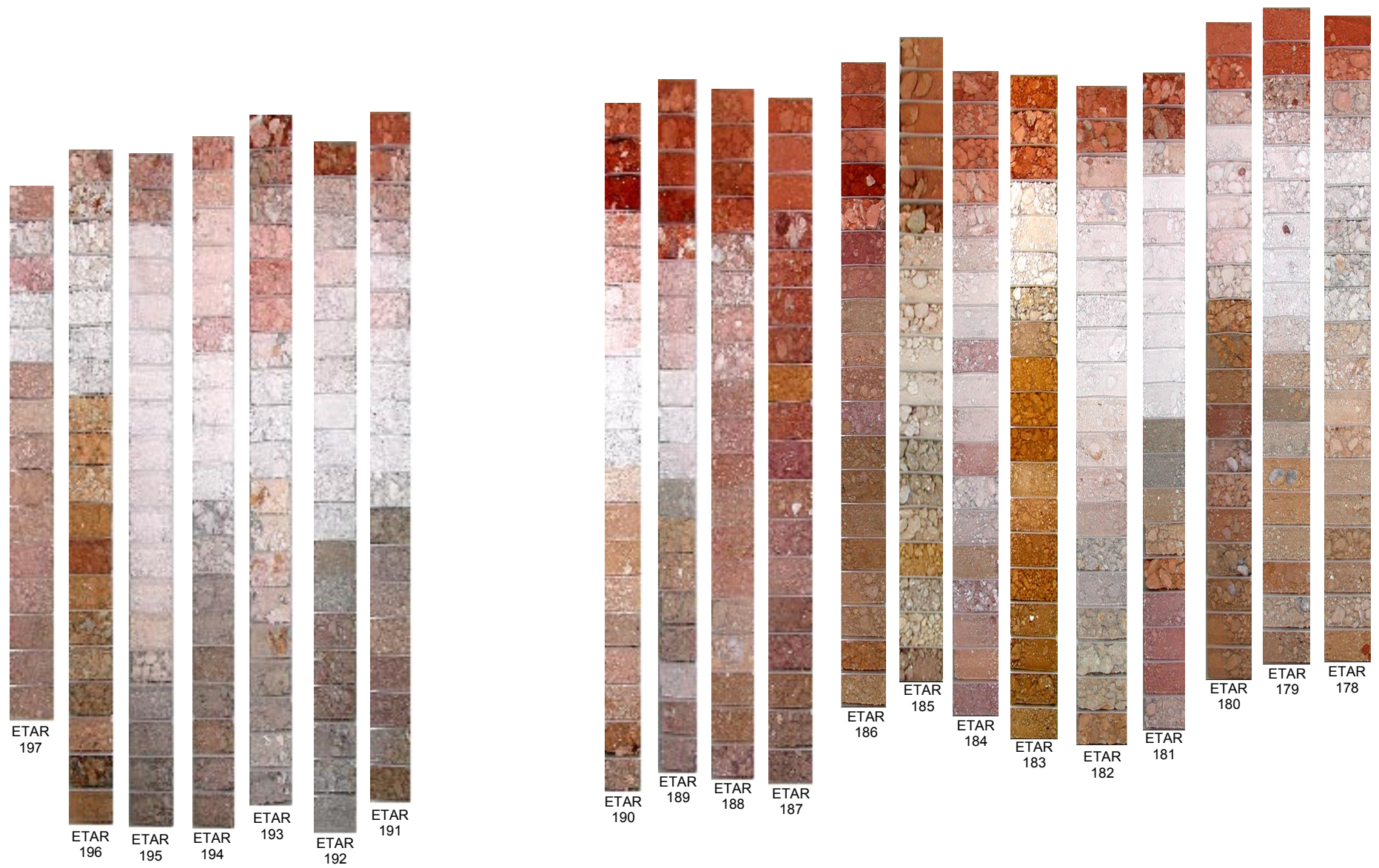


Figure A2.1.1: E.T. Prospect chip tray photographs - vertically arranged according to AHD. Samples taken at 1 m intervals from surface.

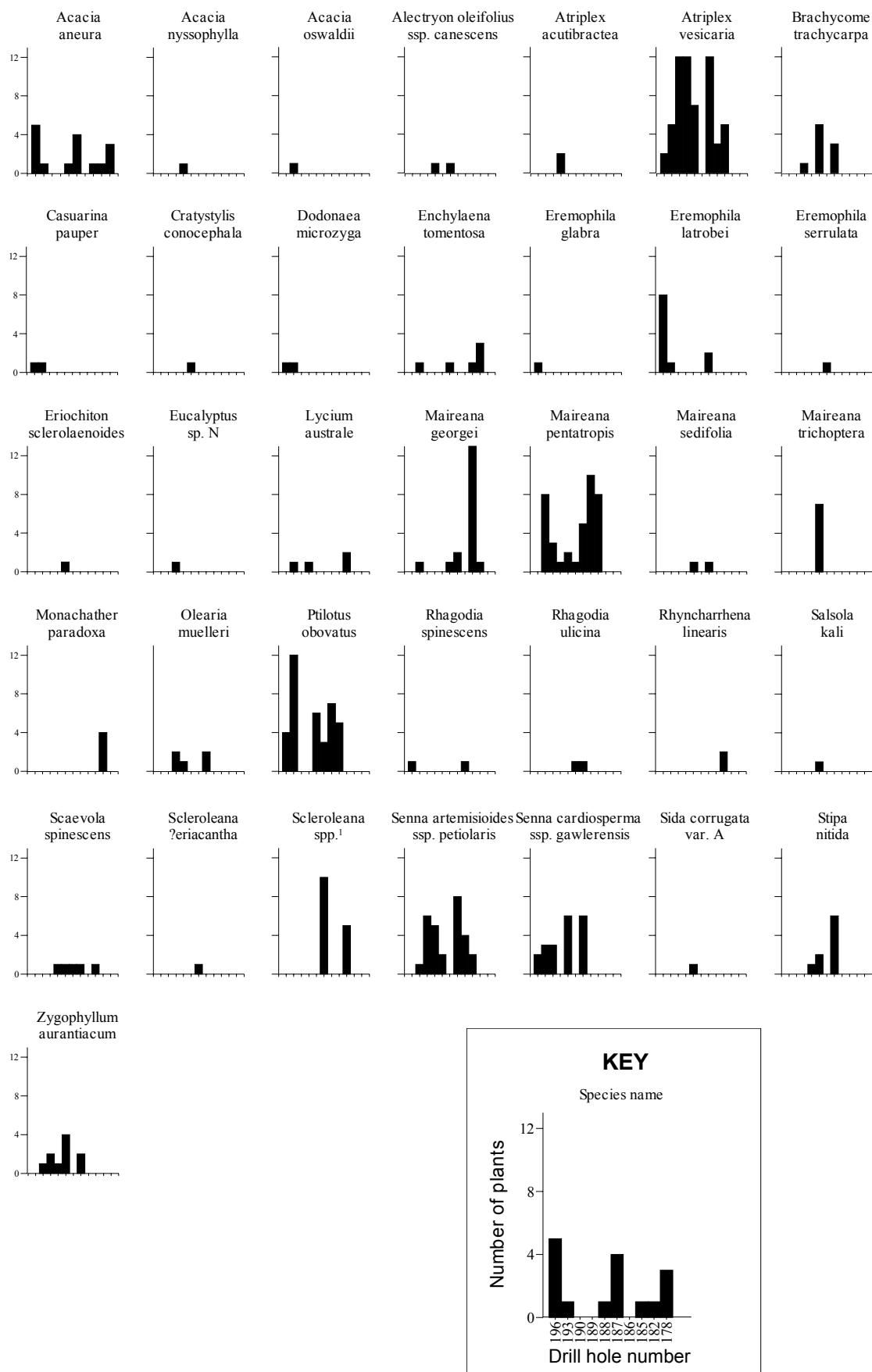


Figure A2.1.2: Species diversity and density at ET Prospect.

¹Sclerolaena spp. includes *S. obliquicuspis* and *S. diacantha*.

Appendix 2.2: Regolith logging of reconnaissance line at Golf Bore

Hole: 96 GBAR 028 Pilot Regolith Line, Golf Bore Prospect. <u>In-Field Descriptions</u> Location: 405246.8 E, 6726618.6 N, AHD: 181.188 m. Site: dune clad silcrete rise Vegetation: <i>Acacia aneura</i> Low Woodland over <i>Eremophila neglecta</i> and <i>Senna cardiosperma</i> subsp. <i>gawlerensis</i> Open Shrubland over <i>Maireana sedifolia</i> and <i>Ptilotus obovatus</i> Low Shrubland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular & platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Reddish dune siliceous sand with calcrete
1 – 3	Silcrete with rounded & angular quartz clasts mm – cm sizes
3 – 5	Pallid zone with reddish Fe oxide mottling @ 4-5 m, saprolite
5 – 11	Pallid zone, pale khaki @ ~5 m, pallid below, abundant grey vein quartz fragments
11 – 12	Pinkish saprolite
12 – >30	Greyish to khaki to olive grey saprolite, greasy feel (talc) & has obvious micaceous minerals.

Hole: 96 GBAR 027 Pilot Regolith Line, Golf Bore Prospect. <u>In-Field Descriptions</u> Location: 405102.6 E, 6726616.8 N, AHD: 181.711 m. Site: dune clad silcrete rise Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Acacia tetragonophylla</i> Tall Open Shrubland over <i>Maireana sedifolia</i> and <i>Eremophila latrobei</i> Low Shrubland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular & platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Reddish dune siliceous sand with calcrete & some silcrete fragments
1 – 4	Silcrete, massive & grey with rounded & angular quartz clasts (sand – pebbles) some sand contamination from above
4 – >5	Pallid zone with yellow mottled & stained waste mantle (pedolith) capping to saprolite
>5 – 7	Pallid zone, kaolin + quartz, saprolite
7 – 11	Yellow zone, kaolin + quartz, saprolite
11 – 23	Pale yellow kaolin + ?talc + quartz, saprolite
23 – 30	Greenish saprolite with greasy feel (talc) & has obvious micaceous minerals
30 – >33	As above but darker with some dark greenish to black relic lithic fragments, saprolite to near saprock.

Hole: 96 GBAR 102 Pilot Regolith Line, Golf Bore Prospect. <u>In-Field Descriptions</u> Location: 404950.4 E, 6726622.1 N, AHD: 180.819 m. Angle Hole @ 60° dip → 090° Site: dune clad silcrete rise Vegetation: <i>Acacia aneura</i> Tall Open Shrubland over Shrubland over <i>Maireana sedifolia</i> Low Shrubland over <i>Eragrostis eriopoda</i> Very Open Grassland. (very variable site also drilling disturbance) (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular & platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Reddish dune siliceous sand with calcrete & some silcrete fragments
1 – 2	Silcrete, massive & grey with rounded & angular quartz clasts (sand – gravel) some sand contamination from above
2 – >3	Silcrete on yellow stained pallid zone – waste mantle (pedolith) capping to saprolite
>3 – 7	Pallid zone, kaolin + quartz, saprolite
7 – 10	Yellow grading to cream saprolite, kaolin + quartz & a hint of talc @ 10 m
10 – 17	Cream saprolite, kaolin + ?talc + quartz
17 – 27	Cream to grey to greyish green saprolite, chloritic
27 – >50	Greenish grey saprolite, very chloritic & grading to saprock.

Hole: 96 GBAR 088 Pilot Regolith Line, Golf Bore Prospect. <u>In-Field Descriptions</u> Location: 404749.9 E, 6726506.7 N, AHD: 179.467 m. NOTE: Moved south to pick up on another parallel line. Angle Hole @ 60° dip → 090° Site: flat, sandy area. Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Acacia aneura</i> Tall Open Shrubland over <i>Maireana integra</i> and <i>Maireana georgei</i> Low Shrubland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 2	Reddish aeolian siliceous sand with calcrete
2 – 3	Red hard-pan with dark Fe oxide bands or mottles
3 – 4	As above with thin silcrete-silicified saprolite containing angular quartz grains & fragments
4 – 5	Yellow to orange stained pallid zone, rich in gypsum, possible waste mantle (pedolith) capping to saprolite
5 – 15	Pallid zone with yellowish & creamy sub-zones, kaolin + angular quartz, gypseous to ~7 m, saprolite
15 – 29	Greenish grey, greenish yellow saprolite with greasy feel, kaolin + ?talc + quartz + chlorite + mica-like minerals
29 – >49	Greyish saprolite with quartz + micas + chlorite, greenish cast to hue (last 4 samples in poor condition).

Hole: 96 GBAR 091 Pilot Regolith Line, Golf Bore Prospect. <u>In-Field Descriptions</u> Location: 404679.1 E, 6726509 N, AHD: 179.283 m. Angle Hole @ 60° dip → 090° Site: flat, sandy area Vegetation: <i>Acacia aneura</i> Tall Shrubland over Open Shrubland over <i>Atriplex vesicaria</i> , <i>Maireana integra</i> and <i>Maireana georgei</i> Low Open Shrubland. (many tracks drilling disturbance) (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 2	Reddish aeolian siliceous sand with calcrete
2 – 5	Red hard-pan & calcrete, carbonate coatings on hard-pan blocks near its top
5 – 7	? thin silcrete-silicified saprolite, rich in gypsum, possible waste mantle (pedolith) capping to saprolite – pallid with some yellow & pink staining
7 – 11	Pallid saprolite with yellow & reddish mottling & staining, mostly kaolin + quartz, Fe oxide segregations @ 10-11 m,
11 – 16	Creamy saprolite with greenish cast to hue, greasy feel (talc), kaolin + angular quartz, increasing chlorite with depth
16 – 24	Greenish to greyish, saprolite with greasy feel, kaolin + talc + quartz + chlorite + mica-like minerals
24 – 26	Yellow-brown saprolite with quartz + micas + chlorite
26 – >50	Greenish grey saprolite, chloritic & micaceous (41-50 m, samples not well preserved & contaminated by surface materials.

Hole: 96 GBAR 093 Pilot Regolith Line, Golf Bore Prospect. <u>In-Field Descriptions</u> Location: 404631.3 E, 6726511 N, AHD: 179.026 m. Angle Hole @ 60° dip → 090° Site: flat, sandy area Vegetation: <i>Acacia aneura</i> Tall Shrubland over <i>Eremophila latrobei</i> , <i>Maireana georgei</i> and <i>Atriplex vesicaria</i> Low Open Shrubland. (many vehicle tracks) (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 2	Reddish aeolian siliceous sand with calcrete
2 – >4	Red hard-pan & calcrete, carbonate coatings on hard-pan blocks @ 2-3 m & some saprolite @ 4 m
>4 – 6	Waste mantle (pedolith) capping to saprolite – multi coloured & gypseous
6 – 8	Pallid saprolite with bright yellow mottling & staining, mostly kaolin + quartz, abundant grey vein quartz as cm sized angular fragments. Down hole contamination by rounded quartz clasts from the red hard-pan is prominent
8 – 11	Pallid zone, greasy feel (talc), kaolin + angular quartz
11 – 13	As above, but with greenish cast to saprolite, kaolin + talc + quartz, red mottling @ 12-13 m
13 – 17	Greenish saprolite, quartz + kaolin + micas + chlorite
17 – 18	Yellowish saprolite
18 – 32	Greyish saprolite with olive green cast, quartz + kaolin + micas + chlorite
32 – 37	Strong yellow saprolite
37 – >50	Greyish saprolite with abundant grey quartz.

Hole: 96 GBAR 244 Pilot Regolith Line, Golf Bore Prospect. In-Field Descriptions Location: 404400.2 E, 6726514 N, AHD: 177.822 m. Site: flat, sandy area. On west side of road. Vegetation: <i>Acacia aneura</i> Tall Open Shrubland over <i>Atriplex vesicaria</i> , <i>Maireana integra</i> and <i>Maireana georgei</i> Low Shrubland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Reddish orange aeolian siliceous sand with calcrete
1 – 2	Thin partly silicified cap to saprolite, pallid zone with yellow bands and/or staining
2 – 3	As above but greenish, quartz + kaolin + silica + gypsum
3 – 7	Greenish saprolite with some brownish sub-zones, contains talc
7 – 12	Greyish saprolite with quartz & kaolin + micas + talc
12 – 14	Pale yellowish green saprolite
14 – 24	Greenish grey saprolite, quartz + clay + talc + chlorite
24 – 29	Greyish saprolite
29 – 32	Greenish to dark greenish saprolite
32 – >38	Greyish ?saprock with quartz veining.

Hole: 96 GBAR 247 Pilot Regolith Line, Golf Bore Prospect. In-Field Descriptions Location: 404100.4 E, 6726517.8 N, AHD: 177.839 m. Large distance from last hole sampled. Site: flat, sandy area Vegetation: <i>Senna artemisioides</i> subsp. <i>petiolaris</i> Shrubland over <i>Atriplex vesicaria</i> Low Open Shrubland over <i>Eragrostis eriopoda</i> Very Open Grassland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Reddish aeolian siliceous sand
1 – 2	Reddish aeolian siliceous sand with calcrete & some rounded quartz gravel
2 – 3	Bright yellow clay – partly to fully silicified, has some rounded quartz gravel within, includes upper part of waste mantle (pedolith) cap to saprolite
3 – 4	Yellow clay zone, part of the waste mantle (pedolith) cap to saprolite
4 – >11	Pallid zone, saprolite with kaolin + quartz + talc
>11 – 15	Yellowish to bright yellow clay, saprolite, clay + talc + micas
15 – 25	Greenish saprolite, quartz + clay + talc + chlorite + micas
25 – >47	Grey saprolite to grey saprock with quartz veining @ 38-40 m & yellow sub-zone @ 28 m.

Hole: 96 GBAR 249 Pilot Regolith Line, Golf Bore Prospect. <u>In-Field Descriptions</u> Location: 403898.1 E, 6726511.1 N, AHD: 179.650 m. (Near Hole 98 ORAR 001) Site: on dune-silcrete rise Vegetation: <i>Acacia aneura</i> Tall Open Shrubland over Shrubland over <i>Maireana georgei</i> and <i>Maireana integra</i> Low Open Shrubland over <i>Eragrostis eriopoda</i> Very Open Grassland. (many dead <i>Acacia aneura</i> trees.) (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Reddish aeolian siliceous sand with some calcrete
1 – 2	Reddish aeolian siliceous sand with calcrete + some silcrete & grey quartz fragments
2 – 4	Silcrete with enclosed quartz clasts & fragments thereof
4 – 6	Cream clay zone, yellow mottles waste mantle (pedolith) capping to saprolite
6 – 8	Pallid zone, kaolin + angular quartz
8 – 9	Yellow to off-white & grey saprolite
9 – 13	Yellowish saprolite with a weak greasy feel, quartz + kaolin + ?talc
13 – 14	Bright yellow saprolite
14 – 17	Pale yellow saprolite
17 – 19	Strong yellow saprolite
19 – >44	Grey saprolite with olive-green chlorite-rich zones & abundant grey quartz.

Hole: 98 ORAR 010 Pilot Regolith Line, Golf Bore Prospect. <u>In-Field Descriptions</u> Location: 403584.2 E, 6726522.3 N AHD: 180.884 m. (Later set of RAB holes) Site: on dune-silcrete crest at far western end of Investigation line Vegetation: <i>Acacia aneura</i> Low Open Woodland over Shrubland over <i>Ptilotus obovatus</i> , <i>Atriplex vesicaria</i> and <i>Maireana georgei</i> Low Shrubland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Reddish aeolian siliceous sand with some calcrete
1 – ~4	As above with abundant calcrete nodules + siliceous calcrete
4 – 6	Silcrete with abundant quartz clasts – rounded & angular with some having calcrete coatings
6 – 9	Yellow & near white clay + gypsum, waste mantle (pedolith) capping to saprolite
9 – 11	Pallid zone, kaolin + angular quartz + ?talc
11 – 14	White-yellow to cream saprolite with greasy feel, kaolin + angular quartz + ?talc
14 – 17	Pallid zone with greenish tint
17 – 21	Bright yellow saprolite
21 – 25	Yellow to green-grey saprolite
25 – 34	Greenish grey saprolite
34 – 35	Greenish grey saprolite
35 – >50	Greenish grey to grey and green saprolite to saprock.

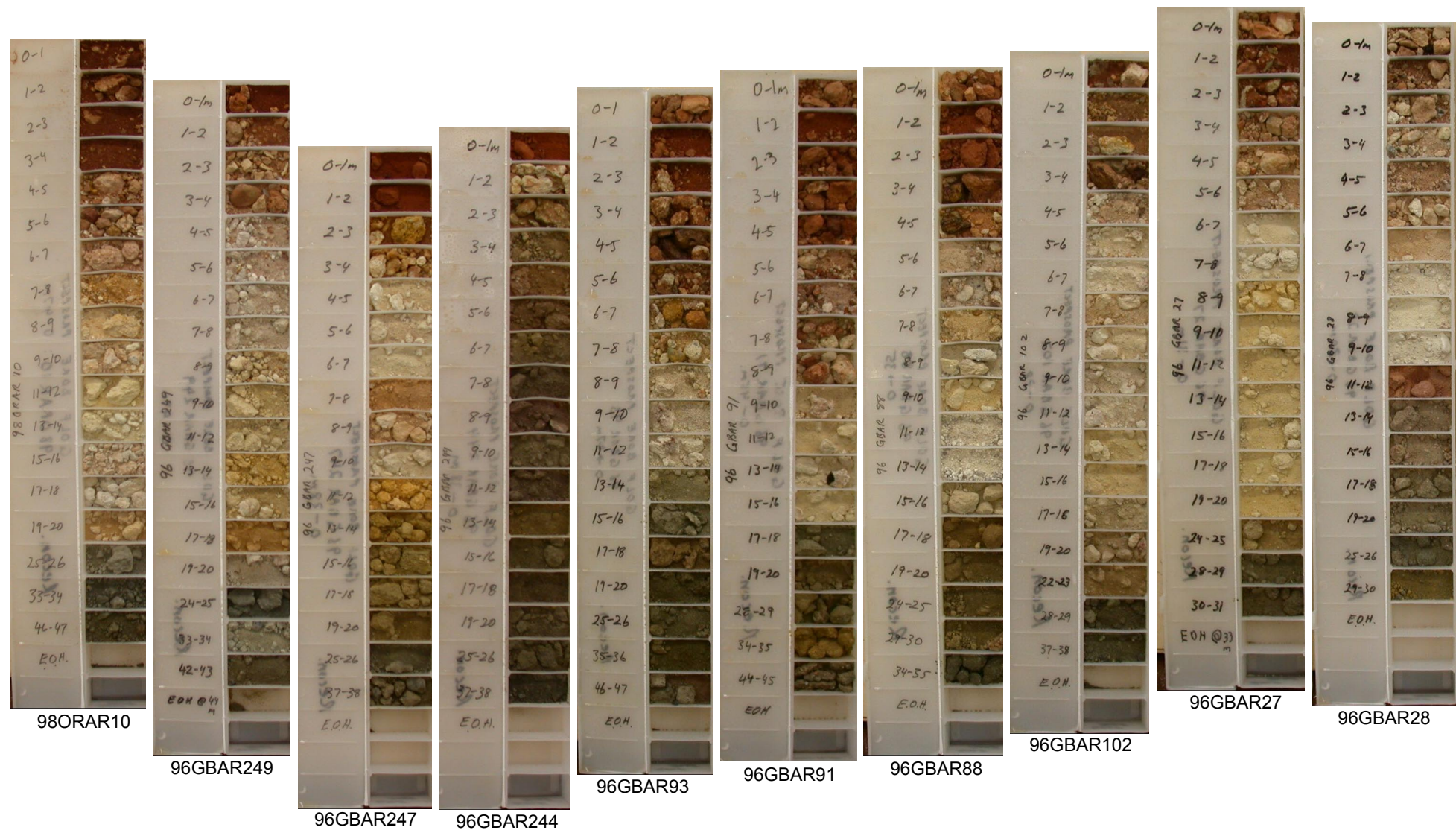


Figure A2.2.1: Golf Bore Prospect chip tray photographs - vertically arranged according to AHD

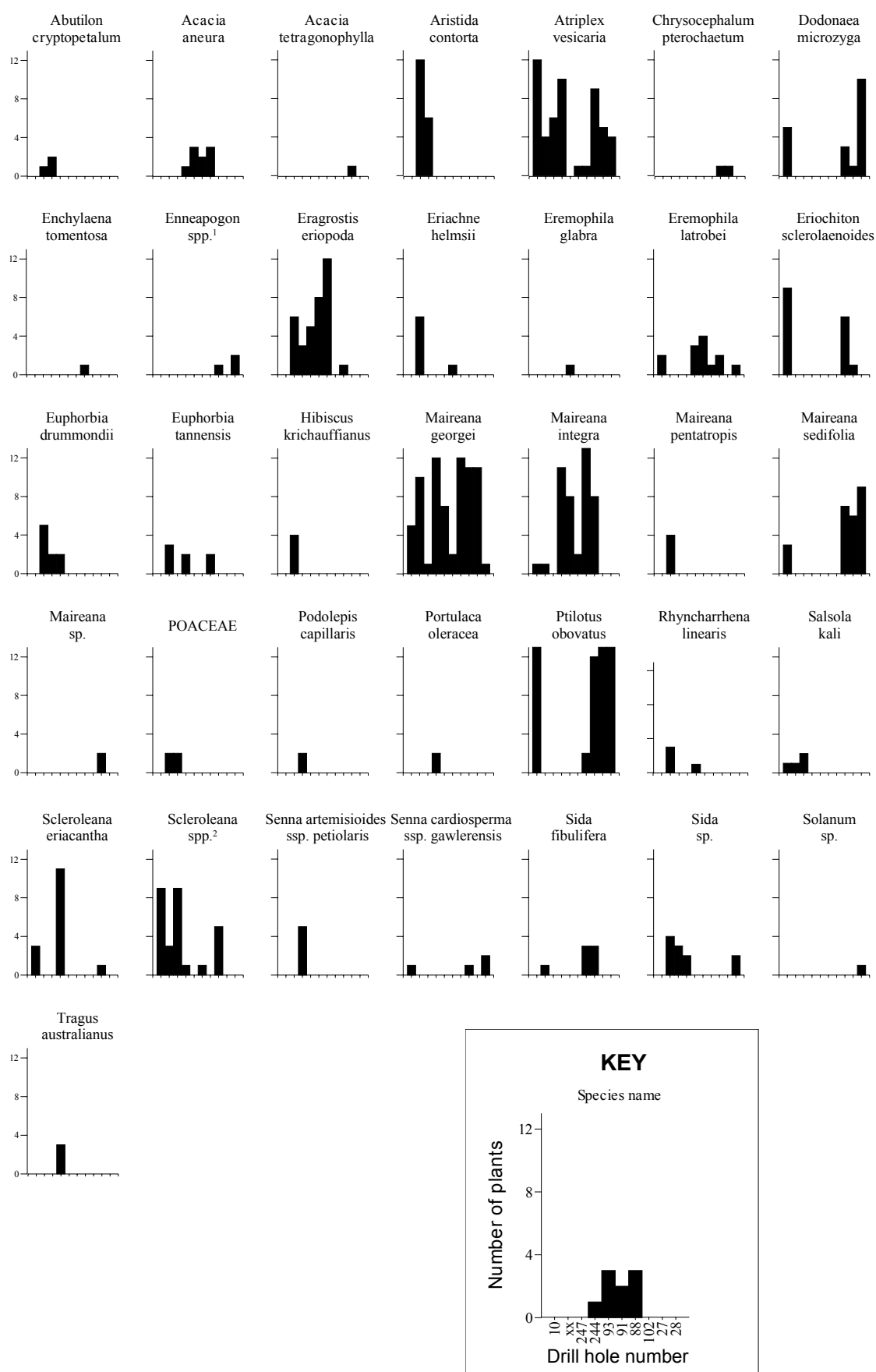


Figure A2.2.2: Species diversity and density along 6726500N at Golf Bore Prospect.

¹Enneapogon spp. includes *E. avenaceus* and *E. polyphyllus*.

²Scleroleana spp. includes *S. diacantha/uniflora*, *S. eriacantha*, *S. obliquicuspis* and *S. patenticuspis*.

Appendix 2.3: Regolith logging of reconnaissance line at Jumbuck

Hole: 97 JBAR 069 Pilot Regolith Line, Jumbuck Prospect. <u>In-Field Descriptions</u> Location: 374993.6 E, 6690435.7 N, AHD: 206.844 m Site: Vegetation: <i>Ptilotus obovatus</i> and <i>Maireana</i> sp. Low Open Shrubland over <i>Eragrostis eriopoda</i> Very Open Grassland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 2	Orange sand + pinky calcrete
2 – ~4	Silcrete enclosing angular quartz clasts
>4 – 17	Pallid zone with chunks appearing like saprolite but rounded quartz clasts seen @ 6 – 7 m, yellow mottling @ 11-12 & 17 m,
17 – 25	Yellow saprolite, strongest colours @ 19-21 & 23 m, rounded quartz clasts seen @ 24, 25 m
25 – 29	Pale brown to yellowish brown clay saprolite with angular vein quartz fragments common
29 – 32	Pinkish clay saprolite
32 – >51	Greyish saprolite with plenty of vein quartz fragments.

Hole: 97 JBAR 067 Pilot Regolith Line, Jumbuck Prospect. <u>In-Field Descriptions</u> Location: 375188.6 E, 6690436.3 N, AHD: 207.138 m Site: Vegetation: <i>Acacia aneura</i> Low Woodland over Shrubland over <i>Maireana georgei</i> , <i>Ptilotus obovatus</i> and <i>Sclerolaena</i> Low Open Shrubland over Very Open Grassland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 2	Orange sand + calcrete @ 1-2 m
2 – >3	Ferruginous–siliceous rounded granules–nodules with khaki coloured coatings (cutans)
>3 – >4	Silcreted quartz grains – mostly angular
>4 – 12	Pallid zone, kaolinitic + quartz but less than in previous hole (069). Some yellow FeOH mottles @ 10 m. No rounded clasts. Zone has a slight greenish cast to it
12 – 39	Pinkish to pale maroon saprolite, hue intensifies with depth, much bluish grey vein quartz @ 27 m
39 – >48	Greyish saprolite with yellowish-green cast.

Hole: 97 JBAR 066 Pilot Regolith Line, Jumbuck Prospect. <u>In-Field Descriptions</u> Location: 375287.6 E, 6690443 N, AHD: 206.446 m. Photo: 11/99/R2/#8 Site: Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Eremophila Latrobei</i> Open Shrubland over <i>Maireana georgei</i> , <i>Sclerolaena</i> and <i>Sida fibulifera</i> Low Shrubland over <i>Eragrostis eriopoda</i> Open Grassland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 2	Reddish quartz sand, aeolian dune with calcrete @ 1-2 m
2 – 3	Silcrete – both reddish & grey, encloses greyish quartz grains
3 – 4	Pale brownish sandy clay
4 – 5	Grey quartz + some clay
5 – 7	Brown silty sandy clay
7 – 20	Pallid zone, greyish to off-white, kaolin + quartz, coarse blue vein quartz @ 7-8 m
20 – 22	Bright yellow clay saprolite & much coarse bluish vein quartz as fragments (5-20 mm)
22 – 23	Yellowish clay saprolite
23 – 25	Yellow clay saprolite
25 – 31	Pinkish to maroon clay saprolite
31 – >34	Brown clay saprolite with greyish zones & quartz, coarse blue vein quartz
>34 – 37	Mostly grey quartz & some clay
37 – 42	Brownish-stained grey saprolite + quartz
42 – >49	Greyish saprolite grading to saprock.

Hole: 97 JBAR 064 Pilot Regolith Line, Jumbuck Prospect. <u>In-Field Descriptions</u> Location: 375490.3 E, 6690433.4 N, AHD: 206.593 m Site: Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Acacia aneura</i> Open Shrubland over <i>Ptilotus obovatus</i> and <i>Maireana georgei</i> Low Open Shrubland over <i>Eragrostis eriopoda</i> Very Open Grassland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Reddish dune sand, siliceous, some calcrete present
1 – 2	As above with ubiquitous calcrete
2 – ~3	Red hardpan, non calcareous but peds/clods are calcrete coated, ferruginous
~3 – 4	Brown to yellowish silcrete with rounded & angular sand grains – granules, hardpan also within this interval – boundary ~midway
4 – 5	Yellow to reddish sandy clay with some rounded sand grains
5 – 8	Pale pink to buff coloured sand + silt & kaolin, boundary @ 8 m
8 – 11	Kaolinitic material, white with yellow staining & flecks, very little quartz clasts, rare rounded quartz @ 9-10 m
11 – 31	As above but with more quartz, including subrounded granules, start of new pallid zone, saprolite, having abundant angular bluish vein quartz fragments @ 13-15, 17-18 & 26-28 m
31 – 36	Pinkish-grey-creamy mottled zone, saprolite
36 – 42	Brownish-grey saprolite with yellow mottles & becoming pale olive-grey with depth
42 – >60	Greyish saprolite with some pink staining, reddish staining @ 55, 57 & 60 m.

Hole: 97 JBAR 062 Pilot Regolith Line, Jumbuck Prospect. <u>In-Field Descriptions</u> Location: 375681.8 E, 6690448.1 N, AHD: 208.026 m Site: Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Ptilotus obovatus</i> and <i>Sida fibulifera</i> Low Open Shrubland over <i>Eragrostis eriopoda</i> Very Open Shrubland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Reddish siliceous dune sand + pink calcrete + silcrete gibber fragments
1 – 2	Pink & white & yellow clays with grey quartz
2 – 4	As above but with more white kaolinite
4 – 5	Silicified material to silcrete with pepper-like flecks of ?biotite or graphite enclosed within (implying this is silicified saprolite)
5 – 6	White & brownish clay + quartz, saprolite
6 – 7	Pale brown clay, saprolite
7 – 8	White clay, saprolite
8 – 11	Olive smectitic clays with some yellow flecks & quartz, saprolite
11 – 12	Bright yellow & olive smectitic clays
12 – ~14	Grey smectitic saprolite
~14 – 18	Bright yellow clay saprolite
18 – 22	Pale brown saprolite
22 – 24	Pale grey saprolite with FeOH segregations & vein quartz
24 – 28	As above but brownish
28 – 51	Grey saprolite with brown FeOH segregations
51 – >58	Grey saprock with large fragments of biotite-rich rock (strongly foliated) + vein quartz

Hole: 97 JBAR 060 Pilot Regolith Line, Jumbuck Prospect. <u>In-Field Descriptions</u> Location: 375978.5 E, 6690461.4 N, AHD: 208.076 m Site: Vegetation: <i>Acacia aneura</i> Tall Open Shrubland over <i>Senna artemisioides</i> subsp. <i>petiolaris</i> Open Shrubland over <i>Ptilotus obovatus</i> Low Open Shrubland over <i>Eragrostis</i> Open Grassland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 2	Orange-red siliceous dune sand + calcrete
2 – 3	Bright orange sand & rounded clasts + some clay, may equate to the red hardpan seen in other holes.
3 – 4	Silcrete, grey with angular clasts of quartz
4 – 8	Pallid kaolin + quartz zone with angular vein quartz, saprolite
8 – 10	As above but with abundant dark bluish vein quartz, saprolite
10 – 12	As above with some down-hole contamination
12 – 15	White & yellow saprolite
15 – 24	Yellow clay saprolite
24 – 37	Grey vein quartz & clay saprolite with Fe oxide stained lithic relics
37 – >48	Pinkish-grey saprolite + vein quartz with redder & orange lithic relics.

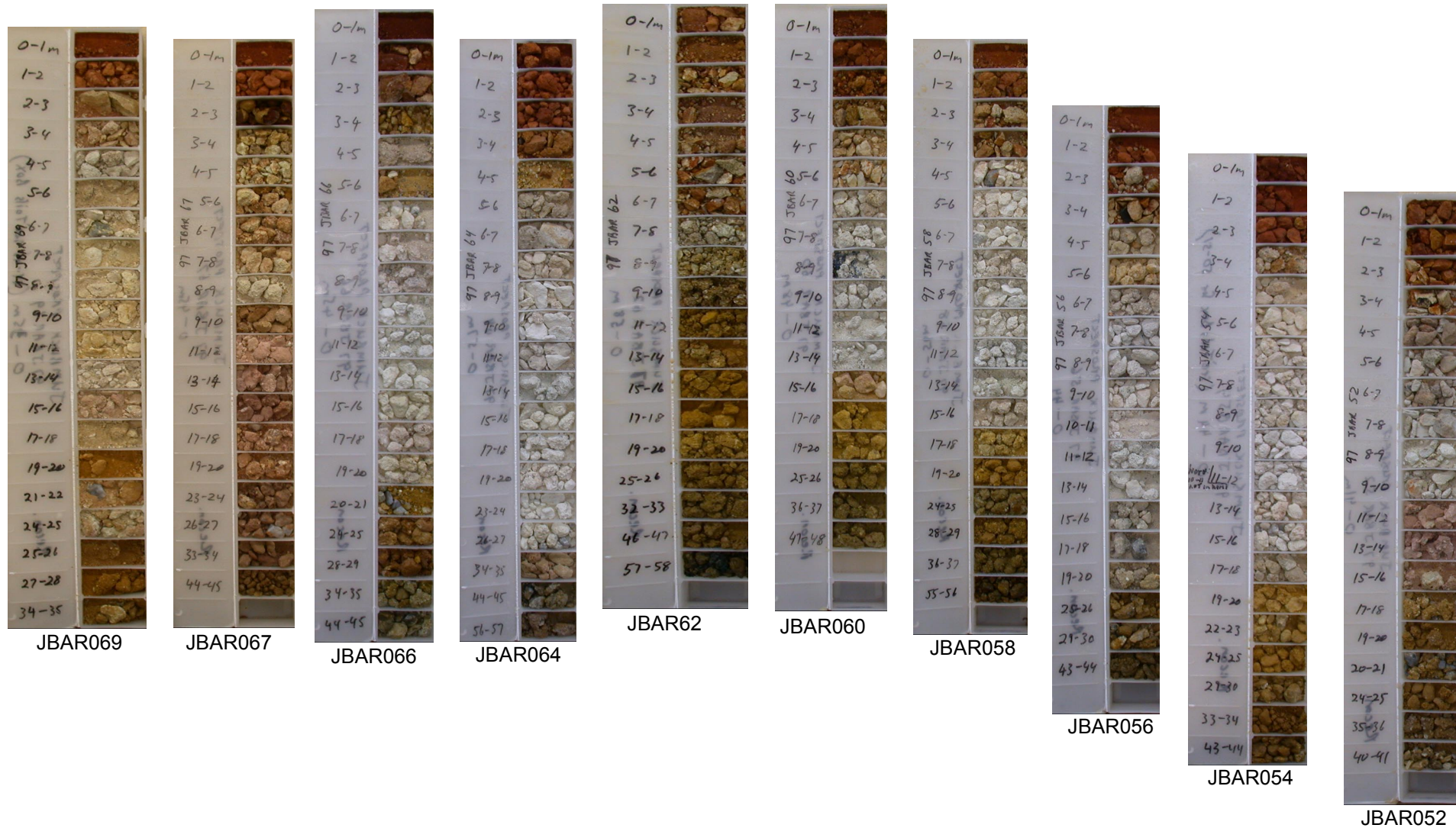
Hole: 97 JBAR 058 Pilot Regolith Line, Jumbuck Prospect. <u>In-Field Descriptions</u> Location: 376078.6 E, 6690461.9 N, AHD: 206.918 m Site: Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Eremophila latrobei</i> and <i>Acacia aneura</i> Shrubland over <i>Ptilotus obovatus</i> and <i>Maireana georgei</i> Low Shrubland over <i>Eragrostis eriopoda</i> Very Open Grassland. (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Reddish siliceous dune sand + calcrete
1 – 2	Brown & grey silcrete containing rounded quartz clasts – sand to cobbles
2 – 3	Brown & grey silcrete as above + clays
3 – 4	Clays & some silcrete + down-hole contamination of subrounded quartz
4 – 11	White zone, kaolin + quartz with some angular quartz fragments, ?saprolite
11 – 12	As above with abundant blue vein quartz fragments, saprolite
12 – ~16	Pallid saprolite zone with some pinkish colourings, little vein quartz
~16 – 23	Yellow-orange saprolite
23 – 26	Greyish saprolite with bluish vein quartz fragments
26 – 55	Brownish saprolite with yellow-brown relic lithic fragments, vein quartz @ 32 & 40 m
55 – >60	As above but material becoming fresher with depth, vein quartz @ 57 m.

Hole: 97 JBAR 056 Pilot Regolith Line, Jumbuck Prospect. <u>In-Field Descriptions</u> Location: 376273.2 E, 6690463.5 N, AHD: 204.160 m. Photo: 11/99/R2/#7 Site: Vegetation: <i>Maireana georgei</i> and <i>Ptilotus obovatus</i> Low Shrubland over <i>Eragrostis eriopoda</i> Open Grassland. (many dead <i>Acacia aneura</i> trees) (Logged by S. Lintern) Soil: Um (sandy) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Orange siliceous dune sand
1 – 2	Paler orange siliceous dune sand + calcrete
2 – 4	As above + grey silcrete with yellow stains & blebs
4 – 8	Pallid zone, kaolin + quartz, yellow mottling @ 5-6 m & pale pink mottling @ 7 m
8 – 9	As above with abundant rounded bluish quartz clasts as gravel to pebbles (to 50 mm) ⇔ ? this is a fluvial sequence.
9 – 10	Pallid zone, kaolin + quartz, yellow to pink mottling & streaking, may be a waste mantle (pedolith) cap to saprolite below
10 – 19	Pallid zone, kaolin + quartz, yellow mottling, saprolite
19 – 23	Brownish grey saprolite
23 – 29	Brownish grey saprolite + yellow FeOH segregations or relic lithic fragments
29 – 37	Brown-grey saprolite with dark brown or yellow-brown relic rock fragments
37 – >51	Greyish to dark olive-grey saprolite to saprock, the latter forms dark grey fissile rock fragments rich in mafic minerals

Hole: 97 JBAR 054 Pilot Regolith Line, Jumbuck Prospect. <u>In-Field Descriptions</u> Location: 376471.2 E, 6690470.8 N, AHD: 201.853 m. NOTE: this hole logged in more detail to better delineate model alluded to in log of hole 97 JBAR 56 (requires PIMA to verify due to down-hole contamination by rounded clasts). Site: Vegetation: <i>Acacia aneura</i> Tall Open Shrubland over <i>Senna artemisioides</i> subsp. <i>petiolaris</i> Open Shrubland over <i>Ptilotus obovatus</i> and <i>Maireana georgei</i> Low Shrubland over <i>Eragrostis eriopoda</i> Very Open Grassland. (Logged by S. Lintern) Soil: Um (sand) Calcrete: nodular Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Reddish siliceous dune sand
1 – 2	Pale red siliceous dune sand + carbonate
2 – 3	Pale red siliceous dune sand + nodular carbonate
3 – 4	Greyish to yellowish silcrete + quartz fragments & coarse sand
4 – 5	White, red & yellow clay, kaolin + quartz sand
5 – 9	Pallid zone, white to grey kaolin + quartz with rounded water-worn clasts (of quartz, sandstone & silcrete: 10-40 mm) @ 7-9 m
9 – 10	Clay-rich zone, kaolinitic with angular quartz fragments only, waste mantle (pedolith) cap to saprolite.
10 – 12	Yellow version of 9 – 10 m, saprolite
12 – 14	Pallid zone, kaolin with greenish hue cast, saprolite
14 – 17	Bright yellow saprolite, paler yellow with depth
17 – 22	Pinkish clay saprolite with vein quartz fragments @ 20 m
22 – 25	Brown Fe-stained saprolite with yellow-brown segregations
25 – 28	Brownish grey saprolite with quartz veining @ 26 m
28 – 35	Olive-brown & grey saprolite with dark brown relic lithic fragments
35 – >52	Pale olive-brownish grey saprolite to near saprock.

Hole: 97 JBAR 052 Pilot Regolith Line, Jumbuck Prospect. <u>In-Field Descriptions</u> Location: 376671.6 E, 6690479.3 N, AHD: 199.448 m. Site: Vegetation: <i>Acacia aneura</i> Woodland over <i>Acacia aneura</i> Open Shrubland over <i>Ptilotus obovatus</i> , <i>Eremophila latrobei</i> and <i>Maireana georgei</i> Open Low Heath over <i>Eragrostis eriopoda</i> and <i>Thyridolepis mitchelliana</i> Open Grassland. (Logged by S. Lintern) Soil: thin Um (sandy) Calcrete: platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 2.5	Thin reddish sandy soil – aeolian (<30 cm) on massive yellow to grey silcrete, porcellanite towards base and lower part is silicified sandstone
2.5 – 8	Pallid zone, kaolin + quartz sand, rounded clasts of mm to cm sizes, grey to white with some pale pink & pale yellow tints
8 – 11	Creamy to grey clay-rich zone, waste mantle (pedolith) cap to saprolite, with yellow staining @ 10-11 m
11 – 16	Pinkish saprolite, kaolin-rich + quartz
16 – 19	Yellowish grey saprolite with yellow staining
19 – 20	Pinkish saprolite
20 – 21	Pinkish saprolite with abundant dark bluish vein quartz fragments (cm sized)
21 – 29	Pinkish brown-grey saprolite, clay & quartz-rich
29 – >42	Mostly greyish saprolite, variably quartz veined and with some brownish zones.

Hole: 97 JBAR 050 Pilot Regolith Line, Jumbuck Prospect. <u>In-Field Descriptions</u> Location: 376876.8 E, 6690477.3 N, AHD: 195.397 m. Site: Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Acacia aneura</i> Tall Open Shrubland over <i>Eremophila latrobei</i> Shrubland over <i>Maireana georgei</i> Low Open Shrubland over <i>Eragrostis</i> <i>eriopoda</i> and <i>Thyridolepis mitchelliana</i> Open Grassland. (Logged by S. Lintern) Soil: thin Um (sandy) Calcrete: platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Thin reddish sandy soil – aeolian (<20 cm) on massive yellow to grey silcrete,
1 – >3	Grey silcrete developed in & on kaolin-rich quartz sand
>3 – 10	Greyish quartz sand + kaolin with rounded bluish & grey quartz granules to gravel @ 6-10 m
10 – 11	Pallid zone, kaolin-rich & quartz poor with creamy tints – waste mantle (pedolith) cap to saprolite
11 – 13	As above but pinkish, saprolite
13 – 16	Yellow stained pallid zone, saprolite
16 – 22	Bright yellow saprolite
22 – 31	Pinkish grey to grey saprolite
31 – 35	NO SAMPLE available
35 – 37	Bright yellow to cream saprolite
37 – 45	Grey saprolite with pink staining
45 – >51	Grey saprolite with pink staining & abundant pale olive smectitic clays.



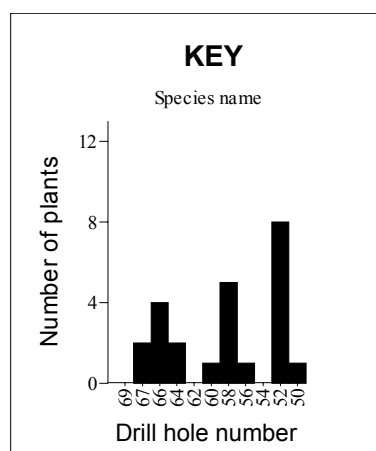
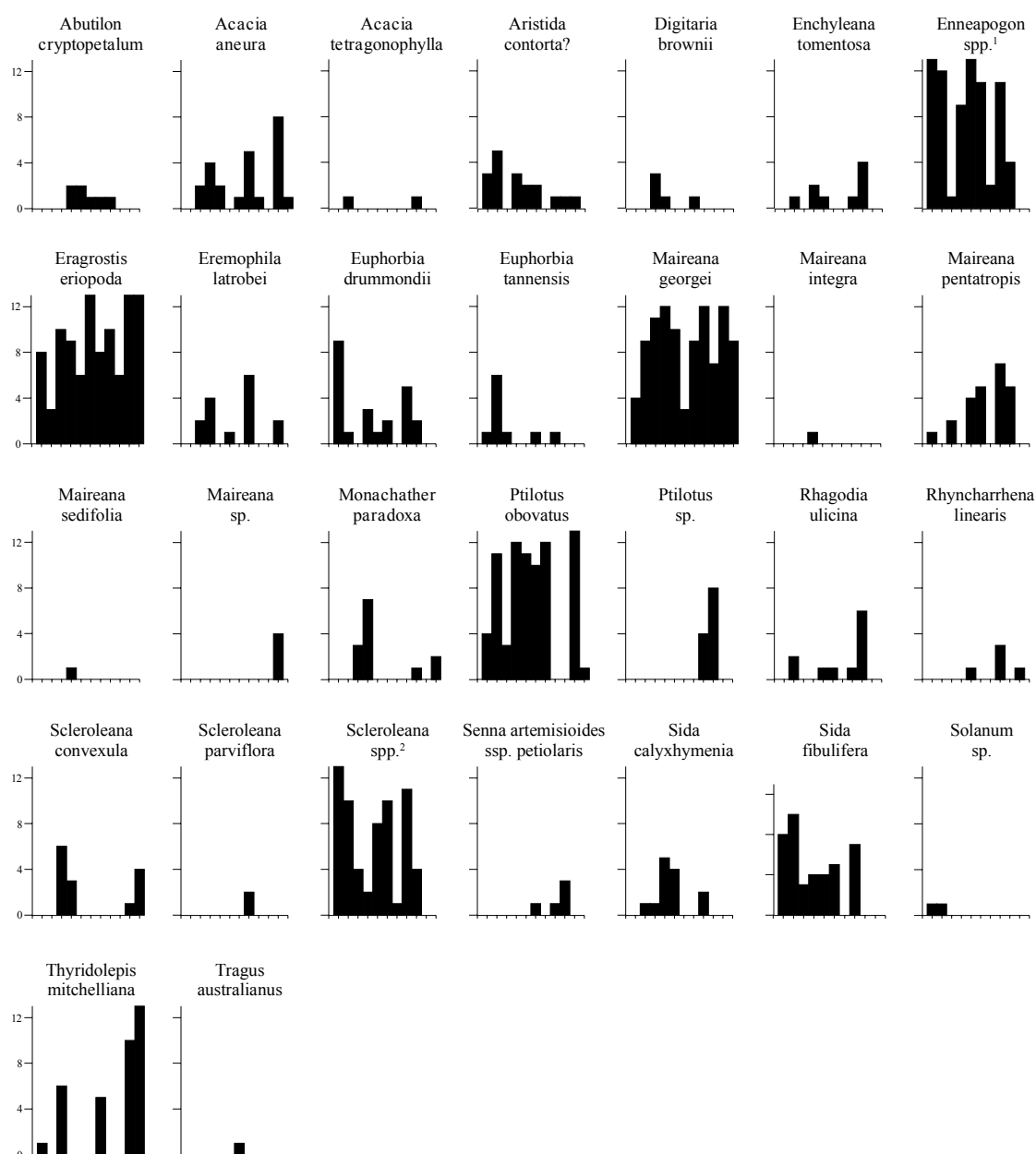


Figure A2.3.2: Species diversity and density along 6690450N at Jumbuck Prospect.

¹Enneapogon spp. includes *E. avenaceus*, *E. caerulescens* and *E. cylindricus*.

²Scleroleana spp. includes *S. diacantha*, *S. obliquicuspis*, *S. uniflora* and *S. aff. burbridgeae*.

Appendix 2.4a: Regolith logging of reconnaissance line at Monsoon.

Hole: 97 MNAR 106 Pilot Regolith Line, Monsoon Prospect. <u>In-Field Descriptions</u> Location: 350550.8 E, 6657557 N, AHD: 180.747 m Site: within a shallow creek gully Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Maireana sedifolia</i> and <i>Eremophila latrobei</i> Low Shrubland. (Logged by S. Lintern) Soil: Uc (gravelly alluvium) Calcrete: massive to platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Pale coloured siliceous alluvium, sand to pebbles cemented by calcrete
1 – 6	An older reddish to reddish brown colluvium–alluvium related to the modern channel, calcareous in part as coatings, clasts within are rounded to subangular, quartz as sand to gravel
6 – 8	Red-brown hard-pan, palaeosol, partly Fe oxide cemented
8 – 9	Thin silcrete on incipiently silicified saprolite which is pallid with weakly developed brownish micro mottles
9 – 16	Pallid saprolite, kaolin + quartz
16 – 22	Pinkish to yellowish saprolite, kaolin + quartz, vein quartz @ 19 m
22 – 26	Greyish saprolite, kaolin + quartz
26 – 30	Reddish saprolite, kaolin + quartz + Fe oxides
30 – 42	Greyish saprolite, kaolin + quartz
42 – 55	Khaki saprolite, kaolin + quartz, top appears to be more weathered than zone 30-42 m, vein quartz @ 45-46 m, more lithic relics by 45 m
55 – >66	Greyish to dark grey saprolite, kaolin + quartz + lithic remnants.

Hole: 97 MNAR 186 Pilot Regolith Line, Monsoon Prospect. <u>In-Field Descriptions</u> Location: 350554.8 E, 6657495 N, AHD: 180.728 m Site: within a shallow creek gully Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Senna cardiosperma</i> subsp. <i>microphylla</i> , <i>Maireana sedifolia</i> and <i>Senna artemisioides</i> subsp. <i>petiolaris</i> Low Shrubland. (Logged by S. Lintern) Soil: Uc (gravelly alluvium) Calcrete: massive to platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 2.5	Pale coloured siliceous alluvium, sand to pebbles cemented by calcrete
2.5 – 5	An older dark brown colluvium–alluvium related to the modern channel, calcareous in part as coatings, Fe oxide staining
5 – 7	Red-brown hard-pan, palaeosol, partly Fe oxide & ?silica cemented
7 – 8	Thin silcrete on incipiently silicified saprolite which is pallid with weakly developed brownish Fe oxide micro mottles & staining
8 – 11	Silicified pallid saprolite, off-white with weak pink tint, kaolin + quartz
11 – 15	Pale pink saprolite, kaolin + quartz
15 – 18	Pink saprolite, redder at top of zone, kaolin + quartz
18 – 31	Pale yellow-brown saprolite (near pallid), kaolin + quartz, bluish grey vein quartz @ 19-20 m
31 – 40	Pale grey saprolite, kaolin + quartz, bluish vein quartz @ 33-34 m
40 – >74	Grey saprolite with a redder sub-zone @ 73-74 m.

Hole: 97 MNAR 105 Pilot Regolith Line, Monsoon Prospect. <u>In-Field Descriptions</u> Location: 350560.1 E, 6657453 N, AHD: 180.823 m Site: within a shallow creek gully Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Maireana sedifolia</i> , <i>Senna cardiosperma</i> subsp. <i>microphylla</i> and <i>Eremophila latrobei</i> Low Open Heath. (Logged by S. Lintern) Soil: Uc (gravelly alluvium) Calcrete: massive to platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 2	Pale pinkish siliceous alluvium, sand to pebbles cemented by calcrete
2 – 4	An older dark reddish brown colluvium–alluvium related to the modern channel, calcareous in part as coatings, Fe oxide staining
4 – 6	Red-brown hard-pan, palaeosol, partly Fe oxide cemented
6 – 8	Silcrete on incipiently silicified saprolite which is greyish to cream
8 – 12	Pallid saprolite, kaolin + quartz
12 – 32	Pinkish to pink saprolite, kaolin + quartz
32 – 45	Pale yellow brown saprolite
45 – 72	Grey saprolite, clays + quartz, bluish grey vein quartz @ 55-56 m
72 – >76	Dark grey saprolite, quartz + clays.

Hole: 97 MNAR 104 Pilot Regolith Line, Monsoon Prospect. <u>In-Field Descriptions</u> Location: 350560.2 E, 6657408 N, AHD: 180.792 m Site: near the edge of shallow creek gully Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Maireana sedifolia</i> and <i>Senna cardiosperma</i> subsp. <i>microphylla</i> Low Shrubland. (Logged by S. Lintern) Soil: Uc (gravelly alluvium) Calcrete: massive to platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 2	Pale pinkish siliceous alluvium, sand to pebbles cemented by calcrete
2 – >4	An older dark reddish brown colluvium–alluvium related to the modern channel, calcareous in part as coatings, Fe oxide staining
>4 – >5	Red-brown hard-pan, palaeosol, with dark brown to black Fe oxide segregations, partly Fe oxide & ?silica cemented
>5 – >6	Pale greyish silcrete on incipiently silicified pallid saprolite
>6 – 10	Pallid saprolite, kaolin + quartz
10 – 15	Pinkish to purplish saprolite, mostly clay + some quartz
15 – 21	Pale yellow brown saprolite with thin quartz veining
21 – 25	Pale grey saprolite, mostly clay
25 – 30	Dark brown saprolite, mostly clays.
30 – >61	Pale grey saprolite with some darker grey lithic relics, becomes greenish tinted near 61 m

Hole: 97 MNAR 119 Pilot Regolith Line, Monsoon Prospect. <u>In-Field Descriptions</u> Location: 350566.5 E, 6657358 N, AHD: 180.806 m Site: near the edge of a shallow creek gully Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Maireana sedifolia</i> and <i>Senna cardiosperma</i> subsp. <i>microphylla</i> Low Shrubland. (Logged by S. Lintern) Soil: Uc (gravelly alluvium) Calcrete: massive to platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – >1	Pale pinkish siliceous alluvium, sand to pebbles cemented by calcrete
>1 – 3	An older reddish brown colluvium–alluvium related to the modern channel, calcareous in part as coatings, Fe oxide staining
3 – >4	Red-brown hard-pan, palaeosol, with dark brown to black Fe oxide segregations, partly Fe oxide & ?silica cemented
>4 – 5	Pale greyish silcrete on incipiently silicified pallid saprolite
5 – 8	Pallid saprolite, with relict granulite texture preserved, medium to coarse-grained kaolin + quartz
8 – 14	Pallid saprolite, finer grained, pinkish near base of zone, clays + some quartz
14 – 18	Pale brown to brown saprolite
18 – 22	Yellow saprolite, mostly clay
22 – 30	Pinkish grey saprolite, mostly clays.
30 – 50	Grey saprolite
50 – >62	Grey saprolite with greenish blue-grey tint.

Hole: 97 MNAR 046 Pilot Regolith Line, Monsoon Prospect. <u>In-Field Descriptions</u> Location: 350559.1 E, 6657306 N, AHD: 180.933 m Site: near the edge of a shallow creek gully Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Maireana sedifolia</i> and <i>Senna cardiosperma</i> subsp. <i>microphylla</i> Low Shrubland. (This site contains a distinct margin in vegetation and sand/rock changes) (Logged by S. Lintern) Soil: Uc (lithosol, gravelly colluvium) Calcrete: massive to platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 2	Pale grey-brown colluvium, mostly cemented by calcrete
2 – 4	An older reddish brown colluvium related to the nearby modern channel, calcareous in part as coatings, Fe oxide staining
4 – <6	Red-brown hard-pan, palaeosol, partly Fe oxide & ?silica cemented
<6 – 8	Grey silcrete with enclosed angular quartz clasts
8 – 10	Greyish to pinkish grey silicified saprolite
10 – 13	As above but not silicified, clays + some quartz
13 – 25	White saprolite, kaolin + some quartz
25 – 33	Pale greyish to yellowish grey saprolite
33 – 40	Pinkish grey saprolite, mostly clays.
40 – 50	Grey saprolite
50 – >72	Grey saprolite with greenish tint & more competent after 60 m.

Hole: 97 MNAR 118 Pilot Regolith Line, Monsoon Prospect. <u>In-Field Descriptions</u> Location: 350564.3 E, 6657256 N, AHD: 181.008 m Site: minor creek channel within the upper part of a low flat outcrop area Vegetation: <i>Maireana sedifolia</i> and <i>Dodonaea microzyga</i> Low Shrubland over Very Open Grassland. (Logged by S. Lintern) Soil: Uc (lithosol, gravelly alluvium) Calcrete: massive to platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Modern creek alluvium, pale pinkish grey
1 – 3	As above, with quartz pebbles to 20 mm with reddish brown fines, may include a thin dark reddish alluvium-colluvium
3 – 5	Greyish to yellowish grey silicified saprolite
5 – 6	Pallid clay saprolite with reddish micro-mottles & stains
6 – 14	White clay-rich saprolite + quartz
14 – 25	Pallid saprolite with pinkish stains @ 15-16 m
25 – 30	Pinkish to pale yellowish red saprolite, clay + some quartz
30 – 40	Pinkish grey saprolite
40 – 60	Grey saprolite, with greenish tint
60 – >78	Grey to dark grey saprolite with dark grey lithic relic fragments.

Hole: 97 MNAR 047 Pilot Regolith Line, Monsoon Prospect. <u>In-Field Descriptions</u> Location: 350567.1 E, 6657199 N, AHD: 181.109 m Site: on the upper part of a low flat outcrop area Vegetation: <i>Maireana sedifolia</i> Low Shrubland. (Logged by S. Lintern) Soil: Uc (lithosol, gravelly colluvium) Calcrete: massive to platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Surficial lag + colluvium + thin lithosol, pale brown, calcreted
1 – ~4	Pinkish – brownish – greyish silcreted saprolite & partly silicified saprolite
~4 – 5	Off-white silicified saprolite
5 – ~8	Pallid clay saprolite, kaolin + quartz
~8 – 12	?smectitic clay saprolite – greyish with multi coloured mottles & staining
12 – 15	Bright yellow saprolite
15 – 17	Creamy saprolite
17 – 19	Pale brown saprolite
19 – 22	Pale yellow-grey saprolite
22 – 40	Greyish saprolite, with relict schistose fabric evident & greenish tint
40 – >54	Grey, dark grey and greenish grey saprolite with abundant relic lithic fragments approaching saprock mineralogy.

Hole: 97 MNAR 049 Pilot Regolith Line, Monsoon Prospect. <u>In-Field Descriptions</u> Location: 350569 E, 6657043 N, AHD: 180.859 m Site: on the upper part of a low flat outcrop area Vegetation: <i>Maireana sedifolia</i> and <i>Senna cardiosperma</i> subsp. <i>microphylla</i> Low Shrubland. (Logged by S. Lintern) Soil: Uc (lithosol, gravelly colluvium) Calcrete: massive to platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 1	Surficial lag + colluvium + thin lithosol, pale brown, calcreted
1 – 3	Brownish silicified unit & partly ?silcrete or just silicified colluvium & saprolite
3 – <6	White silicified saprolite
<6 – 12	Pallid clay saprolite, kaolin + quartz & bluish vein quartz @ 8-9 m
12 – 15	Greyish saprolite, more quartz than zone above
15 – 17	Khaki saprolite
17 – 19	Pallid zone with brown micro-flecking, saprolite
19 – 30	Pale yellowish to grey to khaki saprolite with bluish vein quartz @ 19-20 m
30 – 50	Pale brown saprolite, mostly clays
30 – >74	Greyish saprolite, with dark grey lithic relics increasing towards 70 m.

Hole: 97 MNAR 052 Pilot Regolith Line, Monsoon Prospect. <u>In-Field Descriptions</u> Location: 350570.4 E, 6656897 N, AHD: 180.780 m Site: on the upper part of a low flat outcrop area, end of sampled line of RAB holes Vegetation: <i>Maireana sedifolia</i> Low Shrubland. (Logged by S. Lintern) Soil: Uc (lithosol, gravelly colluvium) Calcrete: platy Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 2	Silcrete with quartz clasts and thin calcrete coatings
2 – 8	Pallid zone, mostly kaolin + some quartz
8 – 10	Pale yellow saprolite
10 – >16	Yellow clay saprolite
>16 – 20	Cream to pale grey saprolite
20 – 40	Pale pinkish saprolite
40 – 50	Grey saprolite
50 – >66	Grey to pinkish grey saprolite.

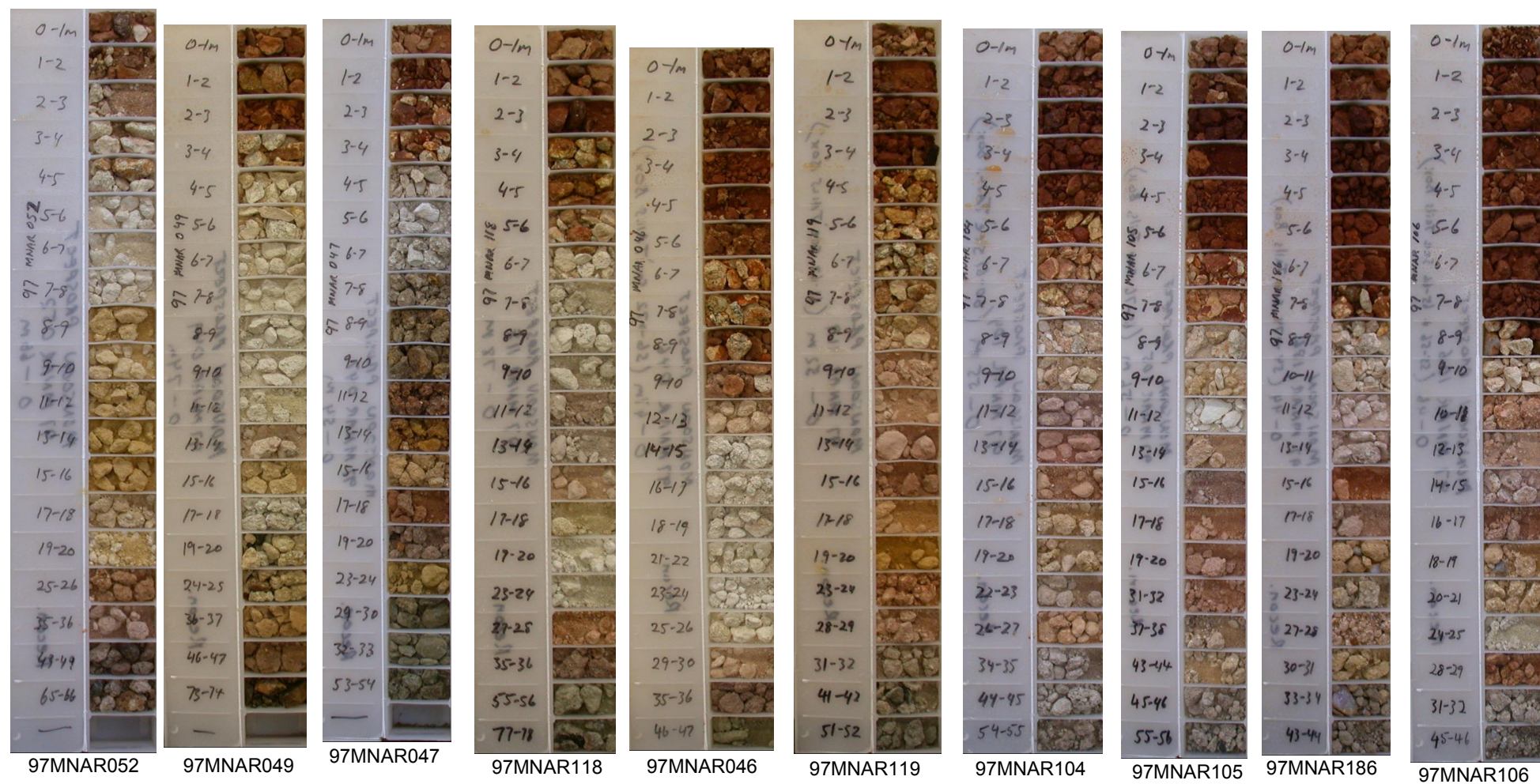


Figure A2.4.1: Monsoon Prospect chip tray photographs - vertically arranged according to AHD

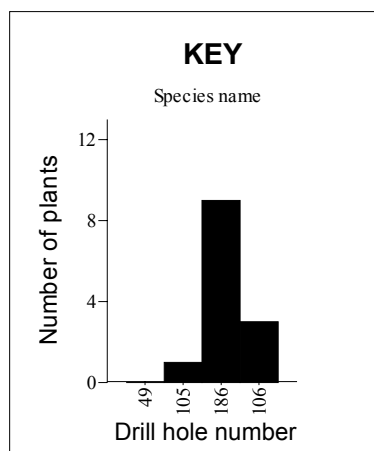
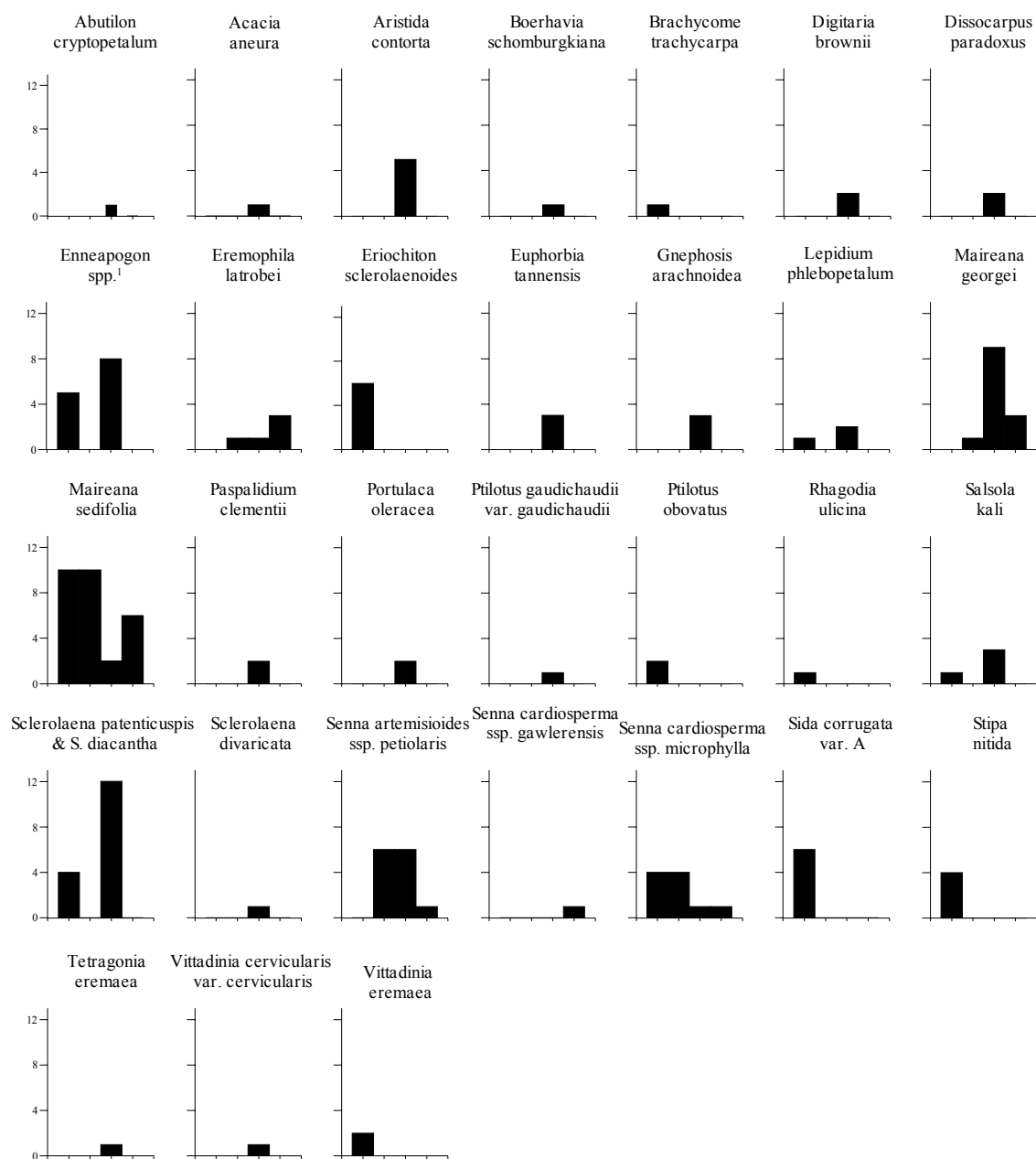


Figure A2.4.2: Species diversity and density at Monsoon Prospect.

N.B. For holes 105 and 106 only plants >0.7 m counted.

¹Enneapogon spp. includes *E. avenaceus*, *E. caeruleus* & *E. cylindricus*.

Appendix 2.5a: Regolith logging of reconnaissance line at South Hilga.

Hole: 96 SHAR 154 Pilot Regolith Line, South Hilga Prospect. <u>In-Field Descriptions</u> Location: 371373.4 E, 6660305 N, AHD: 210.041 m Site: Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Acacia aneura</i> Tall Open Shrubland over Shrubland over mixed Chenopodaceae Low Shrubland. (Logged by S. Lintern) Soil: Calcrete: Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 - ~3	Brown colluvium–alluvium with prominent carbonate within the 1 st meter
~3 – 4	Thin silcrete developed on white clay saprolite
4 – 19	White saprolite with green ?Fuchsite staining, lithic relics @ 15 – 16 m
19 – 36	Yellowish to pinkish saprolite
36 – 54	Greyish saprolite with dark coloured Fe oxide-rich chips
54 – 58	Yellowish grey saprolite with brown Fe sesquioxide nodules & chips
58 – 59	Pallid saprolite
59 – >65	Pallid saprolite with greenish tint + pink saprolite.

Hole: 96 SHAR 152 Pilot Regolith Line, South Hilga Prospect. <u>In-Field Descriptions</u> Location: 371531.3 E, 6660306 N, AHD: 209.509 m Site: Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Maireana sedifolia</i> and <i>Sclerolaena</i> Low Shrubland. (Logged by S. Lintern) Soil: Calcrete: Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 3	Reddish colluvium–alluvium with prominent carbonate within the 1 st meter
3 – 4	Incipient silcrete developed in/on white clay saprolite
4 – 10	Pallid saprolite – ?weathered gneiss
10 – 20	Yellowish to pinkish saprolite with Fe sesquioxide segregations rods & @ 14, 16 & 19 m
20 – 34	Yellowish to pinkish saprolite with Fe sesquioxide rods & segregations @ 21 & 33 m
34 – 42	Greyish saprolite with darker relicts as chips
42 – 48	Dark greyish saprolite with darker chips
48 – 61	Greyish-green saprolite with Fe oxide as dark reddish fragments & mica common below 49 m
61 – 64	Pinkish saprolite
64 – >75	Variably coloured – grey, purple, brown. Mica & Fe oxide segregations, relic lithic fragments – garnet-bearing felsic gneiss.

Hole: MHP 079 Pilot Regolith Line, South Hilga Prospect. <u>In-Field Descriptions – Roughs</u> Location: 371625.9 E, 6660322 N, AHD: 210.002 m, Angle Hole 60° → 270° Site: Vegetation: <i>Acacia aneura</i> Low Open Woodland over Shrubland over <i>Maireana sedifolia</i> and <i>Sclerolaena</i> Low Shrubland. (Logged by S. Lintern) Soil: Calcrete: Logged by: M.J. Sheard NOTE: only 2 m composite sample piles available.	
Depth (m)	Description of RAB cuttings
0 – 7	Reddish colluvium–alluvium with prominent carbonate @ ~1 st meter & Mn oxide staining @ 6 m
7 – 8	Silcrete developed on pale clay saprolite
8 – >12	Pallid saprolite, partly silicified

Hole: MHP 080b (on bags as 085) Pilot Regolith Line, South Hilga Prospect. <u>In-Field Descriptions</u> Location: 371646.6 E, 6660331 N, AHD: 209.971 m, Angle Hole 60° → 270° Site: Vegetation: Soil: Calcrete: Logged by: M.J. Sheard NOTE: only 2 m composite sample piles available.	
Depth (m)	Description of RAB cuttings
0 – 10	Reddish colluvium–alluvium (deepest channel infill here) with prominent carbonate @ ~1 st meter
10 – 16	Yellow-brown clay-rich material – ferruginous saprolite, [NOT Algebuckina Sandstone (JKa) as stated by K. Wills, 1997 AMF Calcrete Course Case Studies paper]
16 – 18	Reddish saprolite
18 – 20	NO SAMPLE
20 – >34	Yellowish brown to dark yellowish brown saprolite.

Hole: MHP 081 Pilot Regolith Line, South Hilga Prospect. <u>In-Field Descriptions</u> Location: 371667.6 E, 6660342 N, AHD: 210.211 m, Angle Hole 60° → 270° Site: Vegetation: <i>Acacia aneura</i> Low Woodland over <i>Senna artemisioides</i> subsp. <i>artemisioides</i> , <i>Eremophila latrobei</i> and <i>Sclerolaena</i> Open Shrubland over <i>Maireana sedifolia</i> and <i>Maireana georgei</i> Low Shrubland. (many dead <i>Acacia aneura</i>) (Logged by S. Lintern) Soil: Calcrete: Logged by: M.J. Sheard NOTE: only 2 m composite sample piles available.	
Depth (m)	Description of RAB cuttings
0 – <5	Reddish colluvium–alluvium (deepest channel infill here) with prominent carbonate @ >1 m
5 – 12	Yellowish to strong yellow clay saprolite with silcrete (yellowish-grey) @ ~6 m. [NOT Algebuckina Sandstone (JKa) as stated by K. Wills, 1997 AMF Calcrete Course Case Studies paper]
12 – 34	Dark yellow to yellow-brown clay saprolite
34 – >40	Dark yellow-brown-grey saprolite, ferruginous.

Hole: 96 SHAR 148 Pilot Regolith Line, South Hilga Prospect. <u>In-Field Descriptions</u> Location: 371725.6 E, 6660322 N, AHD: 209.827 m Site: Photos: 11/99/R2/#2 & 3 Vegetation: <i>Senna artemisioides</i> subsp. <i>artemisioides</i> Shrubland over <i>Maireana sedifolia</i> , <i>Maireana georgei</i> and <i>Sclerolaena</i> Low Shrubland. (Site drilling disturbance. Many dead <i>Acacia aneura</i>) (Logged by S. Lintern) Soil: Calcrete: Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – <5	Reddish colluvium–alluvium with many rounded quartz clasts + prominent carbonate within the 1 st meter
5	Pale silcrete developed in/on white clay saprolite (plenty of down-hole contamination of silcrete & rounded quartz clasts)
>5 – 11	Pallid clay saprolite – ?weathered gneiss, plenty of down-hole contamination of silcrete & rounded quartz clasts, [may have led to sediment confusion by K. Wills]
11 – >16	Yellowish to strong yellow-brown Fe-stained clay saprolite (plenty of down-hole contamination of silcrete, rounded quartz clasts & calcrete).

Hole: MHP 102 Pilot Regolith Line, South Hilga Prospect. <u>In-Field Descriptions</u>	
Location: 371755.8 E, 6660344 N, AHD: 209.843 m, Angle Hole 60° → 270°	
Site:	
Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Senna artemisioides</i> subsp. <i>artemisioides</i> Shrubland over <i>Maireana sedifolia</i> , <i>Maireana georgei</i> and <i>Sclerolaena</i> Low Shrubland. (Logged by S. Lintern)	
Soil:	
Calcrete:	
Logged by: M.J. Sheard NOTE: only 2 m composite sample piles available.	
Depth (m)	Description of RAB cuttings
0 – >10	Reddish colluvium–alluvium with many rounded quartz clasts + prominent carbonate within the 1 st meter
~11	Thin yellowish silcrete developed in/on pallid clay saprolite
~12 – 22	Pallid clay saprolite with yellowish-pink upper zone, waste mantle (pedolith) cap to saprolite, [down-hole contamination of silcrete & rounded quartz clasts, may have led to sediment confusion by K. Wills]
22 – 38	Yellow clay saprolite ferruginising & stronger colour development with depth
38 – ~43	Dark yellow saprolite
44 – >76	Dark reddish to some dark yellowish clay saprolite.

Hole: 96 SHAR 147 Pilot Regolith Line, South Hilga Prospect. <u>In-Field Descriptions</u>	
Location: 371777.8 E, 6660310 N, AHD: 209.369 m	
Site:	
Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Senna artemisioides</i> subsp. <i>artemisioides</i> Shrubland over <i>Maireana sedifolia</i> , <i>Senna artemisioides</i> subsp. <i>artemisioides</i> and <i>Sclerolaena</i> Low Shrubland. (Logged by S. Lintern)	
Soil:	
Calcrete:	
Logged by: M.J. Sheard Photo: 11/99/R2/#4	
Depth (m)	Description of RAB cuttings
0 – <4	Reddish colluvium–alluvium with abundant rounded quartz clasts + prominent carbonate within the 1 st meter
~4	Thin yellowish silcrete developed in/on pallid clay saprolite
>4 – 10	Pallid zone, kaolin + quartz (?clay saprolite or ?transported JKa) under hand lens cuttings exhibit ?graphite + angular micro-vein quartz & polymict grains (possibly contamination from top zone)
10 – 23	Yellowish clay saprolite Fe-rich & stronger colour development with depth
23 – 26	Dark reddish (maroon) clay saprolite with dark red-brown segregations & yellow patches
26 – >29	Yellow to dark yellow-brown clay saprolite.

Hole: 96 SHAR 146 Pilot Regolith Line, South Hilga Prospect. <u>In-Field Descriptions</u> Location: 371830 E, 6660319 N, AHD: 209.369 m Site: Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Senna artemisioides</i> subsp. <i>artemisioides</i> Shrubland over <i>Maireana sedifolia</i> , <i>Senna artemisioides</i> subsp. <i>artemisioides</i> and <i>Sclerolaena</i> Low Shrubland. (Logged by S. Lintern) Soil: Calcrete: Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – 2	Reddish colluvium with mostly angular quartz clasts + prominent carbonate within the 1 st meter
2 – 3	Silcrete developed in/on pallid clay saprolite
3 – 11	Pallid clay saprolite with yellowish-pink upper zone, waste mantle (pedolith) cap to saprolite, [down-hole contamination of silcrete & rounded quartz clasts, may have led to sediment confusion by K. Wills]
11 – 13	Pallid clay saprolite with obvious mica present
13 – 21	Pinkish to reddish saprolite
21 – 25	Yellowish clay saprolite with Fe hydroxide segregations @ 24m
25 – 28	Greyish pink saprolite zone, dark reddish @ 26 – 27 m
28 – >46	Saprolite, variably grey with yellow-brown, greenish & dark grey fragments + many relic lithic fragments.

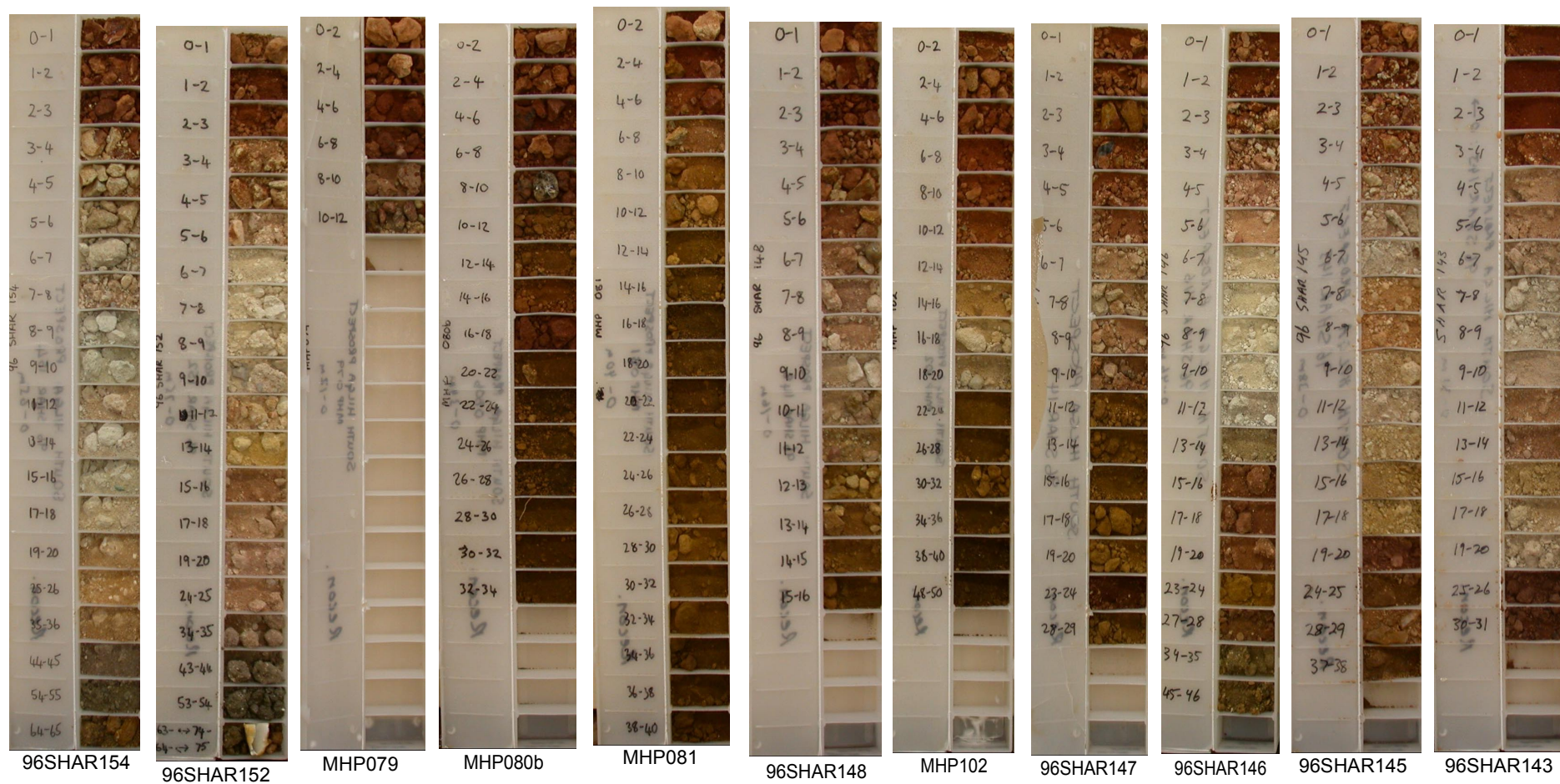
Hole: 96 SHAR 145 Pilot Regolith Line, South Hilga Prospect. <u>In-Field Descriptions</u> Location: 371879.4 E, 6660325 N, AHD: 209.025 m Site: Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Eremophila latrobei</i> Open Shrubland over <i>Maireana sedifolia</i> and <i>Sclerolaena</i> Low Open Shrubland. (Logged by S. Lintern) Soil: Calcrete: Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – <2	Reddish colluvium with rounded quartz clasts + prominent carbonate within the 1 st m
~2	Grey silcrete developed in/on pallid clay saprolite
>2 – 8	Pallid clay saprolite with yellowish-pink upper zone, waste mantle (pedolith) cap to saprolite, (some down-hole contamination of silcrete & rounded quartz clasts)
8 – 11	Pale yellowish clay saprolite
11 – 18	Pallid saprolite with yellow zones @ 13 & 16 m
18 – 19	Pale yellow saprolite
19 – 28	Reddish saprolite
28 – 30	As above but with plenty of coarse fragments (2-3 cm) of grey vein quartz
30 – >38	Grey to dark grey saprolite to saprock with some red & yellow zones within.

Hole: 96 SHAR 143 Pilot Regolith Line, South Hilga Prospect. <u>In-Field Descriptions</u> Location: 371979.2 E, 6660318 N, AHD: 208.734 m Site: Vegetation: <i>Acacia aneura</i> Open Woodland over <i>Senna artemisioides</i> subsp. <i>artemisioides</i> Open Shrubland over <i>Maireana sedifolia</i> and <i>Sclerolaena</i> Low Open Shrubland. (Logged by S. Lintern) Soil: Calcrete: Logged by: M.J. Sheard	
Depth (m)	Description of RAB cuttings
0 – <3	Orange colluvium with rounded quartz clasts + prominent carbonate within the 1 st m
~3	Very thin brown to grey silcrete developed in/on pallid clay saprolite
>3 – 12	Pallid kaolin + quartz saprolite
12 – 25	Pale pink to dark pink saprolite
25 – >31	Maroon-red saprolite

Appendix 2.5b: Sample descriptions of reconnaissance line at South Hilga.

Hole: 96 SHAR 154 Pilot Regolith Line, South Hilga Prospect. <u>Sample Descriptions</u> Location: 371373.4 E, 6660305 N, AHD: 210.041 m Site: Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Acacia aneura</i> Tall Open Shrubland over Shrubland over mixed Chenopodaceae Low Shrubland. (Logged by S. Lintern) Soil: Calcrete: Logged by: M.J. Sheard		
Depth (m)	Sample #	Description of RAB cuttings
0-1	R	UNWASHED: : (d), ; texture – (w) (/). Brown colluvium–alluvium with prominent carbonate within the 1 st meter,
1-2	R	UNWASHED: : (d), ; texture – (w) (/). Brown colluvium–alluvium
2–~3	R	UNWASHED: : (d), ; texture – (w) (/). Brown colluvium–alluvium
~3	R	UNWASHED: : (d), ; texture – (w) (/). Thin silcrete on white saprolite.
~3-4	R	UNWASHED: : (d), ; texture – (w) (/). White saprolite
4-5	R	UNWASHED: : (d), ; texture – (w) (/). White saprolite
5-6	R	UNWASHED: : (d), ; texture – (w) (/). White saprolite
6-7	R	UNWASHED: : (d), ; texture – (w) (/). White saprolite
7-8	R	UNWASHED: : (d), ; texture – (w) (/). White saprolite
8-9		UNWASHED: : (d), ; texture – (w) (/). White saprolite
9-10		UNWASHED: : (d), ; texture – (w) (/). White saprolite
11-12	R	UNWASHED: : (d), ; texture – (w) (/). White saprolite
13-14	R	UNWASHED: : (d), ; texture – (w) (/). White saprolite
15-16	R	UNWASHED: : (d), ; texture – (w) (/). Green Fuchsite noted in the near-white saprolite, relict lithics @ 15-16 m.
17-18	R	UNWASHED: : (d), ; texture – (w) (/). Green Fuchsite noted in the near-white saprolite
19-20	R	UNWASHED: : (d), ; texture – (w) (/). Yellowish to pinkish saprolite
25-26	R	UNWASHED: : (d), ; texture – (w) (/). Yellowish to pinkish saprolite
35-36	R	UNWASHED: : (d), ; texture – (w) (/). Yellowish to pinkish saprolite
37->54	R	UNWASHED: : (d), ; texture – (w) (/). Greyish saprolite with FeOH chips (dark)
45-46	R	UNWASHED: : (d), ; texture – (w) (/). Greyish saprolite with FeOH chips (dark)
55-56	R	UNWASHED: : (d), ; texture – (w) (/). Yellowish-grey saprolite with brown FeOH nodules & chips.
58-59	R	UNWASHED: : (d), ; texture – (w) (/). Pallid saprolite.
59-60		UNWASHED: : (d), ; texture – (w) (/). Pallid saprolite with greenish tint, plus pink saprolite.

Hole: 96 SHAR 152 Pilot Regolith Line, South Hilga Prospect. <u>Sample Descriptions</u>		
Location: 371531.3 E, 6660306 N, AHD: 209.509 m		
Site:		
Vegetation: <i>Acacia aneura</i> Low Open Woodland over <i>Maireana sedifolia</i> and <i>Sclerolaena</i> Low Shrubland. (Logged by S. Lintern)		
Soil:		
Calcrete:		
Logged by: M.J. Sheard		
Depth (m)	Sample #	Description of RAB cuttings <u>Sample Descriptions</u>
0-1	R	UNWASHED: : (d), ; texture – (w) (/). Brown colluvium–alluvium with prominent carbonate within the 1 st meter,
1-2	R	UNWASHED: : (d), ; texture – (w) (/). Brown colluvium–alluvium
2-3	R	UNWASHED: : (d), ; texture – (w) (/). Brown colluvium–alluvium
3-4	R	UNWASHED: : (d), ; texture – (w) (/). Incipient silcrete on/in white saprolite
4-5	R	UNWASHED: : (d), ; texture – (w) (/). Pallid saprolite, weathered gneiss
5-6	R	UNWASHED: : (d), ; texture – (w) (/). Pallid saprolite, weathered gneiss
6-7	R	UNWASHED: : (d), ; texture – (w) (/). Pallid saprolite, weathered gneiss
7-8	R	UNWASHED: : (d), ; texture – (w) (/). Pallid saprolite, weathered gneiss
8-9	R	UNWASHED: : (d), ; texture – (w) (/). Pallid saprolite, weathered gneiss
9-10	R	UNWASHED: : (d), ; texture – (w) (/). Pallid saprolite, weathered gneiss
11-12	R	UNWASHED: : (d), ; texture – (w) (/). Yellowish to pinkish saprolite
13-14	R	UNWASHED: : (d), ; texture – (w) (/). Yellowish to pinkish saprolite with FeOH segregations
15-16	R	UNWASHED: : (d), ; texture – (w) (/). Yellowish to pinkish saprolite with FeOH segregations.
17-18	R	UNWASHED: : (d), ; texture – (w) (/). Yellowish to pinkish saprolite
19-20	R	UNWASHED: : (d), ; texture – (w) (/). Yellowish to pinkish saprolite with FeOH segregations (to 21m).
25-26	R	UNWASHED: : (d), ; texture – (w) (/). Yellowish to pinkish saprolite
35-36	R	UNWASHED: : (d), ; texture – (w) (/). greyish saprolite with darker relicts as chips.
37-54	R	UNWASHED: : (d), ; texture – (w) (/).
45-46	R	UNWASHED: : (d), ; texture – (w) (/).
55-56	R	UNWASHED: : (d), ; texture – (w) (/).
58-59	R	UNWASHED: : (d), ; texture – (w) (/).
59-60	R	UNWASHED: : (d), ; texture – (w) (/).



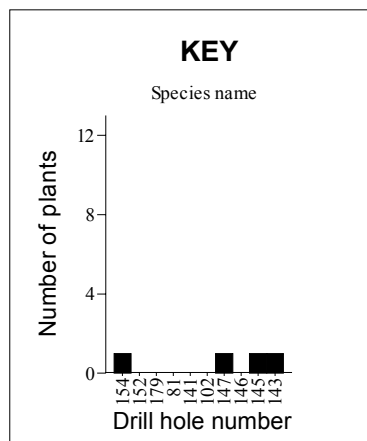
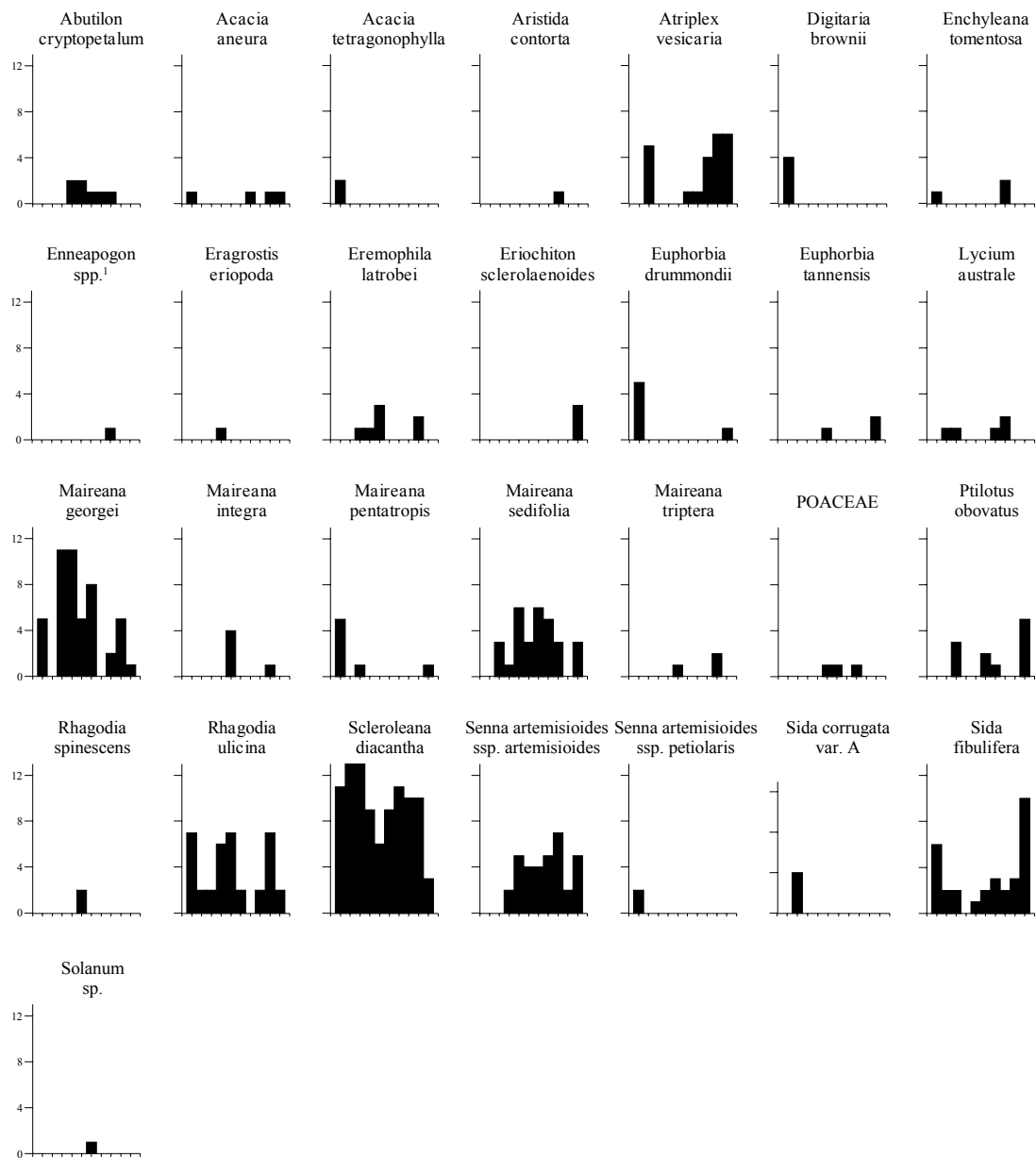


Figure A2.5.2: Species diversity and density along 6660320N at South Hilga Prospect.
¹Enneapogon spp. includes *E. avenaceus*, *E. caerulescens*?, *E. cylindricus* and *E. intermedius*

APPENDIX 3

Geochemical Data

Data located on CD-ROM

APPENDIX 4

Differential GPS data

Table A4.1: Tabulated differential data along regolith line at Golf Bore.

Site No.	DH	Easting	Northing	Height (m)
G001	96JBAR102	404950.4	6726622.1	180.819
G002	96JBAR26	404998.0	6726623.1	181.035
G003		405038.9	6726625.7	181.246
G004	96JBAR27	405102.6	6726616.8	181.711
G005		405136.5	6726626.0	181.54
G006		405179.0	6726626.4	181.031
G007		405246.7	6726618.6	181.186
G008		405284.7	6726594.4	181.832
G009		404926.9	6726624.2	180.655
G010		404893.3	6726632.7	180.407
G011		404857.1	6726612.4	180.423
G012		404845.6	6726575.4	179.782
G013		404818.8	6726547.7	179.666
G014		404781.6	6726526.5	179.636
G015	96GBAR88	404749.9	6726506.7	179.467
G016	96GBAR90	404701.7	6726503.2	179.428
G017	96GBAR91	404679.1	6726509.0	179.283
G018		404654.7	6726518.8	179.099
G019	96GBAR93	404631.3	6726511.0	179.026
G020		404578.6	6726517.8	178.682
G021	96GBAR243	404508.2	6726522.3	178.716
G022		404482.1	6726513.0	178.642
G023		404432.0	6726520.2	178.278
G024	96GBAR244	404400.2	6726514.0	177.822
G025		404350.9	6726513.7	177.776
G026	96GBAR245	404304.2	6726511.0	177.561
G027		404257.3	6726515.8	177.406
G028	96GBAR246	404199.3	6726510.0	177.266
G029		404153.5	6726510.1	177.534
G030	96GBAR247	404100.4	6726517.8	177.839
G031		404046.7	6726514.4	177.79
G032		403942.3	6726514.9	178.674
G033	96GBAR249	403898.1	6726511.1	179.65
G034		403829.4	6726513.1	180.66
G035	98ORAR001	403792.2	6726522.7	180.978
G036		403741.7	6726511.9	181.531
G037	98ORAR011	403691.6	6726508.8	182.092
G038		403638.7	6726523.5	181.499
G039	98ORAR010	403584.2	6726522.3	180.884
G040		403538.2	6726531.3	180.592
G041	98ORAR009	403490.4	6726525.3	180.536
G042		403427.5	6726540.4	179.855

Table A4.2: Tabulated differential data along regolith line at ET.

Site No	DH	Easting	Northing	Height (m)
E001	96ETAR193	340259.4	6635572.6	186.895
E002	96ETAR194	340255.4	6635469.0	185.751
E003	96ETAR195	340257.6	6635369.9	184.891
E004	96ETAR196	340267.2	6635267.2	185.135
E005	96ETAR197	340268.7	6635167.1	182.31
E011	96ETAR192	340251.8	6635674.1	185.516
E012	96ETAR191	340255.5	6635767.5	187.101
E013	96ETAR190	340245.2	6636148.1	187.436
E014	96ETAR189	340239.0	6636245.6	188.833
E015	96ETAR188	340240.0	6636344.2	188.181
E016	96ETAR187	340237.3	6636441.2	187.83
E019	96ETAR184	340224.0	6636745.3	189.235
E021	96ETAR182	340219.0	6636948.8	188.482
E022	96ETAR181	340209.1	6637042.8	189.093
E023	96ETAR180	340216.9	6637148.9	191.642
E024	96ETAR179	340206.9	6637248.9	192.662
E025	96ETAR178	340215.4	6637341.3	192.168
E031	96ETAR183	340213.1	6636845.6	188.88
E033	96ETAR185	340226.6	6636654.1	191.171

Table A4.3: Tabulated differential data along regolith line at Jumbuck.

Site	DH	Easting	Northing	Height (m)
J001	JBAR055	376366.2	6690462.5	203.326
J002		376393.8	6690466.1	202.955
J003		376444.1	6690462.9	202.239
J004	JBAR054	376471.2	6690470.8	201.853
J005		376509.3	6690477.4	201.461
J006		376567.8	6690492.4	200.885
J007	JBAR053	376569.6	6690477.3	201.02
J008		376612.8	6690477.1	200.383
J009	JBAR052	376671.6	6690479.3	199.446
J010		376721.8	6690485.2	198.407
J011	JBAR051	376764.5	6690476.2	197.565
J012		376787.5	6690467.8	197.441
J013		376835.3	6690475.8	196.048
J014	JBAR050	376876.8	6690477.3	195.397
J015		376918.8	6690464.6	194.838
J016		376321.2	6690453.6	203.677
J017	JBAR056	376273.2	6690463.5	204.16
J018		376204.3	6690471.7	205.025
J019	JBAR057	376173.4	6690460.4	206.221
J020		376144.7	6690466.8	206.719
J021		376106.8	6690470.3	206.938
J022	JBAR058	376078.6	6690461.9	206.916
J023		376048.1	6690462.3	207.236
J024		376020.7	6690464.3	208.003
J025	JBAR059	375978.5	6690461.4	208.114
J026		375930.9	6690463.4	207.895
J027	JBAR060	375882.5	6690460.0	208.076
J028		375834.8	6690450.8	208.072
J029	JBAR061	375784.5	6690456.9	208.197
J030		375721.1	6690448.3	208.149
J031	JBAR062	375681.8	6690448.0	208.026
J032		375640.5	6690446.6	207.923
J033	JBAR063	375588.5	6690450.9	207.315
J034		375543.8	6690446.8	206.818
J035	JBAR064	375490.2	6690443.4	206.593
J036		375443.1	6690439.5	206.516
J037	JBAR065	375391.1	6690444.6	206.901
J038		375349.0	6690443.8	206.757
J039	JBAR066	375287.4	6690443.0	206.446
J040		375259.3	6690434.6	206.673
J041		375232.8	6690428.6	207.318
J042	JBAR067	375188.6	6690436.3	207.138
J043		375162.5	6690438.1	207.356
J044		375130.8	6690438.7	207.334
J045	JBAR068	375097.1	6690432.8	207.159
J046		375048.1	6690434.5	206.981
J047	JBAR069	374993.6	6690435.7	206.844
J048		374954.9	6690459.5	206.857

Table A4.4: Tabulated differential data along regolith line at Monsoon.

Site	DH	Easting	Northing	Height (m)
M001	97MNAR106	350550.8	6657557.2	180.747
M002	97MNAR186	350554.8	6657495.3	180.728
M003	97MNAR105	350560.1	6657452.8	180.823
M004	97MNAR104	350560.2	6657407.6	180.792
M005	97MNAR119	350566.5	6657357.6	180.806
M006	97MNAR046	350559.1	6657305.9	180.933
M007	97MNAR118	350564.3	6657255.9	181.008
M008	97MNAR047	350567.1	6657198.5	181.109
M009	97MNAR117	350574.5	6657146.4	181.011
M010	97MNAR048	350568.3	6657092.5	181.023
M011	97MNAR049	350569.0	6657043.2	180.859
M012	97MNAR050	350568.7	6656997.6	180.739
M013	97MNAR051	350575.4	6656941.8	180.655
M014	97MNAR052	350570.4	6656897.3	180.78
M015	97MNAR053	350576.2	6656790.0	180.208
M016	97MNAR054	350576.5	6656691.4	179.924
M017	97MNAR107	350584.4	6656632.3	179.787

Table A4.4: Tabulated differential data along regolith line at South Hilga.

Site	DH	Easting	Northing	Height (m)
SH01	96SHAR151	371579.2	6660315.2	209.86
SH02		371557.7	6660311.6	209.645
SH03	96SHAR152	371531.3	6660305.7	209.509
SH04		371503.5	6660308.9	209.497
SH05	96SHAR153	371482.1	6660319.2	209.615
SH06		371451.6	6660316.2	209.63
SH07	96SHAR155	371422.6	6660317.3	209.696
SH08		371400.6	6660313.2	209.898
SH09	96SHAR154	371373.4	6660305.2	210.041
SH10		371349.5	6660306.9	209.945
SH11		371326.9	6660316.3	209.956
SH12		371302.0	6660321.4	210.018
SH13		371266.9	6660321.3	210.086
SH14		371243.3	6660321.3	210.193
SH15		371588.7	6660314.0	209.926
SH16	MHR078	371599.0	6660309.3	209.925
SH17		371613.6	6660319.4	210.057
SH18	MHP079	371625.9	6660322.1	210.002
SH19		371637.3	6660324.7	209.941
SH20	MHP080B	371646.6	6660330.7	209.971
SH21		371657.2	6660337.8	210.153
SH22	MHP081	371667.6	6660342.1	210.211
SH23		371677.6	6660337.1	210.151
SH24	96SHAR329	371688.5	6660336.0	210.2
SH25		371704.9	6660321.7	209.894
SH26	96SHAR148	371725.6	6660321.7	209.827
SH27		371742.8	6660331.4	209.884
SH28	MHP102	371755.8	6660343.6	209.843
SH29		371767.4	6660328.5	209.593
SH30	96SHAR147	371777.8	6660310.1	209.369
SH31		371802.7	6660318.5	209.314
SH32	96SHAR146	371830.0	6660318.7	209.176
SH33		371854.9	6660320.3	209.183
SH34	96SHAR145	371879.4	6660324.5	209.025
SH35		371905.0	6660326.1	208.953
SH36	96SHAR144	371930.5	6660319.4	208.764
SH37		371961.0	6660318.3	208.764
SH38	96SHAR143	371979.2	6660317.9	208.734
SH39		372006.5	6660316.2	208.703
SH40	96SHAR142	372030.9	6660316.6	208.857
SH41		372063.2	6660314.8	208.487
SH42		372099.2	6660310.2	208.51

APPENDIX 5

Quality Control

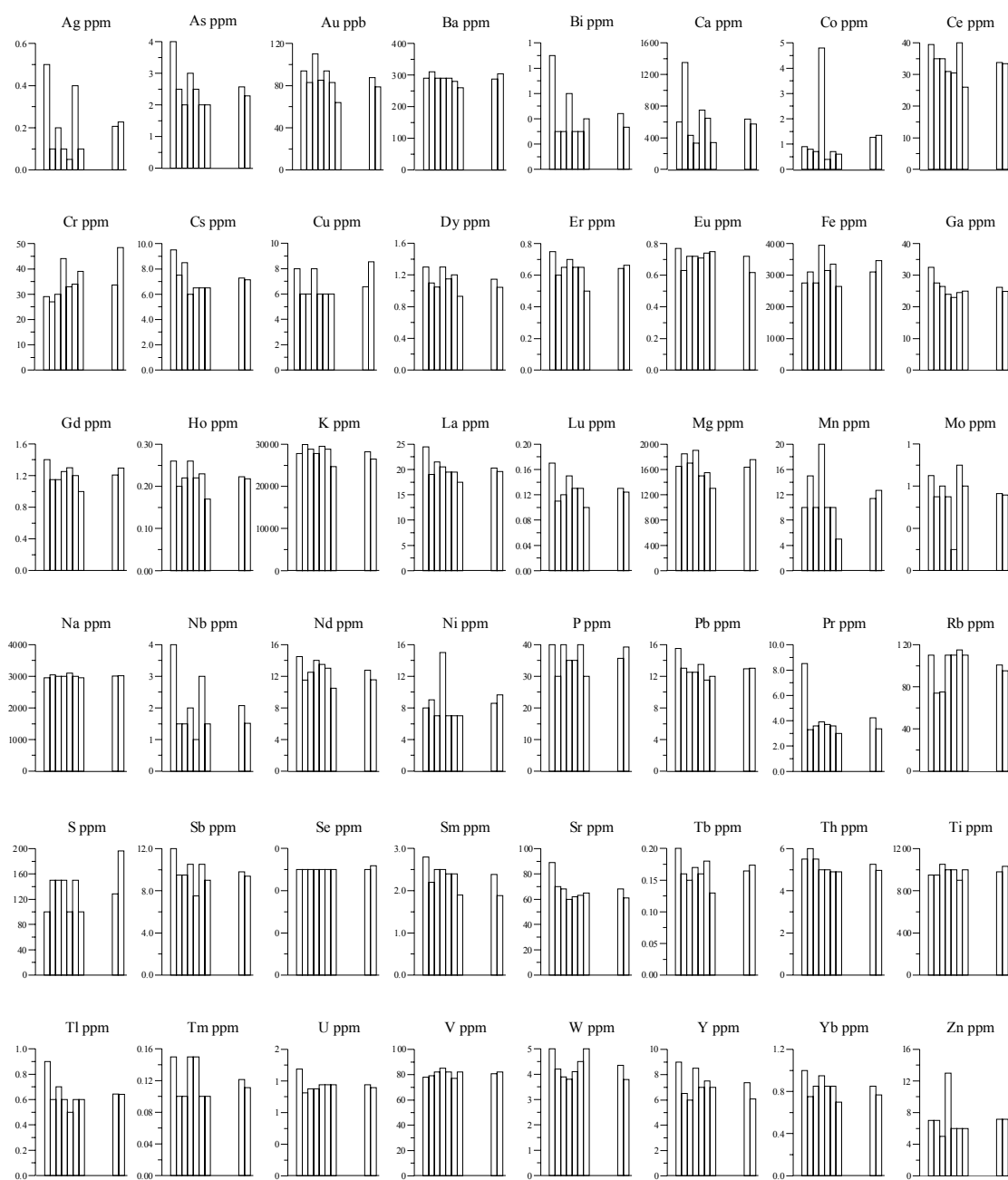


Fig A5.1: Elemental abundancies for a series of CRC LEME STANDARD 6 samples submitted "blind" with regolith samples. The two bar charts (from l to r) on right of each graph is mean of samples from this project and mean from 27 samples from previous projects.

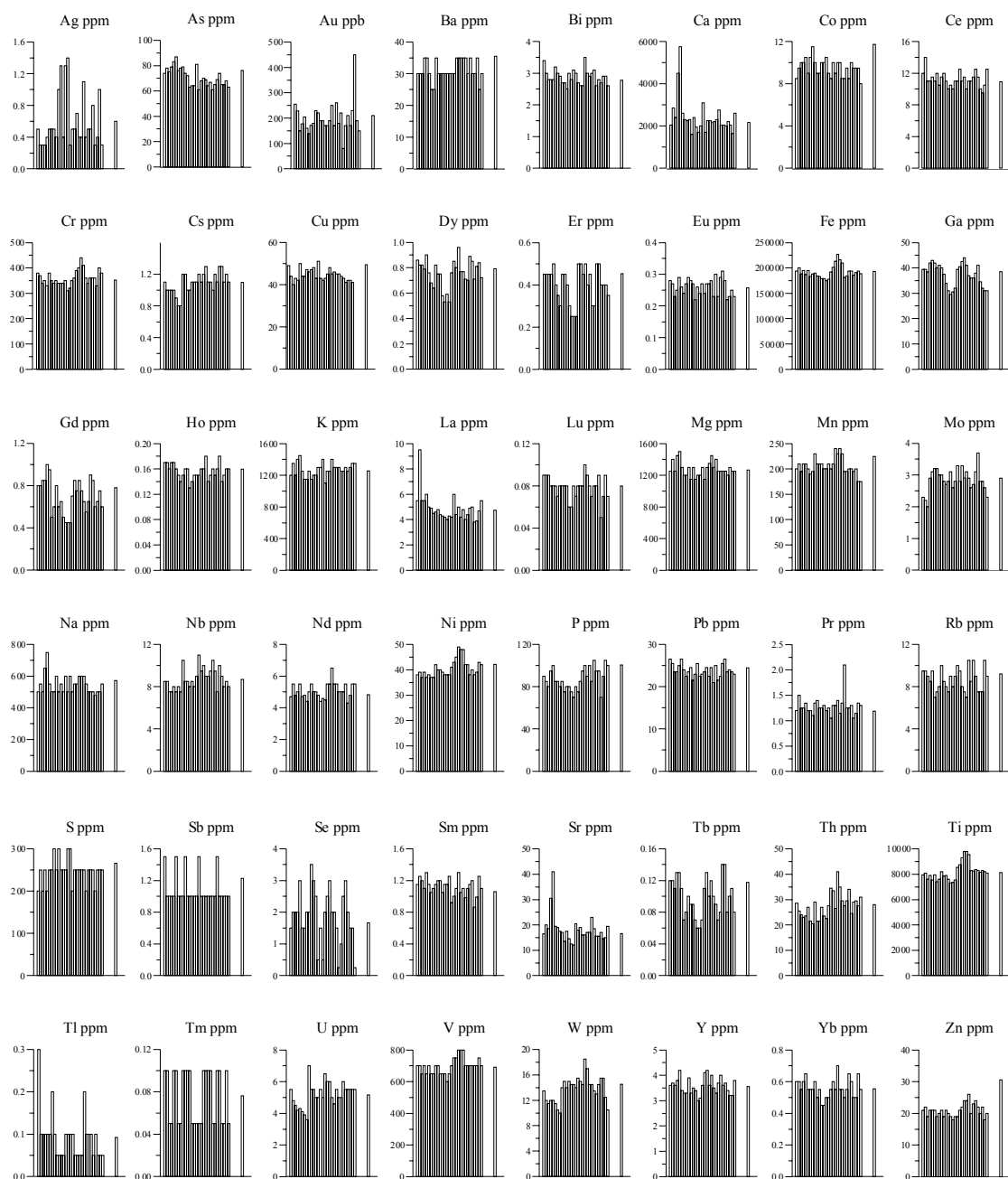


Fig A5.2: Elemental abundances for a series of CRC LEME STANDARD 6 samples submitted "blind" with regolith samples. Bar on far right are means of 57 samples from previous projects using the same standard

APPENDIX 6

CD containing data and pdf files