

Appendix 1: Diamond Drilling Logs with Results

GEOLOGICAL SURVEY BRANCH
ASSOCIATED REPORT

27,083

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-00-12B**

Northing: 16095.9	Total Depth: 673.61m
Easting: 10561.7	Azimuth: 0°
Elevation: 1688.2	Dip: -90°

Geologist: B. LaPeare
Logged Date: 6/19/2002

Survey Depth	Azimuth	Dip	Comments:
674 m	352 °	-82 °	

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-00-12B**

From (m)	To (m)	Rock Type	Comments
0	509.02	PREVIOUSLY DRILLED	Pre-drilled in 2000
509.02	604.5	QUARTZ MONZONITE	QTZ MONZONITE: 25 to mostly >50% anhedral/subhedral equant (1-3mm) plagioclase phenocrysts within fine to very fine grain bio + feldspar + qtz matrix -> crystals locally dusted pale light orange presumably from kfsp alt'n -> secondary biotite also noted as
604.5	615.3	SYENITE DYKE	SYENITE DYKE: predominantly med grain orthoclase w/ biotite -> possible source or engine of late stage pink zeo/kfsp/fe carb veinlets -> veinlet x-cut by rare carb veinlets
615.3	638.7	QUARTZ MONZONITE	kfsp alt'n of plag - zeo > qtz
638.7	660.3	SYENITE DYKE	SYENITE DYKE: - same as 606-615.30 - post mineralization
660.3	673.61	QUARTZ MONZONITE	mostly ser +/- qtz alt'n

Kemess North 2002 - Detail Drill Log



Hole Number: KN-00-12B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	509.02	PREVIOUSLY DRILLED							
0.00	509.02					Pre-drilled in 2000	9999912		
509.02	604.5	QUARTZ MONZONITE							
509.02	511.00	Medium-fine-grained grey-green porphyritic sericitic quartz	2.0	0.5	1	QKVN 15 QTZ MONZONITE: 25 to mostly >50% anhedral/subhedral equant (1-3mm) plagioclase phenocrysts within fine to very fine grain bio + feldspar + qtz matrix -> crystals locally dusted pale light orange presumably from kfsp alt'n -> secondary biotite also noted as med grain knots, <3% overall -> 3% as chloritic knots possibly alt'd from biotite knots (or vice versa); bio and/or chl knots may be alt'd mafic crystals -> veining predominantly qtz throughout @ roughly 5-10% of veinlet and may include pinkish qtz (w/ kfsp or zeo?) magnetite and either py and/or cpy -> qtz veinlets generally range between 45-90 degrees c.a. but no apparent overall orientation -> veins may or may not exhibit wall rock alt'n which is usually qtz + ser but locally exhibits epidote +/- chl (see 525m) -> overall py + cpy is <3% , vein hosted + diss -> although rare, extremely well developed cpy + mag occurs within qtz vein @ 522.00m -> veinlet is competent w/ good recovery & RQD thru-out	106199	0.395	0.958
511.00	513.00		3.0	1.0	1	QKVN 15 qtz veinlets may or may not exhibit qtz + ser within alt'n; mag locally in qtz veinlet; carb veinlet @ 30 degrees exhibits coarse, well developed xls	106200	0.405	0.722
513.00	515.00		2.0	0.5		QKVN 10 qtz veinlets @ random angles - local green hue from sericitic alt'n -> two coarse (<=5cm) very fine grain black fragments	106201	0.279	0.625
515.00	517.00		2.0	0.5	1	QKVN 10 as above -> orange 'dusted' kfsp alt'n of crystals occurs best proximal to veinlets	106202	0.313	0.602
517.00	519.00		3.0	1.0	1	QKVN 20 barren qtz veinlets cross cut by low angle qtz + kfsp veinlets +/- cpy or py	106203	0.45	0.8
519.00	520.70		3.0	0.5	2	QKVN 15 qtz + mag veinlets more common -> qtz +/- kfsp random veinlets over 30cm within well developed greenish pervasive sericitic alt'n	106204	0.288	0.531

Hole Number: KN-00-12B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
520.70	521.60	Medium-fine-grained grey-green porphyritic sericitic quartz	2.0 0.1	1	QMTVN 5	mostly unaltered except for top 20cm	106205	0.267	0.49
521.60	522.35		2.0 4.0	3	QMTVN 15	10cm qtz vein @ 45 degrees c.a. w/ very well developed cpy + magnetite + minor py - wall rock alt'n up to 20cm on either side	106206	2.56	2.34
522.35	524.00		1.0 1.0	2	QKVN 15	qtz + kfsp cross cut by qtz veinlets -> local carb veinlet w/ local ser + chl +ep wall rock alt'n	106207	0.348	0.717
524.00	526.00	Medium-fine-grained grey-green porphyritic sericitic chloritic	1.0 0.5	2	QMTVN 10	ser + chl wall rock alt'n common locally	106209	0.201	0.386
526.00	528.00		2.0 0.1	3		as above - local cross cutting kfsp veinlets	106210	0.287	0.648
528.00	530.00	Medium-fine-grained grey-green porphyritic sericitic quartz	2.0 0.1			no mag w/ qtz -> kfsp cross cuts qtz	106211	0.286	0.535
530.00	532.00		3.0 0.5			mostly fresh - veinlets mostly high angle - kfsp parallel within qtz	106212	0.222	0.436
532.00	534.00		2.0 0.7			as above - only wk ser +/- qtz wall rock alt'n locally	106213	0.362	0.726
534.00	536.00		2.0 0.5	2		as above - local pink stringers are soft -(zeo?) -> patchy mag w/ qtz	106214	0.333	0.816
536.00	538.00		2.0 0.5	2		as above - wk kfsp dusting of plag crystals	106215	0.256	0.503
538.00	540.00		2.0 0.1	1		as above	106216	0.206	0.565
540.00	542.00		2.0 0.1	2		pink soft zeo +/- carb veinlets @ low angle cross cut high angle qtz veinlets	106217	0.17	0.364
542.00	544.00		2.0 0.7	1		inc in both sericitic alt'n of matrix and kfsp alt'n of crystals -> locally visible cpy in low angle qtz veinlet -> most veinlets @ 60-70 degrees	106218	0.207	0.355
544.00	546.00		2.0 0.5	2		qtz + ser alt'n thru-out but porphyritic texture preserved -> high angle veinlets +/- kfsp	106219	0.249	0.374
546.00	548.00		2.0 0.1			local qtz + ser alt'n more intense but locally fresh -> one carb veinlet	106220	0.17	0.284
548.00	550.00	Medium-fine-grained grey-green porphyritic sericitic k-felspar	2.0 0.1	2		mostly fresh -> kfsp alt'n of plag best developed proximal to veinlets -> rare carb veinlets	106221	0.174	0.394
550.00	552.00		2.0 0.1	2		as above - no carb	106222	0.132	0.232
552.00	554.00		2.0 0.1	2			106223	0.202	0.376
554.00	556.00		2.0 0.1	2		as above - sericitic alt'n more pronounced	106224	0.223	0.46
556.00	558.00		2.0 0.7	4		as above - rare anhy + pinkish zeo veinlet -> patchy mag as infill in qtz	106225	0.306	0.51

Hole Number: KN-00-12B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
558.00	560.00	Medium-fine-grained grey-green porphyritic sericitic k-felspar	2.0 0.5	4			106226	0.339	0.609
560.00	562.00		2.0 0.5	3		qtz + ser more pervasive	106227	0.289	0.584
562.00	564.00		2.0 0.7	3		local kfsp wall rock alt'n of matrix -> mostly fresh	106228	0.272	0.491
564.00	566.00	Medium-fine-grained grey-green porphyritic sericitic quartz	2.0 0.1	3	QVN 70	7 as above - mag locally diss	106229	0.211	0.353
566.00	568.00		2.0 0.1	3	QVN 70	5	106230	0.124	0.181
568.00	571.00		2.0 0.5	4	QVN 60	5 as above - mag locally well developed in veinlets	106231	0.351	0.713
571.00	572.00		2.0 0.1	3	QVN 60	7 as above -> qtz + ser wall rock alt'n locally well developed + kfsp alt'n	106232	0.349	0.598
572.00	574.00		2.0 0.1	3	QVN	7 as above - top 1/2 pervasive qtz + ser; lower half only wkly alt'd to fresh	106233	0.19	0.323
574.00	576.00		3.0 0.5	3	QVN	5 variable qtz + ser +/- chl alt'n and kfsp alt'n	106235	0.284	0.593
576.00	578.00		3.0 0.7	1	QVN	5	106236	0.153	0.295
578.00	580.00		4.0 0.7	3	QVN	7 porphyritic texture destroyed/pverprinted by pervasive qtz + ser alt'n	106237	0.255	0.413
580.00	582.00		2.0 0.7	4	QVN	7 3-5mm diss mafic 'knots' - fragments?? <5% overall -> mag well developed in most veinlets	106238	0.129	0.209
582.00	584.00		3.0 1.0	4	QCV	7 cpy +/-py locally developed in qtz veinlets & local pinkish carb veinlets (w/zeo?)	106239	0.288	0.437
584.00	586.00		2.0 0.1	1	QCV	3 dec in veinlets & sulphides but pervasive ser +/- qtz alt'n & local kfsp alt'n of crysts	106240	0.197	0.344
586.00	588.00		2.0 0.1	1	QCV	7 porphyritic texture diffuse within ser + qtz alt'n -> one qtz + carb + zeo veinlet (fe carb??)	106241	0.189	0.484
588.00	590.00		2.0 0.1	0	QCV	3 porf texture well preserved thru-out - py in thin random zeo + carb stringers	106242	0.263	0.701
590.00	592.00		2.0 1.0	3	QZVN	3 as above but inc in alt'n - cpy w/ very thin zeo stringers	106243	0.151	0.262
592.00	594.00		1.0 2.0	1	QZVN	3 pervasive mod ser + qtz alt'n thru-out - 20 degree qtz veinlets w/ well developed cpy +/-py	106244	0.141	0.234
594.00	596.00	Medium-fine-grained grey-green porphyritic k-felspar sericitic	1.0 2.0	4	QZVN	5 intrusive texture w/ locally well developed kfsp alt'n -> local rounded chloritic knots	106245	0.202	0.306
596.00	598.00		4.0 0.5	2	QZVN	7 as above but slight dec in kfsp - local well developed py in veinlets	106246	0.273	0.361
598.00	600.00	Medium-fine-grained grey-green porphyritic sericitic quartz	2.0 0.5	2	QZVN	5 as above but qtz + ser > kfsp -> soft zeo stringers cross cut qtz	106247	0.191	0.278

Hole Number: KN-00-12B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
600.00	602.00	Medium-fine-grained grey-green porphyritic k-felspar sericitic	2.0	0.5	2	QZVN 7	as above - kfsp > ser + qtz	106248	0.158	0.197
602.00	603.50	Medium-fine-grained grey-green porphyritic sericitic k-felspar	2.0	0.5	2	QZVN 7	as above -> ser + qtz > kfsp	106249	0.131	0.215
603.50	604.50		2.0	0.5	7	QZVN 10	as above w/ well developed mag infilling qtz veinlets then cross cut by zeo stringers -> esp well developed @ lower contact	106250	0.334	0.438
604.5	615.3	SYENITE								
604.50	606.00	Medium-fine-grained pink					SYENITE DYKE: predominantly med grain orthoclase w/ biotite -> possible source or engine of late stage pink zeo/kfsp/fe carb veinlets -> veinlet x-cut by rare carb veinlets	106251	0.01	0.007
606.00	608.00						as above	106252	0.004	-2
608.00	610.00							106253	0.003	-2
610.00	612.00							106254	0.003	-2
612.00	614.00							106255	0.003	-2
614.00	615.30						as above - lower contact very sharp @ 45 degrees	106256	0.004	-2
615.3	638.7	QUARTZ MONZONITE								
615.30	617.00	Medium-fine-grained orange porphyritic k-felspar sericitic	1.0		2	QZVN 15	kfsp alt'n of plag - zeo > qtz	106257	0.113	0.154
617.00	618.00				3	QZVN 15	as above - mag locally well developed in qtz locally - highly fx'd	106258	0.226	0.399
618.00	620.00		1.0		2	QZVN 15	as above - inc in ser alt'n +/- qtz	106259	0.208	0.324
620.00	622.00	Medium-fine-grained grey-green porphyritic sericitic k-felspar	1.0		1	QZVN 5	as above -> ser +/- qtz > kfsp - zeo veinlets locally vuggy	106261	0.214	0.289
622.00	624.00		3.0	0.7	10	QZVN 10	very well developed mag -> one qtz veinlet appears to x-cut mag	106262	0.213	0.301
624.00	626.00		3.0	0.7	5	QCV 10	mocal cpy +/- mag w/ pink stringer - possibly fe carb??	106263	0.254	0.36
626.00	628.00		2.0	0.5	5	QZVN 15	inc in veinlets +/- py +/- mag - kfsp as locally well developed wall rock alt'n	106264	0.286	0.389
628.00	630.00		3.0	0.5	25	QZVN 10	py w/ remnant qtz surrounded by msv mag	106265	0.241	0.321
630.00	632.00		3.0	0.5	10	QZVN 15	py +/- cpy in seluage assoc w/ mag	106266	0.258	0.383
632.00	634.00		2.0	0.1	1	QZVN 5	sericitic alt'd intercept locally wkly overprinted by kfsp wall rock alt'n	106267	0.168	0.249

Hole Number: KN-00-12B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
634.00	636.00	Medium-fine-grained grey-green porphyritic sericitic k-felspar	2.0	0.1	4	QZVN 7	mag assoc w/ one 25 degree qtz veinlet	106268	0.116	0.18
636.00	638.00		3.0	0.5	7	QMTVN 40	10 mag veinlets +/- qtz @ 40 degrees c.a. +/- py	106269	0.109	0.179
638.00	638.70	Medium-fine-grained green chloritic sericitic	2.0		0	QVN 15	contact zone w/ lower syenite - well developed chloritic alt'n	106270	0.177	0.326
638.7	660.3	SYENITE								
638.70	640.00	Medium-fine-grained pink					SYENITE DYKE: - same as 606-615.30 - post mineralization	106271	0.004	-2
640.00	642.00						as above	106272	0.003	-2
642.00	644.00							106273	0.003	-2
644.00	646.00							106274	0.003	-2
646.00	648.00							106275	0.003	-2
648.00	650.00							106276	0.003	0.011
650.00	652.00							106277	0.003	-2
652.00	654.00							106278	0.003	-2
654.00	656.00							106279	0.003	-2
656.00	658.00							106280	0.003	-2
658.00	660.00							106281	0.003	-2
660.00	660.30						as above - lower 1m slightly more mafic (?) - sharp contact @ 50 degrees	106282	0.003	-2
660.3	673.61	QUARTZ MONZONITE								
660.30	662.00	Medium-fine-grained grey-green porphyritic sericitic quartz	3.0	0.5	1	QZVN 10	mostly ser +/- qtz alt'n	106283	0.157	0.266
662.00	664.02	Medium-fine-grained grey-green sericitic k-felspar	2.0	0.5	2	QZVN 7	ser = kfsp in %	106284	0.215	0.307
664.02	666.00	Medium-fine-grained grey-green chloritic sericitic	2.0	0.5	10	QCV 10	locally well developed mag +/- py - w. chl alt'n -> one 4cm carb veinlet	106285	0.383	0.547
666.00	668.00		5.0	1.0	10	QVN 80	7 two 10cm qtz-mt-py stringers @ 666.5 + 667.7	106287	0.153	0.251
668.00	670.00	Medium-fine-grained grey-green k-felspar sericitic	3.0	0.5	10	QVN 50	3 late orange-red kfsp-cc veinlets - loly in qtz stringer at 669.8	106288	0.193	0.29
670.00	672.00		5.0	1.0	10	QVN 45	5	106289	0.292	0.436
672.00	673.61		5.0	1.0	10	QVN 80	5 py replacing mt on late low angle slips and stringers	106290	0.162	0.205

Hole Number: KN-00-12B

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

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-01-17B**

Northing: 16018.3	Total Depth: 755.5m
Easting: 10282.2	Azimuth: 340°
Elevation: 1794.4	Dip: -80°

Geologist: J. Mazvihwa
Logged Date: 6/4/2002

<u>Survey Depth</u>	<u>Azimuth</u>	<u>Dip</u>	<u>Comments:</u>
755 m	332 °	-86 °	

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-01-17B**

From (m)	To (m)	Rock Type	Comments
0	590.71	PREVIOUSLY DRILLED	Previously drilled in 2001
590.71	755.5	MONZONITE	Pyrite veining associated with cpy in places, pink/orange kfsp veinlets, randomly orientated and phenocrysts. Porphyritic dark green chlorite and white plagio phenocrysts

Kemess North 2002 - Detail Drill Log



Hole Number: KN-01-17B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	590.71	PREVIOUSLY DRILLED							
0.00	590.71	chloritic				Previously drilled in 2001	9999917		
590.71	755.5	MONZONITE							
590.71	592.09	Fine-medium-grained green-grey porphyritic chloritic	1.0	0.5	10	QKVN 7 Pyrite veining associated with cpy in places, pink/orange kfsp veinlets, randomly orientated and phenocrysts. Porphyritic dark green chlorite and white plagio phenocrysts	9393	0.161	0.271
592.09	593.76		1.0	0.5	10	QMTKV 7 Portions with increased amount of dark grey magnetic magmatite - diss.	9394	0.087	0.15
593.76	594.20		1.0	0.5	10	QMTKV 7 Portions with fewer kfsp phenocrysts and plagio phenocrysts - more chloritic, smokey grey qtz veinlets	9395	0.154	0.244
594.20	596.49		1.0	0.5	10	QMTKV 7	9396	0.075	0.102
596.49	597.91		1.0	0.5	10	QMTKV 7 minor qtz veining, about 10cm, py/cpy veinlet cutting through, smokey grey qtz veinlets	9397	0.09	0.153
597.91	598.35		1.0	0.5	10	QMTKV 7 black, fine, soft -graphite infilling joint, associated with smokey grey qtz infill and py, dfsp veining	9398	0.249	0.39
598.35	600.76		1.0	0.5	10	QMTKV 7 minor red non-magnetic hem infilling, qtz vein - 20cm wide associated with py and cpy, kfsp veining	9399	0.383	0.53
600.76	601.26		1.0	0.5	10	QMTKV 7 portions with increased dark grey/black magnetic magmatite kfsp veining	9400	0.121	0.186
601.26	603.73		1.0	0.5	10	QMTKV 7 kfsp veining associated with diss. and stringer, py +/-cpy and smokey grey qtz	9401	0.178	0.272
603.73	604.23		1.0	0.5	10	QMTKV 7 slightly more diss. magmatite in some portions, less kfsp phenocrysts	9402	0.158	0.267
604.23	606.75		1.0	0.5	10	QMTKV 7 portions with high magmatite content	9403	0.084	0.101
606.75	608.10		1.0	0.5	10	QMTKV 7 kfsp veinlets bound by smokey grey qtz veinlets, portions with few white plagio phenocrysts	9404	0.372	0.566
608.10	609.75		1.0	0.5	10	QMTKV 7 slightly more dark green chlorite phenocrysts	9405	0.391	0.497
609.75	610.25		1.0	0.5	10	QMTKV 7 lighter grey colour, magmatite and qtz rick portions, associated with kfsp in part, smokey grey qtz stockwork	9406	0.322	0.483
610.25	612.25		1.0	0.5	10	QMTKV 7 grey/smokey qtz associated with py/cpy veining	9407	0.459	0.693

Hole Number: KN-01-17B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
612.25	614.35	Fine-medium-grained green-grey porphyritic chloritic	1.0	0.5	10	QMTKV 7 cpy + py stringers bounding smokey/grey qtz vein, minor red hem lining joint	9408	0.156	0.231
614.35	615.60		1.0	0.5	10	QMTKV 7	9409	0.207	0.339
615.60	616.10		1.0	0.5	10	QMTKV 7 20cm qtz vein - smokey grey associated with magmatite, chlorite rich portion	9410	0.233	0.321
616.10	618.44		1.0	0.5	10	QMTKV 7 increased no. of smokey grey qtz at 90 degrees to core axis, associated with kfsp and py in places	9411	0.205	0.296
618.44	619.80		1.0	0.5	10	QMTKV 7 portions with increased pink kfsp phenocrysts, kfsp veinlet bound by smokey grey qtz	9413	0.066	0.09
619.80	621.34		1.0	0.5	10	QMTKV 7 smokey grey qtz running perpendicular to core axis, more plagio and kfsp phenocrysts, chloritic rich portions	9414	0.198	0.262
621.34	622.80		1.0	0.5	10	QMTKV 7 more plagio and kfsp phenocrysts and portions with rich magmatite, smokey grey qtz bounded by black magnetic magmatite	9415	0.132	0.188
622.80	623.82		1.0	0.5	10	QMTKV 7 lighter green coloration, fewer plagioclase and kfsp phenocrysts, chlorite rich	9416	0.783	1.04
623.82	625.65		1.0	0.5	10	QMTKV 7 slightly more plagio phenocrysts, kfsp stringer bound by smokey grey qtz, magmatite rich portions, diss. and in veinlets	9417	0.333	0.461
625.65	627.00		1.0	0.5	10	QMTKV 7 less plagio and kfsp phenocrysts, chlorite rich	9418	0.203	0.327
627.00	628.50		1.0	0.5	10	QMTKV 7 more plagio and kfsp phenocrysts, magmatite rich portions	9419	0.185	0.244
628.50	629.98		1.0	0.5	10	QMTKV 7 portion with slightly brecciated qtz, kfsp veinlets bound by smokey grey qtz, minor kfsp phenocrysts, chloritic, few plagio phenocrysts	9420	0.269	0.32
629.98	631.35		1.0	0.5	10	QMTKV 7 increased plagio phenocrysts, magmatite rich portion - diss.	9421	0.233	0.284
631.35	632.88		1.0	0.5	10	QMTKV 7 10cm qtz vein, white/pale pink, kfsp and plagio phenocrysts, magmatite rich portions - diss. and stringer form and associated with smokey grey qtz	9422	0.208	0.256
632.88	634.31		1.0	0.5	10	QMTKV 7 kfsp infilling joint	9423	0.249	0.316
634.31	635.73		1.0	0.5	10	QMTKV 7 portion with high amount of dark green subhedral mafic phenocrysts - about 20% in dark green matrix, possible pyroxene, no plagio or kfsp phenocrysts	9424	0.273	0.324
635.73	637.20		1.0	0.5	10	QMTKV 7	9425	0.209	0.255

Hole Number: KN-01-17B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
637.20	638.70	Fine-medium-grained green-grey porphyritic chloritic	1.0	0.5	10	QMTKV 7 portion with high amount of dark green subhedral mafic phenocrysts - about 20% in dark green matrix, possible pyroxene, no plagio or kfsp phenocrysts, increased kfsp veinlets/stringers	9426	0.533	0.65
638.70	640.03		1.0	0.5	10	QMTKV 7 portion with high amount of dark green subhedral mafic phenocrysts - about 20% in dark green matrix, possible pyroxene, no plagio or kfsp phenocrysts, increased kfsp veinlets	9427	0.314	0.398
640.03	640.72	Fine-medium-grained light brown-green porphyritic chloritic	1.0	0.5	3	QKVN 10 dark green mafic subhedral chlorite and kfsp phenocrysts in dull brown matrix, diss. py associated with cpy-diss., pink kfsp stringers + veinlets	9428	0.239	0.286
640.72	641.59		1.0	0.5	3	QKVN 10	9429	0.034	0.039
641.59	642.70		1.0	0.5	3	QKVN 10	9430	0.003	0.005
642.70	644.08		1.0	0.5	3	QKVN 10	9431	0.002	0.005
644.08	645.58		1.0	0.5	3	QKVN 10	9432	0.004	-2
645.58	646.65		1.0	0.5	3	QKVN 10	9433	0.008	0.006
646.65	647.95		1.0	0.5	3	QKVN 10	9434	0.001	-2
647.95	649.22		1.0	0.5	3	QKVN 10	9435	0.004	-2
649.22	650.02	Fine-medium-grained green-grey porphyritic chloritic	1.0	0.5	1	QKVN 10 dark green chlorite and white plagio phenocrysts, kfsp phenocrysts + stringers in places, contact - possibly kfsp and break down product - friable,	9436	0.149	0.169
650.02	650.72		1.0	0.5	1	QKVN 10 kfsp + weathering product/friable pink material infilling veinlet	9437	0.47	0.63
650.72	652.10		1.0	0.5	1	QKVN 10 chloritic portions with chlorite phenocrysts in fine matrix and minor plagio and kfsp phenocrysts	9439	0.266	0.327
652.10	653.57		1.0	0.5	1	QKVN 10 qtz vein, 20cm, associated with pink kfsp stringers, minor plagio and kfsp phenocrysts	9440	0.246	0.3
653.57	654.95		1.0	0.5	1	QKVN 10 plagio, kfsp and dark green phenocrysts	9441	0.191	0.224
654.95	656.42		1.0	0.5	1	QKVN 10 diss. magmatite and veinlets, minor pink kfsp phenocrysts	9442	0.119	0.148
656.42	658.07		1.0	0.5	1	QKVN 10 portion with minor kfsp phenocrysts, dark green chloritic portions	9443	0.262	0.31
658.07	659.52		1.0	0.5	1	QKVN 10	9444	0.275	0.321
659.52	660.34	Fine-medium-grained medium grey porphyritic chloritic	1.0	0.5	5	QKVN 6 light grey matrix with minor dark green euhedral chlorite, qtz smokey grey qtz bound by py +/-cpy veinlets and diss. in places,	9445	1.48	2.22

Hole Number: KN-01-17B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
660.34	660.70	Fine-medium-grained dark green light gr porphyritic chloritic	1.0	0.5	5	QMTKV 10	Dark green fine to medium sized euhedral phenocryst, white plagioclase pheno, qtz smokey grey veinlets and kfsp stringers , diss py, diss mt	9446	0.176	0.203
660.70	662.20		1.0	0.5	5	QMTKV 10		9447	0.18	0.202
662.20	663.60		1.0	0.5	5	QMTKV 10	portions with increasd diss mg, associate with qtz veining in places	9448	0.173	0.221
663.60	664.77		1.0	0.5	5	QMTKV 10	increased pink kfsp veinlets	9449	0.212	0.298
664.77	665.63		1.0	0.5	5	QMTKV 10	dark green sub/euhedral phenocrysts- possibly pyroxene in pale green/ grey matrix. Qtz vein associated with magnetite and py and cpy. Carbonate veinlets , minor pink subhedral kfsp phenocrysts and kfsp stringers	9450	0.315	0.34
665.63	666.23		1.0	0.5	5	QMTKV 10	minor pink subhedral kfsp phenocryst and kfsp stringers	11001	0.309	0.348
666.23	667.51		1.0	0.5	5	QMTKV 10	kfsp phenocrysts, stringers and veinlets, py and cpy veinlets	11002	0.129	0.145
667.51	668.05		1.0	0.5	5	QMTKV 10	py & cpy veinlets surrounded by kfsp veinlets then bound by smokey grey qtz vein, magnetite rich portions	11003	0.253	0.291
668.05	670.51		1.0	0.5	5	QMTKV 10	magnetite vein bound by smokey grey qtz, Its lined by kfsp	11004	0.097	0.122
670.51	671.95		1.0	0.5	5	QMTKV 10	protion with increased pink kfspstringers and veinlets, less chlorite matrix, slightly polor	11005	0.184	0.162
671.95	673.46		1.0	0.5	5	QMTKV 10		11006	0.212	0.252
673.46	674.81		1.0	0.5	5	QMTKV 10		11007	0.147	0.173
674.81	676.25		1.0	0.5	5	QMTKV 10		11008	0.249	0.313
676.25	677.14		1.0	0.5	5	QMTKV 10	slightly less mafic matrix. Magnetite vein about 5 cm wide and diss internally	11009	0.074	0.082
677.14	679.40		1.0	0.5	5	QMTKV 10	chlorite portions with minor plagioclase and kfsp phenocrysts	11010	0.123	0.14
679.40	680.83		1.0	0.5	5	QMTKV 10		11011	0.145	0.149
680.83	681.15		1.0	0.5	5	QMTKV 10	dark green dyke with fine to medium sized white euhedral plagioclase phenocrysts in dark green matrix	11012	0.22	0.226
681.15	682.53	Fine-medium-grained light grey green porphyritic chloritic	1.0	0.5	3	QMTKV 5	white subhedral phenocrysts, diss mg, qtz veining associated with kfsp stringers and veinlets	11013	0.158	0.178
682.53	684.55		1.0	0.5	3	QMTKV 5	diss py associated with cpy	11015	0.175	0.227
684.55	686.01		1.0	0.5	3	QMTKV 5	smokey grey qtz associated with diss py and veinlets, and magnetite in places, and kfsp	11016	0.402	0.543

Hole Number: KN-01-17B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
686.01	687.51	Fine-medium-grained light grey green porphyritic chloritic	1.0	0.5	3	QMTKV 5 10cm qtz vein, smokey qtz associated with py and cpy. kfsp pink stringers. Dark green dyke with minor white fine euhedral plagioclase phenocrysts, magnetite rich portions diss	11017	0.361	0.511
687.51	688.65		1.0	0.5	3	QMTKV 5 smokey grey qtz bound by magnetite associated with pink kfsp stringer +/- cpy and py	11018	0.164	0.229
688.65	690.05		1.0	0.5	3	QMTKV 5	11058	0.43	0.779
690.05	691.00		1.0	0.5	3	QMTKV 5 py +/- cpy diss associated with smokey grey qtz. kfsp veinlets associated with smokey qtz veinlet. Minor carbonate veinlets association	11059	0.199	0.258
691.00	692.53		1.0	0.5	3	QMTKV 5 Magnetite veinlets surrounded by qtz veinlets associated with kfsp veinlets	11060	0.07	0.091
692.53	693.89		1.0	0.5	3	QMTKV 5	11061	0.045	0.061
693.89	695.37		1.0	0.5	3	QMTKV 5	11062	0.062	0.082
695.37	696.80		1.0	0.5	3	QMTKV 5	11063	0.086	0.203
696.80	697.99		1.0	0.5	3	QMTKV 5	11064	0.186	0.248
697.99	698.44		1.0	0.5	3	QMTKV 5 qtz vein associated with diss py, white veinlet, fizzing with HCl- carbonate, less potassic portions	11065	0.379	0.557
698.44	700.94		1.0	0.5	3	QMTKV 5 Mafic portions with smokey qtz veins associated with diss py +/- cpy. few potassic portions with fewer lfsp phenocrysts; Magnetite rich portions	11067	0.042	0.043
700.94	703.84		1.0	0.5	3	QMTKV 5	11068	0.055	0.052
703.84	705.32		1.0	0.5	5	QMTKV 5 kfsp phenocrysts and veinlets in a few portions. Smokey grey qtz, diss py	11069	0.032	0.033
705.32	706.59		1.0	0.5	5	QMTKV 5 qtz vein, smokey grey, associated with diss py +/- cpy and veinlets	11070	0.042	0.051
706.59	707.19		1.0	0.5	5	QMTKV 5 Magnetite portions, kfsp stringers/ veinlets	11071	0.206	0.28
707.19	707.87		1.0	0.5	5	QMTKV 5 qtz vein dominant, cut by py +/- cpy stringers and kfsp veinlets. Diss py +/- associated with kfsp veinlets in places	11072	0.258	0.447
707.87	709.08		1.0	0.5	5	QMTKV 5 Diss py +/- cpy and stringers ~2% py in places. Pale pink kfsp veinlet bound by smokey grey qtz veinlets	11073	0.211	0.305
709.08	709.47		1.0	0.5	5	QMTKV 5 py +/- stringers cutting smokey grey qtz and kfsp veinlets in potassic rich portion. py 1 % higher in this part about 3 %	11074	0.337	0.412

Hole Number: KN-01-17B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
709.47	710.95	Fine-medium-grained light grey green porphyritic chloritic	1.0 0.5	5	QMTKV	5 kfsp veinlet bound by smokey grey qtz vein, py +/- cpy veinlets associated with smokey qtz and kfsp veinlets	11075	0.313	0.353
710.95	712.22		1.0 0.5	5	QMTKV	5 py +/- cpy veinlet bound by smokey grey qtz, qtz associated with kfsp veinlet	11032	0.533	0.756
712.22	713.74		1.0 0.5	5	QMTKV	5 potassic parts associated with py + cpy in places	11033	0.229	0.271
713.74	714.81		1.0 0.5	5	QMTKV	5 py +/- cpy diss. associated with smokey grey veinlets and kfsp, mt rich portions, 10cm portion of dk green pheno. in pale green matrix with diss. py	11034	0.131	0.185
714.81	715.48		1.0 0.5	5	QMTKV	5 mt rich portions	11035	0.155	1.58
715.48	716.01		1.0 0.5	5	QMTKV	5 smokey grey vein (320cm) with about 4% diss. py and cpy, smokey qtz 10cm vein associated with mt, kfsp + 1% py +/- cpy mafic rich portion	11036	0.136	0.295
716.01	716.83		1.0 0.5	5	QMTKV	5 kfsp veins associated with diss. py +/- cpy	11037	0.114	0.124
716.83	718.00		1.0 0.5	5	QMTKV	5 qtz/carb stringers, associated with pink kfsp veinlets in place	11038	0.098	0.113
718.00	719.53		1.0 0.5	5	QMTKV	5 py +/- cpy stringers and diss. stringers cut by qtz/carb veinlets, py +/- cpy stringer bound by qtz veinlet	11039	0.091	0.227
719.53	721.03		1.0 0.5	5	QMTKV	5 minor diss. py +/- cpy and kfsp/qtz/carb veining	11041	0.099	0.108
721.03	722.38	Fine-medium-grained light grey green porphyritic	1.0 0.5	5	QMTKV	5	11042	0.102	0.105
722.38	724.60	Medium-coarse-grained lt green-grey porphyritic	1.0 0.5	10	QMTVN	10 py +/- cpy stringers associated with smokey grey qtz. diss py	11043	0.256	0.336
724.60	725.10		1.0 0.5	10	QMTVN	10 diss py +/- cpy	11044	0.069	0.084
725.10	725.57		1.0 0.5	10	QMTVN	10 kfsp stringer bound by smokey grey qtz. Purple subhedral metallic lustre soft, possible Bornite????	11045	0.073	0.118
725.57	728.05		1.0 0.5	10	QMTVN	10 potassic rich portions smokey grey qtz veinlets +/- carbonates, bornite?? Diss py +/- cpy	11046	0.172	0.247
728.05	729.37		1.0 0.5	10	QMTVN	10	11047	0.076	0.114
729.37	730.87		1.0 0.5	10	QMTVN	10	11048	0.125	0.232
730.87	732.40		1.0 0.5	10	QMTVN	10	11049	0.069	0.103
732.40	733.87		1.0 0.5	10	QMTVN	10	11050	0.043	0.05
733.87	735.22		1.0 0.5	10	QMTVN	10 kfsp veinlet with carbonate-fizzes with HCl removing a yellow stain from surface	11051	0.103	0.124
735.22	736.77		1.0 0.5	10	QMTVN	10	11052	0.192	0.255

Hole Number: KN-01-17B

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
736.77	738.30	Medium-coarse-grained It green-grey porphyritic	2.0	0.5	10	QMTKV 5 slight increase in diss py +/-cpy. Kfsp veinlets associated with py +/-cpy stringers and smokey grey qtz	11053	0.103	0.151
738.30	739.64		2.0	0.5	10	QMTKV 5	11054	0.268	0.477
739.64	741.11		2.0	0.5	10	QMTKV 5	11055	0.097	0.143
741.11	742.65		1.0	0.5	10	QMTKV 5 py +/- cpy associated with smokey grey qtz vein	11056	0.13	0.194
742.65	744.13		1.0	0.5	10	QMTKV 5	11057	0.101	0.16
744.13	745.10		1.0	0.5	10	QMTKV 5 py +/- cpy diss. Stringer in places bound in kfsp and smokey qtz veins	11174	0.227	0.393
745.10	746.08		1.0	0.5	10	QMTKV 5	11175	0.223	0.504
746.08	749.58		1.0	0.5	10	QMTKV 5 py +/- cpy diss, minor stringers: purple/ grey, metallic lustre, soft	11176	0.116	0.207
749.58	749.95		1.0	0.5	10	QMTKV 5	11177	0.096	0.229
749.95	751.45		1.0	0.5	10	QMTKV 5	11178	0.159	0.281
751.45	752.90		1.0	0.5	10	QMTKV 5	11179	0.141	0.297
752.90	754.40		1.0	0.5	10	QMTKV 5 Petro sample taken from about 754.00m-754.07m for bornite or phlagophite?	11180	0.175	0.352
754.40	755.50		1.0	0.5	10	QMTKV 5	11181	0.201	0.419
755.5	EOH								

Kemess North 2002 - Diamond Drill Log



Hole Number: *KN-02-01*

Northing: 16139.1	Total Depth: 623.9m
Easting: 10458.9	Azimuth: 360 °
Elevation: 1699.1	Dip: -80 °

Geologist: J. Mazvihwa
Logged Date: 6/6/2002

<u>Survey Depth</u>	<u>Azimuth</u>	<u>Dip</u>	<u>Comments:</u>
0 m	360 °	-80 °	
112 m	350 °	-80 °	
212 m	13 °	-81 °	Mechanical
313 m	3 °	-82 °	Mechanical
414 m	338 °	-82 °	
514 m	338 °	-81 °	
624 m	10 °	-78 °	Mechanical

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-01**

From (m)	To (m)	Rock Type	Comments
0	13.72	CASING	Overburden
13.72	90.53	ANDESITE FLOW	Highly fxd, mottled color; py as units, fx fill & w/ vuggy qtz unit
90.53	92.53	LOST CORE	
92.53	336.3	ANDESITE FLOW	
336.3	337.15	QUARTZ VEIN	qtz flooded portions, extensive qtz vein, cut by py stringers/veinlets, pink portions on the qtz indicate anhydrite associated with the qtz vein
337.15	407.4	ANDESITE FLOW	brecciated, qtz angular in places in medium green fine grained matrix, py veinlets around qtz clasts
407.4	480.06	MONZONITE	mottled grain chlorite and euhedral white plag and qtz. Siliceous, cut by grey smokey qtz, kfsp pink/orange veinlets. Smokey qtz veinlets associated with py cutting of veins in places
480.06	566.44	MONZONITE-QUARTZ MONZONIT	py+/-cpy diss. Smokey/grey veins bound by magnetite, diss magnetite. Kfsp.
566.44	599.63	ANDESITE POLYLITHIC TUFF	Dark green/grey matrix with fine to coarse sized monzodiorite fragments. Polyolithic tuff. Matrix had diss py +/- cpy. White plagioclase clasts and mafic, chl clasts. Cut by kfsp veinlets. Toodoggone Formation.
599.63	600.27	MOTTLED SPOTTED UNIT	Diss py with trace cpy. Sericite altered portion, pale grey with darker grey smokey qtz vein. Minor py +/- cpy stringers in places, associated with qtz vein in places. Qtz clalcedony qtz vein, 5cm. Dark green clasts, gaseous vesicles infilled by green mafic-chlorite qtz.
600.27	601.21	ANDESITE POLYLITHIC TUFF	
601.21	601.91	MOTTLED SPOTTED UNIT	Diss py with trace cpy. Sericite altered portion, pale grey with darker grey smokey qtz vein. Minor py +/- cpy stringers in places, associated with qtz vein in places. Qtz clalcedony qtz vein, 5cm. Dark green clasts as seen in sample 101676.

Hole Number:

KN-02-01

From (m)	To (m)	Rock Type	Comments
601.91	611.53	ANDESITE POLYLITHIC TUFF	
611.53	612.5	QUARTZ VEIN	Diss py +/- cpy in qtz vein , cut by kfsp stringers+/-carbonate, randomly orientated.
612.5	623.93	ANDESITE POLYLITHIC TUFF	Potassic rich zone. Diss py in tuff matrix. Polyolithic tuff has qtz, plag and chl fragments.

Saturday, December 07, 2002

623.90 EOH

Page 2 of 2

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	13.72	CASING							
0.00	13.72					Overburden	1	-2	-2
13.72	90.53	ANDESITE FLOW							
13.72	16.57	Fine-grained light grey silicic sericitic	5.0	0.1	QVN	10 Highly fxd, mottled color; py as units, fx fill & w/ vuggy qtz unit	9694	0.06	0.208
16.57	18.69		3.0	0.1	QVN	7 Mod/highly mottled color; py as units, fx fill & w/ vuggy qtz unit	9695	0.097	0.221
18.69	19.97		7.0	0.1	QVN	15	9696	0.024	0.342
19.97	22.38		10.0	0.1	QVN	25	9697	0.161	0.627
22.38	24.19		5.0	0.1	QVN	10	9698	0.019	0.257
24.19	25.92		7.0	0.1	QVN	10 Mod mottled color; py as units, fx fill & w/ vuggy qtz unit	9699	0.103	0.436
25.92	28.57		12.0	0.1	QVN	15	9700	0.081	0.565
28.57	29.80		5.0	0.1	QVN	15	9701	0.097	0.41
29.80	31.22		7.0	0.1	QVN	10	9702	0.129	0.39
31.22	32.69		3.0	0.1	QVN	7	9703	0.165	0.414
32.69	34.48		5.0	0.1	QVN	7	9704	0.101	0.279
34.48	36.15		7.0	0.1	QVN	10	9705	0.103	0.352
36.15	37.90		5.0	0.1	QVN	10	9706	0.103	0.371
37.90	38.31		7.0	0.1	QVN	10	9707	0.058	0.336
38.31	39.84		12.0	0.1	QVN	15	9708	0.013	0.3
39.84	40.85		7.0	0.1	QVN	10	9709	0.045	0.309
40.85	42.44		10.0	0.1	QVN	15	9710	0.022	0.265
42.44	43.66	Fine-grained light grey green broken chloritic sericitic	7.0	0.1	QVN	12	9711	0.1	0.442
43.66	44.88		5.0	0.1	QVN	12	9712	0.027	0.235
44.88	47.32		15.0	0.1	QVN	20	9713	0.061	0.331
47.32	49.70		10.0	0.1	QVN	10	9714	0.281	0.454

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
49.70	51.75	Fine-grained light grey green broken chloritic sericitic	7.0 0.1	QVN	10	9715	0.045	0.206
51.75	52.90		7.0 0.1	QVN	10	9716	0.096	0.242
52.90	54.19		7.0 0.1	QVN	10	9717	0.166	0.221
54.19	56.06		10.0 0.1	QVN	15	9718	0.108	0.274
56.06	57.70		5.0 0.1	QVN	7	9719	0.166	0.271
57.70	58.44		10.0 0.1	QVN	10	9720	0.064	0.119
58.44	59.41		7.0 0.1	QVN	10	9721	0.096	0.156
59.41	61.00		10.0 0.1	QVN	10	9722	0.064	0.119
61.00	62.15		10.0 0.1	QVN	10	9723	0.066	0.138
62.15	62.97		10.0 0.1	QVN	10 Intense fxd, mottled color; py as units, fx fill & w/ vuggy qtz unit	9724	0.047	0.163
62.97	64.55		7.0 0.1	QVN	10	9725	0.054	0.139
64.55	66.14		10.0 0.1	QVN	10	9726	0.065	0.182
66.14	67.84		5.0 0.1	QVN	7	9727	0.119	0.199
67.84	69.56		5.0 0.1	QVN	10	9728	0.131	0.233
69.56	71.11	Fine-grained grey-green broken chloritic sericitic	7.0 0.1	QVN	10	9729	0.066	0.242
71.11	72.24		7.0 0.1	QVN	10	9730	0.119	0.293
72.24	73.70		3.0 0.1	QVN	5	9731	0.145	0.301
73.70	75.43		5.0 0.1	QVN	7	9732	0.092	0.228
75.43	76.72		7.0 0.1	QVN	10	9733	0.103	0.285
76.72	77.45		5.0 0.1	QVN	7	9734	0.059	0.201
77.45	78.43		7.0 0.1	QVN	10	9735	0.053	0.184
78.43	79.66		12.0 0.1	QVN	15	9736	0.103	0.319
79.66	80.39		5.0 0.1	QVN	7	9737	0.083	0.267
80.39	81.69		5.0 0.1	QVN	7	9738	0.013	0.122
81.69	82.73		10.0 0.1	QVN	15	9739	0.021	0.145
82.73	83.60		7.0 0.1	QVN	10	9740	0.155	0.233
83.60	84.59		10.0 0.1	QVN	15	9741	0.134	0.217

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
84.59	85.84	Fine-grained grey-green broken chloritic sericitic	5.0	0.1	QVN	7	9742	0.153	0.227
85.84	87.05		5.0	0.1	QVN	7	9743	0.095	0.179
87.05	87.79		7.0	0.1	QVN	10	9744	0.118	0.188
87.79	89.06		7.0	0.1	QVN	10	9745	0.129	0.226
89.06	90.53		7.0	0.1	QVN	10	9746	0.061	0.187
90.53	92.53	LOST CORE							
90.53	92.53						-9		
92.53	336.3	ANDESITE FLOW							
92.53	93.87	Fine-grained grey-green broken chloritic sericitic			QVN	10	9747	0.094	0.216
93.87	94.22				QVN	10	9748	0.083	0.301
94.22	96.67				QVN	10	9749	0.142	0.318
96.67	100.48	Fine-grained green-grey chloritic sericitic	2.0		QVN	10	9751	0.112	0.363
100.48	101.86		2.0		QVN	10	9752	0.097	0.33
101.86	103.33	Fine-grained green-grey silicic sericitic	2.0		QVN	10	9753	0.202	0.643
103.33	104.65	Fine-grained green-grey brecciated silicic sericitic	1.0		QVN	10	9754	0.045	0.158
104.65	106.07	Fine-grained light grey chloritic sericitic	2.0		QVN	10	9755	0.046	0.145
106.07	107.44		1.0		QVN	10	9756	0.062	0.173
107.44	108.85		1.0		QVN	10	9757	0.09	0.244
108.85	110.30		1.0		QVN	10	9758	0.035	0.118
110.30	111.76		1.0		QVN	10	9759	0.081	0.236
111.76	113.12		1.0		QVN	10	9760	0.066	0.158
113.12	114.64	Fine-grained green-grey chloritic sericitic	1.0		QVN	70 10	9761	0.074	0.185
114.64	116.10		1.0		QVN	10	9762	0.088	0.186
116.10	117.47		1.0		QVN	10	9763	0.095	0.224

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
117.47	118.91	Fine-grained green-grey chloritic sericitic	2.0		QVN 10	mag 30.3 @117.63, pink veins, minor (about 0.5cm thick), chloritic portion	9764	0.077	0.204
118.91	120.42		1.0		QVN 10		9765	0.104	0.199
120.42	121.80	Fine-grained light grey silicic chloritic	2.0	1	QVN 10	green chloritic and pyrite specks, pervasive silicification, qtz and pyrite stringers/vein, pyrite also disseminated, minor pink vein	9766	0.028	0.115
121.80	123.27		2.0	1	QVN 10		9767	0.036	0.097
123.27	124.66		2.0	1	QVN 10		9768	0.123	0.184
124.66	126.17	Fine-grained grey-green silicic chloritic	2.0	1	QVN 10	phenocrysts anhedral, very strong silicification, protolith destroyed by alt'n, larger dark green chloritic specks associated with pyrite, pyrite also in veinlets, random orientation. Qtz vein surrounded by chlorite	9769	0.112	0.178
126.17	127.55		2.0	1	QVN 10		9770	0.113	0.234
127.55	128.98		2.0	1	QVN 10	Shallow fault infilled by pyrite cutting, steep angled fault filled with qtz, pink vein associated with pyrite about 2cm (45 degre)	9771	0.122	0.238
128.98	130.36		2.0	1	QVN 10		9772	0.142	0.239
130.36	132.24		2.0	1	QVN 10		9773	0.1	0.23
132.24	132.65	Fine-grained green-grey chloritic silicic	2.0	1	QVN 10	slightly darker colouration, minor pink/purple veining	9774	0.085	0.204
132.65	134.08		2.0	1	QVN 10		9775	0.092	0.286
134.08	136.16	Fine-grained dark green chloritic silicic	3.0	1	QMTVN 10	mag 127 @ 135.76, magmatite vein, about 2cm across, red, mottled texture	9777	0.106	0.269
136.16	137.48		3.0	1	QMTVN 10		9778	0.154	0.39
137.48	138.95		3.0	1	QVN 45 7	pervasive sericitized portioin about 20cm, py veining, yellow/grey coloration, qtz vein about 10cm, in places cut by py veins, seri stringers, white/pink/purple veining - qtz anhydrite veinlet	9779	0.212	0.695
138.95	140.31		3.0	1	QVN 45 7		9780	0.113	0.262
140.31	141.78		3.0	1	QVN 45 7		9781	0.089	0.189
141.78	143.18		3.0	1	QVN 45 7	minor qtz brecciated portion	9782	0.11	0.225
143.18	144.10		3.0	1	QVN 45 7	white/pink/purple veining, qtz/anhydrite/py vein	9783	0.141	0.328
144.10	146.27		3.0	1	QVN 45 7		9784	0.134	0.317

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
146.27	147.71	Fine-grained dark green chloritic silicic	3.0	1	QVN 45 7	pervasive ser portion, py +/- chl veining, joints infilled qtz, pyr, chl	9785	0.102	0.235
147.71	149.07	Fine-grained green-grey chloritic silicic	2.0	1	QVN 80 8	k-feldspar veinlets surrounded by pyrite, chloritic phenocrysts veinlets	9786	0.087	0.206
149.07	150.60		2.0	1	QVN 80 8		9787	0.076	0.187
150.60	151.88		2.0	1	QVN 80 8		9788	0.09	0.193
151.88	153.30		2.0	1	QVN 80 8	qtz flooding	9789	0.135	0.274
153.30	154.71		2.0	1	QVN 80 8	k-feldspar clasts - pink color	9790	0.11	0.194
154.71	156.70		2.0	1	QVN 80 8	strong pervasive silicification, minor pink veinlets - k-feldspar	9791	0.144	0.29
156.70	157.69		2.0	1	QVN 80 8	strong pervasive silicification portion, chloritic mottled	9792	0.091	0.195
157.69	159.13		2.0	1	QVN 80 8		9793	0.105	0.231
159.13	160.57		2.0	1	QVN 80 8		9794	0.148	0.259
160.57	162.00	Fine-grained green-grey silicic chloritic	3.0	1	QVN 80 10	chl phenocrysts associated with pyr/diss., strong pervasive Silicification, k-feldspar veinlets associated with pyrite	9795	0.165	0.286
162.00	163.43		3.0		QVN 80	chloritic phenocrysts associated with diss. Pyrite, 90 degree joint infilled by py and lined by chl	9796	0.122	0.22
163.43	164.85	Fine-grained dark green chloritic silicic	1.0			contact slightly gradual, over 5cm	9797	0.069	0.172
164.85	166.32		1.0			slightly qtz brecciated, mottled	9798	0.191	0.458
166.32	167.75		1.0				9799	0.245	0.484
167.75	169.24		1.0			minor pink, k-feldspar veinlets + clasts, slightly mottled, slightly brecciated	9800	0.139	0.308
169.24	170.59		1.0				9801	0.093	0.236
170.59	172.14		1.0			minor pink, k-feldspar veinlets and clasts	9803	0.18	0.344
172.14	173.55		1.0			slightly more k-fsp veinlets	9804	0.156	0.338
173.55	175.07	Fine-grained grey-green silicic sericitic	2.0			pervasive strong sericite portion, pervasive moderate silicification, chlorite specks, qtz flooding - moderate	9805	0.206	0.451
175.07	176.40		2.0			slightly more chloritic phenocrysts, anhedral medium sized, associated with diss. Pyr	9806	0.118	0.312
176.40	178.16	Fine-grained grey-green silicic chloritic	2.0			sericite, pervasive, moderate to strong alteration, k-feldspar veinlets, pink qtz flooding, contact at end of sample	9807	0.128	0.331

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
178.16	179.53	Fine-grained medium green chloritic silicic	1.0		minor qtz veining, pyrite veins	9808	0.112	0.275
179.53	181.22		1.0		strong pervasive ser + sil alteration in portions, minor randomly orientated qtz veining	9809	0.11	0.286
181.22	182.57		1.0		strong pervasive ser alteration in portions, minor randomly orientated qtz veining	9810	0.18	0.383
182.57	183.65		1.0			9811	0.247	0.54
183.65	185.01		1.0			9812	0.137	0.295
185.01	186.40		1.0			9813	0.173	0.355
186.40	187.95		1.0	QVN	15 randomly orientated pyrite veining - minor	9814	0.169	0.341
187.95	189.38		1.0	QVN	15 minor strong pervasive sericite alteration - 10cm thick	9815	0.154	0.368
189.38	190.85		1.0	QVN	15 no ser. alteration portions	9816	0.101	0.24
190.85	192.23		1.0	QVN	15 portion with about 20cm of white clasts in dark green chl matrix flanked by qtz veins	9817	0.103	0.274
192.23	193.86		1.0	QVN	15 slightly pervasive ser alteration, brecciated portion with increased qtz veins	9818	0.142	0.35
193.86	195.22		1.0	QVN	15	9819	0.167	0.413
195.22	196.80		1.0	QVN	15	9820	0.146	0.369
196.80	198.21		1.0	QVN	15 qtz and pyrite veining, some portions have less than 1% pyrite	9821	0.112	0.276
198.21	199.71		1.0	QVN	15 portion of pervasive ser alteration	9822	0.072	0.189
199.71	201.15		1.0	QVN	15	9823	0.101	0.254
201.15	202.60		1.0	QVN	15	9824	0.13	0.336
202.60	204.08		1.0	QVN	15	9825	0.101	0.273
204.08	205.54		1.0	QVN	15	9826	0.078	0.21
205.54	206.97		1.0	QVN	15	9827	0.145	0.396
206.97	208.80	Fine-grained green-grey silicic chloritic	2.0	QVN	10 weak to moderate pervasive ser alteration, qtz flooding in first part of sample, grey/smoky qtz veinlets, pyriminly associated with lining qtz veins, minor diss.	9829	0.249	0.625
208.80	209.91		2.0	QVN	10 slightly fewer qtz veining, minor pink/white veinlets qtz, anhydrite veining	9830	0.078	0.267

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
209.91	211.44	Fine-grained green-grey chloritic silicic	1.0	QVN	10 weak to mod. pervasive ser, very minor pink/white qtz/anh. veinlet, minor chl specks/phenocrysts - weakly mottled	9831	0.069	0.184
211.44	212.85		1.0	QVN	10 chl, qtz, anhydrite - pink/white stringer, minor. Py, chl stringers, slightly mottled in places, pale green/yellow sphere/rounded averaging 2mm diameter	9832	0.105	0.248
212.85	214.25		1.0	QVN	10 qtz veining with chl specks, weak to mod. pervasive ser, weak qtz flooding	9833	0.136	0.34
214.25	215.92		1.0	QVN	10 slightly mottled, pale gn/gy averaging 2mm diameter and medium chloritic phenocrysts	9834	0.084	0.191
215.92	217.39		1.0 0.5	QVN	10 minor pink veining - k-fsp veining	9835	0.087	0.204
217.39	218.83		1.0	QVN	10 end part of sample has slightly more diss. py	9836	0.117	0.286
218.83	220.25		1.0	QVN	10 diss. py	9837	0.09	0.246
220.25	221.73		1.0	QVN	6 minor diss. py, minor light pink/white qtz, k-fsp/anh vein +/- py	9838	0.091	0.24
221.73	223.30		1.0	QVN	6	9839	0.109	0.293
223.30	224.72	Fine-grained light green silicic chloritic	1.0	QVN	5 dgn chl phenocrysts + clasts, med. clast size - giving a slight mottled txt, moderate sill, weak to moderate per. ser, dgn chl portion at end of sample - about 30cm	9840	0.128	0.286
224.72	226.15	Fine-grained green-grey silicic chloritic	1.0	QVN	5 dgn chl phenocrysts + clasts, medium clast size, slightly speckled, dgn chl portions with increased qtz veining, minor ser rich bands	9841	0.083	0.182
226.15	227.69	Fine-grained green-grey chloritic silicic	1.0	QVN	6 minor sericitized portions - about 10cm, green/yellow, minor chl specks lining some of the qtz/py veinlet boundaries	9842	0.096	0.207
227.69	229.13		2.0	QVN	7 major ser, some at the end of sample - green/yellow color, chlorite phenocrysts, fine to med. clast size, minor pink ksp clasts, associated with qtz	9843	0.108	0.323
229.13	230.71		2.0	QVN	8 slightly more diss. py than previous sample, 70 degree + infilled by qtz, ksp, chl, py, pink colour. Minor ser portion about 20cm wide with increased diss. + stringer py content	9844	0.169	0.426
230.71	232.10		1.0	QVN	7 ser altered portions, light green/yellow with stringer py and weak diss., minor qtz, ksp vein, chloritic stringers and phenocrysts, minor green/grey sphere/rounded at end of sample	9845	0.116	0.233

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
232.10	233.63	Fine-grained green-grey chloritic silicic	1.0		QVN	7 fewer ser portions	9846	0.093	0.27
233.63	235.08		1.0		QVN	7 qtz/carbonate vein, white vein, part of it fizzes with HCl	9847	0.098	0.248
235.08	236.52		1.0		QVN	10 minor pale pink/white ksp veinlets, minor chl veinlets lining boundaries of qtz veinlets	9848	0.11	0.254
236.52	237.90	Fine-grained light green silicic sericitic	1.0		QVN	10 qtz flooding, moderate to high pervasive silicification, minor pervasive ser, dgn chl portions about 10cm, minor py stringers mainly associated with qtz rich portion. Magnetic	9849	0.206	0.403
237.90	239.42		1.0		QVN	10	9850	0.209	0.459
239.42	240.90	Fine-grained dark green chloritic sericitic	1.0		QVN	10 Pervasive ser altered portions about 15cm, associated with minor white clasts which fizz with HCl - carbonate. Dgn chl specks, minor pink/white ksp veinlets	9851	0.131	0.285
240.90	242.44	Fine-grained dark green chloritic silicic	2.0		QVN	10 dgn chl stringers, more py veinlets associated with chl than previous sample, slightly more sili with chl specks/phenocrysts	9852	0.149	0.332
242.44	243.80		1.0		QVN	10 first half of sample same as above, last half is dgn, minor pyrite stringers associated with chl	9853	0.103	0.222
243.80	245.43		1.0	0.5	QKVN	10 minor diss. and stringer py, minor cpy associated with pink/white qtz/anh or qtz/ksp veinlet	9855	0.169	0.329
245.43	246.78		1.0		QVN	10 gradual increase in sili and ser, diss py ksp veinlets - minor. Green/yellow ser at end of sample, more ser pervasive with diss. pyrite	9856	0.132	0.346
246.78	248.36	Fine-grained green-grey silicic sericitic	1.0		QVN	10 chl specks, increased pervasive sili and ser, chl specks and stringers associated with qtz veins, diss. py and stringer	9857	0.149	0.311
248.36	249.80		1.0		QVN	10	9858	0.194	0.427
249.80	251.37	Fine-grained green-grey chloritic silicic	1.0		QAVN	10 pale pink/white - qtz/anhydrite vein, diss. pyr	9859	0.124	0.265
251.37	252.76		1.0		QAVN	10	9860	0.175	0.379
252.76	254.17		1.0		QAVN	10	9861	0.144	0.325
254.17	255.60		1.0	0.5	QAVN	10 cpy associated with py and qtz veins	9862	0.176	0.368
255.60	257.22		1.0	0.5	QVN	10 dgn portions, diss. cpy associated with py, silicified weak to mod. pervasive	9863	0.141	0.368
257.22	258.66		1.0	0.5	QVN	10 slightly speckled with white, greenish, medium to fine size qtz clasts, hard	9864	0.177	0.374

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
258.66	260.17	Fine-grained green-grey chloritic silicic	1.0 0.5	QVN	10 chl phenocrysts and minor fine stringers, pale brown/green medium sized phenocrysts - gives speckled appearance, biotite, qtz/anh flooding	9865	0.219	0.496
260.17	261.50	Fine-grained grey-green chloritic silicic	1.0	QVN	10 chloritic phenocrysts, minor calcite- white, fizzes with HCl, infilling it	9866	0.144	0.301
261.50	262.96	Fine-grained grey-green silicic chloritic	1.0	QVN	10 diss. py, also in veinlets, associated with grey smoky qtz, veinlets are randomly orientated	9867	0.151	0.257
262.96	264.46		1.0	QVN	10 qtz veins are associated with dark green/grey fine sized specks - chlorite	9868	0.146	0.277
264.46	265.91		2.0	QVN	10 minor py veinlet associated with ksp and qtz veining, dgn chlorite rich portions, more diss. py	9869	0.102	0.199
265.91	267.21		2.0	QVN	10	9870	0.122	0.23
267.21	268.71		1.0	QVN	10 red, non magnetic, stringers associated with qtz vein - qtz/hematite vein, with pale apple green stringers cutting qtz vein. Possible cpy associated with py	9871	0.123	0.223
268.71	270.06		1.0	QVN	10 qtz fragments, medium sized, some angular, diss. py, minor hematite stringers	9872	0.105	0.196
270.06	271.56		1.0	QVN	10	9873	0.122	0.223
271.56	272.94		1.0	QVN	10 minor pale pink ksp stringers assoc. with chl and qtz towards end of sample	9874	0.124	0.219
272.94	274.37		1.0	QMTVN	10 dark grey/black, magnetic portions of magnetite, in places associated with qtz veining. White/yellow portions, fizz with HCl associated with qtz veining	9875	0.11	0.232
274.37	275.92		1.0	QMTVN	10 carbonate/qtz veining, pervasive ser portion - minor, less than 5cm	9876	0.116	0.187
275.92	277.05		1.0 0.5	QCV	10 qtz/carb white veining with white/yellow portions that fizz with HCl, diss. py, minor cpy assoc. with diss. and veinlet py	9877	0.095	0.171
277.05	277.75		1.0 0.5	QCV	10 diss. py, associated with cpy. Qtz stringers and veinlets randomly orientated. Chloritic, dark green portions. More diss. py + cpy than in stringer form	9878	0.122	0.228
277.75	278.60	Fine-grained light green sericitic chloritic	1.0 0.5	QCV	10 Dark green chloritic stringers, qtz veining associated with chl stringers, diss. py + cpy and pink anhydrite, ser pervasive, moderate to strong, qtz/carb flooding, vein boundary not distinct	9879	0.168	0.209
278.60	279.40	Fine-grained light green chloritic silicic	1.0 0.5	QCV	10 white/yellow qtz/carbonate, dark green stringers. Very minor pink/white stringer - qtz/anh veinlets	9881	0.251	0.315

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
279.40	280.05	Fine-grained light green chloritic silicic	1.0	0.5	QCV	10 slightly more diss. py with cpy in places, slightly silicified and ser pervasive altered portions	9882	0.197	0.229
280.05	281.55	Fine-grained light green chloritic silicic	1.0	0.5	QAVN	10 chlorite phenocrysts, med to coarse size, associated with diss. py also in veinlets, associated with cpy in places, pink/purple + white veinlets - qtz/anh veinlets	9883	0.16	0.195
281.55	282.95		1.0	0.5	QAVN	10	9884	0.169	0.209
282.95	284.46	Fine-grained light green chloritic silicic	1.0		QAVN	10 speckled green chloritic portions, chl stringers associated with qtz, pink/white qtz/anh veinlets, qtz veinlets, diss. py, qtz flooding in places	9885	0.311	0.395
284.46	285.80		1.0	0.5	QMTVN	10 dark grey/black magnetic magmatite, diss. py associated in places with cpy	9886	0.234	0.239
285.80	286.20	Fine-grained green-grey chloritic silicic	1.0	0.5	QAVN	10 slightly more chlorite, black/grey magnetic magmatite veinlets, qtz/carbonate veinlets - fizz with HCl, pink/white qtz/anh veining. Diss. py with minor cpy	9887	0.217	0.277
286.20	288.46	Fine-grained dark green chloritic silicic	1.0		QVN	10 reduced qtz/carbonate/anhydrate veining, py mainly diss.	9888	0.289	0.346
288.46	289.15		1.0	0.5	QMTVN	10 portions of lighter green/grey-slightly less chloritic, dark grey/black magnetic magmatite, surrounded by white qtz with diss. py	9889	0.235	0.304
289.15	290.25		1.0		QAVN	10 chloritic specks, qtz vein associated with minor pale pink anhydrate and chlorite, and ser alteration associated with qtz diss. py	9890	0.199	0.288
290.25	291.75		1.0		QAVN	10	9891	0.229	0.25
291.75	292.23		1.0		QAVN	10	9892	0.143	0.161
292.23	293.09	Fine-grained green-grey chloritic silicic	1.0		QVN	10 Diss. py, weak brecciation, smoky/grey qtz vein, brown/green phenocrysts chl + bt, chl green stringers	9893	0.113	0.137
293.09	294.61		1.0		QVN	10 slightly less brecciated	9894	0.105	0.117
294.61	295.35		1.0	0.5	QVN	10 smoky/grey qtz and grey fine clay infilling joint, associated with minor pink ksp, green/brownish chl phenocrysts slightly altered	9895	0.25	0.26
295.35	295.94	Fine-grained grey-green chloritic silicic	2.0	0.5	QVN	10 slightly more diss. py, associated with cpy, smokey/grey qtz stringers + chl, py +/- cpy stringers, boundaries lined by chl green stringers	9896	0.178	0.214
295.94	297.37		2.0	0.5	QVN	10 minor qtz/carbonate veinlets	9897	0.181	0.184
297.37	298.85		2.0	0.5	QVN	10 grey/smokey qtz vein at about 70 degrees, associated with portion of rich diss. py	9898	0.267	0.288

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
298.85	300.62	Fine-grained grey-green silicic chloritic	2.0	0.5	QVN	10	pale pink/purple qtz/anh veining	9899	0.138	0.173
300.62	301.24	Fine-grained green-grey chloritic silicic	2.0	0.5	QVN	10	dark green chloritic specks, white/pale pink qtz/anhydrite vein	9900	0.188	0.209
301.24	302.04		2.0	0.5	QVN	10		9901	0.237	0.155
302.04	303.05		2.0	0.5	QVN	10	about 20cm siliceous portion, pale green colour	9902	0.169	0.136
303.05	304.46		2.0	0.5	QVN	10		9903	0.103	0.3
304.46	304.90		2.0	0.5	QVN	10	about 20cm siliceous/ser altered portion with high amount of diss. py with cpy	9904	0.283	0.461
304.90	306.29		2.0	0.5	QVN	10	carbonate/yellow, fizzes with HCl, associated with qtz veining, chl veining outlining qtz veinlet boundaries, minor ksp vein and pink/white qtz/anh veining with diss. py	9905	0.406	0.641
306.29	306.93		2.0	0.5	QVN	10	minor kfsp slast associated with white carbonate - slight fizzing with HCl	9907	0.206	0.216
306.93	307.70	Fine-grained light green chloritic silicic	2.0		QVN	10	dark grey/black veinlet, non magnetic. ser altered portions, less chloritic than previous sample, diss. py	9908	0.174	0.188
307.70	309.20		2.0		QVN	10	qtz flooding, dark green chl phenocrysts/clasts	9909	0.13	0.171
309.20	310.62		2.0		QVN	10	pink/white, qtz/anh veining	9910	0.109	0.135
310.62	311.65		2.0		QVN	10	mainly diss. py - minor py stringers/veinlets	9911	0.17	0.213
311.65	312.31	Fine-grained grey silicic chloritic	2.0		QVN	10	dark to medium green chloritic phenocrysts associated with diss. py, sharp contact with previous sample	9912	0.2	0.246
312.31	313.58		2.0		QVN	10	pink/white qtz/anh veinlets	9913	0.214	0.244
313.58	314.29		2.0		QVN	10		9914	0.203	0.204
314.29	315.07	Fine-grained green-grey chloritic silicic	1.0		QAVN	10	py-diss, minor py veinlets, minor carbonate associated with qtz veinlets	9915	0.186	0.239
315.07	316.57		1.0		QAVN	10	pink/white qtz and anhydrite veinlets, dark green non magnetic hematite veining, ksp veinlets	9916	0.267	0.337
316.57	318.03		1.0		QAVN	10		9917	0.19	0.217
318.03	319.55		1.0		QAVN	10	white/pink qtz/anh veining, minor ksp veining, qtz veinlets associated with diss. py, minor py veinlets and strings	9918	0.192	0.186
319.55	320.10		1.0		QAVN	10		9919	0.194	0.192
320.10	321.15		1.0		QAVN	10	slightly brecciated qtz associated with chl veining, ksp veining - minor dark grey/black non-magnetic hematite veining, qtz flooding	9920	0.177	0.226

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
321.15	321.75	Fine-grained green-grey chloritic silicic	1.0		QAVN 10	between 2-3% qtz/carbonate veining - fizzes with HCl, pink/white qtz/anh veining and ksp, portions slightly brecciated	9921	0.092	0.118
321.75	322.40	Fine-grained light green chloritic	2.0	0.5	QVN 10	dark to medium + fine to medium sized, phenocrysts in silicified grey matrix, chloritic veinlets	9922	0.09	0.107
322.40	323.60	Fine-grained light green chloritic sericitic	1.0		QAVN 12	qtz/carbonate veining associated with py, high amount of diss. py near beginning of sample, white/red qtz/anh and hematite veining	9923	0.099	0.14
323.60	324.55		1.0		QAVN 12	red/magnetic magmatite veinlet associated with qtz veining, minor py, reduced qtz veining, significant qtz veining confined to first part of sample	9924	0.337	0.391
324.55	325.22		1.0		QAVN 12	chl veinlets, qtz veinlets, qtz/carbonate veinlets, fizz with HCl	9925	0.309	0.33
325.22	326.38	Fine-grained dark green chloritic silicic	1.0		QVN 15	increased qtz veining, slight brecciated texture in places, in grey, massive py matrix, diss. py, chl veining	9926	0.188	0.181
326.38	328.27		1.0		QVN 15		9927	0.258	0.254
328.27	329.67		1.0		QVN 15	pale pink/white qtz/anhydrate veinlets	9928	0.216	0.199
329.67	331.10		1.0		QVN 15	red magnetic magmatite associated with qtz veining, pale pink/white qtz/anhydrite veinlets	9929	0.23	0.242
331.10	332.58		1.0		QVN 15	pale pink/white veinlets = qtz/anhydrite veinlets	9930	0.229	0.25
332.58	333.98		1.0		QVN 15	pale pink/white veinlets, qtz/anhydrite veinlets, associated with diss.py	9931	0.262	0.228
333.98	335.41		1.0		QVN 15	slightly brecciated portions	9933	0.168	0.168
335.41	336.30		1.0		QVN 15	less brecciated portions	9934	0.185	0.197
336.3	337.15	QUARTZ VEIN							
336.30	337.15	Fine-grained light grey green chloritic silicic	1.0		QAVN 10	qtz flooded portions, extensive qtz vein, cut by py stringers/veinlets, pink portions on the qtz indicate anhydrite associated with the qtz vein	9935	0.385	0.399
337.15	407.4	ANDESITE FLOW							
337.15	338.00	Fine-grained medium green chloritic silicic	1.0		QVN 10	brecciated, qtz angular in places in medium green fine grained matrix, py veinlets around qtz clasts	9936	0.444	0.278
338.00	338.56		1.0		QVN 10	brecciated, smaller qtz angular fragments, boundaries slightly fused with green chloritic matrix	9937	0.314	0.321
338.56	339.46		1.0		QAVN 10	qtz veinlets, randomly orientated, associated with pink anhydrites, minor diss. py	9938	0.202	0.218

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
339.46	340.80	Fine-grained medium green chloritic silicic	1.0		QAVN 10	slightly less qtz veinlets, portions with increased qtz/carbonate veining, fizzes with HCl	9939	0.141	0.099
340.80	341.50		1.0		QAVN 10	increased amount of qtz/carbonate veining, fizzes with HCl, major qtz veining associated with high amount of diss. py at end of sample	9940	0.186	0.259
341.50	342.10		1.0		QAVN 10	minor dark green chloritic sphere/rounded, minor py veinlets/stringers, qtz veining	9941	0.12	0.164
342.10	342.72		1.0		QAVN 10		9942	0.095	0.18
342.72	343.62		1.0		QAVN 10	chloritic portions	9943	0.115	0.132
343.62	344.87		1.0		QAVN 10	qtz vein along large axis of core, associated with fine black/grey clay, minor carbonate/qtz veinlets, slightly brecciated portions	9944	0.188	0.294
344.87	346.25		1.0		QVN 10	qtz veining, rich portions of diss. py, red stringers and apple green fassulite strings associated with the qtz veining	9945	0.161	0.248
346.25	347.20		1.0		QVN 10	qtz vein boundary lined by carbonate, yellow, fizzes with HCl, qtz vein runs along length of core, bound by apple green veinlets which is lined by diss. py	9946	0.267	0.383
347.20	347.75		1.0		QVN 10	diss. py, qtz veinlets randomly orientated	9947	0.258	0.349
347.75	348.12		1.0		QVN 10	moderate pervasive ser and sil altered portion about 20cm long at end of sample	9948	0.127	0.203
348.12	349.66		1.0		QVN 10	qtz/carbonate veinlet at beginning of sample fizzes with HCl	9949	0.152	0.216
349.66	350.70		1.0		QVN 10		9950	0.161	0.228
350.70	351.80		1.0		QVN 10		9951	0.115	0.129
351.80	352.65		1.0		QVN 10	increased amount of qtz veining, qtz flooding, red stringer, mag or hematite, associated with qtz vein	9952	0.146	0.245
352.65	353.50		1.0		QVN 7	qtz veinlets associated with chl veinlets and diss. py in places, diss. py also in fine green matrix	9953	0.157	0.217
353.50	354.96		1.0		QVN 7	qtz veinlet lined by red hematite/ magnetite stringer, qtz veinlets also associated with diss. pyr and red hematite stringer in places	9954	0.195	0.304
354.96	356.38		1.0		QVN 7		9955	0.127	0.178
356.38	357.84		1.0		QVN 7		9956	0.327	0.491
357.84	359.20		1.0		QVN 7	qtz veining boundary lined by diss. py and red hem/mag vein, also associated with apple green epidote veinlets	9957	0.176	0.193

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
359.20	360.20	Fine-grained medium green chloritic silicic	1.0		QVN	7	9959	0.181	0.242
360.20	360.96		1.0		QVN	7	9960	0.491	0.538
360.96	362.02		1.0		QVN	7	9961	0.421	0.52
362.02	363.14		1.0		QVN	7	9962	0.44	0.526
363.14	364.37		1.0		QVN	7	9963	0.252	0.272
						reduced amount of qtz veining, veinlets are randomly orientated, diss. py, slightly more diss. py near end of sample			
364.37	364.85	Fine-grained green-grey chloritic silicic	1.0		QVN	5	9964	0.117	0.159
364.85	365.29		2.0		QVN	5	9965	0.228	0.257
						minor fine diss. py, also in stringers, qtz veining associated with red non-magnetic hematite stringers, py stringers and fine diss. and ksp in places			
365.29	366.33		1.0		QVN	5	9966	0.16	0.183
						py in stringer forms and diss., qtz veining associated with diss. py in places, lithology is slightly dark green, slightly less qtz veining			
366.33	367.84		1.0		QVN	5	9967	0.134	0.142
						dark green and white medium sized rounded structures towards end of sample, qtz vein present associated with red hem stringers and anhydrite			
367.84	368.56		1.0		QVN	5	9968	0.19	0.231
						minor red hem stringers associated with qtz stringers, slightly more pyrite stringers			
368.56	369.39	Fine-grained medium green chloritic silicic	2.0		QVN	5	9969	0.179	0.184
						increased amount of py stringers and diss., qtz stringer and veinlets associated with ksp, hem in places, more diss. py			
369.39	369.99		1.0		QVN	5	9970	0.265	0.359
						slightly less qtz veining and py stringers, diss. py			
369.99	370.68		2.0		QVN	10	9971	0.226	0.277
						py, mainly diss. and stringers, cpy in places, qtz veining associated with hem/red stringers			
370.68	372.15		2.0		QVN	10	9972	0.322	0.415
						more py stringers, chlorite and epidote, dark green and pale apple green respectively			
372.15	373.59		2.0		QVN	10	9973	0.213	0.295
						less py, ksp veinlets and stringers cutting grey smokey qtz in places			
373.59	375.10		2.0		QVN	10	9974	0.21	0.247
375.10	376.60		3.0		QVN	10	9975	0.372	0.502
						increased qtz veining associated with coarse diss. pyrite, chl veinlets and phenocrysts			
376.60	378.06				QVN	10	9976	0.375	0.488
						chloritic phenocrysts, diss. py and stringers			

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
378.06	379.40	Fine-grained medium green chloritic silicic			QVN	10 less diss. py and stringers, ksp veinlets and stringers	9977	0.27	0.375
379.40	380.09				QVN	10	9978	0.217	0.326
380.09	380.77				QVN	10 yellow/grey portions - pervasive sericite alteration, associated with qtz veining, diss. pyrite and chl phenocrysts	9979	0.254	0.42
380.77	381.67		1.0		QAVN	10 diss. py, qtz vein associated with anhydrite in places, dark green chl stringers	9980	0.155	0.244
381.67	382.53		1.0		QAVN	10	9981	0.185	0.25
382.53	383.37		1.0		QAVN	10	9982	0.172	0.297
383.37	384.33		1.0		QAVN	10	9983	0.14	0.296
384.33	385.41	Fine-grained medium green silicic chloritic	1.0		QAVN	10 major qtz vein, ser/yellow portion, py stringers cutting qtz vein, qtz/anhydrite veining associated with py stringers	9985	0.19	0.294
385.41	386.74	Fine-grained medium green chloritic silicic	1.0		QVN	10 diss. py, associated with qtz veinlets in places	9986	0.226	0.34
386.74	387.85		1.0		QVN	10 qtz vein about 15cm long, qtz/carbonate in places, also associated with pink anhydrite - minor	9987	0.21	0.294
387.85	389.11		1.0		QVN	10	9988	0.159	0.323
389.11	390.49		1.0	3	QMTVN	10 cpy associated with py in qtz veining in places. Qtz/ carb veining. Dark grey/ black magnetic magnetite vienlet phlanked by Qtz stringers	9989	0.136	0.24
390.49	391.34		1.0		QCV	10 Diss py, Qtz veining associated with carbonate and kfsp, chl stringers	9990	0.133	0.212
391.34	392.33				QCV	10	9991	0.217	0.408
392.33	393.36	Fine-grained medium green silicic sericitic	1.0		QVN	10 slightly brecciated, ser, chl stringers	9992	0.272	0.589
393.36	394.28	Fine-grained medium green chloritic silicic	1.0		QVN	10 diss py stringers in places. Pink/ grey anhydrite associated with qtz vein, chl phenocrysts	9993	0.258	0.438
394.28	395.03		1.0		QVN	10 diss py stringers associated with smokey grey qtz veining and chl	9994	0.166	0.251
395.03	395.56		1.0		QVN	10	9995	0.274	0.493
395.56	396.54		1.0		QVN	10 qtz flooding increased amount of qtz veining. Slightly pale green matrix than previous sample	9996	0.366	0.722
396.54	397.65		1.0		QVN	10	9997	0.215	0.305
397.65	398.02		1.0		QVN	10 pink anhydrite associated with qtz veining	9998	0.156	0.211

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
398.02	398.70	Fine-grained medium green chloritic silicic	1.0	QVN 10		9999	0.188	0.28
398.70	399.39		1.0	QVN 10	qtz veining associated with py in places. Chl stringers also associated with qtz veining in places. Diss py	10000	0.17	0.217
399.39	400.74		1.0	QVN 10	qtz / carb veinlets, fizz with HCl minor anhydrite (pink) also associated with qtz. Diss py	9351	0.163	0.21
400.74	401.63		1.0	QVN 10	Medium green volcanic is slightly poler with a grey tinge. Diss py	9352	0.294	0.395
401.63	403.25	Fine-grained dark green chloritic silicic	1.0	QKVN 10	qtz rich highly broken faulted zone. Qtz flooded in places. Minor Kfsp veinlets. Diss py in broken zone	9353	0.187	0.281
403.25	403.95		1.0	QVN 10	significant qtz flooding. Grey smokey qtz dominant, generally more intact and competent than pervious sample	9354	0.202	0.653
403.95	404.69		2.0	QVN 10	Increased amount of diss and stringer py. Chl phenocrysts associated with diss py	9355	0.463	1.21
404.69	405.80		2.0	5 QKVN 10	Dominant qtz vein, qtz vein brecciated in places. Portions of competent grey smokey qtz, has diss py and cut by Kfsp, pink/ orange veinlets and dark grey/ black magnetic magnetite veinlets	9356	0.256	0.579
405.80	406.70		2.0	QKVN 10		9357	0.178	0.497
406.70	407.40		2.0	5 QMTVN 20	dominant qtz vein cut by py veinlets. DgN volcaninic and monzodorite contact- qtz vein. Grey/ black magnetic magnetite veinlets. Py associated with qtz vein	9358	0.184	0.442
407.4	480.06	MONZONITE						
407.40	408.38	Fine-grained light grey porphyritic chloritic silicic	2.0	QKVN 90 20	mottled grain chlorite and euhedral white plag and qtz. Siliceous, cut by grey smokey qtz, kfsp pink/orange veinlets. Smokey qtz veinlets associated with py cutting of veins in places	9359	0.224	0.738
408.38	409.44		2.0	QKVN 90 20	portions with larger dark green chl associated with diss py	9361	0.4	1.045
409.44	410.25		2.0	QKVN 90 20	portions with high amount of diss py, associated with smokey grey qtz +/- kfsp veinlets. Large # of grey smokey qtz at 90 deg to core axis	9362	0.463	1.165
410.25	411.05		2.0	QKVN 90 20	cpy associated with py vein kfsp veinlets associated in places	9363	0.781	1.685
411.05	411.97	Fine-grained light grey green porphyritic chloritic silicic	2.0 0.5	QMTVN 90 10	cpy stringers associated with py diss in qtz, +/- kfsp veinlets. Smokey grey qtz veinlets at 90 deg to core axis	9364	0.273	0.631

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
411.97	412.81	Fine-grained light grey porphyritic silicic	1.0	0.5	2	QMTVN 90 15	py stringers associated with cpy. Smokey grey qtz veining cutting at 90 deg. Siliceous qtz flooding	9365	0.54	0.8
412.81	413.86		1.0	0.5		QMTVN 90 15		9366	0.262	0.472
413.86	415.14		1.0	0.5		QMTVN 90 15	py stringers cutting through smokey grey qtz veinlets running 90 deg to core. Kfsp veinlets also cutting smokey/ grey qtz vein. Siliceous qtz flooding	9367	0.424	0.692
415.14	416.21		1.0	0.5		QMTVN 90 15		9368	0.329	0.584
416.21	416.98		1.0	0.5		QMTVN 90 15		9369	0.308	0.59
416.98	418.14		1.0	0.5		QMTVN 90 15	dominant larger qtz vein ~25 cm associated with dss py and cpy Qtz/ carb vein, reacts with HCl	9370	0.249	1.065
418.14	419.06		1.0	0.5		QMTVN 90 15		9371	0.178	0.473
419.06	419.50	Fine-grained It green-grey porphyritic silicic chloritic	1.0	0.5		QVN 15	increased chlorite giving darker green colouration	9372	0.299	0.508
419.50	420.73		1.0	0.5		QVN 15		9373	0.243	0.634
420.73	422.30		1.0	0.5	2	QKVN 10		9374	0.353	0.921
422.30	422.82		1.0	0.5	2	QKVN 10	Dark grey/ black magnetic magnetic veinlets Qtz flooding	9375	0.278	0.617
422.82	424.00		1.0	0.5	2	QKVN 10		9376	0.362	0.772
424.00	425.11		1.0	0.5	2	QKVN 10	kfsp pink/ orange stringers and veinlets parallel to core axis cutting smokey/ grey qtz veins at 90 deg to core axis. Qtz flooding	9377	0.622	0.984
425.11	426.61		1.0	0.5	2	QKVN 10	slightly less kfsp stringers, qtz flooding	9378	0.396	1.015
426.61	428.11		1.0	0.5	2	QKVN 10	qtz flooding. Dark green euhedral chl pheno. Py veinlets cutting grey smokey qtz. Cpy associated with py. Minor kfsp stringers, Qtz vein associated with py	9379	0.49	1.255
428.11	429.20		1.0	0.5	2	QKVN 10		9380	0.462	1.32
429.20	429.92		1.0	0.5	2	QKVN 10		9381	0.281	0.778
429.92	430.67		1.0	0.5	2	QKVN 10		9382	0.484	1.17
430.67	431.22		1.0	0.5	2	QKVN 10		9383	0.392	0.707
431.22	432.22		1.0	0.5	2	QKVN 10		9384	0.588	1.225
432.22	433.43		1.0	0.5	2	QVN 5	increased grain size, cpy and py veinlet associated with qtz veining euhedral dark green chl phenocrysts. Minor Kfsp pale apple green clasts (epidote or fasscite) with the dark green euhedral chlorite phenocrysts. Kfsp stringers. Trace py	9385	0.192	0.512

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
433.43	434.06	Fine-grained lt green-grey porphyritic silicic chloritic	1.0	0.5	2	QVN 5	9387	0.168	0.46
434.06	435.08		1.0	0.5	2	QVN 5	9388	0.241	0.462
435.08	436.08	Fine-grained light green porphyritic silicic	1.0	0.5	2	QKVN 5	9389	0.744	1.47
436.08	436.94	Fine-grained light grey green porphyritic silicic chloritic	1.0	0.5	2	QKVN 5	9390	0.859	2.75
436.94	438.27		1.0	0.5	2	QKVN 5	9391	0.514	1.13
438.27	438.83	Fine-medium-grained grey-green porphyritic silicic	2.0	0.5	7	QKVN 20	9392	0.731	2.16
438.83	440.63		2.0	0.5	7	QKVN 20	11020	0.405	0.802
440.63	441.33		2.0	0.5	7	QKVN 20	11021	0.479	1.165
441.33	442.69		2.0	0.5	7	QKVN 20	11022	0.683	1.14
442.69	444.09		2.0	0.5	7	QKVN 20	11023	0.624	1.185
444.09	446.00		2.0	0.5	7	QKVN 20	11024	0.359	0.824
446.00	447.41		2.0	0.5	7	QKVN 20	11025	0.442	1.215
447.41	448.55		2.0	0.5	7	QKVN 20	11026	0.477	1.435
448.55	450.05		2.0	0.5	7	QKVN 20	11027	0.61	1.925
450.05	451.59		2.0	0.5	7	QKVN 20	11028	0.739	1.78
451.59	452.90		2.0	0.5	7	QKVN 20	11029	0.278	0.55

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
452.90	454.39	Fine-medium-grained grey-green porphyritic silicic	2.0	0.5	7	QKVN 20 py +/- cpy stringers bound by smokey grey qtz in places and cut by kfsp veinlets. Magnetite veinlets also bound by smokey qtz and cut by kfsp veinlets	11030	0.695	1.255
454.39	455.75		2.0	0.5	7	QKVN 20	11031	0.375	0.71
455.75	457.06		2.0	0.5	7	QKVN 20 py +/- cpy stringers associated with smokey grey qtz and minor kfsp. Kfsp veinlet rich portion. Diss magnetite, slightly increased Mg content & qtz veining. Qtz veins, some up to 10 cm thick, cut by py +/- cpy veinlets. Diss py +/- cpy in the porphyry and diss magnetite. Qtz monzo	11076	0.574	1.06
457.06	458.34		2.0	0.5	7	QKVN 20	11077	0.721	1.435
458.34	459.81		2.0	0.5	7	QKVN 20 Py +/- cpy stringers again bound within smokey qtz veins. Magnetite associated with smokey qtz veins. Diss py +/- cpy in monzo. Qtz monzo & magnetite thin stringers py +/- cpy in smokey grey qtz. Smokey qtz veinlets 90 deg to core axis heighted magnetite and diss	11078	0.686	1.32
459.81	461.30		2.0	0.5	7	QKVN 20	11079	0.625	1.335
461.30	461.60	Fine-medium-grained medium grey porphyritic silicic	3.0	0.5	10	QKVN 50 py +/- cpy diss in porphyry and stringers associated with smokey grey qtz veins. Magnetite diss in porphyry. Minor hematite-red and kspars veinlets.	11080	0.302	0.801
461.60	462.26		3.0	0.5	10	QKVN 50 slightly less magnetite, therefore pailer colour. Qtz vein of end of sample has about 3 % py diss and in stringer from	11081	0.474	1
462.26	463.68		3.0	0.5	10	QKVN 50 Increased magnetite stringers bounding smokey grey qtz veins. Py +/- cpy stringers bound in qtz veins. Diss py +/- found in porphyry matrix. Py infilled qtz cutting veins which are at 90 deg to core axis. Portions with less magnetite	11082	0.469	1.04
463.68	464.20		3.0	0.5	10	QKVN 50	11083	0.533	1.195
464.20	465.60		3.0	0.5	10	QKVN 50 several orientations of py +/- cpy veinlets, crosscutting bound in smokey qtz veins. Also diss in porphyry matrix. Diss magnetite. Stockwork qtz veins. 70% qtz vein. Diss and stinger py +/- cpy ~ 5 % in places. Smokey/ gnye qtz veinlets, 90 deg to core axis	11084	0.768	1.155
465.60	466.36		3.0	0.5	10	QKVN 50	11085	0.541	1.075
466.36	467.10		3.0	0.5	10	QKVN 50 Decreased py +/- cpy stringers and diss heighted magnetite content diss darker colour Qtz brecciated. Minor kfsp potassic alteration	11086	0.405	0.678

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
467.10	469.88	Fine-medium-grained medium grey porphyritic silicic	3.0	0.5	10	QKVN 50 Less qtz breccia, qtz flooding. Dis and stringer py +/- cpy in veins. Magnetite diss and stringers bound by qtz veins in places. Qtz veins in places. Qtz vein cut by kfsp veinlets	11088	0.435	0.649
469.88	471.93		3.0	0.5	10	QKVN 50 Slight increase in kfsp (90%) stringers cuttings smokey qtz. Qtz. Veins cherty-diss py +/- cpy with these units. Qtz veining slightly brecciated in places. Minor red hematite.	11089	0.459	0.732
471.93	472.63		3.0	0.5	10	QKVN 50 decrease in py +/- cpy stringers. Increase magnetite veins and diss.	11090	0.312	0.482
472.63	473.92		3.0	0.5	10	QKVN 50 more py +/- cpy stringers cutting smokey qtz veinlets and diss in jporphyry. Qtz veinlets crosscutting , py +/- cpy at 90 degrees	11091	0.704	0.913
473.92	476.43		3.0	0.5	10	QKVN 50 10cm qtz vein cut by py +/- cpy and kfsp stringers. Kfsp stringers generally show preferred orientation. Red hematite lining it. Smokey qtz veinlets associated with magnetite veins.	11094	0.791	0.751
476.43	477.62		3.0	0.5	10	QKVN 50 grey colour, high qtz. Py +/- cpy veinlets diss. Magnetite concentration decreased to about 2%. Py +/- cpy cutting smokey/grey qtz-cherty. Qtz flooding, dominantly qtz vein.	11095	0.672	0.893
477.62	478.30		3.0	0.5	10	QKVN 50 Diss. And stringer py +/- cpy associated with smokey qtz and magnetite veinlets. Minor green chloritic specks.	11096	0.715	1.085
478.30	480.06		3.0	0.5	10	QKVN 50	11097	0.596	0.73
480.06	566.44	MONZONITE-QUARTZ MONZONIT							
480.06	480.77	Fine-medium-grained medium grey porphyritic	2.0	0.5	10	QMTVN 50 py +/- cpy diss. Smokey/grey veins bound by magnetite, diss magnetite. Kfsp.	11098	0.532	0.664
480.77	481.95		2.0	0.5	10	QMTVN 50 diss + stringer py +/- cpy. About 70% qtz vein. Magnetite conc about 3%.	11099	1.01	1.08
481.95	482.81		2.0	0.5	10	QMTVN 50 py +/- cpy, diss and veinlets cutting qtz veins. Magnetite and red hematite veinlets. Diss py +/- cpy. Slightly brecciated qtz.	11100	0.827	0.491
482.81	484.02		2.0	0.5	10	QMTVN 50	11151	0.28	0.616
484.02	484.76		2.0	0.5	10	QMTVN 50 mainly qtz vein-cut by py +/- cpy, randomly oriented. Also cut by minor magnetite veinlets.	11152	0.344	0.438
484.76	485.46		2.0	0.5	10	QMTVN 50 py +/- cpy stringers cutting smokey, grey qtz. Magnetite veins and diss.	11153	0.325	0.367

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
485.46	486.38	Fine-medium-grained medium grey porphyritic	2.0	0.5	10	QMTVN 50 py+/-cpy stringers cutting smokey, grey qtz. Magnetite veins and diss. Dominant quartz veining.	11154	0.239	0.263
486.38	487.77		2.0	0.5	10	QMTVN 50 py+/-cpy stringers cutting smokey, grey qtz. Magnetite veins and diss. Qtz veining slightly broken up.	11155	0.343	0.434
487.77	488.53		2.0	0.5	10	QMTVN 50 py+/-cpy stringers associated eith smokey/grey qtz. Py +/-cpy diss in porphyry. Alternating dark magnetite rich bands with qtz rich lighter portions.	11156	0.32	0.344
488.53	489.51		2.0	0.5	10	QMTVN 50	11157	0.254	0.281
489.51	490.69		2.0	0.5	10	QMTVN 50	11158	0.493	0.752
490.69	491.18		2.0	0.5	10	QMTVN 50 qtz in angular clasts, disspy surroundingqtz clasts. Minor red hematite cutting through the qtz clasts.	11159	0.524	0.656
491.18	492.89		2.0	0.5	10	QMTVN 50 pale grey, between 60-75% qtz veining at 90 degrees to core axis. Py +/-cpy stringers and diss in porphyry and stringers cutting qtz veins. Weakly brecciated portions.	11160	0.346	0.498
492.89	494.02		2.0	0.5	10	QMTVN 50 pale grey, between 60-75% qtz veining at 90 degrees to core axis. Py +/-cpy stringers and diss in porphyry and stringers cutting qtz veins. Weakly brecciated portions. Magnetite rich portion about 25cm long.	11161	0.31	0.48
494.02	494.58		2.0	0.5	10	QMTVN 50 pale grey, between 60-75% qtz veining at 90 degrees to core axis. Py +/-cpy stringers and diss in porphyry and stringers cutting qtz veins. Weakly brecciated portions.	11162	0.395	0.59
494.58	495.20		2.0	0.5	10	QMTVN 50	11163	0.3	0.438
495.20	495.90		2.0	0.5	10	QMTVN 50	11164	0.339	0.608
495.90	496.92	Fine-medium-grained medium grey porphyritic silicic	3.0	0.5	15	QMTVN 50 py+/-cpy in stringers bound by smokey grey quartz veining. Diss magnetite. Magnetite concentration weak in parts which are qtz dominant. Qtz fragmented in places.	11165	0.302	0.546
496.92	498.30		3.0	0.5	15	QMTVN 50	11166	0.267	0.674
498.30	499.53		3.0	0.5	15	QMTVN 50	11167	0.318	0.619
499.53	500.07		3.0	0.5	15	QMTVN 50	11169	0.302	0.638
500.07	500.98		3.0	0.5	15	QMTVN 50	11170	0.359	0.679
500.98	501.47		3.0	0.5	15	QMTVN 50	11171	0.312	0.591
501.47	502.16		3.0	0.5	15	QMTVN 50	11172	0.354	0.754
502.16	503.15		3.0	0.5	15	QMTVN 50	11173	0.312	0.633

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
503.15	504.42	Fine-medium-grained porphyritic silicic medium grey	3.0	0.5	15	QMTVN 50 py+/-cpy diss and stringers in qtz. Diss py+/-cpy diss in porphyry. Mt veinlets bounding qtz veinlets. Cryptocrystallineqtz in places. Minor vuggy qtz.	11182	0.613	1.185
504.42	505.41	Fine-medium-grained porphyritic silicic grey-green	3.0	0.5	10	QMTVN 30 slightly less mt. About 5% py+/-cpy associated with minor white qtz veinlets. Mt diss and veinlets, bounding smokey/grey qtz veinlets in places.	11183	0.529	0.996
505.41	505.86	Fine-medium-grained porphyritic silicic light grey	3.0	0.5	10	QVN 45 py+/-cpy diss and stringers. Py+/-cpy stringers in grey/smokey cryptocrystalline. No mt.	11184	0.309	0.657
505.86	506.64	Fine-medium-grained porphyritic silicic grey-green	3.0	0.5	10	QVN 50 py+/-cpy veinlets bound by grey/smokey qtz, cryptocrystalline in places. Mt rich portions alternating with portions with minor mt. Pale green porphyry with 50% veining	11185	0.293	0.514
506.64	507.37		3.0	0.5	10	QVN 50 slightly less mt.	11186	0.599	1.245
507.37	507.96		3.0	0.5	10	QVN 50 py+/-cpy stringers and diss cutting cryptocrystalline smokey/grey qtz. Alternating dark grey mt rich portions with paler, less magnetic portions.	11187	0.494	0.791
507.96	509.45		3.0	0.5	10	QVN 50 py+/-cpy stringers in smokey/grey qtz and diss in porphyry. Mt diss in qtz veinlets.	11188	0.183	0.334
509.45	509.88		3.0	0.5	10	QVN 50	11189	0.208	0.48
509.88	510.54		3.0	0.5	10	QVN 50	11190	0.174	0.476
510.54	511.58		3.0	0.5	15	QMTVN 50 py+/-cpy stringers bound in grey/smokey qtz vein, py+/-cpy stringers cutting smokey/grey qtz veins in places. Decreased vein %.	11191	0.267	0.448
511.58	512.22		3.0	0.5	15	QMTVN 50 portions with increased mt %. Smokey/grey qtz veinlets stockwork.	11192	0.289	0.507
512.22	512.93		3.0	0.5	15	QMTVN 50	11193	0.614	1.155
512.93	513.98		3.0	0.5	15	QMTVN 50 half of sample is quartz, smokey/grey qtz veinlets , associated with py +/-cpy, about 70% veining	11195	0.707	1.525
513.98	514.64		3.0	0.5	15	QMTVN 50 slightly less smokey/grey cryptocrystalline (cdon) qv than previous sample < /= 50%. Associated with diss and stringer py +/- cpy.	11196	0.231	0.672
514.64	515.23		3.0	0.5	15	QMTVN 50 red hematite rich portion, assic. With mat. Cdon qtz vein about 25cm associated with diss py +/- cpy. Diss py +/- in mt veinlets and porphyry.	11197	0.367	0.804
515.23	516.03		3.0	0.5	15	QMTVN 50 diss py +/- cpy in porphyry- py+/- cpy stringers generally confined to smokey/grey(20%) cdon qv. Mt rich portions-medium to dark grey and porphyry-gngy	11198	0.291	0.637

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
516.03	516.65	Fine-medium-grained grey-green porphyritic silicic	3.0	0.5	15	QMTVN 50 alternating mt rich dark bands with mt poor light bands. Py +/-cpy stringers associated with grey/smokey cdon qv. Minor dark green subhedral mafic clasts.	11199	0.549	0.992
516.65	517.52		3.0	0.5	15	QMTVN 50 py +/- cpy stringers associated with grey/smokey cdon qv, bound by diss mt. Joint cutting veins along core axis is lined with carbonate, fizzes with HCl, 5%mt.	11200	0.178	0.387
517.52	518.20		3.0	0.5	15	QMTVN 50 py +/-cpy stringers + diss in smokey qtz veins. Diss in porphyry;kfsp stringer cutting smokey/grey cdon qtz veins and py +/- cpy veinlet.	101601	0.633	1.08
518.20	519.40		3.0	0.5	15	QMTVN 50 py +/- cpy associated with cdon qv-low mt content alternating pale grey low mt and dark grey high mt bands about 10-15cm wide.	101602	0.406	0.909
519.40	520.05		3.0	0.5	15	QMTVN 50	101603	0.456	1.25
520.05	521.47		3.0	0.5	15	QMTVN 50	101604	0.389	0.866
521.47	522.28		3.0	0.5	15	QMTVN 50	101605	0.283	0.705
522.28	523.73		3.0	0.5	15	QMTVN 50	101606	0.3	0.654
523.73	524.63		3.0	0.5	15	QMTVN 50	101607	0.345	0.967
524.63	525.40		3.0	0.5	15	QMTVN 50	101608	0.308	0.601
525.40	525.96		3.0	0.5	15	QMTVN 40 Diss py +/-cpy and stringers cutting smokey/grey cdon qtz vein. Alternating mt rich and poor portions.	101609	0.437	0.866
525.96	526.17		3.0	0.5	15	QMTVN 40	101610	0.35	0.618
526.17	528.72		3.0	0.5	15	QMTVN 40 py+/-cpy diss and stringers in cdon qtz vein, bound by mt diss and veinlets in places. Qtz veins cut by orange kfsp stringers.	101611	0.669	1.175
528.72	530.05	Fine-medium-grained medium grey porphyritic silicic	3.0	0.5	15	QMTVN 40 py +/- cpy stringers in smokey qtz vein, diss py +/- cpy in porphyry. Increased mt than in previous sample. Py +/- cpy crosscutting each other. Mt bounding cdon qtz vein, vuggy. 25cm qtz vein, smokey qtz with diss + stringer py +/- cpy, cut by kfsp stringers cutting py +/- cpy and smokey qtz vein. Alternating banding of light grey, mt weak and dark grey, mod mt. Increased py +/- cpy stringers + diss in smokey qtz vein	101612	0.415	0.714
530.05	531.48		3.0	0.5	20	QMTVN 45	101613	0.511	0.941
531.48	532.88		3.0	0.5	20	QMTVN 45	101614	0.495	0.833
532.88	534.15		3.0	0.5	20	QMTVN 45	101615	0.446	0.877

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
534.15	535.53	Fine-medium-grained medium grey porphyritic silicic	3.0	0.5	20	QMTVN 45	Smokey qtz cdon(</=5cm) qtz vein with increased py +/- cpy stringers + diss-about 5% over about 5cm qtz vein.	101616	0.593	1.165
535.53	537.01		3.0	0.5	20	QMTVN 45	Mt veinlet bound by smokey/grey qtz vein, py +/- cpy also bound by smokey/grey qtz vein. Diss + stringer mt. Minor vuggy qtz vein. 5-10cm qtz vein with increased py +/- cpy.	101617	0.432	1.125
537.01	538.50		3.0	0.5	20	QMTVN 45		101618	0.42	0.811
538.50	539.75		3.0	0.5	20	QMTVN 45		101619	0.356	0.855
539.75	541.20		3.0	0.5	20	QMTVN 45		101621	0.59	1.305
541.20	542.68		3.0	0.5	20	QMTVN 45		101622	0.749	1.425
542.68	544.17		3.0	0.5	20	QMTVN 45		101623	0.777	1.415
544.17	545.67		3.0	0.5	20	QMTVN 45		101624	1.13	1.845
545.67	547.00		3.0	0.5	20	QMTVN 45		101625	0.454	0.875
547.00	548.27		3.0	0.5	20	QMTVN 45		101626	0.291	0.601
548.27	549.77	Fine-medium-grained grey-green porphyritic silicic	2.0	0.5	20	QMTVN 40	cpy + py diss in porphyry matrix. Py +/- cpy stringers associated with smokey/grey qtz vein. Mt stringers, one generation bound by qtz vein, another generation bounding quartz veins. Qtz vein stockwork localized.	101627	0.327	0.505
549.77	551.23		2.0	0.5	20	QMTVN 40	Py +/- cpy dis along boundaries of locally brecciated qtz. Portions of darker mt rich portions.	101628	0.367	0.574
551.23	552.40		2.0	0.5	20	QMTVN 40	Minor diss py +/- cpy bound by mt and qv. Alternating dark bands of mt rich portions. Local brecciation. Diss py +/- cpy associated with green subhedral mafic and plagioclase phenocrysts bound by qtz vein.	101629	0.493	0.809
552.40	553.89		2.0	0.5	20	QMTVN 40	Parts with less mt, with diss py +/- cpy in porphyry matrix. Most diss py surround cpy, associated with qtz vein and found in porphyry matrix.	101630	0.805	1.315
553.89	555.37		2.0	0.5	20	QMTVN 40	Crackled brecciated qtz/smokey/grey, associated with mt. Significant py +/- cpy diss, qtz vein stockwork, cut by mt veining.	101631	0.375	0.76
555.37	556.57		2.0	0.5	20	QMTVN 40	Diss py +/- cpy associated with smokey/grey qtz vein and mt veins. Qtz locally brecciated, less mt, between 10-15%.	101632	0.222	0.522

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
556.57	558.05	Fine-medium-grained grey-green porphyritic silicic	2.0	0.5	20	QMTVN 40 Py +/- cpy stringer cut by kfsp veinlet. Py +/- cpy diss through the porphyry, stringers also present. Decreased qtz and mt veining. Py +/- cpy stringer cutting qtz vein. This vein complex is then cut by mt vein associated with diss py +/- cpy. Increased diss py +/- cpy at intersection of vein sets. portions of localized stockwork. qtz vein bound by mt veinlets, mt/qtz banding.	101633	0.187	0.314
558.05	558.98		2.0	0.5	20	QMTVN 40	101634	0.178	0.256
558.98	559.78		2.0	0.5	20	QMTVN 40	101635	0.315	0.457
559.78	560.88		2.0	0.5	20	QMTVN 40 less mt, between 7-10%. Py +/- cpy diss through in porphyry matrix. Py +/- cpy stringers associated with mt and smokey/grey, chalcedonic qtz vein. Portions with brecciated qtz vein.	101636	0.343	0.577
560.88	561.61		2.0	0.5	20	QMTVN 40 py +/- cpy cut by orange/pink kfsp veinlets, weak local vuggy. Diss py +/- cpy in porphyry matrix. Smokey /grey qtz vein cut by py +/- cpy stringers. About 5%mt and 20% veins.	101637	0.72	1.015
561.61	562.32		2.0	0.5	20	QMTVN 40 py +/- cpy stringers cutting smokey qtz vein, diss in porphyry matrix. Increased mt to about 15%, about 35-40% veining.	101638	0.247	0.423
562.32	563.73		2.0	0.5	20	QMTVN 40 Portions of rich qtz veins. About 10cm qtz vein, cut by py +/- cpy stringers and mt veinlets, cut by kfsp veinlets.	101639	0.251	0.45
563.73	565.22		2.0	0.5	20	QMTVN 40 qtz brecciated in places. Py +/- cpy stringer/diss around qtz angular blocks. Mt stringers associated qtz vein-smokey grey-ksfp cutting through. Slightly less mt %. Contact defined by minor gauge filled joint with chlorite +/- sericite and minor kfsp defining contact.	101640	0.328	0.488
565.22	566.01		2.0	0.5	20	QMTVN 40	101641	0.38	0.599
566.01	566.44		2.0	0.5	20	QMTVN 40 Highly broken near the qtz/mt zone (QMZ), making gradational contact.	101642	0.031	0.05
566.44	599.63	ANDESITE POLYLITHIC TUFF							
566.44	567.83	Medium-coarse-grained grey-green flow brecciated silicic chloritic	1.0	0.5		QKVN 5 Dark green/grey matrix with fine to coarse sized monzodiorite fragments. Polyolithic tuff. Matrix had diss py +/- cpy. White plagioclase clasts and mafic, chl clasts. Cut by kfsp veinlets. Toadogone Formation.	101643	0.022	0.142

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
567.83	569.33	Fine-coarse grained grey-green flow brecciated chloritic k-felspar	1.0	0.5	QKVN	7 Diss py +/- cpy in tuff matrix and monzodiorite fragments. Dark green chloritic fragments and plagioclase also present in polyolithic tuff. Cut by qtz +/- carb +/- kfsp veinlets.	101644	0.058	0.485
569.33	569.93		1.0	0.5	QKVN	7 Pale grey fragmented portions, cut by kfsp veinlets.	101645	0.125	0.187
569.93	571.31		1.0	0.5	QKVN	7	101647	0.19	0.284
571.31	572.11		1.0	0.5	QKVN	7	101648	0.29	0.408
572.11	573.36		1.0	0.5	QKVN	7 15cm sheared portion with kfsp, plag and mafic clasts elongated within zone to about 45 degrees. Diss py +/- cpy, fine in sheared zone. Increased kfsp veinlets, about 10%.	101649	0.065	0.093
573.36	574.03		1.0	0.5	QKVN	7 Slightly paler green/yellow bleached matrix. Protolith destroyed. Diss py +/- cpy. Vuggy qtz vein and randomly orientated kfsp veinlets.	101650	0.028	0.05
574.03	574.90		1.0	0.5	QKVN	7 Dark green matrix, few fragments in tuff. Cut by pink kfsp veinlets, about 10%. Diss py +/- cpy in matrix.	101651	0.054	0.061
574.90	576.27		1.0	0.5	QKVN	7	101652	0.018	0.022
576.27	577.68		1.0	0.5	QKVN	7 larger monzodiorite fragments in tuff, size range from fine to about 3 cm. Potassic rich portion.	101653	0.011	0.014
577.68	579.00		1.0	0.5	QKVN	7 Diss py +/- cpy in qtz vein +/- carb. Bound by kfsp veinlets, associated with potassic altered zones. Kfsp veinlets are randomly orientated.	101654	0.005	0.01
579.00	580.27		1.0	0.5	QKVN	7 Large potassic altered zones. 10cm size monzodiorite clasts within tuff matrix. Protolith almost destroyed.	101655	0.003	-2
580.27	581.65		1.0	0.5	QKVN	7	101656	0.001	-2
581.65	582.21		1.0	0.5	QKVN	7	101657	-2	-2
582.21	583.69		1.0	0.5	QKVN	7 increased potassic altered portions, associated with minor carbonate. Alteration obscuring original protolith.	101658	0.005	0.01
583.69	584.56		1.0	0.5	QKVN	7	101659	0.009	0.005
584.56	585.99		1.0	0.5	QKVN	7	101660	0.003	-2
585.99	586.95		1.0	0.5	QKVN	7	101661	0.001	-2
586.95	587.42	Fine-coarse grained dark grey flow brecciated chloritic k-felspar	0.5		QKVN	5 minimum fragments in flow. Potassic rich portion at end of sample, about 20cm thick-pink/orange colour.	101662	-2	-2
587.42	588.54		0.5		QKVN	5 minimum fragments in flow. About 7% kfsp veinlets randomly orientated.	101663	0.002	-2

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
588.54	589.40	Fine-coarse grained dark grey flow brecciated chloritic k-felspar	0.5	QKVN	5 More monzodiorite fragments in flow, cut by kfsp stringers + veinlets. White plagioclase clasts and green mafic clasts.	101664	0.001	-2
589.40	590.25		0.5	QKVN	5 Potassic rich alteration, pink colour cut by kspar veinlets associated with carbonate, white fizzes with HCl, increased number of stringers and veinlets.	101665	-2	-2
590.25	591.30		0.5	QKVN	5	101666	-2	-2
591.30	592.49		0.5	QKVN	5 Few kfsp stringers, generally randomly orientated. Fine to coarse sized fragments-monzodiorite, plagio and mafic chlorite in polyolithic tuff	101667	-2	-2
592.49	594.00		0.5	QKVN	5	101668	-2	-2
594.00	594.80		0.5	QKVN	5 lighter grey portions, possibly felsic, increased plagio in matrix. White hard qtz clasts also present.	101669	-2	-2
594.80	595.59		0.5	QKVN	5 Potassic rich portions. 20cm monzodiorite fragment in tuff, cut by kfsp veinlets and stringers, randomly orientated.	101670	0.001	-2
595.59	596.62		0.5	QKVN	5 Minor diss p +/- cpy. About 10cm portion with about 20% qtz+/-kfsp+/-carbonate. 3% diss py +/- associated with it.	101671	0.004	0.006
596.62	597.61		0.5	QKVN	5 Diss py in tuff matrix. Mt, monzodiorite, plagio fragments in polyolithic tuff.	101673	0.006	0.009
597.61	598.18		0.5	QKVN	5 Large sericitized fragment, about 15cm long in tuff surrounded by kfsp veinlets and kfsp fragments. Minor diss py. Gradual contact with next unit, pale grey colour.	101674	0.001	-2
598.18	599.63	Fine-grained light grey sericitic silicic	0.5	QKVN	3 Diss py with trace cpy. Sericite altered portion, pale grey with darker grey smokey qtz vein. Minor py +/- cpy stringers in places , associated with qtz vein in places. Qtz clalcedony qtz vein, 5cm.	101675	-2	0.013
599.63	600.27	MOTTLED SPOTTED UNIT						
599.63	600.27	Fine-medium-grained grey-green sericitic silicic	0.5	QKVN	2 Diss py with trace cpy. Sericite altered portion, pale grey with darker grey smokey qtz vein. Minor py +/- cpy stringers in places , associated with qtz vein in places. Qtz clalcedony qtz vein, 5cm. Dark green clasts, gaseous vesicles infilled by green mafic-chlorite qtz.	101676	-2	-2
600.27	601.21	ANDESITE POLYLITHIC TUFF						
600.27	601.21	Fine-grained light grey sericitic silicic	0.5	QKVN	2	101677	-2	0.018
601.21	601.91	MOTTLED SPOTTED UNIT						

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
601.21	601.91	Fine-medium-grained grey-green sericitic silicic	0.5	QKVN	2	Diss py with trace cpy. Sericite altered portion, pale grey with darker grey smokey qtz vein. Minor py +/- cpy stringers in places , associated with qtz vein in places. Qtz calcedony qtz vein, 5cm. Dark green clasts as seen in sample 101676.	101678	-2	-2
601.91	611.53	ANDESITE POLYLITHIC TUFF							
601.91	603.13	Fine-grained light grey sericitic silicic	0.5	QKVN	2		101679	-2	-2
603.13	603.63	Fine-coarse grained grey-green flow brecciated silicic chloritic		QKVN	3	minor diss py, polyolithic tuff with green chlorite fragments, white plag in pale grey matrix-consists of finer phenocrysts. Orange kfsp clasts.	101680	-2	-2
603.63	604.46	Fine-coarse grained medium grey flow brecciated				minor diss py, polyolithic tuff with green chlorite fragments, white plag in pale grey matrix-consists of finer phenocrysts. Orange kfsp clasts. 25cm qtz vein.	101681	-2	-2
604.46	605.82	Fine-coarse grained light grey flow brecciated sericitic silicic		QKVN	50	sericite altered portion eith white qtz vein, slightly brecciated. Major qtz vein.Minor kfsp stringers.	101682	-2	-2
605.82	607.23			QKVN	50		101683	-2	-2
607.23	608.59			QKVN	50		101684	-2	-2
608.59	609.96	Fine-coarse grained grey-green flow brecciated chloritic		QKVN	4	Polyolithic tuff with monzodiorite, qtz, chlorite fragments cut by kfsp stringers in places.	101685	-2	0.006
609.96	610.85	Fine-coarse grained medium grey flow brecciated				10cm qtz vein cut by kfsp associated with carbonate and chlorite. Diss py +/- cpy in tuff.	101686	-2	-2
610.85	611.53					Potassic rich portion, larger qtzfragments in tuff.	101687	-2	0.005
611.53	612.5	QUARTZ VEIN							
611.53	612.50	Fine-grained white silicic	3.0 1.0	QKVN	100	Diss py +/- cpy in qtz vein , cut by kfsp stringers+/- carbonate, randomly orientated.	101688	-2	-2
612.5	623.93	ANDESITE POLYLITHIC TUFF							
612.50	613.28	Fine-coarse grained grey-green flow brecciated silicic chloritic	1.0	QKVN	5	Potassic rich zone. Diss py in tuff matrix. Polyolithic tuff has qtz, plag and chl fragments.	101689	-2	-2
613.28	613.72	Fine-coarse grained medium grey flow brecciated				10cm qtz fragments, has green chlorite phenocrysts, cut by kfsp stringers.	101690	-2	-2
613.72	615.35					Few qtz fragments.	101691	-2	-2
615.35	616.47					Large qtz fragments with diss py +/-cpy, cut by kfsp. Minor potassic rich portions, associated with py +/- cpy in qtz vein-4-5% py in qtz vein.	101692	-2	-2

Hole Number: KN-02-01

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
616.47	617.57	Fine-coarse grained medium grey flow brecciated			About 5-6% py diss associated with potassic zone cut by kfsp veinlets. Qtz fragments in tuff.	101693	-2	-2
617.57	618.28	Fine-grained white silicic	2.0	0.1	QKVN 40 Sericite altered portion with dess py +/- cpy. 30cm qtz vein cut by kfsp stringers, boundary lined by diss py	101694	-2	0.027
618.28	619.70		2.0	0.1	QKVN 40	101695	-2	0.005
619.70	620.58		2.0	0.1	QKVN 40 kfsp veinlet, associated with py stringer	101696	-2	0.006
620.58	621.87	Fine-coarse grained dark grey brown flow brecciated silicic k-felspar	0.5		KVN 5 Diss py, potassic rich portions, pink/orange colour. Polyolithic tuff, with monzodiorite qtz, chlorite fragments. Cut by kfsp stringers.	101697	-2	-2
621.87	622.82		0.5		KVN 5 Potassic rich portion with kfsp phenocrysts/clasts followed by diss py +/- cpy about 5-10% py in about 13cm portion.	101699	-2	0.024
622.82	623.39		0.5		KVN 5	101700	-2	0.093
623.39	623.93		0.5		KVN 5 Less potassic rich portion. Less py %.	101701	-2	-2
623.93		EOH						

Kemess North 2002 - Diamond Drill Log



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

Northing: 16377.7	Total Depth: 224.6m
Easting: 10557	Azimuth: 0°
Elevation: 1624.7	Dip: -90°

Geologist: B. Mercer
Logged Date: 6/9/2002

Survey Depth	Azimuth	Dip	Comments:
224 m	0 °	-90 °	

Kemess North 2002 - Summary Drill Log



Hole Number:

KN-02-02

From (m)	To (m)	Rock Type	Comments
0	4.36	CASING	
4.36	69.22	DACITE FLOW	Propylitic, altered weakly porphoritic flow. Pink zeolite veinlets crosscut by dissolution cracks lined with limonite. Broken core. Toodoggone FM to 212.0m
69.22	125.08	DACITE LITHIC TUFF	course grained polyolithic volcanic breccia. Fragments include bladed feldspar porphyry, epidotized volc, black aphanitic volcanic, matrix is plag porph locally.
125.08	203.5	DACITE	
203.5	212	DACITE LITHIC TUFF	Lithic tuff similar to above min. Not solid and only minor py. Magnetic, but magnetite not visible. Cut by salmon coloured zeolite veinlets
212	224.64	INTERMEDIATE VOLCANIC	Similar to faulted zone at 176.78m to 193.18m without talc. Takla Group to EOH.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-02

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	4.36	CASING							
	0.00	4.36					2	-2	-2
4.36	69.22	DACITE FLOW							
4.36	6.36	Fine-grained green porphyritic propylitic zeolite	1.0	2	ZVN 20	1 Propylitic, altered weakly porphyritic flow. Pink zeolite veinlets crosscut by dissolution cracks lined with limonite. Broken core. Toodogone FM to 212.0m	102001	0.003	0.009
6.36	8.36		1.0	2	ZVN 20	1	102002	0.003	0.022
8.36	10.36		1.0	2	ZVN 20	1	102003	0.001	0.006
10.36	11.26		1.0	2			102004	0.001	0.032
11.26	13.26	Fine-grained green porphyritic propylitic	1.0	2	LVN 15	0 very similar to above with addition of trace-1% very fine grained py in irregularly distributed clots. No zeo.	102005	0.001	0.042
13.26	14.38		1.0	2	LVN 15	0 same as for 2005	102006	0.001	0.057
14.38	15.52	Fine-grained green porphyritic propylitic zeolite	0.1	2	ZVN 20	0 zeo veinlets are back in py occurs as trace amounts only. Local chl porphyroblasts.	102007	0.001	0.006
15.52	16.66	Fine-grained green-grey porphyritic propylitic zeolite	1.0	2	ZVN 20	0 approximatley 2-4% angular qtz fragments up to 1.5cm in bleached looking chl flow. Local clots of chl porphyroblasts, up to 5% locally.	102008	0.006	0.023
16.66	18.40	Fine-grained green-grey porphyritic propylitic	2.0	2			102009	0.001	0.043
18.40	19.63	Fine-coarse grained green-grey brecciated propylitic epidote	2.0			very fine grained py, patchy chl porphyroblasts, strong epidote on fractures. Brecciated, looks epigenetic	102010	0.004	0.037
19.63	20.56		1.0			dark chl fragments in a slightly lighter colour matrix.	102011	0.004	0.022
20.56	21.83		3.0			highly bleached looking with very fine grained diss py. Strong epidote on fractures and slips.	102012	0.002	0.019
21.83	23.18	Fine-coarse grained green-grey brecciated propylitic zeolite	3.0			Same as for 2012	102013	0.001	0.064
23.18	23.91	Fine-coarse grained green-grey brecciated propylitic epidote	3.0			brecciated texture less apparent	102014	0.001	0.056
23.91	25.08		3.0			same as for 2014	102015	0.001	0.127
25.08	26.04		3.0			well pronounced primary volcanic brecciated texture	102016	0.002	0.017

Hole Number: KN-02-02

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
26.04	27.43	Fine-coarse grained green-grey brecciated propylitic silicic	4.0			same as for 2016-mod silica. Py replacing brecciated fragments, as well as diss through chl matrix.	102017	0.006	0.033
27.43	28.96		4.0			same as for 2017, silica slightly stronger.	102018	0.003	0.032
28.96	30.53		4.0			same as for 2018	102019	0.001	0.044
30.53	31.85	Fine-coarse grained green brecciated propylitic epidote	0.5	2	ZVN 20 0	dark green chl fragments up to several cm in a lighter green aphanitic matrix	102020	0.007	0.017
31.85	33.16		0.5	2	ZVN 20 0	same as for 2020	102021	0.002	0.01
33.16	34.24		1.0	2	ZVN 20 0		102022	0.004	0.02
34.24	35.68		0.5	2	ZVN 20 0		102023	0.003	0.091
35.68	36.87		0.3	2	ZVN 20 0		102024	0.001	0.019
36.87	38.28		0.3	2	ZVN 20 0		102025	0.003	0.031
38.28	39.65		0.3	2	ZVN 15 0	epidote lessening down hole	102027	0.003	0.03
39.65	41.54		0.3	2	ZVN 15 0		102028	0.003	0.016
41.54	43.02		0.3	2	ZVN 15 0		102029	0.003	-2
43.02	44.38		0.3	2	ZVN 15 0		102030	0.004	0.006
44.38	45.99	Fine-coarse grained green brecciated propylitic zeolite	0.1	2	ZVN 15 0	same as above	102031	0.001	-2
45.99	47.34	Fine-coarse grained green propylitic zeolite	0.1	2	ZVN 15 1		102032	0.002	0.009
47.34	48.63		0.1	2	ZVN 15 4		102033	0.002	0.005
48.63	50.44		0.1	2	ZVN 15 1		102034	0.002	-2
50.44	51.88		0.1	2	ZVN 15 1		102035	0.006	-2
51.88	53.34		0.1	2	ZVN 15 1	Epidote becoming weak to non-existent	102036	-2	-2
53.34	54.60		0.1	2	ZVN 15 1		102037	-2	-2
54.60	55.64		0.1	2	ZVN 15 1		102038	0.004	0.008
55.64	56.58		0.1	2	ZVN 15 1		102039	-2	-2
56.58	58.88	Fine-medium-grained dark green porphyritic propylitic zeolite	0.1	2	ZVN 50 0	plag phenocrysts. Probable andesite flow, cut by zeolite/carb veinlets. Only trace pyrite.	102040	0.015	0.029
58.88	60.58		0.1	2	ZVN 50 0		102041	0.088	0.225
60.58	63.26		0.1	2	ZVN 50 0		102042	0.009	0.028
63.26	64.89		0.1	2	ZVN 50 0		102043	0.025	0.097

Hole Number: KN-02-02

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
64.89	67.06	Fine-medium-grained dark green porphyritic propylitic zeolite	0.1	2	ZVN 20 6		102044	0.01	0.037
67.06	68.01		0.1	2	ZVN 20 3		102045	0.011	0.052
68.01	69.22		0.1	2	ZVN 20 3		102046	0.008	0.028
69.22	125.08	DACITE LITHIC TUFF							
69.22	70.54	Coarse-grained green propylitic zeolite	0.1	2	ZVN 20 4	course grained polyolithic volcanic breccia. Fragments include bladed feldspar porphyry, epidotized volc, black aphanitic volcanic, matrix is plag porph locally.	102047	0.009	0.017
70.54	71.63	Coarse-grained dark green propylitic zeolite	0.1	2	ZVN 25 0	same as for 102047	102048	0.007	0.01
71.63	73.15		0.1	2	ZVN 25 1	epidote is confined to minor slip coatings and occasional fragments, suggesting it was pre-breccia locally.	102049	0.004	0.007
73.15	74.56		0.1	2	ZVN 25 1	same as for 2049	102050	0.004	0.009
74.56	76.20		0.1	2	ZCVN 25 1	core badly broken, gauge on pieces.	102052	0.006	0.007
76.20	77.47		0.1	2	ZCVN 0	good example of epidote rich fragments.	102053	0.006	0.007
77.47	79.25		0.1	2	ZCVN 1		102054	0.004	0.01
79.25	80.63		0.1	2	ZCVN 0	contains patchy areas of broken to subhedral k-spar crystals, not k-spar alteration. Crystalithic tuff.	102055	0.006	0.005
80.63	82.09		0.1	2	ZCVN 0	same as 102055	102056	0.011	0.007
82.09	83.49		0.1	2	ZCVN 0		102057	0.006	0.005
83.49	85.20		0.1	2	ZCVN 0	same as 102053	102058	0.007	0.007
85.20	86.49		0.1	2	ZCVN 0		102059	0.005	-2
86.49	87.61		0.1	2	ZCVN 0		102060	0.005	-2
87.61	88.74		0.1	2	ZCVN 0		102061	0.005	0.009
88.74	90.46		0.1	2	ZCVN 0	strong zeolite (pink)-carb veining (white)	102062	0.007	0.009
90.46	91.59		0.1	2	ZCVN 0		102063	0.005	-2
91.59	92.99	Coarse-grained grey-green propylitic zeolite	0.1	2	ZCVN 25 0	pale cream-white carb + salmon coloured zeolite veinlets.	102064	0.007	0.009
92.99	94.31	Coarse-grained grey-green	0.1	2	ZCVN 25 1		102065	0.006	0.005
94.31	95.42		0.1	2	ZCVN 25 2		102066	0.009	0.008
95.42	96.71		0.1	2	ZCVN 25 2		102067	0.007	0.011
96.71	98.08		0.1	2	ZCVN 25 5	epidotized fragments	102068	0.002	-2

Hole Number: KN-02-02

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
98.08	99.23	Coarse-grained grey-green	0.1	2	ZCVN 30 2	same as for 102067	102069	0.016	0.061
99.23	100.82		0.1	2	ZCVN 30 1		102070	0.006	0.032
100.82	103.63		0.1	2	ZCVN 25 0	minor epidote veinlets, separate from zeo/carb veinlets.	102071	0.006	0.045
103.63	104.91		0.1	2	EPI 25 0		102072	0.007	0.012
104.91	105.87		0.1	2	EPI 25 0		102073	0.007	0.009
105.87	107.24		0.1	2	ZCVN 25 0		102074	0.007	0.011
107.24	108.71		0.1	2	ZCVN 25 0		102075	0.035	0.36
108.71	110.02		0.1	2	ZCVN 25 0		102077	0.011	0.044
110.02	111.11		0.1	2	ZCVN 25 0		102078	0.008	0.019
111.11	112.68		0.1	2	ZCVN 25 0	strong hematite in zeolite/carb veins in top 15cm of sample.	102079	0.025	0.175
112.68	113.88		0.1	2	ZCVN 25 1		102080	0.011	0.086
113.88	115.23	Coarse-grained grey-green propylitic zeolite	0.1	2	ZCVN 30 3		102081	0.018	0.226
115.23	116.59			2	ZCVN 30 3		102082	0.016	0.188
116.59	118.00			2	ZCVN 30 3		102083	0.035	0.268
118.00	119.52			2	ZCVN 30 3		102084	0.013	0.45
119.52	120.99			2	ZCVN 30 3		102085	0.013	0.145
120.99	122.18		1.5	2	ZCVN 30 3		102086	0.01	0.14
122.18	123.67		1.5	2	ZCVN 30 3		102087	0.014	0.108
123.67	125.08		1.5	2	ZCVN 30 5		102088	0.01	0.047
125.08	203.5	DACITE							
125.08	126.54	Coarse-grained grey-green brecciated silicic sericitic	1.5	2	ZCVN 30 1		102089	0.012	0.048
126.54	127.72		1.5	2	ZCVN 30 1		102090	0.01	0.03
127.72	129.04		1.5	2	ZCVN 30 1		102091	0.025	0.112
129.04	131.27		1.5	2	ZCVN 30 1		102092	0.057	0.289
131.27	133.75	Coarse-grained light grey brecciated silicic sericitic	15.0			fault contact, siliceous sulphide bearing breccia. Approximately 20% clay gouge cemented.	102093	0.009	0.079
133.75	134.75		10.0			same as above with 50% gouge.	102094	0.008	0.047

Hole Number: KN-02-02

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
134.75	136.52	Coarse-grained light grey brecciated silicic sericitic	15.0	0.5		Very siliceous and competent. Pyrite occurs as semi-massive stringers and disseminations.	102095	0.01	0.059
136.52	137.98		20.0	0.5		Same as above.	102096	0.02	0.103
137.98	139.43		20.0	0.5			102097	0.041	0.173
139.43	141.43		15.0	0.7		As for 102097	102098	0.15	0.249
141.43	143.43		15.0	1.0			102099	0.172	0.309
143.43	145.43		15.0	1.0			102100	0.081	0.248
145.43	147.43		25.0	0.5			102101	0.079	0.283
147.43	149.43		20.0	0.7			102103	0.066	0.272
149.43	151.43		20.0	0.7			102104	0.081	0.278
151.43	153.43	Coarse-grained dark grey brecciated silicic sericitic	20.0	1.0			102105	0.09	0.283
153.43	155.45		20.0	1.5			102106	0.061	0.226
155.45	157.45		20.0	0.7			102107	0.094	0.288
157.45	159.45		20.0	0.5			102108	0.074	0.234
159.45	160.88		15.0	0.3		Chl. very prominent on slips. Bx texture very evident due to weathering silicification.	102109	0.057	0.188
160.88	161.90	Coarse-grained grey-green brecciated chloritic silicic	15.0	0.5		Silicified fragments similar to above in a dark green chlorite matrix. Minor snow white zeolite in fractures.	102110	0.063	0.168
161.90	163.36	Coarse-grained light grey brecciated phyllic	7.0	0.1		Core rubbly and more ser. Rich distinguishing it from more solid zone above.	102111	0.087	0.233
163.36	164.36		7.0	0.1			102112	0.052	0.172
164.36	166.36		7.0	0.1		Heavy clay like sericite fault gouge. Silicified rock deteriorates easily.	102113	0.082	0.12
166.36	167.64		20.0	0.3		Broken with some gouge filled seams.	102114	0.069	0.233
167.64	169.92		25.0	1.2		Very strong semi-massive pyrite. Very greenish looking.	102115	0.08	0.294
169.92	171.85		5.0	0.1		Gouge cemented silica fragments	102116	0.089	0.2
171.85	173.85		8.0	0.1			102117	0.051	0.129
173.85	175.85		5.0	0.1		Granular textured quartz in sericite matrix. Relatively soft.	102118	0.002	0.018
175.85	176.78		5.0	0.1			102119	0.001	0.012
176.78	178.78	Coarse-grained grey white brecciated argillic	0.1				102120	0.001	-2

Hole Number: KN-02-02

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
178.78	180.78	Coarse-grained grey white brecciated argillic	2.0			Sub-rounded silica fragments in a gouge of seicite/clay with possible kaolinite(bright white).	102121	-2	-2
180.78	182.78		2.0			Very fine grained pyrite.	102122	-2	-2
182.78	184.10		0.1				102123	0.001	-2
184.10	185.74		7.0				102124	0.001	-2
185.74	186.35	Coarse-grained grey white brecciated argillic talc	0.1			Similar to above with greenish white talc in gouge.	102125	-2	-2
186.35	188.35		10.0				102126	0.001	-2
188.35	190.35		7.0				102127	0.001	-2
190.35	192.35		4.0				102129	0.001	-2
192.35	193.18		3.0			Very strong talc.	102130	0.001	0.005
193.18	195.18		15.0			Much more competent. Talc only on occasional slip. Strong semi massive clots of f.g. pyrite.	102131	0.001	0.005
195.18	197.18	Coarse-grained grey white brecciated phyllic talc	15.0			As for 102131	102132	0.001	0.011
197.18	198.28		4.0			Strong talc alteration.	102133	0.001	-2
198.28	200.12		20.0	0.1			102134	0.001	0.009
200.12	202.12		20.0	0.1			102135	0.001	0.007
202.12	203.50		15.0			Contact gradational over 20 cm.	102136	0.001	0.014
203.5	212	DACITE LITHIC TUFF							
203.50	205.50	Coarse-grained green-grey propylitic zeolite	0.5	2		Lithic tuff similar to above min. Not solid and only minor py. Magnetic, but magnetite not visible. Cut by salmon coloured zeolite veinlets	102137	0.013	0.086
205.50	207.50		0.5	2			102138	0.01	0.035
207.50	209.50		1.0	2			102139	0.046	0.137
209.50	211.50		2.0	2			102140	0.012	0.261
211.50	212.00		2.0	2			102141	0.002	0.076
212	224.64	INTERMEDIATE VOLCANIC							
212.00	214.00	Coarse-grained light grey brecciated phyllic	4.0			Similar to faulted zone at 176.78m to 193.18m without talc. Takla Group to EOH.	102142	0.031	0.105
214.00	216.00		4.0				102143	0.04	0.101

Hole Number: KN-02-02

From	To	Rock Type	Py-Cpy-Mt Ms Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
216.00	218.08	Coarse-grained light grey brecciated phyllic	4.0	Approximately 1.25m of lost core. Remaining 0.75m is highly milled.	102144	0.039	0.09
218.08	220.08		10.0	As for 102142	102145	0.129	0.23
220.08	222.10		10.0		102146	0.107	0.237
222.10	224.64		5.0	50% sericite rubble and gouge. Hole abandoned in fault zone.	102147	0.148	0.245
224.64 EOH							

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-03**

Northing: 16033.0	Total Depth: 770.23m
Easting: 10460.8	Azimuth: 360°
Elevation: 1707.7	Dip: -80°

Geologist: J. Mazvihwa
Logged Date: 6/17/2002

Survey Depth	Azimuth	Dip	Comments:
0 m	360 °	-80 °	
106 m	338 °	-80 °	
197 m	343 °	-80 °	
298 m	331 °	-80 °	
398 m	352 °	-81 °	Mechanical
499 m	331 °	-80 °	
600 m	313 °	-80 °	
700 m	323 °	-79 °	
770 m	32 °	-79 °	Mechanical

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-03**

From (m)	To (m)	Rock Type	Comments
0	11.25	CASING	
11.25	135.35	ANDESITE FLOW	Light green/grey, green chloritic, white/grey plag crystals, py +/- cpy stringers and veinlets bound by dark green chlorite vein in some places, bound by vuggy qtz vein. Weak breccia.
135.35	136.65	ANDESITE ALTERED FLOW	Sericitized, silica and carbonate. Cut by smokey qtz vein, py +/- cpy and kfsp. Minor darker chl rich portions.
136.65	137.11	ANDESITE FLOW	Py mainly disseminated, massive-minor py stringers within qtz vein.
137.11	138.61	EPIDOTE ZONE	About 30% epidote, high carbonate content + chl=propylitic zone. Diss py <= 4%, minor veining, red staining-hematite, minor magnetite about 1%.
138.61	145.83	ANDESITE ALTERED FLOW	Ghost mottled texture, white plag/qtz clasts. Chloritized, carbonate and epidote alteration. Diss py. Portion of py assoc with qtz/carbonate.
145.83	249.68	ANDESITE FLOW	Speckled portions of dark grey mt and green vol carbonated portions. Py +/- cpy assoc with qtz vein +/- mt. Kfsp stringers-minor. Slight qtz brecciated in volcanic.
249.68	252.51	QUARTZ VEIN	Sugary granular texture in places, about 100% qtz vein. Cut by py +/- cpy veinlets, diss in places, cut by 2nd generation qtz-random orientation. Minor carbonate, dissolution vuggy texture.
252.51	253.73	SYENITE	Barren, generally gradual contact.
253.73	254.17	ANDESITE FLOW	Py-diss, higher diss py % associated with qtz vein at beginning of sample. Bt alteration, peppered texture.
254.17	256.73	QUARTZ VEIN	Qtz vein cut by minor fault, filled by clay gouge cementing material. Qtz vein associated with massive pyrite, chacedonic in places. Minor epidote in 2nd generation qtz vein.
256.73	280.69	ANDESITE FLOW	Minor sericitized portions associated with kfsp and qtz vein. Minor diss py and stringers in weakly sericitized portions. Veining is randomly oriented.

Hole Number:

KN-02-03

From (m)	To (m)	Rock Type	Comments
280.69	283.04	QUARTZ VEIN	10cm syenite dyke defines contact, qtz vein-fine, granular/sugary text in places. Py diss + stringers, randomly oriented. Vuggy, dissolution cavities. Minor epidote.
283.04	289.05	SYENITE	Minor volcanic litho within the dyke. Volcanic flow is light grey, speckled, phaneritic mafic/chlorite cut by 450 jt infilled by py + qtz. Dyke is also cut by qtz vein+kfsp+py
287.76	306	ANDESITE FLOW	Cut by 10cm syenite vein, py mainly diss. Py stringers associated with qtz vein and chl in places. Minor epidote.
306	306.72	SYENITE	Diss py rimmed by chl within bt altered volcanic. Syenite SD dyke-cut by py +/-kfsp +/- chl veinlets, randomly oriented. Very light grey matrix-though soft, mottled with green/brown chl +/- bt?
306.72	308.59	ANDESITE FLOW	Py diss + stringers associated with qtz vein +/- carbonate +/- kfsp +/- mt. Py stringer + chl at Ooto core axis and randomly oriented in places. Barren qtz vein +/- kfsp +/- chl-randomly oriented qtz vein. Locally vuggy qtz vein.
308.59	320.54	SYENITE	Py - dominantly diss with chl halo especially in the SD chl + bio. Minor py stringers assoc with qv, chl locally. Send SD + py for thin section.
320.54	322.3	ANDESITE FLOW	Minor py stringers - dominant disseminations in bio altered vol. Stringers assoc qv + minor chl and kfsp. Minor pale green epi mineralization chloritic. Vol locally vuggy + BKN.
322.3	325.9	SYENITE	Minor py stringers, assoc with smokey grey qtz, outlined by white qv, and minor chl. Py is less than 1:1. Local py inc. to 2:1 assoc with qtz +carb jt infill.
325.9	331.79	ANDESITE FLOW	Py diss in bio altered vol, with green mafic probably chlorite halos. Py stringers assoc with qtz +/-carb +/-chl in places. Vuggy qtz +/-carb veinlets - dissolution +/- texture. Local BKN zone.
331.79	334.51	PYRITE ZONE	Pyrite zone - about 5% py mainly diss with fault zone. Minor py stringers assoc with vuggy qv +/-carb, minor fizz with HCl
334.51	335.33	ANDESITE FLOW	Minor unaltered vol flow. Randomly oriented qtz veinlets assoc with minor py stringers in places. Py also diss.
335.33	337.41	PYRITE ZONE	Pyrite zone - about 4%, mainly diss with fault zone. Minor hem, localized vein staining. Py +/-cpy diss.
337.41	359.45	ANDESITE FLOW	Minor bio alteration. Diss py +/-cpy vol, stringers assoc with qtz vein and localized mt veining. Veining randomly oriented. Pale green chl/epi portions

Hole Number:

KN-02-03

From (m)	To (m)	Rock Type	Comments
359.45	359.75	PYRITE ZONE	Pyrite fault zone, about 5% pyrite, mainly as diss. Clay/gouge material cementing vol and qtz. BKN.
359.75	360.58	SYENITE	Barren, protolith obscured. Competent. Missing 4ft - 360.58m to 361.80m and 3ft btwn 364.85m to 365.76m.
360.58	361.8	LOST CORE	
361.8	364.85	PYRITE ZONE	Pyrite rich fault zone. Minor reduction in pyrite %. BKN. Competent 10 cm syenite dyke.
364.85	365.76	LOST CORE	
365.76	366.84	PYRITE ZONE	
366.84	454.86	ANDESITE FLOW	Pervasive silification, protolith destroyed, minor green chloritic portions present. Minor py disseminations ~1:1. About 15% qv - random orientation.
454.86	457.18	ANDESITE QUARTZ VEIN ZONE	Py +/-cpy assoc with smokey grey qtz +Kfsp. Diss within Kfsp. Mottled, speckled bio. Qv bound by mt in places. Altered flow or qtz monz - protolith not clear.
457.18	458.69	ANDESITE FLOW	slightly peppered/mottled, local bt rich and potassic alt'n - kfsp veining
458.69	468.56	ANDESITE QUARTZ VEIN ZONE	minor py +/-cpy diss assoc w/ qtz veining in places. Kfsp - random and bower, locally mottled, minor diss mt
468.56	478.76	QUARTZ MONZONITE	slightly mottled dark to medium green, black mt stringers assoc w/ grey smokey qv. Diss mt. Py +/-cpy - diss and stringers form - minor: slightly carbonated
478.76	479.62	SYENITE	Plagio and kfsp qtz phenocrysts up to 2mm length embedded in brown, fine, potassic alt'd - bt rich matrix. Barren. Cut by randomly orientated kfsp veinlets
479.62	484.72	QUARTZ MONZONITE	Diss and stringer py +/-cpy assoc with smokey grey qtz veining and mt. Mt veining + diss found within qv locally. Cut by randomly orientated kfsp. All veining has no preferred orientation
484.72	487.64	SYENITE	Plagio and kfsp qtz fbt phenocrysts in fine, brown bt altered matrix, cut by randomly orientated kfsp veining and qt veining. Bt maybe primary + alternation product - barren.
487.64	498.28	QUARTZ MONZONITE	Py +/- cpy stringers + diss, bound by qtz, smokey grey, assoc w/ mt in places. Mt stringers/veinlets + diss, minor kfsp veinlets.

Hole Number:

KN-02-03

From (m)	To (m)	Rock Type	Comments
498.28	502.01	SYENITE	Plagio, kfes, qtz, bt phenocysts in brown fine matrix with 1 and 2 degree bt. Barren post mineralization, alt by randomly orientated kfsp veining.
502.01	504.07	QUARTZ MONZONITE	Colonic smokey/grey qtz flooding assoc with massive py +/- cpy. Wide monzo diorite protolith evident. Sample constitutes mainly of qtz vein. Minor cotb- slight fizzing.
504.07	505.16	SYENITE	Barren veining is randomly orientated, very minor fizz with HCl, possible carb.
505.16	508.1	QUARTZ MONZONITE	Minor py diss and stringers assoc with smokey qtz, randomly orientated. Cut by later stage pink kfelspar veining. Mt. Veining. Monzodiorite protolith evident.
508.1	514.79	SYENITE	Barren, kfsp qtz veining randomly orientated, not assoc.
514.79	541.31	QUARTZ MONZONITE	Py +/- cpy diss + stringers assoc with qv - smokey/grey - c'donic. Py infilling cracks in c'donic qv - randomly orientated. Kfsp veining random. Monzo protolith visible.
541.31	543.68	SYENITE	Barren, kfsp and qtz veining randomly orientated, not assoc. Bt altered.
543.68	573.61	QUARTZ MONZONITE	Py +/- cpy diss and stringers qtz veining flooding, brecciated locally and cut by discontinuous kfsp stringers. Massive py assoc with smokey/grey qtz. Protolith evident.
573.61	584.42	SYENITE	Barren, kfsp veining - randomly orientated.
584.42	695.71	QUARTZ MONZONITE	Py +/- cpy stringer -assoc with smokey/grey qv and diss in qv and monzodiorite, protolith visible locally. Minor kfsp veining cutting smokey grey qv veining is randomly orientated in local siliceous portions.
695.71	696.09	QUARTZ VEIN	Smokey/grey cholecedonic qv, ~40 cm long, Diss py +/- cpy +infilling erodes in qv. Later generotia, milky white, vuggy qv cutting across. Py with my inclusions.
696.09	714.35	QUARTZ MONZONITE	Py +/- cpy - mainly diss- rare stringers. Assoc with smokey/grey qv and mt diss. Protolith destroyed locally. Inc mt ~20% locally ~10 cm smokey/grey c'donic with gypsum clump assoc with green mafic chlorite.
714.35	727.06	ANDESITE POLYLITHIC TUFF	Peppered texture, black mt dissem with white 1 deg plagio + quartz phenocysts in monzodiorite. localize incr in kfsp veining. Smokey/grey qv assoc with mt massive diss. light green/grey vfg matrix med to very coarse sized mafic chloritic, plagioclase, qtz and monzo frags. Py and cpy +/- diss in matrix and frags. Chlorite infilling jts locally. Randomly orientated kfsp + qv + hairline structures. Incr. kfsp veining. Toodoggone Formation to EOH.

Hole Number:

KN-02-03

From (m)	To (m)	Rock Type	Comments
727.06	733.36	MOTTLED SPOTTED UNIT	Pale grey matrix probably fine grained qtz + plagioclase. Anhedral to subhedral dark green mafic clumps, size range btwn 1mm to 5mm diameter. Localized plagio + qtz phenocrysts. Clasts are randomly aligned. Possibly sili + seri. Darker grey portions. Less falsic?
733.36	738.91	ANDESITE POLYLITHIC TUFF	Medium grey fine grain w/ five to ~10cm diameter fragments in tuff matrix . Polyolithic qtz monzodiotite, vnlt cross fragments. Outline of fragments faint. Localized potassic portion
738.91	741.44	MOTTLED SPOTTED UNIT	Pet. Sample marked. Moderately silicified, wkly sericitized. Dark green mafic clumps, anhedral to subhedral, size range btwn 1mm to 5mm diameter, in pale to medium grey matrix. Medium plagio + qtz + pyroxene? Phenocrysts in matrix
741.44	744.33	ANDESITE POLYLITHIC TUFF	Darker grey coloration, more silicified. Py disseminations. Minor ghost outlined fragments. Polyolithic tuft.
744.33	746.18	MOTTLED SPOTTED UNIT	
746.18	770.23	ANDESITE POLYLITHIC TUFF	

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	11.25	CASING							
0.00	11.25						3	-2	-2
11.25	135.35	ANDESITE FLOW							
11.25	11.38	Fine-grained light green silicic chloritic	2.0	0.5	QVN	10 Light green/grey, green chloritic, white/grey plag crystals, py +/- cpy stringers and veinlets bound by dark green chlorite vein in some places, bound by vuggy qtz vein. Weak breccia.	101702	0.129	0.335
11.38	11.81	Fine-grained light grey sericitic silicic	2.0	0.5	QVN	15 Qtz veining randomly orientated, associated with py +/- cpy stringers + diss. Gouge rich, about 10cm thick, sericitized and siliceous portion-patchy. Protolith destroyed.	101703	0.135	0.36
11.81	13.09	Fine-grained light green silicic chloritic	1.0		QVN	2 Sericitized and siliceous altered portion. Py mineralization assoc. with qtz veining +/- carbonate. Chl rich portions. Protolith destroyed.	101704	0.098	0.242
13.09	13.83	Fine-grained light grey sericitic silicic	2.0	0.5	QCV	5	101705	0.041	0.254
13.83	15.66	Fine-grained light green silicic chloritic	2.0	0.5	QCV	5 Py stringers bound by qtz +/- carb veinlets, randomly orientated, assoc with chl in places. Incompetant broken zone. Light grey sericitized and silicified zone.	101706	0.111	0.175
15.66	16.15	Fine-grained light grey silicic sericitic	3.0	0.5	QVN	10 More silicification than seritization. 10cm portion with about 10% py- veinlet form assoc with carbonate veining. Protolith destroyed.	101707	0.057	0.327
16.15	18.09		3.0	0.5	QVN	10	101708	0.017	0.26
18.09	20.07		3.0	0.5	QVN	10 Py stringers and veinlets cut by fine gouge filled joint, parallel to core axis-possible movement. Diss py also present, seritization and silicification, 2cm wide qtz veinbound by grey thin stringers at 45 degrees, diss within vein.	101709	0.084	0.313
20.07	21.95		3.0	0.5	QVN	10 Py veins, diss also present. Minor carbonate veins in vuggy qtz vein. Protolith destroyed.	101710	0.107	0.261
21.95	23.80		3.0	0.5	QVN	10	101711	0.139	0.331
23.80	25.72		3.0	0.5	QVN	10	101712	0.117	0.306

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
25.72	27.88	Fine-grained light grey silicic sericitic	3.0 0.5	QVN	10 Fuchsite, with the silicified alteration, running parallel to core axis. Minor fault zone with clay material, diss py above the minor fault. Fauksite also assoc. with gouge zone.	101713	0.199	0.61
27.88	29.89		3.0 0.5	QVN	10 py stringers/veins and diss, surrounded by green mafic specks, probably chlorite. Less silicified portion with more chlorite and sericite altered, py stringers parallel to core axis gouge zone.	101714	0.138	0.521
29.89	31.19		3.0 0.5	QVN	10 Randomly orientated joints infilled by white/grey clay gouge material in silicified alteration. Py veinlets crosscutting.	101715	0.047	0.321
31.19	33.20		3.0 0.5	QVN	10 Less altered volcanic litho with the sericitized/silicified zone. Py stringers crosscutting. Minor fault zone.	101716	0.197	0.385
33.20	33.97		3.0 0.5	QVN	10 About 25cm fault zone with grey clay and green volcanic portion. Diss py in gauge zone. Silicified zone after fault zone. Qtz + volcanic fragments cemented weakly by clay gouge.	101717	0.079	0.415
33.97	36.16	Fine-grained light green chloritic silicic	2.0 0.5	QVN	15 Volcanic flow, chlorite alteration, py +/- cpy veinlets associated with quartz veining +/- chlorite in places, veining randomly orientated. Minor silicified light grey zones. Minor fault zones.	101718	0.21	0.525
36.16	38.11		2.0 0.5	QVN	15 Volcanic flow, chloritic, py +/- cpy veinlets associated with qtz veining, chloritic in places, veins random orientation, siliceous portions- grey colour. Minor fault zone, infilled clay, sericite, py.	101719	0.205	0.528
38.11	39.41		2.0 0.5	QVN	15	101720	0.166	0.484
39.41	41.95		2.0 0.5	QVN	15	101721	0.193	0.495
41.95	42.64		2.0 0.5	QVN	15	101722	0.132	0.271
42.64	44.56		2.0 0.5	QVN	15 More chloritic dark green and light grey siliceous portions, associated with py stringers + gauge material infilling joint.	101723	0.202	0.542
44.56	46.48	Fine-grained medium green chloritic silicic	2.0 0.5	QCV	10 Dark green chloritic and felsic forming patchy/matted texture. Py stringers associated with qtz vein, smokey grey in places, py stringers bound by thin chlorite stringers, random orientation, crosscutting. Py also diss in vol.	101724	0.213	0.414

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
46.48	48.19	Fine-grained medium green chloritic silicic	2.0	0.5	QCV	10 25cm minor fault zone, volcanic fragments cemented by clay gouge material. Py stringers present in fault zone. Py stringers associated with qtz vein, random orientation, crosscutting.	101725	0.22	0.496
48.19	49.38	Fine-grained light grey silicic	3.0	0.5	QCV	15 silicified zone, qtz vein, associated with py stringers +/- carbonate, weak fizzing with HCl. Random orientation, crosscutting. Minor, less silicified mafic volcanic portions. 5k% py associated with increased carb + qtz vein. Diss py.	101726	0.132	0.386
49.38	50.49	Fine-grained medium grey pink silicic sericitic	3.0	0.5	QVN	7 Patchy-grey/smokey silica within pink/grey seritization giving DGY pink lacey mottled appearance. Diss py with grey silicification. Minor py stringers associated with smokey/grey qtz vein.	101728	0.08	0.286
50.49	51.90		3.0	0.5	QVN	7 Less altered green volcanic portions with diss py. Py stringer bound by smokey grey qtz with grey black nonmagnetic lining qtz vein outer boundary, about 1 cm displacement by minor joint, 90 degrees.	101729	0.098	0.41
51.90	53.93		3.0	0.5	QVN	7 Silicification and sericitization as above. Local silicified sections with increased diss py, about 5-7% in 10cm portion.	101730	0.079	0.287
53.93	55.10		3.0	0.5	QVN	7 Silicification and sericitization as above. Qtz vein at 90 degrees perpendicular to core axis, qtz vein +/- py stringers. Diss py. Minor white, white, fine soapy, possibly talc infilling minor joint.	101731	0.028	0.271
55.10	56.59	Fine-grained medium green chloritic silicic	2.0	0.5	QVN	7 Less altered volcanic flow. Py stringers assoc. with qtz vein/flooding, py stringers randomly orientated, cross-cutting. Diss py in the volcanics and minor stringers bound by thin chlorite. Qtz vein boundaries not defined.	101732	0.182	0.47
56.59	56.97		2.0	0.5	QVN	7 Portion with increased qtz +/- py veining. Qtz vein boundaries not defined, py diss in qtz rich zones and volcanics-minor. Py veinlet bound by chl stringer, within qtz vein-boundary not defined.	101733	0.209	0.786
56.97	58.75		2.0	0.5	QVN	7 py stringers associated with qtz vein in places, py veinlets bound by chl in places. Minor broken incompetent zone with gouge material.	101734	0.186	0.457
58.75	60.64		2.0	0.5	QVN	7 Py stringers assoc. with qtz vein +/- chl, no preferred orientation, minor gouge zone. Portions with magnetite mineralization-minor, about 2% mt diss- magnetic, difficult to see.	101735	0.163	0.52

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
60.64	62.04	Fine-grained medium green chloritic silicic	2.0 0.5		QVN 7		101736	0.173	0.441
62.04	62.45		2.0 0.5		QCV 10	Minor broken zone. Py stringer assoc with qtz vein. Diss py in volcanic. Veinlets randomly orientated-crosscutting. Volcanic-mafic green and felsic slightly mottled/patchy.	101737	0.177	0.609
62.45	63.51		2.0 0.5		QCV 10		101738	0.182	0.538
63.51	65.21		2.0 0.5		QCV 10		101739	0.198	0.535
65.21	66.01	Fine-grained medium green chloritic sericitic	2.0 0.5	2	QVN 10	Mottled green chl and yellow sericite. Mt, magnetic, diss, mottled with yellow sericite alteration. Qtz vein randomly orientated. Py stringers bound by qtz +/- chl stringers approx. 90 degrees. Qtz + mt veinlet parallel to core axis.	101740	0.119	0.315
66.01	67.81		2.0 0.5	2	QVN 10	Portions with less sericite alteration, and magnetite.	101741	0.162	0.516
67.81	69.57		2.0 0.5	2	QVN 10		101742	0.336	1.27
69.57	70.12		2.0 0.5	2	QVN 10		101743	0.227	0.687
70.12	73.51		2.0 0.5	2	QVN 10		101744	0.19	0.521
73.51	75.34		2.0 0.5	2	QVN 10		101745	0.181	0.51
75.34	77.49		2.0 0.5	2	QVN 10		101746	0.24	0.532
77.49	79.33		2.0 0.5	2	QVN 10		101747	0.401	0.984
79.33	81.56		2.0 0.5	2	QVN 10		101748	0.159	0.352
81.56	83.22		2.0 0.5	2	QVN 10		101749	0.142	0.368
83.22	85.21		2.0 0.5	2	QVN 10		101750	0.129	0.361
85.21	87.16		2.0 0.5	2	QVN 10		101751	0.211	0.474
87.16	87.75		2.0 0.5	2	QVN 10		101752	0.299	0.546
87.75	88.27	Fine-grained medium green chloritic silicic	2.0 0.5	1	QVN 15	Silicified and chlorite rich portions separated by py stringers, generally perpendicular and parallel to core axis, crosscutting. Py diss.	101754	0.159	0.581
88.27	90.34		2.0 0.5	1	QCV 10	Py assoc with qtz vein, +/- chl, randomly orientated. Minor qtz vein assoc with magnetite. Qtz veinlet cut by mt veinlets. Mt content-trace.	101755	0.186	0.433
90.34	92.33		2.0 0.5	1	QCV 10	Py stringer assoc with qtz vein +/- chl, randomly orientated, crosscutting. Minor diss py in volcanics. About 3cm mt vein assoc with qtz vein and py.	101756	0.212	0.459

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
92.33	94.20	Fine-grained medium green chloritic silicic	2.0 0.5	1	QCV	10 Py stringers assoc with qtz vein, randomly orientated, crosscutting, minor diss in volcanic. Minor sericitized portions. Trace mt-diss in places and up to about 3% in places .	101757	0.157	0.405
94.20	96.10		2.0 0.5	1	QCV	10	101758	0.207	0.518
96.10	96.90		2.0 0.5	1	QCV	10	101759	0.153	0.371
96.90	98.40		2.0 0.5	1	QCV	10 Minor pink/orange kfsp stringers assoc with qtz +/- chl +/- py veining. Diss py in volcanics. Incompetant portions. Weakly sericitized portions, green/yellow colour. Mt assoc with qtz vein.	101760	0.2	0.45
98.40	98.87		2.0 0.5	1	QCV	10 Py stringers bound by smokey grey qtz vein, randomly orientated, assoc with kfsp + chl.	101761	0.14	0.425
98.87	100.28		2.0 0.5	1	QCV	10	101762	0.156	0.427
100.28	103.01		2.0 0.5	1	QCV	10 qtz vein-10cm assoc with about 3% py, sericite +carbonate pervasive. Py bound by qtz veining stockwork. Volcanics slightly mottled, broken, locally incompetent, very weakly magnetic.	101763	0.133	0.343
103.01	104.83		2.0 0.5	1	QCV	10	101764	0.111	0.325
104.83	106.82		2.0 0.5	1	QCV	10 Py stringers bound by chl stringers + qtz veins, crosscutting, randomly orientated. 2% magnetite in places-diss. Carbonate alteration. Qtz + carb veining.	101765	0.15	0.447
106.82	108.81		2.0 0.5	1	QCV	10	101766	0.091	0.213
108.81	111.02		2.0 0.5	3	QMTVN	10 Py +/- cpy (1 clast) in qtz/carb vein, bound by chl, crosscut by py stringer bound by chl-minor displacement. Mt diss, stringers assoc with qtz vein +/- carb. Mottled in places, chl+plag, weak sericitization.	101767	0.124	0.273
111.02	111.93		2.0 0.5	3	QMTVN	10 Py veinlet bound by chl crosscut by smokey qtz vein, weak mottled darker grey magnetite disseminations and ser vol.	101768	0.094	0.255
111.93	112.60		2.0 0.5	3	QMTVN	10 Py veinlet associated with mt vein, bound by smokey grey qtz, cut by randomly orientated qtz.	101769	0.198	0.464
112.60	114.11		2.0 0.5	3	QMTVN	10 Less veining 7%, less competent-broken. Qtz, 1 carbonate vein. Py stringers +/- qtz vein +/- carb +/-mt, veinlet, diss mt.	101770	0.142	0.283
114.11	115.61		2.0 0.5	3	QMTVN	10 Py +/- cpy boudinaged in qtz +/- carb 10cm veinlet. Py +/- carbonate veinlet bound by chl parallel to core axes. Qtz stockwork, cut by py stringer, minor diss py.	101771	0.121	0.265

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
115.61	116.75	Fine-grained light green chloritic	2.0 0.5	1	QMTVN	5 Peppered, white plag and green mafic specks, yellow sericitized portions, less chloritic, more felsic, reduced veining. Qtz +/- carb, about 45 degrees to core axis, py +/- cpy clast with vein, mt +/- qtz vein-minor.	101772	0.066	0.163
116.75	118.51		2.0 0.5	1	QMTVN	5	101773	0.118	0.263
118.51	120.62	Fine-grained medium green chloritic	2.0 0.5	2	QCV	10 Py delineated by qtz veining and chl stringers, no preferred orientation. Minor kfsp stringer. Diss mt. Dark green chl portions. Localized sericitized altered zones. Qtz vein stockwork.	101774	0.08	0.178
120.62	123.02		2.0 0.5	2	QCV	10 Peppered, qtz + carb veining +/- mt stringer-diss as well. Mottled in places, yellow sericite alteration and chloritic portions. Qtz stockwork, more felsic in places.	101775	0.137	0.273
123.02	124.97		2.0 0.5	2	QCV	10	101776	0.141	0.265
124.97	125.57		2.0 0.5	2	QCV	10 Minor fault, gouge/clay rich-about 10cm portion, followed by diss py.	101777	0.167	0.324
125.57	126.66	Very fine grained medium green chloritic	0.5 0.5		QVN	3 Massive, no texture, green, mafic, very fine grained. Minor qtz veining and weak diss py.	101778	0.194	0.605
126.66	127.86	Fine-grained medium green chloritic silicic	2.0 0.5	2	QKVN	10 Diss py, assoc with qtz rich portions, diss in vol, minor kfsp veining. Carbonate stringers, weak effervesence with HCl. Diss mt and minor stringers.	101780	0.279	0.565
127.86	128.56	Fine-grained light green broken chloritic	0.5			Cpy clast, about 5cm in diameter, smokey/grey qtz vein, limiting mt stringers. Incompetant broken zone.	101781	0.138	0.325
128.56	129.48	Fine-grained light green chloritic	2.0 0.5	1	QVN	7 Speckled, mafic light green with white plag specks-peppered. Diss py, some bound in qtz veining. White felsic portions.	101782	0.127	0.38
129.48	130.68	Very fine grained medium green chloritic	0.5 0.5			Euhedral py crystals in stringer parallel to core axis cut at approximately 90 degrees by qtz veins. Qtz veining stockwork.	101783	0.257	0.671
130.68	132.47	Fine-grained medium green grey chloritic silicic	1.0 0.5		QMTVN	7 Minor sericite alteration, py stringers rare, are 90 degrees to core axis, minor zeolite infilling joint. Euhedral py infilling joint, 45 degrees to core axis. Chl specks giving localized mottled texture.	101784	0.199	0.409
132.47	133.16	Fine-grained light grey silicic sericitic	2.0 0.5		QKVN	5 Sericitized and silicified portion. Py veinlets and minor py +/- cpy. Chloritic portions. Minor py stringers associated with qtz vein and kfsp.	101785	0.413	0.681
133.16	135.35	Fine-grained dark green chloritic silicic	1.0 0.5		QKVN	7 Minor felsic grey portions, peppered. Monor py diss associated qtz +/- carbonate and in volcanic.	101786	0.205	0.37

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
135.35	136.65	ANDESITE ALTERED FLOW								
135.35	136.65	Fine-grained light grey silicic sericitic	1.0	0.5	QKVN	5 Sericitized, silica and carbonate. Cut by smokey qtz vein, py +/- cpy and kfsp. Minor darker chl rich portions.	101787	0.027	0.129	
136.65	137.11	ANDESITE FLOW								
136.65	137.11	Fine-grained medium green chloritic silicic	2.0	0.5	QVN	3 Py mainly disseminated, massive-minor py stringers within qtz vein.	101788	0.245	0.469	
137.11	138.61	EPIDOTE ZONE								
137.11	138.61	Fine-grained red green epidote chloritic	5.0	0.5	1	QCV	1 About 30% epidote, high carbonate content + chl=propylitic zone. Diss py <= 4%, minor veining, red staining-hematite, minor magnetite about 1%.	101789	0.363	0.85
138.61	145.83	ANDESITE ALTERED FLOW								
138.61	139.34	Fine-grained green chloritic carbonate	2.0	0.5	1	QKVN	7 Ghost mottled texture, white plag/qtz clasts. Chloritized, carbonate and epidote alteration. Diss py. Portion of py assoc with qtz/carbonate.	101790	0.118	0.179
139.34	140.14	Fine-grained green-grey chloritic silicic	3.0	0.5	1		Orange potassic portions-minor, qtz veinlets assoc with mt diss and minor pale green epidote stringers. Diss py-about 4% in places, veinlets random.	101791	0.153	0.234
140.14	141.78	Fine-grained green chloritic carbonate	2.0	0.5	1	QKVN	7 Ghost mottled texture, white plag/qtz clasts. Chloritized, carbonate and epidote alteration. Py in stringers + diss. Minor hem-red stain. Minor mt stringer.	101792	0.141	0.312
141.78	142.68	Fine-grained grey-green silicic potassic	4.0	0.5	1	QKVN	5 About 5% diss py in places within silicified portion, weakly carbonated and potassic portion. Epidote and diss py.	101793	0.447	0.681
142.68	143.58		4.0	0.5	1	QKVN	5	101794	0.2	0.336
143.58	143.96		4.0	0.5	1	QKVN	5 About 5% diss py in places within silicified portion, weakly carbonated and potassic portion. Epidote and diss py. Minor fault zone, infilled by clay/gouge material, approx parallel to core axis-0 degrees.	101795	0.32	0.507
143.96	145.83		4.0	0.5	1	QKVN	5	101796	0.199	0.446
145.83	249.68	ANDESITE FLOW								
145.83	147.79	Fine-grained medium green chloritic carbonate	2.0	10	QMTVN	10 Speckled portions of dark grey mt and green vol carbonated portions. Py +/- cpy assoc with qtz vein +/- mt. Kfsp stringers-minor. Slight qtz brecciated in volacnic.	101797	0.313	0.613	

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
147.79	149.50	Fine-grained medium green chloritic carbonate	2.0	10		Py stringers and diss within qtz vein +/- chl, slightly vuggy qtz vein. Diss mt about 10%, assoc with qtz vein+py in places.	101798	0.315	0.656
149.50	151.90	Fine-grained dark green chloritic	1.0	0.5	10	QKVN 10 Gaseous vesicles infilled by mafic material/chloritic, about 2mm in diameter. Py +/- cpy surrounded by qtz vein. Minor kfsp veinlets. Diss mt.	101799	0.126	0.295
151.90	153.29		1.0	0.5	10	QKVN 10 Gaseous vesicles infilled by mafic material/chloritic, about 2mm in diameter. Py +/- cpy surrounded by qtz vein. Minor kfsp veinlets. Diss mt. Minor portions with speckled texture-peppered.	101800	0.128	0.237
153.29	155.98		1.0	0.5	10	QKVN 10 Gaseous vesicles infilled by mafic material/chloritic, about 2mm in diameter. Py +/- cpy surrounded by qtz vein. Minor kfsp veinlets. Diss mt. Pale apple green epidote bound in qtz vein. Py +/- cpy bound by qtz/carbonate vein. Qtz stockwork.	101801	0.107	0.229
155.98	158.61		1.0	0.5	10	QKVN 10 Gaseous vesicles infilled by mafic material/chloritic, about 2mm in diameter. Py +/- cpy surrounded by qtz vein. Minor kfsp veinlets. Diss mt. 5cm carbonate/qtz vein.	101802	0.113	0.276
158.61	159.21		1.0	0.5	10	QKVN 10 Gaseous vesicles infilled by mafic material/chloritic, about 2mm in diameter. Py +/- cpy surrounded by qtz vein. Minor kfsp veinlets. Diss mt. Slightly lighter grey colour, weakly siliceous and carbonated. Py stringers associated with qtz and carbonate.	101803	0.117	0.242
159.21	160.63		1.0	0.5	10	QKVN 10 Gaseous vesicles infilled by mafic material/chloritic, about 2mm in diameter. Py +/- cpy surrounded by qtz vein. Minor kfsp veinlets. Diss mt. About 3cm fault zone-infilled by gouge/clay material. Kfsp stringers, random orientation.	101804	0.09	0.165
160.63	161.81		1.0	0.5	10	QKVN 10	101806	0.13	0.248
161.81	162.56		1.0	0.5	10	QKVN 10 Gaseous vesicles infilled by mafic material/chloritic, about 2mm in diameter. Py +/- cpy surrounded by qtz vein. Minor kfsp veinlets. Diss mt. Fault zone, gouge clay material.	101807	0.144	0.292
162.56	164.95	Fine-grained medium green chloritic sericitic	1.0	0.1	1	QKVN 10 Py +/- cpy associated with smokey grey qtz vein +/- carb, kfsp associated in places. Minor diss mt.	101808	0.133	0.238
164.95	167.02		1.0	0.1	1	QKVN 10	101809	0.143	0.235
167.02	168.32		1.0	0.1	1	QKVN 10	101810	0.114	0.167

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
168.32	170.89	Fine-grained medium green chloritic sericitic	1.0 0.1	1	QKVN	10	101811	0.153	0.238
170.89	172.82	Fine-grained light green sericitic chloritic	1.0 0.1	2	QKVN	10 slightly lighter grey due to slightly more sericitization. Py +/- cpy associated with smokey/grey qtz vein +/- carb. Minor kfsp and diss mt. Mottled in places.	101812	0.187	0.315
172.82	173.51		1.0 0.1	2	QKVN	10	101813	0.078	0.141
173.51	174.86		1.0 0.1	2	QKVN	10 slightly lighter grey due to slightly more sericitization. Py +/- cpy associated with smokey/grey qtz vein +/- carb. Minor kfsp and diss mt. Mottled in places. Mt vein bound by qtz vein, portion with slightly more diss mt.	101814	0.173	0.298
174.86	176.50		1.0 0.1	2	QKVN	10	101815	0.147	0.276
176.50	178.15		1.0 0.1	2	QKVN	10 slightly lighter grey due to slightly more sericitization. Py +/- cpy associated with smokey/grey qtz vein +/- carb. Minor kfsp and diss mt. Mottled in places. Increased kfsp veinlets and stringers, associated with vuggy qtz vein. Portions with slightly more diss pyrite, about 2%.	101816	0.128	0.247
178.15	181.05		1.0 0.1	2	QKVN	10	101817	0.028	0.244
181.05	182.86		1.0 0.1	2	QKVN	10	101818	0.159	0.309
182.86	184.40		1.0 0.1	2	QKVN	10 Broken portion, incompetent.	101819	0.161	0.289
184.40	187.06		1.0 0.1	2	QKVN	10 About 3cm qtz vein tinted by pale green colour-possibly epidote. Subhedral qtz within the vein. Qtz stringer-with associated py + cpy stringer.	101820	0.12	0.245
187.06	188.86		1.0 0.1	2	QKVN	10 Slightly more diss py, about 3 % in places	101821	0.133	0.257
188.86	190.16		1.0 0.1	2	QKVN	10 Broken faulted zone, incompetent.	101822	0.181	0.348
190.16	192.40	Fine-grained light green chloritic	1.0	2	QKVN	10 Py striger assoc. with quartz vein, py also diss in volcanic. Minor py strigner bound by chl. Diss mt, about 2-3% kfsp stringers. Veinlets show no preferred orientation.	101823	0.11	0.188
192.40	194.16		1.0	2	QKVN	10 Minor sericite/chlorite zones, minor epidote(possibly prpylitic + phyllic zones). Mottled texture- dark diss mt and yellow pervasive sericite altered matrix.	101824	0.137	0.229
194.16	196.00	Fine-grained light grey sericitic silicic	2.0 0.5		QVN	10 Py +/- cpy stringers lined by thin chl stringers in places, assoc with quartz vein. Py +/- cpy also diss. Peppered and mottled in places. Broken zone, incompetent zone at end of sample.	101825	0.133	0.264

Hole Number: KN-02-03

From	To	Rock Type		Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
196.00	197.62	Fine-grained sericitic	medium green chloritic	1.0	0.1	QMTVN	7 Possible minor silicification. Localized pale grey sericitized portions. Carb + kfsp lining it. Minor py stringers bound by smokey qtz and chl, weakly magnetic, mt.	101826	0.11	0.189
197.62	198.83	Fine-grained chloritic	light grey sericitic	2.0	0.5	2 QMTVN	10 Slightly more veining approx 10% and about 2% py +/- 0.5% cpy + diss, sericitized. Mt stringers + diss about 2% veining random;y orientated. Minor kfsp stringers. Brown patches.	101827	0.149	0.282
198.83	199.84			2.0	0.5	2 QMTVN	10 Increased mt approx 7%-diss + minor stringer-localized. Py stringers bound by chl, in places, associated with qtz vein + mt, cut by pale pink, randomly orientated kfsp.	101828	0.099	0.168
199.84	201.90			2.0	0.5	2 QMTVN	10 Py +/- cpy stringers bound by thin chl veinlets assoc by qtz vein-boundaries not defined in places, cut by kfsp veinlets in places. Dirty dark brown portions bt, possibly 2 degrees.	101829	0.185	0.32
201.90	202.44	Fine-grained	light grey silicic sericitic	3.0	0.5	2 QMTVN	10 Highly silicified + moderately sreicitized portion, py +/- cpy strigners + diss, assoc with smokey qtz vein +/- mt veinlets-randomly oriented.	101830	0.12	0.262
202.44	203.37	Fine-grained biotite	medium green chloritic	3.0	0.5	QVN	7 Dark dirty brown coating-Bt, py +/- cpy diss + stringers associated with qtz vein, randomly oriented.	101832	0.152	0.293
203.37	205.14	Fine-grained biotite	green brown chloritic	3.0	0.5	QVN	7 Mottled, dirty brown bt with felsic patches lined by chl. Py +/- cpy diss and minor stringers bound by thin chl. Minor epidote lining joints.	101833	0.152	0.651
205.14	206.06	Fine-grained chloritic biotite	medium green grey	1.0	0.1	QVN	5 Minor py +/- cpy stringers associated with smokey/grey qtz, randomly oriented +/- chl locally-minor diss. Kfsp stringers.	101834	0.147	0.26
206.06	207.11	Fine-grained biotite	green-grey chloritic				Patchy, minor kfsp strigners associated with qtz vein in places. Minor diss py. Qtz/feldspar + plag fragments-slightly brecciated texture-bt rich, py +/- cpy, minor stringers.	101835	0.12	0.221
207.11	208.37						Minor py stringers associated with qtz vein +/- kfsp, bt and sericite alteration.	101836	0.143	0.247
208.37	209.31	Fine-grained carbonate	light green sericitic	2.0	0.1	QMTVN	7 Minor py stringers+diss, mt + kfsp stringers- randomly oriented. Dark dirty brown-bt-patchy-mafic rich portion chl.	101837	0.161	0.324
209.31	210.39	Fine-grained sericitic	light green chloritic	2.0	0.1	QKVN	7 Minor bt. Py +/- cpy stringers associated with qtz vein, bound by chl, disseminated in places. Cut by kfsp veinlets, randomly oriented, Bt	101838	0.19	0.359

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
210.39	211.94	Fine-grained light green chloritic sericitic	2.0	0.1	QKVN	7 Mottled-dark bt patches and sericite yellow altered portions. Diss py associated with qtz vein in places. Minor kfsp stringers.	101839	0.114	0.196
211.94	213.19		2.0	0.1	QKVN	7 Minor Bt within sericitized portions-yellow. Minor mt associated with qtz +/- kfsp, green mafic chl stringers.	101840	0.16	0.326
213.19	214.27		2.0	0.1	QKVN	7 Increased bt, localized moderate sericite alteration-yellow/green. Qtz veining associated with py +/- cpy +/- kfsp +/- chl.	101841	0.117	0.192
214.27	215.15		2.0	0.1	QKVN	7 Minor faulted zone-gouge/clay rich, very light grey colour, cementing material. Py +/- cpy stringers + diss. Qtz, kfsp + mt veinlets randomly oriented, associated with py stringers in places. Minor bt-patchy-locally.	101842	0.127	0.208
215.15	217.28		2.0	0.1	QKVN	10 Py +/- cpy stringers, associated with qtz vein, chl and kfsp in places, randomly oriented. Bt and chl patchy. Pervasive sericite alteration. Minor epidote.	101843	0.146	0.239
217.28	219.00	Fine-grained medium green chloritic	2.0		QKVN	10 More chlorite-less bt and sericite alteration, minor py stringers, more diss. Kfsp veinlets dom.-randomly oriented. Py stringers associated with kfsp.	101844	0.139	0.249
219.00	220.38		2.0			Minor mt assoc with qtz+kfsp+carbonate. Py stringers associated with chl + qtz vein-randomly oriented.	101845	0.164	0.305
220.38	222.51	Fine-grained medium green sericitic chloritic	2.0	0.1	QKVN	10 pervasive sericite alteration. Bt alteration. Patchy mafic chloritic portions. Py +/- cpy stringers associated with qtz+kfsp+chl veinlets. Mottled appearance.	101846	0.13	0.247
222.51	223.85	Fine-grained medium green grey sericitic chloritic	2.0	0.1	QKVN	10 Minor bt rich portion. Slightly fewer veins about 5%. Less sericite alteration. Py +/- cpy stringers and diss.	101847	0.127	0.251
223.85	226.00		2.0	0.1	QKVN		101848	0.227	0.401
226.00	227.83		2.0	0.1	QKVN		101849	0.147	0.289
227.83	229.99	Fine-grained light green chloritic	1.0		QMTVN	7 Py mainly disseminations, associated with qtz vein locally. Kfsp bound by qtz vein and kfsp surrounding mt diss-vuggy in places. Main qtz vein associated with diss py is parallel to core axis.	101850	0.129	0.24
229.99	230.78		1.0		QMTVN	7 Main qtz vein assoc with diss is generally parallel to core axis-0o, also associated with minor kfsp locally.	101851	0.124	0.273
230.78	232.79		1.0		QMTVN	7 Diss py +/- cpy associated with chl clasts in places and qtz vein stringers. Minor kfsp veinlets. Veining shows random orientation. Py stringers assoc qtz vein.	101852	0.186	0.325

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
232.79	234.86	Fine-grained medium green grey chloritic biotite	2.0		QVN 10	Py stringers associated with qtz vein +/- kfsp. Diss encompassed by green mafic chl in places. Bt rich portion with py diss.	101853	0.419	0.526
234.86	236.70	Fine-grained				Increased bt, white subhedral fine to 0.5cm across sized phenocrysts, cut by qtz vein + kfsp stringers, slightly mottled with green chlorite rich specks-dyke?	101854	0.12	0.244
236.70	237.21	Fine-grained light grey sericitic potassic	2.0		QKVN 7	Minor fault zone, potassic, sericitized, minor silicification, chloritic portions. Cut by random oriented kfsp veinlets.	101855	0.187	0.29
237.21	239.04	Fine-grained light green chloritic	2.0	0.5	QKVN 7	peppered texture, diss py and stringer form, bound by qtz vein showing minor vuggy dissolution texture, +/- minor carbonate. Cut by kfsp-randomly oriented.	101856	0.195	0.336
239.04	241.21	Fine-grained				Portion with minor sericite alteration. Py stringer associated with chl, mainly disseminated. Qtz vein associated with kfsp + increased diss py. Bt rich portions.	101858	0.127	0.193
241.21	243.03	Fine-grained medium green grey chloritic biotite	2.0	0.5	QKVN 10	Py +/- cpy stringers and diss associated with qtz vein +/- carb +/- kfsp-randomly oriented veinlets. Bt rich portions. Peppered chl + plag/qtz.	101859	0.173	0.247
243.03	245.28		2.0	0.5	QKVN 10		101860	0.117	0.171
245.28	247.39	Fine-grained medium green grey chloritic	1.0		QKVN 5	Py-diss. Qtz and kfsp stringers randomly oriented. Portions with reduced veining. Minor potassic rich 3cm wide zone.	101861	0.142	0.198
247.39	248.26		1.0		QKVN 5	Minor fault zones/gouge clay material infilling joint, roughly 45o to core axis	101862	0.158	0.267
248.26	249.68		1.0		QKVN 5	Minor mt stringer bound by qtz vein, randomly oriented. Minor bt rich portion. Diss py. Minor fault zone-about 45o, almost parallel to core axis. Blue metallic stringer-bornite/covellite, rare?	101863	0.16	0.292
249.68	252.51	QUARTZ VEIN							
249.68	251.47	Fine-grained light grey silicic	2.0	0.5		Sugary granular texture in places, about 100% qtz vein. Cut by py +/- cpy veinlets, diss in places, cut by 2nd generation qtz-random orientation. Minor carbonate, dissolution vuggy texture.	101864	0.186	0.237
251.47	252.51		2.0	0.5			101865	0.415	0.409
252.51	253.73	SYENITE							
252.51	253.73	Fine-grained				Barren, generally gradual contact.	101866	0.212	0.251
253.73	254.17	ANDESITE FLOW							

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
253.73	254.17	Fine-grained medium green grey chloritic biotite	2.0	0.5	QVN	5 Py-diss, higher diss py % associated with qtz vein at beginning of sample. Bt alteration, peppered texture.	101867	0.371	0.411
254.17	256.73	QUARTZ VEIN							
254.17	255.31	Fine-grained light grey silicic	3.0	0.5		Qtz vein cut by minor fault, filled by clay gouge cementing material. Qtz vein associated with massive pyrite, chacedonic in places. Minor epidote in 2nd generation qtz vein.	101868	0.077	0.193
255.31	256.73		3.0	0.5		Qtz vein cut by minor fault, filled by clay gouge cementing material. Qtz vein associated with massive pyrite, chacedonic in places. Minor epidote in 2nd generation qtz vein. More grey colour smokey qtz.	101869	0.154	0.174
256.73	280.69	ANDESITE FLOW							
256.73	258.31	Very fine grained dark green chloritic	2.0	0.5	QKVN	7 Minor sericitized portions associated with kfsp and qtz vein. Minor diss py and stringers in weakly sericitized portions. Veining is randomly oriented.	101870	0.151	0.195
258.31	260.30	Fine-grained dark green chloritic	2.0	0.5	QKVN	7 Increased kfsp veining associated with minor sericitized and carbonated portion.	101871	0.118	0.157
260.30	262.43		2.0	0.5	QKVN	7 Minor portions with increased diss py, appear to be associated with minor bt alteration, mafic chloritic specks and kfsp.	101872	0.142	0.195
262.43	263.16		2.0	0.5	QKVN	7 Minor bt rich portions. Py stringers + diss associated with qtz vein, bound by chl in places, kfsp and qv randomly oriented.	101873	0.11	0.142
263.16	264.02		2.0	0.5	QKVN	7	101874	0.121	0.147
264.02	265.29	Fine-grained medium green grey chloritic biotite	1.0		QKVN	7 Diss py, bt alteration. Kfsp and qtz vein-randomly oriented. Minor py stringer associated with py +/- kfsp. Slightly brecciated, portions with increased py.	101875	0.153	0.188
265.29	266.72		1.0		QKVN	7	101876	0.186	0.212
266.72	268.74		1.0		QKVN	7	101877	0.188	0.252
268.74	269.74		1.0		QKVN	7 diss py. Qtz vein and kfsp-minor-random orientation. Bt alteration. Minor carbonate alteration, weak effervescence with HCl. Portions with increased diss py.	101878	0.241	0.304
269.74	271.44		1.0		QKVN	7 diss py. Qtz vein and kfsp-minor-random orientation. Bt alteration. Minor carbonate alteration, weak effervescence with HCl. Portions with increased diss py. 10cm portion with about 3% pyrite.	101879	0.13	0.187

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
271.44	273.37	Fine-grained medium green grey chloritic biotite	1.0		QKVN	7 diss py. Qtz vein and kfsp-minor-random orientation. Bt alteration. Minor carbonate alteration, weak effervescence with HCl. Portions with increased diss py. 20cm portion with about 3% py.	101880	0.278	0.348
273.37	274.44		1.0		QKVN	7 diss py. Qtz vein and kfsp-minor-random orientation. Bt alteration. Minor carbonate alteration, weak effervescence with HCl. Portions with increased diss py. Slight increase in kfsp stringers.	101881	0.198	0.263
274.44	276.62		1.0		QKVN	7 diss py. Qtz vein and kfsp-minor-random orientation. Bt alteration. Minor carbonate alteration, weak effervescence with HCl. Portions with increased diss py. Minor increase in qtz veining.	101882	0.274	0.309
276.62	278.90		1.0		QKVN	7 diss py. Qtz vein and kfsp-minor-random orientation. Bt alteration. Minor carbonate alteration, weak effervescence with HCl. Portions with increased diss py. Gradual decrease in bt alteration.	101884	0.15	0.212
278.90	280.69	Very fine grained medium green grey chloritic	1.0		QKVN	5 Weak sericite alteration, qtz + kfsp stringers. Minor py diss, stringers bound by qtz vein, cuts qtz + kfsp vein. Py stringers bound by chl in places.	101885	0.112	0.179
280.69	283.04	QUARTZ VEIN							
280.69	282.55	Fine-grained light grey silicic	2.0			10cm syentite dyke defines contact, qtz vein-fine, granular/sugary text in places. Py diss + stringers, randomly oriented. Vuggy, dissolution cavities. Minor epidote.	101886	0.063	0.114
282.55	283.04		2.0			Qtz vein-cutting into syenite dyke.	101887	0.121	0.144
283.04	289.05	SYENITE							
283.04	285.08	Fine-grained brown				Minor volcanic litho within the dyke. Volcanic flow is light grey, speckled, phaneritic mafic/chlorite cut by 45o jt infilled by py + qtz. Dyke is also cut by qtz vein+kfsp+py	101888	0.116	0.132
285.08	289.05						101889	0.205	0.211
287.76	288.71	Very fine grained medium green grey chloritic biotite	2.0	0.5	QKVN	7 Cut by 10cm syenite vein, py mainly diss. Py stringers associated with qtz vein and chl in places. Minor epidote.	101891	0.143	0.156
289.05	287.76		2.0	0.5	QKVN	7 Dark brown-bt alteration. Py stringers associated with qtz vein and chl in places. Minor epidote. Mottled texture.	101890	0.149	0.185
287.76	306	ANDESITE FLOW							

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
287.76	288.71	Very fine grained medium green grey chloritic biotite	2.0 0.5	QKVN	7 Cut by 10cm syenite vein, py mainly diss. Py stringers associated with qtz vein and chl in places. Minor epidote.	101891	0.143	0.156
288.71	289.18		2.0 0.5	QKVN	7 Cut by 25cm syenite vein, py diss associated with qtz + kfsp veinlets, random orientation.	101892	0.221	0.249
289.05	287.76		2.0 0.5	QKVN	7 Dark brown-bt alteration. Py stringers associated with qtz vein and chl in places. Minor epidote. Mottled texture.	101890	0.149	0.185
289.18	291.53		2.0 0.5	QKVN	7 cut by about 10cm syenite vein. Diss py associated with epidote +/- qtz vein. Also associated with kfsp + qtz + chl. Minor carbonate stringers.	101893	0.141	0.13
291.53	293.74		2.0 0.5	QKVN	7 Cut by about 5cm syenite vein. Py stringers associated with chl veins, cut by kfsp, randomly oriented. Patchy bt alteration, moderate sericite alteration.	101894	0.242	0.191
293.74	295.17	Fine-grained medium green chloritic biotite	2.0 0.5	QKVN	7 py stringers associated with chlorite, kfsp and qtz in places. Py diss, veining is randomly oriented.	101895	0.164	0.192
295.17	296.66	Fine-grained medium green chloritic	1.0	QKVN	10 Py diss, and stringer form, associated with qtz + carb + kspars bound by chl stringers. Mt diss bound in qtz + carb	101896	0.159	0.201
296.66	298.38		1.0	QKVN	10	101897	0.134	0.125
298.38	299.46	Fine-grained medium green grey chloritic biotite	1.0	QKVN	10 Py diss and stringers associated with qtz and chl. Slightly sericitized. Patchy bt alteration. Qtz + kfsp veining-randomly oriented.	101898	0.194	0.181
299.46	299.81	Fine-grained lt green-grey sericitic	2.0 0.5	QVN	5 Diss py, minor py stringer associated with qtz vein-smokey grey in places. Gouge/clay 10 cm zone cementing qtz, plag+kfsp clasts.	101899	0.178	0.341
299.81	301.15	Fine-grained medium green grey chloritic biotite	2.0 0.5	QKVN	7 Diss py + stringers associated with qtz vein+kfsp, 4% py in qtz vein locally. Veinlets randomly oriented. Bt alteration gives a dirty brown colour.	101900	0.31	0.347
301.15	302.39		1.0	QKVN	7 Diss + stringer assoc with qtz +/- kfsp +/- carbonate bound by thin chl stringers. Diss py surrounded by chl. Slightly less py, veinlets and veins randomly oriented.	101901	0.365	0.231
302.39	303.53		1.0	QKVN	7 Slight mottled texture-localized decrease in bt alteration. Diss py rimmed by chl. Py also diss in qtz +/- kfsp +/- minor carbonate, weak effervescence with HCl-py forms minor boudinage structures with the qtz vein +/- kfsp vein-cut and displaced $\neq 0.5\text{cm}$ by joint infilled by pyrite.	101902	0.252	0.283
303.53	304.32		1.0	QKVN	7 Less veining $\neq 3\%$. Dominantly qtz vein-minor association with rare mt $\neq 0.5\%$. Py is diss-2%.	101903	0.301	0.314

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
304.32	306.00	Fine-grained medium green grey chloritic biotite	3.0	0.5	QKVN	10 More diss + stringer py associated with kfsp-bright orange. Py stringer also associated with qtz vein, diss rimmed by green/brown rim, probably chl/brown. Blue, metallic-bornite within qtz vein band bound by kfsp.	101904	0.316	0.313	
306	306.72	SYENITE								
306.00	306.72	Fine-grained medium green grey chloritic biotite	2.0	0.1	QKVN	7 Diss py rimmed by chl within bt altered volcanic. Syenite SD dyke-cut by py +/-kfsp +/- chl veinlets, randomly oriented. Very light grey matrix-though soft, mottled with green/brown chl +/- bt?	101905	0.314	0.384	
306.72	308.59	ANDESITE FLOW								
306.72	308.59	Fine-grained medium green grey chloritic biotite	2.0	0.5	1	QMTVN	10 Py diss + stringers associated with qtz vein +/- carbonate +/- kfsp +/- mt. Py stringer + chl at Ooto core axis and randomly oriented in places. Barren qtz vein +/- kfsp +/- chl-randomly oriented qtz vein. Locally vuggy qtz vein.	101906	0.215	0.273
308.59	320.54	SYENITE								
308.59	310.01	Fine-grained medium green grey chloritic biotite	2.0	0.5	QKVN	7 Py - dominantly diss with chl halo especially in the SD chl + bio. Minor py stringers assoc with qv, chl locally. Send SD + py for thin section.	101907	0.271	0.366	
310.01	311.51	Fine-coarse grained broken	1.0		QKVN	5 Silicified locally - -Broken - incompetent; minor py inc'd. Kfsp in SD bound by pale green mafic probably chl/epi. Py stringers assoc qtz/chl. Diss py in BKN siliceous zone.	101908	0.131	0.135	
311.51	313.62		1.0		QKVN	5 Silicified locally - -Broken - incompetent; minor py inc. Kfsp in SD bound by pale green mafic probably chl/epi. Py stringers assoc qtz/chl. Diss py in BKN siliceous zone.	101910	0.113	0.142	
313.62	315.86	Fine-coarse grained broken silicic	1.0		QKVN	5 Locally broken. Veinlets and stringers are randomly oriented. SD locally silicified, diss py in siliceous portion. Minor bio alt.	101911	0.111	0.156	
315.86	318.94		1.0		QKVN	5 Locally broken. Veinlets and stringers are randomly oriented. SD locally silicified, diss py in siliceous portion. Minor bio alt. Increased BKN zone.	101912	0.151	0.177	
318.94	320.54	Fine-grained medium green grey chloritic biotite	2.0	0.5	QVN	5 Gradient contact - friable gouge clay cementing material. About 20cm SD + vol. Vol moderate bio alter'n. Green chloritic speckles + stringers. Py - diss mainly in bio altered vd. Assoc with qv, pale green epidote. Cavity in bio altered vol with euhedral qtz x-tals about 5mm across. Local epidote mineralization - mottled.	101913	0.18	0.248	
320.54	322.3	ANDESITE FLOW								

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
320.54	322.30	Fine-grained medium green grey chloritic biotite	2.0 0.5	QVN	5 Minor py stringers - dominant disseminations in bio altered vol. Stringers assoc qv + minor chl and kfsp. Minor pale green epi mineralization chloritic. Vol locally vuggy + BKN.	101914	0.269	0.391
322.3	325.9	SYENITE						
322.30	324.68	Fine-grained brown			Minor py stringers, assoc with smokey grey qtz, outlined by white qv, and minor chl. Py is less than 1:1. Local py inc. to 2:1 assoc with qtz +carb jt infill.	101915	0.13	0.159
324.68	325.90					101916	0.161	0.227
325.9	331.79	ANDESITE FLOW						
325.90	327.76	Fine-grained medium green grey chloritic biotite	2.0 0.5	QCV	7 Py diss in bio altered vol, with green mafic probably chlorite halos. Py stringers assoc with qtz +/-carb +/-chl in places. Vuggy qtz +/-carb veinlets - dissolution +/- texture. Local BKN zone.	101917	0.183	0.226
327.76	329.99		2.0 0.5	QCV	7 Localized minor qtz flooding. Portion with less bio alteration.	101918	0.106	0.129
329.99	331.15		2.0 0.5	QCV	7 Localized minor qtz flooding. Portion with less bio alteration. Qtz rich portion about 25cm wide. Vuggy at beginning of sample. Py assoc. with qv about 3% py and 0.5% cpy. Qv and bio altered vol contact has minor epi-mineralization.	101919	0.171	0.192
331.15	331.79		3.0 0.5		Minor broken core, diss. py in broken zone and on bio altered vol.	101920	0.154	0.168
331.79	334.51	PYRITE ZONE						
331.79	333.99	Fine-grained medium green grey broken chloritic silicic	5.0 0.5		Pyrite zone - about 5% py mainly diss with fault zone. Minor py stringers assoc with vuggy qv +/-carb, minor fizz with HCl	101921	0.165	0.199
333.99	334.51	Fine-grained medium green grey broken chloritic			Pyrite zone - about 5% py mainly diss with fault zone. Minor py stringers assoc with vuggy qv +/-carb, minor fizz with HCl. Slightly more competent, 7 pieces of core over 5 cm in length within broken py zone.	101922	0.166	0.165
334.51	335.33	ANDESITE FLOW						
334.51	335.33	Fine-grained lt green-grey chloritic	1.0	QCV	5 Minor unaltered vol flow. Randomly oriented qtz veinlets assoc with minor py stringers in places. Py also diss.	101923	0.15	0.181
335.33	337.41	PYRITE ZONE						

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
335.33	337.41	Fine-grained medium green grey broken chloritic silicic	4.0	0.5		Pyrite zone - about 4%, mainly diss with fault zone. Minor hem, localized vein staining. Py +/- cpy diss.	101924	0.173	0.197
337.41	359.45	ANDESITE FLOW							
337.41	338.95	Fine-grained medium green grey chloritic	2.0	0.5	QMTVN	10 Minor bio alteration. Diss py +/- cpy vol, stringers assoc with qtz vein and localized mt veining. Veining randomly oriented. Pale green chl/epi portions	101925	0.245	0.284
338.95	341.02		2.0	0.5	QMTVN	10 Localized py increases to about 3% in places, assoc with smokey/grey qtz veining - randomly oriented.	101926	0.252	0.292
341.02	341.80	Fine-grained lt green-grey chloritic sericitic	4.0	0.5	QVN	15 Py diss and stringers assoc with qv in places. Veining is randomly oriented. Sericite alteration produces yellow colouration.	101927	0.144	0.188
341.80	343.35	Fine-grained medium green grey chloritic	2.0	0.5	QVN	10 Py mainly diss stringers assoc with qtz. Weak to moderate bio alteration. Py disseminations leave chl and bio haloes in places. Veining ranomly oriented.	101928	0.162	0.185
343.35	345.23		2.0	0.5	QVN	10 Py mainly diss stringers assoc with qtz. Weak to moderate bio alteration. Py disseminations leave chl and bio haloes in places. Veining ranomly oriented. Minor chl stringers.	101929	0.149	0.158
345.23	347.68		2.0	0.5	QVN	10 Very minor kfsp veining assoc with qv and diss and stringer py. Minor ser altered portion about 15 cm.	101930	0.222	0.248
347.68	350.36		3.0	0.5	QVN	7 Py mainly diss +/-chloritic halos. Qtz veining assoc with massive py, up to 5% py in places. Qv random. Minor py stringers found by chl, mjoy py stringer parallel to CA - 0 degrees	101931	0.225	0.239
350.36	350.99		3.0	0.5	QVN	7 Localized protion with decreased py, 1% and about 2:1 veining.	101932	0.106	0.134
350.99	352.19		3.0	0.5	QVN	7 Py diss mainly. Py stringers bound by chl- localized, py stringers assoc with qtz veining. Randomly oriented qtz veining - localized flooding.	101933	0.147	0.181
352.19	353.15	Fine-grained medium green grey chloritic sericitic	3.0	0.5	QVN	10 Randomly oriented qv. Ser alteration, localized bio alteration. Py - mainly diss with chl halos. Qtz veining assoc with inc'd py content up to 4% in places. Minor bio alteration.	101934	0.195	0.211
353.15	355.09	Fine-grained medium green grey chloritic	3.0	0.5	QVN	10 Py - mainly diss, stringers in places assoc with qv; lined by chl in places. Inc. py stringers assoc with qv. Minor Bio alteration. Blue metallic stringer assoc qv + py = bornite.	101936	0.298	0.307

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
355.09	356.28	Fine-grained medium green grey chloritic	3.0	0.5		Decreased py stringers assoc with qv. Py mainly diss, minor Bio alteration. Qtz veining random orientation. Minor bio alteration.	101937	0.162	0.195
356.28	357.37	Fine-grained medium green grey chloritic sericitic	3.0	0.5	QVN	7 Fine diss py, minor py stringers assoc with qv in places. Minor Bio alteration. Minor chl stringers.	101938	0.136	0.227
357.37	359.45	Fine-grained medium green grey chloritic biotite	3.0	0.5	QVN	10 Increased Bio alteration, moderate to high - giving dark brown colour. Py mainly disseminated. Minor stringers assoc with qv and chl in places. Qtz veining stockwork.	101939	0.169	0.212
359.45	359.75	PYRITE ZONE							
359.45	359.75	Fine-grained medium green grey chloritic silicic	5.0	0.5		Pyrite fault zone, about 5% pyrite, mainly as diss. Clay/gouge material cementing vol and qtz. BKN.	101940	0.131	0.196
359.75	360.58	SYENITE							
359.75	360.58	Fine-medium-grained medium brown porphyritic biotite silicic				Barren, protolith obscured. Competent. Missing 4ft - 360.58m to 361.80m and 3ft btwn 364.85m to 365.76m.	101941	0.209	0.233
360.58	361.8	LOST CORE							
360.58	361.80						-99		
361.8	364.85	PYRITE ZONE							
361.80	364.85	Fine-grained medium green grey chloritic silicic	4.0	0.5		Pyrite rich fault zone. Minor reduction in pyrite %. BKN. Competent 10 cm syenite dyke.	101942	0.173	0.209
364.85	365.76	LOST CORE							
364.85	365.76						-999		
365.76	366.84	PYRITE ZONE							
365.76	366.84	Fine-grained medium green grey chloritic silicic	4.0	0.5			101943	0.117	0.153
366.84	454.86	ANDESITE FLOW							
366.84	368.63	Fine-grained light grey silicic chloritic	1.0		QVN	15 Pervasive silification, protolith destroyed, minor green chloritic portions present. Minor py disseminations ~1:1. About 15% qv - random orientation.	101944	0.156	0.244
368.63	369.47	Fine-grained medium green grey chloritic biotite	1.0		QVN	10 Brown colour due to Bio alteration - moderate to high. Minor diss py. Qtz veining sockwork - random orientation.	101945	0.122	0.196
369.47	370.78		1.0		QVN	10 Green patches less Bio alteration, more chlorite.	101946	0.215	0.306
370.78	373.17		1.0		QVN	10	101947	0.164	0.251

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
373.17	375.22	Fine-grained medium green grey chloritic biotite	1.0		QVN	10 Py +/-cpy assoc with qv and chl. Increased py content, about 3% diss.	101948	0.132	0.153
375.22	377.62		3.0	0.5	QVN	10 Diss py +/-cpy. Stringers assoc with qtz vein in places. Py diss with chl haloes in places. Qv stockwork	101949	0.238	0.229
377.62	379.65		3.0	0.5	QVN	10	101950	0.253	0.252
379.65	380.54		3.0	0.5	QVN	10	101951	0.227	0.218
380.54	382.15	Fine-grained medium green grey chloritic	2.0	0.1	QKVN	7 Weak Bio alteration. Py mainly diss and in stringer form - assoc with qv - random orientation. Kfsp stringers assoc with qv and minor red hem and minor carb. Localized decreased py ~1%	101952	0.168	0.147
382.15	382.59		2.0	0.1	QKVN	7	101953	0.206	0.179
382.59	384.91		2.0	0.1	QKVN	7 2 cm thick qv and mind carb and Kfsp. Slight peppered texture. Py diss and stringers assoc with smokey/grey qv and chl stringers. Chl halo around py diss. Minor Kfsp stringers. Py diss in qv.	101954	0.181	0.14
384.91	387.19		2.0	0.1	QVN	7 3 cm thick qv and mind carb and Kfsp. Slight peppered texture. Py diss and stringers assoc with smokey/grey qv and chl stringers. Chl halo around py diss. Minor Kfsp stringers. Py diss in qv. Minor mt assoc with qv. Minor vesicles with flow infilled qtz + carb +/- py. Minor fizz in HCl.	101955	0.2	0.188
387.19	389.23		2.0	0.5	QVN	7 Minor Bio alteration; slight brown colour. Diss py in col and in qv. Py stringers - minor assoc chl, qv, Kfsp in places. Veining randomly oriented. Minor vesicles infilled qtz + py.	101956	0.277	0.295
389.23	389.75		2.0	0.5	QVN	7 Qv bound by py stringer cut and displaced about 5 mm by joint infilled by qtz and chl. Diss py and stringers assoc with chl.	101957	0.338	0.279
389.75	390.28		2.0	0.5	QCV	20 Py diss and stringers in vol and qv - smokey. Minor carb and Kfsp. Portions with higher py content.	101958	0.477	0.463
390.28	391.18	Fine-grained light grey sericitic silicic	2.0	0.5	QVN	50 Py - mainly diss, about 1% in sericitized and silicified vol with chl speckes. Major qv, about 40 cm wide, assoc up to 3% py and 0.5% cpy. (Minor blue stain on qv.)	101959	0.336	0.352
391.18	392.05	Fine-grained light grey brown sericitic	2.0	0.5	QVN	30 Weak to moderate bio alteration, mottled. Py diss in col, stringers assoc with qv. Bio assoc with diss py locally. Minor blue staining.	101960	0.351	0.447

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
392.05	392.50	Fine-grained light grey brown silicic biotite	2.0	0.5	QKVN	50 Py stringer at 10 degrees to CA bound by about 10cm qv. Bio alt in col. About 10cm qv assoc with diss py. Kfsp, chl speckles, minor bio and blue stain.	101962	0.219	0.324	
392.50	395.00	Fine-grained medium green grey chloritic biotite	1.0	0.1	QVN	10 Py stringers and diss. Minor Kfsp veining atr beginning of sample. Py assoc with qv. Veining/stringers discontinuous, random orientation. Veining more continuous generally randomly oriented. Py assoc with qv, not evenly distributed in sample. Diss py in qv in HW bychl and mt and just mt in FW.	101963	0.356	0.296	
395.00	395.87	Fine-grained lt green-grey sericitic biotite	2.0	0.5	QVN	10 About 5cm qv at beginning of sample assoc with py stringers. Py also diss in vol and smokey/grey qv. Patchy bio alteration, pervasive ser and sil alteration. Protolith destroyed.	101964	0.344	0.291	
395.87	397.41		2.0	0.5	QVN	10 Increased bio alteration, reduced ser. Protolith destroyed. Portions with higher ser alteration. Py diss and stringer assoc with qv, cut in displaced ~1cm by qv. White soft/3 veinlet, H to CA with striations within qv; bound by chl/bio -talc +Qtz vein	101965	0.244	0.195	
397.41	399.31		2.0	0.5	QVN	10	101966	0.464	0.425	
399.31	401.42	Fine-grained medium green grey chloritic biotite	2.0	0.5	QVN	10 Py - diss and minor stringers. Diss in col with chl halo in places. Qtz +/-minor carb lined by chl stringers. Kfsp stringer minor. Veining random	101967	0.365	0.317	
401.42	403.64		2.0	0.5	QVN	10 Minor silicified protions. Minor mt assoc with qv and assoc with py +/-cpy. Minor Kfsp veining assoc with qv.	101968	0.411	0.318	
403.64	405.96	Fine-grained medium green grey chloritic	2.0	0.5	1	QVN	10 Py - diss and stringers, assoc with qv. Some of diss py have chl halo. Reduced bio alteration, wk in places. Minor mt bound by qv. Trace vesicles infilled by qtz. Veining random, x-cutting.	101969	0.358	0.306
405.96	408.09		2.0	0.5	1	QVN	10 Reduced mt content	101970	0.612	0.46
408.09	409.82		2.0	0.5	1	QVN	10 Stringers random, discontinous. Py diss and stringers assoc with qtz veining. Mt diss in qv. Locally decreased py %.	101971	0.454	0.421
409.82	410.57		2.0	0.5	1	QVN	10 Boudinage py +/-cpy structures in smokey qv. Diss py with chl halos in places. Localized chl and bio rich.	101972	0.185	0.16
410.57	412.57		2.0	0.5	1	QVN	10 Veining generally discontinous, randomly oriented qtz and chl veining. Minor diss py ~1:1 - stringers assoc with qv +/-carb.	101973	0.271	0.202

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
412.57	413.61	Fine-grained medium green grey chloritic	2.0	0.5	1	QVN 10	About 10cm qv assoc with py +cpy and chl cutting of about 45 degrees to CA. Py +/-cpy diss and stringers assoc with qv and chl. Minor mt stringers.	101974	0.338	0.319
413.61	414.84		2.0	0.5	1	QVN 10	Py mainly diss - minor stringers assoc with qv and chl. Veining randomly oriented and cutting. Localized py +/-cpy rich in qv. Diss py with chl haloes in places.	101975	0.133	0.117
414.84	416.04		2.0	0.5	1	QVN 10		101976	0.308	0.502
416.04	417.40		2.0	0.5	1	QVN 10		101977	0.224	0.275
417.40	419.59	Fine-grained light grey chloritic silicic	1.0	0.1		QVN 10	Py - minor diss, stringers assoc with qv and chl. Minor mt assoc with qv. Veining randomly oriented. Green mafic speckles.	101978	0.17	0.218
419.59	420.97		1.0	0.1		QVN 10		101979	0.174	0.259
420.97	422.47	Fine-grained medium grey chloritic silicic	1.0	0.7		QAVN 10	Massive cpy assoc with qv +/- pale stain - anhydrate? About 0.7% cpy assoc with py in the qtz and anhydrate veining. Less silicified, more chl content - darker colouration.	101980	0.233	0.294
422.47	424.27		1.0	0.7		QAVN 10	0.5% cpy content, stringers assoc with py, chl, Kfsp and minor carb. Randomly oriented. Slightly lighter colour - more silicified, less chl content.	101981	0.14	0.195
424.27	425.81		1.0	0.7		QAVN 10	Localized increases in cpy - assoc with qtz flooding and anhydrate, randomly oriented. Chl stringers. Py and cpy also in diss - About 0.7% chl speckles.	101982	0.158	0.25
425.81	427.63		1.0	0.7		QAVN 10		101983	0.192	0.177
427.63	429.76		1.0	0.7		QAVN 10		101984	0.251	0.268
429.76	431.11	Fine-grained light grey silicic chloritic	1.0	0.1		QCV 10	Py +/-cpy diss and stringers, assoc with qv, +/-chl. Silicified and chloritic, chl speckles. Py +/-cpy bound by chl haloes in places. About 0.7% cpy locally. Qtz brecciated locally	101985	0.216	0.231
431.11	433.15	Fine-grained lt green-grey chloritic	2.0	0.5		QCV 10	Py +cpy mainly diss, minor stringers assoc with qv, chl. Veining randomly oriented. Cpy about 0.7% in places, local carb assoc. Py +/-cpy with chl.	101986	0.305	0.333
433.15	434.95		2.0	0.5		QCV 10	Cpy about 0.7% in places, local carb assoc. Py +/-cpy with chl. Minor mt veinlets assoc with qv.	101988	0.252	0.289
434.95	435.66		2.0	0.5		QCV 10		101989	0.251	0.233

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
435.66	436.90	Fine-grained light grey silicic chloritic	2.0 0.5		QVN 10	Stringers randomly oriented, discontinuous in places. Py +/-cpy diss and stringers assoc with qv and anhydrate. Cpy about 0.7% in places. Chl specks.	101990	0.276	0.333
436.90	438.56	Fine-grained lt green-grey chloritic	2.0 0.5		QCV 10	Minor py +/-cpy - diss - chl halos and stringers assoc with qv +/-chl locally. Minor mt - diss assoc with qv. Veining locally discontinuous, randomly oriented. Minor Kfsp.	101991	0.261	0.289
438.56	440.65		2.0 0.5		QMTVN 10	Py +/-cpy - diss and stringers assoc with qv, chl, locally. Mt assoc with qv +py +/-cpy.	101992	0.207	0.191
440.65	442.08		2.0 0.5			Qtz veining, discontinuous, randomly oriented - assoc with py +/-cpy +/-minor carb. 10 degrees qtz, +/- carb + chl stringer. Minor mt assoc with qv.	101993	0.191	0.184
442.08	443.21		2.0 0.5				101994	0.151	0.158
443.21	444.24	Fine-grained lt green-grey chloritic silicic	2.0 0.5		QCV 10	Qtz veining - locally chalcedonic, cut by Kfsp, light brown colour maybe due to potassic alt. Chl green specks. Fine diss py in about 5cm portion - ~4% - bound by chalcedonic qt in HW and sheared vein FW. Locally increased py +/-cpy, about 3% in places.	101995	0.202	0.301
444.24	445.58	Fine-grained medium green grey chloritic	1.0 0.1		QMTVN 10	Py +/-cpy assoc with qv, randomly oriented, cut by qtz +Kfsp - pale pink, barren. Minor mt stringers also cut by barren pink qv + Kfsp veining. Py +/-cpy bound by thin chl stringers in places	101996	0.408	0.585
445.58	447.14	Fine-grained medium green grey	1.0 0.1			Py +/-cpy assoc with qv +/- chl and mt in places. Qtz veining assoc with minor Kfsp, hem and carb, randomly oriented. Barren.	101997	0.281	0.427
447.14	448.36		1.0 0.1			Increased qtz veining assoc with py +/-cpy and mt locally - randomly oriented, bound by Kfsp locally. Increased py +/-cpy assoc with about 5 cm smokey/grey chalcedonic qv ~3:1.	101998	0.653	0.978
448.36	450.33	Fine-grained medium green grey chloritic sericitic	2.0 0.5	2	QMTVN 10	Slightly sericitic, pale yellow colouration. Py +/-cpy assoc with qv, bound by Kfsp, hem locally. Mt veining about 2:1. Minor bornite assoc with qv +py +/-cpy.	101999	0.368	0.642
450.33	452.70		2.0 0.5	2	QMTVN 10		102000	0.522	1.135
452.70	453.27		2.0 0.5	2	QMTVN 10		102151	0.388	0.866
453.27	454.86		2.0 0.5	2	QMTVN 10	Less sericitized; less py +/-cpy, chl haloes local. Py +/-cpy stringers assoc with qv, cut by Kfsp veinlets in places - local potassic alteration.	102152	0.479	1.655

454.86 457.18 **ANDESITE QUARTZ VEIN ZONE**

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
454.86	456.29	Fine-grained green brown chloritic biotite	2.0	0.5	10	QMTVN 10	Py +/-cpy assoc with smokey grey qtz +Kfsp. Diss within Kfsp. Mottled, speckled bio. Qv bound by mt in places. Altered flow or qtz monz - protolith not clear.	102153	0.191	0.577
456.29	457.18		2.0	0.5	10	QMTVN 10	Locally reduced bio alteration and py +/- cpy mineralization. Qtz slightly brecciated. Minor Kfsp veining. Altered flow or qtz monz - protolith not clear.	102154	0.11	0.308
457.18	458.69	ANDESITE FLOW								
457.18	458.69	Fine-grained lt green-grey chloritic	1.0			QMTVN 10	slightly peppered/mottled, local bt rich and potassic alt'n - kfsp veining	102155	0.208	0.322
458.69	468.56	ANDESITE QUARTZ VEIN ZONE								
458.69	460.02	Fine-grained medium green grey chloritic	1.0				minor py +/-cpy diss assoc w/ qtz veining in places. Kfsp - random and bower, locally mottled, minor diss mt	102156	0.16	0.572
460.02	461.93		2.0	0.5		QMTVN 10	py +/-cpy - diss and stringers assoc with qv_cdonic, kfsp and mt. Cut by kfsp - barren. Veining randomly orientated. Red hem in cdonic qtz veining	102157	0.241	0.678
461.93	462.38		2.0	0.5		QMTVN 10	potassic at beginning of sample, slightly broken. Local bt alt'n, chl specks dark green + mt specks	102158	0.192	0.417
462.38	464.16	Fine-grained dark to medium gree chloritic silicic	2.0	0.5		QKVN 15	mottle green and dark green - magnetic, py +/-cpy diss + stringers assoc with qtz veining, kfsp. Qv is cdonic, carb infilling cracks in cdonic smokey grey qtz.	102159	0.381	0.776
464.16	465.81		2.0	0.5		QKVN 15		102160	0.183	0.503
465.81	467.27		2.0	0.5		QKVN 15		102161	0.136	0.293
467.27	468.56		2.0	0.5		QKVN 15		102162	0.231	0.727
468.56	478.76	QUARTZ MONZONITE								
468.56	469.74	Fine-grained medium green grey chloritic silicic	1.0	0.1		QMTVN 15	slightly mottled dark to medium green, black mt stringers assoc w/ grey smokey qv. Diss mt. Py +/-cpy - diss and stringers form - minor: slightly carbonated	102164	0.168	0.453
469.74	471.17		1.0	0.1		QMTVN 15	localized increased mt veining about 15%. Minor: slightly carbonated. Cdonic qv - local	102165	0.244	0.869
471.17	473.11		1.0	0.1		QMTVN 15	Localized increased mt veining about 15%. Cdonic qv - local	102166	0.309	1.03
473.11	475.09		1.0	0.1		QMTVN 15		102167	0.215	0.591

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm		
475.09	477.30	Fine-grained medium green grey chloritic silicic	1.0	0.1	QMTVN	15	Minor broken zone. Py +/-cpy diss and minor stringers - 10cm after bkn has up to 3% py diss and stringers assoc with smokey grey cdonic veining. Cut later by phase yell/orange kfsp, dp	102168	0.236	0.497	
477.30	478.76		1.0	0.1	QMTVN	15	slightly reduced mt % to 7%. Potassic alt'n mod localized. Py +/-cpy diss and in stringer form assoc w/ smokey qtz cdonic. Cut by yell/orange post mineraliz'n or kfsp. Veining random	102169	0.269	0.736	
478.76	479.62	SYENITE									
478.76	479.62	Fine-medium-grained brown grey porphyritic biotite silicic	1.0	0.1	KVN	5	Plagio and kfsp qtz phenocrysts up to 2mm length embedded in brown, fine, potassic alt'd - bt rich matrix. Barren. Cut by randomly orientated kfsp veinlets	102170	0.042	0.117	
479.62	484.72	QUARTZ MONZONITE									
479.62	481.20	Fine-grained medium green grey chloritic silicic	1.0	0.1	QMTVN	15	Diss and stringer py +/-cpy assoc with smokey grey qtz veining and mt. Mt veining + diss found within qv locally. Cut by randomly orientated kfsp. All veining has no preferred orientation	102171	0.183	0.615	
481.20	483.23		1.0	0.1	QMTVN	15	Diss and stringer py +/-cpy assoc with smokey grey qtz veining and mt. Mt veining + diss found within qv locally. Cut by randomly orientated kfsp. All veining has no preferred orientation. Minor potassic wk alt'n	102172	0.544	1.325	
483.23	484.72		1.0	0.1	QMTVN	15	Diss and stringer py +/-cpy assoc with smokey grey qtz veining and mt. Mt veining + diss found within qv locally. Cut by randomly orientated kfsp. All veining has no preferred orientation. Localized increases in py +/-cpy, up to 3%py and 0.7%cpy in 10cm qtz veining in diss + stringer form. Localized decreased mt veining + diss.	102173	0.904	2.19	
484.72	487.64	SYENITE									
484.72	486.77	Fine-medium-grained medium brown porphyritic biotite			QKVN	7	Plagio and kfsp qtz fbt phenocrysts in fine, brown bt altered matrix, cut by randomly orientated kfsp veining and qt veining. Bt maybe primary + alternation product - barren.	102174	0.008	0.01	
486.77	487.64					7		102175	0.004	0.005	
487.64	498.28	QUARTZ MONZONITE									
487.64	489.60	Fine-medium-grained medium green grey silicic chloritic	1.0	0.1	10	QMTVN	20	Py +/- cpy stringers + diss, bound by qtz, smokey grey, assoc w/ mt in places. Mt stringers/veinlets + diss, minor kfsp veinlets.	102176	0.197	0.716

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
489.60	490.75	Fine-medium-grained medium green grey silicic chloritic	1.0	0.1	10	QMTVN 20	102177	0.417	1.47
490.75	492.43		1.0	0.1	10	QMTVN 20 Same as above, but with minor potassic altered portions; slightly reduced mt -about 7%.	102178	0.426	1.385
492.43	494.48		1.0	0.1	10	QMTVN 20 Same as above but with minor BKN zone.	102179	0.635	1.73
494.48	496.50		1.0	0.1	10	QMTVN 20	102180	0.37	1.215
496.50	498.28		1.0	0.1	10	QMTVN 20 Same as above but with locally incr'd potassic zones.	102181	0.437	1.495
498.28	502.01	SYENITE							
498.28	498.96	Fine-medium-grained medium brown porphyritic biotite				KVN 7 Plagio, kfes, qtz, bt phenocrysts in brown fine matrix with 1 and 2 degree bt. Barren post mineralization, alt by randomly orientated kfsp veining.	102182	0.006	0.005
498.96	500.55					KVN 7	102183	0.004	-2
500.55	502.01					KVN 7	102184	0.005	-2
502.01	504.07	QUARTZ MONZONITE							
502.01	502.51	Fine-grained medium grey porphyritic silicic	2.0	0.5	10	QMTVN 10 Colonic smokey/grey qtz flooding assoc with massive py +/- cpy. Wide monzo diorite protolith evident. Sample constitutes mainly of qtz vein. Minor cotb- slight fizzing.	102185	0.784	1.69
502.51	504.07		2.0	0.5	10	QMTVN 10 Slightly less smokey/grey qtz veining. Minor increase in pink fsp veining, locally mt veining assoc with qtz veining.	102186	0.417	1.145
504.07	505.16	SYENITE							
504.07	505.16	Fine-medium-grained brown grey porphyritic biotite chloritic				QKVN 5 Barren veining is randomly orientated, very minor fizz with HCl, possible carb.	102187	0.136	0.373
505.16	508.1	QUARTZ MONZONITE							
505.16	507.72	Fine-grained medium grey porphyritic silicic	2.0	0.5	10	QMTVN 10 Minor py diss and stringers assoc with smokey qtz, randomly orientated. Cut by later stage pink kfelspar veining. Mt. Veining. Monzodiorite protolith evident.	102188	0.277	0.88
507.72	508.10		2.0	0.5	10	QMTVN 10 Minor py diss and stringers assoc with smokey qtz, randomly orientated. Cut by later stage pink kspar veining. Mt. Veining. Monzodiorite protolith evident. Major py +/- cpy veinlet assoc with smokey/grey qtz vein; kfsp veining friable possible zeolite.	102190	0.665	2.14
508.1	514.79	SYENITE							
508.10	509.23	Fine-medium-grained medium brown porphyritic biotite				QKVN 5 Barren, kfsp qtz veining randomly orientated, not assoc.	102191	0.004	0.006

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
509.23	511.11	Fine-medium-grained medium brown porphyritic biotite			QKVN	5	102192	0.008	0.009
511.11	512.92					Barren, kfsp and qtz veining randomly orientated, not assoc, bt altered.	102193	0.004	-2
512.92	514.79						102194	0.014	0.027
514.79	541.31	QUARTZ MONZONITE							
514.79	516.85	Fine-medium-grained grey-green porphyritic silicic	2.0	0.5	QMTVN	10	102195	0.538	1.44
516.85	517.49		2.0	0.5	QMTVN	10	102196	0.713	1.825
517.49	518.67		2.0	0.5	QMTVN	10	102197	0.232	0.555
518.67	520.36		2.0	0.5	QMTVN	10	102198	0.232	0.759
520.36	522.67		2.0	0.5	QMTVN	10	102199	0.519	1.64
						Py +/- cpy diss + stringers assoc with qv - smokey/grey - c'donic. Py infilling cracks in c'donic qv - randomly orientated. Kfsp veining random. Monzo protolith visible. Yellow carb veining assoc with pyrite k-felspar veining-vuggy locally assoc with qv smokey/grey - kfsp randomly orientated. Yell veining fizzes w/ HCl leaving beaded while patches.			
522.67	524.75		2.0	0.5	QMTVN	10	102200	0.469	1.17
						Py +/- cpy diss + stringers assoc with qv - smokey/grey - c'donic. Py infilling cracks in c'donic qv - randomly orientated. Kfsp veining random. Monzo protolith visible. Yellow carb veining assoc with py + cpy - randomly orientated. Portions with locally reduced mt % - up to 2%. Massive py + cpy assoc with diss mt + qv. veining- vuggy locally assoc with qv.			
524.75	526.87		2.0	0.5	QMTVN	10	102201	0.322	0.972
						Py +/- cpy diss + stringers assoc with qv - smokey/grey - c'donic. Py infilling cracks in c'donic qv - randomly orientated. Kfsp veining random. Monzo protolith visible. Lighter grey portions, less mt ~ 2%. Py +/- cpy assoc with qv and kfsp. Locally moderately silicified portions.			
526.87	529.03		2.0	0.5	QMTVN	10	102202	0.222	0.509
						Py +/- cpy diss + stringers assoc with qv - smokey/grey - c'donic. Py infilling cracks in c'donic qv - randomly orientated. Kfsp veining random. Monzo protolith evident.			
529.03	530.93		2.0	0.5	QMTVN	10	102203	0.237	0.706
						Diss mt in places, protolith destroyed locally. Dis py +/- cpy assoc with kfsp within qv.			

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
530.93	532.80	Fine-medium-grained grey-green porphyritic silicic	2.0	0.5	QMTVN	10	Minor broken zone. Diss mt and minor stringers. Py +/- cpg stringers assoc with smokey/qtz veins. Minor kfsp veining, minor red lining joint.	102204	0.186	0.426
532.80	534.75		2.0	0.5	QMTVN	10	Less altered locally - protolith very evident. Speckled, smokey/grey vein assoc with mt. diss in places. Py + cpy assoc with smokey/grey qv.	102205	0.188	0.516
534.75	536.85		2.0	0.5	QMTVN	10		102206	0.216	0.628
536.85	538.89		2.0	0.5	QMTVN	10		102207	0.285	0.568
538.89	540.81		2.0	0.5	QMTVN	10		102208	0.36	0.647
540.81	541.31		2.0	0.5	QMTVN	10		102209	0.122	0.253
541.31	543.68	SYENITE								
541.31	542.97	Fine-medium-grained medium brown porphyritic biotite			QKVN	5	Barren, kfsp and qtz veining randomly orientated, not assoc. Bt altered.	102210	0.011	0.019
542.97	543.68				QKVN	5		102211	0.007	0.007
543.68	573.61	QUARTZ MONZONITE								
543.68	545.62	Fine-grained grey-green porphyritic silicic	2.0	0.5	QMTVN	10	Py +/- cpy diss and stringers qtz veining flooding, brecciated locally and cut by discontinuous kfsp stringers. Massive py assoc with smokey/grey qtz. Protolith evident.	102212	0.234	0.432
545.62	547.55		2.0	0.5		10	Py +/- cpy diss and stringers qtz veining flooding, brecciated locally and cut by discontinuous kfsp stringers. Massive py assoc with smokey/grey qtz. Protolith evident. Minor broken zone, slightly brecciated locally. Kfsp infilling jts. Py +/- cpy diss + stringer assoc with smokey.grey qtz veining - random orientated. Minor kfsp veining.	102213	0.269	0.623
547.55	549.59		2.0	0.5		10	Py +/- cpy diss and stringers qtz veining flooding, brecciated locally and cut by discontinuous kfsp stringers. Massive py assoc with smokey/grey qtz. Protolith evident. Local incr in kfsp phenocrysts in monzo matrix.	102214	0.241	0.54
549.59	550.43		2.0	0.5		10	Locally more silicified - protolith destroyed , assoc with py + cpy stringers. Mt veining cut by kfsp veining - randomly orientated. Protolith generally visible.	102216	0.222	0.501
550.43	552.64		2.0	0.5		10		102217	0.219	0.362
552.64	554.72		2.0	0.5		10		102218	0.209	0.291
554.72	557.03		2.0	0.5		10		102219	0.152	0.258

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
557.03	559.13	Fine-medium-grained grey-green porphyritic silicic	2.0 0.5	QMTVN 15	/ncr smokey/grey qv, flooding -c'donic, cracked brecciated, weakly assoc with py +/- cpy stringers locally massive. Incr mt veining, 2nd diss, protolith less visible.	102220	0.291	0.357
559.13	561.22		2.0 0.5	QMTVN 15	Locally incr py +/- cpy ~4% py and 0.7% cpy. assoc with smokey/grey qv - assoc with kfsp. Protolith visible in places. Kfsp cutting c'donic qtz veining, random orientated hem.	102221	0.114	0.133
561.22	563.35		2.0 0.5	QMTVN 15	Locally reduced qv - flooding, Py +/- cpy diss and stringers - assoc with qv - fine to med sized py diss within monzo protolith. Mt is in stringer form and diss.	102222	0.16	0.154
563.35	565.71		2.0 0.5	QMTVN 15		102223	0.167	0.219
565.71	567.76		2.0 0.5	QMTVN 15	Same as above but grey smokey qtz is locally vuggy in places. Dissolution cavity with asicular crystals.	102224	0.355	0.589
567.76	569.35		2.0 0.5	QMTVN 15	Locally reduced qv - flooding, Py +/- cpy diss and stringers - assoc with qv - fine to med sized py diss within monzo protolith. Mt is in stringers form and diss. Locally vuggy qtz veining. 218 mag sucept reading on Kappometer.	102225	0.38	0.438
569.35	571.15		2.0 0.5	QMTVN 15	Locally reduced qv - flooding, Py +/- cpy diss and stringers - assoc with qv - fine to med sized py diss within monzo protolith. Mt is in stringers form and diss.	102226	0.203	0.288
571.15	571.49		2.0 0.5	QMTVN 15	Locally reduced qv - flooding, Py +/- cpy diss and stringers - assoc with qv - fine to med sized py diss within monzo protolith. Mt is in stringers form and diss. Magnetite rich - diss. Molybdenite - blue/green soft, masive, metallic lustre blue grey streak. 444 mag szept reading on Kappometer.	102227	0.136	0.113
571.49	573.61		2.0 0.5	QMTVN 15		102228	0.196	0.279
573.61	584.42	SYENITE						
573.61	574.57	Fine-medium-grained dark brown porphyritic biotite		KVN 10	Barren, kfsp veining - randomly orientated.	102229	0.227	0.275
574.57	576.54	Fine-medium-grained dark brown porphyritic		KVN 10		102230	0.003	-2
576.54	578.70			KVN 10		102231	0.003	-2
578.70	579.38			KVN 10		102232	0.003	-2
579.38	581.45			KVN 10		102233	0.004	-2

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
581.45	584.42	Fine-medium-grained dark brown porphyritic			KVN 10	Barren, kfsp veining - randomly orientated. Angle associated with contact is about 45 deg to CA. Mismatch, groundcore for 5 ft. Recovery less than 50% 102234 - 581.45 - 582.78 m then 5 ft loss to 584.30.	102234	0.003	0.006
584.42	695.71	QUARTZ MONZONITE							
584.42	584.89	Fine-medium-grained medium green porphyritic silicic	2.0	0.1	QMTVN 15	Py +/- cpy stringer -assoc with smokey/grey qv and diss in qv and monzodiorite, protolith visible locally. Minor kfsp veining cutting smokey grey qv veining is randomly orientated in local siliceous portions.	102235	0.242	0.316
584.89	585.25		2.0	0.1	QMTVN 15	Locally silicified portion, lighter grey color protolith destroyed. Py +/- cpy stringers. Assoc with qv + kfsp - minor dissem. in altered portion.	102236	0.444	0.667
585.25	587.16		2.0	0.1	QMTVN 15	Py +/- stringers - assoc with smokey/grey qv, minor diss. alt veining and diss. Protolith showing locally. Veining randomly oriented. Edonic qv locally.	102237	0.191	0.252
587.16	588.20		2.0	0.1	QMTVN 15	Py +/- stringers - assoc with smokey/grey qv, minor diss. alt veining and diss. Protolith showing locally. Veining randomly oriented. Edonic qv locally. Weak potassic altered portions - locally.	102238	0.144	0.209
588.20	588.71		2.0	0.1	QMTVN 15	Chloritic portion with euhedral/subhedral mafic phenocrysts asoc with qtz in pale green matrix. Minor qtz veining - random orientation. Dis py in qv.	102239	0.118	0.187
588.71	589.61		2.0	0.1	QMTVN 15	Chloritic portion with euhedral/subhedral mafic phenocrysts asoc with qtz in pale green matrix. Minor qtz veining - random orientation. Dis py in qv. Minor monzodiorite portion of beginning of sample. Minor mt stringers + diss assoc with smokey/ grey qv.	102240	0.097	0.138
589.61	590.23		2.0	0.1	QMTVN 15	Py +/- cpy stringers assoc with qv + mt locally. Mt veining assoc with qv, also diss. Protolith destroyed locally. Localized peppered texture. Local silicified + doloritic portions.	102242	0.257	0.365
590.23	590.93		2.0	0.1	QMTVN 15		102243	0.302	0.47
590.93	593.17		2.0	0.1	QMTVN 15	Py +/- cpy stringers assoc with qv + mt locally. Mt veining assoc with qv, also diss. Protolith destroyed locally. Localized peppered texture. Local silicified + doloritic portions. Minor carbonate veining assoc with mt veining and/or qv locally.	102244	0.15	0.193

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
593.17	594.13	Fine-medium-grained medium green porphyritic silicic	2.0 0.1	QMTVN	15 Py +/- cpy stringers assoc with qv + mt locally. Mt veining assoc with qv, also diss. Protolith destroyed locally. Localized peppered texture. Local silicified + doloritic portions. Local qtz flooding assoc. with incrd. py ~3% slightly brecciated.	102245	0.197	0.269
594.13	595.54		2.0 0.1	QMTVN	15 Py +/- cpy stringers assoc with qv + mt locally. Mt veining assoc with qv, also diss. Protolith destroyed locally. Localized peppered texture. Local silicified + doloritic portions. Py mainly disseminated in this sample. Py +/- cpy veinlets assoc with kfsp veining mainly. Gradual contact with QM2.	102246	0.296	0.388
595.54	596.18	Fine-medium-grained medium green grey porphyritic silicic	2.0 0.1	QMTVN	15 Major zeolite - pink friable veinlet // to CA, 0 degree running down core. Cuts through qv roughly at 45. Plagio, ksp, qtz phonocrysts within silicified matrix. Minor diss mt locally.	102247	0.102	0.099
596.18	597.80		2.0 0.1	QKVN	10	102248	0.149	0.178
597.80	600.53		2.0 0.1	QMTVN	10 Py +/- cpy stringers assoc with smokey/grey qv, locally assoc with mt. Randomly orientated. Protolith destroyed by alteration overprint. Minor qtz - bonding of about 45 deg. Gradual contact with QM2.	102249	0.124	0.15
600.53	602.34		2.0 0.1	QMTVN	10 Py +/- cpy stringers assoc with smokey/grey qv, locally assoc with mt. Randomly orientated. Protolith destroyed by alteration overprint. Minor qtz - bonding of about 45 deg. Gradual contact with QM2. Localized qtz flooding assoc with mt, assoc with minor disseminated pyrite.	102250	0.328	0.502
602.34	604.52		2.0 0.1	QMTVN	10 Py +/- cpy stringers assoc with smokey/grey qv, locally assoc with mt. Randomly orientated. Protolith destroyed by alteration overprint. Minor qtz - bonding of about 45 deg. Gradual contact with QM2. Localized assoc btween py and mt.	102251	0.219	0.268
604.52	604.82		2.0 0.1		Py +/- cpy - stringers assoc with smokey/grey qtz. Locally diss. More silicified + pale grey colorization. Veining is randomly orientated, qtz monzodiorite.	102252	0.318	0.432
604.82	606.17		2.0 0.1		Py +/- cpy stringers assoc with smokey/grey qtz and kfsp locally. Minor disseminations. Protolith overprinted by silicification locally. Localized more silicified + chloritic zones.	102253	0.124	0.155
606.17	608.41		2.0 0.1			102254	0.218	0.308

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
608.41	609.78	Fine-medium-grained medium green grey porphyritic silicic	2.0	0.1			102255	0.285	0.395
609.78	612.05		2.0	0.1			102256	0.319	0.367
612.05	614.44		2.0	0.1			102257	0.143	0.204
614.44	615.12		2.0	0.1			102258	0.346	0.488
615.12	615.85		2.0	0.1			102259	0.075	0.091
615.85	616.90		2.0	0.1			102260	0.109	0.148
616.90	618.95		2.0	0.1			102261	0.099	0.119
618.95	620.06		2.0	0.1			102262	0.095	0.116
620.06	621.91	Fine-grained lt green-grey porphyritic silicic chloritic	2.0	0.1		QKVN 10 Py +/- assoc with qv, chalcedonic qtz in places, cut by kfsp veinlets at about 0 deg to CA. Protolith locally destroyed. Carb stringers also cutting c'donic qtz v.	102263	0.249	0.435
621.91	624.00		2.0	0.1		Py +/- assoc with qv, chalcedonic qtz in places, cut by kfsp veinlets at about 0 deg to CA. Protolith locally destroyed. Carb stringers also cutting c'donic qtz v. Minor BKN zone, and weakly brecciated.	102264	0.272	0.402
624.00	624.97		2.0	0.1		Py +/- assoc with qv, chalcedonic qtz in places, cut by kfsp veinlets at about 0 deg to CA. Protolith locally destroyed. Carb stringers also cutting c'donic qtz v. Smokey/grey qtz veining running about 45 to CA.	102265	0.246	0.352
624.97	626.30	Fine-medium-grained medium green grey porphyritic silicic	2.0	0.1		QKVN 10 Py +/- stringers assoc with qv, c'donic qv locally. 2nd monzochorite. Minor kfsp veining, localized chloritic portion.	102266	0.186	0.247
626.30	628.17		2.0	0.1		QKVN 10	102268	0.273	0.318
628.17	628.77		1.0	0.1	5	Minor py, in stringer form, locally disseminated- locally assoc with smokey/grey qv, c'donic in places. Protolith destroyed locally. Prestine with obvious monzodiorite texture. Plagio, qtz and mafic (possibly amphibole or pyroxene) phenocrysts in fine light grey/green matrix.	102269	0.097	0.122
628.77	630.02		1.0	0.1	5	Kspar phenocrysts present locally, local potassic altern with kspar veining random, qtz bonding, 90 deg CA. Slight BKN.	102270	0.063	0.102
630.02	631.89		1.0	0.1	5	Kspar phenocrysts present locally, local potassic altern with kspar veining random, qtz bonding, 90 deg CA. 10 cm portion with up to 90% green mafic phenocrysts probably amphibole or peroxene.	102271	0.174	0.226

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
631.89	633.93	Fine-medium-grained medium green grey porphyritic silicic	1.0	0.1	5	Kspar phenocrysts present locally, local potassic altern with kspar veining random, qtz bonding, 90 deg CA. Minor yellow carbonate veining assoc with smokey/grey qv minor BKN. Protolith overprinted by alteration locally.	102272	0.103	0.135
633.93	636.24		1.0	0.1	5	Kspar phenocrysts present locally, local potassic altern with kspar veining random, qtz bonding, 90 deg CA. Minor carbonate discontinuous stringers in locally qtz brecciated ~15cm portion, ~10 cm smokey/grey qv.	102273	0.132	0.172
636.24	637.81		1.0	0.1	5	Kspar phenocrysts present locally, local potassic altern with kspar veining random, qtz bonding, 90 deg CA. Minor qtz brecciated ~10 cm portion locally pervasive silicified portion, light grey.	102274	0.182	0.223
637.81	639.90		1.0	0.1	5	Kspar phenocrysts present locally, local potassic altern with kspar veining random, qtz bonding, 90 deg CA. Generally incr potassic altern pervasive, moderate 1 or 2 deg kfsp phenocrysts incr locally.	102275	0.066	0.088
639.90	642.21		1.0	0.1	5	Kspar phenocrysts present locally, local potassic altern with kspar veining random, qtz bonding, 90 deg CA. Reduced kfsp phenocrysts, locally incr plagioclase phenocrysts.	102276	0.151	0.213
642.21	644.51		1.0	0.1	5	Kspar phenocrysts present locally, local potassic altern with kspar veining random, qtz bonding, 90 deg CA. Incr andes/qtz veining- high angle bonding structure ~90 deg to CA locally assoc with kfsp stringers and py.	102277	0.254	0.34
644.51	646.35		1.0	0.1	5	Kspar phenocrysts present locally, local potassic altern with kspar veining random, qtz bonding, 90 deg CA.	102278	0.173	0.23
646.35	648.58		1.0	0.1	5		102279	0.19	0.326
648.58	650.69		1.0	0.1	5	Kspar phenocrysts present locally, local potassic altern with kspar veining random, qtz bonding, 90 deg CA. Minor red hem infilling jt, localized incr in mt and smokey grey qtz veining ramdomly orientated	102280	0.152	0.244
650.69	651.45		1.0	0.1	5		102281	0.131	0.207
651.45	652.08		1.0	0.1	5	Kspar phenocrysts present locally, local potassic altern with kspar veining random, qtz bonding, 90 deg CA. Incr py content - up to about 2% assoc with smokey/grey qt + mt disseminations. Protolith destroyed locally.	102282	0.377	0.571

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
652.08	653.43	Fine-medium-grained medium green grey porphyritic silicic	1.0	0.1	5	Kspar phenocrysts present locally, local potassic altern with kspar veining random, qtz bonding, 90 deg CA. Qtz weakly brecciated. Microfractures in qtz breccia infilled by yellow carb, fizzy with HCl.	102283	0.233	0.381
653.43	654.94		1.0	0.1	5	Kspar phenocrysts present locally, local potassic altern with kspar veining random, qtz bonding, 90 deg CA. Localized incr in smokey/grey and mt veining. Protolith completely overprinted.	102284	0.251	0.401
654.94	655.43		1.0	0.1	5	Kspar phenocrysts present locally, local potassic altern with kspar veining random, qtz bonding, 90 deg CA. Locally dec smokey/grey + mt veining.	102285	0.287	0.408
655.43	657.17		1.0	0.1	5	Kspar phenocrysts present locally, local potassic altern with kspar veining random, qtz bonding, 90 deg CA. Localized incr in smokey/grey and mt veining.	102286	0.294	0.471
657.17	659.40		1.0	0.1	5	QMTVN 7 Py +/- stringers assoc locally with smokey/grey qv. Diss within porphery matrix. Plagio, kfsp mafic proxene/ amphibole/ phenocrysts in pale grey/green matrix - locally potassic qtz/mt bonding, about 90 deg to CA. Minor kfsp stringers, randomly orientated, minor BKN.	102287	0.263	0.333
659.40	661.54		1.0	0.1	5	QMTVN 7	102288	0.285	0.392
661.54	663.55		1.0	0.1	5	QMTVN 7	102289	0.225	0.306
663.55	665.78		1.0	0.1	5	QMTVN 7	102290	0.308	0.445
665.78	667.88		1.0	0.1	5	QMTVN 7	102291	0.316	0.435
667.88	670.00		1.0	0.1	5	QMTVN 7	102292	0.149	0.22
670.00	672.23		1.0	0.1	5	QMTVN 7	102294	0.213	0.343
672.23	674.38		1.0	0.1	5	QMTVN 7	102295	0.193	0.308
674.38	676.27		1.0	0.1	5	QMTVN 7	102296	0.187	0.239
676.27	677.95		1.0	0.1	5	QMTVN 7	102297	0.19	0.237
677.95	680.08		1.0	0.1	5	QMTVN 7	102298	0.123	0.156
680.08	682.14		1.0	0.1	5	QMTVN 7	102299	0.139	0.25
682.14	684.34		1.0	0.1	5	QMTVN 7	102300	0.21	0.313
684.34	685.95		1.0	0.1	5	QMTVN 7	102301	0.098	0.135
685.95	687.93		1.0	0.1	5	QMTVN 7	102302	0.2	0.308
687.93	688.46		1.0	0.1	5	QMTVN 7	102303	0.154	0.211

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
688.46	689.80	Fine-medium-grained medium green grey porphyritic silicic	1.0 0.1	5	QMTVN	7	102304	0.151	0.215
689.80	690.04		1.0 0.1	5	QMTVN	7	102305	0.114	0.158
690.04	690.98		2.0 0.1	10	QMTVN	10	102306	0.347	0.567
						Py +/- cpy mainly disseminated assoc with smokey/grey qtz and mt. Rare py stringers. Pervasive mod to high silicite ~ protolith doliterated locally. Qtz wkly brecciated, py disseminations around the 2 deg qtz insitu breccia. Minor kfsp veining.			
690.98	692.00	Fine-medium-grained medium grey porphyritic silicic	2.0 0.1	7	QMTVN	7	102307	0.296	0.485
						Py +/- cpy - mainly disseminated in silicified porf. matrix and assoc with 2 deg smokey/grey qv, c-donic. Mt disseminations assoc with py diss. locally dark green, mafic ehedral/subhedral phenocysts replacing plagio + qtz pheno in monzodiorite in light/med grey matrix. Qtz + kfsp veining randomly orientated.			
692.00	693.68		2.0 0.1	7	QMTVN	5	102308	0.167	0.281
						Qtz. brecciated with qtz monzodiorite. Py +/- cpy fmt diss within the qtz monzo around the brecciated qtz. Qtz monzo- pervasively silicified, moderate. Possibly weakly sericified. Minor kfsp, veining is randomly orientated. Protolith is destroyed locally.			
693.68	694.03		2.0 0.1	7	QMTVN	7	102309	0.158	0.478
694.03	695.71		2.0 0.1	7	QMTVN	7	102310	0.351	0.54
695.71	696.09	QUARTZ VEIN							
695.71	696.09	Very fine grained red grey silicic	3.0 0.3				102311	0.483	0.8
						Smokey/grey cholecedonic qv, ~40 cm long, Diss py +/- cpy +infilling erodes in qv. Later generotia, milky white, vuggy qv cutting across. Py with my inclusions.			
696.09	714.35	QUARTZ MONZONITE							
696.09	696.93	Fine-medium-grained medium grey porphyritic silicic	2.0 0.1	7	QVN	10	102312	0.54	0.92
						Py +/- cpy - mainly diss- rare stringers. Assoc with smokey/grey qv and mt diss. Protolith destroyed locally. Inc mt ~20% locally ~10 cm smokey/grey cdonic with gypsum clump assoc with green mafic chlorite.			
696.93	698.44		2.0 0.1	7	QMTVN	10	102313	0.376	0.694
						Silicified pervasive qtz brecciated py +/- cpy diss within host rock, not in later stage qtz. Localized massive py. protolith overprinted with silification.			
698.44	700.02		2.0 0.1	7	QMTVN	10	102314	0.305	0.64
						Localized massive py. protolith overprinted with silification. Red mt. hem magnetic veinlet assoc with smokey/grey qv + diss py localized cdonic qtz.			

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
700.02	701.86	Fine-medium-grained medium grey porphyritic silicic	2.0	0.1	7	QMTVN 10	Localized massive py. protolith overprinted with silicification. Minor inc in mt ~20% locally, mt/qtz dark/white banding.	102315	0.405	0.671
701.86	702.91		2.0	0.1	7	QMTVN 10	Localized massive py. protolith overprinted with silicification. Kfsp veining; randomly orientated locally and a set of kfsp infilled jts cutting at 45 deg of CA.	102316	0.369	0.63
702.91	703.46		2.0	0.1	7	QMTVN 10	Localized massive py. protolith overprinted with silicification. Kfsp infilled, its cutting at 45 deg to CA.	102317	0.246	0.403
703.46	705.75		2.0	0.1	7	QMTVN 10	Pervasive, silicated py+/- cpy diss in host rock, locally assoc with mt, qtz slightly brecciated in places.	102318	0.197	0.301
705.75	707.22		2.0	0.1	7	QMTVN 10	Py + cpy diss rare stringers in host rk. Qtz slightly brecciated. Garlic qtz gen cut by py stringers, qtz clumps assoc with mt + minor carb locally. Porphy texture evident.	102320	0.323	0.593
707.22	709.38		2.0	0.1	7	QMTVN 10	Py + cpy diss + locally massive. Protolith destroyed by silicifi- locally. Darker bands of ~15% mt. Peppered texture, black mt dissem with white 1 deg plagio + quartz phenocrysts in monzodiorite.	102321	0.181	0.338
709.38	711.05		2.0	0.1	7	QMTVN 10	Peppered texture, black mt dissem with white 1 deg plagio + quartz phenocrysts in monzodiorite. Minor qtz/carb veining assoc with mt veining. Minor BKN zone.	102322	0.206	0.409
711.05	712.38		2.0	0.1	7	QMTVN 10		102323	0.218	0.375
712.38	714.35		2.0	0.1	7	QMTVN 10	Peppered texture, black mt dissem with white 1 deg plagio + quartz phenocrysts in monzodiorite. hocolize incr in kfsp veining. Smokey/grey qv assoc with mt massive diss.	102324	0.275	0.5
714.35	727.06	ANDESITE POLYLITHIC TUFF								
714.35	716.01	Fine-coarse grained It green-grey fragmental chloritic	1.0	0.1		QKVN 7	Peppered texture, black mt dissem with white 1 deg plagio + quartz phenocrysts in monzodiorite. localize incr in kfsp veining. Smokey/grey qv assoc with mt massive diss. light green/grey vfg matrix med to very coarse sized mafic chloritic, plagioclase, qtz and monzo frags. Py and cpy +/- diss in matrix and frags. Chlorite infilling jts locally. Randomly oreintated kfsp + qv + hairline structures. Incr. kfsp veining. Toodoggone Formation to EOH.	102325	0.014	0.018
716.01	717.15		1.0	0.1		QKVN 7	increased kfsp veining	102326	0.089	0.067

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
717.15	718.79	Fine-coarse grained It green-grey fragmental chloritic silicic	1.0	0.1	QCV	7 Pale green/grey matrix, qtz, plagio fragments - boundaries obscured by pervasive silicif'n Py +/- cpy fine dissem within matrix. Qtz/carb stringers + hairline structures. Green/grey mottled appearance. Chl infilling joint. Minor bkn zones	102327	0.003	0.011
718.79	719.91		1.0	0.1	QCV	7 Green/grey localized mottled texture. Pale green/grey very fine grain matrix w/ gragments - outlines vague alteration. Py +/- cpy diss. Chl + kfsp infilling joint	102328	0.004	0.008
719.91	720.96		1.0	0.1	QCV	7 as above, also: about 60cm potassic altered monzodiotite fragment in tuff assox. W/ later milky white qv structure w/ chl, carb + kfsp inclusions	102329	0.014	0.013
720.96	721.94		1.0	0.1	QCV	7 as above, also: vague porphyritic texture of monzodiotite fragment barely visible	102330	0.035	0.039
721.94	723.85		1.0	0.1	QCV	7 as above, also: ~10cm potassic altered pink monzodiotite fragment	102331	0.004	0.024
723.85	725.21		1.0	0.1	QCV	7 as above, also: ~10cm unaltered monzodiotite fragments - boundary with tuff matrix is clear	102332	0.003	0.018
725.21	726.08		1.0	0.1	QCV	7 as above, also: hairlike stringers - qtz and kfsp	102333	0.001	-2
726.08	727.06		1.0	0.1	QCV	7	102334	0.001	0.006
727.06	733.36	MOTTLED SPOTTED UNIT							
727.06	729.08	Fine-medium-grained grey pink silicic silicic	1.0	0.1	KVN	2 Pale grey matrix probably fine grained qtz + plagioclase. Anhedral to subhedral dark green mafic clumps, size range btwn 1mm to 5mm diameter. Localized plagio + qtz phenocrysts. Clasts are randomly aligned. Possibly sili + seri. Darker grey portions. Less falsic?	102335	0.001	-2
729.08	731.15				KVN	2	102336	0.001	0.005
731.15	733.36				KVN	2	102337	0.001	-2
733.36	738.91	ANDESITE POLYLITHIC TUFF							
733.36	735.22	Fine-coarse grained medium grey fragmental chloritic silicic	1.0	0.1	QKVN	5 Medium grey fine grain w/ five to ~10cm diameter fragments in tuff matrix . Polyolithic qtz monzodiotite, vnt cross fragments. Outline of fragments faint. Localized potassic portion	102338	0.001	-2
735.22	736.08		1.0	0.1	QKVN	5 As above, also: large vnt cross fragment in tuff or cutting (intrusive?) tuff. 45 degree angle might be assoc. with contact	102339	0.002	0.006
736.08	737.04		1.0	0.1	QKVN	5	102340	0.001	-2

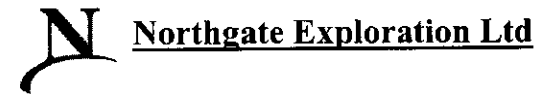
Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
737.04	738.58	Fine-coarse grained medium grey fragmental chloritic silicic	1.0	0.1	QKVN	5	102341	0.002	0.005
738.58	738.91		1.0	0.1	QKVN	5	102342	0.002	0.007
738.91	741.44	MOTTLED SPOTTED UNIT							
738.91	740.27	Fine-coarse grained light grey silicic silicic			KVN	5	102343	0.001	-2
740.27	740.72				KVN	5	102344	-2	-2
740.72	741.14	Fine-grained light green silicic sericitic	2.0	0.1	QVN	5	102346	0.001	0.008
741.14	741.44					As above, also: py as minor fine disseminations, reduced locally to about 1%	102347	-2	-2
741.44	744.33	ANDESITE POLYLITHIC TUFF							
741.44	742.03	Fine-coarse grained grey silicic sericitic	2.0	0.1	QVN	5	102348	0.001	0.016
742.03	744.33		2.0	0.1	QVN	5	102349	0.001	-2
744.33	746.18	MOTTLED SPOTTED UNIT							
744.33	744.71	Fine-medium-grained light green silicic	2.0	0.1	QVN	3	102350	0.001	-2
744.71	745.10	Medium-grained light green silicic	2.0	0.1	QVN	3	102351	0.001	-2
745.10	746.18	Fine-grained grey-green silicic			QKVN	3	102352	0.002	-2
746.18	770.23	ANDESITE POLYLITHIC TUFF							
746.18	748.00	Fine-coarse grained medium green grey chloritic			QKVN	5	102353	0.001	0.005
748.00	748.95				QKVN	5	102354	0.001	0.013
748.95	750.93				QKVN	5	102355	0.001	0.013
750.93	751.67				QKVN	5	102356	0.001	0.006

Hole Number: KN-02-03

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
751.67	754.03	Fine-coarse grained medium green grey chloritic			QKVN	5	102357	0.023	0.02
754.03	755.62				QKVN	5	102358	0.003	-2
755.62	757.71				QKVN	5	102359	0.002	-2
757.71	759.57				QKVN	5	102360	0.018	0.017
759.57	760.78				QKVN	5	102361	0.01	-2
760.78	762.75				QKVN	5	102362	0.001	-2
762.75	764.41				QKVN	5	102363	-2	-2
764.41	765.00	Fine-grained medium green grey chloritic					102364	-2	-2
						Medium green/grey coloured matrix with polyolithic fragments - qtz monzodiorite qtz, plagio - size ranging from fine to 10s of cm. Fragment boundaries faint. Localized potassic alteration confined to veinlets + stringers, randomly oriented.			
765.00	767.06					Same as above.	102365	0.001	-2
767.06	768.73						102366	0.001	-2
768.73	770.23						102367	-2	-2
770.23	EOH								

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-04**

Northing: 16289.4	Total Depth: 450.09m
Easting: 10578.6	Azimuth: 360°
Elevation: 1645.4	Dip: -75°

Geologist: B. LaPeare
Logged Date: 6/15/2002

Survey Depth	Azimuth	Dip	Comments:
0 m	360°	-75°	
91 m	338°	-76°	
183 m	341°	-77°	
274 m	340°	-76°	
451 m	343°	-78°	

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-04**

From (m)	To (m)	Rock Type	Comments
0	15.24	CASING	CASING/OVERBURDEN
15.24	48.77	ANDESITE BLADED FELDSPAR PORPHYRY	BROKEN ZONE (1) highly altered to mostly clay-> protolith texture mostly destroyed by altn but locally bladed enhydral felted clay altd plag phenocysts->impossible to distinguish if BFP is xenoliths within massive int. vol unit but consistency at altn would suggest BFP unit->unit is characterized by 0 RQD and is very crumbly/ rubbly->py is wky diss locally - ARGILLIC?
48.77	125.9	INTERMEDIATE VOLCANIC	BROKEN ZONE(2) - intensely fxd / broken as above but finer gr and locally mod silicified-> locally clay-> qtz + ser -> unit is characterized by mod/ high degree of py mineralization as: on lts/ on fx planes/ disseminated @ 5-15% thru out-> prolith textures destroyed -> very abrupt end at broken zone @ 125.90 -> ARGILLIC -> PHYLLIC
125.9	248.8	ANDESITE FLOW	extremely competent unit (pinkish ate + entry (?) vnlt thru out most of unit) due to high silica content-> silica has been introduced as pervasive silicification/ qtz Flooding-> locally mottled texture from patchy remnant chlorite within pervasive silica-> protolith texture has been completely destroyed -> patch chl probably from previous andesite TAKLA formation volcanoes-> the upper 5m exhibits lite pinkish gypsum vnlt +/- py but overall veining is rare (<3% overall within unit) but locally py vnlt/ stringers are common and randomly oriented -> the very fine gr secondary silica gives the unit a quasi rhyodacitic appearance-> rare visible cpy w/ py
248.8	301	ANDESITE	as above - local w.d patchy py
301	321.56	INTERMEDIATE VOLCANIC	FAULT ZONE : highly rubbly locally clay altd fault and contact zone between upper andesite & lower silicified unit is rubble qtz +/- mag unit - most of gouge probably washed away by drilling - rubble mixed between upper andesite and lower silicified unit

Hole Number:

KN-02-04

From (m)	To (m)	Rock Type	Comments
321.56	375.4	QUARTZ MONZONITE	Quartz Monzonite - QTZ + PY +/- MAG ZONE : siliceous thru out from veining/ qtz flooding/ silicification-> protolith extremely diffuse to mostly obliterated-> however locally equant medium gr sericitic (lite green/ white) plag is somewhat visible and resembles intrusive texture noted in KN02-01 & 03 where qtz + mag zone in QMNZ is know-> py +/- rare cpy occurs as py/ stringers @ random angles mostly but also as infill within qtz vnlt - py locally very euhedral within vnlt - and as diss-> cpy occurs as v.f. gr masses within py vnlt and very rarely diss-> overall % at py +/- cpy @ appox 3-5 % but locally up to 10%-> magnetite is < 1% overall occuring locally up to 3% as vnlt or patchy within qtz vnlt mostly within lower 20m of silicified unit and best developed within last 3m-> lower contact is brecciated over 10cm width and then grades into the siliceous unit or the lower lithic tuff has been emplaced by faulting
375.4	450.9	ANDESITE INTERMEDIATE FRAGMENTAL	Toodoggone Formation: intercalated volci fragmental (?) & syenite(?): fragmental volcanic as intersected in KN02-02, 16 w/ numerous intersections of syentic/monzontic dykes -> fragments in vol'c are mostly light grey/ bleached & siliceous and generally rounded and vary from <1cm to 4cm -> although termed a lithic tuft the matrix is very msv w/ felted med. gr subhedral plag w/ no orientation observed -> vol'c may be more of a sub-volcanic breccia pipe w/ fragments sourced @ depth -> syentic dykes are mostly high angle to c.a w/ alt'd ser, chl -> contacts at dykes range from gradetimal to diffuse -> 'MAY' possibly be larger scale fregments - however med/coarse fragments also occur within the more med gr dykes -> veining throughout is almost all soft pink zeo (?) +/-carb as either white or yellowish -> py or cpy does occur locally w/ some fragments but rare overall

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-04

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	15.24	CASING							
0.00	15.24					CASING/OVERBURDEN	4	-2	-2
15.24	48.77	ANDESITE BLADED FELDSPAR PORPHYRY							
15.24	20.00	Fine-medium-grained black grey brecciated clay	0.5			BROKEN ZONE (1) highly altered to mostly clay-> protolith texture mostly destroyed by altn but locally bladed anhedral feldspar altered plagioclase phenocrysts->impossible to distinguish if BFP is xenoliths within massive int. vol unit but consistency at altn would suggest BFP unit->unit is characterized by 0 RQD and is very crumbly/ rubbly->py is wkly diss locally - ARGILLIC?	106001	0.004	0.108
20.00	26.00		0.5				106002	0.002	0.128
26.00	29.00		0.5				106003	0.002	0.133
29.00	35.05		0.5				106004	0.002	0.14
35.05	40.00		0.5				106005	0.002	0.122
40.00	45.00		0.5				106006	0.013	0.169
45.00	48.77		0.5				106007	0.012	0.143
48.77	125.9	INTERMEDIATE VOLCANIC							
48.77	56.39	Fine-grained light grey green brecciated silicic sericitic	5.0	QVN	5	BROKEN ZONE(2) - intensely fxd / broken as above but finer gr and locally mod silicified-> locally clay-> qtz + ser -> unit is characterized by mod/ high degree of py mineralization as: on lts/ on fx planes/ disseminated @ 5-15% thru out-> protolith textures destroyed -> very abrupt end at broken zone @ 125.90 -> ARGILLIC -> PHYLLIC	106008	0.012	0.11
56.39	57.91		10.0	QVN	5	highly broken	106009	0.013	0.101
57.91	59.44		15.0	QVN	5		106010	0.016	0.164
59.44	62.48		5.0	QVN	5		106011	0.029	0.174
62.48	64.01		10.0	QVN	5		106012	0.007	0.073
64.01	66.14		10.0	QVN	5		106013	0.009	0.059
66.14	68.58		15.0	QVN	5	broken rubbly core w/ various styles of py mineralization well developed	106014	0.029	0.123

Hole Number: KN-02-04

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
68.58	70.68	Fine-grained light grey green brecciated silicic sericitic	10.0		QVN	5	106015	0.068	0.108
70.68	73.15		10.0		QVN	5	106016	0.045	0.114
73.15	76.20		10.0		QVN	5	106017	0.035	0.074
76.20	79.25		5.0		QVN	5	106018	0.011	0.044
79.25	80.77		5.0		QVN	5	106019	0.031	0.057
80.77	83.82		5.0		QVN	5	106020	0.042	0.099
83.82	86.87		3.0		QVN	5	106021	0.052	0.099
86.87	89.92		3.0		QVN	5	106022	0.042	0.119
89.92	91.44		3.0		QVN	5	106023	0.087	0.147
91.44	92.96		5.0		QVN	5	106024	0.077	0.108
92.96	94.49		5.0		QVN	5	106025	0.085	0.121
94.49	96.01		5.0		QVN	5	106027	0.108	0.165
96.01	97.54		5.0		QVN	5	106028	0.138	0.215
97.54	99.06	Fine-grained light grey green brecciated silicic clay	3.0		QVN	5	106029	0.109	0.169
99.06	100.58		3.0		QVN	5	106030	0.052	0.127
100.58	102.10	Fine-grained light grey green brecciated silicic sericitic	3.0		QVN	5	106031	0.165	0.172
102.10	103.63		3.0		QVN	5	106032	0.2	0.157
103.63	105.16		3.0		QVN	5	106033	0.111	0.149
105.16	106.68		5.0		QVN	5	106034	0.072	0.151
106.68	108.20		3.0		QVN	5	106035	0.07	0.165
108.20	111.25		3.0		QVN	5	106036	0.073	0.163
111.25	117.35		3.0		QVN	5	106037	0.2	0.259
117.35	121.92		3.0		QVN	5	106038	0.096	0.139
121.92	125.90		3.0		QVN	5	106039	0.073	0.146
125.9	248.8	ANDESITE FLOW							

Hole Number: KN-02-04

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
125.90	127.90	Fine-grained light grey silicic chloritic	3.0			extremely competent unit (pinkish ate + entry (?) vnlt thru out most of unit) due to high silica content-> silica has been introduced as pervasive silicification/ qtz Flooding-> locally mottled texture from patchy remnant chlorite within pervasive silica-> protolith texture has been completely destroyed -> patch chl probably from previous andesite TAKLA formation volcanoes-> the upper 5m exhibits lite pinkish gypsum vnlt +/- py but overall veining is rare (<3% overall within unit) but locally py vnlt/ stringers are common and randomly oriented -> the very fine gr secondary silica gives the unit a quasi rhyodacitic appearance-> rare visible cpy w/ py	106040	0.021	0.136	
127.90	129.90		5.0	QVN	10	gypsum vnlt exhibit wk diffuse pink colour	106041	0.053	0.118	
129.90	131.90		5.0	QGVN	10		106042	0.029	0.095	
131.90	133.90		10.0	0.5	QGVN	10	gypsum vnlt exhibit wk diffuse pink colour-> nc qtz from silicification/ qtz flooding-> local tr cpy w/ py	106043	0.031	0.08
133.90	136.00		7.0	QVN	10	alunite(?) along py stringer selvages locally-> probably, cnhy and not alunite	106044	0.028	0.107	
136.00	138.00		7.0	QAVN	10		106045	0.043	0.123	
138.00	140.00		7.0	QAVN	10	> 80% SiO2	106046	0.059	0.125	
140.00	142.00	Fine-grained grey silicic chloritic	5.0	1.0	QVN	15	dirty brown qtz (anh?) w/ local py vnlt-> cpy stringers sub // w/ c.a	106047	0.067	0.195
142.00	144.00		5.0	0.5	QVN	10	local, semi- hard, dk gy vnlt (qtz + chl?) x-cut by py vnlt	106048	0.028	0.172
144.00	146.00		10.0	1.0	QAVN	15	very local cpy as separate stringer	106049	0.061	0.133
146.00	148.00		7.0	1.0	QAVN	15		106050	0.045	0.125
148.00	150.00		10.0	0.5			> 90% SiO2 - one black hem patch	106051	0.131	0.27
150.00	152.00		5.0	0.5	QAVN	10		106053	0.063	0.115
152.00	154.00		5.0	0.5	QAVN	10		106054	0.019	0.141
154.00	156.00		7.0	0.5	QAVN	10	> 90% SiO2 - one black hem patch-> sinuous pygmatic dk gy qtz + chl (?) vnlt sub // c.a	106055	0.033	0.167
156.00	158.00		15.0	1.0	QAVN	5	py +/- cpy as well developed patchy infill and as vnlt occuring locally thru out	106056	0.089	0.21
158.00	160.00		5.0	0.5	QAVN	3	patchy chl more prevalent locally	106057	0.175	0.341
160.00	162.00		5.0	1.0	QAVN	5	chl decreases-> locally with patchy py +/- cpy	106058	0.096	0.266

Hole Number: KN-02-04

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
162.00	164.00	Fine-grained grey silicic chloritic	3.0	0.5	QAVN	7 py vnlt x-cuts by qtz + anhy	106059	0.063	0.148
164.00	166.00		3.0	0.5	QAVN	5 patchy chl locally well developed -> local pinkish anhy + qtz vnlt	106060	0.096	0.181
166.00	168.00		3.0	0.1	QAVN	5	106061	0.053	0.13
168.00	170.00		3.0	0.1	QAVN	5	106062	0.126	0.22
170.00	172.00		5.0	0.5	QAVN	10 as above - locally well developed -> local pinkish anhy + qtz vnlt	106063	0.08	0.164
172.00	174.00		3.0	0.1	QAVN	7	106064	0.081	0.162
174.00	176.00		5.0	0.5	QAVN	10	106065	0.087	0.146
176.00	178.00		3.0	0.1	QAVN	10 as above - stringers/ vnlt highly random -> qtz + anhy x-cuts py	106066	0.121	0.246
178.00	180.00		5.0	0.5	QAVN	15 as above - inc in chl : qtz/ chl ~ 60/40	106067	0.135	0.249
180.00	182.00		3.0	0.1	QAVN	7	106068	0.114	0.246
182.00	184.00		5.0	0.1	QAVN	10 as above-> dec in chl	106069	0.112	0.229
184.00	186.00		7.0	0.5	QAVN	15 as above-> chl only locally, < 20% -> mostly complete replacement by qtz	106070	0.132	0.268
186.00	188.00		7.0	0.5	QAVN	10	106071	0.234	0.406
188.00	190.00		2.0	0.1	QAVN	3 as above - slight inc in patchy chl & dec in py	106072	0.12	0.217
190.00	192.00		7.0	0.5	QAVN	5 as above - patchy chl is almost absent - inc in py	106073	0.117	0.223
192.00	194.00		7.0	0.5	QAVN	3	106074	0.105	0.213
194.00	196.00		3.0	0.1	QAVN	3 as above - local in in chl -> dec in py	106075	0.084	0.205
196.00	198.00		3.0	0.1	QAVN	3 as above - further inc in chl to ~ 30%	106076	0.111	0.2
198.00	200.00		5.0	0.5	QAVN	7 as above - one low x cpy stringer +/- py	106077	0.169	0.283
200.00	202.00		5.0	0.5	QAVN	7 local visible cpy w/ py -> smoky gy qtz vnlt same texture as silicification w/ hish	106079	0.121	0.247
202.00	204.00		5.0	0.5	QAVN	7 py common along qtz + anhy selvages-> +/-cpy	106080	0.139	0.289
204.00	206.00		5.0	1.0	QAVN	7 qtz + anhy vnlt more purple-> cpy w/ py locally mod developed	106081	0.192	0.347
206.00	208.00		5.0	0.5		patchy mottled chl locally well developed -> py as random vnlt & patchy in fill +/- cpy	106082	0.148	0.337
208.00	210.00		5.0	0.5	QAVN	5 mottled qtz exhibits very wk dwn colour-> possibly from sericite w/ qtz	106083	0.142	0.297

Hole Number: KN-02-04

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
210.00	212.00	Fine-grained grey silicic chloritic	5.0	0.5	QAVN	7 locally wd patchy - peppered chl-> from fragments(??)	106084	0.181	0.342
212.00	214.00		3.0	0.5	QAVN	5 mottled thru out between lt dirty brownish gy qtz + chl	106085	0.184	0.302
214.00	216.00		7.0	2.0	QAVN	10 py +/- cpy as locally w.d but patchy	106086	0.197	0.356
216.00	218.00		5.0	1.0	QAVN	10 as above but dec in sulphides	106087	0.235	0.513
218.00	220.00		7.0	0.5	QAVN	10 med gr chl clusted proximal to py stringer selvages - one 10cm wide py + qtz + anhy white 50o	106088	0.171	0.27
220.00	222.00		3.0	0.1	QAVN	5 highly mottled	106089	0.192	0.312
222.00	224.00		3.0	0.1	QAVN	5	106090	0.173	0.294
224.00	226.00		3.0	0.1	QAVN	5 more silicified-> less mottled	106091	0.201	0.394
226.00	228.00		3.0	0.5	QAVN	5	106092	0.18	0.311
228.00	230.00		3.0	0.1	QAVN	3 as above-> no patches chl-> py stringer/ vnlts almost always w/ qtz & anhy	106093	0.215	0.36
230.00	232.00		5.0	0.5	QAVN	5 local pure gyp vnlts-> as above	106094	0.232	0.394
232.00	234.00		3.0	0.1	QAVN	5 as above w/ py assoc w/ cmb vnlts -> mostly @ high angle	106095	0.25	0.431
234.00	236.00		5.0	0.5	QAVN	10 visible cpy locally within patchy py	106096	0.212	0.365
236.00	238.00		5.0	0.5	QAVN	10	106097	0.174	0.288
238.00	240.00		3.0	0.5	QAVN	5 inc in chl locally - visible copy in py in silicified intercepts	106098	0.283	0.512
240.00	242.00		5.0	0.5	QAVN	5 as above-> no visible cpy	106099	0.208	0.411
242.00	244.00		5.0	0.5	QAVN	10 gyp vnlts x- cuts mag vnlts-> only one mag vnlts noted	106100	0.335	0.691
244.00	246.00		5.0	0.5	QAVN	10 slight inc in pure anhy vnlts - no mag-> inc in chl->more "volc" apperance	106101	0.18	0.342
246.00	247.60		5.0	0.1	QAVN	10	106102	0.143	0.307
247.60	248.80	Fine-grained grey chloritic silicic	3.0	0.1	AZVN	7 end of silicified zone	106103	0.105	0.169
248.8	301	ANDESITE							
248.80	250.00	Fine-medium-grained grey-green chloritic silicic	5.0	0.1	QAVN	10 as above - local w.d patchy py	106105	0.132	0.235
250.00	252.00		5.0	0.5	QAVN	5 as above - local w.d patchy py - high qtz vnlts significant dec in silicification-> qtz now as vnlts mostly	106106	0.143	0.255
252.00	254.00	Fine-medium-grained grey-green chloritic	3.0	0.5	QAVN	5 silicifraction mostly obsent-> py and/ or vnlts/ stringers-> tr epy w/ py-> py assue w/ qtz +/- anhy vnlts-> local 100% anhy vnlts	106107	0.105	0.186

Hole Number: KN-02-04

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
254.00	256.00	Fine-medium-grained grey-green chloritic	3.0	0.1	QAVN	5 as above : mottled texture due to very dk green texture, med gr chl in background of light grey, Fine to very fine gr plag + ser	106108	0.139	0.247
256.00	258.00		5.0	0.1	QAVN	10 as above but locally silicified area 40cm assoc w/ 3 py vnlt	106109	0.087	0.146
258.00	260.00		3.0	0.1	QAVN	10 as above but more solid u/c gy locally	106110	0.131	0.213
260.00	262.00		5.0	0.5	QAVN	10 as above w/ local patchy py +/- cpy assoc w/ local qtz flooding	106111	0.19	0.32
262.00	264.00		10.0	0.1	QAVN	15 as above but slight inc in patchy qtz flooding-> py as infill x- cuts qtz	106112	0.104	0.196
264.00	266.00		5.0	0.1	QAVN	15 qtz as vnlt-> no flooding -> rare pink anhy (?) vnlt-> dec in py	106113	0.251	0.399
266.00	268.00	Fine-medium-grained grey-green silicic chloritic	5.0	0.1	QAVN	5 local pervasive silicification w/ py stringers-> low x fault @264.85	106114	0.171	0.307
268.00	270.00		10.0	0.5	QAVN	10 inc in silicification to 40% +/- ser-> inc in py w/ local visible py -> anhy x- cuts qtz & py-> qtz locally bx.d	106115	0.234	0.49
270.00	272.00		10.0	0.1	QAVN	25 qtz as flooding & vnlt -> gyp as stringers @ 1-2mm wide	106116	0.217	0.403
272.00	274.00		10.0	0.5	QAVN	25 rare soft pink anhy/ zeo stringers // w/ qtz vnlt	106117	0.267	0.504
274.00	276.00		7.0	0.1	QAVN	15	106118	0.255	0.44
276.00	280.00	Fine-medium-grained grey-green chloritic silicic	5.0	0.1	QAVN	10 as above - highly rubbly and poor recovery thru out-> dec in silicification	106119	0.28	0.459
280.00	286.51		3.0	0.1	QAVN	5 exact as above	106120	0.268	0.461
286.51	293.00		3.0	0.1	QAVN	15 msv - not rubbly	106121	0.391	0.629
293.00	294.00					only locally very wkly silicified-> qtz + py vnlt very rare but random anhy stringers thru out up 15% of intercept is minor py w/ anhy - patchy ser altn assoc w/ secondary qtz	106122	0.37	0.64
294.00	296.00	Fine-grained grey-green chloritic sericitic	3.0		QAVN	15	106123	0.223	0.31
296.00	298.00		4.0		QAVN	15 as above but slight inc in qtz +/- py-> local qtz + anhy vnlt-> py locally x- cuts anhy	106124	0.278	0.42
298.00	300.00		3.0		QAVN	15	106125	0.406	0.515
300.00	301.00		3.0		QAVN	15	106126	0.255	0.423
301	321.56	INTERMEDIATE VOLCANIC							

Hole Number: KN-02-04

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
301.00	304.00	Fine-grained grey brecciated clay chloritic	3.0			FAULT ZONE : highly rubbly locally clay altd fault and contact zone between upper andesite & lower silicified unit is rubble qtz +/- mag unit - most of gouge probably washed away by drilling - rubble mixed between upper andesite and lower silicified unit	106127	0.501	0.859
304.00	321.56					extremely poor recovery (0.05% locally)-> mostly silicified unit as rubble	106128	0.396	0.55
321.56	375.4	QUARTZ MONZONITE							
321.56	323.09	Medium-fine-grained grey silicic sericitic				Quartz Monzonite - QTZ + PY +/- MAG ZONE : siliceous thru out from veining/ qtz flooding/ silicification-> protolith extremely diffuse to mostly obliterated-> however locally equant medium gr sericitic (lite green/ white) plag is somewhat visible and resembles intrusive texture noted in KN02-01 & 03 where qtz + mag zone in QMNZ is know-> py +/- rare cpy occurs as py/ stringers @ random angles mostly but also as infill within qtz vnlt - py locally very euhedral within vnlt - and as diss-> cpy occurs as v.f. gr masses within py vnlt and very rarely diss-> overall % at py +/- cpy @ appox 3-5 % but locally up to 10%-> magnetite is < 1% overall occuring locally up to 3% as vnlt or patchy within qtz vnlt mostly within lower 20m of silicified unit and best developed within last 3m-> lower contact is brecciated over 10cm width and then grades into the siliceous unit or the lower lithic tuff has been emplaced by faulting	106129	0.477	0.619
323.09	324.00	Medium-fine-grained grey-green silicic sericitic	3.0	0.1	QVN	7	106131	0.498	0.68
324.00	326.00	Medium-fine-grained grey-green brecciated silicic sericitic	2.0	0.1	QVN	5	106132	0.285	0.528
326.00	328.00	Medium-fine-grained grey-green silicic sericitic	3.0	0.1	QVN	10	106133	0.314	0.578
328.00	330.00		3.0	0.1	QVN	10	106134	0.382	0.706
330.00	332.00		5.0	0.1	QVN	15	106135	0.494	0.912
332.00	334.00		3.0	0.1	QVN	10	106136	0.378	0.716
334.00	336.00		5.0	0.5	QVN	15	106137	0.318	0.715
336.00	338.00		5.0	0.5	QVN	15	106138	0.587	1.275
338.00	340.00		7.0	0.1	QVN	15	106139	0.473	1.08

Hole Number: KN-02-04

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
340.00	342.00	Medium-fine-grained grey-green silicic sericitic	5.0 0.1	QVN	15 as above-> py locally x- cuts qtz	106140	0.445	0.996
342.00	344.00		5.0 0.5	QVN	20 as above-> qtz vnlt variable between thin (<3mm wide) low angle to c.g to wider vnlt (<10cm) @ 40- 60o c.g	106141	0.44	1.34
344.00	346.00		5.0 1.0	QVN	20 as above-> well developed cpy in 25o c.g qtz vnlt @ 345.70	106142	0.455	1.185
346.00	348.00		3.0 0.5 3	QVN	15 as above locally well developed mag as infill and x-cutting qtz	106143	0.579	1.84
348.00	350.00		5.0 0.5	QVN	20 as above-> py on local low angle fx-> rare pink soft stringers x- cut py & qtz	106144	0.288	1.17
350.00	352.00		5.0 0.1	QVN	20 as above - low angle vuggy, py vnlt locally	106145	0.451	1.315
352.00	354.00		7.0 0.5	QVN	40 inc in chaledonic qtz	106146	0.45	1.105
354.00	356.00		10.0 0.1	QVN	40 30o qtz vnlt w/ wid euhedral py w/ mag in vein selvage as local pink soft x- cutting stringer	106147	0.305	1.895
356.00	358.00		10.0 1.0	QVN	50 py as irregular infill within qtz- epy + py vnlt within and parrallel qtz vnlt	106148	0.443	1.38
358.00	360.00		7.0 1.0	QVN	50 as above but slight dec in py	106149	0.402	1.265
360.00	362.00		10.0 1.0 5	QVN	50 as above w/ 5% mag as patchy infil and inc in py	106150	0.604	1.605
362.00	364.00		7.0 0.5	QVN	70 high dergree of qtz vn replacement-> low angle qtz vnlt-> qtz is brecciated 0 end of intercept-> fragments rounded	106151	0.368	1.56
364.00	366.00	Fine-medium-grained grey-green silicic sericitic	10.0	QVN	40 as above-> well developed qtz + mag + py + cpy over 20cm @ 365.40 - 365.60 @ 90o c.g	106152	0.352	1.275
366.00	368.00		7.0	QVN	40 as above-> no mag-> 3% as random x- cutting pink zeo stringers	106153	0.227	1.125
368.00	370.00		10.0	QVN	40 patchy mag to rare vnlt-> well developed py +/- cpy in 35cm of smoky qtz-> gouge/ fragments @ 368.90 - 369.20	106154	0.182	0.991
370.00	372.00		7.0	QVN	40 smoky grey chaldeconic x- cut by barren milky white qtz w/ py in selvage-> local zeo stringers	106155	0.309	1.185
372.00	374.00		10.0	QVN	90 almost completely smoky qtz flooded -> py + cpy assoc. w/ mag infill locally -> one pink zeo veinlet - 2cm wide @ 45 degrees -> qtz locally bx'd	106157	0.486	1.865
374.00	375.40					106158	0.526	2.21
375.4	450.9	ANDESITE INTERMEDIATE FRAGMENTAL						

Hole Number: KN-02-04

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
375.40	377.00	Fine-medium coarse grained dark grey-green heterogeneous sericitic	0.1			Toodoggone Formation: intercalated volci fragmental (?) & syenite(?): fragmental volcanic as intersected in KN02-02, 16 w/ numerous intersections of syentic/monzontic dykes -> fragments in vol'c are mostly light grey/bleached & siliceous and generally rounded and vary from <1cm to 4cm -> although termed a lithic tuft the matrix is very msv w/ felted med. gr subhedral plag w/ no orientation observed -> vol'c may be more of a sub-volcanic breccia pipe w/fragments sourced @ depth -> syentic dykes are mostly high angle to c.a w/ alt'd ser, chl -> contacts at dykes range from gradetimal to diffuse -> 'MAY' possibly be larger scale fregments - however med/coarse fragments also occur within the more med gr dykes -> veining throughout is almost all soft pink zeo (?) +/-carb as either white or yellowish -> py or cpy does occur locally w/ some fragments but rare overall	106159	0.179	0.512
377.00	378.00	Fine-medium coarse grained dark grey-green heterogeneous	1.0			diffuse to well preserved polyolithic subrounded fragments - mostly qtz -> intercept is fine gr matrix -> random pink zeo stringers throughout -> one qtz veinlet @ 60 degrees -> py located within rims of local fragments and patchy assoc. w/ carb infill	106160	0.132	0.39
378.00	380.00	Fine-medium coarse grained dark grey-green	1.0			as above w/ intercept of med intrusive w/ highly rounded mixed fragments -> locally semi pervasive ser alt'n	106161	0.112	0.594
380.00	382.00	Fine-medium coarse grained grey-green heterogeneous sericitic	0.5	1	ZCVN	5 med gr, msv intrusive/ sub-vol'c texture throughout ranging from diffuse to fresh to well developed - fragments are more rare but locally subrounded black siliceous weakly magnetic fragments -> weak carb in local pink soft veinlets	106162	0.014	0.043
382.00	384.00	Fine-medium coarse grained light grey heterogeneous sericitic clay	1.0		QCV	5 as above but mostly bleached due to semi-pervasive clay +/-ser alt'n - local smoky grey qtz fragments are broken w/ weak assoc. py	106163	0.027	0.088
384.00	386.00		2.0		QCV	5 as above w/ mostly med gr intrusive texture -> variable between fresh /siliceous and softer ser alt'n w/ assoc. colour change from mottled grey (fsh) to light grey-green -> rare qtz + carb + py -> low angle fx's w/ minor gouge -> 15cm cluster of black wkly magnetic v.f.gr rounded fragments	106164	0.202	0.685

Hole Number: KN-02-04

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
386.00	388.00	Fine-medium coarse grained light grey heterogeneous silicic sericitic	2.0		ZCVN	3 variable between fresh & sericitic alt'd intrusive/sub volcanic to locally silicified and fine grain due to overprinting at med grained texture - fragments not observed	106165	0.049	0.231
388.00	390.00		5.0			silicified to local light dun coloured ser alt'n -> med gr 'knots' of py assoc. w/ ser alt'n -> very diffuse 'ghosted' coarse, rounded, med gr possible veinlet(?) fragments within med gr sub-volcanic -> autobreccia ?? -> fine gr, black diss magnetic occurs within both matrix & clasts -> coarse (10cm) fragment of coarse gr monzonite w/ mag fragments within fine grain silicified matrix -> fine grain silicified matrix exhibits sub angular polymictic, med/coarse fragments in light green partially bleached alt'n - fragments range from med grain to aphanitic and locally weakly magnetic	106166	0.056	0.189
390.00	392.00	Fine-medium coarse grained light grey heterogeneous sericitic sericitic	1.0		ZCVN	5 coarse to med grain fragments - polymictic, one 15cm fine grain msv, dk grey, siliceous vol'c fragment -> highly diffuse and may be partially melted -> 20 degree veinlet w/ angular stained carb fragments -> gouge along parallel fx	106167	0.021	0.067
392.00	394.00	Fine-medium coarse grained light grey heterogeneous sericitic chloritic	1.0		ZCVN	3 similar to above w/ diffuse, very coarse - med gr fragments - siliceous, lt grey fragments locally closely packed within chl alt'd matrix	106168	0.033	0.078
394.00	396.00					variable between med grain to more fine grain -> fragments are rounded and are either smoky grey qtz or aphanitic & black which are weakly to mod. Magnetic	106169	0.087	0.168
396.00	398.00		1.0			mostly fine gr w/ polymictic clasts -> which then grades into more med subvolcanic matrix also with clasts -> clasts are f.g. vol'c or med gr int.	106170	0.052	0.104
398.00	400.00	Fine-medium coarse grained grey-green heterogeneous	0.5	2	ZCVN	5 fragmental intrusive -> subvolcanic polyolithic bx suggested by fine to med grain size of matrix - diss. Mag	106171	0.054	0.124
400.00	402.00	Fine-medium coarse grained grey-green heterogeneous sericitic clay	0.5	2	ZCVN	5 as above - locally bleached due to ser or clay alt'n -> diss mag	106172	0.013	0.035
402.00	404.00	Fine-medium coarse grained grey-green heterogeneous silicic	0.5	2	ZCVN	3 mostly fine grain to locally more med grain + typical sub-vol'c	106173	0.01	0.036
404.00	406.00		0.5	2	ZCVN	3 silicified where fine gr -> local black, very coarse irregular shaped vol'c clast -> partial melting -> blebs of sub-vol'c within vol'c clasts -> mixing??	106174	0.007	0.015

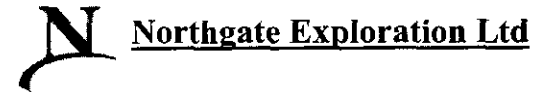
Hole Number: KN-02-04

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
406.00	408.00	Fine-medium coarse grained grey-green heterogeneous k-felspar	0.5	2	ZCVN	5 fine to locally med gr sub vol'c matrix - clasts very diffuse	106175	0.016	0.097	
408.00	410.00	Fine-medium coarse grained grey-green heterogeneous	1.0	2	ZCVN	5 as above - local 'bands' of coarse, rounded, qtz rich fragments -> bands @ 60 degrees -> however also randomly scattered -> diss mag in both matrix and clasts - matrix is siliceous and locally fine gr	106176	0.022	0.122	
410.00	412.00	Fine-medium coarse grained grey-green heterogeneous k-felspar sericitic	1.0	0.5	2	ZCVN	10 mostly kfsp alt'd monzonite w/ local sericitic alt'n -> trace wispy cpy w/ carb + zeo stringers	106177	0.062	0.113
412.00	414.00	Fine-medium coarse grained grey-green heterogeneous sericitic	2.0	2	ZCVN	10 variable between med gr monzonite and fine gr matrix w/ 20% med gr plag -> ghosted fragments of monzonite in FP(?)	106178	0.031	0.04	
414.00	416.00		0.5	1	ZCVN	10 as above - local clusters of highly irregular shaped qtz fragments -> intercept is mostly fine gr but locally well preserved med gr intrusive monzonite texture	106179	0.003	0.01	
416.00	418.00		0.5	1	ZCVN	10 exact as above -> fragment within fragment (???) @ 416.60	106180	0.021	0.022	
418.00	420.00		0.5	1	ZCVN	10 med gr monzonite intrusive texture throughout -> wk but semi-pervasive ser alt'n -> no fragments	106181	0.019	0.022	
420.00	422.00		0.5	2	ZCVN	5 exact as above	106183	0.034	0.091	
422.00	424.00		3.0		QCV	5 variable between monzonite & fine gr matrix w/ 10-15% med gr subhedral plag -> one 'patch' of qtz infill w/ well developed assoc. py -> py also w/ zeo + carb veinlet	106184	0.044	0.079	
424.00	426.00		1.0		ZCVN	5 monzonitic texture diffuse but apparent throughout -> 5cm carb + zeo veinlet @ 40 degrees	106185	0.055	0.202	
426.00	428.00	Fine-medium coarse grained grey-green heterogeneous k-felspar	0.5		ZCVN	5 monzonitic w/ no fragments except bottom 30cm which is fine gr matrix w/ coarse rounded intrusive fragments	106186	0.002	-2	
428.00	430.00		1.0	2	ZCVN	5 monzonitic mostly to locally fine grain w/ rounded to subangular clasts	106187	0.003	-2	
430.00	432.00	Fine-medium coarse grained grey-green heterogeneous sericitic	2.0	2	ZCVN	5 as above - locally bleached - coarse rounded fragments of sericitic alt'd intrusive within monzonitic matrix - py in bleaching	106188	0.001	-2	
432.00	434.00		2.0	2	ZCVN	5 monzonitic texture thru-out -> highly irregular framgnets rounded of sericitic alt'd intrusive (?) within finer grain portion	106189	0.001	-2	

Hole Number: KN-02-04

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
434.00	436.00	Fine-medium coarse grained grey-green heterogeneous sericitic	2.0	2	ZCVN	5 as above -> clasts in finer grain portions -> xenoliths of vol'c fragmental (???) -> locally py w/ high angle qtz veinlet	106190	0.007	0.019
436.00	438.00	Fine-medium coarse grained grey-green heterogeneous sericitic chloritic	1.0	2	ZCVN	3 ser +/-chl alt'n thru-out -> msv, med grain sub vol'c texture -> clasts in finer grain, dk grey section	106191	0.001	-2
438.00	440.00	Fine-medium coarse grained grey-green heterogeneous sericitic	0.5	2	ZCVN	2 fragments are mostly monzonitic and mostly rounded from 3mm - 2cm across -> also 15cm monz. Dykelet or large frag	106192	0.001	-2
440.00	442.00		0.5	2	ZCVN	7 matrix is sub-volcanic - NOT lapilli/xtl tuft - possible dyke w/ upper 30 cm as finer grain vol'c w/ coarse intrusive fragments	106193	0.002	-2
442.00	444.00		0.5	2	ZCVN	5 intercalated between sub-vol'c med grain & fine grain matrix w/coarse irregular clasts - locally closely packed	106194	0.001	-2
444.00	446.00		0.5	2	ZCVN	7 med to very coarse clasts of monzonite within very msv, fine grain vol'c	106195	0.001	-2
446.00	448.00		0.5	2	ZCVN	3 as above -> one frag @ 446.10 as black, very fine grain within monzonitic frag	106196	0.002	0.01
448.00	450.00		0.5	2	ZCVN	35 high degree of pink semi-soft zeo veinlets as sinuous and irregular sub parallel to core axis - local qtz coarse clasts	106197	0.002	-2
450.00	450.90		0.5	2	ZCVN	15 clasts within sub-vol'c matrix - one pinkish carb + zeo veinlet	106198	0.002	-2
450.9 EOH									

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-05**

Northing:	16236.3	Total Depth:	590.4m
Easting:	10356.2	Azimuth:	360°
Elevation:	1736.8	Dip:	-85°

Geologist:	J. Mazvihwa
Logged Date:	6/19/2002

Survey Depth	Azimuth	Dip	Comments:
0 m	360°	-85°	
213 m	360°	-87°	
305 m	343°	-87°	
579 m	323°	-87°	

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-05**

From (m)	To (m)	Rock Type	Comments
0	5.3	CASING	Bleached zone. Highly altered possibly moderately silicified and sericitized. Original protolith totally destroyed. Fine to coarse grained diss pyrite, massive in places and infilling joints along with limonite. BKN
5.3	130.15	ANDESITE	Bleached zone. Highly altered possibly moderately silicified and sericitized. Original protolith totally destroyed. Fine to coarse grained diss pyrite, massive in places and infilling joints with limonite. BKN
130.15	154.88	ANDESITE FLOW	Speckled / mottled green mafic. Chlorite specks within silicified background. More chloritic, less seri and sili - weak to moderate. Minor qtz / anhydrate veining.
154.88	155.24	QUARTZ VEIN	Pale pink/purple, qtz/anhydrate vein. About 70 cm long. Minor dark green chloritic specks within vein. Purple translucent portions of almost 100% anhydrate.
155.24	371.74	ANDESITE FLOW	Py + cpy stringer + diss assoc with qv/anh and minor hem. Speckled/mottled. Veining stockwk every ~10 cm, randomly orientated.
371.74	372.1	QUARTZ VEIN	Qtz vein assoc with minor diss py +/- cpy, smokey grey cdonic.
372.1	408.12	ANDESITE FLOW	Moderately pervasive silicification, weak sericitization. Qtz/anh vein.
408.12	468.41	QUARTZ MONZONITE	Minor diss py +/- cpy in matrix. Medium green euhedral to subhedral mafic phenocrysts - (possibly psuedomorphs from replaced plagioclase phenocrysts) in light green/grey fine matrix - probably fine plagioclase and quartz. Chl veining assoc with diss py at ~30 degrees to c.a. Smokey grey qv assoc with kfsp veining, randomly orientated. Protolith overwritten by alt'n locally.
468.41	468.8	QUARTZ VEIN	Same as sample 102865. Cut by py + cpy stringers. Minor gouge/clay material assoc with qv locally.
468.8	481.85	QUARTZ MONZONITE	Diss py + cpy assoc with smokey grey qv. Up to ~ 50% mt - massive locally. Chalcedonic qv locally cut by later milky white qv.
481.85	482.06	QUARTZ VEIN	Qtz vein, smokey grey, cracks locally infilled by py +/-cpy - stringers. Massive py assoc with mt.

Hole Number:

KN-02-05

From (m)	To (m)	Rock Type	Comments
482.06	523.3	QUARTZ MONZONITE	Dark green mafic phenocrysts in pale grey matrix. Smokey grey 5cm qv, assoc with kfsp and diss py +/- cpy. Smokey grey qtz veinlets randomly orientated.
523.3	524.08	QTZ-MT VEIN	Smokey grey qv, assoc with mt. Py +/- cpy diss in mt and qtz. Weak - 45degrees to c.a. banding. Main qv cut by later milky white qtz stringers. Locally and weak vuggy. Increased diss py assoc with qv - local.
524.08	524.68	QUARTZ MONZONITE	Minor diss py +/- cpy. Qtz monzodiorite protolith locally overwritten by pervasive silicification and potassic alt'n locally. Smokey grey qtz + mt +/- kfsp veining randomly orientated cross cutting locally. Minor joints lined by hematite. Local BKN zones.
524.68	525.23	POLYLITHIC TUFF DACITE	Diss py within pale green grey matrix. Smokey grey, angular fine to 2cm diameter sized fragments within lithic tuff. Cut by randomly orientated kfsp veining. Intrusive breccia - similar to Tooggone FM with qtz phenos.
525.23	534.75	QUARTZ MONZONITE	Plagio and pyroxene/amphibole phenocrysts in pale green matrix. Cut by qtz + mt assoc veining +/- kfsp, randomly orientated. Py +/- cpy diss assoc with smokey grey qv.
534.75	535.03	POLYLITHIC TUFF DACITE	BKN polyolithic tuff. Py diss in matrix (with chloritic haloes) and in fragments. Fragments in polyolithic tuff are qtz, vol and qtz monzodiorite. Chlorite rich. - 30 degrees to c.a. of gouge clay filled joint btwn PLT and silicified portion. Tooggone Formation to EOH.
535.03	556.54	DACITE	Py +/-cpy diss in matrix and fragments - minor stringers. Silicified and sericitized, pervasive moderate to high. Localized bt alt'n - weak to moderate, patchy. Protolith overwritten w/ alt'n. Fragments in tuff are felsic, less pitassic (bt) altered than matrix generally. Outline of fragments barely visible.
556.54	558.58	MOTTLED SPOTTED UNIT	Contact defined by fine grained chloritic portion, BKN zone. Sample consists of PLT and Unit X - contact generally gradual. Unit X - felsic light grey matrix with green mafic fragments. Medium sized py disseminations in unit X matrix.
558.58	590.4	POLYLITHIC TUFF DACITE	Minor py +/- cpy diss in PLT matrix and fragments. Fragment outline barely visible, protolith overwritten by silicification and sericification. Local wk bt alt'n. Cut by randomly orientated kfsp late stage veining.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	5.3	CASING						
0.00	5.30	Fine-coarse grained light grey quartz-sericite-pyrite	3.0	QVN	5 Bleached zone. Highly altered possibly moderately silicified and sericitized. Original protolith totally destroyed. Fine to coarse grained diss pyrite, massive in places and infilling joints along with limonite. BKN	5	-2	-2
5.3	130.15	ANDESITE						
5.30	7.49	Fine-coarse grained light grey quartz-sericite-pyrite	3.0	QVN	5 Bleached zone. Highly altered possibly moderately silicified and sericitized. Original protolith totally destroyed. Fine to coarse grained diss pyrite, massive in places and infilling joints with limonite. BKN	102602	0.013	0.144
7.49	9.25		3.0	QVN	5 Bleached zone, highly altered - sericite and silicified, original protolith destroyed. Fine to coarse diss pyrite, infilling joints in places. BKN. Bleached Takla Volcanics. Local friable portions.	102603	0.012	0.08
9.25	11.34		3.0	QVN	5	102604	0.01	0.064
11.34	13.22		3.0	QVN	5 Localized increased pyrite - fine to massive disseminations, up to about 5% py concentrate locally. BKN zone, Flow and qtz fragments cemented by clay/gouge material. Less friable.	102605	0.01	0.093
13.22	15.39		3.0	QVN	5 Localized org/yell limonite infilling joint plane. Bleached Takla Vol. Moderate silicified and sericitized, original protolith obliterated. Less friable.	102606	0.058	0.153
15.39	16.99		3.0	QVN	5	102607	0.025	0.118
16.99	18.90		3.0	QVN	5 Localized org/yell limonite infilling joint plane. Bleached Takla Vol. Moderate silicified and sericitized, original protolith obliterated. Less friable. Petro Sample.	102608	0.017	0.108
18.90	20.71		3.0	QVN	5	102609	0.03	0.116
20.71	22.60		3.0	QVN	5	102610	0.021	0.057
22.60	24.51		3.0	QVN	5	102611	0.036	0.094
24.51	25.43		3.0	QVN	5	102612	0.034	0.089
25.43	28.51		3.0	QVN	5	102613	0.024	0.079

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
28.51	30.45	Fine-coarse grained light grey quartz-sericite-pyrite	3.0		QVN	5	102614	0.014	0.059
30.45	32.45		3.0		QVN	5	102615	0.091	0.139
32.45	34.50		3.0		QVN	5	102616	0.26	0.241
34.50	36.60		3.0		QVN	5	102617	0.039	0.091
36.60	38.41		3.0		QVN	5	102618	0.03	0.075
38.41	40.23		3.0		QVN	5	102619	0.069	0.112
40.23	42.46		3.0		QVN	5	102620	0.073	0.156
42.46	44.21		3.0		QVN	5	102621	0.194	0.227
44.21	46.46		3.0		QVN	5	102622	0.048	0.119
46.46	47.55		3.0		QVN	5	102623	0.028	0.153
47.55	48.55		3.0		QVN	5	102624	0.05	0.152
48.55	52.94		3.0		QVN	5	102625	0.022	0.09
52.94	55.16		3.0		QVN	5	102627	0.024	0.081
55.16	57.00		3.0		QVN	5	102628	0.04	0.114
57.00	59.08		3.0		QVN	5	102629	0.029	0.094
59.08	60.87		3.0		QVN	5	102630	0.05	0.154
60.87	62.66		3.0		QVN	5	102631	0.052	0.141
62.66	64.62		3.0		QVN	5	102632	0.042	0.152
64.62	66.62		3.0		QVN	5	102633	0.038	0.114
66.62	68.46		3.0		QVN	5	102634	0.057	0.139
68.46	70.25		3.0		QVN	5	102635	0.228	0.271
70.25	70.85		3.0		QVN	5	102636	0.103	0.247

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
70.85	72.81	Fine-coarse grained light grey quartz-sericite-pyrite	3.0		QVN	5	Localized BKN zones, less friable. Bleached Takla Vol. Grey/grey/green mottled texture. Moderately sericitized and silicified. Py +/-cpy +/- fine white soft powdery/soapy joint infilling - probably gypsum. Minor dissolution vuggy py stringers - gypsum removed. Weak volcanic protolith - mottled chloritic structure. Veining, randomly oriented.	102637	0.076	0.311
72.81	75.02	Fine-grained light grey quartz-sericite-pyrite	3.0	0.5	QGVN	10	Bleached Takla vol, moderately silicified and sericitized. Py +/-cpy stringers assoc with qv and gypsum in places. Mottled texture with chl units. Protolith destroyed by gypsum. Alteration. Veining randomly oriented	102638	0.085	0.235
75.02	77.11		3.0	0.5	QGVN	10	Bleached Takla vol, moderately silicified and sericitized. Py +/-cpy stringers assoc with qv and gypsum in places. Mottled texture with chl units. Protolith destroyed by talc/gypsum? Alteration. Veining randomly oriented	102639	0.063	0.184
77.11	79.01		3.0	0.5	QGVN	10		102640	0.07	0.178
79.01	81.11		3.0	0.5	QGVN	10		102641	0.044	0.172
81.11	83.02		3.0	0.5	QGVN	10		102642	0.044	0.155
83.02	83.45		3.0	0.5	QGVN	10		102643	0.081	0.216
83.45	85.79		3.0	0.5	QGVN	10		102644	0.074	0.198
85.79	87.84		3.0	0.5	QGVN	10		102645	0.047	0.195
87.84	89.50		3.0	0.5	QGVN	10		102646	0.036	0.091
89.50	90.93	Fine-grained light grey broken quartz-sericite-pyrite	4.0	0.5			Bleached Takla vol. High pyrite content - average is about 4%. Broken faulted some, angular fragments. Moderately silicified and sericitized. Py +/-cpy diss. 10cm pieces of core in BKN.	102647	0.044	0.142
90.93	92.05		4.0	0.5				102648	0.025	0.09
92.05	94.01	Fine-grained light grey quartz-sericite-pyrite	3.0	0.5	QGVN	10	Py +/-cpy diss and stringers assoc with qv and gypsum locally. Minor BKN increased py % in places up to about 4%. Veining is randomly oriented.	102649	0.11	0.341
94.01	96.01		3.0	0.5	QGVN	10		102650	0.096	0.161
96.01	97.84		3.0	0.5	QGVN	10	Py +/-cpy diss and stringers assoc with qv and gypsum locally. Minor BKN increased py % in places up to about 4%. Veining is randomly oriented. Chloritic portion - weak volcanic protolith visible	102651	0.077	0.168
97.84	99.67		3.0	0.5	QGVN	10		102653	0.06	0.115

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
99.67	100.77	Fine-grained light grey quartz-sericite-pyrite	3.0	0.5	QGVN 10		102654	0.044	0.087
100.77	102.15	Fine-grained light grey broken quartz-sericite-pyrite	4.0	0.5		Bleached Takla vol, high py +/-cpy content. Broken faulted, incompetent zone, angular fragments. Moderately silicified and sericitized. Py +/-cpy diss. Locally competent - about 5cm pieces.	102655	0.015	0.082
102.15	103.67		4.0	0.5			102656	0.016	0.074
103.67	104.97		4.0	0.5		Bleached Takla vol, high py +/-cpy content. Broken faulted, incompetent zone, angular fragments. Moderately silicified and sericitized. Py +/-cpy diss. Locally competent portions with incr chl content.	102657	0.024	0.068
104.97	106.40		4.0	0.5		Bleached Takla vol, high py +/-cpy content. Broken faulted, incompetent zone, angular fragments. Moderately silicified and sericitized. Py +/-cpy diss. Locally competent portions with incr chl content. Slightly more competent + less altered, more chloritic - green colour portions.	102658	0.115	0.218
106.40	108.32		4.0	0.5		Bleached Takla vol, high py +/-cpy content. Broken faulted, incompetent zone, angular fragments. Moderately silicified and sericitized. Py +/-cpy diss. Locally competent portions with incr chl content. More competent portions, about 50 cm of unbroken core. Locally incr py up to 5% in 10 cm BKN faulted zone.	102659	0.055	0.126
108.32	110.04		4.0	0.5			102660	0.069	0.131
110.04	110.41		4.0	0.5		Bleached Takla vol, high py +/-cpy content. Broken faulted, incompetent zone, angular fragments. Moderately silicified and sericitized. Py +/-cpy diss. Locally competent portions with incr chl content. More broken, incompetent, locally chloritic; less seri + sili alteration. Minor about 20 cm portion with slightly rounded fragments and less assoc pyrite about 2%.	102661	0.02	0.092
110.41	113.59		4.0	0.5			102662	0.066	0.193
113.59	115.11		4.0	0.5			102663	0.079	0.179
115.11	116.68		4.0	0.5			102664	0.057	0.152
116.68	118.56		4.0	0.5			102665	0.023	0.108
118.56	120.71		4.0	0.5			102666	0.077	0.168
120.71	123.13		4.0	0.5			102667	0.042	0.134

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
123.13	124.66	Fine-grained light grey broken quartz-sericite-pyrite	4.0	0.5			102668	0.066	0.123
124.66	125.72		4.0	0.5			102669	0.15	0.198
125.72	126.77		4.0	0.5		Bleached Takla vol, high py +/-cpy content. Broken faulted, incompetent zone, angular fragments. Moderately silicified and sericitized. Py +/-cpy diss. Locally competent portions with incrd chl content. Locally dark green portion - more mafic - less silic and seri, little mafic competent.	102670	0.252	0.592
126.77	127.27		4.0	0.5		Bleached Takla vol, high py +/-cpy content. Broken faulted, incompetent zone, angular fragments. Moderately silicified and sericitized. Py +/-cpy diss. Locally competent portions with incrd chl content. Locally zeolite assoc with gypsum and py +/- cpy within BKN faulted zone. *	102671	0.691	-2
127.27	129.35		4.0	0.5		Bleached Takla vol, high py +/-cpy content. Broken faulted, incompetent zone, angular fragments. Moderately silicified and sericitized. Py +/-cpy diss. Locally competent portions with incrd chl content. Incrd competent portions, within BKN faulted pyrite zone.	102672	0.377	0.776
129.35	130.15	Fine-grained light grey quartz-sericite-pyrite	3.0	0.5	QVN	10 Bleached Takla Vol, weak protolith visible. Py +/- diss and stringer form. Minor kfsp veinlets. Mottled textured - chl units.	102673	0.069	0.217
130.15	154.88	ANDESITE FLOW							
130.15	130.78	Fine-grained light grey chlorite-quartz	3.0	0.5	QVN	10 Speckled / mottled green mafic. Chlorite specks within silicified background. More chloritic, less seri and sili - weak to moderate. Minor qtz / anhydrate veining.	102674	0.138	0.301
130.78	132.03	Fine-grained medium green chlorite-quartz	3.0	0.7	QZVN	10 Qv stockwork, random. Py and cpy mainly in stringer forms assoc with qtz + qtz/anhydrite role. Mottled texture. Green chlorite specks within silicified background - protolith. Veining random.	102675	0.101	0.235
132.03	133.61		3.0	0.7	QZVN	10	102676	0.048	0.125
133.61	134.43		3.0	0.7	QZVN	10 Increased purple qtz/anh veining. Associated with py and cpy - massive. Stringers assoc with chl in places. Qv + anh stockwk every +/- 10 cm assoc with py + cpy. Py + cpy also disseminated with chl halos.	102677	0.05	0.129
134.43	136.79		3.0	0.7	QZVN	10	102679	0.058	0.186

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
136.79	138.83	Fine-grained medium green chlorite-quartz	3.0	0.7	QZVN	10 Increased purple qtz/anh veining. Associated with py and cpy - massive. Stringers assoc with chl in places. Qv + anh stockwk every +/- 10 cm assoc with py + cpy. Py + cpy also disseminated with chl halos. Minor graphite infilling jt.	102680	0.048	0.127
138.83	141.11		3.0	0.7	QZVN	10 Increased purple qtz/anh veining. Associated with py and cpy - massive. Stringers assoc with chl in places. Qv + anh stockwk every +/- 10 cm assoc with py + cpy. Py + cpy also disseminated with chl halos. Localized chloritic + silicified portions.	102681	0.063	0.182
141.11	143.26		3.0	0.7	QZVN	10 Increased purple qtz/anh veining. Associated with py and cpy - massive. Stringers assoc with chl in places. Qv + anh stockwk every +/- 10 cm assoc with py + cpy. Py + cpy also disseminated with chl halos. Localized silicified portion with diss py + cpy. Minor kfsp veining.	102682	0.061	0.209
143.26	145.39		3.0	0.7	QZVN	10 Increased purple qtz/anh veining. Associated with py and cpy - massive. Stringers assoc with chl in places. Qv + anh stockwk every +/- 10 cm assoc with py + cpy. Py + cpy also disseminated with chl halos. Diss py and cpy located within chl specks, silicification incr locally.	102683	0.118	0.295
145.39	146.84		3.0	0.7	QZVN	10	102684	0.071	0.232
146.84	148.33		3.0	0.7	QZVN	10	102685	0.101	0.338
148.33	150.44		3.0	0.7	QZVN	10 Increased purple qtz/anh veining. Associated with py and cpy - massive. Stringers assoc with chl in places. Qv + anh stockwk every +/- 10 cm assoc with py + cpy. Py + cpy also disseminated with chl halos. Locally silicified portions.	102686	0.072	0.275
150.44	152.09		3.0	0.7	QZVN	10	102687	0.048	0.183
152.09	154.88		3.0	0.7	QZVN	10	102688	0.088	0.265
154.88	155.24	QUARTZ VEIN							
154.88	155.24	Fine-grained purple				Pale pink/purple, qtz/anhydrate vein. About 70 cm long. Minor dark green chloritic specks within vein. Purple translucent portions of almost 100% anhydrate.	102689	0.002	0.251
155.24	371.74	ANDESITE FLOW							
155.24	157.82	Fine-grained medium green chlorite-quartz	3.0	0.7	QAVN	10 Py + cpy stringer + diss assoc with qv/anh and minor hem. Speckled/mottled. Veining stockwk every ~10 cm, randomly orientated.	102690	0.062	0.266

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
157.82	160.07	Fine-grained medium green chlorite-quartz	3.0	0.7	QAVN	10 10 cm frags of tuft-dark green matrix with qtz/plagio phenocrysts - within diss py. Followed by silicified portion - localized.	102691	0.084	0.218
160.07	162.31		3.0	0.7	QAVN	10	102692	0.085	0.2
162.31	164.02		3.0	0.7	QAVN	10 Silicified portion with incrd py and cpy up to 5% and 0.9% respectively, appears as veinlets randomly oriented, minor assoc with chl specks.	102693	0.06	0.145
164.02	166.89		3.0	0.7	QAVN	10 Py + cpy stringers + diss assoc locally with qv vein and qtz/anh veining. Locally chloritic -less altered portions and high silicified local + sheared portion. Mottled texture.	102694	0.067	0.153
166.89	168.69		3.0	0.7	QAVN	10 Py +/- cpy stringers assoc with qv and qtz/anh veining, diss py + cpy with chl halos. Mottled. Veining stockwk every ~10 cm, randomly orientated. Localized silicified portions. Py + cpy stringers bound by chl in places.	102695	0.123	0.265
168.69	170.84		3.0	0.7	QAVN	10	102696	0.089	0.223
170.84	173.07		3.0	0.7	QAVN	10	102697	0.092	0.185
173.07	175.30		3.0	0.7	QAVN	10	102698	0.174	0.4
175.30	177.46		3.0	0.7	QAVN	10	102699	0.076	0.211
177.46	179.73		3.0	0.7	QAVN	10	102700	0.128	0.272
179.73	181.07		3.0	0.7	QAVN	10	102701	0.12	0.245
181.07	182.31		3.0	0.7	QAVN	10	102702	0.077	0.181
182.31	182.56		3.0	0.7	QAVN	10 Py +/- cpy stringers assoc with qv and qtz/anh veining, diss py + cpy with chl halos. Mottled. Veining stockwk every ~10 cm, randomly orientated. Localized silicified portions. Py + cpy stringers bound by chl in places. Bornite associated with qtz/anh vein with py+ cpy disseminated within.	102703	0.208	0.41
182.56	184.05		3.0	0.7	QAVN	10	102705	0.108	0.213
184.05	186.13		3.0	0.7	QAVN	10	102706	0.101	0.201
186.13	188.35		3.0	0.7	QAVN	10	102707	0.103	0.325
188.35	189.63		3.0	0.7	QAVN	10	102708	0.192	0.358

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
189.63	191.97	Fine-grained medium green chlorite-quartz	3.0	0.7	QAVN	10 Py +/- cpy stringers assoc with qv and qtz/anh veining, diss py + cpy with chl halos. Mottled. Veining stockwk every ~10 cm, randomly orientated. Localized silicified portions. Py + cpy stringers bound by chl in places. About 5cm qtz/anh vein with >5% py and >0.7% cpy enclosed by siliceous material.	102709	0.08	0.151
191.97	193.68		3.0	0.7	QAVN	10	102710	0.051	0.095
193.68	195.05		3.0	0.7	QAVN	10 Py +/- cpy stringers assoc with qv and qtz/anh veining, diss py + cpy with chl halos. Mottled. Veining stockwk every ~10 cm, randomly orientated. Localized silicified portions. Py + cpy stringers bound by chl in places. Locally less chl mottled texture.	102711	0.056	0.115
195.05	196.24		3.0	0.7	QAVN	10	102712	0.085	0.22
196.24	199.00	Fine-grained light grey chlorite-quartz	2.0	0.5	QAVN	3 Py + cpy - minor stringers, diss within chl. Locally silicified pervasive alteration. Minor green chl specks. Reduced qtz /and veining. No mottled texture.	102713	0.084	0.177
199.00	200.16		2.0	0.5	1 QAVN	5 Locally chloritic portions, chlorite specks - minor mottled texture. Minor qtz/anh veining. Diss py and cpy assoc with chl locally.	102714	0.11	0.205
200.16	201.81	Fine-grained medium green chlorite-quartz	2.0	0.5	1 QAVN	7 Py + stringers and diss in chl. Localized chlorite rich portions. Minor silicified portions. Py + cpy stringers assoc with qtz. Anh veining locally. Randomly orientated.	102716	0.095	0.169
201.81	204.14		2.0	0.5	1 QAVN	7	102717	0.111	0.233
204.14	206.18		2.0	0.5	1 QAVN	7	102718	0.136	0.294
206.18	208.36		2.0	0.5	1 QAVN	7	102719	0.092	0.18
208.36	209.65		2.0	0.5	1 QAVN	7 Graphite infilling jt. Locally silicified - pale grey coloration. Green chloritic specks. Diss and stringer py and cpy associated with qtz + anh veining locally. Randomly orientated.	102720	0.1	0.322
209.65	210.78		2.0	0.5	1 QAVN	7 Graphite infilling jt. Locally silicified - pale grey coloration. Green chloritic specks. Diss and stringer py and cpy associated with qtz + anh veining locally. Randomly orientated. Slightly more chloritic specks in silicate matrix.	102721	0.068	0.16
210.78	213.47		2.0	0.5	1 QAVN	7 Py and cpy stringers assoc with qtz/anh veining locally randomly orientated, Py + cpy diss in vol. Dark green mottled texture. Qtz/anh veining, also diss within vol, in locally chloritic and silicified portions.	102722	0.131	0.289

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
213.47	215.49	Fine-grained medium green chlorite-quartz	2.0	0.5	1	QAVN 7 Py + cpy stringers assoc with qtz/anh veining, also diss within vol, in locally chloritic and silicified portions.	102723	0.164	0.328
215.49	216.73		2.0	0.5	1	QAVN 7 Py + cpy stringers assoc with qtz/anh veining, also diss within vol, in locally chloritic and silicified portions. Minor mt assoc with qv.	102724	0.224	0.461
216.73	218.54		2.0	0.5	1	QAVN 7	102725	0.157	0.321
218.54	219.29		2.0	0.5	1	QAVN 7 Py + cpy stringers assoc with qtz/anh veining, also diss within vol, in locally chloritic and silicified portions. Minor tufaceous clasts within vol - med green chl frags within pale green/ grey matrix. Diss py throughout ~1%. Minor qtz stringers.	102726	0.096	0.188
219.29	219.54		2.0	0.5	1	QAVN 7 Extensive pale purple qtz/anh vein in vol. Py stringer within vol bound by pale grey silicified portions.	102727	0.036	0.074
219.54	222.12		2.0	0.5	1	QAVN 7 Py + cpy stringers assoc with qtz/and veining locally. Randomly orientated. Mottled green chl. Smokey grey veins. Minor mt assoc. locally with qtz + anh veining + disseminations. Locally silicified + chloritic portions.	102728	0.131	0.26
222.12	224.64		2.0	0.5	1	QAVN 7 Py + cpy stringers assoc with qtz/and veining locally. Randomly orientated. Mottled green chl. Smokey grey veins. Minor mt assoc. locally with qtz + anh veining + disseminations. Locally silicified + chloritic portions. Minor brown patches - bt. alteration.	102729	0.174	0.308
224.64	227.25		2.0	0.5	1	QAVN 7 Py + cpy stringers assoc with qtz/and veining locally. Randomly orientated. Mottled green chl. Smokey grey veins. Minor mt assoc. locally with qtz + anh veining + disseminations. Locally silicified + chloritic portions.	102731	0.222	0.396
227.25	229.38		2.0	0.5	1	QAVN 7	102732	0.246	0.449
229.38	231.53		2.0	0.5	1	QAVN 7 Py + cpy stringers locally assoc with qtz/anh, also diss. Mottled green-chl minor brown patches - bt alteration locally. Locally silicified portions. Slightly incr my veining cut by qv - randomly orientated- localized.	102733	0.205	0.409
231.53	233.78		2.0	0.5	1	QAVN 7 Py + cpy stringer locally assoc with qtz/and +diss. Mottled green chl, and pale grey silicified local altn. Veining is randomly orientated. Very localized brown specks. Weak bt altn.	102734	0.188	0.365
233.78	235.34		2.0	0.5	1	QAVN 7	102735	0.155	0.289
235.34	237.92		2.0	0.5	1	QAVN 7	102736	0.173	0.344

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
237.92	239.97	Fine-grained medium green chlorite-quartz	2.0	0.5	1	QAVN 7	102737	0.197	0.338
239.97	242.52		2.0	0.5	1	QAVN 7	102738	0.14	0.308
242.52	244.69		2.0	0.5	1	QAVN 7	102739	0.17	0.33
244.69	245.97		2.0	0.5	1	QAVN 7 Py + cpy stringer locally assoc with qtz/and +diss. Mottled green chl, and pale grey silicified local altn. Veining is randomly orientated. Very localized brown specks. Weak bt altn. Slight increase in brown coloration. Possibly bt alteration.	102740	0.156	0.364
245.97	247.02		2.0	0.5	1	QAVN 7	102741	0.183	0.364
247.02	247.92	Fine-grained light grey quartz-chlorite-limonite	3.0	0.7		QAVN 7 Localized inc in py and cpy content - in mod to high silicified portions. Py and cpy stringers locally assoc with qv and anh. Py btwn 3-4%, cpy 0.7% Veining randomly orientated.	102742	0.286	0.549
247.92	249.75		3.0	0.7		QAVN 7	102743	0.205	0.401
249.75	250.88		3.0	0.7		QAVN 7	102744	0.109	0.308
250.88	251.16		3.0	0.7		QAVN 7	102745	0.08	0.237
251.16	252.07		3.0	0.7		QAVN 7	102746	0.213	0.59
252.07	254.06	Fine-grained medium green chlorite-quartz	2.0	0.5	1	QAVN 7 Py + cpy stringers assoc with qtz/and locally, also diss. Locally chloritic + silicified portions. Mottled texture from green specks. Veining is randomly orientated.	102747	0.111	0.293
254.06	256.03		2.0	0.5	1	QAVN 7	102748	0.137	0.302
256.03	258.41		2.0	0.5	1	QAVN 7	102749	0.235	0.488
258.41	260.06		2.0	0.5	1	QAVN 7	102750	0.153	0.377
260.06	261.84		2.0	0.5	1	QAVN 10 Py + cpy - stringers, diss - assoc with anh/qtz veining locally. Minor mt veining. Minor brown stain indicating weak bt. Alteration ? Random orientated veining.	102751	0.233	0.464
261.84	263.14	Fine-grained light grey quartz-chlorite-limonite	2.0	0.5		QAVN 7 Pale grey silicified sample, with pale purple qtz/anh veining. Py + cpy diss and stringers locally assoc with qtz/anh veining. Minor mottled green text. Random orientated veining.	102752	0.241	0.545
263.14	264.10	Fine-grained medium green chlorite-quartz	2.0	0.5		QAVN 10 Py + cpy - stringers assoc with qtz/anh locally. Random orientated qtz veining stwrk. Chloritic portions. Minor brown patches - bt alteration.	102753	0.09	0.215

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
264.10	264.84	Fine-grained light grey quartz-chlorite-limonite	2.0 0.5	1	QAVN 7	Py + cpy stringers - assoc with chl and qtz/andhy locally. Minor mt veining. Light grey generally silicified.	102754	0.221	0.465
264.84	267.05	Fine-grained medium green chlorite-quartz	2.0 0.5	1	QAVN 10	Py + cpy stringers, assoc with qtz/andhy locally. Generally chloritic. Minor mt veining. Mottled. Qtz veining assoc with chl. Brown speck due to wk bt. Alteration. Localized silicified portions.	102755	0.244	0.501
267.05	268.48		2.0 0.5	1	QAVN 10		102757	0.247	0.567
268.48	270.84		2.0 0.5	1	QAVN 10		102758	0.192	0.446
270.84	272.88		2.0 0.5	1	QAVN 10		102759	0.214	0.435
272.88	274.28		2.0 0.5	1	QAVN 10		102760	0.172	0.388
274.28	276.10		2.0 0.5	1	QAVN 10	Same as sample 102755. Py + cpy stringers, assoc with qtz/andhy locally. Generally chloritic. Minor mt veining. Mottled. Qtz veining assoc with chl. Brown speck due to wk bt. Alteration. Localized silicified portions. Minor mt assoc qtz, anh and py veining. Veining is randomly orientated as above. About 5 cm qtz/anh veining.	102761	0.198	0.413
276.10	278.78		2.0 0.5	1	QAVN 10	Same as sample 102755. Py + cpy stringers, assoc with qtz/andhy locally. Generally chloritic. Minor mt veining. Mottled. Qtz veining assoc with chl. Brown speck due to wk bt. Alteration. Localized silicified portions. More pervasive silicification locally - moderate to high. Green and brown patchy chloritic and bt alternation - localized wk to moderate.	102762	0.252	0.549
278.78	279.50		2.0 0.5	1	QAVN 10	Same as sample 102755. Py + cpy stringers, assoc with qtz/andhy locally. Generally chloritic. Minor mt veining. Mottled. Qtz veining assoc with chl. Brown speck due to wk bt. Alteration. Localized silicified portions. Reduced bt alteration - locally weak sericitization bordering the qtz veining. Incrd pervasive silicification - moderate to high.	102763	0.277	0.541
279.50	281.65		2.0 0.5	1	QAVN 10	Same as sample 102755. Py + cpy stringers, assoc with qtz/andhy locally. Generally chloritic. Minor mt veining. Mottled. Qtz veining assoc with chl. Brown speck due to wk bt. Alteration. Localized silicified portions. Localized silicified zone with anh veining.	102764	0.348	0.711

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
281.65	284.00	Fine-grained medium green chlorite-quartz	2.0	0.5	1	QAVN 10	Same as sample 102755. Py + cpy stringers, assoc with qtz/anhy locally. Generally chloritic. Minor mt veining. Mottled. Qtz veining assoc with chl. Brown speck due to wk bt. Alteration. Localized silicified portions. Minor mt diss - local kappometer reading 110 assoc with qv. Localized py + cpy incr about 3% py; 0.7% cpy assoc with qtz/anh veining.	102765	0.308	0.817
284.00	285.73		2.0	0.5	1	QAVN 10	Same as sample 102755. Py + cpy stringers, assoc with qtz/anhy locally. Generally chloritic. Minor mt veining. Mottled. Qtz veining assoc with chl. Brown speck due to wk bt. Alteration. Localized silicified portions. Localized py +/- cpy incr assoc with locally silicified/sericitized portion - wk to moderate.	102766	0.251	0.638
285.73	288.02		2.0	0.5	1	QAVN 10		102767	0.187	0.433
288.02	289.16		2.0	0.5	1	QAVN 10	Same as sample 102755. Py + cpy stringers, assoc with qtz/anhy locally. Generally chloritic. Minor mt veining. Mottled. Qtz veining assoc with chl. Brown speck due to wk bt. Alteration. Localized silicified portions. Locally bed veining - about 5%. Discontinuous qv - localized	102768	0.278	0.627
289.16	289.72	Fine-grained medium green brecciated chlorite	1.0	0.1		FLT 45	Fragmented qtz, kfsp veining - brecciated. Sheared. Moderate to strong dif altn. Weak sericite altn. Foliated around the qtz, kfsp, chl fragments, possibly brown pervasive faulting.	102769	0.164	0.358
289.72	291.69	Fine-grained medium green chlorite	2.0	0.5	1	QAVN 10	Py +/- cpy, stringers assoc with qtz/anhy veining - py + cpy also diss in vol. Weak bt. Alteration. Minor mt assoc with qtz/anh and minor kfsp and carb. Stringers + veins randomly orientated.	102770	0.241	0.517
291.69	293.37		2.0	0.5		QKCAV 10	Py + cpy stringers assoc with qtz/anh veining - minor. Locally cut by bordering qv. Py also diss in dif. Veining is randomly orientated.	102771	0.188	0.342
293.37	295.20		2.0	0.5		QKCAV 10	Same as above, but slightly silicified, slightly paler green coloration.	102772	0.195	0.385
295.20	297.66	Fine-grained light grey quartz-chlorite-limonite	2.0	0.5		QAVN 10	Pervasive silicification, moderate to high. Protolith overprinted locally. Portions of chl + bt altered ~ mottled green + brown in this area. Py + cpy stringers assoc with qv +/- anhy-also diss.	102773	0.181	0.325
297.66	298.46	Fine-grained light grey silicic	2.0	0.5		QAVN 10	Same as above but with slightly incred qv/anh veining, local flooding - veining boundaries not distinct. Sharp 45 deg contact with qv + vol.	102774	0.197	0.411

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
298.46	300.52	Fine-grained medium green chlorite	2.0	0.5	QAVN	10 Py +/- cpy stringers assoc with qv, bound by sericitized zones along veins locally. Veining is randomly orientated. Py + cpy assoc with qv + anh veining. Bt + chl rich areas. Local qv/and flooding.	102775	0.177	0.354
300.52	301.72		2.0	0.5	QAVN	10 Same as above.	102776	0.15	0.288
301.72	302.37		2.0	0.5	QAVN	10	102777	0.206	0.379
302.37	303.27		2.0	0.5	QAVN	10 Same as above but with minor mt units about 0.5 cm diameter assoc with qtz/anh veining. Py + cpy diss also assoc with vein in mod silicified + weakly sericitized portion.	102778	0.135	0.326
303.27	304.70		2.0	0.5	QAVN	10 Same as sample 102775, but mt diss in qv.	102779	0.206	0.424
304.70	305.64		2.0	0.5	QAVN	10 Same as sample 102775.	102780	0.234	0.463
305.64	307.46	Fine-grained light grey quartz-sericite	2.0	0.5	QAVN	10 Pervasive moderately silicification and sericitization. Py + cpy stringers assoc with qtz/anh veining - diss with chl halos. Green chloritic specks.	102781	0.226	0.402
307.46	308.75		2.0	0.5	QAVN	10	102783	0.259	0.475
308.75	310.44	Fine-grained medium brown chlorite-quartz	2.0	0.5	QAVN	10 Py and cpy stringers, bound by chl in places- outlined by sili + seri zones. Localized bt and chl, silicified portions. Weak mottled text. Veining is randomly orientated. Py assoc with qtz/anh veining.	102784	0.308	0.753
310.44	312.57		2.0	0.5	QAVN	10 Same as sample 102784.	102785	0.203	0.555
312.57	314.83		2.0	0.5	QAVN	10	102786	0.266	0.548
314.83	317.04		2.0	0.5	QAVN	10 Same as sample 102784 but 10 cm silicified/seri portions moderate to high, pervasive. Py +/- cpy diss within portions.	102787	0.205	0.421
317.04	319.13		2.0	0.5	QAVN	10	102788	0.271	0.589
319.13	321.22		2.0	0.5	QAVN	10	102789	0.17	0.34
321.22	323.49	Very fine grained medium green chlorite	2.0	0.5	QAVN	10 Py +/- cpy stringers assoc with qv + anh - bound by silicified + seriz moderate altered zones. Localized bt and chl portions. Veining randomly orientated. Py stringers outlined by chl stringers are locally cut by 2 deg generally barren qv. Py +/- cpy diss locally.	102790	0.186	0.481
323.49	325.51		2.0	0.5	QAVN	10 Same as sample 102790, but locally reduced veining btwn 5-7 %.	102791	0.274	0.511
325.51	327.43		2.0	0.5	QAVN	10 Same as sample 102790, but localized py + cpy incr assoc with 10 cm qtz/anh veining.	102792	0.235	0.433

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
327.43	329.33	Very fine grained medium green chlorite	2.0	0.5	QAVN	10	Same as sample 102790.	102793	0.337	0.562
329.33	331.32		2.0	0.5	QAVN	10	Same as sample 102790. Slightly more silicified, lighter green/grey coloration.	102794	0.355	0.572
331.32	333.27		2.0	0.5	QAVN	10		102795	0.41	0.66
333.27	335.11		2.0	0.5	QAVN	10	Same as sample 102790. Localized 5 cm portion of pervasive moderate to high seri altn with chloritic specks.	102796	0.275	0.482
335.11	337.01		2.0	0.5	QAVN	10	Same as sample 102790. Locally more silicified, lighter green/grey coloration. Localized qtz flooding.	102797	0.198	0.314
337.01	339.34		2.0	0.5	QAVN	10	Same as sample 102790. Darker green coloration, increased chlorite content, reduced silicific'n.	102798	0.29	0.467
339.34	341.73		2.0	0.5	QAVN	10	Same as sample 102790. Increased silicification, and sericitization locally about 25cm portion generally pervasive - moderate.	102799	0.177	0.319
341.73	343.77		2.0	0.5	QAVN	10		102800	0.252	0.417
343.77	346.03		2.0	0.5	QAVN	10	Same as sample 102790. Increased py diss assoc with qtz veining stockwork surrounded by chla dn biotite alt - wk to moderate. Biotite alteration, locally pervasive.	102801	0.233	0.321
346.03	348.13		2.0	0.5	QAVN	10	Same as sample 102790. Minor hem assoc with qv and carb, minor fizzing w/ HCl.	102802	0.181	0.235
348.13	350.33		2.0	0.5	QAVN	10	Same as sample 102790. Qtz veining assoc with hem and py, minor chl.	102803	0.299	0.421
350.33	352.72		2.0	0.5	QAVN	10		102804	0.447	0.544
352.72	354.80		2.0	0.5	QAVN	10	Same as sample 102790. Kfsp/hem veinlets assoc with py +/- cpy. Localized bt alteration assoc with chl + qv + py +/- cpy anhydrate	102805	0.436	0.711
354.80	356.83		2.0	0.5	QAVN	10	Same as sample 102790. Locally silicified, chl portions - mottled. Py dissem in qtz/anh veining. Increased py ~3%	102806	0.383	0.594
356.83	358.99		2.0	0.5	QAVN	10	Same as sample 102790. Qtz/anh/carb veining. Diss py in green/brown chl/bt.	102807	0.307	0.465
358.99	361.28	Fine-grained light green chlorite	2.0	0.5	QAVN	7	Py + cpy mainly diss in flow, rare stringers. Pervasive wk to mod. Bt alt'n. Qtz/anh veining + rare carb, minor hem stringers assoc with qtz veining locally.	102809	0.258	0.347
361.28	362.75		2.0	0.5	QAVN	7	Same as sample 102809. Minor mt diss in qv. Hairlike structure qv.	102810	0.181	0.25

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
362.75	363.20	Fine-grained light green chlorite	2.0	0.5	QAVN	7 Same as sample 102809. Wk ser alt'n assoc with qv. Locally increased py assoc with smokey qv, minor hem. Pervasive sil wk to moderate. Anhy qtz vein assoc with py +/- cpy.	102811	0.208	0.494
363.20	365.60		2.0	0.5	QAVN	7 Same as sample 102809. Minor mt stringers bound in smokey grey vein. Py + cpy assoc with 1cm thick qv at 90 degrees to c.a.	102812	0.328	0.575
365.60	367.89		2.0	0.5	QAVN	7 Same as sample 102809. About 7cm thick qv + minor anh assoc with py +/- cpy. Py stringers assoc with qv with minor chl. Minor hem veinlets. Minor mt veinlet assoc with qv.	102813	0.18	0.358
367.89	370.02		2.0	0.5	QAVN	7 Same as sample 102809. ~10cm silicified portion - pale yellow color, hard, bound by white qv assoc with kfsp and hem stringers.	102814	0.234	0.339
370.02	370.68		2.0	0.5	QAVN	7 Same as sample 102809. Increased qtz veining, stockwork locally.	102815	0.229	0.344
370.68	371.36		2.0	0.5	QAVN	7 Same as sample 102809. Slightly silicified - lighter coloration.	102816	0.248	0.382
371.36	371.74	Fine-grained light grey quartz-sericite	1.0	0.1	QAVN	10 Increased silicification. Pervasive, moderate. Wkly sericitized. Qtz/anh veining. Py +/- cpy diss assoc with veining.	102817	0.005	0.066
371.74	372.1	QUARTZ VEIN							
371.74	372.10	Very fine grained silicic	1.0	0.1		Qtz vein assoc with minor diss py +/- cpy, smokey grey cdonic.	102818	0.003	0.04
372.1	408.12	ANDESITE FLOW							
372.10	372.53	Fine-grained light grey quartz-sericite	1.0	0.1	QAVN	10 Moderately pervasive silicification, weak sericitization. Qtz/anh vein.	102819	0.093	0.229
372.53	374.39	Fine-grained medium grey chlorite	2.0	0.5	QAVN	10 Diss py +/- cpy in vol, minor py stringers. Qtz stringers - post mineralization wk to moderate bt alteration - giving dark brown coloration.	102820	0.328	0.47
374.39	376.65		2.0	0.5		Same as sample 102820. Py + cpy diss within qtz lense; surrounded by chl stringers.	102821	0.292	0.366
376.65	378.76		2.0	0.5		Same as sample 102820. Minor mt diss assoc with qtz. Dark green chl specks - giving mottled texture. Localized increase in py +/- cpy content, ~3% py locally	102822	0.15	0.212
378.76	380.83		2.0	0.5		Same as sample 102820.	102823	0.171	0.244

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
380.83	383.13	Fine-grained medium grey chlorite	2.0	0.5		Same as sample 102820. Weakly silicified, mt assoc with qv.	102824	0.242	0.298
383.13	383.78		2.0	0.5		Same as sample 102820. Locally increased diss py +/- cpy. Hem + qtz veining randomly orientated. Qtz/anh veining random.	102825	0.238	0.329
383.78	387.42		2.0	0.5		Same as sample 102820. Minor qtz/hem veining. Minor mt-diss assoc with qv.	102826	0.118	0.17
387.42	389.71		2.0	0.5	QAVN	10 Py +/- cpy diss associated with qtz/anh veining. Rare py stringers. Veining randomly orientated.	102827	0.165	0.212
389.71	391.91		2.0	0.5	QAVN	10 Same as sample 102827. Locally silicified, lighter grey colour. Mt assoc with qv - mt % locally up to ~3% disseminations	102828	0.156	0.22
391.91	394.16		2.0	0.5	QAVN	10 Same as sample 102827. Mt about 5% locally - diss, assoc with qv. Py +/- cpy stringer assoc with qtz + anh veining.	102829	0.116	0.16
394.16	396.39		2.0	0.5	QAVN	10 Same as sample 102827. Py + cpy assoc with qtz + anhy veining bound by qtz veining. Mt diss assoc with qv. Veining randomly orientated.	102830	0.129	0.238
396.39	398.51		2.0	0.5	QAVN	10 Same as sample 102827. Hem veining assoc with qtz veining.	102831	0.084	0.141
398.51	399.32		2.0	0.5	QAVN	10 Same as sample 102827.	102832	0.168	0.376
399.32	399.75		2.0	0.5	QAVN	10 Same as sample 102827. Increased hem stringers assoc with qv, and minor sericitic portion.	102833	0.115	0.151
399.75	400.43		2.0	0.5	QAVN	10 Same as sample 102827.	102835	0.117	0.173
400.43	401.26		2.0	0.5	QAVN	10 Same as sample 102827. Locally increased qtz veining assoc with py.	102836	0.107	0.095
401.26	402.20		2.0	0.5	QAVN	10 Same as sample 102827. Rare qtz assoc with hem veining. Qtz stringers discontinuous locally - structurally controlled? Chalcedonic smokey grey qv assoc with py.	102837	0.173	0.27
402.20	404.30		2.0	0.5	QAVN	10 Same as sample 102827. Py stringers locally bound by chl stringers. Qtz/mt/py vein bound by chl stringers running at ~ 45 degrees to c.a. Minor 90 degrees.	102838	0.181	0.413
404.30	406.42		2.0	0.5	QAVN	10 Same as sample 102827. Qtz vein assoc with kfsp, mt and py. Minor bt alteration - pervasive locally.	102839	0.162	0.339

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
406.42	408.12	Fine-grained medium grey chlorite	2.0 0.5		CTC 90	Same as sample 102827. Minor BKN zone. Contact with qtz monzodiorite defined by gouge and clay filled fault zone and qv assoc with kfsp and chl, angled at about 90 degrees	102840	0.168	0.328
408.12	468.41	QUARTZ MONZONITE							
408.12	409.74	Fine-medium-grained medium green porphyritic quartz-chlorite-limonite	1.0 0.1	2	QKVN	7 Minor diss py +/- cpy in matrix. Medium green euhedral to subhedral mafic phenocrysts - (possibly pseudomorphs from replaced plagioclase phenocrysts) in light green/grey fine matrix - probably fine plagioclase and quartz. Chl veining assoc with diss py at ~30 degrees to c.a. Smokey grey qv assoc with kfsp veining, randomly orientated. Protolith overwritten by alt'n locally.	102841	0.382	0.655
409.74	411.58		1.0 0.1	2	QKVN	7 Plagioclase and mafic - pyroxene or amphibole bt phenocrysts in pale green matrix. ~10cm vuggy smokey grey qv assoc with py +/- cpy diss - cut by later stage qtz/carb vein.	102842	0.517	1.15
411.58	413.62		1.0 0.1	2	QKVN	7 Wk brecciated texture	102843	0.51	0.901
413.62	414.62		1.0 0.1	2	QKVN	7 Minor kfsp discontinuous stringers, ~ 10cm qv assoc with mt, kfsp; py +/- cpy and minor epi, assoc with carb and hem locally.	102844	0.439	0.92
414.62	415.62		1.0 0.1	2	QKVN	7 Portions of plagio and qtz phenocrysts in monzodiorite. Minor qtz/hem veining.	102845	0.276	0.675
415.62	419.80	Fine-medium-grained medium green porphyritic silicic	1.0 0.1	2	QKVN	5 Minor diss py +/- cpy. Plagio, qtz, pyroxene and bt phenocrysts in light green/grey matrix. Cut by discontinuous qtz/kfsp stringers locally - possibly structural controlled. Minor potassic zones. Weakly silicified, moderate to high locally. Generally pristine.	102846	0.288	0.52
419.80	422.06		1.0 0.1	2	QKVN	5 Same as sample 102846. Moderately to high silicified zone - pale grey colour. Protolith overprinted with silicification. Qtz veining assoc with kfsp and mt.	102847	0.492	0.921
422.06	424.28		1.0 0.1	2	QKVN	5 Same as sample 102846. Mt units about 2cm across assoc with moderate altered portion.	102848	0.225	0.479
424.28	426.30		1.0 0.1	2	QKVN	5 Same as sample 102846. Massive py + cpy clump within moderate silicified zone. Minor BKN zone. Red and black hem assoc with qtz + py vein.	102849	0.357	0.72

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
426.30	428.41	Fine-medium-grained medium green porphyritic silicic	1.0 0.1	2	QKVN	5 Same as sample 102846. Qtz vein assoc locally with kfsp, mt and minor carb. Qtz/kfsp/carb vein vuggy dissolution structure. Qv also assoc locally with kfsp, carb, hem + py.	102850	0.273	0.566
428.41	430.82		1.0 0.1	2	QKVN	5 Same as sample 102846. Minor randomly orientated smokey/grey qtz/kfsp +/-mt +/-py veining.	102851	0.285	0.642
430.82	431.50		1.0 0.1	2	QKVN	5 Same as sample 102846.	102852	0.155	0.371
431.50	432.79		1.0 0.1	2	QKVN	5 Same as sample 102846. BKN zones gouge/clay material. Slightly brecciated qtz. Competent silicified portion btwn BKN zones.	102853	0.309	0.769
432.79	434.42		1.0 0.1	2	QKVN	5 Same as sample 102846. Slightly brecciated and altered at beginning of sample.	102854	0.216	0.553
434.42	435.56		1.0 0.1	2	QKVN	5 Same as sample 102846. ~10cm smokey grey qv assoc with kfsp - consisting about 45% of the vein and mt massive about 15% veining. Qtz/kfsp veining assoc with py +/- cpy.	102855	0.235	0.694
435.56	437.21		1.0 0.1	2	QKVN	5 Same as sample 102846. Locally BKN, qtz, kfsp veining assoc with py +/- cpy. Qtz veining also locally assoc with mt and minor py +/- cpy dissem.	102856	0.62	1.9
437.21	439.21		1.0 0.1	2	QKVN	5 Same as sample 102846. Red hem veining assoc with smokey grey qv and kfsp.	102857	0.628	1.33
439.21	441.18		1.0 0.1	2	QKVN	5 Same as sample 102846. Smokey grey qv assoc with kfsp, minor carb and py +/- cpy. Qv also assoc with kfsp + mt locally. Pervasive potassic alt'n.	102858	0.321	0.857
441.18	443.29		1.0 0.1	2	QKVN	15 Same as sample 102846. Localized potassic alt'n, also contained in veining. Increased mt assoc with qv + kfsp ~3% at ~90 degrees to c.a.	102859	0.384	1.04
443.29	445.36		1.0 0.1	2	QKVN	7 Same as sample 102846. Kfsp veining running at ~45 degrees to c.a.	102861	0.273	0.709
445.36	447.32		1.0 0.1	2	QKVN	7 Same as sample 102846. Smokey grey qtz assoc with kfsp and mt locally - minor flooding - locally assoc with py veinlet, randomly orientated, locally pervasive potassic.	102862	0.499	1.63
447.32	449.60		1.0 0.1	2	QKVN	7 Same as sample 102846. Smokey grey qtz + kfsp + mt +/-py veining at ~90 degrees to c.a. Massive mt ~10% locally and randomly orientated.	102863	0.522	1.49
449.60	451.79		1.0 0.1	2	QKVN	7 Same as sample 102846. Py +/- cpy assoc with qv. Locally increased mt - ~292 reading on kappameter.	102864	0.596	1.155

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
451.79	453.81	Fine-medium-grained medium green silicic	1.0	0.1	2	QKVN 7	Minor diss py and cpy. Qtz monzodiorite pristine locally. Qtz veining assoc with kfsp with diss mt. Wkly silicified. Wk locally brecciated. Portion with mafic dark green chloritic phenocrysts in porphyry matrix.	102865	0.328	0.811
453.81	455.96		1.0	0.1	2	QKVN 7	Same as sample 102865. Locally increased mt ~5-7%, locally potassic alt'd. Minor broken zone, low angle ~10 degrees infilled by chlorite.	102866	0.558	1.245
455.96	456.29		1.0	0.1	2	QKVN 7	Same as sample 102865. Py + cpy unit about 2cm x 0.5cm, assoc with smokey grey qv. Qv also assoc with mt. Py diss within 5 cm qv assoc with kfsp and mt.	102867	1.675	3.52
456.29	458.22		1.0	0.1	2	QKVN 7	Same as sample 102865. Protolith overprinted locally. Qtz veining assoc with mt and kfsp.	102868	0.308	0.622
458.22	459.08		1.0	0.1	2	QKVN 7	Same as sample 102865.	102869	0.753	1.935
459.08	460.03		1.0	0.1	7	QKVN 15	Same as sample 102865. Locally increased mt to ~10% - massive units + fine diss and in stringer form assoc with smokey grey qv +/- kfsp.	102870	0.352	0.908
460.03	461.56		1.0	0.1	7	QKVN 15	Same as sample 102865. Rare gypsum clump assoc with kfsp, carb and smokey grey qv. Silicified. Protolith destroyed locally. Py diss within kfsp veining + bound by smokey grey qv. Alt stringers.	102871	0.55	1.495
461.56	463.67		1.0	0.1	5	QKVN 10	Same as sample 102865. Minor diss py assoc with smokey grey qv, and diss within porphyry matrix. Smokey grey qv assoc with kfsp + diss py. Mainly pristine - wk alt'n.	102872	0.308	0.782
463.67	465.99		1.0	0.1	5	QKVN 10	Same as sample 102865. Locally potassic portions. Qtz vein assoc with kfsp and diss py, locally vuggy. Py + mt stringers randomly orientated.	102873	0.317	0.567
465.99	467.85		1.0	0.1	5	QKVN 10	Same as sample 102865. Pervasive potassic alt'n, silicification obscuring protolith locally. Qtz veining, kfsp veining and mt stringers. Qtz + kfsp veining running at 0 degrees to c.a. Mt vein at 45 degrees.	102874	0.209	0.331
467.85	468.41		1.0	0.1	5	QKVN 10	Same as sample 102865. Locally potassic, qv; minor py stringers.	102875	0.397	0.779
468.41	468.8	QUARTZ VEIN								
468.41	468.80	Fine-grained light grey silicic	1.0	0.1			Same as sample 102865. Cut by py + cpy stringers. Minor gouge/clay material assoc with qv locally.	102876	0.649	1.695
468.8	481.85	QUARTZ MONZONITE								

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
468.80	469.53	Fine-medium-grained dark grey porphyritic silicic	2.0	0.1	25	QMTVN 15	Diss py + cpy assoc with smokey grey qv. Up to ~ 50% mt - massive locally. Chalcedonic qv locally cut by later milky white qv.	102877	0.599	1.335
469.53	470.24	Fine-medium-grained medium green porphyritic silicic	1.0	0.1	10	QMTVN 10	Minor diss py +/- cpy in porphyry. Smokey grey qv assoc with mt veining + minor kfsp. Mt diss locally. Qtz monzodiorite porphyritic texture evident locally.	102878	0.602	1.525
470.24	472.42	Fine-medium-grained light green porphyritic silicic	1.0	0.1	10	QMTKV 15	Py +/- cpy diss, stringers assoc with mt and qv locally, Monzodiorite protolith destroyed locally. Mt veining assoc with qv, diss in host rock. Localized pale grey silicified portions. Minor kfsp veining; randomly orientated	102898	0.549	1.12
472.42	473.64		1.0	0.1	10		Same as sample 102898. Qtz/mt veining at ~ 90 degrees to c.a. Mt veining running at about 5 degrees to c.a. ~ 10cm smokey grey qtz vein assoc with diss py.	102899	0.461	0.779
473.64	474.79	Fine-medium-grained medium green porphyritic quartz-chlorite-limonite	1.0	0.1	3	QKVN 7	Minor kfsp veining. Green mafic pyroxene/amphibole phenocrysts in pale green matrix. Qtz veining at about 90 degrees.	102900	0.255	0.316
474.79	475.43	Fine-medium-grained light grey porphyritic silicic	1.0	0.1	2	QKVN 10	Silicified, increased kfsp veining, cutting smokey grey qtz veining - assoc with diss. Protolith destroyed. Kfsp randomly orientated.	102901	0.405	0.67
475.43	475.68	Fine-medium-grained medium green porphyritic quartz-chlorite-limonite	1.0	0.1	3	QKVN 7	Dark green mafic phenocrysts in pale green matrix. Cut at ~ 90 degrees smokey grey qtz veining.	102902	0.57	1.225
475.68	476.41		1.0	0.1	3		Weakly silicified - cut by kfsp veining, randomly orientated.	102903	0.399	0.852
476.41	477.93		1.0	0.1	3		Locally increased silicification pervasive. Dark green mafic phenocryst in pale grey matrix. Smokey grey qv assoc with py stringers, vuggy qtz flooding local.	102904	0.725	1.515
477.93	478.98		1.0	0.1	3		Dark green mafic phenocrysts in pale grey matrix. Smokey grey qtz veining ~ 90 degrees to c.a. assoc with mt stringers + diss +/- py +/- cpy	102905	0.527	0.985
478.98	479.35		1.0	0.1	3		Same as sample 102905. Smokey grey qv.	102906	0.586	1.275
479.35	480.31		1.0	0.1	3		Same as sample 102905. Locally siliceous, minor qtz flooding. Py dissem in matrix and assoc with smokey grey qv. Localized potassic altered portions - weak to moderate.	102907	0.266	0.591
480.31	481.85	Fine-medium-grained light green porphyritic silicic	1.0	0.1	3		Moderate silicification and potassic alteration, py veining assoc with qv +/- kfsp generally randomly orientated.	102908	0.484	1.005
481.85	482.06	QUARTZ VEIN								

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
481.85	482.06	Fine-grained light grey silicic	3.0	0.5	20	QMTVN 100	Qtz vein, smokey grey, cracks locally infilled by py +/- cpy - stringers. Massive py assoc with mt.	102909	1.185	3.51
482.06	523.3	QUARTZ MONZONITE								
482.06	482.44	Fine-medium-grained light green porphyritic silicic	1.0	0.1	3	QKMTV 10	Dark green mafic phenocrysts in pale grey matrix. Smokey grey 5cm qv, assoc with kfsp and diss py +/- cpy. Smokey grey qtz veinlets randomly orientated.	102910	0.553	1.12
482.44	483.83		1.0	0.1	3	QKMTV 15	Green mafic and white plagio phenocrysts in pale grey matrix. Locally potassic. Py +/- cpy diss in matrix. Randomly orientated smokey grey qv assoc with kfsp locally. Mt generally diss.	102911	0.32	0.601
483.83	484.21	Fine-medium-grained dark grey porphyritic silicic	2.0	0.1	7	QMTVN 7	Smokey grey qtz and mt veining generally randomly orientated. Py +/- cpy disseminations in porphyry - protolith is destroyed.	102913	0.611	1.145
484.21	485.84		2.0	0.1	7	QMTVN 7	Increased silicification - pervasive, pale grey colour. Smokey grey qv assoc with py +/- cpy stringers. Randomly orientated kfsp stringers (45 degrees and 0 degrees to c.a. locally).	102914	0.715	1.365
485.84	486.96		2.0	0.1	7	QMTVN 7	Same as sample 102914.	102915	0.707	1.545
486.96	487.45		2.0	0.1	7	QMTVN 7		102916	0.407	1.06
487.45	489.64	Fine-medium-grained medium green porphyritic silicic	1.0	0.1	10	QM1VN 10	Minor diss py +/- cpy in porphyry. Smokey grey qv assoc with mt veining + minor kfsp. Mt diss locally. Qtz monzodiorite phophyritic texture evident locally	102879	0.458	0.943
489.64	490.00		1.0	0.1	15	QMTVN 10	Same as sample 102879.	102880	0.358	0.744
490.00	490.54		1.0	0.1	7	QMTVN 10	Same as sample 102879. Local potassic alteration; pervasive, weak to moderate. Protolith overprinted locally by alteration.	102881	0.401	0.856
490.54	490.94		1.0	0.1	7	QMTVN 10	Same as sample 102879. More chloritic, patchy. Py disseminations.	102882	0.669	1.33
490.94	491.97	Fine-grained dark grey porphyritic silicic	1.0	0.1	20	QMTVN 20	Py diss, assoc with smokey grey qv +/- mt veinlets locally. Minor kfsp assoc with qv. Local BKN zone. Protolith overwritten. Qtz/mt banding at ~ 90 degrees to c.a.	102883	0.561	0.916
491.97	493.42	Fine-medium-grained medium grey porphyritic silicic	1.0	0.1	10	QMTKV 15	Py diss, assoc with mt and smokey grey qv. Porphyritic texture preserved locally. Qtz veining assoc with mt, mainly at 80-90 degrees to c.a. Qtz +/- kfsp veining is generally randomly orientated.	102884	0.313	0.703

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
493.42	495.34	Fine-medium-grained medium grey porphyritic silicic	1.0	0.1	10	QMTKV 15	Same as sample 102884. Protolith locally overprinted. Locally siliceous and potassic.	102885	0.434	1.065
495.34	495.91		1.0	0.1	10	QMTKV 15	Same as sample 102884. Increased qtz veining - about 80% locally, cut by gypsum assoc with py +/- cpy and minor kfsp.	102887	1.3	2.39
495.91	498.31		1.0	0.1	10	QMTKV 15	Same as sample 102884. Locally increased mt content to between 20-40% locally, mainly diss massive cut by kfsp veining. Protolith partially destroyed.	102888	0.533	1.275
498.31	500.11		1.0	0.1	10	QMTKV 15	Same as sample 102884. Hem infilling joints locally. Protolith partially destroyed. Veining shows no preferred orientation. Minor BKN zone.	102889	0.368	0.833
500.11	501.77		1.0	0.1	10	QMTKV 15	Same as sample 102884.	102890	0.471	0.858
501.77	502.66		1.0	0.1	10	QMTKV 15		102891	0.251	0.581
502.66	503.07		1.0	0.1	10	QMTKV 15	Same as sample 102884. Reduced mt stringers and disseminations, about 5%, pale green colour slightly siliceous. Moly assoc with py.	102892	0.998	1.64
503.07	503.52		1.0	0.1	10	QMTKV 15	Same as sample 102884. Gypsum assoc with kfsp, smokey grey qtz veining and py diss.	102893	0.311	0.662
503.52	506.01		1.0	0.1	10	QMTKV 15	Same as sample 102884. Locally silicified and mt rich portions assoc with smokey grey qv.	102894	0.32	0.88
506.01	506.91		1.0	0.1	10	QMTKV 15	Same as sample 102884. Locally rich mt zone up to ~50%. Py + cpy diss assoc with mt, qv and kfsp.	102895	0.429	0.788
506.91	508.22		1.0	0.1	10	QMTKV 15	Same as sample 102884. Locally silicified.	102896	0.526	0.743
508.22	510.35		1.0	0.1	10	QMTKV 15		102897	0.257	0.267
510.35	510.93		1.0	0.1	10	QMTKV 15		102917	0.297	0.378
510.93	511.82	Fine-medium-grained dark green porphyritic silicic	1.0	0.1	10	DYK 45	Qtz mt zone in qtz monzodiorite. White plagio and green mafic pyroxene/amphibole phenocrysts in fine plagio and qtz matrix. Diss mt. Cut randomly by qtz +/- mt veinlets. Cut by dyke shoots ~3cm - which have fine grained chloritic matrix and chlorite clumps similar to those of unit X and qtz fragments. Diss py, medium sized euhedral to subhedral in dyke matrix. Dyke outline is haphazard across the core. Minor BKN zone	102918	0.202	0.308

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
511.82	512.23	Fine-medium-grained dark green porphyritic silicic	1.0	0.1	10	QMTKV 7 ~4cm, dyke shoot with two distinct grain sizes - fine (possibly chl margin) and medium to coarser grained on the outside. Irregular outline tracing around core. Qtz fragments cracked - infilled with py +/- cpy, assoc with kfsp. Qtz + mt fragments - qtz monzodiorite weakly brecciated. Dyke have diss py w/ possibly pre or syn mineralization or late and affected by the late pyritic mineralization.	102919	0.276	0.329
512.23	514.06		2.0	0.1	10	QMTKV 10 Py +/- cpy generally disseminated throughout qtz monzodiorite. Plagio, pyroxene/amphibole phenocrysts in pale grey matrix probably fine qtz and plagio. Diss mt, also outlining qv. Qtz monzodiorite is siliceous, protolith locally overwritten. Faulted gouge/clay zone. Minor kfsp fragments, minor pervasive potassic alteration. Locally brecciated. Qtz +/- mt (QMZ) and qtz monzodiorite fragments in qtz monzodiorite matrix. Event causing brecciation is late - post mineralization. Fragments are angular + touching.	102920	0.456	0.534
514.06	515.50		2.0	0.1	10	QMTKV 10 Same as above. Brecciated qtz fragments of QMZ in monzodiorite matrix. Late py mineralization cutting brecciated qtz. Minor kfsp +/- qtz veining.	102921	0.184	0.219
515.50	517.02		0.5	0.1	10	QMTKV 7 Py +/- cpy minor diss in qtz monz and stringers assoc with qtz/kfsp veining. Plagio, pyroxene/amphibole phenocrysts in pale grey matrix. Pervasive silicification, moderate to high. Weak potassic all'n confined to veining, cross cutting other veining. Qtz +/- mt randomly orientated.	102922	0.211	0.258
517.02	517.90		0.5	0.1	10	QMTKV 7 Same as sample 102922. Mafic portion with dark green mafic euhedral/subhedral phenocrysts - pyroxene/amphibole in dark green matrix.	102923	0.271	0.36
517.90	519.65		0.5	0.1	10	QMTKV 7 Same as sample 102922. Mafic portion with dark green mafic euhedral/subhedral phenocrysts - pyroxene/amphibole in dark green matrix. Local potassic altered portion - pervasive - weak to moderate. Chalcedonic smokey grey qv assoc with kfsp, minor carb. Locally vuggy. Smokey grey qv cut by late stage py mineralization.	102924	0.289	0.325
519.65	521.20		0.5	0.1	10	QMTKV 7	102925	0.333	0.409

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
521.20	522.64	Fine-medium-grained dark green porphyritic silicic	0.5	0.1	10	QMTKV 7	Same as sample 102922. Reduced chlorite content, increase silicification, pervasive. Increased disseminated pyrite.	102926	0.494	0.463
522.64	523.30		0.5	0.1	10	QMTKV 7	Same as sample 102922. Increased chlorite content, increased potassic alt'n confined to kfsp veining - random orientation.	102927	0.41	0.431
523.3	524.08	QTZ-MT VEIN								
523.30	524.08	Fine-grained dark grey silicic	2.0	0.1	30	QMTVN 100	Smokey grey qv, assoc with mt. Py +/- cpy diss in mt and qtz. Weak ~ 45degrees to c.a. banding. Main qv cut by later milky white qtz stringers. Locally and weak vuggy. Increased diss py assoc with qv - local.	102928	0.397	0.523
524.08	524.68	QUARTZ MONZONITE								
524.08	524.68	Fine-medium-grained medium green porphyritic silicic	1.0	0.1	7	QMTKV 7	Minor diss py +/- cpy. Qtz monzodiorite protolith locally overwritten by pervasive silicification and potassic alt'n locally. Smokey grey qtz + mt +/- kfsp veining randomly orientated cross cutting locally. Minor joints lined by hematite. Local BKN zones.	102929	0.266	0.353
524.68	525.23	POLYLITHIC TUFF DACITE								
524.68	525.23	Fine-medium-grained medium green fragmental	2.0	0.1		KVN 5	Diss py within pale green grey matrix. Smokey grey, angular fine to 2cm diameter sized fragments within lithic tuff. Cut by randomly orientated kfsp veining. Intrusive breccia - similar to Toodoggone FM with qtz phenos.	102930	0.451	0.675
525.23	534.75	QUARTZ MONZONITE								
525.23	526.07	Fine-medium-grained medium green porphyritic silicic	1.0	0.1	5	QMTKV 15	Plagio and pyroxene/amphibole phenocrysts in pale green matrix. Cut by qtz + mt assoc veining +/- kfsp, randomly orientated. Py +/- cpy diss assoc with smokey grey qv.	102931	0.532	0.475
526.07	526.39		1.0	0.1	20	QMTKV 15	Same as sample 102931. Increased mt content, local BKN zone - minor.	102932	0.364	0.396
526.39	527.00		1.0	0.1	10	QMTKV 10	Same as sample 102931. Local BKN zone, protolith overwritten locally by pervasive silicification.	102933	0.37	0.497
527.00	527.99		1.0	0.1	10	QMTKV 10	Same as sample 102931. Kfsp + qtz + carb 1cm thick vein ~20 degrees to c.a. cutting qtz + mt veining. ~10cm qtz vein assoc with diss py.	102934	0.458	0.49

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
527.99	529.52	Fine-medium-grained light grey porphyritic silicic	2.0	0.1	7	QMTKV 10 Brecciated qtz monzodiorite, QMZ fragments in qtz monzodiorite matrix. Fragments are pristine qtz monz, qtz, mt, qtz/mt. Py +/- cpy diss with qtz monz matrix, and QMZ fragments. Py stringers are associated with qtz +/- mt veining. Qtz veining is locally brecciated. Mt locally diss - massive in parts. Young kfsp veining cross cutting breccia.	102935	0.539	0.845
529.52	531.12		3.0	0.1	7	QMTKV 10 Minor qtz/kfsp +/-carb veining, decreased chlorite content locally, assoc with increased py +/-cpy diss.	102936	0.34	0.614
531.12	532.49		3.0	0.1	7	QMTKV 10 Py replacing mt locally	102937	0.477	-2
532.49	533.96		3.0	0.1	7	QMTKV 10	102939	0.482	1
533.96	534.75		3.0	0.1	7	QMTKV 10 Red/maroon veining, non-magnetic, doesn't react with HCl, hardness btwn 3-4, red streak assoc with qtz/carb veining in mt rich portion.	102940	0.562	1.07
534.75	535.03	POLYLITHIC TUFF DACITE							
534.75	535.03	Fine-coarse grained medium green fragmental chlorite	1.0	0.1		KVN 5 BKN polyolithic tuff. Py diss in matrix (with chloritic haloes) and in fragments. Fragments in polyolithic tuff are qtz, vol and qtz monzodiorite. Chlorite rich. ~ 30 degrees to c.a. of gouge clay filled joint btwn PLT and silicified portion. Toodoggone Formation to EOH.	102941	0.097	0.155
535.03	536.54	DACITE							
535.03	536.58	Fine-coarse grained light grey fragmental quartz-sericite-biotite	1.0	0.1		KVN 1 Py +/-cpy diss in matrix and fragments - minor stringers. Silicified and sericitized, pervasive moderate to high. Localized bt alt'n - weak to moderate, patchy. Protolith overwritten w/ alt'n. Fragments in tuff are felsic, less pitassic (bt) altered than matrix generally. Outline of fragments barely visible.	102942	0.286	0.492
536.58	537.00	Fine-coarse grained light grey fragmental quartz-sericite	1.0	0.1			102943	0.588	0.956
537.00	537.85		1.0	0.1		Protolith totally overwritten. Fault zone - fragments cemented by pale grey clay/gouge material. Pervasive moderate to strong silicification and sericite alteration.	102944	0.203	0.38
537.85	539.49		1.0	0.1		QVN 5 Silicified and sericitized polyolithic tuff. Alt'n is pervasive - moderate to high, protolith of fragments and tuff matrix overwritten. Outline of fragments barely visible. Py +/- cpy diss in tuff matrix and fragments - minor stringers.	102945	0.377	0.635

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
539.49	541.49	Fine-coarse grained light grey fragmental quartz-sericite	1.0	0.1	QVN	5 Same as sample 102945. Increased silicification; fragment outline not visible - locally.	102946	0.079	0.13
541.49	542.31	Fine-coarse grained light grey fragmental quartz-sericite-biotite	2.0	0.1	QVN	5 Same as sample 102945. Local bt alteration, and increased py +/- cpy dissemination, up to 3% locally.	102947	0.327	0.504
542.31	544.41		2.0	0.1	QVN	5 Same as sample 102945. Highly fragmental portion in tuff - protolith overwritten by bt/ potassic alt'n. Minor kfsp veining. BKN zone - fault - clay/gouge cementing fragments.	102948	0.224	0.324
544.41	546.35		2.0	0.1	QVN	5 Same as sample 102945. Increased pervasive bt/potassic alt'n - moderate to high - protolith completely overwritten.	102949	0.211	0.29
546.35	546.94		2.0	0.1	QVN	5 Same as sample 102945. Locally reduced bt alt'n. Fragments in polyolithic tuff visible, increased py +/- cpy disseminations - ~ 3%.	102950	0.177	0.204
546.94	548.90		2.0	0.1	QVN	5 Same as sample 102945. Increased pervasive bt alteration - fragment outline visible.	102951	0.157	0.155
548.90	549.79		2.0	0.1	QVN	5 Same as sample 102945. Decreased bt/potassic alt'n.	102952	0.202	0.255
549.79	550.49		2.0	0.1	QVN	5 Same as sample 102945. Increased bt/potassic alt'n.	102953	0.288	0.319
550.49	552.24		2.0	0.1		PLT matrix and fragments pervasively altered - moderate to high, protolith overprinted locally. Fragment outline barely visible. Cut by kfsp veining. Py +/- cpy diss and stringers in matrix and tuff. Stringers assoc with qtz veining. Minor py stringers. Bt alteration - wk.	102954	0.144	0.215
552.24	553.18		2.0	0.1		Same as sample 102954. Increased bt/potassic pervasive alt'n; locally. MGY/BN portions.	102955	0.153	0.241
553.18	553.96		2.0	0.1		Same as sample 102954. Increased bt/potassic pervasive alt'n - brown colour. Py diss.	102956	0.183	0.24
553.96	554.31		2.0	0.1		Same as sample 102954. Decreased bt/potassic alt'n. LGY colour.	102957	0.042	0.079
554.31	555.88		2.0	0.1		Same as sample 102954. Increased bt/potassic alt'n. Patchy brown colour.	102958	0.005	0.047
555.88	556.54		2.0	0.1		Same as sample 102954. Decreased bt/potassic alt'n. Light grey.	102959	0.011	0.041
556.54	558.58	MOTTLED SPOTTED UNIT							

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
556.54	558.58	Fine-coarse grained light grey chlorite			Contact defined by fine grained chloritic portion, BKN zone. Sample consists of PLT and Unit X - contact generally gradual. Unit X - felsic light grey matrix with green mafic fragments. Medium sized py disseminations in unit X matrix.	102960	0.011	0.013
558.58	590.4	POLYLITHIC TUFF DACITE						
558.58	560.95	Fine-coarse grained light grey porphyritic quartz-sericite	1.0	0.1	Minor py +/- cpy diss in PLT matrix and fragments. Fragment outline barely visible, protolith overwritten by silicification and sericification. Local wk bt alt'n. Cut by randomly orientated kfsp late stage veining.	102961	0.068	0.052
560.95	563.19		1.0	0.1	Same as sample 102961. Less sericitized and silicified - more chloritic.	102962	0.078	0.099
563.19	564.39		1.0	0.1		102963	0.052	0.045
564.39	565.23	Fine-coarse grained medium green porphyritic chlorite	1.0	0.1	Minor diss py +/- cpy, rare stringer assoc with qtz +/-kfsp. Fragments in PLT include qtz monzo, qtz, flow. Matrix is light green, mafic, fine grained. Locally chloritic. Localized BKN. Cut by young kfsp - randomly orientated. Fragment outline barely visible.	102965	0.011	-2
565.23	566.55		1.0	0.1	Same as sample 102965.	102966	0.004	0.019
566.55	568.61		1.0	0.1	Same as sample 102965. 1cm qv assoc with kfsp, py stringer assoc with qtz + kfsp/potassic portion.	102967	0.129	0.101
568.61	569.30		1.0	0.1	Same as sample 102965. Py assoc with qv.	102968	0.151	0.137
569.30	571.55		1.0	0.1	Same as sample 102965. Local potassic zone - wk and assoc with qv.	102969	0.051	0.045
571.55	573.75		1.0	0.1	Same as sample 102965. Fragment outline clear locally. Qtz monzo fragment has chl alt'n halo.	102970	0.006	0.007
573.75	574.19		1.0	0.1	Same as sample 102965. Increased kfsp veining - up to ~ 20% locally.	102971	0.004	-2
574.19	575.70		1.0	0.1	Same as sample 102965. Fragment outline invisible. Vfg matrix cut by kfsp veining.	102972	0.002	-2
575.70	578.20		1.0	0.1	Same as sample 102965. Fragment outline visible. Py vein assoc with chl + kfsp veining.	102973	0.006	-2
578.20	579.33		1.0	0.1	Same as sample 102965. BFP fragment in tuff.	102974	0.003	-2
579.33	580.50		1.0	0.1	Same as sample 102965. Increased kfsp veining to about 10%. Local BKN zones.	102975	0.002	0.006

Hole Number: KN-02-05

From	To	Rock Type	Py-Cpy-Mt Ms Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
580.50	581.18	Fine-coarse grained medium green porphyritic chlorite	1.0 0.1	Same as sample 102965. Brecciated faulted zone. Fragments cemented by grey/green clay/gouge.	102976	0.002	0.011
581.18	582.44		1.0 0.1	Same as sample 102965. Potassic alt'n confined to kfsp veining.	102977	0.002	0.007
582.44	584.39		1.0 0.1	Same as sample 102965. BFP fragment in tuff, chloritic?	102978	0.013	0.009
584.39	586.27		1.0 0.1	Same as sample 102965. Large fragments - protolith not visible, locally BKN.	102979	0.004	0.011
586.27	586.64		1.0 0.1	Same as sample 102965. Py stringer assoc with qtz + kfsp veining.	102980	0.002	0.007
586.64	588.05		1.0 0.1	Same as sample 102965. Increased qtz monzodiorite fragments cut by kfsp veining ~15%.	102981	0.001	0.005
588.05	589.35	Fine-coarse grained medium green porphyritic chlorite-quartz	0.5	Qtz monzodiorite fragments in fine grained matrix, green to light grey colour. Tuff also contains fragments - potassic altered monzodiorite, cut by randomly orientated kfsp veining. Potassic alt'n also wily pervasive. Fragment outline not visible. LBK. Local increase in veining, kfsp veining locally assoc with carb stringers.	102982	0.001	-2
589.35	590.40		0.5	Same as sample 102982. Increase in carb veining assoc with kfsp. EOH 590.4m	102983	0.001	-2
590.4	EOH						

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-06**

Northing: 16341.2 Total Depth: 602.59m

Easting: 10159.8 Azimuth: 180°

Elevation: 1750.3 Dip: -85°

Geologist: B. LaPeare

Logged Date: 6/21/2002

Survey Depth	Azimuth	Dip	Comments:
0 m	180 °	-85 °	
100 m	178 °	-85 °	
200 m	155 °	-84 °	Magnetic
300 m	168 °	-84 °	Mechanical
400 m	183 °	-84 °	
500 m	178 °	-84 °	
600 m	183 °	-84 °	

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-06**

From (m)	To (m)	Rock Type	Comments
0	3.05	CASING	
3.05	53	INTERMEDIATE VOLCANIC LITHIC TUFF	5-20% coarse fragments -> fragments range from BFP to silicified volc to qtz monzonite (rare) -> mostly sub-rounded suggesting significant transportation/milling before deposition -> highly variable in size from <1cm to >=30cm across -> andesitic matrix appears to be a lapilli/xl tuff w/ sub-rounded whitish plag fragments locally common in matrix -> veining stringers thru-out & random to low angles are whitish pink to pink and soft -> probably mixture of mostly gypsum and/or anhy +/- possible zeolite -> local larger veinlets exhibit mixture w/ calcite -> veinlet is barren of any visible py mineralization -> veinlet is similar if not same as 'mafic' volc intersected in KN01-16 & bottom of KN02-04 -> oxidation well developed on fx's -> veinlet is mod to well fx'd locally
53	57	FAULT ZONE	Represents contact between upper lithic tuff and lower siliceous bx -> from 53.60 - 57.00 w/ very well developed gouge @ 53.60-54.30 -> no veining exists -> increased rock fragments loose within clay rich gouge - wk local light green hue from sericite
57	161.3	INTERMEDIATE VOLCANIC	Pervasive replacement by SiO2 ranging from 60-100% -> qtz exhibits breccia to quasi breccia texture due to interstitial py rich chl +/-ser occurring as later stage infill within silicification qtz flooding > pyritic thru-out ranging from <5 to 151% -> py exhibits affinity for chloritic infill but does occur equally within silicification along microfx's
161.3	167	FAULT ZONE	wkly to mod developed gouge locally -> angles are variable but mostly @ 40-60 deg -> fault is thus only wkly developed representative a small number of slightly rotated blocks. -> no lithology change -> thin py units are random.
167	190.6	INTERMEDIATE VOLCANIC	mottled qtz + ser altn -> quas lineation @ 70 deg locally of chl
190.6	192.35	FAULT ZONE	qtz + ser alt'd andesite w/ 60cm gouge zone @ 50 degrees w/ smaller gouge zones (<10cm) downhole
192.35	198	INTERMEDIATE VOLCANIC	qtz + ser alt'd andesite w/ >=50% qtz flooding
198	200	FAULT ZONE	wkly developed gouge locally thru-out, angle unknown

Hole Number:

KN-02-06

From (m)	To (m)	Rock Type	Comments
200	250	INTERMEDIATE VOLCANIC	highly mottled due to patchy qtz flooding w/ remnant chloritic andesitic -> py locally well developed within interstitial chl
250	255	FAULT ZONE	as above grading into bleached fault zone -> angle is unknown
255	269.3	INTERMEDIATE VOLCANIC	only w/ky alt'd msv porphyritic flow -> crystals are med grain sub rounded & mafic - diss py
269.3	272.4	FAULT ZONE	qtz + ser alt'n -> local well developed gouge at low angle -> py locally w/ gouge
272.4	284	INTERMEDIATE VOLCANIC	dec in sil -> assoc w/ veinlets as wall rock alt'n - volc protolith evident
284	330	ANDESITE BLADED FELDSPAR PORPHYRY	25-40% highly sericitized <- distinctive lite, med/coarse grain felted plag blades/laths within brownish dk grey fine/very fine grained presumably bio rich matrix -> bladed texture destroyed locally by local qtz wall rock alt'n of qtz +/- py veinlets and/or by very patchy but well developed (closely packed laths blending together ???) sericitic alt'n giving the veinlet a highly mottled texture locally -> veining is qtz + py and usually exhibit varying degree of carb -> py occurs w/ veinlets & also diss -> qtz rich alt'n locally semi pervasive
330	332	ANDESITE	no laths present -> typical chl alt'd msv andesite where not masked by qtz + ser alt'n
332	334	FAULT ZONE	local gouge zones within andesite
334	342	ANDESITE	cpy in selvage of one qtz + carb veinlet -> 10cm clay + rk fragments
342	344	ANDESITE BLADED FELDSPAR PORPHYRY	laths are only w/ky alt'd to fresh -> wk orientation @ 50 degrees -> one fe carb veinlet w/ py
344	348.55	ANDESITE	locally calcic within matrix in addition to veinlets -> minor high angle gouge - 7cm wide
348.55	352.9	ANDESITE BLADED FELDSPAR PORPHYRY	texture mostly absent due to semi-pervasive ser + qtz alt'n assoc w/ local qtz +/- wk carb veinlets
352.9	353.6	MAFIC DYKE	possibly thin flow -> predates veining and py mineralization
353.6	377.85	ANDESITE BLADED FELDSPAR PORPHYRY	porf texture only locally evident -> overprinted by mottled ser alt'n & local qtz + ser alt'n
377.85	429.7	ANDESITE	highly random mostly carb veinlets/stringers - local chl w/ carb

Hole Number:

KN-02-06

From (m)	To (m)	Rock Type	Comments
429.7	521.7	QUARTZ MONZONITE	Fresh unalt'd texture is msv w/ med grain white/green, subhedral, equant (1-3mm) phenocrysts within fine grain, pale grey/brown matrix white crystals are plag locally pale green from sericitic alt'n -> dark green crystals are chloritic alt'd mafic (pyk?) crystals -> crystals vary from 20-40% of veinlet -> intrusive/porphyritic texture is mostly masked and/or destroyed by qtz veining and assoc ser + qtz wall rock alt'n -> qtz veining is approx 5-15% of veinlet as aphanitic smoky grey -> assoc qtz + ser wall rock alt'n varies from 40-70% of veinlet -> mag is locally well developed (483.30) but generally rare overall -> 1-3% py overall mostly as diss thru-out in both fresh & alt'd monzonite -> py locally in qtz veinlets but not common -> cpy in local veinlets more commonly than py and also disseminated -> cpy esp. well developed in 20 degree qtz veinlet @ 463.0m is infill along centre of veinlet -> rare pinkish zeo(?) w/ qtz veinlets.
521.7	527.38	SYENITE	Syenite dyke: Phenos- 15% qtz, 25% fsp; 30% mafics rest fg matrix
527.38	541.39	QUARTZ MONZONITE	529-529.24 weak ksp alt'n. Trace cpy.
541.39	550.77	POLYLITHIC TUFF DACITE	Toodoggone Fm? Fragmental veinlet; polyolithic matrix supported with siliceous clasts.
550.77	602.59	CROWDED FELSPAR PORPHYRY	Patchy ser or ksp? along fractures; bleached zones/ Crowded fsp crystals + xenolithic frags. Possible post-mineral porphyry.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	3.05	CASING							
	0.00	3.05					6	-2	-2
3.05	53	INTERMEDIATE VOLCANIC LITHIC TUFF							
	3.05	5.00 Fine-coarse grained grey-green oxidized	0.1		GAZVN 15	5-20% coarse fragments -> fragments range from BFP to silicified volc to qtz monzonite (rare) -> mostly sub-rounded suggesting significant transportation/milling before deposition -> highly variable in size from <1cm to >=30cm across -> andesitic matrix appears to be a lapilli/tft tuft w/ sub-rounded whitish plag fragments locally common in matrix -> veining stringers thru-out & random to low angles are whitish pink to pink and soft -> probably mixture of mostly gypsum and/or anhy +/- possible zeolite -> local larger veinlets exhibit mixture w/ calcite -> veinlet is barren of any visible py mineralization -> veinlet is similar if not same as 'mafic' volc intersected in KN01-16 & bottom of KN02-04 -> oxidation well developed on fx's -> veinlet is mod to well fx'd locally	107001	0.009	0.011
	5.00	7.00	0.1			low angle fx's & veinlets - tuft locally vuggy from weathering -> minor mn staining	107002	0.007	0.007
	7.00	9.00	0.1		FRK 0	fx's & veinlets mostly parallel to c.a. -> veinlets locally vuggy	107003	0.006	0.005
	9.00	11.00	0.1		GAZVN 20	less fx'd - highly random stringers	107004	0.005	0.007
	11.00	13.00	0.1		GAZVN 50 10	as above	107005	0.005	-2
	13.00	15.00	0.1		GCZVN 20	as above - 30% fragments -> frags locally exhibit imbrication @ 40 degrees c.a. -> 30cm BFP fragment	107006	0.008	-2
	15.00	17.00	0.1		GCZVN 20	highly random gyp/zeo pinkish stringers but locally ghasi en echelon - one 20 cm gyp + carb + zeo vein	107007	0.01	-2
	17.00	19.00	0.1		GCZVN 20	veinlets locally vuggy	107008	0.009	-2
	19.00	21.00	0.1		GCZVN 10		107009	0.007	-2
	21.00	23.00	0.1		GCZVN 20	anastomosing veinlets/stringers sub parallel c.a. -> +/- carb	107010	0.003	-2

Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
23.00	25.00	Fine-coarse grained grey-green oxidized	0.1		FRK 10		107011	0.009	-2
25.00	27.00		0.1		FRK 10	locally vuggy veinlets - lapilli's evident in matrix	107012	0.009	-2
27.00	29.00		0.1		GZCVN 25	irregular patchy gyp/zeo is locally vuggy w/ xtls visible	107013	0.008	-2
29.00	31.00	Fine-coarse grained dark grey oxidized	0.1		CCVN 5	pinkish gyp/zeo veinlets absent	107014	0.015	0.014
31.00	33.00	Fine-coarse grained dark grey phyllic	0.1			sheer texture parallel c.a. w/ clay, talc (?) +/- carb	107015	0.02	0.061
33.00	35.00		0.1			as above -> local clay gouge - very rubbly	107016	0.016	0.04
35.00	37.00		0.1				107017	0.009	0.018
37.00	39.00		0.1		GZVN 10	highly random, pygmatic (?) pinkish	107018	0.007	0.008
39.00	41.00	Fine-coarse grained dark grey chlorite	0.1		GZCVN 10	increase in carb w/ gyp/zeo, chl assoc w/ increase in carb	107019	0.008	0.006
41.00	43.00	Fine-coarse grained dark grey	0.1		GZCVN 3	random minor stringers	107020	0.007	-2
43.00	45.00		0.1		GZCVN 10	as above -> fragments occur locally as clusters -> fragments are highly siliceous/aphanitic	107021	0.008	-2
45.00	47.00		0.1		GZCVN 7		107022	0.007	-2
47.00	49.00		0.1		GZCVN 3	as above -> two very coarse siliceous fragments	107023	0.01	0.009
49.00	51.00		0.1		GZCVN 3		107024	0.007	-2
51.00	53.00		0.1		GZCVN 3	as above -> BFP frags locally -> local fx's w/ chl rich gouge	107025	0.007	0.006
53	57	FAULT ZONE							
53.00	55.00	Fine-coarse grained dark grey phyllic			FLT 30	Represents contact between upper lithic tuff and lower siliceous bx -> from 53.60 - 57.00 w/ very well developed gouge @ 53.60-54.30 -> no veining exists -> increased rock fragments loose within clay rich gouge - wk local light green hue from sericite	107027	0.004	0.022
55.00	57.00	Fine-grained dark grey phyllic				randomly fx'd w/ clay on local fx's -> local silicification	107028	0.001	0.016
57	161.3	INTERMEDIATE VOLCANIC							

Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
57.00	59.00	Fine-grained grey in-situ brecciated quartz-chlorite-limonite	10.0		Pervasive replacement by SiO ₂ ranging from 60-100% - > qtz exhibits breccia to quasi breccia texture due to interstitial py rich chl +/-ser occurring as later stage infill within silicification qtz flooding > pyritic thru-out ranging from <5 to 151% -> py exhibits affinity for chloritic infill but does occur equally within silicification along microfx's	107029	0.001	0.012
59.00	61.00	Fine-grained grey quartz-chlorite-limonite	7.0	AVN	2	107030	0.001	0.019
61.00	63.00		3.0	FRK	20	107031	0.001	0.015
63.00	65.00		3.0			107032	0.001	0.023
65.00	67.00		7.0			107033	0.001	0.019
67.00	69.00		7.0	FRK	15	107034	0.001	0.017
69.00	71.00		10.0	FRK	15	107035	0.001	0.026
71.00	73.00		10.0			107036	0.002	0.038
73.00	75.00		7.0	FRK	0	107037	0.002	0.032
75.00	77.00		10.0			107038	0.003	0.045
77.00	79.00		5.0			107039	0.002	0.035
79.00	81.00		7.0	FRK	0	107040	0.004	0.045
81.00	83.00		15.0			107041	0.006	0.085
83.00	85.00	Fine-grained grey in-situ brecciated quartz-chlorite-limonite	15.0	FRK	15	107042	0.003	0.051
85.00	87.00		15.0	AVN	2	107043	0.002	0.041
87.00	89.00		15.0			107044	0.003	0.041
89.00	91.00		15.0			107045	0.002	0.037
91.00	93.00		15.0			107046	0.002	0.031
93.00	95.00		10.0			107047	0.004	0.049
95.00	97.00		15.0			107048	0.004	0.051
97.00	99.00		10.0			107049	0.003	0.045
99.00	101.00		10.0			107050	0.003	0.042

Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
101.00	103.00	Fine-grained grey in-situ brecciated quartz-chlorite-limonite	5.0			as above -> local wk/diffuse dun ser (?) alt'n -> rare plag phenocrysts (<= 1mm)	107051	0.003	0.043
103.00	106.00		7.0			poor recovery - rubbly core -> py mostly w/ patchy interstitial chl	107053	0.007	0.042
106.00	108.00		15.0			70% qtz as rounded within interstitial chl + py quasi by texture thru-out	107054	0.006	0.051
108.00	110.00		10.0			as above - inc in qtz - dec in py	107055	0.006	0.039
110.00	112.00		15.0			anhy on fx and as rare veinlet - >80% qtz	107056	0.006	0.058
112.00	114.00		5.0	FRK	10	as above - but local mod/coarse gr, sericitized feldspar laths -> remnant, alt'd silicified BFP xenolith (???)	107057	0.008	0.077
114.00	116.00		10.0			random fx's & local ser (?) alt'n	107058	0.007	0.083
116.00	118.00		15.0	FRK	5	inc in interstitial chl + py -> local ser alt'n	107059	0.005	0.063
118.00	120.00		25.0			highly mottled - 50% as patchy interstitial chl +/- py	107060	0.015	0.101
120.00	122.00		7.0			inc in qtz - dec in py -> only wkly mottled locally	107061	0.015	0.075
122.00	124.00		10.0			as above -> slightly inc in py as diss in qtz	107062	0.016	0.064
124.00	126.00		7.0			>50% as dun coloured sericitic (?) alt'n	107063	0.049	0.092
126.00	128.00		10.0			<10% as ser alt'n -> mostly silicified	107064	0.019	0.091
128.00	130.00		10.0	FLT	30	locally silification only semi-hard either from anhy or ser -> quasi by texture locally -. Ft @ 128.60	107065	0.053	0.139
130.00	132.00		10.0			as above - locally mottled	107066	0.06	0.16
132.00	134.00		5.0			as above - locally fx'd -> anhy or gyp on fx's -> rare stringers/veinlets	107067	0.033	0.138
134.00	136.00		5.0			silicification overprinted by soft dull brown/salmon coloured alt'n - mineralogy unknown - dec in py	107068	0.084	0.157
136.00	138.00		3.0			as above - inc in soft alt'n from above	107069	0.085	0.176
138.00	140.00	Fine-grained dark grey in-situ brecciated quartz-chlorite-limonite	10.0			NO soft alt'n -> fine gr andesite visible thru semi-pervasive qtz flooding	107070	0.069	0.174
140.00	142.00		10.0	FLT	80	as above - slight inc in qtz flooding -> patchy py to locally well diss - 2cm wide ft @ 80 degrees @ 140.20	107071	0.043	0.126
142.00	144.00		5.0	FLT	90	as above - more mottled locally - local bx texture -> 3cm wide ft @ 143.20	107072	0.051	0.135
144.00	146.00		7.0			>70% silicification -> py patchy to diss	107073	0.066	0.146
146.00	148.00		10.0			as above but inc in py	107074	0.058	0.134

Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
148.00	150.00	Fine-grained dark grey in-situ brecciated quartz-chlorite-limonite	7.0				107075	0.052	0.153
150.00	152.00		5.0		FLT 20	as above - wkly developed gouge over 10cm	107076	0.069	0.133
152.00	154.00		15.0	0.5		as above - trace cpy w/ py	107077	0.048	0.191
154.00	156.00						107079	0.042	0.166
156.00	158.00		0.0	0.0	0 0		107080	0.073	0.16
158.00	160.00	Fine-grained phyllic	10.0	0.5	GVN	2 as above -> lower 50 cm is mottled from intercalcified silification & clay + ser altn.	107081	0.058	0.156
160.00	161.30		10.0		QGVN	2 as above -> 30 cm wide qtz vein @ 55 deg w/ w.d. py.	107082	0.139	0.202
161.3	167	FAULT ZONE							
161.30	163.20	Fine-grained light grey phyllic	5.0		QVN	3 wkly to mod developed gouge locally -> angles are variable but mostly @ 40-60 deg -> fault is thus only wkly developed representative a small number of slightly rotated blocks. -> no lithology change -> thin py units are random.	107083	0.054	0.155
163.20	165.00		5.0		QVN	3 as above -> qtz is locally bx'd	107084	0.061	0.359
165.00	167.00		7.0		QVN	5 dec is gouge - highly mottled 30 cm zone at patchy irregular qtz +/- ser within msv chlorite andesite -> one 10 cm wide smokey, qtz vein w/ 30deg py withn.	107085	0.11	0.268
167	190.6	INTERMEDIATE VOLCANIC							
167.00	168.55	Fine-medium-grained light grey quartz-sericite	3.0		PYVN	2 mottled qtz + ser altn -> quas lineation @ 70 deg locally of chl	107086	0.057	0.181
168.55	170.20	Fine-grained dark grey in-situ brecciated sericite	3.0		CLVN	10 qtz + ser altd broken by anastomosing vein, thin chl +/- py stringers.	107087	0.061	0.14
170.20	172.00		0.0	0.0	0 0		107088	0.08	0.179
172.00	174.00	Fine-medium-grained light grey in-situ brecciated quartz-sericite	2.0		QVN	3 mottled qtz + ser altn I	107089	0.056	0.171
174.00	176.00	Fine-medium-grained light grey	5.0		QVN	3 as above -> diss qtz py within qtz + ser altn	107090	0.066	0.154
176.00	178.00		7.0		QVN	5 qtz flooding mottled with qtz + ser altn -> patchy py with silification	107091	0.031	0.184
178.00	180.00		0.0	0.0	0 0		107092	0.052	0.221
180.00	182.00		3.0		QVN	3	107093	0.05	0.166
182.00	184.00		3.0		QVN	3	107094	0.125	0.332

Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
184.00	186.00	Fine-medium-grained light grey	3.0		QVN 3		107095	0.057	0.222
186.00	188.00		3.0		QVN 3		107096	0.041	0.237
188.00	189.45	Fine-medium-grained grey quartz-sericite	3.0		QVN 3		107097	0.097	0.235
189.45	190.60		5.0		QVN 3		107098	0.116	0.386
190.6	192.35	FAULT ZONE							
190.60	192.35	Fine-medium-grained grey phyllic	2.0		FLT 50	qtz + ser alt'd andesite w/ 60cm gouge zone @ 50 degrees w/ smaller gouge zones (<10cm) downhole	107099	0.065	0.289
192.35	198	INTERMEDIATE VOLCANIC							
192.35	194.00	Fine-medium-grained grey quartz-sericite	5.0		QVN 3	qtz + ser alt'd andesite w/ >=50% qtz flooding	107100	0.062	0.284
194.00	196.00		3.0		QVN 3		107101	0.072	0.267
196.00	198.00		5.0		QVN 3		107102	0.064	0.211
198	200	FAULT ZONE							
198.00	200.00	Fine-medium-grained grey phyllic	10.0		QVN 3	wkly developed gouge locally thru-out, angle unknown	107103	0.065	0.295
200	250	INTERMEDIATE VOLCANIC							
200.00	201.00	Fine-medium-grained grey-green quartz-chlorite-limonite	7.0		QVN 3	highly mottled due to patchy qtz flooding w/ remnant chloritic andesitic -> py locally well developed within interstitial chl	107105	0.107	0.268
201.00	203.00	Fine-medium-grained grey-green	3.0				107106	0.071	0.31
203.00	204.00		3.0			andesitic protolith more prevelant	107107	0.059	0.191
204.00	206.00		3.0			as above but more mottled from inc in patchy silicification	107108	0.122	0.243
206.00	208.00	Fine-medium-grained grey-green sericite-quartz	2.0			semi-pervasive light dun/yellow sericitic alt'n ->w/ clay?	107109	0.082	0.209
208.00	210.00	Fine-medium-grained grey-green quartz-chlorite-limonite	2.0		AVN 10	highly mottled due to qtz infill highly mixed w/ chloritic andesite -> high to irregular anhy veinlets	107110	0.076	0.193
210.00	212.00		2.0		AVN 10	exact as above	107111	0.096	0.198
212.00	214.00		2.0		AVN 10		107112	0.087	0.221
214.00	216.00		5.0	0.5	AVN 10	as above w/ inc in qtz flooding: cross cut by highly random anhy veinlets +/- py in veinlets	107113	0.083	0.217
216.00	218.00		5.0	0.5	AVN 15	as above - inc in anhy	107114	0.113	0.235
218.00	220.00		5.0	0.5	AVN 20		107115	0.115	0.256

Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
220.00	222.00	Fine-medium-grained grey-green quartz-chlorite-limonite	5.0	0.5	AVN	10	as above but dec in flooding & anhy -> locally bx'd w/ rounded fragments	107116	0.122	0.261
222.00	224.00		10.0	0.5		10	> 50% qtz flooding w/ fine grain patchy py +/- trace cpy	107117	0.104	0.305
224.00	226.00		5.0	0.5	PYVN	5	as above but py more common as cross cutting veinlets	107118	0.103	0.263
226.00	228.00		5.0				qtz + ser alt'n -> rare qtz flooding	107119	0.134	0.32
228.00	229.00	Fine-medium-grained dun sericite-quartz	3.0				semi-pervasive light coloured ser alt'n mixed w/ qtz flooding -> local enechelon qtz filled fx's @ 20 degrees c.a. - local py + anhy(?) clots	107120	0.174	0.385
229.00	231.00		3.0				tan/buff coloured sericitic alt'n thru-out, locally well fx'd	107121	0.208	0.473
231.00	233.00	Fine-medium-grained dun quartz-sericite	5.0				mottled ser +/- qtz alt'n mixed w/ qtz flooding & random qtz veinlets	107122	0.148	0.439
233.00	235.00	Fine-medium-grained grey sericite-quartz	3.0		QVN	5	highly mottled between patchy qtz flooding & med grain chl +/- ser alt'd andesite - laths(?)	107123	0.13	0.315
235.00	237.00		3.0		QVN	10	wk patchy epidote -> light yellow brown sericite almost oxidized in colour (?)	107124	0.149	0.391
237.00	239.00		5.0	2	QAMTV	10	absence of light sericite alt'n -> rounded coarse qtz within sericitic alt'n - one mag veinlet - rare anhy	107125	0.154	0.346
239.00	240.00	Fine-medium-grained grey sericite-chlorite-quartz	3.0		QVN	5	dec in veinlets	107126	0.18	0.366
240.00	242.00	Fine-medium-grained green chlorite-quartz-sericite	3.0		QVN	5	local qtz flooding mixed w/ patchy chl +/- ser alt'n - highly mottled locally	107127	0.122	0.286
242.00	244.00	Fine-medium-grained green chlorite-sericite-quartz	3.0		QVN	5		107128	0.147	0.315
244.00	246.00	Fine-medium-grained grey quartz-chlorite-limonite	5.0		QVN	3	locally silicified to chlorite dominant -> variable	107129	0.154	0.354
246.00	248.00	Fine-medium-grained grey chlorite-sericite-quartz	3.0	0.1	FLT	30	highly mottled light grey qtz + ser w/ chl alt'd andesite -> 30 degree fault - 20cm wide	107131	0.118	0.286
248.00	250.00	Fine-medium-grained dark grey chlorite-sericite-biotite	3.0		QVN	3	veinlet becoming much less siliceous - locally wk grey very fine grain biotite rich matrix w/ greenish sericitic alt'd crystals	107132	0.173	0.358
250	255	FAULT ZONE								
250.00	251.10	Fine-grained light grey phyllic	2.0		PYVN	3	as above grading into bleached fault zone -> angle is unknwn	107133	0.088	0.231
251.10	253.00		2.0		CCVN	2	fault zone sub parallel q/ c.a. -> mod/strongly calc rich thru-out zone	107134	0.12	0.341

Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
253.00	255.00	Fine-grained light grey phyllic	1.0		CCVN 3	mostly msv andesite w/ local high angle gouge	107135	0.111	0.299
255	269.3	INTERMEDIATE VOLCANIC							
255.00	257.00	Fine-medium-grained dark green chlorite-biotite	2.0			only wkly alt'd msv porphyritic flow -> crystals are med grain sub rounded & mafic - diss py	107136	0.219	0.495
257.00	258.00	Fine-medium-grained dark green chlorite-biotite-calcite	2.0		CQVN 3	as above - matrix wkly carbonated	107137	0.095	0.101
258.00	260.00	Fine-medium-grained grey				highly mottled -> fine grain bio alt'd matrix w/ med/coarse grain irregular patchy ser +/- chi alt'd frags (?)	107138	0.104	0.267
260.00	262.00	Fine-medium-grained grey chlorite-quartz-sericite	3.0	5		ser to qtz + ser alt'n highly mottled w/ ser alt'd med/coarse subhedral laths -> possibly three levels of alt'n	107139	0.207	0.592
262.00	264.00	Fine-medium-grained grey sericite-chlorite-quartz	3.0		QVN 5	mottled patchy qtz + ser alt'n w/ ser +/- chi alt'n -> wk local clay (gouge) on fx's	107140	0.127	0.31
264.00	266.00		3.0		QVN 7		107141	0.206	0.529
266.00	268.00	Fine-medium-grained grey quartz-chlorite-limonite	4.0		QVN 10	as above -> qtz +/- ser especially well developed w/ qtz + py veinlets -> local hem w/ py -> local felted sericitic subhedral laths	107142	0.334	0.699
268.00	269.30		3.0		QVN 7	as above -> qtz + ser alt'n more pervasive	107143	0.142	0.299
269.3	272.4	FAULT ZONE							
269.30	270.85	Fine-medium-grained light grey quartz-sericite	3.0		QVN 7	qtz + ser alt'n -> local well developed gouge at low angle -> py locally w/ gouge	107144	0.135	0.27
270.85	272.40	Fine-medium-grained light grey phyllic	3.0		QVN 5	as above but w/ pervasive clay alt'n w/ sericite thru-out w/ main gouge zone @ 210.80-211.30 -> angle of fault unknown but probably low angle if parallel w/ thin much smaller gouge zones	107145	0.103	0.252
272.4	284	INTERMEDIATE VOLCANIC							
272.40	274.00	Fine-medium-grained green chlorite-quartz-sericite	3.0		QVN 5	dec in sil -> assoc w/ veinlets as wall rock alt'n - vol/c protolith evident	107146	0.279	0.605
274.00	276.00		3.0		QVN 5	as above but slight inc in sil assoc w/ veinlets	107147	0.228	0.499
276.00	278.00		3.0		QVN 5	as above -> wk minor gouge - 3cm wide @ 65 degrees	107148	0.182	0.438
278.00	280.00	Fine-medium-grained grey quartz-chlorite-limonite	50.0		QVN 10	qtz & qtz + ser semi-pervasive -> inc in qtz + py veinlets	107149	0.184	0.415
280.00	282.00		5.0		QVN 7	as above but locally chloritic andesite evident	107150	0.163	0.375
282.00	284.00		5.0		QVN 7		107151	0.159	0.4

Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
284	330	ANDESITE BLADED FELDSPAR PORPHYRY							
284.00	286.00	Fine-coarse grained dark grey sericite-biotite-quartz				25-40% highly sericitized <- distinctive lite, med/coarse grain felted plag blades/laths within brownish dk grey fine/very fine grained presumably bio rich matrix -> bladed texture destroyed locally by local qtz wall rock alt'n of qtz +/- py veinlets and/or by very patchy but well developed (closely packed laths blending together ???) sericitic alt'n giving the veinlet a highly mottled texture locally -> veining is qtz + py and usually exhibit varying degree of carb -> py occurs w/ veinlets & also diss -> qtz rich alt'n locally semi pervasive	107152	0.148	0.334
286.00	288.00		5.0		QCVN	10 porf texture well preserved -> qtz wall rock alt'n of veinlets	107153	0.151	0.339
288.00	290.00		5.0		QCVN	10 as above -> qtz alt'n locally semi-pervasive	107154	0.127	0.273
290.00	292.00		5.0		QCVN	10 sericitized plag more anhedral/equant -> inc in qtz +/- ser alt'n	107155	0.085	0.216
292.00	294.00		3.0		QCVN	7	107157	0.185	0.489
294.00	296.00		3.0		QCVN	5 locally anhedral py as diss in matrix - coarse laths rare	107158	0.186	0.43
296.00	298.00		5.0		QCVN	10 locally fx'd @ top 30cm of intercept	107159	0.242	0.675
298.00	300.00		3.0		QCVN	5 lath/bladed texture thru-out -> dec in veinlets	107160	0.205	0.473
300.00	302.00		5.0		QCVN	10 as above -> locally well developed qtz + ser wall rock alt'n	107161	0.177	0.426
302.00	304.00		4.0		QCVN	7 as above -> carb wk in local veinlet qtz + py veinlets	107162	0.144	0.364
304.00	306.00		5.0		QCVN	7 inc in qtz + ser as semi-pervasive -> py stringers @ 65-75 degrees and 0 degrees c.a.	107163	0.138	0.322
306.00	308.00		4.0		QCVN	7 porf texture only locally masked by wall rock alt'n	107164	0.138	0.31
308.00	310.00		5.0		QCVN	10	107165	0.25	0.497
310.00	312.00		5.0		QCVN	7 as above - 35cm of pervasive qtz + ser alt'n assoc w/ qtz + py + carb stringer	107166	0.152	0.355
312.00	314.00		10.0		QCVN	15 well developed anhedral py in local carb rich qtz veinlets	107167	0.241	0.501
314.00	316.00		7.0		QCVN	10 porf texture locally masked by qtz + ser wall rock alt'n	107168	0.222	0.446
316.00	318.00		7.0		QCVN	15 >50% qtz-ser alt'n - porf texture only locally	107169	0.093	0.203
318.00	320.00		5.0		QCVN	10 well developed py w/ one high angle veinlet	107170	0.189	0.388
320.00	322.00		3.0		QCVN	5 porf texture mostly	107171	0.166	0.345
322.00	324.00		3.0		QCVN	5	107172	0.162	0.355

Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
324.00	326.00	Fine-coarse grained dark grey sericite-biotite-quartz	3.0		FLT 45	20cm fault @ 324.10-324.30 @ 45 degrees c.a.	107173	0.196	0.342
326.00	328.00		3.0		QCVN 5		107174	0.135	0.291
328.00	330.00		3.0		QCVN 7	local inc in qtz + ser wall rock alt'n	107175	0.137	0.308
330	332	ANDESITE							
330.00	332.00	Fine-grained dark green chlorite-sericite-biotite	5.0		QCVN 10	no laths present -> typical chl alt'd msv andesite where not masked by qtz + ser alt'n	107176	0.128	0.277
332	334	FAULT ZONE							
332.00	334.00	Fine-grained light grey phyllic	3.0		FLT 60	local gouge zones within andesite	107177	0.211	0.409
334	342	ANDESITE							
334.00	336.00	Fine-grained green-grey	3.0	0.5	QCVN 55	cpy in selvage of one qtz + carb veinlet -> 10cm clay + rk fragments	107178	0.202	0.422
336.00	338.00		2.0		QCVN 3	veining & qtz + ser alt'n wk and local	107179	0.149	0.285
338.00	340.00		2.0		QCVN 3		107180	0.197	0.339
340.00	342.00	Fine-grained green-grey chlorite-sericite-biotite	5.0		QCVN 15	inc in local silicification	107181	0.187	0.47
342	344	ANDESITE BLADED FELDSPAR PORPHYRY							
342.00	344.00	Fine-coarse grained dark grey biotite-quartz-sericite	3.0		QCKVN 7	laths are only wkly alt'd to fresh -> wk orientation @ 50 degrees -> one fe carb veinlet w/ py	107183	0.245	0.5
344	348.55	ANDESITE							
344.00	346.00	Fine-grained grey chlorite-biotite-calcite	3.0			locally calcic within matrix in addition to veinlets -> minor high angle gouge - 7cm wide	107184	0.204	0.37
346.00	347.15	Fine-grained light brown biotite-chlorite-sericite	2.0		QCVN 5	mm scale anhedral mafic fragments <3% - 10cm rubbly core @ 346.60	107185	0.149	0.219
347.15	348.55	Fine-grained light grey biotite-chlorite-sericite	2.0		QCVN 5	mottled from mixture of bio and chl + ser alt'n	107186	0.165	0.326
348.55	352.9	ANDESITE BLADED FELDSPAR PORPHYRY							
348.55	350.00	Fine-coarse grained dark grey biotite-sericite-quartz	3.0		QCVN 15	texture mostly absent due to semi-pervasive ser + qtz alt'n assoc w/ local qtz +/- wk carb veinlets	107187	0.167	0.279
350.00	352.00	Fine-coarse grained dark grey sericite-quartz	3.0		QCVN 15		107188	0.193	0.307
352.00	352.90	Fine-coarse grained dark brown biotite-sericite	2.0		QCVN 3	py also w/ med grain rounded bio 'knots' @ upper 20 cm	107189	0.16	0.255

Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
352.9	353.6	MAFIC DYKE							
352.90	353.60	Fine-grained dark green chlorite-biotite	2.0		QCVN	5 possibly thin flow -> predates veining and py mineralization	107190	0.37	0.545
353.6	377.85	ANDESITE BLADED FELDSPAR PORPHYRY							
353.60	356.00	Fine-coarse grained dark grey biotite-sericite-quartz	3.0		QCVN	5 porf texture only locally evident -> overprinted by mottled ser alt'n & local qtz + ser alt'n	107191	0.249	0.38
356.00	358.00		2.0		QCVN	7 veinlets mostly @ 60-70 degrees w/ only wk py -> local qtz + ser vall rock alt'n	107192	0.171	0.308
358.00	360.00		2.0		QCVN	5 as above - local bio 'knots' w/ py within qtz +/- carb flooding	107193	0.188	0.306
360.00	362.00		3.0			as above -> highly mottled qtz + ser alt'n locally fine grain -> porf texture completely -> local well developed py w/ bio knots in sericitic background	107194	0.167	0.282
362.00	364.00		3.0			porf texture mostly thru-out - local bio + py knots	107195	0.202	0.362
364.00	366.00		2.0		QCVN	10 as above but inc in qtz + ser alt'n -> local kfsp veinlets	107196	0.231	0.395
366.00	368.00		5.0		QVN	7 knotty' bio + py assoc w/ qtz + ser wall rock alt'n -> 40% as qtz + ser alt'n of qtz	107197	0.266	0.406
368.00	370.00	Fine-coarse grained dark grey biotite-quartz-sericite	3.0		QVN	7	107198	0.266	0.455
370.00	372.00	Fine-coarse grained dark grey sericite-quartz	2.0		QVN	5 >60% as qtz + ser alt'n - porf texture only locally -> chl as wall rock alt'n of one py stringer	107199	0.337	0.439
372.00	374.00	Fine-coarse grained grey sericite-quartz	3.0		QCVN	10 as above w/ slight dec in ser + qtz alt'n	107200	0.219	0.41
374.00	376.00		2.0		QCVN	5 as above -> local laths range from white plag to green sericitic alt'd	107201	0.199	0.308
376.00	377.85		2.0		FLT	35 as above -> local gouge locally & fault @ 377.70-377.85	107202	0.217	0.331
377.85	429.7	ANDESITE							
377.85	380.00	Fine-grained brown biotite-chlorite	3.0		CQVN	20 highly random mostly carb veinlets/stringers - local chl w/ carb	107203	0.138	0.408
380.00	382.00	Fine-grained brown biotite-sericite-carb	3.0		CQVN	15 patchy dun coloured sericitic w/ bio - inc in chl w/ veinlets	107204	0.146	0.085
382.00	384.00	Fine-grained brown biotite-sericite	3.0	0.5	CQVN	15 as above - local stubby sericitic laths - trace cpy w/ py	107205	0.24	0.277
384.00	386.00		3.0		CQVN	20 one carb vein & one smoky qtz vein >10cm - local stubby laths same as above - possible frags of upper BFP	107206	0.279	0.571

Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
386.00	388.00	Fine-grained grey biotite-sericite-quartz	4.0		QQVN 15	highly random qtz veinlets cross cut locally by pyrite	107207	0.299	0.595
388.00	390.00	Fine-grained dark green chlorite-quartz-sericite	3.0	0.5	QCV 60	porphyritic flow -> (NOT BFP) -> locally well developed qtz + ser wall rock alt'n; local cpy in qtz veinlets	107209	0.344	0.707
390.00	392.00	Fine-grained dark grey biotite-chlorite-sericite	3.0	0.5	QCV 10	qtz + ser wall rock alteration mostly absent/poorly developed w/ local qtz veinlets	107210	0.184	0.352
392.00	394.00		3.0		QZVN 60	as above -> patchy pink zeo(?) w/ qtz veinlets -> py more diss than in veinlets	107211	0.176	0.691
394.00	396.00		5.0		QZCVN 60	as above -> py diss & w/ qtz veinlets	107212	0.257	0.85
396.00	398.00		5.0	1.0	2 QZCVN 5	up to 1% cpy assoc w/ qtz +/- zeo(?) veinlets - 7cm qtz + zeo vein @ 30 degrees w/ mag in selvages	107213	0.216	0.321
398.00	400.00		3.0	0.5	QVN 5	light greenish sericitic wall rock alt'n -> no qtz	107214	0.178	0.529
400.00	402.00		2.0		QVN 5	mottled by greenish ser +/- qtz locally overprinting bio alt'd vol'c	107215	0.245	0.57
402.00	404.00	Fine-grained dark grey biotite-sericite-quartz	4.0	1.0	QZCVN 5	30cm of qtz + ser alt'n assoc w/ random patchy cpy + py and minor carb + patchy zeo(?)	107216	0.211	0.639
404.00	406.00	Fine-grained light grey sericite-biotite-quartz	3.0	0.1	QCZV 5	more lt gy due to semi-pervasive ser + qtz alt'n	107217	0.229	0.472
406.00	408.00	Fine-grained dark grey biotite-chlorite-sericite	4.0		QZVN 5	as above but dec in ser + qtz alt'n	107218	0.249	0.626
408.00	410.00	Fine-grained dark grey biotite-quartz-sericite	4.0	1.0	QZVN 70	py +/- cpy as patchy infill in qtz veinlets	107219	0.167	0.582
410.00	412.00	Fine-grained dark grey biotite-sericite	3.0	0.5	QZVN 60	py + cpy + black chl(?) as infill in one qtz veinlet	107220	0.163	0.332
412.00	414.00		3.0		QZVN 7	as above -> no visible cpy	107221	0.146	0.305
414.00	416.00		4.0	0.5	QZVN 10	as above -> local med grain rounded sericitic 'knots'	107222	0.216	0.392
416.00	418.00	Fine-grained dark grey biotite-sericite-quartz	3.0		QZVN 7	patchy ser + qtz alt'n well developed locally -> qtz veinlets mostly @ high angle but zeo (?) stringers highly random	107223	0.274	0.594
418.00	420.00	Fine-grained dark grey biotite-sericite	3.0	1	QZVN 7	locally pale green -> one qtz veinlet w/ py + mag	107224	0.173	0.344
420.00	422.00	Fine-grained dark grey biotite-sericite-quartz	3.0		QCZV 7	variable between dk gy bio rich to mottled pale green ser +/- qtz	107225	0.251	0.306
422.00	424.00	Fine-grained dark green sericite-quartz-chlorite	3.0		CCVN 5	pervasive ser + qtz alt'n -> only carb veinlets -> chl w/ vein selvage	107226	0.261	0.501

Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
424.00	426.00	Fine-grained dark green sericite-quartz-biotite	5.0	QQVN 45	as above but dec in ser + qtz alt'n @ lower half of sample	107227	0.343	0.801
426.00	428.00	Fine-grained dark grey biotite-sericite-quartz	4.0 0.5	QCZV 10	py stringers cross cut qtz +/- carb veinlets -> locally patchy pale dun ser + qtz alt'n	107228	0.342	0.54
428.00	429.70	Fine-grained dark grey biotite-sericite	2.0		veining mostly carb w/ zeo(?) -> lower contact sharp @ 60 degrees c.a.	107229	0.372	0.767
429.7	521.7	QUARTZ MONZONITE						
429.70	432.00	Medium-fine-grained grey sericite-quartz	2.0 1.0	QZVN 15	Fresh unalt'd texture is msv w/ med grain white/green, subhedral, equant (1-3mm) phenocrysts within fine grain, pale grey/brown matrix white crystals are plag locally pale green from sericitic alt'n -> dark green crystals are chloritic alt'd mafic (pyk?) crystals -> crystals vary from 20-40% of veinlet -> intrusive/porphyritic texture is mostly masked and/or destroyed by qtz veining and assoc ser + qtz wall rock alt'n -> qtz veining is approx 5-15% of veinlet as aphanitic smoky grey -> assoc qtz + ser wall rock alt'n varies from 40-70% of veinlet -> mag is locally well developed (483.30) but generally rare overall -> 1-3% py overall mostly as diss thru-out in both fresh & alt'd monzonite -> py locally in qtz veinlets but not common -> cpy in local veinlets more commonly than py and also disseminated -> cpy esp. well developed in 20 degree qtz veinlet @ 463.0m is infill along centre of veinlet -> rare pinkish zeo(?) w/ qtz veinlets.	107230	0.271	0.624
432.00	434.00		2.0 1.0	QVN 60 15	Angle of units 60 deg at intersecting angles -> rare py stringers x-cut vnlt -> py rarely in vnlt -> local diss clusters.	107231	0.362	0.737
434.00	436.00		3.0 0.5	QVN 10	vnlt more random.	107232	0.297	0.522
436.00	438.00		3.0 1.0	QVN 10	as above, minor cpy in vnlt.	107233	0.415	0.691
438.00	440.00		2.0 1.0	QZVN 5	intrusive texture evident thruout but crystals to ser or chl.	107235	0.22	0.188
440.00	442.00		4.0 1.0			107236	0.206	0.365
442.00	444.00		2.0 0.5	FLT 10	slightly fx - thin gouge sub // c.a. over 30 cm.	107237	0.393	0.642
444.00	446.00		2.0 0.5	QVN 5	x-cutting py stringers @ right angles to each other.	107238	0.221	0.366
446.00	448.00		4.0 0.5	QVN 60 15	pervasive ser + qtz alt'n -> local qtz vnlt w/ py infill.	107239	0.339	0.418
448.00	450.00		4.0 1.0	QVN 20	as above -> units @ 50 and 90 deg -> one vnlt w/ py + cpy + moly.	107240	0.272	0.297

Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
450.00	452.00	Medium-fine-grained grey sericite-quartz	2.0	0.5	QVN	5 vol'c xenolith (?) @ 451.60.	107241	0.341	0.344
452.00	454.00		3.0	0.5	QVN	5 only 10cm width w/ unalt'd intrusive texture	107242	0.246	0.379
454.00	456.00		2.0	0.5	QVN	3 porphyritic/intrusive texture more evident	107243	0.211	0.371
456.00	458.00		2.0	0.5	QVN	40 5 as above	107244	0.225	0.386
458.00	460.00		3.0	0.5	QVN	7 porphyritic texture only locally evident	107245	0.334	0.507
460.00	462.00		3.0	1.0	QVN	3 as above -> py veinlet w/ well developed ser + qtz wall rock alt'n then rimmed by chl	107246	0.39	0.557
462.00	464.00		2.0	2.0	QVN	15 well developed cpy in low angle qtz veinlet	107247	0.479	0.584
464.00	466.00		3.0	1.0	QVN	60 10 py +/- cpy diss and within local qtz veinlets	107248	0.301	0.398
466.00	468.00		2.0	0.5	QVN	5 biotitic (?) matrix overprinted by ser + qtz alt'n (?)	107249	0.3	0.34
468.00	470.00		2.0	0.5	QVN	5	107250	0.216	0.239
470.00	472.00		3.0	0.5	QVN	7 as above -> py in selvage of local veinlets	107251	0.215	0.205
472.00	474.00		2.0	0.5	QVN	5	107252	0.22	0.237
474.00	476.00		2.0	0.5	QVN	3	107253	0.273	0.23
476.00	478.00		2.0	0.5	QVN	5	107254	0.236	0.201
478.00	480.00		3.0	1.0	QVN	15 as above -> inc in qtz veinlets -> cpy visible in local veinlets	107255	0.457	0.45
480.00	482.00		7.0	1.0	QCVN	20 as above -> irregular but well developed py as veinlets + w/ qtz -> locally well developed cpy as infill in veinlet -> qtz veinlet cut by fe carb @ parallel w/ c.a.	107256	0.569	0.724
482.00	484.00		4.0	1.0	5 QVN	5 mag as 10cm wide infill w/ py + cpy	107257	0.435	0.492
484.00	486.00	Medium-fine-grained grey-green sericite-quartz	5.0	1.0	2 QVN	80 6 10cm mt-qtz str @ 485m. Most mafics chlorite	107258	0.297	0.275
486.00	488.00		5.0	1.0	2 QVN	60 5 4 thin sub-cm qtz stringers. Monz has bleached sili'd mtx	107259	0.342	0.289
488.00	490.00		5.0	0.1	1 CCVN	10 late red-pink cc veinlets. Fracts @ 20 degrees	107261	0.362	0.221
490.00	492.00		5.0	3.0	QVN	30 20 qtz-chl-py vein @ 490.4 and 490.6 semi-massive	107262	0.504	0.253
492.00	494.00		5.0	1.0	QVN	30 5 qtz vein 5cm @ 492.86. Py on 5mm thick fracts	107263	0.236	0.198
494.00	496.00		3.0	0.1	QVN	45 5 Thin infrequent qtz stringers	107264	0.273	0.248
496.00	498.00		5.0	1.0	QVN	45 5 Brown (ksp-bi) altered sections of qmonz	107265	0.163	0.1
498.00	500.00		5.0	1.0	QVN	50 5 Py-cpy on fracture surfaces. Qtz-py-mo veins + fractures	107266	0.231	0.183

Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
500.00	502.00	Medium-fine-grained grey sericite-quartz	5.0	1.0	QVN 80	5	107267	0.164	0.141
502.00	504.00		5.0	1.0	QVN 45	3 MoS2 on fracture surfaces	107268	0.167	0.164
504.00	506.00		5.0	1.0	QVN 71	5 MoS2 on slip @ 504.9m	107269	0.18	0.147
506.00	508.00		5.0	3.0	QVN 30	10 Py-cpy in 5cm thick qvns with MoS2 flecks	107270	0.246	0.223
508.00	510.00		5.0	3.0	QVN 10	5 Flecks of MoS2 on 1/2cm qtz-mt veinlet w/py @ 510.6	107271	0.224	0.157
510.00	512.00		5.0	3.0	QVN 30	5 Cpy veinlet @ 510m	107272	0.221	0.213
512.00	514.00		10.0	1.0	QVN 30	10 Qtz-py-mt veins @ 30 degrees c.a. with vuggy red-pink carb? Veinlets	107273	0.25	0.25
514.00	516.00		8.0	1.0	QVN 70	5 MoS2 fleck @ 514.30m. Slip at 30 degrees - hackly. MoS2 @ 515.8	107274	0.204	0.198
516.00	518.00		5.0	1.0	JNT 20	5 MoS2 on slip fractures. Parking kspar alt'n over 15cm lengths	107275	0.22	0.178
518.00	520.00		5.0	2.0	QVN 10	5 Orange-red soft crumbly vuggy veinlets of clot?	107276	0.311	0.222
520.00	521.70		5.0	2.0	QVN 45	5 Abundant disseminated py w/ odd cpy stringer @ 520.29m	107277	0.346	0.223
521.7	527.38	SYENITE							
521.70	523.00	Medium-grained dun porphyritic			CTC 35	Syenite dyke: Phenos- 15% qtz, 25% fsp; 30% mafics rest fg matrix	107278	0.007	-2
523.00	525.00					Minor carb veinlets 2-5mm cross cutting veinlet @ 45%	107279	0.002	-2
525.00	527.00					Xenolith 2.5cms @ 525.4m	107280	0.003	-2
527.00	527.38				CTC 30	Void of mineralization. Mafics contain mt.	107281	0.008	0.01
527.38	541.39	QUARTZ MONZONITE							
527.38	529.00	Medium-fine-grained grey sericite-quartz	10.0	1.0	1 QVN 80	5 529-529.24 weak ksp alt'n. Trace cpy.	107282	0.21	0.172
529.00	531.00		10.0	0.5	1 QVN 35	5 thin qtz stringer veins 1-2 per m, 0.5cm thick	107283	0.25	0.23
531.00	533.00		5.0	0.5	1 QVN 30	20 Two 10cm qtz veins with assoc py-cpy	107284	0.3	0.345
533.00	535.00		10.0	1.0	2 QVN 70	5 Py infilling stringers and fractures	107286	0.218	0.266
535.00	537.00		10.0	1.0	2		107287	0.215	0.231
537.00	539.00		10.0	1.0	2		107288	0.231	0.143
539.00	540.50		5.0	0.5	2		107289	0.319	0.214
540.50	541.39		5.0	1.0	2		107290	0.251	0.159

Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
541.39	550.77	POLYLITHIC TUFF DACITE								
541.39	543.61	Medium-grained grey-green fragmental sericite-chlorite-biotite	10.0	2.0	1	CCVN 30 5	Toodoggone Fm? Fragmental veinlet; polyolithic matrix supported with siliceous clasts.	107291	0.275	0.226
543.61	544.68	Medium-grained grey-green fragmental sericite-chlorite	3.0		1		Matrix supported fragments. Mottled unit x - chlorite replacement of augite? Patchy sericitic alt'n	107292	0.01	-2
544.68	546.15		1.0		1		10 cm siliceous fragment; mottled chl in ser mtx unit x	107323	0.002	-2
546.15	546.90		3.0		1		Fragments comprised of rounded mineralized frags, re-brecciated frags	107293	0.004	0.008
546.90	548.00		2.0		1		Chloritic alt'n of frags(?) or of phenocrysts/crystals	107294	0.007	0.01
548.00	550.00		2.0		1		Abundant fragments of monz in dark biotite (?) mtx.	107322	-2	-2
550.00	550.77		2.0		3		Mottled sil unit x	107295	0.004	-2
550.77	602.59	CROWDED FELSPAR PORPHYRY								
550.77	553.02	Medium-grained dark grey fragmental	1.0		5	MTVN 15 5	Patchy ser or ksp? along fractures; bleached zones/ Crowded fsp crystals + xenolithic frags. Possible post-mineral porphyry.	107296	0.007	0.013
553.02	555.17		1.0		5		Clasts comprise 10-15% of unit volum with rest fsp-mafic crystals.	107297	0.005	-2
555.17	557.35		1.0		5		Weak ksp alt'n(?) on fractures permeating 1-2cms into wall rock.	107298	0.002	0.008
557.35	559.64		10.0		5	QCEVN 5 45	Qtz-cc-py-epidote-mt vein with pink selvage.	107299	0.004	0.014
559.64	561.71		5.0		5	QCEVN 5 30	3cm py-qtz clast @ 561m. Looks like early propylitic alt'n w/ late ksp.	107300	0.007	0.01
561.71	563.73		1.0		5		py-qtz clast @ 559.92. Qtz-cc-epi-py vein +/- ksp. 4cms	107301	0.002	0.009
563.73	565.80		1.0		5		Weak ksp alt'n(?) on fractures	107302	0.038	0.021
565.80	567.97	Medium-coarse-grained red orange homogeneous	1.0		5	CCVN 15 15	Homogeneous - still fragmental but mostly crystals. Ep-mt clot.	107303	0.028	0.015
567.97	569.94		5.0		10	QCEVN 70 5	Bleached section from late carbonate-qtz veinlets. Not mt destructive	107304	0.013	0.006
569.94	572.11	Medium-coarse-grained dark grey homogeneous	1.0		10		Weak ksp?) alt'n. Thin fractures throughout.	107305	0.009	0.106
572.11	574.34		1.0		10	CCVN 80 2	10cm bleached section centred on mt-py-qtz-ksp? Vein	107306	0.001	0.048
574.34	576.39		2.0		10	CCVN 10 20	Very weak ksp alt'n. Chl-epi-ksp vein.	107307	0.001	0.007

Hole Number: KN-02-06

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
576.39	578.39	Medium-coarse-grained dark grey homogeneous	2.0	10	QCEVN 80 5	The odd 1-2cm clast, mafics, qtz rich, porphyritic-polyolithic.	107308	-2	-2
578.39	580.47		2.0	10		Patchy bleaching near carb veins.	107309	0.005	0.012
580.47	582.51		2.0	10	QCEVN 15 5	Thin pink-orange veinlets (0.5cm) of cc.	107310	0.002	0.096
582.51	584.63		1.0	10			107312	0.004	0.557
584.63	586.61		5.0	10	QCVN 15 30	Low angle qtz-mt-py-epi vein with pink alt'd rims	107313	0.006	0.013
586.61	588.89		1.0	10		Fracture density 1 every 10-15cms	107314	0.001	0.038
588.89	590.90		2.0	10			107315	0.001	0.027
590.90	593.05		1.0	10		2cm qtz-cc-py-mt veinlet with 10cm selvage	107316	0.002	0.229
593.05	594.23		5.0	10	QCVN 45 5	Epidote clots in irregular mt rimmed zones 2-3cm	107317	0.001	0.172
594.23	596.42		1.0	10			107318	0.001	0.075
596.42	598.50		2.0	10		Moderate bleached sections over 20-30cm @ 599.59m	107319	0.002	0.401
598.50	600.54		2.0	10			107320	0.001	0.029
600.54	602.59		1.0	10	QCVN 10 5	EOH @ 602.59m. Vuggy alt short qtz-cc vein at 601m	107321	0.002	0.014
602.59	EOH								

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-07**

Northing: 15933.8	Total Depth: 736.7m
Easting: 10461.2	Azimuth: 360°
Elevation: 1725	Dip: -80°

Geologist: J. Mazvihwa
Logged Date: 6/26/2002

Survey Depth	Azimuth	Dip	Comments:
0 m	360 °	-80 °	
737 m	5 °	-77 °	

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-07**

From (m)	To (m)	Rock Type	Comments
0	3.05	CASING	
3.05	39.98	SYENITE POST-MINERAL DYKE	Oxidized, protolith partially destroyed - brown colour, Dark mafic phenocrysts visible, white plagio phenocrysts barely visible. Several jt sets -randomly orientated infilled by lim +/- hem yellow to red colour. Qv has no preferred orientation; cutting across lim, filled locally. Syenite dyke outcrops 10 S of KN00-12 on ridge. Barren past mineralization dyke. Local BKN.
39.98	47.8	ANDESITE BRECCIATED FLOW	Py diss and stringers assoc with chalcocite stringers locally. Py +/- cpy diss ~ 2-3% py and 0.1-0.5% py. Fault BKN zones with 15-25 cm competent portions. Minor Qtz + kfsp veining, and 45 deg CA chalcocite grey stringers. Hairlike structures assoc with diss py. Moderate to high silicification and weak sericitization. Qtz clumps cemented locally by white clay/gouge.
47.8	89.76	ANDESITE FLOW	Py +/- cpy diss + stringers (~5% py) assoc ith CCT/anh veins. CCT lining jts ~0 deg to CA. Moly also lining 0-5 deg angled jt to CA, assoc with silicified portion, py diss within this part. Qtz, ahl, py infilling jts locally.
89.76	120.2	SYENITE	Barren. Euhedral plagio and kfsp phenocrysts in fine grained, brown/green matrix. Cut by Qtz/kfsp +/- carb veining randomly orientated. BKN zone defining contact.
120.2	148.12	ANDESITE FLOW	Py +/- cpy stringers assoc with Qtz +/- carb veining bound by chl stringers. Py +/- cpy also disseminated with chl haloes locally. Qtz, kfsp, carb, chl veining randomly orientated. Localized portions with high chlorite content. Mottled/patchy chlorite portions. Localized BKN zones. Chl mottled portions. Diss. mt assoc with Qtz and/or chl.
148.12	154.2	SYENITE	Barren, euhedral plagio + kfsp phenocrysts in fine grained, brown/green matrix. Cut by Qtz/kfsp +/- carb veining randomly orientated. 45 degree angled contact - potassic
154.2	506.27	ANDESITE FLOW	Py +/- cpy stringers assoc with Qtz veining bound by chl stringers. Py +/- cpy also diss with chl haloes locally. Qtz, kfsp, carb, chl veining; randomly orientated. Local chlorite and silicified rich portions. Localized BKN zones + chl mottled portions. Diss mt

Hole Number:

KN-02-07

From (m)	To (m)	Rock Type	Comments
506.27	522.76	QUARTZ MONZONITE	Py +/- cpy diss, minor stringers associated with veining. Diss in minor broken fault zone and associated with vuggy qtz vein +/- kfsp. Veining is randomly oriented. Qtz monzo has fine to medium plag and qtz phenocrysts with amphibole and/or pyroxene phenocrysts. Magnetic but no magnetite visible.
522.76	540.34	SYENITE	Barren syenite dykes. Euhedral to subhedral medium sized plag and kfsp phenocrysts + mafic phenocrysts in pale brown, fine grained matrix. Cut by hairline stringer structures, randomly oriented crosscutting. Local broken zones. Upper contact with qtz monzodiorite defined by kfsp veining approximately 45 degrees, angles associated with contact. Chloritic near contact with minor mt disseminations. Minor carb stringers.
540.34	541.63	QUARTZ MONZONITE	as above
541.63	542.83	SYENITE	Sharp lower contact with qtz monzodiorite (QMZ).
542.83	736.7	QUARTZ MONZONITE	py +/- cpy diss in qtz monzodiorite, stringers associated with qtz veining. Py +/- cpy locally associated with disseminated mt. Qtz veining is smokey/grey, randomly oriented. Minor broken zone. Veining consists mainly of qtz veining. Mt mainly disseminated in qtz monzodiorite. Local vuggy qtz vein-dissolution structures lined by mt.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	3.05	CASING						
	0.00	3.05				7	-2	-2
3.05	39.98	SYENITE POST-MINERAL DYKE						
	3.05	4.76 Fine-medium-grained light brown porphyritic oxidized		QOQKV	5 Oxidized, protolith partially destroyed - brown colour, Dark mafic phenocrysts visible, white plagio phenocrysts barely visible. Several jt sets -randomly orientated infilled by lim +/- hem yellow to red colour. Qv has no preferred orientation; cutting across lim, filled locally. Syenite dyke outcrops 10 S of KN00-12 on ridge. Barren past mineralization dyke. Local BKN.	102368	0.007	-2
	4.76	6.91		QOQKV	5	102369	0.012	-2
	6.91	9.05		QOQKV	5	102370	0.007	-2
	9.05	10.67		QOQKV	7 Less oxidized locally - brown/green colour, Plagio phenocrysts more visible. Slight incr d qtz veining. Red hem staining local. Yellow/orange lim infilling jts. Locally BKN zones.	102372	0.011	-2
	10.67	12.80		QOQKV	7	102373	0.004	-2
	12.80	14.35		QOQKV	7	102374	0.004	-2
	14.35	14.89		QOQKV	7	102375	0.003	-2
	14.89	15.30 Fine-medium-grained light grey silicic	1.0	0.1	QOQKV	10 Qv or xenolith. Cut by discontinuous orange/pink stringers possibly zeolite or kfsp, structurally controlled? Weak granular texture. Lim infilling jt. Zeo/kfsp stringers difficult to discern from lim infilled jts. Diss py within QV. Medium green patches- possible chlorite. *This and next sample were combined and submitted as sample # 102377*	102376	
	15.30	16.72 Fine-medium-grained light brown porphyritic oxidized		QOQKV	10 Oxidized, brown, less oxidized brown/green zones with plagio phenocrysts visible. Qtz, kfsp veining, locally vuggy. Local BKN zone. Jts infilled by lim - randomly orientated.	102377	0.016	0.043
	16.72	17.07		QOQKV	10	102378	0.022	0.094

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
17.07	17.65	Fine-medium-grained light grey silicic	1.0 0.1	QKZVN 15	Qv or xenolith. Cut by randomly orientated discontinuous orange/pink stringers kfsp/zeo. Minor hem and py stringers. Py +/- cpy diss. Green chloritic stringers. Locally BKN.	102379	0.047	0.176
17.65	19.82	Fine-medium-grained light brown porphyritic oxidized		QKVN 15	Oxidized, less oxidized brown/green portions. Local BKN zones. Qv generally randomly orientated, locally 3 qtz veinlets running at ~ 30 deg to CA. Kfsp randomly orientated.	102380	0.026	0.034
19.82	21.80			QKVN 15		102381	0.01	-2
21.80	23.69			QKVN 15	Oxidized, less oxidized brown/green portions. Local BKN zones. Qv generally randomly orientated, locally 3 qtz veinlets running at ~ 30 deg to CA. Kfsp randomly orientated. Qv locally vuggy, decr in vein %.	102382	0.003	-2
23.69	25.60			QKCVN 5	as above w/ Qv/ carb veining locally vuggy - dissolution structures.	102383	0.003	-2
25.60	27.83			QKCVN 5	as above w/ qtz/carb veining assoc locally with kfsp. Qtz/carb vein randomly orientated, 2 main veining of 0 deg and 90 deg to CA respectively. Dark/black mafic phenocrysts - bt? in dykes. Medium green less oxidized portions ~ 25cm.	102384	0.003	-2
27.83	29.40			QKCVN 5	Oxidized, less oxidized brown/green portions. Local BKN zones. Qv generally randomly orientated, locally 3 qtz veinlets running at ~ 30 deg to CA. Kfsp randomly orientated. Qtz/carb veining generally of 45 deg to CA.	102385	0.003	-2
29.40	30.20			QKCVN 5	Oxidized, less oxidized brown/green portions. Local BKN zones. Qv generally randomly orientated, locally 3 qtz veinlets running at ~ 30 deg to CA. Kfsp randomly orientated. BKN zone.	102386	0.003	-2
30.20	31.96			QKCVN 5		102387	0.002	-2
31.96	34.10	Fine-grained light brown porphyritic oxidized		QKCVN 7	Brown/green less oxidized portions. Qtz +/- carb. Kfsp veining randomly orientated. Qtz +/- carb veining - local vuggy texture, bound by kfsp: dissolve and recrystallization- assoc with less oxidized portion. Local broken zone.	102388	0.003	-2
34.10	34.69			QKCVN 7	Same as above, but less oxidized, slightly silicified - pale grey, decr in carb. Associated with qv.	102389	0.003	-2

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm		
34.69	36.64	Fine-grained light brown porphyritic oxidized			QKCVN	5	Brown/green less oxidized portions. Qtz +/- carb. Kfsp veining randomly orientated. Qtz +/- carb veining- local vuggy texture, bound by kfsp: dissolve and recrystallization- assoc with less oxidized portion. Local broken zone.	102390	0.003	-2	
36.64	38.60				QKCVN	5		102391	0.003	-2	
38.60	39.31				QKCVN	5		102392	0.003	-2	
39.31	39.98				QKCVN	5	Same as above, but less oxidized and pale green.	102393	0.004	-2	
39.98	47.8	ANDESITE BRECCIATED FLOW									
39.98	41.95	Fine-grained light grey quartz-sericite	3.0	0.1	CTC	45	5	Py diss and stringers assoc with chalcocite stringers locally. Py +/- cpy diss ~ 2-3% py and 0.1- 0.5% py. Fault BKN zones with 15-25 cm competent portions. Minor qtz + kfsp veining, and 45 deg CA chalcocite grey stringers. Hairlike structures assoc with diss py. Moderate to high silicification and weak sericitization. Qtz clumps cemented locally by white clay/gouge.	102394	0.052	0.201
41.95	43.82		2.0	0.1	FLT	45	5	Py + cpy diss, py stringers assoc with qv. 45 deg jt infilled by gouge, med grey clay, assoc with kfsp veinlets. Veining is randomly orientated. Silicified and wkly sericitized. Minor chalcocite lining ~ 10 deg jt.	102395	0.089	0.271
43.82	45.95		2.0	0.1	QVN	7	7	Py + cpy diss, py stringers assoc with qv. 45 deg jt infilled by gouge, med grey clay, assoc with kfsp veinlets. Veining is randomly orientated. Silicified and wkly sericitized. Minor chalcocite lining ~ 10 deg jt. Molybdenite stringers. CCT infilling jts.	102396	0.102	0.347
45.95	47.80		2.0	0.1	FLT	45		102398	0.145	0.429	
47.8	89.76	ANDESITE FLOW									
47.80	48.79	Fine-grained light grey quartz-chlorite-limonite	2.0	0.1	QKCVN	7	7	Py +/- cpy diss + stringers (~5% py) assoc ith CCT/anh veins. CCT lining jts ~0 deg to CA. Moly also lining 0-5 deg angled jt to CA, assoc with silicified portion, py diss within this part. Qtz, ah, py infilling jts locally.	102399	0.095	0.339
48.79	50.50	Fine-grained light green sericite-chlorite-quartz	3.0	0.1	QKCLV	10	10	Py +/- cpy diss, stringers assoc with qv. Moderate to high sericitization and chloritic phyllic and propylitic altin, pervasive - moderate to high locally patchy. Sheared. Py content ~5% locally. Qtz/mt/carb vein at end of sample - vuggy.	102400	0.061	0.294

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
50.50	52.08	Fine-grained light green chlorite-quartz	3.0	0.1		Less sericite altn. Py +/- cpy diss. Stringers assoc with qv +/- mt locally. BKN zones + competent silicified portions locally. Qtz/mt/chl/py vein at end of sample.	102401	0.12	0.397
52.08	52.43		2.0	0.1		BKN, green/grey silicified. Py +/- cpy assoc with qv. Chloritic, wkly silicified. Clay/gouge cementing material locally.	102402	0.086	0.352
52.43	53.23		2.0	0.1		Same as 102403. Slightly more competent	102403	0.106	0.281
53.23	55.17		2.0	0.1		Same as 102403. Discontinuous chloritic stringers - possibly structurally controlled. Locally reduced py +/- cpy content ~ 1%	102404	0.091	0.25
55.17	57.00	Fine-grained light green chlorite	2.0	0.1	QCLVN	7 Py +/- cpy diss minor stringers assoc. with chl stringers and qtz veinlets. Locally BKN. Joint infilled with clay + gouge. Veining randomly orientated. Diss. py with chl haloes locally.	102405	0.069	0.203
57.00	59.40		2.0	0.1	QCLVN	7 Same as 102405	102406	0.086	0.244
59.40	62.00		2.0	0.1	QCLVN	7 Same as 102405. Minor kfsp veining.	102407	0.13	0.297
62.00	62.95		2.0	0.1	QCLVN	7 Same as 102405. Slightly more broken, more than 3 joint sets lined by chl and py.	102408	0.083	0.236
62.95	65.50		2.0	0.1	QCLVN	7 Fault zone, pale grey/green clay/gouge cementing flow fragments. Locally more competent portions. Smokey/grey qv assoc w/ increased py ~ 3% diss	102409	0.202	0.453
65.50	65.84		2.0	0.1	QCLVN	7 Slightly less chloritic, reduced py content, ~ 1%	102410	0.206	0.383
65.84	66.70	Fine-grained light grey silicic	2.0	0.1	QVN	7 Py +/- cpy diss, stringers assoc with smokey grey qv. BKN zones - fault. Veining is randomly orientated	102411	0.129	0.664
66.70	68.92	Fine-grained light green chlorite-quartz	1.0	0.1	QCLVN	7 Minor diss py +/- cpy. Flow is chloritic, wkly silicified. Py stringers assoc with qv locally. Local gouge clay infilled joints. Local BKN	102412	0.135	0.258
68.92	69.52		1.0	0.1	QCLVN	7 Same as 102412. Chalcocite (Cu ₂ S) assoc with qv	102413	0.098	0.276
69.52	70.24		1.0	0.1	QCLVN	7 Same as 102412	102414	0.119	0.322
70.24	71.64		1.0	0.1	QCLVN	7	102415	0.182	0.359
71.64	73.59		1.0	0.1	QCLVN	7 Same as 102412. Minor kfsp veinlets assoc with chl stringers.	102416	0.135	0.371
73.59	74.54		1.0	0.1	QCLVN	7	102417	0.135	0.273
74.54	76.19		1.0	0.1	QCLVN	7	102418	0.077	0.215
76.19	77.65		1.0	0.1	QCLVN	7 Same as 102412. Minor kfsp veinlets assoc with qv	102419	0.104	0.198

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
77.65	80.83	Fine-grained medium green chlorite-quartz	2.0	0.5	QCKVN	7 Py +/- cpy stringers assoc w/ qv and bound by silicified and wk sericite along veining. Py +/- cpy also disseminated in flow. Veining is randomly orientated and cross cutting. Locally brecciated portions. Mino kfsp veining cutting py/qtz veining. Minor mf diss. assoc with qtz + carb veining	102420	0.114	0.296
80.83	81.71		2.0	0.5	QCKVN	7 Same as 102420.	102421	0.111	0.328
81.71	83.45		2.0	0.5	QCKVN	7	102422	0.111	0.309
83.45	86.06		2.0	0.5	QCKVN	7 Same as 102420. Angular qtz/carb fragments in locally brecciated portion, also diss in flow.	102424	0.082	0.211
86.06	88.04		2.0	0.5	1 QCKVN	7 Py +/- cpy stringers assoc with qv and bound by silicified and wk sericite along joint structure. Py +/- cpy diss in flow. Veining is randomly orientated, cross cutting	102425	0.095	0.242
88.04	89.76		2.0	0.5	1 QCKVN	7 Locally brecciated portions. Minor kfsp veining cutting py/qtz veining. Minor mt. diss, assoc with qtz + carb veining.	102426	0.123	0.222
89.76	120.2	SYENITE							
89.76	91.33	Fine-medium-grained medium green porphyritic			CTC	30 Barren. Euhedral plagio and kfsp phenocrysts in fine grained, brown/green matrix. Cut by qtz/kfsp +/- carb veining randomly orientated. BKN zone defining contact.	102427	0.004	-2
91.33	92.84					Same as 102427	102428	0.002	-2
92.84	92.92					Same as 102427. Flow breccia fragment.	102429	0.071	0.114
92.92	93.37					Same as 102427.	102430	0.023	0.036
93.37	94.07						102431	0.039	0.089
94.07	94.45					Same as 102427. Flow breccia fragment. BKN zone	102432	0.074	0.136
94.45	95.57					Same as 102427.	102433	0.002	-2
95.57	97.65						102434	0.003	-2
97.65	99.75						102435	0.002	-2
99.75	102.11						102436	0.002	-2
102.11	104.18						102437	0.003	-2
104.18	106.60						102438	0.003	-2
106.60	108.63						102439	0.002	-2

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
108.63	109.44	Fine-medium-grained medium green porphyritic				Same as 102427. Limonite + hematite - yellow and red oxidation lining joints.	102440	0.002	-2
109.44	110.41						102441	0.002	-2
110.41	112.99						102442	0.003	-2
112.99	115.24					Barren, euhedral plagio and kfsp phenocrysts; fine grained green/brown matrix. Cut by qtz/kfsp +/- carb veining randomly orientated.	102443	0.003	-2
115.24	117.50					Same as 102443.	102444	0.003	-2
117.50	119.60						102445	0.002	-2
119.60	120.20					Same as 102433. Syenite dyke is more chloritic towards contact with flow breccia.	102446	0.004	-2
120.2	148.12	ANDESITE FLOW							
120.20	122.32	Fine-grained medium green chlorite-quartz	2.0	0.5	1	QCKVN 7 Py +/- cpy stringers assoc with qtz +/- carb veining bound by chl stringers. Py +/- cpy also disseminated with chl haloes locally. Qtz, kfsp, carb, chl veining randomly orientated. Localized portions with high chlorite content. Mottled/patchy chlorite portions. Localized BKN zones. Chl mottled portions. Diss. mt assoc with qtz and/or chl.	102447	0.081	0.135
122.32	124.23		2.0	0.5	1	QCKVN 7 Same as 102447.	102448	0.295	0.61
124.23	126.46		2.0	0.5	1	QCKVN 7 Same as 102447.	102450	0.123	0.205
126.46	128.38		2.0	0.5	1	QCKVN 7 Same as 102447. Weak pervasive sericite alt'n. Locally increased py stringers + diss.	102451	0.162	0.259
128.38	130.46		2.0	0.5	1	QCKVN 7	102452	0.149	0.219
130.46	132.65		2.0	0.5	1	QCKVN 7	102453	0.164	0.282
132.65	134.48		2.0	0.5	1	QCKVN 7	102454	0.171	0.243
134.48	136.61		2.0	0.5	1	QCKVN 7	102455	0.115	0.199
136.61	138.63		2.0	0.5	1	QCKVN 7	102456	0.087	0.145
138.63	140.61		2.0	0.5	1	QCKVN 7 Same as 102447. Increased py +/- cpy.	102457	0.101	0.184
140.61	142.80		2.0	0.5	1	QCKVN 7 Same as 102477. Locally brecciated.	102458	0.089	0.136
142.80	144.95		2.0	0.5	1	QCKVN 7 Same as 102447. Locally increased qtz + chl stringers. Brecciated weakly. Minor broken zones weak to moderately sheared.	102459	0.076	0.124
144.95	147.11		2.0	0.5	1	QCKVN 7 Same as 102447. Qtz vein - slightly brecciated, generally parallel to c.a.	102460	0.111	0.195

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
147.11	148.12	Fine-grained medium green chlorite-quartz	2.0	0.5	1	CTC 45	Same as 102447. Contact with syenite dyke. Slightly sheared veining towards contact. Qtz vein - slightly brecciated and sheared; no preferred orientation.	102461	0.168	0.27
148.12	154.2	SYENITE								
148.12	149.66	Fine-medium-grained medium green porphyritic					Barren, euhedral plagio + kfsp phenocrysts in fine grained, brown/green matrix. Cut by qtz/kfsp +/- carb veining randomly orientated. 45 degree angled contact - potassic	102462	0.003	-2
149.66	151.60						Same as 102462.	102463	0.004	0.006
151.60	153.70							102464	0.003	-2
153.70	154.20					CTC 45		102465	0.006	-2
154.2	506.27	ANDESITE FLOW								
154.20	155.90	Fine-grained medium green chlorite-quartz	2.0	0.5	1	QCKVN 7	Py +/- cpy stringers assoc with qtz veining bound by chl stringers. Py +/- cpy also diss with chl haloes locally. Qtz, kfsp, carb, chl veining; randomly orientated. Local chlorite and silicified rich portions. Localized BKN zones + chl mottled portions. Diss mt	102466	0.108	0.187
155.90	157.58		2.0	0.5	1	QCKVN 7	Same as 102466.	102467	0.133	0.181
157.58	159.74		2.0	0.5	1	QCKVN 7		102468	0.09	0.17
159.74	161.64		2.0	0.5	1	QCKVN 7	Same as 102466. Qtz/kfsp, carb vein assoc with diss py +/- cpy, weak to moderate pervasive potassic/bt alteration - patchy.	102469	0.08	0.126
161.64	163.68		2.0	0.5	1	QCKVN 7	Same as 102469. Weak to moderate sericification - pervasive.	102470	0.057	0.079
163.68	165.53		2.0	0.5	1	QCKVN 7	Same as 102469. Localized py +/- cpy increase assoc with qtz with minor carb, weak effervescence with HCl. Cut by kfsp	102471	0.063	0.129
165.53	167.94		2.0	0.5	1	QCKVN 7	Same as 102466. Increased potassic/bt alteration, pervasive. Weak to moderate less patchy.	102472	0.065	0.121
167.94	170.06		2.0	0.5	1	QCKVN 7	Same as 102472.	102473	0.1	0.154
170.06	172.35		2.0	0.5	1	QCKVN 7	Same as 102472. Increased cpy	102474	0.367	0.882
172.35	174.41		2.0	0.5	1	QCKVN 7	Same as 102472.	102476	0.254	0.407
174.41	176.62		2.0	0.5	1	QCKVN 7	Same as 102466. Potassic/bt alteration very patchy, less continuous.	102477	0.181	0.298

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
176.62	178.78	Fine-grained medium green chlorite-quartz	2.0	0.5	1	QCKVN 7 Same as 102477.	102478	0.085	0.16
178.78	180.84		2.0	0.5	1	QCKVN 7 Same as 102477. Minor portion with increased silicification - pervasive, light grey/green.	102479	0.086	0.175
180.84	182.89		2.0	0.5	1	QCKVN 7 Same as 102477. Slightly more silicified, light grey/green.	102480	0.072	0.124
182.89	183.61		2.0	0.5	1	QCKVN 7 Same as 102477. Chloritic species in silicified portion cut by locally increased kfsp veining, randomly orientated.	102481	0.129	0.189
183.61	185.01	Fine-grained light grey chlorite-quartz	2.0	0.5	1	QKVN 7 Py +/- cpy diss, stringers assoc. with qtz and minor carb. Chloritic haloes around the diss py +/- cpy in places. Veining is randomly orientated. Locally silicified wk to mod, pervasive. Wk sericite alteration patchy. ~25cm portion of high kfsp veining, randomly orientated. Minor BKN zone. Patchy bt alteration, wk to moderate pervasive.	102482	0.127	0.295
185.01	187.17		2.0	0.5	1	QCKVN 7 PY +/- cpy diss, stringers assoc with qtz + minor carb. Chloritic haloes around diss py +/- cpy. Veining is randomly orientated. Potassic/bt alteration moderate, wk locally, pervasive locally patchy. Minor kfsp veining. Mottled chloritic portions. Minor diss mt assoc with qtz +/- carb veining.	102483	0.104	0.157
187.17	189.31		2.0	0.5	1	QCKVN 7 Same as 102483.	102484	0.075	0.225
189.31	191.52		2.0	0.5	1	QCKVN 7	102485	0.06	0.105
191.52	193.67		2.0	0.5	1	QCKVN 7	102486	0.13	0.195
193.67	195.80		2.0	0.5	1	QCKVN 7	102487	0.093	0.131
195.80	198.11		2.0	0.5	1	QCKVN 7	102488	0.137	0.206
198.11	199.02	Fine-grained light grey silicic	2.0	0.5	1	QKVN 7 Pale grey colour, moderate to high silicification pervasive. Py +/- cpy disseminated and in stringers, assoc with qv. Minor joint infilled by kfsp. Veining is randomly orientated.	102489	0.012	0.063
199.02	200.80	Fine-grained light grey chlorite-quartz	2.0	0.5	1	QKCVN 10 Py +/- cpy diss and stringers assoc with qtz/carb. Py +/- cpy diss with chloritic haloes. Veining is randomly orientated. Mottled chl portions. Patchy biotite alteration - pervasive, weak to moderate. Minor mt specks assoc with qtz/carb veining.	102490	0.103	0.165
200.80	203.01		2.0	0.5	1	QKCVN 10 Same as 102490.	102491	0.098	0.13
203.01	205.20		2.0	0.5	1	QKCVN 10	102492	0.141	0.227
205.20	207.33		2.0	0.5	1	QKCVN 10	102493	0.145	0.253

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
207.33	209.58	Fine-grained light grey chlorite-quartz	2.0	0.5	1	QKCVN 10	102494	0.229	0.327
209.58	211.77		2.0	0.5	1	QKCVN 10	102495	0.138	0.225
211.77	213.86		2.0	0.5	1	QKCVN 10	102496	0.16	0.255
213.86	216.02		2.0	0.5	1	QKCVN 10	102497	0.156	0.194
216.02	218.20		2.0	0.5	1	QKCVN 10	102498	0.127	0.188
218.20	220.38		2.0	0.5	1	QKCVN 10	102499	0.071	0.105
220.38	222.60	Fine-grained light green chlorite-quartz	2.0	0.5	2	QKMTV 10	102500	0.171	0.299
222.60	224.64		2.0	0.5	2	QKMTV 10	102502	0.06	0.147
224.64	226.72		2.0	0.5	2	QKMTV 10	102503	0.1	0.282
226.72	228.81		2.0	0.5	4	QKMTV 10	102504	0.1	0.164
228.81	229.47		2.0	0.5	2	QKMTV 10	102505	0.202	0.359
229.47	231.58		2.0	0.5	2	QKMTV 10	102506	0.132	0.487
231.58	233.61		2.0	0.5	2	QKMTV 10	102507	0.163	0.283
233.61	233.89		2.0	0.5	2	QKMTV 10	102508	0.162	0.258
233.89	235.43	Fine-grained light green quartz-chlorite-limonite	2.0	0.5	2	QKEVN 7	102509	0.307	0.464

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
235.43	236.65	Fine-grained light green chlorite-quartz	2.0 0.1	1	QKVN 10	Py +/- cpy diss with chl haloes, py +/- cpy stringers assoc with qtz/kfsp veining. Veining is randomly orientated. Localized portions of higher potassic alteration confined to kfsp veining and chlorite alteration. Pervasive, moderate to high biotite/potassic alteration. Patchy and mottled locally. Mt diss + stringers.	102510	0.339	0.515
236.65	239.65		2.0 0.1	1	QKVN 10	Same as 102510.	102511	0.096	0.153
239.65	241.49		2.0 0.1	1	QKVN 10		102512	0.142	0.203
241.49	243.66		2.0 0.1	1	QKVN 10		102513	0.233	0.324
243.66	245.80		2.0 0.1	1	QKVN 10		102514	0.277	0.348
245.80	247.86		2.0 0.1	1	QKVN 10	Same as 102510. Local vuggy qtz veining.	102515	0.156	0.157
247.86	250.08		2.0 0.1	1	QKVN 10	Same as 102510. Increased qtz veining locally assoc. with kfsp. Diss py +/- cpy assoc with bt alteration creased, pervasive, moderate to high.	102516	0.213	0.275
250.08	252.22		2.0 0.1	1	QKVN 10	Same as 102510. Diss not assoc. with qtz + kfsp veining. Increased diss mt in flow.	102517	0.245	0.329
252.22	254.33		2.0 0.1	1	QKVN 10		102518	0.167	0.219
254.33	256.40	Fine-grained medium green chlorite-quartz-biotite	2.0 0.5	2	QKCLV 10	Py +/- cpy diss in flow with chlorite haloes. Weakly silicified. Chloritic alterations. Weak to moderate potassic/biotite alteration, pervasive, locally patchy. Qtz and kfsp veining randomly orientated. Locally increased kfsp veining. Qtz veining bound by chl and/or sericitized portions.	102519	0.165	0.236
256.40	258.38		2.0 0.5	2	QKCLV 10	Same as 102519.	102520	0.117	0.178
258.38	260.54		2.0 0.5	2	QKCLV 10		102521	0.1	0.143
260.54	262.65		2.0 0.5	2	QKCLV 10		102522	0.098	0.111
262.65	264.75		2.0 0.5	2	QKCLV 10	Same as 102519. Speckled white, increased pervasive bt alteration - moderate to high.	102523	0.116	0.181
264.75	266.97		2.0 0.5	2	QKCLV 10	Same as 102519. Increased bt alteration and possible weak to moderate sericitization. Less silicification locally. Portions of higher potassic alteration, pervasive and as kfsp veining + increased py.	102524	0.252	0.35
266.97	268.91		2.0 0.5	2	QKCLV 10	Same as 102519. Locally increased mt, diss assoc with qtz + kfsp. Portions of less silicification and increased sericitization + potassic alt'n.	102525	0.13	0.183
268.91	270.62		2.0 0.5	2	QKCLV 10		102526	0.135	0.214

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
270.62	272.18	Fine-grained medium green chlorite-quartz-biotite	2.0	0.5	2	QKCLV 15	Same as 102519. Generally vuggy qtz veining assoc with chl stringers and kfsp locally. Increased qtz veining	102528	0.23	0.315
272.18	273.75		2.0	0.5	2	QKCLV 10	Same as 102519. Minor BKN zone.	102529	0.203	0.258
273.75	276.00		2.0	0.5	2	QKCLV 10	Same as 102519. Locally increased qtz veining, assoc with diss py. Randomly orientated.	102530	0.164	0.241
276.00	276.60		2.0	0.5	2	QKCLV 5	Same as 102519. Slightly reduced veining. Main qtz veining assoc with py +/- cpy diss, bound by chl stringers.	102531	0.184	0.248
276.60	277.70		2.0	0.5	2	QKCLV 10	Same as 102519. Locally increased qtz veining, assoc with py +/- cpy disseminations. Qtz veining assoc with kfsp. More cpy locally up to ~0.7%.	102532	0.348	0.407
277.70	279.50		2.0	0.5	2	QKCLV 10	Same as 102519. Locally vuggy qtz vein with minor carb, wk effervescence with HCl, assoc with kfsp.	102533	0.144	0.222
279.50	281.55		2.0	0.5	2	QKCLV 10	Same as 102519. Mt stringers assoc with qtz + kfsp veining.	102534	0.205	0.328
281.55	283.80		2.0	0.5	2	QKCLV 10	Same as 102519. Less silicified portions, with increased veining - qtz +/- mt and kfsp +/- mt randomly orientated. Patchy green and brown chl + biotite altered portions.	102535	0.136	0.22
283.80	285.74		2.0	0.5	2	QKCLV 10	Same as 102519. Kfsp veining assoc with chl, qtz and minor moly stringers and mt. Py +/- cpy clumps bound by mt and qtz/kfsp. Kfsp assoc with py + cpy locally.	102536	0.094	0.143
285.74	286.44		2.0	0.5	2	QKCLV 10	Same as 102519. Locally increased bt alteration.	102537	0.157	0.236
286.44	287.14	Fine-grained light green quartz-sericite	3.0	0.7	2	QKVN 50	Diss py + cpy and stringers assoc with qtz, chl, kfsp and moly stringers. About 15cm qtz vein, locally vuggy cut by moly stringers ~ 45 degrees to c.a. High py + cpy diss in qtz vein 25% locally. Py + cpy also diss in chloritized, sericitized and potassic banded altered portions. Alteration is pervasive and wk to moderate. Localized bt + chl mottled portions.	102538	0.111	0.125
287.14	288.27	Fine-grained medium green chlorite-quartz-biotite	2.0	0.5	2	QKCLV 10	Py +/- cpy diss in flow and veins, stringers assoc with qtz/kfsp veining. Veining is randomly orientated, cross cutting. Qtz + py +/- cpy veins are bound by ser/sil alt'n. Patchy pervasive wk to mod bt alt'n. Py +/- cpy diss have chl haloes locally. Mt stringers assoc with qtz +/- kfsp veining.	102539	0.146	0.222
288.27	288.93		2.0	0.5	5	QKCLV 15	Same as sample 102539. Increased mt stringers assoc with qtz +/- kfsp veining. Mt also diss in flow bounding py + cpy dissemination.	102540	0.11	0.2

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
288.93	290.60	Fine-grained medium green chlorite-quartz-biotite	2.0	0.5	2	QKCLV 15	Same as sample 102539. Increased veining, maze of qtz, kfsp, chl, py and mt veining. Cross cutting, randomly orientated locally.	102541	0.164	0.242
290.60	291.99		2.0	0.5	2	QKCLV 10	Same as sample 102539.	102542	0.097	0.165
291.99	293.92		2.0	0.5	2	QKCLV 10	Same as sample 102539. Locally increased kfsp veining.	102543	0.147	0.25
293.92	294.60		2.0	0.5	3	QKMTV 20	Same as sample 102539. Moly stringers assoc with qtz, mt, py, cpy veining, randomly orientated. Minor epi assoc with kfsp. Moly content high ~ 0.7% to 1%.	102544	0.297	0.385
294.60	296.35		2.0	0.5	2	QKMTV 10	Same as sample 102539. Moly assoc with qtz veining. Py + cpy diss assoc with qtz veining bound by chl stringers.	102545	0.247	0.384
296.35	298.13		2.0	0.5	2	QKMTV 10	Same as sample 102539. Circular structures infilled with qtz and chl, bound by chl rims, increased kfsp veining assoc with kfsp locally - randomly orientated.	102546	0.245	0.318
298.13	299.19		2.0	0.5	2	QKMTV 15	Same as sample 102539. Increased qtz + kfsp veining assoc with minor moly.	102547	0.239	0.276
299.19	301.19		2.0	0.5	2	QKMTV 7	Same as sample 102539. Mt stringer assoc with qv.	102548	0.155	0.193
301.19	301.65		2.0	0.5	2	QKMTV 10		102549	0.134	0.183
301.65	303.15		2.0	0.5	2	QKMTV 10	Same as sample 102539. Less silicified locally, increased bt alt'n. increased kfsp veining.	102550	0.375	0.419
303.15	305.05		2.0	0.5	2	QKMTV 10	Same as sample 102539. Locally vuggy qtz veining, dissolution and recrystallization structure. Vuggyness extends into chl flow. ~ 5cm portion.	102551	0.161	0.188
305.05	305.83		3.0	0.5	2	QKMTV 20	Same as sample 102539. Less silicified, increased veining, randomly orientated, assoc with diss py +/- cpy ~4% locally. Sericitized. Py + cpy diss in qtz vein.	102552	0.176	0.201
305.83	307.30		2.0	0.5	2	QKMTV 10	Same as sample 102539. Chloritic portions assoc with kfsp, qtz + chl veining.	102554	0.186	0.228
307.30	309.51		2.0	0.5	2	QKMTV 15	Same as sample 102539. Locally increased veining, not assoc with more py.	102555	0.108	0.159
309.51	311.21		2.0	0.5	2	QKMTV 10	Same as sample 102539. ~ 5cm seri band cut by kfsp veining with ~ 4% diss py and ~0.7% cpy. Confined to sericitized band.	102556	0.131	0.132
311.21	312.68	Fine-grained light grey quartz-sericite	4.0	0.7	1	QMTVN 15	Py + cpy diss, ~ 4% py, 0.7% cpy. Moderate to highly silicified and sericitized. Py + cpy diss in alt'd flow. Veining is randomly orientated. Mt stringers assoc with qtz, kfsp veining. Minor smokey grey qtz stringers - cdonic.	102557	0.129	0.144

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
312.68	314.23	Fine-grained medium green chlorite-quartz	2.0	0.5	1	QKMTV 10 Py +/- cpy diss with chl haloes, stringers assoc with qtz and kfsp veining. Local chl and biotite alt'd. Mt diss in flow and assoc with qtz veining. Alt'd portions.	102558	0.072	0.103
314.23	316.17		2.0	0.5	1	QKMTV 10 Same as sample 102558. Py +/- cpy vein bound in qtz vein lined by seri/sili alt'n, wk to moderate.	102559	0.083	0.109
316.17	318.55		2.0	0.5	1	QKMTV 10	102560	0.082	0.094
318.55	320.35		2.0	0.5	1	QKMTV 10 Same as sample 102558. Local increase in diss py +/- cpy in chloritic flow. Increased diss assoc with qtz + kfsp veining.	102561	0.102	0.108
320.35	321.71		2.0	0.5	1	QKMTV 20 Same as sample 102558. BKN locally, increased qtz, kfsp + chl + py +/- cpy stringers, randomly orientated, cross cutting. Locally vuggy. Mt diss in qtz/kfsp veining.	102562	0.125	0.123
321.71	323.90		2.0	0.5	1	QKMTV 10 Same as sample 102558. Local increase in veining - assoc with bt altered portions.	102563	0.177	0.209
323.90	325.93		2.0	0.5	1	QKMTV 10 Same as sample 102558. Increased mt, assoc with qtz and kfsp. Vesicles infilled with qtz +/- seri and py locally.	102564	0.174	0.186
325.93	328.36		2.0	0.5	1	QKMTV 10 Same as sample 102558. Vesicles infilled with qtz +/- seri, also infilled with py +/- cpy.	102565	0.122	0.123
328.36	330.45		2.0	0.5	1	QKMTV 10	102566	0.121	0.137
330.45	332.80		2.0	0.5	1	QKMTV 10 Same as sample 102558. Less silicified, increased pervasive bt alt'n assoc with increased qtz/anh veining, locally vuggy, randomly orientated. Silicified portion has minor diss py, medium size.	102567	0.092	0.141
332.80	334.90		2.0	0.5	1	QKMTV 10 Same as sample 102558. Localized bt altered assoc with increased qv. Qv assoc with minor moly stringers. Milky white chalcedonic qtz in bt + silicified flow. Minor seri portions, diss py increased locally - 4%.	102568	0.21	0.23
334.90	337.27		2.0	0.5	1	QKMTV 10 Same as sample 102558. Localized portion less silicified, assoc with qv with moly stringers, also assoc with py diss.	102569	0.099	0.117
337.27	338.37		2.0	0.5	1	QKMTV 10 Same as sample 102558. Local increase in qtz veining, assoc with massive mt, with py diss in massive mt.	102570	0.068	0.071
338.37	339.80		2.0	0.5	1	QKMTV 5 Same as sample 102558. Py and qtz hairline stringer structures, randomly orientated. Py stringer bound by chl stringer locally.	102571	0.094	0.077

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
339.80	341.70	Fine-grained medium green chlorite-quartz	2.0	0.5	1	QKMTV 10	Same as sample 102558. Moderate to high sericitized and silicified pervasive alt'n, ~15cm portions assoc with increased veining assoc with diss py + cpy.	102572	0.114	0.108
341.70	342.89		2.0	0.5	1	QKMTV 10	Qtz veining, +/- pale pink, vuggy, patchy chl alt'n.	102573	0.107	0.117
342.89	344.66		2.0	0.5	1	QKMTV 10	Same as sample 102558.	102574	0.123	0.128
344.66	345.86		2.0	0.5	1	QKMTV 20	Same as sample 102558. Increased qtz + py, cpy veining, randomly orientated. Py + cpy diss. Chl specks + stringers. Seri portions - pervasive, mod to high. Less silicified portions.	102575	0.162	0.156
345.86	347.35	Fine-grained medium green chlorite-quartz-biotite	2.0	0.5	1	QKMTV 10	Diss py + cpy in flow with chl haloes. Py + cpy stringers assoc with qtz veining. Cpy increased locally, 0.7-1% locally. Py + cpy stringers bound by chl stringers locally. Py + cpy diss in qv. Veining randomly orientated. Minor mt mainly diss in qv. Weak to moderate pervasive bt alteration, locally patchy, generally weak to moderate.	102576	0.074	0.083
347.35	349.61		2.0	0.5	1	QKMTV 10	Same as sample 102576. Mt diss in qtz vein - slight pink colour. Increased veining assoc with less silicified, more seri/bt altered portions.	102577	0.175	0.173
349.61	351.78		2.0	0.5	1	QKMTV 10	Same as sample 102576. Increased veining assoc with less silicified portions. Vesicles infilled with qtz +/- seri. Qtz veining assoc with pink kfsp/anh? + mt, diss py. Randomly orientated, vuggy locally.	102578	0.104	0.115
351.78	352.50		2.0	0.5	1	QKMTV 5	Same as sample 102576. Moderate to high silicification, reduced veining.	102580	0.065	0.057
352.50	354.51		2.0	0.5	1	QKMTV 15	Same as sample 102576. Increased qtz + kfsp/anh veining assoc with seri, less silicified portions. Veining is randomly orientated. Mt diss in flow and veining, infilling vesicles locally.	102581	0.102	0.114
354.51	356.03		2.0	0.5	1	QKMTV 5	Same as sample 102576. Disseminated py +/- cpy with chl haloes.	102582	0.129	0.141
356.03	356.95		2.0	0.5	1	QKMTV 7	Same as sample 102576.	102583	0.108	0.115
356.95	358.90		2.0	0.5	1	QKMTV 7	Same as sample 102576. Mt stringers + diss assoc with qtz + carb veining. Locally increased qv +/- carb +/- kfsp/anh, assoc with ~ 0.7% cpy and 3% py locally and in less silicified portions.	102584	0.283	0.204
358.90	359.84		2.0	0.5	1	QKMTV 7	Same as sample 102576. Locally vuggy, dissolution structures, lined with qtz carb, py and mt.	102585	0.156	0.159

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
359.84	361.80	Fine-grained medium green chlorite-quartz-biotite	2.0 0.5	1	QKMTV	7 Same as sample 102576. Local BKN. Increased qtz, chl, py +/- mt veining, randomly orientated. Py + cpy diss in flow.	102586	0.176	0.121
361.80	363.84		2.0 0.5	1	QKMTV	7 Same as sample 102576. Increased carb veining assoc with qtz, yellow surface stain, fizzes with HCl leaving white carb.	102587	0.135	0.098
363.84	364.60		2.0 0.5	1	QKMTV	7	102588	0.174	0.169
364.60	365.46		2.0 0.5	1	QKMTV	7	102589	0.176	0.16
365.46	366.91		2.0 0.5	1	QKMTV	7 Same as sample 102576. Increased qtz, carb veining assoc with seri and bt altered portions - less silicified. Locally vuggy.	102590	0.095	0.101
366.91	367.21		2.0 0.5	1	QVN 20	10 Same as sample 102576. Increased mt veining, ~ 20 degrees to c.a.	102591	0.065	0.077
367.21	367.98		2.0 0.5	1	QKMTV	5 Same as sample 102576. Decreased veining.	102592	0.109	0.117
367.98	369.70		2.0 0.5	1	QKMTV	10 Same as sample 102576. Weak to moderate sericitization and silicification pervasive. Potassic alt'n confined to veining, diss py +/- cpy assoc with the altered portion. Locally vuggy dissolution structures.	102593	0.089	0.116
369.70	371.15	Fine-grained medium green quartz-chlorite-biotite	2.0 0.5	2	QKMTV	7 Py +/- cpy diss in flow with chloritic haloes. Py +/- cpy stringers assoc with qv bound by chl. Local BKN. Minor kfsp veining. Mt stringers assoc with qv. Weakly silicified moderate chloritic. Weak to mod bt alt'n, pervasive, patchy.	102594	0.114	0.157
371.15	372.97		2.0 0.5	3	QKMTV	10 Same as sample 102594. Increased qtz and kfsp veining, assoc with mt locally. Qtz + carb veining vuggy in places.	102595	0.146	0.078
372.97	374.39		2.0 0.5		QKMTV	7 Same as sample 102594. Moly stringer assoc with qtz vein. Cross cut by qtz vein. ~ 5cm qtz (light pink colour. Kfsp or anh) assoc mt, py +/- cpy, +chl.	102596	0.089	0.101
374.39	376.90		2.0 0.5	2	QKMTV	10 Same as sample 102594. Increased veining is less silicified portions, more sericitized, slightly vuggy. Py +/- cpy diss in silicified portions.	102597	0.102	0.114
376.90	378.94		2.0 0.5	2	QKMTV	10	102598	0.088	0.099
378.94	380.38		2.0 0.5	2	QKMTV	10	102599	0.065	0.063
380.38	381.11		2.0 0.5	2	QKMTV	10	102600	0.109	0.093
381.11	383.03		2.0 0.5	2	QKMTV	3 Same as sample 102594. Reduced veining, minor qtz +/- kfsp hairline stringers.	105001	0.089	0.094

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
383.03	384.31	Fine-grained medium green quartz-chlorite-biotite	2.0	0.5	2	QKMTV 10	Same as sample 102594. Locally vuggy, dissolution structure in qtz/chl veining lined by py. Diss mt and stringers. Locally increased veining in less silicified more sericitized portions.	105002	0.128	0.139
384.31	386.18		2.0	0.5	2	QKMTV 10	Same as sample 102594. Portions with higher bt alt'n - moderate to high, brown. Py diss in chl/qtz vein - locally vuggy. Patchy bt and chl alt'n. Increased veining in less silicified portions more bt.	105003	0.103	0.364
386.18	387.50		2.0	0.5	2	QKMTV 10	Same as sample 102594. Localized bt + seri rich portion assoc with increased qtz + chl veining +/- mt.	105004	0.087	0.087
387.50	389.96		2.0	0.5	2	QKMTV 10		105006	0.123	0.112
389.96	391.98		2.0	0.5	2	QKMTV 10		105007	0.079	0.081
391.98	393.98		2.0	0.5	2	QKMTV 10	Same as sample 102594. Minor qtz/chlepi stringer - pale green colour ~ 45 degrees to c.a., ~ 2mm thick. Contact btwn moderately silicified portion and less silicified, more sericitized. Locally vuggy, increased bt.	105008	0.105	0.11
393.98	395.85	Fine-grained medium green biotite-quartz-carb	2.0	0.5	1	QCLVN 15	Increased bt alteration, pervasive, moderate, medium brown colour. Increased qtz/chl veining randomly orientated., seri wk to mod pervasive portion.	105009	0.183	0.187
395.85	397.66		2.0	0.5	1	QCLVN 15	Py + cpy diss in biotite altered flow. Reduced mt diss + stringers. Vesicles infilled with chl. Py diss rimmed with chl haloes locally.	105010	0.127	0.123
397.66	399.05		2.0	0.5	1	QCLVN 15	Same as sample 102610.	105011	0.111	0.118
399.05	401.12		2.0	0.5	1	QCLVN 15	Same as sample 102610. Locally vuggy qtz/chl veining assoc with sericitized and bt altered portions.	105012	0.121	0.122
401.12	402.84	Fine-grained medium green biotite-quartz	2.0	0.5		QCLVN 10	Py +/- cpy diss in bt altered flows stringers assoc with qtz veining + chl boundaries, generally. Moderate to high bt pervasive alt'n. Slightly mottled brown and pale green/brown chl locally. Vesicles infilled with qtz, and py. Mt diss in qtz veins.	105013	0.129	0.157
402.84	403.44		2.0	0.5		QCLVN 5	Same as sample 105013. Slightly decreased veining.	105014	0.101	0.125
403.44	404.22		3.0	0.5		QCLVN 15	Same as sample 105013. Increased qtz + py +/- cpy veining, randomly orientated. Py content up to ~4% locally.	105015	0.141	0.157
404.22	406.48		3.0	0.5		QCLVN 15	Same as sample 105013. Portions with less bt alt'n, green colour more chloritic and silicified. Diss py in chloritic portions.	105016	0.185	0.173

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
406.48	407.43	Fine-grained medium green biotite-quartz	3.0	0.5	QCLVN	15 Same as sample 105013. Slightly sericitized, diss py + cpy increased, ~4% in places. Mottled green chloritic portions.	105017	0.136	0.14
407.43	408.00		3.0	0.5	QCLVN	15 Same as sample 105013.	105018	0.135	0.158
408.00	408.82		3.0	0.5	QCLVN	15 Same as sample 105013. Bt alt'n increasing, qtz veining assoc with increased py and cpy, ~ 0.7% cpy locally.	105019	0.202	0.137
408.82	410.59	Fine-grained light brown biotite-sericite-quartz	3.0	0.5	QVN	10 Moderate bt alt'n and wk to moderate sericitization, pale brown colour. Qtz + py veining locally vuggy.	105020	0.111	0.13
410.59	413.01	Fine-grained medium brown biotite-chlorite	3.0	0.5	QCLVN	10 Py + cpy diss in bt altered flow, also present as stringers assoc with qtz veining, locally with sericite altered boundaries.	105021	0.109	0.119
413.01	413.61		3.0	0.5	QCLVN	10 Same as sample 105021. Increased sericite alteration assoc with increase in veining and py +/- cpy, locally ~ 4%. Locally vuggy.	105022	0.088	0.159
413.61	416.06		3.0	0.5	QCLVN	10 Same as sample 105021. Increased bt alteration and slightly less sericite alt'n. Bt alt'n, patchy, mottled. Qtz + chl ~ 3mm thick vein running along length of sample at ~ 0 degrees to c.a. Increased vesicles infilled with py with bt and minor chl rims.	105023	0.063	0.101
416.06	416.44		3.0	0.5	QCLVN	10 Same as sample 105021. Increased sericitization, increased veining/stringers. Py +/- cpy diss and stringers assoc with chl veining. Py +/- cpy disseminations bound by chlorite/biotite haloes.	105024	0.107	0.1
416.44	417.82		3.0	0.5	QCLVN	10 Same as sample 105021. Minor sericitized portions, bt alt'n. Sericitized portions associated with increased qtz +/- py +/- cpy veining.	105025	0.204	0.103
417.82	418.59		3.0	0.5	QCLVN	10	105026	0.183	0.18
418.59	418.91		3.0	0.5	QCLVN	10 Same as sample 105021. Qtz + carb veining, strong effervescence with HCl. Vuggy dissolution structures.	105027	0.222	0.223
418.91	419.22		3.0	0.5	QCLVN	10 Same as sample 105021. Increased bt alt'n.	105028	0.197	0.248
419.22	420.57		3.0	0.5	QCLVN	10 Same as sample 105021. Decreased bt alt'n, patchy, increased sericite alt'n, assoc with increased qtz + py +/- cpy veining - Bf speckled.	105029	0.205	0.187
420.57	421.72	Fine-grained medium brown chlorite-biotite	2.0	0.5	QCLVN	10 Chloritic portions, less bt alt'n. Locally vuggy. Py +/- cpy diss in flow. Stringers are assoc with qtz veining.	105030	0.169	0.17
421.72	422.18		2.0	0.5	QCLVN	10 Chloritic portions, less bt alt'n, plagio phenocrysts in mafic flow. Py +/- cpy diss.	105032	-2	-2

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
422.18	423.29	Fine-grained medium brown chlorite-biotite	2.0 0.5		QCLVN 10	Chloritic portions, less bt alt'n, plagio phenocrysts in mafic flow. Py +/- cpy diss. Locally vuggy.	105033	0.101	0.103
423.29	424.24	Fine-grained medium green chlorite-quartz	2.0 0.5	1	QCLVN 10	Py +/- cpy diss in flow. Stringers assoc with qtz +/- chl +/- mt veining. Chloritic, very weak bt alt'n. White medium sized, euhedral to anhedral, plagioclase phenocrysts randomly orientated and spaced. Py +/- cpy also diss in flow. Qtz veining assoc with py +/- cpy and mt.	105034	0.096	0.097
424.24	425.27		2.0 0.5	1	QCLVN 10	Same as sample 105034. Plagio content reduced. Locally vuggy.	105035	0.069	0.075
425.27	426.83	Fine-grained medium green chlorite	2.0		GQVN 10	Py diss in chloritic flow, and veining. Stringers assoc with qtz, gypsum +/- chl veining. Veining is randomly orientated. Gypsum veining assoc with qtz + chl. Dissolution occurring with gypsum during drilling. Gypsum veining locally assoc with mt diss.	105036	0.061	0.069
426.83	428.85		2.0		GQVN 10	Same as sample 105036.	105037	0.072	0.076
428.85	430.95		2.0		GQVN 10		105038	0.103	0.103
430.95	432.88		2.0		GQVN 10		105039	0.071	0.083
432.88	433.80		2.0		GQVN 10		105040	0.117	0.21
433.80	435.56		2.0		GQVN 10		105041	0.098	0.124
435.56	437.27	Fine-grained medium green chlorite-biotite	2.0 0.1		GAQVN 7	Py +/- cpy in flow, also assoc with qtz +/- gypsum +/- anh veining. Gypsum and anh veining in ~3cm of each other. Anh assoc with qv. Weak bt alt'n, generally pervasive.	105042	0.112	0.122
437.27	439.15		2.0 0.1		GAQVN 7	Same as sample 105042. Massive py assoc with anhy veining, bound by some seri alt'n. Less bt alt'n locally. Minor gypsum stringers.	105043	0.12	0.117
439.15	441.03		2.0 0.1		GAQVN 7		105044	0.118	0.124
441.03	443.03		2.0 0.1		GAQVN 7	Increased bt alt'n, pervasive, wk to moderate. Gypsum assoc with qtz, chl, py +/- cpy stringers and diss.	105045	0.172	0.131
443.03	444.51		2.0 0.1		GAQVN 7		105046	0.149	0.152
444.51	445.97		2.0 0.1		GAQVN 7	Anhy veining cut by gypsum stringer?? Anhy veining assoc with qtz + carb - locally. Above veining is cut by py +/- cpy stringers and chl veining. Increased veining bound by ser alt'n - moderate pervasive. Py +/- cpy diss in bt altered flow and veining.	105047	0.103	0.137

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
445.97	447.91	Fine-grained medium green chlorite-biotite	2.0	0.1	QAVN	7 Anhy assoc with qtz and py +/- cpy. Py +/- cpy also diss in bt altered flow. Wk to moderate, pervasive bt alt'n. Portions with less bt alt'n.	105048	0.11	0.132	
447.91	449.30		2.0	0.1	QAVN	7	105049	0.104	0.121	
449.30	450.08		2.0	0.1	QAVN	7	105050	0.077	0.078	
450.08	451.05		2.0	0.1	QAVN	7	105051	0.098	0.101	
451.05	453.24	Fine-grained medium green chlorite-quartz	2.0	0.1	GAQMT	7 py +/- cpy diss in chloritic flow, also associated with gypsum and qtz veining. Py +/- cpy stringer also bound by chl stringers. Chloritic, medium to dark green coloured flow. Weak silicification, pervasive alteration.	105052	0.087	0.116	
453.24	455.12		2.0	0.1	GAQMT	7 py +/- cpy diss in chloritic flow, also associated with gypsum and qtz veining. Py +/- cpy stringer also bound by chl stringers. Chloritic, medium to dark green coloured flow. Weak silicification, pervasive alteration. Qtz vein approx. 7cm thick at its widest part cut by py +/- cpy stringers. Anhydrite veining lined by gypsum stringers.	105053	0.131	0.127	
455.12	457.25		2.0	0.1	GAQMT	7 as above w/ Anhydrite veining associated with diss py bound by qtz + minor carb veining. Randomly oriented.	105054	0.124	0.115	
457.25	459.33		2.0	0.5	1	GAQMT	7 py +/- cpy diss in chloritic flow, also occurs as veining associated with anhydrite, gypsum and mt + chl. About 4% py and 0.7% cpy locally. Flow is chloritic, weak silicification. Py +/- cpy mainly associated with anhydrite veining. Diss py +/- cpy has chloritic halo.	105055	0.134	0.12
459.33	461.05		2.0	0.5	1	GAQMT	7 Reduced only veining. Py +/- cpy associated with gyp + qtz + mt veining, also diss in flow.	105056	0.173	0.175
461.05	462.85		2.0	0.5	1	GAQMT	5 Py +/- cpy diss in flow and associated with gypsum, anhydrite and mt veining. Reduced veining.	105058	0.205	0.213
462.85	464.71		2.0	0.5	1	GAQMT	5 Py + cpy diss in flow and associated with qtz + gypsum veining, bound by chloritic, sericitic alteration. Py +/- cpy diss bound by chl locally. Weak biotite alteration-pervasive.	105059	0.231	0.202
464.71	467.20		2.0	0.5	1	GAQMT	5 Decreased minor carbonate veining, pale yellow veining, fizz with HCl.	105060	0.3	0.294
467.20	468.29		2.0	0.5	1	GAQMT	15 Increased bt alteration and veining, roughly running at approximately 45 degrees to core axis. Py +/- cpy is diss in flow; stringers are associated with qtz veining, +/- carb and minor pink kspars veining.	105061	0.278	0.275

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
468.29	469.81	Fine-grained medium green chlorite-quartz	1.0	0.5	1	QVN 45	Chloritic. Minor diss py +/- cpy in flow, also associated with qtz veining. Increased carb veining, discontinuous and randomly oriented. Minor kfsp veining. Minor broken zone.	105062	0.242	0.29
469.81	470.03		1.0	0.1		QZVN 10	Smokey grey qtz vein approximately 20 cm thick, associated with py +/- cpy, randomly oriented.	105063	0.257	0.306
470.03	472.26		1.0	0.1		QGVN 95	Diss py +/- cpy in chloritic flow with weak bt alteration, pervasive. Py +/- cpy stringers associated with qtz, bound by chl. Mottled chloritic rich portions, weakly sericitic locally.	105064	0.184	0.171
472.26	474.25		1.0	0.1		QGVN 10	Diss py +/- cpy in chloritic flow with weak bt alteration, pervasive. Py +/- cpy stringers associated with qtz, bound by chl. Mottled chloritic rich portions, weakly sericitic locally. Minor kfsp veining.	105065	0.159	0.144
474.25	475.07		1.0	0.1		QVN 10	Diss py +/- cpy in chloritic flow with weak bt alteration, pervasive. Py +/- cpy stringers associated with qtz, bound by chl. Mottled chloritic rich portions, weakly sericitic locally. Minor kfsp veining, increased pervasive biotite alteration.	105066	0.268	0.229
475.07	476.44		3.0	0.1		QKVN 10	Increased diss py +/- cpy associated with smokey grey qtz and kfsp. Weakly silicified + sericitized. Minor kfsp stringers. Diss py +/- cpy also in altered flow. Weak to moderate biotite alteration.	105067	0.193	0.236
476.44	477.24		3.0	0.1		QKVN 10	Weak bt alteration/silicified. Py +/- cpy diss in altered flow and associated with its veining. Py +/- cpy has chloritic haloes. Veining is randomly oriented.	105068	0.171	0.173
477.24	477.62		1.0	0.1		QKVN 10	Weak bt alteration/silicified. Py +/- cpy diss in altered flow and associated with its veining. Py +/- cpy has chloritic haloes. Veining is randomly oriented. Less bt alteration-more chloritic, less diss py +/- cpy.	105069	0.14	0.141
477.62	478.29		1.0	0.1		QKVN 10	Weak bt alteration/silicified. Py +/- cpy diss in altered flow and associated with its veining. Py +/- cpy has chloritic haloes. Veining is randomly oriented. More bt alteration, locally reduced py +/- cpy diss and associated with veining.	105070	0.143	0.131
478.29	479.95		1.0	0.1		QKVN 10	Weak bt alteration/silicified. Py +/- cpy diss in altered flow and associated with its veining. Py +/- cpy has chloritic haloes. Veining is randomly oriented. Weak to moderate bt alteration.	105071	0.478	0.553

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
479.95	480.23	Fine-grained medium green chlorite-quartz	3.0 0.1	3	QMTVN 10	Qtz vein associated with mt, py +/- cpy, chl. Py content up to approximately 4% locally.	105072	0.218	0.332
480.23	482.11	Fine-grained medium green chlorite	1.0 0.1		QKVN 15	py +/- cpy diss in flow also associated with smokey grey qtz veining, also kfsp veining, weakly broken. Kfsp veining locally at approximately 45 degrees. Weak bt alteration. Veining generally randomly oriented.	105073	0.27	0.327
482.11	483.27		1.0 0.1		QKVN 10	Py +/- cpy diss in flow, also associated with kfsp and chl veining. Randomly oriented. Weak to moderate bt alteration.	105074	0.125	0.105
483.27	484.82		1.0 0.1		QKVN 5	Weak bt alteration. Minor diss py, decreased veining.	105075	0.155	0.143
484.82	485.60		1.0 0.1		QKVN 5		105076	0.219	0.203
485.60	485.94		1.0 0.1		QKVN 5		105077	0.137	0.101
485.94	486.47	Fine-grained light green sericite-quartz	2.0 0.5		QKVN 10	py +/- cpy diss, associated with stringer qtz + chl. Pervasive sericitic silica. Patchy bt alteration. Minor broken.	105078	0.156	0.116
486.47	487.05		2.0 0.5		QKVN 10	Weak chloritic and biotite alteration. Py +/- cpy diss in altered flow, also associated with qtz veining. Veining is randomly oriented.	105079	0.243	0.209
487.05	488.70		2.0 0.5		QKVN 10	Increased bt alteration and veining-qtz +/- chl. Py +/- cpy diss and stringers associated with qtz veining and chlorophyll.	105080	0.187	0.152
488.70	490.01		2.0 0.5		QKVN 10	Py +/- cpy diss in flow, also in qtz stringerscut by minor chl stringers. Veining is randomly oriented. Minor bt alteration.	105081	0.13	0.124
490.01	491.50		2.0 0.5		QKVN 10		105082	0.222	0.194
491.50	493.42		2.0 0.5		QKVN 10	diss py +/- cpy in chloritic flow and silicified and sericitized flow. Patchy, moderate pervasive bt alteration. Minor py +/- cpy stringers associated with qtz veining and kfsp. Veining is randomly oriented, concentrated in altered portions.	105084	0.465	0.469
493.42	495.44	Fine-medium-grained medium green chlorite	2.0 0.5	1	QMTVN 10	Mafic, chloritic flow with parts of qtz monzodiorite, gradual contact. Flow is generally chloritic, py +/- cpy diss in flow. Qtz monzodiorite has fine to medium sized plag, qtz, pyroxene, and/or amphibole phenocrysts. Qtz, carb, chl veining. Minor mt diss in qtz veining. Py +/- cpy associated with qtz +/- kfsp veining in qtz monzodiorite-generally more qtz veining in qtz monzodiorite.	105085	0.27	0.222

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
495.44	496.87	Fine-medium-grained medium green chlorite	2.0	0.5	1	QMTVN 10 as above	105086	0.202	0.168
496.87	497.33		2.0	0.5	1	QMTVN 10 Qtz monzodiorite portion, cut by smokey grey qtz vein about 45 degrees to core axis, associated with epidote stringer, py +/- cpy. Locally vuggy. Mt associated with qtz vein.	105087	0.317	0.265
497.33	498.57		2.0	0.5	1	QMTVN 10 Increased carb veining, yellow, fizzes with HCl, associated with red hematite stringers +/- kfsp, qtz approximately 30 degrees to core axis.	105088	0.258	0.219
498.57	499.73		2.0	0.5	1	QMTVN 10 same as 105085	105089	0.269	0.257
499.73	501.03		2.0	0.5	1	QMTVN 10	105090	0.32	0.413
501.03	502.52		2.0	0.5	1	QMTVN 10 Mafic, chloritic flow with parts of qtz monzodiorite, gradual contact. Flow is generally chloritic, py +/- cpy diss in flow. Qtz monzodiorite has fine to medium sized plag, qtz, pyroxene, and/or amphibole phenocrysts. Qtz, carb, chl veining. Minor mt diss in qtz veining. Py +/- cpy associated with qtz +/- kfsp veining in qtz monzodiorite-generally more qtz veining in qtz monzodiorite. Increased lengths of qtz monzodiorite portions, approx. 10 cm qtz vein cut by epidote, kfsp, chl, py +/- cpy, randomly oriented. Mt and kfsp veining associated with carb veining approx 40 degrees to core axis.	105091	0.382	0.378
502.52	504.33		2.0	0.5	1	QMTVN 10	105092	0.405	0.355
504.33	505.77		2.0	0.5	1	QMTVN 10	105093	0.361	0.358
505.77	506.27		2.0	0.5	1	QMTVN 10	105094	0.252	0.241
506.27	522.76	QUARTZ MONZONITE							
506.27	508.10	Fine-medium-grained light grey porphyritic chlorite	1.0	0.1	2	QMTVN 10 Py +/- cpy diss, minor stringers associated with veining. Diss in minor broken fault zone and associated with vuggy qtz vein +/- kfsp. Veining is randomly oriented. Qtz monzo has fine to medium plag and qtz phenocrysts with amphibole and/or pyroxene phenocrysts. Magnetic but no magnetite visible.	105095	0.556	0.628
508.10	508.83		1.0		2		105096	0.409	0.657
508.83	510.41		1.0		5		105097	0.33	0.655
510.41	512.22		1.0		5		105098	0.305	1.125

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
512.22	514.39	Fine-medium-grained light grey porphyritic chlorite	1.0	5			105099	0.391	1.215
514.39	515.63		1.0	5			105100	0.202	0.837
515.63	517.05	Fine-medium-grained light grey porphyritic silicic	2.0	0.5	15	QMTKV 30 Sample consists mainly of smokey/grey qtz vein. Py +/- cpy diss in dark green, mt rich qtz monzodiorite, stringers associated with kfsp + mt veining cutting qtz vein. Veining is randomly oriented.	105101	0.205	0.393
517.05	517.77		2.0	0.5	15	QMTKV 30	105102	0.281	0.478
517.77	518.17	Fine-medium-grained dark grey porphyritic chlorite-biotite	1.0	0.1	5	QKVN 5 Less smokey/grey qtz veining. Dark green/black mt rich sample, weak biotite alteraion. Protolith destroyed. Qtz vein cut by pale pink stringer, possibly kfsp. Veining is randomly oriented.	105103	0.099	0.227
518.17	518.96	Fine-medium-grained light grey porphyritic silicic	2.0	0.5	2	QMTVN 40 Sample is mainly smokey/grey qtz vein; cut by py +/- cpy stringers, randomly oriented. Minor dissolution vuggy structures infilled with py +/- cpy. Less mafic-silicified. Py +/- cpy diss in qtz monzodiorite. Minor local broken zone.	105104	0.086	0.207
518.96	519.20	Fine-medium-grained porphyritic silicic		5		Sample is mainly smokey/grey qtz vein; cut by py +/- cpy stringers, randomly oriented. Minor dissolution vuggy structures infilled with py +/- cpy. Less mafic-silicified. Py +/- cpy diss in qtz monzodiorite. Minor local broken zone. Increased mt content, about 7% in places.	105105	0.057	0.126
519.20	519.90			10	QMTVN 30		105106	0.168	0.334
519.90	521.54	Fine-medium-grained medium grey porphyritic silicic		10	QMTVN 20	Dark green/black mt rich; qtz monzodiorite associated with minor diss py +/- cpy. Py +/- cpy stringers associated with smokey/grey qtz vein, mt also associated with qtz vein. Veining is randomly oriented.	105107	0.119	0.391
521.54	522.07	Fine-medium-grained light grey porphyritic silicic	3.0	0.5	10	QMTKV 40 Sample consists mainly of qtz vein, smokey/grey, chalcedonic. Cut by randomly oriented py +/- cpy, minor kfsp stringers, mt and red hematite + mt. Minor carb veining associated with qtz vein and py +/- cpy. Red hem +/- mt infilling it.	105108	0.209	0.599
522.07	522.76		2.0	0.5	10	QMTKV 20 Minor py +/- cpy in pale green/grey qtz monzodiorite, minor stringers associated with qtz/mt veining. Veining is randomly oriented. Local vuggy dissolution structure in the qtz vein + mt. Contact with syenite dyke is sharp, angle not vissible.	105110	0.244	0.471

522.76 540.34 SYENITE

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
522.76	523.48	Fine-medium-grained light brown porphyritic			KQVN 15	Barren syenite dykes. Euhedral to subhedral medium sized plag and kfsp phenocrysts + mafic phenocrysts in pale brown, fine grained matrix. Cut by hairline stringer structures, randomly oriented crosscutting. Local broken zones. Upper contact with qtz monzodiorite defined by kfsp veining approximately 45 degrees, angles associated with contact. Chloritic near contact with minor mt disseminations. Minor carb stringers.	105111	0.016	0.03	
523.48	524.90				KQVN 10		105112	0.004	-2	
524.90	526.72				KQVN 10		105113	0.003	0.008	
526.72	528.17				KQVN 10		105114	0.003	-2	
528.17	530.45				KQVN 10		105115	0.003	-2	
530.45	532.37				KQVN 10		105116	0.003	-2	
532.37	534.06				KQVN 10		105117	0.003	-2	
534.06	535.85				KQVN 10		105118	0.004	0.013	
535.85	537.82				KQVN 10		105119	0.003	-2	
537.82	539.51				KQVN 10		105120	0.003	0.008	
539.51	540.34				KQVN 10		105121	0.005	0.012	
540.34	541.63	QUARTZ MONZONITE								
540.34	541.63	Fine-medium-grained medium green porphyritic silicic	2.0	0.5	10	QMTKV 20	as above	105122	0.109	0.142
541.63	542.83	SYENITE								
541.63	542.83	Fine-medium-grained light brown porphyritic			CTC 35	Sharp lower contact with qtz monzodiorite (QMZ).	105123	0.004	-2	
542.83	736.7	QUARTZ MONZONITE								
542.83	544.37	Fine-medium-grained light grey porphyritic silicic	2.0	0.5	15	QMTVN 5	py +/- cpy diss in qtz monzodiorite, stringers associated with qtz veining. Py +/- cpy locally associated with disseminated mt. Qtz veining is smokey/grey, randomly oriented. Minor broken zone. Veining consists mainly of qtz veining. Mt mainly disseminated in qtz monzodiorite. Local vuggy qtz vein-dissolution structures lined by mt.	105124	0.135	0.185
544.37	545.27		2.0	0.5	15	QMTVN 45		105125	0.063	0.111
545.27	546.33		2.0	0.5	15	QMTVN 15		105126	0.273	0.366
546.33	547.32		2.0	0.5	15	QMTVN 15		105127	0.131	0.225

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
547.32	549.19	Fine-medium-grained light grey porphyritic silicic	2.0	0.5	15	QMTVN 15	105128	0.113	0.145
549.19	551.09		2.0	0.5	15	QMTVN 30	105129	0.077	0.108
551.09	553.25		2.0	0.5	15	QMTVN 15	105130	0.06	0.1
553.25	554.52		2.0	0.5	15	QMTVN 15	105131	0.151	0.176
554.52	556.40		2.0	0.5	15	QMTVN 15	105132	0.128	0.22
556.40	557.75		2.0	0.5	15	QMTVN 15	105133	0.188	0.241
557.75	558.56		2.0	0.5	15	QMTVN 15	105134	0.223	0.221
558.56	560.28	Fine-grained medium grey porphyritic silicic	2.0	0.5	10	QVN 85 20	105135	0.12	0.125
						Py +/- cpy diss in qtz monzodiorite, also associated with qtz smokey/grey veining. Qtz + mt veining stringers + veins randomly oriented. Qtz monzodiorite, plag + qtz + pyroxene/amphibole phenocrysts in fine grained plagio + qtz. Mt diss in qtz monzodiorite and stringers associated with qtz veining. Minor kfsp/zeolite veining. Qtz vein locally crackle brecciated.			
560.28	561.69		2.0	0.5	10	QMTVN 20	105136	0.136	0.222
561.69	563.28		2.0	0.5	10	QMTVN 20	105137	0.132	0.179
563.28	563.87		2.0	0.5	10	QMTVN 20	105138	0.074	0.1
563.87	565.46		2.0	0.5	10	QMTVN 20	105139	0.224	0.258
565.46	567.38		2.0	0.5	10	QMTVN 20	105140	0.17	0.275
567.38	567.70		2.0	0.5	10	QMTVN 20	105141	0.126	0.269
567.70	571.06		2.0	0.5	10	QMTVN 20	105142	0.18	0.355
571.06	572.76		2.0	0.5	10	QMTVN 20	105143	0.156	0.382
572.76	574.60		2.0	0.5	10	QMTVN 20	105144	0.097	0.253
574.60	575.03		2.0	0.5	10	QVN 45 20	105145	0.202	0.481
575.03	576.54		2.0	0.5	10	QMTVN 20	105146	0.181	0.531
576.54	578.21		2.0	0.5	10	QMTVN 20	105147	0.113	0.183
578.21	579.59		2.0	0.5	10	QMTVN 20	105148	0.091	0.164
579.59	581.56		2.0	0.5	10	QMTVN 20	105149	0.146	0.243
581.56	583.53		2.0	0.5	10	QVN 35 20	105150	0.105	0.176
583.53	584.60		2.0	0.5	10	QMTVN 20	105151	0.167	0.176

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
584.60	585.73	Fine-grained medium grey porphyritic silicic	2.0	0.5	30	QVN 85 20	105152	0.178	0.215
585.73	587.35		2.0	0.5	30	QVN 85 20	105153	0.155	0.162
587.35	589.01		2.0	0.5	30	QVN 85 20	105154	0.379	0.464
589.01	590.75		2.0	0.5	30	QVN 85 20	105155	0.371	0.706
590.75	591.39		2.0	0.5	30	QMTVN 20	105156	0.343	0.65
591.39	591.66		2.0	0.5	30	QMTVN 20	105157	0.378	0.724
591.66	593.22		2.0	0.5	30	QMTVN 20	105158	0.397	1.085
593.22	595.07		2.0	0.5	30	QMTVN 20	105159	0.272	0.834
595.07	596.75		2.0	0.5	30	QMTVN 20	105160	0.168	0.299
596.75	598.63		2.0	0.5	30	QMTVN 20	105162	0.234	0.609
598.63	599.46		2.0	0.5	30	QMTVN 20	105163	0.319	0.519
599.46	600.94		2.0	0.5	30	QVN 45 20	105164	0.301	0.478
600.94	602.59	Fine-medium-grained medium grey porphyritic silicic	3.0	0.5	20	137 QVN 40	105165	0.193	0.298
						Py +/- cpy stringers associated with qtz and mt veining. Rare kfsp veining crosscutting all veining. Protolith overprinted by qtz, mt veining locally. Qtz flooding is smokey/grey qtz, chalcedonic, crackle brecciated locally. Qtz/mt veining form banding locally at approximately 40-45 degrees to core axis. Py +/- cpy also disseminated in qtz monzodiorite matrix. kfsp veining might be zeolite, pink, soft. Veining is generally randomly oriented. silicified portions with less mt, light grey colour.			
602.59	604.60		3.0	0.5	20	255 QVN 40	105166	0.298	0.596
						Broken zone-significant core loss, overall lithology is competent.			
604.60	606.49		3.0	0.5	20	120 QVN 40	105167	0.142	0.265
606.49	608.31		3.0	0.5	20	6 QVN 40	105168	0.218	0.364
						Minor local brecciated qtz fragments surrounded by mt and red hematite.			
608.31	610.23		3.0	0.5	20	165 QVN 40	105169	0.317	0.505
						Rare kfsp veining crosscutting all veining. Protolith overprinted by qtz, mt veining locally. Qtz flooding is smokey/grey qtz, chalcedonic, crackle brecciated locally. Qtz/mt veining form banding locally at approximately 40-45 degrees to core axis. Py +/- cpy also disseminated in qtz monzodiorite matrix. kfsp veining might be zeolite, pink, soft. Veining is generally randomly oriented. silicified portions with less mt, light grey colour.			

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm		
610.23	612.06	Fine-medium-grained porphyritic silicic medium grey	3.0	0.5	20	6 QVN	40	Py +/- cpy also disseminated in qtz monzodiorite matrix. kfsp veining might be zeolite, pink, soft. Veining is generally randomly oriented. silicified portions with less mt, light grey colour.	105170	0.328	0.944
612.06	614.01		3.0	0.5	20	111 QVN	40		105171	0.313	0.504
614.01	615.54		2.0	0.5	20	34 QVN	40		105172	0.186	0.34
615.54	617.60		2.0	0.5	20	127 QVN	40		105173	0.227	0.397
617.60	619.38		2.0	0.5	20	108 QVN	40		105174	0.2	0.466
619.38	621.11		2.0	0.5	20	80 QVN	40		105175	0.147	0.157
621.11	623.09		2.0	0.5	20	53 QVN	40		105176	0.117	0.156
623.09	624.46		1.0	0.1	20	143 QVN	40		105177	0.218	0.261
624.46	626.20		1.0	0.1	20	201 QVN	40		105178	0.13	0.183
626.20	628.13		0.5	0.1	15	141 QVN	20	Rare py +/-cpy diss. In qtz monzodiorite. No py +/-cpy stringers. Qtz/mt stringers, x-cut by later zeolite. Veining is randomly oriented. Fine vuggy dissolution textures in qtz veining and porphyry matrix. Plag, qtz and locally k-fsp phenocrysts visible in qtz monzodiorite, protolith only overprinted locally.	105179	0.072	0.098
628.13	629.90		0.5	0.1	15	QVN	20	Zeolite/minor carbonate veining, vuggy dissolution texture where carbonate has been dissolved. Minor BKN zone.	105180	0.09	0.113
629.90	630.46		0.5	0.1	15	QVN	20	Pale yellow, no effervescence with HCl, patchy soft possibly sericite.	105181	0.075	0.133
630.46	632.06		0.5	0.1	15	18 QVN	20	Fine vuggy dissolution textures in qtz veining and porphyry matrix. Plag, qtz and locally k-fsp phenocrysts visible in qtz monzodiorite, protolith only overprinted locally. Decreased mt content and qtz veining.	105182	0.194	0.288
632.06	633.44	Fine-medium-grained porphyritic silicic medium green	0.5	0.1	5	65 QVN	10	Unit cut by randomly oriented smokey/grey qtz vein and pink/grey/salmon soft zeolite veining. Veining shows no preferred orientation.	105183	0.14	0.217
633.44	634.53		0.5	0.1	7	62 QVN	10	Veining shows no preferred orientation. Slight more diss mt. Smokey/grey qtz vein x-cut but zeolite veining.	105184	0.076	0.113
634.53	636.38		0.5	0.1	10	160 QVN	10		105185	0.134	0.166
636.38	638.33		0.5	0.1		QVN	10		105186	0.138	0.163

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
638.33	639.17	Fine-medium-grained medium green porphyritic silicic	1.0 0.1	10 138	QVN	10 Py +/-cpy aggregates assoc. with smokey/grey qtz vein-localized.	105188	0.35	0.399
639.17	640.00		0.5 0.1	5 20	QVN	10	105189	0.092	0.115
640.00	641.64		0.5 0.1	7 72	QVN	10	105190	0.13	0.15
641.64	643.51		1.0 0.1	193	QVN	10 Rare py +/-cpy diss in smokey/grey qtz veining. Qtz, plagioclase, amphibole and/or pyroxene phenocrysts in fine grained plag and qtz matrix. Unit cut by randomly oriented smokey/grey qtz vein and pink/grey/salmon soft zeolite veining. Veining shows no preferred orientation. Minor increased in py +/-cpy stringers. Minor py stringers.	105191	0.057	0.075
643.51	644.51	Fine-grained medium green porphyritic silicic	0.5 0.1	7 147	QVN	10 Rare py +/-cpy diss or stringers. Mt and smokey/grey qtz vein x-cut by salmon late stage zeolite veining. Mt also diss in porphyry. Plagioclase, qtz, locally k-fsp amphibole and/or pyroxene phenocrysts visible in fine grained light gree/grey matrix. Bright pale yellow, sericitized plag phenocrystalsalso visible. Protolith locally overprinted.	105192	0.08	0.106
644.51	644.70		0.5 0.1	7 36	QVN	10	105193	0.289	0.334
644.70	645.28		0.5 0.1	7 47	QVN	10 Yellow sericitized portions; Zeolite stringers @ 45 to CA.	105194	0.082	0.092
645.28	646.72		0.5 0.1	7 12	QVN	10	105195	0.14	0.16
646.72	647.67		1.0 0.1	7 82	QVN	10 Yellow/pink zeolite/carb stringers x-cutting. Minor BKN zone. Coarse size py aggregates confined to silicious porphyry portion. Locally disseminated in brecciated portion cut by pink zeolite, yellow carbonate veining.	105196	0.09	0.12
647.67	649.05		0.5 0.1	7 82	QVN	10	105197	0.159	0.224
649.05	650.54			7 82	QVN	10	105198	0.161	0.219
650.54	651.16			7 5	QVN	10	105199	0.198	0.241
651.16	651.70	Fine-grained light green porphyritic silicic	0.5 0.1	2 30	QVN	10 Zeolite veining. Qtz locally brecciated. Minor mt diss	105200	0.334	0.468
651.70	653.51		0.5 0.1	2 21	QVN	10 Minor BKN zone.	105201	0.298	0.28
653.51	655.00		0.5 0.1	2 69	QVN	10 Red hem stringers in matrix around brecciated qtz veining. Local BKN portions.	105202	0.118	0.179
655.00	657.00		0.5 0.1	2 79	QVN	15 Minor mt stringers, increased late stage zeolite/carbonate veining.	105203	0.101	0.138

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
657.00	658.87	Fine-grained light green porphyritic silicic	0.5	0.1	2 52 QVN	15 Increased zeolite veining, minor pervasive potassic alteration. Localized pink potassic altered portion-pervasive in porphyry matrix. Kfsp phenocrysts present in altered matrix.	105204	0.152	0.193
658.87	660.73		0.5	0.1	2 31 QVN	15 Plagioclase, qtz, locally k-fsp amphibole and/or pyroxene phenocrysts visible in fine grained light gree/grey matrix. Bright pale yellow, sericitezed plag phenocrystsalso visible. Protolith locally overprinted.	105205	0.074	0.1
660.73	662.30		0.5	0.1	2 42 QVN	15 Phenocrysts outline barely visible, ghostly.	105206	0.296	0.4
662.30	663.74		0.5	0.1	2 0 QVN	15 Local mgt veining, 74.5 on Kappameter.	105207	0.124	0.16
663.74	665.42		0.5	0.1	2 68 QVN	90 20 Dark green/black mafic phenocrysts- pyroxene or amphibole. Protolith overprinted locally by silicification. Local potassic altered portions, K-fsp phenocrysts. Zeolite veining at 90degrees to CA x-cutting qtz + local mt veining.	105208	0.294	0.428
665.42	667.38		0.5	0.1	2 17 QVN	15 Dark green/black mafic phenocrysts- pyroxene or amphibole. Protolith overprinted locally by silicification. Local potassic altered portions, K-fsp phenocrysts. Zeolite veining at 90degrees to CA x-cutting qtz + local mt veining.	105209	0.452	0.583
667.38	668.30		0.5	0.1	2 41 QVN	15 Increased local carb veining.	105210	0.184	0.257
668.30	670.10		0.5	0.1	2 1 QVN	15 Minor portion with diss py-mafic phenocrysts in light green matrix.	105211	0.174	0.232
670.10	671.90		0.5	0.1	2 15 QVN	15 Increased carb stringers, discontinuous assoc in minor qtz brecciated portion (10cm Unit X)	105212	0.189	0.214
671.90	672.87		0.5	0.1	2 12 QVN	15 Qtz + mt veining at ~30degrees to CA. Potassic altered lcoally. Protolith overprinted-silicification.	105214	0.256	0.314
672.87	673.29		0.5	0.1	2 2 QVN	15 Increased carb stringers, smokey/grey/white qtz brecciated. Minor kfsp/zeo veining	105215	0.492	0.447
673.29	674.67		0.5	0.1	2 6 QVN	15	105216	0.106	0.145
674.67	676.17		0.5	0.1	2 2 QVN	15	105217	0.049	0.063
676.17	677.29		0.5	0.1	2 22 QVN	15 Yellow ~1cm thick carb veining, few chl phenocryst in veining.	105218	0.109	0.133
677.29	678.85		0.5	0.1	2 188 QVN	15 Local increased mt diss Core loss.	105219	0.126	0.158
678.85	681.80		0.5	0.1	2 0 QVN	20 Core loss increased zeolite viening.	105220	0.107	0.139
681.80	682.30		0.5	0.1	2 2 QVN	20 Increased carb veining.	105221	0.199	0.235

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
682.30	684.25	Fine-grained light green porphyritic silicic	0.5 0.1	2	12 QVN	20 Chloritic, silicified- protolith overprinted.	105222	0.136	0.201
684.25	685.15		0.5 0.1	2	27 QVN	20 Minor carb veining.	105223	0.204	0.299
685.15	687.14	Fine-grained medium green porphyritic silicic	0.5 0.1	2	50 QVN	7 Qtz zeolite and carb veining randomly oriented. Mafic portions.	105224	0.096	0.128
687.14	688.76		0.5 0.1	2	76 QVN	7 Qtz zeolite and carb veining randomly oriented. Mafic portions. Minor py +/- cpy stringers.	105225	0.151	0.183
688.76	690.88		0.5 0.1	5	187 QVN	7 Qtz zeolite and carb veining randomly oriented. Mafic portions. Carb veining-localized, discontinuous assoc with qtz vein. Mafic increased mt veining, 164 and 126 kappometer readings along sample.	105226	0.117	0.153
690.88	692.65		0.5 0.1	2	40 QVN	7	105227	0.053	0.073
692.65	694.29		0.5 0.1	2	18 QVN	7	105228	0.125	0.176
694.29	696.20		0.5 0.1	2	80 QVN	7 Visible mt stringers bound by qtz veining.	105229	0.123	0.165
696.20	698.06		0.5 0.1	2	60 QVN	7	105230	0.054	0.083
698.06	698.58		0.5 0.1	2	QVN	7	105231	0.2	0.223
698.58	698.90		2.0 0.5	2	55 QVN	7 Py +/-cpy stringers and disseminations assoc sith qtz veining and minor mt diss x-cut by late stage pink zeolite veining.	105232	0.441	0.559
698.90	699.88		0.5 0.1	2	44		105233	0.13	0.172
699.88	700.50		0.5 0.1	2	82 QVN	15	105234	0.125	0.166
700.50	702.05		0.5 0.1	2	31 QVN	15	105235	0.055	0.075
702.05	703.79		0.5 0.1	2	9 QVN	15	105236	0.219	0.341
703.79	705.47		0.5 0.1	2	2 QVN	15	105237	0.148	0.208
705.47	707.03		0.5 0.1	2	30 QVN	15	105238	0.164	0.226
707.03	707.63		0.5 0.1	2	130 QVN	15 Rare py +/-cpy diss in porphyry and in stringers. Plag qtz, amphibole/or pyroxene phenocrysts in fine grained pale green/grey matrix, probably fineplagand qtz fine grained. Locally silicification pervasive. Protolith overprinted locally. Qtz zeolite and carb veining randomly oriented. Mafic portions. Increased mt veining associated with qtz, zeo, carb and hematite, randomly oriented.	105240	0.271	0.384
707.63	709.28		0.5 0.1	2	8 QVN	45 15	105241	0.215	0.256
709.28	710.97		0.5 0.1	2	53 QVN	15	105242	0.104	0.16

Hole Number: KN-02-07

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
710.97	712.32	Fine-grained medium green porphyritic silicic	0.5	0.1	2	QVN 15	105243	0.078	0.142
712.32	713.60		0.5	0.1	2	6 QVN 15	105244	0.121	0.189
713.60	714.04		0.5	0.1	2	6 QVN 15	105245	0.128	0.235
714.04	715.19		0.5	0.1	2	1 QVN 15	105246	0.258	0.374
715.19	716.02		0.5	0.1	2	24 QVN 15	105247	0.106	0.151
716.02	716.53		0.5	0.1	2	9 QVN 15	105248	0.077	0.086
716.53	718.35		0.5	0.1	2	22 QVN 15	105249	0.122	0.183
718.35	720.22		0.5	0.1	2	66 QVN 15	105250	0.164	0.26
720.22	721.09		0.5	0.1	2	11 QVN 15	105251	0.194	0.269
721.09	721.81		0.5	0.1	2	18 QVN 15	105252	0.228	0.315
721.81	722.54		0.5	0.1	2	3 QVN 15	105253	0.2	0.302
722.54	724.51		0.5	0.1	2	2 QVN 15	105254	0.179	0.241
724.51	725.41		0.5	0.1	2	23 QVN 15	105255	0.118	0.172
725.41	727.08		0.5	0.1	2	20 QVN 15	105256	0.092	0.154
727.08	728.24		0.5	0.1	2	QVN 15	105257	0.082	0.126
728.24	729.71		0.5	0.1	2	0 QVN 15	105258	0.15	0.239
729.71	731.45	Fine-grained medium grey silicic	1.0	0.1	1	0	105259	0.079	0.107
						Rare py +/- cpy diss or stringers. Plagioclase, qtz, dark green pyroxene or amphibole phenocrysts in fine qtz +/- plagioclase, light grey matrix. Protolith locally overprinted by pervasive, weak to moderate silicification. Epidote stringers associated with qtz/zeolite veining locally. Local moderate pervasive potassic alteration giving matrix pink stain with pink k-fsp phenocrysts. Locally broken. Veining is randomly oriented.			
731.45	732.20		1.0	0.1	1	4	105260	0.088	0.127
732.20	733.01		1.0	0.1	1	28	105261	0.085	0.084
733.01	735.50		1.0	0.1	1	30	105262	0.111	0.126
735.50	736.70		1.0	0.1	1	22	105263	0.132	0.144
736.7	EOH					EOH - 735.5m			

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-08**

Northing: 16367.6	Total Depth: 423.7m
Easting: 10249.2	Azimuth: 346°
Elevation: 1818	Dip: -80°

Geologist: E. Ramsay
Logged Date: 6/26/2002

Survey Depth	Azimuth	Dip	Comments:
0 m	360 °	-70 °	
22 m	358 °	-70 °	
213 m	323 °	-70 °	Magnetic
305 m	338 °	-70 °	
424 m	333 °	-70 °	Mechanical

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-08**

From (m)	To (m)	Rock Type	Comments
0	1.52	CASING	Casing-overburden
1.52	4.57	POLYLITHIC TUFF ANDESITE	Rubley section with chlorite-epidote-calcite alteration and veinlets. Toodoggone Formation to 218.0m.
4.57	6.1	LOST CORE	No recovery
6.1	79.25	POLYLITHIC TUFF ANDESITE	Lithic fragments: felsic, granitoid, mafic volcanic, clasts of fragmental volcanics + "bladed" feldspar porphyry.
79.25	91.44	BLOCKY LITHIC TUFF ANDESITE	Clasts becoming more angular and abundant compared to matrix.
91.44	138.92	POLYLITHIC TUFF ANDESITE	Feldspar porphyry block at 93.1m-zip alteration.
138.92	139.7	TUFF ANDESITE	Ash tuff unit.
139.7	144	POLYLITHIC TUFF ANDESITE	Typical mottled texture-chl altered mafics. Similar to MSD marker. QCPV=qtz-calcite-pyrite vein.
144	148	BLOCKY LITHIC TUFF ANDESITE	Block size clasts of rhyolite?
148	167.64	POLYLITHIC TUFF ANDESITE	Ash-tuff section at 149.0m. Very similar to granitoid texture.
167.64	169	TUFF ANDESITE	Fragments less abundant, lapilli-ash tuff (?)
169	172.58	POLYLITHIC TUFF ANDESITE	Possible dykelet similar to 164.88-166.10 with 10% subhedral chloritized mafics (1-4mm).

Hole Number:

KN-02-08

From (m)	To (m)	Rock Type	Comments
172.58	174.74	FELSITE	Banded rhyolite flow (or rhyodacite?). Slightly porphyritic with sub-millimetric chloritized anhedral mafic grains/clusters in an aphanitic grained, olive-gray matrix; bands are defined by darker subparallel selvages. Rock is weakly fractured showing a network of hairline fractures filled with white anhydrite and probably pink zeolite. These have been noted throughout the upper intervals without being noted (at least between 156.00-172.58).
174.74	175.24	ANDESITE MOTTLED SPOTTED UNIT	In-situ hydrothermally brecciated and altered rock, probably originally andesitic, now mostly chlorite-calcite zeolite.
175.24	178.45	FELSITE	Massive, slightly porphyritic rhyolite/rhyodacite with chloritized mafic phenocrysts.
178.45	189.83	POLYLITHIC TUFF ANDESITE	Fault zone, gougy in places, locally brecciated with anhydrite +/-gypsum +pink zeolite. Rock is softer, andesitic, possibly originally fragmental massive, massive pyrite vein with silica selvages on both sides near 178.85m and slickensides near 180.55m
189.83	190.47	POLYLITHIC TUFF DACITE	
190.47	204.32	POLYLITHIC TUFF ANDESITE	
204.32	205.93	POLYLITHIC TUFF DACITE	light gray, dominated by rhyolite fragments in clayey matrix.
205.93	218	POLYLITHIC TUFF ANDESITE	Semi-massive pyrite vein with quartz and chlorite near 206.85m.
218	266	BRECCIA BASALT	In-situ brecciated rock, apparently dacitic in composition but pervasively altered to silica and pyrite +/-sericite +/-clay. Usually competent with no anhydrite and zeolite fracture filling. Takla Group to 404.0m.
266	341.35	BRECCIA ANDESITE	Apparent coarsening of protolith's grain size, possibly intrusive in places with millimetric white feldspar laths and euhedral to subhedral chloritized mafic grains and no visible quartz (diorite?). No carbonate is noted. Change of alteration is gradual with pyrite becoming less abundant and magnetite reappearing gradually. Brecciation is less intense than in the preceding quartz-pyrite zone. Biotite appears in places, possible overprinting propylitization.
341.35	352.85	ANDESITE	Lithological change evidenced by overall colour change and polyolithic fragmental composition. Bladed feldspar porphyry fragments are prominent as lapilli to block size intervals. Smaller andesitic fragments (lapilli-size) are either chloritized or biotized. There are still lots of intervals showing coarse (intrusive) texture however and that would suggest some kind of intrusive breccia, rather than tuff. Clayey/gougy fractures near 341.77-341.90m.

Hole Number:

KN-02-08

From (m)	To (m)	Rock Type	Comments
352.85	354.85	ANDESITE PORPHYRY	Interval dominated by bladed feldspar porphyry (block or dyke?) gougy/clay fractures.
354.85	358.85	ANDESITE	Similar to above, but with polyolithic fragments.
358.85	364.85	ANDESITE BLADED FELDSPAR PORPHYRY	Possibly bladed feldspar porphyry. Semi-massive pyrite and silica vein at 359.66m
364.85	404	ANDESITE	Broken core with gouge at low angle to C.A. near 366.85m.
404	423.67	POLYLITHIC TUFF ANDESITE	Back into propylitically altered, unbrecciated fragmental andesitic rock. Toodoggone Formation to EOH.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-08

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	1.52	CASING							
	0.00	1.52				Casing-overburden	8	-2	-2
1.52	4.57	POLYLITHIC TUFF ANDESITE							
	1.52	3.05		3		Rubley section with chlorite-epidote-calcite alteration and veinlets. Toodoggone Formation to 218.0m.	106291	0.001	-2
	3.05	4.57		3		Epidote abundant around zeo-carb veinlets. Matrix=feldspar crystals.	106292	-2	0.005
4.57	6.1	LOST CORE							
	4.57	6.10				No recovery	-8		
6.1	79.25	POLYLITHIC TUFF ANDESITE							
	6.10	7.62		5		Lithic fragments: felsic, granitoid, mafic volcanic, clasts of fragmental volcanics + "bladed" feldspar porphyry.	106293	-2	0.012
	7.62	9.14		5		Pink carbonate-zeolite veinlets, posterior to the epidote alteration.	106294	-2	-2
	9.14	10.67		5		Strongly magnetic unit.	106295	-2	0.008
	10.67	12.19		3		Dark grey 2x5cm clast at 12.15m.	106296	-2	0.008
	12.19	13.72		5			106297	-2	0.029
	13.72	15.24		5	ZCV 70 10	Dark grey, clast (2cm) at 14.3m.	106298	-2	0.006
	15.24	16.76		5			106299	-2	0.018
	16.76	18.29		5		Abundant irregular carbonate-zeolite veinlets.	106300	0.011	0.014
	18.29	19.81		3			106301	-2	0.011
	19.81	21.34		5		Medium-coarse-grained orange propylitic	106302	-2	0.013
	21.34	22.36		5	ZCV 30 5	Orange-red banded carbonate-qtz-zeolite veins crosscut by calcite-vuggy	106303	-2	0.052
	22.36	24.38		5		Medium-coarse-grained grey propylitic	106304	-2	-2
	24.38	25.91		5		Medium-coarse-grained orange propylitic	106305	-2	-2

Hole Number: KN-02-08

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
25.91	27.43	Medium-coarse-grained orange propylitic		5			106306	-2	-2
27.43	28.96			5			106307	-2	-2
28.96	30.48			5	ZCV 70 10		106308	-2	0.012
30.48	32.00			5	ZCV 45 5		106309	0.025	0.037
32.00	33.53			5			106310	0.045	0.033
33.53	35.05	Medium-coarse-grained grey propylitic		5			106311	0.001	-2
35.05	36.58			5			106312	0.001	-2
36.58	38.10			5			106313	0.001	-2
38.10	39.62	Medium-coarse-grained grey fragmental propylitic		5	ZCV 20 5	Hematite in axial portion of 1cm zeolite-calcite veins.	106314	0.004	0.005
39.62	41.15	Medium-coarse-grained grey propylitic		5			106315	0.001	-2
41.15	42.67			5			106317	0.002	-2
42.67	44.20			7			106318	0.005	-2
44.20	45.72			7			106319	0.003	-2
45.72	47.24			5			106320	0.001	0.005
47.24	48.77			5		30cm section with orange-lt green alteration	106321	0.003	0.017
48.77	50.29			5			106322	0.004	0.009
50.29	51.82		1.0	5			106323	0.004	0.007
51.82	53.34	Medium-coarse-grained red pink fragmental propylitic		5		RPK=reddish pink	106324	0.019	0.024
53.34	54.86		2.0	5	ZCV 15 20	Mineralized 20cm felsic clast with pyrite at 54.86m	106325	0.003	0.006
54.86	56.39	Medium-coarse-grained medium grey fragmental propylitic		5		Chl-epidote alteration with abundant zeolite-cc veins.	106326	0.006	-2
56.39	57.91			5		Angular to rounded lithic fragments in med green-grey crystal rich matrix.	106327	0.003	-2
57.91	59.44			5			106328	0.004	0.007
59.44	60.96		1.0	5		Leucocratic clast 15cm at 59.5m	106329	0.005	0.01
60.96	62.48			3		Feldspar porphyry clast 3-5cm diameter	106330	0.004	0.008
62.48	64.01			3			106331	0.009	0.012

Hole Number: KN-02-08

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
64.01	65.53	Medium-coarse-grained medium grey fragmental propylitic		3			106332	0.003	0.005
65.53	67.06			3	ZCV 15 5	Hematite on vein core and selvage. Zeolite veins are very late.	106333	0.003	0.007
67.06	68.58			3		Patchy epidote alteration. 1cm "bladed" feldspar porphyry lithic clast.	106334	0.004	0.005
68.58	70.10			3			106335	0.007	0.021
70.10	71.63			3			106343	0.005	0.011
71.63	73.15			3			106336	0.003	-2
73.15	74.68			3			106337	0.004	0.014
74.68	76.20			3			106338	0.004	0.008
76.20	77.72			3		5cm feldspar porphyry clast. 1cm prismatic feldspars in dark andesite fragments.	106339	0.048	0.05
77.72	79.25			3		Magnetic susceptibility higher through this blockier section.	106340	0.013	0.021
79.25	91.44	BLOCKY LITHIC TUFF ANDESITE							
79.25	80.77	Medium-coarse-grained medium grey fragmental propylitic		3		Clasts becoming more angular and abundant compared to matrix.	106341	0.017	0.024
80.77	82.30			3			106344	0.009	0.011
82.30	85.34			3	ZCV 5 20	82.3-82.7 Light green section. Zeolite vein running down core axis for 1.5m.	106345	0.012	0.014
85.34	88.39		1.0	3			106346	0.006	0.011
88.39	91.44			3			106347	0.004	-2
91.44	138.92	POLYLITHIC TUFF ANDESITE							
91.44	94.49	Medium-coarse-grained medium grey fragmental propylitic		5		Feldspar porphyry block at 93.1m-zip alteration.	106348	0.018	0.019
94.49	97.53			5		Epidote clots at 96.1m	106349	0.01	0.009
97.53	100.58		1.0	5	ZCV 40 15	Rhyolite or felsic clasts at 99.56m, bleached from 99.36-100.58m.	106350	0.003	0.008
100.58	103.63			3	ZCV 30 20	Zeolite-carb veins running parallel to core axis and across.	107326	0.003	0.005
103.63	106.00			3	35		107327	0.001	-2
106.00	108.00			3	18		107328	-2	-2

Hole Number: KN-02-08

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
108.00	110.00	Medium-coarse-grained medium grey fragmental propylitic		5	49	Reduced to NQ at 109.73m	107329	0.001	-2
110.00	112.00			3	ZCV 20 15	Zeolite veinlets crosscut altered "unit x"-like unit.	107330	0.004	-2
112.00	114.00	Medium-coarse-grained light grey fragmental propylitic	3.0		2 ZCV 10 10	Bleached mottled section 112.00-112.78. Qtz-ser altered fragmental	107331	0.002	0.01
114.00	116.00	Medium-coarse-grained medium grey fragmental propylitic	2.0	1		Pyrite associated with pink zeolite veins.	107332	0.001	-2
116.00	118.00	Medium-coarse-grained light grey fragmental propylitic		1			107333	0.004	0.006
118.00	120.00	Medium-coarse-grained medium grey fragmental propylitic		3	12		107334	0.006	0.042
120.00	122.00		2.0	5	26 QMTVN 5 10	Qtz-mt-epidote vein at 121.5 associated with coarse pyrite.	107335	0.002	0.174
122.00	124.00		1.0	3			107336	0.002	0.024
124.00	126.00	Medium-coarse-grained orange fragmental propylitic	1.0	1	1		107337	0.011	0.164
126.00	128.00		1.0	3	20	Qtz-carb-ep-py vein at 10 to core axis.	107338	0.01	0.327
128.00	130.00	Medium-coarse-grained grey-green fragmental propylitic	1.0	3		Zeolite-carb veinlet running down core axis at 128.25m. BFP fragment at 128.85m.	107339	0.014	0.346
130.00	131.50	Coarse-medium-grained orange fragmental propylitic		5		Felsic, mafic and feldspar porphyritic andesite fragments- 1 to 5cm clasts.	107340	0.008	0.18
131.50	133.00			1	1		107341	0.005	0.018
133.00	133.80	Fine-grained white fragmental silicic k-felspar	1.0		CTC 40	Either crosscutting Qtz-sericite-pyrite alteration zone or possible felsic dyke. CTC=contact	107342	0.001	0.019
133.80	135.00	Coarse-medium-grained medium grey fragmental propylitic		5	29		107343	0.005	0.017
135.00	137.00			5		Mottled fragmental texture with sericite at 135.63m	107345	0.003	0.038
137.00	138.12			5	12		107346	0.002	0.061
138.12	138.92	Fine-grained white fragmental silicic k-felspar	3.0			Contains unaltered amoeba-shaped feldspar porphyry clast.	107347	0.001	0.05
138.92	139.7	TUFF ANDESITE							
138.92	139.70	Medium-grained medium grey homogeneous propylitic		5		Ash tuff unit.	107348	0.001	0.022
139.7	144	POLYLITHIC TUFF ANDESITE							

Hole Number: KN-02-08

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
139.70	141.20	Coarse-medium-grained grey-green fragmental propylitic		5	30 QCPV 30 5	Typical mottled texture-chl altered mafics. Similar to MSD marker. QCPV=qtz-calcite-pyrite vein.	107349	0.001	0.085
141.20	143.17	Coarse-medium-grained light grey fragmental propylitic		5		Chlorite replacement of mafic phenocrysts in fragments and matrix.	107350	0.001	0.312
143.17	144.00	Fine-grained white fragmental silicic k-felspar	1.0		2	Bleached section from 143.0-143.3m.	107351	0.006	0.11
144	148	BLOCKY LITHIC TUFF ANDESITE							
144.00	146.00	Coarse-medium-grained orange fragmental propylitic		5		Block size clasts of rhyolite?	107352	0.002	0.021
146.00	148.00	Coarse-medium-grained white fragmental sericitic	1.0	3	17 ZCV 10 30	10cm zeolite vein-pink. Bleached zone-altered clays. ZCV=zeolite-calcite vein.	107353	0.001	-2
148	167.64	POLYLITHIC TUFF ANDESITE							
148.00	150.00	Medium-fine-grained orange fragmental propylitic	1.0	3	17	Ash-tuff section at 149.0m. Very similar to granitoid texture.	107354	0.003	0.013
150.00	152.00	Coarse-medium-grained orange fragmental propylitic	1.0	5		BFP fragment at 150.5m.	107355	0.002	0.522
152.00	154.00		1.0	5	28	Broken section at 152.8m.	107356	0.002	0.021
154.00	156.00		1.0	5	0		107357	0.002	0.018
156.00	158.00	Coarse-medium-grained dark grey fragmental propylitic	1.0	0	2	Dark olive grey andesitic polymictic fragmental unit (breccia) with pyritized fragments.	107358	0.004	0.033
158.00	160.00		3.0		1	Same as above.	107359	0.004	0.021
160.00	161.35	Coarse-medium-grained medium grey fragmental chloritic silicic	1.0		0	Matrix is lighter-coloured, fragments are slightly greenish (chl), weak silicification (diffuse)	107360	0.002	0.011
161.35	162.35	Coarse-medium-grained dark grey fragmental propylitic	1.0		0	Dark greenish grey andesitic polymictic fragmental unit (breccia).	107361	0.002	0.007
162.35	163.00	Coarse-medium-grained medium grey fragmental propylitic	2.0		0	Same as previous but with 10% conspicuous dark anhedral grains (?) on lighter background.	107362	0.001	0.017
163.00	164.88		3.0		0	Medium grey fragmental andesitic polymictic unit with pyritized fragments.	107363	0.001	0.018
164.88	166.10	Coarse-fine-grained medium grey fragmental propylitic	0.5		1	Possible dykelet showing wall rock xenoliths and 10% euhedral to subhedral hexagonal mafic greenish black mineral (now chloritized). Some pyritized fragments.	107364	0.001	0.014
166.10	167.64	Coarse-medium-grained dark grey fragmental propylitic silicic	1.0	1	14	Very homogenous in top 20cm. Dark grey andesitic polymictic fragmental unit, some pyritized siliceous frags.	107365	0.004	0.006
167.64	169	TUFF ANDESITE							

Hole Number: KN-02-08

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
167.64	169.00	Coarse-medium-grained dark grey fragmental propylitic	0.1	1	19	Fragments less abundant, lapilli-ash tuff (?)	107366	0.005	0.01
169	172.58	POLYLITHIC TUFF ANDESITE							
169.00	169.30	Coarse-medium-grained medium grey fragmental propylitic	0.1	1	26	Possible dykelet similar to 164.88-166.10 with 10% subhedral chloritized mafics (1-4mm).	107367	0.001	0.023
169.30	171.30	Coarse-medium-grained dark grey fragmental propylitic	0.1	1	27	Dark grey andesitic polymictic fragmental unit (lapilli to block size).	107368	0.004	0.009
171.30	172.58		0.1		1		107369	0.004	0.028
172.58	174.74	FELSITE							
172.58	173.74	Fine-grained medium grey propylitic	0.1	2	36	Banded rhyolite flow (or rhyodacite?). Slightly porphyritic with sub-millimetric chloritized anhedral mafic grains/clusters in an aphanitic grained, olive-gray matrix; bands are defined by darker subparallel selvages. Rock is weakly fractured showing a network of hairline fractures filled with white anhydrite and probably pink zeolite. These have been noted throughout the upper intervals without being noted (at least between 156.00-172.58).	107371	0.004	0.032
173.74	174.74	Fine-grained medium grey	0.5		7	Same as above	107372	0.003	0.024
174.74	175.24	ANDESITE MOTTLED SPOTTED UNIT							
174.74	175.24	Coarse-medium-grained orange in-situ brecciated propylitic	0.5		1	In-situ hydrothermally brecciated and altered rock, probably originally andesitic, now mostly chlorite-calcite zeolite.	107373	0.001	0.036
175.24	178.45	FELSITE							
175.24	176.78	Coarse-medium-grained medium grey porphyritic			3	Massive, slightly porphyritic rhyolite/rhyodacite with chloritized mafic phenocrysts.	107374	0.004	0.019
176.78	178.45	Coarse-medium-grained dark grey porphyritic		2	33		107375	0.003	0.053
178.45	189.83	POLYLITHIC TUFF ANDESITE							
178.45	179.12	Coarse-fine-grained dark grey fragmental propylitic silicic	5.0		2 FLT 20	Fault zone, gougy in places, locally brecciated with anhydrite +/-gypsum +pink zeolite. Rock is softer, andesitic, possibly originally fragmental massive, massive pyrite vein with silica selvages on both sides near 178.85m and slickensides near 180.55m	106376	0.012	1.095
179.12	180.55	Coarse-fine-grained orange grey fragmental propylitic	0.1	1	17	15% pink zeolite +anhydrite fracture filling.	106377	0.002	0.026

Hole Number: KN-02-08

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
180.55	181.70	Coarse-fine-grained orange grey fragmental propylitic	0.1	9		Nice slickensides near beginning of interval, locally gougy along fractures. Gypsum in vein at end of interval.	106378	0.01	0.107
181.70	183.25	Coarse-medium-grained dark grey fragmental propylitic	2.0	1	10 APVN 20 3	Dark grey andesitic polymictic fragmental rock, showing propylitic alteration (greenish shade of gray). Sparsely fractured with anhydrite +zeolite filling (<1% of rock). Fragments are of various compositions, mainly andesitic but also sometimes rhyolitic or porphyritic, usually sub angular to sub-rounded. (the larger the rounder)	106379	-2	0.024
183.25	185.25		1.0	2	61	Coarse disseminated grains and amorphous blebs of pyrite near 184.90m around some anhydrite veinlets.	106380	0.002	0.119
185.25	186.83		0.1	1	19		106381	-2	0.012
186.83	187.55		0.1		20		106382	-2	0.009
187.55	187.90	Coarse-medium-grained light grey fragmental propylitic argillic	0.5		12		106383	0.001	0.027
187.90	189.83	Coarse-medium-grained dark grey fragmental propylitic	0.1		22		106384	0.001	0.013
189.83	190.47	POLYLITHIC TUFF DACITE							
189.83	190.47	Coarse-medium-grained light grey fragmental propylitic	0.5		1		106385	0.001	0.005
190.47	204.32	POLYLITHIC TUFF ANDESITE							
190.47	192.02	Coarse-medium-grained dark grey fragmental propylitic	0.1		11		106386	0.013	0.044
192.02	194.00		0.5		35	Irregular centimetric blebs of pyrite associated with qtz and zeolite veinlet near 193.25m.	106387	-2	0.031
194.00	196.00		0.5		1	Disseminated pyrite in angular rhyolite clast near 195.80m.	106388	-2	0.027
196.00	197.62		0.5		0		106389	0.016	0.074
197.62	198.74		1.0		16	Pyrite in quartz veinlet.	106390	0.002	0.038
198.74	200.40		0.5		1	Broken core with local gouge. Zeolite and anhydrite veinlets more common. Pyrite assoc with qtz vein near 200.0m.	106391	0.019	0.027
200.40	201.17		1.0		60	Disseminated medium-grained pyrite. Core more solid.	106392	0.014	0.089
201.17	201.50		5.0		6 QCPV 20 10	Semi-massive pyrite in a quartz vein at 20 degrees to C.A.	106393	0.008	0.274

Hole Number: KN-02-08

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
201.50	202.40	Coarse-medium-grained dark grey fragmental propylitic	2.0	28		Core still in one piece but fractured with pyritic gouge filling.	106394	0.006	0.069
202.40	204.32		2.0	18		No more gouge, but still intensely fractured. Semi-massive pyrite with quartz and anhydrite near 203.9m.	106395	0.003	0.056
204.32	205.93	POLYLITHIC TUFF DACITE							
204.32	205.93	Coarse-medium-grained light grey fragmental propylitic argillic	0.5	24		light gray, dominated by rhyolite fragments in clayey matrix.	106397	0.001	0.006
205.93	218	POLYLITHIC TUFF ANDESITE							
205.93	207.00	Coarse-medium-grained dark grey fragmental propylitic	5.0	3 QVN	20 5	Semi-massive pyrite vein with quartz and chlorite near 206.85m.	106398	0.004	0.389
207.00	209.00		1.0	1		Disseminated pyrite with chlorite and quartz and pyrite vein near 208.80m.	106399	0.003	0.064
209.00	211.00		1.0	11		Disseminated pyrite and c.a.-parallel chlorite and quartz and pyrite veinlet.	106400	0.008	0.126
211.00	213.00		0.1	44		Fault with gouge and broken core at 211.10-211.30m, angle unknown.	107401	0.004	0.013
213.00	215.00		0.5	29			107402	0.006	0.04
215.00	217.00		0.1	15			107403	0.009	0.092
217.00	218.00		1.0	28			107404	0.011	0.105
218	266	BRECCIA BASALT							
218.00	220.00	Coarse-medium-grained medium grey silicic	7.0			In-situ brecciated rock, apparently dacitic in composition but pervasively altered to silica and pyrite +/-sericite +/-clay. Usually competent with no anhydrite and zeolite fracture filling. Takla Group to 404.0m.	107405	0.006	0.043
220.00	222.00		15.0			Pyritized fragments and dissemination.	107406	0.012	0.031
222.00	224.00		15.0	0			107407	0.002	0.014
224.00	226.00	Coarse-grained medium grey silicic	15.0	0			107408	0.002	0.026
226.00	228.00		10.0	0		Clay alteration observed around fractures near 226.20-226.80m and 227.05-227.20m.	107409	0.002	0.027
228.00	230.00		15.0	0			107410	0.003	0.022
230.00	232.00		15.0	0		Clay alteration starting near end of interval at 231.70m along fractures.	107411	0.002	0.016
232.00	234.00	Coarse-grained light grey silicic	5.0	0			107412	0.003	0.029

Hole Number: KN-02-08

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
234.00	236.00	Coarse-grained medium grey silicic	15.0				107413	0.005	0.027
236.00	238.00		15.0				107414	0.003	0.025
238.00	240.00		15.0	0			107415	0.003	0.02
240.00	242.00		15.0	0			107416	0.003	0.033
242.00	244.00		15.0	0			107417	0.004	0.023
244.00	246.00		15.0	0		Weak clay alteration along fractures.	107418	0.014	0.091
246.00	248.00		15.0	0		Moderate clay alteration. Rock shows sparse euhedral to subhedral feldspar phenos (1-2mm).	107419	0.063	0.134
248.00	250.00		10.0	0		Same as above. Clay is washed away by water, giving core rough appearance.	107420	0.099	0.297
250.00	252.00		10.0	0		Same as above.	107421	0.101	0.224
252.00	254.00		10.0			Clay alteration is a bit weaker, but still present.	107423	0.099	0.181
254.00	256.00	Coarse-grained light grey silicic	15.0	0		Clay alteration is moderate.	107424	0.124	0.207
256.00	258.00		10.0	0		Clay alteration is moderate, clay washed, core has rough aspect, possible gouge.	107425	0.228	0.273
258.00	260.00	Coarse-grained medium grey silicic	10.0	0		Weak clay alteration.	107426	0.085	0.213
260.00	262.00	Coarse-grained light grey silicic	15.0			Moderate clay alteration, gouge along fractures, rough aspect.	107427	0.117	0.236
262.00	264.00		10.0	0			107428	0.086	0.197
264.00	266.00		15.0	0			107429	0.065	0.19
266	341.35	BRECCIA ANDESITE							
266.00	268.00	Coarse-medium-grained green-grey propylitic sericitic	10.0	0		Apparent coarsening of protolith's grain size, possibly intrusive in places with millimetric white feldspar laths and euhedral to subhedral chloritized mafic grains and no visible quartz (diorite?). No carbonate is noted. Change of alteration is gradual with pyrite becoming less abundant and magnetite reappearing gradually. Brecciation is less intense than in the preceding quartz-pyrite zone. Biotite appears in places, possible overprinting propylitization.	107430	0.138	0.266
268.00	270.00		5.0	0			107431	0.086	0.242
270.00	271.50		10.0	0		Quartz - semi massive pyrite at 271.27-271.37m.	107432	0.139	0.297

Hole Number: KN-02-08

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
271.50	278.50	Coarse-medium-grained propylitic sericitic dark grey	10.0	0		Very poor recovery, broken core, block location uncertain within.	107433	0.096	0.156
278.50	280.50	Coarse-medium-grained green-grey sericitic	5.0	0		Gypsum flooded and cemented breccia (probably after anhydrite.)	107434	0.068	0.228
280.50	281.95		7.0	0		Same as previous.	107435	0.103	0.227
281.95	283.95		5.0	0		Rough aspect of core due to washed-out clay/gouge, pyrite veinlets and blebs.	107436	0.144	0.352
283.95	284.80		3.0	0		Coarse grained/mottled texture. Py disseminations and veinlets.	107437	0.142	0.292
284.80	286.25		3.0	0		Intrusive texture, pyrite veinlets.	107438	0.197	0.387
286.25	288.25	Coarse-medium-grained green-grey silicic	3.0	0		Py mostly in veinlets. Weak brownish shade to chloritized mafics (biotizations?).	107439	0.17	0.405
288.25	290.00		5.0	0		Pyrite veinlets with silica selvages, clay alteration at 289.45-289.60m.	107440	0.145	0.953
290.00	292.00		7.0	1			107441	0.15	0.361
292.00	294.00	Coarse-medium-grained green-grey biotite	5.0	0.5		Py mostly in veinlets, rare cpy diss. Biotite overprinting chlorite.	107442	0.171	0.339
294.00	296.00		3.0	1		Py mostly in veinlets, biotite overprinting chlorite.	107443	0.17	0.247
296.00	298.00	Coarse-medium-grained light grey sericitic silicic	5.0	0		Pyrite veinlets with silica selvages.	107444	0.197	0.506
298.00	300.00	Coarse-medium-grained green-grey biotite sericitic	3.0	0		Medium grained phaneritic texture, very intrusive-like, py in veinlets/stringers.	107445	0.131	0.337
300.00	302.00		3.0	1			107446	0.164	0.368
302.00	304.00	Coarse-medium-grained green-grey sericitic propylitic	5.0	0		Py veinlets with silica selvages.	107447	0.216	0.482
304.00	306.00		3.0	1			107449	0.131	0.353
306.00	308.00	Coarse-medium-grained light grey sericitic silicic	5.0	0		Clay alteration near 307.65-307.90m	107450	0.152	0.435
308.00	310.00		3.0	2		Clayey/gougy fractures from 308.90-309.75m	107451	0.144	0.371
310.00	312.00	Coarse-medium-grained medium grey sericitic propylitic	5.0	0		Grounded between 311.80-311.90 (pyritic gouge.)	107452	0.189	0.321
312.00	314.00	Coarse-medium-grained medium grey propylitic sericitic	3.0	0		Pyrite veinlets with silica selvages	107453	0.174	0.389
314.00	316.00		4.0	0		Broken with gouge between 314.63-314.80m, gougy fractures near 314.90m.	107454	0.228	0.537

Hole Number: KN-02-08

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
316.00	318.00	Coarse-medium-grained medium grey propylitic sericitic	3.0	0		Pyrite veinlets.	107455	0.162	0.53
318.00	320.00		3.0	0		Gougy fractures near beginning of interval weak biotite alteration overprint.	107456	0.19	0.417
320.00	322.00		7.0	1		Pyrite veinlets showing silica selvages, clay alteration and gougy fractures at 320.15-320.65m.	107457	0.162	0.416
322.00	324.00		5.0	0		Similar to previous, clay alteration and gougy fractures at 323.23-323.76m.	107458	0.151	0.344
324.00	326.00	Coarse-medium-grained medium grey sericitic	10.0	0		Gougy fractures and clay alteration at 324.80-325.20m. Py veinlets with silica selvages.	107459	0.238	0.582
326.00	328.00		5.0	0			107460	0.177	0.61
328.00	330.00	Coarse-medium-grained medium grey propylitic sericitic	3.0	0	9		107461	0.221	0.805
330.00	332.00	Coarse-medium-grained medium grey propylitic biotite	3.0	0.1	2		107462	0.18	0.115
332.00	334.00		3.0	1	10	Calcite in yellowish-white veinlets.	107463	0.239	0.516
334.00	336.00	Coarse-medium-grained medium grey propylitic sericitic	3.0	0		Calcite in yellowish-white drusy veins and veinlets.	107464	0.269	0.183
336.00	337.90	Coarse-medium-grained medium grey sericitic propylitic	5.0	0		Drusy yellowish-white calcite vein at 45 degrees to C.A. with gougy/grounded hanging wall (fault?)	107465	0.31	0.611
337.90	338.60	Coarse-medium-grained medium grey silicic	10.0	0		Silicified and pyritized interval (silica dumping zone) with gougy/clayey fractures.	107466	0.411	0.411
338.60	340.13	Coarse-medium-grained medium grey biotite sericitic	2.0	1		Soft waxy luster, slightly greenish mineral, tentatively called paragonite.	107467	0.14	0.315
340.13	341.35	Coarse-medium-grained medium grey sericitic	15.0	0		Semi-massive pyrite and silica between 340.33-340.53m with decimetric selvages of clay alteration.	107468	0.185	0.559
341.35	352.85	ANDESITE							
341.35	343.35	Coarse-medium-grained dark grey fragmental biotite sericitic	3.0	8		Lithological change evidenced by overall colour change and polyolithic fragmental composition. Bladed feldspar porphyry fragments are prominent as lapilli to block size intervals. Smaller andesitic fragments (lapilli-size) are either chloritized or biotized. There are still lots of intervals showing coarse (intrusive) texture however and that would suggest some kind of intrusive breccia, rather than tuff. Clayey/gougy fractures near 341.77-341.90m.	107469	0.167	0.435
343.35	344.25	Coarse-medium-grained medium grey fragmental silicic sericitic	2.0	18		Pyrite in veinlets with silica selvages and in dissemination	107470	0.186	0.514

Hole Number: KN-02-08

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
344.25	345.06	Coarse-medium-grained medium grey fragmental silicic sericitic	3.0	0.1	1	Traces of diss cpy. Pyrite in veinlets with silica selvages and diss.	107471	0.304	0.915
345.06	347.00	Coarse-medium-grained dark grey fragmental biotite silicic	2.0	0.5	0	Biotite alteration more intense.	107472	0.26	0.566
347.00	348.55		2.0		0		107473	0.302	0.655
348.55	349.35	Coarse-medium-grained medium grey fragmental silicic	5.0		0 PVN 5 2	Pyrite and silica veins at low angle to C.A.	107475	0.243	0.607
349.35	351.35	Coarse-medium-grained dark grey fragmental biotite silicic	2.0		0	Pyrite and silica +/-k-spar veinlets.	107476	0.228	0.493
351.35	352.85		5.0		1 FLT 25 50	Fault breccia with pyritic gouge at 352.00-352.85 m with intense clay alteration.	107477	0.16	0.405
352.85	354.85	ANDESITE PORPHYRY							
352.85	354.85	Coarse-medium-grained dark grey porphyritic biotite sericitic	1.0	0.1	1	Interval dominated by bladed feldspar porphyry (block or dyke?) gougy/clay fractures.	107478	0.188	0.34
354.85	358.85	ANDESITE							
354.85	356.85	Coarse-medium-grained dark grey fragmental biotite sericitic	1.0		0	Similar to above, but with polyolithic fragments.	107479	0.238	0.617
356.85	358.85	Coarse-medium-grained dark grey fragmental biotite silicic	5.0			Gougy pyritic fractures throughout.	107480	0.186	0.577
358.85	364.85	ANDESITE BLADED FELDSPAR PORPHYRY							
358.85	360.85	Coarse-medium-grained dark grey biotite sericitic	5.0	0.5	1	Possibly bladed feldspar porphyry. Semi-massive pyrite and silica vein at 359.66m	107481	0.251	0.718
360.85	362.85	Coarse-medium-grained green-grey sericitic biotite	3.0	0.1	0 FLT 40	Clayey, pyritic gouge along fractures near 362.30m (some core loss) Fault.	107482	0.206	0.475
362.85	364.85	Coarse-medium-grained medium grey sericitic silicic	2.0	0.1	0 11 FLT 30	Broken core with gouge at 363.58-364.85m (low recovery)	107483	0.231	0.599
364.85	404	ANDESITE							
364.85	366.85	Coarse-medium-grained medium grey fragmental sericitic silicic	2.0		2 FLT 10	Broken core with gouge at low angle to C.A. near 366.85m.	107484	0.216	0.543
366.85	368.85		1.0	0.5	0	Gougy fractures near start of interval, cpy in silica vein.	107485	0.306	0.817
368.85	370.85		2.0		1 15		107486	0.226	0.662
370.85	372.85		1.0		1 15 FLT 25 10	Py in veinlets and in fault gouge near top of interval.	107487	0.245	0.716
372.85	374.85	Coarse-medium-grained medium grey fragmental biotite silicic	3.0		2	Py veins and veinlets, with or without silica selvages.	107488	0.232	0.743

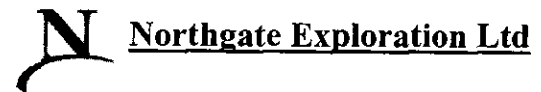
Hole Number: KN-02-08

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
374.85	376.85	Coarse-medium-grained medium grey fragmental sericitic silicic	2.0	2	31	Py veins and veinlets. Both with and without silica selvages.	107489	0.251	0.972
376.85	378.85	Coarse-medium-grained dark grey fragmental sericitic biotite	1.0	0.1	0		107490	0.158	0.503
378.85	380.50	Coarse-medium-grained dark grey fragmental biotite sericitic	2.0	0.1	0		107491	0.264	0.803
380.50	382.00	Coarse-medium-grained light grey fragmental sericitic silicic	2.0	0.5	0		107492	0.238	0.866
382.00	384.00	Coarse-medium-grained medium grey fragmental sericitic biotite	2.0	0.1	0		107493	0.202	0.622
384.00	386.00	Coarse-medium-grained dark grey fragmental biotite sericitic	1.0	0.1	1		107494	0.225	0.678
386.00	388.00		2.0	0.5	0		107495	0.187	0.54
388.00	390.00	Coarse-medium-grained medium grey fragmental biotite sericitic	2.0	0.1	0		107496	0.293	0.83
390.00	392.00	Coarse-medium-grained dark grey fragmental biotite sericitic	2.0	0.5	0		107497	0.305	0.796
392.00	394.00	Coarse-medium-grained medium grey fragmental sericitic silicic	4.0	0.5	0		107498	0.302	0.859
394.00	396.00	Coarse-medium-grained dark grey fragmental biotite sericitic	2.0	1.0	0	Minor orange stained k-spar in veinlets. Pyrite veinlets with silica selvages. Sericite overprinting biotite.	107499	0.217	0.416
396.00	398.00		1.0		1		107501	0.276	0.788
398.00	400.00	Coarse-medium-grained dark grey fragmental sericitic silicic	2.0	0.5	0 PVN 25 2	Massive pyrite veins at 25 degrees to C.A.	107502	0.246	0.779
400.00	402.00	Coarse-medium-grained medium grey fragmental sericitic silicic	2.0	0.5	2	Anhydrite and pyrite veinlets reappear. Pyrite veinlets with silica selvages.	107503	0.244	0.641
402.00	404.00		2.0	0.1	1		107504	0.195	0.558
404	423.67	POLYLITHIC TUFF ANDESITE							
404.00	406.00	Coarse-medium-grained dark grey fragmental propylitic silicic	1.0	0.1	5	Back into propylitically altered, unbrecciated fragmental andesitic rock. Toadogone Formation to EOH.	107505	0.058	0.143
406.00	408.00		1.0	0.1	9		107506	0.049	0.121
408.00	410.00		0.5		1	Bladed feldspar porphyry blocks.	107507	0.013	0.013
410.00	412.00		1.0	0.5	1		107508	0.074	0.295
412.00	414.00		1.0		1		107509	0.082	0.25
414.00	416.00		1.0		8		107510	0.074	0.251

Hole Number: KN-02-08

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
416.00	418.00	Coarse-medium-grained dark grey fragmental propylitic silicic	0.5	5			107511	0.016	0.041
418.00	420.00		0.1	23			107512	0.02	0.049
420.00	422.00		0.5	0			107513	0.004	0.053
422.00	423.67		0.5	0			107514	0.031	0.135
423.67		EOH							

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-09**

Northing: 16320.3	Total Depth: 578.2m
Easting: 10358.3	Azimuth: 360°
Elevation: 1736.6	Dip: -85°

Geologist: J. Mazvihwa
Logged Date: 6/26/2002

Survey Depth	Azimuth	Dip	Comments:
0 m	360°	-85°	No surveys

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-09**

From (m)	To (m)	Rock Type	Comments
0	3.66	CASING	
3.66	88.21	ANDESITE BRECCIATED FLOW	Qtz, gyp, lim, py +/- cpy
88.21	375.75	INTERMEDIATE VOLCANIC FLOW	Py +/- fine disseminations in bleached, moderately silicified and weak sericite pervasive altered flow. Protolith uncertain, overprinted by alteration. Py +/- cpy massive aggregates and py stringers assoc with qtz and gypsum units. Minor rubble zones, generally broken. Localized high pyrite content, up to ~5 % locally. Veining shows no preferred orientation; difficult to discern in rubble zone.
375.75	497.96	QUARTZ MONZONITE	Py +/- cpy stringers assoc with qtz veining, disseminations in altered flow, silicified moderate to high, pervasive. Dark green chloritic specks in silicious flow, protolith overprinted by silicification. Veining is randomly oriented local BKN zone. Qtz veining is locally vuggy dissolution features. Possible flow/Qtz monzodiorite contact.
497.96	578.21	POLYLITHIC TUFF	Poly lithic tuft. Rare py stringers; generally assoc with qtz vein, diss in mineralized fragments. Also diss in tuff matrix locally. Fragments in tuff include qtz, bladed feldspar porphyry, qtz monzodiorite. Fragment boundaries are not defined, ghost. Local potassic alteration, pink stain. Potassic alteration, pink/orange stain around py veining. BKN locally. Protolith overprinted by silicification and chlorite. Hem infilling it locally. Qtz, zeolite veining randomly oriented.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	3.66	CASING							
	0.00	3.66					9	-2	-2
3.66	88.21	ANDESITE BRECCIATED FLOW							
3.66	5.18	Fine-grained light grey quartz-sericite-pyrite	3.0		QGVN	10 Qtz, qyp, lim. py +/- cpy	102984	0.001	0.054
5.18	6.91		3.0		QGVN	10	102985	0.001	0.039
6.91	7.41		3.0		QGVN	10	102986	-2	0.021
7.41	9.30		3.0		QGVN	10	102987	0.001	0.026
9.30	10.15		3.0		QGVN	10	102988	0.001	0.04
10.15	11.44		3.0		QGVN	10	102989	0.002	0.03
11.44	11.88		3.0		QGVN	10	102991	0.003	0.153
11.88	13.73		3.0		QGVN	10	102992	0.002	0.03
13.73	14.33		3.0		QGVN	10	102993	0.001	0.02
14.33	15.55		3.0		QGVN	10	102994	0.001	0.026
15.55	16.57		3.0		QGVN	10	102995	0.001	0.015
16.57	17.37		3.0		QGVN	10	102996	0.001	0.025
17.37	19.14		3.0		QGVN	10	102997	0.001	0.02
19.14	20.86		3.0		QGVN	10	102998	0.001	0.028
20.86	21.88		3.0		QGVN	10	102999	-2	0.01
21.88	22.76		3.0		QGVN	10	103000	-2	0.016
22.76	25.00		3.0		QGVN	10	103001	-2	0.015
25.00	25.55		3.0		QGVN	10	103002	0.001	0.024
25.55	27.12		3.0		QGVN	10	103003	0.001	0.021
27.12	28.60		3.0		QGVN	10	103004	0.001	0.024
28.60	30.89		3.0		QGVN	10	103005	0.001	0.053
30.89	32.94		3.0		QGVN	10	103006	0.001	0.023

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
32.94	35.02	Fine-grained light grey quartz-sericite-pyrite	3.0	QGVN	10	103007	0.001	0.02
35.02	36.56		3.0	QGVN	10	103008	0.001	0.01
36.56	38.02		3.0	QGVN	10	103009	0.002	0.029
38.02	39.48		3.0	QGVN	10	103010	0.001	0.02
39.48	41.57		3.0	QGVN	10	103011	0.001	0.025
41.57	43.24		3.0	QGVN	10	103012	0.001	0.017
43.24	44.81		3.0	QGVN	10	103013	0.001	0.011
44.81	46.98		3.0	QGVN	10	103014	0.001	0.01
46.98	48.51		3.0	QGVN	10	103015	0.004	0.039
48.51	50.44		3.0	QGVN	10	103017	0.001	0.022
50.44	52.31		3.0	QGVN	10	103018	0.002	0.019
52.31	53.65		3.0	QGVN	10	103019	0.002	0.041
53.65	53.98		3.0	QGVN	10	103020	0.001	0.025
53.98	56.82		3.0	QGVN	10	103021	0.001	0.027
56.82	58.10		3.0	QGVN	10	103022	0.003	0.042
58.10	59.50		3.0	QGVN	10	103023	0.003	0.041
59.50	61.50		3.0	QGVN	10	103024	0.003	0.049
61.50	63.21		3.0	QGVN	10	103025	0.003	0.066
63.21	64.77		3.0	QGVN	10	103026	0.003	0.044
64.77	65.40		3.0	QGVN	10	103027	0.004	0.095
65.40	67.15		3.0	QGVN	10	103028	0.005	0.105
67.15	68.84		3.0	QGVN	10	103029	0.02	0.174
68.84	70.62		3.0	QGVN	10	103030	0.066	0.23
70.62	72.50		3.0	QGVN	10	103031	0.052	0.226
72.50	74.33		3.0	QGVN	10	103032	0.009	0.103
74.33	76.01		3.0	QGVN	10	103033	0.007	0.086
76.01	77.46		3.0	QGVN	10	103034	0.008	0.1
77.46	79.53		3.0	QGVN	10	103035	0.015	0.303

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
79.53	81.14	Fine-grained light grey quartz-sericite-pyrite	3.0		QGVN 10		103036	0.037	0.152
81.14	82.58		3.0		QGVN 10		103037	0.031	0.158
82.58	84.21		3.0		QGVN 10		103038	0.041	0.219
84.21	85.50		3.0		QGVN 10		103039	0.018	0.238
85.50	86.67		3.0		QGVN 10		103040	0.115	0.152
86.67	88.21		3.0		QGVN 10		103041	0.057	0.153
88.21	375.75	INTERMEDIATE VOLCANIC FLOW							
88.21	90.22	Fine-grained medium grey silicic sericitic	3.0	0.1	QCPV 10	Py +/- fine disseminations in bleached, moderately silicified and weak sericite pervasive altered flow. Protolith uncertain, overprinted by alteration. Py +/- cpy massive aggregates and py stringers assoc with qtz and gypsum units. Minor rubble zones, generally broken. Localized high pyrite content, up to ~5 % locally. Veining shows no preferred orientation; difficult to discern in rubble zone.	103043	0.074	0.152
90.22	90.72		3.0	0.1	QGCV 10		103044	0.057	0.727
90.72	92.38		3.0	0.1	QGCV 10		103045	0.029	0.148
92.38	93.93		3.0	0.1	QGCV 10		103046	0.037	0.225
93.93	95.08		3.0	0.1		Py +/- cpy disseminated in faulted broken pyrite rich zone. Pyrite content up to ~5% locally. As massive aggregates in flow fragments. Flow fragments cemented by fine/white/grey clay/gouge material and gypsum. Protolith destroyed. Fault zone, broken, zero RQD. Dark grey portions, indicating incr chlorite content - propylitic alteration.	103047	0.025	0.153
95.08	96.44		3.0	0.1			103048	0.091	0.168
96.44	99.15		3.0	0.1			103049	0.095	0.212
99.15	100.29		3.0	0.1			103050	0.059	0.148
100.29	100.64		3.0	0.1			103051	0.082	0.245
100.64	103.30		3.0	0.1			103052	0.08	0.306
103.30	105.68		3.0	0.1			103053	0.075	0.204
105.68	107.26		3.0	0.1			103054	0.03	0.116
107.26	108.82		3.0	0.1			103055	0.031	0.14

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
108.82	110.22	Fine-grained medium grey silicic sericitic	3.0	0.1			103056	0.042	0.174
110.22	111.90		3.0	0.1			103057	0.058	0.174
111.90	113.64		3.0	0.1			103058	0.038	0.149
113.64	114.60		3.0	0.1			103059	0.034	0.183
114.60	116.16		3.0	0.1			103060	0.038	0.176
116.16	117.34		3.0	0.1			103061	0.02	0.112
117.34	118.60		3.0	0.1			103062	0.014	0.091
118.60	119.70		3.0	0.1			103063	0.035	0.173
119.70	121.10		3.0	0.1			103064	0.039	0.128
121.10	122.50		3.0	0.1			103065	0.026	0.182
122.50	123.14		3.0	0.1			103066	0.072	0.255
123.14	125.76		3.0	0.1			103067	0.06	0.209
125.76	126.80		3.0	0.1			103069	0.096	0.197
126.80	128.48		3.0	0.1			103070	0.062	0.217
128.48	129.64		3.0	0.1			103071	0.081	0.186
129.64	131.40		3.0	0.1			103072	0.091	0.266
131.40	132.66		3.0	0.1			103073	0.08	0.265
132.66	134.05		3.0	0.1			103074	0.084	0.178
134.05	134.75		3.0	0.1			103075	0.023	0.114
134.75	137.05	Fine-grained light grey silicic sericitic	2.0	0.5	QAVN	15 Py +/- cpy stringers, veinlets bound by qtz/anhydrite veining, randomly orientated, unevenly distributed. Flow is moderate to highly sericitized and silicified - pervasive. Patch/ green chl rich portions, giving core a mottled appearance. Randomly orientated unevenly spaced stockwork anhydrite veining, pale pink/purple coloration. Minor to weak biotite alteration, appears as brown specks assoc with fine diss py unit. Protolith overprinted. Local fragmented portions, silicification grey fine grained matrix with sericite altered pale grey fragments chl and py diss associated with it. Local incrd py veining bound by silicified portions.	103076	0.039	0.127
137.05	138.65		2.0	0.5	QAVN	15 ~10cm clay/gouge fault zone.	103077	0.027	0.127

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
138.65	140.82	Fine-grained light grey silicic sericitic	2.0	0.5	QAVN	15	103078	0.067	0.179
140.82	142.51	Fine-grained medium green chloritic silicic	2.0	0.5	QAVN	15	103079	0.08	0.239
142.51	144.42		2.0	0.5	QAVN	15	103080	0.114	0.328
144.42	146.29		2.0	0.5	QAVN	15	103081	0.072	0.273
146.29	148.18		2.0	0.5	QAVN	15	103082	0.061	0.15
148.18	149.10		2.0	0.5	QAVN	15	103083	0.061	0.208
149.10	151.03		2.0	0.5	QAVN	15	103084	0.064	0.238
151.03	152.89		2.0	0.5	QAVN	15	103085	0.012	0.101
152.89	154.95		2.0	0.5	QAVN	15	103086	0.054	0.186
154.95	156.98		2.0	0.5	QAVN	15	103087	0.049	0.162
156.98	158.90		2.0	0.5	QAVN	15	103088	0.103	0.257
158.90	160.80		2.0	0.5	QAVN	15	103089	0.059	0.185
160.80	162.03		2.0	0.5	QAVN	15	103090	0.066	0.197
162.03	162.81		2.0	0.5	QAVN	15	103091	0.06	0.207
162.81	164.58		2.0	0.5	QAVN	15	103092	0.089	0.244
164.58	166.65		2.0	0.5	QAVN	15	103093	0.097	0.24
166.65	167.02		2.0	0.5	QAVN	15	103095	0.009	0.141
167.02	167.55		2.0	0.5	QAVN	15	103096	0.045	0.103
167.55	168.36		2.0	0.5	QAVN	15	103097	0.043	0.083
168.36	168.92		2.0	0.5	QAVN	15	103098	0.094	0.191
168.92	170.60		2.0	0.5	QAVN	15	103099	0.071	0.209
170.60	172.50		2.0	0.5	QAVN	15	103100	0.072	0.189
172.50	173.86		2.0	0.5	QAVN	15	103101	0.094	0.186

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
173.86	175.87	Fine-grained medium green chloritic silicic	2.0	0.5	QAVN	15	103102	0.062	0.222
175.87	177.80		2.0	0.5	QAVN	15	103103	0.065	0.161
177.80	179.67		2.0	0.5	QAVN	15	103104	0.066	0.17
179.67	181.55		2.0	0.5	QAVN	15	103105	0.085	0.249
181.55	183.38		2.0	0.5	QAVN	15	103106	0.085	0.227
183.38	184.10		2.0	0.5	QAVN	15	103107	0.098	0.263
184.10	185.96		2.0	0.5	QAVN	10	103108	0.092	0.2
						Py +/-cpy stringers assoc locally with qtz/anhydrite veining, also bound by chl stringers in places. Increased py +/-cpy veining concentrated in silification and sericitized portions. Flow is generally chloritic - giving green mottled appearance with silicified and sericitized portion. Qtz veining, stockwork, randomly oriented and unevenly spaced. Weak to moderate bt alteration, appears as brown specks.			
185.96	187.02		2.0	0.5	QAVN	10	103109	0.07	0.227
187.02	187.55		2.0	0.5	QAVN	10	103110	0.114	0.268
187.55	188.31		2.0	0.5	QAVN	10	103111	0.081	0.358
188.31	189.95		2.0	0.5	QAVN	10	103112	0.081	0.222
189.95	192.94		2.0	0.5	QAVN	10	103113	0.074	0.224
192.94	193.80		2.0	0.5	QAVN	10	103114	0.092	0.246
193.80	195.95		2.0	0.5	QAVN	10	103115	0.108	0.259
195.95	198.03		2.0	0.5	QAVN	10	103116	0.134	0.288
198.03	199.42		2.0	0.5	QAVN	10	103117	0.126	0.328
199.42	200.25		2.0	0.5	QAVN	10	103118	0.162	0.378
						Chloritic alteration more pervasive giving homogeneous green colour, not mottled. Dark green chloritic euhedral/anhedral phenocrysts in flow.			
200.25	200.82		2.0	0.5	QAVN	10	103119	0.076	0.219
						Chloritic alteration more pervasive giving homogeneous green colour, not mottled. Dark green chloritic euhedral/anhedral phenocrysts in flow. Trace mt stringer assoc with qtz veining.			
200.82	201.40		2.0	0.5	QAVN	10	109977	-2	-2
						Same as 103119. Sample inserted because of sawing mistake.			

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
201.40	203.10	Fine-grained light grey silicic sericitic	2.0 0.5	QAVN 10	Slightly more silicified, pale grey, with mottled dark green chl specks. Py +/-cpy stringers assoc with pale purple anhydrite with qtz veining. Veining randomly oriented and unevenly spaced. Silicification and sericitization - pervasive, moderate to high assoc generally with increased anhydrite + py veining. Barren second generation anhydrite veining cutting mineralized veining. Weak bt alteration - localized, mottled, brown specks.	103121	0.126	0.357
203.10	204.87		2.0 0.5	QAVN 10		103122	0.104	0.323
204.87	206.47		2.0 0.5	QAVN 10		103123	0.154	0.334
206.47	207.17		2.0 0.5	QAVN 10	~10cm qtz/anhydrite vein assoc with massive py +/-cpy aggregates.	103124	0.21	0.522
207.17	209.20		2.0 0.5	QAVN 10	Slightly more chloritic, green mottled protions. Py +/-cpy stringers bound by sericitized/silicified, less chloritic pale grey bands.	103125	0.081	0.156
209.20	211.97		2.0 0.5	QAVN 10	~ 5cm qtz/anhydrite vein assoc with massive py +/-cpy aggregates.	103126	0.11	0.33
211.97	213.01		2.0 0.5	QAVN 10	~10cm qtz/anhydrite vein assoc with massive py +/-cpy aggregates (silimilar to 103124)	103127	0.224	0.438
213.01	213.84		2.0 0.5	QAVN 10	Qtz/anhydrite veining locally parallel to CA averaging ~3cm thick assoc with py +/-cpy massive aggregates. Minor diss py +/-cpy in altered flow.	103128	0.067	0.201
213.84	215.95		2.0 0.5	QAVN 10		103129	0.034	0.114
215.95	217.61	Fine-grained medium green chloritic silicic	2.0 0.5	QAVN 10	Py +/-cpy stringers assoc locally with qtz/anhydrite veining; bound by silicified/sericitized, less chloritic bands. Flow generally chloritic, green mottled appearance. Veining randomly oreinted. Qtz/anhydrite/py veining cut locally by late generation anhydrite veining.	103130	0.127	0.233
217.61	218.97		2.0 0.5	QAVN 10		103131	0.17	0.367
218.97	220.99		2.0 0.5	QAVN 10	Silicified light grey portions.	103132	0.141	0.257
220.99	222.74		2.0 0.5	QAVN 10	Silicified light grey portions	103133	0.132	0.278
222.74	224.64		2.0 0.5	QAVN 10		103134	0.167	0.346
224.64	225.51		2.0 0.5	QAVN 10	Main qtz/anh/py +/-cpy veining at 90 degrees to CA then running parallel to CA, 0 degrees.	103135	0.159	0.437

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
225.51	226.29	Fine-grained dun chloritic silicic	2.0	0.5	QAVN	10 Py +/- cpy stringers assoc with qtz, anh veining. Barren, post mineralization qtz veining is stockwork x-cutting mineralized veining. Py +/- cpy veining found locally by silicified/sericitized light grey portions. Patchy silicification, mainly confined to veining. Bt alteration appears as brown specks, enhancing mottled appearance. Local silicified portions- homogenous pale grey, non mottled.	103136	0.077	0.209
226.29	227.43		2.0	0.5	QAVN	10	103137	0.088	0.218
227.43	229.13		2.0	0.5	QAVN	10	103138	0.115	0.277
229.13	231.29		2.0	0.5	QAVN	10	103139	0.153	0.356
231.29	231.82		2.0	0.5	QAVN	10 Light grey silicified and sericitized sample surrounding ~15mm qtz/anh veining with py+/- cpy aggregates-massive.	103140	0.103	0.502
231.82	233.56		2.0	0.5	QAVN	10	103141	0.199	0.487
233.56	235.09		2.0	0.5	QAVN	10	103142	0.123	0.21
235.09	236.59		2.0	0.5	QAVN	10	103143	0.161	0.335
236.59	237.60		2.0	0.5	QAVN	10	103144	0.163	0.444
237.60	237.79		2.0	0.5	QAVN	10 Silicified pattern.	103145	0.179	0.428
237.79	239.88		2.0	0.5	QAVN	10 Ground core.	103147	0.182	0.466
239.88	240.48		2.0	0.5	QAVN	10 Minor silicified portion.	103148	0.137	0.347
240.48	242.33		2.0	0.5	QAVN	10 Weakly brecciated. Rare mt veining assoc. with qtz/anhydrite veining.	103149	0.206	0.026
242.33	242.52		2.0	0.5	QAVN	10 Py +/- cpy veining assoc. with qtz and anhydrite veining, enveloped by pale grey silicified and wkly sericitized portion.	103150	0.117	0.24
242.52	244.49		2.0	0.5	0 QAVN	10	103151	0.194	0.419
244.49	246.45		2.0	0.5	51 QAVN	10 From about 246m mt disseminated, 54.7 on Kappameter. chalcopyrite massive aggregate.	103152	0.186	0.408
246.45	248.12		2.0	0.5	5 QAVN	10	103153	0.206	0.578

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
248.12	249.32	Fine-grained dun chloritic silicic	2.0 0.5	2	QAVN	10 Pale grey, pervasive highly silicified. Weak to moderate pervasive sericite alteration. Protolith overprinted. Py +/- cpy diss. In altered flow, veining generally randomly orientated up to 3cm thick locally and assoc with pale purple anhydrite veining. Localized barren anhydrite veining. Minor bt alteration.	103154	0.137	0.407
249.32	251.10		2.0 0.5	2	QAVN	10 Py +/- cpy stringers assoc with qtz + anhydrate veining, locally bound by chl. Py +/- cpy also diss in flow. Locally moderate to high silicified. Mottled green/brown chl. And bt patches. Qtz/anhy, py +/- cpy veining stockwork bound by iron mottled pervasively silicified and sericitized portion. Less mt detected by kappometer.	103155	0.176	0.365
251.10	253.56		2.0 0.5	0	QAVN	10	103156	0.153	0.414
253.56	255.12		2.0 0.5	26	QAVN	10 Increase in mt detected by kappometer, not detectable by magnetic. Mt stringer bound by qv-47.4 magnetic.	103157	0.250	0.601
255.12	256.40		2.0 0.5	0	QAVN	10 Less silicified portions. Local mt veining assoc. with qv rare.	103158	0.262	0.571
256.40	257.65		2.0 0.5	0	SZN	40 Sheared zone -40o angle to CA, clay/gouge material assoc with qv.	103159	0.243	0.648
257.65	258.17		2.0 0.5	0	QAVN	10 Minor pale pink, hard k-fsp/ possibly zeolite veining, randomly oriented, assoc. with silicified and sericitized portions.	103160	0.294	0.581
258.17	258.50		2.0 0.5	0	QAVN	10 Weakly brecciated silicified flow, green chl. mottled specks.	103161	0.362	0.875
258.50	259.91		2.0 0.5	1	QAVN	10 Slightly more siliceous.	103162	0.299	0.702
259.91	261.58	Fine-grained medium green chloritic silicic	2.0 0.5	0	QMTVN	10 Py +/- cpy stringers and veinlets assoc with qtz/anhydrite veining. Minor py +/- cpy fine diss. Assoc in trace mt veining and disseminations. Py +/- medium size massive aggregates in flow. Patchy mottled green/brown chl +bt alteration, high and moderate respectively. Pale grey highly silicified and sericitezed portions on average ~10cm thick, bounding py +/- cpy +qtz and anhydrite veining, randomly oriented. Rare pink, soft zeolite +white gypsum veining/stringers, generally discontinuous, cutting all veining generations <10% of py +/- cpy stringers bound by chl veining.	103163	0.32	0.764
261.58	263.54		2.0 0.5	0	QMTVN	10 Portions with high bt alteration.	103164	0.219	0.448

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm		
263.54	265.71	Fine-grained medium green chloritic silicic	2.0	0.5	2	17 QMTVN	10	Increased mt % visible mt stringer bound by qtz/anh vein, assoc with diss py +/- cpy. Discontinuous pink zeolite stringer-cutting py +/- cpy stringer assoc with chl veining.	103165	0.334	0.693
265.71	267.47		2.0	0.5	2	1 QMTVN	10	Minor sil +chl pale green brecciated portion. Red/black mt stringer asso with chl veining.	103166	0.362	0.741
267.47	268.81		2.0	0.5	2	0 QMTVN	10		103167	0.438	0.93
268.81	269.32		2.0	0.5	2	0 QMTVN	10	Light grey, highly silicified and moderately sericitized sample. Minor chlorite specks, py stringers x-cut by barren qtz/anhydrite	103168	0.25	0.442
269.32	271.02		2.0	0.5	2	15 QMTVN	10	Increased mt veining assoc with qtz/anh +py+/-cpy veining, randomly oriented, diss locally.	103169	0.268	0.516
271.02	272.37		2.0	0.5	2	0 QMTVN	10	Portions with increased bt alteration.	103170	0.194	0.365
272.37	272.86		2.0	0.5	2	0 QMTVN	10	Light grey highly silicified portion moderately sericitized, protolith destroyed. Massive py +/- cpy aggregates/veining assoc, with qtz/anh veining. Minor bt altered portion.	103171	0.16	0.643
272.86	274.57		2.0	0.5	2	0 QMTVN	10	Localized mt increased vein assoc with qtz/anh vein, py+/- cpy finely dissem in vein Mt vein ~5cm accross, 213 reading on Kappameter at ~273.97m	103173	0.238	0.455
274.57	276.45		2.0	0.5	2	0 QMTVN	10	Qtz, anhydrite, gypsum, zeolite, py +/- cpy veining running 0-5degrees to CA. Minor fragments of dark green BFP, chloritized, feldspar phenocrysts replaced by chlorite forming dark green bladed chlorite pseudomorphs.	103174	0.286	0.58
276.45	276.94		2.0	0.5	2	2 QMTVN	10	Light grey silicified portion with mt disseminations, evenly distributed, fine, locally assoc with with diss py +/- cpy. Protolith destroyed.	103175	0.2	0.401
276.94	277.46		2.0	0.5	2	0 QMTVN	10	~15cm portions of chloritized BFP feldspar replaced with chlorite pseudomorphs, randomly cut by pale pink soft zeolite/gypsum veining.	103176	0.156	0.38
277.46	278.70		2.0	0.5	2	437 QMTVN	10	~5cm mt veinassoc with smokey/grey qv + diss py +/- cpy. Py +/- cpy diss with red hem haloes	103177	0.318	0.529
278.70	280.36		2.0	0.5	2	0 QMTVN	10	Light grey, minor silicified portions, weak bt alteration, K-feldspar and zeolite stringers, randomly oriented, unevenly spaced.	103178	0.212	0.437
280.36	281.81		2.0	0.5	2	1 QMTVN	10	Rare moly assoc with smokey/grey qv assoc. with py+/- cpy stringer.	103179	0.198	0.427
281.81	283.10		2.0	0.5	2	0 QMTVN	10	Vesicles infilled with qtz/ser. Kfsp or zeolite and hem veining. Hem assoc with gypsum veining.	103180	0.123	0.278

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm		
283.10	284.18	Fine-grained light green silicic chloritic	2.0	0.5	2	0 QMTVN	10	Moderate to high silicification. Py+/-cpy diss units and stringers assoc. With anhydrite +qtz veining. Py +/-cpy also finely disseminated in silicified portion. Silicification is pervasive, Red magnetic magnetite cut by py stringers. Weak brecciation locally. Py diss have chlorite haloes locally. Pale pink and white gypsum and anh veining, randomly oriented Pale green chl stringers.	103181	0.154	0.436
284.18	284.55		2.0	0.5	2	0 QMTVN	10	Less silicification, more chloritic, darker green.	103182	0.142	0.324
284.55	286.12	Fine-grained medium green chloritic silicic	2.0	0.5	2	0 QMTVN	10	Py+/-cpy diss and stringers assoc with qtz/anh veining +/- chl stringers, randomly oriented. Weak to moderate bt alteration -pervasive- brown colouration. Qtz veining discontinuous boxwork like structure possibly structurally controlled.	103183	0.1	0.255
286.12	287.70		2.0	0.5	2	QMTVN	10	Qtz zeo veining- spiral like structures	103184	0.154	0.383
287.70	289.08		2.0	0.5	1	0 QAVN	10	Py +/-cpy diss in flow and stringers assoc with qtz/anh veining. Weak bt alteration- locally pervasive. Ser alteration surrounding py stringers locally- randomly oriented. Gypsum veining cutting mineralized veining. Mottled.	103185	0.19	0.404
289.08	289.70		2.0	0.5	1	0		Slightly increased bt alteration.	103186	0.379	0.831
289.70	290.86	Fine-grained light grey silicic sericitic	2.0	0.5		0 QAVN	7	Py +/-cpy fine disseminations in altered flow, stringers assoc with qtz/anh veining randomly oriented. Minor chl mottled textures. Highly pervasive silicification, weak bt alteration locally.	103187	0.17	0.372
290.86	292.57	Fine-grained medium green chloritic silicic	2.0	0.5	2	58 QAVN	10	Py +/-cpy veining assoc with qtz/anh veining Py +/- cpy stringers are bound by silicified and ser portions. Weak to moderate pervasive bt alteration- brown colour. Veining is randomly oriented. Minor py +/-cpy dissem in flow. Increased mt veining and diss locally.	103188	0.175	0.352
292.57	293.46		2.0	0.5	2	3			103189	0.308	0.56
293.46	294.71		2.0	0.5	2	4	15	More silicified light grey colour, locally increased qtz/anh veining silicification is pervasive. Weak sericitization. Zeolite, qtz/mt/py stringers randomly oriented. Mt stringers assoc with qtz anhy and py+/-cpy.	103190	0.236	0.439

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
294.71	296.60	Fine-grained medium green chloritic silicic	2.0	0.5	1 0 QAVN	10 Py +/-cpy minor diss. in flow, stringers assoc with qtz/anh veining, locally bound by chl stringers and enveloped by silicified and sericitized bands. Weak to moderate bt alteration, pervasive. Localized silicified light grey pervasive altered portions present. Veining is randomly oriented, unevenly distributed. Local increase in mt veining- dissem and stringers. Mottled.	103191	0.094	0.205
296.60	298.40		2.0	0.5	1 0 QAVN	10	103192	0.162	0.355
298.40	300.76		2.0	0.5	1 4 QAVN	10 Minor gypsum stringer. Kappameter detected minor increase in mt content at end of sample, not visible though.	103193	0.217	0.421
300.76	302.14		2.0	0.5	1 1 QAVN	10 Minor pink/orange zeolite stringer assoc with gypsum veining.	103194	0.198	0.455
302.14	304.15		2.0	0.5	1 0 QAVN	10 Reduced silicified, sericite altered portions.	103195	0.242	0.562
304.15	305.51		2.0	0.5	1 49 QAVN	10 Localized portions with increased mt content. -diss less mottled locally, bt alteration more pervasive- brown homogenous colour.	103196	0.282	0.666
305.51	307.32		2.0	0.5	1 36 QAVN	7 Homogenous brown colour, pervasive moderate bt alteration, slightly veining, increased mt diss.	103197	0.18	0.429
307.32	309.25		2.0	0.5	1 0 QAVN	7	103199	0.181	0.458
309.25	310.99		2.0	0.5	1 2 QAVN	7 Homogenous brown colour, pervasive moderate bt alteration, decreased mt	103200	0.154	0.351
310.99	312.48		2.0	0.5	1 28 QAVN	10 Homogenous brown colour pervasive, moderate bt. alteration, increased mt locally.	103201	0.153	0.408
312.48	314.22		2.0	0.5	1 93 QAVN	10 Less silicified portions. Qtz/anhydrite veining more distinct-pale purple.	103202	0.232	0.513
314.22	315.64		2.0	0.5	1 4 QAVN	10	103203	0.315	0.682
315.64	317.46		2.0	0.5	1 1 QAVN	10	103204	0.37	0.902
317.46	319.13		2.0	0.5	1 1 QAVN	10	103205	0.233	0.541
319.13	320.81		2.0	0.5	1 34 QAVN	10 Py +/-cpy stringers, locally bound by chl +gypsum, bound by silicified/sericitized.	103206	0.241	0.552
320.81	322.61		2.0	0.5	1 1 QVN	10 ~15cm qtz/chl vein, no visible py or cpy	103207	0.282	0.639
322.61	324.70		2.0	0.5	1 18 QAVN	10 Homogenous, brown colour, bt pervasive alteration, slightly mottled.	103208	0.169	0.433
324.70	326.40		2.0	0.5	1 0 QAVN	10	103209	0.13	0.338

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
326.40	328.27	Fine-grained medium green chloritic silicic	2.0 0.5 1	1	QAVN	10 Weakly Mottled.	103210	0.211	0.467
328.27	329.29		2.0 0.5 1	41	QAVN	10	103211	0.175	0.402
329.29	332.32		2.0 0.5 1	27	QAVN	10 ~10cm qtz/anhydrite vein assoc with diss and fine stringers of py +/-cpy.	103212	0.19	0.421
332.32	333.64		2.0 0.5 1	9	QAVN	10 Py +/-cpy minor diss in flow, stringers and veinlets assoc with qtz anhy veining. Large %age of py +/- cpy stringers and diss are bound by silicified/ sericite pale grey/yellow altered portions. Localized bt and chl mottled texture. Bt alteration is generally pervasive and weak to moderate. Veining- no preferred orientation. Mt content locally high as stringers and/or diss. Gypsum veining also locally assoc with py +/-cpy diss.	103213	0.284	0.668
333.64	335.60		2.0 0.5 1	35	QAVN	10	103214	0.167	0.415
335.60	337.41		2.0 0.5 1	88	QAVN	10 Trace zeolite stringers assoc with gypsum, x-cutting all veins,	103215	0.249	0.573
337.41	339.44		2.0 0.5 1	0	QAVN	10 2-3cm qtz vein without the anhydrite associated with py + cpy massive aggregate units, outlined by thin chl and gypsum stringers.	103216	0.255	0.62
339.44	341.40		2.0 0.5 1	18	QAVN	10 less bt/chl mottled portions - bt alteration more homogenous.	103217	0.176	0.432
341.40	343.37		2.0 0.5 1	33	QAVN	10 Increased gypsum and mt veining. Gypsum veining x-cutting mineralized qtz vein. Py +/-cpy stringers bound by chl. stringers.	103218	0.146	0.37
343.37	345.09		2.0 0.5 1	4	QAVN	10 Local increases in mt veining assoc with py +/-cpy stringers and qtz veining. ~5cm thick qtz/anh gypsum and py vein at ~50 to CA. X-cut by barren gypsum veining.	103219	0.216	0.514
345.09	345.58		2.0 0.5 1	0	QAVN	10 Increased bt and silicification, mottled brown.	103220	0.354	0.777
345.58	347.02	Fine-grained medium green chloritic silicic	2.0 0.5 1	0	QAVN	100 Qtz vein, assoc with py +/-cpy stringers infilling gaps formed by crackled brecciation. About 15cm bt altered portion. Qtz vein also cut by gypsum barren stringers. Chl portions.	103221	0.231	0.536
347.02	348.63	Fine-grained medium green chloritic silicic	2.0 0.5 1	0	QAVN	10 Minor pink zeolite veining.	103222	0.213	0.508
348.63	349.82		2.0 0.5 1	0	QAVN	10 Increased silicified and sericitized bands assoc with py +cpy stringers.	103223	0.277	0.74

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
349.82	350.90	Fine-grained medium green chloritic silicic	2.0 0.5	1	12 QAVN	15 Increased silicification, light grey colour. Minor chl/bt content-mottled textured.	103225	0.18	0.418
350.90	352.73		2.0 0.5	1	0 QAVN	15 Decreased silicification, increased bt and chl alteration, medium green/brown, locally mottled.	103226	0.316	0.881
352.73	353.32	Fine-grained medium green chloritic silicic	2.0 0.5	1	0 QAVN	100 Smokey grey qtz vein. Py +/-cpy massive aggregate units and thin stringers appear to be oriented at ~45o to CA. Massive py stringer x-cutting. Pale purple colour due to minor anhydrite content.	103227	0.126	0.627
353.32	354.04	Fine-grained medium green chloritic silicic	2.0 0.5	1	0 QAVN	15 Rare vesicles infilled qtz/sericite. Py+/-cpy stringers x-cut by barren gypsum and barren qtz vein.	103228	0.296	0.79
354.04	354.79	Fine-grained medium green chloritic silicic	2.0 0.5	1	32 QAVN	70 Mt stringers and diss. smokey/grey qtz vein, weak to moderate sericite alteration on the qtz vein, Increased gypsum veining x-cutting sericite altered qtz vein.	103229	0.307	0.8
354.79	355.56	Fine-grained medium green chloritic silicic	2.0 0.5	1	4 QAVN	10 Mt stringers assoc with qtz/chl/py +/-cpy stringers. Minor mottled portions, BKN zone cpy rich sulphide aggregate unit assoc. with qtz vein. Very weak bt alteration.	103230	0.322	0.693
355.56	356.79		2.0 0.5	1	0 QGCV	10 BKN zone. Vuggy dissolution structures in qtz/py veining, randomly oriented. Bt altered- weak to moderate pervasive ~40%RQD, poor recovery. Minor gypsum veining.	103231	0.331	0.682
356.79	358.15		2.0 0.5	1	3 QGCV	10	103232	0.363	0.78
358.15	359.01		2.0 0.5	1	0 QGCV	10	103233	0.212	0.345
359.01	359.99		2.0 0.5	1	0 QGCV	7	103234	0.374	0.762
359.99	360.25		2.0 0.5	1	0 QGCV	7 BKN bt alteration moderate, pervasive. Py diss, in broken fragments, poor recovery.	103235	0.376	0.825
360.25	360.75		2.0 0.5	1	0 QGCV	7 Local vuggy, dissolution structure on qtz/py veining.	103236	0.242	0.51
360.75	361.43		2.0 0.5	1	0 QGCV	7 Minor BKN zone. Vuggy dissolution structures in qtz/py veining, randomly oriented. Bt altered- weak to moderate pervasive ~40%RQD, poor recovery. Minor gypsum veining.	103237	0.152	0.359
361.43	362.10		2.0 0.5	1	0 QGCV	7	103238	0.149	0.315
362.10	363.63		2.0 0.5	1	0 QGCV	7	103239	0.172	0.405
363.63	365.16		2.0 0.5	1	0 QGCV	7	103240	0.242	0.464

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
365.16	367.69	Fine-grained medium green chloritic silicic	2.0 0.5	1	3 QGCV	10 Py +/- cpy stringers assoc with qtz veining. Locally bound by chl??. Randomly oriented veining. Qtz veining showing vuggy dissolution structures where possible anhydrite has been recovered. Weak to moderate bt alteration -brown mottled locally. Minor pale green/grey portions-moderate to high silicified, minor chl/bt speckles. BKN zones. Rubby mt diss generally low.	103241	0.171	0.349
367.69	368.76		2.0 0.5	1	0 QGCV	10	103242	0.454	0.871
368.76	370.94		2.0 0.5	1	1 QGCV	10	103243	0.191	0.539
370.94	372.75		2.0 0.5	1	12 QGCV	10 Increased diss mt.	103244	0.266	0.653
372.75	374.92		2.0 0.5	1	1 QGCV	10	103245	0.347	0.831
374.92	375.75		2.0 0.5	1	0 QGCV	10 Mt stringer bound by qtz vein.	103246	0.248	0.496
375.75	497.96	QUARTZ MONZONITE							
375.75	377.90	Fine-medium-grained light green silicic chloritic	2.0 0.1	1	QGCV	10 Py +/- cpy stringers assoc with qtz veining, disseminations in altered flow, silicified moderate to high, pervasive. Dark green chloritic specks in silicious flow, protolith overprinted by silicification. Veining is randomly oriented local BKN zone. Qtz veining is locally vuggy dissolution features. Possible flow/Qtz mozdiorite contact.	103247	0.316	0.548
377.90	379.53		2.0 0.1	1	0 QGCV	10 Minor fault infilled by gouge/clay material.	103248	0.41	0.803
379.53	381.06		2.0 0.1	1	4 QGCV	10 Minor diss mt.	103249	0.452	0.917
381.06	382.22	Fine-medium-grained light green silicic	1.0 0.1	1	0 QVN	100 BKN quartz veins, vuggy dissolution features. Py +/- cpy stringers, randomly oriented. Pale green chl staining on qtz vein.	103251	0.255	0.474
382.22	382.88	Fine-medium-grained light green silicic chloritic	2.0 0.1	0	QGCV	10	103252	0.239	0.257
382.88	384.05		2.0 0.1	0	0 QGCV	10	103253	0.279	0.247
384.05	385.57		2.0 0.1	0	0 QGCV	10 BKN	103254	0.129	0.138
385.57	386.70		2.0 0.1	0	0 QGCV	10	103255	0.331	0.688
386.70	388.60		2.0 0.1	0	0 QGCV	10 Less silicified, uniform homogenous pale green colour. Vuggy qtz vein dissolution features 0o to CA locally, Flow.	103256	0.329	0.508
388.60	390.23		2.0 0.1	0	1 QGCV	10 Less silicified locally, homogenous pale green colour. Qtz, py, mt veining bound by silicified portion. Local qtz flooding to pervasive silicification. Flow	103257	0.226	0.428

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
390.23	391.17	Fine-medium-grained light green silicic chloritic	2.0 0.1	0	0 QGCV	10 Silicified-dark green chlorite specks. Qtz veining, with diss pyrite. Veining is randomly oriented. Minor BKN zone. Flow/Qtz Monz.	103258	0.377	0.704
391.17	391.46		2.0 0.1	0	0 QGCV	10 Diss py +/- cpy in qv. Brecciated-cracked qtz less mineralized.	103259	0.188	0.512
391.46	392.63		2.0 0.1	0	0 QGCV	10 Dark green medium sized chloritic clumps in silicified flo/Qtz monzodiorite	103260	0.338	0.606
392.63	394.65	Fine-medium-grained light grey silicic	2.0 0.1	0	QVN	100 Silicification-pervasive, also bound to Qtz vein. Py stringers cross-cutting ~30 degrees to the C.A. Minor B.K.N.	103261	0.588	1.375
394.65	395.33		2.0 0.1	0	QVN	100 Dark green medium sized chloritic units in silicified flow / Qtz monzodiorite.	103262	0.541	1.1
395.33	395.74		2.0 0.1	0	0 QVN	100	103263	0.49	0.824
395.74	397.69		3.0 0.5	0	QVN	95 py +/- cpy stringers and diss in smokey/grey Qtz vein. Locally vuggy dissolution structures.	103264	0.528	1.065
397.69	398.37		3.0 0.5	0	QVN	95	103265	0.186	0.448
398.37	398.91		3.0 0.5	0	QVN	95	103266	0.741	0.846
398.91	400.80		3.0 0.5	0	QVN	95	103267	0.538	1.07
400.80	402.04		2.0 0.5	0	QVN	90	103268	0.75	1.19
402.04	403.18	Fine-medium-grained light green silicic	2.0 0.5	0	QGCV	10 Silicified, plagioclase, pyroxene or amphibole green mafic units, possibly phenocrysts fine to medium size, Qtz monzodiorite. Vuggy dissolution structures in Qtz vein. Py +/- cpy disseminated and stringers assoc locally with qv and chl stringers.	103269	0.482	0.806
403.18	404.13		2.0 0.5	0	QGCV	10	103270	0.53	0.876
404.13	404.70	Fine-medium-grained light grey silicic	3.0 0.5	0	QVN	10 Py + cpy stringers assoc with smokey grey Qtz vein, also disseminated in Qtz vein. Veining is randomly oriented. Minor mafic dark green units - possibly pyroxene or amphibole phenocrysts. Protolith destroyed by silicification. Lithology is flow and/or Qtz monzodiorite - gradual contact.	103271	0.577	0.917
404.70	405.83	Fine-medium-grained light green silicic	3.0 0.5	0	QGCV	10 Qtz monzodiorite protolith partially overprinted plagioclase, Qtz, pyroxene or amphibole phenocrysts visible in fine light grey matrix. Py +/- cpy stringers assoc with smokey/grey qv, also diss in siliceous matrix.	103272	0.652	1.015
405.83	407.62		3.0 0.5	0	QGCV	10 Minor pink, soft, zeolite veining. Locally BKN.	103273	0.559	0.916

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
407.62	407.91	Fine-medium-grained light green silicic	3.0 0.5	0 0	QVN 95	Minor BKN portions	103274	0.414	0.71
407.91	408.56		3.0 0.5	1 0		~5cm py +/-cpy veinlet cross-cutting smokey/grey qtz stringers.	103275	0.435	0.72
408.56	409.96		3.0 0.5	0 0	10		103277	0.434	0.748
409.96	411.58	Fine-medium-grained light green	3.0 0.5	0 0	QGCV 10	Py +/-cpy stringer, assoc with smokey/grey qtz vein. Minor pink/salmon zeolite veining. Veining randomly oriented.	103278	0.293	0.492
411.58	413.61		3.0 0.5	0 0	QGCV 10		103279	0.367	0.601
413.61	415.56		3.0 0.5	0 0	QGCV 10		103280	0.472	0.746
415.56	417.20		3.0 0.5	0 0	QGCV 10	Smokey/grey qtz vein assoc with py +cpy massive aggregate. Qtz veinlets as dissolution features.	103281	0.319	0.539
417.20	417.90		3.0 0.5	0 1	QGCV 10		103282	0.391	0.643
417.90	418.55		3.0 0.5	0 0	QGCV 10	Localized light grey siliceous part, generally assoc with increased py +/-cpy stringers and diss.	103283	0.533	1.22
418.55	419.71		3.0 0.5	0 0	QGCV 10		103284	0.36	0.715
419.71	420.34		2.0 0.5	0 0	QGCV 10	Localized light grey siliceous part, generally assoc with increased py +/-cpy stringers and diss.	103285	0.31	0.54
420.34	422.02		2.0 0.5	0 1	QGCV 35 15	Zeolite veining at ~30-40 degrees C.A. locally assoc with smokey qtz vein.	103286	0.258	0.475
422.02	423.82		2.0 0.5	0 0	QGCV 15	Veining is randomly oriented, locally assoc with smokey grey qtz vein, locally vuggy.	103287	0.329	0.563
423.82	424.50		2.0 0.5	0 0	QGCV 15	Protolith visible. Plagio, qtz, pyroxene and/or amphibole phenocrysts, fine to medium grained in fine, grey qtz and plagioclase phenocrysts	103288	0.48	0.87
424.50	425.64		2.0 0.5	0 0	QGCV 15	Minor siliceous portion.	103289	0.384	0.647
425.64	426.82		2.0 0.5	0 0	QGCV 15	Protolith evident, zeolite veining. Less py +/-cpy in pristine qtz monzodiorite.	103290	0.239	0.444
426.82	428.77		2.0 0.5	0 2	QGCV 15	Medium grey silicified portion, generally assoc with increased py +/-cpy stringers. Randomly cut by qtz and zeolite veining.	103291	0.452	0.774
428.77	429.44		1.0 0.1	0 1	QGCV 15	Reduced py +/-cpy. Local potassic altered portion.	103292	0.225	0.383
429.44	430.32		1.0 0.1	0 0	QGCV 15	Protolith overprinted locally by silification. Minor BKN zones.	103293	0.349	0.656
430.32	431.90		1.0 0.1	0 0	QGCV 15	Minor BKN zone.	103294	0.218	0.418

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
431.90	433.65	Fine-medium-grained light green	1.0 0.1 0	0	QGCV 15		103295	0.399	0.646
433.65	434.85		1.0 0.1 0	14	QGCV 15	Dark green/black mafic phenocrysts in qtz monzodiorite.	103296	0.223	0.356
434.85	436.14		1.0 0.1 0	1	QGCV 15	Minor carb and pink/brown soft zeolite veining + qtz, randomly oriented. Minor mafic portions.	103297	0.191	0.315
436.14	437.21		1.0 0.1 0	1	QGCV 15	Less silicified and chloritized, friable, fault zone; minor gouge/clay zone ~45 degrees to C.A.	103298	0.37	0.596
437.21	438.26		1.0 0.1 0	0	QGCV 98	Qtz vein, weak pervasive sericite alteration. Pink/salmon veining randomly oriented. Rare py +/-cpy stinger and minor ~2cm gouge/clay filled fault zone.	103299	0.26	0.581
438.26	439.07		1.0 0.1 0		QGCV 15		103300	0.025	0.075
439.07	439.76		1.0 0.1 0	0	QGCV 15	Medium grey silicified portions. Qtz +carb veining, locally assoc with pink/salmon zeolite veining.	103301	0.268	0.551
439.76	440.35		1.0 0.1 0	0	QGCV 15	Silicified, moderate to high - pervasive. Smoke/grey qtz vein assoc with diss py +/-cpy.	103303	0.414	0.891
440.35	441.40		1.0 0.1 0	1	QGCV 15	Minor BKN zones.	103304	0.296	0.606
441.40	443.15	Fine-medium-grained medium green porphyritic silicic	1.0 0.1 1	1	QGCV 10	Py +/-cpy stringer assoc with smokey qtz veining, surrounded by pervasively silicified and eri light grey portions. Py +/-cpy also finely diss in silicified and sericitized portion. Pink/salmon veining, randomly oriented. Minor brecciated portion.	103305	0.38	0.633
443.15	445.05		1.0 0.1 1	0	QGCV 10	Minor carb veining assoc with pink zeolite veining, randomly oriented.	103306	0.281	0.491
445.05	445.39		1.0 0.1 1	0	QGCV 10	Pervasively overprinted silicified, py +/-cpy stringers assoc with smokey/grey qtz veining.	103307	0.463	0.711
445.39	447.50		1.0 0.1 1	48	QGCV 10	Protolith overprinted by silification locally.	103308	0.477	1.26
447.50	448.13		1.0 0.1 1	4	QGCV 10	Reduced zeolite veining.	103309	0.323	0.683
448.13	450.08		1.0 0.1 1	13	QGCV 10	Pervasively silicified, seric portion cut by py +/-cpy stringer assoc with smokey/grey qtz veining and pink zeolite. Py +/-cpy also diss in silicified light grey portion.	103310	0.285	0.515
450.08	451.70		1.0 0.1 1	1	QGCV 10	Py +/-cpy stringer bound by smokey/grey qtz vein. Protolith locally overprinted.	103311	0.233	0.42
451.70	453.47		1.0 0.1 1	0		Light grey, pervasive silicification, protolith destroyed. Minor BKN zones.	103312	0.269	0.576
453.47	455.00		1.0 0.1 1	0		Protolith partially destroyed.	103313	0.329	0.631

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
455.00	455.32	Fine-medium-grained medium green porphyritic silicic	2.0 0.5	1 0		Increased py +/-cpy stringers assoc with smokey grey qtz vein x-cutting pale grey silicified portion.	103314	0.883	1.73
455.32	456.05		1.0 0.1	1 0		Pristine monzodiorite, weak silicification. Dark green mafic pyroxene/amphibole and plagioclase phenocrysts in grey fine matrix.	103315	0.2	0.356
456.05	457.82		2.0 0.5	1 0		Silicified, moderate to high, pervasive; light grey, minor diss py +/-cpy in silicified portion.	103316	0.362	0.824
457.82	458.20			1 0			103317	0.405	0.748
458.20	459.58		1.0 0.1	1 2		Moderate to high pervasively silicified portion, light grey. Local portions of dark green/grey porphyritic monzo-unaltered.	103318	0.336	0.606
459.58	461.33		1.0 0.1	1 0			103319	0.358	0.816
461.33	462.05		1.0 0.1	1 0		Mainly unaltered, py +/-cpy stringers bound by smokey/grey quartz vein.	103320	0.18	0.261
462.05	462.45		2.0 0.5	1 0	QGCV 50	Light grey silicified portion, ~50% smokey/grey crackled brecciated quartz vein, cracks lined by py +/-cpy, diss in silicified portion.	103321	0.625	1.17
462.45	464.21		1.0 0.1	1 3	QGCV 10	Mt stringers bound by smokey/grey qtz vein. Py +/-cpy stringers bound by qtz vein. Relatively unaltered.	103322	0.34	0.543
464.21	466.10		1.0 0.1	1	QGCV 10	Rare red hem infilling 25-35 degrees C.A. Local potassic altered portions. ~25cm silified portions.	103323	0.193	0.332
466.10	466.53		1.0 0.1	1 1	QGCV 10	Relatively unaltered.	103324	0.334	0.557
466.53	467.58		2.0 0.5	1 0	QGVN 10	Local slight grey, pervasively silified poritons, protolith partially overprinted.	103325	0.476	0.947
467.58	468.03		1.0 0.1	1 0	QGVN 10	Relatively unaltered. 2mm mafic, dark brown/black subhedral phenocrysts. ~30% of phenocrysts in monzodiorite matrix.	103326	0.577	1.48
468.03	469.03		2.0 0.5	1 0	QGVN 15	Locally silicified portions. Plagio, qtz, mafic pyroxene and/or amphibole phenocrysts in fine grained matrix, grey - fine qtz and plagioclase. Locally pristine. Protolith overprinted by silicification locally. Smokey/grey qtz vein, pink/salmon zeolite and rare py +/-cpy stringers assoc with qtz veining. Locally increased py +/-cpy diss in silicified portions. Veining is randomly oriented.	103327	0.483	0.966
469.03	470.59		2.0 0.5	1 0	QGVN 15		103329	0.338	0.688
470.59	472.51		2.0 0.5	1 1	QGVN 15	Silicified portion with up to 3% py and ~ 0.5% cpy diss.	103330	0.461	0.865

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
472.51	472.94	Fine-medium-grained porphyritic silicic medium green	2.0	0.5	1	0 QGVN 15	103331	0.202	0.399
472.94	474.05		2.0	0.5	1	0 QGVN 15	103332	0.367	0.792
474.05	474.88		1.0	0.1	1	0 QGVN 10	103333	0.349	0.797
474.88	476.27		2.0	0.5	1	0 QGVN 15	103334	0.104	0.255
						Light grey, pervasively moderate to high silicification. Py +/-cpy stringers assoc with qv and zeolite ~ 0 degrees C.A.			
476.27	477.48		2.0	0.5	1	0 QGVN 15	103335	0.186	0.463
477.48	479.90		2.0	0.5	1	QGVN 15	103336	0.297	0.77
						Silicified portion, py +/-cpy stringer assoc with qtz veining. Locally unaltered monzodiorite.			
479.90	481.99		2.0	0.5	1	QGVN 15	103337	0.253	0.581
481.99	483.98		2.0	0.5	1	1 QGVN 15	103338	0.217	0.52
						Qtz veining weakly brecciated. Randomly cut by py +/-cpy stringers and pink zeolite			
483.98	484.63		2.0	0.5	1	0 QGVN 15	103339	0.199	0.365
484.63	485.08	Fine-medium-grained porphyritic silicic medium grey	3.0	0.7	1	5 QGVN 15	103340	0.244	0.469
						Py +/-cpy stringers locally assoc with qtz veins. Cpy rich sulphide aggregate bound by smokey/grey qtz vein; pink zeolite clumps also bound in the qtz vein. Py +/-cpy also finely diss in pale to medium grey, pervasively silicified, moderate to high. Minor faulted zone ~0 degrees C.A. filled with clay and gouge material. Qtz veining weakly brecciated. Mo mt diss identified. Protolith overprinted by silicification.			
485.08	485.56	Fine-medium-grained porphyritic silicic medium green	1.0	0.1	1	0 QGVN 7	103341	0.226	0.453
						Rare py +/-cpy stringers assoc with smokey/grey qtz vein assoc with pink zeolite stringer. Veining is randomly oriented. Plagioclase, qtz and dark green/black mafic pyroxene or amphibole phenocrysts in fine (possibly qtz and plagioclase), light grey matrix.			
485.56	487.37	Fine-medium-grained porphyritic medium green	1.0	0.1	1	2 QGVN 7	103342	0.201	0.509
487.37	487.91		1.0	0.1	1	0 QGVN 7	103343	0.244	0.409
						Relatively unaltered.			
487.91	489.19		1.0	0.1	1	3 QGVN 7	103344	0.544	1.095
						Silicified portion enveloping smokey/grey qtz vein assoc with py +/-cpy stringers. Locally assoc with zeo.			
489.19	490.50		1.0	0.1	1	0 QGVN 7	103345	0.356	0.806
						Local potassic altered portions, pervasive alteration, weak to moderate.			
490.50	491.28		1.0	0.1	1	0 QGVN 7	103346	0.631	1.19
						Moderate to highly silicified, pervasive, protolith overprinted. Py +/-cpy diss in silicified matrix.			

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm		
491.28	491.60	Fine-grained light grey porphyritic silicic	3.0	0.7	1	0 QVN	30	Py +/-cpy stringers assoc with smokey/grey qtz vein, also diss in moderate to high, pervasively altered monzodiorite - protolith overprinted, minor mafic green specks assoc with diss py locally.	103347	0.157	0.661
491.60	492.10		3.0	0.7	1	0			103348	0.611	1.115
492.10	494.23		3.0	0.7	1	0			103349	0.411	0.84
494.23	494.76		3.0	0.7	1	0		~5% py and ~0.7% cpy locally	103350	0.231	0.578
494.76	495.73		3.0	0.7	1	0 QVN	15	Local dark green chloritic portion, with diss py +/-cpy. Py stringer bound by qtz vein and silicified portion. Portion with pervasive, moderate to high silicification.	103351	0.408	0.814
495.73	496.90		3.0	0.7	1	0 QVN	20	Minor carb veining assoc with qtz vein, minor fizzing. Locally vuggy qv, dissolution structure, possibly where carb has been removed.	103352	0.356	0.618
496.90	497.57		3.0	0.7	1	0 QVN	50		103353	0.452	1.215
497.57	497.96	Fine-grained light green porphyritic silicic	1.0	0.1		0 CTC	45	Rare py +/-cpy diss. Pagio, qtz, mafic pyroxene and/or amphibole phenocrysts in light grey fine, probably plagioclase and qtz matrix. Protolith destroyed locally. Weak potassic altered portions. Randomly cut by qtz and zeolite stringers. Contact defined by clay, gouge filled fault ~45 degrees to C.A.	103355	0.732	1.9
497.96	578.21	POLYLITHIC TUFF									
497.96	499.79	Fine-medium-grained medium green	1.0	0.1		0 QGVN	10	Polyolithic tuff. Rare py stringers; generally assoc with qtz vein, diss in mineralized fragments. Also diss in tuff matrix locally. Fragments in tuff include qtz, bladed feldspar porphyry, qtz monzodiorite. Fragment boundaries are not defined, ghost. Local potassic alteration, pink stain. Potassic alteration, pink/orange stain around py veining. BKN locally. Protolith overprinted by silicification and chlorite. Hem infilling it locally. Qtz, zeolite veining randomly oriented.	103356	0.032	0.061
499.79	501.52		1.0	0.1		10 QGVN	10		103357	0.031	0.041
501.52	502.85		1.0	0.1		23 QGVN	10	Rare hem infilling jts.	103358	0.02	0.012
502.85	504.54		1.0	0.1		18 QGVN	10		103359	0.009	0.019
504.54	506.49		1.0	0.1		5 QGVN	10		103360	0.013	0.07
506.49	508.60		1.0	0.1		24 QGVN	10		103361	0.002	0.007
508.60	510.57		1.0	0.1		33 QGVN	10		103362	0.005	0.007

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
510.57	512.45	Fine-medium-grained medium green	1.0 0.1	6	QGVN	15	Zeo x-cutting all other veining.	103363	0.004	0.008
512.45	514.46		1.0 0.1	29	QGVN	15	Zeo x-cutting all other veining. Felsic fragments present in tuff (Unit X fragment?)	103364	0.009	0.037
514.46	515.49		1.0 0.1	10	QGVN	15	Zeo x-cutting all other veining. ~10% portion with diss py stringers assoc with zeolite veining ~40 degrees C.A.	103365	0.015	0.052
515.49	517.34		1.0 0.1	3	QGVN	15	Zeo x-cutting all other veining. Chl veining assoc with qtz. Discontinuous qtz stringers - possibly controlled by structure.	103366	0.002	0.012
517.34	517.94		1.0 0.1	2	QGVN	15	Zeo x-cutting all other veining. Sericite altered fragment in tuff, boundaries not visible. Minor faults - lined by clay/gouge material.	103367	0.003	0.022
517.94	520.29		1.0 0.1	3	QGVN	15	Rare py stringers, generally assoc with qtz vein, diss in mineralized fragments, diss in tuff matrix locally. Fragments in tuff includes qtz, plagioclase, bladed feldspar porphyry and qtz monzodiorite. Fragment boundaries weakly defined locally. Localized potassic and possibly sericite altered fragment with pink and yellow staining respectively. Matrix is generally dark green, mafic, fine grained. Qtz/zeolite veining randomly oriented. Zeo x-cutting all other veining.	103368	0.004	0.009
520.29	522.04		1.0 0.1	8	QGVN	15		103369	0.002	-2
522.04	523.78		1.0 0.1	19	QGVN	15		103370	0.013	0.03
523.78	525.51		1.0 0.1	7	QGVN	15		103371	0.015	0.018
525.51	527.05		1.0 0.1	29	QGVN	15		103372	0.002	0.024
527.05	528.64		1.0 0.1	16	QGVN	15	~3cm qtz vein assoc with diss py. Unit bound by potassic alteration.	103373	0.008	0.013
528.64	529.07		1.0 0.1		QGVN	15	Pink/orange moderate to high pervasive potassic altered portion with chl stringers.	103374	0.002	0.017
529.07	530.75		1.0 0.1	9	QGVN	15	Pink/white late stage zeolite and carb veining.	103375	0.004	0.017
530.75	532.58		1.0 0.1	29	QGVN	15	Qtz vein assoc with py aggregates - bound by pink potassic ~7cm band.	103376	0.016	0.013
532.58	534.49		1.0 0.1	12	QGVN	15		103377	0.013	0.068
534.49	536.06		1.0 0.1	4	QGVN	15		103378	0.01	0.012
536.06	536.70		1.0 0.1	15	QGVN	15	Rare light green epidote veining locally assoc with pink zeolite veining.	103379	0.011	0.02

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
536.70	538.77	Fine-medium-grained medium green	1.0	0.1	27 QGVN	15	103381	0.005	0.005
538.77	540.45		1.0	0.1	19 QGVN	15	103382	0.01	0.015
540.45	542.45		1.0	0.1	14 QGVN	15	103383	0.008	0.021
542.45	544.18		1.0	0.1	12 QGVN	15	103384	0.026	0.024
544.18	545.93		1.0	0.1	18 QGVN	15	103385	0.011	0.012
545.93	547.73		1.0	0.1	1 QGVN	15	103386	0.016	0.54
						Epidote stringers assoc with pink zeolite veining.			
						Epidote alteration surrounding dark green/black mafic fine grain fragment. Elongated felsic fragments with white plagio and qtz and dark green mafic phenocrysts in felsic matrix. Vuggy qtz veining x-cutting fragment - veining has dissolution features.			
547.73	549.61		1.0	0.1	0 QGVN	15	103387	0.008	0.026
549.61	550.68		1.0	0.1	2 QGVN	15	103388	0.012	0.011
550.68	552.45		1.0	0.1	10 QGVN	15	103389	0.004	0.006
552.45	553.50		1.0	0.1	10 QGVN	15	103390	0.002	-2
553.50	555.39		1.0	0.1	6 QGVN	15	103391	0.001	-2
555.39	557.25		1.0	0.1	11 QGVN	15	103392	0.001	-2
557.25	559.05		1.0	0.1	6 QGVN	15	103393	0.009	0.009
559.05	560.80		1.0	0.1	2 QGVN	15	103394	0.007	0.05
560.80	562.72		1.0	0.1	8 QGVN	15	103395	0.001	0.021
562.72	564.65		1.0	0.1	11 QGVN	5	103396	-2	0.008
564.65	566.45		1.0	0.1	1	7	103397	-2	0.007
						Py +/- cpy, diss in tuff matrix and some mineralized fragments. Fragments in polyolithic tuff are qtz, bladed porphyry, qtz monzodiorite, Unit X. Outline of fragments not visible. Qtz/zeolite veining randomly oriented.			
566.45	567.70		1.0	0.1	0		103398	0.001	-2
567.70	569.63		1.0	0.1	1		103399	0.002	0.006
569.63	571.70		1.0	0.1	0		103400	-2	-2
571.70	572.55		1.0	0.1	0		103401	-2	-2
572.55	574.13		1.0	0.1	1		103402	-2	-2
574.13	576.07		1.0	0.1	18		103403	0.001	-2
576.07	577.01		1.0	0.1	2		103404	0.001	-2

Hole Number: KN-02-09

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
577.01	578.21	Fine-medium-grained medium green	1.0	0.1	0		103405	0.003	-2
578.21	EOH								

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-10**

Northing: 16264.6	Total Depth: 502.01m
Easting: 10053.6	Azimuth: 0°
Elevation: 1682.7	Dip: -90°

Geologist: B. Mercer
Logged Date: 6/28/2002

Survey Depth	Azimuth	Dip	Comments:
0 m	0 °	-90 °	
100 m	0 °	-88 °	
200 m	0 °	-88 °	
300 m	0 °	-88 °	
400 m	0 °	-88 °	
500 m	10 °	-86 °	

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-10**

From (m)	To (m)	Rock Type	Comments
0	17.37	CASING	
17.37	19.37	MAFIC VOLCANIC FLOW BRECCIA	Strongly altered volcanic bt. Py as disseminations and occasional veinlet. 1-3cm subrounded fragments easily visible.
19.37	25.37	MAFIC VOLCANIC FLOW	Appears to be flow with network of py fractures and disseminated py.
25.37	33.23	MAFIC VOLCANIC FLOW BRECCIA	Heavily disseminated and fractured/vein controlled pyrite.
33.23	34.04	MAFIC VOLCANIC FLOW	Poorly mineralized hyaloclastite.
34.04	36.7	MAFIC VOLCANIC	Silicified, becoming stronger down hole.
36.7	53.8	MAFIC VOLCANIC LITHIC TUFF	Strong mottled texture due to qtz-silica alteration overprinting a chloritized mafic fragmental rock. Py as disseminated fracture fill.
53.8	76.22	ANDESITE LITHIC TUFF	Qtz - weak sericite and pyrite mottled with lime green very soft amorphous mineral that is probably pyrophyllite. Suspect fragmental host due to present texture. Pyrite occurs as disseminations and veinlets.
76.22	76.71	ANDESITE FAULT ZONE	Fault. Sericitic gouge and rubble.
76.71	100.11	ANDESITE LITHIC TUFF	
100.11	100.41	ANDESITE FAULT ZONE	Sericitic fault gouge.
100.41	102.72	ANDESITE LITHIC TUFF	Cpy associated with py in veins.
102.72	112.95	ANDESITE FLOW	
112.95	119	ANDESITE LITHIC TUFF	Contains up to 15-20% lime green very soft mineral that is probably pyrophyllite.

Hole Number: **KN-02-10**

From (m)	To (m)	Rock Type	Comments
119	119.3	ANDESITE FAULT ZONE	Chl alteration much greater than sericite. Silica only very weak and patchy. Can see primary tuffaceous texture.
119.3	121.01	ANDESITE LITHIC TUFF	
121.01	121.31	ANDESITE FAULT ZONE	
121.31	123.88	ANDESITE LITHIC TUFF	
123.88	124.5	ANDESITE FAULT ZONE	Sericite very strong, no chlorite. Clay gouge.
124.5	141.39	ANDESITE LITHIC TUFF	Sericite-clay with weak silica.
141.39	142.63	ANDESITE FAULT ZONE	Ser/clay/py gouge and fault breccia
142.63	172.6	ANDESITE LITHIC TUFF	Strong ser/clay with weak chl. Most pyrite is in massive veinlets. Irregular distributed disseminated py. Patchy silica.
172.6	175.4	ANDESITE BLADED FELDSPAR PORPHYRY	Green plagioclase phenocryst in a chl/ser matrix. Upper contact sharp at 40 degrees to C.A.
175.4	184.51	ANDESITE LITHIC TUFF	
184.51	187	ANDESITE BLADED FELDSPAR PORPHYRY	As for 106492 and 106493. Probably dyke, contacts not clear, obscured by alteration.
187	191	ANDESITE LITHIC TUFF	
191	212.06	ANDESITE FLOW	Strong sericite, weak quartz alteration cut by massive py veinlets. Relatively homogeneous looking, probable flow protolith.
212.06	212.45	ANDESITE FAULT ZONE	Fault gouge.
212.45	230.28	ANDESITE FLOW	Possibly fragmental. Py diss as well as in veins. Very minor zeolite veining. Very weak chlorite.
230.28	276.45	MONZONITE	Dark coloured equigranular textured mafic intrusive. Probably more of a monzodiorite. Occasional pink zeolite/carb veins.

Hole Number: **KN-02-10**

From (m)	To (m)	Rock Type	Comments
276.45	276.8	FAULT ZONE MONZONITE	100% chlorite gouge.
276.8	301	MONZONITE	Highly chloritic porphyry with xenoliths of BFP.
301	331.83	BASALT FLOW	Massive amphibole porphyritic basalt flow with occasional plag phenocrysts. Very homogenous looking relatively unaltered flows. Up to 2% zeolite/carbonate veinlets. Magnetic but too fine grained to see visible magnetite.
331.83	356.3	MONZONITE	Strongly chloritized equigranular medium grained monzonite, chl mask much of original texture. Py is m.g. to cg and var dissm
356.3	356.6	FAULT ZONE	Sericite gouge with K-spar
356.6	384.48	MONZONITE	As for 106593
384.48	451.23	ANDESITE FLOW	Brecciated flow. Bloch chlorite seams separate andesitec looking flow fragments. m.g. dissm sub-hedral py
451.23	452.56	QUARTZ PORPHYRY	Very coarse (2-3mm) square qtz phenocryst in a pale green chloritic matrix. Both contacts are veins @ 40o t.c.a.
452.56	458.93	INTERMEDIATE VOLCANIC BRECCIA	Course poly lithic tuff/bx. Dark green mafic sub rounded fragments and pale cream angular fragments is a green chloritic matrix. Py occurs as irregular blebs in the matrix lower the contact @ 458.93 sharp @ 65o t.c.a.
458.93	471.53	ANDESITE FLOW	
471.53	495.38	INTERMEDIATE VOLCANIC TUFF	Intermedite comp. c.g. volcanic bx. Pale salmon coloured aphanitic fragments in a dark green basaltic looking matrix. C.G. py as irregular dissm blebs. String loucoxene alt from 471.53 -> 475.38
495.38	502.01	POLYLITHIC TUFF TOODOGGONE	

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-10

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	17.37	CASING							
	0.00	17.37					10	-2	-2
17.37	19.37	MAFIC VOLCANIC FLOW BRECCIA							
17.37	19.37	Coarse-grained light grey flow brecciated argillic limonitic	2.0	0.0	0	0	106401	0.04	0.164
19.37	25.37	MAFIC VOLCANIC FLOW							
19.37	21.37	Medium-grained light grey heterogeneous argillic limonitic	2.0	0.0	0	1	106402	0.054	0.158
21.37	23.37		5.0	0.0	0	0	106403	0.063	0.144
23.37	25.37		15.0	0.0	0	0	106404	0.059	0.146
25.37	33.23	MAFIC VOLCANIC FLOW BRECCIA							
25.37	27.37	Coarse-grained light grey phyllic	5.0	0.0	0	0	106405	0.051	0.099
27.37	29.37		6.0	0.0	0	0	106406	0.027	0.072
29.37	31.37		10.0	0.0	0	0	106407	0.038	0.092
31.37	33.23		10.0	0.0	0	0	106408	0.055	0.142
33.23	34.04	MAFIC VOLCANIC FLOW							
33.23	34.04	Coarse-grained green homogeneous propylitic	0.5	0.0	0	0	106409	0.055	0.132
34.04	36.7	MAFIC VOLCANIC							
34.04	36.04	Coarse-grained light grey homogeneous silicic sericitic	10.0	0.0	0	0 PVN 35 2	106410	0.039	0.164
36.04	36.70		12.0	0.0	0	0 PVN 35 3	106411	0.037	0.219
36.7	53.8	MAFIC VOLCANIC LITHIC TUFF							
36.70	38.70	Coarse-grained grey-green homogeneous phyllic chloritic	15.0	0.0	0	0	106412	0.034	0.112

Hole Number: KN-02-10

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
38.70	40.70	Coarse-grained grey-green homogeneous phyllic chloritic	15.0 0.0	0	0	Mono-lithic	106413	0.042	0.102
40.70	42.70		10.0 0.0	0	0		106414	0.022	0.1
42.70	44.70		5.0 0.0	0	0		106415	0.059	0.145
44.70	46.70	Coarse-grained grey homogeneous phyllic	10.0 0.0	0	0		106416	0.051	0.139
46.70	48.70		7.0 0.0	0	0		106417	0.03	0.109
48.70	50.70		15.0 0.0	0	0 PVN	40 5 As above with abundant massive py veins up to 4cm thick.	106418	0.029	0.15
50.70	51.80		15.0 0.0	0	0 PVN	40 5	106419	0.218	0.529
51.80	53.80	Coarse-grained grey mottled quartz-sericite-pyrite phyllic	12.0 0.0	0	0	See next sample.	106420	0.024	0.087
53.8	76.22	ANDESITE LITHIC TUFF							
53.80	55.80	Coarse-grained grey-green mottled quartz-sericite-pyrite phyllic	3.0 0.2	0	0 PVN	50 1 Qtz - weak sericite and pyrite mottled with lime green very soft amorphous mineral that is probably pyrophyllite. Suspect fragmental host due to present texture. Pyrite occurs as disseminations and veinlets.	106421	0.017	0.082
55.80	57.80		4.0 0.2	0	0 PVN	45 1	106422	0.054	0.127
57.80	59.80		5.0 0.2	0	0 PVN	50 1	106423	0.026	0.093
59.80	60.96		7.0 0.2	0	0 PVN	40 0	106424	0.041	0.129
60.96	62.96		7.0 0.2	0	0 PVN	55 1 Qtz - weak sericite and pyrite mottled with lime green very soft amorphous mineral that is probably pyrophyllite. Suspect fragmental host due to present texture. Pyrite occurs as disseminations and veinlets. Reduced to NQTK.	106425	0.014	0.096
62.96	64.96		7.0 0.2	0	1 PVN	50 1	106427	0.053	0.114
64.96	66.96		5.0 0.2	0	0 QVN	40 5	106428	0.066	0.163
66.96	68.96		7.0 0.2	0	0 PVN	45 5 Similar to above textureally but pyrophyllite is weakening and silica is increasing.	106429	0.073	0.181
68.96	70.96		12.0 0.2	0	0 PVN	0 1	106430	0.121	0.241
70.96	72.96		10.0 0.2	0	0 PVN	40 2	106431	0.056	0.131
72.96	74.96		8.0 0.3	0	1 PVN	5 2	106432	0.083	0.178
74.96	76.22		8.0 0.3	0	0 PVN	35 4	106433	0.017	0.077

Hole Number: KN-02-10

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
76.22	76.71	ANDESITE FAULT ZONE							
76.22	76.71	Coarse-grained grey-green broken quartz-sericite-pyrite phyllic	15.0 0.0	0	1	Fault. Sericitic gouge and rubble.	106434	0.016	0.074
76.71	100.11	ANDESITE LITHIC TUFF							
76.71	78.71	Coarse-grained grey-green broken quartz-sericite-pyrite phyllic	10.0 0.3	0	0 PVN	55 5	106435	0.05	0.135
78.71	80.71		8.0 0.3	0	0 PVN	5 3	106436	0.069	0.15
80.71	82.71		8.0 0.3	0	0 PVN	40 4	106437	0.039	0.114
82.71	84.71		8.0 0.3	0	0 PVN	40 5	106438	0.056	0.13
84.71	86.71		5.0 0.0	0	0 PVN	55 1	106439	0.105	0.157
86.71	88.71		3.0 0.0	0	0 PVN	60 2	106440	0.052	0.164
88.71	90.53	Coarse-grained grey broken quartz-sericite-pyrite phyllic	3.0 0.0	0	0 PVN	30 2	106441	0.11	0.286
90.53	92.53	Coarse-grained dark grey broken quartz-sericite-pyrite phyllic	10.0 0.1	0	0 PVN	30 5	106442	0.083	0.313
92.53	93.57	Coarse-grained dark grey mottled quartz-sericite-pyrite phyllic	12.0 0.1	0	0 PVN	60 5	106443	0.048	0.115
93.57	95.21	Coarse-grained yellow mottled quartz-sericite-pyrite sericitic	6.0 0.0	0	0 PVN	45 2	106444	0.047	0.172
95.21	97.21	Coarse-grained grey mottled quartz-sericite-pyrite phyllic	6.0 0.1	0	0 PVN	30 2	106445	0.056	0.119
97.21	99.21		5.0 0.1	0	0 PVN	30 2	106446	0.053	0.162
99.21	100.11		4.0 0.1	0	0 PVN	40 2	106447	0.091	0.183
100.11	100.41	ANDESITE FAULT ZONE							
100.11	100.41	Coarse-grained green broken quartz-sericite-pyrite sericitic	10.0 0.0	0	0	Sericitic fault gouge.	106448	0.095	0.21
100.41	102.72	ANDESITE LITHIC TUFF							
100.41	101.21	Coarse-grained grey-green mottled quartz-sericite-pyrite phyllic	4.0 0.1	0	0 PVN	30 2	106449	0.035	0.106
101.21	102.72		5.0 0.3	0	1 PVN	50 2	106450	0.108	0.229
						As for 106449. Pyrophyllite very strong here. Probably due to relatively impermeable flow vs fragmental host.			
102.72	112.95	ANDESITE FLOW							
102.72	104.72	Coarse-grained light grey mottled quartz-sericite-pyrite phyllic	3.0 0.0	0	0 PVN	50 1	106451	0.081	0.23

Hole Number: KN-02-10

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
104.72	106.72	Coarse-grained light grey homogeneous quartz-sericite-pyrite phyllic	3.0 0.0	0	0 PVN	45 1	106453	0.048	0.166
106.72	108.72		3.0 0.1	0	0 PVN	45 1	106454	0.06	0.16
108.72	110.72		3.0 0.0	0	0 PVN	45 1	106455	0.067	0.199
110.72	112.95		5.0 0.0	0	0 PVN	45 3	106456	0.076	0.217
112.95	119	ANDESITE LITHIC TUFF							
112.95	114.95	Coarse-grained grey-green mottled quartz-sericite-pyrite phyllic	4.0 0.0	0	0 PVN	20 1	106457	0.065	0.165
114.95	116.95		4.0 0.0	0	0 PVN	20 1	106458	0.069	0.172
116.95	119.00		4.0 0.0	0	0 PVN	20 0	106459	0.071	0.174
119	119.3	ANDESITE FAULT ZONE							
119.00	119.30	Coarse-grained dark grey broken chloritic sericitic	0.5 0.0	0	0 FLT	30	106460	0.072	0.175
119.3	121.01	ANDESITE LITHIC TUFF							
119.30	121.01	Coarse-grained dark grey mottled chloritic sericitic	0.5 0.0	0	0		106461	0.043	0.109
121.01	121.31	ANDESITE FAULT ZONE							
121.01	121.31	Coarse-grained green-grey broken chloritic sericitic	2.0 0.0	0	0 FLT	30	106462	0.072	0.207
121.31	123.88	ANDESITE LITHIC TUFF							
121.31	123.00	Coarse-grained green-grey mottled chloritic sericitic	0.5 0.0	0	1		106463	0.038	0.115
123.00	123.88		1.0 0.0	0	0		106464	0.06	0.176
123.88	124.5	ANDESITE FAULT ZONE							
123.88	124.50	Coarse-grained grey broken argillic	3.0 0.0	0	0		106465	0.073	0.191
124.5	141.39	ANDESITE LITHIC TUFF							
124.50	126.36	Coarse-grained grey mottled argillic	4.0 0.0	0	0 PVN	45 1	106466	0.058	0.17
126.36	128.36	Coarse-grained grey-green mottled argillic chloritic	2.0 0.0	0	0 PVN	45 1	106467	0.08	-2
128.36	130.36		2.0 0.0	0	0 PVN	45 1	106468	0.078	0.197

Hole Number: KN-02-10

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
130.36	132.36	Coarse-grained grey-green mottled argillic chloritic	4.0 0.0	0	0 PVN 45 2		106469	0.085	0.224
132.36	134.36		2.0 0.0	0	0 PVN 45 1		106470	0.041	0.133
134.36	136.36		4.0 0.0	0	0 PVN 45 2		106471	0.052	0.181
136.36	138.36		2.0 0.0	0	0 PVN 1		106472	0.067	0.197
138.36	140.36		2.0 0.0	0	0 PVN 1		106473	0.061	0.163
140.36	141.39		5.0 0.0	0	0 PVN 55 2		106474	0.042	0.127
141.39	142.63	ANDESITE FAULT ZONE							
141.39	142.63	Coarse-grained grey-green broken argillic	8.0 0.0	0	1	Ser/clay/py gouge and fault breccia	106475	0.119	0.43
142.63	172.6	ANDESITE LITHIC TUFF							
142.63	144.63	Coarse-grained grey-green mottled argillic	4.0 0.0	0	1 PVN 55 1	Strong ser/clay with weak chl. Most pyrite is in massive veinlets. Irregular distributed disseminated py. Patchy silica.	106476	0.083	0.217
144.63	146.63	Coarse-grained grey-green mottled argillic chloritic	7.0 0.0	0	0 PVN 30 3		106477	0.045	0.153
146.63	148.63		2.0 0.0	0	0 PVN 20 1		106479	0.08	0.217
148.63	150.63		2.0 0.0	0	0 PVN 15 2		106480	0.072	0.243
150.63	152.63		8.0 0.0	0	0 PVN 80 4	Patchy but locally strong vuggy silicification.	106481	0.478	-2
152.63	154.63		1.0 0.0	0	0 PVN 45 0	Very strong chlorite.	106482	0.078	0.214
154.63	156.63		4.0 0.0	0	1 PVN 45 2		106483	0.076	0.212
156.63	158.63		3.0 0.0	0	0 PVN 45 1		106484	0.055	0.15
158.63	160.63		5.0 0.0	0	0 PVN 45 3		106485	0.021	0.08
160.63	162.63		5.0 0.0	0	0 PVN 45 3		106486	0.146	0.198
162.63	164.63	Coarse-grained grey-green mottled chloritic sericitic	3.0 0.0	0	0 PVN 45 1	Continuation of typical mono-lithic tuff with chloritic angular fragments and sericitic +/- clay matrix.	106487	0.145	0.342
164.63	166.63		5.0 0.0	0	0 PVN 45 1		106488	0.107	-2
166.63	168.63		3.0 0.0	0	0 QVN 25 2	Minor vuggy qtz veins up to 2cm wide with massive pyrite.	106489	0.096	0.185
168.63	170.63		3.0 0.0	0	0 QVN 10 4	As for 106489.	106490	0.138	0.25
170.63	172.60		3.0 0.0	0	0 PVN 35 1	Lower 20cm silicified at contact.	106491	0.107	0.188
172.6	175.4	ANDESITE BLADED FELDSPAR PORPHYRY							

Hole Number: KN-02-10

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
172.60	174.60	Coarse-grained dark green chloritic sericitic	4.0 0.0	0	0 PVN 35 4	Green plagioclase phenocryst in a chl/ser matrix. Upper contact sharp at 40 degrees to C.A.	106492	0.113	0.317
174.60	175.40		4.0 0.0	0	0 PVN 35 4		106493	0.297	0.525
175.4	184.51	ANDESITE LITHIC TUFF							
175.40	177.40	Coarse-grained grey-green mottled chloritic sericitic	3.0 0.0	0	0 PVN 35 3		106494	0.123	0.279
177.40	179.40		8.0 0.0	0	0 PVN 35 3	Heavily disseminated py. Bleached and weakly silicified	106495	0.124	0.239
179.40	181.40		3.0 0.0	0	0 PVN 35 3	Py mostly all in veins.	106496	0.119	0.216
181.40	183.40		4.0 0.0	0	0 PVN 20 4		106497	0.092	0.174
183.40	184.51		2.0 0.0	0	0 PVN 80 2		106498	0.1	0.207
184.51	187	ANDESITE BLADED FELDSPAR PORPHYRY							
184.51	186.52	Coarse-grained dark green chloritic	2.0 0.0	0	0 PVN 45 2	As for 106492 and 106493. Probably dyke, contacts not clear, obscured by alteration.	106499	0.156	0.308
186.52	187.00		0.5 0.0	0	0 PVN 45		106500	0.119	0.217
187	191	ANDESITE LITHIC TUFF							
187.00	189.00	Coarse-grained grey-green mottled chloritic sericitic	3.0 0.0	0	0 PVN 45 3		106501	0.131	0.267
189.00	191.00		3.0 0.0	0	0 PVN 45 3		106502	0.072	0.144
191	212.06	ANDESITE FLOW							
191.00	193.00	Medium-grained grey-green homogeneous quartz-sericite-pyrite phyllic	4.0 0.0	0	0 PVN 70 2	Strong sericite, weak quartz alteration cut by massive py veinlets. Relatively homogeneous looking, probable flow protolith.	106503	0.108	0.212
193.00	194.75		8.0 0.0	0	0 PVN 60 3	As above.	106505	0.108	0.219
194.75	196.28	Medium-grained grey-green broken quartz-sericite-pyrite phyllic	10.0 0.0	0	0 PVN 70 5	Brecciated to fractured with pockets of sericite gouge.	106506	0.077	0.178
196.28	198.28	Medium-grained grey-green homogeneous quartz-sericite-pyrite phyllic	7.0 0.0	0	0 PVN 80 2	As for 106503, with abundant disseminated py as well.	106507	0.177	0.363
198.28	200.28		7.0 0.0	0	0 PVN 35 1	As for 106507.	106508	0.109	0.228
200.28	202.28	Medium-grained grey homogeneous quartz-sericite-pyrite argillic	3.0 0.0	0	0 PVN 35 3	Medium grained qtz granules in a matrix of sericite residual feldspar and minor clay. Py predominantly in veins.	106509	0.062	0.12
202.28	204.28		3.0 0.0	0	0 PVN 45 3		106510	0.125	0.239

Hole Number: KN-02-10

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
204.28	206.28	Medium-grained grey homogeneous quartz-sericite-pyrite argillic	3.0 0.0	0	0 PVN 45 3		106511	0.09	0.182
206.28	208.28		3.0 0.0	0	1 PVN 45 3		106512	0.174	0.303
208.28	210.28		3.0 0.0	0	0 PVN 45 3		106513	0.114	0.206
210.28	212.06		8.0 0.0	0	0 PVN 60 6	Py veins up to 5cm wide.	106514	0.217	0.338
212.06	212.45	ANDESITE FAULT ZONE							
212.06	212.45	Medium-grained grey broken sericitic	3.0 0.0	0	0	Fault gouge.	106515	0.271	0.387
212.45	230.28	ANDESITE FLOW							
212.45	214.45	Medium-grained grey-green mottled quartz-sericite-pyrite sericitic	3.0 0.0	0	0 PVN 45 1	Possibly fragmental. Py diss as well as in veins. Very minor zeolite veining. Very weak chlorite.	106516	0.149	0.271
214.45	216.45		3.0 0.0	0	2 PVN 45 1		106517	0.168	0.291
216.45	218.45		3.0 0.0	0	0 PVN 45 1		106518	0.223	0.333
218.45	220.45		3.0 0.0	0	0 PVN 45 1		106519	0.15	0.264
220.45	222.45	Medium-grained dark grey mottled quartz-sericite-pyrite sericitic	2.0 0.0		1 PVN 20 1	Similar to above but alteration is weakening and py veins are less common.	106520	0.135	0.238
222.45	224.45		2.0 0.0		1 PVN 20 1		106521	0.112	0.203
224.45	226.45		2.0 0.0		0 PVN 20 1		106522	0.138	0.22
226.45	228.45		2.0 0.0		0 PVN 20 0		106523	0.104	0.154
228.45	230.28		2.0 0.0		1 PVN 20 0		106524	0.161	0.249
230.28	276.45	MONZONITE							
230.28	232.28	Coarse-grained green black chloritic	1.0 0.0		0 PVN 1	Dark coloured equigranular textured mafic intrusive. Probably more of a monzodiorite. Occasional pink zeolite/carb veins.	106525	0.216	0.397
232.28	234.28		1.0 0.0		1 PVN 1		106526	0.17	0.31
234.28	236.28		1.0 0.0		1 PVN 1		106527	0.101	0.151
236.28	238.28		1.0 0.0		1 PVN 1		106528	0.246	0.399
238.28	240.28		1.0 0.0		0 PVN 1		106529	0.163	0.322
240.28	242.28	Coarse-grained light grey sericitic chloritic	1.0 0.0	0	0 PVN 45 1	Similar to above with stronger sericitic alteration partially obscuring igneous texture.	106531	0.15	0.288
242.28	244.28		1.0 0.0	0	2 PVN 45 1		106532	0.355	0.721
244.28	246.48		1.0 0.0	0	3 PVN 45 1		106533	0.149	0.171

Hole Number: KN-02-10

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
246.48	248.48	Coarse-grained dark grey porphyritic chloritic	1.0 0.0	1	2 PVN 25	1 Variably porphyritic monzonite. Feldspar phenocrysts range up to 1cm by 0.3cm. Plagioclase is pale cream to pale green. Feldspar matrix is weakly altered. Chlorite is pervasive. Saussurization of feldspar is variable.	106534	0.129	0.256
248.48	250.48		1.0 0.0	2	40 PVN 25	1	106535	0.246	0.364
250.48	252.48		0.5 0.0	2	13		106536	0.205	0.305
252.48	254.48		0.5 0.0	2	13		106537	0.156	0.125
254.48	256.48		0.5 0.0	2	20		106538	0.227	0.349
256.48	258.48		0.5 0.0	2	8		106539	0.109	0.125
258.48	260.48		0.5 0.0	2	10 ZVN 50	Approximately 1-2% pale pink zeolite/carbonate veinlets cut section at moderate intervals.	106540	0.089	0.117
260.48	262.48		0.5 0.0	2	11 50		106541	0.116	0.101
262.48	264.48		0.5 0.0	2	10 50		106542	0.168	0.124
264.48	266.48		0.5 0.0	2	6 50		106543	0.193	0.254
266.48	268.48		1.0 0.0	2	13 PVN 40	1 Minor massive py veins.	106544	0.191	0.327
268.48	270.48		0.1 0.0	2	6	Strongly porphyritic, pale green plagioclase phenocrysts up to 1cm long. Appears to be xenolith of BFP. These xenoliths are common down the hole throughout.	106545	0.217	0.44
270.48	272.48		0.1 0.0	2	6		106546	0.216	0.401
272.48	274.48		0.1 0.0	2	42		106547	0.33	0.511
274.48	276.45		0.1 0.0	2	0		106548	0.306	0.514
276.45	276.8	FAULT ZONE MONZONITE							
276.45	276.80	Fine-grained dark green chloritic	0.1 0.0	0	1	100% chlorite gouge.	106549	0.326	0.28
276.8	301	MONZONITE							
276.80	278.80	Coarse-grained dark grey porphyritic chloritic	0.1 0.0	2	2	Highly chloritic porphyry with xenoliths of BFP.	106550	0.265	0.371
278.80	280.80		0.1 0.0	2	15 QVN 45	5 Unit is cut by qtz-feldspar veinlets and occasional pink zeolite veinlet. Very minor py disseminated throughout and in qtz veins.	106551	0.306	0.364
280.80	282.80	Coarse-grained green-grey porphyritic chloritic	0.5 0.1	2	10 QVN 45	5 One qtz vein at 283.00m contains coarse grain (1cm) blebs of cpy.	106552	0.213	0.303
282.80	284.80		0.5 0.0	2	10 QVN 45	5	106553	0.217	0.317

Hole Number: KN-02-10

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
284.80	286.80	Coarse-grained green-grey porphyritic chloritic	0.5 0.0	2	20 QVN 45 5		106554	0.197	0.346
286.80	288.80		0.5 0.0	2	7 QVN 45 5		106555	0.285	0.453
288.80	290.80		0.5 0.0	2	5 QVN 45 5		106557	0.215	0.268
290.80	292.80		0.5 0.0	2	29 QVN 45 5		106558	0.342	0.626
292.80	294.80		0.5 0.0	2	3 QVN 45 5		106559	0.295	0.624
294.80	296.80		0.5 0.0	2	11 QVN 45 5		106560	0.21	0.291
296.80	298.80		0.5 0.0	2	5 QVN 45 5		106561	0.207	0.359
298.80	301.00		0.5 0.0	2	2 QVN 45 5	contact sharp at 20 degrees to core axis.	106562	0.198	0.335
301	331.83	BASALT FLOW							
301.00	303.00	Fine-grained dark green porphyritic chloritic	0.0 0.0		7 ZVN 30 1	Massive amphibole porphyritic basalt flow with occasional plag phenocrysts. Very homogenous looking relatively unaltered flows. Up to 2% zeolite/carbonate veinlets. Magnetic but too fine grained to see visible magnetite.	106563	0.046	0.04
303.00	305.00		0.0 0.0		9 ZVN 30 1		106564	0.062	0.077
305.00	307.00		0.0 0.0		13 ZVN 30 1		106565	0.007	-2
307.00	309.00		0.0 0.0		15 ZVN 30 1		106566	0.006	-2
309.00	311.00		0.0 0.0		17 ZVN 30 1		106567	0.006	-2
311.00	313.00		0.0 0.0		17 ZVN 30 1	Weak sericite alteration picking up.	106568	0.024	0.036
313.00	315.00		0.0 0.0		16 ZVN 30 1	Contains 1x18cm qtz veins with minor pyrite.	106569	0.006	0.005
315.00	317.00		0.0 0.0		13 ZVN 30 1	Zone of strong bleaching and plus trace pink feldspar veining. Contact alteration.	106570	0.006	-2
317.00	319.00		0.0 0.0		14 ZVN 15 3	Strongly chloritized equipgranular medium grained monzonite,	106571	0.007	-2
319.00	321.00		0.0 0.0		2 ZVN 15 3		106572	0.075	0.111
321.00	323.00		0.0 0.0		15 ZVN 25 1		106573	0.151	0.298
323.00	325.00		0.0 0.0		8 ZVN 25 1		106574	0.007	-2
325.00	327.00		0.0 0.0		16 ZVN 45 3		106575	0.132	0.299
327.00	329.00	Fine-grained dark green porphyritic chloritic sericitic	0.0 0.0		16 QVN 45 5		106576	0.162	0.308
329.00	331.10		0.1 0.0		18 QVN 55 20		106577	0.141	0.248

Hole Number: KN-02-10

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
331.10	331.83	Coarse-grained light grey heterogeneous silicic sericitic	0.1 0.0	7	QVN 45 2		106578	0.243	0.354
331.83	356.3	MONZONITE							
331.83	333.83	Medium-grained dark green chloritic sericitic	1.0	11	QVN 45 2	Strongly chloritized equigranular medium grained monzonite, chl mask much of original texture. Py is m.g. to cg and var dissm	106579	0.241	0.347
333.83	335.83		1.0	14	QVN 45 2		106580	0.213	0.316
335.83	337.83		1.0	9	QVN 45 2	very weak sericite, patchy loucxene	106582	0.338	0.547
337.83	339.83		1.0	3	QVN 45 2		106583	0.177	0.233
339.83	341.83		2.0	9	QVN 45 2		106584	0.143	0.129
341.83	343.83	Medium-grained dark green chloritic	5.0 0.1	4	QVN 45 2		106585	0.293	0.486
343.83	345.83		5.0 0.1	7	QVN 45 2		106586	0.218	0.392
345.83	347.83		5.0	6	QVN 45 7		106587	0.191	0.329
347.83	349.83		5.0	4	QVN 45 7		106588	0.232	0.667
349.83	350.22		5.0	6	QVN 45 7		106589	0.126	0.47
350.22	351.75	Medium-grained dark green brecciated chloritic sericitic	3.0	7	QVN 45 4	Strongly brecciated and moderately bleached	106590	0.14	0.207
351.75	353.75	Medium-grained dark green chloritic	7.0	0	QVN 45 4	Abundant c.g. to m.g. subhedral py in strongly chloritized Monzonite	106591	0.169	0.282
353.75	355.75		7.0 0.0	0	QVN 45 4		106592	0.186	0.357
355.75	356.30	Medium-grained light green chloritic sericitic	0.5 0.0	0	QVN 45 20	Pale green bleached, moderately sericitic alt. Mag possibly be inclusion of altered flow in intrusion	106593	0.4	0.745
356.3	356.6	FAULT ZONE							
356.30	356.60	Medium-grained light green sericitic	0.5 0.0	2		Sericite gouge with K-spar	106594	0.12	0.237
356.6	384.48	MONZONITE							
356.60	358.60	Medium-grained light green chloritic sericitic	0.5 0.0	1	KVN 45	As for 106593	106595	0.279	0.478
358.60	360.50	Medium-grained light green homogeneous chloritic sericitic	1.0 0.0	0	KVN 40 1	Py in vuggy cavities in host rock or in feldspar veins	106596	0.226	0.407
360.50	362.50	Coarse-grained dark grey chloritic biotite	3.0 0.0	0	QF 70 8		106597	0.298	0.498
362.50	364.50		3.0 0.0	1	QF 70 5	Dark grey to nearly black altered Monzodiorite. .c.g. mafic minerals in a matrix of cream and pale pink feldspar	106598	0.294	0.606

Hole Number: KN-02-10

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
364.50	366.50	Coarse-grained dark grey chloritic biotite	6.0 0.0	1	PVN 30 3		106599	0.153	0.322
366.50	368.50		2.0 0.0	2	QF 70 2		106600	0.341	0.539
368.50	370.50		2.0 0.0	2	PVN 15 2		106601	0.101	0.168
370.50	372.50		2.0 0.0	2	PVN 15 2		106602	0.108	0.173
372.50	374.50		2.0 0.0	0	PVN 15 2		106603	0.165	0.222
374.50	376.50		1.0 0.0	1	PVN 15 2		106604	0.136	0.14
376.50	377.01		1.0 0.0	9	PVN 15 0		106605	0.214	0.22
377.01	379.01	Coarse-grained white chloritic argillic	1.0 0.0	1	PVN 15 0	strong clay alt. of feldspars	106606	0.149	0.177
379.01	381.01		1.0 0.0	2	PVN 45 0		106608	0.12	0.149
381.01	382.80		1.0 0.0	3	PVN 70 0		106609	0.167	0.167
382.80	384.48	Coarse-grained tan chloritic sericitic	8.0 0.0	6	QF 45 2	Heavily dissm py near contact. contact with volcanics below sharp at 650 t.c.a.	106610	0.126	0.159
384.48	451.23	ANDESITE FLOW							
384.48	386.48	Fine-grained dark green in-situ brecciated chloritic	3.0 0.0	4	QF 45 2	Brecciated flow. Bloch chlorite seams separate andesitec looking flow fragments. m.g. dissm sub-hedral py	106611	0.188	0.186
386.48	388.48		3.0 0.0	5	QF 45 2		106612	0.247	0.376
388.48	390.48		3.0 0.0	2	QF 45 2		106613	0.258	0.359
390.48	392.48		3.0 0.0	4	QF 45 2		106614	0.273	0.32
392.48	394.48		3.0 0.0	4	QF 45 4		106615	0.176	0.135
394.48	396.48		3.0 0.0	5	QF 45 4		106616	0.16	0.138
396.48	398.48		3.0 0.0	6	QF 45 4		106617	0.125	0.091
398.48	400.48		2.0 0.0	2	QF 50 2		106618	0.136	0.116
400.48	402.48		2.0 0.0	6	PVN 60 1	Occ. Massive py vein	106619	0.188	0.2
402.48	404.48		2.0 0.0	2	PVN 30 0		106620	0.147	0.086
404.48	406.48		2.0 0.0	8	PVN 30 0		106621	0.097	0.086
406.48	408.48		3.0 0.0		QF 30 4	Much of the py in this sample is c.g in Qtz- k-spar veins the remainder is in m.g. ->c.g. sub -hedral flecks	106622	0.131	0.101
408.48	410.48	Fine-grained green in-situ brecciated chloritic	1.0 0.0		QF 30 5		106623	0.102	0.111
410.48	412.48		4.0 0.0		QF 30 5		106624	0.117	0.084

Hole Number: KN-02-10

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
412.48	414.48	Fine-grained green in-situ brecciated chloritic	3.0 0.0		QF 30 5		106625	0.156	0.123
414.48	416.48		3.0 0.0		QF 40 2		106626	0.145	0.114
416.48	418.48		2.0 0.0		QF 45 2		106627	0.136	0.116
418.48	420.48		5.0 0.0		QF 45 2		106628	0.178	0.137
420.48	422.48		6.0 0.0		QF 30 10	Most of the py is in v.c.g. sub hedral cluts in the rock matrix	106629	0.183	0.141
422.48	424.48		6.0 0.0		QF 30 10		106630	0.141	0.076
424.48	426.38		4.0 0.1		QF 55 7	Py is in qtz- k-spar veins. Trace cpy.	106631	0.216	0.178
426.38	426.68	Fine-grained dark green brecciated chloritic	5.0 0.0		GVN 30 5	Fracture zone with several vuggy veins with enhdral gypsum	106632	0.16	0.124
426.68	428.68	Fine-grained green in-situ brecciated chloritic	3.0 0.0		QF 35 1		106634	0.153	0.169
428.68	430.68		3.0 0.0		QF 35 1		106635	0.113	0.124
430.68	432.68		3.0 0.0		QF 35 1		106636	0.111	0.084
432.68	434.68		1.0 0.0		ZCV 35 5	Calcite veins picking up downhole turning to cal/zeo veins Irregular in shape	106637	0.173	0.14
434.68	436.68	Fine-grained green in-situ brecciated chloritic sericitic	1.0 0.0		ZCV 35 8		106638	0.18	0.14
436.68	438.68	Fine-grained green in-situ brecciated chloritic	1.0 0.0		ZCV 35 10		106639	0.215	0.272
438.68	440.68		1.0 0.0		ZVN 50 5	Predominantly weakly alt. only with very weak py mineralization zeo/cal veinlets -> qtz - k-spar veinlets	106640	0.169	0.18
440.68	442.68		0.5 0.0	16	ZVN 30 5		106641	0.193	0.133
442.68	444.68		0.5 0.0	13	ZVN 30 10		106642	0.188	0.213
444.68	446.68		0.5 0.0	13	ZVN 30 5		106643	0.213	0.204
446.68	448.68		1.0 0.0	6	ZVN 30 3		106644	0.215	0.274
448.68	450.68		1.0 0.0	7	QF 30 1		106645	0.201	0.148
450.68	451.23		1.0 0.0	7	QF 30 1		106646	0.249	0.423
451.23	452.56	QUARTZ PORPHYRY							
451.23	452.56	Coarse-grained green porphyritic chloritic	0.1 0.0	8		Very coarse (2-3mm) square qtz phenocryst in a pale green chloritic matrix. Both contacts are veins @ 400 t.c.a.	106647	0.113	0.064

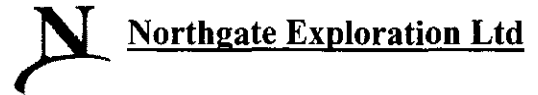
Hole Number: KN-02-10

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
452.56	458.93	INTERMEDIATE VOLCANIC BRECCIA							
452.56	454.56	Coarse-grained green brecciated chloritic	5.0	0.0	32	Course poly lithic tuff/bx. Dark green mafic sub rounded fragments and pale cream angular fragments is a green chloritic matrix. Py occurs as irregular blebs in the matrix lower the contact @ 458.93 sharp @ 650 t.c.a.	106648	0.192	0.087
454.56	456.56		5.0	0.0	8		106649	0.139	0.063
456.56	458.93		5.0	0.0	16		106650	0.2	0.176
458.93	471.53	ANDESITE FLOW							
458.93	460.93	Fine-grained green homogeneous chloritic	5.0	0.0	4 QF 35 0	Cut by several 2 -10 cm wide white qtz veins only trace fig. Py. Slightly bleached and weakly sericitic	106651	0.238	0.241
460.93	462.93		5.0	0.0	3 QF 35 0		106652	0.276	0.193
462.93	463.95		5.0	0.0	2 QF 35 0		106653	0.321	0.171
463.95	465.95	Fine-grained green in-situ brecciated chloritic sericitic	0.5	0.0	0 QVN 70 15		106654	0.2	0.133
465.95	467.95	Fine-grained green homogeneous chloritic	0.5	0.0	1 QF 35 0		106655	0.256	0.262
467.95	469.95		0.5	0.0	7 QF 35 0		106656	0.145	0.167
469.95	471.53		0.5	0.0	9 QF 35 0		106657	0.13	0.034
471.53	495.38	INTERMEDIATE VOLCANIC TUFF							
471.53	473.53	Coarse-grained green chloritic	1.0	0.0	20	Intermedite comp. c.g. volcanic bx. Pale salmon coloured aphanitic fragments in a dark green basaltic looking matrix. C.G. py as irregular dissm blebs. String loucoxene alt from 471.53 -> 475.38	106658	0.159	0.073
473.53	475.38		1.0	0.0	16		106660	0.244	0.407
475.38	477.38	Coarse-grained dark green chloritic	2.0	0.0	7 ZVN 30 1	Similar to above but lapilli are mostly dark green as well. Strongly chloritic. Can still see pale salmon to tan colour intermitantly. Py. occurs as subhedral blebs dissm throughout.	106661	0.181	0.085
477.38	479.38		2.0	0.0	16 ZVN 30 1		106662	0.161	0.074
479.38	481.38		4.0	0.0	22 ZVN 35 1		106663	0.162	0.109
481.38	483.38		3.0	0.0	19 ZVN 35 1		106664	0.183	0.047
483.38	485.38		3.0	0.0	3 ZVN 35 1		106665	0.216	0.153
485.38	487.38		3.0	0.0	15 ZVN 35 1		106666	0.284	0.589

Hole Number: KN-02-10

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
487.38	489.38	Coarse-grained dark green chloritic	3.0	0.0	6 ZVN 35	1	106667	0.188	0.099
489.38	491.38		3.0	0.0	3 ZVN 35	1	106668	0.2	0.117
491.38	493.38		3.0	0.0	5 ZVN 35	1	106669	0.29	0.264
493.38	495.38		3.0	0.0	2 ZVN 35	1	106670	0.245	0.218
495.38	502.01	POLYLITHIC TUFF TOODOGGONE							
495.38	497.38	Coarse-grained dark green fragmental chloritic	3.0	0.0	26 ZVN 35	1	106671	0.01	-2
497.38	498.35		0.0	0.0	11 ZVN 70	1	106672	0.007	0.007
498.35	500.35		0.0	0.0	30 ZVN 70	1	106673	0.004	-2
500.35	502.01		0.0	0.0	5 ZVN 70	1	106674	0.008	0.005
502.01	EOH								

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-11**

Northing: 16489.5	Total Depth: 496.8m
Easting: 10157.5	Azimuth: 180 ^o
Elevation: 1784.9	Dip: -85 ^o

Geologist: B. Mercer
Logged Date: 7/3/2002

Survey Depth	Azimuth	Dip	Comments:
0 m	180 ^o	-85 ^o	No surveys

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-11**

From (m)	To (m)	Rock Type	Comments
0	53.65	ANDESITE TOODOGGONE	Green to dark near featureless basalt. Under a hand lens it is comprised of approximately 25% sub-hedral mafic minerals and magnetite in a total anhedral matrix of pale green plagioclase. Unit is very badly broken and rubbly with minor Fe-stain on fractures. Minor amounts of pink zeolite on fractures as well. Core recovery very poor.
53.65	54.25	ANDESITE BRECCIA	Fault breccia, chlorite with pyrite cementing wall rock.
54.25	56	FAULT ZONE FLOW	
56	65.75	ANDESITE TOODOGGONE	
65.75	81	CONGLOMERATE TOODOGGONE	V.C.G. Volcaniclastically derived conglomerate contains polyolithic clasts that are rounded, sub-rounded and angular. Lithologies include mafic lava, rhyolite/dacite and various porphyries including BFP. It is poorly sorted and matrix supported. Unaltered. This is the same unit called polyolithic tuff in KN-02-02.
81	81.86	FAULT ZONE TOODOGGONE	Sheared, sericitized pyrite.
81.86	110.2	CONGLOMERATE TOODOGGONE	Strong sericite alteration. Massive pyrite seams at upper and lower contacts. Trace c. g. cpy in lower seam in qtz vein.
110.2	128.56	FELSIC VOLCANIC TOODOGGONE	Very course grained to blocky polymictic volcanic breccia, predominantly felsic with many fragments of monzonitic composition. More clast supported but locally matrix supported. White dacite and intermediate lava fragments common. Very weakly chloritic to non-chloritic locally.
128.56	137.56	DACITE TOODOGGONE	Dark green near aphanitic flow. Rare qtz eyes, but rock is very hard. Occasionally pale green feldspar less than 1mm.
137.56	141.48	DACITE BRECCIA	Clast supported breccia of dark green and pale cream dacite. Very angular and unsorted. Both contacts sharp at about 37 degrees.
141.48	146.75	ANDESITE TUFF	Dark green andesite fragments in fine grained matrix. Zeolite/anhydrite veins well zoned.

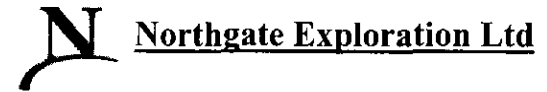
Hole Number: **KN-02-11**

From (m)	To (m)	Rock Type	Comments
146.75	155.25	ANDESITE TOODOGGONE	Pale salmon to pale green nondescript intermediate flow. Fractured and cut by numerous thin zeolite/anhydrite veinlets.
155.25	171.75	INTERMEDIATE VOLCANIC TOODOGGONE	Similar to above, flows with minor flow-top breccia. Differs from above due to the addition of nearly uniformly distributed very fine grained disseminated py. Py is euhedral and <<1mm in size. Possibly more felsic than andesite.
171.75	198.62	INTERMEDIATE VOLCANIC BRECCIA	Breccia with weak to moderate insipient (?) silica flooding polyolithic volcanoclastic, matrix supported with occasional large blocks.
198.62	199.38	INTERMEDIATE VOLCANIC TOODOGGONE	Approximately 60% flooded with poorly zoned zeo/carb veins. Trace gypsum in veins.
199.38	282.17	CONGLOMERATE TOODOGGONE	Unsilicified polyolithic blocky conglomerate BFP, And, Monz, dacite clast. Sub-angular to sub-rounded. Similar to 108101 except it is generally more blocky and more polyolithic.
282.17	282.47	FAULT ZONE	Chl gouge zone cut by zeo/carb veinlets.
282.47	290.03	CONGLOMERATE TOODOGGONE	Several large blocks up to 40cm of pale salmon qtz porphyry. Also contains block of mineralized fragments/within this fragmental.
290.03	290.4	FAULT ZONE	Fault. Same as for 108157.
290.4	292.02	CONGLOMERATE TOODOGGONE	
292.02	292.42	FAULT ZONE	
292.42	397.81	CONGLOMERATE TOODOGGONE	From here down is a wide assortment of plagioclase and qtz porphyries as fragments in this breccia.
397.81	399.15	FAULT ZONE CONGLOMERATE	Gouge cemented fault breccia.
399.15	408.43	INTERMEDIATE VOLCANIC TOODOGGONE	Grey-green massive flow cut by numerous zeo/carb veinlets and occasional banded calcite vein (1-3cm).
408.43	420.7	MONZONITE	Equigranular medium grained monzonite dyke cut by numerous zeolite veinlets and strong bleaching grading into strong potassic flooding. Upper contact gradational due to bleaching obscuring actual contact. Lower contact broken and ground.

Hole Number: **KN-02-11**

From (m)	To (m)	Rock Type	Comments
420.7	453.9	CONGLOMERATE TOODOGGONE	Polymictic conglomerate cut by zeolite veinlets.
453.9	457	MONZONITE	Strongly bleached monzonite dyke. Upper contact is vuggy qtz vein.
457	496.82	CONGLOMERATE TOODOGGONE	Polymictic conglomerate.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-11

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	53.65	ANDESITE TOODOGGONE							
0.00	2.00	Fine-grained grey homogeneous chloritic hematitic	0.0	0.0	2	19			
						Green to dark near featureless basalt. Under a hand lens it is comprised of approximately 25% sub-hedral mafic minerals and magnetite in a total anhedral matrix of pale green plagioclase. Unit is very badly broken and rubbly with minor Fe-stain on fractures. Minor amounts of pink zeolite on fractures as well. Core recovery very poor.	11	-2	-2
2.00	4.00		0.0	0.0	2	27			
						Same as for 108001	108002	-2	-2
4.00	6.00		0.0	0.0	2	11			
							108003	-2	-2
6.00	8.00		0.0	0.0	2	30			
							108004	-2	-2
8.00	10.00		0.0	0.0	2	31			
							108005	-2	0.017
10.00	12.00		0.0	0.0	2	14			
							108006	-2	-2
12.00	14.00		0.0	0.0	2	9			
							108007	-2	-2
14.00	16.00		0.0	0.0	2	11			
						Minor epidote locally.	108008	-2	-2
16.00	18.00		0.0	0.0	2	33			
							108009	-2	-2
18.00	20.00		0.0	0.0	2	9			
							108010	-2	0.07
20.00	22.00		0.0	0.0	10	147			
							108011	-2	-2
22.00	24.00		0.0	0.0	1	3			
							108012	-2	-2
24.00	26.00		0.0	0.0	1	4			
							108013	-2	-2
26.00	28.00		0.0	0.0	1	9			
							108014	-2	-2
28.00	30.00		0.0	0.0	1	5 ZVN 30 7			
						Zeolite/anhydrite veins picking up intensity from here. Prominent veinlets are at moderate angles with irregular fracture fill between veins in multiple orientations.	108015	-2	0.009
30.00	32.00	Fine-grained grey homogeneous chloritic	0.0	0.0	1	25 ZVN 30 7			
							108016	-2	-2
32.00	34.00		0.0	0.0	1	11 ZVN 30 7			
							108017	-2	-2
34.00	36.00		0.0	0.0	1	12 ZVN 30 7			
							108018	-2	-2
36.00	38.00		0.0	0.0	1	16 ZVN 30 7			
							108019	-2	-2
38.00	40.00		0.0	0.0	1	25			
							108020	-2	0.014

Hole Number: KN-02-11

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
40.00	42.00	Fine-grained grey homogeneous chloritic	0.0 0.0	1	25 ZVN 30 7		108021	-2	-2
42.00	44.00	Fine-grained red fragmental chloritic	0.0 0.0	2	16 ZVN 30 30	Abundant zeolite/anhydrite veinlets and fracture fill imparts reddish colour over green wall rock.	108022	-2	-2
44.00	46.00	Fine-grained dark green fragmental chloritic	0.0 0.0	2	15 ZVN 30 7		108023	-2	-2
46.00	48.00	Fine-grained grey fragmental chloritic	0.0 0.0	2	12 ZVN 30 7		108024	-2	-2
48.00	50.00		0.0 0.0	2	16 ZVN 30 7		108025	-2	-2
50.00	52.00		0.0 0.0	2	21 ZVN 30 7		108027	-2	-2
52.00	53.65		0.0 0.0	2	1 ZVN 30 3		108028	-2	-2
53.65	54.25	ANDESITE BRECCIA							
53.65	54.25	Coarse-grained grey fragmental chloritic	0.0 0.0	2	1 ZVN 30 15	Fault breccia, chlorite with pyrite cementing wall rock.	108029	-2	-2
54.25	56	FAULT ZONE FLOW							
54.25	56.00	Fine-grained light grey brecciated chloritic	5.0 0.0	2	17 ZVN 20 5		108030	-2	-2
56	65.75	ANDESITE TOODOGGONE							
56.00	58.00	Fine-grained green-grey fragmental chloritic	0.0 0.0	3	25 ZVN 20 5		108031	0.001	-2
58.00	60.00		0.0 0.0	3	26 ZVN 20 3		108032	-2	-2
60.00	62.00		0.0 0.0	3	46 ZVN 20 3		108033	-2	-2
62.00	63.10		0.0 0.0	3	73 ZVN 20 3		108034	-2	-2
63.10	63.75	Fine-grained green-grey fragmental sericitic chloritic	30.0 0.0	0	1	Massive py cemented shear zone.	108035	-2	-2
63.75	65.75	green-grey fragmental chloritic	0.0 0.0	2	26 ZVN 20 15	Contact with next unit is 6cm wide qtz-py vein.	108036	0.003	0.01
65.75	81	CONGLOMERATE TOODOGGONE							
65.75	67.75	Coarse-grained green-grey heterogeneous chloritic	0.0 0.0	2	28 ZVN 20 3	V.C.G. Volcaniclastically derived conglomerate contains polyolithic clasts that are rounded, sub-rounded and angular. Lithologies include mafic lava, rhyolite/dacite and various porphyries including BFP. It is poorly sorted and matrix supported. Unaltered. This is the same unit called polyolithic tuff in KN-02-02.	108037	-2	-2
67.75	69.75		0.0 0.0	2	28 ZVN 25 5	Same as for 108037	108038	-2	-2

Hole Number: KN-02-11

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
69.75	71.75	Coarse-grained green-grey heterogeneous chloritic	0.0 0.0	0	25 ZVN 25 3		108039	-2	-2
71.75	73.15		0.1 0.0	2	33 ZVN 25 3	HQ ends. Same as for 108037	108040	-2	-2
73.15	75.15		0.1 0.0	2	25 ZVN 25 3	NQ Starts. Same as for 108037	108041	0.035	0.083
75.15	77.15		0.1 0.0	2	17 ZVN 25 2		108042	-2	-2
77.15	79.15		0.1 0.0	2	3 ZVN 25 2		108043	-2	-2
79.15	81.00		0.0 0.0	2	1 ZVN 20 2	Same as for 10837	108044	-2	-2
81	81.86	FAULT ZONE TOODOGGONE							
81.00	81.86	Coarse-grained light grey brecciated sericitic	20.0 0.5	2	0 FLT 35	Sheared, sericitized pyrite.	108045	-2	-2
81.86	110.2	CONGLOMERATE TOODOGGONE							
81.86	83.86	Coarse-grained grey heterogeneous chloritic sericitic	0.1 0.0	2	15 ZVN 25 2	Strong sericite alteration. Massive pyrite seams at upper and lower contacts. Trace c. g. cpy in lower seam in qtz vein.	108046	0.007	0.028
83.86	85.86	Coarse-grained green-grey heterogeneous chloritic	0.1 0.0	2	19 ZVN 25 0		108047	-2	-2
85.86	87.86		0.1 0.0	2	38 ZVN 25 0	Typical unaltered, except for ubiquitous chlorite conglomerate.	108048	-2	-2
87.86	89.86		0.1 0.0	2	16 ZVN 25 0	3cm wide epidote vein at 89.75m	108049	-2	-2
89.86	91.86		0.1 0.0	2	14 ZVN 25 0		108050	-2	-2
91.86	93.85		0.1 0.0	2	25 ZVN 25 0	Excellent example of conglomerate texture.	108051	0.003	-2
93.85	95.85		0.1 0.0	2	15 ZVN 25 0	At 93.30m is clast of the course matrix porphyry logged as unit x. Mafic minerals 1.5mm x 4mm with strong reaction rims turning to chlorite. Doubly terminated.	108053	-2	-2
95.85	97.85		0.1 0.0	2	23 ZVN 15 10		108054	-2	-2
97.85	99.85		0.1 0.0	2	75 ZVN 15 10		108055	-2	-2
99.85	101.85		0.1 0.0	2	22 ZVN 15 5		108056	-2	-2
101.85	103.85		0.1 0.0	2	17 ZVN 15 1		108057	0.001	-2
103.85	105.85		0.1 0.0	2	17 ZVN 15 1		108058	-2	-2
105.85	107.85		0.1 0.0	2	25 ZVN 15 1		108059	-2	-2
107.85	110.20		0.1 0.0	2	21 ZVN 15 1		108060	-2	-2
110.2	128.56	FELSIC VOLCANIC TOODOGGONE							

Hole Number: KN-02-11

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
110.20	112.26	Very coarse grained pink grey brecciated chloritic	0.0	0.0	2 17 ZVN 15 2	Very coarse grained to blocky polymictic volcanic breccia, predominantly felsic with many fragments of monzonitic composition. More clast supported but locally matrix supported. White dacite and intermediate lava fragments common. Very weakly chloritic to non-chloritic locally.	108061	-2	-2
112.26	114.20	Very coarse grained pink grey fractured chloritic	0.0	0.0	27 ZVN 20 2	Same as for 108061, chlorite very weak	108062	0.005	0.011
114.20	116.20		0.0	0.0	10 ZVN 20 2		108063	-2	-2
116.20	118.20		0.0	0.0	69 ZVN 20 2		108064	-2	-2
118.20	120.20		0.0	0.0	26 ZVN 20 2	Very blocky. Includes a 60cm wide block of white dacite porphyry with 2-3mm chloritic pseudomorphs of an unidentified mafic mineral.	108065	-2	-2
120.20	122.20		0.0	0.0	30 ZVN 20 2	Same as for 108065	108066	-2	-2
122.20	124.20		0.0	0.0	27 ZVN 20 2		108067	0.001	-2
124.20	126.20		0.0	0.0	20 ZVN 20 2		108068	-2	-2
126.20	128.20		0.0	0.0	16 ZVN 20 2		108069	-2	-2
128.20	128.56		0.0	0.0	26 ZVN 20 2		108070	-2	-2
128.56	137.56	DACITE TOODOGGONE							
128.56	130.56	Fine-grained dark green chloritic	0.0	0.0	9 ZVN 30 2	Dark green near aphanitic flow. Rare qtz eyes, but rock is very hard. Occasionally pale green feldspar less than 1mm.	108071	-2	-2
130.56	132.56		0.0	0.0	28 ZVN 30 2	Same as for 108071	108072	0.003	-2
132.56	134.56		0.0	0.0	46 ZVN 30 2		108073	-2	-2
134.56	136.56		0.0	0.0	17 ZVN 30 2		108074	-2	-2
136.56	137.56		0.0	0.0	2 ZVN 30 2		108075	-2	-2
137.56	141.48	DACITE BRECCIA							
137.56	139.56	Coarse-grained light green brecciated chloritic	0.0	0.0	1 ZVN 30 2	Clast supported breccia of dark green and pale cream dacite. Very angular and unsorted. Both contacts sharp at about 37 degrees.	108076	-2	-2
139.56	141.48	Coarse-grained brecciated chloritic	0.0	0.0	1 ZVN 30 2	Same as for 108076	108077	0.003	0.005
141.48	146.75	ANDESITE TUFF							

Hole Number: KN-02-11

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
141.48	143.48	Fine-grained dark green chloritic	0.0 0.0	36 ZVN	30 2	Dark green andesite fragments in fine grained matrix. Zeolite/anhydrite veins well zoned.	108079	-2	-2
143.48	145.48		0.0 0.0	17 ZVN	30 2	Same as for 108079	108080	-2	-2
145.48	146.75		0.0 0.0	22 ZVN	30 2		108081	-2	-2
146.75	155.25	ANDESITE TOODOGGONE							
146.75	148.75	Fine-grained pink grey fractured chloritic	0.0 0.0	22 ZVN	30 10	Pale salmon to pale green nondescript intermediate flow. Fractured and cut by numerous thin zeolite/anhydrite veinlets.	108082	-2	-2
148.75	150.75		0.0 0.0	0 ZVN	30 10	Same as for 108082.	108083	0.007	0.012
150.75	152.75		0.0 0.0	16 ZVN	35 10	Very weak chlorite alteration	108084	-2	-2
152.75	154.75		0.0 0.0	16 ZVN	35 10		108085	-2	-2
154.75	155.25		0.1 0.0	20 ZVN	35 10		108086	-2	-2
155.25	171.75	INTERMEDIATE VOLCANIC TOODOGGONE							
155.25	157.25	Fine-grained grey chloritic	2.0 0.0	19 ZVN	60 2	Similar to above, flows with minor flow-top breccia. Differs from above due to the addition of nearly uniformly distributed very fine grained disseminated py. Py is euhedral and <<1mm in size. Possibly more felsic than andesite.	108087	-2	-2
157.25	159.25		2.0 0.0	13 ZVN	60 2	Same as for 108087	108088	0.005	-2
159.25	161.25		2.0 0.0	2 ZVN	60 2	Same as for 108089	108089	-2	-2
161.25	163.25		2.0 0.0	8 ZVN	60 2		108090	-2	-2
163.25	165.25		2.0 0.0	2 ZVN	60 2		108091	-2	-2
165.25	167.25		2.0 0.0	1 ZVN	60 2		108092	-2	-2
167.25	169.25		2.0 0.0	29 ZVN	70 7		108093	0.013	0.023
169.25	171.25		2.0 0.0	20 ZVN	70 3		108094	-2	-2
171.25	171.75		2.0 0.0	9 ZVN	70 1		108095	-2	-2
171.75	198.62	INTERMEDIATE VOLCANIC BRECCIA							
171.75	173.75	Coarse-grained dark green brecciated chloritic silicic	3.0 0.0	0 ZVN	45 0	Breccia with weak to moderate insipient (?) silica flooding polyolithic volcanoclastic, matrix supported with occasional large blocks.	108096	-2	-2
173.75	174.90		2.0 0.0	2 ZVN	45 0	Silicification is patchy.	108097	-2	-2

Hole Number: KN-02-11

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
174.90	176.90	Coarse-grained dark green brecciated chloritic	0.0	0.0	2 ZVN 45 0	unsilicified equivalent of above.	108098	0.008	0.054
176.90	178.90		0.0	0.0	7 ZVN 45 0	Same as for 108096	108099	-2	-2
178.90	180.90		0.0	0.0	2 ZVN 45 0		108100	-2	-2
180.90	182.22	Coarse-grained dark green brecciated chloritic silicic	0.5	0.0	11 ZVN 45 0	Weak silicification, matrix supported breccia. Typical fragment size is less than 2cm. Predominantly monolithic.	108101	-2	-2
182.22	184.22		0.5	0.0	9 ZVN 60 0	Same as for 108101	108102	-2	-2
184.22	186.22		0.5	0.0	9 ZVN 60 0		108103	0.002	0.013
186.22	188.22		0.0	0.0	3 ZVN 60 1		108105	-2	-2
188.22	190.22		0.0	0.0	1 ZVN 60 1		108106	-2	-2
190.22	192.22		0.0	0.0	13 ZVN 60 1		108107	-2	-2
192.22	194.22		0.0	0.0	30 ZVN 60 0		108108	-2	-2
194.22	196.22		0.0	0.0	19 ZVN 60 0		108109	0.015	0.021
196.22	198.22		0.0	0.0	16 ZVN 60 0		108110	-2	-2
198.22	198.62		0.0	0.0	30 ZVN 60 0		108111	-2	-2
198.62	199.38	INTERMEDIATE VOLCANIC TOODOGGONE							
198.62	199.38	Medium-grained pink laminated chloritic	0.0	0.0	1 ZVN 30 60	Approximately 60% flooded with poorly zoned zeo/carb veins. Trace gypsum in veins.	108112	-2	-2
199.38	282.17	CONGLOMERATE TOODOGGONE							
199.38	201.38	Coarse-grained green heterogeneous chloritic silicic	0.0	0.0	16 ZVN 60 2	Unsilicified polyolithic blocky conglomerate BFP, And, Monz, dacite clast. Sub-angular to sub-rounded. Similar to 108101 except it is generally more blocky and more polyolithic.	108113	-2	-2
201.38	203.38		0.0	0.0	17 ZVN 60 2	Same as for 108113	108114	0.009	0.038
203.38	205.38		0.0	0.0	8 ZVN 60 2		108115	-2	-2
205.38	206.12	Coarse-grained dark green heterogeneous chloritic silicic	0.0	0.0	30 ZVN 60 2		108116	-2	-2

Hole Number: KN-02-11

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
206.12	208.12	Coarse-grained dark green heterogeneous chloritic silific	0.0 0.0	17	ZVN 60 2	Same as for 108101 except it is silicified. NOTE: the presence of silicified BFP clearly shows that this is silicified as opposed to siliceous rock. At 111.38m is a large fragment of syenite that resembles the post mineral syenite dykes intruding the deposit. it is the same then these rocks are younger than the deposit. It is similar to the post mineral syenite but contains more qtz.	108117	-2	-2
208.12	210.12		0.0 0.0	20	ZVN 60 2	Epidote alteration. Fragments. Restricted to fragments.	108118	-2	-2
210.12	212.12		0.0 0.0	22	ZVN 60 2		108119	0.019	0.337
212.12	214.12		0.0 0.0	21	ZVN 45 2		108120	-2	-2
214.12	216.12	Coarse-grained pink grey heterogeneous chloritic	0.0 0.0	22	KVN 40 4	Grey with pink streaks due to zeolite vein, and qtz-kfsp veins.	108121	-2	-2
216.12	218.12		0.0 0.0	9	KVN 40 4	Same as for 108121	108122	-2	-2
218.12	220.12		0.0 0.0	16	KVN 40 4		108123	-2	-2
220.12	222.12		0.0 0.0	8	KVN 40 4		108124	0.161	0.505
222.12	224.12	Coarse-grained green-grey heterogeneous chloritic	0.0 0.0	12	KVN 40 2		108125	-2	-2
224.12	226.12	Coarse-grained green-grey heterogeneous chloritic epidote	0.2 0.0	16	KVN 25 3	Epidotized fragments and "in situ" epidote in W.R. at contact of qtz-py veinlet.	108126	-2	-2
226.12	228.12	Coarse-grained green-grey heterogeneous chloritic	0.2 0.0	16	KVN 25 3	Approximately 50/50 qtz/kfsp veins and zeo/carb vein.	108127	-2	-2
228.12	230.12		0.2 0.0	14	KVN 25 3		108128	-2	-2
230.12	232.12		0.2 0.0	18	KVN 25 3		108129	0.019	0.069
232.12	234.12		0.2 0.0	15	KVN 25 3		108131	-2	-2
234.12	236.12		0.2 0.0	11	KVN 25 3		108132	-2	-2
236.12	238.12		0.2 0.0	14	KVN 25 3		108133	-2	-2
238.12	240.12		0.2 0.0	5	KVN 25 3		108134	-2	-2
240.12	242.12		0.2 0.0	9	KVN 25 3		108135	0.008	0.057
242.12	244.12		0.0 0.0	5	ZVN 45 1	Only very minor zeo/carb veinlets and no k-spar veinlets.	108136	-2	-2
244.12	246.12		0.0 0.0	11	ZVN 45 1		108137	-2	-2
246.12	248.12		0.0 0.0	10	ZVN 45 1		108138	-2	-2
248.12	250.12		0.0 0.0	18	ZVN 45 1		108139	-2	-2
250.12	252.12		0.0 0.0	9	ZVN 45 1		108140	0.007	0.014

Hole Number: KN-02-11

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
252.12	254.12	Coarse-grained green-grey heterogeneous chloritic	0.0	0.0	18 ZVN 45 1		108141	-2	-2
254.12	256.12		0.1	0.0	16 ZVN 45 1		108142	-2	-2
256.12	258.12		0.0	0.0	18 ZVN 45 1		108143	-2	-2
258.12	260.12		0.0	0.0	34 ZVN 45 1		108144	-2	-2
260.12	262.12		0.0	0.0	17 ZVN 45 1		108145	0.014	0.043
262.12	264.12		0.0	0.0	5 ZVN 45 1	Fragments in the breccia are getting blocky (76.4cm). A pale salmon pink qtz porphyry with qtz eyes 72mm is becoming common.	108146	-2	-2
264.12	266.12		0.0	0.0	29 ZVN 45 1	Same as for 108146	108147	-2	-2
266.12	268.12		0.0	0.0	6 ZVN 45 1		108148	-2	-2
268.12	270.12		0.0	0.0	14 ZVN 45 1		108149	-2	-2
270.12	272.12		0.0	0.0	21 ZVN 45 1		108150	0.013	0.112
272.12	274.12		0.1	0.0	10 ZVN 45 1	1 massive pyrite veinlet.	108151	-2	-2
274.12	276.12		0.0	0.0	16		108152	-2	-2
276.12	278.12		0.0	0.0	13		108153	-2	-2
278.12	280.12		0.0	0.0	10		108154	-2	-2
280.12	282.17		0.0	0.0	6		108155	0.009	0.04
282.17	282.47	FAULT ZONE							
282.17	282.47	Coarse-grained green-grey heterogeneous chloritic	0.0	0.0	2	Chl gouge zone cut by zeo/carb veinlets.	108157	-2	-2
282.47	290.03	CONGLOMERATE TOODOGGONE							
282.47	284.47	Coarse-grained green-grey heterogeneous chloritic	0.1	0.0	8	Several large blocks up to 40cm of pale salmon qtz porphyry. Also contains block of mineralized fragments/within this fragmental.	108158	-2	-2
284.47	286.47		0.0	0.0	16		108159	-2	-2
286.47	288.47		0.0	0.0	8		108160	-2	-2
288.47	290.03		0.0	0.0	6		108161	0.011	0.112
290.03	290.4	FAULT ZONE							
290.03	290.40	Coarse-grained green-grey heterogeneous chloritic	0.0	0.0	7	Fault. Same as for 108157.	108162	-2	-2

Hole Number: KN-02-11

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
290.4	292.02	CONGLOMERATE TOODOGGONE							
290.40	292.02	Coarse-grained green-grey heterogeneous chloritic	0.0	0.0		6	108163	-2	-2
292.02	292.42	FAULT ZONE							
292.02	292.42	Coarse-grained green-grey heterogeneous chloritic	0.0	0.0		3	108164	-2	-2
292.42	397.81	CONGLOMERATE TOODOGGONE							
292.42	294.42	Coarse-grained green-grey heterogeneous chloritic	0.0	0.0		6	108165	-2	-2
294.42	296.42		0.0	0.0		4	108166	0.011	0.028
296.42	298.42		0.0	0.0		5	108167	-2	-2
298.42	300.42	Coarse-grained green-grey heterogeneous chloritic sericitic	0.0	0.0		7 ZVN	108168	-2	-2
300.42	302.42		0.1	0.0		5 ZVN	108169	-2	-2
302.42	304.42		0.1	0.0		7 ZVN	108170	-2	-2
304.42	306.42		0.1	0.0		21 ZVN	108171	0.016	0.018
306.42	308.00	Coarse-grained green-grey heterogeneous chloritic	0.1	0.0		16 ZVN	108172	-2	-2
308.00	310.00		0.5	0.1		15 ZVN	108173	-2	-2
310.00	312.00		0.0	0.0		21 ZVN	108174	-2	-2
312.00	314.00		0.0	0.0		9 ZVN	108175	-2	-2
314.00	316.00		0.0	0.0		12 ZVN	108176	0.016	0.011
316.00	318.00		0.0	0.0		9 ZVN	108177	-2	-2
318.00	320.00		0.0	0.0		20 ZVN	108178	-2	-2
320.00	322.00		0.0	0.0		20 ZVN	108179	-2	-2
322.00	324.00		0.0	0.0		21 ZVN	108180	-2	-2
324.00	326.00		0.0	0.0		12 ZVN	108181	0.013	0.009
326.00	328.00		0.0	0.0		14 ZVN	108183	-2	-2

Hole Number: KN-02-11

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
328.00	330.00	Coarse-grained green-grey heterogeneous chloritic	0.0 0.0	3 ZVN	45 0		108184	-2	-2
330.00	332.00		0.0 0.0	4 ZVN	45 0		108185	-2	-2
332.00	334.00		0.0 0.0	19 ZVN	45 0		108186	-2	-2
334.00	336.00		0.0 0.0	5 ZVN	45 0		108187	0.026	0.01
336.00	338.00		0.1 0.0	8 ZVN	45 0	One massive pyrite veinlet about 0.5cm wide.	108188	-2	-2
338.00	340.00		0.0 0.0	1 ZVN	45 0		108189	-2	-2
340.00	342.00		0.0 0.0	5 ZVN	40 0	Matrix rich conglomerate. Matrix is of probable andesite composition.	108190	-2	-2
342.00	344.00		0.0 0.0	6 ZVN	40 0	Same as for 108190	108191	-2	-2
344.00	346.00		0.0 0.0	9 ZVN	40 0		108192	0.015	0.023
346.00	348.00		0.0 0.0	25 ZVN	40 0		108193	-2	-2
348.00	350.00		0.0 0.0	23 ZVN	40 0		108194	-2	-2
350.00	352.00		0.0 0.0	1 ZVN	40 0		108195	-2	-2
352.00	354.00		0.0 0.0	23 ZVN	40 0		108196	-2	-2
354.00	356.00		0.0 0.0	8 ZVN	40 0		108197	0.013	0.035
356.00	358.00		0.0 0.0	35 ZVN	40 0		108198	-2	-2
358.00	360.00		0.0 0.0	13 ZVN	40 0		108199	-2	-2
360.00	362.00		0.0 0.0	4 ZVN	40 0		108200	-2	-2
362.00	364.00		0.0 0.0	23 ZVN	40 0		108201	-2	-2
364.00	366.00		0.0 0.0	8 ZVN	40 0		108202	0.014	0.037
366.00	368.00		0.0 0.0	13 ZVN	40 0		108203	-2	-2
368.00	370.00		0.0 0.0	12 ZVN	40 0		108204	-2	-2
370.00	372.00		0.0 0.0	3 ZVN	40 0		108205	-2	-2
372.00	374.00		0.0 0.0	23 ZVN	40 0		108206	-2	-2
374.00	376.00		0.0 0.0	4 ZVN	40 0		108207	0.013	0.015
376.00	378.00		0.2 0.0	5 ZVN	40 0	Same as for 108174. One 3x1.5cm bleb of massive py.	108209	-2	-2
378.00	380.00		0.2 0.0	2 ZVN	40 0	Same as for 108174. One qtz/py veinlet.	108210	-2	-2
380.00	382.00		0.0 0.0	10 ZVN	40 0		108211	-2	-2
382.00	384.00		0.0 0.0	14 ZVN	65 1	Same as for 108174	108212	-2	-2

Hole Number: KN-02-11

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
384.00	386.00	Coarse-grained green-grey heterogeneous chloritic	0.0 0.0	7 ZVN	65 1		108213	0.014	0.018
386.00	388.00		0.5 0.0	10 ZVN	65 1	Trace c.g. euhedral disseminated pyrite.	108214	-2	-2
388.00	390.00		0.5 0.0	13 ZVN	65 1		108215	-2	-2
390.00	392.00		0.5 0.0	27 ZVN	65 1		108216	-2	-2
392.00	394.00		0.5 0.0	0 16 ZVN	65 1	One c.g. py + mag veinlet at 393.38m, 25 degrees to core axis.	108217	-2	-2
394.00	396.00		0.5 0.0	0 16 ZVN	65 1	Same as for 108217. 3 veinlets.	108218	0.04	0.05
396.00	397.81		0.5 0.0	0 10 ZVN	65 1		108219	-2	-2
397.81	399.15	FAULT ZONE CONGLOMERATE							
397.81	399.15	Coarse-grained green-grey brecciated chloritic	0.1 0.0	7 ZVN	45 3	Gouge cemented fault breccia.	108220	-2	-2
399.15	408.43	INTERMEDIATE VOLCANIC TOODOGGONE							
399.15	401.00	Coarse-grained green-grey	0.1 0.0	15 ZVN	45 3	Grey-green massive flow cut by numerous zeo/carb veinlets and occasional banded calcite vein (1-3cm).	108221	-2	-2
401.00	403.00		0.1 0.0	3 ZVN	45 3	Same as for 108222	108222	-2	-2
403.00	405.00		0.1 0.0	6 ZVN	45 3		108223	0.001	-2
405.00	407.00		0.1 0.0	11 ZVN	45 3		108224	-2	-2
407.00	408.43		0.1 0.0	27 ZVN	45 3		108225	-2	-2
408.43	420.7	MONZONITE							
408.43	409.00	Medium-grained pink grey k-felspar sericitic	0.1 0.0	13 ZVN	60 7	Equigranular medium grained monzonite dyke cut by numerous zeolite veinlets and strong bleaching grading into strong potassic flooding. Upper contact gradational due to bleaching obscuring actual contact. Lower contact broken and ground.	108226	-2	-2
409.00	411.00		0.1 0.0	3 ZVN	60 7	Same as for 108226	108227	-2	-2
411.00	413.00		0.1 0.0	2 ZVN	60 7		108228	-2	-2
413.00	413.50		0.1 0.0	9 ZVN	60 7		108229	-2	-2
413.50	415.50	Medium-grained pink k-felspar	0.1 0.0	5 ZVN	60 7		108230	-2	2
415.50	417.50		0.1 0.0	0 ZVN	60 7		108231	-2	-2
417.50	419.50		0.1 0.0	0 ZVN	60 7		108232	-2	-2
419.50	420.70	Medium-grained grey sericitic	0.1 0.0	0 ZVN	40 1	See 108226. Zone of strong bleaching.	108233	0.002	0.005

Hole Number: KN-02-11

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
420.7	453.9	CONGLOMERATE TOODOGGONE								
420.70	422.00	Coarse-grained dark grey heterogeneous chloritic	0.1	0.0	19 ZVN	40 1	Polymictic conglomerate cut by zeolite veinlets.	108235	-2	-2
422.00	424.00		0.1	0.0	19 ZVN	40 1		108236	-2	-2
424.00	426.00		0.1	0.0	32 ZVN	40 1		108237	-2	-2
426.00	428.00		0.5	0.0	2 ZVN	40 1		108238	-2	-2
428.00	430.00		0.5	0.0	2 ZVN	40 1		108239	0.015	0.052
430.00	432.00		1.0	0.0	12 ZVN	40 1		108240	-2	-2
432.00	434.00		1.0	0.0	3 ZVN	40 2		108241	-2	-2
434.00	436.00		1.0	0.0	0 ZVN	40 2		108242	-2	-2
436.00	438.00		1.0	0.0	1 ZVN	40 2		108243	-2	-2
438.00	440.00		1.0	0.0	1 ZVN	40 2		108244	0.004	0.01
440.00	442.00		1.0	0.0	1 ZVN	40 2		108245	-2	-2
442.00	444.00		1.0	0.0	0 ZVN	40 2		108246	-2	-2
444.00	446.00		1.0	0.0	1 ZVN	40 2		108247	-2	-2
446.00	448.00		1.0	0.0	2 ZVN	40 2		108248	-2	-2
448.00	450.00		1.0	0.0	12 ZVN	40 2		108249	0.014	0.011
450.00	452.00		1.0	0.0	13 ZVN	40 2		108250	-2	-2
452.00	453.90		1.0	0.0	14 ZVN	40 2		108251	-2	-2
453.9	457	MONZONITE								
453.90	455.90	Medium-grained light grey sericitic chloritic	0.0	0.0	1 ZVN	40 5	Strongly bleached monzonite dyke. Upper contact is vuggy qtz vein.	108252	-2	-2
455.90	457.00		0.0	0.0	18 ZVN	40 5	Lower contact is sharp at 70 degrees.	108253	-2	-2
457	496.82	CONGLOMERATE TOODOGGONE								
457.00	459.00	Coarse-grained dark grey heterogeneous chloritic	0.0	0.0	26 ZVN	40 2	Polymictic conglomerate.	108254	0.012	0.032
459.00	461.00		0.1	0.0	16 ZVN	35 2		108255	-2	-2
461.00	463.00		1.0	0.0	17 ZVN	35 2		108256	-2	-2
463.00	464.00		0.3	0.0	8 ZVN	35 2		108257	-2	-2
464.00	466.00		0.3	0.0	9 ZVN	35 2		108258	-2	-2

Hole Number: KN-02-11

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
466.00	468.00	Coarse-grained dark grey heterogeneous chloritic	0.3 0.0	11 ZVN	35 2		108259	0.009	0.015
468.00	470.00		0.3 0.0	16 ZVN	45 2		108261	-2	-2
470.00	472.00	Coarse-grained dark grey heterogeneous chloritic epidote	0.5 0.0	17 ZVN	45 2	Very minor fine grained disseminated pyrite and occasional veinlet of massive pyrite. Wall rock contacts of the latter are often epidotized.	108262	-2	-2
472.00	474.00		0.5 0.0	11 ZVN	45 2	same as for 108263	108263	-2	-2
474.00	476.00		0.5 0.0	7 ZVN	45 2		108264	-2	-2
476.00	478.00		0.5 0.0	8 ZVN	45 2		108265	-2	-2
478.00	480.00	Coarse-grained dark grey heterogeneous chloritic	0.5 0.0	14 ZVN	25 7		108266	-2	-2
480.00	482.00		0.5 0.0	3 ZVN	25 7		108267	-2	-2
482.00	484.00		0.5 0.0	8 ZVN	25 7		108268	-2	-2
484.00	486.00		0.5 0.0	4 ZVN	25 7		108269	-2	-2
486.00	488.00		5.0 0.0	6 ZVN	25 7	Clots of semi-massive py near end of sample.	108270	-2	-2
488.00	490.00		1.0 0.0	3 ZVN	25 2		108271	-2	-2
490.00	492.00		1.0 0.0	1 ZVN	65 2		108272	-2	-2
492.00	494.00		1.0 0.0	3 ZVN	65 2		108273	-2	-2
494.00	496.00		2.0 0.5	1 13 ZVN	65 2	One speck of cpy in qtz/py/mt veinlet	108274	-2	-2
496.00	496.82		0.0 0.0	1 32 ZVN	65 2	Magnetite filling fractures.	108275	-2	-2
496.82	EOH								

Kemess North 2002 - Diamond Drill Log



Hole Number: *KN-02-12*

Northing: 15989.1	Total Depth: 688.38m
Easting: 10559.4	Azimuth: 0°
Elevation: 1705.2	Dip: -90°

Geologist: J. Mazvihwa
Logged Date: 7/2/2002

Survey Depth	Azimuth	Dip	Comments:
0 m	0 °	-90 °	
107 m	21 °	-82 °	Mechanical
225 m	41 °	-82 °	Mechanical
316 m	67 °	-81 °	Mechanical
413 m	256 °	-73 °	Mechanical
505 m	125 °	-81 °	Mechanical
596 m	0 °	-86 °	
688 m	331 °	-80 °	Mechanical

Kemess North 2002 - Summary Drill Log



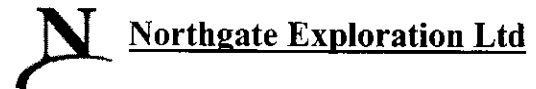
Hole Number: **KN-02-12**

From (m)	To (m)	Rock Type	Comments
0	4.57	CASING	
4.57	240.48	INTERMEDIATE VOLCANIC FLOW	py +/- cpy stringers associated with gypsum and quartz veining with dissolution features locally, where gypsum has been removed. Minor fault zones with fragments cemented by gouge clay material. Flow is bleached, pervasively silicified moderate to high and weakly to moderately sericitized - pervasively. Veining is randomly orientated. Massive py aggregates are local. Protolith overprinted by silicification. Locally BKN.
240.48	252.65	SYENITE	Barren, post mineralization syenite dyke. Plagioclase, kfsp, qtz and mafic dark green phenocrysts (pyroxene?) in light green/grey fine grained matrix. Dyke randomly cut by late stage qtz/zeolite/carb veining, randomly oriented. MagS readings higher.
252.65	517.86	INTERMEDIATE VOLCANIC FLOW	Py +/- cpy stringers associated with qtz veining (milky white), finely diss in flow. Veining is randomly oriented. Flow is weak to moderately silicified, possibly sericitized-pervasive alteration. Weak localized bt alteration, patchy brown colouration. Minor broken zones.
517.86	637.59	QUARTZ MONZONITE	Moderate to highly silicified, increased py +/- cpy stringers + diss. Moderate sericite alteration. Light grey colour. Cross cut by pink zeolite veining. Py +/- cpy also present as coarse size aggregates. Py content up to approx 5% locally. Possible qtz monzodiorite fragments.
637.59	644.75	SYENITE	
644.75	647.16	QUARTZ MONZONITE	
647.16	647.48	BASALT XENOLITH	Rare py +/- cpy and diss, white plag, kfsp locally, pyroxene/amphibole phenocrysts in fine grained qtz and plagio matrix. Smokey/grey qtz assoc locally with mt. Silicified locally and protolith overprinted.
647.48	663.73	QUARTZ MONZONITE	Local potassic alteration.
663.73	665.05	SYENITE	Dark green volcanic xenolith, barren cut by qtz/carb veinlets, randomly oriented, weak effervescence with HCl. Visible white plagio phenocrysts and dark green/black euhedral/anhedral mafic, magnetic magnetite specks.

Hole Number: **KN-02-12**

From (m)	To (m)	Rock Type	Comments
665.05	666.7	BASALT XENOLITH	Barren, post mineralization dyke, x-cut by late qtz/zeolite/carbonate veining. Randomly oriented.
666.7	685.15	SYENITE	
685.15	688.38	QUARTZ MONZONITE	

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
0	4.57	CASING							
0.00	4.57						12	-2	-2
4.57	240.48	INTERMEDIATE VOLCANIC FLOW							
4.57	6.10	Fine-grained medium grey silicic sericitic	2.0	0.1	0	QGVN 10 py +/- cpy stringers associated with gypsum and quartz veining with dissolution features locally, where gypsum has been removed. Minor fault zones with fragments cemented by gouge clay material. Flow is bleached, pervasively silicified moderate to high and weakly to moderately sericitized - pervasively. Veining is randomly orientated. Massive py aggregates are local. Protolith overprinted by silicification. Locally BKN.	105264	0.052	0.1
6.10	6.71		2.0	0.1	0	QGVN 10 Continuous of sample 105264. Rare yellow/orange limonite infilling jts.	105266	0.087	0.144
6.71	8.23		2.0	0.1	0	QGVN 10 Continuous of sample 105264. Rubble zone.	105267	0.047	0.106
8.23	9.75		2.0	0.1	0	QGVN 10 Continuous of sample 105264. Fault zone, bleached, altered flow fragments cemented by gouge/clay material ~50 cm.	105268	0.024	0.078
9.75	11.28		2.0	0.1	0	QGVN 10 Continuous of sample 105264. Fault zone, bleached, altered flow fragments cemented by gouge/clay material ~30 cm.	105269	0.056	0.137
11.28	12.80		2.0	0.1	0	QGVN 10	105270	0.081	0.174
12.80	14.42		2.0	0.1	0	QGVN 10 Continuous of sample 105264. Slightly more competent.	105271	0.042	0.107
14.42	15.85		2.0	0.1	0	QGVN 10 Continuous of sample 105264. Minor fault gouge zone at beginning of sample.	105272	0.05	0.117
15.85	17.09		2.0	0.1	0	QGVN 10 Continuous of sample 105264. Competent, less broken.	105273	0.048	0.128
17.09	18.90		2.0	0.1	0	QGVN 10 Continuous of sample 105264. ~100 cm fault zone. Bleached altered flow fragments cemented by gouge clay material.	105274	0.083	0.156
18.90	20.37		2.0	0.1	0	QGVN 10 Continuous of sample 105264.	105275	0.045	0.114
20.37	21.95		2.0	0.1	0	QGVN 10 Continuous of sample 105264. Local BKN zone.	105276	0.069	0.118
21.95	23.55		2.0	0.1	0	QGVN 10	105277	0.04	0.111

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
23.55	24.99	Fine-grained medium grey silicic sericitic	2.0 0.1	0	QGVN 10	Continuous of sample 105264. Minor BKN zone.	105278	0.034	0.158
24.99	26.30		2.0 0.1	0	QGVN 10	Continuous of sample 105264. Dissolution vuggy qtz veins rare.	105279	0.058	0.153
26.30	28.04		2.0 0.1	0	QGVN 10		105280	0.043	0.108
28.04	29.47		2.0 0.1	0	QGVN 10		105281	0.04	0.152
29.47	30.52		2.0 0.1	0	QGVN 10		105282	0.07	0.174
30.52	31.87		2.0 0.1	2	QGVN 10	Continuous of sample 105264. Darker grey, mafic, dark green mottled texture. Py diss with chloritic halos/vesicles. Contact with bleached flow defined by 45 deg CA qtz vein.	105283	0.087	0.183
31.87	33.19		2.0 0.1	1	QGVN 10	Continuous of sample 105264. Dark grey, mafic dark green mottled texture in parts.	105284	0.076	0.213
33.19	33.91		2.0 0.1	0	QGVN 10	Continuous of sample 105264. Darker grey mafic, mottled dark green chloritic.	105285	0.055	0.184
33.91	36.55		2.0 0.1	0	QGVN 10		105286	0.069	0.194
36.55	37.19		2.0 0.1	0	QGVN 10		105287	0.056	0.158
37.19	38.60		2.0 0.1	0	QGVN 10		105288	0.063	0.161
38.60	40.23		2.0 0.1	0	QGVN 10		105289	0.121	0.309
40.23	42.15		2.0 0.1	0	QGVN 10		105290	0.068	0.196
42.15	43.28		2.0 0.1	0	QGZVN 10		105292	0.113	0.229
43.28	44.81		2.0 0.1	0	QGZVN 10		105293	0.057	0.125
44.81	46.33		2.0 0.1	0	QGZVN 10		105294	0.051	0.186
46.33	47.59		2.0 0.1	0	QGZVN 10		105295	0.046	0.132
47.59	48.09		2.0 0.1		QGZVN 10	Same as above. Bleached, light grey fault plane lined by clay/gouge material. Py diss; weak pale green chloritic specks.	105296	0.021	0.197
48.09	49.30		2.0 0.1	0	QGZVN 10	Continuous of sample 105264. Fault plane infilled by clay/gouge material assoc with qtz vein.	105297	0.027	0.115
49.30	49.85		2.0 0.1		QGZVN 10		105298	0.031	0.069
49.85	51.28		2.0 0.1	0	QGZVN 10	Continuous of sample 105264. Pale grey, increased pervasive silicification. Qtz vein assoc with pale green chlorite patches.	105299	0.058	0.232

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
51.28	52.43	Fine-grained medium grey silicic sericitic	2.0	0.1	1 QGZVN	10	105300	0.067	0.133
52.43	53.95	Fine-grained medium green chloritic silicic	2.0	0.1	0	10 Py +/- cpy stringers associated locally by qtz and gypsum veining bound by chl stringers. Chloritic, weak to moderate pervasively silicified. Chlorite locally mottled, vesicles, about 0.5cm diameter, infilled by chlorite-dark green. Py +/- cpy also disseminated in flow. Veining is randomly oriented.	105301	0.032	0.076
53.95	55.37		2.0	0.1	0 QGZVN	10 Py +/- cpy stringers are bound locally by silicified and/or sericitized portions. Sample is slightly more silicified.	105302	0.035	0.095
55.37	57.00		2.0	0.1	0 QGZVN	10	105303	0.045	0.104
57.00	57.74		2.0	0.1	QGZVN	10 More chloritic, darker green colour, less silicified.	105304	0.026	0.096
57.74	58.52		2.0	0.1	0 QGZVN	10 More silicified less chlorite, light green colour	105305	0.039	0.138
58.52	60.05		2.0	0.1	0 QGZVN	10 Patchy chl/bt alteration, green/brown patchy coloration. Protolith overprinted	105306	0.046	0.117
60.05	61.57		2.0	0.1	1 QGZVN	10 Minor carb. assoc with qtz and py stringers- minor efervescence. Massive py vein ~ 3 cm thick	105307	0.142	0.323
61.57	63.25		2.0	0.1	0 QGZVN	10 Massive py vein approximately 3cm thick associated with qtz vein. Approximately 0.5% cpy associated with py aggregates locally.	105308	0.392	0.62
63.25	64.18		2.0	0.1	0 QGZVN	10	105309	0.039	0.117
64.18	66.96		2.0	0.1	0 QGZVN	10	105310	0.045	0.091
66.96	68.49		2.0	0.1	0 QGZVN	10	105311	0.036	0.108
68.49	69.19		2.0	0.1	QGZVN	10	105312	0.045	0.118
69.19	70.10		2.0	0.1	0 QGZVN	10	105313	0.039	0.108
70.10	71.29		2.0	0.1	0 QGZVN	10	105314	0.107	0.219
71.29	73.96		2.0	0.1	0 QGZVN	10 Light grey, friable dissolution structures in smokey/grey qtz vein. Light green chloritic staining, py increased stringers associated with qtz veining locally. Weak sericitic alteration.	105315	0.111	0.245
73.96	75.45		2.0	0.1	0 QGZVN	10 Mottled chl and bt alteration, brown/green specks.	105316	0.03	0.093
75.45	77.25		2.0	0.1	0 QGZVN	10	105318	0.05	0.122
77.25	79.03		2.0	0.1	0 QGZVN	7 Silicified portion, light grey, less py + cpy stringers associated with qtz + chl veining.	105319	0.031	0.132

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
79.03	80.89	Fine-grained medium green chloritic silicic	2.0 0.1	0			105320	0.064	0.167
80.89	82.73		2.0 0.1	0	QGZVN 10	Dark green mottled portions. Silicified portions.	105321	0.071	0.173
82.73	84.53		2.0 0.1	0	QGZVN 10		105322	0.026	0.067
84.53	86.60		2.0 0.1	0	QGZVN 10	Minor fault zone-gouge/clay cement flow fragments, portion is about 10cm thick, BKN zone, rubbly.	105323	0.099	0.176
86.60	88.36		2.0 0.1	0	QGZVN 10		105324	0.071	0.129
88.36	90.38		2.0 0.1	0	QGZVN 10	Red hematite veining associated with qtz/carb veining, associated with zeolite veining. Rare mt disseminated in qtz vein associated with disseminated py +/- cpy units.	105325	0.051	0.14
90.38	92.10		2.0 0.1	0	QGZVN 10		105326	0.039	0.101
92.10	94.05		2.0 0.1	0		Light grey silicified portion, 10 siliceous. Zeolite veining crosscutting all veins. Peppered texture.	105327	0.032	0.09
94.05	96.05		2.0 0.1	0	QGZVN 7	Qtz veining vuggy, dissolution features gypsum eroded out, associated with py stringers. Less zeolite veins.	105328	0.045	0.094
96.05	98.03		2.0 0.1	0	QGZVN 10	Increased zeolite veining, light grey silicified portion.	105329	0.023	0.078
98.03	100.02		2.0 0.1	1		More chloritic.	105330	0.03	0.097
100.02	101.39		2.0 0.1	1		Approximately 3 cm thick pyrite vein, associated locally with chl and qtz veining and rare red magnetite.	105331	0.133	0.34
101.39	102.99		2.0 0.1	0	QGZVN 7	Mafic, less veining.	105332	0.048	0.104
102.99	104.91		2.0 0.1	0			105333	0.027	0.073
104.91	106.85		2.0 0.1	0		Minor broken zone, chl mottled texture, vesicles unfilled with chl, appears to be brecciated.	105334	0.047	0.115
106.85	108.70		2.0 0.1	1		Approximately 7cm qtz vein associated with disseminated py. Diss py with chl haloes. Chlorite mottled texture.	105335	0.056	0.125
108.70	109.76	Fine-grained medium green chloritic	2.0 0.1	0	QGZVN 10	Py +/- cpy stringers associated with qtz + gypsum veining, disseminated in flow, with chloritic haloes locally. Qtz, gypsum, zeolite +/- carb veining randomly oriented. Chloritic, wealthy to moderate silicified locally. Dark green mafic ghost fragments, in pale grey/green siliceous matrix. Qtz/gypsum/zeolite +/- carb veining appears to be bordering fragments locally. Py diss. confined to dark green mafic fragments, brecciated. Protolith overprinted locally in moderate to high pervasively silicified portions. Locally broken zone.	105336	0.068	0.148

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
109.76	110.70	Fine-grained medium green chloritic	2.0	0.1	0 QGZVN	10 slightly more silicified, pale grey/green, veining is locally vuggy, dissolution features gypsum removed.	105337	0.029	0.107
110.70	112.69		2.0	0.1	0 QGZVN	10 Mafic dark green fragments/brecciated.	105338	0.036	0.128
112.69	114.62		2.0	0.1	0 QGZVN	10 Increased qtz/carb veining, randomly oriented.	105339	0.055	0.15
114.62	116.20		2.0	0.1	1 QGZVN	10 Fragments outline ghosted.	105340	0.05	0.096
116.20	117.96		2.0	0.1	0 QGZVN	15 Increased veining, discontinuous, possibly structurally controlled-qtz/zeolite veining. Fragment boundaries not clear.	105341	0.05	0.125
117.96	119.40		2.0	0.1	QGZVN	10 Local sheared zone, fault zones with clay/gouge cementing fragments of flow.	105342	0.058	0.124
119.40	120.12		2.0	0.1	0 QGZVN	10 More mafic, darker green, brecciated texture less visible.	105344	0.036	0.093
120.12	122.09		2.0	0.1	0 QGZVN	10 Slightly silicified, light grey, hard, pervasive silicification locally, fragment outline not visible. Joints lined by clay/gouge material, less competent. Zeolite/qtz veining.	105345	0.043	0.108
122.09	122.53		2.0	0.1	0 QGZVN	10 Light grey, silicified and sericitized fault zone, qtz fragments cemented by clay/gouge material. Py diss within qtz fragments.	105346	0.06	0.136
122.53	124.61		2.0	0.1	0 QGZVN	10 Light grey, silicified and sericitized fault zone, qtz fragments cemented by clay/gouge material. Py diss within qtz fragments. Slightly more chloritic, pale green/grey. Brecciated texture weakly evident spherical cavities where py disseminations have been removed.	105347	0.079	0.126
124.61	126.61		2.0	0.1	0 QGZVN	20 Locally vuggy qtz/gypsum veining. Local increase in py diss approximately 4%. Silicified, moderate to high, qtz/gypsum flooding.	105348	0.09	0.124
126.61	128.43		2.0	0.1	0 QGZVN	10 About 20cm fault zone, fragments cemented by clay, gouge material.	105349	0.083	0.124
128.43	129.44		2.0	0.1	QGZVN	10 pink zeolite stringers associated with qtz veining. Brecciated texture barely visible.	105350	0.033	0.1
129.44	131.07		2.0	0.1	0 QGZVN	10 Increased in qtz/zeolite veining locally.	105351	0.048	0.107
131.07	133.20		2.0	0.1	0 QGZVN	10	105352	0.113	0.19
133.20	134.55		2.0	0.1	0 QGZVN	10 approximately 20cm of homogenous dark green mafic colour, BKN, joints lined by chl. Py +/- cpy aggregates associated with qtz veining. Brecciated texture less evident.	105353	0.032	0.077
134.55	135.20		2.0	0.1	QGZVN	7 Reduced veining. Brecciated texture less evident.	105354	0.053	0.077

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
135.20	135.70	Fine-grained medium green chloritic	2.0 0.1	0			105355	0.068	0.111
135.70	137.54		2.0 0.1	0	QGZVN 15	Localized increased diss py +/- cpy, veining associated with qtz/carb veining, crosscut by randomly oriented zeolite veining. Joints lined by clay and chl.	105356	0.058	0.107
137.54	138.62		2.0 0.1	0	QGZVN 15		105357	0.076	0.115
138.62	140.42		2.0 0.1	0	QGZVN 7	Brecciated texture weakly visible.	105358	0.083	0.106
140.42	142.34		2.0 0.1	0	QGZVN 7	Approximately 5cm vuggy qtz vein associated with massive py aggregates. Mottled green mafic chl in flow.	105359	0.092	0.123
142.34	143.57		2.0 0.1	0	QGZVN 7		105360	0.076	0.13
143.57	144.03		2.0 0.1		QGZVN 7	Silicified, light grey, sericitized portion-bleached.	105361	0.065	0.213
144.03	145.83		2.0 0.1	1	QGZVN 7		105362	0.036	0.132
145.83	147.62		2.0 0.1	0	QGZVN 7	Zeolite/kfsp(hard) veining, locally associated with gypsum	105363	0.055	0.099
147.62	149.74		2.0 0.1	0	QGZVN 7	mafic, darker green, vesicles infilled with chlorite.	105364	0.047	0.091
149.74	150.90	Fine-grained light green silicic	3.0 0.1	0	QGZVN 15	Increased py +/- cpy stringers and diss in flow, associated with qtz veining. Approximately 1-2cm py veins bound by silicified, sericite altered zones. Local approximately 20cm qtz brecciated portion. Weakly silicified, medium green mottled texture. Minor pink zeolite veining-randomly oriented.	105365	0.097	0.208
150.90	151.22		3.0 0.5		QGZVN 15	Local increased chalcopyrite aggregate assoc. with pyrite and qtz/carb veining	105366	0.297	0.377
151.22	151.98		3.0 0.1	0	QGZVN 15	Increased zeolite veining, pink potassic alteration, localized.	105367	0.054	0.113
151.98	152.94		3.0 0.1	0	QGZVN 15		105368	0.075	0.151
152.94	153.98		3.0 0.1	0	QGZVN 60	Pink zeolite flooding (possibly potassic alteration) increased qtz veining. Rare red magnetite assoc. with qtz vein. Chl mottled in pink altered portions, Minor bt alteration.	105370	0.079	0.15
153.98	155.50		3.0 0.1	0	QGZVN 30	Reduced zeolite flooding, Qtz/gypsum veining vuggy, dissolution.	105371	0.071	0.155
155.50	155.83		2.0 0.1		QGZVN 15	Increased silicified pale grey/green, sericitized.	105372	0.015	0.079
155.83	157.90		2.0 0.1		QGZVN 10	Increased green mottled. ~20cm fault zone clay zone	105373	0.037	0.106
157.90	158.75		2.0 0.1	0	QGZVN 7	Jt infilled by light grey clay/gouge material. Weak to moderate silicification.	105374	0.082	0.364

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
158.75	160.63	Fine-grained light green silicic	2.0	0.1	QGZVN	7 Pale green/brown, wk silicification and bt. Alteratio. Pink zeolite stringers, random orientation.	105375	0.083	0.206
160.63	162.65		2.0	0.1	0 QGZVN	7 Rare red magnetite assoc with qtz veining. Local increase in py stringer and aggregate in light green	105376	0.079	0.172
162.65	164.05		2.0	0.1	0 QGZVN	7 Brown increased patchy 1st alteration.	105377	0.08	0.104
164.05	164.57		2.0	0.1	0 QGZVN	7 Minor BKN zone	105378	0.056	0.108
164.57	165.22		2.0	0.1	0 QGZVN	7 Wk bt alteration, zeolite and qtz veining, high in ~15cm portion.	105379	0.045	0.094
165.22	166.73		2.0	0.1	0 QGZVN	7 Local increase in qtz stringers, boxwk, randomly oriented.	105380	0.039	0.069
166.73	167.55		2.0	0.1	1 QGZVN	7 Dark, homogenous green - mafic, chloritic. Minor dark chloritic patches.	105381	0.095	0.149
167.55	169.45		2.0	0.1	0 QGZVN	7 Pale green, wk to moderately silicified py veining assoc. with qtz, zeolite stringers bound by silicified and sericitized, portions, local milky white barren qtz veining.	105382	0.1	0.246
169.45	170.59		2.0	0.1	0 QGZVN	7 Pale green, wk to moderate silicified. Py veining assoc. with qtz/zeolite, bound by silicified and ser portions.	105383	0.051	0.153
170.59	172.10		2.0	0.1	0 QGZVN	15 Pervasive moderate to high silicification and sericitization, Fragments of flow cemented by clay/gouge material. Randomly oriented pink zeolite veining. Protolith overprinted, Locally vuggy.	105384	0.013	0.1
172.10	172.47		2.0	0.1	0 QGZVN	10 More chloritic portion, less silicified and sericitized.	105385	0.048	0.131
172.47	174.19		2.0	0.1	1 QGZVN	15 Same as sample 105384	105386	0.035	0.15
174.19	174.71		2.0	0.1	QGZVN	15 Less silicification and sericitization, vuggy veining, dissolution features where gypsum has been removed. Local brecciated.	105387	0.121	0.16
174.71	175.10		2.0	0.1	0 QGZVN	20	105388	0.049	0.094
175.10	176.77		2.0	0.1	0 QGZVN	20 Br altered portions	105389	0.076	0.139
176.77	177.13		2.0	0.1	0 QGZVN	15 Silicified and sericitized portion, assoc with increased diss py	105390	0.033	0.114
177.13	178.85		2.0	0.1	QGZVN	7 Clay gouge lined jt.	105391	0.125	0.17
178.85	179.27		2.0	0.1	0 QGZVN	7 Qtz/zeo veining, randomly oriented.	105392	0.09	0.132
179.27	181.07		2.0	0.1	0 QGZVN	7	105393	0.094	0.181
181.07	182.64		2.0	0.1	0 QGZVN	7 minor BKN zone, local increase in diss. Py massive aggregates locally with chloritic haloes.	105394	0.078	0.128

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
182.64	183.70	Fine-grained light green silicic	2.0 0.1	0	QGZVN 7		105396	0.065	0.149
183.70	185.07		2.0 0.1	0	QGZVN 7	~1cm thick py +/-cpy vein bound by silicified/sericitized portion	105397	0.104	0.218
185.07	186.20		2.0 0.1	0	QGZVN 7		105398	0.028	0.069
186.20	187.10		2.0 0.1		QGZVN 7		105399	0.044	0.098
187.10	187.53		2.0 0.1		QGZVN 7	Massive py aggregate ~20% of sample, assoc with qtz.	105400	0.093	0.149
187.53	189.77	Fine-grained light green chloritic silicic	2.0 0.1	0	QGZVN 7	Py +/- cpy stringers associated with qtz vein bound by silicified and sericitized parts. Rare fine diss py locally. Weak to moderate silicification and weak bt alteration-patchy. Localized higher silicification and sericitization, light grey colour.	105401	0.063	0.092
189.77	190.45		2.0 0.1	0	QVN 10	moderate to high silicification and pervasive sericite alteration. Patches of less alteration-medium green colour.	105402	0.036	0.102
190.45	191.65		2.0 0.1	0	QVN 10		105403	0.097	0.114
191.65	192.80		2.0 0.1	0	QVN 10		105404	0.052	0.105
192.80	194.49	Fine-grained medium green chloritic	2.0 0.1	0	QVN 10	Py +/- cpy stringers associated with qtz vein, diss in flow and aggregated locally in qtz vein. Localized portions with increased py diss. Veining randomly oriented. Localized bt alteration, weak to moderate. Mottled green chl specks.	105405	0.059	0.088
194.49	196.48		2.0 0.1	0	QVN 10	Moderate pervasive silicification with dark green patchy mafic chlorite specks. BKN zones. Qtz veining boxwork local.	105406	0.057	0.094
196.48	198.82		2.0 0.1		QVN 10	Moderate pervasive silicified portion with dark green patchy mafic chlorite specks.	105407	0.035	0.059
198.82	200.90		2.0 0.1	0	QVN 10	Silicified/sericitized alteration envelope around py stringers locally.	105408	0.05	0.077
200.90	202.70	Fine-grained light green chloritic silicic	2.0 0.1	0	QVN 10	Dark green mafic chlorite mottled/vesicles. Rare pink zeolite veining.	105409	0.049	0.074
202.70	204.65		2.0 0.1	0	QVN 10	Increased py disseminations in chloritic flow. Joints infilled with clay/gouge material. Approximatley 2cm qtz vein with py +/- cpy aggregates, medium sized.	105410	0.156	0.214
204.65	206.63		2.0 0.1	0	QVN 10	Less chloritic, light green, weak to moderate pervasive silicification.	105411	0.039	0.07

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
206.63	208.85	Fine-grained light green chloritic silicic	2.0 0.1	0	QVN	10	Less chloritic, weak to moderate silicification-pervasive, vesicles infilled by silica and sericite, fault zone, clay/gouge material cementing flow fragments. Weak to moderate patchy bt alteration.	105412	0.044	0.094
208.85	210.63		2.0 0.1	0	QVN	10		105413	0.044	0.071
210.63	212.51		2.0 0.1	0	QVN	10		105414	0.05	0.101
212.51	213.00		2.0 0.1		QVN	10		105415	0.03	0.088
213.00	213.61		2.0 0.1	0	QVN	15	Increased qtz/zeolite veining, associated with minor carb.	105416	0.082	0.099
213.61	215.85		2.0 0.1	0	QVN	10	Qtz veining-croc crackle brecciated. Flow breccia, dark green chl rich fragments.	105417	0.099	0.142
215.85	216.99		2.0 0.1	0	QVN	10	Breccia texture barely visible, minor broken zone. Rare zeolite veining.	105418	0.104	0.119
216.99	218.65		2.0 0.1	0	QVN	10	Minor broken zones.	105419	0.086	0.124
218.65	220.48		2.0 0.1	0	QCV	10		105420	0.1	0.156
220.48	222.33		2.0 0.1	0	QCV	10	Minor zeolite veining. Py disseminated in flow.	105422	0.09	0.15
222.33	223.88		2.0 0.1	0	QVN	10	Local chlorite rich dark green and silicified pale green portion increased py disseminations in silicified portion, associated with increased veining.	105423	0.091	0.157
223.88	225.35		2.0 0.1	0	QVN	15	Chl, silicified, medium green/grey flow, with dark green chl specks. Increased veining py associated with qtz, randomly oriented.	105424	0.082	0.147
225.35	226.32		2.0 0.1	0	QVN	10		105425	0.12	0.178
226.32	228.00		2.0 0.1	0	QVN	10	light grey/green, more silicized and sericitezed.	105426	0.052	0.088
228.00	229.84		2.0 0.1	0	QVN	10		105427	0.067	0.104
229.84	230.73		2.0 0.1	0	QVN	10	Minor zeolite veining.	105428	0.095	0.107
230.73	232.67		2.0 0.1	1	QVN	10	Less silicified, more chlorite, medium grained.	105429	0.107	0.139
232.67	234.36		2.0 0.1	0	QVN	10	More chloritic, less silicified. Vesicles infilled with green mafic chlorite.	105430	0.066	0.094
234.36	235.90		2.0 0.1	0	QVN	15	Increased zeolite veining-pink, randomly oriented.	105431	0.069	0.116
235.90	237.40		2.0 0.1	0	QVN	10	Moderate silicification, light grey. Zeolite stringers.	105432	0.143	0.167
237.40	239.34		2.0 0.1	0	QVN	10		105433	0.192	0.23

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
239.34	240.48	Fine-grained light green chloritic silicic	2.0 0.1	1	QVN	10	Moderate silicification, light grey. Zeolite stringers. About 10cm qtz vein, milky white, associated with disseminated py.	105434	0.127	0.19
240.48 - 252.65		SYENITE								
240.48	241.55	Fine-medium-grained pink porphyritic		15	QZCVN	10	Barren, post mineralization syenite dyke. Plagioclase, kfsp, qtz and mafic dark green phenocrysts (pyroxene?) in light green/grey fine grained matrix. Dyke randomly cut by late stage qtz/zeolite/carb veining, randomly oriented. MagS readings higher.	105435	0.007	0.006
241.55	242.57			15	QZCVN	10		105436	0.003	-2
242.57	244.41			14	QZCVN	10		105437	0.003	-2
244.41	247.10			20	QZCVN	10		105438	0.002	-2
247.10	249.02			13	QZCVN	10		105439	0.003	-2
249.02	250.87			12	QZCVN	10		105440	0.003	0.005
250.87	252.65			16	QZCVN	10		105441	0.003	-2
252.65 - 517.86		INTERMEDIATE VOLCANIC FLOW								
252.65	254.58	Fine-grained light green chloritic silicic	2.0 0.1	0	QVN	10	Py +/- cpy stringers associated with qtz veining (milky white), finely diss in flow. Veining is randomly oriented. Flow is weak to moderately silicified, possibly sericitized-pervasive alteration. Weak localized bt alteration, patchy brown colouration. Minor broken zones.	105442	0.092	0.126
254.58	256.27		2.0 0.1	1	QVN	10	Approximately 10cm qtz vein associated with approximately 2cm py veins- \leq 45 degrees to core axis. It infilled with clay/gouge.	105443	0.105	0.14
256.27	257.90		2.0 0.1	1	QVN	10		105444	0.093	0.126
257.90	259.72		2.0 0.1	0	QVN	10	Mafic portion. Qtz/zeo veining associated with diss py, veining bound by medium green stringer.	105445	0.091	0.114
259.72	261.53		2.0 0.1	1	QVN	10	Locally medium green mottled.	105446	0.07	0.087
261.53	263.43		2.0 0.1	0	QVN	10	Py veining bound locally by high silicified + sericite altered portions. Barren zeolite associated with qtz vein.	105448	0.106	0.161
263.43	265.07		2.0 0.1	0	QVN	10	Approximately 1cm thick py vein associated with qtz vein.	105449	0.093	0.134
265.07	266.84		2.0 0.1	0	QVN	10	Barren pink zeolite veining, randomly oriented. Minor fault zone, clay/gouge cementing flow fragments.	105450	0.069	0.088
266.84	268.68		2.0 0.1	0	QVN	10	Py veining bound by silicified and sericitized portions.	105451	0.086	0.11

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
268.68	269.07	Fine-grained light green chloritic silicic	2.0 0.1	0	QVN 10		105452	0.128	0.232
269.07	270.12		2.0 0.1	1	QVN 10	Local bt alteration, dark green/brown, more chlorite/bt respectively.	105453	0.075	0.075
270.12	270.80		2.0 0.1	0	QVN 10		105454	0.05	0.064
270.80	271.61		2.0 0.1	0	QVN 10	Chloritic portion, darker green colour.	105455	0.101	0.106
271.61	273.50		2.0 0.1	0	QVN 15	Pale green, silicified/sericite altered. Py veining bound by qtz veining, crosscutting randomly.	105456	0.118	0.147
273.50	275.15		2.0 0.1	0	QVN 15	Zeolite veining associated with qtz veining, chloritic cark green portions.	105457	0.147	0.177
275.15	277.05		2.0 0.1	19	QVN 10	Chloritic and silicified/sericitized portions. Zeolite/qtz, veining randomly oriented.	105458	0.091	0.103
277.05	278.95		2.0 0.1	1	22 QVN 10	Py veining bound by qtz vein, bound by chl veining. Mt stringer bound by qtz vein also diss.	105459	0.116	0.124
278.95	280.90		3.0 0.1	0	QVN 10	pale green, silicified and sericitized. Local chl + bt alteration. Increased diss py locally.	105460	0.118	0.131
280.90	282.65		3.0 0.1	0	QVN 10	pale green, silicified and sericitized. Local chl + bt alteration. Increased diss py locally. Increased bt altered portions.	105461	0.157	0.167
282.65	283.71		3.0 0.1	6	QVN 10	Carb veining associated with qtz/zeo veining.	105462	0.245	0.387
283.71	285.03		2.0 0.1	2	63 QVN 5	Dark green, mafic, chloritic, increased mt stringers associated with qtz/	105463	0.084	0.103
285.03	287.54		2.0 0.1	1	QVN 10	Pale green/grey. Approximately 3cm py veining associated with qtz/zeolite veining, randomly oriented. Locally vuggy.	105464	0.147	0.156
287.54	288.38		2.0 0.1	0	QVN 10	increased bt and chl alteration. Silicified and sericitized light green/grey portion.	105465	0.119	0.09
288.38	289.81		2.0 0.1	2	2 QVN 10	Less altered chl rich portions-py stringers bound by qtz veining.	105466	0.067	0.073
289.81	291.69		2.0 0.1	44	QVN 10	Mt veining associated with dqtz, zeolite, chl stringers. Patchy bt alteration.	105467	0.131	0.156
291.69	293.80		2.0 0.1	0	QVN 10	Milky/white qtz vein associated with fine to medium size py aggregates.	105468	0.144	0.124
293.80	294.64		2.0 0.1	0	QVN 10	Increased bt alteration.	105469	0.127	0.114

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
294.64	296.20	Fine-grained medium green chloritic	2.0 0.1	0	QVN	15 Py +/- cpy stringers associated with qtz, zeolite veining, diss in flow and qtz veins. Py content up to approx 4% locally. Veining is randomly oriented. Chloritic, bt alteration, patchy-brown. Increased veining associated with slight silicified and sericite altered portions-pale green colour. Cpy aggregate associated with qtz and py, at approx 294.91m.	105470	0.197	0.225
296.20	298.03		2.0 0.1	0	QVN	10 Mt stringer associated with py +/- cpy and bound by qtz veining. Approx 2cm py +/- cpy vein associated with qtz vein.	105471	0.145	0.18
298.03	299.85		2.0 0.1	0	QVN	10 Localized increase in diss py.	105472	0.116	0.114
299.85	301.94		2.0 0.1	0	QVN	10	105474	0.119	0.164
301.94	302.89		2.0 0.1	1	QVN	10	105475	0.086	0.146
302.89	303.97		2.0 0.1	0	QVN	10 Localized increase in diss py. Slightly sericitized + silicified, light grey colour.	105476	0.096	0.15
303.97	305.08		2.0 0.1	0	QVN	10 Localized increase in diss py. Localized bt alteration.	105477	0.149	0.187
305.08	306.56		2.0 0.1	0	QVN	5 Bt/brown alteration, white plagioclase phenocrysts in dark green/brown flow.	105478	0.096	0.086
306.56	306.88		2.0 0.1	0	QVN	15 Bt/brown alteration, white plagioclase phenocrysts in dark green/brown flow. Increased zeolite/Qtz veining locally associated with py +/- cpy.	105479	0.378	0.51
306.88	309.10		2.0 0.1	0	QVN	10 Bt/brown alteration, white plagioclase phenocrysts in dark green/brown flow. Increased bt alteration, minor BKN.	105480	0.08	0.08
309.10	310.89		2.0 0.1	0	QVN	10 Patchy and silicified and sericitized portions.	105481	0.112	0.116
310.89	312.70		2.0 0.1	0	QVN	10 Approximately 5cm Qtz vein associated with py +/- cpy aggregates. Cpy and py aggregate kfsp.	105482	0.096	0.117
312.70	313.82		2.0 0.1	0	QVN	10 Barren 1cm Qtz vein, pale green chloritic stain.	105483	0.222	0.233
313.82	314.07		2.0 0.1	0	QVN	10 Qtz vein associated with pyrite aggregates. Pale pink stain-zeolite.	105484	0.043	0.086
314.07	316.08		2.0 0.1	0	QVN	10 Darker green, chloritic. Diss py in flow.	105485	0.113	0.141
316.08	317.93		2.0 0.1	0	QVN	10 Localized py disseminations in darker green, more mafic flow. Silicified and sericitized portions with increased veining.	105486	0.147	0.212

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
317.93	319.88	Fine-grained light green silicic sericitic	3.0 0.1	2	QVN	20 Moderate to high silicification, dericitization, pale green/grey colour. It infilled by clay/gouge material, increased py disseminations and stringers associated with qtz veining. Locally vuggy dissolution structures in qtz + zeolite veining.	105487	0.113	0.168
319.88	320.95		3.0 0.1	11			105488	0.084	0.156
320.95	321.52		3.0 0.1			20 Locally vuggy dissolution structures in silicified and sericitized flow. Light green, less alteration.	105489	0.076	0.094
321.52	323.63		3.0 0.1	0		20 Minor fault zones, clay/gouge filled. Qtz/zeolite flooding associated with fine diss py.	105490	0.047	0.075
323.63	324.90		3.0 0.1	0		10 Medium green, weakly sericitized, more chloritic. Desreased veining qtz/zeo/chl, randomly oriented.	105491	0.042	0.058
324.90	325.55		3.0 0.1	0		10 Moderate to high silicification + sericitization, pale green/grey colour. Py +/- cpy diss in altered flow. Protolith destroyed. Qtz/zeolite veining, randomly oriented.	105492	0.105	0.079
325.55	326.35		3.0 0.1			10 Less altered, dark green chloritic, homogenous colour. Localized increased in diss py, fine and medium to coarse sized aggregates.	105493	0.066	0.078
326.35	326.83		3.0 0.1	1		10 Less altered, dark green chloritic, homogenous colour. Localized increased in diss py, fine and medium to coarse sized aggregates. Weak bt alteration, local. Qtz/zeo/chl veining.	105494	0.055	0.086
326.83	327.88		3.0 0.1	0			105496	0.026	0.09
327.88	328.04		3.0 0.5	0		10 Increased silicification + sericite alteration. Diss py +/- cpy. Cpy aggregate.	105495	0.06	0.086
328.04	330.65		3.0 0.1	1		10 Chl less silicification and sericitization, dark green qtz vein + py +/- cpy aggregates. Vesicles.	105497	0.082	0.115
330.65	331.53		3.0 0.1	0		10 Locally fragmented/brecciated, silicified and sericitized, light green/grey.	105498	0.111	0.164
331.53	332.87		3.0 0.1	0		10 More chloritic, less altered. Py +/- cpy aggregates and fine disseminations.	105500	0.066	0.088
332.87	334.37		3.0 0.1	0		10 Localized increased py disseminations. Patchy bt alteration.	105501	0.057	0.091
334.37	336.24		3.0 0.1	0		10 Slightly silicified + sericitized, fragmented/brecciated.	105502	0.099	0.091
336.24	337.21	Fine-grained light green silicic sericitic	3.0 0.1	0		10 chl slightly silicified + sericitized.	105503	0.13	0.133

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
337.21	339.30	Fine-grained light green sericitic silicic	3.0 0.1	0	10	Weak to moderate pervasive sericite alteration.	105504	0.098	0.119
339.30	340.63		3.0 0.1	0	10	Minor BKN zones.	105505	0.077	0.126
340.63	340.98		3.0 0.1	0	10	qtz vein, vuggy, sericite alteration, BKN zones.	105506	0.081	0.08
340.98	341.73		3.0 0.1		10	BKN, weak bt alteration.	105507	0.134	0.155
341.73	343.10		3.0 0.1	0	10	weak to moderate sericite alteration, green/yellow, diss py with chl haloes locally.	105508	0.058	0.098
343.10	344.95	Fine-grained medium brown-green silicic biotite	3.0 0.1	0 QVN	10	Py+/- cpy disseminated and stringers assoc. with qtz, chl veining. Veining is randomly orientated. Moderate to high bt. Alteration, pervasive, medium brown colour. Mottled chloritic vesicles, py curicular aggregates with chloritic haloes. Locally silicified and sericitized.	105509	0.092	0.124
344.95	346.90		3.0 0.1	0 QVN	10	Locally vuggy portions.	105510	0.116	0.181
346.90	347.68		3.0 0.1	0 QVN	10	Vesicles infilled with silica, chl and py. Massive py +/- cpy aggregates.	105511	0.102	0.168
347.68	349.39		3.0 0.1	8 QVN	10	Increased mt content, not visible, diss, not detectable with mt.	105512	0.091	0.138
349.39	350.92		3.0 0.1	0 QVN	10	Veining locally vuggy, dissolution textures.	105513	0.055	0.103
350.92	351.36		3.0 0.1	0 QVN	10	Veining locally vuggy, dissolution textures. Massive py vein approx 1-2cm thick bound by qtz vein. Py infilling vesicles with chl haloes. Moderate to highly silicified + sericitized, light grey/green.	105514	0.06	0.133
351.36	353.08		3.0 0.1	0 QVN	10	Locally homogenous light green/grey, massive, silicified/sericitized, reduced veining. Vesicles, infilled py/silica.	105515	0.09	0.124
353.08	355.15		3.0 0.1	QVN	10	Locally homogenous light green/grey, massive, silicified/sericitized, reduced veining. Vesicles, infilled py/silica. About 5cm qtz vein, bound by silicified and sericitized portion, hard, light yellow grey.	105516	0.077	0.1
355.15	355.70		3.0 0.1	QVN	10		105517	0.072	0.091
355.70	356.61		3.0 0.1	0 QVN	30	Locally vuggy, increased silicification/sericitization, pale grey, patchy bt alteration. Dissolution textures. Massive py veining associated with qtz veining.	105518	0.027	0.098
356.61	358.43		3.0 0.1	0 QVN	10	Slightly more chloritic, darker green colour.	105519	0.112	0.139
358.43	360.60		3.0 0.1	QVN	10		105520	0.139	0.176

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
360.60	362.96	Fine-grained medium brown-green silicic biotite	3.0 0.1	1 QVN	10	Less bt alteration.	105521	0.143	0.2
362.96	364.80		3.0 0.1	0 QVN	10	less bt alteration, chloritic. Approx 2cm py veining associated qtz veining + zeolite/kfsp.	105522	0.099	0.122
364.80	366.67		3.0 0.1	0 QVN	10	Silicified + sericitized, light grey/green. Local vuggy. Locally decreased veining.	105523	0.067	0.079
366.67	367.84		3.0 0.1	0 QVN	5	decreased veining, chloritic, homogenous, dark green colour.	105524	0.066	0.076
367.84	368.12		3.0 0.1	1 QVN	20	Increased veining, randomly oriented.	105526	0.05	0.062
368.12	369.74		3.0 0.1	0 QVN	10	Diss py. Veining randomly oriented.	105527	0.099	0.119
369.74	372.36		3.0 0.1	0 QVN	10	Silicified and sericitized portion, locally less altered, chloritic, dark green portions.	105528	0.067	0.086
372.36	374.19		3.0 0.1	0 QVN	10	Chloritic, approx 5cm py +/- cpy vein associated with qtz vein.	105529	0.086	0.105
374.19	376.44		3.0 0.1	0 QVN	10	Vuggy dissolution features in pink zeolite veining.	105530	0.16	0.18
376.44	377.26		3.0 0.1		10	Approximately 5cm py +/- cpy veining associated with qtz vein. Weakly vuggy.	105531	0.177	0.345
377.26	378.90		3.0 0.1	0 QVN	10	White/green (qtz/chl) mottled texture. Diss py and coarse py aggregate. Vuggy.	105532	0.072	0.106
378.90	380.48		3.0 0.1	0 QVN	10	Locally vuggy, slightly silicified and sericitized pale green colour. Weak bt alteration.	105533	0.062	0.085
380.48	381.76		3.0 0.1	0 QVN	10	Potassic altered, pervasive pink/brown homogenous colour, qtz veining associated with diss py.	105534	0.023	0.09
381.76	382.39		3.0 0.1	0 QVN	10	Locally vuggy, slightly silicified + sericitized, pale green colour. Weak bt alteration.	105535	0.084	0.096
382.39	383.33		3.0 0.1	0 QVN	10	Weak bt alteration. Vuggy, dissolution structures.	105536	0.141	0.104
383.33	383.75		3.0 0.1	7 QVN	10	Mafic, increased mt content, not visible, detected by magnet.	105537	0.095	0.156
383.75	385.81		3.0 0.1	0 QVN	10		105538	0.1	0.161
385.81	386.96		3.0 0.1	4 QVN	10	Mafic, increased mt content, not visible, detected by magnet. Increased zeolite veining.	105539	0.061	0.082
386.96	388.34		3.0 0.1	0 QVN	10	Locally broken, joints parallel to core axis, zero degrees.	105540	0.064	0.083

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
388.34	391.27	Fine-grained medium green chloritic biotite	2.0 0.1	0	QVN	15 Py +/- cpy diss in flow, locally associated with qtz/gypsum veining. Zeolite flooding locally, possibly kfsp veining-potassic alteration. Veining is randomly oriented. Local fault-BKN zone. Weak to moderate bt alteration-pervasive.	105541	0.074	0.096
391.27	392.42		2.0 0.1	0	QVN	15 Brecciated, qtz fragments.	105542	0.124	0.126
392.42	393.52		2.0 0.1	0	QVN	15 Qtz/zeolite veining boxwork, locally vuggy. Less bt alteration locally.	105543	0.071	0.082
393.52	394.70		2.0 0.1	0	QVN	15 Broken sample, brecciated qtz fragments.	105544	0.106	0.105
394.70	395.60		2.0 0.1	0	QVN	15	105545	0.073	0.084
395.60	397.90		2.0 0.1	0	QVN	10	105546	0.1	0.122
397.90	399.79		2.0 0.1	0	QVN	10 Locally increased py +/- cpy disseminations in flow. Py stringers cut by late stage zeolite veining.	105547	0.085	0.102
399.79	401.21		2.0 0.1	0	QVN	10 Minor vuggy dissolution structure in qtz/zeolite/gypsum veining. Py veining bound by chl stringers locally. Py + cpy associated with qtz +/- chl veining.	105548	0.092	0.162
401.21	403.07		2.0 0.1	0	QVN	15 Increased bt alteration. Increased veining, vuggy, dissolution texture, qtz/zeolite vein flooding.	105549	0.083	0.089
403.07	405.26		2.0 0.1	0	QVN	10 Py +/- cpy associated with qtz veining, bound by chl. Qtz/gypsum veining vuggy. Decreased vein flooding.	105550	0.083	0.077
405.26	407.19		2.0 0.1	1	QVN	10 Zeolite veining approx 45 degrees to core axis. Locally vuggy. Veining randomly oriented. About 10cm qtz vein. Assoc. with py+/-cpy. Py stringers bound by chl stringers locally. Fine diss. Py.	105552	0.136	0.15
407.19	408.32		2.0 0.1	5	QVN	5 Py +/- cpy aggregates- medium to coarse size.	105553	0.097	0.095
408.32	410.11		2.0 0.1	0	QVN	15 Increased zeolite veining, locally assoc. with qtz/gypsum. Randomly oriented. Stringers boxworked locally.	105554	0.08	0.086
410.11	411.18		2.0 0.1	0	QVN	7 ~10cm portion of qtz/gyp/zeo/chl veining, assoc. with diss py +/-cpy, randomly oriented. Py +/-cpy diss. In flow.	105555	0.082	0.082
411.18	411.70		2.0 0.1	0	QVN	20 Increased zeolite/ qtz veining- flooding assoc with increased py diss up to 35% locally	105556	0.088	0.093
411.70	412.88		2.0 0.1	1	QVN	10 Py diss in flow, stringers assoc with qtz/gypsum veining + chl locally. Randomly oriented.	105557	0.092	0.092
412.88	413.61		2.0 0.1	0	QVN	10	105558	0.095	0.085
413.61	414.12		2.0 0.1	0	QVN	10 Moderately silicified and sericite altered portion, light brown/green colour.	105559	0.069	0.063

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
414.12	414.52	Fine-grained medium green chloritic biotite	5.0 0.1	0	QVN	95 Massive py +/-cpy aggregates assoc with qtz vein x-cut by late stage barren zeolite veining.	105560	0.056	0.076
414.52	416.16		2.0 0.1	0	QVN	10 Py +/-cpy veining, diss. In flow and qtz veining. Veining is randomly oriented Pink zeolite veining x-cutting all earlier veining. Patchy bt and ser alteration- pervasive, wk to moderate locally.	105561	0.091	0.117
416.16	416.63		2.0 0.1	3	QVN	10 Increased mt according to kappometer, none visible, finely disseminated.	105562	0.115	0.1
416.63	416.96		2.0 0.1	4	QVN	10 Increased mt, locally vuggy in weak seri altered flow, inbetween zeolite veining.	105563	0.155	0.137
416.96	417.74		2.0 0.1	2	QVN	10 Increased mt- disseminated, not visible	105564	0.149	0.17
417.74	418.27		2.0 0.1	0	QVN	10 Moderate bt alteration	105565	0.387	0.423
418.27	420.69		2.0 0.1		QVN	10 BKN zone	105566	0.24	0.273
420.69	423.09		2.0 0.1	0	QVN	10 Epidote assoc with py +/- cpy, vuggy dissolution features assoc with light green/grey altered portions.	105567	0.104	0.146
423.09	425.34		2.0 0.1	1	QVN	5 Competent, less veining, moderate bt. Alteration minor BKN zone ~5m QV.	105568	0.069	0.069
425.34	427.10		2.0 0.1	3	QVN	5	105569	0.078	0.094
427.10	428.17		2.0 0.1	0	QVN	5	105570	0.059	0.18
428.17	428.65		2.0 0.1	32	QVN	7 Mt vein assoc with qtz vein. Qtz epi, Kfsp (yellow hard) vein-vuggy	105571	0.048	0.077
428.65	430.10		2.0 0.1	6	QVN	15 Py +/- cpy aggregate units assoc with qtz veining, randomly oriented	105572	0.127	0.17
430.10	431.52		2.0 0.1	4	QVN	7 Locally vuggy qtz/gypsum veining	105573	0.144	0.133
431.52	432.64	Fine-grained medium green chloritic silicic	2.0 0.1	1		5 Py +/- cpy diss, stringers assoc with chl. Vesicles localized infilled with silica. Veining is randomly oriented. Flow is wkly alterd, pervasive silicification.	105574	0.166	0.142
432.64	433.86		3.0 0.1	1	QVN	15 Py +/- cpy diss, stringers assoc, with qtz veining, locally bound by chl. Increased veining, qtz zeolite, gypsum, py, randomly oriented. Local qtz + zeolite flooding. Weak silicification, pervasive.	105575	0.193	0.31
433.86	434.20		2.0 0.1	4		5 Py +/-cpy diss in flow, stringers assoc. with qtz. Rare zeolite, qtz veining. Very weak silicification. Increased mt, fine diss, not visible, indicated by kappometer.	105576	0.075	0.089

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
434.20	435.09	Fine-grained medium green chloritic silicic	3.0 0.1	0	QVN	15 Py +/- cpy, diss, stringers assoc, with qtz/zeolite, gypsum. Rare yellow/green epidote stringers. Veining randomly oriented. Local bt alteration-moderate, pervasive, locally silicified.	105578	0.214	0.241
435.09	435.95		2.0 0.1	5	ZVN	5 Py +/- cpy diss in flow, coarse aggregates locally, with chloritic haloes. Pink soft sericite veining assoc with rare yellow/green epidote stringers. Very wkly sericitized. Increased mt diss fine not visible, indicated by kappameter.	105579	0.078	0.072
435.95	438.00		2.0 0.1	0	QVN	10 Py +/- cpy diss in flow with chl haloes locally, stringers assoc with qtz/chl veining and mt in places, 29.7 in kappameter ~5cm qtz/zeolite/gyp veining, vuggy, dissolution features. Zeolite flooding in places assoc with increased qtz veining and py aggregates.	105580	0.128	0.127
438.00	439.83		3.0 0.1	0	QVN	10 ~1-2cm thick py veining bound by bt alteration, assoc with qtz veining locally. Vuggy zeolite veining. Greater % of py appears as disseminations in flow with chl haloes.	105581	0.167	0.152
439.83	441.70		2.0 0.1	0		Vesicles locally infilled with qtz/gyp, chl, py and an assoc of py,chl,qtz,gyp	105582	0.17	0.165
441.70	442.29		2.0 0.1	0		Decreased py veining- mostly disseminated	105583	0.443	0.596
442.29	444.16		2.0 0.1	0	QVN	15 Py +/- cpy stringers assoc with ~1-2cm thick qtz veining assoc with zeolite, gypsum and rare carb. Bt alteration, pervasive. Locally vuggy, assoc with chl.	105584	0.347	0.369
444.16	446.17		2.0 0.1	0	QVN	5 Py +/- cpy diss in flow. Rare veining, qtz vuggy vein - with dissolution texture. Py present is massive aggregates, assoc with chl.	105585	0.257	0.248
446.17	446.80		2.0 0.1	0	QVN	7 Py +/- cpy disseminated, surrounded by chl haloes. Vesicles infilled with chl locally. Rare vuggy structures-dissolution features in qtz/gypsum/zeo.	105586	0.231	0.206
446.80	448.32		2.0 0.1	0	QVN	5 Diss py +/- cpy coarse size py aggregates. Locally silicified and sericitization, weak to moderate, pale green/grey. Local bt alteration, patchy brown. Minor vesicles infilled with chl.	105587	0.173	0.15
448.32	450.37		2.0 0.1	0	QVN	10 Pale green/grey weak to moderate silicified and sericite altered portions are assoc with qtz/gyp/zeo,py veining, randomly oriented.	105588	0.161	0.144
450.37	452.41		2.0 0.1	0			105589	0.177	0.157
452.41	453.60		2.0 0.1	0			105590	0.093	0.098

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
453.60	454.20	Fine-grained grey brown biotite sericitic	2.0	0.1	1 QZGCV	10	Py +/- cpy diss in altered flow, stringers assoc. with qtz, chl veining. Moderate to highly silicified and sericitized, very pale grey colour with chl green specks. Moderate patchy bt alteration, medium to dark brown colour. Veining is randomly oriented.	105591	0.16	0.184
454.20	455.98		2.0	0.1	0 QZGCV	10		105592	0.226	0.256
455.98	457.82		2.0	0.1	0 QZGCV	10		105593	0.198	0.179
457.82	459.68		2.0	0.1	0 QZGCV	10		105594	0.107	0.105
459.68	461.65		2.0	0.1	0 QZGCV	10	Increased bt alteration, reduced ser and silicification portion.	105595	0.269	0.255
461.65	462.24		2.0	0.1	0 QZGCV	10		105596	0.122	0.099
462.24	463.95		2.0	0.1	0 QZGCV	10		105597	0.1	0.078
463.95	465.43		2.0	0.1	0 QZGCV	10		105598	0.187	0.159
465.43	467.13	Fine-grained medium green chloritic silicic	3.0	0.5	0 QZGCV	10	Py +/- cpy diss and stringers associated with smokey qtz vein and gypsum. Qtz vein is slightly brecciated. Weak to moderate silicification and sericite alteration, green/yellow portions. Locally brecciated. Brown patchy-possibly bt alteration, no cleavage faces seen.	105599	0.261	0.226
467.13	468.95	Fine-grained brown chloritic silicic	2.0	0.1	0 QZGCV	10	white/grey silicified and sericitized, weak to moderate, pervasive alteration. Brown-possibly bt alteration. Py +/- cpy diss in altered flow, stringers associated with qtz vein-randomly oriented and unevenly spaced.	105600	0.227	0.188
468.95	470.95		2.0	0.1	0 QZGCV	10		105601	0.163	0.174
470.95	472.58		2.0	0.1	0 QZGCV	10		105602	0.173	0.161
472.58	474.57		2.0	0.1	0 QZGCV	10		105604	0.134	0.111
474.57	476.65		2.0	0.1	0 QZGCV	5	Less alteration, more chloritic, dark green colour.	105605	0.168	0.142
476.65	477.88		2.0	0.1	0 QZGCV	5		105606	0.107	0.098
477.88	479.54		2.0	0.1	0 QZGCV	5	Increased zeolite veining associated with qtz vein.	105607	0.123	0.118
479.54	480.54		2.0	0.1	15 QZGCV	5	Reduced zeolite veining.	105608	0.306	0.312
480.54	481.35		3.0	0.5	1 QZGCV	5	Mt veining associated (28.5) with qtz vein + zeolite, chl and py. Cpy + py aggregates	105609	0.482	0.529
481.35	482.25		2.0	0.1	0 QZGCV	0 5	Py +/- cpy diss and stringers, disseminations associated with chl haloes, stringers bound by mt and qtz locally.	105610	0.29	0.275
482.25	484.33		2.0	0.1	0 QZGCV	5		105611	0.183	0.148

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
484.33	485.33	Fine-grained brown chloritic silicic	2.0 0.1	0	QZGCV	5 Py +/- cpy diss in flow and stringers associated with chl and qtz veining. Randomly oriented. Pale green/grey silicified and sericite altered portions, and dark green/brown less altered chloritic flow. Minor carb stringers associated with pink, soft, zeolite veining.	105612	0.193	0.158
485.33	487.07		2.0 0.1		QZGCV	5 Locally increased diss py	105613	0.207	0.178
487.07	488.30		2.0 0.1	0	QZGCV	5 Locally increased diss py with chl haloes, py stringers bound by chl veining, py associated with cpy aggregates.	105614	0.191	0.178
488.30	489.25		2.0 0.1	0	QZGCV	10 Increased zeolite/carb veining, py +/- cpy associated with qtz veining, randomly oriented veining and unevenly spaced.	105615	0.151	0.156
489.25	491.42		2.0 0.1	1	QZGCV	10 Increased mt indicated by kapameter reading. Silicified and sericitized portion associated with increased veining. Sample consists mainly of homogenous dark green unaltered flow.	105616	0.184	0.171
491.42	493.38		2.0 0.1	1	QZGCV	15	105617	0.136	0.129
493.38	493.96		2.0 0.1	0	QZGCV	10	105618	0.092	0.079
493.96	494.81		2.0 0.1	0	QZGCV	10 Increased mt indicated by kapameter reading. Silicified and sericitized portion associated with increased veining. Sample consists mainly of homogenous dark green unaltered flow. Increased zeolite veining.	105619	0.099	0.093
494.81	495.56		2.0 0.1	0	QZGCV	10	105620	0.132	0.11
495.56	497.39		3.0 0.1	0	QZGCV	15 Increased silicification and sericite alteration, pale green/grey. Possible fine grained biotite alteration, no cleavage faced visible. Mottled chl alteration.	105621	0.185	0.172
497.39	498.87		2.0 0.1	0	QZGCV	10	105622	0.151	0.135
498.87	500.34		3.0 0.1	0	QZGCV	50 Increased silicification and sericite alteration, pale green/grey. Possible fine grained biotite alteration, no cleavage faced visible. Mottled chl alteration. Approximately 30cm pv, vuggy dissolution features cut by py, zeo + chl veining.	105623	0.109	0.1
500.34	500.87		2.0 0.1	1	QZGCV	15	105624	0.166	0.157
500.87	502.50		2.0 0.1	0	0	0 0 Increased carb veining.	105625	0.144	0.151
502.50	505.76		2.0 0.1	0			105626	0.148	0.178
505.76	507.52		2.0 0.1	0	QZGCV	5 Mt veining, diss associated with qtz, zeo veining. Green/brown, less silicified or sericitized.	105627	0.149	0.151

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
507.52	509.22	Fine-grained brown chloritic silicic	2.0 0.1	0 0	0 0	Local vuggy qtz vein.	105628	0.119	0.097
509.22	511.05	Fine-medium-grained medium green chloritic silicic	2.0 0.1	2 13	QKVN	7 Py +/- cpy stringers associated with qtz veining, mt locally, also diss in flow. Mt veining associated with qtz veining. Zeolite veining associated with qtz + carb. Veining is randomly oriented and unevenly distributed. Generally unaltered, chloritic.	105630	0.167	0.117
511.05	513.20		2.0 0.1	11	QKVN	7 Cpy aggregates associated with py.	105631	0.191	0.222
513.20	514.32		2.0 0.1	15	QKVN	7 Vesicles, chl and py infilled.	105632	0.164	0.226
514.32	515.82		2.0 0.1	27	QKVN	7 Mt stringers. Vesicles, chl and py infilled.	105633	0.068	0.065
515.82	517.86		2.0 0.1	0	QKVN	7	105634	0.145	0.117
517.86	637.59	QUARTZ MONZONITE							
517.86	519.02	Fine-medium-grained medium green chloritic silicic	4.0 0.1	0	QKVN	7 Moderate to highly silicified, increased py +/- cpy stringers + diss. Moderate sericite alteration. Light grey colour. Cross cut by pink zeolite veining. Py +/- cpy also present as coarse size aggregates. Py content up to approx 5% locally. Possible qtz monzodiorite fragments.	105635	1.465	1.395
519.02	520.61		2.0 0.1	9	QKVN	7 Increased mt veining. Relatively	105636	0.506	0.373
520.61	521.11		2.0 0.1	5	QKVN	7 Mt veining assoc. with qtz vein, also diss in flow.	105637	0.265	0.2
521.11	521.48		2.0 0.1	118	QKVN	7	105638	0.292	0.261
521.48	523.35		2.0 0.1	1	QKVN	7 ~3cm qtz vein, crackle brecciated, cut by py +/- cpy stringers assoc. locally by kfsp or zeolite veining	105639	0.642	0.554
523.35	525.07		2.0 0.1	1	QKVN	7 pink zeolite/kfsp veining	105640	0.241	0.187
525.07	526.91		2.0 0.1	0	QKVN	7	105641	0.191	0.13
526.91	528.56		2.0 0.1	0	QKVN	7 moderate silicified + semi silicified locally, pink potassic alteration, crosscut by zeolite/kfsp veining and carb. Veining, randomly oriented	105642	0.107	0.082
528.56	529.23		2.0 0.1	0	QKVN	7 portions of altered qtz monzodiorite phenocrysts barely visible, silicification overprinting protolith pale green/grey flow, massive crosscut by post mineralization, barren qtz/zeo veining	105643	0.096	0.078
529.23	531.50		2.0 0.1	1	QKVN	7 Silicified, wk to moderate, pervasive, wk, sericite alteration, pale green/grey crosscut by barren zeolite. Medium chl speckles, locally assoc. with pyrite fine diss. 45 degree contact with qtz monzo portion	105644	0.138	0.105

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
531.50	531.98	Fine-medium-grained medium green chloritic silicic	2.0 0.1	2	CTC 45	portions of qtz monzodiorite , elongated plagioclase phenocrysts in pale green/brown matrix with ~20cm flow portions. Both lithologies crosscut by barren qtz +zeo veining	105645	0.075	0.057
531.98	533.60		2.0 0.1	1		Mafic flow, dark green slightly magnetic- diss. not visible	105646	0.12	0.118
533.60	533.99		2.0 0.1	17	QKVN 5	Portions of qtz monzodiorite, elongated plagioclase phenocrysts in green/brown matrix closely assoc. contact not visible with mafic monz-phenocrysts barely visible	105647	0.082	0.082
533.99	535.53		2.0 0.1	1	24	Mt veining visible soc. With qtz and zeolite 64.4 and 33.8 readings on kappimeter in flow. Mt Diss assoc with qtz in monzo ~20cm fragment	105648	0.094	0.089
535.53	536.80		2.0 0.1	1	1	Moderate to high potassic alteration, pervasive, silicified, Py diss in altered portion. Smokey/grey crackle brecciated qv. Protolith overprinted	105649	0.207	0.177
536.80	537.10		2.0 0.1	1	1	Wk potassic alteration, silicified, possibly weak bt. alteration and sericite	105650	0.227	0.399
537.10	538.31		2.0 0.1	1	1	Wk potassic alteration, silicified, possibly weak bt. alteration and sericite, ~3cm qtz vein assoc with carb and pyrite	105651	0.338	0.306
538.31	539.71		2.0 0.1	1	1	brown/green sericite +/- bt alterations, pyrite veining, randomly oriented, prolific overprinted locally.	105652	0.663	0.739
539.71	540.78		2.0 0.1	0	QTZPY 15	Py +/- diss. Fine stringers assoc with qtz veining, mt veining. Up to 20%	105653	0.472	0.482
540.78	542.25	Fine-medium-grained medium green chloritic	1.0 0.1	1	0 QVN 7	Py mainly diss, fine to medium. Mt diss in qtz. Qtz, zeo, carb veining.	105654	0.205	0.211
542.25	543.12		1.0 0.1	1	34 QVN 7		105656	0.171	0.165
543.12	543.92		1.0 0.1	1	1 QVN 7	Py diss assoc with mt stringers also diss in potassic altered portions.	105657	0.146	0.156
543.92	545.29		1.0 0.1	1	23 QVN 7		105658	0.184	0.184
545.29	545.72		1.0 0.1	1	6 QVN 7	Massive py aggregates, BKN zone. Diss mt assoc with qtz vein. Randomly oriented stringers.	105659	0.232	0.218
545.72	547.17		1.0 0.1	1	8 QMTVN 10		105660	0.196	0.18
547.17	548.27		1.0 0.1	1	23 QMTVN 10	Pink qtz/zeo fragment.	105661	0.224	0.23
548.27	549.91		1.0 0.1	1	1 QMTVN 10	Dark green, mafic flow, monzo fragment, protolith overprinted, phenocrysts barely visible.	105662	0.133	0.128

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
549.91	551.02	Fine-medium-grained medium green chloritic	1.0 0.1	1	10 QVN	10 Py +/-cpy stringers assoc with qtz vein. Diss in flow. Monzo is silicified, chl locally moderate to high locally, pervasive. Protolith overprinted locally. Phenocryst outline barely visible. Qtz/zeo/carb veining, randomly oriented. ~10cm qtz vein, crackled brecciated cracks infilled with zeo veining.	105663	0.159	0.214
551.02	552.67	Fine-medium-grained medium green porphyritic silicic	2.0 0.1	2	14 QVN	10 Increased qtz veining, randomly cut by carb/zeo veining. Locally assoc with mt veining. Mt diss locally.	105664	0.351	1.76
552.67	554.74		2.0 0.1	2		Crackled brecciated qtz vein, cracks lined by py and cpy. Qtz veining x-cutting monzo. Protolith overprinted locally. Flow xenoliths in monzo. Mt diss, stringers barely visible.	105665	0.24	0.516
554.74	556.43		3.0 0.7	2	106 QMTVN	15	105666	0.341	0.658
556.43	557.93		3.0 0.5	2	116 QMTVN	15 Monzo protolith visible locally. Plagioclase, Kfsp phenocrysts in pale green mafic matrix. Fine diss py +/- cpy in matrix. Monzo by qtz veining, assoc with zeo/kfsp/carb and mt. Py +/-cpy assoc with smokey/grey qtz veining.	105667	0.132	0.288
557.93	559.77		3.0 0.5	2	43 QMTVN	15	105668	0.079	0.154
559.77	561.76		3.0 0.5	2	83 QMTVN	15 Minor pink stained, potassic altered portions.	105669	0.09	0.216
561.76	562.65		3.0 0.5	2	22 QMTVN	15 Py +/-cpy diss and stringers assoc with qtz and zeo veining - rag in sample. Plagioclase, kfsp, qtz pyroxene or amphibole phenocrysts in the grained qtz and plagi matrix. Cut by randomly oriented qtz/zeo/mt veining. Mt also diss in monzo. Pink stained potassic portions.	105670	0.045	0.057
562.65	564.28	Fine-medium-grained medium green porphyritic silicic k-felspar			30 QMTVN	20 Chalcopyrite aggregate - coarse sized in smokey/grey qtz vein, bound by mt veining.	105671	0.213	0.309
564.28	565.18	Fine-medium-grained pink porphyritic silicic k-felspar			2 QMTVN	20 Protolith overprinted locally by silicification. Chalcopyrite aggregate in ~5cm qv.	105672	0.245	0.408
565.18	565.93				23 QMTVN	20 ~10cm smokey/grey qtz vein assoc with py +/-cpy diss assoc with mt diss in qv.	105673	0.251	0.382
565.93	567.67				12 QMTVN	20 Py +cpy aggregates assoc with secondary qtz stringer x-cutting primary generation qtz vein, ~5cm thick	105674	0.177	0.285
567.67	569.49				22 QMTVN	20 Increased in mt stringers and dissemination.	105675	0.18	0.267
569.49	570.82				82 QMTVN	15 ~3cm thick py +/-cpy vein assoc with qtz vein, cutting through core.	105676	0.16	0.277
570.82	571.50				QMTVN	10 Decreased veining, mt diss in monzo.	105677	0.218	0.353

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm			
571.50	572.61	Fine-medium-grained pink porphyritic silicic k-felspar		28	QVN	5	Increased veining, decreased mt content.	105678	0.121	0.142		
572.61	574.40			4	QMTVN	10	Increased mt diss.	105679	0.285	0.391		
574.40	575.70			1			Py +/-cpy fine diss in qtz veining, cpy coarse size aggregate in milky/white qv. Smokey/grey qtz vein is ~30% of sample. Qtz vein is crackled brecciated, cracks infilled with py +/-cpy and zeolite. Rare mt in disseminations or stringers. Protolith overprinted.	105680	0.374	0.428		
575.70	576.01	Fine-grained light grey porphyritic silicic	2.0	0.5	1	3	QVN	40	Slight green stain, chloritic in monzo matrix.	105682	0.022	0.05
576.01	576.33		1.0	0.1	1		QVN	15	Diss py +/-cpy in monzo matrix, locally assoc with smokey/grey qtz veining, x-cut by post mineralization zeolite veining. Veining stockwork is randomly oriented. Zeolite assoc with carb locally. Plagio, qtz, Kfsp (locally), pyroxene/amphibole phenocrysts in light green/grey matrix. Protolith overprinted locally. Sericitized plagio phenocrysts present locally. Mt reduced locally.	105683	0.231	0.292
576.33	578.21	Fine-grained medium green porphyritic silicic	1.0	0.1	7	50	QMTVN	15		105684	0.13	0.156
578.21	579.58		1.0	0.1	7	18	QMTVN	15	Qtz/mt veining stockwork.	105685	0.253	0.338
579.58	581.60		1.0	0.1	7	1	QMTVN	15	Py +/-cpy stringer assoc with qtz/zeolite/carb veining. ~10cm qtz vein assoc zeo/carb/	105686	0.127	0.149
581.60	583.52		1.0	0.1	7	4	QMTVN	15	~20cm qtz vein assoc with carb and zeo, no py.	105687	0.358	0.45
583.52	584.44		1.0	0.1	7	0	QMTVN	15	~15cm smokey/grey qtz vein, with ~1% py +/-cpy disseminations assoc with mt.	105688	0.27	0.301
584.44	587.35		1.0	0.1	7	34	QMTVN	15	~30cm smokey/grey qtz vein, diss py.	105689	0.111	0.203
587.35	589.23		1.0	0.1	7	8	QMTVN	30	~15cm smokey qtz vein, rare assoc with py diss.	105690	0.08	0.083
589.23	591.18		1.0	0.1	7	5	QMTVN	15	Smokey/grey qtz vein assoc with diss mt and stringers. Zeo/carb veining. BKN.	105691	0.114	0.137
591.18	593.20		1.0	0.1	10	63	QMTVN	15	BKN, less mt, increased zeo/Qtz veining. Silicified, protolith overprinted locally.	105692	0.182	0.206
593.20	594.88		1.0	0.1	7	20	QMTVN	15	Qtz, brecciated locally assoc with mt stringers.	105693	0.641	0.822
594.88	596.68		1.0	0.1	7	98	QMTVN	15	Localized increase in mt diss.	105694	0.214	0.27
596.68	598.56		1.0	0.1	7	40	QMTVN	10	Protolith overprinted by silicification locally. Local increase in mt/carb stringers.	105695	0.085	0.123
598.56	600.40		1.0	0.1	7	144	QMTVN	10	Reduced veining.	105696	0.077	0.106

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
600.40	602.22	Fine-grained medium green porphyritic silicic	1.0 0.1	7 24	QMTVN	5 Locally pink stained potassic altered portion. Rare py +/- cpy stringer	105697	0.092	0.123
602.22	603.80		1.0 0.1	7 240	QMTVN	5 Py +/-cpy stringer and diss assoc with zeolite and qtz vein locally.	105698	0.073	0.093
603.80	605.93		1.0 0.1	7 15	QMTVN	5 Localized increase in diss py, assoc in potassic altered portion. Protolith overprinted locally with silicification.	105699	0.106	0.123
605.93	608.03		1.0 0.1	7 8	QMTVN	5 Protolith overprinted locally by silicification.	105700	0.348	0.461
608.03	609.71		1.0 0.1	7 9	QMTVN	5 Locally altered potassic portions.	105701	0.199	0.213
609.71	611.85		1.0 0.1	5 0	QMTVN	5 Carb veining assoc with zeo +/-carb.	105702	0.192	0.228
611.85	613.59		1.0 0.1	5 1	QMTVN	5	105703	0.198	0.268
613.59	613.94		1.0 0.1	5	QMTVN	5 ~10cm smokey/grey qtz vein assoc with zeolite/carb/pyrite - rare. Protolith overprinted locally.	105704	0.104	0.145
613.94	615.65		1.0 0.1	5 20	QZCVN	5	105705	0.165	0.188
615.65	616.33		1.0 0.1	5	QZCVN	5 Pink stained - potassic pervasive alteration.	105706	0.068	0.093
616.33	617.37		1.0 0.1	5 23	QZCVN	5 Protolith locally overprinted by silicification - pervasive.	105708	0.032	0.041
617.37	619.22		1.0 0.1	5 60	QZCVN	5 Locally increased carb veining.	105709	0.074	0.115
619.22	620.56		1.0 0.1	5	QZCVN	5 Locally increased py - diss and vein ~10cm thick assoc with qtz vein, silicified, protolith overprinted.	105710	0.105	0.191
620.56	620.99		3.0 0.1	5 1	QVN	5 Potassic altered, carb veining, qtz assoc with py aggregates.	105711	0.169	0.503
620.99	621.82		1.0 0.1	5 2	QZCVN	5 Pristine, relatively unaltered.	105712	0.116	0.111
621.82	624.03		1.0 0.1	5	QZCVN	5	105713	0.051	0.073
624.03	626.01		1.0 0.1	5 8	QZCVN	5	105714	0.144	0.177
626.01	627.77		1.0 0.1	5 17	QZCVN	5	105715	0.172	0.195
627.77	629.44		1.0 0.1	5 2	QZCVN	5	105716	0.111	0.144
629.44	630.96		1.0 0.1	5 6	QZCVN	5 Rare py +/-cpy diss and stringers assoc with qtz/zeo veining. Veining is randomly oriented, unevenly spaced. Local potassic altered portions, pink stained. Generally pristine, unaltered. White plagioclase and dark green/black pyroxene/amphibole phenocrysts in medium green/grey matrix.	105717	0.186	0.245
630.96	633.00	Fine-medium-grained medium green porphyritic silicic	1.0 0.1	2 9	QVN	7 ~5cm smokey/grey qtz vein, assoc with fine py disseminations infilling crack.	105718	0.089	0.102

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
633.00	634.92	Fine-medium-grained porphyritic silicic medium green	1.0 0.1	2 19	QVN	7 Moderately silicified portion, pervasive, protolith overprinted locally.	105719	0.125	0.131
634.92	635.60		1.0 0.1	2 1	QVN	7	105720	0.273	0.251
635.60	636.90		1.0 0.1	2 26	QVN	7 Increased carb veining.	105721	0.135	0.122
636.90	637.59		1.0 0.1	2 1	QVN	5 Barren post mineralization syenite dyke, x-cut by late stage zeolite and carbonate veining, randomly oriented. Minor BKN zone.	105722	0.236	0.198
637.59 644.75 SYENITE									
637.59	639.47	Fine-medium-grained pink porphyritic			12 ZCV	7	105723	0.01	0.011
639.47	641.09				15 ZCV	7	105724	0.003	0.006
641.09	642.39				8 ZCV	7	105725	0.003	-2
642.39	644.03				16 ZCV	7	105726	0.004	-2
644.03	644.75				16 ZCV	7 Contact between syenite dyke and monzo defined by qtz vein assoc with massive ~30% cpy aggregate. Rare py +/-cpy stringer and diss. White plagioclase, kfsp, pyroxene/amphibole phenocrysts in fine grained qtz and plagio matrix. X-cut randomly by qtz veining. Late stage zeolite/carb, barren stringers. Mt diss in monzo, minor stringers. Phenocrysts outline barely visible.	105727	0.008	0.012
644.75 647.16 QUARTZ MONZONITE									
644.75	646.58	Fine-medium-grained porphyritic medium green	3.0 0.7	1 21	QZCVN	5	105728	0.523	0.577
646.58	647.16		0.5	1 2	QCV	5 Dark green volcanic xenolith, barren cut by qtz/carb veinlets, randomly oriented, weak effervescence with HCl. ~30 degrees contact with monzo.	105729	0.104	0.132
647.16 647.48 BASALT XENOLITH									
647.16	647.48	Fine-grained dark green			22 QCV	5 Rare py +/-cpy and diss, white plag, kfsp locally, pyroxene/amphibole phenocrysts in fine grained qtz and plagio matrix. Smokey/grey qtz assoc locally with mt. Silicified locally and protolith overprinted.	105730	0.011	0.013
647.48 663.73 QUARTZ MONZONITE									
647.48	649.43	Fine-medium-grained porphyritic medium green	0.5	1 6	QZCVN	5 Local potassic alteration.	105731	0.258	0.387
649.43	651.36		0.5	1 18	QZCVN	5	105732	0.118	0.18

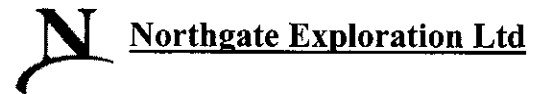
Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
651.36	653.23	Fine-medium-grained medium green porphyritic	0.5	1	14 QZCVN	5 Core loss.	105734	0.105	0.136
653.23	654.71		0.5	1	29 QZCVN	5 Increased veining. Large qtz vein ~5cm thick assoc with zeolite and carb, parallel to core axis. ~0 degrees to c.a. - Barren - post mineralization.	105735	0.132	0.167
654.71	655.04		0.5	1	QZCVN	20 Rare epidote stringer infilling jt.	105736	0.172	0.171
655.04	656.77		0.5	1	45 QZCVN	5 Qtz assoc with epi veining.	105737	0.132	0.145
656.77	658.62		0.5	1	6 QZCVN	5	105738	0.077	0.091
658.62	659.60		0.5	1	4 QZCVN	5	105739	0.11	0.123
659.60	661.41		0.5	1	20 QZCVN	5 Minor anhydrite vein assoc with qtz vein.	105740	0.115	0.138
661.41	663.73		0.5	1	9 QZAC	5 Barren post mineralization syenite dyke, x-cut by late stage zeolite/Kfsp and carbonate veining randomly oriented, ~ 35 degrees c.a. angle contact with flow xenolith.	105741	0.126	0.145
663.73 665.05 SYENITE									
663.73	665.05	Fine-grained pink porphyritic			15 QZCVN 35	5 Dark green volcanic xenolith, barren cut by qtz/carb veinlets, randomly oriented, weak effervescence with HCl. Visible white plagio phenocrysts and dark green/black euhedral/anhedral mafic, magnetic magnetite specks.	105742	0.013	0.017
665.05 666.7 BASALT XENOLITH									
665.05	666.70	Fine-grained dark green			28 QZCVN	5 Barren, post mineralization dyke, x-cut by late qtz/zeolite/carbonate veining. Randomly oriented.	105743	0.008	0.005
666.7 685.15 SYENITE									
666.70	668.68	Fine-medium-grained pink porphyritic					105744	0.002	0.005
668.68	670.66				13		105745	0.002	0.018
670.66	671.36						105746	0.002	-2
671.36	673.26				17	Minor BKN zone.	105747	0.002	-2
673.26	675.21				19		105748	0.002	-2
675.21	676.65				20		105749	0.003	-2
676.65	678.57				15	Minor BKN zone.	105750	0.002	-2
678.57	680.39				18		105751	0.002	-2

Hole Number: KN-02-12

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
680.39	682.15	Fine-medium-grained pink porphyritic		13			105752	0.003	-2
682.15	684.03			21			105753	0.002	-2
684.03	685.15			21		Rare py +/-cpy diss. Plagioclase and dark green, mafic phenocrysts in fine grained, light grey matrix. Potassic altered portions. Kfsp/zeolite veining assoc with carb locally. BKN zones.	105754	0.004	0.005
685.15	688.38	QUARTZ MONZONITE							
685.15	687.38	Fine-grained pink porphyritic	0.5	10			105755	0.047	0.052
687.38	688.38						105756	0.035	0.042
688.38		EOH							

Kemess North 2002 - Diamond Drill Log



Hole Number: **KN-02-13**

Northing: 16046.0	Total Depth: 691m
Easting: 10360.3	Azimuth: 360°
Elevation: 1738.1	Dip: -85°

Geologist: B. Mercer
Logged Date: 7/3/2002

Survey Depth	Azimuth	Dip	Comments:
0 m	360 °	-85 °	
325 m	18 °	-79 °	Magnetic
417 m	313 °	-85 °	
505 m	12 °	-83 °	Magnetic
596 m	333 °	-81 °	
688 m	18 °	-79 °	Magnetic

Kemess North 2002 - Summary Drill Log



Hole Number: **KN-02-13**

From (m)	To (m)	Rock Type	Comments
0	5.05	CASING	
5.05	13.05	ANDESITE FLOW	Moderately well developed stock work of massive py veinlets with bleached selvages. Ground water oxidation has produced bright yellow jarosite on fractures and slips.
13.05	17.05	ANDESITE FAULT ZONE	Minor gouge @ beginning of sample
17.05	23.16	ANDESITE FLOW	
23.16	48.05	SYENITE	Approx 15% subhedral mafic minerals in a groundmass of anhedral to subhedral feldspar, which appears to be K-spar. Minor amounts of calcite veinlets cut unit at low angles in the range of 20-30o t.c.a.
48.05	65.65	ANDESITE FLOW	Very similar to 106676 but stronger ser. Alt. Py veinlets are wider (1cm) and stock work less developed, but py now occurs as anhedral clots and blebs in the rock in addition to the veins
65.65	167.5	ANDESITE FLOW BRECCIA	Well altered polyolithic bx. Can still see fragmental texture including easily identifiable BFP. Alteration consists of very strong ser/chl. Not quite phyllic but more than propylitic. Most py is in either py veinlets or py-bearing white qtz veinlets. These veinlets are increasing down hole but are predominantly unidirectional. Rare cpy in q.v's
167.5	216.92	ANDESITE FLOW	Chl. Alt greater than sericite alt
216.92	253.15	MONZONITE	Highly altered K-spar porphyritic monzonite. 2-3mm plagioclase are replaced by chlorite. The rock is strongly and pervasively silicified and cut by qtz/py veinlets. C.G magnetite from 216.92m-224.92m.
253.15	296.12	ANDESITE FLOW	
296.12	300	MONZONITE	Monz porph. Chloritic pseudomorph after feldspar in a sericitic matrix with patchy silicification.
300	348.24	ANDESITE FLOW	Silicified flow at contact with monzonite. Sericite gouge at 300.65 to 300.70m.

Hole Number:

KN-02-13

From (m)	To (m)	Rock Type	Comments
348.24	360.93	SYENITE	Medium grained equigranular syenite.
360.93	381.7	ANDESITE FLOW	Zeolite/carb veins starting to increase at the expense of qtz veins. May still be present, but very sporadic.
381.7	384.75	FAULT ZONE FLOW	Vuggy open fractures filled with py and zeo/carb. Looks like healed fault.
384.75	397.5	ANDESITE FLOW	Qtz/kfsp and zeolite veins cutting chl/ser/bio altered flows. Medium grained pyrite disseminated throughout wall rock. Minor pyrite bearing qtz veins.
397.5	399.6	FAULT ZONE FLOW	Approximately 20-25cm of gouge and breccia on each end of sample. Abundant fine grained disseminated pyrite in between.
399.6	401.9	ANDESITE FLOW	Disseminated and smeared cpy on fractures.
401.9	402.4	FAULT ZONE FLOW	Sericite gouge and rubble zone.
402.4	403.6	ANDESITE FLOW	Abundant fine to medium grained disseminated pyrite + fine grained pyrite in veins.
403.6	404.45	FAULT ZONE FLOW	k-spar flooded sericite fault gouge.
404.45	415.2	ANDESITE FLOW	k-spar rich qtz veining.
415.2	416.6	FAULT ZONE FLOW	Sheared with minor gouge, cut by irregular qtz/k-spar veinlets. Clots of massive magnetite.
416.6	461.4	ANDESITE FLOW	Massive homogenous looking flows cut by qtz veins. +/- magnetite +/- py. Also mag in fracture fill, very limited k-spar in veins.
461.4	462.4	FAULT ZONE FLOW	Strong chlorite cemented breccia and with last 30cm being gouge.
462.4	464.4	ANDESITE FLOW	
464.4	466.4	MONZONITE	Feldspar porphyritic (15%) monzonite porphyry.
466.4	504.25	ANDESITE FLOW	Similar to 104115 with very abundant mag stringers.
504.25	504.75	ANDESITE FAULT ZONE	Vuggy qtz-py vein and fault gouge.

Hole Number:

KN-02-13

From (m)	To (m)	Rock Type	Comments
504.75	506.14	ANDESITE FLOW	Note out of sequence sample numbers.
506.14	538.06	QUARTZ MONZONITE	Approximately (2-5%) anhedral to subhedral qtz phenocrysts in a very fine matrix of feldspar and biotite. Cut by qtz/py/cpy veinlets +/- magnetite.
538.06	573.38	MONZONITE PORPHYRY	Approximately 30-40% feldspar +/- qtz phenocrysts of a dark grey black biotite rich matrix. Much of the cpy here is in late fractures crossing qtz veins. Qtz veins often coalesce into qtz flooded zones however, veins do not commonly cross but each other.
573.38	574.1	MONZONITE FAULT ZONE	Broken zone with minor gouge at start of sample.
574.1	585.25	MONZONITE PORPHYRY	Patchy areas up to 30cm long have the feldspars replaced by very fine grained biotite.
585.25	587.25	MONZONITE FAULT ZONE	Chl/ser fault gouge and breccia cut by bright salmon zeolite veinlets.
587.25	665	MONZONITE PORPHYRY	True stock work texture ends, most veins are sub-parallel with only minor cross cutting relationships.
665	683.25	SYENITE	Pale grey to tan, fine grained to medium grained equigranular to weakly k-spar porphyritic. Cut by calcite veinlets. Upper contact at 25 degrees to C.A. NOTE: Fine grained primary magnetite in matrix.
683.25	690.98	MONZONITE	As for 104224.

Kemess North 2002 - Detail Drill Log



Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm				
0	5.05	CASING											
	0.00	5.05					13	-2	-2				
5.05	13.05	ANDESITE FLOW											
	5.05	7.05	Fine-grained quartz-sericite-pyrite phyllic	light green fractured	5.0	0.0	0	0	Moderately well developed stock work of massive py veinlets with bleached selvages. Ground water oxidation has produced bright yellow jarosite on fractures and slips.	106677	0.067	0.206	
	7.05	9.05			5.0	0.0	0	0		106678	0.122	0.251	
	9.05	11.05			5.0	0.0	0	0	As for 106676	106679	0.107	0.255	
	11.05	13.05			5.0	0.0	0	0		106680	0.162	0.239	
13.05	17.05	ANDESITE FAULT ZONE											
	13.05	15.05	Fine-grained phyllic limonitic	light green fractured	5.0	0.0	0	0	Minor gouge @ beginning of sample	106681	0.214	0.409	
	15.05	17.05			5.0	0.0	0	0	Minor gouge @ end of sample	106682	0.291	0.409	
17.05	23.16	ANDESITE FLOW											
	17.05	19.05	Fine-grained quartz-sericite-pyrite phyllic	light green fractured	5.0	0.0	0	0		106683	0.107	0.329	
	19.05	21.03			5.0	0.0	0	0		106684	0.191	0.4	
	21.03	23.16			5.0	0.0	0	0		106685	0.149	0.286	
23.16	48.05	SYENITE											
	23.16	25.60	Medium-grained limonitic	light red fractured	0.0	0.0	0	15	Approx 15% subhedral mafic minerals in a groundmass of anhedral to subhedral feldspar, which appears to be K-spar. Minor amounts of calcite veinlets cut unit at low angles in the range of 20-30o t.c.a.	106686	0.021	0.006	
	25.60	27.60	Medium-grained	light red fractured	0.0	0.0	0	23 CCVN	25 0	As for 106686.	106687	0.022	-2
	27.60	29.60	Medium-grained equigranular	light red	0.0	0.0	0	22 CCVN	25 0		106688	0.015	-2
	29.60	31.60			0.0	0.0	0	19 CCVN	25 0		106689	0.007	-2
	31.60	33.60			0.0	0.0	0	14 CCVN	25 0		106690	0.011	-2
	33.60	35.60			0.0	0.0	0	22 CCVN	25 0		106691	0.005	-2

Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
35.60	37.60	Medium-grained light red equigranular	0.0 0.0	0	19 CCVN 25 0		106692	0.007	-2
37.60	39.60		0.0 0.0	0	25 CCVN 25 0		106693	0.003	-2
39.60	41.60		0.0 0.0	0	20 CCVN 25 0		106694	0.002	-2
41.60	43.60		0.0 0.0	0	25 CCVN 25 0		106695	0.004	-2
43.60	45.60		0.0 0.0	0	7 CCVN 25 0		106696	0.002	-2
45.60	47.60		0.0 0.0	2	7 CCVN 30 0		106697	0.002	-2
47.60	48.05		0.0 0.0	2	20 CCVN 30 0		106698	0.004	-2
48.05	65.65	ANDESITE FLOW							
48.05	50.05	Fine-grained light green fractured quartz-sericite-pyrite phyllic	5.0 0.0	0	0 PVN 10 3	Very similar to 106676 but stronger ser. Alt. Py veinlets are wider (1cm) and stock work less developed, but py now occurs as anhedral clots and blebs in the rock in addition to the veins	106699	0.139	0.34
50.05	52.05		7.0 0.0	0	0 PVN 10 5		106700	0.106	0.367
52.05	54.05		12.0 0.0	0	0 PVN 10 3	Same as for 106699	106702	0.148	0.27
54.05	56.05		15.0 0.0	0	0 PVN 10 3		106703	0.134	0.199
56.05	58.05		10.0 0.0	0	1 PVN 10 6		106704	0.106	0.243
58.05	60.05		10.0 0.0	0	0 PVN 10 6		106705	0.184	0.451
60.05	62.05	Fine-grained light grey fractured quartz-sericite-pyrite phyllic	10.0 0.0	2	0 PVN 10 6	Silica alteration picking up	106706	0.153	0.314
62.05	64.05		5.0 0.0	2	0 PVN 20 2		106707	0.146	0.252
64.05	65.65		5.0 0.0	2	0 PVN 20 2		106708	0.166	0.281
65.65	167.5	ANDESITE FLOW BRECCIA							
65.65	67.65	Coarse-grained grey-green mottled sericitic chloritic	7.0 0.0	2	0 PVN 20 2	Well altered polyolithic bx. Can still see fragmental texture including easily identifiable BFP. Alteration consists of very strong ser/chl. Not quite phyllic but more than propylitic. Most py is in either py veinlets or py-bearing white qtz veinlets. These veinlets are increasing down hole but are predominantly unidirectional. Rare cpy in q.v's	106709	0.145	0.323
67.65	69.65	Coarse-grained grey-green sericitic chloritic	7.0 0.0	2	0 PVN 20 2		106710	0.122	0.233
69.65	71.65		8.0 0.0	2	0 PVN 20 2		106711	0.346	0.547

Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
71.65	73.50	Coarse-grained grey-green sericitic chloritic	2.0 0.0	2	8 QVN 20 2	As for 106709 Qtz veins are more abundant than py veins	106712	0.183	0.402
73.50	75.50		2.0 0.0	2	0 QVN 20 2	Start NQ @ 73.50m. As for 106712	106713	0.174	0.4
75.50	77.50		2.0 0.0	2	8 QVN 20 2	As for 106712	106714	0.158	0.347
77.50	79.50		2.0 0.0	2	7 QVN 20 2		106715	0.14	0.312
79.50	81.50		5.0 0.0	2	5 PVN 20 2	Massive py veins more prevalent than qtz veins.	106716	0.122	0.279
81.50	83.50		1.0 0.0	10	75 QVN 20 1	Very c.g. protolith may have been hbl. Porphyritic dyke. Abundant c.g. magnetite.	106717	0.121	0.255
83.50	85.50		1.0 0.0	10	123 QVN 20 1		106718	0.126	0.353
85.50	87.50	Coarse-grained grey-green mottled sericitic chloritic	1.0 0.0	0	3 QVN 45 1	As for 106719	106719	0.12	0.262
87.50	89.50		4.0 0.0	0	21 PVN 20 1	Py finely diss. As well as in veinlets and qtz veinlets	106720	0.129	0.276
89.50	91.50		3.0 0.0	0	1 PVN 1	As for 106720	106721	0.183	0.431
91.50	93.50		3.0 0.0	0	0 PVN 50 2	As for 106720 weak, patchy silicification	106722	0.11	0.268
93.50	95.50		5.0 0.1	0	1 PVN 45 3		106723	0.121	0.249
95.50	97.50		0.5 0.1	0	2 QVN 30 5		106724	0.161	0.363
97.50	99.50		1.0 0.1	0	2 QVN 30 5		106725	0.108	0.214
99.50	101.50		3.0 0.1	0	1 QVN 30 5		106726	0.219	0.41
101.50	103.50		1.0 0.1	3	35 QVN 30 5	Strong magnetite but patchy distribution	106728	0.138	0.338
103.50	105.50		2.0 0.0		1 QVN 30 5		106729	0.282	0.521
105.50	107.50		2.0 0.0	5	112 PVN 35 2	As for 106728. Mag rich area parallel T.C.A	106730	0.176	0.326
107.50	109.50		1.0 0.0	0	4 QVN 35 4	Qtz veins picking up in intensity	106731	0.197	0.381
109.50	111.50		4.0 0.0	5	42 QVN 3	As for 106728	106732	0.109	0.219
111.50	113.50		2.0 0.0	5	49 QVN 6	Abundant qtz and qtz/py veins, predominantly unidirectional, minor cross-cutting veins.	106733	0.153	0.267
113.50	115.50		1.0 0.0	5	54 QVN 5	As for 106733	106734	0.1	0.199
115.50	117.50		1.0 0.0	0	3 QVN 8		106735	0.096	0.184
117.50	119.50		1.0 0.0	1	28 QVN 12		106736	0.088	0.186
119.50	121.50		1.0 0.0	1	9 QVN 8		106737	0.09	0.16
121.50	123.50		2.0 0.0	1	15 QVN 6		106738	0.085	0.171
123.50	125.50		1.0 0.0	1	0 QVN 10	Magnetite very patchy. Sericite stronger	106739	0.164	0.342

Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
125.50	127.50	Coarse-grained grey-green mottled sericitic chloritic	1.0 0.0	1	19 QVN	3	106740	0.135	0.284
127.50	129.50		1.0 0.0	0	6 QVN	40 10	106741	0.095	0.232
129.50	131.50		1.0 0.0	0	0 QVN	40 10	106742	0.201	0.431
131.50	133.50		1.0 0.0	5	32 QVN	40 10	106743	0.213	0.449
133.50	135.50		1.0 0.0	5	44 QVN	40 10	106744	0.155	0.359
135.50	137.50		1.0 0.2	0	1 QVN	40 10	106745	0.151	0.319
137.50	139.50		0.5 0.2	0	1 QVN	40 20	106746	0.154	0.306
139.50	141.50		5.0 0.2	5	54 QVN	40 25	106747	0.173	0.329
141.50	143.50		7.0 0.2	0	1 QVN	40 25	106748	0.235	0.48
143.50	145.50		3.0 0.2	5	63 QVN	55 15	106749	0.137	0.308
145.50	147.50		1.0 0.2	2	147 QVN	55 15	106750	0.15	0.431
147.50	149.50		0.5 0.0	0	1 QVN	55 15	106751	0.127	0.375
149.50	151.50		0.5 0.0	0	7 QVN	70 20	106752	0.098	0.301
151.50	153.50		1.0 0.0	5	21 QZVN	70 20	106754	0.157	0.476
153.50	155.50		0.5 0.0	5	58 QZVN	70 20	106755	0.136	0.412
155.50	157.50		1.0 0.0	5	105 QZVN	70 20	106756	0.198	0.525
157.50	159.50		2.0 0.7	5	16 QZVN	70 20	106757	0.133	0.329
159.50	161.50		2.0 0.2	5	14 QZVN	70 20	106758	0.112	0.285
161.50	163.50		0.1 0.0	5	58 QZVN	70 20	106759	0.087	0.283
163.50	165.50		0.5 0.0	5	67 QZVN	70 20	106760	0.146	0.403
165.50	167.50		0.5 0.0	5	69 QZVN	65 30	106761	0.132	0.315
167.5	216.92	ANDESITE FLOW							
167.50	169.50	Fine-grained grey-green homogeneous chloritic sericitic	0.5 0.0	0	2 QZVN	65 15	106762	0.139	0.26
169.50	171.50	Fine-grained green homogeneous chloritic sericitic	0.5 0.0	3	30 QZVN	65 15	106763	0.101	0.202
171.50	173.25		0.5 0.0	5	103 QZVN	65 15	106764	0.23	0.474

Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
173.25	175.37	Coarse-grained grey-green vuggy quartz-sericite-pyrite chloritic	7.0 0.0	5	7 QZVN 70 50	Heavy stock work and flooding	106765	0.252	0.469
175.37	177.00	Coarse-grained grey-green homogeneous quartz-sericite-pyrite sericitic	1.0 0.0	3	36 QZVN 70 25	As for 106763	106766	0.098	0.224
177.00	177.85		3.0 0.0	0	1 QZVN 70 20		106767	0.133	0.296
177.85	179.85	Coarse-grained grey vuggy quartz-sericite-pyrite silicic	5.0 0.2	0	1 QZVN 35 20	Strong silicification due to complete alteration of rock to granular textured qtz-sericite. Unit is also cut by 15%-10% dull grey qtz stringers. Pyrite mineralization is split about 50/50 diss in wall rock and in qtz veinlets. Rare cpy as f.g. masses near euhedral and subhedral py.	106768	0.267	0.474
179.85	181.85		5.0 0.2	0	3 QZVN 35 20		106769	0.232	0.394
181.85	183.85		4.0 0.2	0	0 QZVN 35 20		106770	0.262	0.377
183.85	185.85		4.0 0.2	0	9 QZVN 35 20	As for 106768	106771	0.157	0.296
185.85	186.70		5.0 0.2	5	21 QZVN 35 20		106772	0.126	0.263
186.70	188.70	Fine-grained green homogeneous quartz-sericite-pyrite chloritic	5.0 0.0	5	27 QZVN 35 8	Less than 10% qtz veining in chloritic flow. C.G. mag in chloritic wall rock	106773	0.147	0.321
188.70	189.27		5.0 0.0	10	114 QZVN 35 8		106774	0.193	0.284
189.27	191.27	Coarse-grained grey vuggy quartz-sericite-pyrite silicic	5.0 0.3	0	0 QZVN 35 20		106775	0.095	0.169
191.27	193.27		7.0 0.3	0	0 QZVN 25 20	Trace Mo in extremely vuggy qtz vein @ 0o t.c.a @ 191.60m	106776	0.398	0.486
193.27	195.27		7.0 0.3	0	0 QZVN 25 20		106777	0.324	0.411
195.27	197.27		7.0 0.3	0	0 QZVN 25 20		106778	0.081	0.141
197.27	199.27		7.0 0.3	0	0 QZVN 25 20	As for 106768 1cm massive py vein @ 197.85m.	106780	0.256	0.336
199.27	201.27		5.0 0.3	0	1 QZVN 20 20		106781	0.098	0.146
201.27	203.27		7.0 0.3	0	0 QZVN 20 20	Qtz veins are becoming more py rich while there is somewhat less diss py.	106782	0.144	0.181
203.27	205.27		7.0 0.3	0	0 QZVN 20 20	Trace Mo and Cpy in py seam @ 0o t.c.a @ 206.67m	106783	0.224	0.205
205.27	207.27		7.0 0.3	0	0 QZVN 20 20	As for 106782	106784	0.318	0.363
207.27	209.27	Coarse-grained light grey vuggy quartz-sericite-pyrite silicic	5.0 0.3	0	0 QZVN 15 20		106785	0.188	0.258
209.27	211.27		8.0 0.3	0	0 QZVN 15 20		106786	0.062	0.13
211.27	213.27		8.0 0.3	0	0 QZVN 15 20		106787	0.212	0.24

Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
213.27	215.27	Coarse-grained light grey vuggy quartz-sericite-pyrite silicic	8.0 0.3	0	0 QZVN 15 20		106788	0.142	0.18
215.27	216.92		3.0 0.3	0	0 QZVN 15		106789	0.09	0.152
216.92	253.15	MONZONITE							
216.92	218.92	Coarse-grained light grey porphyritic silicic sericitic	5.0 0.5	3	20 QVN 15	Highly altered K-spar porphyritic monzonite. 2-3mm plagioclase are replaced by chlorite. The rock is strongly and pervasively silicified and cut by qtz/py veinlets. C.G magnetite from 216.92m-224.92m.	106790	0.174	0.218
218.92	220.92		7.0 0.5	3	26 QVN 15	As for 106790.	106791	0.139	0.198
220.92	222.92		2.0 0.5	3	28 QVN 15		106792	0.18	0.226
222.92	224.92		2.0 0.5	3	28 QVN 15		106793	0.177	0.226
224.92	226.92		10.0 0.5	0	1 QVN 15		106794	0.234	0.274
226.92	228.92		10.0 0.5	0	0 QVN 15		106795	0.258	0.323
228.92	230.92		10.0 0.5	0	0 QVN 15		106796	0.232	0.324
230.92	232.92		5.0 0.5	0	0 QVN 15		106797	0.184	0.246
232.92	234.92		5.0 0.5	0	0 QVN 15		106798	0.247	0.291
234.92	236.92		5.0 0.5	0	0 QVN 15		106799	0.188	0.261
236.92	238.92		10.0 0.5	0	0 PVN 10 3		106800	0.094	0.226
238.92	240.92		10.0 0.3	0	0 PVN 10 3		104001	0.128	0.213
240.92	242.80		6.0 0.3	0	0 PVN 10 3		104002	0.101	0.19
242.80	244.80	Coarse-grained green-grey porphyritic chloritic sericitic	0.5 0.1	3	34 QZVN 20 0	Chloritized and weakly sericitized monzodiorite. No silicification and only weak qtz veining. C.G magnetite	104003	0.113	0.178
244.80	246.80		0.5 0.1	3	19 QZVN 20 0	As for 104003	104004	0.104	0.154
246.80	248.80		0.5 0.1	3	14 QZVN 20 0		104006	0.099	0.142
248.80	250.80		0.5 0.1	1	6 QZVN 20 0		104007	0.174	0.239
250.80	251.70		0.5 0.1	1	4 QZVN 20 0		104008	0.122	0.18
251.70	253.15	Coarse-grained green-grey porphyritic sericitic silicic	3.0 0.1	0	0 QZVN 20 0	Silicification is gradually picking up again down hole, but qtz veining is still weak	104009	0.079	0.155
253.15	296.12	ANDESITE FLOW							
253.15	255.15	Coarse-grained light grey vuggy silicic sericitic	8.0 0.4	0	0 QZVN 20 15		104010	0.066	0.127
255.15	257.15		8.0 0.4	0	2 QZVN 20 15		104011	0.046	0.114

Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
257.15	258.17	Coarse-grained light grey vuggy silicic sericitic	8.0 0.4	0	0 QZVN 20 15		104012	0.05	0.126
258.17	260.15	Coarse-grained light grey vuggy sericitic	2.0 0.4	3	42 QZVN 20 15	Strong but locally intermittent silicification. Can see chloritic flow texture in places. Qtz and qtz/py veins are @ low angles to core axis. Py rich veins are near parallel to core axis.	104013	0.077	0.166
260.15	262.15		8.0 0.4	3	2 QZVN 20 15		104014	0.132	0.22
262.15	264.00		2.0 0.4	3	11 QZVN 20 15	As for 104013 and 104014	104015	0.151	0.245
264.00	266.00	Fine-grained green chloritic sericitic	1.0 0.2	5	39 QVN 60 20	Massive mafic to intermediate flow cut by numerous qtz veinlets. Weak stock work as the veins are predominantly unidirectional but more irregular than sheeted. The intense veining produces a pseudo-fragmental texture. Alteration is Chl/ser some qtz veins have seams of semi massive magnetite, the distribution is very erratic	104016	0.159	0.302
266.00	268.00		1.0 0.2	5	49 QVN 25 20	Unidirectional, but more irregular than sheeted. The intense veining produces a pseudo-fragmental texture. Alt is Chl/Ser.	104017	0.089	0.197
268.00	270.00		1.0 0.2	5	106 QVN 25 20	Some qtz veins have seams of semi massive magnetite, the distribution is very erratic.	104018	0.085	0.174
270.00	272.00		1.0 0.2	5	18 QVN 25 20		104019	0.119	0.251
272.00	274.00		1.0 0.2	5	39 QVN 25 20		104020	0.116	0.224
274.00	276.00		1.0 0.2	5	231 QVN 25 20		104021	0.166	0.281
276.00	278.00		1.0 0.2	5	40 QVN 25 20		104022	0.11	0.221
278.00	280.00		1.0 0.2	5	70 QVN 25 20		104023	0.122	0.19
280.00	282.00		1.0 0.2	5	25 QVN 25 20		104024	0.281	0.417
282.00	284.00		1.0 0.2	5	107 QVN 25 20	Qtz mag veins.	104025	0.294	0.42
284.00	286.00		1.0 0.5	5	407 QVN 25 20	Qtz massive mag veins with trace cpy.	104026	0.32	0.455
286.00	288.00		1.0 0.2	2	28 QVN 20 15		104027	0.135	0.231
288.00	290.00		1.0 0.2	2	6 QVN 20 5	Qtz vein percentage weakening fast from here to 104032. Chl>>Ser.	104028	0.147	0.242
290.00	292.00	Fine-grained green chloritic	1.0 0.2	2	99 QVN 20 5		104029	0.139	0.286
292.00	294.00		1.0 0.2	2	2 QVN 20 5		104030	0.162	0.222
294.00	296.12		1.0 0.2	2	9 QVN 20 5		104032	0.196	0.34
296.12	300	MONZONITE							

Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
296.12	298.12	Coarse-grained grey porphyritic sericitic silicic	1.0 0.5	2 0	QVN 20 7	Monz porph. Chloritic pseudomorph after feldspar in a sericitic matrix with patchy silicification.	104033	0.181	0.235
298.12	300.00		1.0 0.5	2 0	QVN 65 10	As for 104033	104034	0.142	0.215
300	348.24	ANDESITE FLOW							
300.00	300.84	Coarse-grained grey brecciated silicic sericitic	3.0 0.5	2 51	QVN 70 5	Silicified flow at contact with monzonite. Sericite gouge at 300.65 to 300.70m.	104035	0.243	0.351
300.84	302.84	Fine-grained green chloritic	0.5 0.1	2 12	QVN 15 5	Massive aphyric flow cut by qtz +/-py veins. Sporadic m.g. magnetite in vein selvages.	104036	0.232	0.341
302.84	304.84		0.5 0.1	2 29	QVN 15 5		104037	0.192	0.302
304.84	306.25		0.5 0.1	2 57	QVN 15 5	F.G. to M.G. mag in qtz veins.	104038	0.16	0.267
306.25	308.25	Coarse-grained green-grey brecciated sericitic chloritic	3.0 0.5	2 20	QVN 15 15	Up to 1% K-spar in veins and bx. matrix. Strongly sericitic. Diss cpy along fractures in qtz. Vuggy qtz veins.	104039	0.221	0.357
308.25	309.90		2.0 0.5	2 109	QVN 15 7	As for 104039	104040	0.303	0.422
309.90	311.90	Fine-grained green sericitic chloritic	1.0 0.5	2 76	QVN 15 7		104041	0.253	0.409
311.90	313.90		1.0 0.5	5 48	QVN 15 10	Abundant qtz-mag veins	104042	0.121	0.204
313.90	315.90		3.0 0.5	2 16	QVN 15 7		104043	0.123	0.175
315.90	317.90		1.0 0.5	5 76	QVN 15 10	V.C.G. cpy in qtz vein at 317.40. Patchy silicification.	104044	0.161	0.24
317.90	319.90		2.0 0.5	5 343	QVN 15 7	Abundant qtz mag veins.	104045	0.062	0.095
319.90	321.90		2.0 0.5	5 64	QVN 15 7		104046	0.069	0.111
321.90	323.90		2.0 0.5	5 66	QVN 10 10		104047	0.229	0.362
323.90	325.90		2.0 0.5	5 46	QVN 10 10		104048	0.142	0.232
325.90	327.90		2.0 0.5	2 15	QVN 15 10	2-3cm q.v. true at 15 degrees to core axis. Qtz veins unidirectional up core axis.	104049	0.165	0.26
327.90	329.90		2.0 0.5	2 34	QVN 15 5	Qtz-mag veins are still present but not as abundant as above.	104050	0.209	0.345
329.90	331.90		2.0 0.5	2 19	QVN 15 5		104051	0.246	0.399
331.90	333.90		2.0 0.5	2 0	QVN 15 5		104052	0.274	0.395
333.90	335.90		2.0 0.5	2 2	QVN 15 5		104053	0.274	0.398
335.90	337.90		2.0 0.5	6 80	QVN 15 15	As for 104049. Plus strong mag veining.	104054	0.253	0.387
337.90	339.90		2.0 0.5	4 63	QVN 15 10		104055	0.232	0.286
339.90	341.90		2.0 0.5	1 2	QVN 15 5	Minor calcite veinlets at 0 degrees to core axis.	104056	0.134	0.169

Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
341.90	343.90	Fine-grained green sericitic chloritic	2.0	0.5	1 40 QVN	15 5	Minor k-spar veinlets.	104058	0.075	0.11
343.90	345.90		2.0	0.5	1 6 QVN	15 5	3cm semi-massive py/qtz vein speckled with cpy.	104059	0.205	0.257
345.90	347.90		5.0	0.5	1 3 QVN	15 5		104060	0.138	0.191
347.90	348.24	Coarse-grained green brecciated sericitic	3.0	0.5	0 3 QVN	15 25	Vuggy textured qtz cemented bx and qtz stock work at contact with syenite dyke.	104061	0.148	0.19
348.24	360.93	SYENITE								
348.24	350.35	Medium-grained pink red	0.0	0.5	1 7 ZVN	70 2	Medium grained equigranular syenite.	104062	0.003	-2
350.35	352.28		0.0	0.5	1 19 ZVN	70 2		104063	0.004	-2
352.28	354.92		0.0	0.5	1 20 ZVN	70 2		104064	0.004	-2
354.92	356.96		0.0	0.5	1 21 ZVN	70 2		104065	0.004	-2
356.96	358.94		0.0	0.5	1 23 ZVN	70 2		104066	0.003	-2
358.94	360.93		0.0	0.5	1 20 ZVN	70 2		104067	0.008	-2
360.93	381.7	ANDESITE FLOW								
360.93	362.93	Fine-grained green chloritic sericitic	1.0	0.5	11 QVN	35 5	Zeolite/carb veins starting to increase at the expense of qtz veins. May still be present, but very sporadic.	104068	0.177	0.238
362.93	364.93		1.0	0.5	1 QVN	35 5	As for 104068.	104069	0.323	0.41
364.93	366.93		2.0	0.5	2 QVN	35 20		104070	0.353	0.512
366.93	368.93		2.0	0.2	1 16 QVN	35 5	Chlorite alteration >> sericite.	104071	0.225	0.348
368.93	370.93		2.0	0.2	1 25 ZVN	45 5	Same as for 104072.	104072	0.117	0.143
370.93	372.93		3.0	0.2	0 3 QVN	25 10		104073	0.261	0.321
372.93	374.93		2.0	0.2	0 1 QVN	45 15		104074	0.287	0.326
374.93	376.93		2.0	0.2	1 10 QZVN	15 10	k-spar rich qtz-chl veins at 377.80m.	104075	0.226	0.26
376.93	378.93		2.0	0.1	1 2 QVN	35 5	4cm of gouge at 377.80m	104076	0.286	0.327
378.93	380.93		2.0	0.1	1 25 QVN	35 5		104077	0.256	0.31
380.93	381.70		2.0	0.1	1 4 QVN	35 5		104078	0.232	0.29
381.7	384.75	FAULT ZONE FLOW								
381.70	383.70	Coarse-grained green sericitic chloritic	3.0	0.1	0 1 ZVN	35 10	Vuggy open fractures filled with py and zeo/carb. Looks like healed fault.	104079	0.289	0.422
383.70	384.75	Coarse-grained green brecciated sericitic chloritic	3.0	0.1	0 0 ZVN	35 10	Same as for 104081.	104080	0.302	0.487

Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
384.75	397.5	ANDESITE FLOW								
384.75	386.75	Coarse-grained green brecciated chloritic sericitic	3.0	0.1	0	1 QZVN 35 3	Qtz/kfsp and zeolite veins cutting chl/ser/bio altered flows. Medium grained pyrite disseminated throughout wall rock. Minor pyrite bearing qtz veins.	104081	0.204	0.257
386.75	388.75	Coarse-grained green chloritic sericitic	3.0	0.1	1	16 QZVN 35 3	Same as for 104081 with chl porphyroblasts.	104082	0.21	0.309
388.75	390.75		3.0	0.1	0	8 QZVN 35 3		104084	0.21	0.196
390.75	392.75	Fine-grained green chloritic sericitic	3.0	0.1	0	1 QZVN 35 3	Same as for 104081 without chl porphyroblasts.	104085	0.371	0.378
392.75	394.75		3.0	0.1	0	1 QZVN 35 3		104086	0.338	0.328
394.75	396.75		3.0	0.1	2	20 QZVN 35 3		104087	0.219	0.295
396.75	397.50		3.0	0.5	0	5 QZVN 35 2	Same as for 104081 without chl porphyroblasts. 1cm wide band of massive cpy in qtz vein at 397.26m.	104088	0.468	0.384
397.5	399.6	FAULT ZONE FLOW								
397.50	399.60	Fine-grained green broken chloritic sericitic	5.0	0.1		3 QZVN 35 2	Approximately 20-25cm of gouge and breccia on each end of sample. Abundant fine grained disseminated pyrite in between.	104089	0.189	0.221
399.6	401.9	ANDESITE FLOW								
399.60	401.60	Fine-grained green chloritic sericitic	1.0	0.5		1 QZVN 35 2	Disseminated and smeared cpy on fractures.	104090	0.25	0.434
401.60	401.90		2.0	3.0		0 QZVN 35 2	Same as for 104090.	104091	0.286	0.395
401.9	402.4	FAULT ZONE FLOW								
401.90	402.40	Coarse-grained green chloritic sericitic	1.0	0.0		4 QZVN 35 2	Sericite gouge and rubble zone.	104092	0.119	0.138
402.4	403.6	ANDESITE FLOW								
402.40	403.60	Fine-grained green chloritic sericitic	5.0	0.3	0	3 QZVN 10 3	Abundant fine to medium grained disseminated pyrite + fine grained pyrite in veins.	104093	0.335	0.313
403.6	404.45	FAULT ZONE FLOW								
403.60	403.90	Coarse-grained green sericitic chloritic		0.0		0	k-spar flooded sericite fault gouge.	104094	0.189	0.505
403.90	404.45	Coarse-grained white fractured silicic sericitic	30.0	5.0		1 QZVN 70100	qtz/k-spar/py + cpy vein in fault zone. Massive to semi-massive py. Speckled with cp.	104095	0.122	0.415
404.45	415.2	ANDESITE FLOW								
404.45	405.60	Fine-grained green chloritic biotite	1.0	0.1	3	56 QZVN 70 10	k-spar rich qtz veining.	104096	0.237	0.517

Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
405.60	407.60	Fine-grained green chloritic biotite	1.0 0.0	3	4 QVN 60 1	Massive homogenous looking flows cut by qtz +/- k-spar veinlets. Magnetite common as irregular fracture fill veinlets.	104097	0.221	0.291
407.60	409.60		1.0 0.0	3	46 QVN 60 1	Same as for 104097.	104098	0.314	0.364
409.60	411.60		1.0 0.0	3	35 QVN 60 1		104099	0.439	0.485
411.60	413.60		1.0 0.0	3	26 QVN 60 1		104100	0.271	0.496
413.60	415.20		1.0 0.0	3	11 QVN 60 1		104101	0.262	0.378
415.2	416.6	FAULT ZONE FLOW							
415.20	416.60	Fine-grained green brecciated sericitic chloritic	3.0 0.0	5	18 QZVN 45 15	Sheared with minor gouge, cut by irregular qtz/k-spar veinlets. Clots of massive magnetite.	104102	0.244	0.291
416.6	461.4	ANDESITE FLOW							
416.60	418.60	Fine-grained green chloritic biotite	1.0 0.1	5	20 QVN 60 1	Massive homogenous looking flows cut by qtz veins. +/- magnetite +/- py. Also mag in fracture fill, very limited k-spar in veins.	104103	0.262	0.305
418.60	420.60		1.0 0.1	5	63 QVN 60 1	Medium grained py disseminated throughout. Fine grained pyrite in veins. Trace to rare chalcopyrite.	104104	0.259	0.29
420.60	422.60		1.0 0.1	0	3 QVN 60 1		104105	0.506	0.441
422.60	424.60		1.0 0.1	3	46 QVN 60 1		104106	0.445	0.484
424.60	426.60		1.0 0.1	3	68 QVN 60 1		104107	0.308	0.407
426.60	428.60		1.0 0.1	1	5 QVN 60 1		104108	0.243	0.302
428.60	430.60		1.0 0.1	2	66 QVN 60 1		104110	0.263	0.366
430.60	432.50		1.0 0.1	2	21 QVN 60 1		104111	0.212	0.299
432.50	433.40	Fine-grained green sericitic chloritic	2.0 0.1	0	5 QVN 45 30	Strong qtz/kfsp veining.	104112	0.371	0.189
433.40	435.40	Fine-grained green chloritic biotite	2.0 0.3	1	8 QVN 50 1		104113	0.383	0.517
435.40	437.40		2.0 0.3		47 QVN 5 8	Strong mag in qtz vein at approximately 5 degrees to core axis.	104114	0.358	0.489
437.40	439.40		2.0 0.7	3	28 QVN 55 8	Massive flows cut by qtz/py +/- cpy veinlets. Does not look impressive except for the distribution of cpy in qtz veins and on fractures. Sporadically distributed fracture fill and euhedral magnetite in wall rock. Biotite is muted but ubiquitous. Sericite is very weak and patchy. Remarkable uniform distribution of both veining and mineralization.	104115	0.279	0.348

Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
439.40	441.40	Fine-grained green chloritic biotite	2.0 0.7	3 66	QVN 55 8	Same as for 104115	104116	0.32	0.368
441.40	443.40		2.0 0.7	3 25	QVN 55 8		104117	0.502	0.587
443.40	445.40		2.0 0.7	3 19	QVN 55 8		104118	0.388	0.419
445.40	447.40		2.0 0.7	3 31	QVN 55 8		104119	0.332	0.402
447.40	449.40		2.0 0.7	3 16	QVN 55 8		104120	0.325	0.355
449.40	451.40		2.0 0.7	3 11	QVN 55 8		104121	0.255	0.265
451.40	453.40		2.0 0.7	3 28	QVN 55 8		104122	0.188	0.203
453.40	455.40		2.0 0.7	3 53	QVN 55 8		104123	0.254	0.291
455.40	457.40		2.0 0.7	3 30	QVN 55 8		104124	0.198	0.209
457.40	459.40		1.0 0.7	3 7	QVN 55 8		104125	0.167	0.213
459.40	461.40		1.0 0.3	3 39	QVN 55 8	Note out of sequence sample number.	104151	0.222	0.25
461.4	462.4	FAULT ZONE FLOW							
461.40	462.40	Fine-grained green brecciated chloritic sericitic	1.0 0.0	3 11	QVN 55 8	Strong chlorite cemented breccia and with last 30cm being gouge.	104126	0.186	0.258
462.4	464.4	ANDESITE FLOW							
462.40	464.40	Fine-grained green chloritic biotite	1.0 0.5	3 25	QVN 55 8		104127	0.395	0.547
464.4	466.4	MONZONITE							
464.40	466.40	Medium-grained green porphyritic chloritic biotite	1.0 0.5	5 35	QVN 55 8	Feldspar porphyritic (15%) monzonite porphyry.	104128	0.194	0.289
466.4	504.25	ANDESITE FLOW							
466.40	468.40	Fine-grained green chloritic biotite	1.0 0.5	5 94	QVN 55 8	Similar to 104115 with very abundant mag stringers.	104129	0.236	0.342
468.40	470.40		1.0 0.3	5 43	QVN 55 8		104130	0.214	0.308
470.40	472.40		1.0 0.3	5 34	QVN 55 8		104131	0.131	0.286
472.40	474.40		1.0 0.3	5 79	QVN 55 8		104132	0.217	0.331
474.40	476.40		1.0 0.3	5 6	QVN 55 8		104133	0.168	0.282
476.40	478.40		1.0 0.3	5 42	QVN 55 8		104134	0.274	0.404
478.40	480.40		1.0 0.3	5 51	QVN 45 8		104136	0.292	0.693
480.40	482.40		1.0 0.3	5 36	QVN 45 8		104137	0.323	0.542
482.40	484.40		1.0 0.5	5 30	QVN 45 8		104138	0.321	0.487

Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm	
484.40	486.40	Fine-grained green chloritic biotite	1.0 0.5	2	14 QVN	45 6	Same as for 104115. Less magnetic veining and less qtz veining.	104139	0.274	0.413
486.40	488.40		1.0 0.3	5	30 QVN	45 6		104140	0.316	0.433
488.40	490.40		1.0 0.6	1	8 QVN	45 6		104141	0.414	0.673
490.40	492.40		1.0 0.3	1	9 QVN	45 6		104142	0.423	0.541
492.40	494.40		1.0 0.6	5	67 QVN	45 8		104143	0.381	0.537
494.40	496.40		2.0 0.6	10	224 QVN	45 8	Same as for 104115. One speck of native copper at 496.15m. Abundant massive magnetite.	104144	0.395	0.74
496.40	498.40		2.0 1.0	3	15 QVN	45 8	Same as for 104115. Cpy is common.	104145	0.492	0.838
498.40	500.40		1.0 1.0	3	30 QVN	45 8		104146	0.374	0.638
500.40	502.40		1.0 1.0	3	15 QVN	45 8	Same as for 104115. Aggregate of bismuthinite with cpy at 501.06m.	104147	0.346	0.582
502.40	504.25		2.0 0.5	10	107 QVN	45 8	Same as for 104115. Qtz veins contain more than 50% magnetite. Magnetite also in massive veinlets and aggregates.	104148	0.325	0.725
504.25	504.75	ANDESITE FAULT ZONE								
504.25	504.75	Coarse-grained green brecciated sericitic			10 QVN	80 60	Vuggy qtz-py vein and fault gauge.	104149	0.637	1.83
504.75	506.14	ANDESITE FLOW								
504.75	506.14	Fine-grained green chloritic biotite	0.5 0.1	1	23 QVN	35 15	Note out of sequence sample numbers.	104150	0.232	0.527
506.14	538.06	QUARTZ MONZONITE								
506.14	508.00	Fine-grained black homogeneous biotite chloritic	1.0 0.6	1	1 QVN	35 7	Approximately (2-5%) anhedral to subhedral qtz phenocrysts in a very fine matrix of feldspar and biotite. Cut by qtz/py/cpy veinlets +/- magnetite.	104152	0.627	1.8
508.00	508.84		1.0 0.6	1	9 QVN	35 7	Same as for 104152.	104153	1.305	4.35
508.84	509.45		3.0 5.0	1	10 QVN	35 25	A 23cm vein and a 1 cm vein containing about 25% cpy.	104154	1.66	4.44
509.45	510.00		2.0 0.6	1	12 QVN	35 7	as for 104152	104155	0.79	3.32
510.00	512.00		2.0 0.6	0	2 QVN	35 7		104156	0.602	2.29
512.00	514.00		2.0 0.6	0	2 QVN	35 7		104157	0.323	1.22
514.00	516.00		2.0 0.8	5	83 QVN	35 7	Same as for 104152 with clots of massive magnetite.	104158	0.417	1.31
516.00	518.00		2.0 0.8	1	7 QVN	35 7	Same as for 104152	104159	0.335	1.26
518.00	520.00		2.0 0.8	1	10 QVN	35 7		104160	1.155	5.73

Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
520.00	522.00	Fine-grained black homogeneous biotite chloritic	2.0 0.8	5 50 QVN	35 7	Same as for 104152. Plus heavily disseminated magnetite.	104162	0.44	1.645
522.00	524.00		2.0 0.8	3 27 QVN	35 7		104163	0.212	0.692
524.00	526.00		4.0 0.8	10 180 QVN	35 7	Same as for 104152. Plus heavily disseminated magnetite.	104164	0.285	0.971
526.00	528.00		2.0 0.8	10 148 QVN	55 7	Vein angle to core axis is steepening, very abundant magnetite.	104165	0.135	0.327
528.00	530.00		2.0 0.8	10 55 QVN	55 7		104166	0.131	0.27
530.00	532.00		2.0 0.8	15 288 QVN	65 7		104167	0.186	0.34
532.00	534.00		4.0 1.2	10 196 QVN	65 30	Multiple qtz veins coalescing into qtz flooding. Trace bismuthinite at several locations.	104168	0.209	0.514
534.00	536.00		4.0 1.2	15 381 QVN	65 20		104169	0.258	0.825
536.00	538.06		6.0 0.6	3 46 QVN	65 30		104170	0.297	0.677
538.06	573.38	MONZONITE PORPHYRY							
538.06	540.00	Coarse-grained grey homogeneous biotite chloritic	2.0 0.6	5 58 QVN	30	Approximately 30-40% feldspar +/- qtz phenocrysts of a dark grey black biotite rich matrix. Much of the cpy here is in late fractures crossing qtz veins. Qtz veins often coalesce into qtz flooded zones however, veins do not commonly cross but each other.	104171	0.247	0.581
540.00	542.00		2.0 0.6	2 10 QVN	30	Same as for 104171.	104172	0.166	0.353
542.00	544.00		2.0 0.6	1 0 QVN	30		104173	0.218	0.438
544.00	546.00		2.0 0.6	1 0 QVN	40	Trace bismuthinite at 545.74m. Same as for 104171.	104174	0.135	0.304
546.00	548.00		2.0 0.8	15 270 QVN	30	Same as for 10471	104175	0.359	0.82
548.00	550.00		2.0 1.0	15 117 QVN	30		104176	0.258	0.57
550.00	552.00	Coarse-grained grey stockworked biotite chloritic	2.0 0.8	15 368 QVN	30	Similar to above except qtz veins are commonly noted in multiple crosscutting relationships, i.e. a true stock work.	104177	0.173	0.472
552.00	554.00		3.0 1.0	15 311 QVN	40		104178	0.243	0.544
554.00	556.00		1.0 0.6	15 459 QVN	30		104179	0.201	0.441
556.00	558.00		2.0 0.6	5 42 QVN	50 20	Well developed stock work. Abundant magnetite.	104180	0.179	0.486
558.00	560.00		2.0 1.0	15 150 QVN	50 20		104181	0.34	0.716
560.00	562.00		2.0 1.0	15 195 QVN	50 20	One speck of molybdenite at 562.10m	104182	0.293	0.512
562.00	564.00		2.0 1.0	10 168 QVN	50 20		104183	0.135	0.382

Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
564.00	566.00	Coarse-grained grey stockworked biotite chloritic	3.0 0.8	7	67 QVN 50 20		104184	0.299	0.695
566.00	568.00		2.0 1.0	2	6 QVN 50 20		104185	0.225	0.487
568.00	570.00		2.0 1.0	7	100 QVN 50 20	Magnetite is distributed sporadically as massive veinlets.	104186	0.255	0.555
570.00	572.00		2.0 0.6	2	5 QVN 50 20		104188	0.211	0.517
572.00	573.38		2.0 0.6	2	2 QVN 50 20		104189	0.208	0.425
573.38	574.1	MONZONITE FAULT ZONE							
573.38	574.10	Coarse-grained green brecciated chloritic	2.0 0.1	0	2 QVN 50 10	Broken zone with minor gouge at start of sample.	104190	0.195	0.596
574.1	585.25	MONZONITE PORPHYRY							
574.10	576.00	Coarse-grained grey biotite chloritic	2.0 0.6	2	20 QVN 60 20	Patchy areas up to 30cm long have the feldspars replaced by very fine grained biotite.	104191	0.178	0.402
576.00	578.00		2.0 0.6	2	15 QVN 60 20		104192	0.2	0.376
578.00	580.00		2.0 0.6	5	100 QVN 60 20		104193	0.179	0.305
580.00	582.00		4.0 0.8	5	67 QVN 60 20		104194	0.266	1.04
582.00	584.00		4.0 0.6	2	7 QVN 60 20		104195	0.218	0.456
584.00	585.25		2.0 0.6	1	1 QVN 60 20		104196	0.117	0.223
585.25	587.25	MONZONITE FAULT ZONE							
585.25	587.25	Coarse-grained green brecciated chloritic sericitic	1.0 0.1	0	3 QVN 45 10	Chl/ser fault gouge and breccia cut by bright salmon zeolite veinlets.	104197	0.163	0.236
587.25	665	MONZONITE PORPHYRY							
587.25	589.00	Coarse-grained grey biotite chloritic	5.0 0.6	5	56 QVN 65 15	True stock work texture ends, most veins are sub-parallel with only minor cross cutting relationships.	104198	0.393	0.727
589.00	591.00		2.0 0.5	10	74 QVN 65 50	The monzonite is becoming more coarse grained, more mafic looking down hole. Qtz veining is at high angles to the core axis. Py content is decreasing rapidly and cpy is only noted sporadically. Magnetite remains strong in qtz veins and as fracture fill.	104199	0.329	0.538
591.00	593.00		2.0 0.5	10	189 QVN 65 40		104200	0.154	0.2
593.00	595.00		2.0 0.5	5	23 QVN 65 30	Same as for 104199.	104201	0.108	0.157
595.00	597.00		1.0 0.4	5	59 QVN 80 20		104202	0.186	0.264
597.00	599.00		1.0 0.4	1	1 QVN 80 20		104203	0.166	0.2

Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
599.00	601.00	Coarse-grained grey biotite chloritic	1.0 0.4	7 86	QVN 80 20		104204	0.124	0.186
601.00	603.00		1.0 0.4	7 263	QVN 80 20		104205	0.148	0.197
603.00	605.00		1.0 0.4	5 28	QVN 80 20		104206	0.157	0.245
605.00	607.00		1.0 0.4	5 56	QVN 80 20		104207	0.115	0.21
607.00	609.00		1.0 0.4	5 62	QVN 65 10		104208	0.111	0.17
609.00	611.00		1.0 0.4	5 10	QVN 65 15		104209	0.078	0.133
611.00	613.00		1.0 0.4	5 21	QVN 65 15		104210	0.124	0.178
613.00	615.00		1.0 0.4	5 37	QVN 65 15		104211	0.177	0.236
615.00	617.00		1.0 0.4	1 2	QVN 70 20		104212	0.152	0.237
617.00	619.00		1.0 0.4	5 84	QVN 70 20		104214	0.106	0.13
619.00	621.00		1.0 0.4	10 201	QVN 70 15		104215	0.311	0.497
621.00	623.00		1.0 0.3	2 13	QVN 70 15		104216	0.281	0.43
623.00	625.00		1.0 0.3	5 19	QVN 70 10	Same as for 104217	104217	0.076	0.132
625.00	627.00		1.0 0.3	2 7	QVN 70 10		104218	0.207	0.465
627.00	629.00		1.0 0.3	2 18	QVN 70 10		104219	0.141	0.267
629.00	631.00		1.0 0.3	5 47	QVN 70 10		104220	0.157	0.238
631.00	633.00		1.0 0.3	5 56	QVN 70 7		104221	0.41	0.612
633.00	635.00		1.0 0.3	3 5	QVN 70 7		104222	0.225	0.314
635.00	637.00		1.0 0.3	3 93	QVN 70 7		104223	0.265	0.357
637.00	639.00	Coarse-grained grey red chloritic	0.5 0.2	1 10	QVN 55 7	Alteration is weak to very weak, qtz veining is decreasing rapidly. Py in minor and cpy is rare. Zeolite veinlets are increasing down hole. Magnetite is still common but less abundant than previously.	104224	0.269	0.395
639.00	641.00		0.5 0.2	1 2	QVN 55 7	Same as sample 104225.	104225	0.345	0.454
641.00	643.00		0.5 0.2	1 1	QVN 55 5		104226	0.149	0.679
643.00	645.00		0.5 0.2	1 16	QVN 55 5		104227	0.114	0.275
645.00	647.00		0.5 0.2	3 47	QVN 45 3		104228	0.126	0.191
647.00	649.00		0.5 0.2	3 54	QVN 45 3		104229	0.088	0.137
649.00	651.00		0.5 0.2	3 19	QVN 45 3		104230	0.167	0.245
651.00	653.00		0.5 0.2	3 21	QVN 45 3		104231	0.135	0.212

Hole Number: KN-02-13

From	To	Rock Type	Py-Cpy-Mt	Ms	Veins (CA-%)	Comments	Sample#	Cu %	Au ppm
653.00	655.00	Coarse-grained grey red chloritic	0.5 0.2	2	9 QVN 45 3	Same as sample 104225. Gypsum in vuggy zeolite calcite vein.	104232	0.13	0.181
655.00	657.00		0.5 0.2	2	16 QVN 45 3		104233	0.089	0.123
657.00	659.00		0.5 0.2	1	12	Pale grey to tan fine to medium grained equigranular to weakly porphyritic. Cut by zeolite/carb veinlets. Upper contact at 25 degrees to C.A. Fine grained magnetite in matrix.	104234	0.127	0.221
659.00	661.00		0.5 0.2	1	10		104235	0.128	0.161
661.00	663.00		0.5 0.2	1	1		104236	0.242	0.28
663.00	665.00		0.5 0.2	1	1		104237	0.403	0.496
665	683.25	SYENITE							
665.00	665.50	Medium-grained grey tan	0.0 0.0	1	10 CCVN 40 1	Pale grey to tan, fine grained to medium grained equigranular to weakly k-spar porphyritic. Cut by calcite veinlets. Upper contact at 25 degrees to C.A. NOTE: Fine grained primary magnetite in matrix.	104238	0.282	0.356
665.50	667.50		0.0 0.0	1	7 CCVN 40 1	Same as sample 104238	104240	0.004	0.006
667.50	669.50		0.0 0.0	1	11 CCVN 40 1		104241	0.003	-2
669.50	671.50		0.0 0.0	1	14 CCVN 40 1		104242	0.003	-2
671.50	673.50		0.0 0.0	1	6 CCVN 40 1		104243	0.005	0.006
673.50	675.50		0.0 0.0	1	12 CCVN 40 1		104244	0.002	-2
675.50	677.50		0.0 0.0	1	10 CCVN 40 1		104245	0.002	-2
677.50	679.50	Medium-grained grey tan equigranular	0.0 0.0	1	10 CCVN 40 1		104246	0.002	-2
679.50	681.50		0.0 0.0	1	6 CCVN 40 1		104247	0.002	0.01
681.50	683.25		0.0 0.0	1	14 CCVN 40 1	Lower contact at 40 degrees to C.A.	104248	0.016	0.016
683.25	690.98	MONZONITE							
683.25	685.00	Coarse-grained grey red porphyritic chloritic	1.0 0.3	2	20 QVN 55 5	As for 104224.	104249	0.149	0.211
685.00	687.00		1.0 0.3	2	36 QVN 55 5		104250	0.204	0.329
687.00	689.00		1.0 0.3	2	14 QVN 55 5		104251	0.216	0.34
689.00	690.98		1.0 0.3	5	226 QVN 55 5		104252	0.243	0.409
690.98		EOH							