

# FIRST SUMMIT MAKROMINES

Summary of Exploration, Oct 1–Nov 7, 2007



**MIMOPI PROJECT, ZARUMA, ECUADOR**

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**November 7, 2007**

## MIRANDA

### Drill Results:

*References:* Summary of Drill Hole Statistics, Nov 5, 2007  
 Provisional Vertical Longitudinal Section, Nov 6, 2007  
 Provisional Vertical Longitudinal Section, with Interpreted Faults and Mineralization, Nov 7, 2007  
 (All included at the end of this memo)  
 Also see previous memos.

### Analyses

Results for holes 16–20. Examples:

Hole 16: 31.21–31.66, 0.995 g/t Au, 137.0 g/t Ag, 2.56 % Cu / 0.45m  
 79.70–81.07, 1.095 g/t Au, 65.8 g/t Ag, 0.52% Cu / 1.37m  
 Hole 17: 27.18–27.75, 1.145 g/t Au, 19.0 g/t Ag, 0.41% Cu / 0.57m  
 107.26–108.09, 2.385 g/t Au, 85.5 g/t Ag, 1.82% Cu / 0.83m  
 201.35–201.78, 2.310 g/t Au, 10.6 g/t Ag, 0.15% Cu / 0.43m  
 Hole 18: 174.66–176.09, 0.157 g/t Au, 138.6 g/t Ag, 3.85% Cu / 1.43m  
 188.07–188.44, 9.740 g/t Au, 13.9, g/t Ag, 0.46% Cu / 0.37m  
 197.99–199.53, 4.518 g/t Au, 82.8 g/t Ag, 1.07% Cu / 1.54m  
 Hole 19: 29.66–30.00, 1.210 g/t Au, 5.7 g/t Ag, 0.08% Cu / 0.34m  
 75.67–75.89, 3.200 g/t Au, 49.8 g/t Ag, 1.21% Cu / 0.28m  
 98.35–99.06, 2.955 g/t Au, 13.0 g/t Ag, 0.18% Cu / 0.71m  
 Hole 20: 212.46–213.04, 0.983 g/t Au, 1.8 g/t Ag, 0.02% Cu / 0.58m

### Observations

- Important gold values are present in 17 of the 19 holes.
- Similar mineralogy and high grade of Au in holes –04 (62.837 g/t /0.98m), –05 (60.763 g/t /1.06m), and –15 (25.300 g/t /0.69m) suggest that these and other intercepts are beginning to define a high-grade deposit. It is interpreted that the strike length of this mineralization has been traced for 175m and is open to the north and down dip. A vertical mineralized interval of approximately 50m has been incompletely bracketed, equivalent to 60m on the assumed  $\pm 50^\circ$  dip of veins. Depending upon cutoff grades, true widths of mineralization may vary from approximately 2 to 9m. Faults appear to have interrupted continuity. En echelon transfers of mineralization between adjacent structures without noticeable faulting has been recognized in underground exposures.
- Various intersections in holes –04, –05, –06, –11, –12, –15 to –19 have similar macroscopic quartz-chalcopyrite  $\pm$  galena mineralogy. Gold is always associated although the quantity varies widely. Visible gold was not seen in any core.  
 Silver and copper are directly related, generally 40–70 g/t Ag: 1% Cu (subjective scan, not a statistical calculation).  
 Sphalerite occurs occasionally in the same intervals (hole –11, 5.3% Zn, hole –15, 9.5% Zn) but is both positively and negatively related to copper and gold.  
 It is not clear if the quartz-high sulphide veins occupy the same structures as the quartz-low sulphide veins, or are in crosscutting zones.
- Quartz veins with minor sulphides contain variable gold content ( $\pm 5$  g/t Au).

- Quartz veins in the southern block (upper parts) of holes –16 to –20 have been offset by thrust faulting in relation to veins in the northern block. A right-lateral attitude of one set of fault planes is suggested. The location of offset veins in the northern fault block may be predictable.
- The provisional longitudinal sections are not drawn to scale and should be considered to be schematic diagrams. Horizontal scale is approximately 1cm = 10m. In the vertical plane, mineralized intercepts are compressed so as to fit on one page for electronic transmittal, particularly in the lower part where some are indicated by arrows to be below the margin.

## **Discussion**

The interpretation of one set of fault attitudes and their effect on mineralization is very tentative, in part suggested by repetition of volcanic lithologies, a feldspar porphyry intrusive, and gold-quartz-sulphide mineralization on opposite sides of crush or shear zones on the section of holes –16, –17, –18 and the section of holes –19 and –20. At least one other direction of fracturing is present. The faults are thought to be repeated at two additional locations to the south (see diagram). Hole –20 may have passed into another northern fault block.

The strike of post-mineral faults as shown (longitudinal section with interpretations) is not oriented at Az 285°, i.e. directly in the line of viewing, but may trend more northwesterly at ± 305° and dip moderately southwesterly. The southwestern fault blocks (upper plates) have been thrust upwards and perhaps northwesterly (right-lateral displacement), the major component being vertical. The effect on preexisting mineralization is to have moved veins in the southwestern fault blocks to positions above correlative segments in the northern blocks. Erosion has removed the upper portions of all blocks so that on a common horizontal elevation the southwestern veins appear to the southwest of correlative segments in the northern blocks.

The implication within the mine-scale strike and dip projections and dimensions proximal to the drill pattern is indicated in the interpretive longitudinal section (cartoon) which suggests that important gold values could be hosted in the blocks at progressively lower elevations to the north, for example below holes –4 and –5, and in the block below holes –15 and –18.

Mineralization may sometimes be correlated from one drill section to the next but inexact survey data allow multiple interpretations.

## **Recommendations**

- Preparation of a comprehensive report with maps, sections, and interpretations requires an accurate distomat survey to tie together drill holes, surface features, and underground workings in a 3-dimensional grid. A local contract surveyor with suitable equipment and underground experience is available.
- Confirmation drilling in a Phase 2 program should be planned to include a vertical hole at the site of hole –15, three holes from the planned site between holes –13 and –15, a vertical hole from the site of hole –05, and fans of holes from the planned and possible sites near and below (west of) hole –05. A program of 5000m of drilling is recommended.
- Most of this drilling will be oriented to expand and define the mineralization of holes –04, –05 and –15. Testing for vein extensions to both the north and south of the present drill pattern will be planned from two sites.

# First Summit Makromines, Mimopi Project, Zaruma, Ecuador

## Summary of Diamond Drill Hole Statistics

					Updated:	July 27,2007	Aug 20,2007	Sept 10,2007	Nov 5,2007
						Aug 06,2007	Aug 26,2007	Sept 30,2007	
Hole No.	Site	Azimuth, °	Dip, °	Length, m	Selected Analyses				
					From, m	To, m	Weighted Average:		
					Au, g per t; Ag, g per t; Cu, % / length				
MIR-07-01	1	285	-70	240.79	206.44	209.92	2.255 /3.5		
MIR-07-02	1	285	-50	225.55	77.10	81.38	0.958 /4.3		
MIR-07-03	2	283	-50	236.35	57.91	61.30	2.379 /3.4		
MIR-07-04	2	283	-70	234.69	61.60	72.30	8.140, 128.4, 1.13 / 10.70; within which 16.838, 257.8, 2.25 / 5.10		
MIR-07-05	3	288	-50	278.89	104.79	116.43	9.564, 84.8, 0.54 / 11.64; within which 16.323, 180.2, 1.10 / 5.21		
MIR-07-06	3	288	-70	275.84	115.00	116.66	0.882, 66.7, 2.40 /1.66		
					176.05	178.30	0.275, 51.3, 1.50 /2.25		
MIR-07-07	4	285	-50	264.56	101.50	101.78	1.870 / 0.28		
					200.20	200.36	2.040 / 0.16		
					262.88	263.51	1.095 / 0.63		
MIR-07-08	4	285	-70	260.60	127.61	130.08	1.026, 5.5 / 2.47		
MIR-07-09	5	285	-50	268.22	26.78	31.66	2.923, 3.4 / 4.88; within which 17.050, 10.5, 0.07 / 0.77		
					130.17	132.00	1.849, 3.9 / 1.83		
MIR-07-10	5	285	-70	316.99	215.18	218.03	0.703, 3.2 / 2.85		
MIR-07-11	6	285	-50	309.98	53.86	55.69	5.926, 5.7, 0.10 / 1.83; within which 17.100, 13.4, 0.94 / 0.63		
					161.94	163.06	0.758, 18.7, 0.23 / 1.12		
					255.98	257.57	2.243, 7.6, 0.20 / 1.59;		

MIR-07-12	6	285	-70	255.72	157.41	157.92	within which 8.500, 10.8, 0.30 / 0.41 0.457, 8.2, 0.19 / 0.51
MIR-07-13	7	285	-50	21.33			Intersected stope, 15.24-21.33m. Site abandoned. No significant values.
MIR-07-14	8	285	-50	240.79	78.02	78.79	1.344, 95.5, 1.02 / 0.77
MIR-07-15	8	285	-70	245.36	8.79	9.20	2.940, 73.3, 0.76 / 0.41
					153.72	161.34	3.216, 57.3, 0.46 / 7.62; within which 5.481, 109.1, 0.81 / 3.57 and 25.300, 557.0, 4.15 / 0.69 (and 9.51% Zn)
MIR-07-16	9	285	-50	178.30	31.21	31.66	0.995, 137.0, 2.56 / 0.45
					79.70	81.07	1.095, 65.8, 0.52 / 1.37
MIR-07-17	9	285	-70	280.41	27.18	27.75	1.145, 19.0, 0.41 / 0.57
					107.26	108.09	2.385, 85.5, 1.82 / 0.83
					201.35	201.78	2.310, 10.6, 0.15 / 0.43
MIR-07-18	9	285	-90	266.70	174.66	176.09	0.157, 138.6, 3.85 / 1.43
					188.07	188.44	9.740, 13.9, 0.46 / 0.37
					197.99	199.53	4.518, 82.8, 1.07 / 1.54
MIR-07-19	10	285	-50	275.84	29.66	30.00	1.210, 5.7, 0.08 / 0.34
					75.67	75.89	3.200, 49.8, 1.21 / 0.28
					98.35	99.06	2.955, 13.0, 0.18 / 0.71
MIR-07-20	10	285	-70	317.90	212.46	213.04	0.983, 1.8, 0.02 / 0.58
<b>Total Length</b>				<b>4994.81</b>			
<b>End of Phase 1 drilling, 10:45AM Sept 30, 2007</b>							