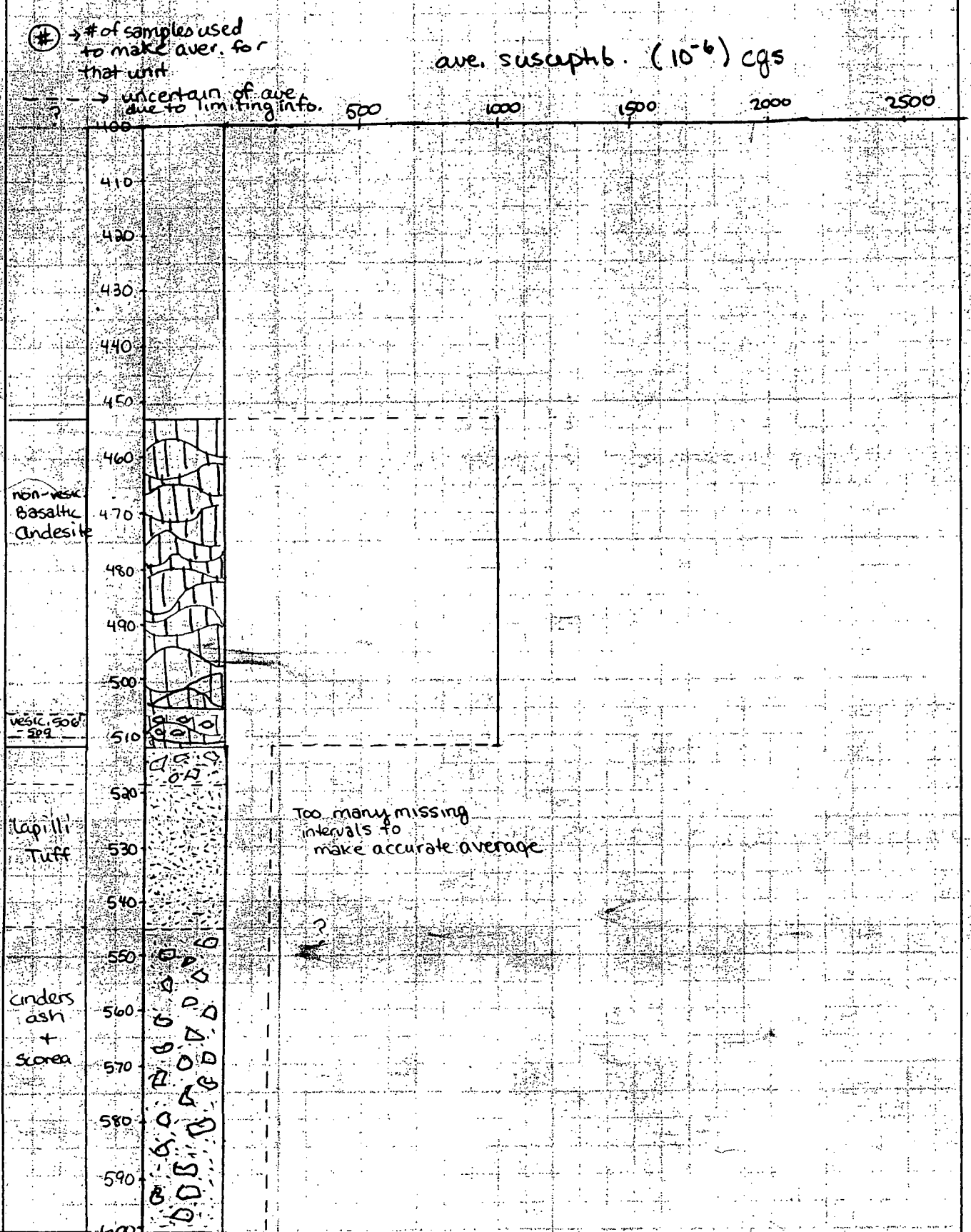
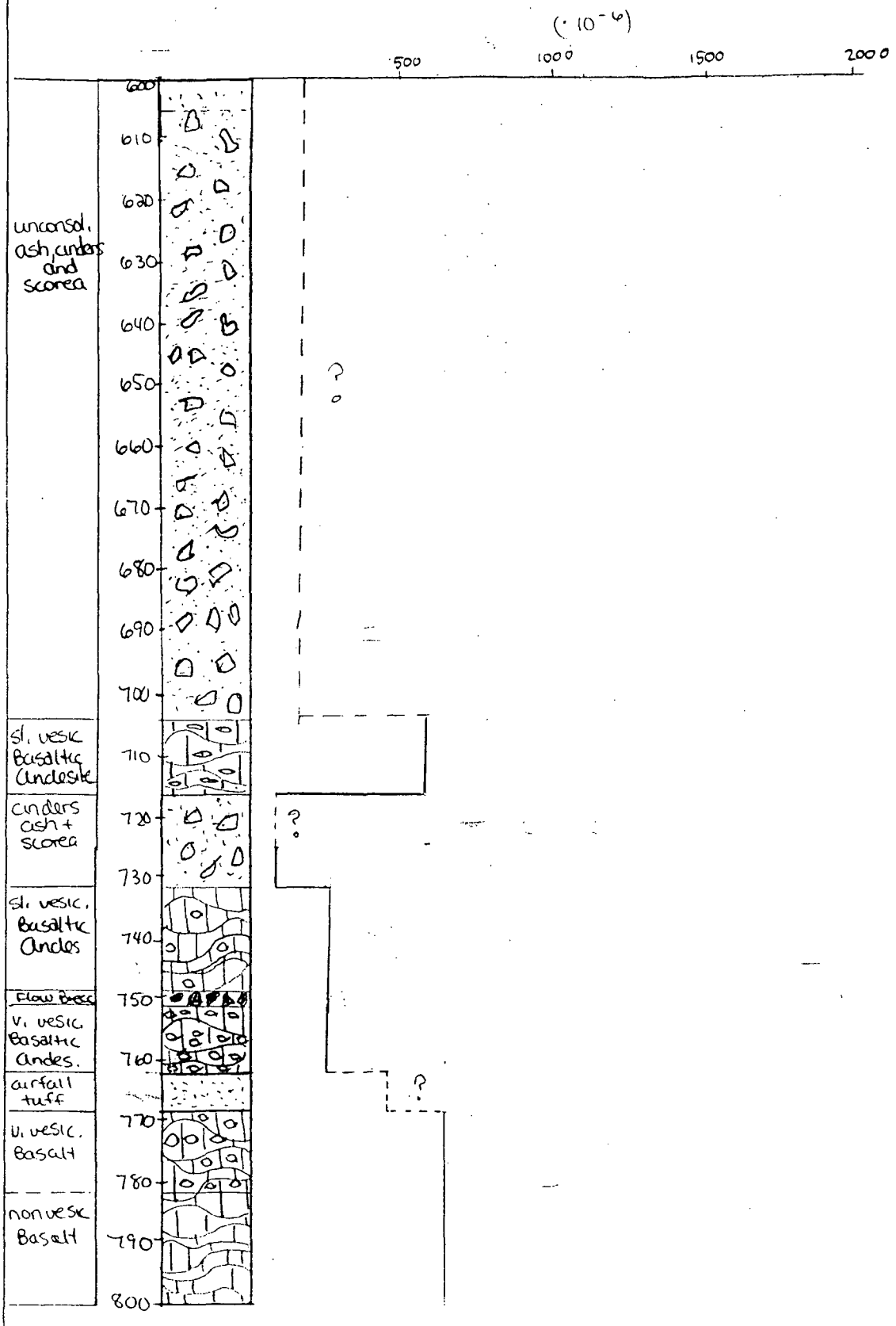
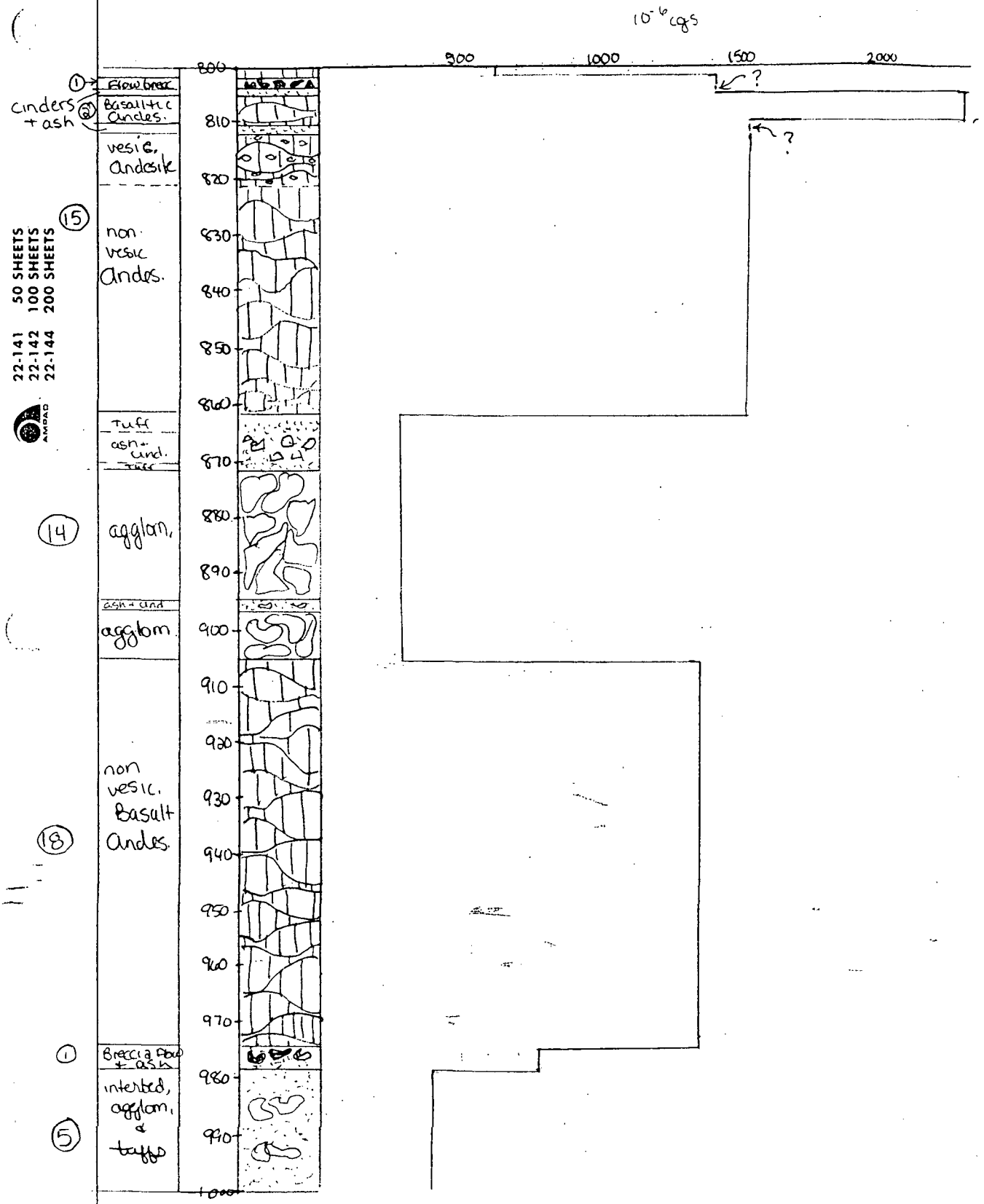
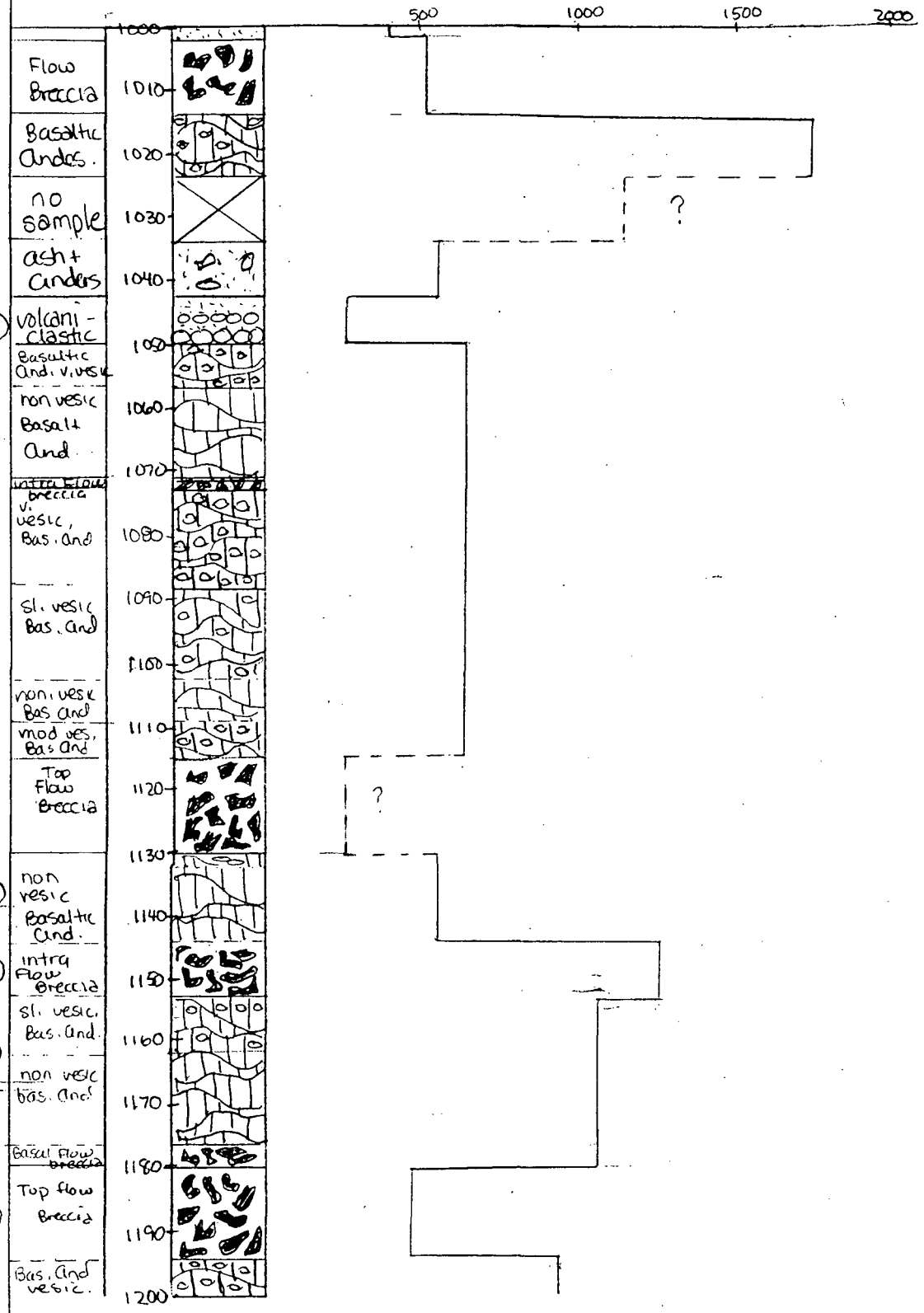
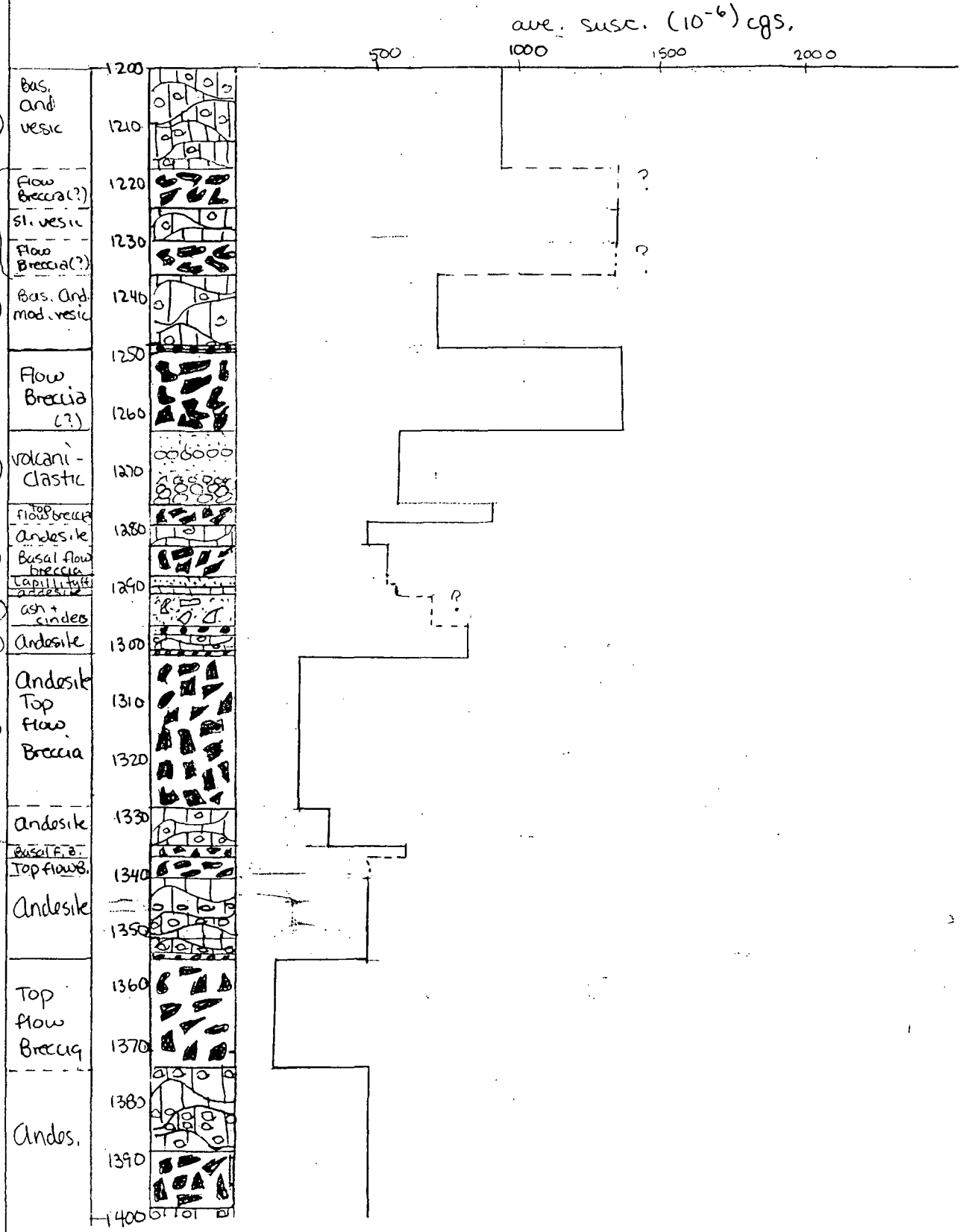
GL01668 | GEO N-3



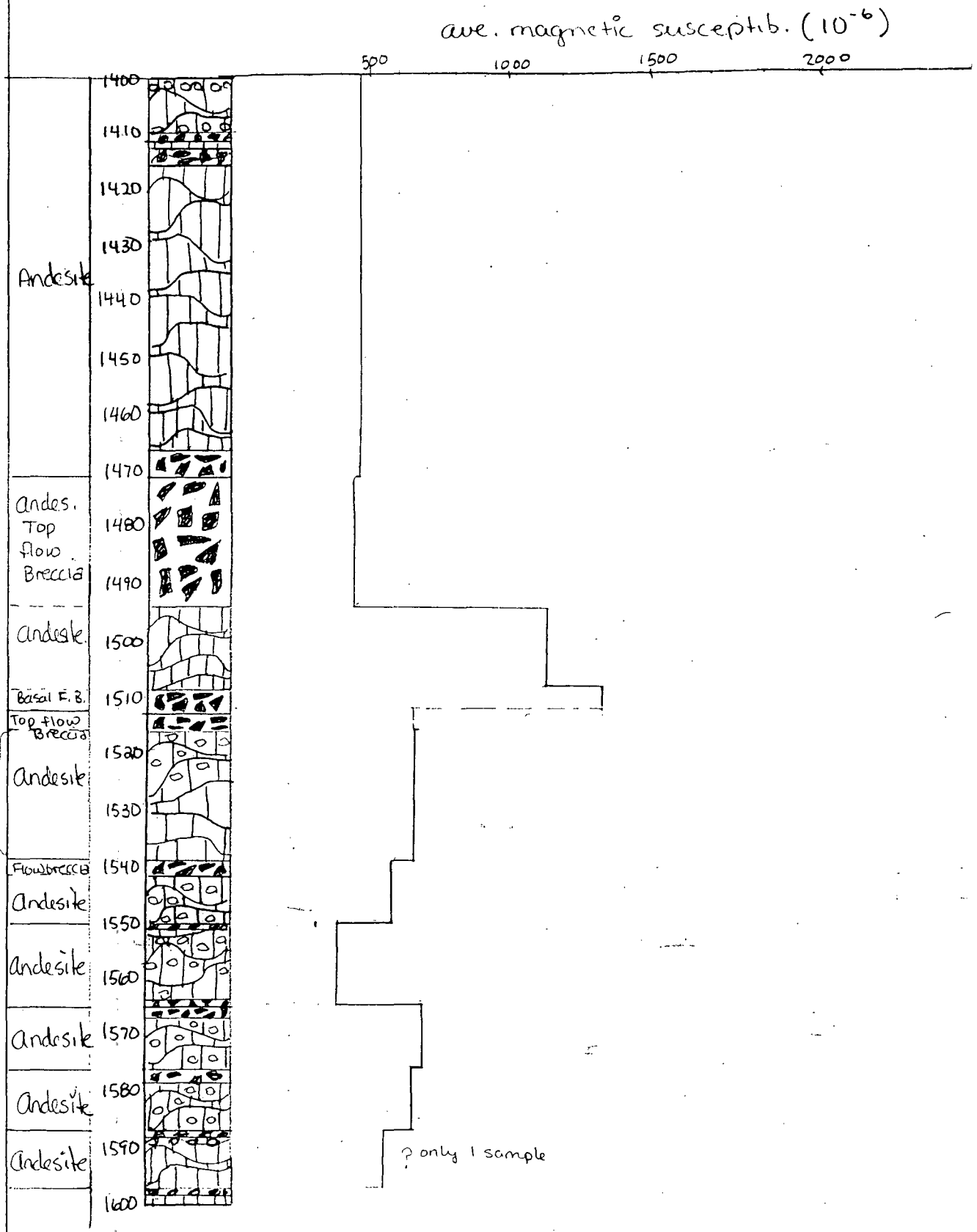


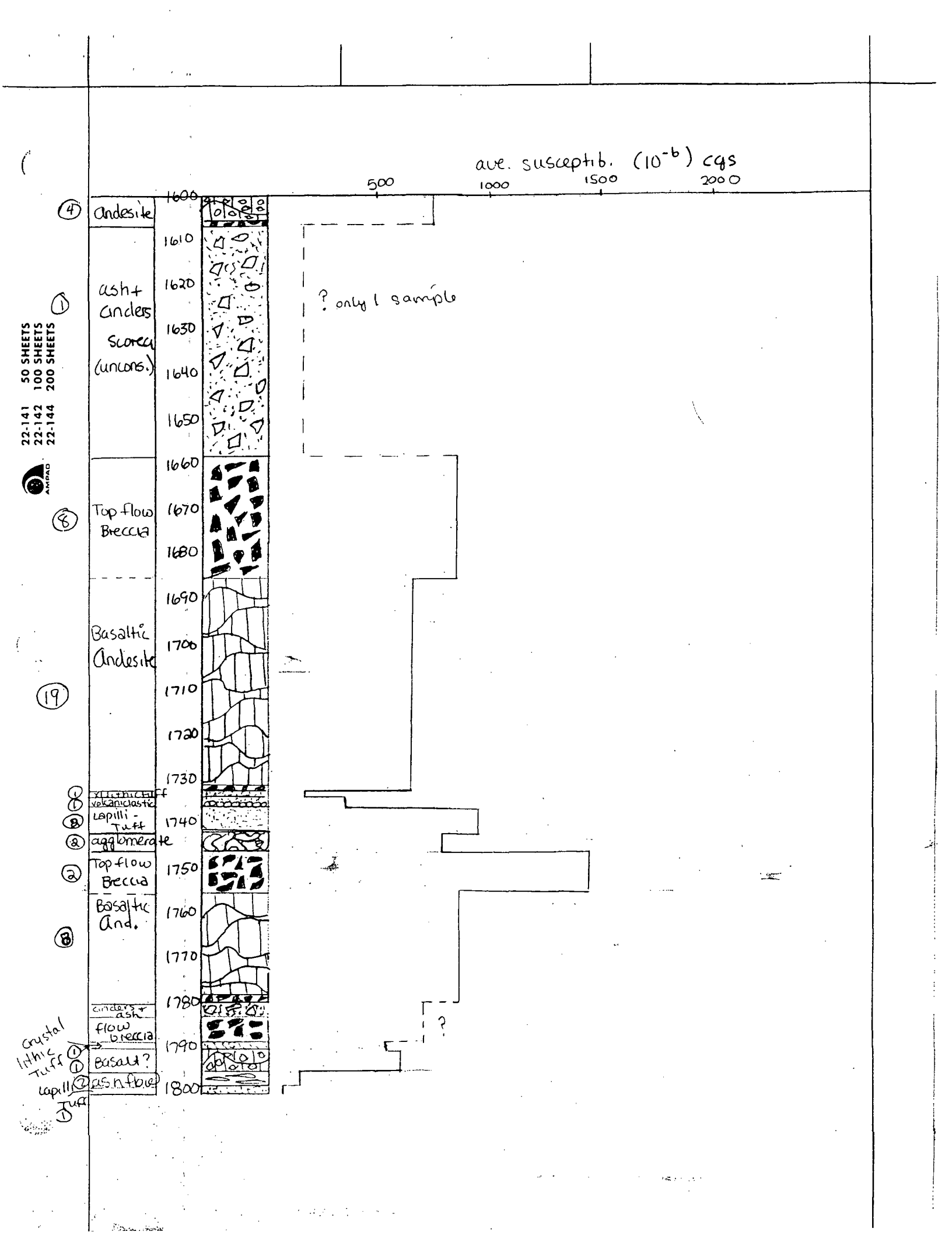


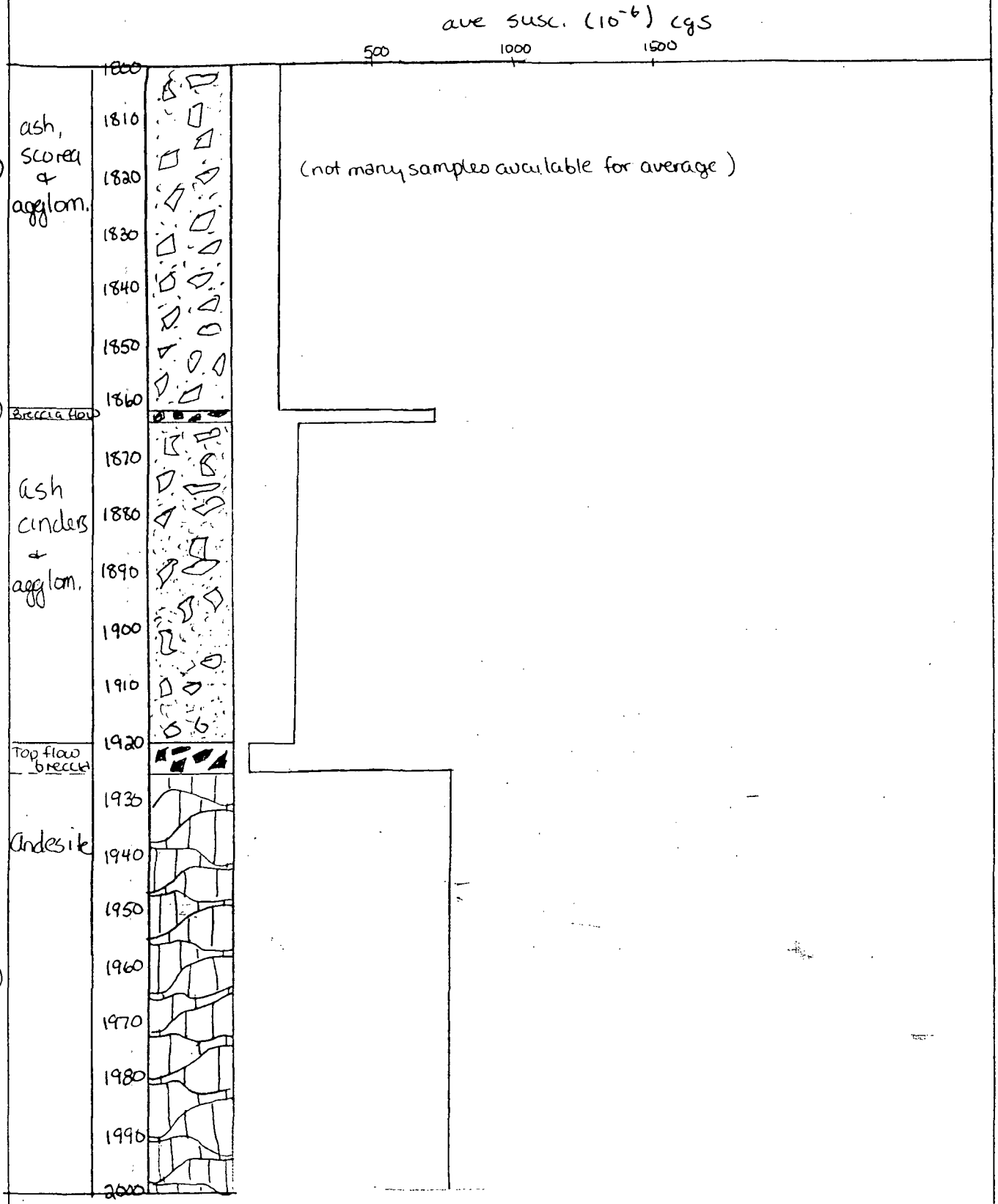


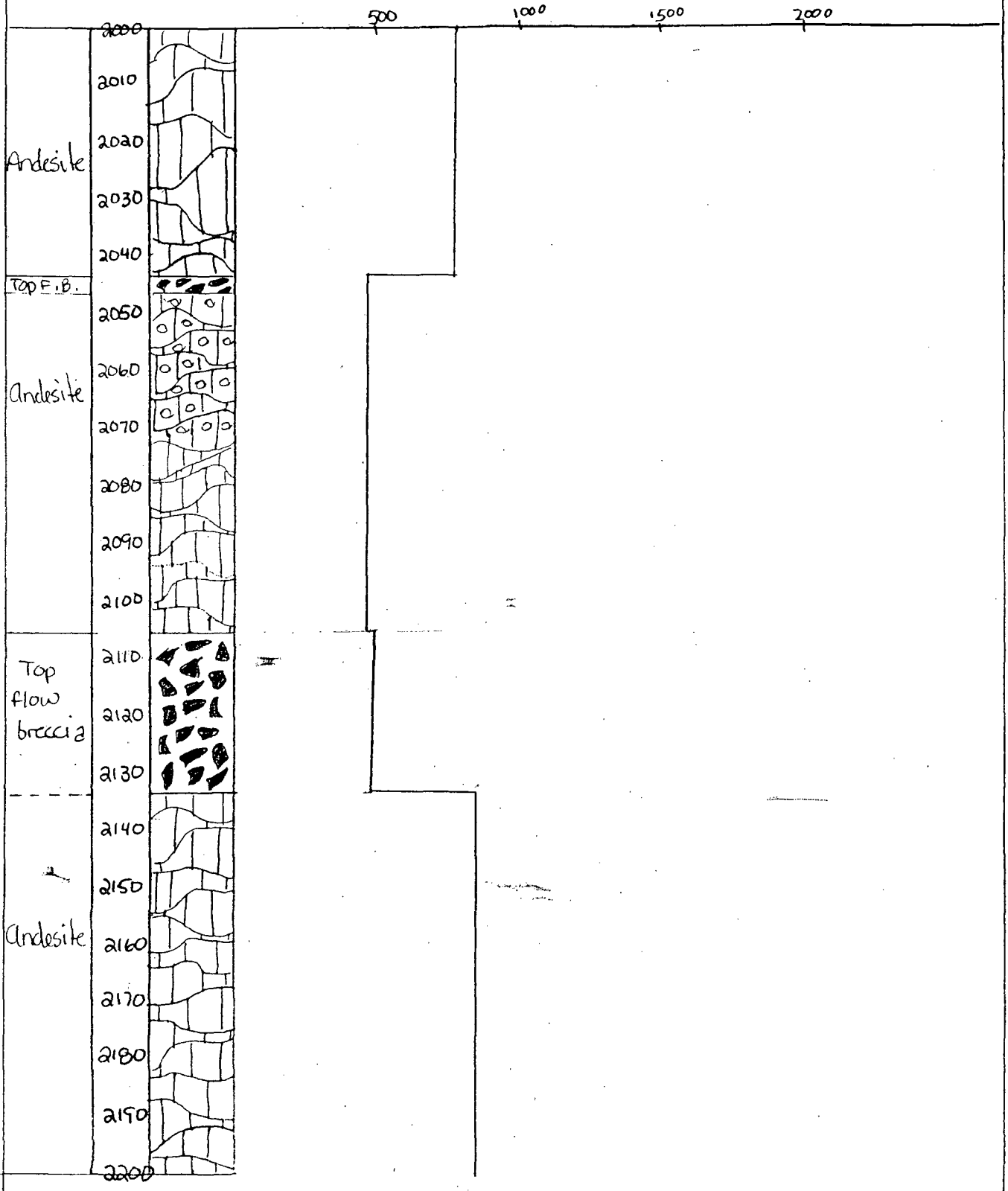


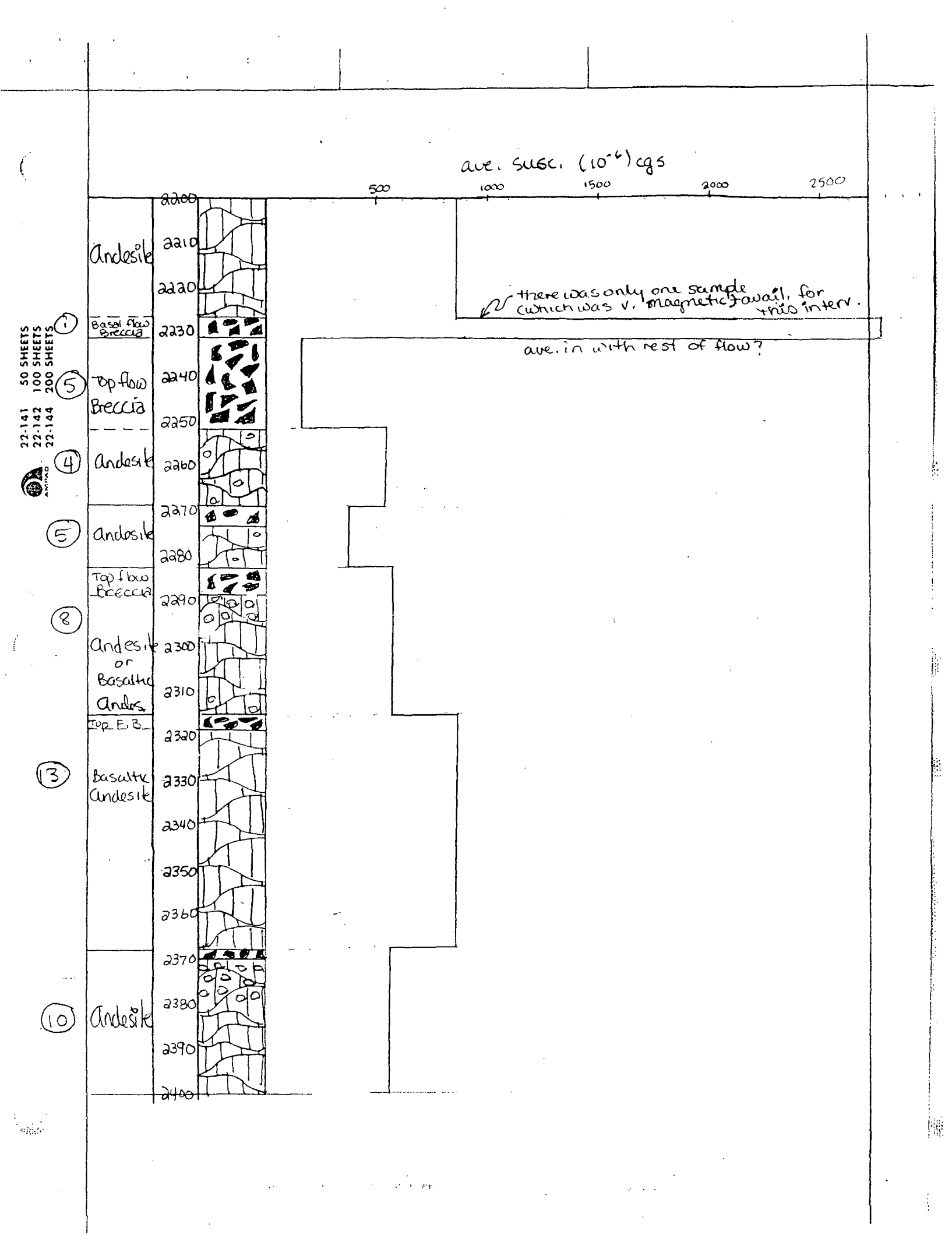
50 SHEETS
100 SHEETS
200 SHEETS
22-141
22-142
22-144
AMSAD

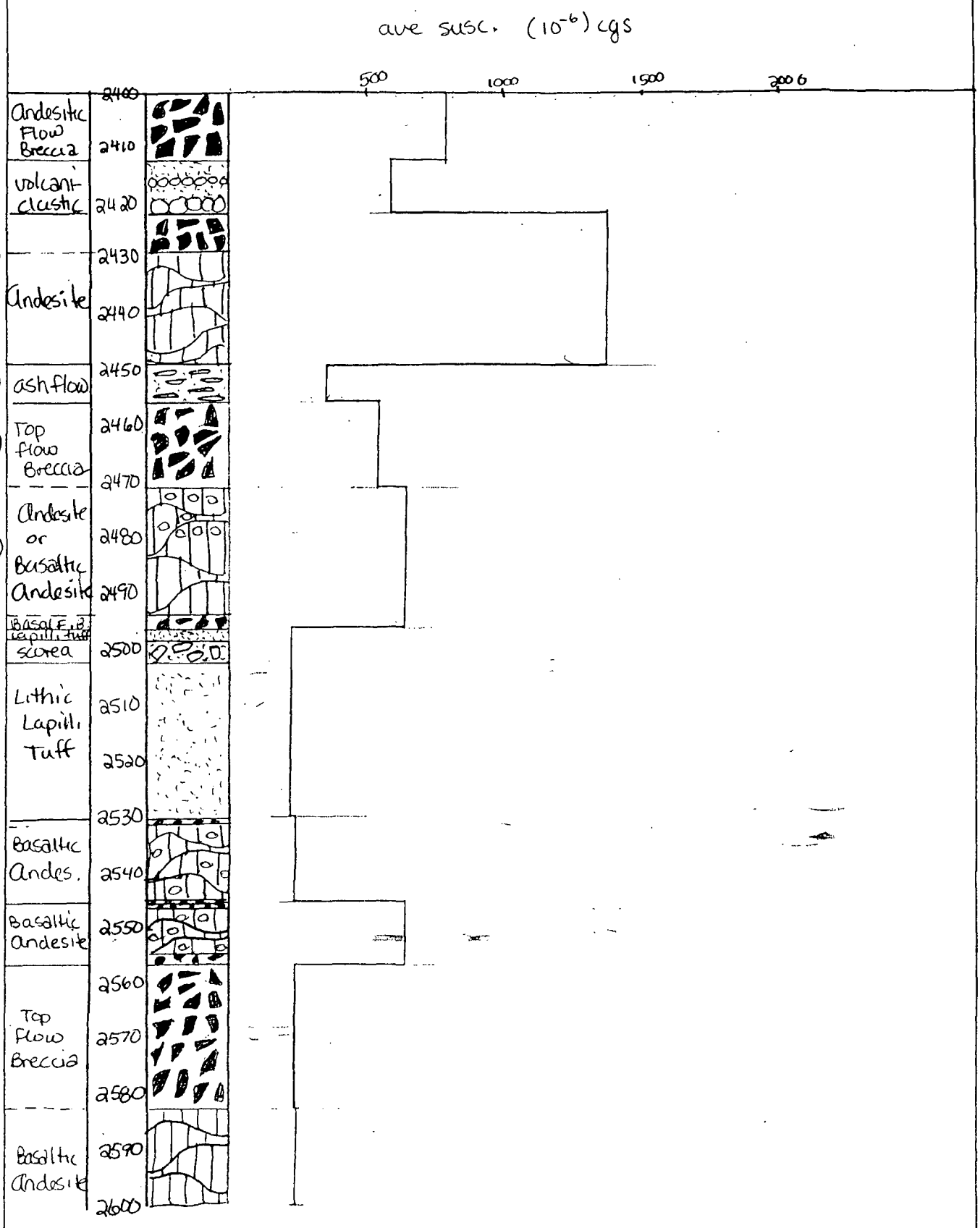


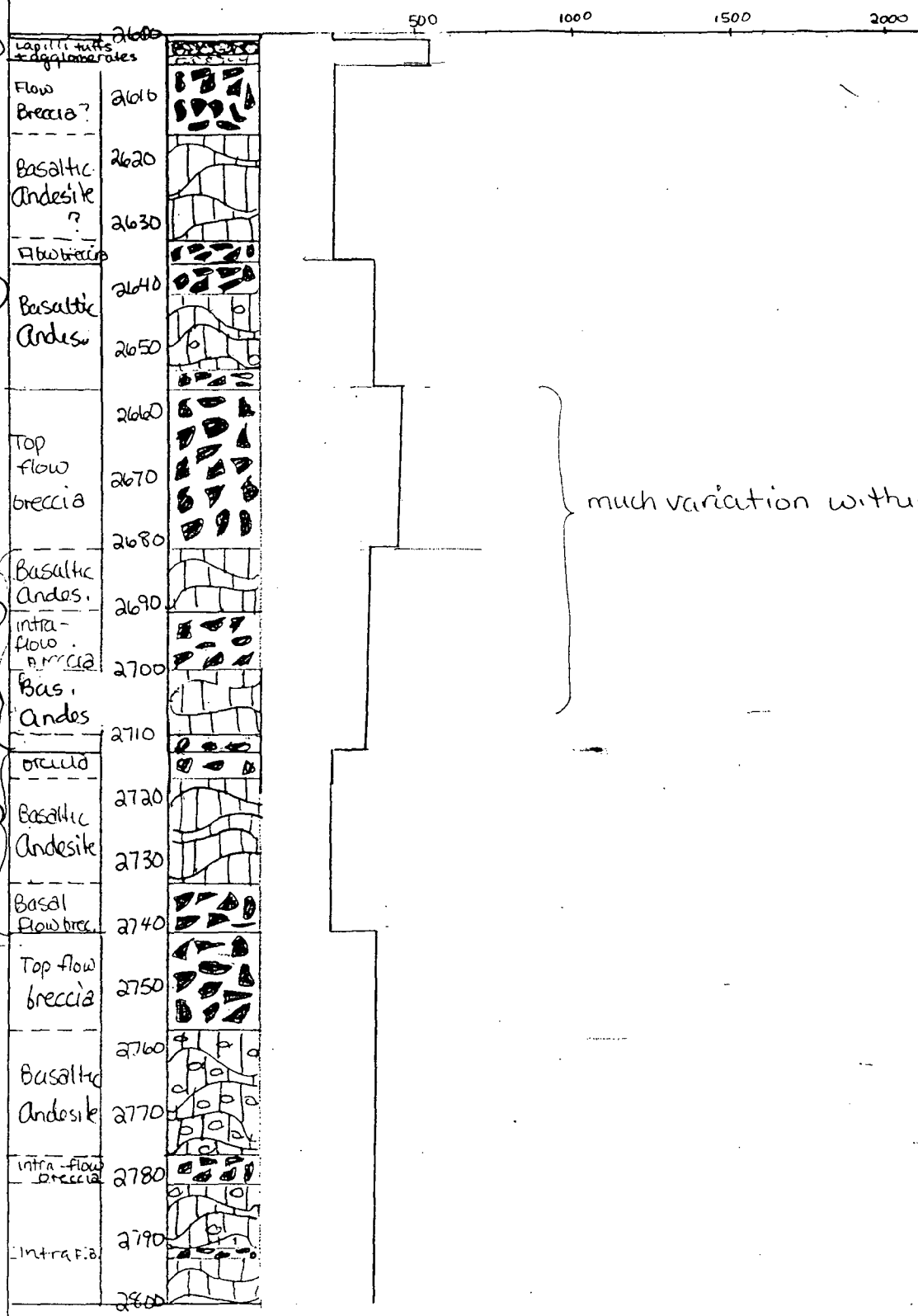

ave. susceptib. (10^{-6}) cgs
500
1000
1500
2000
1600
1610
1620
1630
1640
1650
1660
1670
1680
1690
1700
1710
1720
1730
1740
1750
1760
1770
1780
1790
1800
andesite
ash + cinders scoria (uncons.)
? only 1 sample
Top flow Breccia
Basaltic Andesite
xlithic tuff
volcaniclastic
lapilli - Tuff
agglomerate
Top flow Breccia
Basaltic And.
cinders + ash
flow breccia
Basalt?
lapilli tuff
Crystal lithic Tuff
22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS
AMPAD

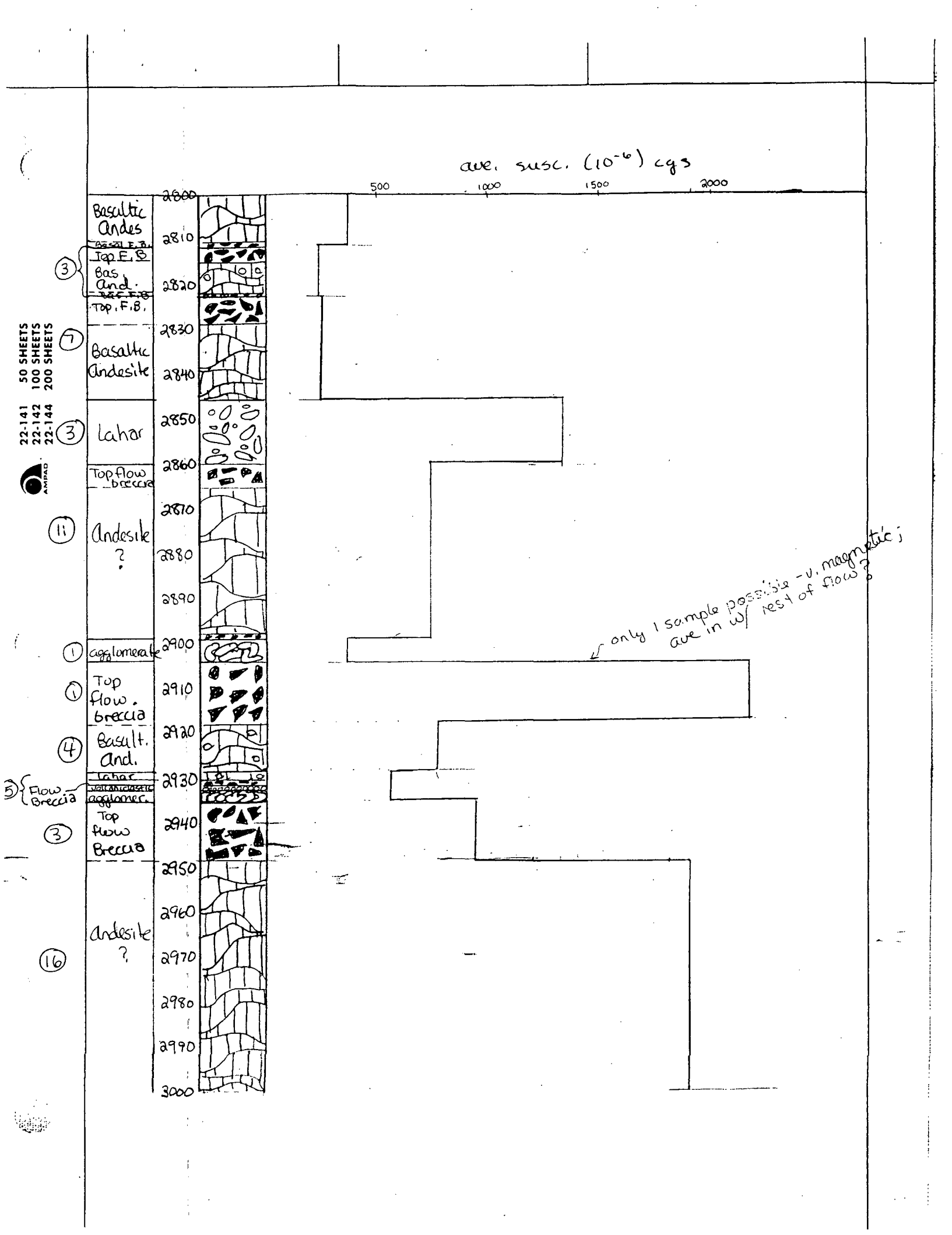


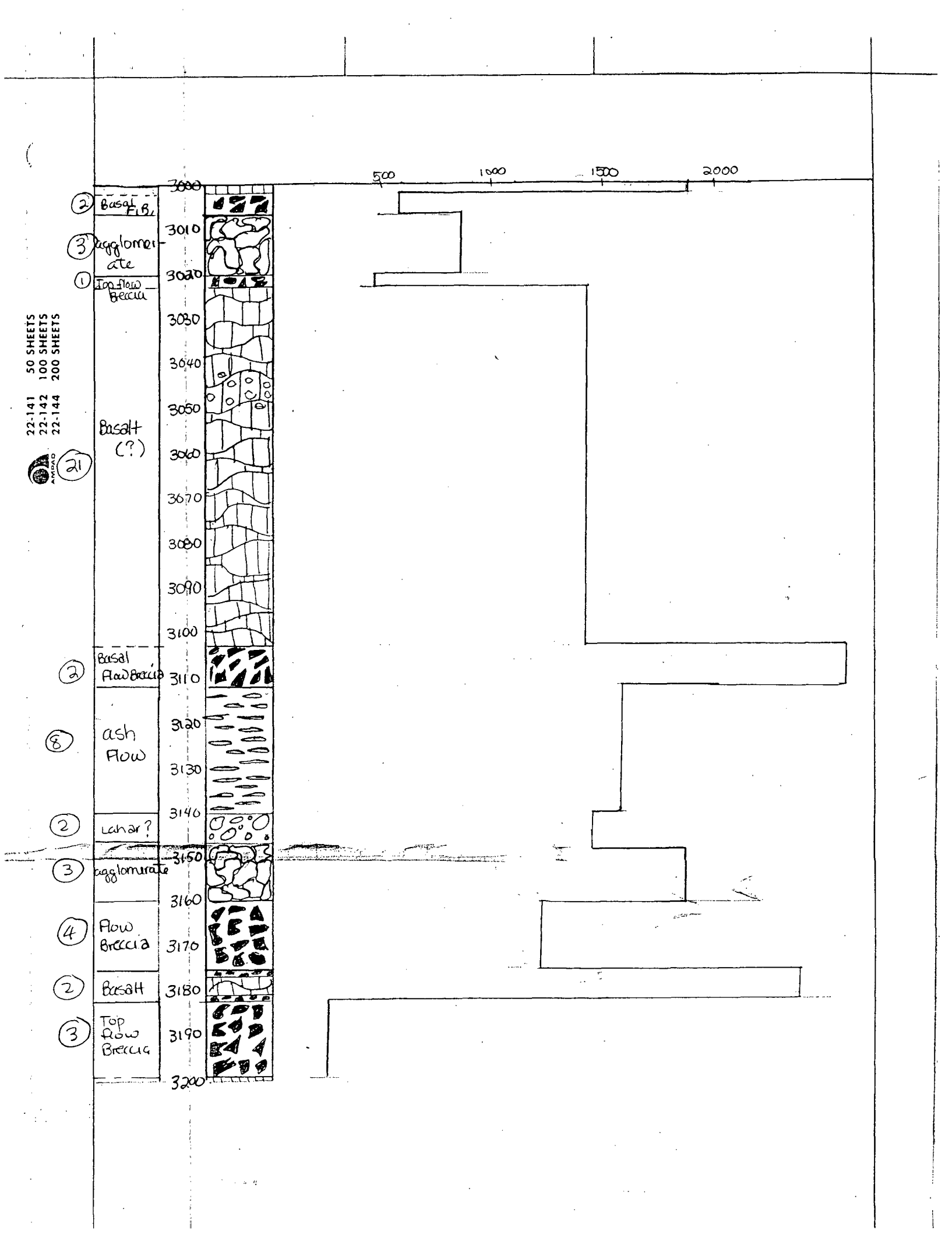


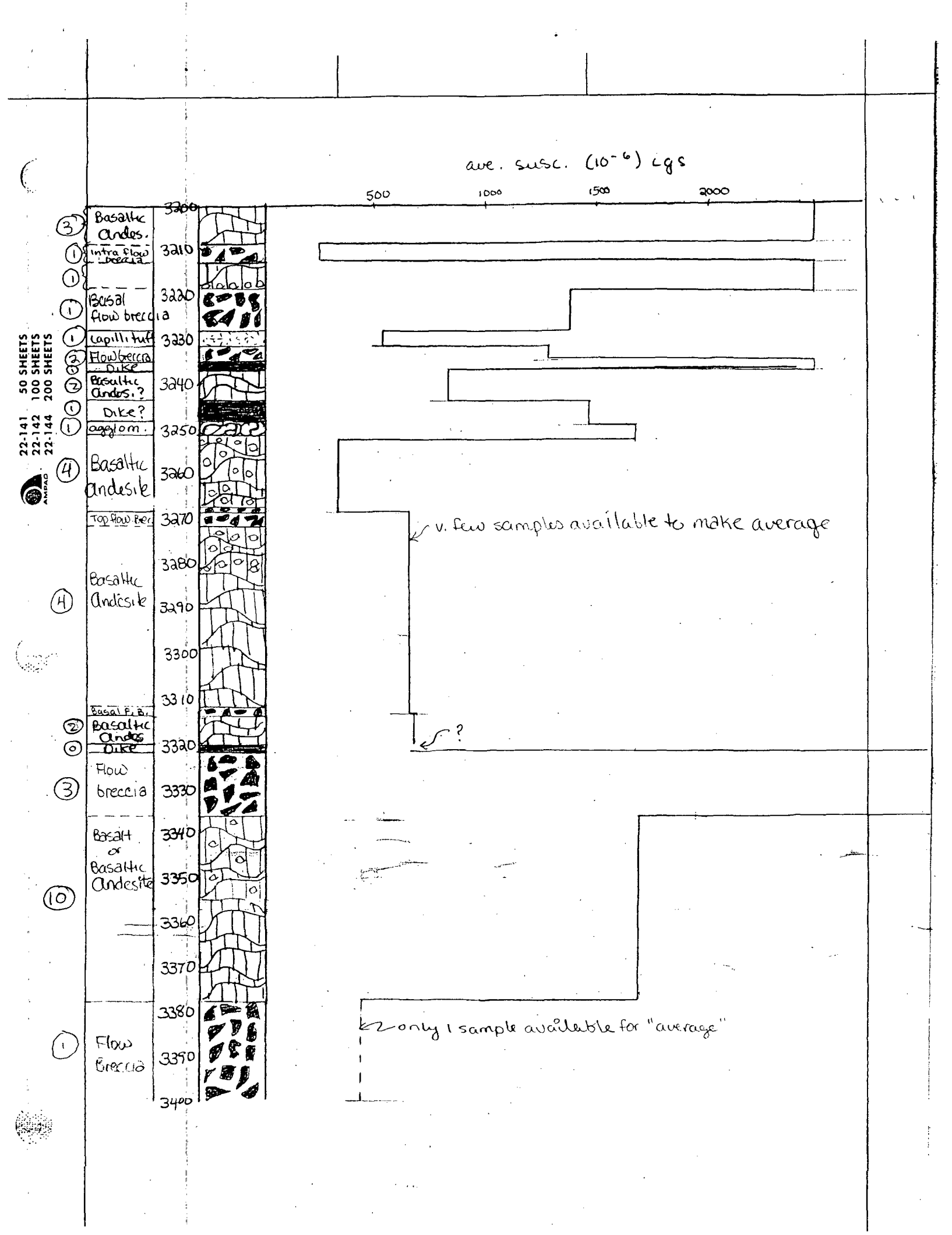

ave. susc. (10^{-6}) cgs
500
1000
1500
2000
2500
there was only one sample which was v. magnetic for this interv.
ave. in with rest of flow?
2200
2210
2220
2230
2240
2250
2260
2270
2280
2290
2300
2310
2320
2330
2340
2350
2360
2370
2380
2390
2400
Andesite
Basal flow Breccia
Top flow Breccia
Andesite
Andesite
Top flow Breccia
Andesite or Basaltic Andes.
Top E. B.
Basaltic Andesite
Andesite
1
5
4
5
8
13
10
50 SHEETS
100 SHEETS
200 SHEETS
22-141
22-142
22-144
AMPAD

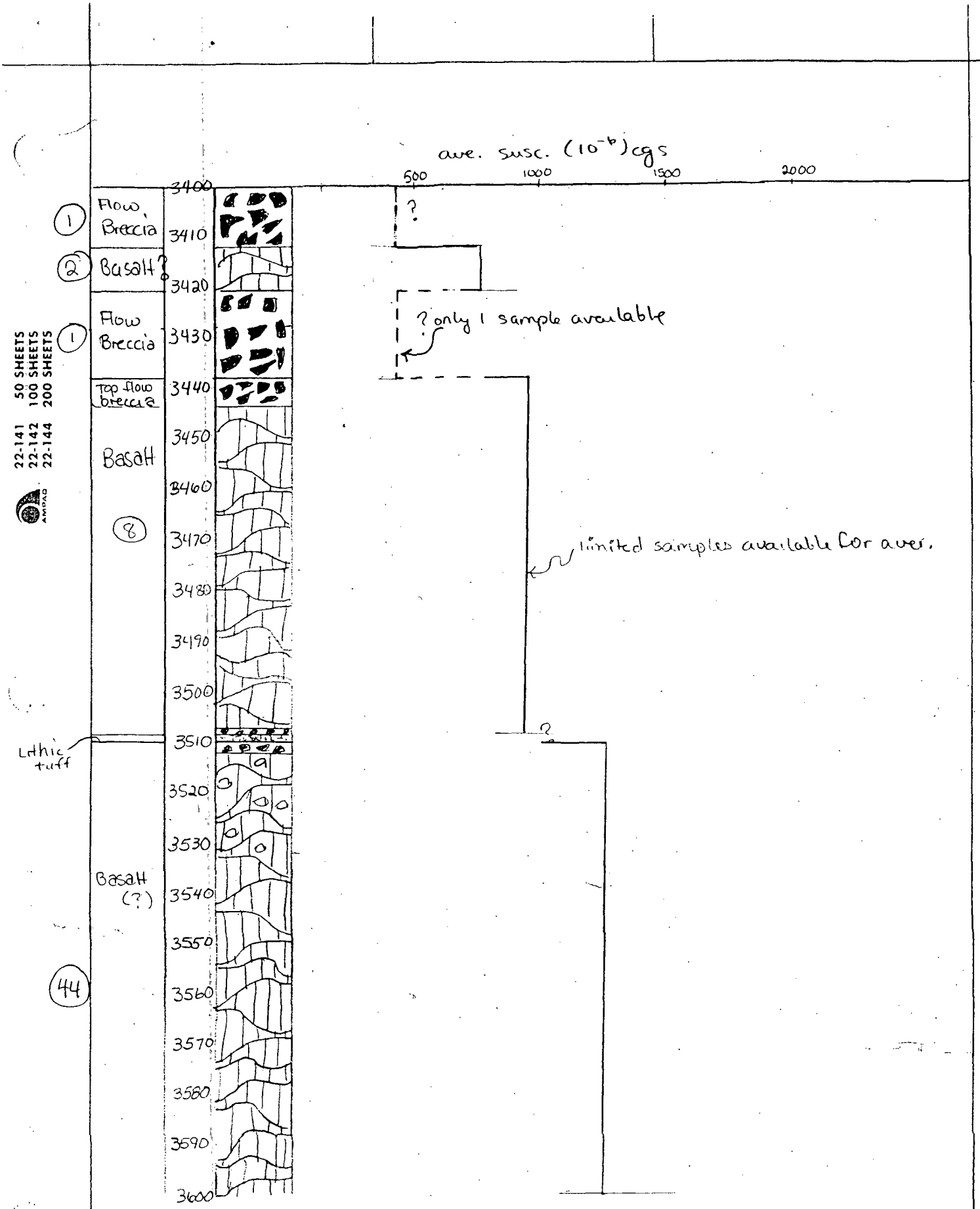


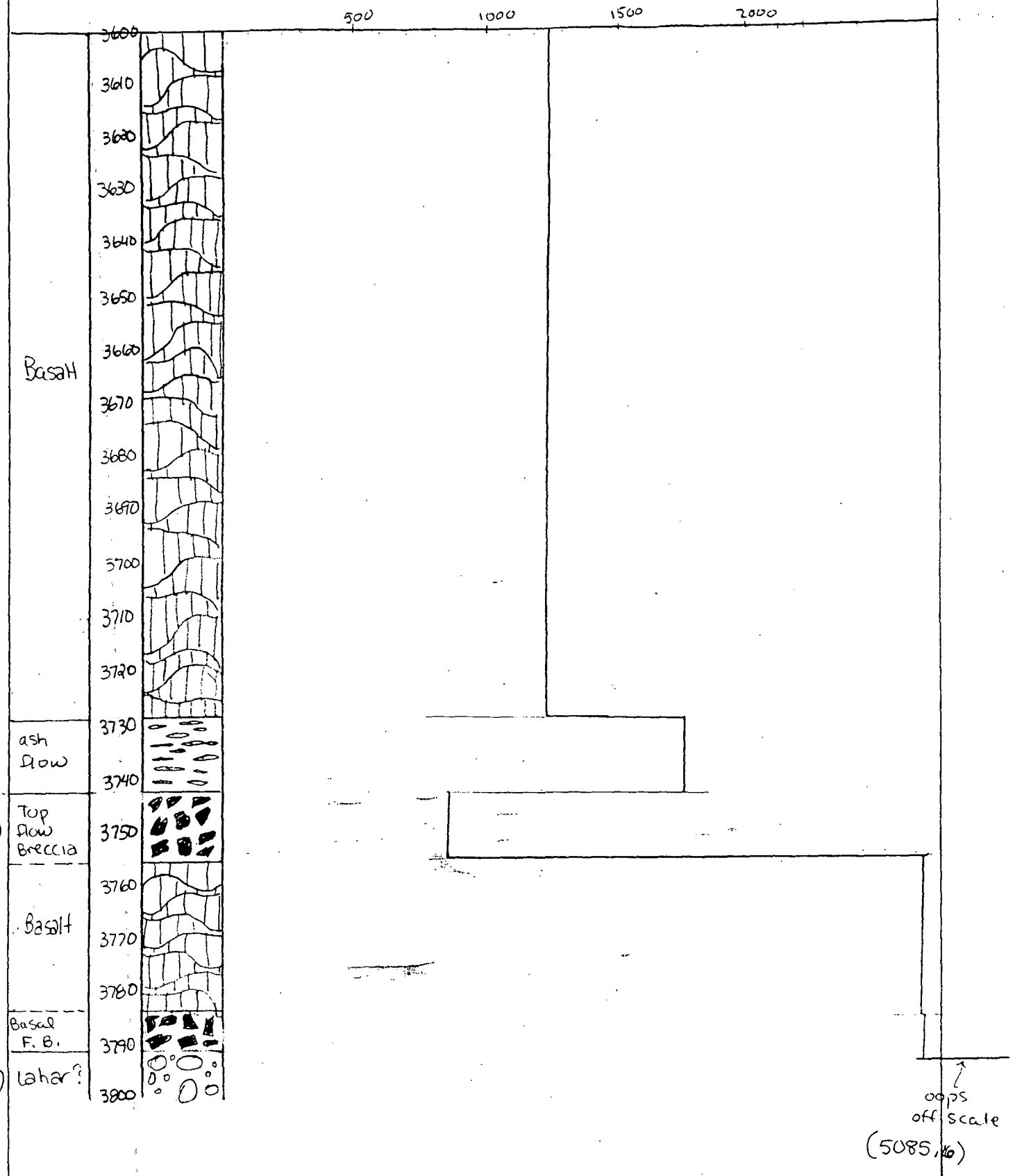


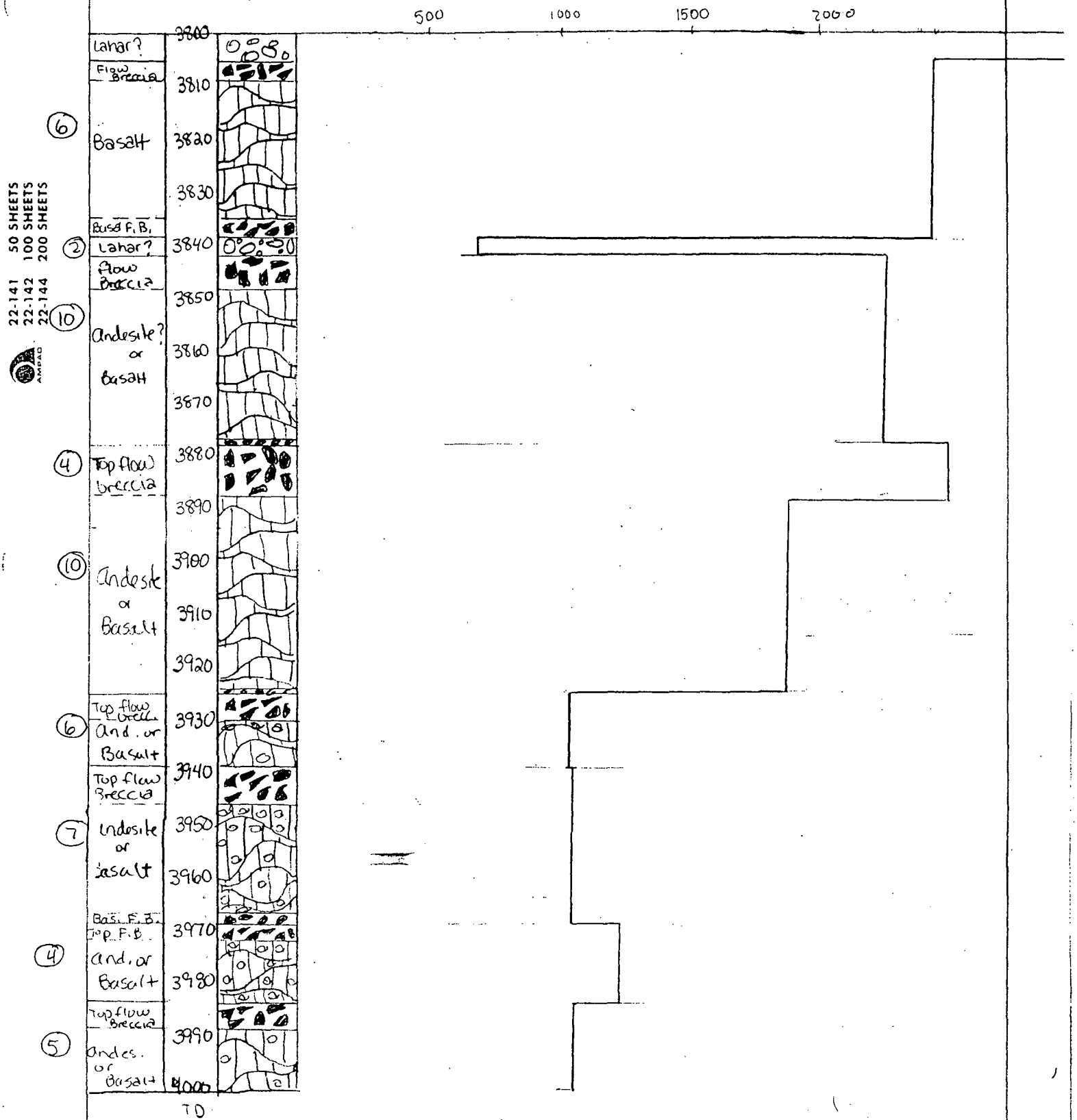

ave. susc. (10^{-6}) cgs
500
1000
1500
2000
2800
2810
2820
2830
2840
2850
2860
2870
2880
2890
2900
2910
2920
2930
2940
2950
2960
2970
2980
2990
3000
Basaltic Andes
Bas. F. B.
Top. F. S.
(3) Bas. And.
Top. F. B.
(7) Basaltic Andesite
(3) Lahar
Top flow breccia
(11) Andesite ?
(1) agglomerate
(1) Top flow. breccia
(4) Basalt. And.
Lahar
(5) Flow Breccia
volcaniclastic agglomer.
(3) Top flow Breccia
(16) Andesite ?
only 1 sample possible - v. magnetic; ave in w/ rest of flow?
22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS
AMPAD



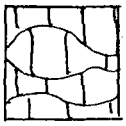

ave. susc. (10^{-6}) cgs
500
1000
1500
2000
3200
3210
3220
3230
3240
3250
3260
3270
3280
3290
3300
3310
3320
3330
3340
3350
3360
3370
3380
3390
3400
3 Basaltic Andes.
1 intra flow breccia
1
1 Basal flow breccia
1 capilli tuff
2 Flow breccia
0 Dike
2 Basaltic Andes.?
1 Dike?
1 agglom.
4 Basaltic Andesite
Top flow Brec
4 Basaltic Andesite
Basal F. B.
2 Basaltic Andes
0 Dike
3 Flow breccia
Basalt or Basaltic Andesite
10
1 Flow Breccia
v. few samples available to make average
?
only 1 sample available for "average"
22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS
AMPAD



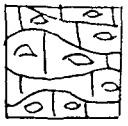




Lithologic Key

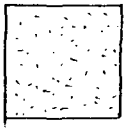


non vesic Basalt, Basaltic Andesite or Andesite Flow



vesic. Basalt, Basaltic Andesite or Andesite flow

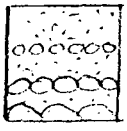
ash, cinders + scorea



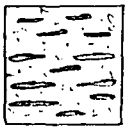
Tuffs

agglomerates

Flow Breccias



volcaniclastic



ASH FLOW

Lahar

Dike

Geo N-3 Data

interval	ave susc, ($\cdot 10^{-6}$) cgs
452'-512'	1002.0
512' - 705'	? 180.8
705' - 716.5'	575.2
716.5' - 732'	79.0
732' - 762.5	278
762.5 - 768'	? ≈456.4
768' - 802'	634.9
802' - 803'	1416.2
803' - 805	?
805 - 810.5	1309.8
810 - 812	?
812 - 862	1540.3
862 - 905	282.4
905 - 974	1354.7
974 - 978	767.2
978 - 1002	399.1
1002 - 1014	505.8
1014 - 1024	1731.8
1024 (?) - 1043	558.2
1043 - 1050	261.3
1050 - 1115	635.1
1115 - 1130	? 244.2
1130 - 1144	541.1
1144 - 1153	1254.2
1153 - 1180	1050.7
1180 - 1194	451.2 (?)
1194 - 1217	937.5
1217 - 1224	?
1224 - 1230	1346.4
1230 - 1236	?

interv	ave susc
1236 - 1249	603.3
1249 - 1263	1353.5
1263' - 1276	581.5
1276' - 1279	1006.6
1279' - 1283'	485.8
1283' - 1289'	541.9
1289' - 1290	?
1290' - 1291	565.7
1291 - 1299	?
1297 - 1301.5	818.8
1301.5 - 1328	210.4
1328 - 1335	337.6
1335 - 1337	698.5
1337 - 1355	454
13551 - 1374'	247.2'
1374 - 1471'	477.8'
1471' - 1494.5	433.6
1494.5' - 1509'	1121.8
1509' - 1513'	1319.1
1513' - 1539'	654.4
1539' - 1550'	584.4
1550' - 1565	383.3
1565' - 1576.5'	678.0
1576.5' - 1587'	647.8
1587' - 1597'	535.6
1597' - 1607.5'	737.7
1607.5 - 1659'	? 169.8
1659' - 1686	823.6
1686' - 1733'	621.1
1733' - 1734	11.4 G

interval	ave susc. (10^{-6}) cgs	interval	ave susc. (10^{-6}) cgs
1734' - 1736'	335.7	2456' - 2471.5'	531.6
1736' - 1742'	927.3	2471.5' - 2496.5'	624.2
1742 - 1746	786.5	2496.5' - 2530.5'	223.0
1746 - 1755.5	1414.9	2530.5' - 2545	263.6
1755.5' - 1780	861.6	2545.5' - 2557'	635.9
		2557' - 2583	239.4
1786' - 1789.5	?	2583' - 2601.5'	233.7
1789.5' - 1790.5	510.4	2601.5' - 2605	538.4
1790.5' - 1795	594.3	2605' - 2636	239.9
1795' - 1798	133.8	2636' - 2656.5	358.3
1798 - 1800'	65.9'	2656.5 - 2681	450.4
1800' - 1861'	? ~167.5	2681' - 2713'	357.2
1861 - 1863'	708	2713' - 2741.5'	203.2
1863 - 1920	226.4	2741.5' - 2812'	368.2
1920 - 1925.5'	42.4	2812' - 2823'	226.2
1925.5' - 2044'	783.1	2823' - 2846'	237.1
2044' - 205.5'	484.9	2846' - 2860'	1319.2
2105.5' - 2134'	584.5	2860' - 2899'	581.7
2134 - 2227	850	2899' - 2909'	385
2227 - 2231.5	2816.3	2909' - 2918'	2144.2 ?
223	264.6	2918' - 2928'	785.6
2252' - 2269'	532.4	2928 - 2935'	561.6
2269' - 2283.5'	391.2	2935' - 2948'	938.7
2283.5' - 2315	546.8	2948 - 3002	1893.9
2315' - 2368'	860.0	3002 - 3007	594.6
2368' - 2400'	552.2	3007 - 3020	851.6
2400' - 2413'	797.8	3020 - 3023	459.3
2413' - 2422	595.6	3023 - 3103	1404.3
2422 - 2449	1375.1	3103 - 3112'	2572.1
2449 - 2456'	365.8	[illegible]	[illegible]

interval	ave. susc. (10^{-6})
3140'-3147'	1413.4
3147 - 3160'	1874.8
3160' - 3175.5'	1203.3
3175.5' - 3183.5'	2385.3
3183.5' - 3199	254.2
3199' - 3219	2461
↳ 3209'-3213'	354.3
3219' - 3228.5'	1381.6
3228.5' - 3231	532.9
3231 - 3235'	1287.4
3235' - 3239'	2457.7
3237 - 3244	824.9
3244' - 3248'	1471.8
3248' - 3251'	1663.5'
3251' - 3269'	317.7
3269' - 3314'	645.9
3314' - 3320	672.6
3320 - 3322	?
3322 - 3336'	3179.8
3336' - 3378'	1680.8
3378 - 3412'	418.9 ?
3412' - 3421.5'	794.0
3421.5' - 3438'	424.6?
3438 - 2509'	922.3
3.509' - 3729'	1243.8
3729' - 3742.5'	1426.3
3742.5' - 3756'	858.5
combine? 3756' - 3784'	2633.6
combine? 3784' - 3791'	2645.9
3791' - 3805'	5085.6
3805' - 3839'	2434

interval	ave susc
3839' - 3842'	692.7
3842' - 3877'	2236.9
3877' - 3888.5'	2495.5
3888.5' - 3924.5	1898.1
3924.5' - 3939'	1012.1
3939' - 3969'	1048.1
3969' - 3984'	1217.1
3984' - 4002'	1040.1

EFFICIENCY® LINE NO. 6636

STANDARD SAMPLE CR-38

Interim Calibration Record

		INTERNAL		EXTERNAL		Ex x 1.75							
Date	By	X 1	X 10	X 1	X 10								
	1	2	3	4	5	6	7	8	9	10	11	12	13
4/2/87	HR	2965 2900	2968	1690	1600	2958							
6/9/87	HR + ML	3215 3215	3110 3110	1746	1620	3055.5							
6/10/87	ML			1789	1640	3130.7							
6/11/87	ML			1783	1670	3120.3							
6/12/87	ML			1723	1600	3015.3							
6/15/87	ML			1791	1680	3134.3							
6/16/87	ML			1726	1600	3020.5							
6/17/87	ML			1733	1600	3032.8							
6/18/87	ML			1718	1600	3006.5							
6/24/87	ML			1726	1600	3020.5							
6/29/87	ML			1771	1610	3099.3							
6/30/87	ML			1728	1590	3024							
7/1/87	ML			1710	1590	2992.5							
7/6/87	ML			1730	1590	3027.5							
7/7/87	ML			1762	1600	3083.5							
7/8/87	ML			1700	1600	2975							
7/9/87	ML			1720	1600	3010							
7/13/87	ML			1766	1610	3090							
7/14/87	ML			1710	1580	2992.5							
7/15/87	ML			1717	1600	3004.7							
7/22/87	ML			1792	1640	3136							
7/27/87	ML			1763	1620	3085.2							
7/28/87	ML			1711	1580	2994.2							
7/29/87	ML			1751	1600	3064.2							
7/30/87	ML			1798	1670	3146.5							
7/31/87	ML			1764	1610	3087							
8/1/87	ML			1736	1600	3038							
8/3/87	ML			1739	1600	3043							
8/10/87	ML			1693	1570	2962.7							
8/12/87	ML			1773	1630	3102.7							
8/13/87	ML			1749	1610	3060.7							

EFFICIENCY® LINE NO. 6636

S

External Ex · 1.75

Date	1 By	2	3	4 × 1	5 × 10	6	7	8	9	10	11	12	13
8/14/87 1	ML			1803	1650	3155.2							
8/17/87 2	ML			1767	1630	3092.2							
8/18/87 3	ML			1770	1610	3097.5							
8/19/87 4	ML			1763	1646	3085.2							
8/20/87 5	ML			1713	1590	2997.8							
8/24/87 6	ML			1710	1580	2992.5							
8/25/87 7	ML			1720	1600	3010.0							
8/26/87 8	ML			1711	1580	2994.2							
8/27/87 9	ML			1747	1600	3057.2							
8/31/87 10	ML			1782	1630	3118.5							
9/1/87 11	ML			1798	1670	3146.5							
9/2/87 12	ML			1692	1550	2961.0							
9/3/87 13	ML			1780	1630	3115.0							
9/8/87 14	ML			1762	1620	3083.5							
9/9/87 15	ML			1763	1600	3085.2							
9/10/87 16	ML			1727	1600	3022.2							
9/11/87 17	ML			1716	1560	3003.0							
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 1 of 65 Date: 7-22-87

Company: Geo newberry Logged by: ML

Core Diameter: HQ 2.49" Total Correction: [redacted](1.75)( ) =

Instrument: Bison 3101 A

ideal split { x = 2.49" / r = 1.245" } r x in inches

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. (x 10^{-6} cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	General Lithol.	Comments
zero → Box 1	454	1. 1994	X							Basaltic Andesite	r = 1.25 x = 2.48
		2. 1894	X								no fractures
		3. 1877	X		1921.7	.5327	1023.8				v. porphyritic w/ plag + oliv pheno
	458	1. 1892								"	r = 1.37 x = 2.49
		2. 1908									
		3. 1952	X		1917.3	.5306	1017.3				
	461.5	1. 2005								"	r = 1.36 x = 2.48
		2. 2016									some FeOx stains
		3. 2045	X		2022	.5060	1023.1				
Box 2	463.5	1. 2214									
		2. 2251									
		3. 2260	X		2241.7	.5107	1144.7			"	r = 1.34 x = 2.48
	468.5	1. 2207									
		2. 2160									
		3. 2192	X		2186	.4912	1073.8			"	r = 1.38 x = 2.47
	471.0	1. 1545									
		2. 1548									
		3. 1590	X		1561	.6924	1080.9			"	r = 1.04 x = 2.47
Box 3	474.5	1. 2050									
		2. 2069									
		3. 2090	X		2070	.4971	1029.1			"	r = 1.51 x = 2.49
	475.5	1. 1898									on top fract - pyrite? brothercumin
		2. 1927									starting to get mildly vesicular
		3. 1936	X		1920	.4922	945.0				r = 1.43 x = 2.45 1/.95
	478	1. 1992									r = 1.43 x = 2.50
		2. 1953									plag pheno - 6mm disseminated
		3. 1979	X		1974.7	.5157	1018.4			"	metallic min along fracture ↓ x 65°
Box 4	481.5	1. 2319									
		2. 2322									r = 1.48 x = 2.47
		3. 2358	X		2333	.4704	1097.5			"	limonite on fract frac — horiz.

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 2 of 65 Date: 7-23-87

Company: Geo newberry Logged by: mc

Core Diameter: 2.49" HQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. (x 10^{-6} cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geol. Unit	Comments
Zero + Box 4 cont										
486	1345								Basaltic Andesite	X=2.45" r=1.09"
	1363								"	nonvesicular
	1377	X		1361	.6989	951.2			"	
489.5	1523								"	r=1.10 x=2.47
	1589								"	finely disemin oxidized pyrite
	1587	X0		1566	.6675	1045.3			"	diviner phenos < 2mm
Box 5										
491	1306									r=1.09 x=2.44 1/95
	1299									no fractures
	1444	X		1350	.7479	1009.6			"	finely disem Cu
493	1334								"	r=1.06 x=2.49 1/90
	1460									v. rare cu/pyrite decrease in oliv. phen
	1408	X		1400.7	.6928	970.3				
4										1 monute on frac frac @ 55°
498.5	1475								"	r=1.08 x=2.47
	1477									
	1458	X		1470	.6756	993.1				
Box 6										
502.5	1995	X							"	r=1.35 x=2.48
	2025	X								
	2050	X		2023	.5083	1028.3				
504.5	2885									r=1.89 x=2.19
	2880									
	2915			2893	.3515	1017.0			"	
508	1680									r=1.53 x=2.47 1/90
	1680									increase in vesicularity plag phono
	1696	X		1685	.5119	862.5			"	vesicles - 4mm elongated
										v. fine disemmin copper? vesicles copper
Box 7										
510.5	1347	X								r=1.33 x=2.48
	1359									nonvesicular
	1427	X		1377.7	.5130	706.8	s dev. 94.1	ave 1002.0	"	little olivine disemin. copper

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: GEO N-3 Pg 3 of 65 Date: 7-23-87

Company: Geonewberry Logged by: MC

Core Diameter: 2.49" HQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen Lithol	Comments
Box 7 (cont) zero → 513	279								cinders/ agglomerate	unconsolidat, red/ash matr
	288	X		283.5	.4598	130.4				r=1.58" x=2.48"
										porph-vesicular w/ plag phenos
Box 8 530	355	X							"	brown/yellow matrix
	278	X		316	.6905	218.2				crude grading; various lapilli loosly indurate r=1.46 x=2.43
535.5	148	X			?	?			"	1/.70 badly broken
Box 9 538	172	X								
	194	X		183	.6243	114.2			"	1/.80 r=1.25 x=2.44
544	231	X		231	.5170	119.4				1/.75 r=1.68 x=2.30
Box 10 547	177	X								
	194	X		185.5	.5285	98.0			"	1/.80 r=1.30 x=2.20
Box 11 - Box 18 is too unconsolidated to make measur.										

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 4 of 65 Date: 7-27-87

Company: Geonewberry Logged by: ML

Core Diameter: HQ 2.49 Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen. lith.	Comments
Box 19 zero →	658	262	x		262	.4667	122.3			agglom.	gray ash. v. small lapilli
	670										r=1.42 x=2.13 1/.85 rest of box uncon.
Box 20	670.5	979	x		979	.5586	546.9			"	1/.75 v. vesicular scoracious
											r=1.62 x=2.41
Box 21										"	no samples possible
Box 22	703	176	x		176	.5517	97.1		180.8	"	1/.70 red matrix minor vesicular
										"	r=1.58 x=?
Box 23	708	1891	x							basaltic andes.	slightly vesicular oxidation throughout
		1922	x		1906.5	.3960	753.8				sample, porphyr., plag pheno < 2mm
											oxidized groundmass
											some olivine phenos
											r is variable x=2.19
											d=2.438 l=5.0
											s=.47 r=1.005
	709.5	1672	x		1672	.7922	1324			"	l=5.0 s=.59 d=1.78 x=2.29
	711.5	290	x							"	r=1.31 x=2.48 1/.75 r=1.18
		264	x								increase in red color (oxidat.) decrease in
		276	x		276.7	.5202	143.9			"	amt. of phenos
Box 24	712.5	352	x							"	r=1.47 x=2.47
		335	x								v. red oxidized grndmass cu flakes-tarnished
		337	x		341.4	.4724	161.3			"	increase in vesicul. + olivine pheno
	715.0	1020	x								increase in gray black non oxidized
		896	x								grndmass + plag phenos
		975	x		963.7	.5115	493.0	s dev 489.1	575.2	"	r=1.29 x=2.47
											remainder of box unconsolid.
Box 25	724.5	258	x							cinders + ash	1/.80 red/ash mostly
		252	x		255	.3696	94.3			"	unconsolid r=2.57 x=?
	727.5	76	x		76	.8386	63.7		79.0	"	darker grndmass no xls x=2.39
	727.5		x								1/.85 r=1.19
Box 26 zero →	734	531	x		531	.4785	254.1			Basaltic andes	v. red oxidized matrix plag crystals.
											r=1.44 x=2.47
	738	519 498	x		509	.4912	250.0				r=1.38 x=2.47

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 5 of 65 Date: 7-27-87

Company: Geonewberry Logged by: MC

Core Diameter: 2.49" HQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo, Lith	Comments
Box 26 (cont)	741.5	585	X							Basalte and,	
		581	X								x = 2.47
		593	X		586.3	.4934	289.3				v. red matrix r = 1.37
Box 27	743	556								"	r = 1.56 x = 2.45
		556	X		556	.4435	246.6				v. red oxidized matrix
	744	904	X		904	.2822	255.2			"	entire core
	748	1155	X		1155	.2822	326.0			"	increasing vesicular
Box 28	752	488	X								
		456	X								
		448	X		464	.6518	302.5			olivine basalt	vesicular r = 1.14 x = 2.47
	759	495	X								1/95
		463	X								r = 2.48 x = 1.22
		450	X		469.4	~~.6388~~ ~~.6067~~	~~299.9~~ ~~284.9~~	sdev 30.2	278.0	"	
	768.5	1710	X							basalt	v. vesicular 1/85 dk gray, aphanitic
		1720	X			.9015					r = 1.04 x = 2.41
		1674	X		1701.3	~~.7662~~	1533.6				
Box 29 zero →	769.5	1857								"	vesicular yellow & white clay
		1856	X		1856.5	.3502	650.2				on rare usually open + unfilled
											w/ metallic flake x = 2.23 r = 1.94
	772	1013	X								abund. v. fine metallic flakes in
		1005	X								vesicles, no phenos r = 1.16 x = 2.46
		1010	X		1009.4	.6578	664.0			"	slight Rox stain
	778.5	1030	X								r = 1.35 x = 2.48
		1005	X								
		1014	X		1016.3	.5083	516.16			"	
Box 30	780.5	925									r = 1.19
		951									x = 2.46
		956	X		944	.6464	610.2			"	
	783	1170	X							"	x = 2.48 r = 1.32
		1094	X		1132	.5154	583.4			"	v. fine grained aphanitic non vesicular

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

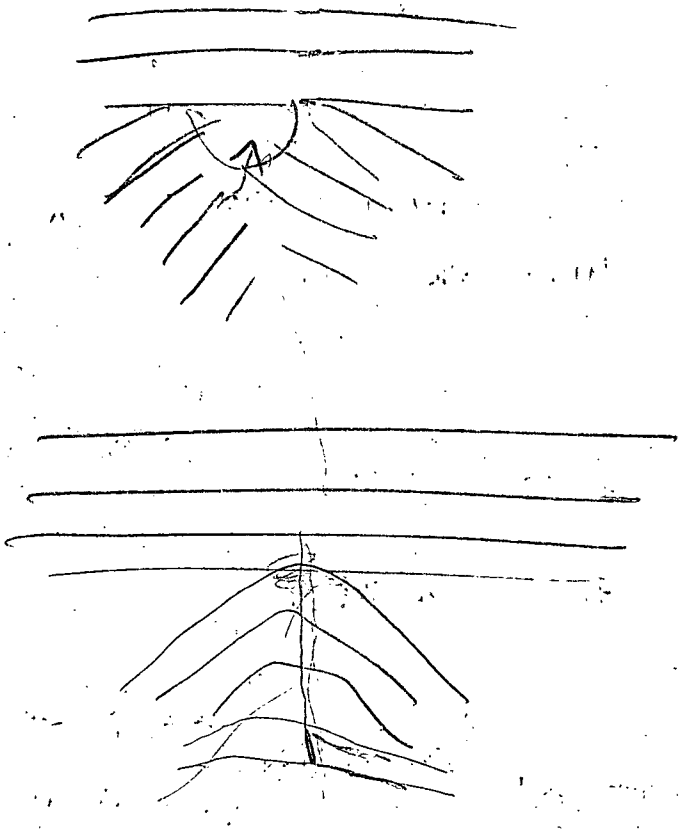
Drill Hole: Geo N-3 Pg 6 of 65 Date: 7-28-87

Company: Geonewberry Logged by: ML

Core Diameter: 2.49" HQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo Unit	Comments
Box 30 (cont)	788.5	952	x							basalt	1/95
		979	x		965.5	.5194	501.4				r = 1.37 x = 2.47
Box 31 zero →	790	1172	x							"	
		1170	x		1171	.5251	615.0				r = 1.28 x = 2.48
	793.5	950	x								
		984	x		967	.4912	475.0			"	r = 1.38 x = 2.47
	795	805	x								
		788	x		796.5	.5302	422.3			"	r = 1.26 x = 2.48
Box 32	798	1798	x		1798	.2823	507.5				entire core
	800	767	x		767	.6369	488.5	sdev 308.2	634.9		r = 1.18 x = 2.47
	803	1210	x		1210	1.17	1416.2		1416.2	flow breccia	1/70 x = 2.34 r = 1.06
	806	4173	x		4173	.4704	1963.1			pyroclastic agglom. trans + to Basalt	1/68 of whole core
Box 33	807.5	4011	x							Basalt	flow & apparent
		4211	x								r = 1.19 x = 2.47
		4362	x		4194.7	.6333	2656.5		2309.8		
	813	4654	x							"	r = 1.21 x = 2.48
		4712	x		4683	.6102	2857.6				
	814.5	4795								"	r = 1.41 x = 2.48
		4967	x								dark grey, dense v. slight vesicular
		4994	x		4918.7	.4947	2433.3				
Box 34	817.0	2647	x							"	increased vesicles, brown FeOx (hem.?)
		2637									alteration of grndm. (fairly extensive)
		2742	x		2675	.4675	1250.5				r = 1.46 vesicles x = 2.46 < 5mm
	820	1854	x							"	t = 4.61 r = 1.63
		1878									θ = .3614 2.150 x = 2.44 r' = .815
		1970	x		1900.7	.8595	1633.8			"	very altered not above
	824.5	3536	x							"	very dense non vesic. little alter.
		3774									x = 2.49 ? r = 1.245 ?
		3919			3743	.5645	2112.9				



MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 7 of 65 Date: 7-28-87

Company: Geonewberry Logged by: MC

Core Diameter: 2.49" HQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo lith	Comments
Box 35 Zero ▷	826.5	2956	X							basalt	r = 1.16
		2966	X								x = 2.48
		3129	X		3017	.6275	1893.1				dense, non vesic
	833.5	4093	X							"	x = 2.28
		4152	X		4122	.377	1532.4			"	r = 1.79
	835.5	3048	X							"	much oxid. of grndmass + on fract
		3060	X		3054	.4785	1461.5			"	r = 1.44 x = 2.47
Box 36	837.5	1905	X							"	less alterat.
		1985	X		1945	.5227	1016.6				r = 1.29 x = 2.48
	840.0	2427	X								
		2495	X		2461	.6136	1510.0			"	r = 1.20 x = 2.48
	843.0	2596	X								no alterat dense. non vesi
		2744	X		2670	.5211	1391.4			"	r = 1.25 x = 2.47
Box 37	846.0	1990	X								
		1994	X		1992	.5327	1061.3			"	r = 1.25 x = 2.48
	849	2624	X							"	r = 1.31 x = 2.48
		2619	X		2621.5	.5178	1357.4				
	854.5	1413	X								much alter. on fract
		1376	X		1394.5	.5163	719.9			"	r = 1.27 x = 2.47
Box 38	858.5	3092	X		3092	.2823	872.7	Sdev 583.3	1540.3		whole core oxid on fract This box is so platy that no other samples were possib. (the basalt appears fissile)

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo Nr-3 Pg 8 of ~~165~~ Date: 7-29-87

Company: Geo newberry Logged by: ML

Core Diameter: 2.49" up to 910' then 2.50" Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo with,	Comments
Box 38 (cont) zero →	862.5	526	X							Basalt transit.	1/.65 highly oxidized matrix support
		514	X		520	1.011	525.7			to tuffs & ash	r = 1.08 x = 2.48
	863.5	870	X							xl, lithic tuff	1/.85 highly oxidized
		816	X		843	.5791	488.1				x = ? r = 1.34
Box 39	866.5	268	X		268	.9884	264.9			agglom + cinders	1/.75 x = 2.41 r = 1.09
	871.8	205	X		205	.5166	105.9			tuff (xl, utric	1/.95 x = 2.44 r = 1.29
	873	263	X		263	.4956	130.3			" lithic	x = 2.47 r = 1.36
Box 40	882.5	651	X		651	.4704	306.2	1%.2	30[illegible]	volcan breccia	1/.60 of entire core
Box 41 zero →	886	563	X		563	.4816	271.2			agglom,	most of this box is highly broken
	[illegible]									[illegible]	r = 1.36 x = 2.45
	888	109	X		888	.5759	511.4			tuff xl	1/.80 highly altered
	[illegible]										x = 2.47 r = 1.53
	891.5	90	X							tuff	highly vesicular x = 2.45
		88	X		89	.6945	61.8				r = 1.10
	893	427	X							flow breccia	r = 1.12 x = 2.47
		330	X		378.5	.6596	249.6				
Box 42	898	270	X		270	.4052	109.4			"	r = 1.63 highly x = 2.36 oxidiz.
	902	630	X								r = 1.47 x = 2.31
		640	X		635	.4181	265.5				Pink alteration
	900	170	X		170	.5337	90.7			"	r = 1.61 x = 2.43 1/.80
Box 43	904	1230	X								Pink altered matrix
		1236	X		1233	.4912	605.7		28[illegible]2.4	"	r = 1.38 x = 2.47
zero →	910.5	2525	X		2525	.5600	1414			basalt andes	x = 2.50 r = 1.29
	913.0	2396	X		2396	.6459	1547.7				r = 1.10 x = 2.49
	915	?								"	samples will not fit in core sampler
Box 44	922	1750	X		1750	1.227	2146.8			"	1/.60 x = 2.44 r = 1.05
	926.5	2500	X		2500	.5895	1473.7				1/.95 x = 2.50 r = 1.30
	919	2758	X		2758	.5355	1752.8				x = 2.47 r = 1.21

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 9 of 65 Date: 7-29-87

Company: Geonewberry Logged by: ML

Core Diameter: 2.50" Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo lithol.	Comments
Box 45	930	1952	X		1952	.6483	1265.4			Basaltic Andes	x= 2.48 r= 1.14
	933	1620	X		1620	.5202	842.8			"	r= 1.40 x= 2.50
	935.5	2255	X		2255	.5595	1261.7			"	1/90 x=2.50 r=1.47
Box 46	938.5	2090	X		2090	.4987	1042.3			"	r=1.38 x=2.49
	942.5	1740	X		1740	.5134	893.4			"	r= 1.27 x= 2.48
	944.5	1436	X		1436	.6895	990.1			"	1/90 x=2.49 r=1.17
Box 47	948	2933	X		2933	.4902	1437.7			"	1/90 x=2.46 r=1.56
	950	2042	X		2042	.6823	1393.2			"	x= 2.47 r= 1.09
	953	1344	X								1/75 r= ? x= ?
Box 48 zero ↓	956	2074	X		2074	.6193	1284.4				r=1.22 x=2.48
	961	1822	X		1822	.6678	1216.7				r= 1.09 x= 2.48
	958	1840	X		1840	.6408	1179.0				r= 1.16 x= 2.48
Box 49	964.5	3296	X		3296	.6158	2029.7				r= 1.23 x= 2.48
	967	2230	X		2230	.7730	1720.0				r= .98 x= 2.44
	972.5	1100	X		1100	.7713	848.4	sdev —	1354.7		r= .98 x= 2.44

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 10 of 65 Date: 7-30-87

Company: Geonewberry Logged by: ML

Core Diameter: 2.50 Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Corr. with	Comments
Box 50 zero→	975	694	X		975	.7867	767.2		767.2	breccia flow	grad. cont between pyrox. & basalts
											highly oxidiz x=2.46 r=1.06
	980	180	X		980	.4667	457.3			cinder agglom.	.60 of whole core
											most of ooxg unconsolidated
											large piece will not fit in Sus. meter
Box 51	988	492	X		492	.5033	247.6			breccia flow	x=2.49 r=1.316
	993	512	X		512	1.56	796.6			breccia flow	x=2.32 highly ox. r=.41
	994.5	234	X		234	1.25	292.7			tuff	x=2.4 r=.49
Box 52	996	125	X		125	1.609	201.2	sdev	399.1	tuff	x=2.06 most of tuff broken r=.161
	1004	226	X		226	.9351	211.3			Flow breccia	1/80 x=2.38 r=1.14
Box 53	1006	566	X		566	.4961	280.8			"	x=2.47 r=1.31
	1008	236	X		236	.6934	163.6			"	x=2.49 r=1.16 1/90
	1013	2241	X		2241	.6102	1367.5		505.8	"	x=2.50 r=1.20
											This sample had large basalt clasts
	1015	2912	X		2912	.5530	1610.2			basalt, andes.	x=2.50 r=1.275
Box 54 zero→	1019.5	2743	X		2743	.5807	1592.9			"	x=1.18 x=2.50
	1016.5	3795	X		3795	.5516	2093.2			"	x=2.5 r=1.28
	1023	2604	X		2604	.6263	1630.9		1731.8	"	r=1.20 x=2.48
Box 55	missing	No samples									Box 55 missing
Box 56	1034.5	803			803	1.1147	920.8			cryst. lith tuff	1/80 x=2.32 r=.94
	1040.0	297			297	.6586	195.6		558.2	tuff "	altered w/ sulfer x=2.44 r=1.23
	1044	456			456	.5704	260.1			volcanic arkose	1/80 x=2.98 r=1.31
Box 57	1047.5	399			399	.6581	262.6		261.35	~~basalt~~ "	highly altered (sulfer?)
		651								"	x=2.47 r=1.15
	1052	651			651	.4961	322.9			"	still altered as above; crumbly
zero→											x=2.47 r=1.31
	1053	429			429	.6559	281.4			basalt	no alter. highly vesicular
											x=2.48 r=1.12

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 11 of ____ Date: 7-31-87

Company: Geo Newberry Logged by: ML

Core Diameter: 2.50 Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen lith	Comments
Box 58 Zero → 1060	510	X							Basalt Andes.	non-vesicular
	519	X								x = 2.47 r = 1.12
	514	X		514.3	.6800	344.6				
1063	550	X							"	
	548	X		549	.7265	398.9				x = 2.44 r = 1.07
1064	700	X								
	708	X		704	.4945	348.1			"	x = 2.45 r = 1.26
Box 59 1067	631	X								
	623	X		627	.5248	329.0			"	x = 2.49 r = 1.27

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 12 of 68 Date: 8-1-87

Company: Geonewberry Logged by: ML

Core Diameter: 2.50 Total Correction: $(1/d^2)(1.75)(\quad)=$

Instrument: Bison 3101A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen. Lith	Comments
Box 59 (cont) zero→ 1074	738	x							basalt, andes=	v, vesicular ½90
	734	x		736	.5572	410.1				r=1.27 x=2.5
Box 60 1080	2664	x							"	decrease in vesc.
	2788	x		2726	.6740	1837.4				r=1.11 x=2.47
1084	740	x								
	720	x		730	.6002	438.2			"	r=1.23 x=2.48
1089	585	x		585	.5134	300.4				r=1.27 x=2.48
Box 61 1094	673	x								
	669	x		671	.6193	415.5			"	r=1.22 x=2.48
1096	2025	x							"	r=1.33
	1974	x		1999.5	.4996	998.9			—	x=2.48
1097.5	530	x		530	.7698	408			"	½80 x=2.48 r=1.23
Box 62 1104	1559	x							"	x=2.50 dense r=1.27 no vesc
	1576	x		1567.5	.5544	868.9				med grey
1106.5	826	x							"	x=2.48 r=1.07
	828	x		827	.6759	559			"	
1109	809	x							"	x=2.49
"	836	x		822.5	.6171	507.5				r=1.18
Box 63 1113.5	1980	x							"	vesicular dk grey
	2022	x		2001	.6951	1390.8			"	x=2.47 r=1.06
1114.5	2008	x							"	dk grey
	2052	x		2030	.6263	1271.4		635.1		x=2.48 r=1.20
1124	483	x		483	.5056	244.2		244.2	"	x=2.49 r=1.35
										highly oxid. red vesic.
										remainder of box broken up
Box 64 zero→ 1131	1254	x							"	vesicular med grey/mnr. alt
	1266	x		1260	.6334	798.1				x=2.48 r=1.18
1133	849	x							"	decrease in vesicles r=1.22 x=2.48
	854	x		851.5	.6036	513.9				

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: GeoN-3 Pg 13 of 65 Date: 8-1-87

Company: Geonewberry Logged by: ML

Core Diameter: 2.50" Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo lith	Comments
Box 64 (cont) 1135	859	X							basalt, andes.	dense med grey non vesic
	861	X		860	.6171	530.7				r = 1.18 x = 2.49
1137.5	830								"	
	830	X		830	.5102	423.5				r = 1.23 x = 2.49
Box 65 1139	719									
	721	X		720	.6158	443.4			"	r = 1.23 x = 2.48
1142	873									increase in FeOp
	870			871.5	.6158	536.7		541.1	"	r = 1.19 x = 2.48
1144	1114									increase in FeOp
	1094			1104	.6429	709.7			"	r = 1.19 x = 2.47
Box 66 1152.3	2807	X							"	1st 4' of box all fractured, highly altered
	2807	X		2807	.6408	1798.6		1254.2	"	x = 2.48 r = 1.16
										this sample dense slightly vesic
1154	1708	X								x = 2.48 r = 1.24
	1708	X		1708	.6447	1101.1				1.95
1159	2297	X								
	2566	X		2431.5	.6542	1590.7				x = 2.47 r = 1.16

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 14 of ____ Date: 8-3-87

Company: GeoNewberry Logged by: ML

Core Diameter: 2.50" HQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. (x 10^{-6} cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen. litho.	Comments
Box 67 zero →	1160	1599	x							basaltic andesite	slightly vesicular medgrey
		1631	x		1615	.5111	825.4			"	x = 2.48 r = 1.28
	1164	1724	x							"	
		1712	x		1718	.6263	1076.0			"	x = 2.48 r = 1.20
	1168	1357	x							"	
		1350	x		1353.5	.6003	812.5			"	x = 2.49 r = 1.23
Box 68	1170	1222	x								
		1230	x		1226	.6620	811.6			"	r = [illegible].14 x = 2.47
	1172	1225	x								
		1225	x		1225	.6620	810.9			"	r = 1.14 x = 2.47
	1174	2146	x							"	dramatic increase in alteration –
		2228	x		2187	.6298	1377.5		1050.7		start of highly alter zone x = 2.48 r = 1.0
Box 69	1183	368	x		368	1.072	394.3			a	1/.60 x = 2.47 r = 1.19
	1184	757	x		757	.6385	483.3			"	1/.55 x = 2.49 r = 2.31
											v. vesicular remainder of box broken up
Box 70	1193	1033	x							"	x = 2.44 r = 1.44
		1065	x		1049	.4537	476.0		451.2		
	1195	313	x							"	back to slightly altered - still vesic
		313	x		313	.7375	230.8				x = 2.48 r = 1.10 1/.90
	1198	591	x							"	gndmass slightly oxidized
		701	x		646	.8797	568.3			"	x = 2.46 1/.80 r = 1.07
Box 71	1200	994	x							"	vesicular gndmass more oxidized
		979	x		986.5	.6284	619.9			"	x = 2.47 r = 1.23
	1203	1032	x							"	1/.95
		1028	x		1030	.7182	739.7			"	x = 2.47 r = 1.09
	1206	2172	x							"	increase in frac & alteration
		2158	x		2165	.7458	1614.6			"	x = 2.44 r = 1.03
Box 72 zero →	1211	1229	x		1229	.5292	650.4			"	1/.95 x = 2.47 r = 1.28
											little or no alterat. non vesic
	1212	1715	x								x = 2.48 r = 1.23 1/.80
		1713	x		1714	.8151	1397.1				

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: GeoN-3 Pg 15 of 65 Date: 8-3-87

Company: Geonewberry Logged by:

Core Diameter: 2.50" NQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo lith	Comments
Box 72 (cont)	1215	2600	x							Basalt end	x = 2.49 r = 1.10
		2600	x		2600	.6459	1679.4	5 dev 544.8	937.5		
Box 73	1225	2602	x							"	1215'-1225' broken up too small
		2600	x		2601	.6581	1711.7				x = 2.47 r = 1.15
	1227	775	x		775	1.21	938.1			"	1/80 x = 2.41 r = 1.74
Box 74	1229	2316	x							"	1/85
		2357	x		2336	.5948	1389.4	5 dev 388.6	1346.4		x = 2.49 r = 1.35
	1237	870	x							"	broken up 1230-1237
		859	x		864.6	.7173	620.1				x = 2.46 r = 1.04
	1238	886	x							"	1/80 x = 2.48 r = 1.28
		889	x		887.5	.6388	567.0				

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 16 of ____ Date: 8-11-87

Company: Geoneuberry Logged by: ML

Core Diameter: 2.49 HQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. (x 10^{-6} cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen lith	Comments
Box 75 zero →	1243	1275	X							bas. and	x=2.47 r=1.33
		1317	X		1296	.5023	651.0				
	1244	897	X							"	x=2.47 r=1.19
		1018	X		957.5	.6333	606.4				
	1246	987	X							"	x= ? r= ?
		1039	X		1013	.5645?	571.8	sdev 34.9	603.3		slight. vesic. med grey
Box 76	1251	2522	X							Flow breccia	1/60 of full core dens P
		2539	X		2530.5	.4704	1190.4				
	1256	744	X							"	1/60 of full v. vesic core
		717	X		730.5	.4704	343.6				
	1254	1860	X							"	dense non vesic x=2.47 r=1.03
		1939	X		1899.5	.9290	1764.6				1/75
	1259	2949	X							"	dense but vesic x=2.43 r=1.13
		3066	X		3007.5	.7034	2115.4		1353.5		1260'-1263' broken up
Box 77	1263	1142	X							"	dense unalter. but v. vesic.
		1125	X		1133.5	.4835	548.1				x=2.43 r=1.30
	1265.5	878	X							volcani clastic	x=2.41 r=1.09
		887	X		882.5	.7413	654.2				
	1267	931	X							"	x=2.44 r=1.31
		939	X		935	.4865	454.9				
Box 78 zero →	1270	1473	X							"	x=2.47 r=1.3
		1489	X		1481	.5092	754.1				
	1273	1037	X							"	x=2.41 r=2.31
		1063	X		1050	.4726	496.2	sdev 121.9	581.5		
	1277	2155	X							Andesite Flow breccia	x=2.47 r=1.36
		2158	X		2156.5	.6195	1335.9				1/80
Box 79	1278.5	1368	X							"	x=2.48 r=1.4
		1358	X		1363	.4969	677.3		1006.6		N. vesic.
	1282	765	X							Andesite flow center	non vesic
		778	X		771.5	.6297	485.8		485.8	"	x=2.47 r=1.20

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N3 Pg 16 of ____ Date: 8-11-87

Company: Geonewberry Logged by: M. Lemieux

Core Diameter: 2.49 HQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	cen, lith	Comments
Box 79 (cont)										
1286	697	X							andesite Basalt F.B.	x=2.47 r=1.20
	708	X		702.5	.6297	442.4				
1287	1050	X							"	x=2.46 r=1.20
	1055	X		1052.5	.6427	676.4				
1284	996	X							"	x=2.44 r=1.31
	1088	X		1042	.4865	506.9		541.9		
Box 80										
1290.5	826	X							Andes. (?)	x=2.47 r=1.17
	824	X		825	.6406	528.5				most of box broken
1291	607	X							"	x=? 2.4 r=1.02
	619	X		613	.9836?	602.9		565.7		1/80
1297	1487	X							andesite	x=2.18 r=1.23
	1480	X		1483.5	.8398	1245.8				
Box 81										
1299.3	1194	X							"	x=2.47 r=1.28
	1200	X		1197.0	.5139	615.1				mesic,
1300.5	956	X							"	x=2.47
	957	X		956.5	.6227	595.6		818.8		r=1.22
1303.5	370	X							Andesite flowbreccia	1/75 highly ves. & oxid
	358	X		364	.5544	201.8				x=2.5 r=1.27
1306.5	345	X							"	strl vesic. & oxid
	323	X		334	.4868	162.6				x=2.46 r=1.62 1/90

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 18 of ____ Date: 8-12-87

Company: Geonewberry Logged by: ML

Core Diameter: 2.50 Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen lith	Comments
Box 82 zero →	1311	298	x							Breccia flow	highly red oxid x = 2.48
		298	x		298	.4805	143.2			andesite	r = 1.43
	1313	357	x							"	x = 2.47
		344	x		350.5	.4790	167.9				r = 1.39 oxid + vesic
	1317.5	439	x							"	x = 2.47
		398	x		418.5	.4810	201.3				r = 1.38
Box 83	1319	309	x							"	x = 2.47 red r = 1.43 vesic
		309	x		309	.5232	161.7			"	1/90
	1321	319	x							"	x = 2.48
		294	x		306.5	.6193	189.8				r = 1.22
	1324.5	426	x							"	x = 2.47
		410	x		418	.5074	212.1				r = 1.25
Box 84	1327.5	710	x							"	x = 2.47
		724	x		717	.6319	453.1	sdev 93.8	210.4		r = 1.22
	1329	781	x							Andesite flow	r = 1.32 grey dense
		794	x		787.5	.5487	432.1			center	x = 2.47 1/90
	1332.5	562	x							"	x = 2.48
		560	x		561	.4780	268.2				r = 1.43
	1334	724	x							"	x = 2.35
		709	x		716.5	.4362	312.5		337.6		r = 1.38
Box 85	1336.5	1428	x							and basal flow brec	red oxid vesic x = 2.41
		1494	x		1461	.4781	698.5		698.5		r = 1.25
	1341	279	x							and flow center	x = 2.06 1/90 r = 1.41
		253	x		266	.4289	114.1				
	1343	804	x							Andesite	x = 2.44 r = 1.50
		834	x		819	.4430	362.8				dense non vesic

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 19 of ____ Date: 8-13-87

Company: Geonewberry Logged by: ML

Core Diameter: 2.49 Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo Lith	Comments
Box 86 zero →	1346.5	1298	X							And.	dk grey sl. vesic
		1353	X		1325.5	.7011	929.4				x = 2.47 r = 1.02
	1348	850	X							"	
		860	X		855	.5187	443.5				x = 2.47 r = 1.26
	1352.5	673	X							"	x = 2.47
		676	X		674.5	.6227	420.0	s dev 296.3	454.0		r = 1.22
Box 87	1355.5	267	X							Andesite Lava	oxid red vesic
		271	X		269	.6957	187.1			breccia	x = 2.42 r = 1.17
	1358	195	X							"	Y .80 x = 2.47 r = 1.37
		193	X		194	.6336	122.9				oxid red but dense
	1361	427	X							"	highly vesic., red x = 2.47 r = 2.41
		429	X		428	.3377	144.5				
Box 88	1365	397	X							"	Y .80 x = ? 2.47? r = 1.31
		389	X		393	.6336	249.0				broken to 1370
	1370.5	759	X							"	x = 2.45
		750	X		754.5	.4715	355.7				r = 1.41
	1372.5	974	X							"	Y .95 x = 2.42 r = 1.66
		962	X		968	.4377	423.7	s dev 120.4	247.2		
	1374	311	X							Andes.	dense grey/red mod vesic
		306	X		308.5	.6443	198.8				x = 2.47 r = 1.46
Box 89	1377	1093	X							"	grey, dense v. few ves,
		1093	X		1093	.5163	564.3			"	x = 2.47 r = 1.27
	1382	623	X								increase inves and oxid of grading
		630	X		626.5	.6192	387.9			"	x = 2.47 r = 1.23
	1383.5	464	X							"	x = 2.47
		464	X		464	.4978	231.0				r = 1.35
Box 90	1385.5	417	X							"	Y .85 x = 2.47 r = 1.30
		433	X		425	.5990	254.6				
	1387.5	407	X								x = 2.47
		410	X		408.5	.6227	254.4				r = 1.22

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 20 of ____ Date: 8-13-87

Company: Geo Newberry Logged by: MC

Core Diameter: 2.49" HQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen, Lith	Comments
Box90(cont)	1391	810	x							Andes. intra flow breccia	x = 2.47
		828	x		819	.4934	404.1				r = 1.37
	1393	615	x							"	x = 2.48
		630	x		622.5	.5107	317.9				r = 1.34
Box91	1395	708	x							"	x 1/80 x = 1.41
		707	x		703.5	.6060	426.3				x = 2.47
	1398.5	1007	x							Andesite	x = 2.47 r = 1.22
		1008	x		1007.5	.6227	627				
	1399	620	x							"	x = 2.48
		660	x		640	.5252	336.1				r = 1.28
	1402	334	x							"	x = ?
		343	x		338.5						r = ?
Box92 zero →	1403.5	492	x							"	dense sl. red oxid (mostly grey)
		500	x		499	.4912	245.1				x = 2.47 r = 1.38
	1406.5	232	x							"	1/70 x = 2.47 r = 1.19
		248	x		240	.9047	217.1				
	1408	423	x							"	x = 2.47
		414	x		418.5	.4745	198.6				r = 1.46
	1409	471	x							"	vesic x = 2.47
		530	x		500.5	.5139	257.2				r = 1.28
Box93	1413	899	x		899	.2997	269.4			"	dense, non vesi grey x = 1.82 r = 2.33
	1414	838	x							intra flow Breccia	x = 2.47
		873	x		855.5	.5000	427.8				r = 1.34
	1417	798	x							Andes.	x = 2.47
		782	x		790	.5211	411.7				r = 1.25
	1419	648	x							"	x = 2.48 1/90
		630	x		639	.5780	369.4				r = 1.30

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: GeoN-3 Pg 21 of ____ Date: 8-13-87

Company: Geonewberry Logged by: ML

Core Diameter: 2.49 HQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo Lith	Comments
Box 94	1421	367	x							Andes.	non ves, grey/red x = 2.43
		441	x		404	.7500	303.0				r = 1.03
	1424	515	x							"	x = 2.47
		494	x		504.5	.4848	244.6				r = 1.41
	1426	410	x							"	med grey (no grains under cutter non vesic
		425	x		417.5	.6596	275.4				x = 2.47 r = 1.12
	1428	1638	x							"	r = 1.46
		1653	x		1645.5	.4745	780.7				x = 2.47
Box 95	1430	699	x							"	x = 2.47
		734	x		716.5	.6333	453.8				r = 1.19
	1434	970	x							"	x = 2.47
		972	x		971	.500	485.5				r = 1.34
	1437	1174	x							"	x = 2.47
	"	1196	x		1185	.4785	567.1				r = 1.44
Box 96	1440	1398	x							"	x = 2.48
		1328	x		1363	.4903	668.3				r = 1.43
	1444	1978	x							"	x = 2.47
		2020	x		1999	.5046	1008.7			"	r = 1.32
	1447	1049	x								x = 2.48
		1110	x		1079.5	.5107	551.3			"	r = 1.34
	1445	1377	x								r = 1.37
		1420	x		1398.5	.4934	690.0				x = 2.47
Box 97	1449	790	x							"	x = 2.47
		780	x		785	.4934	387.3				r = 1.37
	1451	498	x							"	x = 2.47
		466	x		482	.5211	251.2				r = 1.25
	1454	1000	x							"	x = 2.48
		1010	x		1005	.5170	520.4				r = 1.31
	1456	1516	x							"	v. slight. vesic
		1629	x		1572.5	.6262	984.7				x = 2.47 r = 1.21

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: GEO N-3 Pg 22 of ____ Date: 8-13-87

Company: Geonewberry Logged by: ML

Core Diameter: 2.48 Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo Unit	Comments
Box 98 1458	1783	1							Andes	dense, med grey non vesc
	1783	1		1783	.6514	1161.4				1/80 x=2.47 r=1.25
1460	1981	1							"	1/90 highly frag 1462-1468
	2050	1		2015.5	.5410	1090.4				x=2.47 r=1.40
1468.5	1227	1							Breccia Flow	x=2.41 vesic oxid
	1250	1		1238.5	.6919	856.9	265.6 s dev	477.8		r=1.20
Box 99 1472	573	1							Andes, Breccia Flow	x=2.47 1/95
	597	1		585	.6518	381.3				r=1.23
1474	735	1								r=1.31
	770	1		752.5	.5069	381.4				x=2.47
1479	1260	1							"	less oxid but vesic
	1244	1		1252	.5227	654.4				x=2.48 r=1.29
Box 100 1482	1165	1							"	
	1200	1		1182.5	.4925	582.4				x=2.48 r=1.42
1484	730	1							"	
	780	1		755	.4891	369.2				x=2.47 r=1.39

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 23 of ____ Date: 8-14-87

Company: Geonewberry Logged by: MC

Core Diameter: 2.49 Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen lith	Comments
Box 100 (con't) zero → 1487	1389	X							Brecc. flow	red, sl. vesic some grey b.A.,
	1361	X		1375	.3975	546.5				x = 2.28 r = 1.58
Box 101 1493	191	X							Breccia flow	broken up 1487 - 1493 red vesi
	178	X		184.5	.6518	120.3	s dev.	433.6		x = 2.47 r = 1.23 1/95
1497	1678	X							andes.	1/.75 x = 2.48 r = 1.38
	1777	X		1727.5	.6686	1154.9			"	
1494	1894	X							"	x = 2.47
	1911	X		1902.5	.5037	958.3				r = 1.44 1/95
Box 102 1499	1128	X							"	1/.70 x = 2.48 r = 1.17
	1248	X		1188	.8914	1058.9				
Box 102 1501	2351	X							"	1/.95 x = 2.48 r = 1.27
	2385	X		2368	.5554	1315.3	—	1218		dense mnr oxid non vesic
										remainder of box high M frac + brec
Box 103 1513	2079	X							Flow (? breccia)	x = 2.47
	2158	X		2118.5	.6227	1319.1		1319.1	"	r = 1.22
1516.5	854	X								v. vesic, oxid grnd M; med grey
	866	X		860	.5252	451.6				x = 2.48 r = 1.28
1519	1559	X							"	x = 2.48
	1683	X		1621	.6311	1022.9				r = 1.15

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 24 of ____ Date: 8-17-87

Company: Geonewberry Logged by: ML

Core Diameter: 2.48 Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen Lith	Comments
Box 104 zero →	1521	1794	↓							Andes.	x = 2.47 r = 1.19
		1938	↓		1866	.6204	1157.7				vesic. grey mnr. oxid
	1523	1557	↓							"	x = 2.47
		1642	↓		1599.5	.6204	992.3				r = 1.19
	1526.0	709	↓							"	x = 2.47 r = 1.38
		728	↓		718.5	.7202	517.5				1/.78 dense grey
	1529	675	↓							"	1/.70 x = 2.47
		726	↓		700.5	.8863	620.8				r = 1.19
Box 105	1530.5	720	↓							"	x = 2.47
		710	↓		715	.5256	375.8				r = 1.29
	1532	710	↓							"	x = 2.46
		759	↓		734.5	.6633	487.2				r = 1.12
	1535	713	↓							"	x = 2.46
		714	↓		713.5	.6479	462.3				r = 1.16
	1537	540	↓							"	1/.97 x = 2.42 r = 1.06
		655	↓		597.5	.7624	455.5	s.dev 288.0	654.4		
Box 106	1539.5	200	↓							Top Aav Breccia	1/.90 oxid grey/red vesic
		186	↓		193	.5758	111.1				x = 2.47 r = 1.32
	1542	1570	↓							"	v. vesic. red/grey
		1550	↓		1560	.4547	709.4				x = 2.41 r = 1.44
	1546	1293	↓							Andes	x = 2.47 r = 1.29
		1340	↓		1316.5	.5256	691.9				med grey med vesic
	1547	1086	↓							"	decrease in ves. med grey
		1065	↓		1075.5	.4974	534.9				x = 2.47 r = 1.41
Box 107	1549.5	1528	↓							"	non vesic. but red oxid
		1547	↓		1537.5	.5691	874.9	s dev 290.7	584.4		x = 2.48 r = 1.87
	1552	995	↓							Andes.	grey vesic x = 2.47
	↓	980	↓		987.5	.5111	504.7				r = 1.35
	1554	552	↓							"	x = 2.47
		560	↓		556	.6494	361.1				r = 1.11

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: GeoN-3 Pg 25 of 65 Date: 8-17-87

Company: GeoNewberry Logged by: ML

Core Diameter: 2.48" - 1566 Then bit change - 2.50" to ? Total Correction: $(1/d^2)(1.75)(\quad)=$

Instrument: Bison 3101 A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. (x 10⁻⁶ cgs)	S.I.	Average Mag.Susc.	Gen lith	Comments
Box 107 (cont) 1556.5	546	x							andes.	non vesic med grey
	574	x		560	.6204	347.4				x = 2.47 r = 1.19
Box 108 1558	548	x							"	1/80 x = 2.47 r = 1.34
	520	x		534	.6418	342.7				
1560.5	572	x							"	x = 2.47 r = 1.17
	612	x		592	.6274	371.4				
1563.5	740	x							"	x = 2.47 r = 1.37
	732	x		736	.5064	372.7	s dev. 60.7	383.3		
1566.5	567	x							Top flow breccia	x = 2.47 r = 1.21
	598	x		582.5	.6355	370.2				vesic. red oxid alter. on fracts.
Box 109 1568	1490	x					–		andes	x = 2.50 vesic, oxid red
	1572	x		1531	.5600	857.4	-			r = 1.25
1569.5	1395	x					-		"	x = 2.50 r = 1.25
	1485	x		1440	.5600	806.4				
1572	1150	x		1150	.5895	677.9	s. dev. ←	678.0	"	1/95 x = 2.50 r = 1.22
										remainder of box wont fit in suscept. meter note: this corresp. w/ bit change in driller log (bit > HQ size)
Box 110 zero ?	1786								andes	could not fit any samples in meter in entire box
	1311									
Box 111 1587	1238	x		1238	.5696	705.1			top flow breccia	x = 2.49 r = 1.32 1/90
1584	1150	x		1150	.5134	590.4	–	647.8	andes	x = 2.48 r = 1.27 grey dense non vesic
1593	1048	x		1048	.5111	535.6		535.6	"	x = 2.48 r = 1.28
										most of box wouldn't fit
Box 112 1599	1564	x		1564	.5600	875.8				v. vesic grey/red x = 2.50 r = 1.25
1601	1418	x		1418	.6036	855.9				x = 2.49 r = 1.22
1603	1253	x		1253	.6825	855.2				1/90 x = 2.44 r = 1.17

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 26 of ____ Date: 8-18-87

Company: Geonewberry Logged by: mc

Core Diameter: 2.50 HQ+ ~1690 2.490(?) Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: ____

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo with	Comments
Box 112(cont) 1604	578	0		578	.6298	364.1	sdev. 249.3	737.7	and.	vesr $r=1.19$ $x=2.48$
Box 113, 114, 115, 116, 117 too unconsol. for measurement										
Box 118 zero → 1658	4357	x							Lapilli Tuff	$x=2.47$ $r=1.42$
	361	x		359	.4729	169.8		169.8		yellow clay last grn glass
16605	1672	x		1672	.4413	737.9			Top flow breccia	vesr, med grey $x=2.37$ $r=1.38$
16666	756	x							"	1/.85 $x=2.36$ $r=1.99$
	747	x		751.5	1.03	777.4				
Box 119 1670	1021	x							"	$x=2.47$
	1021	x		1021	.6951	709.7				$r=1.06$ increased cond
1671	1016	x							"	$x=2.47$
	1045	x		1030.5	.6740	694.6				$r=1.11$
1674	2500	x							"	$x=2.48$
	2516	x		2508	.4996	1252.9				$r=1.33$
Box 120 1679	800	x							"	$x=2.47$ 1/.90
	780	x		790	.7269	574.3				$r=1.16$
1682	1330	x							"	$x=2.47$
	1332	x		1331	.4961	660.2				$r=1.31$
1685.5	1224	x		1685.5	.7010	1181.5	s. dev. 250.8	823.6	"	1/.95 $r=1.13$ $x=2.47$
Box 121 1687	1554	x		1687	.5409	912.6			Andesite flow center	1/.95 $x=2.47$ $r=1.28$
1688	1227	x								dense med grey
	1300	x		1263.5	.6170	779.6				$x=2.48$ $r=1.19$
1691	1068	x							"	$x=2.47$ $r=1.175$
	1161	x		1114.5	.6388	711.9				
1694.5	889	x							"	$x=2.47$
	980	x		934.5	.7372	688.9				$r=1.11$ 1/.90
Box 122 zero → 1696	1278	x							"	$x=2.48$
	1265	x		1271.5	.4992	634.7				$r=1.39$

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: GeoN-3 Pg 27 of ____ Date: 8-18-87

Company: Geonewberry Logged by: MC

Core Diameter: 2.49" HQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo Lith	Comments
Box 122 (cont)										
1698	884	x							and. flow center	x = 2.47 r = 1.06
	894	x		889	.7199	640.0				1/95
1701	1110	x							"	x = 2.48
	1125	x		1117.5	.6102	681.9				r = 1.21
1703	1174	x							"	x = 2.49
	1180	x		1177	.5689	669.6				r = 1.23
Box 123										
1705	1164	x							"	x = 2.49
	1148	x		1156	.5689	657.6				r = 1.23
1708	978	x							"	x = 2.48
	983	x		980.5	.6069	595.0				r = 1.22
1710	880	x							"	x = 2.42
	880	x		880	.7713	678.7				r = 1.01
1713	824	x		824	.6069	500.1			"	x = 2.48 r = 1.22
Box 124										
1714	962	x							"	x = 2.48
	903	x		932.5	.5252	489.7				r = 1.28
1716	1093	x							"	x = 2.48
	1095	x		1094	.5107	558.6				r = 1.34
1720	876	x							"	x = 2.48
	864	x		870	.5327	463.5				r = 1.25
1722	857	x							"	x = 2.48
	900	x		878.5	.6240	548.1				r = 1.19
Box 125										
1723.5	524	x							"	x = 2.36
	531	x		531.5	.9015	479.2				r = .90
1726	673	x							"	1/95 x = 2.48
	646	x		659.5	.6797	448.3				r = 1.11
1729	662	x		662	1.002	663.6	s. dev	621.1	"	x = 2.30 r = 1.85
										remainder of box broken up
Box 126 2x0 → 1735.5	340	x							Lapilli tuff volcanic	x = 2.44 r = 1.28
	329	x		334.5	.4929	164.9	—	164.9		

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: GeoN-3 Pg 28 of ____ Date: 8-18-87 8-19-87

Company: Geo Newberry Logged by: MC

Core Diameter: 2.50" Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geol	Comments
Box 126 (cont)	1735	506	X							volcani-clastic	yellow ash bas. grains matrix
		512	X		511	.6569	335.7		335.7		x = 2.45 r = 1.21
	1737	1059	X							lapilli tuff	x = 2.45 r = 1.26
		1090	X		1074.5	.5817	625.1			"	Tan
	1739	1746	X							"	x = 2.45 r = 1.22
		1831	X		1788.5	.6874	1229.5		927.3		
Box 127	1744	1627	X							agglom.	1739'-1748 broken up x = 2.45
		1608	X		1617.5	.4630	750.2				r = 1.41
	1742.5	1107	X							"	x = 2.47 r = 1.27
		1183	X		1145	.6313	722.9		786.5		remainder of box highly broken + fracts.
Box 128 zero →	1753	1867	X							flow breccia	x = 2.47
		1966	X		1916.5	.4852	930.0				r = 1.36
	1755	3840	X							"	x = 2.48
		3869	X		3854.5	.4929	1899.8		1414.9		r = 1.36
	1758	1503	X							Basalt Andes.	x = 2.32 X.95
		1460	X		1481.5	.447	662.3				r = 1.41
Box 129	1761	1423	X							"	x = 2.50
		1413	X		1418	.6222	882.3				r = 1.25
	1764	1893	X							"	x = 2.48
		1930	X		1911.5	.6124	1170.7				r = 1.24
	1766	1454	X							"	x = 2.50
		1454	X		1454	.6222	904.7				r = 1.25
Box 130	1770	1100	X							"	x = 2.48
		1115	X		1107.5	.3636	402.6				r = 2.16
	1772.5	1690	X							"	x = 2.47
		1700	X		1695	.6319	1071.1				r = 1.22
	1775	1294	X							"	x = 2.47
		1359	X		1326.5	.6700	888.7		871.6		r = 1.12

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg. 29 of ____ Date: 8-19-87

Company: Geonewberry Logged by: ML

Core Diameter: 2.50" Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geology both	Comments
Box 131	1779	1262	x							Breccia Flow	k=2.47
		1302	x		1282	.7102	910.5	sder 237 x	861.16		1/90 r=1.20
											remainder of box all broken
Box 132	1790	1343	x							lapilli tuff	k=2.47 r=1.32
		1349	x		1346	.4939	664.7	—			
	1795.5	827	x							basalt	x=2.43 r=1.19
		912	x		869.5	.6835	594.3		594.3		
	1792	577	x							lapilli tuff	x=2.47 r=1.41
		623	x		600	.5936	356.2		510.4		1/80 vesic
	1797	420	x							ash flow	x=2.44 r=1.40
		428	x		424	.4612	195.5	—			white ash
Box 133	1798	144	x							"	x=2.45 r=1.41
		136	x		140	.5153	72.1	—	133.8		yellow ash 1/80
	1800	132	x							lapilli tuff	x=2.45 r=1.34
		144	x		138	.4776	65.9				
	1803.5	146	x							agglom	x=2.47 r=1.22
		154	x		150	.7021	105.3				1/80
											remainder of box & start of next one broken up
Box 134	1809	406	x							"	x=2.47
		413	x		409.5	.4939	202.2				r=1.32
	1811	220	x		220	.6305	138.7				1/75 x=2.47 r=1.42
	1815	243	x							"	x=2.46
		231	x		237	.6822	161.7	—	167.5		r=1.12
Box 135											no sample avail in this box — either broken or too large for susc. meter
Box 136, 137, 138 totally unconsolidated											
Box 139											

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: GeoN-3 Pg 30 of ____ Date: 8-19-87

Company: Geonewberry Logged by: ML

Core Diameter: NQ" 1.87" Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen Lith	Comments
Box 139 1860-V 1861	621	0							Ba. and Flow breccia	x = 1.82
	637	2		629	.5817	365.9				r = 7.8
1868	1246	0							"	x = 1.85
	1281	0		1263.5	.8311	1050.1	—	708		r = 1.10
1869	236	0							agglom ash + cinder	x = 1.86
	241	0		238.5	1.108	264.2				r = .89 Tf Matrix
Box 140 1872	250	0							"	x = 1.87
	272	0		261	.9166	239.2				r = 1.07
1875	2666	0							"	x = 1.84
	285	0		275.5	.7553	208.1				r = 1.25
1877.5	344	0					—		F.B Block	x = 1.86
	352	0		348	.8856	308.2	7.6			r = 1.03
Box 141, 142, 143 totally unconsolid.										
Box 144 1910	95	0							agglom ash + cinders	x = 1.86
	90	0		92.5	.8963	82.9				r = 1.01
1914.5	271	0							"	x = 1.86
	286	0		278.5	.9186	255.8	sdev 77.6	226.4		r = .97
								—		rem. uncons + most of nxt box
Box 145 1923.5	27	0							Andes. Top F.B	x = 1.85 red entirely oxid
	27	0		27	.8219	22.2				r = 1.12
1925	74	0							"	x = 1.86 grey unox
	69	0		71.5	.8751	62.6		42.4		r = 1.05

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 31 of ____ Date: 8-20-87

Company: Geonewberry Logged by: ML

Core Diameter: NQ 1.87" Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen. Lithol.	Comments
Box 146 Zero ✱	1926	942	X							Andes.	grey non vesic x=1.86
		979	X		960.5	.8800	845.5				r=1.04
	1928.5	974	X							"	x=1.85
		1004	X		989	1.21	1193.6				r=0.82
	1931	762	X							"	x=1.84
		786	X		774	1.1979	927.2				r=.86
	1934	624	X							"	x=1.85
		639	X		631.5	1.1689	738.1				r=.86
Box 147	1935.5	770	X							"	x=1.86
		767	X		768.5	.8699	6685				r=1.06
	1937.5	1010	X							"	x=1.86
		1026	X		1018	.8699	885.6				r=1.06
	1941.0	1430	X							"	x=1.78
		1759	X		1744.5	.7237	1262.5				r=1.22
	1943	1031	X							"	x=1.86
		1064	X		1047.5	.8909	933.2				r=1.02
Box 148	1945	1288	X							"	x=1.81
		1316	X		1302	.7797	1015.2				r=1.12
	1947.5	910	X		910	.9711	883.7			"	1.90 x=1.87
											r=.98
	1950	1054	X							"	x=1.86
		1110	X		1082	.8900	964.0				r=1.02
	1953	836	X							"	x=1.86
		840	X		838	.8856	742.1				r=1.03
Box 149	1955	740	X							"	x=1.85
		764	X		752	.8501	639.3				r=1.06
	1958	697	X							"	x=1.86
		724	X		710.5	.8803	625.5				r=1.04
	1960	896	X							"	x=1.86
		865	X		880.5	.8963	789.2				r=1.01

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: GeoN-3 Pg 32 of ____ Date: 8-20-87

Company: Geonewberry Logged by: ML

Core Diameter: NQ 1.87" Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo with	Comments
Box 149 (cont)	1962.5	601	X							Andes.	x = 1.85
		609	X		605	.8357	505.6			"	r = 1.09
Box 150	1965	371	X							"	x = 1.86
		377	X		374	1.083	405.1				r = 0.92
	1968	881	X							"	x = 1.86
		906	X		893.5	.8856	791.3				r = 1.03
	1971	822	X							"	x = 1.86
		822	X		822	.8699	715.1				r = 1.06
	1972	801	X							"	x = 1.84
		854	X		827.5	1.198	991.2				r = .86
Box 151 zero →	1975	670	X							"	x = 1.85
		700	X		685	.8700	595.9				r = 1.02
	1977	642	X							"	x = 1.85
		658	X		650	.8453	549.4				r = 1.07
	1980	788	X							"	x = 1.86
		818	X		803	.8803	706.9				r = 1.04
	1981	575	X							"	x = 1.82
		543	X		559	1.384	773.6				r = .74
Box 152	1983	1083	X							"	x = 1.85
		1088	X		1085.5	.8219	892.1				r = 1.12
	1985.5	1115	X							"	x = 1.69
		1124	X		1119.5	.6486	726.1				r = 1.36
	1987	768	X							"	x = 1.82
		789	X		778.5	.7452	580.2				r = 1.23
	1990.5	796	X							"	x = 1.86
		684	X		740	.8909	659.3				r = 1.02
Box 153	1993	800	X							"	x = 1.83
		798	X		799	1.275	1019				r = .81
	1997	630	X							"	x = 1.85
		649	X		639.5	.8909	569.7				r = .98

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 33 of ____ Date: 8-20-87

Company: Geonewberry Logged by: ML

Core Diameter: NQ 1.87" Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geology	Comments
Box 153 (cont) 1998	796	x							Andes.	x = 1.81
	813	x		804.5	.7679	617.8				r = 1.15
Box 154 2001	713	x							"	x = 1.82
	779	x		746	.8598	641.4				r = .96
2005	548	x							"	x = 1.86
	561	x		554.5	.8699	482.4				r = 1.06
2007	746	x							"	x = 1.86
	770	x		758	1.0832	821.1				r = .92
2009	1344	x							"	x = 1.86
	1399	x		1371.5	.9129	1252.1				r = .98
Box 155 2011.5	550	x							"	x = 1.84
	517	x		533.5	1.349	719.9				r = .72
2013.5	1220	x							"	x = 1.86
	1241	x		1230.5	.9129	1123.4				r = .98
2017	844	x							"	x = 1.86
	878	x		861	.9302	800.8				r = .95
2018.5	798	x							"	x = 1.84
	820	x		809	.8084	654.0				r = 1.12
Box 156 2020	898	x							"	x = 1.79
	915	x		906.5	.7257	657.9				r = 1.23
2024	791	x							"	x = 1.68
	813	x		802	.6359	510.0				r = 1.4
2026	855	x							"	x = 1.85
	858	x		856.6	.8405	719.9				r = 1.08
Box 157 2028	956	x							"	x = 1.86
	975	x		965.5	.8751	757.4				r = 1.05
2030	654	x								x = 1.85
	6160	x		657	1.178	774.0			"	r = .85
2033	1016	x							"	x = 1.85
	1038	x		1027	.8453	868.1				r = 1.07

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: GeoN-3 Pg 34 of ____ Date: 8-20-87

Company: Geo Newberry Logged by: MK

Core Diameter: NQ 1.87" Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 R

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geol. Unit	Comments
Box 157 (cont)	2036	694	x							Andes.	x= 1.86
		705	x		699.5	1.108	774.8				r= .89
Box 158	2038	817	x							"	x= 1.86
		828	x		822.5	1.142	939.2				r= .85
	2040	843	x							"	x= 1.86
		878	x		860.5	.9186	790.5				r= .97
	2043	1018	x							"	x= 1.85 Sl. oxid
		1020	x		1019	.8550	871.2	s dev 192.7	783.1		r= 1.05 2045 - 2049
Box 159	2050	100	x							Andes. (red oxid)	broken up - Top flow breccia
		214	x		157	.8357	131.2				x= 1.85 vesic r= 1.09
	2053	166	x							"	x= 1.83
		167	x		166.5	.7890	131.4				r= 1.14
	2055	140	x							"	x= 1.84
		133	x		136.5	.7997	109.2				r= 1.14
	2056.5	69	x							"	x= 1.81 ?
		69	x		69	.5846	?40.3				r= 1.77 ?
Box 160	2059	72	x							"	x= 1.82
		65	x		68.5	1.300	89.1				r= .81
	2061	129	x							"	x= 1.84
		127	x		128	.7955	101.8				r= 1.15
	2064	113	x							"	x= 1.82
		106	x		109.5	1.312	143.6				r= .80
	2067	184	x							"	x= 1.83
		187	x		185.5	.8103	150.3				r= 1.09
Box 161	2069	291	X							"	x= 1.85
		293	X		292	.8962	261.7				r= .97
	2073	433	X							"	x= 1.82 red vesic
		435	X		434	.7527	326.7				r= 1.21
	2076	547	X							"	x= 1.83
		573	X		560	1.1574	648.2				r= .93

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 35 of ____ Date: 8-20-87

Company: Geonewberry Logged by: ML

Core Diameter: NQ 1.87" Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 IA

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo Lith.	Comments
Box 162										
2078	640	X							Andesite red oxid	non vesic $\chi = 1.84$
	666	X		653	.8309	542.6				$r = 1.07$
2081.5	800	X							"	$\chi = 1.82$
	810	X		805	.7489	602.9				$r = 1.22$
2085	825	X								$\chi = 1.83$
	836	X		830.5	.7849	651.9			"	$r = 1.15$
Box 163										
2087	581	X							"	$\chi = 1.86$
	605	X		593	.8856	525.1				$r = 1.03$
2091	802	X							"	$\chi = 1.84$
	826	X		814	.8128	661.6				$r = 1.11$
2093.5	655	X							"	$\chi = 1.86$
	680	X		667.5	1.0754	717.8				$r = .93$
Box 164										
2096	689	X							"	$\chi = 1.86$
	713	X		701	.9018	632.2				$r = 1.0$
2098	643	X							"	$\chi = 1.84$
	667	X		655	1.170	766.2				$r = .89$
2103	810	X							"	$\chi = 1.85$
	820	0		815	.8219	669.8				$r = 1.12$

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 36 of ____ Date: 8-24-87

Company: Geonewberry Logged by: ML

Core Diameter: NQ 1.87" Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo lith	Comments
Box 165 zero → 2105.5	317	x							Andes	x = 1.83 r = 0.83
	320	x		318.5	1.254	399.4	s.dev 282.3	484.9		
2108.5	614	x							Flow Breccia	x = 1.81
	612	x		613	1.41	864.4				r = .74
2112.5	557	x							"	x = 1.84
	570	x		563.5	.8040	453.1				r = 1.13
2113.5	279	x							"	x = 1.84
	279	x		279	.8355	233.1				r = 1.06
Box 166 2115	389	x							"	x = 1.84
	407	x		398	.8402	334.4				r = 1.05
2119	406	x							"	x = 1.81
	505	x		455.5	.8045	366.5				r = 1.06
2123	535	x							"	x = 1.83
	555	x		545	1.309	713.2				r = .78
Box 167 2126.5	1087	x							"	x = 1.84
	1108	x		1097.5	.8263	906.8				r = 1.08
2130	673	x							"	x = 1.84
	715	x		694	.8128	564.1				r = 1.11
2132	687	x							"	x = 1.85
	714	x		700.5	1.1781	825.3	s dev	584.5		r = .85
Box 168 2135	722	x							Andesite	x = 1.85
	750	x		736	.9120	671.8				r = .94
2137.5	637	x							"	x = 1.86
	668	x		652.5	1.091	712.0				r = .91
2141.5	540	x							"	x = 1.86
	560	x		550	.9018	496.0				r = 1.0
Box 169 2143.5	646	x		646	1.014	655.3				1/90 x = 1.86 r = .98
2146.5	451	x		451	.9234	416.5				x = 1.865 r = .99
2149	386	x		386	1.231	475.0				1/90 x = 1.86 r = .89

Drill Hole: Geo N-3 Pg 37 of ____ Date: 8-24-87

Company: Geonewberry Logged by: ML

Core Diameter: NQ 1.87" Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen Loth	Comments
Box 170	2153.5	833	X							Andes Flow Center	x= 1.85 r= 1.14
		850	X		841.5	.8129	684.0				
	2157	456	X							"	x=1.84
		484	X		470	1.2075	567.5			V	r= .85
	2161	745	X							"	x= 1.84
		774	X		759.5	.7997	607.4				r=1.14
Box 171	2163.5	690	X							"	x=1.82
		680	X		685	.7680	526.1				r= 1.17
	2166.5	225	X							"	x=1.85
		240	X		232.5	1.178	273.9				r= .85
	2170	287	X							"	x=1.86
		287	X		287	1.083	310.9				r= .92
Box 172	2173	243	X							"	x = 1.83
		262	X		252.5	.8469	213.8				r= 1.01
	2176	709	X							"	x= 1.86
		743	X		726	.9129	662.8				r= .98
	2178.5	773	X							"	x=1.83
		814	X		793.5	1.309	1038.4				r=.78
Box 173	2181	1123	X							"	x=1.85
		1146	X		1134.5	.8264	937.6				r=1.11
	2185.5	678	X							"	x=1.85
		698	X		688	1.1597	797.9				r= .87
	2188.5	974	X							"	x=1.68
		980	X		977	.6511	636.1				r=1.34
Box 174	2190.5	3177	X							"	x = 1.51
		3222	X		3199.5	.5883	1882.3				r= 1.48
	2193	2164	X							"	x=1.86
		2230	X		2197	.8963	1969.2				r= 1.01
	2197	874	X							"	x=1.86
		877	X		875.5	.8548	748.4				r=1.09

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: GeoN-3 Pg 38 of ____ Date: 8-24-87

Company: Geonewberry Logged by: ML

Core Diameter: NX 1.87" Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: ____

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geology	Comments
Box 75	2200	996	X							Basalt and	X = 1.86
		1010	X		1003	.9018	904.5				r = 1.00
	2204	1489	X							"	X = 1.86
		1500	X		1494.5	1.0832	1618.9				r = .92
	2208	1341	X							"	X = 1.86
		1389	X		1365	1.1689	1595.5				r = .86
Box 76	2212	1267	X							"	X = 1.85
		1286	X		1276.5	1.2268	1566.0				r = .80
	2217	811	X							"	X = 1.84
		840	X		825.5	1.269	1047.6				r = .79
	2218.5	1168	X							"	X = 1.83
		1108	X		1138	.7932	902.7				r = 1.13
Box 77	2220.5	922	X							"	X = 1.86
		967	X		944.5	.9186	867.16				r = .97
	2223.5	745	X						—	"	X = 1.86
		771	X		758	1.1418	865.5	s.dev 462.9	850.0		r = .85
Box 78	2230	3988	X							Basal Flow	X = 1.77
		3996	X		3992	.7056	2816.5		2816.5	Breccia	r = 1.26
	2235.5	291	X								X = 1.86
		286	X		288.5	.8963	258.6				r = 1.01
	2237.5	194	X							"	X = 1.84
		209	X		201.5	1.247	251.4				r = .81
Box 79	2240	172	X							"	X = 1.86
		174	X		173	.9129	157.9				r = .98
	2242	263	X							"	X = 1.84
		267	X		265	.8645	229.1				r = 1.00
	2249	658	X							"	X = 1.71
		671	X		664.5	.6412	426.1		264.6		r = .41

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: G-60 N-3 Pg 39 of ____ Date: 8-25-87

Company: ____ Logged by: ML

Core Diameter: ~~BQ~~ NX 1.87 Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: ____

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen. Lithol.	Comments
Box 180	2254	442	X							Andes.	x = 1.86
		440	X		441	.9244	407.6				r = .96
	2256	392	X							"	x = 1.86
		426	X		406	1.0994	446.3				r = .90
	2259.5	676	X							"	x = 1.87
		704	X		690	.9523	657.1				r = 1.01
Box 181 zero->	2262.5	821	X							"	x = 1.79
		852	X		836.5	.7397	618.8	s dev 123.8	532.4		r = 1.19
	2272	331	X							"	broken up most of box V. vesic
		331	X		331	.9523	315.2			Breccia Flow	x = 1.87 r = 1.01
Box 182	2276	492	X							Andesite	x = 1.86 v. vesic.
		498	X		495	1.091	540.2				r = .91
	2278	324	X							"	x = 1.84 v. vesic
		341	X		332.5	1.2375	411.4				r = .82 + oxid
Box 183	2281.5	341	X							"	x = 1.86
		352	X		346.5	1.0832	375.3				r = .92
	2283	341	X							"	x = 1.86
		351	X		346	.9073	313.9	s dev 93.0	391.2		r = .99
	2289	935	X							"	x = 1.85
		980	X		957.5	.9128	873.9				r = .94
Box 184	2292.5	261	X							"	x = 1.87
		261	X		261	.9585	250.2				r = 1.00
	2296	769	X							"	x = 1.85
		810	X		789.5	.8649	682.9				r = 1.03
	2300.5	468	X							"	x = 1.85
		481	X		474.5	1.1781	559.0				r = .85
Box 185	2303	360	X							"	x = 1.85
		388	X		374	1.1508	430.4				r = 1.88
	2306	539	X							"	x = 1.86
		564	X		551.5	.9018	497.3				r = 1.00

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: GeoN-3 Pg 40 of ____ Date: 8-25-87

Company: Geonewberry Logged by: ML

Core Diameter: NX 1.87 Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geology	Comments
Box 185 (cont)										
2310	866	x							Andesi	x= 1.62
	889	x		877.5	.6250	548.5				r= 1.39
Box 186										
2313.5	448	x						—	"	x= 1.85
	456	x		452	1.1781	532.5	sdev, 181.2	546.8		r= .85
2320	605	x							"	most of 600 broken up
	620	x		612.5	1.1697	716.4				x= 1.84 r= .89
Box 187										
2323	1040	x							"	x= 1.77
	1062	x		1051	.7120	748.3				r= 1.24
2327	805	x							"	x= 1.86
	847	x		826	.9073	749.4				r= .99
Box 188										
2329.5	654	x							"	x= 1.86
	666	x		660	1.0832	714.9				r= .92
2334	890	x							"	x= 1.86
	907	x		898.5	.8699	781.6				r= 1.06
2337	823	x							"	x= 1.87
	849	x		836	1.0182	851.2				r= .91
Box 189 zero + 2340	893	x							"	x= 1.85
	915	x		904	1.1597	1048.4				r= .87
2343	928	x							"	x= 1.86
	948	x		938	1.0994	1031.2				r= .90
2346	736	x							"	x= 1.85
	759	x		747.5	1.1597	866.9				r= .87
Box 190										
2349.5	1234	x							"	x= 1.85
	1253	x		1243	.8357	1038.8				r= 1.09
										2351- ext 00 fracs no sample possible
Box 191										
2357.5	1710	x		1710	.5560	950.8			"	1/90 full core
2362	1269	x		1269	.5560	705.16			"	1/90 full core
2367	865	x							"	x= 1.86
	924	x		894.5	1.0912	976.1	sdev —	860.0		r= .91

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 40 of ____ Date: 8-25-87 ~~8-26-87~~

Company: Geonewberry Logged by: ML

Core Diameter: NX 1.87 Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen. lith	Comments
Box 192	2369	28	x							Gnd.	U. vesic + oxid x = 1.84 r = 1.84
		28	x		280	1.2174	340.9				
	2372.5	86	x							"	x = 1.86
		89	x		87.5	1.1418	99.9				r = .85
	2377	432	x							"	x = 1.09
		435	x		433.5	.8548	370.6				x = 1.86 not as oxid
Box 193	2379	311	x							Andes	x = 1.80
		327	x		319	1.463	466.5				r = .72
	2383	692	x							"	
		725	x		708.5	.8126	575.7			"	x = 1.77 r = .97
	2386	514	x							"	x = 1.83
		525	x		519.5	1.3438	698.1				r = .75
Box 194	2389	1056	x							"	x = 1.87 grey non ves.
		1048	x		1052	.9585	1008.3				r = 1.00
	2393	736	x							"	x = 1.84
		758	x		747	.8084	603.9				r = 1.02
	2396.5	483	x							"	x = 1.85
		510	x		496.5	1.2068	599.2				r = .82
Box 195 zero	2398	676	x							"	x = 1.86
		694	x		685	1.1076	758.7	sder 251	552.2		r = .89
	2402.5	123	x							Flow breccia	x = 1.86 red oxid vesic
		119	x		121	.9244	111.8				r = .96
	2405	858	x							"	1/90 x = 1.86
		880	x		869	.8909	774.2				r = 1.02
Box 196	2409.5	1300	x							"	x = 1.85
		1342	x		1321	.8501	1123.0				r = 1.06
	2412	1979	x		1979	.5973	1182.0		797.8	"	x = 1.56 r = 1.47
	2414	673	x		673	.8850	595.6		595.6	volcaniclastic	x = 1.84
			x								r = .96

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 41 of ____ Date: 8-26-87

Company: GeoNewberry Logged by: ML

Core Diameter: 7.87 NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: ____

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. (x 10⁻⁶ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen Lith	Comments
Box 197	2423	2220	X							Andesite Top flow Br	x = 1.53 r = 1.48
		2250	x		2235	.5910	1320.9				
	2430	2462	x							And.	x = 1.74
		2493	x		2479	.6750	1673.4				r = 1.32
Box 198	2433	2850	x							"	x = 1.73
		2821	x		2835.5	.6659	1888.2				r = 1.34
	2436.5	1626	x							"	x = 1.86 1/90
		1650	x		1638	.9723	1592.7				r = 1.05
	2441.5	1030	x							"	x = 1.86 1/85
		1075	x		1052.5	1.2651	1331.5				r = .93
Box 199	2443	788	x							"	this box is all 1/95 frac
		793	x		790.5	1.1659	921.6				x = 1.86 r = .89
	2446	948	x							"	x = 1.85 1/90
		952	x		950	.9445	897.3	3 dev	1375.1		r = 1.06
											remainder of box badly brok. (vitrophyre of ash flow)
Box 200 zero +	2452.5	380	x		380	1.387	527.1			ash flow (Top) Tan	1/85 x = 1.84
			x								r = .88
	2455	120	x		120	1.70	204.5		365.8	Pink Top	1/85 x = 1.75
											r = .81
	2460	342	x							B.A. flow brecc	x = 1.85
		363	x		352.5	1.1508	405.6				r = .88
Box 201	2464	280	x							"	x = 1.84
		283	x		281.5	1.2375	348.4				r = .82
	2469	770	x							"	x = 1.86
		794	x		782	1.0754	840.9	—	531.6		r = .93
Box 202	2472	502	x							Bas, And	x = 1.85
		516	x		509	.9017	458.9				r = .96
	2477	815	x							"	x = 1.86
		819	x		817	.8699	710.7				r = 1.06

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 42 of ____ Date: 8-26-8

Company: Geonewburn Logged by: ML

Core Diameter: 1.87" NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo with	Comments
Box 203 (cont)	2480	689	x							Bas. and	x = 1.84 r = 1.06
		718	x		703.5	.8699	612.0				
Box 203	2483	650	x							"	x = 1.87
		670	x		1060	.9975	658.3				r = .94
	2487.5	505	x							"	1/.85 x = 1.86
		526	x		515	1.087	560.0				r = .96
											remaind of box broken up
Box 204	2491.5	527	x							"	x = 1.85
		553	x		540	1.23	664.4				r = .86 1/.95
	2495	526	x							Acesyl Flow Breccia	x = 1.84
	[illegible]	557	x		541.5	1.303	705.4	s. dev.	624.2		r = .82 1/.9
	2498.5	204	x							lapilli tuff	x = 1.85
		215	x		209.5	1.1689	244.9				r = .86 remaind of box broke
Box 205	2505	147	x							lapilli tuff	1/.90 x = 1.85
		150	x		148.5	.9445	140.3				r = 1.06
	2513	202	x							"	x = 1.84
		202	x		202	.8798	177.7				r = .97
Box 206	2515	170	x							"	x = 1.82
		180	x		175	1.2468	218.2				r = .86
	2520	305	x							"	x = 1.85
		318	x		311.5	.8550	266.1				r = 1.05
Box 207 zero	2523.5	345	x							"	x = 1.84
		350	x		347.5	1.1517	400.2				r = .91
	2526	123	x							"	x = 1.86
		121	x		122	.9302	113.5	sdev	223.0		r = .95
	2532	374	x							Bas. and	x = 1.85
		374	x		374	.8649	3235				r = 1.03
Box 208	2535.5	214	x							"	x = 1.85
		221	x		217.5	.9776	212.6				r = .97

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 43 of ____ Date: 8-26-87

Company: Geonewberry Logged by: MC

Core Diameter: 1.87" NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo with	Comments
Box 208 cont	2538.5	186	x							Bas. and	x = 1.85
		193	x		189.5	1.1419	216.4				r = .89
	2542	201	y							"	x = 1.85 y .90
		201	y		201	.9445	189.9				r = 1.06
Box 209	2543.5	459	y							"	y = 1.83
		463	y		466	.9060	375.6	sdev 81.2	263.6		r = 1.10
	2546.5	245	y		245	1.227	300.7			"	x = 1.84
										"	r = .83
	2551.5	1161	y		1161	.8962	1040.5				x = 1.85
											r = .97
Box 210	2554	622	y							"	y = 1.86
		650	y		636	.8909	566.6		635.9		r = 1.02
											remainder of box badly broken
Box 211	2569	212	x							slow break	y = 1.84 r = .81
		209	y		210.5	1.314	276.5				y .95
										"	remainder of box broken
Box 212	2582	234	y							"	x = 1.85
		231	x		232.5	.8700	202.3		239.4		r = 1.02
	2586	94	y							"	x = 1.86
		110	y		102	.8803	89.8				r = 1.04

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 44 of ____ Date: 8-27-87

Company: Geonewberry Logged by: ML

Core Diameter: 1.87" NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen. lith.	Comments
Box 213 zero →	2588	121	x							Flow breccia	x=1.84
		111	x		116	1.1979	138.9			& flows	r=.086
	2590	179	x							"	x=1.86 r=1.01
		174	x		176.5	.8963	158.2				
	2594	460	x							"	x=1.80
		454	x		457	1.3957	637.8				r=.77
Box 214	2597	241	x							"	x=1.85
		243	x		242	.8501	205.7				r=1.06
	2600	188	x							"	x=1.85
		203	x		195.5	.8803	172.1	s.dev. 201.6	233.7		r=1.0
	2603.5	557	x		557	.9667	538.4		538.4	lapilli tuff	1/90 x=1.85 r=1.02
Box 215	2609	3000	x							flow breccia	x=1.84 r=.87
		3073	x		3036.5	?					dense dk grey
	2613	130	x							"	mesic. red x=1.84
		134	x		132	1.2974	171.3		—		r=.86
	2617.5	346	x							flow? center	x=1.83 r=.79
		378	x		362	1.2974	469.6				"
Box 216	2624	180	x							"	most of top broken up
		194	x		187	.9018	168.6				x=1.86 r=1.00
Box 217	2628	195	x							"	x=1.84
		186	x		190.5	1.279	237.7				r=.81
	2631.5	180	x							"	x=1.84 r=1.07
		186	x		183	.8309	152.1	s dev 132.5	239.9		
Box 218	2637	144	x							Top flow Breccia	1/90 x=1.86 r=.90
		150	x		147	1.1848	174.2				
	2642	349	x							Pos. Anc flow center	x=1.86
		388	x		368.6	.9186	338.5				r=.97
	2645	307	x							"	x=1.85
		317	x		312	1.1246	350.9				r=.91

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 45 of ____ Date: 8-27-87

Company: Geonewberry Logged by: ML

Core Diameter: 1.87" NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo wk	Comments
Box 219 zero→	2650	185	x							Bas. and	x = 1.87 1/95
		176	x		180.5	1.043	188.2				r = .95
	2653.5	93	x							"	x = 1.86
		91	x		92	.9361	86.1				r = .94
	2656	949	x							"	x = 1.86
		933	x		941	1.0754	1011.9		358.3		r = .93
Box 220	2663.5	131	x							Top aow	red and vesic. x = 1.86
		126	x		128.5	.9361	120.3			Breec	r = .94 most of box frac
	2665	268	x		268	1.0912	292.4			"	x = 1.86 r = .91
Box 221	2667	1380	x							"	x = 1.86
		1395	x		1387.5	.9186	1274.6				r = .97
	2673	906	x							"	x = 1.87
		916	x		911	.9776	890.6				r = .97
	2676	99	x							"	x = 1.86
		110	x		104.5	.9186	96.0				r = .97
Box 222	2678	32	x							"	x = 1.86
		20	x		26	1.083	28.2		450.4		r = .92
	2682	1070	x							Bas and	x = 1.86
		1111	x		1090.5	.9129	995.6				r = .98
	2686	70	x							"	x = 1.85
		77	x		73.5	.9128	67.1				r = .94
Box 223	2690	43	x							"	x = 1.86
		36	x		39.5	1.083	42.8				r = .92
	26925	33	x							"	x = 1.87
		36	x		34.5	.9900	34.2				r = .95
	2695	1195	x							"	x = 1.86
		1277	x		1236	.9129	1128.4				r = .98
Box 224	2698	58	x							"	x = 1.86
		35	x		47.5	.9244	43.9				r = .96
	27035	117	x		124	.9900	122.8			"	x = 1.87 r = .95

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: GeoN-3 Pg 46 of ____ Date: 8-27-87

Company: Geonewberry Logged by: ML

Core Diameter: 1.87" NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen, Lith	Comments
Box 225	2707.5	135	x							Bas, and	x = 1.85
		146	x		140	.8962	125.5				r = .97
	2710	243	x							"	x = 1.85
		254	x		248.5	1.1597	288.2				r = .87
	2713	625	x							Bas. Flow Breccia	x = 1.85
		662	x		643.5	1.125	723.7	sdev 426	357.2		r = .91
Box 226	2717	399	x							Top Flow Breec	x = 1.82
		405	x		402	.8005	321.8				r = 1.09
	2720	173	x							Bas. and	x = 1.86
		196	x		184.5	.9018	166.4				r = 1.00
	2725	177	x							"	x = 1.85
		180	x		178.5	.8550	152.6				r = 1.05
Box 227 zero	27265	195	x							"	x = 1.85
		199	x		197	.8357	164.6				r = 1.09
	2730	229	x							"	x = 1.85
		237	x		233	1.1079	258.1				r = .93
	2733	177	x							"	x = 1.84
		185	x		181	.8595	155.6	s.dev 70.3	203.2		r = 1.01
Box 228	27465	259	x							"	most of box broken x = 1.85
		252	x		255.5	.9667	247.0				r = 1.02 1/90
Box 229	2749	539	x							"	x = 1.85
		542	x		540.5	.8405	454.3				r = 1.08
	2753.5	526	x		526	.9555	502.6			"	1/90 x = 1.85 remi; 1/90 r = 1.04 broke n
Box 230	2760	299	x							"	x = 1.85
		294	x		296.5	.8649	256.4				r = 1.03
	2762	238	x							"	x = 1.86
		248	x		243	.9018	219.1				r = 1.0
	27606	198	x							"	x = 1.84
		201	x		199.5	.8355	166.7				r = 1.06

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 47 of ____ Date: 8-31-87

Company: Geonewberry Logged by: ML

Core Diameter: 1.87 NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen. with	Comments
Box 231 zero → 2769	224	X							Bas and R.	x = 1.86 r = .87
	244	X		234	1.1244	263.1				
2772.5	257	X							"	x = 1.85
	265	X		261	.8700	227.1				r = 1.02
2774	206	X							"	x = 1.84
	210	X		208	.8355	173.8				r = 1.06
Box 232 2777.0	374	X							"	x = 1.83
	379	X		376.5	.7974	300.2				r = 1.12
2782	1437	X							"	x = 1.85
	1479	X		1458	.8809	1283.5				r = 1.00
2785	658	X							"	x = 1.82
	674	X		666	.7308	486.7				r = 1.27
Box 233 2788	250	X							"	x = 1.84
	240	X		245	.8402	205.8				r = 1.05
2791	2021	X							"	x = 1.72
	2078	X		2049.5	.6710	1375.3				r = 1.31
2794	196	X		196	.6739	132.1			"	x = 1.72 r = 1.30
Box 234 2798	70	X							"	x = 1.83
	76	X		73	.8103	59.1				r = 1.09
2801	151	X							"	x = 1.85
	170	X		160.5	1.1419	183.3				r = .89
										remainder of box broken
Box 235 2807	471	X							"	x = 1.84
	484	X		477.5	.7294	348.3				r = 1.32
2809	295	X							"	x = 1.86
	296	X		296	.8803	260.6				r = 1.04
2812	252	X							"	x = 1.85
	268	X		260	.8453	219.8	sdev	368.2		r = 1.07

Drill Hole: GeoN-3 Pg 48 of ____ Date: 8-31-87

Company: Geonewberry Logged by: ML

Core Diameter: 1.87 NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geology	Comments
Box 236 zero → 2816.5	223	x							Basalt and	x=1.85
	237	x		230	.8219	189.0				r= 1.12
2819	142	x							"	x= 1.85
	144	x		143	1.108	158.4				r= .93
2822	448	x							"	x= 1.78
	448	b		447	.7411	331.2	s. dev 92.2	2216.2		r= 1.17
Box 237 2827	240	x						—	Flow Breccia	x= 1.80
	254	x		247	.7570	180.0				r= 1.16
2830	258	x							Bas and	x= 1.86
	262	x		260	.8699	226.2				r= 1.06
2834	162	x							"	x= 1.86
	170	x		166	1.075	178.5				r= .93
Box 238 2837	169	x							"	x= 1.85
	182	x		175.5	.8856	155.4				r= .99
2841	137	x							"	x= 1.85
	148	x		142.5	1.1500	164.0				r= .88
2844	231	x							"	x= 1.84
	238	x		234.5	1.1429	268.0				r= .92
Box 239 2845.5	587	x							"	x= 1.84
	590	x		588.5	.8172	480.9	s dev 114.4	2371		r= 1.10
2849.5	2609	x							lahar	x= 1.78
	2678	x		2643.5	.6944	1835.7				r= 1.31
Box 240 2855	1614	x							"	1/95 x= 1.77
	1640	x		1627	.7962	1181.5				r= 1.31
2858	1258	x							"	x= 1.81
	1303	x		1280.5	.7345	940.5		1319.2		r= 1.24
Box 241 2861	938	x							Flow, Breccia	most of Box 240 broken x= ?
	961	x		949.5		?				1/95 r= 0
2868	184	x							andesite	vesic + phenocrst. x= 1.83
	198	x		191	1.234	2356				r= .85

Drill Hole: Geo N-3 Pg 49 of ____ Date: 8-31-87

Company: Geonewberry Logged by: ML

Core Diameter: 1.87 NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo Unit	Comments
Box 241 (cont) 2872	450	X		450	.8084	363.8			Andes	x = 1.84 r = 1.12
Box 242 2875	597	X							"	
	626	X		611.5	.8549	522.8				x = 1.82 r = .97
2879	189	X							"	x = 1.85
	200	X		194.5	.8909	173.3				r = .98
2882	193	X							"	x = 1.82
	200	X		196.5	.7880	154.8				r = 1.12
Box 243 2883	538	X							"	x = [illegible] ?
	557	X		547.5		?				r = 1.40
2887	2249	Y		2249	1.038	2334.9			"	most of box fract x = 1.85 r = 1.02
Box 244 2893	106	Y							"	x = 1.73
	100	Y		103	1.6569	170.7				r = .70
2895	207	Y							"	x = 1.84
	210	X		208.5	1.227	209.7				r = .83
2897	1288	Y							"	x = 1.84
	1331	Y		1309.5	.8172	1070.2	S. dev 19.3	581.7		r = 1.10
Box 245 2902	577	Y		577	.6673	385.0			agglom	3/4 of whole core
								385.0		rem. of box broken up + most of next one
Box 246 2917.5	2580	X		2580	.8311	2144.2		2144.2	Flow Breccia	x = 1.85
										r = 1.10

Drill Hole: Geo N-3 Pg 50 of ____ Date: 9-1-87

Company: Geonewberry Logged by: ML

Core Diameter: 1.87 NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geology	Comments
Box 247 zero →	2920	502	X							Bas. and	x = 1.84
		517	X		509.5	1.2274	625.3				r = .83
	2924	1607	X							"	x = 1.85
		1677	X		1642	.9128	1498.7				r = .94
	2926.5	754	X							"	x = 1.79
		779	X		766.5	.7469	5725				r = 1.17
Box 248	2927.5	398	X							"	x = 1.85
		371	X		384.5	1.1597	445.9	sdev 481.3	785.6		r = .87
	2930	592	X							Basalt Flow Breccia	x = 1.84
		616	X		604	1.1979	723.5				r = .86
	2934	255	X		255	1.5676	399.7		561.6	agglom.	1/80 x = 1.83 r = .83
Box 249	2940	1059	X		1059	.6673	706.6			Top flow Breccia	1/75 of full core
											most of box broken
	2944	1006	X							"	
		1034	X		1020	.9503	969.3				x = 1.82 1/80 r = 1.19
	2946.5	16663	X		1663	.6857	1140.2		938.7	"	x = 1.76
											r = 1.91
Box 250	2949	1812	X							Andes or Basalt	x = 1.86 dense r = .99 non vesk
		1846	X		1829	.9073	1659.5				dk grey
	2951	1770	X							"	x = 1.83
		1789	X		1779.5	.7974	1419.0				r = 1.12
	2955.5	2550	X							"	x = 1.87
		2650	X		2600	.9975	2593.5				r = .94
Box 251	2959	690	X							"	x = 1.85
		727	X		708.5	1.1508	815.3				r = .88
	2964	1706	X							"	x = 1.85
		1785	X		1745.5	.9128	1593.2				r = .94
Box 252	2967	1397	X							"	x = 1.85
		1480	X		1438.5	.9128	1313.0				r = .94
	2970	1646	X		1667	.8962	1494.0			"	x = 1.85 r = .97
		1688	X								

Drill Hole: Geo N-3 Pg 51 of ____ Date: 9-1-87

Company: Geonewberry Logged by: MC

Core Diameter: 1.87 NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo Unit	Comments
Box 252 (cont) 2974	2131	x							and. or Basalt	x=1.86 r=.94
	2235	x		2183	.9361	2043.4				
Box 253 2976	3256	x							"	x=1.84 r=.98
	3363	x		3309.5	.8746	2894.6				
2980	3339	x							"	x=1.85
	3490	x		3414.5	.8649	2953.3				r=1.03
2983	1844	x							"	x=1.85
	1888	x		1866	.8962	1672.4				r=.97
Box 254 2986.5	1999	x							"	x=1.85
	2060	x		2029.5	.8962	1818.9				r=.97
2991	1819	x							"	x=1.84
	1979	x		1899	.8645	1641.7				r=1.00
2993.5	2030	x							"	x=1.85
	2162	x		2096	.8803	1845.1				r=1.00
Box 255 2996	2427	x							"	x=1.84
	2595	x		2511	.8850	2222.2				r=.96
3000	2540	x							"	x=1.85
	2646	x		2593	.8962	2323.9	s.dev 582.0	1893.9		r=.97
3003	232	x								x=1.86
	258	x		245	1.0754	263.5			Flow Breccia	r=.93
Box 256 3004	1030	x							↓	x=1.85 r=1.00
	1073	x		1051.5	.8803	925.6		594.6		
3008.5	1813	x							agglom	x=1.84 r=1.12
	1885	x		1849	.8084	1494.7				
3012.5	784	x							"	x=1.85
	894	x		839	.8909	747.4				r=.98
Box 257 3017.5	291	x		291	1.0748	312.8		851.6	"	x=1.86 r=1.08
3021	490	x							Top! flow Breccia	
	510	x		500	.9186	459.3		459.3		x=1.86 r=.97
										most of box broken

Drill Hole: Geo N-3 Pg 52 of ____ Date: 9-1-87

Company: Geo Newberry Logged by: ML

Core Diameter: 1.87" Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geology	Comments
Box 258										
3025	2394			2394	1.0754	2574.4			Andesite Bas.	k = 1.86 r = .93
3030	2277			2277	.9493	2161.5				k = 1.86 r = 1.00 1/95
Box 259										
3032	3270								"	k = 1.85 r = 1.07
	3314			3294	.8459	2786.4				
3036	1190								"	k = 1.86
	1238			1214	.9018	1094.8				r = 1.00
3039	1098								"	k = 1.84
	1146			1122	1.1697	1312.4				r = .89
Box 260										
3044	1684			1684	.8962	1509.3			"	k = 1.85 r = .97
3047	1660			1660	.9018	1496.9			"	k = 1.86 r = 1.00
Box 261										
3051	997								"	k = 1.85
	1070			1033.5	1.1332	1171.2				r = .90
3055	721								"	k = 1.86
	480			750.5	1.0912	819.0				r = .91
3059.5	830								"	k = 1.85
	866			848	1.1875	1007.0			"	r = .84
Box 262 zero										
3062	1080								"	k = 1.85 r = .97
	1107			1093.5	.8962	980.0				
3065	1896								"	k = 1.85 r = 1.06
	1859			1877.5	.8501	1596.0				k = 1.22 r = 1.062 almost full core
3067	1880			1880	.5405	1016.1			"	
Box 263										
3072	1671			1671	.8700	1453.8			"	k = 1.85 r = 1.02
3076	1082								"	k = 1.86
	1115			1098.5	.9018	990.6			"	r = 1.00
Box 264										
2081.5	1349								"	k = 1.86
	1444			1396.5	.8699	1214.8				r = 1.06
2084	806								"	k = 1.84
	858			832	.8084	672.6				r = 1.12
3087	910								"	k = 1.85
	960			935	1.1597	1084.4				r = .87

Drill Hole: GeoN-3 Pg 53 of ____ Date: 9-2-87

Company: Geonewberry Logged by: ML

Core Diameter: 1.87" NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen, Lith	Comments
Box 265										
3090	598	x							and or Basalt	x = 1.82 r = .78
	630	x		614	1.3350	819.7				
3095	1897	x							"	x = 1.84
	1908	x		1902.5	.7789	1481.8				r = 1.19
Box 266 zero → 3101	2033	x							"	most of box fract
	2087	x		2060	1.0912	2247.9	s dev	1404.3		x = 1.86 r = .91
3107	2293	x							Basal Flow Br.	x = 1.84
	2349	x		2321	1.2174	2825.5				r = .84
Box 267										
3110	2679	x							"	x = 1.84
	2745	x		2712	.8546	2317.8		2572.1		r = 1.02
3115	1657	x							ash flow (top) grey	x = 1.85
	1690	x		1673.5	.8962	1499.8				r = .97
Box 268										
3117	2470	x		2470	.6899	1704.0			"	x = 1.77 r = 1.31
3121	2480	x		2480						x = 1.85
	2607	x		2543.5	.8700	2212.8			"	r = 1.02
3123	1686	x							Ash Flow	x = 1.85
	1715	x		1700.5	1.1781	2003.4			tan	r = .85
Box 269										
3127.5	1630	x							Diutrih ash flow	x = 1.86 r = .94
	1683	x		1656.5	.9361	1550.6				
3131	1450	x							"	x = 1.86 r = .94
	1504	x		1477	.9361	1382.6				
Box 270										
3136	1068	x							"	x = 1.86
	1111	x		1089.5	.9018	982.5				r = 1.00
3139.5	897	x							"	x = 1.84
	980	x		938.5	1.2479	1171.1	s. dev. 407.7	1563.4		r = .81
3141	927	x							Lahar	x = 1.84
	1005	x		966	1.2375	1195.5				r = .82
Box 271										
3145	1120	x							"	x = 1.84 1.85
	1158	x		1139	1.4322	1631.3		1413.4		r = .84
3149	2310	x		2386.5	.9128	2178.3			agglom	x = 1.85
~ 2463										r = .94

Drill Hole: Geo N-3 Pg 54 of ____ Date: 9-2-87

Company: Geonewberry Logged by: ML

Core Diameter: 1.87" NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen Wh	Comments
Box 271 (cont)	3152	1614	X							aggtom	x = 1.86
		1705	X		1659.5	.8751	1452.2				r = 1.05
Box 272	3154	1650	X							"	x = 1.84 r = .86
		1679	X		1664.5	1.1979	1993.8	5 dev	1874.8		remainder of box broken up
Box 273	3164	857	X							Biscuit Flow Breccia	x = 1.85 1/40 r = .99
		883	X		870	.9839	856.6				
	3167.5	824	X		824	1.1508	948.2			"	x = 1.85 r = .88
	3171	1627	X		1627	.8700	1415.5			"	x = 1.85 r = 1.02
Box 274	3174	1992	X							"	1/80 x = 1.64
		2045	X		2018.5	.7894	1593.5		1203.3		r = 1.38
	3177.5	2118	X							Flow Center	x = 1.81 1/80
		2192	X		2155	.9503	2047.8				r = 1.07
	3180	1889	X							"	.80 x = 1.85 r = .89
		1926	X		1907.5	1.427	2722.8		2385		
Box 275	3184.5	432	X							Top flow Breccia	1/75 x = 1.84 r = .98
		460	X		446	.8746	390.1				
	3189	134	X							"	x = 1.83
		141	X		137.5	1.3683	188.1				r = .73 rem. of box broken
Box 276	3195	163	X							"	x = 1.86
		165	X		164	1.1244	184.4		254.2		r = .87
	3199	2195	X							flow center	x = 1.85
		2267	X		2231	1.1597	2587.4				r = .87
Box 277	3203	2713	X							"	x = 1.86
		2849	X		2781	.9186	2554.6				r = .97
	3206	3930	X							"	x = 1.84 1/95
		4157	X		4043.7	.8355	3378.6		2840.2		r = 1.06
	3211	471	X							intra-clast Breccia?	x = 1.80 r = 1.22
		493	X		482	.7351	354.3		354.3		

Drill Hole: Geo N-3 Pg 55 of ____

Date: 9-3-87 / 9-2-87

Company: GeoNewberry

Logged by: ML

Core Diameter: 1.87 NX

Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. (x 10^{-6} cgs)	Magnetic Susc. S.I.	Average Mag. Susc.	Geol Litl	Comments
Box 278 zero	3215	1396	x							flow center	most of box broken x = 1.85 1/.95
		1460	x		1428	.92.66	1323.2		2461.0		r = 1.00
Box 279	3223	2012	x							Flow Brecc?	x = 1.86 r = 1.02
		2134	x		2073	.8909	1846.9				
	3227	1164	x							"	x = 1.82
		1174	x		1169	.7839	916.4		1381.6		r = 1.13
	3228.5	691	x							Lapilli tuff/ agglom	x = 1.81 r = 1.15
		697	x		694	.7679	532.9		532.9		
Box 280	3232	1749	x							Flow Brecc	x = 1.85
		1880	x		1814.5	.8501	1542.5				r = 1.06
	3234.5	1218	x							"	x = 1.85
		1211	x		1214.5	.8501	1032.4		1287.4		r = 1.02
	3237	2280	x		2280	1.0779	2457.7		2457.7	Dike	1/.75 x = 1.85 r = 1.15 blk wax
Box 281	3241	682	x							Bas. and.	x = 1.85
		711	x		696.5	1.1689	814.1				r = ~~.83~~ .86
	3244	960	x								k = 1.85
		984	x		972	.8599	835.8		824.9		r = 1.04
	3246	1458	x							Dike	1/.75 x = 1.79 r = 1.15
		1469	x		1463.5	1.0057	1471.8	771.4	1471.8		
	3249.5	2073	x							agglom	x = 1.82
		2127	x		2100	.7921	1663.5		1663.5		r = 1.11
Box 282											
	3252	562	x		562	.5560	312.5			Bas and	1/.90 full core
	3260	412	x							"	most of box frac
		427	x		419.5	.7974	334.5			"	x = 1.83 r = 1.12
Box 283	3262.5	391	x		391	.9361	366				x = 1.86 r = .94
	3267.5	305	x			~~.88~~				"	v. yellow! x = 1.79 r = 1.0
		328	x		316.5	.8142	257.7	s dev ←	317.7		• rem. of box
											badly broken

Drill Hole: GRO-N-3 Pg 56 of ____ Date: 9-387

Company: Geonewberry Logged by: ML

Core Diameter: 1.87" NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen. Lith	Comments
Box 284 3273	408	x							Bas, cond	x = 1.86 r = 1.04
	421	x		414.5	.8803	364.9				
3277	280	x							Vi vesic	1/90 x = 1.78
	287	x		283.5	.8041	228.0			yellow clay	r = 1.22
Box 285, 286 Vi broken + frac										
Box 287 3304	1911	x		1911	.5268	1006.7			dense w matrix	1/45 of full core
3306	1770	x		1770	.5560	984.2		645.9		1/40 of full core
										rem. of box too broken
Box 288 3314	706	x							Dike	1/90
	742	x		724	.9667	699.9				x = 1.85 r = 1.02
3316	750	x							Dike	x = 1.84
	786	x		768	.8402	645.3		672.6		r = 1.05
Box 289 3324	2716	x							flow Breccia	x = 1.85
	3786	x		3751	.8219	3082.9				r = 1.12 rem. of box broken
Box 290 3329.5	2684	x							"	1/15 x = 1.78
	2710	x		2697	.9649	2602.4				r = 1.122
3334	5881	x		5881	.6723	3954		3179.8	"	x = 1.67 r = 1.25
3338	3548	x							Basalt	x = 1.86 r = 1.01
	2574	x		2561	.8751	2241.2			and	
Box 291 3341	2055	x							"	x = 1.86 r = .97
	2097	x		2076	.9186	1907.0				
3345	1744	x							"	x = 1.84
	1854	x		1799	1.258	2263.8				r = .80
Box 292 3349	2313	x							"	x = 1.84
	2349	x		2331	.8128	1894.6				r = 1.11
3354	2346	x							"	x = 1.83
	2450	x		2398	.8191	1964.3	s.dev	1907.0		r = 1.07

Drill Hole: _____ Pg 57 of _____ Date: 9-3-87

Company: _____ Logged by: _____

Core Diameter: _____ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: _____

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.		Comments
Box293	3358	1782	x							Dike?	x=1.86 r=.94
		1859	x		1820.5	.9361	1704.1				
	3362	1160	x								x=1.86
		1191	x		1175.5	.9073	1066.6				r=.99
Box294	3365	1173	x							"	x=1.87
		1223	x		1198	.9776	1171.2			"	r=.97
	3369	1266	x								1.05 x=1.62
		1268	x		1267	.7220	914.8		1680.8		r=1.44 most of box fractu
Box295	3377	195	x							" blk waxy	1.10 x=1.84
		197	x		196	1.143	223.9	s.dev —	1016.1		r=1.14 most of box is
Box296	3399	464	x							Flow Brec	broken; same as Box 296
		482	x		473	.8856	418.9		418.9		x=1.86 r=1.03
Box297	3414	780	x							Flow center	x=1.85
		795	x		787.5	.8649	681.1				r=1.03
	3421	905	x							"	
		926	x		915.5	.9908	907.0		794.0		x=1.87 r=.95
Box298	3426	597	x							Flow Brec	x=1.80
		597	x		597	.7112	424.6		424.6		r=1.29
	3441	573	x							Top Fl Breccia	most of box missing & broken
		586	x		579.5	1.0043	588.0				x=1.87
											r=.93

Drill Hole: GeON-3 Pg 58 of ____ Date: 9-8-87

Company: Geonewberry Logged by: M L

Core Diameter: 1.87" NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: ____

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Gen. Lith	Comments
Box 299 zero ▷ 3447.5	788	x							Basalt	most of box broke x = 1.87
	844	x		816	1.025	836.7				r = .90
3449	845	x							"	1/90 x = 1.87 r = .97
	906	x		875.5	1.086	951.0				
Box 300 3455	966	x		966	1.1838	1143.6			"	1/95 x = 1.85 r = .91
3457.5	939	x							"	
	985	x		962	1.1418	1098.4				x = 1.86 r = .85
3459	1119	x							"	x = 1.86
	1174	x		1146.5	1.0994	1260.4				r = .90
Box 301 3471	954	x							"	most of box broken,
	969	x		961.5	1.0142	975.1				x = 1.85 1/90 r = .94
Box 302 3473.5	1507	x							"	x = 1.75
thru box is v. brec	1559	x		1533	.6817	1045			"	r = 1.31
Box 303 3495	338	x		338	1.2096	408.8	S dev 273.8	922.3		1/75 x = 1.85 r = .95
most of box frac.								—		
Box 304 3518	1030	x		1030	1.008	1038.2			"	1/90 x = 1.85 r = .96
most of box frac										non vesic
3525.5	1656	x							"	1/70 x = 1.85 r = .83
	1679	x		1667.5	1.7102	1441.5				v. vesic (amyg)
Box 305 3536.5	1430	x							"	non vesic x = 1.66 1/95
most of box frac	1446	x		1438	.6569	944.6				r = 1.43
Box 306 3550.5	1618	x							"	x = 1.85
most of box frac	1665	x		1641.5	.8856	1453.6				r = .99
Box 307 3554	1430	x							"	x = 1.85
	1535	x		1482.5	1.1597	1719.3				r = .87
3561.5	1492	x		1492	.9072	1353.5			"	x = 1.85 r = .95
Box 308 3567	1808	x		1808	.8775	1586.5				1/98 x = 1.85 r = 1.04
Box 309 3570	1632	x							"	x = 1.85 r = .97
	1552	x		1542	.8962	1382				
3574.5	2546	x		2546	.5854	1490.4			"	x = 1.56 r = .53
3576.5	1582	x		1582	.9080	1436.5			"	1/90 x = 1.84 r = 1.00

Drill Hole: GeoNW-3 Pg 59 of ____ Date: 9-8-87

Company: Geonewberry Logged by: MC

Core Diameter: 1.87" NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: ____

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag. Susc.	Gen Lith	Comments
Box 310	3581.5	1397	P							Basalt	P=1.04
		1470	P		1433.5	.8355	1197.7				T=1.06
	3587	1422	P							"	K=1.84
		1487	P		1454	.8355	1214.8				T=1.06
	3589	1684	K		1684	.8147	1372			"	K=1.83 T=1.08
Box 311 Zero-K	3591.5	1324	P							"	K=1.85
		1359	K		1341.5	.8550	1146.9				T=1.05
	3594.5	1111	K							"	K=1.84
		1156	K		1133.5	.8595	974.3				T=1.01
Box 312	3599	1712	K							"	K=1.83
		1776	K		1744	.7572	1320.6				T=1.22
	3603.5	1285	P							"	K=1.86
		1350	K		1317.5	.8856	1166.8				T=1.03
	3607.5	1306	K							"	K=1.84
		1356	K		1331	.8128	1081.8				T=1.11
Box 313	3611.5	1262	K							"	1/90
		1276	K		1269	1.3526	1716.5				K=1.84 T=.84
	3613	1122	K							"	
		1181	P		1151.5	.8498	978.5				K=1.84 T=1.03
	3615	1278	K							"	K=1.83
		1324	K		1301	.7974	1037.4				T=1.12
Box 314	3618	1362	K								
		1407	P		1384.5	.8128	1125.3				K=1.84 T=1.11
	3623	1016	K								1/95 K=1.86
		1058	P		1037	1.1747	1218.2				T=.88
	3626	915	K								K=1.77
		936	P		925.5	1.7408	1611.1				T=.60

Drill Hole: GeoN-3 Pg 60 of ____ Date: 9-9-87

Company: ____ Logged by: ML

Core Diameter: 1.87" NX Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: ____

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.		Comments
Box 315 zero →	3628.5	1224	X							Basalt	1/95 x=1.86
		1224	X		1224	.8548	1046.3				r=1.09
	3632.5	1188	X							"	x=1.86
		1230	X		1209	1.0754	1300.1				r=.93
Box 316	3637.5	1599	X							"	x=1.72
		1677	X		1638	.6739	1103.8				r=1.30
	3643	1928	X							"	1/80 x=1.49
most of box brkn.		1920	X		1924	.7140	1373.8				r=1.56
Box 317	3649	724	X							"	1/95 x=1.78 r=.67
		764	X		744	1.6725	1244.3				
	3654	2162	X							"	x=1.55
		2229	X		2195.5	.6019	1321.4				r=1.44
	3658	1522	X							"	x=1.84
		1608	X		1565	.8498	1329.9				r=1.03
Box 318	3660	1063	X							"	x=1.84 r=.85
		1116	X		1089.5	1.2075	1315.6				
	3667	1052	X							"	1/90 x=1.85 r=.85
		1147	X		10995	1.3090	1439.3				
Box 319	3669.5	1090	X		1090	.8402	915.8			"	x=1.84 r=1.05
	3674	1797	X							"	x=1.84
		1876	X		1836.5	.7997	1468.7				r=1.14
	3678	1301	X							"	x=1.80
		1352	X		1326.5	.7570	1004.1				r=1.16
Box 320	3682.5	1130	X							"	x=1.83
		1210	X		1170	1.1664	1364.7				r=.92
	3685.5	895	X							"	x=1.84
		912	X		903.5	.8798	794.9				r=.97
Box 321	3693	1256	X							"	most of box fract'd 1/95
		1280	X		1268	.7357	932.9				x=1.74 r=1.24
	3696.5	1477	X		1477	.6412	947.0			"	x=1.71 r=1.41

Drill Hole: GEON-3 Pg 61 of ____ Date: 9-9-87

Company: Geonewberry Logged by: ML

Core Diameter: 1.87" NQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.		Comments
Box 322 3699.5	1320	x							Basalt	x = 1.85 r = .94
	1372	x		1346	.9128	1228.6				
3706.5	1256	x							"	x = 1.86
	1296	x		1273	1.0832	1379.0				r = .92
Box 323 This Box zero & Too frac. for 1 sample										
Box 324 3718	1464	x		1464	.6945	1016.7			"	1/90 x = 1.62 r = 1.39
3721	2389	x		2389	.6239	1490.6	S. dev 224.5	1243.8	"	1/95 x = 1.57 r = 1.50
rem. of box brkn + most of next one										
Box 325 3732	1493	x							ash flow	1/90 x = 1.79 r = 1.28
	1560	x		1526.5	.7877	1202.4			(Top)	
3734	2150	x							"	x = 1.85
	2170	x		2160	.8357	1805.2				r = 1.09
Box 326 3735.5	2171	x							"	x = 1.70
	2264	x		2217.5	.6620	1468.0				r = 1.32
3741	2285	x							mudflo	x = 1.78
	2292	x		2288.5	.7305	1671.8				r = 1.20
3742.5	1788	x		1788	.5504	984.2	S. dev —	1426.3	vitrophyr	x = 1.25 almost r = 1.56 full core
Box 327 3743.5	630	x		630	.8947	563.6			Flow Breccia	1/95 x = 1.86 r = 1.10
3750	1279	x							"	x = 1.86 1.10
	1326	x		1302.5	.8856	1153.5		858.5		r = 1.03
Box 328 3756.5	3733	x							Basalt	x = 1.86
most of box brkn.	3803	x		3768	.9073	3418.8				r = .99
3760	3884	x							"	x = 1.57
	3942	x		3913	.7283	2850.0				r = .95
Box 329 3761.5	1830	x		1830	1.0217	1869.7			"	1/80 x = 1.85 r = 1.13
3764	5872	x		5872	.8751	5138.6			Flow Breccia	x = 1.86 r = 1.05
3767	1887	x							Basalt	x = 1.83
	1941	x		1914	1.2753	2441				r = .81

Drill Hole: GeoN-3 Pg 62 of ____ Date: 9-9-87 9-10-87

Company: Geonewberry Logged by: ML

Core Diameter: 1.87" NQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geol. Unit	Comments
329(cont)										
3770	2640	x							Basalt	x = 1.81
	2970	x		2805	1.2688	3558.9				r = .86
Box 330 zero→ 3776	1096	x							"	x = 1.78
	2037	x		1566.5	.7237	1133.7				r = 1.22
3780.5	1196	x							"	x = 1.85
	1213	x		1204.5	.8962	1079.5				r = .97
Box 331 3782	2246	x							"	x = 1.86
	2510	x		2378	.9302	2211.9		2633.6		r = .95
3787	2000	x							Flow Breccia	x = 1.85
	2137	x		2068.5	1.1079	2291.6			or Lahar	r = .93
3790	3390	x							"	x = 1.85
	3507	x		3448.5	.8700	3000.2		2645.9		r = 1.02
Box 332 3792.5	4688	x							Lahar	x = 1.85
	4877	x		4782.5	1.1162	5338.1				r = .92
zero→ 3796	5509	x							"	x = 1.86
	5549	x		5529	.9302	5142.9				r = .95
3799	4797	x							"	x = 1.85
	5119	x		4958	1.1679	5492.8				r = .93
Box 333 3802	3996	x							"	x = 1.86
	4070	x		4033	1.0832	4368.7	sdev	5085.6		r = .92
3806	4035	x							Top Flow Breccia	x = 1.85
	4000	x		4017.5	1.1971	4809.4				r = .83
										rem. of box frac.
Box 334 zero→ 3811	2661	x							Basalt	x = 1.87
rem. of two box brch + most of next one	2874	x		2767.5	.9585	2652.5				r = 1.00
Box 335 3823	2945	x							"	x = 1.76
	2968	x		2956.5	.6979	2063.4				r = 1.27
3827	2107	x							"	x = 1.83 1/90 r = 1.19
	2170	x		2138.5	.8543	1826.8				

Drill Hole: Geo N-3 Pg 63 of ____ Date: 9-10-87

Company: Geonewberry Logged by: ML

Core Diameter: 1.87" NQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.		Comments
Box 336	3831	2088	x							Result	x = 1.86
		2126	b		2107	.8856	1865.9				r = 1.03
	3833	1112	x							"	x = 1.84
rem. of box brcn, up.		1165	b		1138.5	1.2174	1386.0	s. dev 1234.3	2434		r = .84
Box 337	3840	522	x							Lunar?	x = 1.86
		548	x		535	.9361	500.8				r = .94
	3842.5	939	x							"	x = 1.86
		1011	b		975	.9073	884.6		692.7		r = .99
	3844.5	2162	b							Flow Brecc	x = 1.85
		2238	b		2200	1.1246	2474.2				r = .91
Box 338	3850.5	2795	x							Andesite Basalt	x = 1.86
		2895	x		2845	.9361	2663.1				r = .94
	3852	2755	x							"	x = 1.86
		2943	x		2849	.9186	2617.1				r = .97
	3854.5	2565	b							"	x = 1.85
		2689	b		2627	.8962	2354.4				r = .94
Box 339	3857	2692	x							"	x = 1.86
		2789	b		2740.5	.9302	2549.1				r = .95
	38605	1786	x							"	x = 1.84
		1877	x		1831	1.1429	2092.6				r = .92
Box 340	3868.5	1920	x							"	x = 1.86
		1953	x		1936.5	.9018	1746.3				r = 1.00
	3870	1789	b							"	x = 1.85
		1840	x		1814.5	.8649	1569.4				r = 1.03
	3871.5	2062	x		2062	.9445	1947.6			"	1/90 x = 1.85 r = 1.06
Box 341	3876	2562	x							Basal F.B.	x = 1.84
		2700	b		2631	.8956	2355.4	s dev 379.8	2236.9		r = .94
	3878	5013	x							Top flow Breccia	b = 1.85 r = 1.06
		5016	x		5014.5	.8501	4262.8				
	3882	5630	x		5692	.8501	4838.7			"	x = 1.85 r = 1.06
		5754									

MAGNETIC SUSCEPTIBILITY LOG-DRILL CORE

Drill Hole: Geo N-3 Pg 63 of ____ Date: 9-11-87

Company: Geonewberry Logged by: ML

Core Diameter: 1.87" NQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101 A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.	Geo with	Comments
Box 342 zero→	3885	80	X							Flow Breccia	x=1.84 r=.91
		80	X		80	1.1517	92.1				
	3887	615	X							"	x=1.84
		638	X		626.5	1.2584	788.4		2495	Andesite	r=.80
	3892	1359	X							And. or Bas.	x=1.84
		1474	X		1416.5	1.4168	2006.9				r=.77
Box 347	3899	1688	X		1688	1.3438	2268.3			"	x=1.83 r=.75
	most of box broken										
	3901	1861	X							"	.86 x=1.85 r=1.00
		1954	X		1907						
Box 343	3905	1390	X		1390	1.0357	1439.6			"	x=1.84 r=.78
	3907	1866	X								
		1923	X		1894.5	.8088	1532.3			"	x=1.81 r=1.05
	3910	2992	X		2992	.7828	2342.0			"	x=1.72 r=.97
Box 344	3913	2238	X							"	x=1.87
		2352	X		2295	1.1190	2568				r=.78
	3915.5	2605	X							"	x=1.85
		2717	X		2661	.8599	2288.3				r=1.04
	3919.5	1113	X							"	x=1.85
		1144	X		1128.5	1.1875	1340.1				r=.84
Box 345											

Drill Hole: Geo N-3 Pg 64 of ____ Date: 9-12-87

Company: Geoneuberry Logged by: MC

Core Diameter: 1.87" NQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

	Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.		Comments
Box 345	3915.5	2683	x								x=1.85
		2806	x		2744.5	.8453	2319.8				r=1.07
	3918.5	1058	x								x=1.84
		1086	x		1072	.8172	876.1	s.dev 560.2	1898.1		r=1.00
Box 346 zero-K	3920.5	1806	x							Andes.	x=1.86
		1839	x		1822.5	.8856	1614.0		—		r=1.03
	3926	1794	x							Top flow Breccia	x=1.85
		1850	x		1822	.9017	1642.8				r=.096
	3929	430	x							"	x=1.86
		457	x		443.5	.8649	383.6				r=1.07
Box 347	3931	420	x							Andes	x=1.85
		437	x		423.5	1.1508	487.3			vesic ox	r=.88
	3934	1029	x							Ande nonves grey	x=1.85
		1068	x		1048.5	.9017	945.4				r=.96
	3938	1042	x							"	x=1.86
		1093	x		1067.5	.9361	999.2	s.dev 535.7	1042.1		r=.94
Box 348	3941	1268	x							Top flow brecc	x=1.86
		1405	x		1336.5	1.0754	1437.2			vesic oxid	r=.93
	3947	1576	x							Andes	x=1.86
		1613	x		1594.5	.8216	1310.0				r=1.16
Box 349	3950.5	834	x		834	.9158	763.8			"	x=1.85 r=1.02 1/95
	3953.5	867	x							"	x=1.85
		914	x		890.5	1.1246	1001.5				r=.91
	3957.5	708	x							"	x=1.86
		749	x		728.5	.9186	669.2				r=.97
Box 350	3960	1136	x							"	x=1.85
		1174	x		1155	.8264	954.5				r=1.11
	3965	1021	x							"	x=1.84
		1040	x		1030.5	1.1697	1205.4	s.dev 282.9	1048.8		r=.89

MAGNETIC SUSCEPTIBILITY

Drill Hole: Geo N-3 Pg 65 of 65 Date: 9-12-87

Company: Geonewberry Logged by: ML

Core Diameter: 1.87" NQ Total Correction: $(1/d^2)(1.75)(\quad) =$

Instrument: Bison 3101A

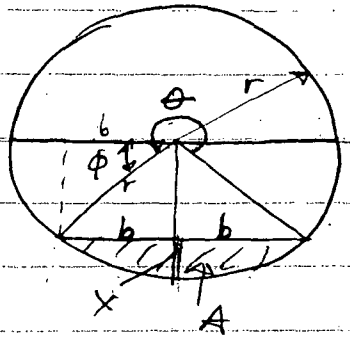
Depth (ft.)	Instrument Reading	Scale x1	Scale x10	Observed Value	Total Corr.	Magnetic Susc. ($\times 10^{-6}$ cgs)	Magnetic Susc. S.I.	Average Mag.Susc.		Comments
Box 351 3972	1667								andes.	x = 1.85
most of box broken	1795			1731	.8649	1497.2				r = 1.03
3975.5	1810									x = 1.84
	1866			1838	.7997	1469.9				r = 1.14
Box 352 3978	1000								pink vesic	x = 1.85
	1996			998	.8599	858.2		[illegible]		r = 1.04
3982	1154								and dk grey	x = 1.85
	1230			1192	.8751	1043.1		1217.1		r = 1.01
3985	1660									x = 1.80
	1717			1688.5	.7646	1291.0				r = 1.14
Box 353 3992										
most of box brkn	797									x = 1.83
	814			805.5	1.2135	977.5				r = 1.87
3993	714									x = 1.83
	731			722.5	.8328	601.7				r = 1.04
Box 354 3995	558									x = 1.73
	566			562	1.8077	1015.9				r = .62
4000	1579	x								x = 1.85
	1620	x		1599.5	.8219	1314.6	s.dev 289.4	1040.1		r = 1.12

Lithol. units with few or no samples for susc. measurements

Box 11-18	cinders, ash & scorea	
Box 24,25	" " "	716' - 732'
Box 28	airfall tuff	interv. 762-768'
Box 63	Flow Breccia	interv. 1115' - 1130'
Box 72	Flow Breccia	interv. 1217' - 1224'
Box 74	Flow Breccia	1230' - 1236'
Box 80	ash & cinders	1291' - 1297
Box 113-117	ash & cinders	
Box 131	ash & cinders / flow breccia	1780' - 1789'
Box 295-297	Flow Breccia	3378 - 3412

Derivation -

Susceptibility Correction factor for Partial Core



$$A = \pi r^2 - \frac{\theta r^2}{2} - 2 \cdot \frac{1}{2} b (r - x)$$

$$= \pi r^2 - \frac{\theta r^2}{2} - b(r - x)$$

for $< \frac{1}{2}$ Core

$$\theta = \pi + 2\phi$$

$$\phi = \cos^{-1} \frac{b}{r}$$

$$\therefore \theta = \pi + 2\cos^{-1} \frac{b}{r}$$

$$A = \pi r^2 - \frac{r^2}{2}\left(\pi + 2\cos^{-1} \frac{b}{r}\right) - b(r - x)$$

$$= \frac{\pi r^2}{2} - r^2 \cos^{-1} \frac{b}{r} - b(r - x)$$

$$= r^2\left(\frac{\pi}{2} - \cos^{-1} \frac{b}{r}\right) - b(r - x)$$

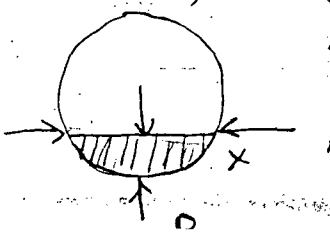
measure b, x (cm) r

measure X, R

change in notation:

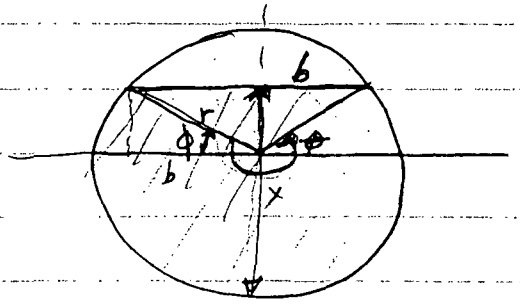
$x = 2b \quad R = x \quad d/2 = r$

let



$$A = \left(\frac{d}{2}\right)^2 \pi/2 - \cos^{-1}\left(\frac{x/2}{d/2}\right) - x/2\left(\frac{d}{2} - R\right)$$

for $> \frac{1}{2}$ core



$\frac{1}{A} > 1$

$A = \frac{\theta r^2}{2} + b(x-r)$

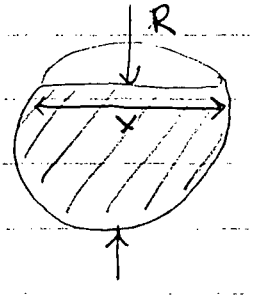
$\theta = \pi + 2\phi$

$\phi = \cos^{-1}\frac{b}{r}$ $\therefore \theta = \pi + 2\cos^{-1}\frac{b}{r}$

$A = \frac{r^2}{2}(\pi + 2\cos^{-1}\frac{b}{r}) + b(x-r)$

$= \frac{\pi r^2}{2} + r^2\cos^{-1}\frac{b}{r} + b(x-r)$

$A = r^2(\frac{\pi}{2} + \cos^{-1}\frac{b}{r}) + b(x-r)$



change in notation:

$r = d/2$ $x = 2b$ $R = x$

$A = (d/2)^2(\frac{\pi}{2} + \cos^{-1}\frac{\pi/2}{d/2}) + \frac{x}{2}(R - d/2)$

measure R, X

Summary

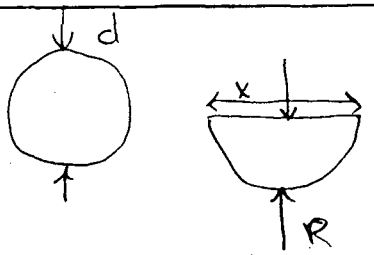
$R \leq d/2$ case 1

$$corr = \frac{\pi/4}{(d/2)^2\left(\pi/2 - \cos^{-1}\left(\frac{x}{d}\right)\right) - \frac{x}{2}\left(\frac{d}{2} - R\right)}$$

$R \geq d/2$ case 2

$$corr = \frac{\pi/4}{(d/2)^2\left(\pi/2 + \cos^{-1}\frac{x}{d}\right) + \frac{x}{2}\left(r - \frac{d}{2}\right)}$$

correction factor
check



$R \le d/2$

$$\text{corr} = \frac{\pi/4}{(d/2)^2\left(\pi/2 - \cos^{-1}\left(\frac{x}{d}\right)\right) - \frac{x}{2}\left(\frac{d}{2} - R\right)}$$

for $R = d/2$ (using $R \le d/2$ formula)

$$\text{corr} = \frac{\pi/4}{\left(\frac{2.49}{2}\right)^2\left(\pi/2 - \cos^{-1}\left(\frac{2.49}{2.49}\right)\right) - \frac{2.49}{2}\left(\frac{2.49}{2} - 1.245\right)}$$

$\text{corr} = .322575$

$R \ge d/2$

$$\text{corr} = \frac{\pi/4}{(d/2)^2\left(\pi/2 + \cos^{-1}\frac{x}{d}\right) + \frac{x}{2}\left(R - \frac{d}{2}\right)}$$

for $R = d/2$ (using $R \ge d/2$ formula)

$$\text{corr} = \frac{\pi/4}{\left(\frac{2.49}{2}\right)^2\left(\pi/2 + \cos^{-1}\frac{2.49}{2.49}\right) + \frac{2.49}{2}\left(1.245 - \frac{2.49}{2}\right)}$$

$\text{corr} = .322575$

using form for area of ½ circle

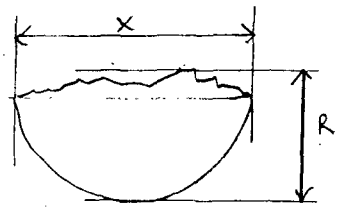
$$\frac{\pi/4\,(1)^2}{\frac{1}{2}\left(\frac{\pi}{4}d^2\right)} = \frac{2}{d^2} = \frac{2}{(2.49)^2} = .322575$$

another check

full core correct. $= \frac{1}{d^2} \times 1.75$ $\quad d = 2.49$ $\quad \frac{1}{(2.49)^2} \times 1.75 = .2823$

using corr. factor (w/ $x = 0$ $R = 2.49$ $d = 2.49$) $= \dfrac{\pi/4}{\left(\frac{2.49}{2}\right)^2\left(\pi/2 + \cos^{-1}0\right) + 0/2\,(2.49 - 2.49/2)} \times 1.75 = .2823$

Sources of error



1)

Ex: $x = 1.87''$
$R = .95$ where as if split was perfect R would be $.9350''$

correct for $R = .95 \rightarrow .9908$ corr. for $R = .9350'' \rightarrow 1.009$

if susc = $500(.9908) = \underline{495.4}$ $500(1.009) = \underline{500.44}$

2) Core diameter would vary slightly – Ex: Pg 25 (Usually after a bit change) so some calculations with $D = 2.49''$, and some done with $D = 2.50''$ - it was difficult to determine actual diameter, since there were few whole cores, often NQ core would not fit in meter when $D = 2.50''$, and would barely fit with $D = 2.49''$

Ex: $x = 2.44''$ for $D = 2.50''$ $x = 2.44''$ for $D = 2.49''$
$R = 1.17''$ $R = 1.17''$

corr = .6825 corr. = .6764

if susc. = 500 ⇒
$500(.6825) = \underline{341.25}$ $500(.6764) = \underline{338.2}$