5 APRELKOVO

5.1 Background

5.1.1 Location, Accessibility and Infrastructure

The Aprelkovo gold deposit is situated in the Shilkinskii district, near to the towns of Shilka and Nerchinsk and approximately 120km east of the regional centre of Chita. The deposit is located approximately 3km to the south of the navigable River Shilka, as shown in Figure 5.1 below.

The Trans-Siberian railway is located on the north bank of the River Shilka, with the nearest stations of Shilka (regional centre); Kholbon and Priiskvaya, at distances of 20, 7 and 45km respectively from the deposit.

Power supply is provided from two power lines (110 and 10kv) running through the licence area. Industrial water is supplied from Shilka River, whereas drinking water is obtained from wells in the Aprelkovo stream and Shilka River valleys.

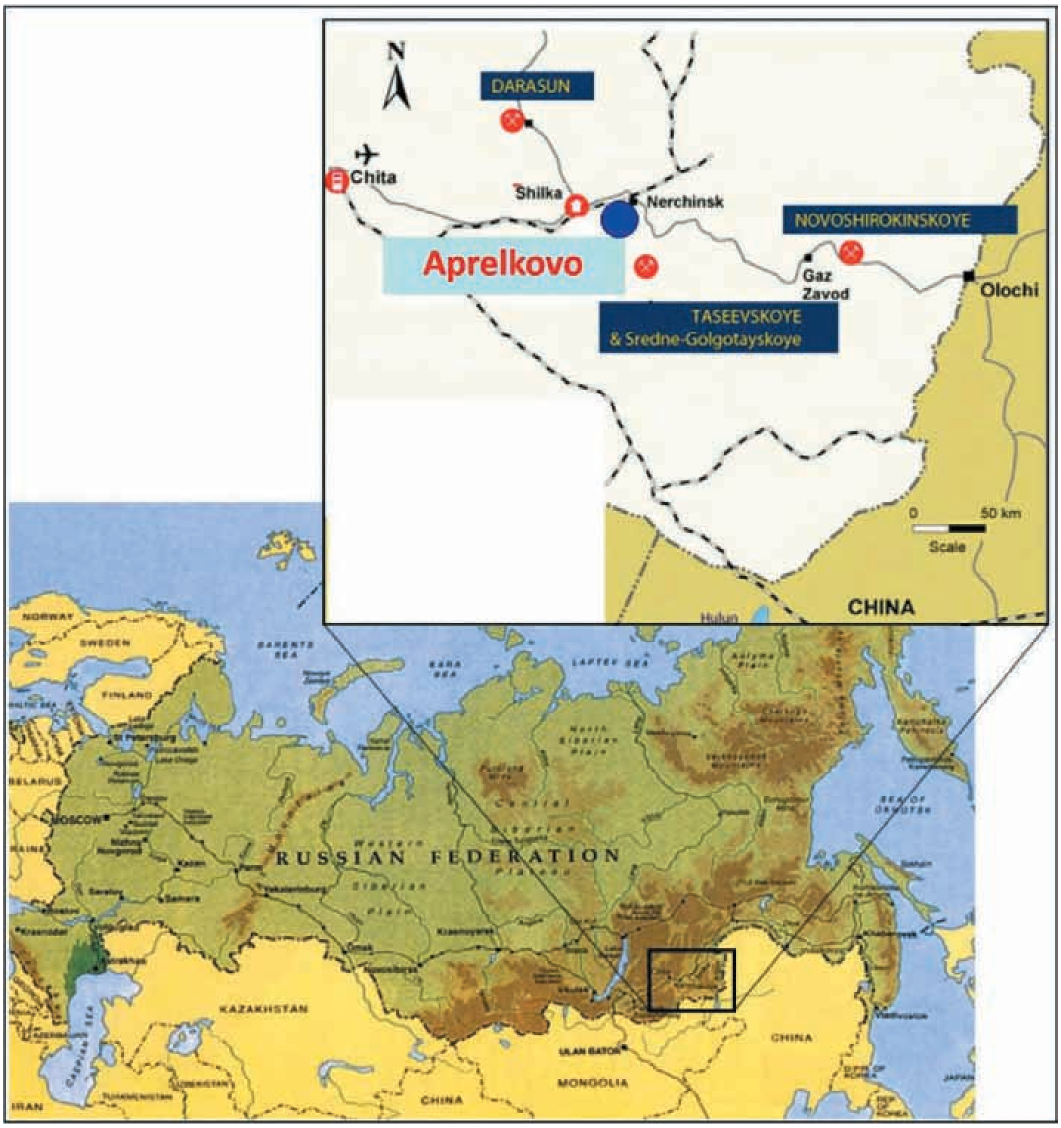


Figure 5.1: Location of Aprelkovo Gold Deposit, Chita Region Russian Federation

5.1.2 Topography and Climate

The elevation of the area ranges from 580 to 665masl. The typical landscape of the deposit area consists of low rolling hills.

The climate is extreme continental with a long winter and short, hot summer. The maximum temperature is +37°C whereas the minimum is -46°C with the annual average of -1.6°C. Annual precipitation is in the range of 300 - 600mm, with most of it falling in August. Rivers are frozen from November to the end of April - beginning of May. The thickness of the snow cover in winter is usually 15 - 20cm and in winter, soil is frozen to a depth of 3 - 4m.

5.2 Licence

The Aprelkovo licence is held by CJSC "Mine Aprelkovo. The corner co-ordinates of the licence, which covers an area of 6.62km^2 are provided in Table 5.1 below:

Table 5.1: Aprelkovo Licence Co-ordinates

Point	Latitude (North)	Longitude (East)
1	51° 51` 27``	116° 13` 15``
2	51° 51` 47``	116° 13` 50``
3	51° 51` 40``	116° 13` 58``
4	51° 51` 40``	116° 16` 17``
5	51° 50` 09``	116° 15` 12``
6	51° 50` 38``	116° 14` 08``

The licence number ЧИТ 01545, issued on 05 November 2004 and expiring on 31 December 2020 is for exploration and trial mining only. Approval is still being sought to cover an allotment for a large scale mining operation.

5.3 Geology and Mineralisation

5.3.1 Regional Geology

The Aprelkovo deposit is located within an east-west striking thrust that belongs to the Mongol-Ohotsk Regional Fault System. The area comprises Proterozoic, Palaeozoic and Jurassic metamorphic and volcano-metamorphic sequences, together with intrusive rocks of Undiskiy, Olekminskiy, Shandonskiy and Borshevskiy intrusive complexes as shown in Figure 5.2 and Figure 5.3 below.

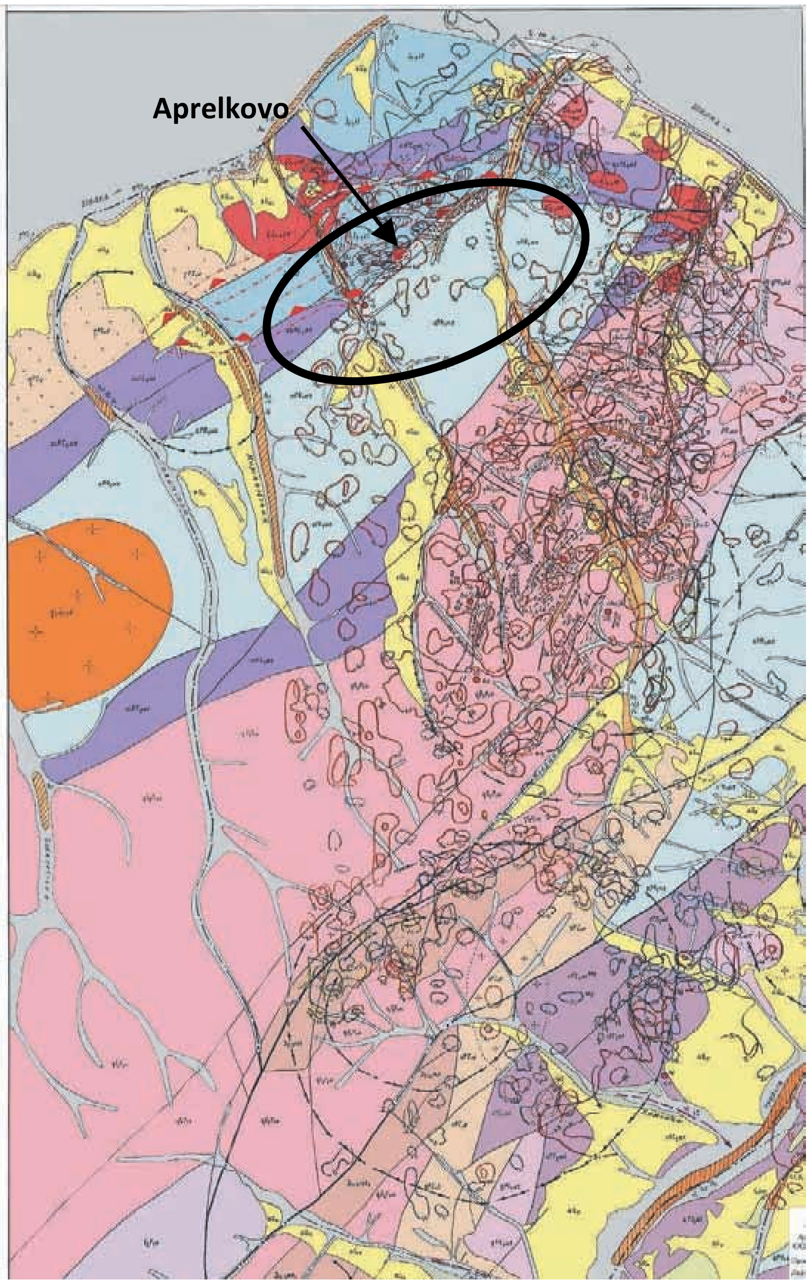


Figure 5.2: Aprelkovo – Regional Geology (Author: G Ilina)

Figure 5.3: Aprelkovo – Legend for Regional Geology

5.3.2 Local Geology

The local stratigraphy comprises the Lower Proterozoic Urulginskiy Metamorphic Complex, Middle Jurassic Upper Gazimirovskiy Formation, Middle-Upper Jurassic Shadoronskiy Dacite Volcanogenic Complex, and Pleistocene and Holocene alluvial and colluvial sediments (see Figure 5.4 and Figure 5.5).

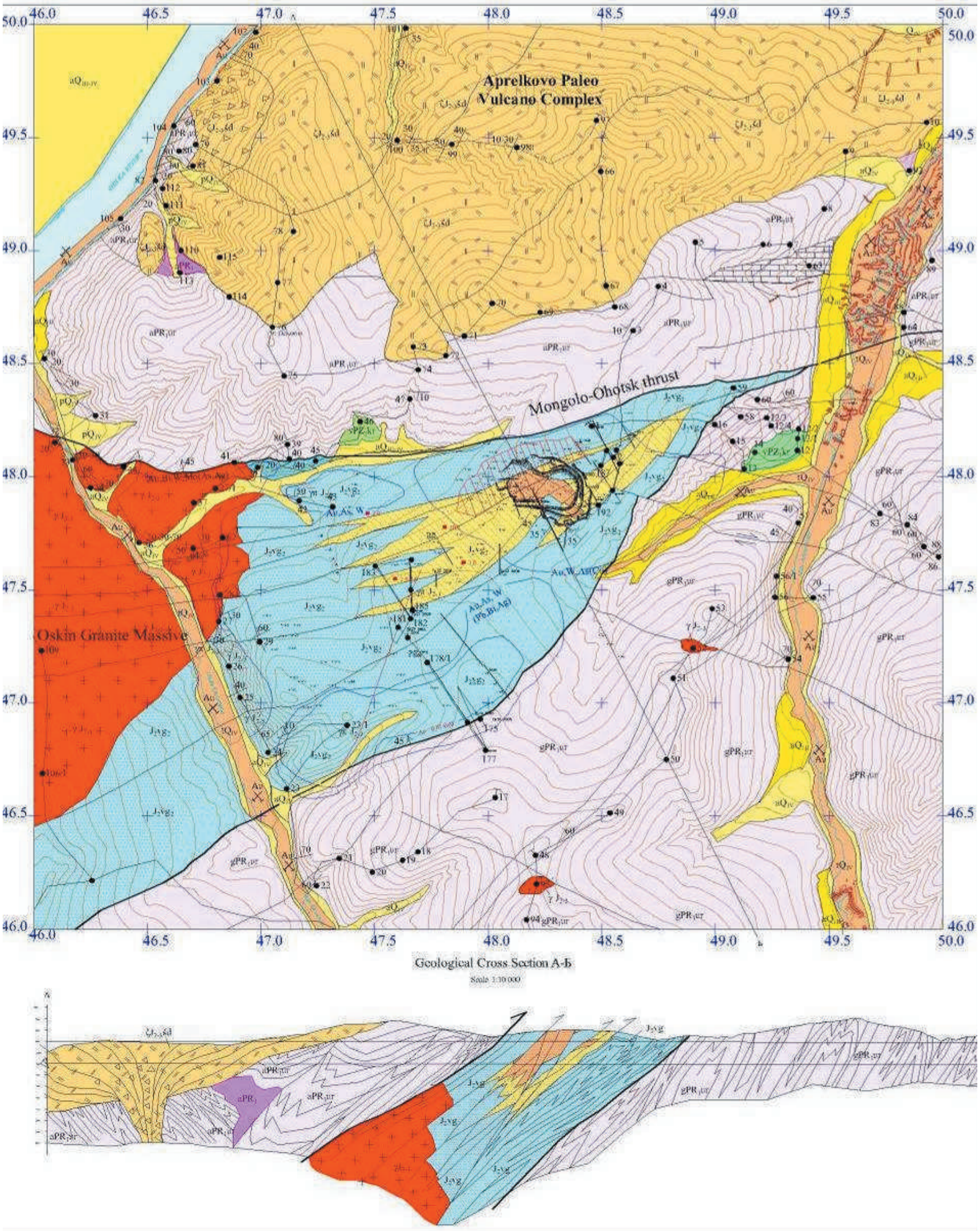


Figure 5.4: Aprelkovo – Local Geology (Author: A Sagir)

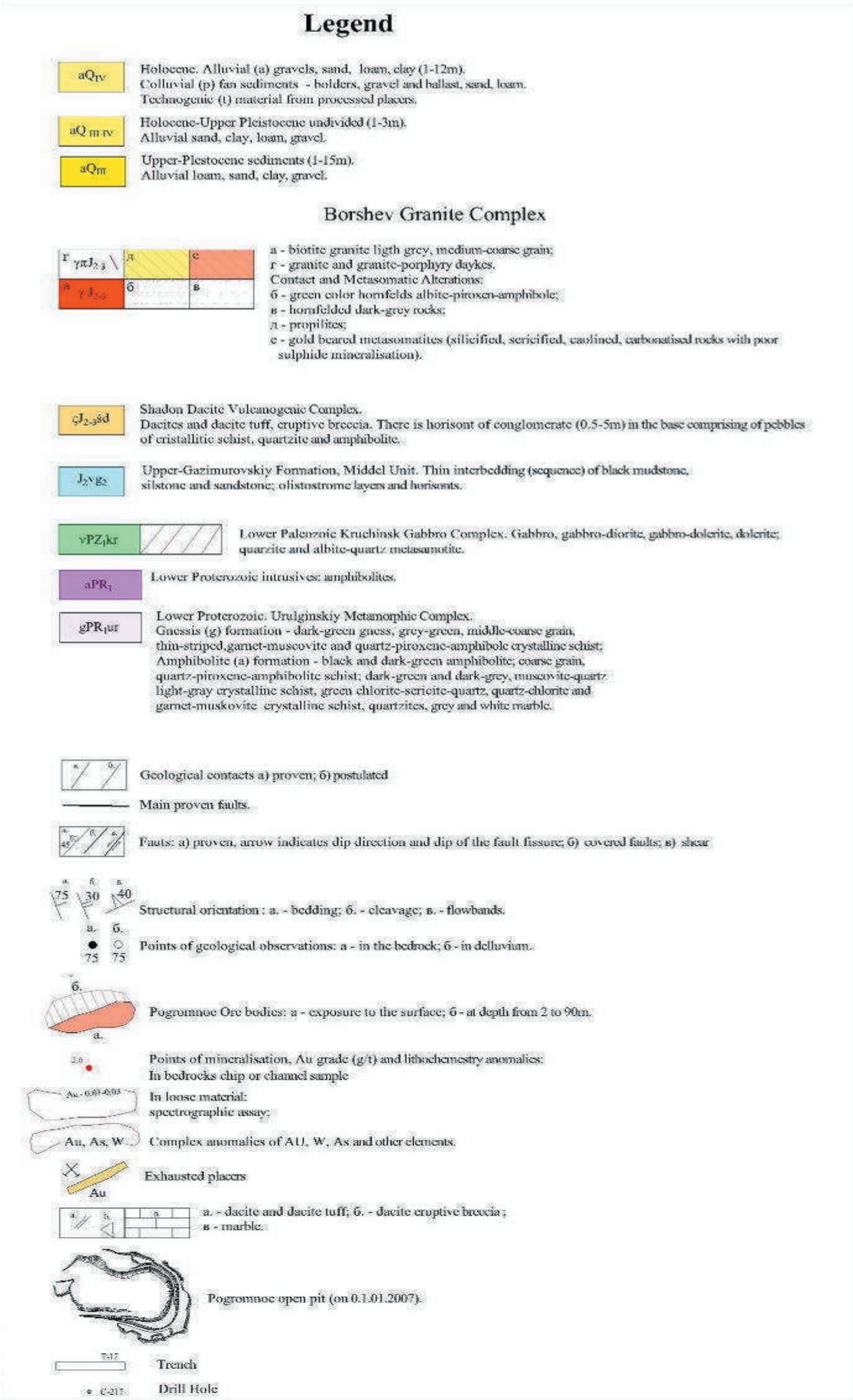


Figure 5.5: Aprelkovo – Legend for Local Geology

The Urulginskiy Metamorphic Complex occurs on both sides of the thrust. The Complex comprises Amphibolite and Gneissic Formations. It is believed that the Amphibolite Formation has an intrusive or volcanic origin, whereas the Gneissic Formation was formed from sedimentary rocks.

The inner part of the thrust wedge in which Aprelkovo is centred is made up of the Jurassic- Upper Gazimirovskiy Formation; the Shadoronskiy Dacite Volcanogenic Complex occurs to the south of Aprelkovo.

Holocene and Pleistocene sediments occur in the valleys as alluvial and colluvial sand, gravel, loam and clay and in someplaces host gold placers that are now exhausted.

The **intrusive rocks** comprise Lower Proterozoic amphibolites which are believed to have an intrusive origin, Lower Palaeozoic gabbro of the Kruchinsk Gabbro Complex and granites of the Borshev Granite Complex, the latter forming the Oskin Granite Massive located to the west of Aprelkovo and two small stocks to the south and to the south-east from the open pit.

At the contact of the Oskin Granite Massive rocks, the Upper Gazimirovskiy Formation has been metamorphosed to hornfels of albite-pyroxene facies. According to the latest concept for the origin of the Aprelkovo metasomatites, the mineralisation is thought to be genetically related to the Oskin Granite massive.

5.3.2.1 Structure

Aprelkovo lies within that part of a thrust zone at a point where the thrust splits or branches, as shown in Figure 5.4. Two major faults, North Fault and South Fault, form the boundaries of this important tectonic zone.

The North fault typically dips to the north at angles of between 10° and 50° and comprises a series of individual faults whilst the South Fault strikes in a southwest direction and dips to the northwest at an angle of 45°. Reported thickness of the fault fissure, comprising sheared and weathered rocks, is 10m. There is also a system of minor shear faults striking at 110 - 120°.

The wedge zone, between the North and South Faults is intensively sheared, tectonised and altered. Rocks are turned into mylonite, propylites, secondary quartzites and hornfels (near Oskin Granite Massive); whilst the internal structure has become almost unrecognisable.

Orebodies have no visual contacts and are identified purely by assay. Ore Zone 1 is the only ore zone that has been confirmed at Aprelkovo and is situated in the central zone between North and South Faults and dips to the north at approximately 45°. The thickness of Ore Zone 1 varies from 18 to 65m with a strike length of approximately 400m. There are several waste and low grade inclusions with thicknesses of between 5 and 30m reported within the ore zone. It is apparent from drilling that the eastern flank of Ore Zone 1 has a natural boundary whilst the western flank is still open, both along strike and at depth.

A typical cross section through Ore Zone 1 is shown in Figure 5.6 below.

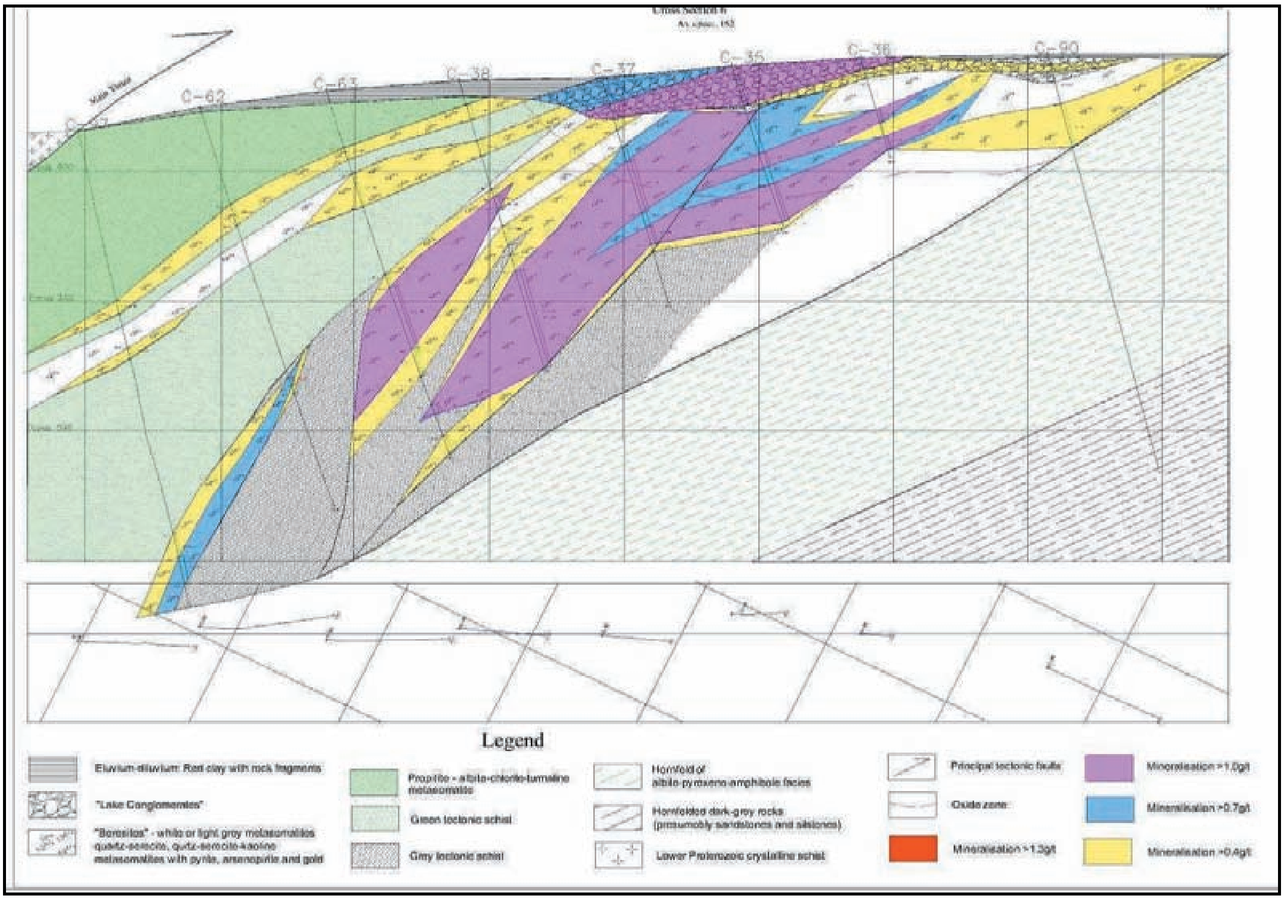


Figure 5.6: Aprelkovo – Typical Cross Section through Ore Zone 1 (Author: A Sagir)

5.3.2.2 Mineralisation

The Aprelkovo gold metasomatite comprises quartz-albite-sericite (beresite). The metasomatites contain veinlets of quartz-albite, sericite, tourmaline, quartz-sulphide and carbonate composition, as well as disseminated sulphide mineralisation. The micro-vein content is up to 5-10% of the metasomatite volume. Disseminated sulphide mineralisation is also reported, but its content is usually <1%.

On the west side of the pit, the metasomatite is overlain by conglomerates with clay cement. The pebble fragments of the conglomerate are composed of the metasomatite and it is believed that the conglomerates may hold economical grades of up to 2.0g/t Au.

Ore at the shallow horizons is heavily oxidised (up to 80 - 100%). The depth of the oxidation zone is reported as approximately 50m below ground level.

Other mineral occurrences in the region consist of Talovoe which comprises mineralised zones with a strike length of up to 350m and average width of 12.2m as well as 400×190m of stockwork. Prognostic resources at P_1 category to a depth of 50m, with an average grade of 1.8g/t Au, were estimated at 21.7t of gold.

Zones of disseminated sulphide mineralisation, hosted by Palaeozoic metamorphic rocks are reported at the Rudnoe occurrence. The sulphides consist of pyrite, arsenopyrite, galena and sphalerite. The main mineralised zone forms a 150×100m stockwork structure.

Similar zones of sulphides as well as veins have been described at the Labaznoe, Zariken, Klimiha and Yagodnoe mineral occurrences; with average grades (apparently from scattered trench samples) ranging from 2.5 - 3.7g/t Au.

5.3.3 Exploration

5.3.3.1 Historical Exploration

The Aprelkovo deposit was discovered in 1931. Thereafter several prospecting campaigns were undertaken as follows:

- 1950-1955 by Darasunzoloto company: trenching, grades up to 10g/t Au reported, although the details were lost;
- 1958-1964 by Shilkinskaya exploration team: trenching, pitting, core drilling; prospecting target was a high grade vein deposit and therefore the low grade metasomatites were not sampled, and the result was considered as negative;
- 1989-1992 Talovsk Geophysics team: airborne magneto metric survey at the scale of 1:25,000, ground magneto metric, radiometric and electro survey, vertical electro sounding; drilling to test geophysics anomalies; evaluated "prognostic resources" of P_1 category estimated as 5t of gold at 2.4g/t; and
- 1995-1996 Artel Iskra: 270m of trenching, resources estimated as 367kt at 2.2g/t Au.

Since 2001, Aprelkovo Mine Company has undertaken an extensive drilling and mining operation which currently remains in progress.

WAI has concluded that pre-1995 exploration activities attempted to identify a high grade target. Low grade metasomatite was not sampled systematically and therefore these exploration data have limited value for the current deposit assessment.

Historical geophysical data have aided identification of new exploration targets. However, most of these targets have already been drilled and/or trenched during the most recent exploration campaigns.

Between 2001 and 2004, some 36,000m^3 of trenches were excavated; with a further 29 diamond core drill holes (totalling some 2,009m) being drilled. These data allowed Mineral Resources and Ore Reserves of Ore Zone 1 to be estimated.

5.3.3.2 Current Exploration

No exploration was conducted on the site for the majority of the year.

Further work was carried out on the Southern zone starting in October 2010 with re-sampling of old trenches (ore zone 10, trenches No.10 and 20). This work had only partially been completed due to the snow cover and frozen weather which has postponed this work until May 2011. In December 2010 a further 13 diamond drill holes have been drilled totaling 1,100m. Assay results from the ALS laboratory based in Chita are expected in the middle-late part of January 2011. All of these drill holes are located around trenches No 10 and 20 within the Southern zone (zone No 10).

Further interest in the southern is based on review of trenching and drilling undertaken in 2005 which identified the following encouraging intersections:

- Trench:10: a 10m intersection at 1.35g/t Au
- Trench 20: intersections including 9.5m at 1.64g/t Au and 5m at 1.69g/t Au;
- DDH 56 with an intersection of 12m at 1.21g/t Au;
- DDH 58 with an intersection of 20m at 0.5g/t Au; and
- DDH 65 with intersection with intervals of 37.6m and 65.5m at grades of 16g/t and 18g/t Au respectively.

Historical resource estimates for ore zone 10, based on an average width of 35m and an average grade of 1.4g/t Au and a density of 2.8t/m^3 to a depth of 60m are estimated (by the Client) to contain 4.7Mt of ore and 6.6t gold. Estimates to a depth of 120m are 9.4Mt containing 13.2t of gold.

Metallurgical test has been undertaken on samples at the research Institute TOMS (Irkutsk city). Initial results from TOMS suggest that gravity separation and cyanide leach of gravity tailings can generate a total recovery 82.26%.

5.3.4 Mineral Resources and Reserves

5.3.4.1 Historical Estimates

The first estimate was prepared by Aprelkovo in 2004 and subsequently reviewed by GKZ in August 2004 and by the Chita Local Resource Commission (TKZ) in February 2005.

Resources were estimated using sectional methodology using three variants of cut-off grade (COG): 1.5, 1.0 and 0.5g/t Au. Details for these estimations are provided in Table 5.2 below.

Table 5.2: Aprelkovo Resources as at 2004 (Mine Aprelkovo)

	COG of 1.5g/t	Material between 1.5 and 1.0g/t COG	COG of 1.0g/t	Material between 1.0 and 0.5g/t COG	COG of 0.5g/t
C_1 Category					
Tonnage (kt)	405.0	461.8	866.8	211.7	1078.5
Metal (kg)	1,137.8	645.8	1,783.6	189.9	1,973.5
Average Grade (g/t)	2.81	1.4	2.06	0.9	1.83
C_2 Category					
Tonnage (kt)	619.2	465.2	1,084.4	605.3	1,698.7
Metal (kg)	1,343.8	575.9	1,919.7	588.3	2,508.0
Average Grade (g/t)	2.17	1.24	1.77	0.97	1.48
Total C_1+C_2					
Tonnage (kt)	1,024.2	926.9	1,951.1	817.2	2,768.2
Metal (kg)	2,481.6	1,221.7	3,703.3	778.3	4,481.5
Average Grade (g/t)	2.42	1.32	1.9	0.95	1.62

These resources were estimated for an open pit with an arbitrary stated depth of 50m. After the review in August 2004, GKZ declined to approve any of these estimates.

Nevertheless, GKZ admitted that potential at Aprelkovo existed and recommended the continuation of exploration and thereafter, after making some amendments, to submit the resource estimate at 1.0g/t Au COG to the Chita TKZ for review, in order to obtain permission for the test mining.

After review, TKZ down classified all submitted C_1 resources to C_2 category, but approved resources for a test mining operation with details quoted in Table 5.3 below.

Table 5.3: Aprelkovo Resources as at February 2005 (Chita TKZ)

Type	Resources		Average Grade (g/t Au)
	Tonnage (kt)	Metal (kg)	
Metasomatite	1,426	2,943.3	2.06
Conglomerates	72	117.2	1.62
Total	**1,498**	**3,060.5**	**2.04**

TKZ also estimated 5t of gold in P_1 ‘prognostic resources’ for Aprelkovo.

5.3.4.2 Arlan Resource Statement (2007)

Arlan obtained a resource statement in 2007 by depletion of the 2005 resource status (see Table 5.4). A summary of the current resource statement is provided in Table 5.5 below.

Table 5.4: Aprelkovo Resources as at 01.01.2007 (Mine Aprelkovo)

	Resources		Average Gold Grade (g/t)
	Ore (Kt)	Gold (kg)	
Total 'On Balance' C_2 resources	739.8	1,505.1	2.03
Including:			
Quartzite Type	721.5	1,468.3	2.03
Conglomerate Type	18.3	36.8	2.01

In addition to the above resources, Arlan estimated 'prognostic resources', which are summarised by WAI and quoted in Table 5.5 below. Such resources would be classified by WAI as being equivalent to, and no better than Exploration Results in accordance with JORC (2004). It should be noted that metal estimates would not be quoted for such exploration results, but would quote as a range of potential tonnage and grades, supported by a tabulation of drilling results.

Table 5.5: Aprelkovo Prognostic Resources as at 01.01.2007 (Mine Aprelkovo)

Ore Zone	Estimated In-situ Gold Resources (t)	
	P_1 Category	P_2 Category
1	48	-
2	-	11
3	-	14.8
10	-	18.8
Total	**92.6**	

5.3.5 TKZ Approval

The Territorial Committee of Resources and Reserves (TKZ) have approved resources for Aprelkovo mine on 12.12.2008 (Protocol No.837) for the first stage (Stage I) of mining (Table 5.6):

Table 5.6: Aprelkovo Resource Statement (Approved by TKZ 12.12.2008)

Resource Category	Ore (kt)	Au (kg)	Au grade (g/t)
C_1 (within pit boundary)	5221.1	7,651.33	1.47
C_2 (within pit boundary)	119.1	133.69	1.12
Total. C_1+ C_2 (within pit boundary)	5,340.2	7,785.02	1.46
C_1 (outside pit boundary)	2,518.2	1,192.32	0.47
C_2 (outside pit boundary)	264.8	131.42	0.50
Total C_1+ C_2 (outside pit boundary)	2,783.0	1,323.74	0.48

WAI Comment: *All resources and reserves quoted above in sections 1.4.1 to 1.4.3, have not been estimated in accordance with the guidelines of the JORC Code (2004) are based on historical data and provided here for information only.*

5.3.6 WAI Estimate (1st November 2010)

WAI was commissioned by Nord Gold to prepare a Mineral Resource estimate in accordance with the guidelines of the JORC Code (2004) for Aprelkovo. The work completed is summarised below.

5.3.6.1 Topography

The pit topography used in this study is understood to have been based on a mine survey carried out on the 1st November 2010.

5.3.6.2 Sample Database

All available sample data were collated, as derived from diamond drillholes and blastholes as shown in Table 5.7 and Table 5.8, respectively.

Table 5.7: Summary of Aprelkovo Drilling Campaigns

Method	Year	Number of Drillholes	Metres	Number of Samples
Core (Wireline)	2001	4	201	165
	2002	6	301	366
	2003	18	1,494	1,647
	2005	36	3,091	3,839
	2006	92	11,942	12,490
	2007	94	14,363	15,027
	2008	58	8,998	9,094
	Total	**308**	**40,390**	**42,628**

Table 5.8: Summary of Aprelkovo Blasthole Sampling Campaigns

Method	Year	Number of Drillholes	Metres	Number of Samples
Blasthole Samples	2007	796	3,589	3,592
	2008	3,260	16,783	3,372
	2009	15,947	76,672	15,902
	Total	**20,003**	**97,044**	**22,866**

5.3.6.3 Mineralised Zone Interpretation

A new set of mineralised zone envelopes have been defined, which encompass both the upper flat-lying conglomerate body, as well as dipping vein and metasomatite structures. This interpretation has been developed from coded lithologies, as well as a cut-off grade of 0.3g/t Au, and has produced 12 separate mineralised bodies as shown in Figure 5.7. A sub-set of the drillhole data and blasthole data has been selected within, and coded by, these principal zones.

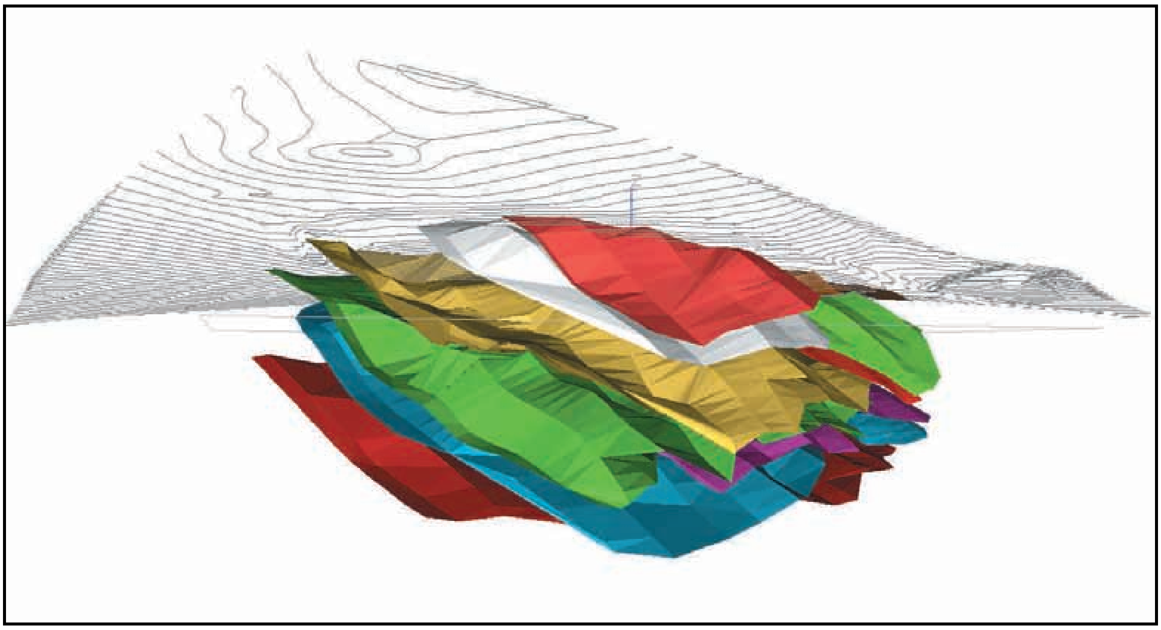


Figure 5.7: Isometric View of Aprelkovo Mineralised Zone Wireframes

5.3.6.4 Geostatistics

The sample data indicates approximately distinct log-normal population of gold grades. Very similar gold grade population distributions were observed between the oxide and transition and sulphide zones. 5m composites within an individual ore zone were generated for subsequent modelling purposes, regardless of oxidation. Variography was carried out using the blasthole data to improve variogram structure as shown in Figure 5.8. Variography identified ranges of approximately 40m along strike (080/00) and 30m down dip (350/50).

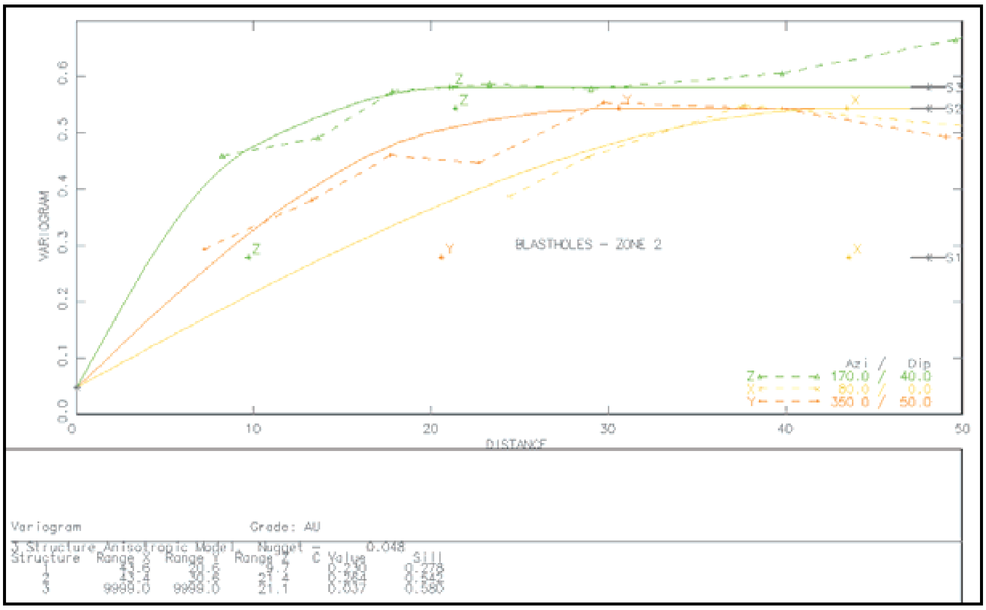


Figure 5.8: Modelled Semi-Variogram

5.3.6.5 Block Model

A volumetric block model was set up with parent block sizes of 10m x 10m x 5m. As well as representing the mineralized zones, the current pit topography and original topographies, surfaces were also used to separate the modelled material between, oxide, transition and sulphide as shown in Figure 5.9. Density values were set by degree of oxidation: 2.06t/m^3 for oxide, 2.43t/m^3 for transition and 2.68t/m^3 for sulphide.

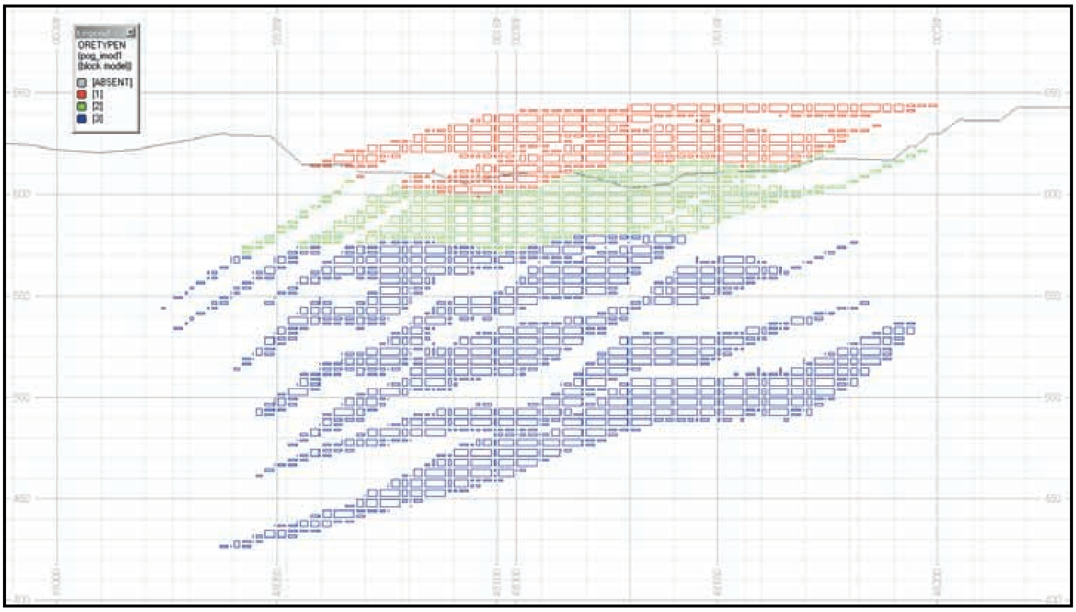


Figure 5.9: Sectional View of Block Model Ore Zones Coded as Oxide (1), Transition (2) and Sulphide (3)

5.3.6.6 Grade Estimation

Based on model variograms, gold grades were estimated using ordinary kriging, although alternative grades were also generated by nearest neighbour and inverse-distance weighting for validation purposes.

5.3.6.7 Model Validation

A model validation process included the examination of block model versus composites, and the building up of a model grade profile, to compare average grades on vertical slices, as derived from the composites directly, as well as from interpolated model grades.

5.3.6.8 Resource Classification

Criteria for defining resource categories were also derived from the geostatistical studies. Key drillhole spacings for these categories were 30m x 25m (along-strike x down-dip) for *Measured* resources and 40m x 30m for *Indicated* resources. The extent of *Inferred* resources was limited to 50m laterally, from any individual diamond drillhole intersections. An example plan projection of the resource classification for zone 1 is shown in Figure 5.10.

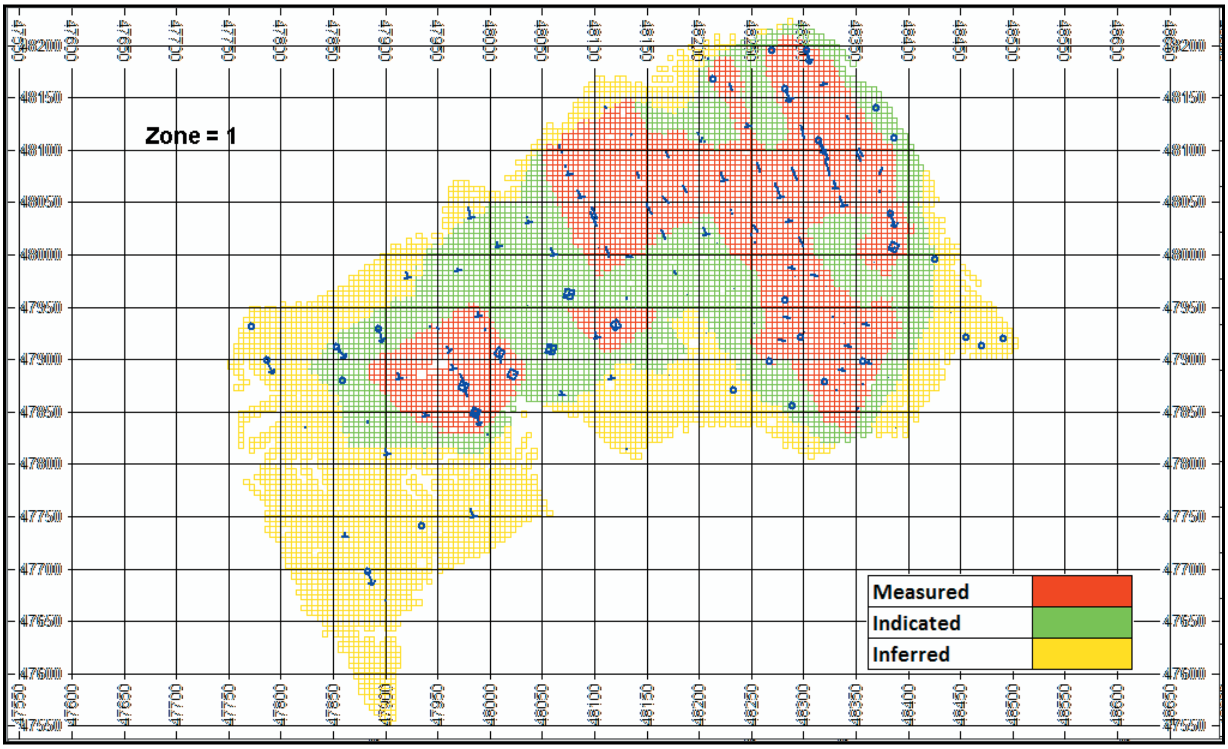


Figure 5.10: Resource Classification for Zone 1 – Horizontal Projection

5.3.6.9 Resource Evaluation

The final block model was used as the basis for resource evaluation. Summary results of the evaluation of the in-situ resources are shown in Table 5.9, Table 5.10, and Table 5.11 below for three different cut-off grade levels: 0.3g/t, 0.5g/t and 0.7g/t Au.

**Table 5.9 Aprelkovo Resource Estimate (WAI, 1st November 2010)
(in accordance with the guidelines of the JORC Code (2004)**

Ore Type			Oxide	Transition	Sulphide	Total
Cut Off Grade			0.3	0.3	0.3	0.3
Measured	Tonnage (kt)		9	680	7,290	7,979
	Au (g/t)		0.42	1.18	1.27	1.26
	Metal	kg	4	800	9,284	10,088
		oz	117	25,730	298,498	324,345
Indicated	Tonnage (kt)		29	893	7,931	8,852
	Au (g/t)		0.87	0.81	0.99	0.97
	Metal	kg	25	724	7,838	8,586
		oz	796	23,262	252,001	276,059
Measured + Indicated	Tonnage (kt)		37	1,573	15,221	16,831
	Au (g/t)		0.76	0.97	1.12	1.11
	Metal	kg	28	1,524	17,122	18,675
		oz	913	48,992	550,499	600,405
Inferred	Tonnage (kt)		361	1,804	7,443	9,607
	Au (g/t)		0.91	0.82	0.79	0.80
	Metal	kg	330	1,487	5,889	7,706
		oz	10,604	47,811	189,349	247,765

Notes:
1. Mineral Resources are not reserves until they have demonstrated economic viability based on a Feasibility study or pre-feasibility study.
2. Mineral Resources are reported inclusive of any reserves.
3. The contained Au represents estimated contained metal in the ground and has not been adjusted for metallurgical recovery.

Table 5.10 Aprelkovo Resource Estimate (WAI, 1st November 2010) (in accordance with the guidelines of the JORC Code (2004)						
Ore Type			**Oxide**	**Transition**	**Sulphide**	**Total**
Cut Off Grade			**0.5**	**0.5**	**0.5**	**0.5**
Measured	**Tonnage (kt)**		2	590	7,000	7,592
	Au (g/t)		0.64	1.29	1.31	1.31
	Metal	**kg**	1	764	9,163	9,928
		oz	32	24,565	294,593	319,190
Indicated	**Tonnage (kt)**		27	783	7,219	8,029
	Au (g/t)		0.89	0.86	1.05	1.03
	Metal	**kg**	24	677	7,549	8,250
		oz	775	21,758	242,701	265,234
Measured + Indicated	**Tonnage (kt)**		29	1,373	14,219	15,621
	Au (g/t)		0.88	1.05	1.18	1.16
	Metal	**kg**	25	1,441	16,712	18,178
		oz	807	46,323	537,294	584,425
Inferred	**Tonnage (kt)**		344	1,732	6,562	8,638
	Au (g/t)		0.94	0.84	0.84	0.84
	Metal	**kg**	322	1,456	5,520	7,298
		oz	10,362	46,795	177,470	234,627

Notes:

1. Mineral Resources are not reserves until they have demonstrated economic viability based on a Feasibility study or pre-feasibility study.
2. Mineral Resources are reported inclusive of any reserves.
3. The contained Au represents estimated contained metal in the ground and has not been adjusted for metallurgical recovery.

Table 5.11 Aprelkovo Resource Estimate (WAI, 1st November 2010)
(in accordance with the guidelines of the JORC Code (2004)

Ore Type			Oxide	Transition	Sulphide	Total
Cut Off Grade			**0.7**	**0.7**	**0.7**	**0.7**
Measured	Tonnage (kt)		0.1	515	6,313	6,827
	Au (g/t)		0.75	1.40	1.38	1.39
	Metal	kg	0.1	718	8,740	9,459
		oz	3	23,093	281,009	304,105
Indicated	Tonnage (kt)		23	487	5,955	6,466
	Au (g/t)		0.94	1.02	1.14	1.13
	Metal	kg	21.8	500	6,781	7,303
		oz	702	16,059	218,023	234,784
Measured + Indicated	Tonnage (kt)		23	1,002	12,268	13,293
	Au (g/t)		0.94	1.22	1.27	1.26
	Metal	kg	22	1,218	15,522	16,761
		oz	705	39,153	499,032	538,890
Inferred	Tonnage (kt)		287	1,122	4,394	5,803
	Au (g/t)		1.00	0.97	0.96	0.96
	Metal	kg	289	1,087	4,204	5,580
		oz	9,286	34,955	135,169	179,410

Notes:
1. Mineral Resources are not reserves until they have demonstrated economic viability based on a Feasibility study or pre-feasibility study.
2. Mineral Resources are reported inclusive of any reserves.
3. The contained Au represents estimated contained metal in the ground and has not been adjusted for metallurgical recovery.

5.3.7 Other Resources

A number of exploration targets classified as prognostic resources have been identified around the Aprelkovo property, although recently, most of these have been tested and discounted.

However, it is possible that some potential exists immediately to the southwest of the current open pit, close to the power lines that cross the site, although this occurrence requires further investigation.

5.4 Mining

5.4.1 WAI Reserve Estimate

5.4.1.1 Introduction

As a continuation of *Mineral Resource* modelling of Aprelkovo deposit WAI has undertaken a pit optimisation using the *Mineral Resource* Block Model prepared by WAI and updated in November 2010. The model was depleted to contain only those *Mineral Resources*, which have not been extracted as of 01 November 2010. WAI used NPV Scheduler® software for the optimisation, applying conceptual financial and technical parameters, provided by the Client.

The NPV Scheduler® programme comprises three components, the ultimate pit shell generator, a push back generator and the optimising scheduler. The ultimate pit generator is the first stage of the optimisation process and utilises a Lerchs-Grossman algorithm to generate an economic open pit shell from the *Mineral Resource* block model based on the initial input parameters.

The objective of this study was to obtain an optimised pit shell containing economically viable *Mineral Resources*, which therefore will provide an estimate of *Ore Reserves*. The estimate of *Ore Reserves* will form a basis for the mining schedule.

Prior to importing into NPV Scheduler®, the Mineral Resource block model was expanded by adding waste cells. A density of 2.06t/m^3 for oxide, 2.43t/m^3 for transitional and 2.68t/m^3 for sulphide was assumed for each new waste cell. Zero grade values for gold were also assigned to each waste cell.

5.4.1.2 Pit Optimisation Parameters

The metal price used for the pit optimisation was US$900/oz Au. The major Key Performance Indicators (KPI) such as mining and processing costs, and other parameters, considered during the optimisation, have been supplied by the Client, as actual results of year 2008-2009 production. These figures are given in Table 5.12 below.

Table 5.12: Aprelkovo Key Performance Indicators for 2008 – 9m 2010

	Unit	2008	2009	9m 2010
Rock mined	Kt	4,765	8,718	7,472
Ore mined	Kt	863	1,586	1,237
Ore processed	Kt	1,351	1,704	1,284
Average Au grade (ore processed)	g/t	1.01	1.04	1.17
Ore stripped	Kt	3,305	7,071	6,004
Gold recovered**	kg	924	898	747
Gold recovered**	koz	29.7	28.9	24.0F
Recovery rate	%	74.4	70.7	N/A
Full cash cost	US$/oz	616	754	819
Normalised TCC	US$/oz	586	668	651
Ore mining costs	US$/t	1.9	1.2	1.0
Waste mining costs (US$/t)	US$/t	1.9	1.1	0.9
Ore processing costs (US$/t)	US$/t	5.4	4.9	5.4
General and administration costs	US$M	2.2	1.4	2.3
CAPEX*	US$M	13.3	4.9	3.7
Depreciation	US$M	4.8	6.9	5.1

* including Exploration and Evaluation
** including 74GEO of Silver production in 2010

WAI has reviewed the results of year 2008 and 2009 and technical data, obtained from the Client both during site visit and by request, together with the Client's production forecasts for the 2010 and 2011, and found the following technical and economical parameters to be the best suitable for the optimisation purposes (Table 5.13).

Table 5.13: WAI Pit Optimisation Parameters		
Parameter	**Units**	**Value**
Metal Price (Au)	US$/oz	900
Metal Price (Au)	US$/g	28.94
Production Rate	ktpa	1,600
Discount Rate	%	11.2
Dilution	%	10
Mining Recovery Factor	%	96
Mining Cost (Ore)	US$/t	1.34
Mining Cost (Waste)	US$/t	1.23
Processing Cost (per t of processed ore)	US$/t	5.1
Gold Recovery Oxide and Transition Ore	%	65
Gold Recovery Sulphide Ore	%	52.7
Final Pitwall Angle	Degrees	varous

One of the most crucial geotechnical parameters is the overall pit slope angle. The shallower the overall slope angle, the more waste cells that are included in the pit design. This has a great effect on the stripping ratio and hence economic viability. Various overall pit slope angle for different directions was used for the optimisation (as supplied by the Client and observed by WAI at the site), details of which are given in Table 5.14 below.

Table 5.14: Slope Angles Used in the Optimisation	
Azimuth	**Slope Angle**
0	44
90	43
180	32
270	34

5.4.1.3 Pit Optimisation Results

The results of the WAI Base case optimisation as calculated by NPV Scheduler® are presented in Table 5.15 below. The Base case optimised pit shell 3D image is shown in Figure 5.11.

Only the *Measured and Indicated Mineral Resources* were utilised in the optimisation as only these categories of *Mineral Resources* can become *Ore Reserves*.

Table 5.15 Aprelkovo Deposit Open Pit Optimisation Results (WAI 2010, COG=0.33g/t)								
Case	**Gold Price (US$/oz)**	**Plant Recovery (%)**	**Annual Discount (%)**	**Ore (Mt)**	**Au (g/t)**	**Au (kg)**	**Waste* (Mt)**	**Stripping Ratio Estimation (t/t)**
Base Case	900	65 Oxide/52.7 Sulphide	11.2	15.28	1.06	16,158	20.64	1.35

Note: 10% dilution and 96% mining recovery applied
Waste is given inclusive of *Inferred* material, which is also treated as waste

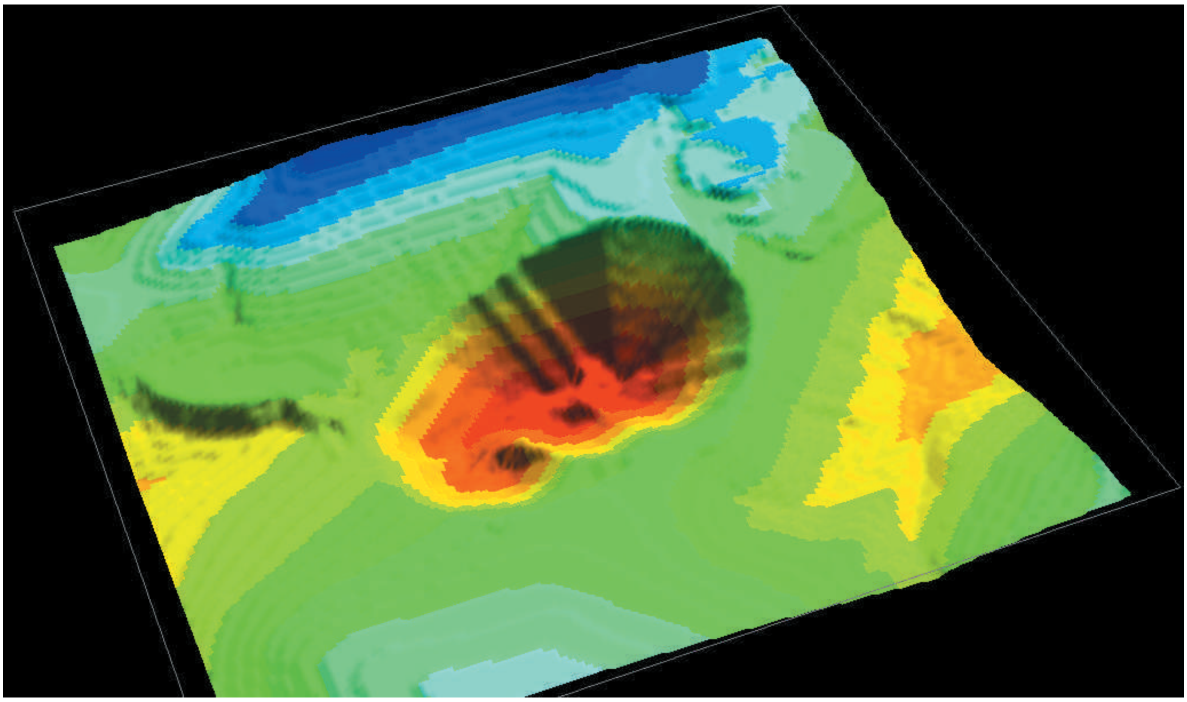


Figure 5.11: 3D View of WAI Optimised Pit

5.4.1.4 WAI Ore Reserve Estimation

Based on the described above open pit optimisation, WAI estimated Aprelkovo open pit *Ore Reserves*. Detailed results of this estimation are given in Table 5.16 below.

Table 5.16: Aprelkovo Open Pit Ore Reserves as of 01 November 2010 (WAI)
(in accordance with the guidelines of the JORC Code (2004))

Ore Type			Oxide	Transitional	Sulphide	Total
Cut Off Grade (g/t)			0.27	0.27	0.36	-
Proven	Tonnage (kt)		9	724	7,080	7,814
	Au (g/t)		0.38	1.06	1.19	1.18
	Metal	kg	4	770	8,433	9,206
		oz	113	24,756	271,154	296,023
Probable	Tonnage (kt)		15	797	6,650	7,462
	Au (g/t)		0.79	0.77	0.95	0.93
	Metal	kg	12	614	6,309	6,935
		oz	370	19,738	202,870	222,977
Proven + Probable	Tonnage (kt)		24	1,522	13,730	15,275
	Au (g/t)		0.63	0.91	1.07	1.06
	Metal	kg	15	1,384	14,742	16,141
		oz	482	44,494	474,023	519,000

Note:
Mining Factors of 10% Dilution and 96% Mining Recovery applied

Table 5.17: Aprelkovo Reserve Pit Summary (WAI, 01 November 2010)			
Ore (kt)	**Waste (kt)**	**Strip Ratio**	**Total Rock (kt)**
15,275	20,633	1.35	35,908

Note:
Ore Cut Off of 0.27g/t Au for oxide and transitional ore, and 0.36g/t Au for sulphide ore applied
Mining Factors of 10% Dilution and 96% Mining Recovery applied
Waste is given inclusive of *Inferred* material, which is also treated as waste

5.4.1.5 Life of Mine Schedule (LOM)

After optimised pitshells were generated for each of the optimisation runs, WAI has designed a mining schedule for the Base case.

The Ore Reserve statement was prepared by WAI as of 01 November 2010, therefore the LOM schedule considers only the year 2011. The remaining material to be mined in 2010 has been incorporated into 2011 production plan. As the Aprelkovo mine already is in production and the majority of stripping works has been performed, the LOM schedule targets to maintain consistent total volume of ore (at a grade, equal to the average grade for the deposit) and waste extracted, providing the required planned annual ore tonnage of 1.6Mt as the result.

Table 5.18 below describes mining schedule for the Base case open pit shell designed by WAI.

An Ore Reserve open pit plan, long-section and cross-section are given in Figure 5.12, Figure 5.13 and Figure 5.14 below respectively.

Table 5.18: Aprelkovo Deposit LOM Mining Schedule (WAI 2010)													
		Nov-Dec2010*	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**Total**
Rock	kt	1,369	3,455	3,657	3,487	3,528	3,652	3,933	3,908	3,885	3,966	1,089	35,927
Waste	kt	1,187	1,855	2,057	1,887	1,927	2,052	2,333	2,308	2,285	2,365	389	20,644
Ore (TOTAL)	kt	182	1,600	1,601	1,600	1,601	1,599	1,600	1,600	1,600	1,601	701	15,283
Avg. Au Grade (TOTAL)	g/t	1.17	1.03	1.05	1.19	1.08	1.11	0.99	0.92	1.01	1.09	1.10	1.06
Au (TOTAL)	kg	213	1,654	1,686	1,909	1,731	1,779	1,579	1,476	1,611	1,748	772	16,158
Strip		6.5	1.2	1.3	1.2	1.2	1.3	1.5	1.4	1.4	1.5	0.6	1.4
Oxide and Transitional Ore	kt	0	804	231	121	83	93	53	144	7	0	25	1,561
Au	g/t	0	0.95	0.95	1.07	0.89	0.60	0.65	0.80	0.44	0.00	0.77	0.90
Au	kg	0	760	220	130	73	56	35	115	3	0	19	1,411
Sulphide	kt	182	796	1,370	1,478	1,518	1,506	1,547	1,456	1,593	1,601	676	13,722
Au	g/t	1.17	1.12	1.07	1.20	1.09	1.14	1.00	0.93	1.01	1.09	1.11	1.07
Au	kg	213	894	1,467	1,778	1,658	1,723	1,545	1,360	1,608	1,748	753	14,747

*** Based on the Company forecast**
Note:
10% dilution and 96% mining recovery applied
Waste is given inclusive of *Inferred* material

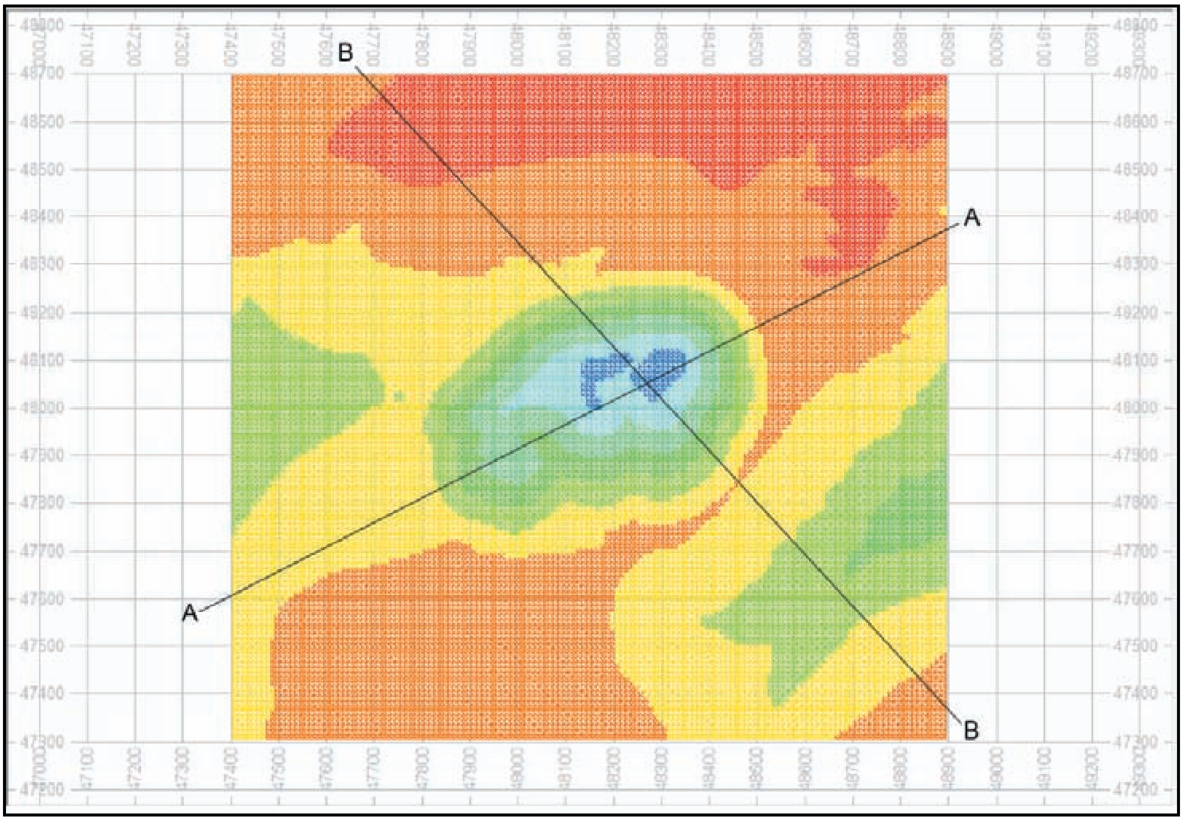


Figure 5.12: Plan View of WAI Reserve Pit, Colour Coded by Elevation

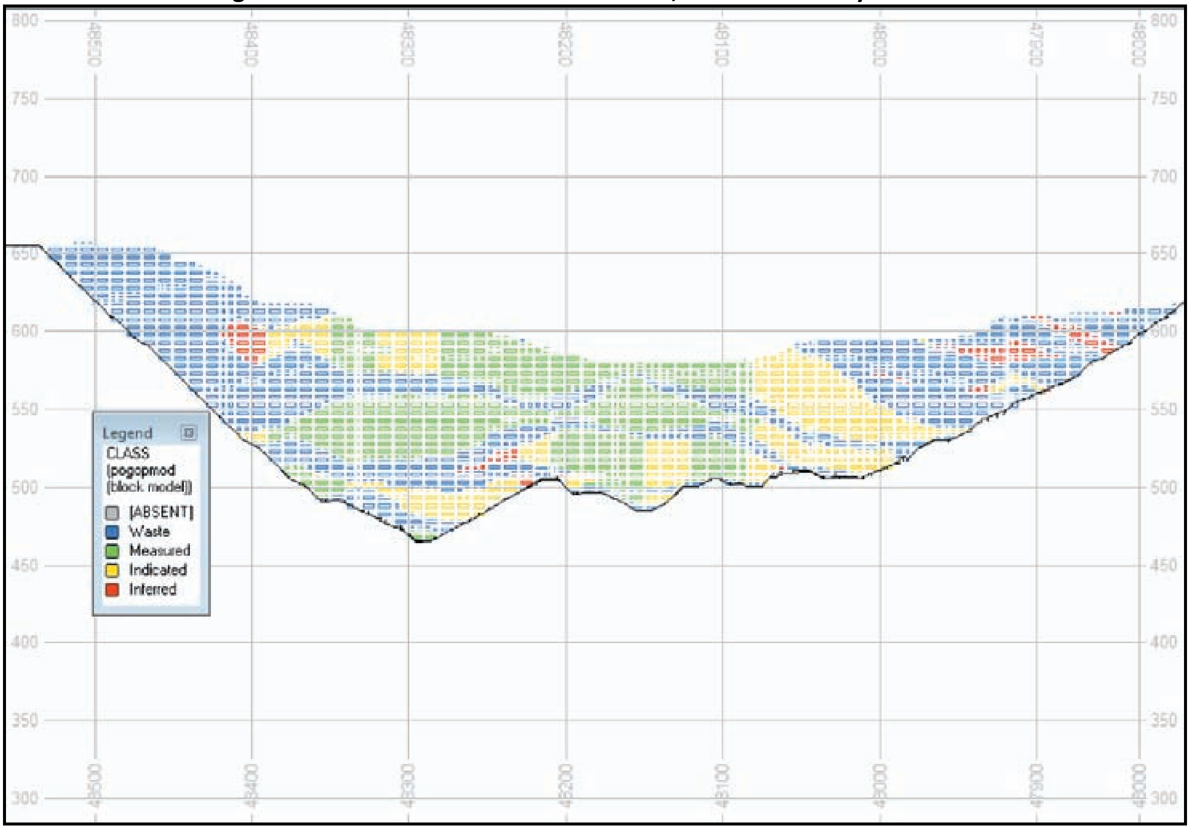


Figure 5.13: Long Section (Section A-A) of Geological Model
(Black – Contours of WAI Reserve Pit)

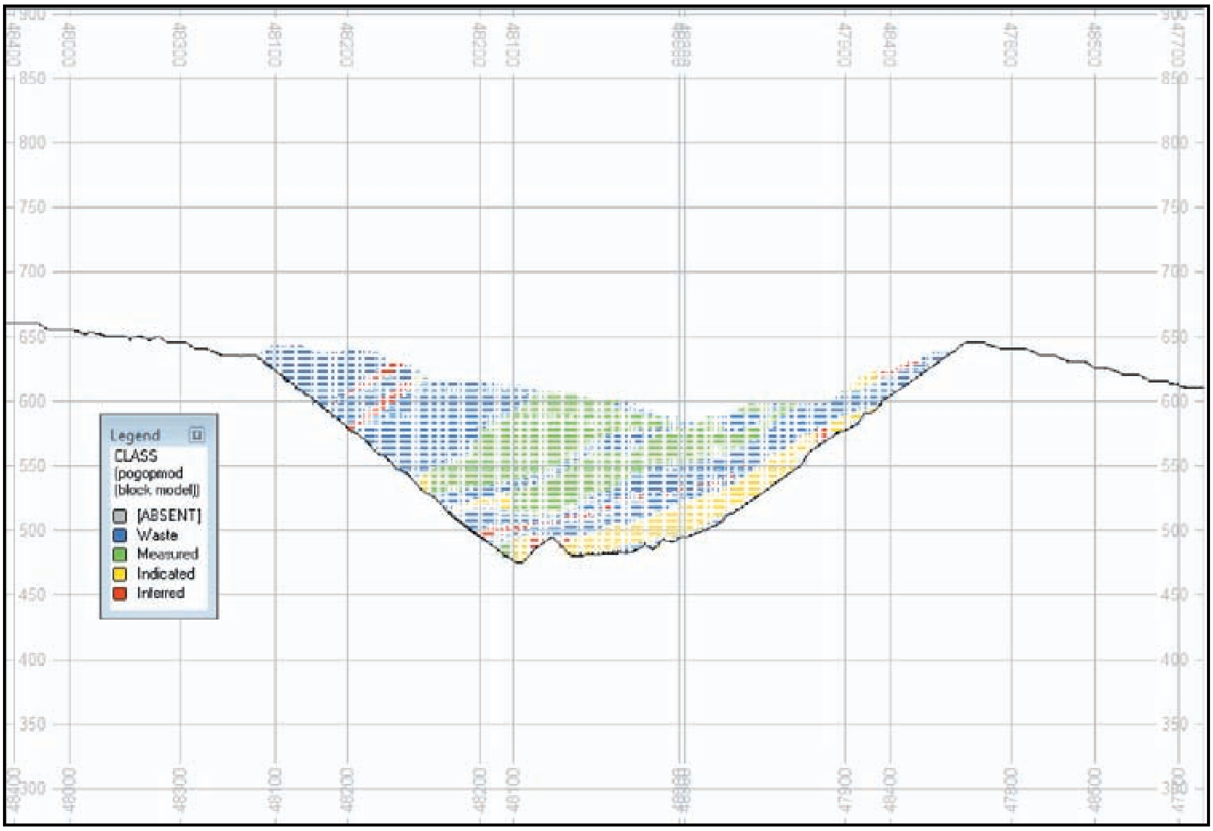


Figure 5.14: Cross-Section (Section B-B) of Geological Model
(Black – Contours of WAI Reserve Pit)

5.4.2 Current Pit Layout

The pit is being mined unequally in different areas; the lag can reach up to 9 flitches (standard flitch height is 5m). This is related to blasting exclusion zones caused by the location of two sets of power lines to the east and west of the current pit which require repositioning – a process which is currently delayed. This restriction has caused the mine to deepen rather than expand laterally along strike.

Currently the pit bottom reaches a zone where both transitional and oxidised ores are present; whilst higher flitches in oxide ore only remain un-blasted.

Transitional ore is excavated and stacked onto the heap leach pad along with oxidised ore. WAI is of an opinion that adding of transitional ore (from WAI experience has different mineralogical and hence metallurgical properties and generally lower recovery) to the oxidised ore on the heap leach is detrimental to overall gold recovery.

Delays in blasting also affect in-pit road layout, with more temporary roads being constructed, which increases overall mining costs.

However, WAI has been informed that it is expected that power lines will be repositioned in the nearest future.

5.4.3 Mining Method

The mine employs conventional truck-and shovel open pit mining with the use of drilling-and-blasting techniques for hard rock fragmentation. The ore and waste are excavated by hydraulic excavators (both backhoe and front shovel) and transported out of pit by 30t and 50t trucks.

The rock properties require drilling and blasting techniques for rock fragmentation. The rock hardness is medium - hard. During the early part of mining, surficial, softer cover rocks were stripped by dozers in order to open the orebody.

The mine employs Atlas Copco DM-45HP drill rigs for production drilling. It was estimated that two rigs of this type will meet annual production drilling target of 258,000m.

After each of the blast holes is drilled, the cuttings are sampled and the assay information is used for locating of ore/low-grade ore or waste zones.

WAI observed the results of the blast during the visit; and noted excessive heave of both ore and waste as a consequence of over blasting.

The pit has an advantage that the water table is located below the projected pit bottom. This reduces the amount of expected water inflow to water produced by precipitation only. The maximum estimated precipitation level (according to long-term monitoring data) is 106mm/day. There is a drainage system preventing the pit from collecting surrounding surface waters.

When fully developed, the expected maximum water inflow will be 8,770m^3/day during the most intensive periods. Dewatering of the pit can be performed using a rudimentary in-pit drainage system collecting water into a pond at the bottom of the pit. The water can be pumped out of the mine employing three pumps: 2 x K200-150-400 (one on standby) and 1 x K100-65-250 with capacity of 400m^3/h and 100m^3/h respectively. The pumps should be repositioned as the pit deepens.

> ***WAI Comment:*** *the estimated water inflow is generally low and no major problems with pit dewatering expected.*

5.4.4 ROM, Low-Grade Ore Stockpiles and Waste Dumps

The ore after it has been extracted is transported into two ROM ore stockpiles (see Figure 5.15 below). The stockpile No1 is adjacent to one of the two crushing plants, and it is maintained by two dozers.

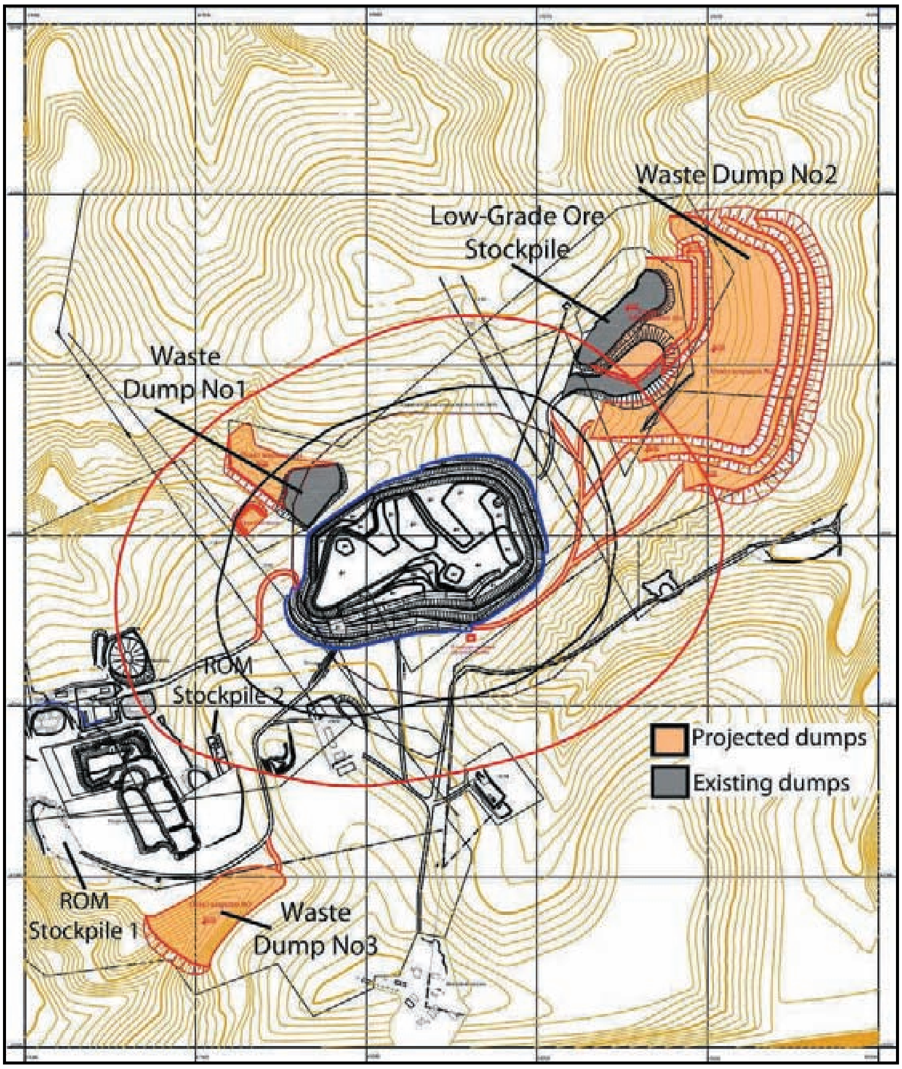


Figure 5.15: ROM, Low-Grade Ore Stockpiles and Waste Dumps Location Plan

At the time of the visit, this stockpile had a significant amount of ore being stacked. The second stockpile is associated with another crushing plant and it is located close to the exit from the pit. There is a low-grade (0.4-0.7g/t) ore stockpile to the south of the pit where at the time of the visit, approximately 400kt of the ore were stored.

Top soil, which covered the orebodies, is stored at the edge of the pit. The waste from the pit is transported to waste dumps No1-No3 with capacities of 440,000m^3, 9,044,000m^3 and 1,200,000m^3 respectively.

Average transportation distance from the pit exit to the waste dump is 800m, 830m and 800m for waste dumps No1, No2 and No3 respectively. WAI is of an opinion that waste dumps are located too remotely, which increases truck travel distances.

5.4.5 Conclusions and Recommendations

From the visit to the site, WAI believes that the mine is reasonably well operated with the benefits of:

- Natural aridity of the area and absence of underground water inflow into the pit;
- Proximity of the deposit to the surface allowing dozer stripping of the covering soils; and
- Location of the pit on the side of hill, which minimises demand for in-pit road construction.

The main earth-moving equipment have been recently purchased allowing improvements in machinery availability by reducing down-time (which is especially important in harsh climatic conditions) and performance by employing up-to date techniques.

Nevertheless WAI has indicated several areas of concern, where steps should be taken in order to increase the efficiency of the operation. These are:

- Blasting performance should be improved with a view to minimise rock dispersion during blasting and enhancing of fragmentation. WAI would recommend a study to reconcile blast hole sampling data and actual location of the ore and waste after they were blasted;
- WAI recommends mapping of all easily recognisable geological features such as faults onto the mining plans. This would help to locate ore zones more precisely;
- At the present time, mining is seriously restricted by the location of power lines within the blasting exclusion area, which has forced mining works to deepen rather than expand the pit along strike. In some areas the pit bottom reached mixed ore and the mixed ore is fed to the crushing plant and then stacked on the leach pads. WAI is of the opinion that this practice is detrimental to overall metal recovery as the mixed and oxidised ores would normally have different technological properties; and
- Re-location of the power line is expected to be completed in January 2011.

5.5 Processing

5.5.1 Introduction

WAI requested that GBM provide input to the Technical Review in the field of metallurgy. This section of the report describes the current status of the metallurgical operation, identifies positive and negative aspects and provides recommendations for improvements and future work.

5.5.2 Process Description

Run of mine ore is crushed in two parallel crushing plants, agglomerated with cement and stacked on heaps that are irrigated with dilute sodium cyanide solution. Pregnant solution is recovered and the gold adsorbed onto activated carbon. The gold is then eluted from the carbon and electrowon from eluate prior to smelting to doré.

The operation treats approximately 1.6Mtpa.

5.5.3 Crushing

Ore is crushed to a nominal 15mm in two parallel, three stage crushing and screening systems.

The West crushing plant has stockpiles of run of mine ore and winter crushed ore. Run of mine ore is fed into a bin by two bulldozers. An apron feeder delivers onto a vibrating screen with 15mm apertures. Screen undersize is conveyed to the leach heaps. Screen oversize is crushed in a jaw crusher operating in open circuit. Secondary crushing is performed by two jaw crushers operating in parallel. Tertiary crushing is done by a Sandvik CH430 cone crusher operating in open circuit.

Crushed product is conveyed to an agglomeration drum, passing through a cement dosing system and a hammer sampler prior to the drum.

The East crushing plant has a stockpile that is reclaimed by two bulldozers that feed ore into a bin. An apron feeder delivers ore from this bin onto a 15mm aperture screen. Screen undersize is conveyed to agglomeration whilst oversize passes through a SMD110 jaw crusher set at 160mm and operating in open circuit that discharges onto a double deck vibrating screen. The top screen deck has 50mm apertures and oversize is crushed in two parallel jaw crushers set at 50mm and returned to the screen feed. The bottom screen deck has 15mm apertures and oversize is crushed in a Sandvik CH430 cone crusher with a setting of 10mm that should operate in closed circuit with a vibrating screen. The undersize streams from the double deck and tertiary screens are conveyed to agglomeration.

Cement is added at 6kg/t from a silo prior to agglomeration. Winter crushed ore can be fed into the circuit downstream of the cement addition via a chute and cross conveyor.

Since the feed to the plant is immediately split on the first screen it is only possible to sample crusher product. Samples are taken manually by placing a shovel in the falling stream transferring material from the agglomerating drum discharge conveyor to the first of the overland conveyors to the heaps. This is undesirable, firstly from a safety perspective and secondly with regard to the representivity of the sample.

The sample that has been taken is weighed and scoops removed randomly to reduce the weight to 15kg. The sample is crushed in a laboratory jaw crusher, placed in a pile and a sample for analysis obtained by coning and quartering and riffling.

Crusher throughput is measured by a two idler belt scale installed just upstream of the agglomerator. Its proximity to the cement silo also allows for accurate control of the rate of cement addition but it is not possible to use the scale output to control the rate of feed to the primary screen. The point at which winter crushed ore is fed into the circuit is also just upstream of the scale and the weight of this material is therefore fully accounted for. Two idler scales are not accurate enough for accounting use and four idler or longer units are normally specified.

At the time of the visit, guards were either substandard or missing completely, and the Company is believed to be rectifying this matter.

5.5.4 Heap Leaching

There are presently four heap leaching pads with two being stacked and two being leached. Stacking is performed by radial stackers which appear to be functioning well, resulting in regular cells of stacked material that has been well distributed.

Leach solution is applied at a rate of 8,500-10,000m^3/d. The target cyanide concentration is 0.5g/l but is currently being controlled at 0.3g/l due to a lack of cyanide available on site.

Sprinklers supplied by Senninger Irrigation of Florida are used to apply the sodium cyanide solution to the top of the heaps whilst wobblers are used to irrigate the side walls. The sprinklers appear to give excellent coverage of the heap surface but the drift losses appear high visually, especially in windy conditions. Comparison of the volumes of fresh leach solution pumped to the heaps and the volume of pregnant solution returned to the recovery section suggest that the total solution loss is 25-30% and a large portion of this is likely to be drift losses from the sprinklers.

In October the irrigation systems are changed to pipes buried 400-500mm beneath the top of the heap and approximately the same distance apart to enable drip irrigation. This, coupled with heating of the leach solution, makes it possible to irrigate throughout the winter.

The extraction of gold by heap leaching has been shown by previous testwork to be size dependent and the optimum size is also dependent on the ore type being process. Transition and sulphide ores require a finer top size than oxidised ore to maintain similar extraction rates. The mining operation is being constrained by the proximity of an overhead power line and the ore being fed to the plant has increasing transition ore content. When the power line is moved there will be an influx of oxidised ore for a while, after which the ore will be entirely transition material. In order to manage the blend of ore being mined and the crushing and leaching parameters it will be necessary to conduct regular column leach tests.

The increasing quantity of transition ore necessitates a longer leaching time and two new pads are being prepared to provide this.

5.5.5 Gold Recovery

Leachate is collected in a plastic lined earthworks dam and pumped into three 80m^3 tanks inside the metallurgical plant. Solution is pumped through four pairs of adsorption columns in parallel, each column containing about 10t of activated carbon. The flow rate to each pair is measured. Barren solution is heated to approximately 8°C in electrode boilers and has the pH and sodium cyanide concentration adjusted to specification before being returned to the leach heaps. Two parallel pump sets deliver to specific heaps and the flow rate to each is measured.

Loaded carbon is eluted in two 1t capacity columns operating at 5 bar pressure and 150°C, circulating through pressurised electrowinning cells. Each elution is of 12 hours duration; hence approximately 4t of carbon are eluted per day.

Carbon is regenerated through acid washing and thermal regeneration as required at least annually.

The planned volume of pregnant solution is 6,000-8,000m^3/d containing approximately 0.5mg/l Au. During 2010 the actual volume was 5,000m^3/d at 0.28mg/l, at least part of the difference being attributable to seasonable fluctuations resulting from stopping stacking and leaching of fresh material during the winter. The pregnant solution grade is reduced to 0.010-0.030mg/l through adsorption, representing a recovery of 94-98% which is normal from solution of this tenor.

Eluted carbon contains 100-150g/t Au which is a little higher than normal but not a cause for great concern.

The total production for 2010 was 1,077.75kg of gold with an average recovery ratio of 65%.

5.5.6 Conclusions & Recommendations

The metallurgical operation at Aprelkovo is basic, but functions adequately in terms of throughput and recovery. There are, however, areas where relatively minor changes could enhance safety, performance and control significantly, the most notable of which are:

- Improve control over the top size of material fed to the leach heaps;
- Change the configuration of the tertiary crushers to closed circuit;
- Use a cone crusher for secondary crushing;
- Improvement of metal accounting system around the crushers; and
- Improvement of guarding of moving machinery.

In order to achieve these aspects, the following recommendations are made:

- Conduct confirmatory column leach tests on current arisings (both oxide and transition ore types);
- Determine the optimal crusher product size in terms of maximising the amount of gold extracted;
- Install automatic samplers (cross stream or hammer type) on the final product conveyor from the East crushing section; and
- Obtain professional advice regarding the stability of the eroded leach heaps.

5.6 Environmental Issues

5.6.1 Introduction

WAI was commissioned by the Client to undertake a review of environmental and social issues to establish whether or not Aprelkovo project is in compliance with environmental management commitments and relevant environmental legislation, and to evaluate whether environmental, social and occupational health and safety issues have been assessed in a manner consistent with the local legislation as well as international best practice. WAI also compared existing practices at Nord Gold operations to intenational standards, codes and best management practices e.g IFC Performance Standards and World Bank Guidelines.

Russian operations have always sought to comply with Russian Federation requirements and continue to meet the applicable standards. Compliance with these standards is monitored and results are reported. Non-compliances are addressed and corrective actions are implemented and reported to regulatory authorities, it is important to note the reluctance of local Russian authorities to change their approach to standards. This does not encourage the implementation of international standards, however Nord Gold continues to strive to improve its HSEC programmes and performances.

5.6.2 General Description

WAI understand that the project area is not designated for particular biodiversity or cultural interest or protection. Nevertheless, the region supports various ecosystems and is fragile, and as such, requires environmentally sound regimes to support industrial activities.

5.6.3 Permitting

At the time of the site visit, the licenses and permits were at various stages of development. There is an OVOS document (equivalent to EIA) in place for the operations which was prepared in 2005. WAI has viewed the Expert's Conclusion (Approval) for the OVOS document which is positive.

Subsequent to the visit it has been confirmed that Aprelkovo are in possession of the necessary permits from the Transbaikal Department of Rostechnadzor, to produce 1.6Mt of ore.

Furthermore, Maximum Allowable Concentrations (MAC) and Maximum Allowable Emissions (MAE) waste disposal limits calculated for the project have been approved by the State authorities based on the original production figures. However, with the expansion of operations, new MAEs and waste disposal limits had to be prepared, but have not yet received State approval.

It has been reported that that MAD's are not required for the operations, as there are no discharges at the mine.

> ***WAI Comment:*** *MAD's should be prepared for the operations to cover any discharges originating as a result of the operations. To this end, WAI has not been able to ascertain whether or not Aprelkovo JSC has financial security in place for the mine closure, rehabilitation and post-monitoring and this should be clarified.*

5.6.4 General Housekeeping Issues

Aprelkovo mine has a well developed infrastructure, including the staff camp, medical facilities, storehouses and workshops.

The shipment of hazardous materials to the site, such as cyanide, is a high potential risk. Thus, the precautions are very tight with the materials being packaged in sealed steel drums to prevent spills and uncontrolled releases. Furthermore, the handling of dangerous reagents is conducted by specially trained personnel and transportation is allowed in specially licensed trucks only.

It is recommended that the Company considers bunding the storage tanks at the Fuel Depot with the size of bunding adequate for the volume of fuel stored.

> ***WAI Comment:*** *the standard of general housekeeping is generallygood.*
>
> *All storage facilities, including the CN main and auxiliary storehouses, fuels and lubricants storage area are reported to have been designed, constructed and located in a manner consistent with the local regulations while the explosives storehouse was under construction and the associated permits were at the stage of preparation and approval. The storehouses are kept tidy and are equipped with the ventilation where necessary, fire protection boards and safety signage.*

5.6.5 Water Management

Water use for Aprelkovo is governed by the contract concluded between CJSC Aprelkovo and the Committee of Industry and Natural resources of Zabaikalsky Region which, amongst other responsibilities, obliges the Company to make regular payments for the amount water used.

It is understood that potable water is supplied from a borehole near Oskino Stream flood plain.

For the technological purposes, the water is continuously recycled and some fresh water is added into the process when necessary to compensate the losses occurring as a result of evaporation.

WAI has inspected two surge capacity ponds which are located below the heap leach pad. Although plastic-lined and constructed in compliance with the state-approved design, these have recently been relined to prevent contamination.

5.6.6 Air Quality

The main source of air pollution emerges as a result of drill-and-blasting works in the open pit with the suspended particles being the main pollutant. Overall, the emissions to air from the mining, processing and related activities are relatively small and any effects are localised. All necessary permits are in place to cover such emissions and relevant payments are made to the state budget for the atmospheric pollution.

It has been reported that the air quality is carefully monitored through analysing the samples for poisonous gases and suspended substances. Furthermore, instrumentation is calibrated annually and the main mine facilities are equipped with ventilation systems and other dust control equipment. Dust suppression is conducted regularly through irrigation of roads and sites using the open pit water.

5.6.7 Waste Management

The waste rock is considered to be the main type of waste generated by the mining operations at Aprelkovo. It is classified as the lowest danger class (class V) and is stockpiled in two separate dumps east of the current open pit.

It has been reported that the Company is in the receipt of the relevant permits and executes payments to the State for the waste disposal in accordance with the limits calculated and approved for the operations.

It is understood that there is a landfill at the mine for disposal of solid waste. Oils and grease (danger class III) are recycled whilst oiled rags (class III also) are incinerated. Used tyres (danger class IV) are stored and disposed of. Metal containers used for transportation of chemicals such as CN are understood to be neutralised using ferric sulphide, compressed, accumulated in a designated place and then disposed of at Boley town (c.90km away) by a contractor.

It is understood that the waste water from the mine camp is currently discharged to the Tyemny stream upon its precipitation in a holding pool nearby. A waste water treatment plant for the domestic drainage has been recently constructed and will be commissioned in the near future.

5.6.8 Environmental Monitoring and Reporting

It has been reported that the monitoring of surface and ground water quality for poisonous substances, petroleum products and heavy metals is undertaken by the laboratory staff every month for the purposes of the internal control and once a quarter for the external control.

Monitoring has shown the determinants to be within the threshold levels established for the operations. This has been substantiated by the monitoring reports that have been available for WAI to review.

For the purposes of reporting, the results of the environmental monitoring are provided to Mine Aprelkovo Head Office quarterly and to the State authorities (Rosprirodnadzor) on an annual basis. The State authorities are reported to undertake planned and unplanned inspections which include collection of water, air and soil samples; the results of the latest unplanned inspection and corroborate the absence of any breaches in threshold levels established for the operations.

5.6.9 Environmental and Social Management

At the time of the site visit, WAI has not been provided with an Environmental and Social Management System (ESMS), nor has been advised if the latter is in place for the operations.

> ***WAI Comment:*** *WAI considers that the existing environmental team is insufficient to facilitate the current operations. WAI recommend that Aprelkovo consider increasing the size of the environmental team to meet the requirements of compliance with international best practice in EHSC management.*

5.6.10 Mine Closure Planning and Land Rehabilitation

To WAI's knowledge there is no financial provision set aside in an escrow account for the final closure cost. Financial security for mine closure is not common in Russia. Estimated mine closure costs are only reported as financial liability in IFRS financial statements. Such provision would normally be made, often as a levy on production, and held in an escrow account separate from the assets of the Company.

However, it has been reported that the Aprelkovo budget would provide 100MRoubles for the final closure and rehabilitation costs.

5.6.11 Occupational Health and Safety

The Labour Protection Department has one staff at the mine who deals with the industrial safety issues as well as paperwork. At the mine, a nurse is present full time.

It is understood that the mine is generally compliant with the regulatory requirements in Russia with no registered deviations from the Norms. Moreover, it is understood that there have been no reported accidents or fatalities at the site.

> ***WAI Comment:*** *based on the site walkover observations, conversations with the Health and Safety Engineer and the relevant documentation, WAI finds that H&S procedures are generally sound, with the mine facilities being equipped with fire protection boards, visual aids and the staff wearing all necessary PPE.*

WAI would recommend allocating a separate office for the Health and Safety Engineer. WAI would recommend expanding the First Aid Hospital, which is important from a hygienic and sanitary viewpoint.

5.7 Life of Mine Production Model

5.7.1 Introduction

A life of mine model for the Aprelkovo gold deposit has been prepared in order to demonstrate the potential viability of the project and its robustness. This life of mine model was based on the Ore Reserve figures described above, capital investment requirement estimates provided by the Client and audited by WAI with a view to similar projects, and other parameters. Input parameters were input into the life of mine model developed by WAI. The details of this life of mine model are given below.

5.7.2 Financial Model Assumptions and Input Data

The assumptions made in the WAI the life of mine model for the Aprelkovo Gold project were based on:

- Au price of US$900/oz;
- Ore reserves as of 01 November 2010, estimated by WAI in accordance with the guidelines of the JORC (2004) code;
- Mining Schedule, prepared by WAI. The Mining Schedule targeting a 1.6Mtpa ore mining rate; November and December 2010 ore tonnage being estimated by the Company forecast (plan);
- Long-term operating costs forecasts based on year 2008-2010 production results and considering analogous deposits in this part of Russia;
- Overall Au recovery indices obtained from actual annual results for 2008-2010;
- Annual discount factor of 11.2% (Base case);
- General and Administration costs estimated on the basis of the Client’s forecast, and vary in a region of US$4.5-5.0/t; and
- Overall tax at 20% of net income applied.

A summary of the Aprelkovo the life of mine model assumptions and input data is given in Table 5.19 below.

Table 5.19: Aprelkovo life of mine Model Assumptions and Input Data

Year	TOTAL	Nov-Dec 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Gold Price, US$/Oz	-	900	900	900	900	900	900	900	900	900	900	900
Ore Ox.+Trans. production (diluted) kt	1,561	-	804	231	121	83	93	53	144	7	-	25
Waste Ox.+Trans. mined, kt	20,644	1,187	1,855	2,057	1,887	1,927	2,052	2,333	2,308	2,285	2,365	389
Ore Ox.+Trans. Mining cost, US$/t	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34
Waste Ox.+Trans. Mining cost, US$/t	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Mining Ox.+Trans. OPEX, k US$	27,484	1,460	3,359	2,839	2,484	2,480	2,649	2,941	3,031	2,820	2,909	511
Au Ox.+Trans. Grade g/t	0.65	-	0.95	0.95	1.07	0.89	0.60	0.65	0.80	0.44	-	0.77
Gold Ox.+Trans. mined, kg	1,411	-	760	220	130	73	56	35	115	3	-	19
Recovery Ox.+Trans. , %	71.0%	71.0%	71.0%	71.0%	71.0%	71.0%	71.0%	71.0%	71.0%	71.0%	71.0%	71.0%
Gold Ox.+Trans. recovered, kg	1,002	-	540	156	93	52	40	25	82	2	-	14
Gold Ox.+Trans. recovered, Oz	32,218	-	17,359	5,013	2,974	1,670	1,274	789	2,629	71	-	439
Processing Ox.+Trans. cost, US$/Oz	-	-	232	230	204	247	365	338	274	498	-	285
Processing Ox.+Trans. cost, US$/t	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Proc and Mining Ox.+Trans. Costs US$/Oz	-	-	425	797	1,039	1,732	2,445	4,064	1,427	40,269	-	1,451
Ore Sulph. production (diluted) kt	13,722	182	796	1,370	1,478	1,518	1,506	1,547	1,456	1,593	1,601	676
Waste Sulph. mined, kt	-	-	-	-	-	-	-	-	-	-	-	-
Ore Sulph. Mining cost, US$/t	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34
Waste Sulph. Mining cost, US$/t	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
Mining Sulph. OPEX, k US$	18,387	244	1,066	1,835	1,981	2,035	2,018	2,072	1,951	2,134	2,145	905
Au Sulph. Grade g/t	1.09	1.17	1.12	1.07	1.20	1.09	1.14	1.00	0.93	1.01	1.09	1.11
Gold Sulph. mined, kg	14,747	213	894	1,467	1,778	1,658	1,723	1,545	1,360	1,608	1,748	753
Recovery Sulph. , %	52.7%	52.7%	52.7%	52.7%	52.7%	52.7%	52.7%	52.7%	52.7%	52.7%	52.7%	52.7%
Gold Sulph. recovered, kg	7,772	112	471	773	937	874	908	814	717	847	921	397
Gold Sulph. recovered, Oz	249,861	3,611	15,143	24,851	30,130	28,097	29,191	26,173	23,050	27,245	29,621	12,751
Processing Sulph. cost, US$/Oz	273	252	263	276	245	270	258	295	316	292	270	265
Processing Sulph. cost, US$/t	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Proc and Mining Sulph. Costs US$/Oz	346	320	333	349	311	343	327	375	400	371	343	336
Gold Recovered TOTAL, Oz	282,079	3,611	32,502	29,864	33,104	29,767	30,465	26,962	25,679	27,316	29,621	13,189
Proc and Mining TOTAL Costs US$/Oz	411	320	382	425	376	421	416	483	506	474	343	373
Depreciation (total) k US$	52,476	3,326	4,915	4,915	4,915	4,915	4,915	4,915	4,915	4,915	4,915	4,915
Revenue, k US$	253,871	3,249	29,252	26,877	29,794	26,791	27,418	24,266	23,111	24,585	26,658	11,870
Operating Costs, k US$	117,920	1,155	12,426	12,677	12,463	12,520	12,663	13,013	12,982	12,953	10,149	4,920
G&A, Sales	60,529	952	5,714	5,714	5,714	5,714	5,714	5,714	5,714	5,714	5,714	5,714
Rolyalty 6%	15,232	195	1,755	1,613	1,788	1,607	1,645	1,456	1,387	1,475	1,600	712
CAPEX, k US$	16,201	1,234	3,967	2,000	2,000	2,000	1,000	1,000	1,000	1,000	1,000	-

5.7.3 Conclusions

The WAI life of mine model results in a positive NPV at various discount rates and at various gold prices, as well as the relatively high internal rate of return at nominal input parameters. This shows that the reserves considered in the financial model are profitable for exploitation in the current economic environment.

The deposit consists of a medium size gold ore resource. The fact that the key financial indices remain reasonably high given the conservative cost input parameters and recovery used in the models, shows good economic potential for the project.

6 GROSS

6.1 Introduction

Wardell Armstrong International (WAI) has been commissioned by LLC Neryungri-Metallic (Neryungri) to undertake a review of the Gross gold exploration project in order to assess the resource potential of the licence and review the status of exploration works undertaken to date.

Mark Owen, Technical Director and geologist with WAI first visited the Gross gold exploration project prior to commencement of the 2009 drilling programme on 08 - 15 July 2009 and re-visited the project during the period 10 - 12 of November 2009.

6.2 Exploration History

6.2.1 Introduction

The Gross gold occurrence was first discovered in 1969 during an exploratory mapping survey at 1:50,000 scale (Dorozhkov and others, 1969). The results of this preliminary work identified the broad structural styles and hydrothermal-metasomatic processes present.

6.2.2 Previous Work (Arlan 2004-2005)

The Gross Mineral occurrence is situated approximately 4km to the east of Tabornoe and comprises a zone of potassium feldspar metasomatite hosted within early Proterozoic sandstones (Figure 6.1 and Figure 6.2). The zone was originally traced by geochemical and radiometric geophysical anomalies.

Five drillhole profiles were drilled at Gross in 2004-2005 by the previous owner, Arlan Associates, containing a total of 87 holes. Low grade Tabornoe-type gold mineralisation was intersected on drill profile No. 1, whilst profiles drilled at approximately 260m to the west and 800m to the east from profile No. 1 showed limited economical mineralisation.

From the results of drilling, Arlan were able to identify preliminary ore envelopes at cut-off-grades of 0.30 and 0.70g/t Au.

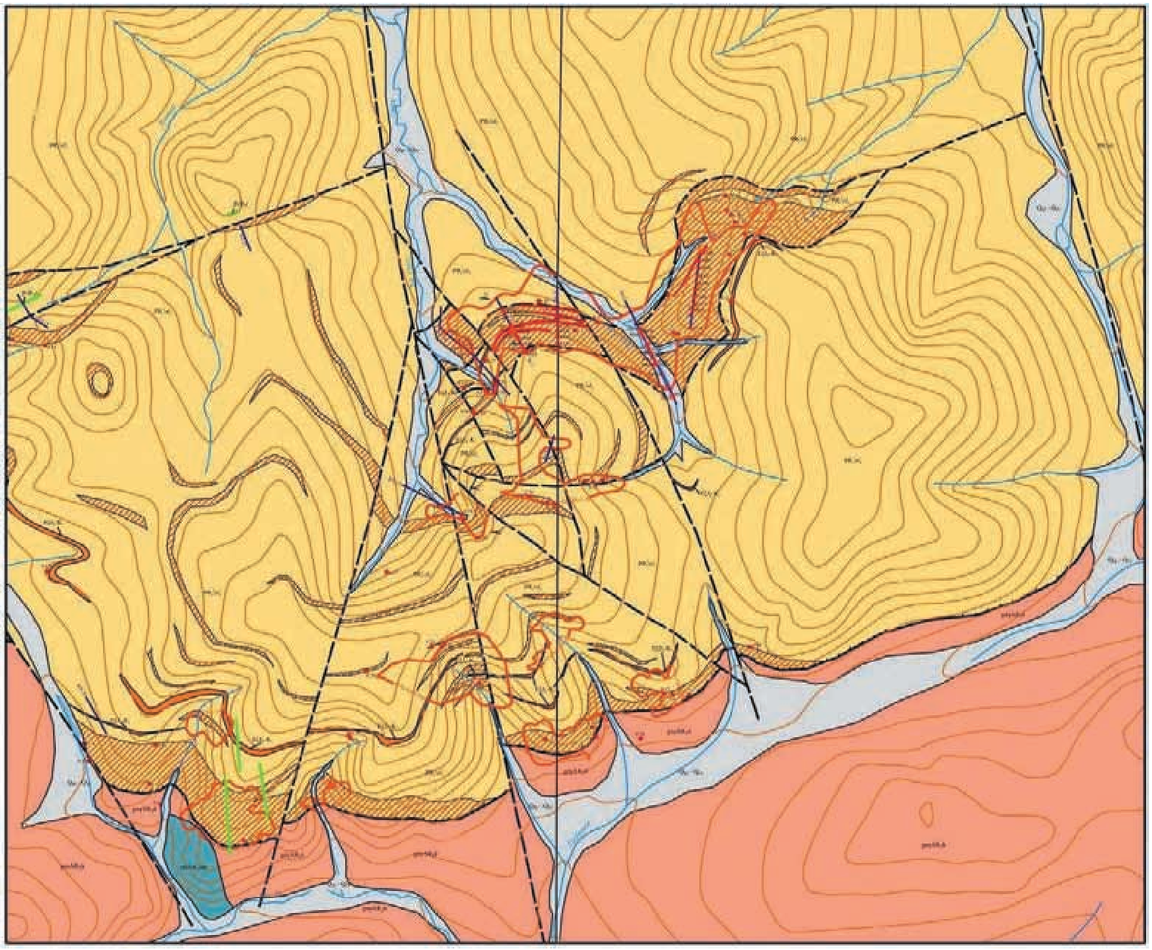


Figure 6.1: Geological Plan of the Gross Exploration Target

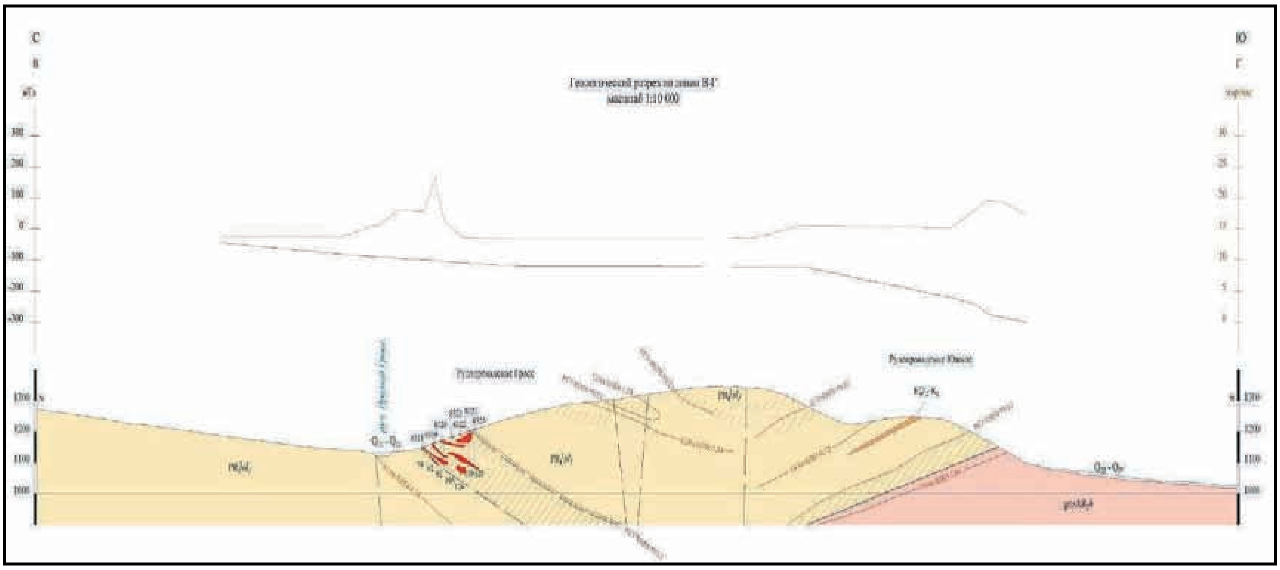
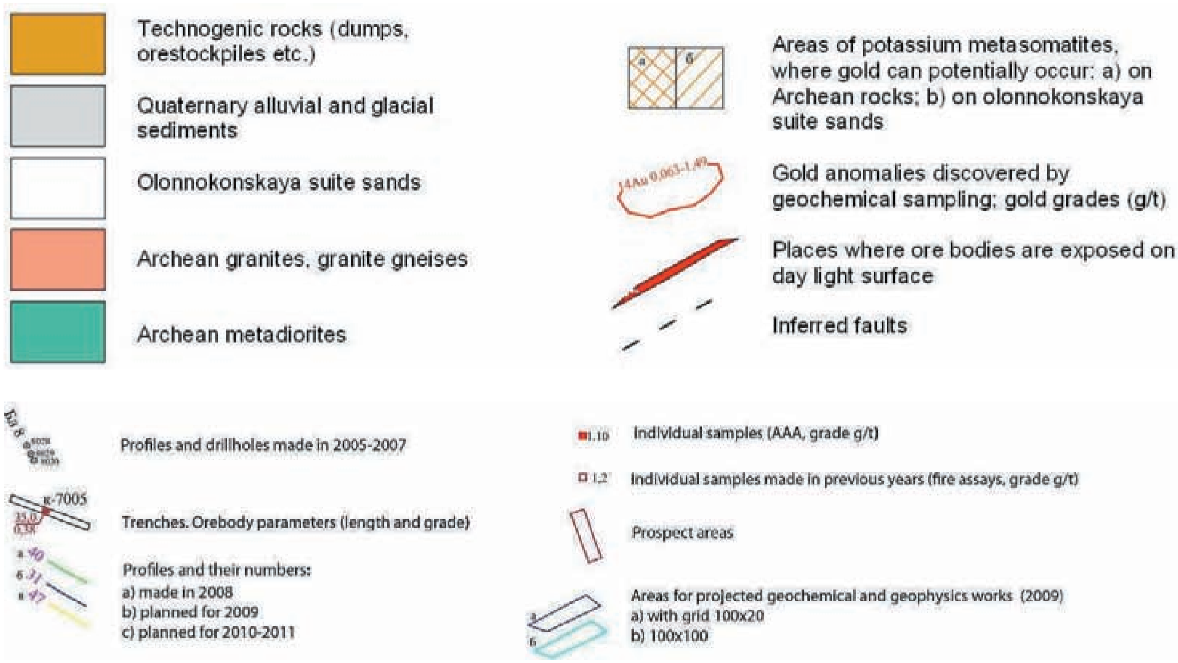


Figure 6.2: Schematic Cross Section through Gross (approximately 1:10,000 scale)
(Archaen (pink) showed gently dipping to the north with the Gross metasomatic ore zones (red) shown dipping gently south)



Legend for Figure 6.1 to Figure 6.2 above

6.2.3 Radiometric Geophysical Survey

The metasomatic alteration zones are well defined by the gamma radiometric geophysical survey as illustrated in Figure 6.3 below.

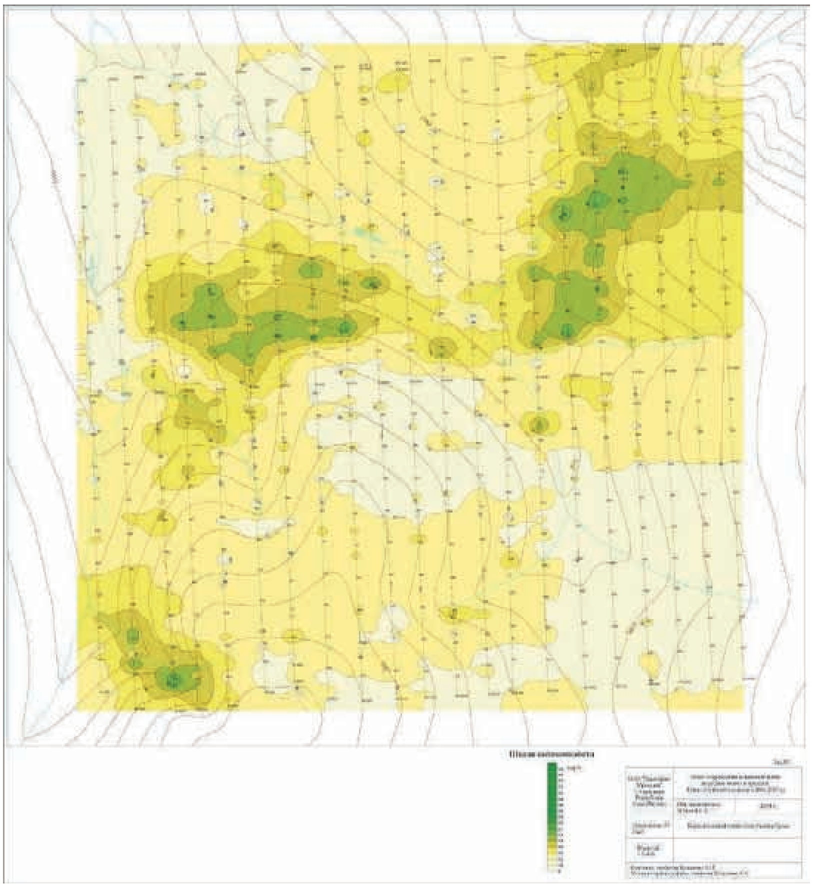


Figure 6.3: Radiometric (Gamma) Plot for Gross

6.2.4 Soil Geochemistry

Similarly the soil geochemistry for gold readily identifies the geochemical halo over the metasomatic ore zone, as shown in Figure 6.4 below.

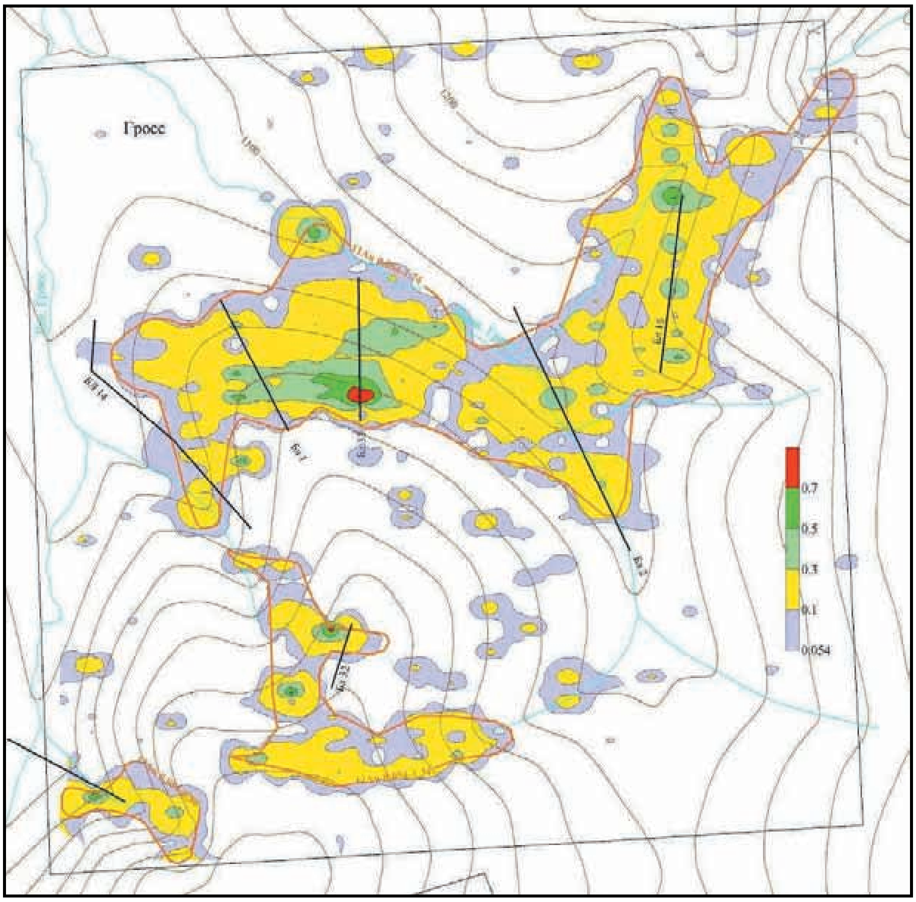


Figure 6.4: Results of Soil Geochemistry showing Anomalous Gold Halo (Legend Grade in g/t Au)

6.2.5 Exploration Drilling (Neryungri 2008)

A comprehensive drill programme conducted by Neryungri-Metallic in 2008 identified at least four shallow southerly dipping (30°) consistent zones of gold mineralisation which contain comparable grades to those at Tabornoe Ore Zone No. 1, and can be traced both down dip (up to 440m) and along strike for a distance of at least 640m (see Figure 6.5 below). A surface plot shows the location of the projected ore zones together with projected fault bounded mineralisation.

It has been inferred that the zone of metasomatism is fault bounded, with the hangingwall marked by a flat lying, very shallow dipping fault zone which has a southerly dip, whilst the footwall in contrast is marked by a south dipping fault zone with a much steeper dip (30-35°).

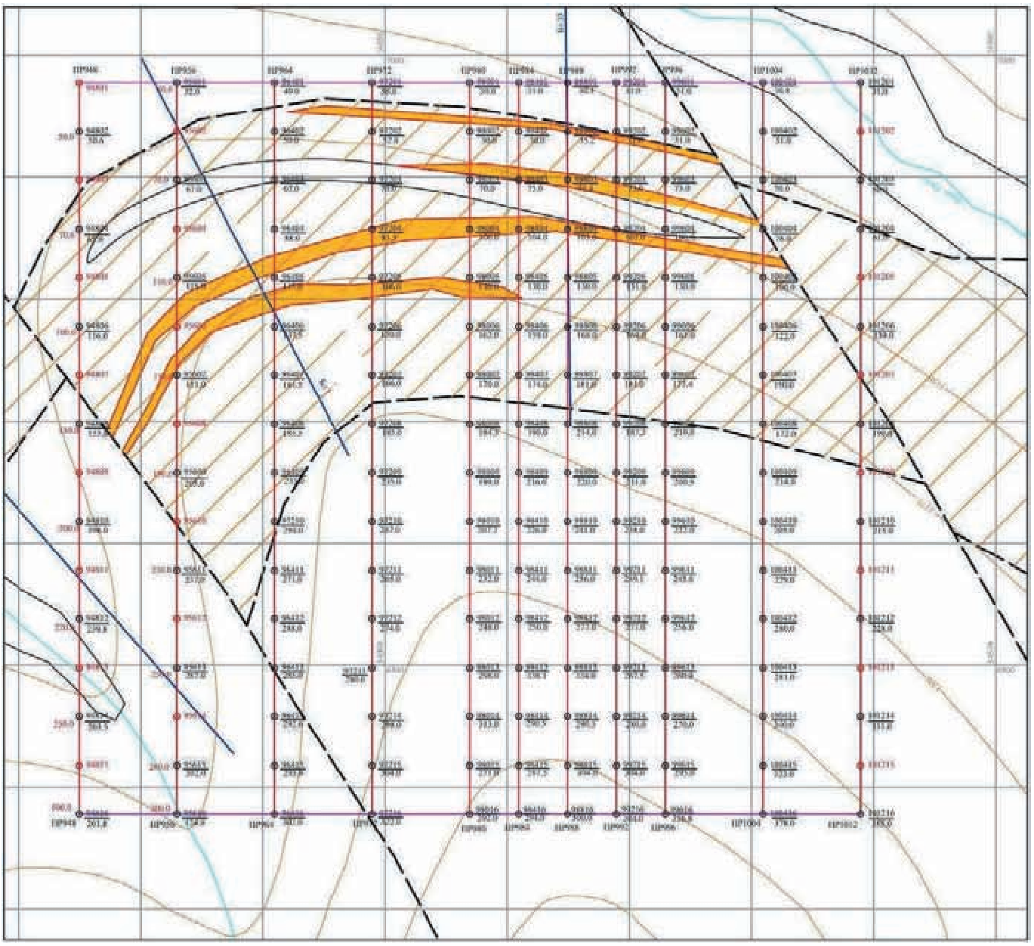


Figure 6.5: Gross Drill Profile Lines completed during 2008 by Neryungri-Metallic

A study of the results of multi element analysis has shown that a strong correlation exists between gold and various elements, the signature of which clearly suggests that the deposit is of metasomatic origin. The most striking correlations include:

- A strong correlation exists between potassium and gold and arsenic and gold; and
- A strong inverse correlation exists between magnesium and gold, zircon and gold and sodium and gold.

WAI Comment: *Further multi element analysis from the 2008-2009 drill holes would be particularly useful for zircon, as this could be a successful tool to aid the ore zone delineation (wireframing) process. Ore zone boundaries should not lie inside the anomalous zones of zircon.*

6.3 Review of the Relationship between Grade and Ore Zone Thickness

A plot of the 2008 drill hole data reveals a relationship between grade and ore thickness for metre x gram/t Au values and suggests that a NW-SE axial trend through the data set exists, which may well be parallel to steep dipping faults (refer Figure 6.6 below).

WAI Comment: *it may be prudent to drill two steeply inclined drill holes, orientated along a NE-SW trend from both the west to the east and vice versa in order to check structural interpretation.*

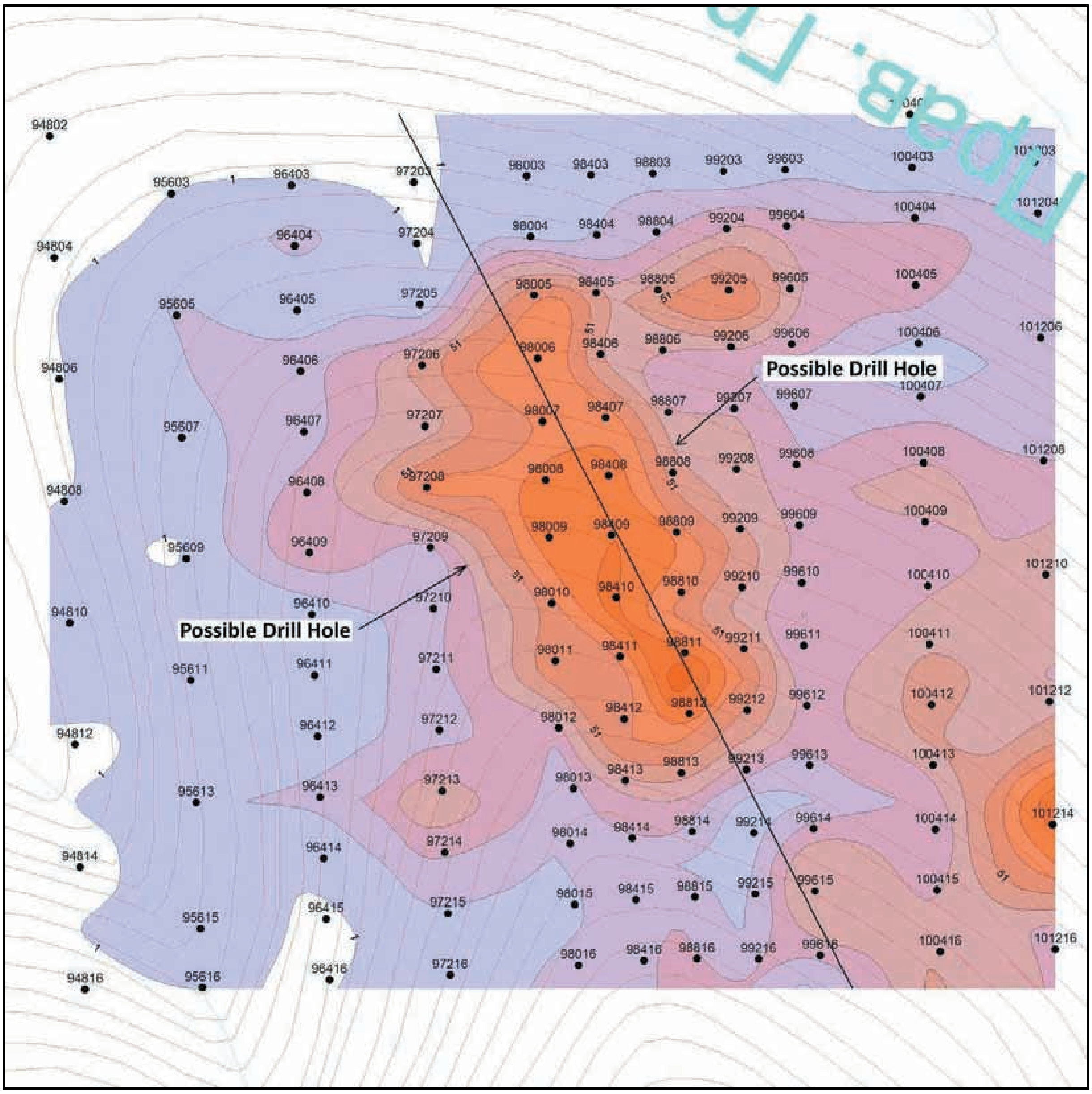


Figure 6.6: Results of Metre x Gram Plot for the 2008 Drill Profiles
(Showing Possible Position of Additional Boreholes)

6.4 Exploration Program (Neryungri 2009)

Further drilling has been undertaken on Gross in 2009, to explore both the eastern flank extension of the deposit and by extension of all profiles to the south to identify whether or not the deposit forms a bowl shaped synform, potentially giving a very low strip ratio and in consequence making this target extremely attractive to open pit mining.

6.4.1 Drilling

The drilling programme, which commenced in August 2009, is summarised in Table 6.1 a plan of the collar locations of the drill holes is shown in Figure 6.7.

Table 6.1: Exploration Programme at Gross (from 2009)

Profile ID	Length of the Profile (m)	Quantity of Holes	Average Depth of the Hole (m)	Scope of drilling (m)	Drilling diameter	Grid (m)/ Category of Resources	Prognostic amount of Gold (t)	Geological Tasks/Objective
98803-1	-	1	300	300	HQ-NQ	Structural- Exploration	-	Investigate potential of ore zones at depth
892-940	480	7	200	1,400	HQ-NQ	Structural- Exploration	-	Investigation of west part of ore zone
972	640	9	200	1,800	HQ	180-200x80 P_1	6.5	Investigation of ore zone to the south, studying probable change of footwall dip (from south to north)
992	560	8	300	2,400	HQ			
1012	480	7	200	1,400	HQ			
1020	1120	15	300	4,500	HQ	80x80 C_2	9.5	Investigation of the south-east part of ore zone, where mineralisation has good potential. Increase of resources in C_2 category
1028	1040	14	200	2,800	HQ			
1036	1040	14	200	2,800	HQ			
1044	1120	15	300	4,500	HQ			
1068	2080	27	300	8,100	HQ	240-600x80 P_1	24.5	Investigation of eastern extension to the ore zone. Profile 1068 aims to study area of intersection of the ore zone with Paleozoic/Archaean contact using holes to a depth of 500m.
1092	1760	23	300	6,900	HQ			
1212	640	9	200	1,800	HQ			
Total	**10,960**	**149**		**38,700**			**40.5**	

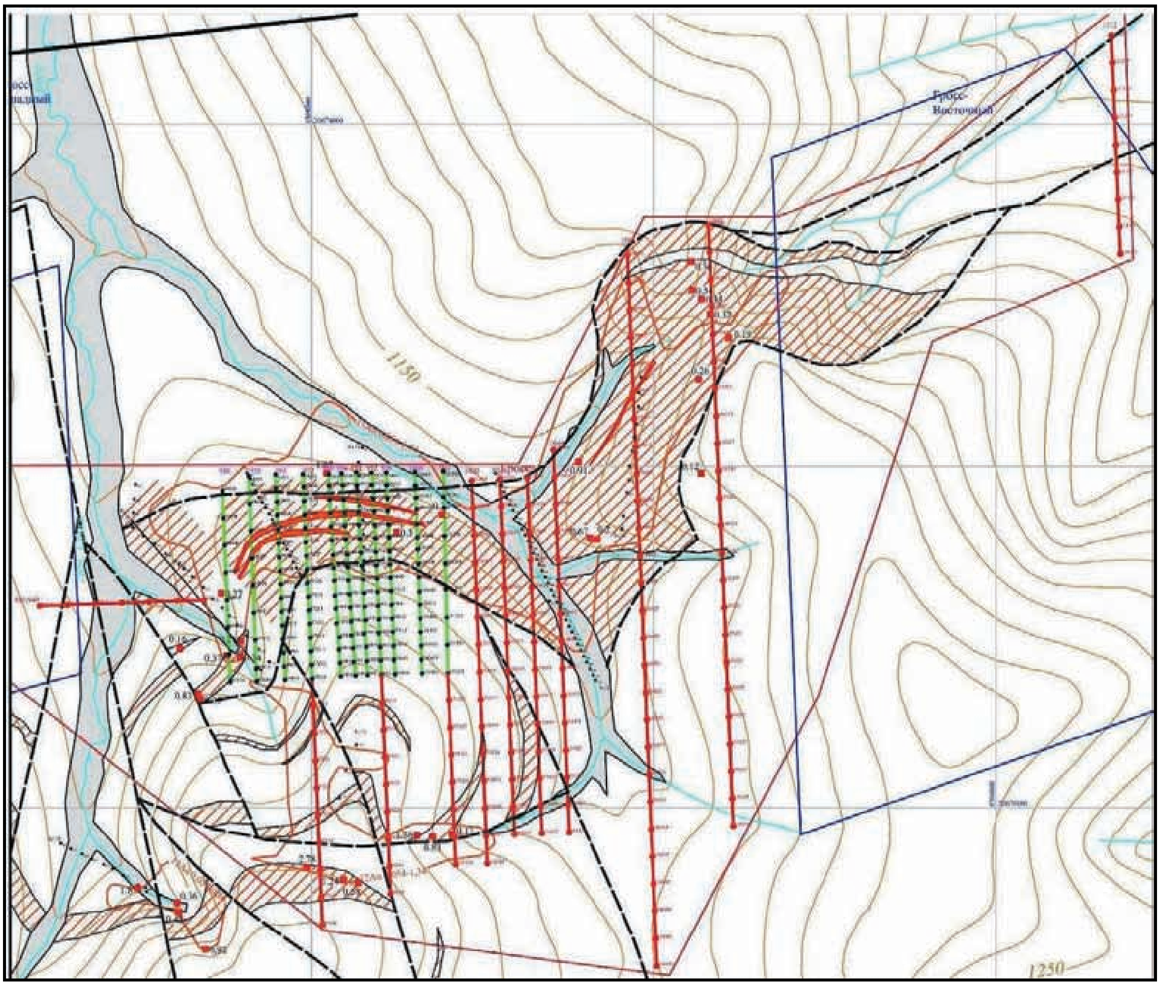


Figure 6.7: Gross – Exploration Programme Drill Hole Layout (Neryungri-Metallic 2009)
(Green Profile Lines – Completed Drill Holes during 2008; Red Profile Lines – Proposed Drill Holes for 2009)

> ***WAI Comment***: *WAI has inspected the manner in which the drilling has been performed and considers it to be very satisfactory. Core recovery observed at the time of the site visit was excellent (approaching 100%), even in poor ground conditions.*

All holes have been drilled vertically, varying from 50-620m (average 300-400m). A total of some 15 holes have been drilled further south to a depth greater than 500m (holes greater than 500m have drilled through the zone of permafrost which lies at approximately 400-500m), in order to investigate the sandstones at depth and their relationship with the underlying Archean basement. WAI understands that of these 6 holes intersected the Archean.

Down-the-hole surveys are performed at regular intervals of 20m plus the bottom of the hole and drift is understood to be less than 3°.

> ***WAI Comment:*** *At the time of the site visit in mid-November a total of 138 holes had been completed for a total of 34,832m. A further 8 holes remain to be completed for a total of 146 holes in the program.*

6.4.2 Digital Drill Logs

Logging is entered directly into a computer notepad on an Excel spreadsheet which has been purpose written for the project by RJC.

> ***WAI Comment****: The method of logging introduced to the exploration programme is excellent. WAI considers that it is both efficient and less labour intensive. It also benefits from being a system where the resultant logging is consistent and can be readily input into the computer geological modelling software, thereby saving time and expense.*

No duplicates are inserted into the sample stream, but as part of the QA/QC procedures a blank sample is inserted every 50th sample into the sample stream together with a “Standard” sample, which is sourced locally and comprises unaltered red medium coarse sandstone and is inserted every 20th sample.

Three standards supplied by ROCKLABS of New Zealand are utilised with grades of 1.817g/t Au, 0.805g/t Au and 0.205g/t Au.

6.4.3 Diamond Saw Core Cutting

> ***WAI Comment:*** *Core cutting was observed during the site visit and found to be of a very high standard. The operators observe the procedures of cutting along the axis of core at right angles to structure very precisely.*

6.4.4 Sample Preparation

WAI understands that results from only 30% of drill holes has been received to date, hence validation of the assay dataset can only be undertaken on completion of this task.

> ***WAI Comment:*** *WAI has inspected the methods of on-site crushing and pulverisation and found them to be acceptable. WAI did however notice that excessive dust was present after each sample has been processed and considers it beneficial to use vacuum cleaners to clean up the machinery and pulverisation vessels after each sample. This recommendation was implemented immediately.*
>
> *SGS in Chita assay the samples by fire assay with AAS finish for gold, whilst all gold analysis above 0.005g/t Au are assayed for silver by AAS 12E.*
>
> *In addition, multi element analysis has been conducted on selected profile lines by ICP40D, together with two structural holes and the 15 deep holes to target the Archean.*

6.4.5 Core Storage Facility

A purpose built wooden core storage facility has been constructed to house the cut core and sample reference material. The facility is well constructed and laid-out.

6.4.6 Further Studies

The collection of mineralogical samples from the core, for thin section studies is still on-going.

Samples were taken from the core drilled in 2008, in three grade ranges; 0.30; 0.50 and 0.70g/t Au, together with waste rock samples for this test work.

WAI understands that an additional 15 structural - HQ diameter boreholes were drilled in late 2009, on various profiles across the deposit in order to generate bulk samples of the most representative parts of the ore zones.

6.4.7 AMTZ Geophysical Survey

Neryungri has employed a new geophysical technique at Gross, namely, AMTZ (a method of audio-magnetic-telluric sounding) which is based on studying the surface impedance of the natural electro-magnetic field of the earth within frequency from 1 to several thousands of Hertz. These measurements allow the study of the underlying geology from a few metres down to several kilometres below surface. The method gives low cost-high performance measurements which makes it highly suitable for geological prospecting work.

An important benefit of this technique is that it can be employed to interpret structures in both horizontally-foliated and horizontally-non-homogeneous environments (rocks), with a high degree of reliability.

The results of the AMTZ survey are summarised in comparison to geological mapping of structure; soil geochemistry and orebody outcrop in Figure 6.8 and Figure 6.9 below.

Clearly the edges of the metasomatic zone are well defined by the survey and from interpretation of the cross section it would appear that the entire zone is associated with a strong steeply dipping structure. WAI considers that the technique has proved itself very useful, but the results clearly require further interpretation.

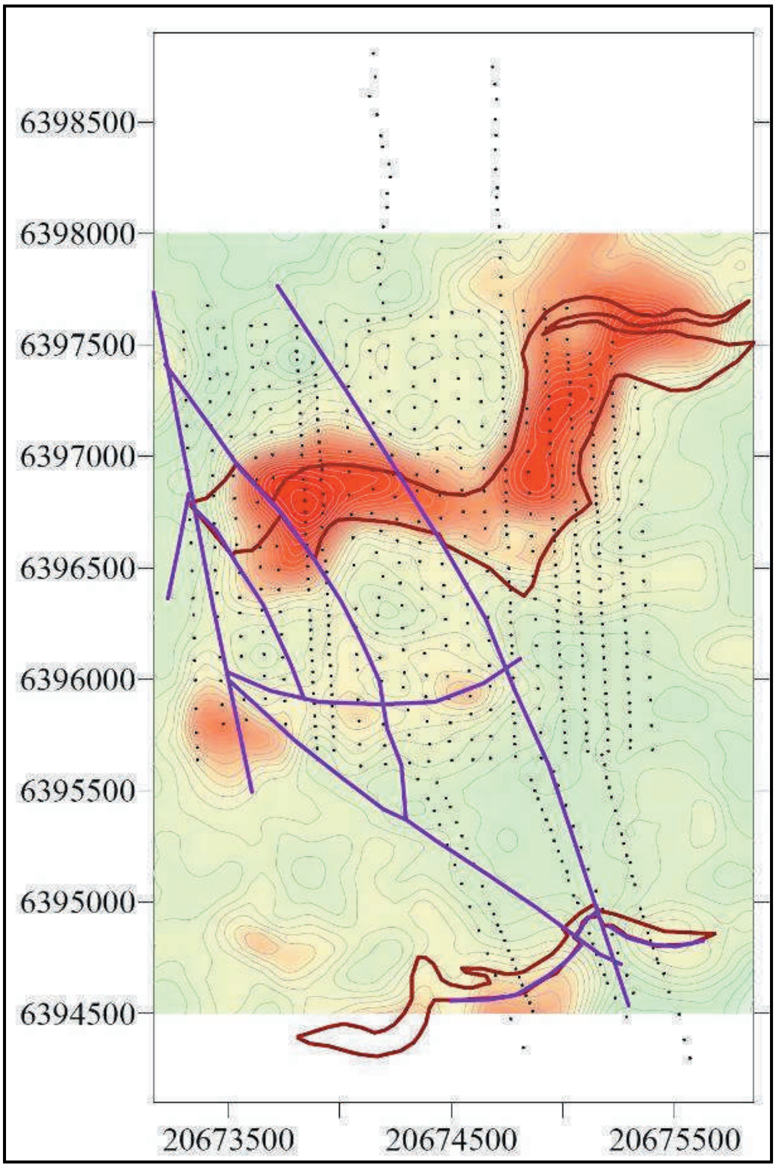


Figure 6.8: Distribution of Potassium Grade According to Aerial Mapping

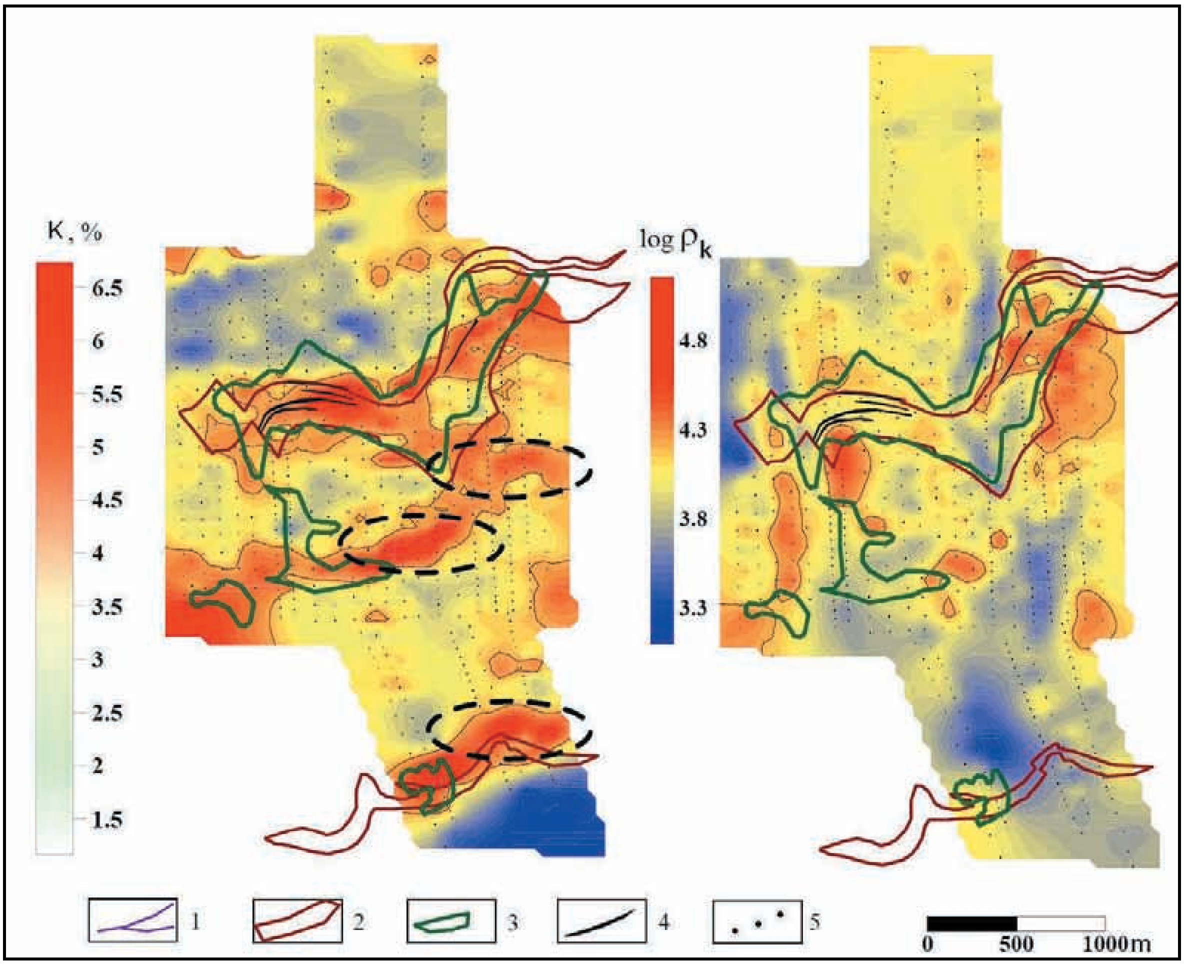


Figure 6.9: Distribution of Apparent Resistance [Impedance] for H-polarised (left) and E-polarized (right) Fields (at a frequency 80 Hz)
1 – Structural Features 2 – Metasomatic Zones; 3 – Lithochemical Gold Anomalies; 4 – Orebody Outcrop; 5 – ATMZ Survey Points
Black dashed lines show prospective areas

6.5 Mineral Resource Estimate (WAI 01 November 2010)

WAI was commissioned by the Client to update a 2009 Mineral Resource estimate (also prepared by WAI) for the Gross Au deposit. The previous Mineral Resource estimate used drillhole data from drilling campaigns carried out prior to January 2009.

An additional diamond drilling campaign was carried out by Nord Gold at Gross during 2009 and 2010. This report details an update of the Mineral Resource estimate to include this new drillhole data. The Mineral Resource estimate for the Gross Au deposit has been produced in accordance with the guidelines of the JORC Code (2004). The work completed during this project is summarised below.

6.5.1 Topography

The topography used in this study is understood to have been based on survey carried out in October 2009. It is understood that no mining operations have been carried out at Gross since this date. The current topography along with diamond drillhole locations are shown in Figure 6.10.

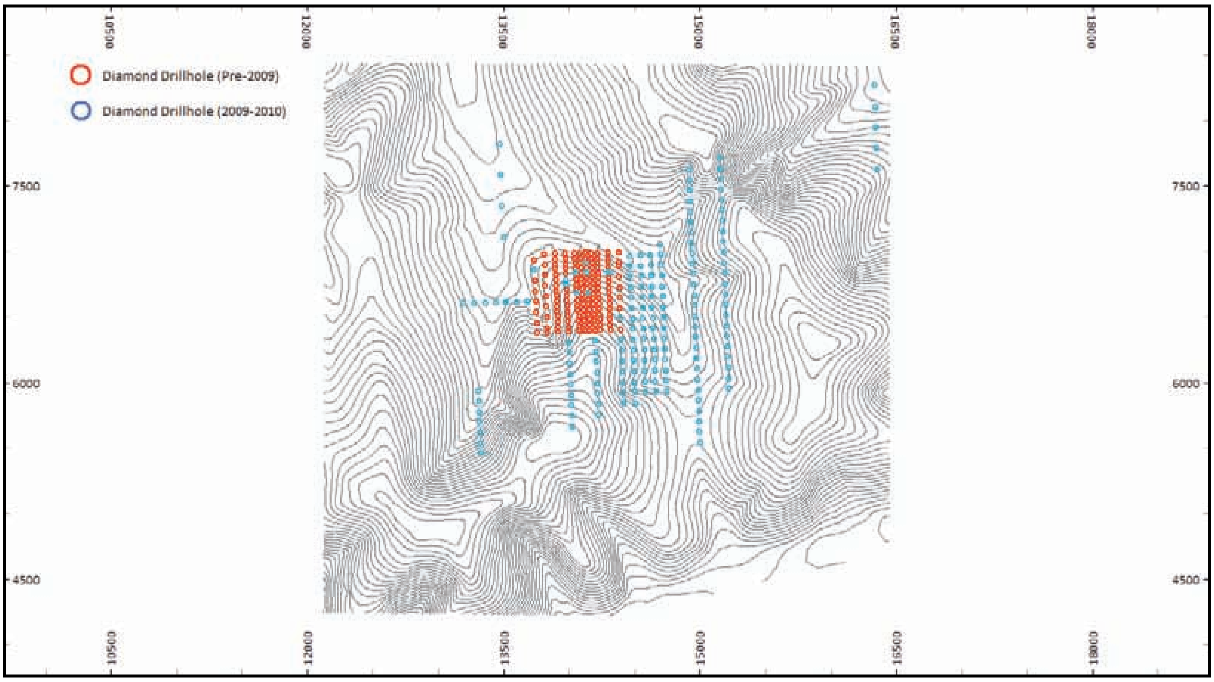


Figure 6.10: 5m Contour Topographical Survey of Gross as of October 2009

6.5.2 Sample Database

The sample database is based on diamond drillhlole data. The previous sample database contained 154 drillholes and 28,982 samples. The 2009/2010 drilling has generated an additional 205 drillholes and 51,877 samples. The combined database now contains a total of 359 drillholes and 80,859 samples. All drillholes have been drilled vertically and are spaced on an extremely regular 40m, 80m and 200m spaced grids. A summary of the diamond drillholes at Gross is shown in Table 6.2.

Table 6.2: Sample Data Summary

	No. of Diamond Drillholes	No of Samples	Total Length
Previous Study (Pre-2009)	154	28,982	29,139
New Drillholes (2009-2010)	205	51,877	52,154
Total	**359**	**80,859**	**81,293**

6.5.3 Mineralised Zone Interpretation

The mineralised zones have been updated to include the new drillhole data and have been extended to both the north and south of the Gross deposit. Nine different mineralized zones have now been defined and were based on a 0.3g/t Au grade cut-off. The zones are predominantly southerly dipping, with dips varying between approximately horizontal and 25°. A sub-set of the drillhole data has been selected within, and coded by, these principal zones. A section through the mineralised zones is shown in Figure 6.11 below.

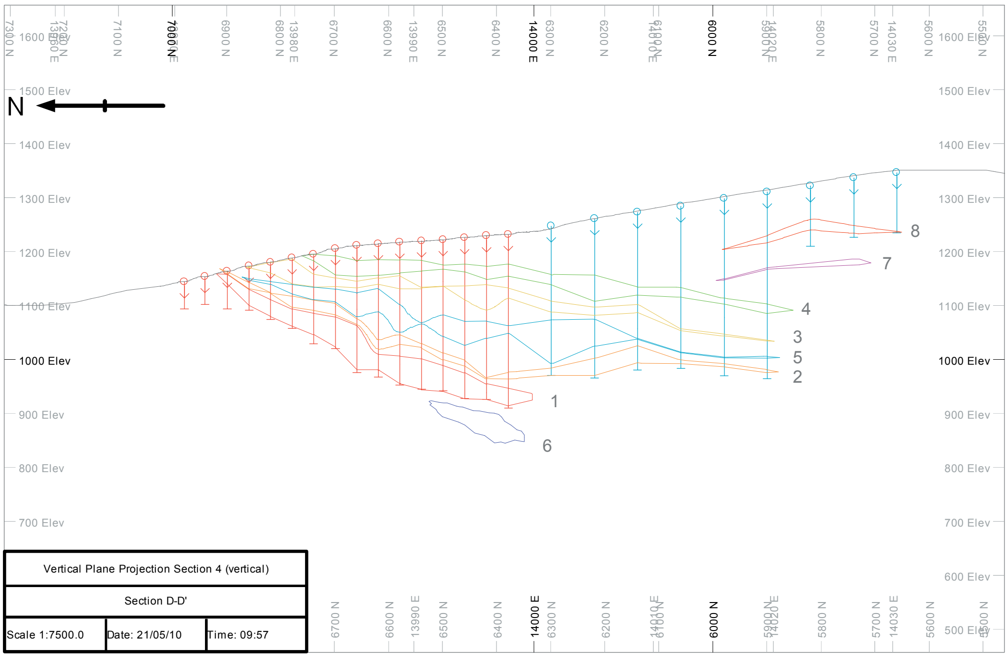


Figure 6.11: Section F-F' through Mineralised Zones

6.5.4 Geostatistics

The sample data indicates approximately distinct log-normal population of gold grades within the different lithologies, as well as between the identified mineralized zones. A geostatistical study of 5m diamond-drillhole composites carried out during the previous study indicated variogram ranges of approximately 60m in the along-strike direction (267°), 60-80m in the down-dip direction (177°) and 25m in the cross-strike direction. A modelled variogram is shown in Figure 6.12. These same parameters have been used in the current study.

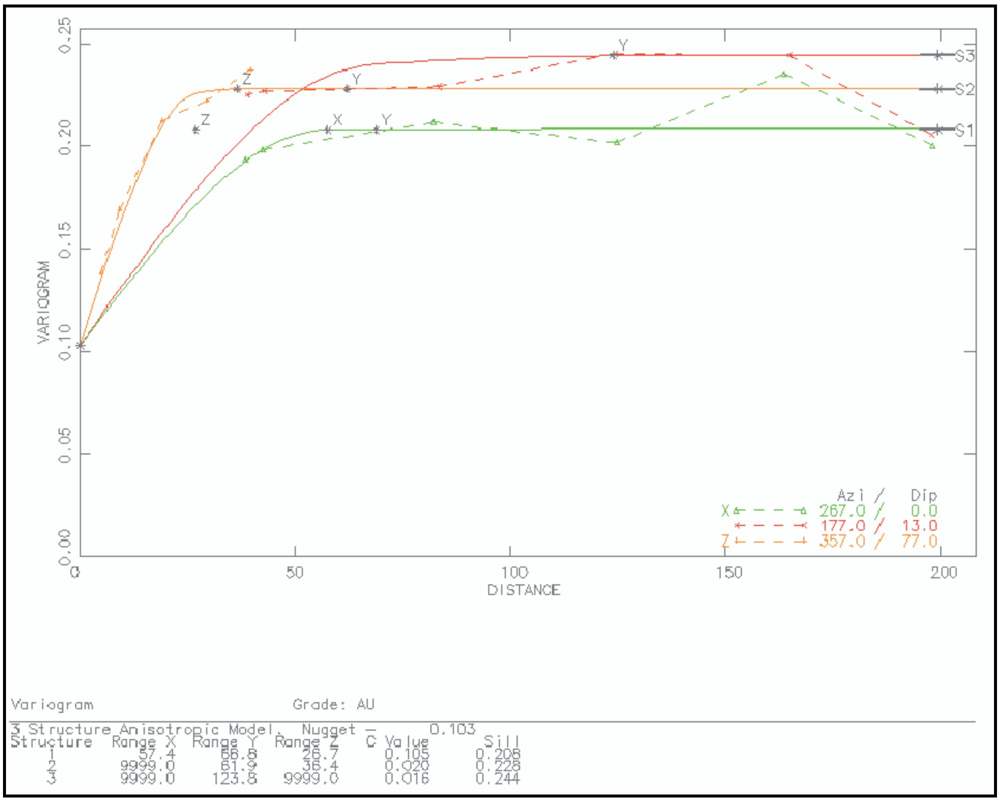


Figure 6.12: Modelled Semi-Variogram

6.5.5 Block Model

A volumetric block model was set up with a 10m x 10m x 5m block size used for the mineralised zones and a 20m x 20m x 10m block size used for the waste blocks. A global density value of 2.4t/m^3 has been assumed for all rock types. A cross section through the block model coded by ore zone is shown in Figure 6.13.

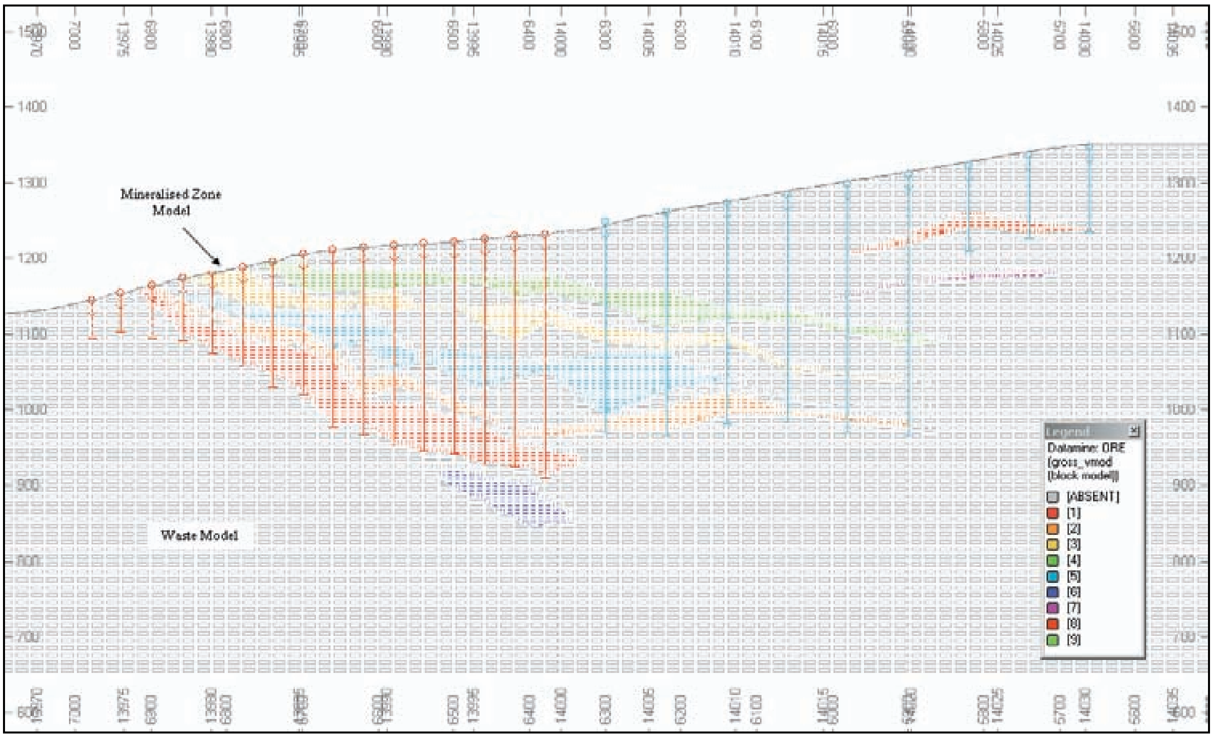


Figure 6.13: Block Model Ore Zone Codes

6.5.6 Grade Estimation

Gold grades were estimated within the mineralized zones using ordinary kriging. Alternative grades were also interpolated using inverse distance weighting and nearest neighbour estimations for validation purposes.

6.5.7 Model Validation

A model validation process included the examination of block model versus composites, and the building up of a model grade profile, to compare average grades on vertical slices, as derived from the composites directly, as well as from interpolated model grades.

6.5.8 Resource Classification

Criteria for defining resource categories were derived from the geostatistical studies. Key drillhole spacings for the allocation of *Indicated* resources were 40m x 40m (along-strike x down-dip). All of the modelled resources, covered by 80m x 40m or 80m x 80m or 200m x 80m drillings grids, have been classified as *Inferred* resources. A plan projection of the resource classification for ore zone 3 is shown in Figure 6.14.

Figure 6.14: Plan Projection of Ore Zone 3 Showing Resource Classification

6.5.9 Resource Evaluation

The final block model was used as the basis for resource evaluation. Summary results of the evaluation of the in-situ Mineral Resources are shown in Table 6.3 below, for three different cut-off grade levels: 0.3g/t, 0.5g/t and 0.7g/t.

Table 6.3: Gross Resource Estimate
(WAI, 1st November 2010)
(in accordance with the guidelines of the JORC Code (2004)

Ore Type			Sulphide	Sulphide	Sulphide
Cut Off Grade			0.3	0.5	0.7
Measured	Tonnage (kt)		-	-	-
	Au (g/t)		-	-	-
	Metal	kg	-	-	-
		oz	-	-	-
Indicated	Tonnage (kt)		29,755	21,834	10,159
	Au (g/t)		0.65	0.73	0.88
	Metal	kg	19,202	15,884	8,895
		oz	617,372	510,696	285,965
Measured + Indicated	Tonnage (kt)		29,755	21,834	10,159
	Au (g/t)		0.65	0.73	0.88
	Metal	kg	19,202	15,884	8,895
		oz	617,372	510,696	285,965
Inferred	Tonnage (kt)		330,712	220,389	82,603
	Au (g/t)		0.60	0.68	0.83
	Metal	kg	197,279	150,873	68,804
		oz	6,342,652	4,850,676	2,212,099

Notes:
1. Mineral Resources are not reserves until they have demonstrated economic viability based on a Feasibility study or pre-feasibility study.
2. Mineral Resources are reported inclusive of any reserves.
3. The contained Au represents estimated contained metal in the ground and has not been adjusted for metallurgical recovery.

6.6 Conclusions and Recommendations

WAI have reviewed the exploration methodology employed at Gross and have reached the following conclusions:

- The method of logging introduced to the exploration programme is excellent. WAI considers that it is both efficient and less labour intensive. It also benefits from being a system where the resultant logging is consistent and can be readily input into the computer geological modelling software, thereby saving time and expense;
- WAI has inspected the manner in which the drilling is performed and considers it to be very satisfactory. Of particular merit is the improved methods by which core is transferred from the double tube core barrel to the core boxes directly. WAI considers that core recoveries are excellent, in the majority of cases being 100%. Where core is in fractured ground, the recovery still is typically very high (97%) indicative of the rock competency and the benefit of drilling under permafrost conditions;
- WAI has inspected the core and found it to be well drilled. WAI considers that deflection of boreholes will be insignificant, as a direct result of the large bore diameter size (HQ) and the competency of these siliceous rocks in permafrost conditions;
- The core logging room is substantial both in size and the facilities that it contains and benefits from having good lighting and heating, as well as well designed and appropriate core logging benches;
- WAI has inspected the core logging facilities and reviewed the core logging procedures and protocols established for describing lithological types, structure, mineralisation and alteration and have found them all to be of a very high standard that would equal any established western best practices;

- WAI considers that the computerised logging sheet that has been written for this project is excellent. The log sheet has been thoroughly thought out and has a comprehensive database that will allow correlation between both rock types; structure; style of mineralisation and assay grade to be assessed;
- Core cutting was observed during the site visit and found to be of a very high standard. The operators observe the procedures of cutting along the axis of core at right angles to structure very precisely;
- The condition of the sample preparation facility was very good, in terms of the state of the equipment and the cleanliness of the facility, as well as housekeeping and safety (PPE – personal protection equipment) procedures;
- WAI has inspected the methods of on-site crushing and pulverisation and found them to be acceptable.
- Samples are assayed by fire assay with AAS finish by SGS and accredited laboratory in Chita. WAI has inspected this laboratory and hence has no reason to believe that the assay results are not to the highest standards;
- The AMTZ survey has highlighted several prospective areas, possibly for follow-up drilling.

6.7 Gross Valuation

6.7.1 Introduction

The Gross property has been extensively drilled by Nord Gold in an effort to delineate a resource suitable for a stand-alone project, or to provide feed to the nearby Tabornoe mine.

The results of this work have defined a large, low grade gold resource (Table 6.4), with the majority of the resource at Inferred category due to the step-out nature of the exploration drilling. However, the project does not benefit from a Feasibility Study and therefore WAI cannot produce a life of mine model based on existing inferred resources.

Table 6.4: Gross Resource Estimate (WAI, 01 July 2010)
(in accordance with the guidelines of the JORC Code (2004)

Ore Type			Sulphide	Sulphide	Sulphide
Cut Off Grade			0.3	0.5	0.7
Measured	Tonnage (kt)		-	-	-
	Au (g/t)		-	-	-
	Metal	kg	-	-	-
		oz	-	-	-
Indicated	Tonnage (kt)		29,774	21,707	10,058
	Au (g/t)		0.64	0.72	0.87
	Metal	kg	19,092	15,727	8,759
		oz	613,821	505,621	281,623
Measured + Indicated	Tonnage (kt)		29,774	21,707	10,058
	Au (g/t)		0.64	0.72	0.87
	Metal	kg	19,092	15,727	8,759
		oz	613,821	505,621	281,623
Inferred	Tonnage (kt)		268,545	184,259	73,538
	Au (g/t)		0.61	0.69	0.84
	Metal	kg	163,305	127,755	61,925
		oz	5,250,380	4,107,422	1,990,924

In an effort to determine the longer term potential of the asset, the Company has elected to undertake a more rigorous economic analysis whereby the mine plan includes the use of *Inferred* material, the results of which are presented below.

6.7.2 Company Life of Mine Model

Based on capital and operating costs from the nearby Tabornoe deposit, the Company has endeavoured to present a tentative mine schedule and economic model for the Gross project.

The Company has estimated the capital cost for the development of the project as being around US$130M, the details of which are provided in Table 6.5 below.

Table 6.5: Company Capital Cost Estimate For Gross Project

Item	**Gross Capex, US$M**
Exploration	10.0
Feasibility Study, Design, Camp expansion	3.0
Mining Fleet	55.0
Excavator PC 2000 (6)	16.6
Dump trucks 90t (30) China	23.7
Drilling rig (6) Sandvik	4.5
Bulldozer (6) China	4.1
Bulldozer (2) CAT 834	2.0
Excavator PC 400	0.6
Grader CAT 16GH (4)	3.6
Crushing	12.0
primary jaw crusher (4) Sandvik	4.0
secondary jaw crusher (8) Sandvik	6.0
separator crusher (4) Sandvik	2.0
Leaching pad 400,000m^2	21.3
Gold recovery plant	9.0
elution, electrowinning, fusion, gold room	8.0
electric circuits, automation	1.0
Emergency pond and pumping station	4.0
Diesel power plant 10 MW/h	2.8
Infrastructure, Camp expansion	12.2
Total	**129.3**

WAI Comment: *the capital cost proposed by the Company, based on experience of working in the region, appears to be reasonable, given the level of knowledge at this time.*

The details of the mine schedule and economic model are presented in Table 6.6 below.

Table 6.6: Company Mine Schedule and Economic Analysis

Year	Total	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Gold price, US$/Oz		900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900	900
Ore (diluted) production, kt	**160,408**			4,001	8,002	8,001	7,999	8,000	7,996	8,000	8,004	7,996	8,005	7,992	8,002	7,997	7,998	8,007	7,993	8,002	8,006	7,993	8,007	4,407
Waste mined, kt	**297,816**			6,943	15,876	16,585	15,883	15,050	16,826	16,061	28,971	30,310	32,528	13,093	11,889	11,241	11,259	10,818	11,332	9,557	10,119	8,174	4,579	719
Au grade, g/t	**0.60**			0.63	0.57	0.61	0.58	0.61	0.61	0.59	0.58	0.52	0.60	0.64	0.56	0.52	0.54	0.55	0.56	0.61	0.72	0.61	0.71	0.74
Gold mined, kg	**96,166**			2,528	4,557	4,868	4,601	4,847	4,886	4,711	4,605	4,179	4,790	5,144	4,497	4,187	4,327	4,443	4,491	4,908	5,770	4,886	5,690	3,252
Recovery, %	**75%**			75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Gold recovered, kg	**72,125**			1,896	3,417	3,651	3,451	3,636	3,664	3,534	3,453	3,134	3,593	3,858	3,373	3,141	3,245	3,332	3,368	3,681	4,327	3,664	4,267	2,439
Gold recovered, 000'Oz	**2,319**			61	110	117	111	117	118	114	111	101	116	124	108	101	104	107	108	118	139	118	137	78
Revenue, m US$	**2,087**			55	99	106	100	105	106	102	100	91	104	112	98	91	94	96	97	107	125	106	123	71
Ore miming cost, US$/t	**1.3**			1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Waste mining cost, US$/t	**1.3**			1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Mining costs, m US$	**596**			14	31	32	31	30	32	31	48	50	53	27	26	25	25	24	25	23	24	21	16	7
Processing cost, US$/t	**3.2**			3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Processing cost, m US$	**513**			13	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	14
Operating costs, m US$	**1,109**			27	57	58	57	56	58	57	74	75	78	53	51	51	51	50	51	48	49	47	42	21
Operating costs, US$/Oz	**478**			443	516	490	511	475	491	501	664	748	678	427	475	501	485	468	468	409	354	395	306	265
G&A, Sales, m US$	**335**			13	16	16	16	16	16	16	16	15	16	17	16	15	16	16	16	16	18	16	17	14
Depreciation, m US$	**310**			10	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
CAPEX, m US$	**309**	14	65	50	10	10	10	10	10	25	10	10	10	10	10	10	10	10	10	5	5	5	0	0

WAI Comment: *the mine schedule and economic analysis as presented by the Company includes Inferred material and makes broad assumptions about the grades likely to be encountered over the life of mine. However, it does accurately reflect the size of the asset, but in WAI's opinion, requires significantly more work before a reliable economic project analysis can be made.*

7 PROGNOZ

7.1 Introduction

7.1.1 Background

Wardell Armstrong International (WAI) was commissioned by Buryatzoloto to prepare a Competent Persons Report (CPR) on the Prognoz silver (lead and Zinc) project, situated in the Verkhoyanskiy district, Republic of Yakutia, Russian Federation.

Much of the data for this report is taken from a NI-43-101 report (27 June 2008) prepared by Micon International Limited (Micon) for High River Gold Ltd and Buryatzoloto and includes estimation in accordance with the guidelines of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) of compliant mineral resources according to the current definitions. This resource statement remains current as no further work has been conducted on the property since that time. The current estimate is also compliant with the Australian Joint Ore Reserve Committee (JORC) standards.

The review of Prognoz was based on published material researched by Micon, as well as data, professional opinions and unpublished material submitted by the professional staff of Buryatzoloto or their consultants.

7.1.2 Location

The Prognoz project is located within the south-central portion of the Republic of Yakutia, within the Russian Federation, approximately 444km north of the capital city of Yakutsk and approximately 220km southwest of the village of Batagai in the Verkhoyanskiy district. The latitude and longitude for the centre of the mineral licence is approximately 65°41’N, 133°12’E. The location of the Prognoz project is shown in Figure 7.1 below.

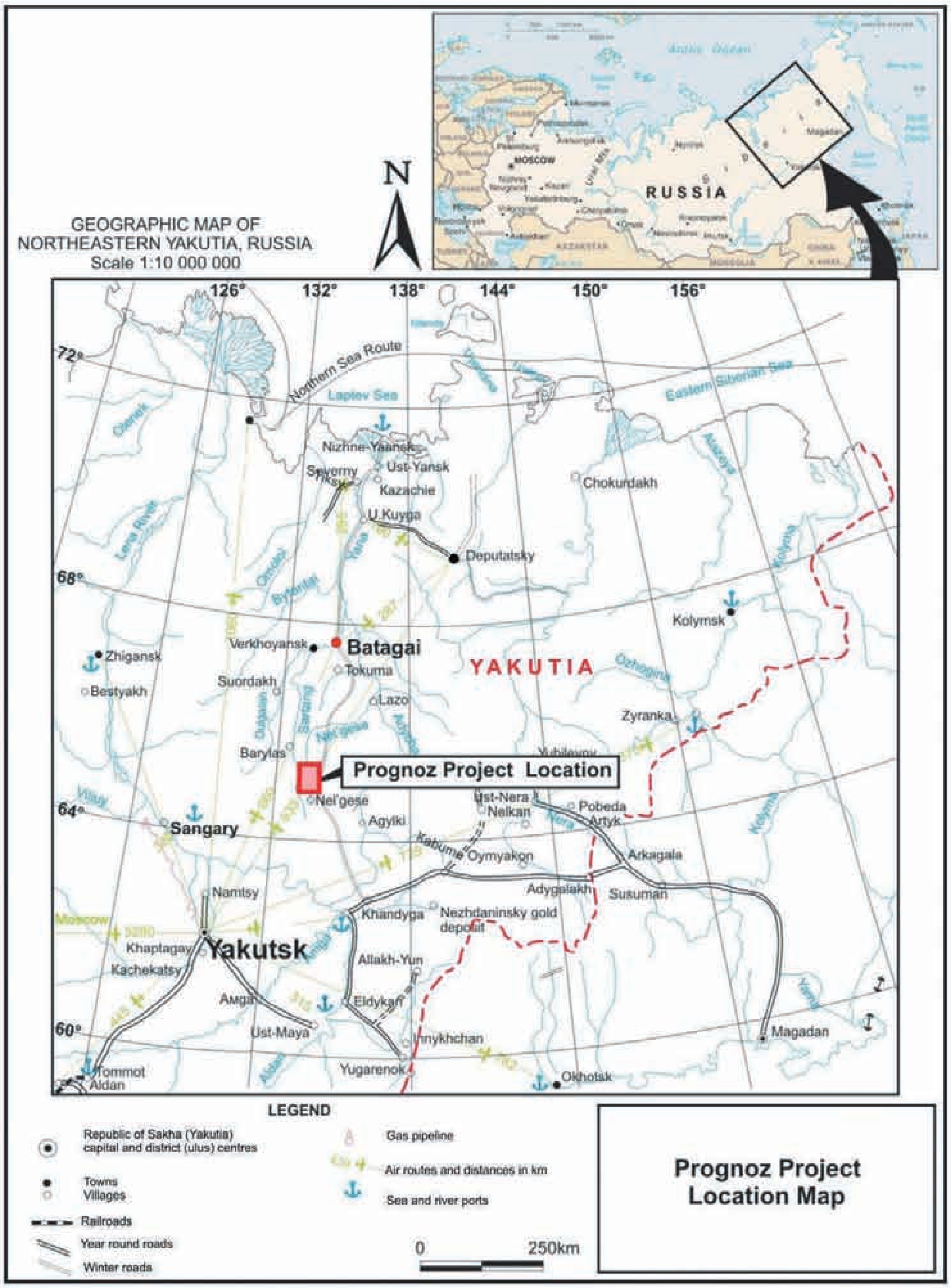


Figure 7.1: Location of Prognoz Silver Project within the Yakutia Region, Russian Federation

7.1.3 Access

The region around the Prognoz project has little or no infrastructure to provide support to the project. The major population centre for the region is Yakutsk whilst the administrative centre for the Verkhoyanskiy district is the village of Batagai with a population of approximately 2,000 inhabitants, situated approximately 220km to the northeast of the property. Bagatai is a river port, and is the base for Yangeologia which conducted the historical exploration on the Prognoz property.

There is an all-weather dirt road between the villages of Batagai and Tokuma, and from Tokuma there is a link to the Prognoz project via a road passable, in the summer, only by caterpillar trucks.

The closest village to the Prognoz project is Barylas, 50km northwest of the property. Barylas is linked to the property with an old road which could be rebuilt to provide access (see Figure 7.2 below). The abandoned village of Lazo, located 150km northeast of the property has a small air field which can accommodate helicopters of the MI-6, MI-8 types, and airplanes such as the An-2, An-26, and L-410 types.

During most of the year, the Prognoz project is primarily accessible by MI-8 helicopters from either Yakutsk or Batagai. From Yakutsk, the weather may interfere with flight schedules, but from Batagai, the helicopter service is more frequent but delays due to weather conditions or lack of fuel are not uncommon.

Buryatzoloto's main shipment route for prospecting and exploration (other than petrochemicals) materials are via automotive transportation using a route through Ulan-Ude to Chita to Tynda to Yakutsk to Khandyga to Topolinoye and on to Prognoz, for a total length of 4,500 km. The road from the city of Ulan-Ude to the village of Topolinoye (approximately 4,105km) is year round. However, the road from the village of Topolinoye to Prognoz (a distance of 395km) is only for vehicles with flotation capabilities (caterpillar trucks) and is in use only during the winter.

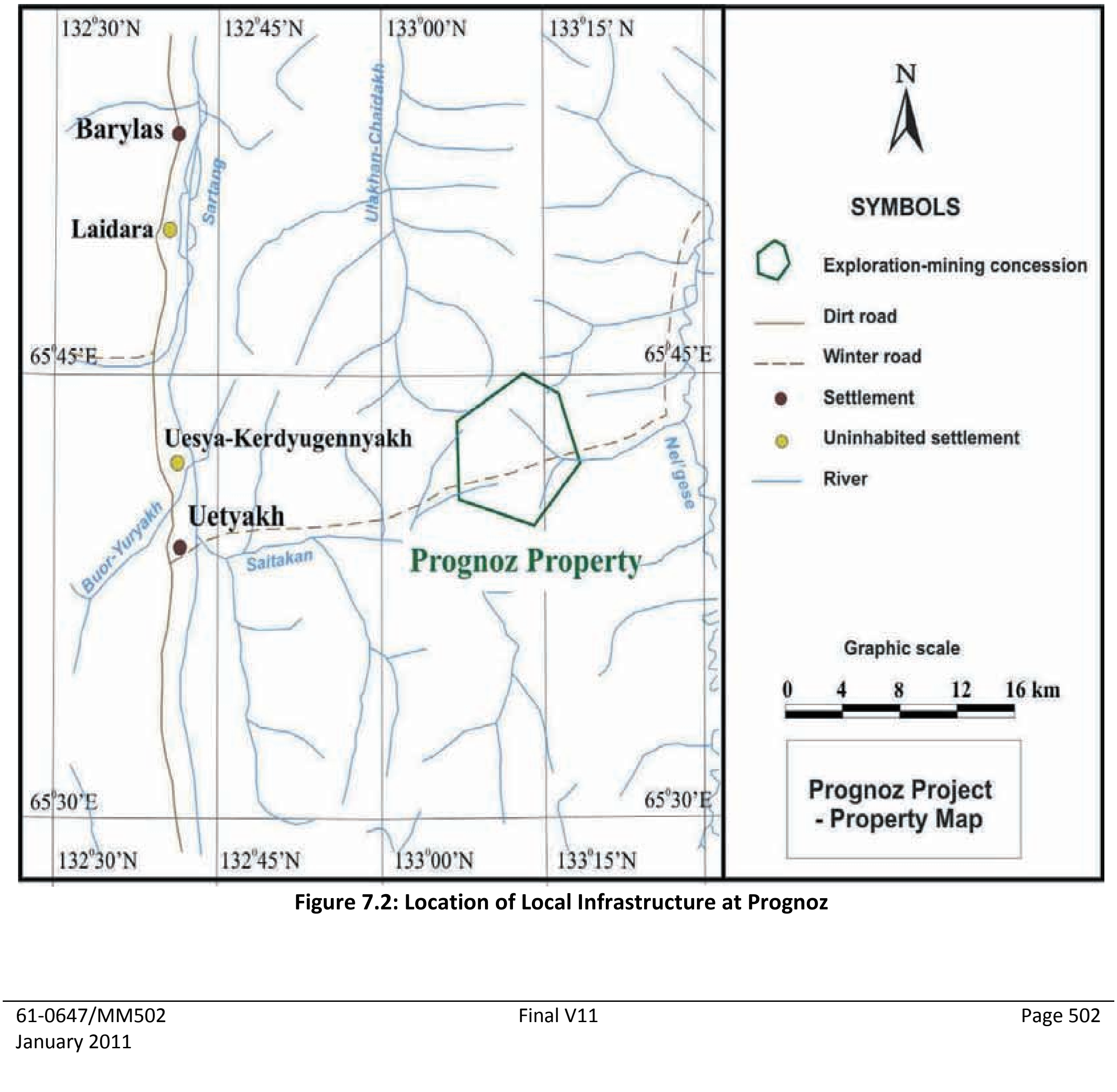


Figure 7.2: Location of Local Infrastructure at Prognoz

The second transportation route for the shipment of goods to Prognoz can be accomplished during June to October by the Northern Sea Route from the town of Ust-Kut (the railway station Lena and the river port Osetrovo) in the Irkutsk region. Goods go through Osetrovo to Yakutsk to Batamai to Tixi to Nizhneyansk to Ust-Yansk and finally to Batagai. The total length of the water transportation is 4,734km.

7.1.4 Infrastructure

The territory surrounding the property is largely uninhabited and the hiring of labour is from the village of Batagai or in other regions of Yakutia and Siberia.

Power supply for the property is by means of mobile diesel electric generator. The project uses either surface water or water derived from an underground exploration ramp.

Two exploration camps are located at Prognoz, the first is an exploration base camp located on the Nel'gese River, which consists of supply depot, core storage and sample preparation facilities. The second camp is located near the main area of exploration, current drill sites and underground sampling adits. Transportation between the base camp and the exploration camp uses a combination of semi-amphibious vehicles on tracks and six-wheel drive passenger vehicles.

WAI understands that there are no archaeological and naturally significant sites or nature reserves and parks either on the property or within adjacent areas.

7.1.5 Topography and Climate and Vegetation

The Prognoz project lies in a mountainous region with elevations ranging from 300-1,100masl. The relief in the area of the exploration programs ranges from 300-350m.

The area has a forest-tundra landscape with a permafrost layer 300-350m thick, or more, with seasonal thawing of the permafrost ranging from 0.2-0.5m in areas covered by moss and from 0.8-1.2m in exposed areas.

The annual precipitation ranges from 250-300mm. Maximum temperature in the summer is +34°C, averaging +14°C in July. In winter, the temperature can decrease to -65°C, averaging -44°C. Snow cover begins around the end of September and melts by the second half of May. However, the area has been known to have snow in the summer. The thickness of the snow varies from 40-50cm. The rivers are usually ice-bound at the end of September, with spring thaw completed by the end of May.

The region experiences light winds throughout the year, with a wind speed generally in the range of 2m/s.

The vegetation of the Prognoz area is classified as a forest-tundra zone. Outcrops are absent due to a covering of overburden which ranges from 2-10m in thickness.

The region holds bear, ermine, wolverine, fox, deer, elk, squirrel and wolf. Bird species consists of geese, duck, partridge, woodpecker, hazel grouse and arctic owl. There is an abundance of fresh water fish in the streams and lakes, including grayling, lenok, pickerel, taimen and perch.

7.1.5.1 Drainage

The river and streams of the area are part of the Nel'gese and Sartang river basins. The main waterway is the Nel'gese River which is a tributary of the Adycha River. The width of the river is typically 100-200m, with flows up to 1m/s in areas of rapids. The depth of the river ranges from 0.7-0.8m in shallow areas and up to 5m. It is possible to travel by rafts and motor boats. The floor of the valleys consist of bog and marsh land with numerous oxbows.

7.1.6 Mineral Rights and Permitting

The Prognoz property consists of one exploration-mining licence covering 56km^2. The licence, which was obtained in 2005 following an auction held by the State authorities, is valid until 30 September 2025.

The co-ordinates of the licence are provided in Table 7.1 below.

Table 7.1: Co-ordinates of the Licence Area

Corner Number	Northing (N)	Easting (E)
1	65°43’25”	133°06’55”
2	65°45’05”	133°13’05”
3	65°44’25”	133°16’10”
4	65°42’05	133°18’10”
5	65°40’00”	133°14’05”
6	65°40’50”	133°07’10”

From 2005 until 2007 Gaztek Industries LLC possessed the mineral licence YAK 13345 PM which was issued on 10 October 2005. Since 27 March 2007, Prognoz-Serebro LLC has held the rights to the Prognoz property via licence YAK 14002 PM and has assumed the liabilities and terms of the old licence YAK 13345 PM. Prognoz-Serebro LLC is 50% indirectly owned by HRG and 50% by a Russian private company Argentum.

As the winner of the auction for the Prognoz project, Gaztek Industries LLC paid to the Federal budget a non-recurring payment of 380,100,000R (roubles) for the property. Gaztek also paid 8,000R to the Federal budget for the issuance of the licence for the property. Aswell, 500,000R were paid for the geological information on the licensed area from results of the historical state exploration work.

The terms of the licence require that all other payments and taxes, including the tax for the usage of land and payment for damage to the environment, are paid in accordance with the legislation of the Russian Federation.

Buryatzoloto has been the general contractor and operator for exploration at the project since 27 December 2005 according to the terms of its contract (No. 1/2005-P) with Gaztek Industries LLC. In 2006, Buryatzoloto became a 50% owner of Gaztek Industries LLC and in accordance with a “Cooperation Agreement” dated 13 June 2006, was appointed as the project operator (exploration and development) for the period that licence YAK 13345 PM remains valid.

According to the agreement, Buryatzoloto assumes responsibility for day-to-day activity, organisation and implementation of exploration, Feasibility study preparation, project works, construction and operation of the Prognoz property. Under the terms of the initial transaction, Buryatzoloto acquired the interest and became the operator for a purchase price of US$7.3M and the settlement of certain Gaztek Industries LLC liabilities totalling US$14.7M, which brought the initial cost of the transaction to US$22M.

The vendor of the deal has retained an option to repurchase the Buryatzoloto interest in the project under certain conditions with Buryatzoloto having the right to cancel the vendor option for an additional payment of US$8.0M.

Buryatzoloto and the vendor have entered into a “Cooperation Agreement” which recognises Buryatzoloto as the operator and contains both a dilution clause and a dispute resolution process for the parties.

The exploration project was compiled and the required permission obtained from the Authority on Subsoil Use (Yakutsknedra) of Yakutia; from the State Committee on Geology and Subsoil Use of Yakutia; from the Authority of Technological and Environmental Supervision of Rostechnadzor of Yakutia, and from the Authority of the Federal Service on the Supervision in the Sphere of Subsoil Use of Yakutia.

On 30 May 2007, Buryatzoloto entered into a new “Co-operation Agreement” with Argentum which replaced the previous June 2006 agreement with Gaztek Industries LLC. The new agreement has the same terms as the previous one and was concluded to reflect the transfer of the licence to Prognoz–Serebro LLC in March 2007. Under the terms of this agreement Buryatzoloto's role as the project operator was confirmed.

During the second quarter of 2008, in preparation for further transactions regarding the Prognoz property, intercompany transactions were conducted which increased High River's interest to 50% from 42.5%.

7.2 Geology and Mineralisation

7.2.1 Regional Geology

The licence is located within the Verkhoyansk mobile belt of northeastern Yakutia. The fold-and-thrust belt forms part of a major orogenic system separating the Siberian North Asian Craton to the west from the immense expanse of accreted terranes, which form most of the Russian Far East.

The belt extends for 2,000km from the Laptev Sea to the Sea of Okhotsk. The belt is made up of a rock package that is greater than 7km in thickness and is comprised of Late Precambrian to Triassic rocks deposited along the paleo-Pacific margin of the Siberian Craton. The margin developed as a consequence of rifting events which occurred in the Late Precambrian and again during the Late Devonian to Early Mississippian periods. Deformation events during the Late Jurassic to Early Cretaceous were accompanied by low-grade metamorphism in the internal parts of the belt and the emplacement of high-level granitic bodies. During the Tertiary period, strike-slip faulting occurred within the fold-and-thrust belt.

The central part of the belt is dominated by a thick monotonous succession of Carboniferous and Permian turbidites which are metamorphosed to lower green schist grade. Granodiorite and granite plutons intrude the core of the range and are associated with extensive gold-bearing quartz vein systems.

A plan showing the regional geology of the district is given in Figure 7.3 below.

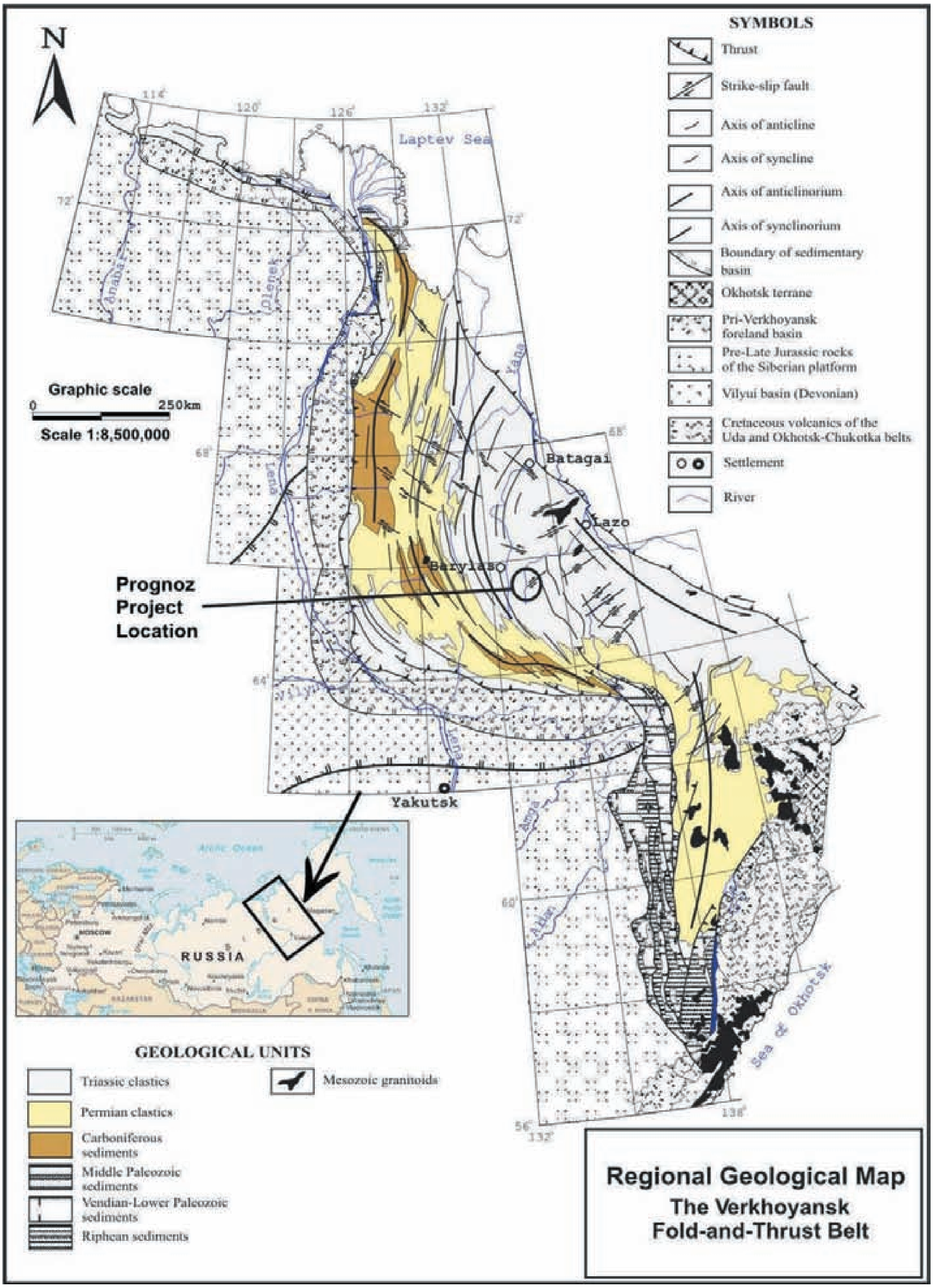


Figure 7.3: Regional Geological Map of the District

7.2.2 District Geology

7.2.2.1 Sedimentary Rocks

The geological district in which Prognoz is located covers the junction between the Sartang synclinorium in the west and the Adychan fold-and-block dome to the east. The district's geological setting comprises of Permian, Triassic and Jurassic sequences of interbedded sandstones and siltstones with conglomerate and limestone layers.

The total thickness of the Verkhoyanskiy complex strata varies from 3,640m in the west to 6,100m in the east. Sediments within the synclinorium are contorted, forming linear folds, with branching fold characteristics within the fold-and-block dome. The sedimentary rocks are intruded by late Jurassic-Cretaceous stocks and dykes, are hornfelsed in some areas, and reveal signs of regional metamorphism.

Adjacent to the ore zones, the sediments are hydrothermally and metasomatically altered. Longitudinal faults are prevalent striking towards the north and northwest, as well as lateral ones striking towards the northeast. The river valleys and slopes are covered by unconsolidated overburden.

7.2.2.2 Igneous Rocks

Igneous rocks are not well developed and are fairly insignificant within the district. Where they occur, they are represented mainly by sets of dykes.

Sub E-W trending late Jurassic dykes consist of diabase, andesite-basalt and kersantite on the east of the Khospokhtokh and Upper Ilin-Suruktaakh rivers. In these areas the dykes strike for up to 1-2km towards the east and northeast.

The early Cretaceous is represented by a granodiorite stock located in the Upper Arangas River and randomly oriented dykes composed of granodiorite, porphyry, diorite and quartz-diorite porphyries. The thickness of the dykes ranges from 2 to 20m with a strike length up to 3 to 5km.

Late Cretaceous dykes are composed of subalkaline diabase, diorite porphyrite, quartz syenite porphyries, biotite camptonite, rhyolite and rhyodacite. The dykes range in thickness up to 5m and strike approximately E-W over 0.5 to 2km. The dykes formed prior to the mineralisation and most of them are hydrothermally altered.

7.2.2.3 Structure

For the most part, the district is situated within the Sartang synclinorium which is characterized by linear folding. The eastern part belongs to the Adychan fold-and-block dome with wide box anticlines and branching synclines. The E-W trending AllahNel'gesinskiy fault separates the synclinorium and fold-and-block dome and represents a zone of approximately E-W trending reverse thrust faults. Most of the faults are represented by reverse-oblique and reverse-thrust faults with 0.5 to 1.6km displacements.

Within the central part of the district, the Sredne (Medium)-Sartang zone of E-W faults dissects the N-S trending faults with displacements of 50 to 400m. These faults are mainly normal and oblique-slip faults and are seldom reverse-slip faults.

7.2.2.4 Mineralisation

The Sredne-Nel'gesinskiy silver-polymetallic belt in the district coincides with the Sredne-Sartang zone of E-W trending faults. The N-S trending faults control the location of the Dulgalakhskaya mercury zone. The boundaries of the majority of the mineralised deposits and areas in the district are determined by the intersection of these two sets of faults.

The main minerals within the district are represented by silver and mercury with by-product components of lead, zinc and partly tin and copper. The silver mineralisation is associated with the Sredne-Nel'gesinskaya silver-polymetallic belt which has a width of 12-25km and trends to the northeast for 80km. The Ulakhan-Chaydakhskiy mineralised zone which includes Prognoz is located on the northeast flank of the Sredne-Nel'gesinskiy silver-polymetallic belt. Other promising areas such as the Etigel, Aitykan-Suugun, Kuyntekli areas and others with silver occurrences within quartz-sulphide fractured zones are located on the southwest flank. The occurrences are characterised by silver grades varying from 240-2,130g/t Ag and up to 3,238g/t Ag at the Khospokhtokh occurrence.

7.2.2.5 Prognoz Geology

The western boundary to the area is marked by a reverse-thrust zone of the AllakhNel'gesinskiy fault, which thrusts Middle Triassic sandstone packages of the Arangaschanskaya anticline over the Carnian and Norian stage sandstone-siltstone of the Chaydakhskaya syncline.

On the eastern flank of the area, the mineralisation of the anticline crown can be traced to a system of E-W trending faults which cut the eastern limb of the Arangaschanskaya anticline. However, the mineralisation here is reduced due to a lithological change where the Lower Anisian siltstone-sandstone package is predominant.

To the north and south, the mineralised area is limited by the Sredne-Sartang fault zone which trends towards the northeast. The occurences which make up the Prognoz project were defined within this area. The mineralised area comprises of Middle and Upper Triassic siltstone-sandstone packages intruded by Late Jurassic, and Early and Late Cretaceous dykes. The primary portion of Prognoz is made up of Middle Triassic sediments of the Anisian and Ladinian stages.

Most of the known occurrences at Prognoz are located within the Ladinian sedimentary rocks. The best silver mineralisation is located within the Upper Ladinian package which makes up the core of the isoclinal syncline fold complementing the Arangaschanskaya anticline (the bend of the Glavnoye deposit and central part of the Boloto deposit). The homogenous nature of this sandstone is favourable for the fracture zones containing the silver-sulphide (sulphosalt) mineralisation to develop.

At the time of precipitation of the earliest phase of vein mineralisation, the folded structure of the mineralised area was consolidated into a hard basement unit of rocks. Formation of those ore zones which have significant strike length was due to favourable conditions which led to the precipitation of the mineralisation primarily in those sandstone host rocks of the Ladinian stage which comprise the crown and western limb of the anticline. The ore zones are situated within sub-E-W, northwest and northeast trending faults which are branching faults relative to the northeast trending faults of the SredneSartang fault.

Formation of the structure of the mineralised area occurred over a long period of time and all faults have been grouped into pre-mineralisation, inter-mineralisation or post-mineralisation faults.

The fracture zones connected to the post-mineralization faults are divided into two groups: E-W and NE trending.

The E-W fracture zones are mainly concentrated on the western flank of the mineralized area within the influence zone of the reverse-thrust system of faults located within the Ladinian stage lower rock package. These fracture zones are seldom found in the central part of the mineralised area which is composed of rocks of the Upper Ladinian. Where intersections of the N-S fracture zones and the E-W or NW trending faults hosting the mineralisation occur, an area containing intensive fractured rocks of up to 20 to 40m in length occurs. Some of the N-S and NW trending faults are filled with Late Cretaceous rhyolitic dykes and the intersections of these faults with the N-S and NW trending fracture zones are filled with quartz-carbonate-galena veinlets between 5 and 10cm thick and mineralised fracture zones between 1.2 and 8.6m in thickness.

The NE trending faults are mapped within trenches excavated in the central and southern parts of the mineralised area, with the highest density of faults typically occurring in the southern portion. The thicknesses of the fracture zones associated with the NE faults vary between 1.0m and 10m and up to +55m with the greatest thickness occurring at junctions with the Glavnaya zone. The fracture zones comprise of broken sandstones varying in debris size from rubble to blocks. Some of the NE trending zones are filled with Late Jurassic lamprophyre dykes.

The pre-mineralisation N-S and NE trending faults do not contain any mineralisation but comprise of milk-white quartz veinlets.

During the formation of the mineralisation, the faults opened repeatedly which led to a multicomponent, multi-staged composition, such as that found in the central and eastern parts of the Glavnoye and Boloto ore zones.

The following features are associated with the inter-mineralisation tectonic events:

- Fracturing, cementation and intersection of minerals of early association by minerals of late associations;
- Development of multiple stage breccias, so-called double and triple breccias; and
- The bedded, rhythmic zoning texture of the veins.

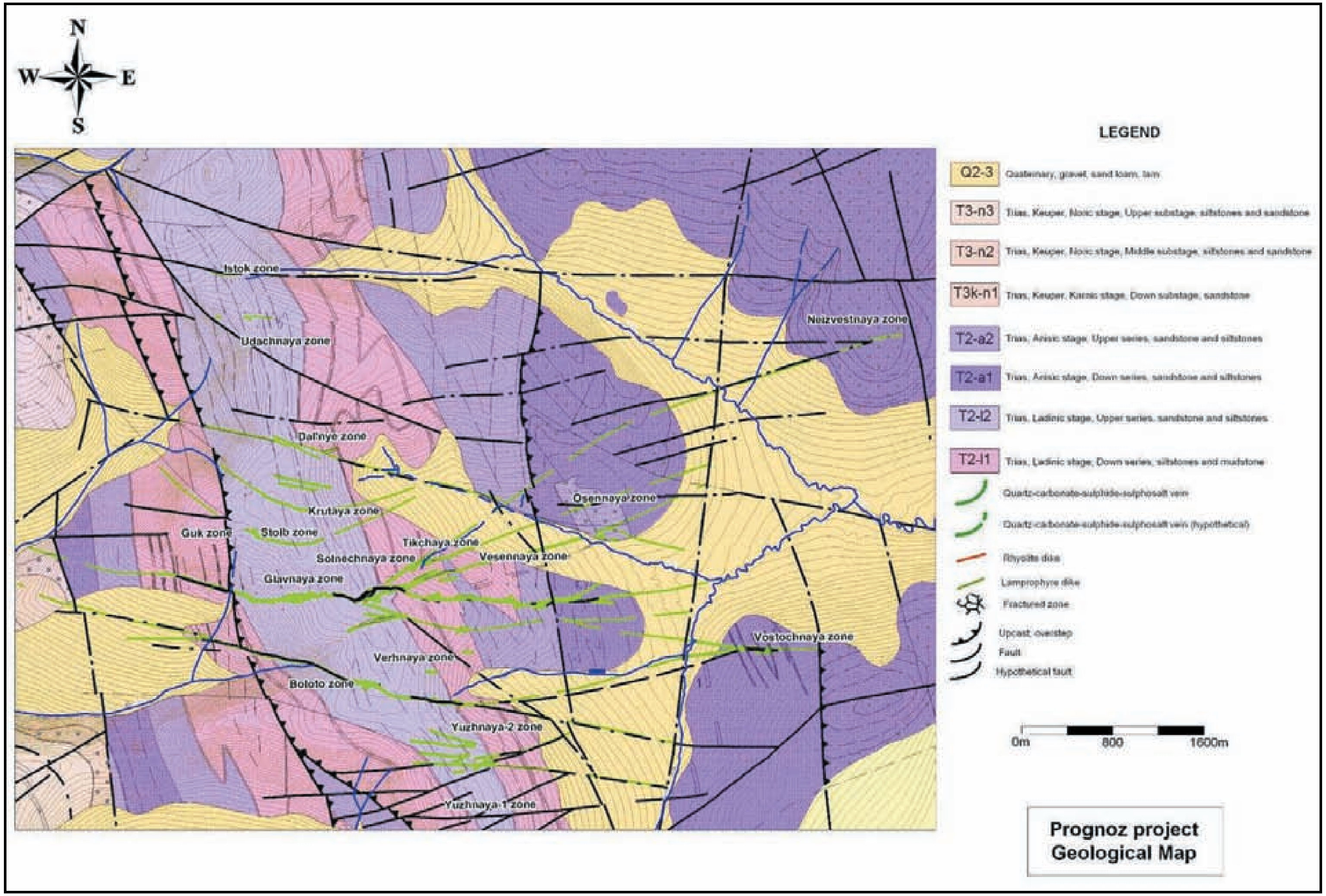


Figure 7.4: Local Geology of Prognoz

7.2.3 Mineralisation at Prognoz

The Prognoz property hosts silver-lead-zinc vein-type deposits within a shear zone, where the host rocks are sandstones.

Mineralogical studies conducted between 1992 and 1998 identified 3 stages of mineral formation:

- Gold and rare metals;
- Cassiterite and sulphides; and
- Silver and base metals.

Gold and rare metals are represented by a pyrite-arsenopyrite-quartz association and quartz-nickelite-gersdorffite-arsenopyrite association. The former is widespread, with the latter found sporadically (primarily in the southern part of the property).

Siderite-polysulfides are one of most widespread associations on the property. The basic paragenesis is chalcopyrite-pyrrhotite-siderite, pyrrhotite-marcasite (pyrite)-sphalerite, pyrrhotite-stannite-sphalerite and chalcopyrite-bismuthite-fahlore-cassiterite-galena. Minerals of this association form close intergrowths and contain numerous micro-inclusions.

The third mineralisation stage (silver-and-base metal formation) forms the main mineralising stage at Prognoz and is represented by siderite-sphalerite-galena and quartz-polysulphide-sulphosalt associations. Pyritesphalerite-ankerite-dolomite and quartz-calcite associations are also present.

The temperatures of mineral formation which established the various stages were as follows: gold-and-rare metal formation (160° to 470°C); cassiterite-and-sulphide formation (180° to 300°C) and silver-and-base metal formation (125° to 225°C).

The numerous mineral associations found at Prognoz are grouped into three main groups (types): the sulphide (galena-sphalerite) group, the sulphide-sulphosalt group and the sulphosalt group. The mineralogical types do not have distinct boundaries.
The galena-sphalerite group are characteristic for the western flank and the central portion of the Glavnoye occurrence, whilst some galena-sphalerite mineralisation is identified at the Daln'eye, Verkhneye, Tickhoye, Istock occurences. Silver is present in the form of argentite, native silver, rarely with pyrargyrite. Ore textures include veinlets and breccias. Silver correlates closely with lead (correlation 0.5-0.9).

The main mineral type in the mineralised zones is a sulphidesulphosalt. It dominates the central portion of the Glavnoye and Boloto zones, as well as some portions of the Vesenn'aya and Tickhaya zones. Minerals of the sulphosalt group jointly with quartz and other sulphides have built up the central parts of the carbonate and sulphide veins. Typomorphic minerals of these zones are galena, sphalerite, fahlore, stannite, bismuth minerals and numerous minerals of the sulphosalt group. Silver minerals and silver containing minerals are represented by fahlore, sulpho-antimonites of silver, silver and lead, and silver and bismuth sulphosalts.

Sulphosalt mineralisation is characteristic of the mineral zones on the eastern flank of the property (Vostochnoye-1, Vostochnoye-2 and Neizvestnoye). Portions of rich mineralisation of this type are found in the central part of the Glavnaya zone, the Yuzhnaya-1 zone, the eastern flank of the Glavnayae zone and the Boloto, Vesenn'aya and Tikhaya zones. Typomorphic minerals of this type of mineralisation are numerous silver and lead sulphosalts, silver and bismuth sulphosalts, silver sulphoantimonites, enriched with silver fahlore. This type of mineralisation is characterised by containing the highest concentration of silver (1 to 28kg/t), the lowest grades of lead and zinc (hundredth and tenth parts of a percent) and the absence of a correlation of silver-lead (correlation coefficient 0.01) and silver-zinc (correlation coefficient 0.14) pairs at the same time.

The criteria for prospecting for silver mineralisation on the property are as follows:

- The intersection of approximately E-W and north eastern trending fault systems;
- The horst uplift of anticlinal structures;
- Sandstone composition of host rocks;
- Transverse or diagonal orientation of mineral bearing faults relative to the axis of fold structures;
- Atypical outshoots from the roof of unexposed granite massifs;
- Aerial carbonatisation around atypical outshoots of the unexposed granite massifs;
- Linear berezitisation haloes;
- Low positive linear magnetic anomalies (15 to 20nT);
- Presence of polymetals and minerals of the sulphosalt group; and
- Excessive concentration of silver, lead, zinc, copper, tin, antimony, bismuth and arsenic in rock, soil and stream sediment anomalies.

7.2.4 Ore Zones

More than 30 mineralised fracture zones, distributed between four areas, have been identified at Prognoz. The main zones comprise of:

- Glavnoye;
- Boloto;
- Vostochnoye-1 and -2;
- Veseneye-1 and -2;
- Dal'neye-2; and
- Verkhneye with ore shoot V-1.

Other occurrences consist of:

- Dal'neye-1;
- Tikhoye;
- Neizvestnoye;
- Yuzhnoye-1 and -2;
- Istok;
- Gook;
- Krutoye;
- Shoot V-2 of the Verkhneye deposit; and
- Shoot B-2 of the Boloto deposit.

By zone:

- The central area comprises of the Glavnoya, Vesenn'aya, Tikhaya, Verhn'aya, Stolb, Solnechnaya, Boloto and Vostochnaya zones;
- The Yuzhnaya area comprises of the Yuzhnaya- 1 and Yuzhnaya2 zones, as well as a number of small unnamed zones;
- The Severnaya area comprises zones Istok, Krutaya, Gook, Daln'aya, Anomaly No. 27 and No. 28; and
- The Muostakh area which includes the Neizvestnaya zone and poorly mineralised zones at the source of the Muostakh stream.

7.2.4.1 Glavnoye

Glavnoye is the main ore zone at Prognoz and is located in the central part of the mineralised area. The strike length is known to be at least 4,500m has been traced down dip to 600m (470m vertical) by means of a single drillhole. The thickness varies from 0.1-13.4m. The ore zone is marked by pinching and swelling along strike and a tabular and V-shape in the dip direction.

The strike direction of the ore zone is typically 80° to 110°, and averages 100°. The strike lengths of the E-W trending segments are 270-800m, and the lengths of sharp offset strike segments are 20-90m and occasionally longer (190m).

The dip of the ore zone is steep (65° to 85°) with an average of 70° and is rarely vertical. The dip is towards the south and changes to a northerly dip on the eastern flank. Drilling has revealed that segments of the deposit flatten to between 35° and 50° for about 120m in the central part of the deposit.

Within the Glavnoye ore zone, three sections have been tentatively distinguished, namely western, central and eastern.

The western section is 680m in length and is located between trenches No.600 and No.73. It comprises 2 separate and echelon branches and is located in an area of monoclinal folding, within the Lower Ladinian rocks. The western section of the ore zone dips to the east at an angle of between 80° and 85°.
The ore zone is characterised by the continuity of mineralisation all along its extension and has a rectilinear strike of 110°. The mineralisation comprises of brecciated and veinlet-filled sandstones and clay with a "motley" composition of material, consisting of the debris of the brecciated rocks and veinlets. The main mineral is galena (5% to 10% and occasionally 45% to 60%), with sphalerite which is less disseminated (up to 1% to 5% and on rare occasions 10% to 15%), and minor fahlerz, pyrite and stannite. Silver occurs in the form of argentite and as admixture in galena (up to 100g/t and higher); however, the silver distribution is very irregular.

The length of the first separate branch No. 1 is 680m and has been traced down dip with 10 drillholes located on 4 lines to a depth of 120-160m. The second separate branch has been distinguished by means of trenches and one drillhole. The second branch is located north of No.1 and has a 140m strike length. The average parameters of the western section of the Glavnoye ore zone are given in Table 7.2 below.

Table 7.2: Parameters of the Western Section - Glavnoye

Branch No.1			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	12.4	0.5	2.66
Silver grade (g/t)	1,906.4	<10	435.8
Branch No.2			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	7.54	0.2	2.56
Silver grade (g/t)	2,016.3	347.1	403.6

The central section of the Glavnoye deposit is divided into two parts.

The first part is located between trench No.774 in the west and trench No.530 in the east. It is hosted by Upper Ladinian sandstone, which forms the core of a syncline fold, and by sandstone intercalated with siltstone of the lower Ladinian stage. The strike length of the first part of the central portion is 1,270m and the dip length is 250m in vertical section. The strike varies from 50° to 120° and averages 90°. The thickness varies from 0.2 to 13.4m. This portion represents eight sub-parallel separate echeloned branches with lengths ranging from 140m (branch No.4) up to 760m (branch No.6). In some locations sharp changes of the strike had been observed as is the case between trenches No.508 and No.661.

The central section of the ore zone is composed of brecciated material, veinlet-filled sandstone with numerous compound veins and multiple-crushed breccias. The mineralisation is multi-component, multi-stage siderite-sphalerite-galena, siderite-sphalerite-fahlerz-galena and siderite-sphalerite-diaphorite with the mineralisation containing an increasing amount of silver from the west to east. Sulphosalt mineralisation peaks in the near-surface part of the vein, intersected by trenches No.528 to No.895 and by drillholes No.1a and No.2. The maximum silver grades (up to 27,755g/t in drillhole No.1a in the interval 32.5-32.8m) have been found in the sections containing the most widespread minerals of the late sulphosalt paragenesis. The amount of sulphosalt minerals decreases sharply down dip (drillholes No.4, No.15 and No.3). The sulphides; galena, sphalerite, pyrite, arsenic pyrite, marcasite, pyrrhotite and fahlerz, essentially comprise the deposit in this area.

The distance between the echelon separate branches along strike and dip varies from 5 to 25m. Only branch No.4 has no outcrop at surface and has been detected in drillholes No.151 and No.152. The average parameters for the separate echelon branches of the first part of the central section of Glavnoye are given in Table 7.3 below.

Table 7.3: Average Parameters for First Part of the Central Section Glavnoye			
Branch No.3			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	7.6	0.53	2.74
Silver grade (g/t)	2,192.7	210.3	898.7
Branch No.4			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	2.38	1.84	2.11
Silver grade (g/t)	1,083.9	285.9	736.0
Branch No.5			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	9.03	0.5	2.76
Silver grade (g/t)	2,146	256	1,555.4
Branch No.6			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	12.8	0,38	2.97
Silver grade (g/t)	4,903.7	<10	775.0
Branch No.7			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	1.7	0.32	0.83
Silver grade (g/t)	3,023.2	323.6	1,408.3
Branch No.8			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	2.0	0.28	1.15
Silver grade (g/t)	2,992.1	358.9	1,449.5
Branch No.9			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	13.4	0.5	3.98
Silver grade (g/t)	6,147.9	161.0	977.8
Branch No.10			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	2.0	0.61	1.07
Silver grade (g/t)	2,330.2	192.0	1,662.2

The second part of the central section of Glavnoye has a strike extent of 800m between trenches No.581 and No.790 and between drillhole lines No.49640 and No.50233. It consists of 5 sub-parallel separate branches from 80m (branch No.14) up to 640m (branch No.11) in length.

This section is notable for its multicomponent composition and is represented by brecciated and veinlet-filled sandstone with veins from 0.1-2.9m in width. Breccias so indicative of the first part of the central portion of the Glavnoye deposit are absent here. Veins mainly possess brecciated texture or rarely banded texture. The veins are composed of minerals of the siderite-polysulphide, siderite-sphalerite-galena and quartz-polysulphide-sulphosalt associations. The sulphosalt component in the deposit increases from the west towards the east and the amount of galena decreases in the same direction. Silver grades in separate samples vary within wide limits ranging from less than 5g/t up to 8,233.2g/t Ag. The maximum silver grades of between 1.4 and 8.2kg/t are assocaited with the wide development of sulpho salt paragenesis minerals. Host rocks are lower strata Ladinian stage sandstones with beds of siltstone.

This portion of the central section has been studied at depth by drilling along lines spaced from 60 to 160m along strike. A summary of the parameters of the second part of the central section are shown in Table 7.4 below.

Table 7.4: Average Parameters for Second Part of the Central Section - Glavnoye			
Branch No.11			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	7.0	1.0	2.57
Silver grade (g/t)	2,866.9	249.1	990.3
Branch No.12			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	2.0	1.1	1.55
Silver grade (g/t)	1,023.6	414	807.3
Branch No.13			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	4.4	0.36	2.32
Silver grade (g/t)	1,016.8	573.8	728.9
Branch No.14			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	1.3	1.0	1.15
Silver grade (g/t)	3,004.4	799.9	1,758.4
Branch No.15			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	2.2	0.7	1.38
Silver grade (g/t)	1,942.6	253.9	944.9

The eastern section of Glavnoye comprises of brecciated and veinlet-filled sandstones, with rare siltstones and lamprophyre, and often with veins between 0.2m and 1.6m thick. The mineralisation comprises of sulphide-sulphosalt and sulphosalt types with extremely irregular distribution. Silver grades vary from less than 5g/t to 7,408g/t Ag in separate samples. The eastern section is hosted by sandstone intercalated with siltstone of Anisian stage on the eastern limb of a syncline.

The presence of Late Jurassic lamprophyre dykes mark the mineral hosting structure in this section. The dykes are located on the hanging wall and footwall contacts of the ore zone, and sometimes up to 5 to 20m separated from it.

Table 7.5: Average Parameters for the Eastern Section - Glavnoye			
Branch No.16			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	5.79	0.17	1.97
Silver grade (g/t)	3,591.0	270.9	587.7
Branch No.17			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	5.4	0.52	2.47
Silver grade (g/t)	2,255.7	284.4	653.8
Branch No.18			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	4.8	0.10	1.50
Silver grade (g/t)	2,750.0	245.8	779.6

7.2.4.2 Boloto

The Boloto ore zone is the second largest zone at Prognoz. It is located in the central part of the property, 500 to 800m south of Glavnoye and has been traced for 2,400m along strike and over a dip length of 320m (220m in vertical section). The deepest drillhole (No. 87) intersected the ore zone at depth with the grade of silver approximately 490.5g/t Ag.

The thickness varies from 0.2 to 7.2m. The deposit is rectilinear along almost all of its strike extension (95° to 110°). Excluding a 210m interval, in the central part, the deposit is hosted by sandstone of the upper strata of the Ladinian stage which forms a syncline fold core. The deposit is steeply dipping towards the north.

Boloto morphology is complicated in its central portion where influenced by the lamprophyre dykes. The deposit is characterised as having flexures, pinches and branches. Galena and pyrite dominate the mineralisation and sphalerite, chalcopyrite, fahlore, stannite, bournonite and jamesonite are present. Silver mineralisation associates with fahlore (freiberghite), pyrargyrite, diaphorite, sulphosalts of silver, bismuth, lead, argentite and native silver.

Boloto is divided into two parts; the western part has been exposed by trenches, whilst the eastern part is intersected by trenches and 5 lines of drillholes.

Table 7.6 summarises the parameters of the western section of Boloto.

Table 7.6: Summary of the Parameters for the Western Section of Boloto

Parameter Description	Maximum	Minimum	Average
Thickness (m)	4.9	0.2	1.7
Silver grade (g/t)	3,732.0	<3.0	366.2
Lead grade (%)	7.36	0.02	2.26
Zinc grade (%)	4.29	0.15	0.85

Table 7.7 summarises the parameters of the eastern section of Boloto.

Table 7.7: Summary of the Parameters from the Eastern Section of Boloto

Parameter Description	Maximum	Minimum	Average
Thickness (m)	7.2	0.2	2.0
Silver grade (g/t)	3,843.0	58.0	813.3
Lead grade (%)	8.14	0.04	1.58
Zinc grade (%)	3.06	0.04	0.84

An offshoot of Boloto - B-1, is located sub-parallel to the Boloto and has a strike extent of some 250m on an azimuth of 90° to 95°. At a depth of 80m, the offshoot hinges into Boloto. Table 7.8 summarises the parameters of the B-1 offshoot.

Table 7.8: Summary of the Parameters for the B-1 Offshoot of Boloto

Parameter Description	Maximum	Minimum	Average
Thickness (m)	5.2	1.0	3.1
Silver grade (g/t)	7,981.1	353.1	1,191.9
Lead grade (%)	0.63	0.05	0.31
Zinc grade (%)	1.05	0.23	0.34

7.2.4.3 Vostochnoye 1 & 2

Vostochnoye-1 and Vostochnoye-2 ore zones are situated near the eastern boundary of the property, 1.3km from the eastern end of Glavnoye. The distance between Vostochnoye-1 and Vostochnoye-2 varies from 5 to 17m. Their strikes are E-W (90°), and have a strike length of 280m. The ore zones were intersected by 2 lines of drillholes. Vostochnoye- 1 was traced down dip for 40m with drillholes No.52 and No.54. In the deepest horizons this ore zone transforms into a mineralised fracture.

Vostochnoye-2 forms a mineralised fracture at a depth of 30 to 40m. At surface the structure is contiguous, with sub-parallel and branching mineralised zones of fracturing from 0.1 to 2.6m thick, which swell up to 6.4m in some areas. At a depth of 30 to 40m, the zones comprise of veins from 0.6 to 1.02m thick, but at a depth 90 to 100m these form into fracture zones with quartzcarbonate-pyrite mineralisation.

Mineralised zones of fracturing comprise of intensively limonitised brecciated stringer-filled sandstones and siltstones, as well as with "mottled" clay with debris, small fragments of brecciated rocks and quartz-carbonate stringers. The veins are brecciated and have a quartz-carbonate-sulphosalt composition.

The sulphide content is less than 1% and is represented by pyrite and galena. A wide array of silver minerals was determined by microprobe studies and consists of miargyrite, stephanite, aguilarite, pyrargyrite, canfieldite and freiberghite. Table 7.9 summarises the parameters of Vostochnoye-1 and Vostochnoye-2.

Table 7.9: Summary of the Parameters for the Vostochnoye-1 and Vostochnoye-2

Parameter Description	Vostochnoye-1			Vostochnoye-2		
	Maximum	Minimum	Average	Maximum	Minimum	Average
Thickness (m)	7.7	0.66	2.42	1.8	0.9	1.11
Silver grade (g/t)	7,817.0	325.3	1,292.2	5,956.0	176.0	2,064.3
Lead grade (%)	0.36	0.03	0.14	0.59	0.01	0.18
Zinc grade (%)	0.73	0.07	0.22	1.12	0.02	0.27

7.2.4.4 Vesenn'eye-1 and Vesenn'eye-2

The Vesenn'eye-1 and Vesenn'eye-2 ore zones are located in the central part of the property, 150 to 550m north of Glavnoye. The distance between Vesenn'eye-1 and Vesenn'eye-2 is 35m. Vesenn'aya 1 has been traced for 1.8km by trenches towards the southwest and northeast, being exposed in 3 trenches, whilst Vesenn'eye-2 was intersected in 4 trenches. The strike length of the zones is 140m and 300m respectively. The strike of both is northeast (65° to 80°) and they steeply dip (75° to 85°) towards the south. In 2006, Vesenn'eye-2 was intersected by drillhole No.226 at a depth of 69 to 69.4m grading 2,120.8g/t Ag over an interval of 1.09m.

The zones comprise of brecciated and veinlet-filled sandstones, brecciated rocks, and rarely a vein or breccias and range from 0.3 to 2.7m in thickness. The main minerals are galena and sphalerite with secondary minerals comprising of pyrite, fahlore, pyrrhotite, stannite, arsenopyrite, bismuth and bournonite. Silver mineralisation occurs with silver containing fahlore (silver grade ranges from 10.7 to 23.5%), galena (silver grade ranges from 0.3 to 0.4%), native silver, acanthite, miargyrite and stephanite. Table 7.10 summarises the parameters of Vesenn'eye- 1 and Vesenn'eye-2.

Table 7.10: Summary of the Parameters for the Vesenn'eye-1 and Vesenn'eye-2

Parameter Description	Vesenn'eye-1			Vesenn'eye-2		
	Maximum	Minimum	Average	Maximum	Minimum	Average
Thickness (m)	1.0	0.3	0.6	2.7	1.0	1.6
Silver grade (g/t)	1,584.4	180.6	710.1	1,102.4	318.8	643.5
Lead grade (%)	0.45	0.03	0.28	15.10	0.06	3.02
Zinc grade (%)	2.20	0.01	1.23	6.34	0.09	1.39

7.2.4.5 Tikhoye

The Tikhoye ore zone is located 100 to 370m north of Glavnoye and has been exposed over 350m by means of 9 trenches. The south western flank has been delineated by the trenching, but the potential length of Tikhaya in a north eastern direction is 2.6km. The ore zone strikes toward the northeast (55° to 80°) and dips steeply (70°) to the north. It is composed of brecciated and veinlet-filled sandstones, sometime with veinlets and veins and rarely with a breccias and ranges from 0.1 to 2.5m in thickness. The main mineralisation is galena, sphalerite, pyrite, arsenopyrite, stannite, bournonite and boulangerite. The silver-containing and silver minerals are represented by galena (silver grade varies from 0.3 to 0.4%), fahlore (silver grade varies from 16.6 to 33.9%), pyrargyrite and miargyrite.

Table 7.11 summarises the parameters of Tikhoye.

Table 7.11: Summary of the Parameters for the Tikhoye

Parameter Description	Maximum	Minimum	Average
Thickness (m)	2.5	0.1	0.9
Silver grade (g/t)	9,931.0	5.0	1,355.3
Lead grade (%)	6.82	0.06	1.13
Zinc grade (%)	1.46	0.05	0.91

7.2.4.6 Verkhneye

Verkhneye is located 250m south of Glavnoye, strikes toward the northeast (70° to 75°) and dips steeply (70° to 85°) south. The zone was traced by 5 trenches for a distance of 290m. The ore zone is marked by a mineralised fracture zone, composed of brecciated and veinlet-filled sandstones with quartz-carbonate-sulphide mineralisation, with a quartz-carbonate-galena vein ranging from 0.5 to 2.0m wide. The main mineralisation is galena, pyrite, sphalerite, fahlore, pyrargyrite, stannite and bournonite, with the silver-containing minerals represented by galena (silver grade varies from 0.5 to 9%) and fahlore (silver grade varies from 14.6 to 26.9%).

Table 7.12 summarises the parameters of Verkhneye.

Table 7.12: Summary of the Parameters for the Verkhneye

Parameter Description	Maximum	Minimum	Average
Thickness (m)	1.6	0.5	1.08
Silver grade (g/t)	765.0	395.0	557.0
Lead grade (%)	15.51	0.88	7.92
Zinc grade (%)	5.31	0.03	1.76

A Verkhneye offshoot, V-1 was intersected in 2 trenches. It joins with the Verkhneye deposit near trench No.604. The offshoot V-1 strikes to the east (90°) for 200m and is steeply dipping (80° to 85°) or vertical. The offshoot is consists of a quartz-carbonate-galena vein with thickness ranging from 0.5 to 0.8m and veinlet-filled and brecciated sandstones.

The offshoot V-2 deposit strikes parallel to the Verkhneye approximately 170m apart and joins with the offshoot V-1 near trench No.312. In one intersection the offshoot V-2 is represented by a vein 1.4m wide hosted by veinlet-filled and brecciated rocks (trench No.511); in a second intersection it is represented by brecciated sandstones with quartz-carbonate-galena mineralisation.

Table 7.13 summarises the parameters of the offshoot V-1 and V-2.

Table 7.13: Summary of the Parameters for the Offshoot V-1 and V-2

Parameter Description	V-1			V-2		
	Maximum	Minimum	Average	Maximum	Minimum	Average
Thickness (m)	1.8	1.0	1.4	3.0	0.6	1.53
Silver grade (g/t)	1,942.5	969.4	1,316.9	801.0	231.3	468.6
Lead grade (%)	1.26	0.79	0.96	2.17	1.13	2.00
Zinc grade (%)	1.58	0.63	0.97	1.20	0.37	0.51

7.2.4.7 Dal'neye-1 and Dal'neye-2

Dal'neye-1 and Dal'neye-2 ore zones are located 1,200m north of Glavnoye, being intersected in 5 and 6 trenches for 320 and 400m, respectively. The distance between the zones is 20m. The strike directions are northwest (290° and 300°, respectively), with steep dips (70° to 80°) towards the south. The zones are composed of brecciated and veinlet-filled sandstones, containing carbonate-galena and galena veinlets. The main mineralisation is sphalerite, pyrite, chalcopyrite, fahlore, stannite, nickel-containing minerals and bournonite, with the silver-containing minerals represented by galena (silver grade varies from 0.1 to 0.77%), fahlore (silver grade varies from 11.9 to 32.9%), acanthite, pyrargyrite and miargyrite.

Table 7.14 summarises the parameters of Dal'neye-1 and Dal'neye-2.

Table 7.14: Summary of the Parameters for the Dal'neye-1 and Dal'neye-2

Parameter Description	Dal'neye-1			Dal'neye-2		
	Maximum	Minimum	Average	Maximum	Minimum	Average
Thickness (m)	3.1	0.6	1.9	1.4	0.9	1.08
Silver grade (g/t)	448.4	138	404.9	1,121.6	5.2	720.0
Lead grade (%)	6.64	0.01	3.12	28.60	0.03	4.19
Zinc grade (%)	0.64	0.1	0.4	1.88	0.10	0.07

7.2.4.8 Neizvestnoye

The Neizvestnoye ore zone is located 4km northeast from Glavnoye on the north eastern flank of the property. It has been intersected for 520m along strike in 3 trenches. The flanks of the deposit have not been delineated. The strike is E-W with a steep dip. The ore zone consists of a mineralised fractured zone composed of veinlet-filled and brecciated sandstones with clay. The mineralisation is of sulphosalt type, with the mineral concentration less than 1%.

Table 7.15 summarises the parameters of Neizvestnoye.

Table 7.15: Summary of the Parameters for the Neizvestnoye Deposit

Parameter Description	Maximum	Minimum	Average
Thickness (m)	2.0	1.0	1.5
Silver grade (g/t)	1,059.0	406	623.7
Lead grade (%)	0.20	0.03	0.07
Zinc grade (%)	0.20	0.03	0.08

Table supplied by OJSC Buryatzoloto.

7.2.4.9 Yuzhnoye-1 and Yuzhnoye-2

The Yuzhnoye-1 and Yuzhnoye-2 ore zones are located 1.3km south of Glavnoye and 0.4 to 0.5km south of Boloto. The distance between both deposits is 170m. Both deposits strike E-W (95°) and dip steeply (65° to 85°) towards the north or are vertical. The zones were traced by trenches along the strike for 550 and 480m, respectively and comprise of mineralised fracture zones composed of veinlet-filled and brecciated sandstones and with the occasional veins from 0.5 to 1.0m wide. The vein is composed of quartz-carbonate-galena and quartzcarbonate-sulphosalt.. The main mineralisation type is sulphosalt. The mineralisation comprises of galena, pyrite, sphalerite, bournonite, stannite and arsenopyrite. The silver mineralisation is associated with fahlore (silver varies 16.2 to 35.6%), with galena (silver varies from 0.17 to 0.42%), with miargyrite and pyrargyrite. A peculiarity within the mineral content of the ore zones is the presence of nickel-containing minerals such as arsenical nickel, rammelsbergite, gersdorffite and ulmanite.

Table 7.16 summarises the parameters of Yuzhnoye-1 and Yuzhnoye-2.

Table 7.16: Summary of the Parameters for the Yuzhnoye-1 and Yuzhnoye-2						
Parameter Description	Yuzhnoye-1			Yuzhnoye-1		
	Maximum	Minimum	Average	Maximum	Minimum	Average
Thickness (m)	1.5	0.8	1.15	3.5	0.4	1.63
Silver grade (g/t)	1,247.0	318.3	844.9	1,183.0	356.0	579.7
Lead grade (%)	0.75	0.09	0.36	8.59	0.49	2.11
Zinc grade (%)	0.35	0.10	0.21	3.75	0.07	0.36

7.2.4.10 Istok

The Istok ore zone is located 2.9km north of the Glavnoye near the northern boundary of the property. The zone was traced by geological traverses and 3 trenches for 650m in an E-W direction. The zone is composed of clay and the debris of brecciated sandstones with carbonate-galena veinlets and the debris of carbonate-galena veinlets. The silver mineralisation occurs as an admixture of silver in galena.

Table 7.17 summarises the parameters of Istok.

Table 7.17: Summary of the Parameters for the Istok			
Parameter Description	Maximum	Minimum	Average
Thickness (m)	1.7	1.2	1.4
Silver grade (g/t)	200.0	86.8	122.3
Lead grade (%)	7.19	1.00	2.98
Zinc grade (%)	1.31	1.00	1.17

7.2.4.11 Krutaya

The Krutaya ore zone is located 0.8km north of the Glavnoye to the north of the property. The zone was traced by geological traverses and 2 trenches for 420m. The zone comprises of brecciated sandstones with quartz-carbonate-galena mineralisation and has a north western strike (315°) and dips steeply (65° to 85°) towards the northeast. The mineralisation consists of galena, sphalerite and pyrite. Silver mineralisation occurs as an admixture of silver in galena. Table 7.18 summarises the parameters of the Krutaya ore zone.

Table 7.18: Summary of the Parameters for the Krutaya			
Parameter Description	Maximum	Minimum	Average
Thickness (m)	4.0	1.4	2.7
Silver grade (g/t)	186.6	72.5	101.6
Lead grade (%)	5.14	2.12	2.90
Zinc grade (%)	0.87	0.41	.075

7.2.4.12 Gook

The Gook ore zone is located 550m north of Glavnoye and has been exposed in 3 trenches over a 350m strike. The strike direction is E-W (95°) and dips steeply (75°) towards the south. The zone comprises of brecciated sandstones with carbonate-galena veinlets. The mineralisation consists of galena and sphalerite. The silver-containing minerals (owyheeite and miargyrite) were determined by means of a microprobe analyses. Table 7.19 summarises the parameters of Gook ore zone.

Table 7.19: Summary of the Parameters for the Gook			
Parameter Description	**Maximum**	**Minimum**	**Average**
Thickness (m)	4.6	2.0	3.3
Silver grade (g/t)	227.3	3.6	155.3
Lead grade (%)	3.49	1.51	2.26
Zinc grade (%)	1.20	0.22	0.80

7.3 Exploration

7.3.1 Historical

In 1968, 1971 and 1973, the property was covered with airborne magnetic, gravimetrical and radiometric surveys at scales of 1:200,000, 1:100,000 and 1:50,000, respectively.

Silver-polymetallic mineralisation was recognised at Prognoz during a 1:200,000 scale geological mapping exercise conducted from 1968 to 1971 by the Central Geological Survey Expedition.

Between 1973 and 1977, the Khorootinskaya geological team of the Central Geological Survey Expedition conducted geological mapping at 1:50,000 and soil sampling on grids of 250 x 100m and 250 x 50m, in addition to trenching, totalling of 6,500m^3.
As a result of this exploration work, 11 anomalous mineralised zones with high grades of lead (1 to 67%), zinc (1 to 10%) and silver (100'sg/t to 11,780g/t) were identified.

From 1985 to 1986, the State Geological Company, Yakutskgeologia, confirmed the potential of the Prognoz project as a target for silver with P_1 and P_2 "resources" of 6,258t of contained silver, and recommended further exploration.

From 1987 to 1990, the Yanskaya exploration expedition conducted further trenching, core drilling, prospecting and soil sampling, which identified mineralised breccia zones which contained galenasphalerite, sulphide-sulphosalt, and sulphosalts. The various zones ranged in strike length from several hundred metres to 2.3-4.1km and, in depth, from 250-320m. P_1 and P_2 "resources" were estimated at 7,164t of silver, 395,133t of lead, and 96,097t of zinc.

The mineral resources quoted above have not been estimated in accordance with the guidelines of the JORC Code 92004) are historical estimates and been included for information only.

In 1988, 358kg of material were collected from the trenches of the Glavnoye deposit for metallurgical testing at the Scientific Research Institute located in Magadan. Testing concluded that the total recovery for the silver was 91% to 98% if a gravity-flotation scheme with cyanidation of flotation tailings was used.

Between 1990 and 1998, Prognoz was explored by the State Geological Company, Yangeologia. Exploration consisted of trenching, diamond drilling, soil and bedrock sampling, and geophysical surveying. The main deposits were explored by trenches along strike and by drillholes at depth. Soil sampling was conducted to outline the flanks of the mineralisation and geophysical surveying was conducted to trace the flanks of the known mineralised zones. A "reserve" study was developed by specialists from the Ministry of Industry of the Yakutia Republic, the State Geology Committee of the Yakutia Republic, the Mining Institute, and Yangeologia, using the data obtained from the exploration program and approved by the State Geology Committee of the Yakutia Republic on 05 July 1996.

The "reserve" study used the following parameters:

- A equivalent silver cut-off grade of 150g/t Ag;
- A minimum grade of equivalent silver in an intercept used to outline the ore envelope over its strike and dip of 250g/t Ag;

- A minimum grade for an estimated block of 673g/t Ag; and
- A minimum thickness of the mineralisation of 0.8m and the maximum thickness of internal waste of 3.0m.

From 1998 to 2000, Yangeologia compiled an exploration report which was based on the data from previous exploration programs, on the new results obtained between 1990 and 1998, and on the parameters for the reserve and resource estimates approved in 1996. In 2000 this report was completed and the “reserves” were classified by Yangeologia as C_2 “reserves”, and as P_1 “resources”.

A total of 4,989kt of “economic” material grading 875.5g/t Ag, for 4,368t of contained silver, were classified as C_2 “reserves”, and 2,346.4kt of material grading 708.3g/t Ag, for 1,662t of contained silver, were classified as P_1 “resources”.

The mineral resources quoted above have not been estimated in accordance with the guidelines of the JORC Code 2004) are historical estimates and been included for information only.

In 2005, an independent team of geologists under the direction of L.P. Kupriyanova checked the Yangeologia “reserve” estimates and concluded that the historical Russian estimate was accurate. The check was conducted on behalf of Gaztek Industries LLC as part of its due diligence of Prognoz. Since acquiring Prognoz in 2005, Gaztek Industries LLC has conducted no physical work on the property.

In 2006, Buryatzoloto commenced exploration in accordance with the approved project agreed to by the state authorities of the Russian Federation and Yakutia.

In March, 2007, Gaztek Industries LLC transferred the mineral licence to Prognoz-Serebro, which assumed the liabilities and terms of subsoil use according the licence YAK 13345 PM.

As of 2000, 17,805.8m of historical surface diamond drilling had been completed, including 89 holes drilled in the areas of the Glavnaya and Boloto zones on a grid spacing of 160x80-60m. A total of 317 trenches spaced at 40m, totalling 17,756.7m had been excavated on the mineralised zones. The diameters of the drillholes were 93mm for the first drilling program (1987 to 1994) and reduced to 76mm for the second drilling program (1994 to 1998) in the hope of improving core recovery.

The host rocks had a core recovery which varied from 75% to 98% and averaged 87%. The mineralised zones had an average core recovery of 83%. Drillholes with a core recovery less than 70% were drilled again.

No historical production has occurred at Prognoz.

7.3.2 2006-2007 Buryatzoloto Surface Exploration

In 2006, Buryatzoloto started exploration of the property under the agreement with Gaztek Industries LLC.

The work during 2006 and 2007 focused on the Glavnoye ore zone. During this period a total of 134 infill drillholes (20,874.7m) were drilled on a grid of 80m along strike by 40m down dip and 6 drillholes (617.6m) were drilled on a grid of 40m x 40m. A total of 7 drillholes (2,619m) were completed to study the distribution of mineralisation to a depth of 400m from the surface: 8 drillholes (1,161.2m) were drilled on the eastern flank of the ore zone on a grid of 160m x 80m and 66 prospecting (reconnaissance) drillholes (3,680.5m) were drilled on the flanks of the ore zone, each 50m deep. In addition, 9 prospecting trenches (329m) were excavated in the central portion of the ore zone and 2 trenches were excavated on the flanks.

The assay results received from the infill holes drilled on the Glavnoye orebody in 2006 and 2007 indicated that:

1. Continuity of the mineralisation along strike is up to 4km, whilst at depth has been confirmed to at least 400m from surface;
2. The lateral continuity within the Boloto zone ranges in strike length up to 3.1km. The depth of mineralisation has been determined to be 240m from surface.
3. The grade x thickness results (metrogram) obtained from the assay results completed during 2006 and 2007 at Glavnoye, at a cut-off grade of 100g/t Ag, averaged 1,563g-m/t Ag (741g/t x 2.11m), which compares with the historical metrogram average 1,926g-m/t Ag (758g/t x 2.54m). For the Boloto deposit the grade x thickness results averaged 4,740g-m/t Ag (1,209 g/t x 1.98m) versus historical average metrogram of 824g-m/t Ag (448g/t x 1.84m).
4. Prospecting and reconnaissance drilling and trenching completed in 2006 and 2007 on other zones (Yuzhnaya, Vesenn'aya, Tikhaya, Dalnyaya, Neizvestnaya) enabled a large increase in the mineral potential estimate for Prognoz. The historical mineral potential estimate for Prognoz equalled 4,460t of silver. Based on Buryatzoloto's exploration of 2006 and first half of 2007 the mineral potential was estimated at between 3,000t and 6,000t of silver (97 to 194Moz) at an average grade of 815g/t Ag. Upon compiling the exploration results for 2006 and 2007, it is estimated that the mineral potential for Prognoz is between 5,000t and 11,500t of silver (161,481 to 369,091Moz) at an average grade of 775.8g/t Ag.

The mineral resources quoted above have not been estimated in accordance with the guidelines of the JORC Code 2004) are historical estimates and been included for information only.

On the Boloto ore zone, 16 infill drillholes (2,826.8m) were drilled on a 160m by 80m exploration grid in the centre and 29 step-out drillholes (4,215.1m) were drilled on the flanks at a spacing of 160m along the strike. On the western flank, 2 perpendicular prospecting sections of reconnaissance holes were drilled at a spacing of 450m along strike (86 drillholes for 4,525m). The depth of reconnaissance drillholes was up to 52m. 3 exploration trenches (151.5m) and one prospecting trench were excavated on the eastern flank.

Four exploration drillholes (618m) were completed on the Tikhaya ore zone, whilst 3 infill holes (533m) were drilled on the Vesenn'aya ore zone.

A total of 9 perpendicular prospecting sections of reconnaissance drillholes were drilled on a spacing of between 160 and 300m along the strike on the TikhayaVesenn'aya ore zone (96 drillholes for 4,938.4m). Also 7 prospecting drillholes (1,052.9m) to depths of 140 to 203m were completed.

On the Yuzhnaya zone one prospecting trench (461m) and 9 exploration drillholes (1,297.9m) were completed in 5 perpendicular sections at 300 to 400m intervals along the strike.

Five exploration drillholes (749.9m) were drilled on the Verkhneyeore zone , 2 exploration holes (312m) on the Dalneye ore zone and 2 exploration holes (totalling 242m) on the Neizvestnoyeore zone. A total of 80 prospecting or reconnaissance drillholes were completed in two sections at an interval of 500m along the strike and 11 trenches (1,332.5m) were excavated on Dalnyaya ore zone. One section of 36 reconnaissance drillholes, totalling 1,807.6m, was completed on the Neizvestnaya ore zone. The Osennyaya zore one was studied by 5 reconnaissance and one prospecting (100m deep) drillholes.

One section of reconnaissance drillholes was completed on the Yugo-Zapadnaya zone along with 3 drillholes ranging in depth from 104m to 190m drilled in two sections on spacing of 380m along strike.
A total of 26,656 core samples and 1,536 channel samples were collected over this period.

During 2006 and 2007 Buryatzoloto spent a total of 436Mroubles or US$16,75M on the exploration programs for Prognoz.

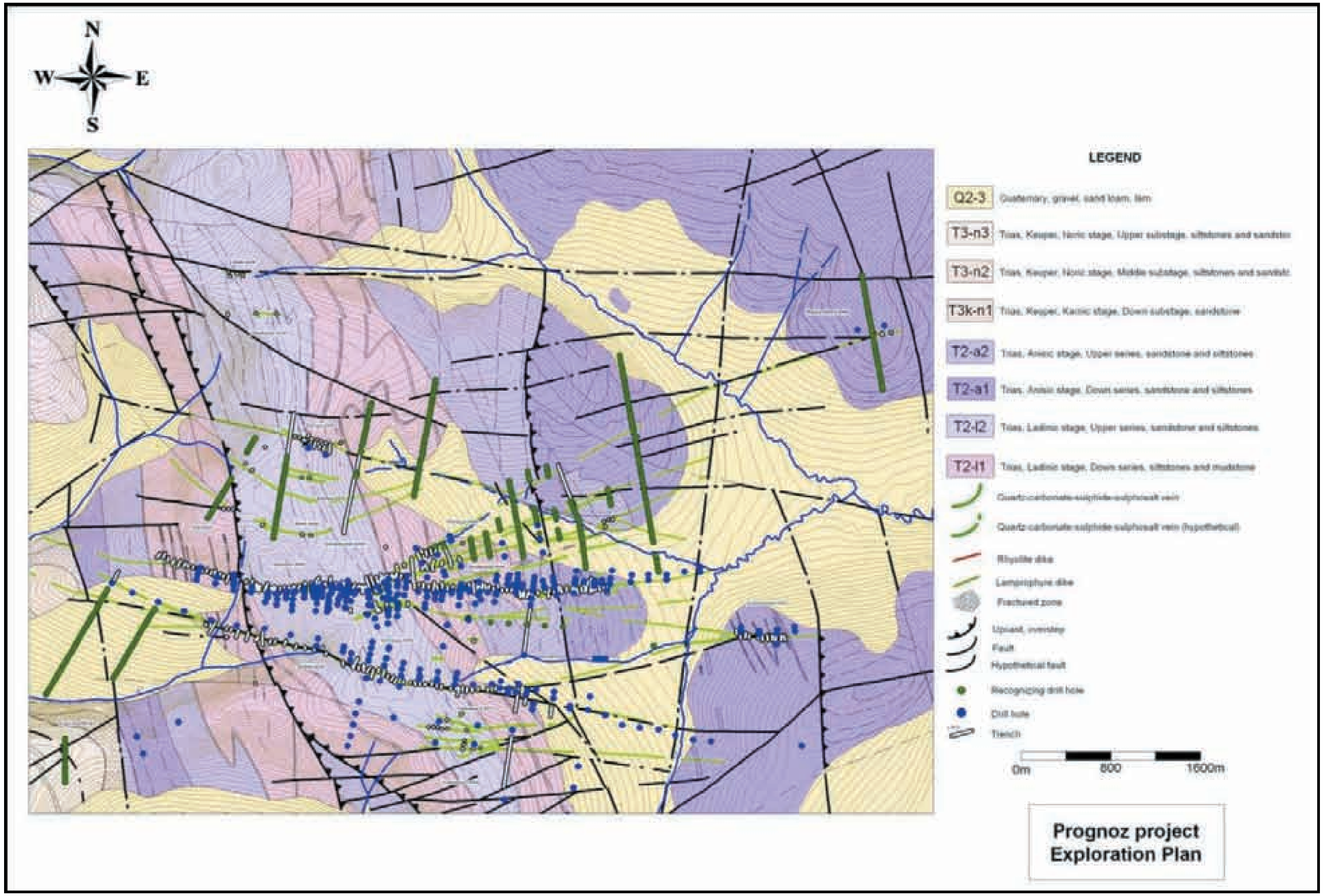


Figure 7.5: Project Geology Map Indicating the Location of the Exploration Trenches and Drillholes

7.3.3 2007 Buryatzoloto Underground Exploration

Four underground ramps (ramps No. 1, 2, 3 and 4) were mined by Buryatzoloto in 2007 to collect a bulk sample (see Figure 7.6 below). The ramps were mined on the Glavnoye ore zone with ramp lengths being 40m, 48m, 44m and 34.5m, respectively. The ore zone was intersected by the ramps at a depth of 15 to 18m below the surface.

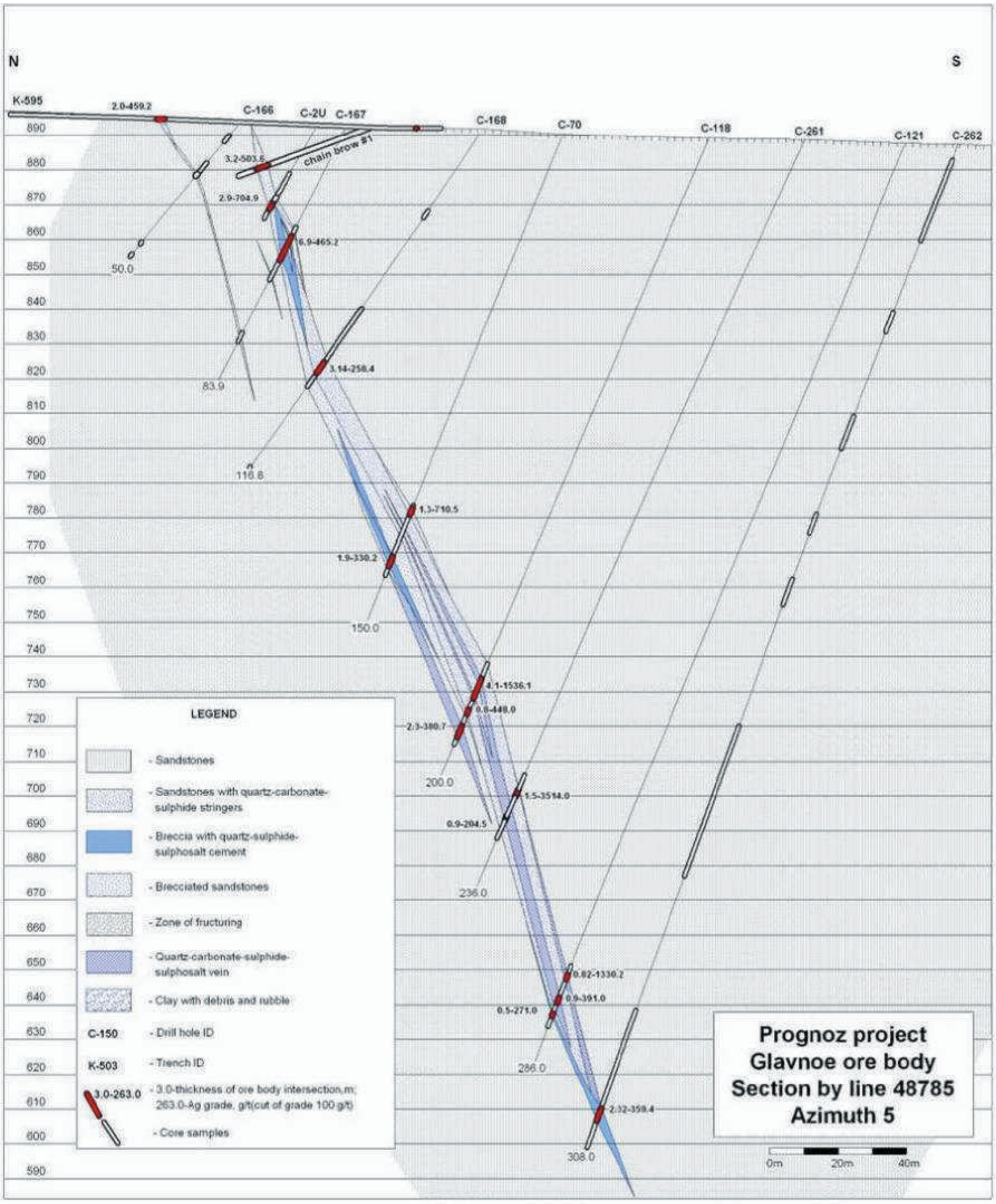


Figure 7.6: Section (Looking East) indicating the Location of Ramp No.1 and associated Trenches and Drillholes

7.3.4 Sample Preparation and Analysis

Prior to 2000, core and channel samples were processed in the crushing facility of Yangeologia. The formula $Q=kd^2$ by Richards-Chechett was used to calculate the reliable weight of sample after splitting, where d is the diameter of rock particles (mm). To account for the irregular distribution of silver within the mineralisation and the significant range in grain sizes of the silver-bearing minerals (from one micron to one mm), the k-factor of the irregular distribution was set as 1.0. The quality control for sample processing was achieved by comparing the initial and final sample weights and by determining the silver grades in the two parts of the sample during splitting.

Since 2006, the processing of all samples including crushing and grinding was performed in the crushing facility located at the property. The reliable weight of the sample is calculated using the Chechett formula $Q=kd^2$. The factor k was taken as 1.0. Crushing of samples was performed using a multi-stage crushing-grinding cycle sequentially using jaw and roller crushers and atomisers.

Splitting of the sample depended on the initial weight of the individual samples. Core samples of 2kg or less in weight were processed without splitting. In order to prepare the sample for shipment to the assay laboratory, the sample underwent a number of crushing (grinding) stages to achieve the required portion on the sample passing the screen size. After every stage of crushing (grinding) the sample were screened and particles with diameter more than the screen cells delivered again for crushing (grinding). The sample was split into a 1kg geological duplicate and 1kg sample used for analysis. The sample which was sent for analysis was ground to 0.074mm and then split into two portions. One portion was kept as a duplicate sample and the other portion sent for fire assay. Two further portions were taken from the analysis sample for X-ray-spectrographic and spectrographic analysis.

A blank sample was added by the geologist to each batch of samples in order to check the process controls during the sample processing. The blank sample was added into the sample preparation process every 15 to 20 samples, starting from the beginning of the sampling process on each drillhole or trench. The blank which was 1kg in weight was made up of un-mineralised material such as brick, dyke or other rock from the property which was determined not to carry any silver grades.

In order to conduct operational quality control, standards, of attested silver grades, were added to every batch of samples (approximately every 40 samples) which were sent to the central nuclear-analytical laboratory of Yangeologia and IRGEREDMET. The laboratory carried out analyses of the standard samples based on the sample sequence for the standards outlined by Buryatzoloto.

During 2006 and the first six months of 2007, laboratory analyses for silver were conducted using the fire assay, gamma-activation and atomic absorption methods. The analyses were performed at the central nuclear-analytical laboratory of Yangeologia, which holds a Russian State Standard accreditation certificate (RF #ROSS RU 0001.5 12384) valid until 09 September 2008.

Since August 2007, the analyses were performed at the JSC IRGEREDMET (IRGEREDMET) laboratory located in the city of Irkutsk. IRGEREDMET holds a Russian State Standard accreditation certificate (#ROSS RU 0001.510043) valid until 13 January 2009.

Semi-quantitative spectral analysis of the samples was carried out at the central geological-analytical laboratory of the State Geological Company Yakutskgeologia. The laboratory holds a Russian State Standard accreditation certificate (RF #ROSS RU 0001.511039) since 05 October 2005.

Chemical analyses for lead, zinc, arsenic and stibnite were conducted at the central geological-analytical laboratory of the State Geological Company Yakutskgeologia.

Samples for internal and external check analyses were collected for silver grade ranges in accordance with the recommendations of the Russian Guideline on Reserves and Resources classification of silver deposits (State Committee of Reserves (SCR), 1984).

According to the requirements of the SCR between 3 to 5% of the total assayed samples were checked and the number of samples for each range of silver grades was not to be less than 30 except when less than 30 samples were available. The samples for the internal check were sent in a coded form to the nuclear-analytical laboratory of Yangeologia and this batch of samples did not include any standard samples. The external check analysis for the fire assays completed by Yangeologia was performed by IRGEREDMET. The samples for the external check were not coded and there were no standard samples included in the batch of samples sent. A total of 1,282 fire assays were done in 2006 with approximately 9.4% of the total number sent for the internal check analysis and 15.4% sent for the external check analysis. In 2007, Yangeologia performed 1,661 fire assay analyses with 10.2% of total number sent for internal check analysis and 11% sent for external check analysis. Processing of the check results for the fire assays was done in accordance to the approved method by RCAM (ASUIM, 1982).

From the Micon June 2008 NI 43-101 report it is stated that “the values of the relative mean square deviations for all of the grade ranges was not higher than the permissible values shown in the Russian guidelines for the reserves and resources classification of silver deposits. Thus, silver assays were reasonable and acceptable according to the Russian standards. Micon also believed that the internal check assays are reasonable and acceptable according to the best practices guidelines available within Canada (CIM)”.

7.3.5 Specific Gravity

From 1987 to 2000, measurements of the specific gravity were carried out using hydrostatic weighing on 80 samples picked from the core and channel samples ranging in depth from 0 up to 247m from the surface. Specific gravity variations for 74 samples were within the limits 2.4 6 to 4.40g/cm^3, 6 samples had anomalous specific gravities from 4.9 up to 6.85g/cm^3. The average value for the specific gravity was 3.19g/cm^3.

In 2006 and 2007, 38 samples were collected from drill core of the Glavnoye and Boloto deposits to measure the specific gravity by hydrostatic weighing. The specific gravity varied from 2.61g/cm^3 (mineralised breccia), up to 5.36g/cm^3 (quartz-carbonate-sulphide-sulphosalt vein). The average value was estimated at 3.16g/cm^3 which is very close to the historical average value.

In 2007, 22 samples were collected from the underground workings (ramps) excavated by Buryatzoloto. The average value of specific gravity was estimated at 2.77g/cm^3. The average value of specific gravity estimated for all of the samples collected by Buryatzoloto was 3.01g/cm^3, which confirms the specific gravity value which had been accepted in the historical Russian “reserve” estimation procedure.

> ***WAI Comment:*** *From the Micon June 2008 NI 43-101 report it is stated that “It is Micon’s opinion, the quality of the samples meets accepted industry standards and that the sampling is believed to be representative of the areas examined based on a general and specific assessment of the sampling data. While the sampling by Buryatzoloto is believed to be representative, some problems have arisen when samples have been sent out for check analysis to the laboratories of IRGIREDMET which appear to indicate that there have been systematic discrepancies in both the fire assays and gamma-activation assays of Yangeologia. A third laboratory conducted arbitral check analysis of the fire assays and did not find any discrepancies. In the case of the gamma activation analysis, Buryatzoloto has conducted fire assays on all samples where the grade range is greater than 300g/t, as well as others. Those checks were conducted in the second half of 2007 and revealed appropriate performance for the gamma-activation laboratory. Micon also recommends that a number of blank and standard samples be sent to the IRGIREDMET laboratory to check the methods at this laboratory to potentially identify if there are any problems in the preparation and assaying procedures.*

7.3.6 2007 Buryatzoloto Bulk Sample

In 2007, Buryatzoloto collected a 17t bulk sample from Glavnoye. The material for the bulk sample was taken from 5 trenches, 34 drillholes and 4 underground workings (ramps). The average calculated grade for the sample was 714.9g/t Ag, 2.59% Pb and 0.66% Zn.

The bulk sample was thoroughly mixed and split into two parts of 5t and a 12t. The 12t portion, referred to as Sample 1, was sent for metallurgical testing to the Scientific Research Institute of Nonferrous Metallurgy (VNII) located in UstKamenogorsk, Kazakhstan. The 5t portion (Sample 2) was sent for metallurgical testing at the IRGIREDMET laboratory in the city of Irkutsk. VNII reported that the silver grade of Sample 1 was 980g/t. IRGIREDMET reported that Sample 2 contained 650g/t Ag, 2.7% Pb and 0.76% Zn.

Both metallurgical programs concluded that silver is partially refractory based on conventional cyanide leaching technology. Whole ore cyanidation tests using Sample 1 and Sample 2 gave silver recoveries of 42% and 63%, respectively. The partial refractory nature of the mineralisation is due to the locking of ultra-fine silver minerals in other minerals, mainly sulphides.

7.4 Resources and Reserves

Micon has constructed a resource estimate for the Prognoz deposit using geologic and assay information from 271 drillholes and 60 surface trenches. The silver mineralisation is concentrated in quartz-carbonate-sulphide veins and sulphosalts. The resource evaluation is based on the results of the diamond drilling obtained for the Glavnoye and Boloto ore zones as of 31 December 2007. Micon recognised two distinct trends of mineralisation in the area. These trends have been defined as Zone B (Boloto) and Zone G (Glavnoye). The two trends were subdivided into 38 mineralised zones based on the continuity of mineralisation, with 11 zones in Zone B and 27 in Zone G (see Figure 7.7, Figure 7.8 and Figure 7.9 below).

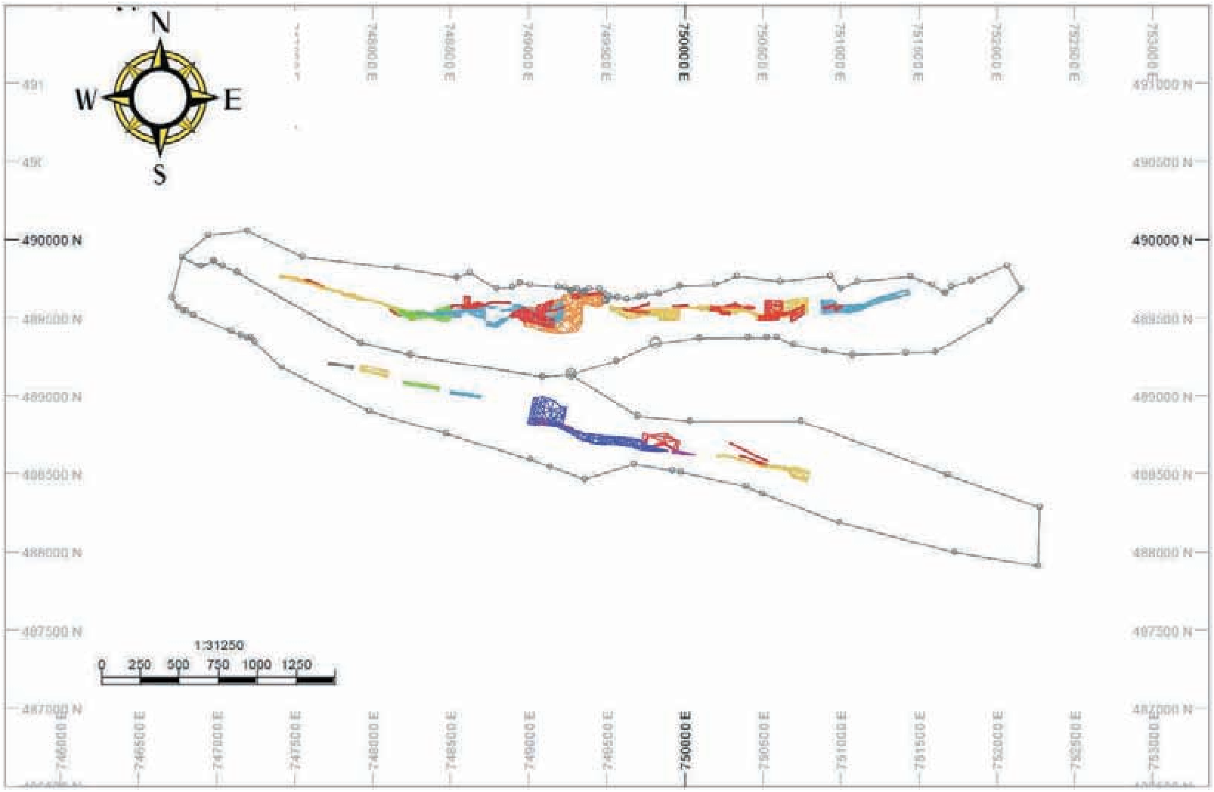


Figure 7.7: Two Mineralised Trends identified by Micon (2007)

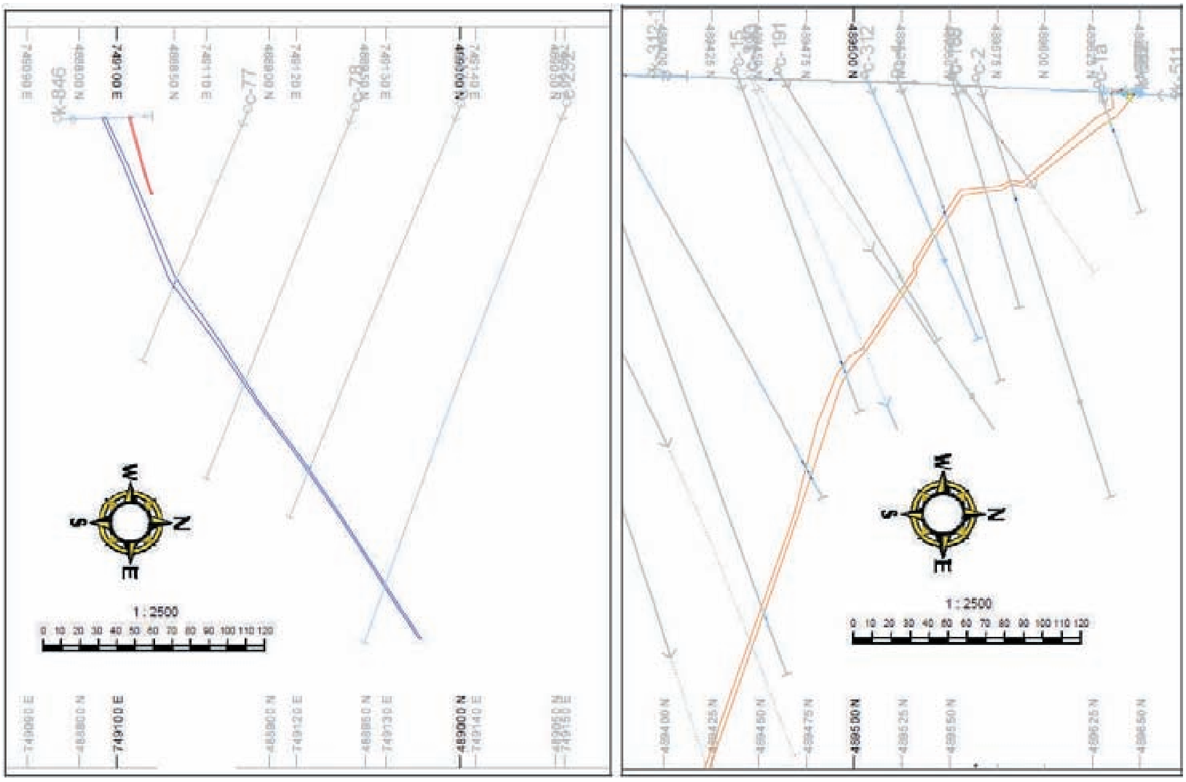


Figure 7.8: Typical Sections for Zones B (Left) and G (Right)

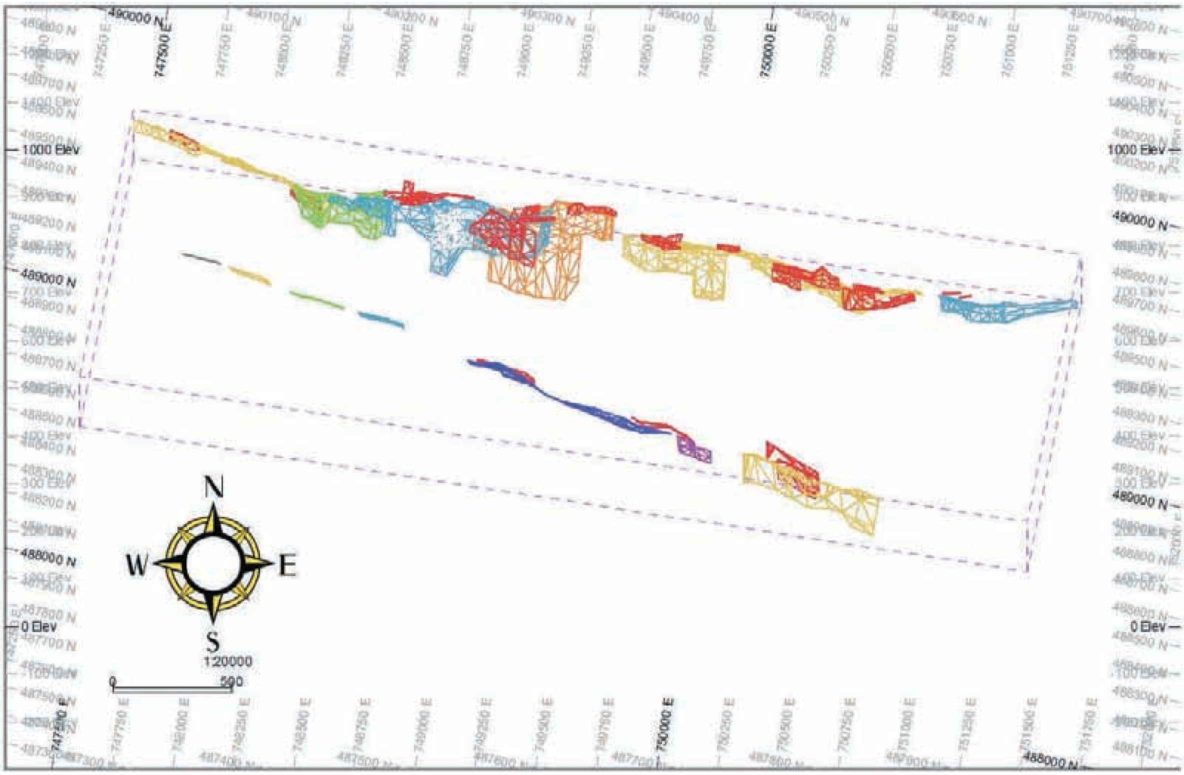


Figure 7.9: 3-D Wireframe Model Looking Southeast Underneath

Micon has considered the technical and economic criteria used to calculate a reasonable mineral resource cut-off grade for Reporting Mineral Resources. Both the CIM and JORC definitions of a Mineral Resource require that "there are reasonable prospects for eventual economic extraction".

Micon has calculated the break-even cut-off grade for Prognoz mineralisation to be 100g/t Ag. The Mineral Resource was updated with the topography and allowance was made for extraction of the bulk sample. Based on the 100g/t Ag cut-off, the Prognoz *Indicated* Mineral Resources totals 4.49Mt at a grade of 704g/t Ag. *Inferred* Mineral Resources total 4.87Mt at a grade of 659g/t Ag.

Table 7.20: Summary of Mineral Resources at Prognoz (Micon 31 December 2007)
(In accordance with the guidelines of the JORC Code (2004))

Cut-off (g/t Ag)	*Indicated*				*Inferred*			
	Tonnage (Mt)	Grade (g/t Ag)	Contained Metal		Tonnage (Mt)	Grade (g/t Ag)	Contained Metal	
			Silver (t)	Silver (Moz)			Silver (t)	Silver (Moz)
100	4.49	704	3,165	102	4.87	659	3,209	103

Notes:
1. The geologic model used a break-even, cut-off grade of 100g/t Ag, calculated by MICON.
2. Assay results were capped at grades ranging from 1,710g/t to 8,230g/t depending on the zones sampled. Only 2.4% of the samples were affected by capping.
3. The block model grade interpolation was performed using ordinary kriging with dynamic anisotropy.
4. Mineral Resources were estimated following NI 43-101 and JORC guidelines. *Indicated* Resources were defined as that portion of mineralization drilled on 40m centres. *Indicated* Resource blocks were estimated based on a minimum of 3 samples. *Inferred* Resources were defined as that portion of mineralisation defined by surface sampling and few drillhole samples. For *Inferred* Resources, the lower density of drillhole data does not provide enough confidence to predict grade continuity, only geologic continuity.
5. ***Mineral Resources that are not mineral reserves do not have demonstrated economic viability***

7.5 Conceptual Mineral Potential

In addition to the resource estimate for the Prognoz property, Micon (2007) has undertaken an evaluation of the conceptual resource potential for 16 of the other known mineralised zones which were not included in the Mineral Resource estimate.

The evaluation of the potential for these zones was conducted using the results of the mineral samples obtained during the trenching and preliminary exploration drilling conducted on these zones. The zones included in this evaluation are the Dal'naya (D) Dal'naya-1 and 2 (D1), Krutaya (K1), Solnechnaya (S1), Osenn'aya (O1), Yuzhnaya-4 (Y4), Yuzhnaya-3 (Y3), Yuzhnaya-2 (Y2), Yuzhnaya-1 (Y1), Tikhaya (T1), Vesenn'aya-4 (V4), Vesenn'aya-3 (V3), Vesenn'aya-2 (V2), Vesenn'aya-1 (V1), Boloto-2 (B2) and Udachnaya (U).

A plan view of the Prognoz licence showing the distribution of the veins or zones which have mineral potential are shown in Figure 7.10 below.

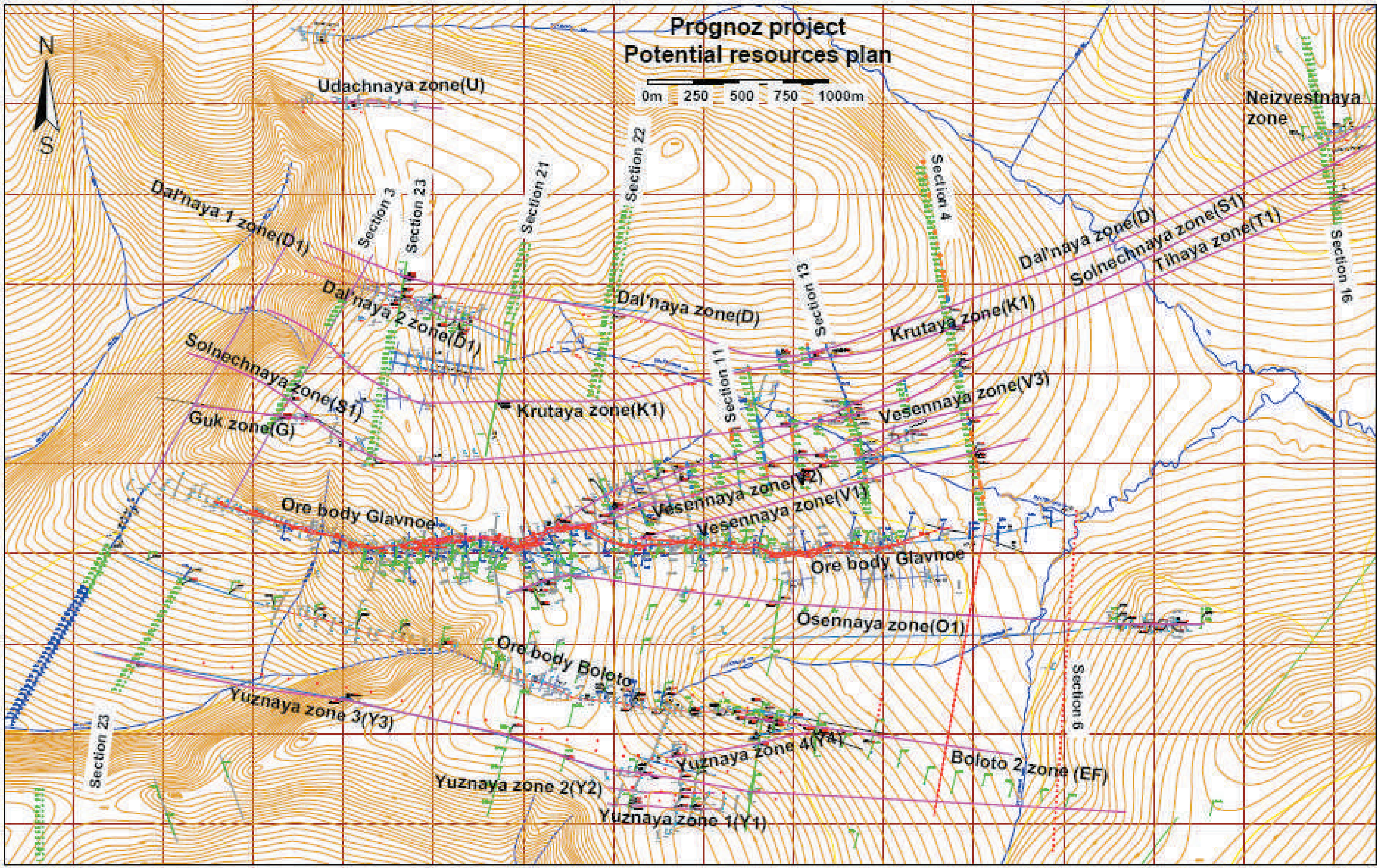


Figure 7.10: Plan View Showing the Veins or Zones at the Prognoz Project used for Determining the Mineral Potential

The depth of the conceptual mineral potential evaluation for the 16 zones which have been explored, ranges from between 40m and 100m below the deepest samples collected up to a maximum vertical depth of either 100m from the sample point or 200m below surface, whichever was reached first. The 200m maximum depth below surface was used as it corresponds approximately to 1/3 of the depth of the known mineralisation of the Glavnoye ore zone. The exception is on the eastern flank of Boloto 2 ore zone, where the maximum depth is set at 230m. The evaluation of the conceptual mineral potential for the 16 other veins or zones on the Prognoz property was based on the available data as of January 1, 2008.

The base case mineral potential scenario reflects only the ore zones which have been identified by trenches or diamond drillholes, with a mineral-bearing factor of 0.3 and does not reflect the further potential for probable zones that may be located in the aureoles of the other geochemical and geophysical anomalies which exist at Prognoz.

The mineral-bearing factor considers a ratio of the areas of the mineral-bearing and barren sections within the zones. The mineral-bearing factor value was selected as being close to the average factor value calculated for the already explored ore zones on the property (Glavnoye and the Boloto). The mineral-bearing factor for the Glavnoye deposit equals 0.5, calculated as a ratio of total "resource" block areas to the total area of the mineralised zone. The mineral-bearing factor for the Boloto deposit is 0.2.

The conceptual mineral potential estimate for the 16 other known zones on the Prognoz property is 7,175t of silver (230,688,000oz silver), based on the stated parameters. However, since the mineral potential of a property cannot be estimated to the same accuracy as a mineral resource, it must be stated as a range. Micon therefore applied a factor of minus -30% on the down side and plus 60% for the upside for the estimated mineral potential, in order to state the range for the conceptual mineral potential of the Prognoz property. The upside potential is stated to a greater degree because of the lack of information for the 16 mineralised zones involved and anticipating the possibility that they will be similar in nature to the Glavnaya and Boloto zones. The upside potential is stated to a greater degree also because the base case mineral potential scenario reflects only the veins which have been identified by trenches or diamond drillholes with a mineral-bearing factor of 0.3, and does not reflect the further potential for probable veins that may be located in the aureoles of the other geochemical and geophysical anomalies which exist on the Prognoz property. It is also not improbable that further mineralised veins related to the existing veins could be located during the further exploration phases. Micon with the concurrence of WAI believes that the current estimate of the mineral potential for the Prognoz project is conservative given the current Mineral Resource estimate for the Glavnaya and Boloto ore zones, which represent only 2 out of the total known veins and zones existing on the property.

A summary of the base case conceptual mineral potential for the other mineral zones at Prognoz are given in Table 7.21 below.

Table 7.21: Summary of Base Case Conceptual Mineral Potential for the Mineral Zones of Prognoz (Micon 2008)

Zone	Block Area for Potential Zone (m^2)	Average Vein Thickness (m)	Block Volume (m^3)	Specific Gravity (t/m^3)	Mineral Bearing Factor	Mineral Potential (t)	Average Silver Grade (g/t)	Potential Contained Silver (t)
Dal'nyaya (D)	1,125,000	1.06	1,190,057	3	0.3	1,071,000	998.0	1,070
Dal'nyaya 1,2 (D1)	240,000	0.93	223,657	3	0.3	201,000	404.6	80
Krutaya (K1)	675,000	2.09	1,408,207	3	0.3	1,267,000	233.1	295
Gook (G)	65,000	2.26	146,677	3	0.3	132,000	140.9	20
Solnechnaya (S1)	1,050,000	1.26	1,324,386	3	0.3	1,192,000	347.7	415
Osennyaya (O1)	760,000	1.41	1,070,521	3	0.3	963,000	1,019.5	980
Yuzhnaya -4 (Y4)	85,000	0.60	51,000	3	0.3	46,000	1,659.1	75
Yuzhnaya -3 (Y3)	754,000	0.89	673,120	3	0.3	606,000	426.5	260
Yuzhnaya -2 (Y2)	150,000	1.12	168,107	3	0.3	151,000	517.2	80
Yuzhnaya -1 (Y1)	102,000	1.64	167,741	3	0.3	151,000	438.2	65
Tikhaya (T1)	1,000,000	0.97	965,666	3	0.3	869,000	874.8	760
Vesenn'aya-3 (V3)	460,000	1.36	625,863	3	0.3	563,000	255.0	145
Vesenn'aya -2 (V2)	500,000	1.15	575,144	3	0.3	518,000	525.7	270
Vesenn'aya -1 (V1)	292,500	1.96	572,023	3	0.3	515,000	1,164.9	600
Boloto 2 (B2 e.f.)	345,000	3.06	1,054,221	3	0.3	949,000	2,108.9	2,000
Udachnaya (U)	100,000	0.60	60000	3	0.3	54,000	1,169.5	60
Total						**9,249,000**	**775.8**	**7,175**

The conceptual mineral potential of the 16 other mineralised zones on the Prognoz property is estimated at between 6,474,000t containing 5,000t of silver (161,481,000oz silver) and 14,798,000t containing 11,500t of silver (369,091,000oz silver) as given in Table 7.22 below.

Table 7.22: Summary of the Conceptual Mineral Potential for a Further 16 Mineral Zones on the Prognoz Property (Micon 2008)

Mineral Potential Range	Mineral Potential (t)	Average Silver Grade (g/t)	Potential Contained Silver (oz)	Potential Contained Silver (t)
Minus 30%	**6,474,000**	**775.8**	**161,481,000**	**5,000**
Base Case	9,249,000	775.8	230,688,000	7,175
Plus 60%	**14,798,000**	**775.8**	**369,091,000**	**11,500**

WAI Comment: *It should be noted that the evaluation of the mineral potential for the Prognoz property is conceptual in nature and that there has been insufficient exploration conducted on the 16 zones contained within the mineral potential evaluation to define a mineral resource. It is also uncertain if further exploration will result in the targets being delineated as mineral resources.*

7.6 Environmental Issues

7.6.1 Soil Protection and Land Tenure

The lands in the Verkhoyanskiy district are used for raising deer, but there are no deer pastures within the property. The topsoil is thin (0.1 to 0.2m) in the area of the Prognoz and almost 90% of the trenching and drilling have been or are planned to be done on material composed of mainly sandstones without forest cover or deer pastures. According to the 2006 to 2010 exploration program outline for the Prognoz, 53.8ha are defined as sites for trenches, drillholes, roads and the other facilities.

Since the exploration programs involve the destruction of the overburden and bedrock by trenching, construction of drill pads and camp facilities, drilling and vehicle movement, the Prognoz exploration and development phases include the implementation of a number of environmental actions. Soil is stripped by a bulldozer and gathered into areas beyond the imprint of the site. Subsoil which is stripped during the exploration stages is placed on the other side of the site and away from possible contamination. Upon the completion of exploration, all areas which have been disturbed are subject to reclamation.

Measures to backfill drillholes are planned to prevent any environmental pollution from open drillholes. According to item 4.3 of "The temporary guideline on the backfilling of exploration drillholes drilled on solid minerals", the easiest way to backfill the drillhole is to fill the hole with a backfill mixture which will freeze within the permafrost and provide an effective method of isolating the hole.

7.6.2 Environmental Monitoring

WAI understands that Buryatzoloto performed the following work in 2006 to evaluate the background level of chemical pollution in the environment:

- Collection and analysing of samples for the lithogeochemical investigation of the soil and soil-forming rocks;
- Collection and analysing of samples for the lithogeochemical investigation of the stream bottom sediments;
- Collection and analysing of samples for the geochemical investigation of the dust emissions through an investigation of the snow cover;
- Collection and analysing of samples for the hydrochemical investigation on the surface water;

- Collection and analysing of samples for a biogeochemical investigation of all layers of the prevalent plant association; and
- Radiometric surveys.

Environmental monitoring is performed using the following outline:

- Hydrochemical sampling of the surface water in the district will include determination of the microcomponents, anion-cation composition with an obligatory determination of the sulphate-ion and sampling of the pH factor once a year;
- Control testing for an accumulation of toxic elements in stream bottom sediments (solid discharge). Testing is to be conducted once every three years;
- Control testing for the accumulation of lead, zinc, cadmium, copper, arsenic, stibnite in soil where lithogeochemical samples are collected. Testing is to be conducted once every three years; and
- Control testing for the accumulation of toxic microcomponents within the vegetation. Testing is to be conducted once every three years

According to an agreement, the laboratory studies were conducted at the specialised accredited laboratories located in the city of Yakutsk and village of Batagai.

8 NERCHA

8.1 Background

8.1.1 Location, Access & Infrastructure

The Nercha gold exploration project is a greenfield site situated in the Shilkinskii district (Transbaikal Region), near to the towns of Shilka and Nerchinsk and approximately 135km east of the regional centre of Chita. The licence is located approximately 5km to the south of the navigable River Shilka, and approximately 15km east of Aprelkovo mine, as shown in Figure 8.1 below.

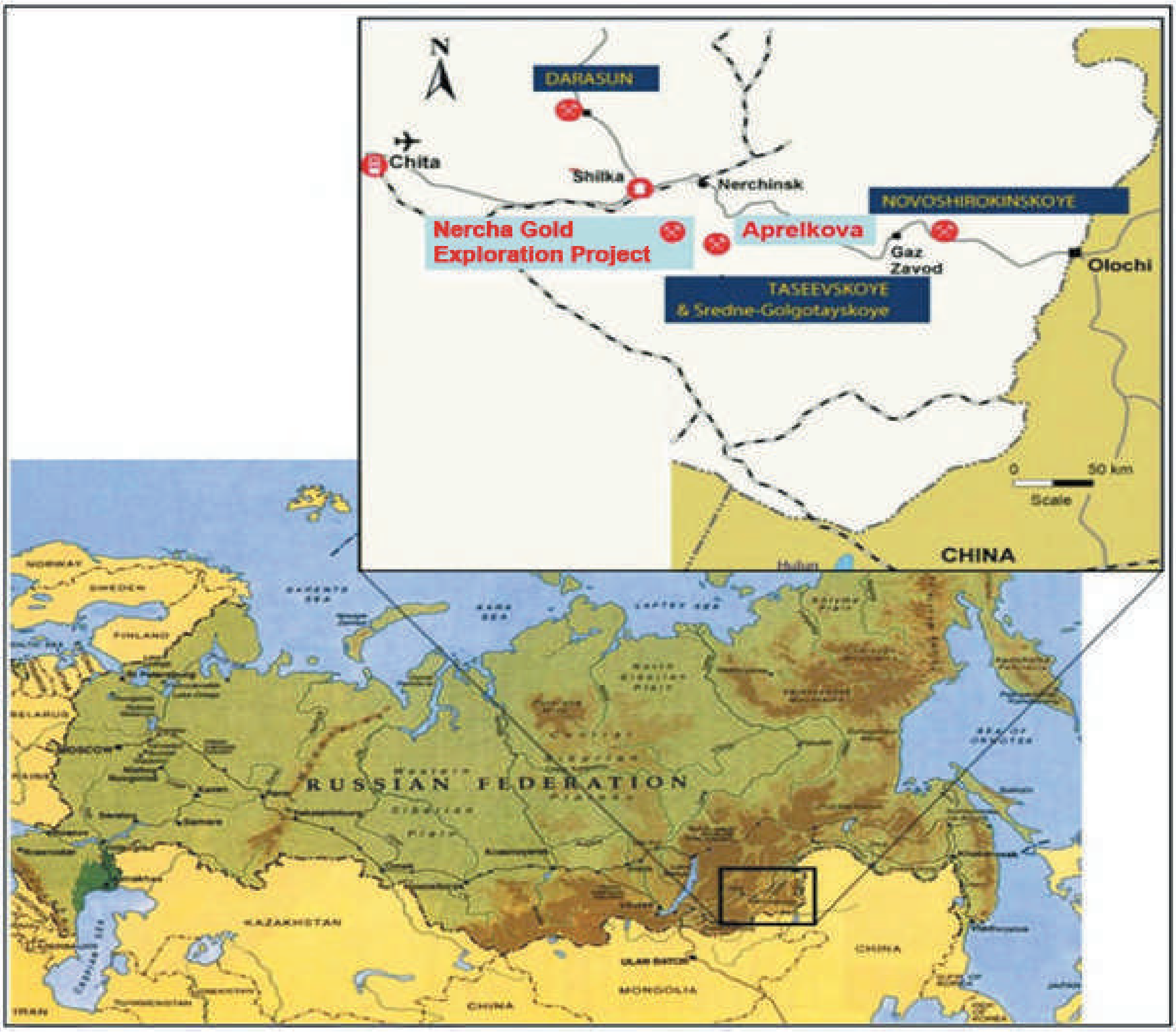


Figure 8.1: Location of Nercha Gold Exploration Project in the Chita Region, Russian Federation

The Trans-Siberian rail road is located on the north bank of the River Shilka, with the nearest stations of Shilka (regional centre), Kholbon and Priiskovaya, at distances of 20, 7 and 45km respectively from the deposit.

8.1.2 Topography and Climate

The elevation of the area ranges from 580 to 665masl. The typical landscape of the licence area consists of low rolling hills and meadows. In general, the licence has a south and west facing aspect and as a consequence is very dry. Slopes are dissected by minor streams and gullies, which remain dry for a considerable period of the year.

The climate is extreme continental with a long winter and short, hot summer. The maximum temperature is +37°C whereas the minimum is -46°C with the annual average of -1.6°C. Annual precipitation is in the range of 300 - 600mm, with most falling in August. Rivers are frozen from November to the end of April - beginning of May. The thickness of the snow cover in winter is usually 15 - 20cm and in winter, soil is frozen to a depth of 3 - 4m.

8.1.3 Licence

The Nercha licence (CHIT 01944 BR), held by the local subsidiary LLC "North Gold Mining Company" covers an area of 34.6km^2 and expires on 01 07 2033 (Figure 8.2).

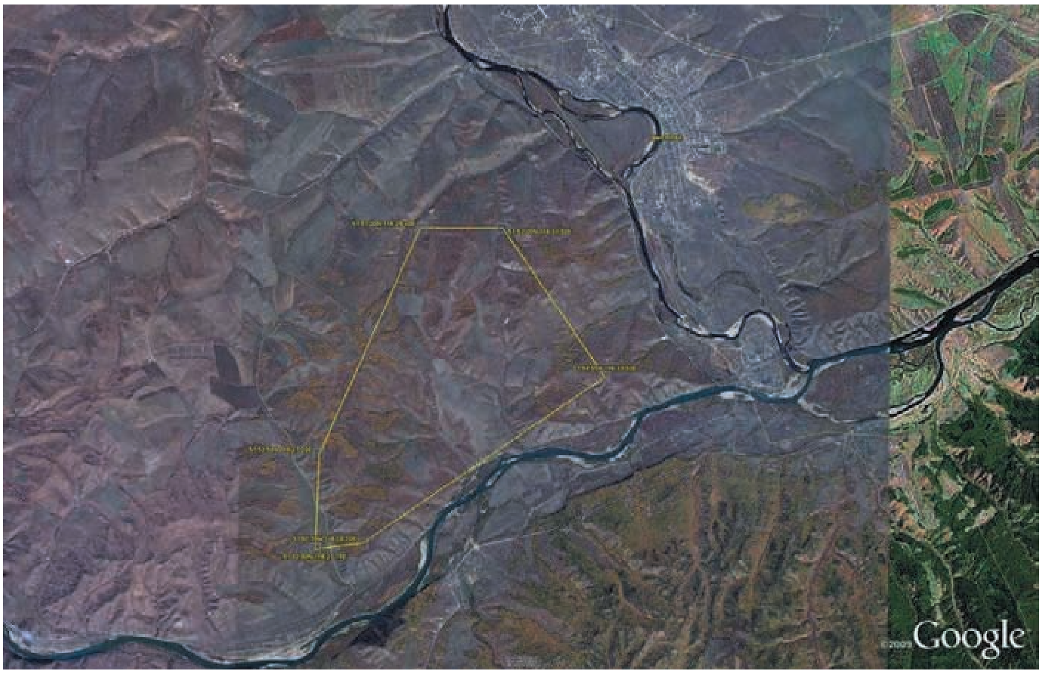


Figure 8.2: Nercha Licence Area (shown in yellow outline)

The corner co-ordinates of the licence are provided in the Table 8.1 below.

Table 8.1: Nercha Licence Co-ordinates		
Point	**Latitude (North)**	**Longitude (East)**
1	51° 52` 30``	116° 27` 15``
2	51° 53` 50``	116° 27’ 20``
3	51° 57` 00``	116° 29` 40``
4	51° 57` 00``	116° 31` 30``
5	51° 54` 55``	116° 33` 50``
6	51° 52` 35``	116° 28` 20``

WAI Comment: *WAI has seen the licence documentation and has no reason to doubt its legitimacy.*

8.2 Geological Setting

8.2.1 Regional Geology

The licence area lies within adjacent parts of the geostructural zones of the Mongolian- Okhotsk mobile belt and the Stanovy region and is located within the regional Mesozoic collision zone between two continental blocks to the north and to the south. It comprises a Paleozoic green schist sequence that also includes minor sub-units of marbles, black shales, quartzo-feldspathic, metasediments and felsic volcanics. The Paleozoic units have undergone strong deformation and are intruded by granitoids of Paleozoic and Mesozoic age.

The most recent rocks are of early Cretaceous and possibly early and mid-Jurassic age (continental sedimentary and volcanic formations) consisting of polymictic volcanoclastic sandstones, minor conglomerates and silt and mudstones with minor flint like rocks. These sediments occur as a graben in the southern part of the property, typically 2 x 3km in size.

Late Pleistocene and Quaternary deposits also cover parts of the area. A plan illustrating the regional geology of the area is given in Figure 8.3 below.

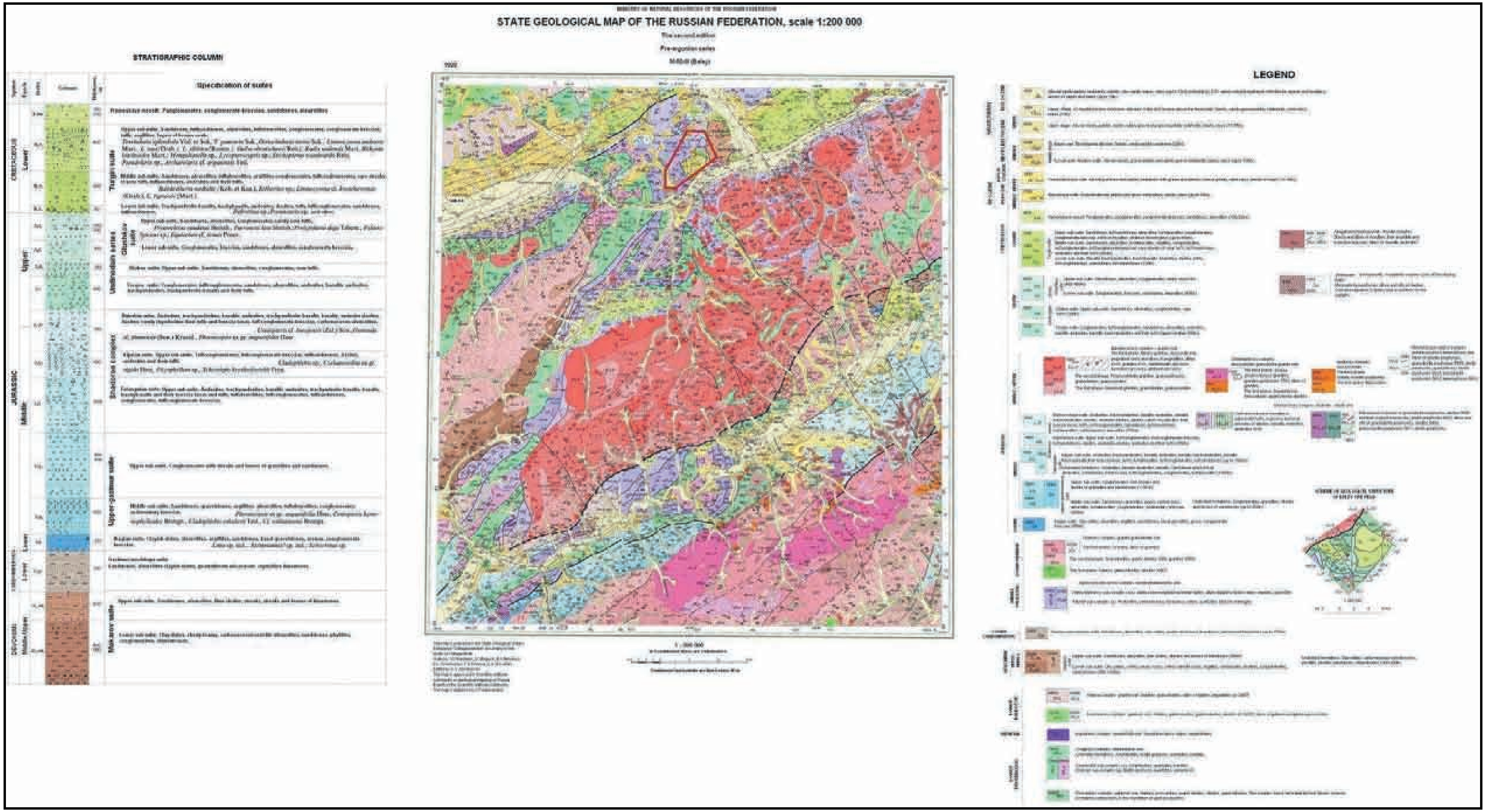


Figure 8.3: Regional Geology of the Area

8.2.2 Local Geology

The majority of the licence area is contained within the West-Stanovaya block, characterised by an elevated gravitational field and by a weakly differentiated low magnetic field. A gently sloping overlap exists between the structures of the Aginsky-Borschovochny zone with the West-Stanovaya block, which is borne out by the gradient of the gravitational field. The zone of articulation between these blocks has a northern dip at an angle of 45-50°. This is thought to represent the marginal listric upthrust deformed in the Late Mesozoic as a result of the formation of granitic dome-like structures in the Aginsky-Borschovochny zone.

A plan showing the main tectonic and lithological units within the licence area is given in Figure 8.4 below.

8.2.3 Structure

Early-Upper Jurassic sedimentary-volcanogenic formations are found within synclinal structures, along the periphery of which are numerous sub-volcanic intrusives, dykes and sills. The structure of these synclines is complicated by local gently sloping flexures, longitudinal (NE-SW) and transverse (NW-SE) fracture dislocation zones which are connected with the recent displacements of blocks.

The longitudinal faults/shears zones (orientated NE-SW) follow the line of ancient faulting, which controlled the bedding of Mesozoic synclinal zones. It is believed that the thrusts, shears and possibly faulting are tensional in nature and are often accompanied by the zones of tectonic brecciation and hydrothermally and metasomatically altered rocks. Mineralisation associated with these zones includes gold, antimony, arsenic, tungsten and mercury.

Transverse structures (orientated NW-SE) consist of parallel shear systems, which dislocate Mesozoic rocks. These faults have both a sinistral and dextral displacement with horizontal amplitude reaching several hundred metres.

The entire system of block-faulting forms an irregular network of diamond-shaped cells which are extended in a SW-NE direction. The structural interpretation of the licence is shown in a schematic drawing in Figure 8.4 below.

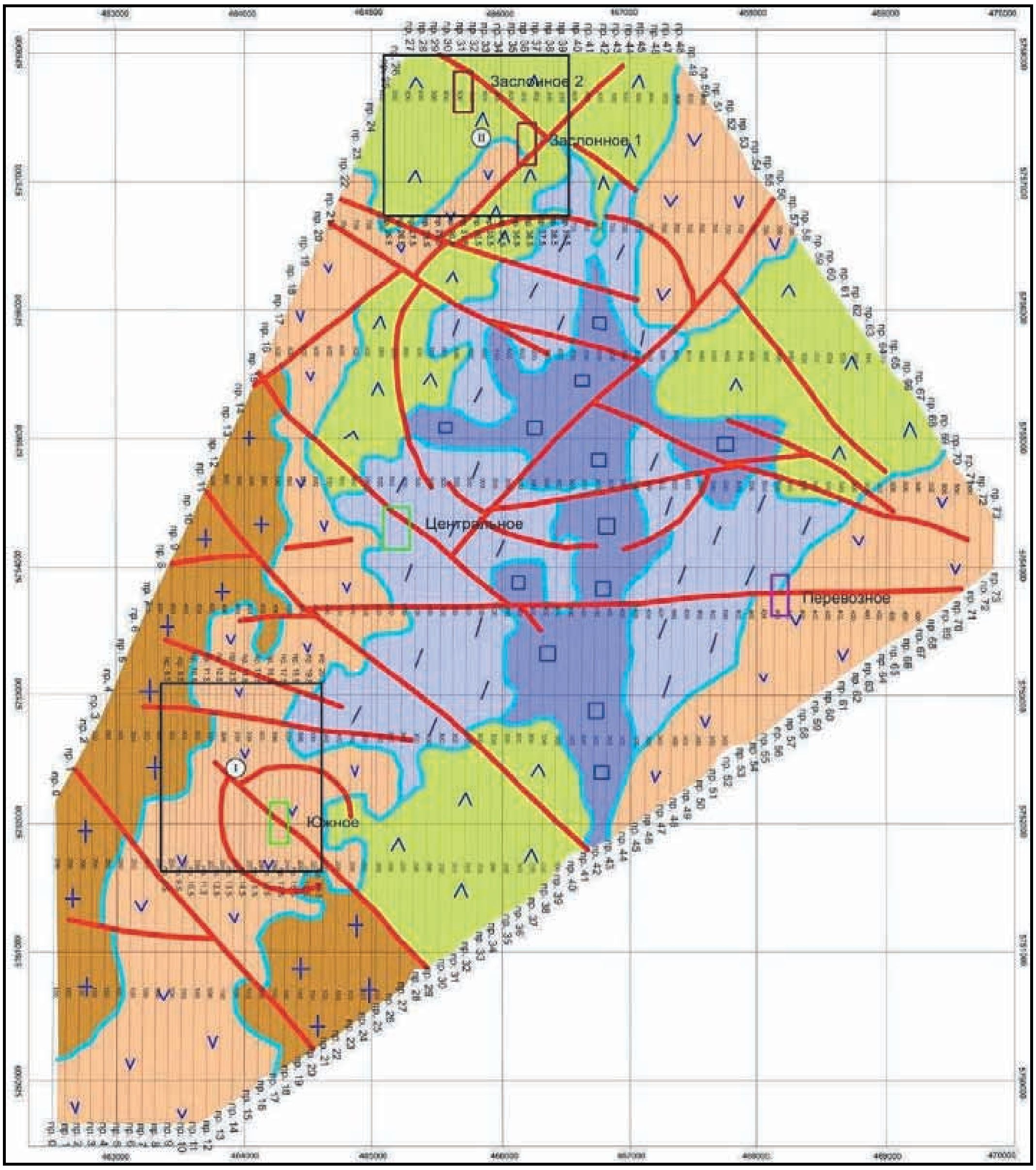


Figure 8.4: Plan showing the Structural Interpretation of the Licence Area

8.3 Exploration

8.3.1 Introduction

This region was intensively explored in the period 1984 -1989 by the Chita Geological Expedition, but no further works were conducted until the licence was acquired by Nord Gold in 2008.

A total of 4 prospective targets were identified for follow-up exploration from 2008, comprising Perevozny (Perevoznoe); Zasloniy (Zaslonnoe); Central (Tsentralnyi); and South (Yuzhnyi) (Figure 8.5).

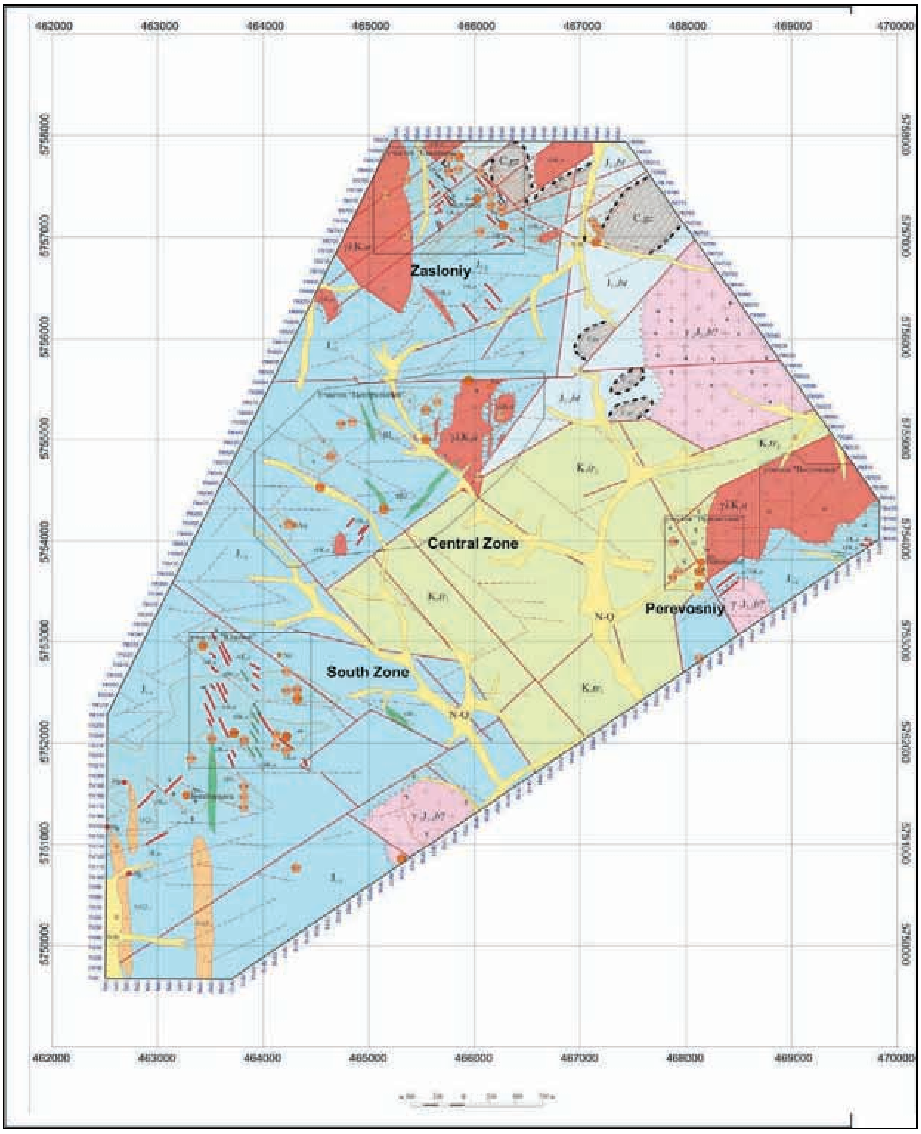
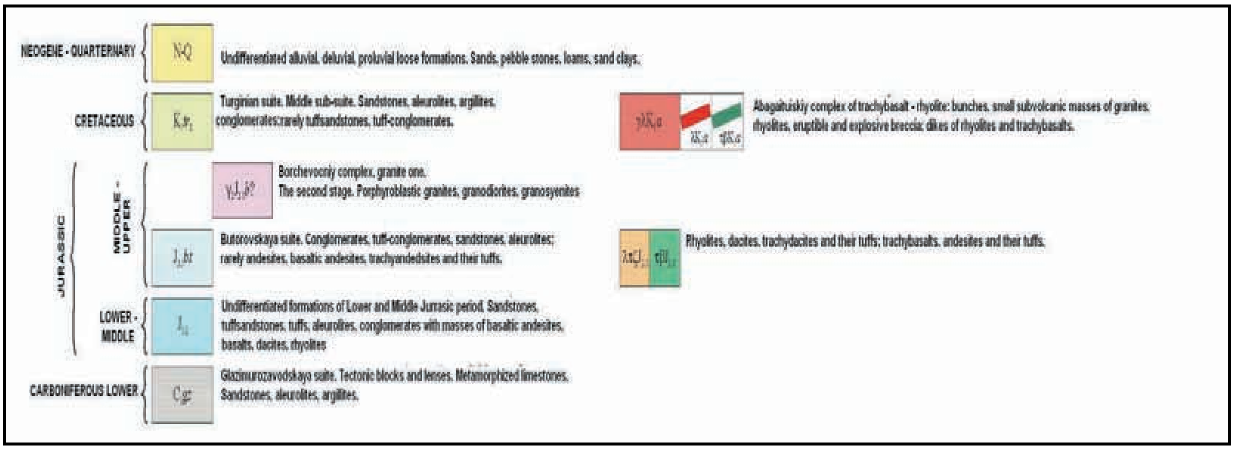


Figure 8.5: Plan showing the Local Geology of the Licence Area and Prospective Targets



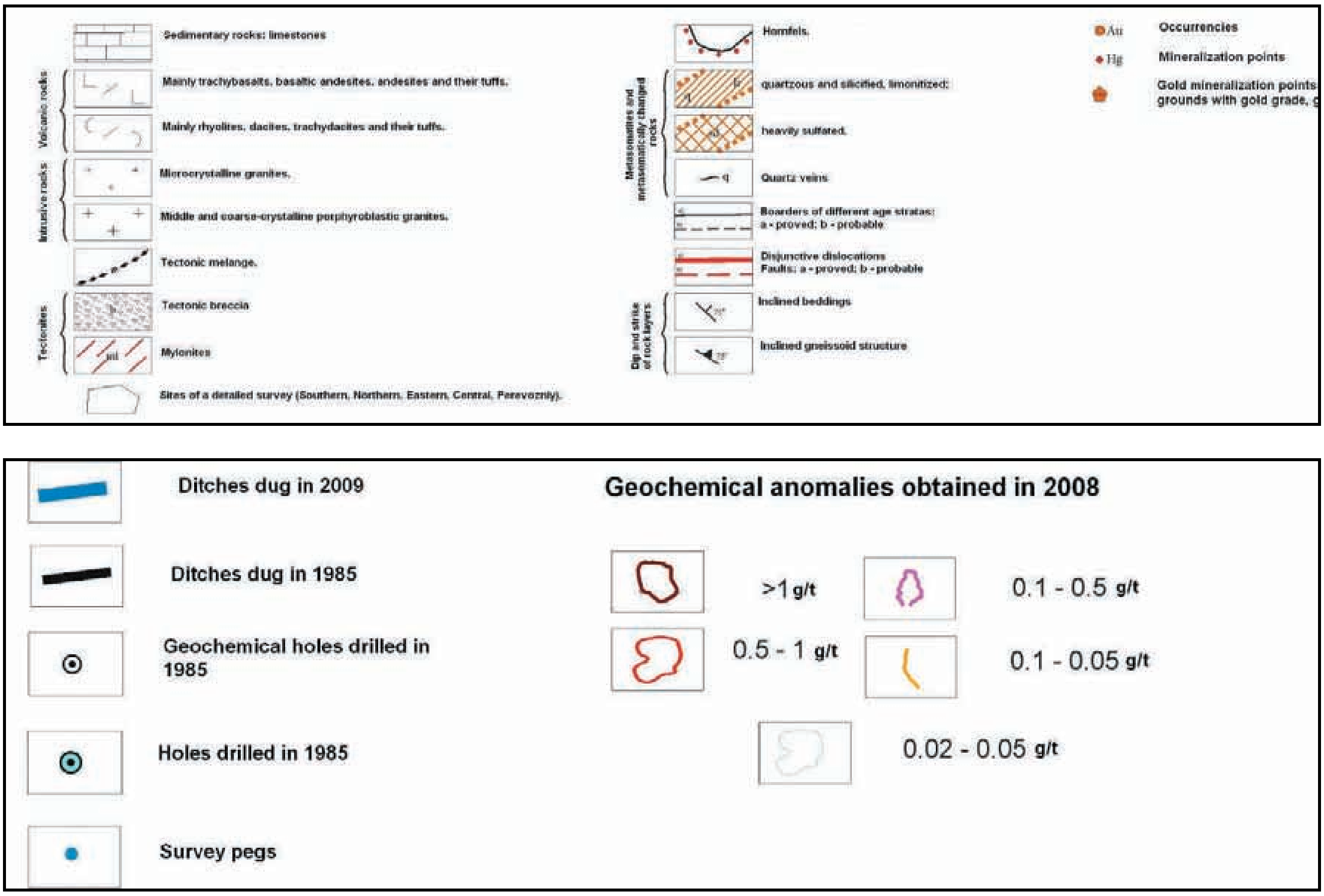


Figure 8.6: Legends for Figure 8.5

8.3.2 Exploration Methodology

8.3.2.1 Geophysics

Induced Polarisation (IP) and magnetic surveys were conducted over the entire licence on an E-W profile grid of 100x100 – 50m. The magnetic survey data have made it possible to ascertain the location of the explosive tectonics in the area, clearly one of the most important exploration targets.

Results of electro-prospecting works have shown that the Nercha territory is clearly divided into an eastern area characterised by low values of apparent resistivity and polarisability and a western area characterised by high values of polarisability and apparent resistance Multidimensional statistical analysis of the geophysical data has outlined, promising targets of sulphide gold mineralisation. Subsequently, a combined analysis of geophysical and geochemical data identified prospective targets where gold-ore mineralisation could be identified.

Notably, polarised objects identified in the western part of the Nercha area continue outside the limits of the licence area, which suggests that continuation of geophysical works in this direction may identify new targets of gold-ore mineralisation.

A composite plot between the IP and magnetic surveys is provided in Figure 8.7 below.

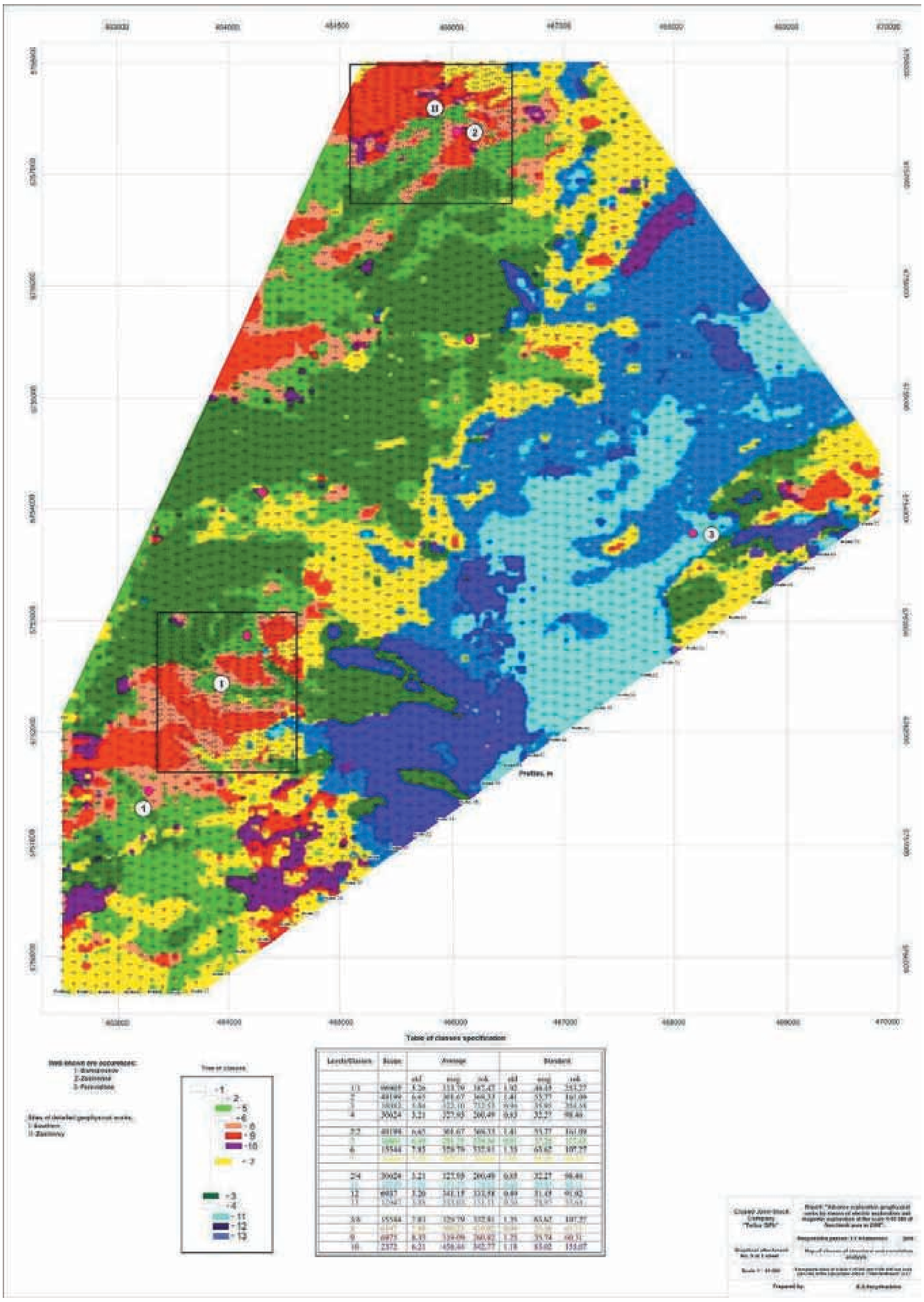


Figure 8.7: Composite Plot between IP and Magnetic Surveys

8.3.2.2 Geochemical Sampling

Soil samples in (2008) were taken from pits (0.4-0.5m depth) over the whole licence on a grid of 100x100m; with more detailed infill over prospective areas on a grid of 100x20m.

Soil anomalies were plotted on 100x100m grid at intervals of 0.0-0.5g/t; 0.51-1.00g/t; >1.0g/t Au.

A total of 3% of the samples analysed at SGS were utilised as control samples (in four separate grade ranges), these were sent for check sampling as part of the QA/QC protocol.

8.3.2.3 Trenching

In 2009, 34 trenches were excavated based on the coincidence of the highest soil and geophysical anomalies. The latter were selected on the basis of:

- High IP anomaly with average resistivity – potentially weak sulphide mineralisation; or
- High Resistivity –Low IP – potential association with quartz stockwork or net veinlet systems.

8.4 Exploration Results from 2009

8.4.1 Perevozny

This occurrence lies at the contact between rocks within a graben and a granitic intrusion and is associated with a shear zone and silica-alkaline low-temperature metasomatism, which trends in a NE-SW direction, along the contact with stratified and intrusive (to a lesser degree) formations.

The Pervosny “orebody” consists of a stockwork zone of thinly banded chalcedony quartz veinlets of variable thickness which has a strike length of 300m and a width of some 80m. The quartz and carbonate veins are typically contained within silicified and brecciated rocks. The number of these veinlets reaches 10-30/linear m (according to Karasev (1990) up to 30-50/linear m). The thickness of the veinlets is typically from 0.2-3.0cm; whilst veinlets with a thickness of approximately 0.5cm predominate.

The occurrence is classified as epithermal low sulphidation type of mineralisation due to the dominance of “chalcedony” like banded quartz, tabular quartz structure, and minor amounts of tabular carbonates.
Carbonate veinlets, with little quartz, are more homogenous along strike and are superimposed on the system of siliceous veinlets, suggesting later formation compared to silica-alkaline metasomatism.

The degree of silicification of rocks appears to be directly proportional to the gold grade. A mineralogical study on the composition of ores from three crushed samples from drill core has established that gold in the ores is fine and dust-like (less than 0,07mm). Grains of pyrite, magnetite, arsenopyrite, antimonite, cassiterite and fluorite were also found to be present.

Historically a vertical borehole intersected mineralisation over an interval of 17.0m at a grade of 1.89g/t Au and in conjunction with results from three other holes, trenching, soil sampling and mapping enabled anomalies and target zones to be identified.

More recent work by Nord Gold included further geophysical and geochemical surveys in 2008 on anomalies previously identified by Karasev. From this work two significant soil anomalies (>1.0g/t Au) have identified within a large elliptical halo (0.1-0.5g/t Au) which trends slightly east of north-south. These are shown in Figure 8.8 with the legend for it shown in Figure 8.9 below.

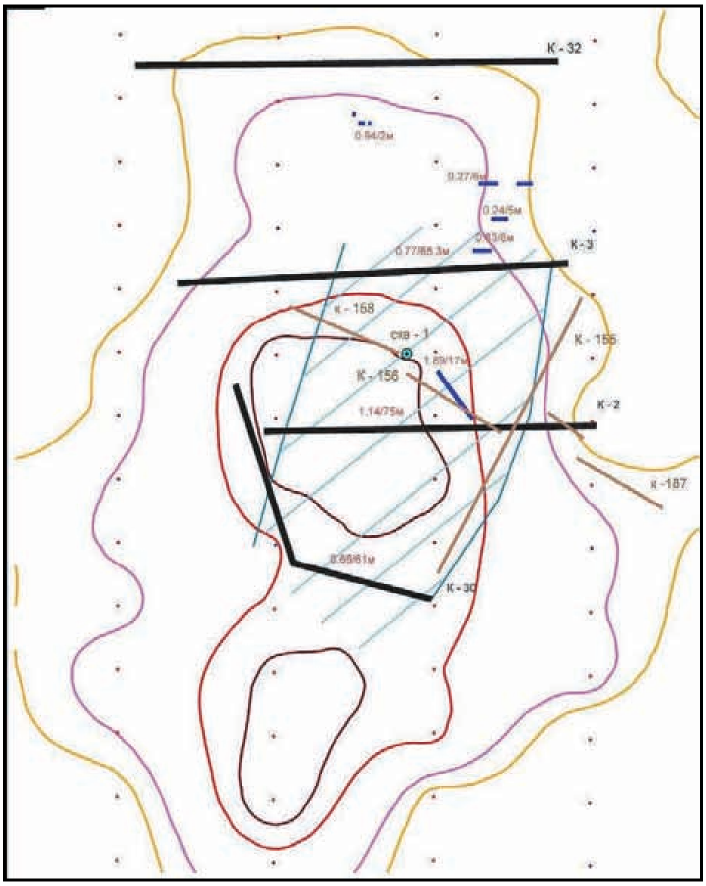


Figure 8.8: Schematic Plan showing Location of Exploration Works Conducted on the Perevozny Anomalies (Scale approx. 1:1,000)

	TRENCHES, MADE IN 2009		GEOCHEMICAL ANOMALIES DISCOVERED IN 2008
	TRENCHES, PLANNED FOR 2009		>1.0G/T
	TRENCHES, MADE IN 1985		0.5-1.0G/T
	DRILLHOLES, MADE IN 1985		0.1-0.5G/T
	SURVEY STAKE (POINT)		0.05-0.1G/T
	ORE SAMPLES		0.02-0.05G/T
1.14/75м	ORE INTERVALS (AU GRADE (G/T) / LENGTH M)		GEOPHYSICS ANOMALY AXIS

Figure 8.9: Legend for Figure 8.8

Four new trenches (orientated E-W and spaced at 80.0m apart) have been excavated by Nord Gold over the anomaly in 2009, with the best of the intersections from three of the trenches given in Table 8.2 below. The results for Trench 32 have not yet been received.

Table 8.2: Perevozny - Best Intersections from Trenching (2009)					
Trench K-30		Trench K-2		Trench K-3	
(m)	g/t Au	(m)	g/t Au	(m)	g/t Au
61.0	0.69	75.0	1.14	65.3	0.77

WAI Comment: *It was the opinion of Karasev (1990) that further exploration at Perevoznoye would prove that this occurrence is sub-economic, since it is represented by low grades of antimony and arsenic and the practical absence of other pathfinders for gold. At that time the forecast resources of gold in P_1 category were 2.8t of gold.*

WAI considers that further detailed geophysics, trenching along strike and a small amount of follow-up drilling are still justified in order to prove if this target has no further potential.

8.4.2 Zasloniy

According to Karasev (1990), this occurrence is associated with the intersection of NW and E-W trending fault zones. The area is hosted by schists, interbedded with quartzites within which intervals of silicification are selectively associated).

Intrusives are represented by stocks and dykes (felsic) of intensively crushed, silicified and limonitic biotite granites, granite-porphyries and subvolcanic granites. Contacts with these intrusions are often marked by silicification, carbonate formation and limonitisation.

Historically, Karasev excavated a total of 14 trenches together with 4 diamond drill holes and a line of geochemical bedrock drill holes to evaluate soil anomalies on this prospect. Trenches to the north of the prospect were found to be barren.

In the historical trenches, a number of intervals (2-17m) contain gold grades up to 0.1-1.0g/t Au and in some samples up to 3.0g/t Au. Zones of pyrite-arsenopyrite mineralisation are associated with these intervals, as well as high grades of arsenic and antimony. Gold grades in drill holes were very poor, rarely reaching 0.1-0.2g/t Au leading Karasev et al, (1990) to suggest that "… the mineralisation of the area does not represent any practical interest".

Inspection of the recent trenching has revealed that grades are not associated directly with quartz veining but found within alteration haloes surrounding felsic intrusives. The recent work (Trenches K-26 and K-27) confirms the investigations of Karasev (1990) who concluded that grades were of a "patchy" nature.

The signature of both geochemical and geophysical anomalies has been ratified by assay results from trenching, which clearly indicates that there has been little movement of the soils overlying the bedrock. Two trenches identified elevated gold grades in the south east sector; the best intersections are given in Table 8.3 and shown in Figure 8.10 below.

Table 8.3: Zasloniy - Best Intersections from Trenching (2009)

K-26 (West Trench)		**K-27 (East Trench)**	
(m)	g/t Au	(m)	g/t Au
1.0	0.67	7.0	1.20
3.0	0.58	1.0	1.70
2.0	0.65	8.0	1.05
1.0	0.78	-	-

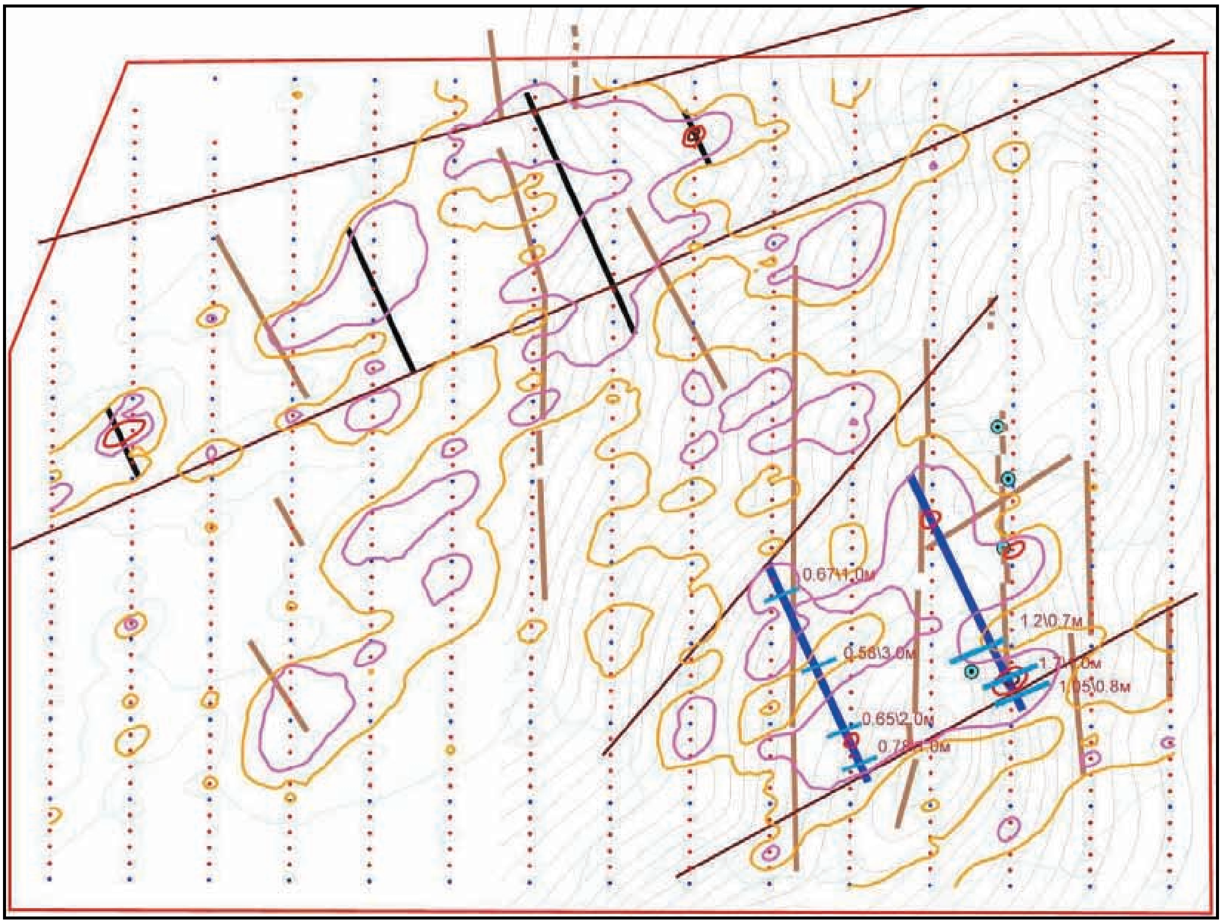


Figure 8.10: Schematic Plan showing Location of 2009 Trenches on the Zasloniy Anomalies (Note: Legend given in Figure 8.9 above, approx. scale 1:5,000)

8.4.3 Central Zone

This prospective area has been identified from results of the 2008 geochemical survey which were encouraging enough for two anomalies (0.1-0.5g/t Au) to be followed up with trenching during 2008.

Trench K-15 has identified a network of minor quartz veinlets, together with chalcedonic quartz hosted within greenschists and felsic volcanic (microgranite). The quartz veinlets often carry grey quartz and minor pyrite, thought to be of epithermal origin. Zones of strongly weathered, reddening of the bedrock were observed in one trench, possibly indicative of weathering of disseminated sulphides. This trench has a similar spatial position as at Perevozny, being located proximal to the edge of the graben.

Trenches K-19, K-20 and K-21 were excavated over a soil anomaly (01.-0.5g/t Au) located on a small granite mass. Trenching has intersected minor quartz veinlets, chalcedonic and crustiform quartz veins and minor secondary copper (malachite). The best results from the trenches are presented in Table 8.4 below.

Table 8.4: Central Zone - Best Intersections from Trenching (2009)

K-19		**K-20**		**K-21**	
(m)	g/t Au	(m)	g/t Au	(m)	g/t Au
5.0	0.13	13.0	0.15	15.0	0.23
1.0	1.00	14.0	0.14	-	-

8.5 Southern Zone

Five trenches have been excavated over this prospect, and show a very strong correlation between the primary geochemical haloes and the position of elevated gold grades in the channel sampling.
Trenching has identified greenschists interbedded with black shales which are in turn intruded by NNW-NNE trending gabbroic dykes and felsic units. The greenschists host what appear to be tectonically controlled minor quartz veins and veinlets. Visible pyrite has been identified in strongly reddened zones of weathering.

Results are available for only 3 of the 5 trenches; the best intersections and assay results are given in Table 8.5 below.

Table 8.5: Southern Zone - Best Intersections from Trenching (2009)

K-7		K-8		K-10	
(m)	g/t Au	(m)	g/t Au	(m)	g/t Au
2.0	0.66	11.0	0.42	15.2	0.85**

** includes intersection of 4.2m @ 1.5g/t Au

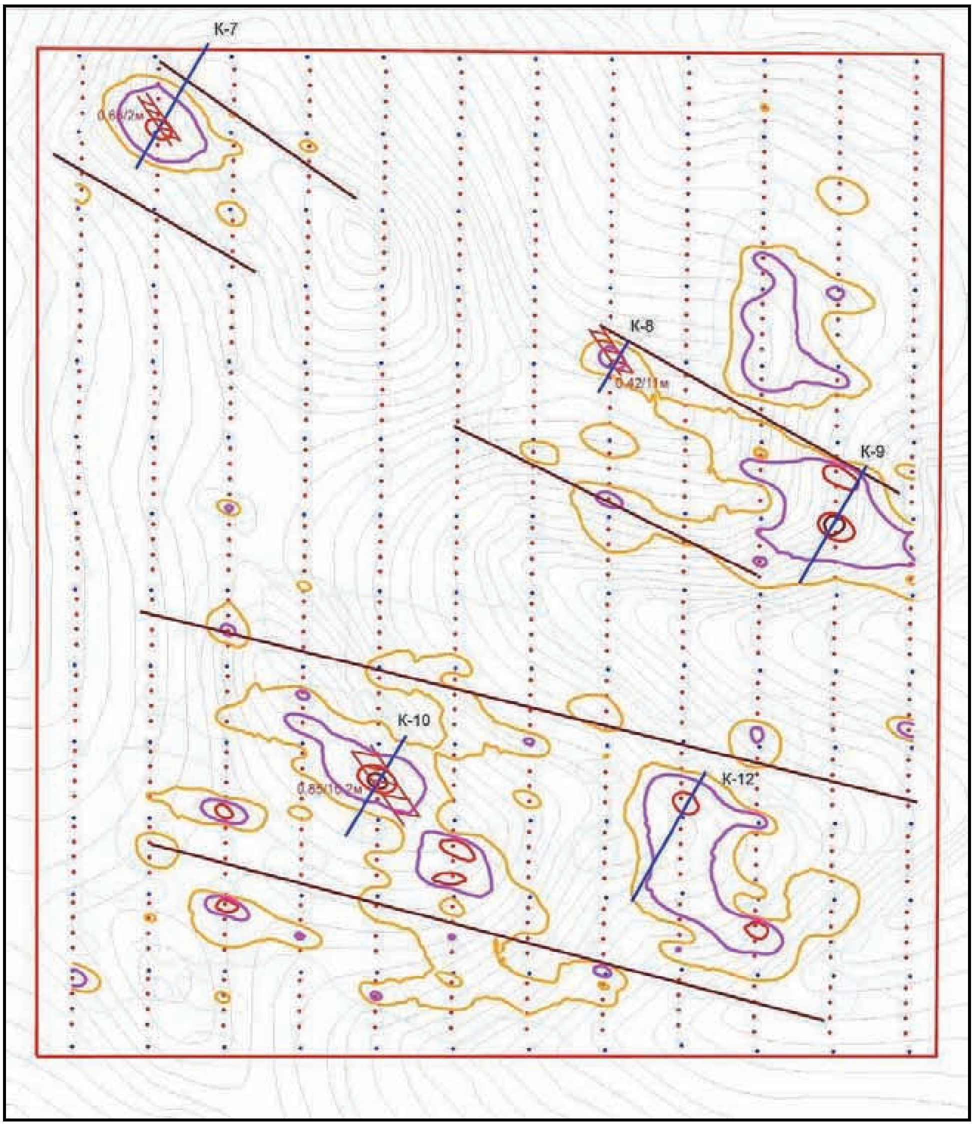


Figure 8.11: Schematic Plan showing Location of 2009 Trenches on the Southern Zone Anomalies (Note: Legend given in Figure 8.9 above, approx. scale 1:5,000)

The intersection found in Trench K-10 (from 71.4 - 86.6m intersecting 15.20m of mineralisation grading 0.85g/t Au) included an internal interval of 4.2m @ 1.5g/t Au and occurred in brown coloured altered greenschists (mafic/metavolcanics) interbedded with black shales and intruded by narrow felsic dykes (dipping north at +50°). Alteration is marked by deep reddening of the bedrock (possibly due to ankerite-iron carbonate?); however mineralisation appears patchy and discontinuous.

8.5.1 Bishiginskoe

Bishiginskoe lies at the south-western end of the licence and is considered as a south western continuation of the Southern zone, which contains only patchy soil chemical anomalies. No work has been considered for this mineral occurrence.

8.5.2 Eastern Zone

The Eastern Zone, located to the east of Perevozny, is marked by a minor geophysical anomaly and weak geochemical signal. This is currently counted as a minor secondary target by Nord Gold and no exploration work is planned here.

8.6 Exploration Results From 2010

The exploration programme for 2010 has consisted of further reconnaissance works on the Perevozny and Yuznyi gold targets already defined by soil geochemistry, geophysics and follow-up trenching. The total approved budget for 2010 was US$1.47M.

The exploration works conducted in 2010 is given in Table 8.6 below.

Table 8.6: Exploration Works Conducted in 2010

Type of Works	Work Completed
Topographic survey and grid establishment for geophysical studies	42km
IP gradient survey and resistivity, 3D IP-resistivity survey	42km
Trenching	9,586.7m^3
Mapping	85km
Diamond Drilling	5157.8m

8.6.1 Perevozny

The Perevozny gold target has been traversed by an additional 4 trenches which has exposed the continuation of the stockwork zone of the identified epithermal style mineralisation. The average width of the stockwork is 70m with an average grade of 0.9g/t Au.

A total of 55 drill holes were completed at Nercha during the year totaling 5,157.8m. 33 diamond drill holes have been drilled at Perevozny, totaling 3,037.3m on a grid of 40x40m and in some areas on a 40x20m grid. One metallurgical sample has been collected from several holes and will be sent for test work in 2011.

A location plan showing the position of trenches and drill holes from 2010 is given in Figure 8.12 below.

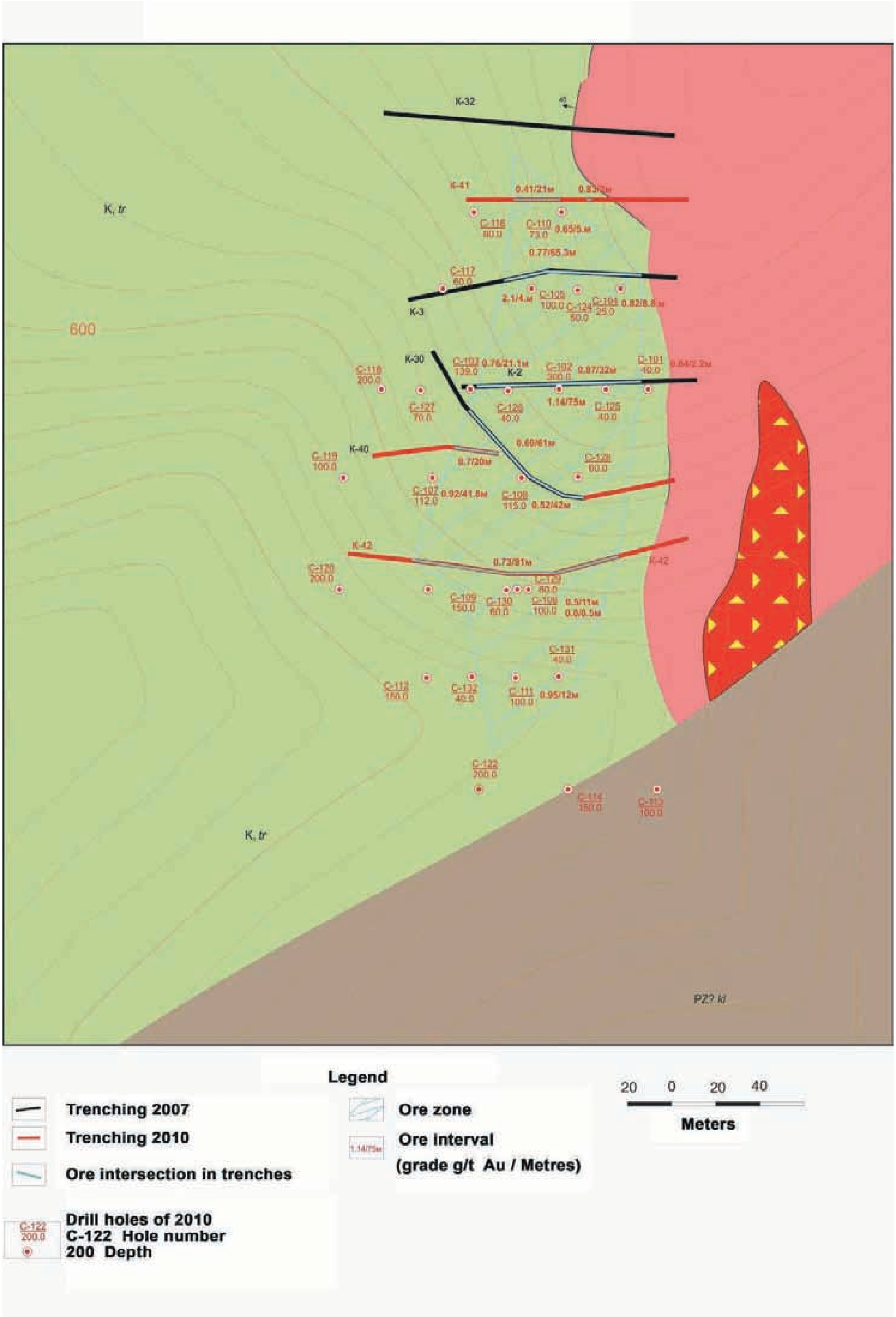


Figure 8.12: Location of Trenches and Drill Holes from 2010 at Perevozny

Some of the best intersections from trenches and drill holes are presented in Table 8.7 below.

Table 8.7: Drilling and Trench Results - Perevozny	
Trench/DD	**Intersection**
Trench No.2	0.75m@ 1.14g/t Au
Trench No.3	65.3m@ 0.77g/t Au
Trench No.30	79.0m @ 0.78g/t Au
Trench No.42-43	62.0m @ 0.87g/t Au
DDH No.102	32.0m @ 0.87g/t Au
DDH No.103	21.1m @ 0.76g/t Au
	6.0m @ 1.21g/t Au
DDH No.106	42.0m @ 0.53g/t Au
DDH No.111	12.0m@ 0.95g/t Au
DDH No.110	5.0m @ 0.65g/t Au
DDH No.105	4.0m @ 2.10g/t Au

It should be noted that further assay results from this year's program remain pending.

8.6.2 Yuzhniy

The Yuzhniy target had been transverse by 33 trenches (totaling 3,787m and recently 22 holes have been drilled, totaling 2,120.5m. Results from drill holes are not yet available. All assays are being conducted at the SGS laboratory located in Chita. Some of the results from trenching are available and are given in Table 8.8 below.

A location plan showing the position of trenches and drill holes from 2010 is given in Figure 8.13 below.

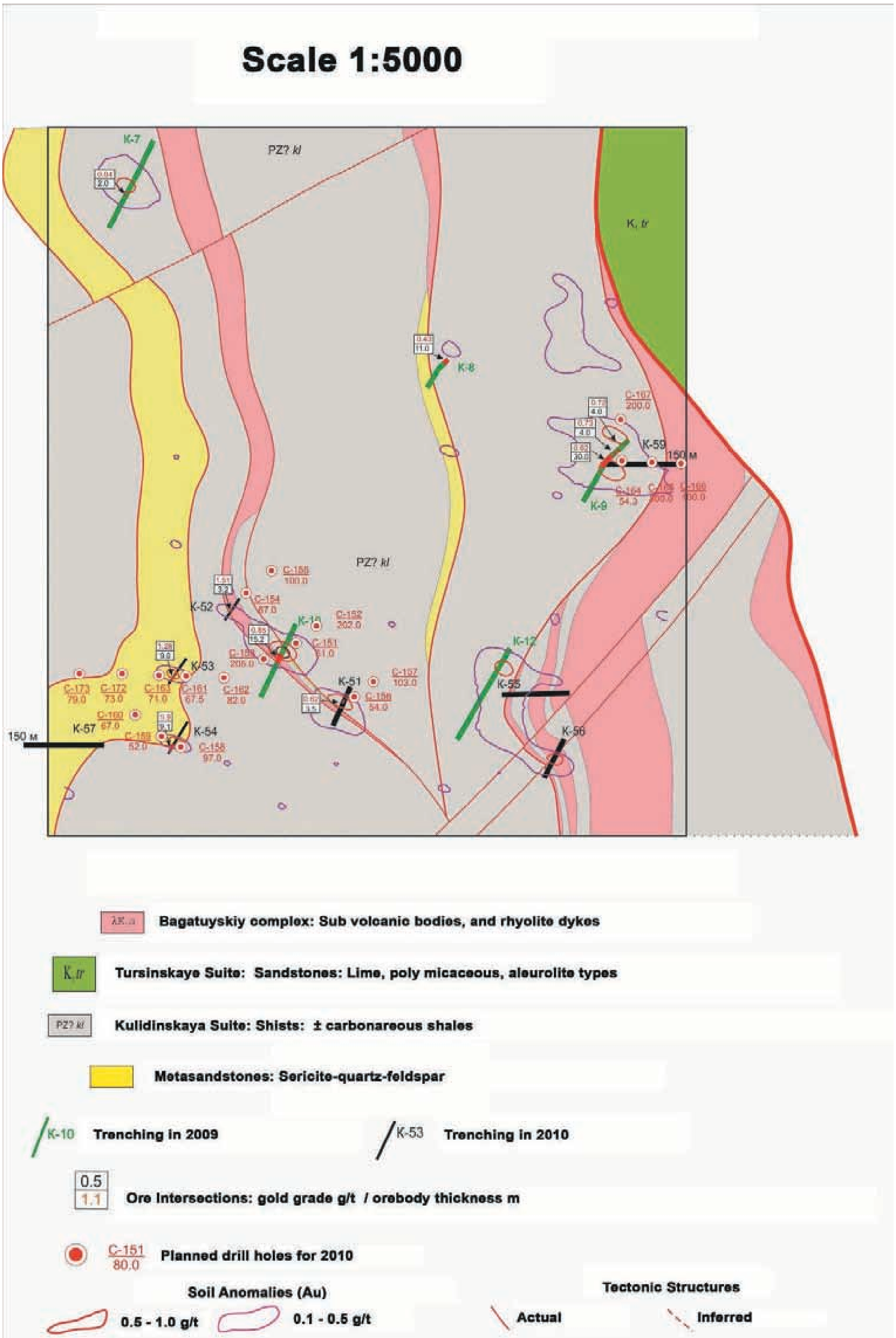


Figure 8.13: Location of Trenches and Drill Holes from 2010 at Yuzhniy

The budget assigned for 2011 was US$1.69M for 5,000m of diamond drilling and 1,0000m^3 of surface trenching.

Table 8.8: Trench Results - Yuzhniy

Trench	Intersections
Trench No.54	9.1m@ 5.9g/t Au
Trench No.53	1.28g/t@9.0 m
Trench No.10	0.85g/t@15.2 m
Trench No.9	0.62g/t@30 m
Trench No.8	0.43g/t@11 m
Trench No.58	0.73g/t@12.7 m 0.86g/t@9.0 m 0.65g/t@6.0 m
Trench No.59	0.8g/t@16.0 m 0.62g/t@6.3 m

WAI Comment: *In January 2011, WAI received additional exploration data on the activities undertaken during the 2010 as well as projected budgets. WAI presents these data as received, without further comment, as no recent site visits have been implemented.*

8.7 Resources and Reserves

No C_1 or C_2 reserve estimates exist for the licence area.

8.8 Conclusions and Recommendations

WAI has reviewed the exploration works conducted by Nord Gold at Nercha and reached the following conclusions:

- Nercha is a green field site which is still at an early stage of exploration;
- The exploration conducted by Nord Gold has been to a very high standard;
- The results for the Yuzhaya Zone remain inconclusive (not all of the assays have yet been received from trenching and drilling in 2010);
- Clearly, Perevozny is considered the main target by Nord Gold as it illustrates its clear affinity with low sulphidation style of mineralisation and is suitably located within the graben. It can be correlated with a post collision mineralising event that is responsible for such giant gold deposits as Balei and Taseevskoe, which are similarly hosted within late sedimentary rocks of a post collision graben and are located only 80km to the south west of the Nercha property. These two epithermal deposits together have produced more that 600t of gold since discovery in the late twenties of the last century. Another analogy is the recent discovery of Fruta Del Norte in south-east of Ecuador by Aurelian Resources, another example of epithermal mineralisation related to a graben structure which exhibited a very weak surface geochemical signature, but has produced of industrial grade mineralisation at depth;
- WAI considers that the proposed exploration work for 2011 will be adequate to explore Yuzhny, Centralny and Zaslonny targets in sufficient detail so as to be in a position to decide the feasibility of taking the project forward or to terminate the licence; and
- WAI considers that all of the other prospects identified so far require additional exploration and some drilling for better definition of their economic potential.

9 URYAKH

9.1 Background

9.1.1 Location Access & Infrastructure

The Uryakh gold exploration project is situated in the extreme south-eastern part of Bodaybinskiy district of Irkutsk region on the border with the Republic of Buryatiya and Transbaikal region of the Russian Federation. The project lies approximately 150km north of the main Baikal-Amurskaya (BAM) railway.

Road access is by 4WD truck and during winter (February to the beginning of April), delivery of materials and equipment has been possible along a winter road.

The nearest populated areas are Nelyaty village and Muya village located at distance of 60 and 70km respectively (direct distance). The main center, Bodaibo town, is situated at 180km distance from the licence (Figure 9.1).

The deposit is located approximately 5km to the south the navigable River Vitim, as shown in Figure 9.1. There is no power supply to the licence area, whilst potable water is obtained from any of the local streams and the Uryakh river valley itself. Drill rigs and earth moving equipment were transported to site along the Vitim River by means of tug and barge.

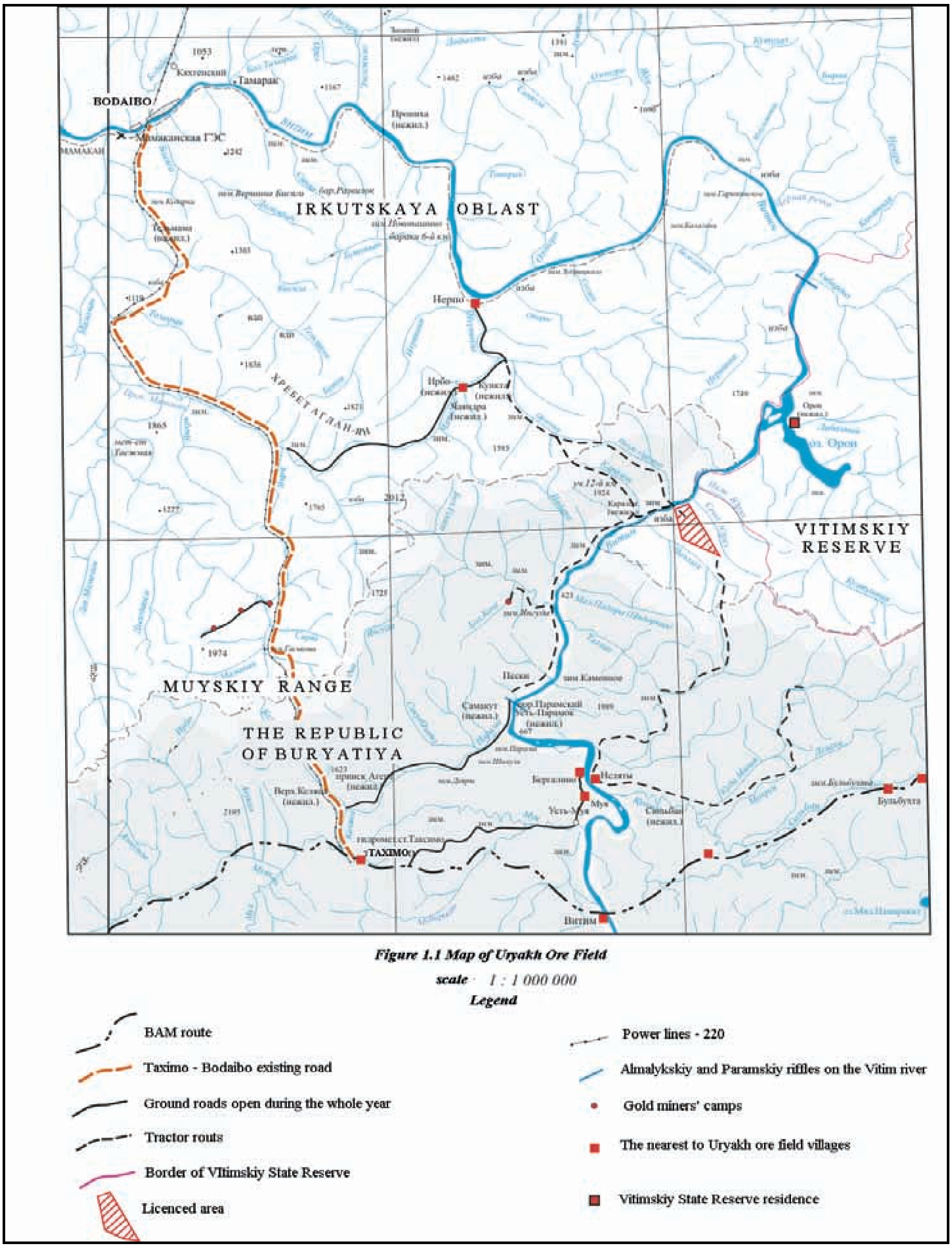


Figure 9.1: Location of the Uryakh Licence Area (Shown in Red Hatch)

9.1.2 Topography and Climate

The licence area consists of mountainous terrain dissected by steep sided river valleys. The elevation of the area ranges from a maximum of 1,400-1,500masl in the south east to 350masl at the Vitim River.

The climate is extreme continental with a long cold winter and short, hot summer. The maximum temperature is +35°C, whereas the minimum is -58°C, with the annual average of -6.1°C. Annual precipitation is in the range of 310 - 315mm with most of it falling in August. Rivers are frozen from November to the end of April - beginning of May.

The permafrost is developed to 50-400m depth in the region, whilst the depth of seasonal thawing is from 0.5 to 1.5m; with northern slopes often remaining frozen.

The region is not seismically active.

9.2 Licence

The Uryakh licence is held by the local subsidiary LLC "North Gold Mining Company". The licence number is IRK 02473 БР, which will expire on 20.11.2032.

The corner co-ordinates of the licence are provided in the Table 9.1below:

Table 9.1: Uryakh Licence Co-ordinates		
Point	**Latitude (North)**	**Longitude (East)**
1	57° 01` 53``	116° 00` 00``
2	57° 02` 50``	116° 05` 00``
3	56° 56` 40``	116° 09` 40``
4	56° 57` 42``	116° 06` 25``
5	56° 58` 57``	116° 01` 20``

The licence covers an area of 52.17km^2 (Figure 9.2).

Figure 9.2: Uryakh Licence Area

WAI Comment: *WAI has seen the licence documentation and has no reason to doubt its legitimacy. However, WAI has not been able to confirm the boundary co-ordinates and would recommend that these, as well as the actual licence agreements, be checked under a separate legal due diligence.*

9.3 Geological Setting

9.3.1 Regional Geology

The Uryakh gold licence lies in the 'Lenskaya gold-bearing province' of the northern Baikal mineralised belt.

The area is located on the regional Syulbanskiy fault zone which is found at the junction of mixed age sedimentary-metamorphic and volcanogenic formations where significant gold occurrences have been identified.

Igneous rocks in the area consist of a three-stage intrusion comprising ultrabasic, basic and felsic phases, and later Paleozoic basic dykes; the ultrabasic component has not been identified at Uryakh.

The third phase comprises granite and plagiogranite rocks developed in intrusions of metagabbroids and in metavolcanics have been identified at the centre of the Uryakh ore occurrence. The thickness of these bodies varies from 100-200m to 2km, with a strike length of 3-5km and they often contain hydrothermal veinlets, lenses of quartz and albite, and occurrences of sulphidation and carbonation.

The igneous rocks in the regional Syulbanskiy fault zone exhibit sheared and mylonitised textures. Contact between igneous and host rocks are sharp and distinctively sheared. Dyke-like bodies of igneous rocks are beresitised, fissured and host gold-bearing quartz ladder veinlets.

Dyke formations include bodies of diabase, diabase-porphyry and granite-porphyry, typically having thicknesses of 0.3-1.5m and can be traced for 10m along the strike. The contact between dykes and host rocks is sharp and sheared.

A map illustrating the regional geology of the area is shown in Figure 9.3 below.

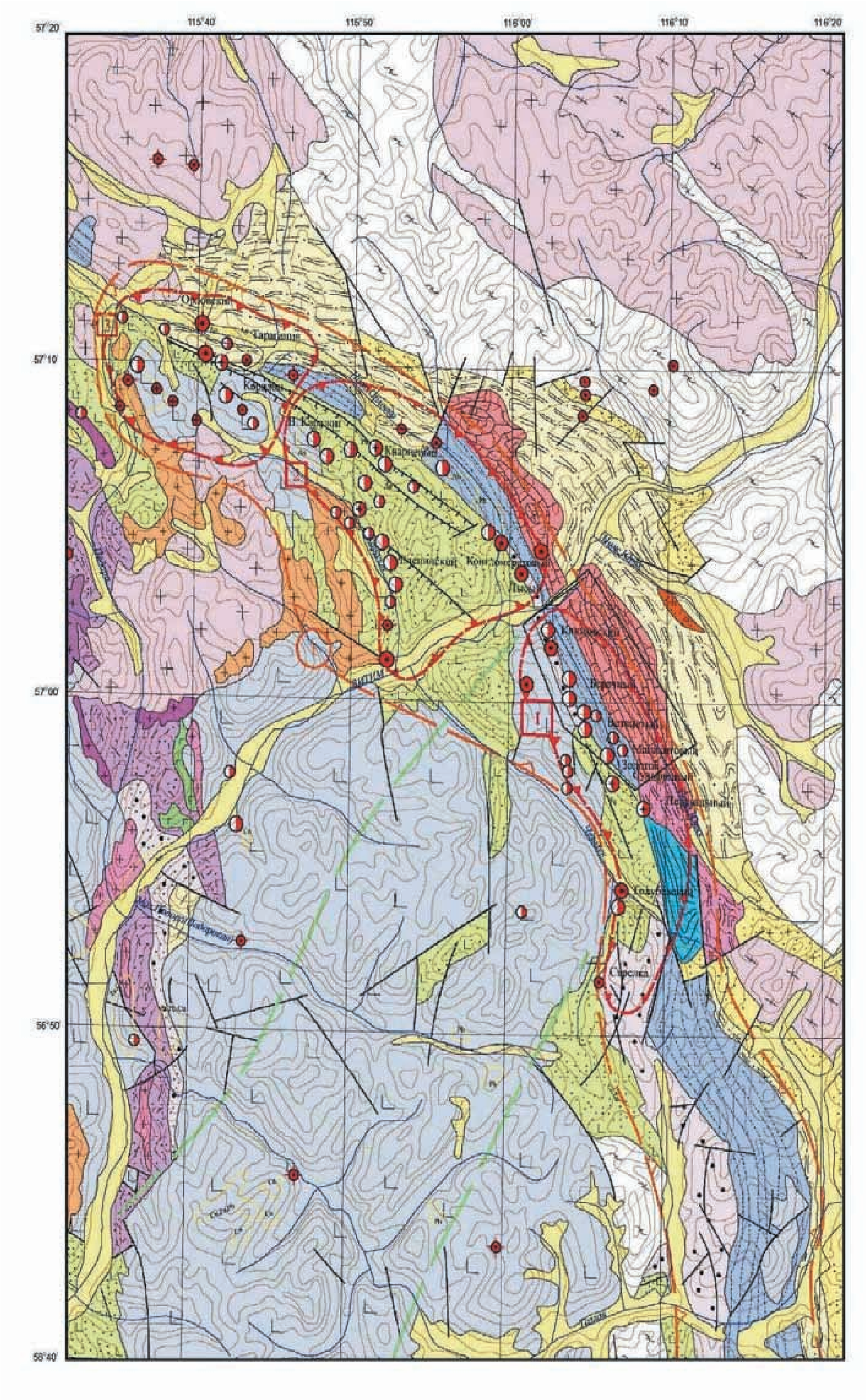


Figure 9.3: Regional Geology of Uryakh

Legend for Regional Geology Figure 9.3			
	Nonsegmented Quarternary ice-laid and alluvial formations	**Ore Formations**	
	Konkudera-Mamakan complex ($\gamma P2_{2-3}$) Biotite and Amphibole-biotite Granites		Gold-quartz
	Nonsegmented Vendian-Cambrian sediments. Conglomerates, Sand stones, Aleurolites, Limestones and Dolomites		Gold-quartz-sulphide
	Vendian terrigenous variegated sediments. Conglomerates, Volcanomictous sandstones		Gold-sulphide
Padrin Volcanic-plutonic Associations		**Ore Morphology**	
	Diabases, Diabase Porphyrites, Basalts		Vein
	Granophyric granosyenites		Stockwork
	Rhyolites, Trachyrhyolites		Impregnated and veinlet-impregnated
	Nonsegmented Volcanic-tuff-Terrigenous rocks	**Other Symbols**	
Island arc association (R_1) Tallon (Muya) Intrusive Complex			Ore occurrences
	The second phase (γR) Plagiogranites, Diorites, Quartz diorites		Point of mineralisation
	The first and second phase. Poorly defined Gabbro, Gabbro-diorites, Diorites, Diabases, Plagiogranites, Orthoamphibolites		Lythological and geochemical dispersion halos
	Ust-Kelyan volcanic complex (R). Plagiorhyolites, Porphyries of Andesite-basalt composition	**Gold Ore Zones**	
	Kuanda complex of Gneiss-granites		Tallon-Karalonskaya
	Archean Formations. Poorly defined Gneiss-amphibolite complex		1 – Uryakh, 2 –Karalonskoe, 3 - Orlovskoe
Paleoshelf (R_{2-3})			Licence contour
	Rodionovskaya suite. Carbon-bearing Sand stones, Schists		Name of sites (gold ore occurrences) of 1:10000 and 1:25000 scale
	Watershed suite. Sandstones, Carbon-bearing Schists		Syulbanskiy fault suture
	Ust-Urykh suit. Limestones		Steeply dipping dislocation with a break of continuity
	Uryakh suite. Alternation of Limestones and Carbon-bearing Schists		Overlaps and upthrusts
	Kedrovskaya suite. Meta sand stones and meta auleurolites		Uryakh-Chelochenskaya zone of hidden fault
	Daninskaya suit. Quartzite-schists, Aluminous Shales		Borders of geological formations

9.3.2 Structure

Mineralisation within the Uryakh licence is associated with changes in strike and branches off the Syulbanskiy fault zone, typically where it is also crossed, both diagonally and obliquely by other tectonic structures. No significant folding has been identified within the licence area.

There appear to have been three successive stages of tectonic activity within the licence area, giving rise to the formation of shear zones (from oldest to youngest), these are:

- Formation of the Syulbanskiy fault as an upthrust-shearing structure (pre-ore tectonics); the fault strikes N-S for more than 15km, dips steeply (50-75°) towards the SW, and locally becomes twisted and dips to the NE at 50°;
- Formation of the Uryakh-Chelolek zone of dislocation consisting of a steeply dipping zone of fissures trending WNW. Strike-slip adjustment movements have led to the opening of fissures of both WNW and E-W direction, and infilling by sulphide-bearing quartz has resulted in different morphological types of orebodies, from systems of single, thick and elongate veins to zones of stockwork mineralisation. The result of this tectonic activity has been the development of three generations of quartz mineralisation, initially in the form of thin veinlets and later by the arrival of the main sulphide-Au bearing solutions. Subsequent mineral assemblages typically consist of quartz, pyrite, sphalerite, galena, chalcopyrite, tetrahedrite and gold. Gold has a close paragenetic connection with the association of chalcopyrite-galena-tetrahedrite ore, being generated at temperature of 230-210°C. Quartz-II is generated in the form of thin stockwork-type veinlets, accompanied by localised processes of beresitisation and quartz-carbonate metasomatism. The end of this productive stage of mineralisation was marked by the intrusion of quartz veins; and
- This third stage of tectonism is characterised by the development of zones of fissuring and schists within earlier decomposed flat structural systems. On the walls of these fissures a fourth generation of mineralisation is often developed, in the form of an accumulation of depressed crystals of fluorite and carbonate-III.

9.3.3 Local Geology

9.3.3.1 Mineralisation

Three *morphologica*l *types* (veins, stockworks and veinlets) of mineralisation have been identified within the licence area in previous exploration and confirmed by work in 2008 *viz.*:

- Gold-bearing quartz veins;
- Stockworks in quartz-carbonate metasomatites;
- Stockworks in beresitised plagiogranites; and
- Veinlet-impregnated mineralisation in carbonaceous shales.

The distribution of the various types of mineralisation identified at Uryakh are shown in Figure 9.4 below.

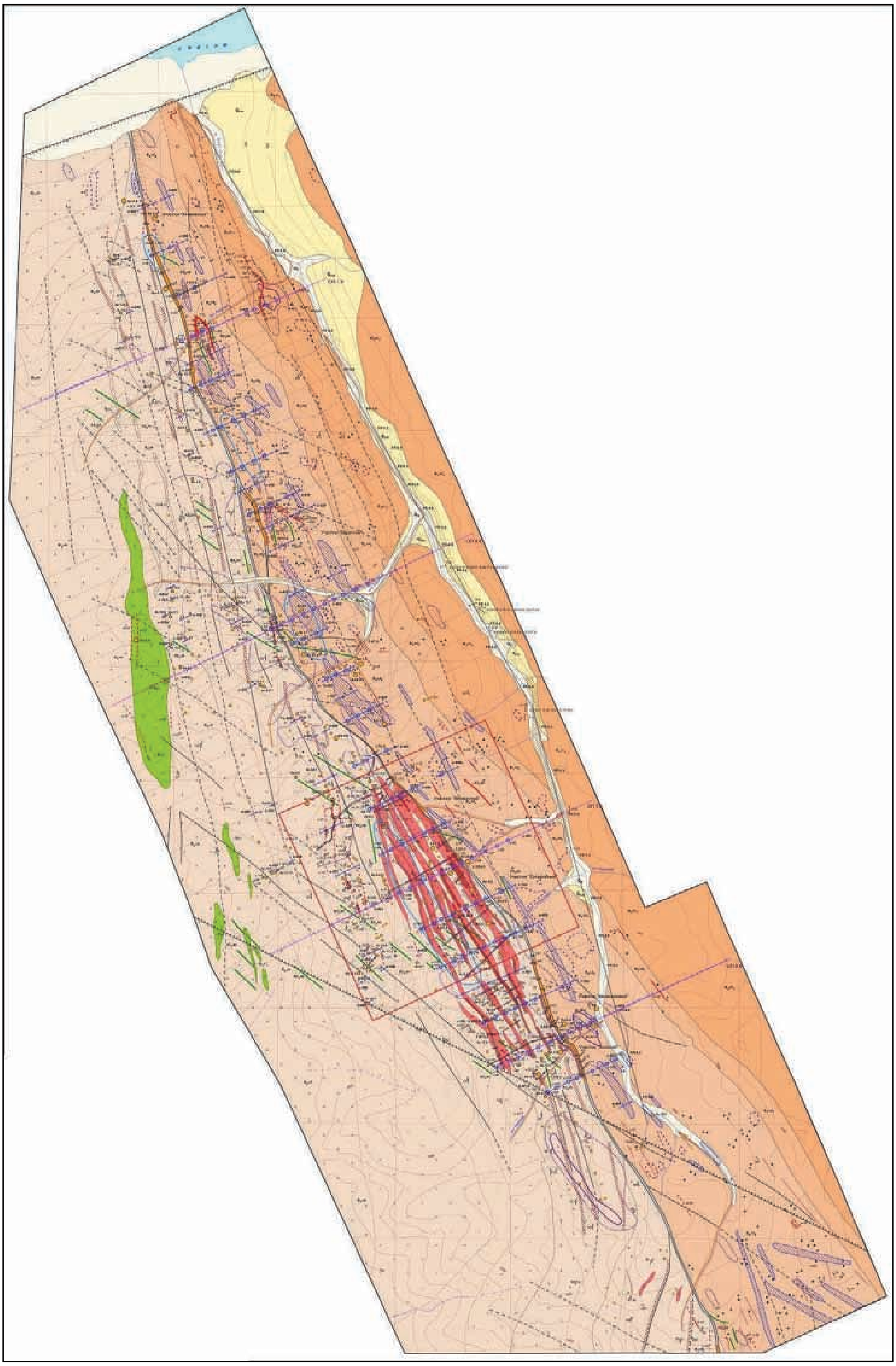


Figure 9.4: Plan showing the Local Geology and Distribution of Mineralised Structures

Legend For Figure 9.4			
Q_H	HOLOCENE. FLOODPLAIN SEDIMENTS OF RIVER VALLEYS		LINEAR NEGATIVE ANOMALIES, ASSOCIATED WITH ZONES OF SULPHIDE MINERALISATION
Q_{II-III}	TERRACED SEDIMENTS OF RIVER VALLEYS		QUARTZ-CARBONACEOUS METASOMATITES FROM TECTONICAL CONTACT OF SULBANSKIY FAULT
$PZ_3 kb$	KADALY-BUDUINSKIY INTRUSIVE COMPLEX. DIABASE DYKES, DIORITES, DIORITE PORPHYRY, LAMPROPHYRE		VEINLET-IMPREGNATED GOLD-SILVER STOCKWORK MINERALISATION IN QUARTZ-CARBONACEOUS METASOMATITES
$\gamma PZ_3 kc^v$	KACHOYSKIY INTRUSIVE COMPLEX. GRANITE-PORPHYRY DYKES	а ж-53 б ж-55	QUARTZ VEINS, THEIR NUMBERS (BASED ON CHEREPANOV'S DATA 1982): EXPOSED IN BED-ROCK (A) AND TRACED ALONG ALLUVIAL-DELUVIAL SHEAR ZONES
а $R_3 \gamma$ б	TALLAINSKIY INTRUSIVE COMPLEX. FIRST PHASE: META-GABBRO, GABBRO-AMPHYBOLITES, ORTHOAMPHYBOLITES. SECOND PHASE: GRANITES, PLAGIOGRANITES	ж-3	QUARTZ VEINS, THEIR NUMBERS (BASED ON KORZHA'S DATA 1976)
$R_3 uk$	UST-KELYANSKAYA SUBLAYER. ALKALINE, ACID AND MEDIUM METAEFFUSIVES		LINEAR ZONES OF THIN VEIN QUARTIZATION
$R_2 vd_3$	VODORAZDELNAYA SUITE. UPPER SUBSUITE. SHALES, SANDSTONES WITH INTERLAYERS OF LIMESTONE SHALES, MARBLE LIMESTONES AND DOLOMITES		DELUVIAL QUARTZ DISINTEGRATION AREAS
$R_2 vd_2$	VODORAZDELNAYA SUITE. INTERMEDIATE SUBSUITE. PHYLLITE SHALES WITH INTERLAYERS OF MARBLE LIMESTONES AND RARE METASANDSTONES		VISIBLE GOLD OCCURRENCES IN QUARTZ
$R_2 vd_1$			VODORAZDELNAYA SUITE. LOWER SUBSUITE. QUARTZ SANDSTONES WITH INTERLAYERS OF SHALES AND MARBLE LIMESTONES

R_2ur_2	UST-URYAKHSKAYA SUITE. UPPER SUBSUITE. MARBLE LIMESTONES INTERLAYED BY CARBON SHALES	1,9/13,0	GOLD BEARING QUARTZ STOCKWORKS IN METAEFFUSIVES AND GRANITOIDS WITH GOLD GRADE 1.7-8.0g/t (SHOWN AS NOMINATOR) AND THICKNESS 3.0-54.0m (SHOWN AS DENOMINATOR)
+ +	GRANITES, PLAGIOGRANITES	Au 2.2	GOLD OCCURRENCES (BASED ON CHANNEL AND CHIP SAMPLING KORZH 1976)
Г Г	GABBRO	а Au 24.7 б в	CHIP SAMPLES WITH GOLD GRADE: >3.0g/t (A); 1.0-3.0g/t (B) AND 0.1-0.9g/t (C)
L L	ALKALINE METAEFFUSIVES	а б в	CONTOURS OF MINED PLACER AREAS AND THEIR PRODUCTIVITY: >130kg/km (A); 60-130kg/km (B) AND <60kg/km (C)
V V	MEDIUM METAEFFUSIVES	а б в	SECONDARY LITHOCHEMICAL AREAS OF GOLD DISTRIBUTION: >10.0g/t (A); 1.0-10.0g/t (B) AND 0.1-0.9g/t (C)
/ —	ACID METAEFFUSIVES		LITHOCHEMICAL CURRENTS OF GOLD DISTRIBUTION
Y Y	THIN INTERLAYERS OF ALKALINE, MEDIUM AND ACID METAEFFUSIVES	K	POTASSIUM ANOMALIES 2.0-2.5% DISCOVERED BY AEROGAMMASPECTROMETRY
Λ Λ	THICK INTERLAYERS OF ALKALINE, MEDIUM AND ACID METAEFFUSIVES	p-3 0.84/24.01	INSETS, THEIR NUMBERS. NOMINATOR – GOLD GRADE (g/t); DENOMINATOR – THICKNESS (m)
kt	CATACLASITES	а к-124 б к-182	TRENCHES, AND THEIR NUMBERS (A); TRENCHES WITH ORE INTERVALS 0.1-0.9g/t Au (B)
а б в	GEOLOGICAL BOUNDARIES: PROVEN (A) INFERRED (B) AND EXPOSED (C)	c-5	SHORT VERTICAL BOREHOLES, THEIR NUMBERS
а 35 б 85 в 40	FOLIATION (A); STRIATION (B) CONTACTS BETWEEN QUARTZ VEINS AND DYKES (C)		LICENCE AREA
а б в г	STEEPLY DIPPING FAULTS: PROVEN (A) INFERRED (B) PROVEN COVERED BY SEDIMENTS (C) AND INFERRED COVERED BY SEDIMENTS (D)	РЛ-4.6	PROJECTED EXPLORATION PROFILES AND THEIR NUMBERS
		c-75	PROJECTED INCLINED BOREHOLES, THEIR NUMBERS

			(BOREHOLES 24, 36, 46, 50, 88, 94, 112, 120 ARE VERTICAL)
			**PROJECTED TRENCHES AND THEIR NUMBERS**
			**BASE EXPLORATION GRIDLINES AND THEIR NUMBERS**
			**AREA OF FIRST STAGE TRIAL-METHODICAL WORKS**

Note: Schematic Geological Map of Uryakh Ore Field (original scale 1:10000) prepared by Goncharuk (2008) based on materials of Dorozhkov (1969), Svirin (1970), Korzh (1976), Cherepanov (1982) and Khlevniy (2003)

9.3.3.2 Gold-Bearing Quartz Veins

The most widespread type of orebody is gold-quartz veins, with 84 known veins occurring within the licence area and can be divided into two groups on the basis of morphological features and mode of occurrence: those occurring within carbonaceous-carbonate stratum, the spatial distribution of which is not well understood, and those within igneous-sedimentary rocks.

The most explored and understood vein is that of the low-grade Selevaya (**Vein No.1**) vein. It occurs near the Syulbanskiy fault suture, strikes at approximately 340° over 3,360m and dips at 80°E. Typically the vein features highly variable thickness (varying from 1.5 to 17.5m), numerous swells, pinches and an abundance of xenoliths of shale and limestone. Sulphide mineralisation consists of pyrite and chalcopyrite and displays an uneven distribution. The highest concentrations of sulphide over 180m, reaches 30-40%, gold grade is from 0.1-0.2 - 0.6-0.8g/t Au, and copper content ranges from 1.0 to 10.0% Cu.

Wall-rock alteration occurs with an average thickness of 0.3 to 3.0m, and is characterised by the occurrence of a network of thin quartz veinlets.

Vein No.2 has a complex morphology, a length of more than 1km, and varies in thickness from 3.5 to 21m. Gold grades recorded were 6.6g/t Au and 115.6g/t Ag over 11m and 6.8g/t Au and 138.2g/t Ag over 21m.

Vein No.12 has been traced along the strike for 150m with thickness varying from 0.4 to 2.5m (average 1m). Mineralisation occurs as pockets of sphalerite, galena, chalcopyrite, scheelite, and pyrite with grades from 0.8 to 125g/t Au and 27.0-84.2g/t Ag. The average gold grade along a distance of 20m is 41g/t Au over/0.9m.

The majority of the gold-bearing quartz veins occurring in the igneous-sedimentary stratum are confined to the zones of schist formation, branching off the main fault and are roughly W-E striking, dipping NW. In general the veins have an undulating shape.

Vein Nos. 50 and 52 have limited extents, are oriented to the WNW, contain chalcopyrite-tetrahedrite sulphide mineralisation and are localised in a system of fissures within dykes.

All gold-bearing quartz veins are characterised by extremely irregular gold grade, varying from traces to 211g/t Au. Gold distribution is of a “pocket” and “payshoot” nature, as evidenced by the presence of isolated single samples with high Au content.

Vein No.9 is an example of “payshoot” distribution of gold, where within a 200m area there are two contiguous ore payshoots of 78m and 38m length, with average gold grades of 11.5 and 7.8g/t Au, silver contents of 291.6 and 342.3g/t Ag, and average thicknesses of 2.12 and 1.65m respectively. The extension of vein No.9 has been identified and partially traced by trenches to Vein No.10, which had an average gold grade of 15.4, 7.2, and 6.8g/t Au at average thickness of 8.3, 7.2, and 4.5m respectively.

> ***WAI Comment:*** *it is possible that the amplitude of the ore "payshoots" could be at least 300m. It is recommended that further exploration of these vein targets is warranted, both by further surface trenching and by drilling to depth and along strike. It is also recommended that the alteration haloes that lie between these structures should be investigated in detail to determine if they could provide low grade additional tonnage, in an open pit scenario.*

9.3.3.3 Stockworks in Quartz-carbonate Metasomatites

Spatially, the stockworks in quartz-carbonate metasomatites, localised in the axial part of the Syulbanskiy fault, can be traced in the form of a narrow band from NW - SE throughout the whole licence area and are related to shear zones. Generally they dip to the SW at 75-85° and a calculated vertical depth of more than 400m. Their thickness varies from 5 to 70m, averaging 20-30m.

They comprise carbonate rocks and consist of dolomite, calcite, ankerite, siderite with a small amount of quartz, and enhanced quantities of quartz veinlets characterised by elevated gold and silver grades.

Orebodies (provisionally based on cut-off grades of >0.6 and 1g/t Au) are 1-2m in thickness, rarely up to 5-10m, and in some cases extend along strike for 750m. The veinlets are highly irregular in distribution, thickness and gold and silver grades (0.1 to 14.8g/t Au and from 0.1 to 2,460g/t Ag).

9.3.3.4 Stockworks in Beresitised Granites

Numerous zones of quartz stockworks are hosted by beresitised plagiogranites and structurally these formations are detected along E-W trending zones of raised schist formation, where WNW faults intersect the Syulbanskiy fault zone.

Stockworks which represent linearly extended zones of flatly dipping quartz ladder veinlets usually corresponds to the size of the fissure zones and have been traced in a band of 500-800m. Some zones extend over 0.2-1.5km with a thickness that varies from 5-30m, and up to 80m.

Orebodies are always of a lesser size and are delineated within the zones, using a cut-off-grade >0.5g/t Au; they range in length from 800 - 1000m, with thicknesses varying from 1 - 54m (average 6-13m). Grades in the orebodies vary from 1.1 to 18.5g/t Au. Distinctive aureoles of mineralisation (50 – 400m) have been identified within the zones. The nature of the gold distribution is very irregular.

9.3.3.5 Veinlet-Impregnated Mineralisation in Carbonaceous Shales

The presence of contrasting geochemical anomalies in carbonaceous shales combined with zones of high conductivity and single samples with gold content, have been interpreted as zones of overlapping quartz-sulphide mineralisation.

Occurrences (up to 84.4g/t Au) in clusters around the intersection of the Syulbanskiy fault with NW trending - diagonally orientated structures are found in a "variegated" horizon.

> ***WAI Comment*:** *This most prospective morphological type is relatively unknown and more detailed investigations with thorough follow-up trenching and drilling and sampling is still required.*

9.3.3.6 Alteration

Hydrothermally-altered rocks are widespread within the Uryakh licence area, especially in the central zone. They are confined to the suture part of Syulbanskiy fault and strike along it in the form of bands from 0.5-1.0km in width.

9.4 Exploration History

9.4.1 Summary

The Uryakh gold mineralisation was first discovered during an exploratory mapping survey at 1:50,000 scale (Dorozhkov and others, 1969). The results of this preliminary work identified the broad structural styles and hydrothermal-metasomatic processes present.

Exploration works up to 2003 are summarised in Table 9.2.

Table 9.2: Summary of Exploration Works Completed to 2003	
Geological Traverses (km)	1,250
Trenches (m^3)	120,000
Chip Samples	11,000
Channel Samples	9,000
Grab Samples	1,500

It has been reported that the quality of historical trenching was poor, samples were collected manually, the channel section was uneven, and the samples were assayed by means of atomic-absorption analysis. All surveys were undertaken with compass and tape.

Stream sediment sampling (Dorozhkov, 1969) and lithochemical prospecting (1974-1975) were carried out along the main fault zone and maps of gold distribution, gold dispersion, and elemental associations were constructed.

Geophysical exploration of the region began in the 1960's and has comprised the following surveys: gravimetric surveys, (1964 and 1979, 1980); airborne magnetic survey (1956); airborne magnetic survey and four-line aerogammaspectrometry (1980 and 1988); ground-base geophysical (electrical and magnetic) (1975); test gamma-spectrometry (1980) and aerogeophysical (magnetic and gamma-spectrometry 2008).

Results of recent trial studies to determine the most effective method of geophysical investigations are still to be reported.

9.5 Exploration Conducted In 2008

9.5.1 Introduction

Exploration in 2008 targetted the following: gold mineralisation in beresites, gold-silver mineralisation in quartz-carbonate metasomatites; and minor investigation for gold in the black-shale formations.

The extremely difficult working conditions have impeded the implementation of the original plan and activities have been focussed on Vetvistiy, the main area of gold-bearing beresite development, and to a lesser extent at the Zolotoy Malakhitiviy site where gold-silver mineralisation is found hosted by quartz-carbonate metasomatites and gold mineralisation in carboniferous shale.

9.5.2 Exploration by Ore Type

The main types of mineralisation targeted are briefly described below and their location shown in Figure 9.5.

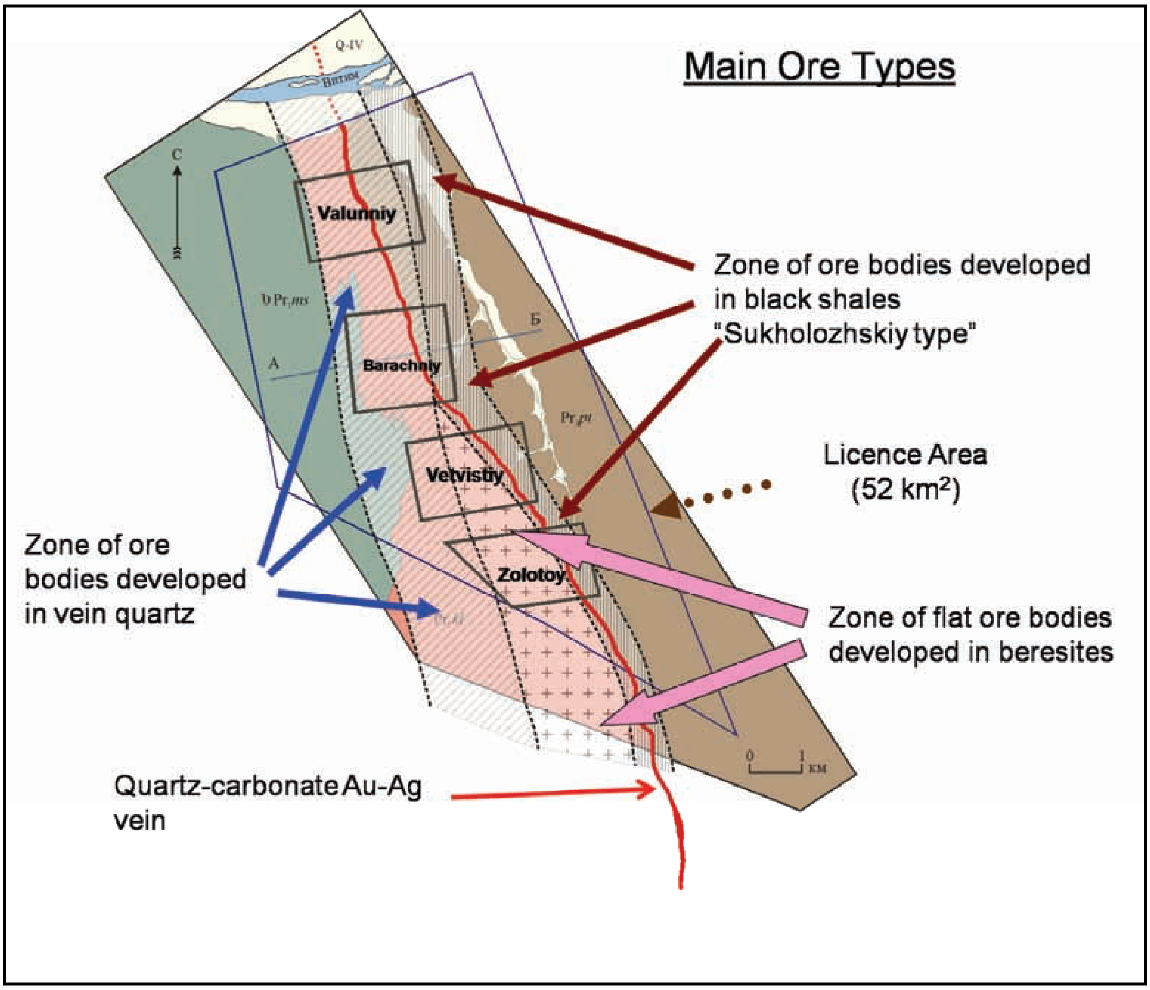


Figure 9.5: Location of the Main Ore Types within the Licence Area

9.5.2.1 Beresites

Although North Gold Mining assumed that this type of mineralisation would be the most important, having the potential to produce a large ore tonnage, albeit at relatively low gold grade the results from trenching and limited diamond drilling have been disappointing, intersecting narrow westerly dipping, flat lying elongate bodies. Gold grades vary from 0.1 to 14g/t Au in drill holes and trenches.

9.5.2.2 Quartz-carbonate Au-Ag Vein

The main quartz-carbonate Au-Ag vein, traced from the NW to the SE for a distance of more than 10km along strike, has been exposed both by trenching and intersected by diamond drill holes. Typically gold grades vary from 0.1 to 5.0g/t Au. The vein also has elevated grades in silver (Photo 9.1).

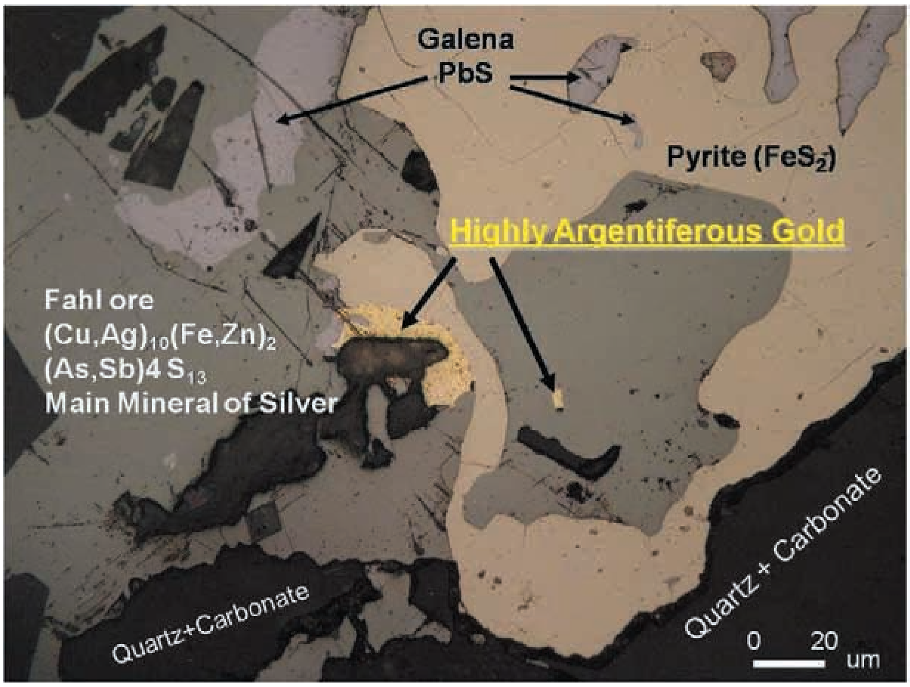


Photo 9.1: Photomicrograph of Quartz-carbonate Vein

9.5.2.3 Quartz Vein 9 (Historical Data)

These veins are confined to several systems of linear fault zones that extend from the NW to the SE over a distance of more than 10km. The most important are vein No. 9 and vein No. 12, which are most developed within the Barachniy site. Gold grade within the veins varies from 0.3 to 81g/t Au and silver from 2 to 1,691g/t Ag.

> ***WAI Comment:*** *these veins and potentially the alteration that surrounds them represent a significant target and despite being extremely difficult to access warrant the cost of the road engineering project.*

9.5.2.4 Beresitised Black Shales

Zones of beresitised black shales have been identified at Vetvistiy, lying to the east and in the footwall of the main sub-vertical westerly dipping quartz-carbonate vein (see Figure 9.6 below). Best intersections are (core drilling): 10.0m at 1.13g/t Au and 56.0m at 0.60g/t Au.

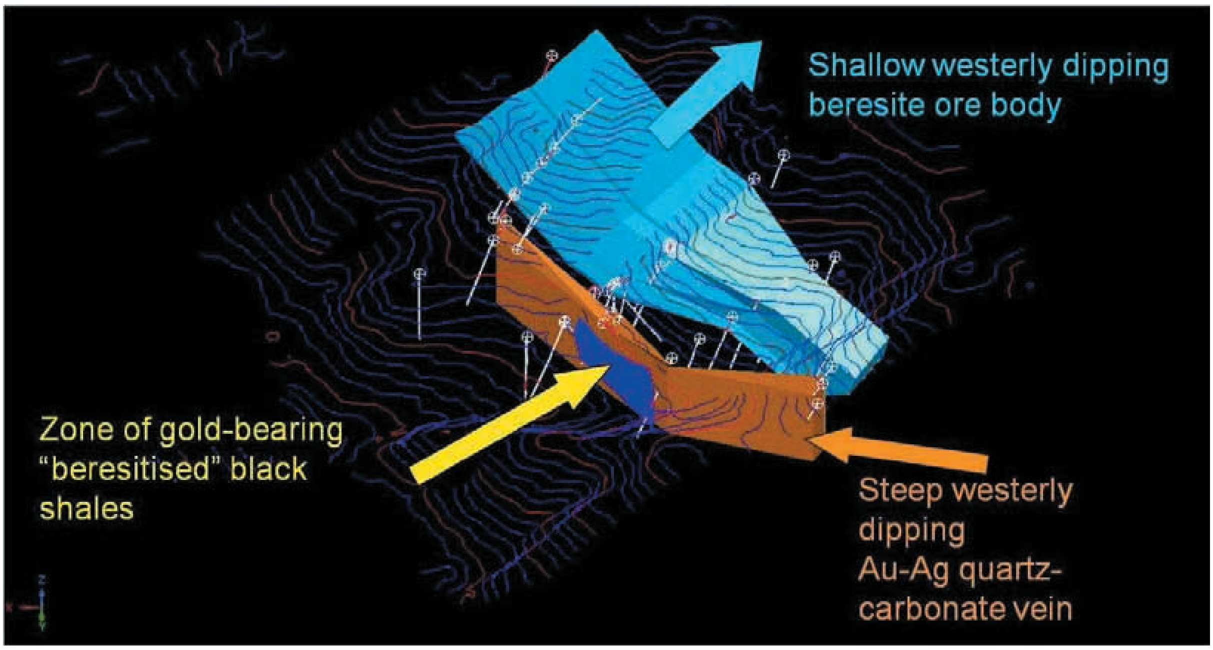


Figure 9.6: Idealised Model of Beresitised Black Shale Mineralisation at Vetvistiy

9.5.2.5 Black Shales

Separate, narrow complex zones of shearing and schistosity in black shales contain economic gold grades e.g. core drilling: 11.0m at 0.9g/t Au; and trenches: 9.0m at 1.01g/t Au and 12.0m at 1.07g/t Au.

9.5.3 Geophysics

In 2008 ground geophysical investigations on a grid of 100 x 20m, included magnetic survey, gamma-spectrometry, and geoelectrical prospecting; this work was limited to an area of only 3km^2 (Vetvistiy site) due to the terrain and difficulty in cutting profiles.

The results of Aerogammaspectrometry showing potassium and uranium anomalies are shown in Figure 9.7 below.

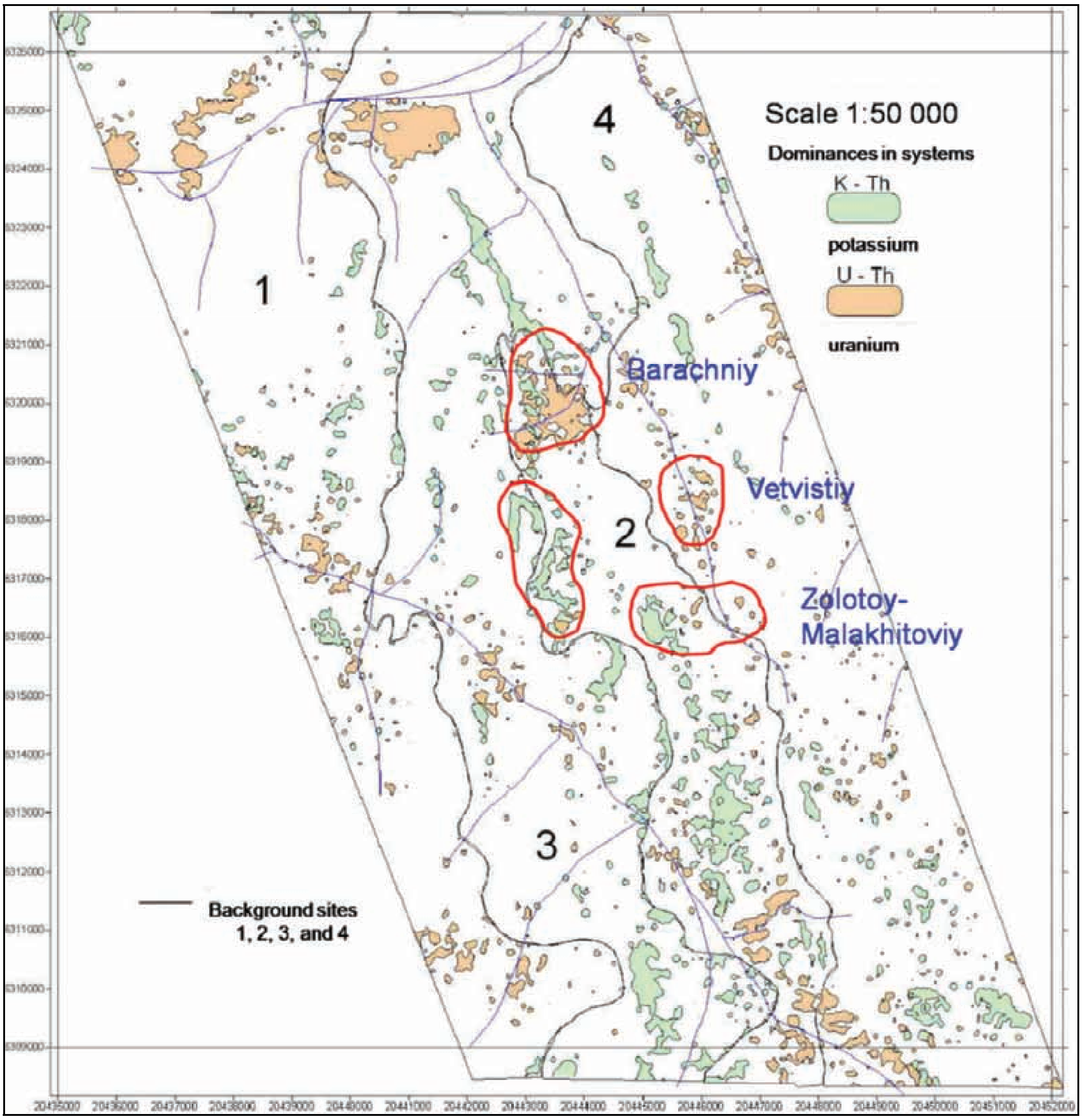


Figure 9.7: Plan showing Location of Potassium and Uranium Anomolies Detected from Aerogammspectrometry

9.5.4 Drilling

Drilling during 2008, focused on the beresites, and a total 6115.5m of core drilling was completed in 24 holes. Rotary percussive drilling to explore near surface gold mineralisation amounted to 238m (7 sub-horizontal holes).

The location of 16 diamond drill holes drilled on three profiles on a spacing of 400.0m (Profiles 6.6, 7.0 and 7.4) at Vetvistiy is shown in Photo 9.2.

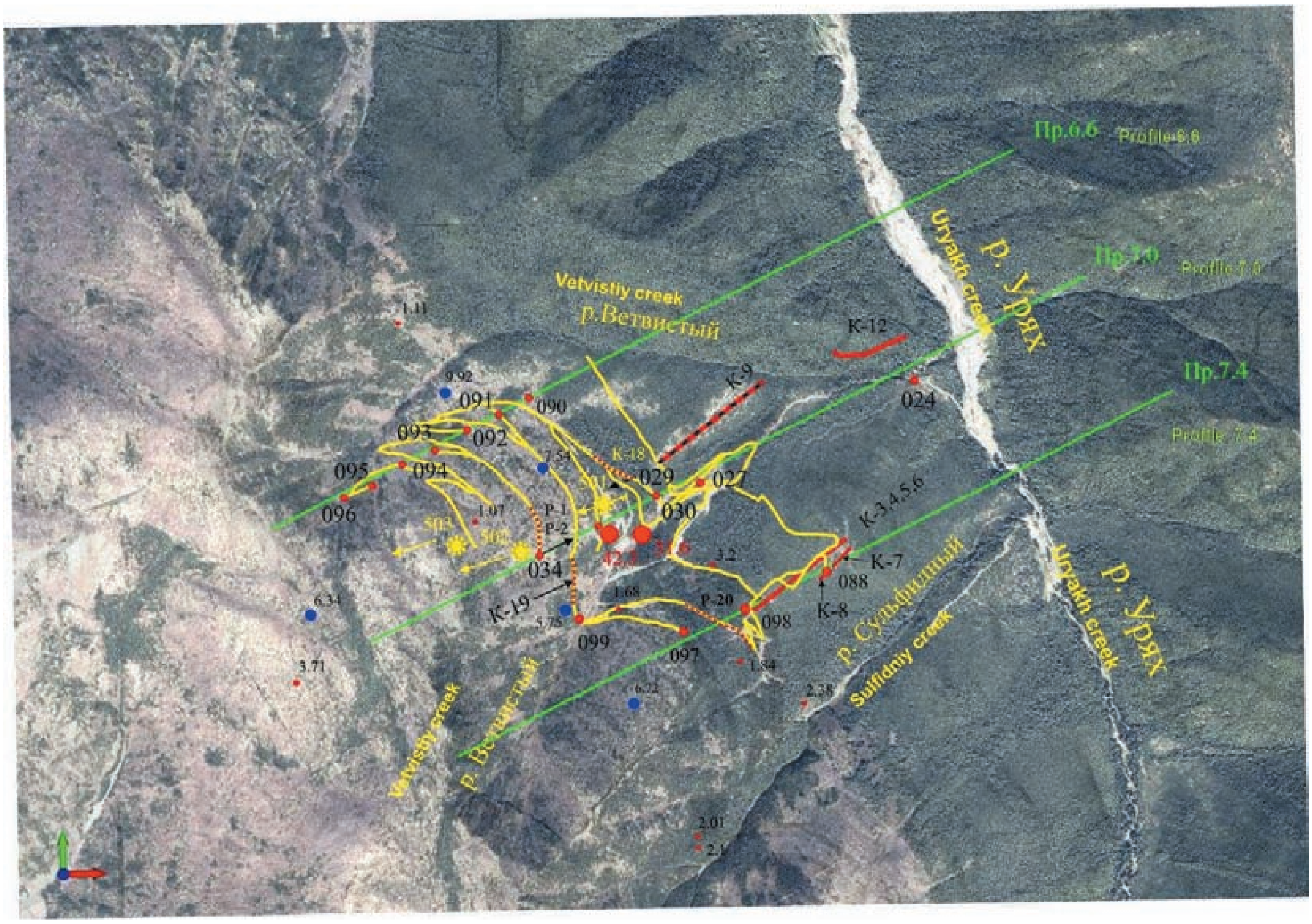


Photo 9.2: Location of Exploration Profiles 6.6, 7.0 and 7.4 (Green), Drill Roads (Yellow), Drill Holes and Trenches (Red) on the Vetvistiy Prospect

The most important intersections of gold mineralisation in metasomatically altered (beresitised) volcanics of acidic composition are summarised in Table 9.3.

Table 9.3: Summary of Borehole Intersections

Bh	Intersection (m)	Au g/t	Type
029(027)	20.0	0.86	Altered black shales, granites and beresitic zones
032	15.0	0.86	Beresite
	12.0	1.43*	Quartz carbonate vein
034	15.0	0.96	Beresite
090	9.0	0.57	Beresite zone associated with granite and meta-andesites
	9.0	0.68	Quartz carbonate vein
092	20.0	0.64	Beresite zone
	11.0	0.43	Beresite zone
093	61.0	0.53	Beresite zones with associated granite
095	12.0	0.87	Beresite zone
096	7.0	0.60	Granite

*12.0m at 1.43g/t Au Equivalent (Au US$865; Ag US$10)

An interpretation of results along profile No. 6.0 defines two shallow westerly dipping beresitic zones, together with the position of the sub-vertical westerly dipping quartz-carbonate vein.

An interpretation of results along profile No. 7.0 defines the position of the sub-vertical westerly dipping quartz-carbonate vein.

The interpretation of results has been superimposed on a photo of the easterly facing slope of Vevistiy, which is shown in Photo 9.3 below.

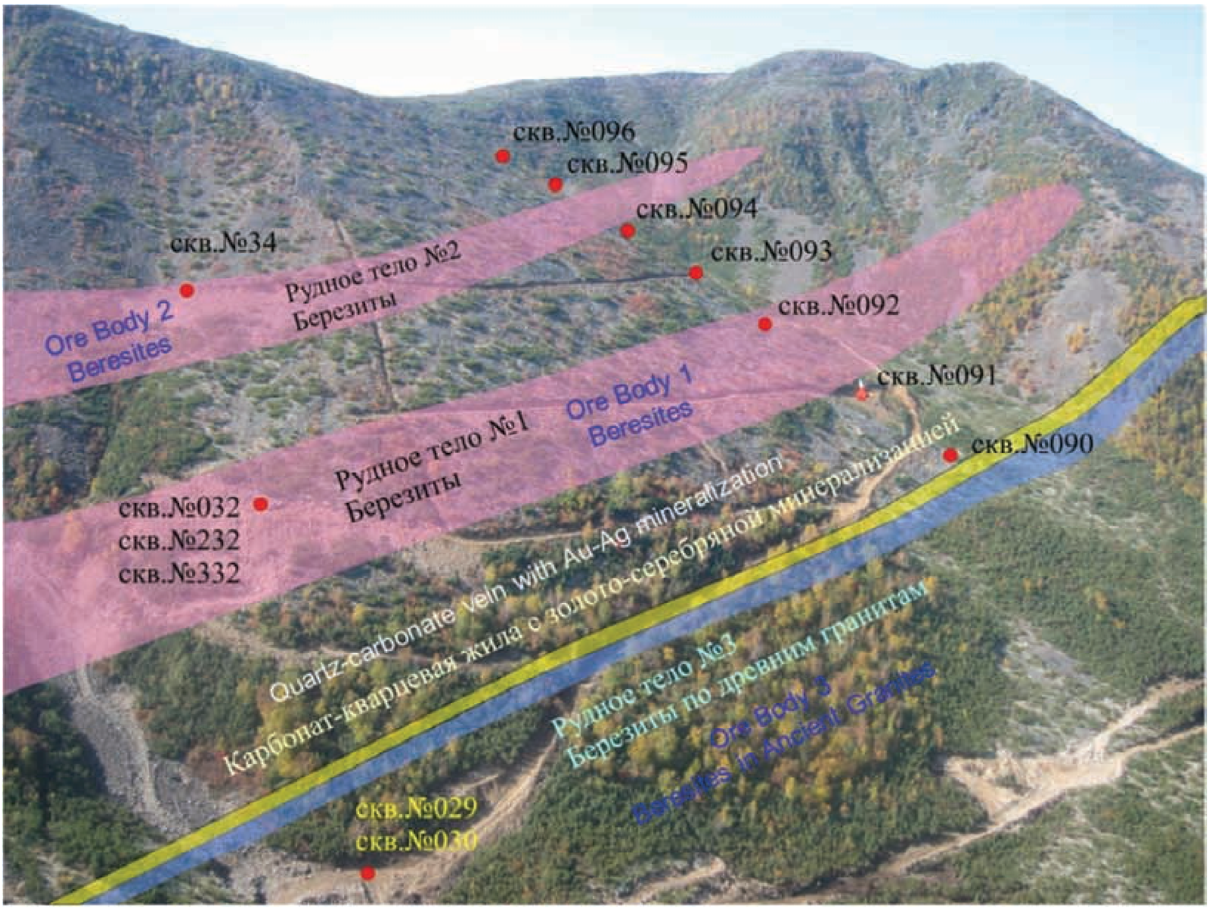


Photo 9.3: Interpretation of Ore Zones at Vetvistiy

The Syulbanskiy fault zone has been investigated by drilling at the Zolotoy prospect area and is represented by beresitised carbonaceous shales, altered by these processes into a light grey sericite-quartz-carbonate rock, about 20m thick, partially developed in limestones; within it there is a 1.6m thick quartz-carbonate body without visible sulphide mineralisation. Beresitised rocks are in immediate contact with carbonaceous shales, which are schistose and silicified in thin (up to 5-8cm) boudinaged veinlets. These shales have been shown to hold gold mineralisation.

Four holes were drilled to investigate the gold-silver mineralisation in quartz-carbonate metasomatites known from historical works in the west bank of the Malachitovy creek and also to intersect gold mineralisation in the black shale units. The location of the boreholes and interpretation of results for this short drill program are illustrated in Figure 9.8.

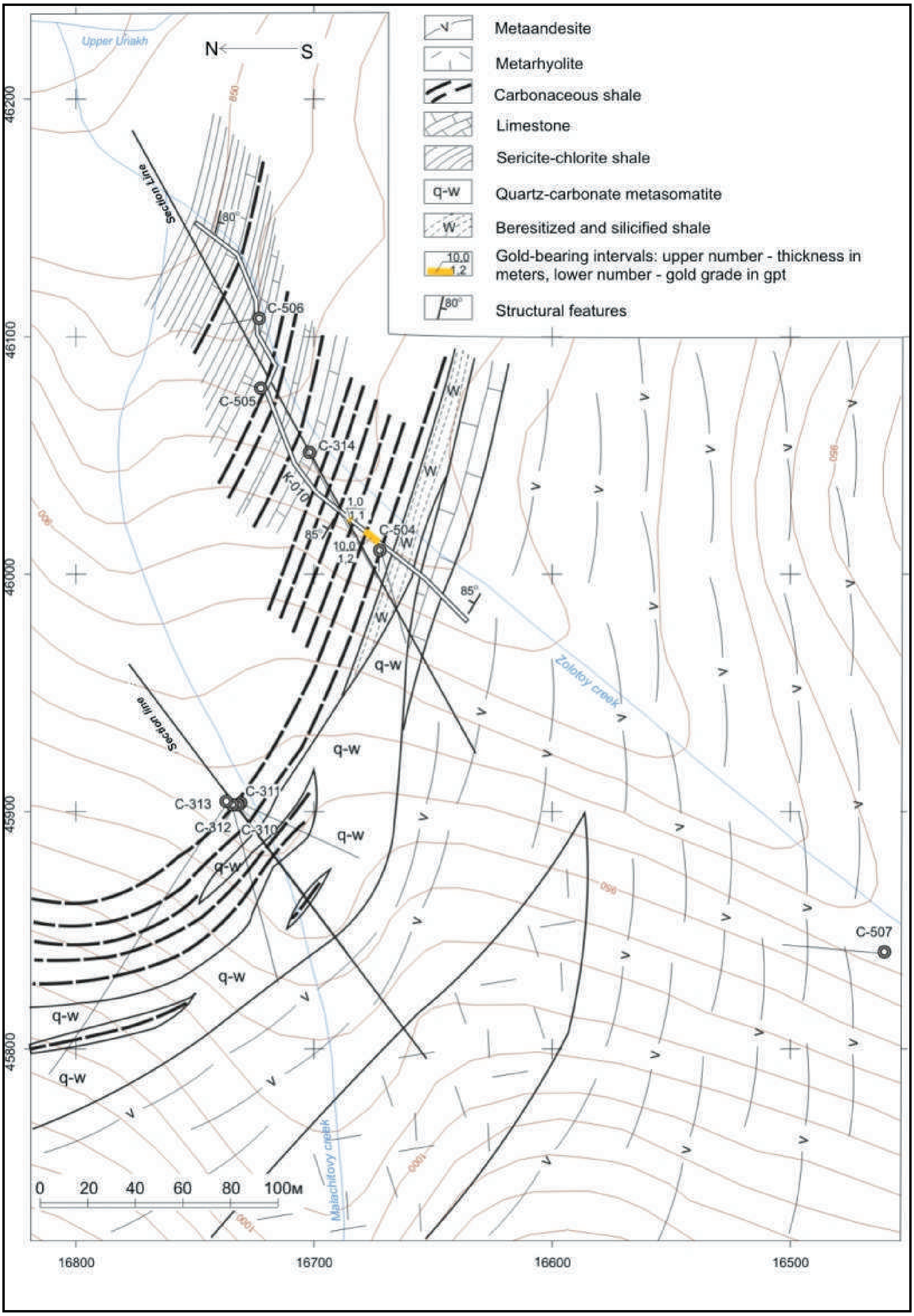


Figure 9.8: Plan View showing Location of Drill Holes at Zolotoy Creek Prospect

Evidence from the drill holes suggests that some analogy can drawn with the deposits of Sukhoy Log and Holbinskoye, namely: the combination of thick metasomatites of beresite formation, quartz veins and a series of kerogen-rich carbonaceous shales, with overlapped sulphide-quartz vein-veinlets and veinlet-disseminated mineralisation.

9.5.5 Core Storage Facility

Drill core has been retained on-site in a purpose built covered shed for the purposes of re-logging at a later date or inspection by external parties.

> ***WAI Comment:*** *WAI are concerned with the method by which core is currently being stored and recommend that the cores store should have covered sides and core stored in purpose built racks would be advantageous but is not thought essential.*

9.5.6 Core Dressing and Logging

The whole drill hole is marked up for cutting by the geologist into sample intervals of 1.0m length, reducing to smaller intervals where lithology or mineralisation dictates; the drilling was of a high standard with very high core recoveries evident in all of the holes whilst the drill logs (passports) prepared by the geologists are found to be satisfactory.

9.5.7 Trenching

Due to the extreme topography, most of the trenching works were carried out in the form of lateral bulldozing cuttings (with subsequent manual deepening of their bottom by hand until bedrock was intersected) alongside the Zolotoy, Vetvistiy and Barachniy creeks.

A total of 14 trenches were excavated at Vetvistiy in 2008, totalling 1,225m in length (4,040m^3) from which a total of 155 channel samples was taken.

9.5.8 Geological Prospecting

Geological prospecting has been conducted at a scale of 1:10,000 and 1:2,000 over an area of 12.7km^2. In total 1,530 lithochemical samples were taken together with 842 geochemical soil samples. Chip and grab samples of mineralised rock totalled 431 samples with a further 28 samples of miscellaneous sediments. Only 129km of the planned 220km of traverse were achieved.

9.5.9 Sampling Procedures

The following methods of sampling were used during the prospect evaluation survey: core, channel, chip, geochemical and lithochemical.

9.5.9.1 Core Sampling

The length of core samples was 0.7-1.3m with an average of 1.0m. The core was cut up lengthwise by diamond saw. On average core recovery was 95%.

In the case of NKR drilling, all sludge collected from each meter was sampled. The sludge was then prepared for analysis in the same manner as that for core samples.

9.5.9.2 Channel Sampling

Bedrock at the trench surface or walls was first cleared manually and sampled with 10x5cm section by by either diamond saw or by electro-percussive chisel. The average weight of channel samples was typically 10.0-15.0kg.

9.5.9.3 Chip Samples

Any primary outcrops and eluvial-deluvial dumped deposits with noticeable indicators of gold mineralisation were subjected to chip sampling. Chips (10-15) were collected to form the sample from a specific area, typically weighting 1.0-2.0kg.

9.5.9.4 Geochemical Samples

Geochemical samples were collected along the geological traverses at 100m spacing from primary and eluvial-deluvial sediments, and individually comprised 5-8 chips with a total weight 0.3-0.5kg.

9.5.9.5 Lithochemical Samples

These were collected along cut profiles, where geochemical sampling was impossible due to the development of vegetation-soil cover, the majority being collected in the lower parts of the Uryakh creek slope. The weight of samples was typically 250-400g.

9.5.10 Conclusions Drawn from the 2008 Exploration Programme

The exploration works conducted in 2008 were encouraging with the following positive results:

- Discovery of gold bearing beresitized metarhyolites at Vetvisty, which may have the potential to hold a large tonnage- albeit low grade orebody or orebodies that may support a sizeable open pit operation;
- Discovery of potentially commercial grade gold mineralisation in silicified zones among carbonaceous shales of the Patom series near the Syulbanskiy fault and small deposits of gold-silver type mineralisation in quartz-carbonate metasomatites; and
- Analogies within the Uryakh ore field of gold-bearing zones in black shales, with large deposits such as Holbinskoye and Sukhoy Log, i.e. a combination of thick bodies of metasomatites of beresite formation, quartz veins and strata of kerogen-rich carbonaceous shales – in all cases with overlapped sulphide-quartz vein/veinlet and veinlet/disseminated mineralisation. Geophysical anomalies identified in these rock types require follow-up trenching and drilling work.

9.6 Exploration conducted in 2009

9.6.1 Introduction

The 2009 exploration programme has focused on follow-up work:

- Identification all geochemical anomalies for Au, Ag and non-ferrous metals to assess the ore potential of black shale strata (50% of the total area of the licence);
- Reassess the ore potential of vein-type mineralisation, which is confined to linear extended structures, developed in volcanics in the east and black shales in the west; and
- Further evaluation of the potential of the quartz-carbonate Au-Ag vein.

Exploration work, despite budget cuts in 2009, has involved

- A lithochemical survey of the whole of the licence area (52km^2) on a 100 x 100m grid;
- Stream sediment sampling of creeks and watercourses;
- Continued geological mapping of the whole licence area, at a scale of 1:10,000; and
- Definition of sites for further trenching and drilling activities in 2010.

9.6.1.1 Stream Sediment Sampling

The results of the 2009 stream sediment sampling exercise are shown in Figure 9.9 below.

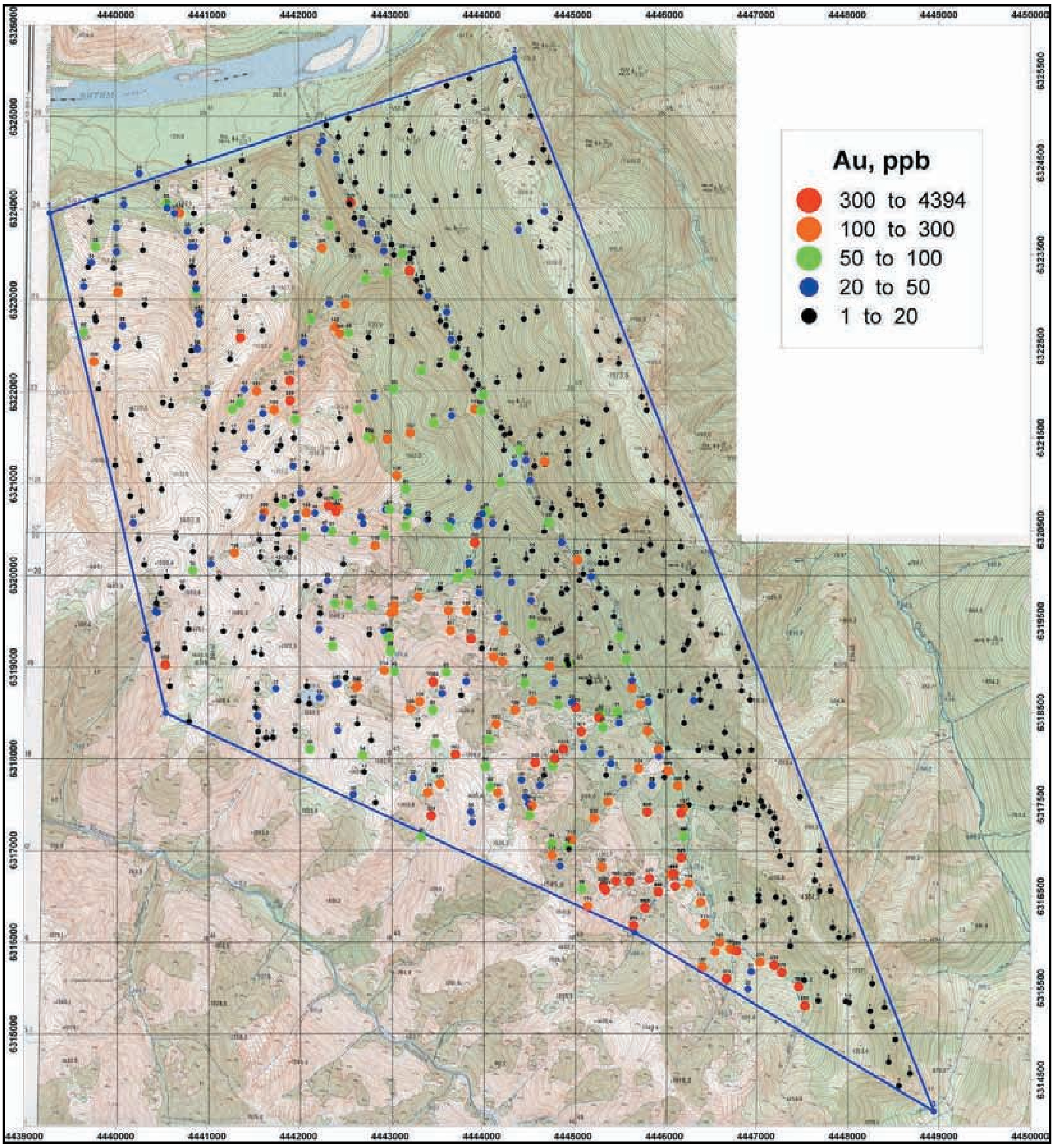


Figure 9.9: Results of 2009 Steam Sediment Sampling Programme

9.7 Exploration conducted in 2010

9.7.1 Introduction

Exploration works during 2010 included the following:

- 25km of drill roads constructed (total volume excavated 144 520m^3);
- Provision of access to the quartz main vein zones - vein No.9, vein No.12, vein No.2 and gold-bearing vein zones located on top of the watershed to the west;
- 1,060m of trenches were developed (total volume excavated 12,369m^3);
- 12,014 samples collected; and
- Lithogeochemical and geophysical studies were conducted over the whole site (23km^2) on a 100 x 20m grid spacing

9.7.2 Summary of Results at Barachniy - Valunniy

A summary of good intersections for gold mineralisation within veins at the Barachniy - Valunniy site are briefly described below.

9.7.2.1 Vein No.9

Quartz vein No.9 has been traced along strike for 200m (see Figure 9.10 below). Its thickness in the central part is 2.5-3.0m. Au grade in vein varies from 0.2 to 86.7g/t Au according to the channel sampling, whilst Ag grade varies from 0.6 to 1,180g/t Ag. The average Au grade in vein is 3.9g/t Au, and Ag is 103g/t Ag.

The following intersections have been intersected in the vein:

- 86.7g/t Au and 1,180g/t Ag over 1.0m;
- 19.1 g/t Au and 647g/t Ag over 2.0m; and
- 10.3 g/t Au and 203g/t Ag over 3.0m.

Figure 9.10: Location of Vein Nos.9, 10 and 12

Grab sampling results has identified a gold-beresite zone proximal to the vein. This zone has a total thickness of 15-20m with an average gold grade of 1.7g/t Au.

Severstal anticipate Au resources of vein No.9 to be of the order of 1.5t, down to a depth of 300m with an average Au grade of 4g/t Au. Expected Au resources in beresites zone, located around the vein are estimated to be 5.3t of gold to a depth of 300m.

9.7.2.2 Vein No.12

Quartz vein No.12 has been traced along strike over 200m with no signs of pinching-out. The vein thickness varies from 0.8 to 1.5-2.0m. A zone of gold-bearing beresitisation hosted within black shales is observed against the vein contact;

Au grade in the vein varies from 3.71 to 18.2g/t Au, whilst the Ag grade varies from 2.3 to 6.8g/t Ag. The Au grade in near-vein beresites varies from 0.3 to 2.99g/t Au with Ag grade not less than 0.5g/t Ag.
In vein No.12 and the zone of beresites around the vein, the best intersection of 3.4g/t Au over 10.0m has been recorded.

Severstal anticipate that the total resources of gold in vein No.12 at the site developed by the trenches is of the order of 5.1t to a depth 300m.

The results of a geophysical survey over vein No.12 suggests that it can be traced to the NW and SE for a distance of 700m distance, should this zone be also payable the total resource could be of the order of 15t of gold to a depth of 300m.

Zones of gold bearing mineralisation are intersected in black shales some 20 and 50m eastwards from vein No.12, where intersections were founded as follows: 2.58g/t Au over 4m and 3.72g/t Au over 3m. Severstal assumes that these zones have a linear development along the same strike as vein No.12 and will be traced for a similar distance of about 700m. The total gold resources anticipated within zones of mineralisation in black shales are of the order of 11.2t to a depth of 300m.

9.7.2.3 Vein No.2

Quartz vein No.2 has been intersected on the sides of a drill road and sampled by channels across its strike. Assay results are not yet available.. According to grab sampling results, the gold grade in the vein varies from 0.9 to 5.4g/t Au, whilst silver grade varies from 28.3 to 125g/t Ag.

Based on historical data, Au resources within vein No.2 are anticipated to be of the order of 10.4t.

9.7.2.4 Proposed Exploration in 2011

In order to improve confidence in identified mineralised structures, Severstal proposes to conduct further exploration including:

- Trenching: 4,000m (Total volume excavated of 40,000m^3); and
- Drilling; 10 000m.

9.7.3 Gold-Beresite Zones at Vetvistiy

Zones of gold- bearing beresites were intersected in 2008 by core drilling at Vetvistiy site and showed mineralized intersections with a grade of approximately 1g/t Au over a width of typically 15.0m. Resources within these beresites were anticipated to be of the order of 6.5t of gold with average grade of 1g/t Au.

As a result of geochemical and geophysical studies carried out in 2010 on a grid 100 x 20m, it was established that beresites continue on the same trend to the south of the Vetvistiy site for the distance of more than 3km and are marked by the series of linear geochemical and geophysical anomalies.

Severstal believes that the gold grade and mineralised content of these ore bodies will increase towards the south and consequently anticipate an improvement in resources in the order of 30t with average grades of 1.5-1.7g/t Au.

The following interesting mineralised intersections were obtained:

- Drill hole NKR 515*:* 4.7g/t Au over 1.0m;
- Drill hole NKR 517: 3.04g/t Au over 15.0m;
- Drillhole NKR 514A: 2.55g/t Au over 1.0m;
- Clearing No.42: 6.60g/t Au over 19.0m; and
- Clearing №30: 3.07g/t Au over 13.0m.

9.7.3.1 Proposed Exploration in 2011

In order to improve confidence in identified mineralised structures at the Vetvistiy – Malakhitoviy - Zolotoi site, Severstal proposes to conduct further exploration including:

- Trenching 100,000m^3; and
- Drilling: 5,000m.

9.7.4 Au- Ag- Dolomite - Quartz Vein

A major Au- Ag- dolomite - quartz vein can be traced from NW to SE over a distance of more than 10km. The vein is characterised by a highly irregular column- shaped distribution of ore with maximum grades of gold (about 50g/t Au) and silver (about 700-1,000g/t Ag).

Historical intersections with gold mineralization in this vein were first observed at the Barachniy-Valunniy and Sulphidniy-Malachitoviy-Zolotoi sites.

Further exploration works proposed for 2011 includes:

- Mining: 20,000m^3; and
- Drilling: 5,000m.

WAI Comment: *In January 2011, WAI received additional exploration data on the activities undertaken during the 2010 as well as projected budgets. WAI presents these data as received, without further comment as no recent site visits have been implemented.*

9.8 Resources and Reserves

9.8.1 Historical Estimates

No C_1 or C_2 reserve estimates exist within the licence area.

Prognostic resources were estimated by CNIGRI on 01 January 2003 comprising the following:

- Quartz-vein ore, Category P_2: 4Mt at an average grade of 12g/t Au (gold 50t); and
- Gold-bearing beresites, Category P_3: 20Mt at an average grade of 2.5g/t Au (gold 50t).

WAI Comment: *WAI considers these estimates are premature and at best would be classified as Exploration Results under the guidelines of the JORC Code (2009). Clearly, the Uryakh licence has the potential to hold significant resources of gold, but considerable exploration works are required before the magnitude of such resources can be quantified.*

9.9 WAI Conclusions and Recommendations

- The licence covers a very large area of prospective mineralised ground, within which a number of different mineralisation styles have been identified in orebodies and veins. Considerable exploration effort and budget will be required before the potential of such the resources can be quantified;
- WAI considers that significant potential may exist within the gold bearing quartz veins which are prevalent throughout the licence. In comparison with other similar ore fields of Transbaikalia and East Sayan, it is possible that the amplitude of the ore "payshoots" within these quartz veins could be at least 300m. Often it is possible that such veins are rather more prospective at depth, where a significant increase of gold grade is possible. WAI recommends that further exploration of these vein targets –similar in type and morphology to those structures mined at Irokinda - is warranted, both by further surface trenching and by drilling to depth and along strike. It also recommended that the alteration haloes that lie between these structures should also be investigated in detail to determine if they could provide low grade additional tonnage, in an open pit scenario. To date little exploration work has been conducted upon them, mainly as a consequence as their inaccessibility and lack of access roads.

WAI also recommends that further studies are conducted on the following:

- Gold-bearing beresites and associated gold-mineralised stockworks over the whole licence and not just the Vetvisty area; and
- Gold-bearing properties of black-shale strata near the Sulbanskiy fault, at the same time studying quartz-carbonate metasomatites with gold-silver mineralisation.

Printed by RR Donnelley, 09751