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November 07, 2011

British Columbia Securities Commission
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Ontario Securities Commission

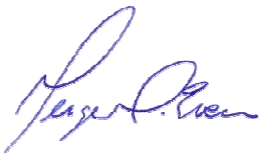
REF: Change to NI 43-101 Report

Dear Sirs:

Reference is to the technical report dated October 28, 2011, titled: “Mineral Resource Estimation, Sleeper Gold Project, Nevada” (the “Technical Report”).

This letter accompanies the revised above-mentioned report. There was an error in regard to Table 14-23. The wrong table was inserted into the document. The accompanying report contains the correct table as well as other minor editorial corrections.

Yours truly,



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Group Offices:
Africa
Asia
Australia
Europe
North America
South America

Mineral Resource Estimation Sleeper Gold Project, Nevada, U.S.A.

Report Prepared for

Paramount Gold and Silver Corp.

Report Prepared by

SRK Consulting (Chile) S.A.
05-2410-01
October, 2011

Mineral Resource Estimation Sleeper Gold Project, Nevada, U.S.A.

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October 28, 2011

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Appendix A: Claim list of Sleeper Property

Appendix B: Contact Profiles

Appendix C: Variogram Maps

Appendix D: Outliers

1 Summary

Introduction

Paramount Gold and Silver Corporation in May, 2011 contracted SRK Consulting (Chile) S.A. to make a CIM NI 43-101 technical report of the mineral resources for its Sleeper gold and silver deposit prospect, located in the Awakening Mining District, Humboldt County, Nevada, U.S.A.

The Sleeper Gold Property comprises 1,044 unpatented lode mining claims totaling approximately 30 square miles (6,709 hectares).

Paramount Gold and Silver Corp., is a public company listed and trading on the NYSE- American Stock Exchange (NYSE-AMEX) and the Toronto Stock Exchange (TSX). It acquired all the issued and outstanding shares of X-Cal Resources Ltd. in August 2010 by plan of arrangement. Paramount's head office and mailing address is 665 Anderson Street, Winnemucca, Nevada 84445-3657.

Paramount through its subsidiaries, X-Cal Resources Lt., X-Cal USA Inc, New Sleeper Gold LLC and Sleeper Mining Company LLC control 100% of the 1,044 unpatented lode mining claims. All claims registered in the name of X-Cal USA are currently assigned to the New Sleeper Gold LLC.

History

AMAX first began production in 1986. The Sleeper operation was designed to treat oxide mineralization by both milling and heap leaching. There was no flotation circuit in the mill to recover gold bearing sulphides. The early pit mill feed was oxide material, but zones of sulphide mineralization were present in the pit. Reported gold production from the mill was 1,219,880 ounces and 438,609 ounces from heap leaching. Silver production totaled approximately 2.3 million ounces. The mine ceased production in 1996.

Geology and Mineralization

Four main types of gold mineralization are found within the Sleeper deposit and may represent a continuum as the system evolved from a high level, high sulphidation system dominated by intrusion related fluids and volatiles to a low sulphidation meteoric water dominant system. In this setting the paragenetic relationships of the differing mineralization styles are as follows:

- Early -quartz-pyrite-marcasite stockwork
- Intermediate -medium-grade, silica-pyrite-marcasite cemented breccias localized on zones of structural weakness
- Late -high-grade, banded, quartz-adularia-electrum-(sericite) veins
- Post -alluvial gold-silver deposits in Pliocene gravels

AMAX mined all four types of mineralization, with high-grade material (> 0.1 oz Au/ton) processed through the mill and low-grade (0.006 to 0.1 oz Au/ton) material processed by heap leaching. All were mined by open pit methods from the Sleeper, Wood, and Office pits. The deposit was mined over a north-south distance of 4,500 ft (1,372 m) and an east-west width of approximately 2,100 ft (640 m).

The high-grade bonanza veins are banded and composed of layers of quartz-adularia-electrum, with minor carbonate, barite, and late stibnite. Veins ranging from 1 inch to 20 feet in true width were mined in the Sleeper, East Wood, West Wood and Office vein systems. Numerous other narrower or shorter veins have been found in the course of drilling and mining, including several below the final mined pit, and some hosted within Auld Lang Syne meta-sedimentary rocks.

Medium-grade breccias in the mine, which were clast-supported and cemented by silica, pyrite, marcasite and adularia, typically assay between 0.1 and 1.0 oz Au/ton. The pyrite-marcasite content of the higher-grade breccias was notably higher than in the veins. The silver content in mined breccias was typically three to six times the gold grade. Lower-grade stockwork and breccia mineralization accounted for approximately 20 percent of the gold production. Mineralized breccias extend below the depth of the Sleeper Mine open pits, as demonstrated by X-Cal drilling west of the Wood Pit, where the breccias are particularly rich in sulphides.

Alluvial gold mineralization of Miocene or Pliocene age was found and mined in the western part of the Sleeper pit. This Older Alluvium consists of poorly sorted conglomerates derived mostly from the weathering of altered Sleeper rhyolite and partly from vein/stockwork ores.

Geological Modeling

Leapfrog Support Chile (LSC) was retained by SRK Chile to create a 3D Geological model of Paramount's Sleeper gold deposit in Nevada. The deliverable products of this work combines a 3D model for Au and Ag mineralization with a lithological model of the study area, to be used as geological domains for resource estimation by SRK. SRK Consulting geologists in Santiago, Chile, worked together with LSC to check the models and verify the process and interpretations. This was also monitored together with Paramount personnel during several meetings held during the process of this study.

Exploration and Drilling

Following the ceasing of operations by AMAX in 1996, The Sleeper Joint Venture performed drilling in 2004 and 2005 concentrating on the West Wood and Facilities areas.

X-Cal Resources drilled the Facilities area in 2006 – 2007, as well as other exploration target areas within the claim block.

Paramount's drilling in 2010 – 2011 concentrated on the West Wood and Facilities areas.

Mineral Resource Estimation

Mr. Glen Van Treek, Vice President Exploration, Paramount asked SRK to estimate the gold and silver resources for the Sleeper Project considering three areas of the deposit, Sleeper, Facility and West Wood.

The estimation work consists of the following:

- (Au) Gold Estimation
- (Ag) Silver Estimation
- Density Estimation
- Resource Classification

The geology used for this work corresponds to the interpreted models of lithology and the gold and silver envelopes. The mineralized area was estimated using indicator kriging. The models of lithology and gold and silver envelopes were created as 3D solids using Leapfrog software. A separation was made based on the solids of 0.1 ppm for Au and 2ppm for Ag. Through various analyses, it was determined that using the geological units of the deposit as the estimation units was the best method for more faithfully representing the gold distribution in the deposit. Since each sector of the deposit (Sleeper, Facility and West Wood) is clearly defined and the behavior in grade by lithology is different in each one of the sectors, it was decided to analyse each lithological unit for each one of the areas separately.

Correlograms on composite data bases were used for modeling and describing the spatial variability of the mineralization of the deposit. The methodology used for developing Au and Ag correlogram models was based on following determined preferential directions for the grade variation behavior and lithology of each estimation domain. Since it was not a simple task to identify this behavior due to the geology groupings which form the estimation units, the process considers the creation of variographic maps as correlograms in such a way in order to better visualize the preferential directions for each estimation unit.

Variographic studies used both down the hole and directional variogram analysis.

A block model with sub-cells was constructed in order to perform the resource estimation using ordinary kriging. Each unit was estimated separately because hard boundaries were used in all cases. Validations were conducted to review the information of the nearest neighbor for global bias and drift, whereas for the general neighborhood review (where blocks around drillholes are also included), composited samples of 1.5 m were used. In order to limit the influence of very high grades, capping was performed on each estimation unit.

The estimations were validated using real grade vs. estimated grade regression and comparison of database vs. estimated block drift. Comparison of global bias was also performed.

The following criteria were used for classifying the resources:

- In order for blocks to be considered as a measured resource, the average estimation distance must be less than or equal to 28 metres. This data is taken from correlograms where at least 90% of the plateau value is appropriate. Furthermore, the block should be estimated using at least two drillholes.
- In order for blocks to be considered as an indicated resource, the average estimation distance must be less than or equal to 40 metres and greater than 28 metres. This data is taken from correlograms, where at least 100% of the plateau value is appropriate. Furthermore, the block should be estimated using at least two drillholes.
- In order for blocks to be considered as an inferred resource, the block must only be estimated for gold and may not be considered as either measured or indicated resources.

Indicator kriging was performed in order to differentiate the mineral zones and data from the mineral zones in the data base were used, namely, oxide, mixed and sulphide. After a data analysis, the decision was made to combine oxides and mixed and use the combined term, “oxides”.

Two indicator variograms were created, one for oxides and the other for sulphides.

Classified global mineral resources at Sleeper are shown in the following table.

UG_AU	Measured			Indicated			Measured+Indicated			Inferred			Total		
	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS
12									-	0.177	0.112	4,689,063	0.177	0.112	4,689,063
13	0.333	1.090	3,202,306	0.349	0.742	1,165,566	0.337	0.997	4,367,872	0.485	0.243	994,030	0.365	0.857	5,361,902
14	0.343	2.656	53,425,668	0.267	1.904	22,857,110	0.320	2.431	76,282,778	0.352	1.643	22,008,973	0.328	2.255	98,291,751
16	0.368	2.093	48,621,277	0.284	1.209	18,932,311	0.345	1.845	67,553,587	0.263	1.351	31,589,823	0.318	1.688	99,143,410
17	0.377	3.599	3,535,810	0.384	2.500	3,446,702	0.380	3.056	6,982,512	0.291	1.156	19,736,647	0.314	1.653	26,719,159
22	0.223	4.199	19,281,936	0.209	4.383	17,926,679	0.216	4.287	37,208,615	0.225	3.693	35,886,732	0.220	3.996	73,095,347
23	0.272	4.647	13,623,604	0.262	4.280	7,317,070	0.268	4.519	20,940,675	0.244	4.161	2,524,947	0.266	4.480	23,465,622
24	0.280	4.354	11,417,544	0.256	3.268	10,396,795	0.268	3.836	21,814,340	0.268	2.772	22,471,280	0.268	3.296	44,285,620
26	0.333	6.241	15,282,778	0.312	6.120	6,347,726	0.327	6.206	21,630,504	0.305	4.670	4,138,427	0.323	5.959	25,768,930
27	0.298	5.318	15,988,381	0.246	3.528	6,902,247	0.282	4.778	22,890,628	0.207	3.341	9,010,189	0.261	4.372	31,900,817
32	0.236	5.382	2,191,630	0.212	5.794	2,608,660	0.223	5.606	4,800,290	0.214	6.754	12,565,520	0.217	6.436	17,365,810
33	0.654	3.357	15,574,453	0.451	1.690	5,557,867	0.601	2.919	21,132,320	0.361	0.904	3,978,632	0.563	2.599	25,110,952
34	0.311	1.629	1,657,375	0.290	0.849	1,548,652	0.300	1.252	3,206,027	0.241	0.923	4,635,720	0.266	1.057	7,841,747
36	0.326	3.199	12,754,037	0.308	3.990	5,327,975	0.320	3.432	18,082,012	0.305	1.900	3,943,594	0.318	3.158	22,025,606
37	0.440	1.883	6,613,942	0.253	1.890	2,343,556	0.391	1.885	8,957,498	0.240	2.143	32,330,753	0.273	2.087	41,288,252
100										2.030		151,675	2.030		151,675
Total	0.349	3.380	223,170,741	0.275	2.968	112,678,917	0.324	3.242	335,849,658	0.263	2.500	210,656,005	0.301	2.956	546,505,663

Classified global oxide mineral resources at Sleeper using a 0.2 ppm Au cut-off are shown in the following table.

UG_AU	Measured			Indicated			Measured+Indicated			Inferred			Total		
	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS
12									-						-
13	0.400	1.378	1,130,280	0.341	0.878	217,631	0.390	1.298	1,347,911	0.484	0.302	261,021	0.405	1.136	1,608,931
14	0.413	2.711	2,424,966	0.374	1.746	278,135	0.409	2.611	2,703,102	0.256	0.387	308,801	0.393	2.383	3,011,903
16	0.414	1.712	9,257,734	0.358	1.102	1,975,281	0.404	1.605	11,233,015	0.332	0.840	1,466,022	0.396	1.516	12,699,037
17	0.546	2.474	150,294	0.349	2.565	70,394	0.484	2.503	220,688	0.452	0.548	554,498	0.461	1.104	775,186
22	0.283	4.166	3,262,825	0.270	4.588	2,239,848	0.278	4.338	5,502,673	0.289	3.262	2,966,843	0.282	3.961	8,469,516
23	0.329	6.049	2,632,517	0.312	5.747	1,088,567	0.324	5.960	3,721,084	0.358	5.227	105,257	0.325	5.940	3,826,341
24	0.309	4.155	1,501,790	0.299	5.009	763,555	0.306	4.443	2,265,346	0.301	4.653	576,411	0.305	4.486	2,841,756
26	0.367	5.735	4,587,573	0.326	5.507	1,233,478	0.358	5.687	5,821,051	0.376	8.856	323,669	0.359	5.854	6,144,720
27	0.324	6.946	2,386,085	0.308	6.605	991,594	0.320	6.846	3,377,679	0.288	4.773	572,347	0.315	6.546	3,950,026
32	0.310	6.769	785,713	0.295	6.571	428,165	0.304	6.699	1,213,879	0.295	8.688	1,701,956	0.299	7.860	2,915,835
33	0.628	2.436	1,325,914	0.465	0.730	350,329	0.594	2.079	1,676,243	0.468	0.178	126,712	0.585	1.946	1,802,955
34	0.323	0.569	139,135	0.270	1.476	252,115	0.289	1.154	391,250	0.254	0.664	869,101	0.265	0.816	1,260,351
36	0.478	1.451	1,869,415	0.460	0.192	778,160	0.472	1.081	2,647,575	0.458	0.074	665,313	0.469	0.879	3,312,888
37	0.554	3.072	506,260	0.320	2.093	162,186	0.497	2.834	668,446	0.318	1.848	2,693,683	0.353	2.044	3,362,129
Total	0.387	3.63	31,960,502	0.328	3.75	10,829,438	0.372	3.66	42,789,940	0.321	3.08	13,191,635	0.360	3.52	55,981,575

Classified global sulphide mineral resources at Sleeper using a 0.25 ppm Au cut-off are shown in the following table.

UG_AU	Measured			Indicated			Measured+Indicated			Inferred			Total		
	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS
12									-	0.332		648,286	0.332		648,286
13	0.455	1.343	923,954	0.467	0.774	552,174	0.460	1.130	1,476,128	0.560	0.233	587,196	0.488	0.875	2,063,324
14	0.524	3.469	24,680,506	0.436	2.198	8,386,710	0.502	3.147	33,067,217	0.650	2.035	8,450,668	0.532	2.921	41,517,885
16	0.533	3.244	20,372,797	0.441	1.693	6,642,579	0.511	2.863	27,015,376	0.432	1.348	10,592,250	0.488	2.436	37,607,626
17	0.607	5.244	1,550,628	0.565	2.904	1,821,754	0.585	3.980	3,372,382	0.476	1.886	7,628,421	0.509	2.528	11,000,803
22	0.343	5.666	4,283,700	0.335	5.931	3,642,537	0.339	5.788	7,926,237	0.349	4.504	10,229,831	0.345	5.065	18,156,068
23	0.379	5.350	4,419,282	0.354	4.372	2,500,272	0.370	4.996	6,919,554	0.334	4.191	781,169	0.367	4.915	7,700,723
24	0.483	5.676	3,462,367	0.438	3.127	3,093,228	0.461	4.473	6,555,595	0.435	2.589	8,356,532	0.447	3.417	14,912,127
26	0.472	9.126	5,260,271	0.417	7.511	2,787,397	0.453	8.567	8,047,668	0.440	5.007	1,876,202	0.450	7.894	9,923,871
27	0.451	6.365	5,832,553	0.395	3.447	1,790,153	0.438	5.679	7,622,706	0.490	5.003	1,365,951	0.446	5.577	8,988,657
32	0.365	3.085	318,551	0.342	4.656	540,784	0.350	4.074	859,336	0.344	8.017	2,633,919	0.345	7.047	3,493,254
33	0.783	3.933	11,263,145	0.551	1.998	3,776,212	0.725	3.447	15,039,357	0.447	1.145	2,526,301	0.685	3.116	17,565,658
34	0.478	3.327	711,249	0.440	1.163	591,690	0.461	2.345	1,302,939	0.438	0.988	1,082,345	0.450	1.729	2,385,284
36	0.464	5.261	4,887,725	0.429	5.987	1,964,008	0.454	5.469	6,851,733	0.433	3.663	1,259,796	0.451	5.188	8,111,530
37	0.695	1.900	3,107,901	0.414	1.433	809,384	0.637	1.803	3,917,285	0.387	1.552	10,391,989	0.455	1.621	14,309,274
Total	0.536	4.32	91,074,631	0.435	3.30	38,898,882	0.506	4.01	129,973,513	0.443	2.62	68,410,857	0.484	3.53	198,384,370

The following tables show the sensitivity of the oxide, sulphide and alluvial resources to the Au cut-off grade.

Oxide Measured and Indicated mineral resources at Sleeper by Au cut-off.

Cut-off	Measured					Indicated					M&I				
Au g/T	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz
0.1	51,140,096	0.3	3.69	493,265	6,067,162	21,251,557	0.242	3.69	165,350	2,521,244	72,391,653	0.28	3.69	658,615	8,588,406
0.2	**31,960,502**	**0.387**	**4.23**	**397,669**	**4,346,620**	**10,829,438**	**0.328**	**4.12**	**114,203**	**1,434,501**	**42,789,940**	**0.37**	**4.20**	**511,872**	**5,781,121**
0.25	23,364,479	0.447	4.5	335,785	3,380,386	6,704,861	0.393	4.4	84,719	948,506	30,069,340	0.43	4.48	420,504	4,328,893
0.3	16,930,538	0.513	4.82	279,245	2,623,708	4,274,272	0.461	4.59	63,352	630,772	21,204,810	0.50	4.77	342,597	3,254,480
0.4	9,427,511	0.648	5.22	196,413	1,582,214	1,884,221	0.61	4.89	36,954	296,236	11,311,732	0.64	5.17	233,367	1,878,451

Oxide Inferred mineral resources at Sleeper by Au cut-off.

Cut-off	Inferred				
Au g/T	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz
0.1	29,635,200	0.225	3.18	214,382	3,029,931
0.2	**13,191,635**	**0.321**	**3.42**	**136,145**	**1,450,516**
0.25	8,053,980	0.384	3.71	99,435	960,688
0.3	4,724,427	0.466	4.06	70,784	616,699
0.4	2,049,919	0.631	3.41	41,588	224,744

Sulphide Measured and Indicated mineral resources at Sleeper by Au cut-off.

Cut-off	Measured					Indicated					M&I				
Au g/T	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz
0,2	115.476.605	0,47	4,77	1.744.977	17.709.655	53.645.467	0,377	3,65	650.238	6.295.404	169.122.072	0,44	4,41	2.395.214	24.005.059
0,25	**91.074.631**	**0,536**	**5,06**	**1.569.495**	**14.816.501**	**38.898.882**	**0,435**	**3,79**	**544.032**	**4.739.953**	**129.973.513**	**0,51**	**4,68**	**2.113.527**	**19.556.454**
0,3	71.695.288	0,606	5,34	1.396.886	12.309.193	27.505.079	0,502	3,84	443.930	3.395.798	99.200.367	0,58	4,92	1.840.816	15.704.991
0,4	45.695.936	0,755	5,7	1.109.232	8.374.332	15.044.512	0,633	3,72	306.182	1.799.363	60.740.448	0,72	5,21	1.415.414	10.173.694
0,5	30.760.064	0,905	5,97	895.022	5.904.176	8.907.105	0,762	3,47	218.217	993.719	39.667.169	0,87	5,41	1.113.239	6.897.895
0,6	21.703.611	1,055	6,22	736.177	4.340.304	5.473.666	0,898	3,4	158.035	598.349	27.177.277	1,02	5,65	894.212	4.938.653

Sulphide Inferred mineral resources at Sleeper by Au cut-off.

Cut-off Au g/T	Inferred				
	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz
0.2	94,874,313	0.382	3.05	1,165,225	9,303,497
0.25	**68,410,857**	**0.443**	**3.07**	**974,376**	**6,752,446**
0.3	49,260,219	0.509	3.1	806,143	4,909,709
0.4	26,265,629	0.652	2.81	550,596	2,372,968
0.5	15,105,865	0.806	2.75	391,452	1,335,599
0.6	9,467,172	0.962	2.79	292,815	849,224

Alluvial inferred mineral resources at Sleeper by Au cut-off.

Cut-off Au g/T	Inferred				
	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz
0.1	156,140	1.975		9,915	
0.20	**151,675**	**2.03**		**9,890**	
0.25	150,281	2.045		9,881	
0.3	148,215	2.07		9,864	
0.4	134,889	2.24		9,715	

The following tables show the reported classified Sleeper mineral resources reported by Oxide, Sulphide and Alluvial at the cut-off grades indicated.

Paramount Sleeper Deposit Oxide Au Mineral Resources as of October 28, 2011

Resource Classification Oxide cut-off 0.2ppm Au	**Tonnage**	**Au Grade**	**Ag Grade**
	(Kilotonnes)	(g/t)	(g/t)
Measured	31,961	0.387	4.23
Indicated	10,829	0.328	4.12
Total Measured and Indicated	42,790	0.372	4.20
Inferred	13,192	0.321	3.42

Paramount Sleeper Deposit Sulphide Au Mineral Resources as of October 28, 2011

Resource Classification Sulphide cut-off 0.25ppm Au	Tonnage	Au Grade	Ag Grade
	(Kilotonnes)	(g/t)	(g/t)
Measured	91,075	0.536	5.06
Indicated	38,899	0.435	3.79
Total Measured and Indicated	129,974	0.506	4.68
Inferred	68,411	0.443	3.07

Paramount Sleeper Deposit Alluvium Au Mineral Resources as of October 28, 2011

Resource Classification Alluvial cut-off 0.2ppm Au	Tonnage	Au Grade	Ag Grade
	(Kilotonnes)	(g/t)	(g/t)
Measured	-	-	-
Indicated	-	-	-
Total Measured and Indicated	-	-	-
Inferred	151,675	2.030	-

Pit Resources

In order to report resources, possibly mineable resources must be shown. A Whittle run was performed in order to report resources inside a plausible pit. Available blocks with Au grades were used (below the current topography) including measured, indicated and inferred resources. Assumed economic parameters were used, including a proportional medium-ranged mine cost supplied by Paramount. The model was re-blocked to 10x10x10 m. Pit 5 from the Whittle exercise below was chosen as the most representative based on a revenue factor of 1.

The parameters used in the Whittle exercise are shown in the following table:

Resource Pit Parameters

Price Au	1,400	US$/oz
Mine Cost	1.6	US$/ton
Alluvial processing cost	5.1	US$/ton
Alluvial processing recovery	85	%
Sulphides processing cost	11.7	US$/ton
Sulphides processing recovery	90	%
Oxides processing cost	6.3	US$/ton
Oxides processing recovery	75	%

The results of the Whittle optimisation are shown in the following table. The “Rock Tonnes” column shows combined ore and waste tonnes. The “Au Grade” in the last column represents the grade of the ore tonnes reported in the “Ore Tonnes” column. The “Fine Au” column considers the fine Au content in grams.

Pit	Revenue Factor	Rock Tonnes	Ore Tonnes	Strip Ratio	Max Bench	Min Bench	Fine Au Grams	Au Grade g/t
1	0.2	556,666	251,395	1.21	80	59	655,336	2.607
2	0.4	5,679,272	2,746,872	1.07	82	58	3,413,775	1.243
3	0.6	37,777,731	14,714,432	1.57	83	54	12,094,276	0.822
4	0.8	171,542,871	49,705,465	2.45	86	46	33,302,610	0.670
5	1	316,085,293	106,200,325	1.98	87	44	56,030,621	0.528
6	1.2	513,748,827	179,053,812	1.87	87	36	80,926,930	0.452
7	1.4	648,144,201	242,747,903	1.67	87	34	98,379,898	0.405
8	1.6	729,963,229	288,878,320	1.53	87	32	108,921,162	0.377
9	1.8	819,627,448	334,114,511	1.45	87	32	118,411,300	0.354
10	2	965,834,320	378,224,461	1.55	88	30	127,809,980	0.338

Interpretation and Conclusions

The Sleeper gold-silver deposit represents a project with a great deal of potential for being an important gold producer in Nevada once again. Exploration potential adjacent to the mine is very positive as well as brownfield opportunities in the other target within the claim block that still remain to be tested, although overall exploration potential was not part of SRK’s work scope, this potential was recognized, nonetheless.

Au and Ag mineralization display various controls, including sub-vertical feeder structures and stockwork halos as well as bedding-parallel controls. The latter, is particularly seen at Facility, related to what has been interpreted in the model presented here in this report, as the base of the rhyolite (either as a flow or dome) and the contact with the underlying Mesozoic basement. These mineralization trends have not been extensively drilled, and present strong potential for continuity for increasing resources at the project.

Recommendations

QA/QC Controls

SRK recommends that the QA/QC sample and laboratory analysis evaluation be done on a regular basis during drill hole campaigns. When QA/QC analyses are completed after the drill campaign, it can be too late for making necessary adaptations and corrections. Fortunately, there does not seem to a consistent problem with the laboratory analyses, however, more attention to detail in consistently sending check assays to other labs and submitting coarse reject duplicates for analysis should be made.

Geologic Model

The following recommendations are presented.

- Grades were used as a proxy for mineralization style in the model (vein, stockwork and dissemination). Identifying mineralization style consistently in the database would allow modeling these features directly in a more geologically consistent fashion.
- The lithological units presented here are preliminary, based on the grouping of codes mapped by different companies over a long period of time. It is recommended that the partition suggested here be used as a basis for future drill hole logging review campaigns, in order to produce an integrated lithological coding system applicable to the whole deposit.
- The structures used were determined primarily on the bases of Au grade distribution and previous interpretations and conceptual models. It is recommended that field and drill hole structural information be carefully reviewed and entered into a newly compiled and integrated database as a more detailed structural model will be necessary at a more advanced project stage.

2 Introduction

In May, 2011,, SRK Consulting (Chile) S.A. (“SRK Chile”) was mandated by Paramount Gold & Silver Corporation (Paramount or Client) to make a Canadian compliant NI 43-101 Technical Report of the Resources for its Sleeper gold and silver deposit prospect, located in the Awakening Mining District, Humboldt County, Nevada, U.S.A.

Figure 2-1: Location of the Sleeper Project

2.1 Scope of Work

The scope of the work is consistent with the NI 43-101 items to be developed in the technical report considering the task of deposit modeling and resource estimation.

The areas of development and the activities under SRK responsibility, as agreed upon in the proposal, are described as follows:

1. Geology and Resources Reviewer and QP, SRK Santiago (George Even) - Field Visit, review of QA/QC and NI-43-101 document review.
2. Database Review and Validation – SRK Reno Geologist (Brooke Miller) to visit site and review database
    a. Review data stream from the logging of holes to lab results to cross-checking the database.
    b. Use blast hole samples, if possible to validate historic AMAX database.
3. Iso-Grade Modeling in Leapfrog – also investigate the possibility of creating a lithological model.
4. Resources, SRK Santiago (Joled Nur) - Perform an Indicator Kriging or Indicator Simulation in order to obtain an idea of the locations and trends of the principal veins.
5. Perform a mineral resource estimation for gold and silver using the constructed geologic units.
6. Combine and compile a single report document according to CIM NI-43-101 guidelines including database review and validation, site visit and QA/QC analysis, as well as the geologic model construction and resource estimate.

This technical report was prepared following the guidelines of the Canadian Securities Administrators National Instrument 43-101 and Form 43-101F1, and in conformity with generally accepted CIM "Exploration Best Practices" guidelines.

2.2 Work Program

The work program involved a field visit to the Sleeper property in May 2011 by SRK Chile geologist, Mr. George Even, a Qualified Person (according to NI 43-101 criteria) and SRK (Reno) Senior Geologist, Ms. Brooke Miller. They were accompanied to the site by Mr. Glen Van Treek, Paramount Vice President of Exploration and other Paramount geologists. Several meetings were held in the SRK Chile office with Mr. Van Treek together with Mr. Joled Nur, SRK project manager, during the course of this study.

2.3 Basis of the Technical Report

This report is based on information collected by SRK during the site visit and on additional information provided by Paramount.

SRK conducted certain independent verifications of exploration data from archived files provided for inspection by the Client in Paramount's Winnemucca, Nevada office. The information contained herein is based on information believed to be reliable.

This technical report is based on the following sources of information:

- Discussions with Paramount personnel and reports prepared by Paramount and previous owners of the Sleeper property;
- Personal inspection of the Sleeper project area;
- Inspection and review of drill core from the Sleeper Project;
- Review of historical exploration work conducted on the property;
- Additional information obtained from public domain sources.

2.4 Qualification of SRK

The SRK Group comprises over 1,000 professionals, offering expertise in a wide range of resource engineering disciplines. The SRK Group's independence is ensured by the fact that it holds no equity in any project and that its ownership rests solely with its staff. This permits SRK to provide its clients with conflict-free and objective recommendations on crucial judgment issues. SRK has a demonstrated track record in undertaking independent assessments of Mineral Resources and Mineral Reserves, project evaluations and audits, technical reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies and financial institutions worldwide. The SRK Group has also worked with a large number of major international mining companies and their projects, providing mining industry consultancy service inputs.

This technical report was compiled by Mr. George Even, MAIG, MAusIMM (Geology), Mr. Joled Nur (Resources), MAus IMM and Mr. Lee P. Gochnour (Environmental).

2.5 Site Visit

A site visit was made to the Sleeper property from June 15 -17, 2011 by SRK geologists, Mr. George Even (Santiago office) and Ms. Brooke Miller (Reno office), who were accompanied to the site by Mr. Glen Van Treek and other Paramount geologists. This visit had as its purpose to review the data available, particularly verifying the information used in the drill hole database, as well as procedures used during the mining of the Sleeper deposit and also during the exploration campaigns carried since the mine ceased operations in 1996.

2.6 Acknowledgements

SRK would like to acknowledge the support and collaboration provided by Paramount personnel for the preparation of this report, and in particular, Mr. Glen Van Treek for his assistance during the field visits and also during the meeting in the Santiago SRK office.

3 Reliance on Other Experts and Disclaimer

SRK's opinion contained herein and effective October 28, 2011, is based on information provided to SRK by Paramount throughout the course of SRK's investigations, which in turn reflect various technical and economic conditions at the time of writing. Given the nature of the mining business, these conditions can change significantly over relatively short periods of time. Consequently actual results may be significantly more or less favorable.

This report includes technical information, which requires subsequent calculations to derive sub-totals, totals and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK does not consider them to be material.

SRK is not an insider, associate or an affiliate of Paramount Gold & Silver Corp. and neither SRK nor any affiliate has acted as advisor to Paramount or its affiliates in connection with this project. The results of the technical review by SRK are not dependent on any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings.

SRK has not researched ownership information such as property title and mineral rights, however, receipts of claim payments and claim lists have been examined by SRK.

The Sleeper project is an idle, open pit gold mine with exploration potential. The mine produced gold concentrate from 1986 to 1996 under AMAX's operation. Paramount is currently carrying out core and RC drilling campaigns to outline further resources. A portion of the open pit is currently occupied by a pit lake.

The opinions expressed in this Report have been based on the information supplied to SRK Consulting (Chile) S.A., (SRK) by Paramount Gold and Silver Corporation (Paramount). The opinions in this Report are provided in response to a specific request from Paramount to do so. SRK has exercised all due care in reviewing the supplied information. SRK has compared key supplied data with expected values and conducted spot checks on data during the site visit. While some data from the period of historic operation of the Sleeper mine by AMAX (until 1998) could not be validated, such as the location of old hole collars in areas already mined out, in general the data received is of a good quality. Parallel studies by other consultants in the fields of mining and metallurgy as well as environmental and hydrogeological studies are being conducted. The results of those studies were not available as of the publication date of this document. Opinions presented in this report apply to the site conditions and features as they existed at the time of SRK's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this Report, about which SRK had no prior knowledge nor had the opportunity to evaluate.

4 Property Description and Location

4.1 Introduction

The Sleeper Gold Property is located in Desert Valley and the adjoining Slumbering Hills, Awakening Mining District, Humboldt County, Nevada, U.S.A. The Property is on the Jackson Well 7.5' United States Geological Survey Quadrangle at Lat: 41°20' N, Long: 118°03' W. The claims cover parts of Sections 3 to 11, 14 to 23 and 26 to 36, inclusive, in Township 40 North, Range 35 East, and Sections 1 to 3, and 10 to 12, inclusive, Township 39 North, Range 35 East, Mount Diablo Base and Meridian, Humboldt County, Nevada, U.S.A. The claims are contiguous. The U.S. Government owns the surface rights to the unpatented lode and placer claims.

4.1.1 Land Tenure

The Sleeper Gold Property (Figure 4-1) comprises 1,044 unpatented lode mining claims totaling approximately 30 square miles (6,709 hectares).

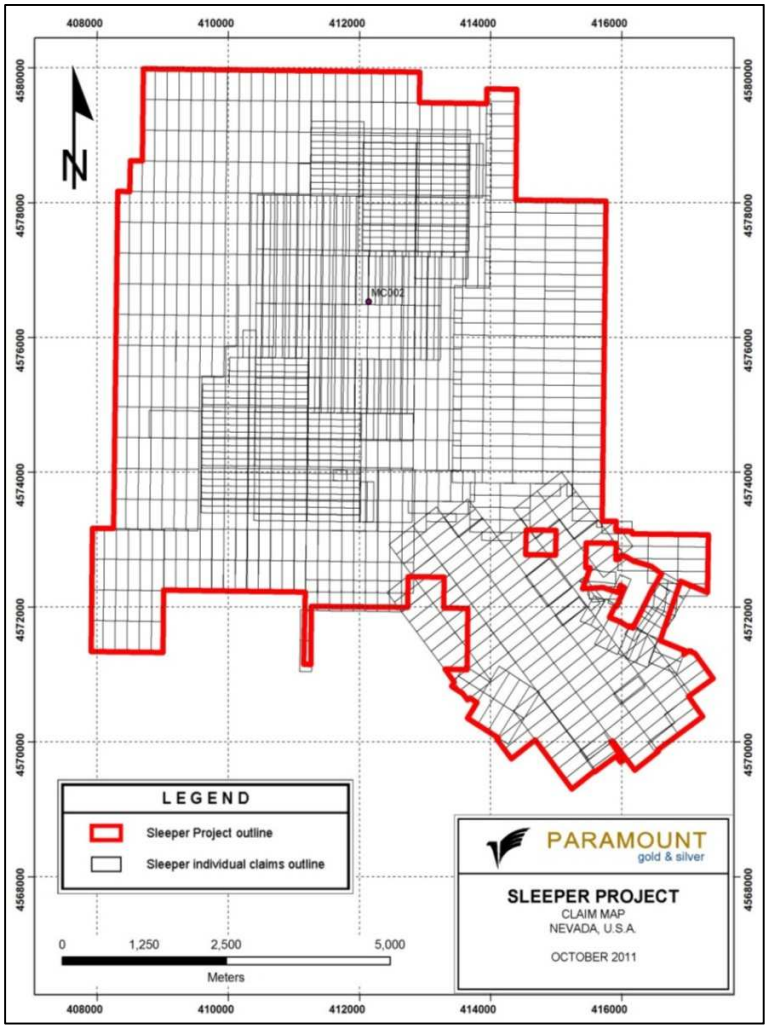


Figure 4-1: Sleeper Tenement Map

See Appendix A for a list of the claims held by Paramount at Sleeper.

4.2 Underlying Ownership

Paramount Gold and Silver Corp., is a public company listed and trading on the NYSE- American Stock Exchange (NYSE-AMEX) and the Toronto Stock Exchange (TSX). It acquired all the issued and outstanding shares of X-Cal Resources Ltd. in August 2010 by plan of arrangement. Paramount's head office and mailing address is 665 Anderson Street, Winnemucca, Nevada 84445-3657.

Paramount through its subsidiaries, X-Cal Resources Lt., X-Cal USA Inc, New Sleeper Gold LLC and Sleeper Mining Company LLC control 100% of the 1,044 unpatented lode mining claims. No one resides on the unpatented claims, which are owned by the U.S. government, and no pre-patent U.S. Mineral Survey has been conducted thereon. The authors know of no other agreements, other encumbrances or environmental liabilities that are attached to the Sleeper Gold Property. All claims registered in the name of X-Cal USA are currently assigned to the New Sleeper Gold LLC.

4.3 Mineral Rights in Nevada

Most Federal laws regarding mining on public land can be found in the United States Code (USC) under Title 30 "Mineral Lands and Mining" and Title 43, Chapter 35 "Federal Land Policy and Management" (FLPMA), and in the Code of Federal Regulations (CFR) under Title 43 "Public Lands." The majority of Nevada state laws regarding mining can be found in the Nevada Revised Statutes (NRS) under Chapters 512 through 520 and several other chapters and in the Nevada Administrative Code (NAC) under Chapter 517.

Federal (30 USC and 43 CFR) and Nevada (NRS 517) laws concerning mining claims on Federal land are based on an 1872 Federal law titled "An Act to Promote the Development of Mineral Resources of the United States."

About 85% of the land in Nevada is controlled by the Federal Government; most of this land is administered by the Bureau of Land Management, the Forest Service, the Department of Energy, or the Department of Defense. Much of the land controlled by the Bureau of Land Management and Forest Service is open to prospecting and claim location.

Bureau of Land Management regulations regarding surface disturbance and reclamation require that a notice be submitted to the appropriate Field Office of the Bureau of Land Management for exploration activities in which five acres or less are proposed for disturbance (43 CFR 3809.1-1 through 3809.1-4). A plan of operation is needed for all mining and processing activities, plus all activities exceeding five acres of proposed disturbance. A plan of operation is also needed for any bulk sampling in which 1,000 or more tons of presumed ore are proposed for removal (43 CFR 3802.1 through 3802.6, 3809.1-4, 3809.1-5). The BLM also requires the posting of bonds for reclamation for any surface disturbance caused by more than casual use (43 CFR 3809.500 through 3809.560).

Bureau of Land Management regulations (43 USC 1744; 43 CFR 3833.1-2) require that the locator of a mining claim, mill site, or tunnel site file a copy of the notice or certificate of location with the State Office of the Bureau of Land Management, along with a map showing the claims location. Failure to file this information within 90 days after the claim is located voids the claim. The certificate must include the name and current mailing address of the owner or owners, the type of claim, and the

location of the claim by township, range, section(s), and quarter section(s). The map should be similar to the one required by Nevada State law.

Federal law (30 USC 28f; 43 CFR 3833.1-5) requires an annual claim maintenance fee of $140 per claim be paid at the State Office of the Bureau of Land Management on or before September 1. During the initial assessment year (the year of location), the claim maintenance fee must be paid at the time the notice of location is filed with the Bureau of Land Management. Failure to pay the claim maintenance fee will void the claim.

Nevada law (NRS 517.230) also requires that on or before November 1 of each year that the annual assessment work is not required, the claimant, or someone in his behalf, must make and have recorded with the County Recorder a notice of “intent to hold”. This is an affidavit that must include the name and mailing address of the claimant, the name of the mining claim, the Bureau of Land Management serial number if any, and a statement that the claimant intends to hold the claim. The notice of intent to hold is proof that the claimant intends to hold the claim from 12 p.m. on September 1 of the year before the affidavit was made and recorded until 11:59 a.m. on September 1 of the year the affidavit was made and recorded.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Sleeper Gold Property is located 26 miles northwest of Winnemucca, Nevada, on the west flank of the Slumbering Hills. Access to the Sleeper Gold Property is by Interstate Highway 80 to Winnemucca, north on Highway 95 for 32 miles, west on Highway 140 for 14 miles, and then south for 6 miles on the maintained gravel Sod House Road to the project site.

The Sleeper Gold Property is in variably flat to hilly, grass-shrub-covered desert, with a few trees present on the higher elevations. Elevations in the Sleeper Gold Property area are between 4,100 ft along the western, valley side of the project to 5,400 ft on a hilltop in the south-eastern portion of the project.

The climate in the Sleeper Gold Property area is favourable for year-round mining. The temperatures are cool to cold during the winter, with occasional moderate snowfalls, and are warm during the summer with cool nights. The area is fairly dry, with infrequent rains during the summer. Exploration and mining activities may be conducted year-round. The Sleeper Gold Property area is uninhabited.

An office building, heavy equipment ‘shop’ plus assorted equipment are present on the Sleeper Gold Property site and are in use for exploration offices, core logging, storage and to support drilling programs. Necessary supplies, equipment and services to carry out full sequence exploration and mining development projects are available in Winnemucca, Reno, and Elko, Nevada. A trained mining-industrial workforce is available in Winnemucca and other nearby communities. The overall subdued topography that characterizes much of the Sleeper Gold Property provides ample ground for the sitting of mine facilities, tailings, waste dumps and heap leach facilities.

6 History

6.1 Pre-AMAX

Significant deposits of gold were first discovered in the Sleeper Gold Property area beginning in 1935 in the Awakening District at the Jumbo and Alma Mines. Narrow quartz-adularia-gold veins within folded metasedimentary rocks were exploited at the Jumbo mine, located in the Slumbering Hills about 3.7 miles southeast of the Sleeper Mine, by open pit and underground methods (Nash et al., 1995). Estimates of the pre-AMAX gold production from the Awakening District vary; Willden (1964) tabulated a total of 26,262 ounces of gold produced from the district between 1932 and 1958.

6.2 AMAX

The modern history of the Sleeper Gold Property began in April 1982 when John Wood, an exploration geologist with AMAX, observed iron staining in a scarp east of what became the Sleeper Mine during an aerial geological reconnaissance. AMAX conducted surface geological and geochemical work over the next two years, including a drilling program that identified gold mineralization that averaged approximately 0.04 oz Au/ton. In late 1984, AMAX's thirty-fourth drill hole stepped out to the west of the previous drilling and intersected 335 ft (102 metres) of silicified breccia with an average grade of 0.81 oz Au/ton gold, including one very high-grade quartz-electrum vein containing abundant visible gold (Nash et al., 1995). This hole led to an immediate increase in the exploration and development programs.

In February 1985, AMAX formally announced the discovery of the Sleeper gold deposit and open pit mine construction was approved in August 1985. The initial development plan called for construction of a 500 ton-per-day mill designed to produce 53,000 ounces of gold per year, with start-up scheduled for mid-1986. Mining initiated in January 1986 and mill commissioning began the following month. On March 26, 1986 AMAX poured its first gold bar from the Sleeper Gold Property three months ahead of schedule and little more than a year after the discovery had been announced. Although the mine plan called for production of about 40,000 ounces in 1986, the mine actually produced 126,000 ounces of gold during the year at an average cost of less than $60 per ounce, making it one of the lowest cost gold mines in the world at the time.

AMAX's initial capital investment was recouped in the first six months of operation. During those first nine months the head grade was 0.75 oz Au/ton, or more than twice the expected grade, owing to bonanza grades in the Sleeper vein (Redfern and Rowe, 2003).

Mill throughput exceeded design capacity during the first full month and was running about 30% over design capacity by the end of the year. In September 1986, AMAX began processing low-grade material in a heap leach circuit. Production increased to 159,000 ounces in 1987 (the first full year of production) and to 230,000 ounces in 1988 at an average cost of $103 per ounce (Proteus, 2002). Armed guards were hired to protect the high-grade, visible gold in the pit.

In 1993, annual production declined to 100,000 ounces at a cash cost of $317 per ounce. Cyprus Minerals and AMAX Inc. merged to form Cyprus AMAX Minerals Co. in 1994. AMAX suspended mining operations at Sleeper in 1996.

The Sleeper operation was designed to treat oxide mineralization by both milling and heap leaching. There was no flotation circuit in the mill to recover gold bearing sulphides. The early pit mill feed was

oxide material, but zones of sulphide mineralization were present in the pit. Reported gold production from the mill was 1,219,880 ounces and 438,609 ounces from heap leaching (Zoutomou, 2007). Silver production totaled approximately 2.3 million ounces.

The cover photo of this report shows the Sleeper pit today. The lake formed by the influx of ground water has filled the pit to within 110 feet (33.5 metres) from the crest of the original pit limits. The mill and crushing facilities have been removed and the mill area reclaimed.

6.3 X-CAL

In 1993, X-Cal acquired property around the Alma underground mine, which lies in the Awakening District to the southeast of the Sleeper pit, through an agreement with Leland York. X-Cal's surface mapping and sampling identified several areas of anomalous gold. X-Cal acquired additional land in 1994 and 1995, so that its holdings then extended to the limit of the AMAX Sleeper Property boundary. In April 1996, X-Cal and AMAX formed a joint venture to explore the Sleeper Gold Property, which included the land holdings of both X-Cal and AMAX.

In 1997, X-Cal entered into an option agreement with Placer Dome. During an intensive 40-day period from July 11 to August 20, 1997, Placer Dome reviewed the Sleeper Gold Property data in detail, completed a detailed aeromagnetic survey, and drilled 46 holes (30,992 ft (9,446 metres) of reverse circulation (RC) drilling; 5,509 ft (1,697m) of diamond core drilling). Revised terms to extend the agreement could not be agreed upon and the Placer Dome option expired.

X-Cal became vested as 50% owner of the Sleeper Gold Project, including the Amax Gold claims and Sleeper Mine Site Area.

In 1998, AMAX merged with Kinross. X-Cal negotiated a series of options to purchase the Kinross interest in Sleeper. From 1998 through 2003, there were several amendments to the agreements between X-Cal and Kinross (Proteus, 2002).

6.4 New Sleeper Gold

On January 9th, 2004 X-Cal and New Sleeper Gold Corp formed a 50/50 Joint Venture and acquired Kinross Gold's 50% interest in the Sleeper Gold Property. New Sleeper assumed management of the Sleeper Gold Property. During the period February 2004 to July 2005 money contributed by New Sleeper Gold to the Sleeper Joint Venture, funded exploration at Sleeper and completed 97,704 ft (29,780 m) of drilling. The drilling consisted of 2,260 ft (688.8 m) of sonic drilling, 37,315 ft (11,373.6 m) of RC drilling and 55,869 ft (17,028.9 m) of core drilling. In addition the Sleeper Joint Venture conducted trenching, electrical geophysical surveys (both IP and MT), ground gravity surveys, 'Quicksilver' mercury soil gas surveys, O2/CO2 soil gas surveys, geological mapping, extensive soil geochemical sampling, and aerial photography. The mill and crusher facilities were removed and the sites where these facilities formerly stood were reclaimed under the management of New Sleeper Gold Corp.

Commencing in August 2005, New Sleeper Gold and X-Cal began to equally fund work at Sleeper, as the initial Joint-Venture funding contributed by New Sleeper Gold had been expended.

During 2004 and to the end of November 2005, New Sleeper Gold LLC had generated approximately 6 to 7 million US dollars of new exploration data acquisition for the Sleeper Gold Property, exclusive of corporate overhead.

In May of 2006, X-Cal purchased New Sleeper's 50% interest in the project for a combination of cash and X-Cal common stock. The Sleeper Gold Property was then consolidated 100% into X-Cal Resources Ltd.

The following figure shows the areas of Sleeper that were under study during the Joint-Venture period.

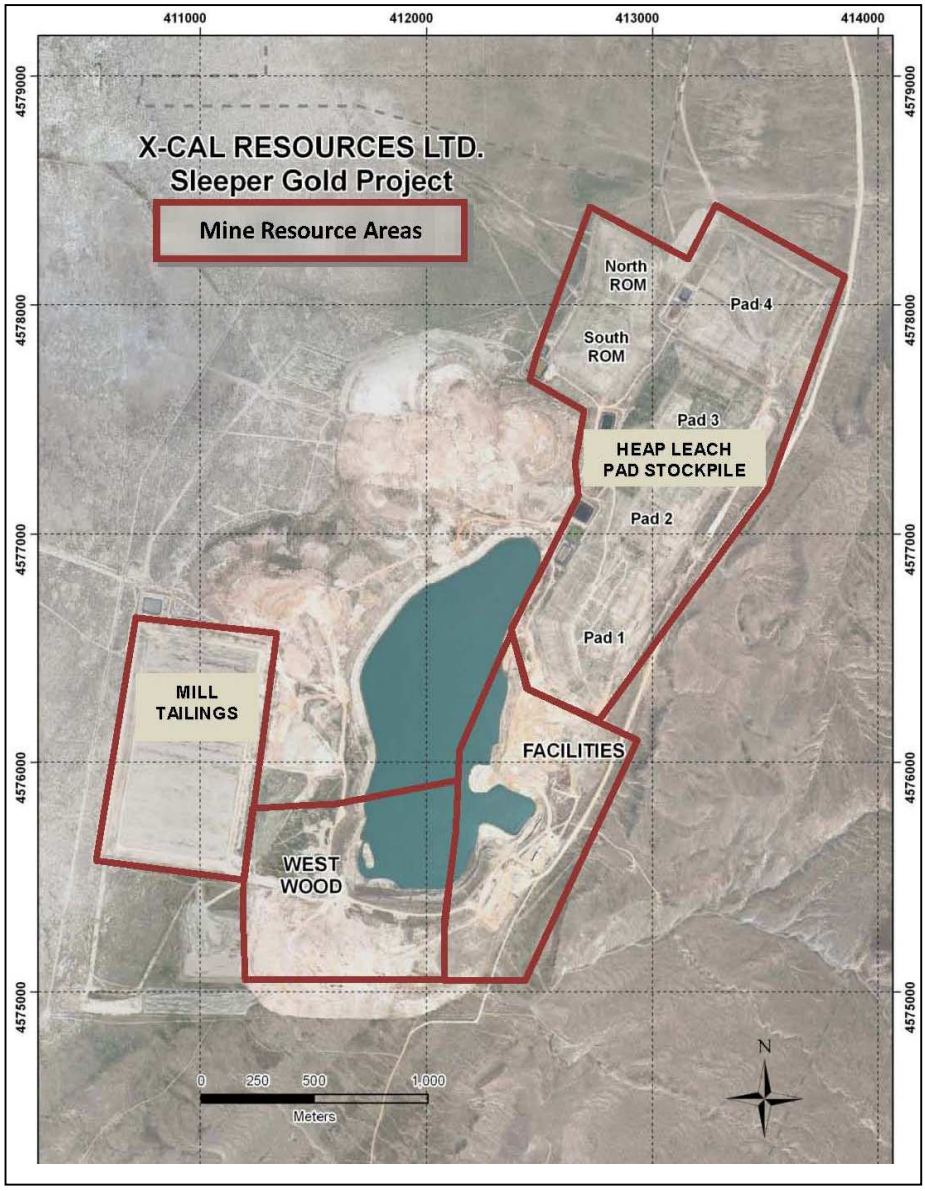


Figure 6-1: Sleeper Resources areas studied by the Joint Venture

6.5 Paramount

Paramount Gold and Silver Corporation acquired all the issued and outstanding shares of X-Cal Resources Ltd. in August 2010 by plan of arrangement.

Paramount through its subsidiaries, X-Cal Resources Lt., X-Cal USA Inc, New Sleeper Gold LLC and Sleeper Mining Company LLC control 100% of the 1,044 unpatented lode mining claims. All claims registered in the name of X-Cal USA are currently assigned to the New Sleeper Gold LLC.

Paramount drilling at Sleeper began October 11, 2010 and consisted of a diamond drill program of 19 drillholes totaling 18,065 ft (5,810 m) carried out by DeLong Drilling and Redcor Drilling, both of Winnemucca, Nevada. The Redcor core drill was mobilized to site October 26, and began drilling on October 30, 2010 and ended in February, 2011. Currently, a drilling programme is underway whose results are not included in this report.

The drilling by Paramount has focused on two mine area zones (West Wood and Facilities area) with the twin goals of verifying the existing model, and to demonstrate continuity/strike extension.

Current activities at the site involve exploration, permit maintenance and reclamation monitoring. The Project is currently operated as an advanced exploration project.

7 Geological Setting, Mineralization and Modeling

7.1 Regional Geology

The Sleeper Gold Property area is situated within the western, apparently older, part of the Northern Nevada Rift ("NNR") geologic province of Miocene age, along the western flank of the Slumbering Hills. The regional geologic framework and generalized local geology and stratigraphy are described below and are shown in Figure 7-1 (modified from Nash et al., 1995).

The core of the Slumbering Hills consists of Mesozoic meta-sedimentary rocks of the Auld Lang Syne Group and Cretaceous granitic intrusions (Willden, 1964). Tertiary volcanic and intercalated sedimentary rocks unconformably overlie the Mesozoic units locally in the northern part of the range. Much of the Tertiary volcanic units are thought to be outflow facies of the McDermitt volcanic field and related calderas to the north, with the volcanic rocks that host the Sleeper deposit originating from a local volcanic complex (Nash et al., 1995). Quaternary pediment gravels and aeolian sands lie to the west of the Slumbering Hills and cover much of the Sleeper Gold Property area.

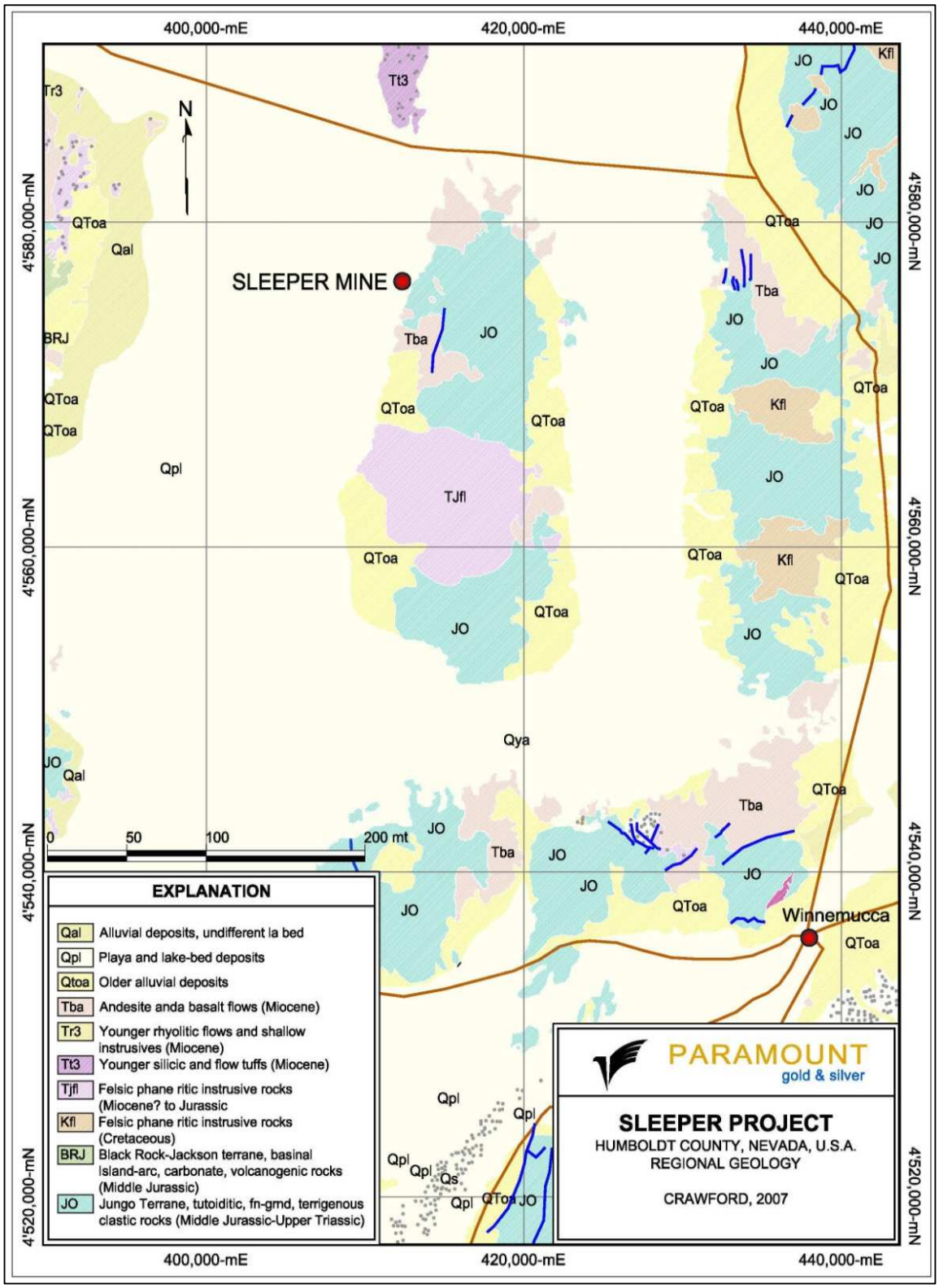


Figure 7-1: Regional Geology of the Sleeper area

7.2 Property Geology

The Sleeper Gold Property is located on the western flank of the Slumbering Hills, largely within Desert Valley. The rock units that underlie Desert Valley appear to have been down-dropped 3,000 to 3,300 ft along north-to northeast-trending normal faults along the western edge of the Slumbering Hills (Nash et al., 1985). Northwest-striking faults also are present, which may represent re-activated Battle Mountain-Eureka trend structures.

Basement rocks are exposed in the Slumbering Hills to the east of the Sleeper Mine and are comprised of the Auld Lang Syne Group of Triassic to Jurassic (?) age. The Auld Lang Syne Group is a sequence of dark, fine-grained slate, phyllite, quartzite, calcareous phyllite and local marble to granular limestone. These sedimentary units were deformed and weakly metamorphosed to greenschist facies during the Mesozoic (Willden, 1964; Burke and Silberling, 1973). The Auld Lang Syne rocks host the quartz-adularia-gold veins that were exploited at the Jumbo and Alma mines. A granodioritic to monzonitic pluton was emplaced during the Cretaceous (Willden, 1964) in the central part of the Slumbering Hills.

Tertiary volcanic rocks (Nash et al., 1985) unconformably overlie and intrude the Mesozoic rocks in the northern and eastern parts of the Slumbering Hills. The first unit deposited on basement was a sequence of volcaniclastic rocks and local volcanic flow strata of intermediate composition that is up to 650 ft thick. The age of this basal unit is uncertain; an age date of 17.3 Ma was obtained from adularia from a vein cutting this unit at the Jumbo Mine (Conrad et al., 1993).

The Intermediate lavas lie atop the basal volcaniclastic unit and are approximately 500-ft thick. This unit consists of a sequence of volcanic flows and flow breccias of dacitic to basaltic composition. A felsic, pumiceous lapilli tuff unit approximately 130-ft thick lies atop the Intermediate flows unit and is in turn overlain by the Sleeper rhyolite. The Sleeper rhyolite is the main host of gold mineralization within the Sleeper pit and consists of a sequence of flows, dikes, sills and flow domes of quartz-eye rhyolite with sanidine phenocrysts and local biotite. Similar appearing rhyolitic to quartz latite dikes and sills are found to the east and southeast of the Sleeper Mine in the Slumbering Hills. The age of the Sleeper rhyolite is approximately 17 Ma, but there are no direct age dates (Nash et al., 1995).

The Sleeper rhyolite is overlain by significant volumes of per-alkaline rhyolite ash flow tuffs, correlated with the tuff of Oregon Canyon (Nash et al., 1995). These tuffs, which are thought to post-date the gold mineralization at the Sleeper Mine, originated from calderas in the McDermitt area about 50 miles to the north at approximately 16.2 to 16.1 Ma (Conrad et al., 1993). This unit crops out in the northern Slumbering Hills, where it is up to 250-ft thick, contains soda amphiboles and is strongly welded.

Flows of the Awakening Rhyolite occur southeast of the Sleeper Mine capping a hill called ZZ Top and are up to 600 ft thick. They have been dated at 13.6 +/-0.7 Ma (Conrad et al., 1993). The Awakening Rhyolite appears to have formed several flow domes along normal faults and the rocks are generally fresh and little altered, in contrast to the strongly altered flows of the older Sleeper rhyolite (Nash et al., 1995). Some silicified but gold-poor dikes of this unit occur near the flow domes.

Pliocene (?) basalt dikes occur locally southeast of the Sleeper Mine and represent the youngest igneous unit recognized in the Slumbering Hills. Older alluvium (Pliocene to Quaternary; Nash et al., 1955) occurs in the Sleeper Gold Property area; weathered clasts with quartz veins and visible gold in gravel deposits were found overlying the main deposit at the Sleeper Mine. Airfall ash tuff beds dated at 2.1 Ma (Pliocene) by Conrad et al. (1993) locally overlie the Older Alluvium. Younger

Quaternary alluvium lies atop the Pliocene tuff beds, as valley fill in Desert Valley and as pediment gravels, alluvium, and colluvium along the flanks of the Slumbering Hills. A mantle of aeolian sand covers much of the surface of Desert Valley and the adjoining hills.

Basin and Range extension was first manifested in lacustrine and alluvial volcaniclastic materials that were deposited prior to 17 Ma, and in numerous high-angle normal faults with northerly to northeasterly strikes. Sets of northwest trending faults may have been initiated at or before this time, as certain faults with this orientation host quartz-adularia vein systems in the Slumbering Hills, such as at the Jumbo and Alma mines.

During late summer in 2006 an X-Cal drilling program was proposed to test several exploration targets located along the Range Front fault. RF-06-01 was located at the southern end of the iron stained scarp exposure that brought attention to the area during Amax's exploration program. The proposed target was to drill an angle hole west to east to intersect the Range Front fault at depth and continue into the meta-sedimentary rocks of the Auld Lang Syne Group. The drill hole intersected a heterolithic breccia zone and the meta-sedimentary contact earlier than anticipated. The volcanic breccia was in contact with the meta-sediments but did not appear to be a tectonic contact. This observation was not understood until core holes and additional RCD holes were drilled in the reclaimed Facilities Area (location of the demolished Amax mill, assay lab and crushing facilities).

Two core holes were drilled in the Facilities North resource area early in 2007. Meticulous logging of the drill holes identified cobbles and occasional boulders of altered vesicular basalt supported by a matrix of cryptocrystalline volcanic ash. Further inspection identified other volcanic clasts of various lithologies supported by the ash matrix. A "block in ash" texture (McPhie, Doyle and Allen, 1993), had been identified and the wide spread occurrence of the volcanic breccia throughout the Facilities Area was referred to as a volcanic unit given the name "debris flow". SRK is of the opinion that further work in reviewing the logging of these holes should be done in order to better describe this unit and see if this terminology is correct.

The "debris flow" is the primary host lithology for precious metals mineralization identified at the Facilities area. Thickness of the debris flow ranges from 100 feet (30 m) to 500 feet (150 m). Ash layers that are inter-bedded within the debris flow are not mineralized but do exhibit advanced argillic alteration. The ash units range in thickness from 5 feet (1.5 m) to 20 feet (6 m). The debris flow dips westerly towards the existing open pit and has been identified in core at West Wood. The banded veins with visible gold (electrum) and the higher grade sulphide breccias of West Wood are developed within the debris flow. The lower grade mineralization of West Wood favors the debris flow and is similar to mineralization found at the Facilities area.

Detailed cross sections developed during the geologic modeling process of Facilities (North and South) in 2007, defined a complex structural setting. The following is a summary of the structures and possible tectonic relationships presently identified.

A very prominent swarm of through going northwest structures (azimuth 325) cut through the Facilities North and South areas. Between the northwest trending structures are numerous northeast (azimuth 50) structures that are steep dipping and predominantly have downward displacement towards the southeast. A series of Range Front type structures (north northeast) down drops stratigraphic marker beds and/or contacts (volcanic sediments and meta-sedimentary rock contact) nearly 100 feet (31 m) westerly. Additional northeastern (azimuth 15-20) structures that parallel the

Sleeper vein, but have apparent up thrown movement on the western flank and an easterly dip direction, may be related to feeder structures for mineralization identified in the Facilities areas.

Five northwest trending structures were identified in Facilities North. The first of these structures projects southeast from the southeastern toe of leach pad 1. The spacing or periodicity between the remaining four structures is approximately 450 feet (137 m). The dip direction for these structures is southwest and measures approximately 75 to 80 degrees. Apparent strike slip movement for the first three and the fifth structure is right-lateral 50 to 100 feet (15 to 31 m). The fourth structure in this sequence may have an apparent left-lateral movement. Down dip offsets of the northwest trending structures were measured less than 50 feet (15 m).

The pattern of northeasterly striking structures developed between the northwest bounding structures reflect similar patterns of transverse and extensional fractures from brittle failure as had been identified by experimental ductile shear tests conducted by Borg and Handin, 1966.

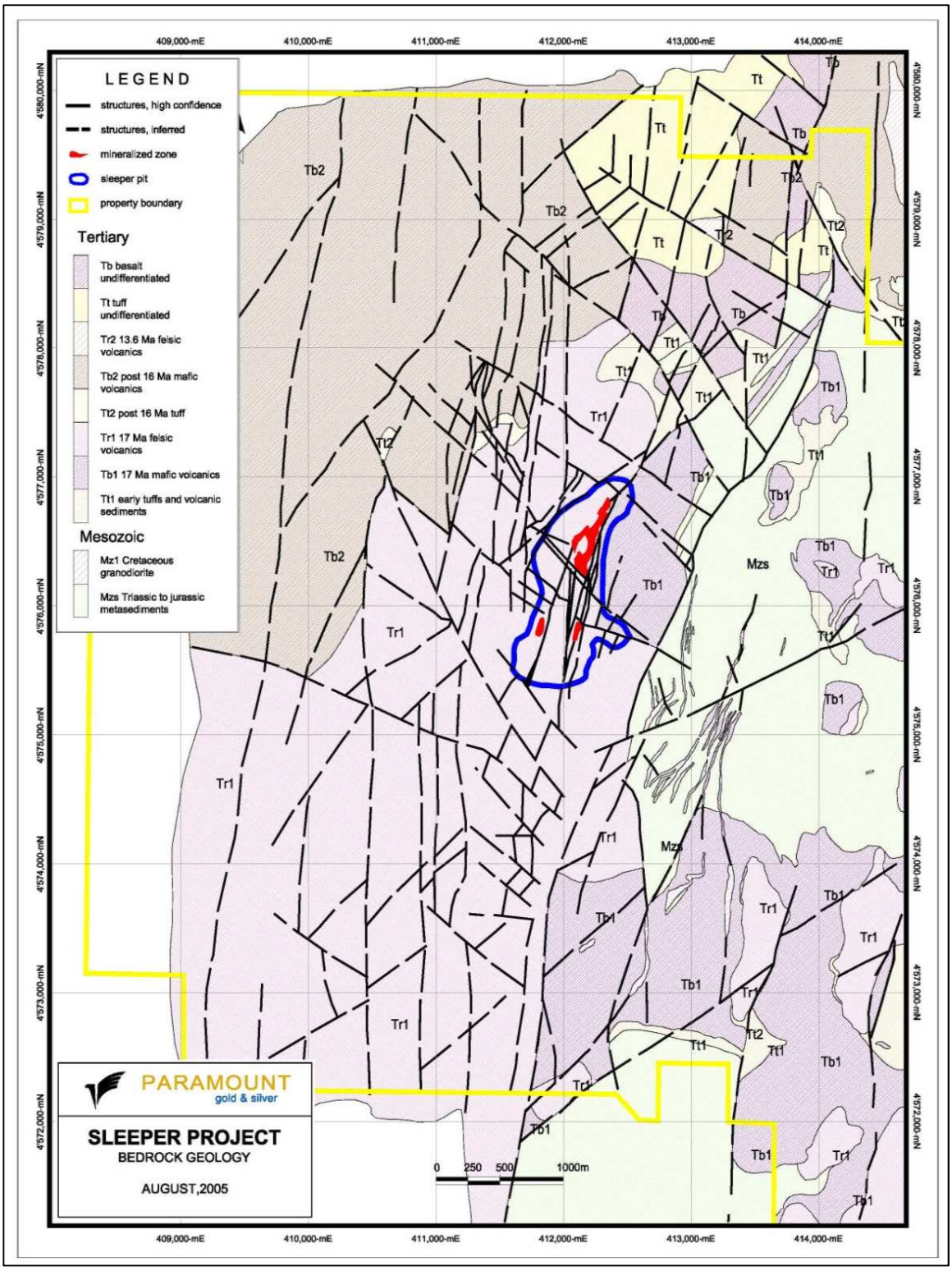


Figure 7-2: Sleeper Deposit Bedrock Geology

7.3 Mineralization

7.3.1 Mineralization and Alteration

Four main types of gold mineralization are found within the Sleeper deposit and may represent a continuum as the system evolved from a high level, high sulphidation system dominated by intrusion related fluids and volatiles to a low sulphidation meteoric water dominant system (Corbett, 2005, Utterback, 2005, Histed, 2005). In this setting the paragenetic relationships of the differing mineralization styles are as follows:

- Early -quartz-pyrite-marcasite stockwork
- Intermediate -medium-grade, silica-pyrite-marcasite cemented breccias localized on zones of structural weakness
- Late -high-grade, banded, quartz-adularia-electrum-(sericite) veins
- Post -alluvial gold-silver deposits in Pliocene gravels

AMAX mined all four types of mineralization, with high-grade material (> 0.1 oz Au/ton) processed through the mill and low-grade (0.006 to 0.1 oz Au/ton) material processed by heap leaching. All were mined by open pit methods from the Sleeper, Wood, and Office pits. The deposit was mined over a north-south distance of 4,500 ft (1,372 m) and an east-west width of approximately 2,100 ft (640 m). During AMAX's operations, the mill feed included the high-grade veins and breccias, while the heap leach feed included lower-grade breccias and stockwork zones. Alluvial gold zones were a special ore type, as they contained vein-bearing clasts with coarse-grained gold that had to be processed through the mill.

The high-grade bonanza veins are banded and composed of layers of quartz-adularia-electrum, with minor carbonate, barite, and late stibnite. Veins ranging from 1 inch to 20 feet in true width were mined in the Sleeper, East Wood, West Wood and Office vein systems. Numerous other narrower or shorter veins have been found in the course of drilling and mining, including several below the final mined pit, and some hosted within Auld Lang Syne meta-sedimentary rocks.

The mined high-grade veins showed good continuity along strike and dip, although the distribution of the highest-grade values was somewhat erratic. Detailed drilling and pit mapping show that the high-grade vein systems can be followed along strike for distances of more than 650 ft, although high-grade gold values and the veins themselves do not continue uninterrupted over these lengths. Veins locally averaged over 20 oz Au/ton within the Sleeper pit; one blast hole reported 195 oz Au/ton over 20 ft (6 m) and an RC drill hole intersected 162 oz Au/ton over a true width of 5 ft (1.5 m). The vein zones in the pit were localized primarily within the Sleeper rhyolite, although they are known to extend downward into the intermediate volcanic rocks and Auld Lang Syne strata. The veins did not show an appreciable nugget effect, as determined by numerous screen-fire gold assays performed by AMAX and X-Cal (Redfern and Rowe, 2003).

Medium-grade breccias in the mine, which were clast-supported and cemented by silica, pyrite, marcasite and adularia, typically assay between 0.1 and 1.0 oz Au/ton. The pyrite-marcasite content of the higher-grade breccias was notably higher than in the veins. The silver content in mined breccias was typically three to six times the gold grade. Much of the breccia mined by AMAX was within 20 feet (6 m) of the high-grade veins, occurring in both the footwall and hanging wall rocks, although they also occurred in discrete zones up to 10 ft (3 m) wide more that 150 ft (45 m) from

known veins. Individual breccia bodies were typically 3 to 10 ft (1 to 3 m) wide and graded laterally into less brecciated wall rocks cut by stockwork veins (Nash et al., 1995). Lower-grade stockwork and breccia mineralization accounted for approximately 20 percent of the gold production. Mineralized breccias extend below the depth of the Sleeper Mine open pits, as demonstrated by X-Cal drilling west of the Wood Pit, where the breccias are particularly rich in sulphides.

Alluvial gold mineralization of Miocene or Pliocene age was found and mined in the western part of the Sleeper pit. This Older Alluvium consists of poorly sorted conglomerates derived mostly from the weathering of altered Sleeper rhyolite and partly from vein/stockwork ores. Nash et al. (1995) stated that approximately 100,000 ounces of gold were produced from this material in 1990 to 1992 at grades of approximately 0.1 oz Au/ton.

7.4 Geological Modeling

Leapfrog Support Chile (LSC) was retained by SRK Chile to create a 3D Geological model of Paramount's Sleeper gold deposit in Nevada. The deliverable products of this work 3D meshes for Au and Ag mineralization and a lithological model of the study area, to be used as geological domains for resource estimation by SRK. Ernesto Jaramillo, Principal Geologist and Head of Resources at SRK Consulting in Santiago, Chile, worked together with LSC to check the models and verify the process and interpretations. This was also monitored together with Paramount personnel during several meetings held during the process of this study.

7.4.1 Methodology

Leapfrog Support Chile uses Implicit Geological Modeling Techniques in their projects, through Leapfrog Mining™ software, developed by Applied Research Associates New Zealand Limited (ARANZ). This methodology consists on using numerical data and user-defined parameters to calculate Volume Functions, from which iso-surfaces can be triangulated. This method eliminates or minimizes the need to manual digitization in 2D sections and plans.

Input data for a volume function can be any 3D georeferenced data, particularly drillhole intervals with assay, intensity or numerical property values. In the case of discrete geological data such as lithology, alteration or mineral zone, the data are converted to "volume points" in the software, through a process that incorporates compositing, dilution, time sequence and cross-cutting relationships into account. In the discrete case, each unit being modeled is represented by a separate set of volume points, which have a value of 0 in the contacts of the unit being modeled.

Geological criteria, critical components and their associated features such as distribution, variability, continuity and structural control are defined by the modeler and entered as numerical parameters, which are applied to the input data in order to create a volume function for each unit. The model can be divided in domains in which different parameters can be defined. Domain boundaries are commonly created from the structural model, which can be generated from the input data, imported from other software, or digitized in Leapfrog Mining™.

Finally, wireframes are constructed from the volume function, with user-defined fitting and triangle-size parameters. The final interlocking model is created by using Boolean operations (union, subtraction and intersection) according to the geological cross-cutting relationships.

Cowan et al. (2003) provide a more detailed description of the Geological Modeling Techniques and its fundamentals. A sample solid construction sequence is shown in the following figure. The upper

image shows the drillhole Au assay data. The middle image shows the drillhole data composited into included (Au > 0.3 ppm) and excluded (Au < 0.3 ppm) regions. The lower image shows the volume points generated from 5 m composited intervals and interpolated Au > 0.3 ppm. Structural trend anisotropy was used.

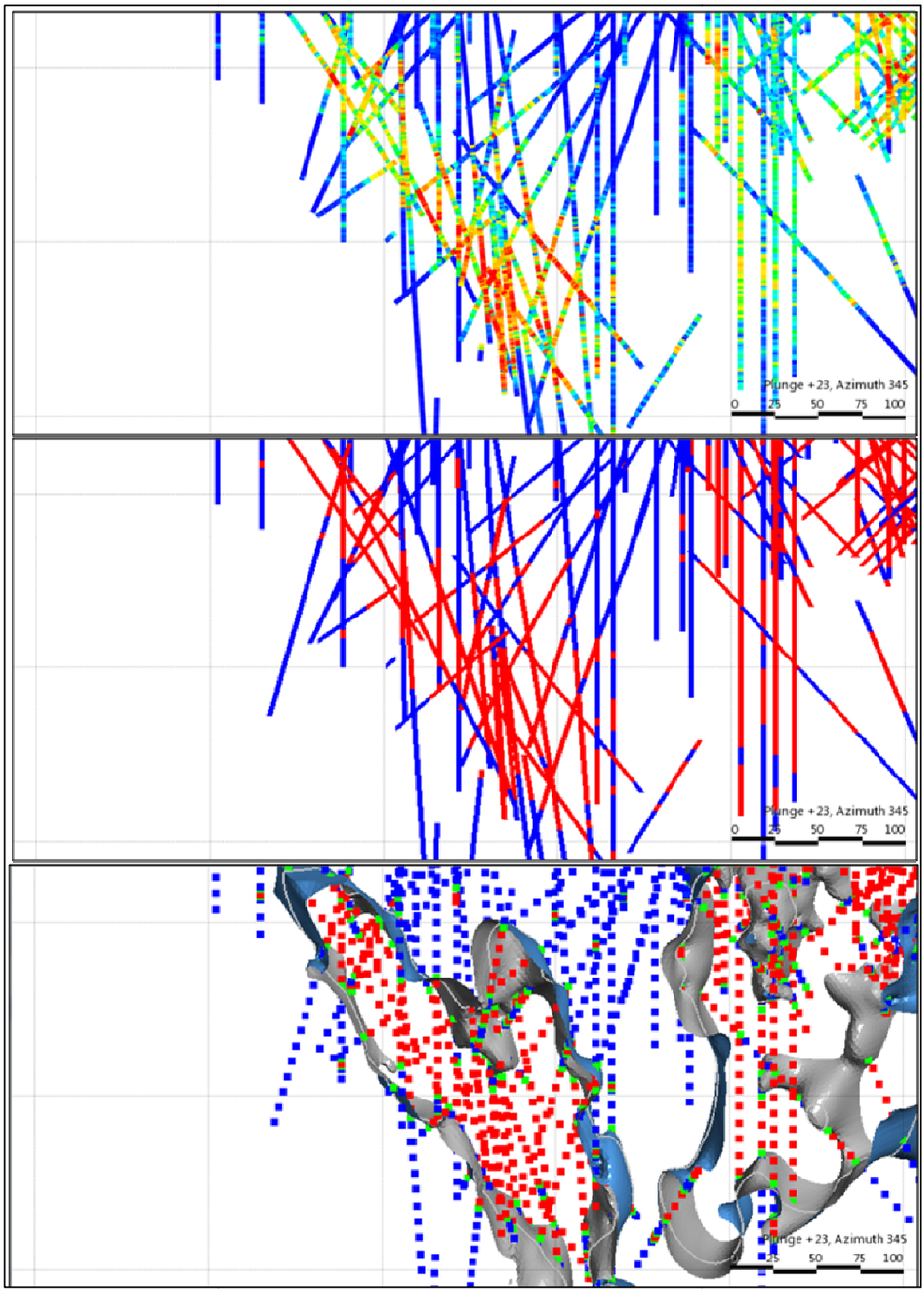


Figure 7-3: Example of implicit modeling of an Au mineralization zone (sliced view of the Westwood Area).

7.4.2 Summary of Geological Modeling Process

The following guidelines and hypotheses were used to guide the modeling process. They were obtained by reviewing the available literature (see references), from discussions with Paramount and SRK professionals and from the three-dimensional integration and study of geophysical, geological and geochemical information:

- The Sleeper deposit is located on the western foothills of the Sleeper range, in NW Nevada. It consists of an epithermal Au-Ag vein system controlled by an extension-related system of NW, NS and bed-parallel structures affecting stratified rocks.
- Country rock is composed of a Mesozoic metamorphic basement overlaid by a volcano-sedimentary sequence.
- The latter is intruded by a system of rhyolitic porphyry domes, whose N-S feeders structures appear to control the bulk of the vein mineralization (Conrad et al., 1993).
- Bed parallel structures related to the base of the rhyolite porphyry and the contact also act as control for Lower grade, disseminated mineralization.
- NW structures act as discontinuities for the main N-S veins, as well as hosts for lower grade mineralization.
- Alluvial gold is present in the overburden, which should be treated as a different domain.

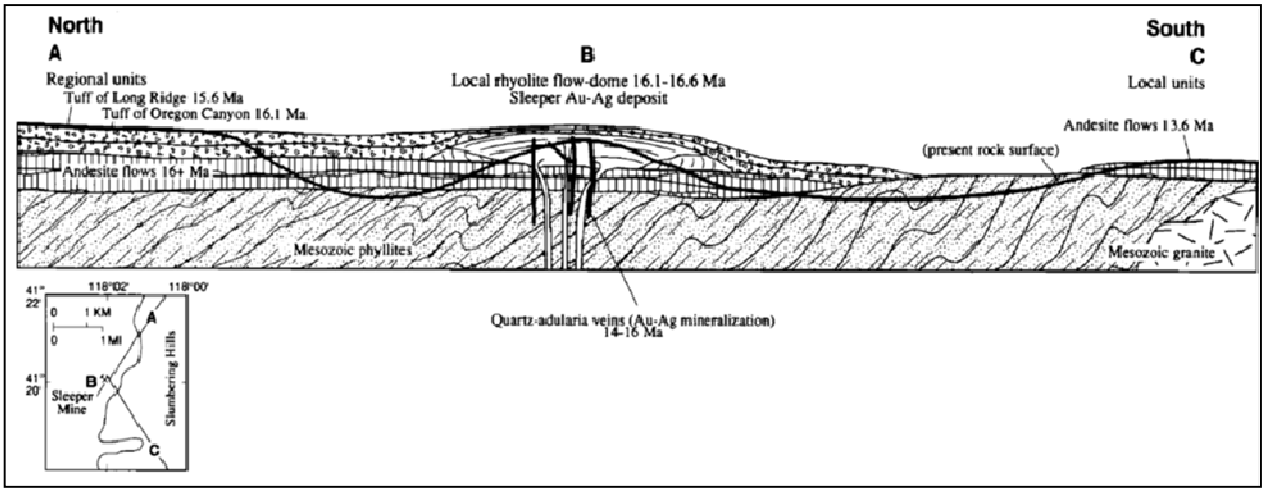


Figure 7-4: Schematic cross-section showing relationship between rocks exposed in the Slumbering Hills and at the Sleeper mine, prior to basin and range faulting and ensuing erosion and sedimentation (Conrad et al., 1993).

7.4.3 Structural Modeling

A structural model was created with the purpose of creating mineralized envelopes that properly represent the geological controls and anisotropy of the gold distribution. This is achieved by creating wireframes of the controlling structures, which are used to direct the interpolation of the Au grades by the "structural trend" feature in the Leapfrog Mining software.

All input data were integrated on a 3D scene. Blastholes and diamond and reverse circulation drillhole assay data most clearly showed which structures needed to be considered to direct the interpolation. These domains were not used as boundaries for the Au and Ag models, since mineralization appears controlled by but not limited to structures. However, some of the structures

were also observed to define hard boundaries for the lithological units, and were therefore used to define structural domains.

The figure below shows the Sleeper blasthole and drillhole data. The top figure is an inclined perspective view from the SE showing drillholes and assays as colour ranges. The middle figure displays the structural wireframes of principal vein controls (N-S) and discontinuities (NW), also in a perspective view. The bottom figure is a sliced view section (W-E) showing assays, vertical and bedding parallel structures, and local anisotropy (black ellipsoids) of the combined structural trend.

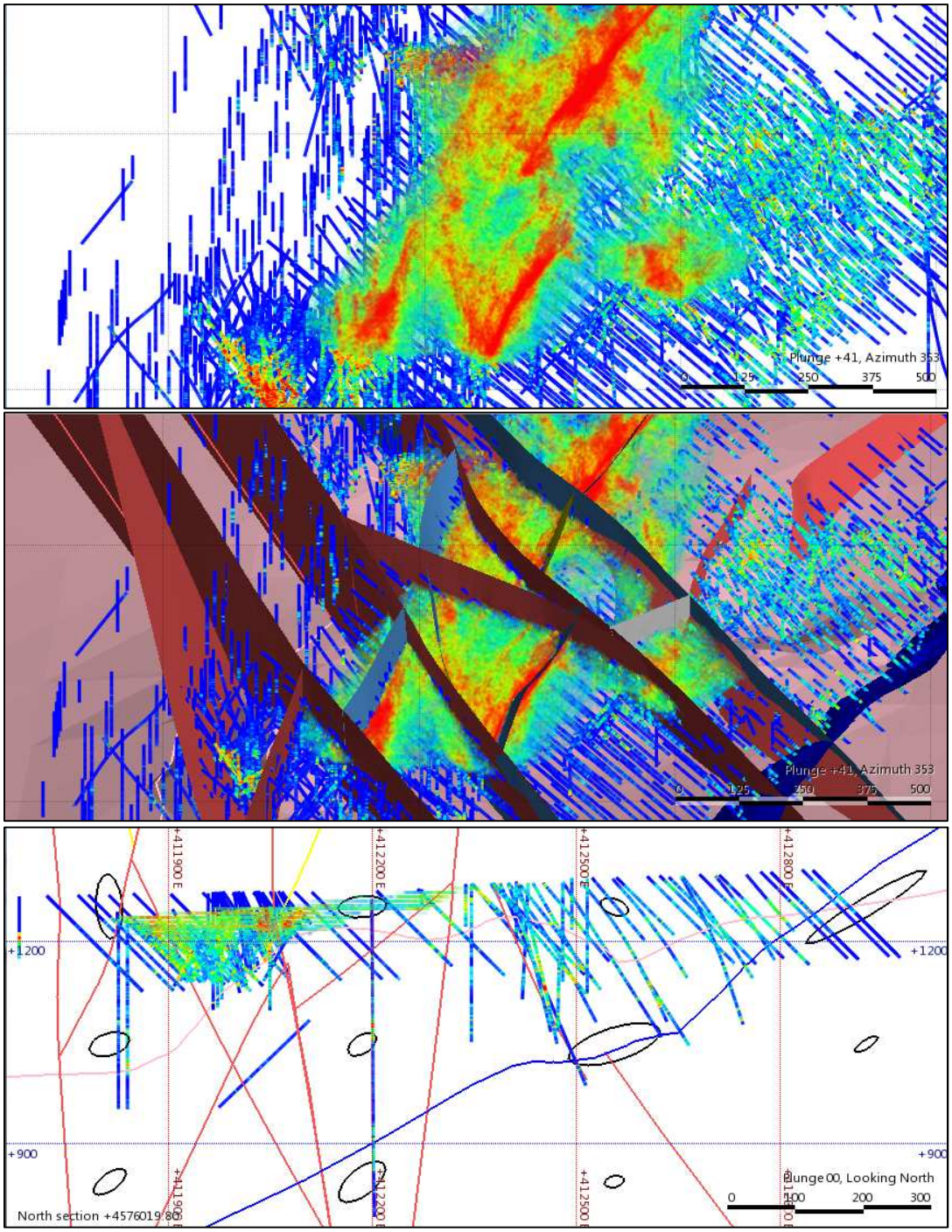


Figure 7-5: Sleeper deposit blasthole and drillhole data

7.4.4 Mineralization Model

The location and shape of the veins in the sleeper deposit are understood mainly by grade distribution rather than by geological drillhole mapping. Therefore, mineralized zones were modeled by defining two regions for Au grades and two for Ag grades. Once these regions were defined, a structural trend was applied based on the structural model. Alluvial deposits were modeled as a separate domain, using the same grade envelopes and a trend parallel to the base of the overburden.

As agreed with Paramount, grade envelopes were selected that represented vein and disseminated mineralization. The grade values selected were 0.3, 0.1 and 1 ppm Au, and 2 and 10 ppm for Ag.

These envelopes were constructed from volume points extracted from composited and filtered drillhole data, and by applying the above mentioned structural trend to the interpolation, with the exception of the alluvial mineralization for which a trend parallel to the base of the overburden was used.

In addition to the mineralization envelopes, three vein zone envelopes were digitized in Leapfrog using Bezier polylines and interpolated volumes. These envelopes were generated by request of Paramount, in order to restrict subsequent grade interpolations in the main areas (Facilities, Sleeper and West Wood).

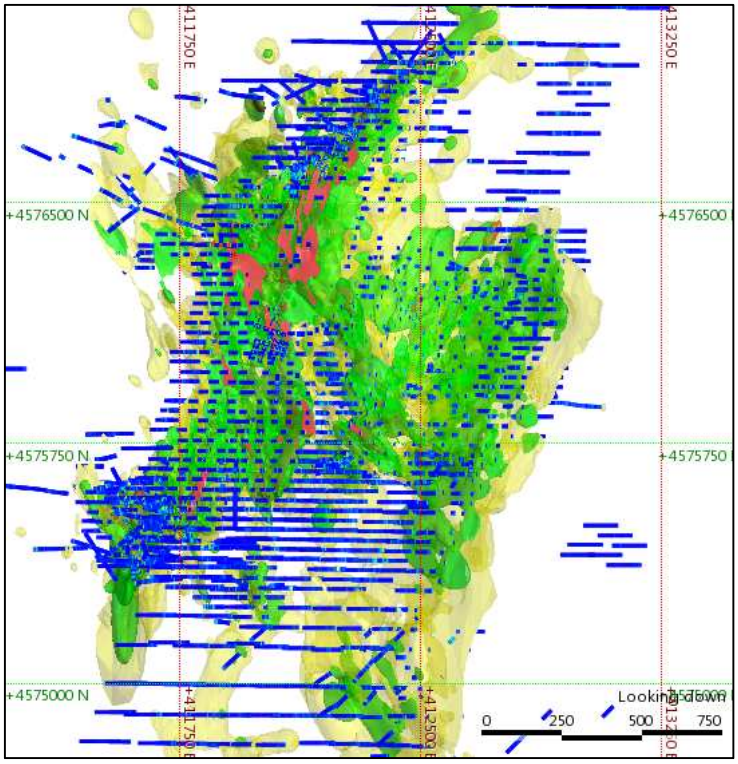


Figure 7-6: Plan view of Au wireframes (yellow > 0.3 ppm, green > 0.1 ppm, red > 1 ppm).

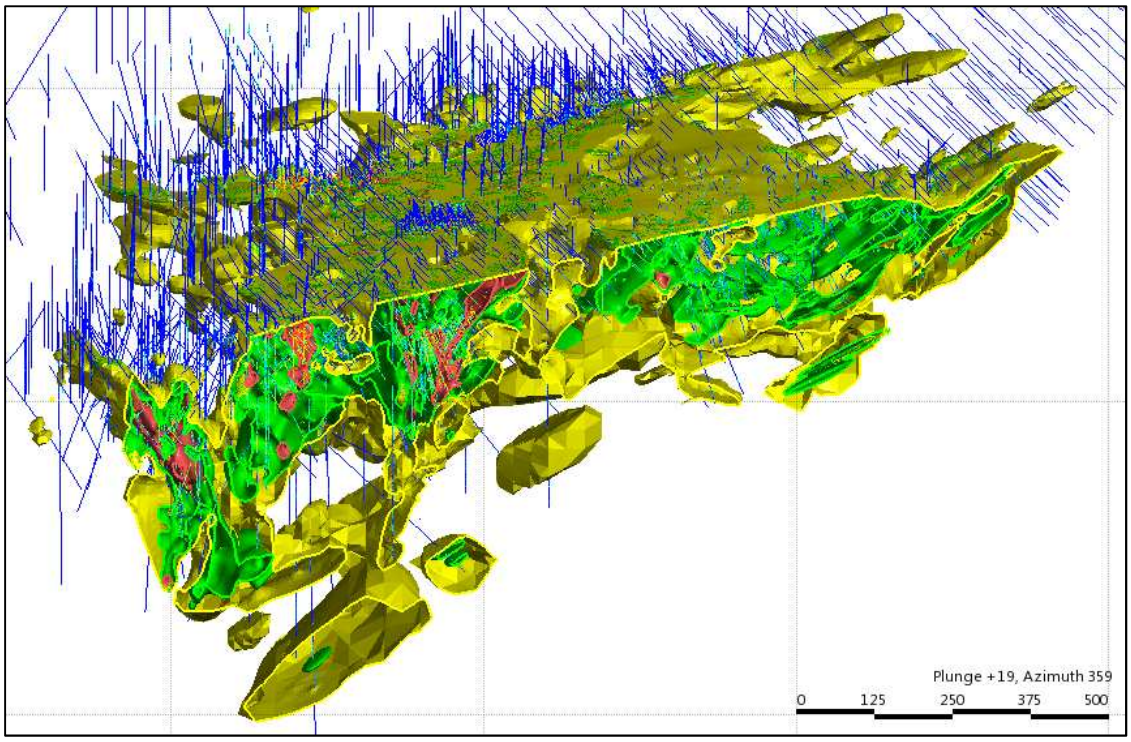


Figure 7-7: 3D Sliced view of Au wireframes (view from the SW).

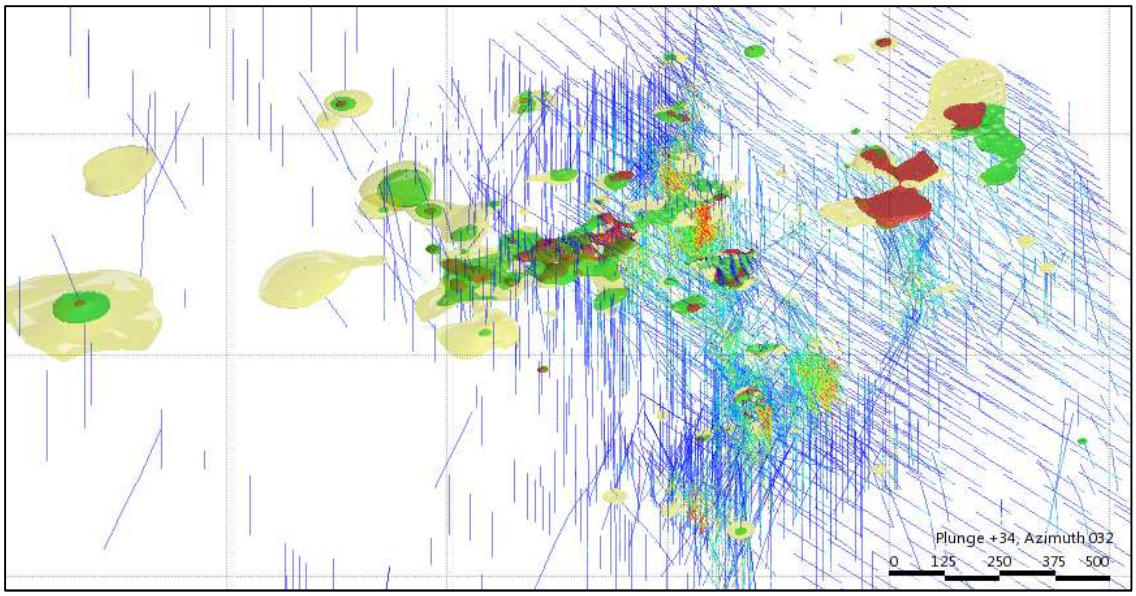


Figure 7-8: Alluvial Au wireframes (view from the SW).

7.4.5 Lithological Model

As reported by Paramount, the lithological database presented several inconsistencies that made interpretation difficult, especially by implicit modeling techniques. However, an attempt was made to group mapped codes, according to their description and spatial correlation, into geological units consistent with the geological interpretation of the Sleeper deposit, as agreed with Paramount. From these partitions, a lithological model was created for each of the structural domains. All groups were modeled as lithological units, except “Intrusive” which corresponds to a small volume of dikes. The “Ignore” group corresponds to intervals with no lithological information or inconsistent coding.

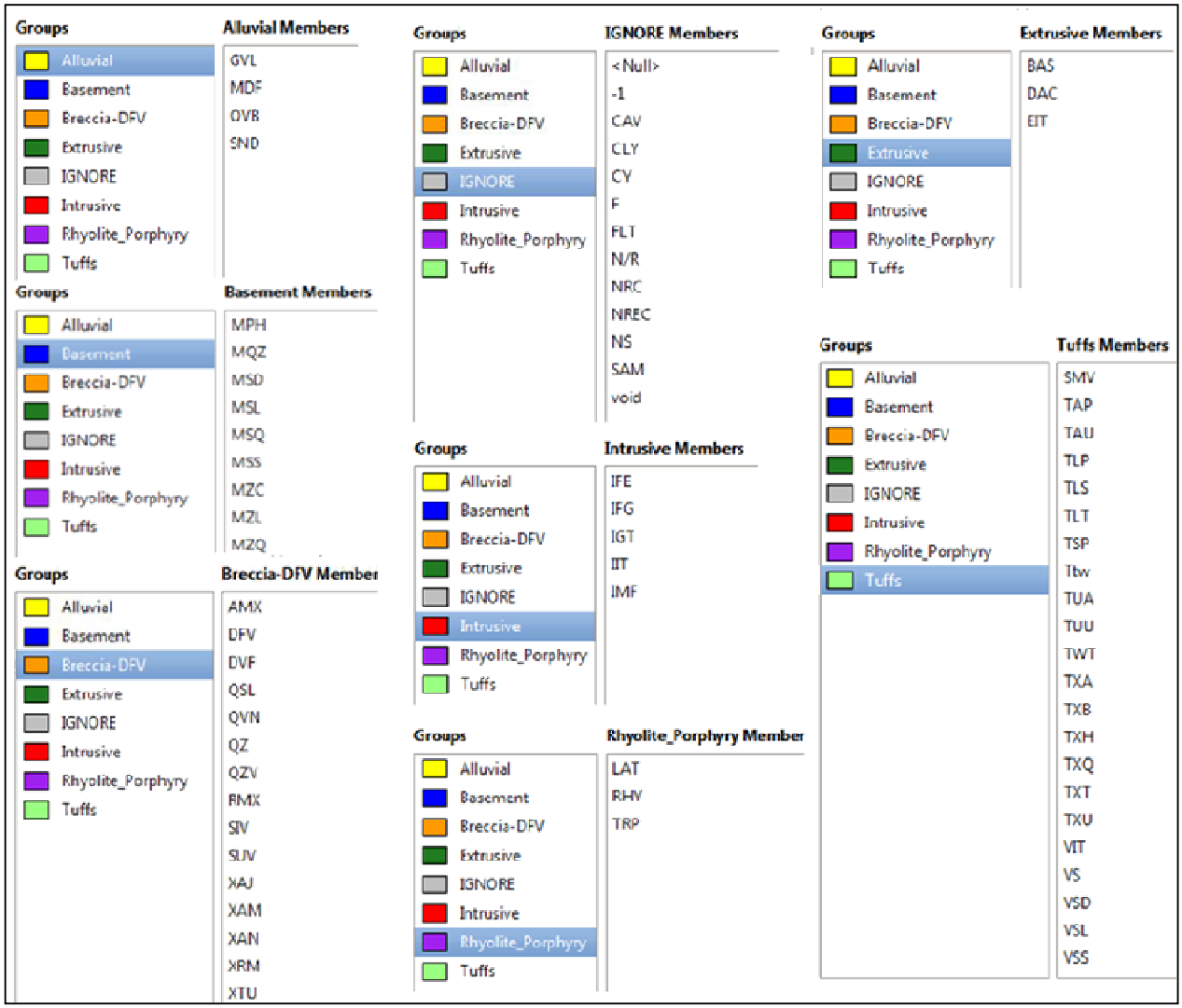


Figure 7-9: Code partition chart, Sleeper lithological model

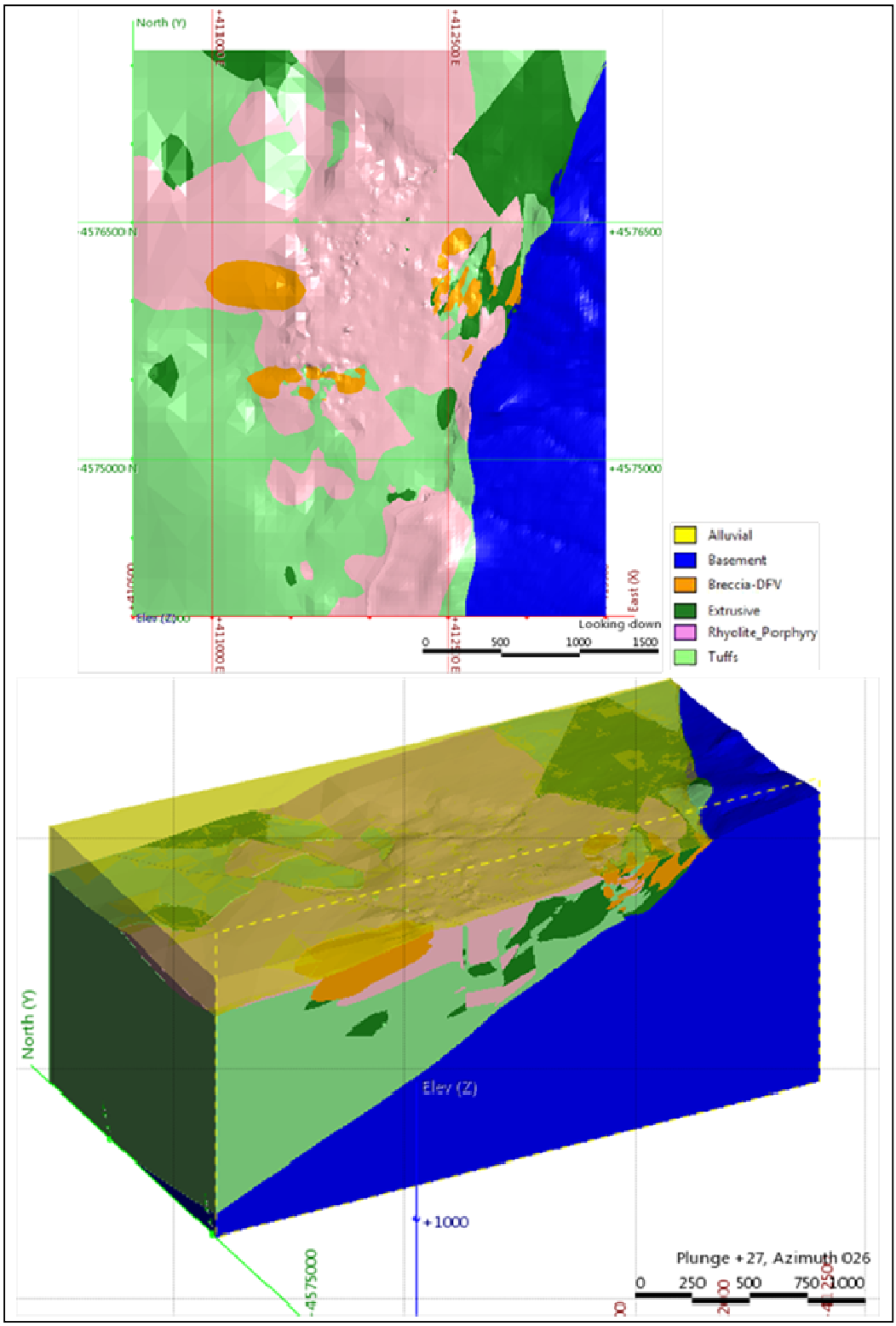


Figure 7-10: Lithological model: Plan view (below overburden) and sliced view from the SW

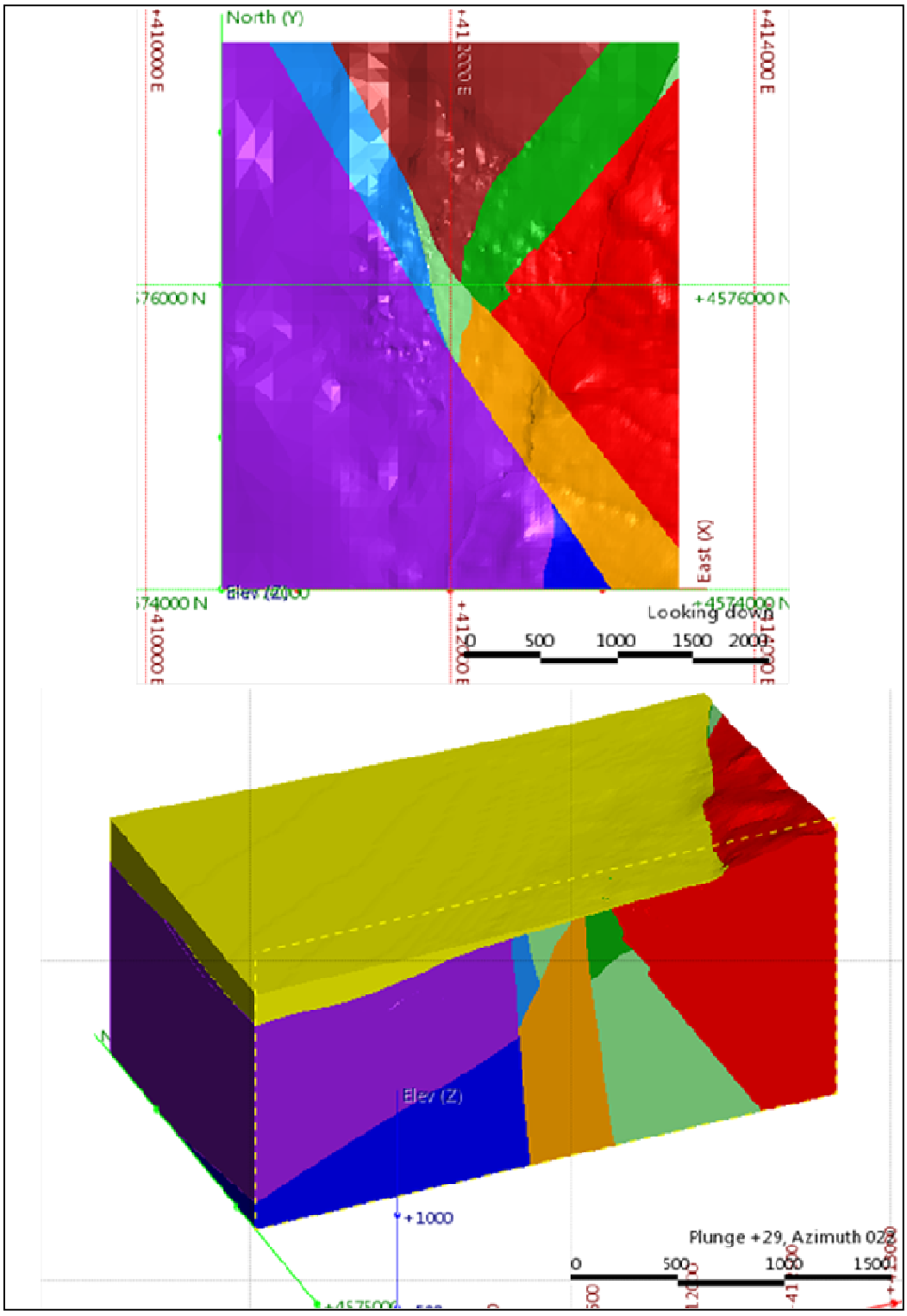


Figure 7-11: Structural domains used as hard boundaries for lithological model

7.4.6 Results and Recommendations

Wireframes

Wireframes for the following units were created:

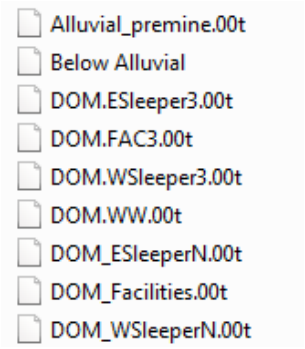
Mineralization model (9 wireframes):

- Alluvial Au: 3 envelopes (0.1, 0.3, 1 ppm)
- Alluvial Ag: 1 envelope (2 ppm)
- Below alluvial Au: 3 envelopes (0.1, 0.3, 1 ppm)
- Below alluvial Ag: 2 envelopes (2 and 10 ppm)

Lithological model split by domain (31 wireframes):

- Overburden
- Mesozoic basement
- Rhyolite
- Breccia-DFV (termed “Debris Flow” in previous reports)
- Andesitic volcanics
- Tuffs

Domains (9 envelopes):



Vein zone envelopes (3 wireframes)

- Facilities
- Sleeper main
- West Wood

Recommendations

- Au and Ag mineralization display bedding-parallel control particularly at Facility, related to what has been interpreted in the model presented here, as the base of the rhyolite, and the contact with the underlying Mesozoic basement. These mineralization trends, especially the latter, have not been extensively drilled, and present strong potential for continuity.
- Grades were used as a proxy for mineralization style (vein, stockwork and dissemination). Identifying mineralization style consistently in the database would allow modeling these features directly in a more geologically consistent fashion.
- The lithological units presented here are preliminary, based on the grouping of codes mapped by different companies over a long period of time. It is recommended that the partition suggested here be used as a basis for future drillhole logging review campaigns, in order to produce a lithological coding system applicable to the whole deposit.
- The structures used were determined primarily on the bases of Au grade distribution and previous interpretations and conceptual models. It is recommended that field and drillhole structural information be carefully reviewed and entered into a newly compiled and integrated database as a more detailed structural model will be necessary at a more advanced project stage.

8 Deposit Type

The Sleeper Mine mineralization consist of both high grade bonanza gold veins low in iron sulphides with silver: gold ratios <1 and low-grade stockwork gold mineralization associated with abundant iron sulphides that is characterized by silver : gold ratios of 3 to 10 (Nash et al., 1995). Nash et al. (1995) believe that the lower grade Sleeper Gold Property mineralization does not fit well in current geochemical classification schemes. They believe, however, that the widespread potassic (sericite and adularia) and silicic alteration indicate that this low-grade mineralization could be considered as a variant of the quartz-adularia class of deposit.

The spectrum of mineralization styles and the spatial relationships of those styles may suggest that the Sleeper Gold system demonstrates a continuum in mineralization from a modified high level, high sulphidation, intrusion related system dominated by magnetic derived fluids to a low sulphidation, meteoric water dominant system with a diluted magnetic fluid component (Corbett, 2005, Utterback, 2005, Histed, 2005).

The broad zones of silica sulphide breccias with elevated silver contents may represent a volatile rich event located above and peripheral to volcanic dome like features (Martin, 2005). The silica sulphide breccias identified in West Wood specifically core hole WW-14 -04 report gold and silver values up to 1.300 opt (44.585 g/t) Au and 74.768 opt (2,563.47 g/t) Ag. Crackle breccias and stockwork textures are part of this event. Extensive zones of clay alteration seen at Sleeper most likely formed at this time as the pH of the water was depressed after the exsolution of the volatiles from the fluid. ASD (analytical spectral data) studies indicate an abundance of kaolin species of clay, confirming the acidic environment of this event. Broad zones of silicification accompanied this event.

Subsequent to this early, elevated thermal energy event, waning of the intrusive activity and re-establishment of the hydrologic setting gradually evolved the system to a meteoric water dominant, low sulphidation system. Chemical buffering with wallrock allowed for the saturation of the near neutral evolved fluids with respect to silica. Dilution and buffering would have also inhibited the ability of the fluids to transport silver in the concentrations seen previously leading to the decreased silver content evident in the later vein style mineralization. Bonanza grade gold deposition appears to have resulted from the boiling of gold rich solution during these explosive events and as fluids mixed with the oxidized, low pH meteoric waters that resulted from the exsolution of volatiles after boiling (Corbett, 2005).

In addition to the Sleeper Mine style of mineralization, future exploration programs may target and expect more traditional low sulphfidation style mineralization, such as the Midas Style of precious metal occurrences (Goldstrand, 2000). Midas Style mineralization is also hosted in bimodal volcanic rocks and related to mid Miocene mineralizing events. Selenium minerals are an important part of the Midas system and manifest as silver selenides in banded quartz veins with bonanza grades. Trace element studies in 2004 and 2005 of various targets of the Sleeper Gold Property have demonstrated highly elevated levels of selenium as well. As mentioned by Goldstrand, “boiling textures” as bladed carbonate replaced by quartz are found in relation to bonanza grades of the Midas veins.

9 Exploration

9.1 2004 and 2005 Exploration Programs

The Sleeper Joint Venture under the management of New Sleeper Gold Corporation conducted the 2004 and 2005 exploration programs. The exploration program in 2004 included a total of 65 drill holes for 84,346 feet (25,715 m) of core, RC, RC pre-collar, and sonic drilling were completed during the year. During early 2005, drilling continued but at a reduced rate accomplishing 34 holes for 22,524 feet (6,867m) of mostly RC and lesser core drilling. The majority of 2004 and 2005 drill holes were located in West Wood, and Facilities drill targets. Six holes were also drilled under the pit. The drill program ended on August 7, 2005 and the focus shifted to gathering of data through a variety of surveys, data compilation and drill hole targeting.

Detailed surface studies and data collection surveys in 2005 included ASD mineralogical studies, soil geochemistry surveys, additional rock chip geochemistry, IP geophysics, additional Gravity geophysics, MT geophysics, Hg and CO2 soil gas studies, trenching, and multi-element ICP geochemistry and 3-dimensional studies of drill holes, and detailed GIS and 3-dimensional studies to better define future drill targets. Details of these studies are presented in the comprehensive report by Thomason, Kornze and Rowe, 2006.

The majority of the Joint Venture targeting studies came in after completion of the drilling program of 2005 by the Sleeper Joint Venture. X-Cal initiated a comprehensive program to review and compile all data following the buy-out using a team of professionals with a variety of geologic disciplines. The compiled 3-D geochemical, geological, geophysical model and all related data continue to evolve incorporating ongoing input from X-Cal's exploration.

9.2 2006 and 2007 Exploration Programs

During 2006, following consolidation of the Property 100% into X-Cal Resources Ltd., the X-Cal individual exploration team members provided their personal recommendations. Initial individual submissions for the Sleeper District totaled 227 drill holes or approximately 300,000 feet (91,440 m) of drilling. The exploration team reviewed the individual recommendations and 107 drill holes were designed to test the "priority mine scale targets". Vic Chevillon reviewed and summarized these target areas. Much of the following discussion is drawn from his in-house memo (Chevillon, 2006).

The Facilities area has been covered by domestic or processing attributes for over 24 years. The decision to define a mineralized resource in this area was placed into the 2007 exploration program. The mill and the crushing facilities had been removed allowing access to areas and targeted specific areas that had not been accessible since 1986.

The objective of the drilling program was to test the targets for Sleeper type gold deposits and alteration signatures (and variants) with the objective of making discoveries that can be mined by open pit or underground methods. The targeting process involved compilation and integration of all project data to date. New geologic controls on past ore bodies in the Sleeper pit have been recognized. Known historic gold ore bodies appear to have been deposited parallel to graben bounding normal faults within a Miocene, asymmetric, range-front graben succession. The better known ore bodies are west dipping on the eastern margin of normal fault-bounded, composite grabens. These horst and graben features are well defined by geologic cross sections and computer

generated 3-D models. The higher gold grades within the ore bodies may have been influenced by intersecting north-west, north-east and east-west faults and fracture zones.

9.3 Drill Targets Determined in 2006 and 2007

In the immediate open pit area, the emerging geologic deposit model correlates very well with multiple, interpreted geophysical surveys (inverted detailed air magnetic, inverted pre-mine IP, CSAMT data). The mineralized and altered Sleeper graben correlates with distinctive magnetic, gravity and resistivity lows. Up thrown horst blocks east and west of the pit correlate with respective geophysical highs. The geophysical correlations for the open pit host geology and alteration are aids to targeting. The correlations allow geophysical patterns in covered pediment areas surrounding the pit to be interpreted as indicators of the structural configuration of covered bedrock. Covered, potentially mineralized grabens are interpreted from the geophysics and these interpretations are supported by recent geochemical data.

Geochemical models in the open pit area depict geochemical and alteration zoning around the deposit (drill hole ICP, ASD alteration clay determinations including ammonia bearing clays proximal to ore). The zoning tends to indicate Sleeper is contained within a large hydrothermal alteration cell. An interstitial soil gas orientation survey documents high CO2, NH3 and locally SO2 anomalies and low O2 anomalies near the ore bodies at each end of the open pit and over the covered West Wood Breccia. In outlying covered areas (SW Target orientation area) soil gas anomalies correlate well with geophysical patterns of projected, covered grabens. Coincident soil gas anomalies, particularly CO2 in combination with NH3 are interpreted as remote surface evidence of covered mineralized and altered faults and veins in bedrock.

9.4 Geophysical Surveys

Geophysical work completed at Sleeper includes: magnetic, gravity, induced polarization (IP) and magnetic-telluric (MT) surveys. Both the historical work and the current work have been incorporated into a MapInfo GIS database to facilitate interpretations based on the entire data set. Consulting geophysicist James Wright, of J. L. Wright Geophysics Inc. is retained by X-Cal to advise on the selection and design of geophysical surveys at Sleeper, and to interpret the results from these surveys. Details of geophysical surveys are given in Thomason, Kornze and Rowe, 2006.

In the Sleeper open pit area there are excellent correlations of air magnetic, pre mine IP and gravity results with the modeled pit geology and alteration. The modeled grabens (and attendant horsts) correlate with the map and 3-D patterns in the inverted geophysical data. Therefore the geophysical information was interpreted and geology was projected into outlying covered areas of the targets.

9.5 Air Magnetic Survey

A 1997 Placer Dome detailed air magnetic survey (draped north-south and eastwest lines at 75 m intervals) was inverted in 2005. It shows the Sleeper ore bodies are within a distinctive magnetic low which is part of a north-south to northnortheast trending magnetic low surrounded by magnetic highs. In the open pit area the magnetic low correlates very well with the map and cross section pattern of the interpreted mineralized Sleeper graben and the highs, with surrounding horsts.

9.6 Geochemical Surveys

For the purposes of surface exploration geochemistry, the Sleeper Gold Property can be divided into 4 general domains:

- Pediment-covered basin
- Hills, where regolith is present
- Hills with exotic cover, including aeolian sands
- Disturbed mine areas

Geochemical surveys in the pediment-covered basin have included Hg vapor surveys, orientation CO2 soil gas surveys, and orientation pH surveys. Work in the hills has included more conventional soil and rock sampling, and limited ant hill sampling. Great care has been taken to avoid disturbed mine areas in all of these surveys. Details of the geochemical surveys are given in Thomason, Kornze and Rowe, 2006.

9.7 Surveying

On site, SRK checked survey reports of drill hole collar surveys for a selection of holes dating from September, 1986, which are the first records that Paramount has in their Winnemucca office. Specifically, several drill hole collar surveys were checked for programmes drilled during 1986, 1990, 1994, 1997, 2004, 2005, 2006, 2007 and the current Paramount 2010-2011 drill programme.

In addition, downhole surveys were checked for a selection of holes drilled from 2004 – 2007. Paramount is currently surveying downhole deviation on their holes as well. Deviation surveys from pre-2004 holes were not found and it is not clear if holes were surveyed when the mine was in operation until 1998. The majority of the holes drilled during mine operation, however, were relatively short and little deviation would be expected from those holes. SRK considers the survey data to be adequate for use in the modeling and estimation activities.

10 Paramount Drill Program 2010 – 2011

Drilling began October 11, 2010 and consisted of a diamond drill program of 19 drillholes totalling 18,065 ft (5,810 m) carried out by DeLong Drilling and Redcor Drilling, both of Winnemuca, Nevada. The Redcor core drill was mobilized to site October 26, and began drilling on October 30, 2010. The DeLong RC drill was mobilized to site and began drilling on November 15, 2010.

The drill campaign focused on two mine area zones (West Wood and Facilities area) with the twin goals of verifying the existing model, and to demonstrate continuity/strike extension. The table below summarises Paramount's drilling to May, 2011.

Table 10-1: Paramount drilling in 2010 - 2011

Hole #	Area	Type	NAD 27 zone 11			Collar		Proposed		Final TD	Start	End	Target
			North(m)	East(m)	Elev(m)	Azi.	Dip	TD (m)	TD (ft)	(ft)			
PGC-10-001	W Wood	Core	4575525	411616	1265	90	-85	350	1150	1153	10/30/2010	11/14/2010	sec 5525 dip extension
PGC-10-002	W Wood	Core	4575525	411616	1265	285	-75	230	755	757	11/14/2010	11/20/2010	sec 5525 model test
PGC-10-003	W Wood	Core	4575575	411615	1265	90	-85	350	1150	1101	12/1/2010	12/9/2010	sec 5575 dip extn and model test
PGC-10-004	W Wood	Core	4575575	411615	1265	270	-70	230	755	718	12/9/2010	12/14/2010	sec 5575 model test
PGC-10-005	W Wood	Core	4575635	411641	1258	270	-68	320	1050	893	12/15/2010	1/6/2011	WW stepout to North, sec 5625
PGR-10-001	W Wood	RC	4575625	411550	1270	270	-76	335	1100	1100	11/15/2010	11/20/2010	WW stepout to North, sec 5625
PGR-10-002	W Wood	RC	4575675	411537	1270	270	-70	310	1020	1020	11/20/2010	11/29/2010	field fit location for sec 5675
PGR-10-004	W Wood	RC	4575775	411630	1271	270	-70	310	1020	1020	12/4/2010	12/9/2010	WW stepout to North, sec 5775
PGR-10-003*	W Wood	RC	4575775	411570	1270	270	-70	310		500*	11/29/2010	12/3/2010	WW stepout to North, sec 5775
PGR-10-003CT	W Wood	Core	4575775	411570	1270	270	-70	310	1020	971	1/7/2011	1/13/2011	Core continuation of PGR-003
PGC-11-006	Facilities	Core	4576316	412575	1285	115	-53	300	985	859	1/14/2011	1/29/2011	Higher grade strike xtn; S-45 pad
PGR-11-012	Facilities	RC	4576254	412580	1290	115	-70	300	985	840	1/11/2011	1/16/2011	Higher grade strike extension
PGR-11-011	Facilities	RC	4576238	412508	1291	115	-55	320	1050	940	1/9/2011	1/11/2011	Higher grade strike extension
PGR-11-010	Facilities	RC	4576231	412408	1285	115	-50	375	1230	1080	1/5/2011	1/8/2011	Higher grade strike extension
PGR-10-008	Facilities	RC	4576094	412512	1290	115	-55	300	985	985	12/22/2010	12/28/2010	Higher grade strike extension
PGR-10-007	Facilities	RC	4576052	412483	1288	115	-55	360	1180	1180	12/17/2010	12/22/2010	Higher grade strike extension
PGR-10-005	Facilities	RC	4575963	412439	1286	115	-55	300	985	985	12/9/2010	12/11/2010	Higher grade strike extension
PGR-10-006	Facilities	RC	4576043	412388	1285	115	-65	330	1085	1085	12/14/2010	12/17/2010	Higher grade strike extension
PGR-10-009	Facilities	RC	4576116	412757	1301	115	-55	170	560	560	12/30/2010	12/31/2010	Higher grade strike extension

10.1 West Wood Area

The West Wood is a complex faulted and hydrothermally altered zone with local gold concentrations. Multiple episodes of brecciation have been identified in core samples. The gold mineralization is associated with silicified volcaniclastic rocks, and alteration containing high sulphidation quartz sulphide breccias. There is an overprinting of the high sulphidation mineralizing event by low sulphidation, auriferous, banded quartz veins. Light coloured to white clays of kaolin and illite fill cavities and voids produced from late stage acid leaching. The host rock types of the West Wood are the Sleeper rhyolite, a lapilli tuff and a volcanic breccia. Within the more altered and mineralized zones, silicification and quartz sulphide alteration have replaced and masked many of the original

volcanic textures. Gold mineralization is associated with marcasite and occurs as electrum and as visible particles within banded quartz veins. Antimony minerals including stibnite and kermesite are commonly identified proximal to and within more anomalous gold zones. Auriferous, banded quartz veins occur and are predominantly easterly dipping and crosscut quartz sulphide altered volcanic strata. The banding texture is derived from multiple stages of fluid transport saturated with silica and sulphides. Commonly, bands of dark sulphides and framboidal marcasite are parallel to the microcrystalline quartz bands.

Six core holes and four RC drill holes were completed at West Wood for a total of 9,520 ft (2,819 m). Mineralization, and to a lesser extent downhole geology, matched closely with the existing model. Step-out drilling to the north (PGR-10-003, 004) indicates a substantial narrowing of the West Wood zone, but the structure continues without significant structural offsetting.

10.2 Facilities Area

The main feature of the revised geologic interpretation of the Facilities area is the existence of a shallowly west-dipping, Miocene volcano-sedimentary sequence, apparently unconformable on and sub-parallel to the underlying Permo-Triassic meta-sedimentary basement. Within the Miocene package, a specific geologic unit of variable thickness is inferred by Larry Martin to host much of the gold mineralization, thereby accounting for its approximately tabular form. This unit, dominated by partly amygdaloidal basaltic andesite and volcaniclastic breccias, was interpreted as a debris flow.

10.3 Geologic Gold Controls Recognized

The Sleeper ore bodies that were mined by Amax were interpreted at that time to be hosted by the Sleeper Rhyolite, stratigraphically above a distinctive basalt marker unit. The contact defines a north and northeast trending complex of grabens and associated gold ore bodies. The host grabens contain second and third order basins (and small, “in-graben” horsts) within the main, mineralized Sleeper zone.

The largest and highest grade ore bodies (Main Sleeper Vein and Wood Vein) are west dipping on the east bounding faults of the Sleeper graben. The West Wood and X-Cal Discovery Breccia are smaller, lower grade and dip vertically or east on interior and west graben bounding faults respectively. In 3-D, gold grades appear to be best along structural intersections of north-west, east-west and north-south faults.

11 Sample Preparation, Analyses and Security

11.1 Sampling Method

Only limited descriptions of the sampling and quality-assurance/quality-control ("QA/QC") procedures followed by AMAX and Placer Dome are available. However, the authors have no reason to believe that these large mining companies did not follow good practice.

The sampling methods and approaches used by X-Cal and New Sleeper on behalf of the Sleeper Joint Venture for surface geochemical samples and drill samples were professionally undertaken and consistent with accepted industry standards. Details of the sampling procedures are included in Thomason, Kornze and Rowe, 2006. The sampling methods and procedures used by Paramount in their 2010 and 2010 drilling campaigns are also considered to be in keeping with industry best practices.

SRK found only limited documentation for sampling method, bagging, security, and transportation practices used by AMAX and Placer Dome. However, summary data sheets and summary reports prepared by these companies, their employees and geological consultants, and the analytical laboratories are available. Review of the summary reports, the sampling done prior to X-Cal appears to have been handled by analytical, geological and engineering employees, and professional mining consultants. It is not unreasonable to expect that these persons used sampling techniques in accordance with industry-accepted protocols. These organizations used accredited commercial laboratories in addition to in-house laboratories.

During the time period of 1994 to early 1997, Barry Smee PhD. headed X-Cal's exploration programs. Prior to its involvement in the actual Sleeper site, X-Cal had land holdings within near proximity to the Sleeper mine. Multiple exploration campaigns were conducted and quality control and quality assurance appear to have maintained a protocol of procedures in the handling, bagging, transportation, security, preparation, and analysis of exploration samples. Additional exploration programs after 1997 used that early foundation and further developed the procedures into the present quality control and quality assurance programs implemented at the present Sleeper Gold Property.

The sampling and assaying procedures utilized by X-Cal and New Sleeper on behalf of the Sleeper Joint Venture at the Sleeper Gold Project appear to have been professional and consistent with industry practice. Details of the sample preparation, assaying procedures and security are included in Thomason, Kornze and Rowe, 2006. Paramount has, in general, followed the same procedures since 2010.

11.2 Procedures for Drilling and Sampling

The following descriptions of QA/QC procedures were generally adopted beginning with the 2006 drilling program. The procedures as follows were further developed and refined during the 2007 exploration program. The following procedures can be considered as the norm for all drilling conducted since 2006.

11.3 Positioning Drill Equipment

Prior to the drilling programs of 2006, Desert Mountain Surveying of Winnemucca, Nevada, positioned two points located North/South relative to each other. A magnetic correction of 15 ½ degrees East was found to be the correct magnetic declination for the Sleeper Project during 2006 and 2007.

All drill sites, including core and RCD locations, were positioned and constructed by personnel employed by X-Cal Resources.

All proposed drill sites were located by using hand held GPS positioning devices. Drill hole collars were then surveyed once each hole was completed.

11.4 Collecting Core

Core was collected by a truck mounted Atlas Copco CS3001 core rig capable of drill depths in excess of 2000 feet (610 m). The drill equipment was owned and operated by EMM Core Drilling of Winnemucca, Nevada. Corrugated waxed cardboard core boxes were provided by the core contractor. Wooden blocks or plastic depth indicators were labelled and placed by the core contractors at the appropriate measured drill depths.

Preferred core size was HQ. Adverse drilling conditions preventing advancement of the HQ tools was remedied by casing the hole down to the problem zone. Occasionally a reduction to NQ tools was needed to continue the drill hole to targeted depth.

Core holes drilled in the West Wood target were pre-collared and cased to bedrock (approximately 160-210 feet (49-64 m)) using the RCD rig. Angle and vertical drill hole collar sites were pre-surveyed using a portable GPS positioning device.

Completion of each core hole was preceded by down-hole surveys conducted by International Directional Services of Battle Mountain, Nevada. After the completion of the drill hole and down hole survey the hole was abandoned by pumping a bentonite slurry from the bottom of the drill hole to within 10 feet (3 m) of the surface. The remaining surface plug was ten feet of Portland cement. Desert Mountain Surveying of Winnemucca, Nevada, conducted surface collar surveys for each core hole.

Core boxes filled with core were neatly stacked upon pallets and covered with a tarp at the drill site until the full pallet was transported to the core processing facility. The core was washed, geologically logged and sample intervals selected and labeled by the core geologist.

Drill core were then digitally photographed utilizing scale bars to easily position the exact down hole location within each individual core box. The core boxes were then positioned next to the sheds that contain self-feeding core saws.

Each piece of silicified or hard core was placed in a confinement jig. The maximum length was one foot. The jig positions the core's central axis producing two nearly exact volumetric halves after the core was cut. One core half was returned to its origin box and the remaining half was placed into a pre-marked 16"X19" (40X48 cm) sample bag. The more clay rich core intervals were hand chiseled into halves by the core technician or by a geologist.

The sampling technician independently logged the core sample intervals. Copies of the sample intervals were submitted to the assay lab and a copy was archived into individual core hole folders.

In addition, the folders contain copies of the geologic log, down hole survey, assays, hole abandonment sheets and surface collar surveys.

11.5 Reverse Circulation Drilling

The reverse circulation drilling (RC) programs for both late 2006 and 2007 utilized a Schramm 685, capable of drill depths in excess of 2,500 feet (762 m). The Schramm rig was owned and operated by DeLong Drilling and Construction of Winnemucca, Nevada. The crew consisted of one driller and two driller's helpers. The driller's helpers had multiple tasks in addition to their mechanical drilling duties which included sample bag numbering (including duplicates), chip tray numbering, sample and chip collection and sample storage at the drill site. All drill hands were responsible for a safe, clean and organized drill site.

The preferred RC drill hole diameter was 5¾ inches (14.6 cm) produced by a pneumatic hammer and carbide button bit. If water volumes exceeded capacities that prevented the advancement of the hammer tool or adverse conditions warranted the use of a tricone tool the hammer tool was tripped out of the hole and the appropriate tri-cone diameter was returned to the bottom of the hole. Occasionally a reduction to a smaller diameter of tri-cone was needed to complete the proposed drill hole.

RC samples were collected from the surface every 5 feet (1.5 m). Duplicate samples were collected from the rotary splitter every 150 feet (45.7 m).

The rotary wet splitter (splitter) was attached to the rear passenger side of the Schramm. The splitter was washed down after each completed drill hole. Once surface casing was completed, water and on demand drilling mud and hole conditioners were injected to suppress silica dust exposure and maintain the integrity of the drill hole.

The splitter had removable pie shaped platelets that are removed or added to maintain a consistent 20:1 volumetric split product at the exit end of the sample collection port. The sample exited the port straight downward into a 5 gallon (20 lt) plastic bucket. Once the 5 feet (1.5 m) drill interval was completed, another clean bucket was placed under the exit port. The sample bucket was poured into a pre-labeled 15"X17" (38X43 cm) sample bag. The sample bucket was rinsed once with fresh water and contents poured into the sample bag. The bag was tied and placed into a collection crib or crate that was provided to the project by American Assay. The crib provided an additional assurance against contamination by ground exposure. The duplicates, taken every 150 feet,(45.7 m) were collected by similar procedure and placed upon a black plastic sheet for drill site storage.

Drill rod changes have long been suspect for down-the hole-contamination during RCD drilling on other projects. At Sleeper, the end of the 20 feet (6 m) drill rod cycle was used to ream, clean and dress the walls of the last 20 feet drilled. The process was considered vital in maintaining a clean drill hole. Once the new rod for the next 20 feet was positioned, the rotation was started and down the hole pressures and water levels were allowed to stabilize. A screen was placed at the exit of the splitter and checked for debris that may have its origin from up hole. The sample bucket was re-positioned under the sample port only after the driller observed a clean return in the screen. This method took additional time, has proven to be a very effective method in minimizing down the hole contamination.

Completion of each RCD hole was preceded by down hole surveys conducted by International Directional Services of Battle Mountain, Nevada. After the completion of the drill hole and down hole

survey, the hole was abandoned by pumping a bentonite slurry from the bottom of the drill hole to within 10 feet (3 m) of the surface. The remaining surface plug was ten feet of Portland cement. Desert Mountain Surveying of Winnemucca, Nevada, conducted surface collar surveys for each RCD and core hole.

Compartmental chip trays (20 compartments) were used to archive drilled material from each 5 feet (1.5 m) of drill advancement. Each compartment's content was prewashed prior to filling the compartment with the aid of a fitted funnel. The process minimizes any contamination from other 5 foot (1.5 m) samples.

All chip tray intervals were reviewed by at least one geologist and logged for geologic attributes. The chip trays were archived by drill hole number and placed upon steel shelves located in closed buildings for later additional reviewing.

11.6 Paramount 2010-2011 Drill Programme

The drilling tubes provided by both drill contractors were in imperial measurements (feet). The sampling procedure of previous drill campaigns under New Sleeper Gold LLC was the template for the completed Paramount drilling campaign.

Drill samples generated at the drill rigs were transported to the onsite logging facility and stored inside a locked building. At no time, prior to surrendering control of the samples to representatives of the assaying company, were the samples handled by anyone other than the drilling contractors or the geologists onsite.

Because the program included both an RVC and core rig, there are some differences in sampling protocol.

Core Sample Length

The 2010-2011 drill core were sawn in half longitudinally into primarily 5-foot-long (1.5 m) samples, which were then shipped off site where they were assayed for gold, silver, and other metals. The range of sample length was generally capped at five feet, with a minimum sample length of 2.5 feet (0.75 m). In the West Wood area minor amounts of core were drilled which represent overburden above the bedrock; these intervals are not representative of the mineralization and geology of the host rock, and therefore, were not shipped for assay. Approximately 96% of the drill holes used HQ drilling tools and the remainder, NQ tools.

RVC Sample Length

The RVC campaign utilized 10-foot and 20-foot (3m and 6 m) sections of drill steel. All assayed samples from the RVC drill were in 5 foot (1.5 m) intervals. Flagging and paint marks were set on the drilling derrick to help with accuracy.

Drilling Conditions

Drilling conditions vary widely throughout the property. While generally absent in the Facilities area, overburden in the West Wood area is composed of up to 200 feet (61 m) of unconsolidated sand and gravel. Care was exercised when drilling the overburden section of the West Wood area, although no sections of overburden were included in material to be assayed.

Sample Quality and Procedure

To ensure the quality and reproducibility of assay results, check samples were inserted into the assay stream. For the core program, a random duplicate sample was inserted every 40 samples. Every 20 samples either a blank or a standard sample was inserted in the sample stream.

The RVC drill rig was working on a 24-hour, round the clock basis. To ensure that there were no problems inserting blanks and standard assay samples into the sample stream while no geologist was present, it was decided to only have duplicate samples associated with the RVC sample stream. As with the core program, duplicate samples were inserted randomly into every 40 contiguous samples of the RVC sample stream. This program was based upon the check sample protocol developed during the drilling campaigns completed under previous owners of the project.

11.7 Sample Control Procedures

SRK found only limited documentation for sample preparation, bagging, security, and transportation practices used by AMAX and Placer Dome. However, summary data sheets and summary reports prepared by these companies, their employees and geological consultants and the analytical laboratories are available. Review of the summary reports indicates that the sampling done prior to X-Cal appears to have been handled by analytical, geological and engineering employees and professional mining consultants. It is not unreasonable to expect that these persons used sampling techniques in accordance with industry-accepted protocols. These organizations used accredited commercial laboratories in addition to in-house laboratories.

During the time period of 1994 to early 1997, Barry Smee PhD., headed X-Cal's exploration programs and was responsible for the sample security, preparation and chemical analyses procedures. Prior to its involvement in the actual Sleeper site, X-Cal had land holdings within near proximity to the Sleeper mine. Multiple exploration campaigns were conducted and quality control and quality assurance appear to have maintained a protocol of procedures in the handling, bagging, transportation, security, preparation, and analysis of exploration samples. Additional exploration programs after 1997 used the early foundation procedures of 1994 - 1997 and further developed them into the quality control and quality assurance programs implemented at the Sleeper Gold Property since that period.

The sampling and assaying procedures utilized by X-Cal, New Sleeper Gold and now Paramount, appear to have been professional and consistent with industry practice. Details of the sample preparation, assaying procedures and security are included in Thomason, Kornze and Rowe, 2006.

The following descriptions of QA/QC procedures were generally adopted from the 2006 drilling program. The procedures as follows were further developed and refined during the 2007 exploration program.

11.8 Assay Submittal for Core and RCD

American Assay Laboratories picked up the sample shipments near the end of a 10-day drilling shift. Predominantly, one drill hole was placed in the shipping container. If additional room was needed to ship a few samples from another drill hole, a plastic liner separated the two sample sets. This procedure helped the lab personnel sort the core or RCD samples according to drill hole.

Duplicate RCD samples were collected from every drill hole on 150 foot (45.7 m) increments. The duplicate RCD samples were temporarily stored on plastic liners near the geology office. The duplicate samples for each individual drill hole once air-dried were placed in larger shipping bags labelled with drill hole numbers and intervals. The duplicate samples were stored at the Sleeper mine site until a shipment quantity "batch" would be ready for transport. The samples were hand delivered by Sleeper personnel to the ALS Chemex's preparation facilities located in Winnemucca, Nevada. Assay submittal sheets and standards accompanied the samples and copies of the submittals were retained by X-Cal for archive.

11.9 Duplicate Samples and Reference Materials

Duplicate samples were collected at the RCD rig every 150 feet (45.7 m).Duplicate samples of specific core intervals were selected from sample rejects after the principle lab preparation and assays were completed. Commercial standards of various gold concentrations (pre-packaged pulps) were introduced into the analytical lab's sample stream at the pulp stage.

11.10 Security

Prior to completion of an RCD hole, the chip trays were stored and secured by the drillers at the rig site after drilling hours. All chip trays were collected after completion of each specific RCD hole. Note: The fenced compound was locked after day shift ends and remained locked until day shift resumed the following day. During the day period the electric gate was unlocked and accessible to entry only through Sleeper personnel.

Core boxes filled with core were neatly stacked upon pallets and tarped at the drill site until the full pallet was transported to the core processing facility. The core was washed, geologically logged and sample intervals selected and labeled by the core geologist. All core boxes were then stored on shelves in the locked core storage facility on site. Paramount is following this same procedure for securing RCD and core samples.

11.11 Specific Gravity Data

The densities used in the SRK block model are average values of units grouped by lithology and mineral zone, beginning with a default value of 2.4 gm/cc. These densities are based on analyses done on diamond drill core. This distribution of density by group is shown as follows:

- Lithology 1 = 2.23
- Lithology 2 = 2.62
- Mineral Zone 1 and Lithology 3 = 2.19
- Mineral Zone 3 and Lithology 3 = 2.33
- Mineral Zone 1 and Lithology 4 = 2.31
- Mineral Zone 3 and Lithology 4 = 2.42
- Lithology 6 = 2.32
- Lithology 7 = 2.30
- Lithology 3 without Mineral Zone = 2.30
- Lithology 4 without Mineral Zone = 2.35

For the density sampling and testing programme carried out by X-Cal, samples of cut core (HQ) were measured for specific gravity by using ASTM International Designation: C97-02 as a guide to methodology. Testing was carried out at the American Assay Laboratory in Reno, Nevada.

Specific samples were pre-selected to test the various rock types and alteration identified in the Facilities Area and West Wood Area. The samples were obtained from intact core that had been sawed in half (lengthwise) for analytical analysis. The rock types varied from debris flow, crystal tuff, lithic tuff, volcanic sediments to meta-sedimentary rocks. Alteration phases included silicified breccias, whole rock silicification, potassic alteration (bleached silicic alteration) and partially clay-altered specimens. The sample sets of half core measured at the Sleeper site did not include samples of advanced argillic alteration (whole rock to clay alteration) due to procedural protocol that required soaking of the test sample in distilled water. The test samples of advanced argillic alteration fell apart and were compromised.

The half core specimens selected for specific gravity measurements were described by specific geologic attributes including alteration, lithology and oxidation state. Each individual sample was labeled with its origin on a smooth surface using indelible ink. The label identifying each sample included specific drill hole number and drill depth interval. The labeled samples were placed in plastic core boxes for storage and archive purposes. Prior to measurement sample sets each containing twenty specimens were place in a portable drying oven for 12 hours set at 105 degrees F. Note that the samples were half core and had been air-drying for a minimum of 30 days prior to oven drying process. A longer oven time interval was tested and 12 hours was found adequate for the minimum drying time that produced successive weight readings with the same weight. The dried specimens were returned to their appropriate core box and stored in a closed room until scheduled for testing.

The dried samples were weighed using an electronic digital scale specifically purchased and dedicated to the specific gravity testing task. The dry weight (measured in grams to nearest tenth of a gram) for each specific sample was recorded and the scale's calibration reset entered after each measurement. The sample sets were measured in lots containing 20 samples. After ten samples of a lot were measured the first sample of that lot was weighed again to confirm the weight measurement. After the last sample of the lot (number 20) was weighed and recorded, the number 10 sample was re-selected and weighed again to assure consistency.

The samples were then carefully immersed in distilled water contained in clean five gallon buckets for 30 minutes. A longer immersion time was tested (up to two hours) and weight measurements collected at 30 minutes, 90 minutes and 120 minutes were the same. It was concluded that 30 minutes was found to be the minimum time to allow the sample to adsorb the distilled water.

After 30 minutes in distilled water the samples were carefully removed and placed on towels for damp dry and surface dried by paper towels. Each specific sample in the twenty (20) sample lot was weighed and its wet weight (measured in grams to nearest tenth of a gram) recorded as per the same procedure as dry weight were collected.

Each sample is fully immersed in the distilled water and air bubbles removed from the basket and specimen. The basket is allowed to stabilize to a static state and the specimen's submerged weight (measured in grams to nearest tenth of a gram) is recorded. The same QA/QC procedure for the dry weight lot measurement is used weighing submerged samples. Sample numbers 1 and 10 of the

submerged lots are weighed again and the calibration reset after each specimen's weight procedure is completed.

12 Data Verification

12.1 AMAX Data

In mid-May 1997, Mineral Resources development Inc. (MRDI) was retained by X-Cal to assist in the evaluation of in-situ resources of the Sleeper deposit, monitor a program to obtain samples of material from the existing leach heaps and Mill Tailings from the impoundment area, establish and supervise laboratory metallurgical testing programs on samples of heap leach material and mill tailings and to evaluate the condition of the existing process plant facilities. The results of MRDI 's work was presented in three separate and stand alone reports. The titles of these three reports are as follows: "Modeling and Resource Estimation of the Facility, Saddle, West Wood and Silica Cap Areas", "Sampling and Metallurgical Evaluation of Existing Leach Heaps and Mill Tailings", and "Evaluation of Existing Process Plant Facilities". The resource model was completed in mid-August, 1997 (MRDI, 1997, Sampling and Metallurgical Evaluation of Existing Leach Heaps and Mill Tailings, Sleeper Gold Property).

During the 1997 study, MRDI selected 2,725 drill holes from a database of 3,732 drill holes. Using the project database MRDI selected five percent of the drill holes to verify collar coordinates down-hole surveys, geological logs and assay data.

The following is a summary of conclusions by MRDI:

Collar coordinates for early drill holes by Amax were difficult to verify and many of the original survey sheets were filed by date and not by specific drill hole. Later drilling by Amax and drilling by Placer Dome and X-Cal, the collar information (including azimuth and dip) was found to be reasonable.

The bulk of the reverse circulation drill holes by Amax were not surveyed down hole. All core holes were surveyed down-hole. MRDI checked all drill holes that were surveyed down-hole and found that there was no entry or data transfer errors from the original survey records.

Overall, MRDI found that the error rate in the assay database is very low at 0.1 percent (10 errors out of 15,588 records), which is well within industry standards (MRDI, 1997 Modeling and Resource Estimation of the Facility, Saddle, West Wood and Silica Cap Areas).

Larry G. Martin, CPG, who logged many of the X-Cal drill holes, provided MRDI with a detailed description of the protocol used by both X-Cal and New Sleeper Gold prior to and during the Sleeper Joint Venture for sample handling, sample preparation, assaying, check assaying and umpire assaying. These procedures and the chain of custody used were found to be satisfactory and SRK is in agreement with this conclusion.

SRK is of the opinion that the pre-2007 data available can be used in the continuing evaluation of the property. A large digital database is available for the Sleeper Gold Property.

12.2 2007 Assay Quality Control Programme

The assay quality control program used during 2007 called for the inclusion of duplicate samples, insertion of reference samples (standards), and regular submission of samples to a second laboratory for check analyses. The principal laboratory was American Assay Laboratories (AAL) in Reno, Nevada and the check laboratory was ALS-Chemex (ALS) in Reno, Nevada.

Prior to submitting samples to AAL, X-Cal had a stipulation protocol that drill samples submitted for assay would require an automatic check assay by AAL if gold values reported were greater than 3 grams and or silver values were greater than 60 grams. In addition, drill intervals that were inspected by the supervisory geologist and visually contained geologic features that accompany higher-grade mineralization, including but not limited to banded veins, dark sulphide bearing breccias, antimony sulphides or visible gold were reported to the lab prior to assay analysis. The principle lab preps the indicated higher-grade zone. Between each of the individual samples that have been highlighted by the supervisory geologist, 5 feet (1.5 m) for RCD and 2 ½ feet for core, a barren silica sand flush was used to clean the grinding equipment.

A total of 565 samples were assayed as check samples (565 samples to AAL and 565 duplicates to ALS). The standards inserted into the sample stream totaled 359. Results of the assay quality control program show generally acceptable gold assaying. For future drilling programs, additional check assaying is recommended.

12.3 Field Duplicates

For the 2007 programme, field duplicates were collected while drilling for the reverse circulation drill holes. Core duplicates were collected from processed core rejects that were returned to the Sleeper mine site by the principle laboratory (AAL) and then the same reject was sent to the secondary lab (ALS) for check analysis.

Although there are relatively few of these duplicate samples, the results show good agreement with no obvious bias.

12.4 Reference Samples

All reference samples used during 2007 were from Rocklabs of New Zealand. A total of nine reference samples were used during the period: seven are/were commercially available from Rocklabs. Standards Pa4 and Pa5 appear to be a special custom order from Rocklabs and were not characterized as their commercially available standards. Given that only five samples were assayed at one lab for characterization of these two standards, the accepted limits were set at +/- 10% of the expected values.

The gold results for the reference samples are generally acceptable with the calculated means within the acceptance limits. The most used reference samples show a slight low (-3% to -7%) bias for grades between 0.5 and 5 ppm Au. Below and above this range the results show a slight high bias. Many anomalous reports have had check analyses at a second laboratory (see below). Additional check assaying is recommended for reports with significant mineralization and anomalous standard results.

12.5 Assay Submittal for Core and RCD

American Assay Laboratories were scheduled to pick up the sample containers near the end of a 10-day drilling shift. Predominantly one drill hole was placed in the shipping crib. If additional crib room was needed to ship a few samples from another drill hole, a plastic liner separates the two sample sets. This procedure helps the lab personnel sort the core or RCD samples after delivery to the Sparks, Nevada preparation facilities and prevents co-mingling of drill holes located in different target areas.

Duplicate RCD samples were collected from every drill hole on 150 feet increments. The duplicate RCD samples were temporarily stored on plastic liners near at the geology office. The duplicate samples for each individual drill hole once air-dried were placed in larger shipping bags labeled with drill hole numbers and intervals. The duplicate samples were stored at the Sleeper mine site until a shipment quantity.

The samples in each batch were delivered by Sleeper personnel to the ALS Chemex's preparation facilities located in Winnemucca, Nevada. Assay submittal sheets and standards accompanied the samples and copies of the submittals were retained by X-Cal for archive.

12.6 SRK Data Verification

While on site during May, 2011, SRK personnel from the SRK Reno, Nevada office and from the Santiago, Chile SRK office, conducted a review of on-site available data. The mine office from the AMAX and X-Cal period is kept locked and secured. All original data such as drill hole logs, plans and sections, lab analyses certificates and records of drill hole collar surveys and down the hole surveys is kept in this office. Certain records such as lab certificates and collar surveys have been copied by Paramount personnel and those copies are in Paramount's office in Winnemucca, Nevada.

SRK searched through the data at the mine office and found that most original information appears to be intact. SRK would recommend, however, that Paramount take the time to inventory this information as it is a wealth of data for not only the history of the project during its operation, but also information of other exploration targets on the Sleeper property are carefully detailed and may add significant value to the project as a whole.

SRK also reviewed the QA/QC programme used by X-Cal starting in 2003. The following are the observations on the X-Cal and Paramount QA/QC programme from 2003 through May, 2011.

In the 2003 drill programme, American Assay Laboratory (AAL) check assay results are systematically higher than original assays from ALS Chemex. A roasting procedure dramatically increases Au-FA results from both labs. Overall, control sample results are high quality.

In the 2004 drill programme, all control samples, except one, have results in the acceptable ranges.

In the 2005 programme, no X-Cal QA/QC results report is included for this data set. SRK took the original data and made plots of Au and Ag results for all the control samples. There are 94 SRM samples and 12 blanks with data, in the set of 1834 RC and 743 drill core samples. Of the 2684 unique drill or SRM samples, 106 of them (3.9%) are SRM. This ratio is within the industry standard of 1 SRM per 20 to 30 drilling samples, 3.3-5%.

Each standard has a certified value and associated standard deviation for gold. Only Standard 8 has a certified silver value. For the rest of the silver results, mean and standard deviation were calculated from the data set for all samples, and with outliers excluded if they were very different from the rest of the data set. In these cases, the mean and standard deviation of the data set without outliers was plotted and the results analysed.

In the SRM results, there is a lot of variance, but a high or low bias is not apparent. Of the 94 certified SRM samples, 8 had masses greater than 3kg when checked in at the lab. Most of these samples have anomalous gold values. These samples may actually be drillhole samples that were labeled incorrectly, which would explain why most of the SRM outside of the acceptable range are much lower than the certified value. Three blanks and 8 SRM have values greater than the mean

plus 2 standard deviations. More samples than that have gold values less than the mean minus 2 standard deviations, so a low bias in gold results is possible, even if the anomalously low gold values are not considered.

Silver values are considered qualitatively, because there is a lot of variation, and only one SRM of five has a certified silver value.

Two RC holes have 8 field duplicates - 6 from SD-02-05 and 2 from BCP-08-05. Duplicate samples are designated in the Type field, but do not have “from” or “to” values to pair them with the original. It appears that check assays were not done at a second lab.

In the 2007 programme, the X-Cal report for this program is unfinished. However, it was noted that results for Standard Reference Material (SRM) samples are often biased high or low. A procedure for field and drilling QA/QC is included in the X-Cal report.

In the 2010 programme, control sample results are within acceptable ranges, with few exceptions. All industry standards were followed and met, except it appears that no check assays were submitted to an outside lab.

While the overall sample and analysis QA/QC programme between 2003 and 2010 is generally acceptable, there are some exceptions as noted above. In particular, it seems that in many cases duplicate coarse reject samples were not analyzed, and check assays were not consistently performed at another lab. SRK strongly recommends that Paramount review its current QA/QC follow up procedures to ensure that industry best practices are consistently followed in regard to controls on analysis so that corrections can be made before the programme is completed.

13 Mineral Processing and Metallurgy

Historically at Sleeper, AMAX processed ore by heap leaching and also by milling and flotation. The table below shows the following average heap leach Au head grades and recoveries for three selected years of production.

Table 13-1: Historic Heap leach head grades and recoveries (Au)

Year	Au Head Grade (g/t)	Au Recovery (%)
1989	0.70	52.4
1993	0.88	46.6
1995	0.74	42.0

An analysis of year-end mine production records shows the following mill recoveries and corresponding Au head grades for four selected years of production.

Table 13-2: Historic Mill head grades and recoveries (Au)

Year	Au Head Grade (g/t)	Au Recovery (%)
1989	13.44	94.24
1991	7.67	88.54
1993	2.73	72.72
1995	3.33	67.49

In 2009, Moose Mountain Technical Services (MMTS) prepared a Preliminary Economic Assessment (PEA) NI 43-101 report on the Sleeper project. The study contemplated three estimated production modules:

- Module 1: Heap Leaching New Oxide Ore
- Module 2: Mill and CIP for Reclaimed Mill Tailings and New Sulphide ore
- Module 3: Re-Heap Leaching of Heap Leach Pad Stockpile

Kappes, Cassiday & Associates (KCA) 2002, indicate that reported heap leach recoveries (at 32 operations) averaged 71% gold, and ranged from 49% to 90%. Typical recovery for silver is 45-60%. The Hycroft Mine (close to the Sleeper mine) May 2009 NI 43-101 report states that a 79.5% actual gold recovery was achieved from their Pad 4, and testwork on transition oxide and silicified oxide showed an average cyanide soluble gold recovery of 75%. These heap leach recoveries from the

Hycroft Mine are thought to be similar to what can be expected at Sleeper.

KCA bottle roll leaching tests on Sleeper oxide ore showed gold recoveries ranging from 51% to 97%, and silver recoveries ranging from 32% to 88%.

The KCA results also show that a significant amount of gold and silver is recoverable from heap leaching of sulphide ore at the Sleeper mine, however, precedence for suitable recoveries by heap leaching sulphide ores in Nevada is rare. The MMTS PEA considers that the potential to heap leach sulphide ore should be investigated by future metallurgical test work.

There is however, an abundance of metallurgical precedence for good recovery of gold and silver from sulphide ore by milling, flotation, and CIL (Carbon in Leach) or CIP (Carbon in Pulp) processing.

In a 1997 study done by Mine Resource Development Inc. (MRDI), they suggest that a mill with agitated leaching could achieve a tailings gold grade down to 0.002 opt (0.07 g/t). For the average Sleeper historical Mill Tailings grade of 0.679 g/t reported in the 2008 NI 43-101 Technical Report this represents a potential gold recovery of 90%.

The MMTS 2009 PEA assumes historical mill tailings and fresh sulphide has an average gold and silver recovery of 85% from a mill with flotation and agitated leaching in a CIP circuit. Economic sensitivity to metallurgical recovery is tested ranging from 80% to 90% gold and silver recovery.

The PEA states that reclaimed tailings will be treated by:

- Milling
- Gravity concentration
- Flotation
- Carbon in Pulp (CIP) – agitated leaching and carbon adsorption

The PEA assumes that previous (historic AMAX) processing did not sufficiently reduce particle size for efficient leaching. Work undertaken by KCA reported by Zoutomou 2007 did not investigate mineralogy and optimum particle size prior to leaching potential.

The PEA report also identified an opportunity to use a wide spaced drilling program to potentially extend the known mineralization into areas immediately adjacent to the newly defined mining areas.

There is currently limited information available regarding the physical characteristics and metallurgical response of each of the Sleeper resource types and hence the amount of resources that can be economically exploited.

A broad ranging metallurgical sampling and test program is required to establish preliminary metal recovery and process design parameters for all potential ore types and including the substantial in-ground sulphide resources that are evident at Sleeper.

A revised PEA, using the results of additional drilling; an updated geological model and resource estimate; and new metallurgical data, is required before advancing the project to the Pre-Feasibility level.

A large amount of data for the Sleeper Project has accumulated as a result of the work of AMAX, Placer Dome, X-Cal and the Sleeper Joint Venture. The data confirms that a largely unexplored epithermal gold system occurs within the claim block. Also, significant areas of known gold mineralization need drilling to define, delineate and quantify resources. Paramount is currently

evaluating how to proceed with this exploration potential.

Paramount has currently contracted Tetra Tech, Inc., to do further metallurgical studies and also to proceed with mine design.

14 Mineral Resource Estimation

14.1 Introduction

Paramount requested SRK through its Exploration vice president Mr. Glen Van Treek, to estimate the gold and silver resources for the Sleeper Project considering three areas of the deposit, Sleeper, Facility and West Wood.

The estimation work consists of the following:

- (Au) Gold Estimation
- (Ag) Silver Estimation
- Density Estimation
- Resource Classification

In order to provide an optimum block model, volumes, tonnage-grade relationships and density designations are calculated in order to have all the required and necessary information to assign to the appropriate modeled units.

14.2 Development

14.2.1 Geology

The geology used for this work corresponds to the interpreted models of lithology and the gold and silver envelopes. The mineralized area was estimated using indicator kriging. The models of lithology and gold and silver envelopes were created as 3D solids using Leapfrog software. Table 14-1 shows the solids provided by Leapfrog and the geological parameters assigned. Table 14-2 shows the codes assigned to each unit.

Table 14-1: Geological Solids

Solid 3D	Domain	Sector
DOM.ESleeper3_Ag_02ppm_2011.06.30.00t	Ag - 2.0 ppm	Sleeper
DOM.FAC3_Ag_02ppm_2011.06.30.00t		Facility
DOM.WSleeper3_Ag_02ppm_2011.06.30.00t		Sleeper
DOM.WW_Ag_02ppm_2011.06.30.00t		West Wood
DOM_ESleeperN_Ag_02ppm_2011.06.30.00t		Sleeper
DOM_Facilities_Ag_02ppm_2011.06.30.00t		Facility
DOM_WSleeperN_Ag_02ppm_2011.06.30.00t		Sleeper
DOM.ESleeper3_Ag_10ppm_2011.06.30.00t	Ag - 10.0 ppm	Sleeper
DOM.FAC3_Ag_10ppm_2011.06.30.00t		Facility
DOM.WSleeper3_Ag_10ppm_2011.06.30.00t		Sleeper
DOM.WW_Ag_10ppm_2011.06.30.00t		West Wood
DOM_ESleeperN_Ag_10ppm_2011.06.30.00t		Sleeper
DOM_Facilities_Ag_10ppm_2011.06.30.00t		Facility

Solid 3D	Domain	Sector
DOM_WSleeperN_Ag_10ppm_2011.06.30.00t		Sleeper
DOM.ESleeper3_Au_0.1PPM_2011.06.29.00t	Au - 0.1 ppm	Sleeper
DOM.FAC3_Au_0.1PPM_2011.06.29.00t		Facility
DOM.WSleeper3_Au_0.1PPM_2011.06.29.00t		Sleeper
DOM.WW_Au_0.1PPM_2011.06.29.00t		West Wood
DOM_ESleeperN_Au_0.1PPM_2011.06.29.00t		Sleeper
DOM_Facilities_Au_0.1PPM_2011.06.29.00t		Facility
DOM_WSleeperN_Au_0.1PPM_2011.06.29.00t		West Wood
DOM.ESleeper3_Au_0.3ppm_2011.06.29.00t	Au - 0.3 ppm	Sleeper
DOM.FAC3_Au_0.3ppm_2011.06.29.00t		Facility
DOM.WSleeper3_Au_0.3ppm_2011.06.29.00t		Sleeper
DOM.WW_Au_0.3ppm_2011.06.29.00t		West Wood
DOM_ESleeperN_Au_0.3ppm_2011.06.29.00t		Sleeper
DOM_Facilities_Au_0.3ppm_2011.06.29.00t		Facility
DOM_WSleeperN_Au_0.3ppm_2011.06.29.00t		Sleeper
DOM.ESleeper3_Au_1ppm_2011.06.29.00t	Au - 1.0 ppm	Sleeper
DOM.FAC3_Au_1ppm_2011.06.29.00t		Facility
DOM.WSleeper3_Au_1ppm_2011.06.29.00t		Sleeper
DOM.WW_Au_1ppm_2011.06.29.00t		West Wood
DOM_ESleeperN_Au_1ppm_2011.06.29.00t		Sleeper
DOM_Facilities_Au_1ppm_2011.06.29.00t		Facility
DOM_WSleeperN_Au_1ppm_2011.06.29.00t		Sleeper
Alluvial.00t	Alluvial	All
DOMS.Basement.00t	Basement	West Wood
ESleeper.E_Basement.00t		Sleeper
FAC3.Basement.00t		Facility
FAC.Basement_.00t		Facility
WSleeper3.Basement.00t		Sleeper
WSleeperN.Basement.00t		Sleeper
DOMWW.Breccia.00t	Breccia	West Wood
ESleeperN.DFV.00t		Sleeper
FAC.DFV.00t		Facility
DOMWW.Extrusive.00t	Extrusive	West Wood
ESleeper3.Extrusive.00t		Sleeper
ESleeperN.Extrusive.00t		Sleeper
FAC3.Extrusive.00t		Facility
FAC.Extrusive.00t		Facility
WSleeper3.Extrusive.00t		Sleeper
WSleeperN.Extrusive.00t		Sleeper
DOMWW.RHY.00t	Rhyolite porphyry	West Wood
ESleeper3.RHY.00t		Sleeper

Solid 3D	Domain	Sector
ESleeperN.RHY.00t		Sleeper
FAC3.RHY.00t		Facility
FAC.RHY.00t		Facility
WSleeper3.RHY.00t		Sleeper
WSleeperN.RHY.00t		Sleeper
DOMWW.Tuff.00t	Tuff	West Wood
ESleeper3.Tuff.00t		Sleeper
ESleeperN.Tuff.00t		Sleeper
FAC3.Tuff.00t		Facility
FAC.Tuff.00t		Facility
WSleeper3.Tuff.00t		Sleeper
WSleeperN.Tuff.00t		Sleeper
Caja_Pit.00t	Topography with pit	All
Caja_Premine.00t	Original Topography	All

Table 14-2: Variable Assignment

Geology	Variable		Type	Code
	Database	Block Model		
Litology	lito_s	lito_s	Alluvial	1
			Basement	2
			Breccia	3
			Extrusive	4
			Intrusive	5
			Rhyolite porphyry	6
			Tuff	7
Isograde Au	Dom_Au	Dom_Au	0.1 ppm	1
			0.3 ppm	3
			1 ppm	10
Isograde Ag	Dom_Ag	Dom_Ag	2 ppm	2
			10 ppm	10
Mineral Zone	Minz	Minz	Oxide	1
			Mix	2
			Sulphide	3

Based on the solids provided by Leapfrog and checked by SRK, a separation was made based on the solids of 0.1 ppm for Au and 2ppm for Ag. This separation is shown in Table 14-3.

Table 14-3: Sectors by grade

Geology	Variable		Type	Code
	Database	Block Model		
Au Sector	Sec_Au	Sec_Au	Sleeper	1
			Facility	2
			West Wood	3
Ag Sector	Sec_Ag	Sec_Ag	Sleeper	1
			Facility	2
			West Wood	3

14.2.2 Database

A) Files

Four databases have been used for the estimation process. These databases are:

1.- Drillholes: sle0711.son.isis. This drillhole database has in the ASSAY table the Au and AG grades in ppm. In the DENS table, it has the density data. Additionally, it contains the table for Collar and Survey.

2.- Grade Composites: sle0711.crl.isis: This is the composite database used for all Au and Ag grade estimation.

3.- Geology Composites: sle0711.geo.isis: This is the composite database used to estimate the separation between the area of oxides and the area of sulphide.

4.- Density Composite: sle0811.den.isis: Is the composite database which contains the density data.

It is important to point out that drillholes were converted to grade composite samples by the Run Length method, where each interval of grades were composited at a constant length equal to 1.5 m. Figure 14-1 shows the composite length distribution, from which 1.5 meters was determined as the composite length.

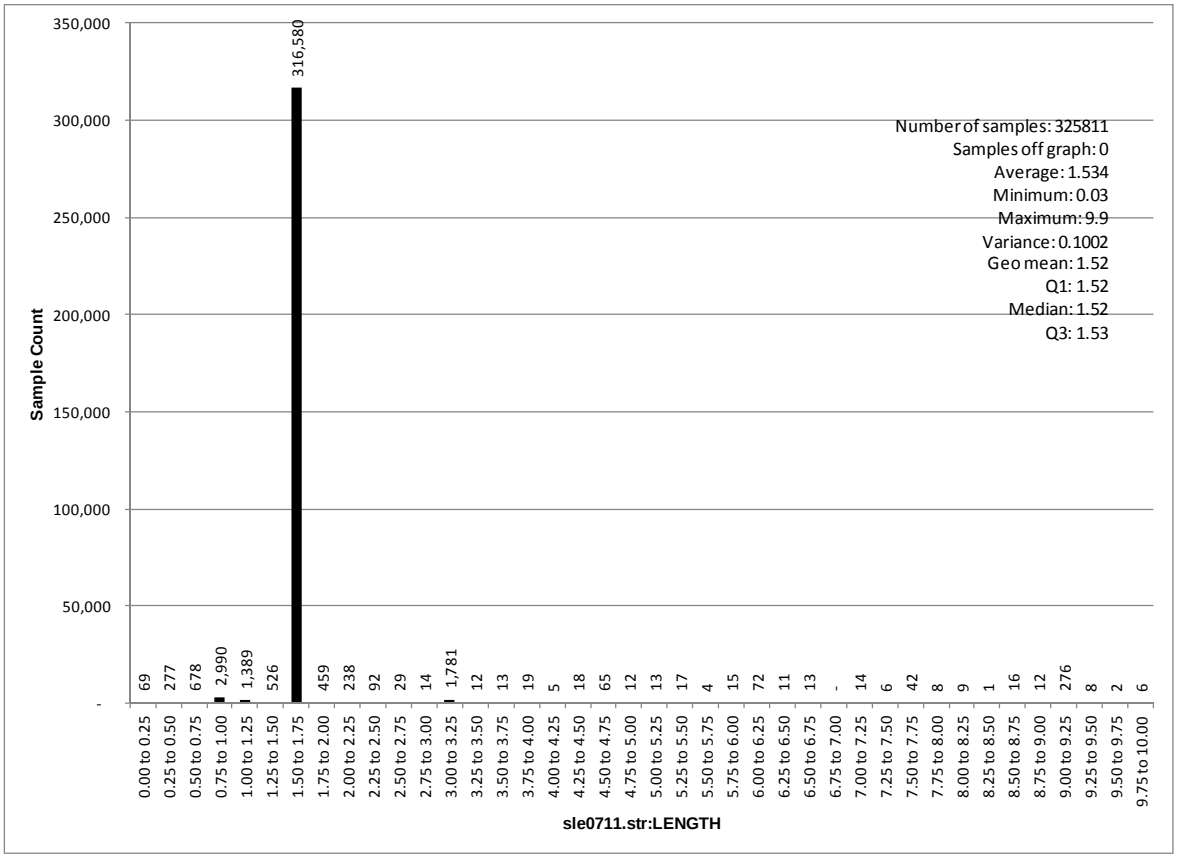
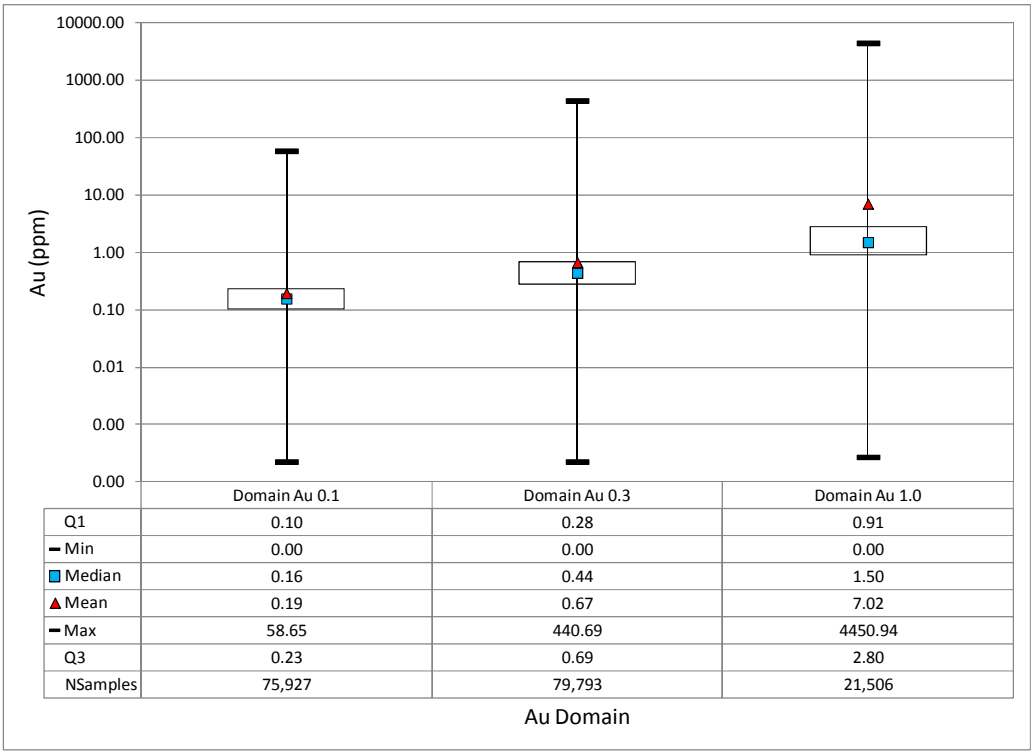


Figure 14-1: Sample Length Histograms

B) Au Statistics

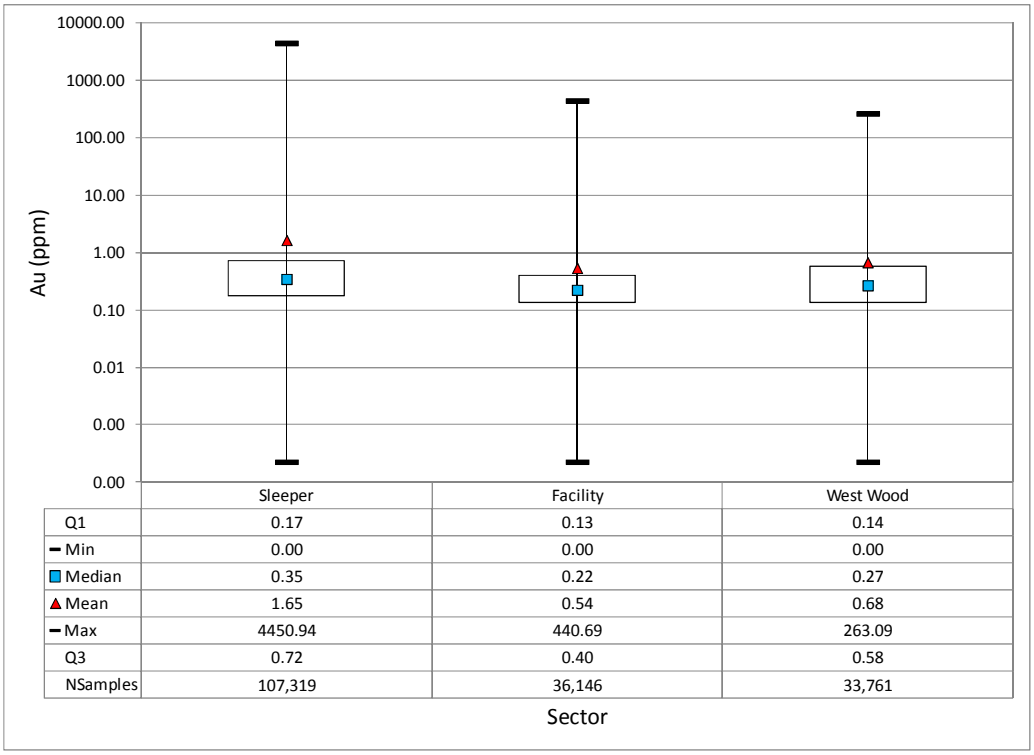
With the grade composite file, basic statistics for Au in each of geological units were created. These statistics are shown in the Box Plots graphic and are shown in Figures 14-2 to Figure 14-8. Upon analysis, the following became clear:

- By separating grades by envelope domains, naturally, the higher areas have better grades.
- The Sleeper area has a better grade with an average of 1.65 ppm, West Wood averages 0.68 ppm and Facility, 0.54 ppm.
- In general, the rhyolite lithology has higher grades.
- In Sleeper, average grades within the rhyolites, breccias and tuffs exceed 1.0 ppm.
- In Facility, rhyolite also has higher grades and there are more data.
- In terms of mineralized breccias, West Wood is the most attractive.



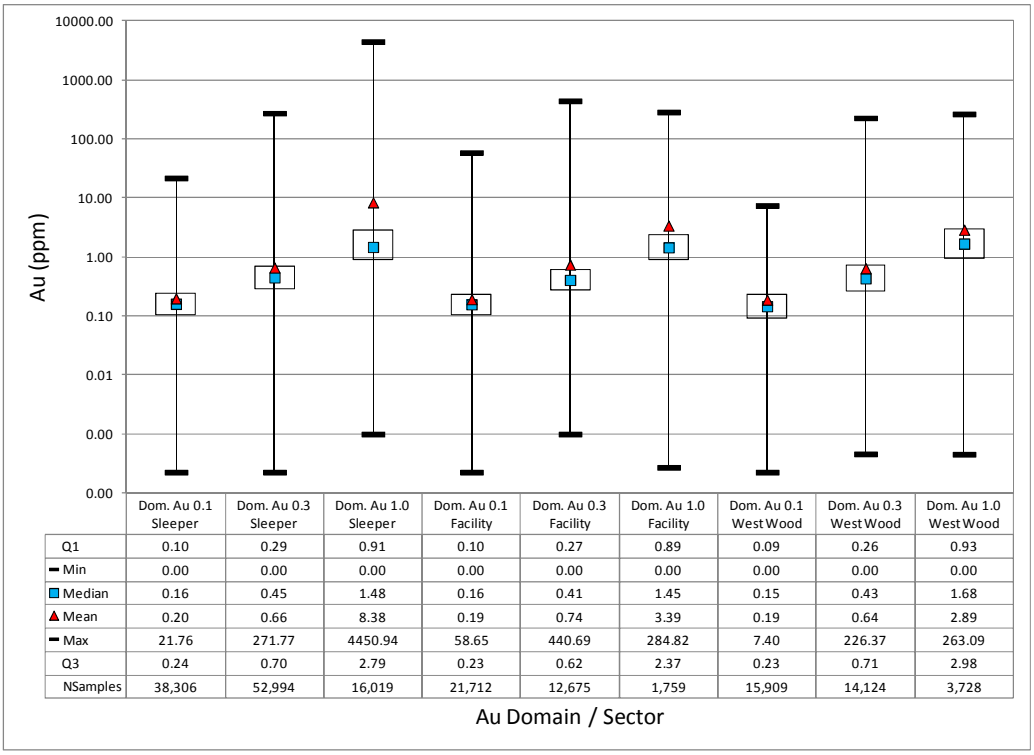
	Domain Au 0.1	Domain Au 0.3	Domain Au 1.0
Q1	0.10	0.28	0.91
Min	0.00	0.00	0.00
Median	0.16	0.44	1.50
Mean	0.19	0.67	7.02
Max	58.65	440.69	4450.94
Q3	0.23	0.69	2.80
NSamples	75,927	79,793	21,506

Figure 14-2: Box Plot Au by Envelopes



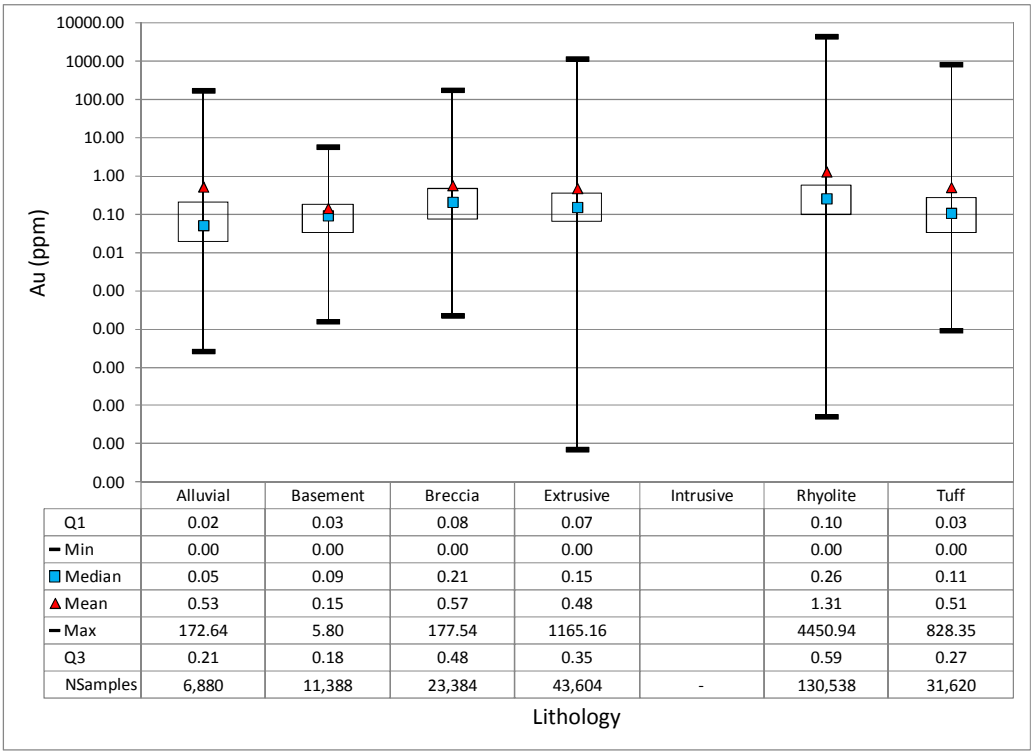
	Sleeper	Facility	West Wood
Q1	0.17	0.13	0.14
Min	0.00	0.00	0.00
Median	0.35	0.22	0.27
Mean	1.65	0.54	0.68
Max	4450.94	440.69	263.09
Q3	0.72	0.40	0.58
NSamples	107,319	36,146	33,761

Figure 14-3: Box Plot Au by Sector



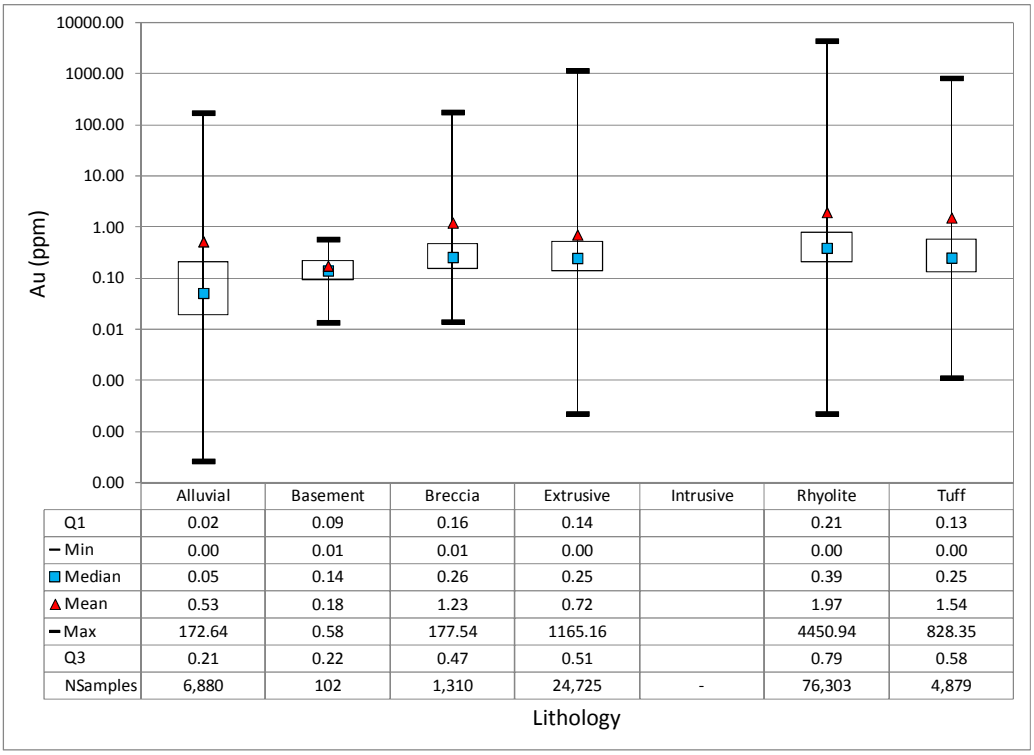
	Dom. Au 0.1 Sleeper	Dom. Au 0.3 Sleeper	Dom. Au 1.0 Sleeper	Dom. Au 0.1 Facility	Dom. Au 0.3 Facility	Dom. Au 1.0 Facility	Dom. Au 0.1 West Wood	Dom. Au 0.3 West Wood	Dom. Au 1.0 West Wood
Q1	0.10	0.29	0.91	0.10	0.27	0.89	0.09	0.26	0.93
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Median	0.16	0.45	1.48	0.16	0.41	1.45	0.15	0.43	1.68
Mean	0.20	0.66	8.38	0.19	0.74	3.39	0.19	0.64	2.89
Max	21.76	271.77	4450.94	58.65	440.69	284.82	7.40	226.37	263.09
Q3	0.24	0.70	2.79	0.23	0.62	2.37	0.23	0.71	2.98
NSamples	38,306	52,994	16,019	21,712	12,675	1,759	15,909	14,124	3,728

Figure 14-4: Box Plot Au by Sector and Envelopes



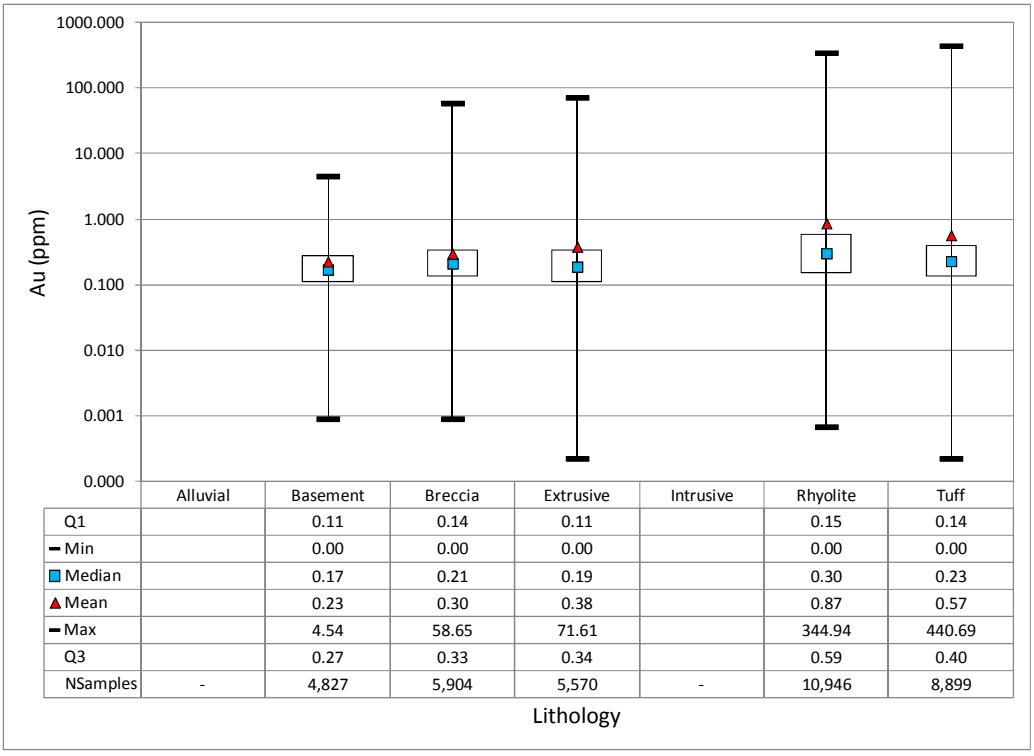
	Alluvial	Basement	Breccia	Extrusive	Intrusive	Rhyolite	Tuff
Q1	0.02	0.03	0.08	0.07		0.10	0.03
Min	0.00	0.00	0.00	0.00		0.00	0.00
Median	0.05	0.09	0.21	0.15		0.26	0.11
Mean	0.53	0.15	0.57	0.48		1.31	0.51
Max	172.64	5.80	177.54	1165.16		4450.94	828.35
Q3	0.21	0.18	0.48	0.35		0.59	0.27
NSamples	6,880	11,388	23,384	43,604	-	130,538	31,620

Figure 14-5: Box Plot Au by Lithology



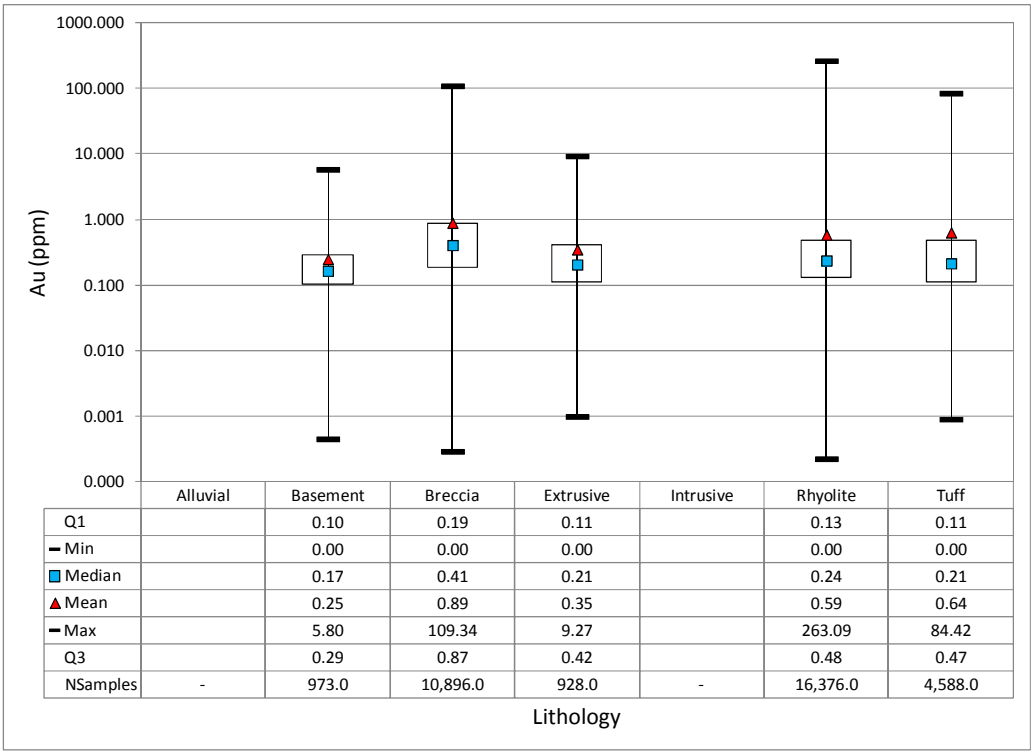
	Alluvial	Basement	Breccia	Extrusive	Intrusive	Rhyolite	Tuff
Q1	0.02	0.09	0.16	0.14		0.21	0.13
Min	0.00	0.01	0.01	0.00		0.00	0.00
Median	0.05	0.14	0.26	0.25		0.39	0.25
Mean	0.53	0.18	1.23	0.72		1.97	1.54
Max	172.64	0.58	177.54	1165.16		4450.94	828.35
Q3	0.21	0.22	0.47	0.51		0.79	0.58
NSamples	6,880	102	1,310	24,725	-	76,303	4,879

Figure 14-6: Box Plot Au by Lithology in Sleeper



	Alluvial	Basement	Breccia	Extrusive	Intrusive	Rhyolite	Tuff
Q1		0.11	0.14	0.11		0.15	0.14
Min		0.00	0.00	0.00		0.00	0.00
Median		0.17	0.21	0.19		0.30	0.23
Mean		0.23	0.30	0.38		0.87	0.57
Max		4.54	58.65	71.61		344.94	440.69
Q3		0.27	0.33	0.34		0.59	0.40
NSamples	-	4,827	5,904	5,570	-	10,946	8,899

Figure 14-7: Box Plot Au by Lithology in Facility



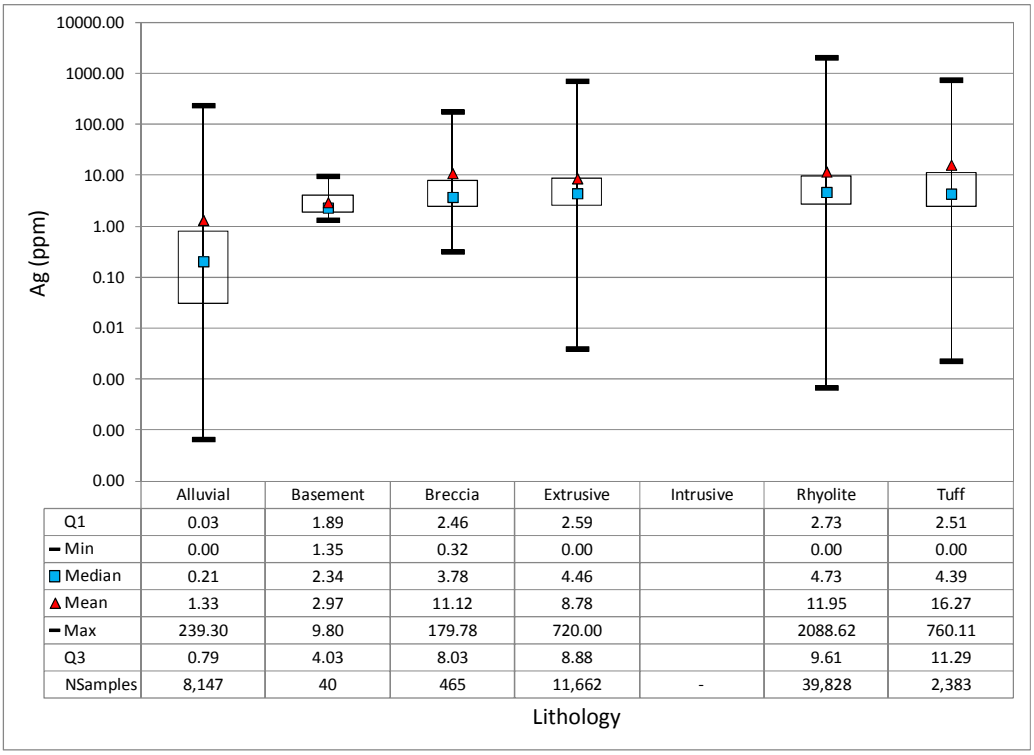
	Alluvial	Basement	Breccia	Extrusive	Intrusive	Rhyolite	Tuff
Q1		0.10	0.19	0.11		0.13	0.11
Min		0.00	0.00	0.00		0.00	0.00
Median		0.17	0.41	0.21		0.24	0.21
Mean		0.25	0.89	0.35		0.59	0.64
Max		5.80	109.34	9.27		263.09	84.42
Q3		0.29	0.87	0.42		0.48	0.47
NSamples	-	973.0	10,896.0	928.0	-	16,376.0	4,588.0

Figure 14-8: Box Plot Au by Lithology in West Wood

C) Ag Statistics

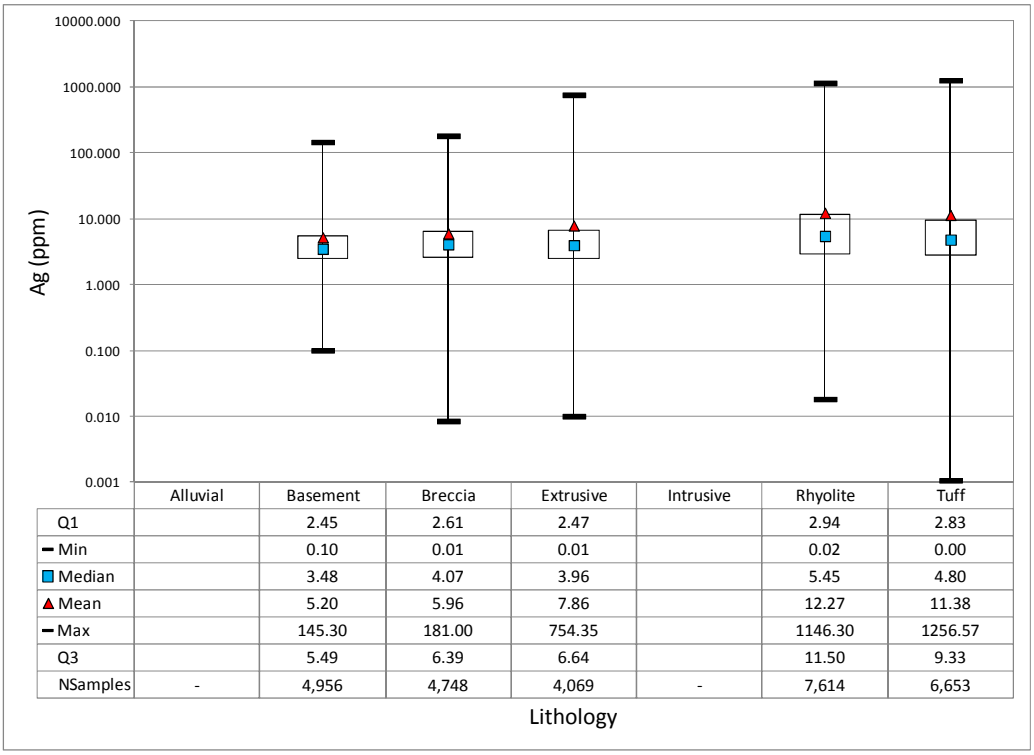
In the case of silver, only basic statistics were developed within each lithology separated by areas. The result is shown in Figures 14-9 to Figure 14-11. Upon examination, the following comments can be made:

- In general, the average grades are low and do not exceed 20 ppm.
- There are many samples per unit, which are sufficient for making consistent silver grade estimations.
- Considering quantity of data and grade, Rhyolite is the lithology which has more information and data for silver.



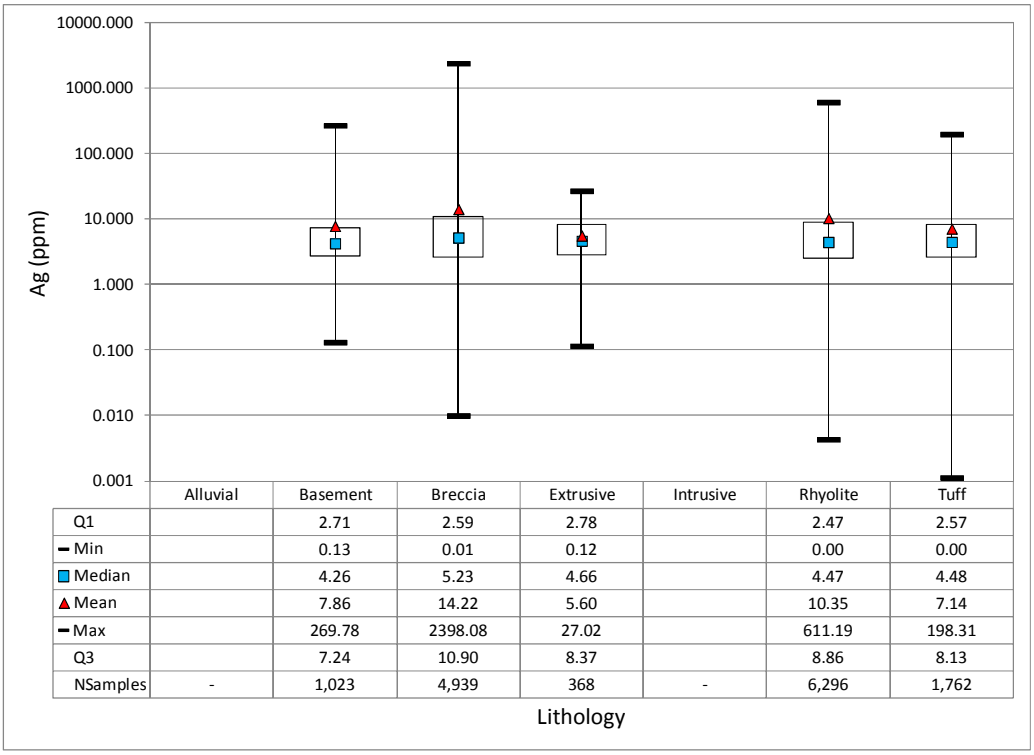
	Alluvial	Basement	Breccia	Extrusive	Intrusive	Rhyolite	Tuff
Q1	0.03	1.89	2.46	2.59		2.73	2.51
Min	0.00	1.35	0.32	0.00		0.00	0.00
Median	0.21	2.34	3.78	4.46		4.73	4.39
Mean	1.33	2.97	11.12	8.78		11.95	16.27
Max	239.30	9.80	179.78	720.00		2088.62	760.11
Q3	0.79	4.03	8.03	8.88		9.61	11.29
NSamples	8,147	40	465	11,662	-	39,828	2,383

Figure 14-9: Box Plot Ag by Lithology in West Wood Sleeper



	Alluvial	Basement	Breccia	Extrusive	Intrusive	Rhyolite	Tuff
Q1		2.45	2.61	2.47		2.94	2.83
Min		0.10	0.01	0.01		0.02	0.00
Median		3.48	4.07	3.96		5.45	4.80
Mean		5.20	5.96	7.86		12.27	11.38
Max		145.30	181.00	754.35		1146.30	1256.57
Q3		5.49	6.39	6.64		11.50	9.33
NSamples	-	4,956	4,748	4,069	-	7,614	6,653

Figure 14-10: Box Plot Ag by Lithology in Facility



	Alluvial	Basement	Breccia	Extrusive	Intrusive	Rhyolite	Tuff
Q1		2.71	2.59	2.78		2.47	2.57
Min		0.13	0.01	0.12		0.00	0.00
Median		4.26	5.23	4.66		4.47	4.48
Mean		7.86	14.22	5.60		10.35	7.14
Max		269.78	2398.08	27.02		611.19	198.31
Q3		7.24	10.90	8.37		8.86	8.13
NSamples	-	1,023	4,939	368	-	6,296	1,762

Figure 14-11: Box Plot Ag by Lithology in West Wood

14.2.3 Estimation Unit

After creating basic statistics for each geological unit, the geological units were grouped in order to obtain final estimation units, which must exhibit a stable grade behavior. This enables a good estimation to be made without a major bias and thus be able to focus on the geological limits proposed for each unit.

A) Estimation Units

Initially, 0.1, 0.3 and 1ppm Au envelope shells were considered for estimating Au grades, However, envelope estimations present a problem with grades that are near the cut-off grade in that many of these samples are eliminated in the block model. Thus, it was decided to use the geological units available in the deposit as the estimation units.

By checking the geological units for each of the lithologies, a good population behavior is seen and the average grades are different for each one, thus it was decided that each population should have its own estimation unit. Another important point is that each population is separated by each of the lithologies inside the 0.1 ppm Au grade shell, which appears to delineate more adequately the deposit and tends to enclose the estimation in such a way as to enhance grade continuity.

Since each sector of the deposit (Sleeper, Facility and West Wood) is clearly defined and the behavior in grade by lithology is different in each one of the sectors, it was decided to separate each lithological unit for each one of the areas.

Figure 14-12, Figure 14-13 and Figure 14-14 show population behaviors in Probability-Plot curves and Table 14-4 shows the estimation units (EU) used in the estimation.

Table 14-4: Au Geological Units of Estimation

EU Au	Sector	Lithology	Colors
100	Sleeper	Alluvial	
12	Sleeper	Basement	
13		Breccia	
14		Extrusive	
16		Rhyolite	
17		Tuff	
22	Facility	Basement	
23		Breccia	
24		Extrusive	
26		Rhyolite	
27		Tuff	
32	West Wood	Basement	
33		Breccia	
34		Extrusive	
36		Rhyolite	
37		Tuff	

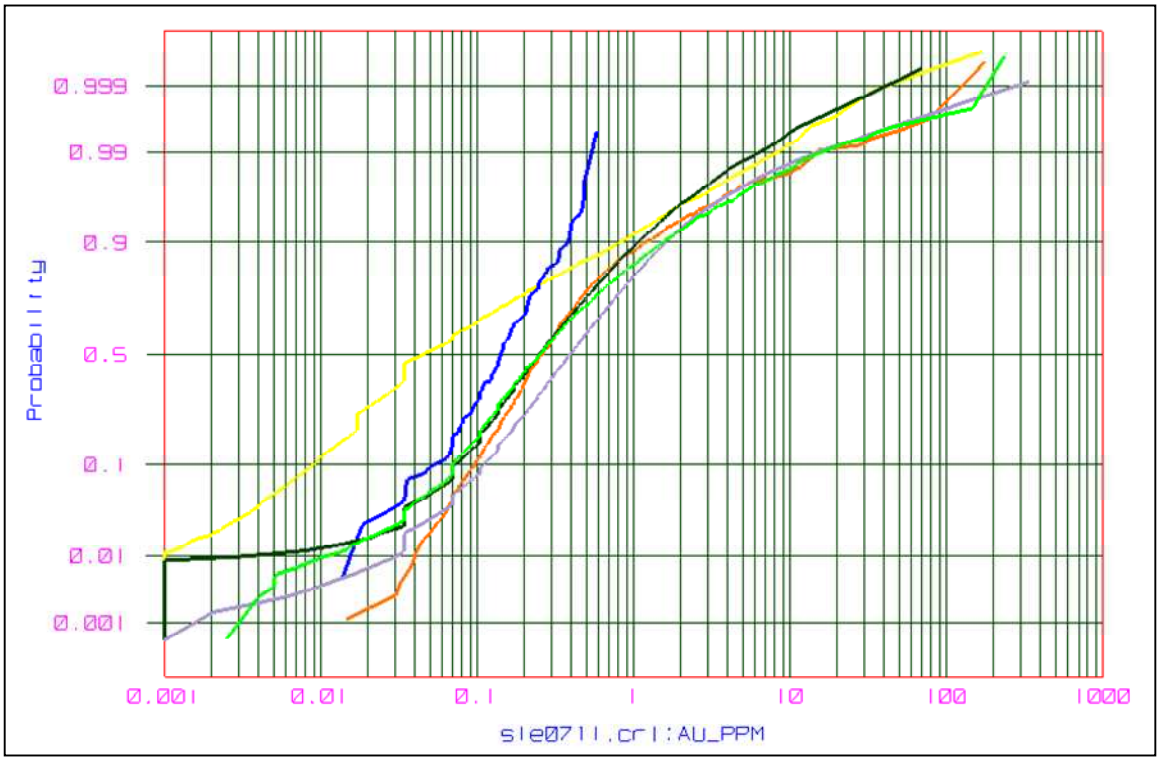


Figure 14-12: Au Probability Plots of Sleeper Estimation Unit

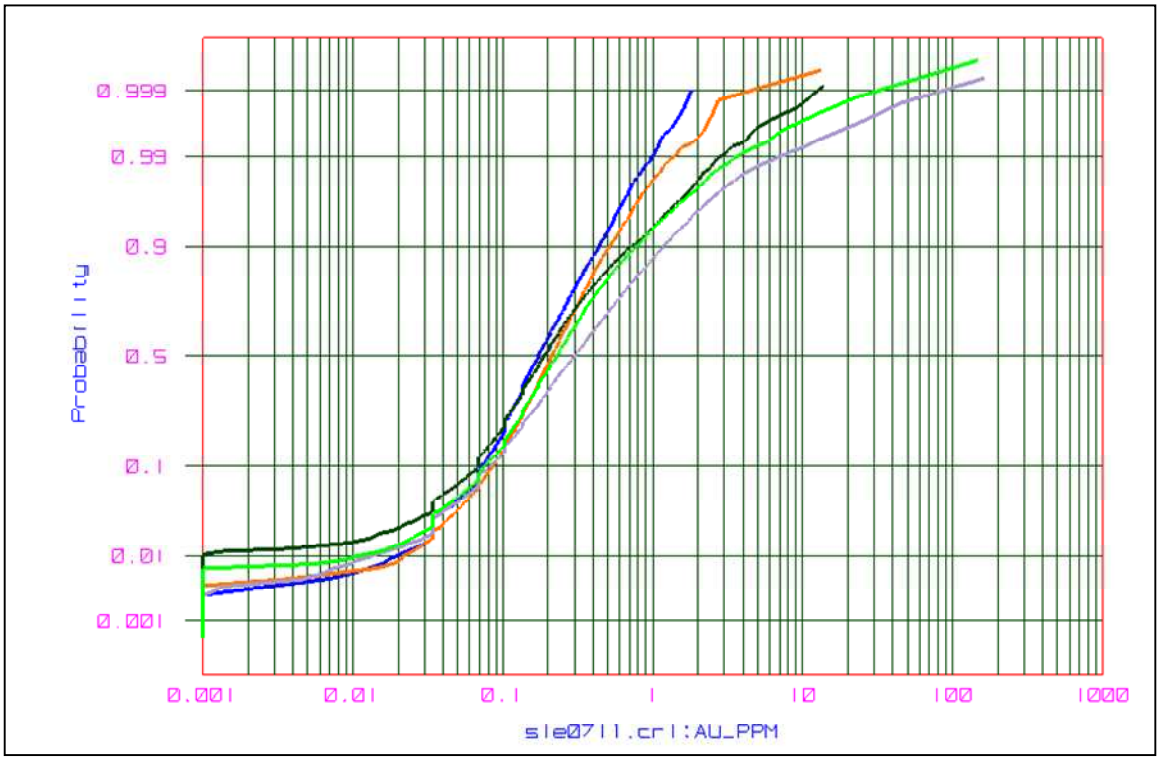


Figure 14-13: Au Probability Plots of Facility Estimation Unit

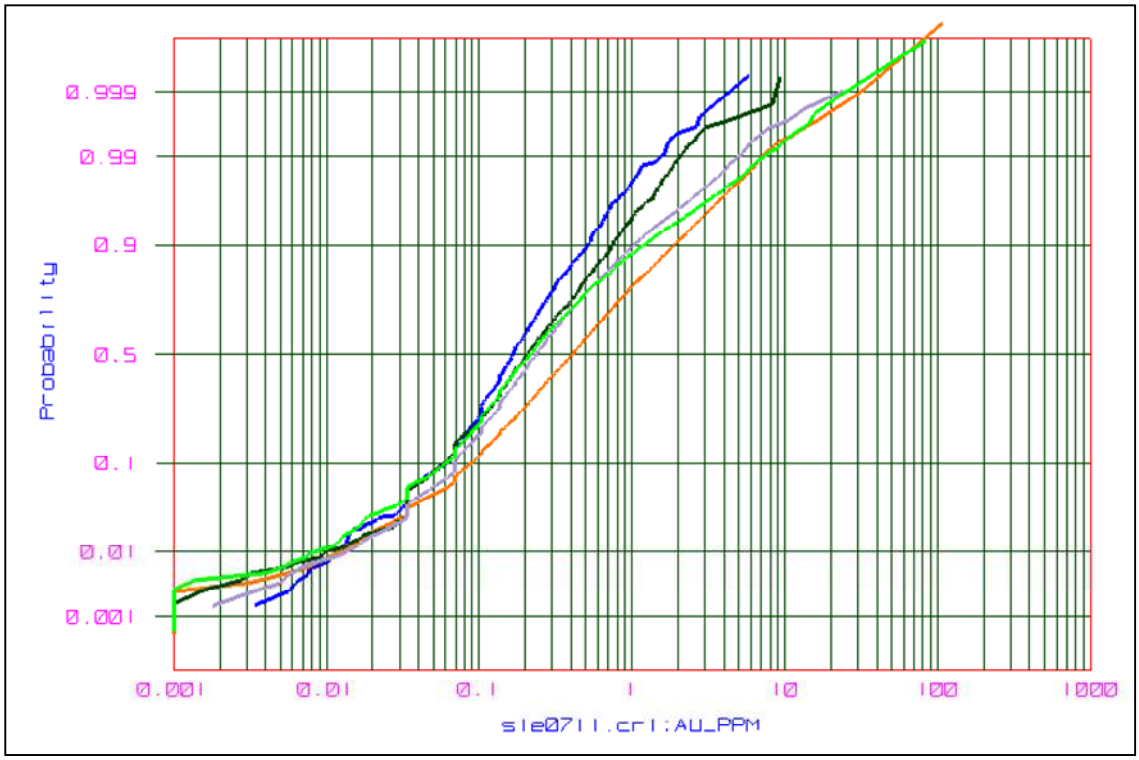


Figure 14-14: Au Probability Plots of West Wood Estimation Unit

As is seen on the graphs, the Alluvial unit was confined to only the Sleeper area, thus the estimation unit was limited to this area. . Basement is the unit with lower grade in the three areas. Coded colors for the curves are explained in Table 14-4.

Basic statistics of each unit are presented in Figure 14-9, Figure 14-10 and Figure 14-11.

B) Ag Estimation Units

The same concept was used for the silver estimation units as was used for gold, namely, separating lithology units within the 2 ppm Ag grade shell. Separation is also made by each of the three sectors.

Table 14-5 shows the estimation units for silver.

Silver was not estimated in the Alluvial lithology.

Basic statistics of each unit are shown in Figure 14-9, Figure 14-10 and Figure 14-11.

Table 14-5: Ag Geological Units of Estimation

EU Ag	Sector	Lithology	Colors
12	Sleeper	Basement	
13		Breccia	
14		Extrusive	
16		Rhyolite	
17		Tuff	
22	Facility	Basement	
23		Breccia	
24		Extrusive	
26		Rhyolite	
27		Tuff	
32	West Wood	Basement	
33		Breccia	
34		Extrusive	
36		Rhyolite	
37		Tuff	

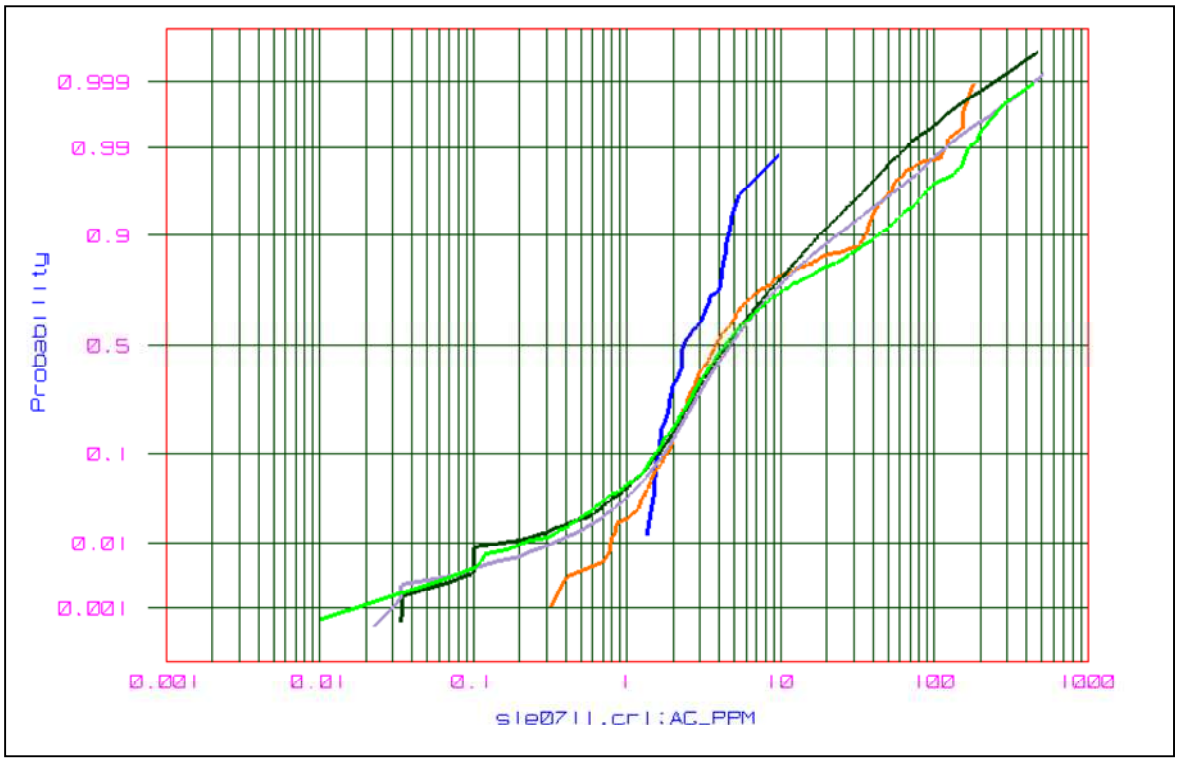


Figure 14-15: Ag Probability Plots Unit of Sleeper Estimation

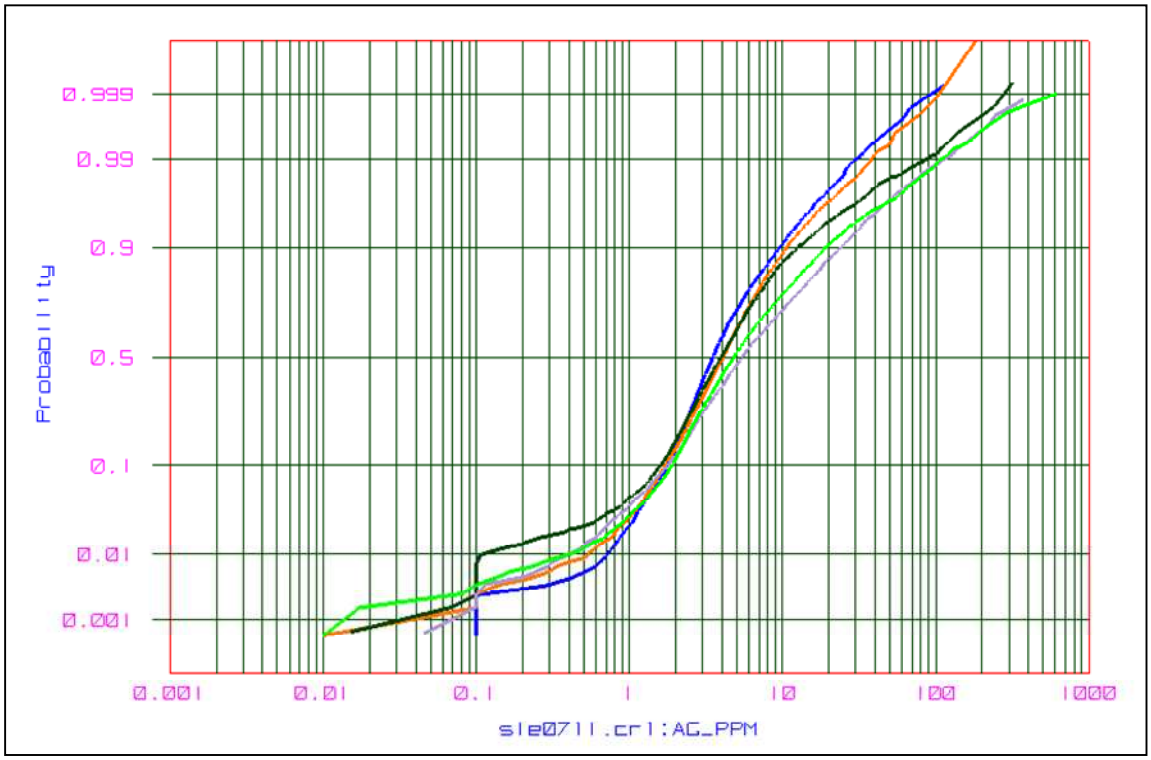


Figure 14-16: Ag Probability Plots Unit of Facility Estimation

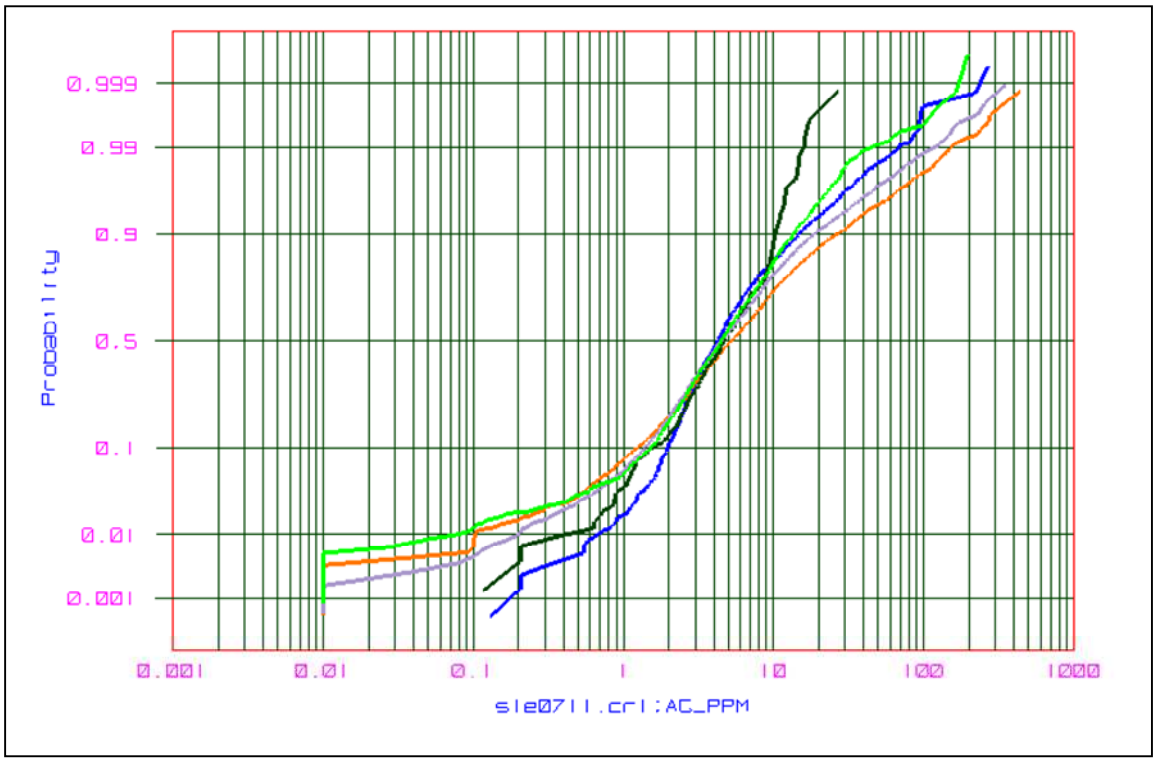


Figure 14-17: Ag Probability Plots Unit of West Wood Estimation

14.2.4 Contact Profile Analysis

Contact Profile Analysis for the interaction of the EU's were carried out in order to determine if some units had soft boundaries or hard boundaries to use the information for grade estimation.

Tables 14-6 to 14-8 show the boundary details. "D" means a hard boundary while "S" is a soft boundary and the figure shows one unit's influence on another in metres.

The detail of all the graphics is shown in Appendix B.

Table 14-6: Au Contact Profile Analysis of the Sleeper Estimation

EU Au	12	13	14	16	17
12		D	D	D	D
13	D		D	D	D
14	D	D		D	D
16	D	D	D		
17	D	D	D	D	

Table 14-7: Au Unit Contact Profile Analysis of the Facility Estimation

EU Au	22	23	24	26	27
22		D	D	D	D
23	D		D	D	D
24	D	D		D	D
26	D	D	D		
27	D	D	D	D	

Table 14-8: Au Unit Contact Profile Analysis of the West Wood Estimation

EU Au	32	33	34	36	37
32		D	D	D	D
33	D		D	D	D
34	D	D		D	D
36	D	D	D		
37	D	D	D	D	

Tables 14-6 to 14-8, indicate that all the boundaries between the gold units are hard boundaries.

Since silver is a secondary unit in the estimation, Contact Profile Analysis between units were not carried out for Ag and all boundaries were assumed as also being hard.

14.3 Au and Ag Variographic Analysis

Variographic analysis considers the creation of variographic maps, “down the hole” variograms and directional variograms for grade, whether it is gold or silver and for each estimation geological unit.

14.3.1 Variographic Maps

Correlograms on composite data bases were used for modeling and describing the spatial variability of the mineralization of the deposit. The methodology used for developing Au and Ag correlogram models was based on following determined preferential directions for the grade variation behavior and lithology of each estimation domain. Since it was not a simple task to identify this behavior due to the geology groupings which form the estimation units, the process considers the creation of variographic maps as correlograms in such a way in order to better visualize the preferential directions for each estimation unit.

Table 14-9 shows angles found from gold variographic maps, which are shown in Appendix C. It should be pointed out that sign convention is according to Vulcan® software. Table 14-10 shows preferential angles for silver.

Table 14-9: Au Search Angles

EU Au	Bearing (°)	Plunge (°)	Dip (°)
12	-	-	-
13	15	0	10
14	15	0	-70
16	15	0	60
17	10	0	50
22	60	45	40
23	165	-5	45
24	25	0	0
26	10	0	80
27	170	80	90
32	0	0	45
33	0	0	-60
34	135	90	90
36	20	0	90
37	90	0	90

Gold estimation unit (EU) 12 does not have information regarding the search angles because this unit does not have sufficient information for performing a variographic analysis.

Table 14-10: Ag Search Angles

EU Ag	Bearing (°)	Plunge (°)	Dip (°)
12	-	-	-
13	-	-	-
14	25	0	-65
16	35	20	75
17	15	10	75
22	65	0	0
23	15	0	90
24	15	15	-75
26	70	-15	55
27	125	0	65
32	110	0	-55
33	0	0	70
34	-	-	-
36	20	15	90
37	170	0	70

Likewise, silver estimation units (EU) 12, 13 and 34 do not have information regarding the search angles because these units do not have sufficient information for performing a variographic analysis.

14.3.2 Down the Hole Variograms

Experimental down the hole variograms are useful to more precisely deter,ome the nugget effect in each estimation unit, which is necessary for modeling experimental directional variograms. This kind of variogram is not a vertical variogram, but rather one which identifies with each drillhole and calculates variogram function along the drillhole depending on the space used. When a drillhole is finished being analysed, it moves to the next until it is finished analysing all the drillholes belonging to the required unit.

Figures 14-18 to 14-26 show the correlograms for gold per estimation unit by drillhole. This method infers the axis curve of the ordinate (Y-axis). Nomenclature DTH means “Down the Hole”.

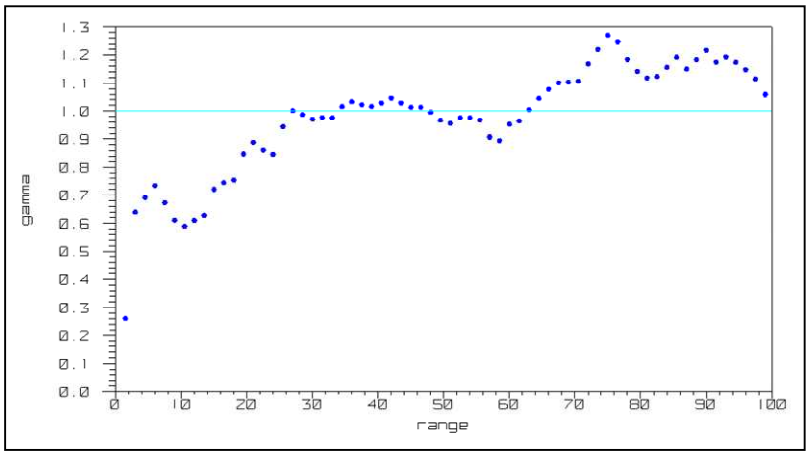


Figure 14-18: UG Au 13 DTH Variogram

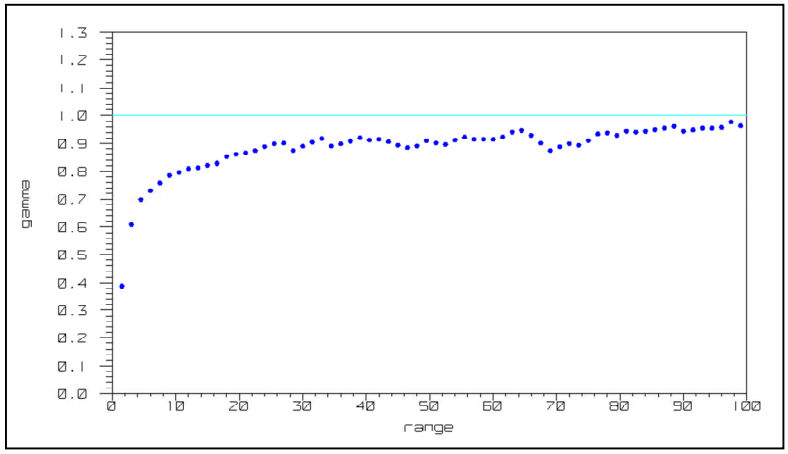


Figure 14-19: UG Au 14 DTH Variogram

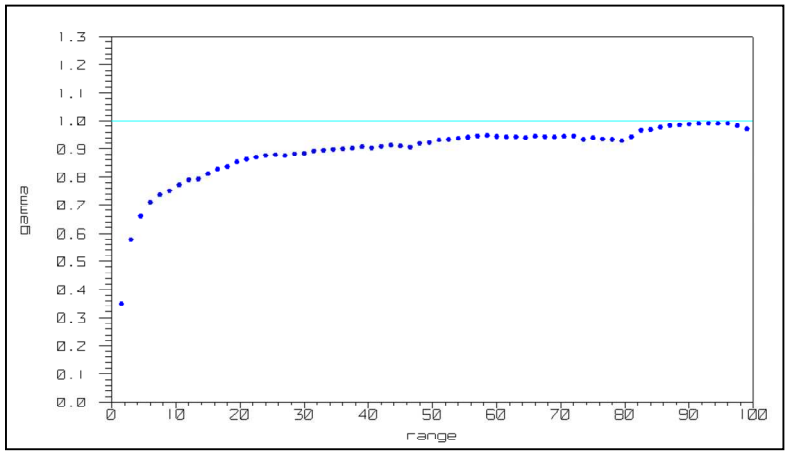


Figure 14-20: UG Au 16 DTH Variogram

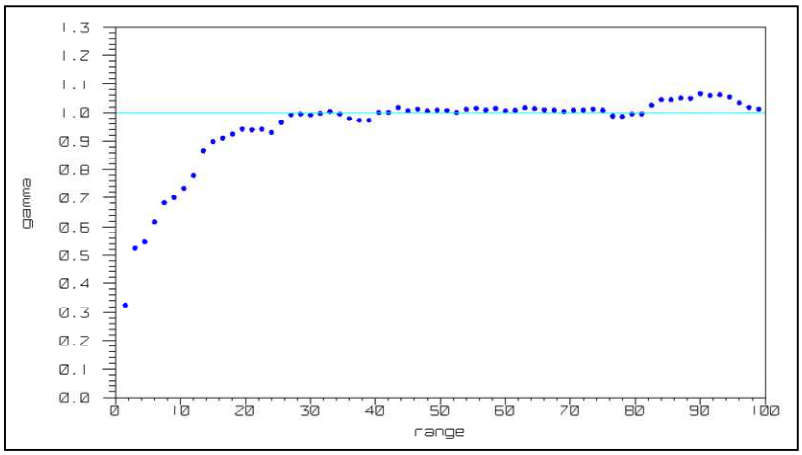


Figure 14-21: UG Au 17 DTH Variogram

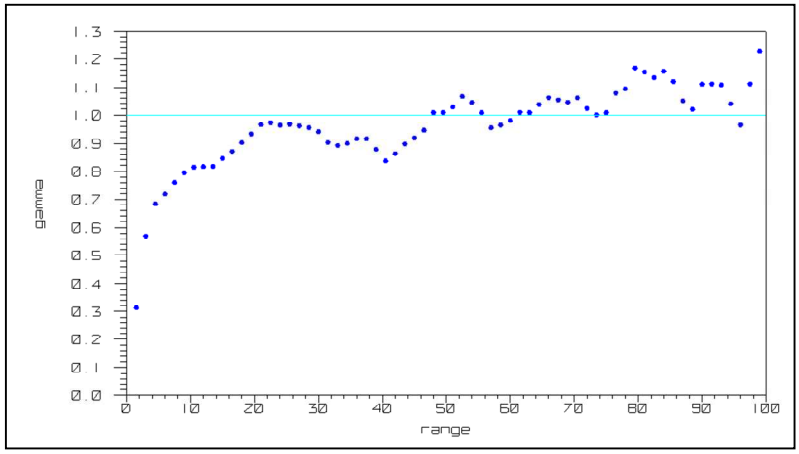


Figure 14-22: UG Au 22 DTH Variogram

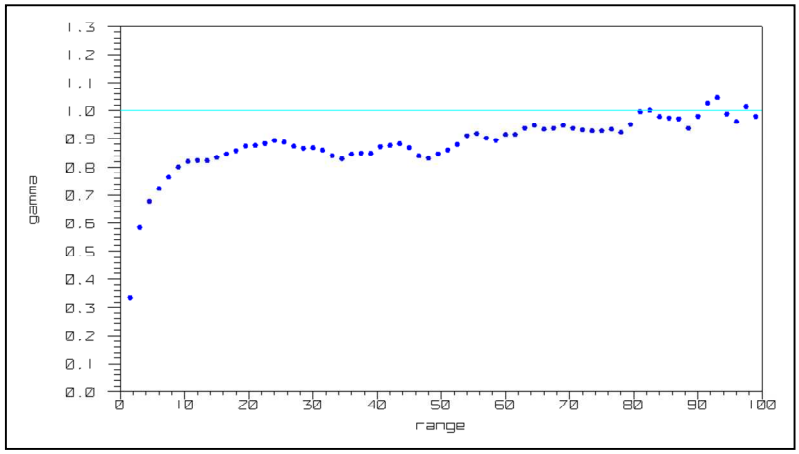


Figure 14-23: UG Au 23 DTH Variogram

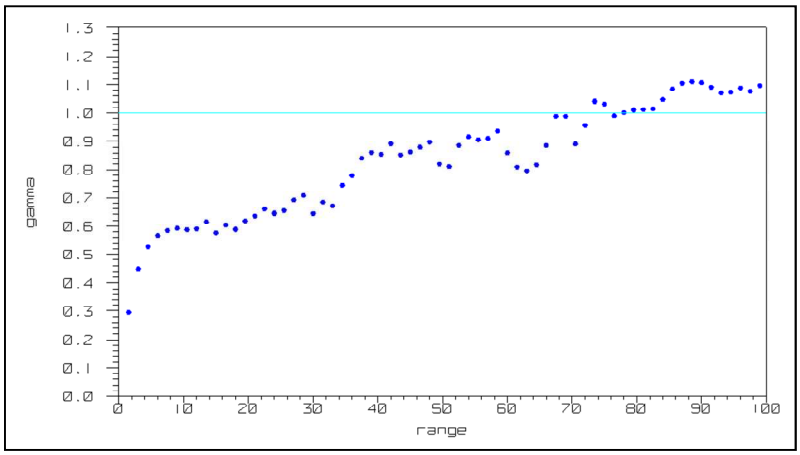


Figure 14-24: UG Au 24 DTH Variogram

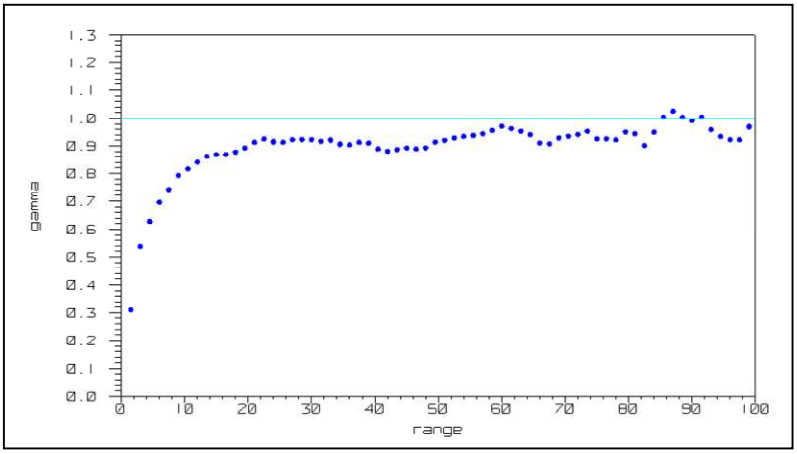


Figure 14-25: UG Au 26 DTH Variogram

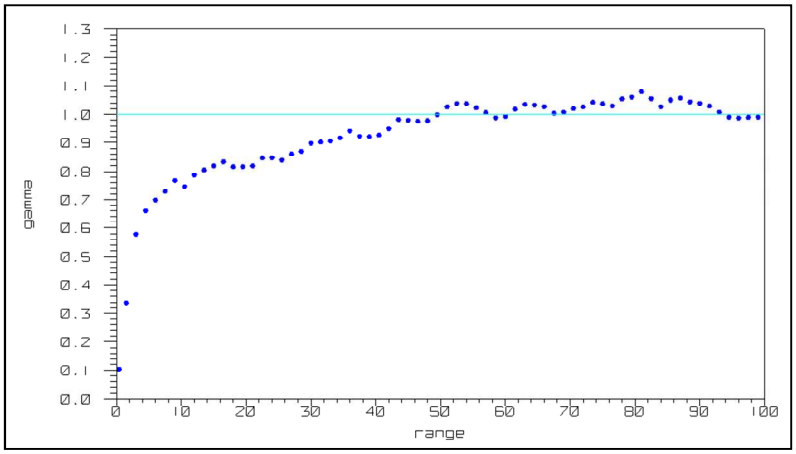


Figure 14-26: UG Au 27 DTH Variogram

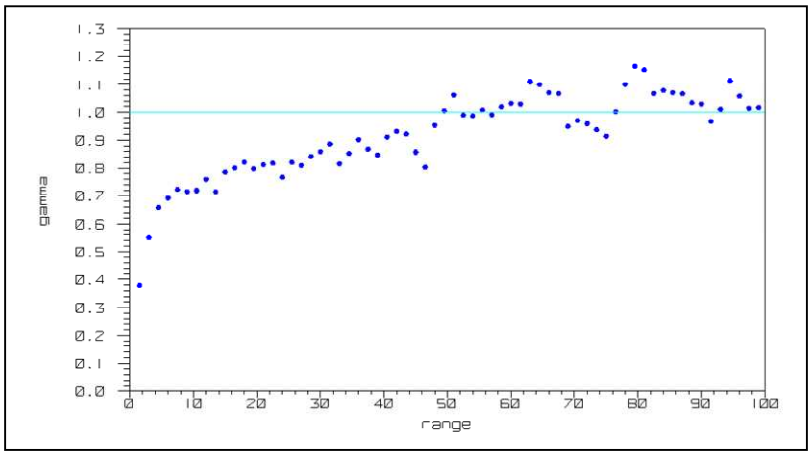


Figure 14-27: UG Au 32 DTH Variogram

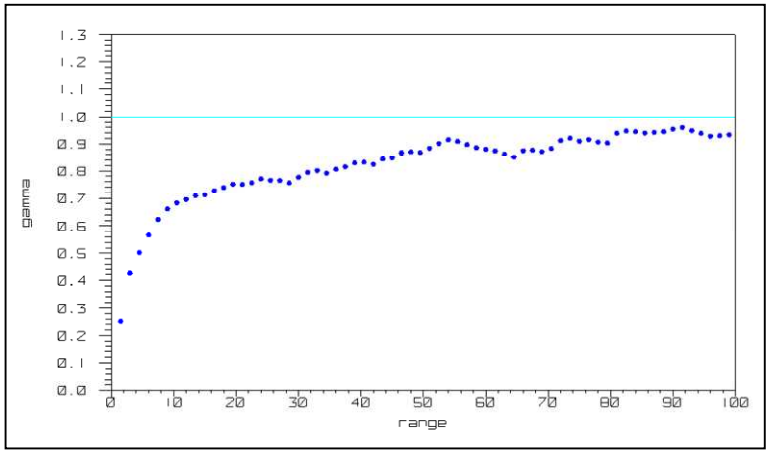


Figure 14-28: UG Au 33 DTH Variogram

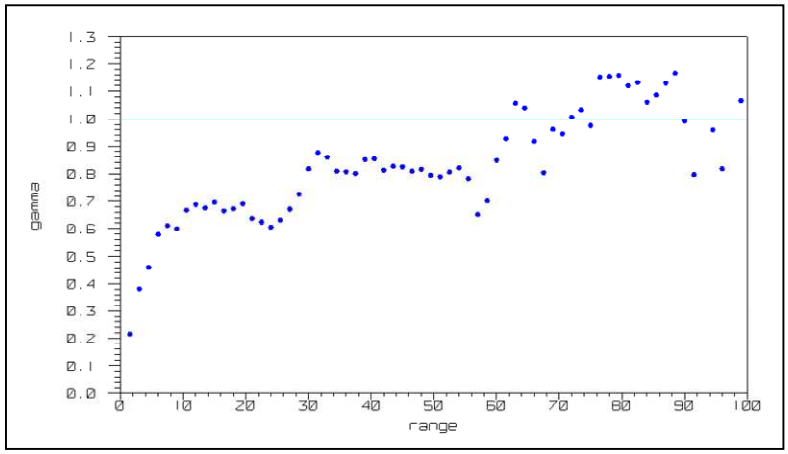


Figure 14-29: UG Au 34 DTH Variogram

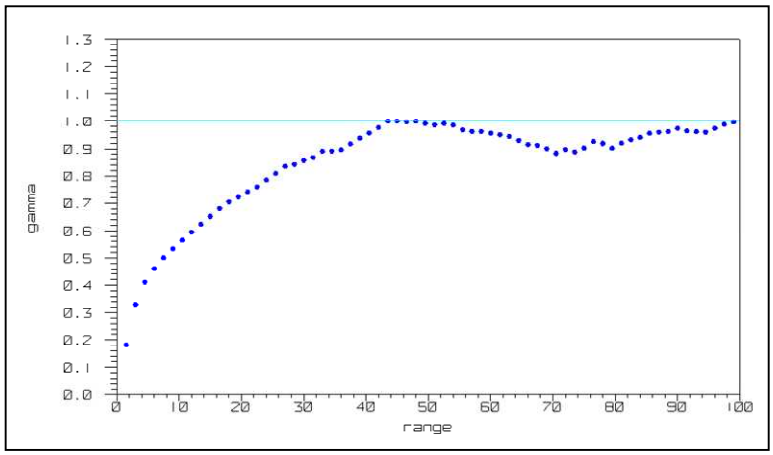


Figure 14-30: UG Au 36 DTH Variogram

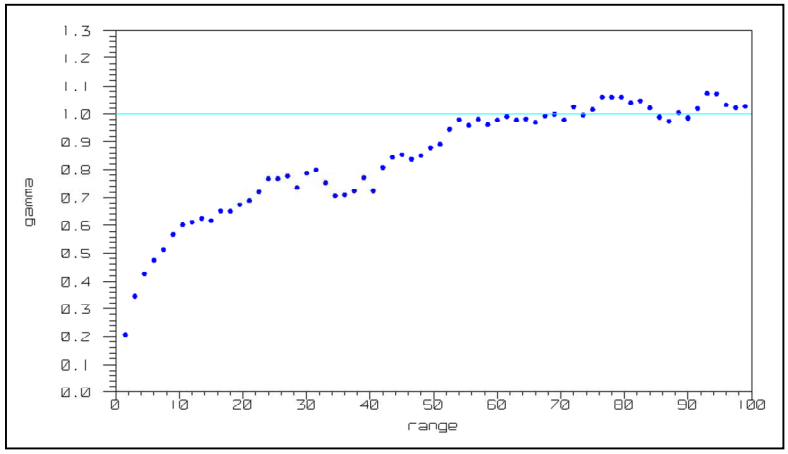


Figure 14-31: UG Au 37 DTH Variogram

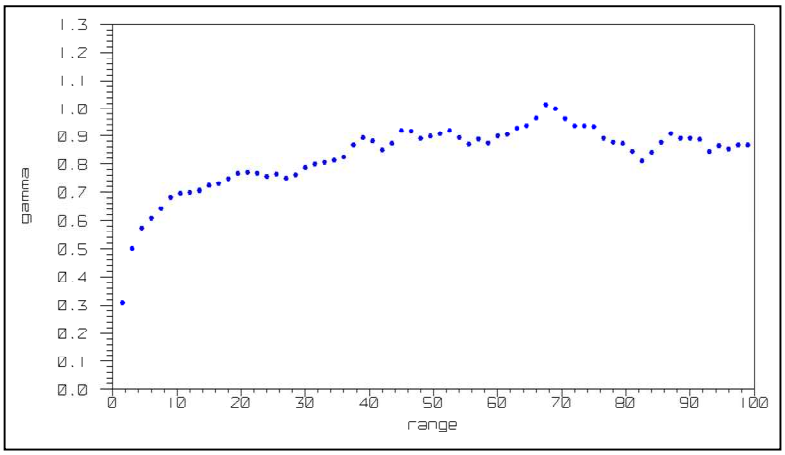


Figure 14-32: UG Ag 14 DTH Variogram

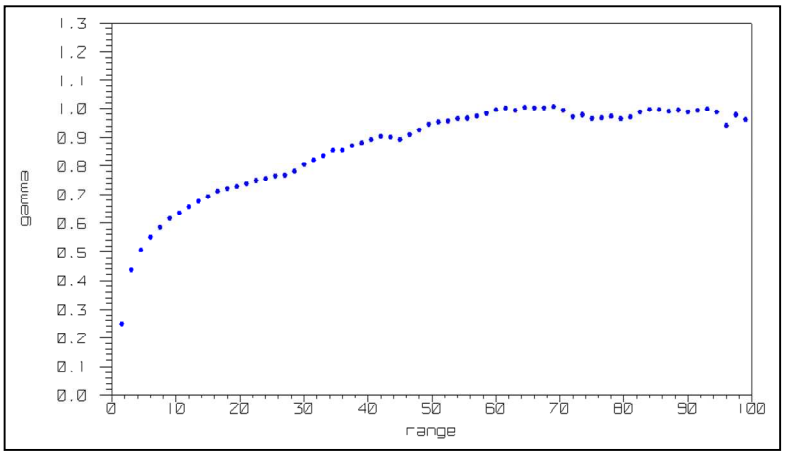


Figure 14-33: UG Ag 16 DTH Variogram

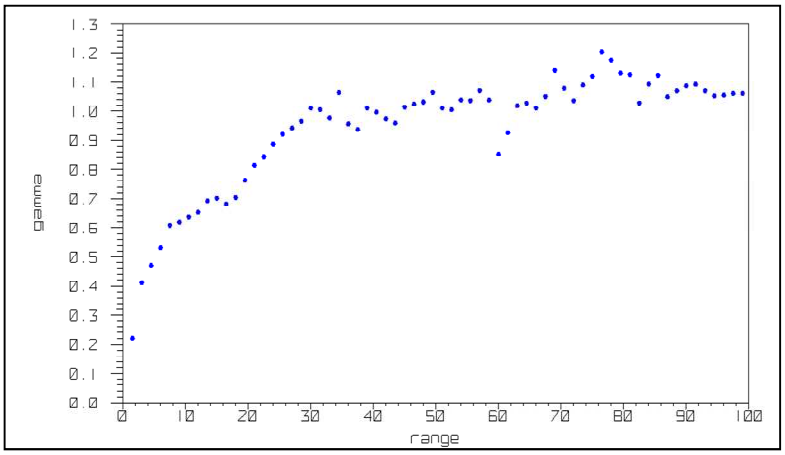


Figure 14-34: UG Ag 17 DTH Variogram

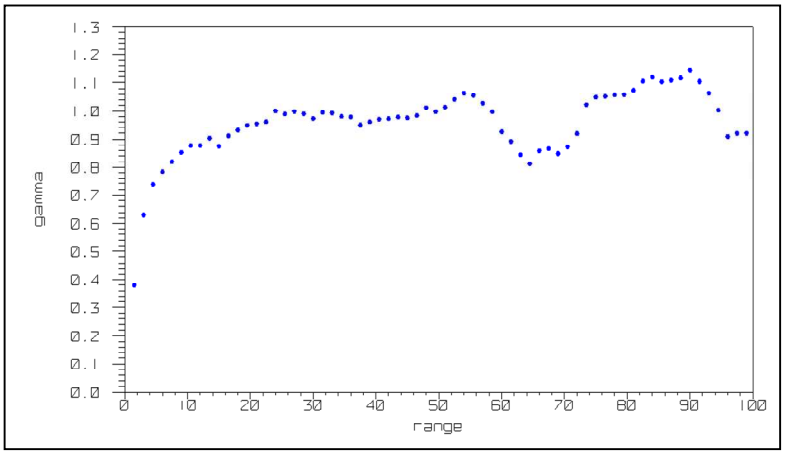


Figure 14-35: UG Ag 22 DTH Variogram

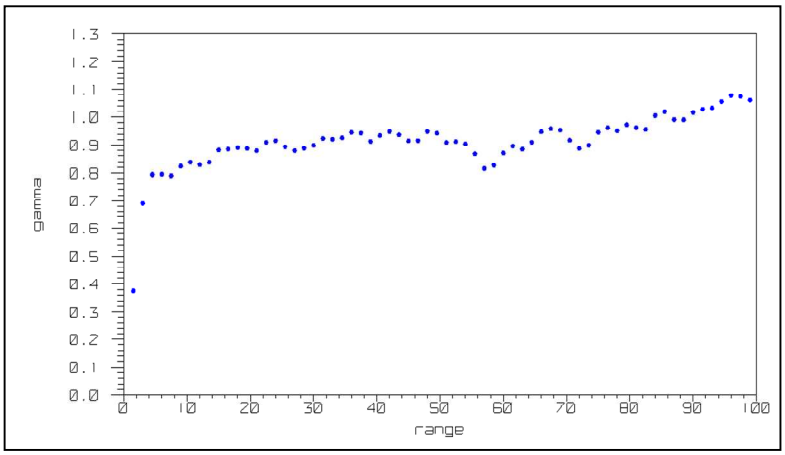


Figure 14-36: UG Ag 23 DTH Variogram

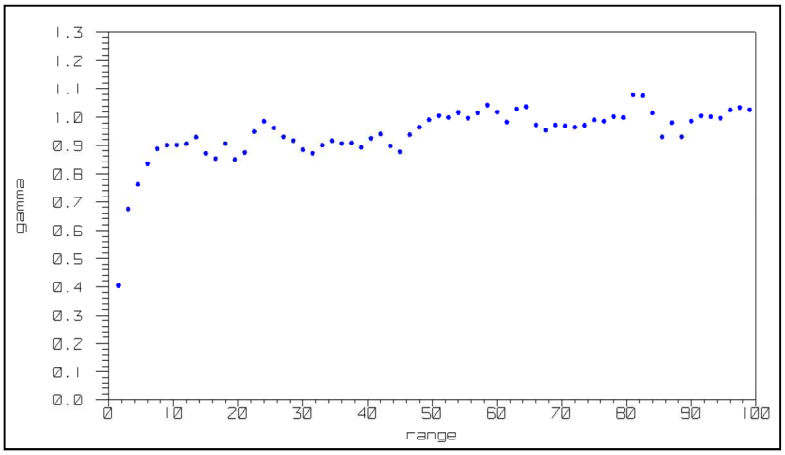


Figure 14-37: UG Ag 24 DTH Variogram

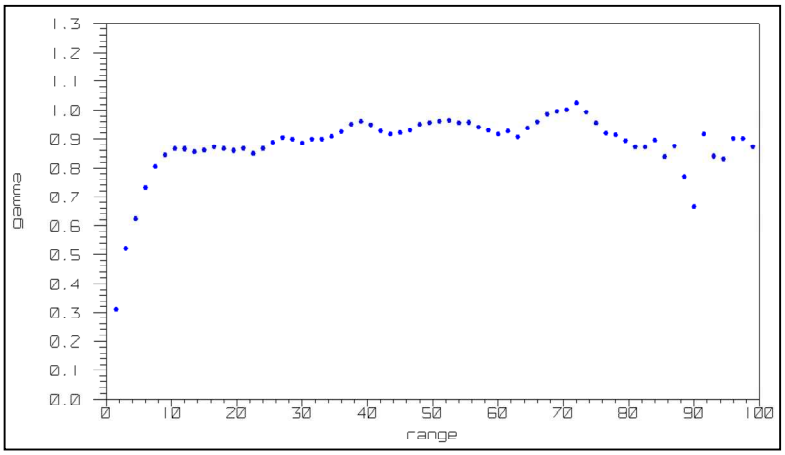


Figure 14-38: UG Ag 26 DTH Variogram

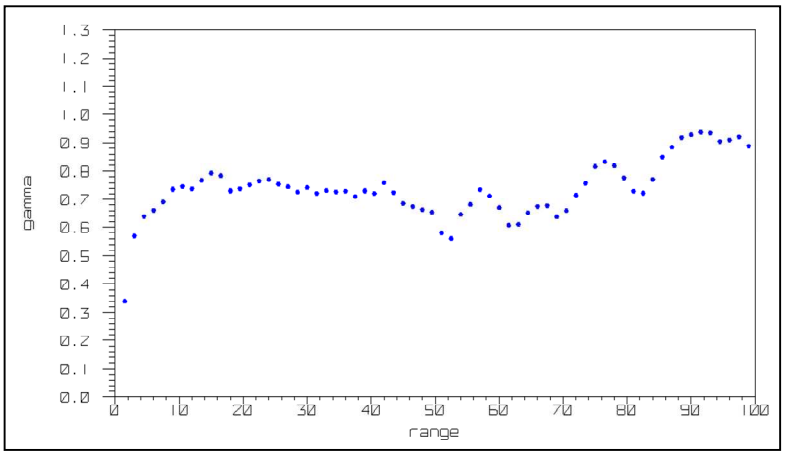


Figure 14-39: UG Ag 27 DTH Variogram

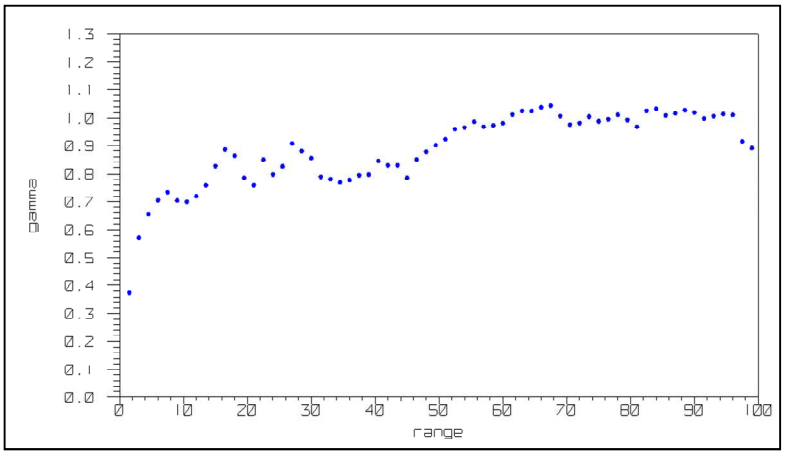


Figure 14-40: UG Ag 32 DTH Variogram

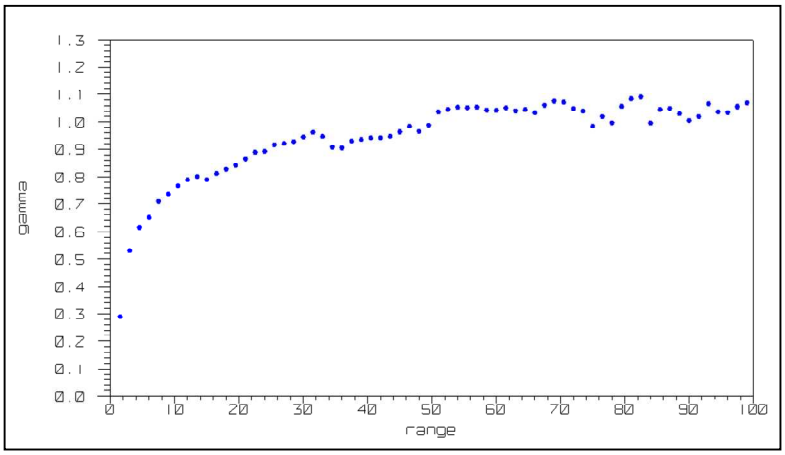


Figure 14-41: UG Ag 33 DTH Variogram

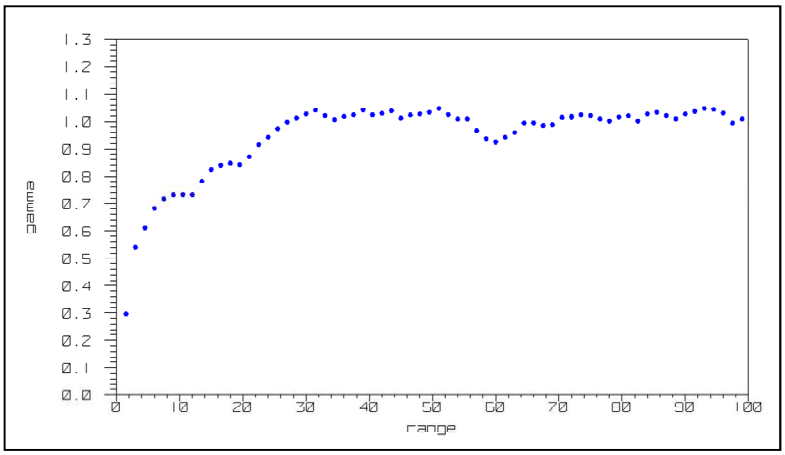


Figure 14-42: UG Ag 36 DTH Variogram

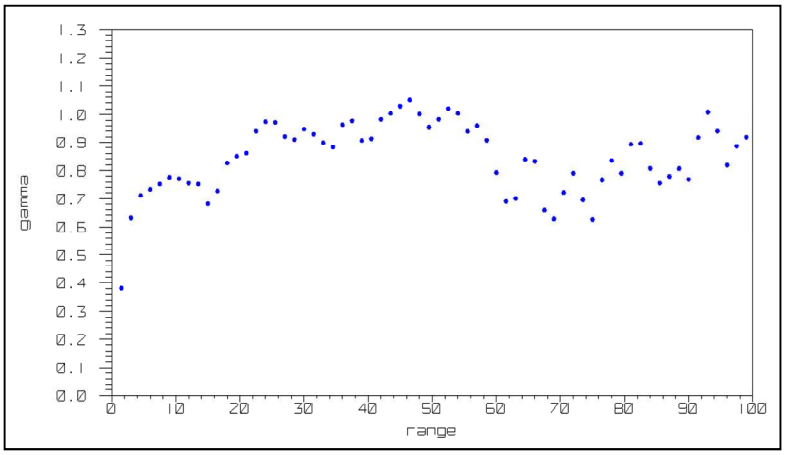


Figure 14-43: UG Ag 37 DTH Variogram

Table 14-11 shows the extrapolated nugget effect for each unit and each grade.

Table 14-11: Nugget Effect per Unit

EU Au	Au Nugget	EU Ag	Ag Nugget
12	-	**12**	-
13	0.02	**13**	-
14	0.02	**14**	0.04
16	0.02	**16**	0.02
17	0.08	**17**	0.02
22	0.02	**22**	0.08
23	0.04	**23**	0.04
24	0.08	**24**	0.04
26	0.05	**26**	0.07
27	0.02	**27**	0.08
32	0.1	**32**	0.1
33	0.04	**33**	0.06
34	0.03	**34**	-
36	0.02	**36**	0.04
37	0.02	**37**	0.06

14.3.3 Directional Variograms

Based on the information obtained from variographic maps, experimental directional correlograms were set, which are interpreted in order to obtain theoretical correlogram models, which provide a 3D model for calculating kriging indicators.

Figures 14-44 to Figure 14-69, show the Au correlograms. Dots show experimental variograms and the curves indicate the theoretical model. Theoretical variogram parameters, plateau or reach, are indicated on the bottom of each figure. Some are 100% directional, but others are omnidirectional, since, as previously mentioned, there was insufficient data for calculating experimental variograms for those units.

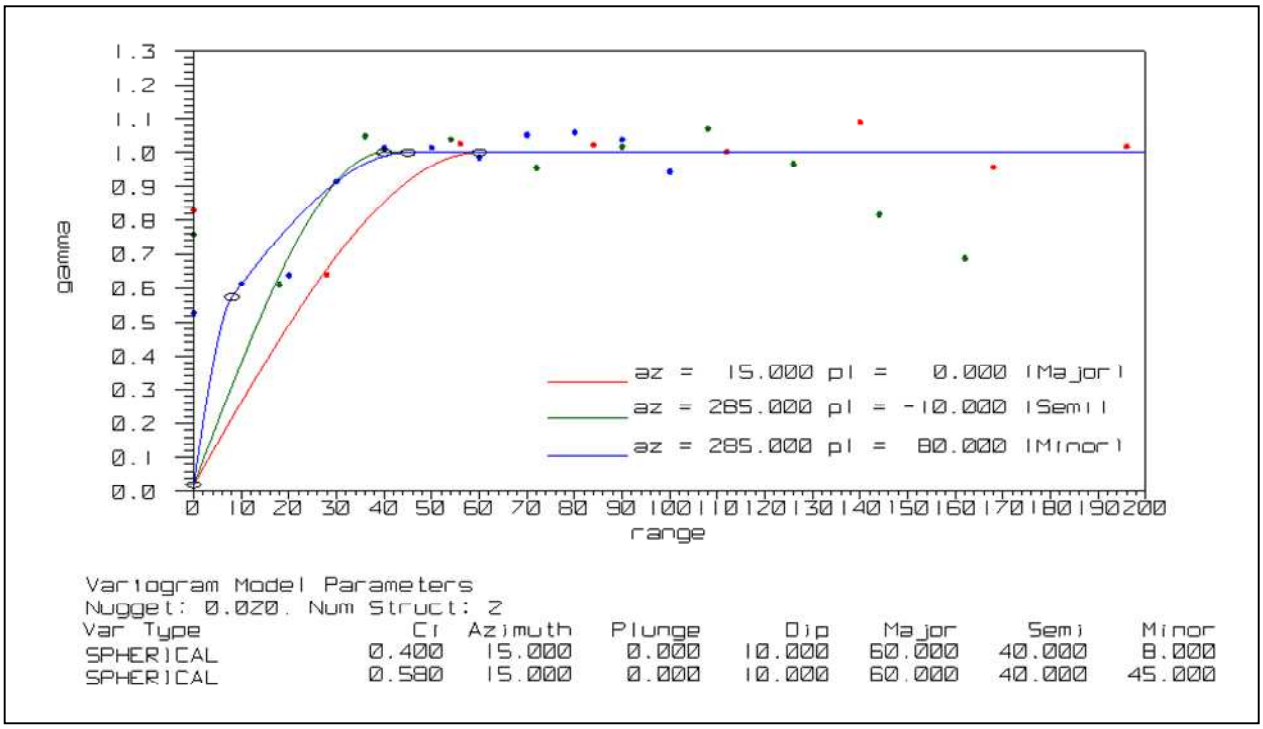


Figure 14-44: EU Au 13 Directional Variogram

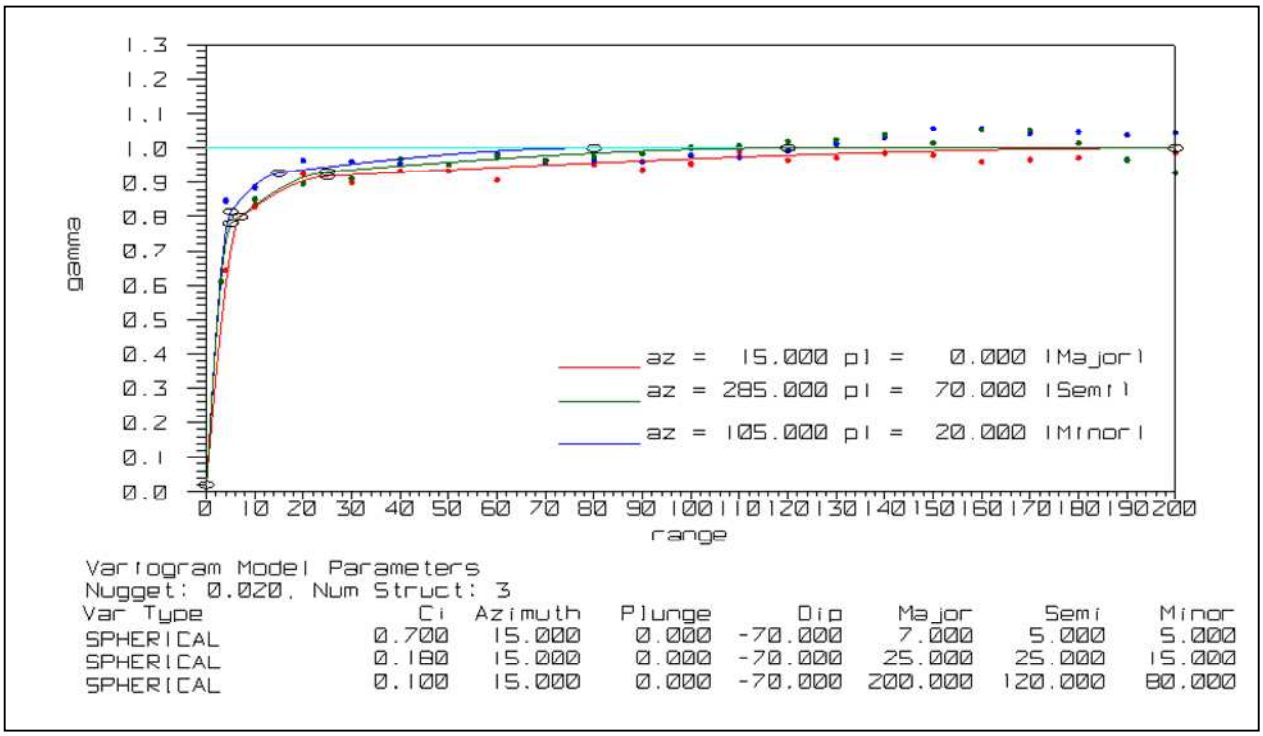
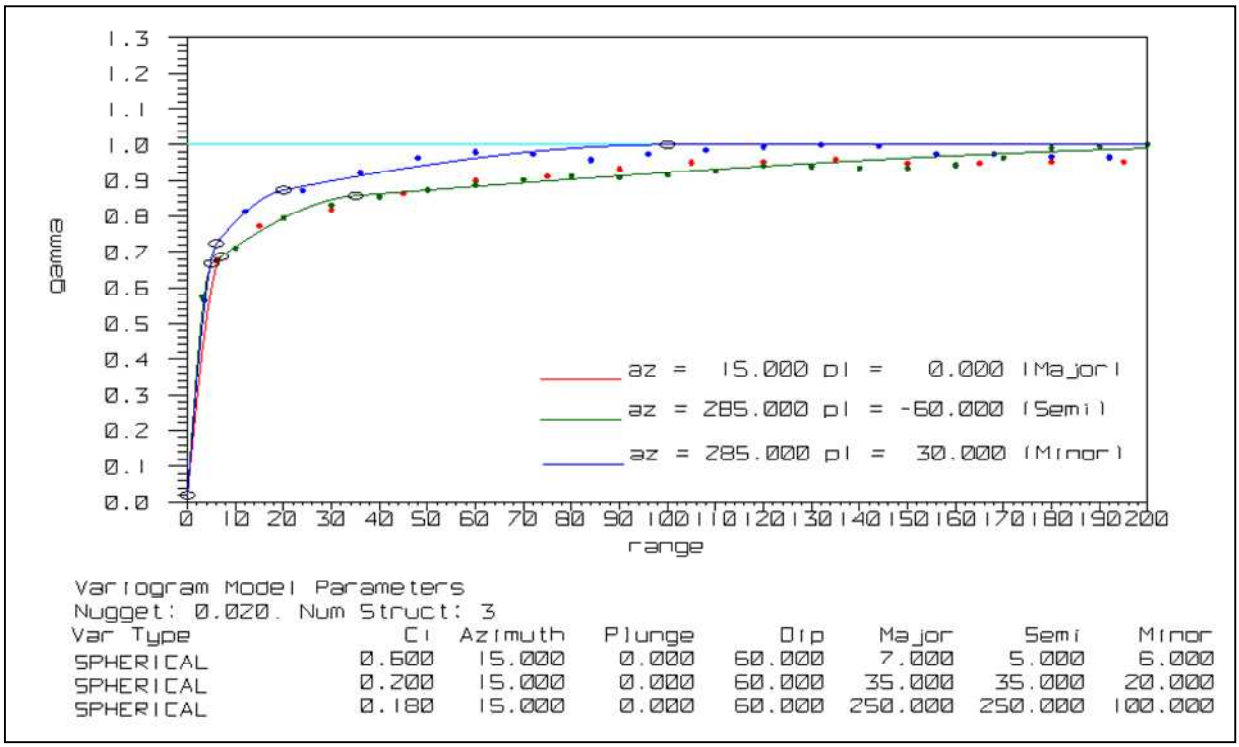


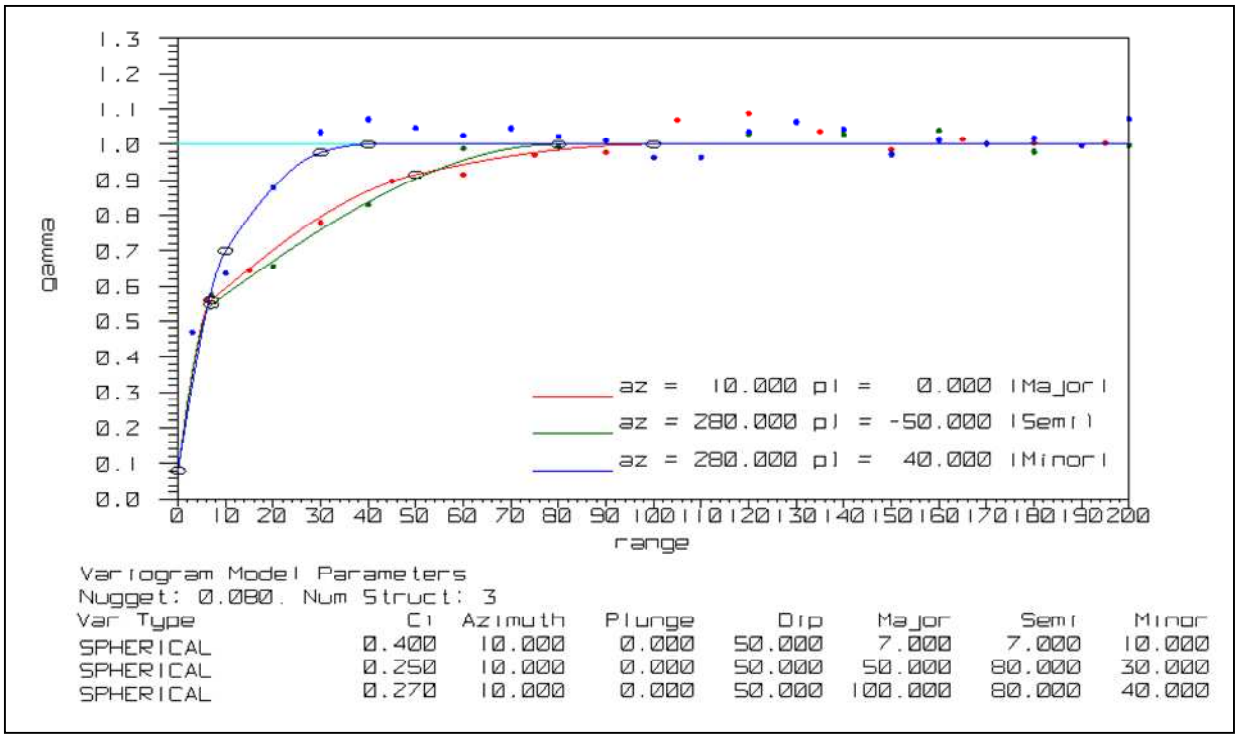
Figure 14-45: EU Au 14 Directional Variogram



Variogram Model Parameters
Nugget: 0.020. Num Struct: 3

Var Type	C1	Azimuth	Plunge	Dip	Major	Semi	Minor
SPHERICAL	0.600	15.000	0.000	60.000	7.000	5.000	6.000
SPHERICAL	0.200	15.000	0.000	60.000	35.000	35.000	20.000
SPHERICAL	0.180	15.000	0.000	60.000	250.000	250.000	100.000

Figure 14-46: EU Au 16 Directional Variogram



Variogram Model Parameters
Nugget: 0.080. Num Struct: 3

Var Type	C1	Azimuth	Plunge	Dip	Major	Semi	Minor
SPHERICAL	0.400	10.000	0.000	50.000	7.000	7.000	10.000
SPHERICAL	0.250	10.000	0.000	50.000	50.000	80.000	30.000
SPHERICAL	0.270	10.000	0.000	50.000	100.000	80.000	40.000

Figure 14-47: EU Au 17 Directional Variogram

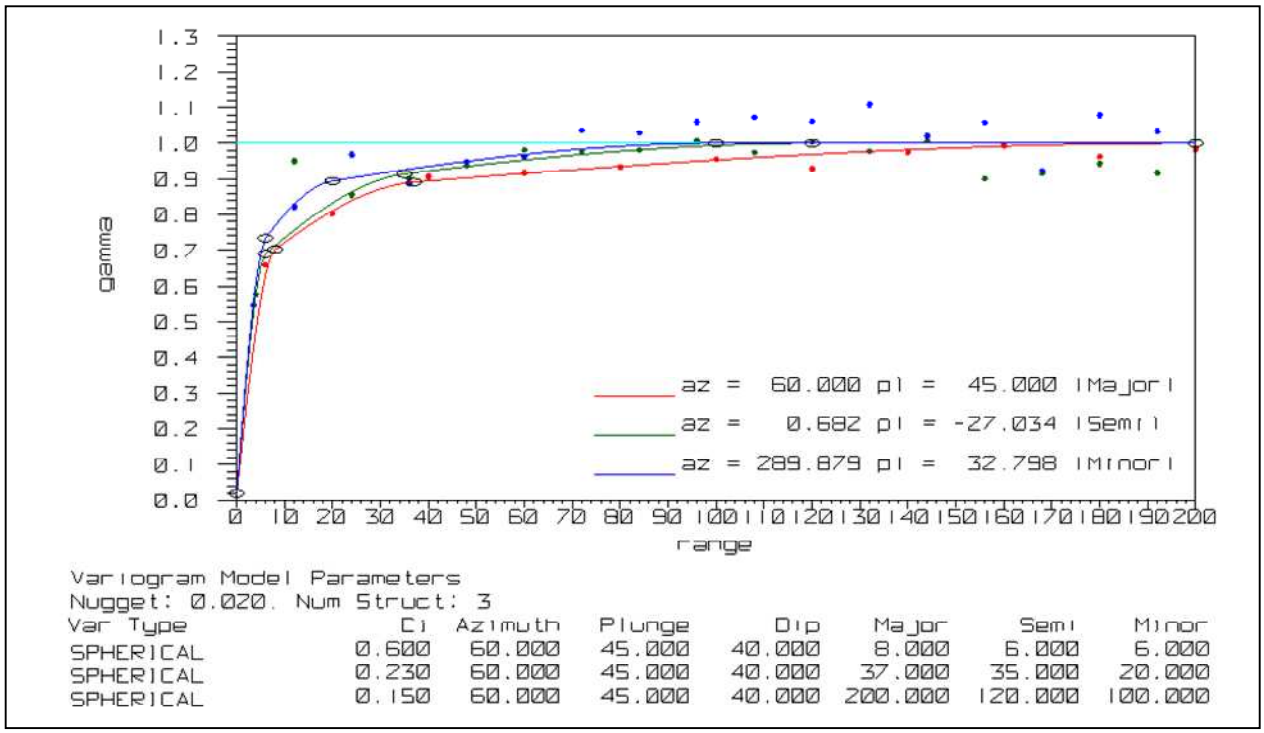


Figure 14-48: EU Au 22 Directional Variogram

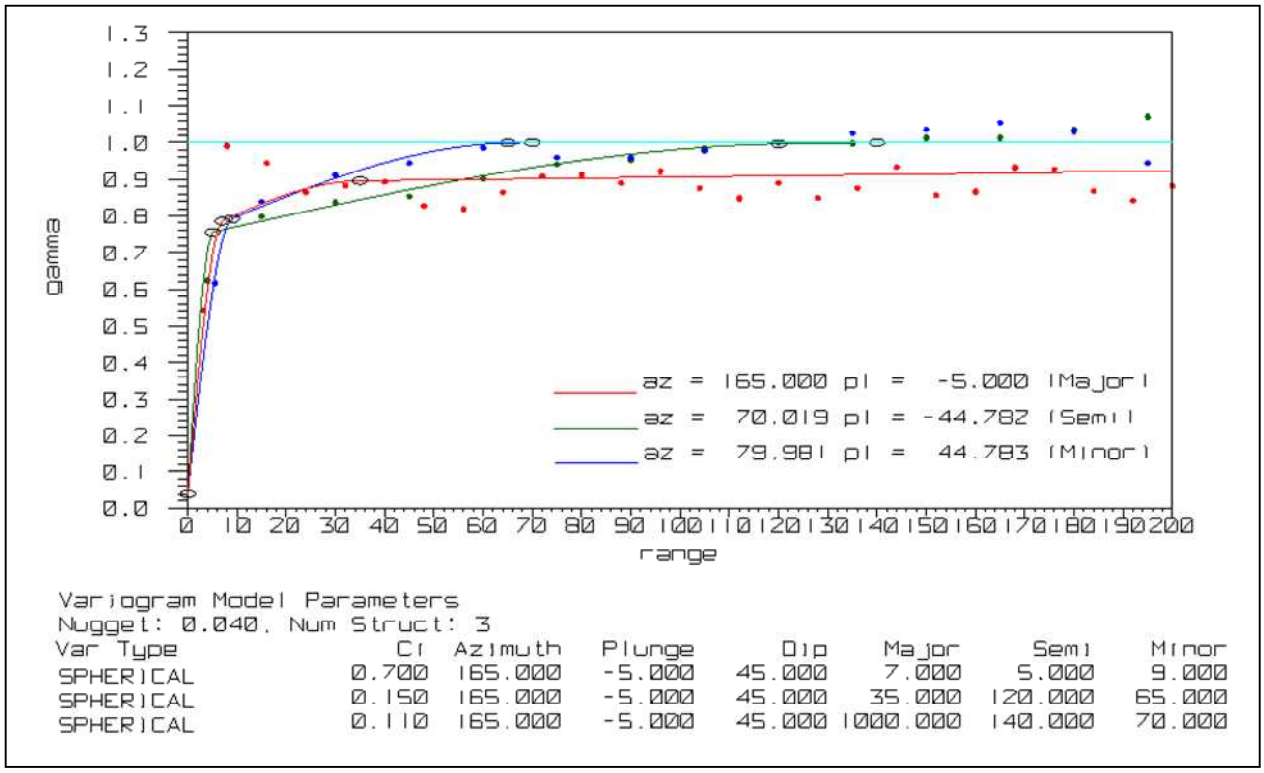
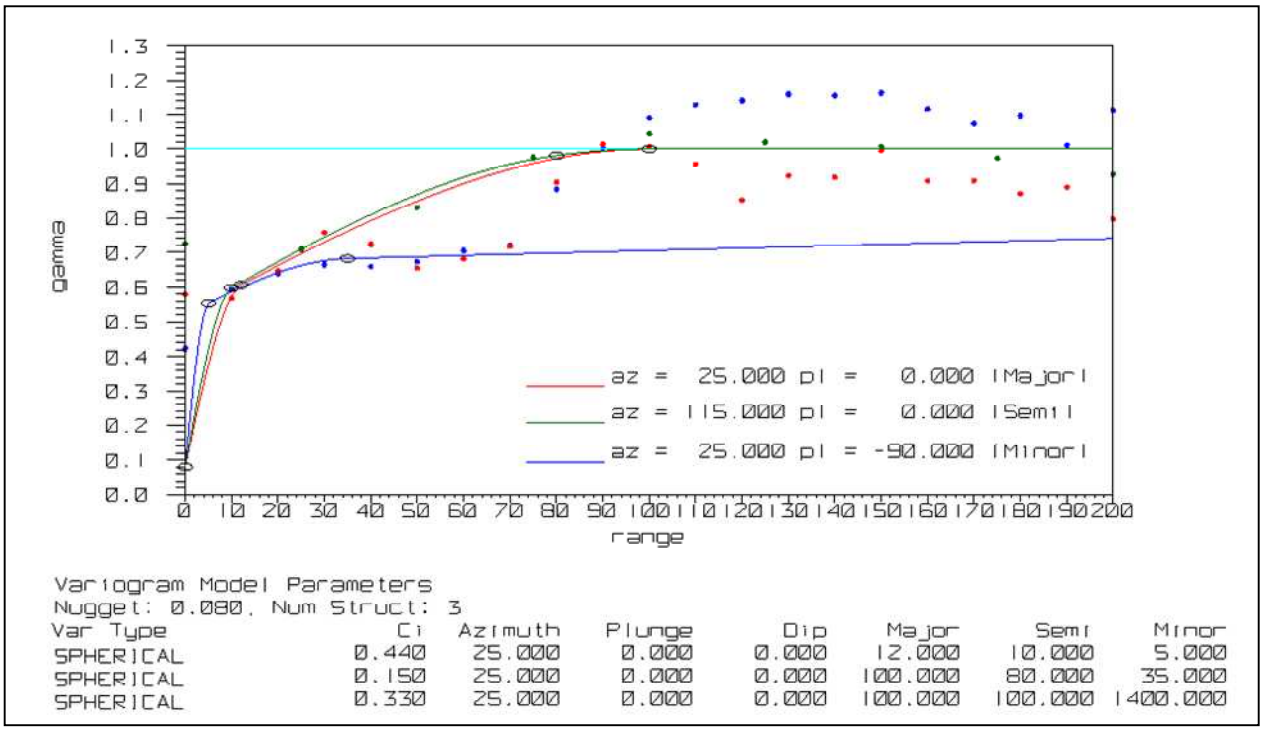


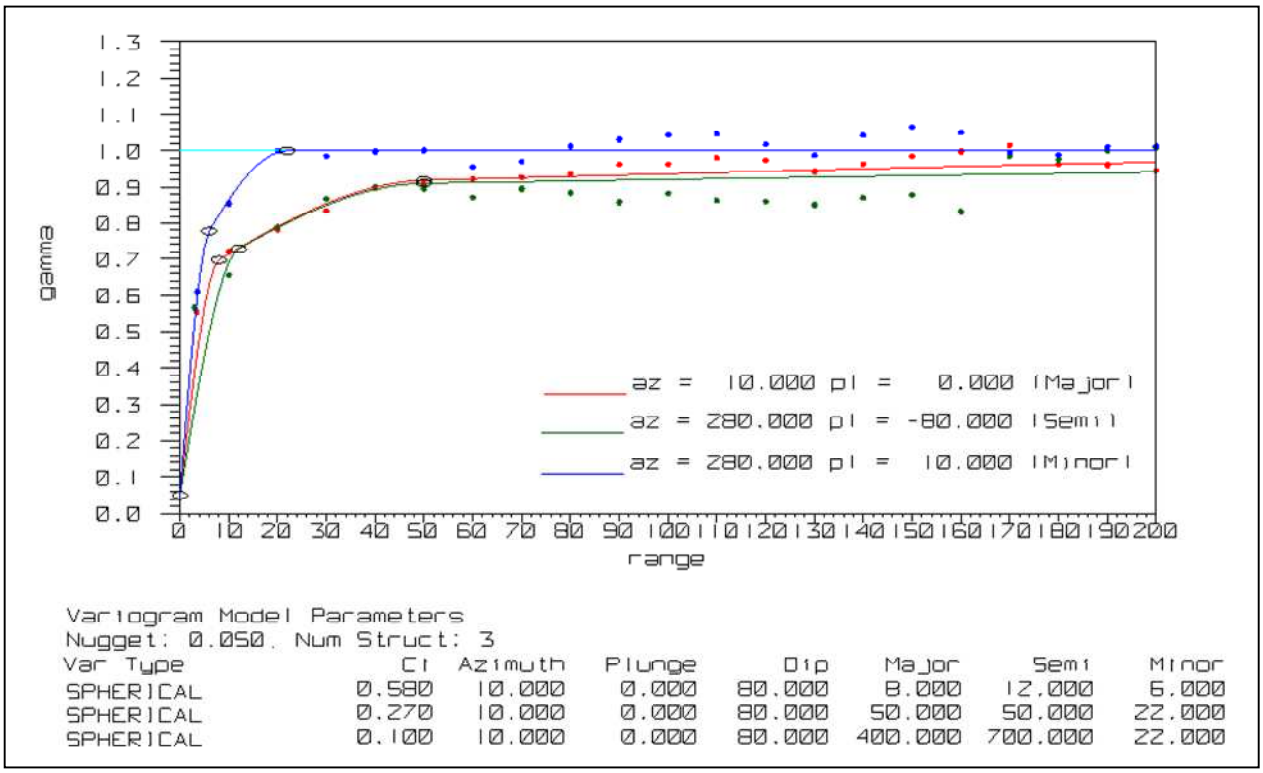
Figure 14-49: EU Au 23 Directional Variogram



Variogram Model Parameters
Nugget: 0.080, Num Struct: 3

Var Type	Ci	Azimuth	Plunge	Dip	Major	Semi	Minor
SPHERICAL	0.440	25.000	0.000	0.000	12.000	10.000	5.000
SPHERICAL	0.150	25.000	0.000	0.000	100.000	80.000	35.000
SPHERICAL	0.330	25.000	0.000	0.000	100.000	100.000	400.000

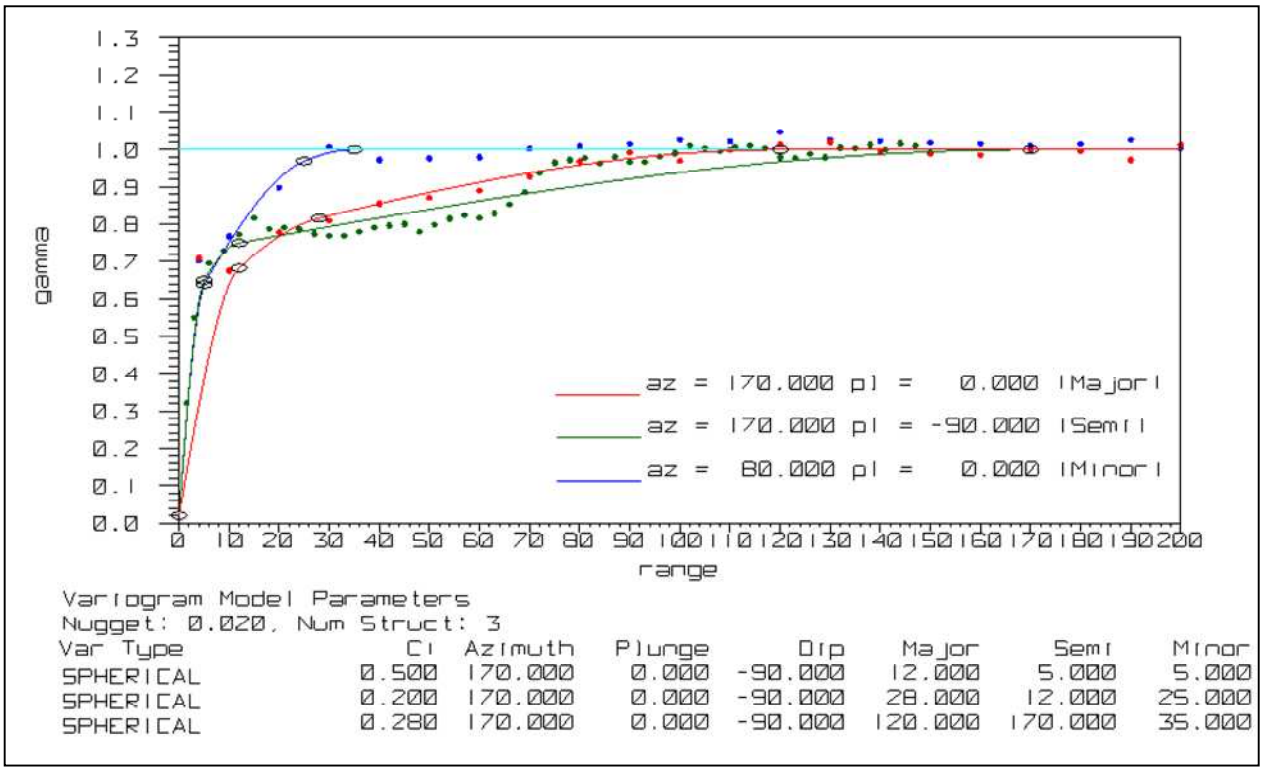
Figure 14-50: EU Au 24 Directional Variogram



Variogram Model Parameters
Nugget: 0.050, Num Struct: 3

Var Type	Ci	Azimuth	Plunge	Dip	Major	Semi	Minor
SPHERICAL	0.580	10.000	0.000	80.000	8.000	12.000	6.000
SPHERICAL	0.270	10.000	0.000	80.000	50.000	50.000	22.000
SPHERICAL	0.100	10.000	0.000	80.000	400.000	700.000	22.000

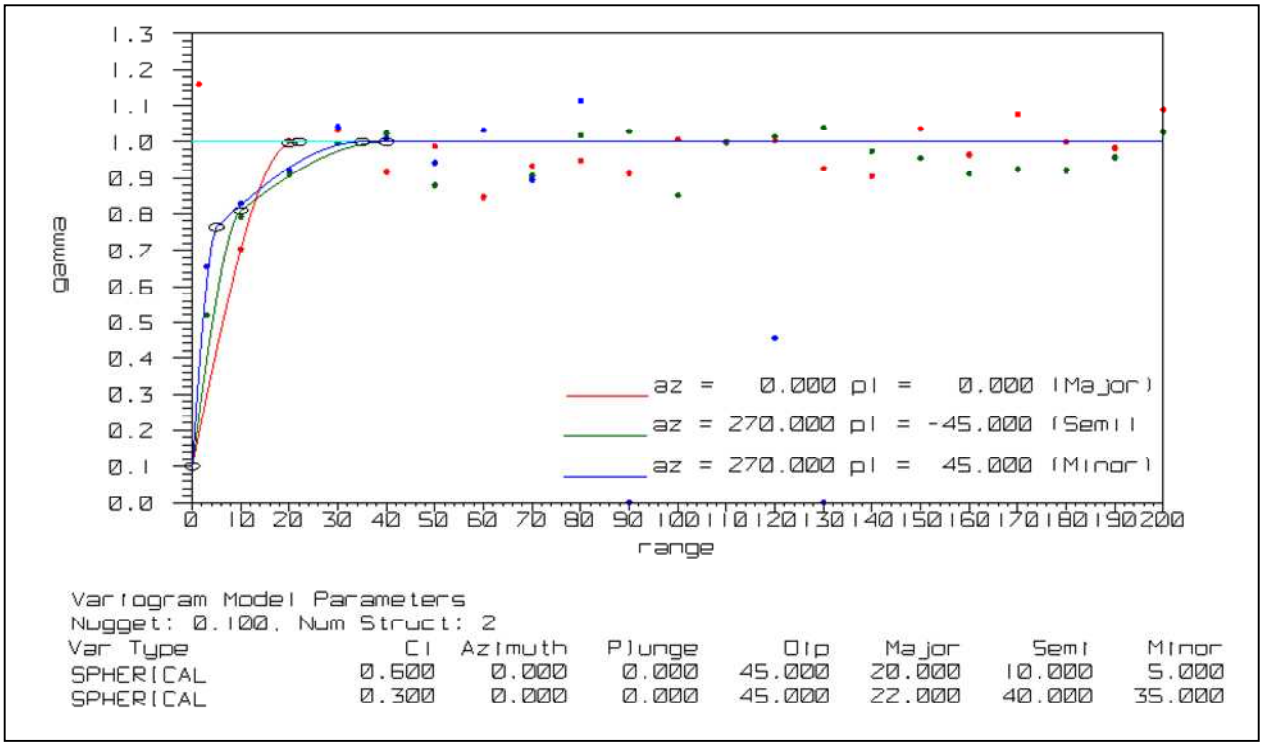
Figure 14-51: EU Au 26 Directional Variogram



Variogram Model Parameters
Nugget: 0.020, Num Struct: 3

Var Type	Cl	Azimuth	Plunge	Dip	Major	Semi	Minor
SPHERICAL	0.500	170.000	0.000	-90.000	12.000	5.000	5.000
SPHERICAL	0.200	170.000	0.000	-90.000	28.000	12.000	25.000
SPHERICAL	0.280	170.000	0.000	-90.000	120.000	170.000	35.000

Figure 14-52: EU Au 27 Directional Variogram



Variogram Model Parameters
Nugget: 0.100, Num Struct: 2

Var Type	Cl	Azimuth	Plunge	Dip	Major	Semi	Minor
SPHERICAL	0.600	0.000	0.000	45.000	20.000	10.000	5.000
SPHERICAL	0.300	0.000	0.000	45.000	22.000	40.000	35.000

Figure 14-53: EU Au 32 Directional Variogram

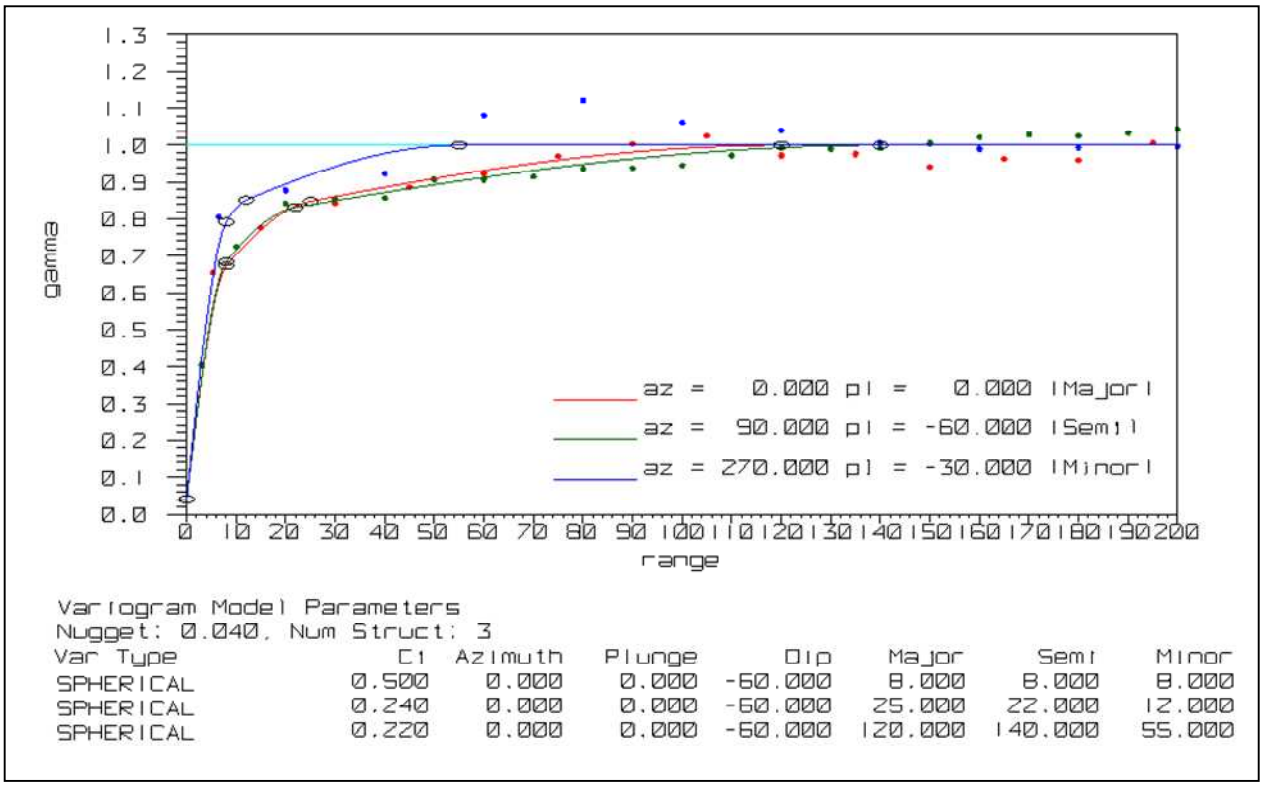


Figure 14-54: EU Au 33 Directional Variogram

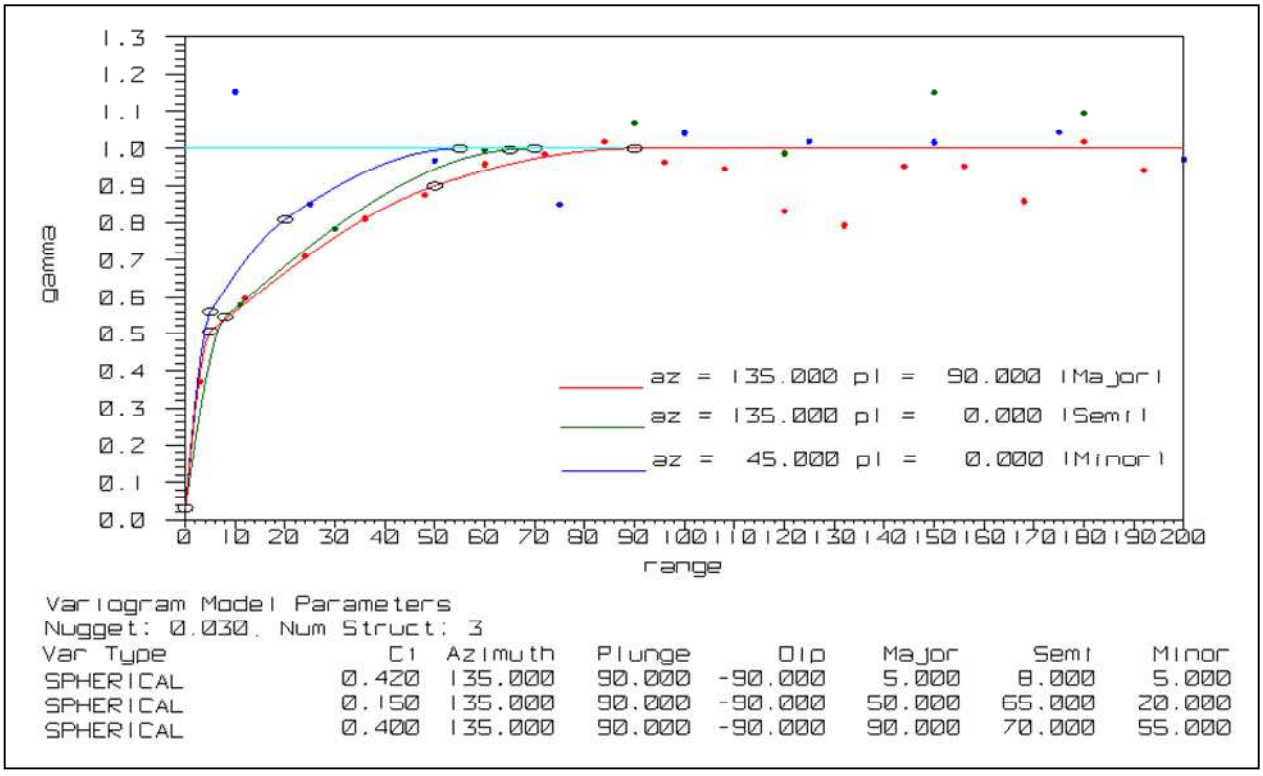


Figure 14-55: EU Au 34 Directional Variogram

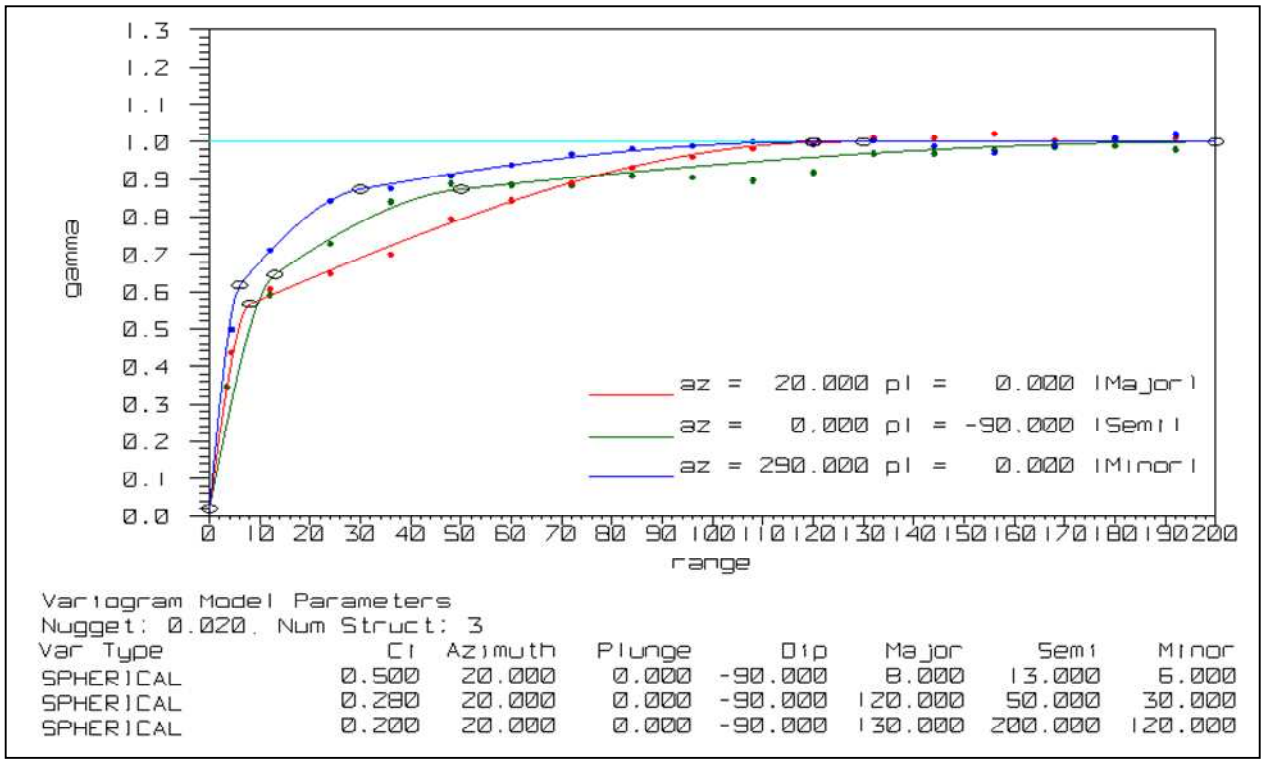


Figure 14-56: EU Au 36 Directional Variogram

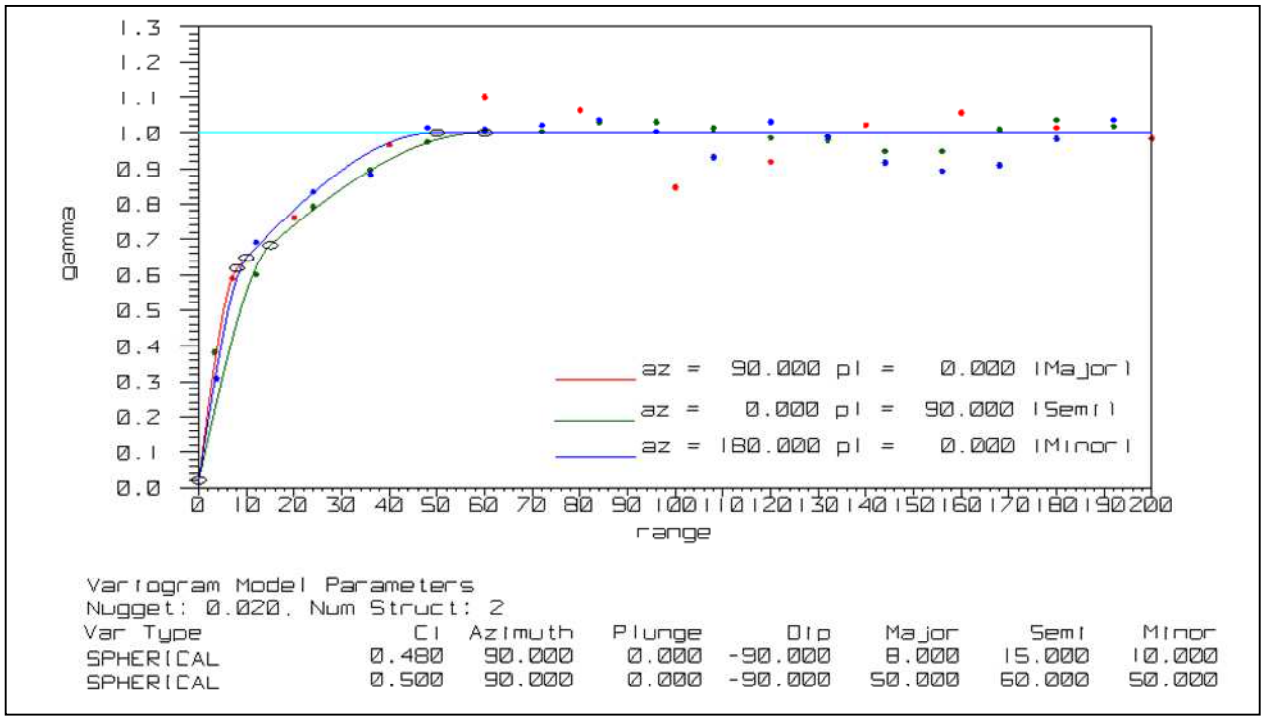


Figure 14-57: EU Au 37 Directional Variogram

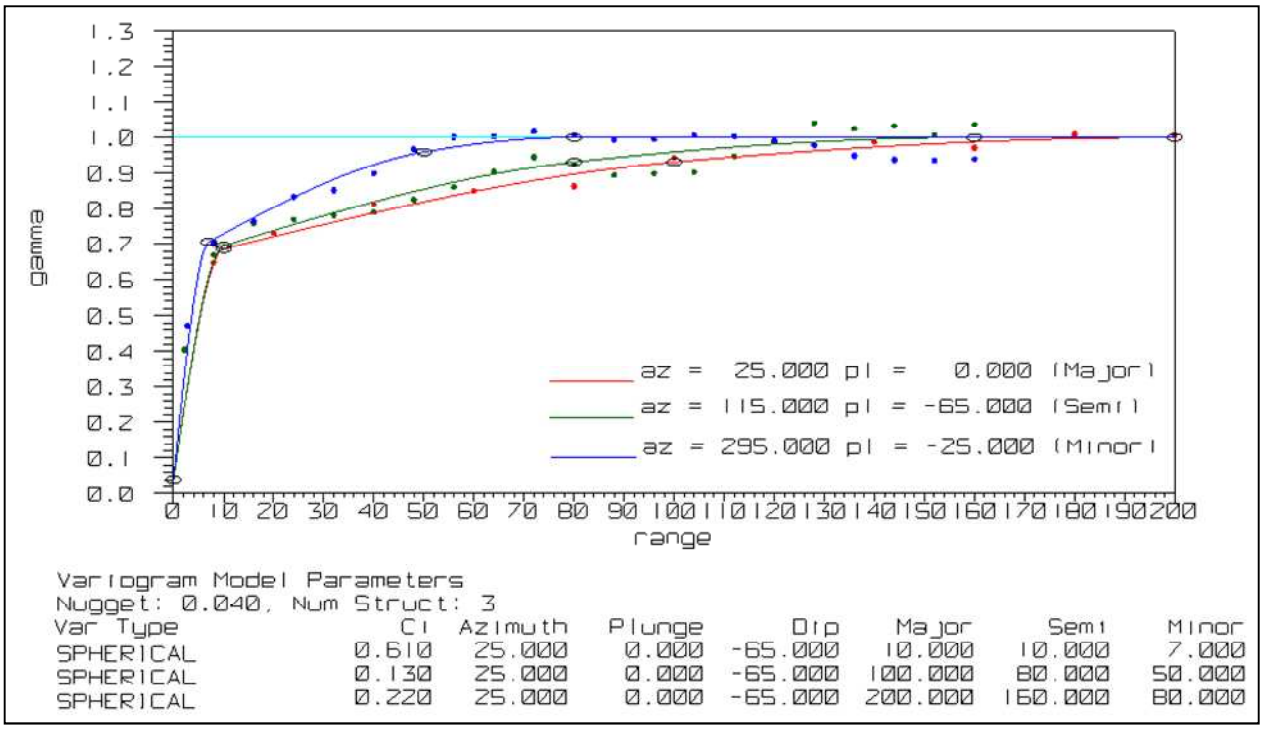


Figure 14-58: EU Ag 14 Directional Variogram

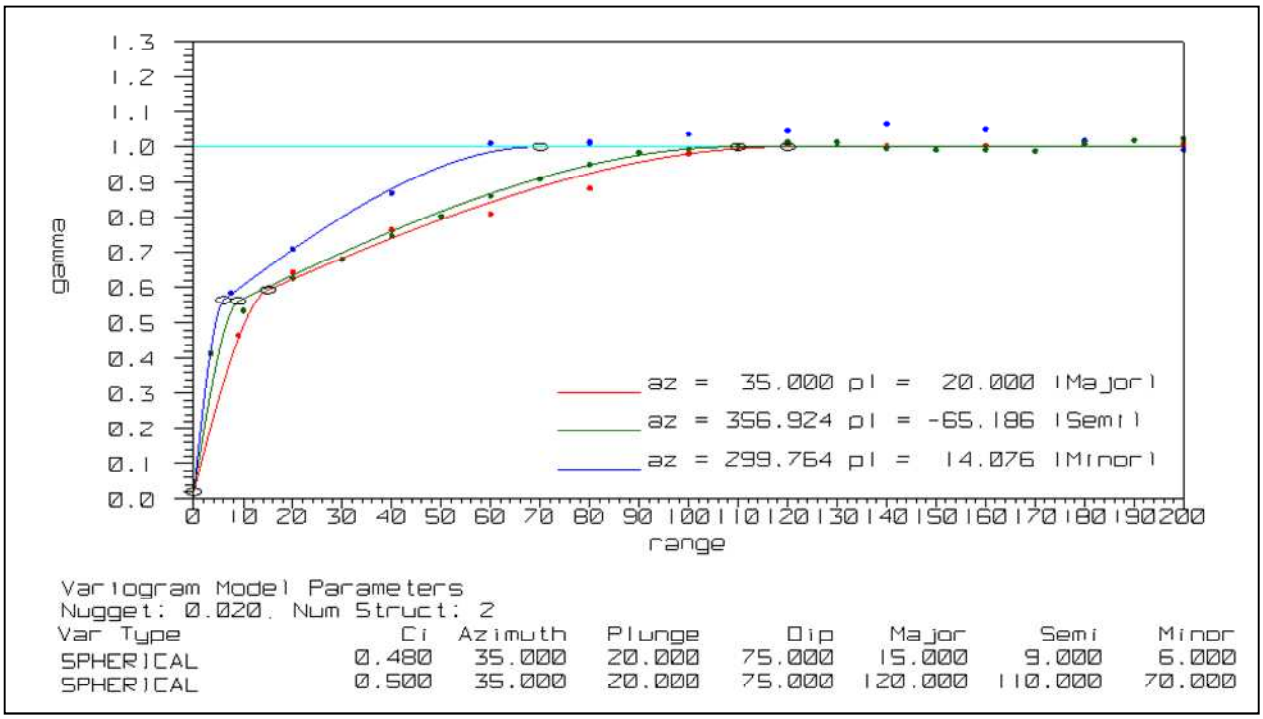


Figure 14-59: EU Ag 16 Directional Variogram

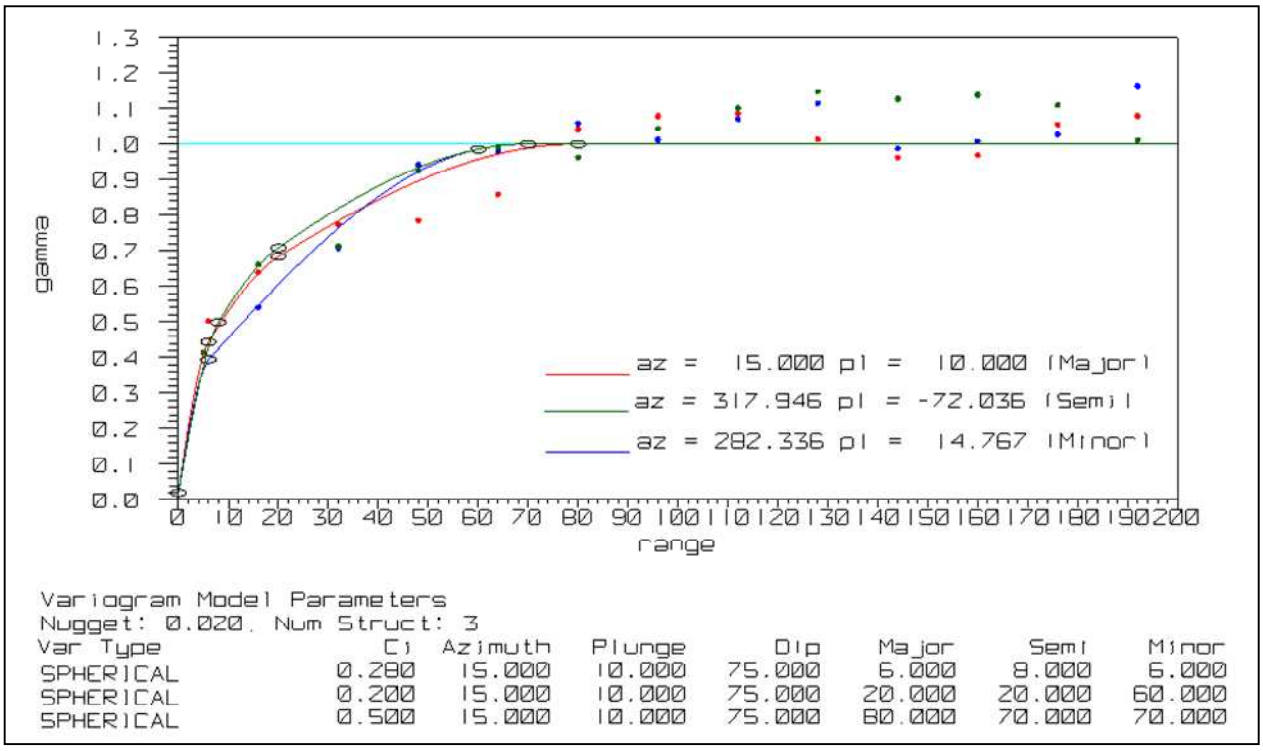


Figure 14-60: EU Ag 17 Directional Variogram

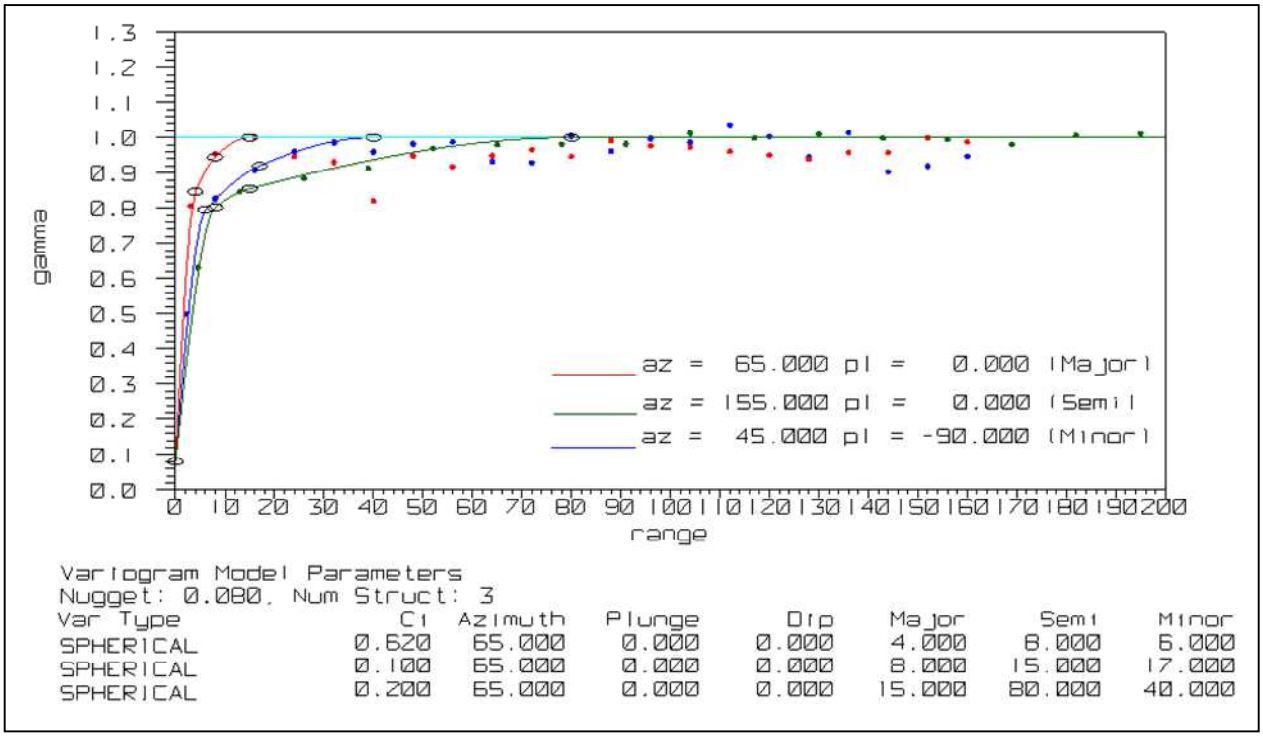
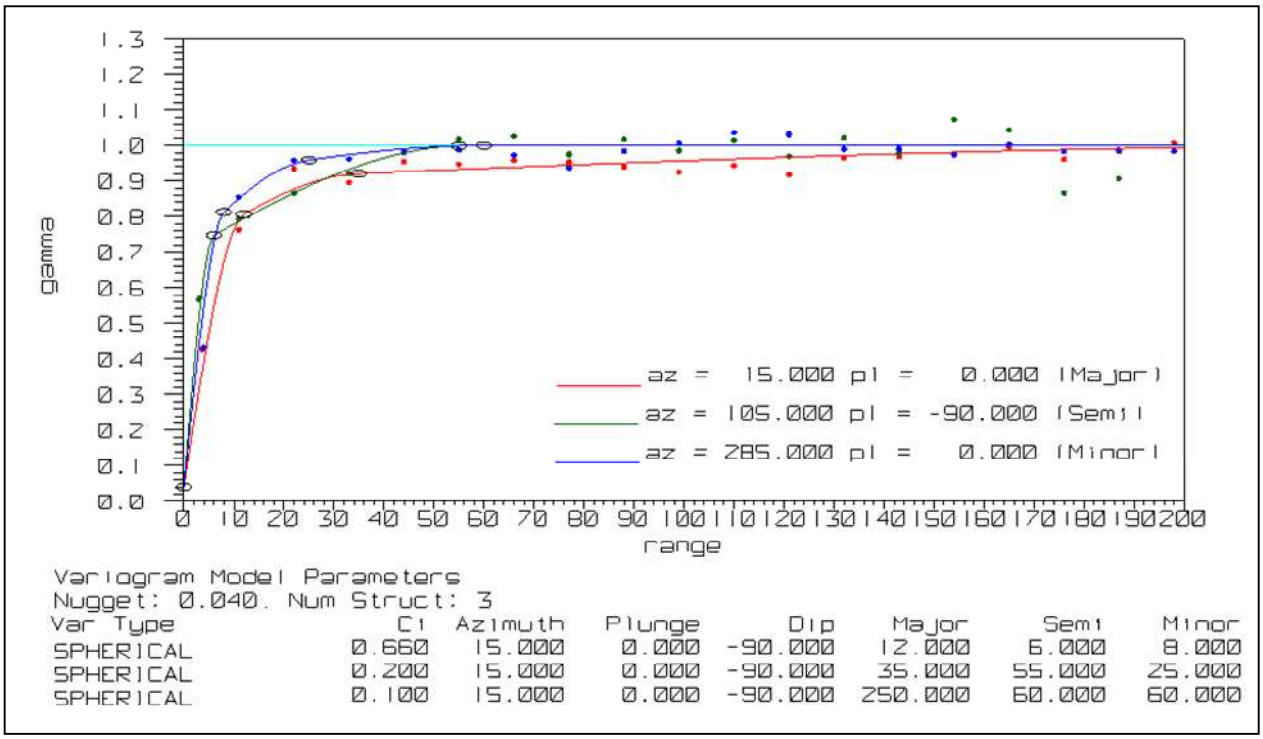


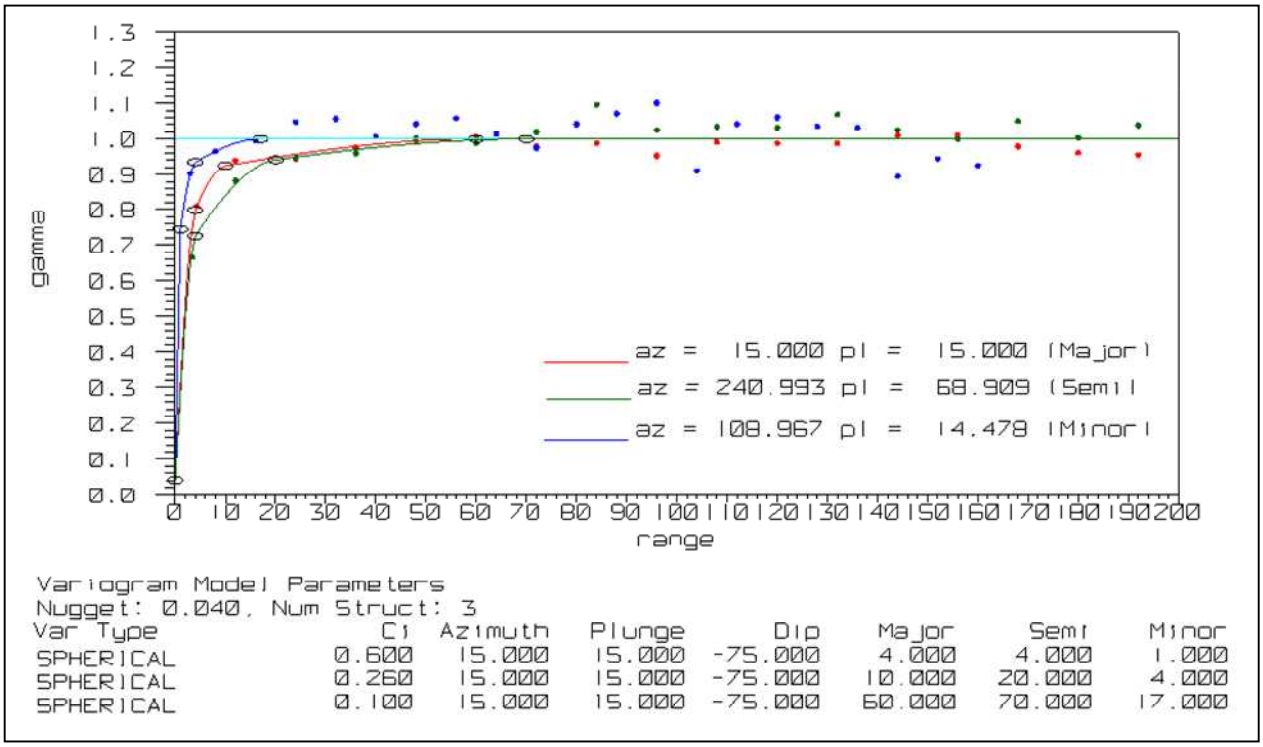
Figure 14-61: EU Ag 22 Directional Variogram



Variogram Model Parameters
Nugget: 0.040, Num Struct: 3

Var Type	C1	Azimuth	Plunge	Dip	Major	Semi	Minor
SPHERICAL	0.660	15.000	0.000	-90.000	12.000	6.000	8.000
SPHERICAL	0.200	15.000	0.000	-90.000	35.000	55.000	25.000
SPHERICAL	0.100	15.000	0.000	-90.000	250.000	60.000	60.000

Figure 14-62: EU Ag 23 Directional Variogram



Variogram Model Parameters
Nugget: 0.040, Num Struct: 3

Var Type	C1	Azimuth	Plunge	Dip	Major	Semi	Minor
SPHERICAL	0.600	15.000	15.000	-75.000	4.000	4.000	1.000
SPHERICAL	0.260	15.000	15.000	-75.000	10.000	20.000	4.000
SPHERICAL	0.100	15.000	15.000	-75.000	60.000	70.000	17.000

Figure 14-63: EU Ag 24 Directional Variogram

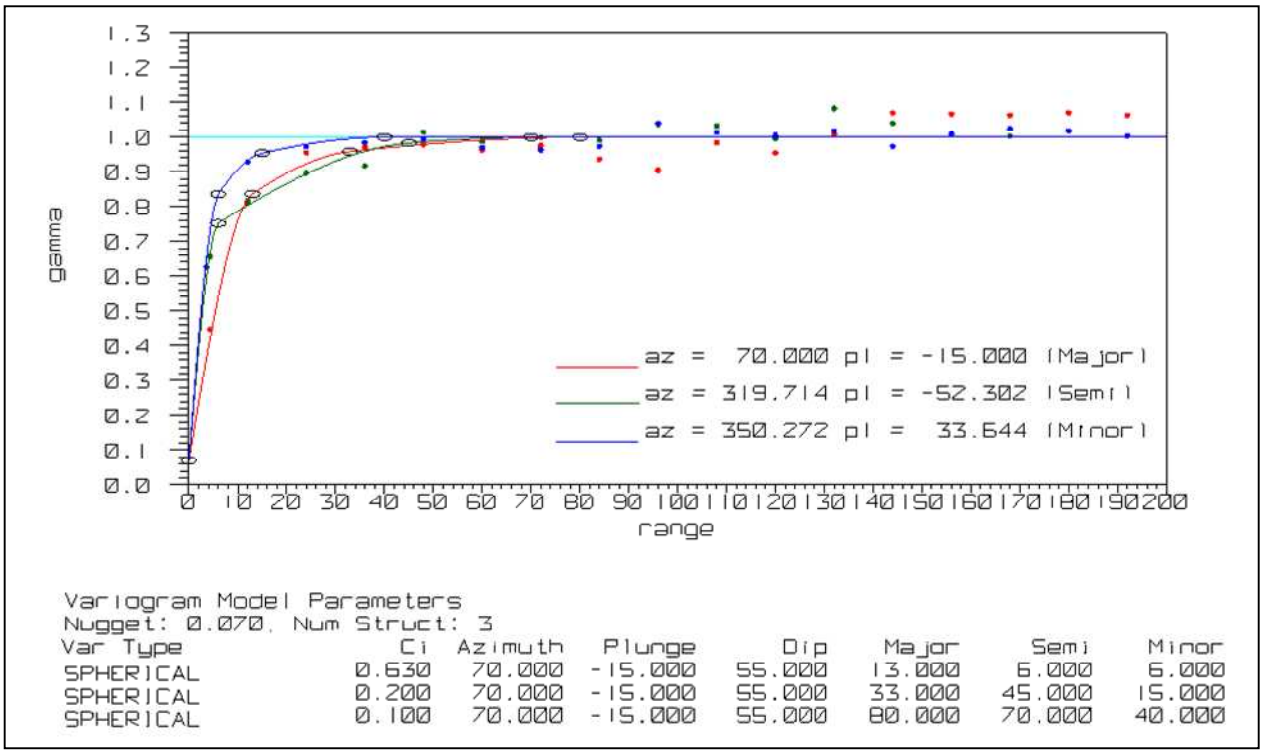


Figure 14-64: EU Ag 26 Directional Variogram

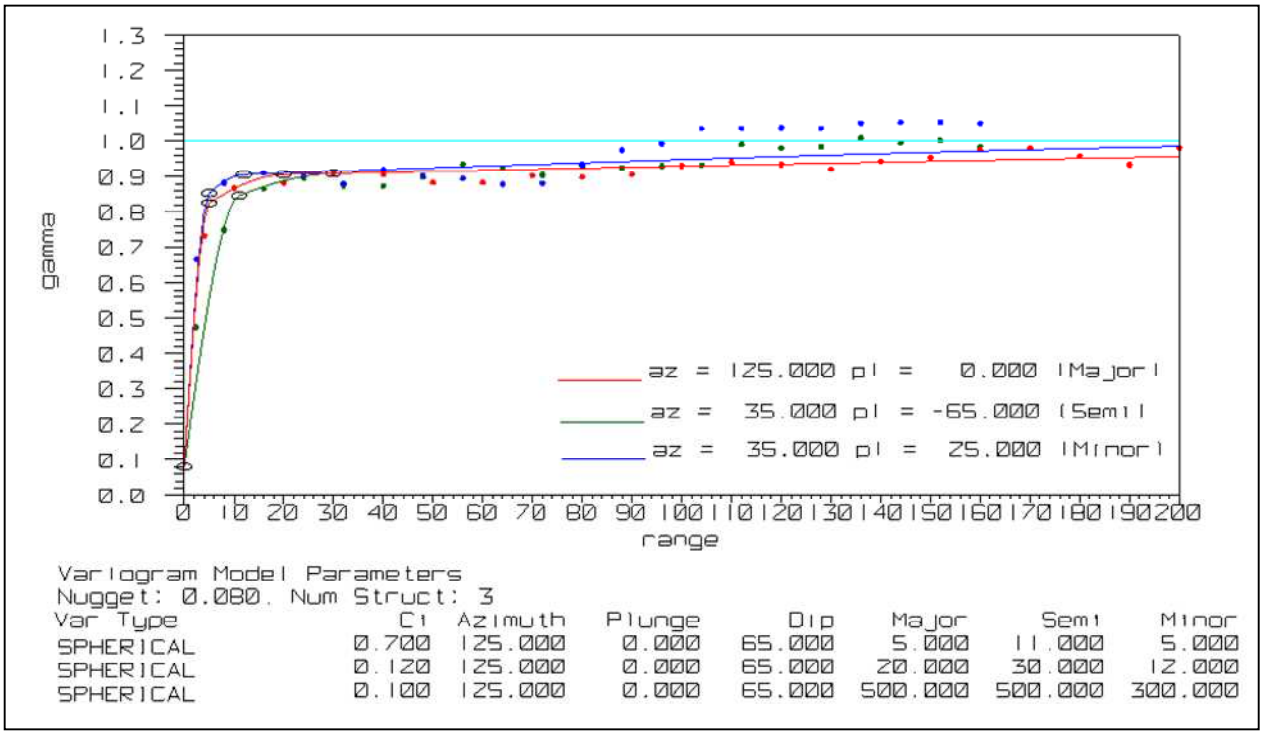
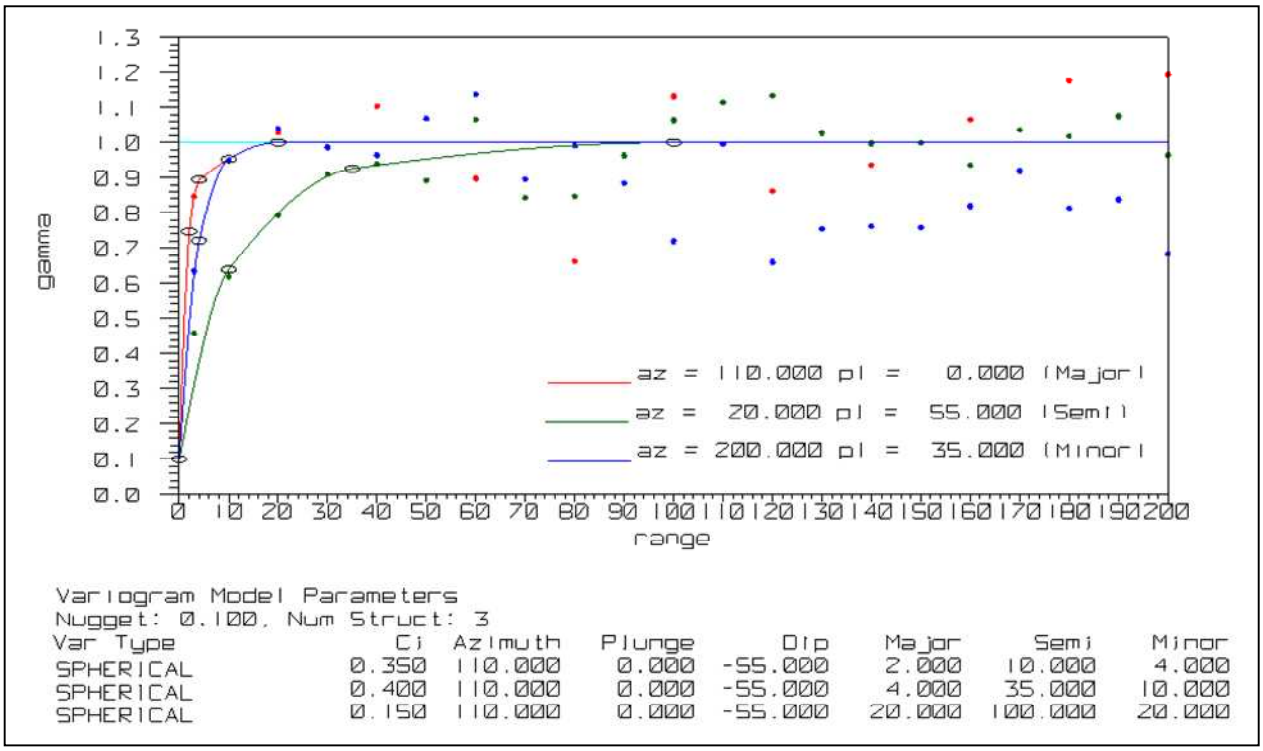


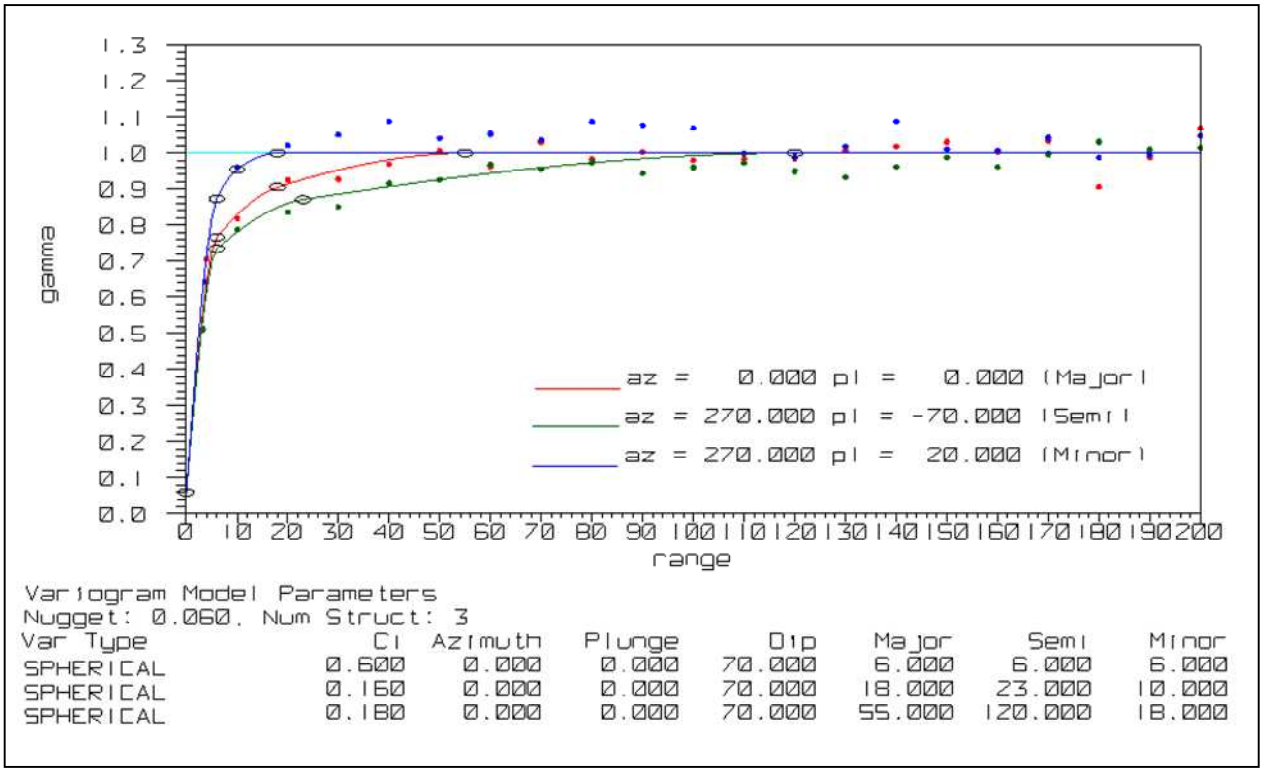
Figure 14-65: EU Ag 27 Directional Variogram



Variogram Model Parameters
Nugget: 0.100, Num Struct: 3

Var Type	Ci	Azimuth	Plunge	Dip	Major	Semi	Minor
SPHERICAL	0.350	110.000	0.000	-55.000	2.000	10.000	4.000
SPHERICAL	0.400	110.000	0.000	-55.000	4.000	35.000	10.000
SPHERICAL	0.150	110.000	0.000	-55.000	20.000	100.000	20.000

Figure 14-66: EU Ag 32 Directional Variogram



Variogram Model Parameters
Nugget: 0.060, Num Struct: 3

Var Type	Ci	Azimuth	Plunge	Dip	Major	Semi	Minor
SPHERICAL	0.600	0.000	0.000	70.000	6.000	6.000	6.000
SPHERICAL	0.160	0.000	0.000	70.000	18.000	23.000	10.000
SPHERICAL	0.180	0.000	0.000	70.000	55.000	120.000	18.000

Figure 14-67: EU Ag 33 Directional Variogram

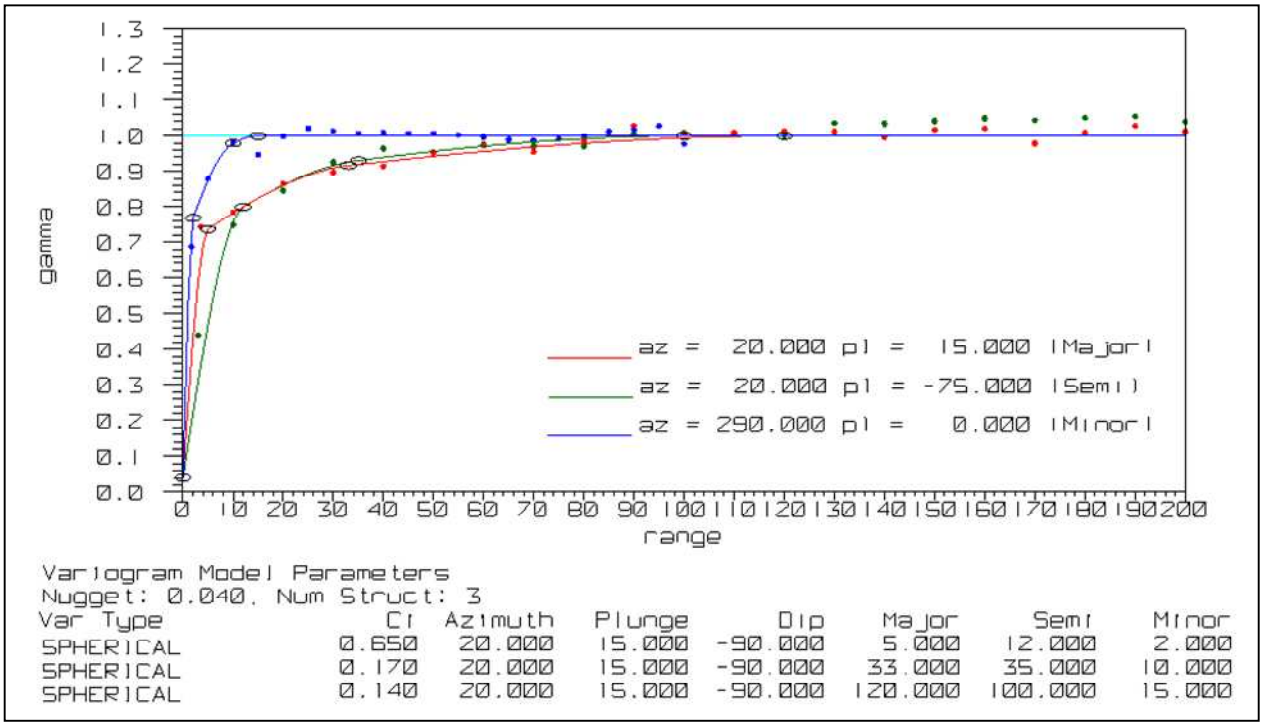


Figure 14-68: EU Ag 36 Directional Variogram

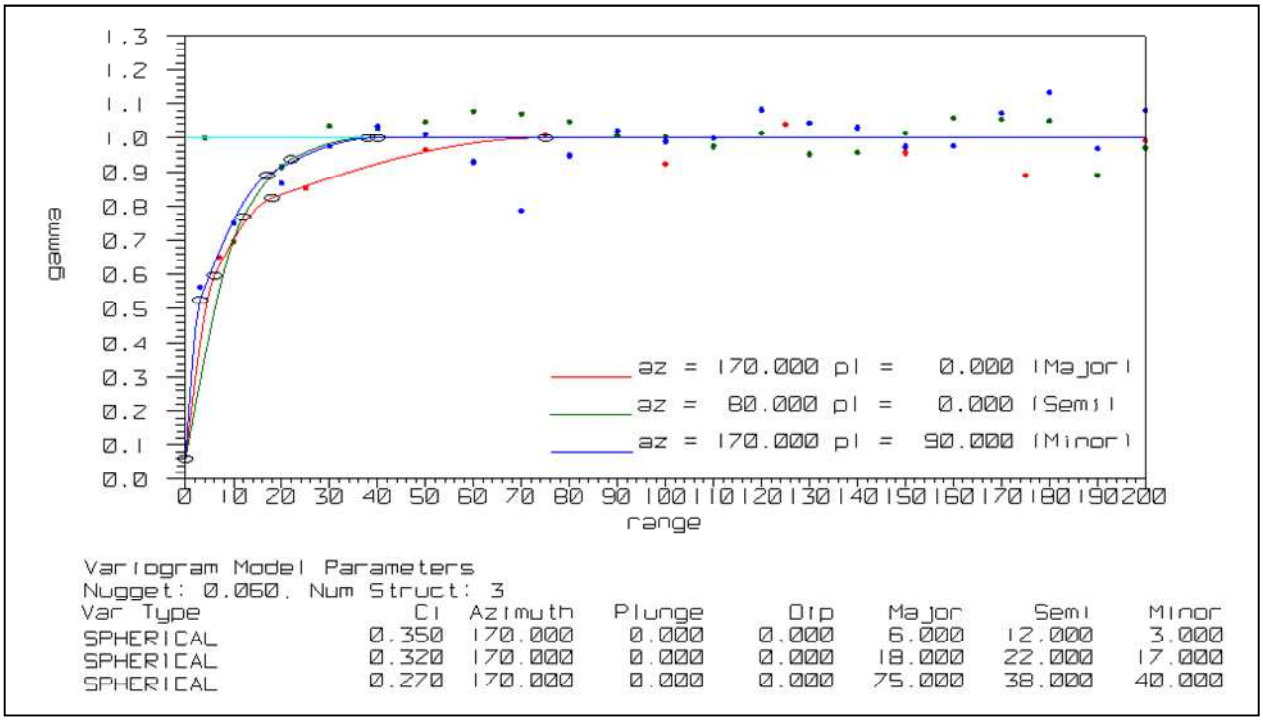


Figure 14-69: EU Ag 37 Directional Variogram

14.4 Au and Ag Resource Estimation

A block model with sub-cells was constructed in order to perform the resource estimation using ordinary kriging. Each unit was estimated separately because hard boundaries were used in all cases. Validations were conducted to review the information of the nearest neighbor for global bias and drift, whereas for the general neighborhood review (where blocks around drillholes are also included), composited samples of 1.5 m were used. In order to limit the influence of very high grades, capping was performed on each estimation unit.

14.4.1 Block Model

The block model with sub-cells was used for storing Au and Ag grades, named "MB_Sleeper_0711_Au_SC_placer.bmf". Coordinates and data for construction are the following:

- X origin: 411,150 meters
- Y origin: 4,574,350 meters
- Z origin: 500 meters
- Bearing: 90°
- Plunge: 0°
- Dip: 0°
- Block size: 2.5x2.5x2.5 meters (minimum)*
- Block size: 50x50x50 meters (maximum)
- X distance: 1,950 meters
- Y distance: 3,200 meters
- Z distance: 900 meters

* = máximum size of block when it is inside a gold vein of 10x10x10 meters.

The most important model characteristics are:

- Au: gold grades in ppm
- Ag: silver grades in ppm
- Sec_au: Indicates the sector that is associated with the block for gold
  - 1: Sleeper
  - 2: Facility
  - 3: West Wood
- Sec_ag: Indicates the sector that is associated with the block for silver
  - 1: Sleeper
  - 2: Facility
  - 3: West Wood

- Dom_au: Indicates the domain that is associated with the block for gold
  - 1: shell gold 0.1 ppm
  - 3: shell gold 0.3 ppm
  - 10: shell gold 1 ppm
- Dom_ag: Indicates the domain that is associated with the block for silver
  - 2: shell silver 2 ppm
  - 10: shell silver 10 ppm
- Ug_Au: Indicates geology unit for estimation gold
- Ug_Ag: Indicates geology unit for estimation silver
- Categ: Indicates the categorization
  - 1: measured
  - 2: indicated
  - 3: infered
- Topo: Indicates the proportion of insitu rock of the block (1=rock, 0=air)
- Lito_s: Indicates the rock type
- Minz: Indicates the mineral zone type
- Densidad: Indicates the density (tonnes/m3)

14.4.2 High Grade Values

In order to avoid over estimation produced by high grade values, a restricted search radius was used for those high gold and silver values. Table 14-12, lists the threshold for those values while the restricted search radius used is detailed in the estimation plan in Appendix D. Additionally, maximum values for gold and silver were set and a cap was applied, as shown in Table 14-12.

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Table 14-12: High Grades Restriction

EU	High yield		Capping	
	Au (ppm)	Ag (ppm)	Au (ppm)	Ag (ppm)
12	-	5.3	-	5.3
13	15	83	15	83
14	9.8	80	80	340
16	13.5	155	950	980
17	17.3	240	52	320
22	1.5	40	2	90
23	2.73	58	3.1	117
24	3.6	135	7	293
26	7.5	154	40	380
27	4.4	135	16	380
32	1.57	75	1.8	100
33	9.5	180	28	500
34	2.5	18	2.5	18
36	6.7	175	30	440
37	8.2	70	16	130

14.4.3 Au and Ag Estimation Plan

The Sleeper estimation plan is divided among 3 ellipsoids or “runs” for estimating each block belonging to a variogram configuration. There is a fourth run for filling non-estimated blocks. General settings are detailed bellow:

- The three first runs were determined according to the correlogram function distribution for each preferential direction.
- A fourth run was created in some units for allowing the estimation of blocks which have not been estimated in the previous three runs and belong, in general, to a double of the third run.
- All Au and Ag estimations are developed by the ordinary kriging method, except unit 12 for gold and units 12, 13 and 34 for silver, which were estimated with inverse distance squared (ID2). This is because these units have insufficient data.

- The angles which determine the search directions for Au and Ag are the same ones determined in the correlogram maps.
- Since the deposit has disseminated mineralization as well as in structures, it was decided to use capping for very high grades and erratic values.
- The estimation file denomination has the following configuration:

  Project Name> + <ko_ugau> + <value of EU> .bef

  For example: sleko_ugau12.bef
- Each BEF has 3 or 4 ID's which belong to each estimation run.
- In order to estimate, a small ellipsoid and non-grade restriction were used.

The estimation plan for Au grades is shown in Table 14-13 and the estimation plan for silver grades is shown in Table 14-14.

Table 14-13: Au Estimation Plan

EU_Au	Pass	Type	Search angles			Search Distance			Discretization			Samples x Est.		Database	Grade	Capping	Restringed Ratios for Threshold High yield					Max_samp_DH
			Bearing	Plunge	Dip	Major	Semi	Minor				min	max				Grade		Mayor	Semi	minor	
100	1	ID[3]	0	0	0	10	10	3	4	4	3	1	4	sle0711.crl.isis	AU_PPM	-	-	-	-	-	-	-
12	1	ID[2]	15	0	10	45	30	30	4	4	3	8	12	sle0711.crl.isis	AU_PPM	-	-	-	-	-	-	5
	2	ID[2]	15	0	10	60	40	45	4	4	3	8	12	sle0711.crl.isis	AU_PPM	-	-	-	-	-	-	5
	3	ID[2]	15	0	10	100	70	80	4	4	3	5	8	sle0711.crl.isis	AU_PPM	-	-	-	-	-	-	4
	4	ID[2]	15	0	10	100	70	80	4	4	3	3	8	sle0711.crl.isis	AU_PPM	-	-	-	-	-	-	-
13	1	OK	15	0	10	45	30	30	4	4	3	8	12	sle0711.crl.isis	AU_PPM	15	AU_PPM	6	4	4	4	5
	2	OK	15	0	10	60	40	45	4	4	3	8	12	sle0711.crl.isis	AU_PPM	15	AU_PPM	6	4	4	4	5
	3	OK	15	0	10	120	80	90	4	4	3	5	8	sle0711.crl.isis	AU_PPM	15	AU_PPM	6	4	4	4	4
	4	OK	15	0	10	120	80	90	4	4	3	3	8	sle0711.crl.isis	AU_PPM	15	AU_PPM	6	4	4	4	-
14	1	OK	15	0	-70	16	16	9	4	4	3	8	12	sle0711.crl.isis	AU_PPM	80	AU_PPM	9.8	8	8	8	5
	2	OK	15	0	-70	40	40	25	4	4	3	8	12	sle0711.crl.isis	AU_PPM	80	AU_PPM	9.8	8	8	8	5
	3	OK	15	0	-70	80	80	50	4	4	3	5	8	sle0711.crl.isis	AU_PPM	80	AU_PPM	9.8	8	8	8	4
	4	OK	15	0	-70	80	80	50	4	4	3	3	8	sle0711.crl.isis	AU_PPM	80	AU_PPM	9.8	8	8	8	-
16	1	OK	15	0	60	36	36	16	4	4	3	8	12	sle0711.crl.isis	AU_PPM	950	AU_PPM	13.5	8	8	8	5
	2	OK	15	0	60	70	70	50	4	4	3	8	12	sle0711.crl.isis	AU_PPM	950	AU_PPM	13.5	8	8	8	5
	3	OK	15	0	60	100	100	75	4	4	3	5	8	sle0711.crl.isis	AU_PPM	950	AU_PPM	13.5	8	8	8	4
	4	OK	15	0	60	100	100	75	4	4	3	3	8	sle0711.crl.isis	AU_PPM	950	AU_PPM	13.5	8	8	8	-
17	1	OK	10	0	50	50	50	20	4	4	3	8	12	sle0711.crl.isis	AU_PPM	52	AU_PPM	17.3	4	4	4	5
	2	OK	10	0	50	70	60	45	4	4	3	8	12	sle0711.crl.isis	AU_PPM	52	AU_PPM	17.3	4	4	4	5
	3	OK	10	0	50	100	90	60	4	4	3	5	8	sle0711.crl.isis	AU_PPM	52	AU_PPM	17.3	4	4	4	4
	4	OK	10	0	50	100	90	60	4	4	3	3	8	sle0711.crl.isis	AU_PPM	52	AU_PPM	17.3	4	4	4	-
22	1	OK	60	45	40	28	24	15	4	4	3	8	12	sle0711.crl.isis	AU_PPM	2	AU_PPM	1.5	4	4	4	5
	2	OK	60	45	40	50	50	50	4	4	3	8	12	sle0711.crl.isis	AU_PPM	2	AU_PPM	1.5	4	4	4	5
	3	OK	60	45	40	75	75	75	4	4	3	5	8	sle0711.crl.isis	AU_PPM	2	AU_PPM	1.5	4	4	4	4
	4	OK	60	45	40	75	75	75	4	4	3	3	8	sle0711.crl.isis	AU_PPM	2	AU_PPM	1.5	4	4	4	-
23	1	OK	165	-5	45	15	50	15	4	4	3	8	12	sle0711.crl.isis	AU_PPM	3.1	AU_PPM	2.73	6	6	6	5
	2	OK	165	-5	45	40	100	60	4	4	3	8	12	sle0711.crl.isis	AU_PPM	3.1	AU_PPM	2.73	6	6	6	5
	3	OK	165	-5	45	60	130	80	4	4	3	5	8	sle0711.crl.isis	AU_PPM	3.1	AU_PPM	2.73	6	6	6	4
	4	OK	165	-5	45	60	130	80	4	4	3	3	8	sle0711.crl.isis	AU_PPM	3.1	AU_PPM	2.73	6	6	6	-
24	1	OK	20	0	0	30	55	18	4	4	3	8	12	sle0711.crl.isis	AU_PPM	7	AU_PPM	3.6	6	6	6	5
	2	OK	20	0	0	60	90	35	4	4	3	8	12	sle0711.crl.isis	AU_PPM	7	AU_PPM	3.6	6	6	6	5
	3	OK	20	0	0	75	120	50	4	4	3	5	8	sle0711.crl.isis	AU_PPM	7	AU_PPM	3.6	6	6	6	4
	4	OK	20	0	0	75	120	50	4	4	3	3	8	sle0711.crl.isis	AU_PPM	7	AU_PPM	3.6	6	6	6	-
26	1	OK	10	0	80	24	24	12	4	4	3	8	12	sle0711.crl.isis	AU_PPM	40	AU_PPM	7.5	10	10	10	5
	2	OK	10	0	80	50	50	22	4	4	3	8	12	sle0711.crl.isis	AU_PPM	40	AU_PPM	7.5	10	10	10	5
	3	OK	10	0	80	75	75	35	4	4	3	5	8	sle0711.crl.isis	AU_PPM	40	AU_PPM	7.5	10	10	10	4
	4	OK	10	0	80	75	75	35	4	4	3	3	8	sle0711.crl.isis	AU_PPM	40	AU_PPM	7.5	10	10	10	-
27	1	OK	170	0	-90	30	30	20	4	4	3	8	12	sle0711.crl.isis	AU_PPM	16	AU_PPM	4.4	10	10	10	5
	2	OK	170	0	-90	90	70	35	4	4	3	8	12	sle0711.crl.isis	AU_PPM	16	AU_PPM	4.4	10	10	10	5
	3	OK	170	0	-90	120	90	50	4	4	3	5	8	sle0711.crl.isis	AU_PPM	16	AU_PPM	4.4	10	10	10	4
	4	OK	170	0	-90	120	90	50	4	4	3	3	8	sle0711.crl.isis	AU_PPM	16	AU_PPM	4.4	10	10	10	-
32	1	OK	0	0	45	15	20	17	4	4	3	8	12	sle0711.crl.isis	AU_PPM	1.8	AU_PPM	1.57	8	8	8	5
	2	OK	0	0	45	22	40	35	4	4	3	8	12	sle0711.crl.isis	AU_PPM	1.8	AU_PPM	1.57	8	8	8	5
	3	OK	0	0	45	35	65	50	4	4	3	5	8	sle0711.crl.isis	AU_PPM	1.8	AU_PPM	1.57	8	8	8	4
	4	OK	0	0	45	35	65	50	4	4	3	3	8	sle0711.crl.isis	AU_PPM	1.8	AU_PPM	1.57	8	8	8	-
33	1	OK	0	0	-60	50	50	20	4	4	3	8	12	sle0711.crl.isis	AU_PPM	28	AU_PPM	9.5	6	6	6	5
	2	OK	0	0	-60	80	80	50	4	4	3	8	12	sle0711.crl.isis	AU_PPM	28	AU_PPM	9.5	6	6	6	5
	3	OK	0	0	-60	100	100	75	4	4	3	5	8	sle0711.crl.isis	AU_PPM	28	AU_PPM	9.5	6	6	6	4
	4	OK	0	0	-60	100	100	75	4	4	3	3	8	sle0711.crl.isis	AU_PPM	28	AU_PPM	9.5	6	6	6	-
34	1	OK	135	90	90	50	42	30	4	4	3	8	12	sle0711.crl.isis	AU_PPM	2.5	AU_PPM	2.5	5	5	5	5
	2	OK	135	90	90	80	60	50	4	4	3	8	12	sle0711.crl.isis	AU_PPM	2.5	AU_PPM	2.5	5	5	5	5
	3	OK	135	90	90	100	80	65	4	4	3	5	8	sle0711.crl.isis	AU_PPM	2.5	AU_PPM	2.5	5	5	5	4
	4	OK	135	90	90	100	80	65	4	4	3	3	8	sle0711.crl.isis	AU_PPM	2.5	AU_PPM	2.5	5	5	5	-
36	1	OK	20	0	90	75	40	40	4	4	3	8	12	sle0711.crl.isis	AU_PPM	30	AU_PPM	6.7	8	8	8	5
	2	OK	20	0	90	120	80	80	4	4	3	8	12	sle0711.crl.isis	AU_PPM	30	AU_PPM	6.7	8	8	8	5
	3	OK	20	0	90	150	100	100	4	4	3	5	8	sle0711.crl.isis	AU_PPM	30	AU_PPM	6.7	8	8	8	4
	4	OK	20	0	90	150	100	100	4	4	3	3	8	sle0711.crl.isis	AU_PPM	30	AU_PPM	6.7	8	8	8	-
37	1	OK	90	0	90	30	36	30	4	4	3	8	12	sle0711.crl.isis	AU_PPM	16	AU_PPM	8.2	5	5	5	7
	2	OK	90	0	90	50	60	50	4	4	3	8	12	sle0711.crl.isis	AU_PPM	16	AU_PPM	8.2	5	5	5	10
	3	OK	90	0	90	75	90	75	4	4	3	5	8	sle0711.crl.isis	AU_PPM	16	AU_PPM	8.2	5	5	5	4
	4	OK	90	0	90	75	90	75	4	4	3	3	8	sle0711.crl.isis	AU_PPM	16	AU_PPM	8.2	5	5	5	-

Table 14-14: Ag Estimation Plan

EU_Ag	Pass	Type	Search angles			Search Distance			Discretization			Samples x Est.		Database	Grade	Capping	Restringed Ratios for Threshold High yield					Max_samp_DH
			Bearing	Plunge	Dip	Major	Semi	Minor				min	max				Grade		Mayor	Semi	minor	
12	1	ID^2	0	0	0	20	20	20	4	4	3	8	12	sle0711.crl.isis	AG_PPM	5.3	AG_PPM	5.3	5	5	5	5
	2	ID^2	0	0	0	40	40	40	4	4	3	8	12	sle0711.crl.isis	AG_PPM	5.3	AG_PPM	5.3	5	5	5	5
	3	ID^2	0	0	0	40	40	40	4	4	3	3	8	sle0711.crl.isis	AG_PPM	5.3	AG_PPM	5.3	5	5	5	-
13	1	ID^2	0	0	0	20	20	20	4	4	3	8	12	sle0711.crl.isis	AG_PPM	83	AG_PPM	83	5	5	5	5
	2	ID^2	0	0	0	40	40	40	4	4	3	8	12	sle0711.crl.isis	AG_PPM	83	AG_PPM	83	5	5	5	5
	3	ID^2	0	0	0	40	40	40	4	4	3	3	8	sle0711.crl.isis	AG_PPM	83	AG_PPM	83	5	5	5	-
14	1	OK	25	0	-65	70	50	30	4	4	3	8	12	sle0711.crl.isis	AG_PPM	340	AG_PPM	80	20	20	20	5
	2	OK	25	0	-65	100	80	60	4	4	3	8	12	sle0711.crl.isis	AG_PPM	340	AG_PPM	80	20	20	20	5
	3	OK	25	0	-65	200	160	120	4	4	3	5	8	sle0711.crl.isis	AG_PPM	340	AG_PPM	80	20	20	20	5
	4	OK	25	0	-65	200	160	120	4	4	3	3	8	sle0711.crl.isis	AG_PPM	340	AG_PPM	80	20	20	20	-
16	1	OK	35	20	75	70	70	40	4	4	3	8	12	sle0711.crl.isis	AG_PPM	980	AG_PPM	155	7	7	7	5
	2	OK	35	20	75	110	110	60	4	4	3	8	12	sle0711.crl.isis	AG_PPM	980	AG_PPM	155	7	7	7	5
	3	OK	35	20	75	200	200	100	4	4	3	5	12	sle0711.crl.isis	AG_PPM	980	AG_PPM	155	7	7	7	4
	4	OK	35	20	75	200	200	100	4	4	3	3	8	sle0711.crl.isis	AG_PPM	980	AG_PPM	155	7	7	7	-
17	1	OK	15	10	75	45	45	45	4	4	3	8	12	sle0711.crl.isis	AG_PPM	320	AG_PPM	240	5	5	5	5
	2	OK	15	10	75	80	80	80	4	4	3	8	12	sle0711.crl.isis	AG_PPM	320	AG_PPM	240	5	5	5	5
	3	OK	15	10	75	150	150	150	4	4	3	5	8	sle0711.crl.isis	AG_PPM	320	AG_PPM	240	5	5	5	4
	4	OK	15	10	75	150	150	150	4	4	3	3	8	sle0711.crl.isis	AG_PPM	320	AG_PPM	240	5	5	5	-
22	1	OK	65	0	0	10	30	15	4	4	3	8	12	sle0711.crl.isis	AG_PPM	90	AG_PPM	40	5	5	5	5
	2	OK	65	0	0	20	80	40	4	4	3	8	12	sle0711.crl.isis	AG_PPM	90	AG_PPM	40	5	5	5	5
	3	OK	65	0	0	50	100	60	4	4	3	5	8	sle0711.crl.isis	AG_PPM	90	AG_PPM	40	5	5	5	4
	4	OK	65	0	0	50	100	60	4	4	3	3	8	sle0711.crl.isis	AG_PPM	90	AG_PPM	40	5	5	5	-
23	1	OK	15	0	90	30	30	15	4	4	3	8	12	sle0711.crl.isis	AG_PPM	117	AG_PPM	58	5	5	5	5
	2	OK	15	0	90	60	60	60	4	4	3	8	12	sle0711.crl.isis	AG_PPM	117	AG_PPM	58	5	5	5	5
	3	OK	15	0	90	120	120	120	4	4	3	5	8	sle0711.crl.isis	AG_PPM	117	AG_PPM	58	5	5	5	4
	4	OK	15	0	90	120	120	120	4	4	3	3	8	sle0711.crl.isis	AG_PPM	117	AG_PPM	58	5	5	5	-
24	1	OK	15	15	-75	10	15	5	4	4	3	8	12	sle0711.crl.isis	AG_PPM	293	AG_PPM	135	15	15	15	5
	2	OK	15	15	-75	50	50	20	4	4	3	8	12	sle0711.crl.isis	AG_PPM	293	AG_PPM	135	15	15	15	5
	3	OK	15	15	-75	100	100	40	4	4	3	5	8	sle0711.crl.isis	AG_PPM	293	AG_PPM	135	15	15	15	4
	4	OK	15	15	-75	100	100	40	4	4	3	3	8	sle0711.crl.isis	AG_PPM	293	AG_PPM	135	15	15	15	-
26	1	OK	70	-15	55	20	30	10	4	4	3	8	12	sle0711.crl.isis	AG_PPM	380	AG_PPM	154	10	10	10	5
	2	OK	70	-15	55	70	70	40	4	4	3	8	12	sle0711.crl.isis	AG_PPM	380	AG_PPM	154	10	10	10	5
	3	OK	70	-15	55	140	140	80	4	4	3	5	8	sle0711.crl.isis	AG_PPM	380	AG_PPM	154	10	10	10	4
	4	OK	70	-15	55	140	140	80	4	4	3	3	8	sle0711.crl.isis	AG_PPM	380	AG_PPM	154	10	10	10	-
27	1	OK	125	0	65	10	5	5	4	4	3	8	12	sle0711.crl.isis	AG_PPM	380	AG_PPM	135	10	10	10	5
	2	OK	125	0	65	30	30	30	4	4	3	8	12	sle0711.crl.isis	AG_PPM	380	AG_PPM	135	10	10	10	5
	3	OK	125	0	65	60	60	60	4	4	3	5	8	sle0711.crl.isis	AG_PPM	380	AG_PPM	135	10	10	10	4
	4	OK	125	0	65	60	60	60	4	4	3	3	8	sle0711.crl.isis	AG_PPM	380	AG_PPM	135	10	10	10	-
32	1	OK	110	0	-55	30	10	10	4	4	3	8	12	sle0711.crl.isis	AG_PPM	100	AG_PPM	75	8	8	8	5
	2	OK	110	0	-55	60	20	20	4	4	3	8	12	sle0711.crl.isis	AG_PPM	100	AG_PPM	75	8	8	8	5
	3	OK	110	0	-55	100	50	50	4	4	3	5	8	sle0711.crl.isis	AG_PPM	100	AG_PPM	75	8	8	8	4
	4	OK	110	0	-55	100	50	50	4	4	3	3	8	sle0711.crl.isis	AG_PPM	100	AG_PPM	75	8	8	8	-
33	1	OK	0	0	70	20	40	10	4	4	3	8	12	sle0711.crl.isis	AG_PPM	500	AG_PPM	180	8	8	8	5
	2	OK	0	0	70	50	60	20	4	4	3	8	12	sle0711.crl.isis	AG_PPM	500	AG_PPM	180	8	8	8	5
	3	OK	0	0	70	100	120	50	4	4	3	5	8	sle0711.crl.isis	AG_PPM	500	AG_PPM	180	8	8	8	4
	4	OK	0	0	70	100	120	50	4	4	3	3	8	sle0711.crl.isis	AG_PPM	500	AG_PPM	180	8	8	8	-
34	1	ID^2	0	0	0	20	20	20	4	4	3	8	12	sle0711.crl.isis	AG_PPM	18	AG_PPM	70	5	5	5	5
	2	ID^2	0	0	0	40	40	40	4	4	3	8	12	sle0711.crl.isis	AG_PPM	18	AG_PPM	70	5	5	5	5
	3	ID^2	0	0	0	40	40	40	4	4	3	3	8	sle0711.crl.isis	AG_PPM	18	AG_PPM	70	5	5	5	-
36	1	OK	20	15	90	30	30	10	4	4	3	8	12	sle0711.crl.isis	AG_PPM	440	AG_PPM	175	5	5	5	5
	2	OK	20	15	90	60	60	20	4	4	3	8	12	sle0711.crl.isis	AG_PPM	440	AG_PPM	175	5	5	5	5
	3	OK	20	15	90	100	100	40	4	4	3	5	8	sle0711.crl.isis	AG_PPM	440	AG_PPM	175	5	5	5	4
	4	OK	20	15	90	100	100	40	4	4	3	3	8	sle0711.crl.isis	AG_PPM	440	AG_PPM	175	5	5	5	-
37	1	OK	170	0	0	35	20	20	4	4	3	8	12	sle0711.crl.isis	AG_PPM	130	AG_PPM	70	5	5	5	5
	2	OK	170	0	0	70	40	40	4	4	3	8	12	sle0711.crl.isis	AG_PPM	130	AG_PPM	70	5	5	5	5
	3	OK	170	0	0	120	70	70	4	4	3	5	8	sle0711.crl.isis	AG_PPM	130	AG_PPM	70	5	5	5	4
	4	OK	170	0	0	120	70	70	4	4	3	3	8	sle0711.crl.isis	AG_PPM	130	AG_PPM	70	5	5	5	-

14.5 Au and Ag Validations

In order to validate the estimation, various methods were used such as, real grade vs. estimated grade regression, comparison of database vs. estimated block drift. Comparison of global bias is detailed in the following section of this report.

14.5.1 Conditional Bias Review

The UG's average grade inside the 10x10x10 m blocks are calculated for the block model and composite samples. In order to avoid a prominent conditional bias, the regression graphic slope must be slightly above 1.

Figure 14-70 to Figure 14-83 show the review of the conditional bias. In these graphs, it is seen that the dot clouds are acceptable. However, in the case of very high grades, the situation is difficult to validate because the estimation was performed with a restricted search, which makes it impossible to perform a proper validation.

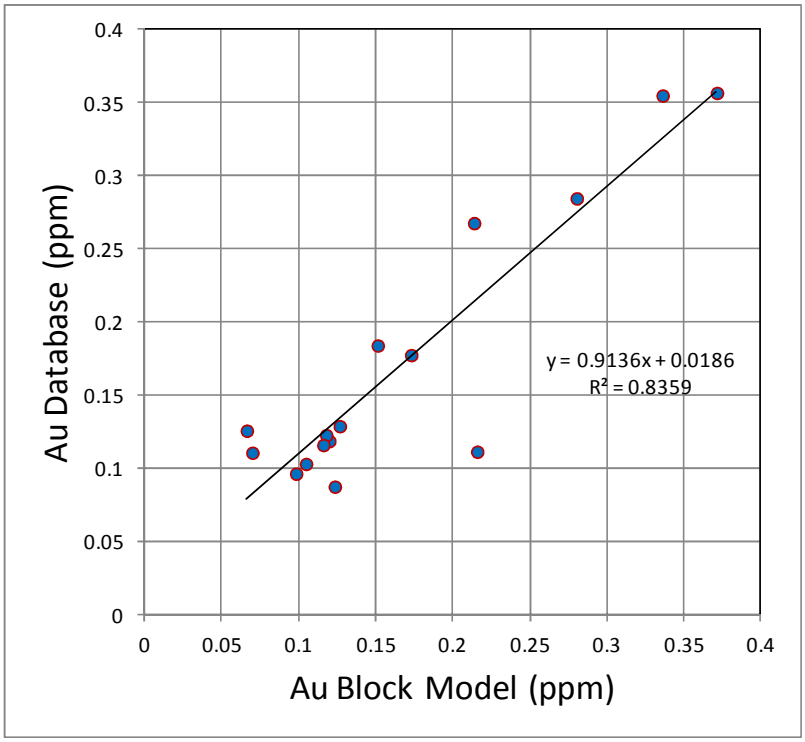

Figure 14-70: EU Au 12 Conditional Bias

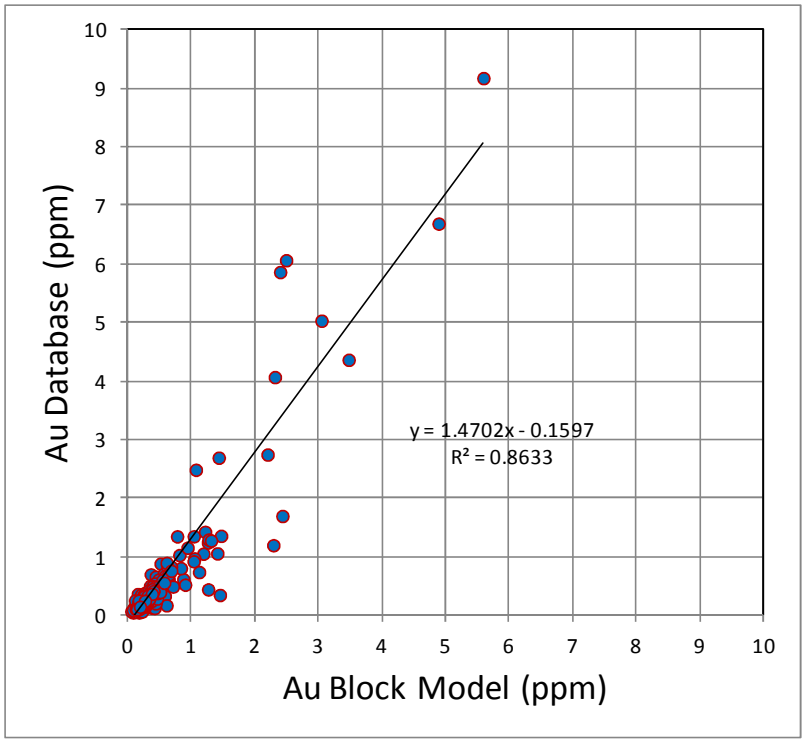

Figure 14-71: EU Au 13 Conditional Bias

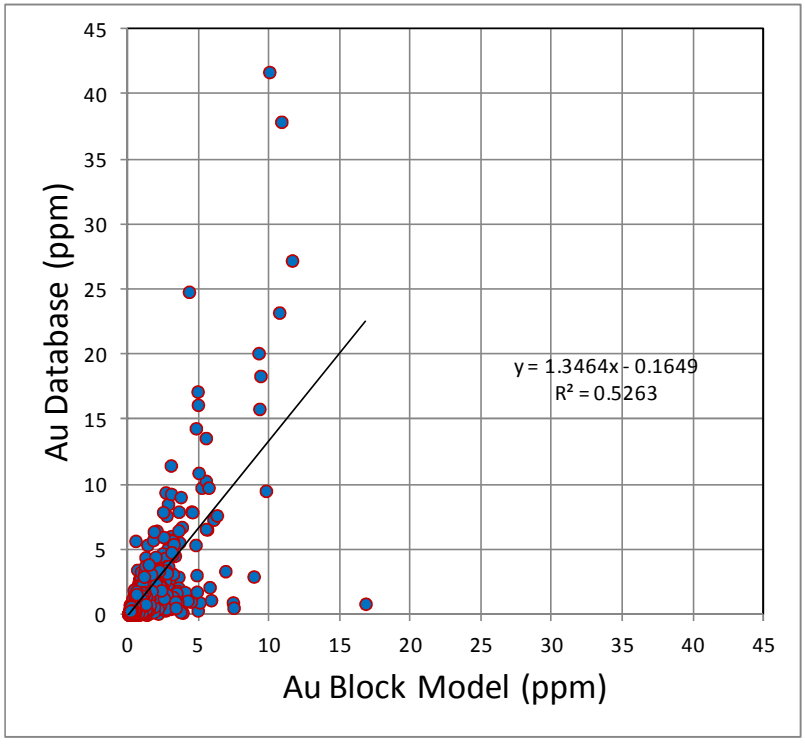

Figure 14-72: EU Au 14 Conditional Bias

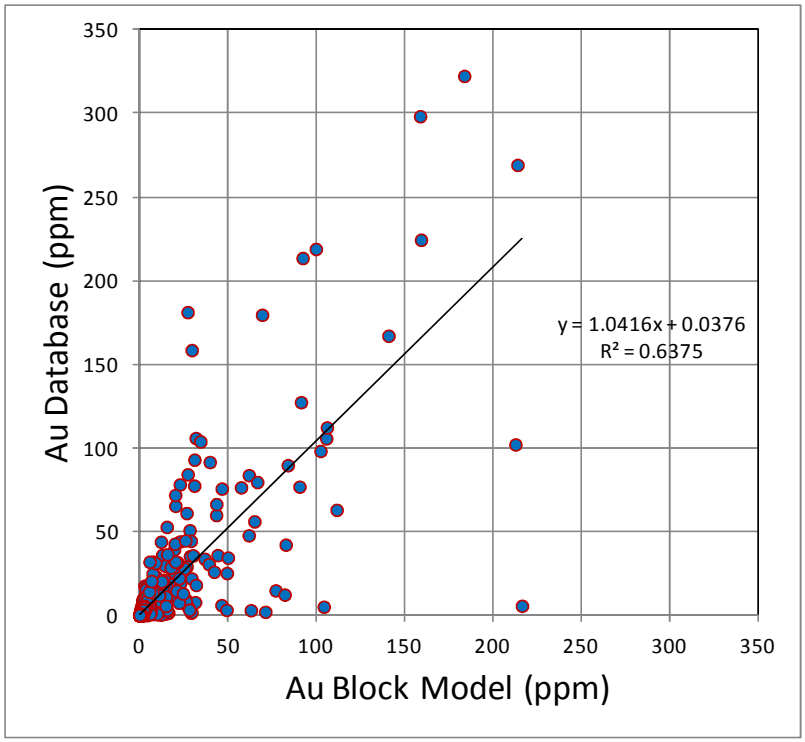

Figure 14-73: EU Au 16 Conditional Bias

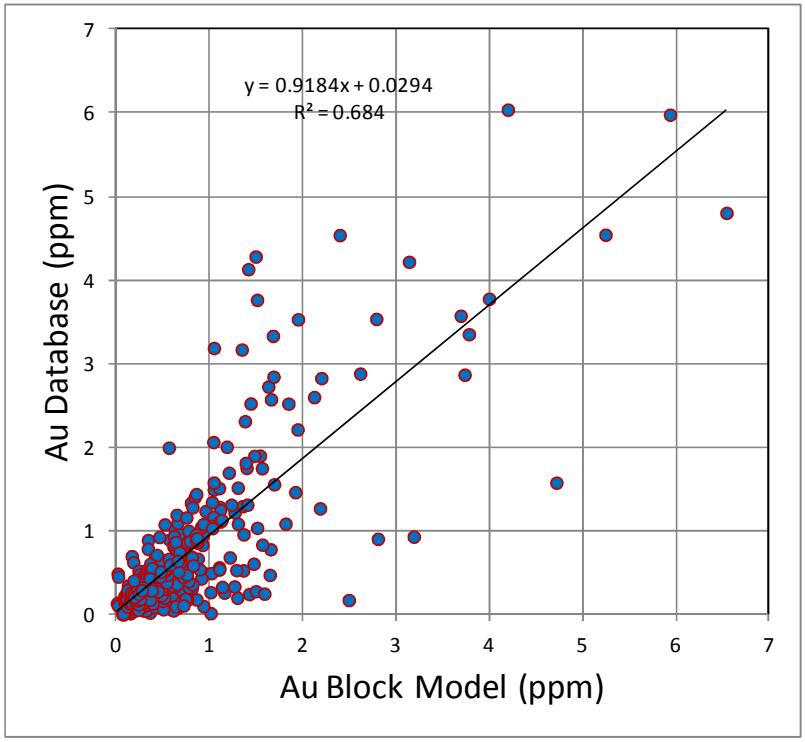

Figure 14-74: EU Au 17 Conditional Bias

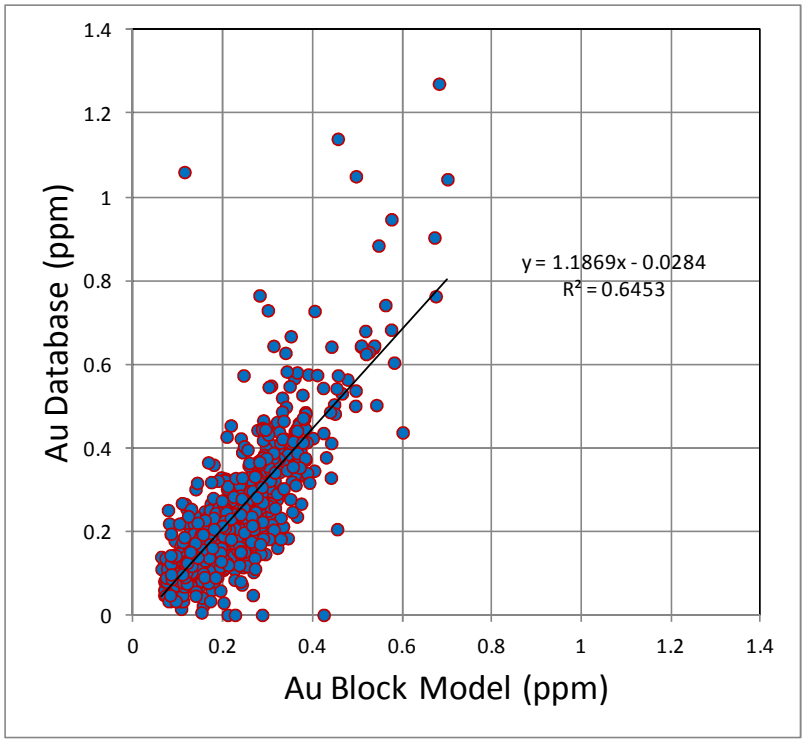

Figure 14-75: EU Au 22 Conditional Bias

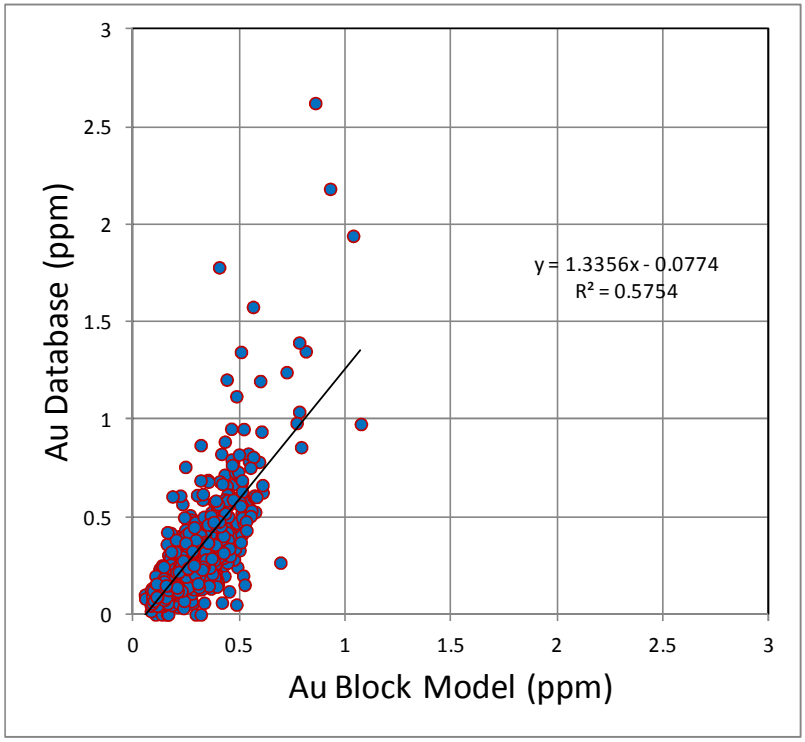

Figure 14-76: EU Au 23 Conditional Bias

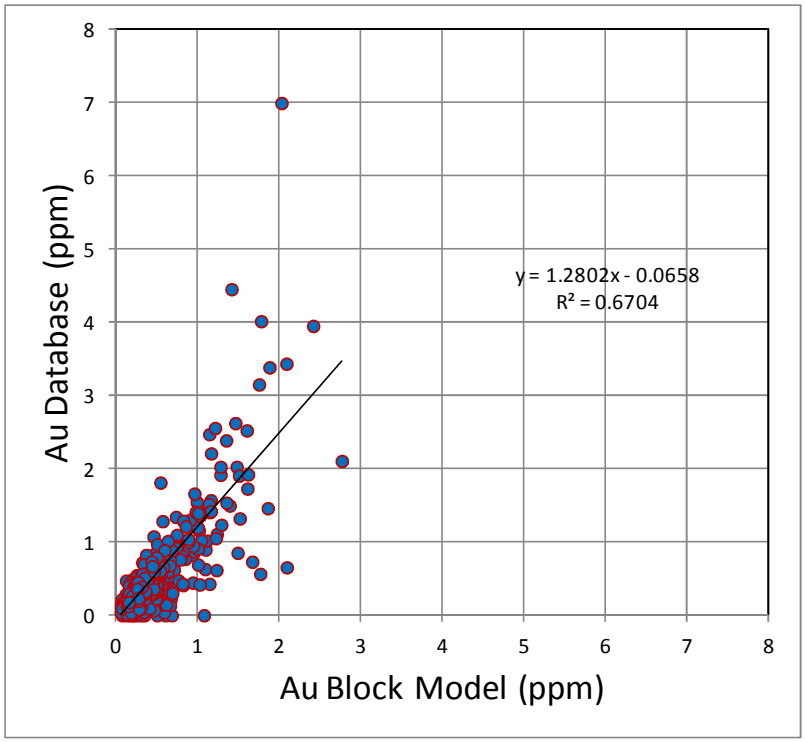

Figure 14-77: EU Au 24 Conditional Bias

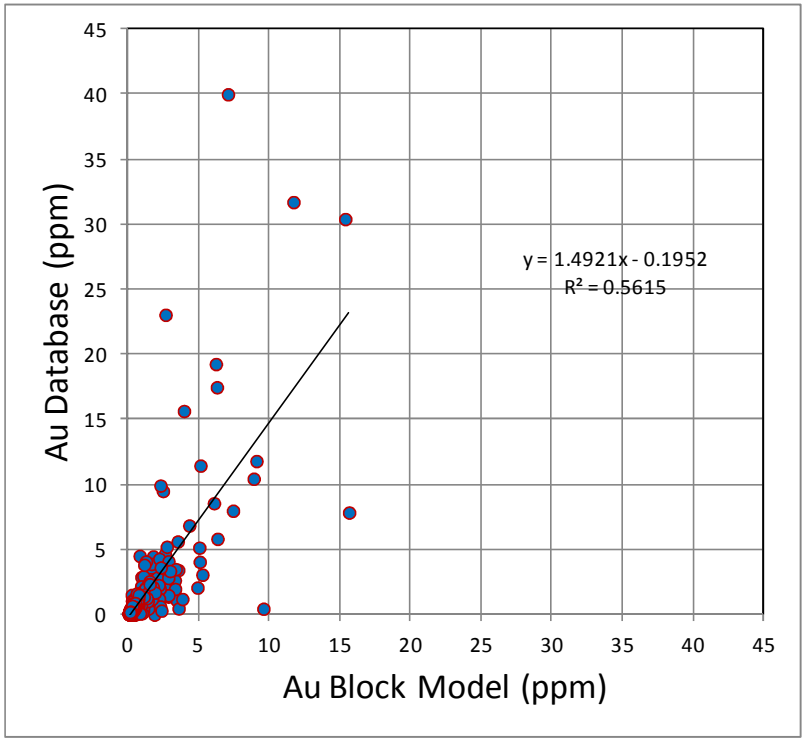

Figure 14-78: EU Au 26 Conditional Bias

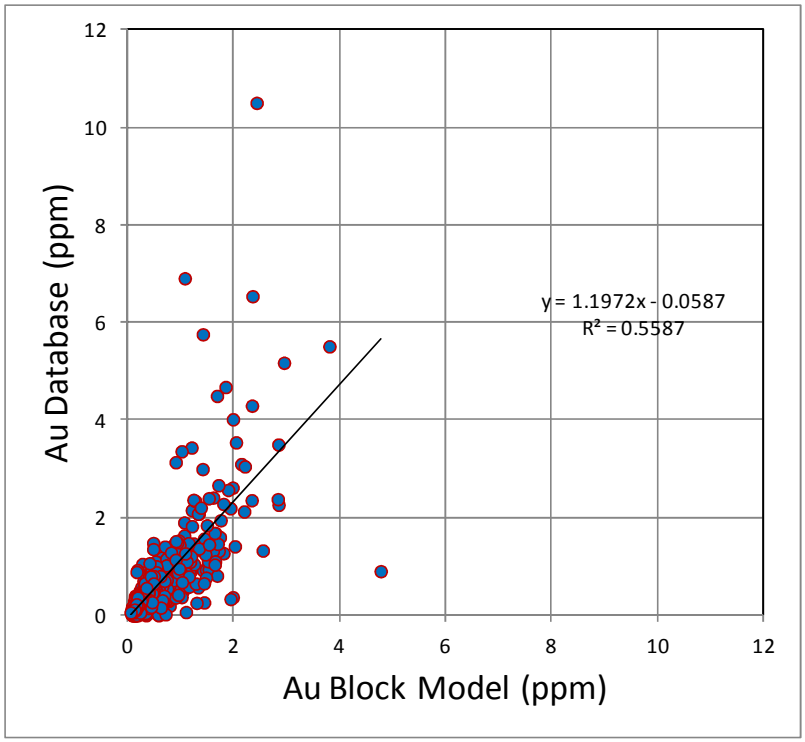

Figure 14-79: EU Au 27 Conditional Bias

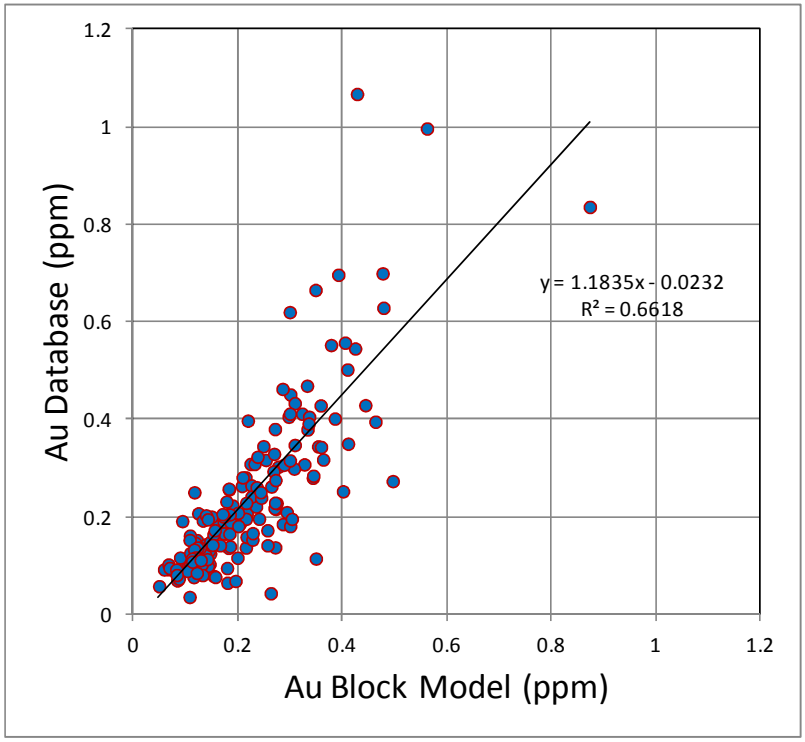

Figure 14-80: Sesgo Condicional EU Au 32

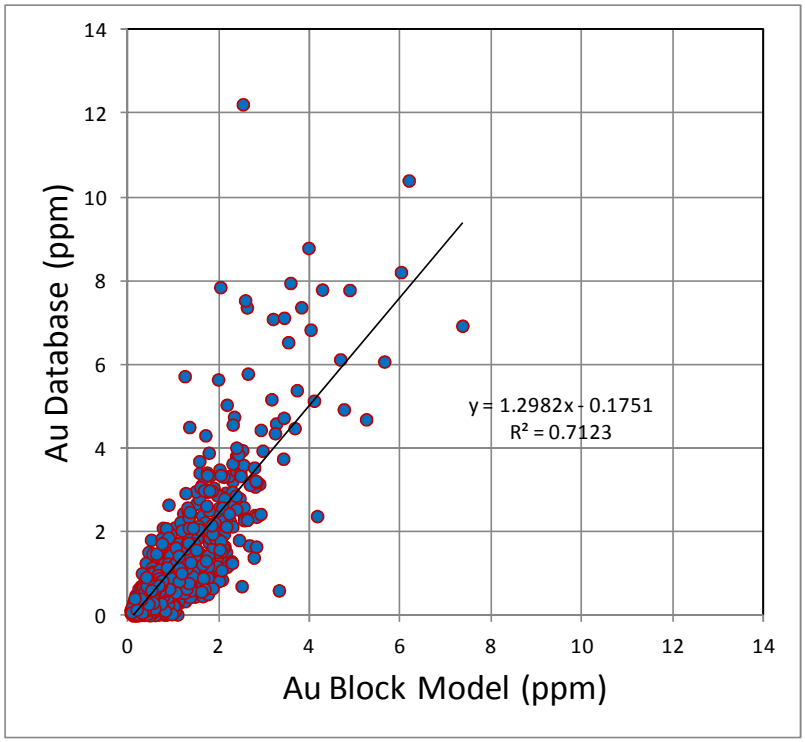

Figure 14-81: EU Au 33 Conditional Bias

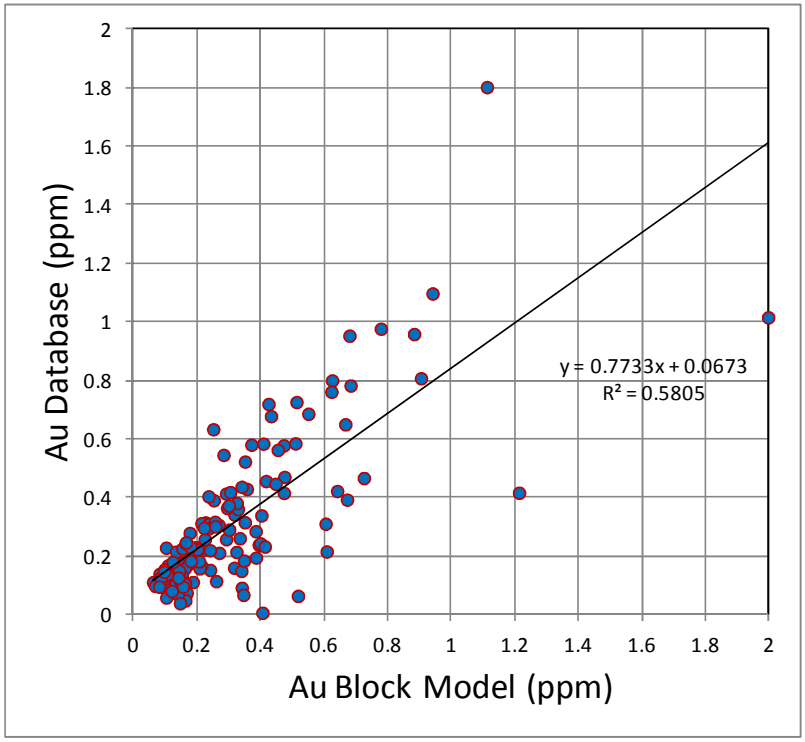

Figure 14-82: EU Au 34 Conditional Bias

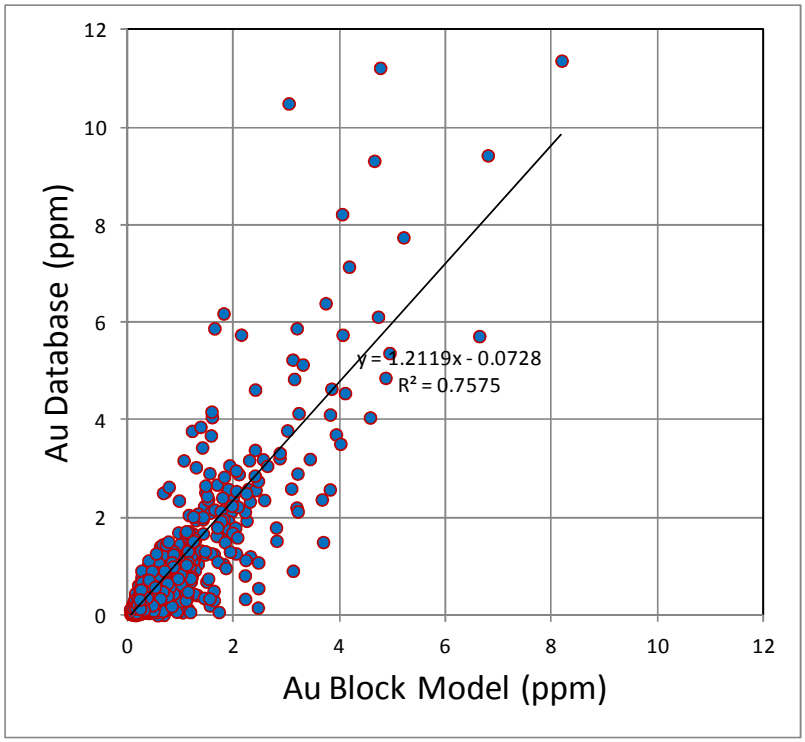

Figure 14-83: EU Au 36 Conditional Bias

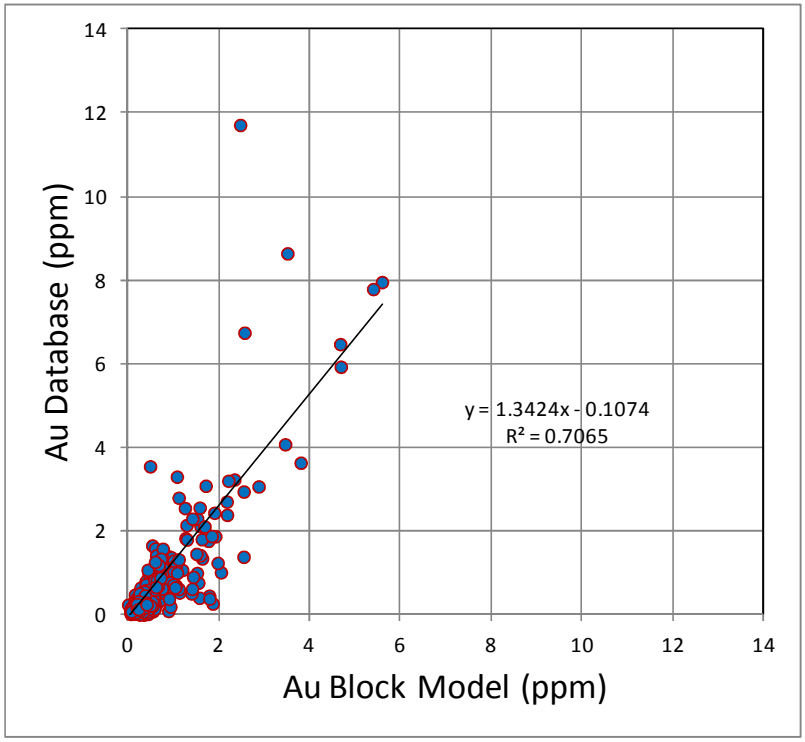

Figure 14-84: EU Au 37 Conditional Bias

14.6 Resource Classification

Gold correlograms were used to classify resources and the following conditions were used:

- In order for blocks to be considered as a measured resource, the average estimation distance must be less than or equal to 28 metres. This data is taken from correlograms where at least 90% of the plateau value is appropriate. Furthermore, the block should be estimated using at least two drillholes.
- In order for blocks to be considered as an indicated resource, the average estimation distance must be less than or equal to 40 metres and greater than 28 metres. This data is taken from correlograms, where at least 100% of the plateau value is appropriate. Furthermore, the block should be estimated using at least two drillholes.
- In order for blocks to be considered as an inferred resource, the block must only be estimated for gold and may not be considered as either measured or indicated resources.

Table 14-15 shows the resource category values set in the block model for characterization.

Table 14-15: Resource Charaterization Values

CATEG	Value
Measured	1
Indicated	2
Infered	3

14.7 Mineral Zone

Indicator kriging was performed in order to differentiate the mineral zones and data from the mineral zones in the data base were used, namely, oxide, mixed and sulphide. After a data analysis, the decision was made to combine oxides and mixed and use the combined term, “oxides”.

Two indicator variograms were created, one for oxides and the other for sulphides. This is shown in the two figures below.

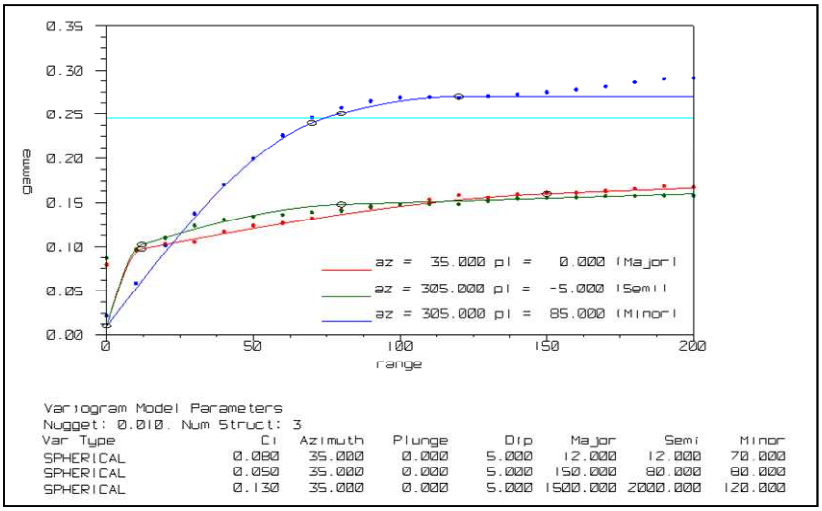

Figure 14-85: Oxide Indicator Variogram

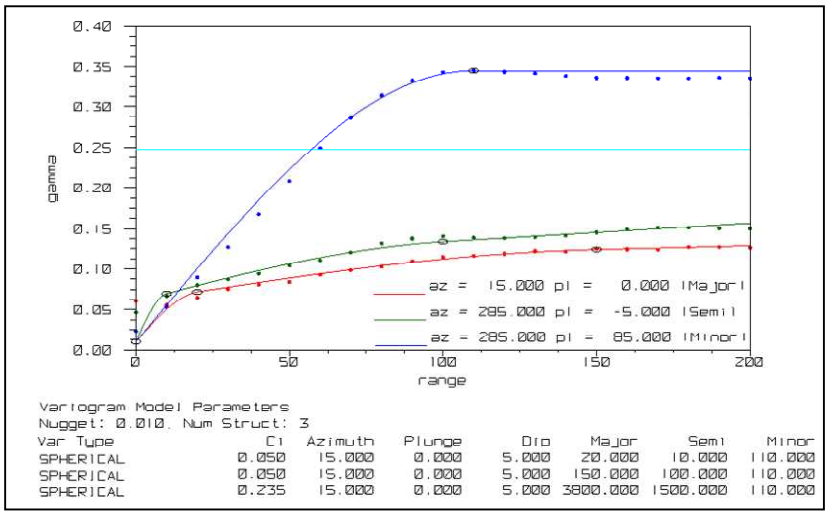

Figure 14-86: Sulphide Indicator Variogram

The main parameters used in indicator kriging are shown in Table 14-16, where two ellipsoids were used for each mineral zone. The calculation resulting from the indicator kriging is the proportion of mineralised material contained in the block and then a code is shown in a master script.

Table 14-16: Mineral Zone Indicator Kriging

Mineral Zone	Pass	Type	Search Angles			Search Distances			Samples		Correction		probability	Database	
			Bearing	Plunge	Dip	Major	Semi	minor	min	max					
Oxide	ox1	IK	35	0	5	120	75	100	1	20	AFFINE	0.878	PROB_OX	sle0711.geo.isis	INDIOX
	ox2	IK	35	0	5	500	300	500	1	8	AFFINE	0.878	PROB_OX	sle0711.geo.isis	INDIOX
Sulphide	su1	IK	15	0	5	120	90	90	1	20	AFFINE	0.905	PROB_SU	sle0711.geo.isis	INDISU
	su2	IK	15	0	5	500	300	300	1	8	AFFINE	0.905	PROB_SU	sle0711.geo.isis	INDISU

14.8 Densities

In order to assign densities, measured grades grouped by common geological parametres were used, starting with a default value of 2.4 g/cc. The following is the configuration:

- Lithology 1 = 2.23
- Lithology 2 = 2.62
- Mineral Zone 1 and Lithology 3 = 2.19
- Mineral Zone 3 and Lithology 3 = 2.33
- Mineral Zone 1 and Lithology 4 = 2.31
- Mineral Zone 3 and Lithology 4 = 2.42
- Lithology 6 = 2.32
- Lithology 7 = 2.30
- Lithology 3 without Mineral Zone = 2.30
- Lithology 4 without Mineral Zone = 2.35

14.9 Re-block

As the estimation model contains sub-cells which start from 2.5x2.5x2.5 m, it is necessary to consolidate a final model with cells of the same size in the x and z axes, which in this case belong to cells of 10x10x10 m. Smaller, regular cells produce a model which is too cumbersome and unusable from the software point of view. Re-blocking is required because the block model must be used in order to develop optimizations to find the optimum pits. The final model is called "MB_Sleeper_Categ_10x10x10.bmf" and has the following variables:

- Au: gold grade
- Ag: silver grade
- Sec_au: Au sector
- Sec_ag: Ag sector
- Dom_au: domain for Au
- Dom_ag: domain for Ag
- Ug_au: Au estimation unit
- Ug_ag: Ag estimation unit
- Categ: resource classification
- Topo: air=0, rock=1
- Lito_s: solid litology
- Minz: mineral zone

14.10 Volume

Table 14-17 shows the deposit global volume. Densities indicated in section 14.8 of this report and the sub-cell model were used. All volume calculations were developed with current cartography. Table 14-18 shows the volumes separated by category and Table 14-19 shows the volumes separated by category with a cut-off of 0.2 ppm Au.

The global volume calculations by mineral type shown in Tables 14-17 to 14-20, were calculated based on the blocks that contain gold values. Since some blocks do not contain values for silver, because of lack of data, and all the blocks must be used in the pit optimization run, it was decided to use a value of "0" in those blocks where no silver values are present in order to be able to make the necessary calculations.

Table 14-17: Global Volume per EU

UG_AU	Au	Ag	TOTAL_MASS
12	0.177	0.112	4,689,063
13	0.365	0.857	5,361,902
14	0.328	2.255	98,291,751
16	0.318	1.688	99,143,410
17	0.314	1.653	26,719,159
22	0.220	3.996	73,095,347
23	0.266	4.480	23,465,622
24	0.268	3.296	44,285,620
26	0.323	5.959	25,768,930
27	0.261	4.372	31,900,817
32	0.217	6.436	17,365,810
33	0.563	2.599	25,110,952
34	0.266	1.057	7,841,747
36	0.318	3.158	22,025,606
37	0.273	2.087	41,288,252
100	2.028	0	151,675

Table 14-18: Global Volume per EU by Category

UG_AU	Measured			Indicated			Measured+Indicated			Inferred			Total		
	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS
12									-	0.177	0.112	4,689,063	0.177	0.112	4,689,063
13	0.333	1.090	3,202,306	0.349	0.742	1,165,566	0.337	0.997	4,367,872	0.485	0.243	994,030	0.365	0.857	5,361,902
14	0.343	2.656	53,425,668	0.267	1.904	22,857,110	0.320	2.431	76,282,778	0.352	1.643	22,008,973	0.328	2.255	98,291,751
16	0.368	2.093	48,621,277	0.284	1.209	18,932,311	0.345	1.845	67,553,587	0.263	1.351	31,589,823	0.318	1.688	99,143,410
17	0.377	3.599	3,535,810	0.384	2.500	3,446,702	0.380	3.056	6,982,512	0.291	1.156	19,736,647	0.314	1.653	26,719,159
22	0.223	4.199	19,281,936	0.209	4.383	17,926,679	0.216	4.287	37,208,615	0.225	3.693	35,886,732	0.220	3.996	73,095,347
23	0.272	4.647	13,623,604	0.262	4.280	7,317,070	0.268	4.519	20,940,675	0.244	4.161	2,524,947	0.266	4.480	23,465,622
24	0.280	4.354	11,417,544	0.256	3.268	10,396,795	0.268	3.836	21,814,340	0.268	2.772	22,471,280	0.268	3.296	44,285,620
26	0.333	6.241	15,282,778	0.312	6.120	6,347,726	0.327	6.206	21,630,504	0.305	4.670	4,138,427	0.323	5.959	25,768,930
27	0.298	5.318	15,988,381	0.246	3.528	6,902,247	0.282	4.778	22,890,628	0.207	3.341	9,010,189	0.261	4.372	31,900,817
32	0.236	5.382	2,191,630	0.212	5.794	2,608,660	0.223	5.606	4,800,290	0.214	6.754	12,565,520	0.217	6.436	17,365,810
33	0.654	3.357	15,574,453	0.451	1.690	5,557,867	0.601	2.919	21,132,320	0.361	0.904	3,978,632	0.563	2.599	25,110,952
34	0.311	1.629	1,657,375	0.290	0.849	1,548,652	0.300	1.252	3,206,027	0.241	0.923	4,635,720	0.266	1.057	7,841,747
36	0.326	3.199	12,754,037	0.308	3.990	5,327,975	0.320	3.432	18,082,012	0.305	1.900	3,943,594	0.318	3.158	22,025,606
37	0.440	1.883	6,613,942	0.253	1.890	2,343,556	0.391	1.885	8,957,498	0.240	2.143	32,330,753	0.273	2.087	41,288,252
100										2.030		151,675	2.030		151,675
Total	0.349	3.380	223,170,741	0.275	2.968	112,678,917	0.324	3.242	335,849,658	0.263	2.500	210,656,005	0.301	2.956	546,505,663

The following table shows the Sleeper Oxide mineral resources reported at 0.2 ppm Au cut-off.

Table 14-19: Oxide Global Volume per EU with 0.2 ppm Au Cut-off by Category

UG_AU	Measured			Indicated			Measured+Indicated			Inferred			Total		
	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS
12									-						-
13	0.400	1.378	1,130,280	0.341	0.878	217,631	0.390	1.298	1,347,911	0.484	0.302	261,021	0.405	1.136	1,608,931
14	0.413	2.711	2,424,966	0.374	1.746	278,135	0.409	2.611	2,703,102	0.256	0.387	308,801	0.393	2.383	3,011,903
16	0.414	1.712	9,257,734	0.358	1.102	1,975,281	0.404	1.605	11,233,015	0.332	0.840	1,466,022	0.396	1.516	12,699,037
17	0.546	2.474	150,294	0.349	2.565	70,394	0.484	2.503	220,688	0.452	0.548	554,498	0.461	1.104	775,186
22	0.283	4.166	3,262,825	0.270	4.588	2,239,848	0.278	4.338	5,502,673	0.289	3.262	2,966,843	0.282	3.961	8,469,516
23	0.329	6.049	2,632,517	0.312	5.747	1,088,567	0.324	5.960	3,721,084	0.358	5.227	105,257	0.325	5.940	3,826,341
24	0.309	4.155	1,501,790	0.299	5.009	763,555	0.306	4.443	2,265,346	0.301	4.653	576,411	0.305	4.486	2,841,756
26	0.367	5.735	4,587,573	0.326	5.507	1,233,478	0.358	5.687	5,821,051	0.376	8.856	323,669	0.359	5.854	6,144,720
27	0.324	6.946	2,386,085	0.308	6.605	991,594	0.320	6.846	3,377,679	0.288	4.773	572,347	0.315	6.546	3,950,026
32	0.310	6.769	785,713	0.295	6.571	428,165	0.304	6.699	1,213,879	0.295	8.688	1,701,956	0.299	7.860	2,915,835
33	0.628	2.436	1,325,914	0.465	0.730	350,329	0.594	2.079	1,676,243	0.468	0.178	126,712	0.585	1.946	1,802,955
34	0.323	0.569	139,135	0.270	1.476	252,115	0.289	1.154	391,250	0.254	0.664	869,101	0.265	0.816	1,260,351
36	0.478	1.451	1,869,415	0.460	0.192	778,160	0.472	1.081	2,647,575	0.458	0.074	665,313	0.469	0.879	3,312,888
37	0.554	3.072	506,260	0.320	2.093	162,186	0.497	2.834	668,446	0.318	1.848	2,693,683	0.353	2.044	3,362,129
Total	0.387	6.392	31,960,502	0.328	5.512	10,829,438	0.372	6.242	42,789,940	0.321	3.569	13,191,635	0.360	5.050	55,981,575

The following table shows the Sleeper Sulphide mineral resources reported at 0.25 ppm Au cut-off.

Table 14-20: Sulphide Global Volume per EU with 0.25 ppm Au Cut-off by Category

UG_AU	Measured			Indicated			Measured+Indicated			Inferred			Total		
	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS	Au	Ag	TOTAL_MASS
12									-	0.332		648,286	0.332		648,286
13	0.455	1.343	923,954	0.467	0.774	552,174	0.460	1.130	1,476,128	0.560	0.233	587,196	0.488	0.875	2,063,324
14	0.524	3.469	24,680,506	0.436	2.198	8,386,710	0.502	3.147	33,067,217	0.650	2.035	8,450,668	0.532	2.921	41,517,885
16	0.533	3.244	20,372,797	0.441	1.693	6,642,579	0.511	2.863	27,015,376	0.432	1.348	10,592,250	0.488	2.436	37,607,626
17	0.607	5.244	1,550,628	0.565	2.904	1,821,754	0.585	3.980	3,372,382	0.476	1.886	7,628,421	0.509	2.528	11,000,803
22	0.343	5.666	4,283,700	0.335	5.931	3,642,537	0.339	5.788	7,926,237	0.349	4.504	10,229,831	0.345	5.065	18,156,068
23	0.379	5.350	4,419,282	0.354	4.372	2,500,272	0.370	4.996	6,919,554	0.334	4.191	781,169	0.367	4.915	7,700,723
24	0.483	5.676	3,462,367	0.438	3.127	3,093,228	0.461	4.473	6,555,595	0.435	2.589	8,356,532	0.447	3.417	14,912,127
26	0.472	9.126	5,260,271	0.417	7.511	2,787,397	0.453	8.567	8,047,668	0.440	5.007	1,876,202	0.450	7.894	9,923,871
27	0.451	6.365	5,832,553	0.395	3.447	1,790,153	0.438	5.679	7,622,706	0.490	5.003	1,365,951	0.446	5.577	8,988,657
32	0.365	3.085	318,551	0.342	4.656	540,784	0.350	4.074	859,336	0.344	8.017	2,633,919	0.345	7.047	3,493,254
33	0.783	3.933	11,263,145	0.551	1.998	3,776,212	0.725	3.447	15,039,357	0.447	1.145	2,526,301	0.685	3.116	17,565,658
34	0.478	3.327	711,249	0.440	1.163	591,690	0.461	2.345	1,302,939	0.438	0.988	1,082,345	0.450	1.729	2,385,284
36	0.464	5.261	4,887,725	0.429	5.987	1,964,008	0.454	5.469	6,851,733	0.433	3.663	1,259,796	0.451	5.188	8,111,530
37	0.695	1.900	3,107,901	0.414	1.433	809,384	0.637	1.803	3,917,285	0.387	1.552	10,391,989	0.455	1.621	14,309,274
Total	0.536	5.525	91,074,631	0.435	4.338	38,898,882	0.506	5.233	129,973,513	0.443	4.144	68,410,857	0.484	5.024	198,384,370

The following tables show the sensitivity of the oxide and sulphide resources to the Au cut-off grade.

Table 14-21: Oxide Measured and Indicated mineral resources at Sleeper by Au cut-off.

Cut-off	Measured					Indicated					M&I				
Au g/T	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz
0.1	51,140,096	0.3	3.69	493,265	6,067,162	21,251,557	0.242	3.69	165,350	2,521,244	72,391,653	0.28	3.69	658,615	8,588,406
0.2	**31,960,502**	**0.387**	**4.23**	**397,669**	**4,346,620**	**10,829,438**	**0.328**	**4.12**	**114,203**	**1,434,501**	**42,789,940**	**0.37**	**4.20**	**511,872**	**5,781,121**
0.25	23,364,479	0.447	4.5	335,785	3,380,386	6,704,861	0.393	4.4	84,719	948,506	30,069,340	0.43	4.48	420,504	4,328,893
0.3	16,930,538	0.513	4.82	279,245	2,623,708	4,274,272	0.461	4.59	63,352	630,772	21,204,810	0.50	4.77	342,597	3,254,480
0.4	9,427,511	0.648	5.22	196,413	1,582,214	1,884,221	0.61	4.89	36,954	296,236	11,311,732	0.64	5.17	233,367	1,878,451

Table 14-22: Oxide Inferred mineral resources at Sleeper by Au cut-off.

Cut-off Au g/T	Inferred				
	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz
0.1	29,635,200	0.225	3.18	214,382	3,029,931
0.2	**13,191,635**	**0.321**	**3.42**	**136,145**	**1,450,516**
0.25	8,053,980	0.384	3.71	99,435	960,688
0.3	4,724,427	0.466	4.06	70,784	616,699
0.4	2,049,919	0.631	3.41	41,588	224,744

Table 14-23: Sulphide Measured and Indicated mineral resources at Sleeper by Au cut-off.

Cut-off Au g/T	Measured					Indicated					M&I				
	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz
0,2	115.476.605	0,47	4,77	1.744.977	17.709.655	53.645.467	0,377	3,65	650.238	6.295.404	169.122.072	0,44	4,41	2.395.214	24.005.059
0,25	**91.074.631**	**0,536**	**5,06**	**1.569.495**	**14.816.501**	**38.898.882**	**0,435**	**3,79**	**544.032**	**4.739.953**	**129.973.513**	**0,51**	**4,68**	**2.113.527**	**19.556.454**
0,3	71.695.288	0,606	5,34	1.396.886	12.309.193	27.505.079	0,502	3,84	443.930	3.395.798	99.200.367	0,58	4,92	1.840.816	15.704.991
0,4	45.695.936	0,755	5,7	1.109.232	8.374.332	15.044.512	0,633	3,72	306.182	1.799.363	60.740.448	0,72	5,21	1.415.414	10.173.694
0,5	30.760.064	0,905	5,97	895.022	5.904.176	8.907.105	0,762	3,47	218.217	993.719	39.667.169	0,87	5,41	1.113.239	6.897.895
0,6	21.703.611	1,055	6,22	736.177	4.340.304	5.473.666	0,898	3,4	158.035	598.349	27.177.277	1,02	5,65	894.212	4.938.653

Table 14-24: Sulphide Inferred mineral resources at Sleeper by Au cut-off.

Cut-off Au g/T	Inferred				
	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz
0.2	94,874,313	0.382	3.05	1,165,225	9,303,497
0.25	**68,410,857**	**0.443**	**3.07**	**974,376**	**6,752,446**
0.3	49,260,219	0.509	3.1	806,143	4,909,709
0.4	26,265,629	0.652	2.81	550,596	2,372,968
0.5	15,105,865	0.806	2.75	391,452	1,335,599
0.6	9,467,172	0.962	2.79	292,815	849,224

Table 14-25: Alluvial inferred mineral resources at Sleeper by Au cut-off.

Cut-off Au g/T	Inferred				
	Tonnes	Au g/T	Ag g/T	Au Oz	Ag Oz
0.1	156,140	1.975		9,915	
0.20	**151,675**	**2.03**		**9,890**	
0.25	150,281	2.045		9,881	
0.3	148,215	2.07		9,864	
0.4	134,889	2.24		9,715	

Tables 14-26 to 14-28 show the reported, classified mineral resources grouped by mineral type: oxide, sulphide and alluvial, with the Au cut-off values as shown.

Table 14-26: Paramount Sleeper Deposit Oxide Au Mineral Resources as of October 28, 2011

Resource Classification Oxide cut-off 0.2ppm Au	Tonnage	Au Grade	Ag Grade
	(Kilotonnes)	(g/t)	(g/t)
Measured	31,961	0.387	4.23
Indicated	10,829	0.328	4.12
Total Measured and Indicated	42,790	0.372	4.20
Inferred	13,192	0.321	3.42

Table 14-27:Paramount Sleeper Deposit Sulphide Au Mineral Resources as of October 28,2 011

Resource Classification Sulphide cut-off 0.25ppm Au	Tonnage	Au Grade	Ag Grade
	(Kilotonnes)	(g/t)	(g/t)
Measured	91,075	0.536	5.06
Indicated	38,899	0.435	3.79
Total Measured and Indicated	129,974	0.506	4.68
Inferred	68,411	0.443	3.07

Table 14-28:Paramount Sleeper Deposit Alluvium Au Mineral Resources as of October 28, 2011

Resource Classification Alluvial cut-off 0.2ppm Au	Tonnage	Au Grade	Ag Grade
	(Kilotonnes)	(g/t)	(g/t)
Measured	-	-	-
Indicated	-	-	-
Total Measured and Indicated	-	-	-
Inferred	151,675	2.030	-

14.11 Pit Resources

Possibly mineable resources must be calculated in order to report resources. A Whittle run was performed in order to report resources inside a hypothetical pit. Available blocks with Au grades were used (below the current topography) including measured, indicated and inferred resources. Furthermore, assumed economic parameters were used, including a proportional medium-ranged mine cost supplied by Paramount, which are shown in Table 14-29. The model to be used was re-blocked to 10x10x10 m.

Table 14-29: Resource Pit Parameters

Price Au	1,400	US$/oz
Mine Cost	1.6	US$/ton
Alluvial processing cost	5.1	US$/ton
Alluvial processing recovery	85	%
Sulphides processing cost	11.7	US$/ton
Sulphides processing recovery	90	%
Oxides processing cost	6.3	US$/ton
Oxides processing recovery	75	%

A proportional medium-range mine cost and other parameters supplied by Paramount were used.

The results of the Whittle optimisation are shown in Table 14-30, where the pit chosen for the resource report is the number 5 with a revenue factor of 1. The “Rock Tonnes” column shows combined ore and waste tonnes. The “Au Grade” in the last column represents the grade of the “Ore Tonnes” reported in that column. The “Fine Au” column considers the fine Au content in grams.

Table 14-30: Resource Pit Parameters

Pit	Revenue Factor	Rock Tonnes	Ore Tonnes	Strip Ratio	Max Bench	Min Bench	Fine Au Grams	Au Grade g/t
1	0.2	556,666	251,395	1.21	80	59	655,336	2.607
2	0.4	5,679,272	2,746,872	1.07	82	58	3,413,775	1.243
3	0.6	37,777,731	14,714,432	1.57	83	54	12,094,276	0.822
4	0.8	171,547,871	49,705,465	2.45	86	46	33,302,610	0.670
5	1	316,085,293	106,200,325	1.98	87	44	56,030,621	0.528
6	1.2	513,748,827	179,053,812	1.87	87	36	80,926,930	0.452
7	1.4	648,144,201	242,747,903	1.67	87	34	98,379,898	0.405
8	1.6	729,963,229	288,878,320	1.53	87	32	108,921,162	0.377
9	1.8	819,627,448	334,114,511	1.45	87	32	118,411,300	0.354
10	2	965,834,320	378,224,461	1.55	88	30	127,809,980	0.338

Figure 14-87 to Figure 14-91 show the transverse sections with the estimated Au block model resource pit 5 line (green) and current topography (brown).

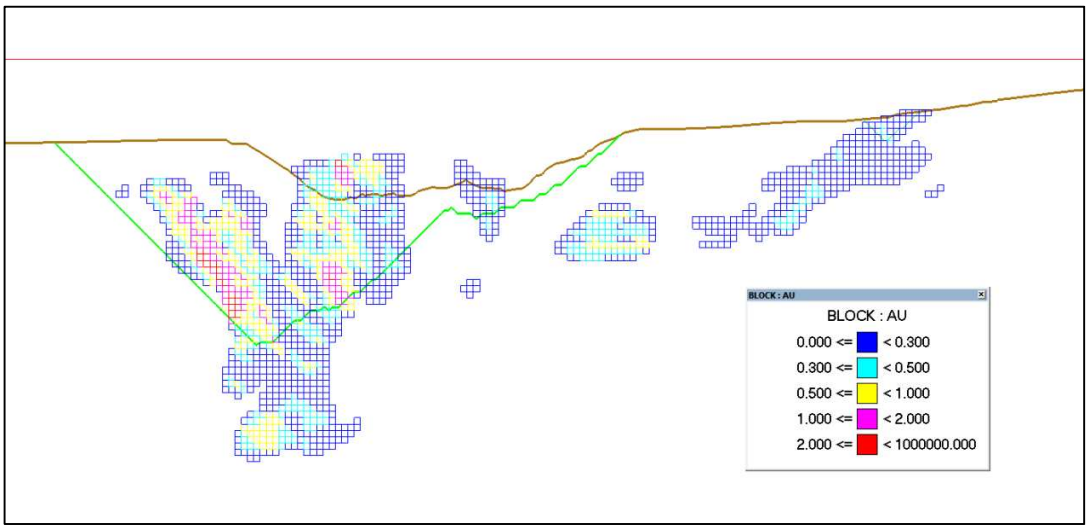

Figure 14-87: 4575520N Section

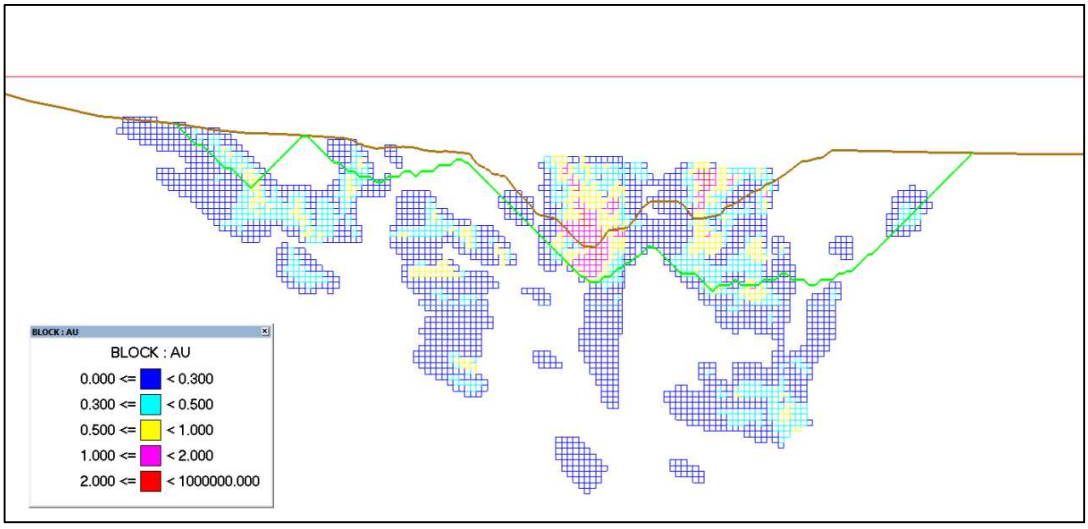

Figure 14-88: 4575640N Section

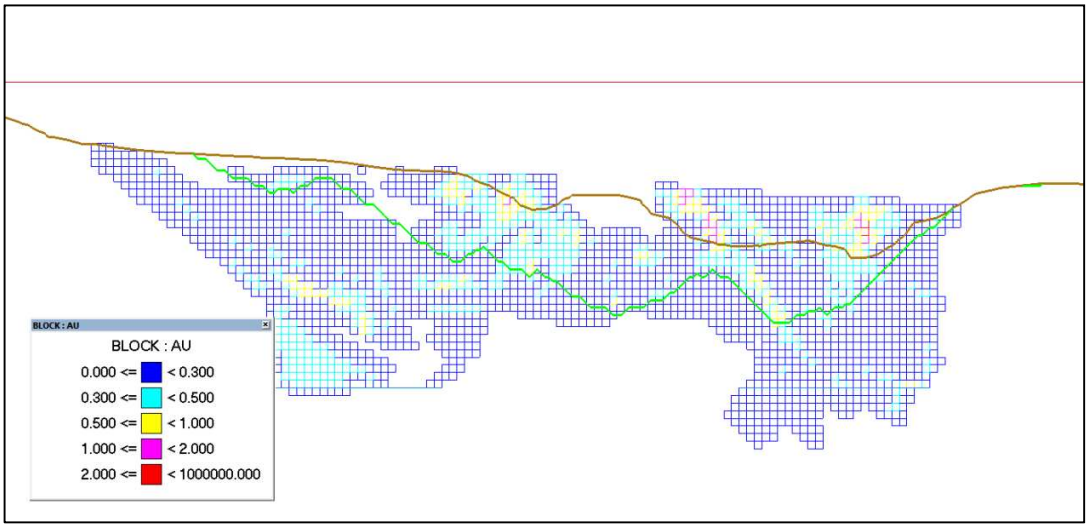

Figure 14-89: 4575890N Section

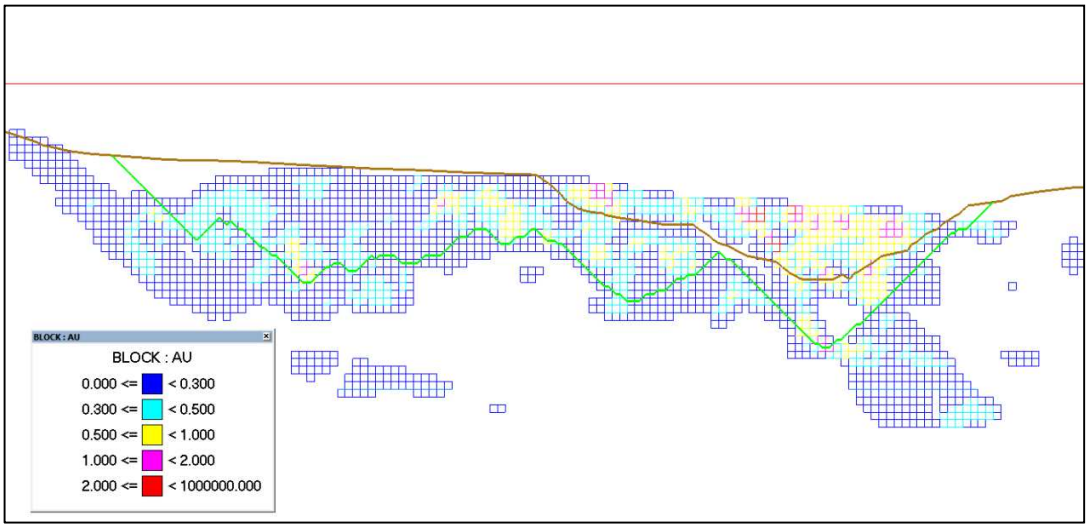

Figure 14-90: 4576150N Section

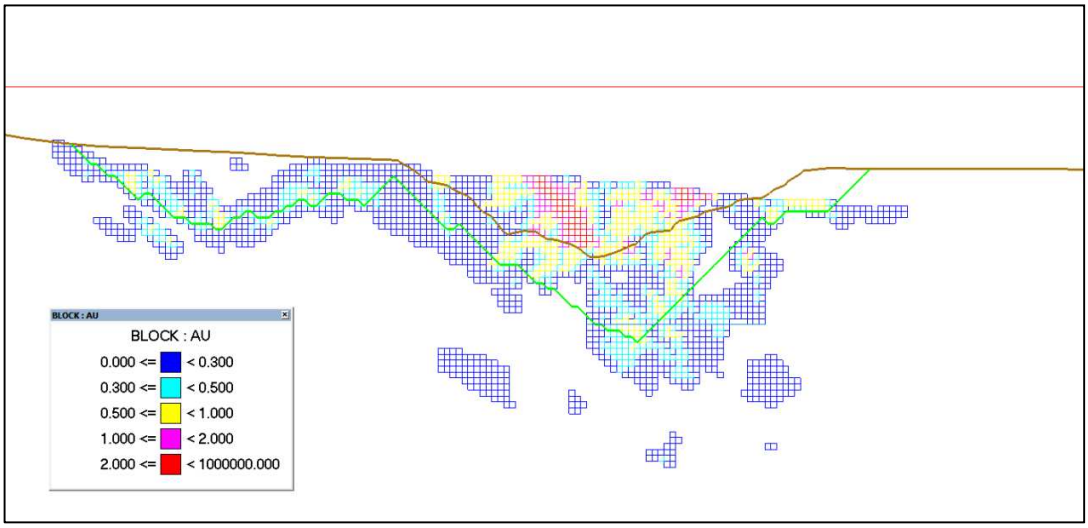

Figure 14-91: 4576315N Section

15 Mineral Reserve Estimates

This section is not applicable because the Sleeper Property is advanced stage exploration project and there are no mineral reserves at this time.

16 Mining Methods

This section is not applicable.

17 Recovery Methods

This section is not applicable.

18 Project Infrastructure

This section is not applicable.

19 Market Studies and Contracts

This section is not applicable.

20 Environmental Studies, Permitting and Social or Community Impact

The Project was explored, developed (mined, milled and heap leached) in the 1980's and 1990's. Reclamation has occurred on the majority of the mine facilities (waste dumps, tailing impounds, heap leach pads and ancillary facilities (access and haul roads) and the open pit has been allowed to refill with water. These reclamation efforts have received awards and recognition from the regulatory agencies and the public. Current activities at the site involve exploration, permit maintenance and reclamation monitoring.

There are no known environmental issues that are adversely impacting air, water or soil resources at the site. Key environmental issues associated with current drilling activities and this NI 43-101 Report are wildlife and archaeology.

While there are no Threatened or Endangered (T&E) species of vegetation or wildlife within the project boundary, there are sensitive species (pygmy rabbit and sage grouse) that may exist and depending upon their location may warrant special mitigation.

There are also known sensitive cultural/archaeological sites within the project area. However, these sites have been effectively avoided during current operations.

Permits

The Project is currently operated as an advanced exploration project. Key permits associated with these activities include:

- Reclamation Permit # 0219
- Plan of Operations # N77104
- Air Permit for Surface Disturbance #AP 1041-2208

A reclamation bond in the amount of $222,081 is currently posted with Bureau of Land Management to guarantee that reclamation is performed on associated exploration activities at the site.

There are also numerous other permits in place that are maintained from previous mine operations. These are maintained for ease in updating should a decision be made to reinitiate production at the site. Maintenance of these permits includes monthly, quarterly and annual monitoring and reporting. These permits include:

- Reclamation Permit #0037
- Water Pollution Control Permit #NEV 50006
- Groundwater Appropriation Permits #'s 53228, 53231, 53236
- Radio Station (FCC) License # 11216793
- Air Quality Operating Permit # AP 1041 1322
- Hazardous Materials Permit # 1168-2326
- Solid Waste Landfill Waiver # SWMI-08-10
- Industrial Artificial Pond Permit # S28231

A reclamation bond in the amount of $3,966,373 is currently posted with Bureau of Land Management to guarantee that reclamation is performed on associated mine facilities and activities at the site.

Paramount is currently in compliance with all issued permits.

21 Capital and Operating Costs

This section is not applicable**.**

22 Economic Analysis

This section is not applicable.

23 Adjacent Properties

SRK does not have specific information related to properties adjacent to the Sleeper Project.

24 Other Relevant Data and Information

This section is not applicable.

25 Interpretation and Conclusions

The Sleeper gold-silver deposit represents a project with a great deal of potential for being an important gold producer in Nevada once again. Exploration potential adjacent to the mine is very positive as well as brownfield opportunities in the other target within the claim block that still remain to be tested (although overall exploration potential was not part of SRK's work scope, this potential was recognised nonetheless.

Au and Ag mineralization display various controls, including sub-vertical feeder structures and stockwork halos as well as bedding-parallel controls. The latter, is particularly seen at Facility, related to what has been interpreted in the model presented here in this report, as the base of the rhyolite (either as a flow or dome) and the contact with the underlying Mesozoic basement. These mineralization trends have not been extensively drilled, and present strong potential for continuity for increasing resources at the project.

26 Recommendations

QA/QC Controls

SRK recommends that the QA/QC sample and laboratory analysis evaluation be done on a regular basis during drill hole campaigns. When QA/QC analyses are completed after the drill campaign, it can be too late for making necessary adaptations and corrections. Fortunately, there does not seem to a consistent problem with the laboratory analyses, however, more attention to detail in consistently sending check assays to other labs and submitting coarse reject duplicates for analysis should be made.

Geologic Model

The following recommendations are presented.

- Grades were used as a proxy for mineralization style in the model (vein, stockwork and dissemination). Identifying mineralization style consistently in the database would allow modeling these features directly in a more geologically consistent fashion.
- The lithological units presented here are preliminary, based on the grouping of codes mapped by different companies over a long period of time. It is recommended that the partition suggested here be used as a basis for future drill hole logging review campaigns, in order to produce an integrated lithological coding system applicable to the whole deposit.
- The structures used were determined primarily on the bases of Au grade distribution and previous interpretations and conceptual models. It is recommended that field and drill hole structural information be carefully reviewed and entered into a newly compiled and integrated database as a more detailed structural model will be necessary at a more advanced project stage.

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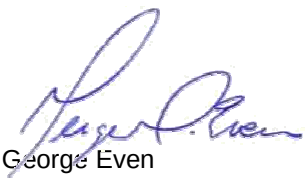
CERTIFICATE AND CONSENT

To accompany the report entitled: Mineral Resource Estimation, Paramount, Nevada, U.S.A.

I, George Even, residing at Vital Apoquindo 941, Las Condes, Santiago, Chile, do hereby certify that:

1) I am a Principal Geologist with the firm of SRK Consulting (Chile) S.A. (SRK) with an office at Av. Apoquindo 4001 Piso 7, Las Condes, Santiago, Chile;
2) I am a graduate of San Diego State University in San Diego, California U.S.A. with a BSc. in Geology in 1972. I have practiced my profession continuously since 1972;
3) I am a Professional Geologist registered with the AusIMM of Australia (#228861) and also with the AIG (#3616) of Australia;
4) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Sleeper project or securities of Paramount Gold.
5) That, as of the date of this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading;
6) I have read National Instrument 43-101 and Form 43-101F1 and by reason of my education and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101. This technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
7) As a qualified person, I am independent of the issuer as defined in Section 1.4 of National Instrument 43-101;
8) I am the author of all the sections of this report except for Section 20.
9) I have visited the Sleeper project and surrounding area during May, 2011;
10) SRK Consulting (Chile) S.A. was retained by Paramount Gold to prepare a mineral resource estimate for the Sleeper project. This assignment was completed using CIM “Best practice” and Canadian Securities Administrators National Instrument 43-101 guidelines. The preceding report is based on our review of project files and discussions with Paramount Gold personnel;
11) I consent to the filing of the Technical Report with the securities regulatory authorities.



Santiago, Chile — George Even

October 28, 2011 — Principal Geologist

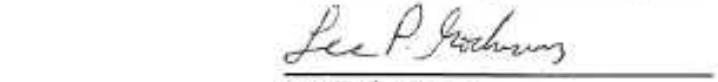
CERTIFICATE of AUTHOR

I, Lee P. Gochnour, do hereby certify that:

1. I am a Principal with the firm of Gochnour & Associates, Inc. (G&A) with an office at 7129 Windwood Way, Parker, CO 80134. U.S.A.
2. I am a graduate of Eastern Washington University with a Bachelors' Degree in Park Administration and Environmental Land Use Planning in 1981. I have practiced my profession continuously since 1981.
3. I am registered with the Mining and Metallurgical Society of America as a Qualified Professional in Environmental, Permitting and Compliance (Member # 01166QP)
4. I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Sleeper project or securities of Paramount Gold Corp.
5. That, as of the date of this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading;
6. I have read National Instrument 43-101 and Form 43-101F1 and by reason of my education and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101. This technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
7. I, as a qualified person, am independent of the issuer as defined in Section 1.4 of National Instrument 43-101.
8. I am the author of Section 20 of this report.
9. I last visited the Sleeper property and surrounding areas on April 19, 2011.
10. SRK Consulting (Chile) S.A. was retained by Paramount Gold Corp. to prepare a Mineral Resource Estimation for the Sleeper gold property. This assignment was completed using CIM "Best practice" and Canadian Securities Administrators National Instrument 43-101 guidelines. The preceding report is based on our review of project files and discussions with Paramount Gold Corp. personnel.

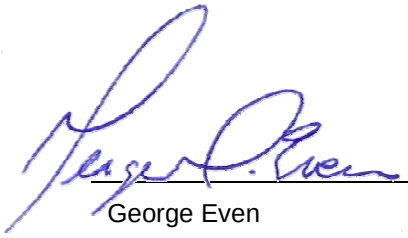
11. I consent to the filing of the Technical Report with the securities regulatory authorities.

Dated this 28 th day of October, 2011.



Lee P. Gochnour

Prepared by



George Even

Reviewed by

Joled Nur

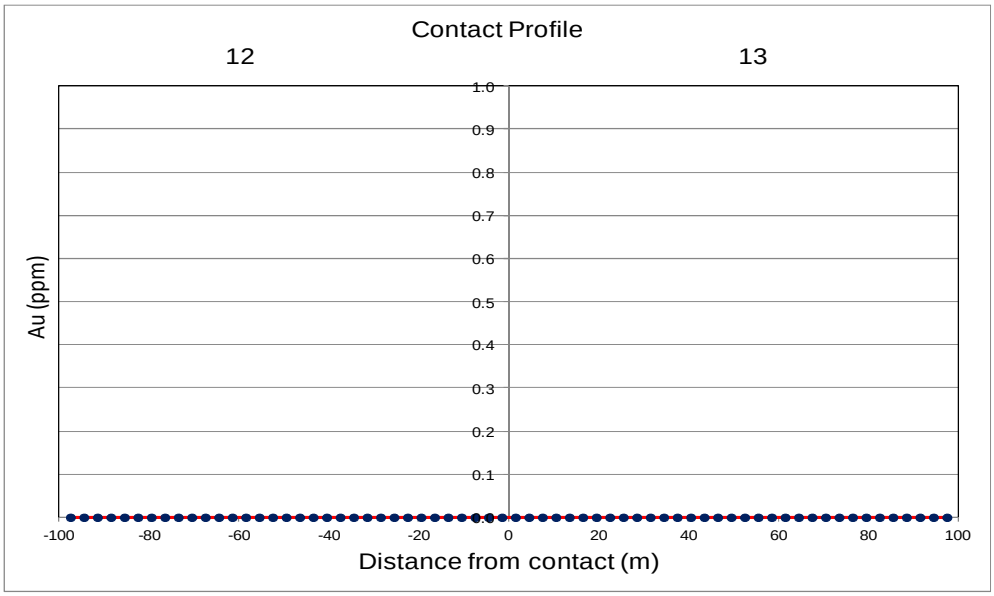
All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional engineering and environmental practices.

Appendices

Appendix A
Claim List

Appendix B
Contact Profiles

Figure 1: Contact Profile EU Au 12-13



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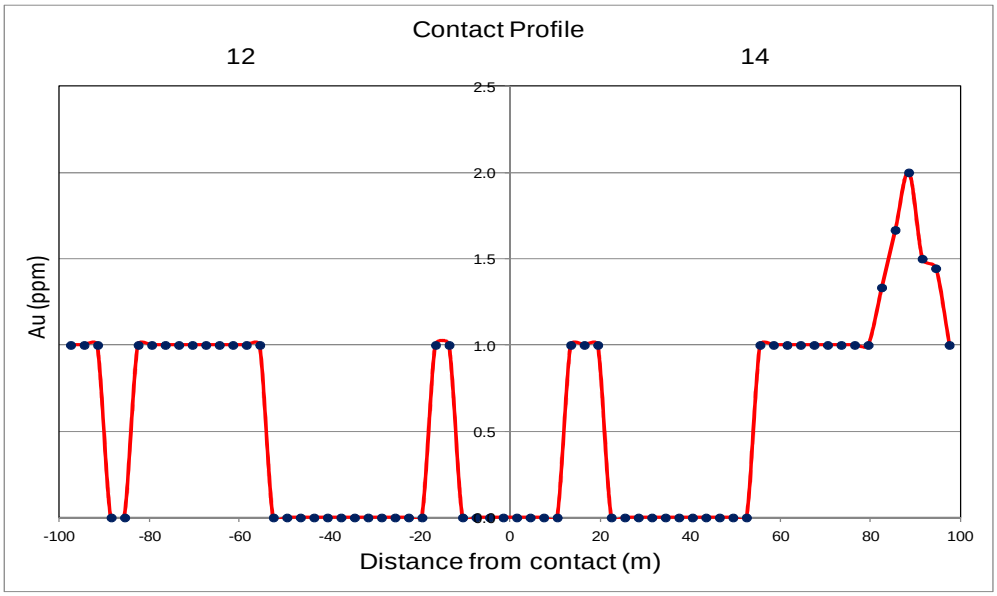

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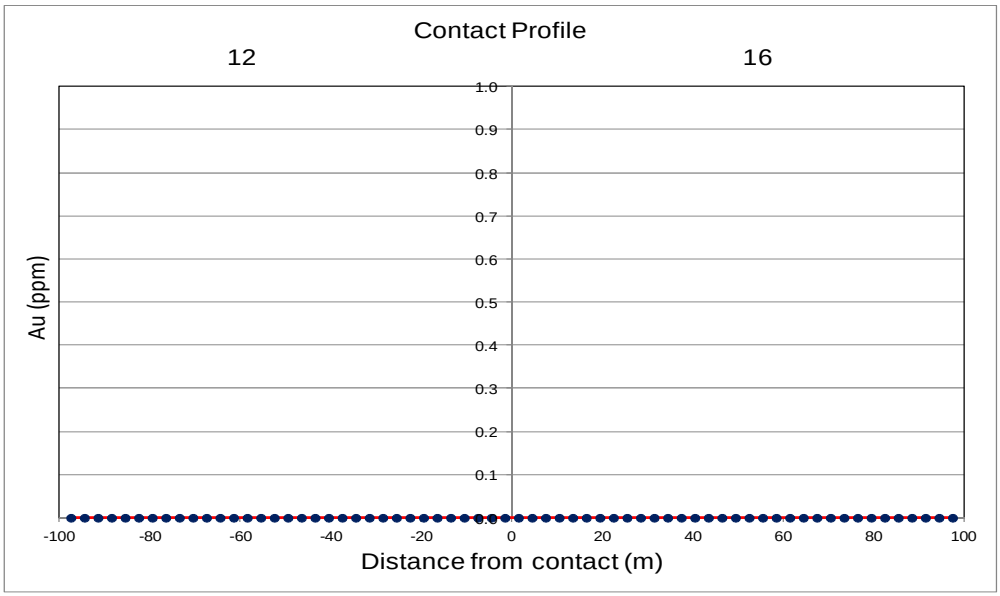

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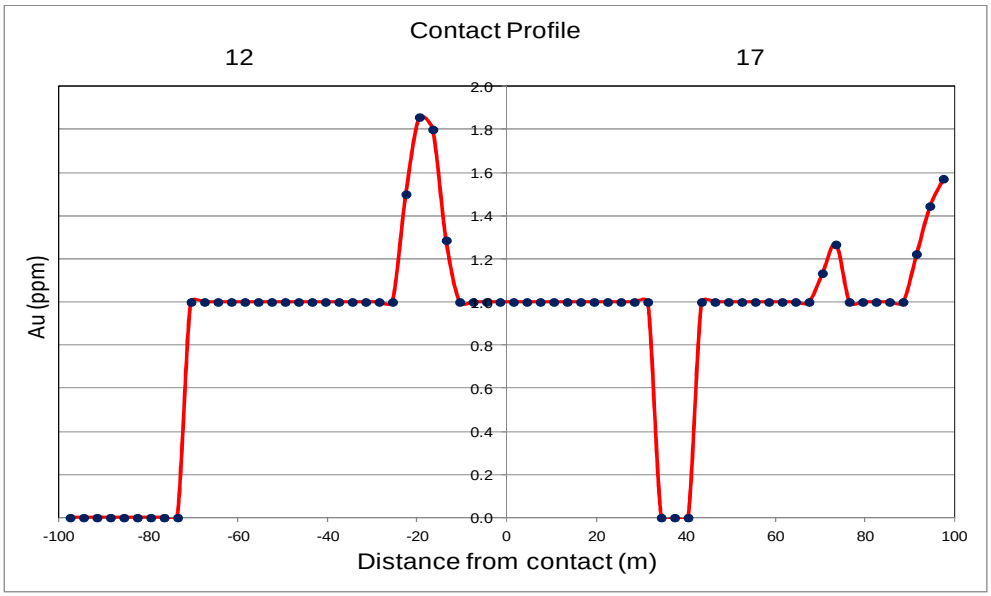

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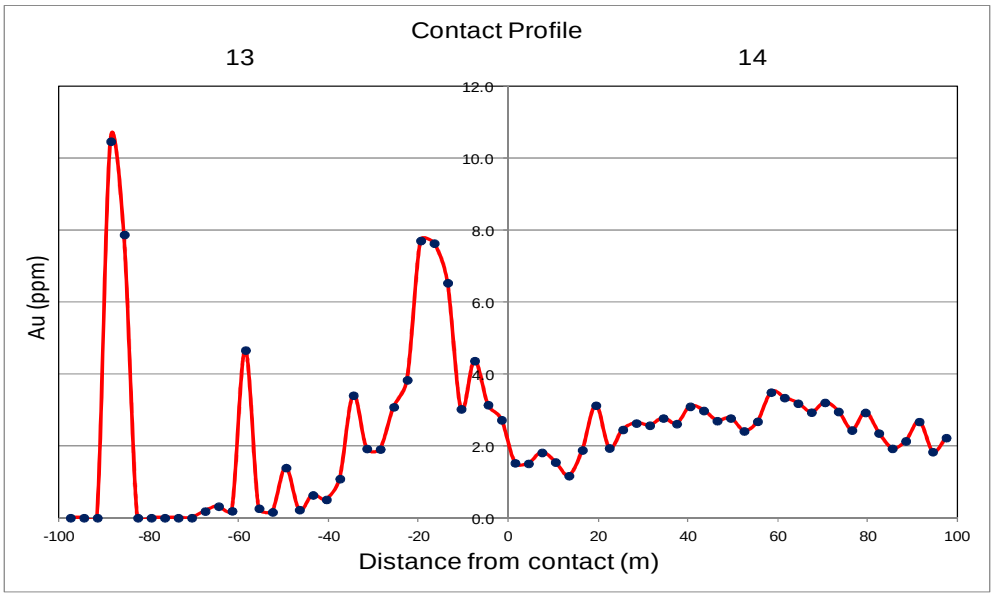

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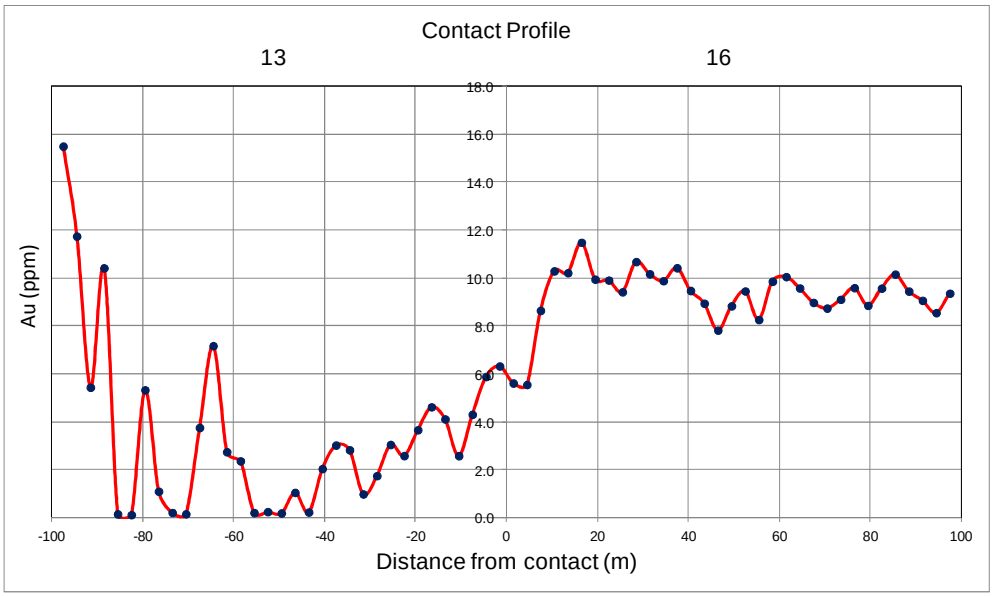

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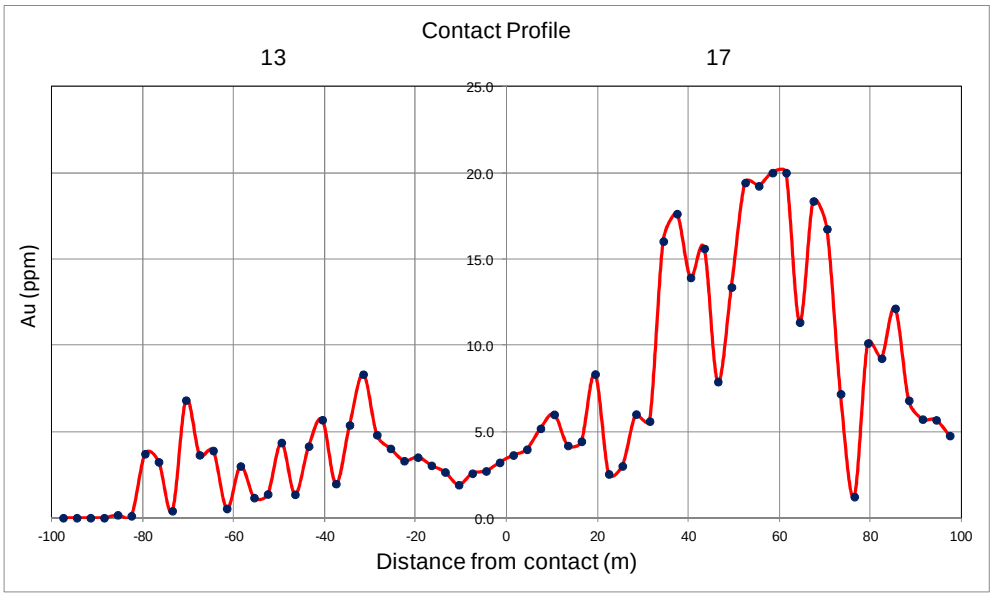

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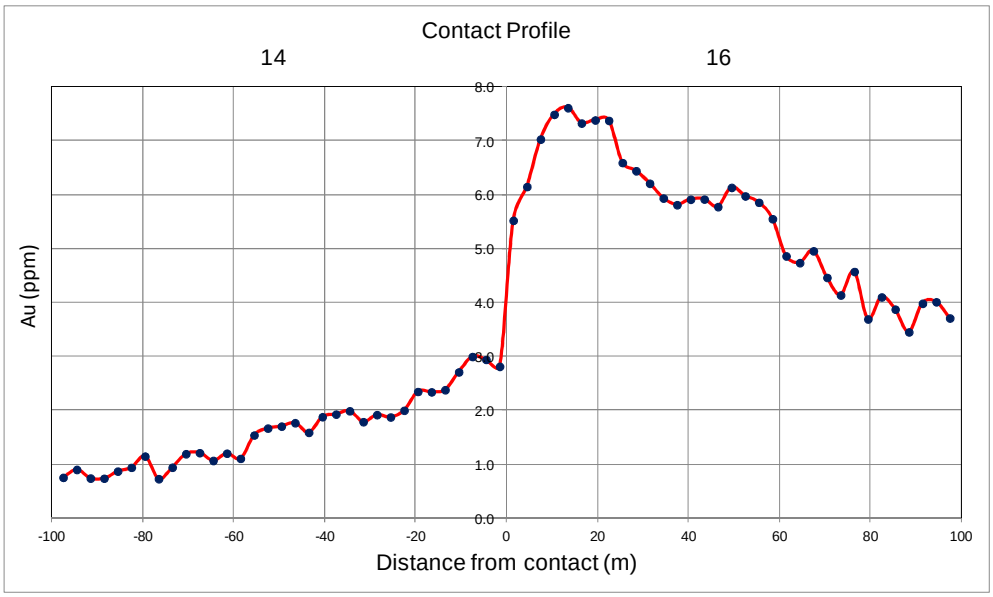

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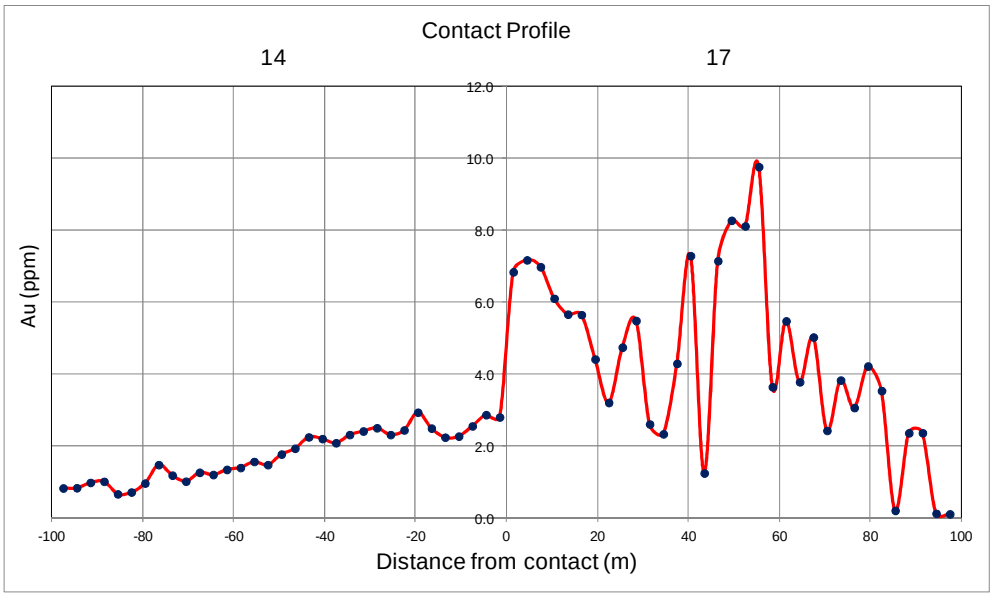

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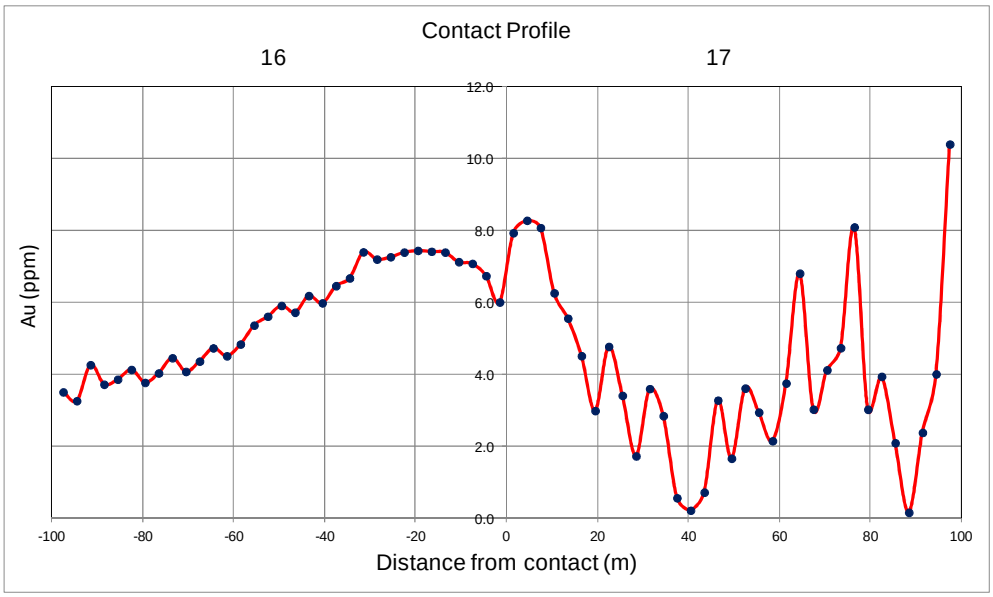


Figure 11: Contact Profile EU Au 22-23

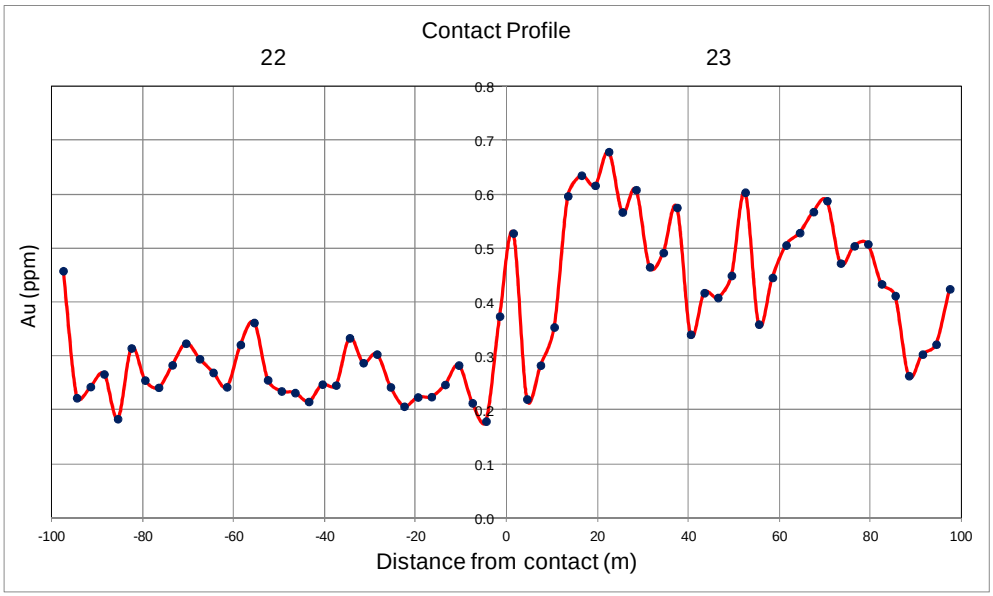
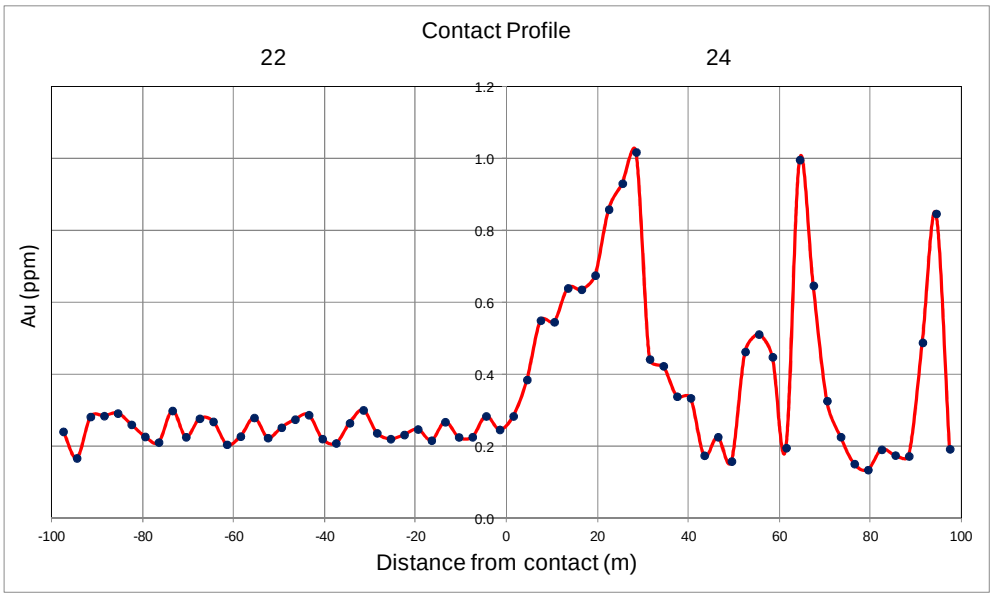


Figure 12: Contact Profile EU Au 22-24



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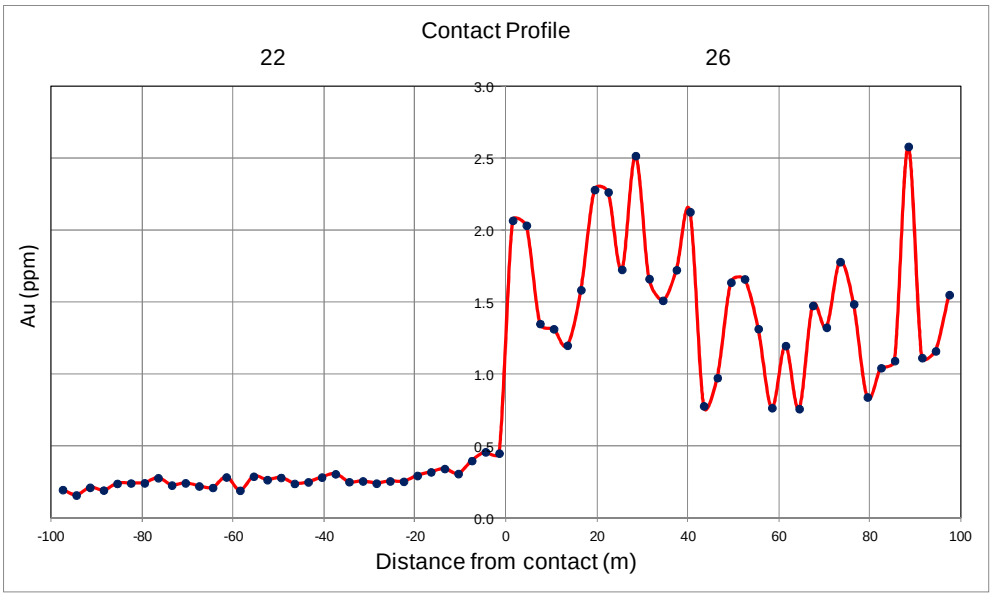

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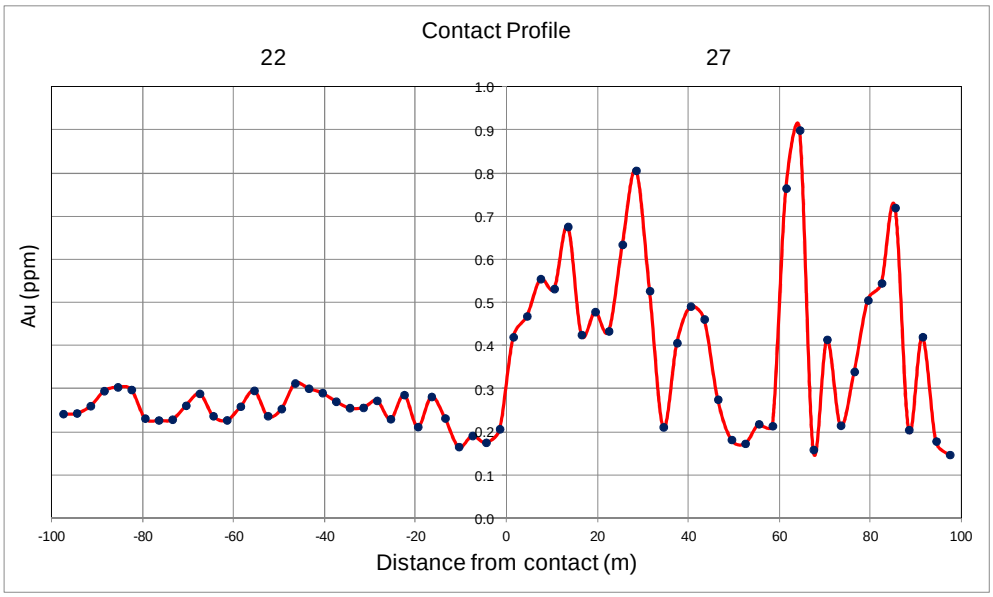

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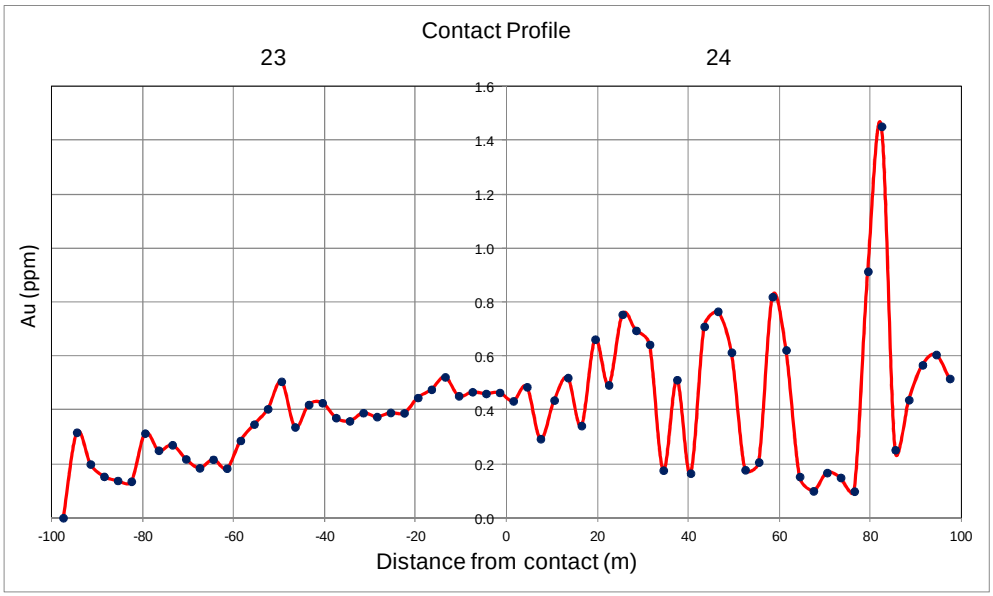

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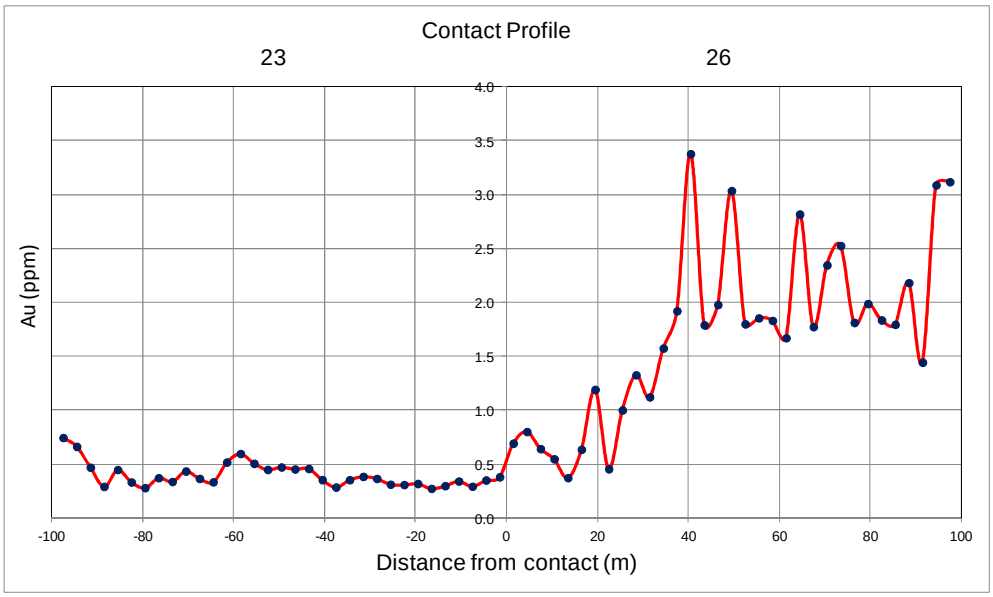

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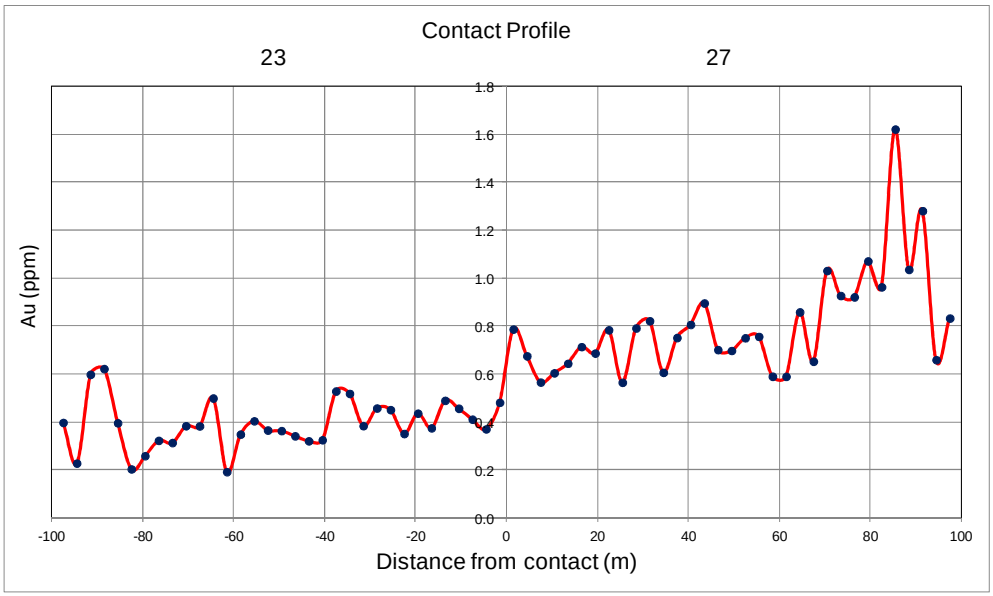

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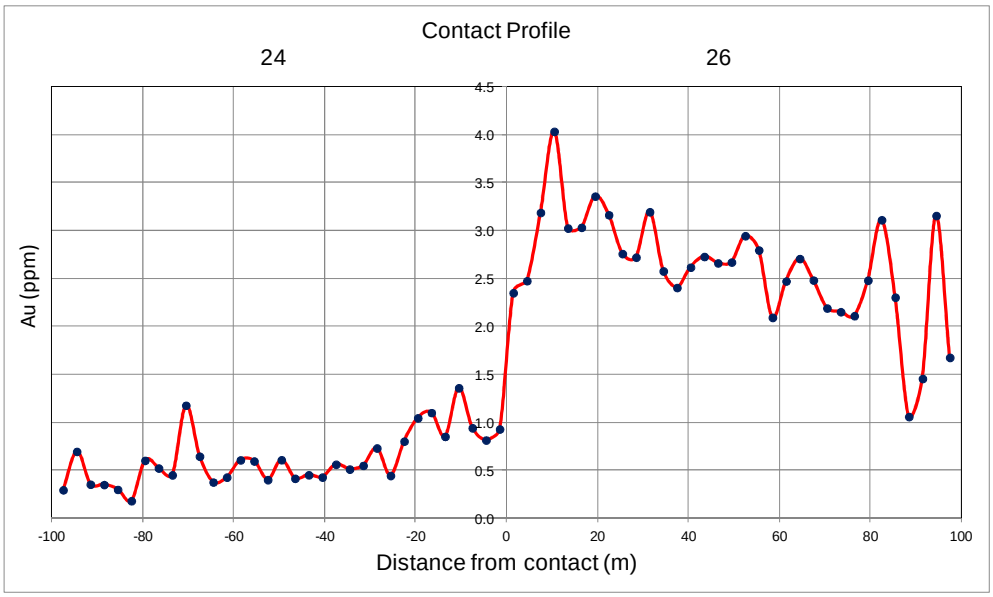

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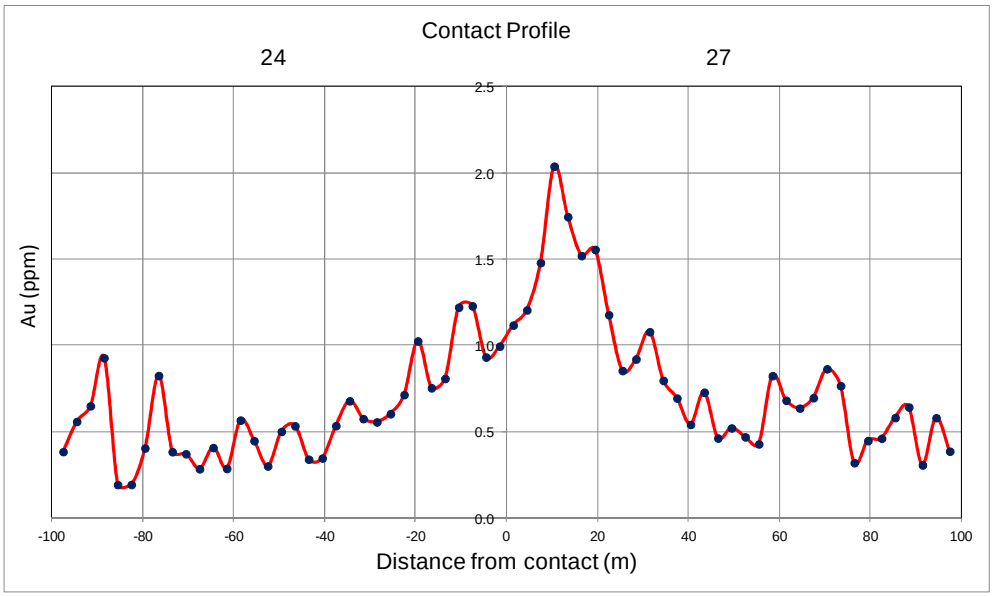

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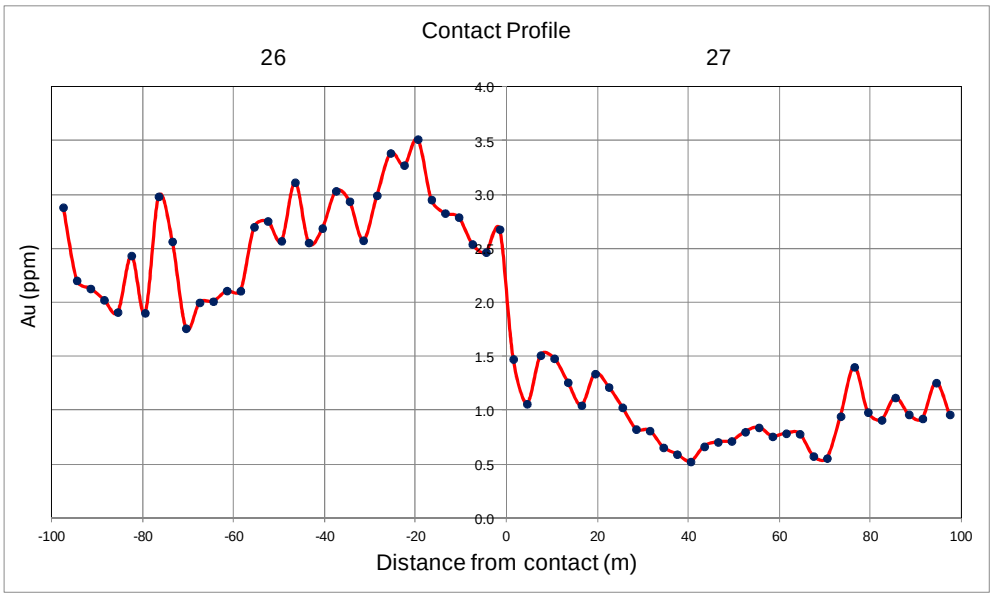

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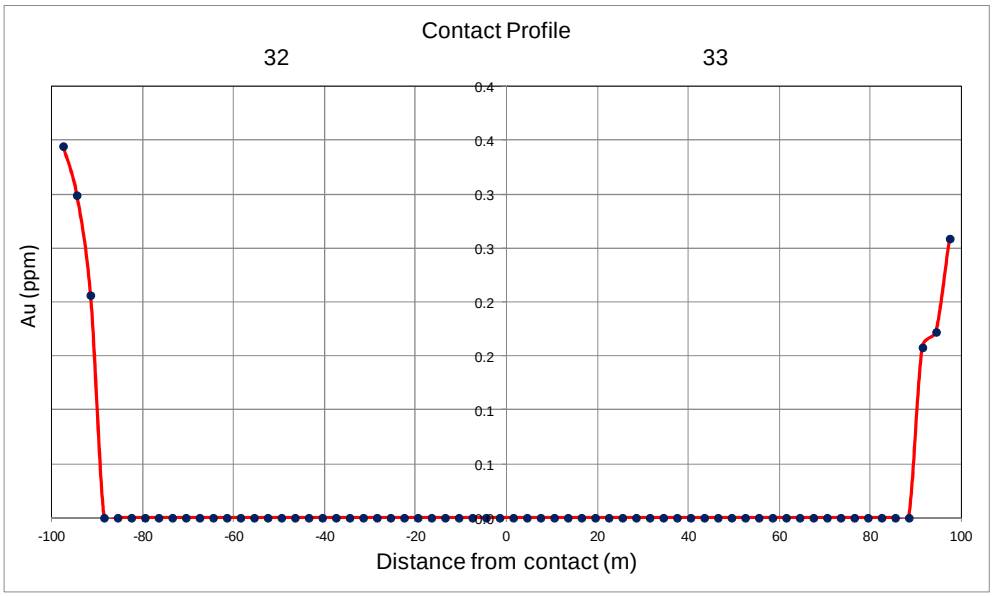

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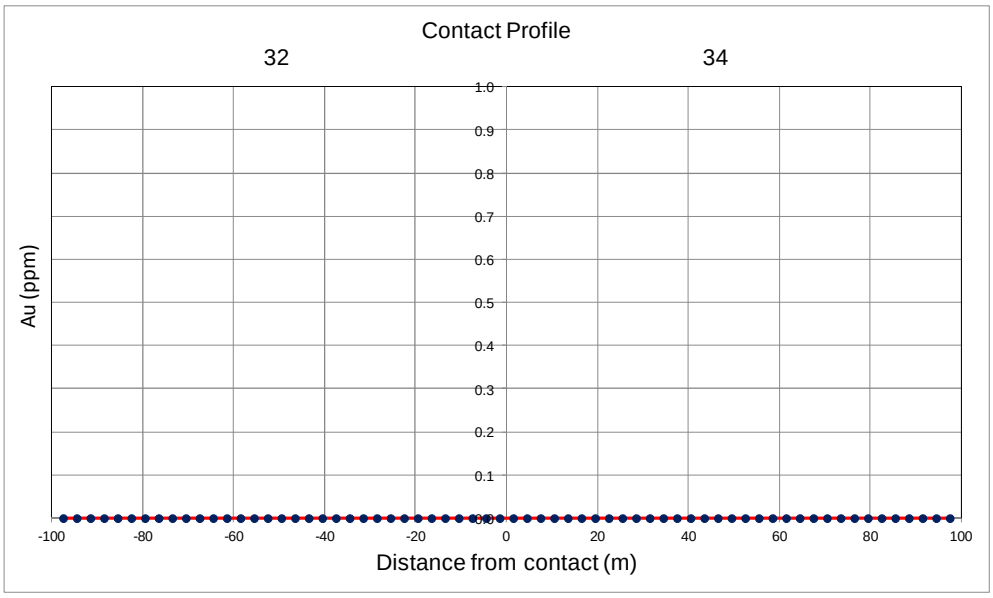


Figure 23: Contact Profile EU Au 32-36

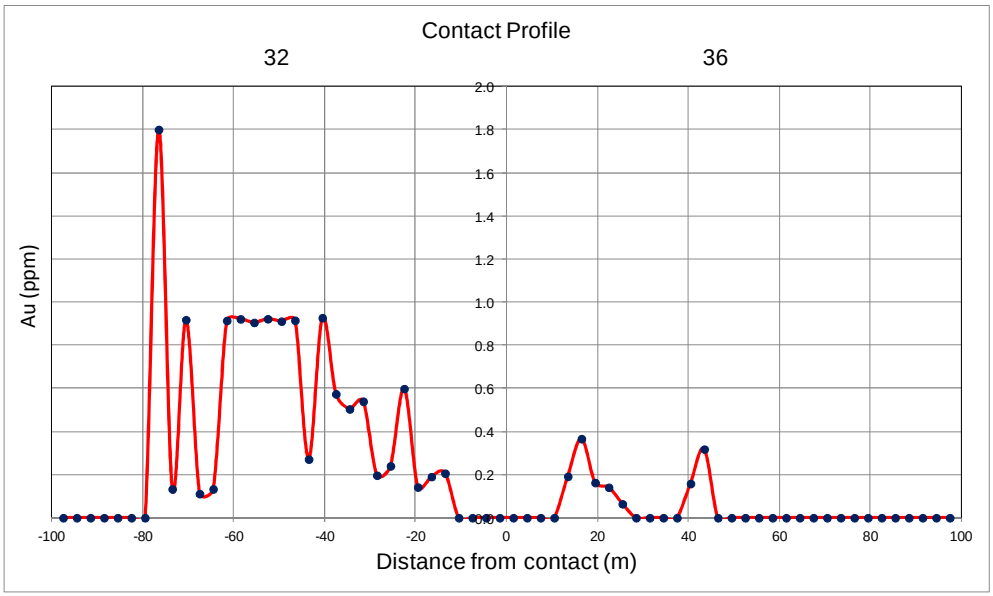


Figure 24: Contact Profile EU Au 32-37

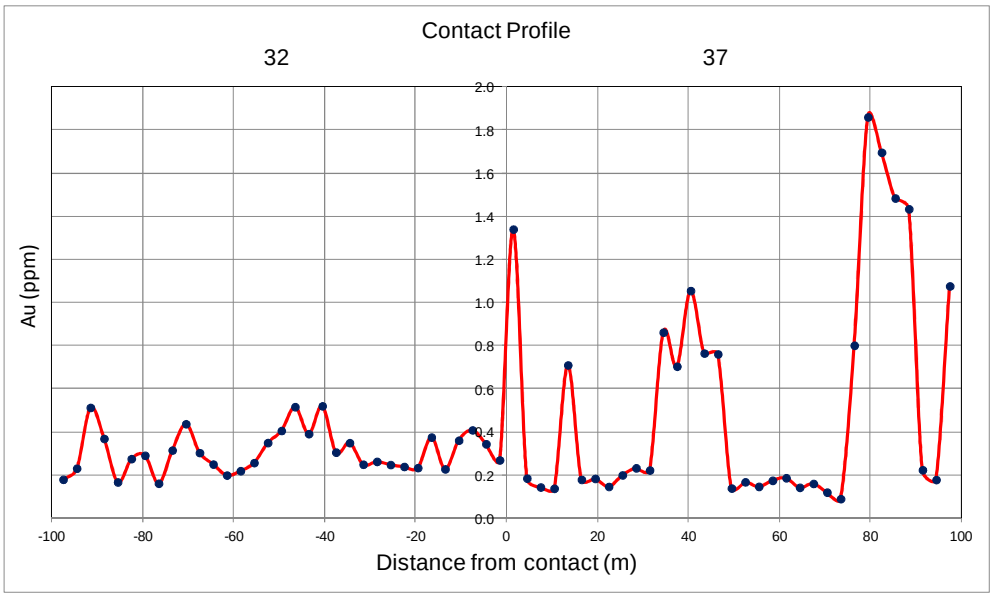


Figure 25: Contact Profile EU Au 33-34

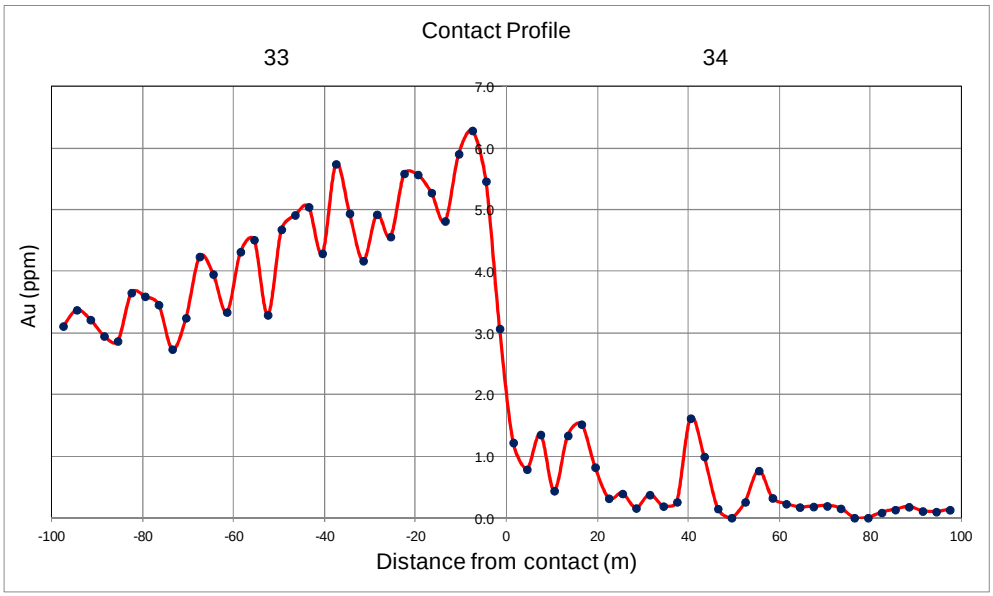


Figure 26: Contact Profile EU Au 33-36

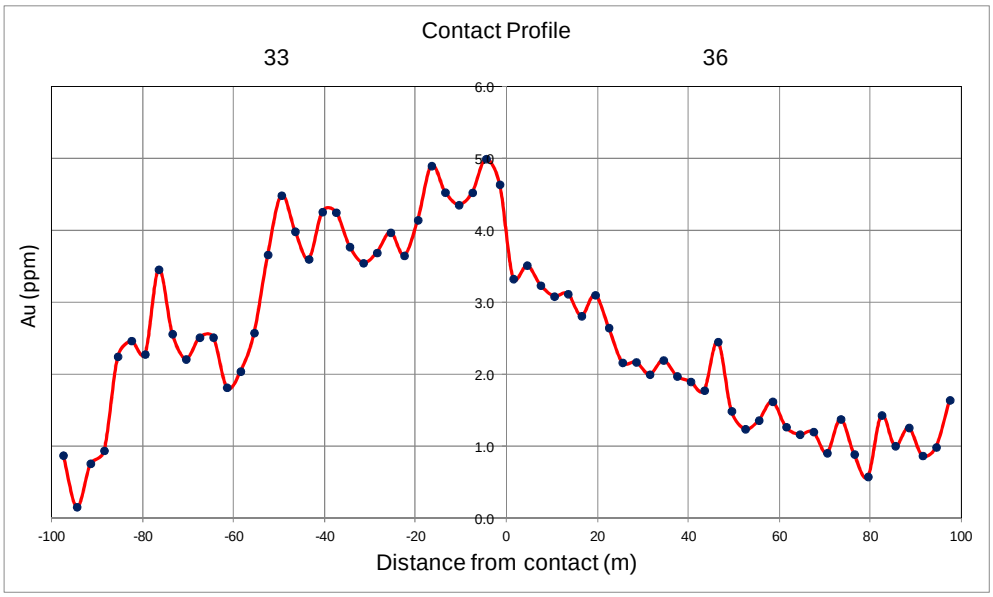


Figure 27: Contact Profile EU Au 33-37

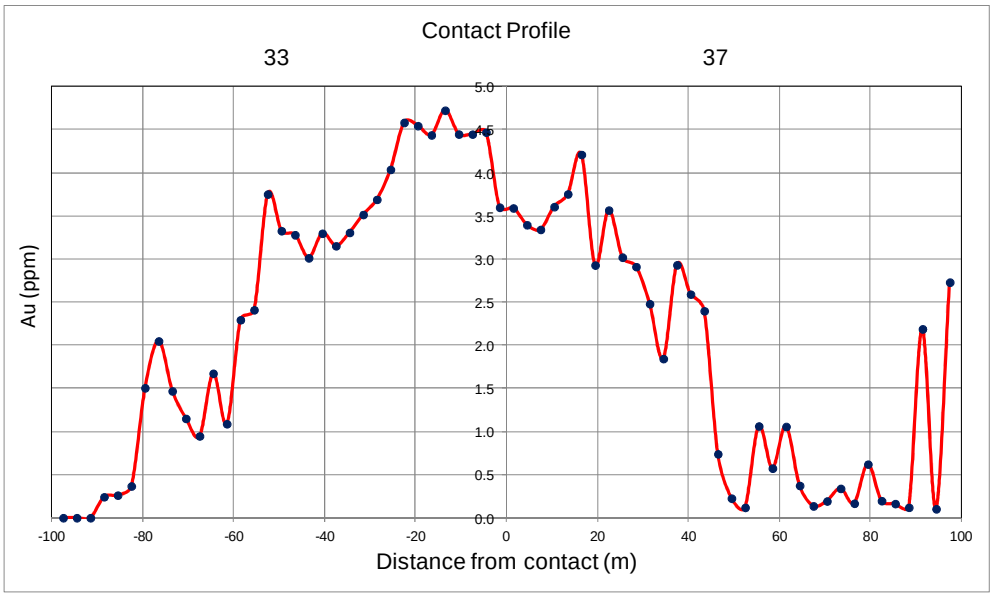


Figure 28: Contact Profile EU Au 34-36

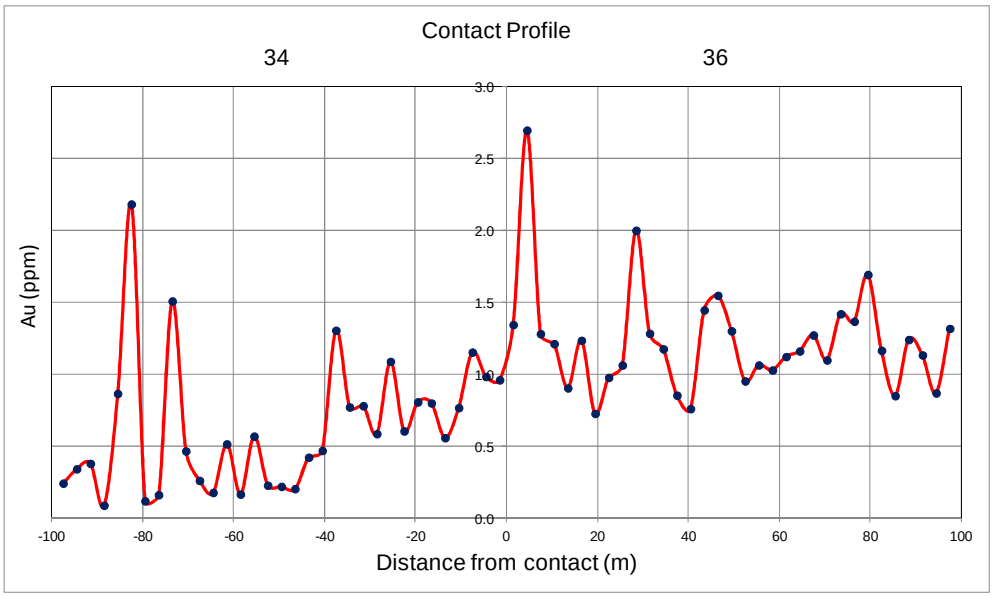


Figure 29: Contact Profile EU Au 34-37

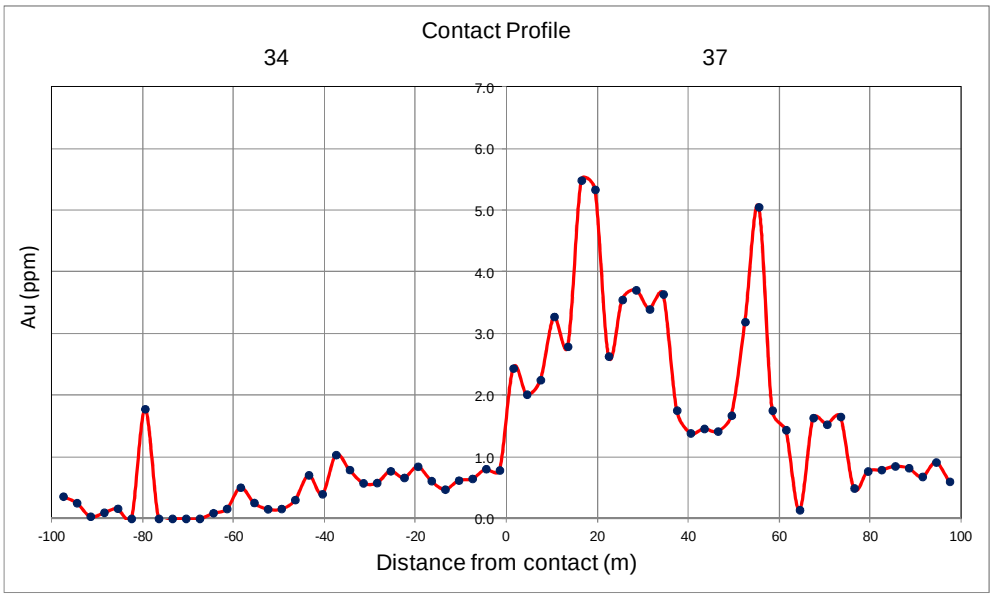
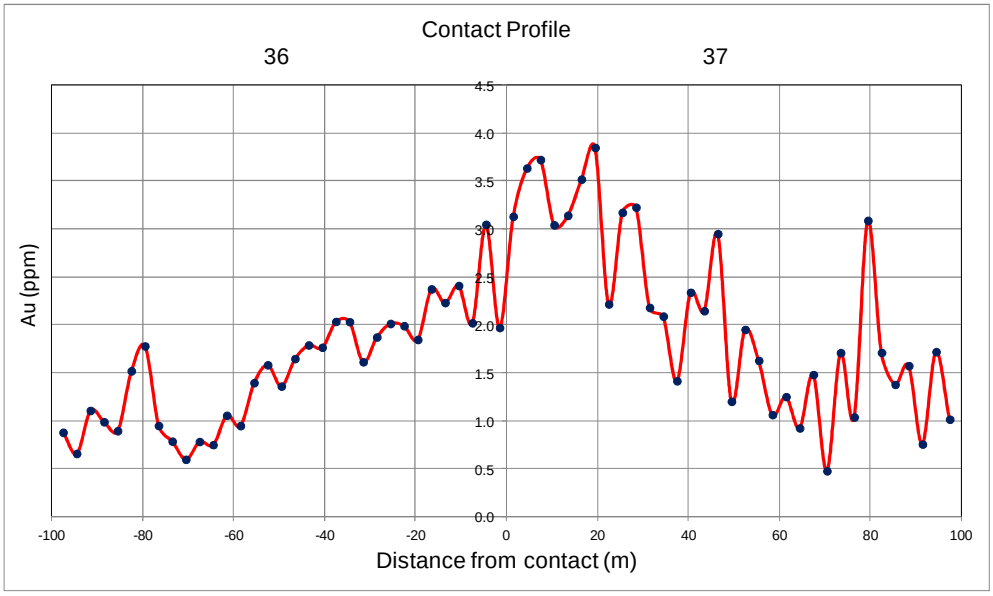


Figure 30: Contact Profile EU Au 36-37



Appendix C
Variogram Maps

Figure 1: Variogram Maps EU Au 13

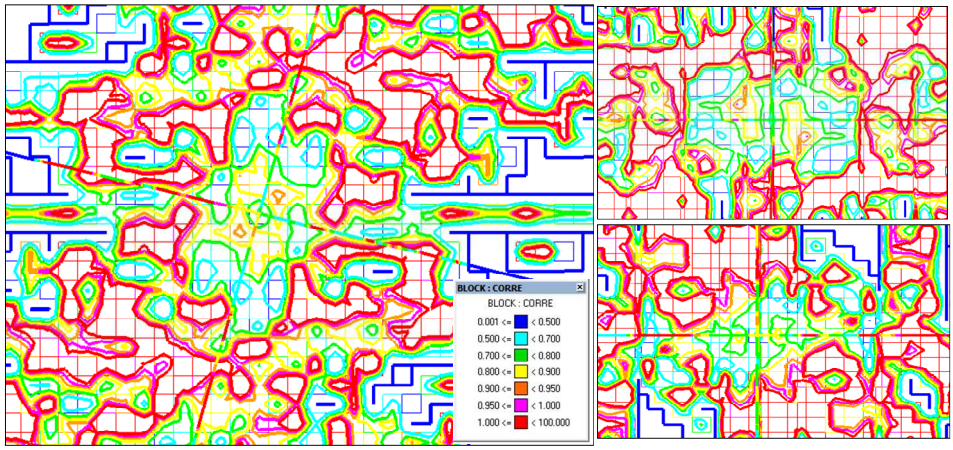


Figure 2: Variogram Maps EU Au 14

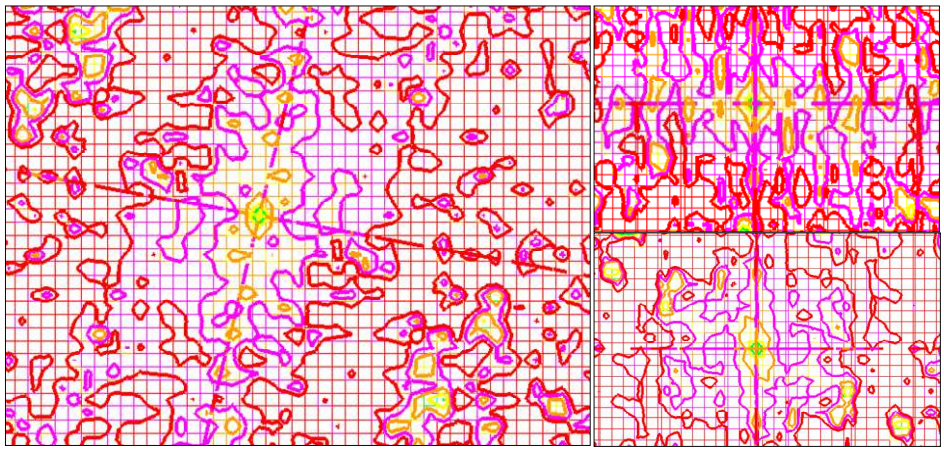


Figure 3: Variogram Maps EU Au 16

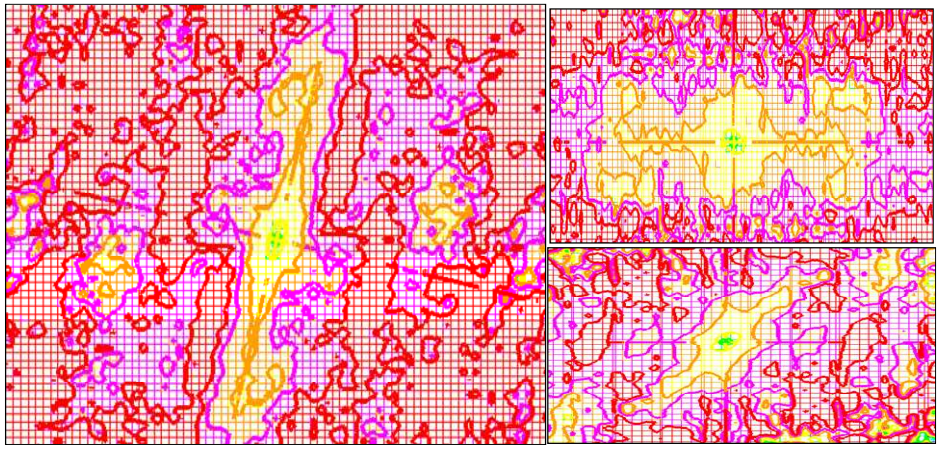


Figure 4: Variogram Maps EU Au 17

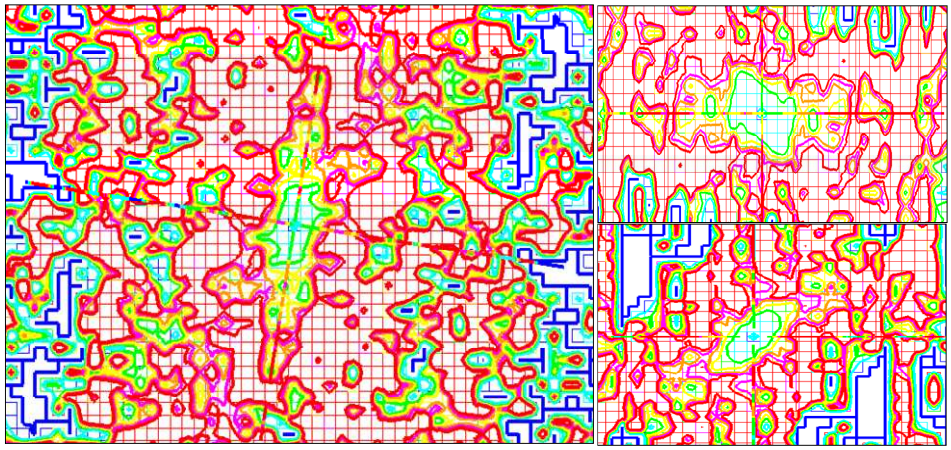


Figure 5: Variogram Maps EU Au 22

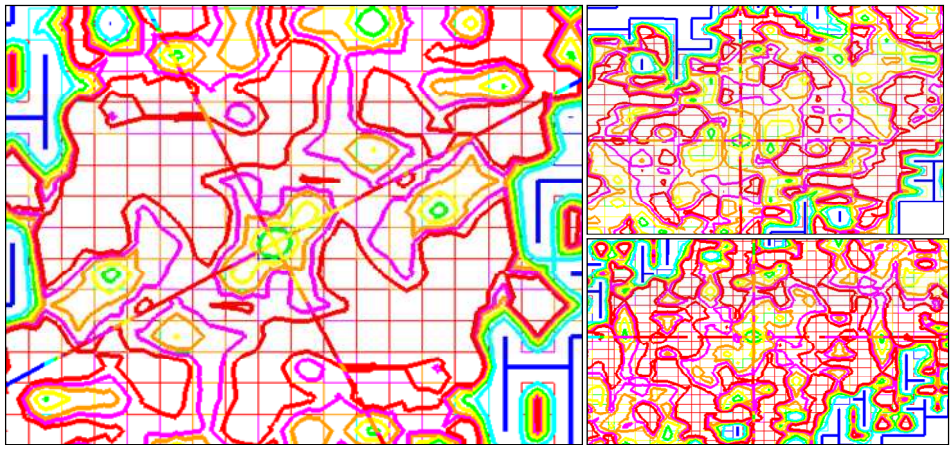


Figure 6: Variogram Maps EU Au 23

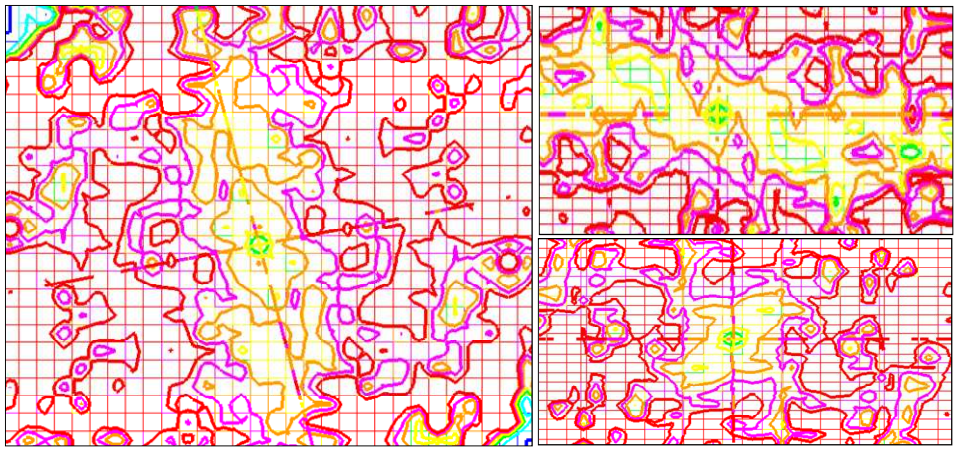


Figure 7: Variogram Maps EU Au 24

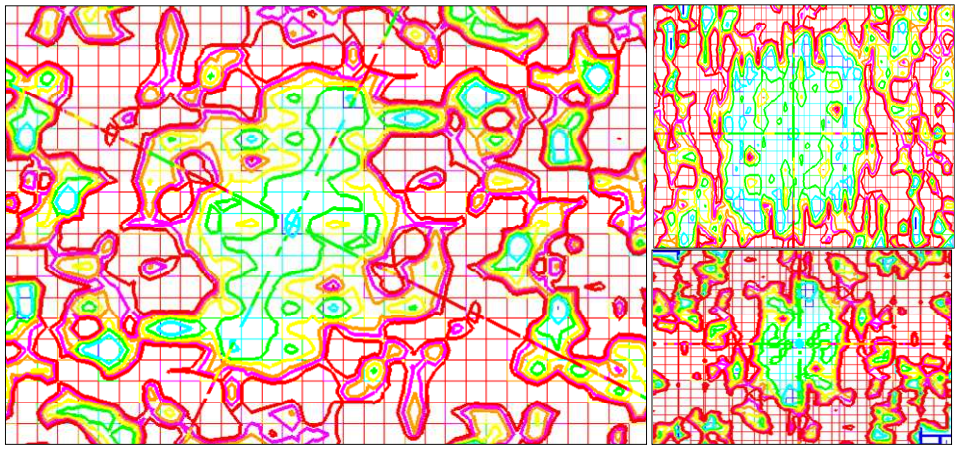


Figure 8: Variogram Maps EU Au 26

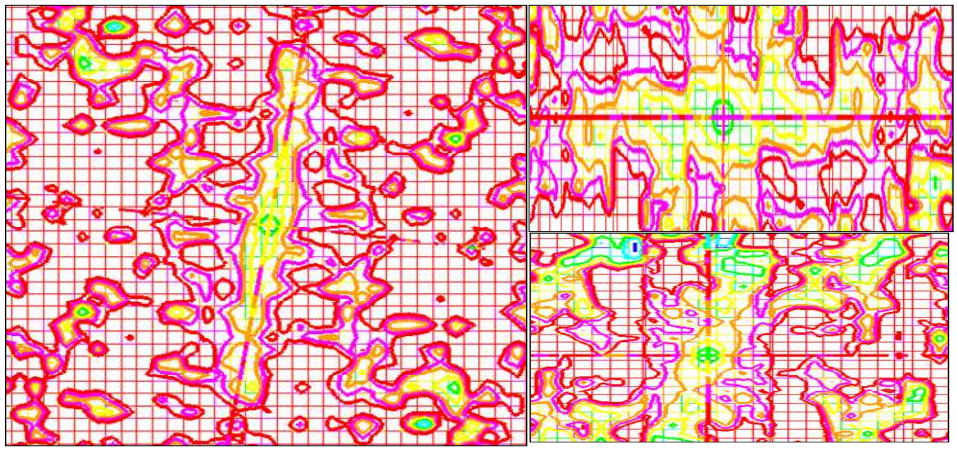


Figure 9: Variogram Maps EU Au 27

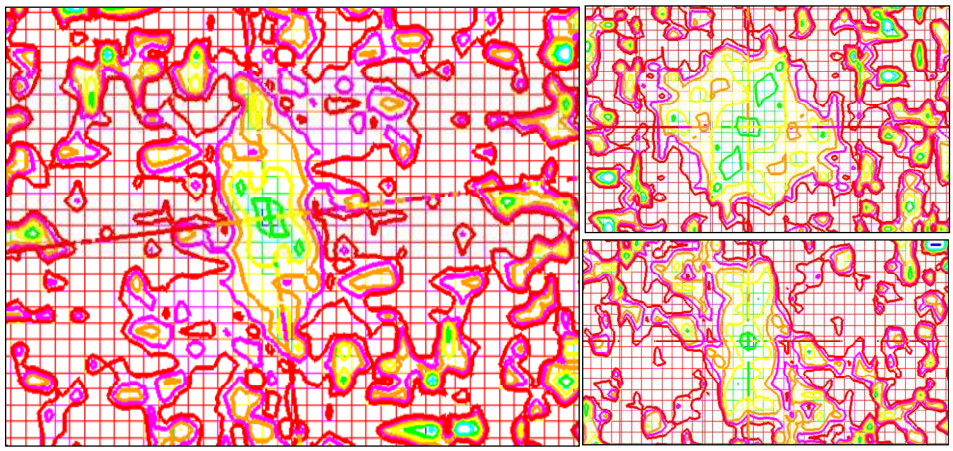


Figure 10: Variogram Maps EU Au 32

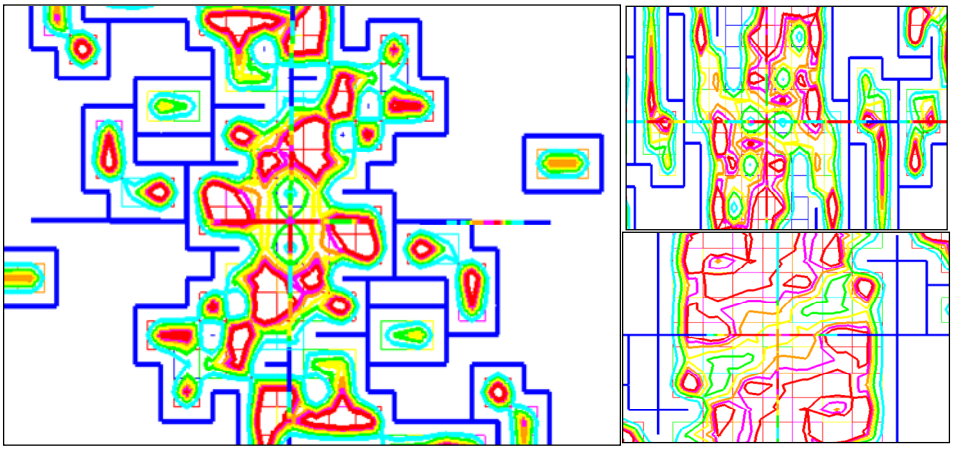


Figure 11: Variogram Maps EU Au 33

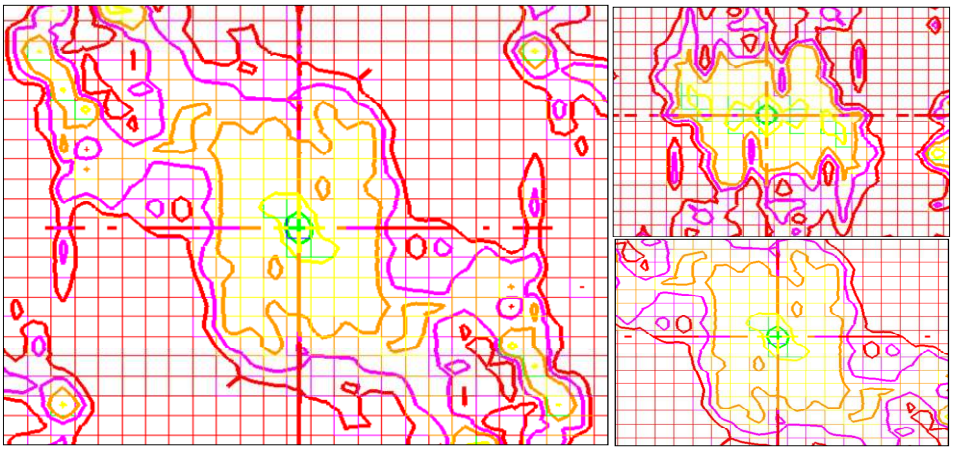


Figure 12: Variogram Maps EU Au 34

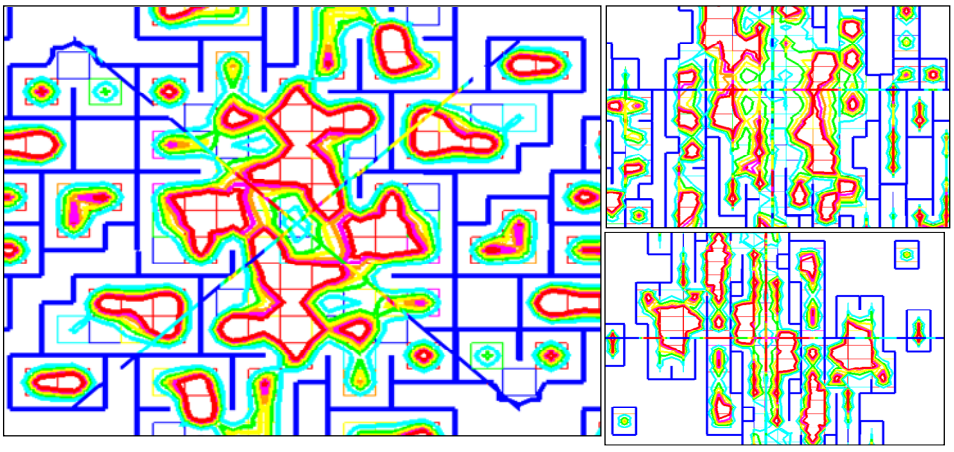


Figure 13: Variogram Maps EU Au 36

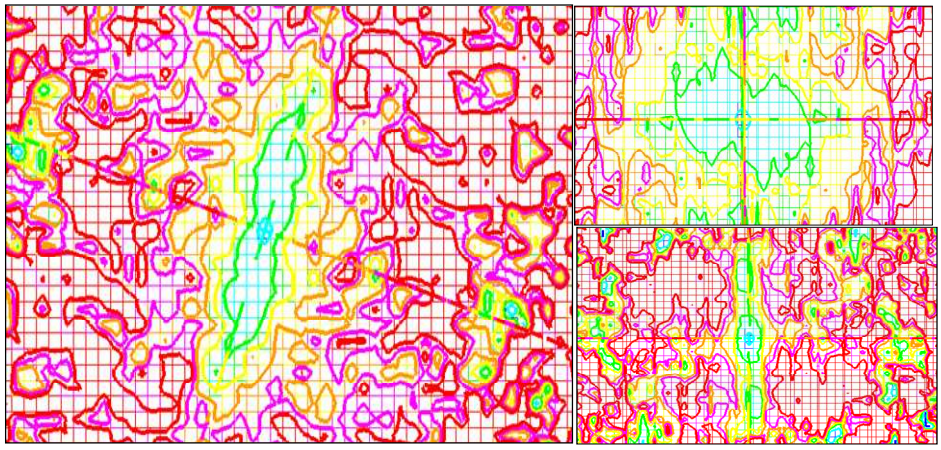


Figure 14: Variogram Maps EU Au 37

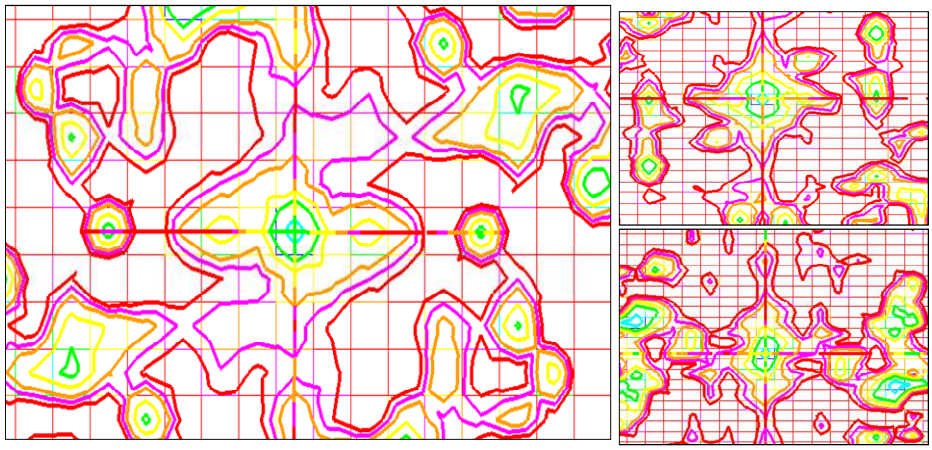


Figure 15: Variogram Maps EU Ag 14

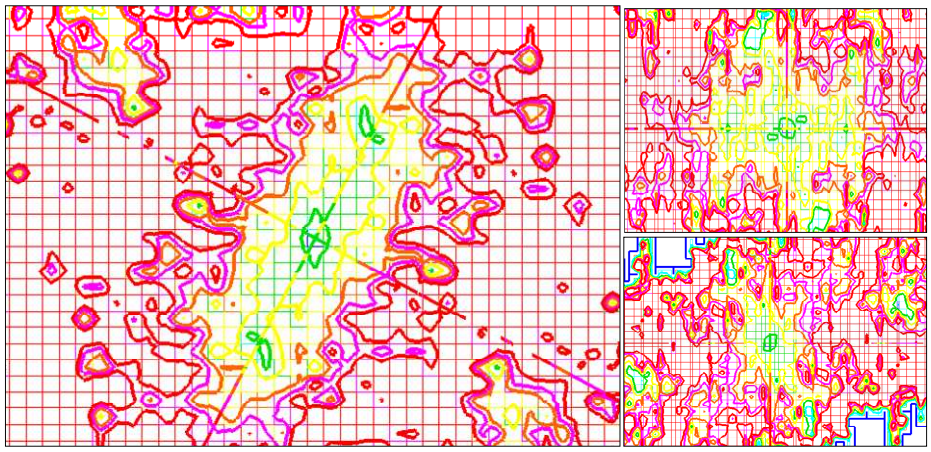


Figure 16: Variogram Maps EU Ag 16

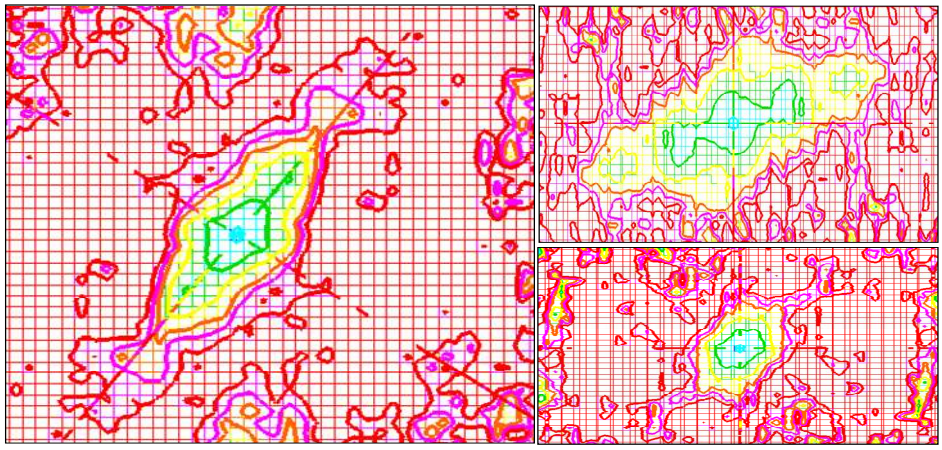


Figure 17: Variogram Maps EU Ag 17

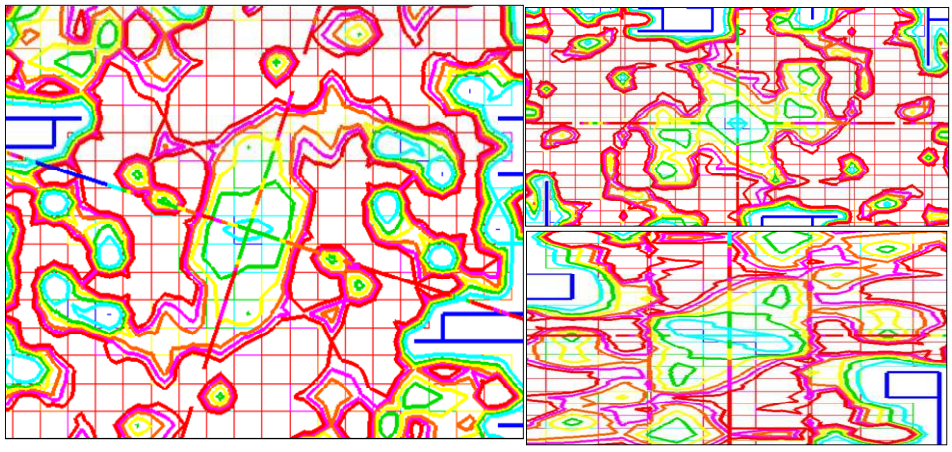


Figure 18: Variogram Maps EU Ag 22

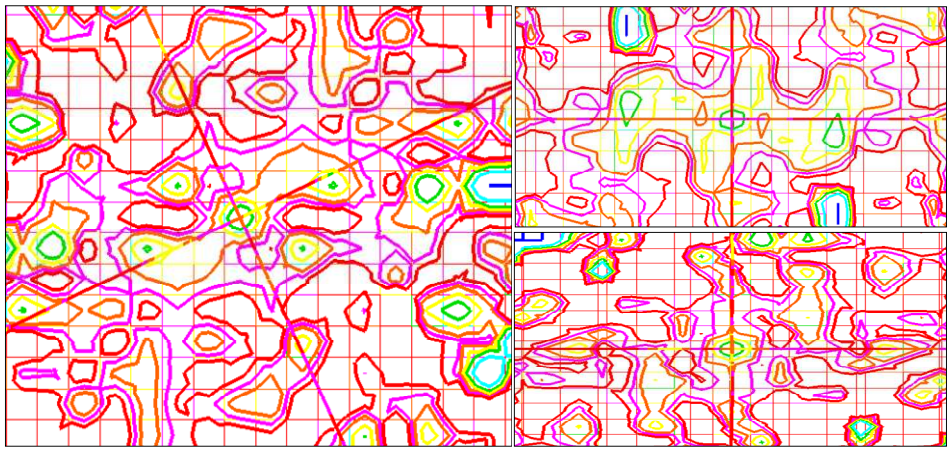


Figure 19: Variogram Maps EU Ag 23

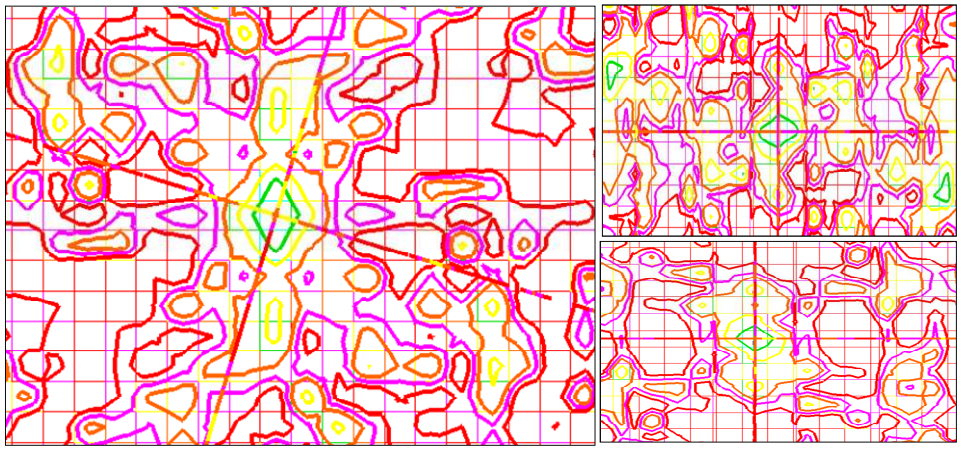


Figure 20: Variogram Maps EU Ag 24

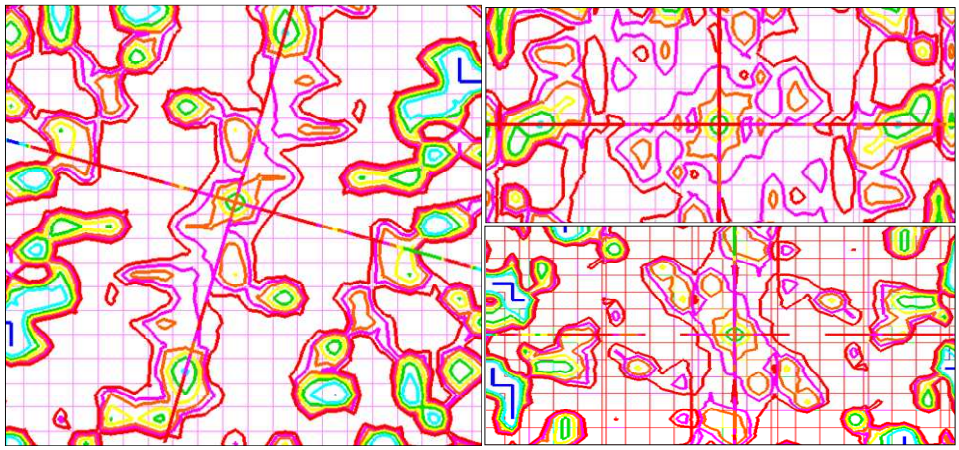


Figure 21: Variogram Maps EU Ag 26

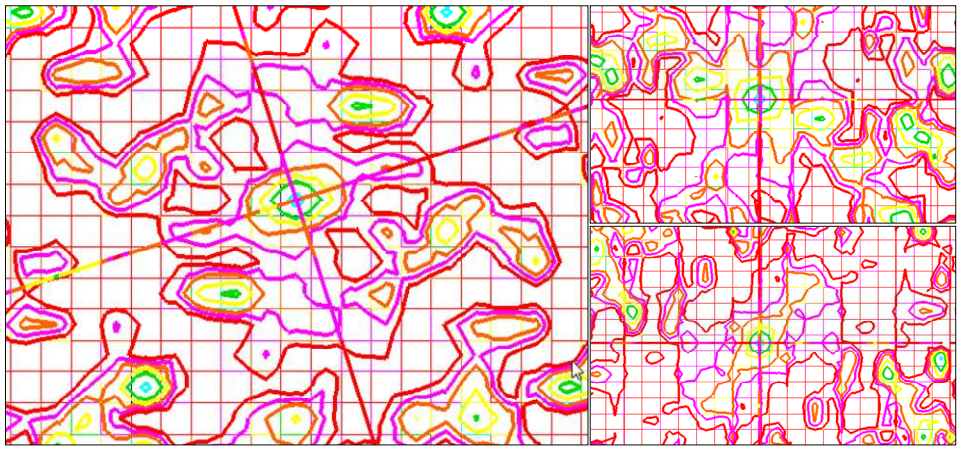


Figure 22: Variogram Maps EU Ag 27

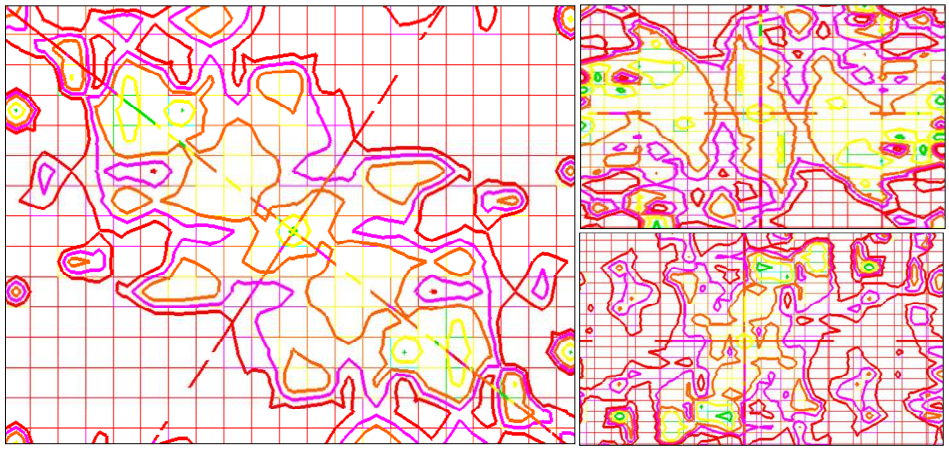


Figure 23: Variogram Maps EU Ag 32

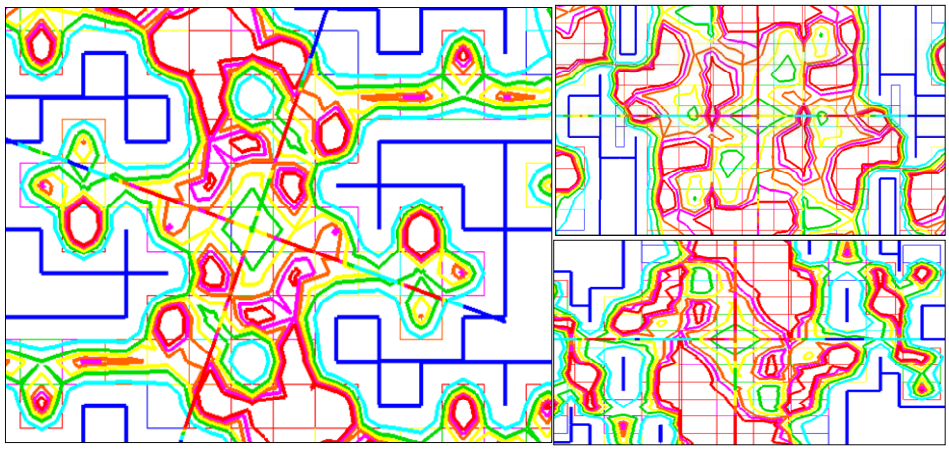


Figure 24: Variogram Maps EU Ag 33

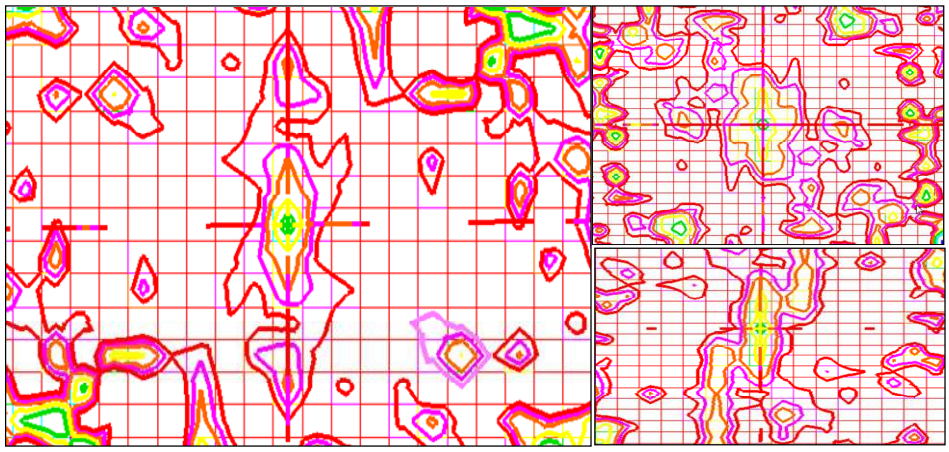


Figure 25: Variogram Maps EU Ag 36

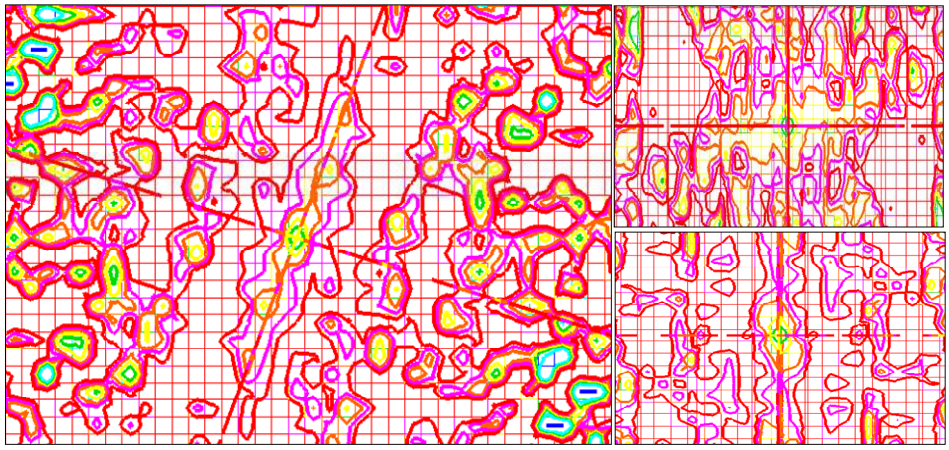
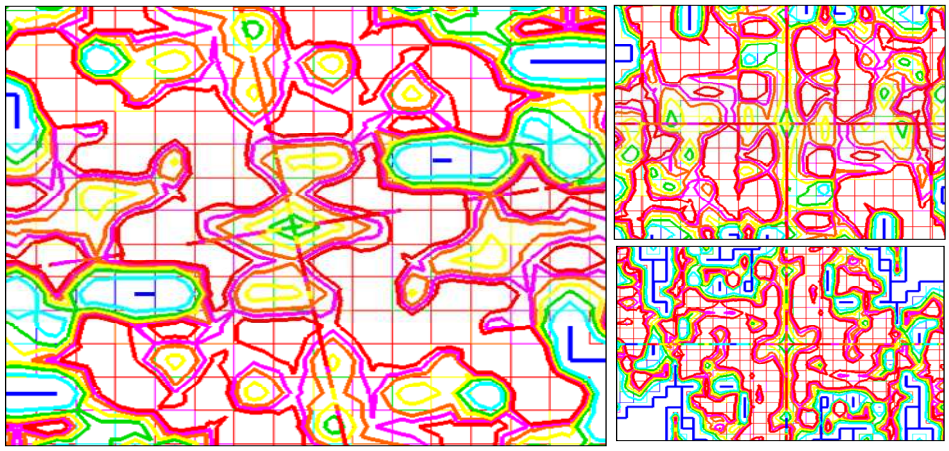


Figure 26: Variogram Maps EU Ag 37



Appendix D

Outliers

Figure 1: High grades search EU Au 12

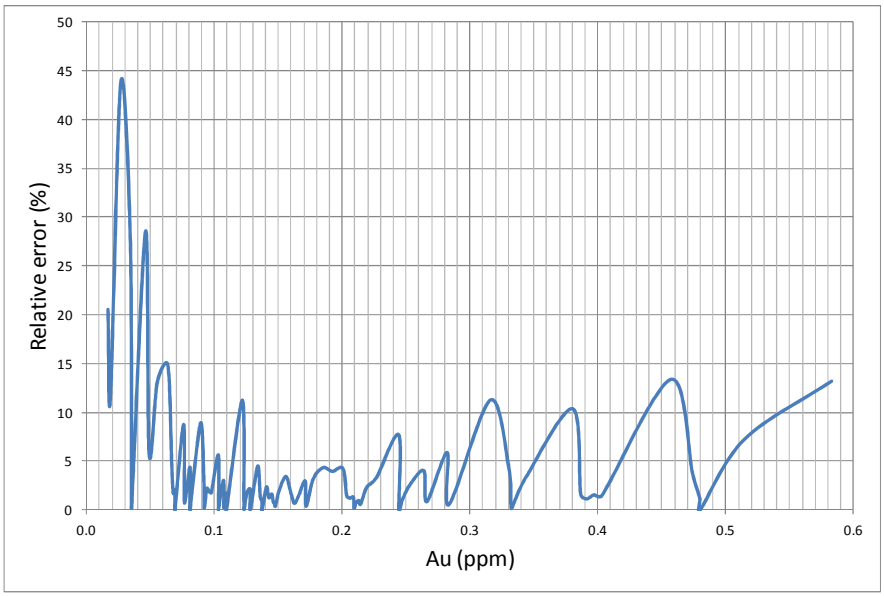


Figure 2: High grades search EU Au 13

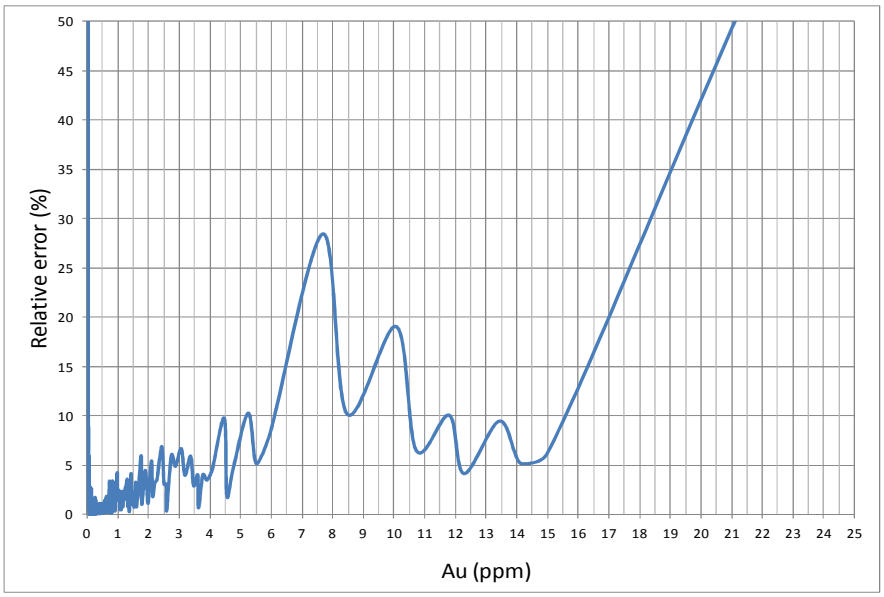


Figure 3: High grades search EU Au 14

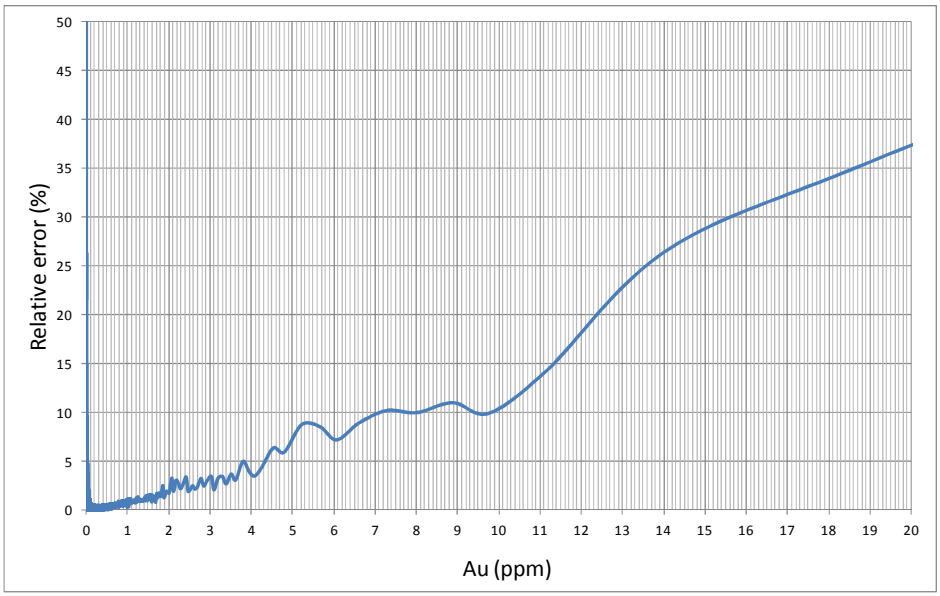


Figure 4: High grades search EU Au 16

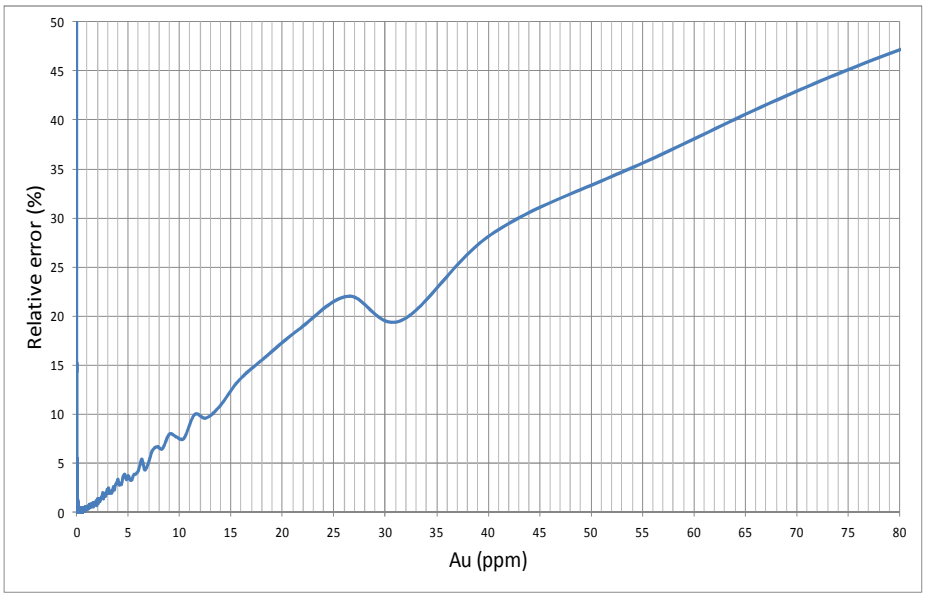


Figure 5: High grades search EU Au 17

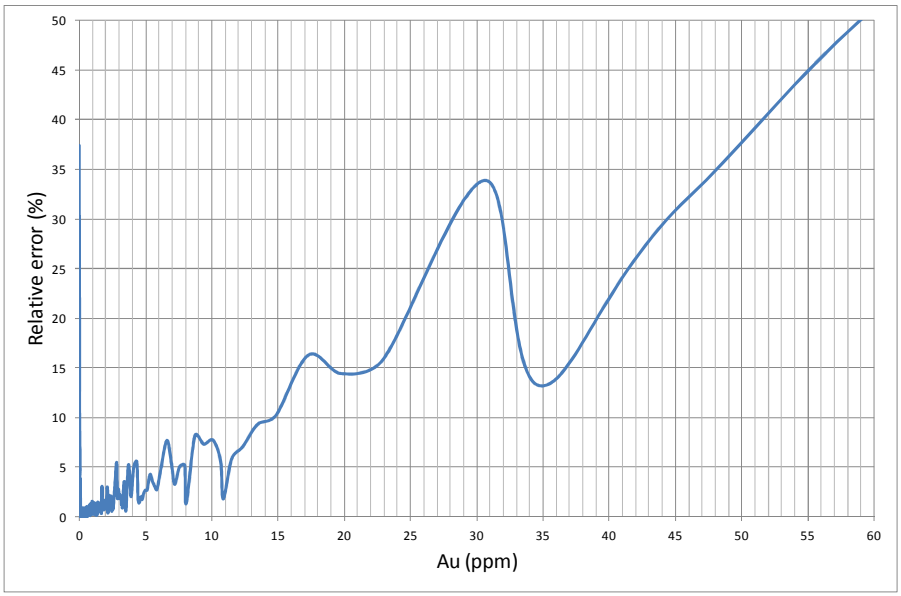


Figure 6: High grades search EU Au 22

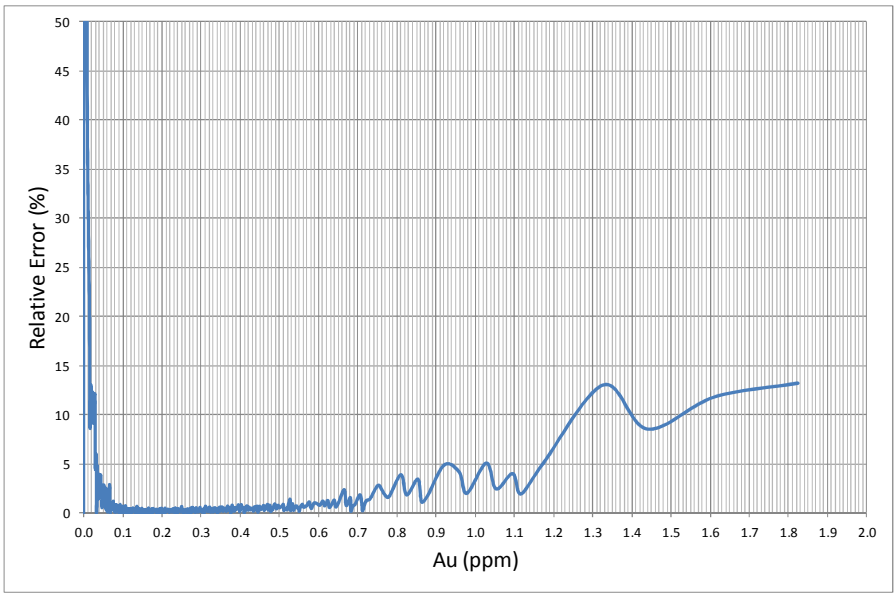


Figure 7: High grades search EU Au 23

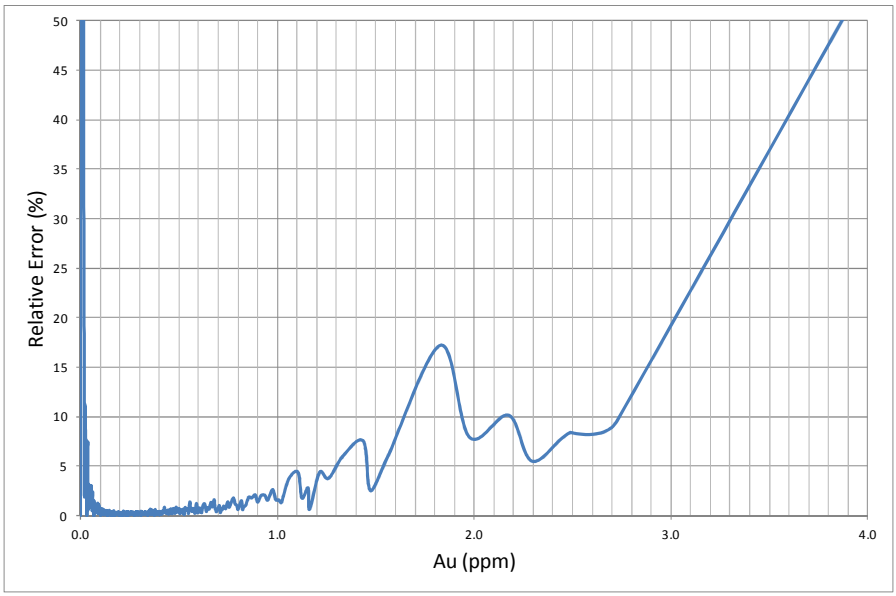


Figure 8: High grades search EU Au 24

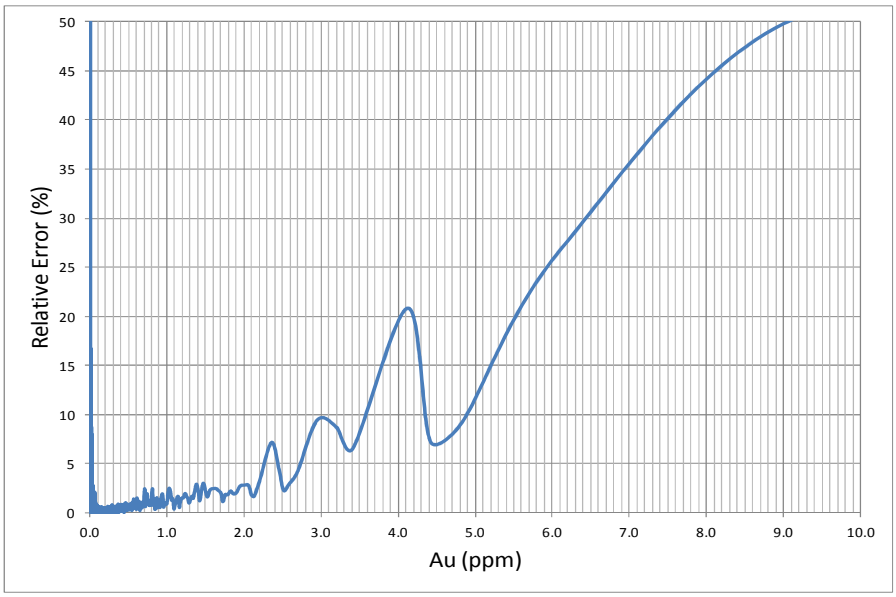


Figure 9: High grades search EU Au 26

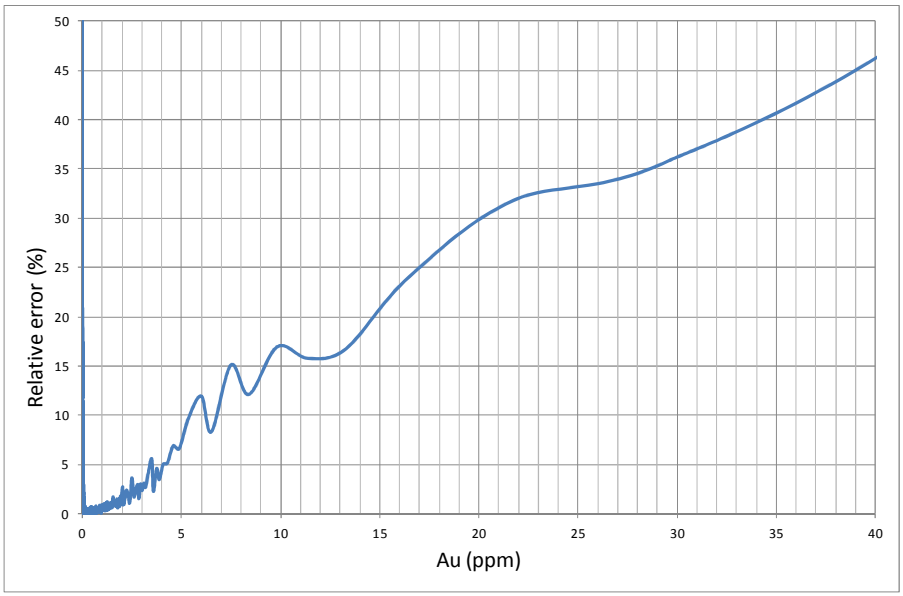


Figure 10: High grades search EU Au 27

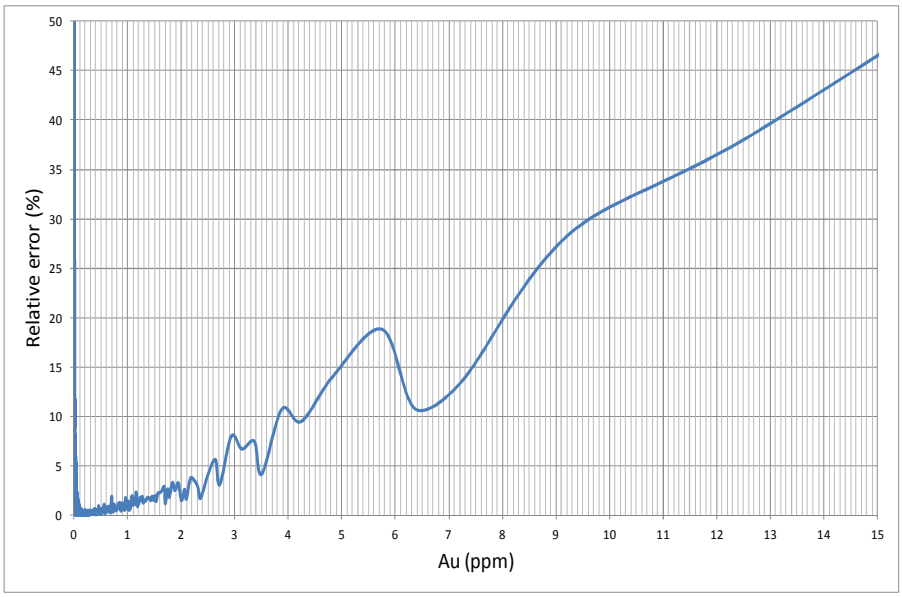


Figure 11: High grades search EU Au 32

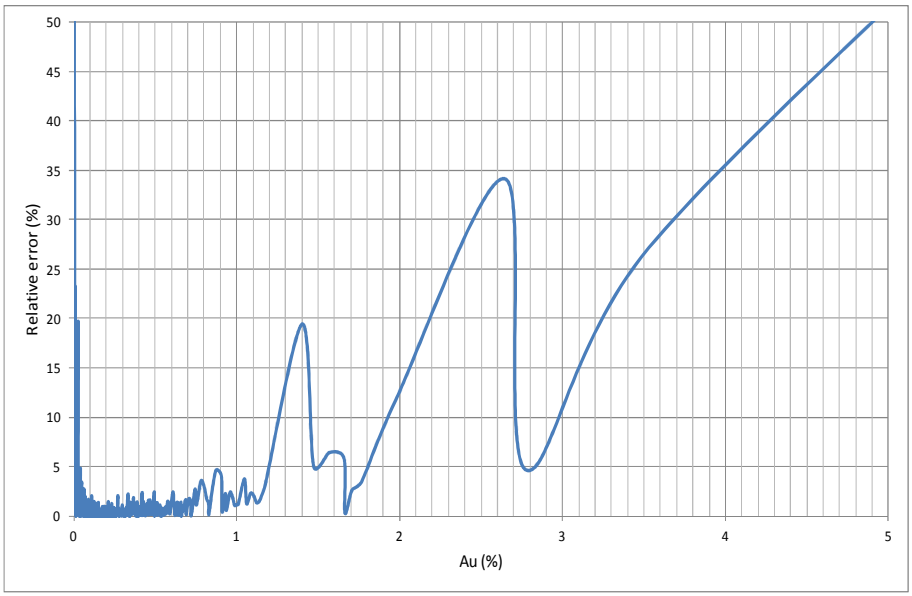


Figure 12: High grades search EU Au 33

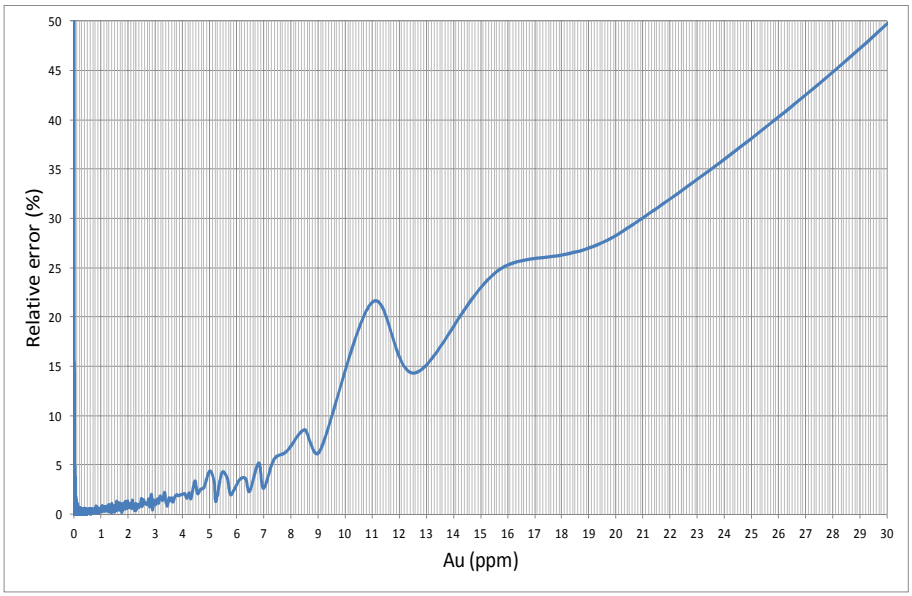


Figure 13: High grades search EU Au 34

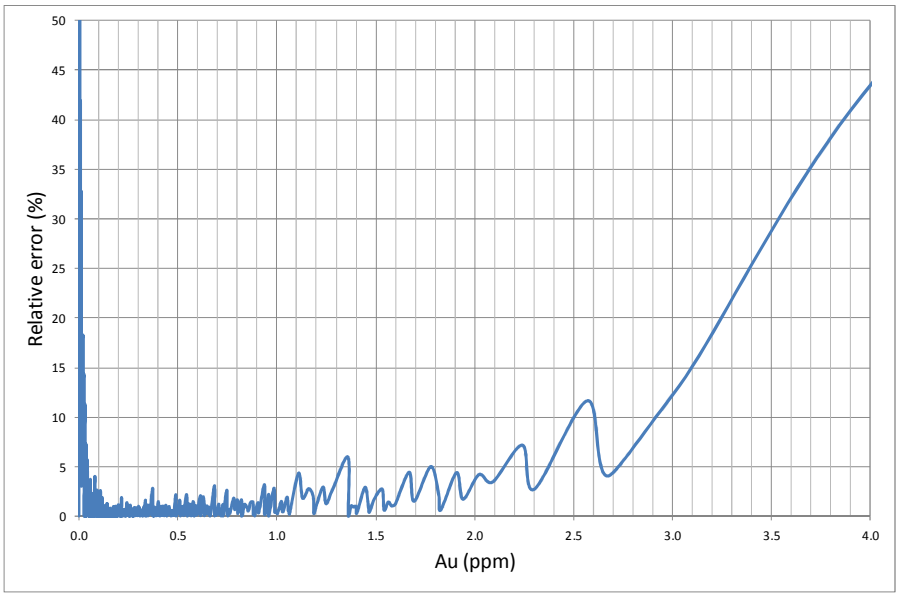


Figure 14: High grades search EU Au 36

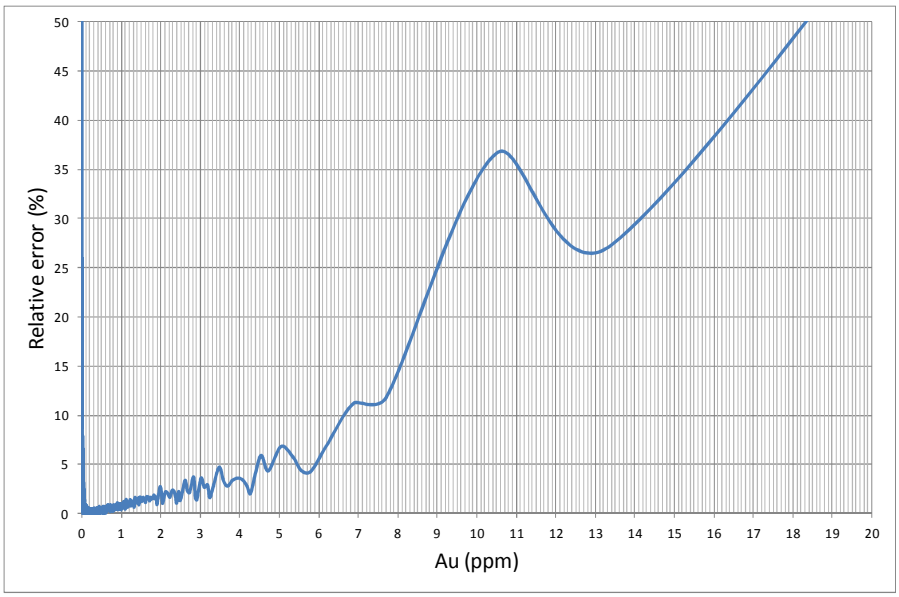


Figure 15: High grades search EU Au 37

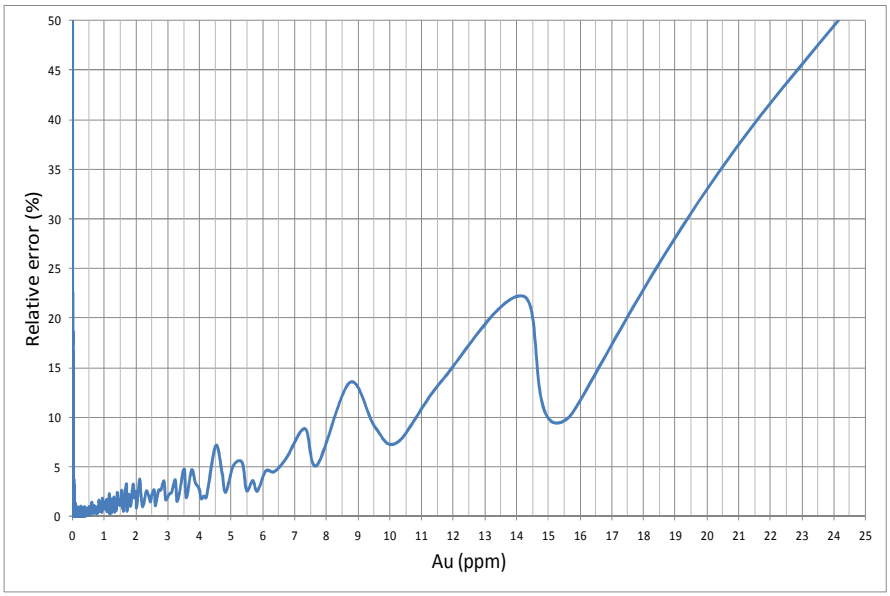


Figure 16: High grades search EU Ag 12

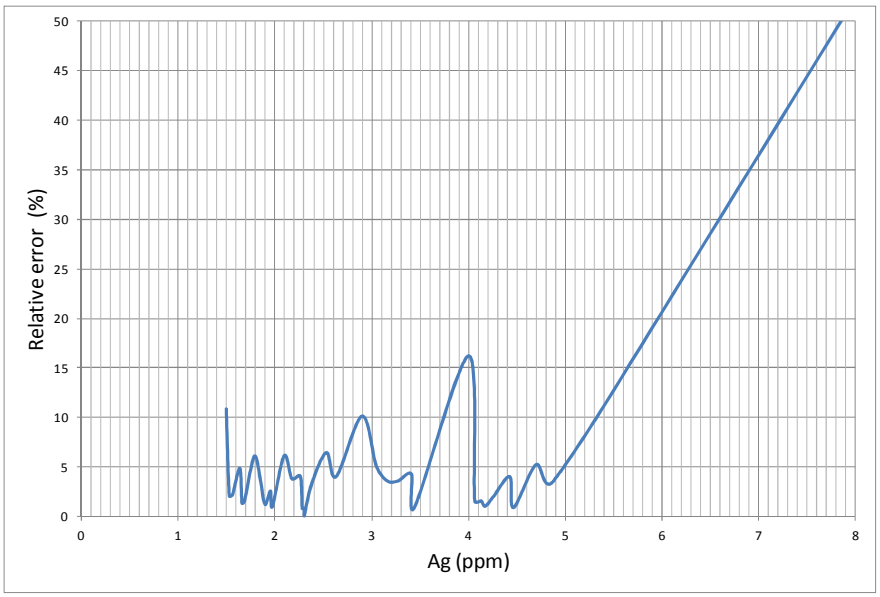


Figure 17: High grades search EU Ag 13

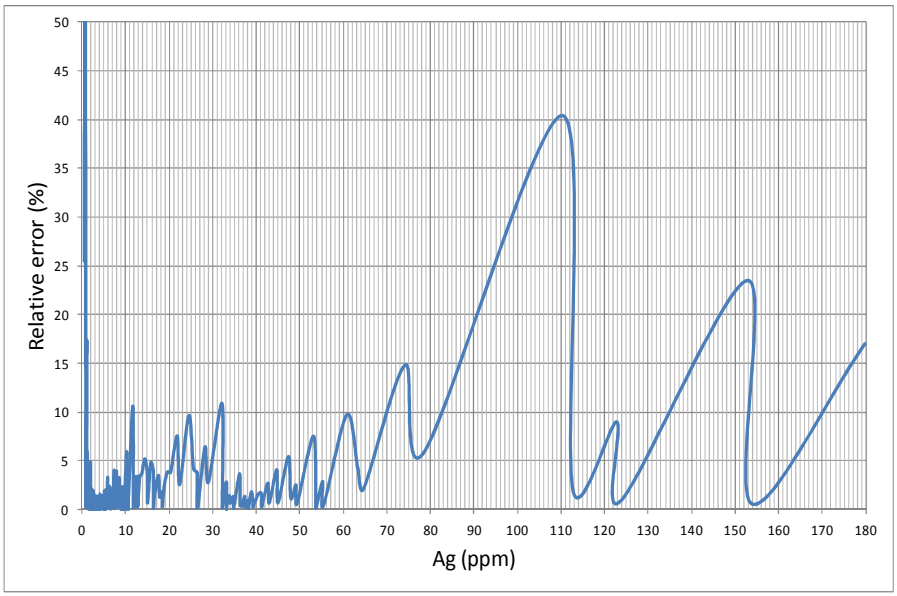


Figure 18: High grades search EU Ag 14

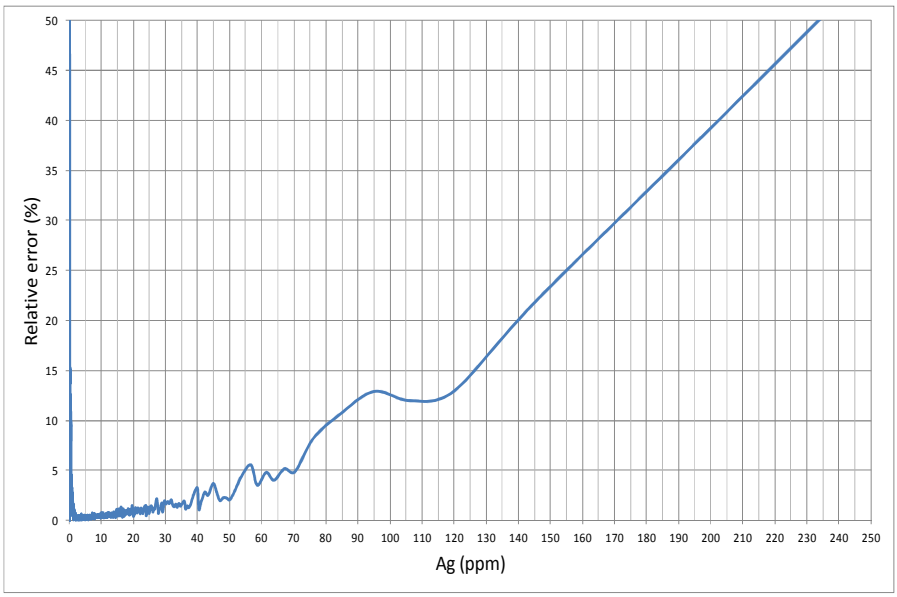


Figure 19: High grades search EU Ag 16

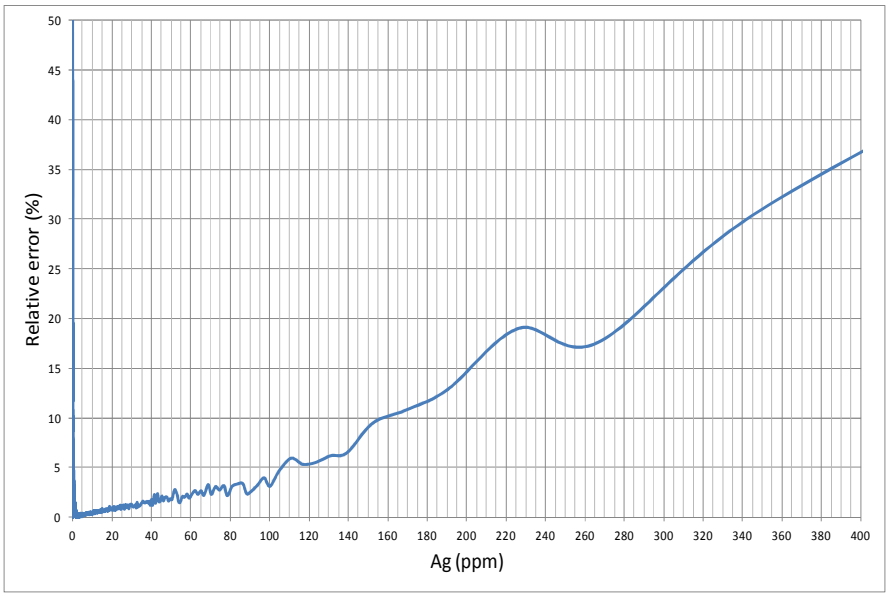


Figure 20: High grades search EU Ag 17

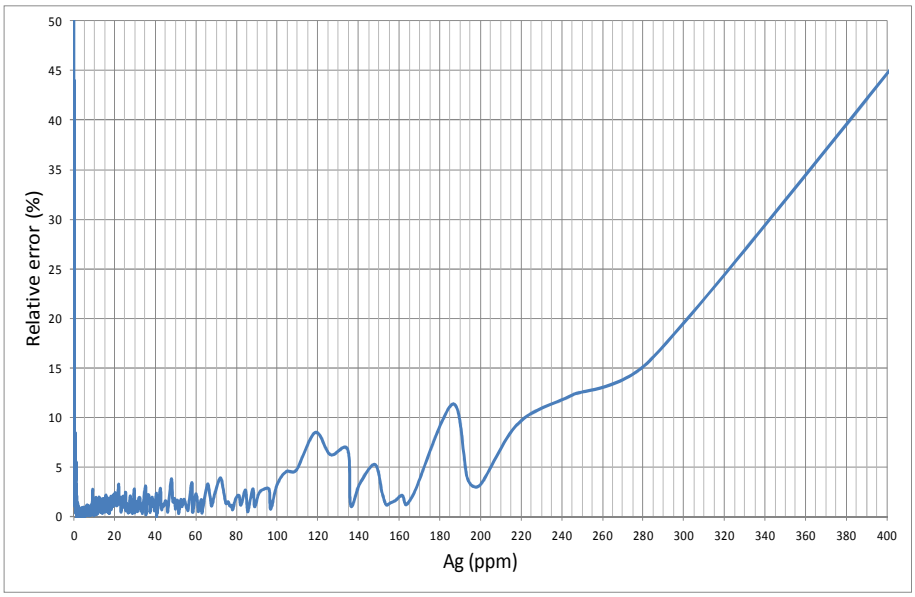


Figure 21: High grades search EU Ag 22

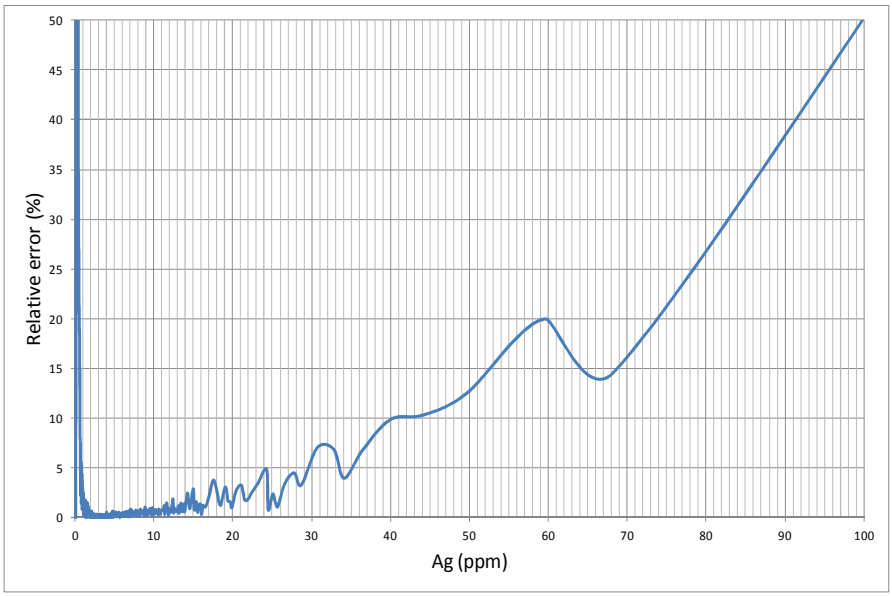


Figure 22: High grades search EU Ag 23

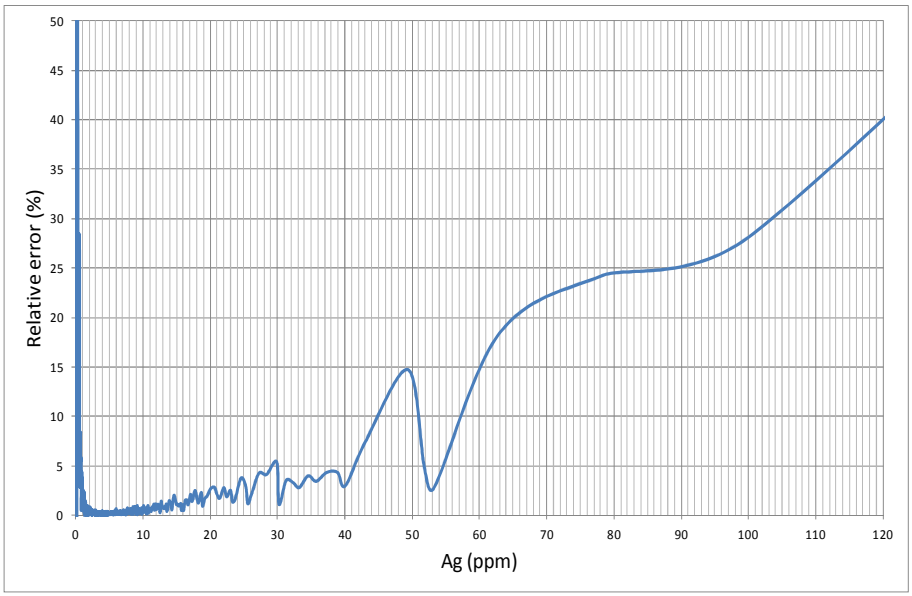


Figure 23: High grades search EU Ag 24

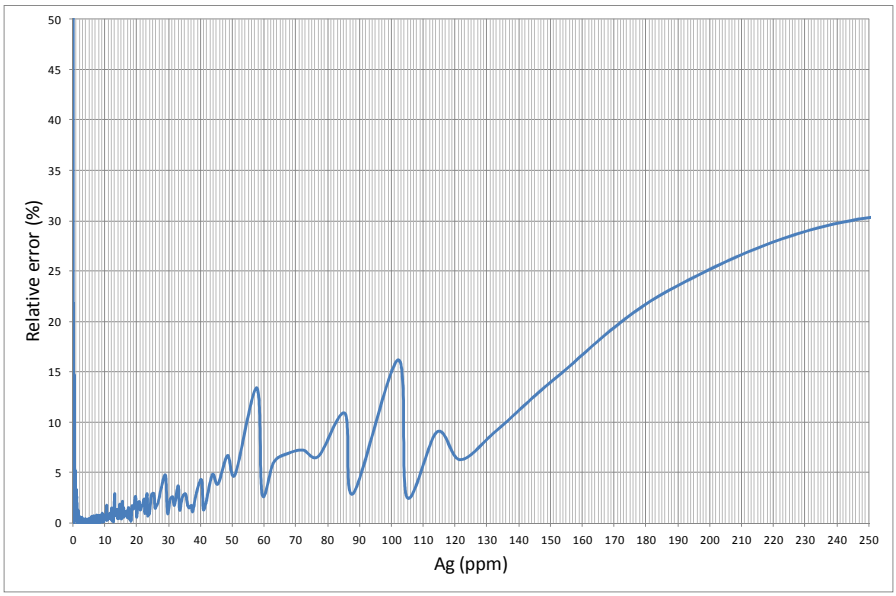


Figure 24: High grades search EU Ag 26

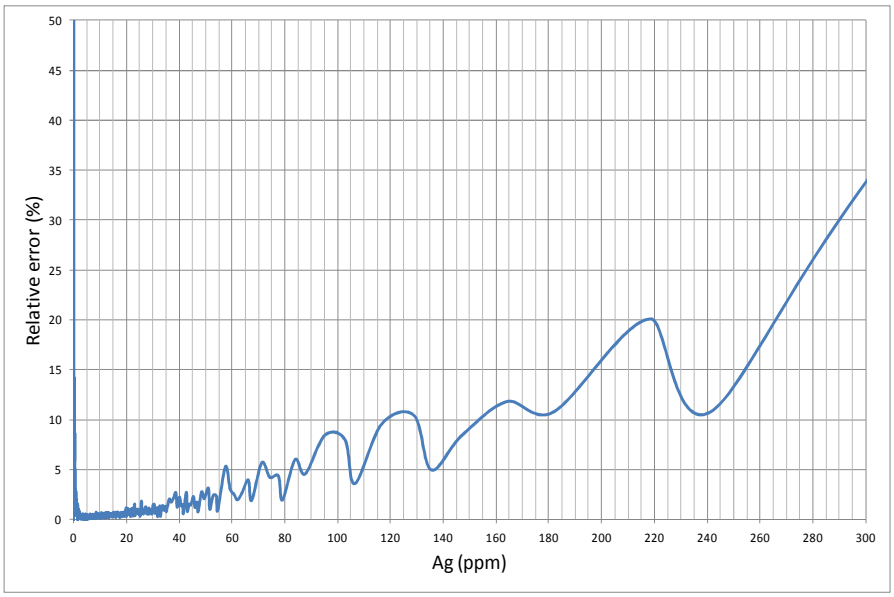


Figure 25: High grades search EU Ag 27

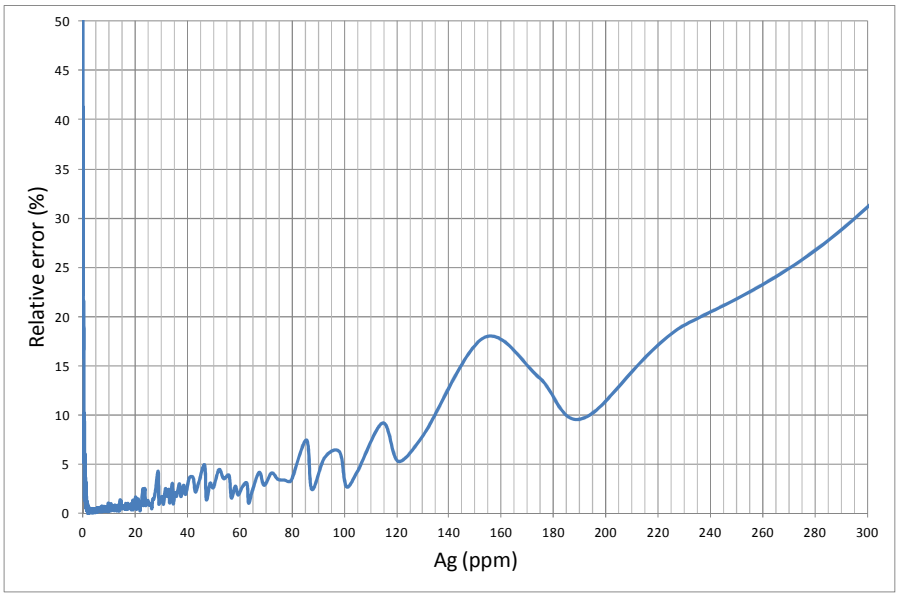
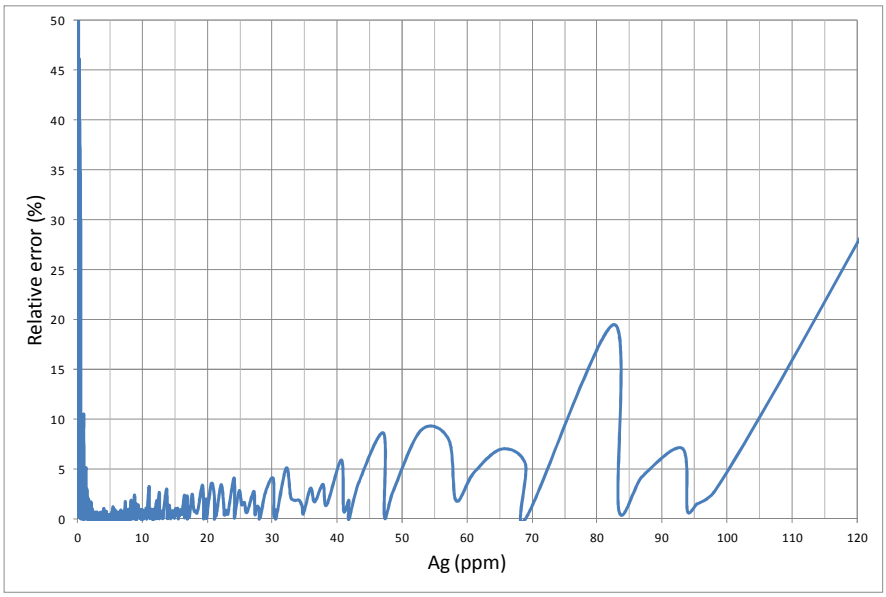


Figure 26: High grades search EU Ag 32



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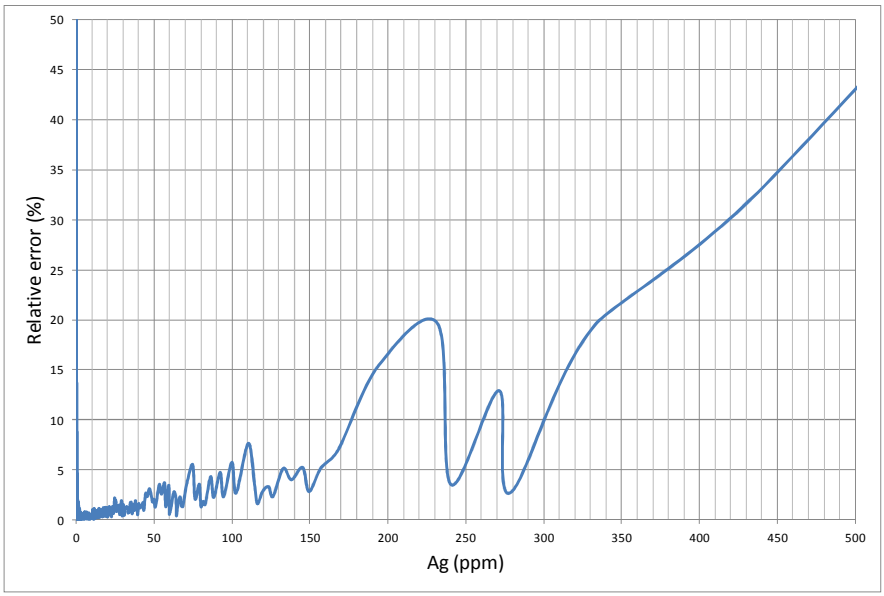
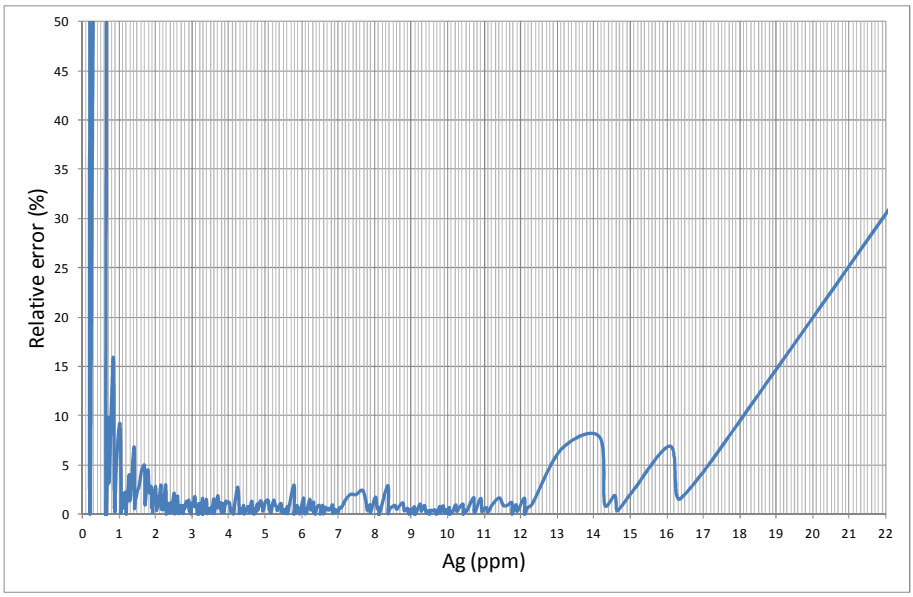


Figure 28: High grades search EU Ag 34



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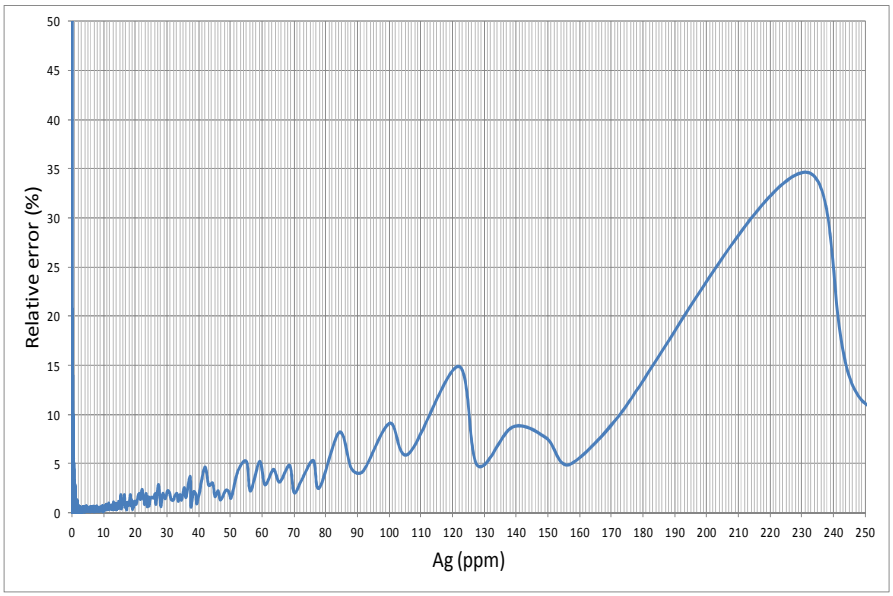

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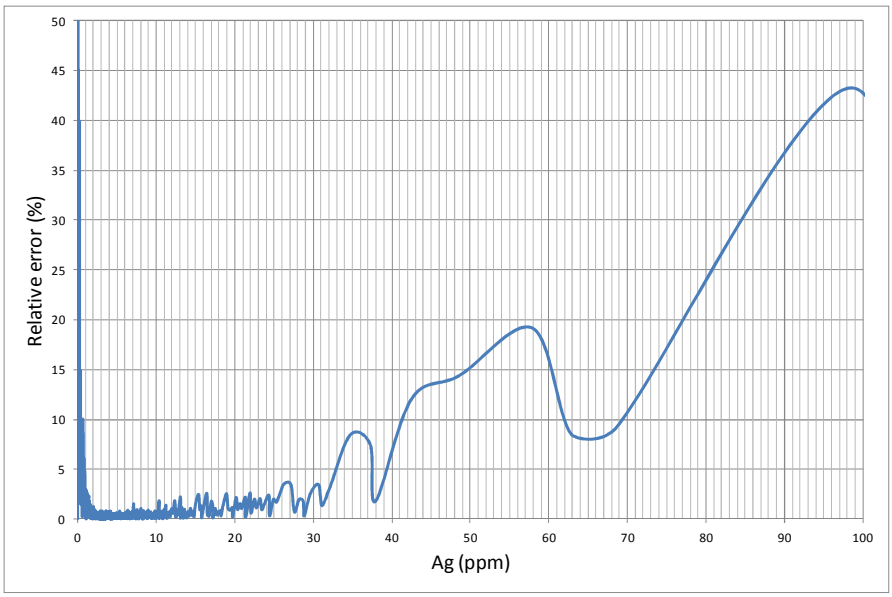

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TRACK CHANGES

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Date	Rev	Change(s)	Prepared by	Signature
07-11-11	2	Mainers text changes	G. Even	
02-11-11	1	Change Table 14-23	G.Even	
28-10-11	0	---	G.Even	

Approval for Release	A.Palma	