

Project: FWZ

Hole: TS18-013

Prospect:	Tom - Exploration	Survey Type:	DGPS	Logged By:	A.Andronyk	Hole Type:	DDH
UTM Grid:	NAD83_09	Survey By:	J.Lewis	Date Started:	2018-07-28	Hole Diameter:	
UTM East:	442405.474	Date Surveyed:	2018-08-24	Date Completed:	2018-08-14	Core Size:	HQ3
UTM North:	7003953.844	Survey Accuracy:		Drill Company:	New Age	Casing Pulled?:	<input type="checkbox"/>
UTM Elevation (m):	1724.016	Grid Convergence:	-1.03	Drill Rig:		Casing Depth (m):	24.5
Local Grid:		Azimuth:		Drill Started:		Reduced (m):	
Local East:		Dip:	-50	Drill Completed:		Reduced Size:	
Local North:		Length (m):	368	Approved By:		Oriented?:	<input type="checkbox"/>
Local Elevation (m):		Comments:				Geotech?:	<input type="checkbox"/>
Hole Status:	Completed						
Hole Purpose:							

Depth (m)	Survey Method	Survey By	Date Surveyed	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Mag. Field	Accept Values?	Comments
0	COLL	J.Lewis	2018-08-24	-50	259				<input checked="" type="checkbox"/>	
30	MS			-47.5	238.83				<input checked="" type="checkbox"/>	
33	MS			-47.4	238.53				<input checked="" type="checkbox"/>	
36	MS			-47.2	238.43				<input checked="" type="checkbox"/>	
39	MS			-47.1	238.73				<input checked="" type="checkbox"/>	
42	MS			-46.8	238.93				<input checked="" type="checkbox"/>	
45	MS			-46.6	239.03				<input checked="" type="checkbox"/>	
48	MS			-46.4	239.13				<input checked="" type="checkbox"/>	
51	MS			-46.2	239.03				<input checked="" type="checkbox"/>	
54	MS			-46	239.43				<input checked="" type="checkbox"/>	

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Depth (m)	Survey Method	Survey By	Date Surveyed	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Mag. Field	Accept Values?	Comments
57	MS			-45.9	239.33				<input checked="" type="checkbox"/>	
60	MS			-45.8	239.53				<input checked="" type="checkbox"/>	
63	MS			-45.5	239.83				<input checked="" type="checkbox"/>	
66	MS			-45.3	239.83				<input checked="" type="checkbox"/>	
69	MS			-45.1	239.93				<input checked="" type="checkbox"/>	
72	MS			-44.9	239.93				<input checked="" type="checkbox"/>	
75	MS			-44.7	240.33				<input checked="" type="checkbox"/>	
78	MS			-44.4	240.43				<input checked="" type="checkbox"/>	
81	MS			-44.2	240.63				<input checked="" type="checkbox"/>	
84	MS			-43.9	240.83				<input checked="" type="checkbox"/>	
87	MS			-43.7	241.03				<input checked="" type="checkbox"/>	
90	MS			-43.4	241.33				<input checked="" type="checkbox"/>	
93	MS			-43.1	241.33				<input checked="" type="checkbox"/>	
96	MS			-42.8	241.73				<input checked="" type="checkbox"/>	
99	MS			-42.8	241.63				<input checked="" type="checkbox"/>	
102	MS			-42.5	241.73				<input checked="" type="checkbox"/>	
105	MS			-42.3	241.83				<input checked="" type="checkbox"/>	
108	MS			-42.1	241.83				<input checked="" type="checkbox"/>	
111	MS			-41.9	242.03				<input checked="" type="checkbox"/>	
114	MS			-41.7	242.13				<input checked="" type="checkbox"/>	
117	MS			-41.5	242.13				<input checked="" type="checkbox"/>	
120	MS			-41.3	242.23				<input checked="" type="checkbox"/>	
123	MS			-41.1	242.23				<input checked="" type="checkbox"/>	

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Depth (m)	Survey Method	Survey By	Date Surveyed	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Mag. Field	Accept Values?	Comments
126	MS			-40.9	242.33				<input checked="" type="checkbox"/>	
129	MS			-40.8	242.43				<input checked="" type="checkbox"/>	
132	MS			-40.6	242.73				<input checked="" type="checkbox"/>	
135	MS			-40.4	242.93				<input checked="" type="checkbox"/>	
138	MS			-40.3	242.93				<input checked="" type="checkbox"/>	
141	MS			-40.1	242.93				<input checked="" type="checkbox"/>	
144	MS			-39.9	243.03				<input checked="" type="checkbox"/>	
147	MS			-39.7	243.03				<input checked="" type="checkbox"/>	
150	MS			-39.6	243.13				<input checked="" type="checkbox"/>	
153	MS			-39.5	243.33				<input checked="" type="checkbox"/>	
156	MS			-39.4	243.33				<input checked="" type="checkbox"/>	
159	MS			-39.3	243.33				<input checked="" type="checkbox"/>	
162	MS			-39.1	243.53				<input checked="" type="checkbox"/>	
165	MS			-39	243.53				<input checked="" type="checkbox"/>	
168	MS			-38.8	243.63				<input checked="" type="checkbox"/>	
171	MS			-38.7	243.63				<input checked="" type="checkbox"/>	
174	MS			-38.5	243.73				<input checked="" type="checkbox"/>	
177	MS			-38.3	243.83				<input checked="" type="checkbox"/>	
180	MS			-38.2	244.03				<input checked="" type="checkbox"/>	
183	MS			-38	244.23				<input checked="" type="checkbox"/>	
186	MS			-37.8	244.23				<input checked="" type="checkbox"/>	
189	MS			-37.7	244.33				<input checked="" type="checkbox"/>	
192	MS			-37.6	244.43				<input checked="" type="checkbox"/>	

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Depth (m)	Survey Method	Survey By	Date Surveyed	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Mag. Field	Accept Values?	Comments
195	MS			-37.4	244.43				<input checked="" type="checkbox"/>	
198	MS			-37.3	244.63				<input checked="" type="checkbox"/>	
201	MS			-37.2	244.63				<input checked="" type="checkbox"/>	
204	MS			-37.2	244.63				<input checked="" type="checkbox"/>	
207	MS			-37.1	244.83				<input checked="" type="checkbox"/>	
210	MS			-37	245.03				<input checked="" type="checkbox"/>	
213	MS			-36.9	244.93				<input checked="" type="checkbox"/>	
216	MS			-36.7	245.13				<input checked="" type="checkbox"/>	
219	MS			-36.6	245.33				<input checked="" type="checkbox"/>	
222	MS			-36.4	245.13				<input checked="" type="checkbox"/>	
225	MS			-36.2	245.53				<input checked="" type="checkbox"/>	
228	MS			-36	245.73				<input checked="" type="checkbox"/>	
231	MS			-35.9	245.73				<input checked="" type="checkbox"/>	
234	MS			-35.7	245.73				<input checked="" type="checkbox"/>	
237	MS			-35.5	245.93				<input checked="" type="checkbox"/>	
240	MS			-35.3	246.13				<input checked="" type="checkbox"/>	
243	MS			-35.1	246.23				<input checked="" type="checkbox"/>	
246	MS			-34.9	246.13				<input checked="" type="checkbox"/>	
249	MS			-34.8	246.33				<input checked="" type="checkbox"/>	
252	MS			-34.7	246.33				<input checked="" type="checkbox"/>	
255	MS			-34.4	246.63				<input checked="" type="checkbox"/>	
258	MS			-34.3	246.53				<input checked="" type="checkbox"/>	
261	MS			-34.1	246.73				<input checked="" type="checkbox"/>	

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Depth (m)	Survey Method	Survey By	Date Surveyed	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Mag. Field	Accept Values?	Comments
264	MS			-33.9	246.73				<input checked="" type="checkbox"/>	
267	MS			-33.7	246.83				<input checked="" type="checkbox"/>	
270	MS			-33.6	246.83				<input checked="" type="checkbox"/>	
273	MS			-33.3	247.03				<input checked="" type="checkbox"/>	
276	MS			-33.2	246.93				<input checked="" type="checkbox"/>	
279	MS			-32.9	247.13				<input checked="" type="checkbox"/>	
282	MS			-32.8	247.23				<input checked="" type="checkbox"/>	
285	MS			-32.7	247.23				<input checked="" type="checkbox"/>	
288	MS			-32.6	247.43				<input checked="" type="checkbox"/>	
291	MS			-32.4	247.23				<input checked="" type="checkbox"/>	
294	MS			-32.3	247.63				<input checked="" type="checkbox"/>	
297	MS			-32.1	247.53				<input checked="" type="checkbox"/>	
300	MS			-31.9	247.73				<input checked="" type="checkbox"/>	
303	MS			-31.7	247.83				<input checked="" type="checkbox"/>	
306	MS			-31.5	247.93				<input checked="" type="checkbox"/>	
309	MS			-31.4	248.03				<input checked="" type="checkbox"/>	
312	MS			-31.2	248.13				<input checked="" type="checkbox"/>	
315	MS			-31	248.03				<input checked="" type="checkbox"/>	
318	MS			-30.8	248.13				<input checked="" type="checkbox"/>	
321	MS			-30.6	248.23				<input checked="" type="checkbox"/>	
324	MS			-30.5	248.33				<input checked="" type="checkbox"/>	
327	MS			-30.3	248.43				<input checked="" type="checkbox"/>	
330	MS			-30.1	248.53				<input checked="" type="checkbox"/>	

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Depth (m)	Survey Method	Survey By	Date Surveyed	Dip	Measured Azimuth	Correction Factor	Corrected Azimuth	Mag. Field	Accept Values?	Comments
333	MS			-29.9	248.73				<input checked="" type="checkbox"/>	
336	MS			-29.8	248.63				<input checked="" type="checkbox"/>	
339	MS			-29.6	248.63				<input checked="" type="checkbox"/>	
342	MS			-29.4	248.93				<input checked="" type="checkbox"/>	
345	MS			-29.3	248.83				<input checked="" type="checkbox"/>	
348	MS			-28.9	249.03				<input checked="" type="checkbox"/>	
351	MS			-28.7	249.03				<input checked="" type="checkbox"/>	
354	MS			-28.5	249.13				<input checked="" type="checkbox"/>	
357	MS			-28.2	249.23				<input checked="" type="checkbox"/>	
360	MS			-28	249.13				<input checked="" type="checkbox"/>	
363	MS			-27.8	248.93				<input checked="" type="checkbox"/>	
366	MS			-27.7	248.93				<input checked="" type="checkbox"/>	

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From (m)	To (m)	Rock Type & Description	From (m)	To (m)	Length	Sample #	Au Best ppm	Ag Best ppm	Cu Best ppm	Pb Best ppm	Zn Best ppm
0.00	9.50	OVER Overburden casing extended on numerous occasions from 0 to 24.5m									
9.50	23.00	BMST Black mudstone This unit could possibly be colluvium/scree that's fallen down from the FLG part of the cliff behind the drill which would explain the unconformable intervals. Tremendously fractured, rubbly near surface interval. Poor ground conditions are likely related faulted contact between narrow Fuller Lake and Mac pass mudstones. Only rare dm scale intervals where it can be concluded that the unit is a black, siliceous, very fine to fine, 0.5% very fine pits from dissolved radiolaria. Very poor core recovery. Cleavage angles are consistent @~65-70° tca.									
23.00	40.39	STST Siltstone Bad ground conditions. Predominantly medium grey to dark grey silt and sandstone laminae beds interbedded with a lesser dark grey-black siliceous mudstone. In competent zones wider silt beds can have ripple cross-laminations and local scours. No confident ori-line for structural data. Strongly oxidized and weathered fracture surfaces. Pyrite is common with associated with silty/sandy interbeds. Bedding and cleavage are consistent at 35-45° tca. Silt beds can be as thick as 18cm, particularly towards base of unit. Overall the unit is composed of 55% silt/sand beds and 45% dark grey to black mudstone interbeds. Sharp, wavy and micro sheared lower contact to underlying mudstone. Topping indicators point to a younging direction uphole however underlying mudstone is quite perplexing. <<Struc: 33.42 - 33.42: bedding>> <<Struc: 38.83 - 38.83: bedding>> <<Struc: 39.74 - 39.74: bedding>>									
40.39	69.50	MDST Mudstone Black, very fine, thick bedded to finely laminated siliceous and carbonaceous mudstone. Mudstone is interlaminated 1% very thin white barite laminations (<1mm) every 3-7cm with a sutured appearance. 3-5% finely disseminated diagenetic brassy yellow pyrite. Rare, up to 3mm wide dull brown pyrite laminations. Bedding angles are variable from 15° to 70° tca. Conformable and gradational lower contact. Unit grades from black siliceous mudstone within increasing abundance of mm-scale silty laminations every 2-5cm. Contact defined where silty laminations become >5mm. <<Struc: 43.07 - 43.07: bedding>> <<Struc: 44.39 - 44.39: bedding>> <<Struc: 47.84 - 47.84: bedding>> <<Struc: 49.65 - 49.65: bedding>> <<Struc: 51.55 - 51.55: bedding>> <<Struc: 52.32 - 52.32: bedding>> <<Struc: 55.91 - 55.91: bedding>> <<Struc: 58.91 - 58.91: bedding>>									

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From (m)	To (m)	Rock Type & Description	From (m)	To (m)	Length	Sample #	Au Best ppm	Ag Best ppm	Cu Best ppm	Pb Best ppm	Zn Best ppm
<<Struc: 66.75 - 66.75: bedding>>											
<<Struc: 68.77 - 68.77: bedding>>											
69.50	128.80	MDST Mudstone									
Dark grey to black siliceous mudstone beds interbedded with medium to dark grey silt/sand laminations. Sed textures that are typically observed in silt/sand interbeds are often cross-laminated, scours into underlying mud beds, and normal grading. Topping indicators point to a younging direction uphole. Silt laminations become more cyclic towards base every 1cm. Finely disseminated pyrite, particularly within mudstone interbeds, and pyrite also occurs as fine laminations within silt-sand lams. Bedding and bedding developed cleavage angles at 30-40° tca. Upper contact to FLC is conformable and gradational over 5-7m. Unit is very competent with good recovery.											
<<Struc: 70 - 70: bedding>>											
<<Struc: 70.9 - 70.9: bedding>>											
<<Struc: 71.89 - 71.89: bedding>>											
<<Struc: 73.94 - 73.94: bedding>>											
<<Struc: 75.89 - 75.89: bedding>>											
<<Struc: 78.36 - 78.36: bedding>>											
<<Struc: 80.31 - 80.31: bedding>>											
<<Struc: 85.58 - 85.58: bedding>>											
<<Struc: 85.59 - 85.59: foliation>>			scour mark								
<<Struc: 89.71 - 89.71: bedding>>											
<<Struc: 90.68 - 90.68: bedding>>											
<<Struc: 91.8 - 91.8: bedding>>											
<<Struc: 92.68 - 92.68: bedding>>											
<<Struc: 93.67 - 93.67: bedding>>											
<<Struc: 98.39 - 98.39: bedding>>											
<<Struc: 100.15 - 100.15: bedding>>											
<<Struc: 101.51 - 101.51: bedding>>											
<<Struc: 109.14 - 109.14: bedding>>											
<<Struc: 114.49 - 114.49: bedding>>											
<<Struc: 117.51 - 117.51: bedding>>											
<<Struc: 118.69 - 118.69: bedding>>											

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From (m)	To (m)	Rock Type & Description	From (m)	To (m)	Length	Sample #	Au Best ppm	Ag Best ppm	Cu Best ppm	Pb Best ppm	Zn Best ppm
<<Struc: 119.72 - 119.72: bedding>>											
<<Struc: 120.51 - 120.51: bedding>>											
<<Struc: 124.47 - 124.47: bedding>>											
128.80	153.87	DIAM Diamictite									
Light grey to grey, clast supported, polymict diamictite with 80-85% clasts and 15-20% mud dominated matrix. Clast composition varies from predominantly up to 3m-wide coarse-facies chert pebble conglomerate with cobble to boulder size-fine facies chert pebble. Conglomeritic clasts contain fine to very coarse, well rounded chert pebbles where clasts constituents are cemented with quartz and lesser ankerite and very locally some brassy yellow pyrite. Boulder and cobble sized- clast angularity is difficult to determine. Sub-cobble sized clast material is composed of silt-sand- ganular sized sized material and lesser mud. Matrix is silt-sand and predominantly dark grey to black muds. Mud/sand/silt rich matrix bedding is highly disrupted between coarser clasts. Strong silicification of CPC clasts associated with 3-5% cm-wide quartz breccia vein from 143.11 to 145.59m. Bedding angles where observed and inconsistent but range from moderate to high angles TCA.											
<<Struc: 153.77 - 153.77: bedding>>											
153.87	193.74	CONG Conglomerate									
Light grey to grey, clast supported, well-sorted, polymictic conglomerate. The interval is 85-90% clasts and 10-15% matrix. The matrix is a grey to dark grey, siliceous mud. Throughout the interval are 10cm to 10-20m wide zones where the matrix is altered to a tan/beige colour and is non-carbonaceous. Where present this alteration is pervasive and moderate to strong increaing in intensity near natural fractures (INTERP: surficial/meteoric alteration of the matrix). Clasts vary in size from 1mm wide sand to 4cm wide pebbles with an average size being granules to pebbles from 5mm to 1cm. Clasts are composed of 2% sub-rounded white quartz, 5% angular to sub-angular black siliceous mud, and 93% rounded to sub rounded light grey to dark grey siliceous chert. The upper contact is sharp and marked by the abrupt end of an overlying 10cm wide mudstone interval. The lower contact is veined for its final 20cm and marked by the last occurrence of conglomerate. From 178.4m to 181.25m, is an interbedded zone of siltstone laminated (1mm to 1cm silty laminations) black mudstone and diamictate with 5mm to 3cm sub angular to sub rounded chert clasts and 1cm to 50cm wide conglomerate clasts. This diamictate zone is veined at its base from 181.10m to 181.25m. Following this veining, the clast size of the conglomerate reduces to an average size of 1mm to 5mm with at least 3 pulses of graded bedding indicating younging uphole from 184.6m to186.56m. A fault zone immediately follows this granule sized zone of conglomerate after which a final pulse of conglomerate is present from 188.12 towards the lower contact. Again texture has changed with white to grey sub-rounded to sub-angular chert clasts having an average size of 3mm to 2cm. Throughout this area hairline black stylolites are present comprising 1% of the total interval. The lower contact is obscured by veining with a minor 2cm interval of diamictite visible at the base of the vein.											
<<Struc: 180.13 - 180.13: bedding>>											
<<Struc: 180.73 - 180.73: bedding>>											
<<Struc: 185.37 - 185.37: bedding>>											
<<Struc: 193.25 - 193.25: foliation>>											

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From (m)	To (m)	Rock Type & Description	From (m)	To (m)	Length	Sample #	Au Best ppm	Ag Best ppm	Cu Best ppm	Pb Best ppm	Zn Best ppm
193.74	195.49	MDST									
Mudstone											
5mm to 5cm beds of black, hard siliceous mudstone interlaminated with light grey, 1 to 5mm wide siltstone laminations. Laminations are parallel with bedding orientated at 65 degrees TCA throughout excepting a zone from 193.51m to 194.63m with a foliation fabric at 132 degrees TCA that is deforming silty laminations causing them to pinch and swell parallel to bedding that varies from 65 to 90 degrees TCA. Very fine grained (< 1mm) brassy yellow pyrite is concentrated within silty laminations (1-3% of laminations).											
<<Struc: 193.94 - 193.94: bedding>>											
<<Struc: 194.31 - 194.31: bedding>>											
<<Struc: 194.77 - 194.77: bedding>>											
195.49	206.81	DIAM									
Diamictite											
40cm to 2.5m wide beds of black to dark grey diamictite. The diamictite is poorly sorted, matrix supported with 40% clasts and 60% black mudstone matrix. Clasts vary in size from 1mm to 3cm. Clasts are sub-rounded to sub-angular intraclasts composed of: massive grey silt, interlaminated grey/brown silt, and light grey, fine grained sandstone. These chaotic diamictite beds are interbedded with 40 to 50cm wide beds of black, non-calcareous mudstone with 1mm to 5mm grey silt laminations that are 25 to 35% of the beds. Within these beds are 1cm to 3cm wide, fine-grained, brown silty beds with a minor green hue (the tuffaceous beds?) that comprise <5% of these intervals and occur 1 to 2 time per mudstone bed. Bedding is consistently 60 degrees TCA throughout. Discontinuous, bedding-parallel, 1mm to 3mm wide, qtz-ankerite veins are present as a trace feature.											
<<Struc: 198.68 - 198.68: bedding>>											
<<Struc: 199.29 - 199.29: bedding>>											
<<Struc: 200.06 - 200.06: bedding>>											
<<Struc: 201.83 - 201.83: bedding>>											
<<Struc: 204.55 - 204.55: bedding>>											
206.81	212.74	SDST									
Sandstone											
1mm to 1.5cm wide very fine grained to fine grained brown/grey sand laminations and beds. These are interbedded with a dark grey to black silty mudstone. The amount of sand laminations/beds decreases towards the lower contact from 70% to 50% with a matching increase in size of mudstone laminations/beds from a size range of 1mm to 1cm to 1cm to 2cm. Displacement in the sand beds is visible throughout the interval with sand beds/laminations being truncated and/or displaced perpendicular to bedding by 1mm to 5mm. One sandy bed displaying cross-bedding is visible. The upper contact is sharp and marked by the first appearance of continuous sand laminations/beds. The lower contact is transitional and distinguished by the increase of mudstone to greater than 50% of rock content. Bedding varies through the interval from 45 to 60 degrees TCA. Trace brassy yellow, very fine grained to fine grained, brassy yellow pyrite occurs as clotty overgrowths in the sand beds.											
<<Struc: 206.91 - 206.91: bedding>>											
<<Struc: 208.19 - 208.19: bedding>>											

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From (m)	To (m)	Rock Type & Description	From (m)	To (m)	Length	Sample #	Au Best ppm	Ag Best ppm	Cu Best ppm	Pb Best ppm	Zn Best ppm
<<Struc: 209.01 - 209.01:	bedding>>										
<<Struc: 209.86 - 209.86:	bedding>>										
<<Struc: 211.8 - 211.8:	bedding>>										
<<Struc: 212.18 - 212.18:	bedding>>										
<<Struc: 212.41 - 212.41:	bedding>>										
212.74	231.72	MDST Mudstone									
5mm to 5cm beds of black, silty mudstone with very fine grained, brassy yellow pyrite deceminated from trace to 1% throughout. This mudstone is interbedded with 1mm to 4cm wide laminations/beds of silty, very fine grained, grey sand. Where > 5mm in width, these sand lamiantions/beds are themselves interlaminated with 1mm to 3mm wide laminations of mudstone and sand. From 217.38m to 222.56m, is a zone of random displacement of sandy beds with beds offset by 1mm to 5mm and slumping listrically (INTERP: soft sediment deformation). Trace hairline to 5mm wide, qtz-ankerite veins are present throughout.											
<<Struc: 213.52 - 213.52:	bedding>>										
<<Struc: 213.9 - 213.9:	bedding>>										
<<Struc: 214.22 - 214.22:	bedding>>										
<<Struc: 214.79 - 214.79:	bedding>>										
<<Struc: 215.52 - 215.52:	bedding>>										
<<Struc: 218.25 - 218.25:	bedding>>										
<<Struc: 218.88 - 218.88:	bedding>>										
<<Struc: 220.41 - 220.41:	bedding>>										
<<Struc: 221.48 - 221.48:	bedding>>										
<<Struc: 222.29 - 222.29:	bedding>>										
<<Struc: 223.87 - 223.87:	bedding>>										
<<Struc: 224.89 - 224.89:	bedding>>										
<<Struc: 226.59 - 226.59:	bedding>>										
<<Struc: 228.1 - 228.1:	bedding>>										
<<Struc: 228.66 - 228.66:	bedding>>										

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From (m)	To (m)	Rock Type & Description	From (m)	To (m)	Length	Sample #	Au Best ppm	Ag Best ppm	Cu Best ppm	Pb Best ppm	Zn Best ppm
231.72	244.92	DIAM Diamictite 20cm to 3m wide beds of polymictic, matrix supported diamictite interbedded with 10cm to 1.5m beds of silty black mudstone. Diamictite clasts are 20% sub angular 5mm to 2cm interlaminated, brown weathered sand clasts, 50% 1mm to 1cm sub-angular black mudstone, 25% 4mm to 2cm massive grey fine grained sandstone, and 5% white qtz/chert. Diamictite texture and composition is variable across beds with clasts content varying from 20 to 60%, and average size varying with beds containing either larger, 5mm to 2cm clasts or smaller 1mm to 1cm clasts. The interbedded mudstone is black, silty with 1 mm to 1cm grey silty sand laminations/beds. Bedding in the mudstone varies from 4 degrees to 35 degrees TCA though this may be the result of attenuation and deformation that is seen in the rotation/displacement by 2mm to 1cm of the beds. <<Struc: 234.46 - 234.46: bedding>> <<Struc: 234.75 - 234.75: bedding>> <<Struc: 237.85 - 237.85: bedding>> <<Struc: 241.16 - 241.16: bedding>> <<Struc: 244 - 244: bedding>>									
244.92	248.44	SDST Sandstone This interval comprises 5 pulses of a graded, younging upward polymictic, clast supported fine grained to granule (.5mm to 3mm) lithic arenite (the base of each section is a lithic conglomerate). Clasts are: 5% black mudstone, 50% white chert, 45% grey chert. Clasts vary from sub-angular to sub-rounded. The graded beds are 50cm wide with a 10 to 15cm base of 1mm to 3mm wide lithic clasts which transitions sharply to a f.g. to v.f.g. sandstone until a final lense of 1cm to 3cm of mudstone. The graded beds are well-sorted throughout. The upper and lower contacts are sharp and marked by the first and last occurrence of arenite. <<Struc: 245.4 - 245.4: bedding>> <<Struc: 246.4 - 246.4: bedding>> <<Struc: 246.71 - 246.71: bedding>>									
248.44	256.79	MDST Mudstone Interval a grey to black, silty mudstone with very fine grained, brassy yellow pyrite disseminated throughout. The mudstone is interbedded with 1mm to 3cm laminations to lenses of fine grained to coarse grained (1/16th mm to 2mm) , grey, lithic arenite. Soft sediment deformation including scours, flame structures, and graded beds are present indicating younging uphole. Less than 3% of the interval is 1cm to 10cm wide beds of silty grey/green material (INTERP: possible tuff). Chaotic displacement of laminations and beds obscures the structure, however, overall bedding is shallow through the interval from 2 to 20 degrees TCA. <<Struc: 249.83 - 249.83: bedding>> <<Struc: 251.18 - 251.18: bedding>> <<Struc: 254.12 - 254.12: bedding>>									

Hole: TS18-013

From (m)	To (m)	Rock Type & Description	From (m)	To (m)	Length	Sample #	Au Best ppm	Ag Best ppm	Cu Best ppm	Pb Best ppm	Zn Best ppm
<<Struc: 256.28 - 256.28: bedding>>											
<<Struc: 256.69 - 256.69: bedding>>											
256.79 263.58 SDST Sandstone											
Polymictic, clast supported fine grained to coarse grained (.25mm to 2mm) lithic arenite. The unit varies texturally from thinly laminated (1-2mm) to well sorted and massive. Trace brassy yellow pyrite and ankerite is present in the groundmass. The sandstone is generally 85 to 95% clasts and 5 to 15% fine grained siliceous matrix. Rare (<1-3% of total content) sub angular, black, 1cm to 3cm wide mudstone clasts are present (INTERP: rip up clasts?). Clast composition is 15% black mudstone clasts, 20% white quartz/chert, and 65% light to dark grey chert. Laminations present in the first 3m of the interval show bedding of 10 degrees TCA. Aproximately 3% of the overall interval content is 2mm to 4cm wide qtz-ankerite veins orientated at 60 to 90 degrees TCA. The lower contact of the unit is sharp and marked by the last occurence of lithic arenite.											
<<Struc: 258.15 - 258.15: bedding>>											
<<Struc: 259.57 - 259.57: bedding>>											
263.58 275.68 MDST Mudstone											
Grey to black, silty mudstone with very fine grained, brassy yellow pyrite disseminated throughout. The mudstone is interbedded with 1mm to 15cm wide laminations/beds of sandy light grey silt. Bedding varies 12 to 60 degrees TCA generally steepening towards the base of the interval. Bedding is often truncated and displaced by 5mm to 1cm with 10cm wide zones of chaotically displaced bedding and reorientated clasts. Scours and flame structures indicate younging upward throughout the interval. Present is a trace amount of 1-2mm black, glossy pyrobitumen in discontinuous, 2mm to 5mm wide qtz veinlets. Silt content increases in the lower 2 m to a 50% to 50% split of black/ grey mudstoen and light grey sandy silt.											
<<Struc: 264.41 - 264.41: bedding>>											
<<Struc: 264.75 - 264.75: bedding>>											
<<Struc: 265.28 - 265.28: bedding>>											
<<Struc: 267.71 - 267.71: bedding>>											
<<Struc: 269.38 - 269.38: bedding>>											
<<Struc: 271.42 - 271.42: bedding>>											
<<Struc: 272.2 - 272.2: bedding>>											
<<Struc: 272.76 - 272.76: bedding>>											
<<Struc: 274.7 - 274.7: bedding>>											
275.68 276.52 SDST Sandstone											
Light grey, polymictic, massive, well sorted, clast supported, lithic arenite. Clasts are 5% black mudstone, 75% light grey to medium grey chert, and 20% white chert/quartz. Overall clast content is 90% with 10% grey siliceous matrix.											

Hole: TS18-013

From (m)	To (m)	Rock Type & Description	From (m)	To (m)	Length	Sample #	Au Best ppm	Ag Best ppm	Cu Best ppm	Pb Best ppm	Zn Best ppm
276.52	279.21	MDST Mudstone The interval is 70% light grey 10 to 50 cm silty mudstone interbedded with 1mm to 2cm wide brown-grey, polymictic, fine grained silty sand. The mudstone/sand beds are 85% grey to black silty mudstone and 15% sand beds. These silty mudstone beds are in sharp contact with 40cm wide diamictite beds. The diamictite beds are polymictic, matrix supported with 1mm to 1.2cm wide sub rounded to sub angular clasts of 5% black mudstone, 65% light grey chert, and 30% white qtz/chert. The diamictite is poorly sorted throughout. <<Struc: 277.39 - 277.39: bedding>> <<Struc: 278.44 - 278.44: bedding>>									
279.21	279.56	CONG Conglomerate Massive, polymictic, clast supported, conglomerate with 1mm to 5mm wide sand to granules. The interval is 85% clasts and 15% grey, siliceous matrix. Trace, < 1mm, brassy yellow pyrite overprints the matrix. Clasts are: 35% black, angular to sub-rounded mudstone and 65% sub-angular to sub rounded grey chert. A beige to white alteration forms a 1/10mm wide rim around the clasts. It is non-calcareous.									
279.56	281.37	MDST Mudstone Grey to black silty mudstone with very fine grained, disseminated pyrite throughout. The interval is randomly interbedded/interlaminated with 2mm to 2cm wide light grey, very fine grained to fine grained silty sand laminations/beds. Bedding is 40 to 50 degrees TCA throughout. The upper contact and lower contact are sharp and marked by the end of coarse clastic material. 2-3% of the sand laminations/beds is very fine grained (<1mm wide) brassy yellow pyrite. <<Struc: 280.04 - 280.04: bedding>> <<Struc: 280.61 - 280.61: bedding>>									
281.37	281.88	SDST Sandstone Clast supported, polymictic, lithic arenite. The interval is graded once through its entirety grading from 2mm wide clasts to .5mm clasts. Clasts are 20% angular to sub-rounded black mudstone, 50% sub rounded to sub angular grey chert, and 30% angular white chert/quartz. At 281.56m a sharp grain size reduction occurs from 1mm wide clasts to mm wide clasts. The interval is generally 10-20% matrix with an increase to 20% matrix also occurring at the grain size reduction at 281.56m.									
281.88	282.80	MDST Mudstone Grey to black silty mudstone with very fine grained, disseminated pyrite throughout. The interval is randomly interbedded/interlaminated with 2mm to 2cm wide light grey, very fine grained to fine grained silty sand laminations/beds. Bedding has steepened to 78 degrees TCA. The initial 5cm of the interval is diamictite with 2mm to 2cm silty sandstone clasts within a silty mudstone matrix. Two separate 3cm to 4cm wide, brown/green silty (tuffaceous?) beds occur separate by 50cm. Overprinting these beds are 1mm to 2mm, euhedral cubic brassy yellow pyrite totalling 3% of the beds. The lower contact is sharp. <<Struc: 282.48 - 282.48: bedding>>									

Hole: TS18-013

From (m)	To (m)	Rock Type & Description	From (m)	To (m)	Length	Sample #	Au Best ppm	Ag Best ppm	Cu Best ppm	Pb Best ppm	Zn Best ppm
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282.80 283.12 SDST Sandstone

Clast supported, polymictic, lithic arenite. The interval is graded once through its entirety grading from 2mm wide clasts to .5mm clasts. Clasts are 20% angular to sub-rounded black mudstone, 50% sub rounded to sub angular grey chert, and 30% angular white chert/quartz. Matrix content of the interval increase uniformaly from the lower contact to the upper contact in the unit from 5-10% to 25% and in the final upper 12cm it is matrix supported. The matrix is dark grey and siliceous from 282.92m and in the upper 12cm from 282.8 to 282.92m it is tan/brown and non-carbonaceous which may be an alteration front.

<<Struc: 282.84 - 282.84: bedding>>

283.12 283.84 MDST Mudstone

Grey to black silty mudstone with very fine grained, disseminated pyrite throughout. The interval is randomly interbedded/interlaminated with 2mm to 2cm wide light grey, very fine grained to fine grained silty sand lamiantions/beds. Bedding is steep through the interval at 80 degrees TCA. The upper and lower contacts are both sharp and distinct and marked by the first and last occurrence of coarser material.

<<Struc: 283.78 - 283.78: bedding>>

283.84 284.59 SDST Sandstone

Clast supported, polymictic, lithic arenite. The interval is graded once through its entirety grading from 2mm wide clasts to .5mm clasts. Clasts are 20% angular to sub-rounded black mudstone, 50 % sub rounded to sub angular grey chert, and 30% angular white chert/quartz. Matrix content of the interval increase uniformaly from the lower contact to the upper contact in the unit from 5-10% to 25% and in the final upper 12cm it is matrix supported. The interval is weakly oxidized with the matrix rusty brown/red.

Hole: TS18-013

From (m)	To (m)	Rock Type & Description	From (m)	To (m)	Length	Sample #	Au Best ppm	Ag Best ppm	Cu Best ppm	Pb Best ppm	Zn Best ppm
284.59	368.00	MDST	Mudstone								
<p>Dark grey to black silty mudstone randomly interbedded with light grey, sandy silty laminations and beds. Sandy silt beds vary in width from 2mm to 20cm in width but are on average 5mm to 2cm wide. Until 305.31m, the width of sandy silt beds varies on a cm scale causing a variably laminated/bedded texture. Sandy beds are graded from 1mm wide lithic clasts to silt and show younging uphole. Scours and slumps are soft-sediment deformation found in more than 50% of sandy silty beds also showing younging uphole. Throughout cross laminations within > 1cm wide sandy silt beds are defined by black muddy laminations and are found in ~5% of sandy beds though topping directions from them are not easily observable.. One 3cm wide bed of silty grey/green silt (tuffaceous?) is present and overprinted by <3% brassy, cubic yellow pyrite at 288.12m. From 290.82m to 291.43m a fault zone is coincident with a 20cm wide zone of matrix supported, polymictic diamictite. Clast are 95% angular 1mm to 2cm intraclasts of sandy silt with 5% being angular 1mm to 5mm white chert. Bedding is steep in the interval (70 to 80 degrees TCA) from 283.84m until the fault zone/diamictite at which point it shallows to 10 to 30 degrees TCA with beta angles 350 to 10 degrees. A zone of attenuation and displacement of sandy silt beds from 300.31 to 305.33 that is coincident with 10 to 20cm wide faulted zones results in a change in bedding to 37 to 50 degrees TCA. After this faulted zone, the texture of the rock changes to traditional pinstrip with cyclic, repetitive banding of 2mm to 1cm wide laminations/beds of mudstone and sandy siltstone being evenly spaced throughout forming the "pinstripe" texture. Brassy yellow pyrite overprints sandy/silty beds throughout forming < 2% of these beds. A weak foliation begins to developed at 312.25m and is distinct after at fault at 334.24m. This foliation forms a planar cleavage with an Alpha angle of 55 degrees TCA and a Beta that fluctuates from 345 to 10 degrees. This same fabric creates a deformation visible in the silty beds demonstrated by a millimetre scale undulation.</p>											
<<Struc: 288.49 - 288.49: bedding>>											
<<Struc: 289.68 - 289.68: bedding>>											
<<Struc: 290.63 - 290.63: bedding>>											
<<Struc: 293.08 - 293.08: bedding>>											
<<Struc: 296.4 - 296.4: bedding>>											
<<Struc: 296.85 - 296.85: bedding>>											
<<Struc: 298.18 - 298.18: bedding>>											
<<Struc: 298.62 - 298.62: bedding>>											
<<Struc: 300.22 - 300.22: bedding>>											
<<Struc: 301.27 - 301.27: bedding>>											
<<Struc: 301.88 - 301.88: bedding>>											
<<Struc: 302.32 - 302.32: bedding>>											
<<Struc: 303.81 - 303.81: bedding>>											
<<Struc: 305.65 - 305.65: bedding>>											
<<Struc: 306.79 - 306.79: bedding>>											

Hole: TS18-013

From (m)	To (m)	Rock Type & Description	From (m)	To (m)	Length	Sample #	Au Best ppm	Ag Best ppm	Cu Best ppm	Pb Best ppm	Zn Best ppm
<<Struc: 307.39 - 307.39: bedding>>											
<<Struc: 308.15 - 308.15: bedding>>											
<<Struc: 308.98 - 308.98: bedding>>											
<<Struc: 310.8 - 310.8: bedding>>											
<<Struc: 311.77 - 311.77: bedding>>											
<<Struc: 312.47 - 312.47: bedding>>											
<<Struc: 313.57 - 313.57: bedding>>											
<<Struc: 314.32 - 314.32: bedding>>											
<<Struc: 315.68 - 315.68: bedding>>											
<<Struc: 320.9 - 320.9: bedding>>											
<<Struc: 321.39 - 321.39: bedding>>											
<<Struc: 322.23 - 322.23: bedding>>											
<<Struc: 322.84 - 322.84: bedding>>											
<<Struc: 323.33 - 323.33: bedding>>											
<<Struc: 323.78 - 323.78: bedding>>											
<<Struc: 324.99 - 324.99: bedding>>											
<<Struc: 326.14 - 326.14: bedding>>											
<<Struc: 327.06 - 327.06: bedding>>											
<<Struc: 334.6 - 334.6: fabric1>>											
<<Struc: 335.05 - 335.05: fabric1>>											
<<Struc: 335.29 - 335.29: fabric1>>											
<<Struc: 336 - 336: bedding>>											
<<Struc: 337.38 - 337.38: fabric1>>											
<<Struc: 337.39 - 337.39: bedding>>											
<<Struc: 338.34 - 338.34: fabric1>>											
<<Struc: 338.8 - 338.8: bedding>>											
<<Struc: 338.92 - 338.92: fabric1>>											
<<Struc: 339.48 - 339.48: bedding>>											
<<Struc: 340.77 - 340.77: bedding>>											

Hole: TS18-013

From (m)	To (m)	Rock Type & Description	From (m)	To (m)	Length	Sample #	Au Best ppm	Ag Best ppm	Cu Best ppm	Pb Best ppm	Zn Best ppm
		<<Struc: 342.5 - 342.5: bedding>>									
		<<Struc: 344.16 - 344.16: bedding>>									
		<<Struc: 345.46 - 345.46: bedding>>									
		<<Struc: 345.89 - 345.89: bedding>>									
		<<Struc: 348.7 - 348.7: bedding>>									
		<<Struc: 352 - 352: bedding>>									
		<<Struc: 355.01 - 355.01: bedding>>									
		<<Struc: 358.9 - 358.9: bedding>>									
		<<Struc: 366.2 - 366.2: bedding>>									
		<<Struc: 367.95 - 367.95: bedding>>									

End of Hole @ 368