ORIECO PROJECT **99ORDD2**

HOLE NO: 99ORDD2	SECTION:	GRID:

PROJECT CODE
TENEMENT : EL 1/98
PROSPECT : ORIECO
GRID
MAP REFERENCE : SCAMANDER TIER
LOCATION : ORIECO
HOLE TYPE : DIAMOND

COLLAR COORDINATES AND RL

SURVEYED:
AMG 5413740N 601120E 38RL

PRE-COLLAR DEPTH 0m
FINAL DEPTH 115.80m

PURPOSE OF HOLE : Resource Definition
HOLE STATUS : Complete
COMMENTS : Ore intersection 70m below existing workings

SURVEY DATA
Survey Method: Eastman Single Shot

Depth	Azimuth	Inclination
36.8	038	-45
115.8	035	-43

SUMMARY LOG

0.00-11.30m	Quartz Sandstone
11.30-14.60m	Siltstone
14.60-28.00m	Interbedded Quartz Sandstone and Siltstone
28.00-99.20m	Quartz Sandstone and Interbedded Siltstone
99.20-115.80m	Foliated and Silicified Quartz Sandstone-Mylonite

** DRILLING SUMMARY**

DIAMOND 0.00 115.80 BQTK

Drilling Contractor : LIDDS
Drill Rig: : Gopher 28
Date Started : 21 Feb 99
Date Completed : 27 Feb 99
Logged By : AG
Sampled By : AG

Material Left in Hole : NIL

Base of Complete Oxidation : 7.90m
Top of Fresh Rock : 7.90m
Water First Encountered : nil
Water Inflow Estimate : nil

SIGNIFICANT ASSAYS

102.50-103.60m	70ppm Ag 3.05% Cu
110.00-111.10m	90ppm Ag 1.35%Cu 1.35%Zn

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FROM (m)	TO (m)	GEOLOGICAL LOG	SAMPLE No	FROM (m)	TO (m)
0.00	1.20	CORE LOSS			
1.20	11.30	QUARTZ SANDSTONE Pale gray to tan coloured, fine grained, massive quartz sandstone. Sandstone is partly oxidised from 1.20-7.90m, with ferric oxides strongly developed along joint planes. Weakly developed, <5%, white, massive quartz veinlets typically 1-2mm in width. Veinlets vugged in part with no significant mineralisation observed. Veinlets typically orientated at 10 and 40 degrees to the core axis. 7.90m Base of complete oxidation.			
11.30	14.60	SILTSTONE Black, fine grained, massive siltstone. Upper contact sharply defined and orientated at approx 45 degrees to the core axis. 11.30-13.00m Moderate 5%, white-gray coloured quartz-?kaolin veinlets 1-2mm in width. Veins are discontinuous, non-mineralised and orientated at approximately 45 degress to the core axis.			
14.60	28.00	INTERBEDDED QUARTZ SANDSTONE AND SILTSTONE Gray, fine grained, interbedded quartz sandstone and siltstone exhibiting repetitive fining upwards cycles. Sandstone units are typically gray, massive, fine to medium grained and grade into gray to black coloured, massive to bedded siltstones. Sedimentary sttructres developed include parallel bedding, cross-bedding and small scale slump structures. The interval contains approximately 5% white to gray quartz-kaolin veinlets + rare pyrite 1-2mm in thickness orientated at 10 and 45 degrees to the core axis.			

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FROM (m)	TO (m)	GEOLOGICAL LOG	SAMPLE No	FROM (m)	TO (m)
28.00	99.20	QUARTZ SANDSTONE AND INTERBEDDED SILTSTONE Gray, to slightly green coloured, fine to medium grained quartz sandstone with minor silt interbeds developed at 31.10m-32.00m; 34.80m-35.0m;46.60m-48.0m;50.2m-51.50m. The silt horizons are typically black in colour. Sedimentary structures recognised include parallel bedding, small scale cross-bedding, slump and flame structures. The sequences exhibit repetitive fining upward cycles with gradational contacts between the silt and sandstone intervals. 37.20-48.00m Zone of approximately 5% white to gray colured quartz veinlets typically 1-2mm in width. Veinlets orientated at 10 and 40 degrees to the core axis and increase in intensity locally to become stockworked. Veins contain rare scattered pyrite cubes and blebs. 48.00-49.70m Sandstone moderately silicified and fractured, with 5% fine grained pyrite+chlorite+quartz veinlets. 59.00-60.10m Moderately silicified sandstone with 10% white-gray quartz+chlorite veinlets 2-5mm thickness. Veins typically orientated at 60 degrees to core axis with trace fine grained pyrite. 66.70-67.30m Moderately silicified sandstone with 10% white-gray quartz+chlorite veinlets 2-5mm thickness. Veins typically orientated at 60 degrees to core axis with trace fine grained pyrite. 70.20-72.80m Zone of approximately 10% white to gray colured quartz veinlets typically 1-2mm in width. Veinlets orientated at 10 and 60 degrees to the core axis and increase in intensity locally to become stockworked. Veins contain rare scattered pyrite cubes and blebs. 72.80-79.50m Weak, 1% white coloured, massive quartz veins 2-3mm in width @ 40 degrees to core axis. Trace fine grained pyrite cubes 79.50-80.20m Strongly silicified fine to medium grained, gray to pale green coloured sandstone with strong 10% gray quartz-chlorite veinlets to 10mm. Veins are typically 5mm in width fine grained pyrite+. black massive chalcocite+trace chalcopyrite. Veins preferentially orientated at 40 degrees to the core axis. 80.20-85.80m Trace 1% white, massive quartz veinlets 1-2mm orientated at 10 and 40 degrees to the core axis. Veinlets are non mineralised.			

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FROM (m)	TO (m)	GEOLOGICAL LOG	SAMPLE No	FROM (m)	TO (m)
		85.90m 20mm wide quatz+pyrite+chalcopyrite vein at 40 degrees to the core axis. Host sandstone is strongly silicified.			
		88.35m Zone 5cm in width containing mulyiple white, massive quartz veins typically 1cm in width and orientated at 40 degrees to the core axis. Quartz veins contain minor chlorite and pyrite cubes.			
		90.30-91.30m Gray-pale green, fine grained, partly silicified and massive quartz sandstone. Interval contains 5% white-gray massive quartz veinlets+ minor pyrite orientated at 40 degrees to the core axis.			
		91.35m 5-10mm wide quartz-pyrite-chalcopyrite vein, 40 degrees to the core axis.			
		92.60m 10mm wide, white to gray coloured, massive, quartz-chlorite-chalacocite vein at 20 degrees to the core axis. Host sandstone locally fractured with open vughs which have been partly infilled by black fine grained chalcocite + pyrite.			
		94.0-99.90m Zone of 5% multiple white, massive quartz veins typically 1cm in width at 40 degrees to the core axis. Veinlets with trace fine grained pyrite and chalcocite.	P1050	94.00	95.00
			P1051	95.00	96.00
			P1052	96.00	97.00
			P1053	97.00	98.00
99.90	115.80	FOLIATED SILICIFIED QUARTZ SANDSTONE - MYLONITE	P1054	98.00	99.00
		Gray, fine grained, foliated moderate to strongly silicified quartz sandstone/mylonite.	P1055	99.00	99.90
		The zone represents the main structure hosting the copper mineralisation developed at the Orieco Prospect	P1056	99.90	100.80
			P1057	100.80	101.60
		99.90-102.50m Zone moderatley silicifed, with approximately 5% pyrite+chalcopyrite+chlorite veinlets	P1058	101.60	102.50
		1-2mm in thickness. Veins are typically discontinuous, but exhibit a preferential orientation of 30 degrees to the core axis.	P1059	102.50	103.60
			P1060	103.60	104.50
		102.5-103.60m Zone of intense (70%) pyrite+chalcopyrite+chalcocite veining which may be locally	P1061	104.50	105.55
		stockworked. Chalcocite is generally present as either a trace or accessory phase usually in	P1062	105.55	106.55
		void spaces. No sheared contacts to the mineralisation,veins exhibit a gradual increase in	P1063	106.55	107.50
		intensity.	P1064	107.50	108.50

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FROM (m)	TO (m)	GEOLOGICAL LOG	SAMPLE No	FROM (m)	TO (m)
		103.6-115.80m Zone of weak (1%) pyrite + chalcopyrite occurring either as veinlets typically 1-2mm in width or as isolated aggregates. Veinlets typically 30-40 degrees tot he core axis. Two vein styles recognised. Type 1: pyrite veinlets+fine grained black chalcocite or Type 2: veinlets with a central chalcopyrite core rimmed by fine grained pyrite.	P1065	108.50	109.30
			P1066	109.30	110.00
			P1067	110.00	111.10
			P1068	111.10	112.00
			P1069	112.00	113.00
			P1070	113.00	114.00
			P1071	114.00	115.00
			P1072	115.00	115.80
		END OF HOLE 115.80M			