DIAMOND DRILLING (PHASES 1 AND 2) ASSESSMENT REPORT ON THE BAR 19 CLAIMS

NTS 82G041

Latitude 49°29'24''N

Longitude 115°55'18''W

1

Work performed from November 15, 2002 to June 30, 2003

CROUCHLESSON RANGER **Owner - Gordon Leask/Therm Exploration** 922 - 510 West Hastings St. Vancouver, B.C. V6B 1L8

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Analytical Data for Hole B-03-10 Analytical Data for Hole B-03-11

* In accordian folder marked "Part 2 of 2"

DIAMOND DRILLING ASSESSMENT REPORT Bar 19 Claim

1.0 Introduction

The Bar property, located 6-8 km west of Cranbrook, in the East Kootenay region of British Columbia, Canada is centered at 49 °29'24'' North Latitude, 115 °55'18'' West Longitude, on NTS sheet 82G041 within the 18-unit (4.5 sq.km) Bar 19 mineral claim.

The Bar property covers a portion of a north-south trending ridge. The ridge area consists of a narrow plateau, with steep flanks on either side. Elevations on the property range from 1580 m to 1700 m; the ridgeline to the south has a maximum elevation of 1768 m. The entire area is covered by dry montane coniferous forest, comprised largely of white spruce, larch and lodgepole pine, of which a significant amount along the access roads to the south has been logged recently. The local climate is fairly dry, although significantly more snow falls at the property than at the city of Cranbrook. The area is normally snow covered from early November to late April. Field seasons extends from mid-May to late-October, although drilling is feasible at all times of year except during spring break-up from late March to mid-April.

1.10 Access

The Bar property is easily accessible by 4 x 4 truck from the City of Cranbrook, population roughly 18,500. Average driving time from Cranbrook is about 45 minutes. Access to the property is by recently refurbished logging roads extending north from Km 4 of the main Lumberton road, which extends west from British Columbia Highway 3. A temporary bridge along the refurbished logging road extends across Palmer Bar Creek, two kilometers north of the Lumberton Road.

1.20 Property Definition, History, Background Information

The Bar property includes the Bar 19 claims totaling 20 units. The owner of the claim is Therm Exploration of Vancouver, B.C. The claim is currently under option to Chapleau Resources Ltd. who is also the operator.

Significant discrepancies in definition of the Bar prospect can be found in published sources. One example of this is the current BC Minfile Database (Minefile 082GSW068, updated Oct.10, 2003) that states "Chapleau Resources Ltd. discovered and drilled the Bar prospect in 1988; DDH B-88-20 returned 0.58% Cu over 50.5 m (Assessment Report 20274). Noranda Exploration Company staked the Bar 19 claim in 1985 and took 49 soil geochemical samples. Swift Mineral Ltd. drilled a 293.2 m deep hole in 1990 and some trenching occurred during the early to middle 1990's. Drilling by Chapleau Resources Ltd. in 2002 and early 2003 confirmed the mineralization extends 290 meters along strike





and to a depth of 341 m...". In this description, there are three absolutely different prospects/properties/mineral showings mixed: the present Bar prospect (Bar 19) where the 2002-2003 work by Chapleau was conducted, the present Zeus prospect situated 1-3 km west of the Bar (Bar 19) prospect which has been partially drilled by Chapleau in 1988-1990 (e.g., Banting, 1989; Klewchuk, 1990), and the Bar (former Bar 1-18 claims) prospect situated 3 km and more south of the present Bar (Bar 19) prospect which has been drilled by Swift Minerals Ltd. and Goldpac Investments (Leask, 1988).

Additional confusion can be happen as it has been common practice to apply the name "Bar (Lookout) prospect" to the Bar (Bar 19) prospect drilled by Chapleau in 2002-2003, as the drilled Bar (Bar 19) prospect and the Lookout prospect cover absolutely different mineral showings. The Lookout prospect (also known as Belleville, Hamilton vein, or Nord – Minfile 082GSW001, or Crown Grant Lots 5253 and 5254) covers high-grade gold-lead showings and is situated about 3.5 km south-south-east of the Bar 19 claim; it has been drilled by White Knight Resources Ltd. in 1990 (McDonald, 1990).

Taking into account the above notes, the true history of the work performed on the Bar 19 prospect can be summarized as following:

1983 - the area incorporating the present Bar 19 claim mineral showing was staked by J.Leask and associates (as Bar 1-19 claims) to acquire ground around numerous lead-zinc showings (situated far south of the present Bar 19 claim) considered for their SEDEX potential.

1985 – Noranda Exploration Company optioned the whole (Bar 1-19) property, drilled the lead-zinc showings to the south but also conducted a limited soil grid sampling (49 samples) over the present Bar 19 claim, with samples assayed for Cu, Pb, Zn, Ag and Mo (but not assayed for gold) (McDonald, 1986). On this basis, a strong Zn-Pb geochemical anomaly has been identified but no follow-up geological work has been done by Noranda. Subsequently, Noranda dropped the option.

1990-1991 – White Knight Resources Ltd. and Therm Exploration Ltd. conducted another soil geochemistry program and outlined a large area of anomalous soil geochemistry in both gold and lead on the northern portion of the property. Follow-up trenching uncovered strongly altered, gold-bearing, quartz syenite dykes. Highlights of the trenching included: 4.52 g/t Au over 26.0 meters, including 7.42 g/t Au over 11.0 meters; 3.08 g/t Au over 18.0 meters; 2.09 g/t Au over 16.0 meters; 1.54 g/t Au over 30 meters. The gold mineralization has been traced in trenches for 280 m along strike and remained open-ended. In addition, a soil geochemistry survey has been conducted to the west of the trenches indicating further extension of the mineralization in this direction (Leask, 1992).

By 2002, only the Bar 19 claim remained in good standing; the Bar 1-18 claims have been allowed to lapse. In 2002, Chapleau Resources Ltd. conducted a due diligence study on the Bar 19 claim. This study has generally confirmed the gold grades and intervals encountered in trenches by White Knight Resources. In addition, an extension of the

mineralized structure further west and east has been confirmed by surface rock sampling establishing a total strike length of the mineralized structure in excess of 1 km.

1.30 Summary of Work Done

The 2002-2003 Phase 1 and 2 exploration program involved the drilling of 15 diamond drill holes of HQ and NQ size, totaling **3153.72 meters**. Access involving clearing/reestablishing an old 4x4 road, bridge re-construction, and establishing the new roads and drill pads was necessary. A limited program of prospecting/sampling was conducted in 2002. In 2003, a much more extensive program of grid soil sampling and prospecting covered most of the property area.

2.00 General Geology of the Property

The property area is underlain by mid-Proterozoic sediments of the Purcell Supergroup that have been intruded by the mid-Cretaceous Bayonne plutonic suite.

2.10 Precambrian metasediments and intrusives

The Purcell Supergroup is a thick sequence of terrigenous clastic, carbonate, and minor volcanic rocks. The basal Aldridge Formation, as exposed in Canada, is siliciclastic turbidites about 4000 meters thick. It is informally divided into the Lower, Middle, and Upper members. The Lower Aldridge, the base of which is not exposed, is about 1500 meters of rusty weathering (due to pyrrhotite), thin to medium bedded argillite, wacke and quartzitic wacke generally interpreted as distal turbidites. The Sullivan SEDEX orebody occurs at the top of this division. The Middle Aldridge is about 2500 meters of grey to rusty weathering, dominantly medium bedded quartzitic wacke turbidites with periodic inter-turbidite intervals of thin bedded, rusty weathering argillites some of which form finely laminated marker beds (time stratigraphic units correlated over great distances within the Aldridge/Prichard basin). The Upper Aldridge is about 300 meters of thin bedded to laminated, rusty weathering, dark argillite and gray siltite often in coupletstyle beds. The Aldridge Formation is overlain by the Creston Formation, consisting of quartzites and grey, green and maroon wackes representing tidal flat to deltaic depositional environments forming a sequence up to 1800 meters thick. The Purcell Supergroup has been intruded by sills, somewhat discordant sheets and dykes of the 1433 Ma +/- 10 Ma Moyie Sills suite, most prominent in the lower portions of the Aldridge Formation.

2.20 Cretaceous and Eocene plutonic suites

The Purcell Supergroup has been intruded by the *mid-Cretaceous Bayonne plutonic suite*, occurring as an arcuate belt extending along the eastern edge of the Kootenay Arc from northwest of Salmon Arm, British Columbia, through the Revelstoke, Golden and Cranbrook area, and beyond the Canada-USA border (Logan, 2002). This intrusive suite

is one of a number of mid-Cretaceous plutonic suites traced along the eastern rim of the Cordilleran from Alaska to Yukon and British Columbia and further south to the USA. Together, these intrusive suites determine a global-scale metallogenic province (or belt) of intrusive-related gold mineralization including a number of large deposits known in Alaska, Yukon, British Columbia and probably extending further south to the Carlin and related group of mining districts in Nevada.

The intrusives of the Bayonne plutonic suite consist largely of monzogranite to granodiorite and biotite to biotite-muscovite granites. The hornblende-biotite granites are metaluminous to weakly peraluminous; two-mica granites, aplites and pegmatites are strongly peraluminous. Trace element analysis suggests the Bayonne plutonic suite intrusives were likely derived from crustal melting in response to crustal thickening along the North American Craton margin (Logan, 2002).

Numerous Bayonne plutonic suite intrusives occur within the Cranbrook area, including the Reade Lake stock, north of the Bar property, and the Kiakho stock, in the east portion of the Bar property. Both stocks are strongly alkalic, with increasing alkali feldspar content with increasing magmatic differentiation, with a relative enrichment of alkali elements within the Kiakho stock. The age of these plutons was determined as 94 Ma (U-Pb method) for the Reade Lake stock and 122Ma (K-Ar method) for the Kiakho stock (Hoy and Van der Heyden, 1988).

In addition to numerous typically granodiorite intrusives representing the Bayonne plutonic suite, much more alkaline - syenite and quartz syenite intrusives (stocks and dykes) are also common in the Cranbrook area. They form a series of roughly east-west trending discontinuous swarms, chains, or "trends", with some "trends" traced for at least over 25 km. The east-west orientation of the syenite dykes and their larger swarms/"trends" is clearly transverse to that of the Bayonne plutonic suite intrusives typically extended northeast or north-south, similarly to the general extent of the Bayonne plutonic suite area. These specific geological and compositional features may suggest that the syenites belong to another - the *Eocene (51 Ma) Coryell plutonic suite* that is well known in the East Kootenay region and is represented by alkaline, biotite-hornblende syenite. This suggestion, however, needs further research.

2.30 Tectonic features

The structural pattern of the Cranbrook area is determined by at least three or four major (regional-scale) fault systems. First, the major northwest-southeast fault zone occurred roughly parallel to the orientation of the major Cordilleran orogenic belts extends through the whole area. Second, a wide district to regional-scale fault zone occurred as transverse to the first one extends southwest-northeast. Third, a number of east-west narrower and often concealed fault zones ("Syenite trends") occurs throughout the area. There is also another quite remarkable west-northwest fault system (so called "Vine vein trend") represented by discontinuous and often concealed fault and deformation zones. Together, these faults form a complex (and obviously multiple re-activated) structural network, with numerous zones of their mutual (locally – triple) intersection zones that acted as

structural "traps" and control the majority of the gold and related mineralization occurred in the area.

This fault network is superimposed on the variously-sized folded structures, of which anticline folds (quite common in the Purcell Anticlinorium), especially their fold closure portions seem to be of significant importance in controlling the hydrothermal mineralization.

2.40 Adjacent properties

The Bar property is situated proximal to the Zeus property located1-2 km to the west, Lookout (Bellville, or Nord) property located 3-4 km to the south and to the St.Joe property located1-2 km to the east. The Zeus property is owned by Chapleau Resouces Ltd. as a part of the Cranbrook Gold Project; it incorporates a number of gold and copper showings related to syenite dykes and crosscutting fault zones bearing abundant quartz and sulfide material. The Zeus property is currently considered as a direct continuation of the Bar property mineralized structures further west. The Lookout property is owned by White Knight Resources Ltd; is incorporates a number of high-grade gold and lead showings apparently related to the west-northwest trending faults. The latter are currently considered as parallel to the mineralized zone of the same direction found at the Bar property. The St.Joe property has recently been acquired by Klondike Gold Corp.; it incorporates a number of high-grade lead-zinc showings apparently related to the further east-southeast continuation of the same structures in part controlling mineralization at the Bar property.

2.50 Local geology of the property

The structure of the property consists of a northerly plunging anticline which is attenuated to the north by the Cranbrook Fault, a major east-west trending structure with some 2000 meters of throw (Leask, 1984). This fault brings Middle Aldridge quartzite wackes in contact with Creston platformal quartzites. The large monzonitic Kiakho stock is situated at the eastern portion of the property (intrudes the anticline ?) and apparently is also cut by the Cranbrook Fault. A number of syenite (quartz syenite) dykes (or apophyses of underlying intrusive) up to 60 meters wide (on surface) are traced east-west along the Cranbrook Fault. The Cranbrook Fault and related deformation zones is the major host for the gold mineralization.

Field work in 2002-2003 and subsequent diamond drilling provided essential information regarding the details of the geological structure of the property. *First*, it has been shown that the mineralization is hosted by some moderately (40-50°) north-dipping fault structure, likely a thrust fault, and by a number of steeper-dipping "splays" occurred along its northern (hanging wall) side. It is unclear whether this thrust-fault represents the east-west trending Cranbrook Fault (previously believed to be a normal fault), or it represents another (but also roughly east-west-striking) fault zone "superimposed" over the Cranbrook Fault and displacing the latter. *Second*, it has been shown that the most intense gold mineralization is preferably occurred within the Cranbrook Fault in the area

of structural intersection with cross-cutting, west-northwest (310-320°) trending fault zone. *Third*, it has been suggested that this west-northwest trending fault zone represents the system of so called "the Vine vein trend" mineralized faults well known in the region and that other similar (parallel) faults may exist on the property intersecting the Cranbrook Fault or situating behind it. *Forth*, is has been shown that the syenite "dykes" outcropped on surface are in fact just apophyses of much larger syenite intrusive found on depth and probably underlying the most of the northern portion of the property. *Fifth*, the monzonites visually similar to these of the Kiakho stock on the eastern side of the property have been found in large rubblecrops along the opposite (western) side of the property: i.e., the monzonite intrusive probably underlies the whole property.

Overall, the mineralization on the Bar property is situated (on surface) within a zone up to 60 meters wide followed for at least 1000 meters along strike. The widest portion of this mineralized zone extends for about 300 meters and apparently corresponds to the intersection on the east-west trending Cranbrook Fault (marked by syenite dykes and/or apophyses) and another - west-northwest trending (300-310°) fault zone. The mineralized zone has a minimum vertical extent of roughly 100 meters, identified in exposures at least 100 vertical meters apart.

The widest portion of the mineralized zone has been exposed by 1990-1991 trenching. Mineralization consists of auriferous quartz, quartz-pyrite and lesser quartz-pyritegalena-bearing stockwork, vein, breccia and dissemination zones occurred in syenites and surrounding metasediments. Especially intense mineralization is found in and close to the northern contact zone of the larger east-west trending syenite body; this contact is tectonic is origin and is manifested by a several meters thick zone of intensely limonitic, oxidized fine gouge.

The syenites are medium to coarse grained, and range from equigranular to weakly potassic-feldspar porphyritic. Within broad zones, they have undergone pervasive moderate to locally strong argillic, phyllic and silica alteration, associated with 1-5% disseminated fine-grained pyrite. Fine quartz stockwork, commonly pyritic, zones comprising 2-6% of the rock mass, are abundant; local zones of strong silicification and multi-episodic stockwork formation also occur. Sulfide content varies directly with intensity of alteration.

At the western limit of the trenching, multiple stages of matrix-filling gray quartz with fine-grained euhedral pyrite occur within strong sediment-hosted replacement-style zones of silicification, including minor chalcedonic veining. Grab rock samples this area returned locally very high values up to 98 g/t Au, with check assays to 281 g/t Au. From here, the zone although much narrower has been traced by prospecting for at least 500 meters to the west, along which grab rock sampling returned values up to 9.84 g/t Au. An elevation difference of roughly 300 meters occurs along this extension, suggesting a minimum vertical dimension of 300 meters. To the east of the trenched area, the mineralized zone apparently splits into 2-3 or more parallel but narrower zones followed for 200-300 meters along strike and open further east; a few grab rock samples returned

elevated values up to 15 g/t Au but the gold grades are typically less consistent than within the trenched area.

3.00 Diamond Drilling

A total of **3153.72** meters of diamond drilling in 15 holes were completed during the Phase 1 and Phase 2 drilling programs extending from Nov 26, 2002 to March 09, 2003 and from April 21 to June 31, 2003, respectively. DDH B-02-01, B-02-02, B-02-03 and B-03-03A were drilled as a fan from a single central setup located at 577925E, 5482380N. Holes B-03-04, B-03-05, B-03-06 were drilled as a fan from a second setup at 577775E, 5482440N, 160 meters west-northwest of the first. Recoveries from the upper portions of these holes, drilled by "NQ" core were deemed inadequate for conclusive results; these upper sections were re-drilled as DDH B-03-04A, B-03-05A and B-03-06A respectively by "HQ" core. DDH B-03-07 and B-03-08 were drilled as a fan from a single setup (third setup) at 578055E, 5482380N, 130 meters east of the first setup. DDH B-03-09 was drilled from south to north from a setup (forth setup) at 140 m south of the second setup; it situates at 577790E, 5482300N. DDH B-03-10 was drilled from a setup situated about 200 meters north of the first and third setups, approximately on equal distance in between, at 577969E, 5482547E. DDH B-03-11 was drilled from a setup situated 245 meters east of the third setup, at 578250E, 5482477N.

Table 1 below states location, azimuths, dips and lengths of the diamond drill holes drilled at the Bar property in 2002-2003.

NN	DDH	Location (U)	FM NAD 83)	Azimuth	Dip	End of
		Easting	Northing		_	Hole (m)
1	B-02-01	577925E	5482380N	180°	-45 °	379.45
2	B-02-02	577925E	5482380N	180°	-70°_	247.80
3	B-02-03	577925E	5482380N	_360°	-70°	250.85
4	B-03-03A	577925E	5482380N	Vertical	Vertical	434.92
5	B-03-04	577775E	5482440N	180°	-45°	194.16
6	B-03-04A	577776.55E	5482440N	180°	-52.5°	49.98
7	B-03-05	577775E	5482440N	180°	-70°	230.72
8	B-03-05A	577776.55E	5482440N	180°	-70°	58.53
9	B-03-06	577775E	5482440N	Vertical	Vertical	51.20
10	B-03-06A	577776.55E	5482440N	Vertical	Vertical	257.56
11	B-03-07	578055E	5482380N	180°	-52.5°	133.20
12	B-03-08	578055E	5482380N	Vertical	Vertical	169.77
13	B-03-09	577790E	5482300N	345°	-52.5°	81.08
14	B-03-10	577969E	5482547N	Vertical	Vertical	320.40
15	B-03-11	578250E	5482472N	180°	-52.5°	276.80

Table 1

In addition, due to poor recoveries, a small portion of DDH B-03-07 was twinned as B-03-07A to a depth of 17.37 meters.

Drilling was done by LeClerc Diamond Drilling of Cranbrook, B.C., and the core was logged by C.M.Schulze, P.Geo (DDH B-02-01 through B-03-09) and D.L.Pighin, P.Geo (DDH B-03-10 through B-03-11). The core is stored in covered core racks on the Vine property near the north end of Moyie Lake.

3.10 Drill Holes B-02-01, B-02-02, B-02-03 and B-03-03A (first setup)

These drill holes were drilled from a single setup situated north of the mineralized zone, somewhere in the middle of its lateral extension. The holes were targeted to intersect the mineralized zone on depth, because field observations shown the zone dips north, as well as to check further dip extension of the zone. To achieve this, two holes (B-02-01 and B-02-02) were drilled in south direction (from north to south), one hole was vertical (B-03-03A), and one hole (B-02-03) was drilled in north direction (from south to north).

All the holes returned significant intersection of gold mineralization summarized in Table 2.

Hole	Interval (meters)	Width (meters)	Gold (g/t) by standard fire assay		Gold (g/t) by metallic screen fire assay			
				Check	Total Au	Au in +100 micron fraction	Au in – 100 micron fraction	
B-02-01	10.25-11.87	1.62	15.25		< 0.05	<0.05	<0.05	
	23.26-23.90	0.64	11.05	14.40	2.43	88.6	0.59	
Az: 180°	42.95-43.45	0.50	0.861		1.03	0.83	1.04	
	43.45-44.15	0.70	8.27		10.1	5.60	10.2	
Dip:-45°	44.15-44.80	0.65	0.319		<0.05	<0.05	<0.05	
	44.80-45.80	1.00	0.724		0.7	0.34	0.7	
	45.80-46.10	0.30	3.48		9.23	95.1	6.19	
	46.10-47.10	··. 1.00	-0.225	in a Sec	0.32	0.08	0.32	
	72.00-72.80	0.80	0.695		0.61	0.54	0.61	
	87.47-88.47	1.00	0.208		- 0 .33	3.8	0.29	
B-02-02	9.28-10.28	1.00	38.0	37.4	7.23	176.5	2.28	
	13.11-14.00	0.89	0.005		0.51	64.9	0.07	
Az: 180°	42.35-43.00	0.65	0.007		0.39	20	0.15	
	44.80-46.02	1.22	35.2	19.95	<0.05	<0.05	<0.05	

Table 2: Significant intersections, DDH B-02-01 through B-03-03A¹

¹ Here and in other Tables: shading is used to emphasize continuous intervals.

D: 709	46.00 17 16	1 10	14.05	6.00			· · · · · · · · · · · · · · · · · · ·
Dip:-70°	46.02-47.15	1.13	14.05	6.99	< 0.05	< 0.05	<0.05
	47.15-47.85	0.70	17.75		1.3	107	0.37
	47.85-48.85	1.00	0.580		0.36	5.22	0.32 👘
	48.85-49.65	0.80	5.92	`	0.35	7.12	0.29
	49.65-50.05	0.40	0.172		<u>: 1.3</u>	50.8	0.48
	50.05-50.50	0,45	0.339	· · ·	7.92	187.5	1.38
	52.25-53.42	1.17	0.069		0.44	15.7	0.26
	58.25-59.25	1.00	0.174		0.76	3.41	0.73
Í	86.08-87.10	1.02	0.085		1.61	15.05	1.44
	87.10-87.87	0.77	0.404		0.18	<0.05	0.18
	87.87-88.87	1.00	0.059		0.45	1.56	0.44
	90.02-90.87	0.85	0.566		0.25	< 0.05	0.26
[[125.76-126.30	0.54	9.76		8.95	36.8	8.34
	188.32-189.28	0.96	2.98		4.86	10.35	4.89
B-02-03	106.27-107.23	0.96	0.345		0.26	< 0.05	0.26
	107.23-107.96	0.73	0.247		0.35	0.83	0.35
Az:360°	108.70-109.77	1.07	0.228		0.32	3.57	0.30
	224.95-225.40	0.50	0.378		0.60	3.71	0.59
Dip:-70 °	231.40-232.25	0.85	0.379		0.45	< 0.05	0.45
	236.05-236.40	0.35	0.365		< 0.05	< 0.05	0.46
B-03-	9.03-9.75	0.72,	1.125		0.45	< 0.05	< 0.05
03A [9.75-10.75	1.00	0.011		1.7	244	0.83
	10.75-11.50	0.75	0.013	- 4 1g 	0.4	61.7	<0.05
Vertical	13.56-14.56	1.00	0.010		0.49	78.2	0.16
	23.60-24.09	0.49	1.675	n ta	15.8 -	287	2.26
	39.55-40.38	0.83	9.83		2.4	272	0.49
	51.12-51.74	0.62	0.012		3.29	133	0.99
	51.74-52.33	0.59	7.67		< 0.05	< 0.05	<0.05
	52.33-52.88	0.55	0.017	n in generation of the second se	0.47	17.1	0.17
	52.88-53.64	0.76	0.048		8.84	104.5	3.62
	53.64-54.65	1.01	0.119		2.41	121.5	0.36
	54.65-55.47	0.80	- >10.0	0.25	1.35	7.23	1.1
	85.42-86.42	1.00	0.53			analyzed for l	
	167.92-168.55	0.63	0.411			•	
	274.20-275.20	1.00	5.57		3.81	56.4	3.27
	336.57-336.97	0.40	0.449			analyzed for l	
ľ	341.36-341.93	0.57	0.509			4	·

The holes have intersected the proposed mineralized zone that, according to the drilling data, is related to a moderately $(40-50^{\circ})$ north dipping fault zone, likely a thrust-fault. This thrust-fault has emplaced a package of strongly altered to brecciated hanging wall siliceous sediments, largely siltstone, greywacke and quartzite, onto the footwall syenite dyke. The "contact zone", similarly to that on surface, is manifested by a several meter-thick zone of intensely limonitic, oxidized fine gouge, largely within the hanging wall

sediments, but extending up to 3 meters into the footwall syenite. Smaller oxidized gouge zones occur in sediments overlying the contact zone; these zones occur either along splays of the contact area or as sub-parallel faults overlying this. Strong gouge and fracture-controlled limonite indicates a high original fracture and quartz-stockwork controlled sulfide content, now almost completely oxidized, extending from surface to slightly within the footwall syenite. Overall, this contact zone tracing along the thrust-fault returned significant gold values: average 2.17 g/t Au over 4.15 meters in DDH B-03-01, 10.33 g/t Au over 7.45 meters in DDH B-02-02, and 7.67 g/t Au over 0.59 meters in DDH B-03-03A. No significant values were returned from hanging wall sediments in DDH B-02-03 tested continuation of the zone further north and down-dip, although values up to 0.326 g/t Au over 0.87 meters were returned from syenite slightly below the contact.

A roughly 2-meter wide zone of cataclastic to milonitic breccia was intersected roughly 10 meters below surface in the hanging wall sediments. Moderately heterolithic fragments are rounded, displaying "milling" during the faulting event, suggesting significant fault movement. This zone returned the highest gold values: 15.25 g/t Au over 1.62 meters in DDH B-02-01, and 38.00 g/t Au (check assay 37.4 g/t Au) over 1 meter in DDH B-02-02. In DDH B-03-03A, metallic screen assay returned a value of 1.7 g/t Au over 1 meter at a corresponding intersection, indicating continuation of the zone. No significant gold values were returned from the continuation of this zone intersected in DDH B-02-03.

Drilling of the syenite underlying the thrust-fault zone ("footwall syenite") revealed the presence of generally narrow, widely spaced mineralized intervals returning values of 0.1 to 0.6 g/t Au. These elevated values are associated largely with local breccia or quartz vein and stockwork zones, possibly occurring within steeply (about 70°) north-dipping auriferous structural zones. The widest intercept occurs in DDH B-02-03, where a value of 0.183 g/t Au over 9.07 meters was returned from a zone situated roughly 40 meters down-hole of the contact (thrust-fault) zone. An intersection of 2.98 g/t Au over 0.96 meters was returned from a similar but separate north-dipping zone in DDH B-02-02.

Several syenite-hosted sheeted gently north-dipping zones of quartz-galena (±sphalerite, arsenopyrite) stockwork mineralization have been intersected in the deeper portion of DDH B-03-03A. Anomalous gold values associated with elevated lead, zinc and/or arsenic values were returned from these, typically within 0.1-0.4 g/t Au range, to a maximum of 0.529 g/t Au over 0.57 meters, and only one notable exception returned values of 5.57 g/t Au over 1 meter.

3.20 Drill Holes B-03-04, B-03-04A, B-03-05, B-03-05A, B-03-06, B-03-06A (second setup)

These drill holes were drilled from a single setup that is situated north of the mineralized zone to check its western lateral extension as well as to intersect the zone on depth. To achieve this, two holes (B-03-04 and B-02-05) were drilled in south direction (from north

to south), and one hole was vertical (B-03-06). As mentioned above, recoveries from the upper portions of these holes, drilled by "NQ" core were deemed inadequate for conclusive results; these upper sections were re-drilled as DDH B-03-04A, B-03-05A and B-03-06A respectively by "HQ" core. The setup is situated 160 meters west-northwest of the first setup.

Significant intersections of gold mineralization returned by holes B-03-04 through B-03-06A are summarized in Table 3.

Hole	Interval (meters)	Width (meters)	Gold (g/t) by standard fire assay		Gold (g/t) by metallic screen fire assay			
				Check	Total Au	Au ín +100	Au in – 100	
						micron fraction	micron fraction	
B-03-04	34.16-34.75	0.59	0.593		Not	analyzed for	MSFA	
Az:180°	34.75-35.77	1.02	0.105			-		
Dip:-45°	71.55-72.45	0.90	5.92					
B-03-	6.85-7.47	0.62	0.006		0.38	102.5	0.09	
04A	17.67-18.29	0.62	6.05		0.18	18.85	<0.05	
(18.29-18.74	0.45	16.35		7.5	829	1.73	
Az:180°	18.74-19.80	1.06	19.00	م بر این اور	5.2	345	2:91	
	19.80-20.80	1.00	0.087		1.02	84.2	0.45	
Dip:-	20.80-21.73	0.93	0.407		<0.05	< 0.05	<0.05	
52.5°	21.73-22.73	1.00	0.412	4 ¹ 10	0.16	. 27.1	<0.05	
	22.73-23.53	0.80	0.017		0.65	30.2	0.26	
	34.00-34.70	0.70	0.335		0.3	0.25	0.3	
	34.70-35.35	0.65	>10.0	8.54	2.33	117	1.62	
	35.35-35.80	0.45	0.067		0.97	35	0.5	
	35.80-36.80	1.00	0.439		0.08	< 0.05	0.08	
B-03-05	24.00-25.00	1.00	0.121		Not	analyzed for	MSFA	
Az: 180°	28.58-29.40	0.82	0.102			-		
Dip:-70°	34.40-35.40	1.00	0.106]			
	36.90-37.47	0.57	0.393					
	39.60-40.30	0.70	0.125					
B-03-	36.60-37.60	1.00	0.148	1	0.33	7.51	0.28	
05A	36.60-37.60	1.00	0.209		0.37	2.37	0.37	
Az: 180°	37.60-38.51	0.91	4.83	10.80	0.27	1.86	0.2	
Dip:-70°	الج المراجع (المراجع			a de la composición d Composición de la composición de la comp				
B-03-06	39.01-40.54	1.55	0.623		Not	analyzed for	MSFA	
Vertical	44.81-46.91	1.10	0.106					
	46.91-47.35	0.44	0.390					

Table 3: Significant intersections, DDH B-03-04 through B-03-06A

B-03-	41.45-42.45	1.00	0.873	•	0.05	< 0.05	0.05
06A	46.64-46.94	0.30	0.219		0.45	2.75	0.41
Vertical	49.49-49.85	0.36	1.300		1.15	19.85	0.95
	52.00-53.00	1.00	0.304		0.39	8.43	0.27
	100.41-101.80	1.39	0.009		0.38	0.75	0.38

The holes have intersected the proposed mineralized zone, thus indicating its lateral extent (strike extent) to at least 160 meters west of the first setup. Similarly to the first setup, the mineralized zone is represented by strongly limonitic gouge hosted by the same moderately (40-50°) north-dipping thrust-fault and related splays and deformation zones. However, the syenites were not intersected, so that the thrust-fault occurs in metasediments and separates brittle quartzite to greywacke unit from the fine siliciclastic sediments. The absence of the syenites (found on surface just in several meters east of the hole collars !) raises several possibilities: 1) syenite body plunges steeply towards the west, 2) it has western, perhaps, fault-related termination somewhere close to the east; 3) it curves more or less sharply to north, so that the holes were collared and drilled south of its possible extension. The latter suggestion is supported by the fact that there is a distinct area of biotite hornfelsing just north of the second setup. Nevertheless, the thrust-fault zone having the major importance in controlling the gold mineralization has been intersected by the holes drilled from the second setup.

Fine clastic sediments along the thrust-fault zone have undergone several episodes of brecciation and associated alteration (mainly silicification), resulting in strongly silicified zone up to 12 meters thick. Intensity of alteration decreases with depth into the footwall sediments, grading through strongly developed quartz stockwork zones to zones of moderate fracture-controlled fine quartz veining. Intensely silicified zones contain up to 15% disseminated fine-grained pyrite; pyrite content also decreases with depth. With depth, a progressive decrease in limonite content is also observed.

Almost all significant gold values were returned from the thrust-fault zone or from limonitic gouge zones in the hanging wall brittle siliceous sediments. The highest gold value returned is 6.35 g/t Au over 5.05 meters (30-gram fire assay) in DDH B-03-04A. Corresponding metallic screen fire assay analysis returned a value of 3.20 g/t Au over 3.13 meters. A value of 1.58 g/t Au over 3.33 meters, including a value of 4.83 g/t Au over 0.72 meters, was returned from DDH B-03-05A; if the check assay value of 10.80 g/t Au over 0.73 meters is used, the intercept returned 3.37 g/t Au over 3.33 meters. This suggests a possible mineralized high-angle splay; conversely it could also represent two distinct moderately north-dipping fault-controlled mineralized lenses. A value of 2.23 g/t Au returned from the thrust-fault zone. Other significant results include a value of 0.623 g/t Au over 1.53 meters from DDH B-03-06, also roughly 15 meters above the thrust-fault zone, 0.873 g/t Au over 1.0 meters from a corresponding depth in DDH B-03-06A, and several anomalous values in DDH-03-06A, to a maximum of 1.3 g/t Au over 0.36 meters, from the thrust-fault zone.

Within the footwall fine clastic sediments, a 0.9 meter zone of roughly 60% quartzpyrite-galena veining returned a value of 5.29 g/t Au in DDH B-03-06. No similar zone was intersected in footwall sediments in the other holes; the best intersection other than this was 0.38 g/t Au in DDH B-03-06. Most samples of footwall sediments returned background gold values.

3.30 Drill Holes B-03-07 and B-03-08 (third setup)

These drill holes were drilled from a single setup that is situated north of the mineralized zone to check its eastern lateral extension as well as to intersect the zone on depth. To achieve this, one hole (B-03-07) was drilled in south direction (from north to south), and one hole was vertical (B-03-08). The setup is situated 130 meters east of the first setup.

Significant intersections of gold mineralization returned by holes B-03-07 and B-03-08 are summarized in Table 4.

Hole	Interval (meters)	Width (meters)	standa	(g/t) by ard fire say	Gold (g/t) by metallic screen fire assay			
				Check	Total Au	Au in +100 micron fraction	Au in – 100 micron fraction	
B-03-07	23.50-24.50	1.00	No		1.47	117	0.51	
	26.52-27.47	0.95	30g		0.74	0.51	0.74	
Az: 180°	29.96-30.96	1.00	fire		0.39	0.13	0.39	
	30.96-31.50	0.54	assay			0:24	0.57	
Dip:-	33.19-34.19	1.00			0.69	4.21	0.68	
52.5°	44.20-45.20	1.00			0.30	0.68	0.30	
	53.20-53.65	0.45			0.64	5.75	0.60	
	59.44-60.44	1.00			0.47	220	0.29	
	65.48-66.48	1.00			0.50	214	0.14	
B-03-08	57.39-58.39	1.00		an an Siran an Arian. Tair Ann Ann	0.34	0.14	0.34	
	62.24-62.79	0.55			0.41	0.67	0.40	
Vertical	64.79-65.79	_ 1.00			0.32	0.81	0.31	
	65.79-66.79	1.00		ಯೇ	1.08	1.25	0.43	
	67.50-68.50	1.00			0.73	0.86	0.14	
	70.75-71.93	1.18			0.36	0.12	0.36	
	71.93-72.23	0.30		a si ya si ya	3.42	86.20	1.77	
	77.11-78.11	1.00			0.43	0.82	0.42	
	78.11-78.76	0.65			0.61	7.82	0.52	
	131.40-132.07	0.67	0.759		Not	analyzed for l	MSFA	

Table 4: Significant intersections, DDH B-03-07 and B-03-08

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The holes have intersected the suggested mineralized zone, thus indicating its lateral extent (strike extent) to at least 130 meters east of the first setup, and total strike extent of at least 290 meters. Similarly to the first and second setups, the mineralized zone is represented by strongly limonitic gouge hosted by the same moderately (40-50 °) north-dipping thrust-fault and related splays and deformation zones. Also, similarly to the first setup, the thrust-fault zone was found separating the footwall syenite and the hanging wall sediments. However, in contrast to previous holes drilled from the first and second setups, no significant results were returned from the hanging wall sediments, except for a value of 0.12 g/t Au over 0.81 meters from DDH B-03-07A. A value of 1.47 g/t Au over 1.00 meters was returned from DDH B-03-07 along the faulted contact with underlying syenite; a value of 0.37 g/t Au over 7.67 meters was returned from syenite extending down-hole from the faulted contact; however, it is unclear whether mineralization was structurally controlled by the contact zone or by steeply north-dipping structures within the syenite. A value of 0.14 g/t Au over 0.74 meters was returned from the contact zone in DDH B-03-08.

Drilling has revealed fairly consistent low-grade mineralization extending from 20 to 45 meters and 23-55 meters down-hole of the contact zone (i.e., in footwall syenite) in DDH B-03-07 and B-03-08 respectively. This suggests a sub-parallel east-west trending mineralized zone underlying the contact zone, dipping about 35° to the north. The zone apparently widens somewhat with depth to the north, associated with slight increase in gold grades. Values to 0.20 g/t Au over 7.0 meters and up to 0.51 g/t Au over 0.75 meters were returned from DDH B-03-07, and to 0.52 g/t Au over 8.44 meters, including 3.42 g/t Au over the lowermost 0.30 meters, were returned from DDH B-03-08 to the north. Several low-grade gold values to 0.38 g/t Au over 1.67 meters were returned from 30-gram fire assay analysis of DDH B-03-08 from 130 to 155 meters down-hole.

3.40 Drill Hole B-03-09 (fourth setup)

DDH B-03-09 was drilled from south to north from a setup (forth setup) situated 140 m south of the second setup. The hole was targeted to intersect the depth extension of the 10-20 meter, locally up to some 50 meters wide zone of strongly pervasively silicified (to almost monomineralic quartz) sediments, with also abundant fine disseminated sulfides (mostly pyrite), and with locally superimposed intense quartz stockwork. Surface prospecting of this mineralized zone shown its extension for several hundred meters in roughly east-west or west-northwest direction, and sampling returned gold values ranging from less than 5 ppb to several hundred ppb and locally up to 9.36-9.84 g/t Au. Surface observation indicated also that the zone dips almost vertically, i.e., it unlikely represents the surface expression of the major (thrust-fault-related) mineralized zone which dips moderately (40-50°) north. Also, drilling from the second setup, i.e., from north to south, failed to intersect this mineralized zone despite its quite significant width on surface.

Significant intersections of gold mineralization returned by DDH B-03-09 are summarized in Table 5.

Hole	Interval (meters)	Width (meters)	Gold (g/t) by standard fire assay		Gold (g/t) by metallic screen fir assay		
				Check	Total Au	Au in +100 micron fraction	Au in – 100 micron fraction
B-03-09	23.00-24.99	1.99	0.344		Not	analyzed for	MSFA
	31.44-31.76	0.32	No 30)g fire	0.400	28.8	< 0.05
Az: 345 °			ass	say			
	59.13-59.40	0.27	0.092	1 - E	Not	analyzed for	MSFA
Dip:-	59.40-60.40	1.00	0.241				
52.5°	60.40-60.96	0.56	0.477	1			
1	60.96-61.76	0.80	0.175	5 .			

Table 5: Significant intersections, DDH B-03-09

The hole intersected mostly fine clastic sediments, locally moderately to strongly hornfelsed, and several small syenite dykes. The results show that drilling again failed to reveal significant mineralized zone on depth, at least a zone comparable in width to that observed on surface. This indicates that the zone outcropped on surface pinches out very abruptly, probably within a few tens of meters of its depth extent. The minor intercepts shown in Table 5 are attributed mostly to alternating narrow and discontinuous zones of quartz veining; the interval of 59.13-59.40 meters is a narrow syenite dike but other similarly small syenite dikes intersected failed to return any significant gold numbers.

3.50 Drill Hole B-03-10 (fifth setup)

DDH B-03-10 was drilled vertically from a setup (fifth setup) situated 200 m north of the first and third setups, approximately on equal distance in between. The hole was targeted to intersect the depth extension of the major mineralized (thrust-fault) zone that, according to the previous drilling, dips north at moderate (40-50°) angle. Although DDH B-02-03 drilled from the first setup has essentially terminated the northern dip extension of the mineralization along the thrust-fault zone, it was considered to be worth to follow this zone in attempt to discover another ("blind") area of gold mineralization, assuming that these zones might pinch and swell downdip along the controlling structure. Also, the holes drilled from the third setup (DDH B-03-07 and DDH B-03-08) have indicated essential increase of consistency and grades of the mineralization downdip the controlling structure that remained open further downdip there. Additional target for DDH B-03-10 was to check out the strike extension of low-grade syenite-hosted mineralization

Significant intersections of gold mineralization returned by DDH B-03-10 are summarized in Table 6 (note: the table includes all gold values exceeding 100 ppb).

Hole	Interval (meters)	Width (meters)	standa	(g/t) by ard fire say	Gold (g/t) by metallic screen fire assay			
				Check	Total Au	Au in +100 micron fraction	Au in – 100 micron fraction	
B-03-10	186.40-186.90	0.50	No 30		0.47	0.37	0.48	
	186.90-187.60	0.70	gram	A	0.91	0.69	0.91	
Vertical	187.60-188.90	1.30	fire		0.36	0.27	0.36	
	188.90-189.20	0.30	assay		0.08	< 0.05	0.08	
	189.20-189.70	0.50			0.34	0.37	0.34	
	189.70-190.20	0.50			0.21	0.25	0.21	
	190.20-190.70	0.50			0.21	0.49	0.21	
	190.70-191.20	0.50			0.31	0.23	0.31	
	· 191.20-191.70	0.50			0.23	< 0.05	0.23	
	191.70-192.20	0.50			0.34	0.16	0.35	
	192.20-192.70	0.50			0.64	1.22	0.64	
	198.50-199.00	0.50			0.36	< 0.05	0.36	
	199.00-199.50	0.50			0.52	0.31	0.53	
	199.50-200.00	0.50			0.59	0.47	0.60	
	200.00-200.50	0.50			1.08	1.09	1.08	
	200.50-201.00	0.50			1.10	0.69	1.11	
	201.00-201.50	0.50			0.68	1.19	0.67	
	201.50-202.00	0.50			2.00	2.95	1.99	
	202.00-202.50	0.50			1.01	0.65	1.02	
	202.50-203.00	0.50			0.13	0.22	0.13	
	203.00-203.50	0.50			0.18	0.16	0.18	
	203.50-204.00	0.50			0.14	< 0.05	0.14	
	204.00-204.50	0.50			0.10	< 0.05	0.11	
	204.50-205.00	0.50			0.20	< 0.05	0.21	
	205.50-205.50	0.50			0.18	< 0.05	0.18	
	209.00-209.50	0.50			0.16	<0.05	0.17	
	212.00-212.50	0.50			0.15	< 0.05	0.15	
	212.50-213.00	0.50			0.11	< 0.05	0.12	
	213.00-213.50	0.50			0.21	0.22	0.21	
	216.00-216.50	0.50			0.13	1.25	0.13	
	216.50-217.00	0.50			0.50	7.07	0.49	
	217.00-217.50	0.50		18 g	0.12	0.12	0.12	
	219.50-220.50	1.00	Ì		0.25	< 0.05	0.25	

Table 6: Significant intersections, DDH B-03-10

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 224.50-225.50	·1.00		0.17	<0.05	0.17
244.50-245.50	1.00	1	0.13	<0.05	0.14
256.50-257.00	0.50		 0.16	<0.05	0.17
257.00-257.50	0.50	-	0.55	3.10	0.52
272.50-273.00	0.50	1	0.29	6.44	0.26
305.50-306.00	0.50	-	~ 0.39 ° °	2.74	0.38
307.50-308.00	0.50	1	0.17	< 0.05	0.17

The hole has intersected the suggested mineralized zone, thus indicating its down-dip extent to at least 200 meters north of its intersection by DHH B-02-03 and to at least 350 meters north of its surface exposure. Similarly, the mineralized zone is represented by strongly limonitic gouge hosted by the same moderately $(40-50^{\circ})$ north-dipping thrust-fault and related deformation zones. Also, similarly to the other intercepts, the thrust-fault zone was found separating the footwall syenite and the hanging wall sediments (syenite contact found at 188.70 m). No significant results were returned from the hanging wall sediments, except for 2.30 meters immediately adjacent (above) to the syenite contact.

In the footwall syenite, significant intervals of quite consistent low-grade gold mineralization were encountered: the first (upper) interval averaging 0.37 g/t Au over 6.3 meters (186.40-192.70 m)(including 2.3 meters of overlying hanging wall sediments) and the second (lower) interval averaging 0.59 g/t Au over 7.0 meters (198.50-205.50 m). The second interval includes a higher-grade "core" averaging 1.17 g/t Au over 2.50 meters (200.00-202.50 m). Remarkably, the gold grades encountered in the second interval are very closely associated with elevated sulfide content (5-10%) and high arsenic values (typically in excess of 2500 ppm) whereas arsenic values corresponding the first interval are low or just slightly elevated.

Further down-hole, a number of narrow low-grade intervals was encountered. None of gold values in these intervals exceed 0.50-0.55 g/t Au but their presence shows further extension of the mineralized system on depth. Of particular interest is the fact that MSFA has revealed the presence of coarse gold (e.g., intervals 257.50-258.00 m, 272.50-273.00 m, 305.50-306.00 m), i.e., it is remarkably different style of gold mineralization as compare to that encountered in shallower portions of the hole. However, the overall importance of coarse gold is negligent that very strongly differs the mineralization from that encountered by almost all holes previously drilled.

Unfortunately, the hole was terminated on too shallow depth to completely check out the lateral extent of syenite-hosted mineralization intersected in deeper portions of DDH B-03-03A drilled about 200 meters south.

3.60 Drill Hole B-03-11 (sixth setup)

This drill hole was drilled to check further eastern lateral and dip extension of the major (thrust-fault-related) mineralized zone. The setup is situated about 245 meters east of the third setup.

Significant intersections of gold mineralization returned by DDH B-03-11 are summarized in Table 7 (note: the table includes all gold values exceeding 100 ppb).

Hole	Interval (meters)	Width (meters)	standa	g/t) by ard fire	Gold (g/t) by metallic screen fire assay			
			<u>as:</u>	say Check	Total Au	Au in +100	Au in – 100	
						micron fraction	micron fraction	
B-03-11	34.50-35.00	0.50	No 30		0.27	0.17	0.28	
	37.00-37.50	0.50	gram		0.19	< 0.05	0.19	
Az: 1800	37.50-38.00	0.50	fire		0.14	< 0.05	0.15	
	85.50-86.00	0.50	assay		0.36	1.14	0.36	
Dip:-	86.00-86.50	0.50			, 0.29	0.87	0.29	
52.50	92.00-93.00	1.00			0.17	0.13	0.18	
	100.00-100.50	0.50			0.36	< 0.05	0.37	
	100.50-101.00	0.50			0.12	<0.05	0.13	
	101.00-101.50	. 0.50 ~		· · · ·	0.13	< 0.05	0.14	
	101.50-102.00	0.50			0.57	1.55	0.57	
	102.00-102.50	0.50			0.79	0.51	0.80	
	108.50-109.50	1.00			0.21	< 0.05	0.22	
	133.00-133.50	0.50			0.22	0.06	0.23	
	149.50-150.00	0.50			0.13	< 0.05	0.13	
	150.00-150.50	0.50			0.26	< 0.05	0.26	
	150.50-151.00	0.50			0.21	1.01	0.20	
	152.00-152.50	0.50			0.29	0.30	- 0.29	
	152.50-153.00	0.50			1.15	0.95	1.16	
	191.50-192.00	0.50			0.27	< 0.05	0.28	
	208.00-208.50	0.50		ал (1997) Фл. (1997)	0.49	3.71	0.47	
	210.00-210.50	0.50			0.24	9.62	0.22	
	210.50-211.00	0.50		-	0.12	0.61	0.11	
	256.00-256.50	0.50			0.26	<0.05	0.15	

 Table 7: Significant intersections, DDH B-03-11

The hole was drilled in syenite from the collar to the down-hole depth of 189.00 meters, where it intersected the "lower", or "southern" syenite-metasediment contact; then, it was drilled through biotite hornfels (to 201.50 m) and then – quartzite with numerous but thin syenite and aplite dikes. The fact that the hole was collared in syenite shows that the target – the thrust-fault-related ("northern") contact of the syenite and overlying sediments – was missed. In other words, to intersect this contact (or major thrust-fault-related mineralized zone), the hole had to be collared significantly (probably, several tens of meters) further north than it was collared.

Nevertheless, the hole has intersected some low-grade gold mineralization mostly hosted by syenites – both within the major syenite body and related to small syenite and aplite dikes intruding the sediments outside the major syenite body. Similarly to DDH B-03-10, two styles of gold mineralization can be distinguished, namely, that represented by fine gold and that represented by coarse gold (e.g., intervals 208.00-208.50 m, 210.00-210.50 m), and, again similarly, the coarse gold has very limited overall importance that is in sharp contrast to the abundance of coarse gold encountered in holes B-02-01 through B-03-09.

4.00 Sampling and Assaying Techniques

All aspects of the drilling program on the Bar property, including core logging, sampling and shipping was conducted directly by Chapleau Resources Ltd. Sample analysis, including preparation, was done by ALS Chemex Labs of North Vancouver, B.C., a certified analytical laboratory.

The core selected for assaying was cut into equal portions by rock saw and sampled. Intervals of highly friable material, unsuitable for sawing, were split vertically using hand tools within the core boxes to minimize loss of fine gold by settling during transport or sampling. Some intervals, usually narrow, of material that can be neither sawn or split using hand tools were split using a standard core splitter. The remaining split halves of all samples are stored in strongly constructed outdoor roofed core racks at secure facilities at the Vine property near Cranbrook, B.C.

Most sample intervals of intrusive or mineralized sedimentary rocks were limited to 0.5-1.0 meter in length, although a small number exceed this somewhat. Samples of visually less mineralized sediments are up to 2.0 meters, due to mo homogenous nature of the material. Prior to splitting, all sample intervals were indicated by china marker on the core boxes and on small wooden blocks placed at the beginning of the interval; these blocks indicate both sample numbers and measured intervals. Sample intervals were recorded separately from the core logbooks; copies are stored at a separate site from the originals.

All drill core samples were placed in thick plastic industry standard sample bags, sealed with thick plastic serrated "Zap Straps" and sent in similarly sealed rice bags to ALS Chemex Labs. Standard and blank samples were inserted into the sample sequence at regular intervals.

The core samples were initially analyzed by standard 30-gram fire assay techniques, whereby they are crushed to ensure that a minimum of 70% of the material is less than 2.0 mm in size; this material is then thoroughly mixed. From this, a 250g sample is pulverized to 75-micron size; then a 30-gram sample of this is analyzed by fire assay with atomic absorption finish techniques. This provides gold analysis ranging from 0.005 to 10 g/t Au; samples exceeding these values (overlimits) were re-analyzed by 30-gram ł.

gravimetric finish. Rejects of all samples exceeding 10 g/t Au were also re-analyzed to confirm repeatability of values.

All samples were also analyzed by 34-element ICP, to test for abundances of Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Ti, Tl, U, V, W and Zn.

During the program, Chapleau recognized the strong probability of a coarse gold "nugget effect", of which industry-standard crushing, pulverization and fire assay techniques may be inadequate for an accurate determination of coarse gold content. Thus, the samples (308 samples) with coarse gold potential were assayed (re-assayed) using metallic screen fire assay (MSFA) techniques. This included the following preparation and analytical procedures:

- All samples are crushed so that >90% of the product is less than 2mm in size. This replaces earlier crushing guaranteeing that >70% will be less than 2mm.
- 2) The entire crushed sample is then pulverized so that >85% is less than 75 microns in length. Formerly, a 250g "split" was pulverized as such, with the remainder stored as a "reject".
- 3) A) Samples taken from strongly limonitic "rusty" material ("thrust-fault zone") are analyzed by "Wet Screen" metallic screen fire assay techniques. Here, the entire pulverized sample is passed through a 75-micron wet screen, two samples of the undersized fraction (<75 microns) are analyzed by gravimetric techniques, and the oversized fraction is analyzed by fire assay techniques. Weighted averages of the weight and gold content of the oversized fraction and the average of two samples of the undersized fraction are obtained, for a final gold value. This increases the accuracy of results and indicates the presence of coarse gold, if any. "Wet Screen" techniques are preferable for samples with high clay contents, common in the thrust-fault zone.</p>

B) Samples taken of non-clay-rich material are analyzed using 100-micron "Dry Screen" techniques. This technique involves a 100-micron screen; otherwise it is the same as the "Wet Screen" procedure.

Starting from DDH B-03-10, all samples taken were analyzed by the metallic screen fire assay (MSFA) techniques, with no standard 30-gram fire assay method employed.

5.00 Interpretations and Conclusions

The diamond drilling program has established major controls of gold mineralization at the Bar property, defined as an east-west or west-northwest striking zone up to 60 meters wide comprised of mineralized fault zones and adjacent intrusives and sediments. The most prominent is the mineralized thrust-fault zone dipping roughly 40-50° to the north; this thrust-fault zone forms the contact between syenites and overlying sediments or between sediments of different age and composition. Associated with this thrust-fault zone is the mineralization controlled either by sub-parallel narrow faulting and ÷

deformation zones or by sub-vertical splays occurred within the hanging wall sediments. This style of gold mineralization can be determined as related to intensely mineralized fault zone.

In more details, however, the drilling has shown that not the whole extent of the thrustfault zone is equally mineralized; the most intense mineralization (the highest gold grades) were found only within some portion of the thrust-fault measuring roughly some 300 meters (laterally) by about 150 meters (down-dip). Assuming eroded portion of this intensely mineralized area, its total three-dimensional shape may be presented as a lens, with thickest (central) portion somewhere close (slightly below) to current erosion level. The possibility exists to encounter other similar pinching and swelling lenses within the wide controlling structure (thrust-fault); apparently, an edge of another lens situated down-dip was intersected by DDH B-03-10. Similarly, other intensely mineralized lenses may be located on further strike extent of the thrust-fault to the west and east.

The other major style of gold mineralization is represented by intrusive-hosted quartz stockwork zones in moderately to strongly altered syenite, associated with up to 5-10% disseminated fine-grained sulfides (mostly pyrite and arsenopyrite, locally with minor galena and sphalerite). This stockwork mineralization occurs in variously-dipping zones up to a few tens of meters thick: some zones are nearly vertical or steeply north-dipping whereas others are moderately north-dipping (parallel to the major thrust-fault zone ?) or flat-lying. Although most of this mineralization encountered to-date seems to be sub-economic due to low grades and poor continuity, there were not enough drilling done to completely outline and trace this mineralization on depth and further north of the drilled portion. As a result, the potential exists to further expand the area of this mineralization as well as to encounter higher grade and more consistent intervals.

6.00 Itemized Cost Statement

Bar Drillholes: B02-01 to B03-11 and B-03-03A, 04A, 05A, and 06A 15 Diamond Drillholes totaling 3,153.72 m

From November 12, 2002 to June 13, 2003

Drilling Contractor.

LeClerc Drilling Ltd., Box 99, Cranbrook, B.C.

Nov21-Dec8/02	32,063.00
Dec9-Dec29/02	38,137.00
Jan5-Jan15/03	46,949.15
Jan16-31/03	69,794.43
Feb1-15/03	91,259.35
Feb16-26/03	30,057.02
Mar1-14/03	27,860.26
Apr21-30/03	17,878.00
May1-15/03	34,424.00

May16-31/03	30,442.73	•
June1-13/03	<u>28,858.86</u>	\$447,723.8
Geological Contractor.		
Carl Schulze, P.Geo., Cranbrook, B.C.		
- permitting, log core, etc.		
November/02	3,600.00	
December/02	6,000.00	
January/03	6,000.00	
February/03	6,000.00	
March/03	3,000.00	
April/03	<u>6,000.00</u>	\$30,600.0
Dave Pighin, P.Geo., 301 - 8th St. S., Cra	anbrook, B.C. V1C 1P2	
- permitting, log core, prepare drill section	ns, etc.	
April 1-30/03	4,875.00	
May 1-31/03	5,155.00	
June 1-15/03	<u>3,250.00</u>	\$13,280.0
Geological - Wages : Serguei Soloviev, P.Geo., Corporate Geo	blogist	
- drill program design, oversee program,		
report writing, etc.		
80 days @ 400/day =		\$32,000.0
Labour - Wages:		
Jason Frame		
Jason Frame	assaying, etc.	
Jason Frame - pick up core, cut core, prepare core for	2,000.00	
Jason Frame - pick up core, cut core, prepare core for December, 2002		
Jason Frame - pick up core, cut core, prepare core for December, 2002 January, 2003	2,000.00	
Jason Frame - pick up core, cut core, prepare core for December, 2002 January, 2003 February, 2003	2,000.00 2,000.00	
Jason Frame - pick up core, cut core, prepare core for December, 2002 January, 2003 February, 2003 March, 2003	2,000.00 2,000.00 4,000.00	
Jason Frame - pick up core, cut core, prepare core for December, 2002 January, 2003 February, 2003 March, 2003 April, 2003	2,000.00 2,000.00 4,000.00 3,000.00	
Labour - Wages: Jason Frame - pick up core, cut core, prepare core for December, 2002 January, 2003 February, 2003 March, 2003 April, 2003 May, 2003 June, 2003	2,000.00 2,000.00 4,000.00 3,000.00 4,000.00	\$21,000.0
Jason Frame - pick up core, cut core, prepare core for December, 2002 January, 2003 February, 2003 March, 2003 April, 2003 May, 2003 June, 2003	2,000.00 2,000.00 4,000.00 3,000.00 4,000.00 4,000.00	\$21,000.0
Jason Frame - pick up core, cut core, prepare core for December, 2002 January, 2003 February, 2003 March, 2003 April, 2003 May, 2003 June, 2003	2,000.00 2,000.00 4,000.00 4,000.00 4,000.00 2,000.00	\$21,000.0
Jason Frame - pick up core, cut core, prepare core for December, 2002 January, 2003 February, 2003 March, 2003 April, 2003 May, 2003	2,000.00 2,000.00 4,000.00 4,000.00 4,000.00 2,000.00	\$21,000.0
Jason Frame - pick up core, cut core, prepare core for December, 2002 January, 2003 February, 2003 March, 2003 April, 2003 May, 2003 June, 2003 June, 2003 ALS Chemex Laboratories Ltd., 212 Brock	2,000.00 2,000.00 4,000.00 4,000.00 4,000.00 2,000.00 2,000.00	\$21,000.0

Assays for samples from Bar holes B-02-01 to B-03-11

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Computer Drafting: Kevin Franck & Associates, 1656 - 6th Ave. S., Cranbrook, B.C. V1C 6H5 - drafting drill plans, sections, location maps, etc.

119.5 hours @ \$35/hour

TOTAL "BAR" DRILLING =

\$670,154.30

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Signed: Serguei G. Soloviev, P.Geo. November 6, 2003

S PROVINCE OF S. G. SOLOVIEV # 28143 BRITISH TUMBI SCIEN

\$4,182.50

\$121,368.00

3900 samples @ an average cost of \$31.12/sample

REFERENCES

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McDonald, J., 1990. Diamond drilling, geophysics, linecutting on the Lookout property. White Knight Resources Ltd. (Assessment Report 20065)

Klewchuk, P., 1990. Report on diamond drill hole B-90-1 (Bar claims, Palmer Bar Creek area). Chapleau Resources Ltd.

Leask, G.P., 1992. Geologic report on the Lookout property. White Knight Resources Ltd. (Assessment Report 22186)

Leask, J.M., 1984. Geological report on the Bar claim group. (Assessment Report 12930)

Leask, J.M., 1988. Assessment report on the Bar property. Goldpac Investments Ltd. (Assessment Report 17886)

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Appendix 1. Author's Qualifications

I, Serguei G. Soloviev, P.Geo, hereby certify that:

- I am employed on a full-time basis as Chief Geologist and Director with: Chapleau Resources Ltd. Suite 104 – 135 10th Avenue South Cranbrook, B.C. Canada V1C 2N1
- I graduated with a Diploma of Geologist (equal to Master of Science Degree, Geological Exploration) from Moscow State University, Moscow, Russia (former USSR), in 1983.
- 3) I received a Degree of Candidate of Geological and Mineralogical Science (equal to PhD, Geology of Ore Deposits) from Moscow State University, Moscow, Russia (former USSR), in 1987, and then I received a Degree of Doctor of Geological and Mineralogical Science (Geology of Ore Deposits; Metallogeny) from Russian Supreme State Attestation Committee, Moscow, Russia, in 1997.
- 4) I have practiced my profession since 1983 in a number of capacities in Russia, Central and Eastern Asia, Africa, and North America.
- 5) I am a Registered Professional Geoscientist and member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC), and I am authorized to use their seal, which has been affixed to this report.

l. s. G. SOLOVIEV s. G. Soloviev, P.Geo BRITISH OLUMBIA SCIEN

Dated this 6th day of November, 2003







V.





5482	2200	5482	
	LOOKING	EAST	1750m
	C	7	M05
			1700m
			1650m
			1600m
Creston F Middle Ald siltstone-s	END ormation: quartzite Iridge Formation: andstone uartz syenite		1550m
Cross-sec 38.00/1.00 Gold in g/t	lt zone	e, fire assay	1500m
5482	perry/sections/revisions/		1450m
JUL		5402	100