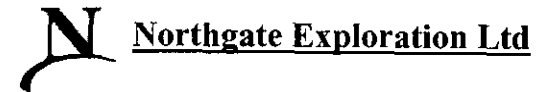


Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-14**

Northing: 15871.4 **Total Depth:** 419.7m
Easting: 10062.0 **Azimuth:** 0°
Elevation: 1692.2 **Dip:** -90°

Geologist: E. Ramsay
Logged Date: 7/2/2002

Survey Depth	Azimuth	Dip	Comments:
0 m	0 °	-90 °	
100 m	0 °	-90 °	
200 m	349 °	-80 °	Magnetic
300 m	25 °	-82 °	Mechanical
400 m	8 °	-82 °	Magnetic

GEOLOGICAL SURVEY BRANCH

27,083

Front Page:

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-14**

From (m)	To (m)	Rock Type	Comments
0	9.14	CASING	HW casing - no recovery.
9.14	37.19	ANDESITE POLYLITHIC TUFF	Broken core of andesite, probably fragmental volcanic rock fine grained aphyric to porphyritic in places (porphyry fragments?) dark greenish gray to greenish black, except for the top 2 meters which are stained by limonite from oxidation of magnetite. Fine grained magnetite in dissemination, in sub centimetric aggregates and veinlets. <i>Takla Group volcanics</i>
37.19	89	QUARTZ MONZONITE	Medium greenish gray, medium grained phamentic intermediate intrusive rock almost homgranular (slightly porphyritic) showing about 10% anhedral quartz, 25-30% partially chloritized biotite books and 60-65% white to greenish white, subhedral to andedral feldspar of undetermined composition (probably mixed). Quartz monzonite.
89	92.05	LOST CORE	Lost core - no recovery
92.05	252.97	BASALT	Porphyritic basalt showing 3-5% subhedral to euhedral phenocrysts of pyroxene (black, 1-5 mm), lightly chloritized in an aphanitic grained matrix, common calcite veinlets. 1-3% Py diss.
252.97	256	QUARTZ MONZONITE	Quartz monzonite porphyry showing 55% more or less hematite-stained subhedral (greenish grey to orange) to euhedral millimetric (1-5m) grains in a fine to medium grained phaneriteic matrix of black biotite and quartz. Rock shows traces of cpy in the matrix and traces of pyrite in silica-fillid fractures. Also hairline cpy-filled fractures.
256	257	BASALT	Brecciated basalt w/ magnetite, silica +/-cpy, pink anhydrite+ gypsum fracture filling
257	259.9	QUARTZ MONZONITE	Same as 254.97-256.00m qtz-monzonite porphyry dyke
259.9	261.25	BASALT	Same as 256.00m-257.00m
261.25	262.82	QUARTZ MONZONITE	Irregular qtz-monzonite dyke, grossly sub-parallel to C.A Interval is 25% basalt
262.82	264.53	BASALT	
264.53	265.29	QUARTZ MONZONITE	

Hole Number:

KN-02-14

From (m)	To (m)	Rock Type	Comments
265.29	269.7	BASALT	
269.7	271.04	QUARTZ MONZONITE	
271.04	283.15	BASALT	
283.15	419.71	QUARTZ MONZONITE	Start of a thick qtz-monzonite porphyry dyke/sill rock shows a stockwork of orange stained anhydrite locally re-hydrated to gypsum causing in-situ brecciation. Rock is nevertheless still competent, locally showing insipient silicification. Rock is stained varying shades of orange but generally weakly altered, showing well-preserved primary porphyritic texture.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-14

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	9.14	CASING							
	0.00	9.14				HW casing - no recovery.	14	-2	-2
9.14	37.19	ANDESITE POLYLITHIC TUFF							
	9.14	11.15 Coarse-medium-grained medium grey fragmental sericitic propylitic	2.0	3	208	Broken core of andesite, probably fragmental volcanic rock fine grained aphyric to porphyritic in places (porphyry fragments?) dark greenish gray to greenish black, except for the top 2 meters which are stained by limonite from oxidation of magnetite. Fine grained magnetite in dissemination, in sub centimetric aggregates and veinlets. Takla Group volcanics	107515	0.094	0.329
	11.15	12.80 Coarse-medium-grained dark grey fragmental propylitic	1.0	2	60		107516	0.233	0.243
	12.80	14.30	1.0	2	2		107517	0.17	0.196
	14.30	15.85	2.0	2	0		107518	0.313	0.31
	15.85	17.35	2.0	1	78		107519	0.225	0.156
	17.35	18.90	1.0	1	13		107520	0.242	0.177
	18.90	21.95	3.0	2	0	Long sample - recovery low - taken from run block to run block	107521	0.168	0.075
	21.95	24.99	3.0	1	0	Idem	107522	0.313	0.261
	24.99	28.04	1.0		1		107523	0.493	0.518
	28.04	31.09	1.0	1	24		107524	0.208	0.253
	31.09	34.14	1.0	1	31		107525	0.098	0.17
	34.14	37.19	1.0	1	25		107527	0.062	0.084
37.19	89	QUARTZ MONZONITE							

Hole Number: KN-02-14

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
37.19	39.00	Medium-grained medium grey broken propylitic	0.1	0		Medium greenish gray, medium grained phanitic intermediate intrusive rock almost homogenous (slightly porphyritic) showing about 10% anhedral quartz, 25-30% partially chloritized biotite books and 60-65% white to greenish white, subhedral to anhedral feldspar of undetermined composition (probably mixed). Quartz monzonite.	107528	0.148	0.177
39.00	40.23		0.1	0			107529	0.208	0.273
40.23	43.28		0.1	0			107530	0.209	0.27
43.28	46.33		0.1	0			107531	0.236	0.294
46.33	49.38		1.0	1			107532	0.224	0.281
49.38	52.43		0.5	1			107533	0.155	0.227
52.43	55.47		0.1	0			107534	0.138	0.187
55.47	58.52		0.5	1	27	Idem - pink and white calcite veinlets appear, becoming gradually more abundant downhole	107535	0.2	0.28
58.52	61.57		2.0	1	16	Idem pyrite = qtz veinlets	107536	0.153	0.199
61.57	64.62		1.0	0			107537	0.194	0.587
64.62	67.67		0.1	1	16		107538	0.232	0.359
67.67	70.71		0.1	1			107539	0.197	0.305
70.71	73.76		0.5	0	5		107540	0.18	0.299
73.76	76.81		2.0	0			107541	0.161	0.256
76.81	79.86		0.1	1	16		107542	0.128	0.367
79.86	82.91		1.0	1	25		107543	0.111	0.257
82.91	89.00		0.5	1	15	Extremely long sample, less than 5% recovery, sample mostly sludge w/ pebbles	107544	0.081	0.141
89	92.05	LOST CORE							
89.00	92.05					Lost core - no recovery	-14		
92.05	252.97	BASALT							
92.05	94.00	Fine-medium-grained black porphyritic propylitic	1.0	10		Porphyritic basalt showing 3-5% subhedral to euhedral phenocrysts of pyroxene (black, 1-5 mm), lightly chloritized in an aphanitic grained matrix, common calcite veinlets. 1-3% Py diss.	107545	0.212	0.436
94.00	96.00		3.0	42		Anhydrite + pyrite veinlets (gypsum)	107546	0.101	0.182

Hole Number: KN-02-14

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
96.00	98.00	Fine-medium-grained black porphyritic propylitic	3.0		157		107547	0.117	0.227	
98.00	100.00		2.0	2	40		107548	0.128	0.238	
100.00	102.00		2.0	1	10	Change from HQ to NQ core @100.58m	107549	0.103	0.192	
102.00	104.00		1.0	0.1	0	51	107550	0.239	0.582	
104.00	106.00		2.0	0	32		107551	0.133	0.233	
106.00	108.00		2.0	0	33		107553	0.13	0.235	
108.00	110.00		2.0	0.5	1	61	107554	0.142	0.202	
110.00	112.00		1.0	0.1	1	59	107555	0.054	0.133	
112.00	114.00		1.0	0.1	0	31	107556	0.11	0.194	
114.00	116.00		0.5	1	46		107557	0.085	0.183	
116.00	118.00		1.0	0	24	Minor porphyry dyke at 200 to c.a near 117.50 - 118.20m	107558	0.085	0.137	
118.00	120.00		0.5		47		107559	0.11	0.277	
120.00	122.00		1.0	0.1	2		107560	0.099	0.197	
122.00	124.00		0.5		6		107561	0.188	0.479	
124.00	126.00		0.5	0.1	5	Minor porphyry dyke at 200 to c.a near 124.35 - 125.35m	107562	0.209	0.455	
126.00	128.00	Fine-medium-grained black flow brecciated propylitic	1.0	0.1	1	19	Flow breccia textures	107563	0.101	0.251
128.00	130.00		1.0	0.5	1	22	Flow breccia textures w/ minor cpy in qtz veinlets	107564	0.151	0.334
130.00	132.00		0.1	0.5	1	12		107565	0.197	0.35
132.00	134.00		1.0	0.1	2	56		107566	0.142	0.251
134.00	136.00		0.5		8		107567	0.094	0.205	
136.00	138.00		0.5	1	19		107568	0.112	0.222	
138.00	140.00		0.5	1	15		107569	0.093	0.19	
140.00	142.00		1.0	0.5	3	164		107570	0.147	0.262
142.00	144.00		0.5	0.1	1	13		107571	0.115	0.19
144.00	146.00	Fine-medium-grained black propylitic	0.1	0.1	1	17		107572	0.101	0.238
146.00	148.00		0.1	0.1	1	19		107573	0.052	0.145
148.00	150.00		0.1	1	17		107574	0.068	0.16	

Hole Number: KN-02-14

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
150.00	152.00	Fine-medium-grained black flow brecciated propylitic	0.1 0.1	8			107575	0.315	0.485
152.00	154.00		1.0 0.5	2 50			107576	0.329	0.371
154.00	156.00		1.0 0.5	2			107577	0.216	0.283
156.00	158.00		0.5	9			107579	0.128	0.154
158.00	160.00	Fine-medium-grained dark grey flow brecciated propylitic	0.5 0.1	2 60			107580	0.172	0.269
160.00	162.00		0.1	2 127			107581	0.101	0.203
162.00	164.00		0.1	2 58			107582	0.224	0.426
164.00	166.00		1.0 0.1	1 14			107583	0.22	0.496
166.00	168.00		0.5	2 45			107584	0.142	0.372
168.00	170.00		0.1 0.1	3 46			107585	0.147	0.27
170.00	172.00		0.1	1 22			107586	0.163	0.27
172.00	174.00		0.1	4 50		Hydratation of anhydrite veinlets into gypsum is causing core fracturation @ low angle to c.a.	107587	0.112	0.225
174.00	176.00		0.1	1 7			107588	0.11	0.223
176.00	178.00		1.0 0.1	3 53 PVN	0 2	Anhydrite + pyrite vein @ low angle to c.a. near 177.00m	107589	0.285	0.559
178.00	180.00		1.0 0.5	2 37 PVN	50 2	Silica + pyrite + minor cpy vein @ 50o to c.a. near 179.80m	107590	0.314	0.567
180.00	182.00		0.1 0.1	2 64			107591	0.123	0.206
182.00	184.00		0.1 0.5	2 50		Irregular silica + cpy vein @ 183.90m	107592	0.156	0.31
184.00	186.00	Fine-medium-grained dark grey in-situ brecciated propylitic	2.0 0.1	1 37		semi-manive pyrite w/ magnetite + silica selvages. Brecciation caused by multi- phased fracturing with silica and enhydrite/ gypsum filling	107593	0.091	0.941
186.00	188.00		0.1	1 64		Brecciation with silica and anhydrite/ gypsum filling continues beyond this point	107594	0.161	0.302
188.00	190.00		0.5 0.1	1 31			107595	0.127	0.273
190.00	192.00	Fine-medium-grained dark grey in-situ brecciated propylitic silicic	2.0 0.5	3 158 PVN	60 2	Massive sulfide (py+cpy) @60o to c.a. near 190.70m; local silicification near 191.10m	107596	0.196	0.368
192.00	194.00		0.1 0.5	3 97		Silica + magnetite alteration near 192.20 -192.50m	107597	0.111	0.247
194.00	196.00	Fine-medium-grained dark grey in-situ brecciated propylitic	0.5 0.1	3 76		Magnetite veinlets are common with centimetric irregular masses common beyond this point	107598	0.135	0.3
196.00	198.00		0.1	3 112			107599	0.112	0.23

Hole Number: KN-02-14

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
198.00	200.00	Fine-medium-grained dark grey in-situ brecciated propylitic	0.1	3	21		107600	0.137	0.246
200.00	202.00		0.1	1	94		107601	0.138	0.3
202.00	204.00		0.5	0.5	1	12	107602	0.222	0.269
204.00	206.00		0.1	0.1	1	18	107603	0.112	0.213
206.00	208.00		1.0	0.1	1	20	107605	0.341	0.587
208.00	210.00		0.5	0.1	2	33	107606	0.224	0.454
210.00	212.00		0.5	1	8		107607	0.261	0.787
212.00	214.00		0.1	1	16		107608	0.094	0.178
214.00	216.00		0.1	2	31		107609	0.111	0.258
216.00	218.00		0.1	1	18		107610	0.207	0.462
218.00	220.00		0.1	1	30		107611	0.111	0.219
220.00	222.00		0.5	3	11		107612	0.094	0.167
222.00	224.00		0.5	3	4		107613	0.117	0.226
224.00	226.00		0.1	1	14		107614	0.238	0.416
226.00	228.00		0.1	1	12	FLT 20 0 Narrow gougey fault @ 20o to c.a.	107615	0.143	0.254
228.00	230.00		0.1	0	3		107616	0.099	0.147
230.00	232.00		0.1	0	10		107617	0.159	0.289
232.00	234.00		0.1	2	50		107618	0.14	0.265
234.00	236.00		0.1	3	3		107619	0.16	0.261
236.00	238.00		0.1	1	17		107620	0.141	0.266
238.00	240.00		0.1	2	92		107621	0.141	0.209
240.00	242.00		0.1	1	39		107622	0.221	0.453
242.00	244.00		0.1	0.1	2	46	107623	0.12	0.253
244.00	246.00		0.5	2	35		107624	0.22	0.392
246.00	248.00		0.5	1	13		107625	0.161	0.292
248.00	250.00		0.5	0.1	1	11	107626	0.216	0.454
250.00	252.00		1.0	2	54		107627	0.159	0.365
252.00	252.97		0.1	0.1	0	3	107628	0.231	0.601

Hole Number: KN-02-14

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
252.97	256	QUARTZ MONZONITE							
252.97	254.97	Medium-grained orange grey porphyritic propylitic	0.1	0.1	1	33	107629	0.143	0.29
254.97	256.00		0.1		1	SZN 70 0	107631	0.079	0.182
256	257	BASALT							
256.00	257.00	Fine-grained dark grey in-situ brecciated propylitic	0.1	0.5	2	14	107632	0.212	0.384
257	259.9	QUARTZ MONZONITE							
257.00	258.17	Medium-grained orange grey porphyritic propylitic	0.1			4	107633	0.092	0.188
258.17	259.90		0.1	0.1		9	107634	0.226	0.613
259.9	261.25	BASALT							
259.90	261.25	Fine-grained dark grey in-situ brecciated propylitic	0.5	0.1		48	107635	0.23	0.452
261.25	262.82	QUARTZ MONZONITE							
261.25	262.82	Medium-grained orange grey porphyritic propylitic	0.1	0.1	3	5	107636	0.174	0.309
262.82	264.53	BASALT							
262.82	264.53	Fine-grained dark grey in-situ brecciated propylitic	0.5	0.1	1	10	107637	0.22	0.488
264.53	265.29	QUARTZ MONZONITE							
264.53	265.29	Medium-grained orange grey porphyritic propylitic	1.0	0.1	0	2	107638	0.486	0.577
265.29	269.7	BASALT							
265.29	267.00	Fine-grained dark grey in-situ brecciated propylitic	0.1	0.1	3	10	107639	0.28	0.354
267.00	269.00		0.1	0.1	3	23	107640	0.159	0.322

Hole Number: KN-02-14

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
269.00	269.70	Fine-grained dark grey in-situ brecciated propylitic	0.1 0.1	3	52		107641	0.092	0.147
269.7	271.04	QUARTZ MONZONITE							
269.70	271.04	Medium-grained orange grey porphyritic propylitic	0.1	0	40		107642	0.171	0.249
271.04	283.15	BASALT							
271.04	273.00	Fine-grained dark grey flow brecciated propylitic	0.1 0.1	1	28		107643	0.151	0.307
273.00	275.00	Fine-grained dark grey in-situ brecciated propylitic	0.5 0.5	2	69		107644	0.154	0.224
275.00	277.00		0.1	3	28		107645	0.127	0.255
277.00	279.00		0.5 0.1	2	4		107646	0.101	0.209
279.00	281.00		0.5	3	159		107647	0.114	0.242
281.00	283.15		0.1	2	35		107648	0.134	0.271
283.15	419.71	QUARTZ MONZONITE							
283.15	285.00	Medium-grained orange grey porphyritic propylitic silicic	2.0	0	6	Start of a thick qtz-monzonite porphyry dyke/sill rock shows a stockwork of orange stained anhydrite locally re-hydrated to gypsum causing in-situ brecciation. Rock is nevertheless still competent, locally showing insipient silicification. Rock is stained varying shades of orange but generally weakly altered, showing well-preserved primary porphyritic texture.	107649	0.084	0.169
285.00	287.00		0.1	0	23		107650	0.083	0.195
287.00	289.00		0.1		17		107651	0.086	0.225
289.00	291.00				2		107652	0.113	0.308
291.00	293.00		0.1		8		107653	0.069	0.18
293.00	295.00	Medium-grained dark grey porphyritic propylitic silicic	0.1		0		107654	0.102	0.246
295.00	296.00	Medium-grained orange grey porphyritic propylitic silicic	0.1		1 QVN 25 20		107655	0.055	0.103
296.00	298.00	Medium-grained orange grey porphyritic propylitic	0.1	0	9		107657	0.022	0.043
298.00	300.00		0.1	0	4		107658	0.047	0.082
300.00	302.00		0.1	0	9		107659	0.048	0.088

Hole Number: KN-02-14

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
302.00	304.00	Medium-grained orange grey porphyritic propylitic	0.1	1	16		107660	0.065	0.124
304.00	306.00		0.1		12		107661	0.055	0.13
306.00	308.00		0.1		16		107662	0.027	0.069
308.00	310.00		0.1		12		107663	0.042	0.086
310.00	312.00		0.1	1	14		107664	0.023	0.049
312.00	314.00		0.5	0	16		107665	0.078	0.209
314.00	316.00		0.1	1	21		107666	0.036	0.105
316.00	318.00		0.1		3		107667	0.068	0.203
318.00	320.00		0.1	0	11		107668	0.049	0.119
320.00	322.00		0.1	0	17		107669	0.046	0.132
322.00	324.00		0.1		1		107670	0.101	0.274
324.00	326.00		0.1	0	9		107671	0.07	0.144
326.00	328.00		0.1	1	13		107672	0.048	0.152
328.00	330.00		0.5		6		107673	0.016	0.034
330.00	332.00		0.1		4		107674	0.069	0.142
332.00	334.00		0.1		4 QVN	10 Irregular shaped quartz vein with traces of pyrite	107675	0.076	0.137
334.00	336.00			1	22		107676	0.101	0.177
336.00	338.00		0.1	0	10		107677	0.045	0.092
338.00	340.00			0	19		107678	0.03	0.073
340.00	342.00				7		107679	0.022	0.054
342.00	344.00		0.1	0.1	0		107680	0.049	0.051
344.00	346.00		0.1		7		107681	0.053	0.093
346.00	348.00				11		107683	0.043	0.087
348.00	350.00		0.1		2		107684	0.061	0.127
350.00	352.00		0.1		8		107685	0.079	0.12
352.00	354.00		0.1	0	12		107686	0.034	0.051
354.00	356.00		0.1		8		107687	0.024	0.043
356.00	358.00			3	72		107688	0.061	0.084

Hole Number: KN-02-14

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
358.00	360.00	Medium-grained orange grey porphyritic propylitic	0.1	0	1		107689	0.063	0.09
360.00	362.00		0.1		0		107690	0.07	0.098
362.00	364.00		0.5		1		107691	0.084	0.147
364.00	366.00		0.5	0.1	0	17	107692	0.072	0.133
366.00	368.00		0.1		9		107693	0.112	0.187
368.00	370.00		0.1	0	12	QVN 45 5 10cm quartz vein @ 45o to C.A.	107694	0.118	0.197
370.00	372.00		0.1	0	13		107695	0.057	0.088
372.00	374.00			0	17		107696	0.054	0.091
374.00	376.00		0.1	0	16		107697	0.032	0.058
376.00	378.00		1.0		7		107698	0.096	0.153
378.00	380.00		0.1		6		107699	0.125	0.198
380.00	382.00		0.1	0	16		107700	0.082	0.138
382.00	384.00		0.1	1	26		107701	0.051	0.109
384.00	386.00		0.1		2		107702	0.083	0.132
386.00	388.00		0.1	1	18		107703	0.074	0.109
388.00	390.00		1.0	0	12		107704	0.113	0.159
390.00	392.00	Medium-grained dark grey porphyritic propylitic	1.0	1	24		107705	0.172	0.172
392.00	394.00	Medium-grained orange grey porphyritic propylitic silicic	0.1	1	9	Quartz veins w/ minor pyrite	107706	0.087	0.107
394.00	396.00		0.1	2	15		107707	0.179	0.214
396.00	398.00		0.1	3	40		107709	0.145	0.317
398.00	400.00		0.5	2	10		107710	0.133	0.177
400.00	402.00		0.5	1	42		107711	0.099	0.157
402.00	404.00		0.1	0	14		107712	0.162	0.26
404.00	406.00		0.1	0	15		107713	0.154	0.234
406.00	408.00		0.1	2	24		107714	0.117	0.193
408.00	410.00		0.1	2	14		107715	0.122	0.198
410.00	412.00		0.1	0	58		107716	0.12	0.211

Hole Number: KN-02-14

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
412.00	414.00	Medium-grained orange grey porphyritic propylitic silicic	0.1	0	9		107717	0.125	0.217
414.00	416.00	Medium-grained dark grey porphyritic propylitic silicic	0.1	3	57	Colour change to dark grey	107718	0.177	0.247
416.00	418.00	Medium-grained orange grey porphyritic propylitic silicic	0.1	3	52		107719	0.138	0.38
418.00	419.71		0.1	3	64	EOH @ 419.71m	107720	0.076	0.264
419.71		EOH							

Kemess North 2002 - Diamond Drill Log



Hole Number: KN-02-14B

Northing: 15871.4 **Total Depth:** 616.61m
Easting: 10062.0 **Azimuth:** 0°
Elevation: 1692.2 **Dip:** -90°

Geologist: E. Ramsay

Logged Date: 7/29/2002

Survey Depth	Azimuth	Dip	Comments:
505 m	0 °	-78 °	Magnetic
608 m	28 °	-85 °	

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-14B**

From (m)	To (m)	Rock Type	Comments
0	422.06	PREVIOUSLY DRILLED	Re-entry in hole KN-02-14. Lost core between 419.71m (E.O.H. KN-02-14) and 422.06m (start of hole KN-02-14B)
422.06	616.61	BASALT FLOW	Dark greenish gray, porphyritic basalt showing 1-20% subhedral to euhedral chloritized augite phenocrysts (1-5mm) in an aphanitic matrix. Rock is intensely fractured, showing abundant (5-7%) hairline zeolite and calcite filled fractures forming a true stockwork (i.e. showing no preferential orientation); dissolution of this calcite is causing core to break into pieces easily (low RQD). Traces of chalcopyrite are noted throughout, associated with pyrite and qtz-fluorite (purple) veins and veinlets.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-14B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm		
0	422.06	PREVIOUSLY DRILLED									
	0.00	422.06				Re-entry in hole KN-02-14. Lost core between 419.71m (E.O.H. KN-02-14) and 422.06m (start of hole KN-02-14B)	14B				
422.06	616.61	BASALT FLOW									
422.06	424.00	Fine-medium-grained green-grey porphyritic chloritic	0.1	50	FVN 70	1	Dark greenish gray, porphyritic basalt showing 1-20% subhedral to euhedral chloritized augite phenocrysts (1-5mm) in an aphanitic matrix. Rock is intensely fractured, showing abundant (5-7%) hairline zeolite and calcite filled fractures forming a true stockwork (i.e. showing no preferential orientation); dissolution of this calcite is causing core to break into pieces easily (low RQD). Traces of chalcopyrite are noted throughout, associated with pyrite and qtz-fluorite (purple) veins and veinlets.	109505	0.132	0.334	
424.00	426.00		0.1	0.1	0	44	QVN 50	1	109506	0.097	0.265
426.00	428.00		0.1	0.1	0	61	FVN 45	1	109507	0.13	0.28
428.00	430.00		0.1	0.1	0	6			109508	0.1	0.234
430.00	432.00		0.5	0.1	0	35	FVN 3		109509	0.166	0.275
432.00	434.00		0.5	0.1	0	25			109510	0.189	0.459
434.00	436.00		0.1	0.1	0	2	SHR 45	3	109511	0.209	0.387
436.00	438.00		0.1	1	5				109512	0.083	0.08
438.00	440.00		0.5	0	3				109514	0.103	0.061
440.00	442.00		0.1		27	FVN 0			109515	0.11	0.256
442.00	444.00		5.0	0	9	PVN 5	4	Pyrite and qtz vein at low angle to c.a. near 441.00m	109516	0.122	0.043
444.00	446.00		0.5	0	9				109517	0.142	0.29
446.00	448.00		0.5	0	7				109518	0.095	0.101
448.00	450.00		0.5	0	8	FVN 0			109519	0.105	0.082
450.00	452.00		0.5	0.1	0	6	SHR 20	10	109520	0.121	0.19
452.00	454.00		1.0		3	FVN 70	1		109521	0.08	0.02
454.00	456.00		1.0		6	FVN 70	1		109522	0.149	0.17

Hole Number: KN-02-14B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
456.00	458.00	Fine-medium-grained green-grey porphyritic chloritic	1.5 0.1	1	13 PVN 30	1	109523	0.075	0.019
458.00	460.00		1.0	1	15 PVN 30	1 Pyrite and mt veinlets.	109524	0.062	0.025
460.00	462.00		0.5	1	18		109525	0.181	0.443
462.00	464.00		1.0	0	1		109526	0.288	0.439
464.00	466.00		1.0 0.1	0	1 FVN	0	109527	0.79	1.135
466.00	468.00	Fine-medium-grained dark grey porphyritic chloritic	2.0		0 SHR 5	40	109528	0.39	0.419
468.00	470.00	Fine-medium-grained green-grey porphyritic chloritic	1.0 0.1	1	13 FVN	0	109529	0.213	0.488
470.00	472.00		1.0	1	12 FVN 30	1	109530	0.179	0.392
472.00	474.00		2.0 0.1	2	20		109531	0.164	0.246
474.00	476.00		0.5	1	6		109532	0.109	0.077
476.00	478.00		1.0 0.1	1	12		109533	0.09	0.055
478.00	480.00		0.5 0.1	1	5 FVN 90	1	109534	0.086	0.037
480.00	482.00		1.0	1	34 SHR 20	2 Minor shear at 20 degrees to c.a. near 480.60m	109535	0.091	0.109
482.00	484.00		1.0		18		109536	0.08	0.102
484.00	486.00		1.0	0	18 FVN 30	2	109537	0.117	0.148
486.00	488.00		2.0 0.1	1	47 PVN 20	2	109538	0.174	0.218
488.00	490.00		0.5 0.1	0	22		109540	0.196	0.247
490.00	492.00		0.5 0.1	1	12 FVN	3	109541	0.26	0.364
492.00	494.00		0.5 0.1	0	8		109542	0.169	0.19
494.00	496.00		0.5 0.1	0	10		109543	0.156	0.221
496.00	498.00		0.5	0	7		109544	0.084	0.084
498.00	500.00		0.1	0	29		109545	0.092	0.153
500.00	502.00		0.1 0.1	0	39		109546	0.096	0.115
502.00	504.00		0.5 0.1	1	22 QVN 50	1 Qtz and py vein at 50 degrees to c.a.	109547	0.083	0.052
504.00	506.00		0.5	1	10		109548	0.144	0.197
506.00	508.00		1.0	0	8 FVN 45	1	109549	0.087	0.042
508.00	510.00		0.5	1	27		109550	0.071	0.053

Hole Number: KN-02-14B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
510.00	512.00	Fine-medium-grained green-grey porphyritic chloritic	0.1 0.1	1	41		109551	0.102	0.228
512.00	514.00		0.1	1	16		109552	0.134	0.202
514.00	516.00		0.1		1		109553	0.068	0.071
516.00	518.00		0.5	1	16		109554	0.167	0.207
518.00	520.00		0.5	1	84		109555	0.108	0.044
520.00	522.00		1.0 0.1	1	20		109556	0.084	0.117
522.00	524.00		1.0	1	36 FVN	1	109557	0.077	0.126
524.00	526.00	Fine-medium-grained green-grey amygdular chloritic	0.5 0.1	0	18		109558	0.098	0.166
526.00	528.00	Fine-medium-grained green-grey porphyritic chloritic	1.0	0	51		109559	0.056	0.042
528.00	530.00		1.0 0.1	0	25		109560	0.073	0.065
530.00	532.00		0.5	1	25		109561	0.061	0.064
532.00	534.00		0.5 0.1	1	5 FVN	65 1	109562	0.109	0.17
534.00	536.00		1.0 0.1	0	17 FVN	7	109563	0.135	0.143
536.00	538.00		1.0 0.1	0	13		109564	0.15	0.189
538.00	540.00		1.0	1	30		109566	0.095	0.094
540.00	542.00		2.0	1	14		109567	0.074	0.024
542.00	544.00	Fine-medium-grained green-grey amygdular chloritic	1.0	1	8		109568	0.091	0.102
544.00	546.00	Fine-medium-grained green-grey porphyritic chloritic	0.5	1	16 QVN	60 3 Qtz and py and mt vein at 60 degrees to c.a. near 545.5m	109569	0.096	0.182
546.00	548.00		2.0 0.1	1	14		109570	0.09	0.04
548.00	550.00		1.0 0.1	1	7		109571	0.099	0.094
550.00	552.00		1.0	1	12		109572	0.113	0.127
552.00	554.00		1.0 0.1	0	8 FVN	0 5 Fluorite vein with qtz margins and accessory pyrite and chalcopyrite. Sub parallel to c.a.	109573	0.152	0.269
554.00	556.00		1.0 0.1	0	8 FVN	0 10 Same vein continues, showing traces to 1% molybdenite. Petro sample taken 554.40-554.50m	109574	0.175	0.359
556.00	558.00		0.5	0	8		109575	0.26	0.378
558.00	560.00		1.0 0.1	0	6		109576	0.267	0.522

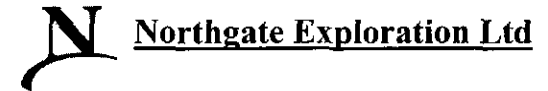
Hole Number: KN-02-14B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm		
560.00	562.00	Fine-medium-grained green-grey porphyritic chloritic	0.5	0	4 FVN 50	5	109577	0.11	0.107		
562.00	564.00		0.5	1	17		109578	0.151	0.283		
564.00	566.00		0.5	0.1	1	16	109579	0.153	0.516		
566.00	568.00		1.0	1	7		109580	0.132	0.38		
568.00	570.00		0.5	0	1		109581	0.058	0.039		
570.00	572.00		1.0	0	2		109582	0.088	0.053		
572.00	574.00		2.0	0	4		109583	0.07	0.066		
574.00	576.00		2.0	0	13		109584	0.07	0.055		
576.00	578.00	Fine-medium-grained dark grey porphyritic chloritic	1.0	0	2		109585	0.099	0.098		
578.00	580.00		2.0	1	1		109586	0.113	0.055		
580.00	582.00		2.0	0	3 FVN	6	Irregular shaped violet fluorite and py vein.	109587	0.151	0.293	
582.00	584.00		1.0	0	2 FVN	50	1	109588	0.093	0.05	
584.00	586.00		2.0	0	4 QVN	35	2	Qtz vein with faulted upper contact at 35 degrees to c.a. near 584.80m	109589	0.098	0.039
586.00	588.00							109590	0.089	0.067	
588.00	590.00	Fine-medium-grained green-grey porphyritic chloritic	1.0	0	5 AVN	1	Core shows vuggy dissolution cavities along fractures, after anhydrite.	109592	0.119	0.249	
590.00	592.00		0.5	0	2 AVN	45	3	White anhydrite vein near 590.50m, broken core with gouge (fault) along lower contact.	109593	0.133	0.199
592.00	594.00		0.5	0	2 QVN	30	2	Vuggy qtz and anhydrite vein at 30 degrees to c.a. near 592.25m and vuggy texture around fractures.	109594	0.092	0.059
594.00	596.00		0.5	0	1			109595	0.088	0.188	
596.00	598.00		0.1	0	2		Vuggy, irregular anhydrite vein.	109596	0.082	0.046	
598.00	600.00		0.5	0	0			109597	0.103	0.105	
600.00	602.00		0.1		2			109598	0.068	0.054	
602.00	604.00		0.5		5			109599	0.084	0.049	
604.00	606.00		0.1		5			109600	0.06	0.032	
606.00	608.00		0.5		8			109601	0.103	0.151	
608.00	610.00	Fine-medium-grained green-grey amygdular chloritic	2.0		9			109602	0.09	0.108	

Hole Number: KN-02-14B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
610.00	612.00	Fine-coarse grained green-grey fragmental chloritic	1.0		2 FVN 0 1	Rare isolated centimetric fragments, subrounded, polyolithic.	109603	0.085	0.056
612.00	614.00	Fine-medium-grained green-grey amygdular chloritic	1.0		20		109604	0.059	0.038
614.00	616.00	Fine-medium-grained green-grey porphyritic chloritic	0.5		10		109605	0.064	0.056
616.00	616.61		0.5		14		109606	0.078	0.064
616.61		EOH							

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-15**

Northing: 15904.2 **Total Depth:** 626.97m
Easting: 9960.29 **Azimuth:** 0°
Elevation: 1687.8 **Dip:** -90°

Geologist: E. Ramsay
Logged Date: 7/9/2002

Survey Depth	Azimuth	Dip	Comments:
0 m	0 °	-90 °	
250 m	6 °	-88 °	
450 m	323 °	-86 °	
550 m	64 °	-84 °	Magnetic
650 m	64 °	-86 °	Mechanical

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-15**

From (m)	To (m)	Rock Type	Comments
0	9.14	CASING	Casing - no recovery
9.14	15.85	ANDESITE POLYLITHIC TUFF	Dark gray volcanic possibly fragmental rock of basaltic composition. Core is broken (RQD=0) into pebble and cobble - sized fragments. Bladed feldspar porphyry fragments suggest the rock to be fragmental, possibly polyolithic. Recovery is low and samples were taken from run-block to run-block
15.85	55.47	BASALT FLOW	1% pyrite in hairline fractures and in anhydrite veinlets. Rock is still badly broken but homogeneous in texture and composition. Basaltic flow? Rock appears mostly chloritized with no visible biotite.
55.47	61.57	LOST CORE	Lost core - 2 runs with no recovery
61.57	64.62	BASALT FLOW	Same as 15.85 - 55.47m
64.62	76.81	LOST CORE	Core reduced from HQ to NQ @79.25m. Massive black basalt flows from here on
76.81	97.84	BASALT FLOW	Silica + Pyrite +/- Chalcopyrite stockwork/veinlets throughout interval 79.25 - 99.92m
97.84	98.18	QUARTZ MONZONITE	quartz monzonite dykelet @45o to c.a.
98.18	99.92	BASALT FLOW	
99.92	114.9	QUARTZ MONZONITE	Intermediate porphyritic intrusive rock, showing 60% greenish gray to orange stained feldspar phenocrysts (1-5m) in an aphanitic grained biotite + quartz matrix. Quartz monzonite. Relatively unaltered w/ well preserved primary textures. Euhedral to subhedral phenocrysts. 1-3% white to orange anhydrite +/- gypsum veins/stockwork.
114.9	115.5	BASALT	Basalt xenolith or mafic dykelet, sharp contacts @ 45o to c.a.
115.5	131.5	QUARTZ MONZONITE	
131.5	141.95	BASALT FLOW	Black aphyric basalt w/ centimetric dykelets of qtz- monzonite porphyry

Hole Number: **KN-02-15**

From (m)	To (m)	Rock Type	Comments
141.95	148.55	QUARTZ MONZONITE	Qtz- monzonite porphyry
148.55	149.5	BASALT FLOW	Aphyric black basalt
149.5	150.95	QUARTZ MONZONITE	
150.95	152.8	BASALT FLOW	Aphyric black basalt w/ centimetric dykelets of qtz- monzonite
152.8	155.15	QUARTZ MONZONITE	
155.15	157.1	BASALT FLOW	Aphyric black basalt w/ local silica flooding
157.1	205.9	QUARTZ MONZONITE	
205.9	218.75	BASALT FLOW	Centimetric qtz- monzonite porphyry dykelets in black, fine grained porphyritic basalt showing <2mm phenocrysts of plagioclase in aphanitic matrix. Magnetic throughout. Pink to white anhydrite veinlets are scarce, white quartz veins (with or without pyrite centers) are common. light violet anhydrite veins are locally noted.
218.75	226.25	QUARTZ MONZONITE	
226.25	227.9	BASALT	Intrusive breccia? Basalt xenoliths?
227.9	242.05	QUARTZ MONZONITE	
242.05	244.3	BASALT	Black magnetite- bearing basalt (xenoliths in qtz- monzonite?)
244.3	260.15	QUARTZ MONZONITE	
260.15	452.95	BASALT FLOW	Greenish black, aphyric to locally fine grained porphyric w/ feldspar phenocrysts (<1mm). Rare centimetric, angular porphyritic xenoliths (<1%). Common pick anhydrite veinlets
452.95	456.85	QUARTZ MONZONITE	Quartz- monzonite porphyry showing 50-60% euhedral to subhedral feldspar grains in a siliceous matrix and minor mafic phase.
456.85	470.9	BASALT FLOW	Greenish gray, locally porphyritic w/ 0-10% sub-hedral 0.5-2mm feldspar grains in an aphanic chloritized matrix (soft). Millimetric amygdules filled w/ anhydrite- zeolite. Core surface is rough/ vuggy possibly because fo anhydrite/gypsum dissolution. Basalt flows.

Hole Number: **KN-02-15**

From (m)	To (m)	Rock Type	Comments
470.9	473	BASALT	Shear zone showing fault breccia, chloritic gouge and strong fabric @450 to c.a. with anhydrite + zeolite veinlets
473	476.55	QUARTZ MONZONITE	Quartz- monzonite porphyry similar to 452.95 - 456.85m
476.55	518.85	BASALT FLOW	Greenish gray, basaltic oligolithic flow breccia with porphyritic basalt fragments, sub angular, clast supported, up to 5 cm in diameter
518.85	519.85	BASALT	strongly altered, in-situ brecciated basalt
519.85	539	BASALT FLOW	Greenish grey massive basalt with weak qtz- mt- py +/- cpy veining, wk incipient silicification OR possibly chloritized dacite (see next interval below)
539	605.9	DACITE FLOW	Locally porphyritic w/ euhedral to sub-hedral, medium-grained phenocrysts of almost pristine-looking proxene. No evidence of alteration beyond green color due to chlorite. One anhedral quartz eye noted near 563.90m. Rock is very hard, cannot be scratched w/ pocket knife but doesn't show the primary texture obliteration/ destruction you would expect if the rock was silicified. Rock therefore likely intermediate to felsic, probably dacite and not basalt
605.9	625	BASALT FLOW	Grayish green to greenish gray, aphanitic to locally weakly porphyritic (0-1% phenocrysts) basalt, showing visible epidote alteration (moderate)
625	626.97	DACITE FLOW	Petrographic sample taken @ 625.85 - 625.95m EOH.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-15

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	9.14	CASING							
	0.00	9.14				Casing - no recovery	15	-2	-2
9.14	15.85	ANDESITE POLYLITHIC TUFF							
	9.14	9.75 Coarse-medium-grained dark grey fragmental propylitic	0.1	1	32	Dark gray volcanic possibly fragmental rock of basaltic composition. Core is broken (RQD=0) into pebble and cobble - sized fragments. Bladed feldspar porphyry fragments suggest the rock to be fragmental, possibly polyolithic. Recovery is low and samples were taken from run-block to run-block	107721	0.178	0.395
	9.75	12.80	1.0	1	55		107722	0.128	0.234
	12.80	15.85	3.0	0	58		107723	0.178	0.274
15.85	55.47	BASALT FLOW							
	15.85	18.90 Fine-medium-grained black broken propylitic	1.0	0	129	1% pyrite in hairline fractures and in anhydrite veinlets. Rock is still badly broken but homogeneous in texture and composition. Basaltic flow? Rock appears mostly chloritized with no visible biotite.	107724	0.18	0.31
	18.90	21.95	1.0	0	7		107725	0.113	0.144
	21.95	24.99	0.5	0	54		107726	0.177	0.299
	24.99	28.04	0.1	1	25		107727	0.174	0.276
	28.04	31.09	0.5	5	301		107728	0.145	0.259
	31.09	34.14	0.5	1	92		107729	0.299	0.487
	34.14	37.19	0.1	1	58		107730	0.141	0.178
	37.19	40.23	0.5	1	56		107731	0.222	0.304
	40.23	43.28	1.0	0	12		107732	0.323	0.554
	43.28	46.33	1.0	1	58		107733	0.145	0.262
	46.33	49.38	1.0	1	120		107735	0.12	0.215
	49.38	52.43	0.5	1	49		107736	0.269	0.341
	52.43	55.47	0.5	0	33		107737	0.094	0.153

Hole Number: KN-02-15

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
55.47	61.57	LOST CORE							
55.47	61.57					Lost core - 2 runs with no recovery	-15		
61.57	64.62	BASALT FLOW							
61.57	64.62	Fine-medium-grained black broken propylitic	0.5		32	Same as 15.85 - 55.47m	107738	0.139	0.214
64.62	76.81	LOST CORE							
64.62	76.81					Core reduced from HQ to NQ @79.25m. Massive black basalt flows from here on	-155		
76.81	97.84	BASALT FLOW							
76.81	79.25	Fine-medium-grained black broken propylitic	0.5		56	Silica + Pyrite +/- Chalcopyrite stockwork/veinlets throughout interval 79.25 - 99.92m	107739	0.084	0.156
79.25	81.00	Fine-grained black propylitic	0.1	0.1	36		107740	0.208	0.332
81.00	83.00		1.0	0.1	1 45		107741	0.134	0.268
83.00	85.00		1.5	0.1	1 54		107742	0.145	0.261
85.00	87.00		0.1	1.0	1 24		107743	0.366	0.621
87.00	89.00		1.0	0.5	1 81		107744	0.2	0.36
89.00	91.00		0.5	0.1	0 7		107745	0.272	0.48
91.00	93.00		1.0	0.1	1 3		107746	0.327	0.543
93.00	95.00		0.5	1.0	1 51		107747	0.618	0.862
95.00	97.00		1.0	0.5	1 2		107748	0.39	0.561
97.00	97.84		2.0	0.1	1 2	107749	0.333	0.562	
97.84	98.18	QUARTZ MONZONITE							
97.84	98.18	Medium-grained orange grey porphyritic propylitic	0.1		0 14	quartz monzonite dykelet @45o to c.a.	107750	0.256	0.362
98.18	99.92	BASALT FLOW							
98.18	99.92	Fine-grained dark grey in-situ brecciated propylitic	1.0	0.1	1 73		107751	0.151	0.292
99.92	114.9	QUARTZ MONZONITE							

Hole Number: KN-02-15

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
99.92	102.00	Medium-grained dark grey porphyritic propylitic	0.5	1	0	Intermediate porphyritic intrusive rock, showing 60% greenish gray to orange stained feldspar phenocrysts (1-5m) in an aphanitic grained biotite + quartz matrix. Quartz monzonite. Relatively unaltered w/ well preserved primary textures. Euhedral to subhedral phenocrysts. 1-3% white to orange anhydrite +/- gypsum veins/stockwork.	107752	0.12	0.168
102.00	104.00	Fine-medium-grained dark grey porphyritic propylitic	0.1	0.5	0	20	107753	0.383	0.439
104.00	106.00	Fine-medium-grained orange grey porphyritic propylitic	0.5			8	107754	0.155	0.224
106.00	108.00		0.1			0	107755	0.115	0.163
108.00	110.00		0.5	0.1	1	AVN 0 5	107756	0.153	0.24
110.00	112.00		2.0	0.1	1	22	107757	0.204	0.256
112.00	114.00		0.5			1	107758	0.166	0.218
114.00	114.90		0.1	0.1		9	107759	0.08	0.125
114.9	115.5	BASALT							
114.90	115.50	Fine-grained black propylitic	0.5	0.5		3	107761	0.198	0.588
115.5	131.5	QUARTZ MONZONITE							
115.50	117.50	Fine-medium-grained orange grey porphyritic propylitic	0.1	0.1		0	107762	0.396	0.609
117.50	119.50	Fine-medium-grained grey-green porphyritic propylitic	1.0	0.1		5 AVN 0 45	107763	0.293	0.397
119.50	121.50	Fine-medium-grained orange grey porphyritic propylitic	1.0	0.1		3	107764	0.176	0.289
121.50	123.50	Fine-medium-grained grey-green porphyritic propylitic	1.0	0.1		1 AVN 30 7	107765	0.379	0.378
123.50	125.50		0.5	0.1		0	107766	0.464	0.486
125.50	127.50		1.0	0.1		1	107767	0.378	0.521
127.50	129.50	Fine-medium-grained dark grey porphyritic propylitic	0.5	0.5		1	107768	0.474	0.796
129.50	131.50		0.5	0.1		3	107769	0.319	0.599
131.5	141.95	BASALT FLOW							

Hole Number: KN-02-15

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
131.50	133.50	Fine-grained dark grey propylitic	0.1 0.1	3	42	Black aphyric basalt w/ centimetric dykelets of Qtz-monzonite porphyry	107770	0.278	0.545
133.50	135.50		1.0 1.0	8	AVN 40 7	Light violet anhydrite (fluorite?) + pyrite + cpy veins	107771	0.208	0.394
135.50	137.50		0.1 0.1	3	44		107772	0.251	0.435
137.50	139.50		1.0 0.5	3	62		107773	0.367	0.587
139.50	141.50		1.0 0.5		1		107774	0.165	0.247
141.50	141.95		1.0 0.5		13	Sharp contact w/ Qtz-monzonite @ 450 to c.a.	107775	0.102	0.173
141.95	148.55	QUARTZ MONZONITE							
141.95	143.50	Fine-medium-grained grey-green porphyritic propylitic	0.5 1.0		1	Qtz-monzonite porphyry	107776	0.377	0.441
143.50	145.50		0.5 0.1	0	AVN 30 2	Light violet anhydrite (fluorite?) + pyrite + cpy vein @ 300 to c.a.	107777	0.17	0.237
145.50	147.50		0.1 0.1		4		107778	0.209	0.406
147.50	148.55		0.1		0		107779	0.138	0.261
148.55	149.5	BASALT FLOW							
148.55	149.50	Fine-grained black propylitic	0.5 0.1	3	50	Aphyric black basalt	107780	0.181	0.402
149.5	150.95	QUARTZ MONZONITE							
149.50	150.95	Fine-medium-grained orange grey porphyritic propylitic	1.0 0.1		2		107781	0.258	0.34
150.95	152.8	BASALT FLOW							
150.95	152.80	Fine-grained black propylitic	1.0 0.1	1	15	Aphyric black basalt w/ centimetric dykelets of Qtz-monzonite	107782	0.211	0.408
152.8	155.15	QUARTZ MONZONITE							
152.80	155.15	Fine-medium-grained green-grey porphyritic propylitic	0.5 0.5		6		107783	0.367	0.587
155.15	157.1	BASALT FLOW							
155.15	157.10	Fine-grained black propylitic	0.1 0.1	3	74	Aphyric black basalt w/ local silica flooding	107784	0.186	0.327
157.1	205.9	QUARTZ MONZONITE							
157.10	159.20	Fine-medium-grained green-grey porphyritic propylitic	0.5		1		107785	0.175	0.306
159.20	161.50		0.1 0.5		0		107787	0.362	0.559

Hole Number: KN-02-15

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
161.50	163.50	Fine-medium-grained green-grey porphyritic propylitic	0.1	0.1	16		107788	0.187	0.273
163.50	165.50		0.1	1	25		107789	0.131	0.193
165.50	167.50		0.1		2		107790	0.141	0.263
167.50	169.50		0.5		3		107791	0.098	0.15
169.50	171.50		0.5	0.1	1	28	107792	0.175	0.268
171.50	173.50	Fine-medium-grained orange grey porphyritic propylitic	0.1	0.1	1	19	107793	0.107	0.206
173.50	175.50	Fine-medium-grained green-grey porphyritic propylitic	0.1		2	44	107794	0.139	0.175
175.50	177.50		0.1	0.1		5	107795	0.135	0.236
177.50	179.50	Fine-medium-grained orange grey porphyritic propylitic	0.1	0.5		3	107796	0.17	0.354
179.50	181.50		0.5		5		107797	0.1	0.157
181.50	183.50		0.1		4		107798	0.114	0.196
183.50	185.50		0.5	0	15		107799	0.15	0.264
185.50	187.50		0.1	0	12		107800	0.116	0.148
187.50	189.50		0.1		15		107801	0.185	0.242
189.50	191.50		0.1	0.1	18		107802	0.088	0.141
191.50	193.50		0.1	0.1	1	AVN 20 7	107804	0.157	0.226
193.50	195.50		0.1		1		107805	0.122	0.199
195.50	197.50		0.1	0.1	8		107806	0.106	0.147
197.50	199.35		0.1		0		107807	0.128	0.14
199.35	200.10		15.0	0.1	0	QVN 20 70	107808	0.134	0.185
200.10	202.00		0.1		14		107809	0.22	0.302
202.00	204.00		0.1		40		107810	0.123	0.196
204.00	205.90		0.1	0.1	21		107811	0.135	0.239
205.9	218.75	BASALT FLOW							

Hole Number: KN-02-15

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
205.90	207.90	Fine-medium-grained black porphyritic propylitic	0.1 0.1	5	152	Centimetric Qtz- monzonite porphyry dykelets in black, fine grained porphyritic basalt showing <2mm phenocrysts of plagioclase in aphanitic matrix. Magnetic throughout. Pink to white anhydrite veinlets are scarce, white quartz veins (with or without pyrite centers) are common. light violet anhydrite veins are locally noted.	107812	0.105	0.192
207.90	209.90	Fine-grained black porphyritic propylitic	0.1 0.1	3	60		107813	0.092	0.212
209.90	211.90		0.1 0.1	5	190		107814	0.147	0.276
211.90	213.90		0.1 0.1	3	75		107815	0.177	0.449
213.90	215.90		1.0 0.1	3	29		107816	0.128	0.265
215.90	217.90		0.5 0.1	4	97		107817	0.165	0.37
217.90	218.75		0.5 0.1	1	7		107818	0.285	0.578
218.75	226.25	QUARTZ MONZONITE							
218.75	219.90	Fine-medium-grained green-grey porphyritic propylitic	1.0 0.1	0	3		107819	0.14	0.234
219.90	221.90		0.1	0	14		107820	0.161	0.226
221.90	223.90		0.1 0.1	1	24		107821	0.313	0.49
223.90	225.50		0.1 0.1		1		107822	0.241	0.425
225.50	226.25		0.1	0	AVN 20 50	Anhydrite vein with wallrock fragments "Hoating" inside	107823	0.074	0.148
226.25	227.9	BASALT							
226.25	227.90	Fine-coarse grained dark grey porphyritic propylitic	1.0 0.1	0	7	Intrusive breccia? Basalt xenoliths?	107824	0.193	0.365
227.9	242.05	QUARTZ MONZONITE							
227.90	229.90	Fine-medium-grained green-grey porphyritic propylitic	0.1	1	26		107825	0.186	0.321
229.90	231.90		0.5 0.1	0	9		107826	0.176	0.268
231.90	233.90		0.5 0.1	0	3		107827	0.167	0.32
233.90	235.90		0.1 0.5	1	14		107828	0.131	0.253
235.90	237.90		1.0 0.5	0	9	Grainsize and texture variation caused by alteration?	107830	0.282	0.653
237.90	239.75		0.1 0.1	1	10		107831	0.177	0.323
239.75	241.00		1.0 0.1		18		107832	0.113	0.179

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
241.00	242.05	Fine-medium-grained green-grey porphyritic propylitic	0.1		11		107833	0.162	0.276
242.05	244.3	BASALT							
242.05	244.30	Fine-coarse grained dark grey porphyritic propylitic	0.1	0.1	45	Black magnetite- bearing basalt (xenoliths in qtz-monzonite?)	107834	0.208	0.485
244.3	260.15	QUARTZ MONZONITE							
244.30	246.30	Fine-medium-grained green-grey porphyritic propylitic	0.1	0.1	5		107835	0.192	0.346
246.30	248.30		0.1	0.1	1	24	107836	0.096	0.145
248.30	250.30		0.1	0.1	1	30	107837	0.162	0.285
250.30	252.30		0.1	1.0		3	107838	0.228	0.329
						Quartz + chalcopyrite +/- violet anhydrite veins and veinlets			
252.30	254.30		0.1	0.1	1	23	107839	0.107	0.207
254.30	256.30		0.1	0.1	1	14	107840	0.146	0.306
256.30	258.30		1.0	0.1		1	107841	0.173	0.283
258.30	260.15		0.1	0.1	1	38	107842	0.107	0.163
260.15	452.95	BASALT FLOW							
260.15	262.00	Fine-grained black propylitic	1.0	0.5		2	107843	0.145	0.246
						Greenish black, aphyric to locally fine grained porphyric w/ feldspar phenocrysts (<1mm). Rare centimetric, angular porphyritic xenoliths (<1%). Common pick anhydrite veinlets			
262.00	264.00		1.0	0.5		2	107844	0.194	0.369
264.00	266.00		1.5	0.1		6	107845	0.25	0.448
266.00	268.00		1.0	0.5	2	57	107846	0.255	0.482
268.00	270.00		1.0	0.1	3	80	107847	0.125	0.2
270.00	272.00		0.5		1	29	107848	0.134	0.274
272.00	274.00		0.1	0.1	2	32	107849	0.176	0.32
						Qtz- monzonite dykelet @ 272.70 - 273.07m			
274.00	276.00		0.5		1	50	107850	0.182	0.358
276.00	278.00		1.0	0.1	2	19	107851	0.163	0.284
278.00	280.00		0.1	0.1	2	74	107852	0.206	0.407
280.00	282.00		0.5		1	134	107853	0.15	0.275
						Qtz- monzonite dykelet @ 280.29 - 280.50m			

Hole Number: KN-02-15

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
282.00	284.00	Fine-grained black propylitic	0.5	0.1	2	34	107854	0.145	0.27
284.00	286.00		1.0	0.1	1	27	107856	0.243	0.451
286.00	288.00		0.1	0.1	1	65	107857	0.166	0.331
288.00	290.00		0.1	0.1	2	17	107858	0.219	0.464
290.00	292.00		1.0	0.1	2	56	107859	0.167	0.354
292.00	294.00	Fine-grained green-grey propylitic	0.5	0.1	1	33	107860	0.194	0.354
294.00	296.00		0.1	0.1	2	37	107861	0.225	0.473
296.00	298.00		0.1		1	10	107862	0.172	0.295
298.00	300.00		0.5	0.1	2	58	107863	0.127	0.244
300.00	302.00		0.5		1	26	107864	0.126	0.232
302.00	304.00		1.0		1	18	107865	0.132	0.225
304.00	306.00		0.5		1	42	107866	0.169	0.318
306.00	308.00		0.1		1	28	107867	0.107	0.162
308.00	310.00		1.0		1	29	107868	0.095	0.129
310.00	312.00		0.1		1	23	107869	0.107	0.204
312.00	314.00		0.5		1	32	107870	0.189	0.326
314.00	316.00		1.0		1	16	107871	0.129	0.166
316.00	318.00		0.1	0.1	1	5	107872	0.101	0.134
318.00	320.00		0.5	0.1	1	3	107873	0.201	0.275
320.00	322.00		1.0		1	19	107874	0.162	0.224
322.00	324.00		1.0		1	29	107875	0.102	0.16
324.00	326.00		0.5	0.1	1	9	107876	0.247	0.431
326.00	328.00		0.1		1	24	107877	0.141	0.217
328.00	330.00		0.1	0.1	1	12	107878	0.119	0.192
330.00	332.00		0.5		1	21	107879	0.059	0.084
332.00	334.00		0.1		1	34	107880	0.082	0.143
334.00	336.00		1.0		2	45	107882	0.159	0.214
336.00	338.00		0.1		1	30	107883	0.097	0.113
338.00	340.00		0.1	0.1	1	39	107884	0.151	0.249

Hole Number: KN-02-15

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
340.00	342.00	Fine-grained green-grey propylitic	0.5	0.1	1	32	107885	0.137	0.206
342.00	344.00	Fine-grained medium grey propylitic	0.1	0.1	2	7	107886	0.135	0.201
344.00	346.00		0.1		1	10	107887	0.196	0.313
346.00	348.00		0.1		1	7	107888	0.2	0.275
348.00	350.00		0.1		1	17	107889	0.162	0.238
350.00	352.00		0.5	0.1	1	42	107890	0.182	0.273
352.00	354.00		1.0		2	139	107891	0.142	0.382
354.00	356.00		0.5		2	52	107892	0.095	0.182
356.00	358.00		0.5		1	45	107893	0.128	0.274
358.00	360.00		0.1		1	26	107894	0.147	0.255
360.00	362.00	Fine-grained medium grey in-situ brecciated propylitic	0.1	0.1	1	1	107895	0.233	0.478
362.00	364.00	Fine-grained medium grey propylitic	1.0		1	3	107896	0.207	0.346
364.00	366.00		0.5	0.1	1	10	107897	0.132	0.291
366.00	368.00		1.0		1	28	107898	0.185	0.393
368.00	370.00		0.5		1	44	107899	0.138	0.23
370.00	372.00		0.5		1	8	107900	0.17	0.292
372.00	374.00	Fine-grained medium grey flow brecciated propylitic	1.0		0	19	107901	0.201	0.403
374.00	376.00	Fine-grained medium grey in-situ brecciated propylitic	1.0		1	102	107902	0.232	0.395
376.00	378.00	Fine-medium-grained medium grey porphyritic propylitic	0.1		1	126	107903	0.119	0.109
378.00	380.00		0.5		1	38	107904	0.146	0.32
380.00	382.00		1.0		1	19	107905	0.182	0.153
382.00	384.00		1.0		0	36	107906	0.154	0.127
384.00	386.00		1.0		0	8	107908	0.162	0.22
386.00	388.00		0.5		0	7	107909	0.173	0.272

Hole Number: KN-02-15

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
388.00	390.00	Fine-medium-grained medium grey porphyritic propylitic	0.5	1	1		107910	0.083	0.054
390.00	392.00		1.0	1	1		107911	0.134	0.227
392.00	394.00		1.5	1	4		107912	0.142	0.231
394.00	396.00		0.5	0	3		107913	0.102	0.07
396.00	398.00		1.0	1	1		107914	0.102	0.068
398.00	400.00		0.1	1	4		107915	0.081	0.135
400.00	402.00		0.5	1	25		107916	0.104	0.202
402.00	404.00		0.5	0.1	2	13	107917	0.061	0.119
404.00	406.00		0.5	0.1	1	3	107918	0.131	0.23
406.00	408.00		0.5	0.1	0	14	107919	0.141	0.248
408.00	410.00		1.0	1	9		107920	0.075	0.057
410.00	412.00		1.0	0	7		107921	0.083	0.069
412.00	414.00		1.0	0.1	1	2	107922	0.159	0.292
414.00	416.00		1.0	0	2		107923	0.103	0.085
416.00	418.00		1.0	1	2		107924	0.134	0.127
418.00	420.00		1.0	1	5		107925	0.123	0.169
420.00	422.00		2.0	1	7		107926	0.075	0.086
422.00	424.00		0.5	0	5		107927	0.077	0.095
424.00	426.00		0.5	1	3		107928	0.098	0.058
426.00	428.00		0.1	0.1	1	11	107929	0.174	0.268
428.00	430.00		0.5	1	10		107930	0.109	0.122
430.00	432.00		0.1	1	2		107931	0.08	0.133
432.00	434.00		0.1	0.1	1	20	107932	0.141	0.21
434.00	436.00		0.5	0.1	2	160	107934	0.132	0.255
436.00	438.00		0.1	0.1	2	9	107935	0.202	0.329
438.00	440.00		0.5	0.1	1	6	107936	0.164	0.279
440.00	442.00		1.0	0.1	1	20	107937	0.11	0.182
442.00	444.00		1.0	0	42		107938	0.099	0.14

Hole Number: KN-02-15

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
444.00	446.00	Fine-medium-grained medium grey porphyritic propylitic	1.0	0.1	0	7		107939	0.109	0.153
446.00	448.00		0.1		1	7		107940	0.086	0.215
448.00	450.00		0.1		1	16		107941	0.23	0.403
450.00	452.00	Fine-medium-grained orange grey porphyritic propylitic	0.1		1	27	Qtz- monzonite dykelets	107942	0.185	0.295
452.00	452.95	Fine-medium-grained medium grey porphyritic propylitic	0.1		1	36		107943	0.121	0.187
452.95	456.85	QUARTZ MONZONITE								
452.95	454.95	Fine-medium-grained orange grey porphyritic propylitic	0.1		0	1	Quartz- monzonite porphyry showing 50-60% euhedral to subhedral feldspar grains in a siliceous matrix and minor mafic phase.	107944	0.142	0.199
454.95	456.85		0.5		0	3		107945	0.18	0.343
456.85	470.9	BASALT FLOW								
456.85	458.00	Fine-medium-grained green-grey porphyritic propylitic	0.1		0	4	Greenish gray, locally porphyritic w/ 0-10% sub-hedral 0.5-2mm feldspar grains in an aphanic chloritized matrix (soft). Millimetric amygdules filled w/ anhydrite- zeolite. Core surface is rough/ vuggy possibly because fo anhydrite/gypsum dissolution. Basalt flows.	107946	0.15	0.201
458.00	460.00		0.5	0.1	0	19		107947	0.156	0.234
460.00	462.00		1.0	0.1	0	7		107948	0.123	0.168
462.00	464.00		0.5		0	9		107949	0.113	0.148
464.00	466.00		0.5		0	6	Broken core w/ gouge between 465.62 - 466.60m	107950	0.142	0.202
466.00	468.00		0.1		0	18		107951	0.132	0.231
468.00	470.00		0.5		1	47		107952	0.092	0.057
470.00	470.90		0.1		0	9		107953	0.094	0.098
470.9	473	BASALT								
470.90	471.53	Fine-medium-grained green-grey broken propylitic	0.1		0	3	Shear zone showing fault breccia, chloritic gouge and strong fabric @450 to c.a. with anhydrite + zeolite veinlets	107954	0.102	0.116
471.53	473.00	Fine-medium-grained green-grey brecciated propylitic	0.1		0	2	Chloritic insitu/ fault breccia cemented with yellow anhydrite, gougey fractures	107955	0.14	0.218
473	476.55	QUARTZ MONZONITE								

Hole Number: KN-02-15

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
473.00	475.00	Fine-medium-grained orange grey porphyritic propylitic	0.5	0.1	0	Quartz- monzonite porphyry similar to 452.95 - 456.85m	107956	0.073	0.11
475.00	476.55		0.1	0	2		107957	0.085	0.146
476.55	518.85	BASALT FLOW							
476.55	478.00	Fine-coarse grained green-grey flow brecciated propylitic	0.1	0	12	Greenish gray, basaltic oligolithic flow breccia with porphyritic basalt fragments, sub angular, clast supported, up to 5 cm in diameter	107958	0.113	0.259
478.00	480.00		0.1	0	12		107960	0.041	0.036
480.00	482.00		0.1	0.1	0	12	107961	0.052	0.086
482.00	484.00		0.1	1	61		107962	0.038	0.081
484.00	486.00		0.5	0.1	1	1	107963	0.074	0.126
486.00	488.00		0.1	0	7		107964	0.064	0.076
488.00	490.00		2.0	1	1	Quartz- monzonite feldspar porphyry dykelet near 488.20 - 488.30m	107965	0.155	0.151
490.00	492.00		1.0	0	34		107966	0.073	0.035
492.00	494.00		0.1	0.1	1	20	107967	0.061	0.04
494.00	496.00		1.0	1.0	0	2	107968	0.105	0.179
496.00	498.00		0.1	0.1	0	30	107969	0.228	0.395
498.00	500.00		0.5	0.1	0	3	107970	0.18	0.284
500.00	502.00		1.0	0	1		107971	0.14	0.065
502.00	504.00	Fine-coarse grained green-grey flow brecciated propylitic silicic	1.0		1	Local incipient silicification	107972	0.14	0.136
504.00	506.00	Fine-coarse grained green-grey flow brecciated propylitic	1.0	0.5	1		107973	0.136	0.105
506.00	508.00		1.0	0	5		107974	0.089	0.066
508.00	510.00		1.0	0	10	Violet fluorite vein @45o to c.a. near 509.90m	107975	0.094	0.078
510.00	512.00		1.0	0	4		107976	0.073	0.117
512.00	514.00		2.0	0.5	0	3	107977	0.107	0.139
514.00	516.00		0.1	0.1	0		107978	0.038	0.023
516.00	518.00		2.0	0.1	2	41	107979	0.134	0.249
518.00	518.85		1.0	1	110		107980	0.155	0.466

Hole Number: KN-02-15

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
518.85	519.85	BASALT								
518.85	519.85	Medium-coarse-grained orange grey in-situ brecciated propylitic sericitic	1.0	0.1	1	117	strongly altered, in-situ brecciated basalt	107981	0.122	0.217
519.85	539	BASALT FLOW								
519.85	521.00	Fine-grained green-grey propylitic silicic	1.0	0.1	0	7	Greenish grey massive basalt with weak qtz- mt- py +/- cpy veining, wk incipient silicification OR possibly chloritized dacite (see next interval below)	107982	0.142	0.562
521.00	523.00		1.0		1	4		107983	0.051	0.066
523.00	525.00		1.0	0.1	0	7		107984	0.061	0.065
525.00	527.00		0.5	0.1	0	4		107986	0.091	0.269
527.00	529.00		0.5	0.1	1	2		107987	0.101	0.25
529.00	531.00		1.0		0	1		107988	0.058	0.022
531.00	533.00		2.0		0	6		107989	0.207	0.501
533.00	535.00		1.0	0.1	1	46		107990	0.103	0.096
535.00	537.00		1.0		1	7		107991	0.061	0.057
537.00	539.00		2.0	0.1	0	3		107992	0.113	0.088
539	605.9	DACITE FLOW								
539.00	541.00	Fine-medium-grained green-grey porphyritic propylitic	2.0	0.1	1	26	Locally porphyritic w/ euhedral to sub-hedral, medium-grained phenocrysts of almost pristine- looking proxene. No evidence of alteration beyond green color due to chlorite. One anhedral quartz eye noted near 563.90m. Rock is very hard, cannot be scratched w/ pocket knife but doesn't show the primary texture obliteration/ destruction you would expect if the rock was silicified. Rock therefore likely intermediate to felsic. probably dacite and not basalt	107993	0.081	0.06
541.00	543.00		2.0	0.1	1	13		107994	0.178	0.335
543.00	545.00		3.0	0.1	1	11		107995	0.14	0.139
545.00	547.00		3.0	0.1	1	21 PVN	5 2	107996	0.119	0.139
547.00	549.00	Fine-medium-grained dark grey porphyritic propylitic	2.0		1	57		107997	0.104	0.084
549.00	551.00		1.0		1	29		107998	0.116	0.094
551.00	553.00		2.0		0	8		107999	0.077	0.066

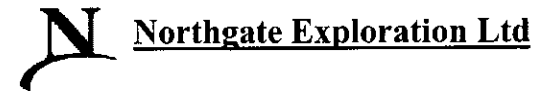
Hole Number: KN-02-15

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
553.00	555.00	Fine-medium-grained dark grey porphyritic propylitic	0.5 0.1	0	27		108000	0.103	0.215
555.00	557.00		0.5	1	30		107324	0.048	0.042
557.00	559.00		0.1 0.1	1	45		107325	0.058	0.059
559.00	561.00		0.5	1	31		107376	0.071	0.078
561.00	563.00		0.5	0	3		107377	0.096	0.134
563.00	565.00		1.5 0.1	1	30		107378	0.063	0.066
565.00	567.00		1.0	1	26		107379	0.039	0.045
567.00	569.00		1.0	1	18		107380	0.061	0.065
569.00	571.00		2.0		1		107381	0.09	0.103
571.00	573.00		1.5	1	33		107382	0.081	0.08
573.00	575.00		1.0	0	10		107383	0.053	0.059
575.00	577.00		1.5	0	4		107385	0.059	0.097
577.00	579.00		1.0	0	7		107386	0.098	0.113
579.00	581.00		2.0	0	13		107387	0.076	0.093
581.00	583.00		1.5 0.1	0	10		107388	0.076	0.077
583.00	585.00		0.5	1	38		107389	0.039	0.04
585.00	587.00		0.5		1		107390	0.046	0.035
587.00	589.00		1.0	1	24		107391	0.047	0.05
589.00	591.00		0.5	1	24		107392	0.049	0.066
591.00	593.00		2.0	0	18		107393	0.107	0.119
593.00	595.00		1.0	1	32		107394	0.061	0.063
595.00	597.00		1.0	0	10		107395	0.067	0.063
597.00	599.00		0.5	0	9		107396	0.047	0.046
599.00	601.00		1.0	0	6	Fluorite vein near 600.40m	107397	0.095	0.097
601.00	603.00		1.0	0	16		107398	0.058	0.063
603.00	605.00		0.5	0	7		107399	0.041	0.042
605.00	605.90		0.5		1		107400	0.041	0.046
605.9	625	BASALT FLOW							

Hole Number: KN-02-15

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
605.90	607.00	Fine-medium-grained green-grey propylitic	1.0	0	8	Grayish green to greenish gray, aphanitic to locally weakly porphyritic (0-1% phenocrysts) basalt, showing visible epidote alteration (moderate)	106351	0.063	0.074
607.00	609.00		0.5	0	15		106352	0.092	0.093
609.00	611.00		1.5	0	13		106353	0.098	0.099
611.00	613.00		1.0	0	12		106354	0.088	0.092
613.00	615.00		0.5	0	5		106355	0.083	0.092
615.00	617.00	Fine-medium-grained green-grey porphyritic propylitic	0.5	0	6		106356	0.081	0.092
617.00	619.00		1.0	0			106357	0.132	0.139
619.00	621.00		1.0	0			106358	0.153	0.173
621.00	623.00		1.0	0	SZN 30 2	Minor shear zone, 3cm wide @ 30o to c.a.	106359	0.154	0.134
623.00	623.45		1.0	0.1	0		106361	0.258	0.178
623.45	625.00		1.0	0.1	0	CTC 45 2	106362	0.241	0.469
						Sharp contact marked by gypsum veins. Rock is softer at start of interval because of weak sericite alteration and moderate chlorite. Alterations weakens downhole to pristine- looking dacite similar to 539.00 - 605.90m.			
625	626.97	DACITE FLOW							
625.00	626.97	Fine-medium-grained green-grey porphyritic propylitic sericitic				Petrographic sample taken @ 625.85 - 625.95m EOH.	106363	0.09	0.045
626.97		EOH							

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-16**

Northing: 15844.2 **Total Depth:** 659.86m
Easting: 10362.3 **Azimuth:** 360°
Elevation: 1741 **Dip:** -85°

Geologist: B. Mercer
Logged Date: 7/10/2002

Survey Depth	Azimuth	Dip	Comments:
0 m	0 °	-75 °	
100 m	0 °	-75 °	
500 m	8 °	-77 °	
600 m	15 °	-78 °	

Kemess North 2002 - Summary Drill Log



Hole Number:

KN-02-16

From (m)	To (m)	Rock Type	Comments
0	6.1	CASING	Casing
6.1	28.65	INTERMEDIATE VOLCANIC FLOW	Sericitized mafic to intermediate flows, flow bx and probable hyaloclastite. Rapid changes in texture but contact relationships not visible due to alteration.
28.65	30.25	FAULT ZONE FLOW	Sheared, highly blocky flow breccia. Epidote between fragments (probably syn-volcanic).
30.25	31.75	INTERMEDIATE VOLCANIC BRECCIA	Similar to 104265 with more py and not sheared.
31.75	39.02	INTERMEDIATE VOLCANIC FLOW	Coarse grained disseminated and fracture controlled py blebs. End of HQ. Reduce to NQ next sample.
39.02	48.25	INTERMEDIATE VOLCANIC TUFF	Can easily see fragmental texture (monolithic tuff or hyaloclastite. Coarse grained disseminated py and py in quartz veins.
48.25	48.85	FAULT ZONE FLOW	Zone of intermittent weak strong. Several areas 10-20cm wide.
48.85	50.9	INTERMEDIATE VOLCANIC TUFF	Sericite >> chlorite alteration. Blocky fragmental texture.
50.9	65.3	INTERMEDIATE VOLCANIC FLOW	Largely homogeneous looking massive flows. Chl >> Ser alteration with occasional fragment outline defined by strong chlorite.
65.3	67.3	FAULT ZONE FLOW	Chloritic fault gouge and gouge cemented breccia.
67.3	77.65	MONZONITE	
77.65	91.15	INTERMEDIATE VOLCANIC TUFF	Highly chloritized. Takla group. C.g. monolithic intermediate tuff cut by pyrite rich qtz veins. Py in veins only.
91.15	124	INTERMEDIATE VOLCANIC FLOW	This is the start of a thick section of chloritized and variably sericitized intermediate flows. Minor fragmental units are noted but appear to be narrow flow top breccia intervals. Overall alteration is weak in intensity. Magnetite is highly erratic in fractures and occasional qtz vein.

Hole Number:

KN-02-16

From (m)	To (m)	Rock Type	Comments
124	136	INTERMEDIATE VOLCANIC FLOW BRECCIA	Flow top breccia. Weakly altered.
136	150	INTERMEDIATE VOLCANIC TUFF	Gradational into monolithic tuff. Can easily see 2mm-->2cm size lithic fragments. They are slightly darker than the matrix.
150	164	INTERMEDIATE VOLCANIC FLOW	
164	171.9	INTERMEDIATE VOLCANIC TUFF	Same as for 104329
171.9	188.06	MONZONITE	Highly altered monzonite porphyry, weaker chl pseudomorphs replace original phenocrysts. If based solely on texture similar to known monzonite porphyry. Minor clay in fractures. Core generally more broken where clay is more abundant.
188.06	260.46	INTERMEDIATE VOLCANIC FLOW	Weakly chloritized massive flows. Narrow (<0.5m) flow top breccia zones. Weak insitu brecciation filled by qtz/carb veining.
260.46	262.02	QUARTZ FELSPAR PORPHYRY	Dark green-black plag porphyry. Contains 5-10% pale gray plagioclase laths and 2-4% partially reabsorbed qtz phenocrysts.
262.02	263.96	ANDESITE FLOW	Strongly sericitized and silica flooded volcanic flow. Brecciated with massive and semi-massive py, and clay infill.
263.96	265.96	QUARTZ FELSPAR PORPHYRY	Same as for 104396
265.96	270.36	ANDESITE FLOW	Same as for 104397
270.36	296	INTERMEDIATE VOLCANIC FLOW	Dark gray qtz and plag porphyritic flows. Contains about 1% of the former and 3% of the latter. The qtz eyes appear to be due to the leaching of plagioclase crystals, they are a mixture of qtz and feldspar. Cut by qtz/carb veinlets +/- py and clots of massive magnetite.
296	296.5	FAULT ZONE FLOW	Sericite fault breccia cut by qtz magnetite veinlets
296.5	299.55	INTERMEDIATE VOLCANIC FLOW	Same as for 104403
299.55	300	FAULT ZONE FLOW	Sericitic gouge cemented fault breccia.

Hole Number:

KN-02-16

From (m)	To (m)	Rock Type	Comments
300	306.33	INTERMEDIATE VOLCANIC FLOW	C.G. magnetite in qtz veins. Trace coy in hairline qtz vein.
306.33	309.25	FAULT ZONE FLOW	Qtz/carb healed fault breccia.
309.25	328	INTERMEDIATE VOLCANIC FLOW	Less than 1% plagioclase phenocrysts (0.5mm-->4mm) in an aphanitic chloritic ground mass. Mag in qtz veins and fractures.
328	328.63	FAULT ZONE FLOW	Minor very fine grained disseminated py in sericitic fault breccia.
328.63	341	INTERMEDIATE VOLCANIC FLOW	
341	347	GABBRO	Course grained amphibole porphyry approx 15% chlorite pseudomorphs after amphibole (2-4mm)
347	431.8	BASALT FLOW	Pyroxene porphyritic (Augite?) basalt flow, containing unevenly distributed chlorite pseudomorphs after amphibole. Ranges from <1% to >10%. Also contains occasional fragments of gabbro. Unit is exceptionally chloritic. Relatively uniformly distributed qtz veining which may contain Fe-carb, magnetite, pyrite, chalcopyrite. Locally contains vuggy gypsum veins with perfect euhedral gyp. Trace anhydrite in qtz/carb veins.
431.8	432.15	FAULT ZONE FLOW	
432.15	441.72	INTERMEDIATE VOLCANIC FLOW	Dark green massive flow cut by a network of hairline fractures, but still intact. Very minor qtz veining Occasional gypsum vein.
441.72	443.28	FAULT ZONE FLOW	Broken silica/sericite/gypsum/anhydrite breccia. Both contacts sharp at approx 65 degrees to core axis.
443.28	461.85	INTERMEDIATE VOLCANIC FLOW	M.G. diss py in wall rock as well as in qtz veins.
461.85	463.31	INTERMEDIATE VOLCANIC FLOW	Purple and minor amount of green fluorite cementing silica and silica/sericite breccia. Cut by irregular thin fracture filled gypsum veinlets.
463.31	474.57	INTERMEDIATE VOLCANIC FLOW	

Hole Number:

KN-02-16

From (m)	To (m)	Rock Type	Comments
474.57	474.87	QUARTZ VEIN	Qtz vein and qtz vein breccia with abundant py and W.R. fragments. Trace cpy only.
474.87	485.5	INTERMEDIATE VOLCANIC FLOW	Dissem py in wall rock py and cpy in veinlets. Weak to moderate magnetic veinlets and mag/qtz veinlets.
485.5	485.8	QUARTZ VEIN	Same as for 104522.
485.8	500.39	INTERMEDIATE VOLCANIC FLOW	Patchy magnetite in W.R. and in fractures.
500.39	503.68	INTERMEDIATE VOLCANIC FLOW BRECCIA	Vuggy gyp/anhydrite cemented silica breccia. Abundant but erratically distributed magnetite.
503.68	504.1	INTERMEDIATE VOLCANIC FLOW	Weak silicification, moderate gypsum/anhydrite veinlets.
504.1	539.5	BASALT FLOW	Pyroxene porphyritic basalt similar to 104451. Stronger chl alteration than the intervening intermediate volcanics.
539.5	540	QUARTZ VEIN	Crackle brecciated textured qtz with abundant py and cpy on magnetite and/or chl rich fractures.
540	551.15	BASALT FLOW	
551.15	566.82	INTERMEDIATE VOLCANIC FLOW	Chlorite is getting much stronger. Zeolite/carb veining is weak but pervasive. Coarse grained cpy in gray fractured quartz veins.
566.82	567.44	MONZONITE	Pale green plag porphyritic monzonite. Contacts at ~35 degrees to core axis.
567.44	587.65	INTERMEDIATE VOLCANIC FLOW	
587.65	659.89	MONZONITE	Well veined but predominantly sulphide poor. Approx 5-8% K-spar veining and flooding. Feldspar alternated to white sericite/albite?? Amphiboles altered to chlorite and strong chl on slips. Probable very fine grained cpy in py. Coarse grained erratically disseminated magnetite.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-16

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	6.1	CASING							
	0.00	6.10				Casing	16	-2	-2
6.1	28.65	INTERMEDIATE VOLCANIC FLOW							
	6.10	8.00 Medium-grained grey-green mottled sericitic chloritic	1.0	0.0	0 0 LVN 35 3	Sericitized mafic to intermediate flows, flow bx and probable hyaloclastite. Rapid changes in texture but contact relationships not visible due to alteration.	104253	0.009	0.156
	8.00	10.00	1.0	0.0	0 0 LVN 35 3	Core broken and rubbly. Limonite after py.	104254	0.05	0.114
	10.00	12.00	2.0	0.0	0 0 QZVN 35 0		104255	0.151	0.214
	12.00	14.00	1.0	0.0	0 0 QZVN 35 0		104256	0.137	0.152
	14.00	16.00	1.0	0.0	0 0 QZVN 35 0		104257	0.098	0.282
	16.00	18.00	1.0	0.0	0 0 QZVN 35 0		104258	0.127	0.187
	18.00	20.00	1.0	0.0	0 0 QZVN 35 0		104259	0.129	0.276
	20.00	22.00	2.0	0.0	0 0 QZVN 35 0	Trace limonite stain only. Some fracture controlled py as well as the usual qtz/py veinlets.	104260	0.114	0.255
	22.00	24.00	2.0	0.0	0 0 QZVN 35 0	Core generally more competent past here.	104261	0.113	0.339
	24.00	26.00	2.0	0.0	0 0 QZVN 35 0		104262	0.093	0.234
	26.00	28.00	2.0	0.0	1 27 QZVN 35 0	Magnetite in one local area at end of sample.	104263	0.064	0.169
	28.00	28.65	2.0	0.0	0 0 QZVN 35 0		104264	0.105	0.204
28.65	30.25	FAULT ZONE FLOW							
	28.65	30.25 grey-green mottled sericitic chloritic	3.0	0.0	0 0 QZVN 35 3	Sheared, highly blocky flow breccia. Epidote between fragments (probably syn-volcanic).	104265	0.12	0.25
30.25	31.75	INTERMEDIATE VOLCANIC BRECCIA							
	30.25	31.75 grey-green mottled chloritic sericitic	7.0	0.0	0 0 QZVN 5 10	Similar to 104265 with more py and not sheared.	104266	0.064	0.196
31.75	39.02	INTERMEDIATE VOLCANIC FLOW							
	31.75	33.53 Fine-grained grey-green mottled chloritic sericitic	3.0	0.0	0 0 QZVN 35 3	Coarse grained disseminated and fracture controlled py blebs. End of HQ. Reduce to NQ next sample.	104267	0.067	0.127

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
33.53	35.00	Medium-grained grey-green mottled chloritic sericitic	3.0	0.0	0 0 QZVN 35 3	Approx 10-15% 2-3mm chloritic pseudomorphs apparently after plagioclase. Coarse grained py and py in qtz vein.	104268	0.101	0.191
35.00	37.00		3.0	0.0	0 0 QZVN 35 3		104269	0.084	0.182
37.00	39.02		3.0	0.0	0 0 QZVN 35 3		104270	0.068	0.104
39.02	48.25	INTERMEDIATE VOLCANIC TUFF							
39.02	41.00	Coarse-grained grey-green chloritic sericitic	3.0	0.0	0 0 QZVN 20 3	Can easily see fragmental texture (monolithic tuff or hyaloclastite. Coarse grained disseminated py and py in quartz veins.	104271	0.104	0.183
41.00	43.00		3.0	0.0	0 0 QZVN 20 3		104272	0.125	0.247
43.00	43.60		3.0	0.0	0 0 QZVN 30 3		104273	0.08	0.152
43.60	44.62		4.0	0.0	0 0 QZVN 30 2		104274	0.105	0.231
44.62	46.58		4.0	0.0	0 1 QZVN 30 2		104275	0.174	0.341
46.58	47.50	Coarse-grained light green chloritic sericitic	7.0	0.0	0 0 QZVN 30 2	Very strong sericite alteration, with abundant fine grained to medium grained py.	104276	0.076	0.197
47.50	48.25	Coarse-grained grey-green chloritic sericitic	3.0	0.0	0 0 QZVN 30 2	As for 104271.	104277	0.163	0.259
48.25	48.85	FAULT ZONE FLOW							
48.25	48.85	Coarse-grained grey-green chloritic sericitic	10.0	0.0	0 0 QZVN 30 1	Zone of intermittent weak strong. Several areas 10-20cm wide.	104278	0.076	0.151
48.85	50.9	INTERMEDIATE VOLCANIC TUFF							
48.85	50.90	Coarse-grained grey-green chloritic sericitic	5.0	0.0	0 0 QZVN 40 3	Sericite >> chlorite alteration. Blocky fragmental texture.	104280	0.088	0.189
50.9	65.3	INTERMEDIATE VOLCANIC FLOW							
50.90	52.00	Fine-grained green chloritic sericitic	7.0	0.0	0 1 QZVN 40 2	Largely homogeneous looking massive flows. Chl >> Ser alteration with occasional fragment outline defined by strong chlorite.	104281	0.084	0.177
52.00	54.00		3.0	0.0	0 0 QZVN 40 3	Ubiquitous coarse grained disseminated py and sporadically distributed qtz/py veintets.	104282	0.155	0.325
54.00	56.00		5.0	0.0	0 0 QZVN 40 5	As for 104281	104283	0.073	0.129
56.00	58.00		4.0	0.0	0 0 QZVN 40 10		104284	0.171	0.47
58.00	60.00		4.0	0.0	5 92 QZVN 40 5	Lower half of sample contains very fine grained aggregates of magnetite.	104285	0.096	0.18

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
60.00	62.00	Fine-grained green chloritic sericitic	4.0	0.0	0 0 QZVN 40 5		104286	0.096	0.148
62.00	64.00		4.0	0.0	0 21 QZVN 40 5		104287	0.098	0.181
64.00	65.30		4.0	0.0	0 0 QZVN 40 5		104288	0.097	0.173
65.3	67.3	FAULT ZONE FLOW							
65.30	67.30	Coarse-grained green chloritic	10.0	0.0	0 2 QZVN 0 2	Chloritic fault gouge and gouge cemented breccia.	104289	0.082	0.155
67.3	77.65	MONZONITE							
67.30	68.25	Coarse-grained green porphyritic chloritic	10.0	0.0	0 2 QZVN 0 2		104290	0.072	0.157
68.25	70.00	Coarse-grained light grey porphyritic chloritic	0.5	0.2	0 0 QZVN 30 0	Upper contact is fault. Pale gray-green coloured porphyritic intrusive. Feldspars up to 0.5cm are completely replaced by chlorite. Pyrite mineralization is sparse. Occasional coarse grained bleb of cpy. I.D. based solely on texture, original mineralogy altered to ser/chl. Chl pseudomorphs in a sericitic matrix.	104291	0.057	0.121
70.00	72.00	Coarse-grained light grey porphyritic sericitic chloritic	0.5	0.2	0 0 QZVN 30 0		104292	0.137	0.27
72.00	74.00		0.5	0.2	0 0 QZVN 30 0		104293	0.072	0.134
74.00	76.00		0.5	0.2	0 0 QZVN 30 0		104294	0.056	0.12
76.00	77.65		0.5	0.2	0 0 QZVN 35 0	Same as for 104291	104295	0.061	0.163
77.65	91.15	INTERMEDIATE VOLCANIC TUFF							
77.65	79.65	Coarse-grained green chloritic	2.0	0.0	0 1 QZVN 35 0	Highly chloritized. Takla group. C.g. monolithic intermediate tuff cut by pyrite rich qtz veins. Py in veins only.	104296	0.195	0.252
79.65	81.65		2.0	0.0	0 1 QZVN 35 3	Same as for 104296	104297	0.142	0.249
81.65	83.65		2.0	0.0	0 1 QZVN 35 3		104298	0.201	0.322
83.65	84.43		2.0	0.0	3 68 QZVN 35 3	With very fine grained dissem magnetite.	104299	0.134	0.27
84.43	86.43	Coarse-grained light grey sericitic chloritic	0.5	0.0	0 15 QZVN 35 1	Highly sericitized Takla group, c.g. polyolithic tuff. Contains fragments of BFP and felsic flows as well as IVO fragments. Strongly sericitized. Much less qtz/py veins than the previous tuff unit.	104300	0.215	0.371
86.43	88.43		0.5	0.0	0 0 QZVN 35 1		104301	0.129	0.205
88.43	90.43		0.5	0.0	0 0 QZVN 35 1		104302	0.149	0.239
90.43	91.15		0.5	0.0	0 0 QZVN 35 1	contact at approximately 65 degrees.	104303	0.124	0.197

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
91.15	124	INTERMEDIATE VOLCANIC FLOW							
91.15	93.00	Fine-grained grey-green chloritic sericitic	0.5	0.0	2 16 QZVN 35 0	This is the start of a thick section of chloritized and variably sericitized intermediate flows. Minor fragmental units are noted but appear to be narrow flow top breccia intervals. Overall alteration is weak in intensity. Magnetite is highly erratic in fractures and occasional qtz vein.	104304	0.142	0.194
93.00	95.00		0.5	0.0	2 34 QZVN 35 0		104306	0.165	0.291
95.00	97.00		0.5	0.0	0 1 QZVN 35 0	Very weak sericite.	104307	0.124	0.35
97.00	99.00		0.5	0.0	0 0 QZVN 35 0		104308	0.157	0.23
99.00	101.00		0.5	0.0	1 12 QZVN 35 0		104309	0.073	0.191
101.00	103.00		0.5	0.0	0 0 ZVN 25 3	Zeolite/carb veins are more prevalent than qtz/py.	104310	0.122	0.188
103.00	104.10		0.5	0.0	0 0 ZVN 25 3		104311	0.049	0.076
104.10	106.00	Fine-grained green chloritic sericitic	0.5	0.0	1 3 ZVN 25 3	Very erratic magnetite in fractures.	104312	0.058	0.103
106.00	108.00		2.0	0.2	1 47 ZVN 25 3	C.G. dissem py, magnetite in fractures.	104313	0.05	0.079
108.00	110.00		1.0	0.2	1 1 ZVN 25 3	Trace magnetite in fractures.	104314	0.182	0.23
110.00	112.00		1.0	0.2	1 1 ZVN 25 3		104315	0.086	0.147
112.00	114.00		1.0	0.2	1 0 ZVN 25 3		104316	0.207	0.166
114.00	116.00		0.5	0.0	1 8 ZVN 35 2	Weakly altered flows. Sporadic magnetite. Mod to weak chl. Very weak ser. Veins are qtz/zeo/Fe carb +/- py.	104317	0.207	0.233
116.00	118.00		0.5	0.0	1 3 ZVN 35 2		104318	0.096	0.127
118.00	120.00		0.5	0.0	3 30 ZVN 35 2		104319	0.186	0.274
120.00	122.00		0.5	0.0	3 34 ZVN 35 2		104320	0.144	0.237
122.00	124.00		0.5	0.0	3 20 ZVN 35 2		104321	0.12	0.174
124	136	INTERMEDIATE VOLCANIC FLOW BRECCIA							
124.00	126.00	Coarse-grained green brecciated chloritic sericitic	0.2	0.0	3 3 ZVN 35 2	Flow top breccia. Weakly altered.	104322	0.171	0.343
126.00	128.00		0.2	0.0	3 48 ZVN 35 2		104323	0.085	0.179
128.00	130.00		0.2	0.0	3 79 ZVN 35 2		104324	0.128	0.407
130.00	132.00		0.2	0.0	3 20 ZVN 35 2		104325	0.097	0.165
132.00	134.00		0.2	0.0	3 19 ZVN 35 2		104326	0.107	0.255

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
134.00	136.00	Coarse-grained green brecciated chloritic sericitic	0.2 0.0	3	18 ZVN 35 2		104327	0.076	0.202
136	150	INTERMEDIATE VOLCANIC TUFF							
136.00	138.00	Coarse-grained green chloritic	0.2 0.0	1	6 ZVN 35 2	Gradational into monolithic tuff. Can easily see 2mm-->2cm size lithic fragments. They are slightly darker than the matrix.	104328	0.089	0.317
138.00	140.00		0.2 0.0	0	4 ZVN 35 2	alteration and mineralization is weak.	104329	0.072	0.384
140.00	141.99		1.0 0.0	0	0 ZVN 35 2		104330	0.289	0.502
141.99	144.00		3.0 0.0	0	1 ZVN 35 2		104332	0.092	0.166
144.00	146.00		1.0 0.0	0	3 ZVN 35 2		104333	0.053	0.105
146.00	148.00		3.0 0.0	0	5 ZVN 35 2		104334	0.129	0.268
148.00	150.00		0.2 0.0	4	48 ZVN 35 2	C.G. magnetite stringer in qtz/zeo/carb vein. Magnetite filling amygdules. Fe-carb +/- chl filled amygdules in massive flows.	104335	0.162	0.308
150	164	INTERMEDIATE VOLCANIC FLOW							
150.00	152.00	Fine-grained green amygdular chloritic	0.2 0.0	0	2 ZVN 35 3		104336	0.093	0.227
152.00	154.00		1.0 0.0	0	1 ZVN 35 3		104337	0.154	0.298
154.00	156.00		0.5 0.0	0	1 ZVN 35 3		104338	0.149	0.301
156.00	158.00		0.5 0.0	3	33 ZVN 35 3	Abundant magnetite on hairline fractures.	104339	0.171	0.367
158.00	160.00		0.5 0.0	2	2 ZVN 35 3		104340	0.139	0.248
160.00	162.00		0.5 0.0	0	0 ZVN 35 3		104341	0.137	0.289
162.00	164.00		0.5 0.0	0	0 ZVN 35 3	Same as for 104328	104342	0.071	0.139
164	171.9	INTERMEDIATE VOLCANIC TUFF							
164.00	166.00	Coarse-grained green chloritic	0.5 0.0	0	0 ZVN 35 3	Same as for 104329	104343	0.117	0.204
166.00	168.00		1.0 0.0	0	2 ZVN 35 3	Same as for 104330	104344	0.051	0.102
168.00	170.00		0.5 0.0	2	28 ZVN 35 3	Magnetite at qtz vein/W.R. contacts.	104345	0.053	0.083
170.00	171.90		0.5 0.0	0	0 ZVN 35 3	Sericite is increasing rapidly down hole toward monzonite contact. Brecciated for about 20cm above contact. Cannot measure orientation of contact, core is broken.	104346	0.097	0.183
171.9	188.06	MONZONITE							

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
171.90	174.00	Coarse-grained light grey porphyritic sericitic chloritic	1.0 0.1	0	0 ZVN 35 1	Highly altered monzonite porphyry, weaker chl pseudomorphs replace original phenocrysts. If based solely on texture similar to known monzonite porphyry. Minor clay in fractures. Core generally more broken where clay is more abundant.	104347	0.062	0.099
174.00	176.00		1.0 0.1	0	0 ZVN 35 1		104348	0.151	0.204
176.00	178.00		1.0 0.1	1	18 ZVN 35 1	Cpy is present but not common. A few specks near py in qtz veinlets. Qtz/zeo veinlets which are most common contain py +/- magnetite only.	104349	0.148	0.166
178.00	180.00		1.0 0.1	0	0 ZVN 35 1		104350	0.089	0.135
180.00	182.00		1.0 0.1	0	0 ZVN 35 1		104351	0.063	0.115
182.00	184.00		1.0 0.3	0	0 ZVN 35 1		104352	0.067	0.109
184.00	186.00		1.0 0.1	0	0 ZVN 35 1		104353	0.06	0.098
186.00	188.06		1.0 0.1	0	16 ZVN 35 1	No visible magnetite despite high reading.	104354	0.096	0.123
188.06	260.46	INTERMEDIATE VOLCANIC FLOW							
188.06	190.00	Fine-grained green chloritic	0.5 0.0	0	2 QCV 35 2	Weakly chloritized massive flows. Narrow (<0.5m) flow top breccia zones. Weak insitu brecciation filled by qtz/carb veining.	104355	0.096	0.154
190.00	192.00		0.5 0.0	0	2 QCV 35 2		104357	0.098	0.19
192.00	194.00		0.5 0.0	0	1 QCV 35 2		104358	0.099	0.19
194.00	196.00		0.5 0.0	0	1 QCV 35 2		104359	0.098	0.163
196.00	198.00		0.5 0.0	0	1 QCV 35 1		104360	0.107	0.177
198.00	200.00		1.0 0.0	0	0 QCV 35 1		104361	0.199	0.356
200.00	202.00		1.0 0.0	0	0 QCV 35 3		104362	0.155	0.255
202.00	204.00		0.1 0.0	0	5 QCV 35 5		104363	0.091	0.174
204.00	206.00		0.1 0.0	0	3 QCV 35 1		104364	0.083	0.133
206.00	208.00		0.1 0.0	2	40 QCV 35 5		104365	0.151	0.249
208.00	210.00		0.1 0.0	1	0 QCV 35 5	Magnetite at start of sample.	104366	0.13	0.197
210.00	212.00		2.0 0.0	1	1 QCV 35 5		104367	0.155	0.356
212.00	214.00		0.5 0.0	2	106 QCV 35 2		104368	0.14	0.239
214.00	214.96		0.1 0.0	2	40 QCV 35 35		104369	0.127	0.22

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
214.96	216.50	Fine-grained green in-situ brecciated chloritic	3.0	0.0	2 42 QCV 5 35	Strong insitu brecciation due to multiple qtz/carb +/- pink zeolite veinlets running sub parallel to core axis.	104370	0.149	0.376
216.50	218.30		3.0	0.0	1 2 QCV 5 1		104371	0.171	0.336
218.30	220.00	Fine-grained green chloritic	0.1	0.0	1 15 QCV 15 1		104372	0.371	0.499
220.00	222.00		0.1	0.0	1 2 QCV 15 1		104373	0.236	0.266
222.00	224.00	Fine-grained grey-green chloritic sericitic	1.0	0.0	1 0 QCV 15 1		104374	0.344	0.384
224.00	226.00		1.0	0.0	1 44 QCV 15 1		104375	0.374	0.446
226.00	228.00		1.0	0.0	0 1 QCV 15 1		104376	0.124	0.204
228.00	230.00		2.0	0.0	4 100 QCV 15 2	Erratically distributed c.g. dissem py as well as py in qtz veinlets.	104377	0.115	0.174
230.00	232.00		2.0	0.1	1 1 QCV 15 5	Same as for 104377.	104378	0.151	0.247
232.00	234.00		2.0	0.1	1 1 QCV 15 7		104379	0.197	0.308
234.00	236.00		2.0	0.1	4 193 QCV 15 7		104380	0.119	0.159
236.00	238.00		1.0	0.0	2 36 QCV 30 10	Sericite picking up gradually down the hole, but still very weak. Qtz/carb/zeolite veins getting wider, up to 2-3cm. C.G. dissem py.	104381	0.142	0.225
238.00	240.00		1.0	0.0	2 68 QCV 30 10	Same as for 104381	104383	0.16	0.288
240.00	242.00		2.0	0.0	2 3 QCV 30 10	contains a 20cm vuggy qtz/carb/py vein.	104384	0.144	0.196
242.00	244.00		2.0	0.0	2 10 QCV 30 10	Same as for 104381 with anhydrite in qtz veins.	104385	0.104	0.148
244.00	246.00		5.0	0.0	2 20 QCV 30 5		104386	0.091	0.133
246.00	248.00		2.0	0.0	2 82 QCV 30 5		104387	0.109	0.162
248.00	250.00		2.0	0.0	2 5 QCV 30 7		104388	0.141	0.227
250.00	252.00		3.0	0.0	2 19 QCV 30 15		104389	0.33	0.518
252.00	254.00		3.0	0.0	2 36 QCV 30 15		104390	0.083	0.139
254.00	256.00		3.0	0.0	2 11 QCV 30 3		104391	0.139	0.187
256.00	256.60		2.0	0.0	0 7 QCV 30 3	Sericite alteration rapidly increasing down sample.	104392	0.099	0.118
256.60	257.93		5.0	0.0	0 14 QCV 30 3	Strong qtz/carb +/- zeolite with py and magnetite veining oriented sub parallel to core axis. Abundant medium grained dissem py.	104393	0.168	0.211
257.93	259.93	Fine-grained grey-green sericitic	7.0	0.0	0 0 QCV 30 15	Strong and pervasive sericite alteration. Coarse grained and M.G. dissem py.	104394	0.172	0.262

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
259.93	260.46	Fine-grained grey-green sericitic	7.0	0.0	0 1 QCV 30 15	Same as for 104394	104395	0.437	0.55
260.46	262.02	QUARTZ FELSPAR PORPHYRY							
260.46	262.02	Medium-grained black homogeneous sericitic	2.0	0.0	0 1 ZVN 30 5	Dark green-black plag porphyry. Contains 5-10% pale gray plagioclase laths and 2-4% partially reabsorbed qtz phenocrysts.	104396	0.357	0.441
262.02	263.96	ANDESITE FLOW							
262.02	263.96	Coarse-grained grey white brecciated silicic sericitic	10.0	0.3	0 0	Strongly sericitized and silica flooded volcanic flow. Brecciated with massive and semi-massive py, and clay infill.	104397	0.176	0.218
263.96	265.96	QUARTZ FELSPAR PORPHYRY							
263.96	265.96	Medium-grained black homogeneous chloritic	2.0	0.0	0 0 ZVN 30 5	Same as for 104396	104398	0.187	0.257
265.96	270.36	ANDESITE FLOW							
265.96	266.53	Coarse-grained grey white brecciated silicic sericitic	15.0	0.5	0 0	Same as for 104397	104399	0.065	0.151
266.53	267.85		50.0	1.0	0 0	Massive and semi-massive py in qtz breccia, come C.G. cpy.	104400	0.086	0.186
267.85	269.30		35.0	1.0	0 1 FVN 15 5	Similar to 104400 with abundant pale green translucent to semi-transparent fluorite, some C.G. cpy.	104401	0.026	0.098
269.30	270.36		10.0	0.5	0 0 PVN 60 2		104402	0.392	0.539
270.36	296	INTERMEDIATE VOLCANIC FLOW							
270.36	272.00	Fine-grained grey porphyritic chloritic sericitic	0.5	0.0	2 65 QCV 30 5	Dark gray qtz and plag porphyritic flows. Contains about 1% of the former and 3% of the latter. The qtz eyes appear to be due to the leaching of plagioclase crystals, they are a mixture of qtz and feldspar. Cut by qtz/carb veinlets +/- py and clots of massive magnetite.	104403	0.196	0.342
272.00	274.00		0.5	0.0	2 42 QCV 30 5		104404	0.113	0.158
274.00	276.00		0.5	0.0	2 3 QCV 30 5		104405	0.259	0.381
276.00	278.00		0.5	0.0	2 17 QCV 30 5	Anhydrite stringer near margin of qtz vein.	104406	0.185	0.33
278.00	280.00		0.5	0.0	2 81 QCV 30 10		104407	0.099	0.159
280.00	282.00		2.0	0.2	2 12 QCV 30 7	finely dissem cpy in W.R. at 281.75m.	104409	0.186	0.325
282.00	284.00		0.5	0.0	2 84 QCV 30 3		104410	0.081	0.151
284.00	286.00		0.5	0.0	2 32 QCV 20 3		104411	0.123	0.209

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
286.00	288.00	Fine-grained grey porphyritic chloritic sericitic	0.5	0.0	1 3 QCV 5 5		104412	0.073	0.134
288.00	290.00		0.5	0.0	1 6 QCV 5 5		104413	0.108	0.211
290.00	292.00		4.0	0.0	3 60 QCV 5 5	Qtz/mag vein running up core axis.	104414	0.157	0.269
292.00	294.00		0.5	0.0	1 5 QCV 30 3		104415	0.081	0.13
294.00	296.00		0.5	0.0	1 6 QCV 30 10		104416	0.14	0.217
296	296.5	FAULT ZONE FLOW							
296.00	296.50	Fine-grained green brecciated sericitic chloritic	2.0	0.0	2 9 QCV 30 5	Sericite fault breccia cut by qtz magnetite veinlets	104417	0.144	0.174
296.5	299.55	INTERMEDIATE VOLCANIC FLOW							
296.50	298.50	Fine-grained grey porphyritic chloritic sericitic	0.5	0.0	1 5 QCV 45 10	Same as for 104403	104418	0.136	0.185
298.50	299.55		0.5	0.0	1 3 QCV 5 3		104419	0.119	0.184
299.55	300	FAULT ZONE FLOW							
299.55	300.00	Coarse-grained green brecciated sericitic chloritic	0.5	0.0	1 8 QCV 30 5	Sericitic gouge cemented fault breccia.	104420	0.399	0.678
300	306.33	INTERMEDIATE VOLCANIC FLOW							
300.00	302.00	Fine-grained green porphyritic chloritic sericitic	1.0	0.3	2 26 QCV 45 5	C.G. magnetite in qtz veins. Trace coy in hairline qtz vein.	104421	0.256	0.41
302.00	304.00		0.5	0.3	2 29 QCV 45 2	Same as for 104421	104422	0.134	0.173
304.00	305.60	Fine-grained green mottled sericitic chloritic	2.0	0.3	1 8 QCV 40 10	Evenly dissem, M.G. py.	104423	0.141	0.176
305.60	306.33	Fine-grained green porphyritic chloritic sericitic	2.0	0.3	1 6 QCV 25 8	Trace F.G. coy associated with py in qtz vein.	104424	0.129	0.17
306.33	309.25	FAULT ZONE FLOW							
306.33	308.00	Coarse-grained light green brecciated sericitic	0.5	0.2	2 25 QCV 45 50	Qtz/carb healed fault breccia.	104425	0.163	0.222
308.00	309.25		0.5	0.2	2 11 QCV 60 1	Sericitic fault breccia and gouge.	104426	0.254	0.372
309.25	328	INTERMEDIATE VOLCANIC FLOW							
309.25	311.25	Fine-grained green porphyritic chloritic sericitic	1.0	0.2	2 139 QCV 30 5	Less than 1% plagioclase phenocrysts (0.5mm-->4mm) in an aphanitic chloritic ground mass. Mag in qtz veins and fractures.	104427	0.109	0.189
311.25	313.25		1.0	0.2	2 48 QCV 30 5	Rare cpy in qtz/carb veinlets.	104428	0.136	0.198

Hole Number: KN-02-16

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
313.25	315.00	Fine-grained green porphyritic chloritic sericitic	1.0 0.2	2	21 QCV 30 5		104429	0.157	0.236
315.00	317.00		1.0 0.2	1	5 QCV 30 5		104430	0.091	0.179
317.00	319.13		1.0 0.2	1	6 QCV 30 5		104431	0.284	0.406
319.13	321.00	Fine-grained dark green porphyritic chloritic	1.0 0.2	1	6 QCV 10 3	Dark green massive flow with 0.5-->1% pale gray rounded qtz eyes from 0.5mm-->4mm. Same as for 270.36m-->296.00m.	104432	0.125	0.131
321.00	323.00		0.5 0.2	2	26 QCV 10 3		104433	0.136	0.177
323.00	325.00		0.5 0.8	4	51 QCV 10 3	Abundant C.G. cpy in qtz/py/mag veinlet at 15 degrees to core axis.	104435	0.292	0.352
325.00	327.00		2.0 0.3	3	23 QCV 10 3		104436	0.082	0.117
327.00	328.00		2.0 0.3	3	72 QCV 10 3		104437	0.171	0.234
328	328.63	FAULT ZONE FLOW							
328.00	328.63	Coarse-grained light green brecciated sericitic chloritic	0.5 0.0	0	5 QCV 10 3	Minor very fine grained dissem py in sericitic fault breccia.	104438	0.454	0.515
328.63	341	INTERMEDIATE VOLCANIC FLOW							
328.63	330.63	Fine-grained green porphyritic chloritic sericitic	0.5 0.2	2	20 QCV 10 3		104439	0.139	0.214
330.63	331.32		0.5 0.2	0	3 QCV 10 3		104440	0.109	0.187
331.32	332.36		0.5 0.2	5	137 QCV 10 3	Abundant magnetite in qtz/carb vein at 0 degrees to core axis.	104441	0.153	0.256
332.36	332.83	Coarse-grained light green brecciated sericitic chloritic	0.5 0.0	1	11 QCV 10 3	Sericitic fault breccia and gouge.	104442	0.128	0.224
332.83	334.00	Fine-grained green porphyritic sericitic chloritic	0.5 0.2	1	26 QCV 25 5	Same as for 104432	104443	0.14	0.249
334.00	336.00		0.5 0.2	1	26 QCV 25 3		104444	0.086	0.129
336.00	338.00		0.5 0.2	3	50 QCV 25 3	Same as for 104432. Very narrow magnetite filled fractures.	104445	0.097	0.155
338.00	340.00		0.5 0.2	3	123 QCV 25 3	Same as for 104432	104446	0.163	0.299
340.00	341.00		1.0 0.2	3	72 QCV 20 7		104447	0.274	0.437
341	347	GABBRO							
341.00	343.00	Coarse-grained light green porphyritic sericitic chloritic	0.2 0.0	0	1 ZVN 40 0	Course grained amphibole porphyry approx 15% chlorite pseudomorphs after amphibole (2-4mm)	104448	0.148	0.18

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
343.00	345.00	Coarse-grained light green porphyritic sericitic chloritic	0.2 0.0	0	1 ZVN 40 0		104449	0.096	0.114
345.00	347.00		0.2 0.0	0	0 ZVN 40 0		104450	0.193	0.202
347	431.8	BASALT FLOW							
347.00	349.00	Coarse-grained dark green porphyritic chloritic	2.0 0.2	0	1 QCV 40 10	Pyroxene porphyritic (Augite?) basalt flow, containing unevenly distributed chlorite pseudomorphs after amphibole. Ranges from <1% to >10%. Also contains occasional fragments of gabbro. Unit is exceptionally chloritic. Relatively uniformly distributed qtz veining which may contain Fe-carb, magnetite, pyrite, chalcopyrite. Locally contains vuggy gypsum veins with perfect euhedral gyp. Trace anhydrite in qtz/carb veins.	104451	0.267	0.288
349.00	351.00		2.0 0.2	2	44 QCV 40 7		104452	0.183	0.258
351.00	353.00		2.0 0.2	2	3 QCV 40 30		104453	0.175	0.266
353.00	355.00		2.0 0.4	4	104 QCV 40 7		104454	0.185	0.224
355.00	357.00		2.0 0.2	2	17 QCV 40 5	V.f.g. cpy in py in qtz/carb veins.	104455	0.116	0.145
357.00	359.00		2.0 0.2	2	28 QCV 40 3		104456	0.166	0.204
359.00	361.00		2.0 0.2	2	24 QCV 40 3		104457	0.253	0.303
361.00	363.00		2.0 0.2	2	46 QCV 40 3		104458	0.138	0.165
363.00	365.00		2.0 0.2	2	19 QCV 40 3		104459	0.173	0.227
365.00	367.00		2.0 0.4	2	20 QCV 40 3		104461	0.115	0.175
367.00	369.00		2.0 0.4	2	8 QCV 40 5	C.G. cpy in qtz/carb/anhydrite veins.	104462	0.164	0.207
369.00	371.00		2.0 0.4	2	18 QCV 40 3		104463	0.162	0.221
371.00	373.00		2.0 0.4	5	176 QCV 40 3		104464	0.18	0.227
373.00	375.00		2.0 0.4	5	99 QCV 40 3		104465	0.118	0.129
375.00	377.00		2.0 0.4	4	22 QCV 40 2	M.G. cpy along fractures. Hairline gypsum veinlets.	104466	0.191	0.209
377.00	379.00		3.0 0.4	3	25 QCV 40 2		104467	0.11	0.128
379.00	381.00		3.0 0.4	3	65 QCV 40 15		104468	0.23	0.265
381.00	383.00	Medium-grained dark green porphyritic chloritic	3.0 0.7	2	14 QCV 30 3	C.G. cpy blebs in qtz/carb/anh veinlets.	104469	0.321	0.367
383.00	385.00		3.0 0.4	1	3 QCV 30 3		104470	0.229	0.287
385.00	387.00		3.0 0.4	3	55 QCV 15 3		104471	0.148	0.183

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
387.00	389.00	Medium-grained dark green porphyritic chloritic	3.0	1.0	3 116 QCV 15 3	Coarse blebs of cpy up to 1x1cm in qtz anhydrite veinlets.	104472	0.093	0.122
389.00	391.00		3.0	1.0	4 42 QCV 15 3		104473	0.117	0.161
391.00	393.00		3.0	0.5	4 33 QCV 15 3		104474	0.102	0.166
393.00	395.00		2.0	0.0	4 131 GAVN 5 3	1-2mm wide gypsum/anhydrite veinlets run sub parallel to core axis and are more abundant than qtz/carb veinlets which run at about 30 degrees to core axis.	104475	0.136	0.234
395.00	397.00		2.0	0.0	2 26 GAVN 5 3		104476	0.184	0.245
397.00	399.00		2.0	0.0	2 15 GAVN 5 3	Tag placed at block due to lost core.	104477	0.116	0.156
399.00	401.00		4.0	0.2	2 35 GAVN 5 10	Approximately 80cm of core represent 2.33m. Core appears to be lost due to the dissolution of abundant gypsum/anhydrite veins, not a fault.	104478	0.156	0.203
401.00	403.00		4.0	0.5	5 58 QCV 30 4	Abundant magnetic veinlets, C.G. cpy in qtz/carb +/- anh veinlets.	104479	0.146	0.182
403.00	405.00		4.0	1.5	5 72 PVN 15 4	Very strong cpy in massive py veins sub-parallel to core axis.	104480	0.181	0.218
405.00	407.00		4.0	3.0	5 16 PVN 15 4	same as for 104480.	104481	0.216	0.277
407.00	409.00		4.0	3.0	5 85 PVN 15 4		104482	0.69	0.763
409.00	411.00		2.0	0.3	5 33 QCV 15 4	Abundant magnetic veinlets sub-parallel to core axis.	104483	0.102	0.19
411.00	413.00		2.0	0.5	5 46 QCV 15 4	Cpy in qtz/carb/anh veinlets.	104484	0.154	0.287
413.00	415.00		2.0	0.5	5 50 QCV 15 4		104485	0.244	0.365
415.00	417.00		2.0	0.3	5 2 QCV 15 2		104487	0.212	0.418
417.00	419.00		2.0	0.3	5 319 QCV 15 2		104488	0.309	0.392
419.00	421.00		2.0	0.3	5 34 QCV 15 2		104489	0.157	0.247
421.00	423.00		0.5	0.1	5 36 QCV 15 2		104490	0.183	0.229
423.00	425.00		0.5	0.0	3 336 QCV 35 2	Basalt becoming less porphyritic. Strong chl alteration, weak veining and weak sulphides. Occasional gypsum veinlet.	104491	0.122	0.167
425.00	427.00		0.5	0.0	3 68 QCV 35 2		104492	0.174	0.228
427.00	429.00		0.5	0.0	3 19 QCV 35 2		104493	0.265	0.387
429.00	431.00		0.5	0.0	0 1 QCV 35 2	Strongly chloritic. No visible magnetite.	104494	0.108	0.133
431.00	431.80		0.5	0.0	0 1 QCV 35 2		104495	0.232	0.304

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
431.8	432.15	FAULT ZONE FLOW							
431.80	432.15	Medium-grained dark green porphyritic chloritic	0.5	0.0	0	10	104496	0.274	0.414
432.15	441.72	INTERMEDIATE VOLCANIC FLOW							
432.15	434.00	Fine-grained dark green chloritic	0.5	0.2	2	28 QVN 35 2	104497	0.133	0.175
						Dark green massive flow cut by a network of hairline fractures, but still intact. Very minor qtz veining Occasional gypsum vein.			
434.00	436.00		0.5	0.2	2	12 QVN 35 2	104498	0.251	0.33
436.00	438.00		2.0	0.2	3	45 QVN 35 2	104499	0.24	0.335
						M.G. dissem py as well as py in qtz stringers. Carb is less prevalent in qtz veinlets. Cpy in occasional. Fracture without qtz.			
438.00	440.00		2.0	0.2	3	18 QVN 35 2	104500	0.224	0.299
						Contains Micro-veinlets of dark gray translucent gypsum.			
440.00	441.72		3.0	0.2	1	18 QVN 35 2	104501	0.209	0.276
441.72	443.28	FAULT ZONE FLOW							
441.72	443.28	Coarse-grained grey white broken silicic sericitic	1.0	0.0	0	1 QVN 65 90	104502	0.191	0.251
						Broken silica/sericite/gypsum/anhydrite breccia. Both contacts sharp at apprx 65 degrees to core axis.			
443.28	461.85	INTERMEDIATE VOLCANIC FLOW							
443.28	445.00	Fine-grained dark green chloritic	3.0	0.5	0	0 QVN 35 2	104503	0.212	0.283
445.00	447.00		3.0	0.5	0	0 QVN 35 2	104504	0.214	0.269
447.00	449.00		2.0	0.5	3	24 QVN 35 5	104505	0.282	0.293
						Abundant fracture fill magnetite.			
449.00	451.00		2.0	0.5	1	5 QVN 35 7	104506	0.273	0.316
451.00	453.00		2.0	0.5	3	53 QVN 35 7	104507	0.178	0.217
						Qtz +/- sulphide veins are cross-cut by numerous anhydrite /gypsum microveinlets. Fracture fill magnetite.			
453.00	455.00		3.0	0.5	3	7 QVN 35 10	104508	0.204	0.213
455.00	457.00		3.0	0.5	3	41 QVN 35 10	104509	0.14	0.148
457.00	459.00		3.0	0.7	0	3 QVN 35 10	104510	0.332	0.373
						Trace moly in thin qtz veinlet at 459.78.			
459.00	461.00		2.0	0.4	1	10 QVN 35 10	104511	0.183	0.201
						Trace bismuthinite in qtz veinlet at 459.78m.			
461.00	461.85	Fine-grained grey-green chloritic gypsum	4.0	0.4	1	19 QVN 50 5	104513	0.143	0.104
						Abundant M.G. dissem py and abundant very thin qtz veinlets.			
461.85	463.31	INTERMEDIATE VOLCANIC							

Hole Number: KN-02-16

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
461.85	463.31	Fine-grained light green brecciated silicic gypsum	0.0	0.0	0 0 FGVV 30100	Purple and minor amount of green fluorite cementing silica and silica/sericite breccia. Cut by irregular thin fracture filled gypsum veinlets.	104514	0.051	0.078
463.31	474.57	INTERMEDIATE VOLCANIC FLOW							
463.31	465.00	Fine-grained grey chloritic gypsum	0.0	0.0	2 35 GVN 65 10		104515	0.25	0.304
465.00	467.00		1.0	0.3	2 30 GVN 65 3	Abundant gypsum veinlets. Minor qtz veinlets, chl alteration getting weaker.	104516	0.332	0.284
467.00	469.00		1.0	0.3	2 24 GVN 65 3		104517	0.541	0.568
469.00	471.00		1.0	0.3	1 8 GVN 65 3		104518	0.234	0.277
471.00	473.00		1.0	0.3	1 1 GVN 65 3		104519	0.233	0.305
473.00	474.57		1.0	0.3	1 3 GVN 65 3	Contains dykelet of monzonite from 472.36m to 472.50m.	104520	0.218	0.209
474.57	474.87	QUARTZ VEIN							
474.57	474.87	Fine-grained light grey crackle brecciated silicic	8.0	0.1	1 22 QVN 45 80	Qtz vein and qtz vein breccia with abundant py and W.R. fragments. Trace cpy only.	104521	0.17	0.242
474.87	485.5	INTERMEDIATE VOLCANIC FLOW							
474.87	476.00	Fine-grained grey chloritic	2.0	0.5	1 10 QVN 40 10	Dissem py in wall rock py and cpy in veinlets. Weak to moderate magnetic veinlets and mag/qtz veinlets.	104522	0.636	0.609
476.00	478.00		2.0	0.7	1 8 QVN 40 10	Same as for 104522.	104523	0.293	0.356
478.00	480.00		2.0	0.5	1 19 QVN 40 10		104524	0.167	0.21
480.00	482.00		2.0	0.5	2 34 QVN 40 10		104525	0.255	0.302
482.00	484.00		2.0	0.5	2 39 QVN 40 10		104526	0.133	0.168
484.00	485.50		2.0	0.5	2 13 QVN 40 10		104527	0.175	0.243
485.5	485.8	QUARTZ VEIN							
485.50	485.80	Fine-grained grey silicic	45.0	0.1	0 4 QZVN 40 50	Same as for 104522.	104528	0.112	0.169
485.8	500.39	INTERMEDIATE VOLCANIC FLOW							
485.80	487.00	Fine-grained grey chloritic	2.0	0.7	2 32 QVN 40 10	Patchy magnetite in W.R. and in fractures.	104529	0.132	0.173
487.00	489.00		2.0	0.7	2 31 QVN 40 10		104530	0.086	0.115
489.00	491.00		2.0	0.3	2 5 QVN 40 5	Trace moly with cpy in qtz vein at 90 degrees to core axis at 489.81m.	104531	0.228	0.247
491.00	493.00		2.0	0.3	2 9 QVN 40 5	Strong zeolite/carb and moderate gyp veinlets crosscut qtz veinlets.	104532	0.186	0.281

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
493.00	495.00	Fine-grained grey chloritic	2.0	0.3	5 155 QVN 40 5	Abundant massive magnetic veinlets.	104533	0.132	0.195
495.00	497.00		1.0	0.5	4 143 QVN 40 5	Qtz veinlets are relatively abundant but narrow cpy in qtz veinlets associated with py. Erratic distributed mag veinlets.	104534	0.154	0.255
497.00	499.00		2.0	0.7	4 335 QVN 40 8	Same as for 104534	104535	0.27	0.434
499.00	500.39		1.0	0.7	4 144 QVN 40 10		104536	0.146	0.213
500.39	503.68	INTERMEDIATE VOLCANIC FLOW BRECCIA							
500.39	502.01	Coarse-grained light grey vuggy silicic gypsum	2.0	0.5	10 31 QVN 65 50	Vuggy gyp/anhydrite cemented silica breccia. Abundant but erratically distributed magnetite.	104537	0.199	0.256
502.01	503.68		2.0	0.3	3 41 QVN 20 3		104539	0.244	0.335
503.68	504.1	INTERMEDIATE VOLCANIC FLOW							
503.68	504.10	Fine-grained light grey heterogeneous silicic gypsum	0.1	0.0	2 79 QVN 40 4	Weak silicification, moderate gypsum/anhydrite veinlets.	104540	0.654	0.986
504.1	539.5	BASALT FLOW							
504.10	506.00	Medium-grained grey-green porphyritic chloritic	1.0	0.4	2 29 QVN 40 4	Pyroxene porphyritic basalt similar to 104451. Stronger chl alteration than the intervening intermediate volcanics.	104541	0.266	0.374
506.00	508.00		1.5	0.8	2 36 QVN 40 4	Same as for 104541.	104542	0.202	0.291
508.00	510.00		1.5	0.8	2 36 QVN 45 5		104543	0.198	0.294
510.00	512.00		1.5	0.4	2 7 QVN 45 5	Remarkably uniform qtz vein distribution and py distribution with erratically distributed cpy. Qtz veins sulphide poor.	104551	0.164	0.271
512.00	514.00		1.5	0.4	2 13 QVN 45 5	Same as for 104551.	104552	0.325	0.466
514.00	516.00		1.5	0.4	2 78 QVN 45 5		104553	0.27	0.399
516.00	518.00		1.5	0.4	2 23 QVN 45 5		104554	0.386	0.458
518.00	520.00		1.5	0.4	2 6 QVN 45 5		104555	0.353	0.452
520.00	522.00		1.5	0.4	5 122 QVN 45 5	Heavily dissem magnetite.	104556	0.278	0.669
522.00	524.00		1.5	0.4	1 3 QVN 45 5		104557	0.411	0.594
524.00	526.00		1.5	0.4	1 29 QVN 45 5		104558	0.323	0.52
526.00	528.00		1.5	0.4	8 94 QVN 45 5		104559	0.269	0.509
528.00	530.00		1.5	0.4	1 4 QVN 45 5		104560	0.288	0.41

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
530.00	532.00	Medium-grained grey-green porphyritic chloritic	5.0 0.6	1	20 QVN 45 5	abundant M.G. evenly dissem subhedral py in wall rock. Strong py mineralization in qtz veins. Trace cpy dissem through wall rock and on fractures.	104561	0.205	0.272
532.00	534.00		5.0 0.6	1	9 QVN 45 5		104562	0.512	0.669
534.00	536.00	Medium-grained grey-green porphyritic biotite chloritic	5.0 1.0	3	37 QVN 45 3	As for 104561.	104563	0.372	0.397
536.00	538.00		5.0 1.0	3	47 QVN 45 3		104565	0.433	0.676
538.00	539.50		3.0 1.0	10	564 QVN 45 3	Massive magnetite veins up to 1cm wide.	104566	0.336	0.592
539.5	540	QUARTZ VEIN							
539.50	540.00	Fine-grained light grey crackle brecciated	8.0 1.0	0	2 QVN 40 90	Crackle brecciated textured qtz with abundant py and cpy on magnetite and/or chl rich fractures.	104544	0.492	0.808
540	551.15	BASALT FLOW							
540.00	542.00	Medium-grained dark green porphyritic biotite chloritic	2.0 0.3	3	31 QVN 40 2		104545	0.426	0.973
542.00	543.15		8.0 4.0	3	36 QVN 5 20	Very strong cpy and mo in 1-2 cm quartz veins sub parallel to core axis.	104546	0.572	1.15
543.15	545.15		3.0 1.0	10	148 QVN 30 10	Massive magnetite veins.	104547	0.739	2.95
545.15	547.15		3.0 3.0	15	413 QVN 30 20	1-2 cm wide massive and semi-massive cpy in qtz veins up to 10cm wide. Magnetite at vein boundaries.	104548	0.641	1.255
547.15	549.15		6.0 5.0	15	117 QVN 65 25	As for 104548. Has one quartz vein 20 cm wide.	104549	0.662	1.515
549.15	551.15		4.0 2.0	15	58 QVN 10 25	Darker due to very abundant biotite. Qtz veins carry abundant magnetite and cpy. Fine grained disseminated py in whole rock.	104550	0.527	1.27
551.15	566.82	INTERMEDIATE VOLCANIC FLOW							
551.15	553.15	Medium-grained dark green chloritic	2.0 1.5	5	40 QVN 40 5	Chlorite is getting much stronger. Zeolite/carb veining is weak but pervasive. Coarse grained cpy in gray fractured quartz veins.	104567	0.589	1.64
553.15	555.00		2.0 1.5	5	41 QVN 40 10	As for 104567.	104568	0.587	1.595
555.00	557.00	Fine-grained dark green chloritic	2.0 0.8	10	214 QVN 40 7		104569	0.625	1.8
557.00	559.00		2.0 0.3	3	36 QVN 40 1		104570	0.607	1.545
559.00	561.00		4.0 1.0	1	1 QVN 40 15		104571	0.767	1.92
561.00	563.00		3.0 1.0	1	24 QVN 40 10	Plus trace moly on slip at 562.88m.	104572	0.274	0.537
563.00	565.00		5.0 0.6	1	3 QVN 40 15		104573	0.339	0.739

Hole Number: KN-02-16

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
565.00	566.82	Fine-grained dark green chloritic	1.0	0.3	1 7 QVN 40 10	Strong chlorite alteration. Very strong zeo/carb veinlets.	104574	0.258	0.618
566.82	567.44	MONZONITE							
566.82	567.44	Coarse-grained green porphyritic chloritic	0.1	0.0	0 1 ZVN 40 10	Pale green plag porphyritic monzonite. Contacts at ~35 degrees to core axis.	104575	0.361	0.909
567.44	587.65	INTERMEDIATE VOLCANIC FLOW							
567.44	569.00	Fine-grained dark green chloritic	1.0	0.2	0 0 QVN 40 5		104576	0.301	0.88
569.00	571.00		1.0	0.2	0 3 QVN 40 5		104577	0.348	0.93
571.00	573.00		1.0	0.4	0 2 QVN 55 6	Most quartz veins are nearly barren at sulphide.	104578	0.276	0.69
573.00	575.00		3.0	0.3	2 75 QVN 55 10		104579	0.381	1.02
575.00	577.00		1.0	0.3	2 48 QVN 55 5		104580	0.238	0.843
577.00	579.00		1.0	0.5	2 52 QVN 55 5		104581	0.357	1.44
579.00	581.00		3.0	0.2	0 1 QVN 55 7	Py rich, cpy poor qtz veins. Little or no mag in quartz veins. Trace Mo.	104582	0.62	1.68
581.00	583.00		0.5	0.2	0 3 QVN 55 7	As for 104578 with trace Fe-carb filling fractures.	104583	0.341	1.155
583.00	585.00	Fine-grained dark green chloritic k-felspar	3.0	0.2	0 0 QVN 55 15	Py rich quartz veins. Strong K feldspar flooding.	104584	0.335	0.722
585.00	587.00		1.0	0.2	3 172 QVN 55 5		104585	0.266	0.718
587.00	587.65		0.1	0.0	3 39 KVN 55 2	Patchy K feldspar flooding.	104586	0.051	0.093
587.65	659.89	MONZONITE							
587.65	589.00	Coarse-grained light grey porphyritic sericitic k-felspar	0.3	0.1	1 2 QVN 65 20	Well veined but predominantly sulphide poor. Approx 5-8% K-spar veining and flooding. Feldspar alternated to white sericite/albite?? Amphiboles altered to chlorite and strong chl on slips. Probable very fine grained cpy in py. Coarse grained erratically disseminated magnetite.	104587	0.127	0.168
589.00	591.00		2.0	0.1	3 26 QVN 65 20		104588	0.157	0.153
591.00	593.00		4.0	0.1	3 26 QVN 65 20	As for 104587.	104589	0.095	0.118
593.00	595.00		0.5	0.1	3 41 QVN 65 20		104591	0.134	0.21
595.00	597.00		0.5	0.1	1 15 QVN 65 20		104592	0.135	0.208
597.00	599.00		0.5	0.1	1 7 QVN 65 20		104593	0.101	0.138
599.00	601.00		0.5	0.1	1 38 QVN 65 20		104594	0.214	0.349
601.00	603.00	Coarse-grained light grey porphyritic sericitic chloritic	0.5	0.1	1 97 QVN 65 15	Feldspars are relatively fresh, mafics are chloritized.	104595	0.205	0.357

Hole Number: KN-02-16

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
603.00	605.00	Coarse-grained grey-green porphyritic chloritic sericitic	0.5 0.1	1	5 QVN 65 15	A lot of copper contamination on core from drill bit matrix.	104596	0.281	0.421
605.00	607.00		0.5 0.1	1	56 QVN 65 15	Heavily disseminated fine grained magnetite and medium grained aggregates at magnetite. Chl alteration > sericite alteration.	104597	0.331	0.449
607.00	609.00		0.5 0.1	1	11 QVN 65 15		104598	0.209	0.299
609.00	611.00		0.5 0.2	1	28 QVN 65 15		104599	0.275	0.847
611.00	613.00	Coarse-grained green-grey porphyritic chloritic sericitic	2.0 0.1	3	39 QVN 60 20		104600	0.196	0.413
613.00	615.00		0.5 0.1	3	19 QVN 60 20		104601	0.098	0.166
615.00	617.00		0.5 0.2	3	9 QVN 60 20		104602	0.125	0.187
617.00	619.00		0.5 0.1	5	117 QVN 60 20	Very coarse grained magnetite in quartz veins as well as disseminated magnetite in whole rock.	104603	0.204	0.394
619.00	621.00		0.5 0.1	1	0 QVN 60 20		104604	0.164	0.271
621.00	623.00	Coarse-grained light grey porphyritic silicic k-felspar	1.0 0.1	0	1 QVN 60 50	Strong silica flooding with patchy k-spar. Py in fractures. Rare Mo on slips.	104605	0.128	0.229
623.00	625.00		1.0 0.1	2	80 QVN 60 50		104606	0.104	0.17
625.00	627.00	Coarse-grained green-grey porphyritic chloritic sericitic	1.0 0.2	2	45 QVN 60 20		104607	0.261	0.452
627.00	629.00		1.0 0.1	2	23 QVN 60 20	Rare Mo on slips.	104608	0.206	0.364
629.00	631.00		1.0 0.3	2	12 QVN 60 30	Strong qtz veining, remarkable parallel spaced 5-10cm apart. Py and minor cpy in fractures orthogonal to vein walls.	104609	0.372	0.603
631.00	633.00		1.0 0.3	2	1 QVN 60 20		104610	0.126	0.184
633.00	635.00		2.0 0.3	2	53 QVN 60 20		104611	0.143	0.216
635.00	637.00		1.0 0.3	2	32 QVN 60 20		104612	0.138	0.217
637.00	639.00		1.0 0.3	2	54 QVN 60 20		104613	0.214	0.293
639.00	641.00	Coarse-grained green-grey porphyritic sericitic chloritic	1.0 0.3	1	3 QVN 60 20		104614	0.159	0.246
641.00	643.00		3.0 0.3	1	26 QVN 60 20	Occasional massive py vein at 20 degrees to core axis x-cutting qtz veins at 60-65 degrees to core axis in opposite direction.	104615	0.219	0.331
643.00	645.00	Coarse-grained green-grey porphyritic chloritic sericitic	0.5 0.3	2	42 QVN 60 20		104617	0.312	0.535

Hole Number: KN-02-16

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
645.00	647.00	Coarse-grained green-grey porphyritic chloritic sericitic	1.0	0.3	2 25 QVN 60 20	As for 104615.	104618	0.211	0.284
647.00	649.00		0.5	0.3	2 114 QVN 55 15	Cpy is found solely within qtz veins x-cutting fractures in the qtz, associated with py.	104619	0.272	0.359
649.00	651.00		0.5	0.3	2 13 QVN 55 15		104620	0.262	0.299
651.00	653.00		0.5	0.5	2 33 QVN 55 20		104621	0.211	0.291
653.00	655.00		0.5	0.2	2 32 QVN 56 15	Approx 1% Fe-carb (yellow) fracture fill veinlets x-cut core. Zeolite veinlets pick up to 1-2 % as well.	104622	0.105	0.146
655.00	657.00		1.0	0.2	2 22 QVN 57 15	As for 104622.	104623	0.191	0.235
657.00	659.00		2.0	0.2	2 5 QVN 58 15	Trace coarse grained blebs of moly in qtz vein at 658.58m.	104624	0.385	0.428
659.00	659.89		0.5	0.2	2 50 QVN 59 15	As for 104622.	104625	0.33	0.367
659.89		EOH							

Kemess North 2002 - Diamond Drill Log



Hole Number: KN-02-16B

Northing: 15844.2	Total Depth: 803.84m
Easting: 10362.3	Azimuth: 360°
Elevation: 1741	Dip: -85°

Geologist: B. Mercer

Logged Date: 8/7/2002

Survey Depth	Azimuth	Dip	Comments:
701 m	353 °	-76 °	
804 m	359 °	-76 °	

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-16B**

From (m)	To (m)	Rock Type	Comments
0	659.89	PREVIOUSLY DRILLED	Previously drilled core (KN-02-16).
659.89	803.84	MONZONITE	C.G. weakly altered porphyry. Crowded subhedral feldspar in a dark grey to black matrix. Locally, irregular veinlets and patchy blebs of massive magnetite. Py predominantly only in qtz veins or near vein margins. Cpy occurs in trace amounts. Biotite occurs as very fine grained felted masses.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-16B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	659.89	PREVIOUSLY DRILLED							
	0.00	659.89				Previously drilled core (KN-02-16).	16.5	0	0
659.89	803.84	MONZONITE							
659.89	662.00	Coarse-grained dark grey porphyritic chloritic biotite	0.5	0.1	2 20 QVN 55 5	C.G. weakly altered porphyry. Crowded subhedral feldspar in a dark grey to black matrix. Locally, irregular veinlets and patchy blebs of massive magnetite. Py predominantly only in qtz veins or near vein margins. Cpy occurs in trace amounts. Biotite occurs as very fine grained felted masses.	k110751	0.159	0.181
662.00	664.00		0.5	0.1	2 12 QVN 55 5		k110752	0.377	0.432
664.00	666.00		2.0	0.1	2 21 QVN 55 30	Similar to above with more abundant qtz veins and patchy qtz flooding.	k110753	0.118	0.281
666.00	668.00		0.5	0.1	2 25 QVN 55 15		k110754	0.135	0.193
668.00	670.00		0.5	0.1	2 5 QVN 55 15	Abundant and regularly spaced parallel to subparallel pale grey qtz veins. Most py in later fractures cross cutting the qtz veins at 15-20 degrees to core axis.	k110755	0.106	0.134
670.00	672.00		0.5	0.1	3 94 QVN 55 15		k110756	0.111	0.157
672.00	674.00		0.5	0.1	3 60 QVN 55 15		k110757	0.184	0.233
674.00	676.00		0.5	0.1	3 118 QVN 55 15		k110758	0.118	0.216
676.00	678.00		0.5	0.1	3 14 QVN 55 15		k110759	0.132	0.178
678.00	680.00		0.5	0.1	3 82 QVN 55 15		k110760	0.088	0.104
680.00	682.00	Coarse-grained grey orange porphyritic k-felspar biotite	0.5	0.1	3 26 QVN 65 15	Abundant qtz veins with insipient to patchy silicification. Moderate patchy bright orange-red kspars appears to be overprinting original texture. Minor py in fractures cutting qtz veins or as occasional massive pyrite veinlet. Trace massive magnetite.	k110761	0.137	0.174
682.00	684.00		0.5	0.1	3 40 QVN 65 15		k110762	0.13	0.159
684.00	686.00		0.5	0.1	3 69 QVN 65 15		k110763	0.218	0.341
686.00	688.00		0.5	0.1	3 154 QVN 65 15	Similar to above with weak haloinization of feldspars and minor leucoxene.	k110764	0.136	0.165

Hole Number: KN-02-16B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
688.00	690.00	Coarse-grained grey orange porphyritic k-felspar biotite	2.0 0.1	1 11	QVN 65 15		k110765	0.145	0.167
690.00	692.00		2.0 0.1	1 16	QVN 65 15		k110766	0.13	0.141
692.00	694.00		2.0 0.1	2 22	QVN 65 15		k110767	0.142	0.16
694.00	696.00	Coarse-grained grey tan porphyritic k-felspar clay	2.0 0.0	4 74	QVN 50 20	Moderate haloinization of feldspars. Qtz veins are forming mod stockworks with many crosscutting relationships noted.	k110768	0.094	0.122
696.00	698.00		2.0 0.0	4 53	QVN 50 15	Massive magnetite stringers are associated with qtz vein is picking up rapidly.	k110769	0.108	0.174
698.00	700.00		2.0 0.0	4 27	QVN 50 15		k110770	0.102	0.183
700.00	702.00	Coarse-grained grey tan porphyritic k-felspar chloritic	2.0 0.1	2 28	QVN 70 10	chl replacing biotite.	k110771	0.113	0.199
702.00	704.00		0.5 0.1	4 170	QVN 70 10	Abundant mt.	k110772	0.09	0.161
704.00	706.00	Coarse-grained light grey porphyritic clay chloritic	0.5 0.1	1 3	QVN 70 10	Strong kaolinization.	k110773	0.086	0.132
706.00	708.00		0.5 0.1	4 11	QVN 70 10	Strong kaolinization, abundant mt.	k110774	0.122	0.201
708.00	710.00	Coarse-grained light grey porphyritic k-felspar chloritic	0.5 0.1	1 12	QVN 70 10	No stockwork texture, veins sub-parallel. Strong k-fsp overprint.	k110775	0.191	0.301
710.00	712.00	Coarse-grained light grey porphyritic chloritic	0.5 0.0	2 12	QVN 75 7	Alt only weak.	k110777	0.152	0.198
712.00	714.00	Coarse-grained green-grey porphyritic chloritic	0.5 0.0	2 5	QVN 75 7		k110778	0.066	0.104
714.00	716.00		0.5 0.0	2 29	QVN 80 15		k110779	0.123	0.193
716.00	718.00		2.0 0.0	3 28	QVN 80 20	In addition to the regular 0.5-2cm qtz veins, also contains a py rich vein of 25cm.	k110780	0.143	0.185
718.00	720.00		2.0 0.0	4 53	QVN 80 20	Similar to 10783 with 20cm vein with massive py and mt. Weak alteration.	k110781	0.105	0.162
720.00	722.00		0.5 0.0	4 28	QVN 80 10		k110782	0.118	0.14
722.00	724.00		0.5 0.0	4 43	QVN 80 10	Abundant mt at vein margins, vein centres and in sub-parallel to core axis veinlets. Orange zeolite veinlets common.	k110783	0.093	0.15
724.00	726.00		0.5 0.0	4 25	QVN 80 10	Same as for 10783. Weak alteration.	k110784	0.087	0.139
726.00	728.00		0.5 0.0	2 9	QVN 65 5	Very few qtz veinlets. One massive py veinlet (1cm), weak alteration.	k110785	0.079	0.117
728.00	730.00		0.5 0.0	2 27	QVN 65 5	Very few qtz veinlets. Weak alteration.	k110786	0.08	0.194

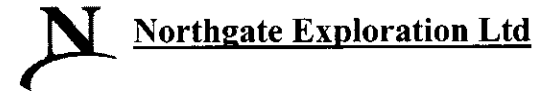
Hole Number: KN-02-16B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
730.00	732.00	Coarse-grained green-grey porphyritic chloritic	0.5	0.0	2 12 QVN 70 10	Clots of strongly chloritized augite pseudomorphs.	k110787	0.117	0.179
732.00	734.00		0.5	0.0	2 24 QVN 70 5		k110788	0.057	0.053
734.00	735.85		0.5	0.0	2 20 QVN 70 7		k110789	0.272	0.297
735.85	736.70	Coarse-grained green-grey porphyritic sericitic chloritic	0.5	0.0	2 24 QZV 30 40	Weakly sheared with qtz/zeo veins. Trace molybdonite in 35cm qtz/zeo vein. Clots of c.g. magnetite in vein as well.	k110790	0.236	0.344
736.70	738.00	Coarse-grained green-grey porphyritic chloritic	0.5	0.0	3 68 QVN 65 5	Abundant mag in thin veinlets.	k110791	0.468	0.7
738.00	740.00		0.5	0.0	5 70 QVN 65 4		k110792	0.242	0.354
740.00	742.00	Coarse-grained dark grey porphyritic chloritic	0.5	0.0	3 119 QVN 65 5	All mafic minerals are altered to chl. Minor zeo veinlets.	k110793	0.384	0.581
742.00	744.00		0.5	0.0	3 63 QVN 65 5		k110794	0.15	0.183
744.00	746.00		0.5	0.0	5 29 QVN 65 5		k110795	0.164	0.33
746.00	748.00		1.0	0.0	5 10 QVN 65 5		k110796	0.196	0.313
748.00	750.00		0.1	0.0	5 33 QVN 40 15	Very good stockwork of thin (1-2mm) qtz veinlets.	k110797	0.137	0.245
750.00	752.00		0.1	0.0	10 168 QVN 45 30	Sample includes short sections of qtz/mt breccia. Appears to be due to multiple intersecting qtz veins.	k110798	0.154	0.24
752.00	754.00		0.1	0.0	2 30 QVN 50 3		k110799	0.127	0.206
754.00	756.00		0.5	0.0	2 30 QVN 35 3	Zeolite veinlets are picking up in concentration.	k110800	0.13	0.164
756.00	758.00		0.5	0.0	10 11 QVN 50 3	Abundant, v.c.g. mt veinlets.	k110801	0.216	0.278
758.00	760.00		0.1	0.0	3 104 QVN 65 5	Trace moly in calcite/zeolite veinlet.	k110803	0.237	0.324
760.00	762.00	Coarse-grained green brown porphyritic biotite k-felspar	0.3	0.0	2 25 QVN 65 5	Very strong bio alteration begins here with color change. Often altered to chl on slips.	k110804	0.213	0.377
762.00	764.00	Coarse-grained dark grey porphyritic biotite k-felspar	0.3	0.0	2 38 QCVN 45 20	Several 15-20cm qtz pale yellow calcite veins.	k110805	0.606	1.115
764.00	766.00		0.3	0.0	2 25 QVN 65 5		k110806	0.31	0.555
766.00	768.00	Coarse-grained orange grey porphyritic biotite k-felspar	0.3	0.0	3 60 QVN 65 5	Strong leucoxene alteration. Pale tan/orange overprint. Appears to be fine grained kfsp.	k110807	0.276	0.458
768.00	770.00		0.3	0.0	2 2 QVN 35 7		k110808	0.181	0.308
770.00	772.00		0.3	0.0	2 58 QVN 45 7		k110809	0.122	0.209
772.00	774.00		0.3	0.3	2 43 QVN 45 7	Trace cpy in c.g. py in qtz vein. Patchy leucoxene alteration.	k110810	0.291	0.573
774.00	776.00		0.3	0.0	4 20 QVN 60 7		k110811	0.201	0.439

Hole Number: KN-02-16B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
776.00	778.00	Coarse-grained grey porphyritic biotite chloritic	0.3	0.1	10 57 MVN 70 7	Strong leucoxene. Very abundant thin to hairline mt veinlets.	k110812	0.144	0.254
778.00	780.00		1.0	0.5	10 100 MVN 35 7	Abundant leucoxene. Very fine grained coy in qtz veins.	k110813	0.141	0.423
780.00	782.00		2.0	0.5	7 16 MVN 35 5		k110814	0.121	0.212
782.00	784.00		0.5	0.3	5 66 MVN 65 10	Very low sulphide content. Abundant mt, weak qtz veining.	k110815	0.165	0.273
784.00	786.00		1.0	0.3	7 11 MVN 55 5		k110816	0.165	0.203
786.00	788.00		0.5	0.5	7 53 QVN 45 5		k110817	0.154	0.25
788.00	790.00		0.5	0.3	7 32 QVN 45 5		k110818	0.158	0.203
790.00	792.00		0.5	0.3	7 30 QVN 45 5		k110819	0.137	0.213
792.00	794.00		0.5	0.3	4 57 QVN 45 5		k110820	0.32	0.501
794.00	796.00		0.5	0.3	4 29 QVN 45 5		k110821	0.191	0.316
796.00	798.00		0.5	0.5	4 42 QVN 45 5	Chl pseudomorphs af augits. Fleck of cpy and on cpy stringer.	k110822	0.299	0.492
798.00	800.00	Coarse-grained grey porphyritic chloritic	0.5	0.1	4 204 ZVN 55 5	Strong zeolite veining. No biotite alteration.	k110823	0.146	0.212
800.00	802.00		1.0	0.0	4 26 ZVN 55 15	One 10cm qtz vein with approx 35% c.g. py.	k110824	0.146	0.18
802.00	803.84		0.5	0.0	15 92 ZVN 55 15	Very strong zeolite veinlets.	k110825	0.152	0.233
803.84 EOH									

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-17**

Northing: 15994.1	Total Depth: 703.14m
Easting: 10062.9	Azimuth: 0°
Elevation: 1683.1	Dip: -90°

Geologist: E. Ramsay
Logged Date: 7/19/2002

Survey Depth	Azimuth	Dip	Comments:
0 m	0 °	-90 °	
100 m	84 °	-79 °	Mechanical
200 m	36 °	-81 °	Magnetic
300 m	167 °	-77 °	Magnetic
400 m	1 °	-83 °	Mechanical
500 m	46 °	-81 °	Mechanical
600 m	24 °	-85 °	Mechanical
700 m	14 °	-88 °	

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-17**

From (m)	To (m)	Rock Type	Comments
0	9.14	CASING	Casing. No recovery (verify with drillers timesheet: meterage block missing)
9.14	28	QUARTZ MONZONITE	Medium gray qtz-monzonite porphyry showing 60-65% white feldspar phenocrysts (euhedral) and greenish black biotite books in an aphanitic siliceous matrix. Abundant reddish orange limonite along fractures produced by oxidation of pyrite veins. Pyrite percentage is mostly estimated from limonite/boxworks. Due to broken condition of the core, sample were taken between run blocks.
28	46	SYENITE	Porphyritic reddish orange coloured syenite, unmineralized and unaltered (post mineral).
46	87.48	QUARTZ MONZONITE	Dark gray, medium-grained porphyritic qtz monzonite with siliceous aphanitic matrix. Rubbly/broken core throughout with low recovery, weak sericite overprinting propylitic alteration. Samples taken between run blocks.
87.48	93.57	LOST CORE	Lost core - no recovery.
93.57	96.62	QUARTZ MONZONITE	
96.62	118.35	SYENITE	Post-mineral syenite dyke, broken-rubbly core down to 101.04m. Grounded upper contact.
118.35	119.82	BASALT	Sheared basalt caught between syenite dykes. Gougy interval between 119.27-119.64m
119.82	123.05	SYENITE	Post mineral syenite dyke, porphyritic. Top contact at 45 degrees to core axis.
123.05	125.15	BASALT	Sheared basalt caught between syenite dykes.
125.15	126.6	SYENITE	Bottom contact highly irregular from 90 degrees to 10 degrees to core axis. Top contact irregular but roughly at 45 degrees to core axis.
126.6	127.3	BASALT	Greenish-gray basalt locally sheared near contact with dykes.
127.3	128.4	SYENITE	Post-mineral syenite dyke with top contact at 70 degrees to core axis. Bottom contact at 40 degrees to core axis.

Hole Number:

KN-02-17

From (m)	To (m)	Rock Type	Comments
128.4	206.4	BASALT FLOW	Dark grayish green, aphyric to locally porphyritic basalt, chloritized, moderately to strongly fractured and cemented by qtz and py and mt +/-anhydrite +/-cpy or gypsum. Sulfides also occur disseminated in the wall rock. Light pink to white anhydrite/zeolite filled fractures are common throughout the unit.
206.4	209.6	FAULT BASALT	Fault breccia with chloritic gouge.
209.6	212.95	BASALT	Strong propylitic alteration and weak silicification hydrothermal breccia.
212.95	214.6	FAULT BASALT	Fault breccia with chloritic gouge showing shear planes at 20 degrees to core axis.
214.6	221.8	BASALT	
221.8	226.2	FAULT BASALT	Fault breccia with chloritic gouge. Probably a fault along the contact with a syenite dyke or dykelet running sub-parallel to coarse axis. Syenite appears and disappears down hole, suggesting an irregular orientation/shape. Core shows rough texture where soft gouge material was washed away. It is holding together but is brittle.
226.2	227.69	QUARTZ MONZONITE BASALT	Interval is roughly 60% qtz-monzo and 40% propylitization basalt.
227.69	228.58	QUARTZ MONZONITE	
228.58	230.97	BASALT	In-situ brecciated anhydrite/zeolite cemented basalt, rough texture caused by gouge washing.
230.97	231.3	FAULT BASALT	Light greenish gray fault breccia with gouge.
231.3	233.65	BASALT	In situ brecciated basalt, cemented with anhydrite/zeolite.
233.65	235	FAULT BASALT	Fault breccia with gouge, variable orientation.
235	240.78	BASALT FLOW	
240.78	241.54	ANHYDRITE VEIN	violet anhydrite/gypsum vein.
241.54	242.19	FAULT BASALT	Fault breccia with gouge.
242.19	248	BASALT FLOW	Gouge lined fractures.

Hole Number:

KN-02-17

From (m)	To (m)	Rock Type	Comments
248	250.8	BASALT	
250.8	251.75	SYENITE	Orange porphyritic syenite vein.
251.75	297.75	BASALT FLOW	
297.75	299.08	BASALT	Low angle to core axis, fault glancing in and out of core.
299.08	301.9	SYENITE	Post mineral syenite dyke.
301.9	303.9	BASALT	
303.9	320.42	BASALT FLOW	
320.42	321.33	SYENITE	Post-mineral syenite dykelet with sheared upper and lower contacts.
321.33	322.23	BASALT	
322.23	334	SYENITE	
334	335.4	BASALT	Sheared chloritized basalt at 30 degrees to core axis.
335.4	354.4	SYENITE	Post-mineral syenite dyke.
354.4	357.05	BASALT	Sheared chloritized basalt.
357.05	358.1	SYENITE	Post-mineral syenite dyke with sheared contacts.
358.1	362	BASALT	Sheared chloritized basalt.
362	368	BASALT FLOW	Porphyritic basalt flow.
368	369.06	BASALT	Sheared chloritized basalt at 5 degrees to core axis parallel to dyke contact
369.06	448.85	SYENITE	Post-mineral syenite dyke.

Hole Number:

KN-02-17

From (m)	To (m)	Rock Type	Comments
448.85	527.6	BASALT FLOW	Porphyritic basalt showing medium-sized chloritized mafic phenocrysts (1-5mm) in an aphanitic grained matrix. Pyrite occurs is disseminated anhedral grains as well as in py +/- qtz +/- anhydrite veinlets. Locally aphyric. Dark gray to orange gray.
527.6	594.1	SYENITE	Post-mineral syenite, initially darker coloured and finer grained, coarsening down hole.
594.1	595.1	QUARTZ MONZONITE	Qtz-monzonite porphyry, weakly altered and mineralized, irregular contacts with previous and next units, vuggy zeolite-calcite veinlets.
595.1	597.93	SYENITE	Porphyritic syenite dyke, unaltered, unmineralized, phenocrysts are finer grained than usual and less numerous (chilled zone?).
597.93	633.38	QUARTZ MONZONITE	Qtz-monzonite porphyry, greenish gray to locally orange gray (zeolite) showing 60 to 65% feldspar + chloritized biotite medium-grained phenocrysts in an aphanitic siliceous matrix. Crowded texture. 1-3% zeolite +/- calcite filled fractures (late, crosscutting everything else), 1-2% silica +/- mt +/- py +/- cp veinlets at variable angles to core axis.
633.38	649	BASALT	Dark gray to black, massive to locally porphyritic basalt, fluorite+cpy vein at 30 degrees to core axis. Qtz-monzonite dykelet at 50 degrees to core axis between 634.55-634.63m.
649	651	BASALT QUARTZ MONZONITE	Qtz-monzonite dykelet at 45 degrees to core axis between 651.25-651.50m.
651	653	BASALT	
653	655	BASALT QUARTZ MONZONITE	Qtz-monzonite dykelet at 45 degrees to core axis. Fluorite + chalcopyrite at 45 degrees to core axis.
655	659.64	BASALT	
659.64	659.97	QUARTZ MONZONITE	Qtz-monzonite dykelet at 35 degrees to core axis.
659.97	665.5	BASALT	
665.5	666.38	QUARTZ MONZONITE	Qtz-monzonite dykelet at 45 degrees to core axis.
666.38	682.9	BASALT	
682.9	683.55	QUARTZ MONZONITE	Strongly altered qtz-monzonite porphyry, alteration locally obliterating primary textures.

Hole Number: **KN-02-17**

From (m)	To (m)	Rock Type	Comments
683.55	700.13	BASALT	Sheared basalt, injected with pink zeolite + calcite along shear planes, sub-parallel to core axis.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-17

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	9.14	CASING							
	0.00	9.14				Casing. No recovery (verify with drillers timesheet: meterage block missing)	17	-2	-2
9.14	28	QUARTZ MONZONITE							
	9.14	10.67 Fine-medium-grained orange grey porphyritic sericitic pyritic	3.0	0	20	Medium gray qtz-monzonite porphyry showing 60-65% white feldspar phenocrysts (euhedral) and greenish black biotite books in an aphanitic siliceous matrix. Abundant reddish orange limonite along fractures produced by oxidation of pyrite veins. Pyrite percentage is mostly estimated from limonite/boxworks. Due to broken condition of the core, sample were taken between run blocks.	106364	0.136	0.22
	10.67	12.19	2.0	0			106365	0.236	0.261
	12.19	13.72	2.0	0			106366	0.225	0.225
	13.72	15.24	3.0	1			106367	0.403	0.413
	15.24	16.76 Fine-medium-grained medium grey porphyritic sericitic pyritic	2.0	0			106368	0.251	0.225
	16.76	18.29	1.0	0	7		106369	0.354	0.261
	18.29	19.81	3.0	0			106370	0.306	0.259
	19.81	21.34	2.0	0			106371	0.379	0.308
	21.34	22.86	3.0	0			106372	0.247	0.242
	22.86	24.38	1.0	0			106373	0.368	0.354
	24.38	25.91	0.1	0			106374	0.231	0.215
	25.91	27.43	0.5	0			106375	0.188	0.183
	27.43	28.00	0.5	0	7		106801	0.427	0.377
28	46	SYENITE							
	28.00	30.00 Fine-medium-grained orange grey porphyritic			23	Porphyritic reddish orange coloured syenite, unmineralized and unaltered (post mineral).	106802	0.045	-2
	30.00	32.00			21		106803	0.026	-2

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
32.00	34.00	Fine-medium-grained orange grey porphyritic		16			106804	0.013	-2
34.00	36.00			20			106805	0.05	-2
36.00	38.00			23			106806	0.02	-2
38.00	40.00			23			106807	0.015	-2
40.00	42.00			24			106808	0.007	0.005
42.00	44.00			24			106809	0.003	-2
44.00	46.00			20			106810	0.003	-2
46	87.48	QUARTZ MONZONITE							
46.00	48.77	Fine-medium-grained dark grey porphyritic sericitic propylitic	5.0	0	13	Dark gray, medium-grained porphyritic qtz monzonite with siliceous aphanitic matrix. Rubbly/broken core throughout with low recovery, weak sericite overprinting propylitic alteration. Samples taken between run blocks.	106812	0.112	0.222
48.77	51.82		0.1	0	12		106813	0.088	0.207
51.82	54.86		3.0	0			106814	0.32	0.449
54.86	57.91		5.0	0			106815	0.293	0.386
57.91	60.96	Fine-medium-grained orange grey porphyritic sericitic propylitic	1.0	0		Orange feldspar staining and orange pink anhydrite/zeolite veinlet.	106816	0.287	0.337
60.96	64.01	Fine-medium-grained dark grey porphyritic sericitic propylitic	0.5	0			106817	0.205	0.246
64.01	67.06		3.0	0			106818	0.162	0.195
67.06	70.10	Fine-medium-grained orange grey porphyritic sericitic propylitic	2.0	0			106819	0.178	0.254
70.10	73.15		2.0	0			106820	0.198	0.253
73.15	76.20		5.0	13			106821	0.123	0.15
76.20	79.25		10.0	0		Hole downsized to NQ at 79.25m.	106822	0.268	0.354
79.25	81.38	Fine-medium-grained dark grey porphyritic sericitic propylitic	5.0	0		Poor recovery - samples taken from run block to run block.	106823	0.095	0.161
81.38	87.48		3.0	0	12		106824	0.096	0.175
87.48	93.57	LOST CORE							
87.48	93.57	broken				Lost core - no recovery.	-17	0	0
93.57	96.62	QUARTZ MONZONITE							

Hole Number: KN-02-17

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
93.57	96.62	Fine-medium-grained dark grey porphyritic sericitic propylitic	1.0	0	15		106825	0.151	0.21
96.62	118.35	SYENITE							
96.62	99.67	Fine-medium-grained orange grey porphyritic		0	16	Post-mineral syenite dyke, broken-rubbly core down to 101.04m. Grounded upper contact.	106826	0.034	0.035
99.67	101.04			0	12		106827	0.007	0.01
101.04	103.00			1	20		106828	0.003	-2
103.00	105.00			1	21		106829	0.002	-2
105.00	107.00			1	21		106830	0.003	-2
107.00	109.00			0	19		106831	0.002	-2
109.00	111.00			1	20		106832	0.003	-2
111.00	113.00			1	21		106833	0.002	-2
113.00	115.00			1	22		106834	0.003	-2
115.00	117.00			1	23		106835	0.003	-2
117.00	118.35			0	20 CTC	60 Bottom contact at 60 degrees to core axis.	106836	0.003	0.005
118.35	119.82	BASALT							
118.35	119.82	Fine-grained green-grey sheared propylitic	1.0		2 FLT	45 25 Sheared basalt caught between syenite dykes. Gougy interval between 119.27-119.64m	106838	0.129	0.191
119.82	123.05	SYENITE							
119.82	121.00	Fine-medium-grained orange grey porphyritic		0	20 CTC	45 Post mineral syenite dyke, porphyritic. Top contact at 45 degrees to core axis.	106839	0.005	0.007
121.00	123.05			1	22 CTC	55 Bottom contact at 55 degrees to core axis.	106840	0.005	-2
123.05	125.15	BASALT							
123.05	125.15	Fine-grained green-grey sheared propylitic	1.0	0.1	0	18 Sheared basalt caught between syenite dykes.	106841	0.177	0.267
125.15	126.6	SYENITE							
125.15	126.60	Fine-medium-grained orange grey porphyritic		1	21 CTC	45 Bottom contact highly irregular from 90 degrees to 10 degrees to core axis. Top contact irregular but roughly at 45 degrees to core axis.	106842	0.004	-2
126.6	127.3	BASALT							
126.60	127.30	Fine-grained green-grey sheared propylitic	0.5		3	Greenish-gray basalt locally sheared near contact with dykes.	106843	0.165	0.205

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
127.3	128.4	SYENITE								
127.30	128.40	Fine-medium-grained orange grey porphyritic		1	20	Post-mineral syenite dyke with top contact at 70 degrees to core axis. Bottom contact at 40 degrees to core axis.	106844	0.004	0.007	
128.4	206.4	BASALT FLOW								
128.40	130.40	Fine-grained green-grey propylitic	1.0	0.5	0	14	Dark grayish green, aphyric to locally porphyritic basalt, chloritized, moderately to strongly fractured and cemented by qtz and py and mt +/-anhydrite +/-cpy or gypsum. Sulfides also occur disseminated in the wall rock. Light pink to white anhydrite/zeolite filled fractures are common throughout the unit.	106845	0.381	0.532
130.40	132.40		0.5	0.5	1	66		106846	0.194	0.308
132.40	134.40		1.0	0.5	1	33		106847	0.308	0.502
134.40	136.40		1.0	0.5	1	18		106848	0.255	0.42
136.40	138.40		0.5	1.0	1	27		106849	0.156	0.254
138.40	140.40		0.5	0.5	1	19		106850	0.214	0.302
140.40	142.40		0.5	0.1	1	18		106851	0.159	0.213
142.40	144.40		0.5		0	12		106852	0.124	0.171
144.40	146.40		0.5		0	45		106853	0.076	0.091
146.40	148.40		0.5	0.5	1	37		106854	0.119	0.254
148.40	150.40		1.0	0.1	1	18		106855	0.177	0.252
150.40	152.40		0.5		1	43		106856	0.121	0.19
152.40	154.40		1.0	0.1	1	16		106857	0.233	0.404
154.40	156.40		1.0	0.1	1	31		106858	0.112	0.12
156.40	158.40		1.0	1.0	1	26 SVN 10 4	Massive chalcopyrite mass in qtz-py-cpy vein at 10 degrees to core axis.	106859	0.268	0.471
158.40	160.40		0.5	0.1	1	8		106860	0.1	0.175
160.40	162.40		0.5	0.1	1	10		106861	0.085	0.095
162.40	164.40		0.5	0.1	1	25		106862	0.13	0.219
164.40	166.40		0.5	0.1	0	30		106864	0.146	0.294
166.40	168.40		0.5	0.1	1	21		106865	0.124	0.19
168.40	170.40		0.5	0.1	1	50		106866	0.198	0.405

Hole Number: KN-02-17

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
170.40	172.40	Fine-grained green-grey propylitic	0.5	0.1	0	18		106867	0.212	0.356
172.40	174.40		0.5	0.1	1	4	173.50-174.00m. Irregular shaped anh/gyp and qtz and mt +/-py vein.	106868	0.116	0.2
174.40	176.40		0.5	0.1	0	14		106869	0.161	0.283
176.40	178.40		0.5	0.1	0	39		106870	0.168	0.28
178.40	180.40		0.5	0.1	3	11		106871	0.137	0.265
180.40	182.40		0.1	0.1	1	21		106872	0.132	0.184
182.40	184.40	Fine-grained green-grey propylitic biotite	1.0		1	12	Weak diffuse biotite alteration overprinting chlorite (faint brownish hue to rock)	106873	0.133	0.147
184.40	186.40		0.5	0.1	1	11		106874	0.194	0.285
186.40	188.40		0.5		1	10		106875	0.114	0.18
188.40	190.40		1.5		0	40		106876	0.143	0.17
190.40	192.40		0.5	0.1	0	20		106877	0.105	0.207
192.40	194.40		2.0	0.5	3	5		106878	0.123	0.1
194.40	196.40		1.0	0.1	1	0		106879	0.188	0.294
196.40	198.40	Fine-grained green-grey propylitic	0.1		2	34		106880	0.121	0.185
198.40	200.40		0.1	0.1	1	37		106881	0.087	0.138
200.40	202.40	Fine-grained green-grey propylitic biotite	2.0	1.0	2	10	A 6cm wide vein of mixed massive py and cpy and silica at 201.50m with weak biotite in wall rock.	106882	0.271	0.69
202.40	204.40	Fine-grained green-grey propylitic	0.1		1	30		106883	0.247	0.353
204.40	206.40		0.1		1	52		106884	0.123	0.186
206.4	209.6	FAULT BASALT								
206.40	208.40	Fine-grained green-grey propylitic	0.5		0	1 FLT 45100	Fault breccia with chloritic gouge.	106885	0.128	0.2
208.40	209.60		0.1		1	101		106886	0.109	0.146
209.6	212.95	BASALT								
209.60	211.60	Fine-grained green-grey brecciated propylitic silicic	0.1		1	23	Strong propylitic alteration and weak silicification hydrothermal breccia.	106887	0.242	0.297
211.60	212.95		0.1		1	26		106888	0.293	0.415
212.95	214.6	FAULT BASALT								
212.95	213.60	Coarse-fine-grained green-grey propylitic	0.1		0	FLT 20100	Fault breccia with chloritic gouge showing shear planes at 20 degrees to core axis.	106890	0.109	0.148

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
213.60	214.60	Coarse-fine-grained green-grey propylitic	0.1		0 FLT 20100		106891	0.106	0.143
214.6	221.8	BASALT							
214.60	215.80	Fine-grained green-grey fragmental propylitic	1.0		12		106892	0.177	0.181
215.80	217.80	Fine-grained green-grey propylitic biotite	0.5		10	Broken core between 215.80-216.15m. Fault? Weak biotite alteration.	106893	0.243	0.349
217.80	219.80	Fine-grained green-grey fragmental propylitic	0.1		1	Rock is fractured but does not contain gouge.	106894	0.208	0.318
219.80	221.80	Fine-grained orange grey fragmental propylitic	0.5	1	64		106895	0.172	0.242
221.8	226.2	FAULT BASALT							
221.80	223.80	Coarse-fine-grained green-grey propylitic	1.0		2 FLT 5100	Fault breccia with chloritic gouge. Probably a fault along the contact with a syenite dyke or dykelet running sub-parallel to coarse axis. Syenite appears and disappears down hole, suggesting an irregular orientation/shape. Core shows rough texture where soft gouge material was washed away. It is holding together but is brittle.	106896	0.265	0.323
223.80	224.64		1.0	1	29 FLT 5100		106897	0.332	0.47
224.64	226.20		0.1		4 FLT 10100	Broken core between 224.64-224.93m. Fault plane/mirror at 10 degrees to core axis with black gouge.	106898	0.186	0.306
226.2	227.69	QUARTZ MONZONITE BASALT							
226.20	227.69	Coarse-fine-grained orange grey brecciated propylitic	0.1	1	52	Interval is roughly 60% qtz-monzo and 40% propylitization basalt.	106899	0.178	0.266
227.69	228.58	QUARTZ MONZONITE							
227.69	228.58	Medium-fine-grained orange grey porphyritic propylitic	0.1	1	43		106900	0.212	0.287
228.58	230.97	BASALT							
228.58	230.00	Medium-fine-grained green-grey in-situ brecciated propylitic	0.1		0	In-situ brecciated anhydrite/zeolite cemented basalt, rough texture caused by gouge washing.	106901	0.255	0.334
230.00	230.97		0.1		3		106902	0.356	0.412
230.97	231.3	FAULT BASALT							
230.97	231.30	Fine-coarse grained light grey brecciated clay propylitic			3	Light greenish gray fault breccia with gouge.	106903	0.025	0.043

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
231.3	233.65	BASALT							
231.30	232.47	Medium-fine-grained green-grey in-situ brecciated propylitic	0.1	1	23	In situ brecciated basalt, cemented with anhydrite/zeolite.	106904	0.217	0.301
232.47	233.65	Medium-fine-grained orange grey in-situ brecciated silicic	0.1	1	11 AVN 45 60	Wide zone of anhydrite/zeolite injections with silicified wall rock.	106905	0.164	0.266
233.65	235	FAULT BASALT							
233.65	235.00	Medium-fine-grained green-grey brecciated propylitic	0.1	1	10	Fault breccia with gouge, variable orientation.	106906	0.156	0.196
235	240.78	BASALT FLOW							
235.00	237.00	Medium-fine-grained green-grey flow brecciated propylitic	0.1	1	30		106907	0.071	0.073
237.00	239.00		0.5		2		106908	0.133	0.155
239.00	240.78		0.1	0.1	1 43 AVN 90 10	violet anhydrite veins.	106909	0.093	0.132
240.78	241.54	ANHYDRITE VEIN							
240.78	241.54	Fine-medium-grained violet in-situ brecciated	0.1		1 AVN 90100	violet anhydrite/gypsum vein.	106910	0.02	0.048
241.54	242.19	FAULT BASALT							
241.54	242.19	Fine-medium-grained green-grey brecciated propylitic	0.1		3 FLT 70 55	Fault breccia with gouge.	106911	0.22	0.343
242.19	248	BASALT FLOW							
242.19	244.00	Fine-medium-grained green-grey flow brecciated propylitic	0.1	1	26	Gouge lined fractures.	106912	0.165	0.264
244.00	246.00		0.1	1	19		106913	0.097	0.134
246.00	248.00		0.1	0.1	1 42 AVN 70 30		106914	0.206	0.272
248	250.8	BASALT							
248.00	250.00	Fine-medium-grained green-grey flow brecciated propylitic	0.1	1	25 FLT 70 30		106916	0.181	0.348
250.00	250.80		1.0	1	24		106917	0.18	0.383
250.8	251.75	SYENITE							
250.80	251.75	Fine-medium-grained orange grey porphyritic		1	15	Orange porphyritic syenite vein.	106918	0.014	0.024
251.75	297.75	BASALT FLOW							

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
251.75	253.75	Fine-medium-grained medium grey porphyritic propylitic	1.0	1	31		106919	0.209	0.211
253.75	255.75	Fine-medium-grained green-grey porphyritic propylitic	0.5		6		106920	0.173	0.22
255.75	257.75		0.1	1	24		106921	0.139	0.213
257.75	259.75		0.5	0.5	1	12	106922	0.101	0.136
259.75	261.75		0.5	0.1	1	41	106923	0.168	0.182
261.75	263.75		0.5	0.1	1	28	106924	0.143	0.148
263.75	265.75		0.1		9		106925	0.212	0.244
265.75	267.75		1.0	1	46		106926	0.296	0.223
267.75	269.75		0.1	1	12		106927	0.086	0.106
269.75	271.75		0.5	1	25	Core breaks easily in angular fragments and is locally vuggy because of gypsum dissolution.	106928	0.198	0.265
271.75	273.75		0.5	1	12		106929	0.219	0.288
273.75	275.75		0.1	0	18	A few decimetric intervals were broken into rounded pebbles.	106930	0.107	0.146
275.75	277.75		0.5	0.1	0	45	106931	0.134	0.207
277.75	279.75		1.0	0.1	1	11	106932	0.298	0.433
279.75	281.75		0.1	1	35		106933	0.236	0.354
281.75	283.75		0.1	0	66		106934	0.096	0.163
283.75	285.75		1.0	0	22		106935	0.271	0.489
285.75	287.75		0.1	0.1	1	22 FLT 5 10	106936	0.191	0.277
287.75	289.75		0.1	0.1	0	45	106937	0.229	0.288
289.75	291.75		1.0	1	33		106938	0.168	0.189
291.75	293.75		1.5	0	8		106939	0.154	0.178
293.75	295.75		0.1	1	34		106940	0.165	0.247
295.75	297.75		0.1	1	2		106942	0.139	0.192
297.75	299.08	BASALT							
297.75	299.08	Fine-medium-grained orange grey brecciated propylitic	1.0	0	1 FLT	5 10	106943	0.234	0.382
299.08	301.9	SYENITE							

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
299.08	301.00	Medium-fine-grained orange grey porphyritic		1	16	Post mineral syenite dyke.	106944	0.02	0.107
301.00	301.90				2		106945	0.033	0.038
301.9	303.9	BASALT							
301.90	303.90	Fine-medium-grained orange grey brecciated propylitic	0.1	1	16 FLT	5 50	106946	0.145	0.236
303.9	320.42	BASALT FLOW							
303.90	305.90	Fine-medium-grained green-grey porphyritic propylitic	0.1	1	21		106947	0.185	0.296
305.90	307.90		0.5	1	12		106948	0.188	0.288
307.90	309.90		1.0	2	98		106949	0.19	0.222
309.90	311.90		0.1	2	18		106950	0.209	0.298
311.90	313.90		0.1	2	28		106951	0.172	0.193
313.90	315.90		0.5		9		106952	0.115	0.124
315.90	317.90		0.1	3	488		106953	0.298	0.442
317.90	319.90	Fine-medium-grained orange grey porphyritic propylitic	0.1	3	14		106954	0.326	0.506
319.90	320.42		0.1	1	13		106955	0.269	0.458
320.42	321.33	SYENITE							
320.42	321.33	Medium-fine-grained orange grey porphyritic		1	15	Post-mineral syenite dykelet with sheared upper and lower contacts.	106956	0.013	0.018
321.33	322.23	BASALT							
321.33	322.23	Fine-medium-grained dark grey porphyritic propylitic	1.0	1	14		106957	0.096	0.133
322.23	334	SYENITE							
322.23	324.00	Medium-fine-grained orange grey porphyritic		1	18		106958	0.003	-2
324.00	326.00			1	17		106959	0.003	-2
326.00	328.00			1	18		106960	0.004	-2
328.00	330.00			1	15		106961	0.003	-2
330.00	332.00			1	15		106962	0.002	0.005
332.00	334.00			1	15		106963	0.003	0.008

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
334	335.4	BASALT							
334.00	335.40	Fine-medium-grained green-grey sheared propylitic	1	16	FLT 30 70	Sheared chloritized basalt at 30 degrees to core axis.	106964	0.002	-2
335.4	354.4	SYENITE							
335.40	336.17	Medium-fine-grained orange grey porphyritic		6		Post-mineral syenite dyke.	106965	0.255	0.4
336.17	338.00		1	24			106966	0.003	-2
338.00	340.00		1	22			106968	0.003	-2
340.00	342.00		1	20			106969	0.003	0.005
342.00	344.00		1	18			106970	0.002	-2
344.00	346.00		1	20			106971	0.002	0.006
346.00	348.00		1	16			106972	0.002	-2
348.00	350.00		1	18			106973	0.002	0.008
350.00	352.00			10			106974	0.002	-2
352.00	354.00		1	17			106975	0.003	-2
354.00	354.40		1	19			106976	0.004	-2
354.4	357.05	BASALT							
354.40	356.00	Fine-grained dark grey sheared propylitic	1	13		Sheared chloritized basalt.	106977	0.395	0.402
356.00	357.05		1	12			106978	0.088	0.111
357.05	358.1	SYENITE							
357.05	358.10	Medium-fine-grained orange grey porphyritic	1	12		Post-mineral syenite dyke with sheared contacts.	106979	0.012	0.01
358.1	362	BASALT							
358.10	360.00	Fine-grained dark grey sheared propylitic		6	SHR 0100	Sheared chloritized basalt.	106980	0.361	0.485
360.00	362.00		0.1	1	13 SHR 0100	Sheared chloritized basalt at 0 degrees to core axis parallel to dyke contact.	106981	0.194	0.273
362	368	BASALT FLOW							
362.00	364.00	Fine-grained dark grey porphyritic propylitic	0.1	1	38	Porphyritic basalt flow.	106982	0.125	0.171
364.00	366.00		0.5	1	16		106983	0.197	0.296

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
366.00	368.00	Fine-grained dark grey porphyritic propylitic	0.1	1	16		106984	0.203	0.293
368	369.06	BASALT							
368.00	369.06	Fine-grained dark grey sheared propylitic	0.1		5 SHR 5100	Sheared chloritized basalt at 5 degrees to core axis parallel to dyke contact	106985	0.134	0.168
369.06	448.85	SYENITE							
369.06	371.00	Medium-fine-grained orange grey porphyritic		0	11	Post-mineral syenite dyke.	106986	0.016	0.021
371.00	373.00			1	15		106987	0.003	-2
373.00	375.00			1	14		106988	0.002	-2
375.00	377.00			1	16		106989	0.002	-2
377.00	379.00			1	14		106990	0.003	0.005
379.00	381.00			1	17		106991	0.003	-2
381.00	383.00			1	17		106992	0.002	0.005
383.00	385.00			1	17		106994	0.002	0.016
385.00	387.00			1	15		106995	0.002	-2
387.00	389.00			1	13		106996	0.003	-2
389.00	391.00			1	17		106997	0.002	-2
391.00	393.00			1	17		106998	0.002	0.005
393.00	395.00			1	17		106999	0.002	-2
395.00	397.00			1	17		107000	0.002	-2
397.00	399.00			1	17		109001	0.002	-2
399.00	401.00			1	20		109002	0.002	-2
401.00	403.00			1	16		109003	0.002	-2
403.00	405.00			1	19		109004	0.002	-2
405.00	407.00			1	19		109005	0.002	-2
407.00	409.00			1	16		109006	0.001	-2
409.00	411.00			1	19		109007	0.002	-2
411.00	413.00			1	16		109008	0.002	-2
413.00	415.00			1	17		109009	0.002	-2

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
415.00	417.00	Medium-fine-grained orange grey porphyritic		1	17		109010	0.002	0.005
417.00	419.00			1	17		109011	0.002	0.006
419.00	421.00			1	16		109012	0.002	-2
421.00	423.00			1	15		109013	0.002	-2
423.00	425.00			1	14		109014	0.001	0.008
425.00	427.00			1	16		109015	0.002	0.013
427.00	429.00			1	16		109016	0.001	-2
429.00	431.00			1	15		109017	0.001	-2
431.00	433.00			1	20		109018	0.035	0.019
433.00	435.00			1	18		109020	0.003	0.039
435.00	437.00			1	19		109021	0.004	-2
437.00	439.00			1	19		109022	0.003	0.006
439.00	441.00			1	14		109023	0.003	0.026
441.00	443.00			1	17		109024	0.004	0.006
443.00	445.00			1	18		109025	0.006	0.01
445.00	447.00			1	18		109026	0.003	0.005
447.00	448.85			1	20		109027	0.003	-2
448.85	527.6	BASALT FLOW							
448.85	450.00	Fine-medium-grained green-grey porphyritic propylitic	1.0		8	Porphyritic basalt showing medium-sized chloritized mafic phenocrysts (1-5mm) in an aphanitic grained matrix. Pyrite occurs is disseminated anhedral grains as well as in py +/- qtz +/- anhydrite veinlets. Locally aphyric. Dark gray to orange gray.	109028	0.147	0.083
450.00	452.00	Fine-medium-grained orange grey porphyritic propylitic	1.0		9		109029	0.174	0.161
452.00	454.00		0.5	1	42		109030	0.198	0.241
454.00	454.50		0.1	1	26	Locally vuggy near anhydrite vein.	109031	0.161	0.262
454.50	456.04	Fine-medium-grained orange grey porphyritic propylitic anhydrite	0.5		5		109032	0.14	0.167
456.04	458.00	Fine-medium-grained orange grey porphyritic propylitic	0.5		10		109033	0.145	0.192

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
458.00	460.00	Fine-medium-grained orange grey porphyritic propylitic	0.1	0.1	4		109034	0.222	0.22
460.00	462.00		0.5	0.5	1	36	109035	0.407	0.588
462.00	464.00		0.5	1	20		109036	0.105	0.12
464.00	466.00		0.5	1	14		109037	0.147	0.145
466.00	468.00		1.0	0.1	1	21	109038	0.41	0.622
468.00	470.00		1.0	0.1	9		109039	0.146	0.129
470.00	472.00		1.0	0.1	1	10	109040	0.133	0.082
472.00	474.00		1.0	0.1	6		109041	0.154	0.124
474.00	476.00	Fine-medium-grained green-grey porphyritic propylitic	1.0	0.1	2		109042	0.181	0.203
476.00	478.00		1.0	1	16		109043	0.144	0.124
478.00	480.00		1.0	2	87		109044	0.15	0.234
480.00	482.00		0.5	0.1	7		109046	0.263	0.504
482.00	484.00		0.1	0	3		109047	0.189	0.379
484.00	486.00		0.1	0	5		109048	0.148	0.19
486.00	488.00		0.5	0	5		109049	0.148	0.176
488.00	490.00		0.5	0.1	0	5	109050	0.121	0.073
490.00	492.00		0.5	0	4		109051	0.168	0.243
492.00	494.00		0.5	9			109052	0.253	0.328
494.00	496.00		1.0	9			109053	0.213	0.263
496.00	498.00		1.0	3			109054	0.261	0.409
498.00	500.00		0.5	3			109055	0.121	0.055
500.00	502.00		0.5	0.1	7		109056	0.209	0.356
502.00	504.00		1.0	1			109057	0.231	0.34
504.00	506.00		1.0	0.1	10		109058	0.219	0.206
506.00	508.00		1.0	0.1	1	12	109059	0.231	0.302
508.00	510.00	Fine-medium-grained orange grey porphyritic propylitic	1.0	0	5	5cm wide anh + mt vein near 507.80m. gray with orange undertones.	109060	0.206	0.281
510.00	512.00		1.0	1	60		109061	0.236	0.312

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
512.00	514.00	Fine-medium-grained orange grey porphyritic propylitic	1.0	0	10		109062	0.149	0.15
514.00	516.00		1.0	0	12		109063	0.311	0.579
516.00	518.00		0.5		1		109064	0.177	0.218
518.00	520.00		0.5	0.1	3		109065	0.306	0.39
520.00	522.00		1.0		4		109066	0.19	0.311
522.00	524.00		1.0		6		109067	0.238	0.301
524.00	526.00		0.5		10		109068	0.221	0.176
526.00	527.60		1.0		1		109069	0.361	0.407
527.6	594.1	SYENITE							
527.60	529.00	Medium-fine-grained orange grey porphyritic		1	22	Post-mineral syenite, initially darker coloured and finer grained, coarsening down hole.	109070	0.008	0.007
529.00	531.00			1	22	Colour lightens slightly down hole.	109072	0.003	-2
531.00	533.00			1	23		109073	0.002	-2
533.00	535.00			1	22		109074	0.002	-2
535.00	537.00			1	20		109075	0.002	-2
537.00	539.00			1	18		109076	0.003	-2
539.00	541.00			1	16		109077	0.003	-2
541.00	543.00			1	15		109078	0.003	-2
543.00	545.00			1	16		109079	0.003	-2
545.00	547.00			1	15		109080	0.003	-2
547.00	549.00			1	15		109081	0.003	-2
549.00	551.00			1	19		109082	0.002	-2
551.00	553.00			1	15		109083	0.002	-2
553.00	555.00			1	19		109084	0.002	-2
555.00	557.00			1	21		109085	0.002	-2
557.00	559.00			1	19		109086	0.003	-2
559.00	561.00			1	19		109087	0.001	-2
561.00	563.00			1	16		109088	0.002	-2
563.00	565.00			1	15		109089	0.002	-2

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
565.00	567.00	Medium-fine-grained orange grey porphyritic		1	19		109090	0.002	-2
567.00	569.00			1	17		109091	0.002	-2
569.00	571.00			1	14		109092	0.002	-2
571.00	573.00			1	14		109093	0.004	-2
573.00	575.00			1	15		109094	0.002	-2
575.00	577.00			1	15		109095	0.003	0.005
577.00	579.00			1	11		109096	0.003	0.007
579.00	581.00			1	13		109098	0.002	0.005
581.00	583.00			1	12		109099	0.003	-2
583.00	585.00			1	17		109100	0.002	-2
585.00	587.00			1	14		109101	0.003	-2
587.00	589.00			1	18		109102	0.002	-2
589.00	591.00			1	18		109103	0.002	-2
591.00	593.00			1	16		109104	0.002	0.005
593.00	594.10			1	16		109105	0.003	0.006
594.1	595.1	QUARTZ MONZONITE							
594.10	595.10	Medium-fine-grained green-grey porphyritic propylitic	0.1		1	Qtz-monzonite porphyry, weakly altered and mineralized, irregular contacts with previous and next units, vuggy zeolite-calcite veinlets.	109106	0.162	0.125
595.1	597.93	SYENITE							
595.10	596.49	Medium-fine-grained orange grey porphyritic		1	16	Porphyritic syenite dyke, unaltered, unmineralized, phenocrysts are finer grained than usual and less numerous (chilled zone?).	109107	0.004	0.005
596.49	597.93			1	18		109108	0.003	-2
597.93	633.38	QUARTZ MONZONITE							
597.93	600.00	Medium-fine-grained green-grey porphyritic propylitic	0.5	0.1	0	Qtz-monzonite porphyry, greenish gray to locally orange gray (zeolite) showing 60 to 65% feldspar + chloritized biotite medium-grained phenocrysts in an aphanitic siliceous matrix. Crowded texture. 1-3% zeolite +/- calcite filled fractures (late, crosscutting everything else), 1-2% silica +/- mt +/- py +/- cp veinlets at variable angles to core axis.	109109	0.181	0.228

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
600.00	602.00	Medium-fine-grained green-grey porphyritic propylitic	1.0	1	23 QVN 40 2	Qtz+zeolite+py vein with pyritic selvages at 40 degrees to core axis. Pyrite stringer dismembered and offset by 3 zeolite-filled fractures indication movement.	109110	0.31	0.361
602.00	604.00		0.1	0.1	0 0 QVN 20 4	Qtz+zeolite+minor py vein at 20 degrees to core axis, traces of cpy in qtz+zeo veinlet.	109111	0.272	0.334
604.00	606.00		0.5		0 QVN 20 1	Qtz+minor anhydrite + minor pyrite veinlet at 20 degrees to core axis.	109112	0.329	0.431
606.00	606.70		0.1	0	8	Weak local sericitic alteration overprint.	109113	0.195	0.245
606.70	607.20		1.0	0.1	50/650 MVN 50 60	Massive magnetite + qtz + py vein from 606.76-607.10m at 50 degrees to core axis.	109114	0.306	0.206
607.20	609.00		1.0	0	2		109115	0.238	0.359
609.00	611.00		1.0		0		109116	0.233	0.283
611.00	613.00		0.5		1 QVN 20 3	Qtz-zeo-py vein.	109117	0.239	0.284
613.00	615.00		1.0	0.5	2 PVN 1	Pyrite+cpy+mt+minor silica veinlet, irregular orientation.	109118	0.216	0.382
615.00	617.00		0.5		1 AVN 70 1	Anhydrite-gypsum vein at 70 degrees to core axis.	109119	0.197	0.302
617.00	619.00	Medium-fine-grained orange grey porphyritic propylitic	1.5	0.1	1 PVN 30 1	Pyrite+minor silica vein at 30 degrees to core axis.	109120	0.181	0.19
619.00	621.00	Medium-fine-grained dark grey porphyritic propylitic	0.5		2		109121	0.179	0.199
621.00	623.00		1.0	0.1	1		109122	0.226	0.34
623.00	625.00	Medium-fine-grained orange grey porphyritic propylitic	0.5		0		109124	0.218	0.239
625.00	627.00		0.5	0.1	1		109125	0.177	0.167
627.00	629.00		0.5		1		109126	0.099	0.097
629.00	631.00	Medium-fine-grained dark grey porphyritic propylitic	1.0	0.1	0 PVN 30 1		109127	0.171	0.146
631.00	633.00	Medium-fine-grained green-grey porphyritic propylitic	0.5	0	2		109128	0.24	0.219
633.00	633.38		0.5	1	29		109129	0.243	0.233
633.38	649	BASALT							
633.38	635.00	Fine-grained dark grey massive propylitic	0.5	0.1	2 63 FVN 30 2	Dark gray to black, massive to locally porphyritic basalt, fluorite+cpy vein at 30 degrees to core axis. Qtz-monzonite dykelet at 50 degrees to core axis between 634.55-634.63m.	109130	0.274	0.426

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
635.00	637.00	Fine-grained dark grey massive propylitic	0.5 0.1	2	49 FVN 10 2	Fluorite vein at 10 degrees to core axis.	109131	0.367	0.545
637.00	639.00		1.0	3	26		109132	0.117	0.174
639.00	641.00		0.5	3	37		109133	0.055	0.044
641.00	643.00		1.0	2	29		109134	0.118	0.172
643.00	645.00		0.5	1	19		109135	0.169	0.3
645.00	647.00		1.0	1	20		109136	0.233	0.335
647.00	649.00		1.0	1	19		109137	0.194	0.214
649	651	BASALT QUARTZ MONZONITE							
649.00	651.00	Fine-grained dark grey massive propylitic	1.0 0.1	1	31	Qtz-monzonite dykelet at 45 degrees to core axis between 651.25-651.50m.	109138	0.235	0.284
651	653	BASALT							
651.00	653.00	Fine-grained dark grey massive propylitic	1.0 0.1	1	38		109139	0.123	0.216
653	655	BASALT QUARTZ MONZONITE							
653.00	655.00	Fine-grained dark grey massive propylitic	1.0 0.1	1	16 FVN 45 2	Qtz-monzonite dykelet at 45 degrees to core axis. Fluorite + chalcopyrite at 45 degrees to core axis.	109140	0.233	0.331
655	659.64	BASALT							
655.00	657.00	Fine-grained dark grey massive propylitic	1.0 0.1	2	39		109141	0.203	0.351
657.00	659.00		1.0 0.5	1	13 PVN 0 3	Py + mt + cpy vein running sub-parallel to core axis.	109142	0.198	0.279
659.00	659.64		0.1	1	26		109143	0.126	0.25
659.64	659.97	QUARTZ MONZONITE							
659.64	659.97	Medium-fine-grained dark grey porphyritic propylitic	0.5	3	69	Qtz-monzonite dykelet at 35 degrees to core axis.	109144	0.072	0.168
659.97	665.5	BASALT							
659.97	661.00	Fine-grained dark grey massive propylitic	0.5	1	18		109145	0.07	0.104
661.00	663.00		0.5 0.5	2	31		109146	0.127	0.203
663.00	665.00		0.5 0.5	4	87		109147	0.2	0.416
665.00	665.50		1.0 0.5	2	27		109148	0.111	0.153

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
665.5	666.38	QUARTZ MONZONITE								
665.50	666.38	Medium-fine-grained dark grey porphyritic propylitic	1.0	0.1	0	5	Qtz-monzonite dykelet at 45 degrees to core axis.	109150	0.198	0.398
666.38	682.9	BASALT								
666.38	668.00	Fine-grained dark grey massive propylitic	1.0	0.1	1	23		109151	0.154	0.289
668.00	670.00		1.0	0.1	1	25		109152	0.195	0.508
670.00	672.00		0.5	0.1	2	13		109153	0.117	0.302
672.00	674.00		1.0	0.1	1	12		109154	0.152	0.224
674.00	676.00		1.0	0.1	1	16		109155	0.235	0.405
676.00	678.00		1.0	0.1	0	10		109156	0.106	0.122
678.00	680.00	Fine-grained green-grey massive propylitic	1.0	0.1	1	22		109157	0.158	0.091
680.00	682.00	Fine-grained dark grey massive propylitic	1.0	0.1	1	16		109158	0.144	0.053
682.00	682.90	Fine-grained green-grey flow brecciated propylitic	0.5			3	Volcaniclastic rock, basaltic/andesitic, brecciated texture (flow breccia?).	109159	0.256	0.507
682.9	683.55	QUARTZ MONZONITE								
682.90	683.55	Medium-fine-grained light grey porphyritic sericitic propylitic	0.1			1	Strongly altered qtz-monzonite porphyry, alteration locally obliterating primary textures.	109160	0.062	0.065
683.55	700.13	BASALT								
683.55	684.75	Fine-grained green-grey sheared propylitic	0.1		2	32 SHR	0 50 Sheared basalt, injected with pink zeolite + calcite along shear planes, sub-parallel to core axis.	109161	0.019	0.053
684.75	685.60	Fine-grained black amygdular propylitic			2	37	Massive black basalt showing 1% amygdules lined with pink zeolite and with a calcite core.	109162	0.008	0.008
685.60	687.75	Fine-grained green-grey brecciated propylitic	0.1		1	1 CVN	0 30 Fractured basalt injected with pink zeolite and calcite. Main calcite + zeolite injection runs parallel to core axis.	109163	0.171	0.264
687.75	689.75	Fine-grained dark grey massive propylitic	0.5			11	Dark gray porphyritic basalt to end of hole.	109164	0.15	0.205
689.75	691.75		1.0		1	14		109165	0.163	0.183
691.75	693.75	Fine-medium-grained dark grey porphyritic propylitic	0.5		0	9		109167	0.153	0.282
693.75	695.75		0.5		0	15		109168	0.103	0.033

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
695.75	697.75	Fine-medium-grained dark grey porphyritic propylitic	0.5	0	13		109169	0.161	0.047
697.75	699.75		0.5	0	5		109170	0.211	0.34
699.75	700.13		0.5	0	3		109171	0.24	0.443
700.13		EOH							

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-18**

Northing: 16067.1 **Total Depth:** 736.67m

Easting: 10654.1 **Azimuth:** 0°

Elevation: 1686.4 **Dip:** -90°

Geologist: B. Mercer

Logged Date: 7/19/2002

Survey Depth	Azimuth	Dip	Comments:
91 m	344 °	-89 °	
183 m	34 °	-88 °	Mechanical
274 m	0 °	0 °	Failed
366 m	73 °	-88 °	Mechanical
457 m	0 °	0 °	Failed
549 m	238 °	-88 °	Magnetic
640 m	50 °	-88 °	Magnetic
731 m	24 °	-88 °	

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-18**

From (m)	To (m)	Rock Type	Comments
0	3.66	CASING	
3.66	13	INTERMEDIATE VOLCANIC FLOW	White grey, intensely clay/ser/qtz altered feldspar porphyritic flow. MG granular looking texture due to 20% kaolin?? pseudomorphs after feldspar. Minor limonitic seams, but py veins mostly intact and un-oxidized. Py approximately 50/50 f.g. dissm/massive veins.
13	46.33	ANDESITE TUFF	Mottled pale apple green with grey patches. Colour change is due to ser>>clay. Fragmental texture well evident in ghost texture of fragments. Can identify BFP protolith for some fragments. Py has same habit as preceding unit from 3.66 --> 13m.
46.33	50.9	ANDESITE BLADED FELDSPAR PORPHYRY	Noticeable absence of clay and silica and core is badly broken down to 81.96m. It is essentially 20% py/80% sericite.
50.9	53.95	LOST CORE	No core recovered.
53.95	82.96	ANDESITE BLADED FELDSPAR PORPHYRY	20% recovery. Py poor. New 100% pale apple green sericite sand.
82.96	84.43	LOST CORE	No core recovered.
84.43	151.1	ANDESITE BLADED FELDSPAR PORPHYRY	Approximately 15% fracture and vein controlled pale blue grey anhydrite and white gypsum. Approximately 2% fine grained disseminated py. The remainder is massive in anhydrite veinlets. HQ ends at 88.34m. Has ghost texture of porphyry.
151.1	210.6	INTERMEDIATE VOLCANIC TUFF	Similar breccia texture as the preceding unit except the fragments are aphanitic as opposed to coarsely porphyritic.
210.6	249	INTERMEDIATE VOLCANIC FLOW	
249	249.36	FAULT INTERMEDIATE VOLCANIC	Fault gouge. Too broken for orientation.

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From (m)	To (m)	Rock Type	Comments
249.36	251.86	INTERMEDIATE VOLCANIC FLOW	Py is all in veinlets.
251.86	253.4	FAULT INTERMEDIATE VOLCANIC	Fault gouge. Too broken for orientation. Several seams of fault gouge one of which is intact at about 10 degrees to c.a.
253.4	261.4	INTERMEDIATE VOLCANIC FLOW	Pyrite mostly medium grained disseminated irregular blebs.
261.4	268.83	FAULT INTERMEDIATE VOLCANIC	From 261.40 to 268.83m is a series of fault gouge seams and broken core in intervening areas.
268.83	413.75	INTERMEDIATE VOLCANIC FLOW	Pale green to apple green highly sericitic flows cut by sparse qtz +/- anhydrite +/-py veinlets. Occasional areas of weakly disseminated py.
413.75	417.1	INTERMEDIATE VOLCANIC TUFF	Weak to no sulphide mineralization.
417.1	422.85	SYENITE	Crowded feldspar texture in a reddish groundmass. Approx 5% chloritized mafic minerals and minor disseminated magnetite. Chloritization is largely restricted to mafic phenocrysts.
422.85	428.85	INTERMEDIATE VOLCANIC FLOW	Flows cut by numerous pink and white zeolite veinlets. Occ qtz vein with medium grained py. Scattered magnetite grain in veins
428.85	429.65	SYENITE	As for 417.10-422.85m. Upper contact broken. Lower contact at 70 degrees.
429.65	430.6	INTERMEDIATE VOLCANIC FLOW	As for 422.85-428.85m with py in veinlets.
430.6	493.67	SYENITE	Similar to dykes above. Upper contact at 45 degrees.
493.67	510.46	BASALT	Moderate greenish gray with local orange hue (zeolite?) Porphyritic basalt showing 10-30% medium sized, sub-hedral to euhedral augite crystals (now chloritized) in an aphanitic grained matrix, rock is moderately altered with primary texture locally obliterated. Zeolite and calcite-filled fractures are common throughout (1-2%).
510.46	516.01	SYENITE	Post mineral syenite, similar to 492.00-493.64m, very shallow upper contact (5 degrees to c.a.)
516.01	534.28	BASALT	Again, wk sericite whitening feldspar laths locally.

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From (m)	To (m)	Rock Type	Comments
534.28	535.16	QUARTZ MONZONITE	Qtz-monzonite porphyry dyke showing crowded texture (65% phenocrysts) of feldspar and biotite.
535.16	537.35	BASALT	Broken core, some qtz and py vein fragments, bottom of interval is composed of gougy brecciated material (fault).
537.35	542.12	SYENITE	Post mineral syenite.
542.12	543.2	BASALT	Several variably oriented qtz and py and cpy veins.
543.2	544.68	SYENITE	Post mineral syenite. Contacts at 30 degrees to c.a.
544.68	546.53	BASALT	Qtz monzonite porphyry dyke similar to 534.28-536.16m.
546.53	559.05	SYENITE	Post mineral syenite, irregular upper contact at roughly 5 degrees to c.a.
559.05	576.8	BASALT	Dark greenish grey to black porphyritic basalt, showing 5-15% subhedral to euhedral augite phenocrysts (now chloritized) in an aphanitic-grained matrix. Rock shows 0-1% zeolite-filled fractures and some irregularly spaced qtz and py +/-cpy veins.
576.8	577.18	QUARTZ MONZONITE	Qtz and mt and cpy and py vein at 10 degrees to c.a. in qtz monzonite dykelet at 60degrees to c.a.
577.18	586.08	BASALT	Qtz monzonite dykelet between 577.60-577.70m at 60 degrees to c.a.
586.08	604.31	SYENITE	Post-mineral syenite dyke, orange-grey, porphyritic.
604.31	609.77	QUARTZ MONZONITE	Qtz and mt and py veins at varying angles to c.a. Greenish-gray qtz monzonite porphyry showing crowded texture (65% phenocrysts) composed of euhedral to subhedral feldspar phenocrysts (medium grained) and medium grained biotite books in an aphanitic matrix. Very weakly chloritized/propylitized. 0-2% pink zeolite +/-calcite veinlets. 1-2% qtz and mt veinlets.
609.77	614.78	LOST CORE	Mismatch -lost core
614.78	650.95	QUARTZ MONZONITE	Qtz and mt veins at various angles to c.a.
650.95	657.45	SYENITE	Post-mineral syenite dyke, similar to 430.60-493.67m.

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From (m)	To (m)	Rock Type	Comments
657.45	701.98	QUARTZ MONZONITE	Qtz-monzonite porphyry, similar to 604.31-650.95m
701.98	702.61	QUARTZ FELSPAR PORPHYRY	Qtz-feldspar porphyry dykelet with contacts at 40 degrees to c.a. and brecciated qtz vein along bottom contact, white coloured (no mafic minerals).
702.61	736.7	QUARTZ MONZONITE	

Kemess North 2002 - Detail Drill Log



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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	3.66	CASING							
	0.00	3.66					18	-2	-2
3.66	13	INTERMEDIATE VOLCANIC FLOW							
	3.66	5.00 Medium-grained white grey porphyritic clay sericitic	4.0	0	PVN 15 2	White grey, intensely clay/ser/qtz altered feldspar porphyritic flow. MG granular looking texture due to 20% kaolin?? pseudomorphs after feldspar. Minor limonitic seams, but py veins mostly intact and un-oxidized. Py approximately 50/50 f.g. dissm/massive veins.	104626	0.006	0.04
	5.00	7.00	4.0	0	PVN 15 2		104627	0.005	0.042
	7.00	9.00	4.0	0	PVN 15 2		104628	0.004	0.044
	9.00	11.00	4.0	0	PVN 15 2		104629	0.011	0.082
	11.00	13.00	4.0	0	PVN 15 2		104630	0.007	0.056
13	46.33	ANDESITE TUFF							
	13.00	15.00 Coarse-grained lt green-grey sericitic clay	5.0	0	PVN 15 1	Mottled pale apple green with grey patches. Colour change is due to ser->>clay. Fragmental texture well evident in ghost texture of fragments. Can identify BFP protolith for some fragments. Py has same habit as preceding unit from 3.66 --> 13m.	104631	0.039	0.143
	15.00	17.37	5.0	0	PVN 65 0		104632	0.03	0.124
	17.37	20.42	5.0	0		0.30m of rubble represents 3.05m of section.	104633	0.006	0.093
	20.42	22.42	5.0	0		1.34m of fairly competent core represents 2.00m of section, very strongly sericitic.	104634	0.005	0.108
	22.42	24.42	5.0	0		strongly sericitic with relatively reasonable recovery.	104635	0.004	0.145
	24.42	26.42	5.0	0			104636	0.009	0.147
	26.42	28.50	10.0	0		Approximately 85cm of rubble represent 2.08m of section.	104637	0.003	0.09
	28.50	30.50	10.0	0		Very strong sericite.	104638	0.008	0.151
	30.50	32.61	10.0	0		Sampled to block at 32.61m. Approximately 50% recovery. Remainder is rubble sericite/clay. Relatively little qtz.	104639	0.017	0.181

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
32.61	34.14	Coarse-grained lt green-grey sericitic clay	15.0	0		relatively siliceous but badly broken until 46.33m.	104640	0.005	0.039
34.14	35.66		15.0	0		60% recovery.	104641	0.004	0.052
35.66	37.19		15.0	0			104642	0.004	0.061
37.19	38.71		15.0	0		15% recovery.	104643	0.003	0.049
38.71	40.23		15.0	0		20% recovery.	104644	0.044	0.13
40.23	41.76		15.0	0			104645	0.049	0.125
41.76	46.33		15.0	0		5% recovery.	104646	0.021	0.125
46.33	50.9	ANDESITE BLADED FELDSPAR PORPHYRY							
46.33	47.85	Coarse-grained light grey green sericitic	20.0	0		Noticeable absence of clay and silica and core is badly broken down to 81.96m. It is essentially 20% py/80% sericite.	104647	0.045	0.208
47.85	50.90		20.0	0		30% recovery. The only recognizable texture is BFP.	104648	0.061	0.184
50.9	53.95	LOST CORE							
50.90	53.95					No core recovered.	-18	0	0
53.95	82.96	ANDESITE BLADED FELDSPAR PORPHYRY							
53.95	55.47	Coarse-grained light grey green sericitic	2.0	0		20% recovery. Py poor. New 100% pale apple green sericite sand.	104649	0.017	0.089
55.47	57.00		10.0	0		This unit shows some evidence of massive py veining as well as heavily dissim py but it is too broken to get orientation data.	104650	0.028	0.113
57.00	58.62		10.0	0		20% recovery.	104652	0.038	0.152
58.62	60.05		25.0	0		50% recovery. Still only recognizable texture is BFP.	104653	0.053	0.174
60.05	61.57		25.0	0			104654	0.054	0.109
61.57	63.09		25.0	0			104655	0.046	0.102
63.09	64.62		25.0	0			104656	0.057	0.143
64.62	66.14		25.0	0			104657	0.025	0.119
66.14	67.67		25.0	0			104658	0.19	0.536
67.67	69.19		25.0	0		35% recovery.	104659	0.04	0.148
69.19	70.71		25.0	0			104660	0.013	0.06
70.71	72.24		10.0	0		50% recovery.	104661	0.05	0.134

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
72.24	73.76	Coarse-grained light grey green sericitic	10.0	0		close to 100% recovery but still broken into pebble size fragments.	104662	0.026	0.127
73.76	75.29		10.0	0		50% recovery.	104663	0.031	0.091
75.29	76.81		10.0	0			104664	0.051	0.13
76.81	78.33		10.0	0		60% recovery.	104665	0.052	0.152
78.33	79.86		10.0	0			104666	0.043	0.136
79.86	81.38	Coarse-grained light grey green	10.0	0		60% recovery.	104667	0.026	0.107
81.38	82.96		10.0	0		20% recovery. Can still see BFP texture.	104668	0.044	0.114
82.96	84.43	LOST CORE							
82.96	84.43					No core recovered.	-188	0	0
84.43	151.1	ANDESITE BLADED FELDSPAR PORPHYRY							
84.43	86.43	Fine-grained light grey sericitic anhydrite	7.0	0	GVN 15 20	Approximately 15% fracture and vein controlled pale blue grey anhydrite and white gypsum. Approximately 2% fine grained disseminated py. The remainder is massive in anhydrite veinlets. HQ ends at 88.34m. Has ghost texture of porphyry.	104669	0.01	0.056
86.43	88.34	Fine-grained light grey	7.0	0	GVN 15 20		104670	0.007	0.086
88.34	90.39		7.0	0	GVN	Start NQ. Pale green apparent pseudomorphs after BFP. Py as c.g. blebs and in anhydrite veinlets as sm stringers.	104671	0.022	0.089
90.39	92.39		7.0	0	GVN		104672	0.025	0.067
92.39	94.24		7.0	0	CTC 45	Very sharp contact with next unit.	104673	0.006	0.072
94.24	96.00	Coarse-grained grey brecciated sericitic anhydrite	7.0	1	QGV 35 7	Coarse grained cobble size breccia, ser alt. BFP in ser matrix. Py is mostly in qtz/anh/py veins. Occasional areas contain minor fracture controlled or blebs of m.g. py. Py veins range from 90% to 100py with the gangue being purple grey quartz/anhydrite.	104674	0.051	0.216
96.00	98.00		10.0	0	QGVN 35 7		104675	0.04	0.205
98.00	100.00		7.0	0	QGVN 35 7	Rock has distinctive mottled appearance due to light sericite in matrix and med green sericite alt of large plagioclase phenocrysts.	104676	0.051	0.171
100.00	102.00		10.0	0	QGVN 35 7		104678	0.058	0.202
102.00	104.00		7.0	0	QGVN 35 7		104679	0.048	0.12

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
104.00	106.00	Coarse-grained grey brecciated sericitic anhydrite	7.0	0.1	0 3 QGVN 35 7	Trace cpy at 105.96. Trace magnetite in qtz veinlet.	104680	0.128	0.224
106.00	108.00		4.0		1 0 QGVN 35 7	Magnetite in 2 qtz veinlets.	104681	0.057	0.181
108.00	110.00		4.0		1 1 QGVN 35 7		104682	0.047	0.099
110.00	112.00		4.0		1 0 QGVN 35 7	Anhydrite partially replaced by gypsum.	104683	0.024	0.073
112.00	114.00		4.0		1 0 QGVN 35 7		104684	0.04	0.14
114.00	116.00		7.0		1 0 QGVN 35 7		104685	0.055	0.185
116.00	118.00	Coarse-grained grey brecciated sericitic silicic	10.0		1 0 QGVN 35 7	Patchy aphanitic silicification with very fine grained disseminated py.	104686	0.027	0.243
118.00	120.00	Coarse-grained grey brecciated sericitic anhydrite	4.0		1 0 QGVN 35 7		104687	0.056	0.261
120.00	122.00	Coarse-grained grey brecciated sericitic silicic	7.0		1 QGVN 35 5	Approx 10-15% of sample is patchy aphanitic silicification with 2-3% very fine grained py. Gypsum is very weak. Py veinlets are wider (up to 1 cm).	104688	0.045	0.182
122.00	124.00		7.0		0 QGVN 35 5		104689	0.033	0.204
124.00	126.00		10.0		0 PVN 30 7	Strong but patchy silicification, abundant py veins.	104690	0.085	0.41
126.00	128.00		10.0		0 PVN 30 4		104691	0.058	0.181
128.00	130.00		5.0		0 PVN 30 5		104692	0.125	0.236
130.00	132.00		7.0		0 PVN 30 5		104693	0.071	0.211
132.00	134.00		7.0		0 PVN 30 1		104694	0.068	0.189
134.00	136.00		4.0		0 PVN 30 3		104695	0.022	0.09
136.00	138.00		3.0		0 PVN 30 2	Strong silicification.	104696	0.021	0.106
138.00	140.00		10.0		0 PVN 30 7	Very strong near pervasive silicification. Dissm. Py. as well as vein hosted py.	104697	0.018	0.119
140.00	142.00		7.0		0 PVN 30 1	Strong dissm py.	104698	0.05	0.134
142.00	144.00		5.0		0 PVN 30 3		104699	0.069	0.172
144.00	146.00		10.0		0 PVN 15 7		104700	0.117	0.23
146.00	148.00		3.0		0 PVN 15 2		104701	0.131	0.268
148.00	150.00		5.0		0 PVN 15 5		104702	0.072	0.171
150.00	151.10		5.0		0 25 5	Contact not visible.	104704	0.056	0.246
151.1	210.6	INTERMEDIATE VOLCANIC TUFF							

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
151.10	153.00	Coarse-grained green-grey brecciated sericitic chloritic	4.0	0	GVN 25 10	Similar breccia texture as the preceding unit except the fragments are aphanitic as opposed to coarsely porphyritic.	104705	0.184	0.322
153.00	155.00		4.0	0	GVN 25	Gypsum veinlets are abundant and appear to be randomly oriented. Py veins appear to be replacement of gypsum veins where there is some gypsum still along the selvages.	104706	0.071	0.146
155.00	157.00		4.0	0	GVN 25	Massive py veins clearly cross-cut gypsum veins.	104707	0.083	0.197
157.00	159.00		4.0	0	GVN 25	Approx 10% gypsum veinlets about 4% py/gyp veins. Monolithic tuffaceous breccia.	104708	0.035	0.074
159.00	161.00		4.0	1	GVN 25	One 3-4 cm patch of hematite at 160.35m.	104709	0.053	0.172
161.00	163.00		4.0	0	GVN 55 10	Traces of anhydrite starting here.	104710	0.059	0.104
163.00	165.00		4.0	0	GVN 55 10		104711	0.049	0.104
165.00	167.00		4.0	1	GVN 55 10		104712	0.067	0.104
167.00	169.00		4.0	0	GVN 55 10		104713	0.063	0.123
169.00	171.00		4.0	0	GVN 15 10		104714	0.073	0.124
171.00	173.00		4.0	0	GVN 15 7	From here, pure gypsum veinlets are less prevalent. Most have some py to >50% py.	104715	0.055	0.147
173.00	175.00		4.0	0	GVN 55 7		104716	0.065	0.114
175.00	177.00		4.0	0	GVN 70 7		104717	0.053	0.11
177.00	179.00		4.0	0	GVN 70 7		104718	0.048	0.103
179.00	181.00		4.0	0	GVN 10 7		104719	0.067	0.1
181.00	183.00		6.0	0	GVN 10 7		104720	0.043	0.08
183.00	185.00		6.0	0	GVN 10 7		104721	0.056	0.1
185.00	187.00		2.0	0	QAV 25	From here veins are much less prevalent and are composed of qtz, anhydrite +/-gypsum +/-pyrite. Fragments are less abundant.	104722	0.04	0.085
187.00	189.00		1.0	0	QAV 55	Unit is becoming more matrix supported. Miner coarse grained py blebs as well as py in veins.	104723	0.043	0.068
189.00	191.00		1.0	0	QAV 55		104724	0.037	0.056
191.00	193.00		1.0	0	QAV 30		104725	0.062	0.171
193.00	195.00		1.0	0	QAV 30		104726	0.058	0.14
195.00	197.00		1.0	1	QAV 10		104727	0.104	0.179

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
197.00	199.00	Coarse-grained green-grey brecciated sericitic chloritic	1.0	0	QAV 10		104728	0.052	0.084
199.00	201.00		1.0	1	QAV 10		104730	0.047	0.096
201.00	203.00		3.0	0	QAV 70		104731	0.037	0.08
203.00	205.00		3.0	0	QAV 25 3	Grain size of fragments is fining down hole very rapidly and probably <10 to 15% by volume.	104732	0.057	0.073
205.00	207.00		3.0	0	QAV 25 3	50/50 vein versus disseminated pyrite.	104733	0.045	0.076
207.00	209.00		3.0	0	QAV 25 3		104734	0.047	0.075
209.00	210.60		3.0	0	QAV 25 3		104735	0.056	0.079
210.6	249	INTERMEDIATE VOLCANIC FLOW							
210.60	212.00	Fine-coarse grained green-grey massive chloritic sericitic	2.0	0	QAV 25 3		104736	0.043	0.094
212.00	214.00		2.0	0	QAV 35 3		104737	0.028	0.06
214.00	216.00		2.0	0	QAV 25 5		104738	0.106	0.126
216.00	218.00		2.0	0	GVN 25 7	Stockwork of pale greasy grey gypsum +/- anhydrite veinlets.	104739	0.072	0.108
218.00	220.00		2.0	1	GVN 25 7	As for 104739.	104740	0.077	0.139
220.00	222.00		7.0	0	GVN 25 7	Anhydrite (white) picking up strongly. Qtz veins are present but minor.	104741	0.046	0.073
222.00	224.00		7.0	0	GVN 55 7		104742	0.049	0.075
224.00	226.00		7.0	0	GVN 35 7		104743	0.109	0.157
226.00	228.00		7.0	1	GVN 0 7		104744	0.077	0.127
228.00	230.00		7.0	0	GVN 40 5		104745	0.042	0.057
230.00	232.00	Coarse-grained green-grey brecciated chloritic sericitic	7.0	0	AVN 35 5	Near complete replacement of gypsum with anhydrite sample 104746 is approx 60% flow tuff breccia.	104746	0.047	0.076
232.00	234.00	Fine-grained green-grey massive chloritic sericitic	7.0	0	AVN 35 5		104747	0.042	0.061
234.00	236.00		2.0	0	AVN 35 5		104748	0.057	0.079
236.00	238.00	Fine-grained grey massive sericitic chloritic	4.0	0.1	PVN 35 5	One bleb of cpy near end of sample. Minor gouge in middle of sample.	104749	0.062	0.102
238.00	240.00		4.0	0	PVN 40 3	Non descriptive fine grained flow cut by py veinlets with gypsum in some selvages.	104750	0.068	0.097
240.00	242.00		4.0	0	PVN 40 3		104751	0.087	0.143

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
242.00	244.00	Fine-grained grey massive sericitic chloritic	4.0	0	PVN 40 3		104752	0.08	0.133
244.00	246.00		5.0	0	PVN 35 5	Py is all in veinlets.	104753	0.141	0.185
246.00	248.00		5.0	0	PVN 35 5		104754	0.078	0.108
248.00	249.00		5.0	0	PVN 35 5		104756	0.079	0.146
249	249.36	FAULT INTERMEDIATE VOLCANIC							
249.00	249.36	Fine-grained grey brecciated sericitic chloritic	5.0	0	FLT	Fault gouge. Too broken for orientation.	104757	0.054	0.129
249.36	251.86	INTERMEDIATE VOLCANIC FLOW							
249.36	251.36	Fine-grained grey massive sericitic chloritic	6.0	0	PVN 35 6	Py is all in veinlets.	104758	0.114	0.171
251.36	251.86		6.0	0	PVN 35 6		104759	0.065	0.078
251.86	253.4	FAULT INTERMEDIATE VOLCANIC							
251.86	253.40	Fine-grained grey brecciated sericitic chloritic	4.0	0	FLT 10	Fault gouge. Too broken for orientation. Several seams of fault gouge one of which is intact at about 10 degrees to c.a.	104760	0.078	0.116
253.4	261.4	INTERMEDIATE VOLCANIC FLOW							
253.40	255.40	Fine-grained grey massive sericitic chloritic	2.0	0	PVN 40 0	Pyrite mostly medium grained disseminated irregular blebs.	104761	0.066	0.084
255.40	257.40		2.0	0	PVN 40 0		104762	0.049	0.098
257.40	259.40		2.0	0	PVN 40 0		104763	0.063	0.073
259.40	261.40		2.0	0	PVN 40 0		104764	0.057	0.072
261.4	268.83	FAULT INTERMEDIATE VOLCANIC							
261.40	263.40	Fine-grained grey-green brecciated sericitic chloritic	2.0	0	PVN 10 0	From 261.40 to 268.83m is a series of fault gouge seams and broken core in intervening areas.	104765	0.123	0.169
263.40	265.40		2.0	0	PVN 10 0		104766	0.074	0.135
265.40	267.40		2.0	0	PVN 10 0		104767	0.067	0.11
267.40	268.83		2.0	0	PVN 10 0		104768	0.051	0.087
268.83	413.75	INTERMEDIATE VOLCANIC FLOW							
268.83	270.00	Fine-grained light green massive sericitic	3.0	1	QAV 25	Pale green to apple green highly sericitic flows cut by sparse qtz +/- anhydrite +/-py veinlets. Occasional areas of weakly disseminated py.	104769	0.145	0.178

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
270.00	272.00	Fine-grained light green massive sericitic	3.0	0	QAV 25		104770	0.062	0.074
272.00	274.00		3.0	0	QAV 25		104771	0.074	0.102
274.00	276.00		3.0	0	QAV 35		104772	0.078	0.093
276.00	278.00		3.0	0	QAV 35		104773	0.074	0.065
278.00	280.00		3.0	0	QAV 35		104774	0.107	0.113
280.00	282.00		0.5	0	QAV 35	0 Very sparse py min.	104775	0.098	0.174
282.00	284.00		0.5	0	QAV 35	0	104776	0.098	0.102
284.00	286.00		0.5	0	QAV 35	0	104777	0.095	0.112
286.00	288.00	Fine-grained green massive sericitic chloritic	2.0	0	QAV 10	3 Change from qtz/anh to qtz/anh/gyp veins. Similar unit as above with weak chl alt as well as ser alt.	104778	0.097	0.124
288.00	290.00		2.0	0	QAV 10	3	104779	0.102	0.124
290.00	292.00		2.0	0	QAV 10	3	104780	0.105	0.188
292.00	294.00		4.0	0	QAV 35	4 Abundant py in qtz/anh/gyp veinlets.	104782	0.095	0.103
294.00	296.00		2.0	0	QAV 35	2	104783	0.058	0.069
296.00	298.00		2.0	0	QAV 35	3	104784	0.066	0.074
298.00	300.00		2.0	0	QAV 35	3	104785	0.087	0.087
300.00	302.00		1.0	0	QAV 30	3	104786	0.105	0.108
302.00	302.60		1.0	0	QAV 25	1	104787	0.072	0.078
302.60	304.60	Fine-grained green massive chloritic zeolite	1.0	0	ZVN 40	10 Same fine grained to aphanitic intermediate flows. Now pink and cream zeolite veinlets are prominent. Some appear to be replacing anhydrite. Most veins are very qtz poor. Bleached to insipient sericite.	104788	0.143	0.162
304.60	306.60		1.0	0	ZVN 5	10	104789	0.189	0.198
306.60	308.60		4.0	0	ZVN 15	10	104790	0.253	0.248
308.60	310.60		2.0	0	ZVN 30	10	104791	0.129	0.167
310.60	312.60		2.0	0	ZVN 30	10	104792	0.108	0.14
312.60	314.60		4.0	0	ZVN 30	10 Heavily disseminated py intensely zeolite rich area.	104793	0.072	0.1
314.60	316.60		4.0	0	ZVN 25	25	104794	0.079	0.118
316.60	318.60		3.0	0	QZVN 50	10	104795	0.124	0.157
318.60	320.60		3.0	0	QZVN 35	10	104796	0.114	0.141

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
320.60	322.60	Fine-grained green massive chloritic zeolite	4.0	0	QZVN 35 15		104797	0.087	0.124
322.60	324.60		3.0	0	QZVN 35 10		104798	0.05	0.085
324.60	326.60		3.0	0	QZVN 15 10		104799	0.048	0.088
326.60	328.60		3.0	0	QZVN 15 10		104800	0.059	0.107
328.60	330.60		5.0	0	QZVN 15 10	In addition to qtz/zeolite veins the rock has insipient qtz alteration. Light grey patchy areas up to 50cm long contain granular quartz with abundant disseminated pyrite.	104801	0.056	0.083
330.60	332.60		5.0	0	QZVN 35 15		104802	0.089	0.117
332.60	334.60		7.0	0	QZVN 15 15		104803	0.123	0.16
334.60	336.60		3.0	0	QZVN 50 15		104804	0.095	0.215
336.60	338.60		3.0	0	QZVN 15 20		104805	0.162	0.781
338.60	340.60		3.0	0	QZVN 50 15		104806	0.147	0.171
340.60	342.60		3.0	0	QZVN 45 15		104808	0.192	0.207
342.60	344.60		7.0	0.1	QZVN 35 15	Coarse grained cpy in one veinlet. Patchy insipient qtz alt with abundant py.	104809	0.186	0.29
344.60	346.60		0.5	0	QZVN 25 15		104810	0.212	0.215
346.60	348.60		0.5	0	QZVN 35 15		104811	0.096	0.097
348.60	350.60		0.5	0	QZVN 35 15		104812	0.144	0.128
350.60	352.60		1.0	0	QZVN 35 10	Very vuggy qtz/zeolite pyrite veinlets. Very fine grained py disseminated in whole rock.	104813	0.172	0.178
352.60	354.60		0.5	0	QZVN 35 10		104814	0.123	0.124
354.60	356.60		0.5	0	QZVN 35 10		104815	0.218	0.261
356.60	358.60		0.5	0	QZVN 25 10		104816	0.085	0.121
358.60	360.60		1.0	0	QZVN 5 10	Coarse grained blebs in qtz/zeolite vein new start of sample.	104817	0.128	0.143
360.60	362.60		0.5	1	QZVN 15 10		104818	0.075	0.093
362.60	364.60	Fine-grained green massive sericitic chloritic	5.0	0	QZVN 35 3	Strongly sericitic with very fine grained disseminated pyrite.	104819	0.126	0.158
364.60	366.60		2.0	0	QZVN 35 3		104820	0.179	0.23
366.60	368.60		3.0	0	QZVN 35 5		104821	0.072	0.14

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
368.60	370.60	Fine-grained green massive sericitic chloritic	1.0		0 QZVN 35 15		104822	0.083	0.148
370.60	372.60		5.0		1 QZVN 35 15	Strongly sericitic with fine grained disseminated py and fracture controlled py. Minor py qtz/zeo veins.	104823	0.126	0.156
372.60	373.50		2.0		1 QZVN 35 5		104824	0.07	0.082
373.50	375.50	Fine-grained light green massive clay sericitic	0.5		0 ZVN 20 1	Very pale green talcose rock (probably montmorillonite) cut by bright orange zeolite veinlets (From 375.50-378.80m)	104825	0.012	0.029
375.50	377.50		0.5		0 ZVN 20 1		104826	0.013	0.032
377.50	378.80		0.5		0 ZVN 20 1		104827	0.096	0.096
378.80	380.80	Fine-grained light green massive sericitic clay	1.0		0 ZVN 20 2	From 378.80-382.60m, strongly bleached with intermittent clay.	104828	0.125	0.115
380.80	382.60		1.0		0 ZVN 20 2	One coarse grained cpy bleb in 1.5cm qtz/zeo vein at 361.60m.	104829	0.082	0.085
382.60	384.60	Fine-grained green massive chloritic sericitic	1.0		0 ZVN 20 4	Chloritized and weakly sericitic flows cut by pink and white zeolite veinlets.	104830	0.083	0.089
384.60	386.60		1.0		0 ZVN 20 4		104831	0.124	0.126
386.60	387.90		1.0		2 ZVN 20 4		104832	0.099	0.109
387.90	389.90	Fine-grained light green massive sericitic silicic	7.0		0 QZVN 20 25	Bleached zone of qtz/sericite and zeolite/carbonate. Locally vuggy.	104834	0.199	0.208
389.90	391.52		5.0		0 QZVN 20 10		104835	0.163	0.161
391.52	393.52	Fine-grained grey-green massive chloritic sericitic	2.0	0.1	1 QCVN 20 5	Fine grained discrete cpy grains assoc with pyrite in white qtz +/-carb +/-zeolite veinlets. Zeolite is weakening fast.	104836	0.13	0.124
393.52	395.52		2.0	0.3	7 QCVN 20 5		104837	0.143	0.132
395.52	397.00		2.0	0.3	3 QCVN 20 5		104838	0.158	0.146
397.00	399.00		2.0	0.3	0 QCVN 20 5		104839	0.156	0.158
399.00	401.00		2.0	0.5	0 QCVN 20 5	Cpy more abundant and more evenly distributed.	104840	0.124	0.137
401.00	403.00	Fine-grained grey-green massive sericitic chloritic	5.0	0.5	1 QCVN 20 5	Cpy occurs in blebs in qtz/carb veinlets or as very fine grained disseminated in py in vein selvages.	104841	0.196	0.153
403.00	405.00	Fine-grained grey tan massive sericitic chloritic	5.0	0.5	0 QCVN 20 5		104842	0.161	0.126
405.00	407.00		5.0	0.5	0 QCVN 45 5		104843	0.135	0.121
407.00	408.50		3.0	0.1	0 QCVN 35 5		104844	0.174	0.149

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
408.50	410.50	Medium-grained grey white heterogeneous sericitic clay	5.0	0	ZVN 20 5	Strong argillic alteration. Possibly fragmental texture barely evident. Rock whitish due to strong clay.	104845	0.355	0.295
410.50	412.50		15.0	0	PVN 20 5	Abundant py dissm through out. Alteration grades but at both ends.	104846	0.081	0.106
412.50	413.75		7.0	1	ZVN 20 10		104847	0.162	0.223
413.75	417.1	INTERMEDIATE VOLCANIC TUFF							
413.75	415.25	Medium-grained grey-green homogeneous sericitic chloritic	0.1	0	ZVN 35 5	Weak to no sulphide mineralization.	104848	0.118	0.119
415.25	417.10		0.1	0	ZVN 35 5		104849	0.095	0.105
417.1	422.85	SYENITE							
417.10	419.10	Coarse-grained red tan homogeneous chloritic	1	15	ZVN 25 2	Crowded feldspar texture in a reddish groundmass. Approx 5% chloritized mafic minerals and minor disseminated magnetite. Chloritization is largely restricted to mafic phenocrysts.	104850	0.007	0.005
419.10	421.10		1	10	ZVN 25 2		104851	0.003	-2
421.10	422.85		1	1	ZVN 25 2		104852	0.091	0.075
422.85	428.85	INTERMEDIATE VOLCANIC FLOW							
422.85	424.85	Fine-grained grey-green massive chloritic	0.5	1	ZVN 30 10	Flows cut by numerous pink and white zeolite veinlets. Occ qtz vein with medium grained py. Scattered magnetite grain in veins	104853	0.46	0.323
424.85	426.85		0.5	2	ZVN 30 10		104854	0.168	0.116
426.85	428.85		0.5	1	ZVN 0 5		104855	0.201	0.15
428.85	429.65	SYENITE							
428.85	429.65	Coarse-grained brown homogeneous chloritic	1	13	ZVN 30 1	As for 417.10-422.85m. Upper contact broken. Lower contact at 70 degrees.	104856	0.006	-2
429.65	430.6	INTERMEDIATE VOLCANIC FLOW							
429.65	430.60	Fine-grained grey-green massive chloritic	1.0	2	ZVN 20 15	As for 422.85-428.85m with py in veinlets.	104857	0.182	0.147
430.6	493.67	SYENITE							
430.60	432.00	Coarse-grained red tan homogeneous chloritic	1	9	ZVN	Similar to dykes above. Upper contact at 45 degrees.	104858	0.002	-2
432.00	434.00		1	9	ZVN		104860	0.003	-2
434.00	436.00		1	8	ZVN		104861	0.002	-2

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
436.00	438.00	Coarse-grained red tan homogeneous chloritic	1	14	ZVN 35 5		104862	0.002	-2
438.00	440.00		1	18	ZVN 35 5	Weak chloritization of mafic minerals.	104863	0.003	-2
440.00	442.00		1	9	ZVN 35 5		104864	0.002	-2
442.00	444.00		1	15	ZVN 35 5		104865	0.002	-2
444.00	446.00		1	9	ZVN 35 5		104866	0.003	-2
446.00	448.00		1	9	ZVN 35 5		104867	0.002	-2
448.00	450.00		1	14	ZVN 35 5		104868	0.002	-2
450.00	452.00		1	14	ZVN 35 5		104869	0.003	-2
452.00	454.00		1	10	ZVN 35 5		104870	0.003	-2
454.00	456.00		1	7	ZVN 35 5		104871	0.003	-2
456.00	458.00		1	16	ZVN 35 5		104872	0.002	-2
458.00	460.00		1	10	ZVN 35 5		104873	0.003	-2
460.00	462.00		1	11	ZVN 35 5		104874	0.003	-2
462.00	464.00		1	16	ZVN 35 5		104875	0.002	-2
464.00	466.00		1	17	ZVN 35 5		104876	0.003	-2
466.00	468.00		1	14	ZVN 35 5		104877	0.002	-2
468.00	470.00		1	10	ZVN 35 5		104878	0.001	-2
470.00	472.00		1	18	ZVN 35 5		104879	0.002	-2
472.00	474.00		1	14	ZVN 35 5		104880	0.002	-2
474.00	476.00		1	13	ZVN 35 5		104881	0.004	-2
476.00	478.00		1	15	ZVN 35 5		104882	0.002	-2
478.00	480.00		1	12	ZVN 35 5		104883	0.002	-2
480.00	482.00		1	14	ZVN 35 2	Weak chloritization of mafic minerals.	104884	0.002	-2
482.00	484.00		1	15	ZVN 35 2		104886	0.002	-2
484.00	486.00		1	14	ZVN 35 2		104887	0.003	-2
486.00	488.00		1	13	ZVN 35 2		104888	0.003	-2
488.00	490.00		1	11	ZVN 35 2		104889	0.003	0.006
490.00	492.00		1	19	ZVN 35 2		104890	0.002	-2

Hole Number: KN-02-18

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm		
492.00	493.67	Medium-fine-grained orange grey porphyritic	1	17	ZVN	1	104891	0.001	-2		
<p>Porphyritic post-mineral syenite dyke showing 50% medium grained phenocrysts of subhedral to euhedral feldspar (90%), lightly stained by pink zeolite, and biotite (10%), black and fresh-looking, in an aphanitic-grained dark grey to black matrix. Sharp intrusive bottom contact with following unit. This is a chilled margin of the syenite dyke described above by Brad. Colour change of the matrix is graded from reddish tan to dark orange hued grey.</p>											
493.67	510.46	BASALT									
493.67	495.00	Fine-medium-grained orange grey porphyritic propylitic	2.0	0.1	1	9 CTC	50	104892	0.344	0.329	
<p>Moderate greenish gray with local orange hue (zeolite?) Porphyritic basalt showing 10-30% medium sized, subhedral to euhedral augite crystals (now chloritized) in an aphanitic grained matrix, rock is moderately altered with primary texture locally obliterated. Zeolite and calcite-filled fractures are common throughout (1-2%).</p>											
495.00	497.00	Fine-medium-grained green-grey porphyritic propylitic	0.5	0.5	2	12	104893	0.295	0.247		
497.00	499.00		0.5	0.1	2	2 QVN	5	3	104894	0.347	0.341
<p>Qtz monzonite dyke at 70 degrees to c.a., between 498.65-498.92m.</p>											
499.00	501.00	Fine-medium-grained orange grey porphyritic propylitic sericitic	1.0	0.1	2	6	104895	0.492	0.445		
<p>Matrix is coarser grained, with weak sericite whitening feldspar laths.</p>											
501.00	503.00	Fine-medium-grained green-grey porphyritic propylitic	2.0	0.1	1	34 QVN	45	3	104896	0.54	0.598
<p>Qtz and py and minor cpy vein at 45 degrees to c.a.</p>											
503.00	505.00	Fine-medium-grained green-grey porphyritic propylitic sericitic	1.0		0	5	104897	0.285	0.298		
<p>Matrix becomes aphanitic again, sericite alteration giving a "flooded" look to matrix. Hard</p>											
505.00	507.00	Fine-medium-grained green-grey porphyritic propylitic	1.0	0.1	1	5 ZVN	55	3	104898	0.384	0.365
<p>Drusy zeolite and calcite vein.</p>											
507.00	509.00	Fine-medium-grained green-grey porphyritic propylitic sericitic	2.0			1	104899	0.463	0.521		
<p>Similar to 503.00-505.00m.</p>											
509.00	510.46	Fine-medium-grained green-grey porphyritic propylitic	0.5	0.1	1	12	104900	0.399	0.352		
510.46	516.01	SYENITE									
510.46	512.00	Medium-fine-grained orange grey porphyritic	1	13	CTC	5	104901	0.004	-2		
<p>Post mineral syenite, similar to 492.00-493.64m, very shallow upper contact (5 degrees to c.a.)</p>											
512.00	513.30		1	16			104902	0.003	-2		

Hole Number: KN-02-18

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
513.30	515.24	Fine-medium-grained green-grey porphyritic propylitic	0.5	0.1	2 46 CTC 55	Mineralized basalt xenolith floating inside syenite dyke. Contact with following basalt unit at 55 degrees to c.a. near 513.45m.	104903	0.247	0.223
515.24	516.01	Medium-fine-grained orange grey porphyritic			1 18		104904	0.004	-2
516.01	534.28	BASALT							
516.01	518.00	Fine-medium-grained green-grey porphyritic propylitic sericitic	1.0	0.1	1 3	Again, wk sericite whitening feldspar laths locally.	104905	0.335	0.412
518.00	520.00	Fine-medium-grained green-grey porphyritic propylitic	1.0	0.1	1 26		104906	0.282	0.458
520.00	522.00		1.0		1 5		104907	0.471	0.836
522.00	524.00	Fine-medium-grained green-grey porphyritic propylitic sericitic	1.0	0.1	1 15 QVN 30 5	Several parallel qtz +/-py +/-cpy veins at 30 degrees to c.a. weak sericite whitening feldspar laths.	104908	0.658	1.3
524.00	526.00	Fine-medium-grained green-grey porphyritic propylitic	1.0		1 15 FLT 50 0	Minor fault with gouge at 50 degrees to c.a. near 525.10m.	104909	0.461	0.971
526.00	528.00		1.0		0 6		104910	0.457	0.878
528.00	530.00	Fine-medium-grained green-grey porphyritic propylitic sericitic	1.0		0	Similar to 503.00-505.00m	104912	0.549	1.07
530.00	532.00		0.1	0.5	1 8 QVN 5	Irregular shaped qtz and py and cpy vein.	104913	0.331	0.593
532.00	534.28	Fine-medium-grained green-grey porphyritic propylitic	1.0	1.0	1 QVN 35	Several variably oriented qtz and py and cpy +/-molybdenite veins.	104914	0.558	0.866
534.28	535.16	QUARTZ MONZONITE							
534.28	535.16	Medium-fine-grained orange grey porphyritic propylitic	0.1	0.1	1	Qtz-monzonite porphyry dyke showing crowded texture (65% phenocrysts) of feldspar and biotite.	104915	0.184	0.303
535.16	537.35	BASALT							
535.16	537.35	Fine-medium-grained green-grey porphyritic propylitic	1.0		1 FLT 45 3	Broken core, some qtz and py vein fragments, bottom of interval is composed of gougy brecciated material (fault).	104916	0.213	0.399
537.35	542.12	SYENITE							
537.35	539.00	Medium-fine-grained orange grey porphyritic			1 15	Post mineral syenite.	104917	0.006	0.01
539.00	541.00				1 19		104918	0.003	-2
541.00	542.12				1 18		104919	0.002	-2
542.12	543.2	BASALT							

Hole Number: KN-02-18

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
542.12	543.20	Fine-medium-grained green-grey porphyritic propylitic	1.0	0.1	1 QVN	Several variably oriented Qtz and py and cpy veins.	104920	0.202	0.285
543.2	544.68	SYENITE							
543.20	544.68	Medium-fine-grained orange grey porphyritic	1	17	CTC 30	Post mineral syenite. Contacts at 30 degrees to c.a.	104921	0.003	-2
544.68	546.53	BASALT							
544.68	546.53	Fine-medium-grained green-grey porphyritic propylitic	1.0	1	25	Qtz monzonite porphyry dyke similar to 534.28-536.16m.	104922	0.28	0.608
546.53	559.05	SYENITE							
546.53	548.50	Medium-fine-grained orange grey porphyritic	0	11	CTC 5	Post mineral syenite, irregular upper contact at roughly 5 degrees to c.a.	104923	0.004	0.008
548.50	550.50		1	18			104924	0.002	-2
550.50	552.50		1	16			104925	0.003	-2
552.50	554.50		1	16			104926	0.002	-2
554.50	556.50		1	14			104927	0.002	-2
556.50	558.50		1	11	FLT 50 0	Fault with gouge and open cavity with euhedral translucent Qtz crystals at 50 degrees to c.a.	104928	0.003	-2
558.50	559.05		1	15			104929	0.01	-2
559.05	576.8	BASALT							
559.05	561.00	Fine-medium-grained green-grey porphyritic propylitic mt-anhydrite-gypsum	0.5	0.1	3 60	Dark greenish grey to black porphyritic basalt, showing 5-15% subhedral to euhedral augite phenocrysts (now chloritized) in an aphanitic-grained matrix. Rock shows 0-1% zeolite-filled fractures and some irregularly spaced Qtz and py +/- cpy veins.	104930	0.592	1.03
561.00	563.00	Fine-medium-grained green-grey porphyritic propylitic	0.1	1.0	2		104931	0.49	1.5
563.00	565.00		0.1	0	8		104932	0.151	0.417
565.00	567.00		0.1	1	36 QVN 40 3	Qtz and mt and py and cpy vein at 40 degrees to c.a.	104933	0.334	0.869
567.00	569.00		0.5	0.5	1 39 QVN 40 4	Qtz and mt and py and cpy veins at 40 degrees to c.a.	104934	0.411	1.125
569.00	571.00		1.0	1.0	0 7 QVN 10	Qtz and mt and py and cpy vein at variable orientations	104935	0.399	0.728
571.00	573.00		0.1	1	17 QVN 20 3	Qtz and zeolite and py vein at 20 degrees to c.a.	104936	0.224	0.576
573.00	575.00		0.1	0.1	1 63 QVN 45 5	Qtz and mt and cpy and py vein at 45 degrees to c.a.	104938	0.106	0.149
575.00	576.80		0.1	1	16 QVN 30 3	Qtz and mt and py vein at 30 degrees to c.a.	104939	0.053	0.117

Hole Number: KN-02-18

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
576.8	577.18	QUARTZ MONZONITE							
576.80	577.18	Medium-fine-grained green-grey porphyritic propylitic	0.1	0.1	1 12 QVN 10 40	Qtz and mt and cpy and py vein at 10 degrees to c.a. in qtz monzonite dykelet at 60degrees to c.a.	104940	0.104	0.254
577.18	586.08	BASALT							
577.18	578.00	Medium-fine-grained green-grey porphyritic propylitic			1 15 QVN	Qtz monzonite dykelet between 577.60-577.70m at 60 degrees to c.a.	104941	0.056	0.095
578.00	580.00		0.1	0.1	1 13 QVN	3 Qtz and mt and py +/-cpy veinlets at variable orientations	104942	0.078	0.139
580.00	582.00		1.5	0.1	1 22 QVN	10 Qtz and mt and py and cpy veinlets at variable orientations	104943	0.089	0.164
582.00	584.00		0.5	0.1	1 33 QVN	15 Qtz and mt and py veins at variable orientation and zeolite and calcite cemented breccia between 583.47-583.64m.	104944	0.075	0.176
584.00	586.08		0.1		1 41 QVN	10 Qtz and mt and py veins at variable orientation.	104945	0.08	0.104
586.08	604.31	SYENITE							
586.08	588.00	Medium-fine-grained orange grey porphyritic			1 16	Post-mineral syenite dyke, orange-grey, porphyritic.	104946	0.005	-2
588.00	590.00				1 17		104947	0.003	-2
590.00	592.00	Medium-fine-grained orange grey porphyritic silicic			1 17	Greenish grey microcrystalline qtz veins/silica flooding with zeolite filling core of veins.	104948	0.002	0.007
592.00	594.00	Medium-fine-grained orange grey porphyritic			1 21		104949	0.002	-2
594.00	596.00				1 16		104950	0.008	-2
596.00	598.00				1 12		104951	0.003	-2
598.00	600.00				1 12		104952	0.002	-2
600.00	602.00				18		104953	0.003	-2
602.00	604.31				14		104954	0.006	0.005
604.31	609.77	QUARTZ MONZONITE							
604.31	606.00	Medium-fine-grained green-grey porphyritic propylitic	0.1	0.1	1 33 QVN	2 Qtz and mt and py veins at varying angles to c.a. Greenish-gray qtz monzonite porphyry showing crowded texture (65% phenocrysts) composed of euhedral to subhedral feldspar phenocrysts (medium grained) and medium grained biotite books in an aphanitic matrix. Very weakly chloritized/propylitized. 0-2% pink zeolite +/- calcite veinlets. 1-2% qtz and mt veinlets.	104955	0.057	0.085

Hole Number: KN-02-18

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
606.00	608.00	Medium-fine-grained green-grey porphyritic propylitic	0.1	0.1	0 3 QVN 10	Qtz and mt veins at various angles to c.a.	104956	0.085	0.125
608.00	609.77			1	24		104957	0.072	0.112
609.77	614.78	LOST CORE							
609.77	614.78					Mismatch -lost core	-1888	0	0
614.78	650.95	QUARTZ MONZONITE							
614.78	616.00	Medium-fine-grained green-grey porphyritic propylitic		2	32 QVN 3	Qtz and mt veins at various angles to c.a.	104958	0.09	0.118
616.00	618.00			1	9		104959	0.115	0.173
618.00	620.00			3	85 QVN 4	Qtz and mt veins at various angles to c.a.	104960	0.147	0.2
620.00	622.00		0.1	3	36 QVN 10		104961	0.101	0.136
622.00	624.00			0.1	3 81 QVN 10		104962	0.119	0.16
624.00	626.00		0.1	3	41 QVN 10		104964	0.119	0.154
626.00	628.00		0.1	3	38		104965	0.12	0.15
628.00	630.00			0.1	1 17		104966	0.116	0.148
630.00	632.00		0.1	0.1	1 10		104967	0.14	0.186
632.00	634.00		0.1	3	40		104968	0.136	0.177
634.00	636.00		0.1	2	20		104969	0.173	0.206
636.00	638.00	Medium-fine-grained orange grey porphyritic propylitic		0.1	1 13 QVN 10		104970	0.205	0.278
638.00	640.00		0.1	2	23		104971	0.079	0.105
640.00	642.00		0.1	2	46		104972	0.073	0.11
642.00	644.00	Medium-fine-grained green-grey porphyritic propylitic	1.0	0.1	1 14 QVN 5		104973	0.151	0.193
644.00	646.00			1	27		104974	0.104	0.107
646.00	648.00		0.5	0.1	0 6		104975	0.145	0.254
648.00	650.00		0.1	1	13		104976	0.054	0.066
650.00	650.95		0.1	0	9		104977	0.156	0.189
650.95	657.45	SYENITE							
650.95	653.00	Medium-fine-grained orange grey porphyritic		1	16	Post-mineral syenite dyke, similar to 430.60-493.67m.	104978	0.003	-2

Hole Number: KN-02-18

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
653.00	655.00	Medium-fine-grained orange grey porphyritic		1	12		104979	0.003	-2
655.00	657.00			1	16		104980	0.002	-2
657.00	657.45			1	16		104981	0.002	-2
657.45	701.98	QUARTZ MONZONITE							
657.45	659.00	Medium-fine-grained orange grey porphyritic propylitic		0	42	Qtz-monzonite porphyry, similar to 604.31-650.95m	104982	0.156	0.19
659.00	661.00		0.1	0.1	1	108	104983	0.203	0.218
661.00	663.00		0.1	0.1	1	2	104984	0.106	0.118
663.00	665.00		0.1	0.5	1	22	104985	0.228	0.309
						Milky white Qtz and cpy and py and mt vein at 35 degrees to c.a.			
665.00	667.00	Medium-fine-grained green-grey porphyritic propylitic	0.1		1	43	104986	0.116	0.164
667.00	669.00		0.1		1	18	104987	0.111	0.161
669.00	671.00		0.1		1	17	104988	0.153	0.188
671.00	673.00	Medium-fine-grained orange grey porphyritic propylitic	0.1	0.1	1	3	104990	0.136	0.134
673.00	675.00		2.0	0.1	1	0	104991	0.117	0.14
675.00	677.00		0.1	0.1		19	104992	0.114	0.148
677.00	679.00		0.1	0.5	1	25	104993	0.159	0.166
679.00	681.00	Medium-fine-grained green-grey porphyritic propylitic	0.1	0.5	1	1	104994	0.356	0.181
						Qtz and cpy +/-py vein at 45 degrees to c.a.			
681.00	683.00	Medium-fine-grained orange grey porphyritic propylitic	0.1		0	9	104995	0.181	0.196
683.00	685.00		0.1			2	104996	0.192	0.229
685.00	687.00	Medium-fine-grained green-grey porphyritic propylitic	0.1			1	104997	0.13	0.17
687.00	689.00		1.0		1	30	104998	0.109	0.146
689.00	691.00		1.0		0	9	104999	0.181	0.211
691.00	693.00		0.1	0.1	0	39	105000	0.193	0.257
693.00	695.00		0.1		0	2	105801	0.125	0.198
695.00	697.00		0.1		0	33	105802	0.136	0.223
697.00	699.00		0.1		0	2	105803	0.103	0.164

Hole Number: KN-02-18

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
699.00	701.00	Medium-fine-grained green-grey porphyritic propylitic sericitic	0.1	0	25 ZVN 0 2	Vuggy zeolitic and calcite veins sub-parallel to c.a.	105804	0.188	0.284
701.00	701.98	Medium-fine-grained green-grey porphyritic propylitic	0.1	0	2		105805	0.112	0.16
701.98	702.61	QUARTZ FELSPAR PORPHYRY							
701.98	702.61	Medium-fine-grained white porphyritic sericitic			1 CTC 40	Qtz-feldspar porphyry dykelet with contacts at 40 degrees to c.a. and brecciated qtz vein along bottom contact, white coloured (no mafic minerals).	105806	0.109	0.144
702.61	736.7	QUARTZ MONZONITE							
702.61	704.00	Medium-fine-grained green-grey porphyritic propylitic	0.1	0.1	1 18		105807	0.208	0.269
704.00	706.00		0.1	0.1	2 29		105808	0.09	0.145
706.00	708.00	Medium-fine-grained orange grey porphyritic propylitic	0.1	0	5		105809	0.167	0.285
708.00	710.00		0.5	0.1	0 12		105810	0.107	0.129
710.00	712.00		0.1	0	1		105811	0.208	0.226
712.00	714.00		0.1	0	13		105812	0.231	0.304
714.00	716.00	Medium-fine-grained green-grey porphyritic propylitic	0.1	0	26		105813	0.189	0.254
716.00	718.00		1.0	0.1	5 PVN 40 1	Pyrite and chalcopyrite stringers sub-parallel to a fabric (insipient shear?) in rock.	105814	0.535	0.608
718.00	720.00		0.1	1	21		105816	0.132	0.164
720.00	722.00		1.0	0.1	0 12 QVN 40 10		105817	0.202	0.212
722.00	724.00		0.1	0	6		105818	0.133	0.203
724.00	726.00	Medium-fine-grained orange grey porphyritic propylitic	0.1	1	24		105819	0.133	0.179
726.00	728.00	Medium-fine-grained green-grey porphyritic propylitic	0.1	3	51		105820	0.099	0.14
728.00	730.00	Medium-fine-grained orange grey porphyritic propylitic	0.1	0.1	3 41		105821	0.167	0.193
730.00	732.00		0.1	0	1		105822	0.121	0.152
732.00	734.00	Medium-fine-grained green-grey porphyritic propylitic	0.5	0.1	1 17		105823	0.113	0.149
734.00	736.00	Medium-fine-grained orange grey porphyritic propylitic	0.1	1	25		105824	0.095	0.109

Hole Number: KN-02-18

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
736.00	736.70	Medium-fine-grained green-grey porphyritic propylitic	1.0	2	39 QVN 35 10	Qtz and pyrite vein at 35 degrees to c.a.	105825	0.089	0.127
736.7	EOH								

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-19**

Northing: 16441 **Total Depth:** 469.37m
Easting: 10364.6 **Azimuth:** 360°
Elevation: 1729.9 **Dip:** -85°

Geologist: B. LaPeare
Logged Date: 7/21/2002

<u>Survey Depth</u>	<u>Azimuth</u>	<u>Dip</u>	<u>Comments:</u>
104 m	26 °	-79 °	
195 m	10 °	-79 °	
286 m	14 °	-79 °	
378 m	22 °	-75 °	Mechanical
469 m	22 °	-78 °	

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-19**

From (m)	To (m)	Rock Type	Comments
0	42.75	POLYLITHIC TUFF DACITE	Toodoggone Formation to EOH; matrix supported/local qtz eyes with highly angular to sub-rounded fragments of med or sub-volcanic material, fine grain very dark gray volcanic and buff/very light gray felsic fragments-->fragments are variable in size from <1cm to 15cm across-->matrix also exhibits subhedral/euhedral fine/med grained plag (5-25%)-->Magnetic throughout matrix and fragments equally-minor py in local fragments.
42.75	44.9	HORNFELS DACITE	MSU-->matrix dominant-->silicified with very distinctive 'spotted' texture due to med/coarse rounded to irregular dark green mafics (25-30%)--> hornfels texture from lower felsic unit.
44.9	48	FELSITE	Very light gray, with pervasive pale green sericite alteration-fairly soft.
48	50	HORNFELS DACITE	More light gray, hornfels mafics only, locally--> fragmental texture more evident.
50	51.2	POLYLITHIC TUFF DACITE	Mostly dark gray fragmental, very weak local hornfels texture (MSU).
51.2	55.5	HORNFELS DACITE	Silicified with well developed hornfels spotted texture (MSU).
55.5	56.1	FELSITE	Massive, siliceous, felsic dyke with weak patchy, ser alteration and coarse but ghosted fragments.
56.1	58.3	HORNFELS DACITE	Med grain mafic from hornfels-->local minor felsite.
58.3	76	POLYLITHIC TUFF DACITE	finer grained version of upper coarse PLT-->possibly just matrix material with rare to absent fragments-->inc in py.
76	77.65	HORNFELS DACITE	Inc in zeolite.
77.65	80	POLYLITHIC TUFF DACITE	Typical polyolithic texture.
80	80.7	FELSITE	Patchy to veinlets of zeo.
80.7	379	POLYLITHIC TUFF DACITE	Locally w.d. zeo +/-calcite.

Hole Number: **KN-02-19**

From (m)	To (m)	Rock Type	Comments
379	389	CRYSTAL-LITHIC TUFF DACITE	Monzodiorite; intrusive texture is diffuse to w.d.; feldspars show weak orange staining.
389	469.39	POLYLITHIC TUFF DACITE	As above.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-19

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	42.75	POLYLITHIC TUFF DACITE							
0.00	2.00	Fine-coarse grained dark grey fractured	0.5	2	18	Toodoggone Formation to EOH; matrix supported/local qtz eyes with highly angular to sub-rounded fragments of med or sub-volcanic material, fine grain very dark gray volcanic and buff/very light gray felsic fragments-->fragments are variable in size from <1cm to 15cm across-->matrix also exhibits subhedral/euhedral fine/med grained plag (5-25%)-->Magnetic throughout matrix and fragments equally-minor py in local fragments.	19	-2	-2
2.00	4.00		0.5	3	24 ZCVN 35	1	103427	0.002	0.007
4.00	6.00		1.0	3	25	One coarse fragment shows ghosted chl altered mafics-->Fresh-no oxidation--> local diss py in matrix and local fragments.	103428	0.006	0.007
6.00	8.00		0.5	5	47 ZCVN 35	1	103429	0.003	-2
8.00	9.15		0.5	6	58 ZVN 40	2	103430	0.005	-2
9.15	18.29		0.5	1	3	Occurrence of coarse magnetic BFP fragments with coarse felsic and diorite fragments-very poor recovery.	103431	0.006	0.012
18.29	20.00		0.5	6	54 CVN 40	1	103432	0.003	0.008
20.00	22.00		0.5	0.1	3 28 ZVN 40	2	103433	0.009	0.007
22.00	24.00		0.5	6	57 CCZVN 3	3	103434	0.01	0.013
24.00	26.00		0.5	4	32 ZVN 3	Very rubbly	103435	0.005	-2
26.00	28.00		0.5	3	22 ZVN 2		103436	0.001	-2
28.00	30.00		0.5	3	28 ZVN 10	Zeolite on fracture.	103437	0.005	0.013
30.00	31.00		0.5	3	21 QCV 30	3	103438	0.155	6.2
31.00	33.00	Fine-coarse grained grey chloritic sericitic	0.5	1.0	0 2 CCZVN 35	10	103439	0.161	0.791

Hole Number: KN-02-19

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
33.00	34.60	Fine-coarse grained grey sericitic chloritic	0.5	3	30 CCZVN 35 7	Similar to above--> local sericitic dominant alteration-patchy.	103440	0.005	0.027
34.60	36.00	Fine-coarse grained dark grey fractured	0.5	2	10 ZVN 25 5		103441	0.004	0.008
36.00	38.00		0.5	2	17 ZQCV 15 7	One low angle qtz veinlet +/- carb with well developed but patchy epidote.	103442	0.006	0.03
38.00	42.75		0.5	2	12 ZCVN 5	Rubby-->minor slickensides on local joint planes-->local coarse felsic fragments.	103443	0.001	0.017
42.75	44.9	HORNFELS DACITE							
42.75	44.90	Fine-coarse grained grey-green silicic	1.0	2	17 ZVN 3	MSU-->matrix dominant-->silicified with very distinctive 'spotted' texture due to med/coarse rounded to irregular dark green mafics (25-30%)--> hornfels texture from lower felsic unit.	103444	0.003	0.011
44.9	48	FELSITE							
44.90	46.00	Fine-grained light grey sericitic	0.1	0	0 ZVN 10 3	Very light gray, with pervasive pale green sericite alteration-fairly soft.	103445	-2	0.007
46.00	48.00		0.1	1	2 ZVN 30 2		103446	-2	-2
48	50	HORNFELS DACITE							
48.00	50.00	Fine-coarse grained grey sericitic	0.5	3	21 ZVN 2	More light gray, hornfels mafics only, locally--> fragmental texture more evident.	103447	-2	-2
50	51.2	POLYLITHIC TUFF DACITE							
50.00	51.20	Fine-coarse grained dark grey	0.5	5	42	Mostly dark gray fragmental, very weak local hornfels texture (MSU).	103448	-2	-2
51.2	55.5	HORNFELS DACITE							
51.20	53.00	Fine-coarse grained grey-green silicic	0.5	4	30 ZVN 3	Silicified with well developed hornfels spotted texture (MSU).	103449	-2	-2
53.00	54.50		0.5	4	36 ZVN 1	40cm of felsic (?) intercalated with MSU hornfels-->ghosted coarse fragments in felsite.	103450	0.002	0.016
54.50	55.50		0.5	7	62 ZVN 1	well developed spotted hornfels texture throughout.	103452	0.001	0.005
55.5	56.1	FELSITE							
55.50	56.10	Fine-grained light grey sericitic	0.1	1	2	Massive, siliceous, felsic dyke with weak patchy, ser alteration and coarse but ghosted fragments.	103453	0.001	-2
56.1	58.3	HORNFELS DACITE							

Hole Number: KN-02-19

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
56.10	57.35	Fine-coarse grained grey silicic	0.1	4	35 CCZVN	5 Med grain mafic from hornfels-->local minor felsite.	103454	0.001	0.019
57.35	58.30	Fine-coarse grained dark grey silicic	0.5	1	6 CCZVN 10 20	Hornfels texture weakly developed-->well developed carb + zeo veinlet.	103455	0.004	0.031
58.3	76	POLYLITHIC TUFF DACITE							
58.30	59.15	Fine-medium-grained dark grey	2.0	2	19	finer grained version of upper coarse PLT-->possibly just matrix material with rare to absent fragments-->inc in py.	103456	-2	-2
59.15	60.60		2.0	1	2 ZCVN	5 Increase in calc veinlets.	103457	0.025	0.635
60.60	62.15		3.0	0	1 ZQCV	7 local w.d. sub-hedral py in qtz veinlets-interval is non-magnetic.	103458	0.025	0.559
62.15	64.15		1.0	1	2 ZQCV	5	103459	0.015	0.131
64.15	67.06		1.0	1	8 CCZVN	3	103460	0.013	0.122
67.06	69.80		3.0	1	5 CCZVN 15 10	Significant increase in veinlets. Mostly low angle - local felsic fragments.	103461	0.021	0.24
69.80	71.80	Fine-coarse grained dark grey	2.0	2	16 CCZVN	3 Local w.d. zeo +/-calc infill.	103462	0.007	0.162
71.80	74.00	Fine-coarse grained grey	2.0	2	14 ZVN 20	2 Locally lt syenite with ghosted fragments.	103463	0.006	0.086
74.00	76.00	Fine-coarse grained grey sericitic	2.0	3	23 ZVN	3 As above with frags more evident and hem on locally fractured.	103464	0.002	0.034
76	77.65	HORNFELS DACITE							
76.00	77.65	Fine-coarse grained grey sericitic	2.0	0	1 ZCVN 20	7 Inc in zeolite.	103465	0.003	0.04
77.65	80	POLYLITHIC TUFF DACITE							
77.65	79.25	Fine-coarse grained dark grey	1.0	3	21 ZCVN 10	5 Typical polyolithic texture.	103466	0.004	0.058
79.25	80.00	Fine-coarse grained dark grey sericitic	2.0	2	18 ZCVN 50	7 Crowded plus texture more evident but still diffuse.	103467	0.01	0.09
80	80.7	FELSITE							
80.00	80.70	Fine-medium-grained light grey sericitic	0.5	0	1 ZCVN 20	Patchy to veinlets of zeo.	103468	-2	0.007
80.7	379	POLYLITHIC TUFF DACITE							
80.70	82.00	Fine-medium-grained dark grey sericitic	0.5	3	22 ZCVN 15	20 Locally w.d. zeo +/-calcite.	103469	0.006	0.02
82.00	85.30	Fine-medium-grained dark grey	0.5	2	12 ZCVN	3 Clasts are very rare.	103470	0.004	0.039
85.30	87.35		2.0	0	0 ZCVN 65	7 Zeo and calc very vuggy.	103471	0.012	0.16
87.35	89.00		3.0	1	4 QEVN 15	5 Py with qtz and epi veintets.	103472	0.018	1.215

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm		
89.00	91.00	Fine-medium-grained dark grey epidote	3.0	1	8 ZCVN	5	Locally w.d. disseminated py - epidote assoc with zeo and rare calcite.	103473	0.023	0.136	
91.00	93.00		2.0	1	4 ZVN	20	5	Rare coarse frags. Very thin monzonite dykelet at 10 degrees to core axis. (~10 cm wide).	103474	0.028	0.197
93.00	95.00	Fine-coarse grained dark grey	2.0	3	25 ZVN	45	5	Increase in % of coarse irregular fragments. One low angle monzonite dykelet.	103475	0.017	0.116
95.00	97.00		3.0	1	1 ZVN	50	3	Local pyritic stringers. Diss mafics more evident. Py also with local siliceous fragments.	103476	0.005	0.044
97.00	99.00	Fine-medium-grained dark grey	4.0	0	0 ZQVN	7		Locally, w.d. pyrite assoc with one low angle qtz veinlet.	103478	0.015	3.29
99.00	101.00	Fine-coarse grained dark grey silicic	3.0	1	1 ZVN	50	20	Patchy silicification. Increase in high angle zeolite veinlets.	103479	0.002	0.037
101.00	103.00	Fine-coarse grained dark grey	1.0	0	0 ZVN	45	3	Highly irregular shaped fragments locally - (hot?)	103480	0.001	0.026
103.00	105.00		4.0	2	19 ZCQVN	3		As above. Locally w.d. py as diss and with qtz/carb veinlet.	103481	0.004	0.424
105.00	107.00		1.0	0	1 ZVN	5		Locally, lt syenite from felsic fragments.	103482	0.004	0.024
107.00	109.00	Fine-medium-grained dark grey	2.0	2	20 ZCVN	35	3	Py with epi in calc and zeo veinlet.	103483	0.006	0.026
109.00	111.00		3.0	3	24 ZQCVN	10	7	Py with local qtz veinlets. Zeo is mostly stilbite.	103484	0.006	0.02
111.00	113.00		2.0	3	28 ZCEVN	25	5	Local thin epidote veinlets with subhedral medium gr mafics.	103485	-2	-2
113.00	115.00		2.0	3	26 ZVN	25	3	Hematite on local fracture.	103486	-2	0.012
115.00	117.00		2.0	3	26 ZVN	35	3		103487	0.001	0.005
117.00	119.00		1.0	2	15 ZVN	7		20 cm intercept within is vuggy and calcic.	103488	0.005	0.007
119.00	121.00	Fine-coarse grained dark grey	1.0	2	14 ZVN	2		Local ghosted fragments.	103489	0.006	0.266
121.00	123.00	Fine-coarse grained dark grey epidote	0.5	2	16 ZVN	7		Epi altered w.r. frags in local zeo veinlets.	103490	0.004	0.011
123.00	125.00	Fine-coarse grained dark grey clay	1.0	3	22 ZVN	45	7	Local clay (?) alteration assoc with zeo veinlets.	103491	0.001	0.011
125.00	127.00	Fine-coarse grained dark grey	0.5	2	16 ZVN	60	10		103492	-2	0.005
127.00	129.00		0.5	3	20 ZVN	40	10	Irregular to rounded felsic fragments more common.	103493	-2	-2
129.00	131.00		0.5	3	22 ZVN	5			103494	0.001	0.011
131.00	133.00	Fine-coarse grained dark grey epidote	0.5	2	14 ZVN	15	5		103495	0.001	-2
133.00	135.00		0.5	2	11 ZVN	15	25	Epi alteration is weak/diffuse - assoc with veinlets.	103496	0.001	-2
135.00	137.00	Fine-coarse grained dark grey	0.5	5	45 ZCVN	5			103497	0.001	0.013

Hole Number: KN-02-19

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
137.00	139.00	Fine-coarse grained dark grey	0.5	1	3 ZVN	3	103498	0.001	0.085
139.00	141.00	Fine-coarse grained dark grey epidote sericitic	0.5	2	10 ZCVN	7	103499	0.001	-2
141.00	143.00		0.5	1	9 ZCVN	30 10	103500	0.002	-2
143.00	145.00		0.5	1	3 ZCVN	35 10	103501	0.002	0.021
145.00	147.00	Fine-coarse grained dark grey epidote	0.5	1	3 ZCVN	5	103502	0.002	0.017
147.00	149.00	Fine-coarse grained dark grey	0.5	1	6 CCZVN	65 15	103504	0.008	0.033
149.00	151.00	Fine-coarse grained dark grey epidote	0.5	1	6 CCZVN	65 15	103505	0.008	0.057
151.00	153.00	Fine-coarse grained dark grey	0.5	1	4 ZCVN	5	103506	-2	-2
153.00	155.00	Fine-coarse grained dark grey epidote	0.5	2	17 ZCVN	5	103507	-2	0.007
155.00	157.00		0.5	1	10 ZCVN	5	103508	-2	0.012
157.00	159.00		0.5	4	35 ZEVN	30 5	103509	0.001	0.022
159.00	161.00	Fine-coarse grained dark grey	0.5	3	27 QZEVN	35 3	103510	-2	0.017
161.00	163.00	Fine-coarse grained dark grey epidote	0.5	2	18 ZCVN	3	103511	0.011	0.107
163.00	165.00		0.5	1	6 ZCVN	60 7	103512	0.024	0.062
165.00	167.00	Fine-coarse grained dark grey	0.5	2	15 ZCVN	50 3	103513	0.006	0.035
167.00	169.00	Fine-coarse grained dark grey epidote	0.5	4	36 ZCVN	35 7	103514	0.002	0.032
169.00	171.00		0.5	3	24 ZCVN	30 3	103515	0.004	0.047
171.00	173.00	Fine-coarse grained dark grey	0.5	3	24 ZCVN	35 2	103516	0.006	0.082
173.00	175.00		0.5	3	21 ZCVN	35 5	103517	0.003	0.007
175.00	177.00		0.5	3	25 CCZVN	35 3	103518	0.002	0.006
177.00	179.00	Fine-coarse grained dark grey epidote chloritic	0.5	3	24 ZCVN	70 25	103519	0.005	0.007
179.00	181.00		0.5	2	18 ZCVN	70 15	103520	0.004	0.011
181.00	183.00		0.5	4	36 ZCVN	5 20	103521	0.005	-2

Hole Number: KN-02-19

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
183.00	185.00	Fine-coarse grained dark grey chloritic epidote	0.5	3	27 ZVN 50 20	Intercalated hfl's texture locally assoc with zeolite veinlets.	103522	0.003	-2
185.00	187.00	Fine-coarse grained dark grey	0.5	3	36 ZVN 3	Local BFP fragments.	103523	0.005	0.006
187.00	189.00	Fine-coarse grained dark grey epidote	0.5	2	16 ZCVN 25 7	Locally w.d. patchy, epidote: 35 cm of dioritic intrusive x-cut by veinlets.	103524	0.014	0.019
189.00	191.00		2.0	3	27 QCV 45 5	One qtz veinlet with epi: 10 cm felsic sub volcanic fragments within.	103525	0.121	0.254
191.00	193.00		0.5	4	31 CVN 35 3	Dioritic and BFP fragments.	103526	0.034	0.048
193.00	195.00		0.5	5	41 CZQ 50 5	One qtz veinlet with Kfsp(?).	103527	0.005	-2
195.00	197.00		0.5	4	31 CCZVN 7	50cm BFP fragment. One vuggy carb veinlet with crystal growth in vug.	103528	0.004	0.01
197.00	199.00	Fine-coarse grained dark grey	0.5	3	27 CVN 30 1	BFP and andesitic coarse fragments.	103530	0.002	0.009
199.00	201.00	Fine-coarse grained dark grey epidote	0.5	3	27 QCV 35 3	Calc and qtz veinlet with epi w.r. alteration.	103531	0.002	0.006
201.00	203.00	Fine-coarse grained dark grey	0.5	3	28 CVN 2		103532	0.004	0.008
203.00	205.00		0.5	4	32 CCZVN 30 2		103533	0.005	0.017
205.00	207.00	Fine-coarse grained dark grey epidote	0.5	3	29 QCZVN 3	Minor epidote with qtz and calc veinlet.	103534	0.005	0.021
207.00	209.00	Fine-coarse grained dark grey	0.5	3	25 CVN 15 3		103535	0.008	0.016
209.00	211.00	Fine-coarse grained dark grey epidote clay	0.5	2	16 FZ 25	40cm fault zone - carb rich from veinlets. Epi with qtz veinlet. Also Kfsp(?)	103536	0.001	0.014
211.00	213.00	Fine-coarse grained dark grey epidote	0.5	2	19 ZCVN 7		103537	0.003	0.005
213.00	215.00	Fine-coarse grained dark grey epidote zeolite	0.5	3	29 ZCVN 45 10	Vuggy zeo veinlets. Zeo as alteration rim around epi patches.	103538	0.005	0.008
215.00	217.00	Fine-coarse grained dark grey	0.5	3	24 ZCVN 3		103539	0.007	0.013
217.00	219.00	Fine-coarse grained dark grey epidote	0.5	2	12 ZCVN 40 7	One carb and zeo veinlet at 10 degrees to core axis with epidote as w.r. alteration.	103540	0.007	0.016
219.00	221.00	Fine-coarse grained dark grey	0.5	4	32 ZCVN 5		103541	0.009	0.019
221.00	223.00	Fine-coarse grained dark grey hematitic	0.5	4	32 ZCVN 5	Random zeo stringers and zeo as weak patchy alteration.	103542	0.006	0.011
223.00	225.00	Fine-coarse grained dark grey epidote	0.5	1	4 ZCVN 65 5	Fragments locally increased in angle. 1m syenite fragment (dyke?).	103543	0.01	0.04
225.00	227.00		0.5	2	15 ZCVN 60 5		103544	0.007	0.016

Hole Number: KN-02-19

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
227.00	229.00	Fine-coarse grained dark grey	0.5	2	17 CCZVN 60 7	Medium gr syenite fragment. X-cut by carb (tension gashes??).	103545	0.01	0.017
229.00	231.00	Fine-coarse grained dark grey epidote hematitic	0.5	3	26 ZCVN 40 5	30cm intrusive fragment - siliceous. Local weak orangish hem(?) staining.	103546	0.008	0.013
231.00	233.00	Fine-coarse grained dark grey	0.5	3	25 ZCVN 30 3		103547	0.007	0.009
233.00	235.00	Fine-coarse grained dark grey hematitic	0.5	3	22 CCZVN 45 3		103548	0.004	0.006
235.00	237.00	Fine-coarse grained dark grey	0.5	3	28 ZCVN 45 3		103549	0.006	0.012
237.00	239.00	Fine-coarse grained dark grey epidote hematitic	0.5	3	28 CCZVN 30 5	One carb with hematite veinlet - zeo rimmed epidote patches.	103550	0.008	0.021
239.00	241.00	Fine-coarse grained dark grey	0.5	3	25 ZCVN 35 3		103551	0.008	0.019
241.00	243.00	Fine-coarse grained dark grey silicic hematitic	0.5	3	22 ZCVN 25 3	Locally lt gray from highly siliceous (silicified?) intercept.	103552	0.006	0.019
243.00	245.00	Fine-coarse grained dark grey epidote	0.5	4	32 CCZVN 3		103553	0.007	0.012
245.00	247.00		0.5	3	27 ZCVN 5 3		103554	0.008	0.016
247.00	249.00	Fine-coarse grained dark grey epidote hematitic	0.5	3	22 CCZVN 7	One 7cm wide zeo-carb veinlet at 35 degrees - stringers are random.	103556	0.007	0.018
249.00	251.00		0.5	3	20 CCZVN 7	Random veinlets x-cut fragments.	103557	0.008	0.013
251.00	253.00		0.5	2	16 CCZVN 7		103558	0.008	0.016
253.00	255.00		0.5	2	17 CCZVN 5		103559	0.012	0.025
255.00	257.00	Fine-coarse grained dark grey hematitic sericitic	0.5	2	12 CCZVN 10 7	Sericite(?) altered where lapilli rich.	103560	0.005	0.025
257.00	259.00	Fine-coarse grained dark grey epidote	0.5	3	24 CCZVN 7		103561	0.007	0.02
259.00	261.00	Fine-coarse grained dark grey epidote hematitic	0.5	3	26 CCZVN 30 7	Patchy epi with hematite.	103562	0.008	0.015
261.00	263.00	Fine-coarse grained dark grey epidote	0.5	3	29 CCZVN 5		103563	0.013	0.025
263.00	265.00	Fine-coarse grained dark grey epidote hematitic	1.0	5	40 ZCVN 30 5	Py with local epi rich veinlet. Also with subhedral chl in veinlet.	103564	0.021	0.047
265.00	267.00		0.5	3	26 ZCVN 35 3	Epi and hem as weak and local.	103565	0.009	0.026
267.00	269.00	Fine-coarse grained dark grey epidote	0.5	3	23 CCZVN 40 3	One 10cm syenite fragment.	103566	0.017	0.053

Hole Number: KN-02-19

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
269.00	271.00	Fine-coarse grained dark grey epidote hematitic	0.5	4	34 CCZVN 60 7	Syenite fragment. Qtz with epidote and orange hematite(?) alteration.	103567	0.015	0.03
271.00	273.00	Fine-coarse grained dark grey epidote	0.5	2	14 ZCVN 5		103568	0.004	0.016
273.00	275.00		0.5	3	27 CCZVN 7	Stringers are highly random and occur as discontinuous infill. Epi is rare.	103569	0.008	0.043
275.00	277.00		0.5	3	21 CCZVN 5		103570	0.016	0.04
277.00	279.00		0.5	3	26 CCZVN 3		103571	0.01	0.022
279.00	281.00	Fine-coarse grained dark grey epidote hematitic	0.5	2	15 CCZVN 3		103572	0.012	0.029
281.00	283.00	Fine-coarse grained dark grey epidote	1.0	4	37 CCZVN 7		103573	0.006	0.062
283.00	285.00		0.5	2	12 CCZVN 5		103574	0.008	0.033
285.00	287.00	Fine-coarse grained dark grey	0.5	2	20 CCZVN 5	BFP fragments.	103575	0.012	0.018
287.00	289.00	Fine-coarse grained dark grey epidote	0.5	1	10 CCZVN 45 5		103576	0.012	0.021
289.00	291.00		2.0	1	7 CZQ 45 7	One py and mag and qtz veinlet and py and mag with epidote patch.	103577	0.031	0.024
291.00	293.00		2.0	2	13 CZQ 7	Local qtz and calc with epidote and py.	103578	0.022	0.139
293.00	295.00	Fine-coarse grained dark grey epidote silicic	2.0	1	8 CZQ 10	One qtz veinlet with py and wk mag in selvage/w.r. silicification.	103579	0.041	0.17
295.00	297.00	Fine-coarse grained dark grey epidote hematitic	2.0	1	14 CZQ 3	Py with qtz and calc infill.	103580	0.01	0.016
297.00	299.00	Fine-coarse grained dark grey epidote	0.5	1	6 CCZVN 50 7	One intrusive fragment; epi as w.r. alteration of 7cm carb and zeo veinlet.	103582	0.008	0.01
299.00	301.00	Fine-coarse grained dark grey epidote sericitic	0.5	1	7 CCZVN 3	Coarse fragments with diffuse boundaries of carb as infill with w.r. fragments as bx Locally vuggy.	103583	0.008	0.009
301.00	303.00	Fine-coarse grained dark grey epidote	1.0	2	11 CCZVN 35 2	Minor py in veinlets/stringers.	103584	0.018	0.014
303.00	305.00		1.0	1	8 CZQ 5	Locally clast rich - rare patchy py with qtz infill.	103585	0.018	0.016
305.00	307.00	Fine-coarse grained dark grey epidote hematitic	2.0	2	17 CCZVN 30 5	Py locally with calc veinlets.	103586	0.017	0.012
307.00	309.00	Fine-coarse grained dark grey epidote	3.0	2	16 CZQ 3	As above but also with rare qtz.	103587	0.011	0.012
309.00	311.00		2.0	2	18 CCZVN 15 5	Very irregular shaped frags. Locally clast rich.	103588	0.008	0.009

Hole Number: KN-02-19

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
311.00	313.00	Fine-coarse grained dark grey epidote	1.0	1	5 CCZVN 15 5	Hem(?) staining of clasts.	103589	0.007	0.005
313.00	315.00		0.5	2	16 CCZVN 15 3	Hem stained felsic frag(?) 20cm wide. Frag rich.	103590	0.006	0.01
315.00	317.00	Fine-coarse grained dark grey epidote hematitic	2.0	1	7 CZQ 20 5	Frag rich; py with qtz and calc infill.	103591	0.016	0.064
317.00	319.00		2.0	1	8 CZQ 50 5	Diss py locally. Epi is minor and patchy.	103592	0.01	0.042
319.00	321.00	Fine-coarse grained dark grey epidote	1.0	3	22 CCZVN 25 3	Mostly intrusive fragments.	103593	0.027	0.035
321.00	323.00	Fine-coarse grained dark grey	1.0	2	11 CCZVN 30 3	Patchy py with calc infill.	103594	0.018	0.017
323.00	325.00	Fine-coarse grained dark grey hematitic	0.5	2	18 CCZVN 3		103595	0.018	0.026
325.00	327.00	Fine-coarse grained dark grey epidote hematitic	2.0	2	16 CZQ 7	7cm calc and qtz and zeo veinlet with patchy py.	103596	0.017	0.019
327.00	329.00		2.0	2	13 CZQ 7	Epi mostly with local/rare qtz veinlets.	103597	0.02	0.028
329.00	331.00		1.0	2	12 CZQ 5	As above.	103598	0.028	0.099
331.00	333.00	Fine-coarse grained dark grey hematitic epidote	2.0	2	17 CZQ 3	Potassic/syenite fragments.	103599	0.021	0.311
333.00	335.00	Fine-coarse grained dark grey chloritic	1.0	2	12 CCZVN 5 5	Epidote with calc veinlets sub-parallel to core axis. Rare patchy py. Chl assoc with same calc veinlets.	103600	0.009	0.021
335.00	337.00	Fine-coarse grained dark grey	0.5	0	1 CCZVN 10 3		103601	0.011	0.013
337.00	339.00	Fine-coarse grained dark grey hematitic	0.5	1	10 CCZVN 35 3		103602	0.009	0.01
339.00	341.00		3.0	3	30 CZQ 30 5	Py with qtz and or calc veinlet.	103603	0.02	0.048
341.00	343.00		2.0	1	9 CZQ 25 7	Py patchy in one zeo and calc veinlet.	103604	0.008	0.015
343.00	345.00	Fine-coarse grained dark grey	3.0	3	22 CCZVN 35 5	Py locally w.d. in calc and zeo veinlet.	103605	0.024	0.103
345.00	347.00	Fine-coarse grained dark grey epidote	3.0	2	14 CCZVN 5	30cm syenite fragment(?); py with veinlets.	103606	0.048	0.233
347.00	349.00		2.0	2	18 CCZVN 30 3	40cm mafic dyke. Epi and py locally w.d. with veinlets.	103608	0.006	0.013
349.00	351.00	Fine-coarse grained dark grey epidote hematitic	2.0	2	12 CZQ 50 3	Py with local qtz stringers.	103609	0.02	0.052
351.00	353.00	Fine-coarse grained dark grey epidote	2.0	4	31 CZQ 40 5	Py +/-epi with local qtz veinlet and patchy infill.	103610	0.015	0.119
353.00	355.00		2.0	2	18 CZQ 45 3	Py +/-epi with calc and zeo veinlets and rare qtz.	103611	0.014	0.024
355.00	357.00		2.0	2	14 CZQ 45 3	As above.	103612	0.015	0.036

Hole Number: KN-02-19

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
357.00	359.00	Fine-coarse grained dark grey epidote hematitic	2.0	2	20 CCZVN	3 No qtz veinlets. Local py.	103613	0.008	0.026
359.00	361.00		1.0	1	10 CCZVN	65 5 More siliceous hem with high angle calc stringers.	103614	0.006	0.015
361.00	363.00	Fine-coarse grained dark grey epidote	2.0	3	24 CCZVN	60 5 As above. Slight increase in py and epidote in veinlets.	103615	0.011	0.036
363.00	365.00		1.0	4	34 CCZVN	15 2	103616	0.013	0.03
365.00	367.00	Fine-coarse grained dark grey hematitic	0.5	4	33 CCZVN	35 7	103617	0.005	0.015
367.00	369.00	Fine-coarse grained dark grey epidote hematitic	2.0	4	33 CZQ	40 7 Py locally with qtz veinlet.	103618	0.023	0.155
369.00	371.00	Fine-coarse grained dark grey	1.0	3	27 CCZVN	55 5	103619	0.016	0.046
371.00	373.00	Fine-coarse grained dark grey hematitic	1.0	3	23 CCZVN	45 3 Locally patchy with alteration.	103620	0.032	0.075
373.00	375.00	Fine-coarse grained dark grey epidote	1.0	2	19 CCZVN	50 5	103621	0.017	0.083
375.00	377.00	Fine-coarse grained dark grey epidote hematitic	0.5	3	26 ZCVN	3	103622	0.014	0.031
377.00	379.00	Fine-coarse grained dark grey epidote	1.0	3	20 ZCVN	7 Gradual contact with lower intrusive.	103623	0.02	0.36
379	389	CRYSTAL-LITHIC TUFF DACITE							
379.00	381.00	Medium-fine-grained green-grey mottled epidote hematitic	0.5	3	22 CCZVN	5 Monzodiorite; intrusive texture is diffuse to w.d.; feldspars show weak orange staining.	103624	0.018	0.052
381.00	383.00	Fine-medium-grained green-grey mottled chloritic hematitic	1.0	1	1 CCZVN	3 As above. Fragments (<5%) of tuff. Locally w.d./patchy epidote.	103625	0.004	0.175
383.00	385.00		2.0	3	21 CCZVN	3 Note: This unit may be closely packed lapilli/crystal tuff with 'quasi' intrusive texture. Rounded feldspars, magnetic, zeo and calc veinlets, fragments.	103626	0.019	0.097
385.00	387.00		2.0	2	16 CCZVN	3	103627	0.013	0.771
387.00	389.00		1.0	3	22 CCZVN	3 Intercalated/mixed with finer gr dacite lithic tuff. Tuff has qtz eyes.	103628	0.003	0.013
389	469.39	POLYLITHIC TUFF DACITE							
389.00	391.00	Fine-medium-grained grey mottled chloritic hematitic	1.0	2	17 CCZVN	3 As above.	103629	0.005	0.023
391.00	393.00		1.0	4	31 CCZVN	5	103630	0.02	0.107
393.00	395.00		1.0	1	6 CCZVN	3	103631	0.019	0.241

Hole Number: KN-02-19

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
395.00	397.00	Fine-medium-grained grey hematitic	3.0	1	9 CCZVN 5	Locally w.d. py assoc with calc +/-zeo patchy infill.	103632	0.045	0.293
397.00	399.00	Fine-medium-grained dark grey chloritic	2.0	1	1 ZCVN 50 7	Thin discontinuous carb stringers. Zeo and carb infill. Patchy py with chl.	103634	0.004	0.073
399.00	400.65		4.0	0.1	0 1 QZCVN 40 10	15cm wide qtz veinlet at 45 degrees to core axis with w.d. py and weak cpy with zeolite.	103635	0.094	0.541
400.65	402.50		2.0	1	8 ZCVN 20 7	50cm wide felsic dyke with trace diss py and weak sericite alteration. X-cut by zeolite.	103636	0.024	0.156
402.50	403.50		2.0	2.0	1 7 QZCVN 55 10	20cm wide irregular qtz vein with wide cpy and py.	103637	1.3	2.59
403.50	405.00	Fine-medium-grained dark grey	1.0	3	21 ZCVN 3	Minor coarse frags.	103638	0.003	0.008
405.00	407.00		2.0	2	16 ZQCVN 3	Qtz eyes present but rare. Local py veinlets.	103639	0.035	0.103
407.00	409.00		2.0	4	31 ZQCVN 2	Py with one 4cm qtz veinlet 35 degrees to core axis.	103640	0.014	0.115
409.00	411.00	Fine-medium-grained dark grey chloritic carbonate	1.0	1	2 CVN 20	Presence of extensive carb infill as fracture fill (tension gashes??). Random to en echelon.	103641	0.117	0.444
411.00	413.00		2.0	2	13 CVN 20	As above with local patchy py assoc with calc +/-qtz.	103642	0.029	0.134
413.00	414.20		1.0	1	2 CVN 10	As above but calc infill begins to decrease.	103643	0.02	0.769
414.20	415.30	Fine-medium-grained dark grey chloritic	3.0	0.5	2 12 ZCVN 10	Calc and zeo veinlets locally with py +/- wk cpy.	103644	0.075	0.868
415.30	417.10	Fine-medium-grained grey silicic	10.0	0.5	0 0 Q 45 20	Silicified, qtz flooding, veinlets with >10% locally w.d. py. Trace cpy.	103645	0.012	1.535
417.10	418.35		7.0	0.5	0 1 Q 45 20	As above but no flooding.	103646	0.008	1.105
418.35	420.00		5.0	0	0 QZCVN 50 15	Silicification now only local. Reappearance of calc and zeo veinlets.	103647	0.006	0.241
420.00	422.00		3.0	0	1 QZCVN 50 10	Silicification is weak and localized. Zeo stringers x-cut local qtz veinlets. Py with qtz veinlet	103648	0.001	0.131
422.00	424.00		3.0	0	1 QZCVN 55 10	As above. Becoming less altered.	103649	0.003	0.139
424.00	426.00	Fine-medium-grained dark grey silicic	5.0	0	0 QZCVN 10 20	Locally extensive low angle zeo and carb. Py in local irregular qtz veinlet. Carb gashes as at 411-413cm.	103650	0.002	0.409
426.00	428.00	Fine-medium-grained dark grey	2.0	2	15 ZCVN 55 3	Decrease in veining. Re-occurrence of magnetite.	103651	0.004	0.288
428.00	430.00	Fine-medium-grained dark grey chloritic epidote	1.0	2	13 ZCVN 25	Highly irregular zeo +/-calc throughout.	103652	0.018	0.227
430.00	432.00	Fine-medium-grained dark grey epidote	2.0	2	15 ZCVN 60 7	Typical dacitic tuff with local qtz eyes.	103653	0.009	0.049
432.00	434.00		2.0	3	25 ZCVN 45 5	Py locally with epi +/-chl stringers; Fe staining orange locally. Quasi intrusive texture.	103654	0.011	0.061

Hole Number: KN-02-19

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
434.00	436.00	Fine-medium-grained dark grey epidote	1.0	2	17 ZCVN 40	3 Very siliceous with 30-40% ghosted plag.	103655	0.021	0.268
436.00	438.00		1.0	2	13 ZCVN 40	3 As above.	103656	0.012	0.056
438.00	440.00		0.5	1	9 ZCVN	3 unit from 434.00 to E.O.H exhibits hypabyssal texture w/ med grained plag and rare local angular fragments; possibly a feldspar porphyry	103657	0.031	0.181
440.00	442.00		1.0	0.7	3 29 ZCVN	3 Local cpy with zeo and calc veinlet.	103658	0.045	0.235
442.00	444.00		1.0	1	9 ZCVN	10 Highly irregular/patchy zeolite and calc stringers.	103660	0.063	0.258
444.00	446.00		1.0	2	20 ZCVN	10	103661	0.047	0.283
446.00	448.00		1.0	2	13 ZCVN	10	103662	0.005	0.011
448.00	450.00		1.0	3	21 ZCVN	10	103663	0.015	0.054
450.00	452.00		1.0	1	6 ZCVN	10	103664	0.021	0.053
452.00	454.00		1.0	1	10 ZCVN	10	103665	0.009	0.059
454.00	456.00		1.0	2	19 ZCVN	10	103666	0.011	0.018
456.00	458.00		1.0	1	1 ZCVN	10 Qtz and calc and zeo and py veinlet.	103667	0.008	0.071
458.00	460.00	Fine-medium-grained green-grey epidote	1.0	2	14 ZCVN	10	103668	0.002	0.006
460.00	462.00		1.0	3	24 ZCVN	10	103669	0.001	-2
462.00	464.00		1.0	3	21 ZCVN	10	103670	0.003	0.008
464.00	466.00		1.0	1	3 ZCVN	10	103671	0.021	0.059
466.00	468.00		1.0	2	14 ZCVN	10	103672	0.015	0.028
468.00	469.39		1.0	2	12 ZCVN	10 EOH	103673	0.007	0.019
469.39		EOH							

Kemess North 2002 - Diamond Drill Log



Hole Number: KN-02-20

Northing: 16361.9 **Total Depth:** 458.7m
Easting: 10456.7 **Azimuth:** 0°
Elevation: 1677.8 **Dip:** -75°

Geologist: J. Mazvihwa

Logged Date: 7/23/2002

<u>Survey Depth</u>	<u>Azimuth</u>	<u>Dip</u>	<u>Comments:</u>
258 m	13 °	-75 °	

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-20**

From (m)	To (m)	Rock Type	Comments
0	3.5	CASING	
3.5	11.07	POLYLITHIC TUFF DACITE	Dark green matrix, qtz rich fragments - boundary not visible. Rare BF porphyry fragments ~1% of total fragments. Lim lining 2 way jt planes. BKN rubby RQD 0%.
11.07	17.27	ANDESITE FLOW	Highly broken up, RQD ~ 0%. Limonite + gypsum coating bleached qtz / sericite rich fragments. Dissolution features visible on larger fragments. Takla volcanic flow.
17.27	45.19	POLYLITHIC TUFF DACITE	Missing core btwn 18.29 m - 18.9 m. BF porphyry fragments, boundaries not defined. Jts infilled by lim and hem yellow + red respectively.
45.19	57	ANDESITE FLOW	Bleached Takla Flow, qtz, seri, pyrite zone. Light grey colour. Fe bleached, qtz/gyp infilling jts. Gypsum + cby cementing fragmented QSP fragments locally + infilling jts in places. Py diss and aggregates in QSP fragments. Localized BKN zones. Minor yellow sericite veining - randomly orientated.
57	344.3	POLYLITHIC TUFF DACITE	Medium green polyolithic tuff. Fragment boundaries not visible. Protolith overprinted by alteration. Zeolite veining rarely assoc with qtz veining. Local BKN zones.
344.3	366.3	CROWDED FELSPAR PORPHYRY DACITE	Medium grey/green monzodiorite. Plagioclase, feldspar, qtz phenocrysts in fine green/grey matrix probably of fine grained plagioclase, feldspar, qtz, amphibole/pyroxene crystals. Py +/- cpy diss in porphyry, also confined to veining associated with qtz/calcite-locally. Bound by potassic altered portions. Unit might be large fragment in PLT, or post main mineralization intrusion-1% diss py? Local potassic alteration. Protolith overprinted locally by chloritization+silicification.
366.3	380.32	POLYLITHIC TUFF DACITE	Medium green polyolithic tuff. Fragments barely visible. Matrix-dominant, fine grained, siliceous. Dark, vitreous qtz eyes. Local epidote alteration, non-pervasive. Zeolite/qtz/carb veining. Portions with increased veining-randomly oriented. Monzodiorite fragments in PLT, boundaries not visible.

Hole Number:

KN-02-20

From (m)	To (m)	Rock Type	Comments
380.32	457.81	CROWDED FELSPAR PORPHYRY DACITE	Plagioclase, feldspar, qtz phenocrysts in grey/green fine grained matrix consisting probably of fine grained plagioclase, feldspar, qtz, amphibole or pyroxene. Zeolite/qtz/carb veining randomly oriented. Porphyritic texture barely visible, protolith overprinted bt alteration locally. Locally stained by potassic alteration.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-20

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	3.5	CASING							
	0.00	3.50					20	-2	-2
3.5	11.07	POLYLITHIC TUFF DACITE							
	3.50	5.90 Fine-coarse grained medium green propylitic chloritic		28	LVN	2 Dark green matrix, qtz rich fragments - boundary not visible. Rare BF porphyry fragments ~1% of total fragments. Lim lining 2 way jt planes. BKN rubbly RQD 0%.	108276	0.004	0.015
	5.90	6.71		36	LVN	2 Same as above.	108277	0.005	0.168
	6.71	11.07		12	LVN	2	108278	0.005	0.042
11.07	17.27	ANDESITE FLOW							
	11.07	12.80 Fine-grained light grey quartz-sericite-pyrite		0		Highly broken up, RQD ~ 0%. Limonite + gypsum coating bleached qtz / sericite rich fragments. Dissolution features visible on larger fragments. Takla volcanic flow.	108279	0.003	0.012
	12.80	17.27		1		Same as above, but core missing btwn 14.33 m to 15.85 m.	108280	0.002	0.026
17.27	45.19	POLYLITHIC TUFF DACITE							
	17.27	18.90 Fine-medium-grained medium green propylitic chloritic		26	LGVN	10 Missing core btwn 18.29 m - 18.9 m. BF porphyry fragments, boundaries not defined. Jts infilled by lim and hem yellow + red respectively.	108281	0.005	0.006
	18.90	20.42		26	LGVN	10 Black, vitreous, glossy, hard, anhedral qtz, eye on fresh broken surface. Fragment boundary not visible. Fault zones. Gypsum veining.	108282	0.012	0.007
	20.42	21.51		29	LGVN	10 Same as above.	108283	0.008	0.005
	21.51	23.47 Fine-medium-grained light green propylitic silicic		29	QZVN	10 Fragment boundaries not visible. Light green silicified, chl matrix + fragments with patchy minor epidote. Pink friable zeolite veining. Broken portions.	108284	0.003	-2
	23.47	25.29		18		Same as sample 284, red hem veining at ~45 degrees.	108285	0.001	-2
	25.29	26.97		30		Same as sample 284.	108286	0.001	0.014

Hole Number: KN-02-20

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
26.97	29.57	Fine-medium-grained light green propylitic silicic				20	Same as sample 284, but calcite/qtz veining bound by pink zeo stringers. Randomly orientated. Highly broken portions.	108287	0.008	0.016
29.57	31.55					32	Same as sample 284.	108288	0.002	0.013
31.55	33.40	Fine-medium-grained medium green propylitic chloritic	1.0	0.1		4 ZVN 15	<1% Diss. Py confined by fragments - boundaries not visible. BF porphyry fragments visible locally. Elongated feldspar in dark green fine grained, mafic matrix. BF porphyry fragments make up btwn 5-10%. Nature of fragments difficult to discern in broken portions.	108289	0.006	0.02
33.40	35.40					14 ZVN 10	Same as sample 289, minor red hem lining jts.	108290	0.008	0.015
35.40	37.65					25 ZVN 10	Same as sample 289, increased BF porphyry fragments, btwn 30-50% of total fragments present. Feldspar chloritized locally. Fragment boundary not visible. Cut randomly by qtz, cal hem veinlets, randomly orientated. Minor epi alteration patchy.	108291	0.024	0.06
37.65	38.21					35 ZVN 10	Same as sample 289, minor pink/red hardness >5 - kfsp infilling jts.	108292	0.015	0.044
38.21	41.17					54 ZVN 10	Same as sample 289, diss py in some fragments, locally assoc with cpy aggregates. Qtz fragments visible.	108293	0.025	0.078
41.17	43.11					31 ZVN 10	Same as sample 289, minor pink/orange, hardness >5 kfsp veining. Fragments in PLT appear to be touched each other, matrix not visible locally.	108294	0.018	0.058
43.11	45.19					42 ZVN 10	Same as sample 289.	108295	0.012	0.042
45.19	57	ANDESITE FLOW								
45.19	46.85	Fine-grained light grey quartz-sericite-pyrite	2.0	0.1		0 GVN 15	Bleached Takla Flow, qtz, seri, pyrite zone. Light grey colour. Fe bleached, qtz/gyp infilling jts. Gypsum + cby cementing fragmented QSP fragments locally + infilling jts in places. Py diss and aggregates in QSP fragments. Localized BKN zones. Minor yellow sericite veining - randomly orientated.	108296	0.001	0.015
46.85	48.24		2.0	0.1		0 GVN 15	Same as above.	108297	0.002	0.014
48.24	48.60		3.0	0.1		0 GVN 95	Milky/white qtz vein, cut by randomly orientated py veining. Dissolution features in the qtz vein where py has been dissolved. Dark (argillite?) green/grey fine grained clay material assoc. with diss features.	108298	0.001	0.01

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
48.60	50.63	Fine-grained light grey quartz-sericite-pyrite	2.0	0.1	0	GVN 15	Core loss. Bleached Takla Flow, QSP Zone. Light grey colour, Fe bleached. Gypsum/qtz veining. Rare chl/epidote rich portions. Py diss in bleached flow, also present as aggregates.	108299	0.002	0.019
50.63	52.53		2.0	0.1	0	GVN 15	Same as sample 299, dark grey fragments, possibly bleached. Takla PLT or bleached brecciated Takla Flow. Protolith overprinted by qtz, seri alteration. Dark grey fragments associated with high py content.	108300	0.001	0.011
52.53	54.55		2.0	0.1	0	GVN 15	Same as sample 299.	108302	0.001	0.011
54.55	56.05		2.0	0.1	0	GVN 15	Same as sample 299, BKN portions. Argillite/clay cementing QSP fragments and infilling jts locally.	108303	0.002	0.024
56.05	57.00		2.0	0.1	0	GVN 15	Same as sample 299, contact defined by highly broken zone, 0% RQD.	108304	0.003	0.018
57	344.3	POLYLITHIC TUFF DACITE								
57.00	58.52	Fine-medium-grained medium green propylitic chloritic				23 ZQHV 15	Medium green polyolithic tuff. Fragment boundaries not visible. Protolith overprinted by alteration. Zeolite veining rarely assoc with qtz veining. Local BKN zones.	108305	0.006	0.02
58.52	60.53					20 ZQHV 7	Same as sample 305, less zeolite veining.	108306	0.012	0.039
60.53	62.47					26 ZQHV 10	Same as sample 305, chl filled circular vesicles possibly Unit X frags in fine grained felsic matrix.	108307	0.002	0.014
62.47	64.45					1	Same as sample 305, less zeolite veining. BKN portions. Dark green, more chloritic portions. BF porphyry fragments ~5-10% of all fragments present. Felsic, light to medium green coloured.	108308	0.006	0.044
64.45	66.30					45	Same as sample 305.	108309	0.042	0.11
66.30	68.30					52 QVN 15	Same as sample 305, 5-10% BF porphyry fragments. Fragment boundaries not visible. Rare red, hem veining. Dark green chloritic portions.	108310	0.026	0.074
68.30	71.20					35 QVN 15	Same as sample 305, Py diss. In zeolite + qtz veining, assoc with epi veining locally.	108311	0.041	0.79
71.20	73.15					39 QVN 7	Same as sample 305, about 30 cm, fragment consisting of qtz and chloritic phenocrysts in medium green matrix.	108312	0.019	0.071
73.15	75.06					35 QVN 7	Same as sample 305, 50-70% BF porphyry fragments. Reduced veining, qtz and zeolite	108313	0.034	0.255

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From	To	Rock Type	Py-Cpy-Mt Ms Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
75.06	76.34	Fine-medium-grained medium green propylitic chloritic	12 QVN	7	Same as sample 305, Py+/-cpy aggregate assoc with chl and epi - in fragment - boundary not visible. Bleached, sericite and qtz altered fragment + diss. Py ~3% - between 75.56 m - 76.00 m.	108314	0.05	0.213
76.34	78.33		15 ZQCLV	30	Same as sample 305, increased veining - zeolite/qtz/cal/hem veining/flooding locally obliterating protolith, fragments not visible. Veining is randomly orientated. BF porphyry fragment visible locally. Epi/chl altered pervasive - weak to moderate alteration locally.	108315	0.027	0.249
78.33	79.69		15 ZQCLV	30	Same as above.	108316	0.016	0.142
79.69	81.70		23 ZQCLV	15		108317	0.039	0.179
81.70	83.91		8 ZQCCV	10	Same as sample 305.	108318	0.013	0.073
83.91	85.96		13 ZQCCV	10	Same as sample 305 with broken zones.	108319	0.01	0.019
85.96	87.90		30 ZQCCV	10	Same as sample 305, with localized epidote alteration.	108320	0.013	0.023
87.90	89.88		25 ZQCCV	10	Same as above.	108321	0.007	0.047
89.88	91.90		17 ZQCCV	15	Medium green, chloritic, siliceous polyolithic tuff. Fragment boundaries not visible, matrix and fragments cut by zeolite/qtz/carb veining. Randomly orientated. Nature of fragments and matrix overprinted by alteration - localized epi alteration - propylitic - weak, generally non pervasive, not clear if this is only confined to fragments. BF porphyry fragments are btwn 10-50% of fragments. BKN locally.	108322	0.004	0.009
91.90	93.83		17 ZQCCV	10	Same as sample 322, rare hem lining jts.	108323	0.065	0.199
93.83	95.85		20 ZQCCV	10	Same as sample 322.	108324	0.004	0.025
95.85	97.80		25 ZQCCV	7	Same as sample 322. Reduced zeolite/qtz/carb veining. Fewer fragments presents more green fine grained matrix.	108325	0.006	0.066
97.80	99.75		25 ZQCCV	10	Same as sample 322. Local increase in veining. Qtz eyes in matrix.	108326	0.004	0.009
99.75	101.72		8 ZQCCV	10	Same as sample 322.	108328	0.006	-2
101.72	103.71		25 ZQCCV	10		108329	0.004	0.013
103.71	105.77		24 ZQCCV	10		108330	0.002	0.077
105.77	107.80		26 ZQCCV	10		108331	0.001	-2
107.80	109.80		11 ZQCCV	10		108332	0.004	-2

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From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
109.80	111.80	Fine-medium-grained medium green propylitic chloritic	8	ZQCCV	10	Same as sample 322.	108333	0.014	0.024
111.80	113.85		22	ZQCCV	10		108334	0.006	0.008
113.85	115.85		26	ZQCCV	10		108335	0.01	0.076
115.85	117.85		13	ZQCCV	30	Same as sample 322. Increased zeolite, qtz, carb veining.	108336	0.011	0.025
117.85	119.85		18	ZQCCV	15	Same as sample 322.	108337	0.014	0.025
119.85	121.85		23	ZQCCV	15		108338	0.005	0.061
121.85	123.86		11	ZQCCV	15		108339	0.005	0.028
123.86	125.85		4	ZQCCV	15	Same as sample 322. Py +/- cpy aggregate in qtz vein, cut by zeolite stringer.	108340	0.012	0.118
125.85	127.83		20	ZQCCV	15	Same as sample 322. Dissolution feature and recrystallized zeolite and carbonate in cavity.	108341	0.011	0.285
127.83	129.83		8	ZQCCV	15	Same as sample 322.	108342	0.014	0.094
129.83	132.83		10	ZQCCV	15		108343	0.016	0.123
132.83	134.83		55	ZQCCV	15		108344	0.015	0.215
134.83	136.83		24	ZQCCV	15		108345	0.017	0.025
136.83	138.85		13	ZQCCV	15		108346	0.027	0.158
138.85	140.87		16	ZQCCV	15		108347	0.005	0.022
140.87	142.82		19	ZQCCV	15		108348	0.003	0.047
142.82	144.83		25	ZQCCV	15		108349	0.002	0.018
144.83	146.80		18	ZQCCV	15		108350	0.005	0.01
146.80	148.80		57	ZQCCV	15	Same as sample 322. Rare hem lining jts.	108351	0.001	0.016
148.80	150.80		16	ZQCCV	10	Same as sample 322. Reduced zeolite/qtz/carb veining. Fragment boundaries visible locally. Fragments include BF, monzodiorite, QSP Takla Flow - overprinted with chloritic and weak epidote locally.	108352	0.013	0.008
150.80	152.84		14	ZQCCV	10	Same as sample 322.	108354	0.008	0.009
152.84	154.84		18	ZQCCV	10		108355	0.008	0.008
154.84	156.86		36	ZQCCV	10		108356	0.009	0.01
156.86	158.83		25	ZQCCV	10	Same as sample 322. White/milky qtz, vein about 2 cm thick, ~30 deg to CA. Assoc with py/cpy aggregates, bound by zeo veinlets.	108357	0.037	0.169

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
158.83	160.88	Fine-medium-grained medium green propylitic chloritic		26	ZQCCV	10	Same as sample 322. Rare hem lining jts.	108358	0.008	0.01
160.88	162.88			15	ZQCCV	10	Same as sample 322.	108359	0.008	0.008
162.88	164.89			32	ZQVN	10	Medium green polyolithic tuff. Fragment boundaries barely visible. Fragments include qtz monzodiorite, BF porphyry (btwn 5-10%). Zeolite/Qtz veining randomly orientated. Rare hem infilling jts. Tuff matrix is fine grained, dark green siliceous-dacitic. Black, vitreous, anhedral Qtz eyes on broken surface. Possible bt mafic flecks - confirms TD.	108360	0.012	0.011
164.89	166.89			21	ZQVN	10	Same as sample 360. Localized epi.	108361	0.009	0.012
166.89	168.89			18	ZQVN	10	Same as sample 360.	108362	0.011	0.016
168.89	170.87			10	ZQVN	10	Same as sample 360. Local potassic, pink, pervasive, wk to moderate altered portions ~10cm - possibly fragment.	108363	0.014	0.026
170.87	172.87			13	ZQVN	10	Same as sample 360.	108364	0.012	0.028
172.87	174.85			19	ZQVN	10	Same as sample 360. Local increases in zeo/Qtz veining.	108365	0.019	0.039
174.85	176.85			13	ZQVN	10	Same as sample 360.	108366	0.016	0.035
176.85	178.85			18	ZQVN	10	Same as sample 360. Fragments with diss py +/- cpy.	108367	0.032	0.067
178.85	180.80			16	ZQVN	10	Same as sample 360.	108368	0.017	0.063
180.80	182.80			23	ZQVN	10		108369	0.04	0.686
182.80	184.80			20	ZQVN	10	Same as sample 360. Patchy, non-pervasive potassic alteration - present as pink staining.	108370	0.021	0.04
184.80	186.80			16	ZQVN	10	Same as sample 360.	108371	0.031	0.092
186.80	188.80			29	ZQVN	10	Same as sample 360. Red hem veining assoc with zeolite/Qtz/cal. Patchy, epi-propylitic alteration.	108372	0.017	0.054
188.80	190.80			8	ZQVN	10	Same as sample 360. Py +/- cpy aggregate associated with Qtz vein in fragments.	108373	0.039	0.167
190.80	192.80			6	ZQVN	10	Same as sample 360. Local increase in veining.	108374	0.029	0.169
192.80	194.80			24	ZQVN	10		108375	0.023	0.158
194.80	196.80			23	ZQVN	10	Same as sample 360. Local increase in veining - zeolite flooding.	108376	0.024	0.266
196.80	198.87			10	ZQVN	10	Same as sample 360.	108377	0.018	0.106
198.87	200.85			15	ZQVN	10		108378	0.016	0.04

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
200.85	202.85	Fine-medium-grained medium green propylitic chloritic		23	ZQVN	10	Same as sample 360. Increased zeolite/qtz/carb veining ~10-15 deg to CA.	108380	0.013	0.466
202.85	204.85			18	ZQVN	10	Same as sample 360. BF porphyry fragment associated with patchy epi alteration.	108381	0.015	0.034
204.85	206.85			11	ZQVN	10	Same as sample 360. 10 cm qtz vein assoc with chl fragments and py +/- cpy aggregates btwn 206.25m - 206.35m	108382	0.053	0.076
206.85	208.85			12	ZQVN	10	Same as sample 360. Localized potassic alteration - pink staining.	108383	0.014	0.069
208.85	210.85			7	ZQVN	10		108384	0.023	0.175
210.85	212.85			13	ZQVN	10	Same as sample 360. Potassic altered fragment btwn 212.02m - 212.45. Pink, potassic, siliceous fragment. Py +/- finely diss within. Contains white, soft, fragments - no fizz with HCl- soft possibly gypsum. Gypsum fragments also has diss py +/- cpy.	108385	0.041	0.038
212.85	214.85			16	ZQVN	10	Same as sample 360.	108386	0.012	0.026
214.85	216.85			20	ZQHV	10	Same as sample 360. Increased BF porphyry fragments ~30%. Increased hem, red veining.	108387	0.008	0.016
216.85	218.85			13	ZQHV	10	Same as above.	108388	0.019	0.043
218.85	220.85			16	ZQHV	10	Same as sample 360. Local increase in zeolite + qtz veining.	108389	0.048	0.04
220.85	222.85			18	ZQHV	5	Same as sample 360. Decrease veining.	108390	0.044	0.032
222.85	224.85			9	ZQHV	5	Same as sample 360. 1 cm thick red hem veining at about 10 deg to CA btwn 224.48 m - 224.64 m.	108391	0.028	0.013
224.85	226.85			23	ZQHV	10	Same as sample 360. 1 cm thick red hem veining at about 10 deg to CA btwn 225.05 m - 225.13 m.	108392	0.01	0.012
226.85	228.85			21	ZQHV	10	Same as sample 360.	108393	0.01	0.008
228.85	230.85			20	ZQHV	10		108394	0.014	0.014
230.85	232.85			18	ZQHV	10		108395	0.01	0.025

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From	To	Rock Type	Py-Cpy-Mt Ms Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
232.85	234.85	Fine-medium-grained medium green propylitic chloritic	19 ZQCCV	15 Medium green polyolithic tuff. Fragments include BF porphyry, monzodiorite QSP bleached flow. Boundaries of fragments are not visible. BFP fragments make up about 5-10% of total fragments. PLT cut by zeo/qtz veining randomly oriented. Rare red hem veining associated with qtz veining. Qtz veining associated with py stringers in fragments. Weak epidote alteration. Pink stained potassic portions. Matrix of tuff is fine grained, dark green with qtz eyes visible.	108396	0.009	0.008
234.85	236.83		9 ZQCCV	15 236.53m qtz vein associated with dissm py bound by epidote and potassic alteration.	108397	0.01	0.007
236.83	238.85		18 ZQCCV	15 238.57m-238.63m qtz vein associated with hem stringers bound by epidote stringers and potassic alteration.	108398	0.018	0.01
238.85	240.85		10 ZQCCV	15	108399	0.007	0.006
240.85	242.84		13 ZQCCV	15	108400	0.009	0.006
242.84	244.84		6 ZQCCV	15	108401	0.023	0.103
244.84	246.87		10 ZQCCV	15	108402	0.014	0.013
246.87	248.84		25 ZQCCV	15 Potassic altered portions.	108403	0.01	-2
248.84	250.84		5 ZQCCV	15	108404	0.025	0.044
250.84	252.84		17 ZQCCV	15	108406	0.013	0.005
252.84	254.84		16 ZQCCV	15	108407	0.01	0.006
254.84	256.84		29 ZQCCV	15	108408	0.012	0.008
256.84	258.84		25 ZQCCV	15 Potassic altered, pink stained BFP-feldspar phenocrysts stained pink.	108409	0.011	0.006
258.84	260.84		19 ZQCCV	15	108410	0.012	0.009
260.84	262.84		19 ZQCCV	15 Potassic altered sections.	108411	0.013	0.009
262.84	264.84		41 ZQCCV	15 Potassic altered BFP-feldspar stained pink.	108412	0.013	0.015
264.84	266.84		28 ZQCCV	15	108413	0.011	0.009
266.84	268.84		6 ZQCCV	15	108414	0.013	0.014
268.84	270.84		11 ZQCCV	15 Epidote stringers, locally associated with qtz stringers.	108415	0.015	0.02
270.84	272.84		4 ZQCCV	15 Magnetic fragments present in tuff. Fragment with qtz vein associated with epidote and dissm py.	108416	0.019	0.04

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
272.84	274.84	Fine-medium-grained medium green propylitic chloritic		7	ZQCCV	15	108417	0.022	0.022
274.84	276.84			10	ZQCCV	15	108418	0.018	0.024
276.84	278.85			20	ZQCCV	15 Increased monzodiorite fragments with py diss and aggregates. Local increase in carbonate veins, mt fragments.	108419	0.016	0.034
278.85	280.84			2	ZQCCV	15	108420	0.024	0.029
280.84	282.90			8	ZQCCV	15 Increased monzodiorite fragments, few (<2%) BFP fragments. Red hematite stringers associated with qtz veins. Mt fragments.	108421	0.019	0.015
282.90	284.90			3	ZQCCV	15 BFP fragments, approximately 5%, local potassic alteration. <80% of fragments=monzodiorite.	108422	0.012	0.007
284.90	286.90			6	ZQCCV	15 BFP fragments, approximately 5%, local potassic alteration. <80% of fragments=monzodiorite. Red hematite stringers.	108423	0.019	0.014
286.90	288.90			11	ZQCCV	15 BFP fragments, approximately 5%, local potassic alteration. <80% of fragments=monzodiorite. More fined grained, green matrix visible.	108424	0.018	0.01
288.90	290.90			7	ZQCCV	30 Increase in zeolite/qtz/carb veining, randomly oriented locally. Monzodiorite fragments approx 50%. Mt fragments.	108425	0.012	0.012
290.90	292.92			7	ZQCCV	10 Approx 5% BFP fragments, approx 50% monzodiorite fragments, boundaries obscure, weak epidote alteration.	108426	0.013	0.09
292.92	294.90			1	ZQCCV	10	108427	0.019	0.019
294.90	296.85			13	ZQCCV	10 Increased monzodiorite fragments, local potassic alteration and epidote alteration. Mt fragments.	108428	0.014	0.015
296.85	298.86			50	ZQCCV	10	108429	0.009	-2
298.86	299.70			18	ZQCCV	10 Increased monzodiorite fragments, local potassic alteration and epidote alteration. Mt fragments. Epidote alteration confined to veining associated with qtz and potassic alteration.	108430	0.018	0.047
299.70	300.35	Fine-grained light grey quartz-sericite-pyrite sericitic	2.0	0	ZQCCV	10 QSP takla bleached flow fragment. Pink staining on surface-weak potassic alteration. Py finely dissm.	108432	0.006	0.013

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
300.35	302.35	Fine-medium-grained medium green propylitic chloritic		6	ZQCCV	10	Medium green polyolithic tuff. Fragments include between 10-20% BFP fragments and over 50% of monzodiorite fragments. Minor Takla flow fragments. Dark green, fine grained matrix barely visible. Py stringers in monzodiorite fragments. Zeolite, qtz, carb-veining randomly oriented. Local potassic altered portions-link stained. Mt fragments local.	108433	0.014	0.213
302.35	304.35			1	ZQCCV	10		108434	0.019	0.169
304.35	306.35			9	ZQCCV	10		108435	0.035	0.109
306.35	308.35			6	ZQCCV	10		108436	0.03	0.041
308.35	310.35			9	ZQCCV	10		108437	0.078	0.052
310.35	312.35			9	ZQCCV	10	Increasing monzodiorite fragments.	108438	0.012	0.013
312.35	314.35			9	ZQCCV	10		108439	0.013	0.011
314.35	316.35			10	ZQCCV	10		108440	0.013	0.012
316.35	318.35			8	ZQCCV	10		108441	0.04	0.335
318.35	320.35			20	ZQCCV	10	Reduced monzodiorite fragments-approx 30%.	108442	0.016	0.047
320.35	322.17			2	ZQCCV	10		108443	0.023	0.018
322.17	324.20			14	ZQCCV	10	Approx 30cm potassic altered, pink stained fragment with white, soft gypsum fragment associated with diss py.	108444	0.017	0.027
324.20	326.20			5	ZQCCV	10		108445	0.018	0.068
326.20	328.27			8	ZQCCV	10		108446	0.013	0.046
328.27	330.23			14	ZQCCV	10		108447	0.009	0.01
330.23	332.26			32	ZQCCV	10	Monzodiorite fragments >60%.	108448	0.003	0.008
332.26	334.26			16	ZQCCV	10	Reduced monzodiorite fragments, BFP porphyry fragments between 10-20%.	108449	0.026	0.102
334.26	336.25			14	ZQCCV	10		108450	0.016	0.033
336.25	338.25			2	ZQCCV	10		108451	0.002	0.008
338.25	340.24			40	ZQCCV	10	Monzodiorite fragments increased to about 60%-Potassic altered, stained pink.	108452	0.001	-2
340.24	342.27			30	ZQCCV	10		108453	0.001	-2
342.27	344.30			13	ZQCCV	10		108454	0.01	0.031
344.3	366.3	CROWDED FELSPAR PORPHYRY DACITE								

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
344.30	346.30	Fine-medium-grained medium grey homogeneous propylitic chloritic	11	ZQCCV	10	Medium grey/green monzodiorite. Plagioclase, feldspar, qtz phenocrysts in fine green/grey matrix probably of fine grained plagioclase, feldspar, qtz, amphibole/pyroxene crystals. Py +/- cpy diss in porphyry, also confined to veining associated with qtz/calcite-locally. Bound by potassic altered portions. Unit might be large fragment in PLT, or post main mineralization intrusion-1% diss py? Local potassic alteration. Protolith overprinted locally by chloritization+silicification.	108455	0.009	0.039
346.30	348.30		1	ZQCCV	10		108456	0.039	0.315
348.30	350.30		8	ZQCCV	10		108458	0.001	-2
350.30	352.30		8	ZQCCV	10		108459	0.001	0.03
352.30	354.30		0	ZQCCV	10		108460	0.004	0.015
354.30	356.30		2	ZQCCV	10		108461	0.007	0.008
356.30	358.30		11	ZQCCV	10		108462	0.002	-2
358.30	360.30		8	ZQCCV	10	Patchy mineralization.	108463	0.008	0.028
360.30	362.30		8	ZQCCV	10		108464	0.003	0.011
362.30	364.30		1	ZQCCV	10	Fragments-in monzodiorite-mt, potassic altered monzodiorite, qtz fragments.	108465	0.003	0.006
364.30	366.30		5	ZQCCV	10	Protolith overprinted locally. Monzodiorite protolith less visible-locally.	108466	0.004	0.015
366.3	380.32	POLYLITHIC TUFF DACITE							
366.30	368.30	Fine-medium-grained medium green propylitic chloritic	2	ZQCCV	15	Medium green poly lithic tuff. Fragments barely visible. Matrix-dominant, fine grained, siliceous. Dark, vitreous qtz eyes. Local epidote alteration, non-pervasive. Zeolite/qtz/carb veining. Portions with increased veining-randomly oriented. Monzodiorite fragments in PLT, boundaries not visible.	108467	0.011	0.017
368.30	370.30		16	ZQCCV	15		108468	-2	-2
370.30	372.30		3	ZQCCV	15		108469	0.005	0.005
372.30	374.30		1	ZQCCV	15		108470	0.001	0.005
374.30	376.30		14	ZQCCV	15		108471	-2	-2
376.30	378.33		5	ZQCCV	15	Local increase in zeolite/qtz/carb veining.	108472	0.009	0.077

Hole Number: KN-02-20

From	To	Rock Type	Py-Cpy-Mt Ms Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
378.33	380.32	Fine-medium-grained medium green propylitic chloritic	4 ZQCCV	15 Local broken zones. Monzodiorite fragments/porphyry barely visible.	108473	0.007	0.009
380.32	457.81	CROWDED FELSPAR PORPHYRY DACITE					
380.32	382.33	Fine-medium-grained medium green homogeneous propylitic chloritic	10 ZQCCV	10 Plagioclase, feldspar, qtz phenocrysts in grey/green fine grained matrix consisting probably of fine grained plagioclase, feldspar, qtz, amphibole or pyroxene. Zeolite/qtz/carb veining randomly oriented. Porphyritic texture barely visible, protolith overprinted bt alteration locally. Locally stained by potassic alteration.	108474	0.009	0.039
382.33	384.30		18 ZQCCV	10	108475	0.013	0.027
384.30	386.30		14 ZQCCV	10	108476	0.005	0.01
386.30	388.30		15 ZQCCV	10	108477	0.004	0.009
388.30	390.30		13 ZQCCV	10	108478	0.004	0.01
390.30	392.30		9 ZQCCV	10	108479	0.004	0.029
392.30	394.30		5 ZQCCV	10 Protolith overprinted-phenocrysts barely visible.	108480	0.005	0.009
394.30	396.30		14 ZQCCV	10 Local potassic altered portion.	108481	0.005	0.021
396.30	398.30		23 ZQCCV	10 epidote + potassic altered portions. Local broken portions.	108482	0.011	0.012
398.30	400.30		13 ZQCCV	10 Local qtz vein associated with trace py, associated with epidote.	108484	0.002	0.007
400.30	402.30		9 ZQCCV	10 Porphyritic texture totally overprinted locally-plag, feldspar, qtz phenocrysts not visible.	108485	0.013	0.026
402.30	404.30		2 ZQCCV	10 Rare cpy aggregate confined to qtz/smokey grey vein.	108486	0.004	0.028
404.30	406.30		2 ZQCCV	10 Localized increases in zeolite veining associated locally with epidote. Rare py dissm. Phenocrysts not visible.	108487	0.017	0.078
406.30	408.30		1 ZQCCV	10	108488	0.021	0.04
408.30	410.34		0 ZQCCV	10	108489	0.032	0.14
410.34	412.30		6 ZQCCV	10 Local increases in zeolite/qtz/carb veining.	108490	0.021	0.036
412.30	414.30		10 ZQCCV	10	108491	0.002	0.009
414.30	416.30		7 ZQCCV	10	108492	0.004	-2
416.30	418.30		1 ZQCCV	10 Local broken zones.	108493	0.009	0.028
418.30	420.30		8 ZQCCV	10 Potassic altered, pink stained portion monzodiorite.	108494	0.004	0.02

Hole Number: KN-02-20

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
420.30	422.30	Fine-medium-grained medium green homogeneous propylitic chloritic		14	ZQCCV	10	Potassic altered, pink stained portion monzodiorite.	108495	0.003	0.01
422.30	424.30			19	ZQCCV	10		108496	0.012	0.015
424.30	426.30			16	ZQCCV	10		108497	0.001	0.005
426.30	428.30			14	ZQCCV	10		108498	0.003	0.007
428.30	430.20			6	ZQCCV	10	Potassic altered portion, pervasive, protolith overprinted.	108499	0.002	0.019
430.20	432.30			16	ZQCCV	10	Local increases in zeolite veining.	108500	0.004	0.006
432.30	434.20			1	ZQCCV	10		108501	0.001	-2
434.20	436.20			14	ZQCCV	20	Plagioclase, kfsp, qtz phenocrysts in fine grained qtz, plagioclase, qtz, amphibole/pyroxene matrix. Protolith overprinted by alteration locally. Zeolite/qtz veining-randomly oriented.	108502	0.006	0.031
436.20	438.20			2	ZQCCV	20		108503	0.006	0.217
438.20	440.20			22	ZQCCV	20	Local broken zones.	108504	0.001	0.006
440.20	442.20			47	ZQCCV	20		108505	0.001	-2
442.20	444.20			21	ZQCCV	20	Dark green mafic portions-protolith not visible.	108506	0.014	0.181
444.20	446.20			48	ZQCCV	7	Chloritic portion associated with approx 5cm gypsum + minor zeolite vein. Decreased veining.	108507	0.001	-2
446.20	448.20			30	ZQCCV	10		108508	-2	-2
448.20	450.19			30	ZQCCV	10	Gypsum/chl veining approx 90 degrees to core axis, associated with zeolite/qtz veining.	108510	0.002	-2
450.19	452.20			14	ZQCCV	10		108511	-2	-2
452.20	454.20			34	ZQCCV	10	Minor py stringers surrounded by potassic staining.	108512	0.006	0.008
454.20	456.20			2	ZQCCV	10	Vuggy dissolution structures in qtz/zeolite veining. Local potassic alteration.	108513	0.004	0.009
456.20	457.81			24	ZQCCV	10	Potassic altered portions-locally pervasive. Local broken zones. Minor py dissm veining.	108514	0.004	0.023

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-21**

Northing:	16156.5	Total Depth:	620.85m
Easting:	10069.7	Azimuth:	0°
Elevation:	1678.0	Dip:	-90°

Geologist: E. Ramsay
Logged Date: 7/26/2002

Survey Depth	Azimuth	Dip	Comments:
621 m	274 °	-86 °	

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-21**

From (m)	To (m)	Rock Type	Comments
0	18.29	CASING	Casing - No recovery.
18.29	36.56	SYENITE	Post-mineral syenite porphyry dyke, reddish-orange grey, fairly homogeneous throughout interval, showing 1% coarse-grained phenocrysts of biotite (3-10mm), 64% medium grained phenocrysts of feldspar (1-3mm) showing varying degrees of hematite staining, in an aphanitic felsic matrix. Rock shows strong fracturation with 0-3% zeolite +/- calcite filling. Biotites are fresh to very weakly chloritized. Numerous zeolite-filled fractures also show slickensides suggesting some degree of movement. Rock is locally clay altered in broken zones (fault gouge?). Samples taken block to block in broken core.
36.56	38	BLADED FELDSPAR PORPHYRY TUFF	Fault zone - Fragments of bladed feldspar porphyry, chloritized tuffaceous-looking rock and qtz vein cemented by pebbly fault gouge.
38	146.9	BLADED FELDSPAR PORPHYRY	
146.9	150.95	PORPHYRY	mafic porphyry dyke, showing up to 55% euhedral to subhedral augite phenocrysts (2-7mm), now partly chloritized in a dark greenish gray fine-grained phaneritic matrix of chlorite and feldspar. Upper contact broken, no measurable orientation. Lower contact at 45 degrees to core axis near 149.90m.
150.95	171.4	BLADED FELDSPAR PORPHYRY	Bladed feldspar porphyry.
171.4	172.02	BASALT	
172.02	174.68	BLADED FELDSPAR PORPHYRY	
174.68	183.35	POST-MINERAL DYKE DIABASE	Mafic porphyry dyke, similar to 146.90-150.95m but with slightly smaller augite phenocrysts (1-5mm). 0.5 % disseminated.
183.35	186.4	BLADED FELDSPAR PORPHYRY	Bladed feldspar porphyry.

Hole Number:

KN-02-21

From (m)	To (m)	Rock Type	Comments
186.4	187.3	POST-MINERAL DYKE DIABASE	Mafic porphyry dyke, similar to 146.90-150.95m.
187.3	188.45	BLADED FELDSPAR PORPHYRY	Contact with previous unit at 45 degrees to core axis.
188.45	190.73	GABBRO	Fine-grained phaneritic mafic dyke, greenish black with irregular contacts at roughly 45 degrees to core axis.
190.73	197.3	BASALT FLOW	Augite-phyric basalt flow, showing 10-20% medium-grained, euhedral to subhedral augite phenocrysts in a greenish grey (chloritized) matrix.
197.3	199.55	GABBRO	Lower contact sharp, irregular and at low angle to core axis.
199.55	203	BASALT FLOW	Broken core between 199.55-199.80m.
203	205	POST-MINERAL DYKE DIABASE	Augite porphyry dyke with 50% euhedral to subhedral augite phenocrysts.
205	240.56	BASALT FLOW	Augite-phyric basalt. Feldspar phenos show greenish sericite alteration described in top of hole, in BFP.
240.56	242.5	QUARTZ MONZONITE	Qtz-monzonite porphyry dyke with contacts at 60 degrees to core axis.
242.5	582.94	BASALT FLOW	Amygdular porphyritic basalt, greenish grey to locally orange grey propylitically altered with local sericite overprint. Amygdules comprised of qtz +/-pyrite +/-zeolite, locally very dense but irregularly distributed (0-40%) phenocrysts are scarce, with up to 3% euhedral to subhedral feldspar and up to 5% chloritized augite. Traces of molybdenite in a vuggy calcite vein near 242.07, and in a qtz vein near 243.75m.
582.94	583.96	DIABASE	Upper contact at 10 degrees to core axis, lower contact at 45 degrees to core axis. Black, fine grained mafic dyke (diabase).
583.96	600.08	BASALT FLOW	
600.08	602.55	DIABASE	Upper contact at 35 degrees to core axis. Lower contact at 45 degrees to core axis. Black, fine grained mafic dyke (diabase).
602.55	620.88	BASALT FLOW	Vuggy qtz and calcite vein at lower angle to core axis.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-21

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
0	18.29	CASING								
	0.00	18.29				Casing - No recovery.	21	-2	-2	
18.29	36.56	SYENITE								
	18.29	19.81		1	24	Post-mineral syenite porphyry dyke, reddish-orange grey, fairly homogeneous throughout interval, showing 1% coarse-grained phenocrysts of biotite (3-10mm), 64% medium grained phenocrysts of feldspar (1-3mm) showing varying degrees of hematite staining, in an aphanitic felsic matrix. Rock shows strong fracturation with 0-3% zeolite +/- calcite filling. Biotites are fresh to very weakly chloritized. Numerous zeolite-filled fractures also show slickensides suggesting some degree of movement. Rock is locally clay altered in broken zones (fault gouge?). Samples taken block to block in broken core.	109172	0.003	-2	
	19.81	21.95		1	23		109173	0.002	-2	
	21.95	24.00	Medium-fine-grained orange grey porphyritic	1	25		109174	0.002	-2	
	24.00	26.00		1	22		109175	0.003	-2	
	26.00	28.00		1	26		109177	0.003	-2	
	28.00	30.00		1	16		109178	0.002	-2	
	30.00	32.00		1	25		109179	0.001	-2	
	32.00	34.00		1	28		109180	0.002	-2	
	34.00	36.00		1	24		109181	0.002	-2	
	36.00	36.56		1	18		109182	0.002	-2	
36.56	38	BLADED FELDSPAR PORPHYRY TUFF								
	36.56	38.00	Coarse-fine-grained green-grey brecciated chloritic clay	5.0	2	FLT 60 60	Fault zone - Fragments of bladed feldspar porphyry, chloritized tuffaceous-looking rock and qtz vein cemented by pebbly fault gouge.	109183	0.208	0.407
38	146.9	BLADED FELDSPAR PORPHYRY								

Hole Number: KN-02-21

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
38.00	40.00	Coarse-fine-grained green-grey brecciated chloritic clay	3.0	0	FLT 50 60		109184	0.13	0.27
40.00	40.65		2.0	0	FLT 40 50		109185	0.125	0.292
40.65	42.00	Fine-coarse grained green-grey porphyritic chloritic sericitic	1.0	0		Bladed feldspar porphyry, showing 40% very coarse (up to 2cm) feldspar laths (now pseudomorphs of sericite) in black aphanitic matrix (chlorite?). Zeolite and calcite veins are conspicuously absent from the interval while qtz-py veins are common. Traces of cpy are noted locally. Silicified near fault.	109186	0.128	0.317
42.00	44.00		1.5	0	FLT 30 5	Fault with gouge at 30 degrees to core axis near 42.50m. 3% qtz and py veins at various orientations.	109187	0.09	0.208
44.00	46.00		2.0	0	QVN 3	3% qtz and py veins.	109188	0.128	0.29
46.00	48.00		2.0	0		Local silicification of wall rock around veins.	109189	0.149	0.301
48.00	50.00		2.0	0.1	0		109190	0.116	0.229
50.00	52.00		1.5	0			109191	0.079	0.222
52.00	54.00	Fine-coarse grained green-grey brecciated chloritic sericitic	2.0	0		Fault with gouge near 52.43m fault breccia between 53.15-53.85m.	109192	0.13	0.304
54.00	56.00	Fine-coarse grained green-grey porphyritic chloritic sericitic	2.0	0		Criss-crossing pyrite veinlets with bleached selvages.	109193	0.119	0.25
56.00	58.00		1.5	0.1	0	2% qtz and py veins.	109194	0.107	0.227
58.00	60.00		1.0	0.1	0		109195	0.131	0.258
60.00	61.32		1.0	0.1	0		109196	0.142	0.313
61.32	63.30		1.5	0		Fault with gouge showing fragment orientation at 45 degrees to core axis.	109197	0.118	0.24
63.30	65.00		3.0	0		10% qtz and py veins.	109198	0.136	0.296
65.00	66.14		2.0	4		Reduced from HQ to NQ core at 66.14m.	109199	0.145	0.323
66.14	67.47		1.0	0		Core loss due to mismatch.	109200	0.274	0.63
67.47	69.00		1.0	0.1	0 FLT 45 7	Sharp discrete fault with gouge at 45 degrees to core axis near 68.70m.	109201	0.148	0.312
69.00	71.00		1.0	0	FLT 45 10	Two zones of fault breccia with gouge near 69.20 and 70.70m.	109203	0.077	0.185
71.00	73.00		1.0	4	FLT 30 5	Fault with gouge at 30 degrees to core axis near 71.15m.	109204	0.086	0.187
73.00	75.00		0.5	0			109205	0.098	0.236
75.00	77.00		1.0	0		Common fractures with minor gouge.	109206	0.096	0.227

Hole Number: KN-02-21

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
77.00	79.00	Fine-coarse grained green-grey porphyritic chloritic sericitic	1.0	0.1		9	Same as above.	109207	0.133	0.265
79.00	81.00		1.0	0.1		0		109208	0.197	0.329
81.00	83.00		0.5			0	Gouge filled fractures between 81.00-81.40m.	109209	0.156	0.299
83.00	85.00		1.0		0 QVN	10	Weak local silicification around qtz and py veins/veinlets.	109210	0.122	0.246
85.00	85.70		5.0		0 PVN	5		109211	0.167	0.329
85.70	87.80		3.0		0 FLT	80	Broken core with gouge probably a fault but orientation unknown.	109212	0.128	0.258
87.80	89.80		2.0			1		109213	0.136	0.254
89.80	90.53		1.0			1 17		109214	0.179	0.372
90.53	93.40	Fine-coarse grained orange grey porphyritic chloritic sericitic	1.0			1 20	Zeolite and calcite veinlets reappear (0-3%) from this point downward.	109215	0.199	0.395
93.40	95.00		0.1			2 107		109216	0.192	0.346
95.00	97.00		0.1			2 14		109217	0.143	0.287
97.00	99.00		1.0		2 PVN	30 1	Massive pyrite vein at 30 degrees to core axis near 99.20m.	109218	0.233	0.462
99.00	101.00		0.1			0		109219	0.178	0.327
101.00	103.00		1.0			5		109220	0.166	0.291
103.00	105.00		0.5		3 FLT	45 2	Minor fault with gouge at 45 degrees to core axis near 104.90m.	109221	0.165	0.317
105.00	107.00		0.5			1		109222	0.148	0.299
107.00	109.00		0.5			1		109223	0.156	0.305
109.00	111.00		1.0			4		109224	0.241	0.504
111.00	113.00		1.0			2		109225	0.165	0.298
113.00	115.00		0.5			26		109226	0.112	0.184
115.00	117.00		1.0			28	Silicified zone between 115.30-116.30m	109227	0.171	0.298
117.00	119.00		1.0			5		109229	0.179	0.359
119.00	121.00		2.0		2 PVN	5 2		109230	0.245	0.421
121.00	123.00		0.1		0	12		109231	0.125	0.236
123.00	125.00		0.1	0.1	2	73		109232	0.109	0.209
125.00	127.00		1.0		1	47		109233	0.138	0.243

Hole Number: KN-02-21

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
127.00	129.00	Fine-coarse grained orange grey porphyritic chloritic sericitic	2.0		5		109234	0.154	0.297
129.00	131.00		0.5		5		109235	0.153	0.315
131.00	133.00		0.5	0	0		109236	0.127	0.253
133.00	135.00		2.0	0.1	0	0	109237	0.157	0.342
135.00	137.00		1.0		0		109238	0.129	0.256
137.00	139.00		1.0	1	27		109239	0.103	0.236
139.00	141.00		1.0	1	36		109240	0.124	0.283
141.00	143.00		2.0		0	ZVN 10 2 Vuggy, bright orange zeolite and minor calcite vein at 10 degrees to core axis.	109241	0.175	0.361
143.00	145.00	Fine-coarse grained brown grey porphyritic chloritic sericitic	1.0		10		109242	0.156	0.306
145.00	146.90		0.5		12		109243	0.135	0.365
146.9	150.95	POST-MINERAL DYKE DIABASE							
146.90	149.00	Fine-coarse grained green-grey porphyritic chloritic	1.0		6	mafic porphyry dyke, showing up to 55% euhedral to subhedral augite phenocrysts (2-7mm), now partly chloritized in a dark greenish gray fine-grained phaneritic matrix of chlorite and feldspar. Upper contact broken, no measurable orientation. Lower contact at 45 degrees to core axis near 149.90m.	109244	0.142	0.24
149.00	150.95		1.0		21	CTC 45 Minor fault with gouge at 35 degrees to core axis near 149.90m.	109245	0.085	0.087
150.95	171.4	BLADED FELDSPAR PORPHYRY							
150.95	153.00	Fine-coarse grained orange brown porphyritic chloritic sericitic	3.0	1	2	Bladed feldspar porphyry.	109246	0.115	0.186
153.00	155.00		0.5	1	1		109247	0.106	0.193
155.00	157.00	Fine-coarse grained orange grey porphyritic chloritic sericitic	1.0	1	27		109248	0.188	0.28
157.00	159.00		2.0	0.1	1	34 PVN 10 2 Py and mt veinlets at low angle to core axis.	109249	0.155	0.275
159.00	161.00		0.5	1	39		109250	0.138	0.27
161.00	163.00	Fine-coarse grained orange brown porphyritic chloritic sericitic	0.5	1	77		109251	0.129	0.273
163.00	165.00		1.0	0.1	1	21	109252	0.141	0.269
165.00	167.00		0.5	0.1	1	54	109253	0.138	0.283

Hole Number: KN-02-21

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
167.00	169.00	Fine-coarse grained orange brown porphyritic propylitic	1.0	0	11		109255	0.156	0.324
169.00	170.80		0.5	1			109256	0.185	0.365
170.80	171.40		0.5	3			109257	0.335	0.776
171.4	172.02	BASALT							
171.40	172.02	Fine-grained light grey massive propylitic	1.0	0.1	0	0	109258	0.217	0.616
172.02	174.68	BLADED FELDSPAR PORPHYRY							
172.02	174.00	Fine-coarse grained orange grey porphyritic propylitic	0.1		18		109259	0.205	0.472
174.00	174.68		0.1	3			109260	0.228	0.477
174.68	183.35	POST-MINERAL DYKE DIABASE							
174.68	176.00	Fine-medium-grained green-grey porphyritic propylitic	1.0		16		109261	0.201	0.559
176.00	178.00		0.5	12			109262	0.122	0.144
178.00	180.00		0.5	13			109263	0.089	0.102
180.00	182.00		0.5	6			109264	0.098	0.118
182.00	183.35		0.5	1			109265	0.222	0.359
183.35	186.4	BLADED FELDSPAR PORPHYRY							
183.35	185.00	Fine-coarse grained orange grey porphyritic propylitic	0.1	0.5	1		109266	0.251	0.445
185.00	186.40		0.1		2 FLT	45 20	109267	0.301	0.5
186.4	187.3	POST-MINERAL DYKE DIABASE							
186.40	187.30	Fine-medium-grained green-grey porphyritic propylitic	5.0	0.5	1	5 PVN	109268	0.306	0.19
187.3	188.45	BLADED FELDSPAR PORPHYRY							
187.30	188.45	Fine-coarse grained orange grey porphyritic propylitic	1.0		1 CTC	45	109269	0.122	0.211
188.45	190.73	GABBRO							
188.45	190.73	Fine-grained black massive propylitic			6 CTC	45	109270	0.016	0.013

Hole Number: KN-02-21

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
190.73	197.3	BASALT FLOW							
190.73	192.00	Fine-medium-grained green-grey porphyritic propylitic	0.5	17		Augite-phyric basalt flow, showing 10-20% medium-grained, euhedral to subhedral augite phenocrysts in a greenish grey (chloritized) matrix.	109271	0.2	0.316
192.00	194.00		0.5	5			109272	0.11	0.134
194.00	196.03		0.1	6			109273	0.095	0.053
196.03	197.30		0.1	10		Broken core with gouge, probable fault, contact with next unit obscured.	109274	0.075	0.042
197.3	199.55	GABBRO							
197.30	199.55	Fine-grained black massive propylitic		10	CTC 5	Lower contact sharp, irregular and at low angle to core axis.	109275	0.01	0.012
199.55	203	BASALT FLOW							
199.55	201.00	Fine-medium-grained green-grey porphyritic propylitic	0.1	5		Broken core between 199.55-199.80m.	109276	0.084	0.072
201.00	203.00		0.1	5			109277	0.076	0.143
203	205	POST-MINERAL DYKE DIABASE							
203.00	205.00	Fine-medium-grained green-grey massive propylitic	1.0	10		Augite porphyry dyke with 50% euhedral to subhedral augite phenocrysts.	109278	0.095	0.092
205	240.56	BASALT FLOW							
205.00	207.00	Fine-medium-grained green-grey porphyritic propylitic sericitic	0.5	0		Augite-phyric basalt. Feldspar phenos show greenish sericite alteration described in top of hole, in BFP.	109279	0.105	0.175
207.00	209.00		1.0	5		Feldspar-phyric basalt showing 1-10% euhedral to subhedral sericitized feldspar phenocrysts.	109281	0.186	0.319
209.00	211.00		1.0	0.1	15		109282	0.244	0.458
211.00	213.00		1.0	7			109283	0.142	0.168
213.00	215.00		1.0	1	17		109284	0.212	0.336
215.00	217.00		1.0	1	13		109285	0.205	0.372
217.00	219.00		2.0	0.1	1	14	109286	0.253	0.217
219.00	221.00	Fine-medium-grained green-grey amygdular propylitic sericitic	1.0	1			109287	0.17	0.269
221.00	223.00		1.0	1			109288	0.253	0.364

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
223.00	225.00	Fine-medium-grained green-grey porphyritic propylitic sericitic	0.5	0	6 FLT 45 10	Minor fault zone with gouge between 224.60-224.80m. 3% qtz and py +/-mt veins.	109289	0.355	0.739
225.00	227.00		0.5		4		109290	0.204	0.266
227.00	229.00		1.0		5 QVN 50 4	Vuggy dissolution cavities near 227.20m. Qtz and py +/-mt veins.	109291	0.289	0.419
229.00	231.00	Fine-medium-grained green-grey amygdular propylitic sericitic	0.5	0.1	0 4 QVN 45 10	Qtz and py +/-cpy veins.	109292	0.277	0.419
231.00	233.00	Fine-medium-grained green-grey porphyritic propylitic sericitic	0.5	1	7 QVN 45 10	Vuggy dissolution cavities near 232.00m. Qtz and py and minor mt veins.	109293	0.242	0.533
233.00	235.00		0.1		1 6		109294	0.205	0.511
235.00	237.00		1.0		1 44		109295	0.286	0.477
237.00	239.00		0.5		0 17		109296	0.208	0.3
239.00	240.56	Fine-medium-grained green-grey amygdular propylitic sericitic	0.5		6		109297	0.197	0.219
240.56	242.5	QUARTZ MONZONITE							
240.56	242.50	Medium-fine-grained orange grey porphyritic propylitic sericitic	0.1	0.1	0 CTC 60	Qtz-monzonite porphyry dyke with contacts at 60 degrees to core axis.	109298	0.207	0.35
242.5	582.94	BASALT FLOW							
242.50	244.00	Fine-medium-grained green-grey porphyritic propylitic sericitic	0.5	0	10	Amygdular porphyritic basalt, greenish grey to locally orange grey propylitically altered with local sericite overprint. Amygdules comprised of qtz +/-pyrite +/-zeolite, locally very dense but irregularly distributed (0-40%) phenocrysts are scarce, with up to 3% euhedral to subhedral feldspar and up to 5% chloritized augite. Traces of molybdenite in a vuggy calcite vein near 242.07, and in a qtz vein near 243.75m.	109299	0.278	0.415
244.00	246.00		1.0		22 SHR 10 1	Vuggy dissolution cavities throughout.	109300	0.285	0.35
246.00	248.00	Fine-medium-grained green-grey amygdular propylitic sericitic	1.0		15		109301	0.245	0.355
248.00	250.00		0.5	0	9		109302	0.18	0.213
250.00	252.00			0.1	1 24		109303	0.103	0.142
252.00	254.00		0.5		1 10		109304	0.208	0.425
254.00	256.00		0.5		1 6		109305	0.105	0.061
256.00	258.00		0.5		1 12		109307	0.106	0.076

Hole Number: KN-02-21

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
258.00	260.00	Fine-medium-grained green-grey amygdular propylitic sericitic	0.5	30			109308	0.206	0.289
260.00	262.00		1.0	26		Weak diffuse biotite alteration, first limited to fracture selvages, but becoming more abundant down hole.	109309	0.144	0.099
262.00	264.00		1.0	17			109310	0.306	0.401
264.00	266.00		5.0	0.1	15 PVN	5 5	109311	0.174	0.077
266.00	268.00		2.0	0	1		109312	0.139	0.099
268.00	270.00		0.5	21			109313	0.158	0.295
270.00	272.00		0.5	0	16		109314	0.229	0.278
272.00	274.00		0.1	1	22		109315	0.226	0.285
274.00	276.00		1.0	25			109316	0.271	0.414
276.00	278.00		1.0	1			109317	0.121	0.138
278.00	278.75		0.5	22			109318	0.409	0.571
278.75	280.80		2.0	0.1	15		109319	0.2	0.275
280.80	282.00		0.5	5			109320	0.123	0.073
282.00	284.00		0.5	2	FLT	45 10 Fault breccia with gouge between 282.97-283.17m	109321	0.255	0.414
284.00	286.00		1.0	6			109322	0.312	0.454
286.00	288.00		1.0	10			109323	0.182	0.289
288.00	290.00		1.0	24		Minor k-spar alteration.	109324	0.215	0.34
290.00	292.00		1.0	19			109325	0.277	0.348
292.00	294.00		1.0	1.0	7 PVN	90 2 Py and cpy and qtz and zeolite vein, irregular but at a sharp angle to core axis.	109326	1.105	1.1
294.00	296.00		0.5	0.1	16 FLT	45 2 Minor fault at 45 degrees to core axis near 295.70m. Minor k-spar alteration.	109327	0.248	0.231
296.00	298.00		3.0	14		Minor pink k-spar alteration.	109328	0.181	0.213
298.00	300.00		0.5	20			109329	0.142	0.2
300.00	302.00		1.0	0.1	7		109330	0.262	0.429
302.00	304.00	Fine-grained orange grey amygdular sericitic	0.1	1	11	Colour change to orange grey.	109331	0.394	0.556
304.00	306.00	Fine-grained orange grey amygdular sericitic biotite	0.5	0.1	5		109333	0.136	0.154
306.00	308.00		1.0	13		Weak diffuse biotite alteration.	109334	0.186	0.209

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
308.00	310.00	Fine-grained orange grey amygdular sericitic biotite	0.5	13			109335	0.295	0.483
310.00	312.00		0.5	19			109336	0.231	0.34
312.00	314.00		1.0	0 11			109337	0.204	0.367
314.00	316.00		1.0	10			109338	0.178	0.172
316.00	318.00		0.5	12 FLT	45 1	Minor fault near 317.50 at 45 degrees to core axis.	109339	0.213	0.335
318.00	320.00	Fine-grained orange grey amygdular sericitic	3.0	1 11			109340	0.178	0.114
320.00	322.00		1.0	0 26			109341	0.341	0.543
322.00	324.00	Fine-medium-grained green-grey amygdular sericitic chloritic	0.5	1 7			109342	0.165	0.323
324.00	326.00	Fine-medium-grained green-grey amygdular chloritic	0.5	1 38			109343	0.21	0.354
326.00	326.45		1.0	1 2			109344	0.173	0.241
326.45	327.72	Fine-medium-grained orange grey amygdular sericitic silicic	0.5	0 4			109345	0.27	0.405
327.72	329.00	Fine-medium-grained green-grey amygdular chloritic	0.5	12			109346	0.176	0.255
329.00	331.00		0.5 0.1	10		Traces of molybdenite in qtz and k-spar veinlets.	109347	0.265	0.381
331.00	333.00		0.1	6			109348	0.253	0.341
333.00	335.00		0.5	12			109349	0.153	0.156
335.00	337.00	Fine-medium-grained orange grey amygdular sericitic	1.0	5		Drusy pink zeolite veins at varying orientations.	109350	0.159	0.12
337.00	339.00	Fine-medium-grained green-grey amygdular	0.5	12			109351	0.124	0.066
339.00	341.00		0.5 0.1	13 FLT	45 4	Minor fault with gouge near 339.90m.	109352	0.133	0.173
341.00	343.00		0.1	9			109353	0.127	0.174
343.00	345.00		0.1 0.1	1 31			109354	0.211	0.388
345.00	347.00		0.5	0 12			109355	0.143	0.155
347.00	349.00		0.5	4			109356	0.145	0.104
349.00	351.00	Fine-medium-grained orange grey porphyritic chloritic sericitic	1.0	0 5 PVN	40 1	Py and mt vein at 40 degrees to core axis near 349.30m.	109357	0.139	0.096
351.00	353.00	Fine-medium-grained green-grey porphyritic chloritic sericitic	1.0	1 4		Gouge filled fractures.	109359	0.303	0.366

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
353.00	355.00	Fine-medium-grained green-grey porphyritic chloritic	1.0	0	4 QVN 50 6		109360	0.417	0.445
355.00	357.00		0.5	0.1	0 1 FLT 10 5	Minor fault with gouge near 355.80m at 10 degrees to core axis.	109361	0.248	0.263
357.00	359.00		2.0	0.1	0 0 CVN 90 3	Calcite vein at sharp angle to core axis. Qtz and minor pyrite vein at 70 degrees to core axis near 358.75m.	109362	0.242	0.32
359.00	361.00		0.5		7		109363	0.172	0.124
361.00	363.00		0.1	0	0 CVN 45 1	Coarse grained calcite vein at 45 degrees to core axis near 362.80m.	109364	0.189	0.181
363.00	365.00		0.5	0.1	0 2		109365	0.333	0.376
365.00	367.00		0.5	0	4		109366	0.36	0.385
367.00	369.00		0.5		1		109367	0.121	0.072
369.00	371.00		1.0		1 CVN 10 3	Vuggy carbonate vein at low angle to core axis near 370.70m.	109368	0.177	0.144
371.00	373.00		1.0		4		109369	0.133	0.167
373.00	375.00		1.0		7 CVN 45 3	Vuggy carbonate and zeolite vein at 45 degrees to core axis near 374.40m.	109370	0.13	0.171
375.00	377.00		1.0		4		109371	0.197	0.262
377.00	379.00	Fine-medium-grained orange grey porphyritic chloritic sericitic	2.0		25		109372	0.283	0.341
379.00	381.00	Fine-medium-grained green-grey porphyritic chloritic	3.0	0.1	7 PVN 5 5	Py and cpy and anh vein running at low angle to core axis.	109373	0.324	0.276
381.00	383.00		0.5	0	6 QVN 40 3	Qtz and mt vein at 40 degrees to core axis.	109374	0.173	0.073
383.00	385.00	Fine-medium-grained orange grey porphyritic chloritic sericitic	0.5	0	9 QVN 45 3	Qtz and zeolite vein at 45 degrees to core axis.	109375	0.242	0.325
385.00	387.00		1.0	0	2		109376	0.283	0.166
387.00	389.00	Fine-medium-grained green-grey porphyritic chloritic	2.0	0	7		109377	0.398	0.6
389.00	390.20		1.0	0	11		109378	0.122	0.082
390.20	390.60	Fine-grained green-grey massive chloritic silicic	1.0		13	Strong silicification destroying porphyritic texture.	109379	0.116	0.071
390.60	392.00	Fine-medium-grained green-grey flow brecciated chloritic	1.0		6	Flow breccia.	109380	0.13	0.1
392.00	393.60		2.0		12		109381	0.091	0.066

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
393.60	395.65	Fine-medium-grained green-grey massive chloritic silicic	1.0	0.1	4	Weak silicification, texture preserved.	109382	0.114	0.079	
395.65	397.42	Fine-medium-grained green-grey porphyritic chloritic	2.0		7		109384	0.199	0.114	
397.42	399.00	Fine-medium-grained green-grey amygdular chloritic silicic	1.0		10		109385	0.182	0.158	
399.00	401.00		1.0	0.1	4		109386	0.234	0.108	
401.00	403.00	Fine-medium-grained green-grey amygdular chloritic	2.0		2		109387	0.23	0.199	
403.00	405.00	Fine-medium-grained green-grey amygdular chloritic silicic	2.0		5	Weak green to brown selvages along sulphide and qtz veinlets/fractures.	109388	0.154	0.045	
405.00	407.00	Fine-medium-grained green-grey amygdular chloritic	1.0		4 QVN	60 3	Traces of molybdenite in qtz vein, vuggy dissolution cavities below qtz-vein, over 10cm.	109389	0.185	0.157
407.00	409.00		1.0		8 QVN	45 2		109390	0.175	0.163
409.00	411.00		1.0		4 QVN	45 2		109391	0.244	0.331
411.00	413.00		0.5	0.1	12		109392	0.186	0.191	
413.00	415.00		0.5		4		109393	0.138	0.118	
415.00	417.00		3.0	0.5	5 PVN	30 2	Py and cpy and qtz vein at 30 degrees to core axis.	109394	0.349	0.392
417.00	419.00		0.1		5 QVN	55 3	Qtz and minor py vein at 55 degrees to core axis.	109395	0.156	0.141
419.00	421.00		0.5	0.1	5		109396	0.241	0.257	
421.00	423.00		1.0		10		109397	0.169	0.119	
423.00	425.00		0.5		10		109398	0.198	0.209	
425.00	427.00		2.0		9		109399	0.149	0.142	
427.00	429.00		0.5		10		109400	0.174	0.13	
429.00	431.00	Fine-medium-grained green-grey amygdular chloritic sericitic	1.0		7 QVN	30 3	Qtz and py vein at 30 degrees to core axis.	109401	0.277	0.381
431.00	433.00		1.0		19		109402	0.093	0.041	
433.00	435.00		2.0	0.1	8		109403	0.215	0.171	
435.00	435.75		0.5		1 CVN	15	Coarse grained carb veining and strong zeo alteration.	109404	0.314	0.445
435.75	437.00		1.0		8		109405	0.294	0.407	
437.00	439.11		2.0	0.1	0		109406	0.188	0.142	
439.11	440.00		0.1		0 QVN	5 45	Irregular qtz vein at low angle to core axis.	109407	0.009	0.029

Hole Number: KN-02-21

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
440.00	441.65	Fine-medium-grained green-grey amygdular chloritic sericitic	0.5		0 QVN 5 50	Same vein as above. Minor fault with gouge at end of interval at 30 degrees to core axis.	109408	0.099	0.154
441.65	443.00	Fine-medium-grained green-grey amygdular chloritic	1.0		10		109410	0.126	0.101
443.00	445.00	Fine-medium-grained green-grey amygdular chloritic sericitic	0.5		14		109411	0.131	0.088
445.00	447.00	Fine-medium-grained green-grey amygdular chloritic	0.5	0.1	11		109412	0.262	0.199
447.00	449.00		0.5	0.1	22 CVN 60 2	Drusy carbonate veins at 60 degrees to core axis. Drusy qtz and py and cpy vein at 45 degrees to core axis.	109413	0.381	0.289
449.00	451.00		0.5		48		109414	0.17	0.056
451.00	453.00		0.5	0.1	1 21		109415	0.2	0.172
453.00	455.00		0.1		11		109416	0.209	0.184
455.00	457.00		1.0	0.1	17		109417	0.188	0.094
457.00	459.00		0.5	0.1	15		109418	0.264	0.931
459.00	461.00		1.0	0.5	17 PVN 60 1	Py and cpy and qtz vein at 60 degrees to core axis.	109419	0.168	0.081
461.00	463.00		0.5		0 10		109420	0.115	0.036
463.00	465.00		0.5	0.1	2 28		109421	0.168	0.187
465.00	467.00		1.0	0.1	1 11 PVN 15 3	Py and cpy and anh vein at low angle to core axis.	109422	0.173	0.141
467.00	469.00		0.5		9		109423	0.179	0.086
469.00	471.00		0.5		39		109424	0.159	0.114
471.00	473.00		0.5		1 32		109425	0.125	0.103
473.00	475.00		0.1	0.1	1 10		109426	0.207	0.159
475.00	477.00	Fine-coarse grained green-grey porphyritic chloritic	1.0	0.1	15	Unit shows rare sub rounded to rounded fragments of basalt (90%) and more felsic porphyry (10%). Fragments are matrix-supported suggesting pebbles being picked up by the flowing lava as it traveled on the ground. Presence of augite crystals in matrix and absence of qtz eyes confirm this unit is still Takla basalt.	109427	0.253	0.181
477.00	479.00		2.0		20		109428	0.236	0.147
479.00	481.00		2.0		7		109429	0.187	0.105
481.00	483.00		1.5	0.1	19 FVN 50 1	Fluorite and cpy vein at 50 degrees to core axis. (violet).	109430	0.346	0.301
483.00	485.00		1.0	0.1	12		109431	0.172	0.077

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
485.00	487.00	Fine-coarse grained green-grey porphyritic chloritic	0.5 0.1	22	FVN	0 Fluorite veins glancing the core, leaving quarter sized lenses of violet fluorite on core.	109432	0.189	0.129
487.00	488.32		0.5		10		109433	0.183	0.133
488.32	489.66	Fine-coarse grained green-grey porphyritic k-felspar silicic	0.5		5		109434	0.133	0.095
489.66	491.00	Fine-coarse grained green-grey porphyritic chloritic	1.0		5		109436	0.158	0.152
491.00	493.00		1.0 0.1		7		109437	0.208	0.166
493.00	495.00		2.0		7		109438	0.249	0.128
495.00	497.00		0.5 0.1	0	12		109439	0.252	0.18
497.00	499.00		0.5	0	16		109440	0.215	0.141
499.00	501.00		0.5 0.1		16		109441	0.167	0.078
501.00	503.00		1.0	0	23		109442	0.201	0.188
503.00	505.00		1.0	0	22		109443	0.11	0.09
505.00	507.00	Fine-medium-grained green-grey amygdular chloritic	0.5 0.1		9	Fragments disappear downward from this point.	109444	0.151	0.153
507.00	509.00	Fine-medium-grained green-grey porphyritic chloritic	1.0		12		109445	0.235	0.179
509.00	511.00		1.0		9		109446	0.242	0.157
511.00	513.00		0.5		30		109447	0.175	0.075
513.00	515.00		0.5		18		109448	0.158	0.237
515.00	517.00		0.1	1	12		109449	0.282	0.492
517.00	519.00		0.5	1	32		109450	0.17	0.217
519.00	521.00		0.5		11		109451	0.229	0.246
521.00	523.00		1.0		54		109452	0.24	0.307
523.00	525.00		0.1	0	20		109453	0.146	0.064
525.00	527.00		0.1	0	17		109454	0.199	0.357
527.00	529.00		0.1	1	7		109455	0.154	0.237
529.00	531.00		1.0	1	35		109456	0.223	0.247
531.00	533.00		0.5 0.1	0	20		109457	0.23	0.294
533.00	535.00	Fine-medium-grained green-grey porphyritic chloritic silicic	0.1	1	24		109458	0.224	0.303

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
535.00	537.00	Fine-medium-grained green-grey porphyritic chloritic	0.5	0.1	0	41	109459	0.214	0.341	
537.00	539.00		0.5	1	37		109460	0.265	0.462	
539.00	541.00	Fine-medium-grained dark grey porphyritic chloritic silicic	1.0	1	25	Patchy local silicification very weak.	109462	0.236	0.169	
541.00	543.00		0.5	0	15	Local silicification/clay alteration near vuggy fractures.	109463	0.264	0.295	
543.00	545.00		0.5	0	35		109464	0.235	0.176	
545.00	547.00		1.0	0.1	1	21	109465	0.267	0.218	
547.00	549.00		1.0	1	15		109466	0.227	0.221	
549.00	551.00		0.5	1	21	SHR 35 4	109467	0.128	0.194	
551.00	553.00		0.5	0	14		109468	0.122	0.078	
553.00	555.00		0.5	1	16		109469	0.114	0.075	
555.00	557.00		0.5	1	9		109470	0.2	0.363	
557.00	559.00		1.0		27		109471	0.216	0.46	
559.00	561.00		0.5	1	56		109472	0.278	0.275	
561.00	563.00		0.1	0.1	1	18	109473	0.338	0.537	
563.00	565.00		0.1	1	18		109474	0.258	0.462	
565.00	567.00		0.1		23		109475	0.172	0.069	
567.00	569.00	Fine-medium-grained dark grey porphyritic silicic	0.5	1	44		109476	0.215	0.176	
569.00	571.00		0.1	1	33		109477	0.134	0.157	
571.00	573.00		0.5	1	53		109478	0.132	0.131	
573.00	575.00		1.0		5		109479	0.182	0.194	
575.00	577.00		0.5	0	15		109480	0.186	0.216	
577.00	579.00		0.5		4		109481	0.148	0.104	
579.00	581.00	Fine-medium-grained green-grey porphyritic chloritic	0.1		2	FLT 0 4	Fault with gouge at low angle to core axis glancing in and out of core.	109482	0.127	0.053
581.00	582.94		0.1		3		109483	0.109	0.104	
582.94	583.96	DIABASE								

Hole Number: KN-02-21

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
582.94	583.96	Fine-grained black massive silicic	3	44	CTC 45	Upper contact at 10 degrees to core axis, lower contact at 45 degrees to core axis. Black, fine grained mafic dyke (diabase).	109484	0.008	-2
583.96	600.08	BASALT FLOW							
583.96	586.00	Fine-medium-grained green-grey porphyritic silicic	0.5		2		109485	0.111	0.109
586.00	588.00		1.0	0	7		109486	0.17	0.138
588.00	590.00		1.0		7		109488	0.131	0.06
590.00	592.00		2.0		9		109489	0.24	0.213
592.00	594.00		0.5	0.5	0 12		109490	0.412	0.963
594.00	596.00		1.0	1	37		109491	0.174	0.099
596.00	598.00		0.5		25		109492	0.155	0.078
598.00	600.08		0.1	1	9		109493	0.125	0.096
600.08	602.55	DIABASE							
600.08	602.55	Fine-grained black massive	3	50	CTC 35	Upper contact at 35 degrees to core axis. Lower contact at 45 degrees to core axis. Black, fine grained mafic dyke (diabase).	109494	0.005	-2
602.55	620.88	BASALT FLOW							
602.55	604.00	Fine-medium-grained green-grey porphyritic silicic chloritic	1.0		5 QVN 15 3	Vuggy qtz and calcite vein at lower angle to core axis.	109495	0.113	0.119
604.00	606.00		0.1	0.1	1 15 QVN 15 3	Same as above.	109496	0.276	1.605
606.00	608.00		1.0	0.1	0 8		109497	0.219	0.72
608.00	610.00		2.0		4		109498	0.159	0.143
610.00	612.00		0.5		10		109499	0.139	0.105
612.00	614.00		1.0		22		109500	0.147	0.11
614.00	616.00		0.1	1	22		109501	0.153	0.448
616.00	618.00		1.0	1	26		109502	0.134	0.101
618.00	620.00		1.0	0.1	1 17		109503	0.155	0.146
620.00	620.88		0.5	1	23		109504	0.102	0.147
620.88		EOH							

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-22**

Northing: 15980 **Total Depth:** 721.43m
Easting: 10760 **Azimuth:** 360°
Elevation: 1738 **Dip:** -85°

Geologist: B. LaPeare

Logged Date: 7/27/2002

Survey Depth	Azimuth	Dip	Comments:
110 m	13 °	-85 °	Mechanical
201 m	12 °	-84 °	Mechanical
293 m	34 °	-84 °	Mechanical
384 m	356 °	-83 °	
475 m	24 °	-83 °	Mechanical
567 m	29 °	-84 °	Mechanical
658 m	4 °	-84 °	
750 m	12 °	-83 °	Mechanical

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-22**

From (m)	To (m)	Rock Type	Comments
0	3.66	CASING	
3.66	29.57	ANDESITE BLADED FELDSPAR PORPHYRY	30% as felted coarse altered plag blades within sericitic altered fine grained matrix. Oxidized fractures.
29.57	34.14	LOST CORE	
34.14	46	ANDESITE BLADED FELDSPAR PORPHYRY	
46	52	FAULT ZONE BLADED FELDSPAR PORPHYRY	Rubby. Ends in clay/gouge rich fault.
52	77.9	ANDESITE BLADED FELDSPAR PORPHYRY	Mottled texture from overprinting of silicification of fine grained chlorite matrix of BFP.
77.9	82.35	DIABASE	Locally well mineralized with py as diss and with local qtz veinlets.
82.35	112	ANDESITE BLADED FELDSPAR PORPHYRY	As upper porphyritic unit. One x-cutting qtz and py veinlet.
112	508.5	ANDESITE FLOW	Massive flow. Mm scale mafic crystals (Not BFP). Increase in py with veinlets and diss.
508.5	529.4	SYENITE	Syenite: locally orange from Fe staining(?). Chlorite altered mafics are med/coarse grained veinlets.
529.4	530.65	FELSPAR PORPHYRY	F.P. dark syenite siliceous matrix with 25% euhedral/subhedral white plus crystals at 4-2mm.
530.65	551	SYENITE	Syenite: As above syn weakly mixed/gradational with F.P. - pinkish stringers.
551	618.3	ANDESITE FLOW	Dark grey to pale green from patchy sericite alteration. One xenolith of syenite??? Possibly edge of dyke. Cpy with qtz. Local thin mag.

Hole Number:

KN-02-22

From (m)	To (m)	Rock Type	Comments
618.3	627.9	QUARTZ MONZONITE	Py weakly diss.
627.9	640.2	ANDESITE FLOW	Weakly magnetic at lower 20cm.
640.2	641.1	QUARTZ MONZONITE	Patchy minor cpy +/-py w/ qtz +/-Fe carb infill. Local Takla xenoliths.
641.1	642.35	ANDESITE FLOW	Random pinkish Fe carb. Hem on local fractures. Lower contact obscured by veining.
642.35	643.95	QUARTZ MONZONITE	One qtz veinlet with moly in selvage. Lower contact sharp at 55 degrees.
643.95	667.8	ANDESITE FLOW	30cm is fragmental due to mixing from quartz monzonite. Weak patch epidote with qtz. One mag veinlet.
667.8	670	QUARTZ MONZONITE	Weakly altered. Typical qtz monzonite.
670	696.55	ANDESITE FLOW	Typical fsh to weakly altered Takla.
696.55	698.95	QUARTZ MONZONITE	Highly random pink Fe carb locally w.d. and x-cuts qtz veinlets.
698.95	706.15	ANDESITE FLOW	Weakly/moderately magnetic through out.
706.15	709.2	QUARTZ MONZONITE	Iron stained throughout from Fe carb(?).
709.2	710.1	ANDESITE FLOW	Rare qtz stringer - Fe carb also as infill.
710.1	710.9	QUARTZ MONZONITE	
710.9	718.25	ANDESITE FLOW	Moderate mag throughout. Calcite veinlets with w.r. by patchy epidote alteration.
718.25	721.46	QUARTZ MONZONITE	Two small volcanic xenoliths.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-22

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	3.66	CASING							
0.00	3.66				0		22	-2	-2
3.66	29.57	ANDESITE BLADED FELDSPAR PORPHYRY							
3.66	6.00	Fine-coarse grained light grey porphyritic sericitic silicic	3.0	0	QVN	5 30% as felted coarse altered plag blades within sericitic altered fine grained matrix. Oxidized fractures.	103676	0.032	0.084
6.00	8.00		5.0	0	QAVN	5 Plag throughout unit to wither white clay or green/yellowish sericite.	103677	0.015	0.064
8.00	10.00		5.0	0	AQVN	5 10 Py is generally assoc with veinlets altered locally, well disseminated.	103678	0.023	0.12
10.00	12.00	Fine-coarse grained dun porphyritic sericitic silicic	7.0	0	QAVN	5 15 Medium grain, round, very soft grains. Locally occur within blades.	103679	0.027	0.096
12.00	14.00		3.0	0	QAVN	3 Local dun colour from sericite and biotite(??) alteration. Clay on fractures. Very weak silicification.	103680	0.019	0.06
14.00	16.00	Fine-coarse grained light grey porphyritic sericitic silicic	3.0	0	AQVN	3 Rubbly.	103681	0.017	0.05
16.00	18.00		5.0	0	AQVN	3 Blades somewhat ghosted. Py diss.	103682	0.005	0.035
18.00	20.00		5.0	0	QVN	3 Only minor coarse plag. Py diss and with local veinlets.	103683	0.01	0.048
20.00	22.00	Fine-coarse grained dun porphyritic sericitic silicic	5.0	0	QAVN	2 Locally developed silicification overprints coarse plag.	103684	0.019	0.063
22.00	24.00	Fine-coarse grained light grey porphyritic sericitic silicic	7.0	0	QAVN	35 10 Py w.d. with one qtz veinlet. Soft rounded mineral within blades locally w.d.	103685	0.03	0.095
24.00	26.00		3.0	0	QVN	3 Rubbly.	103686	0.014	0.069
26.00	28.00		3.0	0	QAVN	3	103687	0.01	0.042
28.00	29.57		3.0				103688	0.013	0.058
29.57	34.14	LOST CORE							
29.57	34.14				0		22.1	0	0
34.14	46	ANDESITE BLADED FELDSPAR PORPHYRY							
34.14	36.00	Fine-coarse grained light grey porphyritic sericitic silicic	3.0	0			103689	0.039	0.09

Hole Number: KN-02-22

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
36.00	38.00	Fine-coarse grained light grey porphyritic sericitic silicic	3.0	0			103690	0.071	0.134
38.00	40.00		5.0	0	5 3	Low angle calcite veinlet. Yellowish alteration?? Take petro at 43.0m.	103691	0.046	0.125
40.00	42.00		5.0	0	AVN 15 3	Blades ghosted.	103692	0.032	0.093
42.00	44.00		5.0	0		As above.	103693	0.018	0.072
44.00	46.00		3.0	0	FLT 45 3	Gouge (2cm) at 45 degrees to core axis.	103694	0.019	0.095
46	52	FAULT ZONE BLADED FELDSPAR PORPHYRY							
46.00	48.00	Fine-coarse grained light grey porphyritic sericitic silicic	3.0	0	FLT 45	Rubby. Ends in clay/gouge rich fault.	103695	0.047	0.125
48.00	50.00		5.0	0	FLT 60	Fault ends at 48.20m. Another fault at 49.70-49.80m.	103696	0.027	0.074
50.00	52.00		5.0	0	FLT 45	Fault at 50.60-50.80m.	103697	0.053	0.091
52	77.9	ANDESITE BLADED FELDSPAR PORPHYRY							
52.00	54.00	Fine-coarse grained light grey porphyritic sericitic silicic	7.0	1	QAVN 3	Mottled texture from overprinting of silicification of fine grained chlorite matrix of BFP.	103698	0.031	0.13
54.00	56.00		7.0	0.5	0 AQVN 3	Weak cpy with py assoc with qtz and anh, stronger blades show wk preferred orientation at 80 degrees to core axis locally.	103699	0.058	0.246
56.00	58.00		7.0	0	AVN 3	Silicification locally w.d. with wk patch, local possible k-spar.	103700	0.041	0.119
58.00	60.00		5.0	0	AQVN 2		103702	0.041	0.089
60.00	62.00		5.0	0	CCQVN 3		103703	0.059	0.14
62.00	64.00		10.0	0.1	0 QCV 35 5	Py locally developed with qtz +/-k-spar veinlet.	103704	0.035	0.126
64.00	66.00		15.0	0.1	0 QCV 15 10	As above but more abundant.	103705	0.039	0.195
66.00	68.00		10.0	0.1	0 QCV 10 10	As above.	103706	0.06	0.329
68.00	70.00		3.0	0	AVN 3	Bladed texture very well developed.	103707	0.036	0.1
70.00	72.00		3.0	0	AVN 2		103708	0.026	0.087
72.00	74.00		3.0	0			103709	0.017	0.07
74.00	76.00		3.0	1			103710	0.035	0.08
76.00	77.90		3.0	0			103711	0.021	0.068
77.9	82.35	DIABASE							

Hole Number: KN-02-22

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
77.90	78.45	Fine-grained dark green chloritic	5.0	0	QVN 3	Locally well mineralized with py as diss and with local qtz veinlets.	103712	0.031	0.09
78.45	80.80		7.0	1	QVN 5	As above. Weak hem staining on fractures.	103713	0.032	0.097
80.80	82.35		5.0	0	QVN 3	As above.	103714	0.029	0.207
82.35	112	ANDESITE BLADED FELDSPAR PORPHYRY							
82.35	84.00	Fine-coarse grained light grey porphyritic sericitic silicic	5.0	0	QVN 10 2	As upper porphyritic unit. One x-cutting qtz and py veinlet.	103715	0.02	0.099
84.00	86.00	Fine-coarse grained grey porphyritic sericitic silicic	5.0	0		Porphyritic texture almost completely overprinted by pervasive phyllic alteration.	103716	0.013	0.073
86.00	88.00		5.0	0		Unit may also be intercalated with previous andesite flows.	103717	0.024	0.063
88.00	90.00		5.0	0		Weak chl alteration but through out unit.	103718	0.027	0.051
90.00	92.00		5.0	0		Py diss through out most of unit.	103719	0.022	0.067
92.00	94.00		5.0	0	FLT 45	Weak local gouge/shear at bottom of interval. Local patchy py.	103720	0.041	0.142
94.00	96.00		5.0	0			103721	0.016	0.059
96.00	98.00		5.0	0			103722	0.032	0.064
98.00	100.00		5.0	0			103723	0.02	0.06
100.00	102.00		5.0	0	SZN 55	Folded py veinlet assoc with very weak shear - 10cm wide.	103724	0.035	0.11
102.00	104.00		7.0	0	QVN 5 3	Increase in py with local qtz veinlets.	103725	0.047	0.097
104.00	106.00		3.0	0	QVN 50 1	BFP texture. Locally well preserved. Decrease in py.	103726	0.06	0.076
106.00	108.00		3.0	0	QVN 15 2	As above.	103728	0.019	0.077
108.00	110.00		5.0	0	QVN 2	Represents gradational contact between upper BFP and lower TAKLA flow.	103729	0.02	0.062
110.00	112.00		10.0	0	QVN 5 3	As above but BFP very rare.	103730	0.023	0.077
112	508.5	ANDESITE FLOW							
112.00	114.00	Fine-medium coarse grained dark grey mottled sericitic silicic	7.0	0	QVN 5 3	Massive flow. Mm scale mafic crystals (Not BFP). Increase in py with veinlets and diss.	103731	0.008	0.044
114.00	116.00		7.0	0	FLT 75	Mottled texture from chl altered mafic fragments. Subrounded to subangular. Flow bx?	103732	0.005	0.049
116.00	118.00		7.0	0	QVN 5 2	Overall increase in py relative to upper BFP unit.	103733	0.012	0.062

Hole Number: KN-02-22

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
118.00	120.00	Fine-medium coarse grained dark grey mottled sericitic silicic	10.0	0		Mottled appearance may also be just remnant original andesite. Doubtful.	103734	0.024	0.074
120.00	122.00		10.0	0 QVN	5 3	Py diss and with veinlets.	103735	0.028	0.088
122.00	124.00	Fine-medium coarse grained grey mottled sericitic silicic	7.0	0 QVN	60 2	Mostly fine grained. Increase in silicification.	103736	0.032	0.068
124.00	126.00		10.0	0		As above. Increase in py.	103737	0.039	0.065
126.00	128.00		7.0	0		Coarse subrounded mafic fragments more prevalent.	103738	0.042	0.078
128.00	130.00		7.0	0 QVN	2	Fragments locally prevalent Py with qtz.	103739	0.03	0.069
130.00	132.00		7.0	0 QVN	2	As above.	103740	0.035	0.071
132.00	134.00		5.0	0 QVN	50 3		103741	0.031	0.065
134.00	136.00		5.0	0 QVN	2		103742	0.023	0.099
136.00	138.00		7.0	0 QVN	15 5	Frag locally angular.	103743	0.023	0.078
138.00	140.00		5.0	0		Py mostly as veinlets +/-qtz.	103744	0.025	0.058
140.00	142.00		5.0	0			103745	0.072	0.116
142.00	144.00		7.0	0 QVN	45 2		103746	0.032	0.07
144.00	146.00		7.0	0 QVN	40 3		103747	0.005	0.062
146.00	148.00		7.0	1 QVN	50 3		103748	0.009	0.04
148.00	150.00		10.0	1 QVN	45 2		103749	0.027	0.079
150.00	152.00		12.0	0 QVN	20 4		103750	0.027	0.119
152.00	154.00		10.0	0 QVN	45 5		103751	0.031	0.081
154.00	156.00		7.0	0 QVN	25 3	Py more diss than in veinlets.	103752	0.027	0.053
156.00	158.00		7.0	0 QVN	40 2		103754	0.028	0.051
158.00	160.00		7.0	0			103755	0.033	0.082
160.00	162.00		5.0	0 QCV	2	One minor calc veinlet.	103756	0.003	0.029
162.00	164.00		7.0	0 QVN	2	Py mostly as veinlets +/-qtz.	103757	0.009	0.031
164.00	166.00		7.0	0 QVN	30 2	As above but py also patchy.	103758	0.01	0.025
166.00	168.00	Fine-medium coarse grained green-grey mottled sericitic silicic	7.0	1 QVN	5 2	Slightly more silicified. Fragments are rare.	103759	0.038	0.044
168.00	170.00		7.0	0 QVN	3		103760	0.017	0.053
170.00	172.00		7.0	0 QVN	40 2		103761	0.062	0.072

Hole Number: KN-02-22

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
172.00	174.00	Fine-medium coarse grained green-grey mottled sericitic silicic	5.0		QVN 70 2	Fragments are mafic. Altered to chl. Same as through out unit.	103762	0.02	0.057
174.00	176.00		5.0				103763	0.027	0.038
176.00	178.00		5.0				103764	0.03	0.064
178.00	180.00		7.0			Increase in py locally as fine grained patches and thin veinlets.	103765	0.062	0.095
180.00	182.00		5.0			Locally rubbly. Clay on fractures.	103766	0.059	0.078
182.00	184.00		7.0		QVN 5 2		103767	0.06	0.084
184.00	186.00		5.0		QCV 30 3	One calcite veinlet. Calc very weak with qtz and py veinlets.	103768	0.057	0.11
186.00	188.00		5.0		QCV 40 3	Calcite weak with qtz and py veinlets.	103769	0.099	0.092
188.00	190.00		5.0		QVN 60 3	One qtz and py veinlet with minor qtz as infill. 5cm gouge at 45 degrees to core axis.	103770	0.059	0.064
190.00	192.00		5.0		FLT 50	Locally broken with weak chl gouge. Possible fuchsite with qtz infill.	103771	0.034	0.081
192.00	194.00		5.0		QVN 40 2	Minor gouge on joint plane parallel with low angle qtz veinlet.	103772	0.072	0.068
194.00	196.00		5.0		QVN 3		103773	0.049	0.056
196.00	198.00		5.0		QVN 3	Clay on local fractures.	103774	0.061	0.082
198.00	200.00		7.0		QCZCV 60 5	Weak zeo with qtz; vuggy 7cm qtz veinlet with py and weak calcite.	103775	0.066	0.691
200.00	202.00		7.0	0.5	QVN 10 7	Patch of cpy with py in low angle qtz veinlet.	103776	0.08	0.26
202.00	204.00		5.0		SZN 45	Weak shear over 30cm.	103777	0.046	0.066
204.00	206.00		5.0		QVN 2	Patchy py with silicification.	103778	0.056	0.068
206.00	208.00		5.0		QVN 55 2		103780	0.059	0.106
208.00	210.00		5.0	0.5	QVN 50 5	Minor cpy with patchy py.	103781	0.097	0.144
210.00	212.00		5.0		QVN 60 3		103782	0.073	0.07
212.00	214.00		5.0		QVN 3		103783	0.049	0.064
214.00	216.00		5.0		QVN 3		103784	0.038	0.123
216.00	218.00		7.0		QVN 50 5		103785	0.02	0.058
218.00	220.00		5.0		QVN 4		103786	0.048	0.075

Hole Number: KN-02-22

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
220.00	222.00	Fine-medium coarse grained green mottled sericitic	5.0		CCZQV 7	Presence of random zeo stringers. Sericite more greenish. Silicification absent.	103787	0.016	0.056
222.00	224.00	Fine-medium coarse grained light grey mottled sericitic silicic	5.0		QVN 5	Locally pale beige from fine grained albite(??).	103788	0.009	0.06
224.00	226.00	Fine-medium coarse grained dark grey mottled sericitic silicic	7.0		QVN 35 7	Py locally well developed with qtz.	103789	0.03	0.056
226.00	228.00		7.0		QVN 35 5	Back to mottled flow bx texture.	103790	0.047	0.083
228.00	230.00		7.0		QVN 5		103791	0.035	0.095
230.00	232.00		10.0	0.5	QCZCV 50 4	Cpy with py in qtz and zeo veinlet.	103792	0.08	0.098
232.00	234.00		7.0		QVN 40 2	Increase in silicification.	103793	0.024	0.104
234.00	236.00		10.0		QVN 7	7cm wide veinlet of py and qtz. Silicified w.r.	103794	0.043	0.115
236.00	238.00		5.0		QVN 50 7		103795	0.054	0.128
238.00	240.00		7.0		QCZCV 60 4	Weak zeo with qtz locally.	103796	0.168	0.195
240.00	242.00		10.0		QVN 7	Py mostly with veinlets.	103797	0.054	0.107
242.00	244.00		7.0		QCZGY 45 4	Minor gypsum or zeo with qtz.	103798	0.035	0.09
244.00	246.00		7.0		QCZCV 45 4	Local clay alteration as w.r. alteration of qtz and py.	103799	0.028	0.086
246.00	248.00	Fine-medium coarse grained dark green mottled sericitic silicic	7.0		QCZCV 4	More darker green.	103800	0.052	0.057
248.00	250.00	Fine-medium-grained grey-green mottled sericitic silicic	7.0	3	QCZMV 7	One qtz and mag veinlet - 10cm wide. Py with 7cm qtz and zeo veinlet.	103801	0.119	0.137
250.00	252.00		7.0		QVN 7	Py and qtz veinlets exhibit white clay alteration.	103802	0.063	0.129
252.00	254.00		5.0		QCZCV 3		103803	0.093	0.13
254.00	256.00		5.0		QCZCV 4	Py mostly disseminated.	103804	0.063	0.071
256.00	258.00		5.0	0.5	2 QCZMV 4	1cm wide qtz and mag veinlet with py and wk cpy. Cpy also in low angle qtz and zeo veinlet.	103806	0.094	0.112
258.00	260.00		7.0		QCZCV 4	Random veinlets. Orange with qtz may be feldspar or Fe carb???	103807	0.143	0.148
260.00	262.00		7.0		QCZCV 5	As above but slight increase in zeo.	103808	0.058	0.079
262.00	264.00		7.0		QCZCV 5		103809	0.089	0.12
264.00	266.00		7.0		QVN 5	Qtz random stringers. Py mostly diss or on x-y planes.	103810	0.046	0.068
266.00	268.00		5.0		QCZCV 7	As above. One vuggy pinkish carb (and zeo) veinlet. Possibly Fe carb.	103811	0.068	0.1

Hole Number: KN-02-22

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
268.00	270.00	Fine-medium-grained grey-green mottled sericitic silicic	7.0	CCZCV 7	Locally w.d. Fe carb +/-zeo. Py increase from disseminations.	103812	0.072	0.084
270.00	272.00		5.0	QCZCV 4	Minor increase in silicification.	103813	0.05	0.066
272.00	274.00		5.0	QCZCV 30 4		103814	0.069	0.131
274.00	276.00		5.0	QCV 7		103815	0.052	0.088
276.00	278.00		10.0	QCV 15 15	W.d. py with 25cm qtz and calc vein.	103816	0.034	0.083
278.00	280.00		5.0	QCZCV 4		103817	0.072	0.105
280.00	282.00		7.0	QCZCV 5		103818	0.05	0.075
282.00	284.00		7.0	QVN 5		103819	0.053	0.082
284.00	286.00		5.0	QVN 35 4	Minor epidote with qtz and py.	103820	0.059	0.134
286.00	288.00		3.0	QCZCV 3	Py mostly with stringers. Sericite clay alteration w.d. with qtz veinlet.	103821	0.038	0.08
288.00	290.00		5.0	QCZCV 7	Patchy py with veinlets.	103822	0.047	0.091
290.00	292.00		3.0	QCZCV 5 5		103823	0.037	0.06
292.00	294.00		5.0	QVN 10 7	Low angle py and qtz stringers. One 10cm veinlet at 40 degrees with patchy py.	103824	0.047	0.092
294.00	296.00		3.0	QVN 3	Low angle fractures.	103825	0.025	0.04
296.00	298.00		5.0	QVN 15 4		103826	0.09	0.091
298.00	300.00		3.0	QVN 2		103827	0.014	0.045
300.00	302.00		4.0	QVN 2	3cm wide gouge zone.	103828	0.02	0.054
302.00	304.00		7.0	0 QVN 35 5	Rounded frags more evident.	103829	0.075	0.144
304.00	305.75	Fine-medium-grained grey-green mottled sericitic chloritic	5.0	0 QVN 30 3		103830	0.1	0.154
305.75	308.00	Fine-medium-grained green-grey mottled sericitic chloritic	3.0	0 QVN 4	Gradational change to pale green sericitic +/-chl alteration with significant decrease in silicification. Coarse chloritic fragments mostly absent.	103832	0.035	0.089
308.00	310.00		4.0	1 QCZCV 3	(can't from above) Basically same andesitic porphyritic flow as above. Also general decrease in py mineralization.	103833	0.027	0.066
310.00	312.00		3.0	1 QVN 4	Locally dark grey.	103834	0.038	0.072
312.00	314.00		3.0	0 QVN 3	Decrease in diss py from above. Ser and sil altered flow.	103835	0.092	0.138
314.00	316.00		4.0	0 QVN 4	Py with veinlets and on fractures.	103836	0.084	0.128
316.00	318.00		4.0	1 QVN 4		103837	0.048	0.09

Hole Number: KN-02-22

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
318.00	320.00	Fine-medium-grained green-grey mottled sericitic chloritic	3.0	0	QVN	4 Py also locally patchy in matrix.	103838	0.034	0.073
320.00	322.00		3.0	0	QVN	10 Highly random Qtz and zeo veinlet but very minor py.	103839	0.165	0.182
322.00	324.00		3.0	0	QVN	3	103840	0.107	0.119
324.00	326.00		5.0	0	QVN	7 Increase in py in highly random Qtz veinlets.	103841	0.081	0.129
326.00	328.00		3.0	0	QCZCV	3	103842	0.078	0.102
328.00	330.00		3.0	0	QVN	3 mm scale phenocrysts locally evident - diffuse.	103843	0.037	0.06
330.00	332.00		3.0	3	QVN	2 Pale green through out.	103844	0.056	0.075
332.00	334.00		3.0	0	QCZCV 70	4 Minor mag locally. Locally, w.d. in 1cm wide Qtz veinlet. Local amygdaloidal texture??	103845	0.059	0.085
334.00	336.00		4.0	0	QVN	3 More dk grey. Local rounded mafic fragments. Slight increase in py.	103846	0.046	0.083
336.00	338.00		5.0	1	QVN	7	103847	0.085	0.121
338.00	340.00	Fine-medium-grained dark grey mottled sericitic chloritic	4.0	0	QVN	5 Rounded mafic fragments evident throughout.	103848	0.043	0.073
340.00	340.80		3.0	0	QVN	4	103849	0.074	0.11
340.80	342.00		5.0	0	QCZCV	4 Py mostly with veinlets and on fracture places. Weakly diss.	103850	0.082	0.112
342.00	343.70		3.0	0	QCZCV	4 Locally soft from w.d. chl +/-ser alteration patchy.	103851	0.054	0.082
343.70	345.00	Fine-medium-grained green-grey mottled sericitic chloritic	4.0	0	QCZCV	35 Highly random veinlet swarm through out. Locally patchy py with veinlets.	103852	0.058	0.088
345.00	347.00	Fine-medium-grained dark grey mottled sericitic chloritic	3.0	2	QVN	2 Dark grey, siliceous mostly fine grained. Py with local chl fragments. Random Qtz stringers.	103853	0.05	0.073
347.00	347.90	Fine-medium-grained green-grey mottled sericitic chloritic	5.0	0	QCZCV 70	7	103854	0.052	0.09
347.90	349.00	Fine-medium-grained dark grey mottled sericitic chloritic	5.0	0	QCZCV	7 Rounder chl knots locally with w.d. py.	103855	0.071	0.088
349.00	351.00	Fine-medium-grained green-grey mottled sericitic chloritic	5.0	0	QCZCV	10 Py with random pristine Qtz-Fe carb veinlets.	103856	0.073	0.107
351.00	353.00		3.0	1	QVN	4	103858	0.039	0.058
353.00	355.00		3.0	0	QCZCV	7 Patchy py with 15 cm Qtz and calc veinlet.	103859	0.085	0.125
355.00	356.55		5.0	0	QCZCV 45	7 Locally silicified as w.r. alteration. Py w.d. in one veinlet.	103860	0.061	0.117
356.55	357.60	Fine-medium-grained light grey mottled sericitic chloritic	7.0	0	QCZCV 50 50	Veinlets/stringers roughly parallel.	103861	0.067	0.09

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
357.60	359.00	Fine-medium-grained dark grey mottled sericitic chloritic	12.0	0	QVN 15 10	3cm qtz veinlet with py. 30cm of interval.	103862	0.065	0.183
359.00	360.65		4.0	0	QVN 5	Local veinlets +/-py	103863	0.068	0.089
360.65	362.25		7.0	1	QVN 50 7	Py diss through out and in veinlets.	103864	0.095	0.119
362.25	364.00	Fine-medium-grained light grey mottled sericitic chloritic	4.0	1	QCZCV 7	Mottled patchy chl alteration.	103865	0.101	0.121
364.00	366.00	Fine-medium-grained green-grey mottled sericitic chloritic	7.0	1	QCZCV 3	Py mostly diss assoc with chl knots.	103866	0.067	0.104
366.00	368.00		7.0	0	QCZCV 5 7	Py mostly with low angle qtz and calc.	103867	0.059	0.106
368.00	370.00		7.0	0	QCV 70 20	Weak calcite with local qtz. One 25cm qtz vein. Pinkish with ech and Fe carb.	103868	0.068	0.108
370.00	372.00		4.0	0	QCV 60 5		103869	0.049	0.083
372.00	374.00		5.0	3	QCV 65 7	One pinkish vuggy calc/Fe calc veinlet - 1cm.	103870	0.094	0.146
374.00	376.00		7.0	0	QCV 10	Low angle qtz veinlet with w.d. py.	103871	0.122	0.161
376.00	378.00		10.0	0	QVN 10		103872	0.132	0.13
378.00	380.00		7.0	15	QCV 25 10	Calc is Fe carb. Py more diss.	103873	0.079	0.114
380.00	382.00		4.0	2	1 QVN 7	Diss mag at end of interval and in one veinlet with py.	103874	0.065	0.103
382.00	384.00		7.0	0	QVN 60 10		103875	0.045	0.075
384.00	386.00		7.0	0	QVN 7		103876	0.117	0.14
386.00	388.00		5.0	0	QVN 10	Minor pink Fe carb with qtz.	103877	0.166	0.2
388.00	390.00		5.0	0	QVN 7	Py mostly with veinlets.	103878	0.141	0.151
390.00	392.00		4.0	0	QVN 50 5		103879	0.06	0.081
392.00	394.00		4.0	0	QVN 45 5		103880	0.09	0.13
394.00	396.00		4.0	0	QVN 5	Py locally with vuggy qtz veinlets.	103881	0.107	0.177
396.00	398.00		7.0	0	QVN 10		103882	0.07	0.095
398.00	400.00		5.0	0	QVN 7	Py mostly with veinlets.	103884	0.066	0.093
400.00	402.00		4.0	0	QVN 7		103885	0.035	0.069
402.00	404.00		4.0	0	QVN 10	Local very weak epidote alteration of veinlet. Weakly pink. Veinlets irregular.	103886	0.065	0.126
404.00	406.00		4.0	0	QVN 7	Veinlets pinkish.	103887	0.077	0.094
406.00	408.00		7.0	0	QVN 5 15	Py mostly with veinlets.	103888	0.055	0.061

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
408.00	410.00	Fine-medium-grained green-grey mottled sericitic chloritic	4.0	0	QVN 5	Minor veinlets. Local weak qtz flooding.	103889	0.05	0.052
410.00	412.00		5.0	1	QCV 50 5	Mostly fine grained typical andesite flow. Calcite very weak with qtz veinlets.	103890	0.066	0.179
412.00	414.00		3.0	0	QVN 7		103891	0.055	0.08
414.00	416.00		3.0	0	QVN 5		103892	0.052	0.207
416.00	418.00		3.0	0	CCQVN 5	Local vuggy, pinkish Fe carb > qtz veinlets.	103893	0.064	0.083
418.00	420.00		3.0	1	CCQVN 10		103894	0.108	0.167
420.00	422.00		3.0	1	CCQVN 5		103895	0.093	0.092
422.00	424.00		3.0	0	CCQVN 3		103896	0.077	0.083
424.00	426.00		3.0	0	CCQVN 4		103897	0.08	0.079
426.00	428.00		5.0	0	CCQVN 4		103898	0.127	0.126
428.00	430.00		3.0	0	QCV 7	Volc is locally pitted/vuggy.	103899	0.093	0.091
430.00	432.00		3.0	0	QCV 7		103900	0.13	0.133
432.00	434.00		3.0	0	QCV 4		103901	0.08	0.089
434.00	436.00		2.0	0	QCV 7		103902	0.111	0.143
436.00	438.00		3.0	0	QCV 4		103903	0.065	0.074
438.00	440.00		3.0	1	QCV 3		103904	0.091	0.125
440.00	442.00		4.0	9	QCV 4		103905	0.111	0.149
442.00	444.00		3.0	2	1 QCV 3	Mag m.d. in one qtz veinlet.	103906	0.112	0.125
444.00	446.00		4.0	1	CCQVN 40 15	Local thin carb stringers at 30% over 70cm interval. Locally en echelon perpendicular to most stringers.	103907	0.116	0.122
446.00	448.00		5.0	0	CCQVN 5 25	Py best developed with qtz rich low angle veinlets.	103908	0.094	0.172
448.00	450.00		4.0	4	QCV 5		103910	0.097	0.162
450.00	452.00		7.0	1	QCV 10	Py with veinlets.	103911	0.071	0.099
452.00	454.00		10.0	0	QCV 10 15	4cm veinlet at 10 degrees to core axis with w.r. by frags and w.d. py.	103912	0.078	0.075
454.00	456.00		3.0	7	QCV 4		103913	0.146	0.136
456.00	458.00		7.0	0	QCV 7	Py mostly with veinlets.	103914	0.198	0.174
458.00	460.00		7.0	0	QCV 7		103915	0.176	0.142

Hole Number: KN-02-22

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
460.00	462.00	Fine-medium-grained green-grey mottled sericitic chloritic	5.0	1	CCZQV 45	Local light pale green alteration locally, x-cut by pinkish stringers. Local medium grained anhedral mafics.	103916	0.147	0.116
462.00	464.00		3.0	3	CCQVN 7	Fuchsite alteration of medium grained mafics locally. Mafic crystals through out.	103917	0.197	0.151
464.00	466.00		3.0	2	2 QCV 5	py and mag veinlets.	103918	0.12	0.122
466.00	468.00		4.0	2	0 CCQVN 10	Most veinlets pinkish; 3 <1cm mag and py veinlets.	103919	0.115	0.099
468.00	470.00		4.0	1	0 CCQVN 20	Fractured parallel to core axis. Mag and py with one qtz veinlets.	103920	0.115	0.096
470.00	472.00		4.0	1	CCQVN 20	Medium grained mafic crystals.	103921	0.136	0.13
472.00	474.00		4.0	1	CCQVN 7		103922	0.218	0.199
474.00	476.00		7.0	0	QCV 7	Py w.d. with low angle veinlet.	103923	0.163	0.183
476.00	478.00		4.0	1	CCQVN 10 10		103924	0.153	0.204
478.00	480.00		4.0	0	QCV 5	More mottled from patchy sericite alteration.	103925	0.16	0.165
480.00	482.00		4.0	1	QCV 5	Low angle qtz and py veinlets x-cut by dull pinkish Fe carb veinlets at 60 degrees.	103926	0.11	0.133
482.00	484.00		7.0	1	QVN 7	Py w.d. in one low angle qtz veinlet.	103927	0.159	0.351
484.00	486.00		5.0	5	QCV 7		103928	0.23	0.184
486.00	488.00	Fine-medium-grained grey-green mottled sericitic chloritic	5.0	0.5	1 8 QCV 7	15cm intercept of amygdules. Py +/- weak cpy with qtz veinlets. Very minor mag locally, diss.	103929	0.212	0.187
488.00	490.00		4.0	1	1 QCV 3	Weak, very local diss mag with mafic chl knots.	103930	0.192	0.154
490.00	492.00		4.0	0	QCV 5		103931	0.115	0.107
492.00	494.00		3.0	0	QVN 3		103932	0.107	0.089
494.00	496.00		3.0	2	1 QCV 3	Mafic crystals/knots through out.	103933	0.198	0.177
496.00	498.00		3.0	2	0 QCV 7	Lower 50cm not magnetic.	103934	0.181	0.154
498.00	500.00		3.0	0.5	7 CCQVN 5	Local cpy with patchy py. W.r. fragments in Fe carb infill. Beginning of increase in Fe carb/zeo veinlets.	103936	0.262	0.235
500.00	502.00		3.0	2	7 CCQVN 15	Mostly thin pinkish Fe carb/zeo stringers. Diss mag locally.	103937	0.178	0.145
502.00	504.00		4.0	0.5	1 1 CCQVN 20	Highly mottled from patchy sericite alteration assoc with irregular Fe carb and qtz veinlets. Weak visible cpy with veinlets.	103938	0.234	0.193
504.00	506.00		3.0	3	CCQVN 20	Medium grained mafic knots. Pinkish stringers are highly random.	103939	0.159	0.132

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
506.00	507.50	Fine-medium-grained grey-green mottled sericitic chloritic	3.0	1	1 QCV 30	No pinkish stringers. Qtz and calc are highly deformed, discontinuous, irregular.	103940	0.255	0.149
507.50	508.50		2.0		11 QCV 10	Decrease in veinlets/stringers. Bottom of Takla volcanics.	103941	0.101	0.095
508.5	529.4	SYENITE							
508.50	510.00	Medium-grained light brown limonitic chloritic	0.5	2	13 CCVN 5	Syenite: locally orange from Fe staining(?). Chlorite altered mafics are med/coarse grained veinlets.	103942	0.004	-2
510.00	512.00		0.5	2	12 CCVN 60 10	Stringers are pinkish.	103943	0.003	-2
512.00	514.00		0.5	2	12 CCVN 45 5		103944	0.003	-2
514.00	516.00		0.5	2	13 CCVN 50 3	Orange staining is minor	103945	0.004	-2
516.00	518.00		0.5	2	14 CCVN	One angular coarse xenolith.	103946	0.004	-2
518.00	520.00		0.5	2	16 CCVN 15 2	w.d. w.r. clay alteration of local stringers, plag to white mont(?). Stringers locally vuggy and crystalline.	103947	0.003	-2
520.00	522.00		0.5	2	16 CCVN 25 2		103948	0.004	-2
522.00	524.00		0.5	2	16 CCVN 40 7	Increase in pinkish Fe carb veinlets/stringers.	103949	0.004	-2
524.00	526.00		0.5	2	14 CCVN 3		103950	0.004	-2
526.00	528.00		0.5	2	14 CCVN 45 3	Becoming more grey/fresh.	103951	0.003	-2
528.00	529.40		0.5	2	14 CCVN 7	Local orange staining. Lower contact observed by veinlets.	103952	0.003	-2
529.4	530.65	FELSPAR PORPHYRY							
529.40	530.65	Fine-medium-grained dark grey porphyritic	0.5	2	12 CCVN 2	F.P. dark syenite siliceous matrix with 25% euhedral/subhedral white plus crystals at 4-2mm.	103953	0.002	-2
530.65	551	SYENITE							
530.65	532.15	Medium-grained light brown limonitic chloritic	0.5	2	10 CCVN 10	Syenite: As above syn weakly mixed/gradational with F.P. - pinkish stringers.	103954	0.002	-2
532.15	534.00		0.5	2	7 CCVN 3	Weakly/moderately orange.	103955	0.003	-2
534.00	536.00		0.5	2	15 CCVN 5		103956	0.003	-2
536.00	538.00		0.5	2	14 CCVN 2		103957	0.003	-2
538.00	540.00		0.5	2	15 CCVN 3		103958	0.003	-2
540.00	542.00		0.5	2	17 CCVN 3		103959	0.003	-2
542.00	544.00		0.5	2	15 CCVN 3		103960	0.003	-2
544.00	546.00		0.5	2	15 CCVN 7		103962	0.003	-2

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
546.00	547.85	Medium-grained light brown limonitic chloritic	0.5	2	12 CCVN	10	103963	0.002	-2	
547.85	550.00	Medium-grained grey limonitic chloritic	0.5	2	9 CCVN	5	103964	0.052	0.037	
550.00	551.00		0.5	1	27 CCVN	5	103965	0.023	0.011	
551	618.3	ANDESITE FLOW								
551.00	553.00	Fine-grained green-grey chloritic sericitic	3.0	0.5	3	5 CCQVN	10	103966	0.194	0.134
553.00	555.00		3.0	0.1	1	6 CCQVN	5	103967	0.187	0.179
555.00	557.00		3.0	0.1	1	4 QCV	60	103968	0.159	0.139
557.00	559.00		3.0	0.1	1	3 QCV	60	103969	0.171	0.161
559.00	561.00		2.0	0.5	1	0 QCV	5	103970	0.245	0.245
561.00	563.00		2.0	0.5	1	16 QCV	7	103971	0.183	0.17
563.00	565.00		2.0	0.1	2	1 QCV	5	103972	0.181	0.16
565.00	567.00		3.0	0.5	2	19 QCV	7	103973	0.247	0.209
567.00	569.00		3.0	0.1	2	5 QCV	50	103974	0.137	0.107
569.00	571.00		3.0	0.1	2	1 CCQVN	25	103975	0.214	0.188
571.00	573.00		3.0	0.1	3	7 CCQVN	7	103976	0.135	0.128
573.00	575.00		3.0	0.1	2	18 QCV	70	103977	0.185	0.169
575.00	577.00		3.0	0.1	2	34 QCV	20	103978	0.185	0.184
577.00	579.00		2.0	0.1	2	47 QCV	55	103979	0.208	0.192
579.00	581.00		3.0	0.5	3	8 QCV	4	103980	0.218	0.181
581.00	581.80		1.0	0.5	1	2 QCV	2	103981	0.2	0.199
581.80	583.40	Fine-grained green-grey mottled chloritic sericitic	2.0	0.1	1	1 QCV	7	103982	0.216	0.217

Hole Number: KN-02-22

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
583.40	584.30	Fine-grained green-grey mottled chloritic sericitic	2.0		3 CCQVN 60 2	Weakly mottled from patchy sericite.	103983	0.295	0.26
584.30	585.55		3.0	0.1	2 25 QCV 15	Pale green sericite alteration. Local mag in low angle qtz stringer.	103984	0.249	0.268
585.55	587.00	Fine-grained green-grey chloritic sericitic	3.0	0.5	2 46 CCQVN 5 5	Py and minor cpy in low angle qtz and calc veinlet. Thin mag stringers.	103985	0.205	0.202
587.00	589.00		3.0	0.5	3 1 QCV 5 5	Cpy stringer. Mag through out lower part of interval.	103986	0.275	0.281
589.00	590.40		3.0	1.0	2 0 CCVN 10	Cpy stringer x-cuts qtz. Cpy also patchy within qtz stringer.	103988	0.313	0.383
590.40	592.35	Fine-grained pink mottled sericitic	0.5		1 CCVN 50	Random pinkish Fe carb (zeo?) throughout. With qtz infill and ser alteration.	103989	0.144	0.132
592.35	593.00	Fine-grained green-grey chloritic sericitic	1.0		1 CCVN 3	Typical massive andesite.	103990	0.099	0.103
593.00	595.00	Fine-grained green-grey mottled chloritic sericitic	1.0		3 CCVN 3	Mottled from sericite alteration.	103991	0.189	0.191
595.00	597.00	Fine-grained green-grey chloritic sericitic	2.0	0.1	4 41 CCQVN 7		103992	0.311	0.253
597.00	599.00		2.0	0.5	3 24 CCQVN 10 10	Diss mag only locally. Cpy and mag with qtz +/-carb.	103993	0.193	0.191
599.00	601.00		2.0	0.5	2 25 QVN 30 4	Diss mag only locally. Cpy with +/-carb.	103994	0.275	0.372
601.00	603.00		2.0	0.1	2 10 QCV 2	Local mag veinlets.	103995	0.142	0.129
603.00	605.00		2.0	0.1	1 20 CCQVN 50 10	Local py with mag.	103996	0.224	0.203
605.00	607.00		2.0	0.1	2 CCQVN 7		103997	0.191	0.187
607.00	609.00	Fine-grained green-grey mottled chloritic sericitic	2.0	0.1	4 34 CCQVN 15	Local semi pervasive sericitic alteration. Patchy py mostly with qtz.	103998	0.19	0.169
609.00	611.00		2.0	0.1	2 22 CCQVN 7	Decrease in veinlets; weak/moderate magnetic through out.	103999	0.17	0.148
611.00	613.00		2.0	0.5	2 2 CCQVN 5	One mag and py and weak cpy veinlet.	104000	0	0
613.00	615.00		2.0	0.1	6 CCQVN 65 3	Local patchy mag with qtz +/-py.	105826	0.1	0.109
615.00	617.00		2.0	0.1	1 CCQVN 65 2		105827	0.19	0.206
617.00	618.30		1.0		1 QCV 3	One 4cm dykelet of quartz monzonite.	105828	0.252	0.262
618.3	627.9	QUARTZ MONZONITE							
618.30	619.00	Medium-grained grey porphyritic sericitic silicic	1.0		1 QCV 1	Py weakly diss.	105829	0.148	0.142
619.00	621.00		1.0	0.5	0 QCV 3	Patchy cpy in qtz infill.	105830	0.142	0.136

Hole Number: KN-02-22

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
621.00	623.00	Medium-grained grey porphyritic silicic sericitic	1.0	0.5	0 QCV 5 7	Porphyritic texture overprinted by qtz and ser alteration. Minor cpy in qtz selvage.	105831	0.233	0.229
623.00	625.00	Medium-grained grey porphyritic sericitic silicic	1.0	0.1	0 CCQVN 15 3	Porphyritic texture evident. Only minor alteration at top of interval.	105832	0.197	0.216
625.00	627.00		1.0	0.1	0 QCV 5	Whitish plag (albitization??) appear at lower part of interval.	105833	0.167	0.169
627.00	627.90		1.0	0.1	10 QCV 15	Whitish plag >50% occur through out. Sharp contact at 55 degrees.	105834	0.18	0.687
627.9	640.2	ANDESITE FLOW							
627.90	629.00	Fine-grained green-grey chloritic sericitic	2.0	2	17 QCV 3	Weakly magnetic at lower 20cm.	105835	0.54	0.219
629.00	631.00		2.0	2	6 QCV 4	One qtz veinlet with py and mag. Local ser alteration with diss chl grains.	105836	0.16	0.154
631.00	633.00		2.0	1	3 QCV 20 3		105837	0.24	0.194
633.00	635.00		3.0	0.1	1 22 QCV 55 15	25cm width of highly vuggy/pitted qtz +/-Fe carb with patchy py.	105839	0.359	0.321
635.00	637.00		2.0	0.5	2 2 QCV 75 3	Cpy with one qtz veinlet.	105840	0.219	0.164
637.00	639.00		1.0	1	1 QCV 70 2		105841	0.257	0.232
639.00	640.20		2.0	0.5	1 15 CCQVN 25 3	Cpy and py in local thin qtz stringers.	105842	0.293	0.268
640.2	641.1	QUARTZ MONZONITE							
640.20	641.10	Medium-grained grey porphyritic sericitic	1.0	0.5	1 8 CCQVN 3	Patchy minor cpy +/-py w/ qtz +/-Fe carb infill. Local Takla xenoliths.	105843	0.085	0.102
641.1	642.35	ANDESITE FLOW							
641.10	642.35	Fine-grained green-grey chloritic sericitic	2.0	1	1 QCV 15	Random pinkish Fe carb. Hem on local fractures. Lower contact obscured by veining.	105844	0.3	0.379
642.35	643.95	QUARTZ MONZONITE							
642.35	643.95	Medium-grained grey porphyritic sericitic	1.0	1	3 QCV 30 2	One qtz veinlet with moly in selvage. Lower contact sharp at 55 degrees.	105845	0.148	0.213
643.95	667.8	ANDESITE FLOW							
643.95	645.65	Fine-grained green-grey chloritic sericitic	1.0	0.5	1 15 QCV 5	30cm is fragmental due to mixing from quartz monzonite. Weak patch epidote with qtz. One mag veinlet.	105846	0.547	0.604
645.65	647.15		1.0	1.0	2 17 QCV 4	Weak cpy with qtz as fracture fill along fracture parallel to core axis. Minor monzonite dykelets. Veinlets x-cut monzonite.	105847	0.535	0.461

Hole Number: KN-02-22

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
647.15	649.00	Fine-grained green-grey chloritic sericitic	1.0	0.5	2 17 CCQVN	7 Two monzonite dykelet 15-25cm wide. Rare patchy cpy with qtz and calc veinlet.	105848	0.194	0.197
649.00	651.00		2.0	0.5	2 21 CCQVN	5 Py +/- cpy with qtz veinlets locally.	105849	0.354	0.294
651.00	653.00		2.0	0.1	2 8 CCQVN	5	105850	0.195	0.159
653.00	655.00		2.0	0.1	1 7 CCQVN 60	5 One py and mag and qtz veinlet x-cut by pinkish Fe carb (zeo?) stringer.	105851	0.225	0.181
655.00	657.00		3.0	0.5	1 15 CCQVN	10 Local pale green sericitic alteration. Qtz cut by Fe carb. Cpy in one qtz stringer.	105852	0.333	0.281
657.00	659.00		2.0	0.5	2 0 CCQVN	4 Rare cpy in qtz. Qtz cut by pinkish carb veinlets. One 7cm qtz vein at 70 degrees with py.	105853	0.303	0.277
659.00	661.00		1.0	0.1	1 2 CCQVN	3	105854	0.286	0.245
661.00	663.00		1.0	0.1	1 0 CCQVN	5	105855	0.389	0.329
663.00	665.00		2.0		2 CCQVN	20 Locally w.d. highly random pinkish stringers x-cut by qtz.	105856	0.255	0.203
665.00	666.80		2.0		1 5 CCQVN	10 Local random Fe carb /qtz stringer.	105857	0.289	0.234
666.80	667.80		2.0		1 0 CCQVN	7 One thin mag stringer.	105858	0.176	0.151
667.8	670	QUARTZ MONZONITE							
667.80	669.80	Medium-grained grey porphyritic sericitic	0.5		0 CCQVN	5 Weakly altered. Typical qtz monzonite.	105859	0.089	0.093
669.80	670.00		1.0		0 CCQVN	7 4cm wide qtz veinlet 25 degrees. Pinkish Fe car x-cuts qtz.	105860	0.177	0.186
670	696.55	ANDESITE FLOW							
670.00	672.00	Fine-grained green-grey chloritic sericitic	2.0		4 CCQVN	5 Typical fsh to weakly altered Takla.	105861	0.108	0.104
672.00	674.00		2.0		1 6 CCQVN	5	105862	0.349	0.353
674.00	676.00		2.0		1 2 CCQVN 60	5	105863	0.231	0.213
676.00	678.00		2.0		1 4 CCQVN 60	5	105865	0.211	0.168
678.00	680.00		2.0		1 7 CCQVN	2	105866	0.242	0.205
680.00	682.00		2.0		1 1 CCQVN 55	12 Two qtz veins - 10cm wide.	105867	0.26	0.218
682.00	684.00		2.0		1 11 CCQVN 50	3	105868	0.319	0.297
684.00	686.00		2.0		1 1 CCQVN 50	2	105869	0.234	0.215
686.00	688.00		2.0		3 CCQVN 60	2	105870	0.179	0.142
688.00	690.00		2.0		1 18 CCQVN	5 Carb x-cuts qtz.	105871	0.351	0.324

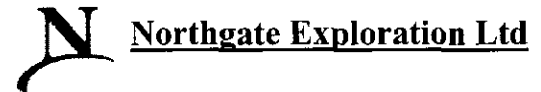
Hole Number: KN-02-22

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
690.00	692.00	Fine-grained green-grey chloritic sericitic	2.0	2	1 CCQVN	7	105872	0.252	0.219
692.00	694.00		2.0	1	1 CCQVN	5 Patchy mag in one veinlet.	105873	0.228	0.226
694.00	695.10		2.0		0 QCV 45	7 Pinkish Fe carb infilling qtz.	105874	0.493	0.434
695.10	696.55		2.0	0.5	2 QCV	3 Minor patchy cpy with qtz and carb. Local quartz monzonite dykelets.	105875	0.383	0.37
696.55	698.95	QUARTZ MONZONITE							
696.55	698.95	Medium-grained grey porphyritic sericitic	1.0	1	35 CCQVN	20 Highly random pink Fe carb locally w.d. and x-cuts qtz veinlets.	105876	0.14	0.182
698.95	706.15	ANDESITE FLOW							
698.95	701.00	Fine-grained green-grey chloritic sericitic	1.0		22 CCQVN	7 Weakly/moderately magnetic through out.	105877	0.247	0.316
701.00	703.00		2.0		18 CCQVN	4	105878	0.208	0.211
703.00	705.00		2.0	0.5	3 CCQVN	5	105879	0.23	0.215
705.00	706.15		2.0	0.5	2 QCV	3	105880	0.296	0.537
706.15	709.2	QUARTZ MONZONITE							
706.15	707.65	Medium-grained grey porphyritic sericitic limonitic	1.0	0.5	3 CCQVN	10 Iron stained throughout from Fe carb(?).	105881	0.092	0.108
707.65	709.20		1.0	0.5	6 CCQVN	7 Lower sharp contact at 60 degrees.	105882	0.087	0.096
709.2	710.1	ANDESITE FLOW							
709.20	710.10	Fine-grained green-grey chloritic sericitic	2.0	0.5	4 CCQVN	7 Rare qtz stringer - Fe carb also as infill.	105883	0.284	0.323
710.1	710.9	QUARTZ MONZONITE							
710.10	710.90	Medium-grained grey porphyritic sericitic limonitic	1.0	4.0	52 CCVN	15 15	105884	0.077	0.17
710.9	718.25	ANDESITE FLOW							
710.90	713.10	Fine-grained green-grey chloritic sericitic	1.0	2.0	30 CCQVN	5 Moderate mag throughout. Calcite veinlets with w.r. by patchy epidote alteration.	105885	0.201	0.251
713.10	715.00		2.0	2.0	12 CCQVN	7 Monzonite dykelets. Low angle qtz veinlet. Locally weakly mineralized.	105886	0.151	0.203
715.00	717.00		2.0	1.0	16 CCQVN	15 Veinlets very random.	105887	0.178	0.293
717.00	718.25		2.0		0 QCV	3 One monz dykelet - 10 cm at 60 degrees.	105888	0.066	0.083

Hole Number: KN-02-22

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
718.25	721.46	QUARTZ MONZONITE							
718.25	720.15	Medium-grained grey porphyritic sericitic limonitic	1.0	8	CCVN	4 Two small volcanic xenoliths.	105889	0.151	0.169
720.15	721.46		1.0	0.5	CCVN	5 Locally Fe stained.	105890	0.162	0.152
721.46	EOH								

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-23**

Northing: 15091.1 Total Depth: 1011.02m
Easting: 8845.28 Azimuth: 360°
Elevation: 1831.5 Dip: -75°

Geologist: J. Mazvihwa
Logged Date: 8/9/2002

Survey Depth	Azimuth	Dip	Comments:
91 m	353 °	-74 °	
183 m	8 °	-75 °	
274 m	20 °	-75 °	Magnetic
366 m	349 °	-74 °	Magnetic
457 m	343 °	-74 °	Magnetic
549 m	25 °	-74 °	Magnetic
640 m	3 °	-74 °	
732 m	9 °	-74 °	
823 m	1 °	-74 °	
915 m	43 °	-73 °	Mechanical
1006m	358 °	-74 °	

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-23**

From (m)	To (m)	Rock Type	Comments
0	3.028	CASING	
3.028	178.93	BASALT FLOW	Takla Fm.; weak to moderate epi alteration - non pervasive, appears to be replacing unknown mineral. Py disse in basalt - possibly primary. Py also appears as aggregates assoc with epi - possibly secondary py replacing epi. Protolith, not visible locally due to iron staining along joint planes. Limonite and oxidization. red/yellow Fe staining along jt planes. Rubble - BKN.
178.93	179.91	BASALT	Mafic dyke, post mineralization. White carbonate phenocrysts +/- quartz associated. Zeolite/ quartz veining randomly oriented. Footwall contact is chill margin defined by BKN zone.
179.91	219.05	BASALT FLOW	Medium green, fine grained basalt, fine sized about 1mm diameter amygdules infilled possibly with secondary augite and chlorite. Quartz/ carbonate/ epidote veining randomly oriented, x-cut by quartz carbonate discontinuous stringers. Rare pyrite +/- chalcopyrite stringers. (Zeolite, 1cm thick vein at about 181.11m).
219.05	224.54	BASALT	Mafic, post mineralization dyke. White carbonate phenocrysts +/- quartz associated. Quartz veining at about 45 degrees to CA. Basalt fragments throughout the mafic dyke (220.27m-221.35m).
224.54	372.14	BASALT FLOW	Medium green fine grained basalt. Quartz/ calcite, randomly oriented veining. Augite dark green phenocrysts. Minor gypsum veining. Amygdules infilled with secondary chlorite, present locally. Minor red hem veining. dissemination feature where gypsum has been removed. Pyrite +/- chalcopyrite disseminated in basalt locally.
372.14	384.1	DIABASE	Light to medium green, fine grained, chloritized mafic dyke with calcite/ quartz phenocrysts which fizz with HCl. Dyke is post- mineralization cut randomly by zeolite/ quartz veining, irregularly spaced. K-feldspar present locally. Basalt fragments present in the chloritic mafic dyke.

Hole Number:

KN-02-23

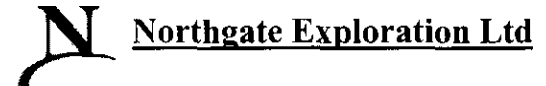
From (m)	To (m)	Rock Type	Comments
384.1	400.58	BASALT FLOW	Medium to dark green/ black, fine to medium grained. Protolith overprinted by quartz/ mt flooding. Quartz veining associated with mt cutting at about 45 degrees to CA with thickness between 2-10cm. Evenly spaced, about 20cm apart, forming a banded appearance. Dominant veining cut by a shallow angled (about 10 degrees) quartz/ zeolite veining. Dominant veining associated with pyrite stringers and aggregates +/- chalcopyrite. Increased mt content, present as disseminations in host rock and as veining associated with quartz/ pyrite veining. Protolith is overprinted by alteration and the lithology is possibly basalt or monzodiorite (Transitional to 400.58m). Porphyritic portions- quartz phenocrysts.
400.58	423.99	QUARTZ MONZONITE	Quartz monzodiorite. Locally chloritized giving a green coloration. Smokey/ gray quartz veining at about 45 degrees cut by discontinuous randomly oriented stringers. Mt present in matrix, fine grained and as stringers and veining. Py+/- cpy stringers and aggregates associated with Smoky/ gray quartz vein locally. Quartz veining is on average at about 45 degrees to CA forming banding, thickness between 0.5cm to 5cm. Unevenly spaced.
423.99	506	BASALT FLOW	Medium to dark green, fine grained basalt. Augite phenocrysts present locally -porphyritic texture. Quartz veining at about 45 degrees to CA associated with mt stringers. Quartz veining thickness between 1cm- 5cm, regularly spaced locally. Associated in places with py+/- cpy. Localized quartz veining stockwork. Minor zeolite veining- associated with hem. Quartz veining at about 45 degrees CA cut by quartz/ carbonate veining with shallow angle of about 5 degrees CA and discontinuous stringer form locally.
506	530.02	QUARTZ MONZONITE	Medium brown/green in places, porphyritic, plagioclase, pyroxene, kfsp (locally) and qtz phenocrysts in fine grained matrix. Matrix is light green consisting possibly of fine grained plag, kfsp, qtz and pyroxene. Veining-qtz, mt, zeolite, associated with py +/- cpy locally is randomly oriented, irregularly spaced. Minor red hem veining.
530.02	902.98	BASALT FLOW	Medium to dark green, fine grained basalt with augite phenocrysts. Qtz/zeolite veining locally associated with mt. Py veining, locally associated with qtz vein. Red mt stringer rare. Veining is randomly oriented and irregularly spaced. Qtz fragments, possible local breccia of qtz veining. Qtz/zeo also present as discontinuous stringers. Localized brown colourization possibly due to sericite or fine biotite alteration. Py +/- cpy also appears as aggregates and fine disseminations.
902.98	922.8	MONZONITE	Intrusive melanocratic, mafic and white plagioclase/Qtz phenocrysts, crowded, matrix barely visible - possibly fine grained white felsic. Phenocrysts visible locally. Py aggregates and disseminations present but rare, indication igneous intrusion is pre or syn mineralization. Local pink staining indicating weak pervasive potassic alteration locally. Qtz/zeo/mt veining randomly oriented, irregularly spaced and associated locally. Monzo.

Hole Number:

KN-02-23

From (m)	To (m)	Rock Type	Comments
922.8	1011.02	BASALT FLOW	Gypsum veining, clear - selenite. Basalt/monzo, gradual contact, augite phenocrysts in mafic matrix. Same as 108991.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-23

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	3.028	CASING							
	0.00	3.03					23	-2	-2
3.028	178.93	BASALT FLOW							
	3.03	5.79 Fine-grained medium green propylitic	2.0	0.1	2 1 LGQV	5 Takla Fm.; weak to moderate epi alteration - non pervasive, appears to be replacing unknown mineral. Py dissem in basalt - possibly primary. Py also appears as aggregates assoc with epi - possibly secondary py replacing epi. Protolith, not visible locally due to iron staining along joint planes. Limonite and oxidization. red/yellow Fe staining along jt planes. Rubble - BKN.	108515	0.016	0.035
	5.79	6.75	2.0	0.1	2 4 LGQV	5	108516	0.016	0.028
	6.75	8.75 Fine-grained medium green amygdular propylitic	2.0	0.1	2 21 QVN	10 Localized, weak to moderate epidote alteration - non-pervasive - propylitic. Chloritized augite clasts. Epi and py infilled amygdules where secondary py appears to be replacing epi - locally - also present as clasts. Minor porphyritic texture - plagioclase and augite phenocrysts. Py also dissem in basalt. Qtz/zeo veining - randomly oriented. Local limonite lining jt structures. Magnetite present, between 2-5% - 75.5 on magnetic susceptibility meter at about 8.33m - rarely present as stringers - mt.	108517	0.02	0.034
	8.75	10.80	2.0	0.1	2 47 QVN	10 Amygdules infilled with epi and py more evident - size range 1mm - 5mm diameter.	108518	0.011	0.025
	10.80	12.80	2.0	0.1	2 84 QZECV	10 Mt rich portions. Amygdules infilled with epi and py more evident - size range 1mm - 5mm diameter.	108519	0.003	0.007
	12.80	14.71	2.0	0.1	2 14 QECV	10 Fine dissem py locally assoc with epi. Epi aggregates and stringers assoc with qtz veining. Local BKN zones. Reduced mt content.	108520	0.003	0.012
	14.71	15.52	2.0	0.1	2 19 QECV	10 Increased epi, less mt. Rare mt stringer assoc with qtz/carb/epi veining.	108521	0.004	0.018
	15.52	17.52	2.0	0.1	10 105 QECV	10 High mt content, dark green/ black colour, 10cm mt vein associated with epi- 281 reading on the Kappa meter between 16.27m- 16.42m.	108522	0.002	-2
	17.52	18.04	2.0	0.1	10 137 QECV	10 High mt content- dark green/ black colour.	108523	0.017	0.026

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
18.04	20.04	Fine-grained medium green amygdular propylitic	2.0	0.1	5 27 QECV	10 Reduced mt content- aggregates. Epi vein between 19.88m- 20.04m.	108524	0.008	0.012
20.04	22.04		2.0	0.1	5 54 QECV	10 Quartz/ carbonate/ mt vein, about 5cm thick between 20.10m- 20.15m, quartz/ carbonate discontinuous stringers.	108525	0.012	0.031
22.04	22.98		2.0	0.1	2 2 QECV	10	108526	0.003	0.018
22.98	24.99		2.0	0.1	2 2 QECV	95 95% quartz vein, cut by pyrite, epi, mt stringers locally. Brecciated in places.	108527	0.049	0.068
24.99	27.00		2.0	0.1	2 0 QECV	10 Epi veining locally associated with hem, red stringers. Quartz/ carbonate/ mt/ epi veining	108528	0.005	0.012
27.00	29.00		2.0	0.1	2 1 QECV	10 Rare mt veining.	108529	0.016	0.04
29.00	31.00		2.0	0.1	2 2 QECV	10 Quartz/ carbonate veining associated with mt, bound by epi alteration. disseminated pyrite.	108530	0.017	0.038
31.00	33.00		2.0	0.1	2 2 QECV	10	108531	0.037	0.087
33.00	35.00		2.0	0.1	2 0 QECV	10 Augite chloritized locally.	108532	0.073	0.184
35.00	37.00		2.0	0.1	2 17 QECV	10 Augite chloritized locally. Quartz veining associated with epidote and hematite stringers.	108533	0.024	0.043
37.00	39.00		2.0	0.1	2 QECV	10	108534	0.019	0.023
39.00	41.00		2.0	0.1	2 2 QECV	10 Epidote, quartz, hematite, pyrite veining. Rare quartz/ anhydrite purple veining.	108536	0.018	0.017
41.00	43.00		2.0	0.1	2 9 QECV	10	108537	0.022	0.025
43.00	45.00		2.0	0.1	2 30 QECV	10 Vuggy dissemolition features in quartz veining.	108538	0.044	0.078
45.00	47.00		2.0	0.1	2 21 QECV	10 Increased augite content in basalt. Increased quartz veining- local flooding.	108539	0.023	0.034
47.00	49.00		2.0	0.1	2 2 QECV	10	108540	0.084	0.205
49.00	51.00		2.0	0.1	2 0 QECV	10 disseminated pyrite associated with epidote alteration- moderate, pervasive locally, rare mt stringer.	108541	0.085	0.14
51.00	53.00		2.0	0.1	2 2 QECV	10	108542	0.043	0.11
53.00	55.00		2.0	0.1	2 0 QECV	10	108543	0.036	0.107

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
55.00	57.00	Fine-grained medium green amygdular propylitic	2.0	0.1	2 3 QECV	10	108544	0.016	0.031
						10			
57.00	59.00		2.0	0.1	1 18 QECV	10	108545	0.049	0.023
						10			
59.00	61.00		2.0	0.1	1 11 QECV	10	108546	0.032	0.017
61.00	63.00		2.0	0.1	1 28 QECV	10	108547	0.01	0.033
63.00	65.00		2.0	0.1	1 12 QECV	10	108548	0.032	0.056
65.00	67.00		2.0	0.1	1 34 QECV	10	108549	0.062	0.053
67.00	69.00		2.0	0.1	1 1 QECV	10	108550	0.057	0.074
69.00	71.00		2.0	0.1	1 2 QECV	10	108551	0.092	0.156
71.00	73.00		2.0	0.1	1 18 QECV	10	108552	0.073	0.143
73.00	75.00		2.0	0.1	1 1 QECV	10	108553	0.03	0.049
75.00	77.00		2.0	0.1	1 2 QECV	10	108554	0.03	0.042
77.00	79.00		2.0	0.1	5 10 QECV	10	108555	0.04	0.088
79.00	81.00		2.0	0.1	2 13 QECV	10	108556	0.081	0.137

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm		
81.00	82.85	Fine-grained medium green amygdular propylitic	2.0	0.1	2	2 QECV	10	Pyrite veining associated with quartz veining, vuggy dissemination feature lined by chlorite, epi, quartz carbonate. Very slightly brecciated.	108557	0.065	0.133
82.85	84.85		2.0	0.1	2	0 QECV	10	Slightly brecciated, minor dissemination feature in quartz/ carbonate veining associated with epidote locally.	108558	0.066	0.114
84.85	86.85		2.0	0.1	2	0 QECV	5	Very slight breccia texture evident. Reduced veining, quartz/ carbonate/ sericite or fine biotite.	108559	0.049	0.084
86.85	88.85		2.0	0.1	2	2 QECV	5		108560	0.035	0.107
88.85	90.82		2.0	0.1	2	1 QECV	5	Reduced visible augite. Dark green / black portions- high mt content.	108562	0.031	0.101
90.82	92.38		2.0	0.1	2	4 QECV	5	Xenolith, pale gray/ green, fine grained, disseminated pyrite and mt. Mt stringers associated with pyrite +/- chalcopyrite. Minor zeolite veining. Mt also disseminated in bleached flow.	108563	0.033	0.116
92.38	94.40		2.0	0.1	2	6 QECV	5	Slight brown coloration, possibly due to brown chlorite and or sericite +/- fine biotite alteration.	108564	0.042	0.08
94.40	96.40		2.0	0.1	2	1 QECV	5	Increased visible augite phenocrysts, increased epidote alteration- localized, weak to moderate patchy.	108565	0.08	0.251
96.40	98.40		2.0	0.1	2	0 QECV	5	Portion with increased epidote and pyrite infill vesicles- amygdules between 96.76m-97.42m.	108566	0.039	0.087
98.40	100.35		2.0	0.1	2	10 QECV	5	Quartz/ calcite/ pyrite stringers, reduced mt veining.	108567	0.042	0.053
100.35	102.41		2.0	0.1	2	11 QECV	15	Local increase in quartz/ carbonate/ zeolite veining - flooding between 100.35m- 100.64m. Smokey/ gray quartz mt veins. disseminated pyrite.	108568	0.07	0.066
102.41	104.40		2.0	0.1	2	1 QECV	10	Mt stringer, quartz veining associated with pyrite stringers and disseminations. Augite phenocrysts visible.	108569	0.078	0.069
104.40	106.40		2.0	0.1	2	1 QECV	10	Mt stringer about 2 cm thick bound by quartz vein at about 0-5 degrees to CA.	108570	0.121	0.143
106.40	108.40		2.0	0.1	2	1 QECV	10	Mt stringer about 2cm thick bound by quartz vein at about 0-5 degrees to CA. Local increase in fine disseminated pyrite and epidote.	108571	0.237	0.447
108.40	109.42		2.0	0.1	5	80 QECV	10		108572	0.18	0.281
109.42	111.42		2.0	0.1	5	22 QECV	10	Mafic dyke, carbonate phenocrysts. Chill margin with basalt- sharp contact. Post mineralization, minor zeolite veining.	108573	0.012	0.007

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
111.42	112.61	Fine-grained medium green amygdular propylitic	2.0	0.1	5 23 QECV	10 Mafic dyke, carbonate, K-feldspar pyroxene phenocrysts near the footwall contact. Chill margin, sharp contact. No mt or pyrite veining.	108574	0.03	0.032
112.61	114.61		2.0	0.5	5 12 QECV	10 0.5% chalcopryite near footwall chill margin. Low angled mt stringer- 0-5 degrees to CA.	108575	0.35	0.534
114.61	116.61		2.0	0.5	2 4 QECV	10 Mt aggregates and stringers increased chalcopryite aggregates associated with pyrite and quartz veining locally.	108576	0.083	0.087
116.61	118.60		2.0	0.5	2 59 QECV	10 Medium fine grained basalt, fine to medium (2mm- 7mm diameter) vesicles infilled with secondary epidote, pyrite amygdules texture. Patchy, localized, weak to moderate epidote alteration- confined to veining in places. Quartz calcite, mt veining randomly oriented. Brown staining possibly due to sericite alteration +/- fine biotite alteration- no flakes, biotite's platy cleavage not visible.	108577	0.076	0.077
118.60	120.60		2.0	0.5	2 46 QECV	15 Local increase in veining, mt, quartz, carbonate- randomly oriented.	108578	0.205	0.256
120.60	122.60		2.0	0.5	2 13 QECV	10 Increased chalcopryite aggregates and stringers. Local increase in epidote, patchy non pervasive alteration, weak to moderate.	108579	0.212	0.979
122.60	124.60		2.0	0.5	2 2 QECV	10 Increased amygdules, infilled by chlorite, same colour as ground basalt, therefore barely visible. Moly stringer present.	108580	0.262	0.502
124.60	126.60		2.0	0.7	2 6 QECV	10 Increased chalcopryite aggregates and stringers locally associated with quartz vein.	108581	0.331	2.56
126.60	128.60		2.0	0.5	2 1 QECV	10 Chalcopryite aggregates bound by quartz vein. Epi associated with quartz vein.	108582	0.391	0.826
128.60	130.60		2.0	0.5	2 9 QECV	7	108583	0.163	0.433
130.60	132.60		2.0	0.5	2 2 QECV	7 10cm silicified portion. Slight brown colour possibly due to sericite alteration +/- fine biotite alteration.	108584	0.487	0.76
132.60	133.26				2 26 QECV	7 Post mineralization mafic dyke. Contact defined by chilled margins. Carbonate phenocrysts.	108585	0.111	0.176
133.26	135.26		2.0	0.5	2 14 QECV	7 Small portions of dark green mafic dyke from previous sample- post mineralization.	108586	0.173	0.281
135.26	137.26		2.0	0.5	2 3 QECV	5 disseminated pyrite and chalcopryite, reduced veining, minor silicified portion. Chalcopryite stringer. Augite phenocrysts localized.	108588	0.232	0.369

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
137.26	139.29	Fine-grained medium green amygdular propylitic	2.0	0.5	2 12 QECV	5 Amygdules infilled by secondary mafic dark green material, possibly pyroxene. disseminated pyrite and chalcopyrite. Mt aggregates. Silicified portion - cut by mt stringers and epidote alteration. Brown stain due to sericite alteration +/- fine biotite.	108589	0.146	0.202
139.29	141.27		2.0	0.5	2 5 QECV	5 disseminated pyrite and chalcopyrite. Brown stain is possibly sericite alteration +/- fine biotite alteration. Minor potassic alteration. Fragmental broken portion with fragments cemented by fine /gray/ green gauge material.	108590	0.557	1.16
141.27	143.26		2.0	0.5	2 137 QECV	5 disseminated pyrite and chalcopyrite. Brown stain is possibly sericite alteration +/- fine biotite alteration. Minor potassic alteration. Fragmental broken portion with fragments cemented by fine /gray/ green gauge material. Fine disseminated mt in matrix.	108591	0.284	0.514
143.26	145.26		2.0	0.5	2 0 QECV	5 disseminated pyrite and chalcopyrite. Brown stain is possibly sericite alteration +/- fine biotite alteration. Minor potassic alteration. Fragmental broken portion with fragments cemented by fine /gray/ green gauge material. Slightly brecciated locally.	108592	0.127	0.167
145.26	147.26		2.0	0.5	2 2 QECV	5 disseminated pyrite and chalcopyrite. Brown stain is possibly sericite alteration +/- fine biotite alteration. Minor potassic alteration. Fragmental broken portion with fragments cemented by fine /gray/ green gauge material.	108593	0.077	0.122
147.26	149.28		2.0	0.5	2 4 QECV	5 disseminated pyrite stringers locally associated with mt. Epi alteration.	108594	0.124	0.247
149.28	151.28		2.0	0.5	2 17 QECV	5 Local epi and pyrite and chalcopyrite infilling amygdules-patchy silicified zones, augite phenocrysts, mt fine disseminated in basalt.	108595	0.161	0.261
151.28	153.25		2.0	0.5	2 4 QECV	5 10cm quartz anhydrite vein. Brown staining, possibly sericite alteration +/- fine biotite alteration. Secondary epidote / pyrite filled amygdules.	108596	0.379	0.589
153.25	155.28		2.0	0.5	2 8 QECV	5 Chalcopyrite+ mt+ quartz vein, Local epidote altered portions.	108597	0.125	0.275
155.28	157.25		2.0	0.5	2 57 QECV	5 Fine mt in basalt, also present as stringers.	108598	0.053	0.096
157.25	159.21		2.0	0.5	2 74 QECV	5 Local BKN zones.	108599	0.061	0.152
159.21	160.65		2.0	0.5	2 6 QECV	5 Amygdules infilled with quartz carbonate.	108600	0.093	0.404

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
160.65	161.22	Fine-grained medium green amygdular propylitic	2.0	0.5	2 16 QECV	5 Moderate epi alteration- increased amygdules infilled with secondary carbonate and quartz, diameter is 2mm average.	108601	0.02	0.024
161.22	163.22		2.0	0.5	2 11 QECV	5 Augite phenocrysts, reduced chalcopryite locally. Mt disseminated locally.	108602	0.173	0.373
163.22	165.20		2.0	0.5	2 52 QECV	5 Chalcopryite associated with quartz vein. Rare moly associated with quartz vein.	108603	0.11	0.171
165.20	167.20		2.0	0.5	5 37 QECV	5 Increased mt veining, associated with epi, quartz, carbonate veining. Local patchy epidote alteration- weak.	108604	0.151	0.321
167.20	169.20		2.0	0.5	2 44 QECV	5 Increased mt disseminated in basalt.	108605	0.049	0.079
169.20	171.20		2.0	0.5	2 34 QECV	5 Local breccia fragments of the same composition as host basalt. K-feldspar fragments/ flow.	108606	0.147	0.299
171.20	172.43		2.0	0.5	2 20 QECV	5	108607	0.162	0.182
172.43	174.43		2.0	0.5	2 2 QECV	5 Increased epidote alteration, moderate, locally pervasive. Local banding at about 45 degrees to CA-quartz veining, epi bands and fragmental.	108608	0.074	0.094
174.43	175.00		2.0	0.5	2 0 QECV	5	108609	0.425	0.599
175.00	176.69		2.0	0.5	2 1 QECV	5	108610	0.144	0.285
176.69	178.93	Fine-grained medium green chloritic silicic	1.0	0.1	2 2 QCCV	30 Increased carbonate veining, flooding, randomly oriented. No amygdules visible. Basalt is dark green, fine grained. disseminated pyrite is rare, trace chalcopryite. Reduced epi alteration- very weak to trace. Brown colour possibly due to sericite alteration +/- fine biotite alteration. Fragmental towards the hanging wall chill margin of the mafic dyke.	108611	0.079	0.116
178.93	179.91	BASALT							
178.93	179.91	Fine-grained dark green porphyritic chloritic		2	15 ZQCV	5 Mafic dyke, post mineralization. White carbonate phenocrysts +/- quartz associated. Zeolite/ quartz veining randomly oriented. Footwall contact is chill margin defined by BKN zone.	108612	0.015	0.019
179.91	219.05	BASALT FLOW							

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
179.91	181.56	Fine-grained medium green amygdular chloritic silicic	1.0	0.1	2 24 QCEV	7 Medium green, fine grained basalt, fine sized about 1mm diameter amygdules infilled possibly with secondary augite and chlorite. Quartz/ carbonate/ epidote veining randomly oriented , x-cut by quartz carbonate discontinuous stringers. Rare pyrite +/- chalcopyrite stringers. (Zeolite, 1cm thick vein at about 181.11m).	108614	0.053	0.103
181.56	183.56		1.0	0.1	2 QCEV	7 Increased veining- local quartz flooding. Minor red hem, veining associated with quartz veining. Localized amygdules.	108615	0.049	0.14
183.56	185.11		1.0	0.1	2 1 QCEV	15 Minor red hem veining associated with quartz veining.	108616	0.071	0.153
185.11	187.11		1.0	0.1	2 35 QCEV	15 Local epidote alteration. Decreased veining- discontinuous quartz carbonate stringers. Amygdules present locally.	108617	0.063	0.216
187.11	189.11		1.0	0.1	2 43 QCEV	7 Amygdules, fine, infilled dark green chlorite/ augite possibly.	108618	0.047	0.115
189.11	190.75		1.0	0.1	2 9 QCEV	7	108619	0.029	0.078
190.75	192.74		1.0	0.1	2 21 QCEV	20 Local increase in quartz carbonate veining, associated with hem veining. Quartz carbonate discontinuous stringers discontinuous. Red hem veining at about 161.66m, quartz hem veining between 192.16m-192.25m.	108620	0.056	0.211
192.74	194.70		1.0	0.1	2 9 QCEV	15 Red hem veining. Fragmental portion, fragments cemented by fine grained clay material. Contact almost parallel to CA- friable.	108621	0.025	0.199
194.70	196.74		1.0	0.1	2 14 QCEV	15 Fragments cemented by fine grained clay material. Epidote veining present locally. Slightly brecciated fragments, same composition as the host basalt- local breccia, appears friable.	108622	0.034	0.652
196.74	198.74		1.0	0.1	2 15 QCEV	10 Augite phenocrysts visible. Quartz/ carbonate veining randomly oriented. disseminated fine mt in basalt, present as veining locally. Quartz/ carbonate stringers discontinuous in places.	108623	0.096	0.252
198.74	200.74		1.0	0.1	2 20 QCEV	10 1cm thick quartz vein bound by mt stringers at about 198.83m. Quartz present as fragments locally. Local epidote altered portions- specks. Local hem veining.	108624	0.069	0.222
200.74	202.74		1.0	0.1	2 9 QCEV	10 Local hem veining stringers. Quartz, carbonate stringers discontinuous, local epidote alteration.	108625	0.09	0.295

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
202.74	204.74	Fine-grained medium green amygdular chloritic silicic	1.0	0.1	2 18 QCEV	10 Augite phenocrysts, local epidote altered portions. Local hem veining.	108626	0.179	0.605
204.74	206.74		1.0	0.1	2 9 QCEV	10 Quartz fragments present locally.	108627	0.303	0.806
206.74	208.74		1.0	0.1	2 17 QCEV	10 Quartz fragments present locally. Local breccia.	108628	0.076	0.354
208.74	210.74		1.0	0.1	2 19 QCEV	10 Epidote altered portions. Sericite and silicified portion between 210.40m- 210.58m.	108629	0.109	0.552
210.74	212.74		1.0	0.1	2 9 QCEV	10 Zeolite quartz veining between 211.20m-211.43m. Minor zeolite/ quartz veining associated with pyrite/ mt stringers.	108630	0.118	0.241
212.74	214.74		1.0	0.1	2 23 QCEV	10 Monzodiorite xenolith between 213.90m- 214. 25m. Xenolith has plagioclase and K-feldspar phenocrysts.	108631	0.084	0.27
214.74	216.74		1.0	0.3	2 39 QCEV	15 Local increase in quartz carbonate veining, associated with mt, chalcopyrite and epidote locally.	108632	0.08	0.215
216.74	219.05		1.0	0.1	2 12 QCEV	10 Mafic dyke between 217.18m- 217.40m. Augite phenocrysts in basalt. Amygdules barely visible.	108633	0.052	0.07
219.05	224.54	BASALT							
219.05	221.05	Fine-grained dark green porphyritic chloritic			24 QCCV 45	5 Mafic, post mineralization dyke. White carbonate phenocrysts +/- quartz associated. Quartz veining at about 45 degrees to CA. Basalt fragments throughout the mafic dyke (220.27m- 221.35m).	108634	0.029	0.048
221.05	223.05				31 QCCV	5 Rare red hem veining.	108635	0.018	0.041
223.05	224.54				26 QCCV	5	108636	0.01	0.01
224.54	372.14	BASALT FLOW							
224.54	226.54	Fine-grained medium green amygdular chloritic silicic	1.0	0.1	2 21 QZCGV	10 Medium green fine grained basalt. Quartz/ calcite, randomly oriented veining. Augite dark green phenocrysts. Minor gypsum veining. Amygdules infilled with secondary chlorite, present locally. Minor red hem veining. dissemoluted feature where gypsum has been removed. Pyrite +/- chalcopyrite disseminated in basalt locally.	108637	0.082	0.285
226.54	228.60		1.0	0.1	2 36 QZCGV	10 Amygdules infilled with quartz/ calcite- slight effervescence with HCl.	108638	0.041	0.068
228.60	230.60		1.0	0.5	2 3 QZCGV	10 Increased chalcopyrite aggregates. Fine disseminated mt in host rock. Mt veining associated with quartz locally. disseminated pyrite and chalcopyrite.	108640	0.166	0.484

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
230.60	232.60	Fine-grained medium green amygdular chloritic silicic	2.0	0.5	2 10 QZCGV	10 Local increase in quartz veining. Increased pyrite +/- chalcopyrite aggregates, locally associated with quartz veining.	108641	0.184	0.25
232.60	234.60		2.0	0.5	2 14 QZCGV	10	108642	0.247	0.579
234.60	236.60		2.0	0.5	2 5 QZCGV	10 Smokey gray quartz vein between 235.20m- 235.43m cut by 2cm thick gypsum vein. Brown staining at the end of sample- possibly sericite alteration +/- fine biotite alteration- pervasive, weak to moderate alteration.	108643	0.336	0.758
236.60	238.60		2.0	0.5	2 32 QZCGV	10	108644	0.083	0.245
238.60	240.60		2.0	0.5	2 5 QZCGV	10 Smokey gray quartz vein associated with pyrite +/- chalcopyrite stringers. Local BKN zone, rare red hem veining.	108645	0.08	0.285
240.60	242.60		2.0	0.5	2 34 QZCGV	10 Augite phenocrysts, amygdules infilled with secondary pyrite.	108646	0.165	0.287
242.60	244.60		2.0	0.5	2 3 QZCGV	5 Massive fine grained, no amygdules visible, reduced veining locally.	108647	0.142	0.23
244.60	246.60		2.0	0.5	2 8 QZCGV	10 Increased pyrite +/- chalcopyrite content, fine disseminated, aggregates and stringers. Local epidote veining. Mt stringers.	108648	0.091	0.307
246.60	248.60		2.0	0.5	2 1 QZCGV	10 Local increase in disseminated pyrite +/- chalcopyrite. Sericitized and silicified, light gray portion cut by quartz, zeolite, epidote veining.	108649	0.126	0.319
248.60	250.60		2.0	0.5	2 13 QZCGV	10 Augite phenocrysts, gypsum veining.	108650	0.23	0.468
250.60	252.60		2.0	0.5	2 8 QZCV	10 Large pyrite and chalcopyrite aggregate, about 3cm widest width associated with quartz and moly vein.	108651	0.105	0.299
252.60	254.60		2.0	0.5	5 26 QZCV	10 plagioclase phenocrysts present. Augite amygdules infilled with melanocratic mafics. Gypsum, quartz, mt stringers.	108652	0.103	0.141
254.60	256.60		2.0	0.5	5 53 QZCV	10 Increased mt disseminated in host rock, also present as veining- associated with pyrite and chalcopyrite aggregates.	108653	0.087	0.186
256.60	258.60		2.0	0.5	5 10 QZCV	10 Large number of amygdules infilled with epidote, mt, mafics. Increased chalcopyrite content >0.7% locally.	108654	0.128	0.219
258.60	260.60		2.0	0.5	5 15 QZCV	10 Increased mt stringers and veining, increased augite phenocrysts.	108655	0.09	0.132
260.60	262.60		2.0	0.5	5 79 QZCV	10 Quartz calcite veining with dissemination features, associated with pyrite +/- chalcopyrite aggregates.	108656	0.086	0.175

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
262.60	264.60	Fine-grained medium green amygdular chloritic silicic	2.0	0.5	5 36 QZCV	10	108657	0.076	0.137
264.60	266.60		2.0	0.5	5 26 QZCV	10 Mt disseminations and stringers, associated with pyrite and chalcopyrite. Augite phenocrysts.	108658	0.174	0.365
266.60	268.60		2.0	0.5	5 22 QZCV	10 Silicified portion, x-cut by quartz, mt stringers associated with pyrite +/- chalcopyrite. Randomly oriented.	108659	0.176	0.302
268.60	270.60		2.0	0.5	5 21 QZCV	10 Chalcopyrite associated with quartz, mt veining. Pyrite +/- chalcopyrite finely disseminated in basalt. Slight brown colour possibly due to sericite alteration +/- fine biotite alteration.	108660	0.176	0.381
270.60	272.60		2.0	0.5	5 8 QZCV	10	108661	0.131	0.293
272.60	274.60		2.0	0.5	5 26 QZCV	10 Chalcopyrite associated with quartz, mt veining. Pyrite +/- chalcopyrite finely disseminated in basalt. Slight brown colour possibly due to sericite alteration +/- fine biotite alteration. Rare zeolite veining associated with quartz veining. Local potassic alteration.	108662	0.128	0.246
274.60	276.60		2.0	0.5	5 30 QZCV	10 Quartz/ carbonate zeolite veining between 275.28m-275.45m.	108663	0.072	0.15
276.60	278.60		2.0	0.5	5 13 QZCV	10 Smokey/ gray quartz vein at about 276.62m- 276.67m and 277.65m- 277.80m associated with weak sericite alteration.	108664	0.12	0.286
278.60	280.60		2.0	0.5	5 32 QZCV	7 Locally reduced veining. Chalcopyrite aggregate associated with quartz. Reduced pyrite and chalcopyrite.	108666	0.071	0.134
280.60	282.60		2.0	0.5	5 55 QZCV	7 Local BKN zones.	108667	0.049	0.085
282.60	284.60		2.0	0.5	7 72 QZCV	7 Increased fine mt in basalt.	108668	0.077	0.154
284.60	286.60		2.0	0.5	7 109 QZCV	7 Increased mt veining associated with quartz veining.	108669	0.107	0.205
286.60	288.60		2.0	0.5	7 8 QZCV	7	108670	0.286	0.67
288.60	290.60		2.0	0.5	7 8 QZCV	7	108671	0.237	0.514
290.60	292.60		1.0	0.1	5 22 QZCGV	10 Medium green, fine grained basalt. Minor brown stain, possibly sericite alteration +/- fine biotite alteration. Dark green augite phenocrysts. Amygdules infilled with secondary mafics, possibly chlorite or pyroxene. Mt aggregates present. Quartz, carbonate, gypsum locally associated with gypsum or pyrite, randomly oriented, irregularly spaced- discontinuous stringers locally.	108672	0.04	0.061
292.60	294.25		1.0	0.1	5 75 QZCGV	10	108673	0.067	0.143

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm		
294.25	296.38	Fine-grained light grey silicic sericitic	2.0	0.1	8 QZCV	20	Light gray, fine grained, moderately silicified and sericitized pervasive alteration. Zeolite/ quartz/ mt veining, randomly oriented, irregularly spaced. disseminated pyrite and chalcopyrite, present as aggregates locally. Mt aggregates also present locally. Minor vuggy dissolution structures, associated with zeolite/ carbonate veining.	108674	0.161	0.323	
296.38	298.30	Fine-grained medium green chloritic silicic	0.5	3	20 QCHV	10	Medium to dark green fine grained basalt. Rare amygdules, quartz\ carbonate veining, randomly oriented. Minor epidote alteration. Rare red hem lining joints. Trace pyrite, fine disseminations. BKN.	108675	0.086	0.182	
298.30	300.30		0.5	3	49 QCHV	10	Increased mt disseminated in basalt.	108676	0.068	0.15	
300.30	302.36		0.5	3	8 QCHV	10	Trace zeolite veining.	108677	0.085	0.181	
302.36	304.36		0.5	3	18 QCHV	10	Trace zeolite veining- locally associated with mt disseminations.	108678	0.149	0.272	
304.36	306.36		0.5	3	35 QCHV	10		108679	0.147	0.283	
306.36	308.36		0.5	3	7 QCHV	10		108680	0.152	0.246	
308.36	310.36		0.5	3	20 QCHV	10		108681	0.064	0.104	
310.36	312.36		0.5	3	11 QCHV	10		108682	0.11	0.218	
312.36	314.36		0.5	3	18 QCHV	10		108683	0.125	0.261	
314.36	316.36		0.5	3	26 QCHV	10		108684	0.122	0.194	
316.36	318.36		0.5	3	5 QCHV	10		108685	0.211	0.374	
318.36	320.36		0.5	3	9 QCHV	10		108686	0.109	0.194	
320.36	322.36		0.5	3	5 QCHV	10		108687	0.179	0.392	
322.36	324.36		0.5	3	7 QCHV	10		108688	0.132	0.262	
324.36	326.36		0.5	3	8 QCHV	10	Medium green, fine grained, competent basalt. Fine disseminated pyrite +/- chalcopyrite. Mt also fine disseminated in basalt present as veining and aggregates associated with quartz vein. Zeolite quartz vein at about 326.72m. Local potassic altered portion.	108689	0.058	0.114	
326.36	328.36		1.0	0.1	2	7 QZCV	10	Minor BKN zones.	108690	0.147	0.322
328.36	330.36		1.0	0.1	2	32 QZCV	10		108692	0.088	0.252
330.36	332.36		1.0	0.1	2	7 QZCV	10		108693	0.099	0.21
332.36	334.36		1.0	0.1	2	41 QZCV	10		108694	0.105	0.175

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
334.36	336.36	Fine-grained medium green chloritic silicic	1.0	0.1	2 14 QZCV	10	108695	0.072	0.141
336.36	338.36		1.0	0.1	2 19 QGV	10 Increased zeolite veining at 337.13m- 337.27m. Increased gypsum veining associated with quartz, mt and pyrite.	108696	0.034	0.063
338.36	340.36		1.0	0.1	2 24 QGV	10 Increased zeolite and gypsum veining.	108697	0.148	0.35
340.36	342.36		1.0	0.1	2 149 QGV	10 Smokey/ gray quartz vein between 340.57m- 340.85m. X-cut by pyrite stringer. Increased fine disseminated mt.	108698	0.12	0.295
342.36	344.36		1.0	0.1	2 30 QGV	10 Smokey/ gray quartz vein between 343.00m- 343.38m.	108699	0.08	0.164
344.36	346.36		1.0	0.1	2 16 QGV	10	108700	0.09	0.193
346.36	348.36		1.0	0.1	2 58 QGV	10	108701	0.03	0.078
348.36	350.36		1.0	0.1	2 21 QGV	10 Quartz/ anhydrite veining between 348.63m- 348.82m- associated with pyrite.	108702	0.068	0.147
350.36	352.36		1.0	0.1	2 51 QGV	10 Quartz/ zeolite veining associated with pyrite +/- chalcopyrite and mt between 351.81m- 352.04m.	108703	0.175	0.459
352.36	354.36		1.0	0.1	2 60 QGV	10 Zeolite/ quartz/ mt/ pyrite +/- chalcopyrite/ moly veining between 352.49m- 352.73m. Quartz/ zeolite veining.	108704	0.112	0.241
354.36	356.36		1.0	0.1	2 70 QGZV	10 Medium green fine grained basalt. Zeolite/ quartz/ gypsum, randomly oriented veining. Irregularly spaced rarely associated with pyrite. Mt disseminated in basalt and present as veining. Rare amygdules visible locally along with augite phenocrysts.	108705	0.103	0.24
356.36	358.36		1.0	0.1	2 79 QGZV	10	108706	0.096	0.264
358.36	360.36		1.0	0.1	2 15 QGZV	10 Potassic altered portion with mt aggregates between 359.64m- 359.95m.	108707	0.105	0.244
360.36	362.36		1.0	0.1	2 53 QGZV	10 Quartz veining at 360.36m associated with pyrite, epi, chlorite and mt. Minor BKN zones.	108708	0.181	0.431
362.36	364.36		1.0	0.1	2 40 QGZV	10 Quartz veining associated with pyrite and minor zeolite at 362.40m and between 363.69m- 363.79m. Augite phenocrysts.	108709	0.173	0.366
364.36	366.36		1.0	0.1	2 50 QGZV	10 Quartz/ mt veining.	108710	0.131	0.284
366.36	368.36		1.0	0.1	2 27 QGZV	10 Augite phenocrysts, minor chalcopyrite aggregates associated with quartz vein.	108711	0.233	0.498
368.36	370.36		1.0	0.1	2 94 QGZV	10 Discontinuous quartz/ gypsum stringers, randomly oriented. Weak potassic alteration.	108712	0.137	0.3

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
370.36	372.14	Fine-grained medium green chloritic silicic	1.0	0.1	2 58 QGZV	10 Amygdules and augite phenocrysts. Quartz veining about 5cm thick associated with mt and trace moly at about 371.91m- 371.95m. High number of augite phenocrysts near the chilled margin of the mafic dyke.	108713	0.074	0.208
372.14	384.1	DIABASE							
372.14	374.14	Fine-grained light green porphyritic chloritic			20 QGZV	10 Light to medium green, fine grained, chloritized mafic dyke with calcite/ quartz phenocrysts which fizz with HCl. Dyke is post- mineralization cut randomly by zeolite/ quartz veining, irregularly spaced. K-feldspar present locally. Basalt fragments present in the chloritic mafic dyke.	108714	0.009	0.007
374.14	376.15				31 QGZV	10	108715	0.01	0.018
376.15	378.15				15 QGZV	10	108716	0.009	0.016
378.15	380.15				20 QGZV	10 Mt veining at about 45 degrees to CA associated with quartz veining.	108718	0.05	0.249
380.15	382.15				24 QGZV	10	108719	0.023	0.01
382.15	384.10				21 QGZV	10	108720	0.008	-2
384.1	400.58	BASALT FLOW							
384.10	386.10	Fine-medium-grained medium green silicic magnetite	2.0	0.5	20 219 QZV	45 30	108721	0.141	0.453
						Medium to dark green/ black, fine to medium grained. Protolith overprinted by quartz/ mt flooding. Quartz veining associated with mt cutting at about 45 degrees to CA with thickness between 2-10cm. Evenly spaced, about 20cm apart, forming a banded appearance. Dominant veining cut by a shallow angled (about 10 degrees) quartz/ zeolite veining. Dominant veining associated with pyrite stringers and aggregates +/- chalcopyrite. Increased mt content, present as disseminations in host rock and as veining associated with quartz/ pyrite veining. Protolith is overprinted by alteration and the lithology is possibly basalt or monzodiorite (Transitional to 400.58m). Porphyritic portions- quartz phenocrysts.			
386.10	388.10		2.0	0.5	20 104 QZV	30	108722	0.15	0.852
388.10	390.10		2.0	0.5	20 334 QZV	30	108723	0.096	0.495
390.10	392.10		2.0	0.5	20 99 QZV	30	108724	0.083	0.522

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
392.10	394.10	Fine-medium-grained medium green silicic magnetite	2.0	0.5	20 269 QZV	30 Mafic dyke between 393.41m- 393.77m, post mineralization. Quartz/ carbonate phenocrysts- 24.3 reading on Kappa meter.	108725	0.083	0.24
394.10	396.10		2.0	0.5	20 127 QZV	30 Red hem/ mt veining at about 395.33m.	108726	0.132	0.149
396.10	398.10		2.0	0.5	20 109 QZV	30 3cm thick post mineralization dyke at 10 degrees CA between 396.80m- 396.87m with chill margin.	108727	0.072	0.345
398.10	399.68		2.0	0.5	20 209 QZV	30 Quartz fragmental between 397.87m- 397.28m	108728	0.102	0.342
399.68	400.58		2.0	0.5	20 179 QZV	90 Quartz vein x-cut by mt stringers and pyrite. Defining contact with quartz monzodiorite.	108729	0.208	0.751
400.58	423.99	QUARTZ MONZONITE							
400.58	402.58	Fine-medium-grained medium green porphyritic silicic magnetite	1.0	0.5	10 83 QVN	30 Quartz monzodiorite. Locally chloritized giving a green coloration. Smokey/ gray quartz veining at about 45 degrees cut by discontinuous randomly oriented stringers. Mt present in matrix, fine grained and as stringers and veining. Py+/- cpy stringers and aggregates associated with Smoky/ gray quartz vein locally. Quartz veining is on average at about 45 degrees to CA forming banding, thickness between 0.5cm to 5cm. Unevenly spaced.	108730	0.087	0.198
402.58	404.58		1.0	0.5	10 21 QVN	30 Local BKN zone, slight brecciated between 403.30m- 403.91m.	108731	0.112	0.345
404.58	406.58		1.0	0.5	10 130 QVN	30 Mafic dyke, post mineralization with carbonate/ quartz phenocrysts between 405. 66m- 406. 29m.	108732	0.032	0.092
406.58	408.58		1.0	0.5	10 111 QVN	30 30cm quartz vein between 407.24m- 407.62m associated with mt/ zeolite veining +/- pyrite +/- cpy, increase in K-feldspar phenocrysts.	108733	0.095	0.189
408.58	410.58		1.0	0.5	10 115 QVN	30	108734	0.068	0.173
410.58	412.58		1.0	0.5	10 109 QVN	30	108735	0.04	0.156
412.58	414.58		1.0	0.5	20 179 QVN	30 Increased mt content in porphyritic matrix. Local potassic altered portions.	108736	0.035	0.143
414.58	416.58		1.0	0.5	20 186 QVN	30	108737	0.023	0.065
416.58	418.58		1.0	0.5	20 33 QVN	30 Vuggy dissemination structures in quartz/ carbonate veining where carbonate has been disseminated.	108738	0.046	0.133
418.58	420.58		1.0	0.5	20 99 QVN	30	108739	0.036	0.097
420.58	422.58		1.0	0.5	20 47 QVN	30	108740	0.06	0.164

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
422.58	423.99	Fine-medium-grained medium green porphyritic silicic magnetite	1.0	0.5	20 8 QVN	30	108741	0.019	0.07
423.99	506	BASALT FLOW							
423.99	425.99	Fine-grained medium green silicic magnetite	1.0	0.5	10 111 QVN	45 30	108742	0.084	0.169
425.99	427.99		1.0	0.5	10 257 QVN	30	108744	0.057	0.269
427.99	429.99		1.0	0.5	10 87 QVN	30	108745	0.07	0.162
429.99	431.99		1.0	0.5	10 216 QVN	30	108746	0.054	0.265
431.99	433.99		1.0	0.5	10 131 QVN	30	108747	0.105	0.648
433.99	435.99		1.0	0.5	10 47 QZV	30	108748	0.075	0.339
435.99	438.00		3.0	0.5	10 72 QZV	30	108749	0.118	0.177
438.00	440.00		1.0	0.5	10 24 QZV	30	108750	0.179	0.427
440.00	442.00		3.0	0.5	10 QZV	30	108751	0.103	0.508
442.00	444.00		1.0	0.5	10 47 QZV	30	108752	0.103	0.51
444.00	446.00		1.0	0.5	10 59 QZV	30	108753	0.139	0.503
446.00	448.00		1.0	0.5	10 94 QZV	30	108754	0.068	0.365
448.00	450.00		1.0	0.5	10 111 QZV	30	108755	0.054	0.243
450.00	452.00		1.0	0.5	10 123 QVN	30	108756	0.141	0.732
452.00	454.00		1.0	0.5	10 54 QVN	30	108757	0.063	0.315

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
454.00	456.00	Fine-grained medium green silicic magnetite	1.0	0.5	10 171 QVN	30	108758	0.095	0.416
456.00	458.00		1.0	0.5	10 265 QVN	30	108759	0.089	0.435
						plagclase phenocrysts in weak to moderate chlorite/ epidote altered- porphyritic zone. Increased fine mt in matrix.			
458.00	460.00		1.0	0.5	10 104 QVN	30	108760	0.063	0.46
460.00	462.00		1.0	0.5	10 144 QVN	30	108761	0.122	0.619
462.00	464.00		1.0	0.5	10 133 QVN	30	108762	0.137	0.839
464.00	466.00	Fine-medium-grained medium green porphyritic silicic magnetite	1.0	0.5	10 222 QVN	45 15	108763	0.092	0.389
						Medium to dark green fine to medium grained basalt. Fine to medium sized plagclase phenocrysts in the basalt and augite phenocrysts giving a porphyritic texture. Minor amygdules filled with dark green mafic material. Zeolite quartz veining associated with mt stringers and veining. Pyrite and chalcopyrite stringers in smoky/ gray vein. Mt fine grained in basalt. Rare hem veining. Weak epi alteration.			
466.00	468.00		1.0	0.5	10 143 QVN	45 15	108764	0.162	0.829
468.00	470.00		1.0	0.5	10 108 QVN	45 15	108765	0.218	0.811
470.00	472.00		1.0	0.5	10 40 QVN	45 15	108766	0.2	0.728
472.00	474.00		1.0	0.5	10 101 QVN	45 15	108767	0.275	0.968
474.00	476.00		1.0	0.5	10 162 QVN	45 15	108768	0.231	0.959
476.00	478.00		1.0	0.5	10 72 QVN	45 15	108770	0.057	0.12
						Smokey/grey qtz vein associated with red hem/mt + py +/- cpy stringers. Augite phenocrysts.			
478.00	480.00		1.0	0.5	10 58 QVN	10	108771	0.239	0.861
						Reduced qtz veining.			
480.00	482.00		1.0	0.5	10 209 QVN	15	108772	0.135	0.647
						Locally increased qtz veining.			
482.00	484.00		1.0	0.5	10 75 QVN	15	108773	0.192	0.646
						Smokey gray qtz + mt veining. Py +/- cpy fine disseminations.			
484.00	486.00		1.0	0.1	10 143 QVN	15	108774	0.172	0.573
						Augite phenocrysts in dark green/black fine mt rich basalt. Sporadic cpy aggregate.			
486.00	488.00		1.0	0.1	10 66 QVN	15	108775	0.099	0.385
488.00	490.00		1.0	0.1	10 142 QVN	15	108776	0.09	0.385
						Increased fine mt dissem in basalt.			
490.00	492.00		1.0	0.1	10 48 QVN	15	108777	0.143	0.631
						Epidote veining and pervasive potassic alteration. Augite and plagclase phenocrysts in basalt.			
492.00	494.00		1.0	0.1	10 78 QVN	15	108778	0.195	0.575
						Augite phenocrysts.			

Hole Number: KN-02-23

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
494.00	496.00	Fine-medium-grained medium green porphyritic silicic magnetite	1.0	0.1	10 67 QVN	15 Minor zeolite veining, randomly oriented.	108779	0.068	0.267
496.00	498.00		1.0	0.1	10 107 QVN	10 Locally reduced qtz veining, randomly oriented. Plag phenocrysts.	108780	0.097	0.287
498.00	500.00		1.0	0.1	10 62 QVN	10 Plag phenocrysts + augite.	108781	0.055	0.181
500.00	502.00		1.0	0.1	10 63 QVN	10 Augite phenocrysts, epidote alteration, zeolite/qtz veining.	108782	0.036	0.064
502.00	504.00		1.0	0.1	10 72 QVN		108783	0.055	0.177
504.00	506.00		1.0	0.1	10 195 QVN	10 Gradual contact between basalt and monzodiorite-localized increase in fine mt dissem in basalt.	108784	0.043	0.245
506	530.02	QUARTZ MONZONITE							
506.00	508.00	Fine-medium-grained medium brown porphyritic silicic potassic	2.0	0.1	2 29 QZV	10 Medium brown/green in places, porphyritic, plagclase, pyroxene, kfsp (locally) and qtz phenocrysts in fine grained matrix. Matrix is light green consisting possibly of fine grained plag, kfsp, qtz and pyroxene. Veining-qtz, mt, zeolite, associated with py +/- cpy locally is randomly oriented, irregularly spaced. Minor red hem veining.	108785	0.012	0.109
508.00	510.00		2.0	0.1	2 49 QZV		108786	0.025	0.073
510.00	512.00		2.0	0.1	2 27 QZV		108787	0.025	0.034
512.00	514.00		2.0	0.1	2 8 QZV	10 Same as 108785 Zeolite/qtz vein between 512.73m-512.99m associated with py-about 3% locally. High fine mt between 512.50-512.73m.	108788	0.022	0.07
514.00	516.00		2.0	0.1	2 19 QZV	7 Reduced mt veining and fine dissememinations in qtz monzodiorite matrix.	108789	0.015	0.019
516.00	518.00		2.0	0.1	2 7 QZV		108790	0.012	0.039
518.00	520.00		2.0	0.1	2 57 QZV	15 Qtz/mt/py +/-cpy veining between 519.52m-520.00. 147 on Kappa meter.	108791	0.022	0.044
520.00	522.00		2.0	0.1	2 55 QZV	10 Smokey/gray qtz vein associated with mt aggregates + py aggregates.	108792	0.011	0.017
522.00	524.00		2.0	0.1	2 15 QZV		108793	0.007	0.016
524.00	526.00		2.0	0.1	2 8 QZV		108794	0.009	0.021
526.00	528.00		2.0	0.1	2 37 QZV		108796	0.011	0.038
528.00	530.02		2.0	0.1	2 8 QZV	15 Contact between qtz monzodiorite and basalt defined by increased veining, zeo, carb, qtz randomly oriented.	108797	0.032	0.093

Hole Number: KN-02-23

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
530.02	902.98	BASALT FLOW							
530.02	532.02	Fine-grained medium green porphyritic chloritic silicic	2.0	0.1	5 62 QZV	15 Medium to dark green, fine grained basalt with augite phenocrysts. Qtz/zeolite veining locally associated with mt. Py veining, locally associated with qtz vein. Red mt stringer rare. Veining is randomly oriented and irregularly spaced. Qtz fragments, possible local breccia of qtz veining. Qtz/zeo also present as discontinuous stringers. Localized brown colourization possibly due to sericite or fine biotite alteration. Py +/- cpy also appears as aggregates and fine disseminations.	108798	0.131	0.376
532.02	534.02		2.0	0.1	5 25 QZV	15	108799	0.115	0.236
534.02	536.02		2.0	0.1	5 24 QZV	15	108800	0.131	0.397
536.02	538.02		2.0	0.1	5 64 QZV	15 Qtz vein between 536.54m-536.64m associated with py + mt aggregates. BFP fragments.	108801	0.095	0.28
538.02	540.02		2.0	0.1	5 26 QZV	15 BFP fragments associated with rare epidote veining + hem. Bladed feldspar phenocrysts barely visible.	108802	0.107	0.174
540.02	542.02		2.0	0.1	5 39 QZV	15 Localized increase in qtz discontinuous stringers.	108803	0.112	0.211
542.02	544.02		2.0	0.1	5 15 QZV	15 Brown stain-possibly sericite or fine biotite alteration.	108804	0.178	0.471
544.02	546.02		2.0	0.1	5 17 QZV	10 Augite + plag phenocrysts visible in vuggy dissemolition structures. Increased brown colour/sericite or bt, friable.	108805	0.169	0.354
546.02	548.02		2.0	0.1	5 2 QZV	10 Augite + plag phenocrysts visible in vuggy dissemolition structures. Increased brown colour/sericite or bt, friable. Decreased veining.	108806	0.183	0.456
548.02	550.02		2.0	0.1	5 45 QZV	10	108807	0.274	0.747
550.02	552.02		2.0	0.1	5 15 QZV	10 Smokey/gray qtz vein cut by py veining at about 45 degrees to core axis. Vuggy structures. Brown colour is probably sericite or fine bt alteration.	108808	0.264	0.928
552.02	554.02		2.0	0.1	5 17 QZV	10 Smokey qtz vein associated with py stringers between 552.07-552.14m.	108809	0.232	0.431
554.02	556.02		2.0	0.1	5 29 QZV	10	108810	0.196	0.354
556.02	558.02		2.0	0.1	5 15 QZV	10 Less chloritized portions-green/gray colour.	108811	0.265	0.554
558.02	560.02		2.0	0.1	5 72 QZV	10	108812	0.236	0.378
560.02	562.02		2.0	0.1	5 42 QZV	10 Less chloritized, moderately silicified and sericitized-giving green/gray colour, augite phenocrysts.	108813	0.16	0.297

Hole Number: KN-02-23

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
562.02	564.02	Fine-grained medium green porphyritic chloritic silicic	2.0	0.1	5 34 QZV	10 Moderately to highly chloritized + silicified, minor broken zones.	108814	0.122	0.218
564.02	566.02		2.0	0.1	5 40 QZV	10 Mafic dyke between 565.12m-565.32m with minor mafic phenocrysts.	108815	0.098	0.155
566.02	568.02		2.0	0.1	5 20 QZV	10	108816	0.085	0.191
568.02	570.02		2.0	0.1	5 21 QZV	10 Slight brown colour possibly due to sericite or fine bt alteration.	108817	0.227	0.432
570.02	572.02		2.0	0.1	5 13 QZV	10 Portions of varying silicification, sericitization and chloritization, friable in places.	108818	0.151	0.193
572.02	574.02		2.0	0.1	5 17 QZV	10	108819	0.177	0.428
574.02	576.02		2.0	0.1	5 33 QZV	10 Portions of varying silicification, sericitization and chloritization, friable in places. Fine disseminated in basalt.	108820	0.177	0.314
576.02	578.02		2.0	0.1	5 9 QZV	10	108822	0.262	0.585
578.02	580.02		2.0	0.1	5 43 QZV	10 Mt. Aggregates associated with qtz vein. Increased mt fine disseminated in basalt.	108823	0.196	0.345
580.02	582.02		2.0	0.1	5 72 QZV	10 Local increases in disseminated py, associated with qtz vein in places. Increased silicification.	108824	0.187	0.256
582.02	584.02		2.0	0.1	5 17 QZV	10 Increased silicification.	108825	0.164	0.159
584.02	586.02		2.0	0.1	5 8 QZV	10	108826	0.156	0.338
586.02	588.02		2.0	0.1	5 29 QZV	10	108827	0.198	0.39
588.02	590.02		2.0	0.1	5 4 QZV	10 Increased silicification. Increased in mt stringers.	108828	0.119	0.16
590.02	592.02		2.0	0.1	5 12 QZV	10	108829	0.181	0.332
592.02	594.02		2.0	0.1	5 32 QZV	10	108830	0.115	0.213
594.02	596.02		2.0	0.1	5 12 QZV	10 Minor porphyritic texture, protolith overprinted locally.	108831	0.245	0.422
596.02	598.02		2.0	0.1	5 11 QZV	10 Increased qtz/zeolite veining.	108832	0.14	0.188
598.02	600.02		2.0	0.1	5 6 QZV	11 Medium to dark green, fine grained basalt with augite phenocrysts. Qtz/zeolite veining locally associated with py stringers. Py +/- cpy also disseminated in basalt. Veining is randomly oriented and irregularly spaced. Minor vuggy disseminated features in zeolite/Qtz veining. Silicified moderate.	108833	0.133	0.189
600.02	602.02		2.0	0.1	5 8 QZV	12 Local BKN zones.	108834	0.109	0.071
602.02	604.03		2.0	0.1	5 5 QZV	13	108835	0.064	0.135

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
604.03	606.03	Fine-grained medium green porphyritic chloritic silicic	2.0	0.1	5 4 QZV	14 Qtz/mt/py veins. ~5cm at about 605.70m.	108836	0.093	0.086
606.03	608.03		2.0	0.1	5 56 QZV	15 Fine dissem py.	108837	0.126	0.125
608.03	610.03		2.0	0.1	5 20 QZV	16 Smokey/gray qtz vein assoc with py 608.90m-608.96m.	108838	0.457	1
610.03	612.03		2.0	0.1	5 26 QZV	17 Qtz vein between 610.69m-610.78m. Qtz /zeo vein between 611.25-611.32m	108839	0.19	0.367
612.03	614.03		2.0	0.1	5 12 QZV	18 BKN zones	108840	0.07	0.079
614.03	616.03		2.0	0.1	5 15 QZV	19	108841	0.05	0.069
616.03	618.03		2.0	0.1	5 15 QZV	20 Augite and plag phenocrysts - in light gray fine grained matrix - slightly sericitized basalt.	108842	0.066	0.096
618.03	620.03		2.0	0.1	5 15 QZV	21	108843	0.085	0.127
620.03	622.03		2.0	0.1	5 6 QZV	22 Chloritized and moderate to high sericitized, brown stain - chl or ser or fine biotite.	108844	0.098	0.136
622.03	624.03		2.0	0.1	5 1 QZV	23	108845	0.178	0.159
624.03	626.03		2.0	0.1	5 10 QZV	24 Moderate to high silicification - portion.	108846	0.135	0.437
626.03	628.03		2.0	0.1	5 12 QZV	25 Moderate to high silicification.	108848	0.066	0.064
628.03	630.03		2.0	0.1	5 26 QZV	26 Zeolite/qtz veining assoc with py aggregates.	108849	0.156	0.253
630.03	632.03		2.0	0.1	5 15 QZV	27 Epidote, weak alteration between about 631.80-632.03m.	108850	0.155	0.482
632.03	634.03		2.0	0.1	5 30 QZV	28 Epidote weak alteration between 632.03-633.00m. Moderate sericitized and chloritized portion.	108851	0.103	0.059
634.03	636.03		2.0	0.1	5 17 QZV	29 Moderate to high silicification.	108852	0.102	0.216
636.03	638.03		2.0	0.1	5 21 QZV	30	108853	0.113	0.135
638.03	640.03		2.0	0.1	5 16 QZV	31	108854	0.081	0.067
640.03	642.03		2.0	0.1	5 14 QZV	32 Minor epidote assoc with qtz veining.	108855	0.05	0.055
642.03	644.03		2.0	0.1	5 26 QZV	33 Plag phenocrysts.	108856	0.043	0.038
644.03	646.03		2.0	0.1	5 33 QZV	34 Local increase in zeolite veining between 644.54-644.92m. - assoc with py aggregates in places.	108857	0.075	0.073
646.03	648.03		2.0	0.1	5 22 QZV	35 Qtz/chl/py vein at about 45 degrees.	108858	0.076	0.083
648.03	650.03		2.0	0.1	5 26 QZAGV	15 anhydrite pale purple veining and gypsum. anhy veining locally assoc with py.	108859	0.089	0.098
650.03	652.03		2.0	0.1	5 5 QZAGV	15 anhydrite and py veining between ~651.30-651.46m, assoc with gypsum veining.	108860	0.068	0.068

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
652.03	654.03	Fine-grained medium green porphyritic chloritic silicic	2.0 0.1	5	4 QZAGV	15 Gypsum veining assoc with zeolite veining, local BKN zone. Gyp/anhy, py +/-cpy between 653.61-653.70m.	108861	0.093	0.329
654.03	656.03		2.0 0.1	5	41 QZAGV	10 Gypsum/anhydrite veining between 654.54m - about 3 cm.	108862	0.059	0.056
656.03	658.03		2.0 0.1	5	10 QZAGV	10 Gypsum/anhydrite veining about 656.74-656.79; localized increase in dissem py.	108863	0.034	0.035
658.03	660.03		3.0 0.1	5	5 QZAGV	10 Localized increase in dissem py.	108864	0.064	0.064
660.03	662.03		3.0 0.1	5	11 QZAGV	10 BKN zone - planes lined by zeolite/qtz.	108865	0.056	0.062
662.03	664.03		3.0 0.1	5	28 QZAGV	10 Gypsum stringers, locally assoc with qtz veining. anhydrite veining assoc with gyp locally. Plag phenocrysts.	108866	0.11	0.118
664.03	666.03		3.0 0.1	5	12 QZAGV	10 Brown stain - possibly due to weak ser alteration +/- fine biotite alteration.	108867	0.103	0.099
666.03	668.03		3.0 0.1	5	8 QZAGV	10 Gypsum stringers, locally assoc with qtz and mt. Plag and augite phenocrysts. Local increase in zeo veining.	108868	0.044	0.052
668.03	670.03		3.0 0.1	5	30 QZAGV	10 Gypsum stringer assoc with mt locally and anhydrite veining +/-qtz. Plag and augite phenocrysts.	108869	0.034	0.04
670.03	672.03		3.0 0.1	5	17 QZAGV	10	108870	0.037	0.034
672.03	674.03		3.0 0.1	5	6 QZAGV	10	108871	0.045	0.044
674.03	675.30		3.0 0.1	5	13 QZAGV	10	108872	0.097	0.082
675.30	676.36	Fine-medium-grained light green porphyritic sericitic silicic	3.0 0.1		7 QZGV	30 Light green/yellow basalt, fine to medium grained, plag and augite phenocrysts in brown fine grained matrix. Moderate to high sericite alteration +/- fine bt alteration. Py +/- cpy dissem finely in basalt matrix also confined to veining. Veining-qtz/zeolite, gyp, carb + py +/- cpy, randomly oriented, irregularly spaced. Sericite and qtz also present as veining.	108874	0.088	0.094
676.36	678.30	Fine-grained medium green porphyritic chloritic silicic	3.0 0.1		24 QZGV	10 Medium to dark gray, fine grained basalt. Augite phenocrysts in dark green mafic matrix. Py finely dissem and present as aggregates in basalt matrix. Qtz/zeolite/gyp/py +/- cpy veining-randomly oriented, irregularly spaced. Py hairline structures crosscutting.	108875	0.074	0.069
678.30	680.30		3.0 0.1		10 QZGAV	15 Mt aggregates in qtz vein. anhydrite +/- gypsum veining present locally associated with py. Rare epi associated with qtz vein.	108876	0.079	0.071

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
680.30	682.30	Fine-grained medium green porphyritic chloritic silicic	3.0	0.1	15	Augite phenocrysts surrounded by py haloes locally at about 682.10m.	108877	0.061	0.063
682.30	684.30		3.0	0.1	9	Augite phenocryst boundaries visible.	108878	0.037	0.039
684.30	686.30		3.0	0.1	18 QZGAV	20 Local increase in veining between 684.94m-685.71m.	108879	0.096	0.086
686.30	688.30		3.0	0.1	8 QZGAV	15 Slight brown colour possibly sericite +/- fine bt alteration.	108880	0.075	0.081
688.30	690.30		3.0	0.1	9 QZGAV	15 Slight brown colour possibly sericite +/- fine bt alteration. Local increase in dissem py.	108881	0.024	0.03
690.30	692.30		3.0	0.1	9 QZGAV	15	108882	0.038	0.055
692.30	694.30		3.0	0.1	7 QZGAV	15 Local increase in augite phenocrysts and dissem py. Slight brown colour due to sericite alteration +/- fine biotite.	108883	0.049	0.096
694.30	696.30		3.0	0.1	6 QZGAV	15	108884	0.03	0.07
696.30	698.30		3.0	0.1	7 QZGAV	15 Light green/gray portion-weak to moderate sericitized, weakly chloritized, + bt. Associated with increased zeolite veins.	108885	0.051	0.089
698.30	700.30		3.0	0.1	1 QZGAV	15 Slight brown colour possibly due to sericite alteration +/- bt alteration. Rare moly associated with zeo/qtz veining. Locally brecciated.	108886	0.089	0.135
700.30	702.30		3.0	0.1	18 QZGAV	15	108887	0.085	14.55
702.30	703.63		3.0	0.1	3 QZGAV	15 Generally massive, augite phenocrysts present locally.	108888	0.034	0.039
703.63	704.80		3.0	0.1	1 QZGAV	15 Light/green/grey/yellow moderately sericitized +/- fine bt. plagioclase and augite phenocrysts visible, porphyritic texture. Localized qtz flooding.	108889	0.028	0.081
704.80	706.80		3.0	0.1	8 QZGAV	15	108890	0.039	0.039
706.80	708.80		3.0	0.1	23 QZGAV	15 Local increase in veining-zeo+qtz. Localized increase in dissem py +/- cpy.	108891	0.039	0.034
708.80	710.80		3.0	0.1	13 QZGAV	15	108892	0.037	0.042
710.80	712.80		3.0	0.1	21 QZGAV	15 Local increase in veining-zeo+qtz. Localized increase in dissem py +/- cpy. 1.26m of core lost-core is competent, pieces fit together well. anhydrite/ gyp veining.	108893	0.035	0.036
712.80	714.80		3.0	0.1	6 QZGAV	15 Local increase in dissem py.	108894	0.036	0.039
714.80	716.80		3.0	0.1	12 QZGAV	15 Local increase in qtz + gyp veining + py. Brown stain, possibly sericite alteration +/- fine bt. plagioclase + augite phenocrysts present locally.	108895	0.029	0.033

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
716.80	718.80	Fine-grained medium green porphyritic chloritic silicic	3.0	0.1	20 QZGAV	15	Minor rare mt aggregates, associated with qtz veining.	108896	0.041	0.038
718.80	720.80		3.0	0.1	14 QZGAV	15	anhydrite purple veining, py aggregates and epidote associated with the only vein. disseminated py. Minor kfsp+ qtz aggregate.	108897	0.069	0.062
720.80	722.80		3.0	0.1	13 QZGAH	15	Qtz flooding between 721.52m-721.75m. Minor potassic, pink stained portions at approx 727.55m and 727.75m.	108898	0.036	0.032
722.80	724.80		3.0	0.1	11 QZGAH	15	Py stringers crosscut by zeo and gyp veining. Mt veining associated with smoky/gray qtz vein. anhydrite/gyp/Qtz/py + minor epidote between 723.21m-723.31m.	108900	0.032	0.035
724.80	726.80		3.0	0.1	29 QZGAH	15		108901	0.046	0.043
726.80	728.80		3.0	0.1	4 QZGAH	7		108902	0.039	0.041
728.80	730.80		3.0	0.1	6 QZGAV	10	Reduced veining, augite phenocrysts.	108903	0.02	0.034
730.80	732.80		3.0	0.1	6 QZGAV	7	Slight increase in py veining, locally associated with Qtz + gyp veining, augite phenocrysts.	108904	0.016	0.027
732.80	734.80		3.0	0.1	11 QZGAV	7	Slight increase in py veining, locally associated with Qtz + gyp veining, augite phenocrysts. Local broken zones.	108905	0.054	0.041
734.80	736.80		3.0	0.1	8 QZGAV	7	Medium green brown fine grained, locally massive with porphyritic portions with augite and plagioclase phenocrysts- Talka basalt pink staining due to potassic alteration. Brown coloration semi alteration +/- fine Bt. alteration Qtz/gypsum/anhydrite/pyrite veining is randomly oriented and irregularly spaced light green portions with weak chlorite moderate silicification and sericitization py+ cpy disseminated aggregates present in basalt	108906	0.019	0.031
736.80	738.80		3.0	0.1	3 QZGAV	7	Portions with varying degrees of sericitization and silicification, medium green brown to light green. Py disseminated in basalt.	108907	0.043	0.055
738.80	740.80		3.0	0.1	5 QZGAV	7	Local increase in disseminated py.	108908	0.036	0.052
740.80	742.62		3.0	0.1	12 QZGAH	7	brown color possibly due to sericitization +/- fine BT alteration pink stained potassic altered portion from 742.10-742.62 QTZ/zeo /cpy/cy veining with potassic alteration potassic portion	108909	0.047	0.082

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
742.62	744.62	Fine-grained medium green porphyritic chloritic silicic	3.0 0.1	10	QZGAH 7	bladed feldspar porphyry fragment between 742.62-743.22m Brown colour due to sericite alteration +/- fine BT zeo veining with own angular fragments within forming a stockwork matrix btwn 743.69m- 743.91m.	108910	0.034	0.065
744.62	746.62		3.0 0.1	4	QZGAH 7	Potassic alteration holes around the qtz/gyp/py veining. Brown staining-Sericite +/- fine biotite augite/plagclase phenocrysts. Py + epi veining between 746.33m and 746.36m.	108911	0.055	0.074
746.62	748.62		3.0 0.1	24	QZGV 10	Slight brown staining-possibly sericite +/- biotite Py veining crosscut by zeo veining locally Py/gyp veining.	108912	0.05	0.053
748.62	750.62		3.0 0.1	3	QZGAV 10		108913	0.038	0.04
750.62	752.64		3.0 0.1	2	8 QZGAH 10	Mt (249. On Kappa meter) vein associated with py aggregates of about 750.79m. anhydrite /gyp vein toward by chl stringer-751.70m.	108914	0.04	0.034
752.64	754.64		3.0 0.1	6	QZV 15	Localized veining increase. Local potassic alteration	108915	0.027	0.028
754.64	756.64		3.0 0.1	3	QZGAV 7	reduced veining, anhydrite veining locally assoc with py. Py disc. in basalt	108916	0.04	0.04
756.64	758.64		3.0 0.1	14	QZGAV 10	Local increase zeo veining; local brown color-sericite alteration +/- fine bt assoc with increased disseminated pyrite	108917	0.041	0.038
758.64	760.64		3.0 0.1	17	QZGAV 10		108918	0.054	0.048
760.64	762.64		3.0 0.1	14	QZGV 10	potassic altered portion associated with pyrite aggregates at about 761.00m. Gypsum/epidote/pyrite veining at 761.80m. 761.87m- Localized k-feldspar veining cut by quartz/zeolite veins at about 762.23m.	108919	0.043	0.052
762.64	764.64		3.0 0.1	21	QZGV 20	Pyrite vein about 3cm thick bound by magnetite aggregates, associated with quartz vein runs to core-axis for full length of sample. Large augite phenocrysts ~0.5cm across subhedral.	108920	0.05	0.057
764.64	766.64		3.0 0.1	5	QGAEV 10	Epidote/Quartz/Gypsum aggregate at about 746.90m. Quartz stringers discontinues locally	108921	0.066	0.074
766.64	768.64		3.0 0.1	7	QGAEV 10	Potassic altered portions, locally cut by epidote stringers 45° core-axis associated with zeolite/quartz. Gypsum veining associated with Pyrite aggregates. Zeolite/Epidote discontinues stringers between 768.33m-768.57m.	108922	0.025	0.021

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
768.64	770.64	Fine-grained medium green porphyritic chloritic silicic	3.0	0.1	5 26 QZGAV	15 Localized k-feldspar discontinues stringers and magnetite veining between 768.65m-768.95m. Quartz/magnetite/Pyrite/Zeolite veining Locally parallel to Cross-Axis. plagclase phenocrysts increased locally at 796.92m.	108923	0.039	0.04
770.64	772.64		3.0	0.1	5 48 QZGAH	10 Dark green, Chloritic, minor potassic altered portion	108924	0.036	0.024
772.64	774.64		3.0	0.1	2 34 QZGAH	10 Increased Quartz veining between 774.40m-774.64m.	108926	0.008	1.585
774.64	776.61		3.0	0.1	8 QZGAH	10 brown coloration due to ser alteration +- fine bt. plagclase phenocrysts present locally	108927	0.02	0.012
776.61	778.60		3.0	0.1	14 QZGV	10 medium green chloritic pristine Augite+ plag phenocryst qtz/zeo/py/MT veining local epi assoc with pot portion	108928	0.037	0.024
778.60	780.60		3.0	0.1	52 QZGV	15 fine dissem MT not visible in matrix local increase in zeo veining cross cut by gy veining locally	108929	0.033	0.02
780.60	782.60		3.0	0.1	7 QZGV	15 local increase in veining localized potassic alteration	108930	0.031	0.018
782.60	784.60		3.0	0.1	12 QZGV	15 kfsp phenocryst present locally	108931	0.034	0.023
784.60	786.60		3.0	0.1	34 QZV	10 reduced veining roundly oriented irregularly spread augite phenocrysts local bkn zones	108932	0.029	0.018
786.60	788.60		3.0	0.1	10 QZV	10 local potassic altered portion -pink stain plagclase phenocryst present locally	108933	0.013	0.013
788.60	790.60		3.0	0.1	17 QZGV	10 qtz/gyp/mt/py veining -locally assoc augite phenocryst minor kfsp discontinuous stringer	108934	0.038	0.023
790.60	792.60		3.0	0.1	27 QZGAH	15 medium to light green fine grained basalt , augite plagclase phenocryst present locally moderate silicification weakly sericitized unit has varying degrees of silicification and sericitization giving dark/medium green - primary chloritic pristine portions to yellow/green/gray from weak to moderate seritization portions py fine to veining locally assoc with MT/qtz veining also present as disseminations and aggregates in basalt matrix from 790.66-790.76 m and 791.91.90-791.98m bound by pink stained potassic altered zones locally	108935	0.029	0.019
792.60	794.60		3.0	0.1	36 QZGAH	15 anhydrate/pyrite/epi/MT vein between 793.25-793.84m roughly oriented py/mt stringers	108936	0.028	0.022
794.60	796.61		3.0	0.1	4 QZGAH	15 local increases in zeo veining local brown stain possibly finer bt alteration	108937	0.058	0.039
796.61	798.60		3.0	0.1	11 QZV	20 local increase in zeo veining augite phenocryst py present as aggregates fine disseminations	108938	0.035	0.023

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
798.60	800.60	Fine-grained medium green porphyritic chloritic silicic	3.0 0.1	2	QZV 20	zeo veining. Augite plagioclase phenocryst brown stain-sericite +/- fine bt alteration py dissem	108939	0.039	0.029
800.60	802.60		3.0 0.1	5	2 QZV 15	mafic dykes between 801.80-801.80 contact with basalt not clear- no chill margin local potassic alt'n	108940	0.052	0.067
802.60	804.60		3.0 0.1	5	9 QZEV 10	zeolite veining cross cutting py/mt veinlet zeo veining post mineralization kfsp plagioclase augite phenocrysts present locally. Minor epi assoc with zeolite/mt/py veining mafic dyke between 803.02-803.17 and 804.03-804.10 contact not visible no drill margins	108941	0.024	0.019
804.60	806.60		3.0 0.1	5	9 QZV 10	zeolite vein crosscutting py/mt veining plagioclase phenocrysts present locally barely visible portion with kfsp phenocrysts potassic altered	108942	0.041	0.037
806.60	808.60		3.0 0.1	5	9 QZEV 10	Local potassic altered portion; locally assoc with epi veining	108943	0.035	0.033
808.60	810.60		3.0 0.1	5	4 QZV 10	plagioclase augite phenocrysts, local potassic altered portion, localized increase in augite phenocrysts. + dissem py.	108944	0.044	0.047
810.60	812.60		3.0 0.1	5	9 QZEV 10	Local increase py aggregates + dissem. assoc. with mt veining, i.e. btwn 810.65m - 810.76m	108945	0.053	0.065
812.60	814.60		3.0 0.1	5	9 QZAV 10	Potassic altered portion, bounding qtz/mt/py vein. Brown colour, possibly seri +/- fine bt alt. Mafic dyke btwn 813.61m - 813.83m. Qtz vein x-cutting py/mt vein - post mineralization.	108946	0.044	0.045
814.60	816.60		3.0 0.1	5	10 QAGV 10	Local increase in augite/plagioclase phenocrysts. Qtz/mt/py veining. Py local dissem.	108947	0.033	0.026
816.60	818.60		3.0 0.1	5	5 QVN 10	Increase dissem. py, local potassic altered portions. Mt/py vein btwn 817.17m - 817.26m.	108948	0.071	0.049
818.60	820.60		3.0 0.1	5	1 QZV 15	Pink/brown colour, potassic altered, brown - seri +/- fine bt alteration. Increased zeo veining. Mafic dyke btwn 820.12m - 820.32m	108949	0.035	0.027
820.60	822.60		3.0 0.1	5	9 QZV 15	Portion of high zeo veining. Mafic dark green portion; local BKN portions, highly silicified portions.	108950	0.038	0.022
822.60	824.60		3.0 0.1	5	14 QAGEV 15	Highly silicified locally. Brown staining - possibly local seri +/- bt alteration. Py dissem locally, stringer form, anhydrate vein, rare epi veining.	108952	0.052	0.038
824.60	826.60		3.0 0.1	5	3 QAGEV 15	Local potassic altered portion. Augite phenocrysts present locally. Local massive veinlets with dissem py.	108953	0.041	0.033

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
826.60	828.60	Fine-grained medium green porphyritic chloritic silicic	3.0	0.1	5 5 QAGEV	15 Augite + plagioclase phenocrysts present locally. anhydrite/gyp/py/qtz veining. Massive silicified.	108954	0.034	0.032
828.60	830.60		3.0	0.1	5 16 QAGEV	15 Potassic altered portion with Qtz, epi, py veining btwn 829.90m - 830.22 m. Local gyp/mt/py veining.	108955	0.054	0.038
830.60	832.60		3.0	0.1	5 4 QGAV	15 Generally massive, augite phenocrysts barely visible locally. Py dissemin. Local potassic rich portion with augite, plagioclase, Kfs phenocrysts.	108956	0.039	0.03
832.60	834.60		3.0	0.1	5 22 QGAV	15	108957	0.064	0.03
834.60	836.60		3.0	0.1	5 253 QVN	15 Increased mt veining btwn 834.89m - 835.36m. Py stringers.	108958	0.05	0.031
836.60	838.60		3.0	0.1	5 19 QZV	15 Local potassic altered portion.	108959	0.069	0.071
838.60	840.60		3.0	0.1	5 11 QAGV	15 Generally massive dissemin. py. Qtz/anhy/gyp/mt/py veining. plagioclase phenocrysts present locally - porphyritic.	108960	0.042	0.026
840.60	842.60		3.0	0.1	5 12 QAGV	15 Local potassic altered portions.	108961	0.055	0.037
842.60	844.60		3.0	0.1	5 9 QAGV	15	108962	0.044	0.037
844.60	846.60		3.0	0.1	5 13 QZGV	15 Medium green to green/brown locally, fine grained basalt. Generally massive, locally porphyritic with plagioclase, augite phenocrysts. Pink staining - indicating potassic alteration, brown stain, possibly sericite +/- fine bt alteration. Py dissemin. locally + present as stringers. Mt veining assoc with py + Qtz locally. Local increase in zeolite veining.	108963	0.033	0.032
846.60	848.60		3.0	0.1	5 12 QZGV	15 Potassic altered portion assoc with plagioclase/augite phenocrysts + dissemin. py. Local BKN zone.	108964	0.04	0.035
848.60	850.60		3.0	0.1	5 19 QZGV	20 Increase in zeolite veining btwn 849.90m - 850.20m	108965	0.028	0.022
850.60	852.60		3.0	0.1	5 20 QZGV	20 Zeolite veining cross cutting mt/py vein. Increase in augite phenocrysts locally. Qtz/zeolite/epi/py vein btwn 852.19m - 852.29m	108966	0.05	0.031
852.60	854.60		3.0	0.1	5 8 QZGV	20 Local increased zeolite veining, randomly oriented, irregularly spaced.	108967	0.028	0.022
854.60	856.60		3.0	0.1	5 11 QZV	15 Fault zone dark black (not graphite) fine, platy gouge like material, local increase in zeolite veining.	108968	0.057	0.023
856.60	858.60		3.0	0.1	5 7 QZV	15 Local potassic alteration, zeolite veining randomly oriented. Mt. veining assoc with Qtz/zeolite veining.	108969	0.028	0.018
858.60	860.60		3.0	0.1	5 12 QZV	15	108970	0.051	0.029

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
860.60	862.60	Fine-grained medium green porphyritic chloritic silicic	3.0	0.1	5 19 QZV	10 Local potassic alteration, zeo veining randomly oriented. Mt. veining assoc with qtz/zeo veining. Reduced veining.	108971	0.043	0.019
862.60	864.60		3.0	0.1	5 24 QZV	10	108972	0.019	0.01
864.60	866.60		3.0	0.1	5 2 QZV	10 Brown colour, possibly seri +/- bt. Local potassic alteration - pink colour. plagclase, kfsp, augite, phenocrysts present locally.	108973	0.036	0.022
866.60	868.60		3.0	0.1	5 22 QZV	10 .Brown colour , possibly seri +/- bt. Local potassic alteration, epi alteration assoc with.	108974	0.031	0.023
868.60	869.75		3.0	0.1	5 3 QZV	10 Moderate to high silicified portions. Light gray with augite phenocrysts.	108975	0.039	0.026
869.75	871.70		3.0	0.1	5 5 QZKV	10 Pink colour - potassic alteration, locally assoc with epi stringers. Py dissem in epi rich/mt veining. Locally brecciated.	108976	0.054	0.036
871.70	873.70		3.0	0.1	5 18 QZKV	10 Local potassic altered portion kfsp/zeo veining. dissem py.	108978	0.086	0.044
873.70	875.65		3.0	0.1	5 6 QZKV	10 Sample is weakly to moderately potassic altered, intrusive - monzodiorite. Mt/qtz vein cross cut by zeo veining - late stage. Crowded - plag/mafic phenocrysts in pale felsic matrix - possibly intrusive dyke btwn 873.60m - 873.83m - minor dissem py.	108979	0.031	0.024
875.65	877.60		3.0	0.1	5 2 QZKV	10 Generally massive, brown - possibly sericite alteration +/- fine bt dissem py and fine stringers cross cut by post mineralization qtz veining.	108980	0.053	0.018
877.60	879.60		3.0	0.1	5 3 QZKV	10 Generally massive, phenocrysts barely visible. Minor epi assoc with mt, py, qtz veining. Py as dissemem and stringers	108981	0.085	0.036
879.60	881.60		3.0	0.1	5 4 QZKV	10 Intrusive, dark black mafic phenocrysts in white felsic matrix - btwn 879.98m - 880.18m cross cute by mt/py veining, dissem py - pre or syn mineralization. Qtz/zeo vein btwn 880.49m - 880.54m. anhyy/gyp/qtz vein btwn 880.94m - 880.98m. Local increase in dissem py. Phenocrysts - outline barely visible - protolith overprinted by seri +/- fine bt alteration. Monzo.	108982	0.057	0.026
881.60	883.60		3.0	0.1	5 9 QVN	10 Augite/plagclase phenocrysts barely visible. Mt/py veining, and qtz/mt veining, randomly oriented.	108983	0.034	0.014
883.60	885.60		3.0	0.1	5 7 QVN	10	108984	0.023	0.012

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
885.60	887.60	Fine-grained medium green porphyritic chloritic silicic	3.0	0.1	5 51 QVN	10 Augite/plagclase phenocrysts barely visible. Mt/py veining, and qtz/mt veining, randomly oriented. Intrusive fragment ~5cm wide btwn 885.72m - 885.77m as seen in sample 108982. Monzo	108985	0.019	0.013
887.60	889.60		3.0	0.1	5 31 QVN	7 Qtz/carb veining cross cutting mt/py vein - post mineralization veining. Augite phenocryst outline barely visible. Locally decreased veining.	108986	0.016	0.013
889.60	891.60		3.0	0.1	5 10 QVN	7 Minor clear gypsum (selenite CaSO4 2H2O). Local portions of dissem py. Qtz/mt veining.	108987	0.026	0.018
891.60	893.60		3.0	0.1	5 5 QZGAH	10 Local increase in veining. anhydrate (CaSO4) assoc. with zeo veining.	108988	0.03	0.015
893.60	895.60		3.0	0.1	5 7 QZGAH	10 Local potassic portion assoc with highly silicified very weakly chloritized portion btwn 893.80mm - 893.99m	108989	0.042	0.021
895.60	897.60		2.0	0.1	5 5 QZGAH	10 Massive, augite plagclase phenocrysts barely visible. Qtz/anhy/mt/py btwn 896.57m - 896.62m and 896.69m - 896.72mm. Intrusion as seen in sample 108982 is btwn 897.06m - 897.09m and 897.25m - 897.38m. - Monzo.	108990	0.039	0.02
897.60	899.60		2.0	0.1	5 17 QAGV	10 Medium to dark green, chloritic, fine grained basalt. Takla volcanic. Augite/plag phenocrysts visible locally, generally massive. Moderate to highly silicified locally. Py dissem in places, confined to veining assoc with mt and qtz locally. Py stringer cross cut by post mineralization, barren qtz vein. Intrusive btwn 897.73m - 897.83m. Melanocratic, mafic phenocrysts and white plagclase phenocrysts in felsic, white, fine grained matrix. Phenocrysts are crowded and matrix is difficult to see. Pre or syn mineralization - intrusion is mineralized with dissem py and rare py stringer. Angle of contact is difficult to determine, approx 45 degrees to core axis. Basalt cross cut by anhydrite/gypsum veining locally assoc with mt.	108991	0.038	0.018
899.60	901.60		2.0	0.1	5 13 QVN	10 Medium to dark green chlorite fine grained basalt Takla augite plag phenocrysts visible locally, generally massive, moderately silicified locally ,py dissem in places confined to veining assoc with mt and qtz locally.	108992	0.031	0.016
901.60	902.98		2.0	0.1	5 9 QVN	10	108993	0.045	0.023
902.98	922.8	MONZONITE							

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
902.98	904.98	Fine-coarse grained medium grey porphyritic silicic	1.0	0.1	2 8 QZV	10 Intrusive melanocratic, mafic and white plagioclase/Qtz phenocrysts, crowded, matrix barely visible - possibly fine grained white felsic. Phenocrysts visible locally. Py aggregates and disseminations present but rare, indication igneous intrusion is pre or syn mineralization. Local pink staining indicating weak pervasive potassic alteration locally. Qtz/zeolite/mt veining randomly oriented, irregularly spaced and associated locally. Monzo.	108994	0.045	0.022
904.98	906.98		1.0	0.1	2 2 QZV	10	108995	0.052	0.034
906.98	908.98		1.0	0.1	2 1 QZAGV	10 Vuggy disseminations features between 907.12m - 907.22m. Rare increased hematite lining joint plane at about 907.88m anhydrite pyrite/mt vein and clear gypsum/selenite - (CaSO4 2H2O) between 907.98m - 908.06m	108996	0.057	0.034
908.98	910.98		1.0	0.1	2 6 QZGV	10 Potassic alteration found around clear gypsum/selenite between 910.73m - 910.78m	108997	0.063	0.045
910.98	912.80		1.0	0.1	2 4 QZGV	10 Potassic altered portion between 912.15m - 912.29m associated with kfspar veining and clear gypsum/selenite and trace epidote within the gypsum vein - also locally associated with mt aggregates.	108998	0.046	0.026
912.80	914.80		1.0	0.1	2 4 QZGV	10 Mottled texture. Qtz/anhydrite/pyrite +/- cpy vein, about 2cm with potassic alteration on boundary at ~ 913.95m	108999	0.049	0.023
914.80	916.80		1.0	0.1	2 QZGV	10 Local potassic alteration.	109000	0.045	0.018
916.80	918.80		1.0	0.1	2 1 QZGV	10 Potassic alteration between 917.04m - 918.42m, might be associated with iron staining.	100926	0.045	0.02
918.80	920.80		1.0	0.1	2 2 QZGV	10 Local potassic altered portions Zeolite/mt veining at ~918.96m Fragmental between 919.53m - 919.58m. Zeolite/mt vein at ~ 919.88m. Local increase in disseminations pyrite between 920.05m - 920.30m.	100927	0.112	0.044
920.80	922.80		1.0	0.1	5 38 QZGV	10 Mt veining	100929	0.047	0.018
922.80	1011.00	BASALT FLOW							
922.80	924.80	Fine-grained medium green chloritic silicic	1.0	0.1	2 3 QZGV	10 Gypsum veining, clear - selenite. Basalt/monzo, gradual contact, augite phenocrysts in mafic matrix. Same as 108991.	100930	0.039	0.017
924.80	926.80		1.0	0.1	2 2 QZV	5 Local potassic alteration. Same as 108991.	100931	0.052	0.019
926.80	927.97		1.0	0.1	2 4 QZV	7 Zeolite veining, kfspar veining. Local BKN zones. Mt veining, disseminations pyrite +/- cpy. Basalt /monzo? Same as 108991.	100932	0.054	0.022

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
927.97	929.59	Fine-grained medium green chloritic silicic	1.0	0.1	2 1 QZV	15 Potassic altered - pink staining. Zeolite veining assoc with qtz vein. Same as 108991.	100933	0.039	0.015
929.59	930.59		1.0	0.1	2 5 QZV	15 Kfsp veining btwn 930.18m - 930.59m. Same as 108991.	100934	0.035	0.01
930.59	932.59		1.0	0.1	2 4 QZV	10 Generally massive . Augite phenocrysts present locally. Gypsum veining - clear - selenite. Local increase in veining. Minor BKN zone. Same as 108991.	100935	0.022	0.019
932.59	934.59		1.0	0.1	2 8 QZV	10 Qtz/kfsp/mt vein between 933.09-933.29 same as 108991	100936	0.036	0.016
934.59	936.59		1.0	0.1	5 17 QZV	7 Qtz/epi/py/mt vein. Mt stringers. Same as 108991.	100937	0.019	0.007
936.59	938.59		1.0	0.1	2 10 QZV	7 Zeo/carb/qtz vein at 936.78m. Same as 108991.	100938	0.022	0.009
938.59	940.59		1.0	0.1	1 3 QZAV	7 Medium to dark green fine grained basalt, Takla volcanic, Augite phenocrysts present locally, barely visible in places. Moderately to highly silicified locally. Zeolite/anhydrite/qtz veining, randomly oriented irregularly spaced. Py dissem in basalt in places assoc with veining.	100939	0.018	0.007
940.59	942.23		2.0	0.2	1 13 ZQAV	7 Mt veining assoc with py. Local increases in dissem py and chalcopyrite. Pyrrhotite +/- cpy assoc'd with py.	100940	0.03	0.012
942.23	944.23		1.0	0.1	1 ZQV	10 Brown staining possibly due to brown sericite alteration +/- fine bt. alteration. Increased zeo veining.	100941	0.016	0.007
944.23	946.23		2.0	0.2	1 12 ZQV	7 Increased py +/- cpy stringers and aggregates. Local potassic altered portion. Brown stain due to seri +/- fine bt alteration.	100942	0.027	0.016
946.23	948.23		2.0	0.2	1 5 ZQV		100943	0.026	0.009
948.23	950.23		2.0	0.2	1 ZQV	7 Local increase in dissem py +/- cpy aggregates and fine disseminations. Brown stain due to seri alteration +/- bt.	100944	0.025	0.013
950.23	952.23		2.0	0.2	1 2 ZQV		100945	0.085	0.031
952.23	954.22		2.0	0.2	1 11 ZQV		100946	0.047	0.015
954.22	956.16		2.0	0.2	1 1 ZQV		100947	0.036	0.015
956.16	958.18		3.0	0.2	1 0 ZQV	7 Local increase in py+cpy fine disseminations and aggregates. Brown staining due to sericite alteration +/- fine bt alteration . Local potassic altered portions. Portions of ~5 py and 1% cpy between 956.16m - 956.26m.	100948	0.056	0.039

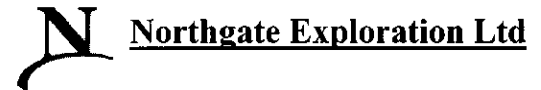
Hole Number: KN-02-23

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
958.18	960.13	Fine-grained medium green chloritic silicic	2.0 0.2	1	13 ZQV	7 Local potassic altered portions. Brown stain due to seri alteration +/- fine biotite. Qtz vein 5 cm associated with 959.84m - 959.92m, assoc. with zeolite, py, mt and moly less than 1%.	100949	0.012	0.007
960.13	962.13		2.0 0.2	1	21 ZQV	7 Augite phenocrysts visible locally.	100950	0.017	0.008
962.13	964.13		2.0 0.2	1	ZQV	7 Local potassic altered portions - weak to moderate.	9463	0.013	-2
964.13	966.13		2.0 0.2	1	10 ZQV	7 Local potassic altered portion associated with qtz vein/ + mt + py btwn 964.91m - 964.50m. Augite phenocrysts visible locally. Potassic portion at 965.30m.	9464	0.025	0.008
966.13	968.13		2.0 0.2	1	22 ZQV	7 Potassic altered portion between 967.65m - 967.81m. Local increase in dissem py.	9465	0.03	0.006
968.13	970.13		2.0 0.2	1	20 QVN	7 Increase in py +/- cpy stringers, locally assoc with qtz +/- mt veining.	9467	0.034	0.012
970.13	972.13		2.0 0.2	1	20 QVN	7	9468	0.029	0.008
972.13	974.13		2.0 0.2	1	18 QVN	7 Augite phenocrysts visible locally assoc with dissem py +/- cpy	9469	0.028	0.01
974.13	976.13		2.0 0.2	1	52 QVN	7 Qtz vein running along CA assoc with MT + py +zeo. Py content up to % locally 0.7% cpy	9470	0.049	0.014
976.13	978.13		2.0 0.2	1	7 QVN	7	9471	0.033	0.012
978.13	980.13		2.0 0.2	1	21 QVN	10 slight brown stain possibly semi alteration +/- fine bt alteration. portion with fine zeo veining assoc with qtz/mt py cpy between 980.23-980.48 m.	9472	0.017	-2
980.13	982.13		2.0 0.2	1	10 QVN	10 zeolite veining	9473	0.021	0.007
982.13	984.13		2.0 0.2	1	8 QVN	10 local potassic alteration assoc with zeo veining	9474	0.012	0.005
984.13	986.13		2.0 0.2	1	24 QVN	10	9475	0.008	-2
986.13	988.13		2.0 0.2	1	6 QVN	10 augite phenocrysts visible locally reduced veining	9476	0.025	0.009
988.13	990.30		2.0 0.2	1	12 QVN	15 Bkn, with increased veining and stringers	9477	0.023	0.011
990.30	991.52		2.0 0.2	1	16 QVN	15 Mafic dykes dark green fine grained matrix with white carbonate slight fizz with HCl hanging wall contact +foot wall defined by veining stinger at 45 degrees to core axis	9478	0.012	0.008
991.52	993.50		2.0 0.2	1	9 QAV	10 augite phenocrysts local decrease in py and cpy present as stringers	9479	0.023	0.01

Hole Number: KN-02-23

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
993.50	995.50	Fine-grained medium green chloritic silicic	2.0	0.2	1 6 ZQV	10 Medium to dark green fine grained basalt augite phenocrysts visible locally . Minor pink stained possibly potassic altered iron staining . zeo /qtz/ py+cpy and Pyrrhotite -magnetic semi soft hardness 3 1/2 to 4 1/4 bronze color .veining is randomly oriented irregularly spaced mt veining assoc with sulphides weak to moderate silicified locally	9480	0.025	0.01
995.50	997.50		2.0	0.2	1 12 ZQV	10	9481	0.01	0.005
997.50	999.50		2.0	0.2	1 33 ZQV	10	9482	0.012	-2
999.50	1001.50		2.0	0.2	1 12 ZQV	10	9483	0.038	0.081
1001.50	1003.52		2.0	0.2	1 5 ZQV	10 Local BKN zones.	9484	0.024	0.011
1003.52	1005.50		2.0	0.2	1 9 ZQV	10	9485	0.031	0.011
1005.50	1007.50		2.0	0.2	1 9 ZQV	10 Local increase in zeolites/py+cpy Pyrrhotite vein between 1006.94-1007.23	9486	0.026	0.012
1007.50	1009.50		2.0	0.2	1 13 ZQV	10 Local increase in zeo/qtz/sulphide veining between 1007.94-1008.22	9487	0.029	0.011
1009.50	1011.02		2.0	0.2	12 ZQV	10 Local potassic portions, associated with an increase in quartz/ zeolite/ sulphide veining. Zeolite veining associated with epidote mt in places. EOH	9488	0.027	0.012
1011.02	EOH								

Kemess North 2002 - Diamond Drill Log



Northgate Exploration Ltd

Hole Number: **KN-02-24**

Northing: 16192.2 **Total Depth:** 710.18m
Easting: 10552 **Azimuth:** 0°
Elevation: 1679.1 **Dip:** -90°

Geologist: E. Ramsay

Logged Date: 8/4/2002

<u>Survey Depth</u>	<u>Azimuth</u>	<u>Dip</u>	<u>Comments:</u>
700 m	0 °	-90 °	No test

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-24**

From (m)	To (m)	Rock Type	Comments
0	11	CASING	Casing - no recovery.
11	12.8	QUARTZ MONZONITE POLYLITHIC TUFF	Low recovery, samples are taken from runblock to runblock, broken core with fragments of clay-altered qtz monzonite porphyry dominating (90%). Fragments of silicified, slightly pyritic polyolithic tuff show no evidence of clay alteration and may just be from an exotic block in poor consolidated talus material (i.e. part of overburden, not bedrock). Yellowish stains from Fe-oxides, tuff fragments are light grey. Qtz monzonite fragments show argillic alteration, probably at least partly supergene as clay abundance diminishes down hole.
12.8	19.81	QUARTZ MONZONITE	
19.81	35.05	BASALT FLOW	
35.05	45.72	BLADED FELDSPAR PORPHYRY	Phenocryst size coarsens, crystal are now feldspar, still no qtz, phenocryst percentage is now about 45%, possibly bladed feldspar porphyry.
45.72	47.24	QUARTZ MONZONITE	Presence of coarse qtz in ground core suggests rock is now at least partly qtz-monzonite. Core is crushed into sand/pebble sized fragments. Texture is assumed to be porphyritic on the basis of one or two larger fragments.
47.24	56.39	BLADED FELDSPAR PORPHYRY	
56.39	59.44	BASALT	Alteration increases obscuring textures. Phenocrysts smaller and fewer in number.
59.44	60.96	BLADED FELDSPAR PORPHYRY	
60.96	71.63	BASALT	Similar to 56.39-59.44m.
71.63	74.68	BLADED FELDSPAR PORPHYRY	

Hole Number:

KN-02-24

From (m)	To (m)	Rock Type	Comments
74.68	76.2	BASALT	
76.2	83.82	BASALT FLOW	
83.82	85.34	LOST CORE	Lost core @ rod string switch
85.34	93	BASALT	Strong alteration obscuring primary textures. Strong fabric @ 550 to c.a. apparently pre-alteration (local early fault?) near 88.39m
93	103	BLADED FELDSPAR PORPHYRY	Mottled texture suggesting protolith was bladed feldspar porphyry or some coarse porphyritic basalt.
103	153	BASALT	Grain size is finer, protolith tentatively called basalt
153	207	BLADED FELDSPAR PORPHYRY	Primary textures locally preserved, rock tentatively identified as bladed feldspar porphyry
207	213	BASALT	Large feldspar blades disappear chloritized mafics still present.
213	219	BLADED FELDSPAR PORPHYRY	
219	426	BASALT	
426	705.55	QUARTZ MONZONITE	VERY altered rock locally showing medium grained porphyritic texture formed of sericitized feldspar (35%) in a silicified/siliceous matrix. May be qtz- monzonite porphyry Greenish to medium grey with irregular masses and veins of black magnetite. Chalcopyrite is abundant locally reading 1-2%
705.55	707	HETEROLITHIC BRECCIA	
707	710.18	QUARTZ MONZONITE	

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-24

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	11	CASING							
	0.00	11.00				Casing - no recovery.	24	-2	-2
11	12.8	QUARTZ MONZONITE POLYLITHIC TUFF							
	11.00	12.80	Fine-coarse grained yellow grey porphyritic sericitic clay	2.0	0	Low recovery, samples are taken from run block to run block, broken core with fragments of clay-altered qtz monzonite porphyry dominating (90%). Fragments of silicified, slightly pyritic polyolithic tuff show no evidence of clay alteration and may just be from an exotic block in poor consolidated talus material (i.e. part of overburden, not bedrock). Yellowish stains from Fe-oxides, tuff fragments are light gray. Qtz monzonite fragments show argillic alteration, probably at least partly supergene as clay abundance diminishes down hole.	109607	0.005	0.078
12.8	19.81	QUARTZ MONZONITE							
	12.80	16.76	Fine-medium-grained yellow porphyritic sericitic clay	2.0	0		109608	0.003	0.082
	16.76	19.81		5.0	0	Light greenish gray porphyritic basalt (?) showing kaolinite pseudomorphs after euhedral to subhedral phenocrysts of augite (?) chloritized with clay alteration overprint. No qtz. 3% disseminated pyrite, mostly oxidized to limonite, fine grained.	109609	0.005	0.111
19.81	35.05	BASALT FLOW							
	19.81	22.86	Fine-medium-grained green-grey porphyritic sericitic chloritic	3.0	0		109610	0.013	0.14
	22.86	25.91		2.0	0		109611	0.008	0.195
	25.91	28.96		2.0	0		109612	0.058	0.295
	28.96	30.48		5.0	0		109613	0.035	0.186
	30.48	32.00		10.0	0		109614	0.044	0.149
	32.00	35.05		2.0	0		109615	0.093	0.106
35.05	45.72	BLADED FELDSPAR PORPHYRY							

Hole Number: KN-02-24

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
35.05	38.10	Fine-medium-grained green-grey sericitic chloritic	5.0	0		Phenocryst size coarsens, crystal are now feldspar, still no qtz, phenocryst percentage is now about 45%, possibly bladed feldspar porphyry.	109616	0.101	0.16
38.10	41.15		10.0	0	109618		0.078	0.171	
41.15	44.20		5.0	0	109619		0.022	0.123	
44.20	45.72		10.0	0	109620		0.104	0.205	
45.72	47.24	QUARTZ MONZONITE							
45.72	47.24	Fine-medium-grained green-grey porphyritic sericitic chloritic	10.0	0		Presence of coarse qtz in ground core suggests rock is now at least partly qtz-monzonite. Core is crushed into sand/pebble sized fragments. Texture is assumed to be porphyritic on the basis of one or two larger fragments.	109621	0.09	0.221
47.24	56.39	BLADED FELDSPAR PORPHYRY							
47.24	48.77	Fine-medium-grained green-grey sericitic chloritic	5.0	0		109622	0.118	0.305	
48.77	50.29		5.0	0		109623	0.137	0.202	
50.29	51.82		2.0	0		109624	0.05	0.168	
51.82	53.34		1.0	0		109625	0.073	0.157	
53.34	56.39		1.0	0		109626	0.089	0.191	
56.39	59.44	BASALT							
56.39	59.44	Fine-medium-grained green-grey porphyritic sericitic chloritic	1.0	0		Alteration increases obscuring textures. Phenocrysts smaller and fewer in number.	109627	0.035	0.14
59.44	60.96	BLADED FELDSPAR PORPHYRY							
59.44	60.96	Fine-medium-grained green-grey sericitic chloritic	5.0	0		109628	0.117	0.256	
60.96	71.63	BASALT							
60.96	62.48	Fine-medium-grained green-grey porphyritic sericitic chloritic	5.0	0		Similar to 56.39-59.44m.	109629	0.033	0.164
62.48	65.53		1.0	1		109630	0.083	0.212	
65.53	67.06		3.0	0		109631	0.089	0.258	
67.06	70.10		10.0	0		109632	0.048	0.21	
70.10	71.63		3.0	0		109633	0.041	0.144	
71.63	74.68	BLADED FELDSPAR PORPHYRY							

Hole Number: KN-02-24

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
71.63	73.15	Fine-medium-grained green-grey sericitic chloritic	2.0	0			109634	0.046	0.172
73.15	74.68		10.0	0			109635	0.058	0.226
74.68	76.2	BASALT							
74.68	76.20	Fine-medium-grained green-grey porphyritic sericitic chloritic	2.0	0			109636	0.044	0.145
76.2	83.82	BASALT FLOW							
76.20	77.72	Fine-medium-grained green-grey porphyritic sericitic chloritic	1.0	0			109637	0.084	0.134
77.72	79.25		2.0	0			109638	0.04	0.157
79.25	80.77		2.0	0			109639	0.117	0.255
80.77	83.82		2.0	0		Downsized from HQ to NQ diameter @83.82m	109640	0.051	0.134
83.82	85.34	LOST CORE							
83.82	85.34					Lost core @ rod string switch	-87	0	0
85.34	93	BASALT							
85.34	88.39	Fine-grained grey sericitic chloritic	2.0	0		Strong alteration obscuring primary textures. Strong fabric @ 55O to c.a. apparently pre- alteration (local early fault?) near 88.39m	109641	0.05	0.197
88.39	91.44	Fine-grained green-grey brecciated sericitic chloritic	5.0	0		In-situ brecciated/ fractured rock, most likely originally mafic (no quartz). Aphanitic- grained, strongly altered w/ primary textures obliterated. Tentatively called basalt. Color varies from greenish gray to locally light gray w/ grayish to moderate red veins of sugary looking anhydrite (?) (hardness ~2.5-3.0, no visible cleavage) Alterations are sericite overprinting early chlorite and controlled by fractures. Silicification is much more limited to a few areas, immediately around qtz + py veinlets.	109642	0.045	0.165
91.44	93.00	Fine-grained green-grey in-situ brecciated sericitic chloritic	2.0	0			109644	0.017	0.133
93	103	BLADED FELDSPAR PORPHYRY							
93.00	95.00	Fine-coarse grained light grey sericitic chloritic	5.0	0		Mottled texture suggesting protolith was bladed feldspar porphyry or some coarse porphyritic basalt.	109645	0.013	0.087
95.00	97.00		2.0	0			109646	0.024	0.094
97.00	99.00		2.0	0			109647	0.035	0.123

Hole Number: KN-02-24

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
99.00	101.00	Fine-coarse grained green-grey sericitic chloritic	1.0	0			109648	0.127	0.228
101.00	103.00		2.0	0			109649	0.078	0.168
103	153	BASALT							
103.00	105.00	Fine-medium-grained green-grey in-situ brecciated sericitic chloritic	3.0	0		Grain size is finer, protolith tentatively called basalt	109650	0.082	0.181
105.00	107.00		2.0	0			109651	0.066	0.15
107.00	109.00		3.0	0.1	0		109652	0.074	0.195
109.00	111.00		2.0	1			109653	0.096	0.195
111.00	113.00		2.0	0.1	0		109654	0.075	0.235
113.00	115.00		3.0	0.1	0		109655	0.098	0.273
115.00	117.00		3.0	0.1	0		109656	0.094	0.214
117.00	119.00	Fine-medium-grained light grey in-situ brecciated sericitic chloritic	3.0	0.1	3 FVN	2 Violet fluorite veins and reddish anhydrite veins, the later cutting the fluorite veins.	109657	0.134	0.333
119.00	121.00	Fine-medium-grained green-grey in-situ brecciated sericitic chloritic	2.0	0.1	20		109658	0.218	0.361
121.00	123.00		1.0	1	1		109659	0.117	0.293
123.00	125.00		1.0	0.1	1	0.1% molybdenite in qtz-cpy vein	109660	0.159	0.335
125.00	127.00		3.0	1			109661	0.11	0.282
127.00	129.00		1.0	1	15		109662	0.132	0.403
129.00	131.00		1.0	0.1	1	1	109663	0.134	0.318
131.00	133.00		5.0	0			109664	0.116	0.291
133.00	135.00		1.0	9			109665	0.164	0.354
135.00	137.00		1.0	0			109666	0.124	0.438
137.00	139.00		2.0	0.1	1	4	109667	0.108	0.247
139.00	141.00		3.0	0.1	2	0	109668	0.169	0.47
141.00	142.20		3.0	0			109670	0.166	0.351
142.20	143.00	Fine-medium-grained medium grey in-situ brecciated sericitic chloritic	3.0	0.1	30	862	109671	0.202	0.4
143.00	145.00	Fine-medium-grained green-grey in-situ brecciated sericitic chloritic	3.0	0.1	0		109672	0.2	0.525
145.00	147.00		1.0	1	144		109673	0.112	0.237

Hole Number: KN-02-24

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
147.00	149.00	Fine-medium-grained green-grey in-situ brecciated sericitic chloritic	2.0	0.1	1	0	109674	0.156	0.309
149.00	151.00		0.5		0	AVN 50 3 Anhydrite vein @ 50o to c.a. between 150.44-150.52 w/ secondary gypsum growth along contacts	109675	0.145	0.282
151.00	153.00		1.0	0.1	1	0	109676	0.271	0.55
153	207	BLADED FELDSPAR PORPHYRY							
153.00	155.00	Fine-medium-grained green-grey in-situ brecciated sericitic chloritic	4.0		0	4	109677	0.157	0.545
155.00	157.00		2.0	0.1	0	2	109678	0.095	0.279
157.00	159.00		3.0	0.1	1	1	109679	0.122	0.284
159.00	161.00		1.0	0.1	1	0	109680	0.225	0.418
161.00	163.00		2.0	0.2	0	78	109681	0.248	0.48
163.00	165.00		2.0	0.1	2	0	109682	0.117	0.218
165.00	167.00		2.0	0.1	0	1 AVN 2 Anh + fluorite + py +/- cpy veins showing sulfide margins and silicate core	109683	0.108	0.249
167.00	169.00		2.0	0.5	1	2	109684	0.122	0.208
169.00	171.00	Fine-medium-grained green-grey flow brecciated sericitic chloritic	1.0	0.2	1	2	109685	0.144	0.265
171.00	173.00	Fine-medium-grained green-grey in-situ brecciated sericitic chloritic	2.0		0	32	109686	0.125	0.256
173.00	175.00		1.5	0.2	0	3	109687	0.124	0.324
175.00	177.00		1.0	0.1	1	1	109688	0.138	0.287
177.00	179.00		2.0	0.1	2	1	109689	0.171	0.373
179.00	181.00		1.0	0.1	0	1	109690	0.174	0.401
181.00	183.00		1.0		1	1	109691	0.164	0.345
183.00	185.00		2.0	0.1	0	1	109692	0.086	0.203
185.00	187.00		0.5	0.1	0	1	109693	0.2	0.321
187.00	189.00		2.0			1	109694	0.139	0.272
189.00	191.00		2.0	0.1		0	109696	0.14	0.216
191.00	193.00		2.0			1	109697	0.127	0.244
193.00	195.00		1.0	0.1		0	109698	0.133	0.265
195.00	197.00		1.5			1	109699	0.077	0.239

Hole Number: KN-02-24

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
197.00	199.00	Fine-medium-grained green-grey in-situ brecciated sericitic chloritic	1.0 0.1	0			109700	0.13	0.248
199.00	201.00		4.0 0.1	0	1		109701	0.131	0.27
201.00	203.00		2.0 0.1		1		109702	0.17	0.369
203.00	205.00		1.0 0.1	1	1		109703	0.146	0.29
205.00	207.00		1.0 0.1	4	45		109704	0.131	0.296
207	213	BASALT							
207.00	209.00	Fine-medium-grained green-grey in-situ brecciated sericitic chloritic	1.0 0.1	0		Large feldspar blades disappear chloritized mafics still present.	109705	0.142	0.382
209.00	211.00	Fine-coarse grained green-grey flow brecciated sericitic chloritic	3.0 0.1	0		Flow breccia, monolithic w/ chloritized matrix.	109706	0.146	0.413
211.00	213.00		1.0	0			109707	0.148	0.322
213	219	BLADED FELDSPAR PORPHYRY							
213.00	215.00	Fine-medium-grained green-grey sericitic chloritic	1.0 0.5	1	1		109708	0.203	0.508
215.00	217.00		1.0 0.1		1		109709	0.171	0.288
217.00	219.00		2.0 0.1		0		109710	0.084	0.207
219	426	BASALT							
219.00	221.00	Fine-medium-grained light grey in-situ brecciated sericitic chloritic	1.0	0			109711	0.067	0.195
221.00	223.00	Fine-medium-grained green-grey in-situ brecciated sericitic chloritic	2.0 0.1	1	1		109712	0.145	0.285
223.00	225.00	Fine-medium-grained green-grey porphyritic sericitic chloritic	1.0 0.1	1	0		109713	0.134	0.32
225.00	227.00		2.0 0.1	0	2		109714	0.137	0.289
227.00	229.00		1.0 0.1	0	1		109715	0.142	0.274
229.00	231.00		1.0 0.1	3	51	Magnetite pseudomorphs after augite phenocrysts	109716	0.293	0.601
231.00	233.00		3.0 0.1	0	7		109717	0.216	0.46
233.00	234.80	Fine-medium-grained green-grey porphyritic chloritic sericitic	2.0 0.1		16	Chloritization is the dominant alteration, sericitization disappears down hole. Dark greenish gray color	109718	0.173	0.349
234.80	237.00	Fine-medium-grained green-grey porphyritic sericitic chloritic	2.0 0.1	5	FVN	5 Violet fluorite +/- pyrite veins, variable orientations	109719	0.109	0.236

Hole Number: KN-02-24

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
237.00	239.00	Fine-medium-grained green-grey porphyritic sericitic chloritic	2.0 0.1	1	FVN 5	Violet to pink fluorite + pyrite veins throughout. Gradually increasing silicification down hole	109720	0.151	0.317
239.00	241.00	Fine-medium-grained green-grey porphyritic silicic sericitic	5.0 1.0	5	3 FVN 0	3 semi-massive magnetite between 239.30-239.60m strong local silicification	109722	0.212	0.465
241.00	243.00	Fine-medium-grained green-grey porphyritic sericitic chloritic	1.0 0.5	1	26		109723	0.178	0.399
243.00	245.00		10.0 1.0	1	0 FVN 20		109724	0.357	0.911
245.00	247.00		15.0 0.1	9	FVN 5		109725	0.206	0.5
247.00	249.00		0.5 0.1	4	12		109726	0.187	0.393
249.00	251.00		1.0 0.1	0	0		109727	0.147	0.38
251.00	253.00		1.0 0.1	1	9 FVN 3		109728	0.212	0.451
253.00	255.00		1.0 0.1	3	5		109729	0.192	0.478
255.00	257.00		3.0 0.1	18		Chlorite alteration becomes predominant, being only locally overprinted by sericite	109730	0.175	0.507
257.00	259.00		1.0 0.5	0	59		109731	0.214	0.554
259.00	261.00		0.1 0.1	37			109732	0.14	0.362
261.00	263.00		0.5 0.1	1			109733	0.243	0.582
263.00	265.00		0.5 0.1	57			109734	0.187	0.482
265.00	267.00		0.5 0.1	2			109735	0.154	0.375
267.00	269.00		3.0 0.2	1	0 FVN 5	4 Fluorite + anhydrite + pyrite + chalcopryrite vein @ low angle to c.a.	109736	0.192	0.363
269.00	271.27		1.0 0.1	1	FVN 4	4 Mislatch core, partially recovered, most core sections are badly eroded by redrilling	109737	0.198	0.377
271.27	273.00		1.0	1	4		109738	0.186	0.384
273.00	274.32		1.0 0.1	5	FVN 2		109739	0.203	0.44
274.32	275.45		1.0 0.2	1	9		109740	0.118	0.276
275.45	277.42		0.1 0.1	0	21	Bad brass smearing on core, likely coming from burnt bit. Chances of contamination.	109741	0.157	0.321
277.42	279.00		1.0	1			109742	0.276	0.513
279.00	281.00		0.5 1.0	0	0		109743	0.205	0.368
281.00	283.00		1.0 0.5	0	60 FVN 30	1	109744	0.211	0.404

Hole Number: KN-02-24

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
329.00	331.00	Fine-medium-grained green-grey porphyritic chloritic	1.0	1	3		109769	0.474	0.722
331.00	333.00		1.0		3		109770	0.235	0.256
333.00	335.00		1.0		5		109771	0.275	0.254
335.00	337.00		1.0		9		109772	0.187	0.186
337.00	339.00		0.5		0		109774	0.211	0.242
339.00	341.00		2.0	1	1		109775	0.199	0.211
341.00	343.00		0.5	0.1	1	6	109776	0.221	0.228
343.00	345.00		0.5	1	4		109777	0.199	0.242
345.00	347.00		2.0	0.1	1	1	109778	0.449	0.499
347.00	349.00		0.1	0.1	0	11 QVN 5	109779	0.388	0.522
349.00	351.00	Fine-medium-grained green-grey amygdular chloritic	2.0	0	18 QVN 60 2	Becomes amygdular @ 350.15m	109780	0.464	0.643
351.00	353.00		2.0	1	20		109781	0.343	0.413
353.00	355.00	Fine-medium-grained green-grey porphyritic chloritic	1.0	1	8		109782	0.315	0.382
355.00	357.00		0.1	1	19		109783	0.181	0.261
357.00	359.00		0.1	0.1	2	8	109784	0.301	0.454
359.00	361.00		0.1	1	9		109785	0.166	0.238
361.00	363.00		1.0	0.1	0	20	109786	0.342	0.391
363.00	365.00	Fine-medium-grained green-grey porphyritic chloritic sericitic	0.1	0	1		109787	0.23	0.365
365.00	367.00		1.0	0.1	0	1	109788	0.287	0.557
367.00	369.00		0.1		0		109789	0.225	0.383
369.00	370.80		0.5		0		109790	0.319	0.443
370.80	373.00	Fine-medium-grained green-grey amygdular chloritic sericitic	0.5		52		109791	0.311	0.458
373.00	375.00		2.0	0.1	0	7	109792	0.339	0.37
375.00	377.00	Fine-medium-grained green-grey porphyritic chloritic	0.5	0.1		34	109793	0.175	0.25
377.00	379.00		1.5		35		109794	0.297	0.405

Hole Number: KN-02-24

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
379.00	381.00	Fine-medium-grained green-grey amygdular chloritic	0.1 0.1	7			109795	0.321	0.431
381.00	383.00		0.5 0.1	13			109796	0.203	0.306
383.00	385.00	Fine-medium-grained green-grey porphyritic chloritic	1.0 0.1	30			109797	0.471	0.497
385.00	387.00		3.0	4			109798	0.325	0.403
387.00	389.00		3.0 0.1	6			109800	0.332	0.457
389.00	391.00		1.0	0			109980	0.45	0.577
391.00	393.00		4.0 0.1	0	1 QVN	30 3	109981	0.435	0.671
393.00	395.00		1.0	1	43 QVN	3	109982	0.362	0.61
395.00	397.00		2.0 0.5	0	0 QVN	3	109983	0.241	0.4
397.00	399.00		2.0	10	QVN	35 2	109984	0.396	0.687
399.00	401.00		1.0	1	36 QVN	10 5	109985	0.323	0.64
401.00	403.00	Fine-medium-grained green-grey porphyritic chloritic sericitic	0.5	1	25		109986	0.181	0.337
403.00	405.00	Fine-medium-grained green-grey porphyritic sericitic chloritic	1.0	1			109987	0.251	0.564
405.00	407.00		0.5	1			109988	0.301	0.543
407.00	409.00		0.1 0.5	1	47		109989	0.471	0.782
409.00	411.00	Fine-medium-grained green-grey porphyritic chloritic	0.1	36	QVN	10	109990	0.289	0.704
411.00	413.00		0.1 0.5	1	36 QVN	10	109991	0.327	0.945
413.00	415.00		2.0 0.1	0	3 QVN	20	109992	0.305	0.772
415.00	417.00		5.0 1.0	0	4 QVN	35	109993	0.333	0.678
417.00	419.00		2.0 0.1	1	8 QVN	10	109994	0.294	0.608
419.00	420.90		0.1 0.5	1	5 QVN	15	109995	0.198	0.466
420.90	421.50	Fine-medium-grained light grey porphyritic sericitic chloritic	3.0 0.5	0	4 QVN	15	109996	0.477	0.912
421.50	422.60	Fine-medium-grained green-grey porphyritic chloritic	1.0	1	48 QVN	3	109997	0.212	0.415
422.60	423.40	Fine-medium-grained light grey porphyritic silicic sericitic	3.0 0.2	0	2 QVN	5	109998	0.593	1.215

Hole Number: KN-02-24

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
423.40	424.20	Fine-medium-grained green-grey brecciated silicic sericitic	5.0	1	6	Monomictic, clast-supported breccia w/ angular to sub-angular fragments varying in size from pebble to cobble, not in-situ brecciated, with pyrite + magnetite in matrix	109999	0.23	0.53	
424.20	426.00	Fine-medium-grained green-grey porphyritic silicic sericitic	4.0	0.5	2	16 FLT 40 5	Minor fault @ 400 to c.a. near 425.40m	110000	0.41	0.974
426	705.55	QUARTZ MONZONITE								
426.00	428.00	Medium-fine-grained green-grey porphyritic silicic sericitic	2.0	1.0	3	34 QVN 10	VERY altered rock locally showing medium grained porphyritic texture formed of sericitized feldspar (35%) in a silicified/siliceous matrix. May be qtz- monzonite porphyry Greenish to medium gray with irregular masses and veins of black magnetite. Chalcopyrite is abundant locally reading 1-2%	k110251	0.407	0.977
428.00	430.00		1.0	2.0	1	1 QVN 20		k110252	0.732	1.725
430.00	432.00		2.0	2.0	2	61 QVN 30		k110253	1.625	3.31
432.00	434.00		4.0	1.0	5	3 QVN 30		k110255	0.585	1.345
434.00	436.00		2.0	0.5	3	5 QVN 20		k110256	0.653	1.36
436.00	438.00		3.0	0.5	2	30 QVN 20		k110257	0.391	0.902
438.00	440.00		5.0	0.1	5	108 QVN 20		k110258	0.413	1.085
440.00	442.00		3.0	0.5	5	26 QVN 10		k110259	0.28	0.709
442.00	444.00		4.0	0.1	2	58 QVN 10		k110260	0.259	0.599
444.00	446.00		10.0	0.5	5	99 QVN 45 20	0.5% Molybdenite in qtz-py vein	k110261	0.649	1.235
446.00	448.00		5.0	0.1	5	5 QVN 10		k110262	0.216	0.604
448.00	450.00		7.0	0.1	3	2		k110263	0.261	0.816
450.00	452.00	Medium-fine-grained green-grey brecciated silicic sericitic	2.0	0.1	3	44 QVN 20 2	Hydrothermal breccia, similar to 423.40-424.20m.	k110264	0.391	0.702
452.00	454.00	Medium-fine-grained green-grey porphyritic silicic sericitic	3.0	1.0	0	37 QVN 20		k110265	0.781	1.58
454.00	456.00		1.0	0.5	4	62 QVN 20		k110266	0.361	0.772
456.00	458.00		1.0	0.1	2	32 QVN 20		k110267	0.353	0.788
458.00	460.00		1.0	0.5	1	46 QVN 15		k110268	0.601	1.235
460.00	462.00		3.0	0.5	2	9 QVN 10		k110269	0.418	0.72
462.00	464.00		5.0	0.5	3	45	1% white gypsum - filled fractures, 0.1% molybdenite.	k110270	0.563	0.577
464.00	466.00		4.0	0.1	5	7		k110271	0.239	0.312

Hole Number: KN-02-24

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
466.00	468.00	Medium-fine-grained green-grey porphyritic silicic sericitic	10.0	0.5	5	32		k110272	0.19	0.342
468.00	470.00		3.0		5	7		k110273	0.259	0.433
470.00	472.00		2.0	0.5	3	61 QVN	5	k110274	0.38	0.799
472.00	474.00		2.0	0.5	5	71 QVN	10	k110275	0.24	0.601
474.00	476.00		5.0	1.0	5	18 FLT	10 50	k110276	0.467	0.583
							Broken core w/ gouge, with low angle gouge - filled fractures in intact pieces.			
476.00	478.00		1.0	1.0	1	28 QVN	3	k110277	0.746	0.509
478.00	480.00		1.0		5	59 QVN	10	k110278	0.15	0.37
480.00	482.00		2.0	0.1	5	32 FLT	45 3	k110279	0.123	0.273
							Minor fault w/ gouge near 481.00m.			
482.00	484.00		1.0		5	16 QVN	45 10	k110281	0.21	0.373
484.00	486.00		1.0		4	12 QVN	4	k110282	0.131	0.269
486.00	488.00		2.0		5	4 QVN	20 1	k110283	0.185	0.288
							Single white drusy qtz vein @ low angle to c.a.			
488.00	490.00	Medium-fine-grained green-grey massive silicic mt-anhydrite-gypsum	2.0		5	12 FAB	37	k110284	0.158	0.203
							Strong pervasive silicification completely obliterating primary textures. Undulating fabric @ 30-45 degrees to c.a. defined by alternating millimetric bands of gray microcrystalline silica and black silica + magnetite. Inherited fabric from silica replacement along parallel fractures?			
490.00	492.00		2.0	0.1	5	14 FAB	40	k110285	0.111	0.156
492.00	494.00		3.0		5	1 FAB	30	k110286	0.1	0.193
494.00	496.00		2.0	0.1	5	4		k110287	0.153	0.254
496.00	498.00		2.0		5	110		k110288	0.13	0.201
498.00	500.00	Medium-fine-grained green-grey porphyritic silicic sericitic	2.0	0.5	5	48		k110289	0.16	0.187
500.00	502.00		3.0	0.1	5	87		k110290	0.296	0.398
502.00	504.00		1.0	0.5	2	145 QVN	10	k110291	0.238	0.312
504.00	506.00		0.5	2.0	2	136 QVN	20	k110292	1.27	1.57
506.00	508.00		1.0	0.5	2	160 QVN	15	k110293	0.27	0.334
508.00	510.00		0.5	0.5	2	88 QVN	10	k110294	0.337	0.316
510.00	512.00		1.0	1.0	2	4 QVN	10	k110295	0.288	0.293
512.00	514.00		2.0	1.0	2	62 QVN	20	k110296	0.679	0.854

Hole Number: KN-02-24

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
570.00	572.00	Medium-fine-grained green-grey porphyritic silicic sericitic	1.0	2	136		k110326	0.269	0.384
572.00	574.00		0.5	0.1	2	75	k110327	0.282	0.372
574.00	576.00		1.0	2	2		k110328	0.227	0.287
576.00	578.00		1.0	1	45		k110329	0.234	0.32
578.00	580.00		1.0	2	5		k110330	0.258	0.393
580.00	582.00		1.0	2	136		k110331	0.277	0.471
582.00	584.00		2.0	2	84		k110333	0.243	0.523
584.00	586.00		1.0	2	6		k110334	0.244	0.41
586.00	588.00		1.0		0		k110335	0.268	0.338
588.00	590.00		4.0	0.1	1	1 QVN 4 Qtz + mt vein near 590.00m.	k110336	0.262	0.343
590.00	592.00		1.0		0		k110337	0.246	0.404
592.00	594.00		1.0	0.1	1	8	k110338	0.183	0.274
594.00	596.00		2.0	1	1		k110339	0.309	0.486
596.00	598.00	Medium-fine-grained green-grey porphyritic sericitic silicic	1.0	0.1	0	3	k110340	0.213	0.367
598.00	600.00		2.0	0.1	3	146 QVN 45 10 Qtz + mt veins, fault @ 45 degrees w/ gouge.	k110341	0.251	0.419
600.00	601.60	Medium-fine-grained green-grey porphyritic sericitic	1.0	1	12		k110342	0.182	0.316
601.60	604.00		2.0	0	9		k110343	0.186	0.326
604.00	606.00		1.0	1	2		k110344	0.221	0.355
606.00	608.00	Medium-fine-grained green-grey porphyritic sericitic mt-anhydrite-gypsum	0.5	1	3		k110345	0.188	0.317
608.00	610.00		1.0	1	26		k110346	0.184	0.278
610.00	612.00		2.0	1	72		k110347	0.169	0.26
612.00	614.00	Medium-fine-grained green-grey porphyritic sericitic	0.5	0	1		k110348	0.144	0.197
614.00	616.00		1.0	0	1	QVN 45 10	k110349	0.181	0.279
616.00	618.00	Medium-fine-grained green-grey porphyritic sericitic chloritic	1.0	0	1	Sericite alteration weakens, chlorite reappears.	k110350	0.211	0.328
618.00	620.00	Medium-fine-grained green-grey porphyritic chloritic sericitic	0.5	0	23		k110351	0.184	0.255

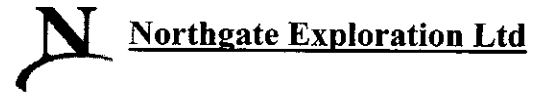
Hole Number: KN-02-24

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
620.00	622.00	Medium-fine-grained green-grey porphyritic chloritic sericitic	0.1		14		k110352	0.238	0.333
622.00	624.00		1.0	1	14		k110353	0.223	0.335
624.00	626.00		0.5	0.1	1	53	k110354	0.243	0.353
626.00	628.00		1.0	0.1		4	k110355	0.2	0.297
628.00	630.00		2.0	0		1	k110356	0.28	0.494
630.00	632.00		0.1	0.1	1	14	k110357	0.159	0.233
632.00	634.00		0.1	1	2	QVN 5	k110359	0.296	0.357
634.00	636.00		1.0	0.1	2	1 QVN 2 Qtz + mt veins.	k110360	0.336	0.488
636.00	638.00		1.0		14	Local silicification between 636.30 - 636.60m.	k110361	0.282	0.416
638.00	640.00		0.5		10		k110362	0.165	0.231
640.00	642.00		0.5		3		k110363	0.171	0.256
642.00	644.00		0.5	1	2		k110364	0.138	0.188
644.00	646.00		1.0	0.1	0	1	k110365	0.47	0.633
646.00	648.00		0.5	2	18	QVN 2 Qtz + mt veins.	k110366	0.238	0.28
648.00	650.00		0.1		2		k110367	0.135	0.176
650.00	652.00		0.5	1	13	QVN 4 Qtz + mt veins.	k110368	0.209	0.318
652.00	654.00		0.5	0	8	QVN 70 2	k110369	0.147	0.253
654.00	656.00		0.5	1	1	QVN 2 Qtz + mt + py veins.	k110370	0.152	0.215
656.00	658.00		0.1	0	12		k110371	0.12	0.153
658.00	660.00		0.1	1	11		k110372	0.131	0.166
660.00	662.00		1.0	0	1	QVN 3 Qtz + mt + py veins.	k110373	0.231	0.306
662.00	664.00		6.0	0	0	QVN 2	k110374	0.218	0.323
664.00	666.00		1.0	2	71	QVN 5	k110375	0.367	0.493
666.00	668.00		1.0	2	432	QVN 5	k110376	0.371	0.484
668.00	670.00		1.0	0.5	3	5 FVN 10 Qtz + mt + py + cpy and Fluorite + Qtz + mt + py vein.	k110377	0.315	0.423
670.00	672.00		0.5	0	1		k110378	0.335	0.495
672.00	674.00		0.5	2	20		k110379	0.344	0.467
674.00	676.00		0.5	1	20		k110380	0.267	0.397

Hole Number: KN-02-24

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
676.00	678.00	Medium-fine-grained green-grey porphyritic chloritic sericitic	0.1	1	29		k110381	0.253	0.336
678.00	680.00		0.1	1	3		k110382	0.27	0.359
680.00	682.00		0.1	1	33		k110384	0.243	0.325
682.00	684.00		0.1	1	7		k110385	0.353	0.499
684.00	686.00		0.5	1	21	Qtz - fluorite-pyrite vein.	k110386	0.222	0.34
686.00	688.00		1.0	0.1	1	13	k110387	0.21	0.331
688.00	690.00		0.5	2	34	QVN 5 Qtz + mt veins.	k110388	0.205	0.304
690.00	692.00		0.1	0.1	2	3	k110389	0.228	0.332
692.00	694.00		0.1		18		k110390	0.286	0.415
694.00	696.00		0.1	1	4	QVN 4 Qtz + mt + py vein near 694.00m.	k110391	0.225	0.321
696.00	698.00		0.1	0.1	0	54	k110392	0.214	0.292
698.00	700.00		0.1	0.1	0	8	k110393	0.23	0.328
700.00	702.00		0.1		3		k110394	0.216	0.306
702.00	704.00		0.1		0		k110395	0.26	0.376
704.00	705.55		0.1		0		k110396	0.238	0.342
705.55	707	HETEROLITHIC BRECCIA							
705.55	707.00	Medium-coarse-grained green-grey fragmental chloritic sericitic	0.1		0	Polymictic breccia/breccia pipe, intrusive, heterogeneous, poorly sorted angular to sub angular frags.	k110397	0.163	0.23
707	710.18	QUARTZ MONZONITE							
707.00	708.00	Medium-fine-grained green-grey porphyritic chloritic sericitic	0.5		13		k110398	0.182	0.2
708.00	710.18		0.5		0	E.O.H.	k110399	0.155	0.188
710.18		EOH							

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-25**

Northing: 15976.2	Total Depth: 764.1m
Easting: 10759.9	Azimuth: 180°
Elevation: 1694.3	Dip: -75°

Geologist: J. Mazvihwa
Logged Date: 8/2/2002

Survey Depth	Azimuth	Dip	Comments:
67 m	168 °	-76 °	
159 m	171 °	-77 °	
259 m	218 °	-78 °	Mechanical
360 m	165 °	-78 °	Mechanical
460 m	205 °	-78 °	Mechanical
561 m	213 °	-79 °	Mechanical
662 m	221 °	-80 °	Mechanical
762 m	203 °	-80 °	

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-25**

From (m)	To (m)	Rock Type	Comments
0	3.28	CASING	
3.28	15.96	ANDESITE BLADED FELDSPAR PORPHYRY	Pale grey bladed felspar porphyry. Felspar bladed phenocrysts in light grey , fine grained matrix. Porphyry is bleached sericitized and silicified pervasively. Protolith is overprinted by alteration. BF's visible only locally. Qtz, gypsum and pyrite veining randomly orientated. Limonite/zeolite infilling joints locally between beginning of hole and 6.40m. Localized zeolite veining. Py also disseminated in BFP matix, coarse and present as aggregates locally.
15.96	18.9	ANDESITE FLOW	Medium to dark green fine grained volcanic- basalt. Fine to medium size augite phenocrysts. Quartz/pyrite veining, randomly orientated, irregularly spaced. Bkn portions. Jonts infilled by black hem. Flow fragments cemented in friable broken fault zone by pale green, fine grained clay material.
18.9	47.95	ANDESITE BLADED FELDSPAR PORPHYRY	Pale grey bladed felspar porphyry. Felspar bladed phenocrysts in light grey , fine grained matrix. Porphyry is bleached sericitized and silicified pervasively- moderate to high. Qtz/ gypsum veining, randomly orientated and irregularly spaced. Protolith overprinted locally, phenocryts visilbe locally.
47.95	50.35	SYENITE	Quartz, plagioclase, pyroxene phenocrysts in light grey, fine grained matrix. Post-mineralisation dyke. Randomly cut by quartz/zeolite/carb veining, irregularly sapced. Local pink staining indicating potassic alteration, weak to moderate, pervasive.
50.35	58.02	ANDESITE BLADED FELDSPAR PORPHYRY	Pale grey BF porphyry. Bladed felspar phenocrysts, in fine grained, light grey matrix. Unit is pervasively silicified and sericitized- moderate to high. Quartz/gypsum veining, locally associated with zeolite veinign and randomly orientated, irregularly spaced. Pyrite stringers associated with quartz/ gypsum veining, x-cutting. Pyrite and chalcopyrite also finely disseminated in BFP matrix. Locally discontinuous zeolite veining. Protolith overprinted by alteration, felspar blades visible locally.
58.02	62.04	SYENITE	Plagioclase, quartz, pyroxene phenocrysts in fine grained medium green matrix. Post-mineralization dyke. Zeolite/ quartz/carb veining associated locally with thin hematite stringers. Local vuggy, dissolution structures. Pink stained indicating potassic altered portions- pervasive, moderate alteration.

Hole Number: **KN-02-25**

From (m)	To (m)	Rock Type	Comments
62.04	116.04	ANDESITE BLADED FELDSPAR PORPHYRY	Same as 105923
116.04	270.44	ANDESITE FLOW	Medium grey, flow, Takla, fine grained, massive. Quartz/ gypsum/ zeolite, randomly orientated, irregularly spaced. Pyrite stringers associated with quartz veining and +/- zeolite locally. Py and cpy diss in flow- fine. Dark green chlorite rich fragement in bleached flow- breccia. Flow is moderate to highly silicified and sericitized pervasively.
270.44	312.29	SYENITE	Post mineralistion, syenite dyke. Plagioclase/ quartz/ pyroxene phenocrysts in medium brown, fine grained matrix. Cut by zeolite veining, locally associated with quartz carbonate veining. Veining randomly orientated, irregularly spaced.
312.29	764.13	ANDESITE FLOW	Light to medium green, fine grained, flow. Weakly to moderately chloritized sericitized and weakly silicified. Rare dark green chloritic fragments, possibly local brecci. Alteration is generally pervasive. More sericitized, light fraible portions with dissolution features. Quartz/ calcite veining, associated with pyrite locally. Pyrite also finely disseminated in flow, also present as aggregates. Protolith overprinted locally.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-25

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	3.28	CASING							
	0.00	3.28					25	-2	-2
3.28	15.96	ANDESITE BLADED FELDSPAR PORPHYRY							
	3.28	3.96 Fine-coarse grained light grey quartz-sericite-pyrite silicic	3.0	0.1	0	QGLV 10	105892	0.019	0.047
	3.96	5.96	3.0	0.1	0	QGLV 10	105893	0.055	0.087
	5.96	7.96	3.0	0.1	0	QGLV 10	105894	0.029	0.066
	7.96	9.96	3.0	0.1	0	QGLV 10	105895	0.02	0.071
	9.96	11.96	3.0	0.1	0	QGLV 10	105896	0.058	0.128
	11.96	13.96	3.0	0.1	0	QGLV 10	105897	0.033	0.065
	13.96	14.49	3.0	0.1	0	QGLV 10	105898	0.018	0.056
	14.49	15.96	3.0	0.1	0	QGLV 10	105899	0.013	0.079
15.96	18.9	ANDESITE FLOW							
	15.96	18.90 Fine-grained medium green quartz-sericite-pyrite chloritic	0.5		1	QVN 7	105900	0.022	0.114
18.9	47.95	ANDESITE BLADED FELDSPAR PORPHYRY							

Hole Number: KN-02-25

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
18.90	20.90	Fine-coarse grained light grey quartz-sericite-pyrite silicic	3.0	0.1	0 QGV	10 Pale grey bladed felspar porphyry. Felspar bladed phenocrysts in light grey , fine grained matrix. Porphyry is bleached sericitized and silicified pervasively- moderate to high. Qtz/ gypsum veining, randomly orientated and irregularly spaced. Protolith overprinted locally, phenocrysts visible locally.	105901	0.038	0.054
20.90	22.90		3.0	0.1	0 QGV	10	105902	0.015	0.074
22.90	24.90		3.0	0.1	0 QGV	10	105903	0.03	0.075
24.90	26.90		3.0	0.1	0 QGV	10	105904	0.032	0.085
26.90	28.90		3.0	0.1	0 QGV	10	105905	0.008	0.058
28.90	30.90		3.0	0.1	0 QGV	10 Core loss.	105906	0.059	0.127
30.90	32.90		3.0	0.1	0 QGV	10 Zeolite veining between 30.90m- 31.19m.	105907	0.052	0.121
32.90	34.90		3.0	0.1	0 QGV	10	105908	0.045	0.079
34.90	36.90		3.0	0.1	0 QGV	10	105909	0.025	0.051
36.90	38.90		3.0	0.1	0 QGV	10	105910	0.036	0.051
38.90	40.90		3.0	0.1	0 QGV	10	105911	0.03	0.053
40.90	42.90		3.0	0.1	0 QGV	10	105912	0.018	0.053
42.90	44.90		3.0	0.1	0 QGV	10	105913	0.031	0.06
44.90	46.90		3.0	0.1	0 QGZV	15 Zeolite veining between 44.90m- 45.10m	105914	0.049	0.069
46.90	47.95		3.0	0.1	0 QGZV	15 Zeolite veining.	105915	0.029	0.051
47.95	50.35	SYENITE							
47.95	49.96	Fine-coarse grained brown porphyritic			11 QZCV	15 Quartz, plagioclase, pyroxene phenocrysts in light grey, fine grained matrix. Post-mineralisation dyke. Randomly cut by quartz/zeolite/carb veining, irregularly sapced. Local pink staining indicating potassic alteration, weak to moderate, pervasive.	105916	0.007	0.01
49.96	50.35				16 QZCV	15	105917	0.003	-2
50.35	58.02	ANDESITE BLADED FELDSPAR PORPHYRY							

Hole Number: KN-02-25

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
50.35	52.35	Fine-coarse grained light grey quartz-sericite-pyrite silicic	3.0	0.1	0	QGZV 10	Pale grey BF porphyry. Bladed feldspar phenocrysts, in fine grained, light grey matrix. Unit is pervasively silicified and sericitized- moderate to high. Quartz/gypsum veining, locally associated with zeolite veinign and randomly orientated, irregularly spaced. Pyrite stringers associated with quartz/ gypsum veining, x-cutting. Pyrite and chalcopyrite also finely disseminated in BFP matrix. Locally discontinuous zeolite veining. Protolith overprinted by alteration, feldspar blades visible locally.	105919	0.031	0.11
52.35	54.35		3.0	0.1	0	QGZV		105920	0.03	0.106
54.35	56.35		3.0	0.1	0	QGZV 15	Localised increase in zeolite veining.	105921	0.021	0.073
56.35	58.02		3.0	0.1	0	QGZV 15		105922	0.03	0.075
58.02	62.04	SYENITE								
58.02	60.02	Fine-coarse grained brown porphyritic			18	QZCV 15	Plagioclase, quartz, pyroxene phenocrysts in fine grained medium green matrix. Post-mineralization dyke. Zeolite/ quartz/carb veining associated locally with thin hematite stringers. Local vuggy, dissolution structures. Pink stained indicating potassic altered portions- pervasive, moderate alteration.	105923	0.009	0.032
60.02	62.04				14	QZCV 15		105924	0.003	0.008
62.04	116.04	ANDESITE BLADED FELDSPAR PORPHYRY								
62.04	64.04	Fine-coarse grained light grey quartz-sericite-pyrite silicic	3.0	0.1	0	QGZV 15		105925	0.013	0.075
64.04	66.04		3.0	0.1	0	QGZV 15		105926	0.025	0.072
66.04	68.04		3.0	0.1	0	QGZV 15		105927	0.039	0.1
68.04	70.04		3.0	0.1	0	QGZV 15		105928	0.038	0.074
70.04	72.04		3.0	0.1	0	QGZV 15		105929	0.02	0.051
72.04	74.04		3.0	0.1	1	QGZV 15		105930	0.056	0.079
74.04	76.04		3.0	0.1	0	QGZV 15		105931	0.066	0.076
76.04	78.04		3.0	0.1	0	QGZV 15		105932	0.042	0.07
78.04	80.04		3.0	0.1	0	QGZV 15		105933	0.038	0.068
80.04	82.04		3.0	0.1	0	QGZV 15		105934	0.025	0.043
82.04	84.04		3.0	0.1	0	QGZV 15		105935	0.035	0.078
84.04	86.04		3.0	0.1	0	QGZV 15	Increased zeolite veining locally.	105936	0.07	0.112

Hole Number: KN-02-25

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
86.04	88.04	Fine-coarse grained light grey quartz-sericite-pyrite silicic	3.0	0.1	0	QGZV 15	Local BKN zones, massive pyrite aggregates between 88.00m- 88.04m	105937	0.112	0.201
88.04	90.04		3.0	0.1	0	QGZV 15	Core loss.	105938	0.037	0.096
90.04	92.04		3.0	0.1	0	QGZV 15	Local increases in zeolite veining associated with pyrite aggregates.	105939	0.046	0.104
92.04	94.04		3.0	0.1	0	QGZV 15		105940	0.042	0.081
94.04	96.04		3.0	0.1	0	QGZV 15	Silicified portion, feldspar blades silicified, appear to be replace by silica locally matrix is also silicified.	105941	0.048	0.088
96.04	98.04		3.0	0.1	0	QGZV 15		105942	0.032	0.071
98.04	100.04		3.0	0.1	0	QGZV 15		105943	0.012	0.056
100.04	102.04		3.0	0.1	0	QGZV 15		105945	0.044	0.104
102.04	104.04		3.0	0.1	0	QGZV 15		105946	0.026	0.072
104.04	106.04		3.0	0.1	0	QGZV 15	Bladed feldspars were more visible in porphyry.	105947	0.031	0.067
106.04	108.04		2.0	0.1	0	QGZV 15	Locally decreased pyrite.	105948	0.085	0.092
108.04	110.04		3.0	0.1	0	QGZV 15	Pale grey BFP. Bladed feldspar phenocrysts in fine grained, light grey matrix. Pervasively silicified and sericitized, moderate to high. Quartz/ gypsum veining locally associated with quartz and gypsum veining, also finely disseminated in BFP matrix. Protolith overprinted by alteration, bladed feldspar phenocrysts visible locally.	105949	0.038	0.08
110.04	112.04		3.0	0.1	0	QGZV 15		105950	0.006	0.036
112.04	114.04		3.0	0.1	0	QGZV 15	Quartz/ zeolite veining between 112.38m- 112.58m. Protolith overprinted- BFP or Flow gradual contact.	105951	0.005	0.029
114.04	116.04		3.0	0.1	0	QGZV 15	115.46m-115.55m, potassic altered portion- pink stained- gradual contact.	105952	0.026	0.052
116.04	270.44	ANDESITE FLOW								
116.04	118.04	Fine-grained medium grey quartz-sericite-pyrite silicic	2.0	0.1	0	QGZV 10	Medium grey, flow, Takla, fine grained, massive. Quartz/ gypsum/ zeolite, randomly orientated, irregularly spaced. Pyrite stringers associated with quartz veining and +/- zeolite locally. Py and cpy diss in flow- fine. Dark green chlorite rich fragments in bleached flow- breccia. Flow is moderate to highly silicified and sericitized pervasively.	105953	0.068	0.081
118.04	120.04		2.0	0.1	0	QGZV 10	Local BKN zones. Light grey portions, zeolite veining. Less competent.	105954	0.069	0.087
120.04	122.04		2.0	0.1	0	QGZV 10		105955	0.032	0.071

Hole Number: KN-02-25

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
122.04	124.04	Fine-grained medium grey quartz-sericite-pyrite silicic	2.0	0.1	0 QGZV	10	Local BKN zones. Light grey portions, zeolite veining. Less competent.	105956	0.008	0.053
124.04	126.04		2.0	0.1	0 QGZV	10	Competant chlorite rich fragments, associated with disseminated pyrite- possibly local breccia.	105957	0.035	0.069
126.04	128.04		2.0	0.1	0 QGZV	10		105958	0.043	0.091
128.04	130.00		2.0	0.1	0 QGZV	10		105959	0.017	0.047
130.00	132.00		2.0	0.1	0 QGZV	10	Less competent fraible, less chloritic, bleached, local potassic rich zones (130.00m- 130.20m).	105960	0.004	0.052
132.00	134.00		2.0	0.1	0 QGZV	10	Friable less chloritic, bleached , local potassic rich zones. Mt stringers.	105961	0.017	0.051
134.00	136.00		2.0	0.1	6 QGZV	10	Chloritic, friable, non-competant and pink stained portions indicating potassic altered portions. Disseminated pyrite.	105962	0.06	0.108
136.00	137.87		2.0	0.1	0 QGZV	10	Fraible less chloritic pink stained potassic altered portions- bleached, silicified and sericitized.	105963	0.075	0.119
137.87	139.87		2.0	0.1	0 QGZV	10	Slightly more chloritic, chlorite rich fragments- possibly local breccia.	105964	0.082	0.117
139.87	140.75		2.0	0.1	0 QGZV	10	20cm piece of misplaced core.	105965	0.056	0.129
140.75	142.22		2.0	0.1	0 QGZV	10	Chloritic fragments- possibly local breccia. Pyrite aggregates present in fragments and host rock.	105966	0.024	0.081
142.22	144.32		2.0	0.1	0 QGZV	15	Less chloritic more bleached- silicified and sericitized. Increased zeolite veining.	105967	0.04	0.114
144.32	146.32		2.0	0.1	0 QGZV	15	Chloritic fragments, less bleached- weakly sericitized and silicified.	105968	0.055	0.102
146.32	148.32		2.0	0.1	0 QGZV	15		105969	0.022	0.067
148.32	150.32		2.0	0.1	0 QGZV	15		105971	0.023	0.073
150.32	152.32		2.0	0.1	0 QGZV	15	Slightly less silicified, chlorite fragments- possibly local breccia.	105972	0.027	0.071
152.32	154.32		2.0	0.1	0 QGZV	15	Ore silicified, increased chloritic fragments, possibly local breccia.	105973	0.017	0.06
154.32	156.32		2.0	0.1	0 QGZV	15	Slightly less silicified, less chlorite fragments	105974	0.02	0.135
156.32	158.32		2.0	0.1	0 QGZV	15	More silicified locally. Small portion of local breccia consisting of chlorite fragments.	105975	0.048	0.086
158.32	160.32		2.0	0.1	0 QGZV	15		105976	0.03	0.058

Hole Number: KN-02-25

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
160.32	162.32	Fine-grained medium grey quartz-sericite-pyrite silicic	2.0	0.1	0 QGZV	15 More silicified locally. Small portion of local breccia consisting of chlorote fragments.	105977	0.048	0.073
162.32	164.32		2.0	0.1	0 QGZV	15	105978	0.023	0.076
164.32	166.34		2.0	0.1	0 QGZV	15	105979	0.054	0.166
166.34	168.34		2.0	0.1	0 QGZV	15 Increased zeolite veining between 166.50m- 166.85m. Medium green, more chloritic, less silicified and sericitised.	105980	0.025	0.067
168.34	170.34		2.0	0.1	0 QGZV	15	105981	0.031	0.062
170.34	172.34		2.0	0.1	0 QGZV	15	105982	0.037	0.101
172.34	174.34	Fine-grained medium green chloritic silicic	2.0	0.1	0 QZV	10 Medium to dark green fine grained flow. Moderate chlorite alteration. Weakly sericitized and silicified. Quartz/ zeolite/ pyrite veining. Pyrite veining mainly associated with quartz veining. Pyrite stringers bound by silicified and slightly sericitized zones, about 1cm thick on either side of the veining- locally. Pyrite and chalcopyrite also finely disseminated in flow. Chlorite fragments, possibly local breccia present locally. Local BKN zones.	105983	0.025	0.09
174.34	176.34		2.0	0.1	0 QZV	10 Fraible portion of flow fragementes and cemented by fine grey/ white gypsum- possibly minor fault zone.	105984	0.049	0.081
176.34	178.34		2.0	0.1	0 QZV	10	105985	0.034	0.061
178.34	180.34		2.0	0.1	0 QZV	10	105986	0.044	0.064
180.34	182.34		2.0	0.1	0 QZV	10	105987	0.049	0.074
182.34	184.34		2.0	0.1	0 QZV	10	105988	0.049	0.081
184.34	186.34		2.0	0.1	0 QZV	10 Local increase in zeolite veining.	105989	0.043	0.088
186.34	188.34		2.0	0.1	0 QZV	10	105990	0.028	0.068
188.34	190.34		2.0	0.1	0 QZV	10	105991	0.035	0.068
190.34	192.34		2.0	0.1	0 QZV	10	105992	0.032	0.096
192.34	194.34		2.0	0.1	0 QZV	10	105993	0.013	0.065
194.34	196.34		2.0	0.1	0 QZV	10	105994	0.015	0.044
196.34	198.34		2.0	0.1	0 QZV	10 Green/ grey less chloritic slightly sericitized	105995	0.012	0.062
198.34	200.34		2.0	0.1	0 QZV	10	105997	0.018	0.058
200.34	202.34		2.0	0.1	0 QZV	10 Green/ grey less chloritic slightly sericitized. Chloritic fragments, possibly local breccia portions.	105998	0.017	0.056

Hole Number: KN-02-25

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
202.34	204.34	Fine-grained medium green chloritic silicic	2.0	0.1	0 QZV	10	Green/ grey less chloritic slightly sericitized.	105999	0.026	0.066
204.34	206.34		2.0	0.1	0 QZV	10	Green/ grey less chloritic slightly sericitized. Chloritic fragments, possibly local breccia portions. Local increase in zeolite veining.	106000	0.012	0.035
206.34	208.34		2.0	0.1	0 QZV	10		109801	0.024	0.05
208.34	210.34		2.0	0.1	1 QZV	10	Local increase in zeolite veining.	109802	0.062	0.126
210.34	212.34		2.0	0.1	0 QZV	10		109803	0.068	0.125
212.34	214.34		2.0	0.1	0 QZV	10	Rarely moly on quartz/ pyrite veining boundary- less than 1% minor quantities.	109804	0.027	0.059
214.34	216.34		2.0	0.1	0 QZV	10	Light grey, slightly silicified and sericitized - weak to moderate chlorite alteration.	109805	0.016	0.046
216.34	218.34		2.0	0.1	0 QZV	10	Chlorite fragments, possibly local breccia.	109806	0.016	0.057
218.34	220.34		2.0	0.1	0 QZV	10		109807	0.036	0.073
220.34	222.34		2.0	0.1	0 QZV	10		109808	0.022	0.055
222.34	224.34		2.0	0.1	0 QZV	10		109809	0.05	0.08
224.34	226.34		2.0	0.1	0 QZV	10		109810	0.066	0.097
226.34	228.34		2.0	0.1	0 QZV	10	Weakly sericitized and silicified portion.	109811	0.054	0.077
228.34	230.34		2.0	0.1	0 QZV	10	Weakly sericitized and silicified, local increase in zeolite veining.	109812	0.024	0.069
230.34	232.34		2.0	0.1	0 QZV	10	Weakly sericitised and silicified portion, more silicified and competent zone.	109813	0.048	0.061
232.34	234.34		2.0	0.1	0 QZV	10		109814	0.042	0.077
234.34	236.34		2.0	0.1	0 QZV	10	Silicified chlorite rich fragments- local breccia.	109815	0.024	0.07
236.34	238.34		2.0	0.1	0 QZV	10		109816	0.026	0.056
238.34	240.34		2.0	0.1	0 QZV	10	Silicified chlorite rich fragments- local breccia. Local BKN zones.	109817	0.051	0.083
240.34	242.34		2.0	0.1	0 QZV	10	Silicified chlorite rich fragments- local breccia. Local increase in zeolite veining.	109818	0.024	0.053
242.34	244.34		2.0	0.1	0 QZV	10		109819	0.044	0.069

Hole Number: KN-02-25

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
244.34	246.34	Fine-grained medium green chloritic silicic	2.0	0.1	0 QZV	10	Medium to light green, fine grained flow. Moderate silicified portions- competent with dark green, chloritic fragments. Portions of less silicified, pale green, slightly friable, weakly sericitized flow with no chloritic fragments. Contact between the two degrees of alteration is sharp. Quartz zeolite veining locally associated with pyrite, randomly orientated and irregularly spaced.	109820	0.086	0.128
246.34	248.34		2.0	0.1	0 QZV	10		109821	0.033	0.068
248.34	250.34		2.0	0.1	0 QZV	10		109823	0.033	0.073
250.34	252.34		2.0	0.1	0 QZV	10		109824	0.031	0.056
252.34	254.34		2.0	0.1	0 QZV	10		109825	0.003	0.005
254.34	256.34		2.0	0.1	0 QZV	10		109826	0.029	0.066
256.34	258.34	Fine-grained light grey chloritic sericitic	2.0	0.1	0 QZV	10	Minor mt veining associated with quartz zeolite veining between 256.75m-256.79m. Light grey/ green, fine grained flow with disseminated pyrite and chalcopyrite. Quartz/ zeolite veining associated with pyrite stringers locally. Weakly to moderate chloritized and sericitized, weakly sericitized.	109827	0.06	0.155
258.34	260.34		2.0	0.1	0 QZV	10		109828	0.062	0.147
260.34	262.34		2.0	0.1	0 QZV	10		109829	0.032	0.06
262.34	264.34		2.0	0.1	0 QZV	10		109830	0.024	0.057
264.34	266.34		2.0	0.1	0 QZV	10		109831	0.027	0.07
266.34	268.34		2.0	0.1	0 QZV	10		109832	0.046	0.068
268.34	270.44		2.0	0.1	1 QZV	10		109833	0.028	0.055
270.44	312.29	SYENITE								
270.44	272.44	Fine-medium-grained medium brown porphyritic			5 QZCV	10	Post mineralisation, syenite dyke. Plagioclase/ quartz/ pyroxene phenocrysts in medium brown, fine grained matrix. Cut by zeolite veining, locally associated with quartz carbonate veining. Veining randomly orientated, irregularly spaced.	109834	0.009	0.005
272.44	274.44				12 QZCV	10	Sericitised and silicified flow fragment in syenite dyke between 274.31m- 274.41m.	109835	0.008	-2
274.44	276.44				12 QZCV	10	Sericitised and silicified flow fragment in syenite dyke between 274.44m- 274.66m and between 275.19m- 276.06m.	109836	0.008	0.021

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
276.44	278.44	Fine-medium-grained medium brown porphyritic		8	QZCV	10	109837	0.002	-2
278.44	280.44			21	QZCV	10	109838	0.002	-2
280.44	282.44			20	QZCV	10	109839	0.002	-2
282.44	284.44			12	QZCV	10	109840	0.002	-2
284.44	285.02			16	QZCV	10	109841	0.002	-2
285.02	287.02			0	QZCV	10	109842	0.033	0.057
						Flow fragment silicified and sericitized, portions of local breccia with dark green fragments.			
287.02	288.32			0	QZCV	10	109843	0.012	0.031
288.32	289.33			0	QZCV	10	109844	0.029	0.045
289.33	291.33			10	QZCV	10	109845	0.01	-2
291.33	293.33			20	QZCV	10	109846	0.003	-2
293.33	295.33			12	QZCV	10	109847	0.004	-2
295.33	297.33			15	QZCV	10	109849	0.002	-2
297.33	299.33			15	QZCV	10	109850	0.002	-2
						Post mineralisation syenite dyke. Plagioclase, quartz, pyroxene phenocrysts in fine grained, medium brown matrix- weakly to moderately potassic altered. X-cut by quartz/ zeolite/ carb. Veining, randomly orientated and irregularly spaced.			
299.33	301.33			22	QZCV	10	109851	0.003	-2
301.33	303.33			17	QZCV	10	109852	0.002	-2
303.33	305.33			15	QZCV	10	109853	0.002	-2
305.33	307.33			18	QZCV	10	109854	0.002	-2
307.33	309.33			11	QZCV	10	109855	0.003	-2
309.33	311.33			13	QZCV	10	109856	0.003	-2
311.33	312.29				QZCV	10	109857	0.003	-2
312.29	764.13	ANDESITE FLOW							

Hole Number: KN-02-25

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
312.29	314.29	Fine-grained light green chloritic sericitic	2.0	0.1	0 QGZCV	15	Light to medium green, fine grained, flow. Weakly to moderately chloritized sericitized and weakly silicified. Rare dark green chloritic fragments, possibly local brecci. Alteration is generally pervasive. More sericitized, light fraible portions with dissolution features. Quartz/ calcite veining, associated with pyrite locally. Pyrite also finely disseminated in flow, also present as aggregates. Protolith overprinted locally.	109858	0.026	0.106
314.29	316.29		2.0	0.1	0 QGZCV	15		109859	0.038	0.111
316.29	318.29		2.0	0.1	0 QGZCV	15		109860	0.021	0.088
318.29	320.29		2.0	0.1	0 QGZCV	15		109861	0.017	0.074
320.29	322.29		2.0	0.1	0 QGZCV	15		109862	0.086	0.219
322.29	324.29		2.0	0.1	0 QGZCV	15		109863	0.013	0.001
324.29	326.29		2.0	0.1	0 QGZCV	15		109864	0.032	0.137
326.29	328.29		2.0	0.1	0 QGZCV	15		109865	0.028	0.129
328.29	330.29		2.0	0.1	0 QGZCV	15		109866	0.015	0.086
330.29	332.29		2.0	0.1	0 QGZCV	15		109867	0.01	0.057
332.29	334.29		2.0	0.1	1 QGZCV	15		109868	0.032	0.058
334.29	336.29		2.0	0.1	0 QGZCV	15		109869	0.027	0.072
336.29	338.29		2.0	0.1	0 QGZCV	15		109870	0.05	0.079
338.29	340.29		2.0	0.1	1 QGZCV	15		109871	0.032	0.113
340.29	342.29		2.0	0.1	0 QGZCV	15		109872	0.023	0.091
342.29	344.29		2.0	0.1	0 QGZCV	15		109873	0.029	0.076
344.29	346.29		2.0	0.1	0 QGZCV	15		109875	0.066	0.133
346.29	348.29		2.0	0.1	0 QGZCV	15	Portions with moderate to high pervasive silicification. Protolith overprinted.	109876	0.016	0.08
348.29	350.29		2.0	0.1	0 QGZCV	15	Amygdules present- barely visible due to alteration.	109877	0.024	0.126
350.29	352.29		2.0	0.1	0 QGZCV	15	Fault zone- flow fragments cemented by white clay material and gypsum.	109878	0.041	0.103
352.29	354.29		2.0	0.1	0 QGZCV	15	Vuggy dissolution features associated with gypsum carb veining.	109879	0.031	0.098
354.29	356.29		2.0	0.1	0 QGZCV	15		109880	0.058	0.124

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
356.29	358.29	Fine-grained light green chloritic sericitic	2.0 0.1	0	QGZCV 15	Increased zeolite veining amygdules like structures infilled with chlorite.	109881	0.011	0.081
358.29	360.29		2.0 0.1	0	QGZCV 15	Moderate to high silicification- pervasive, and barely visible amygdules infilled with chlorite.	109882	0.041	0.125
360.29	362.29		2.0 0.1	0	QGZCV 15		109883	0.062	0.13
362.29	364.29		2.0 0.1	0	QGZCV 15		109884	0.042	0.114
364.29	366.29	Fine-grained medium green chloritic silicic	2.0 0.1	0	QZCV 15	Medium green, fine grained flow. Moderately yo high chloritization and silicification, pervasive alteration. Weak sericitization. Chloritic fragments- possibly local breccia. Quartz/ zeolite/ pyrite veining, randomly orientated, irregularly spaced. Pyrite +/- chalcopyrite also present as fine disseminations and aggregates. Vuggy dissolution features in quartz/ zeolite veining. Localized increases in zeolite/quartz veining.	109885	0.028	0.097
366.29	368.29		2.0 0.1	0	QZCV 15		109886	0.059	0.166
368.29	370.29		2.0 0.1	0	QZCV 15		109887	0.051	0.114
370.29	372.29		2.0 0.1	0	QZCV 15		109888	0.044	0.095
372.29	374.29		2.0 0.1	2	9 QZCV 15	Rare mt. veining between 372.79m- 373.04m. Weak silicification, trace fractures sericitisation. Minor BKN zone. Moly stringers.	109889	0.079	0.108
374.29	376.29		2.0 0.1	0	QZCV 15	Localized increase in zeolite / quartz/ carbonate veining. Vuggy dissolution features, recrystalistion. Amygdules.	109890	0.045	0.124
376.29	378.29		2.0 0.1	0	QZCV 15	Massive disseminated pyrite between 377.85m-377.95m.	109891	0.03	0.099
378.29	380.29		2.0 0.1	1	QZCV 15	Portion of increased zeolite veining.	109892	0.045	0.136
380.29	382.29		2.0 0.1	0	QZCV 15	Localised increase in quartz veining.	109893	0.046	0.113
382.29	384.29		2.0 0.1	0	QZCV 15	Increased sericite alteration. Reduced silicification and chlorite content.	109894	0.019	0.076
384.29	386.29		2.0 0.1	0	QZCV 15		109895	0.039	0.11
386.29	388.29		2.0 0.1	0	QZCV 15		109896	0.035	0.112
388.29	390.29		2.0 0.1	0	QZCV 15	Local increase in zeolite/ quartz veining.	109897	0.033	0.112
390.29	392.29		2.0 0.1	0	QZCV 15	Increased sericite alteration, reduced chloritization and silicification.	109898	0.029	0.091
392.29	394.28		2.0 0.1	1	QZCV 15		109899	0.044	0.104
394.28	396.28		2.0 0.1	1	QZCV 15		109901	0.022	0.047

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
396.28	398.28	Fine-grained medium green chloritic silicic	2.0 0.1	0	QZCV	15	Increased sericite alteration, reduced chloritization and silicification.	109902	0.04	0.073
398.28	400.28		2.0 0.1	0	QZCV	15		109903	0.059	0.095
400.28	402.28		2.0 0.1	0	QZCV	15		109904	0.043	0.105
402.28	404.28		2.0 0.1	0	QZCV	15		109905	0.006	0.043
404.28	406.28		2.0 0.1	0	QZCV	15		109906	0.03	0.091
406.28	408.28		2.0 0.1	0	QZCV	15		109907	0.02	0.073
408.28	410.28		2.0 0.1	0	QZCV	15		109908	0.013	0.035
410.28	412.28		2.0 0.1	0	QZCV	15		109909	0.043	0.075
412.28	414.28		2.0 0.1	0	QZCV	15		109910	0.027	0.041
414.28	416.28		2.0 0.1	0	QZCV	15		109911	0.026	0.036
416.28	418.28		2.0 0.1	0	QZCV	15		109912	0.013	0.033
418.28	420.28		2.0 0.1	0	QZCV	15		109913	0.008	0.038
420.28	422.28		2.0 0.1	0	QZCV	15	Light brown coloration possibly due to sericite alteration +/- fine biotite alteration.	109914	0.025	0.053
422.28	424.28		2.0 0.1	0	QZCV	15		109915	0.037	0.065
424.28	426.28		2.0 0.1	0	QZCV	15		109916	0.032	0.059
426.28	428.28		2.0 0.1	0	QZCV	15	Quartz calcite veining at about 428.25m.	109917	0.046	0.092
428.28	430.28		2.0 0.1	0	QZCV	15	Minor carbonate stringers, discontinuous.	109918	0.039	0.075
430.28	432.28		2.0 0.1	0	QZCV	15	Highly sericitized portion, light grey and quartz/ zeolite veining.	109919	0.027	0.054
432.28	434.28		2.0 0.1	0	QZCV	15		109920	0.055	0.067
434.28	436.28		2.0 0.1	0	QZCV	15		109921	0.02	0.045
436.28	438.28		2.0 0.1	0	QZCV	15	Medium to light green/ grey, fine grained, chlorite and silicified flow- moderate to high pervasive, minor sericitization, moderate to high locally. Quartz veining association with carbonate, zeolite locally. Pyrite veining and aggregates association with quartz veining. Pyrite also finely disseminated in flow. Veining is randomly orientated and irregularly spaced. Local brown sericite +/- fine bt alteration.	109922	0.025	0.048
438.28	440.28		2.0 0.1	0	QZCV	15		109923	0.04	0.074

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
440.28	442.28	Fine-grained medium green chloritic silicic	2.0	0.1	0 QZCV	15	109924	0.094	0.119
442.28	444.28		2.0	0.1	0 QZCV	15	109925	0.052	0.09
444.28	446.28		2.0	0.1	0 QZCV	15	109927	0.03	0.054
446.28	448.28		2.0	0.1	0 QZCV	20	109928	0.026	0.045
448.28	450.28		3.0	0.5	0 QZCMV	20	109929	0.023	0.045
450.28	452.28		3.0	0.5	0 QZCMV	15	109930	0.071	0.087
452.28	454.28		3.0	0.5	0 QZCMV	15	109931	0.121	0.12
454.28	456.28		3.0	0.5	0 QZCMV	15	109932	0.137	0.136
456.28	458.28		3.0	0.5	1 QZCMV	15	109933	0.245	0.201
458.28	460.28		3.0	0.5	0 QZCMV	15	109934	0.106	0.121
460.28	462.28		3.0	0.5	0 QZCMV	15	109935	0.072	0.067
462.28	464.28		3.0	0.5	0 QZCMV	15	109936	0.085	0.076
464.28	466.28		3.0	0.5	0 QZCMV	15	109937	0.128	0.142

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
466.28	468.28	Fine-grained medium green chloritic silicic	3.0	0.5	0 QZCMV	15 Moly associated with zeolite veining - 90 degrees to CA between 466.34m- 466.40m and 467.23m and 467.27m. Brown colour due to sericite alteration +/- fine biotite alteration.	109938	0.139	0.218
468.28	470.28		3.0	0.5	0 QZCMV	15 Patchy brown colour due to sericite alteration +/- fine biotite alteration.	109939	0.047	0.05
470.28	472.28		3.0	0.5	0 QZCV	15 Patchy brown colour due to sericite alteration +/- fine biotite alteration. Petrographic sample taken between 471.73m - 471.84m to identify the brown mineralisation.	109940	0.032	0.058
472.28	474.28		3.0	0.5	0 QZCV	15 Patchy brown colour due to sericite alteration +/- fine biotite alteration.	109941	0.049	0.085
474.28	476.28		3.0	0.5	0 QZCV	15	109942	0.057	0.08
476.28	478.28		3.0	0.5	0 QZCV	15 Patchy brown colour due to sericite alteration +/- fine biotite alteration. Local vuggy dissolution features in brown sericite altered +/- fine biotite.	109943	0.052	0.091
478.28	480.28		3.0	0.5	0 QZCV	15 High chlorite content, weakly sericitized.	109944	0.036	0.059
480.28	482.28		3.0	0.5	0 QZCV	15 Brown stain possibly due to sericite alteration +/- fine biotite.	109945	0.036	0.103
482.28	484.28		3.0	0.5	0 QZCV	15 Brown colour possibly due to sericite +/- fine biotite alteration. Quartz pyrite vein between 483.24m- 483.41m.	109946	0.02	0.033
484.28	486.02		3.0	0.5	0 QZCV	15	109947	0.008	0.022
486.02	488.02		3.0	0.5	0 QCV	95 Smokey/grey quartz/ pyrite vein. Pyrite+/- chalcopyrite aggregates in quartz vein. Minor carbonate associated with quartz. Minor chlorite rich portions.	109948	0.024	0.045
488.02	490.02		3.0	0.5	1 QZCV	15 Brown colour possibly due to sericite alteration +/- fine biotite alteration. Patchy moderate chlorite altered portions.	109949	0.158	0.199
490.02	492.02		3.0	0.5	44 QZCV	15	109950	0.051	0.082
492.02	494.02		3.0	0.5	0 QZCV	15 Medium green/ brown, fine grained basalt, moderate to highly chloritised and silicified locally weak sericite alteration. Brown colour possibly due to sericite alteration +/- fine biotite alteration. Pyrite +/- chalcopyrite locally association with quartz vein, present as aggregates as well in basalt and quartz veining. Rare moly in places associated with quartz vein, local quartz flooding. Portions with reduced chalcopyrite percentage.	109951	0.115	0.152

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
494.02	496.07	Fine-grained medium green chloritic silicic	3.0	0.5	0 QZCV	90 Quartz/ carb flooding, vuggy dissolution features present locally, carbonate recrystation. Associated with pyrite +/- chalcopyrite.	109953	0.027	0.064
496.07	498.07		3.0	0.5	0 QZCV	15 Local breccia portion. Brown colour due to sericite alteration +/- fine biotite alteration.	109954	0.086	0.148
498.07	500.07		3.0	0.5	0 QZCV	15 Quartz vein between 498.92m- 499.43m.	109955	0.042	0.07
500.07	502.17		3.0	0.5	0 QZCV	15 Quartz vein associated with pyrite +/- chalcopyrite aggregates between 501.26m- 502.17m	109956	0.013	0.027
502.17	504.17		3.0	0.5	0 QZCV	15	109957	0.032	0.089
504.17	506.17		3.0	0.5	0 QZCV	20 Increase in zeolite/ quartz veining, randomly orientated- patchy yellow sericite alteration.	109958	0.062	0.107
506.17	508.17		3.0	0.5	0 QZCV	20 Localised zeolite/ quartz/ pyrite stockwork. Quartz veining bound by sericite/ chlorite +/- fine biotite. Rare moly associated with quartz vein at about 507.80m and at 508.77m.	109959	0.043	0.079
508.17	510.17		3.0	0.5	0 QZCV	20 Local increase in disseminated pyrite.	109960	0.053	0.094
510.17	512.17		3.0	0.5	0 QZCV	20	109961	0.024	0.073
512.17	514.17		3.0	0.5	43 QZCV	20 Rare mt vein associated with quartz and pyrite.	109962	0.048	0.078
514.17	516.17		3.0	0.5	0 QZCV	20 Moderate to high sericitized portion- pale green/ grey coloration.	109963	0.047	0.07
516.17	518.17		3.0	0.5	0 QZCV	20 Local potassic alteration, pink stain.	109964	0.085	0.107
518.17	520.17		3.0	0.5	0 QZCV	20 Local potassic alteration, pink stain. Local BKN zones, increase in pyrite aggregates and zeolite veining.	109965	0.078	0.1
520.17	522.17		3.0	0.5	0 QZCV	50 Increase quartz vein, vuggy dissolution features, carb dissolved- 520.17m- 520.89m. Augite phenocrysts.	109966	0.049	0.082
522.17	524.17		3.0	0.5	0 QZCV	15 Decreased veining, slight brown stain due to sericite alteration +/- fine biotite.	109967	0.062	0.084
524.17	526.17		3.0	0.5	0 QZCV	15 Augite phenocrysts in basalt.	109968	0.036	0.054
526.17	528.17		3.0	0.5	0 QZCV	15	109969	0.036	0.056
528.17	530.17		3.0	0.1	0 QVN	15 Local BKN zones.	109970	0.041	0.067
530.17	532.17		3.0	0.1	0 QVN	15 Moderate to high chloritized zones, locally reduced chalcopyrite associated with pyrite. Localized chlorite veining on the boundaries of quartz/ pyrite +/- chalcopyrite veining.	109971	0.065	0.088

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
532.17	534.17	Fine-grained medium green chloritic silicic	3.0 0.1	0	QVN	15 Moderate to high chloritized zones, locally reduced chalcopyrite associated with pyrite. Localized chlorite veining on the boundaries of quartz/ pyrite+/- chalcopyrite veining.	109972	0.051	0.088
534.17	536.17		3.0 0.1	0	QVN	15	109973	0.033	0.07
536.17	538.17		3.0 0.1	1	QVN	15 Moderate to high chloritized zones, locally reduced chalcopyrite associated with pyrite. Localized chlorite veining on the boundaries of quartz/ pyrite+/- chalcopyrite veining. 536.24m- 536.89m, quartz/ carb veining- locally vuggy dissolution features.	109974	0.027	0.055
538.17	540.17		3.0 0.1	0	QVN	15 Moderate to high chloritized zones, locally reduced chalcopyrite associated with pyrite. Localized chlorite veining on the boundaries of quartz/ pyrite+/- chalcopyrite veining.	109975	0.023	0.048
540.17	542.17		3.0 0.1	0	QVN	15 Moderate to high chloritized zones, locally reduced chalcopyrite associated with pyrite. Localized chlorite veining on the boundaries of quartz/ pyrite+/- chalcopyrite veining. Minor chalcopyrite aggregate.	101401	0.044	0.08
542.17	544.17		3.0 0.1	0	QVN	15 Moderate to high chloritized zones, locally reduced chalcopyrite associated with pyrite. Localized chlorite veining on the boundaries of quartz/ pyrite+/- chalcopyrite veining.	101402	0.021	0.047
544.17	546.17		3.0 0.1	0	QVN	15	101404	0.034	0.059
546.17	548.17		3.0 0.1	0	QVN	15 Weak to moderate chloritization and silicification.	101405	0.035	0.032
548.17	550.17		3.0 0.1	0	QVN	15	101406	0.048	0.073
550.17	552.17		3.0 0.1	0	QVN	15 Weak to moderate chloritization and silicification. Brown colour due to sericite alteration +/- fine biotite alteration.	101407	0.029	0.053
552.17	554.17		3.0 0.1	0	QVN	15 Weak to moderate chloritization and silicification.	101408	0.025	0.05
554.17	556.17		3.0 0.1	0	QVN	15	101409	0.027	0.056
556.17	558.17		3.0 0.1	0	QVN	15	101410	0.05	0.061
558.17	560.17		3.0 0.1	0	QVN	15 Weak chloritization, moderate sericitization.	101411	0.04	0.062

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
560.17	562.17	Fine-grained medium green chloritic silicic	2.0	0.1	0 QZCV	10	Medium green/ brown, fine grained basalt, moderate to high chloritization and silicification. Locally weak sericite alteration. Portions of higher sericitization are green/ yellow. Brown portions indicate possible brown sericite alteration +/- fine biotite alteration. Pyrite +/- chalcopyrite present as fine disseminations and aggregates in basalt and veining is associated with quartz veins. Local BKN zone. Protolith is overprinted by alteration locally, localized increase in zeolite veining.	101412	0.059	0.088
562.17	564.17		2.0	0.1	0 QZCV	10		101413	0.026	0.046
564.17	566.17		2.0	0.1	1 QZCV	10		101414	0.022	0.043
566.17	568.17		2.0	0.1	1 QZCV	10	Rare mt aggregates associated with quartz and pyrite veining.	101415	0.034	0.063
568.17	570.17		2.0	0.1	0 QZCV	10		101416	0.037	0.074
570.17	572.17		2.0	0.1	0 QZCV	10		101417	0.036	0.07
572.17	574.17		2.0	0.1	0 QZCV	10	Core loss, BKN zone. Local increase in quartz/ zeolite/ carb veining, randomly orientated, irregularly spaced.	101418	0.032	0.058
574.17	576.17		2.0	0.1	0 QZCV	10		101419	0.049	0.062
576.17	578.21		2.0	0.1	0 QZCV	10	Stockwork of about 1mm thick black/grey stringers bound by light grey staining, randomly orientated with boxwork structure, nonmagnetic, hardness between 2-3, possibly gypsum/ chlorite.	101420	0.046	0.059
578.21	580.21		2.0	0.1	0 QZCV	10	Local increase in quartz/ zeolite veining.	101421	0.127	0.125
580.21	582.21		2.0	0.1	0 QZCV	10	Local increase in pyrite aggregates, up to about 3% locally.	101422	0.056	0.081
582.21	584.21		2.0	0.1	0 QZCV	10		101423	0.041	0.058
584.21	586.21		2.0	0.1	0 QZCV	10	Local increase in pyrite aggregates, up to about 3% locally. Minor brown staining- possibly sericite alteration +/- fine biotite alteration.	101424	0.037	0.054
586.21	588.21		2.0	0.1	7 QZCV	10		101425	0.017	0.03
588.21	590.21		2.0	0.1	0 QZCV	10	Portion with augite and plagioclase phenocrysts in Takla basalt. Local brown colour due to sericite alteration +/- fine biotite alteration.	101426	0.048	0.078
590.21	592.21		2.0	0.5	0 QZCV	10	Local increase in chalcopyrite. Pyrite and chalcopyrite aggregates about 0.5m diameter bound by thin chlorite veining.	101427	0.041	0.083

Hole Number: KN-02-25

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
592.21	594.21	Fine-grained medium green chloritic silicic	3.0 0.1	2	QGAV	10	Gypsum and anhydrite veining associated with quartz and pyrite veining, generally at 45-50 degrees CA and also randomly orientated.	101428	0.027	0.056
594.21	596.21		3.0 0.1	0	QGAV	10	Rare mt aggregates associated with gypsum and anhydrite, quartz and pyrite +/- chalcopyrite.	101430	0.048	0.07
596.21	598.21		3.0 0.1	1	QGAV	10	Augite phenocrysts. Protolith overprinted by sericite +/- fine biotite alteration, amygdules present, boundaries not visible.	101431	0.05	0.067
598.21	600.21		3.0 0.1	0	QGAV	10		101432	0.038	0.05
600.21	602.21		3.0 0.1	1	QGAV	10		101433	0.066	0.089
602.21	604.21		3.0 0.1	3	QGAV	10	Plagioclase phenocrysts present locally.	101434	0.02	0.024
604.21	606.23		3.0 0.1	1	QGAV	10		101435	0.048	0.06
606.23	608.17		3.0 0.1	0	QGAV	10	Quartz/ zeolite/ pyrite veining.	101436	0.041	0.05
608.17	610.17		3.0 0.1	1	QZV	10	Quartz/ pyrite/ chlorite veining, no gypsum and anhydrite veining. Moderate to high silicification. Very weakly sericitized +/- fine biotite- pale brown colouring.	101437	0.04	0.048
610.17	612.17		3.0 0.1	0	QZV	10		101438	0.079	0.098
612.17	614.17		3.0 0.1	1	QZV	10		101439	0.058	0.06
614.17	616.15		3.0 0.1	2	QZV	10		101440	0.094	0.109
616.15	618.15		3.0 0.1	0	QZV	20	Local quartz/ zeolite flooding- in moderate sericitized portions, associated with carb veining.	101441	0.054	0.066
618.15	620.17		3.0 0.1	0	QZV	10	Sericite alteration +/- fine biotite alteration- pale brown coloration.	101442	0.072	0.103
620.17	622.15		3.0 0.1	0	QZV	10		101443	0.037	0.06
622.15	624.17		3.0 0.1	0	QZV	10		101444	0.041	0.054
624.17	626.17		3.0 0.1	0	QZV	10		101445	0.046	0.045
626.17	628.17		3.0 0.1	1	QZV	10		101446	0.064	0.07
628.17	630.15		3.0 0.1	0	QZV	10	Zeolite veining.	101447	0.061	0.059
630.15	632.16		3.0 0.1	49	QZV	10	Rare mt stringer associated with quartz vein.	101448	0.059	0.058

Hole Number: KN-02-25

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
632.16	634.16	Fine-grained medium green porphyritic chloritic silicic	2.0	0.1	4 QZV	10	Fine grained, medium green with portions of pale green/ grey (weakly to moderately sericitized and weakly chloritised). Degree of silicification varies from weak (friable soft) to moderate (competant- hardness >4) throughout the lithology. Patchy brown stain indicates brown sericite alteration +/- fine biotite. The moderate silicified and chloritized portions have about 10% veining (quartz/ zeolite/ pyrite) dark green and rare augite phenocrysts. The green/ grey moderately sericitized and weakly silicified is generally associated with an increase in veining, about 20% locally. Brown staining also indicates sericite alteration +/- fine biotite alteration. Pyrite aggregates and disseminations present in these portions as well as in stringer form association with quartz vein. Augite phenocrysts more evident locally.	101449	0.064	0.06
634.16	636.16		2.0	0.1	1 QZV	10		101450	0.111	0.123
636.16	638.16		2.0	0.1	0 QZV	10	Local BKN zone.	101451	0.125	0.123
638.16	640.16		2.0	0.1	18 QZV	10		101452	0.075	0.087
640.16	642.16		2.0	0.1	4 QZV	10	Protolith overprinted locally. Pyrite veining about 1cm at about 45 degrees CA.	101453	0.086	0.122
642.16	644.16		2.0	0.1	1 QZV	10	Rare moly associated quartz/ zeolite/ pyrite veining at about 643.37m	101454	0.055	0.078
644.16	646.16		2.0	0.1	0 QZV	10		101456	0.073	0.127
646.16	648.16		2.0	0.1	2 1 QZV	15	Amygdules infilled by secondary chlorite and pyrite. Augite phenocrysts. Brown colour due to sericite alteration +/- fine biotite alteration. Local increase in veining. Rare mt aggregates association with quartz/ zeolite/ pyrite veining.	101457	0.092	0.106
648.16	650.16		2.0	0.1	0 QZV	15	Rare mt aggregates associated with quartz/ zeolite/ pyrite veining.	101458	0.127	0.149
650.16	652.16		2.0	0.1	2 1 QZV	10	Quartz/ zeolite/ pyrite veining is randomly orientated.	101459	0.074	0.104
652.16	654.16		2.0	0.1	1 QZV	10		101460	0.051	0.084
654.16	656.16		2.0	0.5	0 QZV	10	Pyrite and chalcopyrite aggregates associated with quartz vein.	101461	0.059	0.1

Hole Number: KN-02-25

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
656.16	658.16	Fine-grained medium green porphyritic chloritic silicic	2.0	0.5	2 0 QZV 90 10	Pyrite and chalcopyrite aggregates associated with quartz vein. Quartz/ pyrite +/- chalcopyrite veining about 2mm thick on average. 90 degrees to CA and equidistant from each other about 5cm, forming a banding appearance as seen in 101562 present, bound by slight brown staining - possibly sericite alteration +/- fine biotite alteration.	101462	0.049	0.071
658.16	660.16		2.0	0.5	1 QZV 90 10	Banding of quartz and pyrite described in sample 101562 present.	101463	0.04	0.143
660.16	662.16		2.0	0.5	1 QZV 90 10	Quartz/ pyrite vein, 3cm thick at about 660.70m associated with mt aggregates. Quartz/ pyrite +/- chalcopyrite veining about 2mm thick, 90 degrees to CA, equidistant from each other about 5cm forming banding appearance as seen in sample 101562 present, bound by slight brown staining possibly sericite alteration +/- fine biotite alteration.	101464	0.043	0.1
662.16	664.16		2.0	0.5	7 QZV 90 10		101465	0.042	0.071
664.16	666.16		2.0	0.5	1 QZV 90 10		101466	0.042	0.069
666.16	668.16		2.0	0.5	0 QZV 10		101467	0.04	0.066
668.16	670.16		2.0	0.5	2 QZV 10		101468	0.043	0.068
670.16	672.16		2.0	0.5	0 QZV 10		101469	0.045	0.17
672.16	674.16		2.0	0.5	0 QZV 10		101470	0.049	0.088
674.16	676.16		2.0	0.5	2 QZV 10	Moly association with quartz pyrite vein at about 675.74m.	101471	0.046	0.083
676.16	678.16		2.0	0.5	2 1 QZV 10	Mt aggregates associated with quartz/ pyrite veining. Augite phenocrysts.	101472	0.051	0.071
678.16	680.16		2.0	0.5	18 QZV 10	Local BKN zone.	101473	0.056	0.078
680.16	682.16		2.0	0.1	2 1 QZV 10	Mt veining associated with with pyrite and quartz at about 680.34m. Brown portion is moderate sericite alteration +/- fine biotite. Increased veining.	101474	0.06	0.088
682.16	686.18		2.0	0.1	0 QZV 10	Moderately chlorite and silicification alteration, fine disseminated pyrite +/- chalcopyrite. 9ft or core ground, 0% recovery between 683.06m (2241ft) and 685.80m (2250ft)	101475	0.067	0.14

Hole Number: KN-02-25

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm			
686.18	687.77	Fine-grained medium green porphyritic chloritic silicic	2.0	0.1	0	QZV	10	Fine grained, medium to dark green basalt. Augite and plagioclase phenocrysts present in places. Chlorite alteration varying from weak(green, gray, yellow colour) to moderate(green). Portion of weak chlorite alteration are generally moderately sericitized +/- fine biotite with green/ grey yellow colour associationwith increased quartz/ pyrite veining. Portions which are moderately chloritized ore generally also silicified. Pyrite +/- chalcopyrite confined to veining associated with quartz vein, and also present as aggregates and fine disseminations.	101476	0.046	0.088	
687.77	689.77		2.0	0.1	0	QZV	15	Quartz/ zeolite/ pyrite, 0.5 degrees CA, about 3cm thick between 687.77m- 688.57m. Local BKN zones.	101477	0.07	0.109	
689.77	691.77		2.0	0.1	0	QZV	10	Local increase in zeolite veining at about 689.80m.	101478	0.141	0.169	
691.77	693.77		2.0	0.1	0	QZV	10	Brown sericite alteration +/- fine biotite, protolith overprinted by alteration. Plagioclase and augite phenocrysts baerly visible. Disseminated pyrite and chalcopyrite.	101479	0.078	0.09	
693.77	695.77		2.0	0.1	0	QZV	10	Brown sericite alteration +/- fine biotite, protolith overprinted by alteration. Plagioclase and augite phenocrysts baerly visible. Disseminated pyrite and chalcopyrite. Mt. Aggregates associated with quartz and pyrite veining.	101480	0.071	0.103	
695.77	697.77		2.0	0.1	0	QZV	10	Increase in zeolite veining between 696.89m -697.27m. Pyrite and chalcopyrite and mt / quartz vein at 697.60m.	101482	0.058	0.064	
697.77	699.77		2.0	0.5	26	QZV	10	Quartz/ zeolite/ mt/ pyrite between 698.44m-698.48m, 90 degrees CA. Plagioclase and augite phenocrysts. Brown stain- possibly due to sericite alteration +/- fine biotite alteration. Quartz/ mt/ pyrite vein at about 701.70m.	101483	0.073	0.088	
699.77	701.77		2.0	0.1	1	QZV	10	Pale green portion with plagioclase and augite phenocrysts and increased zeolite veining between 702.02m and 702.34m.	101484	0.055	0.071	
701.77	703.77		2.0	0.1	0	QZV	10		101485	0.092	0.098	
703.77	705.77		2.0	0.1	5	2	QZV	10	Mt veining associated with quartz/ pyrite vein.	101486	0.04	0.047
705.77	707.77		2.0	0.1	2	0	QZV	10	Mt veining associated with quartz/ pyrite vein. Brown sericite alteration +/- fine biotite alteration.	101487	0.119	0.229
707.77	709.77		2.0	0.1	0	QZV	10	Portion between 708.00m- 708.75m is moderate to highly sericitized, very weak chloritized and silicified. Bkn zones.	101488	0.051	0.058	

Hole Number: KN-02-25

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
709.77	711.77	Fine-grained medium green porphyritic chloritic silicic	2.0	0.1	2 QZV	10	Local increase in disseminated pyrite and aggregates. Local increase in quartz veining, locally associated with mt, pyrite and zeolite.	101489	0.089	0.147
711.77	713.77		2.0	0.1	0 QZV	10	Moderately to highly chloritized and silicified. Dark green colour. Very weak sericitization. Quartz/ pyrite +/- chalcopyrite + mt veinjing , randomly orientated.	101490	0.129	0.166
713.77	715.77		2.0	0.1	6 QZV	10		101491	0.073	0.098
715.77	717.77		2.0	0.1	2 QZV	10		101492	0.047	0.065
717.77	719.77		2.0	0.1	23 QZV	10		101493	0.081	0.072
719.77	721.77		2.0	0.1	1 QZCV	10	Moderate to highly silicified portion. Brown stained-possibly sericite alteration +/- fine biotite. Carbonate associated with quartz veining.	101494	0.043	0.046
721.77	723.77		2.0	0.1	19 QZCV	45 10	Augite phenocrysts. Quartz/ pyrite veining at about 45 degrees to CA. Highly silicified portions. Dark green/ brown indicating possible sericite alteration +/- fine biotite alteration.	101495	0.045	0.036
723.77	725.77		2.0	0.1	1 QZCV	20	Localized increase in pyrite- disseminations. Highly silicified portions. Brown sericite altered portion +/- fine biotite.	101496	0.081	0.086
725.77	727.77		2.0	0.1	0 QZCV	30	Quartz/ zeolite vein association with pyrite aggregates between 725.77m-727.21m. Minor BKN zone, augite phenocrysts.	101497	0.114	0.149
727.77	729.77		2.0	0.1	0 QZCV	7	Increased augite phenocrysts, reduced pyrite aggregates, Quartz/ zeolite/ pyrite/ carbonate veining reduced.	101498	0.055	0.068
729.77	731.77		2.0	0.1	0 QZCV	7	Local potassic altered portions. Brown colour possibly due to sericite alteration +/- fine biotite alteration.	101499	0.068	0.095
731.77	733.77		2.0	0.1	12 QZCV	7	Rare amygdules infilled by carbonate. BKN zones. Quartz vein association with pyrite aggregates between 733.44m- 733.94m.	101500	0.045	0.087
733.77	735.77		2.0	0.1	0 QZCV	7	Plagioclase phenocrysts, locally association with pyrite aggregates. Brown sericite association +/- fine biotite alteration.	101501	0.066	0.156
735.77	737.77		2.0	0.1	2 QZCV	7		101502	0.052	0.063

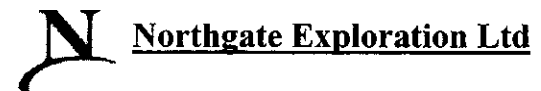
Hole Number: KN-02-25

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm		
737.77	739.77	Fine-grained medium green porphyritic chloritic silicic	2.0	0.1	2	QZCV	7	Plagioclase phenocrysts, locally association with pyrite aggregates. Brown sericite association +/- fine biotite alteration. Local potassic altered portion between 738.53m- 738.73m. Augite phenocrysts, mt associated with zeolite/ quartz/ pyrite vein.	101503	0.029	0.033
739.77	741.77		2.0	0.1	4	QZCV	15	Medium to dark green, fine grained basalt, with plagioclase and augite phenocrysts. Zeolite/ carb/ pyrite veining randomly orientated, irregularly spaced. Local BKN zones. Pyrite disseminated in basalt, also present as veining association with zeolite/ quartz/pyrite - locally associated with carbonate veining .	101504	0.052	0.09
741.77	743.77		2.0	0.1	0	QZCV	30	Increased quartz/ zeolite veining between 742.85m- 743.64m- associated with pyrite locally, randomly orientated.	101505	0.057	0.075
743.77	745.77		2.0	0.1	2	QZCV	30	Monzodiorite between 744.79m- 745.85m. Potassic altered, K-feldspar, plagioclase quartz phenocrysts. Quartz/ carbonate/ pyrite veining- randomly orientated, irregularly spaced.	101506	0.101	0.109
745.77	747.60		2.0	0.1	1	QZCV	15	Rare mt veining associated with quartz and pyrite. Quartz veining associated with pyrite and mt aggregates. Reduced veining. Increased augite phenocrysts, plagioclase phenocrysts present locally.	101508	0.083	0.087
747.60	749.60		2.0	0.1	1	QZCV	10	Disseminated pyrite. Pyrite veining associated with quartz and mt. veining locally.	101509	0.071	0.07
749.60	751.60		2.0	0.1	2	QZV	10	Plagioclase phenocrysts in medium green fine grained matrix, augite phenocrysts present locally.	101510	0.065	0.066
751.60	753.60		2.0	0.1	1	QZV	10	Mt veining locally associated with pyrite/ quartz veining, randomly orientated, irregularly spaced.	101511	0.076	0.095
753.60	755.60		2.0	0.1	5	2 QZV	10	Rare K-feldspar veining. Brown strain is possiblysericite +/- fine biotite alteration- patchy, localised alteration.	101512	0.047	0.049
755.60	757.60		2.0	0.1	5	35 QZV	15	Increase in quartz and zeolite veining between 755.60m and 755.90m. Mt veining associated with quartz/ zeolite/ pyrite veins.	101513	0.06	0.057
757.60	759.60		2.0	0.1	5	27 QZV	7	Massive, minor fine augite phenocrysts- subhedral. Reduced pyrite veining. Fine disseminated pyrite.	101514	0.029	0.027
759.60	761.51		2.0	0.1	8	QZV	10	Patchy brown colour- sericite alteration +/- fine biotite alteration.	101515	0.041	0.04

Hole Number: KN-02-25

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm		
761.51	762.91	Fine-grained medium green porphyritic chloritic silicic	2.0	0.1	5	1 QZV	15	Eolite/ mt/ pyrite veining between 761.51m- 761.62m. Local BKN zone. General increase in pyrite and quartz veining. Increased pyrite, quartz, zeolite, mt veining- locally asociated. Randomly orientated. Plagioclase phenocrysts, local BKN zones.	101516	0.034	0.029
762.91	764.13		2.0	0.1	19	QZV	5	Reduced veining, augite phenocrysts, visible fine disseminated pyrite locally, no plagioclase phenocrysts visible. Quartz/ zeolite veining randomly orientated. Rare pyrite stringers or veining. EOH.	101517	0.043	0.038
764.13	EOH										

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-26**

Northing: 16050.8	Total Depth: 102.7m
Easting: 9858.31	Azimuth: 0°
Elevation: 1672.4	Dip: -90°

Geologist: E. Ramsay
Logged Date: 8/4/2002

Survey Depth	Azimuth	Dip	Comments:
100 m	0 °	-90 °	No survey

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-26**

From (m)	To (m)	Rock Type	Comments
0	12.19	CASING	
12.19	15.24	BLADED FELDSPAR PORPHYRY	broken core w/low recovery throughtout and poor rqd rock is porphyritic, showing 15-25% medium to coarse grained white phenocrysts in a dark gray matrix aphanitic grained. Very weak . Local chlorite alteration 0.1-5% magnetite in matrix , feldspars white to light green from seicite/clay overiant alteration . Traces to 1% pyrite .samples taken form run bloc to run block
15.24	24.38	LOST CORE	lost core- no reocvery
24.38	25.91	BLADED FELDSPAR PORPHYRY	
25.91	27.43	LOST CORE	lost core- no recovery
27.43	30.48	BLADED FELDSPAR PORPHYRY	
30.48	40.45	SYENITE	dark orange -grey , porphyritic post mineral syenite , medium grained . Corefractured bot good recovery
40.45	63.09	BLADED FELDSPAR PORPHYRY	broken core with gouge in some places . Bladed felspar porphy showing medium to coarse grained seriticization feldspar phenocrysts very darkblue-greenish gray to geenish black in a plack aphanihic to fine grained phametic matrix of chloritized mafic minerals and minor magnetite. recovery is low samples are taken from run block to run block
63.09	77.55	SYENITE	post mineral syeniote simmlar to 30.48-40.45
77.55	78.33	BLADED FELDSPAR PORPHYRY	
78.33	84.43	LOST CORE	bladed feldspar porphy similar to 40.45-63.09
84.43	102.72	BLADED FELDSPAR PORPHYRY	

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-26

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	12.19	CASING							
	0.00	12.19					26	-2	-2
12.19	15.24	BLADED FELDSPAR PORPHYRY							
	12.19	13.72	1.0	5	53	broken core w/low recovery throughout and poor rpd rock is porphyritic, showing 15-25% medium to coarse grained white phenocrysts in a dark gray matrix aphanitic grained. Very weak . Local chlorite alteration 0.1-5% magnetite in matrix , feldspars white to light green from seicite/clay overiant alteration . Traces to 1% pyrite .samples taken form run bloc to run block	K110400	0.163	0.106
	13.72	15.24	0.1	3	25		K110401	0.207	0.23
15.24	24.38	LOST CORE							
	15.24	24.38				lost core- no recovery	LC26-01	0	0
24.38	25.91	BLADED FELDSPAR PORPHYRY							
	24.38	25.91	1.0	0	1	Fine-medium-grained dark grey porphyritic sericitic chloritic	K110402	0.231	0.266
25.91	27.43	LOST CORE							
	25.91	27.43				lost core- no recovery	LC26-02	0	0
27.43	30.48	BLADED FELDSPAR PORPHYRY							
	27.43	28.96	0.5	0	0	Fine-medium-grained dark grey porphyritic sericitic chloritic	K110403	0.167	0.186
	28.96	30.48	0.5	0	0		K110404	0.197	0.184
30.48	40.45	SYENITE							
	30.48	33.53		1	4	dark orange -grey , porphyritic post mineral syenite , medium grained . Corefractured bot good recovery	K110405	0.059	0.011
	33.53	35.05		1	16		K110406	0.073	-2
	35.05	36.58		1	17		K110407	0.069	-2
	36.58	38.10		1	17		K110408	0.062	-2

Hole Number: KN-02-26

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
38.10	40.45	Medium-fine-grained orange grey porphyritic		1	13		K110410	0.037	-2
40.45	63.09	BLADED FELDSPAR PORPHYRY							
40.45	42.67	Fine-coarse grained green-grey porphyritic sericitic chloritic	1.0		0	broken core with gouge in some places . Bladed felspar porphry showing medium to coarse grained seriticization feldspar phenocrysts very darkblue-greenish gray to geenish black in a plack aphanihic to fine grained phametic matrix of chloritized mafic minerals and minor magnetite. recovery is low samples are taken from run block to run block	K110411	0.085	0.332
42.67	44.20		0.5		0		K110412	0.207	0.183
44.20	47.24		0.5		0		K110413	0.139	0.162
47.24	51.82		0.5		0		K110414	0.098	0.131
51.82	54.86		1.0		0		K110415	0.147	0.219
54.86	57.91		0.5		0		K110416	0.25	0.352
57.91	63.09		0.5		0		K110417	0.185	0.3
63.09	77.55	SYENITE							
63.09	66.14	Medium-fine-grained orange grey porphyritic		1	18	post mineral syeniote simmlar to 30.48-40.45	K110418	0.004	0.006
66.14	68.17			1	20		K110419	0.002	-2
68.17	70.00			1	20		K110420	0.002	-2
70.00	72.00			1	17		K110421	0.002	-2
72.00	74.00			1	20		K110422	0.002	-2
74.00	76.00			1	18		K110423	0.003	-2
76.00	77.55			1	15		K110424	0.005	-2
77.55	78.33	BLADED FELDSPAR PORPHYRY							
77.55	78.33	Fine-coarse grained green-grey porphyritic	0.5		3		K110425	0.13	0.203
78.33	84.43	LOST CORE							
78.33	84.43					bladed feldspar porphry similar to 40.45-63.09	LC26-03	0	0
84.43	102.72	BLADED FELDSPAR PORPHYRY							

Hole Number: KN-02-26

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
84.43	87.48	Fine-coarse grained green-grey porphyritic sericitic chloritic	3.0	1			K110426	0.148	0.175
87.48	90.53		1.0	10			K110427	0.092	0.071
90.53	96.62		1.0	1			K110428	0.088	0.127
96.62	102.72		0.5	4			K110429	0.117	0.165
102.72	EOH								

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-27**

Northing: 15486.7	Total Depth: 499.85m
Easting: 11784.8	Azimuth: 360°
Elevation: 1736.2	Dip: -70°

Geologist: J. Mazvihwa
Logged Date: 8/15/2002

Survey Depth	Azimuth	Dip	Comments:
82 m	28 °	-82 °	Mechanical
405 m	353 °	-74 °	
497 m	13 °	-74 °	Mechanical

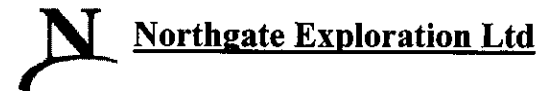
Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-27**

From (m)	To (m)	Rock Type	Comments
0	5.18	CASING	Overburden
5.18	499.87	MONZONITE	Plagioclase, k-feldspar phenocrysts along with tabular / rectangular hornblende and accession biotite and qtz in pale grey, fine grained matrix which probably consists of fine plagioclase, potassic feldspar, hornblende, biotite. Magnetite finely disseminated in matrix, also appear to be associated with tabular hornblende - the tabular hornblende are magnetic in places. Porphyry is generally crowded. Pink zeolite qtz, +/- carb veining are randomly orientated irregularly spaced minor effervesence with HCl locally. Localized potassic altered portions - pink staining, Fe staining, Local BKN zones. Rare k-fsp veining-pink hardness > 4. No visible py mineralization. Looks like crowded feldspar porphyry at bottom of KN02-16 and KN02-25. Syenite - Monzonite depending on alkali feldspar.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-27

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	5.18	CASING						
0.00	5.18				Overburden	27	-2	-2
5.18	499.87	MONZONITE						
5.18	7.62	Fine-medium-grained medium brown porphyritic potassic chloritic	19	ZKQCV	5 Plagioclase, k-feldspar phenocrysts along with tabular / rectangular hornblende and accession biotite and qtz in pale grey, fine grained matrix which probably consists of fine plagioclase, potassic feldspar, hornblende, biotite. Magnetite finely disseminated in matrix, also appear to be associated with tabular hornblende - the tabular hornblende are magnetic in places. Porphyry is generally crowded. Pink zeolite qtz, +/- carb veining are randomly orientated irregularly spaced minor effervesence with HCl locally. Localized potassic altered portions - pink staining, Fe staining, Local BKN zones. Rare k-fsp veining-pink hardness > 4. No visible py mineralization. Looks like crowded feldspar porphyry at bottom of KN02-16 and KN02-25. Syenite - Monzonite depending on alkali feldspar.	101518	0.002	0.007
7.62	8.60		10	ZKQCV	5	101519	0.004	-2
8.60	10.67		8	ZKQCV	5 Minor green colour between 10.00m-10.10m - possibly minor chlorite	101520	0.001	-2
10.67	12.67		20	ZKQCV	5 Planes lined by pink hardness > 4 - kfsp	101521	0.001	0.005
12.67	14.60		12	ZKQCV	5	101522	0.001	-2
14.60	16.60		14	ZKQCV	5	101523	-2	-2
16.60	18.60		22	ZKQCV	5	101524	-2	0.005
18.60	20.60		15	ZKQCV	5	101525	-2	-2
20.60	21.60		18	ZKQCV	5	101526	-2	0.005
21.60	22.60		19	ZKQCV	5	101527	-2	0.005
22.60	24.60		20	ZKQCV	5	101528	-2	-2
24.60	26.60		20	ZKQCV	5	101529	-2	0.005
26.60	28.60		23	ZKQCV	5 Phenocrysts barely visible between 28.34-28.60m	101530	0.001	-2

Hole Number: KN-02-27

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
28.60	30.60	Fine-medium-grained medium brown porphyritic potassic chloritic		26	ZKQCV	5	101531	-2	-2
30.60	32.60			14	ZKQCV	5	101532	-2	0.005
32.60	34.60			20	ZKQCV	5	101534	0.001	-2
34.60	36.60			12	ZKQCV	5	101535	-2	-2
36.60	38.60			21	ZKQCV	5	101536	-2	0.008
						potassic alteration reduced locally. Orange yellow species peppered texture - leucoxene- altered titanium (rutile) between 38.23-38.43m. Vuggy dissolution features has carb has been dissolved lined by red hein, bound by qtz/ carb + minor cpy. Assoc. with white, platy soft hardness < 2 white mica-muscovite. 2mm diameter py aggieyte assoc. with the vuggy local increase in potassic alteration			
38.60	40.60			19	ZKQCV	5	101537	-2	-2
40.60	42.60			26	ZKQCV	5	101538	-2	0.009
42.60	44.60			10	ZKQCV	5	101539	-2	-2
44.60	46.12			16	ZKQCV	5	101540	0.001	0.007
						green colour-chlorite. Phenocryst/ porphyritic not visible. Zeo/ qtz hein veining 34 deg CA defining contact with potassic altered zone			
46.12	47.20			12	ZKQCV	5	101541	0.002	-2
						Chloritic green portions between 47.54-48.18m footwall contact is between 1-5 CA			
47.20	48.44			16	ZKQCV	5	101542	0.001	-2
48.44	50.00			13	ZKQCV	5	101543	0.002	-2
						Chloritic portion between 51.15-51.61m local faults infilled by clay			
50.00	52.60			16	ZKQCV	5	101544	0.001	-2
52.60	54.60			8	ZKQCV	5	101545	0.001	-2
54.60	56.60			15	ZKQCV	5	101546	0.001	-2

Hole Number: KN-02-27

From	To	Rock Type	Py-Cpy-Mt Ms Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
56.60	58.60	Fine-medium-grained medium brown porphyritic potassic chloritic	2 ZKQCV	5 Plagioclase, k-feldspar phenocrysts along with tabular / rectangular hornblende and accession biotite and qtz in pale grey, fine grained matrix which probably consists of fine plagioclase, potassic feldspar, hornblende, biotite. Muscovite-white biotite also present. Magnetite finely disseminated in matrix. also appear to be associated with tabular hornblende - the tabular hornblende - the hornblende are magnetic in places. Porphyry is crowded in place resembling the crowded feldspar porphyry at the bottom of KN02-16 and 02-25 pinkzeolite/Qtz +/- carb veining are randomly orientated and irregularly spaced. Minor effervescence with HCl locally. Pink staining indicating possible potassic alteration or iron staining-orthoclase- staining not effecting feldspar phenocrysts -> k-feldspar. Local BKN zones. Rare k-fsp veining - pink hardness >4. No visible py mineralization crowded feldspar porphyry or syenite or monzo? Minor green chlorite portion micaceous minerals pristine muscovite and mica platy - unaltered.	101547	-2	-2
58.60	60.60		18 ZKQCV	5 Rare epi lining joints between about 59.30-59.40m	101548	-2	-2
60.60	62.60		12 ZKQCV	5 Petro sample taken between 60.68m-60.81m	101549	0.001	-2
62.60	64.60		13 ZKQCV	5 Green chlorite portions carb veining -effervesces with HCl	101550	-2	-2
64.60	66.60		10 ZKQCV	5 Minor green stained portions chloritic. Red hew friable, lining joints	101551	0.001	-2
66.60	68.60		15 ZKQCV	5	101552	0.001	-2
68.60	70.60		0 ZKQCV	5 Chloritic portions mafic- chloritic clasts in fine grained dark green/grey matrix, cut by Qtz/ carb veining randomly orientated irregularly spaced. Zeolite veining, with rare hem veining	101553	-2	-2
70.60	71.58		14 ZKQCV	5 green chloritic portion between 70.55-70.76m	101554	0.001	-2
71.58	73.00		13 ZKQCV	5 green chloritic portions between 72.68-72.84m	101555	0.001	-2
73.00	74.42		20 ZKQCV	5 Local BKN zones	101556	0.001	-2
74.42	76.00		0 ZKQCV	5 Chloritic portions, mafic- chlorite and feldspar phenocryst in fine grained, dark green/grey matrix cut by Qtz/ carb veining +zeolite, randomly orientated and irregularly spaced. Rare infilling jts. Rare red hem lining joints	101557	0.001	-2
76.00	77.72		12 ZKQCV	5 Chloritic portions between 76.30-76.74m	101558	0.001	-2

Hole Number: KN-02-27

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
77.72	80.00	Fine-medium-grained medium brown porphyritic potassic chloritic		1	ZKQCV	5	Local BKN zones. Chloritic portion between 77.37-77.60m	101560	0.001	-2
80.00	82.00			4	ZKQCV	10	Red hem veining	101561	0.001	-2
82.00	84.00			17	ZKQCV	7	Local BKN Zones	101562	0.001	-2
84.00	86.00			16	ZKQCV	7		101563	0.001	-2
86.00	88.00			16	ZKQCV	7		101564	-2	-2
88.00	90.00			18	ZKQCV	7	Minor chloritic portions	101565	0.001	-2
90.00	92.00			5	ZKQCV	7	Chloritic portion green, massive locally sheared between 90.47-90.95m. Hangingwall contact defined by re hem stringers	101566	0.001	-2
92.00	94.00			18	ZKQCV	7	local BKN zones	101567	-2	-2
94.00	96.00			18	ZKQCV	7		101568	-2	-2
96.00	98.00			14	ZKQCV	7	Chloritic portion between 96.64-97.26m assoc with qtz/ carb veining	101569	0.001	-2
98.00	100.00			18	ZKQCV	7	petro sample taken between 100.74m -100.88m	101570	-2	-2
100.00	102.00			7	ZKQCV	7		101571	0.001	-2
102.00	104.00			16	ZKQCV	7	Rare xenolith at about 105.64m ~ 2cm wide, brown fine grained.	101572	-2	-2
104.00	106.00			9	ZKQCV	7		101573	-2	-2
106.00	107.11			12	ZKQCV	7		101574	-2	-2
107.11	109.11			24	ZQHV	10	Plagioclase K-spr phenocrysts and tabular/ rectangular hornblende and accessory between with platy cleavage visible indications biotite is not affected alteration- prestine. Accessory qtz also present in pale grey, fine grained matrix which possibly consists of feldspar , hornblende fine grained. Muscovite large units , platy cleavage very visible prestine, also present. The tabular hornblende are magnetic in places. Porphyry is locally crowded in places with 95-100% of phenocrysts being K-fledspar + plagioclase - crowded feldspar porphyry. Green portions - chlorite rich, Zeolite veing generally thin/ stringers and of ~ 45 deg CA locally. No visible py mialization. Local red hem veining.	101575	-2	-2
109.11	111.11			16	ZKQCV	10		101576	-2	-2
111.11	113.11			17	ZKQCV	10	Chloritic portions	101577	-2	-2

Hole Number: KN-02-27

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
113.11	115.11	Fine-medium-grained medium brown porphyritic potassic chloritic	9	ZKQCV	10	Chloritic portions. Red Hem lining joints	101578	-2	-2
115.11	117.11		18	ZKQCV	10		101579	0.001	-2
117.11	119.11		9	ZKQCV	10	chloritic portions	101580	0.001	-2
119.11	121.11		16	ZKQCV	10		101581	-2	-2
121.11	123.11		12	ZKQCV	10	chloritic portions	101582	0.001	-2
123.11	125.11		10	ZKQCV	10	Local BKN zones	101583	0.001	-2
125.11	127.11		12	ZKQCV	10	Epi btwn 125.90-126.66m. Red hem rich portions	101584	0.001	-2
127.11	129.11		10	ZKQCV	10	Chloritic portions	101586	0.001	-2
129.11	131.11		9	ZKQCV	10		101587	0.001	-2
131.11	133.11		14	ZKQCV	10	chloritic portions. Dark green mafic xenolith ~ 3cm diameter	101588	0.001	-2
133.11	135.11		10	ZKQCV	10	chloritic portions Rare epi fragments	101589	0.001	-2
135.11	137.11		9	ZKQCV	10		101590	0.001	-2
137.11	139.11		1	ZKQCV	10	Chloritic rich portion	101591	0.001	-2
139.11	141.11		10	ZKQCV	10		101592	0.001	0.006
141.11	143.11		16	ZKQCV	10	Portions of crowded porphyry, dominated by plagioclase and k-feldspar phenocrysts	101593	0.002	-2
143.11	145.11		14	ZKQCV	10	chloritic portions	101594	0.003	0.013
145.11	147.11		17	ZKQCV	10	chloritic rich portions	101595	0.003	-2
147.11	149.11		8	ZKQCV	10	chloritic portions	101596	0.007	-2
149.11	151.11		5	ZKQCV	10		101597	0.003	-2
151.11	153.11		16	ZKQCV	10	chloritic portions of crowded porphyry dominated by plagioclase + k-feldspar phenocryst in mafic matrix	101598	0.002	-2
153.11	155.11		7	ZKQCV	10		101599	0.002	-2
155.11	157.11		10	ZKQCV	10	Crowded porphyry dominated by K-feldspar, plagioclase, phenocryst in mafic/ iron stained matrix. Chloritic portions	101600	0.004	-2
157.11	159.11		11	ZKQCV	10	Epi fragments, chloritic green portions. Red hem veining localized	k115001	0.006	-2
159.11	161.11		19	ZKQCV	10	Chloritic portion py stringer at 160.19m assoc with qtz red hem stringers	k115002	0.049	1.205
161.11	163.11		14	ZKQCV	10	Chloritic portions	k115003	0.006	0.015

Hole Number: KN-02-27

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
163.11	165.11	Fine-medium-grained medium brown porphyritic potassic chloritic		15	ZKQCV	10 Chloritic portions local BKN zones	k115004	0.004	0.013
165.11	167.11			19	ZKQCV	15 Chloritic portions between 165.92-167.11m Red hem stringers+ black nonmagnetic 0.34m on kappa, randomly orientated. Local Breccia	k115005	0.004	0.022
167.11	169.11			4	ZKQCV	10 Chloritic portions between 167.11-168.65m	k115006	0.003	-2
169.11	171.11			0	ZKQCV	10 chloritic portions + local BKN zones	k115007	0.001	-2
171.11	173.11			13	ZKQCV	15 chloritic portions 171.66m-173.11. Qtz/ chl veining	k115008	0.003	-2
173.11	175.16			0	QCKV	10 Sericite alteration between 173.11-173.41m. Samle is green- chloritic	k115009	0.005	0.012
175.16	177.11			12	QCKV	10 Plagioclase and feldspar phenocryst +hornblende + biotite + qtz - accessory minerals in fine grained brown to green matrix. Qtz/ zeolite + K-fsp locally (pink lhy zeolite, harder >4) Veining randomly orientated and irregularly spaced portions of crowded phenocrysts predominatly K-feldspar and plagioclase- feldspar porphyry possibly. No visible silphide mineralization Muscovite with prestine cleavage platey clearly visible present locally. Dark to medium green chloritic portions. Local BKN zones. Rare mafic spherical xenoliths present- fine grained. Red hem veining and joints lined by clay/ gauge material cementing monzo. fragments locally. Portions of the monzo look like syenite dyke.	k115010	0.004	-2
177.11	179.11			5	QCKV	10 Crowded plagioclase and K-feldspar phenocrysts- Possibly feldspar porphyry	k115012	0.002	-2
179.11	181.11			21	QCKV	10 Chloritic portions	k115013	0.003	-2
181.11	183.11			9	QCKV	10	k115014	0.003	-2
183.11	185.11			18	QCKV	10	k115015	0.003	-2
185.11	187.11			9	QCKV	10 Clay/ guage infilled jts.locally lined by red hem	k115016	0.001	-2
187.11	188.52			22	QCKV	10 Xenolith fragment of about 187.66m - mafic dark green fine grained, +/- 5cm across longest wide	k115017	0.001	-2
188.52	190.50			26	QCV	10 crowded feldspar + k- feldspar phenocryst- dominant	k115018	0.001	-2
190.50	192.50			23	QCV	10	k115019	0.002	-2
192.50	194.50			20	QCEV	10 Epi stringers assoc with potassic altered portions	k115020	0.004	-2
194.50	196.50			24	QCV	10 Pink stained potassic altered portions - possibly iron stained	k115021	0.004	-2

Hole Number: KN-02-27

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
196.50	198.50	Fine-medium-grained medium brown porphyritic potassic chloritic		25	QCV	10	Pink stained potassic altered portions - possibly iron stained	k115022	0.005	-2
198.50	200.50			22	QCV	10	Local BKN zones	k115023	0.007	-2
200.50	202.50			18	QCEV	10	Epi veining assoc with zeo/qtz veining	k115024	0.016	0.012
202.50	204.50			23	QCV	10	Xenolith, mafic, dark green grained about 3cm across-203.11m	k115025	0.007	-2
204.50	206.50			26	QCEV	10	Epi at about 206.23m, assoc with medium grey, finegrained carbonate veining- fizzes with HCl	k115026	0.011	0.005
206.50	208.50			24	QCV	10	Chl portion between 207.84-208.50m	k115027	0.007	-2
208.50	210.50			18	QCV	10	chl portion between 208.75-209.00m, Gauge/ clay hem infilling jt at ~ 209.00m	k115028	0.019	0.008
210.50	212.50			26	QCHV	10	mafic between 210.03-211.03m and 211.21-211.39 hem gauge/ clay material infilling plane between 211.39-211.49m. Striations, 45 deg CA in mafic portion between 211.66m- 211.86m□plane between 211.39-211.49m. □	k115029	0.012	0.005
212.50	214.50			6	QCHV	10	Mafic portion between 213.17-213.34 cut by 45CA fault lined by zeo and gauge material. Mafic portion between 213.99-214.34m. Potassic altered portion	k115030	0.007	-2
214.50	216.50			28	QCEV	10	Epi assoc with carb qtz fizzes with HCl. Minor straitions visible	k115031	0.013	-2
216.50	218.50			23	QCV	10		k115032	0.008	-2
218.50	220.50			23	QEHV	10	Epi veining assoc with Qtz/ Zeo veining, Red hem lining jts locally	k115033	0.007	-2
220.50	222.50			22	QCV	10	Mafic portion, friable cemented in places by clay/ gauge materials between 221.17-221.49m. Pot alteration	k115034	0.004	-2
222.50	224.50			19	QCV	10	Mafic portion, between ~ 22.97-223.22m and 223.71-223.99m. Hem + gauge filled jts of 223.81m	k115035	0.004	-2
224.50	226.50			24	QCV	10		k115036	0.005	0.005
226.50	228.50			18	QCV	10	Epi veining	k115038	0.005	-2
228.50	230.50			17	QCV	10	Mafic portion between 228.63-229.69m	k115039	0.002	-2
230.50	232.50		0.1	19	QEVN	10	Qtz/py/epi veining between 231.60-231.69m, assoc. with black hem at 232.08m	k115040	0.004	-2
232.50	234.50			22	QCV	15	increased epi stringers	k115041	0.003	-2

Hole Number: KN-02-27

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
234.50	236.50	Fine-medium-grained medium brown porphyritic potassic chloritic		26	QCV	10	Plagioclase and k-feldspar phenocrysts and hornblende with accessory biotite and qtz in fine grained light brown matrix- probably consist of fine grained feldspar and hornblende +/- qtz +/- biotite. Qtz/ zeolite veining locally assoc with carbonate. Rare red and blade hem veining, randomly orientated, irregular spaced. Portions of crowded plagioclase and K-feldspar Phenocrysts with minor mafic phenocryst- possibly and K-feldspar porphyry. Local mafic zones.	k115042	0.002	-2
236.50	238.35			13	QCV	15	Increased Epi aggregate of 236.66m. Local increased in zeo veining randomly orientated	k115043	0.008	-2
238.35	240.45			19	QCV	10	Mafic portions between 238.35-238.72m and 239.20-239.72m. Xenolith fine grained, dark green, mafic at 239.87m, 2.3cm across	k115044	0.003	-2
240.45	242.45			29	QCV	10		k115045	0.002	-2
242.45	244.45			19	QCV	10		k115046	0.002	-2
244.45	246.45			8	QCV	10	Mafic portions than 244.72 Similar to crowded feldspar porphyry	k115047	0.003	-2
246.45	248.45			26	QCV	70 7		k115048	0.004	-2
248.45	250.45			17	QCV	55 7	increased zeo, veining randomly orientated vein angled ~55CA Mafic Chlorite portions 249.17-249.45m and 249.77-250.14m Similar to CFP	k115049	0.004	-2
250.45	252.50			16	QCV	50 7	Epi/ qtz veining at about 50 deg CA between 250.74-251.42m Similar to CFP	k115050	0.003	-2
252.50	254.50			29	QCV	7	Similar to CFP	k115051	0.005	-2
254.50	256.50			18	QCV	80 7	Zeolite veining X-cutting 20 deg CA and 80 deg CA, local KN zones. Similar to CFP	k115052	0.008	-2
256.50	258.50			32	QCV	7	Local pink stained portions- possibly FE staining + potassic alteration. Similar to CFP	k115053	0.005	-2
258.50	260.50			21	QCV	7		k115054	0.004	-2
260.50	262.50			17	QCV	7		k115055	0.004	-2
262.50	264.50			15	QCV	2 7	Xenolith mafic fine grained ~ 3cm across. Zeolite vein of about 263.00 ~2 deg CA	k115056	0.005	-2
264.50	266.50			21	QCV	10 10	Zeolite vein, assoc with qtz at 10deg CA. Local increase in zeolite veining. Local pink stain- FE +/- pot	k115057	0.005	-2
266.50	268.50			7	QCV	60 10	Qtz vein at ~ 266.03m at 60 deg CA	k115058	0.005	-2

Hole Number: KN-02-27

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
268.50	270.50	Fine-medium-grained medium brown porphyritic potassic chloritic		15	QCV 10	Rare hem veining hem lining it. Assoc with epi at ~ 70 deg CA ~ 268.90m. Xenolith mafic fine grained at ~ 268.64m. Local pink staining +/- potassic alteration Epi vein - 45 deg CA	k115059	0.004	-2
270.50	272.50			16	QCV 55 10	Local pink staining +/- potassic alteration. Zeo/qtz ~ 270.89- 45 deg, ~55 deg - 270.75m	k115060	0.017	-2
272.50	274.22			15	QCV 45 10	Epi stringer at 45deg CA	k115061	0.007	-2
274.22	275.97			0	QCV 10	Chloritic portions between 274.65-275.97m, 45 deg CA hem veining, Friable portion between 274.65-274.69m, Chl frag oriented with clay/ gauge material. Hem veining ~45deg CA	k115062	0.002	-2
275.97	278.00		0.0	3	QCV 55 10	Sample consits mainly of chloritic portion. Qtz vein lined by rare pyrite stringers. Qtz / zeo vein ~ 55deg CA	k115064	0.004	-2
278.00	280.00			1	QCV 85 10	Mafic portion between 278-278.23m pink staining possibly Fe staining or potassic alt	k115065	0.008	-2
280.00	282.00			6	QCV 80 10	Pink stained portion, possibly Fe staining +/- potassic alt. Fault planes infilled by clay/ gauge material ~ 80deg CA	k115066	0.016	0.005
282.00	284.00			25	QCV 45 10	Epi alteration between 282.69-282.80m Zeo veining at ~45deg CA	k115067	0.005	-2
284.00	286.00			24	QCV 45 10	Pink stained protions- Fe staining +/- pot alt	k115068	0.008	-2
286.00	288.00			34	QCV 55 10	Local pink stained - Fe staining +/- pot alt	k115069	0.009	-2
288.00	290.00			30	QCV 45 10	Epi aggregates 288.64m and at 289.01m vein assoc with qtz + zeo of ~45 deg CA	k115070	0.005	-2
290.00	292.00		0.0	22	QCV 45 10	Massive pyrite aggregates in qtz/ zeo vein ~45deg CA at ~ 291.63m - bound by pink staining	k115071	0.008	-2
292.00	294.00		0.0	25	QCV 10	Massive pyrite aggregates in qtz/ zeo ~ 45 CA ~ 293.52m - bound by pink stinger	k115072	0.018	-2
294.00	296.00			21	QCV 10	Local pink stained potch possibly Fe staining +/- pot. Matrix silicified locally	k115073	0.02	-2
296.00	298.00			35	QCV 45 10	Portion with lecoxene specks of about 297.39m. Zeo veining 45 deg	k115074	0.007	-2
298.00	300.00			31	QCV 35 10	Qtz/ zeo veining	k115075	0.005	-2
300.00	302.00			29	QCV 10		k115076	0.011	-2

Hole Number: KN-02-27

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
302.00	304.00	Fine-medium-grained medium brown porphyritic potassic chloritic		25	QCV 20 7	Plagioclase. K-feldspar, qtz phenocrysts, hornblende-tabular and accessory pristine biotite and qtz. Bt has not been altered- platy cleavage is obvious with average size of about 2mm across. Phenocrysts are generally in fine grained, light brown matrix probably plagioclase, K-spar, qtz, hornblende. Portions of crowded feldspar phenocrysts in felsic motions looks like CFP. Local pink staining- potassic alteration +/- iron staining. Qtz / Zeo Veining x-cut locally by carbonate veining. Chl infilling its locally. Muscovite- white mica pristine- platy cleavage- present locally	k115077	0.006	0.007
304.00	306.00		0.1	29	QCV 40 10	Pyrite stringers at about 304.31m x-cut by zeo veining. Qtz/ zeo ~ 40 deg CA x-cut by carb stringer	k115078	0.009	0.007
306.00	308.00			34	QCV 55 10	xenolith fine grained, mafic , medium green ~3cm at 306.91. Qtz vein at > 307.01m 55 CA	k115079	0.003	-2
308.00	310.00		0.1	19	QCV 10	309.76m- qtz vein with py aggregates locally assoc with epi. Portion resemble CFP	k115080	0.013	0.014
310.00	312.00			36	QCV 80 10	Zeolite veining at 80 deg CA	k115081	0.019	0.027
312.00	314.00			34	QCV 80 10		k115082	0.012	0.011
314.00	316.00			40	QCV 40 10	Local potassic altered portions. Zeo veining at 40deg CA	k115083	0.012	0.006
316.00	318.00			31	QCV 70 10	Zeo veining ~70 deg CA. QTZ vein at about ~70 deg CA	k115084	0.01	-2
318.00	320.00			34	QCV 10	Unaltered portions	k115085	0.007	-2
320.00	322.00			18	QCV 10	Qtz/zeo/carb veining between 320.82-320.94m bound by potassic altered portions	k115086	0.004	-2
322.00	324.00			23	QCV 35 10	Qtz/ zeo veining assoc with py aggregate at ~35 deg	k115087	0.003	-2
324.00	326.00			22	QCV 80 10	Xenolith, mafic, fine grained at ~325.02m. Epi asso with Zeo veining > 80 CA	k115088	0.002	-2
326.00	328.00		0.1	30	QCV 45 10	Zeolite veining assoc with py aggregate at > 326.55m and 326.71m Xenolith-mafic 326.88m	k115090	0.002	-2
328.00	330.00		0.1	14	QCV 80 10	Zeo veining at ~ 80deg CA and 0deg CA parallel to CA. Local epi aggregates. Py agore assoc with qtz vein bound by potassic alt of 329.10m. Py vein at 80deg CA at 329.95	k115091	0.005	-2
330.00	332.00	Fine-medium-grained medium brown porphyritic potassic silicic		17	QCV 85 10	Qtz/zeo vein almost perpendicular to CA. Minor Potassic altered portions. Chl between 331.47m-332.00m	k115092	0.004	0.007

Hole Number: KN-02-27

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
332.00	334.00	Fine-medium-grained medium brown porphyritic potassic silicic		26	QCV 10	Chl altered portions assoc with zeo locally. Local increased in zeo veining, x cutting locally	k115093	0.008	0.008
334.00	336.00			22	QCV 80 10	Chl between 338.71-336.00. Local pot altered portions	k115094	0.006	-2
336.00	338.00		0.1	5	QCV 50 10	chl between 336.00m-338.00m, py stringers at ~336.84m ~ 50 deg CA	k115095	0.008	0.005
338.00	339.74			12	QCV 20 10	chl between 338.00m-338.51m hem veining ~20 deg CA ~338.15. Odeg CA zeo veining	k115096	0.004	-2
339.74	341.74			15	QCV 50 15	Zeo veining ~50 deg CA, hem lining jt. Locally. Localized increase in veining Zeo	k115097	0.003	-2
341.74	343.74			22	QCV 80 10	Zeo veining at ~80 deg to CA	k115098	0.003	-2
343.74	345.74			23	QCV 80 10	lcal potassic alteration portion +/- Fe staining. Mafic fine grained Xenolith at ~ 345.11m	k115099	0.003	-2
345.74	347.20			22	QCV 80 10	Zeo veining ~ 80deg CA	k115100	0.002	-2
347.20	348.17			18	QCV 10 10	Zeo 10deg CA zeolite veining	110001	0.004	-2
348.17	350.17			14	QCV 60 10	chloritic, Zeolite veining at about 60 deg CA	110002	0.002	-2
350.17	352.20			1	QCV 10 10	Chloritic portion, gauge/clay lined fault. Qtz vein at about 350.67m ~ 10deg CA. Locally fragmented	110003	0.002	-2
352.20	354.10	Fine-medium-grained medium brown porphyritic silicic potassic	0.1	20	QCV 80 10	Bounding appearance caused by zeolite veining at ~ 80deg CA and ~ 1cm apart between 353.67m-353.94m. Pynte vein at about 354.10m. Weakly to moderately silicified	110004	0.013	0.016
354.10	356.20			24	QCV 50 10	Zeolite veining at about 20deg CA and 50 deg assoc with chl. Portion. Locally silicited potassic. Diss py	110005	0.006	0.005
356.20	357.92			22	QCV 30 10	Zeolite veining at ~ 30DEG CA assoc with py stringers Qtz/zeo/carb vein between 357.65-357.75m	110006	0.006	-2
357.92	359.30			21	QCV 80 10	Zeolite veining ~80deg CA. Rare py aggregates	110007	0.006	-2

Hole Number: KN-02-27

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
359.30	361.30	Fine-medium-grained medium brown porphyritic silicic potassic		22	QCV 30 10	Plagioclase K-feldspar phenocryst tabular hornblende and accessory pristine unaltered biotite white mica-muscovite and quartz. Platy cleavage in Biotite and muscovite evident. Phenocrysts are in fine grained, brown/ pink matrix, locally silicified and potassic altered. Zeolite/ qtz/carb veining-randomly orientated irregularly spaced. Silicification and Potassic alteration weak to moderately, locally- pervasive. Local chlorite altered portions. portions where feldspar phenocryst are dominant and crowded lithology resembles CFP. Resembles post mineralization intrusive locally- syenite and monzodiorite locally.	110008	0.002	-2
361.30	363.30			7	QCV 45 10	Local increased in zeolite veining assoc with potassic altered portions.	110009	0.008	0.005
363.30	365.30			13	QCHV 50 10	Zeolite veining at ~50 deg CA. Hem lining its locally. Chloritic altered portions. Siliceous portions.	110010	0.006	-2
365.30	367.30			11	QCHV 75 10	Zeolite veining at ~ 70deg CA. Fault infilled with clay/gauge material assoc with hem/zeo	110011	0.004	-2
367.30	369.30			20	QCV 65 10	generally pink stained- pervasive potassic alteration- Zeolite veining 65 deg CA	110012	0.001	-2
369.30	371.30			28	QCV 75 10	Zeolite veining ~ 65-75deg CA. Potassic + silicified- portion resembling CFP	110013	0.001	-2
371.30	373.30			19	QCV 60 15	Local veing in zeolite veining. Local chl altered portions	110014	0.006	0.008
373.30	375.30			22	QCV 45 15	Zeolite 5cm thick veining at ~ 45 deg CA in chl/green altered portion, assoc with fault plane lined with gauge/ clay material	110016	0.007	0.007
375.30	377.30		0.5	29	QCV 30 10	Xenolith mafic dark green at about 376.37m ~1.5 cm diameter. Py aggregates at ~ 376.69m and 376.78m and 377.00m- py stringers assoc with qtz vein generally potassic alt.	110017	0.007	0.006
377.30	379.30			21	QCV 30 10	Zeolite veining at 30deg locally , potassic + silicated portions. Py aggregated at at about 378.89m	110018	0.003	-2
379.30	381.30		0.1	30	QCV 55 10	Zeolite veining - banding at ~ 55deg to CA 1cm apart, Pyrite veining at about 379.68m	110019	0.003	-2
381.30	383.30		0.1	16	QCV 20 10	Chloritic zeolite veining crenulated locally. Py/qtz stringer at about 20deg at ~ 382.47m	110020	0.005	-2
383.30	385.30			29	QCV 60 10	Generally potassic + silicified altered , zeolite veining mainly at 60 deg CA and 15 deg	110021	0.003	-2

Hole Number: KN-02-27

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
385.30	387.30	Fine-medium-grained medium brown porphyritic silicic potassic		18	QCV 45 10	Zeolite veining/ stringers assoc with potassic alteration chl altered portion	110022	0.002	-2
387.30	389.30			1	QCV 45 15	local increase in qtz/carb veining. Increased chl portions cut by zeo/qtz veining 45deg CA	110023	0.003	-2
389.30	391.30			5	QCHV 45 10	Chloritic sample, increased in qtz veining locally. Hem stringers at about 370.71m	110024	0.003	-2
391.30	393.30			1	QCV 5 10	Qtz/ carb/zeo veining at ~ 5 deg CA almost parallel to CA. Xenolith outline barely visible - 342.82m	110025	0.004	-2
393.30	395.30		0.1	21	QCV 75 10	Epidote aggregates at about 393.73m. Zeolite veining at ~60-75deg CA. Py stringers 395.25m.	110026	0.005	-2
395.30	397.30		0.1	7	QCV 70 10	Zeolite veining at about 70CA. Diss py assoc with qtz vein ~ 397.02m	110027	0.005	0.006
397.30	399.30	Fine-medium-grained medium brown porphyritic chloritic silicic		10	QCV 45 10	Chl alteration. Zeolite veining at about 45deg CA. Local BKN portions-potassic altered.	110028	0.01	-2
399.30	401.30			5	QCV 80 10	Chl alteration, zeolite veining at about 80 deg CA, not clear	110029	0.007	-2
401.30	403.30			6	QCV 15	Increased in Zeolite flooding between 402.03-407.87m-Zeolite/carb/qtz flooding in chl alt	110030	0.003	-2
403.30	405.30		0.1	19	QCHV 45 15	Hem veining assoc with zeo/ qtz about of 80deg CA. Locally Py stringers 402.15m	110031	0.002	-2
405.30	407.30			1	QCV 40 10	Mainly silicified minore chl portions. Qtz/ zeolite portions at about 40deg CA. Local BKN	110032	0.005	0.005
407.30	409.30			15	QCV 45 10	Local increase in Zeo veining assoc with potassic alt portion. Chl + pot portions	110033	0.004	-2
409.30	411.30			6	QCV 40 10	Pot/chl portion. Gauge/clay linedfault zones. Minor chl stringers locally 40deg CA	110034	0.004	-2
411.30	413.30			2	QCHV 45 10	Hem veining at ~45deg CA locally assoc with zeo/qtz veining. Local BKN zone with with carb/qtz 1cm thick	110035	0.004	-2
413.30	415.30			0	QCHV 0 20	Local increase in qtz/zeo veining, crenulated associated with hem-fault zone, fragments cemented by clay/ gauge material. Chl and silicified massive portion- between 414.45 -414.96m. Dark greenwith randomly orientated qtz/carb stringers. Hem veining at ~ 45deg CA, fault zones	110036	0.003	0.005
415.30	417.30			2	QCV 15	loCALIZED INCREASE IN ZEO. Veining assoc with potassic altered portion. Chl portion	110037	0.002	-2

Hole Number: KN-02-27

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
417.30	419.30	Fine-medium-grained medium brown porphyritic chloritic silicic		8	QCHV	10 chl portion. Hem veining	110038	0.003	0.013
419.30	421.30	Fine-medium-grained medium brown porphyritic silicic potassic		12	QCV	10 Plagioclase, K-feldspar Phenocrysts and tabular hornblende. Accessory pristine biotite, white mica-muscovite and quartz. In light to medium brown matrix. Locally weak to moderate pervasive potassic alteration locally- weak to moderate silicification. Portions dominated by feldspar and crowded look like CFP portions of the unit resembles post mineralization syenite. Randomly cut by zeolite/Qtz veining irregularly spaced. Chloritic altered portions- weak to moderate- pervasive	110039	0.001	0.006
421.30	423.30			20	QCV	5 10 Potassic altered portion, locally chloritized. Zeo veining at 5deg CA	110040	0.002	0.005
423.30	425.30		0.1	21	QCV	45 10 Py stringers/ aggregates of about 423.77m. Chl portion between 424.30m- assoc minor epi.	110042	0.003	-2
425.30	427.30			20	QCV	80 10 Chl portion between 425.50-425.80m. Veining of about 80deg CA locally	110043	0.002	-2
427.30	429.30			14	QCV	70 10 Minor chl portion. Zeolite veining between crenulated locally.	110044	0.005	-2
429.30	431.30			14	QCV	50 15 Xenolith at about 430.85m, about 2cm across. Local Chl portions. 431.14m zeo veins all about 50deg CA forming bonding appearance. Local increased in Zeo veining.	110045	0.002	-2
431.30	433.30			21	QCV	40 15 Chl portions 40deg CA zeo veining local. Sharp hangingwall contact with mafic dyke, between 433.03-433.14m	110046	0.002	-2
433.30	435.30			17	QCHV	20 10 Zeolite veining of ~ 20deg CA. Xenolith- mafic fine grained about 2cm across at 435.01m. Hem veining	110047	0.004	-2
435.30	437.30			21	QCV	60 15 Chl + potassic portions, Zeo bonding ~ 60deg CA ~ 2cm apart 436.48-437.30cm	110048	-2	-2
437.30	439.30			31	QCV	10 10 chl +silicified portions. Hem stringer at ~ 439.20m. Zeolite/ Qtz vein at ~ 109.11	110049	-2	-2
439.30	441.30		0.1	15	QCV	45 10 Chl + pot silicified locally. Py stringer at about 440.84m assoc with zeo + Qtz vein	110050	0.006	-2
441.30	443.30			17	QCV	60 10 Silic and potassic portion, Zeo bounding of 60deg CA ~ 1cm apart	110051	0.003	0.008
443.30	445.30		0.1	26	QCV	45 10 Silic +potassic, zeo veining at 45deg CA. Locally assoc with diss py 443.55m	110052	0.025	0.027

Hole Number: KN-02-27

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
445.30	447.30	Fine-medium-grained medium brown porphyritic silicic potassic		8	QCHV 45 10	Chl altered potassic altered. Silicified portion. Rare hem lining jt at 447.25m	110053	0.006	0.011
447.30	449.30			14	QCV 70 10	Zeo veining at ~ 70 deg CA. Local chloritic altered portions	110054	0.002	-2
449.30	451.30			18	QCV 45 10	Zeo veining of ~ 45-60deg CA. Silicified +potassic altered. Zeo veining bonding at about 70deg CA, 1cm apart	110055	0.002	-2
451.30	453.30			6	QCV 45 10	Chl portions. Local increase in Zeo veining between 452.1-452.35, crenulated in chloritic portions	110056	0.001	-2
453.30	455.30			14	QCV 80 10	Silicified portion with dominant feldspar- resem	110057	0.001	-2
455.30	457.30		0.5	17	QCV 60 10	Pyrite stringers associated with qtz vein at ~455.40 and 456.43 Zeolite veining at ~45° to the cross-axis, local bending. Py aggregates between 457.20m and 457.30m---BKN	110058	0.003	-2
457.30	459.30			18	QCV 10 10	Py vein bound by potassic alteration at about 457.64m, epidote alteration at ~458.06m CFP. 10° to the cross-axis.	110059	0.003	-2
459.30	461.30			10	QCV 70 10		110060	0.001	-2
461.30	463.30			12	QCV 60 10		110061	0.001	-2
463.30	465.30			19	QCV 50 15		110062	0.006	-2
465.30	467.30			16	QCV 80 10		110063	0.007	-2
467.30	469.30			18	QCV 80 10		110064	0.001	-2
469.30	471.30			22	QCV 7		110065	0.002	-2
471.30	473.30			16	QCV 7		110066	0.004	-2
473.30	475.30			29	QVN 85 10		110068	0.002	-2
475.30	477.30			18	QVN 80 10		110069	0.003	-2
477.30	479.30			27	QVN 10 10		110070	0.001	-2
479.30	481.30			24	QVN 45 10		110071	0.001	-2
481.30	483.30		0.1	30	QVN 10		110072	0.004	-2
483.30	485.30			17	QVN 45 10		110073	0.001	-2
485.30	487.30			25	QVN 10		110074	0.002	-2
487.30	489.30			14	QVN 75 10		110075	0.001	-2
489.30	491.30			18	QVN 80 15		110076	0.001	-2

Hole Number: KN-02-27

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
491.30	493.30	Fine-medium-grained medium brown porphyritic silicic potassic		19	QVN 45 10		110077	0.002	-2
493.30	495.30				QVN 10		110078	0.001	-2
495.30	497.30			10	QVN 45 10		110079	0.001	-2
497.30	498.68			20	QVN 30 10		110080	0.001	-2
498.68	499.87			26	QVN 80 10	499.87 - EOH	110081	-2	-2
499.87	EOH								

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-28**

Northing: 15761.2	Total Depth: 623.9m
Easting: 9755.06	Azimuth: 0°
Elevation: 1743.2	Dip: -90°

Geologist: B. Mercer
Logged Date: 8/15/2002

Survey Depth	Azimuth	Dip	Comments:
152 m	173 °	-89 °	
243 m	153 °	-87 °	Magnetic
349 m	103 °	-88 °	Magnetic
441 m	128 °	-88 °	Magnetic
532 m	98 °	-88 °	Mechanical
623 m	78 °	-87 °	Magnetic

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-28**

From (m)	To (m)	Rock Type	Comments
0	4	CASING	Casing
4	165.24	BLADED FELDSPAR PORPHYRY	0.5- 2.0 cm plagioclase laths in a dark grey highly chloritized matrix 15-30% phenocryst . Limonite is abundant on fractures and is massive veinlets generally@ low angles to core axis
165.24	169.94	FLOW BASALT	Strong pervasive gypsum/anhydrite flooding. Abundant f.g. biotite, f.g. and m.g. pyrite dissm and fracture controlled
169.94	178.48	BLADED FELDSPAR PORPHYRY	Very strong biotite/amphibole alt. , tr py minor alt vn's
178.48	181.55	MONZONITE	f.g. dissm cpy with dissm m.g. py. Cpy + py in qtz veinlet.
181.55	191	TUFF INTERMEDIATE VOLCANIC	m.g. dissm py rare cpy. Minor py in qtz/anhydrite +/- mt veins.
191	209	FLOW INTERMEDIATE VOLCANIC	Abundant py as m.g. to c.g. dissm irregular blebs and sub-hedral crystals. Veinlet cut by qtz/anh +/- mt veinlets up to 1cmm wide.
209	220.82	FLOW BASALT	Rel. evenly dissm py in irregular blebs. Trace cpy. Thin mt veinlets. Flows are augite porphyritic locally.
220.82	222.34	MONZONITE	Orange/tan monzonite dyke with well developed igneous texture. Crowded feldspars in feldspar matrix. Chl alt. mafic minerals.
222.34	284.02	FLOW BASALT	Regular spaced qtz/anh/mt veins with irregular inter-connecting veinlets.
284.02	288.92	MONZONITE	Crowded feldspar porphyry with pheno. up to 3-5mm. 10-15% anhedral mafic minerals. Now predominantly chlorite. Weak sericitization of feldspars. Veinlet cut by qtz/anh veinlets. Contains xenolith of basalt, 1 epidote veinlet. Contact ~ 60 degrees t.c.a.
288.92	290.08	FLOW BASALT	Strong biotite alt. Insipient anhydrite or possibly. f.g. carb through rock matrix. Contact with bx below is ~ 25 degrees t.c.a.

Hole Number: **KN-02-28**

From (m)	To (m)	Rock Type	Comments
290.08	292.1	BRECCIA	Anhydrite flooded intrusion bx. 30% angular basaltic fragments in a pale gray matrix of anhydrite and possible carb. Lower contact 50 degrees. Very thin mt veinlets locally.
292.1	296.4	FLOW	
296.4	310.62	MONZONITE	Xenolith rich crowded feldspar porphyry as for 0117595. Very minor qtz/anh veinlets. Alt. is very weak.
310.62	315.62	FLOW BASALT	Mt in qtz/anh veinlets or in very thin fracture controlled veinlets.
315.62	315.88	MONZONITE	Crowded feldspar porphyry as for 0117595.
315.88	332.23	FLOW	Augite porphyritic basalt flows. Strong biotite alt. with chl on slips. Anhydrite through rock matrix as well as in cross-cutting qtz veinlets. Very thin mt veinlets.
332.23	332.54	MONZONITE	Very weak alt. One massive py veinlet.
332.54	341.68	FLOW BASALT	Augite porphyritic basalt flows as above.
341.68	343.14	MONZONITE	Very weak alt.
343.14	350.58	FLOW	m.g. dissm py. Bio alt retrograding to chl.
350.58	353.16	MONZONITE	Abundant volc. xenoliths
353.16	379.62	FLOW	Brownish-green c.g. augite porphyritic flow with occ. dyklet of monzonite. Anh alt. in rock matrix as well as veins. Patchy red-brown k-spar flooding. This veinlet looks intrusive locally.
379.62	381.3238	MONZONITE	Now porphyritic monzonite contacts sharp @ 70 degrees Lower half strongly brecciated with qtz/anh in-fill. Mt veinlets augite porphyritic flows.
381.32383	401.24	FLOW	
401.24	413.5	MONZONITE	Very weak sericitization of feldspars and on some slips, otherwise unaltered, sparse qtz/anh veining. Crowded porphyry as earlier in hole. Euhedral dissm mt, appears to be primary.
413.5	435.48	FLOW	Several blebs of cpy in blue grey qtz anhydrite veinlet.

Hole Number:

KN-02-28

From (m)	To (m)	Rock Type	Comments
435.48	466.75	MONZONITE	Cobble size breccia of QFP to monzonite in black aphanitic matrix. Very strong biotite alt. Appears to be an intrusion bx as opposed to volcanogenic.
466.75	523	FLOW	Abundant massive mt veins and mt in qtz/anh veins. Strong biotite alt, chl on slips. Abundant white zeolite through this section.
523	557	FLOW INTERMEDIATE VOLCANIC	Mt in qtz/anh veinlets. Py is greenish.
557	563.82	FLOW BASALT	flows as above with a swarm of monzonite dyklets flows flows are augite porphyritic
563.82	570.44	MONZONITE	highly chloritized hornblend rich monznite whith zeolite common
570.44	589.92	FLOW BASALT	augite porphyritic basalt
589.92	623.93	FLOW	It blue grey qtz/anh flooded zone white is cut by later white zeolite veinlets. faint bx texture. lower contact 40 degrees to core axis

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-28

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
0	4	CASING								
0.00	4.00					Casing	28	-2	-2	
4	165.24	BLADED FELDSPAR PORPHYRY								
4.00	6.00	Coarse-grained grey brown porphyritic chloritic limonitic	0.0	0.0	0	1 LVN 25 2	0.5- 2.0 cm plagioclase laths in a dark grey highly chloritized matrix 15-30% phenocryst . Limonite is abundant on fractures and is massive veinlets generally@ low angles to core axis	k110951	0.035	0.333
6.00	8.00		0.0	0.0	0	0 LVN 25 2		k110952	0.02	0.142
8.00	10.00		0.0	0.0	0	1 LVN 25 2		k110953	0.027	0.096
10.00	12.00		0.0	0.0	0	0 LVN 25 2		k110954	0.031	0.217
12.00	14.00		0.0	0.0	0	0 LVN 25 2		k110955	0.024	0.173
14.00	16.00		0.0	0.0	0	0 LVN 25 2		k110956	0.045	0.12
16.00	18.00		0.5	0.0	0	0 LVN 25 2		k110957	0.043	0.056
18.00	20.00		0.5	0.0	0	7 LVN 25 2	magnetite in irregular veinlets	k110958	0.057	0.075
20.00	20.50		0.1	0.0	1	1 LVN 25 1		k110959	0.112	0.119
20.50	22.50	Coarse-grained light grey porphyritic chloritic sericitic	0.5	0.0	1	9 LVN 25 3	patchy clay and bleaching , weakly limonitic locally. mag veinlets	k110960	0.115	0.38
22.50	24.38	Coarse-grained grey porphyritic chloritic sericitic	0.5	0.0	1	20 LVN 25 3	Dissm py in rock, limonite after py in veinlets mag veinlets	k110961	0.247	0.398
24.38	26.20		0.5	0.0	1	0 LVN 25 3		k110962	0.086	0.266
26.20	28.20	Coarse-grained grey porphyritic chloritic	1.0	0.1	1	32 LVN 35 5	one spec of cpy visible in wall rock py dissm and chl limonitic veins	k110963	0.19	1.705
28.20	30.02		0.5	0.1	0	0 LVN 35 5	one spec of bornite. Dissm py. Abundant py/lim veins	k110964	0.18	0.563
30.02	32.00	Coarse-grained grey porphyritic chloritic sericitic	0.5	0.0	0	0 LVN 20 3	patchy bleaching , strong sericitization of plagioclase phenocryst	k110965	0.073	0.314
32.00	34.00		0.5	0.0	0	1 LVN 20 3		k110966	0.017	0.164
34.00	36.00		0.5	0.0	1	46 LVN 20 3	with c.g. dissm magnetic	k110967	0.146	0.257
36.00	38.00		1.0	0.0	1	25 LVN 10 5		k110968	0.159	0.203

Hole Number: KN-02-28

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
38.00	40.00	Coarse-grained grey porphyritic chloritic sericitic	3.0 0.0	1	9 SVN 25 2	Massive py veinlets no limonite vein c.g. dissm py	k110969	0.188	0.301
40.00	42.00		3.0 0.0	1	0 SVN 25 2	strongly chloritized minor dissm py and py in veinlets @ low angles T.C.A. C.G. py dissm throughout	k110970	0.256	0.401
42.00	44.00	Coarse-grained grey porphyritic chloritic	1.0 0.0	0	0 SVN 20 1		k110971	0.383	0.816
44.00	46.00		1.0 0.0	0	1 SVN 20 1		k110972	0.171	0.302
46.00	48.00		3.0 0.0	0	1 SVN 20 1		k110973	0.199	0.246
48.00	50.00		3.0 0.0	0	1 SVN 20 1		k110974	0.154	0.138
50.00	52.00		3.0 0.0	0	0 SVN 20 1		k110975	0.145	0.149
52.00	54.00		3.0 0.0	0	0 SVN 20 1		k110977	0.137	0.206
54.00	56.00		3.0 0.0	0	0 SVN 20 1		k110978	0.212	0.466
56.00	58.00		3.0 0.0	2	7 SVN 20 1	clots of C.G. MT	k110979	0.175	0.249
58.00	60.00		3.0 0.0	0	0 CVN 0 3	Massive chlorite veinlets parallel to core axis.	k110980	0.273	0.379
60.00	62.00		3.0 0.0	0	0 CVN 0 3		k110981	0.257	0.438
62.00	64.00		3.0 0.0	0	0 CVN 15 3	Massive chlorite + py veinlets sub-parallel to core axis.	k110982	0.173	0.285
64.00	66.00		3.0 0.0	0	0 CVN 15 3		k110983	0.143	0.322
66.00	68.00		1.0 0.0	0	1 CVN 0 3	Massive chlorite veinlets parallel to core axis.	k110984	0.134	0.307
68.00	70.00		1.0 0.0	0	1 CVN 0 3		k110985	0.129	0.21
70.00	72.00		1.0 0.0	1	12 CVN 0 3	c.g. dissm mt	k110986	0.094	0.132
72.00	74.00		1.0 0.0	1	5 CVN 0 3		k110987	0.179	0.371
74.00	76.00		1.0 0.0	1	11 QVN 20 0	one mt/py veinlet	k110988	0.455	1.165
76.00	78.00		1.0 0.0	0	1 QVN 20 0		k110989	0.457	0.804
78.00	80.00		1.0 0.0	0	5 QVN 20 0	one mt/py veinlet	k110990	0.28	0.461
80.00	82.00		3.0 0.0	0	1 QVN 20 0		k110991	0.106	0.173
82.00	84.00		3.0 0.0	3	51 MTV 25 2	several 1-2mm wide massive mt veinlets	k110992	0.277	2
84.00	86.00	Coarse-grained grey porphyritic chloritic sericitic	1.0 0.0	0	2	No veins visible for some ways down hole. Probably due to highly broken nature of core.	k110993	0.284	0.493
86.00	88.00		1.0 0.0	1	22	Clots of massive magnetite and c.g. dissm mt.	k110994	0.174	0.287
88.00	90.00		1.0 0.0	0	1	Strongly chloritic BFP with minor py min. Plagioclase are strongly ser altered.	k110995	0.121	0.174

Hole Number: KN-02-28

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
90.00	92.00	Coarse-grained grey porphyritic chloritic sericitic	1.0 0.0	1	11		k110996	0.271	0.493	
92.00	94.00		1.0 0.0	1	2		k110997	0.233	0.323	
94.00	96.00		1.0 0.0	1	21		k110998	0.222	0.356	
96.00	98.00		1.0 0.0	1	5		k110999	0.181	0.273	
98.00	100.00		1.0 0.0	1	3		k111000	0.075	0.092	
100.00	102.00		1.0 0.0	1	3		k117501	0.059	0.084	
102.00	104.00		1.0 0.0	1	0		k117502	0.164	0.276	
104.00	106.00		3.0 0.0	1	10		k117503	0.157	0.225	
106.00	108.00		3.0 0.0	1	7		k117504	0.265	0.476	
108.00	110.00		1.0 0.0	1	4		k117505	0.27	0.469	
110.00	112.00		1.0 0.0	1	1		k117506	0.463	0.938	
112.00	114.00		1.0 0.0	1	0		k117507	0.224	0.424	
114.00	116.00		1.0 0.0	1	0		k117508	0.454	0.788	
116.00	118.00		2.0 0.0	3	30	Magnetite in chloritic gouge. Mt is v.c.g.	k117509	0.447	0.809	
118.00	120.00		1.0 0.0	2	7	c.g. subhedral magnetite possibly replacing augite. Regularly dissm sub-hedral py.	k117510	0.194	0.359	
120.00	122.00		1.0 0.0	2	19		k117511	0.111	0.312	
122.00	124.00		1.0 0.0	2	6		k117512	0.107	0.267	
124.00	126.00		1.0 0.0	2	6		k117513	0.131	0.263	
126.00	128.02		2.0 0.0	2	9	Chl rubble. Lost core, sampled block to block.	k117514	0.091	0.187	
128.02	132.59		2.0 0.0	2	7		k117515	0.127	0.259	
132.59	138.68		2.0 0.0	2	24		k117516	0.283	0.638	
138.68	143.26		2.0 0.0	2	24		k117517	0.217	0.458	
143.26	144.78		2.0 0.0	2	41		k117518	0.076	0.186	
144.78	146.38	Coarse-grained light grey porphyritic sericitic chloritic	0.1 0.0	0	0 MTV	35 1	Core is competent from here down. Can see chl replacing mafic minerals and sericite replacing plagioclase occ. clot of c.g. magnetite and massive mt veinlets.	k117519	0.163	0.261
146.38	148.00		0.1 0.0	2	32 MTV	35 1		k117520	0.114	0.256

Hole Number: KN-02-28

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
148.00	150.00	Coarse-grained grey porphyritic chloritic	0.1 0.0	2	109 MTV 35 2		k117521	0.101	0.289
150.00	150.88		0.1 0.0	1	1 MTV 35 0	HQ ends/ NQ starts. Trace mt veinlets.	k117522	0.088	0.218
150.88	152.00	Coarse-grained grey porphyritic biotite hornblende	0.1 0.0	5	89 MTV 0 2	Abundant f.g. felted biotite, actinolite/hbl as radiating needles on slips. Anhydrite in veinlets.	k117523	0.192	0.506
152.00	154.00	Coarse-grained grey black porphyritic biotite hornblende	0.1 0.0	2	2 AVN 35 3	Dark grey/black BFP. Primary textures evident with very little alteration.	k117524	0.112	0.229
154.00	156.00		0.1 0.0	2	1 AVN 35 3	As for 0117523.	k117525	0.051	0.148
156.00	158.00		0.1 0.0	2	48 AVN 35 3		k117526	0.122	0.275
158.00	160.00		0.1 0.0	2	29 AVN 35 3		k117527	0.113	0.296
160.00	162.00		0.1 0.0	2	2 AVN 35 3		k117528	0.156	0.461
162.00	164.00		0.1 0.0	2	6 AVN 35 3		k117529	0.165	0.35
164.00	165.24		0.1 0.0	2	9 AVN 35 3	Contact gradual, over 20cm.	k117530	0.169	0.438
165.24	169.94	FLOW BASALT							
165.24	167.00	Fine-grained black homogeneous biotite anhydrite	1.0 0.2	2	3 AVN 60 20	Strong pervasive gypsum/anhydrite flooding. Abundant f.g. biotite, f.g. and m.g. pyrite diss and fracture controlled	k117531	0.11	0.282
167.00	169.00		1.0 0.2	5	206 AVN 60 20	v.f.g. diss cpy	k117532	0.165	0.319
169.00	169.94		1.0 0.2	2	1 AVN 60 20		k117533	0.218	0.487
169.94	178.48	BLADED FELDSPAR PORPHYRY							
169.94	171.00	Coarse-grained black porphyritic biotite hornblende	0.2 0.0	2	0 AVN 15 2	Very strong biotite/amphibole alt. , tr py minor alt vn's	k117534	0.077	0.171
171.00	173.00		0.2 0.0	2	9 AVN 15 1	As for 011735.	k117535	0.069	0.16
173.00	175.00		0.2 0.0	2	25 AVN 15 1		k117536	0.084	0.2
175.00	175.65		0.2 0.0	2	13 AVN 15 1	Lower contact not visible.	k117537	0.152	0.359
175.65	177.65	Coarse-grained black brecciated biotite hornblende	0.2 0.4	2	66 AVN 15 3	Alternating sections with aphanitic texture and BFP texture. Probable c.g. bx of BFP.	k117538	0.174	0.353
177.65	178.48		0.2 0.4	2	68 AVN 15 3	As for 0117538 with one 3 ~ 8mm patch of molybdenite.	k117539	0.16	0.463
178.48	181.55	MONZONITE							
178.48	180.48	Coarse-grained black porphyritic biotite hornblende	3.0 0.5	2	49 QAVN 20 1	f.g. diss cpy with diss m.g. py. Cpy + py in qtz veinlet.	k117540	0.209	0.427
180.48	181.55		5.0 0.5	2	39 QAVN 20 1		k117541	0.224	0.457

Hole Number: KN-02-28

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
181.55	191	TUFF INTERMEDIATE VOLCANIC							
181.55	183.00	Coarse-grained dark grey fragmental biotite anhydrite	3.0	0.1	1 7 QAVN 20 1	m.g. dissim py rare cpy. Minor py in qtz/anhydrite +/- mt veins.	k117542	0.079	0.141
183.00	185.01		3.0	0.1	1 32 QAVN 20 1		k117543	0.1	0.231
185.01	187.00		3.0	0.1	1 14 QAVN 20 1		k117544	0.141	0.402
187.00	189.00		5.0	0.1	1 21 QAVN 20 3		k117545	0.227	0.556
189.00	191.00		3.0	0.1	1 11 QAVN 20 3	Contact not visible, gradational over 0.5m.	k117546	0.1	0.253
191	209	FLOW INTERMEDIATE VOLCANIC							
191.00	193.00	Fine-grained dark grey homogeneous biotite anhydrite	5.0	0.0	2 48 QAVN 25 3	Abundant py as m.g. to c.g. dissim irregular blebs and sub-hedral crystals. Veinlet cut by qtz/anh +/- mt veinlets up to 1cm wide.	k117547	0.078	0.158
193.00	195.00		5.0	0.0	5 104 QAVN 25 3		k117548	0.098	0.208
195.00	197.00		5.0	0.0	3 35 QAVN 25 3		k117549	0.169	0.36
197.00	199.00		5.0	0.0	0 6 QAVN 25 5		k117550	0.153	0.292
199.00	201.00		5.0	0.0	5 208 QAVN 25 5	Does not look appreciably altered. Can easily see f.g. plag. laths and v.f.g. mafic minerals. Possibly weak bio. chlorite on slips. Trace gypsum in some anhydrite rich veins. Abundant m.g. py blebs and disseminations. Thin mt veinlets.	k117551	0.256	0.542
201.00	203.00	Fine-grained dark grey homogeneous chloritic anhydrite	5.0	0.0	3 14 QAVN 15 5		k117552	0.08	0.257
203.00	205.00		5.0	0.1	1 32 QAVN 10 7		k117553	0.2	0.462
205.00	207.00		5.0	0.1	2 32 QAVN 10 10		k117554	0.413	0.823
207.00	209.00		5.0	0.1	2 54 QAVN 10 7		k117555	0.357	0.84
209	220.82	FLOW BASALT							
209.00	211.00	Fine-grained dark grey homogeneous chloritic anhydrite	6.0	0.1	2 33 QAVN 10 7	Rel. evenly dissim py in irregular blebs. Trace cpy. Thin mt veinlets. Flows are augite porphyritic locally.	k117556	0.12	0.24
211.00	213.00		6.0	0.1	2 27 QAVN 10 7	Fracture controlled qtz/anhydrite +/- mt veinlets. Irregular in shape and filling fracture controlled voids. c.g. dissim irregular blebs of py.	k117557	0.09	0.168
213.00	215.00		6.0	0.2	1 12 QAVN 5 7		k117558	0.124	0.202
215.00	217.00		6.0	0.0	5 50 QAVN 5 7		k117559	0.108	0.188
217.00	219.00		3.0	0.0	5 60 QAVN 55 7	As above with local zones of highly irregular fractures.	k117560	0.14	0.221

Hole Number: KN-02-28

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
219.00	220.82	Coarse-grained dark grey homogeneous chloritic anhydrite	3.0 0.0	3	11 QAVN 55 10		k117561	0.212	0.622
220.82	222.34	MONZONITE							
220.82	222.34	Fine-grained orange porphyritic k-felspar anhydrite	0.0 0.0	0	1 QAVN 55 2	Orange/tan monzonite dyke with well developed igneous texture. Crowded feldspars in feldspar matrix. Chi alt. mafic minerals.	k117562	0.178	0.432
222.34	284.02	FLOW BASALT							
222.34	224.00	Fine-grained green-grey homogeneous chloritic anhydrite	3.0 0.1	2	29 QAVN 35 5	Regular spaced qtz/anh/mt veins with irregular inter-connecting veinlets.	k117563	0.175	0.362
224.00	226.00		3.0 0.0	2	15 QAVN 35 5		k117564	0.17	0.386
226.00	228.00		6.0 0.0	3	20 QAVN 20 10		k117565	0.306	0.764
228.00	230.00		6.0 0.0	3	14 QAVN 10 10		k117566	0.162	0.237
230.00	232.00		6.0 0.0	3	62 QAVN 55 15	Nearly anastomosing veinlets with multiple discontinuous ladder like fracture till @ 55 degrees t.c.a.	k117567	0.108	0.186
232.00	234.00		6.0 0.0	2	33 QAVN 20 5		k117568	0.085	0.16
234.00	236.00		10.0 0.0	2	21 QAVN 10 5	Abundant blebs of py.	k117569	0.065	0.16
236.00	238.00		10.0 0.0	2	16 QAVN 50 5		k117570	0.099	0.188
238.00	240.00		6.0 0.1	2	40 QAVN 25 15	Qtz/anh flooding of irregular fractures.	k117571	0.088	0.14
240.00	242.00		6.0 0.0	2	71 QAVN 15 5		k117572	0.065	0.097
242.00	244.00		6.0 0.0	2	2 QAVN 25 10		k117573	0.087	0.151
244.00	246.00		10.0 0.0	2	12 QAVN 25 10	v.c.g. irregular blebs of py up to 1cm	k117574	0.094	0.143
246.00	248.00		10.0 0.0	2	69 QAVN 25 15	As for 0117571.	k117575	0.094	0.156
248.00	250.00		10.0 0.2	2	121 QAVN 25 10		k117576	0.302	0.498
250.00	252.00		3.0 0.0	1	72 QAVN 25 3	As for 0117571.	k117578	0.09	0.121
252.00	254.00		3.0 0.0	2	14 QAVN 5 5		k117579	0.097	0.138
254.00	256.00		3.0 0.3	3	59 QAVN 25 10	As above with cpy picking up, associated with py in qtz/anh/ +/- mt veinlets. No cpy associated with dissim py.	k117580	0.107	0.201
256.00	258.00		1.0 0.5	2	11 QAVN 15 5		k117581	0.149	0.256
258.00	260.00		1.0 0.5	2	32 QAVN 10 10		k117582	0.234	0.382
260.00	262.00		1.0 0.5	3	18 QAVN 5 15		k117583	0.092	0.222
262.00	264.00		1.0 0.3	3	8 QAVN 25 15		k117584	0.095	0.119

Hole Number: KN-02-28

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
264.00	266.00	Fine-grained green-grey homogeneous chloritic anhydrite	1.0 0.0	4	7 QAVN 25 15		k117585	0.12	0.313
266.00	268.00	Medium-grained green-grey heterogeneous chloritic	1.0 0.0	1	35 QAVN 25 7	Inter-bedded sequence of thin flows and flow top breccia. Plagioclase and augite phyric with m.g. dissm py cutting qtz/anh veins. 208 - 284.02	k117586	0.126	0.31
268.00	270.00		1.0 0.5	1	6 QAVN 10 5		k117587	0.129	0.324
270.00	272.00		1.0 0.1	1	11 QAVN 35 7	v.f.g. cpy on vein margins.	k117588	0.106	0.23
272.00	274.00		2.0 0.1	2	28 QAVN 10 5		k117589	0.151	0.275
274.00	276.00		2.0 0.1	2	7 QAVN 0 3		k117590	0.096	0.188
276.00	278.00		3.0 0.1	4	56 QAVN 5 5		k117591	0.078	0.23
278.00	280.00		3.0 0.1	1	9 QAVN 15 7		k117592	0.106	0.228
280.00	282.00		3.0 0.3	1	24 QAVN 15 2		k117593	0.123	0.16
282.00	284.02		3.0 0.1	1	24 QAVN 20 1	contact ~ 60 degrees t.c.a.	k117594	0.153	0.428
284.02	288.92	MONZONITE							
284.02	286.00	Coarse-grained grey white porphyritic chloritic sericitic	0.5 0.1	0	23 QAVN 35 2	Crowded feldspar porphyry with pheno. up to 3-5mm. 10-15% anhedral mafic minerals. Now predominantly chlorite. Weak sericitization of feldspars. Veinlet cut by qtz/anh veinlets. Contains xenolith of basalt, 1 epidote veinlet. Contact ~ 60 degrees t.c.a.	k117595	0.138	0.25
286.00	288.00		0.5 0.0	0	4 QAVN 35 2		k117596	0.153	0.204
288.00	288.92		0.5 0.0	0	0 ZVN 10 2		k117597	0.123	0.137
288.92	290.08	FLOW BASALT							
288.92	290.08	Fine-grained dark green homogeneous biotite chloritic	2.0 0.0	0	0 QAVN 40 5	Strong biotite alt. Insipient anhydrite or possibly. f.g. carb through rock matrix. Contact with bx below is ~ 25 degrees t.c.a.	k117598	0.131	0.267
290.08	292.1	BRECCIA							
290.08	292.10	Coarse-grained grey black brecciated anhydrite biotite	0.5 0.0	0	4 QAVN 40 5	Anhydrite flooded intrusion bx. 30% angular basaltic fragments in a pale gray matrix of anhydrite and possible carb. Lower contact 50 degrees. Very thin mt veinlets locally.	k117599	0.076	0.335
292.1	296.4	FLOW							
292.10	294.00	Fine-grained grey-green homogeneous chloritic	2.0 0.3	1	0 QAVN 40 5		k117600	0.086	0.157

Hole Number: KN-02-28

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
294.00	296.00	Fine-grained grey-green homogeneous chloritic	1.0	0.3	4 170 QAVN 20 7	Widespread hairline to very thin mt or qtz/anh/mt veinlets.	119001	0.228	0.468
296.00	296.40		1.0	0.3	4 206 ZCCV 10 20	Contact 40 degrees t.c.a.	119002	0.165	0.441
296.4	310.62	MONZONITE							
296.40	298.00	Coarse-grained grey orange porphyritic chloritic	0.2	0.0	0 5 QAVN 20 0	Xenolith rich crowded feldspar porphyry as for 0117595. Very minor qtz/anh veinlets. Alt. is very weak.	119004	0.138	0.191
298.00	300.00		0.1	0	12 QAVN 20 0		119005	0.127	0.172
300.00	302.00		0.0	0	3 QAVN 20 0		119006	0.097	0.129
302.00	304.00		0.1	0	11 QAVN 20 0		119007	0.13	0.215
304.00	306.00		0.0	0	1 QAVN 20 0		119008	0.104	0.149
306.00	308.00		0.0	0	18 QAVN 20 0		119009	0.124	0.194
308.00	309.98	Coarse-grained grey orange porphyritic chloritic epidote	0.1	0	0 QAVN 20 0	Trace cpy and in chl rich qtz/anh vein. Trace epidote.	119010	0.15	0.164
309.98	310.62	Coarse-grained grey orange porphyritic chloritic	0.1	0	2 QAVN 20 0	Bleb of massive cpy in qtz/anh vein near contact. Contact @ ~ 15 degrees t.c.a.	119011	0.09	0.139
310.62	315.62	FLOW BASALT							
310.62	312.00	Fine-grained dark green homogeneous chloritic	0.1	0.0	2 63 QAVN 20 3	Mt in qtz/anh veinlets or in very thin fracture controlled veinlets.	119012	0.09	0.189
312.00	314.00	Fine-grained dark green homogeneous chloritic epidote	0.0	2	13 QAVN 20 3		119013	0.113	0.313
314.00	315.62	Fine-grained dark green homogeneous chloritic	0.0	2	30 ZVN 70 5		119014	0.074	0.326
315.62	315.88	MONZONITE							
315.62	315.88	Coarse-grained grey white porphyritic chloritic	0.0	0.0	1 40	Crowded feldspar porphyry as for 0117595.	119015	0.045	0.102
315.88	332.23	FLOW							
315.88	318.00	Coarse-grained grey black porphyritic biotite chloritic	0.1	0.0	1 31 QAVN 0 5	Augite porphyritic basalt flows. Strong biotite alt. with chl on slips. Anhydrite through rock matrix as well as in cross-cutting qtz veinlets. Very thin mt veinlets.	119016	0.077	0.229
318.00	320.00		0.5	0.0	1 26 QAVN 5 15		119017	0.275	0.661
320.00	322.00		0.1	0.0	1 28 QAVN 5 15	Note gypsum as well as anhydrite in veinlets.	119018	0.239	0.643
322.00	324.00		0.1	0.0	1 19 QAVN 25 15	Fracture controlled very thin mt veinlets.	119019	0.205	0.389
324.00	326.00		0.1	0.0	0 15 QAVN 0 15	Cpy in one qtz/anh veinlet adjacent to py.	119020	0.175	0.341

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
326.00	328.00	Coarse-grained grey black porphyritic biotite chloritic	1.0 0.0	1	18 QAVN 0 2	Patchy anhydrite and weak anhydrite halo around qtz/anhydrite veinlets.	119021	0.176	0.384
328.00	330.00		1.0 0.0	1	16 QAVN 20 0	Irregularly diss m.g. py very few veins.	119022	0.097	0.192
330.00	332.23		1.0 0.0	1	13 QAVN 20 2		119023	0.101	0.175
332.23	332.54	MONZONITE							
332.23	332.54	Coarse-grained grey orange porphyritic chloritic	0.0 0.0	1	22 QAVN 50 2	Very weak alt. One massive py veinlet.	119024	0.058	0.164
332.54	341.68	FLOW BASALT							
332.54	334.00	Coarse-grained grey black porphyritic biotite	0.3 0.0	5	116 QAVN 5 8	Augite porphyritic basalt flows as above.	119025	0.255	0.52
334.00	336.00		0.3 0.2	1	10 ZCCV 25 4	Bleb of massive cpy in qtz/anh veinlet @ 335.90m	119026	0.088	0.17
336.00	338.00		0.3 0.0	1	30 ZCCV 25 4		119027	0.054	0.086
338.00	340.00		0.3 0.2	1	35 ZCCV 30 10	Several blebs of massive cpy @ 340.35m in zeo/carb veinlets.	119028	0.105	0.188
340.00	341.68		0.3 0.0	1	10 QAVN 20 4		119030	0.115	0.227
341.68	343.14	MONZONITE							
341.68	343.14	Coarse-grained grey orange porphyritic chloritic	0.3 0.0	1	4 QAVN 20 4	Very weak alt.	119031	0.185	0.291
343.14	350.58	FLOW							
343.14	345.00	Fine-grained dark green homogeneous chloritic biotite	2.0 0.0	2	45 QAVN 20 3	m.g. diss py. Bio alt retrograding to chl.	119032	0.171	0.333
345.00	347.00		2.0 0.0	3	104 QAVN 20 3	Mt filled fractures.	119033	0.163	0.319
347.00	349.00		2.0 0.0	2	6 QAVN 20 3		119034	0.202	0.395
349.00	350.58		2.0 0.0	2	12 QAVN 10 3		119035	0.367	0.679
350.58	353.16	MONZONITE							
350.58	352.00	Coarse-grained grey orange porphyritic chloritic	0.5 0.0	2	110 QAVN 30 5	Abundant volc. xenoliths	119036	0.156	0.509
352.00	353.16		0.5 0.0	2	36 QAVN 30 15	Swarm of monzonite dykelets in Takla flows. Sample includes one 10cm vein.	119037	0.261	0.507
353.16	379.62	FLOW							

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
353.16	355.00	Coarse-grained brown green	0.1 0.0	2	55 QAVN 30 15	Brownish-green c.g. augite porphyritic flow with occ. dyklet of monzonite. Anh alt. in rock matrix as well as veins. Patchy red-brown k-spar flooding. This veinlet looks intrusive locally.	119038	0.26	0.582
355.00	357.00		0.1 0.0	2	22 QAVN 30 15		119039	0.088	0.229
357.00	359.00		0.1 0.0	4	94 QAVN 30 15		119040	0.101	0.287
359.00	361.00		0.1 0.0	4	109 QAVN 30 15		119041	0.246	0.564
361.00	363.00		0.1 0.0	1	8 QAVN 30 20		119042	0.245	0.449
363.00	365.00	Coarse-grained grey brown heterogeneous biotite k-felspar	0.1 0.0	1	4 QAVN 30 5	Augite porphyritic in places, more aphanitic in others.	119043	0.128	0.319
365.00	367.00		0.1 0.0	1	14 QAVN 30	In places this unit actually looks intrusive. Locals abundant mt in fracture fill veins.	119044	0.2	0.554
367.00	369.00		0.1 0.0	2	72 QAVN 30		119045	0.173	0.491
369.00	370.21	Medium-grained grey-green heterogeneous biotite k-felspar	2.0 0.0	3	160 QAVN 30	Increasingly more sil'd down sample culminating in a 40cm q.v. with c.g. py and c.g. anhedral k-fsp.	119046	0.217	0.442
370.21	372.00	Medium-grained grey-green heterogeneous biotite	0.5 0.0	1	9 QAVN 30	Very similar to above with patchy area of augite phenocrysts but generally more f.g. Abundant anhedral mt and mt in veinlets.	119047	0.245	0.53
372.00	374.00		0.5 0.0	2	18 QAVN 30 15		119048	0.182	0.512
374.00	376.00		0.5 0.0	3	98 QAVN 30 10		119049	0.101	0.251
376.00	378.00		0.5 0.0	3	33 QAVN 30 10		119050	0.156	0.359
378.00	379.62		0.5 0.0	4	129 QAVN 30 5		119051	0.147	0.396
379.62	381.32	MONZONITE							
379.62	381.32	Coarse-grained red brown brecciated chloritic	0.1 0.0	2	18 QAVN 15 30	Now porphyritic monzonite contacts sharp @ 70 degrees Lower half strongly brecciated with qtz/anh in-fill. Mt veinlets augite porphyritic flows.	119052	0.053	0.127
381.32	401.24	FLOW							
381.32	383.00	Coarse-grained green heterogeneous biotite	0.5 0.0	2	34 QAVN 20 10		119053	0.118	0.299
383.00	384.00		0.5 0.0	2	26 QAVN 20 10		119054	0.077	0.162
384.00	385.78	Fine-grained black blue stockworked biotite silicic	0.5 0.0	2	14 QAVN 50 60	Black f.g. flow with stock work qtz/anh veining and silica/anhydrite flooding. Trace graphite on one vein contact.	k110433	0.157	0.325

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
385.78	387.00	Fine-grained black blue homogeneous biotite silicic	0.5 0.0	2	5 QAVN 35 10		119056	0.173	0.274
387.00	389.00		1.0 0.3	5	83 QAVN 35 50	1.5cm qtz/anh veinlet with abundant cpy.	119057	0.203	0.408
389.00	391.00		0.5 0.0	5	48 QAVN 30 25	Abundant anhedral clots of mt replacing rock matrix, not in veinlets.	119058	0.124	0.256
391.00	393.00	Fine-grained grey-green homogeneous biotite silicic	0.5 0.0	5	34 QAVN 30 7	Silicification is much richer than above and very patchy.	119059	0.192	0.634
393.00	395.00		1.0 0.0	5	42 QAVN 30 25		119060	0.149	0.377
395.00	397.00	Fine-grained grey black homogeneous biotite	2.0 0.0	3	48 QAVN 30 5	m.g. dissm anhedral py. Trace py in qtz/anh veinlets. Mt in clots and fractures in rock.	119061	0.17	0.368
397.00	399.00		2.0 0.0	3	39 QAVN 30 5		119062	0.11	0.247
399.00	401.24		2.0 0.0	3	32 QAVN 30 5	Contact @ 45 degrees t.c.a.	119063	0.104	0.26
401.24	413.5	MONZONITE							
401.24	403.00	Coarse-grained grey orange porphyritic sericitic	0.0 0.0	1	16 QAVN 30 1	Very weak sericitization of feldspars and on some slips, otherwise unaltered, sparse qtz/anh veining. Crowded porphyry as earlier in hole. Euhedral dissm mt, appears to be primary.	119064	0.075	0.155
403.00	405.00		0.0 0.1	1	8 QAVN 30 1		119065	0.058	0.123
405.00	407.00		0.0 0.0	1	18 QAVN 30 1		119066	0.111	0.271
407.00	409.00		0.0 0.0	1	3 QAVN 30 1		119067	0.096	0.189
409.00	411.00		0.0 0.0	1	10 QAVN 30 2		119068	0.138	0.257
411.00	413.00		0.1 0.0	1	21 QAVN 30 2		119069	0.14	0.349
413.00	413.50		0.0 0.1	1	3 QAVN 30 2	One 1cm by 1mm stringer of cpy in fracture.	119070	0.289	0.814
413.5	435.48	FLOW							
413.50	415.00	Fine-grained black biotite anhydrite	1.0 0.1	5	59 QAVN 30 10	Several blebs of cpy in blue grey qtz anhydrite veinlet.	119071	0.194	0.72
415.00	417.00		1.0 0.0	5	26 QAVN 30 5	Remarkably even distribution of m.g. anhedral to subhedral py in totally dark aphanitic rock. Patchy anhydrite as well as in veinlets. Mt occurs in mt veinlets, qtz/anh veinlets and as v.f.g. dissm irregularly distributed through core.	119072	0.135	0.401
417.00	419.00		1.0 0.0	5	42 QAVN 30 15		119073	0.09	0.253
419.00	421.00		1.0 0.0	5	24 QAVN 30 20	This veinlet looks similar to ore-bearing zones elsewhere but lacks appreciably visible cpy.	119074	0.089	0.204

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
421.00	423.00	Fine-grained black biotite anhydrite	1.0	0.0	5 29 QAVN 30 10		119075	0.13	0.407
423.00	425.00		1.0	0.0	5 37 QAVN 30 10		119076	0.135	0.301
425.00	427.00		1.0	0.0	5 22 QAVN 30 15		119077	0.191	0.439
427.00	429.00		1.0	0.3	5 19 QAVN 30 15	Several patches of massive cpy in qtz/anh veinlet @ 430.28m.	119078	0.182	0.46
429.00	431.00		1.0	0.0	5 46 QAVN 25 25		119079	0.169	0.581
431.00	433.00		1.0	0.0	5 26 QAVN 30 25		119080	0.169	0.536
433.00	435.00		1.0	0.0	5 31 QAVN 40 25		119082	0.116	0.348
435.00	435.48		1.0	0.0	5 32 QAVN 30 10		119083	0.105	0.361
435.48	466.75	MONZONITE							
435.48	437.00	Coarse-grained grey black brecciated biotite silicic	0.5	0.0	5 14 QAVN 30 10	Cobble size breccia of QFP to monzonite in black aphanitic matrix. Very strong biotite alt. Appears to be an intrusion bx as opposed to volcanogenic.	119084	0.065	0.145
437.00	439.00		0.5	0.0	5 50 QAVN 30 10		119085	0.126	0.387
439.00	441.00		0.5		3 11 QAVN 30 15	Mod to string silicification.	119086	0.087	0.189
441.00	443.00		0.5		5 12 QAVN 30 10	Abundant massive mt veinlets. Mod to string silicification.	119087	0.097	0.277
443.00	445.00		0.5		5 11 QAVN 10 10	Fragment supported bx.	119088	0.071	0.139
445.00	447.00		0.5		2 9 QAVN 35 10	Matrix supported (10-15% fragments) monzonite breccia. Matrix is v.f.g. to aphanitic and mt rich. The origin of this veinlet is enigmatic. Volcaniclastic?/intrusion bx.	119089	0.126	0.278
447.00	449.00		0.5		3 58 QAVN 35 10		119090	0.101	0.228
449.00	451.00		0.5		3 14 QAVN 35 10		119091	0.131	0.288
451.00	453.30		0.5		3 16 QAVN 35 10		119092	0.146	0.34
453.30	455.00	Coarse-grained grey orange porphyritic sericitic chloritic	0.5		3 2 QAVN 35 10	Typical crowded feldspar porphyry cut by relatively abundant bluish grey qtz anhydrite veinlets. v.c.g. py in veins.	119093	0.106	0.418
455.00	457.00		0.5		3 33 QAVN 35 20	Weakly sericitic feldspars, chl on slips. Qtz/anh veins up to 20cm	119094	0.121	0.35
457.00	459.00		0.5		3 21 QAVN 35 10		119095	0.161	0.404
459.00	461.00		0.5		1 3 QAVN 35 10		119096	0.125	0.315
461.00	463.00		0.5		1 15 QAVN 35 20		119097	0.123	0.252
463.00	465.00		0.5		1 6 QAVN 35 30		119098	0.107	0.251

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
465.00	466.75	Coarse-grained grey orange porphyritic sericitic chloritic	0.5	1	16 QAVN 35 10		119099	0.201	0.434
466.75	523	FLOW							
466.75	469.00	Fine-grained grey black homogeneous biotite chloritic	1.0	0.2	5 124 QAVN 10 10	Abundant massive mt veins and mt in qtz/anh veins. Strong biotite alt, chl on slips. Abundant white zeolite through this section.	119100	0.161	0.444
469.00	471.00		1.0	0.2	2 12 QAVN 20 10		119101	0.181	0.496
471.00	473.00		1.0	0.4	2 16 QAVN 10 10	c.g. cpy in qtz/anh veins.	119102	0.162	0.437
473.00	475.00		1.0	0.3	2 41 QAVN 25 30		119103	0.185	0.63
475.00	477.00		1.0	0.3	2 10 QAVN 25 15	f.g. cpy attached to py.	119104	0.131	0.341
477.00	479.00		1.0	0.3	2 19 QAVN 25 15		119105	0.168	0.427
479.00	481.00		1.0	0.2	2 17 QAVN 25 15	Greenish py with possible v.f.g. cpy.	119106	0.147	0.446
481.00	483.00	Fine-grained grey black homogeneous biotite anhydrite	2.0	0.1	2 12 QAVN 30 3	Trace v.f.g. cpy. Anhydrite flooding locally.	119108	0.134	0.313
483.00	485.00		1.0	0.1	2 28 QAVN 30 3		119109	0.101	0.265
485.00	487.00		1.0	0.1	2 33 QAVN 30 3		119110	0.145	0.44
487.00	489.00		1.0	0.1	2 32 QAVN 30 3		119111	0.177	0.478
489.00	491.00		2.0	0.2	2 19 QAVN 30 3	f.g. cpy associated with py in veins.	119112	0.351	0.76
491.00	493.00		3.0	0.1	2 67 QAVN 30 3	Several qtz/anh veins contain massive py clots.	119113	0.102	0.255
493.00	495.00		1.0	0.1	2 26 QAVN 30 3		119114	0.142	0.319
495.00	497.00		1.0	0.1	3 12 QAVN 30 3	Abundant mt filled fractures.	119115	0.161	0.339
497.00	499.00		1.0	0.1	2 27 QAVN 30 3	Greenish py.	119116	0.259	0.513
499.00	501.00		1.0	0.1	2 9 QAVN 30 3		119117	0.144	0.33
501.00	503.00		1.0	0.1	4 25 QAVN 30 3	v.c.g. mt in qtz/anh veinlets.	119118	0.143	0.398
503.00	505.00		1.0	0.1	0 3 QAVN 50 25	Abundant white zeolite veinlets in addition.	119119	0.181	0.373
505.00	507.00	Fine-grained grey black in-situ brecciated biotite anhydrite	2.0	0.3	0 3 QAVN 20 10	Discrete qtz/anh veinlets and fracture infill.	119120	0.225	0.469
507.00	509.00		2.0	0.3	2 48 QAVN 20 10		119121	0.155	0.303
509.00	511.00		2.0	0.3	2 3 QAVN 20 10		119122	0.191	0.386
511.00	513.00		2.0	0.1	2 13 QAVN 5 10		119123	0.168	0.408

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
513.00	515.00	Fine-grained grey black in-situ brecciated biotite anhydrite	4.0 0.1	2	20 QAVN 20 15	c.g. py in fractures and dissm throughout. Qtz/anh infill in strong in situ bx.	119124	0.274	0.64
515.00	517.00		4.0 0.3	2	31 QAVN 20 15	1cm square bleb of cpy in qtz/anh veins.	119125	0.197	0.515
517.00	519.00		4.0 0.0	2	34 QAVN 25 15	Abundant very thin qtz/anh veinlets.	119126	0.197	0.421
519.00	521.00		4.0 0.0	2	38 QAVN 25 15		119127	0.191	0.442
521.00	523.00		4.0 0.1	2	69 QAVN 30 15		119128	0.114	0.239
523	557	FLOW INTERMEDIATE VOLCANIC							
523.00	525.00	Fine-grained grey black in-situ brecciated biotite anhydrite	3.0 0.1	2	26 QAVN 25 15	Mt in qtz/anh veinlets. Py is greenish.	119129	0.108	0.178
525.00	527.00	Fine-grained grey black in-situ brecciated biotite chloritic	3.0 0.0	2	26 QAVN 25 10	Pervasive biotite alt. with chl on slips. Dissm sub-hedral py. Wk py in qtz/anh. very zeo/carbveinlets	119130	0.127	0.236
527.00	529.00	Fine-grained grey black homogeneous biotite chloritic	3.0 0.0	2	33 QAVN 40 5		119131	0.152	0.318
529.00	531.00		3.0 0.0	1	17 QAVN 10 5		119132	0.164	0.377
531.00	533.00		3.0 0.0	1	11 QAVN 10 3		119134	0.109	0.19
533.00	535.00		3.0 0.0	3	95 QAVN 20 3	Abundant thin fracture fill MT	119135	0.144	0.314
535.00	537.00		2.0 0.0	2	37 QAVN 40 3	contact @70 dgs. to core axis	119136	0.096	0.204
537.00	538.04		1.0 0.0	1	9 QAVN 20 3	brecciated at 20 to 40% light grey silicified fragments in a blackmatrix	k117406	0.11	0.206
538.04	539.00	Coarse-grained grey black brecciated biotite chloritic	1.0 0.0	1	24 ZCCV 50 5		119137	0.199	0.361
539.00	541.00		1.0 0.0	1	16 ZCCV 50 15		119138	0.149	0.26
541.00	542.39		1.0 0.0	1	5 ZCCV 50 10	as above with weak sericite alt locally contact @ 80 degrees to core axis	119139	0.148	0.246
542.39	543.00	Fine-grained grey black homogeneous biotite chloritic	1.0 0.0	2	17 ZCCV 50 5		k117407	0.095	0.223
543.00	545.00		1.0 0.0	2	27 ZCCV 50 3		119140	0.12	0.24
545.00	547.00		1.0 0.0	2	20 QAVN 25 3		119141	0.077	0.175
547.00	549.00		1.0 0.1	3	386 QAVN 25 3		119142	0.135	0.255
549.00	551.00		1.0 0.0	2	31 QAVN 25 3		119143	0.098	0.239
551.00	553.00		1.0 0.0	2	17 QAVN 25 3	massive cpy in qtz/anh veinlet running up axis	119144	0.162	0.345
553.00	555.00		1.0 1.0	2	25 QAVN 0 7		119145	0.185	0.407

Hole Number: KN-02-28

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
555.00	557.00	Fine-grained grey black homogeneous biotite chloritic	1.0 0.0	1	26 QAVN 25 10		119146	0.101	0.318
557	563.82	FLOW BASALT							
557.00	559.00	Medium-grained grey black porphyritic biotite chloritic	0.5 0.0	1	20 QAVN 50 10	flows as above with a swarm of monzonite dyklets flows are augite porphyritic	119147	0.12	0.224
559.00	561.00		0.5 0.0	1	37 QAVN 55 10		119148	0.1	0.255
561.00	563.00		0.5 0.0	1	16 QAVN 55 10		119149	0.167	0.385
563.00	563.82		0.5 0.0	1	37 QAVN 45 10		119150	0.055	0.112
563.82	570.44	MONZONITE							
563.82	565.00	Coarse-grained grey porphyritic chloritic	0.5 0.0	2	38 QAVN 60 5	highly chloritized hornblend rich monzonite with zeolite common	119151	0.094	0.206
565.00	567.00		0.5 0.0	2	45 QAVN 60 5		119152	0.059	0.113
567.00	569.00	Coarse-grained grey orange porphyritic k-felspar	0.5 0.1	0	6 QAVN 60 10	k-spar wash over monzonite to cpy in Qtz/anh veinlets pink and white zeolite common	119153	0.063	0.124
569.00	570.44	Coarse-grained orange porphyritic k-felspar	0.5 0.0	0	1 QAVN 55 10		119154	0.113	0.132
570.44	589.92	FLOW BASALT							
570.44	572.00	Coarse-grained grey-green porphyritic chloritic	0.5 0.0	2	23 QAVN 65 7	augite porphyritic basalt	119155	0.106	0.286
572.00	574.00		0.5 0.0	2	21 QAVN 65 15	essentially unaltered except for chl on slips and fractures	119156	0.178	0.313
574.00	576.00		0.5 0.0	2	42 QAVN 65 3	Mt in matrix, looks euhedral and primary. Mt in veinlets is secondary	119158	0.085	0.138
576.00	578.00		0.5 0.0	2	40 QAVN 50 3		119159	0.067	0.112
578.00	580.00		0.5 0.1	2	20 QAVN 65 3	tr cpy diss in rock matrix over 5 cm	119160	0.179	0.29
580.00	582.00		0.5 0.0	2	45 QAVN 65 3	Qtz/anh veinlets are very thin (1-2 mm average) about 50/50	119161	0.107	0.124
582.00	584.00		1.0 0.0	2	29 QAVN 15 3		119162	0.113	0.228
584.00	586.00		0.0 0.0	2	11 QAVN 60 3		119163	0.112	0.123
586.00	588.00		2.0 0.0	2	24 QAVN 60 3		119164	0.085	0.102
588.00	589.92		2.0 0.0	2	29 QAVN 60 3	contact 70 degrees	119165	0.116	0.163
589.92	623.93	FLOW							

Hole Number: KN-02-28

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
589.92	591.75	Medium-grained light grey brecciated silicic anhydrite	1.0 0.0	2	23 MTV 60	1	It blue grey qtz/anh flooded zone white is cut by later white zeolite veinlets. faint bx texture. lower contact 40 degrees to core axis	119166	0.071	0.087
591.75	593.00	Fine-grained green homogeneous chloritic	3.0 0.0	2	8 QVN 30	5	Dark grey totally amhaultic flows with 1-2% qtz filled vesicles from 1 mm to 1 cm. sparse veining throughout but very MT rich	119167	0.196	0.35
593.00	595.00		3.0 0.0	3	69 QVN 30	5		119168	0.095	0.138
595.00	597.00	Fine-grained dark grey amygdular chloritic	3.0 0.0	3	84 QVN 30	5		119169	0.11	0.168
597.00	599.00		3.0 0.0	3	9 QVN 30	5		119170	0.135	0.196
599.00	601.00		3.0 0.0	3	139 QVN 30	5		119171	0.135	0.167
601.00	603.00		3.0 0.0	3	140 QVN 30	5		119172	0.073	0.112
603.00	605.00		1.0 0.0	4	22 QVN 55	5	abundent MT/qtz veinlets	119173	0.079	0.103
605.00	607.00		1.0 0.0	3	24 ZCCV 55	10	aproxametly 3-5% white zeolite veinlets as well as the qtz/MT veinlets py in thin . massive veinlets around fracture controlled blebs	119174	0.108	0.194
607.00	609.00		1.0 0.0	1	5 QVN 45	2		119175	0.113	0.115
609.00	611.00		1.0 0.0	1	19 QVN 45	2		119176	0.078	0.062
611.00	613.00		1.0 0.0	1	22 QVN 45	2		119177	0.095	0.044
613.00	615.00		1.0 0.0	1	37 QVN 45	2		119178	0.065	0.099
615.00	617.00		1.0 0.0	1	28 QVN 45	2		119179	0.043	0.064
617.00	619.00		1.0 0.0	2	42 QVN 45	2		119180	0.077	0.09
619.00	621.00		1.0 0.0	2	41 QVN 45	2		119181	0.063	0.066
621.00	623.00		1.0 0.0	2	48 QVN 45	2		119182	0.066	0.072
623.00	623.93		1.0 0.0	1	21 QVN 45	2		119184	0.038	0.035
623.93 EOH										

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-29**

Northing: 15729.5	Total Depth: 785.43m
Easting: 10361	Azimuth: 0°
Elevation: 1766	Dip: -90°

Geologist: B. Mercer
Logged Date: 8/17/2002

Survey Depth	Azimuth	Dip	Comments:
689 m	203 °	-88 °	
785 m	33 °	-86 °	Mechanical

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-29**

From (m)	To (m)	Rock Type	Comments
0	3.05	CASING	Casing
3.05	27	INTERMEDIATE VOLCANIC TUFF	Pale grey green sericitized lapilli tuff to tuffaceous volcanic breccia. Largely monolithic except for color variations of fragment from pale green to dark green. The latter is frequently pyritic and may represent a previous mineralization phase otherwise py. is common as irregular thin stringers and blebs of massive textured dull greyish py. Chl. alt. occurs as wispy. stringers and selective replacement of fragments. Bright white, vuggy Fe-carbonate veins are common. Probably actually mixture of carb. and anhydrite.
27	33.97	INTERMEDIATE VOLCANIC FLOW	Alt. similar to section above except the carb. veinlets are now calcite. There is some gouge near top of sample. Possible fault?
33.97	47.33	INTERMEDIATE VOLCANIC TUFF	Pale green chaotic looking tuff and tuff breccia. Very strong ser. patchy white clay. py. in semi-massive patches and as m.g. disseminations.
47.33	48.2	FAULT ZONE INTERMEDIATE VOLCANIC	Gouge cemented fault bx. A mixture of ser + minor chl. at each contact.
48.2	80	INTERMEDIATE VOLCANIC TUFF	Anhydrite rich highly sericitic tuff. Very crude fabric which is probably a modification of syn-volcanic lamination/bedding and epigenetic veining due to the soft nature of the alteration minerals. Chl. alt. occurs as minor wisps. py. occurs as 1-3% diss. + irregularly distributed massive and semi-massive veinlets.
80	84	INTERMEDIATE VOLCANIC FLOW	The intersection of multiple anh./carb. veinlets gives the rock a brecciated texture however it appears to be just a heavily veined flow. Trace epidote
84	85.97	FAULT ZONE INTERMEDIATE VOLCANIC	Dark green chloritic cemented fault breccia.
85.97	88.49	INTERMEDIATE VOLCANIC FLOW	Greater than 25% anhydrite veinlets patches and stockworks
88.49	89.5	FAULT ZONE INTERMEDIATE VOLCANIC	Sample bound by a 25cm shear zone on either end.

Hole Number: **KN-02-29**

From (m)	To (m)	Rock Type	Comments
89.5	92.25	INTERMEDIATE VOLCANIC FLOW	
92.25	95.05	INTERMEDIATE VOLCANIC TUFF	Abundant py. as replacements of fragments. Otherwise appears to be a monolithic tuff.
95.05	96.71	INTERMEDIATE VOLCANIC FLOW	Massive, highly sericitic flow with c.g. blebs of semi-massive py. and very thin anhydrite veinlets.
96.71	102.5	INTERMEDIATE VOLCANIC TUFF	
102.5	104.25	INTERMEDIATE VOLCANIC FLOW	Bleached looking, similar to 0110871.
104.25	106	INTERMEDIATE VOLCANIC TUFF	
106	125.01	INTERMEDIATE VOLCANIC FLOW	
125.01	149.3	INTERMEDIATE VOLCANIC TUFF	Monolithic tuff. Dark green chloritic lapilli up to 3cm in a lighter green sericitic matrix. py. occurs as m.g. to c.g. disseminations and aggregates up to 1cm across.
149.3	197	INTERMEDIATE VOLCANIC FLOW	Inter-bedded f.g. flows with thin tuffaceous units or flow top bx. Cut by bright white Fe-carb. veinlets. Trace mt. in veinlets.
197	221.86	INTERMEDIATE VOLCANIC TUFF	Remarkably even distribution of c.g. py. and anhydrite +/- py. veinlets. Core is pitted looking but not quite vuggy textured.
221.86	305	INTERMEDIATE VOLCANIC FLOW	
305	305.41	FAULT ZONE INTERMEDIATE VOLCANIC	Gouge cemented fault bx.
305.41	329.32	INTERMEDIATE VOLCANIC FLOW	Occ. chl pseudomorphs of augite, 1-2 mm in size.

Hole Number: **KN-02-29**

From (m)	To (m)	Rock Type	Comments
329.32	331.75	SILICIFIED INTERMEDIATE VOLCANIC	qtz./Anhydrite flooded zSingle with f.g. dissm. py.
331.75	405.47	INTERMEDIATE VOLCANIC FLOW	Stock-work of white carb. veinlets and local carb. flooding.
405.47	406.16	FAULT ZONE BASALT	Possible fault. Rock is badly broken and chloritic but not gouged. Appears more basaltic than andesitic.
406.16	441.9	BASALT FLOW	Approximately 1% chlorite psudomorphs after augite. Locally up to 5% in small clusters.
441.9	585.54	INTERMEDIATE VOLCANIC FLOW	Tr. f.g. disseminated magnetite and thin fracture fill magnetite veinlets.
585.54	586.67	DIORITE	Comprised of approx. 20% 2-3mm altered looking mafic minerals in a cream colored anhedral plagioclase matrix. Trace cpy. at contact which is 70 degrees t.c.a.
586.67	606.33	INTERMEDIATE VOLCANIC FLOW	m.g. with local areas of chl. psudomorphs. Minor py. and tr. cpy. in qtz. anhydrite veinlets. Occasional massive py. veinlet.
606.33	611.54	MONZONITE	Well veined crowded feldspar porphyritic monzonite, mod. chl., wk. ser. alt. sub-parallel, sheeted grey qtz. veinlets which are entirely barren of sulphides and magnetite.
611.54	625	INTERMEDIATE VOLCANIC FLOW	f.g. to totally aphanitic flows with abundant m.g. subhedral py. Sparse thin qtz. +/- yellow stained carb. veinlets.
625	636.24	DIORITE	
636.24	636.97	MONZONITE	Abrupt change from mafic mineral porphyritic to feldspar porphyritic rock. Contact is ~ 85 degrees t.c.a. Appears to be two separate intrusions.
636.97	638.8	INTERMEDIATE VOLCANIC FLOW	Few anhedral plagioclase phenocrysts. Several narrow dykelets at < 15 degrees t.c.a.
638.8	643.5	MONZONITE	Very strong silicification (70% qtz.) of feldspar crowded porphyry. Cpy. in fractures and hairline stringers
643.5	646.16	INTERMEDIATE VOLCANIC FLOW	Deep blue chalcedonic qtz. veins.

Hole Number: **K.N-02-29**

From (m)	To (m)	Rock Type	Comments
646.16	652.8	MONZONITE	No mineralization and sparse qtz. veining. Pink zeolite veins more prevalent. 3-4%
652.8	654.25	INTERMEDIATE VOLCANIC FLOW	May be large xenolith. Magnetite filling hairline fractures.
654.25	657.26	MONZONITE	Single speck of cpy. 1cm by 1mm at border of qtz. zeolite veinlet.
657.26	667.8	INTERMEDIATE VOLCANIC FLOW	f.g. to aphanitic flows with m.g. to c.g. subhedral py. Very thin py./qtz. veinlets. Fracture fill mt.
667.8	674.23	MONZONITE	Crowded feldspar porphyritic monzonite. Light colour due to sericitization of feldspars.
674.23	680.62	INTERMEDIATE VOLCANIC TUFF	Trace amounts of tarnished cpy. in qtz./carb. veinlets and as hairline fracture fill.
680.62	714	INTERMEDIATE VOLCANIC FLOW	Fine to med. grained flows. Very small plagioclase in an aphanitic matrix. Ser/chl alt ~ 50/50 in relative intensity. f.g. dissm. mt.
714	732.3	INTERMEDIATE VOLCANIC TUFF	Moderately sericitized, mottled looking rock. contains approximately 20% chlorite patches about 3-15 mm in size. Due to masking by alteration it is not clear if this unit is in fact a tuff or a highly altered c.g intrusive rock. Contains minor py. in qtz./carb. veinlets.
732.3	734.28	BASALT FLOW	Mottled textured med. grained flow with conspicuous augite phenocrysts. Single 8cm wide massive py. vein.
734.28	736.06	QUARTZ VEIN	Single qtz./pink calcite vein running up core axis carries minor f.g. cpy.
736.06	739.25	BASALT FLOW	Ubiquitous dissm. py. in wall rock. Contains barren qtz./carb. veinlets and barren zeolite veinlets.
739.25	740.02	QUARTZ VEIN	As for 119210 80% qtz./20% pink cal., trace py., several thin stringers of cpy.
740.02	749.63	BASALT FLOW	Mottled textured augite porphyritic basalt cut by cream coloured qtz. veins with fracture controlled stringer of cpy.
749.63	754.67	SYENITE	
754.67	759.35	BASALT FLOW	Augite porphyritic basalt with Single 18 cm dyke similar to above. c.g. cpy. in qtz./carb. veinlet at lower contact which is 45 degrees to core axis.

Hole Number: **KN-02-29**

From (m)	To (m)	Rock Type	Comments
759.35	766.23	MONZONITE	
766.23	769.85	BASALT FLOW	
769.85	785.85	MONZONITE	Crowded feldspar porphyry cut by numerous thin pink zeolite plus yellow calcite veinlets. Sample 119232 has semi massive molybdenite veinlet.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-29

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	3.05	CASING							
0.00	3.05					Casing	29	-2	-2
3.05	27	INTERMEDIATE VOLCANIC TUFF							
3.05	5.00	Coarse-grained light green vuggy sericitic chloritic	7.0	0.0	0 0 CCVN 10 5	Pale grey green sericitized lapilli tuff to tuffaceous volcanic breccia. Largely monolithic except for color variations of fragment from pale green to dark green. The latter is frequently pyritic and may represent a previous mineralization phase otherwise py. is common as irregular thin stringers and blebs of massive textured dull greyish py. Chl. alt. occurs as wispy. stringers and selective replacement of fragments. Bright white, vuggy Fe-carbonate veins are common. Probably actually mixture of carb. and anhydrite.	k110826	0.021	0.109
5.00	7.00		7.0	0.0	0 0 CCVN 10 15		k110827	0.015	0.079
7.00	9.00		7.0	0.0	0 0 CCVN 20 5		k110828	0.013	0.086
9.00	11.00		7.0	0.0	0 0 CCVN 40 5		k110829	0.026	0.129
11.00	13.00		10.0	0.0	0 0 CCVN 20 10		k110830	0.034	0.141
13.00	15.00		7.0	0.0	0 0 CCVN 20 10		k110831	0.007	0.065
15.00	17.00		10.0	0.0	0 0 CCVN 20 10	py. stringers following carb. veinlets.	k110832	0.013	0.139
17.00	19.00		10.0	0.0	0 0 CCVN 10 10		k110833	0.017	0.226
19.00	21.00		10.0	0.0	0 0 CCVN 30 5		k110834	0.048	0.255
21.00	23.00		10.0	0.0	0 0 CCVN 55 5		k110835	0.032	0.369
23.00	25.00		10.0	0.0	0 0 CCVN 30 5		k110836	0.022	0.348
25.00	27.00		7.0	0.0	0 0 CCVN 35 5		k110837	0.034	0.276
27	33.97	INTERMEDIATE VOLCANIC FLOW							
27.00	29.00	Fine-grained light green heterogeneous sericitic chloritic	7.0	0.0	0 0 CCVN 60 7	Alt. similar to section above except the carb. veinlets are now calcite. There is some gouge near top of sample. Possible fault?	k110838	0.017	0.067
29.00	31.00		7.0	0.0	0 0 CCVN 55 7	Somewhat heterogeneous looking but more like a fractured flow than a fragmental rock.	k110839	0.016	0.151

Hole Number: KN-02-29

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
31.00	33.00	Fine-grained light green heterogeneous sericitic chloritic	7.0	0.0	0 0 CCVN 30 3		k110840	0.023	0.095
33.00	33.97		7.0	0.0	0 0 CCVN 10 15		k110841	0.015	0.103
33.97	47.33	INTERMEDIATE VOLCANIC TUFF							
33.97	35.37	Coarse-grained light green fragmental sericitic anhydrite	10.0	0.0	0 0 CCVN 10 20	Pale green chaotic looking tuff and tuff breccia. Very strong ser. patchy white clay. py. in semi-massive patches and as m.g. disseminations.	k110842	0.022	0.125
35.37	36.58		10.0	0.0	0 0 CCVN 10 20	Reduce from HQ to BQ	k110843	0.006	0.047
36.58	38.00		10.0	0.0	0 0 SVN 25 2	As for 110842 and 110843.	k110844	0.008	0.04
38.00	40.00		10.0	0.0	0 0 SVN 25 2	Anhydrite alteration weakening down sample.	k110845	0.022	0.063
40.00	42.00	Coarse-grained grey-green fragmental sericitic chloritic	7.0	0.0	0 0 SVN 35 2	Mod. chlorite alteration imparts a darker colour.	k110846	0.025	0.132
42.00	44.00	Coarse-grained light green fragmental sericitic anhydrite	10.0	0.0	0 0 SVN 35 4		k110847	0.013	0.083
44.00	46.00		15.0	0.0	0 0 SVN 35 5	Abundant dissm. py. in addition to py. veins.	k110848	0.04	0.158
46.00	47.33		10.0	0.0	0 0 SVN 35 2		k110849	0.095	0.196
47.33	48.2	FAULT ZONE INTERMEDIATE VOLCANIC							
47.33	48.20	Coarse-grained light green fragmental sericitic chloritic	0.0	0	1 FLT 20	Gouge cemented fault bx. A mixture of ser + minor chl. at each contact.	k110850	0.059	0.243
48.2	80	INTERMEDIATE VOLCANIC TUFF							
48.20	50.00	Coarse-grained light green fragmental sericitic anhydrite	15.0	0.0	0 0 FOL 20	Anhydrite rich highly sericitic tuff. Very crude fabric which is probably a modification of syn-volcanic lamination/bedding and epigenetic veining due to the soft nature of the alteration minerals. Chl. alt. occurs as minor wisps. py. occurs as 1-3% dissm. + irregularly distributed massive and semi--massive veinlets.	k110851	0.036	0.261
50.00	52.00		15.0	0.0	0 0 FOL 20		k110853	0.027	0.219
52.00	54.00		15.0	0.0	0 0 FOL 20		k110854	0.024	0.217
54.00	56.00		10.0	0.0	0 0 FOL 20		k110855	0.034	0.203
56.00	58.00		10.0	0.0	0 0 FOL 20		k110856	0.028	0.13
58.00	60.00		10.0	0.0	0 0 FOL 20		k110857	0.048	0.132
60.00	62.00		10.0	0.0	0 0 FOL 25		k110858	0	0

Hole Number: KN-02-29

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
62.00	64.00	Coarse-grained light green fragmental sericitic anhydrite	15.0	0.0	0 0 CCVN 35 15	White carb. or possibly white anhydrite veinlets, non-reactive	k110859	0.046	0.227
64.00	66.00		15.0	0.0	0 0 CCVN 35 15	Similar to above with a pronounced vuggy texture.	k110860	0.051	0.463
66.00	68.00		15.0	0.0	0 0 CCVN 25 15		k110861	0.112	0.399
68.00	70.00		15.0	0.0	0 0 CCVN 25 15	Multiple chl. / py. slips sub-parallel to core axis.	k110862	0.024	0.129
70.00	72.00		15.0	0.0	0 0 CCVN 35 15		k110863	0.044	0.173
72.00	74.00		20.0	0.0	0 0 CCVN 35 15	Patchy epidote very strong py.	k110864	0.046	0.112
74.00	76.00		20.0	0.0	0 0 CCVN 35 15		k110865	0.057	0.132
76.00	78.00		20.0	0.0	0 0 CCVN 35 15		k110866	0.024	0.113
78.00	80.00		10.0	0.0	0 0 CCVN 35 15	Patchy epidote, py. weakening.	k110867	0.006	0.079
80	84	INTERMEDIATE VOLCANIC FLOW							
80.00	82.00	Fine-grained light green heterogeneous sericitic anhydrite	3.0	0.0	0 0 AVN 55 10	The intersection of multiple anh./carb. veinlets gives the rock a brecciated texture however it appears to be just a heavily veined flow. Trace epidote	k110868	0.022	0.1
82.00	84.00		3.0	0.0	0 0 AVN 55 10	Several chloritic slips.	k110869	0.036	0.169
84	85.97	FAULT ZONE INTERMEDIATE VOLCANIC							
84.00	85.97	Fine-grained light green heterogeneous sericitic chloritic	3.0	0.0	0 0 FLT 25	Dark green chloritic cemented fault breccia.	k110870	0.023	0.183
85.97	88.49	INTERMEDIATE VOLCANIC FLOW							
85.97	88.00	Fine-grained green white heterogeneous sericitic anhydrite	3.0	0.0	0 0 AVN 55 30	Greater than 25% anhydrite veinlets patches and stockworks	k110871	0.02	0.141
88.00	88.49		3.0	0.0	0 0 AVN 55 30		k110872	0.034	0.184
88.49	89.5	FAULT ZONE INTERMEDIATE VOLCANIC							
88.49	89.50	Fine-grained light green heterogeneous sericitic anhydrite	1.0	0.0	0 0 FLT 20	Sample bound by a 25cm shear zSingle on either end.	k110873	0.05	0.333
89.5	92.25	INTERMEDIATE VOLCANIC FLOW							
89.50	91.00	Fine-grained light green heterogeneous sericitic anhydrite	3.0	0.0	0 0 AVN 55 5		k110874	0	0
91.00	92.25		5.0	0.0	0 0 AVN 55 5		k110875	0.036	0.187
92.25	95.05	INTERMEDIATE VOLCANIC TUFF							
92.25	94.25	Coarse-grained light green fragmental sericitic anhydrite	15.0	0.0	0 0 AVN 55 5	Abundant py. as replacements of fragments. Otherwise appears to be a monolithic tuff.	k110876	0.009	0.083

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
94.25	95.05	Coarse-grained light green fragmental sericitic anhydrite	15.0 0.0	0	0 AVN 55 5		k110877	0.037	0.256
95.05	96.71	INTERMEDIATE VOLCANIC FLOW							
95.05	96.71	Fine-grained light green homogeneous sericitic anhydrite	7.0 0.0	0	0 AVN 55 10	Massive, highly sericitic flow with c.g. blebs of semi-massive py. and very thin anhydrite veinlets.	k110879	0.055	0.264
96.71	102.5	INTERMEDIATE VOLCANIC TUFF							
96.71	98.00	Coarse-grained green fragmental sericitic anhydrite	15.0 0.0	0	1 AVN 40 10		k110880	0.007	0.115
98.00	100.00		15.0 0.0	0	0 AVN 40 10		k110881	0.018	0.174
100.00	102.00		15.0 0.0	0	0 AVN 40 10		k110882	0.019	0.126
102.00	102.50		15.0 0.0	0	0 AVN 40 10		k110883	0.008	0.078
102.5	104.25	INTERMEDIATE VOLCANIC FLOW							
102.50	104.25	Fine-grained light green heterogeneous sericitic anhydrite	5.0 0.0	0	0 AVN 40 25	Bleached looking, similar to 0110871.	k110884	0.025	0.13
104.25	106	INTERMEDIATE VOLCANIC TUFF							
104.25	106.00	Fine-grained light green fragmental sericitic anhydrite	20.0 0.0	0	0 AVN 40 15		k110885	0.004	0.055
106	125.01	INTERMEDIATE VOLCANIC FLOW							
106.00	107.90	Coarse-grained green fragmental sericitic anhydrite	15.0 0.0	0	0 AVN 40 7		k110886	0.013	0.14
107.90	110.00	Coarse-grained green in-situ brecciated sericitic chloritic	7.0 0.0	0	0	Highly tectonized breccia of IVO fragments cut by an anastomosing stockwork of gouge and py. filled fractures. Probable flow originally.	k110887	0.006	0.089
110.00	112.00		7.0 0.0	0	0		k110888	0.017	0.149
112.00	114.00		7.0 0.0	0	0		k110889	0.009	0.12
114.00	116.00		7.0 0.0	0	0	Highly tectonized IVO flow as above.	k110890	0.002	0.03
116.00	118.00	Coarse-grained green in-situ brecciated sericitic	7.0 0.0	0	0		k110891	0.014	0.074
118.00	118.63		7.0 0.0	0	0	Similar to above with some Fe-carb. flooding and Fe-carb. veinlets.	k110892	0.04	0.079
118.63	120.00	Fine-grained white fractured sericitic	2.0 0.0	0	0 CCVN 35 50	Approx 50% Fe-carb. flooded. Very weak reaction with acid when powdered.	k110893	0.041	0.489
120.00	121.10		2.0 0.0	0	0 CCVN 35 50		k110894	0.036	0.101

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
121.10	123.00	Fine-grained green heterogeneous sericitic	5.0 0.0	0	0 CCVN 35 15	Irregular veinlets of Fe-carb.	k110895	0.046	0.132
123.00	125.01		5.0 0.0	0	0 CCVN 35 15		k110896	0.043	0.135
125.01	149.3	INTERMEDIATE VOLCANIC TUFF							
125.01	127.00	Coarse-grained green fragmental sericitic chloritic	10.0 0.0	0	0 AVN 20 10	Monolithic tuff. Dark green chloritic lapilli up to 3cm in a lighter green sericitic matrix. py. occurs as m.g. to c.g. disseminations and aggregates up to 1cm across.	k110897	0.037	0.137
127.00	129.00		10.0 0.0	0	0 AVN 20 10		k110898	0.052	0.145
129.00	131.00		10.0 0.0	0	0 SVN 35 2		k110899	0.03	0.206
131.00	133.00		10.0 0.0	0	0 AVN 35 15	White Fe-carb. veinlets.	k110900	0.055	0.166
133.00	135.00		10.0 0.0	0	0 AVN 35 15		k110901	0.059	0.156
135.00	137.00		10.0 0.0	0	0 AVN 35 15		k110902	0.028	0.119
137.00	139.00		10.0 0.0	0	0 AVN 35 15		k110903	0.024	0.106
139.00	141.00		10.0 0.0	0	0 AVN 20 15		k110905	0.047	0.168
141.00	143.00		10.0 0.0	0	0 AVN 55 5		k110906	0.028	0.116
143.00	145.00		10.0 0.0	0	0 AVN 5 7		k110907	0.024	0.072
145.00	147.00		10.0 0.0	0	0 AVN 35 7		k110908	0.049	0.145
147.00	149.30		10.0 0.0	0	0 AVN 35 7		k110909	0.033	0.115
149.3	197	INTERMEDIATE VOLCANIC FLOW							
149.30	151.00	Fine-grained green heterogeneous sericitic chloritic	2.0 0.0	1	9 AVN 30 1	Inter-bedded f.g. flows with thin tuffaceous units or flow top bx. Cut by bright white Fe-carb. veinlets. Trace mt. in veinlets.	k110910	0.047	0.112
151.00	153.00		2.0 0.0	0	0 AVN 30 1	Clusters of chloritic pseudomorphs of either crystal or small fragments.	k110911	0.045	0.107
153.00	155.00		4.0 0.0	0	0 CCVN 30 3	Minor anhydrite veinlets, most are bright white Fe-carb. They react very slowly with HCl when powdered.	k110912	0.043	0.113
155.00	157.00		5.0 0.0	0	1 CCVN 30 10	From here down the Fe-carb. veinlets often contain up to 20% c.g. py.	k110913	0.033	0.105
157.00	159.00		5.0 0.0	0	1 CCVN 30 10	Some py. has a slightly greenish hue.	k110914	0.048	0.109
159.00	161.00		5.0 0.0	0	0 CCVN 30 10		k110915	0.056	0.125
161.00	163.00		5.0 0.0	0	1 CCVN 30 7		k110916	0.034	0.092
163.00	165.00		5.0 0.0	0	0 CCVN 30 5		k110917	0.026	0.069

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
165.00	167.00	Fine-grained green heterogeneous sericitic chloritic	5.0 0.0	0	0 CCVN 30 5		k110918	0.032	0.093
167.00	169.00		5.0 0.0	1	24 AVN 30 5	Several narrow mt./anh veinlets. Greenish py.	k110919	0.044	0.12
169.00	171.00		5.0 0.0	1	10 AVN 30 5		k110920	0.031	0.08
171.00	173.00		5.0 0.0	1	7 AVN 30 4		k110921	0.038	0.096
173.00	175.00		5.0 0.0	0	0 AVN 30 4	Trace c.g. dissm. mt. Greenish py.	k110922	0.04	0.104
175.00	177.00		7.0 0.0	0	1 AVN 20 4		k110923	0.049	0.137
177.00	179.00		7.0 0.0	0	1 AVN 20 4		k110924	0.065	0.131
179.00	181.00		10.0 0.0	1	3 AVN 20 4	Clots of c.g. mt. locally. Very greenish py. anh > Fe-carb.	k110925	0.04	0.12
181.00	183.00		10.0 0.0	1	1 AVN 25 4		k110926	0.046	0.116
183.00	185.01		10.0 0.0	0	0 AVN 25 3	Anhydrite/carb.onate veinlets frequently contain abundant c.g. py.	k110927	0.109	0.269
185.01	187.00		5.0 0.0	0	0 AVN 25 3		k110928	0.069	0.163
187.00	189.00		5.0 0.0	0	0 AVN 25 3		k110929	0.05	0.087
189.00	191.00	Fine-grained green heterogeneous chloritic sericitic	10.0 0.0	0	0 SVN 35 3	Chlorite much greater than sericite while anhydrite is confined to veinlets only. py.rite occurs in veinlets and as c.g. disseminations.	k110931	0.056	0.12
191.00	193.00		7.0 0.0	1	33 SVN 35 3	mt. in several py. / anh. veinlets.	k110932	0.051	0.078
193.00	195.00		7.0 0.0	1	5 SVN 35 3		k110933	0.077	0.162
195.00	197.00	Fine-grained green heterogeneous sericitic chloritic	5.0 0.0	0	0 CCVN 25 3	No contact visible but over sample 110934-110935 it gradually changes to a very f.g. monolithic tuff	k110934	0.075	0.162
197	221.86	INTERMEDIATE VOLCANIC TUFF							
197.00	199.00	Medium-grained green heterogeneous sericitic chloritic	5.0 0.0	0	0 CCVN 25 3	Remarkably even distribution of c.g. py. and anhydrite +/- py. veinlets. Core is pitted looking but not quite vuggy textured.	k110935	0.03	0.088
199.00	201.00	Medium-grained green fragmental sericitic chloritic	5.0 0.0	0	0 CCVN 25 3		k110936	0.028	0.079
201.00	203.00		5.0 0.0	0	0 CCVN 25 3		k110937	0.047	0.106
203.00	205.00	Coarse-grained green fragmental sericitic chloritic	5.0 0.0	0	1 CCVN 25 3		k110938	0.037	0.108
205.00	207.00		5.0 0.0	0	0 CCVN 25 3		k110939	0.026	0.095
207.00	209.00		5.0 0.0	0	1 CCVN 25 3	Several narrow, weak gouge zSingles. Fault?	k110940	0.032	0.104
209.00	211.00		5.0 0.0	0	0 CCVN 25 3	See 110935.	k110941	0.038	0.112

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
211.00	213.00	Coarse-grained green fragmental sericitic chloritic	5.0	0.2	0	0 CCVN 25 3	Two 1cm x 0.5cm clots of massive cpy.	k110942	0.073	0.127
213.00	215.00		5.0	0.0	1	1 CCVN 25 3	Several narrow, weak gouge zSingles. Fault?	k110943	0.065	0.129
215.00	217.00		5.0	0.0	1	5 CCVN 25 3	See 110935.	k110944	0.073	0.143
217.00	219.00		5.0	0.0	1	9 CCVN 20 10	See 110935. Some gypsum in vugs in white anhydrite veinlets.	k110945	0.075	0.126
219.00	221.00		10.0	0.0	0	0 CCVN 20 10		k110946	0.04	0.114
221.00	221.86		10.0	0.0	0	0 CCVN 20 10		k110947	0.049	0.146
221.86	305	INTERMEDIATE VOLCANIC FLOW								
221.86	223.00	Fine-grained green mottled chloritic sericitic	3.0	0.0	0	0 CCVN 20 5		k110948	0.042	0.154
223.00	224.45		6.0	0.0	0	1 CCVN 20 5		k110940	0.029	0.135
224.45	226.80	Medium-grained green amygdular chloritic sericitic	6.0	0.0	0	0 CCVN 20 5	Vesicles filled with cream-white, moderately hard mineral which is sometimes replaced by py. Estimated hardness is 5-6, mineral unknown.	k110950	0.029	0.102
226.80	229.00	Medium-grained green mottled chloritic sericitic	6.0	0.0	0	0 FLT 20 5	5cm of gouge at lower contact. Possible fault.	k117251	0.031	0.108
229.00	231.00	Fine-grained green mottled chloritic sericitic	4.0	0.0	0	0 CCVN 20 5	Predominantly aphanitic flows with very occasional plagioclase phenocryst and/or vesicle. Ubiquitous white anhydrite/carb.onate veinlets.	k117252	0.038	0.057
231.00	233.00		4.0	0.0	1	5 CCVN 20 5		k117253	0.06	0.086
233.00	235.00		4.0	0.0	1	12 CCVN 20 5	C.g. mt. in white carb./anhydrite? Veins. Vesicles present locally in patches.	k117254	0.046	0.075
235.00	237.00		1.0	0.0	0	0 CCVN 30 7		k117255	0.03	0.052
237.00	239.00		4.0	0.0	0	0 CCVN 30 2	carb./qtz./py. veinlets.	k117257	0.062	0.091
239.00	241.00		1.0	0.0	0	0 AVN 45 2	Grey anhydrite veinlets as well as whiter carb. veinlets.	k117258	0.121	0.226
241.00	243.00		1.0	0.0	0	2 AVN 45 10		k117259	0.075	0.14
243.00	245.00		1.0	0.0	1	5 AVN 25 10	mt. at veinlet margins associated with py.	k117260	0.037	0.05
245.00	247.00		5.0	0.0	2	34 CCVN 25 2	py./anhydrite veinlets +/- mt. and Single 3/4cm mt. vein at end of sample.	k117261	0.108	0.224
247.00	249.00		2.0	0.0	2	13 CCVN 25 2	C.G. and massive mt. in veinlets.	k117262	0.094	0.163
249.00	251.00		2.0	0.0	1	0 CCVN 25 5	C.G. disseminated py. in wall rock and c.g. to semi-massive py. in white anhydrite/carb.onate veinlets.	k117263	0.093	0.197

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
251.00	253.00	Fine-grained green mottled chloritic sericitic	3.0 0.0	0	3 CCVN 35 5		k117264	0.104	0.208
253.00	255.00		5.0 0.0	0	3 CCVN 35 5		k117265	0.035	0.068
255.00	257.00		6.0 0.0	0	1 CCVN 20 5	Trace mt. in fractures.	k117266	0.052	0.089
257.00	259.00		5.0 0.0	1	10 CCVN 20 5	Minor mt. in wall rock new end of sample. Vesicles becoming more abundant.	k117267	0.035	0.065
259.00	261.01		8.0 0.0	0	0 CCVN 20 5	py. in veinlets , fractures and c.g. disseminations.	k117268	0.039	0.067
261.01	263.00	Fine-grained green amygdular chloritic sericitic	8.0 0.0	0	0 CCVN 20 5		k117269	0.029	0.071
263.00	265.00		2.0 0.0	0	0 CCVN 20 5	Very coarsely vesicular andesite. From 2-10% vesicles up to 1.5cm across with an average of 3-4mm. Filled with non-reactive carb.onate. Some have py. cores and carb. rims. Ubiquitous carb. veinlets +/- py.	k117270	0.04	0.078
265.00	267.00		2.0 0.0	0	1 CCVN 20 5		k117271	0.045	0.11
267.00	269.00		2.0 0.0	0	0 CCVN 20 5		k117272	0.045	0.094
269.00	271.00		5.0 0.0	0	0 CCVN 20 30	strong Fe-carb. flooding.	k117273	0.041	0.094
271.00	273.00		2.0 0.0	0	0 CCVN 20 5	Very vesicular.	k117274	0.043	0.104
273.00	275.00		2.0 0.0	0	0 CCVN 20 5		k117275	0.049	0.103
275.00	277.00		3.0 0.0	0	0 CCVN 20 5		k117276	0.046	0.084
277.00	279.00	Fine-grained green amygdular chloritic	2.0 0.0	0	0 CCVN 30 4	Sericite is very weak. Abundant carb. filled vesicles, sparse py.	k117277	0.066	0.105
279.00	281.00		2.0 0.0	0	0 CCVN 30 4		k117278	0.106	0.144
281.00	283.00		2.0 0.0	0	0 CCVN 30 10		k117279	0.073	0.135
283.00	285.00		2.0 0.0	0	0 CCVN 30 3		k117280	0.059	0.083
285.00	287.00		2.0 0.0	0	0 CCVN 30 20	contact with next unit masked by carb. flooding	k117281	0.06	0.076
287.00	289.00	Fine-grained green homogeneous chloritic	2.0 0.0	0	1 CCVN 30 20	Massive, homogenous looking IVO. Occasional chlorite pseudomorphs after augite. py.rite in carb. veins and has irregular blebs in host rock.	k117283	0.06	0.09
289.00	291.00		2.0 0.0	0	0 CCVN 30 2		k117284	0.081	0.117
291.00	293.00		2.0 0.0	0	19 CCVN 30 2		k117285	0.047	0.074
293.00	295.00		2.0 0.0	0	0 CCVN 30 2		k117286	0.069	0.121
295.00	297.00		2.0 0.0	0	56 CCVN 30 2	No visible magnetite despite high susceptibility reading.	k117287	0.11	0.209

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
297.00	299.00	Fine-grained green homogeneous chloritic	2.0 0.0	0	0 CCVN 30 2		k117288	0.03	0.04
299.00	301.00		2.0 0.0	0	0 CCVN 30 2		k117289	0.039	0.063
301.00	303.00		2.0 0.0	2	117 CCVN 30 2	c.g. dissm. magnetite in local areas.	k117290	0.07	0.122
303.00	305.00		2.0 0.0	0	0 CCVN 15 5		k117291	0.056	0.089
305	305.41	FAULT ZONE INTERMEDIATE VOLCANIC							
305.00	305.41	Coarse-grained green brecciated chloritic	2.0 0.0	0	1 CCVN 15 5	Gouge cemented fault bx.	k117292	0.101	0.148
305.41	329.32	INTERMEDIATE VOLCANIC FLOW							
305.41	307.00	Fine-grained green homogeneous chloritic	2.0 0.0	0	0 CCVN 15 5	Occ. chl psudomorphs of augite, 1-2 mm in size.	k117293	0.167	0.282
307.00	309.00		2.0 0.0	0	1 CCVN 15 5		k117294	0.054	0.099
309.00	311.00		2.0 0.0	0	1 CCVN 55 5		k117295	0.077	0.104
311.00	313.00		2.0 0.0	0	0 CCVN 45 5		k117296	0.066	0.079
313.00	315.00		2.0 0.0	0	0 CCVN 40 5		k117297	0.105	0.162
315.00	317.00		2.0 0.0	1	18 CCVN 35 5	c.g. mt. in carb. veinlets which are a mixture of cal + Fe-carb..	k117298	0.08	0.136
317.00	319.00		2.0 0.0	0	0 CCVN 25 10	c.g. py. in vuggy cal / Fe-carb. veinlets.	k117299	0.111	0.21
319.00	321.00		3.0 0.0	0	0 CCVN 25 10		k117300	0.083	0.145
321.00	323.00		0.5 0.0	0	0 CCVN 25 15		k117301	0.07	0.102
323.00	325.00		1.0 0.1	0	22 AVN 60 5	Single 1cm x 0.5cm bleb of cpy. in blue grey anhydrite vein. No visible mt. despite high susceptibility reading.	k117302	0.134	0.294
325.00	327.00		1.0 0.0	1	7 AVN 45 3	Fracture controlled blue grey anhydrite.	k117303	0.081	0.116
327.00	328.00	Fine-grained grey-green homogeneous chloritic	5.0 0.0	1	7 AVN 45 3	v.f.g. dissm. mt.	k117304	0.092	0.134
328.00	329.32	Medium-grained grey-green porphyritic chloritic	4.0 0.0	0	0 AVN 45 3	Fine plagioclase phenocrysts in a dark green chloritic matrix.	k117305	0.176	0.3
329.32	331.75	SILICIFIED INTERMEDIATE VOLCANIC							
329.32	331.07	Fine-grained light grey homogeneous silicic sericitic	3.0 0.0	0	0 AVN 55 5	qtz./Anhydrite flooded zSingle with f.g. dissm. py.	k117306	0.112	0.13
331.07	331.75	Coarse-grained light grey brecciated silicic sericitic	3.0 0.0	0	0 AVN 0 30	qtz./Anhydrite flooding and vuggy veinlets running down the core axis. Cemented breccia.	k117307	0.115	0.276
331.75	405.47	INTERMEDIATE VOLCANIC FLOW							

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
331.75	333.09	Coarse-grained light grey brecciated chloritic sericitic	3.0 0.0	0	0 CCVN 60 30	Stock-work of white carb. veinlets and local carb. flooding.	k117309	0.05	0.145
333.09	335.00	Fine-grained green stockworked chloritic	3.0 0.0	0	0 CCVN 35 7	Stock-work of very thin vuggy chl./ Fe-carb. veinlets.	k117310	0.062	0.083
335.00	336.00		3.0 0.0	0	0 CCVN 35 7		k117311	0.061	0.097
336.00	337.00	Fine-grained green stockworked sericitic chloritic	3.0 0.0	0	1 CCVN 35 7		k117312	0.088	0.142
337.00	339.00	Medium-grained green heterogeneous sericitic chloritic	3.0 0.0	0	0 CCVN 30 4	m.g. andesite. Can see outline of chloritized mafic minerals and v.f.g. plagioclase laths in matrix. Contains m.g. diss. py.	k117313	0.122	0.127
339.00	341.00		3.0 0.0	0	3 CCVN 30 4		k117314	0.261	0.257
341.00	343.00		3.0 0.0	0	0 CCVN 30 4		k117315	0.12	0.173
343.00	345.00		3.0 0.0	1	18 CCVN 30 4	v.f.g. disseminated magnetite in locals areas.	k117316	0.074	0.154
345.00	347.00		3.0 0.0	0	0 CCVN 0 4		k117317	0.061	0.113
347.00	349.00		3.0 0.0	0	0 CCVN 20 4		k117318	0.089	0.15
349.00	351.00		7.0 0.0	0	1 ACCV 35 2	Grey-Bluish anhydrite veinlets as well as carb.onate veinlets.	k117319	0.079	0.12
351.00	353.00		10.0 0.0	0	0 ACCV 35 2	v.c.g. aggregates of py. throughout wall rock.	k117320	0.073	0.128
353.00	355.00	Medium-grained green heterogeneous chloritic	10.0 0.0	0	0 CCVN 25 3	as for 17321.	k117321	0.046	0.086
355.00	357.00		3.0 0.1	0	0 CCVN 25 4	Single spec of cpy. in py. rich carb. veinlet.	k117322	0.087	0.152
357.00	359.00		3.0 0.0	2	2 CCVN 25 5		k117323	0.091	0.143
359.00	361.00		3.0 0.0	0	0 CCVN 0 15	very vuggy carb. veins parallel to core axis	k117324	0.146	0.217
361.00	363.00		3.0 0.0	4	4 CCVN 30 10		k117325	0.065	0.11
363.00	365.00	Fine-grained green homogeneous chloritic	2.0 0.1	1	10 AVN 30 2	Single speck of cpy. in vuggy bluish anhydrite veinlets c.g. mt. in anhydrite veinlets and fractures.	k117326	0.065	0.114
365.00	367.00		2.0 0.0	1	14 AVN 30 2	c.g. mt. in anhydrite veinlets.	k117327	0.045	0.076
367.00	369.00		2.0 0.0	2	32 AVN 30 2		k117328	0.06	0.106
369.00	371.00		2.0 0.0	2	18 AVN 30 2		k117329	0.079	0.135
371.00	373.00		2.0 0.0	2	7 AVN 30 2		k117330	0.092	0.271
373.00	375.00		3.0 0.0	1	25 AVN 20 4		k117331	0.138	0.189
375.00	376.66		1.0 0.0	1	1 AVN 20 20	Abundant molybdenite in 30 cm zSingle of open, vuggy carb. veinlets @ about 20 to core axis.	k117332	0.126	0.237

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
376.66	379.00	Fine-grained green homogeneous chloritic	1.0 0.0	1	2 AVN 20 5		k117333	0.112	0.199
379.00	381.00		1.0 0.0	1	9 AVN 30 15		k117335	0.052	0.087
381.00	383.00		1.0 0.0	1	28 AVN 5 1		k117336	0.049	0.092
383.00	386.18		1.0 0.0	1	4 AVN	Sampled block to block due to broken and lost core in 2 places.	k117337	0.079	0.094
386.18	388.30		1.0 0.0	3	2 AVN 40 3	Abundant c.g. mt. in anhydrite veins.	k117338	0.088	0.13
388.30	390.30	Coarse-grained grey orange heterogeneous zeolite clay	2.0 0.0	1	ZVN 40 30	Strong zeolite / clay / sericite alteration.	k117339	0.138	0.334
390.30	392.28	Coarse-grained grey orange heterogeneous zeolite sericitic	1.0 0.0	0	ZVN 40 30	Similar to above but weaker in intensity.	k117340	0.132	0.22
392.28	394.28	Fine-grained dark green mottled chloritic sericitic	4.0 0.0	9	CCVN 40 2	Evenly diss. m.g. py. plus two qtz./mt. veinlets near end of sample.	k117341	0.154	0.257
394.28	396.24		4.0 0.0	0	CCVN 40 1	Very weak sericite alt. Sampled to block due to badly broken core.	k117342	0.141	0.237
396.24	398.00	Medium-grained grey orange heterogeneous sericitic zeolite	0.5 0.0	0	4 ZVN 45 15	Pale green with orange patches due to wholesale zeolite flooding and veinlets. Also appears to have anhydrite in matrix	k117343	0.132	0.275
398.00	400.00		0.5 0.0	1	5 ZVN 45 15	Massive mt. veinlets and diss., m.g. mt.	k117344	0.093	0.225
400.00	402.00		0.5 0.0	3	74 MTV 30 2	m.g. diss. mt.	k117345	0.216	0.506
402.00	404.00		0.5 0.0	1	16 ZVN 45 15	#REF!	k117346	0.193	0.417
404.00	405.47		0.5 0.0	1	8 ZVN 45 15		k117347	0.153	0.339
405.47	406.16	FAULT ZONE BASALT							
405.47	406.16	Medium-grained grey-green porphyritic chloritic	2.0 0.0	0	0 FLT	Possible fault. Rock is badly broken and chloritic but not gouged. Appears more basaltic than andesitic.	k117348	0.092	0.155
406.16	441.9	BASALT FLOW							
406.16	408.00	Medium-grained grey-green porphyritic chloritic	2.0 0.0	1	9 ZCV 25 3	Approximately 1% chlorite pseudomorphs after augite. Locally up to 5% in small clusters.	k117349	0.118	0.213
408.00	410.00		2.0 0.0	1	0 ZCV 25 3	Unit is comprised of subhedral plagioclase of 0.5-1.0 mm a ground mass of chloritized matrix minerals.	k117350	0.129	0.208
410.00	412.00		2.0 0.1	1	0 ZCV 0 25	1 spec of cpy. in qtz./zeo. veinlet parallel to axis.	k117351	0.09	0.177
412.00	414.00		2.0 0.1	1	0 ZCV 35 20	2 spec of cpy. in qtz./zeo. veinlet parallel to axis.	k117352	0.089	0.142
414.00	416.00		2.0 0.4	5	149 ZCV 35 5	Massive mt. as replacement of wall rock and as fracture controlled veinlets.	k117353	0.229	0.375

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
416.00	418.00	Medium-grained grey-green porphyritic chloritic	2.0 0.1	1	1 ZCV 35 5	v.f.g. cpy. at margin of py. crystals.	k117354	0.106	0.162
418.00	420.00		2.0 0.1	1	0 ZCV 35 5		k117355	0.093	0.135
420.00	422.00		2.0 0.1	3	56 ZCV 35 5	qtz./mt./anh veinlets near end of sample.	k117356	0.102	0.125
422.00	424.00		2.0 0.4	1	29 ZCV 45 5	Single 30 cm section out of several 10's of meters of similar looking material contains 0.5-1.5 carb. filled vesicles similar to 0117270.	k117357	0.049	0.063
424.00	426.00		1.0 0.0	1	2 ZCV 30 7		k117358	0.055	0.074
426.00	428.00		1.0 0.0	1	1 ZCV 30 7		k117359	0.075	0.114
428.00	430.00		1.0 0.0	1	16 ZCV 30 7		k117361	0.129	0.141
430.00	432.00		1.0 0.0	1	4 ZCV 30 7		k117362	0.156	0.185
432.00	434.00		3.0 0.0	1	25 ZCV 30 7		k117363	0.068	0.074
434.00	436.00		1.0 0.0	1	2 ZCV 30 7		k117364	0.112	0.148
436.00	438.00	Medium-grained grey-green porphyritic	1.0 0.0	0	3 ZCV 30 7		k117365	0.111	0.196
438.00	440.00		1.0 0.0	0	0 ZCV 25 7		k117366	0.13	0.196
440.00	441.90		1.0 0.0	0	1 ZCV 35 7	Tr. cpy. rimming py. crystals.	k117367	0.695	1.4
441.9	585.54	INTERMEDIATE VOLCANIC FLOW							
441.90	444.00	Fine-grained grey-green homogeneous	1.0 0.1	1	14 AVN 40 2	Tr. f.g. disseminated magnetite and thin fracture fill magnetite veinlets.	k117368	0.099	0.152
444.00	446.00		1.0 0.0	1	13 AVN 40 2		k117369	0.085	0.156
446.00	448.00		2.0 0.0	2	5 AVN 35 2	Anhydrite veinlets with massive mt. cores, occ. py. veinlet.	k117370	0.084	0.15
448.00	450.00		2.0 0.0	2	6 AVN 5 2		k117371	0.102	0.195
450.00	452.00		1.0 0.0	3	34 AVN 5 2	py. is sparse.	k117372	0.093	0.139
452.00	454.00		1.0 0.0	3	29 AVN 15 2		k117373	0.061	0.104
454.00	456.00		1.0 0.0	2	70 AVN 15 2		k117374	0.075	0.091
456.00	458.00		1.0 0.0	1	4 AVN 40 1		k117375	0.076	0.09
458.00	460.00	Fine-grained grey-green	1.0 0.0	1	0 ZCV 35 10		k117376	0.074	0.087
460.00	462.00	Coarse-grained grey in-situ brecciated	1.0 0.0	1	3 ZCV 25 15	Strong fracturing and in situ brecciation, infill with white/pink zeolite	k117377	0.121	0.16
462.00	464.00		1.0 0.0	1	7 ZCV 60 15		k117378	0.135	0.154

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
464.00	466.00	Coarse-grained grey in-situ brecciated	1.0 0.0	1	1 ZCV 60 15		k117379	0.118	0.174
466.00	468.00		1.0 0.0	1	7 ZCV 60 15		k117380	0.103	0.156
468.00	470.00	Coarse-grained green homogeneous	1.0 0.0	1	1 ZCV 30 5	Aphanitic flows with mt. bearing zeo./carb. veinlets.	k117381	0.069	0.063
470.00	472.00	Fine-grained green homogeneous	2.0 0.0	1	24 ZCV 25 5		k117382	0.097	0.135
472.00	474.00		1.0 0.0	1	5 CCVN 20 3		k117383	0.062	0.074
474.00	476.00		1.0 0.0	1	5 CCVN 20 3		k117384	0.067	0.074
476.00	478.00		1.0 0.0	2	216 CCVN 40 3		k117385	0.125	0.202
478.00	480.00	Fine-grained grey-green homogeneous chloritic	0.5 0.0	20	12 CCVN 25 4	Massive or c.g. mt. in white carb.onate +/- zeolite veinlets.	k117387	0.123	0.143
480.00	482.00		0.5 0.0	20	19 CCVN 25 4		k117388	0.053	0.061
482.00	484.00		0.5 0.0	20	26 CCVN 25 4		k117389	0.086	0.177
484.00	486.00	Fine-grained grey-green homogeneous chloritic sericitic	1.0 0.0	20	10 CCVN 25 4	Patchy weak sericite alt.	k117390	0.055	0.072
486.00	488.00		1.0 0.0	20	28 CCVN 25 4	Single quartz/anhydrite veinlet.	k117391	0.03	0.043
488.00	490.00		0.5 0.0	1	4 CCVN 25 4		k117392	0.042	0.054
490.00	492.00	Fine-grained grey-green homogeneous chloritic	0.5 0.0	1	23 CCVN 15 4	Single quartz/anhydrite veinlet.	k117393	0.042	0.05
492.00	494.00		0.5 0.1	1	25 CCVN 15 4	Single speck of cpy. in zeo. / carb. veinlets	k117394	0.083	0.094
494.00	496.00		0.5 0.0	1	4 CCVN 15 2	Sparse py. in wall rock and a few py. veinlets.	k117395	0.068	0.088
496.00	498.00		0.5 0.0	1	4 CCVN 15 2		k117396	0.101	0.127
498.00	500.00		0.5 0.0	1	11 CCVN 15 2		k117397	0.059	0.08
500.00	502.00	Fine-grained grey orange heterogeneous chloritic sericitic	3.0 0.5	2	41 QAZV 50 1	Weakly sericitic in patches with zSingles of qtz./anh./zeo.	k117398	0.173	0.288
502.00	504.00		3.0 0.1	0	0 QAZV 50 25	Single speck of cpy. in 10cm wide qtz./anh vein.	k117399	0.197	0.369
504.00	506.00		3.0 0.1	0	0 QAZV 50 25		k117400	0.155	0.276
506.00	508.00		0.5 0.1	0	0 QAZV 50 20		k117401	0.188	0.314
508.00	510.00		2.0 0.0	0	0 QAZV 25 5	Weakly sericitic in patches with several epidote veinlets.	k117403	0.099	0.13
510.00	512.00	Fine-grained green-grey homogeneous chloritic sericitic	1.0 0.0	1	0 QVN 25 3	Single massive py. vein 3/4 cm wide. Several thin qtz./mt./py. veinlets.	k117404	0.05	0.069
512.00	514.00		2.0 0.0	1	2 QVN 25 3		k117405	0.085	0.117

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
514.00	516.00	Fine-grained green-grey homogeneous chloritic sericitic	1.0 0.0	3	35 ZCV 10 10	Massive mt. veinlets 0.5-1.0 cm with trace py. and < 10% qtz. Very weak sericite alt. zeo./carb. veinlets >> qtz./mt. veinlets.	119401	0.123	0.149
516.00	518.00		1.0 0.0	3	48 ZCV 10 10		119402	0.098	0.136
518.00	520.00		1.0 0.0	3	204 ZCV 10 10		119403	0.136	0.205
520.00	522.00		2.0 0.0	3	150 QVN 5 10	Laminated qtz./mt./py. veinlets, locally vuggy sub-parallel t.c.a.	119404	0.206	0.293
522.00	524.00		2.0 0.0	1	0 MTV 5 10		119405	0.271	0.472
524.00	526.00		1.0 0.0	1	0 MTV 5 10		119406	0.135	0.16
526.00	528.00		0.5 0.1	1	4 MTV 35 2	Trace v.f.g. cpy. attached to py. in laminated qtz./mt./py. vein at end of sample.	119407	0.122	0.161
528.00	530.00		0.5 0.0	3	26 MTV 35 10	Irregular fracture and straight slip controlled qtz./mt. +/- py. veins.	119408	0.127	0.19
530.00	532.00		0.5 0.0	1	75 MTV 35 10	#REF!	119409	0.191	0.312
532.00	534.00		2.0 0.0	1	1 MTV 0 15	py. rich qtz./mt./py. veins parallel to core axis.	119410	0.1	0.134
534.00	536.00	Fine-grained green-grey in-situ brecciated chloritic sericitic	1.0 0.0	1	2 MTV 40 5	c.g. dissm. anhedral py. as well as sparse py. in veinlets.	119411	0.124	0.17
536.00	538.00	Fine-grained green-grey homogeneous chloritic sericitic	1.0 0.0	1	1 MTV 25 3	#REF!	119412	0.14	0.196
538.00	540.00		0.5 0.0	1	5 ZCV 35 3	Mostly just pink and white zeolite veins occ. sparsely mineralized qtz. veinlet.	119413	0.113	0.117
540.00	542.00		0.5 0.0	1	25 ZCV 35 3	#REF!	119414	0.073	0.086
542.00	544.00		2.0 0.0	1	2 ZCV 35 3	As for 119411.	119415	0.079	0.102
544.00	546.00		3.0 0.0	1	36 QVN 30 5	dissm. py. as well as massive py. in fracture controlled veinlets. Strong pink/white zeolite veinlets as well.	119416	0.083	0.087
546.00	546.68		3.0 0.0	1	3 QVN 30 5	#REF!	119417	0.149	0.178
546.68	548.00	Coarse-grained green porphyritic chloritic sericitic	0.3 0.0	1	37 ZCV 10 7		119418	0.071	0.08
548.00	550.00		0.3 0.0	1	18 ZCV 10 7	c.g. to m.g. flows with up to 15% locally of chlorite pseudomorphs after augite. Sparse qtz. veining and moderate zeolite veining. Sparse py. mineralization.	119419	0.165	0.269
550.00	552.00		0.3 0.0	1	11 ZCV 10 7		119420	0.151	0.191
552.00	554.00		0.3 0.0	1	7 ZCV 10 7		119421	0.185	0.284
554.00	556.00		0.3 0.0	1	6 ZCV 10 7		119422	0.1	0.137

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
556.00	558.00	Coarse-grained green porphyritic chloritic sericitic	3.0 0.1	1	8 QVN 5 3	v.c.g. py. in qtz./mt./py. veinlets sub-parallel to core axis, up to 10% zeo./carb. veinlets locally.	119424	0.173	0.171
558.00	560.00		5.0 0.0	1	10 QVN 5 3		119425	0.219	0.342
560.00	562.00	Medium-grained green in-situ brecciated chloritic sericitic	0.5 0.0	1	18 ZCV 35 7	Very weak sericite alt., patchy chl. pseudomorphs. Rock looks fractured and cemented by zeo./carb.	119426	0.058	0.069
562.00	564.00		0.5 0.0	2	2 ZCV 35 7	As above with Single mt. veinlet sub-parallel t.c.a.	119427	0.097	0.103
564.00	566.00		0.5 0.0	1	9 ZCV 35 7	Single tiny qtz. veinlet but abundant zeolite veinlets and fractured fill.	119428	0.091	0.111
566.00	568.00	Fine-grained green homogeneous chloritic	0.5 0.0	1	2 ZCV 35 7	Fine grained to nearly aphanitic with occasional anhedral plagioclase phenocrysts (<<0.5%). qtz./mt. veinlets are present but sparse. zeo./carb. veinlets are mod., alt intensity is weak. Sparse massive py. veinlets.	119429	0.177	0.257
568.00	570.00		0.5 0.0	1	21 ZCV 35 7		119430	0.105	0.138
570.00	572.00		0.5 0.0	1	5 ZCV 35 7		119431	0.051	0.067
572.00	574.00		0.5 0.0	1	29 ZCV 35 7		119432	0.115	0.164
574.00	576.00		2.0 0.2	1	5 ZCV 35 7	Several massive py. veinlets with trace cpy.	119433	0.166	0.199
576.00	578.00		0.5 0.0	1	13 QVN 0 3	As for 119429.	119434	0.221	0.26
578.00	580.00		0.5 0.0	1	24 ZCV 35 7		119435	0.102	0.115
580.00	582.00		0.5 0.0	1	12 ZCV 35 7		119436	0.144	0.159
582.00	584.00		0.5 0.0	1	26 ZCV 35 7	Similar to above and contains 15cm wide diorite dykelet at end of sample.	119437	0.104	0.158
584.00	585.54		0.5 0.0	1	20 ZCV 35 7	Very thin mt. fracture filled veinlets. Contact 45 degrees t.c.a.	119438	0.084	0.131
585.54	586.67	DIORITE							
585.54	586.67	Coarse-grained homogeneous sericitic epidote	0.0 0.1	0	0 ZCV 35 3	Comprised of approx. 20% 2-3mm altered looking mafic minerals in a cream colored anhedral plagioclase matrix. Trace cpy. at contact which is 70 degrees t.c.a.	119439	0.093	0.156
586.67	606.33	INTERMEDIATE VOLCANIC FLOW							
586.67	588.00	Medium-grained dark green homogeneous chloritic	2.0 0.1	1	13 QAVN 30 3	m.g. with local areas of chl. pseudomorphs. Minor py. and tr. cpy. in qtz. anhydrite veinlets. Occasional massive py. veinlet.	119440	0.172	0.215
588.00	590.00		2.0 0.1	1	16 QAVN 30 3	Magnetite is present mostly as v.f.g. disseminations.	119441	0.111	0.146
590.00	592.00		2.0 0.1	1	4 QAVN 30 3		119442	0.119	0.145

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
592.00	594.00	Medium-grained dark green homogeneous chloritic	3.0 0.1	1	46 QAVN 30 3		119443	0.157	0.18
594.00	596.00		2.0 0.1	1	50 QAVN 30 3		119444	0.118	0.116
596.00	598.00		2.0 0.1	1	35 QAVN 30 5		119445	0.108	0.156
598.00	600.00		2.0 0.1	1	43 QAVN 30 5		119446	0.101	0.126
600.00	602.00		2.0 0.1	1	42 QAVN 40 10	As above with qtz./anh. veinlets becoming more prevalent.	119447	0.102	0.186
602.00	604.00		2.0 0.1	1	11 QAVN 40 15		119448	0.135	0.193
604.00	605.50		2.0 0.1	1	34 QAVN 45 15	As above with c.g. massive cpy. in qtz. veinlets and in wall rock.	119450	0.16	0.27
605.50	606.33		3.0 0.5	1	108 QAVN 40 25		119451	0.34	0.6
606.33	611.54	MONZONITE							
606.33	608.00	Coarse-grained tan green porphyritic chloritic sericitic	0.0 0.0	0	0 QVN 40 15	Well veined crowded feldspar porphyritic monzonite, mod. chl., wk. ser. alt. sub-parallel, sheeted grey qtz. veinlets which are entirely barren of sulphides and magnetite.	119452	0.113	0.179
608.00	610.00		0.0 0.0	0	0 QVN 40 20		119453	0.217	0.307
610.00	611.54		0.0 0.0	0	0 QVN 40 20		119454	0.208	0.255
611.54	625	INTERMEDIATE VOLCANIC FLOW							
611.54	613.00	Fine-grained dark green homogeneous chloritic	4.0 0.0	0	15 QVN 25 3	f.g. to totally aphanitic flows with abundant m.g. subhedral py. Sparse thin qtz. +/- yellow stained carb. veinlets.	119455	0.182	0.238
613.00	615.00		4.0 0.0	0	0 QVN 25 3		119456	0.129	0.178
615.00	617.00		4.0 0.0	0	2 QVN 25 3		119457	0.105	0.116
617.00	619.00		4.0 0.0	0	4 QVN 25 3		119458	0.158	0.21
619.00	621.00		4.0 0.1	0	1 QZV 35 5	Abundant dissm. molybdenite in qtz./pink zeolite vein at zero degrees to core axis. Trace cpy.	119459	0.157	0.204
621.00	623.00		4.0 0.1	1	14 QZV 35 5	m.g. specks of cpy. in qtz./zeo. veinlets	119460	0.12	0.13
623.00	625.00		4.0 0.0	1	14 QZV 35 5		119461	0.109	0.119
625	636.24	DIORITE							
625.00	626.15	Coarse-grained homogeneous sericitic	4.0 0.1	0	2 QZV 35 5		119462	0.105	0.109

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
626.15	628.00	Coarse-grained homogeneous sericitic	0.1	0.0	0	0 QVN 35 10	Diorite exactly like 119439, upper contact at 65 degrees t.c.a. No free qtz. noted. No plagioclase phenocrysts - see below.	119463	0.238	0.423
628.00	630.00		0.1	0.0	0	0 QVN 35 10		119464	0.272	0.401
630.00	632.00		0.1	0.0	0	0 QVN 35 15		119465	0.27	0.398
632.00	634.00		0.5	0.0	0	0 QVN 25 10		119466	0.21	0.32
634.00	636.24		2.0	0.1	0	0 QVN 25 20		119467	0.25	0.322
636.24	636.97	MONZONITE								
636.24	636.97	Coarse-grained porphyritic sericitic	0.1	0.0	0	11 QVN 25 8	Abrupt change from mafic mineral porphyritic to feldspar porphyritic rock. Contact is ~ 85 degrees t.c.a. Appears to be two separate intrusions.	119468	0.138	0.179
636.97	638.8	INTERMEDIATE VOLCANIC FLOW								
636.97	638.80	Medium-grained green black homogeneous	2.0	0.0	0	2 QVN 15 15	Few anhedral plagioclase phenocrysts. Several narrow dykelets at < 15 degrees t.c.a.	119469	0.211	0.292
638.8	643.5	MONZONITE								
638.80	640.69	Coarse-grained light grey brecciated silicic	1.0	0.3	0	0	Very strong silicification (70% qtz.) of feldspar crowded porphyry. Cpy. in fractures and hairline stringers	119470	0.246	0.303
640.69	641.72		1.0	0.6	0	1	Contact 55 degrees t.c.a.	119471	0.225	0.247
641.72	643.50	Coarse-grained grey orange porphyritic silicic	0.1	0.0	0	2 ZVN 55 1	Very weak silicification only. Typical porphyritic monz.	119472	0.127	0.201
643.5	646.16	INTERMEDIATE VOLCANIC FLOW								
643.50	645.50	Medium-grained green black homogeneous chloritic	4.0	0.1	0	0 QVN 25 10	Deep blue chalcedonic qtz. veins.	119473	0.155	0.226
645.50	646.16		4.0	0.0	1	8 QVN 25 10	As for 119473, plagioclase 1mm size, patchy dissm. mt.	119474	0.27	0.518
646.16	652.8	MONZONITE								
646.16	648.00	Coarse-grained grey orange porphyritic chloritic	0.1	0.0	0	0 QVN 30 2	No mineralization and sparse qtz. veining. Pink zeolite veins more prevalent. 3-4%	119476	0.184	0.302
648.00	650.00		0.1	0.0	0	2 QVN 30 2		119477	0.078	0.131
650.00	652.00		0.1	0.0	1	6 QVN 30 2	Similar to above with trace mt. at vein boundaries.	119478	0.077	0.114
652.00	652.80		0.1	0.0	1	20 QVN 30 2		119479	0.152	0.319
652.8	654.25	INTERMEDIATE VOLCANIC FLOW								

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
652.80	654.25	Fine-grained dark green homogeneous chloritic	0.5	0.0	1 20 QVN 20 1	May be large xenolith. Magnetite filling hairline fractures.	119480	0.065	0.17
654.25	657.26	MONZONITE							
654.25	656.00	Coarse-grained grey orange porphyritic chloritic	0.2	0.1	0 3 ZVN 35 2	Single speck of cpy. 1cm by 1mm at border of qtz. zeolite veinlet.	119481	0.063	0.099
656.00	657.26		0.2	0.0	0 1 ZVN 35 2		119482	0.034	0.053
657.26	667.8	INTERMEDIATE VOLCANIC FLOW							
657.26	659.00	Fine-grained dark green homogeneous chloritic	2.0	0.0	1 18 QVN 25 1	f.g. to aphanitic flows with m.g. to c.g. subhedral py. Very thin py./qtz. veinlets. Fracture fill mt.	119483	0.196	0.288
659.00	661.00		2.0	0.0	1 11 QVN 25 1		119484	0.124	0.161
661.00	663.00		2.0	0.0	1 18 QVN 25 1		119485	0.13	0.177
663.00	665.00		2.0	0.3	1 6 QVN 25 1	c.g. cpy. in thin qtz./py. veinlet.	119486	0.118	0.17
665.00	667.00		2.0	0.0	1 2 QVN 25 1		119487	0.161	0.17
667.00	667.80		4.0	0.0	0 1 QVN 25 1		119488	0.184	0.176
667.8	674.23	MONZONITE							
667.80	669.00	Coarse-grained tan brown porphyritic sericitic	1.0	0.3	0 4 QCV 60 10	Crowded feldspar porphyritic monzonite. Light colour due to sericitization of feldspars.	119489	0.154	0.163
669.00	671.00		0.5	0.0	0 6 QCV 55 20		119490	0.102	0.131
671.00	673.00		0.0	0.0	0 1 QCV 45 2	Barren porphyry.	119491	0.078	0.107
673.00	674.23		0.0	0.0	0 0 QCV 45 2		119492	0.179	0.217
674.23	680.62	INTERMEDIATE VOLCANIC TUFF							
674.23	676.00	Medium-grained green sericitic chloritic	1.0	0.1	0 2 QCV 10 5	Trace amounts of tarnished cpy. in qtz./carb. veinlets and as hairline fracture fill.	119493	0.248	0.283
676.00	678.00		3.0	0.1	0 3 QCV 0 15		119494	0.197	0.231
678.00	678.79		5.0	0.1	0 1 QCV 0 15	NQ ends. py. rich qtz. carb. veinlets parallel to core axis.	119495	0.092	0.098
678.79	680.62		2.0	0.1	2 14 QCV 0 10	BQ starts. f.g. dissm. mt., looks primary.	119496	0.127	0.126
680.62	714	INTERMEDIATE VOLCANIC FLOW							
680.62	682.00	Medium-grained green homogeneous sericitic chloritic	2.0	0.0	2 12 QCV 55 1	Fine to med. grained flows. Very small plagioclase in an aphanitic matrix. Ser/chl alt ~ 50/50 in relative intensity. f.g. dissm. mt.	119497	0.164	0.202
682.00	684.00		2.0	0.0	2 20 QAVN 55 2	qtz./anh and qtz./carb. veinlets. f.g. dissm. mt.	119498	0.118	0.237

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
684.00	686.00	Medium-grained green homogeneous sericitic chloritic	2.0 0.0	2	41 QVN 45 3	Contains 20cm of flow top bx. Veinlets are predominantly qtz. only with tr. py. and f.g. dissm. mt.	119499	0.055	0.083
686.00	688.00		2.0 0.0	2	32 QCV 45 1	Barren qtz./carb. veinlets. m.g. anhedral dissm. py. f.g. mt.	119500	0.101	0.117
688.00	690.00		2.0 0.0	2	21 QCV 45 0		119186	0.209	0.302
690.00	692.00		2.0 0.0	2	26 ZCV 55 0	Pink zeo./carb. veinlets with only rare qtz. veinlets. Ubiquitous dissm. anhedral py. f.g. dissm. mt. plus few very thin mt. veinlets	119187	0.143	0.191
692.00	694.00	Medium-grained green homogeneous chloritic	2.0 0.0	2	0 ZCV 55 15		119188	0.127	0.149
694.00	696.00		2.0 0.0	3	52 ZCV 55 0		119189	0.062	0.074
696.00	698.00		1.0 0.0	2	23 ZCV 0 7		119190	0.083	0.216
698.00	700.00		1.0 0.0	2	21 ZCV 50 10		119191	0.067	0.114
700.00	702.00		1.0 0.0	2	16 ZCV 50 3		119192	0.077	0.091
702.00	704.00		1.0 0.0	2	48 ZCV 50 3		119193	0.063	0.038
704.00	706.00		1.0 0.0	2	26 ZCV 50 5		119194	0.121	0.15
706.00	708.00		1.0 0.0	3	77 QVN 25 10	Several qtz. / mt. veinlets in addition to the ubiquitous thin pink zeolite veinlets. f.g. dissm. mt. as well	119195	0.087	0.127
708.00	710.00		1.0 0.0	1	16 QCV 25 5	Tr. Molybdenite in 12 cm wide qtz./carb. vein	119196	0.11	0.122
710.00	712.00		1.0 0.0	2	46 QCV 60 7	Tr. Molybdenite in 3cm wide qtz./carb. vein	119197	0.078	0.102
712.00	714.00		1.0 0.2	2	37 ZVN 55 10	Single thin veinlet in edge of core and @ 0 degrees to core axis contains f.g. cpy.	119198	0.092	0.093
714	732.3	INTERMEDIATE VOLCANIC TUFF							
714.00	715.70	Coarse-grained light green homogeneous sericitic	0.1 0.0	0	2 QCV 55 5	Moderately sericitized, mottled looking rock. contains approximately 20% chlorite patches about 3-15 mm in size. Due to masking by alteration it is not clear if this unit is in fact a tuff or a highly altered c.g intrusive rock. Contains minor py. in qtz./carb. veinlets.	119199	0.122	0.144
715.70	717.00		0.1 0.0	0	0 QCV 55 5		119200	0.144	0.162
717.00	719.00	Coarse-grained light green mottled sericitic	0.1 0.0	0	0 QCV 65 5		119201	0.141	0.195
719.00	721.00		0.1 0.0	0	1 QCV 10 5		119202	0.178	0.219
721.00	723.00		0.1 0.0	0	0 QCV 10 5	Distinct fragmental texture near end of sample.	119203	0.179	0.235

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
723.00	725.00	Coarse-grained light green mottled sericitic	0.1 0.0	0	0 QCV 30 5	As for sample 119199.	119204	0.166	0.225
725.00	727.00		0.1 0.0	0	0 QCV 50 5		119205	0.155	0.183
727.00	729.00		0.1 0.0	0	0 QCV 60 5		119206	0.216	0.266
729.00	731.00		0.1 0.0	0	0 QCV 20 5		119207	0.173	0.22
731.00	732.30		0.1 0.0	0	0 QCV 35 5		119208	0.253	0.331
732.3	734.28	BASALT FLOW							
732.30	734.28	Medium-grained light green mottled chloritic	7.0 0.0	0	12 QCV 45 5	Mottled textured med. grained flow with conspicuous augite phenocrysts. Single 8cm wide massive py. vein.	119209	0.183	0.432
734.28	736.06	QUARTZ VEIN							
734.28	736.06	Fine-grained chloritic	1.0 0.3	0	1 QCV 5 70	Single qtz./pink calcite vein running up core axis carries minor f.g. cpy.	119210	0.334	0.405
736.06	739.25	BASALT FLOW							
736.06	738.00	Medium-grained green porphyritic chloritic	3.0 0.0	0	10 QCV 65 3	Ubiquitous dissm. py. in wall rock. Contains barren qtz./carb. veinlets and barren zeolite veinlets.	119212	0.361	0.451
738.00	739.25		3.0 0.0	0	3 QCV 65 2		119213	0.245	0.286
739.25	740.02	QUARTZ VEIN							
739.25	740.02	Fine-grained chloritic	0.5 0.5	0	6 QCV 10 85	As for 119210 80% qtz./20% pink cal., trace py., several thin stringers of cpy.	119214	0.55	0.815
740.02	749.63	BASALT FLOW							
740.02	742.00	Medium-grained green porphyritic chloritic	3.0 0.1	0	1 QVN 65 10	Mottled textured augite porphyritic basalt cut by cream coloured qtz. veins with fracture controlled stringer of cpy.	119215	0.237	0.276
742.00	744.00		3.0 0.1	0	0 QVN 65 3	Pink zeolite veins only. Contact broken and lost.	119216	0.656	0.938
744.00	746.00		3.0 0.3	0	0 QVN 65 6	Crowded feldspar porphyry with orange wash. No qtz. veins ubiquitous pink zeolite veinlets and occ. yellow calcite vein.	119217	1.215	1.99
746.00	748.00		3.0 0.3	0	0 QVN 65 2		119218	1.305	1.63
748.00	749.63		2.0 0.0	0	3 ZVN 40 2		119219	1.115	1.24
749.63	754.67	SYENITE							
749.63	751.00	Coarse-grained orange porphyritic k-felspar sericitic	0.0 0.0	1	6 ZVN 30 7		119220	0.054	0.093
751.00	753.00		0.0 0.0	1	7 ZVN 30 7		119221	0.031	0.035

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From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
753.00	754.67	Coarse-grained orange porphyritic k-felspar sericitic	0.0 0.0	1	5 ZVN 30 7		119222	0.027	0.026
754.67	759.35	BASALT FLOW							
754.67	756.67	Medium-grained green porphyritic chloritic	0.1 0.1	0	2 QCV 45 5	Augite porphyritic basalt with Single 18 cm dyke similar to above. c.g. cpy. in qtz./carb. veinlet at lower contact which is 45 degrees to core axis.	119223	0.428	0.557
756.67	758.67		0.1 0.1	0	1 ZVN 45 10	Single qtz. carb. vein contains trace cpy. Remaining veins are pink zeolite.	119224	0.484	0.635
758.67	759.35		0.1 0.1	0	3 ZVN 45 3	v.f.g. cpy. and molybdenite in qtz./carb. veinlet at end of sample.	119225	0.452	1.15
759.35	766.23	MONZONITE							
759.35	761.00	Coarse-grained light grey porphyritic chloritic	0.1 0.1	0	2 QCV 50 10		119226	0.189	0.27
761.00	763.00		0.5 0.3	0	0 QCV 45 15		119227	0.231	0.228
763.00	765.00		0.5 0.1	0	0 QCV 40 5	Single qtz./carb. veinlet contains tr. v.f.g. cpy.	119228	0.251	0.267
765.00	766.23		0.1 0.0	0	0 QCV 80 5		119229	0.229	0.207
766.23	769.85	BASALT FLOW							
766.23	768.00	Medium-grained green porphyritic chloritic	0.5 0.1	1	1 QCV 80 3		119230	0.209	0.248
768.00	769.85		0.5 0.0	0	26 QCV 45 1	c.g. diss. mt. near end of sample.	119231	0.067	0.056
769.85	785.85	MONZONITE							
769.85	771.85	Coarse-grained grey orange porphyritic chloritic	0.1 0.0	0	1 ZCV 35 7	Crowded feldspar porphyry cut by numerous thin pink zeolite plus yellow calcite veinlets. Sample 119232 has semi massive molybdenite veinlet.	119232	0.191	0.215
771.85	773.85		0.1 0.0	0	8 ZCV 35 7		119233	0.023	0.02
773.85	775.85		0.1 0.0	0	2 ZCV 35 7		119234	0.081	0.077
775.85	777.85		0.1 0.0	0	5 ZCV 35 7		119235	0.122	0.102
777.85	779.85		0.1 0.0	0	1 ZCV 35 7		119236	0.127	0.103
779.85	781.85		0.1 0.0	0	2 ZCV 35 7		119238	0.079	0.069
781.85	783.85		0.1 0.0	0	2 ZCV 35 7		119239	0.062	0.048
783.85	785.85		0.5 0.0	0	0 ZCV 35 7	Single 2cm qtz./carb. veinlet contains molybdenite at vein margins - EOH	119240	0.071	0.049

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From	To	Rock Type	Py-Cpy-Mt Ms Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
785.85	EOH						