U.S. GEOLOGICAL SURVEY FRACTURED ROCK HYDROLOGY RESEARCH SITE, MIRROR LAKE, GRAFTON COUNTY, NEW HAMPSHIRE, USA

I-93 roadcut litholgy and fracture characteristics -- version 2/14/97

Caution, this table contains unpublished data

Explanation of categories in this table (from left to right) are as follows:
Fracture identification number, rock type(s) cut by fracture trace, strike, dip, aperture (representative of range of aperture along fracture trace, roughness coefficient (ranges from 0=smooth, 20=very smooth), staining morphology and composition observed on fracture surface, trace length exposed on roadcut surface, and termination type.
Other characteristics include the pitch angle and direction of slickensides on fracture faces, the width of iron oxide (Liesegang) bands adjacent to the fracture surface, and additional fracture termination information. Only fractures with exposed trace length greater than 1 meter were included in this study. Data collected by Chris Barton, USGS, St. Petersburg, FL Tel: 813-893-3100 x3014
email: barton@wayback.er.usgs.gov
The geologic and fracture data in this table are quantitatively summarized on the I-93 roadcut maps which you can download at

Key to entries in table:

a= AMPHIBOLITE
A= ABUTS
B= BLIND
C= CROSSES
D= DARK
EST= STRIKE AND DIP ESTIMATED
Fe= IRON
G/S= FRACTURE ON CONTACT BETWEEN GRANITE AND SCHIST
G:S= FRACTURE CROSSES GRANITE AND SCHIST
G= GRANITE
I= INACCESSIBLE
IN2= INTERSECTION WITH FRACTURE 2
L= LAMPROPHYRE
L= LIGHT
M= MEDIUM
Mn= MANGANESE
NO= NOT OBTAINABLE
p= PATCHY
P= PEGMATITE
Qtz= QUARTZ
S= SCHIST
SS= SLICKENSIDES
Su= SULFER
V= VERY

FRACTURE CHARACTERISTICS MEASURED IN
SUBVERTICAL ROAD CUT ALONG INTERSTATE 93, **8/1/94**
EAST SIDE OF NORTHBOUND LANE, 0.25 MILES NORTH OF MIRROR LAKE RD.,
MIRROR LAKE AREA, GRAFTON COUNTY, NEW HAMPSHIRE

Fracture No.	Rock Type(s) cut by Fracture	Strike	Dip	Aperture (mm)	Fracture Roughness Coefficient (FRC)	Staining on Fracture Surface	Trace Length (m)	Termination(s)	Other Characteristics
1	S	26	77 SE	0.63	12	p.L. Fe	4.10	IN2,NO,B	SS 86 NE
2	S	207	70 NW	NO	10	p.M. Fe	3.70	IN1,IN3,IN4,IN6,B,NO	SS 75 SW
3	S	250	51 NW	0.35	7	p.M. Fe	2.50	IN2,B,NO	SS 55 SW
4	S	257	45 NW	1.68	5	L. Fe	1.70	B,NO,IN2	
5	NO FRACTURE								
6	S	14	81 SE	NO	10	p.L. Fe	5.50	IN7,NO,NO,IN2	SS 76 NE
7	S	187	73 NW	1.50	NO	p.D. Fe	4.60	IN6,NO,NO	EST
8	S:P	246	57 NW	2.00	11	D. Fe	0.90	B,A9,C10	
9	S	304	54 NE	NO	NO	NONE	2.80	B,A15,C10	EST
10	S/P:S	107	58 SW	NO	12	p.L. Fe	4.10	NO,A15,IN11,C9,C8,C16,IN14	
11	S:P	195	22 NW	1.65	9	D. Fe	1.00	NO,B,IN10,IN12	
12	S/P:P	24	86 SE	NO	12	p.D. Fe	0.90	B,NO,IN11	SS 81 SW
13	S,S/P	230	57 NW	1.18	9	D. Fe	1.30	NO,B	
13A	S	86	81 SE	0.40	6	p. Mn	1.20	B,A13	B AT S/P
14	S	182	67 NW	0.62	9	p.D. Fe	2.60	NO,NO,IN10	
15	S	199	64 NW	NO	12	p.D. Fe, Mn	5.20	IN16,NO,A14,IN17	SS 73 NE
16	S:P	164	27 SW	NO	NO	L. Fe	4.60	NO,NO,C10,IN15	
17	S	250	48 NW	0.25	NO	M. Fe	3.10	B,NO,IN15	EST
18	S:A	267	44 NW	NO	NO	L. Fe	3.30	B,NO	EST
19	G	231	86 NW	0.05	4	D. Fe, p. Mn	1.40	B,NO	B AT G:S CONTACT
20	G:S	243	88 NW	0.05	5	p.M. Fe, Mn	3.90	B,NO	B AT G:S CONTACT
21	G	55	70 SE	NO	9	Mn	0.70	NO,NO	EST
22	A	221	12 NW	0.63	7	D. Fe	3.00	B,A22A	B AT A/S
22A	A	270	89 N	0.05	3	D. Fe	0.90	A23,NO	WAVY
22B	A	207	16 NW	1.18	3	D. Fe	0.90	B,A22A	B AT S:G CONTACT
23	A:S:A	212	16 NW	3.31	4	D. Fe	4.40	B,B	
24	S:A:S	186	17 NW	0.05	4	D. Fe	2.00	B,B	B AT S:A CONTACT
25	S:A:S	230	9 NW	0.55	10	p.D. Fe	3.70	B,B,C27	WAVY, B AT S:A CONTACT
26	A:S:A:S:A	175	23 SW	0.45	12	p.D. Fe	2.50	B,B,C27	
27	A/S	215	89 NW	NO	9	p.D. Fe	3.10	NO,NO,C26,C25	
28	S/A	215	90 NW	NO	NO	p.M. Fe	1.80	NO,NO	EST
29	S/A	195	85 NW	NO	10	D. Fe	2.90	B,NO	
30	S:G	255	10 NW	NO	NO	L. Fe	2.20	B,B	B AT FOLIATION, EST
31	S	225	5 NW	0.33	9	p.M. Fe	2.10	B,B	BOTH B AT FOLIATION
32	S	210	24 NW	0.20	14	p.L-M. Fe	0.70	A32A,B	

32A	S	220	3 NW	0.55	7	p.M. Fe	1.90	A33,B	
33	S	303	35 NE	0.08	14	p.L. Fe	1.40	B,B,IN35	B AT S:G
34	S	325	5 NE	0.05	11	p.D. Fe	1.40	B,B,IN35	
35	S	30	71 SE	0.63	5	p.M. Fe	2.90	B,A37,IN33,IN34	
36	G	44	72 SE	0.13	9	p.D. Fe, Mn	4.60	B,B,C37	FILLED WITH IRON OXIDE, SS 77 NE
37	G:S	70	12 SE	0.05	9	p.M. Fe	1.50	B,B,C36	
38	G	136	50 SW	NO	NO	M. Fe	1.40	B,B	B AT S:G
39	S	185	1 NW	NO	9	p.D. Fe	1.70	B,A40	
40	S	35	6 SE	0.10	7	p.M. Fe	3.30	B,B	
41	NO FRACTURE								
42	G	200	78 NW	0.05	9	p.D. Fe	1.60	NO,B	B AT A:G CONTACT
43	G	112	84 SW	0.10	3	p.D. Fe	0.60	NO,B	B AT G:S CONTACT
44	G:P	339	44 NE	0.20	11	p.M. Fe, Mn	1.30	B,B	
44A	G	352	72 NE	NO	5	L-D. Fe, Mn	1.90	B,NO,IN45	B AT G:P
45	G:P	129	59 SW	0.07	4	L. Fe, Mn	2.10	NO,NO,IN44A,A48	
46	G	179	86 SW	NO	3	p.M. Fe, Mn	1.30	B,NO	SS 42 SE
47	G	17	82 SE	2.87	4	p.M. Fe, Mn	1.40	NO,NO	
48	G/P	23	80 SE	NO	3	p.M. Fe, Mn	1.20	NO,B	
49	G	27	88 SE	0.15	5	p.M. Fe, Mn	1.70	A45,B	
50	G	165	81 SW	NO	6	p.M. Fe	1.80	B,NO	
51	G	41	51 SE	0.09	4	Mn	1.80	B,B	
52	G	220	24 NW	0.10	5	D. Fe	0.80	B,A51	B AT G:P
53	G	354	86 NE	NO	10	p.M. Fe,Mn	2.00	NO,NO	
54	G:P	213	31 NW	0.05	9	M. Fe	1.30	B,B	B AT S:G CONTACT, B AT P:G CONTACT
55	G	215	84 NW	2.53	5	p.D. Fe, Mn	1.20	NO,B,C56	ORANGE Fe
56	G	181	24 NW	0.28	5	p.L. Fe, Mn	1.70	B,NO,C55	
57	G	175	36 SW	0.50	9	L. Fe	2.00	B,B	
58	G:S	31	58 SE	0.40	13	p.D. Fe, Mn	4.50	NO,B	
58A	S/G	45	83 SE	1.35	11	p.D. Fe, Mn	5.00	NO,NO	WAVY ALONG CONTACT
59	G	16	76 SE	NO	NO	D. Fe	1.10	B,B	BOTH B AT G:S
60	S	13	78 SE	0.05	12	p.D. Fe	1.10	B,B	B AT S:G
61	S	13	33 SE	0.20	9	p.M. Fe	1.80	B,B	
62	S	12	47 SE	0.05	9	p.D. Fe	1.50	B,B	
63	S	135	70 SW	NO	6	NONE	2.40	NO,A64,NO	
64	S	48	90.00	0.63	6	p.M. Fe	3.50	NO,NO	IN FOLIATION PLANE
64A	S	63	42 SE	0.55	11	p.M. Fe, Mn	1.50	NO,NO	WAVY, ORANGE COATING
65	S	70	87 SE	6.30	10	p.D. Fe, Mn	3.40	NO,NO,C68	EXTENDS APPROXIMATELY 10M ON TOP OF OUTCROP
65A	S	186	87 NW	NO	5	D. Fe, Mn	1.20	A65,NO,IN65B	
65B	S	274	90.00	NO	7	D. Fe	0.80	B,IN65A,NO	
66	S	110	35 SW	0.08	13	p.L. Fe	2.20	B,A65	
67	G	208	86 NW	0.65	3	p.D. Fe	1.90	NO,A68	
68	S:G	13	85 SE	0.33	3	p.M. Fe, Mn	8.20	NO,NO,C65	SS 13 SE, WAVY, RIGHT LATERAL
69	S	36	85 SE	0.10	5	p.D. Fe, Mn	1.30	B,NO	
70	S:G:P	42	80 SE	0.08	4	p.D. Fe, Mn	3.60	NO,B	
71	G	134	27 SW	NO	4	M. Fe	0.80	NO,NO	

72	G:P	41	83 SE	NO	4	p.M. Fe, Mn	1.00	NO,NO	
73	S	357	87 NE	3.21	12	p.D. Fe, Mn	2.00	B,B	B AT S:G
73A	G:P	198	85 NW	0.50	3	D. Fe, Mn	0.40	NO,B	B AT S:G
74	S:G	118	21 SW	0.55	12	p.L-M. Fe	12.50	B,B,C76,C77	APERTURE WIDENS AT 3 CM, B AT S/G
75	S	126	53 SW	2.53	5	p.L. Fe, Mn	1.30	NO,NO	
76	S:G	135	69 SW	1.18	6	p.M. Fe	3.30	NO,NO,C74,A77	
77	S	217	84 NW	12.70	9	p.M. Fe, Mn	4.80	C74,NO,NO	SS 3 SW, WAVY, SEVERAL ANASTOMOSING
78	S/P	43	67 SE	0.63	11	p.M. Fe	3.00	NO,NO	
78A	S:P:G	160	11 SW	1.68	7	p.M. Fe	2.20	B,NO	
79	G	145	63 SW	0.08	3	p.D. Fe	4.30	B,B,IN83,IN85	B AT S:G
80	S	37	65 SE	NO	NO	M. Fe, Mn	2.00	NO,NO	
81	S,S/P	50	64 SE	0.15	9	p.D. Fe, Mn	3.60	NO,NO	WAVY IN FOLIATION PLANE, SS 66 N
82	G:P	5	55 SE	NO	9	M-D. Fe	0.70	NO,A81	
83	G	25	55 SE	0.28	7	p.D. Fe	3.20	B,NO,IN79	
84	G:P	4	54 SE	1.18	3	L-M. Fe	1.10	B,A81	A81 AT S:P CONTACT
85	G:P	29	45 SE	0.35	3	L. Fe	1.80	B,NO,IN79	
86	S	226	79 NW	NO	8	p.D. Fe, Mn	4.80	NO,NO	SS 3 NE, WAVY, IN FOLIATION PLANE
87	S	214	83 NW	0.45	10	p.M-D. Fe,Mn	4.70	IN89,NO,NO,IN90	SS 90 NE, WAVY, IN FOLIATION PLANE
88	S	174	10 SW	0.30	10	p.M. Fe	1.80	NO,B,A86	
89	S	298	12 NE	0.55	10	D. Fe	4.40	B,NO,IN87	
90	S	259	11 NW	0.95	8	p.D. Fe	2.60	B,A91,IN87	
91	S:P	33	73 SE	2.53	4	L-D. Fe, Mn	9.30	NO,NO	WAVY
92	NO FRACTURE								
93	S	202	85 NW	0.55	11	p.D. Fe, Mn	3.80	A91,NO	WAVY-DARK, RED FE
94	S:G:P	320	59 NE	1.68	9	D. Fe	2.30	B,B	B AGAINST G/S
95	S	5	45 SE	3.48	7	p.M. Fe	1.50	B,B	B AT S:G
96	S:P,S/P	55	82 SE	NO	9	p.M. Fe, Mn	1.90	B,NO,I99	
97	S/P:P	320	18 NE	1.18	10	p.D. Fe	1.20	B,B	
98	S	50	84 SE	1.18	5	p.D. Fe, Mn	1.20	B,NO	
99	G:P	4	20 SE	2.13	10	D. Fe, Mn	1.80	B,B,I96	
100	S:P:G	97	73 SW	NO	9	p.D. Fe	2.30	NO,B	
101	P	20	48 SE	0.30	2	D. Fe	3.20	NO,B	
102	G:P	28	78 SE	0.55	3	p.M. Fe	6.00	IN103,B,A100,IN106	B AT P:G CONTACT
103	S:P:G	260	55 NW	0.50	5	p.D. Fe	2.90	IN102,IN105,IN106,B,NO	
104	P:G	18	31 SE	0.93	9	p.D. Fe, Mn	4.80	A103,B	
105	S:G/P	26	35 SE	NO	8	p.D. Fe, Mn	9.00	NO,NO,IN103	
106	P	280	11 NE	0.63	7	D. Fe	2.20	B,A104,IN103,IN102	
107	S	10	22 SE	NO	10	D. Fe	1.90	B,NO	
108	S:G	304	68 NE	NO	10	D. Fe	0.60	B,NO	
109	S:G:P	303	80 NE	0.33	9	D. Fe	1.20	B,NO	
110	S	295	60 NE	0.05	8	D.Fe	0.90	B,NO	
111	S/G,S	40	81 SE	1.18	4	M. Fe	3.20	NO,NO	WAVY, INFOLIATION PLANE
112	S	8	61 SE	0.96	11	D. Fe	2.10	B, A(UNMAPPED FRAC.)	
113	S	20	57 SE	0.98	10	D. Fe	3.20	B, A(UNMAPPED FRAC.)	
114	S	75	74 SE	0.05	9	M. Fe	1.20	B,B	IN FOLIATION PLANE

114A	S	63	64 SE	0.20	8	D. Fe	1.80	NO,NO	IN FOLIATION PLANE
115	S/G:G:P	5	18 SE	17.50	6	D. Fe	3.60	B,NO	
116	G	166	18 SW	2.13	10	D. Fe	1.40	B,B	B AT S:G CONTACT
117	S	19	45 SE	1.68	8	D. Fe	4.00	B,NO	WAVY
117A	S/G	83	65 SE	1.68	9	p.D. Fe, Mn	1.00	B,NO	
118	S	129	42 SW	NO	9	p.D. Fe, Mn	4.80	B,NO,IN119	WAVY, IN FOLIATION PLANE
119	S	36	60 SE	0.05	5	D. Fe	1.40	B,B,IN118	
120	S	41	61 SE	0.05	4	D. Fe	1.70	B,NO	
120A	P	184	71 NW	NO	5	p.D. Fe	2.00	NO,NO	SS 85 S
121	G	166	83 SW	1.88	4	D. Fe, Mn	2.20	B,NO	
122	G	355	81 NE	0.38	2	D. Fe	0.90	NO,NO	
123	G	164	74 SW	NO	10	p.D. Fe	1.00	NO,NO	SS 90
124	G	180	70 W	1.15	10	D. Fe	0.50	B,NO,IN127	
125	G	169	80 SW	2.03	5	p.D. Fe	0.80	B,NO	
126	G	195	76 NW	NO	5	p. D. Fe, Mn	1.20	NO,NO	BRIGHT ORANGE Fe
127	G	184	8 NW	NO	4	D. Fe	2.30	NO,NO,IN124,1N127A	
127A	G	33	77 SE	0.33	3	D. Fe	0.90	B,NO,IN127	FRACTURE ZONE 17.8 CM WIDE CONTAINING 7 FRACTUR
128	G	311	77 NE	NO	2	p.M. Fe	0.50	NO,NO	
129	G	0	48 E	0.55	2	D. Fe	2.20	IN130,B,A135,C131	
130	G	99	71 SW	NO	2	L. Fe	0.70	IN129,B,NO	
131	G	45	47 SE	NO	2	L. Fe	2.50	NO,NO,C133,C129	
132	G	54	43 SE	NO	2	M. Fe	1.20	NO,NO,C133	
133	G	338	64 NE	NO	3	M-D. Fe	1.10	C132,C131,B,A135	A AT G/L
134	G	38	90.00	NO	2	D. Fe, Mn	2.50	NO,NO	
135	G/L	218	86 NW	2.13	2	D. Fe, Mn	6.20	NO,NO	
136	G,G/L	56	86 SE	2.81	4	L. Fe, Mn	3.20	NO,NO	
137	G	33	77 SE	0.91	2	p.D. Fe, Mn	1.60	IN141,IN142,NO,NO,IN138	
138	G	27	80 SE	1.63	3	D. Fe	0.70	B,A (UNMAPPED FRAC.),IN137	
139	G:P	0	34 E	0.78	3	M. Fe	2.20	B,NO	
140	G/P:G	25	89 SE	0.76	3	D. Fe, Mn	1.80	B,B,IN143	
141	G	333	90.00	0.63	3	M. Fe, Mn	0.80	A140,NO,IN137	
142	G	25	48 SE	NO	3	L. Fe	1.70	NO,B,IN137	
143	G:P	356	73 NE	NO	3	D. Fe, Mn	1.30	NO,NO,IN140	
144	G/L	40	83 SE	1.68	3	D. Fe	1.10	B,B	
145	G,G/L	38	89 SE	NO	3	p.D. Fe, Mn	1.50	NO,B	
146	G	3	78 SE	4.90	4	p.D. Fe	5.40	NO,B	B AT G:L CONTACT
147	P/G	6	38 SE	1.68	4	p.D. Fe	0.30	B,NO,C151	WEATHERING RIND 10.2 CM IN P
148	G:P	189	77 NW	0.28	3	M-D. Fe, Mn	1.20	B,NO	
149	G	184	73 NW	0.05	4	D. Fe, Mn	1.50	NO,B	
150	G	196	54 NW	NO	3	M. Fe	1.10	NO,NO	
151	G:P	254	65 NW	70.05	3	L-M. Fe	1.80	NO,NO,C147,C152	CURVED
152	P/G	14	41 SE	1.13	3	M. Fe	6.90	B,NO,C151	B AT G:S CONTACT
153	G:P	224	72 NW	NO	8	p.M. Fe	1.30	NO,NO	
154	G:P	62	74 SE	NO	3	L. Fe	0.90	NO,NO	
155	G	238	86 NW	2.88	3	p.M. Fe	1.60	NO,A152	

156	G	25	59 SE	0.55	5	L. Fe	0.90	B,B	BOTH B AGAINST S:G CONTACT
156A	G	233	88 NW	1.68	3	M. Fe	1.10	NO,A147	
157	G	43	45 SE	0.05	5	p.M. Fe	0.50	B,NO	SS 72N N
158	G	10	81 SE	0.71	3	p.D. Fe	0.60	NO,NO	
159	G	207	80 NW	0.55	5	L-M. Fe	1.30	NO,NO	
160	G	184	83 NW	0.05	5	p.M. Fe	1.30	NO,NO	
161	G	47	76 SE	0.28	8	p.M-D. Fe, Mn	0.80	B,B	
162	S	284	35 NE	3.18	6	M. Fe	1.10	C163,B,B	B AT S:G CONTACT
163	S/G	184	46 NW	2.13	8	p.M-D. Fe	2.10	B,NO,C162	
164	G	340	76 NE	NO	6	p.D. Fe	0.70	B.NO	B AT S:G CONTACT
165	G/S:G	200	65 NW	0.33	4	p.M-D. Fe	2.70	NO,NO,IN166,IN167	
166	G:S	74	55 SE	0.55	5	M. Fe	1.20	B, A (UNMAPPED FRAC.), IN165	
167	G:S	68	54 SE	0.45	NO	D. Fe	1.20	B,B,IN165	
168	S:G	58	27 SE	1.18	3	L. Fe	3.20	B,NO,IN170	
169	G	106	47 SW	0.50	5	p.D. Fe	1.30	IN170,B,NO	B AT G:S CONTACT
170	G	345	51 NE	0.10	3	p.L. Fe	1.00	NO,NO,IN169,IN168	
171	G	286	48 NE	0.55	4	p.D. Fe	1.90	B,A172	
172	G:P	33	88 SE	0.63	4	p.M. Fe	1.60	NO,NO	
173	G	239	67 NW	NO	6	p.M. Fe	0.60	NO,NO	
174	S	35	77 SE	1.81	10	D. Fe	1.40	B,NO,IN175	
175	S	210	80 NW	NO	9	M. Fe, Mn	3.40	IN174,NO,NO,IN176	SS 59 NE, WAVY
176	S	181	40 NW	2.88	5	p.M-D. Fe	2.00	NO,NO,C177,IN175	
177	S	21	15 SE	6.30	15	D. Fe	4.80	B,C176,NO	WAVY
178	G/S	205	70 NW	NO	4	p.M-D. Fe	6.10	B,B,IN181,IN179	
179	G,G/S	38	56 SE	2.61	3	M-D. Fe, Mn	4.90	NO,NO,IN178	
180	G	130	55 SW	NO	4	p.D. Fe	2.00	NO,NO	
181	G	42	47 SE	NO	5	M. Fe	1.50	NO,NO,IN178	
182	G	51	38 SE	0.50	5	D. Fe	3.30	B,NO	
183	G	44	50 SE	2.63	8	D. Fe	2.50	NO,NO,IN184	
184	G	208	73 NW	NO	6	D. Fe, Mn	1.30	NO,NO,IN183	WEATHERING RIND 6.4 CM WIDE
185	P	62	36 SE	1.05	3	p.D. Fe	3.40	NO,NO	LIESEGANG ZONE 15.2 CM WIDE
186	G:P	57	36 SE	2.35	5	L. Fe	3.70	B,NO	LIESEGANG ZONE 15.2 CM WIDE
187	G	30	20 SE	2.13	5	L. Fe	3.40	NO,B,IN189	
188	G	35	26 SE	3.84	6	M-D. Fe	6.90	NO,NO,IN192,IN191	LIESEGANG ZONE 11.4 CM WIDE
189	G	358	60 NE	1.68	5	M. Fe	0.70	B,NO,IN187	
190	G:S	39	50 SE	1.18	3	p.D. Fe	2.00	B,NO,C191	WEATHERING RIND 8.9 CM WIDE
191	G	357	62 NE	1.18	4	M-D. Fe	3.10	NO,NO,C190,IN188	WEATHERING RIND 5 CM WIDE
192	G	348	47 NE	6.40	3	L. Fe	4.20	NO,NO,IN188	LIESEGANG ZONE 15.2 CM WIDE
193	G	75	22 SE	NO	9	L. Fe	2.80	NO,NO	LIESEGANG ZONE 15.2 CM WIDE
FRACTURE CHARACTERISTICS MEASURED IN						**8/7/90**			
SUBVERTICAL ROAD CUT ALONG INTERSTATE 93,									
EAST SIDE OF SOUTHBOUND LANE, 0.25 MILES NORTH OF MIRROR LAKE RD.,									
MIRROR LAKE AREA, GRAFTON COUNTY, NEW HAMPSHIRE									

Fracture No.	Rock Type(s) cut by Fracture	Strike	Dip	Aperture (mm)	Fracture Roughness Coefficient (FRC)	Staining on Fracture Surface	Trace Length (m)	Termination(s)	Other Characteristics
1	S	63	76 SE	NO	5	L. Fe	2.80	NO,B,IN1A	
1A	S	171	73 SW	NO	5	Mn	8.90	IN1,2,3,4, NO	SS 33 NW
2	S	334	51 NE	NO	NO	D. Fe	0.90	IN1A, B	EST
3	S	9	4 SE	NO	9	D. Fe	3.90	A4, IN1A	
4	S	23	82 SE	NO	10	p.D. Fe	3.40	NO, IN1A, NO	EQUALS 67 ON TOP
5	G/S	218	52 NW	NO	7	D. Fe	6.00	IN7, NO, IN6, NO	EQUALS 58 ON TOP
6	G	31	83 SE	NO	7	D. Fe, Mn	3.00	B,B,IN5	
7	G	19	35 SE	1.18	8	M. Fe, Mn	3.10	B,NO,IN5	
8	G:P/P	25	20 SE	NO	5	p.D. Fe, Mn	3.10	NO, NO	CURVED, WEATHERING RIND 20 CM LONG X 1.3 CM WIDE
9	S:G	28	43 SE	0.15	9	M. Fe	5.70	NO, B, IN11A	
9A	S	144	36 SW	NO	5	M. Fe	1.70	B, B	
10	S	64	18 SE	0.35	5	M. D. Fe	4.10	B, NO, IN11A	
11	S	60	33 SE	0.50	3	NONE	6.00	B, NO, C11A	
11A	S:P	170	84 SW	NO	9	p.M. Fe	6.90	NO,NO,IN9,10,11, C11	SS 35 NW, RIGHT LATERAL DISPLACEMENT
12	S	186	19 NW	NO	9	D. Fe	1.30	B, NO	
13	S	10	7 SE	NO	9	M. Fe	3.60	NO, NO	EQUALS 61 ON TOP
14	S:P:G	287	9 NE	20.60	10	p.D. Fe	24.60	C22,A13,NO,C19	WATER SEEPING
14A	S	156	78 SW	0.02	4	p.M. Fe	0.82	NO, NO	SS 14 SE
14B	S	333	88 NE	0.05	8	p.D. Fe	1.53	NO, NO	SS 17 SE
15	S	297	5 NE	0.63	6	D. Fe	3.10	B, B	
16	S	28	77 SE	NO	NO	D. Fe	5.00	NO, A14, B	EST
17	S	28	77 SE	NO	NO	Mn	1.40	B, NO	EST
18	S/P:G	33	27 SE	1.68	9	D. Fe	10.70	IN20,22,B,B,C23	
18A	S/P,G/P	298	9 NE	0.40	7	M.Fe	2.10	B,A24	
19	S	155	74 SW	0.45	4	D. Fe	4.20	NO,B,C14	
20	S:P	147	83 SW	0.63	5	D. Fe	2.40	NO,NO,IN18	
21	S	162	77 SW	NO	5	D. Fe	1.00	B,B	B AT S/P
22	S:P	156	89 SW	1.46	5	D. Fe	2.80	NO,A14A,C14,IN18	
23	S:P	245	54 NW	NO	6	D. Fe	2.20	B,A14,C18,C18A	
24	G:P	223	65 NW	NO	5	D. Fe	1.70	NO,B	STRIKE SLIP OFFSETS PEGMATITE
25	G	16	25 SE	0.05	3	M. Fe	3.90	B,B	
26	G/P	22	42 SE	0.05	4	p. D, Fe	1.60	B,B	EST
27	P	13	33 SE	0.03	2	D. Fe	6.10	B,NO	
28	P:G	9	45 SE	NO	NO	D. Fe	5.70	B,A32,IN28A	
28A	G:P	27	72 SE	NO	NO	M. D. Fe	2.70	B,A28,C30	
29	G	11	57 SE	NO	3	M. Fe	3.50	NO,NO	EST
30	G	355	43 NE	NO	NO	D. Fe	1.90	B,A31,C28A	
31	G	13	39 SE	NO	NO	Mn,D. Fe	2.20	B,A33,IN32	18 CM WEATHERING RIND
32	G:S	45	82 SE	NO	NO	Mn,L. Fe	2.00	B,NO,IN31	
33	G	355	43 NE	NO	NO	Mn,M. Fe	2.90	B,NO	
34	P	30	27 SE	NO	7	D. Fe	2.60	B,B	

35	P	198	73 NW	NO	1	D. Fe	4.50	B,B	EQUALS 63 ON TOP
36	S	145	35 SW	2.23	5	M. Fe	6.20	NO,NO	
37	S	35	75 SE	NO	NO	p. V.D. Fe	1.20	B,NO	EST
38	S:G	140	48 SW	NO	NO	D. Fe	5.50	B,NO	
39	S:G:P	60	45 SE	0.63	9	D. Fe	12.60	NO,NO	EQUALS 69 ON TOP
40	S	175	21 SW	NO	NO	L. Fe	3.60	NO,NO	EST
41	G:S	11	35 SE	NO	NO	L. Fe	10.60	B,B,C46	EST
42	G:P:G	353	31 NE	0.35	6	M. Fe	5.40	B,B	BOTH BLIND ENDINGS AT G:S
42A	G/S,G	300	71 NE	NO	NO	D.Fe	3.70	B, A42	EST
42B	S/G	279	60 NE	0.35	9	D. Fe	1.32	B, A42	
43	G:P:S	357	47 NE	0.45	5	p. D. Fe	7.70	B,B	
44	G:S:G	11	43 SE	0.76	3	L. Fe	3.40	B,NO	
45	G:S	10	62 SE	0.28	1	L. M. Fe	1.50	B,A45A	
45A	G:P:G	53	42 SE	0.05	4	D. Fe	1.30	B,B	
46	G	38	45 SE	0.10	3	M. Fe	8.50	B,B,C41	
47	G	9	55 SE	NO	3	p. D. Fe	1.80	A44,B	
48	G	358	49 NE	0.40	3	D. Fe	3.50	A47,B	
49	G:S	13	49 SE	0.55	5	M. Fe	3.20	B,B	
50	G	12	55 SE	0.55	4	L. Fe	1.30	B, B, A46	
51	G:S	359	31 NE	NO	NO	D. Fe	2.20	A46,NO	EST
52	G	45	47 SE	NO	4	p. D. Fe	4.20	NO,B	
53	G	4	45 SE	NO	NO	M. Fe	2.20	B,A54	EST
54	G:S	15	45 SE	NO	NO	Mn	1.80	B,NO	EST
55	G	26	51 SE	0.14	3	M-D. Fe	0.80	B,A55A	
55A	G	55	47 SE	NO	4	D. Fe	1.50	B,NO	EST, EQUALS 70 ON TOP
56	G	20	41 SE	NO	NO	L-M. Fe	1.80	B,NO	EST, B AT G:S CONTACT
57	G	356	38 NE	NO	NO	M. Fe	1.40	B,B	EST
58	S:G	156	29 SW	0.09	8	V.D. Fe	1.10	B,A59	
59	S:G:P	65	37 SE	0.65	8	D. Fe	4.50	B,B	
60	S	94	63 SW	>0.05	5	M. Fe	1.50	B,B	
61	S:P:G	167	9 SW	0.63	8	p.D. Fe	8.50	B,B	
62	G	16	64 SE	>0.05	5	L. Fe	2.50	B,B	B,B AT G:S CONTACT AT BOTH ENDS
63	S	33	69 SE	0.33	10	M-D. Fe	6.40	B,B	
64	S	63	36 SE	0.63	11	D. Fe	2.90	A63, NO, C65	CURVES ALMOST 90 DEGREES, EST
65	S	18	20 SE	0.63	10	V.D. Fe	2.70	B, C64, A64	
66	S	102	68 SW	0.13	4	M-D. Fe, Mn	2.70	B,B	B AT S:P CONTACT
67	G	30	72 SE	0.20	4	p.D. Fe	3.60	NO, NO, IN69, IN70	EST
68	S	38	75 SE	1.18	5	D. Fe	4.60	B, NO	B AT G:S CONTACT
69	G	49	51 SE	0.33	4	M-D. Fe	3.20	NO,B,C70,IN67	B AT G:S CONTACT
70	G:S	10	25 SE	0.45	5	D. Fe	4.10	B,B,IN67,C71,C69	QTZ VAIN IN FRACTURE, B AT G:S CONTACT
71	G	43	31 SE	>0.05	4	M-D. Fe	2.90	B,B,C70	B AT G:S CONTACT, WEATHERING RIND 1.3 CM
72	G	38	40 SE	>0.05	5	D. Fe	2.80	B,B	WEATHERING RIND 11.4 CM, B AT G:S CONTACT
73	G	48	32 SE	>0.05	3	D. Fe, Mn	2.00	B,B	B AT G:S CONTACT
74	G,G/S	134	58 SW	NO	5	D. Fe	2.70	NO,B,C76	EQUALS 26A ON TOP
75	G	15	42 SE	NO	NO	D. Fe, Mn	1.50	NO,A74	WEATHERING RIND 5.8 CM, EST

76	G	20	38 SE	0.15	4	L. Fe, Mn	3.60	B,B,C74,C77	WEATHERING RIND 3 CM, B AT G:S, B AT G:P
77	G	57	67 SE	0.50	5	L. Fe,Mn	2.40	B,B,C76	
77A	G:P:S	103	11 SW	0.10	5	M. Fe	2.20	B,B	B AT P:G CONTACT
77B	G:P	2	42 SE	0.13	4	D. Fe	1.10	B,B	BOTH B AT P:S CONTACT
78	G:P	20	84 SW	0.85	3	p.D. Fe	1.80	B,NO	
79	G	334	84 NE	NO	NO	D. Fe	1.10	B,NO,C80,IN80A	EST
80	G:P:S	43	40 SE	0.20	1	M-D. Fe	8.30	A78,B,C79	WEATHERING RIND 9.5 CM
80A	G	32	60 SE	0.13	NO	D. Fe	1.40	NO,NO,IN79	EST
81	G	73	90.00	NO	NO	D. Fe	0.80	B,A84	EST, WEATHERING RIND 1 CM WIDE
82	G	260	89 NW	NO	NO	D. Fe	0.80	B,A84	EST, WEATHERING RIND 6.4 CM WIDE
83	G	86	86 SE	NO	NO	D. Fe	0.80	B,A84	WEATHERING RIND 3.83 CM, EST
84	G	32	31 SE	NO	NO	D. Fe	1.30	B,B	B AGAINST G:P, EST
85	G:?	50	58 SE	1.06	NO	D. Fe	1.00	B,B	B AT P:S
86	S:G:P	39	51 SE	0.40	5	p.D. Fe	2.90	B,NO	
87	S:P	105	37 SW	>0.05	11	D. Fe	3.20	NO,A86	CURVES ALMOST 90 DEGREES
88	G:S	108	33 SW	0.05	5	M. Fe	4.60	B,NO	
89	G:S	65	9 SE	>0.05	3	D. Fe	4.20	B,A92	
90	G	89	34 SE	0.57	NO	M. Fe	4.20	B,B	EST
91	G:S	50	23 SE	2.48	10	D. Fe	4.90	B,A93,C92	
92	S:G	30	77 SE	0.33	10	D. Fe, Mn	6.80	NO,NO,C91	EQUALS 26 ON TOP
93	S	55	4 SE	2.13	5	D. Fe	2.40	B,B,C93A	
93A	G:S	85	77 SE	1.18	6	M.D. Fe	3.90	B,B,C93	1-2 CM WIDE GRANITE DIKE-ADD TO MAP, FRACTURE SO
									TIMES ON ONE SIDE OF DIKE-SOMETIMES ON THE OTHE
94	G:P	76	6 SE	>0.05	3	L. Fe, Mn	3.50	B,B	
95	S	340	35 NE	NO	NO	L. Fe	1.80	B,NO	EST
96	S:P	237	88 NW	0.35	7	p.M. Fe	1.40	B,B	
97	S:P:S	83	8 SE	>0.05	4	Mn	2.40	B,B	
98	G	13	53 SE	0.28	12	M. Fe	1.70	B,NO	
99	G	45	38 SE	0.05	NO	M. Fe	1.40	B,B	
100	G	13	57 SE	0.50	16	D. Fe, Mn	1.40	B,NO	
101	G:S	227	78 NW	1.68	2	V.D. Fe, Mn	3.20	B,NO	
102	G	2	45 SE	NO	3	D. Fe, Mn	1.40	NO,C103,B	
103	G	53	77 SE	NO	5	p.D. Fe/M. Fe	1.70	B,C102,B	
104	G	59	69 SE	NO	9	L-M. Fe	1.60	B,A105	CURVES ALMOST 90 DEGREES
105	G:S	41	84 SE	NO	4	p.D. Fe	5.20	NO,NO,IN107,IN110	BOUNDS FAULT SPLAY, SS 19 NE, LEFT LATERAL EFFECT
106	G	46	76 SE	1.73	5	D. Fe	2.80	B,NO	
107	G	359	60 NE	1.18	3	D. Fe, Mn	1.30	B,NO,IN105	SS 38 NW
108	G	136	31 SW	0.40	10	L-M. Fe	1.30	B,B	
109	G:P	80	30 SE	1.18	7	L-M. Fe	2.30	B,B	
110	G	15	41 SE	NO	NO	M. Fe	2.80	B,B,IN105	EST, B AT G:S CONTACT
111	G:P	36	72 SE	NO	NO	D. Mn	1.70	B,NO	EST
112	S	25	72 SE	0.05	13	M. Fe, Mn	1.50	B,B	B AT S:G CONTACT
113	S	31	75 SE	0.13	11	L. Fe	1.90	B,B	B AT S:G CONTACT
114	G:P	38	79 SE	0.05	3	p.D. Fe, Mn	1.80	NO,A113	SS 15 NE
115	G:P	38	68 SE	NO	14	p.D. Fe, Mn	5.40	NO,NO	SS 5 NE, BOUNDS FAULT ZONE

116	G:P	26	79 SE	NO	5	D. Fe, Mn	1.70	NO,NO	
117	G:P	39	80 SE	NO	NO	Mn	1.50	NO,NO	EST
118	G:P	54	85 NW	NO	3	p.D. Fe, Mn	4.10	NO,NO	SS 20 SW, BOTTOM HALF BOUNDS FAULT ZONE
119	G	33	65 SE	NO	NO	M. Fe	2.20	NO,B	EST
120	G:P	230	79 NW	0.45	1	Mn	2.90	B,B,C121	WEATHERING RIND 1.3 CM
121	G:P	90	18 S	1.68	5	D. Fe	2.20	B,B,C120	WEATHERING RIND 1.3 CM
122	G:P	309	17 NE	0.50	5	D. Fe	2.00	B,A120	WEATHERING RIND 2.5 CM
123	G:P	31	70 SE	0.55	2	p.D. Fe,p. Mn	6.70	NO,NO,C127,IN126,124	WEATHERING RIND 1.9 CM
123A	G	237	11 NW	0.15	6	D. Fe	1.10	B,A123	B AT G:P, WEATHERING RINDS 2.5 CM
123B	G	242	11 NW	0.30	9	L. Fe	1.70	A120,A123	WEATHERING RIND 1.9 CM
123C	G	184	16 NW	0.05	6	D. Fe	1.40	A123,A120	WEATHERING RIND 1CM
124	S:G	316	11 NE	NO	NO	D. Fe	5.00	B,B,C125,IN123	WEATHERING RIND
125	S	86	78 SE	NO	NO	D. Fe	2.10	B,NO,C124	EST, WEATHERING RIND 0.6 CM
126	G:P	231	22 NW	0.20	5	L. Fe	2.30	B,B,IN123	WEATHERING RIND 3.8 CM
127	G	214	12 NW	0.50	4	L. Fe	3.80	IN123,A128	WEATHERING RIND 3.8 CM
128	G:P	57	87 SE	0.13	5	Mn	2.20	B,NO,C129	B AT G:S CONTACT, WEATHERING RIND 15.2 CM
129	G:P	209	16 NW	0.20	10	D. Fe	4.40	B,A137,IN131,130,C128	
130	G	50	85 SE	0.40	8	D. Fe, Mn	2.70	B,NO,IN129	B AT G:S
131	G	47	71 SE	0.20	1	D. Fe	1.40	B,A130,C129	WEATHERING RIND 0.5 CM
132	G	237	23 NW	0.08	5	M. Fe	1.10	B,A131	WEATHERING RIND 15.2 CM
133	G/P	90	30 S	NO	NO	L. Fe	1.10	B,B	EST
134	G/P	90	30 S	NO	NO	L. Fe	1.10	B,B	EST
135	G	26	72 SE	NO	NO	L. Fe, Mn	2.90	B,B	EST
136	G:P	33	90.00	0.13	5	Mn	1.50	B,NO	WEATHERING RIND 0.6 CM
137	G	34	76 SE	NO	5	p.D. Fe	1.10	B,B	B AT G:S
138	G:S:P	222	25 NW	0.35	4	p.D. Fe	5.50	B,A139,IN130	
139	G	79	43 SE	1.18	5	M. Fe, Mn	6.20	B,NO	SS 69 SE, WEATHERING RIND 17.8 CM, B AT G:S
140	G,G/P	58	5 SE	0.63	5	D. Fe	5.20	B,B	B AT S:G, WEATHERING RIND 16.5 CM
141	S	296	78 NE	0.50	9	D. Fe	1.00	B,NO	B AT S:G, EQUALS 13 ON TOP
142	G	134	77 SW	NO	4	p.D. Fe	1.80	B,NO	EQUALS 13A ON TOP
143	G	71	55 SE	NO	6	p.D. Fe,Mn	0.80	B,B	EQUALS 13B ON TOP
144	G	238	40 NW	0.05	4	p.D. Fe	1.00	B,B,IN145	
145	G	127	43 SW	NO	2	D. Fe	3.90	NO,B,A146	WEATHERING RIND 1.3 CM, EQUALS 12 ON TOP
146	G:S/G	245	56 NW	NO	5	Mn	2.60	IN148,149,NO,NO	EQUALS 12A ON TOP
147	S	215	88 NW	NO	8	D. Fe	1.30	NO,NO,IN150	EQUALS 11A ON TOP, WEATHERING RIND 2.5 CM
148	G	325	6 NE	1.68	8	D. Fe	1.70	NO,NO,A149	WEATHERING RIND 12.7 CM
149	G:S	81	47 SE	0.35	4	p.D. Fe	3.40	B,NO,IN146	WEATHERING RIND 16.5 CM
150	G:S:P	66	36 SE	0.33	NO	L. Fe, Mn	4.10	NO,B	
151	G	169	42 SW	0.30	NO	M. Fe	1.30	B,B	EST, WEATHERING RIND 12.7 CM
152	S	176	46 SW	NO	5	D. Fe	0.40	B,NO	
153	S:P	320	90.00	NO	12	D. Fe	1.10	B,NO,IN160	EQUALS 11B ON TOP, B AT P:G
154	G	53	39 SE	0.28	10	Mn	2.10	B,B,C155	
155	G	319	52 NE	0.63	8	Mn	3.10	B,NO,C154	
156	S/G	218	49 NW	0.05	8	D. Fe	6.20	B,B	WEATHERING RIND 5 CM, EQUALS 11C ON TOP
157	G/P	61	30 SE	1.18	6	D. Fe	1.40	B,NO	EQUALS 9 ON TOP

158	G	226	29 NW	0.63	8	M. Fe, Mn	1.10	NO,NO	WEATHERING RIND 2.5 CM
159	G	108	76 SW	0.50	4	Mn	0.70	B,NO	
160	S	44	81 SE	0.05	NO	D. Fe	2.00	B,B,IN153	EQUALS 10 ON TOP, B AGAINST S:P
161	G	37	76 SE	0.91	2	D. Fe, Mn	2.00	NO,NO	
162	G	52	80 SE	NO	4	p.D. Fe, Mn	1.80	NO,NO	WEATHERING RIND 0.6 CM
163	G:P	46	80 SE	0.93	3	D. Fe	0.80	B,C164,NO	B AT G:S, WEATHERING RIND 1.9 CM
164	G:P	71	86 SE	0.05	5	D. Fe	1.10	B,B,C163	WEATHERING RIND 1.7 CM, B AT P:G
165	G:P:S	247	45 NW	0.91	5	M-D. Fe	4.50	A166,B	WEATHERING RIND 2.5 CM
166	G:P	22	79 SE	0.63	3	p.D. Fe, Mn	2.40	NO,NO	WEATHERING RIND 33 CM
167	G:P	234	12 NW	0.08	9	D. Fe	2.10	B,A168	WEATHERING RIND 11.4 CM
168	G:P	NO	NO	NO	NO	D. Fe	1.60	B,NO,IN169	WEATHERING RIND 20.3 CM, EQUALS 1 ON TOP, EST
168A	G:P	228	74 NW	0.45	4	p.D. Fe	1.60	B,B	WEATHERING RIND 9.5 CM
169	G:P	63	90.00	0.10	3	p.D. Fe, Mn	3.00	B,NO,C168	WEATHERING RIND 0.6 CM
170	G	28	84 SE	0.05	4	L. Fe	1.30	B,NO	WEATHERING RIND 4.1 CM, B AT G:P
171	G	52	36 SE	0.63	3	p.L-D. Fe	1.80	NO,A172	SS 84 SW, THRUST WITH 5 CM DISPLACEMENT
172	G/S	41	67 SE	0.05	8	D. Fe	2.20	B,B	
FRACTURE CHARACTERISTICS MEASURED IN									
SUBHORIZONTAL TOP OF CENTERSTRIP ROAD CUT ALONG INTERSTATE 93,								**Aug-94**	
0.25 MILES NORTH OF MIRROR LAKE RD., MIRROR LAKE AREA, GRAFTON COUNTY, NEW HAMPSHIRE									
					Fracture				
	Rock Type(s)				**Roughness**	**Staining on**	**Trace**		
Fracture	**cut by**			**Aperture**	**Coefficient**	**Fracture**	**Length**		**Other**
No.	**Fracture**	**Strike**	**Dip**	**(mm)**	**(FRC)**	**Surface**	**(m)**	**Termination(s)**	**Characteristics**
1	S	241	34 NW	0.63	7	D. Fe	3.20	NO,NO	
2	S	90	65 S	0.28	9	L. Fe	1.80	B,B	
3	S:G:P	55	63 SE	0.55	NO	NONE	3.80	B,B	
4	S/G:P:S	66	78 SE	0.63	7	NONE	7.40	NO	
5	G:S	47	36 SE	0.63	9	p.D. Fe	1.50	B,B	
6	G	44	39 SE	0.28	4	Qtz	0.90	B,B	SS 62 SE
7	S	230	72 NW	2.13	17	NONE	3.50	NO,B	
8	S	240	83 NW	0.55	13	NONE	3.30	NO,NO	
9	G:P	60	36 SE	0.63	11	NONE	4.40	B, B	
10	S	42	88 SE	0.28	NO	NONE	3.00	B,B,A11B	
11A	S	215	88 NW	NO	8	D. Fe	1.30	NO,NO,IN12A	EQUALS 147 ON SIDE
11B	S:P	320	90.00	NO	12	D. Fe	1.10	B,NO,IN10	EQUALS 153 ON SIDE, B AT P:G
11C	S/G	218	49 SW	0.05	8	D. Fe	6.20	B,A11B	EQUALS 156 ON SIDE, WEATHERING RIND 5 CM
12	G	128	45 SW	NO	2	D. Fe	6.00	NO,NO	EQUALS 145 ON SIDE
12A	G:S/G	245	56 NW	NO	5	Mn	2.60	IN148,149,NO,NO	EQUALS 146 ON SIDE
13	S	298	80 NE	0.55	10	D. Fe	2.50	NO,B,C15	EQUALS 141 ON SIDE, B AT S/G CONTACT
13A	G	134	77 SW	NO	4	p.D. Fe	1.80	B,NO	EQUALS 142 ON SIDE
13B	G	71	55 SE	NO	6	p.D. Fe,Mn	0.80	B,B	EQUALS 143 ON SIDE
14	S	100	66 SW	0.50	8	NONE	3.30	B,B,C15	
15	S	24	84 SE	0.13	4	D. Fe	2.90	B,B,C13,C14	B AT S/G CONTACT

16	S	293	60 NE	NO	13	NONE	7.00	NO,NO	
17	S	316	48 NE	NO	11	NONE	5.70	NO,NO	
18	S	262	87 NW	0.30	NO	NONE	7.20	NO,B	
19	S	276	90.00	NO	10	NONE	7.70	NO,B	
20	S:G	276	90.00	0.33	9	NONE	8.40	NO,NO,C23	
21	S:G	282	90.00	0.63	11	D. Fe	8.00	NO,B,C23	
22	S:G	89	79 SE	0.35	7	D. Fe	6.40	NO,B,C23	
23	S	13	86 SE	NO	6	D. Fe	5.40	NO,B,C22,C21,C20,A24	IN FOLIATION PLANE
24	S	273	90.00	0.13	NO	NO	2.70	B, B	
25	S	259	89 NW	0.30	NO	NO	2.70	B,B	IN FOLIATION PLANE
26	S	32	83 SE	1.05	8	p.D. Fe	6.00	NO,NO,C91 ON SIDE	EQUALS 92 ON SIDE
26A	G,G/S	134	58 SW	NO	NO	D. Fe	2.70	NO,B,C76 ON SIDE	EQUALS 74 ON SIDE
27	G:P	40	67 SE	NO	2	p.D. Fe	2.70	NO,NO	
28	G	32	74 SE	0.30	NO	D. Fe	2.80	NO,NO	
29	G	56	34 SE	NO	1	p.L. Fe	2.70	NO,NO	
30	G:P	301	52 NE	1.27	NO	D. Fe	3.50	B,NO,IN31,C46 ON SIDE	EQUALS 44A ON SIDE, FAULT ZONE, GOUGE 10CM WIDE
31	P:G	50	45 SE	NO	2	p.M. Fe	3.80	NO,NO,IN30	EQUALS 41A ON SIDE
32	G	37	45 SE	NO	2	p.M. Fe	5.50	NO,NO,IN 34,37 ON SIDE	EQUALS 28 ON SIDE, SS 93 SW, THRUST
33	G	42	73 SE	0.13	4	D. Fe	3.50	B,NO,IN32	EQUALS 34B ON SIDE
34	G	50	70 SE	0.28	4	D. Fe, Mn	1.80	B,NO	EQUALS 34A ON SIDE
35	G	39	75 SE	0.05	4	D.Fe, Mn	3.40	B, B	
36	G	45	75 SE	NO	8	D. Fe	5.20	NO,NO,A26 ON SIDE	EQUALS 27 ON SIDE
37	G	44	85 SE	0.33	8	D. Fe	3.50	NO,A(UNMAPPED FRAC),IN21	EQUALS 31 ON SIDE
								IN26 ON SIDE	
38	G	44	77 SE	0.63	4	D. Fe	2.00	B,NO,IN21 ON SIDE	EQUALS 30 ON EAST FACE; DOUBLE STRAND WHEN VIEV
39	G	34	64 SE	0.55	5	D. Fe	2.00	NO,B	
40	S	121	72 SW	NO	8	Qtz	6.20	NO,NO	APERTURE CLOSED BY MINERALIZATION
									FRACTURE EXTENDS UNDER ALLUVIUM
41	S	229	57 NW	NO	5	NONE	5.80	NO,NO	
42	S	116	68 SW	NO	5	Qtz	5.00	NO,NO	ONE FACE MISSING
43	S:G	8	78 SE	NO	3	D. Fe	5.00	NO,NO	
44	S	5	76 SE	NO	6	M. Fe	4.70	NO,NO	SERIES OF 6" LONG DRILL HOLES(?) LONG TOP OF THIS F
									MANMADE OR COULD HAVE BEEN SPLIT ALONG PREXIST
45	G	5	60 SE	NO	1	Qtz. L. Fe	1.90	NO,NO,A46	SS 52 SW
46	S:G,G/S	54	53 SE	1.18	7	L.M. Fe	2.60	NO,NO,C120 ON SIDE	SS 70 NE, EQUALS 119 ON SIDE
								C118 ON SIDE,IN124 ON SIDE	
47	G	25	58 SE	0.1	3	p.D. Fe	2.20	B,NO,IN119	EQUALS 124 ON SIDE
48	G	33	39 SE	0.63	4	p.M. Fe	4.50	NO,NO,IN51	EQUALS 126 ON SIDE
49	G	30	26 SE	1.25	3	Qtz	4.90	B,A132,IN128 ON SIDE	EQUALS 127 ON SIDE, SS 88 NE
50	G	43	40 SE	0.50	5	Fe,Qtz	3.70	NO,NO	SS PATCHY Qtz PITCH 90 DEGREES
51	G	256	33 NW	NO	3	NONE	3.50	NO,NO,IN48,A50	
52	G:S	32	78 SE	0.05	1	D. Fe	3.60	NO,B	
53	S:G,S/P	35	56 SE	7.94	10	L. Fe	3.60	NO,IN142,145,148 ON SIDE	EQUALS 141 ON EAST SIDE
54	P/S,S:G	214	78 NW	<0.50	7	D. Fe	4.00	NO,NO,IN159 ON SIDE	EQUALS 156 ON SIDE
55	P/G,S:G	53	45 SE	0.10	4	V.L. Fe	11.70	B,NO,C56	EQUALS 157 IN SIDE ALONG S CONTACT OF P AND ALON

56	S:G:P	35	74 SE	0.05	6	p. D. Fe	19.50	B,NO,C55,165 ON SIDE	EQUALS 162 ON SIDE
57	S:G	350	90.00	1.68	NO	NONE	5.30	NO,NO	
58	G/S	216	58 NW	NO	11	p. D. Fe	17.50	NO,NO,IN6,7 ON SIDE	EQUALS 5 ON SIDE
59	G	15	43 SE	0.63	6	D. FE	5.70	B, B	
60	S	61	90.00	0.06	9	NONE	4.20	B, B	
61	S	92	18 SW	NO	4	Qtz P. Fe	8.50	NO,NO	
62	S	34	88 SE	0.63	9	NO	5.40	NO,NO	FRACTURE EXTENDS UNDER ALLUVIUM
63	P	198	73 NW	NO	1	D. Fe	4.50	NO,NO	EQUALS 35 ON SIDE
64	S	10	81 SE	0.71	3	p.D. Fe	0.60	NO,NO,IN159 ON SIDE	EQUALS 158 ON SIDE
65	G	26	84 SE	2.03	9	p.D. FE, Mn	3.80	B,NO,C119,122 ON SIDE	EQUALS 118 ON SIDE
66	S	111	74 SW	0.55	7	p.M. Fe	2.10	B,NO,C104 ON SIDE	EQUALS 102 ON SIDE
67	S	23	82 SE	NO	10	p.D. Fe	8.60	NO,NO,IN1A ON SIDE	EQUALS 4 ON SIDE, EST
68	S	160	77 SW	NO	NO	p.D. Fe	2.90	B,B	BLOCK TILTED, DIP TOO STEEP
69	G:S:P	60	45 SE	0.63	9	D. Fe	2.00	NO,NO	EQUALS 39 ON SIDE
70	G	55	47 SE	NO	4	D. Fe	2.20	B,NO	EQUALS 55A ON SIDE
FRACTURE CHARACTERISTICS MEASURED IN									
SUBVERTICAL ROAD CUT ALONG INTERSTATE					**8/7/90**				
WEST SIDE OF NORTHBOUND LANE, 0.25 MILES NORTH OF MIRROR LAKE RD.,									
MIRROR LAKE AREA, GRAFTON COUNTY, NEW HAMPSHIRE									
					Fracture				
	Rock Type(s)				**Roughness**	**Staining on**	**Trace**		
Fracture	**cut by**			**Aperture**	**Coefficient**	**Fracture**	**Length**		**Other**
No.	**Fracture**	**Strike**	**Dip**	**(mm)**	**(FRC)**	**Surface**	**(m)**	**Termination(s)**	**Characteristics**
1	S	218	78 NW	0.40	5	M-D. Fe	3.88	NO,NO,C2	
1	S	218	78 NW	0.40	5	M.-D. Fe	3.88		
2	S	128	20 SW	6.35	13	D. Fe	7.52	C1,NO,B	
3	S	150	25 SW	1.88	7	M. Fe	5.92	B,A1	
4	S	236	80 NW	0.75	13	D. Fe	2.51	B,C5,NO	
5	S	120	62 SW	0.28	12	D. Mn	2.28	C4,NO,B	
6	S	178	24 SW	2.63	9	D. Fe	4.10	B,A5	
7	S	143	67 SW	0.13	9	M. Fe	3.19	NO, NO	
8	S:G	30	80 SE	0.28	5	M. Fe	2.51	A7, NO	APERTURENON GRANITE = 0.08
9	G	77	37 SE	11.18	3	L. Fe	3.42	NO,NO,IN11	
10	G	4	43 SE	NO	3	L. Fe	5.01	A9, NO	
11	G	1	32 SE	NO	4	M. Fe	2.06	IN9,NO	
12	G	65	31 SE	0.50	1	L. Fe	2.28	B,NO	
13	G:S	49	47 SE	0.50	3	M. Fe	7.97	NO, NO	SS 85 NE
14	G:S	85	29 SE	0.40	11	M. Fe	3.42	B, NO	
15	G	180	25 W	0.50	11	D. Fe	3.64	B, B	
16	G	5	63 SE	0.40	5	L. Fe	2.97	NO, NO	MAY BE CONTACT BETWEEN UNITS
17	G/S	0	9 W	NO	6	D. Fe	10.01	NO, NO	
18	G	48	76 SE	0.45	1	D. Mn	2.51	NO, NO	
19	G	26	77 SE	0.33	7	L. Mn/Fe	2.06	A23, NO	

20	G	34	81 SE	0.10	8	L. Mn/Fe	1.60	NO,B,C22,IN21	
21	S:G	26	20 SE	0.13	2	L.-M. Fe	9.56	NO,B,IN30,31,20,32,22	SS 89 SW, THRUST
22	G	34	30 SE	1.13	3	L. Fe	1.15	NO,NO,C20,IN21	SS 90, NORMAL
23	G	54	28 SE	11.11	2	M. Fe	2.51	NO,NO,IN24	SS 90, NORMAL
24	G	134	72 SW	NO	3	D. Fe	2.06	NO,NO,IN23	
25	G	139	69 SW	NO	8	D. Fe	2.51	A22, A23	
26	G	0	31 E	0.55	8	L. Fe	2.28	A21,NO,IN31	SS 62 S
27	G	44	78 SE	NO	8	D. Fe	3.64	A26,NO	EQUALS 36 ON TOP
28	G	25	32 SE	NO	2	L. -M. Fe	7.06	NO,NO,IN37,IN34B	SS 93 SW, THRUST, EQUALS 32 ON TOP
29	G	41	77 SE	0.08	5	D. Fe	1.37	NO, NO	
30	G	40	77 SE	0.63	4	D. Fe	3.19	IN21,B,NO	BREAKSNONTO DOUBLE STRAND
									WHEN VIEWED FROM TOP, EQUALS 38 ON TOP
31	G	42	83 SE	0.33	8	D. Fe	4.55	IN21,26,NO,A(UNMAPPED FRAC	EQUALS 37 ON TOP
32	G	40	66 SE	0.35	3	L. Fe	3.64	IN21,NO,A (UNMAPPED FRAC)	
33	G	47	65 SE	1.90	3	D. Mn	2.97	NO,NO	
34A	G	57	76 SE	0.28	4	D. Mn	2.97	B,NO	EQUALS 34 ON TOP
34B	G	47	79 SE	0.13	4	D. Mn	2.73	IN28,NO,B	EQUALS 33 ON TOP
35	G	25	30 SE	0.50	2	L. Fe	5.46	B, B, C37	SS 88 SW, NORMAL
36	G	30	44 SE	1.50	7	L. Fe	5.70	C37,C40,B,NO	FAINT STRIATIONS
37	G:P	18	81 SE	0.63	8	D. Fe	5.46	IN28,C35,C36,NO,B	
38	P:G	282	87 NE	CLOSED	9	D. Mn	1.37	B, B	
39	G:P	47	90	0.93	9	L. Mn	1.82	B,NO	
40	G:P	60	87 SE	2.25	11	V.L. Mn	5.92	C36,C41,NO,NO	FAULT ZONE 4 cm WIDE
41	G:P	44	34 SE	2.63	6	D. Fe	9.10	B,B,C40	
41A	P:G	50	45 SE	NO	2	p.M. Fe	3.80	NO,NO,IN44A	EQUALS 31 ON TOP
42	G:P	334	61 NE	NO	6	D. Fe	2.51	A41A,IN43,NO	
43	G:P	288	90	1.63	9	D. Fe/S	2.06	IN42,A41A	
44A	G:P	299	52 NE	1.27	NO	D. Fe	7.97	IN41A,NO,B,C46	FAULT ZONE,GOUGE 10 CM WIDE,EQUALS 30 ON TOP
44B	G	NO	NO	NO	NO	D. Fe	5.46	B,A44A,C46	B AT G/S
45	P/G:G	68	35 SE	0.30	4	M. Fe	3.88	B,NO	B AT G/S
46	G:G/S	23	35 SE	NO	NO	D. Fe	5.46	B,B,C44A,C44B	
47	G:G/S	70	29 SE	NO	NO	L. Fe	5.24	B,NO	
48	G	69	41 NW	NO	NO	M. Fe	2.51	B, B	
49	G	291	84 NE	0.15	2	D. Fe	2.06	B,B,C50	B AT G/P
50	G	48	44 SE	0.35	10	D. Fe	2.73	B,C49,NO	
51	G:P:S	49	82 SE	0.40	7	p. D Fe/S	6.83	B,NO	
52	G	40	70 SE	0.33	7	D. Fe/Mn	1.60	B, B	B AT G/P, B AT G/S
53	G:P:S	56	88 SE	0.28	12	p. D. Fe	2.28	B, B	
54	S:G	288	14 NE	0.55	9	D. Fe	2.06	A49,A51	
55	S:G	70	26 SE	0.28	5	D. Fe	3.42	A51,C56,C57,A58	
56	G:P	43	90	1.18	3	p. D. Fe/Mn	4.55	B,NO,C55	
57	G:G/S:P	43	83 SE	1.50	2	D. Fe/p. Mn	6.83	NO,NO,C55	
58	G/S:G:P	48	84 NW	4.76	2	D. Fe	1.60	NO,B	B AT G/P
59	G	51	51 NW	0.20	9	D. Fe	1.37	A52,B	
60	S/P	9	34 SE	1.18	10	V.L. Fe	5.01	A58,B,C61	

61	S:P	240	66 NW	11.11	12	WEATHERED	5.92	C60,B,NO	DIRTNON FRACTURE
62	S/G	128	65 SW	0.05	12	L. Fe	2.73	B,NO	
63	G	2	54 SE	NO	5	NO	3.64	NO,A62	A AT G/S
64	G	2	54 SE	0.63	4	M. Fe	4.10	B,B	B AT G/S
65	G,G/S	90	12 S	0.08	9	M. Fe	3.88	B,NO	
66A	G	13	53 SE	NO	NO	D. Fe	3.64	NO,NO	FRACTUE SURFACE CURVES
66B	G,G/S	2	41 SE	NO	NO	D. Fe	8.88	NO,NO	
67	G	11	34 SE	NO	14	M. Fe/Mn	3.64	B	SS 80 SE, THRUST
68	G,G/S	85	32 SE	NO	8	M. Fe/MN	2.73	B,NO	
69	S:G	348	74 NE	NO	8	D. Fe/Mn	4.10	NO,NO	
70	G,G/S:P	190	45 NW	NO	NO	M. Fe	3.42	B,A68	
71	G	20	50 SE	1.51	11	D. Fe	11.16	B,NO	
72	G/S:S	75	33 SE	0.63	4	D. Fe	8.88	B, B	
73	G:P	80	18 SE	0.55	3	D. Fe	18.66	C79,81,84,NO,A (AT FAULT)	WEATHERED RIND UP TO 13 cm
74	S:G	94	24 NW	NO	NO	D. Fe	9.79	A79, B	
75	S:G	45	36 SE	NO	NO	M. Fe	5.24	A74, B	
76	G	23	52 SE	NO	7	M. Fe	2.51	B,IN82,NO	
77	G	351	45 NE	NO	NO	D. Fe/Mn	2.28	NO, NO	
78	G	30	49 SE	NO	NO	D. Fe	2.28	A77,NO	
79	P	16	36 SE	2.25	5	p. D. Fe/Mn	12.74	A (AT FAULT),NO,C73,82,83	
80	G,G/S	32	44 SE	0.63	5	V.p.L Fe	4.10	A81,NO	
81	G:S:G/S	280	63 NE	2.63	4	p. L Fe	2.06	B,NO	
82	G:P:G	265	64 NW	NO	NO	D. Fe	5.24	C79,C75,IN76,B,IN83	
83	G:P:G/S:S	212	24 NW	NO	6	D. Fe	6.37	A75,C84,C79,IN82,A (AT FAULT)	
84	G	18	65 SE	0.35	1	Mn/p. D Fe	3.64	B,C83,NO,C73	
85	G:P:S	70	25 SE	NO	NO	M. Fe	5.24	B,B	
86	G	35	52 SE	0.40	1	L. Fe	2.06	A85,B	
87	G	25	45 SE	0.40	5	V.L. Fe	3.19	B, B	
88	G	40	47 SE	0.73	6	V.L. Fe	3.88	B,NO	
88A	G:S:G	45	77 NW	NO	NO	M. Fe, Mn	1.51	B,B	
89	G:P	41	72 SE	7.94	9	M. Fe	1.37	A90,NO	
90	G:P	0	0	3.61	8	L. Fe	4.33	B,NO	
91	S	189	66 NW	2.03	4	D. Fe	2.28	B, B	B AT S:G
92	P:G	35	83 SE	NO	NO	WEATHERED	1.37	B, B	
93	G	40	76 SE	1.18	9	D. Mn	1.60	B,NO	
94	S	213	O5 NW	NO	NO	M. Fe	2.51	B, B	
95	S	330	54 SW	<0.05	8	V.L. Fe	2.06	B,B	
96	S	200	14 NW	NO	NO	M. Fe	5.01	A97, B	
97	S	44	69 SE	0.13	5	V.D. Fe/Mn	4.79	NO,NO	
98	S	132	19 SW	0.55	12	V. L. Fe	3.64	A99, B	
99	S/G	310	50 NE	0.55	NO	WEATHERED	1.82	A100, B	
100	S:G	39	54 SE	1.13	8	M. -D. Fe	3.88	B,NO	
101	S	110	59 SW	NO	NO	M. Fe	1.39	C102,NO,B	
102	S	111	74 SW	1.68	7	D. Fe	2.28	C104,B,C101,NO	EQUALS 66 ON TOP
103	S	0	19 W	NO	NO	M. Fe	4.79	IN104,B,A102	

104	S	20	85 SE	NO	6	D. Fe	4.10	B,C102,NO	
105	S	167	44 SW	0.55	9	M. -D. Fe	14.80	C109,IN112,B	B AT S/G
106	S	111	73 SW	NO	8	L. Fe	5.46	C107,B,NO	
107	S	19	59 SE	NO	8	D. Fe	4.79	NO,NO,C106	
108	S	58	63 SE	NO	NO	D. Fe	2.73	B,NO	
109	S	103	41 SW	2.13	7	WEATHERED	1.60	B,C105,NO	
110	S	125	62 SW	0.91	4	V. L. STAINING	4.10	B,B	
111	S	124	58 SW	0.63	9	M. -D. Fe	1.60	A110,NO	
112	S	45	48 SE	12.70	6	D. Fe/Mn	5.46	B,NO,IN105	
113	S	144	45 SW	0.15	12	D. Fe	3.42	B, B	
114	S	25	32 SE	1.18	14	M. Fe	2.97	B,NO	
115	S	200	79 NW	0.05	5	WEATHERED	2.73	B,NO	
116	S	126	51 SW	0.33	8	M. -D. Fe	1.82	B, B	
117	G:S	15	53 SE	0.90	3	L. -M. Fe	2.51	B,NO	
118	G	26	84 SE	2.03	2	L. Fe	4.33	C119,A122,NO,B	EQUALS 65 ON TOP
119	S:G,G/S	54	53 SE	1.18	7	L. -M. Fe	2.06	C120,C118,NO,NO,IN124	EQUALS 46 ON TOP
120	G:G/S	310	71 NE	0.20	12	L. Fe	4.10	A121,B,C119	
121	G	50	29 SE	1.51	6	L. Fe	2.51	B,NO	
122	G	342	80 NE	0.10	4	L. -M. Fe	1.37	A121, A123	
123	G	23	56 SE	1.50	2	p. D. Fe	2.06	NO, NO	
124	G	25	58 SE	0.10	3	p. D. Fe	3.88	B,NO,IN119	EQUALS 47 ON TOP
125	G	5	85 SE	NO	4	p. D. Fe	2.28	A123,C126,NO	
126	G	33	39 SE	0.63	4	p. M. Fe	3.88	NO,NO,C125	EQUALS 48 ON TOP
127	G	60	56 SE	1.25	3	p. D. Fe	1.82	IN128,A132,B	EQUALS 49 ON TOP
128	G:S	310	64 SE	NO	3	M. Fe	1.82	IN131,IN127,B,NO	
129	G/S:G	281	30 NE	1.18	9	L. Fe	3.19	NO,NO,C135	
130	G	24	42 SE	0.63	1	D. Mn	2.08	NO, NO	
131	G:G/S	9	90	0.98	2	D. Fe	2.51	A130,IN128,NO	
132	G	45	35 SE	1.46	2	M. -D. Fe	3.64	IN128,B,NO	
133	G	350	90	0.63	3	p. M. Fe	1.15	B,A130,NO	
134	G	354	82 SW	0.63	2	p. M. Fe	1.60	B,NO	
135	G:S	34	35 SE	3.51	4	L. Fe	7.52	B,C129,C137,NO	
136	G:S	66	26 SE	< 0.05	8	D. Fe/Mn	3.64	B,NO	
137	G	168	55 SW	0.98	7	M. -D. Fe	5.01	B,B,C135	
138	P/S,P/G	68	48 SE	0.08	10	L. Fe	4.87	B,NO	
139	P/S	41	61 SE	0.35	6	L. Fe	3.63	B,NO	
140	S	185	40 NW	2.13	10	D. Fe	5.24	A139, B	WAVEY
141	S:G,S/P	44	56 SE	7.94	10	L. Fe	5.92	A140,IN142,IN148,NO,IN145	EQUALS 53 ON TOP
142	S	216	39 NW	9.53	9	M. Fe	4.10	B,IN141,NO	
143	S:G	200	27 NW	12.70	9	p. L. Fe	2.73	NO, NO	
144	S	185	36 NW	12.70	8	D. Fe	1.82	A147, B	
145	S/G:S	215	24 NW	12.70	10	p. D. Fe	4.10	IN141,B,NO	
146	S:S/P	195	36 NW	6.35	10	D. Fe	1.82	A147, B	
147	P/S:P/G	55	49 SE	7.88	9	D. Fe	6.83	IN149,NO,NO	
148	S:S/G	210	30 NW	NO	NO	M. Fe	3.19	B,IN141,NO	

149	G:S:P	265	31 NW	7.94	6	L. Fe	7.97	IN147,C152,IN151	
150	G:G/P	35	46 SE	12.70	10	D. Fe	2.28	NO,B	
151	G	180	72 W	1.90	9	p. Mn/M. Fe	3.19	B,IN149,NO	
152	G	3	52 SE	1.50	7	V. p. D. Fe	3.19	A151,C149,NO	
153	S	192	26 NW	0.40	9	M. Fe	3.64	B,IN155,NO	
154	S/G	158	58 SW	NO	NO	M. Fe	3.88	A156, B	
155	S	145	70 SW	NO	10	M. Fe	2.51	IN153,B,NO	
156	S:G,P/S	214	78 NW	< 0.50	7	D. Fe	5.70	NO,NO,IN159	EQUALS 54 ON TOP
157	S:G,P/G	37	32 SE	9.52	8	V.L. Fe	10.92	NO,B,C56 ON SIDE	EQUALS 55 ON TOP
158	S	151	87 NE	0.63	8	D. Fe	5.01	NO,NO,IN159	EQUALS 64 ON TOP
159	S:S/G	180	60 W	NO	NO	D. Fe	6.83	A157,IN156,IN158	
160	S:S/G	180	45 W	1.18	8	D. Fe	9.34	B,B	
161	S/G	202	59 NW	NO	6	D. Fe	5.70	A162, B	
162	S:G:P	35	78 SE	0.05	6	V. p. D. Fe	5.01	C165,B,NO,C55 ON TOP	EQUALS 56 ON TOP
163	G	175	55 SW	< 0.05	6	M. Fe	2.73	B,B	
164	G	180	48 W	< 0.05	6	M. Fe	1.82	B,B	
165	S	198	66 NW	0.40	9	D. Fe	4.55	C162,B,NO	
FRACTURE CHARACTERISTICS MEASURED IN					**8/8/94**				
SUBVERTICAL ROAD CUT ALONG INTERSTATE 93,									
WEST SIDE OF SOUTHBOUND LANE,0.25 MILES NORTH OF MIRROR LAKE RD.,									
MIRROR LAKE AREA, GRAFTON COUNTY, NEW HAMPSHIRE									
					Fracture				
	Rock Type(s)				**Roughness**	**Staining on**	**Trace**		
Fracture	**cut by**			**Aperture**	**Coefficient**	**Fracture**	**Length**		**Other**
No.	**Fracture**	**Strike**	**Dip**	**(mm)**	**(FRC)**	**Surface**	**(m)**	**Termination(s)**	**Characteristics**
1	G/S:P	315	81 NE	0.28	8	p.M. Fe	1.70	B,NO,C1B	
1A	P	346	54 NE	0.50	5	L. Fe	0.60	B,NO	SS 75 SW
1B	P:S	34	49 SE	0.05	8	M. Fe	1.00	B,B,C1	
2	S	60	60 SE	0.63	8	p.D. Fe	1.60	NO,B	B AT S:P, IN FOLIATION PLANE
3	S:P	210	48 NW	1.18	14	M. Fe	1.40	B,A2	
4	S:P	202	15 NW	0.50	8	M. Fe	1.20	B,A2	
5	S	36	87 SE	0.05	7	p.M. Fe	1.20	NO,B	
6	G	230	78 NW	NO	4	L. Fe	1.70	NO,B	
7	S	225	89 NW	1.18	3	p.L. Fe	1.90	NO,B	
7A	S	332	85 NW	NO	NO	M. Fe	2.10	NO,NO	EST
8	S/P	36	14 SE	0.10	8	D. Fe	3.50	B,NO	
9									NO FRACTURE
10	S	228	10 NW	NO	NO	L. Fe	4.00	B,B	EST
11	S	232	16 NW	NO	NO	D. Fe	3.00	B,B	EST
12	S	190	18 NW	NO	NO	D. Fe	3.20	B,B	
13	S	220	77 NW	2.13	8	p.D. Fe	7.00	NO,NO	
14	S	181	17 NW	NO	NO	M. Fe	3.20	B,A13	EST
15	S	36	90.00	2.53	9	p. Mn	2.50	B,A16	

16	S:P	169	20 SW	0.75	10	M-D. Fe	3.80	B,B	
17	S	53	86 SE	NO	NO	M-D. Fe	1.50	B,NO,C18,C19	EST
18	S	166	25 SW	NO	NO	D. Fe	6.50	NO,NO,C17	EST
19	S	170	12 SW	NO	NO	D-M. Fe	12.40	B,NO,C17	EST
20	S	174	12 SW	NO	NO	L. Fe	2.30	B,B	EST
21	S	160	8 SW	NO	NO	L. Fe	3.40	B, B	EST
22	S:P	150	10 SW	NO	NO	L. Fe	3.00	B,B	EST
23	S	175	10 SW	NO	NO	D. Fe	1.70	B,A25,C24	EST
24	S:P	233	44 NW	0.63	9	L-M. Fe	9.30	NO,NO,C23	
25	S:P	215	56 NW	0.63	7	L. Fe	9.50	NO,NO	
26	S	184	18 NW	NO	NO	L-M. Fe	2.50	B,B	EST
27	S	145	25 SW	NO	NO	D. Fe	2.30	B,B	EST
28	S	40	88 SE	0.08	3	p.D. Fe	1.20	B, A27	
29	S	223	46 NW	0.05	4	p.L-M. Fe	4.10	NO,B	
30	G:S	97	26 SW	0.50	17	L. Fe,Mn	10.20	NO,NO	
31	S	165	35 SW	NO	NO	L. Fe	4.80	B,B,A31	BOTH B AT S:G, EST
32	S	99	22 SW	NO	NO	M-D. Fe	3.00	NO,B	B AT S:G, EST
33	G:S	185	20 NW	NO	NO	L. Fe	1.10	B,B	BOTH B AT S:G, EST
34	S:G	175	37 SW	1.18	5	M-D. Fe	4.80	B,B	
35	S/G	255	25 NW	0.55	8	D. Fe	2.20	B,B	
36	S:G	175	9 SW	0.40	9	D. Fe	4.80	B,B	
36A	G/S:G	276	15 NE	0.08	NO	D. Fe	1.40	B.B	B AT S:G
37	S:G	170	34 SW	0.13	9	L. Fe	1.40	B,B	
38	S:G	181	5 NW	NO	NO	D. Fe	3.70	B,A(UNMAPPED FRAC.)	EST
39	G	184	38 NW	NO	NO	L-M. Fe	2.50	B,B	B AT G:S, EST
40	S:G	160	45 SW	NO	NO	L-M. Fe	2.60	B,B	B AT S:G, EST
41	S:G	186	15 NW	0.63	NO	L. Fe	2.40	B,B	EST
42	S:G	186	22 NW	0.40	5	M. Fe	2.60	B,A43	EST
43	G	195	46 NW	NO	9	L-M. Fe	0.90	B,B	EST
44	S	170	28 SW	0.15	6	L. Fe	1.40	B,B	
45	S	175	16 SW	0.30	10	D. Fe	2.00	B,B	
46	S:G	227	80 NW	0.35	12	M-D. Fe	4.00	NO,NO	FRACTURE IS EDGE OF ZONE 5-13 CM WIDE, COULD BE
									SMALL FAULT BUT NO SS. GREENISH/ORANGE
									HYDROTHERMALLY ALTERED
47	S	54	85 SE	0.08	5	D. Fe	2.50	NO,B	
48	S	54	82 SE	0.63	7	p.D. Fe	2.40	NO,B,C50	
49	G/S	97	87 SW	0.40	5	p.M-D. Fe	3.60	B,NO,C50,C51,C52	
50	S:G	340	12 NE	4.00	8	M-D. Fe	1.30	B,A52,C48,C49	
51	S	274	11 NE	2.13	9	L. Fe	2.20	NO,A52,C49	
52	S:G	139	12 SW	1.18	10	L. Fe	6.50	B,B,C49	
53	S:G	162	12 SW	0.13	8	M-D. Fe	3.50	NO,A52	
54	S:G	175	18 SW	0.63	7	D. Fe	3.80	B,B	
55	G	170	26 SW	NO	NO	L. Fe	0.80	B,B	EST
56	G	175	20 SW	NO	NO	L. Fe	2.00	B,B	EST. B AT G:S
57	S	168	10 SW	0.55	9	p.M-D. Fe	1.30	B,NO	

58	S:G:P	162	17 SW	0.10	8	p.D. Fe	2.20	B,B	
59	G	185	17 NW	0.30	8	L. Fe	0.90	B,B	B AT G:S, B AT G:P
60	S:G:P	110	18 SW	0.15	9	p. Fe, Mn	4.50	B,NO	
61	S:G:P	194	15 NW	1.18	6	M-D. Fe	3.50	NO,NO	
62	G:P	14	28 SE	0.13	5	D. Fe	1.50	NO,NO,IN66	
63	G	243	16 NW	0.05	NO	D. Fe	1.60	B,A64	B AT G:P
64	G	86	51 SE	0.05	4	M-D. Fe	1.10	B,A(UNMAPPED FRAC.)	
65	G:P	200	15 NW	0.08	NO	M-D. Fe	1.80	A64,NO,IN66	
66	G:P	222	88 NW	3.20	3	p.L. Fe, Mn	2.00	B,NO,IN65,IN62	

| | | |

| | | |

| | | |

| | | |

ES	

| | | |

| | | |

ME-
R

| | | |

| | | |

VED FROM TOP	
FRACTURE	
TING FRACTURE	
G MIDDLE	

| | | |

| | | |

| | | |

| | | |

| | | |

| | | |