mineral fill

20% - 25%

GRAPHIC LOGS

ALTERATION 1. WEAK 2. MOD. 3. STRONG

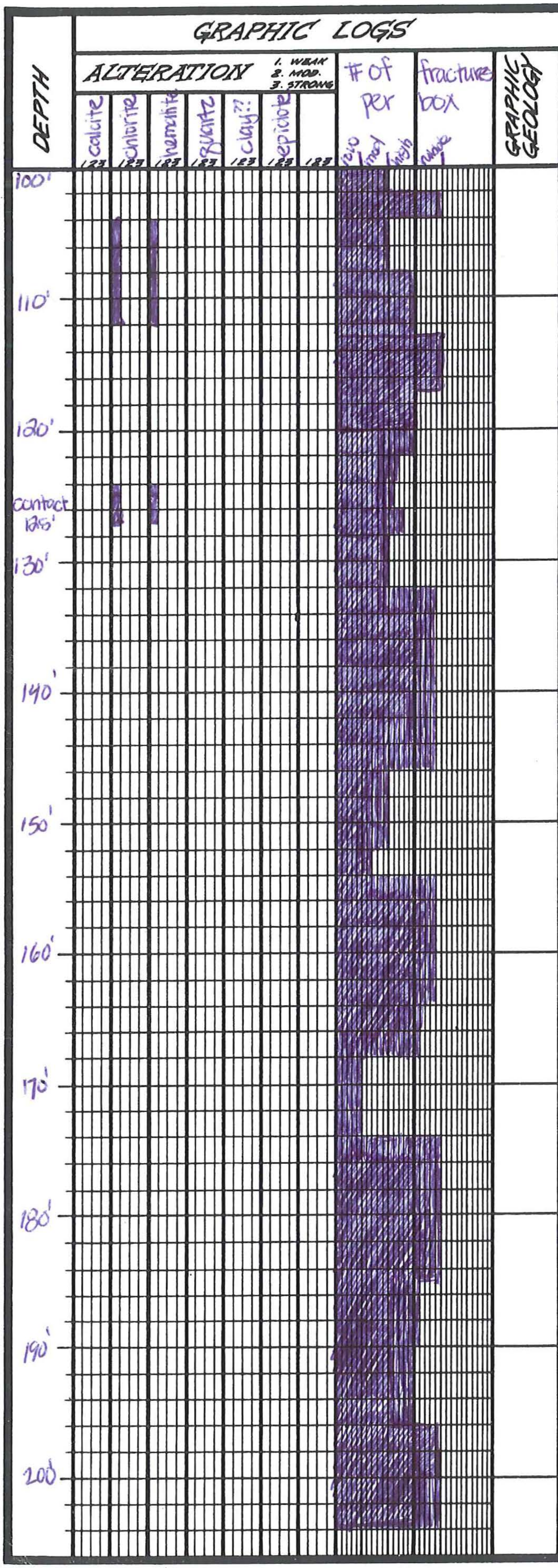
DEPTH	calcite 1 2 3	chlorite 1 2 3	hematite 1 2 3	quartz 1 2 3	clay?: 1 2 3	epidote 1 2 3		# of fractures per 100' low / med / high	rubble	GRAPHIC GEOLOGY	Tr: TRACE 1. WEAK 2. MOD. 3. STRONG Fractures/ VEINLETS	DESCRIPTIONS
												10.0' - 24.0' cinder ash with blocks of basalt
Top												24.0' andesite flow, sparsely vesiculated
10'											28.5' 28°	frac 1chlorite, 2hem frac parallel to flow foliation
											29.0' 43°	frac 1chlorite 2hem
											30' 27°	1chlor 2hem
20'											31' 29°	1chlor 2hem
											32' 20°	1chlor 2hem
30'											33.5' 18°	1chlor 2hem
											34.5' 11°	1chlor 2hem
											42.5' 18°	1chlor 2hem
											46' 18°	1chlor 2hem
40'											49' 13°	1chlor 2hem
											50.5' 16°	1chlor 2hem
											51' 17°	1chlor 2hem
50'											51.5' 20°	1chlor 2hem
												→84.0'
												53.5'- basaltic andesite flow breccia
60'												84' andesite flow upto 113'
												[redacted]
70'												
80'											85' 75°	1chlor 2hem
											85.5' 34°	1chlor 2hem
											86' 16°	1chlor 2hem
90'											89' 25°	1chlor 2hem
												1chlor 2hem 3calcite
											93.5 09°	fractures still parallel with flow foliation
											95' 21°	hem only
											95.5' 17°	hem only
100'											96' 25°	1chlor 2hem
											101' 12°	1chlor 2hem

DRILL HOLE 45-36

LOCATION Medicine Lake

LOGGED BY S. Clausen

mineral fill



Tr: TRACE 1. WEAK 2. MOD. 3. STRONG fractures/ VEINLETS	DESCRIPTIONS
104' 13°	[1]chlor [2]hem
111' 40°	[1]hem [2]chlor
113'	basalt
112' 45°	[1]hem [2]chlor
	113'-117' basalt / rubble
	117'-120' basalt / highly fractured
119' 41°	smooth basalt
120' 55°	basalt no notic. mineralization
121' 26°	basalt shear plane?
124' 27°	shear plane no noticable mineralization
125'	rhyolite flow - dense
125.5' 20°	[1]chlor [2]hem
127' 33°	[1]chlor [2]hem
130'-145'	Hydrothermal breccia
145'	Flow banded frothy obsidian
146' 83°	[1]chlorite
147' 88°	
153	Cinder Ash Scorria

DRILL HOLE ML 45-36
LOCATION MEDICINE LAKE, CA

LOGGED BY S. CLAUSEN

GRAPHIC LOGS

DEPTH	ALTERATION (1. WEAK 2. MOD. 3. STRONG) Calcite 123	Chlorite 123	Hematite 123	Quartz 123	Clay % 123	Epidote 123	123	# of fractures per box (few / mod / high)	rubble	GRAPHIC GEOLOGY	Tr. TRACE 1. WEAK 2. MOD. 3. STRONG fractures VEINLETS	DESCRIPTIONS
200												
210												
220												
230												
240												
250											254	frothy obsidian
260												
270											274.5'	pumice
280												
290											289'–	308' no recovery
308												

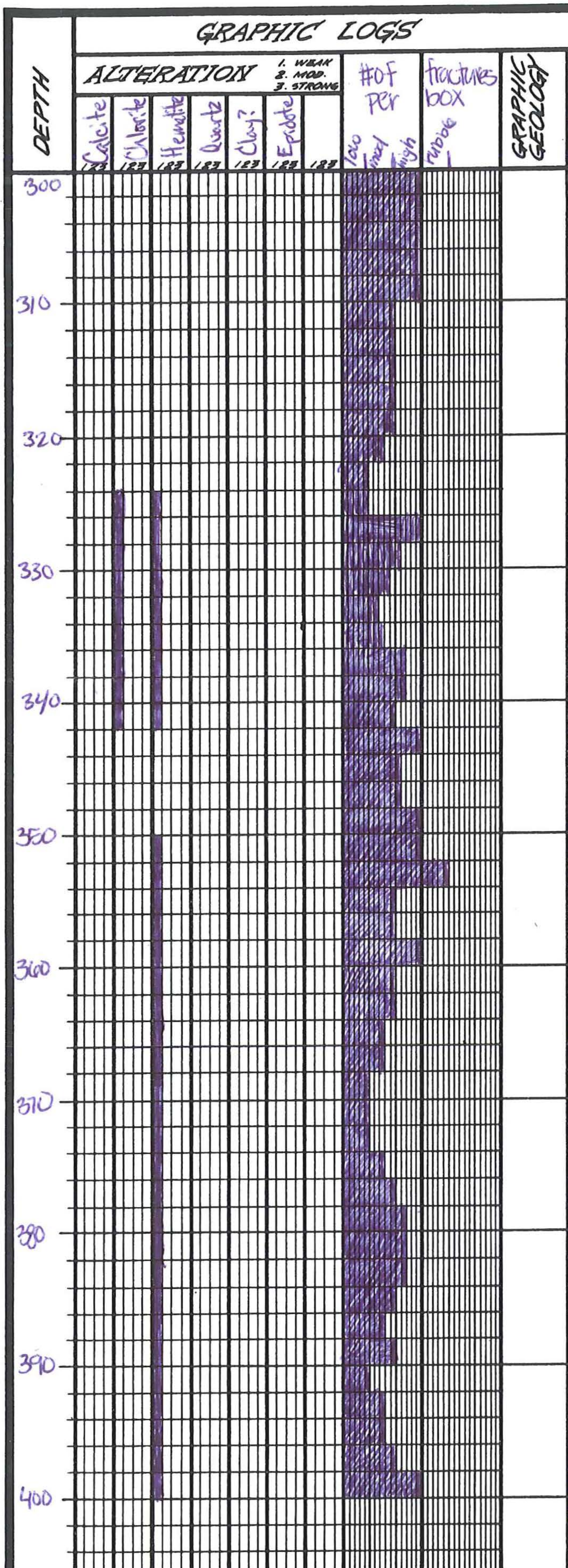
unrecovered core

DRILL HOLE ML 45-36

LOCATION MEDICINE LAKE, CA

LOGGED BY S. CLAUSEN

mineral fill 20%



Tr. TRACE 1. WEAK 2. MOD. 3. STRONG fractures/ VEINLETS	DESCRIPTIONS
308'-311'	frothy obsidian
311'	flow banded frothy obsidian
313' 67°	
	obsidian grades into bands of dacite
320'	dacaite flow top
322' 89	shear plane no slix no minerals identified
328'	[SAMPLE]
329.0' 15°	tensile crack? fibrous minerals min as 336
329.25 16°	← [SAMPLE] ↗ " "
325' 20°	soft white mineral - zeolite?, chlorite, Copper colored min.
336.5'	Hydro thrml breccia
336' 25°	[1]soft white mineral? [2]Chlorite [3]Hem
338' 65°	[1]Chlorite
343' 61°	[Sample] → flourite? [2]chlorite, [3]Hem
344' 44°	[1]soft white mineral? [2]chlorite [3]Hem
	frac along foliation plane.
343.5' 85°	[1]Chlorite
353' 85°	hydro. frac. [1]chlorite [photo]
360' 48°	[1]chlor
364'	mineral xrd [Sample] red/orange platy min.
366' 60°	[1]Chlorite
369' 15°	[1]Chlorite
369.5' 56°	[1]chlorite
384' 73°	[1]chlorite
396' 42°	[1]chlorite
[illegible]	"
398' 58°	[1]chlorite
399' 50°	[1]chlorite

min. → grease non-mineral

DRILL HOLE 45-36

LOCATION MEDICINE LAKE

LOGGED BY S. CLAUSEN

mineral fill

DEPTH	GRAPHIC LOGS: ALTERATION (1. WEAK 2. MOD. 3. STRONG) calcite 123	chlorite 123	hematite 123	Quartz 123	clay? 123	epidote 123	123	# of fractures per box: very	med	high	rubble	GRAPHIC GEOLOGY	Tr. TRACE 1. WEAK 2. MOD. 3. STRONG fractures/ VEINLETS	DESCRIPTIONS
400'														
														Rhyolite / Dacite AA
410'													411' 50°	1 chlorite 2 soft white mineral 3 Hem
													415.5' 27°	1 chlorite 2 Hem
													416' 40°	1 chlorite 2 Hem
													422.5' 26°	1 chlorite
420'													423' 40°	1 chlorite
													429' 81°	1 chlorite
													431' 54°	1 chlorite
430'													433' 85°	#1 chlorite 2 Hem
													438' 63°	1 chlorite
440'													441.5' 83°	1 chlorite 2 Hem
													441.75' 51°	1 chlorite
													443' 30°	1 Chlorite - along foliation plane - well mineralized
													446' 26°	1 Chlorite 2 Hem - shear plane
													446.5' 30°	1 Chlor 2 Hem - shear
450'													451' 29°	1 Chlor 2 white? 3 Hem 4 Quartz
													454' 80°	1 Chlor minerals AA
													456' 37°	minerals AA
													457' 38°	AA
													460' 79°	1 Chlor 2 Hem
460'													463.5' 55°	1 Chlor 2 Hem
470'													471' 37°	1 Chlorite
													475.5' ~~35~~ 20°	1 Chlor 2 Hem
480'													479.5' 25°	1 Chlor
490'														
500'														

DRILL HOLE 45-36

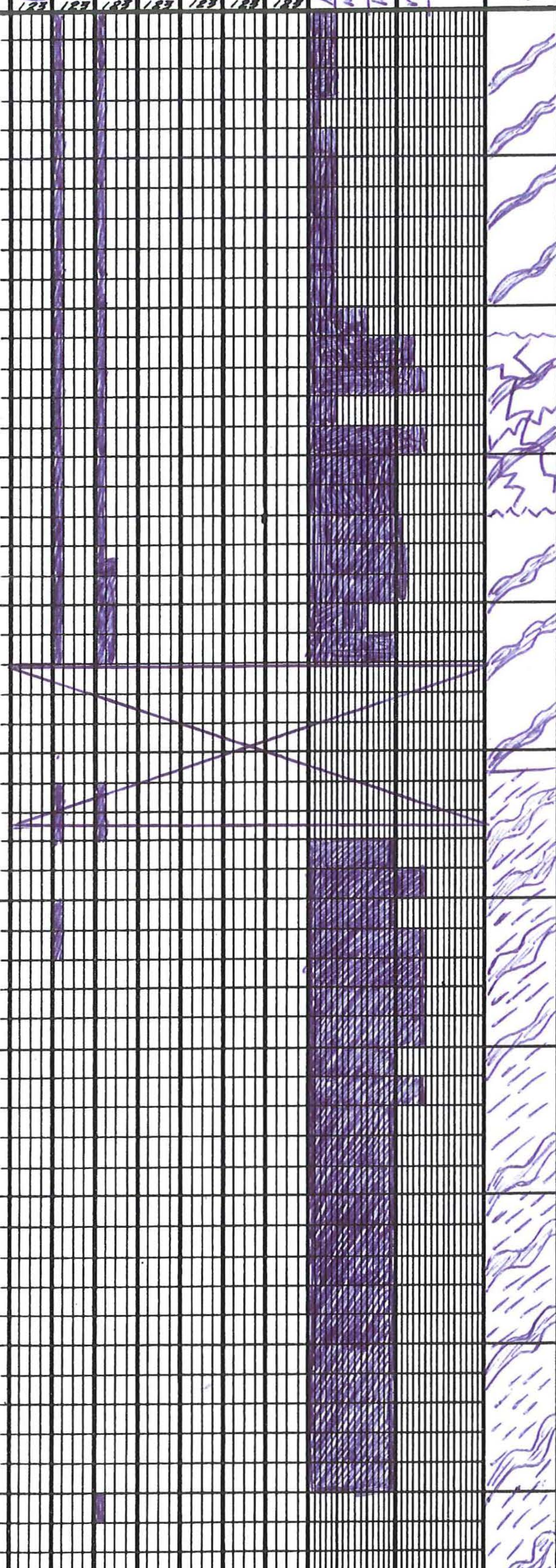
LOCATION Medicine Lake

LOGGED BY S. CLAUSEN

Mineral fill 20%

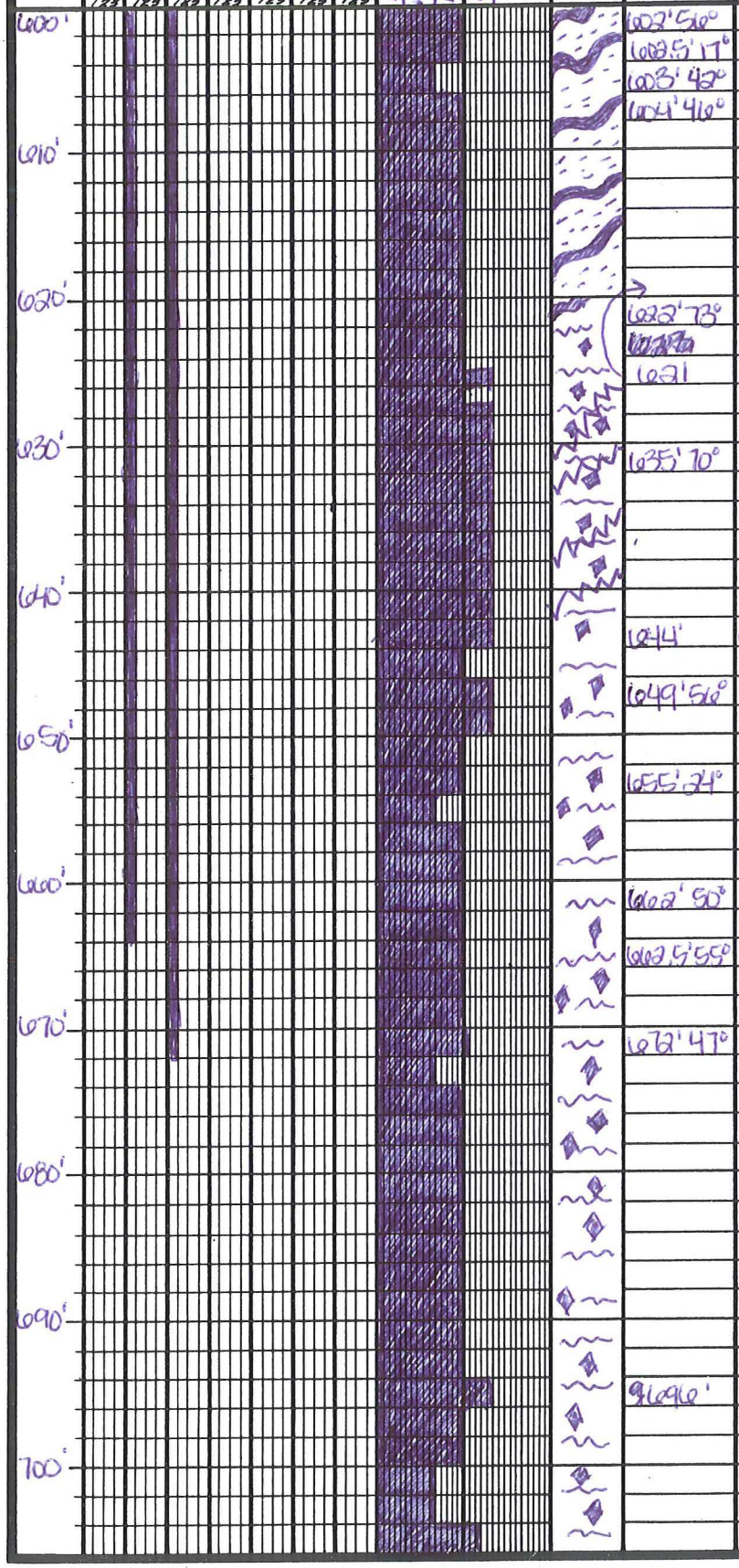
DEPTH	GRAPHIC LOGS	Tr: TRACE 1. WEAK 2. MOD. 3. STRONG Fractures/ VEINLETS	DESCRIPTIONS
500		503' 31°	'Chlor ²Hem
		504' 33°	'Chlor ²Hem
		506' 32°	'Chlor ²Hem
			DACITE Flow AA
510		512' 48°	minerals AA
		517' 55°	min AA
		518' 62°	min AA
520		520' 75°	'Chlor ²Hem
			522'-534' Clay altered rubble possibly fault ??
		526' 78°	'chlorite
		529' 78°	'Chlorite ²Hem
530		531' 80°	min AA
		535' 86°	'Chlor ²Hem
		536' 85°	AA
		537' 75°	AA
540			
550			
			550'-608' discepencies between footage on boxes and markers in boxes - footage messed up
560		551 / 561	- Contact? missing core - frothy obsidian
		564' 82°	shear plan - Chlorite
		554'	
		553' 68°	- in frothy obsidian - 'chlor ²Hem
		562' -	574' Ash containing lithics
570			574'-624' frothy obsidian
		583' 41°	shear plane
580'			
590'			
600'		600' 58°	shear plane 'Hem
		601' 41°	
		601.5' 17°	

GRAPHIC LOGS: ALTERATION (1. WEAK 2. MOD. 3. STRONG) — Calcite, Chlorite, Hematite, Quartz, Clay?, Epidote (123); # fractures per box (low, mod, high, rubble); GRAPHIC GEOLOGY



DRILL HOLE 45-36
LOCATION MEDICINE LAKE
LOGGED BY S. CLAUSEN

GRAPHIC LOGS



VEINLETS	DESCRIPTIONS
Tr. TRACE 1. WEAK 2. MOD. 3. STRONG	
6002' 56°	1chlorite, 2Hem shear plane
6003.5' 17°	1chlorite 2Hem shear plane
6003' 42°	1chlor 2Hem shear plane
6004' 46°	1chlor 2Hem 3white min., shear
6025' 73°	1chlor 2Hem shear plane
6027	contact - lahar. Fine white ashy matrix, lithic fragments, obsidiean, pumice blocks
6035' 70°	Frac. with slickenlines, shear 1chlor 2Hem oblique slip
6044'	contact rhyolite dacite
6049' 56°	White soft mineral [sample] XRD shear frac. Dip-slip slix 75° rake
6055' 24°	1white soft mineral 2chlor 3Hem
6062' 50°	1chlor 2Hem 3 ZEO? hydro frac.
6063.5' 55°	1chlor 2Hem 3 ZEO?
6072' 47°	1Hem
9 6096'	contact debris flow white soft mineral. ZEO? [sample]

DRILL HOLE ML 45-36

LOCATION MEDICINE LAKE

LOGGED BY S. CLAUSEN

GRAPHIC LOGS

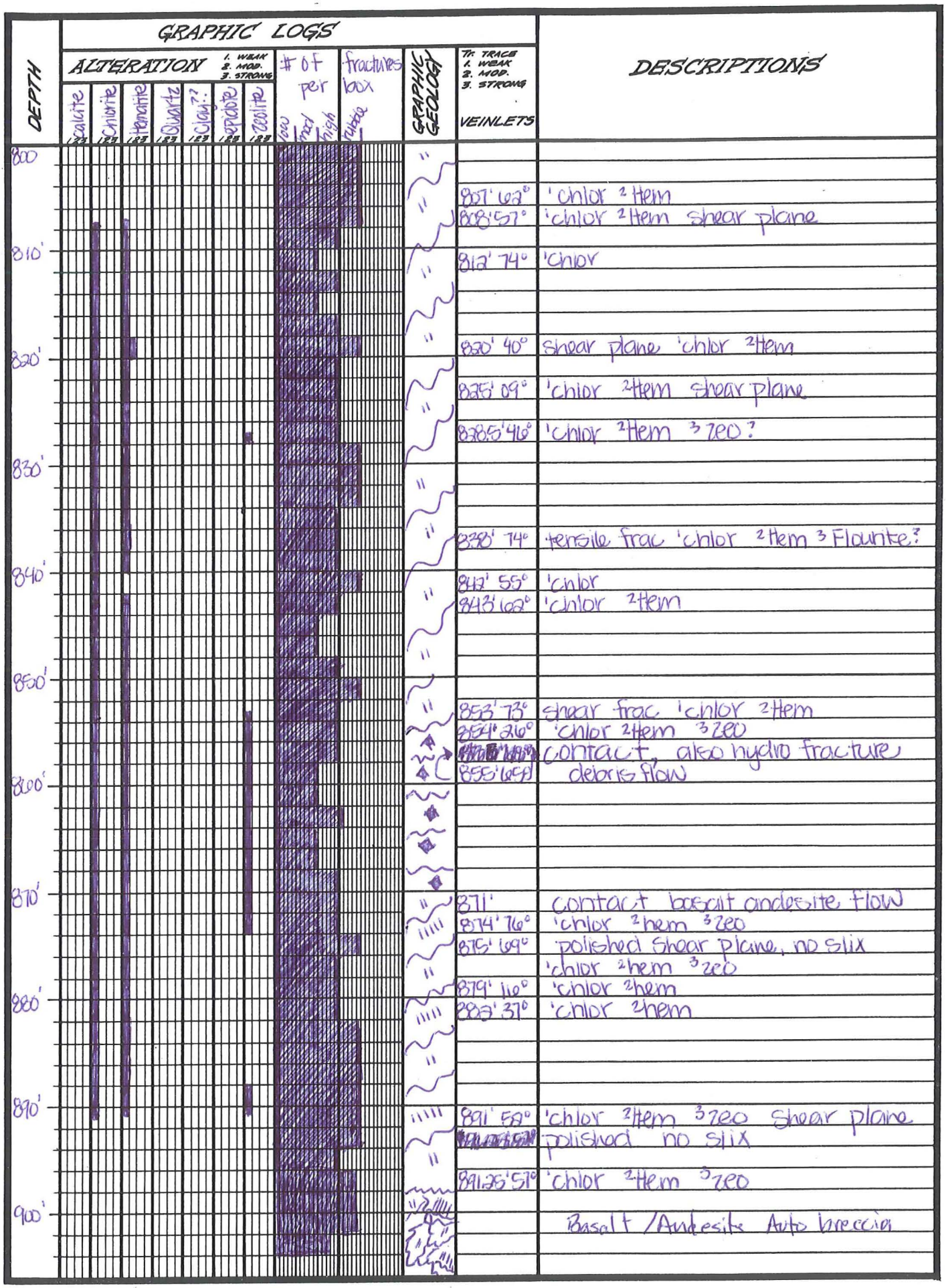
ALTERATION 1. WEAK 2. MOD. 3. STRONG

DEPTH	Calcite 1 2 3	Chlorite 1 2 3	Hematite 1 2 3	Quartz 1 2 3	Clay? 1 2 3	Epidote 1 2 3	Zeo. 1 2 3	# fractures per box: low / mod / high	rutile	GRAPHIC GEOLOGY	Tr. TRACE 1. WEAK 2. MOD. 3. STRONG fractures/ VEINLETS	DESCRIPTIONS
700'												
710'												
720'												
730'												
740'												
750'												
760'												
											769	contact dense andesite flow
											769	contact debris flow
770'		1	1				1				770' SH	1 chlor 2 Hem 3 zeo
											778	contact andesite flow
780'												
											789'	Tensile frac 1 chal. qtz 2 chlor 3 Hem 4 Flourite? [picture]
790'		1	1	1								
											798' 216°	1 chlor 2 Hem
800'												

DRILL HOLE ML 45-36

LOCATION MEDICINE LAKE

LOGGED BY S. CLAUSEN



DRILL HOLE ML 45-36

LOCATION Medicine Lake

LOGGED BY S. Clausen

GRAPHIC LOGS

ALTERATION 1. WEAK 2. MOD. 3. STRONG

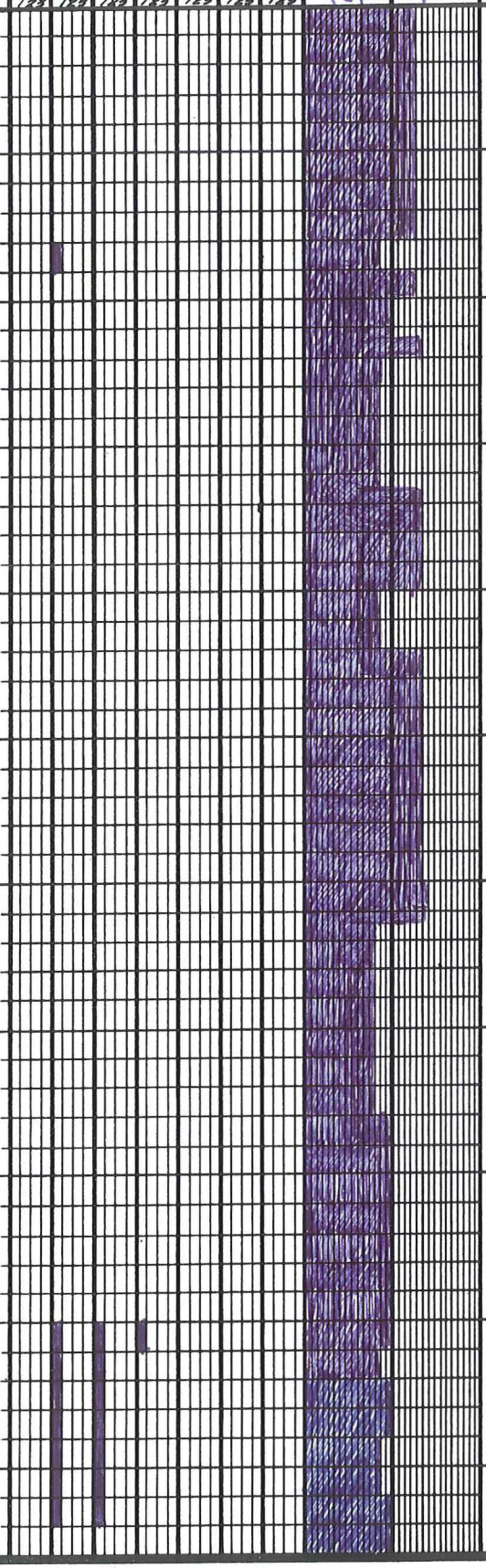
DEPTH	Calcite 1 2 3	Chlorite 1 2 3	Hematite 1 2 3	Quartz 1 2 3	Clay?? 1 2 3	Epidote 1 2 3	Zeolite 1 2 3	# of fractures per box (low, med, high, rubble)	GRAPHIC GEOLOGY	Tr: TRACE 1. WEAK 2. MOD. 3. STRONG VEINLETS	DESCRIPTIONS
											BASALT ANDESITE AUTOBRECCIA
900'										904' 32°	frac - shear - Chlorite
910'											
920'											
930'											
940'											
										945' 37°	frac - chlor - shear plane
950'											
960'											
970'										973' 65°	frac - chlor - Hem
										977.5 53	frac - chlor - shear
980'										986' 78°	frac - clor - shear
990'											
1000'										1000' 80°	frac - chlor, ²Hem - shear
										1005' 79°	frac - chlor, ²Hem - shear sub ⊥ to
										1005.2' 60°	
										1006' 70°	frac - chlor, ²Hem

DRILL HOLE ML 45-36

LOCATION MEDICINE LAKE

LOGGED BY S. CLAUSEN

GRAPHIC LOGS



VEINLETS (T: TRACE 1. WEAK 2. MOD. 3. STRONG)	DESCRIPTIONS
1006.25' 55°	frac Chlor
1006.5' 75°	frac - 1Chlor 2Hem
1026' 73°	frac - 1Chlor
	BASALT ANDESITE AUTOBRECCIA
	AA
	B/A BRECCIA
	AA
1100' 68°	2Chlor, 1Qz Calcedny, 3Hematite
1101' 49°	1Chlor, Shear plane
1103' 45°	frac 1Chlor - 1Shear plane
1103.5' 76°	frac 1Chlor -
1104' 31°	frac 1White soft min, 2Chlor 3Hem
1104' [illegible]	SAMPLE
1114' 89°	dip/dip rake 70° - Chlor 3Hem

DRILL HOLE ML 45-36

LOCATION MEDICINE LAKE

LOGGED BY S. CLAUSEN

mineral fill

fault zone?

DEPTH	GRAPHIC LOGS: ALTERATION (1. WEAK 2. MOD. 3. STRONG) Calcite 123	Chlorite 123	Hematite 123	Quartz 123	Clay?? 123	Epidote 123	Zeolite 123	# of fractures per box: too few / med / thick / rubble	GRAPHIC GEOLOGY	Tr. TRACE 1. WEAK 2. MOD. 3. STRONG VEINLETS	DESCRIPTIONS
1120'											
1130'											
1140'											
1150'										1148' 47°	1chlor 2hem shear frac
										1148.5' 54°	1chlor 2hem shear frac
										1149' 04°	1chlor 2hem
										1150' 57°	1chlor 2hem shear frac
										1150.5' 66°	1chlor 2hem
										1151.7' 28°	1chlor 2hem shear clip/slip rake 75°
										1153' 28°	1chlor 2hem shear plane
1160'										1152.5' 35°	1chlor 2hem shear, oblique slix, rake 35°
										1153' 41°	1chlor 2hem shear, slix/oblique 35° rake
										1153.5' 49°	1chlor 2hem shear plane
										1154.5' 21°	1chlor good slix clip/slip or rake 58° oblique?
1170'										1155' 24°	1chlor 2hem shear plane oblique slip poor slix
										1155.2' 35°	good slix, rake 45° oblique, shear fracture, 1chlor 2hem
1180'										1156' 19°	1chlor 2hem shear plane
										1156.5' 23°	1chlor 2hem shear plane
										1157' 23°	1chlor 2hem shear plane, clip/slip 67° rake
										1158' 14°	1chlor 2hem shear, poor slix
1190'										1158.5' 27°	1chlor 2hem shear frac rake 75°
										1158.7' 49°	clip/slip - 1chlor 2Hem rake 70° good slix
										1159' 32°	1chlor 2hem shear good slix strike/slip rake 32°
										1165' 64°	1chlor 2hem shear, good slix rake 10° strike slip
1200'										1171' 23°	1chlor 2hem shear no slix
										1181' 37°	2hem strike/slip rake 20° 1chlor
										1183'	zeo in fill
										1184' 09°	1183-85 mystery soft yellow/brown clay. rake 80° strike/slip

DRILL HOLE ML 45-36

LOCATION MEDICINE LAKE

LOGGED BY S. CLAUSEN

mineral fill 60%

GRAPHIC LOGS

DEPTH	ALTERATION (1. WEAK 2. MOD. 3. STRONG)							# of fractures per box			GRAPHIC GEOLOGY	Tr: TRACE 1. WEAK 2. MOD. 3. STRONG VEINLETS	DESCRIPTIONS
	calcite 123	chlorite 123	hematite 123	Quartz 123	silica 123	epidote 123	zeolite 123	low	mod	high	matrix		
1180'												1185' 45°	mystery clay, chlor, shear, no slix
												1187' 30°	chlor 2hem, shear, oblique slix 35° rake mystery clay
1190'												1193' 37°	chlor dip/slip rake 75°
1200'													
1210'													
1220'													
1230'													

DRILL HOLE ML45-36

LOCATION Medicine Lake

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