PROPERTY

	Grid East	Grid North	Easting	Northing	Elev.	Depth (m)
ZONE:			504994	6851649	1430m	450.19

SECTION:

HOLE: DDH-M12-05

CLAIM: YD57206

Contractor: Platinum Drilling

Drill: 1

Core size: NQ2 Reduced at: (m)

Casing depth: 12.19 (m) in / **out**

Drilling dates: July 14-19, 2012

Geology logged by: Nick Bueckert

TARGET:

SURVEY

Depth (m)	Azimuth	Dip	Method	Depth (m)	Azimuth	Dip	Method
0	90	-60		246.1	98.4	-56.9	Ranger
17.4	86.7	-56.8	Ranger	307.1	98	-57	Ranger
108.9	89.3	-56.8	Ranger	398.6	100.3	-57	Ranger
185.1	92	-56.9	Ranger	429.1	101.6	-57	Ranger

SUMMARY

From (m)	To (m)	Interval	Unit	Comments
0.00	11.01		CAS	Casing, no recovery
11.01	85.14		V1	Volcanic 1 (andesite), sericite and potassic alteration
85.14	183.19		PP	Plagioclase Porphyry, propylitic and potassic alteratic
				sericitized breccia zones common; local chalcocite(?)
183.19	450.19		PP	Plagioclase Porphyry and Intermediate Porphyry Dike
				potassic and propylitic alteration
420.29	422.55		PP	zone of galena and chalcocite(?) mineralization
				EOH @ 450.19m

SAMPLES

Numbers: M677639- M650136

Total: 198

Batch: 19-24

Date Sent:

Certificate:

COMMENTS

EOH @ 450.19m

Geology Log

Hole: DDH -12-05 **Logger:** **Date: AUG 2012**

GENERAL INTERVAL			DETAILED INTERVAL			LITHOLOGY					ALTERATION								MINERALS				DETAILED DESCRIPTION
																	Other			Other			
From (m)	To (m)	Interval (m)	From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Shade	Colour	Texture	Propylitic	Argillic	Phyllic	Potassic	Silic	Limonitic	Type	Intensity	Pyrite	Type	Conc. (%)	Photo	
0.00		0.00	0.00																				Casing
11.01	72.24					V1		MD	GY	MA						1	SER	2	2	DI			VOLCANIC 1 (andesite) - sericite altered - Grey colour medium-grained crowded plagiolcase, with 5-15% mafics replaced by chorite and pyrite. Chlorite locally occurs as <1cm grains. Minor zones of intense sericitization and clay alteration. Overall core is highly fractured with metre-scale zones of competent core. Limonite staining on fractures up to 32.00m. Downhole increase in pyrite mineralization on fracture surfaces (<10%). Local ankerite veining and vuggy pyrite-carbonate veinlets. Pyrite mineralized fractures (healed) are common.
								LT	GY								SER	3	10	BL			Blebby pyrite <10%
																			1	ST			
72.24	85.14					V1	FG	DK	GY	MA							pot	2	2	DI			VOLCANIC 1 (andesite) - potassic alteration(?) - Dark grey, massive fine-grained pyrite-magnetite-bearing volcanic with faintly visible plagioclase phenocrysts and patchy white zones associated with increase in pyrite stringers.
										PA									2	ST			
			72.24	76.50		V1	FG	DK	GY	MA							POT	2	2	DI			VOLCANIC 1 (andesite) - potassic alteration(?) - Dark grey, massive fine-grained pyrite-magnetite-bearing volcanic with faintly visible plagioclase phenocrysts and patchy white zones associated with increase in pyrite stringers.
										PA									2	ST			
			76.50	76.77		V1		LT	GY	BX													VOLCANIC 1 (andesite) - carbonate-rich zone with minor vuggy breccia. No increase in pyrite mineralization
										VU													
			76.70	82.50		V1	FG	DK	GY	MA							POT	2	2	DI			VOLCANIC 1 (andesite) - potassic alteration(?) - Dark grey, massive fine-grained pyrite-magnetite-bearing volcanic with faintly visible plagioclase phenocrysts and patchy white zones associated with increase in pyrite stringers.
										PA									2	ST			
			82.50	83.00		IPD			WH										1	DI			INTERMEDIATE PORPHYRY DIKE - felsic dike - Medium-grained plagioclase-crowded with light grey crystalline matrix; white clay along fractures; very fine-grained disseminated pyrite present
								LT	GY														
			83.00	85.14		V1	FG	DK	GY	MA							POT	2	2	DI			VOLCANIC 1 (andesite) - potassic alteration(?) - Dark grey, massive fine-grained pyrite-magnetite-bearing volcanic with faintly visible plagioclase phenocrysts and patchy white zones associated with increase in pyrite stringers.
										PA									2	ST			
85.14	138.31					PP		MD	GY	MA					3		PRO	1	2	DI			PLAGIOCLASE PORPHYRY - Dark grey massive unaltered dominate; weak propylitic altered subordinate. Blebby pyrite <6%
								LT	GN										6	BL			
138.31	165.00					PP		DK	GY	PA						3	PRO	3		MG	40		PLAGIOCLASE PORPHYRY - Increase in propylitic and potassic(?) alteration. Breccia zones common. Increase in magnetite stringers and disseminations. Alteration type and intensity alternates throughout interval. Chlorite, milky white feldspar, Kspar(?) present. Magnetite+/-chlorite clots present in stringers. Minor zones of sericitization throughout interval
																	pot	3					

n = none, t= <1%, w = 1-3%, f = 3-5%, m = 5-7%, ms = 7-10%, s = 10-15%, I = 15-20%, (write % for >20%)

Geology Log

GENERAL INTERVAL			DETAILED INTERVAL			LITHOLOGY					ALTERATION								MINERALS				DETAILED DESCRIPTION
																	Other			Other			
From (m)	To (m)	Interval (m)	From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Shade	Colour	Texture	Propylitic	Argillic	Phyllic	Potassic	Silic	Limonitic	Type	Intensity	Pyrite	Type	Conc. (%)	Photo	
			138.31	141.86		PP		DK	GY	PA						3	PRO	3		MG	40		PLAGIOCLASE PORPHYRY - Increase in propylitic and potassic(?) alteration. Breccia zones common. Increase in magnetite stringers and disseminations. Alteration type and intensity alternates throughout interval. Chlorite, milky white feldspar, Kspar(?) present. Magnetite+/-chlorite clots present in stringers. Minor zones of sericitization throughout interval
																	POT	3					
			141.86	143.51		PP		LT	GY	BX					4	2			4	VT			PLAGIOCLASE PORPHYRY - sericitized breccia; clast-supported; pyrite veinlets present
			143.51	153.75		PP		DK	GY	PA						3	PRO	3		MG	40		PLAGIOCLASE PORPHYRY - Increase in propylitic and potassic(?) alteration. Breccia zones common. Increase in magnetite stringers and disseminations. Alteration type and intensity alternates throughout interval. Chlorite, milky white feldspar, Kspar(?) present. Magnetite+/-chlorite clots present in stringers. Minor zones of sericitization throughout interval
																	POT	3					
			153.75	157.58		PP		LT	GY	PA							SER	3	1	DI			PLAGIOCLASE PORPHYRY - sericite altered zone with gougey, clay altered veinlets and veins hosting <3% disseminated chalcocite(?) Decrease in pyrite from normal veinlets 20 degrees to core axis (average)
																			10	VT			
						PP		LT												cc	3		chalcocite(?) <3%
			157.58	165.00		PP		DK	GY	PA						3	PRO	3		MG	40		PLAGIOCLASE PORPHYRY - Increase in propylitic and potassic(?) alteration. Breccia zones common. Increase in magnetite stringers and disseminations. Alteration type and intensity alternates throughout interval. Chlorite, milky white feldspar, Kspar(?) present. Magnetite+/-chlorite clots present in stringers. Minor zones of sericitization throughout interval
																	POT	3					
165.00	183.19					PP		LT	GY	MA													PLAGIOCLASE PORPHYRY - sericite alteration - Metre-scale zone of weak potassic alteration (Kspar-rich) at top of the interval. Core is moderately fractured
										BX							SER	3	2	DI			
																			6	BL			Blebby pyrite <6%
			165.00	181.60		PP		LT	GY	MA													PLAGIOCLASE PORPHYRY - sericite alteration - Metre-scale zone of weak potassic alteration (Kspar-rich) at top of the interval. Core is moderately fractured
										BX							SER	3	2	DI			
																			6	BL			Blebby pyrite <6%
			181.60	181.97		PP		LT	GY	BX							SER	5	8	BL			PLAGIOCLASE PORPHYRY - breccia - Gougey/clay alteration; very coarse-grained pyrite mineralization in massive milky quartz-carbonate vein (2cm)
			181.97	183.19		PP		LT	GY	MA													PLAGIOCLASE PORPHYRY - sericite alteration - type case for interval
										BX							SER	3	2	DI			
																			6	BL			Blebby pyrite <6%
183.19	205.60					IPD		LT	BN	PO													INTERMEDIATE PORPHYRY DIKE - chlorite-phyric (turquoise phenocrysts); yellow mineral present; brownish white milky matrix; one zone of dark grey cobble breccia with ankerite veinlets (30 degrees to core axis)
205.60	266.04					PP-A			wh														PLAGIOCLASE PORPHYRY - Plagioclase-crowded; increasing medium-grained to very coarse-grained mafics (non-magnetic); downhole <40% mafics. Stockwork quartz(?) stringers have white plag-phyric envelopes. Top of interval is brecciated and hosts sulphide mineralization. Weak potassic alteration (development of K-spar) in several zones, but mostly unaltered
									bk								pro	1		mg	10		

n = none, t= <1%, w = 1-3%, f = 3-5%, m = 5-7%, ms = 7-10%, s = 10-15%, l = 15-20%, (write % for >20%)

Geology Log

GENERAL INTERVAL			DETAILED INTERVAL			LITHOLOGY					ALTERATION								MINERALS				DETAILED DESCRIPTION
																	Other			Other			
From (m)	To (m)	Interval (m)	From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Shade	Colour	Texture	Propylitic	Argillic	Phyllic	Potassic	Silic	Limonitic	Type	Intensity	Pyrite	Type	Conc. (%)	Photo	
								lt	gy								pot	1					
									bn														
			205.60	206.35		PP-A			GY	BX					5				10	BL			PLAGIOCLASE PORPHYRY-A - breccia - Silica-flooded matrix (30%) hosting blebby pyrite (<10%) and intergrown chalcopyrite; subangular clasts (4mm-1.5cm) are plagioclase-phyric.
																				CP	2		
			206.35	212.06		PP-A		LT	GY	BX									5	gn	4		PLAGIOCLASE PORPHYRY-A - Zones of crackle breccia and quartz-carbonate veining + sheeted fractures host pyrite(5-15%)+/-chalcocite(?) mineralization. Clay occurs at vein margins. Disseminated grey mineral (galena?) is not associated with veining or breccia
																				CC	2		
			212.06	224.64		PP-A			wh	po													PLAGIOCLASE PORPHYRY - Plagioclase-crowded; increasing medium-grained to very coarse-grained mafics (non-magnetic); downhole <40% mafics. Stockwork quartz(?) stringers have white plag-phyric envelopes. Weak potassic alteration (development of K-spar) in several zones, but mostly unaltered
									bk								pro	1		mg	10		
								lt	gy								pot	1					
									bn														
			224.64	230.40		PP-A			WH								POT	1					PLAGIOCLASE PORPHYRY-A - unaltered diorite with suboridnate potassic alteration; xenoliths (1-3cm) of black magnetite-rich rock
									BK														
			230.40	231.15		PP-A		LT	GY	BX							SER	4	30	MA			PLAGIOCLASE PORPHYRY-A - sericite altered crackle breccia hosting semi-massive pyrite in matrix
			231.15	235.15		PP-A			wh	po													PLAGIOCLASE PORPHYRY - Plagioclase-crowded; increasing medium-grained to very coarse-grained mafics (non-magnetic); downhole <40% mafics. Stockwork quartz(?) stringers have white plag-phyric envelopes. Weak potassic alteration (development of K-spar) in several zones, but mostly unaltered
									bk								pro	1		mg	10		
								lt	gy								pot	1					
									bn														
			235.15	236.02		PP-A			BK	BX							POT	3		MG	30		PLAGIOCLASE PORPHYRY-A - matrix-supported breccia - with subangular to rounded clasts (3mm - 10cm) in black magnetite-rich (<30%) matrix
								LT	PK														
			236.02	253.10		PP-A			wh	po													PLAGIOCLASE PORPHYRY - Plagioclase-crowded; increasing medium-grained to very coarse-grained mafics (non-magnetic); downhole <40% mafics. Stockwork quartz(?) stringers have white plag-phyric envelopes. Weak potassic alteration (development of K-spar) in several zones, but mostly unaltered
									bk								pro	1		mg	10		
								lt	gy								pot	1					
									bn														
			253.10	266.04		PP-A		LT	PK	MA							POT	2	1	DI			PLAGIOCLASE PORPHYRY-A - Increase in Kspar+/-chlorite; quartz absent. Infrequent potassic (Kspar-rich) alteration; infrequent magnetite stringers 25 degrees to core axis; pyrite stringers and one smoky quartz vein in sericite envelope 65 degrees to core axis. Core competent
									BK											MG	10		
									WH														

n = none, t= <1%, w = 1-3%, f = 3-5%, m = 5-7%, ms = 7-10%, s = 10-15%, l = 15-20%, (write % for >20%)

Geology Log

GENERAL INTERVAL			DETAILED INTERVAL			LITHOLOGY					ALTERATION								MINERALS				DETAILED DESCRIPTION
																	Other			Other			
From (m)	To (m)	Interval (m)	From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Shade	Colour	Texture	Propylitic	Argillic	Phyllic	Potassic	Silic	Limonitic	Type	Intensity	Pyrite	Type	Conc. (%)	Photo	
266.04	298.12					PP-A		DK	GY	PA							POT	3		MG	25		PLAGIOCLASE PORPHYRY-A - potassic and propylitic(?) altered - Decrease in grain size from coarse-grained, to medium-grained. Increase in magnetite abundance (<25%), core moderate to strongly magnetic; decrease in Kspar abundance. Increase in chlorite+/-epidote mineralization (early propylitic alteration?) Irregular magnetite clasts (<8cm) rare;
									DK	ma							pro	2					
									PK														
			266.04	271.05		PP-A		DK	GY	PA							POT	3		MG	25		PLAGIOCLASE PORPHYRY-A - potassic and propylitic(?) altered - Decrease in grain size from coarse-grained, to medium-grained. Increase in magnetite abundance (<25%), core moderate to strongly magnetic; decrease in Kspar abundance. Increase in chlorite+/-epidote mineralization (early propylitic alteration?)
									DK	ma							pro	2					
									PK														
			271.05	271.57		PP	mg																PLAGIOCLASE PORPHYRY - plagioclase-crowded porphyry dike in dark grey crystalline matrix
			266.04	271.05		PP-A		DK	GY	PA							POT	3		MG	25		PLAGIOCLASE PORPHYRY-A - potassic and propylitic(?) altered - Decrease in grain size from coarse-grained, to medium-grained. Increase in magnetite abundance, core moderate to strongly magnetic; decrease in Kspar abundance. Increase in chlorite+/-epidote mineralization (early propylitic alteration?)
									DK	ma							pro	2					
									PK														
			278.93	285.83		PP-A'	mg	DK	GY								POT	4	2	DI			PLAGIOCLASE PORPHYRY-A? potassic and propylitic(?) altered - plagioclase-crowded porphyry dike in dark grey crystalline matrix
																	pro	3		HE	ST		
																				MG	30		Magnetite (<30%)
			285.83	298.12		PP-A		DK	GY	PA							POT	3		MG	25		PLAGIOCLASE PORPHYRY-A - potassic and propylitic(?) altered - Decrease in grain size from coarse-grained, to medium-grained. Increase in magnetite abundance (<25%), core moderate to strongly magnetic; decrease in Kspar abundance. Increase in chlorite+/-epidote mineralization (early propylitic alteration?)
									DK	ma							pro	2					
									PK														
298.12	311.63					PP-A		LT	PK	PA							POT	3	3	DI			PLAGIOCLASE PORPHYRY-A - potassic and propylitic(?) altered Decrease in potassic alteration, chlorite gives greenish tinge. Veining frequent; magnetite absent zones frequent. Massive magnetite clasts (irregular, <3cm) present but rare
									WH								pro	2		MG	5		
									BK														
								LT	GY														
			298.12	299.53		PP-A		LT	GY						4								PLAGIOCLASE PORPHYRY-A - Zone of frequent stockwork carbonate stringers and patchy silicified zones (strong)
			299.53	306.12		PP-A		LT	PK	PA							POT	3	3	DI			PLAGIOCLASE PORPHYRY-A - potassic and propylitic(?) altered Decrease in potassic alteration, chlorite gives greenish tinge. Veining frequent; magnetite absent zones frequent.
									WH								PRO	2		MG	5		
									BK														
								LT	GY														
			306.12	306.80		IPD		LT	GY	MA													INTERMEDIATE PORPHYRY DIKE - plagioclase-chlorite-phyric; texture more massive that porphyritic

n = none, t= <1%, w = 1-3%, f = 3-5%, m = 5-7%, ms = 7-10%, s = 10-15%, l = 15-20%, (write % for >20%)

Geology Log

GENERAL INTERVAL			DETAILED INTERVAL			LITHOLOGY					ALTERATION								MINERALS				DETAILED DESCRIPTION
																	Other			Other			
From (m)	To (m)	Interval (m)	From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Shade	Colour	Texture	Propylitic	Argillic	Phyllic	Potassic	Silic	Limonitic	Type	Intensity	Pyrite	Type	Conc. (%)	Photo	
			306.12	311.63		PP-A		LT	PK	PA							POT	3	3	DI			PLAGIOCLASE PORPHYRY-A - Decrease in potassic alteration, chlorite gives greenish tinge. Veining frequent; magnetite absent zones frequent.
									WH								PRO	2		MG	5		
									BK														
								LT	GY														
311.63	377.63					PP-A			BK	MA					4		POT	4	3	DI			PLAGIOCLASE PORPHYRY-A - Texturally similar to 266.04m - 298.12m interval. Black, green, pinkish white flecked medium to coarse-grained massive plagioclase-Kspar-magnetite-chlorite+/-pyrite bearing diorite with strong potassic-chlorite alteration. Zones of silicification common; chlorite+/-pyrite stringers to veinlets with potassic envelope common.Most of interval is moderate to strongly magnetitc (magnetite <50%).Minor white bleached zone of sericite alteration (clay present, 5%pyrite). Local strong-intense potassic alteration where unit is pink and black specked only. These zones are associated with very frequent carbonate stringers.
								MD	GN	PA							pro	4		MG	50		
									GY								SER	5					
			311.63	312.72		PP-A			BK	MA					4		POT	4	3	DI			PLAGIOCLASE PORPHYRY-A - Texturally similar to 266.04m - 298.12m interval. Black, green, pinkish white flecked medium to coarse-grained massive plagioclase-Kspar-magnetite-chlorite+/-pyrite bearing diorite with strong potassic-chlorite alteration. Zones of silicification common; chlorite+/-pyrite stringers to veinlets with potassic envelope common.Most of interval is moderate to strongly magnetitc (magnetite <50%).Minor white bleached zone of sericite alteration (clay present, 5%pyrite). Local strong-intense potassic alteration where unit is pink and black specked only. These zones are associated with very frequent carbonate stringers.
								MD	GN	PA							pro	4		MG	50		
									GY								SER	5					
			312.72	315.84		PP-A			LT	PK							POT	4	1	DI			PLAGIOCLASE PORPHYRY-A - potassic alteration - zone of very frequent sheeted chlorite-magnetite stringers with pink potassic envelopes (<4mm); stringers 1cm apart (20 degrees to core axis). Epidote clots present (<5%)
									MD	GN													
			315.84	316.34		PP-A			BK	MA					4		POT	4	3	DI			PLAGIOCLASE PORPHYRY-A - Texturally similar to 266.04m - 298.12m interval. Black, green, pinkish white flecked medium to coarse-grained massive plagioclase-Kspar-magnetite-chlorite+/-pyrite bearing diorite with strong potassic-chlorite alteration. Zones of silicification common; chlorite+/-pyrite stringers to veinlets with potassic envelope common.Most of interval is moderate to strongly magnetitc (magnetite <50%).Minor white bleached zone of sericite alteration (clay present, 5%pyrite). Local strong-intense potassic alteration where unit is pink and black specked only. These zones are associated with very frequent carbonate stringers.
								MD	GN	PA							pro	4		MG	50		
									GY								SER	5					
			316.34	331.53		PP-A		DK	GN	MA									3	DI			PLAGIOCLASE PORPHYRY- A - Core is highly fractured - very distinct; no textural evidence for faulting; pyrite stringers present (<30cm zones); looks like typical plagioclase porphyry texture
									BK	PA									5	DI			
			331.53	333.10		PP-A		DK	GN	MA					4		SER	4	2	DI			PLAGIOCLASE PORPHYRY- A - sericite alteration and silicification - zone of strong sericite alteration and patches of silicification; stockwork pyrite stringers are frequent; rubbley core is gougey/clay altered
									BK	MA									5				

n = none, t= <1%, w = 1-3%, f = 3-5%, m = 5-7%, ms = 7-10%, s = 10-15%, l = 15-20%, (write % for >20%)

Geology Log

GENERAL INTERVAL			DETAILED INTERVAL			LITHOLOGY					ALTERATION								MINERALS				DETAILED DESCRIPTION
																	Other			Other			
From (m)	To (m)	Interval (m)	From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Shade	Colour	Texture	Propylitic	Argillic	Phyllic	Potassic	Silic	Limonitic	Type	Intensity	Pyrite	Type	Conc. (%)	Photo	
			333.10	340.46		PP-A		DK	GN	MA									3	DI			PLAGIOCLASE PORPHYRY- A - Core is highly fractured - very distinct; no textural evidence for faulting; pyrite stringers present (<30cm zones); looks like typical plagioclase porphyry texture
									BK	PA									5	DI			
			340.46	341.25		PP-A			BK	MA					4		POT	4	3	DI			PLAGIOCLASE PORPHYRY-A - Texturally similar to 266.04m - 298.12m interval. Black, green, pinkish white flecked medium to coarse-grained massive plagioclase-Kspar-magnetite-chlorite+/-pyrite bearing diorite with strong potassic-chlorite alteration. Zones of silicification common; chlorite+/-pyrite stringers to veinlets with potassic envelope common.Most of interval is moderate to strongly magnetitc (magnetite <50%).Minor white bleached zone of sericite alteration (clay present, 5%pyrite). Local strong-intense potassic alteration where unit is pink and black specked only. These zones are associated with very frequent carbonate stringers.
								MD	GN	PA							pro	4		MG	50		
									GY								SER	5					
			341.25	345.35		PP-A			BK								POT	5	1	DI			PLAGIOCLASE PORPHYRY-A - intense potassic alteration and frequent carbonate stringers (stockwork) 0-70 degrees to core axis (15/m), 2% milky ankerite(?) infill
									PK											ak	2		
								DK	GN														
			345.35	345.68		PP-A			BK	MA									1	DI			PLAGIOCLASE PORPHYRY-A - Two massive fine-grained, subangular magnetite-rich clasts/dikes(?) (13cm each)
			345.68	372.60		PP-A			BK								POT	5	1	DI			PLAGIOCLASE PORPHYRY-A - intense potassic alteration and frequent carbonate stringers (stockwork) 0-70 degrees to core axis (15/m), 2% milky ankerite(?) infill
									PK											ak	2		
								DK	GN														
			372.60	377.67		PP-A			BK	BX							POT	4					PLAGIOCLASE PORPHYRY-A - potassic alteration/breccia - black and dark green patchy moderate-strongly magnetic, brecciated potassic altered Plagioclase Porphyry-A. Breccia texture is faint; clasts (2cm avg.) are subrounded-rounded; pink Kspar-rich matrix (20%) with medium-grained magnetite. Chlorite locally present in matrix
								DK	GN	PA													
377.67	393.13					PP			BK	PO							POT	5	2	DI			PLAGIOCLASE PORPHYRY - see 341.25m - 372.60m interval - very similar except for two zones of massive white carbonate veinlets and minor crackle breccia infill. Weak to strongly magnetic core. Top 3m of zone Kspar>magnetite with Kspar-rich vein(?) or matrix(?) (<2cm wide) associated with potassic alteration. Looks like phase has changed back to plagioclase porphyry.
									PK	PA													
								DK	GN														
393.13	396.76					PP-A			PK								POT	2					PLAGIOCLASE PORPHYRY-A - weak to moderate potassic alteration - Pink with black specks. Coarse-grained Kspar-magnetite altered diorite.
									BK														
396.76	420.29					PP	FG		BK	PA							POT	4					PLAGIOCLASE PORPHYRY? - fine-grained - cannot determine if PP or PP-A or either. Weak to strongly magnetic. Fine-grained chlorite-abundant, patchy Kspar and Kspar veining. Frequent calcite+/-chlorite stringers (sheeted). Matrix-supported cobble breccia zones (metre-scale) common. Magnetite-rich matrix(?)

n = none, t= <1%, w = 1-3%, f = 3-5%, m = 5-7%, ms = 7-10%, s = 10-15%, l = 15-20%, (write % for >20%)

Geology Log

GENERAL INTERVAL			DETAILED INTERVAL			LITHOLOGY					ALTERATION								MINERALS				DETAILED DESCRIPTION
																	Other			Other			
From (m)	To (m)	Interval (m)	From (m)	To (m)	Interval (m)	Rock Type	Grain Size	Shade	Colour	Texture	Propylitic	Argillic	Phyllic	Potassic	Silic	Limonitic	Type	Intensity	Pyrite	Type	Conc. (%)	Photo	
			396.76	414.33		PP	FG		BK	PA							POT	4					PLAGIOCLASE PORPHYRY? - fine-grained - cannot determine if PP or PP-A or either. Weak to strongly magnetic. Fine-grained chlorite-abundant, patchy Kspar and Kspar veining. Frequent calcite+/-chlorite stringers (sheeted). Matrix-supported cobble breccia zones (metre-scale) common. Magnetite-rich matrix(?)
			414.33	419.71		PP		LT	GY	PA							POT	3	3	DI			PLAGIOCLASE PORPHYRY? - medium-grained plagioclase in milky white and black crystalline matrix throughout interval. Sericite overprint over earlier potassic alteration (white stringers/envelopes are associated with sericite alteration.
						PP-A		DK	GY								SER	3		gn	2		
			419.71	420.29		PP	FG		BK	PA							POT	4					PLAGIOCLASE PORPHYRY? - fine-grained - cannot determine if PP or PP-A or either. Weak to strongly magnetic. Fine-grained chlorite-abundant, patchy Kspar and Kspar veining. Frequent calcite+/-chlorite stringers (sheeted). Matrix-supported cobble breccia zones (metre-scale) common. Magnetite-rich matrix(?)
420.29	435.61					IPD		LT	GN	PO							SER	4	3	gn	5	X	INTERMEDIATE PORPHYRY DIKE - strong sericite alteration for 2m - core bleached, variable grain size (medium to coarse-graind) 20cm zone of irregular flow banding is associated fracture controlled coarse-grained galena and blebby chalcopyrite+/-pyrite. Disseminated galena throughout sericite alteration(?)
								LT	GY	FL										CP	3		
			420.29	422.55		IPD		LT	GY	FL							SER	4					INTERMEDIATE PORPHYRY DIKE - 20cm zone of irregular flow banding is associated fracture controlled coarse-grained galena and blebby chalcopyrite+/-pyrite (described in interval above)
									WH														
			422.55	435.61		IPD		LT	GN	PO													INTERMEDIATE PORPHYRY DIKE - felsic - chlorite-phyric in greenish white, milky crystalline matrix. Weak clay alteration. Dark gry flow bands present
								LT	GY	FL													
435.61	450.19					PP				PO							pot	4	3	ST			PLAGIOCLASE PORPHYRY - potassic altered(?) - plagioclase-phyric (coarse-grained) in black, magnetite-rich fine-grained to crystalline matrix. No Kspar present. Fine-grained chlorite-present
	EOH																		1	DI			
																							EOH @ 450.19m

n = none, t= <1%, w = 1-3%, f = 3-5%, m = 5-7%, ms = 7-10%, s = 10-15%, I = 15-20%, (write % for >20%)

Contact Log

Hole: DDH-M12-05 Logger Name: Nick Bueckert Date: August 2012

Depth (m)	DESCRIPTION
82.50	VOLCANIC 1 (andesite) - INTERMEDIATE PORPHYRY DIKE - 0 degrees to core axis - contact is subtle; Intermediate Porphyry dike is distinctly plagioclase-phyric
83	INTERMEDIATE PORPHYRY DIKE - PLAGIOCLASE PORHPYRY - orientation of contact unknown
183.19	PLAGIOCLASE PORPHYRY - INTERMEDIATE PORPHYRY DIKE - 90 degrees to core axis; irregular texture and colour change; flow bands in Intermediate Porphyry 30 degrees to core axis
205.60	INTERMEDIATE PORPHYRY DIKE - PLAGIOCLASE PORHPYRY-A - contact runs along core axis for 35cm and crosscuts the axis at 90 degrees (uphole) and 15 degrees (downhole). Intermediate porphyry dike is chilled at contact (1cm wide); Plagioclas Porphyry is brecciated at contact
271.05	PLAGIOCLASE PORPHYRY-A -INTERMEDIATE PORPHYRY DIKE - 35 degrees to core axis; contact sharp, decrease in grain size and transition to black colour. Plagioclase porphyry-a clasts (<3cm) in dike
271.57	INTERMEDIATE PORPHYRY DIKE - PLAGIOCLASE PORHPYRY - 25 degrees to core axis; contact sharp, increase in grain size
306.12	PLAGIOCLASE PORPHYRY - INTERMEDIATE PORPHYRY DIKE - 60 degrees to core axis; undulatory contact
306.80	INTERMEDIATE PORPHYRY DIKE - PLAGIOCLASE PORPHYRY - 60 degrees to core axis; undulatory contact
393.13	PLAGIOCLASE PORPHYRY - PLAGIOCLASE PORPHYRY-A - 40 degrees to core axis; sharp contact, colour change from black to pink
396.76	PLAGIOCLASE PORPHYRY-A - PLAGIOCLASE PORPHYRY - 90 degrees to core axis; sharp contact
420.29	PLAGIOCLASE PORPHYRY - INTERMEDIATE PORPHYRY DIKE - 35 degrees to core axis; sharp, irregular contact
435.01	INTERMEDIATE PORPHYRY DIKE - PLAGIOCLASE PORHPYRY(?) - 40 degrees to core axis; sharp undulatory-irregular contact

Secondary Structure Log

Hole: M12-05 **Logger Name:** **Date:** August 2012

2° Structure Type	From (m)	To (m)	Attitude (TCA)	Attitude (TRFE)	Count	MINERALS Type	MINERALS Conc. (%)	DESCRIPTION
BX	34.86	35.09	50		1	py	2	VOLCANIC 1 (andesite) - chalcocite staining around pyrite grains occurs in matrix-supported breccia (2cm zone in breccia)
						cc?	3	
VT	85.14	102.72	50		<3/m			White quartz stringers +/- quartz feldspar envelope (40-70 Degrees to core axis)
ST-VN	85.14	102.72	20		15/m	chl		Increase in chlorite veining (stockwork). Stringers to veins (<1.3cm)
VT	113.00	113.01	40		2/m	py		Pyrite veinlet crosscuts chalcocite(?) stringer (50 degrees to core axis)
			60		1	mg		
						cc?		
VN	124.01	125.18	0		1	PY	3	Pinkish-white massive crystalline vein (soft - anhydrite(?)) hosting blocky galena and blebby chalcocite(?). Sericite-pyrite are present. Greenish clay present; netted veinlets with a fine-grained black mineral occur proximal to vein. A breccia zone (rounded clasts <2cm) with propylitic alteration occurs below vein
						GN	<6	
						CC?	<15	
ST	138.31	138.32	<20			MG		Frequent sheeted magnetite stringers; chlorite veinlets present; Kspar and plagioclase envelopes common.
VN	140.03	140.04	30		1			Chlorite vein (2cm). No sulphide mineralization
ST	165.00	183.19	25		<2/m			Black sulphide(?) stringers present
VN	208.26	208.28	25		1	py	10	Grey quartz vein (1.5cm) hosting blebby pyrite
VN	211.80	211.82	25		1	py	3	Grey quartz vein (4cm) hosting trace disseminated pyrite and galena
						gn	1	
VN	218.74	218.75	10		1	he	5	Red mineral in 1cm brecciated vein (hematite?); nonmagnetic
VT	224.42	224.43	10		1	py	3	Pyrite veinlet with plagioclase-phyric white envelope
VT	242.78	242.78	30		1	py	60	pyrite chlorite veinlet (7mm)
ST	245.98	251.45	25		6	MG	100	Sheeted magnetite stringers (increase in frequency); Infrequent red magnetic stringers (hematite and magnetite?), locally at 40 degrees to core axis
VN	253.10	253.45	25		1	py	45	Pyrite vein with sericite envelope (4cm wide) and associated dark grey clay
ST	253.10	266.04	25		4	mg	2	Infrequent magnetite stringers; pyrite stringers common
ST	266.04	298.12	45		<10/m	py	<7	Stockwork carbonate stringers present, locally frequent. Smoky quartz veinlets+/-pyrite present (40-60 degrees to core axis) with 1cm pink potassic envelopes. Narrow light grey coloured zone (15cm) of pyrite veinlets and carbonate infill
ST	278.93	285.83	30			he	100	Stockwork hematite stringers dominant (+/-pyrite) with plagioclase phyric white envelopes (8mm). Vuggy chlorite+/-pyrite veinlets present with potassic envelopes (5mm)
			30			chl	100	
VN	288.65	288.96	45		1	py	15	Pyrite+/-chalcocite(?) vein (<1cm) and stringers associated with bleached clay in wide (7cm) yellowish grey alteration envelope. Vugs present
						cc?	3	

Secondary Structure Log

2° Structure Type	From (m)	To (m)	Attitude (TCA)	Attitude (TRFE)	Count	MINERALS		DESCRIPTION
						Type	Conc. (%)	
VN	297.06	297.20	40		1	py	50	Vuggy grey quartz and pyrite vein (1cm) in white bleached envelope (no clay alteration). Wide envelope of greyish ?silicified? host rock
VT	319.13	319.14	20			py	8	Grey quartz +/-pyrite veinlet in white weakly silicified zone.
VT	335.60	335.69	60		3	py	<50	Three sheeted grey quartz veinlets with <50% pyrite in grey silicified zone (20cm)
VT	377.67	393.13	65		3/m	py	3	chlorite+/-pyrite veinlets minor (15 < 65 degrees to core axis). Kspar associated with magnetite vein (1cm) @ 25 degrees to core axis
VT	387.77	388.73	25		15	py	3	White calcite+/-pyrite veinlets, approximately sheeted and calcite infill of minor crackle breccia. Light grey envelopes (<4cm) in zone with fine-grained pyrite (sericite alteration). Locally frequent grey quartz stringers present (stockwork)
VT	393.13	396.76	10		7			Chlorite and calcite stringers infrequent (|0-20 degrees to core axis); magnetite stringers (<40 degrees to core axis) present at lower contact
VN	410.57	410.87	30		4	py	10	Zone of four milky white and grey quartz veinlets (3mm-1cm) hosting pyrite+/-galena(?). Sericite and chlorite selvages (2cm) occur with veining
						gn	<10	
VN	414.33	419.71				py	3	Pyrite and galena(?) veins (<1cm) in plagioclase-phyric envelopes present. Intense stockwork quartz-calcite veining (stringers).
						gn?	2	
ST	435.61	450.19	25		7/m	py	2	Chlorite stringers present. Local quartz+/-pyrite veinletsl Stockwork calcite stringers common

Secondary Structure Log

Photo
x

Secondary Structure Log

Photo

Sample Log

Hole: M12-05 **Date:** AUG 2012

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery (%)	Sample Number	Batch	Au (g/t)	Ag (g/t)	As (ppm)	Comments
11.01	14.32	3.31	3.00	90.6	M677639	19				
14.32	17.37	3.05	2.67	87.5	M677640	19				
17.37	20.42	3.05	2.64	86.6	M677641	19				
20.42	23.46	3.04	2.48	81.6	M677642	19				
					M677643	19				STANDARD ML-2
23.46	26.51	3.05	2.90	95.1	M677644	19				
26.51	29.56	3.05	2.75	90.2	M677645	19				1 sawed - Volcanic 1 (sericite altered)
29.56	32.61	3.05	2.65	86.9	M677646	19				
32.61	33.85	1.24	1.05	84.7	M677647	19				
					M677648	19				1/4 DUPLICATE
33.85	35.66	1.81	1.64	90.6	M677649	19				
35.66	38.71	3.05	1.75	57.4	M677650	19				Core fractured - very poor recovery
38.71	41.76	3.05	2.40	78.7	M677651	19				
41.76	44.81	3.05	2.60	85.2	M677652	19				
44.81	47.86	3.05	1.90	62.3	M677653	19				Core fractured - poor recovery
					M677654	19				BLANK
47.86	50.90	3.04	2.11	69.4	M677655	19				Core fractured - poor recovery
50.90	53.95	3.05	2.56	83.9	M677656	19				
53.95	57.00	3.05	2.69	88.2	M677657	19				Batch 19 starts on DDH-M12-05
57.00	60.05	3.05	2.37	77.7	M677658	20				
60.05	63.09	3.04	2.79	91.8	M677659	20				
63.09	66.14	3.05	2.54	83.3	M677660	20				
66.14	69.19	3.05	2.98	97.7	M677661	20				
					M677662	20				1/4 DUPLICATE
69.19	72.24	3.05	2.65	86.9	M677663	20				
72.24	75.29	3.05	2.80	91.8	M677664	20				
75.29	78.33	3.04	2.79	91.8	M677665	20				1 sawed - fine-grained magnetite-rich Volcanic 1? Potassic alteration?
78.33	81.38	3.05	2.46	80.7	M677666	20				
					M677667	20				STANDARD ML-2
81.38	83.40	2.02	1.67	82.7	M677668	20				
83.40	85.12	1.72	1.60	93	M677669	20				
85.12	87.48	2.36	1.88	79.7	M677670	20				
87.48	90.52	3.04	2.64	86.8	M677671	20				
					M677672	20				BLANK
90.52	93.57	3.05	2.77	90.8	M677673	20				
93.57	96.62	3.05	3.00	98.4	M677674	20				
96.62	99.67	3.05	3.00	98.4	M677675	20				
99.67	102.72	3.05	2.93	96.1	M677676	20				
					M677677	20				COARSE REJECT DUPLICATE
102.72	105.77	3.05	2.53	83	M677678	20				
105.77	108.81	3.04	2.80	92.1	M677679	20				
108.81	111.86	3.05	2.93	96.1	M677680	20				
111.86	113.16	1.30	1.30	100	M677681	20				
113.16	114.91	1.75	1.70	97.1	M677682	20				
					M677683	20				STANDARD ML-2
114.91	117.96	3.05	2.95	96.7	M677684	20				
117.96	120.01	2.05	2.03	99	M677685	20				
120.01	122.64	2.63	2.63	100	M677686	20				
122.64	125.40	2.76	2.55	92.4	M677687	20				
125.40	127.57	2.17	2.05	94.5	M677688	20				
					M677689	20				BLANK
127.57	128.92	1.35	1.20	88.9	M677690	20				
128.92	130.79	1.87	1.84	98.4	M677691	20				
130.79	132.91	2.12	2.12	100	M677692	20				1 piece sawed - potassic alteration (Kspar + magnetite + chlorite veinlet)
132.91	136.01	3.10	3.00	96.8	M677693	20				
136.01	138.31	2.30	2.16	93.9	M677694	21				
138.31	141.46	3.15	3.00	95.2	M677695	21				
141.46	143.56	2.10	2.10	100	M677696	21				
143.56	145.39	1.83	1.73	94.5	M677697	21				1 saw magnetite 'blowout'
					M677698	21				1/4 DUPLICATE
145.39	148.44	3.05	2.95	96.7	M677699	21				
148.44	151.49	3.05	2.93	96.1	M677700	21				
151.49	153.75	2.26	2.18	96.5	M677701	21				
153.75	155.95	2.20	2.05	93.2	M677702	21				
155.95	157.58	1.63	1.55	95.1	M677703	21				
					M677704	21				BLANK
157.58	160.63	3.05	2.85	93.4	M677705	21				
160.63	163.68	3.05	2.75	90.2	M677706	21				
163.68	166.73	3.05	2.50	82	M677707	21				
166.73	169.11	2.38	2.23	93.7	M677708	21				
169.11	171.26	2.15	1.94	90.2	M677709	21				
					M677710	21				STANDARD ML-2

Sample Log

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery (%)	Sample Number	Batch	Au (g/t)	Ag (g/t)	As (ppm)	Comments
171.26	173.34	2.08	1.81	87	M677711	21				
173.34	175.87	2.53	2.20	87	M677712	21				
175.87	178.92	3.05	2.70	88.5	M677713	21				
178.92	181.00	2.08	1.68	80.8	M677714	21				
181.00	183.19	2.19	2.03	92.7	M677715	21				
					M677716	21				BLANK
183.19	185.01	1.82	1.73	95.1	M677717	21				
185.01	188.06	3.05	3.05	100	M677718	21				
188.06	191.11	3.05	2.98	97.7	M677719	21				
191.11	194.16	3.05	3.05	100	M677720	21				
					M677721	21				COARSE REJECT DUPLICATE
194.16	197.21	3.05	3.00	98.4	M677722	21				
197.21	200.25	3.04	3.02	99.3	M677723	21				
200.25	202.53	2.28	2.26	99.1	M677724	21				
202.53	205.61	3.08	2.95	95.8	M677725	21				
					M677726	21				STANDARD ML-2
205.61	206.71	1.10	1.10	100	M677727	21				
206.71	208.60	1.89	1.73	91.5	M677728	21				
208.60	210.93	2.33	2.33	100	M677729	21				
210.93	212.06	1.13	1.12	99.1	M677730	21				
212.06	214.50	2.44	2.27	93	M677731	22				
214.50	216.87	2.37	2.37	100	M677732	22				
216.87	218.54	1.67	1.50	89.8	M677733	22				
218.54	221.59	3.05	2.93	96.1	M677734	22				
					M677735	22				STANDARD ML-2
221.59	224.65	3.06	2.96	96.7	M677736	22				1 piece sawed - Plagioclase Porphyry (Kspar) + magnetite breccia
224.65	227.68	3.03	3.00	99	M677737	22				
227.68	230.35	2.67	1.88	70.4	M677738	22				
230.35	232.62	2.27	2.00	88.1	M677739	22				
					M677740	22				BLANK
232.62	235.64	3.02	3.00	99.3	M677741	22				1 piece sawed - Plagioclase Porphyry - A; Kspar present
235.64	238.05	2.41	2.11	87.6	M677742	22				
238.05	239.88	1.83	1.53	83.6	M677743	22				
239.88	242.93	3.05	2.72	89.2	M677744	22				
242.93	245.98	3.05	2.92	95.7	M677745	22				
					M677746	22				COARSE REJECT DUPLICATE
245.98	249.02	3.04	2.92	96.1	M677747	22				1 piece sawed - Plagioclase Porphyry - A; Kspar present
249.02	252.07	3.05	2.74	89.8	M677748	22				
252.07	255.12	3.05	2.96	97	M677749	22				
255.12	258.17	3.05	3.05	100	M677750	22				
258.17	261.21	3.04	2.84	93.4	M650051	22				
					M650052	22				STANDARD ML-2
261.21	264.26	3.05	2.69	88.2	M650053	22				
264.26	267.31	3.05	2.79	91.5	M650054	22				
267.31	270.36	3.05	2.62	85.9	M650055	22				
270.36	271.62	1.26	1.26	100	M650056	22				
					M650057	22				1/4 DUPLICATE
271.62	273.27	1.65	1.57	95.2	M650058	22				Plagioclase Porphyry dike
273.27	276.12	2.85	2.85	100	M650059	22				
276.12	278.93	2.81	2.73	97.2	M650060	22				
278.93	282.14	3.21	3.05	95	M650061	22				1 piece sawed - hematite stringer in potassic alteration
282.14	284.78	2.64	2.50	94.7	M650062	22				
					M650063	22				BLANK
284.78	287.78	3.00	3.00	100	M650064	22				
287.78	289.78	2.00	2.00	100	M650065	22				
289.78	291.70	1.92	1.92	100	M650066	23				
291.70	294.74	3.04	2.80	92.1	M650067	23				
294.74	296.77	2.03	2.00	98.5	M650068	23				
296.77	298.14	1.37	1.37	100	M650069	23				
					M650070	23				1/4 DUPLICATE
298.14	300.84	2.70	2.70	100	M650071	23				
300.84	303.89	3.05	3.05	100	M650072	23				
303.89	305.73	1.84	1.61	87.5	M650073	23				
305.73	306.93	1.20	1.04	86.7	M650074	23				
					M650075	23				STANDARD ML-2
306.93	309.98	3.05	2.81	92.1	M650076	23				
309.98	313.02	3.04	2.93	96.4	M650077	23				
313.02	316.08	3.06	2.60	85	M650078	23				1 piece sawed - sheeted magnetite stringers
316.08	319.13	3.05	1.90	62.3	M650079	23				core rubble, poor recovery
					M650080	23				BLANK
319.13	322.17	3.04	2.60	85.5	M650081	23				core rubble, poor recovery
322.17	325.22	3.05	2.35	77	M650082	23				core rubble, poor recovery
325.22	328.27	3.05	2.10	68.9	M650083	23				core rubble, poor recovery
328.27	331.32	3.05	2.43	79.7	M650084	23				core rubble, poor recovery
331.32	333.50	2.18	1.86	85.3	M650085	23				
					M650086	23				COARSE REJECT DUPLICATE
333.50	337.24	3.74	3.00	80.2	M650087	23				
337.24	340.46	3.22	2.98	92.5	M650088	23				

Sample Log

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery (%)	Sample Number	Batch	Au (g/t)	Ag (g/t)	As (ppm)	Comments
340.46	343.51	3.05	2.85	93.4	M650089	23				1 piece sawed - strong potassic alteration; magnetite-rich
343.51	346.55	3.04	2.98	98	M650090	23				
					M650091	23				STANDARD ML-2
346.55	349.60	3.05	2.86	93.8	M650092	23				
349.60	352.65	3.05	2.90	95.1	M650093	23				
352.65	355.70	3.05	3.00	98.4	M650094	23				
355.70	358.75	3.05	2.90	95.1	M650095	23				
					M650096	23				BLANK
358.75	361.80	3.05	3.05	100	M650097	23				
361.80	364.85	3.05	2.88	94.4	M650098	23				
364.85	367.90	3.05	2.93	96.1	M650099	23				
367.90	370.94	3.04	2.95	97	M650100	23				
370.94	373.99	3.05	2.70	88.5	M650101	23				
373.99	377.04	3.05	2.85	93.4	M650102	24				
377.04	380.09	3.05	2.68	87.9	M650103	24				
380.09	383.13	3.04	2.96	97.4	M650104	24				1 piece sawed - potassic altered breccia (Plagioclase Porphyry - A)
383.13	386.18	3.05	2.90	95.1	M650105	24				
386.18	389.23	3.05	3.05	100	M650106	24				1 piece sawed - calcite veinlets - sericite envelope; potassic alteration
					M650107	24				COARSE REJECT DUPLICATE
389.23	392.28	3.05	3.05	100	M650108	24				
392.28	395.33	3.05	3.05	100	M650109	24				1 piece sawed - Contact: magnetite-Kspar alteration
395.33	398.37	3.04	2.95	97	M650110	24				
398.37	401.42	3.05	2.97	97.4	M650111	24				
401.42	404.46	3.04	3.05	100	M650112	24				
					M650113	24				STANDARD ML-2
404.46	407.52	3.06	2.94	96.1	M650114	24				
407.52	409.22	1.70	1.70	100	M650115	24				1 piece sawed - potassic altered cobble breccia
409.22	411.95	2.73	2.59	94.9	M650116	24				
411.95	414.32	2.37	2.18	92	M650117	24				
414.32	416.67	2.35	2.17	92.3	M650118	24				Box 90-91 sawed - Contact potassic alteration-felsic dike (Intermediate Porphyry Dike)
					M650119	24				BLANK
416.67	418.36	1.69	1.56	92.3	M650120	24				
418.36	420.29	1.93	1.90	98.4	M650121	24				
420.29	422.57	2.28	1.91	83.8	M650122	24				
422.57	424.77	2.20	2.20	100	M650123	24				
					M650124	24				1/4 DUPLICATE
424.77	426.87	2.10	2.10	100	M650125	24				
426.87	428.85	1.98	1.98	100	M650126	24				
428.85	431.90	3.05	2.95	96.7	M650127	24				
431.90	434.06	2.16	2.16	100	M650128	24				
					M650129	24				STANDARD ML-2
434.06	435.70	1.64	1.64	100	M650130	24				1 piece sawed - Contact - Intermediate Porphyry Dike- Plagioclase Porphyry (potassic altered
435.70	438.00	2.30	2.05	89.1	M650131	24				
438.00	441.04	3.04	2.98	98	M650132	24				
441.04	444.09	3.05	2.65	86.9	M650133	24				
					M650134	24				BLANK
444.09	447.14	3.05	2.77	90.8	M650135	24				
447.14	450.19	3.05	2.80	91.8	M650136	24				EOH @ 450.19m 1 piece sawed - Plagioclase Porphyry with magnetite-rich matrix

Geotechnical Log

DDH-M12-05 **Tech Name: Liz Bueckert** **Date:August 17th 2012**

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)	Strength	Joint Sets				DESCRIPTION
								Freq (/m)	Attitude (tca)	Shape	Roughness	
11.27	14.32	3.05	2.83		1.16		3s	0.12	55	2	1	joint breaks are more "irregular" than "undulating"
14.32	17.37	3.05	2.63		0.88		3s	0.1	65	2	1	joint breaks are more "irregular" than "undulating"
17.37	20.42	3.05	2.66		0.5		3s	0.12	52	2	1	joint breaks are more "irregular" than "undulating" 40-65 tca range
20.42	23.46	3.04	2.71		0.28		3s	0.15	75	2	1	"undulating"
23.46	26.51	3.05	3.03		1.65		3s	0.13	65	1	1	
26.51	29.56	3.05	2.75		0.85		3s	0.16	60	2	1	"undulating"
29.56	32.61	3.05	2.38		0.58		3s	0.14	65	1	1	
32.61	35.66	3.05	2.58		0.23		3s	0.1	70	2	1	"undulating"
35.66	38.71	3.05	2.3		0.41		3s	0.13	70	2	1	"undulating"
38.71	41.76	3.05	2.43		0.52		3s	0.12	60	2	1	"undulating"
41.76	44.81	3.05	2.52		0.7		3s	0.12	65	2	1	"undulating"
44.81	47.86	3.05	2.09		0.1		3s	0.19	60	2	1	"undulating"
47.86	50.9	3.04	2.34		0.13		3s	0.16	60	2	1	"undulating"
50.9	53.95	3.05	2.58		0.78		3s	0.13	70	2	1	"undulating"
53.95	57	3.05	2.62		1.31		3s	0.2		2	1	a lot of rubble
57	60.05	3.05	2.41		0.84		3s	0.13	60	2	1	"undulating"
60.05	63.09	3.04	2.73		0.72		3s	0.13	55	2	1	"undulating"
63.09	66.14	3.05	2.6		0.9		3s	0.17	55	2	1	"undulating"
66.14	69.19	3.05	2.97		1.95		3s	0.16	65	2	1	"undulating"
69.19	72.24	3.05	2.45		0.32		3s	0.2	65	1	1	
72.24	75.29	3.05	2.65		1.11		3s	0.11	55	2	1	"undulating"
75.29	78.33	3.04	2.81		1.63		3s	0.12	50	1	1	range 37 to 75 degree range
78.33	81.38	3.05	2.54		0.98		3s	0.15	75	1	1	
81.38	84.43	3.05	2.82		0.91		3s	0.16	60	2	1	"undulating"
84.43	87.48	3.05	2.41		1.13		3s	0.2	60	2	1	"undulating"
87.48	90.52	3.04	2.75		1.65		3s	0.17	70	1	1	

Geotechnical Log

90.52	93.57	3.05	2.91		2.05		3s	0.27	55	2	1	joint breaks are more "irregular" than "undulating"
93.57	96.62	3.05	3.05		2.14		3s	0.23	60	1	1	
96.62	99.67	3.05	2.98		2.52		3s	0.25	25	1	1	
99.67	102.72	3.05	3.04		2.07		3s	0.2	50	1	1	
102.72	105.77	3.05	2.77		0.62		3s	0.16	65	2	1	joint breaks are more "irregular" than "undulating"
105.77	108.81	3.04	2.7		1.88		3s	0.23	65	1	1	
108.81	111.86	3.05	2.83		1.25		3s	0.21	70	1	1	
111.86	114.91	3.05	2.91		1.85		3s	0.25	65	1	1	
114.91	117.96	3.05	3.01		2.57		3s	0.27	65	1	1	
117.96	121	3.04	2.99		2.78		3s	0.27	70	1	1	
121	124.05	3.05	3.01		1.88		3s	0.25	65	2	1	joint breaks are more "irregular" than "undulating"
124.05	127.1	3.05	2.83		1.25		3s	0.21	70	1	1	
127.1	130.15	3.05	2.84		1.85		3s	0.21	65	2	1	joint breaks are more "irregular" than "undulating"
130.15	133.2	3.05	3.05		2.57		3s	0.25	65	2	2	joint breaks are more "irregular" than "undulating"
133.2	136.25	3.05	2.8		2.78		3s	0.25	60	2	1	joint breaks are more "irregular" than "undulating"
136.25	139.3	3.05	2.91		2.34		3s	0.23	60	2	1	joint breaks are more "irregular" than "undulating"
139.3	142.34	3.04	2.93		1.88		3s	0.25	52	2	1	joint breaks are more "irregular" than "undulating" 35-70 degree range
142.34	145.39	3.05	3.05		2.28		3s	0.23	65	2	2	joint breaks are more "irregular" than "undulating" 50-80 degree range
145.39	148.44	3.05	2.95		2.67		3s	0.2	65	1	1	
148.44	151.49	3.05	2.98		1.62		3s	0.2	55	2	2	joint breaks are more "irregular" than "undulating"
151.49	154.53	3.05	3.01		2.43		3s	0.16	60	2	2	joint breaks are more "irregular" than "undulating"
154.53	157.58	3.04	2.62		1.14		3s	0.17	60	2	1	joint breaks are more "irregular" than "undulating"
157.58	160.63	3.05	2.72		2.51		3s	0.19	70	2	1	joint breaks are more "irregular" than "undulating"
160.63	163.68	3.05	2.78		2.43		3s	0.25	65	2	2	joint breaks are more "irregular" than "undulating"
163.68	166.73	3.05	2.7		1.48		3s	0.23	55	2	1	joint breaks are more "irregular" than "undulating"

Geotechnical Log

166.73	169.77	3.04	2.9		1.49		3s	0.15	60	2	1	joint breaks are more "irregular" than "undulating"
169.77	172.82	3.05	2.64		0.82		3s	0.14	60	2	1	joint breaks are more "irregular" than "undulating"
172.82	175.87	3.04	2.63		0.65		3s	0.13	55	2	1	joint breaks are more "irregular" than "undulating"
175.87	178.92	3.05	2.78		0.62		3s	0.15	60	2	1	joint breaks are more "irregular" than "undulating"
178.92	181.97	3.05	2.32		0.6		3s	0.16	65	2	1	joint breaks are more "irregular" than "undulating"
181.97	185.01	3.05	2.84		1.76		3s	0.13	75	2	2	joint breaks are more "irregular" than "undulating"
185.01	188.06	3.05	3.05		1.96		3s	0.13	75	2	2	joint breaks are more "irregular" than "undulating"
188.06	191.11	3.05	3.02		2.03		3s	0.16	70	2	1	joint breaks are more "irregular" than "undulating"
191.11	194.16	3.05	3.03		2.02		3s	0.3	70	2	2	joint breaks are more "irregular" than "undulating"
194.16	197.21	3.05	3		1.85		3s	0.25	60	2	1	joint breaks are more "irregular" than "undulating"
197.21	200.25	3.04	3		2.3		3s	0.17	70	2	2	joint breaks are more "irregular" than "undulating"
200.25	203.3	3.05	2.95		2.29		3s	0.3	65	1	1	
203.3	206.35	3.05	2.95		2.35		3s	0.25	55	2	1	joint breaks are more "irregular" than "undulating"
206.35	209.4	3.05	3		1.91		3s	0.2	55	2	2	joint breaks are more "irregular" than "undulating" 40-70 degree range
209.4	212.45	3.05	2.99		1.86		3s	0.27	52	2	1	joint breaks are more "irregular" than "undulating" 35-70 degree range
212.45	215.5	3.04	2.87		2.42		3s	0.27	55	1	1	
215.5	218.54	3.05	2.91		1.77		3s	0.2	55	1	1	
218.54	221.59	3.05	2.73		2.03		3s	0.22	60	1	1	
221.59	224.64	3.05	3.02		2.44		3s	0.25	60	1	1	
224.64	227.68	3.05	2.89		1.7		3s	0.17	65	1	1	
227.68	230.73	3.05	2.85		0.86		3s	0.25	60	1	1	rubbley section
230.73	233.78	3.04	2.45		1.98		3s	0.2	50	2	1	joint breaks are more "irregular" than "undulating"
233.78	236.83	3.05	2.72		2.01		3s	0.19	60	1	1	
236.83	239.88	3.05	2.76		1.46		3s	0.21	60	2	1	joint breaks are more "irregular" than "undulating"

Geotechnical Log

239.88	242.93	3.04	2.53		1.73		3s	0.23	60	1	1		
242.93	245.98	3.05	2.54		1.9		3s	0.16	60	1	1		
245.98	249.02	3.05	2.63		2.12		3s	0.34	60	1	1		
249.02	252.07	3.05	2.83		1.96		3s	0.23	55	1	1		
252.07	255.12	3.05	2.8		2.31		3s	0.17	60	1	1		
255.12	258.17	3.05	2.93		2.38		3s	0.25	65	1	1		
258.17	261.21	3.05	3.02		1.39		3s	0.19	60	1	1		
261.21	264.26	3.04	2.73		1.31		3s	0.15	65	2	1		joint breaks are more "irregular" than "undulating"
264.26	267.31	3.05	2.87		1.68		3s	0.21	65	1	1		
267.31	270.36	3.05	2.7		1.07		3s	0.2	60	2	1		joint breaks are more "irregular" than "undulating"
270.36	273.41	3.05	2.5		1.85		3s	0.2	65	1	1		
273.41	276.46	3.04	2.96		2.36		3s	0.23	60	1	1		
276.46	279.5	3.05	2.95		2.41		3s	0.23	65	1	1		
279.5	282.55	3.05	2.86		2.34		3s	0.2	60		1		
282.55	285.6	3.05	2.9		2.67		3s	0.38	60	1	1		
285.6	288.65	3.05	3.05		1.99		3s	0.3	60	2	1		joint breaks are more "irregular" than "undulating"
288.65	291.7	3.05	2.96		2.55		3s	0.27	65	1	1		
291.7	294.74	3.04	2.87		1.583		3s	0.16	65	1	1		
294.74	297.79	3.05	3.01		2.44		3s	0.17	55	1	1		
297.79	300.84	3.05	2.99		1.63		3s	0.16	60	1	1		
300.84	303.89	3.05	3.02		1.7		3s	0.14	60	1	1		
303.89	306.93	3.05	2.9		0.66		3s	0.11	65	1	1		
306.93	309.98	3.04	2.9		0.76		3s	0.13	60	2	1		joint breaks are more "irregular" than "undulating"
309.98	313.03	3.05	2.82		1.14		3s	0.17	65	2	1		joint breaks are more "irregular" than "undulating" 50-80 degree range
313.03	316.08	3.05	2.97		1.26		3s	0.15	70	2	1		joint breaks are more "irregular" than "undulating"
316.08	319.13	3.05	2.63		0.92		3s	0.27	70	2	1		joint breaks are more "irregular" than "undulating"
319.13	322.17	3.04	2.45		nill		3s	0.15	60	2	1		joint breaks are more "irregular" than "undulating"
322.17	325.22	3.05	2.66		0.11		3s	0.23	65	2	1		joint breaks are more "irregular" than "undulating"
325.22	328.27	3.05	2.8		nill		3s	n/a		2	1		all rubble no avg tca
328.27	331.32	3.05	2.09		0.33		3s	0.12	65	1	1		

Geotechnical Log

331.32	334.37	3.04	2.73		0.85		3s	0.13	60	2	1	joint breaks are more "irregular" than "undulating"
334.37	337.41	3.04	2.5		0.25		3s	0.16	70	2	1	joint breaks are more "irregular" than "undulating"
337.41	340.46	3.05	2.75		0.62		3s	0.1	60	2	1	
340.46	343.51	3.05	2.91		1.08		3s	0.15	75	2	1	range 60-90
343.51	346.55	3.05	2.8		2.24		3s	0.19	65	2	1	50-80
346.55	349.6	3.05	3.04		1.14		3s	0.13	67	2	1	55-80
349.6	352.65	3.05	2.9		2.07		3s	0.16	63	2	1	45-80
352.65	355.7	3.05	2.89		1.84		3s	0.18	55	2	1	30-80
355.7	358.75	3.05	2.98		1.31		3s	0.16	70	1	1	
358.75	361.8	3.04	2.93		2.72		3s	0.27	65	1	1	40-90
361.8	364.85	3.05	3.05		2.21		3s	0.2	75	2	1	60-90
364.85	367.9	3.05	2.87		1.52		3s	0.2	60	2	1	40-80
367.9	370.94	3.05	2.94		2.25		3s	0.19	65	2	1	50-80
370.94	373.99	3.05	2.76		1.25		3s	0.19	65	2	1	40-90
373.99	377.04	3.05	2.78		0.93		3s	0.16	75	2	1	60-90
377.04	380.09	3.05	2.92		1.14		3s	0.15	65	2	1	
380.09	383.13	3.05	3.05		2.27		3s	0.25	70	1	1	60-80
383.13	386.18	3.04	2.9		2.45		3s	0.25	65	2	1	50-80
386.18	389.23	3.05	3.05		2.45		3s	0.3	80	1	1	
389.23	392.28	3.05	3.05		2.75		3s	0.3	75	2	1	
392.28	395.33	3.04	3.04		2.55		3s	0.28	75	2	1	
395.33	398.37	3.04	2.92		2.34		3s	0.27	75	2	1	
398.37	401.42	3.05	2.93		2.52		3s	0.3	70	2	1	
401.42	404.47	3.05	3.05		2.7		3s	0.23	70	2	1	
404.47	407.52	3.05	2.78		2.04		3s	0.3	70	2	1	
407.52	410.57	3.05	2.94		2.37		3s	0.25	75	2	1	60-90
410.57	413.61	3.04	3		2.12		3s	0.25	55	2	1	30-80
413.61	416.67	3.05	2.74		1.73		3s	0.18	52	2	1	30-75
416.67	419.71	3.05	2.85		1.6		3s	0.18	65	2	1	
419.71	422.76	3.05	2.8		2.09		3s	0.16	65	2	1	
422.76	425.81	3.05	3.04		2.46		3s	0.16	70	2	1	
425.81	428.85	3.04	3.03		2.75		3s	0.43	65	1	1	
428.85	431.9	3.06	3		2.48		3s	0.38	60	1	1	
431.9	434.94	3.04	3		2.39		3s	0.27	60	1	1	
434.94	438	3.05	2.57		1.14		3s	0.18	60	2	1	
438	441.04	3.05	2.9		1.35		3s	0.14	60	2	1	
441.04	444.09	3.04	2.62		1.6		3s	0.15	50-90	2	1	50-90
444.09	447.14	3.05	2.82		1.32		3s	0.16	30-90	2	1	30-90

Geotechnical Log

447.14	450.19	3.04	1.45		1.2		3s	0.19	75	1	1		EOH

Geotechnical Log

Magnetic Susceptibility Log

Hole: ↄDH-M12-05

Depth (m)	Magnetic Susceptiblity	DESCRIPTION
11.00	1.500	
12.00	0.519	
13.00	6.031	
14.00	4.632	
15.00	1.002	
16.00	0.551	
17.00	0.834	
18.00	1.156	
19.00	1.438	
20.00	0.145	
21.00	0.781	
22.00	0.129	
23.00	0.818	
24.00	0.453	
25.00	1.881	
26.00	5.207	
27.00	3.338	
28.00	n/a	not enough recovery
29.00	1.527	
30.00	0.143	
31.00	0.153	
32.00	0.197	
33.00	0.529	
34.00	0.124	
35.00	0.093	
36.00	1.174	
37.00	1.209	
38.00	0.369	
39.00	0.152	
40.00	0.115	
41.00	0.286	
42.00	0.945	
43.00	0.372	
44.00	0.486	
45.00	1.227	
46.00	0.989	
47.00	0.035	
48.00	0.441	
49.00	0.355	
50.00	0.130	
51.00	0.220	
52.00	0.171	
53.00	0.201	
54.00	0.107	
55.00	0.451	
56.00	0.303	
57.00	0.282	
58.00	0.199	
59.00	0.361	
60.00	0.226	

Magnetic Susceptibility Log

Depth (m)	Magnetic Susceptiblity	DESCRIPTION
61.00	0.143	
62.00	0.273	
63.00	0.303	
64.00	0.118	
65.00	0.049	
66.00	0.044	
67.00	0.218	
68.00	1.570	
69.00	0.232	
70.00	0.036	
71.00	0.154	
72.00	0.099	
73.00	0.395	
74.00	0.646	
75.00	5.677	
76.00	0.958	
77.00	1.799	
78.00	8.295	
79.00	2.140	
80.00	8.031	
81.00	0.946	
82.00	1.419	
83.00	0.242	
84.00	10.490	
85.00	0.718	
86.00	0.652	
87.00	1.726	
88.00	1.166	
89.00	1.061	
90.00	0.656	
91.00	0.723	
92.00	7.605	
93.00	4.073	
94.00	0.912	
95.00	0.521	
96.00	1.176	
97.00	10.740	
98.00	2.691	
99.00	3.584	
100.00	9.363	
101.00	3.110	
102.00	0.939	
103.00	0.268	
104.00	6.376	
105.00	5.598	
106.00	3.355	
107.00	3.478	
108.00	0.549	
109.00	0.867	
110.00	0.964	
111.00	4.211	

Magnetic Susceptibility Log

Depth (m)	Magnetic Susceptiblity	DESCRIPTION
112.00	1.190	
113.00	0.836	
114.00	0.995	
115.00	0.749	
116.00	2.300	
117.00	0.600	
118.00	0.811	
119.00	3.843	
120.00	1.281	
121.00	2.776	
122.00	1.545	
123.00	2.563	
124.00	2.928	
125.00	0.967	
126.00	n/a	not enough recovery
127.00	3.587	
128.00	4.105	
129.00	9.421	
130.00	2.581	
131.00	1.102	
132.00	1.146	
133.00	2.075	
134.00	3.761	
135.00	3.794	
136.00	0.971	
137.00	0.621	
138.00	1.575	
139.00	0.689	
140.00	1.726	
141.00	0.315	
142.00	0.375	
143.00	0.172	
144.00	2.083	
145.00	2.587	
146.00	2.859	
147.00	15.670	
148.00	2.834	
149.00	2.624	
150.00	2.691	
151.00	0.636	
152.00	0.354	
153.00	1.363	
154.00	0.205	
155.00	0.492	
156.00	0.249	
157.00	0.277	
158.00	1.133	
159.00	2.225	
160.00	1.152	
161.00	5.226	
162.00	3.391	

Magnetic Susceptibility Log

Depth (m)	Magnetic Susceptiblity	DESCRIPTION
163.00	1.366	
164.00	4.202	
165.00	1.595	
166.00	3.047	
167.00	1.522	
168.00	4.001	
169.00	0.876	
170.00	0.778	
171.00	0.621	
172.00	0.500	
173.00	1.764	
174.00	0.879	
175.00	0.833	
176.00	0.281	
177.00	0.426	
178.00	0.298	
179.00	0.228	
180.00	0.414	
181.00	0.046	
182.00	0.335	
183.00	0.816	
184.00	0.478	
185.00	0.385	
186.00	0.261	
187.00	0.345	
188.00	0.225	
189.00	0.458	
190.00	0.361	
191.00	0.294	
192.00	0.481	
193.00	0.323	
194.00	0.421	
195.00	0.312	
196.00	0.281	
197.00	0.334	
198.00	0.800	
199.00	1.823	
200.00	1.002	
201.00	0.462	
202.00	0.309	
203.00	0.226	
204.00	1.370	
205.00	0.381	
206.00	0.577	
207.00	0.359	
208.00	0.202	
209.00	0.348	
210.00	0.661	
211.00	1.087	
212.00	0.472	
213.00	0.745	

Magnetic Susceptibility Log

Depth (m)	Magnetic Susceptiblity	DESCRIPTION
214.00	0.625	
215.00	0.912	
216.00	0.545	
217.00	0.357	
218.00	1.481	
219.00	1.028	
220.00	0.961	
221.00	0.348	
222.00	0.221	
223.00	0.859	
224.00	0.394	
225.00	0.962	
226.00	1.752	
227.00	2.515	
228.00	1.876	
229.00	0.613	
230.00	0.477	
231.00	0.562	
232.00	5.367	
233.00	11.700	
234.00	4.942	
235.00	20.670	
236.00	10.650	
237.00	6.292	
238.00	2.440	
239.00	2.030	
240.00	1.557	

Box Log

Hole: DDH-M12-05 **Date: AUG**

Box #	From (m)	To (m)
1	11.01	16.35
2	16.35	20.95
3	20.95	26.11
4	26.11	31.38
5	31.38	36.01
6	36.01	40.85
7	40.85	45.32
8	45.32	50.80
9	50.80	55.95
10	55.95	61.01
11	61.01	66.14
12	66.14	72.29
13	72.29	76.77
14	76.77	82.01
15	82.01	86.05
16	86.05	91.80
17	91.80	91.80
18	97.43	97.43
19	102.72	102.72
20	108.15	108.15
21	113.45	113.45
22	119.31	119.31
23	124.84	124.84
24	130.62	130.62
25	136.25	136.25
26	141.86	141.86
27	147.24	147.24
28	152.75	152.75
29	157.61	162.64
30	162.64	167.70
31	167.70	173.07
32	173.07	178.41
33	178.41	189.55
34	183.55	189.01
35	189.01	194.65
36	194.65	200.25
37	200.25	205.93
38	205.93	211.22
39	211.22	215.50
40	215.50	219.69
41	219.69	223.88
42	223.88	227.95
43	227.95	232.05
44	232.05	236.45
45	236.45	240.46
46	240.46	245.08