

DIAMOND DRILL HOLE LOG

2

Reason for Drilling		LEGEND	
Explanation of Results	CORE IS STORED AT OMNI'S CAMP AT SKUKUM CK.	kgm	caliche
		argillite	quartz (v)
		chert	
		serpentine	

PROJECT Horsehoe Creek - POP
 COORDINATE N. 22 + 20
 E. 37 + 60
 ELEVATION _____
 DATE STARTED Sept 21 / 87
 COMPLETED Sept 29 / 87
 HOLE SURVEY _____

[illegible]

DIAMOND DRILL HOLE No. <i>PHS-3</i> Sheet <i>2</i> of <i>8</i>													
BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE		ANALYTICAL		
									Sample No.	INTERCEPT	CORE LENGTH	O.P.T. Au	G.P.T. Ag
7			80	.29	116', 123' - start, subrounded brx zones in clay 125' - minor calcite vein								
8			95	.54	115-169' - fresh to moderately saussuritized porphyritic Ksp in coarse grain quartz, minor epidote - broken irregular fracturing, very little shear			130 140 150					
9			100	.81	151' - chlorite filled veining @ 30-50°			160 170 180					
10			95	.47				190 200 210					
11			100	.54	168-182' - porphyritic Ksp in moderate saussurization and silicification by coarse grain qz x'tals - CI=15-20			220 230 240					
12			100	.57	182-184' - zone of massive salmon pink Ksp (70%) in minor plag. and 20% rusty mafics.			250 260 270					
13			100	.64	184-206' - CI=30-40, 40%+ plag. in qz and Ksp porphyroblasts. Overall dk grn color. Epidote and sericitized plag. 187', 200' - minor calcite veins @ 50° and 20°			280 290 300					
14				.57	206-245' - quartz-monzonite composition in porphyritic Ksp except in increased darkening of color index by hornblende laths often in blotches or bands. Strongly chloritized. CI=40-50 locally			310 320 330					
15				.48				340 350 360					
16				.43	231' - hematite stained shear in silica 232' - hematite stained qz vein (2-3 cm) @ 30° calcite and chlorite on intense fracture system			370 380 390					
17				.30	244' - minor clay on a shear at 35° in mg. [intrusive] brx hematite stained			400 410 420					
18				.49	255', 262', 263' - qz veined or silicified shears in clay alter'n, sericite, minor brx and minor gray sulphides	disseminated PV and minor gray sulphides in grt qz		430 440 450	3351 3352	252-256 262-265	4.0' 3.0'	.001 .001	.02 .01

DIAMOND DRILL HOLE No. 75-3 Sheet 3 of 8													
BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE		ANALYTICAL		
									Sample No.	INTERCEPT	CORE LENGTH	O.P.T. Au	O.P.T. Ag
19				55	285-286' - porphyritic Qtz-Monz. in decreasing matrix to calc index of 30 @ 286'			280					
20				33	281-282' - sericitised, clay altered shear in gte and Kgm brs, grey gte and grey sulphides	2% Py and banded grey sulphides.		280	3353	281-283	2.0'	.001	.03
21				69	286'-331' - fresh to weakly sericitised porphyritic Kgm. Sericite in plng, some epidote (mainly near fractures)			290					
					331-345' - moderately saussuritized Kgm			300					
22				67	320' - 1/2 cm, clay and chlorite altered unkerite vein			310					
					329' - 1/2 cm chloritized and hematite stained unkerite vein			320					
23				61	327' - intensely argill. shear under a clay matrix crackle brs Kgm. Slightly gattered	trace grey sulphide		330					
					342' - similar clay shear - no gte flooding			340					
24				34	345-373' - moderately saussuritized Kgm in hematite staining esp. on fractures			350					
								360					
25				49	365' - small sulphidised (grey) gte vein @ 20° - one foot - of ang. Kgm brs in clay matrix			370	3354	362.5-367.5'	5.0'	.001	.01
					373-384' - weak to moderate saussuritized Kgm.			380					
26				63	382' - short, brecciated shear in rusty clay matrix			390					
					388' - shear @ 25° in minor brs, hematite and chlorite.			400					
					384-440' - very weakly sericitised Kgm, in sparse, fairly dry, shears			410					
27				79	414' - multiple shear in crackle brs, hematite and chlorite.			420					

PROJECT Morseville (2066) - ROP

DIAMOND DRILL HOLE No. FNC-3 Sheet 4 of 8

BOX	Run	Core	% R	RDR	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE		ANALYTICAL		
									Sample No.	INTERCEPT	CORE LENGTH	O.P.T. Au	O.P.T. Ag
28			100	.84	424' - minor shear @ 55° to kinky qz vein, chlorite and minor clay, sericite, carbonate			420					
					437' - silicified shear @ 40° to sericite, hematite and minor chlorite. Minor chlorite	trace grey sulphide		430					
29			100	.88	440-447' - strongly sericitized, slightly qz flooded coarse-grained Kgm			440					
					447' - shear to crackle bre and clay alter'n, strong sericite			450					
					447'-451' - strongly sericitized and silica flooded Kgm to chlorite, clay alter'n	trace PY, grey qz, and grey sulphides		460					
30			100	.78	451-452' - two minor clay altered, sericitic, brecciated shears separated by 1' of intense, pervasive qz flooded Kgm			470					
					452'-454' - strongly sericitic to hematized shears			480					
31			100	.63	454-473' - mod-strong sericite & strong hematite stain			480					
					474-476' - intense sericite and clay alter'n and 1' of bre, clay altered shear zone @ 474'			490					
					476-496' - mod. sericite, strong hem stained Kgm to minor clay altered chlorite shears			500					
32			100	.66	487' - mod. qz flooded Kgm for 5'			500					
					496'-522' - mod-strong sericite to hematite stain and minor clay on prolific fracturing			510					
33			100	.63	522-523' - crackle bre shear to strong clay and silicification			520					
					523'-549' - weak to moderate sericite. hbl to chlorite, clay on shears			530					
34			100	.60	549' - shear to crackle bre, silicification and strong clay matrix			540					
					549'-551' - weak to mod. sericite hbl to chlorite			550					
35			100	.82	551'-569' - fresh Kgm - weak sericite - weak hbl to chlorite			560					
					569-570' - crackle bre to clay matrix								

DIAMOND DRILL HOLE No. <u>MS-3</u> Sheet <u>5</u> of <u>8</u>												
BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	Scale, FT. 52'	SAMPLE		ANALYTICAL	
									Sample No.	INTERCEPT	CORE LENGTH	Q.P.T. Au
26				.69	570-580' - weak to moderate sericite, clay softening near alcara and crackle bre. Slight bleaching begins.							
					580' - crackle bre., clay softened, slightly bleached			580				
					586' - strong shear to aug. bre. and clay matrix							
27				.63	586-593' - fresh, weak sericite. Kbl → chlorite			590				
					593-603' - weak sericite. Bleaching increases to approach to dike but rock is hard & fresh.							
					600'			600				
28				.76	607-623' - hard kgm with sericite and moderate bleaching			610				
					623-625.7' - strong crackle brecciated kgm in soft clay matrix, sericite and clay shears			620				
					sharp contact @ 35° to minor clay							
29				.47	625.7-630' - flow-banded Rhyolite				3355	623.0-625.6'	2.6'	.001 .01
					pale grn quartz, rhyolite/mag. qz bands @ 20-45° square to rounded qz eyes, 2 mm to 1 cm			630	3356	625.6-630.6'	5.0'	.001 .01
					- intensely crackle-bre, healed by grey qz.							
					- grn sericite tinted bands - qz 641-645'			640				
40				.63	sharp contact @ 35° to clay and massive sericite				3357	637.8-644.8'	5.0'	.001 .01
					645-653' - saussuritized kgm (as 61-61')	minor gr. sulphide		650	3358	644.8-647.3'	2.5'	.001 .01
					- fresh to moderately sericitized. Qz healed, intense fracturing - hematite stained							
					654' - clay and sericite shear @ 40°			660				
					663-667' - bleached kgm to weak sericite, clay on fractures							
41				.38	sharp, weakly sericitic contact, injected rhyolite	minor gr. sulphides						
					667-676' - flow-banded porphyritic rhyolite			670				
					flow-banded, wht and grey rhyolite to kgm rip-up							
					frag. from 688-689'							
					diffuse contact							
					676-718' - porphyritic rhyolite			680				
42				.39	wht-pale grn, massive rhyolite to porphyritic plug.							
					- fresh and hard. Intense, blocky fracturing							
					is mainly dry.			690				
					686-691' - thin or hematite (pink) surface stain.			700				
43				.33	700'			700				
					710'			710				
					718-729' - flow-banded gr. rhyolite (as 667-676')							
					illuvial material, banding @ 75°							

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	Sample No.	INTERCEPT	CORE LENGTH	ANALYTICAL	
											O.P.T. Au	G.T. Ag
44			100	64	710-725' - Kgm and rhyolite breccia to rhyolite and siliceous matrix - sub angular frags (2mm-3mm), massive grn sericite 725-802.3' - breccia - monzonite (as a-61')			3359	721' - 726.0'	5.0'		
45			100	87	725-731' - silicified and bleached grn 731-748' - breccia to silicified grn to blk-sch							
46			100	50	748-767' - bleached zone w sericite (mod) and strongly clay altered fracturing 768-780' - clay matrix crackle bre Kgm shear @ 40° 782-786' - intense sericitic/clay fracturing.							
47			100	54	767' - 802.3' - bleached, silicified and clay altered Kgm. minor bre on shears 769-790' - hematized gr and fluorite vein 1/4 ca. 793, 794', - 781, 791, 792, 801' - minor gr veins associated w shears	subdral fluorite trace PY		3360	768.5' - 771.4'	2.9'	.002	.02
48			100	29	801' - minor gr veins @ 15° and 30° clay shear contact @ 65° 803.3-804.8' - clay breccia to org. Kgm, rhyolite and intermediate frags up to 4cm. Mostly mm scale	gray quartz trace PY		3361	783.7' - 786.4'	2.7'	.001	.01
49			100	18	809.8 - 848.5' - porphyritic rhyolite gray-pink grn w wlt porphyritic plagioclase sericitic, chloritic and 1/2" banding approaching upper contact. Massive away from contact.	trace PY minor gr sulphides		3362	799.2' - 802.4'	3.2'	.001	.01
50			100	19	850' - 853' - strong sericite/clay, silicified 856-870' - sheared, strong hematite, silicified	trace PY		3363	802.4' - 807.0'	4.6'	.005	.02
51			100	62	870' - 875' - brecciated Kgm w rhyolite frags to 4cm. - intense clay and sericite, strongly silicified 875' - (Quartz Monzonite (as a-61')) 875-886' - strong sericite/clay, silicified	trace PY		3364	807.0' - 810.0'	3.0'	.001	.05
52			100	58		minor gr sulphides to 2"		3365	848.5' - 852.8'	4.3'	.001	.02
								3366	852.8' - 857.2'	4.4'	.001	.01
								3367	857.2' - 860.6'	3.4'	.001	.01
								3368	860.6' - 864.5'	3.9'	.001	.01
								3369	864.5' - 869.4'	4.9'	.001	.01

BOX	Run	Core	% R	R.Q.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	1"=20' FT. 820	SAMPLE			ANALYTICAL	
									Sample No.	INTERCEPT	CORE LENGTH	O.P.T. Au	O.P.T. Ag
					820-825 - intensely bleached, clay softened, sericitic steep contact - micro-crack bre. sealed by grey quartz				3370	829.4' - 829.0'	3.6'	.001	.01
					825'-909.1' clay-sericite altered. Rhyolite Porphyry				3371	823.0' - 822.9'	4.9'	.001	.01
53				40	bleached, intensely clay-sericite softened, weakly sericite banded	minor grey sulphide		880	3372	822.9' - 820.5'	2.6'	.001	.01
					- trace, clay altered, plagioclase				3373	820.5' - 820.2'	3.7'	.001	.01
					- moderately silicified to quartz bands, silica blebs and hairline quartz healing micro crackle fractures			890	3374	820.2' - 820.7'	4.5'	.001	.01
54				57	- pale green -> wht				3375	820.7' - 823.2'	4.5'	.001	.02
									3376	823.2' - 826.9'	3.7'	.001	.01
								900	3377	826.9' - 901.8'	4.3'	.001	.02
									3378	901.8' - 905.0'	3.2'	.001	.01
								910	3379	905.0' - 908.5'	3.5'	.001	.02
55				74	909.1' - 926.0' chlorite intrusion (Kgm?) - dk green, intensely chloritic, hard - visible qz, plag, mafics, porphyritic Kspar, spinels - net veined to white qz and calcite,ankerite on fractures				3380	908.5' - 912.2'	3.7'	.001	.01
					gradational, dry contact			920					
					926.0-956 Quartz Monzonite as (0-61')								
56				50	- crackle, brecciated, chlorite healed - strongly chloritic and hematite stained - weakly silicified			930					
					935.5-940 - sericitized, brecciated shear to massive blk sulphide	blk sulphides		940	3381	935.5' - 940'	4.5'	.001	.06
					940-949.5 - hematized qz to hairline crackle vein quartz								
					949.5-955 - bleached, silicified, sericitic qz			950					
57				25	brecciated contact 955-961.5 - Qz-A shear zone - intense clay-sericite shears - Qz-A and qz breccia - grey sulphidized qz and massive py sulphides	trace PY			3382	951.5' - 955'	3.5'	.001	.01
					sharp shear contact @ 10° 961.5-976 - banded rhyolite	intense grey sulphide		960	3383	955' - 961.5'	6.5'	.001	.04
					- wlt rhyolite banded by fine grey quartz and 5Y rhyolite	trace PY dissem + blebby		970	3384	961.5' - 963.7'	2.2'	.001	.01
58				16	963-984.5' banded rhyolite (porphyritic) - grey rhyolite banded by wlt rhyolite and sericite - mod-strongly clay softened. Clay altered plagioclase - intensely fractured and crumbly sharp contact	trace PY		980	3385	967-972	5.0'	.001	.01
					984.5-996.5 Rhyolite Breccia								
59				14	- wlt porphyritic rhyolite matrix with angular frag- - of rhyolite up to 1cm. Grey quartz in fractures - 1-3 1/2 blk blk sulphide. Some dk grey banding - strong clay softening in parts, up in fractures sharp contact @ 25° against clay	minor thorite fragment trace PY		990	3386	980-985.4	5.4'	.002	.01
					996.5-1000.5 wlt clay to grey rhyolite crackle bre 2cm blk quartz vein @ 25° on contact				3387	985.4' - 989	3.6'	.001	.04
					1000.5-1022 Porphyritic Rhyolite			1000	3388	989-992.7	3.7'	.001	.01
					- wlt massive rhyolite to clay altered plagioclase - intensely fractured and crumbly				3389	992.7-996	3.3'	.001	.01
60				31	- intense wlt clay on fractures				3390	996-1000	4.0'	.001	.01
								1010	3391	1000-1003.9'	3.9'	.001	.01
									3392	1003.9'-1008.3	4.4'	.001	.01
									3393	1008.3-1012	3.7'	.001	.01
								1020	3394	1012-1015.5'	3.5'	.014	.01

PROJECT					DIAMOND DRILL HOLE No. <u>AMS-3</u> Sheet <u>8</u> of <u>8</u>									
BOX	Rm	Core	% R	R.O.D.	LITHOLOGY, ALTERATION, STRUCTURE	MINERALIZATION	GRAPHIC LOG	FT.	SAMPLE		ANALYTICAL			
									Sample No.	INTERCEPT	CORE LENGTH	O.P.T. An	GRT Ag	
61			100	.12	gradational contact 1022-1030.7' Banded porphyritic rhyolite - grey qtz/rhyolite and sericite banding @ 30° - sericitic & rhyolite brx @ 1025'. weak clay sericitic shear contact 1030.9'-1036' Rhyolite glass breccia - arg wlt rhyolite no iron in grey rhyolite and clay matrix associated contact 1036-1102' Porphyritic Rhyolite	trace PY		1020	3395	1030.7 - 1036.1	5.4'	.001	.01	
62			100	.37	- pale grn massive rhyolite & weakly clay altered plug laths - weak grey banding approaching contacts - mainly hard and fresh. Clay on and near shears - variably sericitic (veined) throughout	trace PY		1040						
63			100	.42	1045.5', 1054', 1067', 1081', 1085', 1086.5' - abrupt, strongly clay altered shears & minor angular rhyolite brx. 1075', 1078', 1085', 1086' - short zones of clay matrixed rhyolite crackle brx.	trace PY		1060						
64			100	.31				1080						
65			100	.62				1100	3396	1099.1' - 1102.5'	3.4'	.001	.02	
66			100	.68	crumbly, gradational contact 1102-1106.7' - Banded, sericitic rhyolite breccia - grey and wlt banded, sub ang frags, 30-40% sericite bands 1106.7'-1146' - Porphyritic Rhyolite - wht/pale green, massive, small weakly clay altered plug laths - mainly fresh, hard and dry - crackle fractures loaded by grey qtz and sericite			1120	3397	1102.5' - 1106.7'	4.2'	.001	.02	
67			100	.53	- local clay altered faults and minor brx			1140						
68			100	.60	1149' = EOH			1150	3398	1129.1' - 1132.8'	3.8'	.001	.01	