MME Form 9
Rev. Nov. 65

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey

OFFICIAL DOCKET FILE

Contract No. _____ Docket No. 6578

Application
- [x] Denied
- [x] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

- [ ] Royalty Audits
- [ ] Certification of Discovery
- [ ] Closing Letter
- [ ] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [ ] Contract with all exhibits and annexes
- [ ] Owner's Consent to Lien and Subordination Agreement
- [x] Application and Attachments

Right Side

- [ ] Project Summary (final)
- [ ] Work Completed Analysis (final)

All other material filed in chronological order including the following reports if checked:

- [ ] Field Team Semiannual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [x] On-site Exam. Report (Tab) Sept. 1967
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No. _____: Reports

- [ ] Analysis of Semiannual Inspection Reports
- [ ] Project Summary (Interim) by MME Engineers

Right Side

- [ ] Field Team Semiannual Report for Certified Project
- [ ] Field Team Interim Reports
- [ ] Operator's Monthly Reports with Transmittal, Narrative and Maps

Folders No. _____: Maps (Use pocket folder or envelope)

Folders No. _____: Settlement Sheets

Folders No. _____: Drill Logs

Folders No. _____: Royalty Material

72195-65

CONTINENTAL EXPLORATION, INC.

Emery Park Station Box 11216
Tucson, Arizona
602-623-0265

P. O. Box 190
Grand Junction,
Colorado 81501

February 1, 1967

OFFICIAL COPY
O. M. E.
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FEB 3 1967

Mr. Frank E. Johnson, Chief
Office of Minerals Exploration
Geological Survey
U. S. Department of the Interior
Washington, D. C.

Re: OME - 6578 (Copper)

Dear Mr. Johnson:

CWT property = Sec. 25, T. 17S., R. 12 E. } 1 mile

Please find enclosed two copies of a report concerning the large area of copper mineralization located in the N½ of Sec. 30, T17S, R13E, G&SRB&M. Attached are copies of drill hole assays for six of the holes upon which the calculations in the report are based.

This report by Mr. Weaver was made available to us by the owner of a part of the land underlain by the mineralization. The ownership of the area involved is complex with a number of parties holding conflicting interests.

It seems obvious that the area has not been adequately or completely explored, probably for a number of reasons. In view of the limited information available concerning this specific area, we feel that no conclusive interpretation concerning present or future commercialability is presently justified. The available information concerning this area was included in our application for two reasons: (1) to present all available information which might have a bearing on the proposed project area, and (2) to demonstrate the proximity to the project area the existence of large quantities of significant mineralization of eligible minerals.

As further evidence that the mineral sought is eligible for OME assistance, reference is made to the economic return analysis shown in the CWT Report. An estimated "net smelter return" analysis based upon current smelter schedules and varying metal prices would indicate the following values attributable to the various metals contained in the Sec. 23 orebody currently being developed:

1 mi. { Sec. 25 = proposed expl'n.

Net Smelter Return Value per ton of Ore

Value of contained zinc	@ 14.5¢/lb. quotation	8.44
	@ 14.0¢/lb.	7.96
	@ 13.5¢/lb.	7.49
Value of combined copper, silver, & cadmium		
copper	@ 39.225¢/lb. quotation	7.86
	@ 40.225¢/lb.	8.035

From the above, it is evident that only a slight change, in favor of the eligible group of minerals, of any of the several variables affecting these values (actual average grade of heads, actual per cent recovery achieved, labor or fuel costs affecting smelter charges, freight rates, etc.) would result in the principal dollar value of this orebody being in copper, silver, and cadmium. It would seem reasonable to conclude that mineralization, if disclosed in the proposed project area between sec. 23 & 30, could be expected to contain a suite of minerals favoring the eligible group.

We sincerely hope that with this additional evidence you will look favorably upon approval of our application for OME assistance for this proposed exploration project.

Sincerely,

CONTINENTAL EXPLORATION, INC.

C. H. Reynolds

C. H. Reynolds

CHR:lh

Enclosures

CC: Mr. J. Wm. Hasler
Region III, Office of Minerals Exploration
U. S. Geological Survey, Bldg. 25
Denver Federal Center
Denver, Colorado 80225

PRILIMINARY ORE CALCULATIONS OF THE DYNAMITE CLAIMS

PIMA COUNTY, ARIZONA

Richard R. Weaver

PRILIMINARY CALCULATIONS OF THE DYNAMITE CLAIMS

PIMA COUNTY, ARIZONA

Introduction

The Dynamite claim group lies approximately twenty-five miles south-southwest of Tucson, Arizona, in the Pima Mining district. The six unpatented Dynamite claims are located in the N ½, N ½. sec. 30, T. 17 S., R. 13 E., and are oriented in a north-south direction. They embrace an area 1500 feet by 3600 feet and occupy approximately 125 acres.

The blacktopped Twin Buttes Road approximates the western boundary of the claim group, and the maintained, dirt Sahuarita Road traverses eastward through the center of the acreage.

While the claims were under option to Anaconda a total of 9,301 feet was drilled in six holes. Five of these holes contained well mineralized intercepts, and the sixth hole was essentially barren of copper mineralization.

Method of Attack

The calculations of this study are based on five wide-spaced drill holes - A-979, A-974, A-973, A-969 and A-978. Drill hole A-970 contained lean copper values and was not considered in the calculations. The spacing of the drill holes ranges from 500 feet to 925 feet.

Areas of influence were calculated by the polygonal method, and where there wasn't any drill hole bounding the polygon, the mirror image of the controlled half of the polygon was projected. The polygons were constructed around the respective drill holes on graph paper, and the square footage of influence was measured by counting the number of squares in the polygon and multiplying the number by a constant.

To allow for easier calculations a figure of 10 $ft.^3$/ton was used. The specific gravity of the rock containing the sulfide mineralization is about 3. This gives a value of 10.6 $Ft.^3$/ton. Thus the estimated tonnage derived in the study is very close to the actual tonnage figures.

In drill hole A-979 excellent molybdenum values were reported. In this hole only a Cu-Mo equivalent was derived. The formula used in this derivation is 4(Mo %) + Cu % = Cu-Mo equivalent. This conversion allows for a total tonnage in Cu % while still getting the benifit of the Mo assays.

It was assumed for the purpose of this study that there was no limited area due to ownership boundary lines. Also it must be borne in mind that this study is of the rapid priliminary character, and time did not allow for double checking of the figures. It is felt, however, that the estimations are fairly accurate and closely approximate the true values.

Tonnage and Grade Calculations

A break down of the calculations are presented in appendix A. These tonnages and grades were derived from the assay data supplied to Mr. Vernon Smith by the Anaconda Company. Under Mr. Smith's direction more care in preparation of intervals over 1 % Cu was taken than in the intervening intercepts.

In the five wide spaced holes a total of 30, 136, 180 tons of 1.225 % Cu occurs as indicated ore, and a total of 99, 814, 280 tons of 0.539 % Cu. occurs as indicated ore.

Mineralization and Depth

A very brief survey of the core in Mr V. Smith's possession indicates that mineralization consists of chalcocite, malachite, azurite, native copper, chalcopyrite, pyrite, molybdenite and very minor amounts of sphalerite and galena. This mineralization occurs in altered limestones and is of the typical contact-metasomatic type. The limestone units are altered to garnet, wollastonite, tremolite and other calc-silicate minerals. Minor veimlets of gypsum were observed.

The depth of the ore varies from hole to hole, except between A-969 and A-973 where it averages 926 feet below the surface.between the two holes. In drill hole A-974, located in the extreme southwest corner of the claim group, the ore grade material comes in at 374 feet and maintains an average grade of 1.012 % Cu to 511 feet. Ore grade material over 1 % Cu occurs at various depths in the remaining two holes, and correlations of the ore grade intercepts with any degree of confidence is difficult.

Mineralization Immediately South of The Smith Property

A hole located 1000 feet south of the south end bounda ry of the Dynamite group intersected the following ore grade mineralization in a tactite-hornfels host rock:

From	To	Interval	% Cu
702.4	805.5	103.1	0.83
702.4	880.8	178.4	0.74
702.4	722.6	20.2	0.81
742.2	805.5	63.3	1.03
855.8	880.8	25.0	1.44

Mineralization consisted of pyrite, chalcopyrite, molybdenite, bornite and primary chalcocite.

Three holes were drilled on 500 foot centers from the ore hole mentioned above. The hole 500 feet south had 5 feet of 5.18 % oxide copper in tactite-hornfels at a depth of 329 feet. The hole 500 feet west of the ore hole had 41.3 feet of 0.75 % Cu in tactite beginning at a depth of 455 feet, while the hole 500 feet to the east of the ore hole had minor Cu values. Based on the center hole and the hole to the west an estimated 5.5 million tons of 0.80 % Cu is indicated.

Based on drilling information in the area south of the Dynamite claims, it is theorized that the mineralized zone should strike roughly N. 40°-50° W. and dip 40° NE. The mineralized zone would thus project across the Kress ground and into the Dynamite claims.

Conclusions

Tonnage and grade calculations in this report are based on wide spaced-drill hole intercepts. Also high grade intercepts were correlated between the wide-spaced holes with very little regularity. It is extremely dangerous to correlate intersections which do not lie on a straight line or regular curve. Only further closer-spaced drilling will confirm or disprove the derivations contained in this report.

Richard R. Weaver

Richard R. Weaver

Appendix A

ORE CALCULATIONS - DYNAMITE CLAIM GROUP

Hole A-969 Area of influence 481, 200 $ft.^2$ 10 $ft.^3$ = 1 ton

Footage	Interval	Tonnage and Grade
927.0 - 941.0	14.0	673,680 toms of 0.697 % Cu
931.0 - 941.0	10.0	481,200 tons of 0.860 % Cu
1289.0 - 1295.5	6.5	312,780 tons of 1.453 % Cu
1365.0 - 1385.0	20.0	962,400 tons of 0.740 % Cu

Hole A-973 Area of influence 458, 000 $ft.^2$ 10 $ft.^3$ = 1 ton

Footage	Interval	Tonnage and Grade
925.0 - 968.0	43.0	1,969,400 tons of 1.230 % Cu
925.0 - 1216.0	291.0	13,327,800 tons of 0.411 % Cu
1186.0 - 1203.0	17.0	0,778,600 tons of 0.631 % Cu
1332.0 - 1483.0	150.5	6,892,900 tons of 0.424 % Cu
1339.0 - 1379.0	40.0	1,877,800 tons of 0.482 % Cu
1401.0 - 1444.0	43.0	1,969,400 tons of 0.606 % Cu
1471.0 - 1483.0	12.0	0,549,600 tons of 0.589 % Cu

Hole A-974 Area of infuence 768, 000 $ft.^2$ 10 $ft.^3$ = 1 ton

Footage	Interval	Tonnage and Grade
374.0 - 511.0	137.0	10,521,600 tons of 1.012 % Cu
374.0 - 401.0	27.0	2,073,600 tons of 1.070 % Cu
450.0 - 495.0	9.0	0,691,200 tons of 3.370 % Cu
465.0 - 511.0	46.0	3,532,800 tons of 1.398 % Cu

Hole A-978 Area of influence 637, 600 $ft.^2$ 10 $ft.^3$ = 1 ton

Footage	Interval	Tonnage and Grade
1078.0 - 1143.0	65.0	4,144,400 tons of 1.862 % Cu
1306.0 - 1313.0	7.0	0,446,320 tons of 0.780 % Cu
1078.0 - 1313.0	235.0	14,983,600 tons of 0.636 % Cu

Hole A-979 Area of influence 840,000 $ft.^2$ 10 $ft.^3$ = 1 ton

Footage	Interval	Tonnage and grade
708.0 - 718.5	10.5	0,882,000 tons of 3.018 % Cu
763.5 - 823.0	59.5	4,998,000 tons of 0.948 % Cu
834.0 - 870.0	36.0	3,024,000 tons of 1.180 % Cu
1399.0 - 1450.0	51.0	4,284,000 tons of 0.695 % Cu
1465.0 - 1497.5	32,5	2,730,000 tons of 1.049 % Cu

Hole A-979 (continued)

Footage	Interval	Tonnage and Grade
690.0 - 718.5	22.5	1,890,000 tons of 1.64 % Cu
763.5 - 870.0	106.5	8,946,000 tons of 0.887 % Cu
1130.0 - 1136.5	6.5	0,546,000 tons of 2.424 % Cu
696.0 - 1136.5	440.5	37,002,000 tons of 0.404 % Cu
1399.0 - 1497.5	98.5	8,274,000 toms of 0.799 % Cu
1315.0 - 1497.5	182.5	15,330,000 tons of 0.568 % Cu

Tonnage And Grade For Intervals of 1 % Or More

Hole A-979

Footage	Interval	Tonnage and Grade
696.0 - 718.5	22.5	1,890,000 tons of 1.640 % Cu
763.5 - 823.0	59.5	4,998,000 tons of 0.948 % Cu
834.0 - 870.0	36.0	3,024,000 tons of 1.180 % Cu
1465.0 - 1497.5	32.5	2,730,000 tons of 1.049 % Cu
1130.0 - 1136.5	6.5	0,546,000 tons of 2.424 % Cu
	subtotal	13,188,000 tons of 1.182 % Cu
Hole A-974		
374.0 - 511.0	137.0	10,521,600 tons of 1.012 % Cu
Hole A-973		
925.0 - 968.0	43.0	1,969,400 tons of 1.230 % Cu
Hole A-969		
1289.0 - 1295.5	6.5	0,312,780 tons of 1.453 % Cu
Hole A-978		
1078.0 - 1143.0	65.0	4,144,400 tons of 1.862 % Cu
	Total	30,136,180 tons of 1.225 % Cu

Total Tonnage And Grade Average

Hole A-979

Footage	Interval	Tonnage and grade
696.0 - 1136.5	440.5	37,002,000 tons of 0.404 % Cu
1315.0 - 1497.5	182.5	15,330,000 tons of 0.568 % Cu
Hole A-974		
374.0 - 511.0	137.0	10,521,600 tons of 1.012 % Cu
Hole A-973		
925.0 - 1216.0	291.0	13,327,800 tons of 0.411 % Cu

Hole A-973 (continued)

Footage	Interval	Tonnage and grade
1332.0 - 1483.0	150.5	6,892,900 tons of 0.424 % Cu

Hole A-969

931.0 - 941.0	10.0	0,481,200 tons of 0.860 % Cu
1365.0 - 1385.0	20.0	0,962,400 tons of 0.740 % Cu
1289.0 - 1295.5	6.5	0,312,780 tons of 1.453 % Cu

Hole A-978

1078.0 - 1313.0	235.0	14,983,600 tons of 0.636 % Cu
	Total	99,814,280 tons of 0.539 % Cu

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-969

Depth of Hole 1568 ft.

Page 1 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
	0 - 375	375.0	Not Sampled								
B-25804	375 - 376	1.0	1.24		Fragment in fanglomerate						
	376 - 895 18	519.0	Not Sampled								
05	895 - 899	4.0	0.06								
06	899 - 903	4.0	0.07								
07	903 - 908	5.0	0.13								
08	908 - 912	4.0	0.11								
09	912 - 917	5.0	0.08								
10	917 - 922 2/3	5.0	0.17								
11	922 - 927	5.0	0.15								
12	927 - 931	4.0	0.29	0.02							
13	931 - 936	5.0	0.91	0.58							
14	936 - 941	5.0	0.81	0.58							
	941 - 951 3/7	10.0	Not Sampled								
15	951 - 956	5.0	0.08								
	956 - 969	13.0	Not Sampled								
16	969 - 974	5.0	0.06								
	974 - 1011 20/37	37.0	Not Sampled								
17	1011 - 1016	5.0	0.03								
	1016 - 1028 3/9	12.0	Not Sampled								
18	1028 - 1031	3.0	0.05	0.05							
19	1031 - 1034	3.0	0.09	0.05							
20	1034 - 1037	3.0	0.05	0.01							
21	1037 - 1042	5.0	0.03	0.03							
22	1042 - 1047 2/3	5.0	0.62	0.43							
B-25823	1047 - 1050	3.0	0.03	~~0.03~~							

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-969

Depth of Hole _____ ft.

Page 2 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
B-25824	1050 - 1055	5.0	0.17	0.08							
25	1055 - 1059	4.0	0.11	0.05							
26	1059 - 1063	4.0	0.32	0.19							
27	1063 - 1068	5.0	0.18	0.12							
28	1068 - 1073	5.0	0.19	0.15							
29	1073 - 1078	5.0	0.14	0.09							
30	1078 - 1083	5.0	0.02	nil							
X	1083 - 1128	45.0	Not Sampled								
31	1128 - 1133	5.0	0.09								
	1133 - 1182	49.0	Not Sampled								
32	1182 - 1187	5.0	0.10	0.03							
	1187 - 1212	25.0	Not Sampled								
33	1212 - 1217	5.0	0.18	0.04							
	1217 - 1222	5.0	Not Sampled								
34	1222 - 1227	5.0	0.13	0.06							
	1227 - 1242	15.0	Not Sampled								
35	1242 - 1247	5.0	0.06	0.05							
	1247 - 1271	24.0	Not Sampled								
36	1271 - 1276	5.0	0.05	0.03							
	1276 - 1284	8.0	Not Sampled								
37	1284 - 1289	5.0	0.11	0.07							
38	1289 - 1291.5	2.5	2.00	0.15							
39	1291.5 - 1294	2.5	0.10	0.03							
40	1294 - 1295.5	1.5	2.80	0.14							
41	1295.5 - 1300	4.5	0.11	0.02							
B-25842	1300 - 1303	3.0	0.12				.009				

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-969

Depth of Hole _____ ft.

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
B-25843	1303 - 1306	3.0	0.16				.005				
44	1306 - 1310	4.0	0.18				.009				
45	1310 - 1315	5.0	0.17				.007				
46	1315 - 1320 4/1	5.0	0.17				.014				
47	1320 - 1325	5.0	0.05				.006				
48	1325 - 1331	6.0	0.10				.005				
49	1331 - 1334	3.0	0.07				.003				
50	1334 - 1338	4.0	0.07				.002				
51	1338 - 1343	5.0	0.09				.004				
52	1343 - 1347 1/3	4.0	0.13				.035				
53	1347 - 1351	4.0	0.07				.004				
54	1351 - 1356	5.0	0.07				.004				
55	1356 - 1359	3.0	0.07				.004				
56	1359 - 1362	3.0	0.10				.005				
57	1362 - 1365	3.0	0.20				.011				
58	1365 - 1370 4/1	5.0	0.56				.011				
59	1370 - 1373	3.0	1.29				.007				
60	1373 - 1378	5.0	0.77 20				.007				
61	1378 - 1380	2.0	0.66				.007				
62	1380 - 1385	5.0	0.59				.012				
63	1385 - 1390	5.0	0.12 ~~0.07~~				.006				
64	1390 - 1395 4/1	5.0	0.11				.011				
65	1395 - 1400	5.0	0.16				.028				
66	1400 - 1405	5.0	0.90				.039				
	1405 - 1501	96.0	Not Sampled								
B-25867	1501 - 1506	5.0	0.03								

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-969

Depth of Hole 1568 ft.

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
	1506 - 1563	57.0	Not Sampled								
B-25868	1563 - 1568	5.0	0.03								
	1568 END OF HOLE										

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-970

Depth of Hole 1560 ft.

Page 1 of 1

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
	0 - 1395	1395	Not Sampled								
B-25869	1395 - 1400 4/1	5.0	0.03								
	1400 - 1450	50.0	Not Sampled								
70	1450 - 1455	5.0	0.02								
	1455 - 1503	48.0	Not sampled								
71	1503 - 1508	5.0	0.02								
	1508 - 1555 1L	47.0	Not Sampled								
B-25872	1555 - 1560	5.0	0.02								
	END OF HOLE										

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-973

Depth of Hole 1703 ft.

Page 1 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
	0 - 453	453.0	Not Sampled								
B-25452	453 - 458	5.0	0.04								
	458 - 477 14/3	19.0	Not Sampled								
53	477 - 482	5.0	0.42								
	482 - 523 17/24	41.0	Not Sampled								
54	523 - 528 4/4	5.0	0.03								
	528 - 558 21/9	30.0	Not Sampled								
55	558 - 563	5.0	0.05								
	563 - 591 11/11	28.0	Not Sampled								
56	591 - 596	5.0	0.15								
	596 - 643 36/19	47.0	Not Sampled								
57	643 - 648	5.0	0.06								
	648 - 698 16/34	50.0	Not Sampled								
58	698 - 703 4/4	5.0	0.02								
	703 - 753 21/34	50.0	Not Sampled								
59	753 - 758	5.0	0.04								
	758 - 803 16/25	45.0	Not Sampled								
60	803 - 808	5.0	0.05								
	808 - 839 16	31.0	Not Sampled								
61	839 - 841.5	2.5	1.90				.007				
	841.5 - 857 9.5/8	15.5	Not Sampled								
62	857 - 862	5.0	0.11								
	862 - 893	31.0	Not Sampled								
63	893 - 898	5.0	0.08								
	898 - 920	22.0	Not Sampled								
B-25464	920 - 925 4/1	5.0	0.033	0.22							

DRILL HOLE ASSAYS

Property Banner

Drill Hole No. A-973

Location Twin Buttes Area

Depth of Hole _____ ft.

County and State Pima - Arizona

Page 2 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
B-25465	925 - 930	5.0	0.69	0.59							
66	930 - 935	5.0	0.62	0.51							
67	935 - 937	2.0	1.16	0.89							
68	937 - 942	5.0	0.49	0.30							
69	942 - 947	5.0	0.54	0.04			.006				
70	947 - 949	2.0	0.59	0.22			.009				
71	949 - 954	5.0	2.65	0.22			.009				
72	954 - 958	4.0	0.54	0.04			.006				
73	958 - 960	2.0	2.95 21'	0.26			.010				
74	960 - 964	4.0	1.93				.002				
75	964 - 968	4.0	2.13				.005				
76	968 - 973	5.0	0.23				.005				
77	973 - 978 1/4	5.0	0.12				.018				
78	978 - 983	5.0	0.14				.012				
79	983 - 988	5.0	0.06				.003				
80	988 - 993	5.0	0.06								
81	993 - 998	5.0	0.15								
82	998 - 1003 1/4	5.0	0.19								
83	1003 - 1008	5.0	0.23								
84	1008 - 1013	5.0	0.27								
85	1013 - 1018	5.0	0.29								
86	1018 - 1023	5.0	0.25								
87	1023 - 1028 1/4	5.0	0.33								
88	1028 - 1033	5.0	0.24								
89	1033 - 1038	5.0	0.18								
B-25490	1038 - 1043	5.0	0.14								

DRILL HOLE ASSAYS

Property Banner

Drill Hole No. A-973

Location Twin Buttes Area

Depth of Hole _____ ft.

County and State Pima - Arizona

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Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
B-25491	1043-1048	5.0	0.22								
92	1048-1053 1/4	5.0	0.16								
93	1053 - 1058	5.0	0.18								
94	1058 - 1063	5.0	0.17								
95	1063 - 1067	4.0	0.25								
96	1067 - 1071	4.0	0.28								
97	1071 - 1075 3/4	4.0	0.29								
98	1075 - 1078	3.0	0.16								
99	1078 - 1083	5.0	0.19								
B-25500	1083 - 1087	4.0	0.10								
B-27201	1087 - 1092	5.0	0.32								
02	1092 - 1097	5.0	0.09								
03	1097 - 1102 2/3	5.0	0.06								
04	1102 - 1107	5.0	0.24								
05	1107 - 1109	2.0	0.19								
06	1109 - 1114	5.0	0.30								
07	1114 - 1118	4.0	0.19								
08	1118 - 1123	5.0	0.27								
09	1123 - 1128 1/4	5.0	0.43								
10	1128 - 1131	3.0	0.41								
11	1131 - 1133	2.0	0.29								
12	1133 - 1138	5.0	0.40								
13	1138 - 1143	5.0	0.22								
14	1143 - 1148	5.0	0.47								
15	1148 - 1153 1/4	5.0	0.23								
B-27216	1153 - 1158	5.0	0.30								

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-973

Depth of Hole _____ ft.

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Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
B-27217	1158 - 1163	5.0	0.24								
18	1163 - 1165	2.0	0.48								
19	1165 - 1169	4.0	0.33								
20	1169 - 1174	5.0	0.32								
21	1174 - 1178	4.0	0.54								
22	1178-1182	4.0	0.24								
23	1182 - 1186	4.0	0.30								
24.	1186 - 1189	3.0	0.86								
25	1189 - 1193	4.0	0.75								
26	1193 - 1198	5.0	0.52								
27	1198 - 1203¼	5.0	0.51								
28	1203 - 1208	5.0	0.27								
29	1208 - 1213	5.0	0.24								
30	1213 - 1216	3.0	0.40								
	1216 - 1332.5	116.5	NO ASSAY								
31	1332.5-1337	4.5	0.19	0.04							
32	1337 - 1339	2.0	0.28	0.04							
33	1339 - 1344	5.0	0.93	0.07							
34	1344 - 1349	5.0	0.36	0.04							
35	1349 - 1354	5.0	0.10	0.02							
36	1354 - 1359	5.0	1.01	0.06							
37	1359 - 1364	5.0	0.40	Nil							
38	1364 - 1369	5.0	0.25	Nil							
39	1369 - 1374	5.0	0.41	0.01							
40	1374 - 1379	5.0	0.40	0.01							
41	1379 - 1384	5.0	0.14	0.01							

DRILL HOLE ASSAYS

Property Banner

Drill Hole No. A-973

Location Twin Buttes Area

Depth of Hole _____ ft.

County and State Pima - Arizona

Page 5 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%T.Cu X-ray	% Mo X-ray
B-27242	1384 - 1388	4.0	0.23	0.02							
43	1388 - 1393	5.0	0.20	0.02							
44	1393 - 1397	4.0	0.35	0.03							
45	1397 - 1401	4.0	0.16	0.03							
46	1401 - 1406	5.0	0.46	0.06							
47	1406 - 1411	5.0	0.64	0.16							
48	1411 - 1416	5.0	0.44	0.06							.035
49	1416 - 1421	5.0	0.89	0.06							.037
50	1421 - 1426	5.0	0.68	0.14							.032
51	1426 - 1431	5.0	0.57	0.12							.010
52	1431 - 1435	4.0	0.70	0.09							.012
53	1435 - 1439	4.0	0.75	0.11							.022
54	1439 - 1444	5.0	0.38	0.06							.037
55	1444 - 1448	4.0								0.12	.047
56	1448 - 1453	5.0								0.18	.022
57	1453 - 1458	5.0	0.38	0.03							.039
58	1458 - 1463	5.0								0.18	.075
59	1463 - 1467	4.0								0.17	.176
60	1467 - 1471	4.0								0.14	.062
61	1471 - 1476	5.0	0.38	0.02							.013
62 62	1476 - 1481	5.0	0.43	0.14							.025
63	1481 - 1483	2.0	1.51	0.65							.029
64	1483 - 1488	5.0	0.28	0.06							.034
65	1488 - 1493	5.0								0.19	.014
66	1493 - 1498	5.0								0.18	.011
B-27267	1498 - 1503	5.0	0.33	0.08							.008

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-973

Depth of Hole _____ ft.

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Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%TCu X-ray	% Mo X-ray
B-27268	1503 - 1508	5.0								0.18	.010
69	1508 - 1513	5.0								0.15	.014
	1513 - 1637	124.0	No Assay								
70	1637 - 1641	4.0								0.02	Nil
	1641 - 1667	26.0	No Assay								
71	1667 - 1673	6.0								0.02	Nil
	1673 - 1700	27.0	No Assay							0.02	Nil
72	1700 - 1703	3.0									
	1703 E.O.H.										

DRILL HOLE ASSAYS

Property Banner

Drill Hole No. DDH A-974

Location Twin Buttes Area

Depth of Hole 1509 ft.

County and State Pima - Arizona

Page 1 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
	0 - 374	374.0	Alluvium & Fanglomerate				No	Assay			
B-25686	374 - 379	5.0	1.38	0.07			.007				
87	379 - 384	5.0	2.42	0.08			.002				
88	384 - 388	4.0	0.86	0.06			.007				
89	388 - 393	5.0	0.51	0.05			.020		Vy poor recove		
90	393 - 398	5.0	0.37	0.03			.020		Vy poor recove		
91	398 - 401	3.0	0.68	0.05			.008				
92	401 - 405	4.0	0.36	0.02			.002				
93	405 - 409	4.0	0.15	0.03			.002				
94	409 - 412	3.0	0.35	0.03			.002				
95	412 - 418	6.0	0.10	0.01			.001				
96	418 - 420	2.0	3.40			0.41	.002				
97	420 - 422	2.0	0.32			0.29	.002				
98	422 - 427	5.0	0.08			0.21	.002		Vy poor recove		
99	427 - 433	6.0	0.25			0.45	.001		poor recove		
B-25700	433 - 436	3.0	0.05			Tr	.002				
B-25873	436 - 441	5.0	0.05			1.75	.002				
74	441 - 445	4.0	0.06			1.49	.006				
75	445 - 450	5.0	0.09				.017				
76	450 - 455	5.0	0.41				.005				
77	455 - 459	4.0	7.09				.028				
78	459 - 463	4.0	0.04				.002				
79	463 - 465	2.0	0.11				.001				
80	465 - 469	4.0	1.65				.004				
81	469 - 473	4.0	1.71				.004				
82	473 - 476	3.0	3.32				.002				

DRILL HOLE ASSAYS

Property Banner

Drill Hole No. A-974

Location Twin Buttes Area

Depth of Hole _____ ft.

County and State Pima - Arizona

Page 2 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
B-25883	476 - 481	5.0	0.57				.002				
84	481 - 485	4.0	0.55				.005				
85	485 - 490 3/1	5.0	0.22				.002				
86	490 - 495	5.0	0.49				.007				
87	495 - 500	5.0	3.24				.005				
88	500 - 505	5.0	1.80 18'				.008				
89	505 - 508	3.0	2.04				.034				
90	508 - 511	3.0	0.33				.044				
91	511 - 516 2/3	5.0	0.05				.024				
92	516 - 521	5.0	0.05				.043				
93	521 - 526	5.0	0.12							Vy poor recovery	
94	526 - 531	5.0	0.06							"	
95	531 - 535	4.0	0.03							"	
96	535 - 538	3.0	0.06							"	
97	538 - 542	4.0	0.06							"	
98	542 - 546	4.0	0.04							"	
99	546 - 551	5.0	0.04							"	
B-25900	551 - 559	8.0	0.16							"	
~~B-27101~~	~~559 - 563~~	4.0	0.30							"	
02	563 - 567	4.0	0.18								
03	567 - 570	3.0	0.22								
04	570 - 572	2.0	0.32								
05	572 - 577	5.0	0.16								
06	577 - 582	5.0	0.42								
07	582 - 586	4.0	0.09								
08	586 - 589 2/1	3.0	0.15								

DRILL HOLE ASSAYS

Property Banner

Drill Hole No. A-974

Location Twin Buttes Area

Depth of Hole _____ ft.

County and State Pima - Arizona

Page 3 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
B-27109	589 - 593	4.0	0.23								
10	593 - 596	3.0	0.34								
11	596 - 600	4.0	0.10								
12	600 - 603	3.0	0.02								
13	603 - 607	4.0	0.03								
14	607 - 612	5.0	0.02								
	612 - 640	28.0	No Assay								
15	640 - 645	5.0	0.06								
	645 - 670	25.0	No Assay								
16	670 - 675	5.0	0.02								
	675 - 700	25.0	No Assay								
17	700 - 705	5.0	0.04								
	705 - 730	25.0	No Assay								
18	730 - 735	5.0	0.03								
	735 - 745	10.0	No Assay								
19	745 - 749	4.0	0.06								
	749 - 774	25.0	No Assay								
20	774 - 779	5.0	0.05								
	779 - 787	8.0	No Assay								
21	787 - 787.5	.5	5.24								
	787.5-804	16.5	No Assay								
22	804 - 809	5.0	0.05								
23	809 - 812	3.0	0.06								
24	812 - 817	~~4.0~~ 5.0	0.16								
25	817 - 821	4.0	0.03								
26	821 - 824	3.0	0.14								

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-974

Depth of Hole _____ ft.

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Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%T.Cu X-ray	% Mo X-ray
B-27127	824 - 829	5.0	0.31								
28	829 - 830	1.0	0.11								
29	830 - 831.5	1.5	7.12								
30	831.5 - 835	3.5	0.05								
31	835 - 839	4.0	0.05								
32	839 - 844	5.0	0.05								
33	844 - 849	5.0	0.52								
34	849 - 854	5.0	0.16								
35	854 - 860	6.0	0.16								
36	860 - 864 3/1	4.0	0.07								
37	864 - 870	6.0	0.08								
38	870 - 875	5.0	0.12								
39	875 - 880	5.0	0.14								
	880 - 885	5.0	No core recovery								
40	885 - 890 3/✓	5.0	0.05								
41	890 - 895	5.0	0.12								
42	895 - 900	5.0	0.10								
43	900 - 905	5.0	0.05								
44	905 - 909	4.0	0.05								
45	909 - 912	3.0	0.14								
46	912 - 915 1/✓	3.0	0.15								
47	915 - 919	4.0	0.40								
48	919 - 922	3.0	0.17								
49	922 - 927	5.0	0.05								
50	927 - 931	4.0								0.11	
51	931 - 935	4.0								0.03	N

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-974

Depth of Hole _____ ft.

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Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%T.Cu X-ray	% M X-ra
B-27152	935 - 940 3/✓	5.0								0.04	.005
53	940 - 945	5.0								0.05	.003
54	945 - 950	5.0								0.02	Nil
55	950 - 955	5.0								0.02	.004
	955 - 980 8	25.0	No Assay								
56	980 - 984	4.0								0.02	Nil
	984 - 997 4/9	13.0	No Assay								
57	997 - 999	2.0								0.05	.010
	999 - 1010	11.0	No Assay								
58	1010 - 1015 3/✓	5.0								0.02	Nil
	1015 - 1040 23/✓	25.0	No Assay								
59	1040 - 1045	5.0								0.03	Nil
	1045 - 1065 18	20.0	No Assay								
60	1065 - 1070	5.0								0.08	.00
	1070 - 1099 18 11	29.0	No Assay								
61	1099 - 1104	5.0								0.04	Nil
	1104 - 1129 9	25.0	No Assay								
62	1129 - 1135	6.0								0.02	Nil
	1135 - 1157 3	22.0	No Assay							XXX	XX
63	1157 - 1162	5.0								0.01	Nil
	1162 - 1190 1	28.0	No Assay								
64	1190 - 1195	5.0								0.01	Nil
	1195 - 1220	25.0	No Assay								
65	1220 - 1225	5.0								0.02	.00
	1225 - 1253	28.0	No Assay								
66	1253 - 1258	5.0								0.02	.00

DRILL HOLE ASSAYS

Property: Banner

Location: Twin Buttes Area

County and State: Pima - Arizona

Drill Hole No. A-974

Depth of Hole 1509 ft.

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	% T Cu X-ray	% M X-ra
	1258 - 1286	28.0	Not Sampled								
B-27167	1286 - 1291	5.0								0.02	.00
	1291 - 1311	20.0	Not Sampled								
68	1311 - 1316	5.0								0.02	.00
	1316 - 1336	20.0	Not Sampled								
69	1336 - 1341	5.0								0.08	Nil
	1341 - 1361	20.0	Not Sampled								
70	1361 - 1366	5.0								0.02	.01
71	1366 - 1370	4.0								0.02	.00
72	1370 - 1376	6.0								0.02	Nil
	1376 - 1409	33.0	Not Sampled							XXXX	XXXX
73	1409 - 1414	5.0								0.02	Nil
	1414 - 1447	33.0	Not Sampled								
74	1447 - 1453	6.0								0.02	Nil
	1453 - 1481	28.0	Not Sampled								
75	1481 - 1486	5.0								0.02	Nil
	1486 - 1505	19.0	Not Sampled								
B-27176	1505 - 1509	4.0								0.02	Nil
	END OF HOLE										

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes

County and State Pima - Arizona

Drill Hole No. A-978

Depth of Hole 1436 ft.

Page 1 of

Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
	0 - 783	783.0	Not Sampled							
B-31101	783 - 787	4.0	0.04			Nil				
	787 - 802 11/4	15.0	Not Sampled							
02	802 - 805	3.0	0.05			Nil				
	805 - 808	3.0	Not Sampled					Vy poor recovery		
03	808 - 811	3.0	0.12			.001				
04	811 - 815	4.0	0.12			Nil				
05	815 - 817	2.0	0.08			Nil				
06	817 - 820	3.0	0.01			.001				
07	820 - 823	3.0	0.12			Nil				
08 ~~223~~	823 - 828	5.0	0.13			Nil				
09	828 - 833	5.0	0.07			Nil				
10	833 - 837	4.0	0.08			Nil				
11	837 - 841	4.0	0.09			.001				
12	841 - 843	2.0	0.10			Nil				
13	843 - 847	4.0	0.10			.001				
14	847 - 850 1/2	3.0	0.14			Nil				
15	850 - 854	4.0	0.09			Nil				
16	854 - 860	6.0	0.13			Nil				
17	860 - 864	4.0	0.17			.010				
18	864 - 866	2.0	0.15			.001				
19	866 - 869	3.0	0.13			Nil				
20	869 - 871	2.0		0.25	Nil	Nil				
21	871 - 874 2/1	3.0		0.19	0.01	Nil				

Form 1001

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes

County and State Pima - Arizona

Drill Hole No. A-978

Depth of Hole _____ ft.

Page 2 of _____

Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
B-31122	874 - 878	4.0	0.09			Nil				
23	878 - 881	3.0	0.09			Nil				
24	881 - 885	4.0	0.15			Nil				
25	885 - 890	5.0	0.11			Nil				
26	890 - 893	3.0	0.13			Nil				
27	893 - 896	3.0		0.27	Nil	Nil				
28	896 - 900	4.0	0.12			Nil				
29	900 - 901	1.0		0.40	0.01	Nil				
30	901 - 905	4.0	0.06			.003				
31	905 - 909	4.0	0.05			.004				
32	909 - 912	3.0		0.15	0.01	Nil				
33	912 - 915	3.0	0.06			Nil				
34	915 - 919	4.0	0.06			Nil				
	919 - 938	19.0	Not Sampled							
35	938 - 943	5.0	0.04			Nil				
	943 - 970	27.0	Not Sampled							
36	970 - 975	5.0	0.03			Nil				
	975 - 1001	26.0	Not Sampled							
37	1001 - 1005	4.0	0.04			Nil				
38	1005 - 1009	4.0	0.13			Nil				
39	1009 - 1013	4.0	0.08			Nil				
40	1013 - 1016	3.0	0.10			Nil				
41	1016 - 1020	4.0	0.07			Nil				
42	1020 - 1024	4.0	0.10			Nil				

Form 1001

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Drill Hole No. A-978

Location Twin Buttes

Depth of Hole _____ ft.

County and State Pima - Arizona

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Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
B-31143	1024 - 1026	2.0	0.05			Nil				
44	1026 - 1031	5.0	0.10			Nil				
45	1031 - 1036	5.0	0.17			Nil				
46	1036 - 1042	6.0		0.22	0.03	.009				
47	1042 - 1047	5.0	0.10			Nil				
48	1047 - 1049 1/1	2.0	0.11			Nil				
49	1049 - 1052	3.0	0.16			Nil				
50	1052 - 1056	4.0	0.10			Nil				
51	1056 - 1058	2.0	0.12			Nil				
52	1058 - 1062	4.0	0.15			Nil				
53	1062 - 1065	3.0		0.45	0.34	Nil				
54	1065 - 1067	2.0		0.20	0.12	.001				
55	1067 - 1069	2.0		0.15	0.05	.009				
56	1069 - 1070	1.0	0.15			Nil				
57	1070 - 1073	3.0	0.13			.002				
58	1073 - 1075	2.0	0.12			.018				
59	1075 - 1078	3.0		0.28	0.13	.023				
60	1078 - 1080	2.0		0.65	0.55	.006				
61	1080 - 1083	3.0		1.23	1.07	.010				
62	1083 - 1087	4.0		1.05	0.74	.004				
	1087 - 1091	4.0					No core			
63	1091 - 1097	6.0		1.90	1.77	Nil		Very poor recy.		
64	1097 - 1102 1/4	5.0		3.16	2.72	Nil		"	"	"
65	1102 - 1110	8.0		4.57	4.26	.001		"	"	"

Form 1001

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes

County and State Pima - Arizona

Drill Hole No. A-978

Depth of Hole _____ ft.

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Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET		
B-31166	1110 - 1115	5.0		4.20	3.91	.001			
67	1115 - 1132 8/9	17.0		0.67	0.52	Nil		Very poor rcvy.	
68	1132 - 1136	4.0		1.46	1.37	Nil		"	" "
69	1136 - 1139	3.0		0.94	0.81	Nil		"	" "
70	1139 - 1141	2.0		0.54	0.38	.003		"	" "
71	1141 - 1143	2.0		0.80	0.65	.008		"	" "
72	1143 - 1144	1.0		0.23	0.15	.008			
73	1144 - 1148	4.0	0.19			Nil			
74	1148 - 1151	3.0	0.19			.001			
75	1151 - 1154	3.0		0.23	0.17	Nil			
76	1154 - 1158	4.0		0.52	0.21	Nil			
77	1158 - 1161	3.0	0.07			Nil			
78	1161 - 1166	5.0	0.15			Nil			
79	1166 - 1167	1.0		0.40	0.27				
80	1167 - 1172	5.0	0.11			Nil			
81	1172 - 1175.5 1/2	3.5		0.33	0.03	.001			
82	1175.5 - 1178	2.5	0.11		0.03	.159			
83	1178 - 1182	4.0		0.25	0.02	Nil			
84	1182 - 1187	5.0		0.36	0.03	Nil			
85	1187 - 1193	6.0		0.29	0.02	Nil			
86	1193 - 1198	5.0	0.03			Nil			
87	1198 - 1203	5.0	0.04			Nil			
88	1203 - 1208	5.0	0.08			Nil			
89	1208 - 1213	5.0	0.07			Nil			

Form 1001

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-978

Depth of Hole _____ ft.

Page 5 of _____

Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET		
B-31190	1213 - 1217	4.0	0.04			Nil			
91	1217 - 1221	4.0	0.05			.001			
92	1221 - 1226 2/3	5.0	0.05			Nil			
93	1226 - 1231	5.0	0.04			Nil			
94	1231 - 1236	5.0	0.05			.001			
95	1236 - 1241	5.0	0.06			Nil			
96	1214 - 1245	4.0	0.15			Nil			
97	1245 - 1248	3.0		0.40	0.34	.001			
B-31198	1248 - 1253	5.0		0.26	0.21	.001			
99	1253 - 1258	5.0		0.28	0.19	Nil			
B-31200	1258 - 1263	5.0	0.11			Nil			
B-27511	1263 - 1268	5.0	0.16			Nil			
12	1268 - 1272	4.0		0.33	0.01	.001			
13	1272 - 1276 1/3	4.0	0.10			.017			
14	1276 - 1281	5.0	0.12			.001			
15	1281 - 1285	4.0		0.46	0.03		.078		
16	1285 - 1290	5.0		0.44	0.04	Nil			
17	1290 - 1294	4.0	0.16			Nil			
18	1294 - 1297	3.0	0.03			Nil			
19	1297 - 1301 1/3	4.0	0.08			Nil			
20	1301 - 1306	5.0	0.05			Nil			
21	1306 - 1310	4.0		1.05	0.05	Nil			
22	1310 - 1313	3.0		0.43	0.05	Nil			
23	1313 - 1317	4.0	0.05			Nil			

Form 3001

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-978

Depth of Hole _____ ft.

Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET		
B-27524	1317 - 1322	5.0	0.04		Nil	Nil			
25	1322 - 1327 1/4	5.0	0.05			.003			
26	1327 - 1332	5.0	0.03			.003			
27	1332 - 1336	4.0	0.08			.004			
28	1336 - 1340	4.0	0.03			Nil			
29	1340 - 1345	5.0	0.03			Nil			
30	1345 - 1350 3/4	5.0		0.61	0.09	.001			
31	1350 - 1354	4.0	0.12			.002			
32	1354 - 1359	5.0	0.09			.001			
B-27533	1359 - 1363	4.0	0.12			Nil			
34	1363 - 1368	5.0	0.04			Nil			
35	1368 - 1372	4.0	0.03			.003			
36	1372 - 1377 1/4	5.0	0.05			.001			
37	1377 - 1382	5.0	0.04			.001			
38	1382 - 1387	5.0	0.04			.001			
39	1387 - 1391	4.0	0.03			.003			
40	1391 - 1396	5.0	0.05			.001			
41	1396 - 1399 1/4	3.0		0.46	Nil	.005			
42	1399 - 1403	4.0	0.03			.005			
43	1403 - 1407	4.0	0.02			.003			
44	1407 - 1411	4.0	0.02			.004			
45	1411 - 1416	5.0	0.04			.004			
46	1416 - 1421	5.0	0.02			.007			
47	1421 - 1425 3/4	4.0	0.05			.004			

Form 1001

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-978

Depth of Hole _____ ft.

Page 7 of 7

Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
B-27548	1425 - 1429	4.0		0.24		.004				
49	1429 - 1433	4.0	0.17			.002				
B-27550	1433 - 1436	3.0		0.29		.008				
	END OF HOLE									

Form 1001

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-979

Depth of Hole 1525 ft.

Page 1 of

Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
	0 - 654	654.0	Not Sampled							
B-27273	654 - 659	5.0	0.11			Nil				
74	659 - 664	5.0		0.29	0.19	.002				
75	664 - 669	5.0	0.15			Nil				
76	669 - 674	5.0		0.31	0.17	Nil				
77	674 - 678	4.0	0.08			Nil				
78	678 - 681	3.0	0.10			.001				
79	681 - 685	4.0	0.08			.004				
80	685 - 688	3.0	0.08			.003				
81	688 - 692	4.0	0.09			.007				
82	692 - 696	4.0	0.18			.005				
83	696 - 697.5	1.5		2.04	1.35	.008				
84	697.5 - 700	2.5	0.08			.010				
85	700 - 704	4.0	0.10			.006				
86	704 - 708	4.0		0.25	0.17	.006				
87	708 - 710	2.0		3.14	2.85	.009				
88	710 - 713	3.0		1.92	1.60	.006				
89	713 - 715	2.0		5.94	4.30	.006				
90	715 - 718	3.0		2.32	0.86	.005				
91	718 - 718.5	.5		0.95	0.46	.019				
92	718.5 - 724	5.5	0.10			Nil				
	724 - 744	20.0	Not Sampled							
93	744 - 749	5.0	0.05			Nil				
	749 - 758.5	9.5	Not Sampled							
94	758.5 - 763.5	5.0	0.04			Nil				
B-27295	763.5 - 765	1.5		0.61	0.10	~~.185~~ .185				

Form 1001

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes

County and State Pima - Arizona

Drill Hole No. A-979

Depth of Hole _____ ft.

Page 2 of _____

Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
B-27296	765 - 768	3.0		0.61	0.20		.070			
97	768 - 772	4.0	0.17			.012				
98	772 - 775	3.0		0.89	0.08		.050			
99	775 - 779 3/1	4.0		1.00	0.18		.042			
B-27300	779 - 782	3.0		1.29	0.07	.015				
B-27177	782 - 785	3.0		1.96	0.10	.011				
78	785 - 790	5.0		1.55	0.08	.014				
79	790 - 795	5.0		0.98	0.11		.090			
80	795 - 798	3.0		0.44	0.07	.016				
81	798 - 802	4.0	0.13			.024				
82	802 - 806 1/3	4.0		0.48	0.05		.033			
83	806 - 811	5.0		0.91	0.06	.022				
84	811 - 815	4.0	0.13			.009				
85	815 - 820	5.0		0.56	0.05	.027				
86	820 - 823	3.0		0.38	0.05	.012				
87	823 - 826	3.0	0.18			.013				
88	826 - 830 1/1	4.0	0.18			.009				
89	830 - 834	4.0	0.13				.038			
90	834 - 837	3.0		2.25		.014				
91	837 - 840	3.0		2.10		.001				
92	840 - 845	5.0		1.12		.028				
93	845 - 850	5.0		1.54		.008				
94	850 - 821	1.0		3.07		.012				
B-27195	851 - 855 1/1	4.0		1.26		.003				

Form 1001

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes

County and State Pima - Arizona

Drill Hole No. A-979

Depth of Hole _____ ft.

Page 3 of _____

Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
B-27196	855 - 860	5.0		0.52		.009				
97	860 - 865	5.0		0.42		.007				
98	865 - 870	5.0		0.41		.005				
99	870 - 874	4.0	0.10				.116			
B-27200	874 - 879 2/1	5.0	0.10			.005				
B-31001	879 - 884	5.0	0.14			.017				
02	884 - 889	5.0	0.07			.001				
03	889 - 894	5.0	0.06			.011				
04	894 - 897	3.0	0.08			.010				
05	897 - 900	3.0	0.09			.002				
06	900 - 904 3/1	4.0	0.06			.010				
07	904 - 908	4.0	0.11			.003				
08	908 - 910	2.0	0.09			.003				
09	910 - 914.5	4.5	0.02				.036			
10	914.5 - 918	3.5	0.07				.057			
11	918 - 923	5.0	0.06			.012				
12	923 - 928	5.0	0.06			.004				
13	928 - 930	2.0	0.10			.004				
14	930 - 935	5.0	0.09			.009				
15	935 - 937	2.0	0.08			.002				
16	937 - 940	3.0		0.27		.016				
17	940 - 944	4.0		0.36			.042			
18	944 - 947	3.0	0.09			.017				
19	947 - 951	4.0	0.15			.008				

Form 1001

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes

County and State Pima - Arizona

Drill Hole No. A-979

Depth of Hole _____ ft.

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Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
B-31020	951 - 955	4.0	0.08			Nil				
21	955 - 959	4.0	0.12			Nil				
22	959 - 962	3.0	0.09			Nil				
23	962 - 966	4.0	0.10			.002				
24	966 - 970	4.0	0.10			Nil				
25	970 - 975	5.0	0.12			Nil				
26	975 - 979	4.0	0.08			Nil				
27	979 - 982	3.0	0.06			Nil				
28	982 - 987	5.0	0.08			Nil				
29	987 - 991	4.0	0.07			Nil				
30	991 - 995	4.0	0.10			Nil				
31	995 - 998	3.0	0.06			Nil				
32	998 - 1001	3.0	0.06			Nil				
33	1001 - 1005	4.0	0.07			Nil				
34	1005 - 1009	4.0	0.09			Nil				
35	1009 - 1012	3.0	0.08			Nil				
36	1012 - 1016	4.0	0.07			Nil				
37	1016 - 1018	2.0	0.09			Nil				
38	1018 - 1022	4.0	0.08			Nil				
39	1022 - 1025	3.0	0.08			Nil				
40	1025 - 1029	4.0	0.07			Nil				
41	1029 - 1033	4.0	0.08			Nil				
42	1033 - 1038	5.0	0.08			Nil				
43	1038 - 1044	6.0	0.07			Nil				

Form 1001

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes

County and State Pima - Arizona

Drill Hole No. A-979

Depth of Hole _____ ft.

Page 5 of _____

Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET		
B-31044	1044 - 1049	5.0	0.08			Nil			
45	1049 - 1052	3.0	0.06			Nil			
46	1052 - 1055 1√	3.0	0.07			Nil			
47	1055 - 1059	4.0	0.09			Nil			
48	1059 - 1062	3.0	0.11			.004			
49	1062 - 1066	4.0	0.09			Nil			
50	1066 - 1070	4.0	0.09			Nil			
51	1070 - 1073	3.0	0.14			Nil			
52	1073 - 1077	4.0	0.16			Nil			
~~53~~	1077 - 1104 ~~1√~~	27.0	Not Sampled						
53	1104 - 1109	5.0		0.54		Nil			
	1109 - 1120	11.0	Not Sampled						
54	1120 - 1125	5.0	0.05			Nil			
55	1125 - 1130 3√	5.0	0.06			Nil			
56	1130 - 1131	1.0		3.45	0.30	.071			
57	1131 - 1133	2.0		0.28	0.13	Nil			
58	1133 - 1136.5	3.5		0.34	0.06		.735		
	1136.5 - 1315 1√	178.5	Not Sampled						
59	1315 - 1317	2.0	XXXX	1.21 ~~XXX~~	0.05	Nil			
60	1317 - 1320	3.0	0.19			.018			
61	1320 - 1325	5.0		0.22	0.08	.019			
62	1325 - 1330 3√	5.0		0.26	0.08	.008			
63	1330 - 1335	5.0		0.19	0.02	.004			
64	1335 - 1340	5.0		0.34	0.03	.027			

Form 1001

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-979

Depth of Hole _____ ft.

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Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET		
B-31065	1340 - 1345	5.0		0.36	0.03-	.013			
66	1345 - 1349	4.0		0.38	0.05	.003			
67	1349 - 1353	4.0		0.22	0.01	.026			
68	1353 - 1357	4.0	0.19			.008			
69	1357 - 1361	4.0		0.73	0.12	.013			
70	1361 - 1366	5.0		0.65	0.02	.014			
71	1366 - 1369	3.0	0.17			.018			
	1369 - 1395 9/17	26.0	Not Sampled						
B-31072	1395 - 1399	4.0	0.12			Nil			
73	1399 - 1401	2.0		0.76	0.46	.006			
74	1401 - 1403	2.0	0.11			Nil			
75	1403 - 1404.5	1.5		1.07	0.16	.005			
76	1404.5 - 1405.5	1.0	0.10			Nil			
77	1405.5 - 1410	4.5		0.83	0.39	.009			
78	1410 - 1415	5.0		0.75	0.32	.003			
79	1415 - 1420	5.0	24.5'	1.24	0.33	.004			
80	1420 - 1425	5.0		0.41	0.21	Nil			
81	1425 - 1430 3/✓	5.0		0.61	0.23	.003			
82	1430 - 1434	4.0		0.86	0.23	.008			
83	1434 - 1440	6.0	0.15			.033			
84	1440 - 1445	5.0		0.82	Nil	.038			
85	1445 - 1450	5.0		0.55	0.07	.270			
86	1450 - 1455 3/✓	5.0	0.18			.019			
87	1455 - 1460	5.0		0.16	Nil	.025			

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-979

Depth of Hole _____ ft.

Page 7 of 7

Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET		
B-31088	1460 - 1465	5.0	0.11			.026			
89	1465 - 1470	5.0		0.49	0.13	.038			
90	1470 - 1475	5.0		1.42	1.16	.006			
91	1475 - 1480	5.0		1.51	0.71	.052			
92	1480 - 1485	5.0		0.70	Nil	.013			
93	1485 - 1490	5.0	27.5'	0.39	Nil	.015			
94	1490 - 1495	5.0		1.27	Nil	.023			
95	1495 - 1497.5	2.5		0.89	Nil	.009			
	1497.5 - 1505	7.5	Not Sampled						
96	1505 - 1510	5.0	0.03			.002			
	1510 - 1520	10.0	Not Sampled						
B-31097	1520 - 1525	5.0	0.02			.001			
	END OF HOLE								

Form 1001

OFFICIAL COPY
OCT 10 1966

October 7, 1966

Memorandum

To: J. William Hasler, Field Officer, Office of Minerals Exploration

From: John R. Cooper, Branch of Base and Ferrous Metals

Subject: Application for financial assistance in minerals exploration, on CWT property, Pima County, Arizona, by Continental Exploration, Inc.

I have reviewed the subject application, as requested, and believe it merits serious consideration by OME. The target area lies between Continental Exploration's ore body in Section 23, T. 17 S., R. 12 E. and considerably larger but lower grade mineralized ground 2 miles to the east in Section 30, T. 17 S., R. 13 E. Similar mineralization may well occur in the target area. sub-ore

In appraising the application the following should be kept in mind:

1. It is not yet demonstrated that Continental Exploration's ore body can be mined profitably. The applicant's estimate of net income assumes a production of 500 tons of ore per day, which may be difficult to maintain because of the characteristically poddy nature of this kind of ore, and the broken and faulted ground that is likely to be encountered.

2. Continental's ore body is in a fault slice of limestone along the San Xavier thrust, whose post-ore age is I think amply demonstrated, in spite of some other's opinions. The block mineralized in Section 30 has the same structural relations insofar as the subsurface geologic information I have goes. The blocks are drag blocks, or more probably lag blocks that broke off the bottom of the upper plate of the thrust and were over-ridden. Hence the mineralized blocks are of small to moderate thickness.

3. Lag blocks of limestone are known to occur along the San Xavier thrust in the target area, but these blocks are not continuous with the block containing Continental's ore body in Section 23; there is an intervening belt in which limestone is missing and the post-ore Helmet Fanglomerate, with its contained monolithologic breccias, extend from the surface to the sole of the San Xavier thrust. The block mineralized in Section 30 may extend into the eastern part of the target area but indications are that the mineralization ends before the target area is reached. Holes A 974 and T46

4. Limestones, cut by Laramide intrusive rocks and locally mineralized, pass beneath the San Xavier thrust plate southeast of the target area and hence valuable mineraliztion in the autochthonous block beneath the thrust are a distinct possibility. but not a target

5. The target area is underlain by the post-ore Helmet Fanglomerate except in the southwest corner. The Helmet, which makes up most of the upper plate in this area, ranges in thickness from 0 along the outcrop of the thrust zone in the southwest corner of the target area to more than 1,800 feet near the northeast corner. It is 1,000 to 1,250 feet thick in the northwest corner and about 400 feet thick near the southeast corner, where the San Xavier thrust is south of the position shown in Exhibit C. Obviously if ore is present in the target area, it is likely to be at considerable depth.

6. The proposed Induced Polarization-Resistivity lines (Exhibit C) approximate the strike of the Helmet Fanglomerate which dips steeply to the southeast. I wonder if some other orientation might yield more useful geophysical information.

If I can be of further service in processing this application, please let me know.

JRC

John R. Cooper
Branch of Base and Ferrous Metals

JRC:dmh

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
FEDERAL CENTER, DENVER, COLORADO 80225
Office of Minerals Exploration

OFFICIAL COPY
O. M. E.
RECEIVED
OCT 17 1966

October 5, 1966

Memorandum

To: Chief, OME

From: J. William Hasler, Field Officer, Region III

Subject: Application for Continental Exploration, Inc. (Copper)
CWT Property
Pima County, Arizona

Transmitted herewith is an application for financial assistance in minerals exploration from Continental Exploration, Inc., Grand Junction, Colorado, to explore for copper on the CWT property, Pima County, Arizona. The Continental Exploration, Inc. is a wholly-owned subsidiary of Continental Materials Corporation, Chicago, Illinois. The total estimated cost of the exploration is $140,054.68.

The application was received in this morning's mail and I have had only a chance to give it a cursory review. However, I talked to John Cooper, who is thoroughly familiar with the Twin Buttes area and have asked him to review the application. I will transmit his memorandum to you as soon as he has reviewed the application.

It will not be possible for me to examine this docket on my scheduled trip to Tucson during the week of October 17 as I will be examining Western Minerals Corporation property of Silver Hill and Homestake-Indiana in the Silver Hill Mining District, Pima County, Arizona (OME-6574) as well as an interim examination the Donald C. Gilbert Royal and Deer Horn Claims, Santa Cruz County, Arizona (OME-6465).

J. William Hasler

J. William Hasler
Field Officer, Region III
Office of Minerals Exploration

Office of Minerals Exploration

October 5, 1966

Memorandum

To: John Cooper

From: J. William Hasler

Subject: Application for financial assistance in minerals exploration, on the CWT property, Pima County, Arizona, by Continental Exploration, Inc.

I am referring the subject application to you for a review and comments since you are thoroughly familiar with the geology in the area. A review by you will materially assist us in an appraisal of the project as a whole. Page 1, Introduction, 2nd sentence indicates what you told me this morning about the lack of continuity of ore grade material at depth.

The applicant proposes exploration in Section 23, T. 17 S., R. 12 E. in a 2-phase program, No. 1 an Induced Polarization-Resistivity survey to localize targets and non-core and core drilling to test favorable areas. Phase II will depend upon results to Phase I, and if it is encouraging enough additional Induced Polarization-Resistivity surveying lines will be run on lines of 250 spacing to define closer target areas disclosed by Phase I drilling.

The application is quite well prepared, however, there may be some question concerning Phase I and Phase II programs. Just at a quick glance the drilling probably should be done in Phase II rather than during Phase I.

The applicant states that a lien and subordination agreement may not be executed. If this is the case, the applicant would have to execute a Standard Form 25 Performance Bond in order to subordinate the ground for possible repayment of government funds should production come as a result of an OME contract.

J. William Hasler

J. W. Hasler,
Field Officer, Region III
Office of Minerals Exploration

cc: Chief, OME
OME chron
Hasler chron
Continental Exploration file

CONTINENTAL EXPLORATION, INC.

Emery Park Station Box 11216

Tucson, Arizona

602-623-0265

October 3, 1966

Mr. J. William Hasler, Field Officer
Region III, Office of Minerals Exploration
U. S. Geological Survey, Building 25
Denver Federal Center
Denver, Colorado 80225

Dear Mr. Hasler:

We are submitting, under cover with this letter, an application, with required information, for Office of Minerals Exploration financial assistance in the exploration for copper ores in Pima County, Arizona.

Continental Exploration, Inc. will appreciate your early consideration of this application.

Respectfully,

C. H. Reynolds

C. H. Reynolds
Vice President-Mining

CHR/ds
Incls.

A Subsidiary of CONTINENTAL MATERIALS CORPORATION

Executive Office: 4534 West North Avenue, Chicago, Illinois 60639

Mining Field Office: P. O. Box 190 Grand Junction, Colorado

092766

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MME Form 40
Jan. 65

Budget Bureau No. 42-R1506
Approval expires Dec. 31, 1968

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR FINANCIAL ASSISTANCE IN MINERALS EXPLORATION

Pursuant to Public Law 85–701 (72 Stat. 700; 30 U.S.C. 641)

NAME OF APPLICANT *(Full legal name and mailing address as they should appear on contract if one is executed.)*

Continental Exploration, Inc.
820 South Ninth Street
P. O. Box 190
Grand Junction, Colorado 81501

APPLICANT DO NOT USE THIS BLOCK

DOCKET NUMBER: 6578

DATE RECEIVED: 10-11-66

REGION: III

DIVISION CODE:

BUSINESS ORGANIZATION *(Check one)*

- INDIVIDUAL [ ]
- CORPORATION [X]
- PARTNERSHIP [ ]
- OTHER *(Specify)* [ ]

STATE IN WHICH FIRM IS ORGANIZED: Colorado

LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE

NAME	ADDRESS	TITLE
Willard Gidwitz	72 West Adams Street Room 950 Chicago, Illinois 60603	President
Gerald Gidwitz	"	Vice-President
Peter A. Bauer	"	Vice-President
William G. Shoemaker	"	Vice-President
Max H. Braum	"	Sec'y & Treasurer
Melvin Pollack	"	Asst. Sec'y & Asst. Trea
C. H. Reynolds	Grand Junction, Colo.	Vice-President

MINERAL(S) FOR WHICH YOU WISH TO EXPLORE: Copper

ESTIMATED COST OF PROJECT: $ 140,054.68

PROPERTY NAME	LOCATION COUNTY	STATE
CWT	Pima	Arizona

GENERAL INSTRUCTIONS

Before filling out this application, please read the *OME Regulations for Obtaining Federal Assistance in Financing Explorations for Mineral Reserves* (30 CFR Chap. III). To assure prompt action, your application must provide all applicable material and information specified on the back of this application form. Avoid unnecessary correspondence and delays by submitting complete and accurate information. *Please submit two copies of this application and all accompanying papers* except as otherwise noted. Place your name and address on each sheet. Each item of information, maps, and reports required as a part of this application is described on the back of this form. Identify each attached statement by the item number to which it applies. If an item does not apply to your application, show the item number on your statement and after it write "not applicable." Maps or sketches should be used to supplement narrative descriptions of the property location and boundaries in item 2, existing mine workings and geology in item 3, and the proposed exploration work in item 5. When this information is not too complex, all of it may be shown on one map or sketch. All documents and other attachments submitted as a part of this application, except those in item 3(g) which you mark to be returned, become the property of the Government and will not be returned to the applicant. Send true copies, *not originals*, of leases, contracts, and other documents which are an essential part of your business records. *File this application with the Office of Minerals Exploration, Department of the Interior,* ~~Washington 25, D. C. ONE Field Office~~ Washington, D. C., 20242, or with the nearest OME Field Office.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief, and that he would not ordinarily undertake the proposed exploration under current conditions and circumstances at his sole expense.

October 3, 1966
DATED

C. H. Reynolds
BY *(Signature)*

C. H. Reynolds, Vice-President
TITLE

A wilfully false statement or certification to any Department or Agency of the United States Government is a criminal offense. U. S. Code, Title 18, Sec. 1001.

INFORMATION REQUIRED WITH THIS APPLICATION

1. Financial Eligibility:

(a) Submit evidence of efforts made within 90 days preceding the filing of this application to obtain credit from your bank of account and at least one other banking institution or other private source of credit. Such evidence shall include true copies of correspondence which show: (1) date of loan request, (2) amount and terms requested, (3) proposed use of loan funds, and (4) the replies from credit sources. If the loan was offered under terms which you consider unreasonable, state why you consider them so.

(b) List names and addresses of affiliated, parent, or controlling companies or organizations and state extent and nature of their interest.

(c) State how you propose to furnish your share of the cost of the exploration work.

2. Applicant's Rights in Land:

(a) State your interest in the land and mineral rights, whether owner, lessee, purchaser under contract, or other. If you are not the owner, submit one true copy of the lease, contract, or other document (with address of owner) under which you control the property. Describe all liens, mortgages, or other encumbrances on the land and state book and page number and official place where recorded.

(b) State the legal description (section, township, and range; metes and bounds; patent number of claims) of the land upon which you wish to explore and all adjacent land which you own or control. Describe any part of the land or workings which should not be subject to Government royalty and liens. If the land consists of unpatented claims, state book and page number for each recorded location notice, including amended locations, and official place where recorded. State all the names by which you know the property.

(c) For all land or mineral rights encumbered or not owned, submit five copies of Lien and Subordination Agreements on MME Form 52. If the agreements cannot be obtained, state reasons and provide copies of letters of refusal.

3. Physical Description:

(a) Describe in detail and illustrate with maps or sketches all mining or exploration operations which you know have been or are being conducted upon the land. Include existing mine workings and all production facilities.

(b) State your interest, if any, in operations described in (a).

(c) State, if you know, the past and current production, supporting your statement with copies of settlement sheets, mine records, or published data if available.

(d) Describe known ore reserves, giving quantities and grades and sampling methods used. Support your statement with copies of assay certificates and assay maps if available.

(e) Describe by narrative and maps or sketches the geologic features of the property, including ore minerals, geologic formations if known, and type of deposit (vein, bedded, etc.).

(f) State your reasons for expecting to find ore, and if you have sampled the area you propose to explore, show where the samples were taken, describe sampling methods used, and provide copies of assay certificates.

(g) Send with your application at least *two* copies of all geologic or engineering reports, assay maps, or technologic information which you have, indicating whether you require their return.

4. Accessibility of Property:

(a) To aid the OME representative who may examine the property, state name and address of person who will meet him; give directions for reaching the property; and describe accessibility of property and of any mine workings.

(b) Name the shipping and supply points and state the distances to the property.

5. Exploration Work:

(a) Describe fully the proposed exploration work giving individual footages and sizes of openings *for each item of work.* Use narrative, maps, plans, and sections as necessary. Show location of the proposed work as related to geologic features such as veins, ore-bearing beds, contacts of rock formations, etc. Show also the relation of the proposed work to any existing mine workings and to *land boundaries* or to the closest identifiable corner.

(b) If an access road must be built, show the proposed location on the property map and state the length, type and construction methods proposed.

(c) If an OME contract is executed, state how soon thereafter work would be started and finished. State your anticipated average daily or monthly rate of progress for each type of work.

6. Experience:

State your operating experience and background to conduct this exploration work and also that of the person who will supervise the work.

7. Estimate of Costs:

Furnish detailed estimates of the necessary costs *for each item of the work proposed in 5(a)* under the headings listed below with a total for each heading and the estimated total cost of the work. Costs for any work to be performed by an independent contractor should be listed separately under category (a) below. Costs for any work that is not to be performed by an independent contractor should be listed under categories (b) through (g).

(a) Independent contracts. State the total cost of any proposed independent contract for all or any part of the work, and the number of units and the unit cost for each type of work, such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, or per cubic yard of material moved. Cost estimates should be supported by bids from three contractors if possible. (*Note*—If none of the work is to be contracted, write "none" after this item.)

(b) Personal services. The cost of supervision, engineering and geological services, outside consultants, and labor should be itemized by numbers and classes of employees; rates of wages, salaries or fees; and periods of employment. State whether these services are available.

(c) Operating materials and supplies. List items of material and supplies giving quantity and cost of each. Include under this heading power, water, and fuel, and units of equipment and tools costing less than $50 each.

(d) Operating equipment. List items of equipment and tools costing $50 or more per unit. Give specifications and indicate how each item is to be acquired—i.e., rented, purchased or provided by the applicant. If rented or purchased, state the estimated rental or purchase price. If furnished by the applicant, state condition and present fair market value.

(e) Initial rehabilitation and repairs. Describe the type and the cost of *initial* rehabilitation or repair of existing buildings, fixtures, installations (exclusive of mine workings), and movable operating equipment now owned by the applicant which will be used in the exploration work.

(f) New buildings, fixtures, installations. Describe each building, fixed improvement, and installation to be purchased, constructed, or installed for the exploration work, stating specifications and cost including labor, materials, and supervision.

(g) Miscellaneous. Describe the type and estimate the cost of repairs and maintenance of the operating equipment listed in 7(d). Do not repeat initial repairs listed in 7(e). Show also the costs of analytical work, accounting, workmen's compensation and employees' liability insurance, payroll taxes, and other required costs that do not fall within the previous categories. [*Note*—The Government will not contribute to costs incurred before the date of the contract, or to costs of or incident to: (1) acquiring, using, or possessing land and any existing improvements, facilities, buildings, installations, and appurtenances, or the depreciation and depletion thereof; (2) general overhead, corporate management, interest and taxes (other than payroll and sales taxes); (3) insurance (other than employees' liability insurance); and (4) damages to persons or property (other than authorized repair to or replacement of equipment or other property used in the work).]

INT.-DUP. SEC., WASH., D.C

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EXPLORATION PROPOSAL

Introduction.

This application by Continental Exploration, Inc., a Colorado corporation, (a wholly-owned subsidiary of Continental Materials Corporation) is for assistance in the exploration of the CWT property in the Pima Mining district, Pima County, Arizona, 20 miles south of Tucson, in which it is believed that commercial deposits of copper ores may be found. The applicant believes this undertaking has inherent in it a degree of risk greater than that normally assumed by private exploration companies, and accordingly the applicant hereby certifies that it would not normally undertake such exploration at its sole expense under current economic conditions or circumstances.

1. Financial Eligibility.

(a) The applicant applied to Central National Bank in Chicago (its regular bank of account and the bank of account of its parent corporation) for a loan of the amount requested by this application. Such loan was denied. The applicant also applied to Harris Trust and Savings Bank of Chicago for such a loan, and this loan also was denied. Both lenders considered a loan of the type requested as inappropriate for them to undertake. Copies of correspondence are included as Exhibit A.

(b) The sole stockholder of applicant is:

Continental Materials Corporation
72 West Adams Street, Room 1236
Chicago, Illinois 60603

No other person or corporation has any interest in applicant.

(c) Applicant will furnish its share of the cost of the exploration work from its general funds.

2. Applicant's Rights in Land.

(a) Applicant has a lease to March 11, 2014 on and an option to purchase the subject premises. This leasehold and option interest arises under CWT Mining Lease and Option dated March 12, 1964 between Continental Exploration, Inc., and C. DARREL WILSON, et al., (a copy of which is recorded in the office of the Recorder, Pima County, Arizona, at Docket 2470, Pages 328-386) as amended by First Amendment dated March 16, 1964 (a copy of which First Amendment is recorded in the office of the Recorder, Pima County, Arizona, at Docket 2470, Pages 387-415), by Second Amendment dated March 18, 1964 (a copy of which Second Amendment is recorded in the office of the Recorder, Pima County, Arizona, at Docket 2470, Pages 416-444) and by Third Amendment to CWT Mining Lease and Option and Restated CWT Mining Lease and Option, a true copy (completely conformed) of which Third Amendment is included as Exhibit B. Such agreements state the names and addresses of the owners.

There are no liens, mortgages, or other encumbrances on the land.

(b) The land upon which the applicant wishes to explore and which should be subject to Government royalty and liens comprises the following unpatented mining claims:

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The following named unpatented lode mining claims situated in Township 17 South, Ranges 12 and 13 East, G. & S. R. M., in the Pima Mining District, Pima County, Arizona, the original and amended notices of location of which are of record in the office of the Recorder of Pima County, Arizona, as follows:

Name of Claim	Docket	Page
Arizona No. 25	911	176
Arizona No. 27	911	177
Arizona No. 29	911	180
Arizona No. 31	911	182
Arizona No. 33	911	184
Amended	2698	208
Arizona No. 35	911	186
Amended	2698	210
Arizona No. 37	911	188
Amended	2698	212
Copper Bottom #1	2218	430
Copper Bottom #2	2218	431
Copper Bottom #3	2218	432
CWT No. 3	2698	202
CWT No. 13		
CWT No. 14		
Ella #28	1113	96
Ella #30	1113	98
Ella #31	1113	99
Ella #32	1113	100
Ella #33	1113	101
Ella #34	1113	102
Ella #35	1113	103
Ella #36	1113	104
Ella #37	1113	105
Ella #38	1113	106
Ella #39	1113	107
Ella #40	1113	108
Ella #41	1113	109

Name of Claim	Docket	Page
Midland No. 1	943	350
Midland No. 2	943	351
Midland No. 3	943	352
Midland No. 4	943	353
Midland No. 5	943	354
Midland No. 6	943	355
Midland No. 7	943	356
Midland No. 8	943	357
Midland No. 9	943	358
Midland No. 10	943	359
Midland No. 11	943	360
Midland No. 12	943	361
Midland No. 13	943	362
Midland No. 14	943	363
Midland No. 15	943	364
Midland No. 16	943	365
Midland No. 17	943	366
Midland No. 18	943	367
Amended	2698	252
Midland No. 19	943	368
Amended	2698	253
Midland No. 20	943	369
Amended	2698	254
Midland No. 24	943	373
Midland No. 26	943	375
Midland No. 28	943	377
Pima #2	2060	181
Amended	2698	237
Pima #3	2060	182
Pima #4	2060	183
Pima #5	2060	184

(c) The applicant requested that the owners of the claims execute a Lien and Subordination Agreement (MME Form 52). It was not possible to secure agreement from the owners, and through their representative, C. Darrel Wilson, and their attorney Leo N. Smith, they advised applicant that they declined to execute the MME Form 52. See letter dated July 28, 1966 to Sidney M. Gunther from C. Darrel Wilson, included as Exhibit D.

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3. Physical Description.

(a) Description of Operations.

Continental is now installing underground facilities for production of 500 tons per day from its Nevada shaft on Section 23, T.17 S., R.12 E. A mill contract has been let for completion at the end of March, 1967. Drilled Ore Reserves are carried at 1,208,000 tons averaging 1.08% Cu, 7.2% Zn, 0.30% lead, 1.54 oz silver. Based on Induced Polarization resistivity and drill data the probable size of the ore lenses is at least double that now measured by drill holes. Furthermore the ore host rock area is several times as large as has been located by drilling and additional ore lenses may be expected.

Eligible
Cd 0.37
Ag @$1.29 = 1.99
Cu @ 36¢ = 7.78
Zn @ 15¢ = 21.60
Pb @ 15¢ = .90
not eligible
See M.W. Cox, p.2

The CWT property and geology pertinent to exploration is shown by the attached Geologic and Claim Map, Exhibit C.

(b) All development work described above in (a) has been done by the applicant, Continental Exploration, Inc.

(c) There has been no production.

(d) See CWT Property Report attached.

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(e) Geologic Features.

The CWT property held by Continental covers nearly 9 square miles within the southern part of the San Xavier thrust block in the Pima Mining District of the Sierrita Mountains in southern Pima County, Arizona. In the northern part of this block, copper, molybdenum, copper-zinc and zinc-lead ore bodies have been located and mined at the San Xavier, Mineral Hill, Daisy, Pima, Palo Verde and Mission mines. Broadly speaking, these deposits have much in common in that they are all contact or pyrometasomatic deposits in limestones, arkoses and intrusive porphyries. They are all characterized by intense rock alteration that in the non-calcareous rocks takes the usual form of pyrite, silica, clay and mica minerals, but in calcareous rocks, i.e. limestones, dolomites and limy arkoses, takes the form of garnet-epidote-diopside-serpentine minerals, the so-called "tactite." In form the worked deposits range from simple, steeply dipping vein-like shoots at San Xavier to complex replacements of several rock types as at Palo Verde, Pima, and Mission. Bulk grade of the deposits shows an inverse ratio to size in that the arkose-monzonite multimillion ton deposits of Mission, Pima and Palo Verde mines average less than 1% metal content, while the limestone replacement deposits at other mines, although smaller, contain 5%-20% metal content.

Rocks present in the area, in order of descending age are:

Late Tertiary	- Helmet or San Xavier fanglomerate	- barren
Early Tertiary	- Monzonite intrusives	- mineralized
Cretaceous	- Arkose and shale	- mineralized
Paleozoic	- Limestone, quartzite, dolomite and gypsum beds	- mineralized
Precambrian	- Granitic rocks and gneisses	- barren

~~barren~~ San Xavier Thrust

Structurally the district is extremely complex and on the age of major thrust faulting, most important to Applicant's project, there is no local agreement. The Paleozoic calcareous rocks are generally separated from the Precambrian granites by a flatly dipping, folded and offset thrust fault, the San Xavier. However, unconformable contacts with a basal Paleozoic conglomerate (Bolsa quartzite) are locally present at the surface. The Paleozoic rocks are tightly folded and complexly faulted near Mineral Hill to the north and Twin Buttes to the south. Cretaceous rocks rest with strong angular unconformity on the Paleozoic but are themselves strongly folded and faulted. Capping these rocks are thick masses of post mineral fanglomerate, landslide breccia and andesitic volcanic rocks whose exact relationship, although unconformable on all older rocks, is unsolved.

It is variously held that the San Xavier thrust is (1) completely post ore with a movement of 15 to 20 miles from the southeast, thus making the CWT land underlain by the tops of ore bodies, if any, whose beheaded roots lie south of Twin Buttes, (2) completely pre-ore and intruded by monzonite which is mineralized, thus increasing favorability of a large area of CWT lands, and (3) partially post ore, jumbling ore blocks around, thus accounting for the diversity of structural conditions known to exist.

The area explored by Continental to date lies entirely in Section 23 and is bounded on the west by the Ruby Star Fault, a northwest trending, east dipping, high angle normal fault, probably of post thrust age. In the hanging wall of the fault a thin dragged sheet of crushed Paleozoic limestone is found overlain by silicified Cretaceous arkose. All of the rest of the surface area is covered by post ore fanglomerate and recent wash.

Subsurface geologic conditions in Section 23 are known from 38 core holes in the immediate area, 25 of them drilled by Continental. The Cretaceous rocks are silicified, metamorphosed and slightly mineralized from the surface (on the west side of this section) to the limestone contact, a depth ranging from 500 to more than 1,000 feet. No ore grade drill intercepts were found but 0.3% to 1.0% copper occurs over widths of 5 to 50 feet in several drill holes. Near the

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limestone contact the arkoses are variously hornfelzed, silicified and mineralized, and crushed and clay altered. The contact is in places a thrust fault, in others an unconformity, often with a basal pebble conglomerate.

Below the arkose is found from 20' to 400' of limestone, quartzite and anhydrite beds. These Paleozoic rocks are cut off at depths of 900 to 1,100 feet by the gently dipping San Xavier thrust fault. This thrust fault has not been found to be mineralized. Just above the thrust a thickness of 100 to 200 feet of anhydrite-limestone is always present. Below the thrust:- mineralized SE of this area.

?? But there is 0--1800 feet of fanglomerate over the Paleozoic rocks

The limestone contains layers of tactite, a greenish crystalline rock composed largely of garnet, epidote, diopside and marble, layers of olive colored hornfels, coarse crystalline marble, and of a material locally known as "clay garnet rock". Ore mineralization occurs in both tactite and hornfels.

The balance of the area east of the Ruby Star Fault is explored only by a few scattered drill holes, many of which failed to bottom the post-ore fanglomerate.

South = below ? of the San Xavier thrust Paleozoic rocks and Precambrian granite occur. Mineralization is known in the Paleozoic rocks. SE of this area - See Cooper, S.R. Oct. 3, 1926

Just east of applicant's boundary in the North 1/2 of Section 30, T.17 S., R.13 E. a large mineralized area has recently been disclosed by drill holes in such rocks underlying an area at

? Paleozoic

least 3,000 feet by 1,500 feet. The shallowest mineralization occurs in a drill hole located about 1,800 feet East and 1,200 feet South of the S.E. corner of Section 24. Here an intersection from 374 feet to 511 feet averages plus 1.0% Cu with minor amounts of MoS_2 and ZnS. The area sampled by drill holes probably contains in excess of 100,000,000 tons of material grading plus 0.5% Cu at depths of from 400 feet to 1,500 feet.

Paleozoic rocks are known to underlie the area between = See 2b the mineralization disclosed in Section 30, T.17 S., R.13 E. and the ore body presently being developed by applicant in Section 23, T.17 S., R.12 E. Mineralization is known in this area from wide spaced scout drilling. Although some target size cannot be known at this time, it is reasonable to expect to find in this area either a low grade ore body of extremely large size or a relatively smaller and higher grade ore body similar to that in Section 23.

(f) The geology of the Pima Mining District has been intensely investigated by the U. S. Geological Survey, University of Arizona and mining company geologists. Maps and reports published since 1955 in government publications, technical journals, and university papers are recent enough to be pertinent. These are summarized in the bibliography of U.S.G.S. Bulletin 1112-C.

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The most recent material available to applicant is contained in a thesis submitted to the faculty of the department of geology in the graduate college of the University of Arizona by Richard R. Weaver, entitled "Structural Interpretation of the Ruby Star Ranch Area, Pima Mining District, Pima County, Arizona." A copy of this thesis is available for loan at the library of the University of Arizona. Mr. Weaver has granted permission to applicant to use information from this thesis.

4. Accessibility of Property.

(a) Mr. J. G. Roscoe, Manager, Continental Exploration, Inc. is available at the mine office at the property. The property lies about 20 miles southwesterly of Tucson and is about 8 miles west of Sahuarita, which is on U. S. Highway 89, 17 miles south of Tucson. It may be reached by various routes on paved and good gravelled roads from Tucson. The most direct route is along the paved Mission-Twin Buttes road which crosses Section 24.

(b) The nearest railhead is Sahuarita where loading facilities exist on the Southern Pacific Company line from Tucson to Nogales. Other facilities have been installed within a few miles north and south of Sahuarita. Adequate mining and milling supplies, equipment and tools are available in Tucson.

5. Exploration Work.

(a) Two methods of exploration are proposed to explore this area: Induced Polarization - Resistivity surveying to help localize targets, and non-core and core drilling to test favorable areas.

Applicant proposes to explore this area in two phases. Phase I will consist of approximately 37,000 feet of Induced Polarization - Resistivity lines as indicated on accompanying Map (Exhibit C) and six drill holes to allow interpretation of the results of this survey. Following the Induced Polarization - Resistivity survey the location of the initial holes necessary to allow interpretation will be determined by consultation with the OME field representative.

Phase II of the program will be dependent upon the results of Phase I. It will consist of detailed Induced Polarization - Resistivity surveying on lines of 250 foot spacing over anomalies disclosed and confirmed by Phase I. Approximately 30,000 feet of Induced Polarization - Resistivity line will be allocated for this purpose. Phase II drilling will define target areas disclosed by Phase I drilling and Induced Polarization - Resistivity work.

A minimum of twenty drill holes will be required to define a target area of the anticipated size.

(b) Existing access roads will be used.

(c) Geophysical survey work can be started within 30 days after contract execution, and can be completed in approximately 30 additional days. Drilling the six Phase I holes can be completed within three months. Phase II Induced Polarization - Resistivity work and drilling will require approximately four months.

6. Experience.

Continental Exploration, Inc., holder of the CWT property, is a wholly-owned subsidiary of Continental Materials Corporation, a Delaware corporation, incorporated in 1954 as "Continental Uranium, Inc." and listed on the American Stock Exchange.

Since its inception Continental Materials Corporation, itself or through wholly-owned subsidiaries, has been continuously engaged in production, development and exploration of mining properties. Its principal operations, all conducted by its own Mining Division, include the following:

Continental No. 1 Mine, San Juan County, Utah. Underground, open stoping, with random pillar support, using trackless diesel equipment. Induced caving following pillar extraction. Production of 77,000 tons of uranium ore, 1954-1958.

Rattlesnake Mines, San Juan County, Utah. Initially open pit uranium operation with 2.5 million yards of waste stripped to produce 173,000 tons of ore. Subsequent underground production similar to Continental No. 1 amounted to 97,000 tons, 1956-1965. Total production was 270,600 tons.

Seismic and Reserve Mines, Fremont County, Wyoming. Underground, open stoping with both induced caving and sandfilling using slushers with rail haulage. Production of 200 tons per day

of uranium ore from two vertical shafts. Production of 481,000 tons, 1958-1965.

Texwood Mine, San Juan County, Utah. A joint venture with Atlas Minerals, Inc. Underground, open stoping, with random pillar support, using trackless diesel equipment. Induced caving following pillar recovery. Operated by Continental personnel through incline shaft. Production of 49,800 tons, 1963-1965.

CWT Mine, Pima County, Arizona. See CWT Property Report (Exhibit F).

In addition, several smaller properties have been operated as uranium and precious metal producers.

All activities of the Mining Division have been performed by company staff. This includes supervising exploration drilling, estimating reserves, conducting feasibility studies, planning development systems, determining mining methods, designing and constructing mine plants, performing shaft sinking and selecting production equipment.

Present Mining Division personnel:

Administrative & Supervisory . . .	5
Techical	6
Accounting	3
Hourly Employees.	70

The Mining Division employees who will be responsible for the CWT operations include the following:

C. H. Reynolds	Vice President, Mining, Continental Materials Corporation and subsidiaries.
J. G. Roscoe	Manager, Continental Exploration, Inc.
M. A. Price	Geological Engineer, Continental Exploration, Inc.

In addition to the Mining Division employees listed above, Manning W. Cox & Associates of San Francisco, California, are retained on a consulting basis to assist in this project.

A resume of the professional experience and background of the Mining Division employees follows.

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C. H. REYNOLDS

Biographical data:

Born 1918

B. S. in Mining Engineering, Mackay School of Mines, University of Nevada, 1943

Member:

American Institute of Mining and Metallurgical Engineers, 1946

Past Chairman of Colorado Plateau Section, 1961

Nu Eta Epsilon, Honorary Engineering Society

Professional Experience:

1943-1944.....Basic Refractories, Inc., Gabbs, Nevada, mining engineer. Duties consisted of establishing engineering control, conducting cost studies, pit design and planning for open pit mining of Brucite (Mg OH2) deposit. Conducted engineering and sampling procedures for rigid quality control. Supervised initial pilot plant studies to beneficiate ore.

1944-1946.....South Pacific Area, United States Marine Corps.

1946-1947.....Bunker Hill and Sullivan Mining and Concentrating Co., Coeur d'Alene district -- geologist, mine operating geology, detailed mapping of development work and outside properties.

1947-1955.....Sidney Mining Co., Coeur d'Alene District, Engineer-Geologist to 1951; chief engineer to 1953; mine superintendent to 1955. Integrated Pb-Zn mining and milling operation with new (1947) modern selective flotation plant; 250 tpd. capacity. Underground vein mine with shrinkage and cut and fill stoping. In responsible charge of extensive exploration and development program, including 1000 feet shaft deepening project and attendant installation and level development.

1955-1965.....Continental Materials Corporation -- General Superintendent of Mining Division, organized mining department and brought properties into production from initial drilling. In charge of staff -- operating, technical, accounting -- engaged in mining activities, property evaluation, exploration projects.

1966- .....Vice President, Mining, Continental Materials Corporation.

JOHN G. ROSCOE

Biographical Data:

Born 1922

B. S. in Mining Engineering, Mackay School of Mines, University of Nevada, 1948

Member:

American Institute of Mining and Metallurgical Engineers, 1947, Registered Professional Engineer, Idaho, No. 876, 1954.

Professional Experience:

1948-1954.....Bunker Hill Co., Kellogg, Idaho -- Mining Engineer. Mine and surface plant surveying, mill and smelter construction engineering, mill and smelter physical appraisal, mining claim patent surveying.

1954-1955.....U. S. Atomic Energy Commission, Denver, Colorado -- Mining Engineer. Ore reserve data computation and evaluation. Exploration contract administration, property examination.

1955-1956.....Farmington Funding Corp., Colorado Springs, Colorado -- Mining Engineer, Property examination. Organized and supervised exploration projects.

1956-1957.....Continental Materials Corporation, Moab, Utah -- Mine Superintendent. Supervised stripping and put Rattlesnake Open Pit into production. Set up plant and equipment, developed mining system.

1957-1964.....Continental Materials Corporation, Grand Junction, Colorado -- Superintendent of Mines. Responsible to General Superintendent for mine production, mine planning and development. Coordinates activities at producing properties. Purchasing agent for capital expenditures. Assists general superintendent in direction of technical and administrative personnel and property evaluation.

1964- .....Continental Exploration, Inc., Tucson, Arizona, Manager. In charge of bringing newly developed property into production. Responsible for detailed planning, engineering and supervision of erection of mine plant, mine development and mill for proposed 500 tons per day mining and milling operation.

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MICHAEL A. PRICE

Biographical Data:

Born 1915
B.S. in Geological Engineering, Mackay School of Mines, University of Nevada, 1955
Member:
American Institute of Mining and Metallurgical Engineers, 1955

Professional Experience:

1932-1956.....Work experience as mucker, miner, mine operator, mine shift boss in various mines in Arizona, California and Nevada, including military service and attending university.

Military service 1941-1946 U.S.M.C.

1956-1957.....Wah Chang Mining Corp., Bishop, California Field Geologist, General Superintendent of Exploration at Copper King Mine, Bagdad, Arizona and Culeta Mine, Lee Vining, California.

1958-1959.....Vitro Uranium Corp. Mine Superintendent, U.P. Shaft, Green River, Utah. In charge of underground mining operation, development and exploration.

1959-1961.....Great Western Universal Silvers Co., Lower Lake, California General Superintendent of Reed Mine. In charge of production and exploration.

1961-1964.....Vitro Minerals Corp., Salt Lake City, Utah. Ore Production Engineer. Responsible for production and grade control in open pit uranium mining operation in Gas Hills area of Wyoming.

1964-1965.....Altoona Mine, Inc., Dunsmuir, California. General Superintendent in charge of exploration, development and production at underground mercury operation.

1966- .....Continental Exploration, Inc. Mine engineer.

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7. Estimate of Costs.

To conduct the proposed Induced Polarization - Resistivity geophysics and aid in interpretation, the applicant proposes to use the services of the Heinrichs Geoexploration Company.

An estimate of the charges for the geophysical work as outlined under (5. Exploration Work) is as follows:

Phase I.

37,000 feet of Induced Polarization - Resistivity survey in six lines, spaced 1000 feet apart, including compilation, interpretation and reporting.

37,000 feet @ $.10 per foot - $ 3,700.00

Phase II.

30,000 feet of Induced Polarization - Resistivity survey on line spacing of 250 feet including compilation, interpretation and reporting.

30,000 feet @ $.10 per foot - $ 3,000.00

Total $ 6,700.00

Applicant proposes to contract drilling to an independent contractor. The applicant conducted a drilling program in 1964 to delineate its present orebody. This program consisted of 25 holes aggregating 13,617 feet of non-core drilling and 7,086 feet of NXWL diamond core. This 1964 program is the basis for applicant's estimates of indirect costs.

Based upon current proposals from qualified contract drillers and actual costs incurred in conducting the 1964 drilling program the following costs are estimated for the program proposed herein:

Phase I.

(a) Independent Contracts

1. Drilling Contract

(Assume six holes averaging 1000 feet total depth, with an average of 700 feet of non-core and 300 feet of core drilling)

Proposal (1) (Boyles)

Non-core	0-500 @ $2.60/ft. x 3000 ft	=	$ 7,800.00
	500-750 @ $3.10/ft. x 1200 ft.	=	3,720.00
NX Core	500-1000@ $7.00/ft. x 1800 ft.	=	12,600.00
Water Truck 3 mos. @ $190 plus 1500 mi. @ $.12		=	750.00
	Total		$24,870.00

Proposal (2) (Metler)

Non-core	0-250 @ $3.10/ft. x 1500 ft.	=	$ 4,650.00
	250-500 @ $3.60/ft. x 1500 ft.	=	5,400.00
	500-1000@ $4.10/ft. x 1200 ft.	=	4,920.00
NX Core	500-1000@ $6.25/ft. x 1800 ft.	=	11,250.00
	Total		$26,220.00

2. Indirect Costs See p. 1

Casing left in hole

Cement, drilling mud and chemicals

Standby time

Average $300/hole x 6 = $ 1,800.00

3. Site Preparation

Average 3.5 hours/site @ $23/hr.
$80.50 x 6 = 483.00

Total Contract Cost

Proposal (1)	$27,153.00
Proposal (2)	$28,503.00

(b) Personal Services

1. Sample preparation and assaying
   10/hole x 6 = 60 @ $11.50 — $ 690.00

2. Engineering, surveying, etc.(pro-rata time)
   3 months @ $420 — 1,260.00

3. Geology
   Resident - 3 months @ $1000 — 3,000.00
   Consultant - 10 days @ $100 — 1,000.00

Total Personal Services — $ 5,950.00

(c) Operating Material and Supplies

Core boxes - 180 @ $0.70 — $ 126.00

Core storage - 3 months @ $20 — 60.00

Total Operating Materials & Supplies — $ 186.00

(d) Operating Equipment

None

(e) Initial Rehabilitation and Repairs

None

(f) New Buildings, Fixtures, Installations

None

(g) Miscellaneous

1. Payroll Taxes
   7.2% x $4260 — $ 306.72

2. Accounting
   No charge — -

3. Field Office
   No charge — -

Total Miscellaneous $ 306.72

Total Phase I

Geophysics — $ 3,700.00
Drilling, etc.
Proposal (1) — $33,595.72
Proposal (2) — $34,945.72

Phase II.

(a) Independent Contracts

1. Drilling Contract

(Assume twenty holes averaging 1000 feet total depth, with an average of 700 feet of non-core and 300 feet of core drilling)

Proposal (1) (Boyles)

Non-core	0-500 @ $2.60/ft. x 10,000 ft.	=	$26,000.00
	500-750 @ $3.10/ft. x 4,000 ft.	=	12,400.00
NX Core	500-1000@ $7.00/ft. x 6,000 ft.	=	42,000.00
Water Truck 4 mos. @ $190 plus 5000 mi. @ $.12		=	1,360.00
	Total		$81,760.00

Proposal (2) Metler)

Non-core	0-250 @ $3.10/ft. x 5000 ft.	=	$15,500.00
	250-500 @ $3.60/ft. x 5000 ft.	=	18,000.00
	500-1000@ $4.10/ft. x 4000 ft.	=	16,400.00
NX Core	500-1000@ $6.25/ft. x 6000 ft.	=	37,500.00
	Total		$87,400.00

2. Indirect Costs

Casing left in hole

Cement, drilling mud and chemicals

Standby time

Average $300/hole x 20 $ 6,000.00

3. Site Preparation

Average 3.5 hours/site @ $23/hr.=$80.50x20 $ 1,610.00

Total Contract Costs

Proposal (1)	$89,370.00
Proposal (2)	$95,010.00

(b) Personal Services

1. Sample Preparation and Assaying
   10/hole x 20 = 200 @ $11.50 — $ 2,300.00

2. Engineering, Surveying, etc.(pro-rata time)
   4 months @ $420 — 1,680.00

3. Geology
   Resident - 4 months @ $1000 — 4,000.00
   Consultant - 15 days @ $100 — 1,500.00

Total Personal Services — $ 9,480.00

(c) Operating Material and Supplies

Core boxes - 600 @ $0.70 — $ 420.00
Core Storage - 4 months @ $20 — 80.00

Total Operating Supplies & Material — $ 500.00

(d) Operating Equipment

None

(e) Initial Rehabilitation and Repairs

None

(f) New Buildings, Fixtures, Installations

None

(g) Miscellaneous

1. Payroll Taxes
   7.2% of $5680 — $ 408.96

2. Accounting
   No charge — -

3. Field Office
   No charge — -

Total Miscellaneous — $ 408.96

Total Phase II

Geophysics-
Drilling, etc. — $ 3,000.00

Proposal (1) — $ 99,758.96

Proposal (2) — $105,398.96

COSTS

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TOTAL PROPOSED PROGRAM

Geophysics - Drilling, etc.		$ 6,700.00
	Proposal (1)	$133,354.68
	Proposal (2)	$140,344.68

The applicant's parent company, Continental Materials Corporation, itself or through subsidiaries, has performed exploration pursuant to prior contracts as follows:

Docket & Contract	Commodity	Amount of Government Participation	Date Repaid
DMEA-3688 Idm-E 827	Uranium	$ 20,322.08	December, 1958
DMEA-3297 Idm-E 800	Uranium	$ 25,821.41	December, 1964
OME-6236 2148	Gold-Silver	$ 33,733.70	$16,258.79 repaid to July 20, 1965.
OME-6455 2214	Gold-Silver	$38,350.00	Currently being explored.

This application has been prepared by the staff of Continental Materials Corporation, parent company of Continental Exploration, Inc.

General administration of all matters pursuant to this program will be under the direction of C. H. Reynolds, Vice President, Mining.

Respectfully submitted,

CONTINENTAL EXPLORATION, INC.

C. H. Reynolds

C. H. Reynolds, Vice President

COSTS

PHONE:

CONTINENTAL MATERIALS CORPORATION

4534 W. NORTH AVENUE • CHICAGO, ILLINOIS 60639

August 9, 1966

Mr. Robert I. Logan
Central National Bank in Chicago
120 South LaSalle Street
Chicago, Illinois 60603

Dear Mr. Logan:

Continental Exploration, Inc., a subsidiary of Continental Materials Corporation, holds a copper property in Southern Arizona. This property has on it a drill-proved ore body.

Based upon work done by our mining staff, we believe that other portions of this property have a sufficient likelihood of success to justify an exploration program which would total approximately $150,000. We would like to borrow about one-half of this or $75,000 from the Central National Bank in Chicago. The loan would be repayable out of production from any newly-found ore body. There would be no personal liability by Continental Exploration, Inc. or its parent corporation.

I am prepared to furnish you complete details concerning the property and the program we propose. However, I would like a preliminary indication as to whether your bank would be willing to consider such a loan and on what terms.

Sincerely,

CONTINENTAL MATERIALS CORPORATION

By Peter A. Bauer

Peter A. Bauer
Vice President

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CENTRAL NATIONAL BANK
IN CHICAGO

ROBERT I. LOGAN
SENIOR VICE PRESIDENT

August 10, 1966

Mr. Sidney M. Gunther
Gunther & Choka
72 West Adams Street
Chicago, Illinois 60603

Dear Mr. Gunther:

This will acknowledge receipt of your letter of August 9th, regarding a proposed loan in the amount of $75,000 from us for an exploration program on copper properties in Southern Arizona.

We regret to inform you that we cannot give favorable consideration to the loan requested.

Very truly yours,

Robert I. Logan

Robert I. Logan

RIL/rss

PHONE:

CONTINENTAL MATERIALS CORPORATION

EXECUTIVE OFFICE 4534 W. NORTH AVENUE • CHICAGO, ILLINOIS 60639

August 9, 1966

Mr. Richard H. Huson
Harris Trust and Savings Bank
111 West Monroe Street
Chicago, Illinois 60603

Dear Mr. Huson:

Continental Exploration, Inc., a subsidiary of Continental Materials Corporation, holds a copper property in Southern Arizona. This property has on it a drill-proved ore body.

Based upon work done by our mining staff, we believe that other portions of this property have a sufficient likelihood of success to justify an exploration program which would total approximately $150,000. We would like to borrow about one-half of this or $75,000 from the Harris Trust and Savings Bank. The loan would be repayable out of production from any newly-found ore body. There would be no personal liability by Continental Exploration, Inc. or its parent corporation.

I am prepared to furnish you complete details concerning the property and the program we propose. However, I would like a preliminary indication as to whether your bank would be willing to consider such a loan and on what terms.

Sincerely,

CONTINENTAL MATERIALS CORPORATION

By Peter A. Bauer

Peter A. Bauer
Vice President

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HARRIS *Trust and Savings* BANK

ORGANIZED AS N. W. HARRIS & CO. 1882. INCORPORATED 1907

111 WEST MONROE STREET CHICAGO, ILLINOIS 60690

TELEPHONE: 461-2121
Area Code 312

August 9, 1966

Mr. Peter A. Bauer
Vice President
Continental Materials Corporation
4534 West North Avenue
Chicago, Illinois 60639

Continental Exploration, Inc.

Dear Pete:

This will acknowledge receipt of your letter dated August 9, 1966, in respect of a proposal made by the Company that this bank advance approximately $75,000 to finance in part an exploration program which the Company contemplates undertaking with respect to a copper property in southern Arizona.

I am sorry, but the bank is unable to participate in the financing of the Company for such a program. The nature of the exploration program does not, in our opinion, provide us with a predictable cash flow from which we could derive a definite repayment program. In addition, there is no available alternative exit in the event that the needed cash flow does not materialize.

Because of the foregoing reasons, we are unable to assist the Company with its credit needs so far as this request is concerned.

Very truly yours,

Dick

Commercial Banking Officer

Richard H. Huson
LME

THIRD AMENDMENT TO CWT MINING LEASE AND OPTION
AND RESTATED CWT MINING LEASE AND OPTION

THIS THIRD AMENDMENT is made effective as of this _____ day of _____, 1966, between C. DARREL WILSON, husband of Mary Page Wilson, dealing with his sole and separate property and estate; ALICE ANN KILROY, wife of Oliver B. Kilroy, dealing with her sole and separate property and estate; RUSSELL A. TODD and ELLA C. TODD, husband and wife; RICHARD E. CHILSON, husband of Alice Chilson, dealing with his sole and separate property and estate; MARIAN C. CHILSON, a widow; DONNA GAIL CHILSON, a minor, by her Guardian, Marian C. Chilson; LAURITA YARTER, an unmarried woman; STEVEN C. CHILSON, husband of Jean Doris Chilson, dealing with his sole and separate property and estate; DANIEL G. CHILSON, JR., husband of Rosemary Chilson, dealing with his sole and separate property and estate; ROBERT C. FORDHAM and REBECCA FORDHAM, husband and wife; LUCILLE COOK, a widow; ROBERT D. GIBSON and JACQUELINE D. GIBSON, husband and wife; LAWRENCE S. REID and NAOMI REID, husband and wife; GEORGE E. HANDLEY and DOROTHY H. HANDLEY, husband and wife; VIRGINIA J. MOCK, wife of Thomas E. Mock, dealing with her sole and separate property and estate; JOYCE K. BUBBICO, wife of Michael A. Bubbico, dealing with her sole and separate property and estate; and CHARLES R. TODD, husband of Pauline Todd, dealing with his sole and separate property and estate (hereinafter called "Owners") and CONTINENTAL EXPLORATION, INC., a Colorado corporation, authorized to do business in the State of Arizona, (hereinafter called "Lessee"),

WITNESSETH:

WHEREAS, the parties hereto joined in the execution of the CWT MINING LEASE AND OPTION dated March 12, 1964, and pertaining to certain unpatented mining claims in Pima County, Arizona, a copy of which is

recorded in the office of the Recorder, Pima County, Arizona, at Docket 2470, Pages 328-386, and which LEASE AND OPTION was subsequently amended March 16, 1964, a copy of which amendment is recorded in the above office at Docket 2470, Pages 387-415, and which LEASE AND OPTION was subsequently amended a second time on March 18, 1964, a copy of which amendment is recorded in the above office at Docket 2470, Pages 416-444; and

WHEREAS, from time to time, prior to the date of this THIRD AMENDMENT, spouses of some of the above named Owners have been named in and may have joined in the execution of various and sundry documents relating to the subject matter of the CWT MINING LEASE AND OPTION, as amended, from which such documents it might appear that one or more of such spouses may have had or claimed some right, title or interest in and to the property; and

WHEREAS, none of such spouses owns any interest in the property constituting the subject matter of the CWT MINING LEASE AND OPTION nor has any of such spouse received any interest therein from his or her respective spouse, by deed, gift, contribution or otherwise except as to any income that may have been from time to time contributed to the community; and

WHEREAS, due to the manner in which the names of the locators have been affixed to certain of the location notices of the claims constituting portions of the subject matter, the record title to many of the claims described therein did not accurately reflect the true ownership of the parties on March 12, 1964, the date on which the CWT MINING LEASE AND OPTION was executed. Consequently, the said LEASE AND OPTION contains an inadequate and misleading description of the ownership interests of the various Owners; and

WHEREAS, the parties hereto have joined in that certain "Agreement Concerning Unpatented Mining Claims and Instructions to Trustee" for

the purpose of causing the record title to be made to accurately reflect the ownerships existing in the claims constituting the subject matter of the said LEASE AND OPTION; and

WHEREAS, the parties hereto desire to amend further the CWT MINING LEASE AND OPTION for purposes of clarifying and correcting the said LEASE AND OPTION to show the true ownership status of the subject property and to eliminate as parties to the said LEASE AND OPTION those individuals who have no interest in and to the subject matter and to add certain provisions to the said LEASE AND OPTION; and

WHEREAS, the partners hereto desire to restate as a single agreement all the presently effective provisions of the CWT MINING LEASE AND OPTION, as amended;

NOW, THEREFORE, the parties hereto amend the CWT MINING LEASE AND OPTION to provide as follows:

1. Mineral Property. The term "Mineral Property" shall mean and include all of those certain unpatented mining claims situated in Pima Mining District, Pima County, Arizona, more particularly described in Exhibit A attached hereto and incorporated by reference herein, together with:

(i) All and singular the mines, minerals, lodes and veins within the lines of said claims and the dips, spurs and angles, and all rights, privileges and appurtenances thereto in anywise belonging, including extra lateral rights, easements, rights of way, water and water rights pertaining to or connected with any of said mining claims; and which rights the Owners now have, or at any time during the term of this lease, may acquire; and

(ii) The exclusive use of all camp sites or other property usable for any other purpose in connection with such

claims, and also the exclusive use of any buildings, machinery and equipment located on such claims, camp sites or other property; and which rights the Owners now have, or at any time during the term of this lease, may acquire.

2. Locations and Title. (a) Owners represent that they have used their best efforts to locate properly and to keep valid the mining claims set forth on Exhibit A. Owners make no representation in the nature of a warranty of title to or of validity of said claims. Owners represent that they have not heretofore transferred any of the Mineral Property or any interest therein to the detriment of Lessee and warrant that there were no mortgages or liens as of March 12, 1964 upon the Mineral Property.

(b) It is understood that the Lessee shall acquire from Owners no greater rights than Owners' present or after-acquired interest in and to the Mineral Property, and that the terms of this Lease will not require the Owners to secure a greater interest in and to the Mineral Property.

(c) On or after March 12, 1964, if Lessee obtains any information disclosing a defect in Owners' interest in the Mineral Property Lessee shall advise Owners of said information. Lessee shall have the right, but shall in no way be obligated, to take such action as may be necessary to quiet or otherwise establish, protect or defend the right, title or interest of the Owners in the Mineral Property. Lessee shall also have the right, but shall in no way be obligated, to make locations, amended locations or relocations as it determines to be reasonably appropriate to the establishment or protection of any of the claims set forth on Exhibit A. This right extends to any open fractions or fractional claims within the perimeter of the claims set forth on Exhibit A. Lessee

shall not be responsible to Owners for the validity of such locations, amended locations or relocations. Such locations, amended locations or relocations within the red line shown on Exhibit E shall be for the benefit and protection of the Owners but subject to all of the rights of Lessee under this Lease. One-half the cost (including reasonable attorney's fees of counsel selected by Lessee) of all proceedings which Lessee determines to be reasonably necessary to quiet or otherwise establish, protect and defend the right, title or interest of the Owners shall be credited against any sums due under this Lease from Lessee to Owners. If Lessee does not elect to defend the title of Owners on certain claims set out above, Owners may do so and upon their option drop such claims from this agreement, or restore them to this agreement.

(d) The location of any open fractions or fractional claim within the perimeter of the Mining Property shall be made in the name of the person (or his successor) specified in paragraph 22 as the agent, who shall be the agent for those of the Owners entitled to such fractional claim in accordance with the provisions of that certain Pooling Agreement, including all amendments heretofore made, which Agreement, together with all such amendments, have been or promptly hereinafter shall be recorded in the Office of the Recorder of Pima County, Arizona. Upon any transfer by the said agent to one or more of the Owners of interests in said fractional claims, Owners shall cause said agent to furnish Lessee with conformed copies of all such transfer documents. Any relocations or amended locations of any of the claims described in Exhibit A shall be made in the name of the Owners of such claims, indicating their interests as set forth in Exhibit B. For purposes of convenience, notices of relocation or amended location notices of the claims constituting the Mineral Property may be submitted by Lessee to the agent (or his successor) specified in paragraph 22, who may sign such notices as agent for the Owners of such claims.

3. Policy of Title Insurance. Lessee may within six (6) months of March 12, 1964 obtain a preliminary title report, take the necessary steps to cure any defects therein, including the filing of applications for State Mining Leases, and secure a leasehold policy of title insurance. Lessee may charge one-half of the cost of the preliminary title report, title insurance, and attorneys' fees to accomplish the above as a credit against any sums due under this Lease from Lessee to Owners.

4. Term of Lease. Unless sooner terminated as hereinafter provided, the term of this Lease shall be for a term of fifty (50) years from March 12, 1964 and so long thereafter as ores, minerals, materials, concentrates or precipitates are mined or marketed in commercial quantities.

5. Possession and Right to Work. (a) From and after March 12, 1964 and thereafter during the term of this Lease, Lessee shall, to the extent permitted by law, have the sole and exclusive possession of the Mineral Property, and shall have the sole and exclusive right to explore, develop, mine and work the Mineral Property for the purposes of prospecting for, mining and producing ores, minerals, materials, concentrates, or precipitates of all kinds. Hereinafter in this Lease, the term "minerals" shall be used to refer to ores, minerals, materials, concentrates or precipitates of all kinds.

(b) All work done on the Mineral Property shall be done in a prudent and miner-like manner; however, all such work shall be under the exclusive control of, and in accordance with the exercise of the discretion and judgment of the management of Lessee as to the time, place, method and manner of operation. To the extent permitted by law, Lessee shall have the right to use open-pit or any other legitimate mining methods and may mine the minerals and use the surface of the Mineral Property, subject to the provisions of paragraph 2(b) of this Lease, for milling, processing, storing and removing of minerals and for the storage of waste materials. Upon the removal of any minerals, title thereto shall vest in Lessee. Any minerals so removed shall remain subject to the terms of this Lease.

6. Commingling. Lessee shall have the right to process or treat any minerals produced from the Mineral Property at any mill or processing plant owned or operated by Lessee and located on the Mineral Property or elsewhere. Lessee shall also have the right to commingle or mix any minerals produced from the Mineral Property with minerals produced from any other property. Minerals shall not be so commingled until after proper weighing and sampling according to recognized engineering practices, so that the correct "Net Smelter Returns" or "Net Sales" price may be calculated for the minerals produced from the Mineral Property.

7. Royalties. (a) In the event Lessee mines and markets minerals from the Mineral Property, Lessee shall pay over to Owners a royalty, which shall be in the amount of five per cent (5%) of the Net Smelter Returns, or Net Sales (where shipped to points other than smelters or other reduction works) on all minerals mined and shipped from the Mineral Property. By "Net Smelter Returns" is meant total returns from the smelter or other reduction works, LESS all charges by the smelter or other reduction works, including, but not limited to, smelting or other reduction charges, refining charges, selling charges and charges for railroad or other transportation from the point of loading in railroad cars, to the smelter or other reduction works (but excluding any charges for hauling to or loading into railroad cars). If minerals are processed in a smelter or other reduction works owned or operated by Lessee, then in determining Net Smelter Returns, Lessee shall make customary deductions for smelting or other reduction charges, refining charges and selling charges. By "Net Sales" is meant the net price received by Lessee for a sale, LESS all selling charges and railroad transportation charges from the point of rail loading to the point of sale (but excluding any charges for hauling to the point of loading). Payment of such royalties shall be made monthly on or before the 20th day of each calendar month, based on receipts during the preceding calendar month, and each such payment shall be accompanied by a complete copy of

settlement schedules or other liquidation sales accounting from the smelter or reduction works. The term, reduction works, as used herein shall mean any works used in lieu of a smelter in which concentrated, upgraded or beneficiated minerals are refined. The term, railroad transportation, as used herein, includes any direct (without transshipment) means of transport (truck or otherwise) from the mill to the smelter or other reduction works.

(b) "Net Smelter Returns" or "Net Sales" shall be increased by, except where prohibited by law or governmental regulations, all additional payments, premiums or bonuses of every kind or character from whomsoever received which Lessee may receive as a result of operating or holding the Mineral Property.

(c) Notwithstanding the earned royalty provisions above set forth, Lessee shall pay to Owners minimum royalty payments as follows:

(i) The rate of One Thousand Five Hundred Dollars ($1,500.00) per month for the first twelve (12) months of the term of this Lease, the first One Thousand Five Hundred Dollars ($1,500.00) to be payable on the signing of this Lease and each of the remaining payments to be payable as hereinafter set forth.

(ii) The rate of Three Thousand Dollars ($3,000.00) per month commencing on the 13th month of the term of this Lease and continuing thereafter for each and every month during the term of this Lease, such payments to be payable as hereinafter set forth.

(d) With respect to every calendar month during the term of this Lease, the foregoing minimum royalty payments shall be payable on or before the 20th day of such calendar month; provided, however, that Lessee shall be required to pay such minimum royalty payment for any calendar month only to the extent that earned royalties accruing to Owners under the five per cent (5%) formula shall be less than the minimum royalty payment attributable to such calendar month. Lessee shall have credit for all amounts paid to Owners as minimum royalty hereunder, and all such amounts shall be recovered by Lessee as hereinafter set forth. Whenever and so long as any such credit shall remain unrecovered by Lessee, Lessee shall have the right during any calendar month or months to retain thirty per cent (30%) of all earned royalties accruing to Owners hereunder in excess of the minimum royalty payments applicable to said month or months and to apply said retained sums to the liquidation of such credit.

(e) In respect to recovery of credits under paragraphs 2, 3, 17 and 20 hereof, Lessee may deduct from the five per cent (5%) royalty prior to any payment to Owners any such out of pocket expenses over the minimum royalty.

(f) If Lessee shall apply to the State of Arizona and obtain a State lease of any of the said property located within the perimeter of the claims set forth on Exhibit E, Lessee shall be obligated to pay Owners for minerals produced from said State leases in lieu of the five per cent (5%) royalty set forth above, a royalty of one-half of one per cent (1/2 of 1%) which will be calculated precisely in the same manner as the five per cent (5%) royalty set forth above. This royalty of one half of one per cent (1/2 of 1%) will be in addition to the royalty which Lessee would be required to pay the State of Arizona under said Lease.

8. Records. Lessee shall keep an accurate record of the output from the Mineral Property and furnish Owners with monthly reports thereof at the time the royalty payments are to be made, or if there shall be no output, Owners shall be so advised by the 15th day of each succeeding month. Copies of all settlement schedules, smelter charges, reduction charges, refining charges, selling charges, transportation charges, net smelter returns and tonnages, mined, milled or shipped, will also be made available to Owners upon request.

9. Data. Upon termination of this Lease Agreement Owner shall within a reasonable time thereafter receive from Lessee copies of all drill logs, portions of drill cores not used for testing, maps, all other technical data and information and evaluation data and information which Lessee has prepared, had prepared for it, been given or obtained from its operations on the said Mineral Property.

10. Inspection by Owners. Owners or their agent authorized in writing shall have the right, at all reasonable times, accompanied by a representative of Lessee, to enter, at the risk of the said Owners and agents, upon and into the Mineral Property and workings thereon, for the purposes of examination and inspection of the Mineral Property. Owners, or their agent authorized in writing, shall have access, at all reasonable times, to the records of production and such other records as will show compliance on the part of Lessee with the provisions of this Lease.

11. Termination by Lessee. At any time during the term of this Lease, Lessee may terminate this Lease by giving written notice to Owners not less than thirty (30) days prior to the date of termination specified in said written notice. In the event that such notice of termination shall be given, this Lease shall, as to both parties, terminate on the effective date of termination specified in said written notice. However, a termination while in default of this Lease or while in arrears to Owners shall not extinguish Owners' rights under this Lease in respect

to such default or arrearage, notwithstanding such termination. On or before the effective date of termination, Lessee shall deliver quitclaim deeds to the respective Owners of the claims constituting the Mineral Property, which deeds shall quitclaim to each of the Owners (or to their successors), the undivided interest in and to the claims as shown on Exhibit B and to any after acquired claims within the perimeter of the Mineral Property to which the respective Owners are entitled. Upon such termination, all interests whatsoever that an individual Owner may have in and to those claims included within the Mineral Property to which such individual Owner has no title interest shall terminate (except as to such rights, if any, that have accrued prior to such termination).

12. Taxes. During the continuance of this Lease, Lessee shall pay, prior to delinquency, all taxes, if any, that may be levied or imposed upon the Mineral Property or upon machinery, equipment, or improvements subsequently placed upon the Mineral Property by Lessee, provided that, with reference to the Mineral Property, Lessee shall be obligated to pay only a pro rata portion of such taxes for the tax years in which this Lease commences and terminates, respectively, and further provided, that Lessee may protest or otherwise resist disputed taxes in a manner not jeopardizing any interests of Owners.

13. Liens. Lessee agrees to furnish and pay for all labor, power, tools, materials and all other materials and supplies that may be used by it in the prosecution of work on the Mineral Property. Lessee agrees that it will not permit nor suffer any liens to attach to or against the Mineral Property or any part thereof for work, labor, materials and supplies that may be furnished to or by Lessee during the continuance of the lease hereunder provided that Lessee may resist disputed liens upon furnishing an appropriate bond and in any event not jeopardizing the interests of Owners. Lessee shall hold Owners harmless from any and all damages, claims, costs and expenses arising from or growing out of any or all injuries to persons or property in connection with Lessee's operations

on the said claims during the life of this instrument. The Owners may post and Lessee shall maintain if posted by Owners any "No Lien" notices as set out in Arizona Revised Statutes, Section 33-990.

14. Assessment Work. Lessee shall perform at its own expense such annual assessment work as may be required and not excused by any applicable Moratorium Laws, now or subsequently enacted, on the Mineral Property. By June 30, 1964 Lessee shall perform the assessment work required to be done before September 1, 1964 and record appropriate affidavit. So long as Lessee continues this Lease, Lessee shall perform the assessment work thereafter during each succeeding mining assessment year during the life of this Lease. If, however, Lessee terminates this Lease prior to March 1st of any assessment year except 1964, then Lessee shall have no obligation to perform assessment work for that particular assessment year. Lessee shall, when doing assessment work, prepare and record appropriate affidavits of assessment work and shall furnish copies thereof to the agent of Owners. Further, any work done by Lessee in the year of withdrawal shall be accounted for and substantiated by affidavit and may be used by Owners in computing the assessment work required for said year.

15. Buildings, Machinery and Equipment. Lessee at its own expense shall have the right (subject to paragraph 2(b) above) to erect or install upon the Mineral Property such structures, machinery, equipment, and other property as, in the opinion of the management of Lessee, may be necessary, desirable or appropriate in connection with its use and occupancy of the Mineral Property or any adjacent or nearby property. Lessee shall have the right to remove from the Mineral Property at any time during the continuance of this Lease, or within ninety (90) days after the expiration or sooner termination thereof, any and all structures, machinery, equipment and other property that it may have installed,

erected or placed thereon, if any, other than timbering or other underground support thereby leaving all sub-surface workings safe so entry can be made unless closed pursuant to good mining practice.

16. Water Wells. Lessee may (subject to paragraph 2(b) above) at its own expense, drill, equip, and take water from water wells on the Mineral Property and agrees that all wells will be left intact at the termination of this Lease by expiration of its term or otherwise. Lessee shall have the right to remove all mechanical pumping equipment installed by it at any well.

17. Patent Proceedings. During the term of this Lease, Lessee may initiate and prosecute in the name of the applicable Owners, indicating their interests as set forth in Exhibit B, proceedings to patent any of the mining claims comprising the Mineral Property, and such Owners shall, at Lessee's request, execute any and all documents required in connection with such proceedings. Lessee may charge one-half (1/2) of the cost of initiating and prosecuting such proceedings as a credit against any sums due under this Lease from Lessee to Owners. Owners' share of such charges shall apply against all Owners without regard to which of the claims may be patented. If, during the term of this Lease, a patent is issued to any of the respective Owners with respect to any of the mining claims comprising the Mineral Property, such Owners' title thereto shall remain subject to all the rights of Lessee under this Lease.

18. Rights of Shut-Down. If at any time or times Lessee, after commencing production, wants to shut down for any reason it shall have the right to do so.

19. Default. Should Lessee fail in any respect to comply fully with the terms and provisions of this instrument, the Owners may notify Lessee in writing of the matters in regard to which default is asserted, and if Lessee does not then (A) cure such default within sixty (60) days after the giving of such notice, or (B) commence within thirty (30) days to

rectify such default and continue thereafter with due diligence to rectify such default and cure such default within ninety (90) days from the date of the notice, the Owners may terminate the Lease at any time thereafter during the continuance of such default by giving written notice to Lessee of such election to terminate.

20. Force Majeure. (a) If Lessee is delayed or interrupted in or prevented from performing its obligations, as herein provided, by acts of God, wars, fires, floods, strikes or labor troubles, insurrection or mob violence, inability to obtain labor or supplies, injunction, regulations, orders or requirements of Government or other disabling cause beyond its reasonable control, or if prevailing levels of costs in relation to prevailing levels of prices make it economically impractical to operate the Mineral Property, then and in all such cases Lessee shall be excused, without liability, from performance of its obligations hereunder during the period of each such delay, prevention, disability or condition, but all of the provisions hereof shall again come into full force and effect upon the termination of the period of delay, prevention, disability or condition, and the term of the Lease hereunder shall be extended for a period equal to the total number of days during which performance shall have been excused.

(b) If Lessee claims the rights under this paragraph it shall nevertheless make the minimum royalty payments but may recover such payments by credit as set forth in paragraph 7(e) hereof.

21. Duties to Develop. Under no circumstances shall Lessee be obligated to commence or perform any development or mining work upon the Mineral Property for a period of ten (10) years from and after March 12, 1964, except as set out in paragraph 14 hereof.

22. Payments to Owners. Owners hereby designate C. Darrel Wilson as their agent for all purposes of this Lease. All royalty and other payments required to be made by Lessee to Owners shall be made to the credit of the respective Owners in the name and in the percentages set forth in Exhibit C, attached hereto and incorporated by reference herein, and may be paid by currency or by draft or Lessee's check, at the option of Lessee, and said payments may be deposited either with Owners' single agent above named (or his successor) or to a single designated depository, for the credit of Owners, which agent or depository and their successors shall continue as depository for said royalties and other payments regardless of the changes in the ownership of the Mineral Property. Upon depositing any payments with the Owners' agent or a single designated depository, Lessee shall be relieved of any responsibility for the distribution of such payment to the respective Owners. If the agent named above dies, refuses or becomes unable to act, or if the Owners wish to substitute a new agent, the Owners of a simple majority of the interests set forth in Exhibit C shall have the right to designate a successor agent. Upon receipt by Lessee of written notice of such designation, executed by the Owners of a majority of such interests, Lessee shall thereafter be entitled to treat the successor as agent for Owners until replaced in a like manner.

23. Notices. All notices shall be in writing. Any notice or communication required or permitted hereunder shall be effective when personally delivered or when deposited, postage prepaid, registered, in the United States mail addressed as set forth below. Notices or communications to Lessee shall be addressed:

Continental Exploration, Inc.
4534 West North Avenue
Chicago, Illinois 60639
Attn: Legal Department

Notices or communications to Owners may be addressed:

c/o C. Darrel Wilson
6824 East Tivani Drive
Tucson, Arizona

An information copy of notices to Owners shall also be sent to each of the following:

Russell A. Todd
3120 North Romero Road
Tucson, Arizona

Richard E. Chilson
8350 Tanque Verde Road
Tucson, Arizona

Robert C. Fordham
3006 East Lester Street
Tucson, Arizona

C. Darrel Wilson
6824 East Tivani Drive
Tucson, Arizona

Either Lessee or Owners by notice to the other party may change its mailing address for future notices and communications hereunder.

24. Binding on Successors and Assigns. (a) This Lease shall inure to the benefit of and be binding upon the parties hereto, their heirs, executors, administrators, successors and assigns. Both Lessee and Owners may during the life of this Lease when not in default convey, transfer, assign, encumber, mortgage, or hypothecate their respective rights and duties in this Lease. Notice of any change or encumbrance of interest shall be given to the other party within thirty (30) days thereafter.

(b) Upon request by notice (as provided in paragraph 23) to agent for Owners and to Russell A. Todd, to Richard E. Chilson, to C. Darrel Wilson, and to Robert C. Fordham, the Owners will determine and certify to Lessee (or to such other person as Lessee may request) that Lessee is not in default under the CWT MINING LEASE AND OPTION, if such be the case, or determine and specify the nature of any default, if one

exists. The Owners will furnish such certification by mailing (as provided in paragraph 23) within 30 days after receipt by agent for Owners of such request. The parties recognize that such certification is for the purpose of enabling Lessee to obtain financing, and any financing agency or other third person may rely on any such certification. If Lessee terminates this Lease pursuant to the provisions of paragraph 11 (Termination by Lessee) such certification shall not extinguish or otherwise affect any right of Owners under this Lease in respect to any default or arrearage existing prior to such termination.

(c) The Owners authorize their agent and C. Darrel Wilson, Russell A. Todd, Richard E. Chilson, and Robert C. Fordham or any one of them, with power of substitution, to determine and certify on behalf of all Owners that Lessee is not in default under the CWT MINING LEASE AND OPTION, if such be the case, and to determine and specify the nature of any default, if one exists. It being the primary duty of the agent to determine and certify as to absence or existence and nature of default, and in order to prevent duplication, a timely certification by agent for Owners shall be the only one considered binding on Owners or Lessee; however, if the agent for Owners fails to submit a timely certification, then a certification by C. Darrel Wilson shall be the only one considered binding on Owners and Lessee; if C. Darrel Wilson also fails to submit a timely certification, then a certification by Russell A. Todd shall be the only one considered binding on the Owners and Lessee; and if Russell A. Todd also fails to submit a timely certification, then a certification by Richard E. Chilson shall be the only one considered binding on the Owners and Lessee; and if Richard E. Chilson also fails to submit a timely certification, then a certification by Robert C. Fordham shall be the only one considered binding on the Owners and Lessee.

25. Option. (a) In consideration of the mutual covenants hereinafter set forth, the Owners hereby grant to Lessee the exclusive option to purchase the Owners' interest in the Mineral Property at any time when not in default during the life of this Lease for a total purchase price of Two Million Five Hundred Thousand Dollars ($2,500,000.00) (exclusive of any payments under paragraph 7) payable as follows:

(i) Twenty five per cent (25%) of said sum upon the exercise of said option;

(ii) The remaining balance of One Million Eight Hundred Seventy Five Thousand Dollars ($1,875,000.00) shall be paid in five (5) equal annual installments of Three Hundred Seventy Five Thousand Dollars ($375,000.00). Each such payment shall fall due on the next five (5) anniversaries of the date of the exercise of option until the full purchase price is paid.

(b) The option herein granted shall be exercised by Lessee by giving written notice of such exercise to the agent of the Owners (or to their designated nominee, trustee, or escrow agent) and by the payment to an escrow company of the first installment of the purchase price. At the time of giving of such notice the Owners shall within a reasonable time thereof execute a deed in the form as given and set out in Exhibit D attached hereto and incorporated by reference herein, and place said deed properly executed and in recordable form into an escrow with the usual instructions required by said escrow company who shall deliver said deed to the Lessee upon the full and complete payment by Lessee to the Owners. The escrow company shall be agreed upon by all the parties at the time of the exercise of said option. Lessee shall accompany said written notice of exercise of said option by a Quit-Claim Deed. In the event of default and upon default by Lessee the Lessee shall, thereafter, execute a disclaimer

of the Mineral Property. The deed of Lessee and the deed of the Owners together with the escrow instructions shall be placed into said escrow. Until the final payment is made the Mining Lease and Option will be in full effect except as to payments under paragraph 7, which payments, if not then accrued, shall terminate upon exercising said Option.

(c) When not in default under the Mining Lease and Option, this option may be terminated by Lessees anytime after the date of its execution by giving written notice of such termination to the designated escrow company acconpanied by a disclaimer of any interest and the date of such notice of termination. In the event of default after exercise of this option all payments made by Lessee shall be kept by Owners as liquidated damages.

(d) If Lessee exercises the foregoing option, upon the full and complete payment by Lessee to the Owners, Lessee will in addition pay to Russell A. Todd and Ella C. Todd the sum of Three Hundred Seventy Five Dollars ($375.00).

26. Survey. Lessee shall make a survey of the Mineral Property and furnish a copy to the Owners not later than March 12, 1966, provided this Agreement has not been terminated prior to such date.

27. Interpretation. All matters pertaining to the validity, interpretation and performance and enforcement of this Agreement shall be controlled by the laws of the State of Arizona.

28. Abandonment of Certain Claims. It is hereby agreed by and between the parties hereto that the following claims may be abandoned and the record Owner may execute and record a disclaimer to such claims, which claims were included in the Exhibit A attached to the original CWT MINING LEASE AND OPTION and which claims have been deleted from Exhibit A attached to this THIRD AMENDMENT:

Name of Claim	Located	Recorded	Docket	Page
Ella No. 101 (Todd)	9-29-62	12-10-62	2027	255
Ella No. 13	3-2-57	4-4-57	1113	81
Ella No. 15	3-2-57	4-4-57	1113	83

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed to be effective on and after the day and year hereinabove first written.

C. Darrel Wilson

Alice Ann Kilroy

Russell A. Todd

Ella C. Todd

Richard E. Chilson

Marian C. Chilson

Donna Gail Chilson, a minor

Donna Gail Chilson, a minor, by her Guardian, Marian C. Chilson

Laurita Yarter

Steven C. Chilson

Daniel G. Chilson, Jr.

Lucille Cook

Robert C. Fordham

Rebecca Fordham

Robert D. Gibson

Jacqueline D. Gibson

Lawrence S. Reid

Naomi Reid

George E. Handley

Dorothy H. Handley

Virginia J. Mock

Joyce K. Bubbico

Charles R. Todd

CONTINENTAL EXPLORATION, INC.

By

Peter A. Bauer, Vice President

ATTEST:

Melvin Pollack, Assistant Secretary

CONFIRMATION BY ACCOMODATING SPOUSES

WHEREAS, Alice Ann Kilroy, Richard E. Chilson, Laurita Yarter, Steven C. Chilson, Daniel G. Chilson, Jr., Virginia J. Mock, Joyce K. Bubbico, and Charles R. Todd (referred to as "Owners"), and Continental Exploration, Inc. (referred to as "Lessee"), with others, entered into a THIRD AMENDMENT TO CWT MINING LEASE AND OPTION AND RESTATED CWT MINING LEASE AND OPTION (to which this document is attached and made a part thereof), wherein it was recited that the above named Owners, and each of them, was dealing with his or her sole and separate property; and

WHEREAS, the undersigned are the spouses of the above named Owners; and

WHEREAS, each of the undersigned joined in the execution of the CWT MINING LEASE AND OPTION and in the execution of the FIRST and SECOND AMENDMENTS thereto solely as a convenience and an accomodation to his or her respective spouse;

NOW, THEREFORE, the signature of each of the undersigned shall serve as a confirmation by the individual so signing that the interest of such signing individual's spouse in and to the subject matter of the CWT MINING LEASE AND OPTION, as amended, is in fact the sole and separate property of such spouse.

IN WITNESS WHEREOF, the undersigned have executed this instrument to be effective as of the date of the THIRD AMENDMENT TO CWT MINING LEASE AND OPTION AND RESTATED CWT MINING LEASE AND OPTION.

Oliver B. Kilroy, husband of Alice Ann Kilroy

Alice Chilson, wife of Richard E. Chilson

Jean Doris Chilson, wife of Steven C. Chilson

Rosemary Chilson, wife of
Daniel G. Chilson, Jr.

Thomas E. Mock, husband of
Virginia J. Mock

Michael A. Bubbico, husband of
Joyce K. Bubbico

Pauline Todd, wife of Charles R.
Todd

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)

On this the 30th day of July, 1966, before me, the undersigned officer, personally appeared ALICE ANN KILROY and OLIVER B. KILROY, husband and wife, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the purpose therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Leo M. Smith
Notary Public

My Commission Expires:

AUGUST 22, 1966

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)

On this the 2ND day of SEPTEMBER, 1966, before me, the undersigned officer, personally appeared RUSSELL A. TODD and ELLA C. TODD, husband and wife, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the purpose therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Leo M. Smith
Notary Public

My Commission Expires:

AUGUST 22, 1970

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)

On this the 6TH day of SEPTEMBER, 1966, before me, the undersigned officer, personally appeared RICHARD E. CHILSON and ALICE CHILSON, husband and wife, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they

executed the same for the purpose therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Leo M. Smith
Notary Public

My Commission Expires:

August 22, 1970

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)

On this the 29th day of July, 1966, before me, the undersigned officer, personally appeared MARIAN C. CHILSON, a widow, known to me to be the person whose name is subscribed to the within instrument and acknowledged that she executed the same for the purpose therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Leo M. Smith
Notary Public

My Commission Expires:

August 22, 1966

STATE OF Arizona)
) ss.
COUNTY OF Pima)

On this the 29th day of July, 1966, before me, the undersigned officer, personally appeared DONNA GAIL CHILSON, a minor, individually and by her guardian, MARIAN C. CHILSON, which persons are known to me to be the persons whose names they subscribed to the within instrument and in the capacity therein stated and acknowledged that they executed the same for the purpose therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Leo M. Smith
Notary Public

My Commission Expires:

August 22, 1966

STATE OF Arizona)
) ss.
COUNTY OF Pima)

On this the 4th day of August, 1966, before me, the undersigned officer, personally appeared LAURITA YARTER, an unmarried woman, ~~and MONTE H. YARTER, husband and wife~~, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that ~~they~~ she executed the same for the purpose therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Victor H. Verity
Notary Public

My Commission Expires:
July 8, 1967

STATE OF CALIFORNIA)
) ss.
COUNTY OF SACRAMENTO)

On this the 26th day of AUGUST, 1966, before me, the undersigned officer, personally appeared STEVEN C. CHILSON and JEAN DORIS CHILSON, husband and wife, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the purpose therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Maralyn Parker MARALYN PARKER
Notary Public

My Commission Expires:
JAN 17, 1967

MARALYN PARKER
Notary Public
Sacramento County
State of California

STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

On this the 15th day of August, 1966, before me, the undersigned officer, personally appeared DANIEL G. CHILSON, JR., and ROSEMARY CHILSON, husband and wife, known to me to be the persons whose names are subscribed to the within instrument and

acknowledged that they executed the same for the purpose therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Arnella E. Morro
Notary Public

My Commission Expires:
ARNELLA E. MORRO
My Commission Expires March 4, 1967

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)

On this the 3RD day of SEPTEMBER, 1966, before me, the undersigned officer, personally appeared ROBERT C. FORDHAM and REBECCA FORDHAM, husband and wife, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the purpose therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Leo N. Smith
Notary Public

My Commission Expires:
AUGUST 22, 1970

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)

On this the 27th day of July, 1966, before me, the undersigned officer, personally appeared LUCILLE COOK, a widow, known to me to be the person whose name is subscribed to the within instrument and acknowledged that she executed the same for the purpose therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Leo N. Smith
Notary Public

My Commission Expires:
August 22, 1966

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)

On this the 27th day of July, 1966, before me, the undersigned officer, personally appeared ROBERT D. GIBSON and JACQUELINE D. GIBSON, husband and wife, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the purpose therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Leo N. Smith
Notary Public

My Commission Expires:
August 22, 1966

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)

On this the 27th day of July, 1966, before me, the undersigned officer, personally appeared LAWRENCE S. REID and NAOMI REID, husband and wife, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the purpose there contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Leo N. Smith
Notary Public

My Commission Expires:
August 22, 1966

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)

On this 2nd day of September, 1966, before me, the undersigned officer, personally appeared C. DARREL WILSON, known to me to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same for the purpose therein

contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Leo M. Smith
Notary Public

My Commission Expires:
AUGUST 22, 1970

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)

On this the 28th day of JULY, 1966, before me, the undersigned officer, personally appeared GEORGE E. HANDLEY and DOROTHY H. HANDLEY, husband and wife, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the purpose therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Leo M. Smith
Notary Public

My Commission Expires:
AUGUST 22, 1966

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)

On this the 28th day of JULY, 1966, before me, the undersigned officer, personally appeared THOMAS E. MOCK and VIRGINIA J. MOCK, husband and wife, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the purpose therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Leo M. Smith
Notary Public

My Commission Expires:
AUGUST 22, 1966

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)

On this the 28th day of July, 1966, before me, the undersigned officer, personally appeared MICHAEL A. BUBBICO and JOYCE K. BUBBICO, husband and wife, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the purpose therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Leo M. Smith
Notary Public

My Commission Expires:
AUGUST 22, 1966

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)

On this the 28th day of July, 1966, before me, the undersigned officer, personally appeared CHARLES R. TODD and PAULINE TODD, husband and wife, known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the purpose therein contained.

IN WITNESS WHEREOF I hereunto set my hand and official seal.

Leo M. Smith
Notary Public

My Commission Expires:
AUGUST 22, 1966

STATE OF ILLINOIS)
) ss.
COUNTY OF COOK)

This instrument was acknowledged before me this 20th day of September, 1966, by Peter A. Bauer and Melvin Pollack, Vice President and Assistant Secretary, respectively, of CONTINENTAL EXPLORATION, INC., a Colorado corporation.

Ruth Baron
Notary Public

My Commission Expires:
July 9, 1968

EXHIBIT A

The following unpatented lode mining claims situated in Township 17 South, Ranges 12 and 13 East, G. & S. R. M., in the Pima Mining District, Pima County, Arizona, the location notices of which claims are of record in the office of the Recorder of Pima County, Arizona, as follows:

Name of Claim	Docket	Page
Arizona No. 25	911	176
Arizona No. 26	911	177
Arizona No. 27	911	178
Arizona No. 28	911	179
Arizona No. 29	911	180
Arizona No. 30	911	181
Arizona No. 31	911	182
Arizona No. 32	911	183
Arizona No. 33	911	184
Amended	2698	208
Arizona No. 34	911	185
Amended	2698	209
Arizona No. 35	911	186
Amended	2698	210
Arizona No. 36	911	187
Amended	2698	211
Arizona Fraction 42	2060	185
Colorado No. 1	904	186
Colorado No. 2	904	187
Colorado No. 3	904	188
Colorado No. 4	904	189
Colorado No. 5	904	190
Colorado No. 6	904	191
Colorado No. 7	904	192
Colorado No. 8	904	193
Colorado No. 9	914	109
Colorado No. 10	914	110
Colorado No. 11	914	111
Colorado No. 12	914	112
Colorado No. 13	914	113
Amended	2698	238
Colorado No. 14	914	114
Amended	961	387
2nd Amendment	2698	239
Colorado No. 15	914	115
Colorado No. 16	914	116
Colorado No. 17	914	117
Colorado No. 18	914	118
Colorado No. 19	914	119
Colorado No. 20	914	120
Colorado No. 21	914	121
Colorado No. 22	914	122
Colorado No. 23	914	123

Name of Claim	Docket	Page
Arizona No. 37	911	188
Amended	2698	212
Arizona No. 38	911	189
Amended	2698	213
Arizona No. 39	911	190
Amended	2698	214
Arizona No. 40	911	191
Amended	2698	215
Arizona No. 41	911	192
Amended	2698	216
Arizona No. 42	911	193
Amended	2698	217
Arizona No. 43	911	194
Amended	2698	218
Colorado No. 24	914	124
Colorado No. 25	914	125
Colorado No. 26	914	126
Colorado No. 27	914	127
Colorado No. 28.	914	128
Colorado No. 29	914	129
Colorado No. 30	914	130
Colorado No. 31	914	131
Amended	961	388
Colorado No. 32	914	132
Amended	961	389
Colorado No. 33	914	133
Amended	961	390
Colorado No. 34	914	134
Amended	961	391
Colorado No. 35	914	135
Amended	961	392
Colorado No. 36	914	136
Amended	961	393
Colorado No. 37	914	137
Colorado No. 38	914	138
Colorado No. 39	914	139
Colorado No. 40	914	140
Colorado No. 41	914	141
Colorado No. 42	914	142
Colorado No. 43	914	143

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Colorado No. 44	914	144
Colorado No. 45	914	145
Amended	961	394
Colorado No. 46	914	146
Colorado No. 47	914	147
Colorado No. 48	914	148
Colorado No. 49	914	149
Colorado No. 50	914	150
Colorado No. 51	914	151
Colorado No. 52	914	152
Colorado No. 53	914	153
Colorado No. 54	914	154
Colorado No. 55	914	155
Amended	961	395
Colorado No. 56	914	156
Amended	961	396
Colorado No. 57	914	157
Colorado No. 58	914	158
Copper Bottom #1	2218	430
Copper Bottom #2	2218	431
Copper Bottom #3	2218	432
Copper Bottom #4	2218	433
Copper Bottom #5	2218	434
CWT No. 1	2447	300
Amended	2698	234
CWT No. 2	2447	301
Amended	2698	235
CWT No. 3	2698	202
CWT No. 4	2698	203
CWT No. 5	2698	204
CWT No. 6	2698	205
CWT No. 7	2698	206
CWT No. 8	2698	207
Dot #1	1113	124
Dot #2	1113	125
Dot #3	1113	126
Dot #4	1113	127
Dot #5	1113	128
Dot #6	1113	129
Dot #7	1113	130
Dot #8	1113	131
Dot #9	1113	132
Dot #10	1113	133
Dot #11	1113	134
Dot #12	1113	135
Dot #13	1113	136
Dot #14	1113	137
Dot #15	1113	138
Dot #16	1113	139
Dot #17	1113	140
Dot #18	1113	141
Dot #19	1113	142
Dot #20	1113	143
Ella #1	1113	69
Amended	2698	248
Ella #2	1113	70
Ella #3	1113	71
Amended	2698	249
Ella #4	1113	72
Ella #5	1113	73
Amended	2698	250
Ella #6	1113	74
Ella #7	1113	75
Amended	2698	251
Ella #8	1113	76
Ella #9	1113	77
Ella #10	1113	78
Ella #11	1113	79
Ella #12	1113	80
Ella #14	1113	82
Ella #15 R.	2158	26
Ella #16	1113	84
Ella #17	1113	85
Ella #18	1113	86
Ella #19	1113	87
Ella #20	1113	88
Ella #21	1113	89
Ella #22	1113	90
Ella #23	1113	91
Ella #24	1113	92
Ella #25	1113	93
Ella #26	1113	94
Ella #27	1113	95
Ella #28	1113	96
Ella #29	1113	97
Ella #30	1113	98
Ella #31	1113	99
Ella #32	1113	100
Ella #33	1113	101
Ella #34	1113	102
Ella #35	1113	103
Ella #36	1113	104
Ella #37	1113	105
Ella #38	1113	106
Ella #39	1113	107
Ella #40	1113	108
Ella #41	1113	109
Ella #42	1113	110
Ella #43	1113	111
Ella #44	1113	112
Ella #45	1113	113
Ella #46	1113	114
Ella #47	1113	115
Ella #48	1113	116
Ella #49	1113	117
Ella #50	1113	118
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Ella #53	1113	121
Ella #54	1113	122
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Ella #101 (Gallagher)	2158	28
Ella #103	2158	27
Fox #1	979	307
Amended	1588	242
Fox #2	979	308
Amended	1588	243
Fox #3	979	309
Amended	1588	244
Fox #4	979	310
Amended	1588	245
Fox #5	979	311
Amended	1588	246
Fox #6	979	312
Amended	1588	247
Fox #7	979	313
Amended	1588	248
Fox #8	979	314
Amended	1588	249
Fox #9	979	315
Amended	1588	250
Fox #10	979	316
Amended	1588	251
Fox #11	979	317
Amended	1588	252
Fox #12	1104	82
Amended	1588	253
Fox #13	1104	83
Amended	1588	254
Fox #14	1104	84
Amended	1588	255
Fox #15	1104	85
Amended	1588	256
Fox #16	1104	86
Amended	1588	257
Fox #19	1588	258
Fox #25	1588	259
Fox #26	1588	260
Fox #27	1588	261
Midland No. 1	943	350
Midland No. 2	943	351
Midland No. 3	943	352
Midland No. 4	943	353
Midland No. 5	943	354
Midland No. 6	943	355
Midland No. 7	943	356
Midland No. 8	943	357
Midland No. 9	943	358
Midland No. 10	943	359
Midland No. 11	943	360
Midland No. 12	943	361
Midland No. 13	943	362
Midland No. 14	943	363
Midland No. 15	943	364
Midland No. 16	943	365
Midland No. 17	943	366
Midland No. 18	943	367
Amended	2698	252
Midland No. 19	943	368
Amended	2698	253
Midland No. 20	943	369
Amended	2698	254
Midland No. 21	943	370
Amended	2698	255
Midland No. 22	943	371
Amended	2698	256
Midland No. 23	943	372
Amended	2698	257
Midland No. 24	943	373
Midland No. 25	943	374
Midland No. 26	943	375
Midland No. 27	943	376
Midland No. 28	943	377
Midland No. 29	943	378
Nevada No. 1	914	101
Amended	961	370
2nd Amendment	2368	295
3rd Amendment	2698	240
Nevada No. 2	914	102
Amended	2698	241
Nevada No. 3	914	103
Amended	961	371
2nd Amendment	2698	242
Nevada No. 4	914	104
Amended	961	372
2nd Amendment	2368	296
3rd Amendment	2698	243
Nevada No. 5	914	105
Amended	961	373
2nd Amendment	2368	297
3rd Amendment	2698	244
Nevada No. 6	914	106
Amended	961	374
2nd Amendment	2368	298
3rd Amendment	2698	245
Nevada No. 7	914	107
Amended	961	375
2nd Amendment	2368	299
3rd Amendment	2698	246
Nevada No. 8	914	108
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2nd Amendment	2368	300
3rd Amendment	2374	489
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Amended	2698	219
Utah No. 2	923	145
Amended	961	377
Utah No. 3	923	146
Amended	961	378
2nd Amendment	2698	220
Utah No. 4	923	147
Utah No. 5	923	148
Amended	2698	221
Utah No. 6	923	149
Utah No. 7	923	150
Amended	2698	222
Utah No. 8	923	151
Utah No. 9	923	152
Utah No. 10	923	153
Utah No. 11	923	154
Utah No. 12	923	155
Utah No. 13	923	156
Utah No. 14	923	157
Utah No. 15	923	158
Utah No. 16	923	159
Utah No. 17	923	160
Utah No. 18	923	161
Utah No. 19	923	162
Utah No. 20	923	163
Utah No. 21	923	164
Amended	961	379
Utah No. 22	923	165
Amended	961	380
Utah No. 23	923	166
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Utah No. 31	923	174
Utah No. 32	923	175
Utah No. 33	923	176
Amended	2698	223
Utah No. 34	923	177
Utah No. 35	923	178
Amended	2698	224
Utah No. 36	923	179
Utah No. 37	923	180
Amended	2698	225
Utah No. 38	923	181
Amended	2698	226
Utah No. 39	923	182
Amended	2698	227
Utah No. 40	923	183
Amended	2368	292
2nd Amendment	2698	228
Utah No. 41	923	184
Amended	2368	293
2nd Amendment	2698	229
Utah No. 42	923	185
Amended	2368	294
2nd Amendment	2698	230
Utah No. 43	923	186
Amended	2698	231
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Amended	2698	232
Utah No. 45	961	382
Utah No. 46	961	383
Utah No. 47	961	384
Utah No. 48	961	385
Utah No. 49	961	386
Amended	2698	233

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EXHIBIT B

EXHIBIT B, setting forth the undivided interest claimed by each of the individual OWNERS. The unpatented lode mining claims listed below are the same claims (including any amendments thereof) as are more fully described in Exhibit A, to which reference is made for the legal descriptions:

I.

Arizona Nos. 25-43, CWT Nos. 1, 3, 4; Midland Nos. 1-29; Pima #'s 1-5:

Name of Owner	Undivided Interest (per cent)
Richard E. Chilson	8.00 %
Marian C. Chilson	30.00
Donna Gail Chilson	8.00
Laurita Yarter	8.00
Steven C. Chilson	18.00
Daniel G. Chilson, Jr.	8.00
Robert C. Fordham & Rebecca Fordham	20.00
Total	100.00 %

II.

Arizona Fraction 42:

Name of Owner	Undivided Interest (per cent)
Richard E. Chilson	6.500 %
Marian C. Chilson	24.375
Donna Gail Chilson	6.500
Laurita Yarter	6.500
Steven C. Chilson	14.625
Daniel G. Chilson, Jr.	6.500
Robert C. Fordham & Rebecca Fordham	10.000
C. Darrel Wilson	6.250
Alice Ann Kilroy	6.250
Russell A. Todd & Ella C. Todd	12.500
Total	100.000 %

III.

Colorado Nos. 1-58:

Name of Owner	Undivided Interest (fractional)
Richard E. Chilson	1/30 (4/120)
Marian C. Chilson	1/8 (15/120)
Donna Gail Chilson	1/30 (4/120)
Laurita Yarter	1/30 (4/120)

III. (cont'd)

Name of Owner	Undivided Interest (fractional)
Steven C. Chilson	3/40 (9/120)
Daniel G. Chilson, Jr.	1/30 (4/120)
C. Darrel Wilson	1/6 (20/120)
Alice Ann Kilroy	1/6 (20/120)
Russell A. Todd & Ella C. Todd	1/3 (40/120)
Total	1 (120/120)

IV.

Copper Bottom #'s 1-5; Dot #'s 1-13; Ella #'s 2, 4, 6, 8, 23-48, 56, 57:

Name of Owner	Undivided Interest (per cent)
Russell A. Todd & Ella C. Todd	100.00 %

V.

Dot #'s 14-20; Ella #'s 10-12, 14, 16-22, 49-55, 15R, 103:

Name of Owner	Undivided Interest (fractional)
Virginia J. Mock	1/3
Joyce K. Bubbico	1/3
Charles R. Todd	1/3
Total	1

VI.

Ella #'s 5, 7, 9, 101 (Gallagher):

Name of Owner	Undivided Interest (per cent)
C. Darrel Wilson	100.00 %

VII.

Ella #1; Ella #3:

Name of Owner	Undivided Interest (per cent)
George E. Handley & Dorothy H. Handley	100.00 %

VIII.

Fox #'s 1-16, 19, 25, 26, 27:

Name of Owner	Undivided Interest (per cent)
Lucille Cook	50.00 %
Robert D. Gibson & Jacqueline D. Gibson	5.00
Lawrence S. Reid & Naomi Reid	5.00
Russell A. Todd & Ella C. Todd	40.00
Total	100.00 %

IX.

Nevada Nos. 1-8; Utah Nos. 1-49; CWT Nos. 2, 6, 7, 8:

Name of Owner	Undivided Interest (per cent)
C. Darrel Wilson	12.50 %
Alice Ann Kilroy	12.50
Russell A. Todd & Ella C. Todd	25.00
Richard E. Chilson	5.00
Marian C. Chilson	18.75
Donna Gail Chilson	5.00
Laurita Yarter	5.00
Steven C. Chilson	11.25
Daniel G. Chilson, Jr.	5.00
Total	100.00 %

X.

CWT No. 5:

Name of Owner	Undivided Interest (per cent)
Richard E. Chilson	4.167 %
Marian C. Chilson	15.625
Donna Gail Chilson	4.167
Laurita Yarter	4.167
Steven C. Chilson	9.375
Daniel G. Chilson, Jr.	4.167
C. Darrel Wilson	14.583
Alice Ann Kilroy	14.583
Russell A. Todd & Ella C. Todd	29.166
Total	100.00 %

EXHIBIT C

1.	C. Darrel Wilson	22.45821/263
2.	Alice Ann Kilroy	16.79155/263
3.	Russell A. Todd and Ella C. Todd, husband and wife	86.24970/263
4.	Richard E. Chilson	12.13191/263
5.	Marian C. Chilson, a widow	32.04058/263
6.	Donna Gail Chilson, a minor, by her guardian, Marian C. Chilson	8.54330/263
7.	Laurita Yarter	8.54330/263
8.	Steven C. Chilson	17.29815/263
9.	Daniel G. Chilson, Jr.	8.54330/263
10.	Robert C. Fordham and Rebecca Fordham, husband and wife	9.40000/263
11.	Lucille Cook, a widow	10.00000/263
12.	Robert D. Gibson and Jacqueline D. Gibson, husband and wife	1.00000/263
13.	Lawrence S. Reid and Naomi Reid, husband and wife	1.00000/263
14.	George E. Handley and Dorothy H. Handley, husband and wife	2.00000/263
15.	Virginia J. Mock	9.00000/263
16.	Joyce K. Bubbico	9.00000/263
17.	Charles R. Todd	9.00000/263

Exhibit "D"

(This is the form to be used on exercise of Section 25 and covers Exhibit A list of claims of the Third Amendment To CWT Mining Lease And Option And Restated CWT Mining Lease And Option.)

QUIT-CLAIM DEED

For and in consideration of the sum of Ten Dollars and other valuable considerations, C. DARREL WILSON, husband of Mary Page Wilson, dealing with his sole and separate property and estate; ALICE ANN KILROY, wife of Oliver B. Kilroy, dealing with her sole and separate property and estate; RUSSELL A. TODD and ELLA C. TODD, husband and wife; RICHARD E. CHILSON, husband of Alice Chilson, dealing with his sole and separate property and estate; MARIAN C. CHILSON, a widow; DONNA GAIL CHILSON, a minor, by her guardian, Marian C. Chilson; LAURITA YARTER, wife of Monte H. Yarter, dealing with her sole and separate property and estate; STEVEN C. CHILSON, husband of Jean Doris Chilson, dealing with his sole and separate property and estate; DANIEL G. CHILSON, JR., husband of Rosemary Chilson, dealing with his sole and separate property and estate; ROBERT C. FORDHAM and REBECCA FORDHAM, husband and wife; LUCILLE COOK, a widow; ROBERT D. GIBSON and JACQUELINE D. GIBSON, husband and wife; LAWRENCE S. REID and NAOMI REID, husband and wife; GEORGE E. HANDLEY and DOROTHY H. HANDLEY, husband and wife; VIRGINIA J. MOCK, wife of Thomas E. Mock, dealing with her sole and separate property and estate; JOYCE K. BUBBICO, wife of Michael A. Bubbico, dealing with her sole and separate property and estate, and CHARLES R. TODD, husband of Pauline Todd, delaing with his sole and separate property and estate; Grantors, do hereby release and quit-claim unto CONTINENTAL EXPLORATION, INC., a Colorado corporation, Grantee,

and unto its successors and assigns forever, all of their right, title, interest, claim and demand in and to those certain unpatented lode mining claims situated in the Pima Mining District, Pima County, State of Arizona, the original and amended location notices of which are of record in the office of the Pima County Recorder at the following Dockets and pages:

(Copy list from Exhibit A)

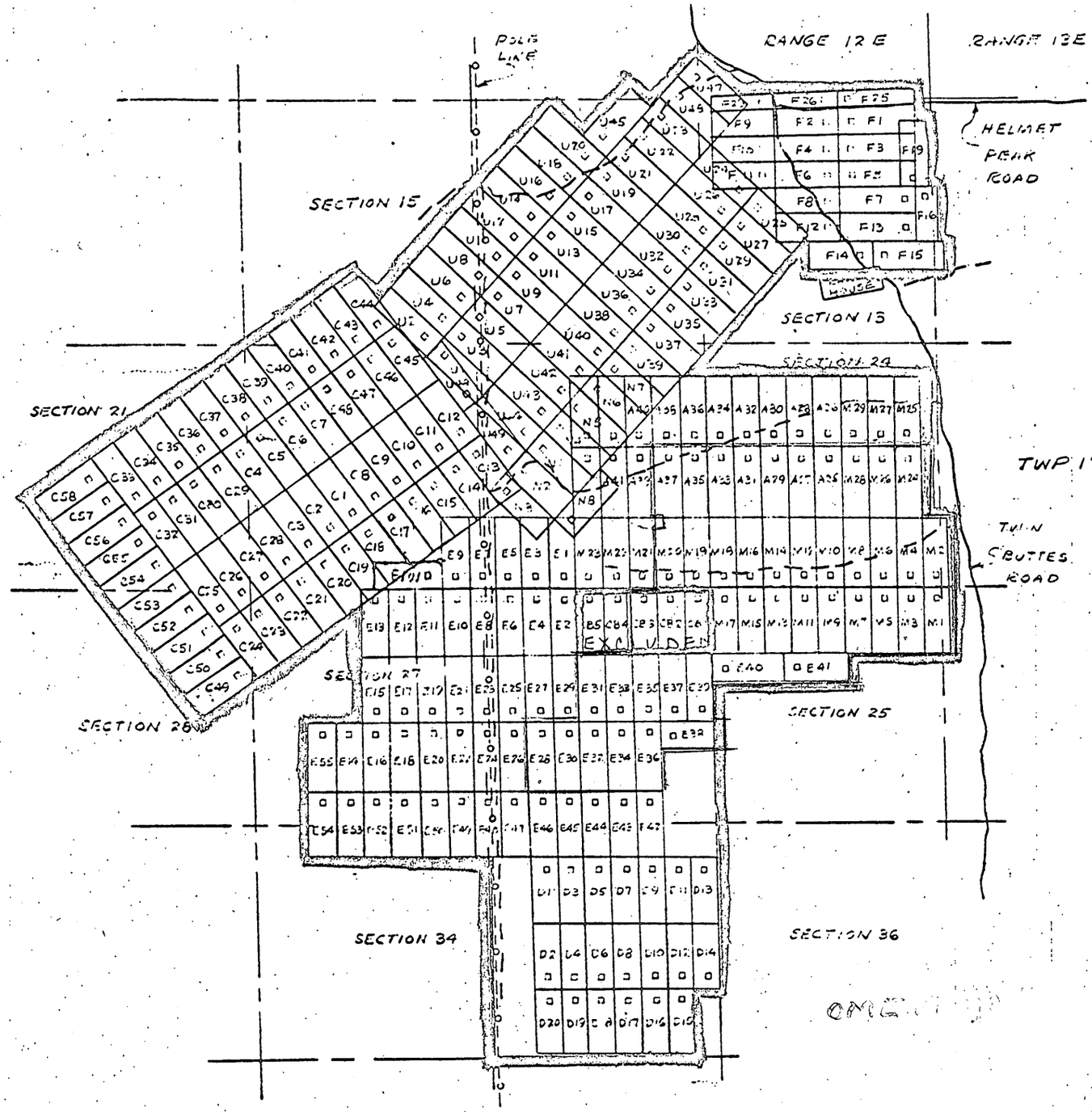
TO HAVE AND TO HOLD the same, together with all the appurtenances thereunto belonging, unto said Grantee, its successors and assigns forever.

IN WITNESS WHEREOF, the said Grantors have hereunto set their hands this _____ day of _____, 19___.

NAMES

JURATS

EXHIBIT B



LEGEND:-

- - - Unimproved Roads

o---o- Power Pole Line

F	Fox Claims (1-16 & 19 & 25-26 & 29 = 20)
U	Utah Claims (1-49 = 49)
C	Colorado Claims (1-58 = 58)
N	Nevada Claims (1-8 = 8)
A	Arizona Claims (25-41 & 43 = 17)
M	Midlands Claims (1-29 = 29)
CB	Copper Bottom Claims (1-5 = 5)
E	Ella Claims (1-55 = 55)
D	Dot Claims (1-20 = 20)

CHILSON, WILSON, TODD
CLAIMS GROUP (261 SHOWN)
TOWNSHIP 17 SOUTH,
RANGE 12 EAST

APPROXIMATE & NOT TO SCALE

EXHIBIT E

6824 E. Tivani Drive
Tucson, Arizona
July 28, 1966

Sidney M. Gunther, Esq.
Gunther & Choka
Attorneys at Law
72 W. Adams Street
Chicago, Illinois 60603

Dear Sid:

Regarding the phone conversation of Tuesday afternoon between yourself and our attorney, Mr. Leo N. Smith, the CWT owners do not feel at this time that the proposed OME Exploration Program and resulting lien outlined in your letter to me of July 21, 1966 is of interest to them.

Very truly yours,

C. Darrel Wilson

CDW/fb

cc: Leo N. Smith, Esq.

August 30, 1966

HEINRICHS GEOEXPLORATION COMPANY

806 WEST GRANT ROAD, TUCSON, ARIZONA, 85703. P.O. BOX 5671. PHONE: (AREA CODE 602) 623-0578

Continental Exploration Inc.
P. O. Box 11216, Emery Park Station
Tucson, Arizona

Re: Proposed Induced Polarization Geophysics in vicinity of Sections 23, 24, 25, 26, T 17 S, R 12 E, Pima County, Arizona

Attn: Mr. John Roscoe

Gentlemen:

This will confirm Mr. Roscoe's visit to our office on August 17, 1966.

It is our understanding you are considering approximately 30,000 line feet of I. P. coverage on six lines about 5,000 ft. long; penetration of upwards of 1,000 ft. or deeper is desired. Based on known geology of the area, probably an east-west and a northeast, southwest line orientation would be preferred; however, alternative northwest, southeast orientation may also be worthwhile in some cases as the best compromise between geology and local artificial effects. Some of these were noted on the sketch map left by Mr. Roscoe.

Our bid price is $3,000.00, including interpretational report in three copies and all expenses. On a unit cost basis we quote $500.00 per line as specified above, or $300.00 per field working day plus $100.00 per Tucson staff working day in compilation, interpretation and reporting. Reproducible copies of base maps on which our results can be plotted should be furnished by you.

We carry the standard liability and public property damage insurance coverage required by all of the major companies for most contractors. In connection with insurance, it is assumed that you would protect us against any and all costs and liability regarding trespass done at your direction. Rarely is this a problem and usually our crews are able to handle it by proper discussion whenever it arises.

Our equipment is among the finest and most powerful available on contract. Incidently, the above quotations include resistivity and self potential data as well as information regarding polarization effects. We are equipt in most other phases of geology, geophysics and geochemistry as well and are used to working as closely or as independently as may be desired, with client personnel. Our availability rarely exceeds three weeks notice and often we can be on a job within a few days after notice to proceed.

If there are any questions whatsoever, please do not hesitate to let us know. Meanwhile, we will look forward to possibly serving you soon.

Faithfully,

HEINRICHS GEOEXPLORATION COMPANY

Walter E. Heinrichs, Jr.
President & General Manager

WEH:jh

cc: Extra Encl.

DIAMOND CORE DRILLING
DIAMOND DRILLING EQUIPMENT
GROUTING
FOUNDATION TESTING
MINING
QUARRYING
SHAFT SINKING
TUNNEL DRIVING
MINE PLANT DESIGN
AND FABRICATION

Boyles Bros.
DRILLING COMPANY
CONTRACTORS-ENGINEERS-GEOLOGISTS

10801 North 21st Avenue
PHOENIX, ARIZONA 85020
Phones: Office 944-1731
Home 948-2009

General Offices and Plant
1624 Pioneer Road P. O. Box 58
SALT LAKE CITY, UTAH 84110
Phone 487-7595

BRANCH OFFICES
PHOENIX
RENO
SPOKANE
DENVER
SACRAMENTO
SANTIAGO, CHILE
LIMA, PERU

August 12, 1966

Mr. C. H. Reynolds
Continental Exploration, Inc.
P.O. Box 190
Grand Junction, Colorado 81501

Dear Mr. Reynolds:

For your proposed drilling in the Pima Mining District, approximately twenty miles south of Tucson, Arizona, we submit the following prices.

1. Non-coring or Plug Drilling

   0 to 500 ft. -$2.60 per ft. plus cost of drilling mud, and chemicals.
   500 to 750 ft. -$3.10 " " " " " " " " "

2.

Core Drilling	BXWL	NXWL
0 to 500 ft.	5.90	6.40
500 to 1000ft.	6.40	7.00
1000 to 1500 ft.	7.00	

3. Cementing, if necessary, $12.50 per hour plus cost of cement or cement substitutes, including drilling mud and chemicals.

4. Water truck rental of $190.00 per month plus .12 cents a mile. Water to be hauled from your source of supply.

5. Casing lost or left in hole at your request to be charged for at list prices F.O.B. jobsite.

6. Core boxes can be furnished at $1.00 per box.

Thanks for asking for our prices.

Sincerely yours,

J. E. Roberts

J. E. Roberts
District Manager

JER/tk

DIAMOND CORE DRILLING
DIAMOND DRILLING EQUIPMENT
GROUTING
FOUNDATION TESTING
MINING
QUARRYING
SHAFT SINKING
TUNNEL DRIVING
MINE PLANT DESIGN
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10801 North 21st Avenue
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Phones: Office 944-1731
Home 948-2009

General Offices and Plant
1624 Pioneer Road P. O. Box 58
SALT LAKE CITY, UTAH 84110
Phone 487-7595

BRANCH OFFICES
PHOENIX
RENO
SPOKANE
DENVER
SACRAMENTO
SANTIAGO, CHILE
LIMA, PERU

August 31, 1966

Mr. C. H. Reynolds
Continental Materials Corporation
P.O. Box 190
Grand Junction, Colorado 81502

Dear Mr. Reynolds:

As per your request to extend prices beyond 750 feet the following price will exist.

For non-core rotary drilling from 750 feet to 1250 feet the charge will be $ 3.90 per foot plus cost of bits, drilling mud and chemicals.

All other clauses dated 8/12/66 to remain the same.

Sincerely yours,

J. E. Roberts

J. E. Roberts
District Manager

JER/tk

DRILLING
BLASTING

QUARRYING
TUNNELING

METLER BROTHERS DRILLING CO.

Core Drilling Contractors

4001 E. Illinois Street ★ ★ ★ Phone 327-4268 Tucson, Arizona 85714

19 August, 1966

Continental Exploration, Inc.
P.O. Box 190
Grand Junction, Colorado 81501

Attention: Mr. C.H. Reynolds

Dear Sirs:

We hereby enclose the following proposal for drilling on your property located in Pima Mining District, 20 miles south of Tucson, Arizona.

1. Rotary drilling with rock bit;
   0 to 250' @ $3.10/ft.
   250 to 500' @ $3.60 ft.
2. Core Drilling (wireline)

	(NX)	(BX)
Ledge to 500'	$ 5.95/ft.	$ 5.65/ft.
500 to 1000'	6.25 "	5.95 "
1000 to 1500'	6.55 "	6.25 "

3. Cementing and drilling cement @ $12.50 per hour plus the cost of cement.
4. Drilling mud delivered to jobsite and mixed @ $2.50 per 50-lb. bag. Mud additives used will be billed at cost.
5. Reaming, if necessary, will be charge at the rate of $2.75 ft.
6. Casing ordered in place or lost due to ground conditions will be charged at contractor's cost.
7. Water Haul -No Charge.
8. Access roads and drill sites are to be prepared by your company in advance.
9. Core boxes are to be furnished by your company, however, we will furnish them at $1.00 per box if requested.

Thank you for giving us the opportunity to quote prices on this project.

Very truly yours,

METLER BROS. DRILLING CO.

Frank C. Metler

Frank C. Metler

FCM/dr

DRILLING
BLASTING

QUARRYING
TUNNELING

METLER BROTHERS DRILLING CO.

Core Drilling Contractors

~~Box 2x Box 6x~~ 4001 E. Illinois Street ☆ ☆ ☆ Phone 327-4268 Tucson, Arizona 85714

31 August, 1966

Continental Materials Corporation
P.O. Box 190
Grand Junction, Colorado 81502

Attention: Mr. C.H. Reynolds

Dear Sirs:

In reply to your letter of August 29, 1966, we wish to amend our recent proposal for drilling on your Pima Mining District Property.

In item No. 1 of this proposal, we quoted prices to 500 feet for non-core rotary drilling. For drilling below 500 feet with non-core rotary we submit the following;

500 to 1000' @ $4.10 per foot.
1000 to 1250' @ $4.60 per foot.

Thank you for your request.

Very truly yours,

METLER BROS. DRILLING CO.

Frank C. Metler

Frank C. Metler

FCM/dr

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C W T P R O P E R T Y R E P O R T

June, 1966

Report

Index Map

Area Map

CWT Property Location Map

Geology & Ore Reserves, September 2, 1964, from Manning W. Cox Associates, with exhibits.

Preliminary Engineering Report and Capital Cost Estimate, November 3, 1964, from Western Knapp Engineering, with exhibits.

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C W T P R O P E R T Y R E P O R T

June, 1966

This report has been prepared for management by the Mining Division of Continental Materials Corporation. A drilling program has developed a commercial body of complex copper and zinc ore on the CWT property in Pima County, Arizona, held by Continental Exploration, Inc., a wholly-owned subsidiary of Continental Materials Corporation. This report discusses the program for extracting, processing and marketing that ore.

Summary.

The CWT property is in the Pima Mining District, about 20 miles southwest of Tucson, Arizona, and consists of unpatented lode mining claims covering about 5,400 acres. Continental Exploration, Inc. holds the property under a 50-year lease with an option to buy. The lease provides for a 5% net smelter return royalty.

Continental has drilled 25 holes in an area 1,000 feet by 1,500 feet. The ore appears to range from 500 feet to 1,000 feet below the surface, and varies from a minimum mining thickness of 10 feet to more than 48 feet. The attached report of Manning W. Cox discusses geology of the ore deposit, and estimates drill proven and drill probable reserves at:

Total Reserves	1,208,000 Tons
Zinc	7.20 %
Copper	1.08 %
Lead	0.30 %
Silver	1.54 oz. per ton
Cadmium	$ 0.30 to $0.45 per ton

Access to the ore will be gained through a vertical shaft 1,000 feet deep, with horizontal rail haulage drifts. Stope development will be accomplished on a grid system using trackless type equipment.

The ore will be extracted by a retreating panel mining system with trackless transportation to drawpoints on the rail net. Hydraulic sand fill will be introduced into the stopes to control the ground and to serve as a working platform in the thicker portions of the ore bodies.

Preliminary ore dressing tests on composite drill core samples indicate that the ore can be concentrated into two sulfide concentrates. The concentrates will be prepared by selective flotation in a 500 ton per day plant which will be erected at the site. One concentrate will contain approximately 85% to 90% of the zinc and cadmium content of the ore with minor amounts of copper and silver; and the other will contain approximately 85% of the copper, from 70% to 80% of the lead and silver, and about 3% to 5% of the zinc. See attached report by Western Knapp Engineering Division of Arthur G. McKee & Company.

The company will market the copper concentrates by sale to a domestic smelter. Zinc concentrates have been contracted to a domestic smelter for the first five years of production. Based upon the estimated distribution of metals into two concentrates, the value per ton of mine run ore at various metal prices would be as follows:

Metal Price Per Pound		Value Per Ton
Zinc	Copper	
12.5¢	32¢	$ 13.13
13.5¢	34¢	14.43
14.5¢	36¢	15.73

The economic yield from the ore body has been estimated at the price level of 13.5¢ per pound for zinc and 34¢ per pound for copper. This is midway between the current price level and the approximate past ten year average for these metals.

The total estimated drill proven and drill probable reserves of 1,208,000 tons will be produced at the rate of 175,000 tons per year. Present reserves will sustain operations at this rate for 7 years. Capital expenditures of about $3,700,000 will be required to bring the mine into production and to construct the mill. If these capital expenditures are completely amortized over 7 years, present reserves of 1,208,000 tons should yield a mining net profit of $2.86 per ton, or an average annual profit of $500,500 as follows:

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Gross Value (NSR)		$ 14.43
Royalty - 5% NSR	$ 0.72	
Production Tax - 1-1/2% NSR	0.22	
Labor - Direct and Indirect	3.50	
Materials	2.67	
Overhead	0.72	
Depreciation	1.81	
Amortization	1.31	
Selling and Administration	0.55	
Provisions for Arizona State Income Tax	0.07	11.57
Net Mining Profit --		
Per ton		$ 2.86
Per year (175,000 tons)		$500,500

SUM

PROPERTY DESCRIPTION

A. Leasehold:

The property consists of 272 unpatented lode mining claims (approximately 5,400 acres) in 10 contiguous groups held under a 50 year minimum term lease by Continental Exploration, Inc. The lease provides a 5% net smelter return royalty on production, a $3,000 per month minimum advance royalty beginning February, 1965, and a $2,500,000 buy-out price (royalties not applying).

B. Location:

1. Status:

The claims lie in all or in parts of Sections 11, 12, 13, 14, 15, 21, 22, 23, 24, 25, 26, 27, 28, 34, and 35 of T 17 S, R 12 E, and Sections 18, 19 and 30 of T 17 S, R 13 E, G&SRM, Pima Mining District, Pima County, Arizona, between the so-called Twin Buttes and Mineral Hill localities. See attached maps.

The mineral rights leased by Continental are all in the public domain, although the surface rights of most of the area are either privately owned or belong to the State of Arizona. The State has granted grazing leases on much of the surface. Those portions of the surface which are public domain are administered by the United States Bureau of Land Management.

The area of current exploration work lies entirely in Section 23, the mineral rights of which are owned by the United States and held by Continental, with surface rights of most of the Section owned by the State of Arizona and leased under a grazing lease.

2. Access.

The property lies about 20 miles southwesterly of Tucson and is about 8 miles west of Sahuarita, which is on U. S. Highway 89, 17 miles south of Tucson. It may be reached by various routes on paved and good gravelled roads from Tucson. The most direct route is along the paved Mission-Twin Buttes road which cuts through Section 24.

3. Topography.

The area in general is gently sloping desert terrain at an average elevation of 3,600 feet above sea level, with alternate ridges and washes running northeasterly about 1/4 to 1/2 mile apart. In Section 23 the washes have a maximum relief of about 30 feet and a gradient of about 2-1/2%. None of the property is considered inaccessible, and most of it can be reached by pickup truck.

Although washes and flats may be covered by sandy alluvium, the surface material can be readily excavated and is suitable for construction purposes. General land gradient is sufficient for good drainage and flat enough for minimum site preparation of mine plant and mill.

Vegetation is sonoran desert varieties of thorny plants and sparse grass.

4. Transportation.

The property can be reached from Tucson by a good paved road, and several connecting gravel roads. The nearest railhead, over about 10 miles of paved and gravelled roads, is at Sahuarita, where loading facilities exist on the Southern Pacific Company line from Tucson to Nogales. Other facilities have been installed within a few miles north and south of Sahuarita.

5. Service Facilities.

(a) Power. A 14.4 kilovolt power line of Trico Electric Cooperative, Inc. serves the shaft site. Power for shaft sinking, development and construction is being supplied from this line through a 1500 KW 14.2/2.4 kilovolt transformer station. Continental has purchased and is installing three 1,150 KW capacity engine generator sets to be fueled with natural gas. A gas line to the mine plant has been installed by The Tucson Gas, Electric Light and Power Company.

(b) Water. Surface water is inadequate for any productive operation, but sufficient water should be developed by the mine to sustain milling requirements. The San Xavier mine, Mineral Hill mine and Palo Verde mine, 5 to 6 miles north in similar geologic environment, produce water for an 800 ton per day mill. Exploration

drilling indicates the existence of water in and above ore bodies on the property. One drill hole on Section 23 has standing water at 90 feet below the surface, although flow rate has not been determined. Known aquafers can be developed 8 miles eastward in the Santa Cruz Valley.

(c) Supplies. Adequate mining and milling supplies, equipment and tools are available in Tucson.

(d) Telephone. Single line telephone service has been installed to the mine and mill site.

6. Labor Supply.

Local experienced mine and mill labor is available, but Continental intends to provide most of the mine crew from company operated mines in Utah and Wyoming, which are scheduled for reduction in force about the time men will be required. Mill labor will be recruited locally.

7. Climate.

Climate is arid with hot summers and mild winters, conducive to underground operations. Minimum precautions are sufficient protection from freezing. Air conditioning has been installed in the surface buildings. Some drainage protection will be required to handle cloud burst run-off water.

HISTORY OF PROPERTY

Most of the claims were located in 1955 in fairly large groups -- some up to 60 claims -- with additional claims located later, and with some amendments and relocations during 1964 and 1965. Claims owned by individuals have been pooled into a group to form a single operating unit of the entire property.

Parts or all of the property have been leased or optioned by three organizations prior to Continental's acquisition. John C. Higgins leased part of the property during 1957 and 1958; Bear Creek Mining Company controlled the entire property from 1960 to 1963; Pima Mining Company leased it during 1963. Continental obtained the property in January, 1964.

Exploration of the property has been by geology, geophysics and core drilling. There is no known production. Continental's work has been confined to an area in Section 23. Except for wide-spaced scout drilling, the balance of the property is unexplored.

? T9, T52, T39, T61, T17, T51, T62, T46 are all in CMC project area. Results of these holes not mentioned.

DRILLING

To October, 1964, Continental had drilled 25 holes, all in Section 23, aggregating 13,617 feet of non-core and 7,086 feet of NC diamond core, for a total of 20,703 feet drilled. Twenty of the holes contained at least one ore grade intercept, two were weakly mineralized, and three were essentially barren.

Three additional holes totalling 1,895 feet of non-core and 906 feet of NC core were later drilled in the mill site and tailings disposal areas. These holes were drilled beyond the perimeter of the known mineralized area to check tracts which will become inaccessible from the surface. No significant mineralization was found.

The area drilled by Continental is within a rough perimeter outlined by previous drilling with dimensions of about 1,000 feet by 1,500 feet, although the extent of the mineralized ground has been apparently determined only at three points on the perimeter. It is probable that favorable rocks exist over an area roughly three times this size. Depth of ore ranges from 500 feet to 1,000 feet below the surface, with most of the ore lying between 600 feet and 800 feet. Ore thickness varies from a minimum mining thickness of 10 feet to more than 48 feet.

Core recovery has been excellent, approaching 100% in ore zones. Penetration rates average 30 feet per 8-hour shift with wire line drilling equipment.

Previously, Bear Creek Mining Company conducted exploration work on the property as part of a large scale project, which included a great deal of other ground. Drilling for the most part was widespaced, usually at 1,000 foot to 2,000 foot centers and random in layout.

Three holes drilled into ore localized the present Continental ore body. Two holes were offsets of the discovery hole. No ore was encountered in the other holes. Altogether, Bear Creek drilled thirty-six holes totalling 28,725 feet on the property.

Pima Mining Company drilled three offset holes on roughly 500 foot centers in the area of the Bear Creek ore intercept. Two encountered ore. Pima drilled two additional barren holes several thousand feet to the north.

John C. Higgins had drilled 48 shallow holes on the northwest edge of the property. The holes encountered weak mineralization within 400 feet of the surface.

GEOLOGY

A. Reports and Maps:

The geology of the Pima Mining district has been intensely investigated by the U. S. Geological Survey, University of Arizona and mining company geologists. Maps and reports published since 1955 in government publications, technical journals and university papers are recent enough to be pertinent. These are summarized in the bibliography of U. S. G. S. Bulletin 1112-C.

Surface geology of the property has been mapped by Bear Creek, Pima and Continental. Underground geology has necessarily been confined to information developed from drill hole data and is therefore very sketchy in detail over all of the property. Geologic sections and a scale model have been prepared by Continental for the area drilled in Section 23.

B. Photogrammetry:

Continental has photographed that portion of Section 23 of current interest and has prepared a photogrammetric survey. Detailed aerial photographs of the entire area are available through a local Tucson photogrammetrist.

C. Geophysical Work:

Continental has experimented with resistivity and induced potential methods over the drilling area, primarily to develop criteria and establish applicability. The experimental data bears

a correlation to the drill hole data and suggests other nearby drilling targets.

What is now the Pima Mine was discovered by a ground magnetic survey. The nearby Mission, Palo Verde and Copper Glance ore bodies were in part found by electromagnetic and induced polarization ground surveys. It is believed that geophysical work will be helpful in evaluating the rest of the property.

D. Geology of the Ore Deposit:

See attached report of Manning W. Cox.

E. Exploration Possibilities:

The commercial grade mineralization found in Section 23 has been in tactite zones and Paleozoic limestones lying in the upper plate of the San Xavier thrust fault. The limestones are overlain unconformably by Cretaceous arkoses and shales. Both rocks are intruded by quartz monzonite sills and dikes and are mineralized by sulfide zinc and copper minerals. Both rocks are overlain unconformably by late Tertiary fanglomerates. The limestones appear to be rafted blocks implaced by post ore thrust faulting. A random drill pattern found this Section 23 ore body. Non-commercial copper-zinc mineralization has been cut by drilling in the Cretaceous arkose which indicates that areas larger than developed to date have been subject to mineralization. There is thus reason to believe that other limestone ore bodies can be found on the property. Geophysical surveys will be necessary to establish drill targets, inasmuch as surface mapping cannot decipher sub-surface conditions in areas concealed beneath two unconformities.

In addition to limestone ore, deposits of porphyry copper-molybdenum ore may be present in areas where non-commercial drill hole intercepts have been made. An intelligent estimate of the potential of this property cannot be made until more geologic data is generated.

F. Ore Reserves:

Based upon the drill information obtained to August 31, 1964, an estimate of ore reserves has been made, and is summarized as follows:

Estimated Ore Reserves
August 31, 1964

Reserves	Tons	% Zinc	% Copper	% Lead	Oz. per Ton Silver
"Drill" Proven					
Upper Zone	393,000	6.9	1.19	0.15	1.85
Lower Zone	56,000	5.8	1.91	nil	1.40
"Drill" Probable					
Upper Zone	78,000	8.6	1.43	0.46	2.01
Lower Zone	681,000	7.3	0.76	0.44	1.11
Total	1,208,000	7.2	1.08	0.30	1.54

For detail see attached report of Manning W. Cox.

METALLURGY

Western Knapp Engineering Division of Arthur G. McKee & Company has conducted laboratory scale ore dressing tests on samples made up from drill core recovered from the ore zones. Two composite samples were collected for this purpose. One lot (approximately 185 pounds of material) represented the upper ore zone, and the other lot (approximately 285 pounds of material) represented the lower ore zone.

These preliminary tests indicate that portions of the ore body may be somewhat refractory to simple flotation ore dressing techniques. However, satisfactory results can be obtained in the production of zinc and copper sulfide concentrates by utilizing a flexible flow sheet in the design of the flotation circuit.

Based upon this test work Western Knapp prepared a plant flowsheet and a preliminary capital cost estimate for a 500 ton per day mill. For details of the results of the test work to date see attached reports by Western Knapp Engineering Division of Arthur G. McKee & Company.

Design of the mill has now been completed and all equipment selections have been made. Final engineering drawings for construction are being prepared. Equipment orders have been placed with deliveries scheduled to allow completion of construction by the end of March, 1967.

A revised capital cost estimate based upon final mill design, equipment selection, and the final mill construction contract, brings the cost of the mill to approximately $1,400,000 compared to the preliminary estimate of approximately $1,100,000 made in 1964 by Western Knapp.

OPERATION

A. Development:

To provide access below the lowest known ore, the company has completed and equipped a production shaft 1,000 feet deep. It has also completed a large diameter drill hole to serve as a second exit and as a ventilation shaft. Installed hoisting capacity will support production at the rate of 500 tons of ore per day. Two stations at approximately the 800 foot and 900 foot levels are excavated and equipped with ore pockets and with skip loading facilities. Rail haulage drifts will be driven below ore horizons to move broken ore from drawpoints to the shaft. A development level, which will also provide access for service, will be driven on the base of ore by trackless equipment. Ore encountered will be delineated by a grid of drifts and crosscuts preparatory to sampling and stoping. Ore pods will be fully evaluated by perimeter excavations and localized drilling at a rate sufficient to keep developed ore available for milling while continuing the development advance.

In the stopes ore will be trammed to drawpoints for storage and transfer to the shaft. Drawpoints will be vertical raises run from a stub drift on the track level. An overshot loader will pick up ore and load it into trains for transfer to shaft pockets.

B. Mining:

Ore now known will be extracted by underground operation, using a horizontal cut and sand-fill stoping system with trackless equipment. Stoping will be essentially a retreating panel method with trackless transportation to drawpoints on a rail net, and panels will be filled upon retreat. Where ore thickness exceeds heights that can be cut and filled in one pass, successive slices will be made on top of the prior fill.

C. Concentration and Processing:

Concentration will be done by selective flotation in a 500 ton per day plant.

D. Marketing:

The metals contained in the ore deposit will be selectively concentrated into their respective sulfide concentrates. Test work to date indicates that probably only two concentrates will be produced -- one containing 85% to 90% of the zinc content of the ore with minor amounts of copper and silver, and the other containing 80% to 85% of the copper, silver and lead content. Further test work will be conducted to determine if an additional lead-silver concentrate will be economic.

Marketing these concentrates most favorably presents a complex problem under present market conditions. A large number of copper smelters are concentrated within shipping range of the property. However, many of these are operated by major integrated producers who will accept concentrates

on a custom basis only when they have smelting capacity in excess of their own production. Custom copper smelters in the southwest United States are operated by the American Smelting and Refining Co. at El Paso, Texas and at Hayden, Arizona.

There are two zinc smelters in Texas which accept custom concentrates. One at Amarillo is operated by A S & R and another at nearby Dumas, Texas, is operated by American Zinc Company of Illinois. In addition there are two custom zinc smelters in Oklahoma to which the company can ship zinc concentrates under present market conditions.

A contract for the sale of zinc concentrate, F.O.B. Sahuarita, Arizona, has been made with the operator of one of the zinc smelters in Oklahoma. The term of the contract is for five years commencing with first delivery, expected to be in early 1967.

No contract for the sale of copper concentrate has yet been made. However, Continental has submitted information regarding the anticipated character, grade and quantity of the copper concentrate to several potential buyers. Some have responded with firm or tentative offers to purchase.

Following is an analysis of the average ore value based upon the anticipated distribution of metal in the concentrates. This analysis indicates the average net smelter return value that is anticipated from the sale of the zinc and copper concentrates.

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METAL DISTRIBUTION IN CONCENTRATES

Disposition of Metal Content of Ore

		Recovery		Loss in Tails
		Zinc Concentrate	Copper Concentrate	
Zinc	(Zn)	87 %	3 %	10 %
Copper	(Cu)	10 %	85 %	5 %
Lead	(Pb)	10 %	70 %	20 %
Silver	(Ag)	10 %	80 %	10 %
Cadmium	(Cd)	?	-0-	?

Composition of Concentrates

	Heads					Concentrate	
	Tons		Assay		Recovery	Composition	Per Ton
Zinc Concentrate (Ratio 9:1)							
Zn:	9	@	7.20 %	@ 87 %	--	56.40 %	1,128.00 lbs.
Cu:	9	@	1.08 %	@ 10 %	--	.97 %	19.40 lbs.
Pb:	9	@	0.30 %	@ 10 %	--	.27 %	5.40 lbs.
Ag:	9	@	1.54 oz.	@ 10 %	--	1.39 oz.	1.39 oz.
Cd:	9	@	?	?		.20 %	4.00 lbs.
Copper Concentrate (Ratio 23.3:1)							
Zn:	23.3	@	7.20 %	@ 3 %	--	5.00 %	100.00 lbs.
Cu:	23.3	@	1.08 %	@ 85 %	--	21.38 %	427.60 lbs.
Pb:	23.3	@	0.30 %	@ 70 %	--	4.90 %	98.00 lbs.
Ag:	23.3	@	1.54 oz.	@ 80 %	--	28.70 oz.	28.70 oz.

Value of Metals

	June 1, 1966 Prices	
Zinc	14.5 ¢ per lb.	(East St. Louis)
Copper	36.0 ¢ per lb.	(Domestic Refinery)
Lead	15.0 ¢ per lb.	(Engineering & Mining Journal-N.Y.)
Silver	$ 1.289 per oz.	(Handy & Harman - unrefined)
Cadmium	$ 2.40 per lb.	(Engineering & Mining Journal)

SMELTER SCHEDULE - ZINC

Per Ton of Concentrate

Credits		Pay		
Zn:	1,128.00 lbs.	85%	@ 14.17 ¢	$ 135.86
Cu:	19.40 lbs.	65%	@ 29.0 ¢	3.66
Ag:	1.39 oz.	80%	@ $1.289	1.43
Cd:	4.00 lbs.	65%	@ $1.56	4.06
	Total Credits			$ 145.01

Charges

Treatment	$ 58.75

Net Smelter Return at Sahuarita, Arizona

Per ton of zinc concentrate	$ 86.26
Per ton of ore (from zinc concentrate)	9.58

Effect of Zinc Price Change

For each 1¢ increase or decrease in zinc price, increase or decrease value per ton of concentrate by 958.80 lbs. @ 1¢, less $1.00 per ton change in treatment charge, or ($9.588 - $1.00)

Per ton of zinc concentrate	$ 8.59
Per ton of ore (1:9)	0.95

Value per ton of ore from zinc concentrate at varying prices of zinc per pound:

11.5 ¢	$ 6.73
12.5 ¢	7.68
13.5 ¢	8.63
14.5 ¢	9.58

SMELTER SCHEDULE - COPPER

Per Ton of Concentrate

Credits

Cu:	427.6 lbs. less 20 lbs. or 407.6 lbs.	@ 31.8 ¢	$129.62
Pb:	No pay unless over 5%, then 50% @ E. & M. J-N.Y. Lead price less 8 ¢		
Ag:	28.70 oz. @ 95% or 27.265 oz.	@ $1.264	34.46
	Total Credits		$ 164.08

Charges

Treatment	$ 15.75
Freight	5.00
Total Charges	$ 20.75

Net Smelter Return at Sahuarita, Arizona

Per ton of copper concentrate	$ 143.33
Per ton of ore (from copper concentrate)	6.15

Effect of Copper Price Change

For each 1¢ increase or decrease in copper price, increase or decrease value per ton of concentrate by 407.6 lbs. @ 1¢ or $4.076

Per ton of concentrate	$ 4.08
Per ton of ore (1:23.3)	0.175

Value per ton of ore from copper concentrate at varying prices of copper per pound:

32¢	$ 5.45
34¢	5.80
36¢	6.15
38¢	6.50

TOTAL VALUE PER TON OF ORE

At Varying Metal Prices

Price Per Pound		
Zn	Cu	
12.5¢	32¢	$ 13.13
13.5¢	34¢	14.43
14.5¢	36¢	15.73

ECONOMICS

A value per ton of ore of $14.43 is used in developing estimates of net yield. This value is based upon the net smelter returns shown. The metal prices chosen for this study are 13.5¢ per pound for zinc and 34¢ per pound for copper. The price for these metals (at June 1, 1966) is 14.5¢ for zinc (East St. Louis) and 36¢ for copper (Electrolytic Domestic Refinery). For the prior analysis under Marketing, the current Custom, f.o.b. Refinery price of 35.6¢ for copper was used, since it is the Custom Refinery price upon which some custom smelters base their payments. For the historical study in this section, the current Electrolytic Domestic Refinery price of 36¢ was used, since it is the Electrolytic Domestic Refinery price upon which past statistics are based. The average price for the last ten years -- 1956 through 1965 -- has been 12.28¢ per pound for zinc and 31.85¢ per pound for copper. For the nineteen year period 1947 through 1965 it has been 12.68¢ and 28.75¢ respectively.

Because of the preliminary nature of the estimate of ore reserves based upon drill data, and as pointed out in the attached report by Manning W. Cox that it is probable that the reserves in the immediate area will be further expanded by development and future exploration, no percentage extraction discount is applied for preliminary valuation purposes. In the present estimate a minimum thickness of 10 feet was used for each drill hole intercept. In those instances where ground conditions might contribute dilution, drill hole intercepts were diluted with waste on an individual basis.

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The company proposes to extract and mill the ore at the rate of 500 tons per day, with an annual production of approximately 175,000 tons; this would exhaust the presently estimated reserves in 7 years. The following projections are based upon this proposed rate of extraction for the period of 7 years and a total of 1,208,000 tons.

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ESTIMATED AVERAGE ANNUAL NET INCOME

Basis: 175,000 tons annually

	(175,000 Tons) Total		Per Ton	
Gross Value (Net Smelter Returns)		$ 2,525,250	$	$ 14.43
Royalty - 5 % NSR	$ 126,262			
Production Tax - 1½% NSR	37,878	164,140		.94
Net Value		$ 2,361,110		$ 13.49
Cost of Sales:				
Labor-Direct and Indirect	$ 611,742		$ 3.50	
Materials and Supplies	467,250		2.67	
Overhead	125,800	$ 1,204,792	.72	6.89
Balance		$ 1,156,318		$ 6.60
Depreciation	$ 316,770		1.81	
Amortization	229,570	546,340	1.31	3.12
Gross Profit		$ 609,978		$ 3.48
Selling & Administration		$ 96,250		$ 0.55
Net Profit before State Income Tax		$ 513,728		$ 2.93
Provision for Arizona State Income Tax		12,840		0.07
NET PROFIT		$ 500,888		$ 2.86

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ESTIMATED LABOR COSTS--DIRECT AND INDIRECT

Basis: 175,000 tons annually

Item	Number of Personnel	Hourly Rate	Total Hours	Straight-time Earnings	Overtime Shift Differential	Total Payroll
Production						
Mine:						
Drilling & Blasting	30	3.00	62,400	$ 187,200	$ 1,872	$189,072
Mucking & Tramming	6	3.00	12,480	37,440	374	37,814
Timbering & Bolting	6	3.00	12,480	37,440	374	37,814
Sand Filling	2	2.75	4,160	11,440	125	11,565
Hoisting	2	3.00	4,160	12,480	125	12,605
Supervision	3					33,000
Mill:						
Crushing	2	3.00	4,992	14,976	1,248	16,224
Grinding & Flotation	12	3.00	29,952	89,856	--	89,856
Tailings Disposal	1	2.75	2,496	6,864	--	6,864
Maintenance & Repair	2	3.50	4,992	17,472	1,456	18,928
Supervision	1					13,000
General Surface:						
Mechanical	2	3.50	4,160	14,560	--	14,560
Electrical	2	3.50	4,160	14,560	--	14,560
General	4	2.75	8,320	22,880	--	22,880
Engineering	2					20,000
Geology	2					20,000
Metallurgical & Assay	2					20,000
Administrative & Accounting	3					33,000
Total	84					$611,742
Per ton						$ 3.50

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ESTIMATED MATERIALS AND SUPPLIES COST

Basis: 175,000 tons annually

Item	Total Annual	Cost Per Ton
Production		
Mine:		
Drilling & Blasting	$ 105,000	$ 0.60
Mucking & Tramming	8,750	0.05
Timbering & Bolting	26,250	0.15
Sand Filling		
Hoisting	8,750	0.05
Power	36,750	0.21
Maintenance & Repair	61,250	0.35
	$ 246,750	$ 1.41
Mill:		
Crushing	$ 10,500	$ 0.06
Grinding	38,500	0.22
Flotation	105,000	0.60
Maintenance & Repair	12,250	0.07
Power	49,000	0.28
Miscellaneous	5,250	0.03
	$ 220,500	$ 1.26
Total	$ 467,250	$ 2.67

ESTIMATED OVERHEAD COSTS

ANNUAL

Item	Basis of Calculation	Total Annual	Cost Per Ton
Telephone	$ 200/mo.	$ 2,400	
Stationery & Printing	25/mo.	300	
Misc. Office Supplies	25/mo.	300	
Traveling Expense	400/mo.	4,800	
Engineering	100/mo.	1,200	
Research	100/mo.	1,200	
Property Tax	Est.	16,000	
Insurance	400/mo.	4,800	
Payroll Tax	% of earnings	20,100	
Workmen's Comp.	% of earnings	43,100	
Vacation Pay	Average 6 day per employee	10,800	
Holiday Pay	6 day/yr/employee	10,800	
Group Insurance	Avr.$10/mo. per employee	10,000	
Total		$125,800	$ 0.72

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ESTIMATED DEPRECIATION AND AMORTIZATION

Basis: 175,000 tons per year

Item	Cost	Life	Annual Depreciation	Per Ton
Depreciation:				
Buildings and Facilities	$ 322,000	7 years	$ 46,000	$ 0.26
Machinery and Equipment=				
Mining	421,000	5 years	84,200	0.48
Milling	1,168,000	7 years	166,860	0.96
Power	138,000	7 years	19,710	0.11
	$2,049,000		$ 316,770	$ 1.81
Amortization:				
Exploration Drilling	$ 133,000			
Preparation and Pre-production Development	1,474,000	7 years		
	$1,607,000		$ 229,570	$ 1.31

ESTIMATED CAPITAL COSTS

Item	Exploration Drilling	Preparation	Buildings and Facilities	Machinery and Equipment	Total
Pre-production Expenses	$ 133,000	$ 268,000	$	$	$ 401,000
Mine Development		1,206,000	70,000	421,000	1,697,000
Milling			222,000	1,168,000	1,390,000
Power			30,000	138,000	168,000
	$ 133,000	$1,474,000	$322,000	$1,727,000	$3,656,000

COMPANY

Continental Exploration, Inc., holder of the CWT Property, is a wholly owned subsidiary of Continental Materials Corporation, a Delaware corporation, incorporated in 1954 as "Continental Uranium, Inc.", and listed on the American Stock Exchange.

Continental Materials Corporation was organized by three brothers, Gerald Gidwitz, Willard Gidwitz and Joseph L. Gidwitz, who are still its chief stockholders and executive officers. They are also the chief stockholders and executive officers of Helene Curtis Industries, Inc. of Chicago (beauty aids, fragrances -- New York Stock Exchange) and of Consolidated Packaging Corporation of Chicago and Monroe, Michigan (paper mills, corrugating plants, folding box plants -- Detroit Stock Exchange).

Since its inception, Continental Materials Corporation -- itself or through wholly owned subsidiaries -- has been continuously engaged in production, development and exploration of mining properties. Its principal operations, all conducted by its own Mining Division, include the following:

Continental No. 1 Mine, San Juan County, Utah. Underground, open stoping with random pillar support using trackless diesel equipment. Induced caving following pillar extraction. Production of 77,000 tons of uranium ore, 1954-1958.

Rattlesnake Mines, San Juan County, Utah. Initially open pit uranium operation with 2.5 million yards of waste stripped to produce 173,000 tons of ore. Subsequent under ground production similar to Continental No. 1 amounted to 97,600 tons, 1956-1965. Total production was 270,600 tons.

Seismic and Reserve Mines, Fremont County, Wyoming. Underground, open stoping with both induced caving and sand filling using slushers with rail haulage. Production of 200 tons per day of uranium ore from two vertical shafts. Production of 481,000 tons, 1958-1965.

Texwood Mine, San Juan County, Utah. A joint venture with Atlas Minerals, Inc. Underground, open stoping with random pillar support, using trackless diesel equipment. Induced caving following pillar recovery. Operated by Continental personnel through incline shaft. Production of 49,800 tons, 1963-1965.

In addition, several smaller properties have been operated as uranium and precious metal producers.

All activities of the Mining Division have been performed by company staff. This includes supervising exploration drilling, estimating reserves, conducting feasibility studies, planning development systems, determining mining methods, design and construction of mine plants, performing shaft sinking and selecting production equipment.

Present Mining Division field personnel:

Administrative & Supervisory 5

Technical 5

Accounting 3

Hourly Employees 60

The Mining Division employees who will be responsible for the CWT operations include the following:

C. H. Reynolds	General Superintendent of Mining Division of Continental Materials Corporation and subsidiaries.
John G. Roscoe	Manager of Continental Exploration, Inc.
Maurice H. Brady	Mine Superintendent of Continental Exploration, Inc.
C. A. McKinley	Mill Superintendent of Continental Exploration, Inc.
M. A. Price	Mine Engineer of Continental Exploration, Inc.

Following are personal resumes and experience records of these employees.

COMP

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C. H. REYNOLDS

Biographical data:

Born 1918

B. S. in Mining Engineering, Mackay School of Mines, University of Nevada, 1943

Member:

American Institute of Mining and Metallurgical Engineers, 1946
Past Chairman of Colorado Plateau Section, 1961
Nu Eta Epsilon, Honorary Engineering Society

Professional Experience:

1943-1944.....Basic Refractories, Inc., Gabbs, Nevada, mining engineer. Duties consisted of establishing engineering control, conducting cost studies, pit design and planning for open pit mining of Brucite (Mg OH2) deposit. Conducted engineering and sampling procedures for rigid quality control. Supervised initial pilot plant studies to beneficiate ore.

1944-1946.....South Pacific Area, United States Marine Corps.

1946-1947.....Bunker Hill and Sullivan Mining and Concentrating Co., Coeur d'Alene district -- geologist, mine operating geology, detailed mapping of development work and outside properties.

1947-1955.....Sidney Mining Co., Coeur d'Alene District, Engineer-Geologist to 1951; chief engineer to 1953; mine superintendent to 1955. Integrated Pb-Zn mining and milling operation with new (1947) modern selective flotation plant; 250 tpd. capacity. Underground vein mine with shrinkage and cut and fill stoping. In responsible charge of extensive exploration and development program, including 1000 feet shaft deepening project and attendant installation and level development.

1955-1965.....Continental Materials Corporation -- General Superintendent of Mining Division, organized mining department and brought properties into production from initial drilling. In charge of staff -- operating, technical, accounting -- engaged in mining activities, property evaluation, exploration projects.

1966- .....Vice President, Mining, Continental Materials Corporation.

COMP

JOHN G. ROSCOE

Biographical Data:

Born 1922

B. S. in Mining Engineering, Mackay School of Mines, University of Nevada, 1948

Member:

American Institute of Mining and Metallurgical Engineers, 1947, Registered Professional Engineer, Idaho, No. 876, 1954.

Professional Experience:

1948-1954.....Bunker Hill Co., Kellogg, Idaho -- Mining Engineer. Mine and surface plant surveying, mill and smelter construction engineering, mill and smelter physical appraisal, mining claim patent surveying.

1954-1955.....U. S. Atomic Energy Commission, Denver, Colorado -- Mining Engineer. Ore reserve data computation and evaluation. Exploration contract administration, property examination.

1955-1956.....Farmington Funding Corp., Colorado Springs, Colorado -- Mining Engineer, Property examination. Organized and supervised exploration projects.

1956-1957.....Continental Materials Corporation, Moab, Utah -- Mine Superintendent. Supervised stripping and put Rattlesnake Open Pit into production. Set up plant and equipment, developed mining system.

1957-1964.....Continental Materials Corporation, Grand Junction, Colorado -- Superintendent of Mines. Responsible to General Superintendent for mine production, mine planning and development. Coordinates activities at producing properties. Purchasing agent for capital expenditures. Assists general superintendent in direction of technical and administrative personnel and property evaluation.

1964- .....Continental Exploration, Inc., Tucson, Arizona, Manager. In charge of bringing newly developed property into production. Responsible for detailed planning, engineering and supervision of erection of mine plant, mine development and mill for proposed 500 tons per day mining and milling operation.

COMP

MAURICE H. BRADY

Biographical Data:
Born 1922
B. S. in Mining Engineering, Mackay School of Mines, University of Nevada, 1950
Member:
American Institute of Mining and Metallurgical Engineers, 1949.

Professional Experience:

1950-1951.....Bunker Hill Co., Kellogg, Idaho -- Miner, timberman and junior geologist in underground Pb-Zn-Ag mine.

1951-1955.....American Smelting & Refining Co., Santa Barbara, Chihauhua, Mexico -- Engineer, assistant chief engineer, shift boss, division foreman, assistant to General Mine Superintendent. In charge of exploration and development projects, research on special problems, industrial engineering for 1500 tons per day integrated mining and milling operation with selective flotation for Pb, Zn, Cu, Fe -- 1400 employees.

1955-1957.....Sabre-Pinon Corp., Colorado Plateau and New Mexico area. Superintendent for exploration and mining activities, engineer in charge of drilling projects in Grants, New Mexico district. Supervised drilling and participated in evaluation as well as original mine planning of areas which have developed into major producers in largest uranium district in the United States -- property now mining and milling 2250 tons per day.

1957-1963.....Continental Materials Corporation, Mine Superintendent, Rattlesnake Mines, San Juan County, Utah. In charge of mining at Open Pit uranium mine, responsible for grade control and selective extraction. Supervised underground mining, development and exploration of adjoining ore bodies.

1963-1964.....Texwood, Inc. (joint venture, operated by Continental Materials Corporation). Mine Superintendent, San Juan County, Utah. In charge of erection of mine plant and development and mining of underground uranium deposit. Trackless mining method with production of 150-200 tons per day.

1965- .....Continental Exploration, Inc. Mine Superintendent.

COMP

C. A. MC KINLEY

Biographical data:
Born 1906

Member:
American Institute of Mining and Metallurgical Engineers, 1951

Professional Experience:

1923-1935.....Career began as maintenance mechanic, mill operator, miner, timberman and related jobs in various mines and mills in California, Nevada, Idaho and Montana. Diversified experience gained in the mining and recovery of lead, zinc, silver, gold, manganese, copper and mercury.

1935-1946.....Maintenance mechanic and flotation plant shift supervisor in a 500 ton per day flotation mill.

1945-1946.....While employed above was retained by another firm in an advisory and consulting capacity for a 150 ton per day flotation mill.

1946-1960.....Sidney Mining Co., Coeur d'Alene District, Idaho, Mill Superintendent to 1953; General Superintendent to 1955; General Manager to 1960. Elected director of company 1957. Integrated lead, zinc, silver underground mining operation with modern selective flotation plant; 250-300 ton per day capacity.

1960-1964.....Trout Mining Company, Phillipsburg, Montana; General Manager of open cut and underground mining and milling operation. Company produced battery and metallurgical grade manganese dioxide and mined and milled sulfide ores of zinc, lead, silver and copper.

1964 .....Mine Superintendent, Continental Uranium Co. of Wyoming (subsidiary of Continental Materials Corporation). Responsible for the operation of underground uranium mine producing 200-300 tons per day.

1965- .....Continental Exploration, Inc. Mill Superintendent.

COMP

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MICHAEL A. PRICE

Biographical Data:

Born 1915
B.S. in Geological Engineering, Mackay School of Mines, University of Nevada, 1955
Member:
American Institute of Mining and Metallurgical Engineers, 1955

Professional Experience:

1932-1956.....Work experience as mucker, miner, mine operator, mine shift boss in various mines in Arizona, California and Nevada, including military service and attending university.

Military service 1941-1946 U.S.M.C.

1956-1957.....Wah Chang Mining Corp., Bishop, California Field Geologist, General Superintendent of Exploration at Copper King Mine, Bagdad, Arizona and Culeta Mine, Lee Vining, California.

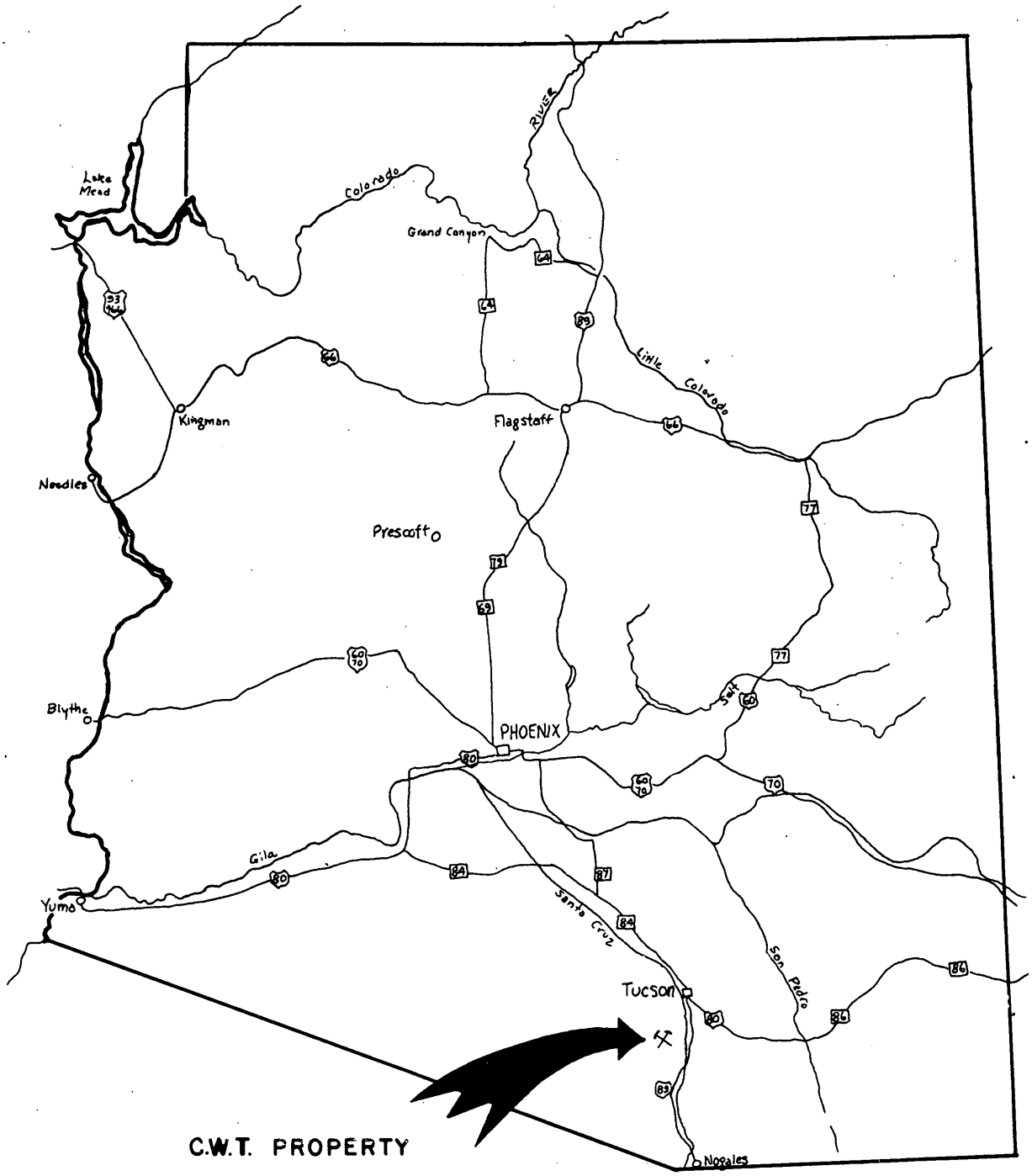
1958-1959.....Vitro Uranium Corp. Mine Superintendent, U.P. Shaft, Green River, Utah. In charge of underground mining operation, development and exploration.

1959-1961.....Great Western Universal Silvers Co., Lower Lake, California General Superintendent of Reed Mine. In charge of production and exploration.

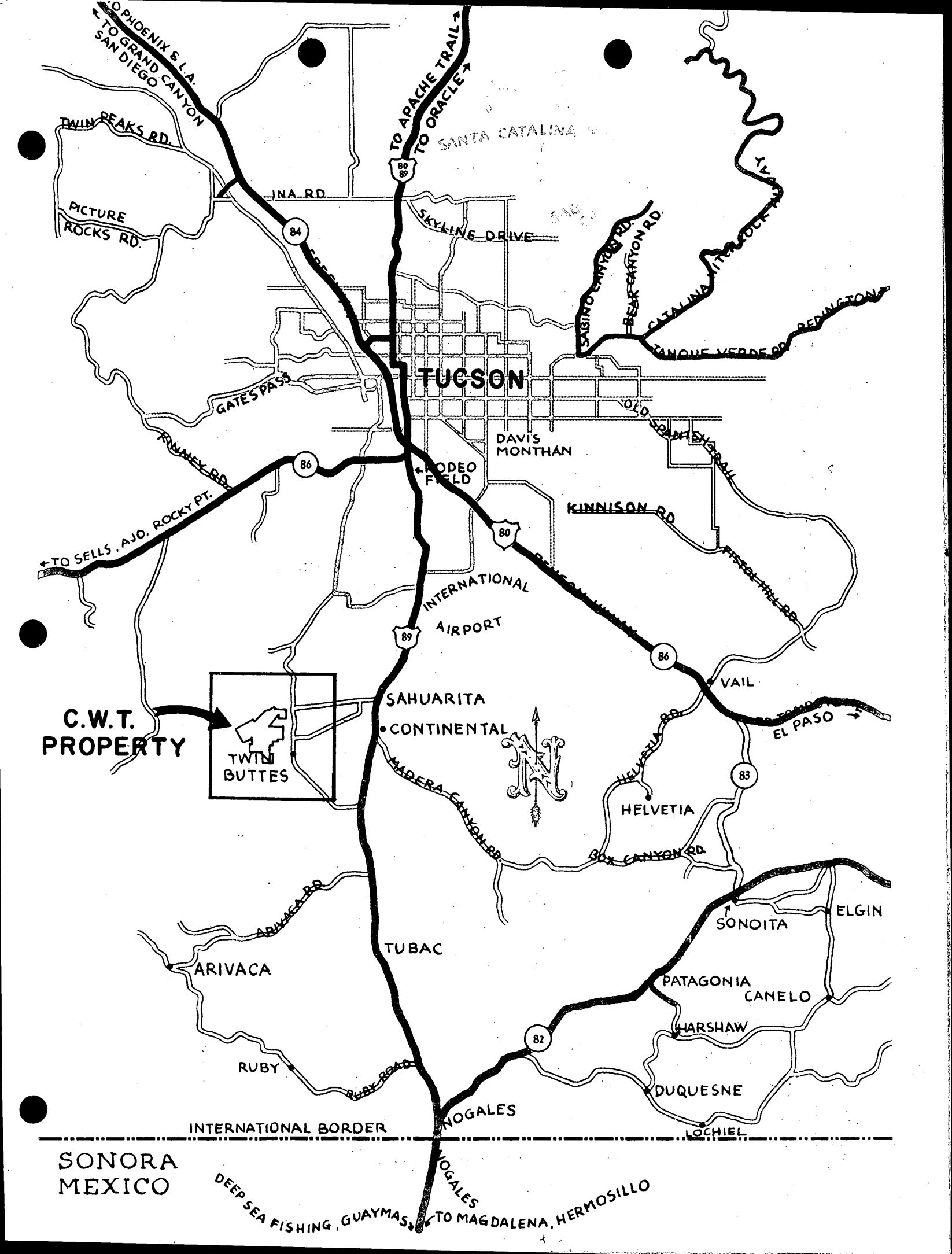
1961-1964.....Vitro Minerals Corp., Salt Lake City, Utah. Ore Production Engineer. Responsible for production and grade control in open pit uranium mining operation in Gas Hills area of Wyoming.

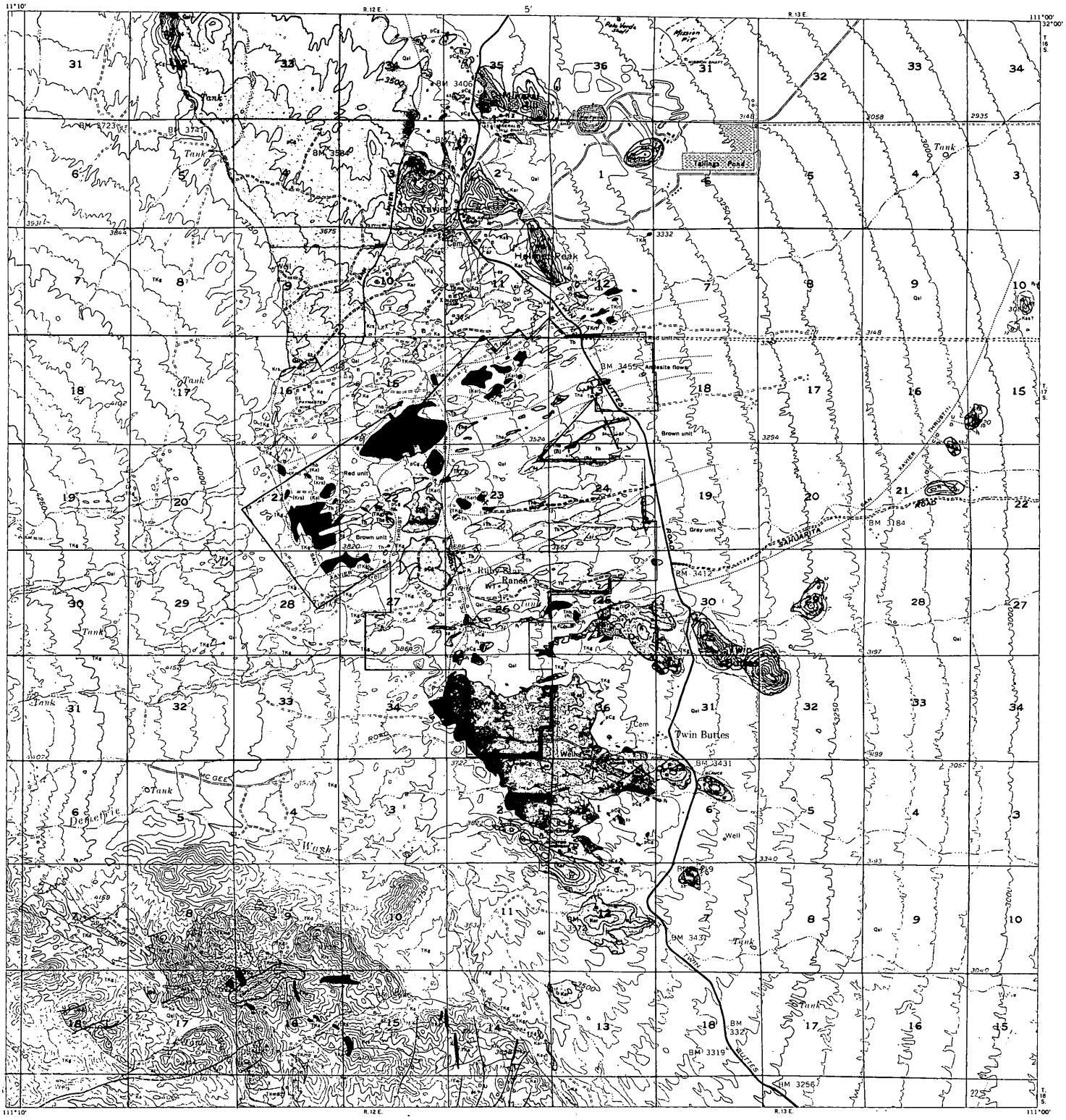
1964-1965.....Altoona Mine, Inc., Dunsmuir, California. General Superintendent in charge of exploration, development and production at underground mercury operation.

1966- .....Continental Exploration, Inc. Mine engineer.


Lake Mead
Colorado
Grand Canyon
River
Little Colorado
Kingman
Flagstaff
Needles
Prescott
Blythe
PHOENIX
Salt
Gila
Yuma
Santa Cruz
San Pedro
Tucson
Nogales
C.W.T. PROPERTY

INDEX MAP


TO PHOENIX & L.A.
TO GRAND CANYON
SAN DIEGO
TWIN PEAKS RD.
TO APACHE TRAIL
TO ORACLE
SANTA CATALINA
INA RD.
PICTURE ROCKS RD.
SKYLINE DRIVE
SABINO CANYON RD.
BEAR CANYON RD.
CATALINA HIGHWAY
TANQUE VERDE RD.
REDINGTON
TUCSON
GATES PASS
OLD SPANISH TRAIL
DAVIS MONTHAN
RINALDI RD.
RODEO FIELD
KINNISON RD.
TO SELLS, AJO, ROCKY PT.
PISTOL HILL RD.
INTERNATIONAL AIRPORT
VAIL
EL PASO
C.W.T. PROPERTY
TWIN BUTTES
SAHUARITA
CONTINENTAL
HELVETIA RD.
HELVETIA
MADERA CANYON RD.
BOX CANYON RD.
ARIVACA RD.
ARIVACA
TUBAC
SONOITA
ELGIN
PATAGONIA
CANELO
HARSHAW
RUBY
RUBY ROAD
DUQUESNE
NOGALES
LOCHIEL
INTERNATIONAL BORDER
SONORA
MEXICO
DEEP SEA FISHING, GUAYMAS
TO MAGDALENA, HERMOSILLO



Base from U. S. Geological Survey 1:62500
Twin Buttes quadrangle, 1957

C.W.T. PROPERTY LOCATION MAP AND GENERAL GEOLOGY OF PART OF THE PIMA MINING DISTRICT
PIMA COUNTY, ARIZONA

SCALE
1 0.5 0 1 MILE

MANNING W. COX ASSOCIATES consulting geologists

57 post street san francisco, california YU 2-1436

September 2, 1964

Continental Exploration, Inc.
Box 1550
Grand Junction, Colorado

GEOLOGY & ORE RESERVES
CWT Project - Pima District
Pima County, Arizona

Gentlemen:

The following report on the geology and ore reserves as of August 25, 1964 at the CWT project of Continental Exploration, Inc. in Pima County, Arizona, should be read in conjunction with two plan maps and overlays and a set of geologic sections which are handed to you herewith.

GEOLOGY

Setting

The CWT property controlled by Continental covers nearly 9 square miles within the southern part of the San Xavier thrust block in the Pima Mining District of the Sahuarita Mountains in southern Pima County, Arizona. In the northern part of this block, copper, molybdenum, copper-zinc and zinc-lead ore bodies have been located and mined at the San Xavier, Mineral Hill, Daisy, Pima, Palo Verde and Mission mines. Broadly speaking, these deposits have much in common in that they are all contact or pyrometasomatic deposits in limestones, arkoses and intrusive porphyries. They are all characterized by intense rock alteration that in the non-calcareous rocks takes the usual form of pyrite, silica, clay and mica minerals, but in calcareous rocks, i.e. limestones, dolomites and limy arkoses, takes the form of garnet-epidote-diopside-serpentine minerals, the so-called "tactite". In form the worked deposits range from simple, steeply dipping vein-like shoots at San Xavier to complex replacements of several rock types as at Palo Verde and Mission. Bulk grade of the deposits shows an inverse ratio to size in that the arkose-monzonite multimillion ton deposits of Mission, Pima and Palo Verde mines average less than 1% copper, while the limestone replacement deposits at other mines, although smaller, contain a much higher metal content.

Rocks present in the area, in order of descending age are:

Late Tertiary	-	Helmet or San Xavier fanglomerate	-	barren
Early Tertiary	-	Monzonite intrusives	-	mineralized
Cretaceous	-	Arkose and shale	-	mineralized
Paleozoic	-	Limestone, quartzite, dolomite and gypsum beds	-	mineralized
Precambrian	-	Granitic rocks and gneisses	-	barren

Structurally the district is extremely complex and on the age of major thrust faulting, most important to Continental's Section 23 project, there is no local agreement. The Paleozoic calcareous rocks are generally separated from the Precambrian granites by a flatly dipping, folded and offset thrust fault, the San Xavier. However, unconformable contacts with a basal Paleozoic conglomerate (Bolsa quartzite) are locally present at the surface. The Paleozoic rocks are tightly folded and complexly faulted near Mineral Hill to the north and Twin Buttes to the south. Cretaceous rocks rest with strong angular unconformity on the Paleozoic but are themselves strongly folded and faulted. Capping these rocks are thick masses of post mineral fanglomerate, landslide breccia and andesitic volcanic rocks whose exact relationship, although unconformable on all older rocks, is puzzling and unsolved. It is pertinent to future exploration only.

It is variously held that the San Xavier thrust is (1) completely post ore with a movement of 15 to 20 miles from the southeast, thus making all the CWT land underlain by the beheaded tops of ore bodies, if any, whose roots lie south of Twin Buttes, (2) completely post ore and intruded by monzonite which is mineralized, thus increasing favorability of a large area of CWT lands, and (3) partially post ore, jumbling ore blocks around, thus accounting for the diversity of structural conditions known to exist. On Section 23, rolled ore fragments are found in thrust plates, but the thrust zones are so intensely altered to clay and clay-garnet rock as to leave the problem unsolved. It is critical to Section 23 ore prediction.

Section 23

The area explored by Continental lies entirely in Section 23 and is bounded on the west by the Ruby Star Fault, a northwest trending, east dipping, high angle normal fault, probably of post thrust age. In the hanging wall of the fault a thin dragged sheet of crushed Paleozoic limestone is found overlain by silicified Cretaceous arkose. All of the rest of the surface area is covered by post ore fanglomerate and recent wash.

Subsurface geologic conditions are known only from 38 drill holes in the immediate area, 25 of them drilled by Continental. Cores, logs and analyses have been studied for all the holes. The Cretaceous rocks are silicified, metemorphosed and slightly mineralized from the surface (on the west side of this section) to the limestone contact, a depth ranging from 500 to more than 1000 feet. No ore grade drill intercepts were found but 0.3% to 1.0% copper occurs over widths of 5 to 50 feet in several drill holes. Near the limestone contact the arkoses are variously hornfelsed, silicified and mineralized, and crushed and clay altered. The contact is in places a thrust fault, in others an unconformity, often with a basal pebble conglomerate.

Structurally the contact strikes NW-SE and dips to the southwest at 10°-30°, but reversals and fault offsets are common. The contact and immediately underlying tactite zone is a favored locus for ore.

Below the arkose is found from 20' to 400' of limestone, quartzite and anhydrite beds. These Paleozoic rocks are cut off at depths of 900 to 1100 feet by the gently dipping San Xavier thrust fault. This thrust fault has not been found to be mineralized. Just above the thrust a thickness of 100 to 200 feet of anhydrite-limestone is always present. The anhydrite does not follow bedding planes and is interpreted as a secondary migrated deposit. Bedding is commonly visible in the less altered parts of the limestone where it varies from vertical to horizontal in the drill cores.

The limestone contains layers of tactite, a greenish crystalline rock composed largely of garnet, epidote, diposide and marble, layers of olive colored hornfels, a dense greasy rock composed largely of serpentine, of coarse crystalline marble, and of a material locally known as clay garnet rock which is a soft, pulverent white rock composed of clay with small blebs of garnet. Ore mineralization occurs in both tactite and hornfels. The clay garnet rock is peripheral to ore zones.

Structurally the relationship of the limestone to the arkose is very complex. A zone of gently dipping thrust faulting (Brooke Thrust) repeats the arkose-limestone contact in places several times. High angle faulting is visible as well in drill cores and can be inferred from cross section map studies, but the exact location and attitude of these faults is indeterminate from drill cores alone. That this complex faulting is not of one generation is evident from recemented mineralized breccias and intensely altered gouges on one hand, and the presence of gouge, mylonite and closely fractured zones on the other. Fault details will strongly affect mining methods and costs but are indeterminate at this date.

The limits of tactite mineralization are not co-extensive with the limits of this buried block of Paleozoic limestone, but are somewhat smaller. Holes T-57, C-1 and T-11, although encountering a thick section of limestone, show no mineralization. The limits of ore are likewise not co-extensive with the limits of tactite. To the west of holes T-12 - T-3, there is thin tactite, but only weak mineralization. To the south of holes T-12 - T-18 there is very thick tactite, but no ore has yet been found. The general limits of limestone and contained tactite appear to be known from scout drilling and resistivity work. Excluding the limestone lying to the north, of uncertain interest, the tactite mass extends from an unknown point just northwest of hole T-43 to the southeast as far as a resistivity low east of C-25, about 2800 feet in all. The mass extends from the resistivity low near hole T-57 southwest to its cutoff by the late stage Ruby Star fault - a distance of about 2000'. However, from a resistivity low lying north-south and about 350 feet west of hole T-12, the tactite is of questionable exploration interest. Exploration to date has principally been in an area 1500 feet east and west, and 1000 feet north and south within this larger target area.

Within the tactite and hornfels ore minerals, chalcopyrite, sphalerite, pyrite, galena and tetrahedrite occur. They are intimately intergrown with the gangue minerals of quartz, marble, garnet, epidote, serpentine, diposide and clay. The grain size is from pinpoint to several tenths of an inch. Tenor of mineralization ranges from trace to 6% copper, trace to 6 oz. of silver, trace to 30% zinc, trace to 4% lead, trace to 100% pyrite.

Either through thrust repetition or by original selective replacement, the mineralization is split generally into an upper and lower ore zone. The upper ore zone is higher in copper and lower in lead than is the lower ore zone, and zinc is about the same in both. As may be expected, only parts of either zone contain mineralization of commercial grade and extent.

Both the ultimate extent and detailed shape of the ore bodies has not been determined by drill exploration. Sufficient close-spaced drilling has been done to prove up a minimum acceptable minable tonnage and to outline additional probable reserves.

Drilling to date has all been with high pressure mud circulation which has limited underground water data available. We can only say that the ground appears to be usually dry until near or at the limestone contact where artesian water is penetrated. Static water levels in drill holes rise to 60 to 140 feet of the land surface. Circulation has been lost in several holes and back pressure developed in some. Examination of cores discloses slight leaching of ore in several holes and development of small open water courses.

A program to swab old holes and install a large diameter pump hole is now underway. Definitive water tests will then be conducted.

Back and floor conditions, as interpretable from 38 available drill hole cores, range from excellent to poor. Some dilution will be unavoidable particularly in thinner ore intercept. Allowance is made for this in estimating reserves. No ground was encountered that gave serious difficulty in coring and no exceptional ground support problems are anticipated.

ORE RESERVES

Ore reserves are restricted to the area of concentrated exploration. They are hereinafter divided into two categories: drill proven - where several drill holes on 125-foot spacing locate and measure ore; drill probable - where more widely spaced drill holes locate but do not measure ore. Within the thrust zone individual ore intercepts are allowed a 50-foot extension. Outside the thrust zone individual ore intercepts are allowed a 100-foot extension. Reserves are estimated by the usual engineering techniques involving area distribution, geologic shape, thickness and grade, to arrive at a weighted average. Weighed cores suggest a tonnage factor of 10.6 cubic feet per ton, and we have used 11 cubic feet throughout. Dilution is taken into account with respect to the back and floor conditions at each intercept and is considered barren unless assayed. It is not segregated in the adjoined tables but can be seen to range from none to 100% averaging about 25%. The only ore body in which drilling is sufficient to approach delineation is the C-7 lense of the upper ore zone. Thus even within the main drilled area additions and subtractions can be expected for all the ore lenses.

In general reserves can be thought of as in two zones or layers and in several lenses in each zone. In the upper zone we have principal reserves in the C-7 lense, but ores occur at T-3, C-3, C-2 and C-4 drill holes. In the lower zone the principal reserves are in the T-18, T-12, and T-3 lenses but ore is present in the area of C-2 and P-3 drill holes as well.

To establish a cutoff grade for reserve estimation, we have used net smelter values per ton of ore and per unit of metal of:

Zn	=	$1.10
Pb	=	$1.40
Cu	=	$3.80
Ag	=	$1.00

The mining cutoff has been placed at $6.00 net smelter. If cutoff is raised, tonnage will be cut but grade increased. No studies at other cutoffs have been made.

There is consistency between averages for various parts of the deposit and between various classes of ore. Variation in values of intercepts within ore bodies is 2 to 3 times. We interpret this to mean that a high confidence factor may be attributed to these estimates at this stage of development. However, we do not consider that any drilled area such as this can be said to contain proven or measured ore in the usual mining sense.

Upper Ore Zone

A continuously mineralized zone trends from hole C-21 to hole T-3 bounded on the northeast and southwest by thrust faulting and probably offset south of C-21 - 22, and north of T-3 by high angle normal faulting. Most of the closely drilled reserves are in this zone. The zone probably extends northwest and southeast of the drilled area for several hundreds of feet.

Northeast of the main upper zone, drill holes encounter pods of ore within the thrust fault. Insufficient drilling has been done to delimit reserves. Southwest from the main upper zone the host rocks are cut out by thrust faulting. In my opinion the ultimate minable reserve in the upper zone will be double that now known.

Only the C-7 lense is considered drill proven. This lense is measured by nine holes which give the following data. A minimum thickness of 10 feet is used. Where back and floor conditions are good, no dilution is taken. In other cases, dilution is taken as shown.

C-7 Lense Proven Reserve

Hole	Thickness	% Zn	% Cu	% Pb	oz. Ag
C-23 - 4' dilution	20.0'	4.45	0.73	0.45	1.88
C-22 - 3' dilution	10.0'	6.60	0.78	nil	0.48
C-21 - no dilution	23.5'	3.10	0.67	nil	0.98
C-20 - no dilution	10.5'	9.40	0.21	nil	1.80
C-19 - no dilution	20.5'	5.44	1.60	0.10	0.57
C-15 - no dilution	37.5'	7.77	1.43	0.32	3.61
C-14 - no dilution	14.5'	3.76	1.82	0.10	4.83
C- 7 - no dilution	48.5'	8.75	1.13	nil	0.71
PX-1 - 7' dilution	14.0'	11.50	2.10	0.45	2.16
Weighted Average	22.0'	6.9	1.19	0.15	1.85

Using 11 cu. ft./1 ton, C-7 lense contains 393,000 tons.

Four holes penetrate ore lense that are not drilled in detail. These are drilled probable reserves as shown in the following table.

Drilled Probable Reserve

Hole	Thickness	Tons	% Zn	% Cu	% Pb	oz. Ag
T-3 - 2' dilution	10.0'	7,000	0.20	1.92	0.20	0.66
C-3 - 5' dilution	10.0'	28,000	4.10	0.80	nil	0.86
C-2 - 10' dilution (2 intercepts)	18.0'	34,000	12.50	2.02	0.67	2.83
C-4 - 3' dilution	13.0'	9,000	14.3	0.77	1.30	3.55
Total		78,000	8.6	1.43	0.46	2.01

Lower Ore Zone

Below the Brooke Thrust is a widespread tactite zone in limestone that contains three principal ore lenses (T-8, T-12, T-3). South of these lenses thick mineralized tactite is present but drilling is insufficient to locate or to measure ore. West of the T-12 - T-3 lense the tactite is thin and although mineralized, no ore is known. Northward the tactite mass is caught up in the Brooke Thrust. Ore is present in pods of undetermined size.

Based on drill intercepts, resistivity and I-P data, the probable size of the principal ore lenses is in my opinion double that now measured by drill holes. Furthermore, the lower tactite is probably several times as large as has been located by drilling and thus additional ore lenses may be expected.

Holes C-7, 19 and 22 which is Area B of the lower ore zone are spaced at 125 foot intervals and measure a portion of the T-12 lense. Proven reserves are shown in the attached table.

T-12 Lense
- Area B -

Hole	Thickness	% Zn	% Cu	% Pb	oz. Ag
C-7 - 5' dilution	10.0'	7.6	0.84	nil	0.65
C-19 - 5' dilution	10.0'	5.6	2.85	nil	1.20
C-22 - no dilution	12.0'	4.4	2.03	nil	2.18
Weighted Average	10.7'	5.8%	1.91%	nil	1.40 oz.

T-12 (B) lense is estimated to contain 56,000 tons of drilled proven ore.

Portions of three lenses are penetrated by widespread drill holes for which probable reserves are calculated. These are T-18, T-12 and T-3 lenses.

T-18 Lense
- Area A -

Hole	Thickness	% Zn	% Cu	% Pb	oz. Ag
T-18 no dilution	32.0'	7.4	0.40	nil	1.0
C-14 no dilution	18.5'	10.0	0.20	nil	1.4
Weighted Average	25.2'	8.4%	0.30%	nil	1.1 oz.

T-18 lense is estimated to contain 203,000 tons of drilled probable ore.

T-3 Lense
-Area D-

Hole	Thickness	% Zn	% Cu	% Pb	oz. Ag
T-3 - 2.5' dilution	16.0'	5.1	0.19	2.7	2.90
C-8 - no dilution	15.0'	7.8	1.03	nil	0.62
C-9 - 4' dilution	10.0'	nil	1.55	nil	1.06
Weighted Average	13.7'	4.8%	0.83%	1.0%	1.6 oz.

T-3 lense (Area D) is estimated to contain 116,000 tons of drilled probable ore.

T-12 Lense
- Area C -

Hole	Thickness	% Zn	% Cu	% Pb	oz. Ag
T-12 (1) 5' dilution	9.0'	10.7	0.55	3.2	3.8
(2) no dilution	15.0'	17.6	1.29	nil	1.07
C-10 - 2' dilution	12.0'	3.5	0.03	1.1	0.54
C-11 - no dilution	14.5'	1.34	2.15	nil	2.00
C- 3 - 5.5' dilution	9.0'	4.6	0.66	nil	0.42
C-13 - no dilution	12.5'	5.8	0.52	0.33	0.54
C- 9 - no dilution	13.5'	2.22	1.76	nil	0.72
Weighted Average	14.2'	6.6%	1.08%	0.5%	1.2 oz.

T-12 lense (Area C) is estimated to contain 340,000 tons drilled probable ore.

Two lenses are penetrated by single holes (C-2 & P-3) for which probable reserves are calculated.

C-2 Lense

Hole	Thickness	% Zn	% Cu	% Pb	oz. Ag
C-2 - 5.5' dilution	9.9'	3.1	0.76	nil	0.52

C-2 lense is estimated to contain 6000 tons of drilled probable ore.

P-3 Lense

Hole	Thickness	% Zn	% Cu	% Pb	oz. Ag
P-3 - no dilution	22.0'	13.7	0.37	nil	1.09

P-3 lense is estimated to contain 16,000 tons of drilled probable ore.

A tabulation of total ore reserves is given as follows:

CWT Property
Ore Reserve Tabulation
August 31, 1964

	Tons	(%) Zinc	(%) Copper	(%) Lead	(Ozs. per ton) Silver
"Drill" Proven Reserve:					
Upper Zone	393,000	6.9	1.19	0.15	1.85
Lower Zone	56,000	5.8	1.91	nil	1.40
"Drill" Probable Reserve:					
Upper Zone	78,000	8.6	1.43	0.46	2.01
Lower Zone	681,000	7.3	0.76	0.44	1.11
Sum Total Drilled Reserves	1,208,000	7.2	1.08	0.30	1.54

Respectfully submitted,

M. W. Cox

WESTERN KNAPP ENGINEERING
DIVISION OF ARTHUR G. McKEE & COMPANY
ENGINEERS AND CONTRACTORS
650 FIFTH STREET
SAN FRANCISCO, CALIF. 94107
CABLE ADDRESS
WKECO

November 3, 1964

Continental Materials Corporation
P.O. Box 1550
Grand Junction, Colorado

Attention: Mr. C. H. Reynolds,
General Superintendent

Subject: Preliminary Engineering Report and
Capital Cost Estimate for CWT Property,
Tucson, Arizona
WKE Job No. 908

Gentlemen:

In accordance with our agreement dated July 17, 1964, we are now submitting the attached report and order of magnitude estimate of capital cost for your anticipated 500 ton per day copper-zinc ore beneficiation plant near Tucson, Arizona. This report defines the scope and cost of the plant, together with a preliminary block diagram flowsheet based on laboratory test work conducted by the WEMCO Division of Arthur G. McKee and Co.

The plant cost for this facility has been estimated to be approximately $1,089,000. An order of magnitude estimate prepared in the manner followed for this study is usually considered to be accurate to within plus or minus 10 percent.

Since the ore samples tested were somewhat more refractory than anticipated and further necessary testing was precluded by the limited sample, available time and budget, the information in our report is necessarily preliminary. However, the informa-

tion and estimate developed are suitable for the purpose of evaluating the potential of your property within reasonable limits.

It is our opinion that representative samples of ore from this deposit should be subjected to continuous pilot plant testing to determine if better copper concentrate grade and recovery can be obtained.

We trust that the information presented fulfills your present requirements. In addition, we are available to assist you in further development of your program.

Very truly yours,
WESTERN KNAPP ENGINEERING
Division of Arthur G. McKee & Co.

R. K. Young,
Manager Engineering

DG:RKY:ch

COPPER-ZINC BENEFICIATION PLANT
CWT PROPERTY

PRELIMINARY ENGINEERING REPORT

prepared for
CONTINENTAL MATERIALS CORPORATION
Grand Junction, Colorado

November, 1964
WKE Report 908-1
Copy Number 4

WESTERN KNAPP ENGINEERING
Division of Arthur G. McKee & Company
San Francisco, California

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2. Summary

3. Process Description

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Equipment List
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Flowsheet

I. INTRODUCTION

The purpose of this report is to develop a flowsheet, equipment list, and order of magnitude capital cost estimate for the installation of facilities necessary to produce smelter grade copper concentrates and zinc concentrates from 500 tons per day of ore containing approximately 1% copper and 7-10% zinc.

The flowsheet and equipment selection is based on preliminary metallurgical test work done by the Wemco Division of Arthur G. McKee & Company.

Plant tonnages are based on mining five days per week, the crushing plant operating one shift per day, six days per week and the concentrator operating three shifts per day, seven days per week.

The estimated cost of the following facilities are included in this report:

All process facilities from a coarse ore receiving bin through the tailings thickener and product storage bins.

All process water systems from deep well pumping to head water tanks and mill, including return water from process thickeners.

All electrical power systems from the low voltage side of the power company's transformer to the process facilities.

Sample Preparation and Assay Laboratory.

Fire Protection System.

The cost of the following facilities are not included in the estimate:

Change House and Office

Sanitary Sewer System

Yard Paving and Grading

Tailings Disposal and Dam

Access Roads

Ore Haul Road

Domestic Water Supply

Machine Shop

Warehouse

Garage

Primary Electrical Substation

Reagents, Operating Supplies, and Spare Parts.

2. SUMMARY

Basis of Estimate

The order of magnitude capital cost for this copper-zinc beneficiation plant is estimated at $1,089,000.

This estimate is based upon the following:

1. Preliminary metallurgical test results from the Wemco Laboratory.
2. Treatment of variable and/or complex ore types requiring a great degree of flexibility in the flowsheet.
3. Comparable past job experience.
4. Actual 1963-64 equipment costs for items of a similar size and duty as taken from past job records.
5. Utilization of sub-contractors for the electrical work.
6. Topographic map furnished by Continental Materials Corporation which indicate a comparatively flat plant site.

Discussion and Comments

The flowsheet and capital cost estimate included with this report are based primarily upon preliminary laboratory test work conducted on two ore samples submitted August 11, 1964 and designated as Lot No. 1 and Lot No. 2. Results of testing

Lot No. 1 indicated that this material is particularly refractory and does not respond readily to conventional treatment. Some specialized methods, including regrinding of a copper middling concentrate and other reagent combinations, are indicated for this ore. Lot No. 2 responds more readily to conventional treatment, although some specialized processing might be indicated in order to improve copper recovery. The flowsheet was therefore designed for treatment of either or both types of ore, allowing flexibility in the copper flotation circuit for regrinding of all copper concentrates or intermediate concentrate products as dictated by the ore type received.

We strongly recommend that further test work on a pilot plant scale should be carried out to determine if better copper concentrate grade and recovery can be obtained. The apparent difficulty is in the separation of zinc from the copper concentrate when attempting to make a higher copper recovery. It is our opinion that the copper and zinc are intimately associated and difficult to separate.

The estimate and plant design presented in this report are suitable for the purpose of analyzing the potential of this property, so that a decision can be reached regarding the merit of pursuing further investigation of this project.

Comparative tabulations of test results together with details of testing are shown in the Appendix of this report.

The data shown represent a series of tests conducted on Lot Nos. 1 and 2. Test No. 1 on Lot No. 1 was an exploratory type of test using normal reagent quantities and flotation procedures. Test No. 2 was the result of increasing Reagent 404 in order to improve copper recovery. Test 3 was a repeat of Test 2 except plantsite water was used. Test 4 was the result of regrinding copper rougher concentrates to about 95% minus 325 mesh and cleaning twice. Test 5 was the result of a two-stage copper rougher float in which concentrate "A" was made during the first two minutes of flotation and concentrate "B" was made during the final four minutes of flotation. These concentrates were not reground or cleaned.

Test No. 1 on Lot No. 2 was also exploratory in nature, using normal reagent quantities and flotation procedures. Test 2 was the result of increasing copper and zinc rougher flotation times from 3 to 5 and 4 to 6 minutes respectively in order to improve recoveries. Test 3 was a repeat of Test 2 except plantsite water was used. No further testing of Lot No. 2 was undertaken.

In the comparative tabulations, the copper and zinc recoveries shown represent the distribution of copper and zinc in the rougher concentrates. Concentrate grades shown in all tests with the exception of Lot 1, Series 5 are assays of final cleaned concentrate. Concentrate grades shown for Lot 1, Series 5 are assays of a two minute rougher and a four minute middling copper concentrate.

3. PROCESS DESCRIPTION

Crushing Plant

Ore as received from the mine will be dumped into a 500 ton coarse ore storage bin. A 36 in. wide x 18 ft apron feeder will withdraw the ore from the bin and discharge into an 18 x 32 inch jaw crusher set at 3-1/2 in. Product from the jaw crusher will be transported by a 30 inch wide conveyor to a 4 wide x 8 ft long single deck vibrating screen. A magnet over the belt provides for tramp iron removal. The screen will make a size separation at 3/4 inch with the oversize material being fed to a 4 ft standard cone crusher. Two 24 in. wide conveyor belts will transport combined cone crusher product and screen undersize to a fine ore storage bin having 1000 tons of live capacity.

A dust collection system will be provided, utilizing a wet collector. Dust slurry will be pumped to the mill grinding circuit.

Grinding Plant

Ore from the 1000 ton bin will be withdrawn by two feeder belts, transferred to the ball mill feed conveyor, and sent to a 10 x 10 ft ball mill for wet grinding. A belt scale will control and record the rate and total tonnage fed to the ball mill.

The ball mill discharge will be pumped to 10 inch hydraulic cyclones operating in closed circuit with the ball mill. Cyclone underflow will be fed to the ball mill scoop box. Cy-

clone overflow will be sampled automatically and laundered to the copper rougher flotation section.

Copper Flotation and Filtration

Rougher copper flotation will consist of six 40 cu ft machines operating in series. These machines will be equipped with a launder system which provides for the following alternate flows:

1. All rougher concentrates laundered to the first copper cleaners.

2. All rougher concentrates laundered to the copper regrind circuit.

3. First rougher cell concentrate laundered to the final concentrate sampler, second and third rougher cell concentrate laundered to the first copper cleaners, and concentrates from the remaining three cells laundered to the copper regrind circuit.

4. Any combination of flows shown in 3 above which achieve desired results.

The copper rougher concentrates selected for regrinding will be pumped to hydraulic cyclones operating in closed circuit with a regrind ball mill. Ball mill discharge is returned to the cyclone feed pump. Cyclone overflow, or reground concentrate will be returned to the head of copper rougher flotation. The copper rougher concentrates selected for cleaning will flow by gravity to the first of two 12 cu ft flotation machines for first stage cleaning. First stage cleaner tailings will be sent to the regrind circuit or to copper rougher flotation. First cleaner concentrates will be laundered to one 12 cu ft flotation machine for second stage cleaning. Second cleaner tailings will be returned to first cleaner flotation.

Second cleaner concentrate will be sampled automatically and pumped to an 18 ft diameter copper concentrate thickener. Thickener underflow will be pumped to a 4 ft diameter, three disc filter and final copper concentrate will be loaded into a bin for shipment.

Zinc Flotation and Filtration

Copper rougher tailings will be pumped to a 10 ft diameter x 10 ft deep conditioner ahead of zinc flotation. The conditioner overflow will feed the first of six 40 cu ft zinc rougher flotation machines operating in series. Zinc rougher concentrate will be laundered to the first of four 12 cu ft flotation machines for first stage cleaning. Zinc first cleaner concentrates will be laundered to the first of two 12 cu ft flotation machines for second stage cleaning. Zinc first cleaner tailings will be returned to the rougher flotation circuit and second cleaner tailings will be returned to the first cleaner flotation circuit.

Second cleaner concentrate will be sampled automatically and pumped to a 25 ft diameter zinc concentrate thickener. The thickener underflow will be pumped to a 4 ft diameter 4 disc filter, and final zinc concentrate will be loaded into a bin for shipment.

Tailing Disposal

Zinc rougher tailing will be sampled automatically and pumped to a 75 ft diameter tailing thickener. Tailing thickener underflow will be pumped and laundered to the tailings disposal area.

(Appendix)

EQUIPMENT LIST

Flowsheet No.	Description	Connected hp
Crushing Section		
005	Coarse Ore Bin - 500 ton capacity	
010	Apron Feeder - 36" x 18'	5
015	Jaw Crusher - 18" x 32"	60
020	30" Belt Conveyor	5
025	Tramp Iron Magnet	
030	Vibrating Screen - 4' x 8'	7-1/2
035	Cone Crusher - 4' std.	100
040	24" Belt Conveyor	5
045	24" Belt Conveyor	5
050	Fine Ore Storage Bin (1000 Ton live capacity)	

(Appendix)

Flowsheet No.	Description	Connected hp
055	30" Belt Feeder	3
060	30" Belt Feeder	3
065	24" Belt Conveyor	3
070	Belt Scale	
080	Overhead Service Crane (10 Ton Capacity)	
085	Wet Dust Collector	25
090	Dust Slurry Sump & Pump	5
095	Sump Pump	5
Grinding Section		
100	Ball Mill - 10' diameter x 10' long	500
105	Sump & Pump	15
110;111	2-Cyclone Classifiers - 10" diameter	
115	Sampler	1/2
Copper Flotation, Regrind & Filtration Section		
120	Rougher Flotation Machines - 6, 40 cu ft cells	30
125	1st cleaner Flotation Machines - 2, 12 cu ft cells	3

(Appendix)

Flowsheet No.	Description	Connected hp
130	2nd cleaner Flotation Machines - 1, 12 cu ft cell	2
135	Sampler	1/2
140	Sump & Pump	3
145	Concentrate Thickener - 18' diameter	2
150	Diaphragm Pump - 3" Simplex	1
155	Concentrate Filter - 4' diameter, 3 disc	2
160	Vacuum Pump	20
165	Filtrate Pump	2
170	Filtrate Receiver	
175	Moisture Trap	
180	Concentrate Bin	
185	Sump & Pump	5
190; 195	2-Cyclone Classifiers - 6" diameter	
200	Regrind Ball Mill	20

(Appendix)

Flowsheet No.	Description	Connected hp
Zinc Flotation & Filtration Section		
205	Sump & Pump	5
210	Conditioner - 10' dia. x 10' deep	7-1/2
215	Rougher Flotation Machines - 6, 40 cu ft cells	30
220	1st cleaner Flotation Machines - 4, 12 cu ft cells	6
225	2nd cleaner Flotation Machines - 2, 12 cu ft cells	3
230	Sampler	1/2
235	Sump & Pump	3
240	Concentrate Thickener	2
245	Diaphragm Pump - 3" Simplex	1
250	Concentrate Filter - 4' diameter, 4 disc	2
255	Vacuum Pump	25
260	Filtrate Pump	2
265	Filtrate Receiver	
270	Moisture Trap	
275	Concentrate Bin	
305	Overhead Service Crane	

(Appendix)

Flowsheet No.	Description	Connected hp
310	Wet Dust Collector	25
315	Dust Slurry Pump	3
320-322	Sump Pumps (3)	15
Tailings Disposal Section		
280	Sampler	1/2
285	Sump & Pump	5
290	Tailing Thickener - 75' diameter	3
295	Diaphragm Pump - 5" Duplex	5
Miscellaneous Equipment		
325	Instrumentation	
330	Compressed Air Service	50
335	Return Water Pump	10
340	Deep Well Pump	25
345; 346	Mill Water Head Tanks	
350	Fire Pump	
360-386	Reagent Equipment, Tanks & Pumps	35

(Appendix)

Flowsheet No.	Description	Connected hp
390	Laboratory & Sample Preparation Equipment	10
395	Front End Loader	
400	Fork Lift Truck	

Buildings and Miscellaneous Areas

075	Crusher Building	
300	Concentrator Building	
355	Ball Handling & Storage	
405	Piping	
410	Electrical	

SUMMARY OF TOTAL PROJECT COST

Item	Total Cost
Total Direct Cost	$ 729,000
Indirect Cost, incl. Field Expense (office labor, utilities, telephone, supplies, supervision, tools and equipment, temporary construction, social security taxes, W.C., P.L., and P.D. Ins.), Engineering, and Construction Fee	308,000
Contingency	52,000
Total Estimated Project Cost:	$1,089,000

SUMMARY OF DIRECT COSTS

Description	Total Cost Material and Labor
Crushing Section, incl. Fine Ore Storage	$225,200
Grinding Section	166,700
Copper Flotation, Regrind and Filtration Section	55,200
Zinc Flotation and Filtration Section	53,000
Tailing Disposal Section	54,000
Buildings and Miscellaneous Equipment	174,900
Total Direct Cost:	$729,000

LABORATORY TEST RESULTS

Summary Tabulations

Detailed Test Results

LABORATORY FLOTATION TEST RESULTS

CWT PROPERTY

TUCSON, ARIZONA

LOT NO. 1

HEADING	SERIES NO. 1	SERIES NO. 2	SERIES NO. 3	SERIES NO. 4	SERIES NO. 5 RO. CONC.	SERIES NO. 5 MIDD. CONC.
% Copper	1.21	1.21	1.21	1.21	1.21	
% Zinc	7.12	7.12	7.12	7.12	7.12	
% Copper (Calc)	1.21	1.14	1.21	1.17	1.17 *	
% Zinc (Calc)	7.31	7.11	7.15	7.04	7.04 *	
ROUGHER TAILING						
% Copper	0.20	0.11	0.13	0.26	Not Assayed	
% Zinc	0.86	0.51	0.50	6.53		
% Wt. + 200 Mesh	12.4	12.4	12.4	12.4		
pH	9.1	10.5	9.4	7.8		
COPPER CONCENTRATE						
% Copper	25.59	22.54	17.68	20.36	27.41	10.65
% Zinc	9.59	15.50	25.04	20.80	4.80	19.44
% Copper Recovery	70.7	81.0	78.9	79.1	53.7	24.6
% Zinc Recovery	4.5	9.6	19.2	12.6	1.6	7.5
ZINC CONCENTRATE						
% Copper	1.41	0.86	1.36	Zinc Float Not Conducted	Not Assayed	
% Zinc	58.67	58.77	55.74			
% Copper Recovery	15.7	11.2	12.4			
% Zinc Recovery	85.8	84.6	75.2			
REAGENTS (lb/ton)						
Soda Ash	0.50	0.50	1.50	0.50	0.50	
Zinc Sulfate	0.80	0.80	0.80	0.80	0.90	
Aero Cyanide	0.40	0.40	0.40	0.40	0.40	
Thiocarbanalide 130	0.22	0.22	0.22	0.22	0.22	
Reagent 404	0.01	0.02	0.02	0.02	0.02	
Reagent 194	0.002	0.002	0.002	0.002	0.002	
Copper Sulfate	0.80	0.80	0.80	0.80	0.80	
Sodium Aerofloat	0.20	0.20	0.20	0.20	0.20	
Dowfroth 250	0.45	0.34	0.17	0.29	0.31	
Lime	3.60	7.20	8.20	--	--	

* ASSUMED SAME CALC. HEADING AS SERIES 4 FOR CALCULATING ESTIMATED DISTRIBUTION.

(Appendix)

LABORATORY FLOTATION TEST RESULTS

LOT NO. 2

HEADING	SERIES NO. 1	SERIES NO. 2	SERIES NO. 3
% Copper	1.01	1.01	1.01
% Zinc	9.95	9.95	9.95
% Copper (Calc)	1.00	1.11	0.99
% Zinc (Calc)	9.91	10.15	9.59
ROUGHER TAILING			
% Copper	0.08	0.21	0.04
% Zinc	1.67	1.77	1.11
% Wt. +200 Mesh	12.4	12.4	12.4
pH	9.3	10.5	8.5
COPPER CONCENTRATE			
% Copper	21.38	19.54	19.33
% Zinc	5.70	8.84	10.70
% Copper Recovery	73.9	77.9	88.2
% Zinc Recovery	2.1	4.6	5.5
ZINC CONCENTRATE			
% Copper	1.11	0.38	0.46
% Zinc	55.74	59.98	58.77
% Copper Recovery	19.9	7.5	8.7
% Zinc Recovery	84.0	82.0	85.5
REAGENTS (lb. / ton)			
Soda Ash	0.50	0.50	1.50
Zinc Sulfate	0.80	0.80	0.80
Aero Cyanide	0.40	0.40	0.40
Thiocarbanalide 130	0.22	0.22	0.22
Reagent 404	0.01	0.01	0.01
Reagent 194	0.002	0.002	0.002
Copper Sulfate	0.80	0.80	0.80
Sodium Aerofloat	0.20	0.20	0.20
Dowfroth 250	0.10	0.12	0.10
Lime	3.6	4.6	6.0

LABORATORY FLOTATION TEST
CWT PROPERTY
LOT NO. 1 TEST NO. 1

CONDITIONS AND REAGENTS

Point of Addition	Conditions			Reagents Pounds Per Ton								
	Time Mins.	% Solids	pH	Soda Ash	Z	A	404	Lime	C	S. A.	250	130
Rod Mill	15	60		0.5	0.8	0.4						.22
Cu Cond.	3	34	8.0				.01				.051	
Cu Rougher	6	30	8.0								.189	
Cu Cleaner	2-1/2		8.0								.034	
Zn Cond.	12	29	9.3					3.0	0.8	0.2		
Zn Rougher	6		9.1								.138	
Zn Cleaner	4		10.1								.034	

Remarks: Z - Zinc sulphate
A - Aero Cyanide
130 - Thiocarbanilide 130
404 - Reagent 404
C - Copper Sulphate
S. A. - Sodium Aerofloat
250 - Dowfroth 250

METALLURGICAL PRODUCTS

Product	% WT	Assays				Units		% of Total				
		Cu	Pb	Zn	Ag	Cu	Zn	Cu	Zn	Ag		
Ro. Tail	82.4	0.20		0.86	0.38	.165	.709	13.6	9.7			
Cu Cl. Conc.	3.3	25.59		9.59	25.04	.844	.316	69.7	4.3			
Cu Cl. Tail	0.9	1.31		1.67	-	.012	.015	1.0	.2			
Zn Cl. Conc.	10.3	1.41		58.67	2.34	.145	6.043	12.0	82.7			
Zn Cl. Tail	3.1	1.46		7.22	2.80	.045	.224	3.7	3.1			
TOTAL	100.0					1.211	7.307					
Assay Head		1.21		7.12	1.32							

LABORATORY FLOTATION TEST
CWT PROPERTY
LOT NO. 1 TEST NO. 2

CONDITIONS AND REAGENTS

Point of Addition	Conditions			Reagents Pounds Per Ton								
	Time Mins.	% Solids	pH	Soda Ash	Z	A	404	Lime	C	S. A.	250	130
Rod Mill	15	60		0.5	0.8	0.4						.22
Cu Cond.	3	34	8.0				.02				.17	
Cu Rougher	6	30									.10	
Cu Cleaner	2-1/2										.017	
Zn Cond.	12	29	10.3					6.0	0.8	0.2		
Zn Rougher	6		10.5					0.6			.034	
Zn Cleaner	4							0.6			.017	

Remarks: Z - Zinc sulphate
A - Aero Cyanide
130 - Thiocarbanilide 130
404 - Reagent 404
C - Copper Sulphate
S. A. - Sodium Aerofloat
250 - Dowfroth 250

METALLURGICAL PRODUCTS

Product	% WT	Assays				Units		% of Total				
		Cu	Pb	Zn	Ag	Cu	Zn	Cu	Zn	Ag		
Ro. Tail	80.7	0.11		0.51	0.46	.089	.412	7.8	5.8			
Cu Cl. Conc.	4.0	22.54		15.50	20.90	.902	.620	79.1	8.7			
Cu Cl. Tail	1.6	1.36		3.89	2.32	.022	.062	1.9	0.9			
Zn Cl. Conc.	9.9	0.86		58.77	1.36	.085	5.818	7.5	81.9			
Zn Cl. Tail	3.8	1.11		5.17	2.04	.042	.196	3.7	2.7			
TOTAL	100.0					1.140	7.108					
Assay Head		1.21		7.12	1.32							

LABORATORY FLOTATION TEST
CWT PROPERTY
LOT NO. 1 TEST NO. 3

CONDITIONS AND REAGENTS

Point of Addition	Conditions			Reagents Pounds Per Ton								
	Time Mins.	% Solids	pH	Soda Ash	Z	A	404	Lime	C	S. A.	250	130
Rod Mill	15	60		.50	0.8	0.4						0.22
Cu Cond.	3	34	7.9	.75			.02				.103	
Cu Rougher	6	30	7.8								.034	
Cu Cleaner	2-1/2		8.4								.017	
Zn Cond.	12	29	9.8					7.0	0.8	0.2		
Zn Rougher	6		9.8									
Zn Cleaner	4		10.2					1.2			.017	

Remarks:
Z - Zinc sulphate
A - Aero Cyanide
130 - Thiocarbanilide 130
404 - Reagent 404
C - Copper Sulphate
S. A. - Sodium Aerofloat
250 - Dowfroth 250

METALLURGICAL PRODUCTS

Product	% WT	Assays				Units		% of Total				
		Cu	Pb	Zn	Ag	Cu	Zn	Cu	Zn	Ag		
Ro. Tail	80.4	0.13		0.50	0.30	.105	.402	8.7	5.6			
Cu Cl. Conc.	5.3	17.68		25.04	16.72	.937	1.327	77.7	18.6			
Cu Cl. Tail	1.0	1.46		4.29	3.40	.015	.043	1.2	0.6			
Zn Cl. Conc.	9.4	1.36		55.74	2.48	.128	5.240	10.6	73.3			
Zn Cl. Tail	3.9	0.53		3.53	1.02	.021	.138	1.8	1.9			
TOTAL	100.0					1.206	7.150					
Assay Head		1.21		7.12	1.32							

LABORATORY FLOTATION TEST
CWT PROPERTY
LOT NO. 1 TEST NO. 4
CONDITIONS AND REAGENTS

Point of Addition	Conditions			Reagents Pounds Per Ton								
	Time Mins.	% Solids	pH	Soda Ash	Z	A	404	Lime	C	S. A.	250	130
Rod Mill	15	60	7.8	0.5	0.8	0.4						0.22
Cu Cond.	3	34	7.8				0.02				0.17	
Cu Rougher	6										0.12	
Ro. Cu Conc. To BM	6				.05							
1st Cu Clean.	5		7.7									
2nd Cu Clean.	2-1/2		7.1		.05							

Remarks: Z - Zinc sulphate
A - Aero Cyanide
130 - Thiocarbanilide 130
404 - Reagent 404
C - Copper Sulphate
S. A. - Sodium Aerofloat
250 - Dowfroth 250

METALLURGICAL PRODUCTS

Product	% WT	Assays				Units		% of Total				
		Cu	Pb	Zn	Ag	Cu	Zn	Cu	Zn	Ag		
Ro. Tail	94.2	0.26		6.53		.245	6.151	20.9	87.4			
2nd Cl. Conc.	3.7	20.36		20.80		.753	.770	64.2	10.9			
2nd Cl. Tail	0.6	20.51		12.32		.123	.074	10.5	1.1			
1st Cl. Tail	1.5	3.45		3.03		.052	.045	4.4	0.6			
TOTAL	100.0					1.173	7.040					
Assay Head		1.21		7.12	1.32							

NOTE: Above test conducted for copper flotation circuit only. Copper rougher concentrate reground before cleaning.

LABORATORY FLOTATION TEST
CWT PROPERTY
LOT NO. 1 TEST NO. 5

CONDITIONS AND REAGENTS

Point of Addition	Conditions			Reagents Pounds Per Ton								
	Time Mins.	% Solids	pH	Soda Ash	Z	A	404	Lime	C	S. A.	250	130
Rod Mill	15	60	8.2	0.5	0.8	0.4						0.22
Cu Cond.	3	34					0.02				0.17	
Cu Ro. Float. A	2										0.06	
Cu Ro. Float. B	4										0.06	
Zn Cond.	12		10.0					6.0	0.8	0.20		
Zn Rougher	6		9.9									
Zn Cleaner	4							0.6				

Remarks: Z - Zinc sulphate
A - Aero Cyanide
130 - Thiocarbanilide 130
404 - Reagent 404
C - Copper Sulphate
S. A. - Sodium Aerofloat
250 - Dowfroth 250

METALLURGICAL PRODUCTS

Product	% WT	Assays				Units		% of Total				
		Cu	Pb	Zn	Ag	Cu	Zn	Cu	Zn	Ag		
Ro. Tail	81.8											
Ro. Conc. A	2.3	27.41		4.80		.630	.110	53.7	1.6			
Ro. Conc. B	2.7	10.65		19.44		.288	.525	24.6	7.5			
Zn Cl. Conc.	10.1											
Zn Cl. Tail	3.1											
TOTALS						*1.173	*7.040					
Assay Head		1.21		7.12	1.32							

NOTE: Copper rougher float produced a 2 minute rougher concentrate and a 4 minute middling concentrate. Concentrates were not cleaned. Zinc circuit products were not assayed.

* Estimated for purposes of calculating estimated distribution.

LABORATORY FLOTATION TEST
CWT PROPERTY
LOT NO. 2 TEST NO. 1

CONDITIONS AND REAGENTS

Point of Addition	Conditions			Reagents Pounds Per Ton								
	Time Mins.	% Solids	pH	Soda Ash	Z	A	404	Lime	C	S. A.	250	130
Rod Mill	11	60		0.5	0.8	0.4						0.22
Cu Cond.	3	33	7.9				.01				.103	
Cu Rougher	3	33	7.8									
Cu Cleaner	4		7.9									
Zn Cond.	12		9.6					3.0	0.8	0.20		
Zn Rougher	4		9.3									
Zn Cleaner	3		10.5					0.6				

Remarks: Z - Zinc sulphate
A - Aero Cyanide
130 - Thiocarbanilide 130
404 - Reagent 404
C - Copper Sulphate
S. A. - Sodium Aerofloat
250 - Dowfroth 250

METALLURGICAL PRODUCTS

Product	% WT	Assays				Units		% of Total				
		Cu	Pb	Zn	Ag	Cu	Zn	Cu	Zn	Ag		
Ro. Tail	76.6	0.08		1.67	0.19	.061	1.279	6.2	12.9			
Cu Cl. Conc.	3.3	21.38		5.70	28.10	.706	.188	70.7	1.9			
Cu Cl. Tail	1.2	2.66		10.00	-	.032	.120	3.2	1.2			
Zn Cl. Conc.	14.5	1.11		55.74	0.76	.161	8.082	16.1	81.5			
Zn Cl. Tail	4.4	0.86		5.55	1.58	.038	.244	3.8	2.5			
TOTALS	100.0					.998	9.913					
Assay Head		1.01		9.95	1.37							

LABORATORY FLOTATION TEST
CWT PROPERTY
LOT NO. 2 TEST NO. 2

CONDITIONS AND REAGENTS

Point of Addition	Conditions			Reagents Pounds Per Ton								
	Time Mins.	% Solids	pH	Soda Ash	Z	A	404	Lime	C	S. A.	250	130
Rod Mill	11	60		0.5	0.8	0.4						0.22
Cu Cond.	3	33	8.0				0.01				0.10	
Cu Rougher	5	33										
Cu Cleaner	4										0.02	
Zn Cond.	12		10.5					4.0	0.8	0.2		
Zn Rougher	6											
Zn Cleaner	4		10.5					0.6				

Remarks: Z - Zinc sulphate
A - Aero Cyanide
130 - Thiocarbanilide 130
404 - Reagent 404
C - Copper Sulphate
S. A. - Sodium Aerofloat
250 - Dowfroth 250

METALLURGICAL PRODUCTS

Product	% WT	Assays				Units		% of Total				
		Cu	Pb	Zn	Ag	Cu	Zn	Cu	Zn	Ag		
Ro. Tail	77.0	0.21		1.77	0.33	.162	1.363	14.6	13.4			
Cu Cl. Conc.	4.3	19.54		8.84	17.68	.840	.380	75.7	3.8			
Cu Cl. Tail	0.8	3.16		9.95	-	.025	.080	2.2	0.8			
Zn Cl. Conc.	13.4	0.38		59.98	0.76	.051	8.037	4.6	79.2			
Zn Cl. Tail	4.5	0.71		6.36	0.84	.032	.286	2.9	2.8			
TOTALS	100.0					1.110	0.146					
Assay Head		1.01		9.95	1.37							

LABORATORY FLOTATION TEST
CWT PROPERTY
LOT NO. 2 TEST NO. 3

CONDITIONS AND REAGENTS

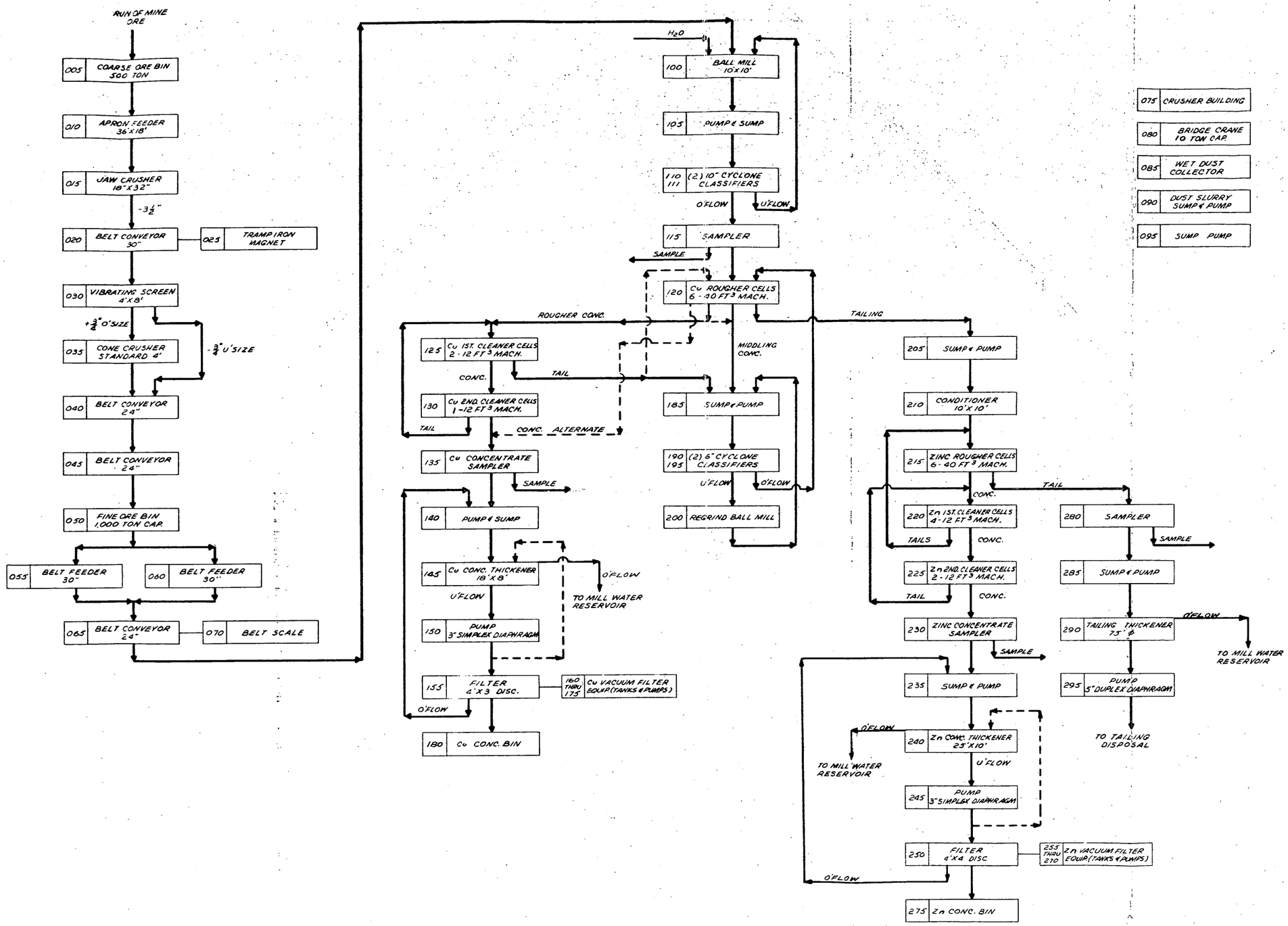
Point of Addition	Conditions			Reagents Pounds Per Ton								
	Time Mins.	% Solids	pH	Soda Ash	Z	A	404	Lime	C	S. A.	250	130
Rod Mill	11	60		1.00	0.8	.4						.22
Cu Cond.	3	33	8.0	0.25			.01				.103	
Cu Rougher	5	33	7.9									
Cu Cleaner	4		8.5	0.25								
Zn Cond.	12		10.2					5.0	0.8	0.2		
Zn Rougher	6											
Zn Cleaner	4		10.3					1.0				

Remarks:
Z - Zinc sulphate
A - Aero Cyanide
130 - Thiocarbanilide 130
404 - Reagent 404
C - Copper Sulphate
S. A. - Sodium Aerofloat
250 - Dowfroth 250

METALLURGICAL PRODUCTS

Product	% WT	Assays				Units		% of Total				
		Cu	Pb	Zn	Ag	Cu	Zn	Cu	Zn	Ag		
Ro. Tail	77.7	0.04		1.11	0.11	.031	.862	3.1	9.0			
Cu Cl. Conc.	4.4	19.33		10.70	25.56	.851	.471	85.9	4.9			
Cu Cl. Tail	0.8	2.88		7.42	6.20	.023	.059	2.3	0.6			
Zn Cl. Conc.	13.6	0.46		58.77	0.86	.063	7.993	6.4	83.4			
Zn Cl. Tail	3.5	0.66		5.81	1.44	.023	.203	2.3	2.1			
TOTAL	100.0					.991	9.588					
Assay Head		1.01		9.95	1.37							

FLOWSHEET



075	CRUSHER BUILDING
080	BRIDGE CRANE 10 TON CAP.
085	WET DUST COLLECTOR
090	DUST SLURRY SUMP & PUMP
095	SUMP PUMP

300	CONCENTRATOR BLDG
305	BRIDGE CRANE 10 TON CAP.
310	WET DUST COLLECTOR
315	DUST SLURRY SUMP & PUMP
320	SUMP PUMP
325	INSTRUMENTATION
330	COMPRESSED AIR SERVICE
335	RETURN WATER PUMP
340	DEEP WELL PUMP
345 346	(2) MILL WATER HEAD TANKS
350	FIRE PUMP
355	BALL HANDLING EQUIPMENT
360 THRU 386	REAGENT EQUIPT. "TANKS & PUMPS"
390	LAB. & SAMPLE PREPARATION EQUIP
395 400	FRONT END LOADER FORK LIFT TRUCK

COPPER-ZINC CONCENTRATOR
FLOWSHEET
CRUSHING, GRINDING & FLOTATION

REVISIONS	DESCRIPTION	BY	CK.	DATE

REFERENCES

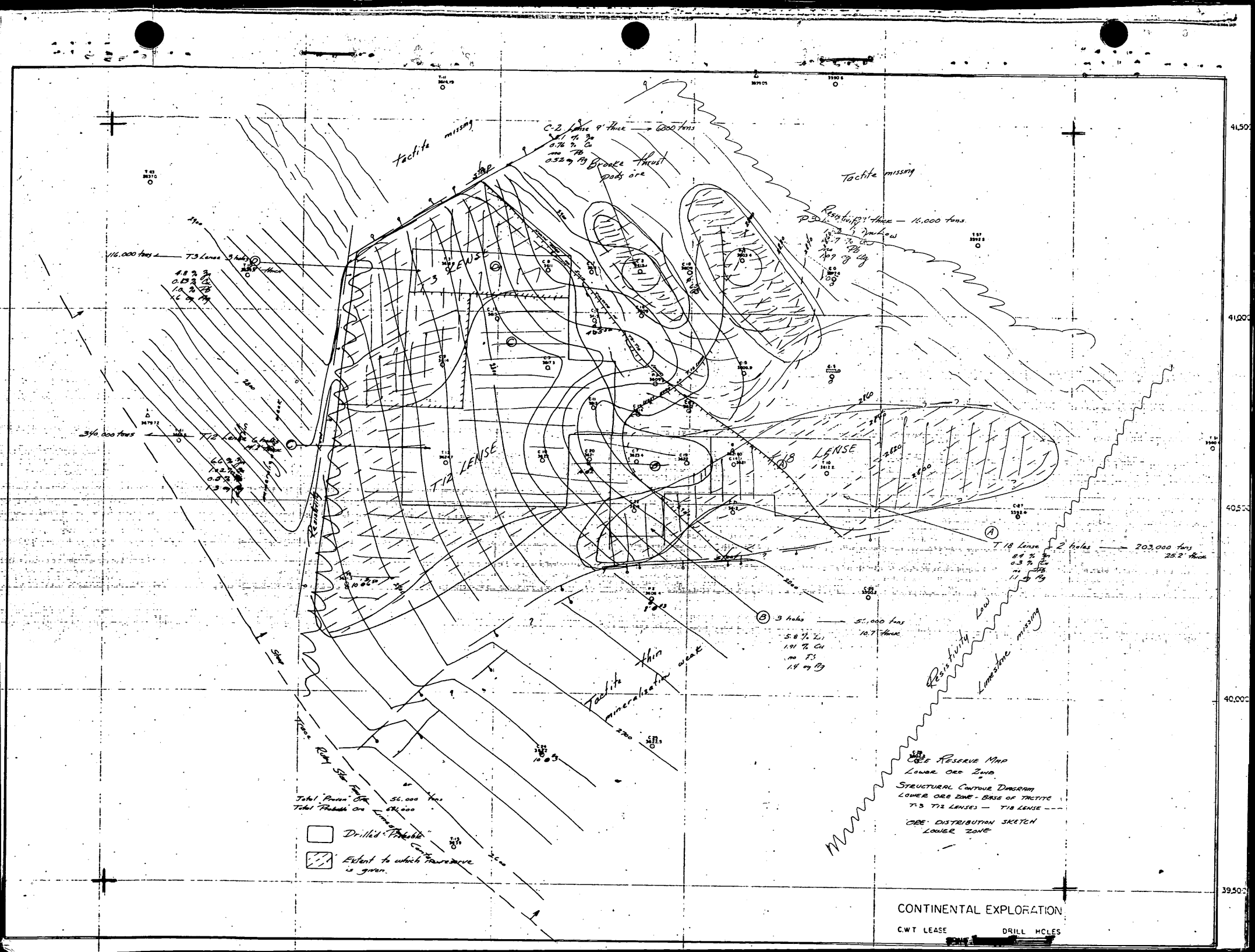
		DATE
DRAWN BY		10-10-64
CHECKED		10-19-64
APPROVED		10-22-64

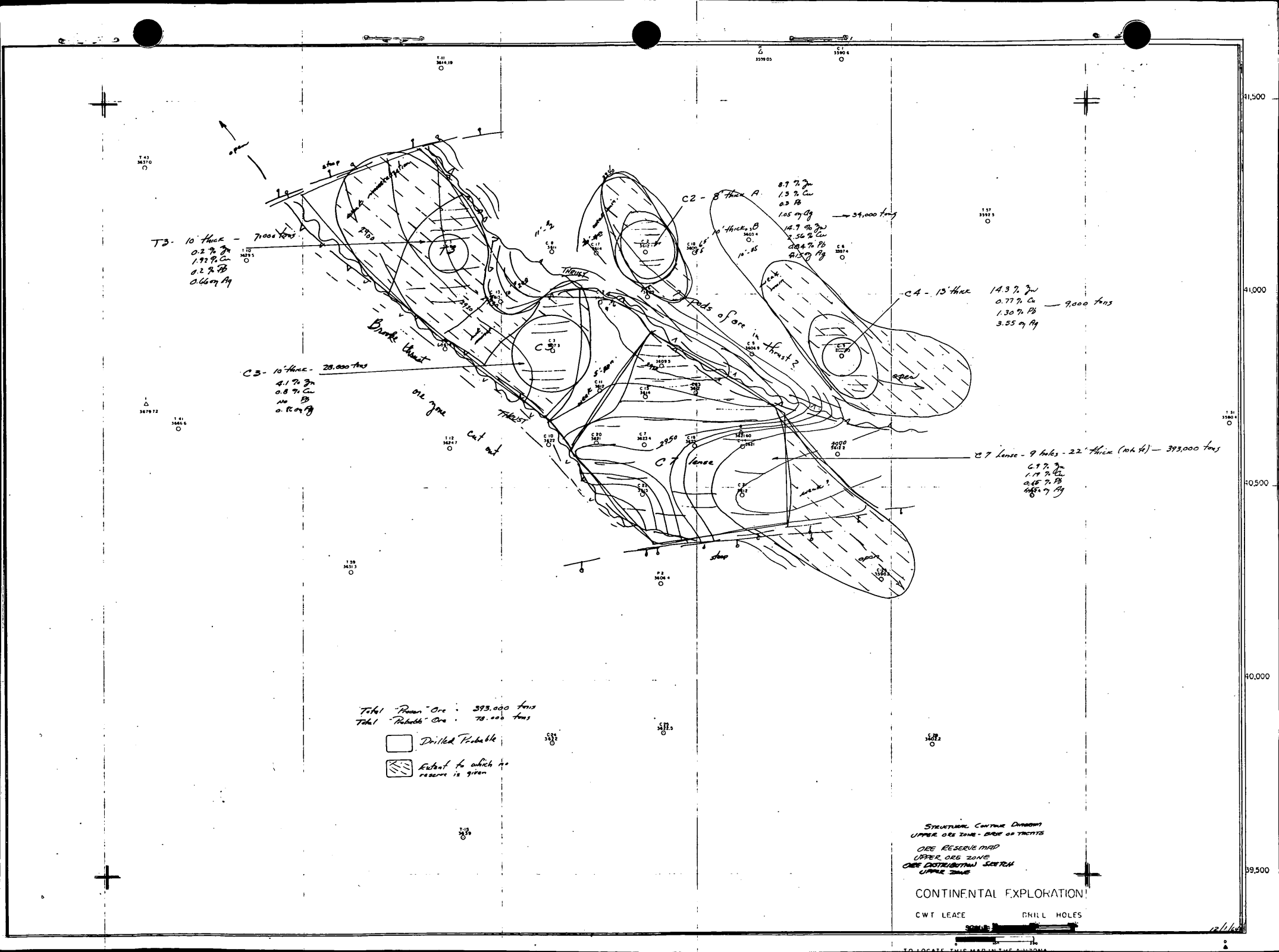
WESTERN KNAPP ENGINEERING CO.
DIVISION OF ARTHUR G. McKEE & CO.
ENGINEERS CONSTRUCTORS
SAN FRANCISCO CALIFORNIA

CONTINENTAL MATERIALS CORP.
GRAND JUNCTION COLORADO

SCALE ~ | 908-1M | REV. 0

PRINTED ON 8½"X11" NO. 1922 CLEARPRINT


Tactite missing
C-2 Lense 9' thick → 6000 tons
Brooke Thrust
pods ore
Tactite missing
Resistivity low
116,000 tons — T3 Lense
T3 LENSE
340,000 tons — T12 Lense
T12 LENSE
T18 LENSE
T18 Lense 2 holes — 203,000 tons
25.2' thick
3 holes — 51,000 tons
10.7' thick
Resistivity low
Limestone missing
Tactite thin mineralization weak
Total "Proven" Ore 56,000 tons
Total "Probable" Ore 671,000
Drilled "Probable"
Extent to which reserve is given
ORE RESERVE MAP
LOWER ORE ZONE
STRUCTURAL CONTOUR DIAGRAM
LOWER ORE ZONE - BASE OF TACTITE
T-3 T12 LENSES — T18 LENSE ---
ORE DISTRIBUTION SKETCH
LOWER ZONE
CONTINENTAL EXPLORATION
C.W.T. LEASE
DRILL HOLES


T3 - 10' thick - 71000 tons
0.2 % Zn
1.92 % Cu
0.2 % Pb
0.66 oz Ag
C2 - 8' thick A
8.7 % Zn
1.3 % Cu
0.3 Pb
1.05 oz Ag
34,000 tons
14.7 % Zn
2.56 % Cu
0.84 % Pb
4.15 oz Ag
10' thick B
C4 - 13' thick
14.3 % Zn
0.77 % Cu
1.30 % Pb
3.55 oz Ag
9,000 tons
C3 - 10' thick - 28,000 tons
4.1 % Zn
0.8 % Cu
no Pb
0.12 oz Ag
C7 lense - 9 holes - 22' thick (10 ft) - 393,000 tons
6.9 % Zn
1.19 % Cu
0.15 % Pb
0.54 oz Ag
Pods of ore in thrust ?
Brooke thrust
ore zone
cut out
THRUST
open
stop
weak
Total "Proven" Ore : 393,000 tons
Total "Probable" Ore : 78,000 tons
Drilled Probable
Extent to which no reserve is given
Structural Contour Diagram
Upper Ore Zone - Base of Thrust
Ore Reserve Map
Upper Ore Zone
Ore Distribution Sketch
Upper Zone
CONTINENTAL EXPLORATION
CWT LEASE
DRILL HOLES
SCALE:
41,500
41,000
40,500
40,000
39,500

Performance Bond

to be requested by F.O.

CWT 13 & 14 not included in lease but are shown on map.

EXPLORATION CONTRACT
CONTINENTAL EXPLORATION, Inc.
OME-6578

ANNEX I

The land, including all rights thereto, referred to in Article 2 of the contract consists of 53 ~~patented and~~ unpatented lode mining claims, [~~patented and unpatented placer mining claims, patented and unpatented millsites, and town lots~~] in secs. 23, 24, 25, and 26, T. 17 S., R. 12 E. and secs. 19 and 30, T. 17 S., R. 13 E., G. & S. R. B&M, Pima ~~(unorganized)~~ Mining District, Pima County, Arizona. It is shown outlined in green on Figure 1 entitled, "Continental Exploration, Inc., C.W.T. [illegible]," attached and made part hereof.

The unpatented lode mining claims are ~~as follows:~~ recorded in

~~Name~~ ~~U. S. Survey No.~~

the Office of the County Recorder, Tucson, Arizona, as follows

[This draft of a contract for the Applicant's original proposal of a 2-stage project is incomplete]

54
65
98
63
280

Name	Docket	Page	Name	Docket	Page
Arizona No. 25	911	176	Arizona No. 35	911	186
" No. 27	911	178	Amended	2698	210
" No. 29	911	180	Arizona No. 37	911	188
" No. 31	911	182	Amended	2698	212
Arizona No. 33	911	184			
Amended	2698	208			
Copper Bottom #1	2218	430	Copper Bottom #3	2218	432
" " #2	"	431			
CWT No. 3	2698	202	CWT No. 14	?	?
CWT No. 13	?	?			
Ella #28	1113	96	Ella #36	1113	104
#30		98	#37		105
#31		99	#38		106
#32		100	#39		107
#33		101	#40		108
#34		102	#41		109
#35		103			

26
27
53

Midland No. 1	943	350	Midland No. 14	943	363
2		351	15		364
3		352	16		365
4		353	17		366
5		354	18		367
6		355	Amended	2698	252
7		356	Midland No. 19	943	368
8		357	Amended	2698	253
9		358	Midland No. 20	943	369
10		359	Amended	2698	254
11		360	Midland No. 24	943	373
12		361	" 26	"	375
13		362	" 28	"	377

Pima # 2	2060	181	Pima # 4	2060	183
Amended	2698	237	Pima # 5	2060	184
Pima # 3	2060	182			

~~The Operator is owner of the~~ _____

~~claims.~~

The Operator is in possession of the Unpatented claims under the terms of a Third Amendment to CWT Mining Lease and Option and Restated CWT Mining Lease and Option dated ? 1966 from the following owners: .

~~_____ obtained rights to the leased land by a~~ _____

~~dated _____ from _____,~~

~~the owners.~~

~~_____ Lien and Subordination Agreements signed by the following owners of the leased land are attached and made part hereof.~~

In lieu of Lien and Subordination Agreements, a Performance Bond dated _____ is attached and made part hereof.

Russell A. Todd and Ella C. Todd
Richard E. Chilson
Marian C. Chilson
Donna Gail Chilson
Laurita Yarter
Steven C. Chilson
Daniel G. Chilson, Jr.
Robert C. Fordham and Rebecca Fordham
and from their agent C. Darrel Wilson.

Figure 1. Map showing
OME Project Area
CWT Property

U S Geological Survey
Office of Minerals Exploration } 2

OME-6578
Continental Exploration, Inc } 2

EXPLORATION CONTRACT
CONTINENTAL EXPLORATION, INC.
OME-6578

EXHIBIT A

The purpose of the project is to explore by Induced Polarization-Resistivity surveys and by drilling for copper-bearing ore bodies below 0-1800 feet of barren fanglomerate in Paleozoic limestone, quartzite and dolomite, Cretaceous arkose and shale, and Early Tertiary monzonite above the San Xavier thrust fault of Tertiary age.

General Provisions

A bulldozer no small or than the equivalent of a Caterpillar D-8 shall be used for preparation of access roads and drill sites.

The Government will not contribute to the cost of any drill hole closer than ~~100~~ 200 feet to the outer boundary of the project area or closer than ~~50~~ feet to the ore intercept in any previously drilled hole.

All drill holes shall be completed not less than ~~standard AX core size or equivalent~~ NX wireline size.

All drill holes shall be cased as necessary. The Government will not contribute to the cost of casing left in a hole at the Operator's request.

~~Drill holes shall be surveyed as necessary with an in-hole instrument suitable for determining both bearing and inclination.~~

All drill core shall be stored in boxes identified by hole number with markers in the core sections indicating the depths represented.

Facilities shall be provided for recovering drill sludge, and such sludge shall be retained when drilling in significantly mineralized rock.

All drill core shall be logged and significantly mineralized core shall be split and one split assayed. Whenever core recovery is less than 60 percent, a split of the corresponding retained sludge shall be assayed separately. The remaining core shall be stored in proper sequence with the unsampled core, and the remaining sludge shall be stored in suitable containers properly identified as to hole number and depth.

Stored samples shall be made available for Government inspection and possible use, and may be disposed of with prior Government approval.

All ~~splits of~~ samples ~~for assay~~ shall be analyzed for ~~gold and~~ oxide copper, ~~silver, and for~~ total copper, ~~lead, and~~ zinc and silver as warranted.

True copies of assay certificates, copies of drill logs, and maps or sketches showing the work completed, the location, width, and assay value of all samples assayed, and the geological formations and structures traversed by the drill holes and workings shall be furnished monthly to the Government.

The Operator shall provide such supervision, labor, and technical services as may be required to perform the work in a satisfactory manner. The Government will contribute only to that portion of the monthly salaries or daily wages representing the time spent on the project work by the various employees.

The location, direction, and extent of each work item shall be subject to Government approval.

The work shall be divided into two stages. The Operator shall complete all of Stage I and as much of Stage II as is authorized in advance by the Government and confirmed in writing. Approval of Stage II shall depend upon the results obtained in Stage I.

Description of the Work

STAGE I

The ~~initial~~ work shall consist of surveying by Induced Polarization-Resistivity methods ~~including compiling, interpreting, and reporting the~~ results, along six lines spaced about 1,000 feet apart, ~~apart and totaling not more than 37,000 linear feet,~~ ~~and~~ of compiling, interpreting, and reporting the results, of bulldozing six access roads and drilling not more than six holes at sites to be mutually agreed upon by the Operator and the Government, and of assaying approximately 60 samples.

It is estimated that ~~the completed~~ 37,000 linear feet of surveying, 6,000 feet of core and non-core drilling, 21 hours of bulldozing for drill sites will be required to complete Stage I.

The approximate locations of the six survey lines are shown in red on Figure 2 entitled "Continental Exploration, Inc., CWP Claims, Pima County, Arizona" attached and made part hereof.

STAGE II

'The work shall consist of surveying by Induced Polarization-Resistivity methods along lines spaced about 250 feet apart over anomalies disclosed and confirmed to be indicative of ore by the work in Stage I, of compiling, interpreting, and reporting the results, of bulldozing not more than 20 access roads and drilling not more than 20 holes at sites to be mutually agreed upon by the Operator and the Government, and of assaying about 200 samples.

It is estimated that 3,000 linear feet of {surveying, IP-R} 70 hours of bulldozing, and 20,000 feet of core or non-core drilling will be required to complete stage II.

Estimated Costs of the Work
Stage I

Actual Costs

Category (1) Independent Contracts

Induced Polarization-Resistivity survey
including compiling, interpreting, reporting
37,000 feet @ $0.10/foot — $3,700.00

Bulldozing access roads and drill sites
21 hours @ $23.00/hour — 483.00

Drilling, 6 holes, 6000 feet
Non-core, 0-500 foot depths
1500 feet @ $2.60/foot — 7,800.00
Non-Core, 500-750 foot depths
1200 feet @ $3.10/foot — 3,720.00
NX Core, 500-1000 foot depths
1800 feet @ $7.00/foot — 12,600.00

~~Core boxes~~
~~180 boxes @ $0.70/box~~ ~~126.00~~

Cementing, and redrilling, reaming, installing casing

5.0 hours @ $12.50/hour $ 625.00

?

Additives (Cement, drilling mud, etc)

150 sacks @ $7.50/sack 1,125.00

?

Casing lost in hole

200 feet at $3.30/foot 660.00

?

Rental, water truck

3 months @ $190.00/month 570.00

Mileage, water truck

1500 miles @ $0.12/mile 180.00

Category (2) Personal Services

None except:

One supervisor, geologist, engineer
3 months @ $1,000.00/month $3,000.00

One assistant engineer, part time
3 months @ $420.00/month 1,260.00

One outside consultant
10 days @ $75.00/day

Category (7) Miscellaneous

None except:

Core boxes
180 boxes @ $0.70/box 126.00

Core storage
3 months @ $20.00/month 60.00

Payroll taxes, insurance @ 11.5%
3 months @ $165.00/month (rounded) 495.00

Assaying for
60 samples @ $ /sample

Office expense
3 months @ $40.00/month 120.00

Stage II

Actual Costs

Category (1) Independent Contracts

Induced Polarization-Resistivity survey
30,000 feet @ $0.10/foot $3,000.00

Bulldozing access roads and drill sites
70 hours @ $23.00/Hour 1,610.00

Drilling, 20 holes, 20,000 feet
Non-core, 0-500 foot depths
10,000 feet @ $2.60/foot $26,000.00
Non-core, 500-750 foot depths
4,000 feet @ $3.10/foot 12,400.00
NX core, 500-1,000 foot depths
6,000 feet @ $7.00/foot 42,000.00

2.153'
14 hrs
20 sks,
500' cas

cementing, redrilling, reaming, installing casing

140 hours @ $12.50/hour — 1,750.00

?

Additives (cement, drilling mud, etc.)

800 sacks @ $7.50/sack — 6,000.00

?

Casing lost in hole (NX)

600 feet @ $3.30/foot — 1980.00

?

Rental, water truck

4 months @ $190.00/month — 760.00

Mileage, water truck

5,000 miles @ $0.12/mile — 600.00

Category (2) Personal Services

None except:

One Supervisor-geologist-engineer
4 months @ $1,000.00/month 4,000.00

One Assistant engineer
4 months @ $420.00/month 1,680.00

One Outside consultant
15 days @ $ /day

Category (7) Miscellaneous
None except:

Core boxes
600 boxes @ $0.70/box $ 420.00

Core storage
4 months @ $20.00/month 80.00

Assaying for [illegible]
200 samples @ $ /sample

Payroll taxes, insurance @ 11.5%
4 months @ $165.00/month (rounded) 660.00

Office expense
4 months @ $40.00/month 160.00

Total Estimated Costs, Stage II

Summary

Total Estimated Actual Costs, Stage I

Total Estimated Actual Costs Stage II

Total Estimated Actual Costs of the Work

Government Participation @ 50%

OFFICIAL FILE COPY

Date	Surname	Code
6/6/68	RMSmith	120
6/6/68	Kirkham	120
		110
		220

AIRMAIL

JUN 7 1968

Mr. C. H. Reynolds
Vice President
Continental Exploration, Inc.
820 South Ninth Street
P. O. Box 190
Grand Junction, Colorado

Re: OME-6578 (Copper)
Continental Exploration, Inc.
CWT Property
Pima County, Arizona

Gentlemen:

In accordance with your request dated May 29, 1968, the application referenced above is considered as withdrawn and will be placed in our inactive file.

If you wish to reopen this case you may do so by filing a new application, referring to this docket number, and furnishing information pertinent at the time. Applicable data already submitted need not be repeated.

We wish to thank you for your continued interest in the OME program.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Economic Geology File
OME Docket
OME Reading File
Region III
Mr. Smith

RMSmith/bsl 6/6/68

AREA CODE 303
PHONE: CHAPEL 3-2100

CONTINENTAL MATERIALS CORPORATION

MINING FIELD OFFICE: 820 SOUTH NINTH STREET, P. O. BOX 190, GRAND JUNCTION, COLORADO 81502

May 29, 1968

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C. H. E.
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| 110
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Copy to R-IV

Mr. Frank E. Johnson, Chief
Office of Minerals Exploration
Geological Survey
U.S. Department of the Interior
Washington, D.C. 20242

Re: OME-6578 (Copper)
Continental Exploration, Inc.
CWT Property
Pima County, Arizona

Dear Mr. Johnson:

Please withdraw the above referenced application from consideration.

Thank you for your consideration and patience regarding this matter.

Sincerely,

CONTINENTAL EXPLORATION, INC.

C. H. Reynolds

C. H. Reynolds

CHR:jd

MME Form 7
(2/63)

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Date	Surname	Code
4/10/68	RMSmith	120
4/11/68	HKirkemo	120
		110
4/11	cae	220
		120M

APR 11 1968

AIRMAIL

Mr. C. H. Reynolds
Vice President
Continental Exploration, Inc.
820 South Ninth Street
P. O. Box 190
Grand Junction, Colorado

Re: OME-6578 (Copper)
Continental Exploration, Inc.
CWT Property
Pima County, Arizona

Gentlemen:

We have received no further instructions since your letter of December 28, 1967. Will you please inform us of your plans regarding the application. If you have decided not to pursue it further, will you please so inform us.

Sincerely yours,

Frank E. Johnson

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Division File
Economic Geology File
OME Docket
OME Reading File
Mr. Smith
Region III

HKirkemo/bsl 4/10/68

AREA CODE 303
PHONE: CHAPEL 3-2100

CONTINENTAL MATERIALS CORPORATION

MINING FIELD OFFICE: 820 SOUTH NINTH STREET, P. O. BOX 190, GRAND JUNCTION, COLORADO 81502

December 28, 1967

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Mr. Frank E. Johnson, Chief
Office of Minerals Exploration
U. S. Department of the Interior
Geological Survey
Washington, D. C. 20242

Re: OME-6578 (Copper)
Continental Exploration, Inc.
CWT Property
Pima County, Arizona

Dear Mr. Johnson:

This will acknowledge your letter of December 15, 1967 in reference to the status of the above referenced application.

Please continue to hold this application for further consideration pending our final decision on whether to proceed on the suggested basis.

Sincerely,

C. H. Reynolds

C. H. Reynolds

CHR:jd

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
12/15/67	RMSmith	120
12/15/67	Kirbamo	120
		110
12/15	cae	220
		120M

DEC 15 1967

AIRMAIL

Mr. C. H. Reynolds
Vice President
Continental Exploration, Inc.
820 South Ninth Street
P.O. Box 190
Grand Junction, Colorado

Re: OME-6578 (Copper)
Continental Exploration, Inc.
CWT Property
Pima County, Arizona

Gentlemen:

In your letter of October 3, 1967 you advised us that you would notify us when a decision was reached on performing Phase I work at your own expense and limiting your application to the Phase II work. To date we have not received such a notice.

If you need additional time to reach a decision, please let us know. If we do not receive a reply from you within 30 days from the date of this letter, we must assume you are no longer interested in proceeding with your application, and we shall consider it as having been withdrawn.

Sincerely yours,

FRANK E. JOHNSON (Lgh.)

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Division File
Economic Geology File
OME File
OME ReadingFile
Mr. Smith
Region III

RMSmith/bsl 12/15/67

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AREA CODE 303
PHONE: CHAPEL 3-2100

CONTINENTAL MATERIALS CORPORATION

MINING FIELD OFFICE: 820 SOUTH NINTH STREET, P. O. BOX 190, GRAND JUNCTION, COLORADO 81502

October 3, 1967

OFFICIAL COPY
O. M. E.
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BH	120 M
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RMS	120 S

Mr. Frank E. Johnson, Chief
Office of Minerals Exploration
Geological Survey
U.S. Department of the Interior
Washington, D. C. 20242

Re: OME-6578 (Copper)
Continental Exploration, Inc.
CWT Property
Pima County, Arizona

Gentlemen:

This will acknowledge your letter of September 8, 1967 concerning the above referenced application wherein you propose we consider the feasibility of performing the Phase I work at our expense.

This is to advise you that we will consider the procedure you have suggested and will notify you when we have reached a decision.

Sincerely,

C. H. Reynolds

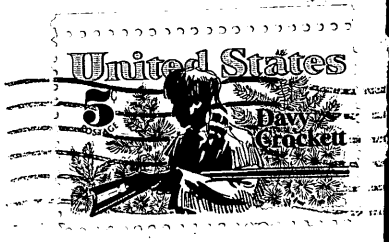
C. H. Reynolds

CHR:jd

cc: Mr. J. Wm. Hasler, Field Officer

CONTINENTAL MATERIALS CORPORATION

GRAND JUNCTION, CO
OCT 3
PM
1967
81501



Mr. Frank E. Johnson, Chief
Office of Minerals Exploration
Geological Survey
U.S. Department of the Interior
Washington, D.C. 20242

GRAND JUNCTION, CO
OCT 3
PM
1967
81501

P. O. BOX 190, GRAND JUNCTION, COLORADO 81502

Form 7

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Date	Surname	Code
9/8/67	R M Smith	120
9/8/67	Kerbaugh	120
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9/8	CAC	220
		120M

AIRMAIL

Mr. C. H. Reynolds
Vice President
Continental Exploration, Inc.
820 South Ninth Street
P. O. Box 190
Grand Junction, Colorado

SEP 8 1967

Re: OME-6578 (Copper)
Continental Exploration, Inc.
CWT Property
Pima County, Arizona

Gentlemen:

We have carefully reviewed the referenced application and the additional information received since it was submitted. Our review indicates that Phase I of the proposed project does not qualify for Government assistance under OME regulations because it is more in the nature of prospecting than exploration.

The OME program is restricted to exploration and excludes prospecting. The distinction as defined by our regulations is that exploration is the search for ore by testing a specific target--for which there is geological evidence--in a specific locality, whereas prospecting is the search for a specific target. The purpose of Phase I is to localize targets which would be tested and delineated in Phase II.

Since there appears to be a good chance of identifying specific exploration targets by the work in Phase I, in which case the work in Phase II may be eligible for OME assistance, we would appreciate your views on the feasibility of completing Phase I at your own expense.

If you decide to perform Phase I at your own expense and furnish the results to support an application for Phase II, you need not repeat information already submitted. However, if the financial status of the company has changed, new bank letters may be required. Also, if you apply for Phase II work, please explain how the company acquired rights to the two claims CWT 13 and CWT 14--these are not listed in the lease but are shown on the map.

23263

Nothing in this letter should be construed as a commitment by the Government to grant an exploration contract. We shall postpone further action on this application pending your instructions, but we would appreciate a reply as soon as you reach a decision on the procedure you wish to follow.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Division File
Economic Geology File
OME Docket
OME Reading File
OME Region III
Mr. Smith

RMSmith/gla 9-8-67

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
FEDERAL CENTER, DENVER, COLORADO 80225
Office of Minerals Exploration

September 6, 1967

OFFICIAL COPY
O. M. E.
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Memorandum

To: Chief, OME

From: Field Officer, Region III

Subject: OME-6578 (Copper)
Continental Exploration, Inc.
CWT Property
Pima County, Arizona

Enclosed are 4 copies of Figure 1 to be used for contract use which were inadvertently omitted from the report of examination which was transmitted September 1.

J. William Hasler
J. William Hasler
Field Officer

File for possible future use.

C. M. Merrill

Area V

Mineral Resource Office
Tucson Field Office

October 14, 1966

Memorandum

To: J. H. Van Sant, Chief, Area V Mineral Resource Office

From: J. E. Soule', Project Coordinator, Tucson

Subject: Report on "OVF Mine (Shilson, Wilson and Todd), Continental Exploration, Inc.," GMF 2. Summary report Soule' L-10 included.

Enclosed are your and Mr. Gochan's copies of the subject reports. Because of the shortness of time, copies for Mr. Sinnar and Mr. Bishop are being sent directly to Mr. Sinnar's office in Washington.

John E. Soule'

Enclosures

cc - R.H.Gochan
P.Sinnar
Gn. Bishop

[redacted]

[redacted]

By [redacted]

[redacted]

[redacted]
[redacted]

[redacted]
[redacted]

[redacted]

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GWT MINE (GHILSON, WILSON AND TODD)
CONTINENTAL EXPLORATION, INC.
PIMA MINING DISTRICT, PIMA COUNTY, ARIZONA

GMP 2

by

John H. Soule[1]

SUMMARY AND CONCLUSIONS

The officers of the Continental Exploration, Inc., a subsidiary of Continental Materials Co., applied for Government assistance under the Copper Production Expansion Program. They seemingly requested $3 million to complete mine development and mill construction for a capacity of 300 tons per day with an additional $1.8 million to double plant capacity. The project was discussed with the resident manager.

The mine, GWT for Ghilson, Wilson and Todd, is leased with an option to purchase by the Continental Exploration, Inc. It is located about 24 miles southwest of Tucson, Ariz., in the Pima Mining District, Pima County, Arizona. The terrain is typical desert and the topography of moderate to easy relief. There are no permanent streams in the area, but there is, reportedly, more than enough water in the mine to supply the proposed mill.

1/ Mining Engineer, Area V Mineral Resources Office, U. S. Department of the Interior, Bureau of Mines, Tucson, Ariz.

The CWT mine is a recent discovery in a booming district that has some past history. Copper is the major metal being produced, although the CWT mine is primarily a zinc mine with only a small amount of copper in the ores. No production has been obtained from the mine to date.

The CWT property consists of about 272 claims comprising 5,400 acres and is owned by a group of men represented by C. Darrel Wilson of Tucson, Ariz. The owners have refused to sign a Lien and Subordination agreement as collateral for a Government loan.

The geology of the district is complicated. Paleozoic and Cretaceous sedimentary rocks lie upon Precambrian granitic rocks and are intruded by monzonitic rocks. Many structural problems remain unsolved and the alteration due to the intrusion is intense. Sphalerite and chalcopyrite are the predominant ore minerals and the gangue is largely tactite.

Ore reserves were calculated by a respected firm of consultants. Studying their results and reclassifying the categories, about 449,000 tons of ore are indicated that contain 6.76 percent zinc, 1.28 percent copper, 0.13 percent lead, and 1.79 ounces per ton of silver. Where drilling is wide spaced or lean ore intercepts occur, about 799,000 tons of ore may be inferred that contains 7.4 percent zinc, 0.83 percent copper, 0.44 percent lead and 1.20 ounces per ton of silver. The measured reserves are negligible. There is no evidence to warrant the doubling or otherwise increasing the above ore estimates.

The mine is being developed by a shaft 1,000 feet deep. Haulage levels are being driven on the 800- and 900-foot levels. They look about 300 feet each of reaching a large diameter drill hole that will serve as a ventilation shaft and second entry or exit. About 600 or 700 feet of crosscutting from the haulage ways remain to be done on each level. Raises from the levels to the ore bodies remain to be driven. It is difficult to see production started by January 1, 1957. Cut and sand-fill stoping will be used. Some trouble using trackless vehicles in the stopes may occur if the steep grades between some of the ore intercepts are as steep as indicated. There were no maps available showing the planned development.

Metallurgical tests were done upon composite samples obtained from drill cores. A zinc and a copper concentrate were obtained that contained an average of 56.18 percent zinc and 20.05 percent copper, respectively. The zinc concentrate contained an average of 83.8 percent of the zinc in the ore and the copper concentrate contained an average of 81.7 percent of the copper in the ore. No testing was done on large-bulk underground samples because of their unavailability.

A smelter contract has been obtained for the zinc concentrates and, because of their small quantity, it is expected that the copper concentrates can be disposed of.

The application for assistance was well documented, perhaps too well so. Planning above the local level indicates the production of somewhat more copper than is present in the reserves. There is no engineering basis for such an optimistic outlook.

It is concluded that the CWT mine is primarily a zinc mine and that a modest amount of copper could be produced to help alleviate the present copper shortage. For a 500-ton per day operation this is equivalent to about 1,600 tons of copper per year. Indicated ore reserves total nearly a half million tons of ore containing 1.28 percent copper. Metallurgical tests on composite samples from drill hole cores indicates satisfactory recovery of a copper and a zinc concentrate with average recoveries of 81.7 and 83.8 percent, respectively. The operating staff of Continental Exploration, Inc., seems competent and capable of mining 500 or 1,000 tons per day from the CWT mine. About $1.97, neglecting interest, would be charged to each ton of indicated ore based on a loan of $4.8 million to place the plant on a 1,000-ton per day basis.

INTRODUCTION

The officers of Continental Exploration, Inc., applied for Government assistance to help bring into production their CWT (Chilson, Wilson and Todd) mine. This assistance is available under the Copper Production Expansion program of the Defense Materials Service of the General Services Administration. A comprehensive application was dated August 10, 1966 and requested $3 million to complete placing the property into production at a rate of 500 tons per day with an additional $1.8 million to double the capacity to 1,000 tons per day. Additional expansion would be planned pending new ore discoveries.

The CWT mine is a new discovery and although development and mill construction is underway, much remains yet to be done. Ore reserves are indicated and inferred and are based upon drilling only. The property was visited on September 27, 1966 and the project discussed with Mr. John G. Reeves, General Manager.

ACKNOWLEDGMENTS

Acknowledgment is made of the information supplied by John G. Reeves, General Manager of Continental Exploration, Inc.

LOCATION AND PHYSICAL FEATURES

The CWT mine is situated in the Pima Mining District, Pima County, Arizona about 24 miles by road southwesterly from Tucson, Ariz. (figs. 1 and 2). The mine may be reached by going westerly on Congress Street, a main thoroughfare in Tucson, to Mission Road. Turn left and follow Mission southerly for about 3 miles to State Highway 86. Continue southerly and southwesterly on Mission Road (it becomes Twin Buttes Road) for about 19 miles from Highway 86 (this is about 3 miles beyond the San Xavier mine beside the road). Then turn right and follow a well travelled dirt road westerly for nearly 2 miles to the mine. Alternate routes are available.

Major and minor mining supplies are available in Tucson. Mining labor, both skilled and unskilled, is available in Tucson as is ample housing. Important north-south and east-west highways pass through Tucson. The main line of the Southern Pacific Railroad also passes through Tucson and rail accommodations are available at Sahuarita, about 14 miles by road east of the mine.

The mining district is in a semi-arid area with an average annual precipitation of about 11 inches. Winter snows are rare and heavy summer thunderstorms are common. Summer temperatures often exceed 100° F. and freezing weather is not usual. Temperature extremes of 6° F. and 115° F. have been recorded. Typical desert vegetation--cactus, mesquite and other trees and range grasses and shrubs--abound. There is no timber suitable for mining purposes.

There are no permanent streams in the area and subsurface water is available in the Santa Cruz basin a few miles to the east. The mine "makes" about 200 gallons of water per minute which is thought more than enough to supply the proposed flotation plant.

The average altitude at the CWT property is about 3,700 feet above sea level and in the foothills of the Sierrita Mountains. The terrain is largely gently rolling hills with broad sand washes. The relief is not great.

HISTORY AND PRODUCTION

The CWT mine is a recent discovery although the Pima Mining District is old with recorded production in 1876. This district had been idle for many years, excepting Eagle-Picher's zinc-lead San Xavier mine, following the operations of World War I time and shortly thereafter. About 1950, new copper discoveries were made and developed until the district is now one of the important copper producing areas of the world. The outlook for expansion in the district as a whole is very good.

The major metal production has been and is copper. Other than the San Xavier mine operated by the Eagle-Picher Mining and Smelting Co. since World War II until about 1954 the zinc and lead production is negligible. The CWT mine is about 2.5 miles due south of the San Xavier mine. No production has yet been obtained from the CWT mine.

OWNERSHIP AND EXTENT

The CWT group of claims is shown in outline in figure 3. About 272 unpatented claims constitute the CWT group which totals about 5,400 acres. The Continental Exploration, Inc., has located additional claims in the area, none of which are patented. The CWT claims are owned by a group of men represented by C. Darrel Wilson of Tucson, Ariz. The bulk of the claims are situated in T 17 S, R 12 E. The ore body and shaft are near the center of the claim group and near the center of section 23 of the above township.

The owners of the claims refuse to execute a Lien and Subordination Agreement thus removing the property as possible collateral for a loan from the Government.

GEOLOGY AND ORE DEPOSITS

The geology of the district is complicated and much is yet to be learned. Rocks varying from Precambrian to recent age are known in the area. Paleozoic and Mesozoic sedimentary rocks rest upon the Precambrian basement of granites and gneisses. All of these rocks have been intruded by monzonitic rocks and alteration often is intense. The development of iron rich silicate rocks (tactite) was a most notable feature.

The structure also is complicated and a thrust fault is a prominent feature. Some estimates place 20 miles as the displacement along this fault. Block faulting is common, often obscuring and disrupting the continuity of the sedimentary beds and altered beds.

The ore minerals are sphalerite, chalcopyrite, galena and tetrahedrite. Pyrite is common and quartz, marble, garnet and other iron rich silicate rocks constitute the bulk of the gangue.

Much work remains to be done to solve the geological problems indicated by the drilling.

ORE RESERVES

The applicants for Government assistance list 1,208,000 tons of reserves using terms such as "Drill" Proved and "Drill" Probable to indicate a category. These terms can be misleading. Also was a statement doubling the reserves on the basis of expectation. From the text of the report submitted by a respected consulting firm, (Manning W. Cox, Associates), the ore estimates can be easily placed in the indicated and inferred categories and this was done in the table at the end of this chapter.

A plan of the drill holes is shown on figure 4 and the ore blocks for the general two levels of mineralization are shown on figures 5 and 6. The areas of the blocks were measured and the tons of ore calculated. These figures check reasonably well with those submitted by the applicants and quantitatively are acceptable. The ore grades are acceptable as they also seem reasonable.

A study of the drilling and applicants ore reserve calculations shows that there is practically no measured ore and none is computed. From the drill pattern, only two areas show closely enough spaced drilling to warrant the calculation of indicated reserves. These are blocks A in figure 5 and B in figure 6. This is noted in the consulting geologists report. In all other blocks, the spacing is so far apart or so isolated that the reserves must be considered as inferred. In many instances intervening holes do not show ore intercepts, thus indicating non-continuity of some of the ore layers. There is no evidence at this time to warrant a doubling of the following reserves as was done in the application for assistance.

The revised reserve estimations in standard Bureau of Mines terms are shown in the following tabulation. These reserves are based upon drilling results exclusively.

TABLE 1. - Revised ore reserves, CWT mine

		Zinc Percent	Copper Percent	Lead Percent	Silver Ounces
Measured Ore	Negligible				
Indicated Ore	449,000	6.76	1.28	0.13	1.79
Inferred Ore	759,000	7.4	0.83	0.44	1.80

DEVELOPMENT

The ore bodies of the CWT mine lie to a depth of nearly 1,000 feet beneath a fairly flat surface. The bodies are too small, the overburden too great, to warrant mining by open pit. The alternative is development by a shaft. A shaft was sunk to 1,000 feet and levels started on the 800- and 900-foot levels. These levels were being driven northerly to connect with a large-diameter bore hole. This bore hole will serve as a ventilation raise and will be equipped with a hoist and cage to be used as an emergency exit (second exit). On September 27, 1966, the levels lacked about 500 feet each to reach the ventilation raise. In addition, there remained about 600 or 700 feet of crosscutting on each level to extend the haulage levels out under the ore bodies. This means about 1,200 feet of lateral driving on each level remains to be done. Raises must yet be driven from the levels up into the ore bodies.

The maps showing the planned development were asked for, but it was stated that there were none and a mine model was substituted instead. It seems very strange that the mine development is being done without the use of maps to guide the work. This would suggest poor engineering practices.

The ore bodies are to be mined by cut and fill-fill methods using a panel retreat. Trackless mining is planned with the delivery of ore through raises to the haulage levels where rail transportation will be used to convey the ore to the shaft. From the looks of some of the intercepts between adjacent drill holes, some very steep grades may make trackless mining a little difficult. Much more delineation of the ore bodies seems necessary before the mining method can be finalized.

METALLURGY

Metallurgical samples were obtained from composites of samples from drill cores. These samples were submitted to a responsible metallurgical engineering firm (Western Knapp) who reported the following results. Two concentrates, a zinc and a copper concentrate were obtained by flotation of the samples. The zinc concentrate contained between 82.0 and 85.5 percent, and averaging 83.8 percent, of the zinc in the ore. Small amounts of cadmium, copper and silver also occurred in the zinc concentrates which averaged 56.18 percent., zinc.

The copper concentrate contained from 77.9 to 88.2 percent, averaging 81.7 percent, of the copper in the ore. About 70 to 80 percent of the lead and silver with small amounts of zinc occurred in the copper concentrates which averaged 20.05 percent copper. Recovery of the very small amount of galena in a lead concentrate has been considered, but no decision has yet been reached. These results seem to indicate that the ore will be treatable. No tests were done on unavailable large-bulk samples and the results of such tests are not yet known. It is expected that bulk samples will show a similar amenability to treatment as the composite core samples.

A smelter contract for the zinc concentrates has been executed. Because of the small amount of copper concentrates, it is logical to assume that they will be accepted at a copper smelter.

THE PROJECT

Continental Exploration, Inc., a wholly owned subsidiary of Continental Materials Corp., have leased, with option to purchase, the CWT (Chilson, Wilson and Todd) property near Twin Buttes in the Pima Mining District, Pima County, Arizona. A substantial discovery of predominantly zinc ore was made and the mine is being prepared for production at a rate of 300 tons per day. The ores contain about one percent copper and because of this, the operators have applied for Government assistance under the Copper Expansion Program. An application for assistance was submitted in April 1966 to be supersedd by a detailed application dated August 10, 1966.

In the application it is stated that the applicant, with Government assistance, would produce copper in <u>addition</u> to the quantity produced without said assistance. The planned mill capacity is 500 tons per day which would indicate the production of about 1,600 tons of copper per year. Is this what is meant to be produced without assistance? A doubling of the mill capacity to 1,000 tons per day would double the recovery of copper to about 3,200 tons per year, a very modest amount. Clarification of the application letter seems desirable.

For participation in the expansion program, the applicants plan, from 1967 through 1976, to produce 1,090,392,000 <u>additional</u> pounds of copper. Since, by their not acceptable reserve estimates, only 52,183,600 pounds of copper exist in the ore and of which about only 42,700,000 pounds is recoverable, make up of copper from some source seems mandatory. There is no evidence to warrant assuming or not assuming that future exploration will be successful, especially to the extent indicated in the proposal.

Although the application was seemingly well documented, it may well have been too much so and much material is not clear. It may be clarified by an inordinate amount of time studying the document. The first impression is that a sum of $3 million will be necessary to complete the mill and prepare the mine for production. However, it seems that plans are to continue erecting the mill and to place the mine into production, whether Government help is forthcoming or not.

Then the proposal is made to double the mill capacity to 1,000 tons per day. This would be done with an additional loan of $1.8 million. This would mean a total loan of $4.8 million or a little over 11 cents per pound of recoverable copper, their reserves, or about 51 cents per pound of recoverable copper as per present indicated reserves. However, the above figures mean but little, and spread over the ore value, this would impose a debt, interest neglected, of about $1.07 per ton of indicated reserves.

Another suggested schedule of expansion is increasing the mill capacity to 2,000 tons per day pending new ore discoveries. This is too nebulous to warrant further consideration.

The entire cost structure in the application was examined only in a most general way because of the lack of time. It is recommended that these costs be thoroughly checked before any assistance is granted.

6-803
(January 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Soule' No. L-10

SUMMARY REPORT OF MINERALS EXAMINATION

State Arizona County Pima Mineral Products Zinc-Copper-Silver

Name of property or deposit (WT (Chilson, Wilson and Todd)

Date examined 9-27-66 Engineer John H. Soule' Date of this report 10-10-66

Reason for examination Mine expansion program

Engineer accompanied by J. G. Roscoe Address Tucson, Ariz.

Extent of property 27 unpatented mining claims plus recent locations (5,400 acres)

Owner Darrel Wilson, et al Address Tucson, Ariz.

Leased or optioned to Continental Exploration, Inc. Address Tucson, Ariz.

Location of property (be specific) T 17 S, R 12 & 13 E, Pima County, Ariz.

Type of deposit and mineralogy (brief description) Limestone replacements of varying not steep dips. Sphalerite and chalcopyrite important ore minerals. Gangue is largely tactite.

Known dimensions of the deposits Largest
Length 500 Width 55 Depth 14 Am

Attitude of the deposit (strike, dip, etc.) Generally flat lying with pitches and rolls.

Possible extensions; correlation of known showings Other ore bodies may exist in areas not drilled or explored.

Mine workings (brief description or attach map or sketch) (indicate whether accessible) New shaft with [illegible] -ft haulage levels. These levels being driven.

(over)

Mining and milling equipment on property Mine plant to be expanded for production.

Past production (if any) None - A new mine

Present rate of production (if any) Preparing for production

Sampling (describe briefly, or attach sketch) All sampling from drill holes.

Tentative Estimate of Reserves
(Subject to revision when assays are received or after engineering calculations)

Measurable	None	tons	Grade
Indicated	490,000	tons	6.76% Zn, 1.28% Cu, 0.13% Pb, 1.79 oz Ag Grade
Inferred	799,000	tons	7.4% Zn, 0.83% Cu, 0.44% Pb, 1.20 oz Au Grade

Mining method (actual or suggested) Plan cut and fill using sand fill.

Milling or processing method (actual or suggested) Standard flotation methods with no decision as to lead recovery.

Processing tests suggested None

Tentative conclusion and decision This is primarily a zinc mine with some copper and a little silver. A very modest amount of copper, about 1900-2000 tons, based upon a 500 ton per day operation, would be contributed each year to the copper expansion program.

To be accompanied by brief letter giving examining engineer's general impression of the deposit, his impression of the owner, and any other confidential information he may care to submit. Refer to any known prior examinations and reports. May be executed in pencil. Should be mailed within 24 hours after examination is completed.

Send original and one copy to Washington Office
cc - R.W.Geehan, J.N.Van Sant, P.Zinner, O.M.Bishop
File 463.2 & 463.4

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes

County and State Pima - Arizona

Drill Hole No. A-978

Depth of Hole 1436 ft.

Page 1 of

Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
	0 - 783	783.0	Not Sampled							
B-31101	783 - 787	4.0	0.04			Nil				
	787 - 802 11/4	15.0	Not Sampled							
02	802 - 805	3.0	0.05			Nil				
	805 - 808	3.0	Not Sampled					Vy poor recovery		
03	808 - 811	3.0	0.12			.001				
04	811 - 815	4.0	0.12			Nil				
05	815 - 817	2.0	0.08			Nil				
06	817 - 820	3.0	0.01			.001				
07	820 - 823	3.0	0.12			Nil				
08 ~~223~~	823 - 828	5.0	0.13			Nil				
09	828 - 833	5.0	0.07			Nil				
10	833 - 837	4.0	0.08			Nil				
11	837 - 841	4.0	0.09			.001				
12	841 - 843	2.0	0.10			Nil				
13	843 - 847	4.0	0.10			.001				
14	847 - 850 3/4	3.0	0.14			Nil				
15	850 - 854	4.0	0.09			Nil				
16	854 - 860	6.0	0.13			Nil				
17	860 - 864	4.0	0.17			.010				
18	864 - 866	2.0	0.15			.001				
19	866 - 869	3.0	0.13			Nil				
20	869 - 871	2.0		0.25	Nil	Nil				
21	871 - 874 2/1	3.0		0.19	0.01	Nil				

Form 1001

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes

County and State Pima - Arizona

Drill Hole No. A-978

Depth of Hole _____ ft.

Page 2 of _____

Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
B-31122	874 - 878	4.0	0.09			Nil				
23	878 - 881	3.0	0.09			Nil				
24	881 - 885	4.0	0.15			Nil				
25	885 - 890	5.0	0.11			Nil				
26	890 - 893	3.0	0.13			Nil				
27	893 - 896	3.0		0.27	Nil	Nil				
28	896 - 900 4/r	4.0	0.12			Nil				
29	900 - 901	1.0		0.40	0.01	Nil				
30	901 - 905	4.0	0.06			.003				
31	905 - 909	4.0	0.05			.004				
32	909 - 912	3.0		0.15	0.01	Nil				
33	912 - 915	3.0	0.06			Nil				
34	915 - 919	4.0	0.06			Nil				
	919 - 938 4/15	19.0	Not Sampled							
35	938 - 943	5.0	0.04			Nil				
	943 - 970 5/r	27.0	Not Sampled							
36	970 - 975 3	5.0	0.03			Nil				
	975 - 1001 r3/3	26.0	Not Sampled							
37	1001 - 1005	4.0	0.04			Nil				
38	1005 - 1009	4.0	0.13			Nil				
39	1009 - 1013	4.0	0.08			Nil				
40	1013 - 1016	3.0	0.10			Nil				
41	1016 - 1020	4.0	0.07			Nil				
42	1020 - 1024 3/r	4.0	0.10			Nil				

Form 1001

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes

County and State Pima - Arizona

Drill Hole No. A-978

Depth of Hole _____ ft.

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Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET		
B-31143	1024 - 1026	2.0	0.05			Nil			
44	1026 - 1031	5.0	0.10			Nil			
45	1031 - 1036	5.0	0.17			Nil			
46	1036 - 1042	6.0		0.22	0.03	.009			
47	1042 - 1047	5.0	0.10			Nil			
48	1047 - 1049 1/1	2.0	0.11			Nil			
49	1049 - 1052	3.0	0.16			Nil			
50	1052 - 1056	4.0	0.10			Nil			
51	1056 - 1058	2.0	0.12			Nil			
52	1058 - 1062	4.0	0.15			Nil			
53	1062 - 1065	3.0		0.45	0.34	Nil			
54	1065 - 1067	2.0		0.20	0.12	.001			
55	1067 - 1069	2.0		0.15	0.05	.009			
56	1069 - 1070	1.0	0.15			Nil			
57	1070 - 1073	3.0	0.13			.002			
58	1073 - 1075	2.0	0.12			.018			
59	1075 - 1078	3.0		0.28	0.13	.023			
60	1078 - 1080	2.0		0.65	0.55	.006			
61	1080 - 1083	3.0		1.23	1.07	.010			
62	1083 - 1087	4.0		1.05	0.74	.004			
	1087 - 1091	4.0					No core		
63	1091 - 1097	6.0		1.90	1.77	Nil		Very poor recy.	
64	1097 - 1102 1/4	5.0		3.16	2.72	Nil		" "	"
65	1102 - 1110	8.0		4.57	4.26	.001		" "	"

Form 1602

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes

County and State Pima - Arizona

Drill Hole No. A-978

Depth of Hole _____ ft.

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Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
B-31166	1110 - 1115	5.0		4.20	3.91	.001				
67	1115 - 1132 8/9	17.0		0.67	0.52	Nil		Very poor rcvy.		
68	1132 - 1136	4.0		1.46	1.37	Nil		"	"	"
69	1136 - 1139	3.0		0.94	0.81	Nil		"	"	"
70	1139 - 1141	2.0		0.54	0.38	.003		"	"	"
71	1141 - 1143	2.0		0.80	0.65	.008		"	"	"
72	1143 - 1144	1.0		0.23	0.15	.008				
73	1144 - 1148	4.0	0.19			Nil				
74	1148 - 1151	3.0	0.19			.001				
75	1151 - 1154	3.0		0.23	0.17	Nil				
76	1154 - 1158	4.0		0.52	0.21	Nil				
77	1158 - 1161	3.0	0.07			Nil				
78	1161 - 1166	5.0	0.15			Nil				
79	1166 - 1167	1.0		0.40	0.27					
80	1167 - 1172	5.0	0.11			Nil				
81	1172 - 1175.5 1/2	3.5		0.33	0.03	.001				
82	1175.5 - 1178	2.5	0.11		0.03	.159				
83	1178 - 1182	4.0		0.25	0.02	Nil				
84	1182 - 1187	5.0		0.36	0.03	Nil				
85	1187 - 1193	6.0		0.29	0.02	Nil				
86	1193 - 1198	5.0	0.03			Nil				
87	1198 - 1203	5.0	0.04			Nil				
88	1203 - 1208	5.0	0.08			Nil				
89	1208 - 1213	5.0	0.07			Nil				

Form 1001

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-978

Depth of Hole _____ ft.

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Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET		
B-31190	1213 - 1217	4.0	0.04			Nil			
91	1217 - 1221	4.0	0.05			.001			
92	1221 - 1226 2/3	5.0	0.05			Nil			
93	1226 - 1231	5.0	0.04			Nil			
94	1231 - 1236	5.0	0.05			.001			
95	1236 - 1241	5.0	0.06			Nil			
96	1214 - 1245	4.0	0.15			Nil			
97	1245 - 1248	3.0		0.40	0.34	.001			
B-31198	1248 - 1253	5.0		0.26	0.21	.001			
99	1253 - 1258	5.0		0.28	0.19	Nil			
B-31200	1258 - 1263	5.0	0.11			Nil			
B-27511	1263 - 1268	5.0	0.16			Nil			
12	1268 - 1272	4.0		0.33	0.01	.001			
13	1272 - 1276 1/3	4.0	0.10			.017			
14	1276 - 1281	5.0	0.12			.001			
15	1281 - 1285	4.0		0.46	0.03		.078		
16	1285 - 1290	5.0		0.44	0.04	Nil			
17	1290 - 1294	4.0	0.16			Nil			
18	1294 - 1297	3.0	0.03			Nil			
19	1297 - 1301 1/3	4.0	0.08			Nil			
20	1301 - 1306	5.0	0.05			Nil			
21	1306 - 1310	4.0		1.05	0.05	Nil			
22	1310 - 1313	3.0		0.43	0.05	Nil			
23	1313 - 1317	4.0	0.05			Nil			

Form 1001

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-978

Depth of Hole _____ ft.

Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
B-27524	1317 - 1322	5.0	0.04		Nil	Nil				
25	1322 - 1327	5.0	0.05			.003				
26	1327 - 1332	5.0	0.03			.003				
27	1332 - 1336	4.0	0.08			.004				
28	1336 - 1340	4.0	0.03			Nil				
29	1340 - 1345	5.0	0.03			Nil				
30	1345 - 1350	5.0		0.61	0.09	.001				
31	1350 - 1354	4.0	0.12			.002				
32	1354 - 1359	5.0	0.09			.001				
B-27533	1359 - 1363	4.0	0.12			Nil				
34	1363 - 1368	5.0	0.04			Nil				
35	1368 - 1372	4.0	0.03			.003				
36	1372 - 1377	5.0	0.05			.001				
37	1377 - 1382	5.0	0.04			.001				
38	1382 - 1387	5.0	0.04			.001				
39	1387 - 1391	4.0	0.03			.003				
40	1391 - 1396	5.0	0.05			.001				
41	1396 - 1399	3.0		0.46	Nil	.005				
42	1399 - 1403	4.0	0.03			.005				
43	1403 - 1407	4.0	0.02			.003				
44	1407 - 1411	4.0	0.02			.004				
45	1411 - 1416	5.0	0.04			.004				
46	1416 - 1421	5.0	0.02			.007				
47	1421 - 1425	4.0	0.05			.004				

Form 1001

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-978

Depth of Hole _____ ft.

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Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
B-27548	1425 - 1429	4.0		0.24		.004				
49	1429 - 1433	4.0	0.17			.002				
B-27550	1433 - 1436	3.0		0.29		.008				
	END OF HOLE									

Form 1001

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-979

Depth of Hole 1525 ft.

Page 1 of

Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET		
	0 - 654	654.0	Not Sampled						
B-27273	654 - 659	5.0	0.11			Nil			
74	659 - 664	5.0		0.29	0.19	.002			
75	664 - 669	5.0	0.15			Nil			
76	669 - 674	5.0		0.31	0.17	Nil			
77	674 - 678	4.0	0.08			Nil			
78	678 - 681	3.0	0.10			.001			
79	681 - 685	4.0	0.08			.004			
80	685 - 688	3.0	0.08			.003			
81	688 - 692	4.0	0.09			.007			
82	692 - 696	4.0	0.18			.005			
83	696 - 697.5	1.5		2.04	1.35	.008			
84	697.5 - 700	2.5	0.08			.010			
85	700 - 704	4.0	0.10			.006			
86	704 - 708	4.0		0.25	0.17	.006			
87	708 - 710	2.0		3.14	2.85	.009			
88	710 - 713	3.0		1.92	1.60	.006			
89	713 - 715	2.0		5.94	4.30	.006			
90	715 - 718	3.0		2.32	0.86	.005			
91	718 - 718.5	.5		0.95	0.46	.019			
92	718.5 - 724	5.5	0.10			Nil			
	724 - 744	20.0	Not Sampled						
93	744 - 749	5.0	0.05			Nil			
	749 - 758.5	9.5	Not Sampled						
94	758.5 - 763.5	5.0	0.04			Nil			
B-27295	763.5 - 765	1.5		0.61	0.10	~~.185~~	.185		

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THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes

County and State Pima - Arizona

Drill Hole No. A-979

Depth of Hole _____ ft.

Page 2 of _____

Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
B-27296	765 - 768	3.0		0.61	0.20		.070			
97	768 - 772	4.0	0.17			.012				
98	772 - 775	3.0		0.89	0.08		.050			
99	775 - 779 3/1	4.0		1.00	0.18		.042			
B-27300	779 - 782	3.0		1.29	0.07	.015				
B-27177	782 - 785	3.0		1.96	0.10	.011				
78	785 - 790	5.0		1.55	0.08	.014				
79	790 - 795	5.0		0.98	0.11		.090			
80	795 - 798	3.0		0.44	0.07	.016				
81	798 - 802	4.0	0.13			.024				
82	802 - 806 1/3	4.0		0.48	0.05		.033			
83	806 - 811	5.0		0.91	0.06	.022				
84	811 - 815	4.0	0.13			.009				
85	815 - 820	5.0		0.56	0.05	.027				
86	820 - 823	3.0		0.38	0.05	.012				
87	823 - 826	3.0	0.18			.013				
88	826 - 830 1/1	4.0	0.18			.009				
89	830 - 834	4.0	0.13				.038			
90	834 - 837	3.0		2.25		.014				
91	837 - 840	3.0		2.10		.001				
92	840 - 845	5.0		1.12		.028				
93	845 - 850	5.0		1.54		.008				
94	850 - 821	1.0		3.07		.012				
B-27195	851 - 855 1/1	4.0		1.26		.003				

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THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes

County and State Pima - Arizona

Drill Hole No. A-979

Depth of Hole _____ ft.

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Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
B-27196	855 - 860	5.0		0.52		.009				
97	860 - 865	5.0		0.42		.007				
98	865 - 870	5.0		0.41		.005				
99	870 - 874	4.0	0.10				.116			
B-27200	874 - 879	5.0	0.10			.005				
B-31001	879 - 884	5.0	0.14			.017				
02	884 - 889	5.0	0.07			.001				
03	889 - 894	5.0	0.06			.011				
04	894 - 897	3.0	0.08			.010				
05	897 - 900	3.0	0.09			.002				
06	900 - 904	4.0	0.06			.010				
07	904 - 908	4.0	0.11			.003				
08	908 - 910	2.0	0.09			.003				
09	910 - 914.5	4.5	0.02				.036			
10	914.5 - 918	3.5	0.07				.057			
11	918 - 923	5.0	0.06			.012				
12	923 - 928	5.0	0.06			.004				
13	928 - 930	2.0	0.10			.004				
14	930 - 935	5.0	0.09			.009				
15	935 - 937	2.0	0.08			.002				
16	937 - 940	3.0		0.27		.016				
17	940 - 944	4.0		0.36			.042			
18	944 - 947	3.0	0.09			.017				
19	947 - 951	4.0	0.15			.008				

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THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes

County and State Pima - Arizona

Drill Hole No. A-979

Depth of Hole _____ ft.

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Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
B-31020	951 - 955 1/1	4.0	0.08			Nil				
21	955 - 959	4.0	0.12			Nil				
22	959 - 962	3.0	0.09			Nil				
23	962 - 966	4.0	0.10			.002				
24	966 - 970	4.0	0.10			Nil				
25	970 - 975	5.0	0.12			Nil				
26	975 - 979 3/1	4.0	0.08			Nil				
27	979 - 982	3.0	0.06			Nil				
28	982 - 987	5.0	0.08			Nil				
29	987 - 991	4.0	0.07			Nil				
30	991 - 995	4.0	0.10			Nil				
31	995 - 998	3.0	0.06			Nil				
32	998 - 1001	3.0	0.06			Nil				
33	1001 - 1005 1/1	4.0	0.07			Nil				
34	1005 - 1009	4.0	0.09			Nil				
35	1009 - 1012	3.0	0.08			Nil				
36	1012 - 1016	4.0	0.07			Nil				
37	1016 - 1018	2.0	0.09			Nil				
38	1018 - 1022	4.0	0.08			Nil				
39	1022 - 1025	3.0	0.08			Nil				
40	1025 - 1029 3/1	4.0	0.07			Nil				
41	1029 - 1033	4.0	0.08			Nil				
42	1033 - 1038	5.0	0.08			Nil				
43	1038 - 1044	6.0	0.07			Nil				

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THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes

County and State Pima - Arizona

Drill Hole No. A-979

Depth of Hole _____ ft.

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Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
B-31044	1044 - 1049	5.0	0.08			Nil				
45	1049 - 1052	3.0	0.06			Nil				
46	1052 - 1055 1√	3.0	0.07			Nil				
47	1055 - 1059	4.0	0.09			Nil				
48	1059 - 1062	3.0	0.11			.004				
49	1062 - 1066	4.0	0.09			Nil				
50	1066 - 1070	4.0	0.09			Nil				
51	1070 - 1073	3.0	0.14			Nil				
52	1073 - 1077	4.0	0.16			Nil				
~~53~~	1077 - 1104 ~~1√~~	27.0	Not Sampled							
53	1104 - 1109	5.0		0.54		Nil				
	1109 - 1120	11.0	Not Sampled							
54	1120 - 1125	5.0	0.05			Nil				
55	1125 - 1130 3√	5.0	0.06			Nil				
56	1130 - 1131	1.0		3.45	0.30	.071				
57	1131 - 1133	2.0		0.28	0.13	Nil				
58	1133 - 1136.5	3.5		0.34	0.06		.735			
	1136.5 - 1315 1√	178.5	Not Sampled							
59	1315 - 1317	2.0	XXXX	1.21 ØXØ	0.05	Nil				
60	1317 - 1320	3.0	0.19			.018				
61	1320 - 1325	5.0		0.22	0.08	.019				
62	1325 - 1330 3√	5.0		0.26	0.08	.008				
63	1330 - 1335	5.0		0.19	0.02	.004				
64	1335 - 1340	5.0		0.34	0.03	.027				

Form 1001

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-979

Depth of Hole _____ ft.

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Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
B-31065	1340 - 1345	5.0		0.36	0.03-	.013				
66	1345 - 1349	4.0		0.38	0.05	.003				
67	1349 - 1353	4.0		0.22	0.01	.026				
68	1353 - 1357	4.0	0.19			.008				
69	1357 - 1361	4.0		0.73	0.12	.013				
70	1361 - 1366	5.0		0.65	0.02	.014				
71	1366 - 1369	3.0	0.17			.018				
	1369 - 1395 9/17	26.0	Not Sampled							
B-31072	1395 - 1399	4.0	0.12			Nil				
73	1399 - 1401	2.0		0.76	0.46	.006				
74	1401 - 1403	2.0	0.11			Nil				
75	1403 - 1404.5	1.5		1.07	0.16	.005				
76	1404.5 - 1405.5	1.0	0.10			Nil				
77	1405.5 - 1410	4.5		0.83	0.39	.009				
78	1410 - 1415	5.0		0.75	0.32	.003				
79	1415 - 1420	5.0	24.5'	1.24	0.33	.004				
80	1420 - 1425	5.0		0.41	0.21	Nil				
81	1425 - 1430 3/✓	5.0		0.61	0.23	.003				
82	1430 - 1434	4.0		0.86	0.23	.008				
83	1434 - 1440	6.0	0.15			.033				
84	1440 - 1445	5.0		0.82	Nil	.038				
85	1445 - 1450	5.0		0.55	0.07	.270				
86	1450 - 1455 3/✓	5.0	0.18			.019				
87	1455 - 1460	5.0		0.16	Nil	.025				

Form-1602

THE ANACONDA COMPANY

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-979

Depth of Hole _____ ft.

Page 7 of 7

Sample No.	Interval (ft.)	Feet	% Tot. Cu X-RAY	% Tot. Cu WET	% Ox. Cu WET	% Mo X-RAY	% Mo WET			
B-31088	1460 - 1465	5.0	0.11			.026				
89	1465 - 1470	5.0		0.49	0.13	.038				
90	1470 - 1475	5.0		1.42	1.16	.006				
91	1475 - 1480	5.0		1.51	0.71	.052				
92	1480 - 1485	5.0		0.70	Nil	.013				
93	1485 - 1490	5.0	27.5'	0.39	Nil	.015				
94	1490 - 1495	5.0		1.27	Nil	.023				
95	1495 - 1497.5	2.5		0.89	Nil	.009				
	1497.5 - 1505	7.5	Not Sampled							
96	1505 - 1510	5.0	0.03			.002				
	1510 - 1520	10.0	Not Sampled							
B-31097	1520 - 1525	5.0	0.02			.001				
	END OF HOLE									

Form 1001

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. DDH A-974

Depth of Hole 1509 ft.

Page 1 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
	0 - 374	374.0	Alluvium & Fanglomerate				No	Assay			
B-25686	374 - 379	5.0	1.38	0.07			.007				
87	379 - 384	5.0	2.42	0.08			.002				
88	384 - 388	4.0	0.86	0.06			.007				
89	388 - 393	5.0	0.51	0.05			.020		Vy poor recove		
90	393 - 398	5.0	0.37	0.03			.020		Vy poor recove		
91	398 - 401	3.0	0.68	0.05			.008				
92	401 - 405	4.0	0.36	0.02			.002				
93	405 - 409	4.0	0.15	0.03			.002				
94	409 - 412	3.0	0.35	0.03			.002				
95	412 - 418	6.0	0.10	0.01			.001				
96	418 - 420	2.0	3.40			0.41	.002				
97	420 - 422	2.0	0.32			0.29	.002				
98	422 - 427	5.0	0.08			0.21	.002		Vy poor recove		
99	427 - 433	6.0	0.25			0.45	.001		poor recove		
B-25700	433 - 436	3.0	0.05			Tr	.002				
B-25873	436 - 441	5.0	0.05			1.75	.002				
74	441 - 445	4.0	0.06			1.49	.006				
75	445 - 450	5.0	0.09				.017				
76	450 - 455	5.0	0.41				.005				
77	455 - 459	4.0	7.09				.028				
78	459 - 463	4.0	0.04				.002				
79	463 - 465	2.0	0.11				.001				
80	465 - 469	4.0	1.65				.004				
81	469 - 473	4.0	1.71				.004				
82	473 - 476	3.0	3.32				.002				

DRILL HOLE ASSAYS

Property Banner

Drill Hole No. A-974

Location Twin Buttes Area

Depth of Hole _____ ft.

County and State Pima - Arizona

Page 2 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
B-25883	476 - 481	5.0	0.57				.002				
84	481 - 485	4.0	0.55				.005				
85	485 - 490 3/✓	5.0	0.22				.002				
86	490 - 495	5.0	0.49				.007				
87	495 - 500	5.0	3.24				.005				
88	500 - 505	5.0	1.80 18				.008				
89	505 - 508	3.0	2.04				.034				
90	508 - 511	3.0	0.33				.044				
91	511 - 516 2/3	5.0	0.05				.024				
92	516 - 521	5.0	0.05				.043				
93	521 - 526	5.0	0.12							Vy poor recovery	
94	526 - 531	5.0	0.06							"	
95	531 - 535	4.0	0.03							"	
96	535 - 538	3.0	0.06							"	
97	538 - 542	4.0	0.06							"	
98	542 - 546	4.0	0.04							"	
99	546 - 551	5.0	0.04							"	
B-25900	551 - 559	8.0	0.16							"	
~~B-27101~~	~~559 - 563~~	4.0	0.30							"	
02	563 - 567	4.0	0.18								
03	567 - 570	3.0	0.22								
04	570 - 572	2.0	0.32								
05	572 - 577	5.0	0.16								
06	577 - 582	5.0	0.42								
07	582 - 586	4.0	0.09								
08	586 - 589 2/1	3.0	0.15								

DRILL HOLE ASSAYS

Property Banner

Drill Hole No. A-974

Location Twin Buttes Area

Depth of Hole _____ ft.

County and State Pima - Arizona

Page 3 of _____

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
B-27109	589 - 593	4.0	0.23								
10	593 - 596	3.0	0.34								
11	596 - 600	4.0	0.10								
12	600 - 603	3.0	0.02								
13	603 - 607	4.0	0.03								
14	607 - 612	5.0	0.02								
	612 - 640	28.0	No Assay								
15	640 - 645	5.0	0.06								
	645 - 670	25.0	No Assay								
16	670 - 675	5.0	0.02								
	675 - 700	25.0	No Assay								
17	700 - 705	5.0	0.04								
	705 - 730	25.0	No Assay								
18	730 - 735	5.0	0.03								
	735 - 745	10.0	No Assay								
19	745 - 749	4.0	0.06								
	749 - 774	25.0	No Assay								
20	774 - 779	5.0	0.05								
	779 - 787	8.0	No Assay								
21	787 - 787.5	.5	5.24								
	787.5-804	16.5	No Assay								
22	804 - 809	5.0	0.05								
23	809 - 812	3.0	0.06								
24	812 - 817	~~4.0~~ 5.0	0.16								
25	817 - 821	4.0	0.03								
26	821 - 824	3.0	0.14								

DRILL HOLE ASSAYS

Property Banner

Drill Hole No. A-974

Location Twin Buttes Area

Depth of Hole _____ ft.

County and State Pima - Arizona

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Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%T.Cu X-ray	% Mo X-ray
B-27127	824 - 829	5.0	0.31								
28	829 - 830	1.0	0.11								
29	830 - 831.5	1.5	7.12								
30	831.5 - 835	3.5	0.05								
31	835 - 839	4.0	0.05								
32	839 - 844	5.0	0.05								
33	844 - 849	5.0	0.52								
34	849 - 854	5.0	0.16								
35	854 - 860	6.0	0.16								
36	860 - 864 3/1	4.0	0.07								
37	864 - 870	6.0	0.08								
38	870 - 875	5.0	0.12								
39	875 - 880	5.0	0.14								
	880 - 885	5.0	No core recovery								
40	885 - 890 3/1	5.0	0.05								
41	890 - 895	5.0	0.12								
42	895 - 900	5.0	0.10								
43	900 - 905	5.0	0.05								
44	905 - 909	4.0	0.05								
45	909 - 912	3.0	0.14								
46	912 - 915 1/1	3.0	0.15								
47	915 - 919	4.0	0.40								
48	919 - 922	3.0	0.17								
49	922 - 927	5.0	0.05								
50	927 - 931	4.0								0.11	
51	931 - 935	4.0								0.03	N

DRILL HOLE ASSAYS

Property Banner

Drill Hole No. A-974

Location Twin Buttes Area

Depth of Hole _____ ft.

County and State Pima - Arizona

Page 5 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%T.Cu X-ray	% Mo X-ray
B-27152	935 - 940 3/✓	5.0								0.04	.005
53	940 - 945	5.0								0.05	.003
54	945 - 950	5.0								0.02	Nil
55	950 - 955	5.0								0.02	.004
	955 - 980 8	25.0	No Assay								
56	980 - 984	4.0								0.02	Nil
	984 - 997 4/9	13.0	No Assay								
57	997 - 999	2.0								0.05	.010
	999 - 1010	11.0	No Assay								
58	1010 - 1015 3/✓	5.0								0.02	Nil
	1015 - 1040 23/✓	25.0	No Assay								
59	1040 - 1045	5.0								0.03	Nil
	1045 - 1065 18	20.0	No Assay								
60	1065 - 1070	5.0								0.08	.003
	1070 - 1099 18	29.0	No Assay								
61	1099 - 1104	5.0								0.04	Nil
	1104 - 1129 9	25.0	No Assay								
62	1129 - 1135	6.0								0.02	Nil
	1135 - 1157 3	22.0	No Assay							XXX	XXX
63	1157 - 1162	5.0								0.01	Nil
	1162 - 1190 1	28.0	No Assay								
64	1190 - 1195	5.0								0.01	Nil
	1195 - 1220	25.0	No Assay								
65	1220 - 1225	5.0								0.02	.00
	1225 - 1253	28.0	No Assay								
66	1253 - 1258	5.0								0.02	.00

DRILL HOLE ASSAYS

Property: Banner

Location: Twin Buttes Area

County and State: Pima - Arizona

Drill Hole No. A-974

Depth of Hole 1509 ft.

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	% T Cu X-ray	% M X-ra
	1258 - 1286 5/3	28.0	Not Sampled								
B-27167	1286 - 1291 2/2	5.0								0.02	..00
	1291 - 1311	20.0	Not Sampled								
68	1311 - 1316 2/3	5.0								0.02	.00
	1316 - 1336	20.0	Not Sampled								
69	1336 - 1341 2/3	5.0								0.08	Nil
	1341 - 1361	20.0	Not Sampled								
70	1361 - 1366 2/3	5.0								0.02	.01
71	1366 - 1370	4.0								0.02	.00
72	1370 - 1376	6.0								0.02	Nil
	1376 - 1409	33.0	Not Sampled							XXXXX	XXXXX
73	1409 - 1414	5.0								0.02	Nil
	1414 - 1447	33.0	Not Sampled								
74	1447 - 1453	6.0								0.02	Nil
	1453 - 1481	28.0	Not Sampled								
75	1481 - 1486	5.0								0.02	Nil
	1486 - 1505	19.0	Not Sampled								
B-27176	1505 - 1509	4.0								0.02	Nil
	END OF HOLE										

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PRILIMINARY ORE CALCULATIONS OF THE DYNAMITE CLAIMS

PIMA COUNTY, ARIZONA

Richard R. Weaver

PRILIMINARY CALCULATIONS OF THE DYNAMITE CLAIMS

PIMA COUNTY, ARIZONA

Introduction

The Dynamite claim group lies approximately twenty-five miles south-southwest of Tucson, Arizona, in the Pima Mining district. The six unpatented Dynamite claims are located in the N ½, N ½. sec. 30, T. 17 S., R. 13 E., and are oriented in a north-south direction. They embrace an area 1500 feet by 3600 feet and occupy approximately 125 acres.

The blacktopped Twin Buttes Road approximates the western boundary of the claim group, and the maintained, dirt Sahuarita Road traverses eastward through the center of the acreage.

While the claims were under option to Anaconda a total of 9,301 feet was drilled in six holes. Five of these holes contained well mineralized intercepts, and the sixth hole was essentially barren of copper mineralization.

Method of Attack

The calculations of this study are based on five wide-spaced drill holes - A-979, A-974, A-973, A-969 and A-978. Drill hole A-970 contained lean copper values and was not considered in the calculations. The spacing of the drill holes ranges from 500 feet to 925 feet.

Areas of influence were calculated by the polygonal method, and where there wasn't any drill hole bounding the polygon, the mirror image of the controlled half of the polygon was projected. The polygons were constructed around the respective drill holes on graph paper, and the square footage of influence was measured by counting the number of squares in the polygon and multiplying the number by a constant.

To allow for easier calculations a figure of 10 $ft.^3$/ton was used. The specific gravity of the rock containing the sulfide mineralization is about 3. This gives a value of 10.6 $Ft.^3$/ton. Thus the estimated tonnage derived in the study is very close to the actual tonnage figures.

In drill hole A-979 excellent molybdenum values were reported. In this hole only a Cu-Mo equivalent was derived. The formula used in this derivation is 4(Mo %) + Cu % = Cu-Mo equivalent. This conversion allows for a total tonnage in Cu % while still getting the benifit of the Mo assays.

It was assumed for the purpose of this study that there was no limited area due to ownership boundary lines. Also it must be borne in mind that this study is of the rapid priliminary character, and time did not allow for double checking of the figures. It is felt, however, that the estimations are fairly accurate and closely approximate the true values.

Tonnage and Grade Calculations

A break down of the calculations are presented in appendix A. These tonnages and grades were derived from the assay data supplied to Mr. Vernon Smith by the Anaconda Company. Under Mr. Smith's direction more care in preparation of intervals over 1 % Cu was taken than in the intervening intercepts.

In the five wide spaced holes a total of 30, 136, 180 tons of 1.225 % Cu occurs as indicated ore, and a total of 99, 814, 280 tons of 0.539 % Cu. occurs as indicated ore.

Mineralization and Depth

A very brief survey of the core in Mr V. Smith's possession indicates that mineralization consists of chalcocite, malachite, azurite, native copper, chalcopyrite, pyrite, molybdenite and very minor amounts of sphalerite and galena. This mineralization occurs in altered limestones and is of the typical contact-metasomatic type. The limestone units are altered to garnet, wollastonite, tremolite and other calc-silicate minerals. Minor veimlets of gypsum were observed.

The depth of the ore varies from hole to hole, except between A-969 and A-973 where it averages 926 feet below the surface.between the two holes. In drill hole A-974, located in the extreme southwest corner of the claim group, the ore grade material comes in at 374 feet and maintains an average grade of 1.012 % Cu to 511 feet. Ore grade material over 1 % Cu occurs at various depths in the remaining two holes, and correlations of the ore grade intercepts with any degree of confidence is difficult.

Mineralization Immediately South of The Smith Property

A hole located 1000 feet south of the south end bounda ry of the Dynamite group intersected the following ore grade mineralization in a tactite-hornfels host rock:

From	To	Interval	% Cu
702.4	805.5	103.1	0.83
702.4	880.8	178.4	0.74
702.4	722.6	20.2	0.81
742.2	805.5	63.3	1.03
855.8	880.8	25.0	1.44

Mineralization consisted of pyrite, chalcopyrite, molybdenite, bornite and primary chalcocite.

Three holes were drilled on 500 foot centers from the ore hole mentioned above. The hole 500 feet south had 5 feet of 5.18 % oxide copper in tactite-hornfels at a depth of 329 feet. The hole 500 feet west of the ore hole had 41.3 feet of 0.75 % Cu in tactite beginning at a depth of 455 feet, while the hole 500 feet to the east of the ore hole had minor Cu values. Based on the center hole and the hole to the west an estimated 5.5 million tons of 0.80 % Cu is indicated.

Based on drilling information in the area south of the Dynamite claims, it is theorized that the mineralized zone should strike roughly N. 40°-50° W. and dip 40° NE. The mineralized zone would thus project across the Kress ground and into the Dynamite claims.

Conclusions

Tonnage and grade calculations in this report are based on wide spaced-drill hole intercepts. Also high grade intercepts were correlated between the wide-spaced holes with very little regularity. It is extremely dangerous to correlate intersections which do not lie on a straight line or regular curve. Only further closer-spaced drilling will confirm or disprove the derivations contained in this report.

Richard R. Weaver

Richard R. Weaver

Appendix A

ORE CALCULATIONS - DYNAMITE CLAIM GROUP

Hole A-969 Area of influence 481, 200 $ft.^2$ 10 $ft.^3$ = 1 ton

Footage	Interval	Tonnage and Grade
927.0 - 941.0	14.0	673,680 toms of 0.697 % Cu
931.0 - 941.0	10.0	481,200 tons of 0.860 % Cu
1289.0 - 1295.5	6.5	312,780 tons of 1.453 % Cu
1365.0 - 1385.0	20.0	962,400 tons of 0.740 % Cu

Hole A-973 Area of influence 458, 000 $ft.^2$ 10 $ft.^3$ = 1 ton

Footage	Interval	Tonnage and Grade
925.0 - 968.0	43.0	1,969,400 tons of 1.230 % Cu
925.0 - 1216.0	291.0	13,327,800 tons of 0.411 % Cu
1186.0 - 1203.0	17.0	0,778,600 tons of 0.631 % Cu
1332.0 - 1483.0	150.5	6,892,900 tons of 0.424 % Cu
1339.0 - 1379.0	40.0	1,877,800 tons of 0.482 % Cu
1401.0 - 1444.0	43.0	1,969,400 tons of 0.606 % Cu
1471.0 - 1483.0	12.0	0,549,600 tons of 0.589 % Cu

Hole A-974 Area of infuence 768, 000 $ft.^2$ 10 $ft.^3$ = 1 ton

Footage	Interval	Tonnage and Grade
374.0 - 511.0	137.0	10,521,600 tons of 1.012 % Cu
374.0 - 401.0	27.0	2,073,600 tons of 1.070 % Cu
450.0 - 495.0	9.0	0,691,200 tons of 3.370 % Cu
465.0 - 511.0	46.0	3,532,800 tons of 1.398 % Cu

Hole A-978 Area of influence 637, 600 $ft.^2$ 10 $ft.^3$ = 1 ton

Footage	Interval	Tonnage and Grade
1078.0 - 1143.0	65.0	4,144,400 tons of 1.862 % Cu
1306.0 - 1313.0	7.0	0,446,320 tons of 0.780 % Cu
1078.0 - 1313.0	235.0	14,983,600 tons of 0.636 % Cu

Hole A-979 Area of influence 840,000 $ft.^2$ 10 $ft.^3$ = 1 ton

Footage	Interval	Tonnage and grade
708.0 - 718.5	10.5	0,882,000 tons of 3.018 % Cu
763.5 - 823.0	59.5	4,998,000 tons of 0.948 % Cu
834.0 - 870.0	36.0	3,024,000 tons of 1.180 % Cu
1399.0 - 1450.0	51.0	4,284,000 tons of 0.695 % Cu
1465.0 - 1497.5	32,5	2,730,000 tons of 1.049 % Cu

Hole A-979 (continued)

Footage	Interval	Tonnage and Grade
690.0 - 718.5	22.5	1,890,000 tons of 1.64 % Cu
763.5 - 870.0	106.5	8,946,000 tons of 0.887 % Cu
1130.0 - 1136.5	6.5	0,546,000 tons of 2.424 % Cu
696.0 - 1136.5	440.5	37,002,000 tons of 0.404 % Cu
1399.0 - 1497.5	98.5	8,274,000 toms of 0.799 % Cu
1315.0 - 1497.5	182.5	15,330,000 tons of 0.568 % Cu

Tonnage And Grade For Intervals of 1 % Or More

Hole A-979

Footage	Interval	Tonnage and Grade
696.0 - 718.5	22.5	1,890,000 tons of 1.640 % Cu
763.5 - 823.0	59.5	4,998,000 tons of 0.948 % Cu
834.0 - 870.0	36.0	3,024,000 tons of 1.180 % Cu
1465.0 - 1497.5	32.5	2,730,000 tons of 1.049 % Cu
1130.0 - 1136.5	6.5	0,546,000 tons of 2.424 % Cu
	subtotal	13,188,000 tons of 1.182 % Cu

Hole A-974

374.0 - 511.0	137.0	10,521,600 tons of 1.012 % Cu

Hole A-973

925.0 - 968.0	43.0	1,969,400 tons of 1.230 % Cu

Hole A-969

1289.0 - 1295.5	6.5	0,312,780 tons of 1.453 % Cu

Hole A-978

1078.0 - 1143.0	65.0	4,144,400 tons of 1.862 % Cu
	Total	30,136,180 tons of 1.225 % Cu

Total Tonnage And Grade Average

Hole A-979

Footage	Interval	Tonnage and grade
696.0 - 1136.5	440.5	37,002,000 tons of 0.404 % Cu
1315.0 - 1497.5	182.5	15,330,000 tons of 0.568 % Cu

Hole A-974

374.0 - 511.0	137.0	10,521,600 tons of 1.012 % Cu

Hole A-973

925.0 - 1216.0	291.0	13,327,800 tons of 0.411 % Cu

Hole A-973 (continued)

Footage	Interval	Tonnage and grade
1332.0 - 1483.0	150.5	6,892,900 tons of 0.424 % Cu

Hole A-969

931.0 - 941.0	10.0	0,481,200 tons of 0.860 % Cu
1365.0 - 1385.0	20.0	0,962,400 tons of 0.740 % Cu
1289.0 - 1295.5	6.5	0,312,780 tons of 1.453 % Cu

Hole A-978

1078.0 - 1313.0	235.0	14,983,600 tons of 0.636 % Cu
	Total	99,814,280 tons of 0.539 % Cu

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-969

Depth of Hole 1568 ft.

Page 1 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
	0 - 375	375.0	Not Sampled								
B-25804	375 - 376	1.0	1.24		Fragment in fanglomerate						
	376 - 895 18	519.0	Not Sampled								
05	895 - 899	4.0	0.06								
06	899 - 903	4.0	0.07								
07	903 - 908	5.0	0.13								
08	908 - 912	4.0	0.11								
09	912 - 917	5.0	0.08								
10	917 - 922 2/3	5.0	0.17								
11	922 - 927	5.0	0.15								
12	927 - 931	4.0	0.29	0.02							
13	931 - 936	5.0	0.91	0.58							
14	936 - 941	5.0	0.81	0.58							
	941 - 951 3/7	10.0	Not Sampled								
15	951 - 956	5.0	0.08								
	956 - 969	13.0	Not Sampled								
16	969 - 974	5.0	0.06								
	974 - 1011 20/37	37.0	Not Sampled								
17	1011 - 1016	5.0	0.03								
	1016 - 1028 3/9	12.0	Not Sampled								
18	1028 - 1031	3.0	0.05	0.05							
19	1031 - 1034	3.0	0.09	0.05							
20	1034 - 1037	3.0	0.05	0.01							
21	1037 - 1042	5.0	0.03	0.03							
22	1042 - 1047 2/3	5.0	0.62	0.43							
B-25823	1047 - 1050	3.0	0.03	~~0.03~~							

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-969

Depth of Hole _____ ft.

Page 2 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
B-25824	1050 - 1055	5.0	0.17	0.08							
25	1055 - 1059	4.0	0.11	0.05							
26	1059 - 1063	4.0	0.32	0.19							
27	1063 - 1068	5.0	0.18	0.12							
28	1068 - 1073	5.0	0.19	0.15							
29	1073 - 1078	5.0	0.14	0.09							
30	1078 - 1083	5.0	0.02	nil							
X	1083 - 1128	45.0	Not Sampled								
31	1128 - 1133	5.0	0.09								
	1133 - 1182	49.0	Not Sampled								
32	1182 - 1187	5.0	0.10	0.03							
	1187 - 1212	25.0	Not Sampled								
33	1212 - 1217	5.0	0.18	0.04							
	1217 - 1222	5.0	Not Sampled								
34	1222 - 1227	5.0	0.13	0.06							
	1227 - 1242	15.0	Not Sampled								
35	1242 - 1247	5.0	0.06	0.05							
	1247 - 1271	24.0	Not Sampled								
36	1271 - 1276	5.0	0.05	0.03							
	1276 - 1284	8.0	Not Sampled								
37	1284 - 1289	5.0	0.11	0.07							
38	1289 - 1291.5	2.5	2.00	0.15							
39	1291.5 - 1294	2.5	0.10	0.03							
40	1294 - 1295.5	1.5	2.80	0.14							
41	1295.5 - 1300	4.5	0.11	0.02							
B-25842	1300 - 1303	3.0	0.12				.009				

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-969

Depth of Hole _____ ft.

Page 3 of _____

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
B-25843	1303 - 1306	3.0	0.16				.005				
44	1306 - 1310	4.0	0.18				.009				
45	1310 - 1315	5.0	0.17				.007				
46	1315 - 1320 4/1	5.0	0.17				.014				
47	1320 - 1325	5.0	0.05				.006				
48	1325 - 1331	6.0	0.10				.005				
49	1331 - 1334	3.0	0.07				.003				
50	1334 - 1338	4.0	0.07				.002				
51	1338 - 1343	5.0	0.09				.004				
52	1343 - 1347 1/3	4.0	0.13				.035				
53	1347 - 1351	4.0	0.07				.004				
54	1351 - 1356	5.0	0.07				.004				
55	1356 - 1359	3.0	0.07				.004				
56	1359 - 1362	3.0	0.10				.005				
57	1362 - 1365	3.0	0.20				.011				
58	1365 - 1370 4/1	5.0	0.56				.011				
59	1370 - 1373	3.0	1.29				.007				
60	1373 - 1378	5.0	0.77 10				.007				
61	1378 - 1380	2.0	0.66				.007				
62	1380 - 1385	5.0	0.59				.012				
63	1385 - 1390	5.0	0.12 XXXX				.006				
64	1390 - 1395 4/1	5.0	0.11				.011				
65	1395 - 1400	5.0	0.16				.028				
66	1400 - 1405	5.0	0.90				.039				
	1405 - 1501	96.0	Not Sampled								
B-25867	1501 - 1506	5.0	0.03								

DRILL HOLE ASSAYS

Property Banner

Drill Hole No. A-969

Location Twin Buttes Area

Depth of Hole 1568 ft.

County and State Pima - Arizona

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
	1506 - 1563	57.0	Not Sampled								
B-25868	1563 - 1568	5.0	0.03								
	1568 END OF HOLE										

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-970

Depth of Hole 1560 ft.

Page 1 of 1

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
	0 - 1395	1395	Not Sampled								
B-25869	1395 - 1400	5.0	0.03								
	1400 - 1450	50.0	Not Sampled								
70	1450 - 1455	5.0	0.02								
	1455 - 1503	48.0	Not sampled								
71	1503 - 1508	5.0	0.02								
	1508 - 1555	47.0	Not Sampled								
B-25872	1555 - 1560	5.0	0.02								
	END OF HOLE										

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-973

Depth of Hole 1703 ft.

Page 1 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
	0 - 453	453.0	Not Sampled								
B-25452	453 - 458	5.0	0.04								
	458 - 477 14/3	19.0	Not Sampled								
53	477 - 482	5.0	0.42								
	482 - 523 17/24	41.0	Not Sampled								
54	523 - 528 1/4	5.0	0.03								
	528 - 558 21/9	30.0	Not Sampled								
55	558 - 563	5.0	0.05								
	563 - 591 11/1	28.0	Not Sampled								
56	591 - 596	5.0	0.15								
	596 - 643 25/9	47.0	Not Sampled								
57	643 - 648	5.0	0.06								
	648 - 698 16/24	50.0	Not Sampled								
58	698 - 703 1/4	5.0	0.02								
	703 - 753 21/24	50.0	Not Sampled								
59	753 - 758	5.0	0.04								
	758 - 803 16/25	45.0	Not Sampled								
60	803 - 808	5.0	0.05								
	808 - 839 16	31.0	Not Sampled								
61	839 - 841.5	2.5	1.90				.007				
	841.5 - 857 9.5/8	15.5	Not Sampled								
62	857 - 862	5.0	0.11								
	862 - 893	31.0	Not Sampled								
63	893 - 898	5.0	0.08								
	898 - 920	22.0	Not Sampled								
B-25464	920 - 925 1/1	5.0	0.033	0.22							

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-973

Depth of Hole _____ ft.

Page 2 of _____

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
B-25465	925 - 930	5.0	0.69	0.59							
66	930 - 935	5.0	0.62	0.51							
67	935 - 937	2.0	1.16	0.89							
68	937 - 942	5.0	0.49	0.30							
69	942 - 947	5.0	0.54	0.04			.006				
70	947 - 949	2.0	0.59	0.22			.009				
71	949 - 954	5.0	2.65	0.22			.009				
72	954 - 958	4.0	0.54	0.04			.006				
73	958 - 960	2.0	2.95 21'	0.26			.010				
74	960 - 964	4.0	1.93				.002				
75	964 - 968	4.0	2.13				.005				
76	968 - 973	5.0	0.23				.005				
77	973 - 978 ¼	5.0	0.12				.018				
78	978 - 983	5.0	0.14				.012				
79	983 - 988	5.0	0.06				.003				
80	988 - 993	5.0	0.06								
81	993 - 998	5.0	0.15								
82	998 - 1003 ¼	5.0	0.19								
83	1003 - 1008	5.0	0.23								
84	1008 - 1013	5.0	0.27								
85	1013 - 1018	5.0	0.29								
86	1018 - 1023	5.0	0.25								
87	1023 - 1028 ¼	5.0	0.33								
88	1028 - 1033	5.0	0.24								
89	1033 - 1038	5.0	0.18								
B-25490	1038 - 1043	5.0	0.14								

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-973

Depth of Hole _____ ft.

Page 3 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
B-25491	1043-1048	5.0	0.22								
92	1048-1053 1/4	5.0	0.16								
93	1053 - 1058	5.0	0.18								
94	1058 - 1063	5.0	0.17								
95	1063 - 1067	4.0	0.25								
96	1067 - 1071	4.0	0.28								
97	1071 - 1075 3/1	4.0	0.29								
98	1075 - 1078	3.0	0.16								
99	1078 - 1083	5.0	0.19								
B-25500	1083 - 1087	4.0	0.10								
B-27201	1087 - 1092	5.0	0.32								
02	1092 - 1097	5.0	0.09								
03	1097 - 1102 2/3	5.0	0.06								
04	1102 - 1107	5.0	0.24								
05	1107 - 1109	2.0	0.19								
06	1109 - 1114	5.0	0.30								
07	1114 - 1118	4.0	0.19								
08	1118 - 1123	5.0	0.27								
09	1123 - 1128 1/4	5.0	0.43								
10	1128 - 1131	3.0	0.41								
11	1131 - 1133	2.0	0.29								
12	1133 - 1138	5.0	0.40								
13	1138 - 1143	5.0	0.22								
14	1143 - 1148	5.0	0.47								
15	1148 - 1153 1/4	5.0	0.23								
B-27216	1153 - 1158	5.0	0.30								

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-973

Depth of Hole _____ ft.

Page 4 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%	%
B-27217	1158 - 1163	5.0	0.24								
18	1163 - 1165	2.0	0.48								
19	1165 - 1169	4.0	0.33								
20	1169 - 1174	5.0	0.32								
21	1174 - 1178	4.0	0.54								
22	1178-1182	4.0	0.24								
23	1182 - 1186	4.0	0.30								
24.	1186 - 1189	3.0	0.86								
25	1189 - 1193	4.0	0.75								
26	1193 - 1198	5.0	0.52								
27	1198 - 1203¼	5.0	0.51								
28	1203 - 1208	5.0	0.27								
29	1208 - 1213	5.0	0.24								
30	1213 - 1216	3.0	0.40								
	1216 - 1332.5	116.5	NO ASSAY								
31	1332.5-1337	4.5	0.19	0.04							
32	1337 - 1339	2.0	0.28	0.04							
33	1339 - 1344	5.0	0.93	0.07							
34	1344 - 1349	5.0	0.36	0.04							
35	1349 - 1354	5.0	0.10	0.02							
36	1354 - 1359	5.0	1.01	0.06							
37	1359 - 1364	5.0	0.40	Nil							
38	1364 - 1369	5.0	0.25	Nil							
39	1369 - 1374	5.0	0.41	0.01							
40	1374 - 1379	5.0	0.40	0.01							
41	1379 - 1384	5.0	0.14	0.01							

DRILL HOLE ASSAYS

Property Banner

Drill Hole No. A-973

Location Twin Buttes Area

Depth of Hole _____ ft.

County and State Pima - Arizona

Page 5 of

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%T.Cu X-ray	% Mo X-ray
B-27242	1384 - 1388	4.0	0.23	0.02							
43	1388 - 1393	5.0	0.20	0.02							
44	1393 - 1397	4.0	0.35	0.03							
45	1397 - 1401	4.0	0.16	0.03							
46	1401 - 1406	5.0	0.46	0.06							
47	1406 - 1411	5.0	0.64	0.16							
48	1411 - 1416	5.0	0.44	0.06							.035
49	1416 - 1421	5.0	0.89	0.06							.037
50	1421 - 1426	5.0	0.68	0.14							.032
51	1426 - 1431	5.0	0.57	0.12							.010
52	1431 - 1435	4.0	0.70	0.09							.012
53	1435 - 1439	4.0	0.75	0.11							.022
54	1439 - 1444	5.0	0.38	0.06							.037
55	1444 - 1448	4.0								0.12	.047
56	1448 - 1453	5.0								0.18	.022
57	1453 - 1458	5.0	0.38	0.03							.039
58	1458 - 1463	5.0								0.18	.075
59	1463 - 1467	4.0								0.17	.176
60	1467 - 1471	4.0								0.14	.062
61	1471 - 1476	5.0	0.38	0.02							.013
62	1476 - 1481	5.0	0.43	0.14							.025
63	1481 - 1483	2.0	1.51	0.65							.029
64	1483 - 1488	5.0	0.28	0.06							.034
65	1488 - 1493	5.0								0.19	.014
66	1493 - 1498	5.0								0.18	.011
B-27267	1498 - 1503	5.0	0.33	0.08							.008

DRILL HOLE ASSAYS

Property Banner

Location Twin Buttes Area

County and State Pima - Arizona

Drill Hole No. A-973

Depth of Hole _____ ft.

Page 6 of _____

Sample No.	Interval (ft.)	Feet	% Total Cu	% Oxide Cu	% Pb	% Zn	% Mo	oz/ton Au	oz/ton Ag	%TCu X-ray	% Mo X-ray
B-27268	1503 - 1508	5.0								0.18	.010
69	1508 - 1513	5.0								0.15	.014
	1513 - 1637	124.0	No Assay								
70	1637 - 1641	4.0								0.02	Nil
	1641 - 1667	26.0	No Assay								
71	1667 - 1673	6.0								0.02	Nil
	1673 - 1700	27.0	No Assay							0.02	Nil
72	1700 - 1703	3.0									
	1703 E.O.H.										

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
FEDERAL CENTER, DENVER, COLORADO 80225

Office of Minerals Exploration

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September 1, 1967

Memorandum

To: Chief, OME

From: Field Officer, Region III

Subject: OME-6578 (Copper)
CWT Property of the
Continental Exploration, Inc.
Pima County, Arizona

Transmitted herewith is the report of examination on the above-stated property. It is concluded that the chances of discovering copper ore bodies comparable in size to the C.W.T. ore body, or the Section 30 ore body are good and it is therefore recommended that an exploration contract be executed to complete the work herein outlined, at an estimated total cost of $136,489.68.

UNITED STATES

DEPARTMENT OF THE INTERIOR

STEWART L. UDALL, SECRETARY

U. S. GEOLOGICAL SURVEY

OFFICE OF MINERALS EXPLORATION

REPORT OF EXAMINATION

REGION III

OME-6578 (COPPER)

CWT PROPERTY OF THE

CONTINENTAL EXPLORATION, INC.

PIMA COUNTY, ARIZONA

By

J. WILLIAM HASLER

GEOLOGIST

SEPTEMBER 1967

ON-SITE
EXAM.RPT.

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Figure 1. Continental Exploration, Inc. CWT Property, Pima County, Arizona.

Information and summary

Continental Exploration, Inc., a corporation, 820 South Ninth Street, P. O. Box 190, Grand Junction, Colorado 81501, applied to the Office of Minerals Exploration to explore for copper on the CWT property in the Pima Mining district, Pima County, Arizona, 20 miles south of Tucson at an estimated cost of $140,054.68. The application was referred to the field and an examination was made on April 18, 1967. The examining geologist was accompanied by Mr. John Roscoe, Manager, Continental Exploration, Inc., Tucson, Arizona.

The CWT property is located in T. 17 S., R. 12 and 13 E., G. & S. R. M., in the Pima Mining District, Pima County, Arizona and is held under lease with an option to purchase the subject property. There are no liens, mortgages or other encumbrances on the property.

The applicant proposes to explore for copper in an area that lies between Continental Exploration, Inc.'s ore body in Section 23, T. 17 S., R. 12 E., and considerably larger but lower grade mineralized ground 2 miles east in Section 30, T. 17 S., R. 13 E. Similar mineralized material may well occur in the target area. The target area is underlain by the post-ore Helmet Fanglomerate except in the southwest corner. The Helmet Fanglomerate, which makes up most of the upper plate of the San Xavier thrust in this area, ranges in thickness from 0 along the outcrop of the thrust zone in the southwest corner of the target area to more than 1800 feet near the northeast corner. It is 1,000 to 1,250 feet thick in the northwest corner and about 400 feet thick near the southeast corner, where the San Xavier thrust is south of the position shown in Exhibit C of the applicant's report.

Additional information supplied by the applicant included detailed assay data and reserve calculations on the Dynamite claims that lie in the section 30 mineralized area east of the block of ground proposed for exploration. The data show that hole A-974 cut virtually unoxidized copper ore below 374 feet, whereas hole A-978 cut oxide copper ore at depths in excess of 1,100 feet. John Cooper, USGS project geologist, who has mapped the area believes this relationship may be significant in that the deep oxide ore could be in one or more of the monolithologic landslide masses within the Helmet Fanglomerate rather than in lag blocks along the San Xavier thrust as is the unoxidized ore further south on the property. Unquestionably there is a lot of copper on the Dynamite claim to the east, and the neighboring part of the Continentals' target area is virtually unexplored. The regional structure of the area indicates that the chances of important ore discoveries increase to the east within the target area. It is therefore recommended that the application be approved and that a contract be prepared to complete the exploration work as essentially herein outlined with accompanying costs.

Location

The applicant's property, known as the C.W.T. Property, is located in T. 17 S., Ranges 12 and 13 East G & S. R. M. in the Pima Mining District, Pima County, Arizona.

The property lies about 20 miles southwest of Tucson and is about 8 miles west of Sahuarita, Arizona which is on U. S. Highway 89, 17 miles south of Tucson. It may be reached by various routes on paved and good gravelled roads from Tucson. The most direct route is along the paved Mission-Twin Buttes road which crosses Section 24.

The nearest railhead is Sahuarita, Arizona where loading facilities exist on the Southern Pacific Company line from Tucson to Nogales. Other facilities have been installed within a few miles north and south of Sahuarita. Adequate mining and milling supplies, equipment and tools are available in Tucson.

Property

The following named unpatented lode mining claims situated in Township 17 South, Ranges 12 and 13 East, G. & S. R. M., in the Pima Mining District, Pima County, Arizona, the original and amended notices of location of which are of record in the office of the Recorder of Pima County, Arizona, as follows:

NAME OF CLAIM	DOCKET	PAGE	NAME OF CLAIM	DOCKET	PAGE
Arizona No. 25	911	176	Midland No. 1	943	350
Arizona No. 27	911	177	Midland No. 2	943	350
Arizona No. 29	911	180	Midland No. 3	943	352
Arizona No. 31	911	182	Midland No. 4	943	353
Arizona No. 33	911	184	Midland No. 5	943	354
Amended	2698	208	Midland No. 6	943	355
Arizona No. 35	911	186	Midland No. 7	943	356
Amended	2698	210	Midland No. 8	943	357
Arizona No. 37	911	188	Midland No. 9	943	358
Amended	2698	212	Midland No. 10	943	359
			Midland No. 11	943	360
Copper Bottom #1	2218	430	Midland No. 12	943	361

NAME OF CLAIM	DOCKET	PAGE
Copper Bottom #2	2218	431
Copper Bottom #3	2218	432
CWT No. 3	2698	202
CWT No. 13		
CWT. No. 14		
Ella #25	1113	76
Ella #28	1113	96
Ella #30	1113	98
Ella #31	1113	99
Ella #32	1113	100
Ella #33	1113	101
Ella #34	1113	102
Ella #35	1113	103
Ella #36	1113	104
Ella #37	1113	105
Ella #38	1113	106
Ella #39	1113	107
Ella #40	1113	108
Ella #41	1113	109

NAME OF CLAIM	DOCKET	PAGE
Midland No. 13	943	362
Midland No. 14	943	363
Midland No. 15	943	364
Midland No. 16	943	365
Midland No. 17	943	366
Midland No. 18	943	367
Amended	2698	252
Midland No. 19	943	368
Amended	2698	253
Midland No. 20	943	368
Amended	2698	254
Midland No. 24	943	373
Midland No. 26	943	375
Midland No. 28	943	377
Pima #2	2060	181
Amended	2698	237
Pima #3	2060	182
Pima #4	2060	183
Pima #5	2060	184

Property Rights

The applicant has a lease until March 11, 2014 and an option to purchase the subject premises. This leasehold and option interest arises under CWT Mining Lease and Option dated March 12, 1964 between Continental Exploration, Inc., and C. DARREL WILSON, et al, (a copy of which is recorded in the office of the Recorder, Pima County, Arizona at Docket 2470, Pages 328-386) as amended by First Amendment dated March 16, 1964 (a copy of which First Amendment is recorded in the office of the Recorder, Pima County, Arizona, at Docket 2470, Pages 387-415), by Second Amendment dated March 18, 1964 (a copy of which Second Amendment is recorded in the office of the Recorder, Pima County, Arizona, at Docket 2470, Pages 416-444) and by Third Amendment to CWT Mining Lease and Option and Restated CWT Mining Lease and Option, a true copy (completely conformed) of which Third Amendment is included as Exhibit B. Such agreements state the names and addresses of the owners.

There are no liens, mortgages, or other encumbrances on the land.

The land upon which the applicant wishes to explore and which should be subject to Government royalty and liens comprises the following unpatented mining claims:

NAME OF CLAIM	DOCKET	PAGE	NAME OF CLAIM	DOCKET	PAGE
Arizona No. 25	911	176	Midland No. 1	943	350
Arizona No. 27	911	177	Midland No. 2	943	351
Arizona No. 29	911	180	Midland No. 3	943	352

NAME OF CLAIM	DOCKET	PAGE
Arizona No. 31	911	182
Arizona No. 33	911	184
Amended	2698	208
Arizona No. 35	911	186
Amended	2698	210
Arizona No. 37	911	188
Amended	2698	212
Copper Bottom #1	2218	430
Copper Bottom #2	2218	431
Copper Bottom #3	2218	432
CWT No. 3	2698	202
CWT No. 13		
CWT No. 14		
Ella #28	1113	96
Ella #30	1113	98
Ella #31	1113	99
Ella #32	1113	100
Ella #33	1113	101
Ella #34	1113	102
Ella #35	1113	103

NAME OF CLAIM	DOCKET	PAGE
Midland No. 4	943	353
Midland No. 5	943	354
Midland No. 6	943	355
Midland No. 7	943	356
Midland No. 8	943	357
Midland No. 9	943	358
Midland No. 10	943	359
Midland No. 11	943	360
Midland No. 12	943	361
Midland No. 13	943	362
Midland No. 14	943	363
Midland No. 15	943	364
Midland No. 16	943	365
Midland No. 17	943	366
Midland No. 18	943	367
Amended	2698	253
Midland No. 19	943	368
Amended	943	253
Midland No. 20	943	369
Amended	2698	254
Midland No. 24	943	373
Midland No. 26	943	375
Midland No. 28	943	377

NAME OF CLAIM	DOCKET	PAGE	NAME OF CLAIM	DOCKET	PAGE
Ella #36	1113	104	Pima #2	2060	181
Ella #37	1113	105	Amended	2698	237
Ella #38	1113	106	Pima #3	2060	182
Ella #39	1113	107	Pima #4	2060	183
Ella #40	1113	108	Pima #5	2060	184
Ella #41	1113	109			

The applicant requested that the owners of the claims execute a Lien and Subordination Agreement (MME Form 52). It was not possible to secure agreement from the owners, and through their representative, C. Darrel Wilson, and their attorney Leo N. Smith, they advised applicant that they declined to execute the MME Form 52. See letter dated July 28, 1966, to Sidney M. Gunther from C. Darrel Wilson, included as Exhibit D in the application.

Geology[1/]

The Pima district is on the northeast flank of the Sierrita Mountains in the Basin and Range physiographic province. The southwestern part of the district, which contains the Esperanza (Duval) mine, is in foothills that are continuous with the main part of the mountains. The rest of the district is beneath an extensive pediment. This pediment is not perfectly even but is trenched by shallow arroyos and surrounted by isolated hills, such as Mineral Hill, Helmet Peak, and Twin Buttes, which are conspicuous landmarks. Alluvium of Santa Cruz valley overlaps the eastern part of the pediment and is about 200 feet thick over the large Pima and Mission ore bodies.

The rocks exposed in the district include an upper Cretaceous or lower Tertiary granodiorite to the west and a complex of faulted and folded sedimentary and igneous rocks to the east and south. Ore mineralization followed intrusion of the granodiorite and of a quartz monzonite porphyry that is either a facies of the granodiorite or a generically related intrusive rock. Important clues to the structural history are provided by the postmineralization Helmet fanglomerate, which has not been described heretofore.

The Helmet fanglomerate in the Pima mining district is a deformed postmineralization formation of Tertiary age. Where the fanglomerate is present, it forms a thick blanket over the potentially ore-bearing rocks. It also provides a basis for distinguishing late Tertiary from older structural features.

The Pima Mining District is an old copper, lead, zinc, and precious metal district in Pima County, Arizona, 15 to 30 miles by road south-southwest of Tucson. The district promises to become one of the major sources of copper in the United States as a result of the recent discovery of several large deposits.

The principal new discoveries in the district have been made by four mining companies and include those at and near the Mineral Hill, Daisy, and Glance mines of the Banner Mining Co. (Bowman, 1955; Storms and Bowman, 1957; anonymous, 1958a and 1959b), the Pima open-pit mine of the Pima Mining Co. (Thurmond, Heinrichs, and Spaulding, 1954; Thurmond and Storms, 1958; Thurmond, Olk, and other, 1958), the Esperanza open-pit mine of the Duval Sulphur and Potash Co. (anonymous,

1957, 1958b, and 1959a), and the Mission deposit (once called the East Pima deposit) of the American Smelting and Refining Co. (anonymous, 1957, 1958b, and 1959c).

1/ John R. Cooper, Some geologic features of the Pima Mining district, Pima County, Arizona, U.S.G.S. Geol. Surv. Bull. 1112-C.

In a review of this application by Mr. John Cooper,[2/] Geologist, U. S. Geological Survey he describes the geologic structure with relation to the ore deposits in the immediate area as follows:

"Continental's ore body is in a fault slice of limestone along the San Xavier thrust, whose post-ore age is I think amply demonstrated, in spite of some other's opinions. The block mineralized in Section 30 has the same structural relations insofar as the subsurface geologic information I have goes. The blocks are drag blocks, or more probably lag blocks that borke off the bottom of the upper plate of the thrust and were over-ridden. Hence the mineralized blocks are of small to moderate thickness."

"Lag blocks of limestone are known to occur along the San Xavier thrust in the target area, but these blocks are not continuous with the block containing Continental's ore body in Section 23; there is an intervening belt in which limestone is missing and the post-ore Helmet Fanglomerate, with its contained monolithologic breccias, extend from the surface to the sole of the San Xavier thrust. The block mineralized

in Section 30 may extend into the eastern part of the target area but indications are that the mineralization ends before the target area is reached."

"Limestones, cut by Laramide intrusive rocks and locally mineralized, pass beneath the San Xavier thrust plate southeast of the target area and hence valuable mineralization in the autochthonous block beneath the thrust are a distinct possibility

The target area is underlain by the post-ore Helmet Fanglomerate except in the southwest corner. The Helmet, which makes up most of the upper plate in this area, ranges in thickness from 0 along the outcrop of the thrust zone in the southwest corner of the target area to more than 1,800 feet near the northeast corner. It is 1,000 to 1,250 feet thick in the northwest corner and about 400 feet thick near the southeast corner, where the San Xavier thrust is south of the position shown in Exhibit C. Obviously if ore is present in the target area, it is likely to be at considerable depth.

2/ Memorandum, October 7, 1966, from John R. Cooper to J. William Hasler concerning subject application.

Previous Work

The applicant's previous exploration work in the area lies entirely in Section 23 and is bounded on the west by the Ruby Star Fault, a northwest trending, east-dipping, high angle normal fault, probably of post thrust age. In the hanging wall of the fault a

thin dragged sheet of crushed Paleozoic limestone is found overlain by silicified Cretaceous arkose. All of the rest of the surface area is covered by post ore fanglomerate and recent wash.

Subsurface geologic conditions in Section 23 are known from 38 core holes in the immediate area, 25 of them drilled by Continental. The Cretaceous rocks are silicified, metamorphosed and slightly mineralized from the surface (on the west side of this section) to the limestone contact, a depth ranging from 500 to more than 1,000 feet. No ore grade drill intercepts were found but 0.3% to 1.0% copper occurs over widths of 5 to 50 feet in several drill holes. Near the limestone contact the arkoses are variously hornfelzed, silicified and mineralized, and crushed and clay altered. The contact is in places a thrust fault, in others an unconformity, often with a basal pebble conglomerate.

Below the arkose is found from 20' to 400' of limestone, quartzite and anhydrite beds. These Paleozoic rocks are cut off at depths of 900 to 1,100 feet by the tently dipping San Xavier thrust fault. This thrust fault has not been found to be mineralized. Just above the thrust a thickness of 100 to 200 feet of anhydrite-limestone is always present.

The limestone contains layers of tactite, a greenish crystalline crystalline rock composed largely of garnet, epidote, diopside and marble, layers of olive colored hornfels, coarse crystalline marble, and a materiall locally known as "clay garnet rock". Ore mineralization occurs in both tactite and hornfels.

The balance of the area east of the Ruby Star Fault is explored only by a few scattered drill holes, many of which failed to bottom the post-ore fanglomerate.

South of the San Xavier thrust Paleozoic rocks and Precambrian granite occur. Mineralization is known in the Palezoic rocks.

Just east of the applicant's boundary in the North 1/2 of section 30, T. 17 S., R. 13 E. a large mineralized area has recently been disclosed by drill holes in such rocks underlying an area at least 3,000 feet by 1,500 feet. The shallowest mineralization occurs in a drill hole located about 1,800 feet East and 1,200 feet South of the S.E. corner of Section 24. Here an intersection from 374 feet to 511 feet averages plus 1.0% Cu with minor amounts of MoS_2 and ZnS. The area sampled by drill holes probably contains in excess of 100,000 tons of material grading plus 0.5% Cu at depths of from 400 feet to 1,500 feet.

Paleozoic rocks are known to underlie the area between the mineralization disclosed in Section 30, T. 17 S., R. 13 E. and the ore body presently being developed by applicant in Section 23, T. 17 S., R. 12 E. Mineralization is known in this area from wide spaced scout drilling. Although target size cannot be known at this time, it is reasonable to expect to find in this area either a low grade ore body of extremely large size or a relatively smaller and higher grade ore body similar to that in Section 23.

The geology of the Pima Mining District has been intensely investigated by the U. S. Geological Survey, University of Arizona and

mining company geologists. Maps and reports published since 1955 in government publications, technical journals, and university papers are recent enough to be pertinent. These are summarized in the bibliography of U.S.G.S. Bulletin 1112-C.

The most recent material available to applicant is contained in a thesis submitted to the faculty of the department of geology in the graduate college of the University of Arizona by Richard R. Weaver, entitled "Structural Interpretation of the Ruby Star Ranch Area, Pima Mining District, Pima County, Arizona." A copy of this thesis is available for loan at the library of the University of Arizona. Mr. Weaver has granted permission to applicant to use information from this thesis.

Production

Physical Description

Description of Operations. Continental is now installing underground facilities for production of 500 tons per day from its Nevada shaft on Section 23, T. 17 S., R. 12 E. A mill contract has been let for completion at the end of March, 1967. Drilled Ore Reserves are carried at 1,208,000 tons averaging 1.08% Cu, 7.2% Zn, 0.30% lead, 1.54 oz silver. Based on Induced Polarization resistivity and drill data the probable size of the ore lenses is at least double that now measured by drill holes. Furthermore the ore host rock area is several times as large as has been located by drilling and additional ore lenses may be expected.

The CWT property and geology pertinent to exploration is shown by the attached Geologic and Claim Map, Exhibit C.

All development work described above has been done by the applicant, Continental Exploration, Inc.

There has been no production.

See CWT Property Report attached.

Proposed Exploration

Exploration Work.

Two methods of exploration are proposed to explore this area: Induced Polarization - Resistivity surveying to help localize targets, and non-core and core drilling to test favorable areas.

The applicant proposes to explore this area in two phases. Phase I will consist of approximately 37,000 feet of Induced Polarization - Resistivity lines as indicated on accompanying Map (Exhibit C) and six drill holes to allow interpretation of the results of this survey. Following the Induced Polarization - Resistivity survey the location of the initial holes necessary to allow interpretation will be determined by consultation with the OME field representative.

Phase II of the program will be dependent upon the results of Phase I. It will consist of detailed Induced Polarization - Resistivity surveying on lines of 250 foot spacing over anomalies disclosed and confirmed by Phase I. Approximately 30,000 feet of Induced Polarization - Resistivity line will be allocated for this purpose. Phase II drilling will define target areas disclosed by Phase I drilling and Induced Polarization - Resistivity work.

A minimum of twenty drill holes will be required to define a target area of the anticipated size.

Existing access roads will be used.

Geophysical survey work can be started within 30 days after contract execution, and can be completed in approximately 30 additional days. Drilling the six Phase I holes can be completed within three months. Phase II Induced Polarization - Resistivity work and drilling will require approximately four months.

Estimate of Costs.

To conduct the proposed Induced Polarization - Resistivity geophysics and aid in interpretation, and applicant proposes to use the services of the Heinrichs Geoexploration Company.

An estimate of the costs for the geophysical work as outlined as follows:

Phase I.

37,000 feet of Induced Polarization - Resistivity survey in six lines, spaced 1000 feet apart, including compilation, interpretation and reporting.

37,000 feet @ $.10 per foot	-	$ 3,700.00

Phase II.

30,000 feet of Induced Polarization - Resistivity survey on line spacing of 250 feet including compilation, interpretation and reporting.

30,000 feet @ $.10 per foot	-	$ 3,000.00
Total		$ 6,700.00

Applicant proposes to contract drilling to an independent contractor. The applicant conducted a drilling program in 1964 to delineate its present orebody. This program consisted of 25 holes aggregating 13,617 feet of non-core drilling and 7,086 feet of NXWL diamond core. This 1964 program is the basis for applicant's estimates of indirect costs.

Based upon current proposals from qualified contract drillers and actual costs incurred in conducting the 1964 drilling program the following costs are estimated for the program proposed herein:

Phase I.

(a) Independent Contracts

1. Drilling Contracts

(Assume six holes averaging 1000 feet total depth, with an average of 700 feet of non-core and 300 feet of core drilling)

Proposal (1) (Boyles)

Non-core	0 - 500 @ $2.60/ft x 3000 ft =		$7,800.00
	500 - 750 @ $3.10/ft x 1200 ft =		3,720.00
NX Core	500 - 1000 @ $7.00/ft.x 1800 ft.=		12,600.00
Water Truck			
3 months @ $190. plus 1500 mi. @ $.12		=	750.00
			$24,870.00

2. Indirect Costs

Casing left in hole

Cement, drilling mud and chemicals

Standby time

Average $300/hole x 6 = $1,800.00

3. Site Preparation

Average 3.5 hours/site @ $23/hr $80.50 x 6 = 483.00

Total Contract $27,153.00

(b) Personal Services

1. Sample preparation and assaying

10/hole x 6 = 60 @ $11.50 690.00

2. Geologist-supervisor-Engineer Resident 3 mo. @ $1,000 = 3,000..00

Consultant - 10 days @ $75.00/day 750.00

Total Personal Services $4,440.00

(c) Operating Material and Supplies

Core boxes - 180 @ $0.70 $ 126.00

Core storage - 3 months @ $20 60.00

Total Operating Materials & Supplies $ 186.00

(d) Operating Equipment

None

(e) Initial Rehabilitation and Repairs

None

(f) New Buildings, Fixtures, Installations

None

(g) Miscellaneous

1. Payroll Taxes 7.2% x $4260 $ 306.72

2. Accounting - No charge -------

3. Field Office - No charge -------

Total - Phase I

Geophysics	$3,700.00
Drilling, etc.	32,085.72
Phase I Total	$35,085.72

Phase II.

(a) Independent Contracts

1. Drilling Contract

(Assume twenty holes averaging 1,000 feet total depth, with an average of 700 feet of non-core and 300 feet of core drilling)

Proposal (1) (Boyles)

Non-core	0 - 500 @ 2.60/ft x 10,000 ft	=	$26,000.00
	500 - 750 @ 3.10/ft x 4,000 ft	=	12,400.00
NX Core	500 -1000 @ 7.00/ft x 6,000 ft	=	42,000.00
Water Truck			
4 mos. @ $190.00 plus 5,000 mi	@ $.12	=	1,360.00
	Total		$81,760.00

2. Indirect Costs

Casing left in hole

Cement, drilling mud and chemicals

Standby time

Average $300/hole x 20 6,000.00

3. Site Preparation

Average 3.5 hours/site @ $23/hr = $80.50 x 20 1,610.00

Proposal (1) $89,370.00

(b) Personal Services

1. Sample Preparation and Assaying

10/hole x 20 = 200 @ $11.50	$ 2,300.00

2. Geologist-Supervisor-Engineer

Resident - 4 months @ $1,000	4,000.00
Consultant - 15 days @ $75.00/day	1,125.00
Total Personal Services	$ 7,425.00

(c) Operating Material and Supplies

Core boxes - 600 @ $0.70	420.00
Core storage - 4 months @ $20.00	80.00
Total Operating Supplies & Material	$500.00

(d) Operating Equipment

None

(e) Initial Rehabilitation and Repairs

None

(f) New Buildings, Fixtures, Installations

None

(g) Miscellaneous

1. Payroll Taxes 7.2% of $5680	$408.96
2. Accounting - No charge	---
3. Field Office - No charge	---
Total Miscellaneous	$408.96

Total Phase II

Geophysics	$3,000.00
Drilling, etc.	97,703.96
Total Phase II	100,703.96

Total - Phase I	$35,785.72
Total - Phase II	100,703.96
Total Estimated Cost	$136,489.68

Conclusions and Recommendations

The applicant has developed an ore reserve in Section 23, T. 17 S., R. 12 E., estimated at 1,208,000 tons averaging 1.08% copper, 2.7% zinc, 0.30% lead, and 1.54 oz. silver. Diamond drilling in the N. 1/2 Section 30, T. 17 S., R. 13 E., G & SRB & M is reported to have developed an estimated 30,136,180 tons of material containing 1.225% copper and nearly 100,000,000 tons of material containing 0.539 percent copper (See applicant's map Exhibit C). Recently estimated reserves of copper in the Pima mining district area indicate the following:

Area	Tons of Copper	Ore Grade
Asarco (Mission)	2×10^6	0.85 (Copper)
Pima	1.3×10^6	0.76 (USBM 1965)
Twin Buttes	2×10^6	0.5 - 0.7 (E & MJ April, 1967)

The block of ground that the applicant has proposed exploring lies between the two ore bodies mentioned above, and the ore reserve figures quoted above indicate that there are possibilities of discovering ore bodies containing copper and silver comparable in size to the C.W.T. ore body and the Section 30 mineralized area. The ore bodies are likely to be comparable in grade to those of the Mission, Pima and Twin Buttes ore bodies and range in grade from less than 0.4 percent copper, the cut-off for the Mission pit to as much as 1.76 per cent copper, and may average between 0.5 - 0.7% copper, and may also be similar to the C.W.T. ore body and the Section 30 ore body.

It is concluded that the area proposed for exploration could contain ore bodies of comparable size to those already discovered, and consequently

offer a reasonable target for potential ore bodies of the size and grade mentioned above. Costs of exploration and development and mining should not be much different than they have been for other operating properties in the area, e.g. Mission and Pima and C.W.T. The applicant states that the total value of the ore in the C.W.T. ore body is $ 14.43 per ton, and that a net profit of $ 2.86 per ton can be realized on the basis of a production of 175,000 tons annually. The applicant proposes that the exploration of the C.W.T. property be conducted in two phases: Phase I will be to conduct a geophysical survey to help localize specific target areas and phase II will consist of a diamond drilling to test the favorable areas delineated by the geophysical work. Phase II would only be done if phase I work probed favorable, and would be done by prior Government approval. The NE-SW lines for geophysical work were designed to obtain better depth penetration and better accessability. High tension lines lie in a N-S direction along the west side of Section 23.

Continental has experimented with resistivity and induced potential methods over the drilling area on the C.W.T. ore body, primarily to develop criteria and establish applicability. The experimental data bears a correlation to the drill hole data and suggests other nearby drilling targets.

What is now the Pima Mine was discovered by a ground magnetic survey. The nearby Mission, Palo Verde and Copper Glance ore bodies were in part found by electromagnetic and induced polarization ground surveys. It is believed, at least by the applicant, that the geophysical work will be a helpful tool in evaluating the property.

The C.W.T. ore body is higher in zinc content, however, it also has a higher silver content than do most mines in the area according to the applicant's resident manager.

It is concluded therefore that the chances of discovering copper ore bodies comparable in size to the C.W.T. ore body, or the Section 30 ore body are good and it is therefore recommended that an exploration contract be executed to complete the work herein outlined, at an estimated total cost of $136,489.68.

Form 7
(63)

OFFICIAL FILE COPY

Date	Surname	Code

AUG 30 1967

Hon. William H. Natcher
House of Representatives
Washington, D. C. 20515

Dear Mr. Natcher:

This is in reply to your letter of August 23 concerning information on possible Government participation in exploration projects underway for iron ore in Crittenden County, Kentucky, and gold, silver, and copper in Pima County, Arizona.

At the present time the Government is not participating in any exploration projects in Crittenden County, Kentucky, or in Pima County, Arizona. Also, we do not have any pending applications for exploration projects in Crittenden County, Kentucky, but we do have two applications being processed to explore for copper and copper-silver in Pima County, Arizona. The processing of these two applications will be completed upon receipt of additional information. These applications are listed below:

OME-6574 (Copper-Silver) Western Minerals Corporation, P. O. Box 5071, Tucson, Arizona. Application to explore the Indiana-Arizona and Silver Hill Mines in Pima County, Arizona.

OME-6578 (Copper) Continental Exploration, Inc., Emery Park Station, Box 11216, Tucson, Arizona. Application to explore the CWT mining property in Pima County, Arizona.

In accordance with your request, we are enclosing literature which explains the procedures to be followed in obtaining financial assistance in minerals exploration and a set of forms for applying for this type of assistance. The information necessary to support a proposed project is outlined on the back of the application form.

Sincerely yours,

Arthur A. Baker

Acting Director

cc: General files
Division file
Director's chron file
Economic Geology file
OME Region III
OME file
OME Reading file

Enclosures

FEJohnson/bih 8/28/67

177940

23263

Congress of the United States
House of Representatives
Washington, D.C. 20515

August 23, 1967

Dr. W. T. Pecora, Director
Geological Survey
Department of the Interior
General Services Building
Washington, D. C.

Dear Dr. Pecora:

I am very much interested in obtaining whatever information is available concerning the possible Federal government participation in an Iron Ore exploration project underway in Crittenden County, Kentucky as well as Gold, Silver and Copper projects in Pima County, Arizona.

I shall appreciate very much your furnishing me with any pertinent available material regarding the procedures to be followed in obtaining such participation in the exploration of these projects.

With cordial good wishes, I am

Sincerely yours,

William H. Natcher, M.C.

127990

This copy to Wash - 3-31-67

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
FEDERAL CENTER, DENVER, COLORADO 80225

OFFICIAL COPY
O. M. E.
RECEIVED
APR 4 1967

INITIALS	CODE
	120 AU
JEJ	110
Rmd	1208

Memorandum March 30, 1967

To: J. William Hasler, Field Officer, Region III, OME

From: John R. Cooper

Subject: OME-6578 (Copper)
Continental Exploration, Inc.
CWT Property
Pima County, Arizona

The subject application for financial assistance was reviewed in my memorandum of October 7, 1966 to you. No basis for changing the comments in that review has been found in the supplementary information later furnished by the applicant.

The only new information of geologic significance is the detailed assay data and reserve calculation on the Dynamite claims in Section 30, submitted by the applicant February 1, 1967. These data show that hole A-974 cut virtually unoxidized copper ore below 374 feet, whereas hole A-978 cut oxide copper ore at depths in excess of 1,100 feet. This relationship is surprising and I think significant in appraising the commercial potential of this deposit. The deep oxide ore could be in one or more of the monolithologic landslide masses within the Helmet Fanglomerate rather than in lag blocks along the San Xavier thrust as is the unoxidized ore farther south on the property. There are other possible interpretations of course, and any interpretation must be pure speculation as no geologic logs of the holes were provided.

Several months ago I had a brief look at development workings in the CWT mine in Section 23. Everything seen tended to confirm the prediction that the ore would be poddy and the ground much faulted and broken. My doubt that the deposit can be mined profitably has been increased. This doubt should be only a minor consideration in your appraisal of the application however. Unquestionably there is a lot of copper on the Dynamite claims to the east; and the neighboring part of Continental's target area is virtually unexplored. My views on regional structure also lead me to believe the chances of important ore discoveries increase to the east within the target area.

John R. Cooper

John R. Cooper
Branch of Base and Ferrous Metals

Copy of this sent to Washington 3/30/67

AREA CODE
PHONE CHAPEL 3-

CONTINENTAL MATERIALS CORPORATION

MINING FIELD OFFICE: 820 SOUTH NINTH STREET, P. O. BOX 190, GRAND JUNCTION, COLORADO 81502

March 29, 1967

OME Region III
RECEIVED
MAR 30 1967
Denver, Colorado

OFFICIAL COPY
O. M. E.
RECEIVED
APR 4 1967

INITIALS	CODE
JG	120
RMG	110
	120

Mr. J. William Hasler
Field Officer, Region III
Office of Minerals Exploration, Geological Survey
United States Department of Interior
Federal Center, Denver, Colorado 80225

Reference: OME-6578 (Copper)
CWT Property
Pima County, Arizona

Dear Bill:

This will acknowledge your letter of March 24 stating that you will be in Tucson on April 18.

This date will be satisfactory for a field examination. Please plan to contact John Roscoe when you arrive.

Best regards,

C. H. Reynolds

CHR:jd

cc: J. G. Roscoe
S. M. Gunther

Office of Minerals Exploration

March 24, 1967

Mr. C. H. Reynolds, Vice President
Continental Exploration, Inc.
820 South Ninth Street
P. O. Box 190
Grand Junction, Colorado 81501

~~120 110~~
~~110~~
RMS 120.8

Reference: OME-6578 (Copper)
CWT Property
Pima County, Arizona

Dear Herb:

The above-referenced docket has been referred to the field for an examination. It will be impossible for me to set the date for a field examination prior to the third week in April, 1967, because of an unusually heavy workload. It will be possible for me to set the date for a field examination on April 18. I will be in the Tucson area making some routine interim examinations on contracts that are already in force and could make a field examination of CWT property on that date.

Best regards,

J. William Hasler,
Field Officer, Region III
Office of Minerals Exploration

cc: Chief, OME ✓
Hasler chron
OME chron
OME-6578

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
2/8/67	RMSmith	120
	On leave	120
		110
2/8	coe	220
		120M

AIRMAIL

Memorandum

To: Field Officer, Region III

From: Chief, Office of Minerals Exploration

Subject: OME-6578 (Copper)
Continental Exploration, Inc.
CWT Property
Pima County, Arizona

The application is referred to Region III for review, a field examination if you consider it necessary, and recommendations.

The Applicant has now established that there is a reasonable mathematical probability that the mineralization in the area to be explored (sec. 25) resulted in predominantly eligible minerals (copper, silver, cadmium, molybdenum) because it lies between a copper deposit (sec.30) and an ore body that contains about 50 percent of its value in copper, silver, and cadmium (sec. 23).

No additional evidence is presented for the geologic probability that the principal minerals are eligible for OME assistance, but as pointed out in the Applicant's letter of February 1, 1967, only limited information on the target area is available.

The Applicant has also established its financial eligibility and has indicated that a performance bond in lieu of Lien and Subordination Agreements can be furnished.

The question of the geologic probability of a significant discovery is partly answered by John Cooper's memorandum of October 7, 1966, to you. He concluded that the application merits serious consideration by OME, but he also concluded that if ore is found it is likely to be at considerable depth. In your report please comment on the commercial potentialities of the target in relation to the costs of exploration, development, and mining, as well as on the probability of a significant discovery.

Exploration costs as estimated by the Applicant appear to be reasonable, although the rates for personal services are higher than we normally allow. The over-all cost will of course depend on the amount of work to be done. The actual amount, the proportions of geophysical and drilling exploration, and the staging we shall leave to your good judgment and concurrence therein by the Applicant.

23263

You may wish to discuss the application with John H. Soulé, Mineral Resources Office, U. S. Bureau of Mines, 8 West Paseo Redondo, Tucson, Arizona. Mr. Soulé wrote a report in 1966 on the CWT mine area in response to an application for $3,000,000 under the Copper Production Expansion program of the Defense Materials Service of the General Services Administration.

FRANK E. JOHNSON

Frank E. Johnson

cc: Director's Reading File
Division File
Economic Geology File
OME docket
OME Reading File
Mr. Smith

RMSmith/gla 2-8-67

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
2/8/67	RM Smith	120
	On leave	120
		110
		220
		120M

AIRMAIL

Continental Exploration, Inc.
820 South Ninth Street
P. O. Box 190
Grand Junction, Colorado 81501

Re: OME-6578 (Copper)
Continental Exploration, Inc.
CWT Property
Pima County, Arizona

Gentlemen:

Thank you for your letter of February 1, 1967, enclosing additional information concerning the subject application.

The application is now being referred to Mr. J. William Hasler, Field Officer, Region III, Office of Minerals Exploration, U. S. Geological Survey, Room 2284, Building 25, Denver Federal Center, Denver, Colorado 80225.

The Regional Office will notify you if additional information concerning the application is needed.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Division File
Economic Geology File
OME File
OME Reading File
OME Region III
Mr. Smith

GLAult/a 2-8-67

23263

AREA CODE 303
PHONE: CHAPEL 3-2100

CONTINENTAL MATERIALS CORPORATION

MINING FIELD OFFICE: 820 SOUTH NINTH STREET, P. O. BOX 190, GRAND JUNCTION, COLORADO 81502

OFFICIAL COPY
O. M. E.
RECEIVED
JAN 23 1967
INITIALS

January 18, 1967

Mr. Frank E. Johnson, Chief
Office of Minerals Exploration
Geological Survey
United States Department of the Interior
Washington, D. C.

Re: OME-6578 (Copper)

Dear Mr. Johnson:

This will acknowledge receipt of your letter of inquiry of January 5 concerning our OME application.

The submission of additional evidence that the proposed exploration is eligible for OME assistance has been delayed by the press of other matters.

You may expect to hear from us in the immediate future concerning this matter.

Sincerely,

C. H. Reynolds

C. H. Reynolds

CHR:lh

CC: Mr. J. Wm. Hasler
Region III, Office of Minerals Exploration
U. S. Geological Survey, Bldg. 25
Denver Federal Center
Denver, Colorado 80225

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
1/4/67	RM Smith	120
1/4/67	Kirkemo	120
		110
1/5	coe	220
		120M

JAN 5 1967

Continental Exploration, Inc.
820 South Ninth Street
P. O. Box 190
Grand Junction, Colorado 81501

Re: OME-6578 (Copper)
Continental Exploration, Inc.
CWT Property
Pima County, Arizona

Gentlemen:

We have not received a reply to our letter of November 9, 1966, requesting additional evidence that the proposed exploration is eligible for OME assistance.

Will you please inform us when we may expect the necessary data.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Division File
Economic Geology File
OME docket
OME Reading File
OME Region III
Mr. Smith

RMSmith/gla 1-4-67

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
1/9	[illegible]	120
11/1/66	[illegible]	120
		110
11/9	cal	220
		120M

AIRMAIL

Continental Exploration, Inc.
820 South Ninth Street
P. O. Box 190
Grand Junction, Colorado 81501

NOV 9 1966

Re: OME-6578 (Copper)
Continental Exploration, Inc.
CWT Property
Pima County, Arizona

Gentlemen:

Thank you for your letter of October 19, 1966, from Gunther and Choka, informing us that you are prepared to furnish a Performance Bond in the event of an OME contract, and transmitting recent financial statements of the Applicant and its parent company.

Our review of your well prepared application indicates that the proposed project may not qualify for OME assistance because zinc, the principal mineral sought, is not currently on the OME list of eligible minerals. It will be necessary, therefore, to furnish additional evidence that meets at least one of the following criteria for eligible minerals:

1. The principal dollar value of the ore is in copper, silver, and cadmium.

2. The ore could be mined for these metals regardless of the other values.

3. Ore containing an exceptionally large quantity of eligible minerals is expected to be found by the proposed work.

Unless one of these criteria can be met, we would have no alternative but to deny the application.

As pointed out in the application, the target area lies between two areas of known mineralization, one of which is predominately zinc and the other, although it may be predominately copper, is of submarginal grade. The target of the proposed work could be expected, therefore, to be a large noncommercial copper deposit or several smaller but possibly commercial zinc deposits. — Sec. 23 Sec. 30

23263

Perhaps another interpretation based on either statistical or geological reasoning is possible, but evidence for it is not contained in the application.

Will you please furnish any additional evidence you may have to support that the mineral sought is eligible for OME assistance. This evidence might be furnished from present information, or it might be available only by completing one or two drill holes at your own expense.

This request for additional information should not be construed as a commitment by the Government to grant an exploration contract. We shall hold the further processing of your application until the requested data are received.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Division File
Economic Geology File
OME Docket
OME Region III w/cy Gunther & Choka letr. 10/19/66 and encls.
OME Reading File
Mr/ Smith

RMSmith/gla 11-9-66

GUNTHER & CHOKA
ATTORNEYS AT LAW

SIDNEY M. GUNTHER
ALLEN D. CHOKA
LESTER J. von STEIN
PETER A. BAUER
LAWRENCE A. ZINDER
ESTELLE LINN
JOHN M. JANEWICZ
WARREN W. WALLIN
PAUL E. KLEIN

LEWIS D. KONIGSFORD
PATENT COUNSEL

72 WEST ADAMS STREET
CHICAGO, ILLINOIS 60603
312-346-5121
312-292-2344

OFFICIAL COPY
O. M. E.
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120

October 19, 1966

Mr. Frank E. Johnson
Chief, Office of Minerals Exploration
Geological Survey
United States Department of the Interior
Washington 25, D.C.

Re: OME-6578 (Copper)
Continental Exploration, Inc.
CWT Property
Pima County, Arizona

Dear Mr. Johnson:

Mr. C. H. Reynolds, Vice President of Continental Exploration, Inc., has asked me to reply to your letter of October 12, 1966 inquiring about a Performance Bond and asking for financial statements.

The insurance agent of Continental Exploration advises that the company will be able to obtain a Performance Bond covering the Government's share of the proposed work in the event of a contract. Officials of Continental Exploration asked me to assure you that they stand ready to go forward with a Performance Bond upon approval of a contract.

With respect to financial statements of the applicant company (Continental Exploration, Inc.) and the parent company (Continental Materials Corporation), I enclose three sets of financial statements as follows:

Continental Exploration, Inc., August 31, 1966. This includes balance sheet, statement of net income - cumulative, and statement of fixed expenses - cumulative.

Continental Materials Corporation, June 30, 1966. This includes balance sheet, statement of net income - cumulative, and statement of fixed expenses - cumulative.

Continental Materials Corporation and its
wholly-owned subsidiaries, consolidated,
June 30, 1966. This includes balance sheet,
and statement of net income - cumulative.

The second set of statements is for the parent company only. The third set of statements consolidates the parent with all of its subsidiaries, including Continental Exploration, Inc.

As all of the statements indicate, these are company statements prepared from the books and records without audit. In examining these financial statements, questions may arise. If so, we will do our best to secure answers for you if you will advise us. Should you desire a personal meeting with the Controller of the company to discuss the statements, please let us know and we will arrange such a meeting.

Sincerely,

GUNTHER & CHOKA

By Sidney M. Gunther
Sidney M. Gunther

SMG:ak
cc: C. H. Reynolds

CONTINENTAL EXPLORATION, INC.

FINANCIAL STATEMENT

AUGUST 31, 1966

CONTINENTAL EXPLORATION, INC.

CONDENSED BALANCE SHEET
BY MONTHS YEAR 1966
(PREPARED FROM THE BOOKS AND RECORDS WITHOUT AUDIT)

CONTINENTAL EXPLORATION, INC.
BALANCE SHEET BY MONTHS
EXHIBIT A

IN THOUSANDS (000.0)

LINE	ASSETS	(1) JANUARY	(2) FEBRUARY	(3) ~~MARCH~~ 3-31-66	(4) APRIL	(5) MAY	(6) JUNE	LINE	(7) JULY	(8) AUGUST	(9) SEPTEMBER	(10) OCTOBER	(11) NOVEMBER	(12) DECEMBER	LINE
1	CURRENT ASSETS:							1							1
2	Cash			59.6	38.9	57.3	53.2	2	91.6	105.3					2
3	Notes and Accounts Receivable (Net)			—				3	—	—					3
4	Accounts Receivable – Others			10.1	—	0.4	0.1	4	1.0	1.9					4
5	Inventories			71.6	76.4	77.9	74.1	5	70.3	72.5					5
6	Prepaid Insurance and Expenses			0.9	10.7	10.8	10.5	6	10.4	10.3					6
7	Deferred Expenses – Current							7	—						7
8	TOTAL CURRENT ASSETS			142.2	126.0	146.4	137.9	8	173.3	190.0					8
9	INTER-COMPANY ACCOUNTS							9							9
10	INVESTMENTS AND RECEIVABLES:							10							10
11	Invest. in and Advances to Jointly-Owned Enterprises							11							11
12	Non-Current Portion of Receivables							12							12
13	TOTAL INVESTMENTS AND RECEIVABLES							13							13
14	PROPERTY, PLANT AND EQUIPMENT							14							14
15	Land, Bldgs., Mach. and Equipment (Net)			812.4	845.6	909.2	975.5	15	1077.0	1144.3					15
16	Mining Properties (Net)			—	—	—	—	16	—						16
17	TOTAL PROPERTY, PLANT AND EQUIPMENT			812.4	845.6	909.2	975.5	17	1077.0	1144.3					17
18	OTHER ASSETS:							18							18
19	Deferred Expenses – Non Current			941.1	952.8	1043.1	1107.8	19	1166.6	1226.8					19
20	Home Co. Properties – Net of Allowance			—				20							20
21	Others			—				21							21
22	TOTAL OTHER ASSETS			941.1	952.8	1043.1	1107.8	22	1166.6	1226.8					22
23	TOTAL ASSETS			1895.7	1967.4	2099.7	2221.2	23	2416.9	2561.1					23
24	LIABILITIES AND SHAREHOLDERS' EQUITY							24							24
25	CURRENT LIABILITIES:							25							25
26	Notes Payable – Secured							26							26
27	Notes Payable – Unsecured							27							27
28	Accounts Payable and Accrued Expenses			62.3	35.0	58.9	85.2	28	95.0	88.7					28
29	Mortgages on Land and Home Construction							29							29
30	Mortgage and Equipment Contract Payable			16.0	16.0	16.0	16.0	30	16.0	16.0					30
31	Subsidiaries' Purchase Contract Liability							31							31
32	Other							32							32
33	TOTAL CURRENT LIABILITIES			78.3	51.0	74.9	101.2	33	111.0	104.7					33
34	INTER-COMPANY ACCOUNTS			1812.3	1920.2	2041.3	2149.9	34	2342.5	2497.0					34
35	NON-CURRENT LIABILITIES:							35							35
36	Mortgage and Equipment Contract Payable			126.5	122.5	122.5	118.5	36	118.5	118.5					36
37	Subsidiaries' Purchase Contract Payable							37							37
38	Notes and Loans Payable-Officers							38							38
39	Less: Current Portion (Above)			(16.0)	(16.0)	(16.0)	(16.0)	39	(16.0)	(16.0)					39
40	NET NON-CURRENT LIABILITIES			110.5	106.5	106.5	102.5	40	102.5	102.5					40
41	SHAREHOLDERS' EQUITY:							41							41
42	Preferred Stock Shares							42							42
43	Common Stock Shares			1.0	1.0	1.0	1.0	43	1.0	1.0					43
44	Common Stock to be Issued							44							44
45	Paid-in Surplus							45							45
46	Retained Earnings (Deficit)			(106.4)	(114.3)	125.0	(133.4)	46	(140.1)	(144.1)					46
47	TOTAL			(105.4)	(113.3)	(124.0)	(132.4)	47	(139.1)	(143.1)					47
48	Less Treasury Stock			—				48							48
49	TOTAL SHAREHOLDERS EQUITY			105.4	113.3	(124.0)	(132.4)	49	(139.1)	(143.1)					49
50	TOTAL LIAB. AND SHAREHOLDERS' EQUITY			1895.7	1967.4	2099.7	2221.2	50	2416.9	2561.1					50

CONTINENTAL EXPLORATION, INC.

STATEMENT OF NET INCOME
CUMULATIVE – YEAR 19__
(PREPARED FROM THE BOOKS AND RECORDS WITHOUT AUDIT)

CONTINENTAL EXPLORATION, INC.

STATEMENT OF NET INCOME – CUMULATIVE

EXHIBIT C

IN THOUSANDS (000.0)

LINE		(1) ONE MONTH ENDED		(2) TWO MONTHS ENDED		(3) THREE MONTHS ENDED		(4) FOUR MONTHS ENDED		(5) FIVE MONTHS ENDED		(6) SIX MONTHS ENDED		(7) SEVEN MONTHS ENDED		(8) EIGHT MONTHS ENDED		(9) NINE MONTHS ENDED		(10) TEN MONTHS ENDED		(11) ELEVEN MONTHS ENDED		(12) TWELVE MONTHS ENDED		(13)	LINE
		ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN		
1																											1
2	SALES – GROSS																										2
3	Less – Returns and Allowances																										3
4																											4
5																											5
6																											6
7	NET SALES																										7
8																											8
9	VARIABLE COST OF SALES																										9
10	Material (Exh. C-1)																										10
11																											11
12	Direct Labor (Exh. C-1)																										12
13																											13
14	Variable Costs (Exh. C-1)																										14
15																											15
16																											16
17	INVENTORY VARIATION (Exh. C-1)																										17
18																											18
19																											19
20	TOTAL (EXH. C-1)																										20
21																											21
22	MANUFACTURING MARGIN																										22
23																											23
24	OTHER VARIABLE DIST. COSTS (Exh. C-2)																										24
25																											25
26	MERCHANDISING MARGIN																										26
27																											27
28	FIXED EXPENSES (Exh. C-3)	7	5	16	10	8	16	15	22	25	27	33	33	39	39	43	43		40		54		60		65		28
29																											29
30	SPECIAL ITEMS	–	3	–	7	2	12	2	17	3	22	3	28	4	35	4	43		51		60		70		80		30
31																											31
32	PRE-TAX INCOME (LOSS)	(7)	(8)	(16)	(17)	(10)	(28)	(17)	(39)	(28)	(49)	(36)	(61)	(43)	(73)	(47)	(86)		(100)		(114)		(130)		(145)		32
33																											33
34	STATISTICAL DATA																										34

CONTINENTAL EXPLORATION, INC

STATEMENT OF FIXED EXPENSES
CUMULATIVE - YEAR 1966
(PREPARED FROM THE BOOKS AND RECORDS WITHOUT AUDIT)

CONTINENTAL EXPLORATION, INC
STATEMENT OF FIXED EXPENSES - CUMULATIVE

EXHIBIT C-3

IN THOUSANDS (000.0)

LINE		(1) ONE MONTH ENDED		(2) TWO MONTHS ENDED		(3) THREE MONTHS ENDED		(4) FOUR MONTHS ENDED		(5) FIVE MONTHS ENDED		(6) SIX MONTHS ENDED		(7) SEVEN MONTHS ENDED		(8) EIGHT MONTHS ENDED		(9) NINE MONTHS ENDED		(10) TEN MONTHS ENDED		(11) ELEVEN MONTHS ENDED		(12) TWELVE MONTHS ENDED		(13)	LINE
		ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN		
1																											1
2	INDIRECT EXPENSES																										2
3																											3
4	INDIRECT LABOR																										4
5																											5
6	OVERHEAD COSTS																										6
7	Depreciation-Mine Equip																										7
8	Mill Equip																										8
9	Bldgs.																										9
10	Power																										10
11																											11
12	General Insurance	–	0.1	–	0.2	0.2	0.3	0.2	0.4	0.2	0.5	0.4	0.6	0.4	0.7	0.4	0.8		0.9		1.0		1.1		1.2		12
13	Taxes - Property																										13
14	Real Estate	–	0.3	–	0.6	–	1.0	–	1.3	4.0	1.6	1.8	2.0	0.2	2.3	9.5	2.6		3.0		3.3		3.6		4.0		14
15	Other																										15
16																											16
17	TOTAL OVERHEAD COSTS	–	0.4	–	0.8	0.2	1.3	0.2	1.7	4.2	2.1	1.8	2.6	9.6	3.0	9.9	3.4		3.9		4.3		4.7		5.2		17
18																											18
19	GENERAL & ADMINISTRATIVE																										19
20	Salaries: Office & Adm.																										20
21	Office Supplies & Exp.	2.0	5.0	5.6	10.0	7.6	15.0	14.6	20.0	20.9	25.0	24.5	30.0	29.6	35.0	33.0	40.0		45.0		50.0		55.0		60.0		21
22	Legal Expenses																										22
23	Other																										23
24																											24
25	TOTAL GEN. & ADM.	2.0	5.0	5.6	10.0	7.6	15.0	14.6	20.0	20.9	25.0	24.5	30.0	29.6	35.0	33.0	40.0		45.0		50.0		55.0		60.0		25
26																											26
27	TOTAL FIXED EXPENSES	2.0	5.4	5.6	10.8	7.8	16.3	14.8	21.7	25.1	27.1	32.2	32.6	39.2	38.0	42.9	43.4		48.9		54.3		59.7		65.2		27
28																											28
29																											29
30																											30
31	SPECIAL ITEMS																										31
32	Interest Expense-Inter Co.																										32
33	Interest Expense-Other	–	3.4	–	7.3	2.2	11.8	2.3	16.7	2.6	22.0	3.4	28.1	3.7	35.0	4.0	42.6		50.9		59.9		69.6		79.8		33
34																											34
35	TOTAL SPECIAL ITEMS	–	3.4	–	7.3	2.2	11.8	2.3	16.7	2.6	22.0	3.4	28.1	3.7	35.0	4.0	42.6		50.9		59.9		69.6		79.8		35
36																											36

CONTINENTAL MATERIALS CORPORATION

FINANCIAL STATEMENT

JUNE 30, 1966

CONTINENTAL MATERIALS CORPORATION

CONDENSED BALANCE SHEET

BY MONTHS ___ YEAR _____

(PREPARED FROM THE BOOKS AND RECORDS WITHOUT AUDIT)

CONTINENTAL MATERIALS CORPORATION
BALANCE SHEET BY MONTHS

EXHIBIT A

IN THOUSANDS (000's)

LINE	ASSETS	(1) JANUARY	(2) FEBRUARY	(3) MARCH	(4) APRIL	(5) MAY	(6) JUNE	LINE	(7) JULY	(8) AUGUST	(9) SEPTEMBER	(10) OCTOBER	(11) NOVEMBER	(12) DECEMBER	LINE
1	CURRENT ASSETS:							1							1
2	Cash			146.8			286.6	2							2
3	Notes and Accounts Receivable (Net)			50.0			50.0	3							3
4	Accounts Receivable – Others			98.9			95.3	4							4
5	Inventories			–			–	5							5
6	Prepaid Insurance and Expenses			9.1			9.8	6							6
7	Deferred Expenses – Current			–			–	7							7
8	TOTAL CURRENT ASSETS			304.2			441.7	8							8
9	INTER-COMPANY ACCOUNTS			6,329.0			6,612.1	9							9
10	INVESTMENTS AND RECEIVABLES:							10							10
11	Invest. in and Advances to Jointly-Owned Enterprises							11							11
12	Non-Current Portion of Receivables							12							12
13	TOTAL INVESTMENTS AND RECEIVABLES			–			–	13							13
14	PROPERTY, PLANT AND EQUIPMENT							14							14
15	Land, Bldgs., Mach. and Equipment (Net)			20.2			19.2	15							15
16	Mining Properties (Net)			4.1			4.1	16							16
17	TOTAL PROPERTY, PLANT AND EQUIPMENT			24.3			23.3	17							17
18	OTHER ASSETS:							18							18
19	Deferred Expenses – Non Current							19							19
20	Home Co. Properties – Net of Allowance							20							20
21	Others			748.8			697.1	21							21
22	TOTAL OTHER ASSETS			748.8			697.1	22							22
23	TOTAL ASSETS			7,406.3			7,774.2	23							23
24	LIABILITIES AND SHAREHOLDERS' EQUITY							24							24
25	CURRENT LIABILITIES:							25							25
26	Notes Payable – Secured							26							26
27	Notes Payable – Unsecured			293.7			1,243.7	27							27
28	Accounts Payable and Accrued Expenses			79.3			71.9	28							28
29	Mortgages on Land and Home Construction			–			–	29							29
30	Mortgage and Equipment Contract Payable						–	30							30
31	Subsidiaries' Purchase Contract Liability						–	31							31
32	~~Other~~ NOTES PAYABLE - OFFICERS			275.0			725.0	32							32
33	TOTAL CURRENT LIABILITIES			648.0			2,040.6	33							33
34	INTER-COMPANY ACCOUNTS			1,288.3			1,278.6	34							34
35	NON-CURRENT LIABILITIES:							35							35
36	~~NOTES PAYABLE - UNSECURED~~ Mortgages and Equipment Contract Payable			950.0			–	36							36
37	Subsidiaries' Purchase Contract Payable						–	37							37
38	Notes and Loans Payable-Officers			885.0			1,335.0	38							38
39	Less: Current Portion (Above)			(275.0)			(725.0)	39							39
40	NET NON-CURRENT LIABILITIES			1,560.0			610.0	40							40
41	DEFERRED INVESTMENT INCOME TAX LIABILITY			300.0			300.0	41							41
42	SHAREHOLDERS' EQUITY:			–			–	42							42
43	Preferred Stock Shares			650.7			650.8	43							43
44	Common Stock Shares			–			–	44							44
45	Common Stock to be Issued			2,473.0			2,473.8	45							45
46	Paid-in Surplus			494.7			422.6	46							46
47	Retained Earnings (Deficit)			3,618.4			3,547.2	47							47
48	TOTAL			8.4			2.2	48							48
49	Less Treasury Stock			3,610.0			3,545.0	49							49
50	TOTAL SHAREHOLDERS EQUITY			7,406.3			7,774.2	50							50
	TOTAL LIAB. AND SHAREHOLDERS' EQUITY														

8/5-68

8866

CONTINENTAL MATERIALS CORP

STATEMENT OF NET INCOME

CUMULATIVE – YEAR 1966

(PREPARED FROM THE BOOKS AND RECORDS WITHOUT AUDIT)

CONTINENTAL MATERIALS CORP

STATEMENT OF NET INCOME – CUMULATIVE

EXHIBIT C

IN THOUSANDS (000.0)

LINE		(1) ONE MONTH ENDED 1-31-66		(2) TWO MONTHS ENDED 2-28-66		(3) THREE MONTHS ENDED 3-31-66		(4) FOUR MONTHS ENDED 4-30-66		(5) FIVE MONTHS ENDED 5-31-66		(6) SIX MONTHS ENDED 6-30-66		(7) SEVEN MONTHS ENDED 7-31-66		(8) EIGHT MONTHS ENDED 8-31-66		(9) NINE MONTHS ENDED 9-30-66		(10) TEN MONTHS ENDED 10-31-66		(11) ELEVEN MONTHS ENDED 11-30-66		(12) TWELVE MONTHS ENDED 12-31-66		LINE
		ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	
1																										1
2	SALES – GROSS																									2
3	Less – Returns and Allowances																									3
4																										4
5																										5
6																										6
7	NET SALES																									7
8																										8
9	VARIABLE COST OF SALES																									9
10	Material (Exh. C-1)																									10
11																										11
12	Direct Labor (Exh. C-1)																									12
13																										13
14	Variable Costs (Exh. C-1)																									14
15																										15
16																										16
17	INVENTORY VARIATION (Exh. C-1)																									17
18																										18
19																										19
20	TOTAL (EXH. C-1)																									20
21																										21
22	MANUFACTURING MARGIN																									22
23																										23
24	OTHER VARIABLE DIST. COSTS (Exh. C-2)																									24
25																										25
26	MERCHANDISING MARGIN																									26
27																										27
28	FIXED EXPENSES (Exh. C-3)	23	17	47	35	70	52	80	72	109	95	142	117	136	155	173	190	208	229							28
29																										29
30	SPECIAL ITEMS																									30
31																										31
32	PRE-TAX INCOME (LOSS)	(23)	(17)	(47)	(35)	(70)	(52)	(80)	(72)	(109)	(95)	(142)	(117)	(136)	(155)	(173)	(190)	(208)	(229)							32
33																										33
34	STATISTICAL DATA																									34
35																										35
36																										36
37																										37
38																										38
39																										39
40																										40
41																										41
42																										42
43																										43
44																										44
45																										45
46																										46
47																										47
48																										48
49																										49
50																										50

CONTINENTAL MATERIALS CORP.

STATEMENT OF FIXED EXPENSES
CUMULATIVE – YEAR 1966
(PREPARED FROM THE BOOKS AND RECORDS WITHOUT AUDIT)

CONTINENTAL MATERIALS CORP.
STATEMENT OF FIXED EXPENSES – CUMULATIVE

EXHIBIT C-3

IN THOUSANDS (000.0)

LINE		(1) ONE MONTH ENDED 1-31-66		(2) TWO MONTHS ENDED 2-28-66		(3) THREE MONTHS ENDED 3-31-66		(4) FOUR MONTHS ENDED 4-30-66		(5) FIVE MONTHS ENDED 5-31-66		(6) SIX MONTHS ENDED 6-30-66		(7) SEVEN MONTHS ENDED 7-31-66		(8) EIGHT MONTHS ENDED 8-31-66		(9) NINE MONTHS ENDED 9-30-66		(10) TEN MONTHS ENDED 10-31-66		(11) ELEVEN MONTHS ENDED 11-30-66		(12) TWELVE MONTHS ENDED 12-31-66		(13)	LINE
		ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN		
	EXECUTIVE OFFICE																										
1	ADMINISTRATIVE EXPENSES																										1
2	SALARIES - EXECUTIVE	2.1	2.1	4.2	4.2	6.2	6.2	8.3	8.3	10.4	10.4	12.5	12.5		14.6		16.7		18.7		20.8		22.9		25.0		2
3	SALARIES - LEGAL	2.4	2.4	4.8	4.8	7.3	7.2	10.4	9.6	13.5	12.0	16.6	14.4		16.8		19.2		21.6		24.0		26.4		28.8		3
4	SALARIES - OFFICE	8.3	8.0	16.9	16.0	26.3	24.0	36.0	32.0	46.0	40.0	56.0	48.0		56.0		64.0		72.0		80.0		88.0		100.0		4
5	EMPLOYEE PAYROLL COSTS	.8	1.0	1.6	2.0	2.5	2.9	3.3	3.6	3.9	4.2	4.5	4.8		5.4		5.9		6.4		6.8		7.2		7.6		5
6	TRAVEL + ENTERTAINMENT	.6	1.2	2.1	2.4	3.5	3.6	4.5	4.8	6.1	6.0	9.3	7.2		8.4		9.6		10.8		12.0		13.2		14.4		6
7	GENERAL INSURANCE	.1	.2	.3	.4	.5	.6	1.1	.8	1.4	1.0	1.7	1.2		1.4		1.6		1.8		2.0		2.2		2.4		7
8	DEPRECIATION AND RENT	.2	.2	.4	.4	.6	.6	0.9	.8	1.1	1.0	1.3	1.2		1.4		1.6		1.8		2.0		2.2		2.4		8
9	PROFESSIONAL SERVICES - LEGAL	1.7	.5	1.8	1.0	1.8	1.5	2.0	2.0	2.2	2.5	2.4	3.0		3.5		4.0		4.5		5.0		5.5		6.0		9
10	PROFESSIONAL SERVICES - AUDIT	1.3	1.3	2.6	2.6	3.9	3.9	5.2	5.2	6.5	6.5	10.9	7.8		9.1		10.4		11.7		13.0		14.3		15.6		10
11	PROFESSIONAL SERVICES - OTHER	—	—	—	.1	—	.1	0.2	.1	0.2	.8	0.5	1.1		1.2		3.2		3.3		3.4		3.5		3.6		11
12	LISTED CORPORATION EXPENSES	.2	.1	2.6	.8	2.6	.9	7.9	4.9	17.2	11.2	20.2	14.6		17.4		17.6		19.2		20.2		21.5		22.5		12
13	OFFICE SUPPLIES AND EXPENSE	.9	.8	1.7	1.6	2.4	2.4	3.0	3.2	4.0	4.0	5.2	4.8		5.6		6.4		7.2		8.0		8.8		9.6		13
14	TAXES - FRANCHISE + OTHERS	—	—	.1	—	.1	—	0.1	.1	0.1	.1	1.4	1.3		1.6		1.7		1.7		1.7		1.7		1.8		14
15	TELEPHONE + TELEGRAPH	.3	.3	.6	.6	1.0	.9	1.2	1.2	1.6	1.5	1.9	1.8		2.1		2.4		2.7		3.0		3.3		3.6		15
16	PROFESSIONAL SERVICES - RENEW OFFICE											3.2															16
17																											17
18																											18
19																											19
20	TOTAL ADMINISTRATIVE EXPENSE	18.9	18.1	39.7	36.9	58.7	55.4	84.1	77.2	114.2	101.2	147.6	123.7		144.5		164.3		183.4		201.9		220.7		243.3		20
21																											21
22	LESS RECOVERY OF EXEC. OFFICE EXP.	3.1	3.0	7.2	6.0	11.6	9.0	15.6	12.0	19.5	15.0	22.7	18.0		21.0		24.0		27.0		30.0		33.0		36.0		22
23																											23
24	NET ADMINISTRATIVE EXPENSE	15.8	15.1	32.5	30.9	47.1	46.4	68.5	65.2	94.7	86.2	124.9	105.7		123.5		140.3		156.4		171.9		187.7		207.3		24
25																											25
26	OTHER EXPENSE (INCOME)																										26
27	INTEREST INCOME - INTERCOMPANY	(3.6)	(2.4)	(10.6)	(4.8)	(18.1)	(7.2)	(25.9)	(9.6)	(33.9)	(12.0)	(42.5)	(14.4)		(16.8)		(19.2)		(21.6)		(24.0)		(26.4)		(28.8)		27
28	RECOVERY OF PRIOR YEARS PROVISION FOR LOSS + LIQUIDATING VALUATION	—	(4.0)	—	(8.0)	—	(12.0)	—	(16.0)	—	(20.0)	—	(24.0)		(28.0)		(32.0)		(36.0)		(40.0)		(44.0)		(48.0)		28
29	MISCELLANEOUS INCOME	(.6)		(1.1)		(1.7)		(0.1)		(0.7)		(7.4)															29
30	INTEREST EXPENSE - BANK LOAN	2.2		8.2		14.9		22.0		28.9		35.7															30
31	INTEREST EXPENSE - OFFICERS LOAN	2.9	2.5	6.8	5.0	10.8	7.5	14.8	10.0	19.2	12.5	24.8	15.0		17.5		20.0		22.5		25.0		27.5		30.0		31
32	MISCELLANEOUS EXPENSE	.6		.6		.6		0.7		0.7		0.7															32
33	CONTRIBUTION TO EMPLOYEES PROFIT SHARING PLAN																										33
34																											34
35																											35
36	TOTAL	1.5	(3.9)	3.9	(7.8)	6.5	(11.7)	11.5	(15.6)	14.2	(19.5)	17.3	(23.4)		(27.3)		(31.2)		(35.1)		(39.0)		(42.9)		(46.8)		36
37																											37
38																											38
39	TOTAL - EXECUTIVE OFFICE	17.3	11.2	36.4	23.1	53.6	34.7	80.0	49.6	108.9	66.7	142.2	82.3		96.2		109.1		121.3		132.9		144.8		160.5		39
40																											40
41																											41
42	MINING OPERATIONS OF PARENT COMPANY - EXHIBIT C-3A	5.2	5.7	10.2	11.4	16.6	17.1	—	22.8	—	28.5	—	34.2		39.9		45.6		51.3		57.0		62.7		68.4		42
43																											43
44																											44
45																											45
46	TOTAL LINE 39 AND 43	22.5	16.9	46.6	34.5	70.2	51.8	80.0	72.4	108.9	95.2	142.2	116.5		136.1		154.7		172.6		189.9		207.5		228.9		46
47																											47
48																											48
49																											49
50																											50

4

CONTINENTAL MATERIALS CORPORATION
AND ITS WHOLLY-OWNED SUBSIDIARIES
CONSOLIDATED FINANCIAL STATEMENTS

JUNE 30, 1966

CONTINENTAL MATERIALS CORPORATION

CONDENSED DATED BALANCE SHEET
FOR QUARTERS ENDED

~~CONDENSED BALANCE SHEET~~
~~BY MONTHS — YEAR~~

(PREPARED FROM THE BOOKS AND RECORDS WITHOUT AUDIT)

BALANCE SHEET
EXHIBIT 4

IN THOUSANDS (000.0)

LINE		(1) JANUARY	(2) FEBRUARY	(3) MARCH 31 1000	(4) APRIL	(5) MAY	(6) JUNE 30 1960	LINE	(7) JULY	(8) AUGUST	(9) SEPTEMBER	(10) OCTOBER	(11) NOVEMBER	(12) DECEMBER
	ASSETS													
1	CURRENT ASSETS:							1						
2	Cash			945.5			788.2	2						
3	Notes and Accounts Receivable (Net)			1775.6			3040.3	3						
4	Accounts Receivable – Others			100.0			102.4	4						
5	Inventories			3380.2			3465.4	5						
6	Prepaid Insurance and Expenses			119.7			125.0	6						
7	Deferred Expenses – Current							7						
8	TOTAL CURRENT ASSETS			6321.0			7521.3	8						
9	INTER-COMPANY ACCOUNTS							9						
10	INVESTMENTS AND RECEIVABLES:							10						
11	Invest. in and Advances to Jointly-Owned Enterprises			282.8			305.3	11						
12	Non-Current Portion of Receivables			391.1			507.0	12						
13	TOTAL INVESTMENTS AND RECEIVABLES			673.9			812.3	13						
14	PROPERTY, PLANT AND EQUIPMENT							14						
15	Land, Bldgs., Mach. and Equipment (Net)			2660.6			2912.8	15						
16	Mining Properties (Net)			45.6			42.3	16						
17	TOTAL PROPERTY, PLANT AND EQUIPMENT			2706.2			2955.1	17						
18	OTHER ASSETS:							18						
19	Deferred Expenses – Non Current			982.8			1160.0	19						
20	Home Co. Properties – Net of Allowance			30.3			14.0	20						
21	Others			63.3			60.9	21						
22	TOTAL OTHER ASSETS			107.2			1234.9	22						
23	TOTAL ASSETS			10775.8			12523.6	23						
24	LIABILITIES AND SHAREHOLDERS' EQUITY							24						
25	CURRENT LIABILITIES:							25						
26	Notes Payable – Secured			1517.7			2150.0	26						
27	Notes Payable – Unsecured			311.1			1261.2	27						
28	Accounts Payable and Accrued Expenses			1726.3			1851.7	28						
29	Mortgages on Land and Home Construction							29						
30	Mortgage and Equipment Contract Payable			141.9			115.1	30						
31	Subsidiaries' Purchase Contract Liability			19.2			22.9	31						
32	~~Loan~~ Notes Payable – OFFICERS						725.0	32						
33	TOTAL CURRENT LIABILITIES			3716.2			6125.9	33						
34	INTER-COMPANY ACCOUNTS							34						
35	NON-CURRENT LIABILITIES:							35						
36	Mortgage and Equipment Contract Payable			1273.4			297.2	36						
37	Subsidiaries' Purchase Contract Payable			78.8			59.0	37						
38	Notes and Loans Payable-Officers			1126.8			1126.8	38						
39	Less: Current Portion (Above) DEFERRED INCOME TAX			300.0			387.0	39						
40	NET NON-CURRENT LIABILITIES			2279.0			1870.0	40						
41	SHAREHOLDERS' EQUITY:							41						
42	Preferred Stock Shares							42						
43	Common Stock Shares			659.7			651.1	43						
44	Common Stock to be Issued							44						
45	Paid in Surplus			3132.5			3133.0	45						
46	Retained Earnings (Deficit)			501.2			741.6	46						
47	TOTAL			4284.3			4529.9	47						
48	Less Treasury Stock			(2.1)			(2.2)	48						
49	TOTAL SHAREHOLDERS EQUITY			4282.3			4527.7	49						
50	TOTAL LIAB. AND SHAREHOLDERS' EQUITY			10779.5			12523.6	50						

CONTINENTAL MATERIALS CORPORATION

CONSOLIDATED STATEMENT OF INCOME

STATEMENT OF NET INCOME

CUMULATIVE – YEAR

(PREPARED FROM THE BOOKS AND RECORDS WITHOUT AUDIT)

(IN THOUSANDS THOUS)	(1) ONE MONTH ENDED		(2) TWO MONTHS ENDED		(3) THREE MONTHS ENDED 3-31-66		(4) FOUR MONTHS ENDED		(5) FIVE MONTHS ENDED		(6) SIX MONTHS ENDED 6-30-66		(7) SEVEN MONTHS ENDED		(8) EIGHT MONTHS ENDED		(9) NINE MONTHS ENDED		(10) TEN MONTHS ENDED		(11) ELEVEN MONTHS ENDED		(12) TWELVE MONTHS ENDED	
	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN	ACTUAL	PLAN
SALES – GROSS					2718	2428					6886	6259												
Less – Returns and Allowances																								
NET SALES																								
VARIABLE COST OF SALES																								
Material (Exh. C-1)																								
Direct Labor (Exh. C-1)																								
Variable Costs (Exh. C-1)																								
INVENTORY VARIATION (Exh. C-1)																								
TOTAL (EXH. C-1)					1763	1518					4383	3934												
MANUFACTURING MARGIN					955	910					2503	2325												
OTHER VARIABLE DIST. COSTS (Exh. C-2)					267	258					675	625												
GROSS MARGIN					688	652					1828	1700												
FIXED EXPENSES (Exh. C-3)					699	683					1571	1350												
SPECIAL ITEMS					7	—					13	—												
PRE-TAX INCOME (LOSS)					(18)	(31)					314	350												
STATISTICAL DATA																								

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
10/12	Kirkemo	120
		110
10/12	Cal	220
		120M

AIRMAIL

OCT 12 1966

Mr. C. N. Reynolds
Vice-President
Continental Exploration, Inc.
820 South Ninth Street
P. O. Box 190
Grand Junction, Colorado 81501

Re: OME-6578 (Copper)
Continental Exploration, Inc.
CWT Property
Pima County, Arizona

Dear Mr. Reynolds:

A preliminary review of your application for financial assistance in exploring the referenced property indicates that the following additional information is required:

1. In lieu of a Lien and Subordination Agreements, MME Form 52, signed by the owners of the claims involved, it is necessary to have your assurance that you are able and willing to obtain a Performance Bond covering the Government's share of the proposed work in the event of a contract.

2. To further determine your eligibility for OME assistance, recent financial statements of both the applicant company and the parent organization, Continental Materials Corporation, are requested.

Submittal of the requested information should not be construed as a commitment by the Government to grant an exploration contract.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Division File
Economic Geology File
OME File
OME Reading File
OME Region III
Mr. Kirkemo

HKirkemo/gla 10-12-66

23263

October 11, 1966

Mr. C. H. Reynolds
Continental Exploration, Inc.
820 South Ninth Street
P. O. Box 190
Grand Junction, Colorado 81501

Subject: OME - 6578

Dear Mr. Reynolds:

Your application for exploration assistance, dated October 3, 1966, submitted to our office at Denver, Colorado, has been assigned Docket No. OME-6578.

Please identify all future correspondence relating to your application by this docket number.

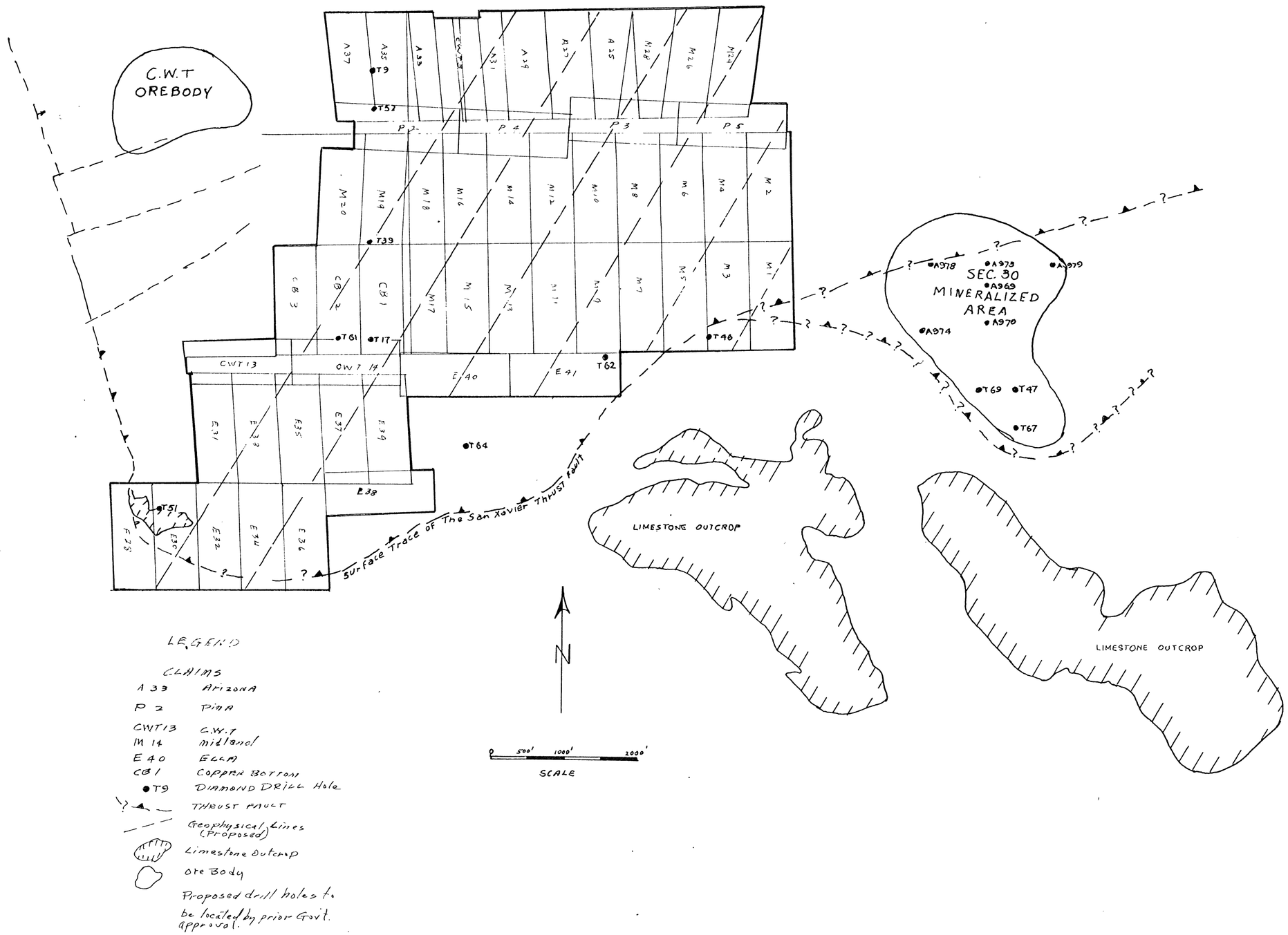
Sincerely yours,

Frank E. Johnson
Chief, Office of
Minerals Exploration

Copy to Region III

DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

OFFICE OF MINERALS EXPLORATION
DOCKET 6578



LEGEND

CLAIMS

A 33	Arizona
P 2	Pima
CWT13	C.W.T
M 14	Midland
E 40	Elam
CB 1	Copper Bottom
●T9	Diamond Drill Hole
? ▲	Thrust Fault
— —	Geophysical Lines (Proposed)
	Limestone Outcrop
	Ore Body

Proposed drill holes to be located by prior Govt. approval.

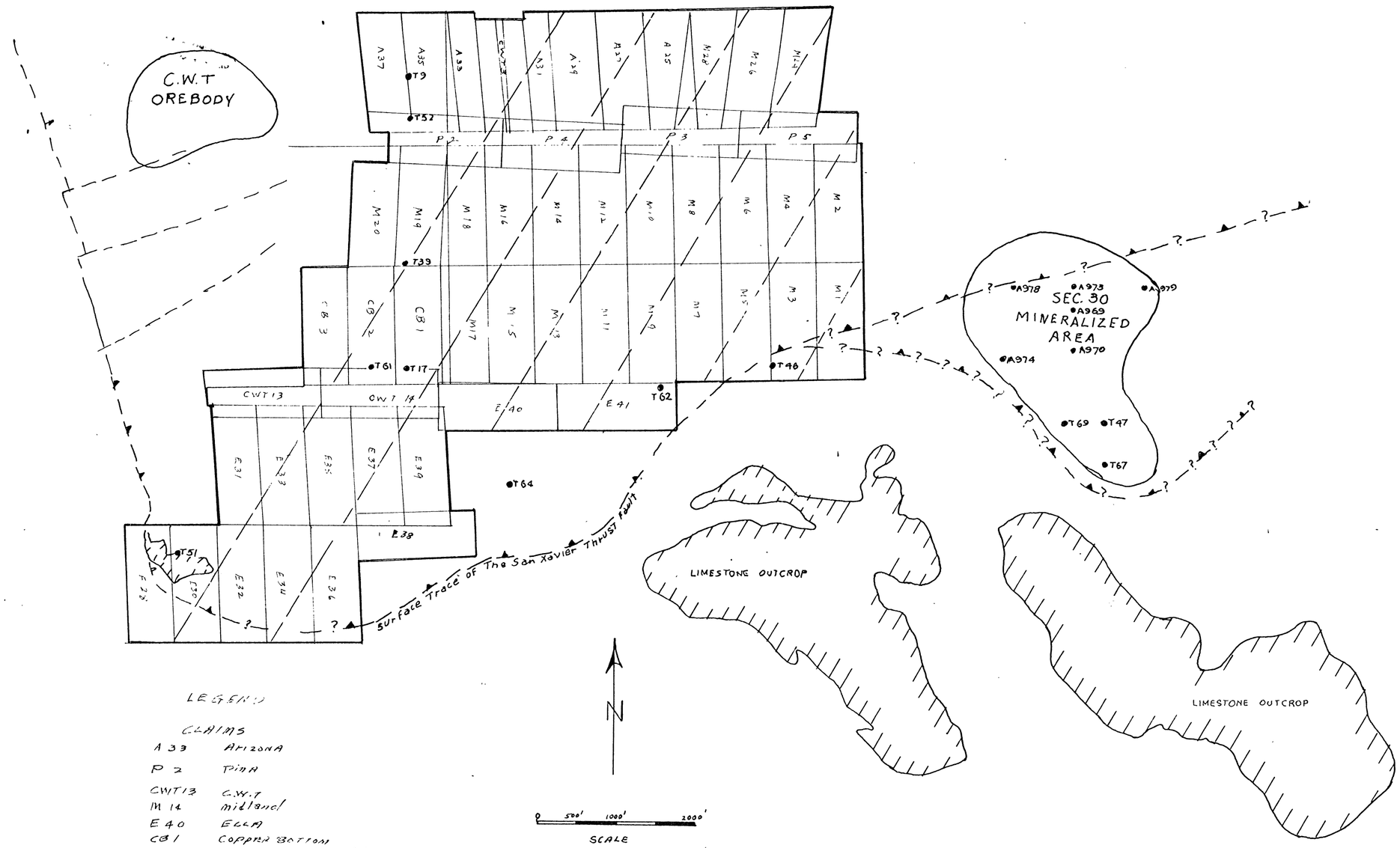
Figure 1

CONTINENTAL EXPLORATION, INC
CWT PROPERTY PIMA COUNTY, ARIZONA

Adapted by JWH 8/31/67.

DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

OFFICE OF MINERALS EXPLORATION
DOCKET 6578



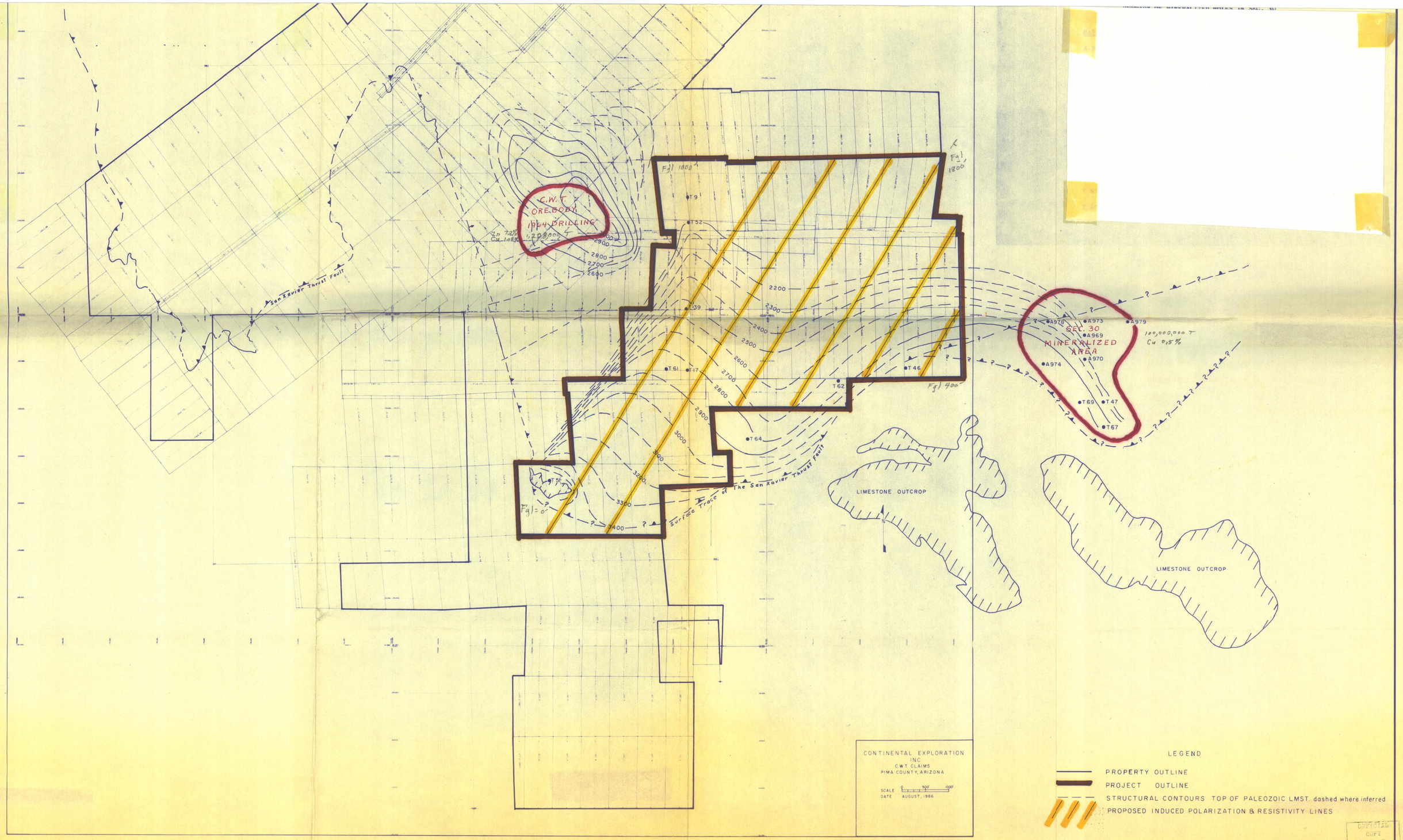
LEGEND

CLAIMS

A 33	ARIZONA
P 2	PIMA
CWT13	C.W.T
M 14	midland
E 40	ELLA
CB 1	COPPER BOTTOM
● T9	DIAMOND DRILL Hole
? ▲ —	THRUST FAULT
— —	Geophysical Lines (Proposed)
	Limestone Outcrop
	Ore Body
	Proposed drill holes to be located by prior Govt approval.

Figure 1 CONTINENTAL EXPLORATION, INC
CWT PROPERTY PIMA COUNTY, ARIZONA

Adapted by JWH 8/31/67.



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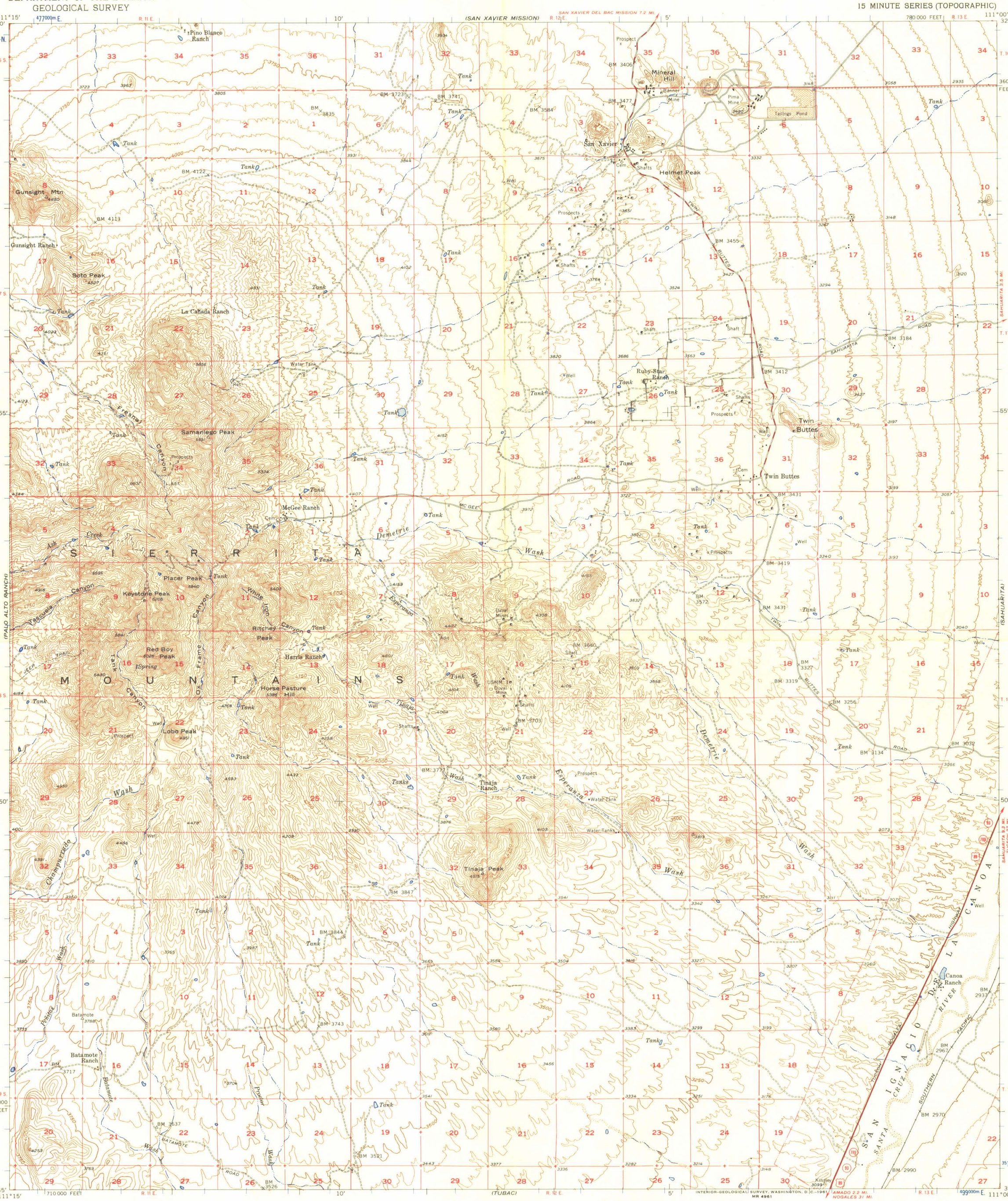
O. N. S.
RECEIVED
OCT 11
INITIAL COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

TWIN BUTTES QUADRANGLE
ARIZONA—PIMA CO.
15 MINUTE SERIES (TOPOGRAPHIC)



Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, and USCE

Topography by planetable surveys 1938–39
Culture revision and field check 1957

Polyconic projection. 1927 North American datum
10,000-foot grid based on Arizona coordinate system, central zone
1000-meter Universal Transverse Mercator grid ticks, zone 12, shown in blue

TRUE NORTH
MAGNETIC NORTH
13°
APPROXIMATE MEAN DECLINATION, 1957

SCALE 1:62500

1 ½ 0 1 2 3 4 MILES

3000 0 3000 6000 9000 12000 15000 18000 21000 FEET

1 .5 0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 50 FEET
DATUM IS MEAN SEA LEVEL

ARIZONA
QUADRANGLE LOCATION

ROAD CLASSIFICATION
Heavy-duty — Light-duty
Unimproved dirt
U. S. Route — State Route

TWIN BUTTES, ARIZ.
N3145—W11100/15

1957

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST