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LOWER ANVIL CREEK JOINT VENTURE

PROGRESS REPORT 1977

for

CYPRUS ANVIL MINING CORPORATION

and

PREUSSAG CANADA LTD.

by

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and

D. S. Jennings, Ph.D.

November 1, 1977

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LOWER ANVIL CREEK JOINT VENTURE

Progress Report - 1977

SUMMARY

During 1977 cut line grids were extended to cover six restaked claims on the western margin of the claim block. Additional Turam and gravity surveys were carried out on the new line and Turam was completed on a twelve mile northeastern section of the 1976 grid. In addition, selected lines of the 1973 Scintrex Surveys Limited Turam was rechecked and I.P. expanders used as a means to estimate depth to granite basement. Map sheets C-6 and D-6, extending well outside the claim boundaries, were mapped in detail as part of an overall geological re-interpretation of the area west of Faro. The 1970 DDH LA-1 was re-logged and two holes totalling 489.11m were drilled in 1977 on two separate gravity targets. Of these 77-LA-1 to 152m, intersected a marginal phase of the Anvil Batholith; the gravity anomaly apparently being caused by a bedrock ridge. Hole 77-LA-2 to 337.11m cut in excess of 100m of unconsolidated overburden, and continued to termination in high metamorphic grade quartzo-feldspathic schists of the Faro Group.

Outcrops of Mount Mye Group calc-silicate rocks in the Lower Anvil Creek gorge to the north of 77-LA-2, and also in hole 70-LA-1 to the south, indicate the presence of a major F_1 fold axis paralleling the Lower Anvil Creek valley, and, by correlative implication, the possible presence of the lower sulphide horizon host rock which, at Faro, lies between the overlying calc-silicate and underlying Faro schist sequences.

No direct evidence of sulphide occurrence was noted in either borehole and the presence of extremely variable and often very thick overburden raises a question as to the interpretability of the geophysical methods employed. Suggestions for further work rest on testing the stratigraphic inferences implied by the geological cross section, possibly by cheaper overburden drilling techniques on a grid or selected fence pattern. Field expenditures to 31 September, 1977 totalled $190,174 of which $72,472 was incurred in 1976.

PREVIOUS WORK

During 1976, some sixty miles of chainsaw grid was cut over the main area of interest within the Lower Anvil Creek claim block, underlain by rocks of the Anvil lead-zinc belt. A gravity survey and claim location program was conducted over the grid area. A number of moderate excess mass anomalies were indicated of which one, at the western extremity of the GRAN claims, and a second just south of Anvil Creek gorge on the ARO claims, were considered to be suitable drill targets. Extension and closure of the gravity survey in a number of areas and completion of Turam survey in others was carried out prior to drill target selection.

WORK PROGRAM 1977

Six previously lapsed claims, GRAN 7-12, were restaked due to the proximity of an indicated gravity anomaly on the northwest margin of the 1976 claim block, and additional cut line, Turam, and gravity surveys were extended to close off the area of interest on the additional claims. An area on the ROTO claims, in the northeast corner of the claim block, was covered by new Turam surveys, but as no conductors were apparent gravity was not extended over this block.

Some doubt remained as to the validity of the rather uniform, moderate Turam anomalies indicated by the 1973 Scintrex survey along the Lower Anvil Creek valley. In order to better evaluate this work the inphase-outphase angles of the Scintrex survey were recalculated to allow direct comparison with Walcott Ltd. surveys, common to both the extended 1977 Turam and other Turam surveys in the Anvil belt. In addition several lines were rerun by Walcott Ltd. to test reproducibility of results. While the latter tests indicated that the Scintrex work was satisfactory the recalculated values indicated that most of the profiles were incompatable with good graphitic response by comparison to other areas in the district, and those paralleling Lower Anvil Creek would most likely be caused by either overburden effects e.g self ionization or response to calc-silicate and schist packages.

A thorough and detailed revision of the geology on the claims and in surrounding areas was carried out as part of an overall mapping program in the Rose Creek-

Lower Anvil Creek valley areas, west of Faro, and some re-interpretation of the claim block geology made. The geology is described in detail in a later section, but three prominant facts emerged in that;

(a) the Anvil Batholith suite was more extensive than previously considered;
(b) the boundary between Unit 3D (calc-silicate Mount Mye Group) and 5A-5B (graphitic and calcareous phyllites of the Vangorda Group) does not extend onto the C-6 map area, and;
(c) the outcrops previously mapped as calcareous phyllite in the Lower Anvil Creek valley are in fact Unit 3D calc-silicate rocks.

Similarly on re-logging DDH 70-LA-1, in addition to sections of basic greenstone, the country rock proved to be calc-silicate phases (3D) of the Mount Mye Group. Thus the stratigraphic exploration target was limited to the Faro horizon (1D) between Unit 3D (Mount Mye Group) and feldspathic schist (1C) of which no outcrops were noted in the Lower Anvil Creek area.

Six additional claims were staked and the maximum assessment work was filed on these and all other claims in the joint venture agreement. An updated claim summary is included as Appendix i to this report.

RESULTS OF 1977 PROGRAM

1) Geology

Mineral claims comprising the joint venture land package straddle the overburden-filled valley of Lower Anvil Creek. Bedrock exposure is less than 1% necessitating geologic interpretation from drill holes, peripheral areas of better exposure, federal aeromagnetic surveys and to a lesser extent, ground geophysical surveys.

The accompanying 1"=1000' maps of areas C-6 and D-6 summarize the best current interpretation of available geologic and geophysical data. The joint venture area is underlain principally by rocks of Faro and Mount Mye Groups (Units 1 and 3 respectively) as well as granitoids of Anvil Batholith (Unit 10). Drastic stratigraphic and/or tectonic thinning of Vangorda Group (Unit 5) through C-6 and D-6 precludes the presence of thick sections of 5A graphitic phyllites (host of Grum, Vangorda, DY, Swim), the original exploration target of the joint venture. Only a thin ($\approx$100 ft) section of Vangorda Group rocks was mapped northwest of C-6. An original thinned section coupled with intrusive "cut-outs" of Vangorda Group in C-6, render this unit effectively absent throughout the joint venture claim area.

Thus by elimination, the principal "stratigraphic" target is the upper horizon (Unit 1D) of Faro Group known to host the Faro deposit approximately 14 miles to the southeast. While carbonaceous biotite-muscovite-andalusite schists of Unit 1D were not observed either in outcrop or drillcore in the joint venture area, a modest section of Unit 1C quartzo-feldspathic biotite-muscovite gneisses and schists is indicated in DDH 77-LA-2 between two thick packages of Unit 3 calc-silicate phyllites (3D) and non-calcareous biotite-muscovite schists (3G). This mode of occurrence is analogous to the Unit 3 repetition about a regional northeasterly verging doubly plunging Z symmetry, F_1 (first phase) megascopic fold cored by Unit 1 at the Faro deposit and, similarly on the Eva/Mabel claims (Welcome North Mines) in the northwestern corner of map area D-6. The nearly identical stratigraphic situation in the present joint venture area strongly suggests the continuation of the Faro F_1 antiform from map area E-6 northwest through D-6 and C-6.

In the vicinity of the Faro deposit, Unit 1C, the oldest recognizable Unit, is succeeded upward by carbonaceous pelitic schists of Unit 1D. It appears Unit 1D has a "free form" or "amoeboid" shape in the So plane in reconstructed three dimensional format. The Faro deposit lies near the margin of this "reduced basinal shale assemblage". In areas where Unit 1 rocks are exposed it is therefore not necessary to see Unit 1D schists developed to recognize the so-called "Faro horizon". The presence of Unit 1C in contact with Unit 3D/3G defines it.

Continued exploration in the joint venture area should concentrate on delimiting the presence or absence of Unit 1D on either "limb" of

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the postulated megascopic F_1 fold. Constraints have been placed on the "search" area by DDHs 70-LA-1 and 77-LA-2 as well as Unit 3 exposures southwest and northeast of the respective holes. Additional constraints are placed on the probable area of subcrop of Unit 1 rocks by the 1968 federal aeromagnetic survey. Northwest of DDHs 70-LA-1 and 77-LA-2, lower magnetic relief responses in the 1000ft mean terrain clearance survey, suggests metamorphic rocks to be cut out by the Anvil Batholith northeast of and subparallel to Lower Anvil Creek. If this interpretation is correct and unit contacts are roughly parallel to S_2 in the metamorphic rocks, the Faro "horizon" should be cut out by the batholith as shown, thereby limiting the search area virtually to the central corridor of the claim area. The moderate to strong turam anomaly on the southwest flank of the major fold may be indicative of Unit 1D.

Within the confines of our current understanding of Anvil Range geology, no additional geologic exploration targets beyond Unit 1D (Unit 1/Unit 3 contact) are apparent in the joint venture area. It is suggested that a flextrack mounted overburden/diamond drilling rig would most effectively delimit and refine the Unit 1 outcrop pattern along selected lines of section.

2) Geophysics

For a summary of 1976 and previous geophysical surveys, reference should be made to the 1976 Progress Report and a Preliminary Report on Gravity Survey by P. E. Walcott. During 1977 all previous Turam surveys were recalculated and redrafted. Additional surveys on the newly staked GRAN 7-12 claims showed a continuation of the modest Turam anomalies to the west-southwest and a more discrete elongate shape to the excess mass gravity anomaly. The latter was estimated at in excess of 1.0 m gal with a causative depth of 250-300m. The only other gravity feature which was considered as target potential was centered on Line 48W at 57+50N just south of the Lower Anvil Creek gorge. No significant turam features were associated with this anomaly.

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Recalculation of the 1973 Turam results significantly downgraded the persistent but suspect anomalies paralleling Lower Anvil Creek in the eastern section of the claim block. Twelve miles of fill-in Turam on the ROTO claims did not reveal any potential graphitic zones and no gravity surveys were conducted over this part of the grid.

Two I.P. expanders were carried out over lines 80W and 120W in an effort to estimate the depth of overburden and depth to possible local granite basement. These were interpreted as indicating a 50 to 150m depth of overburden and at least 300m of additonal metasediments.

On the basis of geological mapping and comparative overlays of Turam, gravity, and airborne magnetics two drill targets were selected.

3) Drilling

Target 77-LA-1 (grid reference L24W 9+00N) was selected to test the centre of an indicated mass excess gravity anomaly and partly coincident airborne magnetic anomaly associated with moderate Turam effects. After only 7 metres of overburden, granodioritic material of the Anvil Batholith was intersected and continued until the hole was terminated at 152m. The geophysical overprint was not suggestive of this lithology and the circumstances are unusual for the district. The shallow overburden implies a bedrock ridge flanked by deep troughs of overburden and while the causative depth projected by Mr. Walcott was deeper than 150m no justification could be made for continuation of the hole. The Turam effects flanking the gravity must be interpreted as overburden effects as they are most atypical of granite response by comparison with other areas. A small but persistent amount of pyrrhotite was noted throughout the granodioritic core, which again is most unusual for the district, but would obviously explain the magnetic anomaly. In hindsight, an I.P. expander over the target would have warned of the shallow overburden and probably

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indicated a granite suboutcrop, however, the combination of anomalies would still have warranted a drill test at some stage. Target 77-LA-2 was sited at Line 48W 57+50N to test the mass excess gravity anomaly, but more importantly to provide stratigraphic information as to the units underlaying the Lower Anvil Creek valley. This location was on section between outcrops of Unit 3D/3G in Lower Anvil Creek gorge and calc-silicate greenstone lithologies of Units 3D/3C in DDH 70-LA-1. After some 100m of difficult caving overburden, the hole was drilled entirely in quartzo-feldspathic schists of the Faro Group Unit 1C, with minor tactite horizons, and was terminated in this lighology at 489.11m. This hole can be regarded as a technical success in that it proves beyond doubt that the Lower Anvil Creek valley is underlain in part by the Faro Group, host of the Faro orebodies further to the east, and implies the presence of a major F_1 antiform roughly parallel to Lower Anvil Creek, with Unit 1C flanked by Unit 3 lithologies. No sulphide indicators were seen in the hole, which would structurally form the footwall sequence to the Faro sulphide horizon. As the 3D Unit calc-silicate rocks form the hanging wall sequence there is a strong inference that andalusite bearing, graphitic schist of Unit 1D may be present in the Lower Anvil Creek area.

Detailed lithological and structural logs of DDHs 77-LA-1 and 2 and a relog of 70-LA-1 are included as Appendix ii at the rear of this report.

SUMMARY AND CONCLUSIONS

It must be concluded that in the Lower Anvil Creek area the highly variable and often thick glacial overburden renders interpretation of our traditionally useful Turam and gravity surveys extremely difficult. Persistence in drilling a second hole for maximum stratigraphical information, although expensive, proved successful and implies that Lower Anvil Creek valley is underlain by the Faro mine sequence. Further work on the claim blocks will obviously be difficult and expensive, based on a spatial assessment of the Faro Group-Mount Mye Group contact by drilling. It is suggested that this may be best

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achieved by utilization of a relatively cheap track-mounted, rotary-hammer rig, of which it is hoped a proto-type unit will be tested in the general Faro area in 1978. No immediate follow-up on the Lower Anvil Creek claims is contemplated at this time.

Respectfully submitted,

J. G. SIMPSON
Vice-President, Exploration.

JGS/ew
November 1, 1977.

CYPRUS ANVIL MINING CORPORATION

DIAMOND DRILL CORE LOG

ole Number: 70 LA-1

oject: Tintina/Lorna

cation: Map Area C-6; 105-K-5

Claim: Lorna 29

Terr. Plane
Co-ords.: ______ N

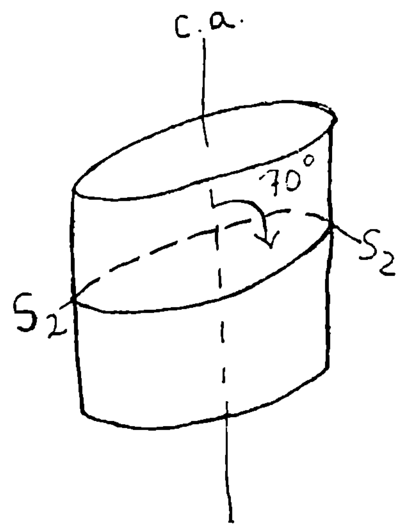
______ E

Grid
Co-ords.: L24W, 9+00N

Elevation: Approx. 3,000'

al Depth: 567'

Fabric Orientation Diagram:



All symmetry determinations looking NW with S_2 dipping SW with dip azimuth ______.

oose: Test Gravity Anomaly with Coincident Magnetic Anomaly

ed by: D.S. Jennings/G.A. Jilson Date(s) Logged: ______

ling
ractor: ______

Core:	Size	From	To
	BQ	140	576

Collar Cased and Capped: Yes

Started: 4 Nov., 1970 Completed: 6 Dec., 1970

DH 70LA-1 (2–8)

Cyprus Anvil Mining Corp.

Diamond Drill Core Log

Drillhole (–8)	Elevation (10–16)	Northing (17–24)	Easting (25–32)	Comments (34–48)
0LA-1	3000.0			NOT SURVEYED

Drillhole (–8)	Depth (10–14)	Zenith Angle (22–26)	True Azimuth (28–32)	Comments (34–56)
0LA-1	0000	180.0	00.0	AT COLLAR ASSUME VERT.

Drillhole (–8)	Comments, Errant Remarks, Snivellings and /or Lewd Suggestions (10–47)

Lithologic Log

Logged By: DSJ and GAJ

From		To		Unit	Code	Description
0	14	16	20	22 23	25 27	
0	0	140	0	1	#	Overburden.
140	0	146	0	2	3D4	Calc-silicate.
146	0	175	0	3	3C0	Metabasite, "gabbroic" texture with prominent relict
						pyroxene phenos and minor pyrrhotite.
175	0	186	0	4	3D8	Calc-silicate, almost no calc-silicate or CO_3 bands,
						medium reddish-brown biotite-muscovite schist.
186	0	218	0	5	1D0	1D0 band in 3D sequence. In general, this looks like
						3A9 transition zone.
218	0	309	5	6	3D4	Calc-silicate - sub-equal calc-silicate and biotite-
						phyllite bands.
309	5	314	0	7	1D0	3A9, similar to 186-218. Looks like transition zone at
						mine.
314	0	319	5	8	3D1	3D1 band with 3D4 318.5-319.5.
319	5	337	0	9	1D0	3A9 as 186-218; 309.5-314.
337	0	354	0	10	3D8	Essentially 175-186; reddish brown biotite-muscovite
						phyllite/schist with no calc-silicate or CO_3 interbands.
354	0	360	0	11	3D1	3D1 band.
360	0	362	0	12	1D0	3A9.
362	0	364	0	13	3D1	3D1 breccia, highly epidotized post-D_2 breccia.
364	0	369	5	14	1D0	3A9.
369	5	372	5	15	3D4	3D4 band.
372	5	380	0	16	3D8	As 175-186; 337-354.
380	0	382	0	17	3D1	
382	0	399	0	18	3D4	Sub-equal calc-silicate and biotite-phyllite bands.
399	0	403	5	19	3D1	Massive "metabasite" or calc-silicate band.
403	5	408	0	20	1D0	3A9. Finely crystalline Al_2SiO_5 in PS_2 foliated
						carbonaceous biotite-muscovite-andalusite schist.
408	0	417	0	21	3D4	3A9. Sub-equal calc-silicate and biotite-phyllite.
						Excellent transition zone lithology.
417	0	438	0	22	3C0	Metabasite with relict igneous texture. This interval
						is interpretted as foliated margin of pre-D_2 and/or
						pre-D_1 gabbro or diorite.
438	0	576	0	23	0G0	Gabbro with relict igneous texture, magnetite-bearing,
						feldspars altered; this interval is unfoliated equiva-
						lents of 417-438.

DDH 70LA-1 (cols. 2–8)

Cyprus Anvil Mining Corp.

Structural Log

Logged By: DSJ and GAJ

From (–14)	To (16–20)	Feature (22–24)	Sym (26)	S_1 Dip (28–)	S_1 Direct. (–32)	S_2 Dip (34–)	S_2 Direct. (–38)	Description
	1430					80		All measurements taken from 1970 log by
	1600					80		W. J. Roberts/R. Nussbaum.
	1800					70		
	2000					60		
	2200					60		
	2400					65		
	2620					65		
	2800					50		
	3000					80		
	3230					75		
	3460					85		
	3630					85		
	3800					90		
	4040					85		
	4270					55		

CYPRUS ANVIL MINING CORPORATION

DIAMOND DRILL CORE LOG

.e Number: 77 LA-1

)ject: Lower Anvil Joint Venture (Cyprus Anvil/Preussag Canada)

:ation: Lower Anvil Creek, Map Area C-6

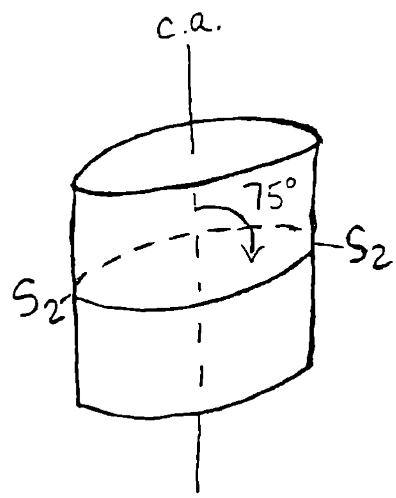
Claim: Gran 15

Terr. Plane Co-ords.: ______ N

______ E

Grid Co-ords.: 152 W, 36+50N

Fabric Orientation Diagram:



All symmetry determinations looking NW with S_2 dipping SW with dip azimuth ______.

Elevation: Approx. 3,000'

al Depth: 152 M

pose: To test Gravity Anomaly

ged by: G. D. House

Date(s) Logged: ______

.ling ractor: Arctic Diamond Drilling

Core: Size	From	To
BQ	15.4	152.0

Collar Cased and Capped: No

Started: 15/08/77

Completed: 20/08/77

Cyprus Anvil Mining Corp.

Diamond Drill Core Log

H 77LA-1

Drillhole	Elevation	Northing	Easting	Comments
77LA-1	3000.0			NOT SURVEYED

Drillhole	Depth	Zenith Angle	True Azimuth	Comments
77LA-1	0000	180.0	00.0	AT COLLAR VERTICAL

Drillhole	Comments, Errant Remarks, Snivellings and /or Lewd Suggestions

DDH 77LA-1

Cyprus Anvil Mining Corp.

Lithologic Log

Page - of

Logged By: G.D. House

From	To	Unit	Code	Description
0 0	15 4		#	Overburden.
15 4	25 0		0B9	Broken, altered Kaolin.
25 0	39 0		0B0	Porphyritic granodiorite.
39 0	54 0		0C0	Fine-grained, biotite-rich dyke.
54 0	66 0		0B0	Porphyritic granodiorite.
66 0	72 3		0B0	
72 3	72 5		0B0	Fine-grained, biotite-rich.
72 5	79 6		0B0	
79 6	82 6		0B9	Altered Kaolin fractures at 45°.
82 6	98 0		0B0	
98 0	107 0		0B0	
107 0	111 0			Gouge, shear.
111 0	113 5		0B0	Pyrrhotite.
113 5	114 8			Gouge, shear 0-5°.
114 8	118 0		0B0	
118 0	118 2			Gouge, shear.
118 2	124 0		0B0	
124 0	126 3			Fracture, gouge 20°-80°.
126 3	132 0		0B0	
132 0	138 5		0B0	
138 5	144 3			Shear, fracture, fault 138.7. 139.6 - sand.
144 3	145 0		0B0	
145 0	146 8			Gouge.
146 8	148 8		0B0	
148 8	152 0			Gouge.
				END OF HOLE

CYPRUS ANVIL MINING CORPORATION

DIAMOND DRILL CORE LOG

le Number: 77 LA-2

ɔject: Lower Anvil Joint Venture

ːation: Lower Anvil Creek

Claim: Aro 24

Terr. Plane Co-ords.: ______ N

______ E

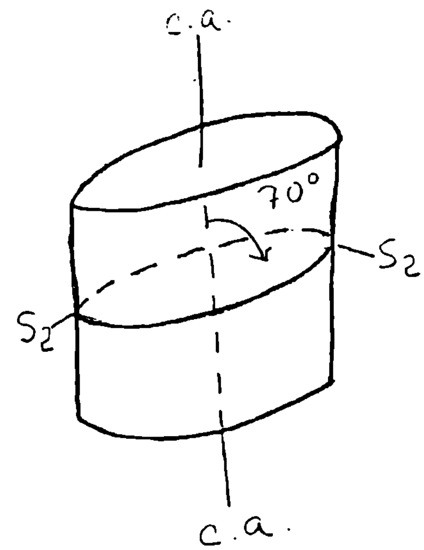
Grid Co-ords.: L48W, 57+50N

Elevation: Approx. 2,900'

al Depth: 337.11 M

ɔose: To test Gravity and Turam Anomalies.

Fabric Orientation Diagram:



All symmetry determinations looking NW with S_2 dipping SW with dip azimuth ______.

ged by: G. D. House   Date(s) Logged: 11, 12, 13 September, 1977

lling ːractor: Arctic Diamond Drilling

Core: Size	From	To
BQ	95.1 M	337.11 M

Collar Cased and Capped: Yes

Started: 26/08/77   Completed: 12/09/77

Cyprus Anvil Mining Corp.
Diamond Drill Core Log

DH 77LA-2

Drillhole	Elevation	Northing	Easting	Comments
77LA-2	2900.0			NOT SURVEYED

Drillhole	Depth		Zenith Angle	True Azimuth	Comments
77LA-2	000	0	180.0	.	AT COLLAR VERTICAL

Drillhole	Comments, Errant Remarks, Snivellings and /or Lewd Suggestions
77LA-2	214 FEET NW CASING LEFT IN HOLE.
	DIFFICULT OVERBURDEN CAUSED INITIAL
	PROBLEMS.
	NO EXPLANATION FOR GRAVITY ANOMALY
	SEEN IN CORE.

DDH 77LA-2

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Cyprus Anvil Mining Corp.

Lithologic Log

Logged By: G.D. House

From		To		Unit	Code	Description
10	14	16	20	22 23	25 27	
0	0	95	1	1	#	Overburden and casing. Bedrock from 80.8 M - cased to
						95.1 M.
95	1	97	0	2	1C7	Contorted S_2, broken ground, staurolite.
97	0	100	1	3	1C7	Knots garnets, light brown.
100	1	103	3	4	1C7	Garnets.
103	3	104	0	5	0Q0	Muscovite, pyrite in quartz vein, 75^{0} to core axis.
104	0	106	5	6	1C8	Mixed 1C1, S_2 at 0-5^{0}, broken ground.
106	5	110	9	7	1C7	Contorted S_2.
110	9	111	5	8	1C1	Quartz-feldspar-muscovite-garnet "quartzite".
111	5	116	0	9	1C7	
116	0	116	4	10		Quartz vein, 80^{0}, garnets.
116	4	132	0	11	1C7	Garnets.
132	0	135	4	12	1C8	Fine-grained, chloritic, garnets in veins.
135	4	142	0	13	1C7	Lost core 136.3-136.6. Contorted S_2, biotite knots,
						pyrite associated S_2 planars from 137 M.
142	0	144	0	14	1C8	Contorted S_2.
144	0	148	1	15	1C7	Pyrite on S_2 planars, garnets, chlorite.
148	1	148	9	16	1C1	Quartz-feldspar-muscovite "quartzite", altered.
148	9	151	7	17	1C7	Minor quartz planars to S_2.
151	7	155	0	18	1C7	Contorted S_2, minor bands to 0.2 M 1C8.
155	0	160	7	19	1C7	Much decreased staurolite, minor garnets.
160	7	164	0	20	1C8	Mixed chlorite and biotite schist.
164	0	167	4	21	1C7	Minor garnets.
167	4	167	6	22	0Q0	Quartz vein.
167	6	176	4	23	1C7	Contorted S_2, pyritic.
176	4	178	8	24	1C7	Altered, chloritic sericitic, gougey? Quartz-muscovite
						vein 179.4-179.7 M.
178	8	185	0	25	1C7	Contorted S_2.
185	0	186	0	26	1C7	To 1C8 in parts, associated quartz veining, altered,
						chloritic, pyrite.
186	0	188	0	27	1C7	Quartz veining part S_2, pyrite, chlorite.
188	0	199	0	28	1C7	Pyritic, minor quartz veins cross-cutting S_2 planes,
						chloritic 195-196 M.
199	0	200	0	29	0E8	Hornblende-quartz-feldspar intrusive, dyke, fault
						bounded.

DDH 7 7 L A - 2 (columns 2–8)

Cyprus Anvil Mining Corp.
Lithologic Log

Logged By: G.D. House

From		To		Unit	Code	Description
	14	16	20	22 23	25 27	
200	0	201	1	30	1C8	Sheared, broken ground to 200.2, siliceous and chloritic.
						pyrite.
201	1	206	4	31	1C7	Increased biotite-muscovite, pyritic, siliceous.
206	4	208	2	32	1C8	1.1 M recovery, lost core. Chloritic alteration,
						broken ground, FAULT.
208	2	209	2	33	1C1	Very pyritic, BROKEN GROUND, FAULT GOUGE AND ALTERATION.
209	2	210	0	34	1C7	Pyritic, ALTERED, GOUGE, VERY BROKEN, FAULT ZONE.
210	0	211	5	35	1C7	LOST CORE, NO RECOVERY.
211	5	213	6	36	1C8	Slightly pyritic, broken ground.
213	6	214	3	37	1C8	Gougey, altered, pyritic.
214	3	216	2	38	1C8	Less gougey, pyritic.
216	2	217	0	39	1C8	Pyritic, GOUGE.
217	0	219	5	40	1C8	More solid, quartz veined.
219	5	223	0	41	1C7	Pyritic, altered, chloritic, healed shear zone?
223	0	225	7	42	1E2	Muddy gouge at 223.7 M, very pyritic.
225	7	233	2	43	1C7	Very pyritic.
233	2	233	8	44	1C8	Fine grained, chloritic (alteration around dyke?).
233	8	236	8	45	0D8	LOST CORE. 0.2 M recovered, very fine grained, pink
						garnets.
236	8	238	0	46	0D8	LOST CORE, GROUND, BROKEN GROUND, PEBBLES 10D.
						0.8 M recovered.
238	0	238	5	47	1C7	0.2 M recovery, LOST CORE, BROKEN, RUST, FAULT ZONE.
238	5	240	3	48	1C5	Coarser S_2 layering, banding, increased quartz-feldspar.
240	3	242	3	49	1C8	FAULT ZONE, QUARTZ-FELDSPAR-CHLORITE VEINED, FILLED.
242	3	243	5	50	1C7	BROKEN GROUND.
243	5	246	0	51	1C7	Healed shear zones - quartz filled, 25^{0} to core axis at
						244.6, 244.5, 246.0 M.
246	0	247	9	52	1C7	
247	9	248	2	53	1C8	Quartz-feldspar-muscovite-garnet-chlorite shear 65^{0}.
248	2	252	2	54	1C7	Contorted S_2.
252	2	252	4	55	1C8	Garnet-chlorite-muscovite filled fracture.
252	4	253	5	56	1C7	Very contorted kinked S_2.
253	5	255	0	57	1C7	Siliceous, quartz-filled veins, shears, at high angles.
255	0	255	4	58	1C7	Increased staurolite.
255	4	256	2	59	1C7	Ptygmagtic veining.

Cyprus Anvil Mining Corp.
Lithologic Log

Logged By: G.D. House

From	To	Unit	Code	Description
2562	2574	60	1C7	Large porphyritic garnets, late, cross-cut S_2.
2574	2595	61	1C7	Chloritic garnets, contorted S_2.
2595	2597	62	0C0	Biotite-rich quartz-feldspar vein, shear.
2597	2612	63	1C7	Altered, siliceous, very contorted S_2.
2612	2614	64	1C7	Biotitic, contorted around quartz-feldspar vein.
2614	2675	65	1C7	Contorted S_2, late kink folds, increased disseminated garnet.
2675	2706	66	1C7	S_2 at low angles, also quartz-feldspar veins, healed fault/shear zone.
2706	2754	67	1C7	Altered, increased staurolite and garnet, quartz-feldspar veins and healed shears.
2754	2858	68	1B5	Calcareous, 1C3, margin to 1G5. TACTITE.
	2756	69	1C4	1C3 garnets.
	2760	70	1B3	Bands pink-brown garnets, silicated marble, calcareous.
	2764	71	1B5	Bands biotite-garnet-marble, calcareous.
	2768	72	1B3	Large pink garnets in marble.
	2789	73	1B5	Bands biotite-garnet-marble, S_2 layers.
	2793	74	1C3	Staurolite and garnets, soft altered.
	2799	75	1B0	Contorted S_2 layers/bands garnet-marble-biotite-chlorite.
	2805	76	1B5	Calc-silicate S_2 layers parallel to core axis, slightly contorted.
	2815	77	1B5	Biotite-calc-silicate-garnet narrow S_2 layers.
	2850	78	1C3	Staurolite, garnet, calcareous.
	2858	79	1C3	0.2 M recovered, LOST CORE, GOUGE, BRECCIA.
2858	2874	80	1C3	BRECCIA, LOST CORE, FAULT ZONE, BRECCIA. 1C3.
2874	2882	81	1C3	Garnets, staurolite, shears at 35-45^0, gougey.
2882	2904	82	1C7	Contorted, garnets, slightly calcareous.
2904	2982	83	1C7	Garnets, disseminated, contorted S_2, calc-silicate veins at 296.5.
2982	3023	84	1C7	Garnets, gouge associated quartz-feldspar veins in part.
023	3030	85	1B5	Massive garnet-calc-silicate-biotite layer, part S_2.
030	3194	86	1C7	Garnet-rich veins, disseminated garnets.

TACTITE HORIZON DETAILED (units 69–79)

DH 7 7 L A - 2

Cyprus Anvil Mining Corp.

Lithologic Log

Logged By: G.D. House

From		To		Unit	Code	Description
319	4	322	1	87	1C8	Chlorite alteration, to 1F?
322	1	326	2	88	1C7	Contorted S_2, disseminated garnets.
326	2	337	1	89	1C7	Contorted S_2,S_3-S_4 kink folds, garnetiferous.

337.11 M END OF HOLE

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Cyprus Anvil Mining Corp.
Structural Log

Logged By: G.D. House

Code	From		To		Feature	Sym	S_1 Dip	S_1 Direct.	S_2 Dip	S_2 Direct.	Description
S	95	1	103	3					65		
S	103	6	104	0					0		0-5° S_2 quartz filled fault?
S	104	0	107	0					65		Contorted S_2, fracture at 0-5°.
S	107	0	110	6					65		S_3 dip 40° to 300° az.
S	111	2	115	7					50		S_3 dip 60° to 270° az.
S	116	1	132	0					65		Minor S_3.
S	132	0	135	4					60		Fracture dip 25° to 010°.
S	135	4	139	0							Distorted S_2 to 139 M.
S	139	0	148	4					65		S_2 to 45° dip around quartz vein at 145M
S	148	4	155	0					60		Contorted quartz veins, etc.
S	155	0	160	7					40		
S	160	7	164	0					70		Most contorted, 70° dip in 1C8 at 162.2M
S	164	0	166	1					70		
S	166	1	167	6							Quartz-muscovite vein, very contorted S_2
S	167	6	172	0					75		S_3 kinks to 20 mm on S_2.
S	172	0	176	4					50		Minor variation about 50°, S_3-S_4 kinks
											to 20 mm.
S	177	4	177	7							Quartz vein, healed shear at 80°.
S	178	0	182	0					40		S_3 kink folds on S_2.
S	182	0	185	0					50		Minor S_3 kink folds in S_2.
S	188	0	188	1					50		Minor quartz veins at 50°N.
S	188	1	190	2					75		
S	190	2	197	3					50		Quartz veins cross cut at 50°.
S	197	3	199	0					65		Increasing quartz, siliceous.
S	201	1	206	5					50		Contorted S_2, S_3 and S_4
S	206	5	211	5							FAULT ZONE, GOUGE ETC. at 40-50°.
S	211	5	213	6					75		Chloritic.
S	213	6	214	0							GOUGE, FAULT, 50°.
S	214	0	219	5					65		Strong S_2, minor quartz veins, very
											minor S_3.
S	219	5	223	0					75		Healed shear? Strong S_2.
S	223	0	223	8					75		Carbonaceous layers, S_2 gouge at 223.8M.
S	223	8	224	3					75		
S	224	3	225	3					45		Contorted S_2 to S_3 folds.
S	225	3	226	8					55		

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Cyprus Anvil Mining Corp.
Structural Log

Logged By: G.D. House

Code	From	To	Feature	Sym	S_1 Dip Direct.	S_2 Dip Direct.	Description
1	10–14	16–20	22–24	26	28–32	34–38	
S	2273	2290				70	
S	2322	2335				70	Courser banding S_2.
S	2385	2400				65	
S	2400	2410					FAULT ZONE, DIP 35°. Healed quartz-feldspar.
S	2417	2423					FAULT ZONE, DIP 5-15°. Quartz healed.
S	2436	2445				70	
S	2445	2450				40	Healed shears at 40° also.
S	2450	2476				70	Contorted S_2, S_3-S_4 kink folds.
S	2480	2484				35	
S	2484	2502				70	Contorted S_2, S_3-S_4 kink folds.
S	2502	2518					Very contorted S_2, no regular S_2.
S	2518	2522				75	
S	2522	2615					Quartz veined, contorted S_2, late S_3-S_4 kinks.
S	2615	2655				65	Kink folded S_2, late S_2-S_3
S	2655	2673				70	Quartz veined in part.
S	2673	2683				15	Faulted, sheared, low angle S_2.
S	2683	2712					FAULT, healed SHEAR, low angle 35-45°.
S	2712	2754				40	Quartz-feldspar veined, at 80°.
S	2760	2764				75	Banded marble.
S	2815	2850				65	Biotite-marble-garnets S_2 layers.
S	2850	2874					FAULT, BRECCIA, GOUGE, 35-50°.
S	2874	2882				35	1C3, strong S_2.
S	2882	2904				60	1C7, contorted S_2.
S	2904	2930				35	1C7.
S	2930	2940				65	1C7.
S	2940	2954				55	
S	2960	2970				60	
S	3010	3100				65	
S	3100	3130					Contorted S_2, S_3-S_4 kink folds.
S	3130	3150				35	Contorted S_2, S_3-S_4 kink folds.
S	3150	3200				70	S_2 planars.
S	3220	3250				70	
S	3250	3270				35	

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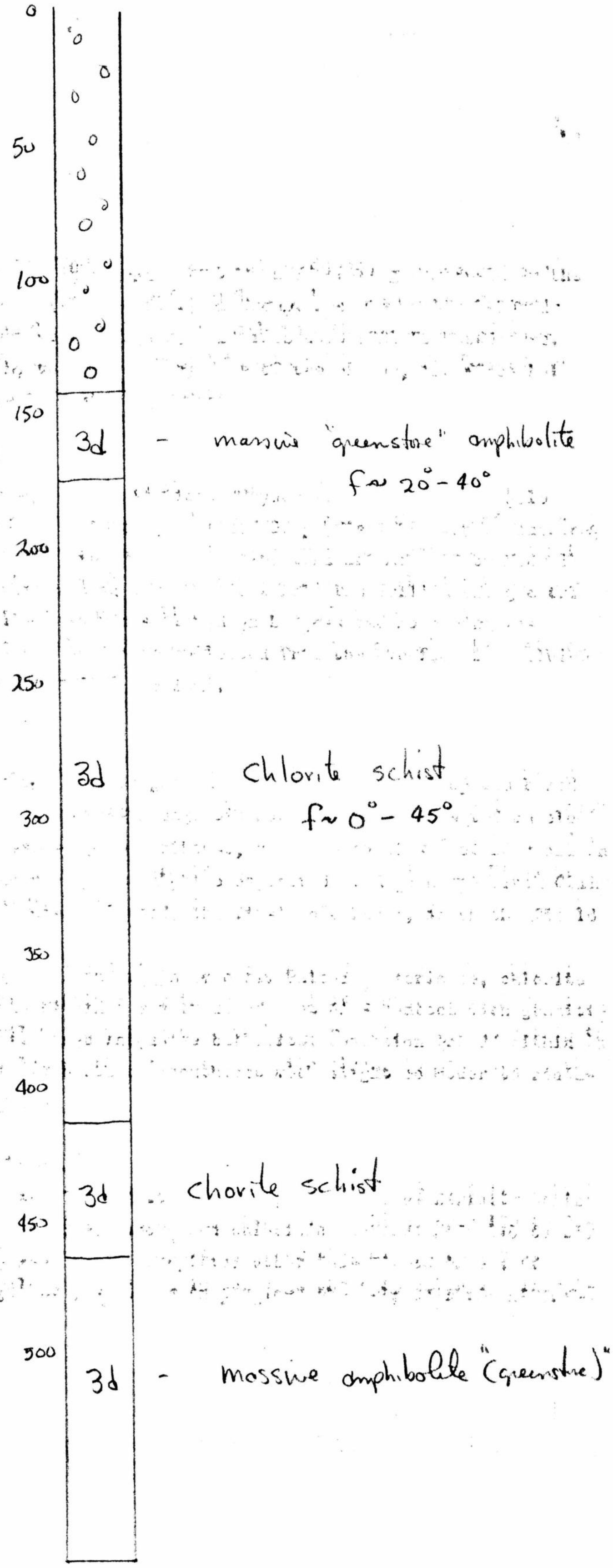
Cyprus Anvil Mining Corp.

Structural Log

Logged By: G.D. House

From	To	Feature	Sym	S1 Dip	S1 Direct.	S2 Dip	S2 Direct.	Description
330 5	331 5					30		
331 5	332 3					75		
332 3	334 0					45		
335 0	337 1					50		Contorted S_2.

LR-1


0
50
100
150
3d - massive "greenstone" amphibolite
f~ 20°-40°
200
250
3d
Chlorite schist
f~ 0°-45°
300
350
400
3d chorite schist
450
500
3d - massive amphibolite "(greenstone)"