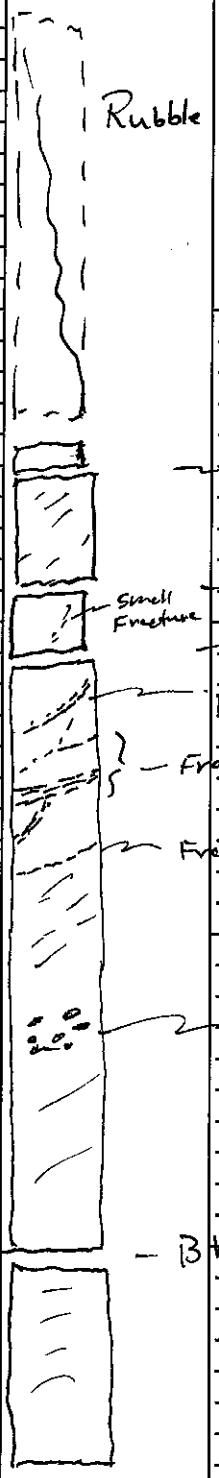
kISMET core logging Run# 1 Core ID KISMET 003 Logged by WMR Date 7-12-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 HQ Core — Note and description
0												
												Rubble
1												Break
												Phyllite with thin, discontinuous Carbonate lamellae; dark with Carbonate content only ~10%.
												Break
2								<0.5				Small Fracture
												Break
							70	1				Fracture; primarily qtz filled
								5				Fracture zone, individual fractures up to 5 mm in thickness
							70	3				Fracture - qtz filled
3												
												Sulfidic Zone (~2% Sulfide) Consisting of isolated blebs of Sulfide
4							15	1				Break - occurs at fracture filled with qtz
4.9												

kISMET core logging Run# 2 Core ID KISMET 003 Logged by WMP Date 7-12-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
4.9												HQ Core
												Phyllite - carbonate content relates primarily to the presence of thin, discontinuous carbonate laminae;
												Massive layer
												Darker layer without white laminae; lower carbonate content
												Break - across layering
1							40	<0.5				Thin fracture
								<0.5				Discontinuous hairline fracture
												Thinly layered; tightly folded; carbonate content increasing
2							70	0.5				Fracture; carbonate filled; segments are offset repeatedly
							70	0.5				
3												Thinly layered; tightly folded; carbonate-rich (~25%)
							10	<0.5				Thin fracture; carbonate filling
4												lithology as above
9.9												

kISMET core logging Run# 3 Core ID KISMET 003 Logged by WMR Date 7-12-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
												HQ Core
9.9												Phyllite - dark with very thin white laminae
											B	break across layering
											B	break across layering
								0.5				fracture; complex, carbonate filled
1												
								0.5				
11.92												
B												
A												
AAA												

kISMET core logging Run# 3A Core ID KISMET 003 Logged by WMR Date 7-13-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
												This core is a continuation of Run 3
												This is cement from casing run
												Phyllite
												Breck-mechanical
												Phyllite
						105	0.5					Fracture
												Breck-mechanical
												Phyllite

kISMET core logging Run# 4 Core ID Kismet 003 Logged by WMR Date 7-13-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
14.9												Ran gyroconpass - 89.7 209.8
												graphitic mica phyllite
												Alternating more mica-rich layers/sets
												Fracture less-mica
							10	0.5				tightly folded, thin-layered
												Break parallel to ~~bed~~ layering
												Subvertical layering
												Break - mechanical
							30	3				Fracture - Carbonate-filled
9.9												

kISMET core logging Run# 5 Core ID KISMET 003 Logged by WMR Date 7-13-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
19.9												Graphitic phyllite
											carbonate-rich layering	layering throughout is regular until 23.4 ft
												Break - parallel to layering
												Quartz layers
												Break parallel to layering
												Qtz lens
												Qtz layers & carbonate layering
												Break parallel to layering
						60	<0.5					Fracture - carbonate-filled
						50	<0.5					Fracture - carbonate-filled
44												

kISMET core logging Run# 6 Core ID KISMET 003 Logged by WMR Date 7-13-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
24.9												Carbonate phyllite
												layering indistinct
												Alternating sets of carbonate-rich layers and darker, less carbonate layers
												very small aperture fracture
							70	<0.5				Fracture - hairline
							65	1				Break - along a fracture - carbonate filled
												higher carbonate
												Break - mechanical across layering
												Break - mechanical across layering
												Qtz and carbonate layer
29.9												Hammered wedge and adjusted Column bar in Run 7

kISMET core logging Run# 7 Core ID KISMET 003 Logged by CMR Date 7-13-16

Depth	Lithology	Magnetism	Foliation Strike	Foliation Dip	Foliation Shape	Discontinuity Strike	Discontinuity Dip	Discontinuity Aperture (mm)	Discontinuity Shape	Discontinuity Infill	Graphic	003 Note and description
29.9												
							50	<<0.5				Phyllite
												Qtz and carbonate layer; some brecciation with sharp contact with Phyllite on lower contact. Small amount of Sulfide
											Fracture discontinuity	
												Qtz and Carbonate layer/lens
												mica carbonate phyllite
							10					Break - parallel to layering
												Break across bedding
							5					
							60	0.5				Fracture; Carbonate fill
							60	<<0.5				Fracture; Carbonate;
34.9												

kISMET core logging Run# 8 Core ID KISMET 003 Logged by WMR Date 7-13-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
34.9												
							15	0.5				Carbonate phyllite
												Alternating light/dark layers
												Fracture; carbonate
												Fracture; carbonate
												Fracture; carbonate
							50	1				Break along preexisting fracture; carbonate
							50	>>0.5				Fracture: hairline; carbonate
											Indistinct layering	
												Tightly folded; thinly layered phyllite
39.9												

kISMET core logging Run# 9 Core ID KISMET 003 Logged by WMR Date 7-13-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
39.9												No fractures identified in this core
												Alternating light/dark rhythmic layering
												mica carbonate phyllite
												Break - parallel to layering
						20						Qtz and calcite layer/lens
												lithology same as above
4.9												

kISMET core logging Run# 10 Core ID KISMET 003 Logged by WMR Date 7-13-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
44.9												Gyro compass survey 50'
												Dip - 89.0° Azimuth 299.8°
							60	70.5				Fracture
							15					Break - parallel to layering
							30					Break - parallel to layering
							60	<0.5				Fracture - filled
												Higher Carbonate Content
							30	<0.5				Fracture - irregular
							20					Break - parallel to layering
							40					Break - across layering Tightly folded
9.9												

kISMET core logging Run# 11 Core ID KISMET 003 Logged by WmK Date 7-13-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
49.9												Tightly folded phyllite
							80	1				Fracture; carbonate fill; somewhat irregular
												more micaceous
							70	<0.5				Fracture
												Break parallel to layering
												Alternating light/dark phyllite
							20					Break across layering
							20	3				
												layering indistinct
							20	1				Fracture: discontinuous; carbonate fill
54.9												

kISMET core logging Run# 12 Core ID Kismet -003 Logged by WMK Date 7-13-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
54.9												
							15	1				Fracture; carbonate fill; not continuous
												Alternating light/dark; carbonate/lower carbonate
												Mica-rich sets of layers alternating with lower mica content
							50					Break - parallel to layering
												Folded tightly with varying mica content
59.9												

kISMET core logging Run# 13 Core ID KISMET 003 Logged by WmR Date 7-13-16

Depth	Lithology	Magnetism	Foliation Strike	Foliation Dip	Foliation Shape	Discontinuity Strike	Discontinuity Dip	Discontinuity Aperture (mm)	Discontinuity Shape	Discontinuity Infill	Graphic	003 Note and description
58.9												
							5	<0.5				Alternating light/dark phyllite
												Fracture
												layering indistinct
							60	0.5				Fracture; carbonate fill
												break across layering
							25					
												Fractures; filled ?
							60					
							60					
												Thinly layered, tightly folded
4.9												

kISMET core logging Run# 14 Core ID KISMET 003 Logged by WMR Date 7-13-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
64.9												
												Rhythmic Phyllite
												Thinly layered; tightly folded
							40					
												Break across layering
							30	<0.5				Fracture-filled; irregular
							25	0.5				micaceous Phyllite
												Fracture; very irregular
												Rhythmically layered
												tightly folded; thinly layered
												Qtz layer/lens
69.9												

kISMET core logging Run# 15 Core ID KISMET -003 Logged by WMR Date 7-13-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
69.9												No breaks in this core. No fractures identified in this core but some openwork at 73 - 73.5 ft
												carbonate phyllite
												Alternating light/dark phyllite
												Tightly folded, thinly layered
												openwork in disturbed zone; no defined fracture but seems to be a zone ~ 7 cm long. Openwork is small (~ 5 mm x 2 mm)
												sets of mica-rich layers alternating with less mica-rich layers
149												

kISMET core logging Run# 16 Core ID KISMET -003 Logged by WMK Date 7-13-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
74.9												No fractures identified in this core.
												Alternating mica-rich and mica-poor sets of layers. Mica-rich layers vary from 7 cm to 3 cm thick; mica-poor vary from 2 to 8 cm thick.
												Characterized by very rhythmic layering.
												Break: Probably mechanical - occurs in a more pelitic unit.
												Lithology as above.
93.9												

kISMET core logging Run# 17 Core ID KISMET -003 Logged by WMP Date 7-13-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
79.9												No fractures identified in this Core.
												Carbonate phyllite
												Thinly layered; light colored layers. Complex inner structure in layers. Dark layers are more simply deformed; laminae are generally continuous and defined.
												Rhythmic layering
							10					Break parallel to layering
							25					Break parallel to layering
												mica-poor part of section.
84.9												

kISMET core logging Run# 18 Core ID KISMET 003 Logged by WMR Date 7-13-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
84.9												Alternating light/dark carbonate graphitic phyllite. The darker layers still have significant carbonate content.
							40				Break	
												Rhythmically layered - dark, graphitic ~4cm and light carbonate ~2cm
							60	1				Fractures; filled with carbonate
							60	1				Mica carbonate phyllite
							30					Breccia - parallel to layering
												lithology as above
							60					Break
89.9												Qtz and carbonate layer

kISMET core logging Run# 19 Core ID KISMET-003 Logged by WMR Date 9-13-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
89.9											small amount sulfide; Qtz layer; Qtz layer; Qtz layer	Strongly foliated Carbonate graphitic phyllite alternating with Carbonate graphitic mica Phyllite (light/dark)
												– Break – along strong foliation
												– Break-along strong foliation
												– Break – along strong foliation
											Strong foliation; small amount of sulfide	Strongly foliated carbonate mica phyllite (~2mm in diameter)
							90	<0.5				small fracture - no filling in part otherwise Carbonate
												Less foliation expressed, possibly due to change in attitude of layering with respect to core axis
												– Break-along strong foliation
												irregular fractures
												– Break – along strong foliation
94.9												

kISMET core logging Run# 20 Core ID KISMET -003 Logged by WMR Date 7-13-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
94.9												
							30	2				Alternating light/dark phyllite; dark predominates
												Irregular fracture - filled carbonate
							70	~0.5				Fracture - carbonate filled
						40						Small sulfide (~2 x 3 mm)
						20						Break on fracture
73.9												

kISMET core logging Run# 21 Core ID KISMET -003 Logged by WMR Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
98.9												No breaks in this core. Only one fracture identified. Core is characterized by very rhythmic layering.
												Carbonate graphitic phyllite
							60	1				Fracture: carbonate filled but appears to be partially open in spots.
												Rhythmic layering produced by alternating light (carbonate-rich) layers and dark (carbonate-poor) layers. The sets of layers ~1cm thick for each light plus 1cm thick for each dark layer.
												Carbonate-rich section
												Tightly folded; thin bedded
												Carbonate content decreases. Still has rhythmic layering
												Higher carbonate content
												Rhythmic layering
												Carbonate content greater
												Rhythmic layering
104.9												

kISMET core logging Run# 22 Core ID KISMET-003 Logged by WMK Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
104.9												
												Alternating light/dark layering
												Rg. Rhythmic a top
												then more carbonate-rich throughout
							20					Break parallel to layering
							40	0.5				Fracture; carbonate fill; discontinuous
							30	-				Break
109.9												

kISMET core logging Run# 23 Core ID KISMET-003 Logged by WMR Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
109.9												No breaks in this core. Only one barely visible fracture in this core.
												Alternating light/dark layers; small (2mm) sulfide occurrence
												Carbonate graphitic mica phyllite
												mica content appears to be greater in light colored layers
												lower mica content
							~90	0.5				subvertical hairline fracture; filled
												micaceous phyllite (greater mica content)
14.9												

kISMET core logging Run# 24 Core ID KISMET-003 Logged by WMR Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
114.9												
												Alternating light/dark with greater carbonate content (lighter colored layers).
												Layering tightly folded but not regular.
							60	<0.5				Fracture-filled
												Rhythmic layering
												Strongly foliated; alternating light/dark layers; mica content greater in light layers.
119.9												

kISMET core logging Run# 25 Core ID KISMET -003 Logged by WMR Date 7-14-16

Depth	Lithology	Magnetism	Foliation Strike	Foliation Dip	Foliation Shape	Discontinuity Strike	Discontinuity Dip	Discontinuity Aperture (mm)	Discontinuity Shape	Discontinuity Infill	Graphic	003 Note and description
119.9												Core has more mica and less carbonate layers than preceding cores.
												Dark graphitic phyllite predominates with interlayers of quartz plus carbonate.
												Break parallel to layering
												Break parallel to layering
												Strongly foliated graphitic mica phyllite
												minor layer of Qtz intermixed with carbonate
												Irregular layer of qtz (~1-2 cm thick
							30	0.5				Fracture slightly lighter than break; filled
												Break parallel to layering;
												Qtz layer with carbonate
												after find the relationship
												phyllite
												Carbonate
												Qtz
												Break parallel to layering
												mica phyllite;
												Strongly foliated
124.9												

kISMET core logging Run# 26 Core ID KISMET -003 Logged by WMP Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
124.9												
							290	<0.5				Strongly foliated graphitic Phyllite with carbonate interbeds
												Irregular, very small aperture fracture, filled
												Small sulfide occurrence
												Zone of disseminated sulfides. Typically each occurrence 1-2-3mm in diameter
												Break Parallel to layering Greater Carbonate
												Break parallel to layering lesser Carbonate
												Break parallel to layering Carbonate increased
129.9												

kISMET core logging Run# 27 Core ID KISMET-003 Logged by WMK Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
129.9												Break parallel to layering
												Thinly layered, tightly folded carbonate graphitic phyllite
												small sulfide grains
												lithology as above
												Strongly foliated
												Break parallel to layering
												lithology as above
134.9												

kISMET core logging Run# 28 Core ID KISMET -003 Logged by WMR Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
134.9												
												Carbonate graphite phyllite
							45	0.5				Fracture; filled
							30	<0.5				Fracture; filled
							40					Break- Parallel to layering
												massive with little carbonate or visible micas
												Carbonate layers present
							20	0.5				Fracture; discontinuous
139.9												

kISMET core logging Run# 29 Core ID KISMET -003 Logged by WMR Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
139.9												
												Carbonate Phyllite
												massive unit with fine-scale layering
												Break
												massive unit with interspersed thin carbonate-rich, light-colored layers
												Fracture; qtz-filled, small amount of sulfide
												Break
												Thin qtz layer parallel to layering
												Break
144.9												

kISMET core logging Run# 30 Core ID KISMET-003 Logged by WmR Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
144.9												
												Predominantly mica phyllite with subordinate amounts of Carbonate phyllite
												Break parallel to layering
						5	20.5					Fracture; discontinuous
						290	20.5					Fracture; subvertical; filled
						50	>0.5					Fracture; filled
149.9												

kISMET core logging Run# 31 Core ID KISMET-003 Logged by WMR Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
149.9 ft												Ran gyro compass at 150'
												Dip -85.4° Azimuth 303.5°
												Qtz layer ~7mm thick; Parallel to layering
						5	<0.5					Fracture - filled
												Break - mechanical; roughly parallel to layering
												Qtz layers ~1 cm thick
												Qtz layers ~1.5 cm thick
												mica phyllite
												strongly foliated
												Break parallel to layering
												mica phyllite
						20	<0.5					Fracture; hairline; filled
154.9 ft												

kISMET core logging Run# 32 Core ID KISMET-003 Logged by WMR Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
154.9												graphitic phyllite; light/dark layers present but carbonate lesser in quantity than in remainder of core
												Qtz layer
												Break: parallel to layering
							60					
							20	<0.5				Fracture-filled
							60					Qtz layer
												Small fault; offsets qtz layers; no filling in fault surface; offset probably ~1.5 cm
							50	<0.5				Fracture; filled
59.9												

kISMET core logging Run# 33 Core ID KISMET -003 Logged by WMR Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
1599												[redacted] graphitic mica phyllite; finely layered
												mica phyllite
							5	0.5				Fracture; filled
							75	0.5				Fracture; Partially filled with carbonate; some portions appear to be open; irregular
												Fracture; Partially filled with carbonate; Some portions appear to be open
												Break across layering
							60	<0.5				Lithology as above
												Fracture; filled
1649												Lithology as above

kISMET core logging Run# 34 Core ID KISMET-003 Logged by WMR Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
												No breaks in this core
164.9												
							45	1				Fracture; filled carbonate
												carbonate graphitic phyllite
							50	0.5				Fracture; carbonate filled
							50	<0.5				Fracture; carbonate filled
												Graphitic phyllite
							50	<0.5				Fracture; carbonate filled
												carbonate graphitic phyllite
							35	10				Fracture; ~1cm thick; filled with qtz and sulfide (~10%)
							35	2				Fracture; filled with qtz and minor carbonate
							50	1				Fracture; carbonate filled
169.9												

kISMET core logging Run# 35 Core ID KISMET -003 Logged by WMK Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
168.9												
												Graphitic phyllite with minor carbonate units
												Fracture; filled with carbonate
							65	1.5				Fracture
												Break across layering
							65	1				
							70	20.5				Fracture (several) all filled
							~90	3				Fracture; qtz filled but may be part of a qtz layer stretched by folding; may not be a fracture
												Break across layering
174.9												

kISMET core logging Run# 36 Core ID KISMET -003 Logged by WMR Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
174.9												
												Qtz layer with minor carbonate (~2 cm thick)
												Break parallel to qtz layer
												mica phyllite
						60		<0.5				Fracture
												mica phyllite
						60		<0.5				Fracture; filled
						75		1				Fracture; filled with carbonate
179.9												

kISMET core logging Run# 37 Core ID KISMET-003 Logged by WMR Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
179.9												
												mica phyllite
							60	<0.5				Fracture
												Strongly foliated
												Break parallel to layering
							70	1				Fracture; filled carbonate
												Qtz. layer (~1cm thick)
184.9												

kISMET core logging Run# 38 Core ID KISMET -003 Logged by WMK Date 7-14-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	003 Note and description
184.9												Mica phyllite
												large sulfide inclusions (~1-1.5 cm)
												sulfide inclusion (~0.5 cm)
												Qtz
189.9												

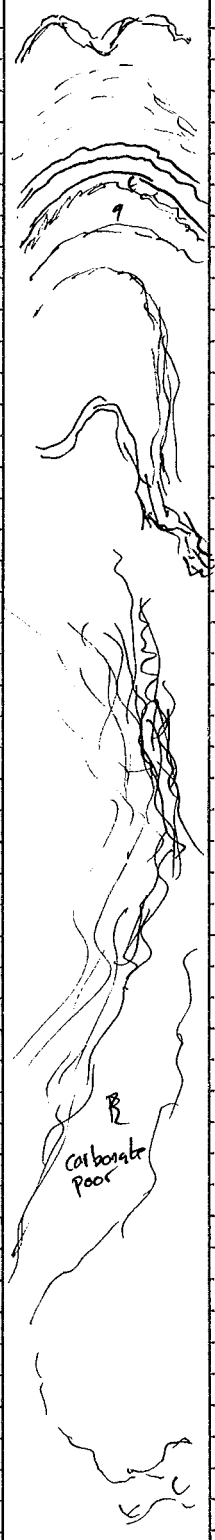
kISMET core logging Run# 39 Core ID Kismet-003 Logged by Drew Siler Date 7-19-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
												carbonate rich bands & nodules
189.9	P			~65°								0.5cm to ~2cm wide carbonate poor bands. Steepest foliation is ~65° defined by calcite veins, large pyrite nodules & veins with steeply dipping carbonate quartz & calcite veins
190.9												tightly folded calcite veins alternating coarse mica rich layers & finer
191.9												
				75° 80°								bedding very steep ~70°-80° very finely bedded calcite rich & calcite poor bands
192.9												
				45°								~0.25 cm pyrite band with foliation ~45°
193.9												foliation defined by pyrite & calcite
				40° 60°								& calcite folds with quartz also
194.9												

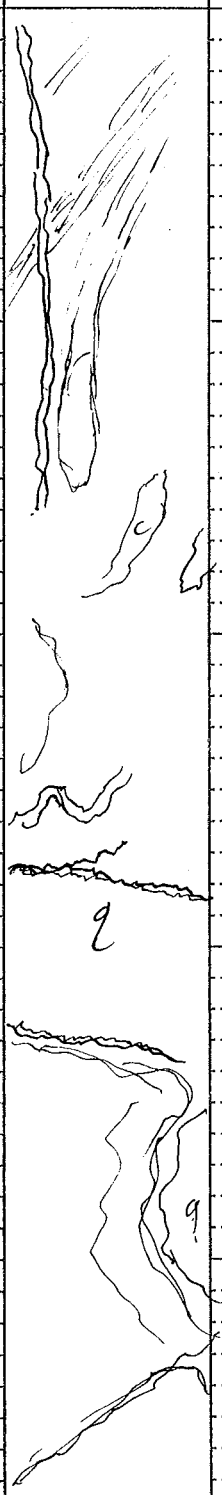
kISMET core logging Run# 40 Core ID K-003 Logged by Drew Siler Date 7-19-16

Depth	Lithology	Magnetism	Foliation Strike	Foliation Dip	Foliation Shape	Discontinuity Strike	Discontinuity Dip	Discontinuity Aperture (mm)	Discontinuity Shape	Discontinuity Infill	Graphic	Note and description
194.9				45°								finly bedded carbonate and carbonate-poor dip 45-55° fold hingest are very tightly folded in carbonet ~1cm wide calkite vein w/ quartz sharp discontinuity w several in thick calcite vein ~4" thick quartz folded within calcite Crack Calcite ~~vein~~ steeply dipping calcite vein with ~1cm thick quartz infill ~2cm wide vien, a few mm of calcite on either wall than quartz infill three total viens like this bottom ~1.5 ft are finely bedded phyllite & carbonate gently folde Crack
195.9				50°								
196.9				82°								
197.9												
198.9			c	42°								
199.9												

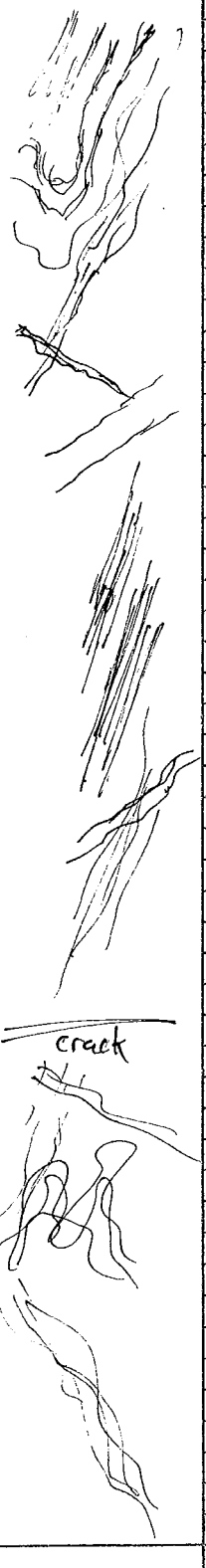
kISMET core logging Run#4 Core ID K-003 Logged by DLS Date 7-19-06

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
199.9												finely bedded phyllite & carbonate ~3cm scale folding
												~1 ft wide vein w/ calcite rim & quartz in fill
200.9												very finely bedded phyllite w/ calcite
				81°								chaotic, tight folding
201.9												very steep 'wavy' foliation, not well defined beds
												discrete calcite nodules
202.9												
												carbonate poor
203.9				74								calcite + pyrite?
204.9												

kISMET core logging Run# 42 Core ID K-003 Logged by DLS Date 7-19-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
204.9												near vertical calcite vein ~.75cm wide
				66°								massive poorly foliated
				88°								cuts across phylite carbonate foliation
205.9												vertical foliation
												very carbonate rich
												carbonate blobs
206.9												~~very fine chaotic foliate~~ massive poorly foliated zone
												~.05ft carbonate vein
207.9												.05 .05 F quartz vein
			35°									carbonate on the margins
												dips ~35°
												looks like it is in the foliation?
												another chunk of a wide quartz vein
												calcite rimmed
208.9												surrounded by very finely bedded ? phyllite
												green is grey
												contact with more pure grey carbonate rich phylite
209.9												

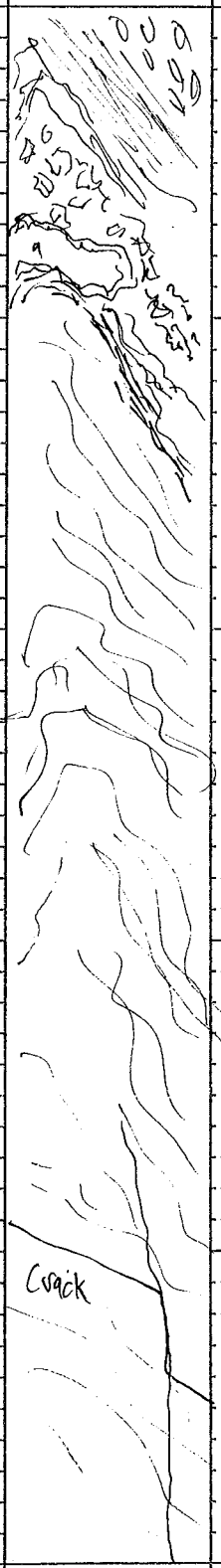
kISMET core logging Run# 43 Core ID K-003 Logged by DLS Date 7-19-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
209.9				50°								finely bedded, carbonate rich phylite
												2.5cm thick veins calcite w/quartz
~~205.9~~ 210.9												0.5cm calcite vein cuts foliation
												2cm calcite vein ~20°
~~206.9~~ 211.9				70°								two discrete black mica? rich bands
												finely bedded, darker color calcite vein cuts main foliation
~~207.9~~ 212.9				71°								
												calcite vein cuts foliation
~~208.9~~ 213.9			78									fine chaotic, tight fds pyrite in calcite veins
												lots of pyrite in calcite bands + mica bands
~~209.9~~ 214.9												

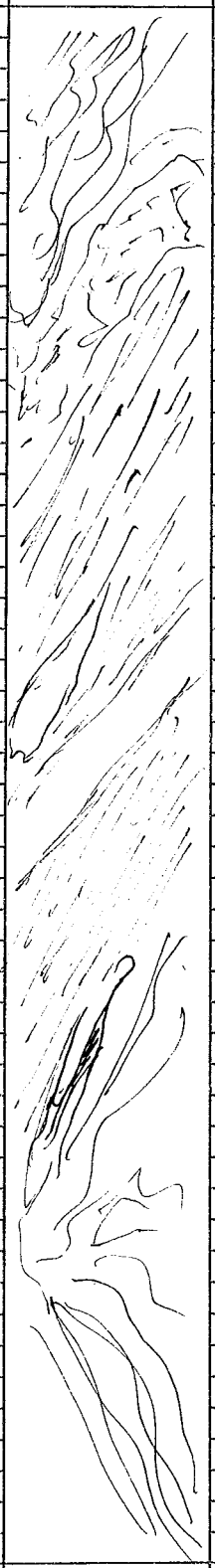
kISMET core logging Run# 44 Core ID H-0089 Logged by DLS Date 7-19-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
214.9												Dark black carbonate poor layers alternate with grey carbonat rich layers carbonate poor layers have lots of fine grained pyrite
												carbonate poor layers still have interbedded calcite veins
				85°								
215.9												fine phyllitic carbonate foliation reserves lots of interbedded pyrite
				73°								
216.9				84°								more irregular folding, more carbonate rich beds
217.9												
				79°								Pretty flat contact ~ 79° more calcite rich banding below
218.9												calcite bands alternate with very pyrite rich bands look like nasty pyrite
219.9												

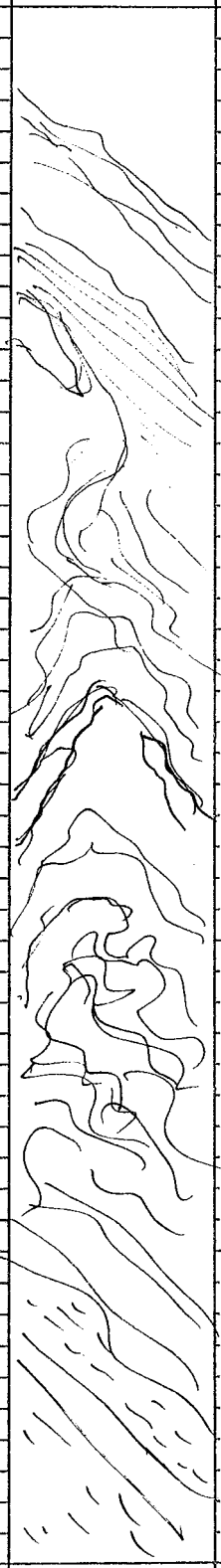
kISMET core logging Run# 45 Core ID K-003 Logged by DCS Date 7-19-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
219.9				70°								alternately bedded phyllite-carbonate bedding has speckled texture in some places
												3cm wide vein part calcite rim quartz middle
220.9												more speckled texture
												vein is brecciated into another vein fine platy mica-pyrite bedding
221.9												very wavy bedding in calcite layers mica beds are stronger much less pyrite but still some
222.9												
223.9											Crack	very fine late calcite vein cuts bedding foliation
224.9												

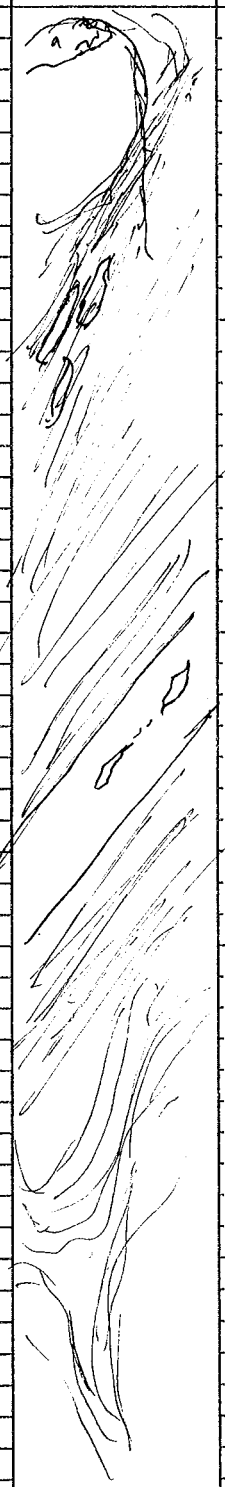
kISMET core logging Run# 46 Core ID K-003 Logged by DLS Date 7-19-16

Depth	Lithology	Magnetism	Foliation Strike	Foliation Dip	Foliation Shape	Discontinuity Strike	Discontinuity Dip	Discontinuity Aperture (mm)	Discontinuity Shape	Discontinuity Infill	Graphic	Note and description
224.9				41°								poorly bedded, carbonate rich carbonate layers are chaotically folded
												.15ft thick darker carbonate poor band
225												well bedded
226.9												calcite rimmed quartz filled vein part
				60°								.2ft wide cacite + quartz vein 60°
												very finely well bedded
227.9												
												calcite vein .01ft wide
228.9												
				50°								very chaotic, tight folding in fold hinge
229.9												

kISMET core logging Run# 47 Core ID K-003 Logged by DLS Date 7-19-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
229.9				45								massive, very fine grained
												thicky bedded calcite veins
230.9												massive fine grained
												finely bedded with calcite & pyrite
231.9												calcite rich, much lighter color
												~1cm calcite vein, bad damaged
232.9												Chaotically bedded calcite, pyrite, muscovite (?) + quartz, Looks gold & white banded
												calcite, foliated phylite
233.9												Several 1-2 cm calcite rimmed quartz filled veins, pyrite in bedding
				60								
234.9												

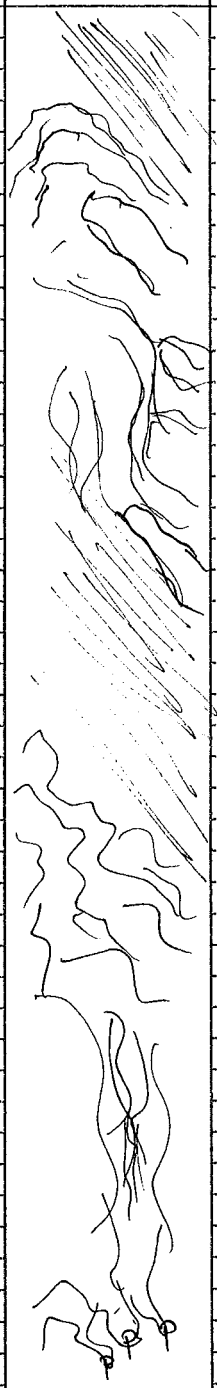
kISMET core logging Run# 48 Core ID K-003 Logged by DLS Date 7-19-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
234.9				54°								coarse grained, welled bedded calcite + mica quartz filled vein with calcite rim
235.9												boudinaged calcite veins w/ pyrite
				41°								finely bedded calcite, mica, pyrite
236.9												0.2 ft wide mica pyrite band with boudinaged calcite vein
237.9												alternating 2 cm wide bands of calcite rich + calcite very rich
238.9												
239.9												

kISMET core logging Run# 49 Core ID K-003 Logged by DCS Date 7-19-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
239.9												Chaotically foliated mica, calcite, pyrite
												bedded calcite + pyrite
240.9											Cal	Calcite vein ~2cm
												very finely bedded, micas, calcite, very fine pyrite?
241.9				5P								
				50°								
247.9											crack / crack / crack / quartz	~0.2 ft wide quartz vein with calcite rims
243.4											9	another wedge of a quartz vein
244.9												

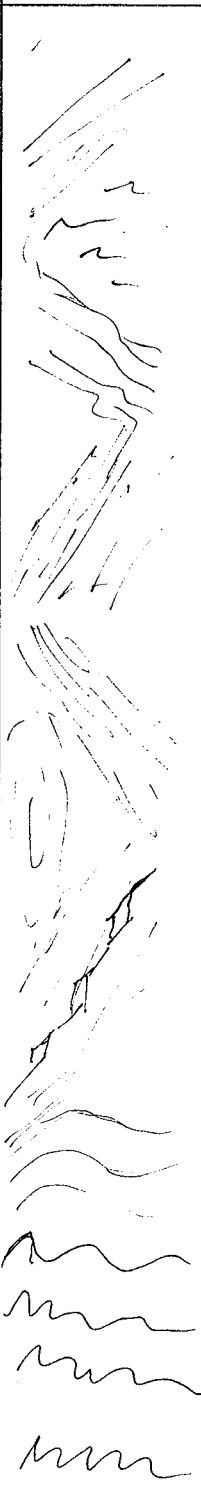
kISMET core logging Run# 50 Core ID K-003 Logged by DLS Date 7-19-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
244.9												very fine grained, faint massive bedding
												coarsely bedded, calcite & ~~qtz~~ quartz bands
245.9												Near- Near vertical bedding, goes around quartz/calcite nodules
												very finely bedded
246.9												
												very chaotic folding with quartz veins with calcite rims several 1-2 cm quartz boudins
247.9												
248.9												pyrite in fill in folds axes
249.9												

kISMET core logging Run# 51 Core ID K-003 Logged by DLS Date 7-19-16

Depth	Lithology	Magnetism	Foliation: Strike	Foliation: Dip	Foliation: Shape	Discontinuity: Strike	Discontinuity: Dip	Discontinuity: Aperture (mm)	Discontinuity: Shape	Discontinuity: Infill	Graphic	Note and description
249.9												poorly bedded
												calcit vein cuts bedding
250.9												quartz + calcite boudins in fold hinge
												very tight folding, fold hinges spaced ~3cm
251.9				50°								
252.9												
253.9											Crack	moderately well bedded calcite + quartz
254.9												

kISMET core logging Run# 52 Core ID K-003 Logged by DLS Date 7-20-16

Depth	Lithology	Magnetism	Foliation Strike	Foliation Dip	Foliation Shape	Discontinuity Strike	Discontinuity Dip	Discontinuity Aperture (mm)	Discontinuity Shape	Discontinuity Infill	Graphic	Note and description
254.9												poorly foliated, calcite + pyrite
				40°								~1-2mm wide calcite bands ~40°
												chaotic tight folding
255.9												
			70°									poorly defined foliation, with not well defined mica + calcite
256.9												
												fold hinge, very tight folding
			58°									
257.9												badly damaged calcite vein ~2-3 mm wide
												alternating layers of calcite rich + calcite poor grey w/ some black
258.9												
												very tight folding
259.9												

7-20-16

Sampled K-003 258.4 - 259.9

K-003 259.9 - 264.9 run 53

259.9 Poorly foliated, little evidence of pyrite, so carbonate & mica

260.9 61° dipping folded calcite bands in foliation
boudinaged quartz vein

262.9 very tightly folded carbonat rich layers alternating with carbonate poor layers
very tight folding continues to bottom of core at 264.9

264.9 - 269.9 run 54

264.9 well defined foliation, mica rich bands & carbonate rich bands

265.4 boudinaged quartz vein with calcite rim dipping 65° ~1cm
pyrite rich areas in fold hinges

266.9 dips ~ 72° very tight folding
several 0.5cm boudinaged q+c veins

268.9 dips ~ 50°

269.9 - 274.9 run 55

269.9 ~1cm wide calcite & quartz vein dips ~35°
moderately well bedded calcite rich & calcite poor bands

270.9 ~1cm wide primarily quartz vein with some calcite, 1cm wide pyrite vein in quartz vein boudinaged ~40° dip
another ~2-3 cm wide quartz vein at 271.4ft.

Run 55 continued

271.9-273.9 well bedded tightly folded with some pyrite

273.9 ~1-1.5cm wide quartz vein with calcite rim gently dipping ~10°

274.4 late calcite vein cuts across foliation ~ 1mm

274.9 very well folrated, fine grained ~20° dips

~~274~~

dips steepen at bottom ca ~70° calcite & pyrite in fold hinges

274.9-279.9 Run 56

274.9 well bedded ~72° dip

276.9 wavy bedding with calcite boudanage & quartz calcite vien cuts across bedding ~70°

277.4 ~1cm wide & calcite vein with pyrite

~~277.9~~-278.9 well bedded ~~to~~ 63° dip

278.9 think fold. lots of calcite in fold hinges & some pyrite

279.9 gentle dips ~~~150°~~ 15°

~~279.9~~ Run 57

279.9 becomes very calcite rich, much more light grey color pretty massive although there is still minor bedding

~~281.4~~ much more mica, alternating mica rich & carbonate rich bands

282.4 ~~1cm wid~~ .1ft wide very carbonate richh band serves as contact with ~5ft of sandstone?

fine grained, no bedding, no carbonate

282.9 ~1.5 ft wide quartz vein, carbonate at the margins and in discrete bands in the vein

284.2 well bedded mica rich phyllite, alternating carbonate rich & carbonate poor bands. dips ~40°

~~284.9~~-289.9 Run 58

284.9 very finely bedded ~4 cracks allong bedding 4ft

285.6 .7ft wide quartz vein, .1ft wide calcite vein at base

286.4 well bedded alternating calcite rich & poor phyllite beds ~25°

Run 58 continued

289.4 Chaotic bedding, fold hinge? calcite boundanage ~1cm

288.1 lots of pyrite with calcite boudins

bedding is very wavy, main bed is ~60°

289.9-294.9 Run 59

Top ~.2ft is broken up, propably because of a little quartz vein

well foliated with alternating carbonate rich & carbonate poor bands

290.9 bedding is wavy with calcite & pyrite in fold hinges very tightly folded

291.9 Two ~horizontal calcite veins, cutt across foliation ~1mm wide

292.4 2mm wide calcite vein cuts across foliation pyrite infill in center of vein

Foliation is still wavy, well foliated

294.2 much more calcite in bedding, bedding becomes chaotically Folded, pyrite in fill, bedding is mostly steep ~62°

Conversation with Joel Carr

Apparently the casing that was set in KC03 has sagged down the hole, meaning that the cement didn't set before drilling resumed. He thinks it just slid ~2 Ft down. He does not have any more stainless steel casing here so he is going to screw on a normal steel rod to the casing that sagged, & order new stainless casings when that arrive we can unscrew the non-stainless & screw on the stainless by hand.

294.9-299.9 Run 60

294.9-295.4 Poorly Foliated, massive, dark grey several ~1cm carbonate boudinens

295.4-297.4 Very well foliated, carbonate rich layers bedded with carbonate poor layers ~70°

297.4 more massive dark grey section with ~1-2cm calcite & quartz deposits in Fold hinges, also lots of pyrite in fold hinges

298.4 Several ~1cm calcite veins ~1mm cut across foliation

299.0-299.9 banding becomes less distinct, more ~~uniform~~ uniform in color

299.9 - 304.9 Run 61

299.9 - 300.4 indistinct foliation, 2cm calcite vein cuts foliation

300.4 - 303.9 distinct foliation with carbonate rich & carbonate poor bands, ~50°
lots of calcite ± quartz boudins, tend to be in fold hinges

301.9 east calcite filled fracture cuts foliation ~70° dip ~1mm

302.4 - 303.9 several more 1mm wide calcite veins cut foliation

303.9 & 304.3 quartz boudin ~2-3cm, with foliation

304.9 very wavy foliation

304.9 - 309.9 Run 62

304.9 First ~.3ft are almost all quartz & calcite veins in foliation
quartz in the middle calcite on the edges
several very mica rich bands in foliation
these tend to changes thickness between hinges & limbs

304.9 - 307.9 folding is pretty indistinct & chaotic
some pyrite veining

307.9 more mica rich foliation and ~3cm wide quartz veins boudins
Calcite boudins as well. mica rich foliation is very weak
so foliation is chaotic with lots of calcite & quartz in fill.

309.9 - 314.9 Run 63
well foliated alternating carbonate rich & carbonate poor bands

310.9 boudinaged calcite ± quartz vein in foliation ~2cm ~60°

311.9 - 313.2 45° well foliated

313.2 .6ft wide quartz vein ± calcite, calcite on the rim

313.9 - 314.9 well foliated ~60° dip, some tight folding

314.9 - 319.9 Run 64

314.9 - 316.4 Well foliated, light grey carbonate rich

316.4 two ~3-4 cm wide boudins in foliation, one is quartz ± calcite
one is mostly calcite 60°

316.9 ~ wavy foliation, ramp steep ~65°, speckled, texture in carbonate
rich beds, platy texture in mica rich beds

318.9 ~80° dip

319.9 - 324.9 Run 65

319.9 well foliated, mica rich bands & carbonate rich bands, tight
folds & wavy foliation ~73°

320.4 quartz ± calcite boudin ~2cm, ~65°

quartz vein cuts across foliation ~68° ~2mm

321.9 wavy tight folds speckled texture in carbonate rich bands

322.4 several ~1mm ± calcite filled veins cut across foliation ~73°
veins are mineralize with pyrite, pyrite in fold hinges as well.

324.9 - 329.9 Run 66

Wavy foliation, tight folding ~45°

325.9 Calcite filled fracture cuts across foliation
calcite ± quartz boudins throughout

327.9 Way foliation, grey speckled texture in carbonate rich bands

328.4 Pyrite in fold hinges, very tight folding to TD