Contractor: LANE | Coordinates: SITE 163 | Project: GILT EDGE | Hole No.: R88-498

Drill Type: | Casing Depth: | State: SD | Sheet 1 of 9

Hole Size: | Bearing: - | Inclination: 90 | Date Started: 11.3.88 | Property: GILT EDGE

Collar Elev.: | Final Depth: 1420' | Date Completed: | Hole Surveyed:

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL SULFIDES (vol %)	ROCK CODE	ORE CODE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	GEOLOGIC NOTES: ROCK TYPE	DESCRIPTION: MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veinlill, Replacement)	TYPE	ASSAY: Au	Ag
			60	3	0-5		Tep	0-305 TRACHYTE PORPHYRY.	0-120	OXIDE		
					20-25				(20-25) tr-1% FeS_2			
									(35-50) tr-1% FeS_2			
					45-50							
					70-75							
					95-100							
				1	120-125				120-1420	SULFIDE 2-3% FeS_2		
					145-150							
					170-175				170-200	FRACTURED		

DRILL CUTTING LOG

Logged by:

Contractor _____ Coordinates _____ Project _____ Hole No. R88-498

Drill Type _____ Casing Depth _____ State _____ Sheet 2 of 9

Hole Size _____ Bearing _____ Inclination _____ Date Started _____ Property _____

Collar Elev. _____ Final Depth _____ Date Completed _____ Hole Surveyed _____

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL SULFIDES % (vol %)	ROCK CODE	ORE CODE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	ROCK TYPE	GEOLOGIC NOTES: DESCRIPTION (MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE)	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veinlill, Replacement) / TYPE	ASSAY Au	ASSAY Ag
			60	1	175-180		Ttp				
									(190 – 260) 3-5% FeS_2		
					195-200						
								(210 – 415) dk. gray matrix			
					220-225						
					245-250						
									(260 – 275) 2-3% FeS_2		
					270-275						
									(275 – 305) 3-5% FeS_2		
					295-300						
								(300 – 305) 3-4% PC schist			
				10			PC	305 – 315 PRECAMBRIAN SCHIST	(305 – 375) 5-7% FeS_2		
				60			Ttp	315 – 1630 TRACHYTE PORPHYRY			
					320-325				320 – 325 FRACTURED		
									330 – 355 FRACTURED		
					345-350						

DRILL CUTTING LOG

Logged by: _____

Contractor _____ Coordinates _____ Project _____ Hole No. R88-498

Drill Type _____ Casing Depth _____ State _____ Sheet 3 of 9

Hole Size _____ Bearing _____ Inclination _____ Date Started _____ Property _____

Collar Elev. _____ Final Depth _____ Date Completed _____ Hole Surveyed _____

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL SULFIDES (vol %)	ROCK CODE	ORE CODE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	GEOLOGIC NOTES: ROCK TYPE	DESCRIPTION: MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veintill, Replacement)	TYPE	ASSAY: Au	Ag
			60	1	350-355		Ttp					
					370-375							
									(375-410) 2-4% FeS_2			
					395-400							
									(410-475) 1-3% FeS_2			
								(415-425) 30-40% Tqtp	415-425 FRACTURED			
					420-425			- w/ embayed quartz, phenos to 1%				
								(425-810) dk. gray matrix				
					445-450							
					470-475				470-485 FRACTURED			
									(475-485) 3-5% FeS_2			
									(485-610) 2-3% FeS_2			
					495-500							
					520-525							

DRILL CUTTING LOG

Logged by: _____

Contractor _____ Coordinates _____ Project _____ Hole No. R88-498

Drill Type _____ Casing Depth _____ State _____ Sheet 4 of 9

Hole Size _____ Bearing _____ Inclination _____ Date Started _____ Property _____

Collar Elev. _____ Final Depth _____ Date Completed _____ Hole Surveyed _____

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL SULFIDES (vol %)	ROCK CODE	ORE CODE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	ROCK TYPE	GEOLOGIC NOTES: DESCRIPTION (MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE)	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veinlill, Replacement)	TYPE	ASSAY: Au	Ag
			60	1	525-530		Tkp		525-530	FRACTURED		
					545-550							
					570-575							
									580-595	FRACTURED		
					595-600							
					620-625							
					645-650							
					670-675				(670-680)	3-5% FeS_2		
									(680-740)	2-3% FeS_2		
					695-700							

DRILL CUTTING LOG

Logged by: _____

Contractor _____ Coordinates _____ Project _____ Hole No. RBB-498

Drill Type _____ Casing Depth _____ State _____ Sheet 5 of 9

Hole Size _____ Bearing _____ Inclination _____ Date Started _____ Property _____

Collar Elev. _____ Final Depth _____ Date Completed _____ Hole Surveyed _____

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL SULFIDES (vol %)	ROCK CODE	ORE CODE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	ROCK TYPE	GEOLOGIC NOTES: DESCRIPTION (MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE)	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veinlill, Replacement)	TYPE	ASSAY Au	ASSAY Ag
			60	1	700-705		TKP					
									710-715 FRACTURED			
					720-725							
					745-750				(740-770) 3-5% FeS2			
								<fluorite>				
					770-775							
									(770-780) 1-2% FeS2			
									(780-820) 3-5% FeS2			
					795-800							
					820-825			(820-865) green brown silicified matrix quartz phenocrysts NOT embayed	(820-975) 1-2% FeS2			
					845-850							
					870-875			(865-975) gray matrix				

DRILL CUTTING LOG

Logged by: _____

Contractor _____ Coordinates _____ Project _____ Hole No. R88-498

Drill Type _____ Casing Depth _____ State _____ Sheet 6 of 9

Hole Size _____ Bearing _____ Inclination _____ Date Started _____ Property _____

Collar Elev. _____ Final Depth _____ Date Completed _____ Hole Surveyed _____

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL SULFIDES (vol %)	ROCK CODE	ORE CODE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	ROCK TYPE	GEOLOGIC NOTES: DESCRIPTION (MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE)	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veinlill, Replacement)	TYPE	ASSAY Au	ASSAY Ag
			60		875-880		Tkp					
					895-900							
					920-925							
					945-950							
								(960-975) 5-15% PC schist				
					970-975							
								(975-1010) gray-brown matrix silicified	(975-1055) 2-3% FeS_2			
					995-1000							
								(1010-1030) dm gray matrix w/ 3-5% PC schist.				
					1020-1025							
			80				Tkp	1030-1035 QUARTZ TRACHYTE PORPHYRY				
			60				Tkp	1035-1420 TRACHYTE PORPHYRY gray matrix				
					1045-1050				1045-1075 FRACTURED			

DRILL CUTTING LOG

Logged by:

Contractor _____ Coordinates _____ Project _____ Hole No. R88-498

Drill Type _____ Casing Depth _____ State _____ Sheet 2 of 9

Hole Size _____ Bearing _____ Inclination _____ Date Started _____ Property _____

Collar Elev. _____ Final Depth _____ Date Completed _____ Hole Surveyed _____

DRILL CUTTING LOG

Logged by:

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL SULFIDES (vol %)	ROCK CODE	ORE CODE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	ROCK TYPE	GEOLOGIC NOTES: DESCRIPTION (MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE)	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veinlill, Replacement)	TYPE	ASSAY: Au	Ag
			60	1	1050-1055		TEP					
									(1055 - 1075) 3-4% FeS2			
					1070-1075							
									(1075 - 1085) 4-5% FeS2			
									(1085 - 1130) 2-4% FeS2			
					1095-1100							
									1100-1130 FRACTURED			
					1120-1125							
									(1130 - 1155) 4-5% FeS2			
					1145-1150							
									1145-1160 FRACTURED			
									(1155 - 1175) 5-6% FeS2			
					1170-1175			<fluorite>				
									(1175-1245) 4-5% FeS2			
					1195-1200			(1200 - 1290) gray-brown silicified matrix				
					1220-1225							

Contractor _____ Coordinates _____ Project _____ Hole No. 1288-498

Drill Type _____ Casing Depth _____ State _____ Sheet 8 of 9

Hole Size _____ Bearing _____ Inclination _____ Date Started _____ Property _____

Collar Elev. _____ Final Depth _____ Date Completed _____ Hole Surveyed _____

DRILL CUTTING LOG

DISTANCE (feet)	GRAPHIC LOGS: ALTERATION (1 Weak, 2 Moderate, 3 Strong)	TOTAL SULFIDES % (vol %)	ROCK CODE	ORE CODE	DOWN HOLE LOCATION: DISTANCE DOWN HOLE (feet)	ELEVATION	ROCK TYPE	GEOLOGIC NOTES: DESCRIPTION (MINERALOGY, ALTERATION, TEXTURES, GRAIN SIZE, FRAGMENT SIZE)	MINERALIZATION: DISTRIBUTION (Massive, Disseminated, Veinlet, Replacement) / TYPE	ASSAY Au	ASSAY Ag
			60	1	1225-1230		TKP				
					1245-1250				(1245 - 1250) 3-4% FeS_2		
									(1250-1275) 2-3% FeS_2		
					1270-1275				1260 - 1270 FRACTURED		
									(1275 - 1370) 3-5% FeS_2		
					1295-1300			(1290 - 1335) gray matrix	1290 - 1300 FRACTURED		
								<fluorite>			
					1320-1325						
								(1335-) gray brown green spotted matrix, greenish, complete in phenos.	1330 - 1340 FRACTURED		
					1345-1350						
					1370-1375						
									(1370 - 1395) 5-7% FeS_2		
									1380 - 1390 FRACTURED		
					1395-1400						
									(1395 - 1420) 3-5% FeS_2		

Logged by: