

DRILL HOLE REPORT

Hole Number **H-09-3413**

Project: **TITAN**

Project Number:

<u>Drilling</u>	<u>Casing</u>	<u>Core</u>	<u>Location</u>	<u>Other</u>
Azimuth: 0	Length: 13.5	Dimension: NQ	Township: BUCHANS	Logged by: Paul Moore/David Butler
Dip: -90	Pulled: no	Storage: RRO Buchan	Claim No.: 10524M	Relog by:
Length: 1232	Capped: yes	Section:	NTS: 12A/15	Contractor: Logan Drilling
Started: 23-Aug-09	Cemented: no	Hole Type DD	Hole: SURFACE	Spotted by: David Butler
Completed:				Surveyed:
Logged: 19-Sep-09				Surveyed by: hand held GPS
Comment:	Hole is collared 350 m northwest, and down plunge of the former MacLean mine to test a TITAN anomaly at 1,125 m depth. The hole is also following up results from underground drilling in 1982 (H-3270) which intersected mineralization 175 m northwest of the underground mine averaging 0.43%		<u>Local Grid Coordinate</u>	<u>UTM Coordinate</u>
				Geophysics:
				Geophysical Contractor:

Local Grid Coordinate

UTM Coordinate

East: 0 **East:** 507365
North: 0 **North:** 5409260
Elev.: 0 **Elev.:** 291
Zone: 21 **NAD:** NAD83

Left in hole:
Making water:
Multi shot survey: yes

Deviation

<i>Distance</i>	<i>Azimuth</i>	<i>Dip</i>	<i>Type</i>	<i>Good</i>	<i>Comn</i>
0.00	0.00	-90.00	C	☑	Collar
50.00	167.20	-89.00	F	☑	
100.00	312.60	-89.50	F	☑	
150.00	294.70	-89.60	F	☑	
200.00	223.00	-89.30	F	☑	
250.00	227.60	-89.20	F	☑	
299.00	271.00	-89.10	F	☑	
350.00	244.90	-89.00	F	☑	
398.00	252.20	-89.60	F	☑	
452.00	276.90	-89.60	F	☑	
500.00	265.90	-89.20	F	☑	
551.00	290.20	-88.80	F	☑	
600.00	236.00	88.90	F	☑	
656.00	297.90	-88.80	F	☑	
700.00	298.80	-88.50	F	☑	
749.00	298.70	-88.60	F	☑	
851.00	312.50	-88.70	F	☑	
902.00	307.20	-88.20	F	☑	
953.00	317.80	-88.70	F	☑	
995.00	312.00	-88.60	F	☑	
1052.00	296.30	-89.30	F	☑	
1097.00	277.70	-88.70	F	☑	
1157.00	329.40	-89.30	F	☑	

Distance	Azimuth	Dip	Type	Good	Comn
1202.00	334.30	-89.20	F	☒	
1232.00	335.20	-89.40	F	☒	bottom

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From (m)	To (m)	Lithology	Sample #	From	To	Length	Cu (%)	Pb (%)	Zn (%)	Ba (%)	Ag (ppm)
0.00	13.50	OB Overburden, granite bldrs Granite boulders Upper Contact: Colour: Overburden comprises granitic boulders up to one metre in size.									
13.50	16.40	DAC Dacite tuff; q-phyrlic Dacite tuff Upper Contact: Colour: Green-grey Light grey-green dacitic tuff is blocky and locally severely broken. Some light pinkish (hematized) staining, and lower contact appears gouge-like, although this may be gravelly overburden along open fractures. Weak bedding in tuff at 60° to CA (15.5 m). Tuff has Qtz-phenos, but are <1mm, and difficult to see.									
		Alteration Maj:	Type/Style/Intensity	Comment							
		13.50 - 16.40	Chlorite Fracture Controlled Moderate to Strong Silicification Pervasive Weak	Along fractures							
16.40	23.20	BSLT Basalt; amyg Basalt, amyg Upper Contact: Conformable Broken Colour: Green-grey Medium grey-green basalt is amygdaloidal and has strong pervasive carbonate alteration. Some amygdules are dissolved giving a pitted appearance. Section is very broken and locally crumbly making it difficult to find precise contacts. Basalt is weakly to occasionally moderately magnetic									

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23.20	57.15	DAC <i>Dacite tuff; q-phyric</i> DACITIC TUFF <i>Upper Contact:</i> Conformable Broken <i>Colour:</i> Green-grey Light grey-green dacitic tuff is very line-grained, having a siliceous siltstone appearance in places. Minor sections of rhyolite-dacite usually less than 1m (45.0-45.3m; 47.7-48.3m; 50.9-51.7m). Dacite tuff contains black chloritic blebs/flecks up to 1% abundant and 6-8 mm in size; also locally jasper flecks (34.2m). Tuff is quartz-phyric (<1%, <1mm). Quartz-carbonate stringers (<5mm) are common at 65-75° to CA. Several broken sections making it difficult to assess the upper contact; 23-24m, 26-29m. Locally unit has weak hematization throughout 10% of unit, giving tuff an arkose appearance. Local weak bedding at 50-55° to CA.									
57.15	62.20	SLST <i>Siltstone with jasper</i> Siltstone/jasper <i>Upper Contact:</i> Conformable Sharp <i>Colour:</i> Green-grey Purple Light to medium grey-green, and locally purple where jasper bands are present (20% of unit). Siltstone is bedded at 70° to Ca, marked by bands of light and dark green siltstone. Jasper-rich bands are at 57.6-57.85m and 58.0-58.3m.									
62.20	81.30	T <i>Tuff/Lapilli Sediment</i> Tuff/lapilli sed									

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		Upper Contact:	Conformable	Gradational									
		Colour:	Green-grey										
		Tuffaceous sediment consists of light to medium grey-green fine tuffaceous sandstone and lapillistone. Unit is non-magnetic. Local sheared sections (64.8-65.2m at 43° to CA). Chlorite altered clasts are common in the coarser sections (63.6-65.5m, 69.3-71.0m, 71.4-74.0m). Unit appears to coarsen downhole, and load structured at silt/sand contact indicated topping uphole. Weak to local moderate sericite and chlorite; moderate sericite in silty sections. Bedding is 45-65° to CA. Local fracturing is sub-parallel to CA. Towards the bottom of unit fine silty laminations at 65° to CA.											
		Alteration Maj:	Type/Style/Intensity	Comment									
		62.30 - 81.30	Sericite Pervasive Weak to Moderate	In silty sections									
			Chlorite Clasts Moderate to Strong	In lapillistone sections									
81.30	121.60	FW	Mafic flow or intrusive	Mafic Flow/Int?									
		Upper Contact:	Intrusive	Chilled									
		Colour:	Green-grey										
		Massive, fine-grained, medium to dark grey-green mafic flows or intrusive is moderately to strongly magnetic, pervasively carbonatized and has common calcite stringers. Unit is fairly competent with a few strongly blocky and broken sections (94-95m, 107.5-113.0m). Upper contact is sharp and very fine grained (slightly chilled looking), and is non magnetic over the top 10 cm of unit. Some gouge seen at 110.5m but difficult to assess orientation as the core is highly fractured and broken due to fracturing subparallel to CA. Local shearing from 118.5-118.9, at 40° to CA. Local sections with 5-10% chlorite blebd 3-5mm in size.											
121.60	137.10	FG	Felic to Int Frag/BX	Fel/Int Frag/BX									
		Upper Contact:	Conformable	Broken									
		Colour:	Purple										
		Coarse felsic fragmental/breccia is extensively hematized, fractured and locally brecciated. Both upper and lower contacts are strained with shearing at 20-25° to CA; local gouge (5cm) within broken and blocky section from 134.1-134.9m, although no orientation could be seen. Shearing is occasionally sub-parallel to CA. Unit is very broken and blocky throughout, and non-magnetic. Unit has ~70% felsic to intermediate (chlorite altered feldspar phyrlic to feldspar phyrlic) fragments (10-15 cm) and abundant (20-											

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		25%) red hematitic matrix, commonly jasper. Fragments are up to 20 cm in size, and commonly round to sub-round; and brecciated sections contain sub-angular fragments. Fragments are siliceous and orange (hematite stained), and contain fine (1-2mm) chlorite altered feldspars.									
		Alteration Maj:									
		121.60 - 137.10									
		Type/Style/Intensity									
		Hematite Fracture Controlled Strong									
		Comment									
		Strong hematite along fractures									
137.10	148.80	FG Mafic to Int Fragmental									
		Upper Contact: Conformable Broken									
		Colour: Green-grey Purple									
		Unit is medium to dark grey-green and purple where strongly hematized; hematization is stronger in upper half of unit, generally occurring along fractures (3-5%). Fragmental is coarse with <10% fine silty to occasionally sandy matrix. Some cherty siltstone and grey chert near lower contact. Chert and tuffaceous bed from 147.6-147.9m at 45° to CA. Gouge (5cm) in middle of sheared and broken section from 141.5-141.8m; difficult to assess orientation of gouge but could be at 45° to CA. Minor thin carbonate stringers. Silty section from 145.4-146.1m.									
148.80	156.90	SLST Siltstone/Mudstone									
		Upper Contact: Conformable Broken									
		Colour: Purple Green									
		Unit is purple (weakly to moderately hematized) changing to light grey-green at 154.6m. Unit is locally blocky but fairly competent throughout; one broken section from 152.6-153m. Fine silty laminations at 154.5 at 45° to CA.									
		Alteration Maj:									
		148.80 - 156.90									
		Type/Style/Intensity									
		Silicification Local Weak									
		Hematite Pervasive Moderate									
		Comment									
		Locally siliceous/cherty siltstone									
		Weak to moderate where purple									

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156.90	202.40	FW Mafic to Int Flow Mat/Int Flow Upper Contact: Conformable Sharp Colour: Green-grey Medium grey-green with common orange feldspar phenocrysts. Fragments are siliceous (hard), with weak to moderate chlorite along local fractures seen in broken sections (171.3-171.7m, 172.5-172.8m, 175.9-177.7m, 194.5-195.8m). Unit is fairly competent, massive, and locally fragmented. Local fine tuffaceous sandstone beds (185.6-186.1m, 186.9-187.4m) with bedding at 46° to CA. Upper contact is at 45°. Carbonate stringers are fairly common throughout. Minor trace pyrite.									
202.40	222.80	T Felsic to Int Lithic Tuff Felsic/Int Tuff Upper Contact: Conformable Broken Colour: Green-grey Tuff is light to medium grey-green, and contains 60% variolitic lapilli sections and 40% coarse fragments. Most fragments are feldspar +/- qtz phryic. Occasional pyrite-bearing fragments. Fragments are sub-angular to round and densely packed in lapillistone sections, with 10-15% felsic to intermediate matrix. Unit is generally non-magnetic throughout, however minor fragments are very weakly magnetic. Unit is competent with local broken sections, mostly in lower half of unit. Upper contact is broken. Lower contact is parallel to bedding at 38° to CA.									
222.80	228.00	DIA Diabase Sill Diabase Sill Upper Contact: Intrusive Chilled Colour: Dark-grey Sill is dark grey green, fine grained, and chilled at both contacts. Unit is fractured throughout with calcite									

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		and orange-stained silica in-fill. Weak to moderate chlorite alteration, stronger along fractured sections (223-224m, 225.8-226.7m). Sill is moderately to strongly magnetic. Contacts at 35° to CA. Minor disseminate py near lower contact.									
		Alteration Maj:									
		222.80 - 228.00									
		Type/Style/Intensity									
		Chlorite Fracture Controlled Strong									
		Comment									
		Local strong in broken sections									
228.00	231.04	T Felsic to Int Lithic Tuff									
		Upper Contact: Intrusive Chilled									
		Colour: Green-grey									
		Tuff is light to medium grey-green, and contains 60% variolithic lapilli sections and 40% coarse fragments. Most fragments are feldspar +/- qtz phyrlic. Occasional pyrite-bearing fragments. Fragments are sub-angular to round and densely packed in lapillistone sections, with 10-15% felsic to intermediate matrix. Unit is generally non-magnetic throughout, however minor fragments are very weakly magnetic. Unit is competent with local broken sections, mostly in lower half of unit. Upper contact is broken. Lower contact is parallel to bedding at 38° to CA.									
		FELSIC/INT TUFF									
231.04	308.40	BSLT Amygdaloidal Basalt (hem)									
		Upper Contact: Conformable									
		Colour: Purple Dark-grey									
		Dark purple-grey hematized basalt is locally dark grey-green (20%; at lower portion of unit) and is difficult to see the dark grey calcite-filled amygdules. Basalt is pillowed, commonly with selvages marked by lighter green calcite-chlorite and epidote alteration. In darker green basalt (292.0-308.4m) there is no hematization, however there is strong magnetite throughout. Entire basalt unit is fairly competent and locally blocky. Chloritization is moderately pervasive throughout and stronger along local fractures. Carbonatization is strongly pervasive throughout and amygdules are mostly calcite-filled; locally silica-filled (258m). Minor interpillow jasper at 276.3m at 40° to CA (1 cm thick). Dark grey-green flow 264.65-269.1m. Cherty magnetite-rich sediment at 35° to CA at 298.4-298.53m. Strongly sheared section; broken with abundant carbonate at 10° to CA.									
		Amyg Basalt									
		Alteration Maj:									
		231.04 - 308.40									
		Type/Style/Intensity									
		Chlorite Fracture Controlled Weak to									
		Comment									

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From (m)	To (m)	Lithology	Sample #	From	To	Length	Cu (%)	Pb (%)	Zn (%)	Ba (%)	Ag (ppm)
		Moderate Hematite Pervasive to Strong									
308.40	356.10	FW Mafic-inter, massive flow Upper Contact: Intrusive Colour: Green-grey Mafic tointermediate massive amygdaloidal flow. Unit is medium to dark grey green, fine grained with common orange-stained feldspars (2-3 mm) and moderately to strongly magnetic. Locally quartz-carbonate amygdaloidal with pinkish-orange rims to host rock as if weakly hematized glass. Frequent carbonate-quartz-epidote fracture veining. Unit is fairly competent throughout, with local fracturing where chloritized (326.0-326.8 m). Fractured siliceous zenolith/blocks at 327.8-328.2 m. Upper contact is epidote-quartz-carbonate veined and broken core (shear). Note aphyric, non-magnetic diabase dyke with chilled contacts parallel to C.A. at 349 m (dyke likely <20 cm wide) Alteration Maj: 308.40 - 356.10				Mafic-Inter flow Sharp Type/Style/Intensity Carbonate Pervasive Moderate Comment					
356.10	428.35	BSLT Amygdaloidal Basalt flows Upper Contact: Tectonic Colour: Green-grey Amygdaloidal mafic flows. Unit is locally brecciated, moderately magnetic, with up to 30% carbote +/- quartz amygdalules and may be a flow top zone to either overlying unit or underlying unit. Upper contact is broken in brittle shearing over 1 m section but presumed to be conformable (not significant fault). Note non-magnetic aphyric diabase dyke with contacts almost parallel to C.A. at 361.1 to 362.2 m. Note broken core and brittle shearing from 359 to 361.5 m and 364.3 to 366 m (presumable sub-vertical brittle faults with minor diabase dykes occuring in sections. Unit is pervasively, moderatley carbonatized. Pillowed with good pillow selvages below 382 m. Note local hematized basiat section with jasper blocks (disrupted beds?) from 426.2 to 428.35 m. Alteration Maj: 356.10 - 367.40				Mafic amyg flows Broken Type/Style/Intensity Carbonate Pervasive Moderate Comment					



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From (m)	To (m)	Lithology	Sample #	From	To	Length	Cu (%)	Pb (%)	Zn (%)	Ba (%)	Ag (ppm)
428.35	442.40	AND Andesite flow, f Upper Contact: Conformable Sharp Colour: Dark-green Grey Massive to brecciated andesite flow. Unity is dard-grey to green with <15% white feldspars (<2 mm), weakly magnetic. Unit is transitional into underlying unit and is breccia (lapilli of andesitye) and debris from 437 to 442.4 m. Upper contact is sharp and conformable at 60 degrees to C.A. No alteration or mineralization.									
442.40	531.20	DBX Andesite Debris block breccia Upper Contact: Conformable Gradational Colour: Green-grey Reddish-brown Fledspar-phyric andesite blocky debris flow, locally bedded. Unit is locally bedded as 1 cm beds of fine sand and silt from 442.4 to 446.5. Bedding at 60 degrees to C.A. at 444.5 m. Unit hosts rare jasper clasts from 442.4 to 446.5 m, <0.5 cm diameter. Trace fine grained leucoxene (white, <0.5 mm to 446.5 m). 10 cm shear at 50 degrees to C.A. at 446.5 m. Upper contact is gradational with brecciated andesite (+/- debris) above. Below 446.5 m unit is almost entirely a blocky, clast supported with vitric to granular andesite blocks (75%, 10 to 30 cm, a few <5 cm diameter, typically angular, feldspar-phyric (<15%, <2 mm), locally quartz and or carbonate amygdaloidal (<3 mm, < 10%)). Matrix is variably hematized (locally purple) fine silt to almost chert and accounts for approximately 25% of unit by volume. Some weakly silicified zones where blocks become bright orange-pink and matrix is bleached pale grey with trace to 1% pyrite (e.g., 478 to 483 m, as well as 512 to 515 m). Unit is moderately magnetic from 446.5 m to ~512.0 m. A very distictive unit!	87364	512.00	513.00	1.00	-	-	-	-	1
			87365	513.00	514.00	1.00	-	-	-	-	1
			87366	514.00	515.00	1.00	-	-	-	-	1
		Texture Maj: 444.50 - 444.90 Type: Locally Bedded Comment: bedding at 60 degrees to C.A.									

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531.20	656.90	DBX Felsic to andesitic debris									
		Fel to Int DBX	87376	531.20	532.00	0.80	-	-	-	-	1
		Upper Contact: Conformable Gradational	87377	532.00	533.00	1.00	-	-	-	-	1
		Colour: Grey Green-grey	87378	533.00	534.00	1.00	-	-	-	-	1
		Felsic to andesitic blocky debris. Unit is possibly a weakly silicified and bleached version of the overlying andesite blocky debris unit, but blocks and lapilli appear more felsic (check whole rocks - sampled only clasts with no matrix). Unit's upper portion, 531.2 to 550 m is finer lapilli-stone with rare jasper clasts and rare flow-banded rhyolite(?) clasts. Bedding at 544 m is 65 degrees to C.A. Unit is non-magnetic and looks more felsic (clasts are paler grey) than overlying andesite blocky debris unit; however, the clasts still host pinkish to orange feldspar phenos, no quartz eyes and aside from lighter colour (possibly an alteration affect) look much like the andesite above. The clasts in this unit are; however, no longer amygdaloidal as they were in the overlying unit, though some seen between 610 and 614 m (filled by quartz and pyrite plus or minus calcite). Coarser debris sections have similar texture as overlying unit with angular block-sized clasts making up 75% of the rock within a fine grey silty matrix that constitutes approximately 25% of the unit. Rock is certainly altered with locally chloritized (dark green) or silicified (pale grey) matrix and silicified/bleached clasts. Unit also hosts anomalous fine grained disseminated pyrite as well as coarser grained pyrite clasts (broken stringers) and variably pyritized clasts of almost massive fine grained pyrite (replacement as opposed to ore clasts). Selected better mineralized sections containing >5% pyrite for assay from 531.2 to 541.0 m, 591.0 to 599.0 m, and 616 to 656.9 m. Unit hosts 1-3% pyrite overall; but hosts 10% to 15% in more altered section from 616 to 656.9 m, where matrix is moderately to strongly chloritized and clasts are partially replaced by fine grained pyrite (cores and more often as bleached/ silicified rims). Section from 616 to 656.9 m hosts IMPRESSIVE VMS ALTERATION with chloritized interblock matrix and bleached and pyritized blocks and lapilli). Upper contact is gradational over 0.5 m but may be sharp and overprinted by alteration. Suspect unit is transitional debris from andesite at top to more felsic with depth, but may all be felsic with alteration causing bleaching as depth increases. Unit from 616 m to 656.9 m is definitely felsic with abundant flow-banded rhyolite clasts. Unit has NO quartz eyes anywhere.	87379	534.00	535.00	1.00	-	-	-	-	1
			87381	535.00	536.00	1.00	-	-	-	-	1
			87382	536.00	537.00	1.00	-	-	-	-	1
			87383	537.00	538.00	1.00	-	-	-	-	1
			87384	538.00	539.00	1.00	-	-	-	-	1
			87385	539.00	540.00	1.00	-	-	-	-	1
			87386	540.00	541.00	1.00	-	-	-	-	1
			87367	591.00	592.00	1.00	-	-	-	-	1
			87368	592.00	593.00	1.00	-	-	-	-	1
			87369	593.00	594.00	1.00	-	-	-	-	1
			87371	594.00	595.00	1.00	-	-	-	-	1
			87372	595.00	596.00	1.00	-	-	-	-	1
			87373	596.00	597.00	1.00	-	-	-	-	1
			87374	597.00	598.00	1.00	-	-	-	-	1
			87375	598.00	599.00	1.00	-	-	-	-	1
			87387	615.00	616.00	1.00	-	-	-	-	1
			87388	616.00	617.00	1.00	-	-	-	-	1
		Alteration Maj: Type/Style/Intensity Comment	87389	617.00	618.00	1.00	-	-	-	-	1
		531.20 - 616.00 Chlorite Interstitial Weak	87391	618.00	619.00	1.00	-	-	-	-	1
		Silicification Pervasive Weak	87392	619.00	620.00	1.00	-	-	-	-	1
		616.00 - 656.90 Silicification Pervasive Weak w associated 10-15% pyrite	87393	620.00	621.00	1.00	-	-	-	-	1
		Chlorite Matrix Moderate w associated 10-15% pyrite	87394	621.00	622.00	1.00	-	-	-	-	1
			87395	622.00	623.00	1.00	-	-	-	-	1
			87396	623.00	624.00	1.00	-	-	-	-	1
		Mineralization Maj. : Type/Style/%Mineral Comment	87397	624.00	625.00	1.00	-	-	-	-	1
		531.20 - 616.00 COPPER	87398	625.00	626.00	1.00	-	-	-	-	1
		LEAD	87399	626.00	627.00	1.00	-	-	-	-	1
		ZINC	70501	627.00	628.00	1.00	-	-	-	-	1
		3% PYRITE	70502	628.00	629.00	1.00	-	-	-	-	1
		616.00 - 654.00 COPPER	70503	629.00	630.00	1.00	-	-	-	-	1
		LEAD	70504	630.00	631.00	1.00	-	-	-	-	1
		ZINC	70505	631.00	632.00	1.00	-	-	-	-	1
		12% PYRITE fg pyrite replacing clasts (cores and rims) and some in matrix	70506	632.00	633.00	1.00	-	-	-	-	1
		Structure Maj.: Type/Angle to Core Axis Comment	70507	633.00	634.00	1.00	-	-	-	-	1
		544.00 - 544.50 Bedded 65 laminated to bedded section 0.6 m wide	70508	634.00	635.00	1.00	-	-	-	-	1
			70509	635.00	636.00	1.00	-	-	-	-	1
			70511	636.00	637.00	1.00	-	-	-	-	1
			70512	637.00	638.00	1.00	-	-	-	-	1

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Project: **TITAN**

Project Number:

<i>From (m)</i>	<i>To (m)</i>	<i>Lithology</i>	<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Cu (%)</i>	<i>Pb (%)</i>	<i>Zn (%)</i>	<i>Ba (%)</i>	<i>Ag (ppm)</i>
			70513	638.00	639.00	1.00	-	-	-	-	1
			70514	639.00	640.00	1.00	-	-	-	-	1
			70515	640.00	641.00	1.00	-	-	-	-	1
			70516	641.00	642.00	1.00	-	-	-	-	1
			70517	642.00	643.00	1.00	-	-	-	-	1
			70518	643.00	644.00	1.00	-	-	-	-	1
			70519	644.00	645.00	1.00	-	-	-	-	1
			70521	645.00	646.00	1.00	-	-	-	-	1
			70522	646.00	647.00	1.00	-	-	-	-	1
			70523	647.00	648.00	1.00	-	-	-	-	1
			70524	648.00	649.00	1.00	-	-	-	-	1
			70525	649.00	650.00	1.00	-	-	-	-	1
			70526	650.00	651.00	1.00	-	-	-	-	1
			70527	651.00	652.00	1.00	-	-	-	-	1
			70528	652.00	653.00	1.00	-	-	-	-	1
			70529	653.00	654.00	1.00	-	-	-	-	1
			70531	654.00	655.00	1.00	-	-	-	-	1
			70532	655.00	656.00	1.00	-	-	-	-	1
			70533	656.00	656.90	0.90	-	-	-	-	1

656.90 763.50 **BSLT Basalt-intermediate flows Felsic flow**

Upper Contact: Conformable Gradational

Colour: Green-grey Pale-green

Massive and locally brecciated aphyric basalt (possibly intermediate) flows and minor breccia. Unit has breccia sections from 656.9 to 669 m. Upper contact is gradational with breccia from overlying unit, but also marked by change in alteration and mineralization style, as rocks are weakly pervasively sericitized with chlorite stockworks containing semi-massive fine grained to buckshot pyrite from 656.9 to 705 m. Unit's upper section to ~705 m is light pale green-grey, hard, non-magnetic but gradually changes to darker green colour with virtually no silicification below 705 m. Unit cut by bleached diabase sills/dykes from 662.3 to 663.3 and 664.7 to 665.2 m, weakly magnetic with rare silica-filled amygdulites. Unit is still not magnetic below 705 m to 763.5 m and tends to be more massive with amygdaloidal sections (carbonate) and locally feldspar-phyric pink to white up to 2 mm and up to 10% locally. Shear (5 cm wide with quartz-carbonate veins) at 15 degrees to C.A. at 742.4 m.

Alteration Maj:	Type/Style/Intensity	Comment
656.90 - 705.00	Silicification Pervasive Weak	
	Sericite Pervasive Weak	
	Chlorite Stockwork Weak	<1% chlorite stwk (<5 cm) w semi-massive fg py

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		Mineralization Maj. : 656.90 - 705.00	Type/Style/%Mineral COPPER LEAD ZINC 1% PYRITE								
						semi-massive fg pyrite in chlor stockworks					
763.50	812.40	BX basalt breccia/ debris breccia Upper Contact: Conformable Gradational Colour: Green Basalt breccia and debris. Looks somewhat polyolithic due to variable colour (pale grey to dark green) and textures of mafic lapilli and block-sized fragments which into massive-aphyric, bleached scoariaceous to amygdaloidal, feldspar-phyric, and variably altered). Matrix is typically darker green and weakly chloritized mafic granular epiclastic/hyaloclastic material. Unit is non-magnetic to 816.5 m and is weakly to moderately magnetic from 816.5 m to 812.4 m. Upper contact is conformable and likely irregular with a <1 cm shear at 60 degrees to C.A.				basalt dbx/b					
		Alteration Maj: 763.50 - 817.92	Type/Style/Intensity Chlorite Matrix Weak								
812.40	861.00	FW Mafic-Intermediate Flows, loc hem/jas Upper Contact: Conformable Sharp Colour: Green Green-grey Massive to locally brecciated and locally amygdaloidal mafic to intermediate flows. Unit is green-grey to dark green, aphyric with local <10 cm wide sections of jasper/hematite (including veins). Unit is variably weakly magnetic and upper contact is sharp (possibly irregular at 65 degrees to C.A. Hematized section from 857.1 to 859.9 m (possibly a dyke). Unit's lower contact lost in fault (broken core and gouge between 860.7 to 861.0 m. Minor calcite in fractures and amygdules (<<1% amygdules).				mafic-Int flows					
		Structure Maj.: 860.70 - 861.00	Type/Angle to Core Axis Fault			broken core & gouge					

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861.00	865.60	DY Intermediate to felsic dyke-Maroon dy Int-fels dyke Upper Contact: Tectonic Fault Colour: Maroon Maroon coloured intermediate to felsic dyke. Unit is identical to that seen at the bottom of hole H-2105 (1771'-1970'/ 539.8 to 600.5 m). Unit is pervasively hematized and glassy with local sections where feldspar phenocrysts are visible as <5%, <2 mm pinkish crystals. Upper contact is lost in fault gouge and suspect dyke intruded into a brittle-ductile fault zone aligned 45 to 50 degrees to C.A. Lower contact appears chilled at 45 degrees to C.A. Unit part of complex fault zone from 861.0 to 892.4 m. CLASTS and CRYSTS: pink feldspar phenocrysts, <5%, <2 mm									
865.60	867.95	BSLT Strongly foliated basalt/ strain zone basalt shear zon Upper Contact: Intrusive Chilled Colour: Green-grey Strained basalt (strain zone). Unit is part of ductile-brittle shear zone from 857.1 m to 867.95 m. Rock composed of highly foliated amygdaloidal medium to light green basalt. Foliation is at 50 degrees to C.A. throughout and is cut by maroon intermediate to felsic dyke from 867.75 to 867.95 m. Unit part of complex fault zone from 861.0 to 892.4 m.									
Structure Maj.:		Type/Angle to Core Axis	Comment								
865.60 - 867.95		Foliated 50	highly folited strain zone (fault)								
867.95	874.90	BSLT Amygdaloidal basalt flows basalt amy flow Upper Contact: Tectonic Shear Colour: Dark-green Green Amygdaloidal basalt flows. Unit is dark gree, and locally tectonized and likely a lithon within a complex fault zone that started at 861.0 m. Unit is good flow breccia below 871.0 m and locally weakly folitaed with multiple shears 1 cm wide shears including/ affecting quartz-carbonate veins. Shear 40 degrees to C.A. at 871.2 m. Shaer at 65 degrees to C.A. at 872.8 m. Upper contact is sheared along chilled dyke at 75 degrees to C.A. Unit part of complex fault zone from 861.0 to 892.4 m.									

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From (m)	To (m)	Lithology	Sample #	From	To	Length	Cu (%)	Pb (%)	Zn (%)	Ba (%)	Ag (ppm)
874.90	883.10	UNK <i>Intermediate to felsic maroon dyke/flo</i> Int-fels dyke? Upper Contact: Tectonic Sharp Colour: Maroon Maroon coloured intermediate to felsic dyke or possibly flow? Similar to 861 to 865.6 m but less brilliant colour and perhaps more fractured/ brecciated (tectonic?). Unit is moderately fractured with local shears and has tectonized section of basalt from 881.9 to 882.6 m and is itself likely a lithin within the same complex fault zone. Shear at 50 degrees to C.A. at 879.8 m. Unit is blocky and broken below 880.5 m. Upper contact is strained, sharp at 40 degrees to C.A. Unit part of complex fault zone from 861.0 to 892.4 m.									
883.10	890.50	BSLT <i>Amygdaloidal basalt, local bx & jaspe</i> basalt flows Upper Contact: Tectonic Shear Colour: Pale-green Dark-green Amygdaloidal basalt flows with local jasper. Unit is light green to dark green with lighter green sections being foliated to sheared. Darker sections are less deformed and still weakly magnetic. Shearing at 20 degrees to C.A. at 884.5 m. Upper contact is sheared at 48 degrees to C.A. rare calcite amygdules, feldspar-phyric sections with up to 15% feldspars < 2mm. Unit part of complex fault zone from 861.0 to 892.4 m. Alteration Maj: 883.10 - 890.50 Type/Style/Intensity Carbonate Pervasive Weak Comment									

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From (m)	To (m)	Lithology		Sample #	From	To	Length	Cu (%)	Pb (%)	Zn (%)	Ba (%)	Ag (ppm)
890.50	892.40	PQT	prominent quartz tuffs				Qtz crystal tuff					
		Upper Contact: Tectonic Shear										
		Colour: Pale-green Green-grey										
		Prominent quartz rhyolitic tuff (sheared and broken) (LH). Sheared and broken, non-magnetic, pale to medium sericitic green to grey tuff with tectonic blocks ranging from weakly quartz-phyric rhyolite (quartz, <3 mm, <5%) to more strongly sericitized quartz-rich sections (crystal tuff) with quartz up to 4 mm, <15%. Unit is moderately sericitized. Upper contact is sheared and sharp at 38 degrees to C.A. Unit part of complex fault zone from 861.0 to 892.4 m.										
		CLASTS and CRYSTS: Quartz crystals, <4 mm, <10%										
		Alteration Maj:	Type/Style/Intensity	Comment								
		890.50 - 892.40	Sericite Pervasive Moderate to Strong									
892.40	904.15	DIA	Diabase, fresh, magnetic				diabase dyke					
		Upper Contact: Tectonic Shear										
		Colour: Green-grey										
		Massive fine-grained diabase. Moderately magnetic, aphyric, fresh with weak pervasive carbonatization. Upper contact sharp and sheared in 10 cm wide shear zone at 50 degrees to C.A. Lower contact chilled and sharp at 35 degrees to C.A. Complex fault zone appears to have ended at dyke's upper contact at 892.4 m.										
904.15	918.00	PQT	prominent quartz tuffs				Qtz crystal tuff					
		Upper Contact: Intrusive Chilled										
		Colour: Pale-green Green-grey										
		Quartz-phyric rhyolitic crystal tuff (Prominent Quartz unit - Lundberg Hill Formation?). Unit is relatively massive (not tectonized) and green with 10% to 15% quartz crystals, <5 mm, <15%. Unit is crystal to lapilli tuff with numerous lapilli of variable colour (green, grey, orange). Unit is weakly magnetic throughout. Pervasive weak sericitization. Upper contact is sharp at 45 degrees to C.A. against chilled diabase. Unit cut by few narrow diabase dykes up to 10 cm wide at 907.8 and 913 m. Weak chloritization on fractures.										
		CLASTS and CRYSTS: Quartz crystals, <5 mm, <15%										
		Alteration Maj:	Type/Style/Intensity	Comment								
		904.15 - 918.00	Chlorite Fracture Controlled Weak									

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		Sericite Pervasive Weak to Moderate									
918.00	926.50	BSLT <i>Basalt flows</i> basalt flows <i>Upper Contact:</i> Conformable Sharp <i>Colour:</i> Dark-green Basalt flows. Dark green, moderately magnetic, fractured with fine (<1 mm, <5%) dark green specks (chloritized pyroxenes?). Unit cut by chilled diabase from 918.8 to 919.2 m (irregular contacts). Epidote and carbonate on fractures. Minor magnetite seams, veins? (<0.4 cm). Upper contact is sharp, irregular and conformable. Unit becomes very weakly magnetic below fine, siliceous diabase dyke seen from 920.7 to 921.3m; dyke is strongly magnetic.									
926.50	928.80	PQT <i>prominent quartz tuffs</i> Qtz crystal tuff <i>Upper Contact:</i> Conformable Broken <i>Colour:</i> Green Orange Quartz-phyric rhyolitic crystal tuff (Prominent Quartz unit - Lundberg Hill Formation?). Unit is relatively massive (not tectonized) and green with 10% to 15% quartz crystals, <5 mm. Unit is crystal to lapilli tuff with numerous lapilli of variable colour (green, grey, orange). Unit is weakly magnetic to non-magnetic throughout. Pervasive weak sericitization and chloritization. Upper contact is sharp and brecciated at 30° to CA. Sheared lower contact at <10° to CA.									
928.80	931.00	BSLT <i>Basalt flows</i> BASALT FLOWS									

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<i>From</i> (m)	<i>To</i> (m)	<i>Lithology</i>		<i>Sample #</i>	<i>From</i>	<i>To</i>	<i>Length</i>	<i>Cu</i> (%)	<i>Pb</i> (%)	<i>Zn</i> (%)	<i>Ba</i> (%)	<i>Ag</i> (ppm)
		Upper Contact:	Conformable	Shear								
		Colour:	Green-grey									
		Basalt flows. Dark green, moderately magnetic, fractured with fine (<1 mm, <5%) dark green specks (chloritized pyroxenes?). Epidote and carbonate on fractures. Upper contact is sharp and sheared at 10° to CA. Unit is weakly to non-magnetic.										
931.00	932.35	PQT	prominent quartz tuffs	Qtz crystal tuff								
		Upper Contact:	Conformable	Sharp								
		Colour:	Green	Orange								
		Quartz-phyric rhyolitic crystal tuff (Prominent Quartz unit - Lundberg Hill Formation?). Unit is relatively massive (not tectonized) and green with 10% to 15% quartz crystals, <5 mm. Unit is crystal to lapilli tuff with numerous lapilli of variable colour (green, grey, orange). Unit is weakly magnetic to non-magnetic throughout. Pervasive weak sericitization and chloritization. Upper contact is sharp at 20° to CA.										
932.35	946.00	BSLT	Basalt flows	BASALT FLOWS								
		Upper Contact:	Conformable	Sharp								
		Colour:	Green-grey									
		Basalt flows. Grey-green to occ medium grey-green, moderately magnetic to locally non-magnetic, fractured with fine (<1 mm, <5%) dark green specks (chloritized pyroxenes?). Occasional chlorite stringers where more chloritized. Carbonate on fractures. Upper contact is sharp and sheared at 25° to CA. Local broken and blocky sections from 939.3-940.7m.										

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From (m)	To (m)	Lithology	Sample #	From	To	Length	Cu (%)	Pb (%)	Zn (%)	Ba (%)	Ag (ppm)
946.00	1023.50	PQT prominent quartz tuffs Qtz crystal tuff Upper Contact: Conformable Sharp Colour: Green Orange Quartz-phyric rhyolitic crystal tuff (Prominent Quartz unit - Lundberg Hill Formation?). Unit is relatively massive (not tectonized) and green with orange blotches, with 10% to 15% quartz crystals, <5 mm, <15%. Unit is crystal to lapilli tuff with numerous lapilli of variable colour (green, grey, orange). Unit is weakly magnetic throughout. Pervasive weak sericitization. Upper contact is sharp at 20° to CA. Unit cut by few narrow diabase dykes; 947.4-947.5m at 60° to CA, 948.05-948.1m at 70° to CA, 948.67-948.74m at 65° to CA, 952.46-952.62m at 20° (upper) and 60° (lower) to CA. Mafic fragments/clasts at 962.9-962.96m, 965.9-966.0m. Further downhole the Prominent Quartz unit becomes greener and less orange, with an increase in sericite/chlorite alteration (1008m). At 996m weak foliation of unit at 50° to CA. At 1008m the Prominent quartz rhyolitic tuff unit becomes less orange color and more greenish; appears to be more sericitized/chloritized, with local foliated/strained sections. At 987.8-988.5 Prominent Quartz unit is gouges/sheared at 20° to CA.									
Minor Interval: 993.25 994.62 BSLT <i>Basalt flow or dyke?</i> Basalt as seen uphole with black chlorite flecks. Unit is non-magnetic.											
Minor Interval: 996.15 997.30 BSLT <i>Basalt flow or dyke?</i> Mafic intrusive looks like basalt flows above, but are moderately magnetic and have somewhat chilled upper and lower (moderately chilled looking) contacts. Upper contact @ 50° to CA, and lower is @ 20° to CA.											
Minor Interval: 1003.20 1006.40 BSLT <i>Basalt flow or dyke?</i> Mafic is same as that seen uphole, but is locally amygdaloidal (minor amygdules up to 1 cm). Upper contact is at 25° to CA and lower contact is at 45° to CA.											
Minor Interval: 1013.40 1014.30 BSLT <i>Basalt flow or block</i> Similar to mafic seen uphole but does not look intrusive. Appears like a large exotic block within the Prominent quartz rhyolite tuff unit.											
1023.50	1066.50	T Felsic Tuff, quartz phyric Felsic Tuff Upper Contact: Conformable Gradational Colour: Green-grey Yellow-green Felsic tuff is yellowish-green to grey-green with local orange fragments, similar to Prominent Qtz unit above, but much less quartz-phyric. Consists of minor fine tuffaceous sections, and common coarser sections, with fragments/clasts up to 8cm. Minor local jasper flecks at 1044.1 and 1061.3m. Unit is non-magnetic and weakly foliated locally. Upper portion of unit has several 10-30cm zones of strained/sheared mafic, chloritized and foliated at 35-45° to CA; 1025.2-1025.5m, 1025.8-1025.9m, 1026.05-1026.15m, 1026.42-1026.6m. Tuffaceous bedding at 1040.9m @ 46° to CA.									

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		Alteration Maj: 1032.00 - 1035.50 Type/Style/Intensity Sericite Pervasive Weak to Moderate Comment Zone of weak to moderate sericite; yellow-green.									
1066.50	1079.20	DAC Dacite Flow/tuff Upper Contact: Conformable Gradational Colour: Maroon Grey Felsic flow is maroon-grey dacitic, and pervasively hematized and weakly magnetic throughout. Dacite is quartz-phyric (contains 2-3% , 1-2mm in size). Unit is competent and siliceous, and contains local quartz-carbonate stringers. Locally the unit appears fine-grained tuffaceous, with faint bedding or weak foliation at 66° to CA. Upper contact is gradational at 65° to CA.									
		Dacite Flow Alteration Maj: 1066.50 - 1078.00 Type/Style/Intensity Hematite Pervasive Weak to Moderate Comment									
1079.20	1122.40	T Felsic Tuff, quartz phyric Upper Contact: Conformable Gradational Colour: Green-grey Felsic tuff is similar to the dacitic tuff from 1023.5-1066.5m. Unit is grey-green with local minor orangy fragments, and is quartz-phyric (2-3%, 1-2mm in size). Unit is competent throughout, has a weak pervasive sericitization, which becomes weak to moderate below 1099m. Upper contact is gradational over 30cm. Orangy fragments are minor and up to 5 cm in diameter. Weak tuffaceous bedding or foliation seen locally at 60-75° to CA. Jasper band, irregular and at low CA (15-20° to CA), at 1079.52-1079.53m. Siliceous section similar to Prominent Quartz Unit from 1100.4-1100.9m. Mafic dyke seen from 1106.6-1107.5m, with chilled margins at 45° to CA.	70534	1121.40	1122.40	1.00	-	-	-	-	1
		FELSIC TUFF									

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1122.40	1129.00	DBX <i>Sedimentary Debris Flow, silt/sand</i> SED DEBRIS <i>Upper Contact:</i> Conformable Sharp <i>Colour:</i> Grey Green-grey Sedimentary debris flow consists of light to medium grey-green sediment, comprising ~60% siltstone blocks and layers, 20% coarse sandstone (fine conglomerate) and 20% felsic fragments (dacite/rhyolite). Bedding is at 64-68° to CA. Minor jasper fragemnts (1-2mm) in coarse sandstone/conglomerate sections. Siltstone and sandstone contains 1-2% fine sulphide; minor galena speck seen/could be specular hematite.	70535	1122.40	1123.40	1.00	-	-	-	-	1
			70536	1123.40	1124.40	1.00	-	-	-	-	1
			70537	1124.40	1125.40	1.00	-	-	-	-	1
			70538	1125.40	1126.40	1.00	-	-	-	-	1
			70539	1126.40	1127.40	1.00	-	-	-	-	1
			70541	1127.40	1128.40	1.00	-	-	-	-	1
			70542	1128.40	1129.40	1.00	-	-	-	-	1
1129.00	1141.00	DBX <i>Sedimentary Debris Flow, basalt rich</i> SED DBX-BASALTIC <i>Upper Contact:</i> Conformable Gradational <i>Colour:</i> Maroon Green-grey Sedimentary debris flow is similar to above unit (1122.4-1129.0m) however this unit contains 30% basalt clasts/fragments. Unit is medium grey-green with hematized basalt fragments up to 20 cm in diameter. Many of the basaltic fragments are purplish in color, and some are dark green; all are moderately to strongly magnetic, and altered amygdaloidal. Other fragments/clasts consist of siltstone, and lesser felsic volcanics (dacite-rhyolite). Local minor jasper fragments are seen in the coarse sandstone/conglomerate sections. Bedding is at 55-62° to CA. Felsic tuff from 1139.3-1141.0m, possibly quartz-phyric, with moderate pervasive sericitization, and black chlorite stringers along foliation or bedding at 50-60° to CA. Minor sulphide disseminations (<1%).	70543	1129.40	1130.40	1.00	-	-	-	-	1
			70544	1130.40	1131.40	1.00	-	-	-	-	1
			70545	1131.40	1132.40	1.00	-	-	-	-	1
			70546	1132.40	1133.40	1.00	-	-	-	-	1
			70547	1133.40	1134.40	1.00	-	-	-	-	1
			70548	1134.40	1135.40	1.00	-	-	-	-	1
			70549	1135.40	1136.40	1.00	-	-	-	-	1
			70551	1136.40	1137.40	1.00	-	-	-	-	1
			70552	1137.40	1138.40	1.00	-	-	-	-	1
			70553	1138.40	1139.40	1.00	-	-	-	-	1
			70554	1139.40	1140.40	1.00	-	-	-	-	1
			70555	1140.40	1141.40	1.00	-	-	-	-	1
1141.00	1169.45	FG <i>Mafic Fragmental, BASALT</i> Basaltic Frag <i>Upper Contact:</i> Conformable Gradational <i>Colour:</i> Green-grey Purple Basaltic fragmental unit is grey-green with occasional purplish (hematized) fragments, mostly above 1154m. Unit is basaltic, and fragments are up to 25 cm in diameter, but generally between 2 and 10 cm.	70556	1141.40	1142.40	1.00	-	-	-	-	1

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In general, the variably amygdaloidal basalt fragments are purplish-green to dark grey-green (70-80%) in a lighter grey-green basaltic matrix. Unit is strongly hemitized locally; local strong chloritization, local minor strong epidotization. Overall, there is about 3-5% quartz-calcite amugdules ranging in size from 2 to 10 mm in diameter. Local epidotized sections, rendering the core blocky and broken (1142.8-1143.2m, 1146.8-1147.3m).

1169.45 1170.80 **FW Felsic Flow - Dacite Dacite Flow**

Upper Contact: Conformable Sharp

Colour: Buff

Buff datite flow is siliceous and altered-feldspar-phyric (2% up to 1mm). A 10 cm section of coarse sediment is found at the lower contact, and a few pieces of the sediment is found as xenoliths within the base(?) of the dacite flow. Upper contact is at 75° to CA, and lower conact with sediment is at 60° to CA.

1170.80 1189.20 **FG Mafic Fragmental, BASALT Basaltic Frag**

Upper Contact: Conformable Sharp

Colour: Green-grey

Basaltic fragmental unit is grey-green with basaltic fragments (70-80%) being darker than the lighter grey-green basaltic matrix. Fragments are up to 15 cm in diameter, but generally between 2 and 10 cm. Unit is weakly chloritized, and has local moderate epidotization. Overall, there is about 3-5% quartz-calcite amugdules ranging in size from 2 to 10 mm in diameter. Unit is moderately to strongly magnetic.

LITHOLOGY REPORT

Hole NumberH-09-3413

Project:TITAN

Project Number:

From (m)	To (m)	Lithology			Sample #	From	To	Length	Cu (%)	Pb (%)	Zn (%)	Ba (%)	Ag (ppm)
1189.20	1193.20	DIA	Diabase Dyke	Diabase dyke									
		Upper Contact: Intrusive Sharp											
		Colour: Dark-green Dark-grey											
		Dark grey-green diabase dyke is massive with 3-5% fine black chloritized phenocrysts (1-2 mm in size). Unit is competent, and upper contact is sharp at 30° to CA. Lower contact is broken and blocky. Weak carbonatization throughout.											
1193.20	1232.00	FG	Mafic Fragmental, BASALT	Basaltic Frag									
		Upper Contact: Conformable Broken											
		Colour: Green-grey											
		Basaltic fragmental unit is grey-green with basaltic fragments (70-80%) being darker than the lighter grey-green basaltic matrix. Fragments are up to 15 cm in diameter, but generally between 2 and 10 cm. Unit is weakly chloritized, and has local moderate silicification and epidotization. Overall, there is about 2-3% quartz-calcite amugdules ranging in size from 2 to 10 mm in diameter. Unit is moderately to locally strongly magnetic. Shear zone with strained and broken core from 1206.9-1208.8m; moderate chloritization.											

EOH

FULL ANALYTICAL REPORT - ICP -

Hole Number **H-09-3413**

Project: **TITAN**

Project Number:

ICP Report (part 1 of 1)

From (m)	To (m)	Length (m)	Sample #	Lab	Certificate #	Date of Certificate	As (ppm)	Mo (ppm)	Zn (ppm)	Cu (ppm)	Sb (ppm)	Ag (ppm)	Pb (ppm)	Co (ppm)	Ni (ppm)	Mn (ppm)
512.00	513.00	1.00	87364	Eastern Analytical			5	1	75	12	5	1	2	9	6	541
513.00	514.00	1.00	87365	Eastern Analytical			61	3	78	33	5	1	43	18	7	357
514.00	515.00	1.00	87366	Eastern Analytical			10	1	69	18	5	1	4	10	6	554
531.20	532.00	0.80	87376	Eastern Analytical			39	2	69	18	5	1	17	12	7	306
532.00	533.00	1.00	87377	Eastern Analytical			88	4	35	29	5	1	18	10	8	131
533.00	534.00	1.00	87378	Eastern Analytical			123	6	34	20	5	1	22	14	9	166
534.00	535.00	1.00	87379	Eastern Analytical			47	1	49	30	5	1	15	12	7	319
535.00	536.00	1.00	87381	Eastern Analytical			49	1	22	14	5	1	13	11	9	167
536.00	537.00	1.00	87382	Eastern Analytical			69	3	25	30	5	1	14	13	11	107
537.00	538.00	1.00	87383	Eastern Analytical			57	1	48	13	5	1	16	12	12	193
538.00	539.00	1.00	87384	Eastern Analytical			44	2	96	14	5	1	17	12	10	286
539.00	540.00	1.00	87385	Eastern Analytical			25	1	155	15	5	1	11	12	9	498
540.00	541.00	1.00	87386	Eastern Analytical			36	2	146	20	5	1	12	11	9	728
591.00	592.00	1.00	87367	Eastern Analytical			18	2	67	9	5	1	26	12	8	874
592.00	593.00	1.00	87368	Eastern Analytical			17	1	61	6	5	1	18	11	8	1070
593.00	594.00	1.00	87369	Eastern Analytical			21	2	80	17	5	1	29	13	7	854
594.00	595.00	1.00	87371	Eastern Analytical			14	1	161	25	5	1	32	10	6	750
595.00	596.00	1.00	87372	Eastern Analytical			67	4	81	23	5	1	86	28	8	628
596.00	597.00	1.00	87373	Eastern Analytical			73	2	56	18	5	1	47	21	7	587
597.00	598.00	1.00	87374	Eastern Analytical			85	2	48	14	5	1	93	28	7	539
598.00	599.00	1.00	87375	Eastern Analytical			30	1	43	5	5	1	13	13	5	585
615.00	616.00	1.00	87387	Eastern Analytical			11	1	222	30	5	1	46	14	8	1038
616.00	617.00	1.00	87388	Eastern Analytical			7	2	24	1	5	1	23	9	4	472
617.00	618.00	1.00	87389	Eastern Analytical			22	1	21	1	5	1	32	11	7	300
618.00	619.00	1.00	87391	Eastern Analytical			14	2	50	12	5	1	18	9	5	344
619.00	620.00	1.00	87392	Eastern Analytical			20	1	150	24	5	1	159	14	7	649
620.00	621.00	1.00	87393	Eastern Analytical			14	2	41	1	5	1	11	12	6	738
621.00	622.00	1.00	87394	Eastern Analytical			18	1	47	12	5	1	18	10	6	578
622.00	623.00	1.00	87395	Eastern Analytical			24	2	111	20	5	1	35	15	7	676
623.00	624.00	1.00	87396	Eastern Analytical			15	1	39	1	5	1	15	12	7	486
624.00	625.00	1.00	87397	Eastern Analytical			15	1	37	1	5	1	4	11	5	601
625.00	626.00	1.00	87398	Eastern Analytical			14	1	30	1	5	1	4	8	6	519
626.00	627.00	1.00	87399	Eastern Analytical			32	2	19	1	5	1	7	12	6	331
627.00	628.00	1.00	70501	Eastern Analytical			24	4	19	1	5	1	5	8	6	386
628.00	629.00	1.00	70502	Eastern Analytical			19	1	30	1	5	1	5	9	7	596
629.00	630.00	1.00	70503	Eastern Analytical			65	5	21	2	5	1	19	11	8	332
630.00	631.00	1.00	70504	Eastern Analytical			11	1	27	1	5	1	5	7	6	582
631.00	632.00	1.00	70505	Eastern Analytical			9	2	18	1	5	1	5	5	5	421
632.00	633.00	1.00	70506	Eastern Analytical			18	1	30	1	5	1	5	5	5	663
633.00	634.00	1.00	70507	Eastern Analytical			18	2	24	9	5	1	5	5	5	677
634.00	635.00	1.00	70508	Eastern Analytical			6	2	18	1	5	1	5	5	4	493
635.00	636.00	1.00	70509	Eastern Analytical			15	3	20	1	5	1	5	11	4	493
636.00	637.00	1.00	70511	Eastern Analytical			19	1	43	18	5	1	31	3	4	480
637.00	638.00	1.00	70512	Eastern Analytical			16	2	43	1	5	1	10	8	5	751
638.00	639.00	1.00	70513	Eastern Analytical			5	1	25	2	5	1	5	4	5	507
639.00	640.00	1.00	70514	Eastern Analytical			8	3	24	1	5	1	12	5	4	1029
640.00	641.00	1.00	70515	Eastern Analytical			21	2	52	5	5	1	158	10	6	586

FULL ANALYTICAL REPORT - ICP -

Hole Number **H-09-3413**

Project: **TITAN**

Project Number:

ICP Report (part 1 of 1)

From (m)	To (m)	Length (m)	Sample #	Lab	Certificate #	Date of Certificate	As (ppm)	Mo (ppm)	Zn (ppm)	Cu (ppm)	Sb (ppm)	Ag (ppm)	Pb (ppm)	Co (ppm)	Ni (ppm)	Mn (ppm)
641.00	642.00	1.00	70516	Eastern Analytical			146	4	32	12	5	1	151	31	9	506
642.00	643.00	1.00	70517	Eastern Analytical			31	1	30	9	5	1	25	9	6	480
643.00	644.00	1.00	70518	Eastern Analytical			14	2	16	1	5	1	5	8	5	342
644.00	645.00	1.00	70519	Eastern Analytical			28	1	22	1	5	1	23	10	6	461
645.00	646.00	1.00	70521	Eastern Analytical			9	1	21	1	5	1	5	6	4	539
646.00	647.00	1.00	70522	Eastern Analytical			11	2	30	6	5	1	7	6	4	596
647.00	648.00	1.00	70523	Eastern Analytical			15	1	45	21	5	1	5	7	5	932
648.00	649.00	1.00	70524	Eastern Analytical			10	3	39	4	5	1	14	5	5	671
649.00	650.00	1.00	70525	Eastern Analytical			15	1	30	3	5	1	6	7	5	1023
650.00	651.00	1.00	70526	Eastern Analytical			18	3	32	4	5	1	36	7	5	822
651.00	652.00	1.00	70527	Eastern Analytical			15	1	22	10	5	1	10	7	5	535
652.00	653.00	1.00	70528	Eastern Analytical			19	3	28	2	5	1	9	8	6	565
653.00	654.00	1.00	70529	Eastern Analytical			22	1	28	9	5	1	10	11	6	634
654.00	655.00	1.00	70531	Eastern Analytical			28	2	70	36	5	1	19	12	6	918
655.00	656.00	1.00	70532	Eastern Analytical			21	1	45	10	5	1	5	10	5	852
656.00	656.90	0.90	70533	Eastern Analytical			17	1	93	1	5	1	10	10	6	1346
1121.40	1122.40	1.00	70534	Eastern Analytical			5	1	46	11	5	1	27	1	2	222
1122.40	1123.40	1.00	70535	Eastern Analytical			17	1	217	40	5	1	318	7	6	560
1123.40	1124.40	1.00	70536	Eastern Analytical			7	1	91	11	5	1	73	3	4	287
1124.40	1125.40	1.00	70537	Eastern Analytical			11	1	189	19	5	1	175	5	4	429
1125.40	1126.40	1.00	70538	Eastern Analytical			6	1	132	21	5	1	109	6	5	498
1126.40	1127.40	1.00	70539	Eastern Analytical			19	2	167	28	5	1	53	11	11	381
1127.40	1128.40	1.00	70541	Eastern Analytical			15	1	146	42	5	1	55	13	10	446
1128.40	1129.40	1.00	70542	Eastern Analytical			9	1	197	63	5	1	17	17	12	671
1129.40	1130.40	1.00	70543	Eastern Analytical			13	1	171	59	5	1	48	13	10	395
1130.40	1131.40	1.00	70544	Eastern Analytical			8	1	190	88	5	1	22	18	14	473
1131.40	1132.40	1.00	70545	Eastern Analytical			9	1	175	62	5	1	30	22	14	616
1132.40	1133.40	1.00	70546	Eastern Analytical			8	1	213	121	5	1	15	22	13	577
1133.40	1134.40	1.00	70547	Eastern Analytical			8	1	178	56	5	1	14	21	13	620
1134.40	1135.40	1.00	70548	Eastern Analytical			7	1	155	89	5	1	19	21	13	596
1135.40	1136.40	1.00	70549	Eastern Analytical			6	1	96	33	5	1	28	19	13	538
1136.40	1137.40	1.00	70551	Eastern Analytical			14	1	52	63	5	1	60	8	8	297
1137.40	1138.40	1.00	70552	Eastern Analytical			5	1	82	10	5	1	16	5	7	387
1138.40	1139.40	1.00	70553	Eastern Analytical			5	1	56	4	5	1	21	5	6	391
1139.40	1140.40	1.00	70554	Eastern Analytical			5	1	77	1	5	1	5	6	5	431
1140.40	1141.40	1.00	70555	Eastern Analytical			5	1	77	48	5	1	9	19	9	699
1141.40	1142.40	1.00	70556	Eastern Analytical			7	1	92	59	5	1	13	30	13	955

FULL ANALYTICAL REPORT

- Whole Rock -

Hole Number **H-09-3413**

Project: **TITAN**

Project Number:

Whole Rock (part 1 of 3)

From (m)	To (m)	Length (m)	Sample #	Lab	Certificate #	Date of Certificate	Sio2 (%)	Al2O3 (%)	Fe2O3 (%)	CaO (%)	MgO (%)	Na2O (%)	K2O (%)	Cr2O3 (%)	TiO2 (%)	MnO (%)	P2O5 (%)	SrO2 (%)	BaO (%)	Loi (%)	Ag (ppm)	Ba (ppm)	Ce (ppm)	Co (ppm)	Cr (ppm)
14.00	14.10	0.10	67334	ALS Chemex			76.20	12.15	1.76	0.95	1.44	1.02	2.43	0.01	0.12	0.03	0.01	-	0.11	3.30	1	994	69	2	10
34.00	34.10	0.10	67335	ALS Chemex			79.50	10.25	1.30	1.55	0.72	4.86	0.44	0.01	0.09	0.02	0.01	-	0.02	1.69	1	157	53	1	40
43.00	43.10	0.10	67336	ALS Chemex			74.20	11.40	1.49	2.81	1.01	1.67	2.49	0.01	0.10	0.02	0.01	-	0.07	5.46	1	647	62	1	10
68.90	69.00	0.10	67337	ALS Chemex			68.60	12.90	3.40	1.70	4.71	0.42	2.71	0.01	0.18	0.05	0.02	-	0.07	5.81	1	640	44	2	10
84.00	84.10	0.10	67338	ALS Chemex			54.00	14.65	11.95	3.62	5.38	3.96	0.55	0.01	0.88	0.18	0.17	-	0.04	4.44	1	368	36	29	20
113.90	114.00	0.10	67339	ALS Chemex			50.90	15.30	10.10	4.97	3.92	2.59	2.28	0.01	0.79	0.14	0.16	-	0.04	7.01	1	326	29	24	10
130.30	130.40	0.10	67340	ALS Chemex			71.20	13.50	2.70	1.02	0.49	1.21	4.76	0.01	0.30	0.01	0.12	-	0.04	3.27	1	376	10	2	10
140.90	141.00	0.10	67341	ALS Chemex			63.30	14.35	6.85	1.83	1.91	1.88	3.29	0.01	0.42	0.04	0.10	-	0.01	4.37	1	128	6	8	10
159.40	159.50	0.10	67342	ALS Chemex			64.00	16.75	4.45	0.45	1.66	3.42	4.38	0.01	0.50	0.03	0.10	-	0.02	2.60	1	186	8	5	10
189.20	189.30	0.10	67343	ALS Chemex			65.50	13.95	5.86	1.42	2.31	3.10	2.82	0.01	0.40	0.09	0.08	-	0.02	3.41	1	172	9	7	10
219.00	219.10	0.10	67344	ALS Chemex			67.80	12.20	5.90	0.69	4.12	2.37	2.26	0.01	0.36	0.08	0.08	-	0.02	4.08	1	195	6	11	10
249.20	249.30	0.10	67345	ALS Chemex			49.60	16.35	11.00	4.39	5.62	3.81	2.06	0.09	0.44	0.13	0.05	-	0.03	5.58	1	224	14	40	570
279.10	279.20	0.10	67346	ALS Chemex			44.90	11.20	6.34	15.25	5.36	4.61	0.06	0.07	0.24	0.24	0.15	-	0.01	12.15	1	37	13	22	400
301.10	301.20	0.10	67347	ALS Chemex			48.90	14.10	11.05	7.03	4.63	4.73	0.17	0.01	1.90	0.18	0.34	-	0.01	6.47	1	57	41	31	20
330.90	331.00	0.10	67348	ALS Chemex			46.00	13.85	8.08	9.25	7.78	1.96	1.35	0.08	0.36	0.22	0.04	-	0.03	10.95	1	220	13	33	460
367.15	367.25	0.10	67349	ALS Chemex			44.60	15.75	11.15	4.94	9.72	2.93	0.90	0.12	0.45	0.23	0.02	-	0.01	8.90	1	80	11	50	760
397.20	397.30	0.10	67350	ALS Chemex			48.10	14.05	8.01	9.34	11.25	1.54	0.49	0.11	0.35	0.17	0.12	-	0.01	5.63	1	91	15	36	650
430.00	430.10	0.10	67210	ALS Chemex			68.80	16.45	3.52	0.73	0.43	9.05	0.10	0.01	0.38	0.03	0.10	-	0.01	0.90	1	53	10	4	20
460.00	460.10	0.10	67211	ALS Chemex			66.40	16.25	3.21	1.68	0.49	6.61	2.83	0.01	0.43	0.03	0.07	-	0.02	1.20	1	147	7	5	20
500.20	500.30	0.10	67212	ALS Chemex			57.60	19.45	6.77	0.35	1.98	2.32	6.73	0.01	0.53	0.04	0.10	-	0.02	3.57	1	154	11	7	10
530.25	530.35	0.10	67213	ALS Chemex			63.90	15.35	6.25	0.33	2.95	2.21	4.33	0.01	0.45	0.10	0.09	-	0.02	4.01	1	166	9	8	20
560.90	561.00	0.10	67214	ALS Chemex			63.50	15.60	7.23	0.39	2.65	2.98	4.03	0.01	0.45	0.11	0.09	-	0.02	2.80	1	173	7	14	80
589.90	590.00	0.10	67215	ALS Chemex			64.10	14.85	6.18	0.39	3.09	3.41	2.77	0.01	0.42	0.11	0.09	-	0.01	4.49	1	76	9	10	40
619.75	619.95	0.20	67216	ALS Chemex			56.80	15.40	9.29	0.80	3.33	2.90	3.62	0.01	0.55	0.10	0.07	-	0.01	5.19	1	118	7	24	10
630.80	631.00	0.20	67217	ALS Chemex			67.20	15.20	3.69	0.50	3.29	4.51	2.01	0.01	0.42	0.08	0.07	-	0.01	2.85	1	66	6	7	10
655.80	656.00	0.20	67218	ALS Chemex			66.10	13.80	5.75	0.51	4.13	3.28	2.30	0.01	0.44	0.11	0.08	-	0.01	3.30	1	81	7	13	10
685.35	685.45	0.10	67219	ALS Chemex			62.80	15.80	6.65	0.36	4.05	2.98	2.98	0.01	0.44	0.13	0.10	-	0.01	3.55	1	98	8	9	10
710.60	710.70	0.10	67220	ALS Chemex			58.80	15.90	10.25	0.55	4.36	1.98	2.71	0.01	0.51	0.15	0.05	-	0.01	5.17	1	81	4	23	10
740.00	740.10	0.10	67221	ALS Chemex			58.50	15.85	10.85	0.34	4.15	1.14	4.63	0.01	0.51	0.09	0.05	-	0.02	4.27	1	156	4	23	10
770.00	770.10	0.10	67222	ALS Chemex			52.60	15.15	11.30	3.52	4.60	2.37	1.96	0.01	0.59	0.17	0.07	-	0.01	5.81	1	49	7	25	40
800.00	800.10	0.10	67223	ALS Chemex			51.30	15.95	9.26	3.90	4.97	4.15	1.84	0.01	0.54	0.16	0.03	-	0.01	6.08	1	138	7	27	40
829.90	830.00	0.10	67224	ALS Chemex			60.00	16.60	6.80	1.99	2.64	3.02	3.93	0.01	0.53	0.07	0.06	-	0.01	4.59	1	123	5	16	10
864.00	864.10	0.10	67225	ALS Chemex			71.40	13.00	4.17	1.85	0.75	4.56	1.90	0.01	0.31	0.03	0.09	-	0.01	2.20	1	72	12	6	10
877.00	877.10	0.10	67226	ALS Chemex			62.20	16.10	3.30	4.27	0.64	6.19	1.40	0.01	0.40	0.04	0.08	-	0.01	4.90	1	74	8	3	10
880.00	880.10	0.10	67227	ALS Chemex			54.30	14.30	6.45	7.38	1.63	2.27	2.18	0.01	0.43	0.07	0.17	-	0.02	8.87	1	143	9	13	10
901.00	901.10	0.10	67228	ALS Chemex			48.30	15.00	10.80	8.13	5.78	2.95	0.39	0.02	2.08	0.18	0.44	-	0.03	3.89	1	241	41	38	130
911.00	911.10	0.10	67229	ALS Chemex			67.60	14.60	3.13	2.10	1.31	3.04	2.84	0.01	0.27	0.08	0.05	-	0.35	3.83	1	3050	48	4	10
937.00	937.10	0.10	67230	ALS Chemex			41.30	13.40	9.87	8.63	8.92	1.60	1.10	0.09	0.74	0.15	0.26	-	0.07	12.00	1	640	32	45	600
967.90	968.00	0.10	67231	ALS Chemex			73.20	11.45	2.47	2.36	0.61	2.64	2.18	0.01	0.23	0.05	0.04	-	0.07	3.19	1	556	36	3	10

FULL ANALYTICAL REPORT

- Whole Rock -

Hole Number **H-09-3413**

Project: **TITAN**

Project Number:

Whole Rock (part 1 of 3)

From (m)	To (m)	Length (m)	Sample #	Lab	Certificate #	Date of Certificate	SiO ₂ (%)	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	CaO (%)	MgO (%)	Na ₂ O (%)	K ₂ O (%)	Cr ₂ O ₃ (%)	TiO ₂ (%)	MnO (%)	P ₂ O ₅ (%)	SrO ₂ (%)	BaO (%)	Loi (%)	Ag (ppm)	Ba (ppm)	Ce (ppm)	Co (ppm)	Cr (ppm)
998.00	998.10	0.10	67232	ALS Chemex			73.80	11.65	1.99	2.40	0.75	2.09	2.65	0.01	0.20	0.05	0.05	-	0.07	3.92	1	564	43	2	10
1021.00	1021.10	0.10	67237	ALS Chemex			71.10	13.05	1.75	3.33	0.78	1.80	2.39	0.01	0.18	0.05	0.04	-	0.37	3.96	1	3230	55	1	10
1030.00	1030.10	0.10	67233	ALS Chemex			70.90	13.95	1.91	1.37	1.02	1.37	4.15	0.01	0.21	0.04	0.03	-	0.08	3.13	1	652	61	1	10
1060.00	1060.10	0.10	67234	ALS Chemex			74.40	12.35	1.87	1.00	0.49	5.78	0.72	0.01	0.19	0.06	0.03	-	0.02	1.98	1	211	51	2	10
1072.00	1072.10	0.10	67236	ALS Chemex			76.00	11.60	1.98	0.42	0.32	3.80	3.53	0.01	0.18	0.04	0.03	-	0.16	1.19	1	1395	47	1	20
1091.00	1091.10	0.10	67235	ALS Chemex			73.10	13.35	1.78	2.19	0.48	3.55	1.92	0.01	0.19	0.06	0.04	-	0.06	2.79	1	528	59	1	10
1121.00	1121.10	0.10	67237	ALS Chemex			71.10	13.05	1.75	3.33	0.78	1.80	2.39	0.01	0.18	0.05	0.04	-	0.37	3.96	1	3230	55	1	10
1143.00	1143.10	0.10	67238	ALS Chemex			61.20	12.70	8.14	3.66	2.54	4.55	0.42	0.01	0.89	0.11	0.23	-	0.02	3.87	1	153	28	22	10
1173.00	1173.10	0.10	67239	ALS Chemex			55.80	14.20	9.32	6.44	3.35	4.22	0.63	0.01	0.67	0.15	0.12	-	0.04	3.56	1	371	26	27	20
1201.90	1202.00	0.10	67240	ALS Chemex			48.40	16.60	12.05	6.96	4.06	2.71	1.36	0.01	1.00	0.26	0.20	-	0.19	4.32	1	1590	36	38	10
1231.00	1231.10	0.10	67241	ALS Chemex			55.50	15.30	9.03	6.34	3.04	2.93	1.20	0.01	0.70	0.12	0.13	-	0.12	3.82	1	1040	29	25	40

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Hole Number **H-09-3413**

Project: **TITAN**

Project Number:

Whole Rock (part 2 of 3)

From (m)	To (m)	Length (m)	Sample #	Lab	Certificate #	Date of Certificate	Cs (ppm)	Cu (ppm)	Dy (ppm)	Er (ppm)	Eu (ppm)	Ga (ppm)	Gd (ppm)	Hf (ppm)	Ho (ppm)	La (ppm)	Lu (ppm)	Mo (ppm)	Nb (ppm)	Nd (ppm)	Ni (ppm)	Pb (ppm)	Pr (ppm)	Rb (ppm)	Sm (ppm)
14.00	14.10	0.10	67334	ALS Chemex			3	5	5	3	1	13	5	3	1	37	0	2	10	26	5	37	8	74	5
34.00	34.10	0.10	67335	ALS Chemex			0	5	4	2	0	9	4	3	1	27	0	2	9	20	16	5	6	17	4
43.00	43.10	0.10	67336	ALS Chemex			1	5	4	3	1	12	4	3	1	32	0	2	10	23	5	11	7	86	5
68.90	69.00	0.10	67337	ALS Chemex			2	5	5	3	1	13	4	5	1	22	1	2	7	19	10	9	5	70	4
84.00	84.10	0.10	67338	ALS Chemex			1	62	4	2	1	17	4	2	1	19	0	2	2	17	16	6	4	8	4
113.90	114.00	0.10	67339	ALS Chemex			1	106	3	2	1	15	3	2	1	15	0	2	2	14	11	6	3	31	3
130.30	130.40	0.10	67340	ALS Chemex			1	5	4	3	1	13	3	3	1	4	1	2	2	7	5	5	1	55	2
140.90	141.00	0.10	67341	ALS Chemex			2	5	3	2	1	16	2	2	1	2	0	2	1	4	5	5	1	45	2
159.40	159.50	0.10	67342	ALS Chemex			2	12	3	2	1	18	2	3	1	3	0	2	2	6	5	5	1	50	2
189.20	189.30	0.10	67343	ALS Chemex			1	8	3	2	1	14	3	2	1	3	0	2	1	6	5	5	1	29	2
219.00	219.10	0.10	67344	ALS Chemex			1	31	3	2	1	13	2	2	1	2	0	2	1	5	5	5	1	24	2
249.20	249.30	0.10	67345	ALS Chemex			1	8	2	1	1	13	2	1	0	6	0	2	1	7	127	5	2	44	2
279.10	279.20	0.10	67346	ALS Chemex			0	5	1	1	0	8	2	1	0	7	0	2	0	7	75	5	2	1	2
301.10	301.20	0.10	67347	ALS Chemex			0	28	6	3	2	19	6	5	1	18	0	2	7	22	14	15	5	2	5
330.90	331.00	0.10	67348	ALS Chemex			1	122	2	1	1	11	2	1	0	6	0	2	1	7	142	5	2	37	2
367.15	367.25	0.10	67349	ALS Chemex			1	36	1	1	0	15	1	1	0	6	0	2	1	5	206	5	1	23	1
397.20	397.30	0.10	67350	ALS Chemex			1	66	2	1	1	11	2	1	0	7	0	2	1	8	172	5	2	9	2
430.00	430.10	0.10	67210	ALS Chemex			0	50	4	3	1	13	3	2	1	3	0	2	2	7	5	39	1	1	2
460.00	460.10	0.10	67211	ALS Chemex			0	13	3	2	1	11	2	2	1	2	0	2	1	5	5	10	1	21	2
500.20	500.30	0.10	67212	ALS Chemex			2	11	4	3	1	22	4	2	1	4	0	2	2	8	5	5	2	54	3
530.25	530.35	0.10	67213	ALS Chemex			1	23	3	2	1	17	3	2	1	3	0	2	2	6	5	5	1	32	2
560.90	561.00	0.10	67214	ALS Chemex			1	28	2	2	1	18	2	2	1	3	0	2	2	5	19	6	1	28	2
589.90	590.00	0.10	67215	ALS Chemex			1	14	3	2	1	16	2	2	1	3	0	2	2	6	21	18	1	23	2
619.75	619.95	0.20	67216	ALS Chemex			1	21	3	2	1	17	2	2	1	3	0	2	1	5	5	32	1	28	2
630.80	631.00	0.20	67217	ALS Chemex			1	5	3	2	1	15	2	2	1	2	0	2	2	5	5	27	1	16	2
655.80	656.00	0.20	67218	ALS Chemex			0	13	3	2	1	13	2	2	1	2	0	2	1	5	5	26	1	17	2
685.35	685.45	0.10	67219	ALS Chemex			1	17	4	3	1	16	3	2	1	3	0	2	2	6	5	11	1	23	2
710.60	710.70	0.10	67220	ALS Chemex			1	95	2	2	0	17	2	1	1	2	0	2	1	4	5	11	1	22	1
740.00	740.10	0.10	67221	ALS Chemex			1	135	2	1	0	16	1	1	0	1	0	2	1	3	5	7	1	34	1
770.00	770.10	0.10	67222	ALS Chemex			1	74	2	2	1	15	2	1	1	2	0	2	1	5	20	13	1	19	2
800.00	800.10	0.10	67223	ALS Chemex			0	68	3	2	1	18	2	1	1	3	0	2	1	5	20	6	1	16	2
829.90	830.00	0.10	67224	ALS Chemex			1	54	2	2	1	17	2	1	1	2	0	2	1	4	5	8	1	33	1
864.00	864.10	0.10	67225	ALS Chemex			1	5	4	3	1	13	3	2	1	5	1	2	2	9	5	6	2	23	3
877.00	877.10	0.10	67226	ALS Chemex			1	11	3	2	1	13	3	2	1	3	0	2	1	6	5	6	1	22	2
880.00	880.10	0.10	67227	ALS Chemex			2	55	4	3	1	12	3	2	1	4	0	2	1	7	5	6	1	37	2
901.00	901.10	0.10	67228	ALS Chemex			0	31	6	3	2	17	6	5	1	18	0	2	9	26	64	5	6	5	6
911.00	911.10	0.10	67229	ALS Chemex			2	5	3	2	1	13	3	3	1	28	0	2	5	17	8	9	5	80	3
937.00	937.10	0.10	67230	ALS Chemex			1	16	3	2	1	12	4	2	1	15	0	2	2	19	189	20	4	24	4
967.90	968.00	0.10	67231	ALS Chemex			1	5	2	2	1	10	2	3	1	21	0	2	3	14	5	14	4	55	2

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Project Number:

Whole Rock (part 2 of 3)

From (m)	To (m)	Length (m)	Sample #	Lab	Certificate #	Date of Certificate	Cs (ppm)	Cu (ppm)	Dy (ppm)	Er (ppm)	Eu (ppm)	Ga (ppm)	Gd (ppm)	Hf (ppm)	Ho (ppm)	La (ppm)	Lu (ppm)	Mo (ppm)	Nb (ppm)	Nd (ppm)	Ni (ppm)	Pb (ppm)	Pr (ppm)	Rb (ppm)	Sm (ppm)
998.00	998.10	0.10	67232	ALS Chemex			2	9	2	2	1	10	3	3	1	25	0	2	4	16	5	6	5	72	3
1021.00	1021.10	0.10	67237	ALS Chemex			1	5	3	2	1	12	3	3	1	32	0	2	5	20	7	38	6	66	3
1030.00	1030.10	0.10	67233	ALS Chemex			2	5	3	2	0	13	3	4	1	34	0	2	6	22	5	8	6	131	4
1060.00	1060.10	0.10	67234	ALS Chemex			0	5	2	2	1	9	3	3	1	30	0	2	4	19	5	13	5	23	3
1072.00	1072.10	0.10	67236	ALS Chemex			0	5	2	2	1	9	3	3	1	28	0	2	4	16	5	8	5	52	3
1091.00	1091.10	0.10	67235	ALS Chemex			1	5	3	2	1	10	3	4	1	34	0	2	5	22	5	17	6	56	4
1121.00	1121.10	0.10	67237	ALS Chemex			1	5	3	2	1	12	3	3	1	32	0	2	5	20	7	38	6	66	3
1143.00	1143.10	0.10	67238	ALS Chemex			0	142	3	2	1	13	3	2	1	14	0	2	2	15	10	9	4	9	3
1173.00	1173.10	0.10	67239	ALS Chemex			0	86	3	2	1	13	3	1	1	13	0	2	1	14	12	11	3	12	3
1201.90	1202.00	0.10	67240	ALS Chemex			1	97	4	3	1	16	4	2	1	19	0	2	2	19	12	16	5	24	4
1231.00	1231.10	0.10	67241	ALS Chemex			1	114	3	2	1	13	3	2	1	15	0	2	1	15	25	16	4	28	3

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- Whole Rock -

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Whole Rock (part 3 of 3)

From (m)	To (m)	Length (m)	Sample #	Lab	Certificate #	Date of Certificate	Sn (ppm)	Sr (ppm)	Ta (ppm)	Tb (ppm)	Th (ppm)	Ti (ppm)	Tm (ppm)	U (ppm)	V (ppm)	W (ppm)	Y (ppm)	Yb (ppm)	Zn (ppm)	Zr (ppm)
14.00	14.10	0.10	67334	ALS Chemex			1	86	1	1	13	-	0	2	9	2	24	3	28	88
34.00	34.10	0.10	67335	ALS Chemex			1	103	1	1	11	-	0	1	7	2	21	2	25	70
43.00	43.10	0.10	67336	ALS Chemex			1	106	1	1	13	-	0	2	5	1	23	3	28	78
68.90	69.00	0.10	67337	ALS Chemex			1	55	1	1	7	-	0	2	6	1	26	3	79	169
84.00	84.10	0.10	67338	ALS Chemex			1	285	0	1	4	-	0	1	350	1	20	2	91	61
113.90	114.00	0.10	67339	ALS Chemex			1	123	0	1	4	-	0	1	335	1	15	2	69	58
130.30	130.40	0.10	67340	ALS Chemex			1	31	0	1	1	-	1	1	16	1	24	4	22	72
140.90	141.00	0.10	67341	ALS Chemex			1	47	0	0	0	-	0	0	48	1	16	2	251	59
159.40	159.50	0.10	67342	ALS Chemex			1	52	0	0	1	-	0	0	65	1	15	2	147	70
189.20	189.30	0.10	67343	ALS Chemex			1	54	0	1	0	-	0	0	42	1	17	2	92	58
219.00	219.10	0.10	67344	ALS Chemex			1	54	0	0	1	-	0	1	67	1	16	2	67	54
249.20	249.30	0.10	67345	ALS Chemex			1	256	0	0	1	-	0	0	151	1	8	1	58	29
279.10	279.20	0.10	67346	ALS Chemex			1	304	0	0	1	-	0	0	147	1	7	1	39	17
301.10	301.20	0.10	67347	ALS Chemex			1	370	1	1	3	-	0	1	263	1	28	3	97	185
330.90	331.00	0.10	67348	ALS Chemex			1	191	0	0	1	-	0	0	186	1	8	1	52	24
367.15	367.25	0.10	67349	ALS Chemex			1	142	0	0	2	-	0	0	192	1	5	1	73	29
397.20	397.30	0.10	67350	ALS Chemex			1	238	0	0	1	-	0	0	231	1	8	1	52	23
430.00	430.10	0.10	67210	ALS Chemex			1	93	0	1	1	-	0	1	18	1	22	3	126	72
460.00	460.10	0.10	67211	ALS Chemex			1	179	0	0	0	-	0	1	66	1	18	2	84	52
500.20	500.30	0.10	67212	ALS Chemex			1	59	0	1	1	-	0	0	94	1	24	2	138	68
530.25	530.35	0.10	67213	ALS Chemex			1	72	0	0	0	-	0	1	62	1	20	2	136	62
560.90	561.00	0.10	67214	ALS Chemex			1	86	0	0	0	-	0	1	79	1	15	2	118	59
589.90	590.00	0.10	67215	ALS Chemex			1	104	0	0	1	-	0	1	43	1	18	2	51	66
619.75	619.95	0.20	67216	ALS Chemex			1	98	0	0	0	-	0	1	145	1	16	2	76	48
630.80	631.00	0.20	67217	ALS Chemex			1	112	0	0	0	-	0	1	66	1	18	2	31	60
655.80	656.00	0.20	67218	ALS Chemex			1	88	0	0	0	-	0	1	93	1	20	2	51	52
685.35	685.45	0.10	67219	ALS Chemex			1	91	0	1	1	-	0	0	43	1	24	3	92	66
710.60	710.70	0.10	67220	ALS Chemex			1	69	0	0	0	-	0	1	286	1	13	2	154	32
740.00	740.10	0.10	67221	ALS Chemex			1	52	0	0	0	-	0	0	291	1	12	2	134	31
770.00	770.10	0.10	67222	ALS Chemex			1	66	0	0	0	-	0	0	195	1	16	2	117	49
800.00	800.10	0.10	67223	ALS Chemex			1	119	0	0	0	-	0	0	228	1	16	2	92	48
829.90	830.00	0.10	67224	ALS Chemex			1	116	0	0	0	-	0	0	185	1	14	2	77	38
864.00	864.10	0.10	67225	ALS Chemex			1	104	0	1	1	-	0	0	19	1	27	3	84	73
877.00	877.10	0.10	67226	ALS Chemex			1	124	0	0	0	-	0	1	73	1	19	2	53	55
880.00	880.10	0.10	67227	ALS Chemex			1	117	0	1	0	-	0	1	133	1	29	3	64	47
901.00	901.10	0.10	67228	ALS Chemex			1	402	1	1	2	-	0	1	238	1	30	3	107	183
911.00	911.10	0.10	67229	ALS Chemex			1	315	0	0	10	-	0	2	29	2	19	2	49	132

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937.00	937.10	0.10	67230	ALS Chemex	1	227	0	1	3	-	0	1	244	1	15	2	77	63
967.90	968.00	0.10	67231	ALS Chemex	1	142	0	0	7	-	0	2	28	2	14	2	36	95
998.00	998.10	0.10	67232	ALS Chemex	1	141	0	0	8	-	0	2	20	1	13	2	23	95
1021.00	1021.10	0.10	67237	ALS Chemex	1	324	0	0	12	-	0	3	10	2	17	2	39	106
1030.00	1030.10	0.10	67233	ALS Chemex	1	81	1	0	13	-	0	3	9	2	16	2	36	130
1060.00	1060.10	0.10	67234	ALS Chemex	1	142	0	0	10	-	0	3	10	2	15	2	34	108
1072.00	1072.10	0.10	67236	ALS Chemex	1	78	0	0	10	-	0	3	15	2	14	2	30	98
1091.00	1091.10	0.10	67235	ALS Chemex	1	336	0	0	12	-	0	3	11	2	18	2	26	119
1121.00	1121.10	0.10	67237	ALS Chemex	1	324	0	0	12	-	0	3	10	2	17	2	39	106
1143.00	1143.10	0.10	67238	ALS Chemex	1	93	0	1	4	-	0	5	252	2	19	2	120	60
1173.00	1173.10	0.10	67239	ALS Chemex	1	277	0	1	3	-	0	2	406	2	17	2	82	42
1201.90	1202.00	0.10	67240	ALS Chemex	1	377	0	1	5	-	0	2	368	2	22	2	126	69
1231.00	1231.10	0.10	67241	ALS Chemex	1	267	0	1	3	-	0	1	347	1	18	2	80	45