



Observations and Conclusions Regarding a New Low Sulfide Porphyry Copper Gold System, Ecuador

John R King

JRKConsulting, Lone Tree, CO, USA

Mar. 4, 2018

EL GUAYABO Adriana Addit

Summary

Converging lines of field geologic evidence indicate the probable presence of an ore grade “Low Sulfide” porphyry gold copper system at the El Guayabo property, Ecuador. The most demanding evidence is the observation of multiple phases of hydrothermal ore grade (Au Cu) mineralizing events. Contemporaneous with ore grade mineralization are at least two phases of hydrothermal brecciation. Two limited drilling programs targeting surface gold anomalies in 1994 and 2006 returned ore grade intersections in a number of near vertical breccia pipes with some of the better results including:

- 183.0m @ 2.7 g/t Au +10.1 g/t Ag + 0.15% Cu (inc 38m @ 7.1 g/t Au + 30.1 g/t Ag + 0.32% Cu)
- 95.0m @ 1.6g/t Au + 2.4 g/t Ag +0.03% Cu
- 103.3m @ 0.61 % Cu +0.7 g/t Au +15.6 g/t Ag
- 116.3m @ 0.40% Cu 0.6 g/t Au + 8.9g/t Ag (inc 53m @ 0.63% Cu +1.2g/t Au +13.3g/t Ag +)

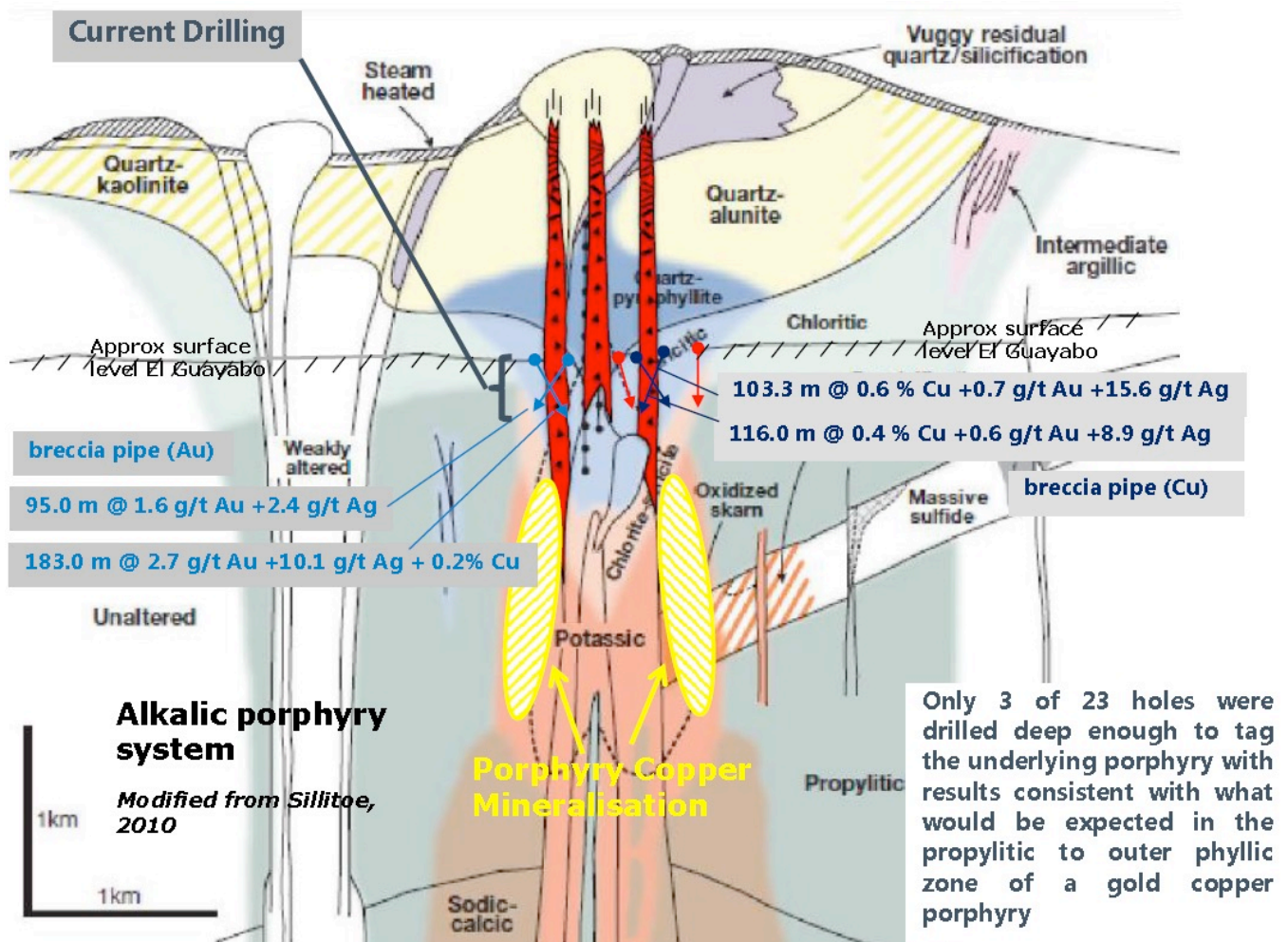


Figure 1 – Proposed Mineralisation model at El Guayabo

The property is currently producing high-grade gold and copper ore from artisanal mines. The artisanal operations are centered on three locations within the property and produce ~ 100 tpd ore. The artisanal operators have installed

an 800m long adit between to two largest breccia bodies. This adit exposes interbedded mineralized breccias and intrusives which contain disseminated sulfides.

The breccia pipes are attractive exploration targets. The known mineralisation appears to represent the top of a breccia system which has not vented to surface. Thus there is ample scope for higher grade breccia mineralisation at depth not discounting the existing 38m @ 7.1 g/t Au + 30.1 g/t Ag + 0.32% Cu. The breccias include clasts of material which appears to have been mineralised prior to brecciation. The breccias are also classic indicators of an underlying porphyry system. As can be seen from Figure 2. the mineralization at the property forms a circular feature approximately 2.5km across.

The intrusives at El Guayabo have been dated at 20 Ma which is the same age as that of the giant Chilean and Peruvian porphyries (10-40 Ma). The Cangrejos deposit, located 10km from El Guayabo, is a gold porphyry with a resource of 10 Moz Au and shows grade increasing at depth. Recent press releases state the discovery of a significant deeper high grade zone at Cangrejos including 138m @ 1.8 g/t Au and 0.54% Cu. Importantly the El Guayabo property appears to have an early phase of higher grade copper mineralisation which is absent at Cangrejos.

The few deeper holes at the project confirm the model of an underlying Cu/Au porphyry source for the breccias. These drill holes were not targeted at, and terminated several hundreds of meters short of, where economic porphyry mineralization would be expected to begin. They intersected Quartz Diorite and Dacite intrusives with both the alteration assemblages and tenor of mineralization in the intrusives consistent with what would be expected in the propylitic to outer phyllic zone of a porphyry deposit.

The El Guayabo is a clear “Property of Exploration Merit” and should be pursued.

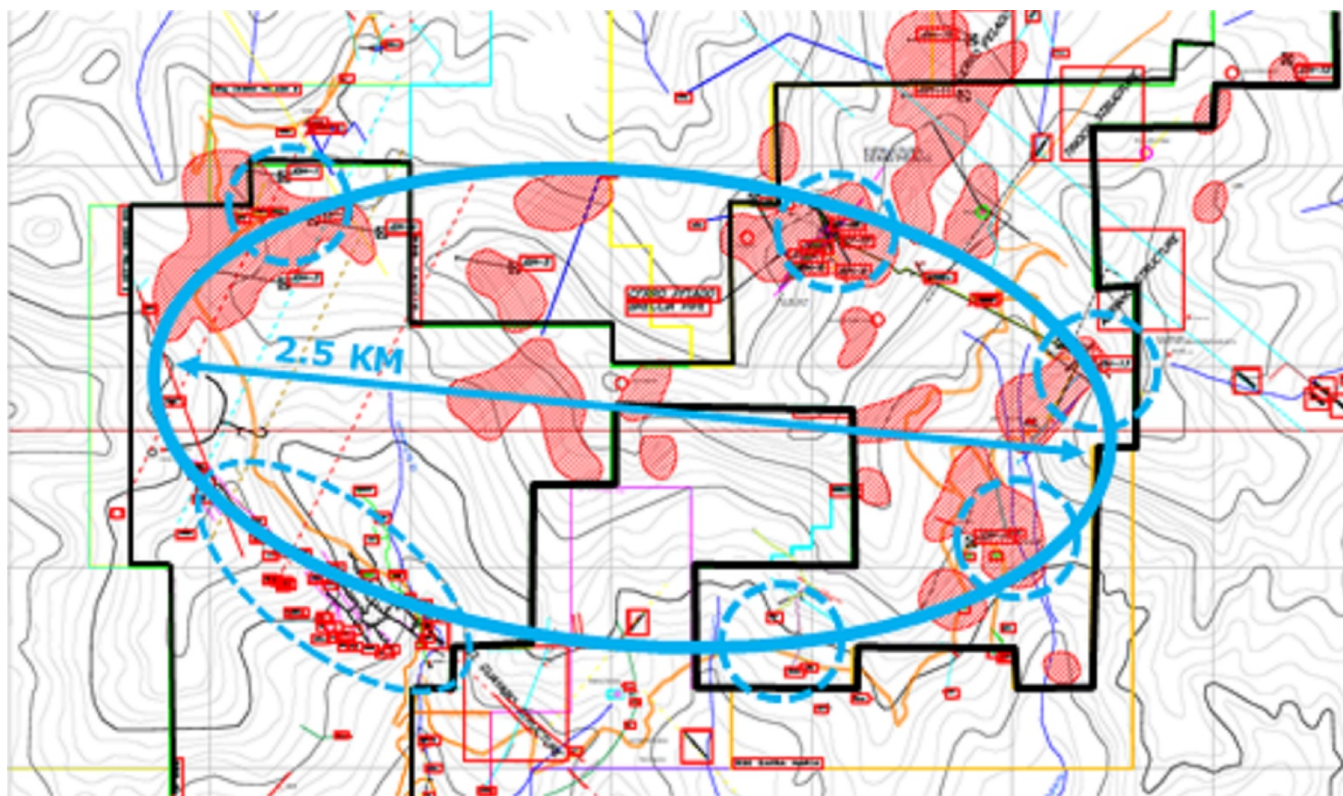


Figure 2 – Known Mineralisation model at El Guayabo

Introduction

The author via JRK Consulting was retained to review and evaluate the copper-gold potential of El Guayabo property, El Oro Province, southern Ecuador. The review consisted of 3 days, of on the ground, detailed examination of drill core, road cut – outcrops, underground workings and a similar 3 days reviewing historic reports, assay data, photo interpretive recon and meetings with knowledgeable project personnel and off site experts. Much of the geologic summary is taken from published reports and internal company reports authored by C. Moncayo.



Figure 3 – Location of El Guayabo property

The author worked for Asarco and Anaconda Copper early in his career and was part of the teams in each company to use porphyry copper field experience, as gained in N & S America, to understand the significance of hydrothermal

porphyry related breccias to ore grade mineralization. This porphyry mineralization knowledge lead to the direct discovery of two porphyry deposits, the Charleston-Robbers Roost porphyry copper and the Silver Creek porphyry molybdenum. In each case (and others made by both companies) the understanding of breccia pipes, breccia pebble dikes, and non-uniform breccia bodies, lead directly to discovery.

Location and Logistics

The "El Guayabo" property encompasses an area of 280 hectares. It is located within the El Oro Province of southern Ecuador, 35 Kilometers south southeast of the port city of Machala (Ecuador's fourth largest city with a population of 250,000). The port of Puerto Bolivar, located 9 km to the west of Machala, is the world's largest banana exporting port. Machala city lies on the Pan-American Highway linking Guayaquil to Lima in Peru.

Access to the property is excellent. The Santa Rosa Canton airport at Machla is a small and modern airport with air services to Guayaquil and Quito daily. From the Santa Rosa airport access to the property is paved road (18 km) and gravel road (5 km).

A well-equipped active exploration camp exists at the camp. This facility is capable of housing up to 20 workers and has electricity and phone internet capabilities. The living conditions are clean and acceptable for fully taking care of all personnel,

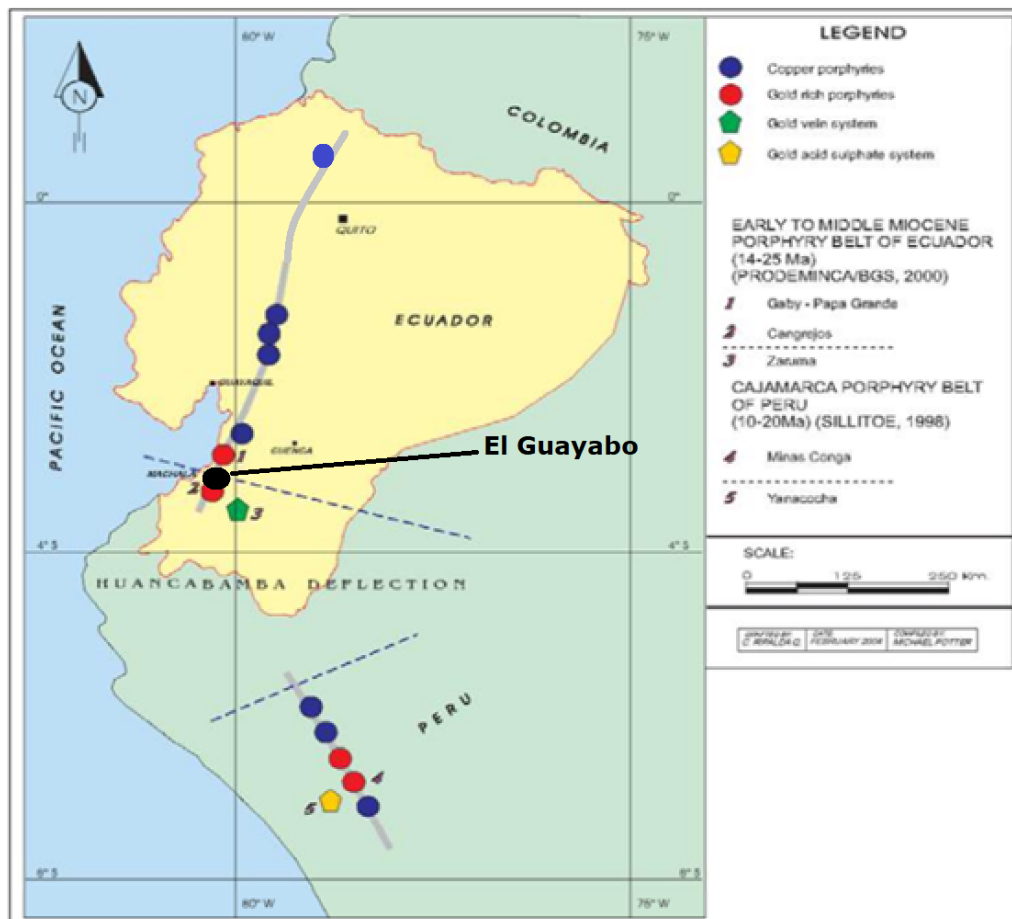


Figure 4 – Regional Geology of El Guayabo Property

Regional Geology

The property is located in the Miocene Porphyry belt of Ecuador which is becoming an increasingly important zone of discoveries. It sits at the western end of the Cangrejos Zaruma intrusive belt in southern Ecuador. This geologic belt is typified by multiple nested late Oligocene to Early Miocene intrusions, punctured and intruded by a number of porphyry dikes and breccia pipes (Potter 2004). The approx. 20 Ma age of the intrusions in the Zaruma intrusive belt is the same as that of the giant Chilean porphyries which range in age from 10-40 Ma years.

On a more local scale El Guayabo lies in the central to north-central part of the Portovelo-Zaruma gold mining district within the Cangrejos Zaruma intrusive belt which covers 50 kilometers. Total historic gold production from high grade quartz vein systems is estimated to be approximately 4 to 5 million ounces from the Portovelo-Zaruma gold mining district.

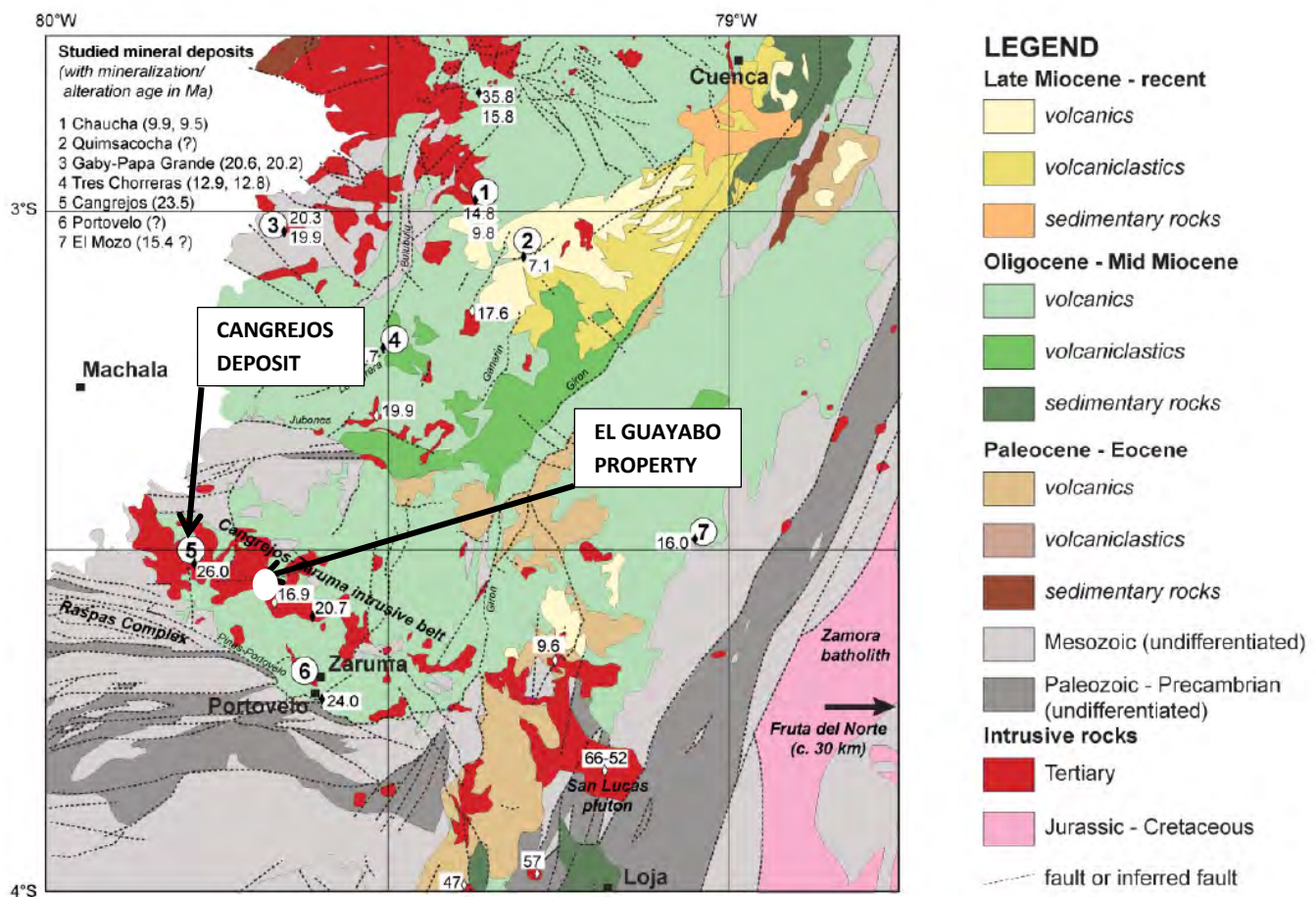


Figure 5 – Geology of El Guayabo Property on a district scale

El Guayabo is located approximately 10kms from Lumina Gold’s Cangrejos Project which has a resource of 423Mt @ 0.65 g/t Au, 0.60 g/t Ag, 0.13% Cu that is open in most directions and shows grade increasing at depth. The intrusives at Cangrejos and El Guayabo are mapped as being the same age. Recent press releases state the discovery of a significant high grade zone at Cangrejos including 138m @ 1.8 g/t Au and 0.54% Cu (hole C17 – 70) and 242m @ 1.01 g/t Au 0.30% Cu (hole C17-65). Lumina Gold describe the Canrejos deposit as:

“Au Cu porphyry deposit which forms a relatively continuous zone of gold-copper-silver, porphyry-style mineralization associated with a sequence of breccias and porphyritic dioritic intrusions. The zone has been defined

to a depth of over 600 m and remains open at depth. Deep drilling in the centre of the zone has defined a higher grade Au-Cu resource that is associated with magnetite-rich breccias and sodic alteration. The Cangrejos porphyry Au Cu system displays múltiple breccias/mineralización stages and with alteration zoning with depth and laterally”.

History and Previous Exploration

Odin Mining and Exploration with Newmont Mining were active in the Cangrejos - El Guayabo – Osos area beginning in 1992. From 1994 thru 1996, Odin and Newmont carried out a diamond drill campaign carried out that culminated in 7,605 m of diamond core drilling. An airborne magnetic survey over the property was conducted by Newmont in 2000. Kinross Gold Corporation was active in the district from 2006 to 2009 under a farming agreement with Odin. Kinross’ work included geological mapping and soil and rock sampling.

Results for all drill holes are available in electronic format (Excel spreadsheet) with each spreadsheet containing lithological logs, core recovery data, assay sample numbers, magnetic susceptibility, and assays which have been sampled in 1-5-meter increments (generally 1-2 meters) depending upon the degree of mineralization. Drill holes JDH-001 to JDH-006 were assayed for gold only. Drill holes JDH-007 to JDH-014 were assayed for Au, Ag, Cu, Zn, Pb, As while the GY series was assayed for Au, Ag, Cu, Zn, Pb, As and Mo. Core log information is predominantly in Spanish. An example of the drill hole data is given in Figure 6. Drill collar locations are provided in Appendix 2.

The majority of the core is stored on site and available for re-logging and re-sampling with a list of core status provided below. The available core should be sufficient for re-logging with attention to breccias features and chemistry and zonation. Enquiries have yet to be made as to the availability of the raw geological mapping and soil and rock sampling data however hard copies of reasonable quality are in existence on site.

Drill hole #	Core Available	Drill hole #	Core Available	Drill hole #	Core Available
GY-01	Yes	GY-12	Yes	JDH-004	No
GY-02	Yes	GY-13	No	JDH-005	No
GY-03	Yes	GY-14	No	JDH-006	Yes
GY-04	Yes	GY-15	No	JDH-007	No
GY-05	Yes	GY-16	No	JDH-008	No
GY-06	Yes	GY-17	Yes	JDH-009	No
GY-07	Yes	GY-18	Yes	JDH-010	Yes
GY-08	Yes			JDH-011	Yes
GY-09	Yes	JDH-001	No	JDH-012	Yes
GY-10	No	JDH-002	No	JDH-013	Yes
GY-11	Yes	JDH-003	No	JDH-014	Yes

Table 1 – Drill Core availability

Key historical intersections are shown in Table 2 over the page with a complete listing of all historical intercepts included as Appendix 1. The author of this document believes the total exploration expense on the El Guayabo property in to today’s dollars would be well over \$10 million.

Drillhole (#)	TD (m)	Mineralised Interval		Width (m)				Au (eqv)	Cu (eqv)
		From	To		(g/t)	(%)			
JDH-002	257.5	6.1	256.1	250.0 m @	0.4 g/t Au +			n/a	n/a
	inc	64.8	110.2	45.4 m @	0.7 g/t Au +			n/a	n/a
JDH-003	260.97	120.42	254.57	134.2 m @	0.4 g/t Au +			n/a	n/a
JDH-004	219	67.4	207.8	140.4 m @	0.4 g/t Au +			n/a	n/a
JDH-006	302.74	107.93	281.09	173.2 m @	0.4 g/t Au +	7.0 g/t Ag +	0.31 % Cu	1.02	0.62
	inc	227.8	281.09	53.3 m @	1.2 g/t Au +	13.3 g/t Ag +	0.63 % Cu	2.44	1.48
JDH-008	352.7	249.1	316.15	67.1 m @	0.2 g/t Au +	5.8 g/t Ag +	0.27 % Cu	0.75	0.45
JDH-009	256.7	14.7	117.98	103.3 m @	0.7 g/t Au +	15.6 g/t Ag +	0.61 % Cu	1.91	1.16
JDH-013	124.08	89.9	154.96	65.1 m @	1.4 g/t Au +	2.7 g/t Ag +	0.06 % Cu	1.53	0.93
GGY-002	272.9	0	183	183.0 m @	2.7 g/t Au +	10.1 g/t Ag +	0.15 % Cu	3.06	1.85
	inc	0	102	102.0 m @	3.3 g/t Au +	12.7 g/t Ag +	0.15 % Cu	3.71	2.25
GGY-005	258.27	12	192	180.0 m @	0.4 g/t Au +	10.0 g/t Ag +	0.27 % Cu	0.92	0.56
	inc	12	100	88.0 m @	0.6 g/t Au +	16.1 g/t Ag +	0.37 % Cu	1.44	0.87
GGY-008	312.3	0	271	271.0 m @	0.1 g/t Au +	6.2 g/t Ag +	0.23 % Cu	0.60	0.36
	inc	221	271	50.0 m @	0.4 g/t Au +	9.7 g/t Ag +	0.48 % Cu	1.27	0.77
GGY-009	166.2	1.65	45	43.4 m @	1.7 g/t Au +	2.9 g/t Ag +	0.06 % Cu	1.80	1.09
GGY-010	194.47	0	95	95.0 m @	1.6 g/t Au +	2.4 g/t Ag +	0.03 % Cu	1.67	1.01
GGY-011	241.57	0	227	227.0 m @	0.2 g/t Au +	9.7 g/t Ag +	0.34 % Cu	0.87	0.53
	inc	202	227	25.0 m @	0.4 g/t Au +	16.4 g/t Ag +	0.86 % Cu	2.01	1.22

Table 2 – Selected historical intersection

ODIN MINING & EXPLORATION														
AREA MINERA: GUAYABO		POZO #: NEWMONT		JDH - 09		LONGITUD: _____			FECHA INICIO: _____					
INCLINACION: -45°		DIRECCION: 150°				LATITUD: _____			FECHA FINAL: _____					
						ALTURA: _____			GEOLOGO POZO: _____					
Prof.	Geologia	Description	Muestra #:	Desde:	Hasta:	RCV	Au	Ag	Cu	Pb	Zn	As	Suc.Mag.	Prof.
1													0.05	1
2													0.05	2
3		No recovery until 6.70 m.											0.03	3
4													0.04	4
5													0.06	5
6													0.02	6
7		6.70 m.											0.07	7
8		METEORIZED CERRO PELADO-TYPE HIDROTHERMAL BRECCIA	CP-43954	6.70	8.23		120	0.5	224	8	8	305	0.05	8
9		9.00 m.											0.04	9
10			CP-43955	8.23	10.23		66	1.5	209	3	6	304	0.04	10
11													0.24	11
12			CP-43956	10.23	12.28		121	3.6	321	4	5	2390	0.06	12
13													0.05	13
14			CP-43957	12.28	14.32		544	8.4	360	6	9	1830	0.04	14
15													0.03	15
16			CP-43958	14.32	16.32		946	15.4	7172	8	21	837	0.04	16
17		mm. cm. clasts aligned at 130 - 150°											0.04	17
18			CP-43959	16.32	18.37		394	25.1	8107	10	38	1350	0.06	18
19													0.03	19
20		19.50 m.	CP-43960	18.37	20.42		255	24.2	3894	9	16	1090	0.06	20
21		Foliation (?): 140°											0.03	21
22		21.70 m.	CP-43961	20.42	22.42		491	27.2	2051	9	6	591	0.06	22
23													0.03	23
24			CP-43962	22.42	24.47		275	19.2	7838	10	7	266	0.05	24
25													0.13	25
26		25.50 m.	CP-43963	24.47	26.52		582	22.4	2273	13	7	576	0.04	26
27		Oxide-stained joint-planes											0.06	27
28													0.03	28
29		29.00 m.	CP-43964	26.52	28.52		26	2.8	372	8	5	345	0.04	29
30													0.06	30
31			CP-43965	28.52	30.57		562	6.9	1002	17	5	520	0.05	31

Figure 6 – Showing sample drill hole logs and assay results

Observations on historical work.

The geologic exploration work by Newmont and Odin was designed and directed by in-country inexperienced geologists. It appears to have been focused almost exclusively for gold targeting surface gold anomalies or the depth extensions of higher grade gold zones being exploited by the artisanal miners.

The geologic logs for all drill holes did not record details that would have been typical, industry standards for porphyry copper exploration at that time. Descriptions of alteration styles, mineralization assemblages and zonation are not ideal and only intermittently noted. Total sulfide content, sulfide ratios (such as disseminated versus fracture controlled), cross cutting relations were not noted in the logs. In short, they missed important detail. The same situation occurred at Cangrejos (1999 – 2002) where Newmont drilled with in-country geologists.

Re-logging of the core by geologists familiar with porphyry Au/Cu systems is strongly recommended early in the exploration cycle to better target initial deeper drilling.

Specific comments on the exploration are given below:

- Newmont's first 5 holes targeted the Los Ochos high grade Au and Cu pebble dike/vein. All five holes were terminated before reaching the target and were assayed for gold only. Kinross/Odin never followed up these initial 5 drill holes JDH-01 to JDH-05 which intersected an as yet undefined breccia body in the northwest of the project. These 5 holes returned intercepts including 250m @ 0.4 g/t Au in breccias with chalcopyrite logged in the core and it appears that they were never subject to follow up assaying or drilling to determine copper content.
- A number of drill holes ended in mineralization including the following end of hole intercepts:
 - 3.6 g/t Au + 5.3 g/t Ag + 0.1% Cu - drill hole GGY-06;
 - 3.1 g/t Au + 4.0 g/t Ag + 0.1% Cu - drill hole GGY-07;
 - 0.2 g/t Au + 50.0 g/t Ag + 0.1% Cu - drill hole JDH-11;

Detailed Project Geology

A geological map of the tenement is provided in Figure 7. The property geology consists of metamorphic rocks intruded by Miocene intrusives described in the core logs as Quartz Diorites and Dacites. Mineralization has been recognized in:

1. breccia bodies which are almost vertical and up to 200m in diameter
2. quartz veins and veinlets which appear structurally controlled
3. the intrusives themselves accompanied with disseminated pyrite and pyrrhotite

Field inspections (outcrops, addit and core) and review of core logs (JDH -14, JDH-002, 3, 4, and 5) indicate country wall rocks are mineralized and altered. Six breccia bodies have been identified on the property. The bodies are all altered and similarly (chemically) mineralized and are described as quartz tourmaline breccias although the core logs indicate a number of different descriptions. The two breccia bodies that

are currently being exploited by artisanal miners the Bloque De Cobre (Copper Block) and Bloque De Oro (Gold Block) are better defined and they appear to be two distinct breccia types

The Copper Block is interpreted as the **youngest** Cu and Ag rich breccia. It has Ag:Cu ratios of approximately 50:1, Cu:Zn ratios of approximately 50:1 and Cu:Au ratios in excess of 10,000:1. It also exhibits more open space textures. The chemistry of the **older Au dominant** with lesser Cu and Ag breccias as defined by the Block De Oro are an order of magnitude different with Ag:Cu ratios of approximately 1:1, Cu:Zn ratios of approximately 10:1 and Cu:Au ratios of 1,000:1. A review of the core in this older gold rich breccia phase identified at least two distinct the breccia mineralizing events within this Au rich breccia which is described in more detail in next section.

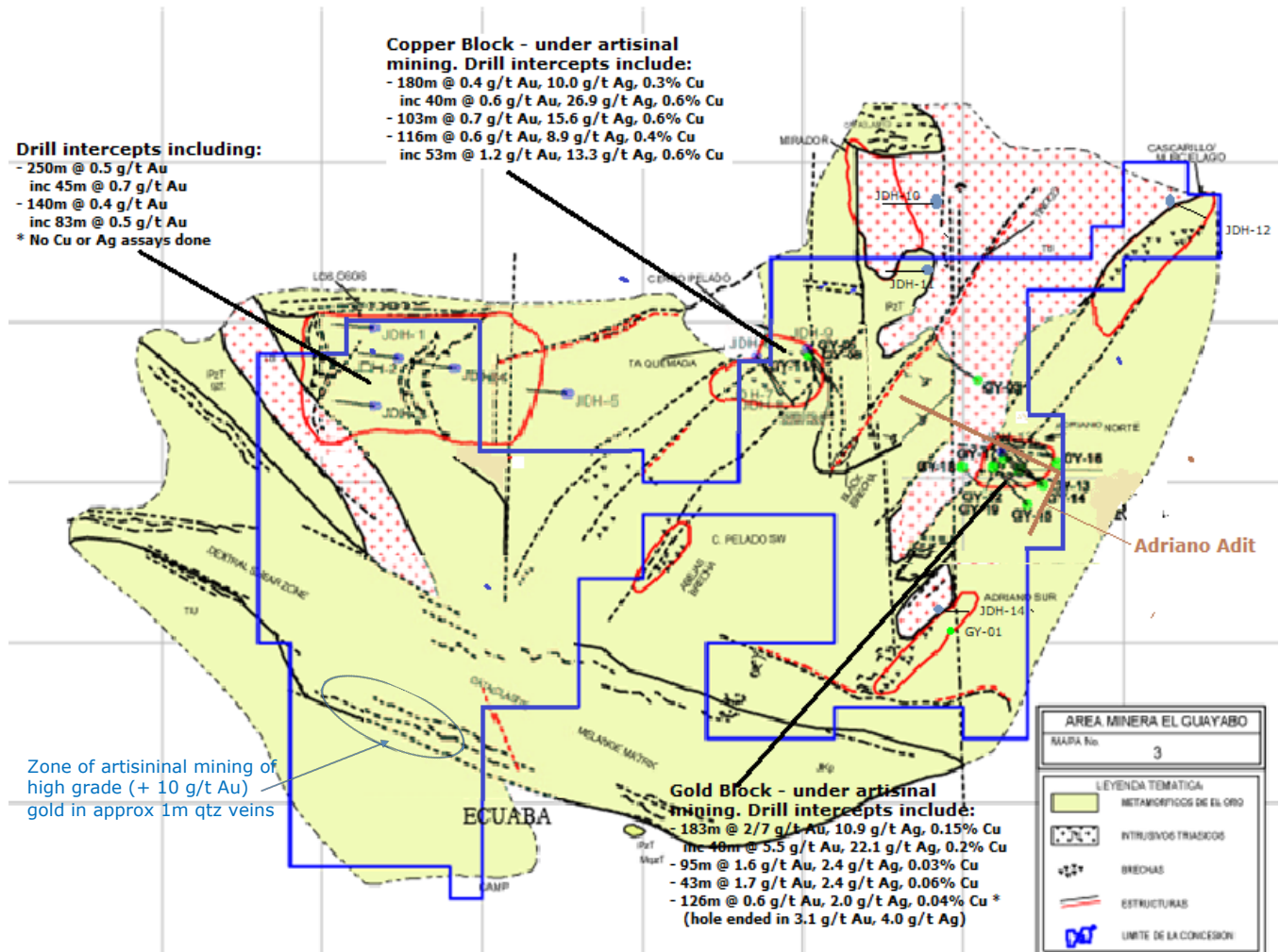


Figure 7 – Summary geological map El Guayabo Concession

Figure 8 is an interpreted long section from the Copper Block to the Gold Block showing the Odin and Newmont drill holes and geology as mapped in the Adit and Figure 9 provides a plan view.

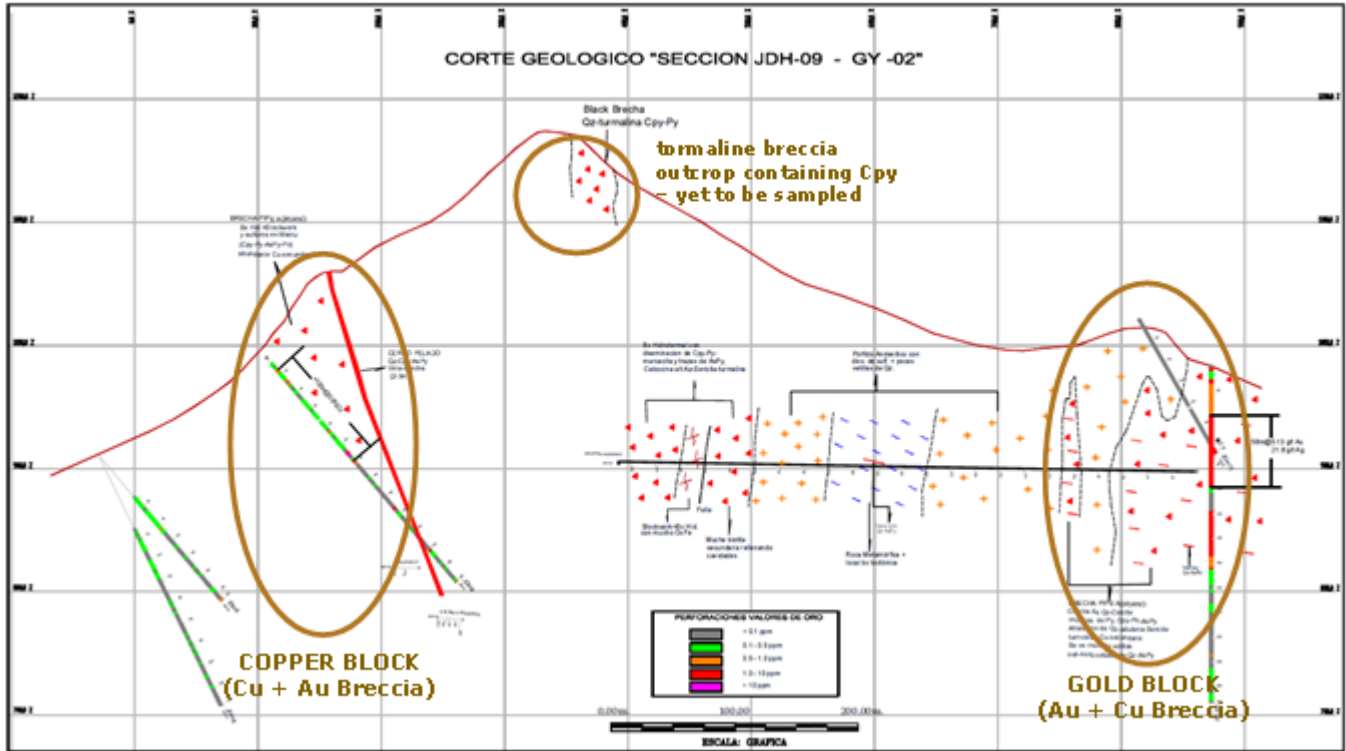


Figure 9 – Long Section Adriano’s Adit

The high-grade gold veins identified by Kinross with north west strike are reported as being of 1-meter width with quartz, arseno-pyrite and chalcopyrite, and gold with values of over 10 grams per ton. They continue with depth and are sufficiently continuous horizontally to have been mined profitably by small-scale mining methods for a number of years. They have been identified over 500m of strike and down to a depth of 150m and remain open in all directions. A 3.48kg composite sample of the sulfide veins being mined immediately adjacent to the property yielded 25 g/t Au and 304 g/t Ag and a 0.44 kg sample of oxide ore taken within the property yielded a 252 g/t Au assay. While not evaluated by the author the scale of development of these gold veins may merit upscaling of current artisanal mining to significantly larger conventional underground mining operations.

Artisanal Mining Operations

The property is currently producing high-grade gold and copper ore from artisanal mines. The artisanal operations are centered on three locations within the property (Figure 10 and Table 3). Combined artisanal production is approximately 100 tpd ore. The various artisanal operators deliver the property owner 30% of their mined ore as payment. The author was provided with additional details on the processing of the 30% toll ore provided by the artisanal operations which is via a simple, albeit primitive, floatation operation to produce a copper and gold concentrate. The flow sheet is attached in Appendix 4 and recoveries are in excess of 80% for both gold and copper are achieved.

The artisanal operators are on 2-year contracts and the tenement owner has the ability to cancel the artisanal mining contracts upon the sale of the mine. The artisanal operators were happy to allow the author into the decline and various adits and workings to take samples and these will be a valuable source of exploration data.

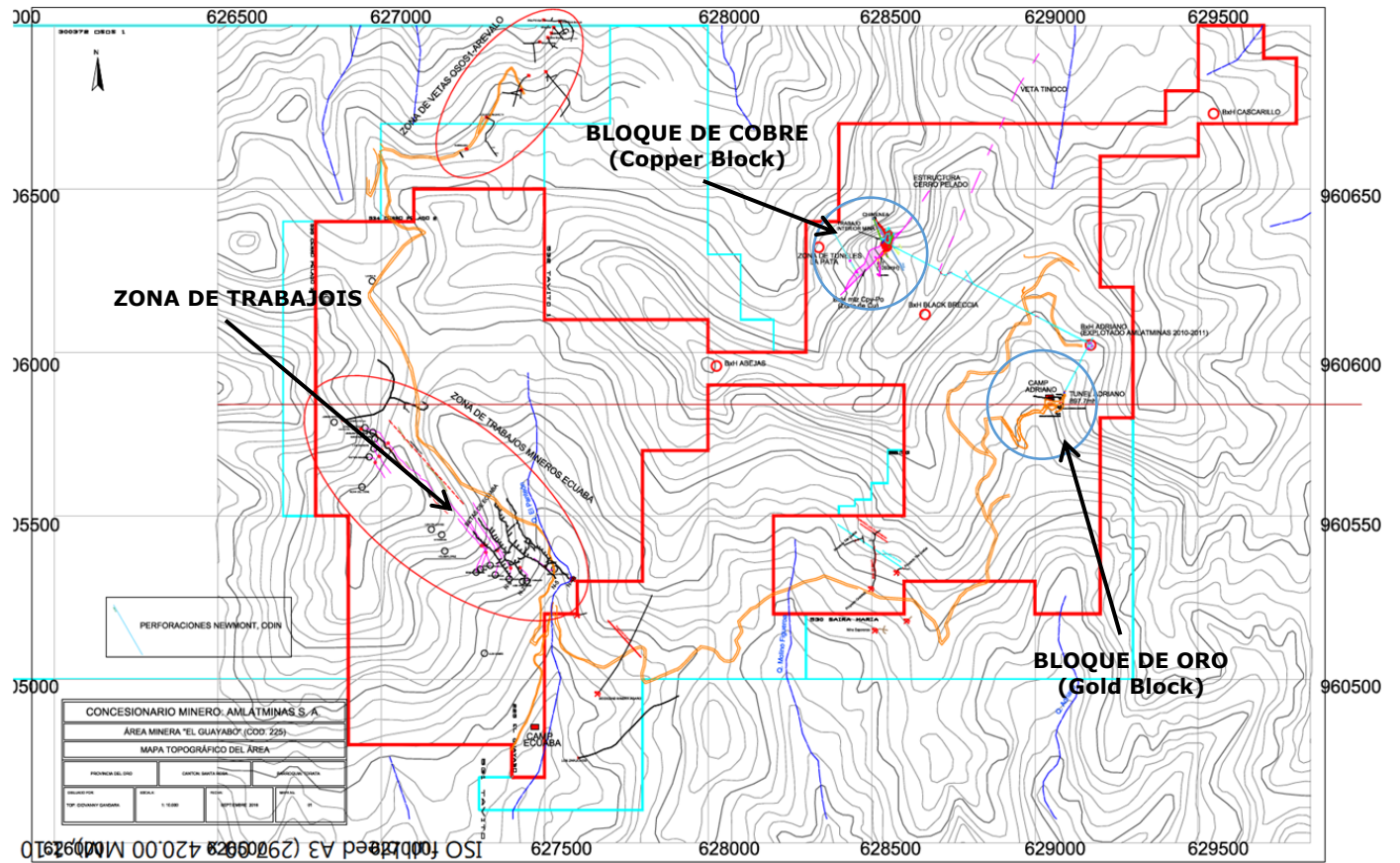


Figure 10 – Artisanal mining operations El Guayabo Concession

Artisanal operation	Daily rate	Grade	Description of Mineralization
Block De Oro (gold block)	40 tpd	2.5 g/t Au, 0.5% Cu	breccia pipe – later gold phase Intersected by drill hole GY-02, JHD-013
Block De Cobre (copper block)	20 tpd	1.5% Cu, 1-2 g/t Au	breccia pipe – earlier copper/silver/gold phase Intersected by drill hole JDH-006, GY-011, GY-008
Zona De Trabajojs	40 tpd	~ 10 g/t Au	0.5 -2m thick NW trending quartz veins (late stage) targeted in JDH-001 to JDH-005 (terminated prior to target)

Table 3 – Artisanal production (note recovered grades have been provided by the artisanal operators)

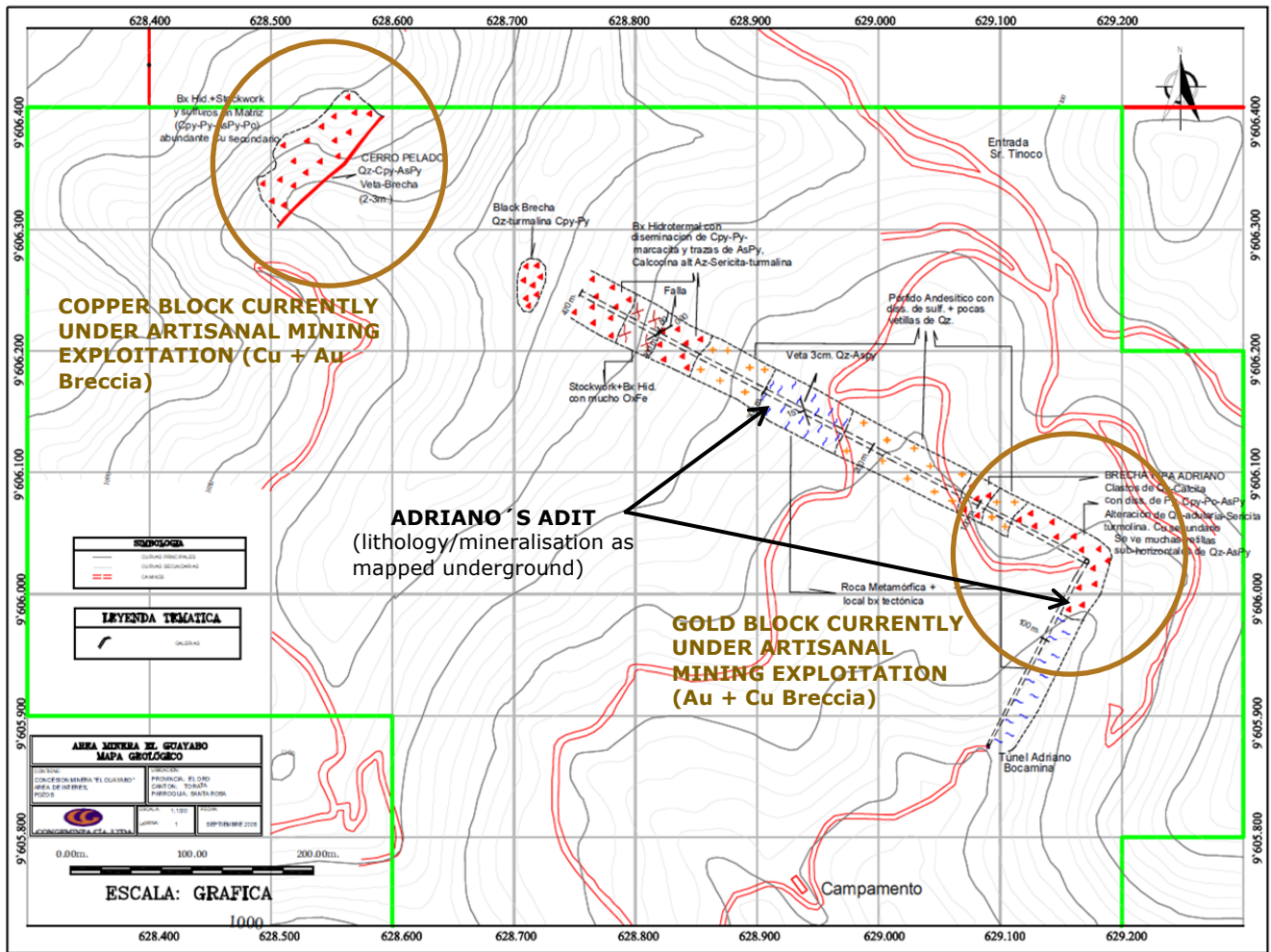


Figure 11 – Plan view mapped geology in Adit

Observations/Conclusions on the Project

The following lists my observations gathered from logging core, underground and surface geologic inspection, assay review, and personal communication with knowledgeable staff.

- The mineralization exhibited at the Guayabo project is pervasive and typical of a porphyry copper system.
- The Guayabo mineralizing porphyry is typical of “low sulfide” porphyry systems (Porgera, Sierrita, Henderson, Rico, Mt. Emmons, Kalamazoo).
- The current level of exposure is well below the “argillic, phyllic, pyritic (collapse related)” tops of many porphyry copper systems currently being mined in South and Central America. However, Guayabo does appear to be similar in setting to the exciting, new, large tonnage Cu/Au discoveries

at Cascabel and especially the nearby Cangrejos. At these two deposits, the best grades are at depth and associated with dioritic porphyries and tight breccias that appear not to have vented.

- While the project geology appears to be more similar to the nearby Cangrejos and Gaby (300Mt @ 0.7 g/t Au + 0.1% Cu located 70km north) gold rich porphyry deposits the early stage Cu:Ag Mineralisation breccia phase identified at El-Guayabo does not appear to be present at either Cangrejos and Gaby. The higher grades being intersected at depth in Cangrejos are akin to more intense Au rich breccia which in drill hole GY-02 returned values in excess of 1% Cu in some of the higher-grade sections. Gaby, which is open at depth, has not been drilled below 300m so the higher-grade zone encountered in Cangrejos may be yet to be penetrated.
- In the author's evaluation of the drill core (which was limited due to time constraints) advanced argillic and phyllic alteration patterns appeared to be largely missing possibly because the system is more sodic. Further supporting this the 43-101 report on Cangrejos describes Cangrejos as an Alkalic Au-Cu deposit. Alkalic porphyry systems are typically high-grade porphyry-style deposits associated with small volume pipe-like intrusions that have surface expressions of only a few hundred square meters. These systems are increasingly being recognized as being of important economic significance. They include some of the world's highest grade and largest porphyry-related gold resources. Cadia-Ridgeway and Dinkidi are examples of Alkalic Au-Cu deposits which would be well known to Australian geoscientists.
- Drill holes JDH-002 to JDH-006 and JDH-014 logged much of the gold and copper mineralization occurring in altered metamorphic wallrocks as well as breccia pipes. This (mineralization being pervasive in the surrounding country rocks) is generally evidence of a large Alkalic Au-Cu deposit. For example, this is commonly seen at Cardia.
- A detailed evaluation of the breccias was conducted in the Bloque De Oro which indicated:
 - High grade gold - copper mineralization is either confined to the breccias (at least two phases), or late tight (very minor selvages, no open space crystal growth) vein systems (predominately low-angle (less than 40-degree dip).
 - The older, first phase breccia is encountered in the Adriana adit. Figure 12 presented on the following page illustrates the position the older breccias are positioned in a porphyry system like Guayabo. The older phase breccias do not appear to have vented as there are no open space textures between fragments and all fragments are matrix supported. Another indication that the older breccias did not vent is the non-uniform shape of the breccias. In other words, no pipe like features.
 - The best grades in copper and gold are associated with the late, second breccia mineral event (open space), and the late low-angle, vein mineral event. The presence of a tourmaline copper gold pipe/dike like body located ridge between the high-grade pipe (that is being mined) and hole GY 2 adds to the evidence of Guayabo high grade porphyry Au Cu mineralization system. This noted tourmaline pipe outcrop has never been sampled and this is recommended as a priority.

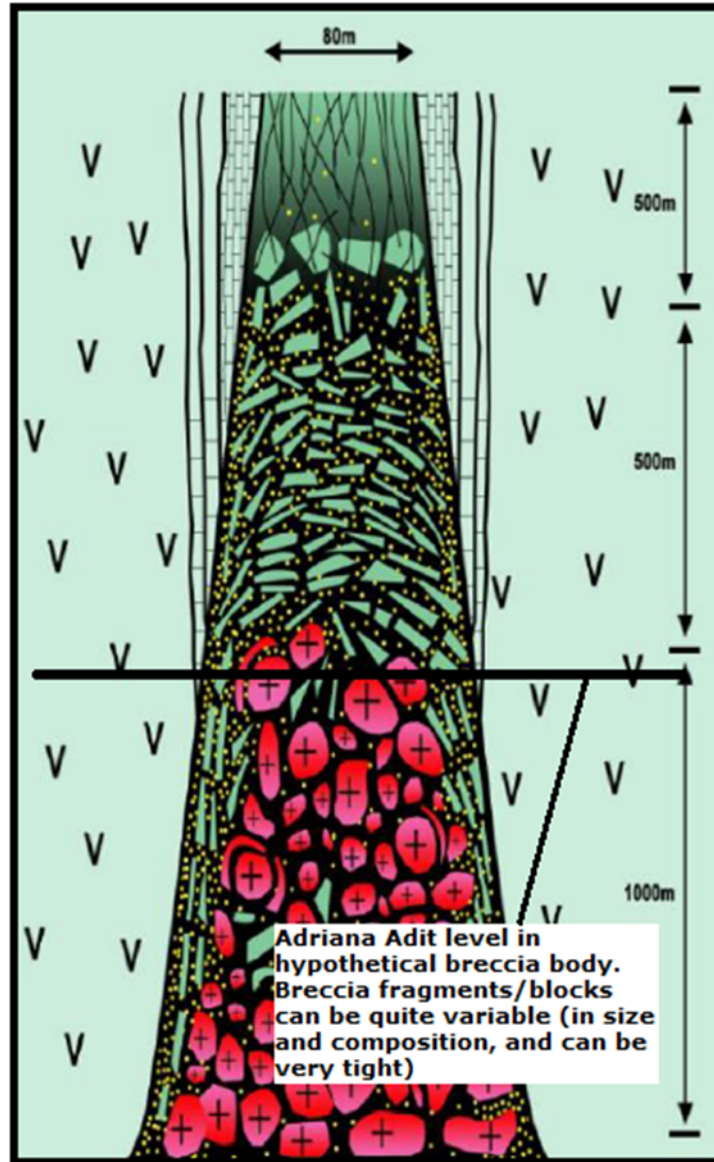


Figure 12 – Typical porphyry associated hydrothermal breccia

- The low angle-veins tend to dip inwards toward a central zone/area.
- The youngest breccia event along with the youngest, tight, thin, low-angle, vein event, are the locations of the best Au and Cu grades, by far!
- The older breccia event, as seen in DDH - GY – 2 and in pictures shown below is very tight and clearly shows the better grades occur in those breccias which display clear evidence of transported, mineralized fragments.
- The photos below show the tight brecciation encountered in drill hole GY 2. Note the fragment mixing of shapes and style. The white mineral/mineral assemblage is believed to be a mix of silica and albite. The black minerals appear to be iron rich chlorite and possibly non-crystalline actinolite/tourmaline. The assay geologic log for drill hole GY- 2 follows the pictures. Note the lack of detail observations in the log, yet this drill hole is a true discovery ore hole even for the late 1990's.



Sample #:	From:	To:	RCV	Au (Screen)	Au	Ag	Cu	Pb	Zn	As	Mo
CP	m	m	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm
3498	54.00	54.70		4.19	4212	2.6	40	6	41	14	4
3499	54.70	55.62		3.02	2841	65.6	4074	36	731	690	14

Figure 13 - DDH-GY-2 representative picture & ddh assay – log

- While the time allotted was insufficient to provide a detailed understanding, there appears to be mineral zoning --- good grade Ag \geq Ag outer vein mineralization, Au \gg Ag mineralization central veining, and then Au \geq Cu inner. The highest-grade mineralization is more central and associated with brecciation and veining. Arsenic was noted in the outer area of the prospect. Metal and element finger print zoning has proven to be a direct tool that leads to discovery. One only needs to look at the history of discoveries like Henderson – Urad, Silver Creek – Rico, 4 Metals – Red Mountain, or Mt. Emmons.
- The genesis/development of gold/copper porphyry mineralization at El Guayabo is interpreted as follows:
 - First pulse: A deep seated, vein-controlled mineralization (Au with minor sulfide (py, cpy.)) directly associated with an unidentified, black alteration mineral. Amorphous silicification (white – sodic) alteration seems to be associated with this early event, (similar situation at Cangrejos).
 -
 - Then: Hydrothermal mineralization & alteration related to a developing, large porphyry Au Cu system with associated discordant brecciation of wall-rock volcanics occurring. The hydrothermal

brecciation is described as a quartz matrix clast supported or in part banded hydrothermal breccia. This breccia has more open space than the first stage of the gold rich breccia

- Then: Discordant, hydrothermally related, brecciation of both the host porphyry and wall rock volcanics occurred. This hydrothermal brecciation is tight and carries fragments of extreme variations in size. These breccia bodies do not appear to be typical “pipe” in form but are more like oblong wavy zones. This mineralization is typified by the high-grade gold copper mineralization discovered in DDH-GY-2 and in the adit. In my experience this typifies large tonnage, deep seated, porphyry systems.
 - Finally: The youngest stage of mineralization occurs and is typified by very high grade, thin, low-angle veins (Au > Cu), and the true pipe shaped high grade (Au = Cu) breccia bodies. Two of these bodies are recognized and are interpreted to be a true pebble dike or pipe like bodies. Again, this relationship and style of mineralization is displayed by many of the deep discoveries during the last 50 years of exploration.
- Sulfide metal zoning may be present as exhibited by the following: distal Ag > Au veins zoning inward to Au > Ag veining, and then the inner Au ≥ Cu odd shaped, tight breccias. Attachment 2 is a Plan Projection (SIMPLIFIED) that tries to illustrate potential metal zoning and structure/veining patterning both of which support the presence of a core/central area for discovery of a “Low Sulfide” porphyry copper gold ore system.



Sample #:	From:	To:	RCV	Au (Screen)	Au	Ag	Cu	Pb	Zn	As	Mo
CP	m	m	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm
3504	60.00	61.00		5.03	4828	46.1	7234	163	432	510	40
3505	61.00	62.00		3.67	3530	41.7	2374	57	190	125	19

Expansion of Tenement Position

While the project contains all identified mineralization to date a significant part of the postulated porphyry system (circa 30%) could fall outside of the existing concession. The acquisition of adjoining properties particularly to the north and the south should be a priority.

Discussions with the tenement owners have indicated that the tenements to the west (held by xxx a TSX and Frankfurt listed junior) are likely available for farm-in or acquisition cheaply. The tenements immediately to the north and south of the project are held by local speculators and available for acquisition – most likely via a cash sale. The current project owner has offered to assist in the acquisition of these tenements. Given the properties are in the hands of speculators a targeted acquisition program using local representatives should be completed before any drilling is conducted.

Suggested work program

6-month time line (see Attachment 1, Time Line Tab)

- Acquire missing historic data maps, scan as needed to build 3 D model, especially focusing on veining, breccias, structures, geochemistry, metal zoning/ratios.
- Mapping sampling with the low sulfide model for guidance.
- Re-log core with attention to breccias features and chemistry.
- Underground mapping and sampling limited to safe conditions.
- Then (or during) core drilling 2 ddhs 1000m per hole.
- Geophysical survey, as justified by geology, which by its self could generate additional drilling h (800m).
- Support technical surveying, possibly supported by new aerial control.
- Continue community support

Logistics

- Field core control/storage, sawing, office, computers, phones, radios.
- Office in town small and staffed locally.
- Two 4WD vehicles (leased?) with drivers.
- Safety support/education for employees and others who work on company land.
- Continue with onsite staff and improve communications with off-site management.

Budget

- Appendix 4 outlines the budget needed for the acquisition and discovery exploration phase of El Guayabo porphyry gold copper property. A 6-month exploration work program of \$1.35 million (US) is presented in a spread sheet format.

Appendix 1 – Assay Results

Drillhole (#)	TD (m)	Mineralised Interval		Total (m)		Gold		Ag		Cu		Au (eqv)	Cu (eqv)
		From	To			(g/t)		(g/t)	(%)	(g/t)	(%)		
JDH-001	236.9	118.7	128.7	10	m @	0.2	g/t Au +	no assay		no assay		n/a	n/a
	and	176.9	200.6	23.7	m @	0.16	g/t Au +	no assay		no assay		n/a	n/a
JDH-002	257.5	6.1	256.1	250.0	m @	0.4	g/t Au +	no assay		no assay		n/a	n/a
	inc	64.8	110.2	45.4	m @	0.7	g/t Au +	no assay		no assay		n/a	n/a
	and	116.3	152.9	36.6	m @	0.5	g/t Au +	no assay		no assay		n/a	n/a
JDH-003	260.97	36	45.7	9.7	m @	1.3	g/t Au +	no assay		no assay		n/a	n/a
	and	48.8	54.9	6.1	m @	0.2	g/t Au +	no assay		no assay		n/a	n/a
	and	60.97	79.6	18.6	m @	0.3	g/t Au +	no assay		no assay		n/a	n/a
	and	120.42	254.57	134.2	m @	0.4	g/t Au +	no assay		no assay		n/a	n/a
JDH-004	219	0	25.47	25.5	m @	0.3	g/t Au +	no assay		no assay		n/a	n/a
	and	67.4	207.8	140.4	m @	0.4	g/t Au +	no assay		no assay		n/a	n/a
	inc	124.47	207.8	83.3	m @	0.5	g/t Au +	no assay		no assay		n/a	n/a
JDH-005	210.37	5.18	91.07	85.9	m @	0.4	g/t Au +	no assay		no assay		n/a	n/a
	and	108.8	123.17	14.4	m @	0.2	g/t Au +	no assay		no assay		n/a	n/a
	and	147.38	155.49	8.1	m @	0.2	g/t Au +	no assay		no assay		n/a	n/a
	and	161.59	208.5	46.9	m @	0.2	g/t Au +	no assay		no assay		n/a	n/a
JDH-006	302.74	10.4	89.6	79.2	m @	0.2	g/t Au +	1.9	g/t Ag +	0.09	% Cu	0.40	0.24
	and	107.93	281.09	173.2	m @	0.4	g/t Au +	7.0	g/t Ag +	0.31	% Cu	1.02	0.62
	inc	164.8	281.09	116.3	m @	0.6	g/t Au +	8.9	g/t Ag +	0.40	% Cu	1.38	0.84
	inc	227.8	281.09	53.3	m @	1.2	g/t Au +	13.3	g/t Ag +	0.63	% Cu	2.44	1.48
JDH-007	105.8	3.96	34.6	30.6	m @	0.2	g/t Au +	0.7	g/t Ag +	0.03	% Cu	0.22	0.13
	and	39.7	84.45	44.8	m @	0.3	g/t Au +	1.3	g/t Ag +	0.04	% Cu	0.38	0.23
	and	88.5	92.54	4.0	m @	0.2	g/t Au +	0.8	g/t Ag +	0.03	% Cu	0.27	0.16
	and	100.69	105.79	5.1	m @	0.2	g/t Au +	0.5	g/t Ag +	0.01	% Cu	0.24	0.15
JDH-008	352.7	21.34	92.46	71.1	m @	0.1	g/t Au +	1.6	g/t Ag +	0.03	% Cu	0.22	0.13
	and	104.65	236.89	132.2	m @	0.1	g/t Au +	2.5	g/t Ag +	0.09	% Cu	0.26	0.16
	and	249.1	316.15	67.1	m @	0.2	g/t Au +	5.8	g/t Ag +	0.27	% Cu	0.75	0.45
	inc	291.76	316.15	24.4	m @	0.5	g/t Au +	9.3	g/t Ag +	0.34	% Cu	1.13	0.69
JDH-009	256.7	6.7	14.3	7.6	m @	0.2	g/t Au +	3.5	g/t Ag +	0.03	% Cu	0.30	0.18
	and	14.7	117.98	103.3	m @	0.7	g/t Au +	15.6	g/t Ag +	0.61	% Cu	1.91	1.16
	and	170.8	172.8	2.0	m @	1.0	g/t Au +	0.8	g/t Ag +	0.01	% Cu	1.06	0.64
	and	176.9	181	4.1	m @	0.3	g/t Au +	1.1	g/t Ag +	0.03	% Cu	0.36	0.22
	and	201.4	205.4	4.0	m @	11.4	g/t Au +	9.7	g/t Ag +	0.01	% Cu	11.54	6.99
	and	219.6	227.4	7.8	m @	0.7	g/t Au +	1.5	g/t Ag +	0.05	% Cu	0.80	0.49
	and	255.1	eoh	1.5	m @	0.7	g/t Au +	1.5	g/t Ag +	0.02	% Cu	0.75	0.46

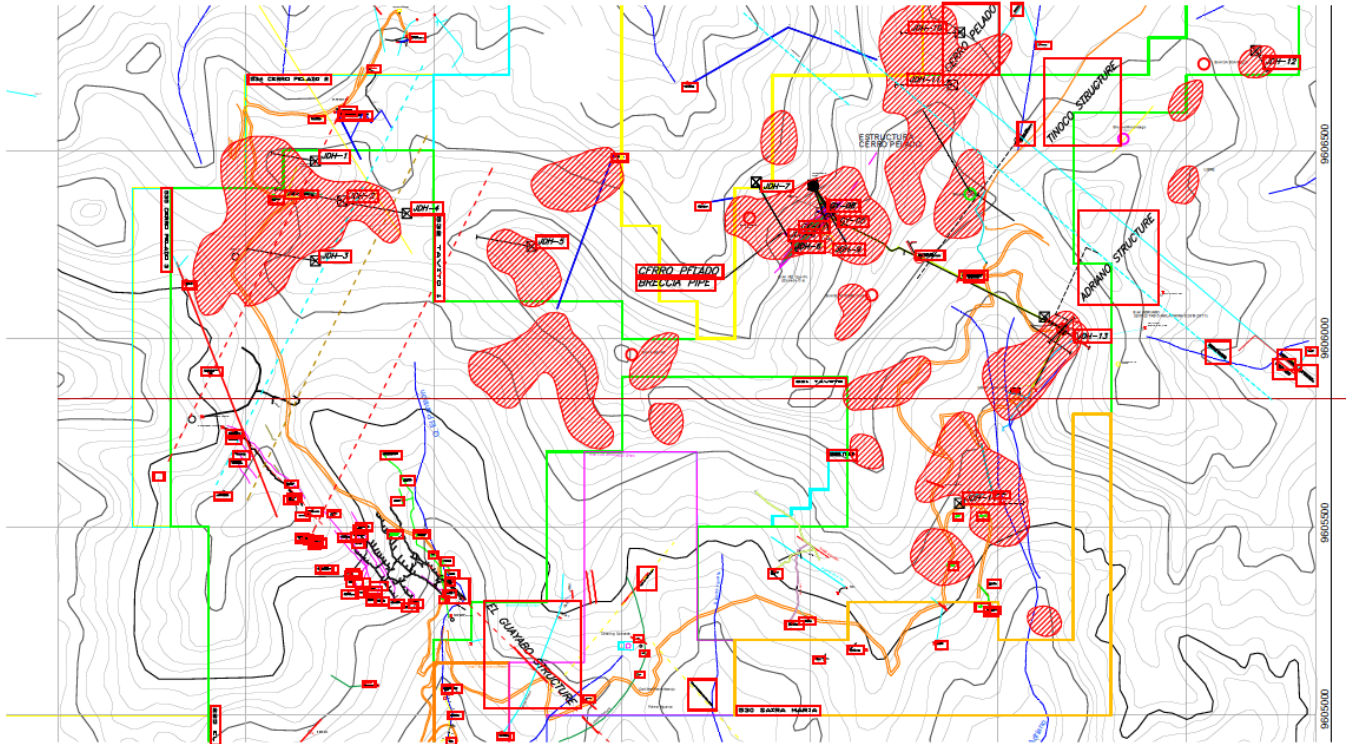
Drillhole (#)	TD (m)	Mineralised Interval		Total (m)	Gold (g/t)	Ag (g/t)	Cu (%)	Au (eqv) (g/t)	Cu (eqv) (%)
		From	To						
JDH-10	221.6	1.5	52.9	51.4 m @	0.5 g/t Au +	2.5 g/t Ag +	0.09 % Cu	0.68	0.41
	and	90.5	119	28.5 m @	0.2 g/t Au +	3.0 g/t Ag +	0.10 % Cu	0.40	0.24
	and	140	eoh	81.6 m @	0.3 g/t Au +	1.1 g/t Ag +	0.06 % Cu	0.40	0.24
JDH-011	218.0	6.1	24.4	18.3 m @	0.2 g/t Au +	0.2 g/t Ag +	0.02 % Cu	0.24	0.14
		82.4	102.7	20.3 m @	0.1 g/t Au +	2.2 g/t Ag +	0.03 % Cu	0.20	0.12
		102.7	eoh	115.3 m @	0.4 g/t Au +	4.2 g/t Ag +	0.10 % Cu	0.57	0.35
JDH-012	124.08	0	53.96	54.0 m @	0.6 g/t Au +	5.5 g/t Ag +	0.04 % Cu	0.68	0.41
JDH-013	124.08	53.35	65.4	12.1 m @	0.5 g/t Au +	6.5 g/t Ag +	0.03 % Cu	0.62	0.38
	and	89.9	154.96	65.1 m @	1.4 g/t Au +	2.7 g/t Ag +	0.06 % Cu	1.53	0.93
	inc	114.32	140.7	26.4 m @	3.0 g/t Au +	5.2 g/t Ag +	0.01 % Cu	3.05	1.85
JDH-014	239.39	1.52	167.15	165.6 m @	0.3 g/t Au +	3.9 g/t Ag +	0.08 % Cu	0.52	0.32
	inc	26.7	75.7	49.0 m @	0.4 g/t Au +	5.3 g/t Ag +	0.10 % Cu	0.67	0.41
	inc	128.5	167.15	38.7 m @	0.5 g/t Au +	3.7 g/t Ag +	0.08 % Cu	0.69	0.42
	and	173.25	eoh	66.1 m @	0.1 g/t Au +	2.0 g/t Ag +	0.07 % Cu	0.24	0.15
GGY-001	249.2	105	243	138.0 m @	0.3 g/t Au +	0.8 g/t Ag +	0.04 % Cu	0.38	0.23
	inc	151.5	158.5	7.0 m @	3.1 g/t Au +	6.0 g/t Ag +	0.09 % Cu	3.32	2.01
GGY-002	272.9	0	183	183.0 m @	2.7 g/t Au +	10.1 g/t Ag +	0.15 % Cu	3.06	1.85
	inc	0	102	102.0 m @	3.3 g/t Au +	12.7 g/t Ag +	0.15 % Cu	3.71	2.25
	and	114	183	69.0 m @	1.2 g/t Au +	4.1 g/t Ag +	0.20 % Cu	1.60	0.97
	and	244	272	28.0 m @	0.3 g/t Au +	2.3 g/t Ag +	0.00 % Cu	0.31	0.19
GGY-003	295.9	1	262	261.0 m @	0.2 g/t Au +	2.9 g/t Ag +	0.06 % Cu	0.35	0.21
	and	263	eoh	33.0 m @	0.1 g/t Au +	1.6 g/t Ag +	0.04 % Cu	0.21	0.13
GGY-004	172.2	1	42	41.0 m @	0.4 g/t Au +	2.3 g/t Ag +	0.03 % Cu	0.50	0.31
GGY-005	258.27	12	192	180.0 m @	0.4 g/t Au +	10.0 g/t Ag +	0.27 % Cu	0.92	0.56
	inc	12	100	88.0 m @	0.6 g/t Au +	16.1 g/t Ag +	0.37 % Cu	1.44	0.87
	inc	12	52	40.0 m @	0.6 g/t Au +	26.9 g/t Ag +	0.57 % Cu	1.91	1.16
GGY-006	101.92	1	15	14.0 m @	0.7 g/t Au +	3.0 g/t Ag +	0.04 % Cu	0.83	0.50
	and	53	eoh	49.0 m @	0.4 g/t Au +	2.6 g/t Ag +	0.03 % Cu	0.45	0.27
	inc	72	eoh	30.0 m @	0.6 g/t Au +	2.6 g/t Ag +	0.04 % Cu	0.65	0.39
GGY-007	127	0.9	eoh	126.1 m @	0.6 g/t Au +	2.0 g/t Ag +	0.04 % Cu	0.68	0.41
	inc	119	eoh	8.0 m @	1.3 g/t Au +	3.7 g/t Ag +	0.13 % Cu	1.59	0.96
GGY-008	312.3	0	271	271.0 m @	0.1 g/t Au +	6.2 g/t Ag +	0.23 % Cu	0.60	0.36
	inc	221	271	50.0 m @	0.4 g/t Au +	9.7 g/t Ag +	0.48 % Cu	1.27	0.77
GGY-009	166.2	1.65	45	43.4 m @	1.7 g/t Au +	2.9 g/t Ag +	0.06 % Cu	1.80	1.09
	and	76	90	14.0 m @	0.2 g/t Au +	5.2 g/t Ag +	0.05 % Cu	0.32	0.20
	and	121	eoh	45.0 m @	0.1 g/t Au +	1.8 g/t Ag +	0.04 % Cu	0.19	0.11

Drillhole (#)	TD (m)	Mineralised Interval		Total (m)		Gold (g/t)	Ag (g/t)	Cu (%)	Au (eqv) (g/t)	Cu (eqv) (%)			
		From	To										
GGY-010	194.47	0	95	95.0	m @	1.6	g/t Au +	2.4	g/t Ag +	0.03	% Cu	1.67	1.01
	inc	21	64	43.0	m @	2.2	g/t Au +	2.5	g/t Ag +	0.03	% Cu	2.28	1.38
	and	172	eoH	13.0	m @	0.2	g/t Au +	1.3	g/t Ag +	0.05	% Cu	0.28	0.17
GGY-011	241.57	0	227	227.0	m @	0.2	g/t Au +	9.7	g/t Ag +	0.34	% Cu	0.87	0.53
	inc	16	96	80.0	m @	0.2	g/t Au +	14.6	g/t Ag +	0.46	% Cu	1.14	0.69
	inc	202	227	25.0	m @	0.4	g/t Au +	16.4	g/t Ag +	0.86	% Cu	2.01	1.22
GGY-012	256	57	131	74.0	m @	0.4	g/t Au +	1.9	g/t Ag +	0.05	% Cu	0.52	0.31
	and	156	192	36.0	m @	0.2	g/t Au +	3.3	g/t Ag +	0.13	% Cu	0.43	0.26
	and	192	eoH	64.0	m @	0.0	g/t Au +	0.8	g/t Ag +	0.04	% Cu	0.12	0.07
GGY-013	340.9	37	43	6.0	m @	0.3	g/t Au +	1.0	g/t Ag +	0.02	% Cu	0.32	0.19
	and	237	280	43.0	m @	0.2	g/t Au +	2.5	g/t Ag +	0.06	% Cu	0.34	0.20
GGY-014	309.1			nsi								0.00	0.00
GGY-015	251.1	110	132.4	22.4	m @	0.4	g/t Au +	0.5	g/t Ag +	0.03	% Cu	0.45	0.27
	and	153	168	15.0	m @	0.2	g/t Au +	1.3	g/t Ag +	0.08	% Cu	0.38	0.23
	and	179	237	58.0	m @	0.3	g/t Au +	1.6	g/t Ag +	0.10	% Cu	0.45	0.27
GGY-016	195.73	8	57	49.0	m @	0.2	g/t Au +	0.7	g/t Ag +	0.01	% Cu	0.26	0.16
	and	185	188	3.0	m @	1.0	g/t Au +	0.8	g/t Ag +	0.01	% Cu	1.03	0.62
GGY-017	280.4	0	24	24.0	m @	0.5	g/t Au +	1.3	g/t Ag +	0.01	% Cu	0.49	0.30
	and	69	184	115.0	m @	0.5	g/t Au +	2.4	g/t Ag +	0.04	% Cu	0.55	0.33
	inc	125	147	22.0	m @	0.2	g/t Au +	3.0	g/t Ag +	0.08	% Cu	0.35	0.21
	and	206	241	35.0	m @	0.3	g/t Au +	1.8	g/t Ag +	0.07	% Cu	0.44	0.27
	and	254	277	23.0	m @	0.6	g/t Au +	1.3	g/t Ag +	0.02	% Cu	0.60	0.36
GGY-018	160.4	0	25	25.0	m @	0.1	g/t Au +	0.5	g/t Ag +	0.01	% Cu	0.13	0.08
	and	78	136	58.0	m @	0.2	g/t Au +	3.3	g/t Ag +	0.06	% Cu	0.35	0.21
GGY-019	175.4	89	155	66.0	m @	0.3	g/t Au +	0.4	g/t Ag +	0.00	% Cu	0.30	0.18

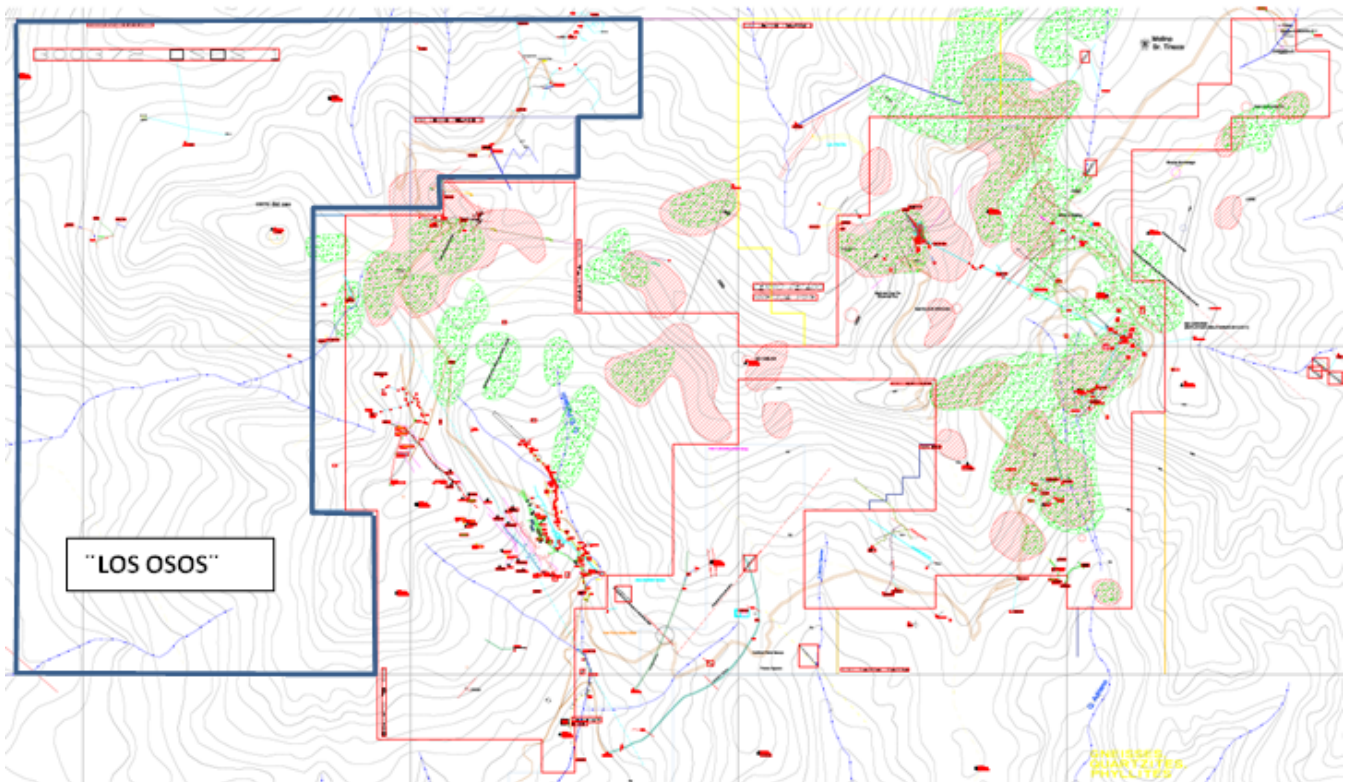
Appendix 2 – Drill collar location data

DRILLHOLE CODE	EAST (X)	NORTH (N)	ELEVATION (m.a.s.l)	AZIMUTH (°)	DIP (°)	FINAL DEPTH	DRILLED BY
JDH01	627185.78	9606463.27	933.47	280.0	-60.0	236.89	Newmont
JDH02	627260.37	9606353.12	921.56	280.0	-45.0	257.62	Newmont
JDH03	627191.61	9606200.35	952.82	280.0	-45.0	260.97	Newmont
JDH04	627429.81	9606324.00	933.80	280.0	-45.0	219.00	Newmont
JDH05	627755.97	9606248.70	1066.24	280.0	-45.0	210.37	Newmont
JDH06	628356.37	9606416.13	911.58	150.0	-45.0	302.74	Newmont
JDH07	628356.37	9606416.13	911.58	150.0	-75.0	105.79	Newmont
JDH08	628356.37	9606416.13	911.58	150.0	-60.0	352.74	Newmont
JDH09	628507.01	9606408.43	990.18	150.0	-45.0	256.70	Newmont
JDH10	628897.96	9606813.62	985.60	270.0	-45.0	221.64	Newmont
JDH11	628878.64	9606674.39	1081.96	270.0	-45.0	217.99	Newmont
JDH12	629684.61	9606765.31	993.45	150.0	-60.0	124.08	Newmont
JDH13	629122.61	9606058.49	1020.98	125.0	-60.0	239.33	Newmont
JDH14	628897.15	9605562.77	852.59	90.0	-45.0	239.32	Newmont
DRILLHOLE CODE	EAST (X)	NORTH (N)	ELEVATION (m.a.s.l)	AZIMUTH (°)	DIP (°)	FINAL DEPTH	DRILLED BY
DDHGY 01	628928.09	9605517.20	839.01	360	-90.0	249.20	Odin
DDHGY 02	629171.15	9606025.55	983.16	360.0	-90.0	272.90	Odin
DDHGY 03	629041.84	9606312.81	1063.37	305.0	-60.0	295.94	Odin
DDHGY 04	629171.68	9606025.18	983.2	125.0	-60.0	172.21	Odin
DDHGY 05	628509.21	9606405.29	989.87	145.0	-60.0	258.27	Odin
DDHGY 06	629170.56	9606025.97	983.11	305.0	-60.0	101.94	Odin
DDHGY 07	629170.81	9606025.80	983.16	305.0	-75.0	127.00	Odin
DDHGY 08	628508.95	9606405.74	989.86	145.0	-75.0	312.32	Odin
DDHGY 09	629171.22	9606025.88	983.22	45.0	-75.0	166.25	Odin
DDHGY 10	629170.77	9606025.24	983.12	225.0	-75.0	194.47	Odin
DDHGY 11	628507.97	9606405.33	989.83	160.0	-60.0	241.57	Odin
DDHGY 12	629087.18	9606035.53	996.98	125.0	-60.0	255.7	Odin
DDHGY 13	629242.46	9605975.42	997.292	320.0	-65.0	340.86	Odin
DDHGY 14	629242.27	9605975.64	997.285	320.0	-75.0	309.14	Odin
DDHGY 15	629194.67	9605912.35	977.001	320.0	-60.0	251.07	Odin
DDHGY 16	629285.92	9606044.44	1036.920	320.0	-60.0	195.73	Odin
DDHGY 17	629122.31	9606058.64	1021.053	125.0	-82.0	280.04	Odin
DDHGY 18	628993.10	9606035.45	977.215	140.0	-60.0	160.35	Odin
DDHGY 19	629087.23	9606034.98	997.332	45.0	-53.0	175.41	Odin

Appendix 3- Soil geochemistry data



- Au > 100 ppb red colour



- Au > 100 ppb red color ; Cu > 300 ppm green colour