

## BOLT PROPERTY

Grid East	Grid North	Easting	Northing	Elev.	Depth (m)
3+75E	8+00N	446195	6819596	1510	152.70

**ZONE:**

**SECTION:**

**HOLE: BOLT-10-03**

**CLAIM:** Bolt 3 YC73900

Contractor: Top Rank Diamond Drilling Ltd

Drill: JKS-300

Core size: NTW & BTW

Casing depth: 4.87 (m) in / out

Drilling dates: July 22nd to July 26th, 2010

Geology logged by: Oliver Fu

[illegible]

**TARGET:**

[illegible]

<b>SAMPLES</b>
Numbers: J981527 to J981551
Total: 15
Batch: 1, 2
Date Sent: October 15, 2010
Certificate: WH10150449, WH10150834

COMMENTS	

# GEOLOGY LOG

HOLE: BOLT-10-03

INTERVAL			SUB-INTERVAL			LITHOLOGY			STRUCTURE				ALTERATION						MINERALS						Photo	DETAILED DESCRIPTION		
From (m)	To (m)	Interval (m)	From (m)	To (m)	Interval (m)	Unit	Modifier	Texture	Type	Attitude (tca)	Attitude (tfa)	Density (frequency)	Oxidation	Jasper	Epidote		Other		Pyrite				Other				Other	
																	Type	Intensity					Type	Intensity			Type	Intensity
0.00	4.87	4.87				OVB																				Overburden. 25 cm recovered. Maroon chert pebbles and broken up leucogabbro.		
4.87	20.11	15.24				LGAB							m			w	CLY	m								Light green, moderately altered leucogabbro. Unit weathers to light brown-orange. White, megacrystic, euhedral, plagioclase crystals range in size between 2 to 12 mm.		
																	CHL	m										
																	K	w										
			7.32	7.92	0.60				DY																	Dark grey, fine grained, siliceous dyke		
																										Dark green to black, medium to coarse grained, weakly to moderately magnetic ultramafic. Upper and lower contacts are intensely clay altered, granular, and soft. Dark red hematitic whisps are common. Local epidote-rich pulses infills fractures and seams. Carbonate alteration is strong and mainly on fractured surfaces.		
			14.55	19.00	4.45	ULT							t		s		CLY	s										
																	CHL	m										
																	CAR	s										
20.11	41.35	21.24				BXA							w		w		SIL	m								Medium to dark green, heterolithic, matrix supported breccia. Fragments are angular to subrounded, poorly sorted, light tan to dark green and white, and range in size between 0.2 to 3 cm. Local zones are speckled with dark, round crystals between 1 to 2 mm. These zones are matrix supported. The entire unit is moderately broken up. Dark green to black tension gashes are soft, and appear to be filled with chlorite. Tension gashes mainly occur proximally to jasper and epidote altered zones. Few white carbonate infilled seams. Black manganese staining occurs on fractured surfaces. Silicification varies from trace to moderate.		

# GEOLOGY LOG

INTERVAL			SUB-INTERVAL			LITHOLOGY			STRUCTURE				ALTERATION						MINERALS						Photo	DETAILED DESCRIPTION	
From (m)	To (m)	Interval (m)	From (m)	To (m)	Interval (m)	Unit	Modifier	Texture	Type	Attitude (tca)	Attitude (tfa)	Density (frequency/	Oxidation	Jasper	Epidote		Type	Intensity	Pyrite			Type	Intensity	Type			Intensity
			29.80	41.35	11.55									m			SIL	s								Multiple alteration events. White tension gashes are moderately hard, and dolomitic in composition (effervesces only when scratched). Lithic fragments are larger, and range in size between 1.5 to 7 cm. Few clasts contain soft, rounded fragments between 1 to 3 mm within their matrix. Moderately jasper altered. Epidote alteration occurs alongside jasper altered zones. These zones show fluid migration textures (32.1 m). Jasper alteration appears to be primary, followed by epidote alteration. Tension gashes appear to be the end stage of the alteration event.	
41.35	43.55	2.20				VOL								s												Light green to dark chlorite green volcanic flow with small, subrounded to rounded, soft, cloudy black crystals. Flow banding is evident, and range in size between 1 to 15 mm wide. Manganese stained patches are between 2 to 3 mm wide. Strong epidote alteration.	
			41.86	43.55	1.69												CLY	i								Light buff, intensely clay altered, soft, and granular zone.	
																	CAR	s									
43.55	99.00	55.45				VOL/ BXA							t		m											Volcanic flow interfingering a green breccia. This zone displays textures from both units, and contains numerous tension gashes which have all been filled with a white carbonaceous mineral, or a soft, non-magnetic, dark green chlorite-rich or ultramafic mineral (44.0 m). Manganese staining occurs throughout. This unit is relatively identical to the interval above, between 41.35 to 43.55 m,	
			52.50	55.50	3.00										m		SIL	s								The zone is silicified and hard. Few light pink, potassic altered patches occur alongside epidote altered zones. Subrounded, lenticular, hard, quartz phenocrysts occur throughout and range in size between 1 to 2 mm. Sharp lower contact. Deformation between intensifies with depth. Lower contact transitions to an intensely jasper altered green breccia. Dark green, soft tension gashes are numerous at the lower contact.	
																	K	m									

# GEOLOGY LOG

INTERVAL			SUB-INTERVAL			LITHOLOGY			STRUCTURE				ALTERATION						MINERALS						Photo	DETAILED DESCRIPTION	
From (m)	To (m)	Interval (m)	From (m)	To (m)	Interval (m)	Unit	Modifier	Texture	Type	Attitude (tca)	Attitude (tfa)	Density (frequency/	Oxidation	Jasper	Epidote		Other		Pyrite			Other		Other			
																	Type	Intensity				Type	Intensity				
			55.50	87.22	31.72									s	m			SIL	m								Intensely jasper altered breccia. Remnant outlines of clasts are still present, although most have a strong jasper overprint. Jasper alteration has destroyed the brecciated texture. There are numerous cross-cutting epidote, chlorite and carbonate veins that range in size between 5 to 20 mm. Crystalline epidote is common on fractured surfaces and within veins. Local potassic altered zones occur alongside epidote 'pulses'.
																		K	w								
			60.02	60.20	0.18																						Light orange-red, hard clast. Sharp contacts. Clast not yet seen in core. Black scintery mineral is found on fractured surfaces. Tension gashes within the clast are 1 to 2 mm wide. The clast resembles an altered chert fragment.
			75.70	78.02	2.32	BXA								w	s			SIL	s								Light green breccia. Crystalline epidote veins cross-cutting the unit are common. Overall epidote alteration is strong. Few white quartz veins occur alongside epidote altered zones. Clasts are matrix supported, subangular to subrounded and follow a very weak, local foliation. Jasper alteration is weak. Few clasts show a weak jasperitic overprint. Dendritic manganese staining is common on fractured surfaces.
			78.02	78.37	0.35										s			CLY	i								Same clast/unit as interval between 60.02 to 60.20 m. Although unit has undergone intense clay alteration.
			87.22	91.20	3.98									w				SIL	s								Light pinkish alteration in a light green, bleached, altered volcanic flow and brecciated unit. Quartz veins are sparse and 2 cm wide. Dark green, soft, tension gashes are common at the upper and lower contacts.
																		K	s								
																		CHL	m								

# GEOLOGY LOG

INTERVAL			SUB-INTERVAL			LITHOLOGY			STRUCTURE				ALTERATION					MINERALS					Photo	DETAILED DESCRIPTION			
From (m)	To (m)	Interval (m)	From (m)	To (m)	Interval (m)	Unit	Modifier	Texture	Type	Attitude (tca)	Attitude (tfa)	Density (frequency/	Oxidation	Jasper	Epidote		Other		Pyrite			Other			Other		
																	Type	Intensity				Type			Intensity		
			91.20	99.00	7.80	VOL/ BXA							t	w	m		CLY	w								Altered breccia and volcanic flow. Upper and lower contact are potassic altered and contain tension gashes filled with a soft, dark green mineral (chlorite?). Unit is matrix supported, and fragments contain tension gashes within their matrix. Most clasts have undergone weak to moderate jasper and epidote alteration. Few flow textures are preserved but deformed. Light tan sericite altered zones have undergone weak clay alteration. Note: this is a narrow zone showing multiple phases of alteration. From potassic -> epidote & potassic -> jasper -> clay altered with local silicified zones.	
																	SIL	w									
																	SER	m									
99.00	152.70	53.70				ULT								w			CHL									Dark black with a greenish tinge, medium grained, moderately magnetic, serpentinized ultramafic with weak jasper altered zones. Dark maroon jasper alteration occurs as wisps and cryptic patches. Locally clay altered. Serpentinized surfaces are sleek, slightly grease and vary from light to medium green. Section is weakly to moderately broken and rubbly. Carbonate stringers occur locally. Note: This unit is most likely responsible for the alteration above.	
																	CLY										
			127.75	133.00	5.25	BXA								w	m		CHL	m								Altered green breccia interbedded with a volcanic flow. Zone has undergone intense deformation. Tension gashes, and quartz veins are abundant at the upper contact. Unit is soft, local silicified zones are harder. Jasper alteration is patchy, and locally overprints the unit. Locally clay altered. Epidote alteration is locally pervasive. Dendritic manganese staining is common on fractured surfaces.	
																	SIL	w									
																	CLY	w									
																	SER	w									
			129.00	131.37		VOL											CAR	s								Purplish maroon, soft, deformed and sheared, jasper altered volcanic flow(?). Weak local foliation. Local white carbonate seams and veins range in size between 1 to 7 mm wide.	
EOH																											

## Sample Log

Hole: BOLT-10-03

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery (%)	Sample	Batch	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Comments
4.87	7.92	3.05	2.10	69	J981527	2	<0.005	0.7	260	<2	96	
7.92	10.97	3.05	2.00	66	J981528	2	<0.005	<0.2	238	<2	163	
10.97	12.49	1.52	0.42	28	J981529	2	<0.005	<0.2	71	<2	55	Very poor recovery.
12.49	14.55	2.06	1.45	70	J981530	2	<0.005	<0.2	110	2	79	Bx ontact
14.55	17.07	2.52	1.70	67	J981531	2	<0.005	<0.2	22	2	26	ULT contact
17.07	20.11	3.04	2.35	77	J981532	2	<0.005	<0.2	28	2	20	
20.11	23.16	3.05	2.90	95	J981533	2	<0.005	<0.2	121	2	111	
-	-	-	-	-	J981534	2	0.221	149.0	2460	4800	48200	Standard CDN-ME-7
23.16	26.21	3.05	2.50	82	J981535	2	<0.005	<0.2	59	4	75	
26.21	29.26	3.05	3.05	100	J981536	2	<0.005	<0.2	51	7	68	
29.26	32.31	3.05	2.95	97	J981537	2	<0.005	0.3	62	115	190	
29.26	32.31	3.05	2.95	97	J981538	2	<0.005	<0.2	57	4	78	Duplicate
32.31	35.35	3.04	3.04	100	J981539	2	<0.005	<0.2	57	<2	78	
49.50	52.50	3.00	3.00	100	J981540	2	<0.005	<0.2	83	9	106	Volcanic flow/Green Breccia?
52.50	55.50	3.00	3.00	100	J981541	2	<0.005	<0.2	146	2	118	Potassic altered
55.50	58.50	3.00	2.90	97	J981542	2	<0.005	<0.2	228	3	133	Strong jasper alteration
-	-	-	-	-	J981543	2	<0.005	<0.2	2	3	18	Blank
58.50	61.50	3.00	3.00	100	J981544	2	<0.005	<0.2	180	<2	167	
72.70	75.70	3.00	3.00	100	J981545	2	<0.005	<0.2	87	<2	109	
75.70	78.02	2.32	1.75	75	J981546	2	<0.005	<0.2	50	5	91	
78.02	81.07	3.05	3.00	98	J981547	2	<0.005	<0.2	97	2	113	
95.00	98.00	3.00	2.86	95	J981548	2	<0.005	<0.2	64	<2	61	
98.00	101.00	3.00	1.30	43	J981549	2	<0.005	<0.2	22	<2	27	
113.08	116.13	3.05	1.85	61	J981550	2	<0.005	<0.2	39	<2	27	
116.13	119.18	3.05	1.85	61	J981551	3	<0.005	<0.2	7	3	10	

# GEOTECHNICAL LOG

HOLE: BOLT-10-03

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)	Hardness	Weathering	Comments
0.00	4.87	4.87	0.30	6	0	0		SW	
4.87	6.40	1.53	1.00	65	0.00	0		SW	
6.40	7.92	1.52	1.13	74	0.00	0		SW	
7.92	9.45	1.53	1.40	92	0.00	0		MW	
9.45	10.97	1.52	0.80	53	0.00	0		MW	
10.97	12.49	1.52	0.35	23	0.00	0		SW	
12.49	14.02	1.53	1.13	74	0.00	0		MW	
14.02	15.54	1.52	1.20	79	0.35	23		SW	
15.54	17.07	1.53	0.70	46	0.00	0		MW	
17.07	20.11	3.04	2.30	76	1.70	56		MW	
20.11	21.64	1.53	1.30	85	0.80	52		SW	
21.64	23.16	1.52	1.55	102	0.90	59		SW	
23.16	24.69	1.53	1.20	78	0.36	24		SW	
24.69	26.21	1.52	1.30	86	0.30	20		SW	
26.21	27.73	1.52	1.53	101	0.37	24		FR	
27.73	29.26	1.53	1.26	82	0.72	47		FR	
29.26	30.78	1.52	1.20	79	0.75	49		FR	
30.78	32.31	1.53	1.56	102	1.56	102		FR	
32.31	33.83	1.52	1.56	103	1.25	82		FR	
33.83	35.35	1.52	1.50	99	0.80	53		FR	
35.35	36.88	1.53	1.50	98	1.40	92		FR	
36.88	38.40	1.52	1.43	94	0.75	49		FR	
38.40	39.93	1.53	0.40	26	0.00	0		FR	
39.93	41.45	1.52	1.20	79	0.00	0		FR	
41.45	42.97	1.52	1.16	76	0.60	39		FR	
42.97	44.50	1.53	1.60	105	1.00	65		SW	
44.50	46.02	1.52	1.40	92	0.88	58		FR	
46.02	47.55	1.53	1.25	82	0.00	0		FR	
47.55	49.07	1.52	1.30	86	1.09	72		FR	
49.07	50.59	1.52	1.53	101	1.33	87		FR	
50.59	52.12	1.53	1.44	94	1.06	69		FR	
52.12	53.64	1.52	1.48	97	1.07	70		FR	
53.64	55.17	1.53	1.13	74	1.15	75		FR	
55.17	56.69	1.52	1.48	97	1.05	69		FR	
56.69	58.21	1.52	1.31	86	0.00	0		FR	
58.21	59.74	1.53	1.40	92	0.00	0		FR	
59.74	61.23	1.49	1.52	102	0.75	50		FR	
61.23	62.79	1.56	1.41	90	0.40	26		FR	
62.79	64.31	1.52	1.41	93	1.18	78		FR	
64.31	65.83	1.52	1.55	102	0.77	51		FR	
65.83	67.36	1.53	1.38	90	0.27	18		FR	
67.36	68.88	1.52	1.45	95	0.47	31		FR	
68.88	70.44	1.56	1.35	87	0.72	46		FR	
70.44	71.63	1.19	1.23	103	0.41	34		FR	
71.63	73.45	1.82	1.53	84	0.73	40		FR	
73.45	74.98	1.53	1.55	101	1.32	86		FR	
74.98	76.50	1.52	1.57	103	0.75	49		FR	
76.50	78.02	1.52	1.07	70	0.40	26		FR	
78.02	79.55	1.53	1.10	72	0.60	39		SW	
79.55	81.07	1.52	1.42	93	0.40	26		FR	

## GEOTECHNICAL LOG

From (m)	To (m)	Interval (m)	Recovery (m)	Recovery (%)	RQD (m)	RQD (%)	Hardness	Weathering	Comments
81.07	82.60	1.53	1.43	93	0.60	39		FR	
82.60	84.12	1.52	1.40	92	0.63	41		FR	
84.12	85.65	1.53	1.10	72	0.40	26		FR	
85.65	88.69	3.04	2.95	97	0.61	20		FR	
88.69	91.74	3.05	2.55	84	1.40	46		FR	
91.74	94.79	3.05	2.65	87	1.10	36		FR	
94.79	97.84	3.05	2.70	89	1.50	49		SW	
97.84	100.89	3.05	1.45	48	0.57	19		SW	
100.89	103.93	3.04	1.47	48	0.10	3		MW	
103.93	106.98	3.05	1.26	41	0.00	0		MW	
106.98	110.03	3.05	1.30	43	0.00	0		MW	
110.03	113.08	3.05	1.52	50	0.00	0		MW	
113.08	116.13	3.05	2.40	79	0.32	10		SW	
116.13	119.18	3.05	1.70	56	0.60	20		SW	
119.18	122.24	3.06	1.04	34	0.00	0		SW	
122.24	125.27	3.03	2.21	73	0.13	4		SW	
125.27	128.32	3.05	2.40	79	0.87	29		SW	
128.32	131.37	3.05	1.90	62	0.88	29		MW	
131.37	134.41	3.04	1.76	58	0.30	10		MW	
134.41	137.46	3.05	0.90	30	0.00	0		SW	
137.46	140.51	3.05	1.60	52	0.56	18		SW	
140.51	143.56	3.05	2.43	80	0.52	17		SW	
143.56	146.60	3.04	2.01	66	0.90	30		SW	
146.60	149.66	3.06	1.80	59	1.24	41		SW	
149.66	152.70	3.04	1.40	46	1.53	50		SW	
EOH									



## MAGNETIC SUSCEPTIBILITY LOG

**HOLE:** BOLT-10-03

Depth (m)	Unit	Modifier	Magnetic Susceptibility	Comments
1.00			N/A	
2.00			N/A	
3.00			N/A	
4.00			N/A	
5.00			0.31	
6.00			0.27	
7.00			0.21	
8.00			0.42	
9.00			0.38	
10.00			0.25	
11.00			0.21	
12.00			N/A	
13.00			0.56	
14.00			0.34	
15.00			27.10	
16.00			0.75	
17.00			3.34	
18.00			11.00	
19.00			N/A	
20.00			0.82	
21.00			0.76	
22.00			0.53	
23.00			0.51	
24.00			0.45	
25.00			0.36	
26.00			0.54	
27.00			0.40	
28.00			0.47	
29.00			0.38	
30.00			0.65	
31.00			1.81	
32.00			0.60	
33.00			1.51	
34.00			0.54	
35.00			0.58	
36.00			0.67	
37.00			0.43	
38.00			0.32	
39.00			2.92	
40.00			3.40	
41.00			0.62	
42.00			0.43	
43.00			0.20	
44.00			10.90	

## MAGNETIC SUSCEPTIBILITY LOG

Depth (m)	Unit	Modifier	Magnetic Susceptibility	Comments
45.00			0.42	
46.00			0.54	
47.00			0.29	
48.00			0.53	
49.00			0.47	
50.00			0.53	
51.00			0.32	
52.00			0.34	
53.00			0.36	
54.00			0.54	
55.00			0.51	
56.00			0.12	
57.00			0.87	
58.00			0.84	
59.00			1.66	
60.00			1.44	
61.00			0.78	
62.00			0.43	
63.00			0.64	
64.00			0.49	
65.00			0.49	
66.00			0.43	
67.00			0.60	
68.00			0.60	
69.00			0.27	
70.00			0.45	
71.00			0.40	
72.00			0.43	
73.00			0.65	
74.00			1.00	
75.00			0.53	
76.00			0.43	
77.00			0.40	
78.00			0.42	
79.00			0.53	
80.00			0.29	
81.00			0.05	
82.00			0.07	
83.00			0.08	
84.00			0.45	
85.00			0.05	
86.00			0.10	
87.00			0.29	
88.00			0.21	
89.00			0.07	

## MAGNETIC SUSCEPTIBILITY LOG

Depth (m)	Unit	Modifier	Magnetic Susceptibility	Comments
90.00			0.07	
91.00			0.24	
92.00			0.61	
93.00			0.53	
94.00			0.65	
95.00			0.47	
96.00			0.28	
97.00			0.45	
98.00			4.65	
99.00			N/A	
100.00			16.90	
101.00			N/A	
102.00			N/A	
103.00			24.80	
104.00			30.90	
105.00			N/A	
106.00			16.20	
107.00			27.00	
108.00			N/A	
109.00			N/A	
110.00			48.90	
111.00			27.00	
112.00			N/A	
113.00			59.10	
114.00			18.40	
115.00			5.16	
116.00			50.20	
117.00			36.00	
118.00			N/A	
119.00			43.80	
120.00			28.70	
121.00			N/A	
122.00			21.10	
123.00			2.52	
124.00			1.80	
125.00			0.55	
126.00			0.53	
127.00			15.90	
128.00			1.88	
129.00			0.63	
130.00			N/A	
131.00			1.43	
132.00			0.69	
133.00			12.40	
134.00			49.50	

## MAGNETIC SUSCEPTIBILITY LOG

Depth (m)	Unit	Modifier	Magnetic Susceptibility	Comments
135.00			35.30	
136.00			N/A	
137.00			N/A	
138.00			62.00	
139.00			N/A	
140.00			32.70	
141.00			31.40	
142.00			19.90	
143.00			34.20	
144.00			74.50	
145.00			20.30	
146.00			35.30	
147.00			26.60	
148.00			61.00	
149.00			73.30	
150.00			46.30	
151.00			51.50	
152.00			0.67	
EOH				

## BOX LOG

**HOLE: BOLT-10-03**

BOX	FROM (m)	TO (m)
1	0.00	9.10
2	9.10	15.18
3	15.18	20.70
4	20.70	24.93
5	24.93	28.95
6	28.95	33.22
7	33.22	36.88
8	36.88	41.70
9	41.70	46.02
10	46.02	49.84
11	49.84	53.70
12	53.70	57.65
13	57.65	61.23
14	61.23	65.10
15	65.10	68.88
16	68.88	71.96
17	71.96	75.95
18	75.95	80.25
19	80.25	84.12
20	84.12	86.42
21	86.42	92.33
22	92.33	98.12
23	98.12	110.00
24	110.00	118.70
25	118.70	126.13
26	126.13	133.90
27	133.90	143.40
28	143.40	149.66
29	149.66	152.70
EOH		