

000808

To
J. F. OikDate
January 28, 1976From
J. C. DevittSubject
FARO DEPOSIT MARGINAL DRILLING PROGRAM

Attached is a memorandum from D. Hanson with comments regarding your memo on the subject topic of January 16, 1976. My further comments are:

Zone 1 Down Dip Extension Test Drilling - 3 Holes in Phase 5 Area:

I agree that this should be evaluated for underground potential. As Daryl states, there is minimal possibility of encountering quantities of open pit ore. If these three holes must be drilled in the specific locations shown (106/17, 108/16 and 110/16), then they must be drilled in 1976. There will be no access to these locations after that. However, if the locations are not critical, and could be moved 100-300 feet to the west, drilling could be postponed and done at any later date to evaluate the possibility of underground ore. Total footage in these three holes is 2400 feet.

Zone 3 Down Dip Extension Test Drilling - SW and NE of Zone 3:

The potential underground ore to be evaluated by this program will not be readily accessible until the zone 3 portion of the pit is mined out (year 1987). There is no immediate need to drill any of these holes. A logical approach to this program would be to drill the holes in advance of mining, adding one or two holes outside the pit each year. Three of the holes in the phase 5 area (114/16, 118/14, and 120/12) and three holes in the east wall phase 6-8 area (122/28, 124/26, and 126/26) should be planned for 1977. Total footage in these holes is 4650 feet.

The remaining 31 holes indicated for this program (total footage 24,250 feet) should be drilled ahead of mining and in any case, completed, by year 1983, to allow at least four years for additional drilling, underground feasibility studies, and equipment acquisition and development of the underground operation, if feasible.

Zone 2 - Marginal Holes to South:

Five of these holes (N10/E22, N8/E6, N6/E18, N4/E8, and N4/E14, total 1150 feet) should be drilled in 1976. There is good probability of finding open pit ore with a very low stripping ratio between the south edge of the present orebody and Rose Creek. This is evidenced by the definition of a diorite dike abruptly terminating the south side of the orebody and one hole (65-61) on the south edge of the dike which encountered 25 feet of +5% sulfides starting at a depth of 115 feet. This appears to be a similar structural configuration to the separation of zones 1 and 3.



Stripping is not scheduled to start on the zone 2 pit until January 1978. However, if ore on the south side of the dike is outlined, additional definition drilling will be required. If the five hole "reconnaissance" drilling is done in 1976 and ore is found, the definition drilling could be planned and done in 1977. This would still allow time for pit redesign and rescheduling prior to the start of stripping.

Additional Funding Summary - Year 1976:

1) Phase 5 - three holes (possible) - 2400 ft. @ \$15	\$36,000
2) Zone 3 underground evaluation	0
3) Zone 2 evaluation - 1150 ft. @ \$15	<u>17,250</u>
	<u>\$53,250</u>



J. C. Devitt
Chief Mining Engineer

JCD/mm

cc. P. Taggart
D. Marr
D. Hanson

To J. C. Devitt Date January 27, 1976

From D. J. Hanson

Subject FARD DEPOSIT MARGINAL DRILLING PROGRAM
RE: MEMO FROM D. S. JENNINGS DATED DECEMBER 4, 1975
RE: MEMO FROM J. F. OLK DATED JANUARY 16, 1976

My comments on the above memoranda are as follows:

- 1) Analysis of the down dip potential in the area of the Phase 5 expansion indicates 20-40 feet of greater than 5% combined Pb + Zn with a waste slope length of 700 feet. Even after Phase 5 stripping, this material would have a minimum stripping ratio of 18:1.

The three proposed holes and any contingency holes between the present pit perimeter and the Phase 5 limit should be drilled before the upper part of Phase 5 is started (scheduled for mid-summer 1976). Once this wall has been established at 45°, the berms will be too narrow for drill access.

- 2) The proposed holes south-west of Zone 3 and inside the ultimate pit should be drilled in advance of mining Phases 6-12.
- 3) Since Phase 6A (Zone 2 ore extraction) is scheduled for 1978-79, consideration should be given to drilling five of the marginal Zone 2 holes (1150 feet) in 1976. This would allow adequate time for drilling contingency holes and for modifying Phase 6A mining and dumping plans, if necessary, before 1978.



D. J. Hanson
Mine Geologist

DJH/mm

Diamond Drilling

Cyprus Anvil Mining Corporation

Interoffice Correspondence

To J. C. Devitt

Date January 16, 1976

From J. F. Oik

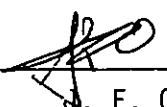
Subject Faro Deposit Marginal Drilling Program
Memo from D. S. Jennings dated December 4, 1975

As a result of my review of the subject memorandum and the proposed drilling program, I have the following comments:

1. With regard to the potential of a significant amount of underground ore down dip from the No. 1 and 3 zone, I agree that this should be investigated in the future. Due to the extensive drilling program planned for Zone 3 this year and the need to reduce expenses in every way possible, a program such as this must be deferred until the near future. Since our present policy is to exhaust the open pit ore before going underground (assuming the feasibility of conducting an underground operation), it would seem that there is plenty of time to consider this program over the next few years. The main point, however, is that this ore has been indicated by the two exploration drill holes, and the possibilities and potential kept in mind.
2. Three holes are proposed for Zone 1 southwest of the pit, in the area of the Phase 5 pit expansion. I am not familiar with the potential of these holes, and if you have not as yet evaluated this, please do this and advise me of your analysis.
3. The framework of marginal drillholes around Zone 2 appear to be a necessity in order to better define the margin of the zone. However, I am of the opinion that these could be deferred until 1977, and possibly later.

I would appreciate your comments on the program that Dave has proposed, as well as the thoughts expressed above.

JFO:mb



 J. F. Oik

cc: R. E. G. Davis
 J. G. Simpson
 D. S. Jennings

To

J. F. Olk

Date

December 4, 1975

From

D. S. Jennings

Subject

Faro Deposit Marginal Drilling Program

The attached 1" = 400' map summarizes a "reconnaissance" marginal drilling proposal for the Faro deposit (zones 1, 2 and 3). It also shows revised interpretive outlines of:

- (a) the inferred deposit margin based on limiting drillholes, and
- (b) presently drill-defined sulfides.

Note that neither outline has an economic basis.

Inspection of this map gives rise to the following considerations:

1. Since drill-defined sulfides are not coextensive with the inferred margin of the deposit, potentially economic reserves may be found up and downdip from zones 1 and 3, as well as downdip and along strike from zone 2. Assay results (Table 1) from Exploration drillholes 456-75-15 and 456-75-18 suggest potentially economic reserves downdip of zone 3. An extension 1,000' downdip over a strike length of 1,700' with an average thickness of 20' is not improbable and would add in the order of 4×10^6 tons of underground reserves recoverable from the southwest wall of the ultimate zone 3 pit. Drilling should be initiated in time to evaluate this underground potential and to co-ordinate surface and underground planning, should this potential be realized.
2. Commensurate with the Phase 5 slashing of the west pit wall, consideration should be given to drilling at least 3 holes (intersection of sections 17/106, 16/108, 16/110) in 1976 to test for dip extensions of zone 1 which may be economic (or may become economic as a result of the Phase 5 waste removal) in this area of scant drill testing. This suggestion seems reasonable in that:
 - (a) there is no drill testing of zone 1 southwest of the pit between sections 15 to 18 and 104 to 112 to test for the presence of ore, and
 - (b) the 3 proposed holes may prompt additional drilling and/or stripping while heavy equipment is in this area.
3. If stripping and mining of zone 2 is still planned to begin in 1977, the skeletal framework of marginal drillholes around zone 2 (enclosed map) should be drilled in the near future to, at least, better define the margin of the zone and aid in development of a longer term definition drilling program.

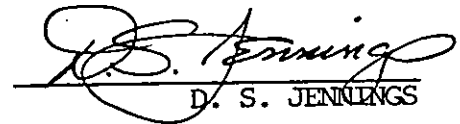
... 2

4. Six holes (shown in red on the map) will be drilled by the Exploration Department in 1976 to test alternative S or Z symmetry, F₂ fold model repetition of the sulfide horizon within zone 1. This may indicate additional sulfide reserves requiring future follow-up drilling.

A total of 32,450 feet of diamond drilling is included in the attached proposal, excluding the 4,300' in the six proposed 1976 Exploration holes and the 1976 Engineering drilling program. At an average total cost of \$15/ft., the following funding is indicated:

$$(32,450 \text{ ft.}) (\$15/\text{ft.}) = \$486,750, \text{ or approx. } \underline{\underline{\$500,000}}$$

It is emphasized that this proposal is a reconnaissance, not a definition, drilling program that may require additional drill testing and that it is more an Engineering than Exploration function.


D. S. JENNINGS

DSJ/cb
Attach.

c.c. J. C. Devitt ✓
D. J. Hanson
R.E.G. Davis
R. L. Cook
J. G. Simpson
U. Jansons
D. Bohach

TABLE 1

Assay Results - DDH's 456-75-15 and 456-75-18

DDH 456-75-15

<u>Sample</u>	<u>Interval</u>	<u>Footage</u>	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>	<u>Pb+Zn</u>	<u>Au Oz/Ton</u>	<u>Ag Oz/Ton</u>
1425	710.0 - 716.5	6.5	0.10	0.05	0.02	0.07	0.005	0.04
1426	716.5 - 722.5	6.0	0.07	0.43	1.28	1.71	"	0.96
1427	722.5 - 729.5	7.0	0.06	4.88	8.00	12.88	"	1.40
1428	729.5 - 731.0	1.5	0.34	6.11	9.46	15.57	"	2.68
1429	731.0 - 736.5	5.5	0.19	5.10	7.06	12.16	"	1.60
1430	736.5 - 742.5	6.0	0.19	4.58	8.20	12.78	"	1.64
1431	742.5 - 747.0	4.5	0.09	1.53	3.48	5.01	"	1.64
1432	747.0 - 752.0	5.0	0.05	1.28	2.52	3.80	"	0.72
1433	752.0 - 757.0	5.0	0.05	1.48	2.46	3.94	"	1.00
1434	757.0 - 762.0	5.0	0.04	0.75	2.34	3.09	Trace	0.56
1435	762.0 - 767.0	5.0	0.06	1.28	2.76	4.04	0.005	0.76
1436	767.0 - 773.0	6.0	0.04	0.28	0.40	0.68	Trace	0.16

DDH 456-75-15 - Weighted Averages

722.5 - 742.5	20.0	0.16	4.94	7.89	12.83	0.005	1.62
722.5 - 747.0	24.5	0.14	4.32	7.08	11.40	0.005	1.63
747.0 - 767.0	20.0	0.05	1.20	2.52	3.72	0.005	0.76
722.5 - 767.0	44.5	0.10	2.92	5.03	7.95	0.005	1.24

DDH 456-75-18

4244	720.0 - 724.5	4.5	0.22	5.03	8.14	13.17	0.005	2.48
4245	724.5 - 729.5	5.0	0.07	4.20	0.19	4.39	NA	7.69
4246	729.5 - 734.0	4.5	0.09	0.69	1.92	2.61	NA	0.88
4247	734.0 - 739.0	5.0	0.10	1.97	3.36	5.33	NA	1.38
4248	739.0 - 743.0	4.0	0.29	4.95	7.61	12.56	0.005	2.92
4249	743.0 - 748.0	5.0	0.08	1.65	3.42	5.07	NA	0.83
4250	748.0 - 753.0	5.0	0.05	0.03	0.02	0.05	NA	0.01
4501	753.0 - 758.0	5.0	0.03	Tr.	0.01	0.01	NA	0.01
4502	758.0 - 762.5	4.5	0.06	0.49	0.01	0.50	NA	0.79
4503	762.5 - 766.5	4.0	0.09	0.09	0.01	0.10	NA	0.06
4504	766.5 - 771.5	5.0	0.42	5.25	6.44	11.69	0.005	3.91

NA = Not Assayed

TABLE 1 - (Cont'd)

DDH 456-75-18 - Weighted Averages

<u>Sample</u>	<u>Interval</u>	<u>Footage</u>	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>	<u>Pb+Zn</u>	<u>Au Oz/Ton</u>	<u>Ag Oz/Ton</u>
	720.0 - 729.5	9.5	0.15	4.42	4.16	8.56	-	5.22
	720.0 - 748.0	28.0	0.14	3.02	3.95	6.97	-	2.73
	720.0 - 771.5	51.5	0.13	2.19	2.75	4.94	-	1.89

Diamond Drilling

Cyprus Anvil Mining Corporation

Interface Correspondence

To J. DEWITT
R.E.G. Davis/J.G. Simpson

Date October 22, 1975

From D.S. Jennings

Subject Assay Results - DDH 456-75-15

The following table summarizes assay results for DDH 456-75-15:

Sample	Interval	Footage	Au oz/ton	Ag oz/ton	Pb	Zn	Cu	Comb.
1425	710 -716.5	6.5	0.005	0.04	8.05	0.02	0.10	0.07
1426	716.5-722.5	6.0	0.005	0.96	0.43	1.28	0.87	1.71
1427	722.5-729.5	7.0	0.005	1.40	4.88	8.00	0.86	12.88
1428	729.5-731	1.5	0.005	2.68	6.11	9.46	0.34	15.57
1429	731 -736.5	5.5	0.005	1.60	5.10	7.06	0.19	12.16
1430	736.5-742.5	6.0	0.005	1.64	4.58	8.20	0.19	12.78
1431	742.5-747	4.5	0.005	1.64	1.53	3.48	0.89	5.01
1432	747 -752	5.0	0.005	0.72	1.28	2.52	0.05	3.80
1433	752 -757	5.0	0.005	1.00	1.48	2.46	0.85	3.94
1434	757 -762	5.0	Trace	0.56	0.75	2.34	0.04	3.09
1435	762 -767	5.0	0.005	0.76	1.28	2.76	0.06	4.04
1436	767 -773	6.0	Trace	0.16	0.28	0.40	0.04	0.68

These results yield the following weighted averages for the footages indicated:

Interval	Footage	Cu	Pb	Zn	Ag	Au	Pb+Zn
722.5-742.5	20.0	0.16	4.94	7.89	1.62	0.005	12.83
722.5-747	24.5	0.14	4.32	7.08	1.63	0.005	11.40
747 -767	20.0	0.05	1.20	2.52	0.76	0.005	3.72
722.5-767	44.5	0.10	2.92	5.03	1.24	0.005	7.95

... 2

Diamond Drilling

To

L. P. Taggart

Date

September 19, 1975

From

J. C. Devitt

Subject 1976 DIAMOND DRILLING PROGRAM

Attached is a memorandum from D. Hanson outlining the proposed diamond drilling program for 1976. A map showing hole locations is also enclosed. The recommended program is outlined as follows:

<u>Item</u>	<u>Number</u>	<u>Footage</u>	<u>Cost</u>
Zone 3 Ore Control Holes	30	19,000	304,000
Dump Site Test Holes	6	6,000	96,000
Contingency Holes	2	2,000	32,000
Core Storage Building	1	-	7,000
Drill Hole Surveying Instrument Rental	1	-	3,250
Core Logging Room Maintenance	-	-	<u>1,000</u>
Total			443,250

In the past two years it has been customary to drill off only the areas projected for mining within the coming five years. Drilling costs for such a program as outlined in D. Hanson's memo would be \$208,000.00, as opposed to the above \$432,000. However, it is considered imperative to expand the conventional program to complete pit diamond drilling during the next year for the following reasons:

1. Reserve Reliability:

Recent close spaced ore control holes in Zone 1, and some in Zone 3, plus actual mining experience, show that the Cyprus Anvil orebody consists of ore lenses interbedded with continuous layers of barren, sandy pyrite, instead of being relatively homogeneous.

Drill holes were originally laid out on a grid oriented 45° from north on $200\sqrt{2}$ (282.84) ft. centers. (See Fig. 1 attached). Mining in Zone 1 during the first couple of years showed the spacing to be inadequate, as projected ore tonnages in many cases failed to materialize during mining. More drilling was done at the intersection of odd-numbered sections between the original even-numbered section intersections, but only covering material to be mined a year or so in advance. From this closer spaced drilling (200 x 200' pattern), many differences from the original orebody projection became evident. Internal pyritic waste and a previously undetected diorite dike cutting through the center of the orebody were identified. In some cases the addition of previously undetected ore to

the orebody configuration was evidenced. These showed that substantial modifications to the ore reserves, stripping ratio, and pit configuration would be necessary to take the changes into account.

In 1974 and 1975, interspaced drilling was increased to cover ore blocks within the 5 year pit plan. Results of these five year drilling programs clearly indicate the necessity of the closer spaced holes. Actual mining results confirm the need, as evidenced by the unexpected appearance of large lenses of pyritic waste on the 3790 and 3750 benches during 1975 mining. This area had been drilled off with interspaced holes which were still evidently inadequate for accurate projections in this area.

In 1975, in light of the many evidences of change in the ore reserve occasioned by recent interspaced drilling, E.N. Pennebaker was retained to calculate a new ore reserve estimate based on the new drilling information. Excerpts of his report dealing with degrees of reliability and recommendations are attached.

Mr. Pennebaker categorized the ore remaining in Zone 1, north of the diorite dike, as "proved" ore, since it had been drilled adequately for projection purposes and was confirmed by mining history. However, Zone 3, south of the dike, was classed as "probable" ore, since it had not been adequately drilled and no mining history was available. He recommends to "Drill the Southeast Sector of the large Faro ore body at intermediate locations to facilitate ore control during mining and to improve the reserve estimate." This program proposes to do just that.

An analysis of ore body sections shows clearly that the Zone 3 portion is affected more strongly by interbedding of barren pyrite layers than Zone 1. Section 22 is enclosed to graphically illustrate this point. Interspaced drilling is needed in Zone 3 even more emphatically than Zone 1 because of this condition. An accurate estimate of remaining ore in the Faro orebody is not possible until this drilling is completed.

Holes to complete this requirement are shown in red on the enclosed map.

2. Pit Design:

An ultimate pit cannot be designed until the extent and location of the orebody is known. Each mining phase from now on establishes a portion of a final ultimate pit wall. All aspects of mining, such as ramp location and final limits, lead toward the final pit design, and are inherent parts of it. Changes in this design at any point lead to gross inefficiencies in operations. Mining practice sets limits on the magnitude of the change. For instance, once even a portion of a final wall is established, together with an access ramp system, such as our east wall, the substantial addition of ore grade material outside that pit wall by later drilling means it will probably not be recoverable, unless it is of such magnitude that it can later support a separate 200' wide mining slice, complete with a ramp system

some thousands of feet long. The knowledge of that mineral prior to establishment of the pit wall over it might mean that it could have been extracted with only minimal extra stripping. The reverse is also true, and much unnecessary waste removal might take place before it is learned that material to be mined years in the future, which would have paid for the stripping, is simply not there.

In short, it is imperative to sound efficient mining of an open pit to establish the mining reserve by adequate drilling so that an ultimate economic pit can be designed and adhered to in later years, without resorting to large expenditures for extra stripping to extract the optimum amount of economic ore, or in some cases, losing that ore forever.

In this program, the east pit wall must be defined. The eastern portion of the orebody is extremely spotty and erratic. Seven intermediate holes at $100\sqrt{2}$ (141.42) ft. centers are required to adequately delineate this wall, in addition to the other interspaced holes. These are shown in green on the enclosed map.

3. Grade Control and Prediction:

Mining experience has demonstrated that core assays from prior to 1972, and ore projections therefrom, are inaccurate. Various means of trying to apply corrections to these early assays have resulted in failure, since the apparent differences are arbitrary and unpredictable. Grade projections for short range and especially long range planning have been accordingly in error. The completion of one intermediate cross-section from drilling done in 1973 and 1974 shows a clearly defined zonation of lead-zinc ratios across the orebody in the area of 1976 mining. From this section, zones of high and low Pb-Zn ratios could be defined and projections for the 1976 mining plan could be accurately forecast. The completion of the proposed holes will enable us to accurately define the zonations in the remainder of the orebody and project accurate grade distributions for long range scheduling.

4. Dump Site Evaluation:

Future dump sites must be evaluated for economic mineral occurrence prior to dumping to avoid the all-too-common situation of having to strip one's dumps to uncover a previously undetected portion of the orebody. The holes proposed to effect this purpose in 1976 are shown in blue on the enclosed drawing. Locations were derived from a cooperative effort between the Engineering and Exploration Departments and will serve the interests of exploration as well as evaluating the mine dump sites. Spacing is roughly 2000 x 2000 ft., and they are located to evaluate all areas between existing deep drill holes. The dump site area is bounded by the power line, North Fork of Rose Creek, diversion ditch, and the pit. A deep hole is planned through the No. 2 orebody, since it will be covered with dumps after it is mined out. Depths of all holes are to be 1000 ft., with the exception of two or three which will be deepened beyond 1000' at Exploration Department expense.

5. Engineering Department Functions:

Each year, seemingly endless man days go toward the revision of cross sections, bench plans, reserve estimates, mining schedules, and pit outlines due to the internal changes in the orebody brought on by the additional diamond drilling information. Once this drilling is complete, as proposed, and the reserve is calculated, grades are established, and the ultimate pit is designed, these man hours will go instead toward badly needed requirements in ore grade control and projection, planning, and slope stabilization and control.

6. General:

The two contingency holes are oriented primarily toward dump evaluation. The Exploration Department considers it likely that mineralization extends outwards from the southern portion of the orebody towards the southwest. If this is indeed found to be the case, several additional holes will be required to further delineate it, as this area is immediately in front of the present dumps.

The additional core storage building is necessary to store the core from this project.

The drill hole surveying instrument, a Sperry-Sun magnetic directional single-shot, gives the required position of the holes at depth. Due to the foliation, drill holes in the area tend to deviate from vertical. Accurate locations of the holes at depth are imperative for ore projections.

The core logging room requires a new roof, and floor and wall insulation for cold weather use.



J. C. Devitt
Chief Mining Engineer

JCD/mm

cc. J. F. Olk
R. H. Marshall

Attach.

Diamond Drilling

Cyprus Anvil Mining Corporation

Interoffice Correspondence

To J. C. Devitt

Date September 13, 1975

From D. S. Jennings

Subject 1975 Exploration Drilling Program -
1976 Dump Site Drilling Program

Further to our discussions re the above topics, our recommended locations for 1976 dump site drilling are as follows:

<u>Hole</u>	<u>Location</u>
1	Intersection of sections 130/10S
2	" " " 142/10S
3	" " " 142/ 2S
4	" " " 142/12N
5	" " " 154/26N
6	Approx. " " " 142/25N

These sites are shown on the accompanying 1" = 400' map and on the 1" = 1,000' map in your possession. We understand you plan to drill each hole to a depth of 1,000' and it is our option to deepen any or all holes at our expense. Due to the presently unpredictable location of the 4030 dump toe as at June, 1976, relative to an easterly trending gravity high near 142/25N, the final location of hole 6 will be decided prior to drilling in June.

While dump site testing on 2,000 foot centers is a marked improvement over the present situation, there is a body of opinion that either 1,000' centers on 2,000' spacings or staggered lines of 2,000' spaced holes would be more desirable than a rectilinear 2,000' x 2,000' pattern. Such an array would virtually preclude the possibility of significant sulfide mineralization going undetected.

Five 1975 Exploration drill sites are shown on the attached 1" = 400' scale map. These holes are designed to test the Faro sulfide horizon up/down dip from 71-DS-1 and 66-56 and the strike projection of zone 2 across the North Fork of Rose Creek. Since these holes cannot be considered development or dump site holes, Exploration will assume all costs of this drilling.

DSJ/cb
Attach.
c.c. D. J. Hanson
J. G. Simpson
U. Jansons


D. S. JENNINGS

CYPRUS ANVIL

To

Glen Simpson

Date

September 3, 1975

From

J. C. Devitt

Subject

DRILLING CHARGES

Final invoices are in from Caron Diamond Drilling Ltd, Under our agreement, we will pay:

- 1) Hole 75-10. Full depth (to 959').
- 2) Hole 75-11, to 630 ft. (50 ft. below lower ore contact).
- 3) Hole 456-75-13, upper 1000 ft. for dumpsite evaluation @ Caron's rates (\$12.50/ft.).

Attached is a memo from D. Hanson outlining apportionment of charges. We have already paid invoice # 50, covering part of exploration charges for hole 75-11, plus camp costs, totalling \$5510.20. We will credit your account with \$12,500.00 (for 456-75-13) less \$5510.20, or \$6989.80.

Invoice # 57 covers only exploration charges for hole 75-11. It is enclosed for your payment.



J. C. Devitt
Chief Mining Engineer

JCD/mm

cc. U. Jansons
J. Oik
T. Biggs
D. Hanson (w/o attach.)

Attach (2)

To

J. C. Devitt

Date

September 3, 1975

From

D. J. Hanson

Subject DRILLING CHARGES FOR 75-11 AND
456-75-13

By mutual agreement with the Exploration Department, we are responsible for costs incurred in hole 75-11 to a depth of 630 feet (approximately 50 feet out of sulfides) and in hole 456-75-13 to a depth of 1,000 feet at \$12.50 per foot.

Invoice #50 (copy attached) from E. Caron Diamond Drilling Limited dated July 31, 1975 included the following costs charged against W.O. #60207:

Hole 75-11 x 90° x BQ (630-990 feet)

Coring

630-990 = 360 ft. @ \$9.70 per foot \$ 3,492.00

Mixing Mud

24 man hours @ \$8.95 per hour 214.80
12 machine hours @ \$6.50 per hour 78.00

Stand-By

2 man hours @ \$8.95 per hour 17.90

Supplies

42 bags of Mud @ \$10.75 per bag 451.50

Total \$ 4,254.20

Camp costs for 75-11 from 630-2159 feet charged against W.O. #60207 were:

80 man days @ \$15.70 per day \$ 1,256.00

Summary:

1) Engineering costs for hole 456-75-13	
1,000 feet @ \$12.50 per foot	\$12,500.00
2) Exploration costs for hole 75-11 charged against W.O. #60207	
Drilling costs	\$ 4,254.20
Camp costs	\$ 1,256.00
3) Balance	\$ 6,989.80

The balance of \$6,989.80 should be transferred from W.O. #60207 to the Exploration Department.

The Exploration Department should pay in full Invoice #57 (copy attached) from E. Caron Diamond Drilling Limited dated August 19, 1975. This account should be paid before September 30, 1975 to avoid interest payments under term 32 of our contract.

Danyl.

D. J. Hanson
Mine Geologist

DJH/mm

Attach.

Charge to W.O. # 0207

E. Caron Diamond Drilling Limited

HEAD OFFICE:
7 ROUND ROAD
WHITEHORSE, Y.T. Y1A-3H3
PHONE 668-2424 - 668-2425
TELEX 036-8-337

CONTRACT DIAMOND DRILLING

VANCOUVER OFFICE:
3-425 HOWE STREET
VANCOUVER, B.C. V6C-2A9
PHONE 687-4634

July 31, 1975,

Invoice #50

IN ACCOUNT WITH:

Cyprus Anvil Mining Corporation Ltd.,
P.O. Box 1,000,
Faro, Y. T.

Drilling charges July 16 - 31, 1975

(Pit Project)

Hole: 75-10 x 90° x BQ

Reaming Cave

4 man hrs.	@ \$8.95 per hr.	= \$	35.80	
2 machine hrs.	@ \$6.50 per hr.	= \$	13.00	\$ 48.80

Testing

2 man hrs.	@ \$8.95 per hr.	= \$	17.90	
1 machine hr.	@ \$6.50 per hr.	= \$	6.50	\$ 24.40

Coring

778 - 959 = 181 ft.	@ \$9.70 per ft.	=		\$1,755.70
---------------------	------------------	---	--	------------

Reaming Casing

94 - 210 = 116 ft.	@ \$7.95 (BW) per ft.	=	\$ 922.20	\$ 2,751.10
--------------------	-----------------------	---	-----------	-------------

Hole: 75-11 x 90° x BQ

Reaming Cave/Washing Sand

12 man hrs.	@ \$8.95 per hr.	= \$	107.40	
6 machine hrs.	@ \$6.50 per hr.	= \$	39.00	\$ 146.40

Waterline

70 man hrs.	@ \$8.95 per hr.	= \$	626.50	
31 machine hrs.	@ \$6.50 per hr.	= \$	201.50	\$ 828.00

Mud Time

62 man hrs.	@ \$8.95 per hr.	= \$	554.90	
31 machine hrs.	@ \$6.50 per hr.	= \$	201.50	\$ 756.40

Standby

13 man hrs.	@ \$8.95 per hr.	=		\$ 116.35
-------------	------------------	---	--	-----------

Overburden

0 - 10 = 10 ft.	@ \$8.95 (BW) per ft.	=		\$ 89.50
-----------------	-----------------------	---	--	----------

Coring

10 - 500 = 490 ft.	@ \$8.95 per ft.	= \$4,385.50		
500 - 990 = 490 ft.	@ \$9.70 per ft.	= \$4,753.00	\$9,138.50	

Reaming Casing

10 - 46 = 36 ft.	@ \$7.95 (BW) per ft.	=	\$ 286.20	\$11,361.35
------------------	-----------------------	---	-----------	-------------

Material Consumed

July 26 N/S 100 ft. only 1" pressure hose @ \$1.00 per ft.	=		\$	100.00
--	---	--	----	--------

E. Caron Diamond Drilling Limited

HEAD OFFICE:
7 ROUNDEL ROAD
WHITEHORSE, Y.T. Y1A-3H3
PHONE 668-2424 - 668-2425
TELEX 038-8-337

CONTRACT DIAMOND DRILLING

VANCOUVER OFFICE:
3-425 HOWE STREET
VANCOUVER, B.C. V6C-2A9
PHONE 687-4634

Supplies

94 only bags of Mud @ \$10.75 per bag	= \$1,010.50	
41 only bags of Quik Trol @ \$7.75 per bag	= \$ 317.75	
1 only 40 lb. bag of Kwik Seal @ \$38.00	= \$ 38.00	\$ 1,366.25

Total Invoice \$15,578.70

E. Caron Diamond Drilling Limited

HEAD OFFICE:
7 ROUND EL ROAD
WHITEHORSE, Y.T. Y1A-3H3
PHONE 668-2424 - 668-2425
TELEX 036-8-337

CONTRACT DIAMOND DRILLING

VANCOUVER OFFICE:
3-425 HOWE STREET
VANCOUVER, B.C. V6C-2A9
PHONE 687-4634

August 19, 1975

Invoice #-57

IN ACCOUNT WITH:

Cyprus Anvil Mining Corporation Ltd.,
P. O. Box 1,000,
Faro, Y. T.

Drilling charges August 1 - 19, 1975

(Pit Project)

Hole: 75-11 x 90° x BQ

Reaming Cave/Washing Sand

41 man hrs.	@ \$8.95 per hr.	= \$ 366.95	
20.5 machine hrs.	@ \$6.50 per hr.	= \$ 133.25	\$ 500.20

Mud Time

140 man hrs.	@ \$8.95 per hr.	= \$1,253.00	
70 machine hrs.	@ \$6.50 per hr.	= \$ 455.00	\$ 1,708.00

Testing

8 man hrs.	@ \$8.95 per hr.	= \$ 71.60	
4 machine hrs.	@ \$6.50 per hr.	= \$ 26.00	\$ 97.60

Standby

6 man hrs.	@ \$8.95 per hr.	=	\$ 53.70
------------	------------------	---	----------

Coring

990 - 1000 = 10 ft.	@ \$9.70 per ft.	= \$ 97.00	
1000 - 1500 = 500 ft.	@ \$10.45 per ft.	= \$5,225.00	
1500 - 2000 = 500 ft.	@ \$11.95 per ft.	= \$5,975.00	
2000 - 2159 = 159 ft.	@ \$15.95 per ft.	= \$2,536.05	\$13,833.05 \$16,192.55

Material Consumed

Aug. 8	D/S	4 only BQ 10' rods @ \$49.20	=	\$ 196.80
"	17	N/S 50 ft. only 1" pressure hose @ \$1.00 per ft.	=	\$ 50.00
"	18	D/S 4 only BQ 10' rods @ \$49.20	=	\$ 196.80
"	1	1 only BW 10' casing @ \$71.40	=	\$ 71.40
		100 ft. only 1" pressure hose @ \$1.00 per ft.	=	\$ 100.00
In. hole-11		1 only BQ 10' outer tube @ \$62.70	=	\$ 62.70
		1 only BQ adapter coupling @ \$28.60	=	\$ 28.60
		1 only BQ locking coupling @ \$73.00	=	\$ 73.00
		1 only BQ landing ring @ \$8.15	=	\$ 8.15
		1 only BQ stabilizer @ \$20.00	=	\$ 20.00
		1 only BQ shell # 3330 @ \$205.58	=	\$ 205.58
		1 only BQ bit # 8367 @ \$318.14	=	\$ 318.14

Less 10%

\$ 1,331.17
133.11

\$ 1,198.06

E. Caron Diamond Drilling Limited

HEAD OFFICE:
7 ROUNDEL ROAD
WHITEHORSE, Y.T. Y1A-3H3
PHONE 668-2424 - 668-2425
TELEX 036-8-337

CONTRACT DIAMOND DRILLING

VANCOUVER OFFICE:
3-425 HOWE STREET
VANCOUVER, B.C. V6C-2A9
PHONE 687-4634

Supplies

152 only bags of mud @ \$10.75 per bag	=	\$ 1,634.00	
95 only bags of Quik Trol @ \$7.75 per bag	=	\$ 736.25	
42 only bags of Cellex @ \$6.50 per bag	=	\$ 273.00	
23 only gallons of Torq Trim @ \$11.35 per gal.	=	\$ 261.05	\$ 2,904.30

Supplies Returned

20 only bags of mud @ \$10.75 per bag	=	\$ 215.00	
5 only bags of Quik-Trol @ \$7.75 per bag	=	\$ 38.75	(\$ 253.75)

Total Invoice \$20,041.16

(Total Contract = 7,999 ft.)

Planned Drilling

MESSAGE

DATE 15 SEPT 1975

Cyprus Anvil Mining Corporation

TO J. DEVITT

FROM

FROM U. JANSONS

P.O. BOX 1000, FARO, Y.T.

SUBJECT DRILL SITE LOCATION SURVEYS

FOLD

THE ANTICIPATED FALL DRILLING PROGRAM BY THE EXPLORATION DEPT. REQUIRES THAT THREE DRILL SITE LOCATIONS BE SURVEYED IN THE MINE AREA. THE HOLE LOCATIONS, LISTED IN DECREASING ORDER OF PRIORITY ARE:

	HOLE	LOCATION	
1	456-75-15	SECT 130/SECT 10	INTERSECTION ^{near Wed}
2	456-75-16	SECT 130/SECT 11	"
3	456-75-17	12,000 E 9170 N	MINE GRID 30' W JWH 19

A DRILL MOVE TO SITE 1. IS ANTICIPATED BY MID WEEK.

SIGNED

U. Jansons

FOLD

REPLY

DATE

19

SIGNED

Diamond Drilling

MESSAGE

DATE Sept. 5 1975

TO J.C.D

FROM Cyprus Anvil Mining Corporation

P.O. BOX 1000, FARO, Y.T.

SUBJECT August Diamond Drilling.

The following footage was drilled in August:

Hole No.	Footage	Purpose
75-11	1,169	Exploration

Caron withdrew their drill on Aug. 18th.
Total Footage drilled on the contract was 7,999.

SIGNED

REPLY

DATE _____ 19__

SIGNED

Diamond Drilling

MESSAGE

DATE Aug. 11 1975

TO J.C.D.

FROM Cyprus Anvil Mining Corporation

P.O. BOX 1000, FARO, Y.T.

SUBJECT Diamond Drilling Progress Report - July 1975

The following holes and total footage were drilled in July:

hole #	footage	purpose
75-9	418-7723 = 305	grade control
75-10	959	east wall ore
75-11	990 (incomplete)	west wall ore & exploration

total 2,254

SIGNED Dauph

REPLY

DATE 19

SIGNED

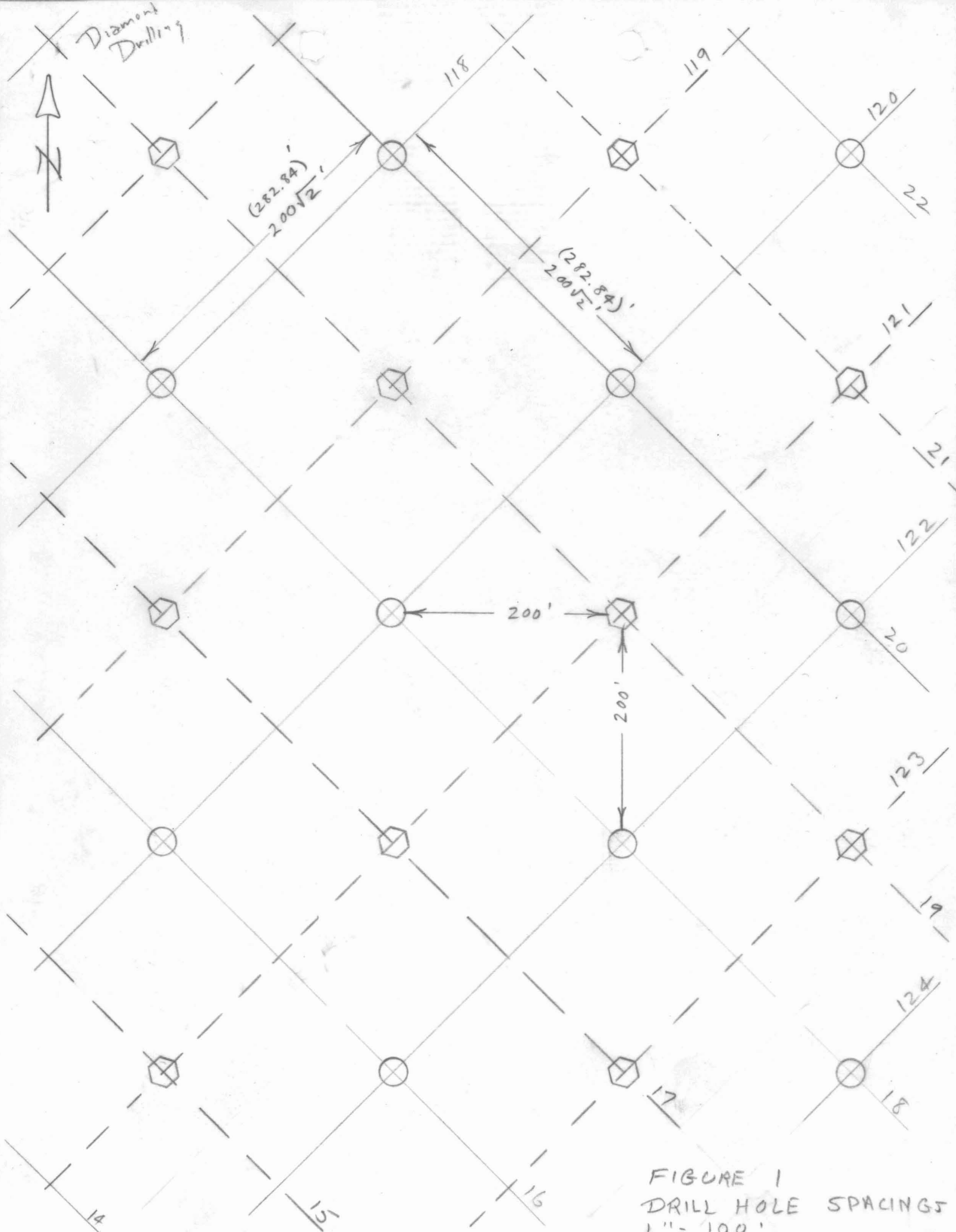


FIGURE 1
 DRILL HOLE SPACINGS
 1" = 100'