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Tom Schroeter
Oct. 24/03
Field Visit

VAULT GOLD PROPERTY CONCLUSIONS

(1) gold mineralization in the Main 1 to 3 zones is hosted by lahars and lesser amounts of felsite while the North Vein is hosted by trachyte. These mineralized zones trend east/west with the Main 1 to 3 zones capped by carbonaceous mudstones in a geological environment similar to the Republic Camp in Washington State and are of the same age. → Klondike Sanpoil

(2) mineralization in the Main 1 to 3 zones occurs in a **silicified zone that is greater than 900m long, +200m to +500m down dip and about 100m wide, representing a large system**. It is present in quartz veins and to a lesser degree in quartz veinlets and in pervasively silicified rock and occurs in tabular shaped bodies that are generally sub parallel to bedding. Veins and veinlets are variously banded, multistaged, brecciated, vuggy, chalcedonic to opaline and often contain adularia, all indicating a low sulfidation system.

(3) gold grades in the Main 1 zone, from 29 intersections, average 2.58ppm Au(uncut)and range from 2.61ppm Au/4.52m to 4.46ppm Au/44.24m with eight high grade intersections(18.80ppm Au/2.88m to 277.87ppm Au/0.56m)in the deeper, central part of the zone that may represent a feeder system. In the Main 2 zone there is one intersection of 7.12ppm Au/2.93m that is open to depth and to the east. The Main 3 zone shows 11 intersections that average 2.33ppm Au and range from 0.94ppm Au/6.90m to 3.19ppm Au/15.60m with the zone open at relatively shallow depths(100m to 150m).

(4) the best gold grades in the North Vein occur in three zones, open to depth, with grades of 16.80ppm Au(2 holes), 19.45ppm Au(3 holes)and 20.34ppm Au(3 holes)with the vein typically about one meter in thickness.

(5) the Main 1 to 3 zones are enveloped by large haloes of greater than 0.10ppm Au. This halo is much smaller than the hosting silicified zone.

(6) drill targets exist in the feeder zone area of the Main 1 zone, below and along strike of the Main 2 zone and beneath the Main 3 zone.

MJO
September 25, 2003

SUMMARY OF AN EVALUATION OF THE VAULT GOLD PROPERTY

This report summarizes the results of an evaluation of the Vault gold property in early Tertiary volcanic and sedimentary rocks of south-central B.C. and makes recommendations as to the next phase of exploration.

(1) a detailed evaluation, primarily of the drilling(41,704m in 176 holes), of the Vault gold property in south-central B.C. was done. It focussed on the distribution of gold values greater than 0.10ppm, alteration, structure and the distribution of the mudstone unit.

The purpose of this evaluation was to check the previously indicated reserves and to see if additional potential exists. To do this all the alteration and much of the available structural data were digitized and added to the previously digitized data on rock units and analyses. These data were then plotted onto 20 north/south sections, spaced 50m apart(from 150E to 1,100E), at a scale of 1:1,000 by Terracad Drafting. This scale was used to show all of the mineralized system from the North Vein to the Main 1 to 3 zones. Most of the data on the sections are readable, however, some of the analyses are difficult to read as the analysis interval is often less than 0.50m with values overlapping so I have removed the individual values from the sections and have annotated the significant gold intersections onto each section. Section 100 is hand drawn as it was not computer plotted. The drill logs show the gold values to be in ppm i.e. geochemical and **not** assays so with the siliceous matrix the assays could be 10 to 15 percent higher.

In addition to the evaluation of the principle mineralized areas the drill logs from the South area, about 900m to the south of the Main 1 zone(Plate 1), were also examined but only one value above 0.10ppm gold was found(hole 72453- 0.22ppmAu/0.16m in a silicified breccia). Also, there are no zones of significant silicification, except in hole 72427 where 30m were encountered.

(2) one zone with **probable reserves** is indicated **(Main 1- 1.55 million tonnes of 2.58ppmAu- uncut and calculated using the sectional method).** In the **North Vein there are three zones, open to depth, with grades of 16.80ppm Au(2 holes), 19.45ppm Au(3 holes) and 20.34ppm Au(3 holes)over a typical thickness of one meter**(Plates 1 and 2, Tables 1 and 2).The Main 1 to 3 zones occur along a distinct east/west trend, perhaps representing the trend of the original feeder.

(3) the **mineralization** in the Main 1 to 3 zones occurs mainly in quartz veins, and to a lesser degree in quartz veinlets and in pervasively silicified rock, hosted by lahar and lesser amounts of felsite, and occur in the sections as tabular shaped bodies that are generally sub parallel to the bedding. These mineralized bodies are often immediately adjacent to a faulted contact with the underlying trachyte and are enveloped by broad halos of greater than 0.10ppm gold values. These halos are also tabular in shape, with a average height of 160m and a thickness of 45m, and occur from sections 150E to 950E and then from 1050E to the end of drill testing on section 1100E. The 0.10ppm gold

contour encompasses the mineralized zones and contains about 15 million tonnes of mineralized rock. On section 750E there are mineralized quartz breccias one of which grades 7.00ppmAu/5.60m(hole 72401)that appear to be perpendicular to the tabular, mineralized bodies i.e. dips about 45 degrees to the north, that could represent the original feeder system. Similar features, but less obvious, occur on sections 700E and 800E. A rotation of 45 degrees of the stratigraphy to the original flat lying position results in a vertical dip of this postulated feeder system. It possible that the high grade veins discussed in part 4 are also part of this feeder system.

Veins and veinlets in the mineralized zones are variously banded, multistaged, brecciated, vuggy, chalcedonic to opaline and often contain adularia, all indicating an epithermal low sulfidation system.

Klondike fm / Sanpoil fm

The mineralized zones, and their associated gold halos, are stratigraphically below the carbonaceous mudstone unit(extends at least from 100E to 1100E), usually by several tens of meters but the silicification can carry up to it or in some cases into it. Zones of silicification are much more extensive than the mineralized zones or the associated zones of greater than 0.10ppm Au.

(4) **higher grade intersections(+18ppmAu)**in the Main 1 zone occur primarily in quartz veins from sections 600E to 900E but mainly in sections 750E and 800E(Table 3 and Plate 3). **Values range from 18.80ppmAu/2.88m to 277.86ppmAu/0.56m** and represent, most likely, short discontinous veins. However, on sections 750 to 800E they may be part of the same quartz vein, as shown on Plate 3 which is a composite section of all the high grade intersections.

(5) the mineralization in the Main 1 to 3 zones occurs in a silicified zone that is greater than 900m long, +200m to +500m down dip and about 100m wide, representing a large system..

(6) The Main 1 zone is cut by northerly trending post mineral faults which, in steps, drops the zone from a high of about an elevation of 265m in the western part of the zone to a low of 100m in the east(Plate 4).

(7) Delta Geoscience did an gradient IP survey on lines 800E, 900E, 1000E and 1100E from 300N to 200S covering the east end of the Main 1 zone to the Main 2 zone(see attached sections and plans). Data were plotted on real depth sections from the surface to 500m below the surface. The Main 1 zone is on sections 800E and 900E and is identified as a resistivity low while the trachyte is a resistivity high. This is peculiar as the Main 1 zone occurs in a area of moderate to strong silicification which should be a resistivity high but maybe the mudstone is conductive and is masking the signature of the underlying silicified zone.

Line 1100E, over the Main 2 zone is difficult to interpret. It would be instructive to have a meeting with Delta Geoscience to compare their results with the drill section information.

(8) the **potential** on the property exists in the Main 1, 2 and 3 zones as well as down dip on parts of the North Vein(Plate 1). In the Main 1 zone, potential exists in possible feeder zone beneath the central part of the present reserves(sections 700, 750 and 800)as indicated by apparently cross cutting mineralized zones and by the open 0.10ppm Au contours and silicified zones.

Potential also exists in the Main 2 zone as represented by the intersection of 7.12ppm Au/2.93m in hole 72471(section 1100E), however, it is 500m below the surface. It is open both down and up dip on the section as well as to the east into a flat pasture area and is associated with the same zone of silicification, broad halo of +0.10ppmAu(60m wide)and faulted lahar/trachyte contact as seen in the Main 1 zone. It is possible that faulting could bring it closer to the surface further to the east but the post mineral faulting that is well documented in the Main 1 zone to the west strongly suggests that the system is getting deeper to the east. Potential could also exist at shallower depths i.e. 250m below the surface at the intersection of the projected North Vein and the lahar unit if it exist in this area.

The Main 3 zone occurs from section 100E to 450E and shows 11 intersections of interest(Table 2)from 0.94ppmAu/6.90m to 3.19ppmAu/15.60m with a typical width of 3 to 4m. It is 45m to 200m below the surface and shows the same features of alteration, structure and broad halo of +0.10ppm gold values as seen in the Main 1 and 2 zones but no high grade gold values were intersected. There is not enough data to calculate a reserve for this zone. The zone is cut off to the east on section 500E and to the west by holes 82780 and 82781 so the potential is down dip but it would have to show an increase in grade and thickness to offer any serious potential.

The North Vein has three zones with good gold grades and true thicknesses of about one m that occur at relatively shallow depths(50m to 130m below the surface)and are open to depth(see part 2). It is possible to see perhaps doubling the tonnes.

(9) it is **recommended** to: **(i)** determine what tonnes of say 16g/tonne gold in the North Vein would be required to make a viable mining operation and similarly how many tonnes of say 3g/tonne gold(underground bulk mining)would it take. This would suggest the best type of target to go after; **(ii)** relog the best mineralized intervals in the Main 1 zone(holes 72408, 72422, 72433, 72434, 72444, 72446 and 82712), Main 2 zone(hole 72471)and Main 3 zone(holes 82784 and 82785)to get a better handle on the style of mineralization; **(iii)** map and compile geological information to the east of the Main 2 zone and down to the Dusty Mac showings to get the large picture of possible potential in this area, **(iv)** review the Delta Geoscience IP data, for the appropriate drill sections, to see if resistivity surveys might be helpful in identifying mineralized zones in untested areas. In this regard it would be instructive to collect mudstone samples from the Inco drilling(holes 72410, 72408, 72417, 72457 and 72467 on section 800 and hole 72471 on section 1100E)and to test them for conductivity with an ohm meter, **(v)** make a digitized version of the present geological map(1:4,000)and **(vi)** select drill targets on the Main 1(see sections 700, 750 and 800), Main 2(see section 1100E)and Main 3(see sections

200E, 250E and 300E)zones and other areas of geological interest that might arise from the regional compilation.

Attachments

(1) **Table 1**- Vault Main Zones(1 to 3)Au and Ag Analyses, **Table 2**- Main 1 Zone Reserves and **Table 3**- High Grade Gold Intersections in the Main 1 zone.

(2) **Plate 1**- Geology of the Vault property(1:4,000), **Plate 2**- Longitudinal section of the North Vein, **Plate 3**- Composite Section of the High Grade Gold Intersections in the Main 1 Zone and **Plate 4**- Longitudinal Section of the Main 1 to 3 Zones.

(3) **Drill Sections** 100E to 1100E(21).

(4) **IP sections and plans from Delta Geoscience**

M. J. Osatenko

September 25, 2003

Table 1

Vault Main Zones(1 to 3)Au and Ag Analyses

Hole #	From(m)	To(m)	Length(m)	Au(ppm)	Ag(ppm)	Au/Ag	Host rock	Alteration[2]	Comments
38898	373.10	385.70	12.60	1.74	0.8	2.17	bx,lahar,qv,sst	6	qvs stk
PDH3	54.90	67.10	12.20	1.05	4.2	0.25	lahar	6	
72401	267.00	272.60	5.60	7.00	10.7	0.65	bx,lahar,qv,sst	6	mult qv,py
72408	314.56	342.50	27.94	4.82	9.1	0.53	lahar,qv	6	qvs@35-60(wh-blk),vuggy silica,
	329.60	337.96	10.76	8.36	19.5	0.43	lahar	6	qvs(wh-grey-brown@40,55,60,**vuggy silica(38.50ppmAu/1.5m)**
72414	408.90	411.30	2.40	2.70	8.9	0.30	qv,lahar	5	py, qvs@50-70
72415	357.02	400.1	43.08	1.34	4.4	0.31	qv,lahar	6	qvs(wh-blk)@70-80,qv@70,30,80
	379.05	389.55	10.50	3.14	7.4	0.42	lahar,qv	6	**vbx(60.35ppmAu/0.30m)**
72416	297.95	318.22	20.27	1.10	2.6	0.42	lahar,qv,felsite	5	qvs@50-70,qv@30,50(wh-grey-bk)
72417	433.30	450.80	17.50	1.36	1.3	1.05	lahar	5	qvs@30-60(wh-grey)
72419	354.73	358.75	4.02	3.06	12.3	0.25	bx,lahar,qv,sst	5	py,qvs
72422	276.15	353.85	77.70	3.03	6.20	0.48	qv,bx,lahar	6	qvs(wh-blk)@40-60,qv-vuggy
	303.55	314.00	10.45	12.71	15.30	0.83	qv, qvbx	6	qv mult(wh-grey),py
72423	309.16	414.31	5.15	2.73	18.3	0.15	lahar,bx,qv	6	qvs(wh-grey)
72433	285.25	316.00	30.75	2.11	5.60	0.38	lahar,qv,bx	6	qvs(wh-blk)@35-70,vuggy silica,py
	285.25	293.93	8.68	4.23	9	0.47	lahar,qv	6	qvs(wh-blk)@35-70,vuggy silica,py
72434	345.60	348.89	3.29	2.25	7.90	0.28	qv	6	py,opal,qv@60
	364.77	373.22	8.45	1.81	7.2	0.25	qv,lahar	6	py,opal,qvs(grey-blk)
	391.60	435.84	44.24	4.46	9.7	0.46	lahar,qv	6	rare qvs,vuggy silica,py,
	404.65	415.11	10.46	7.65	15.4	0.50	lahar,qv	6	**qvs(wh)@20-70,qv(27.8ppmAu/0.6m)**
	420.58	424.14	3.56	7.79	9.9	0.79	lahar	6	py,vuggy silica
	459.74	462.60	2.81	4.64	8.5	0.55	felsite,lahar	6	py
72436	364.55	367.70	3.15	1.47	4.9	0.30	qv,lahar	6	qvs,py
72439	335.03	343.45	8.42	2.56	5.4	0.47	lahar,qv	6	qvs(grey-blk)@20,30,py,vuggy silica,qv@30,opal
	359.21	366.95	7.74	2.41	3.6	0.67	qv,trachyte	6	qvs(grey)@40-60,py,vuggy silica
	402.90	414.40	11.50	1.32	3.8	0.35	lahar	6	qvs(grey)@40-70,py
72440	164.41	185.67	21.26	0.83	3.3	0.25	lahar,qv	5	qvs(grey),py,qv@20-30 and 70
	400.51	453.06	52.55	1.57	4.6	0.34	lahar,qv,felsite	6	qvs(wh-grey)@15-50,py,qv@35-45
	436.14	441.63	5.49	5.04	10.1	0.50	felsite,qv	6	qvs(wh-blk)@30-60
72441	427.81	433.87	6.06	2.96	7.6	0.39	lahar,qv	6	qvs,py,qv@15-30

Table 1(Cont'd)

72441	449.06	453.34	4.28	2.58	10.2	0.25	qv,lahar	6	qvs(grey-blk)@30
72442	389.46	404.42	14.96	7.70	13.9	0.55	qv,lahar	6	**qvs(blk)@30-60,py,qv32.8ppm/0.9m**
	396.44	399.32	**2.88**	**18.80**	47.00	0.40	qv	6	mult qv
	434.11	441.29	7.18	1.83	12.3	0.15	felsite,bx	6	qvs@20,60,80
	448.64	456.69	8.05	2.33	9.2	0.25	qv,lahar	6	qvs@80, qv@55,30
	541.33	541.55	**0.22**	**269.30**	178.4	1.51	qv	6	qv(wh)
72443	462.69	462.91	**0.22**	**27.25**	22.1	0.81	qv	6	qv(wh-blk)
	466.23	473.69	7.46	2.66	2.8	0.95	lahar,sst,bx	5	qvs,py
	487.57	496.44	8.80	2.49	3.4	0.73	lahar,bx,sst,qv	6	qvs@15,vuggy silica
72444	393.00	397.52	4.52	2.61	8.4	0.31	qv	6	qv@40,vuggy silica
	434.97	448.98	14.01	2.78	5.1	0.55	qv,lahar,felsite	6	py,qvs
72446	257.94	273.73	15.79	1.53	4.3	0.36	qv,lahar	6	qv@20,py
	302.06	308.81	6.75	1.26	2.6	0.46	qv,lahar	6	qv@30,py,qvs(grey)@60,70
	337.73	351.69	13.96	4.00	4.1	0.98	felsite	6	qvs(grey-blk)@30-60,py
72449	213.53	327.13	113.60	1.81	4.0	0.45	qv,bx,lahar,fel	6	qvs(wh-grey)@30-60,opal,py
	220.98	235.40	14.42	4.40	10.7	0.41	qv,bx,lahar	6	qvs(wh-grey)@30,py,opal
72450	164.00	166.12	2.12	1.62	1.4	1.16	andesite	6	no comments
	281.96	286.58	4.62	5.60	8.8	0.64	qv,bx,lahar	6	qvs,py
72457	330.15	336.79	6.64	2.70	3.3	0.82	qv,lahar	6	qvs(stk),py,qv@30
72460	218.54	263.66	45.12	2.33	3.8	0.61	qv,fel,bx,lahar	6	qvs(wh-pink)@30,py,opal
	256.89	263.66	6.77	5.80	6.2	0.94	qv,bx,lahar	6	qvs(wh-blk)@30,qv@30,70,90
72461	230.49	261.09	30.60	1.13	2.6	0.43	fel,bx,lahar,st	6	qvs(grey-bk),py
72462	237.87	253.29	15.42	2.93	4.8	0.61	qv,lahar,ult	6	qvs@45,py
72463	260.33	289.98	29.65	1.61	2.2	0.73	qv,lahar,fel	6	qvs(grey)@20-75,py
	300.04	300.77	0.73	11.95	6.5	1.83	lahar	6	qvs@20
72464	303.07	304.03	**0.96**	**23.64**	9.7	2.44	**mudstone**	6	opal,bxqvs
72465	287.25	287.81	**0.56**	**277.87**	**337.3**	nd	nd	nd	nd
	295.00	298.96	3.96	3.62					
72470	268.95	272.68	3.73	3.35	5.4	0.62	felsite	6	qvs(grey)
72471	505.48	508.41	2.93	7.12	6.6	1.08	bx,qv	6	qvs(grey)@50
82702	206.05	214.40	8.35	1.87	13.0	0.14	lahar	6	py,qvs(grey-blk)
82709	151.48	152.68	1.20	3.98	6.2	0.64	lahar	6	
	215.85	217.95	2.10	3.69	5.6	0.66	bx	6	py
82711	254.00	257.28	3.28	1.52	2.5	0.61	lahar,bx	6	qvs,py

Table 1(Cont'd)

82711	269.56	271.56	2.26	5.12	7.7	0.66	qv,bx,lahar	6	qvs,py
82712	240.61	256.13	15.52	3.15	3.5	0.90	felsite,qv,lahar	6	**qvs@50-80,qv@60,56.41ppmAu/0.49m**
82777	86.63	88.97	2.34	1.70	4.7	0.36	qv	6	
82778	127.37	142.97	15.60	3.19	10.7	0.30	qv,bx,lahar	6	py
82779	126.77	129.87	3.10	1.95	17.6	0.11	qv	6	qv(wh)
82784	124.73	128.3	3.57	3.10	12.1	0.26	bx,and	6	qvs(wh)@45-55
82785	151.5	158.4	6.9	3.86	16.4	0.24	qv,bx	6	py
83-4	64.00	68.00	4.00	1.85	6.2	0.30	trachyte	5	qvs(wh-blk)

* high grade intersection(+18ppmAu)

2- 5(weak silicification), 6(moderate to strong silicification)

Table 2

Main 1 Zone Reserves

Section	Dimensions(m)	Tonnes(1000)	Grade(ppmAu)*	Intersections(ppmAu/m)	Location	Elevation(m)
Zone 1						
550	70(10)(45)(2.6)	**82**	**3.20**	3.35/3.73,3.16/15.52	45S-200S	310-220
	95(30)(50)(2.6)	**370**	**1.98**	2.33/45.12,1.81/113.60,2.11/30.75		
600	80(30)(50)(2.6)	**312**	**2.61**	1.26/6.75,1.13/30.60,4.00/13.96,1.52/3.28,5.12/2.26,3.03/77.70	35S-115S	290-200
650	70(15)(50)(2.6)	**137**	**2.34**	2.93/15.52,2.56/8.42,2.41/7.74,1.32/11.50	35S-95S	230-180
700	75(15)(50)(2.6)	**146**	**1.76**	2.61/4.52,1.61/29.65,2.78/14.01,1.10/20.27	60S-110S	235-175
750	65(20)(50)(2.6)	**169**	**3.12**	7.00/5.60,7.70/14.96,2.33/8.05,1.52/52.55	40S-100S	215-170
800	170(17)(45)(2.6)	**338**	**3.24**	1.81/8.45,4.46/44.24,3.06/4.02,2.70/6.64,1.34/43.08,4.82/27.94	10S-120S	215-120
Total		**1554**	**2.58(uncut)**			
Zone 2						
1100				7.12/2.93	60S	-50
Zone 3						
100				0.93/6.90	90S-95S	480-475
150				no intersections		
200				1.62/2.12	105S-115S	430-400
250				1.95/3.10	120S-125S	375
300				1.05/12.20	40S-60S	460
350				3.10/3.57,3.19/15.60,3.86/6.90,3.69/2.10,3.98/1.20	95S-150S	400-280
400				1.85/4.00,1.70/2.34	65S-95S	430-410

*** Au values done by geochemical method and are not assays. Since the host rock is siliceous the assay values could be 10-15%higher.**

Table 3

High Grade Gold Intersections in the Main Zone 1

Hole #	Section	From(m)	To(m)	Length(m)	Au(ppm)	Host Rock	Comments
72443	900	462.69	462.91	0.22	**27.25**	qv	qv@40
72408	800	329.60	331.10	1.50	**38.50**	lahar	mult qvs(70%),vuggy silica,qvs@35-45
72415	800	379.05	379.35	0.30	**60.35**	.qv	qv@80
72434	800	414.51	415.11	0.60	**27.80**	qv	qv@20
72465	800	287.25	287.81	0.56	**277.87**	nd	nd
72442	750	396.44	399.32	2.88	**18.80**	qv	no structural data
	750	403.52	404.42	0.90	**32.80**	qv	qv@20
	750	541.33	541.55	0.22	**269.30**	qv	qv@50
72464	700	303.07	304.03	0.96	**23.64**	mudstone	no structural data
82712	600	246.00	246.49	0.49	**56.41**	lahar	qvs, no structural data

nd- no data