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DATE: August 31, 1990

TO: John Norby

FROM: Jim Bosco

SUBJECT: KORN KOB PROJECT--MONTHLY UPDATE, AUGUST, 1990

MAPPING

During the month, mapping (1 in. = 100 ft.) was completed in the vicinity of the "western quartzite" and reconnaissance scale mapping/sampling was initiated along structural and stratigraphic trends which mirror those at Korn Kob (Map 1).

Western Quartzite: Geologically, the Western Quartzite appears to represent an original limy arenaceous unit containing thinly (1-10 ft.) intrabedded siltstone and schist. Alteration is characterized by varying proportions of garnet, epidote and magnetite in a granular quartz groundmass. Iron oxide is pervasive but copper oxide is sparse. Alteration intensities (garnetization and FeOx) are irregular and it is difficult to say if a particular rock layer was more susceptible to alteration/ mineralization. In addition, alteration/mineralization intensities don't appear gradational away from its SW footwall contact.

At the quartzite's SW contact is a 20 to 70 ft. thick diorite(?) quartz-feldspar porphyry which is commonly schistose. Footwall (SW) to the diorite is unaltered quartzite and schist (20-200 ft. thick) which contacts coarse Catalina granite to the SW. The diorite has the look of a PreCambrian greenstone based on foliation and chlorite content; however, this appearance is probably the result of thrusting or faulting. The diorite doesn't appear hydrothermally altered, although minor FeOx associated with sparse pyrite casts is notable at its contact (upper?) with the altered quartzite.

Nine chip samples were collected for Cu and Au analyses from altered and FeOx bearing portions of the western quartzite and diorite. Results indicate that gold contents are all less than .002 opt and copper analyses are all less than .142 percent.

The following reconnaissance areas are reported chronologically. See Map 1 for specific locations.

Quartz Diorite Pyrite Showing--T12S,R18E,Section 18: This unit outcrops along the eastern edge of Buehman canyon for a distance of roughly 1200 ft. in length and 400 ft. in width. The unit is porphyritic with quartz and feldspar phenocrysts. Occasional

sericitic alteration is notable in small zones. Coarse euhedral pyrite cubes are also notable, although not necessarily in association with sericitization. A total of six chip samples from pyritic or sericitic zones were collected for Cu and Au analyses.

T12S,R18E,Sects.18 and 19: This area was investigated since it is located on the structural(?) contact between PreCambrian and Cambrian quartzites and later Paleozoic carbonates. Also, the USGS has noted a "gossen" zone near this contact. Field examinations indicate that several small 1 to 10 ft. thick limonite/hematite zones (apparently after pyrite) occur at the top of the quartzite in association with quartz veins and fractures. In this portion of the trend, overlaying limestones and dolomites are relatively fresh although somewhat marbleized. Where exposed, the actual contact zone is marked by a 6-12 inch chloritic gouge zone with only weak to moderate brecciation. Five samples were collected in the area, mostly from "gossen" pods.

Donovan's Area: The Donovan's Tank area was "quick mapped" at a scale of 1 in. = 200 ft. Geologically, the area consists of quartzite (fresh and altered), schist (part of quartzite?), marbleized limestone and skarn. The geology seems fairly straight forward consisting of what appear, at this time, to be a repeated (faulted?) cycle (from top to bottom) of limestone to skarn to quartzite. However, mapping should be continued to fill in gaps. The main Donovan skarn, which is exposed on the east side of the riparian, also outcrops on the west side of the draw (toward the south pit area) before apparently disappearing under cover. This skarn outcrop on the western side of the draw contains abundant CuOx--at least as much as that over to the east. Skarn thicknesses in the area of the draw are about 20 to 40 feet. The trend between Donovan's skarn and the South Pit area needs to be studied in more detail. To the east, on top of the ridge, the skarn is about 5 to 10 feet thick. This eastern strike extent has not yet been traced as far as Bullock Canyon. (John, I'll send you a map of the area after Labor Day.)

T12S,R18E Sect.30 and T12S,R17E Sect.25: The area north and northeast of Piety Hill was traversed to try to pick up the Korn Kob structural trend. It was hoped that red-brown outcrops seen, at a distance, from the Piety Hill road and apparently located near the trend, were actually skarn material (Map 1). The red outcrops turned out to be a weathered dolomite--possibly part of the Cambrian Abrigo formation. Scattered (well rounded) garnet skarn cobbles were noted in a wash which trends along the Forest Service boundary between Sections 25 and 30. The material is very similar to the coarse, heavy garnet skarn which outcrops in the South Pit. The material was traced upstream (between 3800 and 1700 feet due north of the SW 1/4 of Sect. 30) until a T-storm

hit the area. The skarn material in the creek is interesting because the USGS maps the Korn Kob structural trend further to the south which may be its source.

MISCELLANEOUS

Bob Gilmore visited Jack Kelley on 8-28-90. Bob feels that Mr. Kelley is fairly cooperative; however, he is concerned about the 1.5 times appraised value purchase price. Mr. Kelley feels appraisals of rural properties aren't fair and don't always account for assets such as available water, etc. Mr. Kelley mentioned to Bob that maybe 3 times the appraised value would be suitable. Mr. Kelley also expressed that he would prefer that all of his property be purchased at one time rather than portions. Bob was planning to visit Mr. Goff on 8-30 or 8-31. Apparently, Mr. Goff is fairly busy. Bob hasn't been able to contact Mr. Sturgis yet and wanted to wait before calling Mr. Kellogg. Bob thought we should have John Lacy look into the liens against Mr. Kellogg before we approach him. It could be that a bank is involved, although Bob found out First Interstate (Kelley's banker) doesn't have any liens against Mr. Kellogg. Bob wants further guidelines (from us) as far as Mr. Kelley is concerned and wants to know if we should have John Lacy look into liens against Mr. Kellogg's property.

Joe Ansman plans to come to Tucson during the Week of 9-10-90, although this will be firmed up after Labor Day.

During the month, portions of drill and access roads were in-sloped or out-sloped and reseeded at the Korn Kob sit as specifically requested by the Forest Service. These were temporary measures to control further erosion caused by summer rains.

All drill sample rejects From Mountain States Labs. are at the Budge warehouse in Tucson.

The pump was removed from the Korn Kob well during the month to prevent vandalism.

Enclosure: Map 1

TO: John Norby

DATE: October 2, 1990

FROM: Jim Bosco

COPIES: R.R. Short
C.A. O'Brien
D.A. Allen

SUBJECT: KORN KOB PROJECT--MONTHLY UPDATE, SEPTEMBER, 1990

During the month, preliminary reconnaissance mapping/sampling was completed within Budge Mining's claim block along the structural/stratigraphic horizon thought to be equivalent to that of the Korn Kob skarn deposit. This preliminary work was undertaken to characterize the trends and locate the more prospective areas for detailed work. In general, the target horizon is the Abrigo and/or Martin formation which are the first appearance of Paleozoic calc-sediments (receptive to skarnification) above the Leatherwood Quartz Diorite and Catalina Granite, both of which are possible sources of Cu mineralization. As is the case at Korn Kob, the Abrigo/Martin formations reportedly host Cu-Zn-Ag skarn mineralization at the Oracle Ridge mine and the Cyprus Johnson mine, respectively located 15 miles northwest and 35 miles southwest of Korn Kob.

Within the claim block the prospective Korn Kob horizon (Abrigo/Martin formations) has a strike length of roughly 10 linear miles. For descriptive purposes, an analysis of the target horizon has been divided into three parts (1) the Southeast Trend, (2) the Northeast Trend and (3) the Northwest Trend based on their locations in relation to the main Korn Kob deposit (see map 1). Only the Southeast Trend appears promising for skarn mineralization at this time. A summary of the visit by consulting geophysicist, Joe Anzman, and a land status update follows the Trend analyses.

SOUTHEAST TREND

The Southeast Trend stretches from the eastern edge of the "south pit" through the Donovan's Camp area then southeastward to Piety Hill. Lithologically, the Southeast Trend consists mostly of Abrigo/Martin formation carbonates. The area is structurally disrupted by at least one major NW-SE trending fault (thrust?) possibly resulting from emplacement of the Catalina granite to the south. In addition to the skarn at Donovan's camp, a smaller skarn was noted along the trend in the vicinity of Piety Hill--roughly 1.5 miles southeast of Donovan's. Rare traces of secondary copper are also notable in quartzites and limestones along the trend. Favorable rock units, structural deformation, the proximity of the Catalina Granite and Leatherwood Quartz Diorite and the presence of scattered skarn and secondary Cu minerals make the Southeast Trend attractive from an exploration

viewpoint. Mapping (at a scale of 1 in. = 500 ft.) and prospecting is ongoing (on Budge Mining's claims) in a 1400 acre area from Donovan's Camp to a point east of Piety Hill.

Donovan's Camp

Surface and drill indications are that the main skarn narrows to 1 - 10 feet thick pods and lenses along its trend east of the "south pit." In the vicinity of Donovan's Camp, roughly 2000 feet east of the "south pit," the skarn thickens to between 15 and 60 feet. The apparent strike length of the Donovan skarn is about 1400 feet; however, its continuity is questionable. Most interesting are the strong chrysocolla showings evident within fractured garnet skarn exposed in the old workings 700 feet north of the Donovan homestead. Assay results from three continuous chip samples spaced along 300 ft of strike length at the old workings are as follows:

Sample	True Thickness	Cu %	Zn %	Au(opt)	Ag(opt)
1	30 ft.	.69	.07	nil	.06
2	15 ft.	.99	.07	nil	.03
3	30 ft.	.42	.07	nil	.10

Approximately 1000 feet to the southeast, the Donovan skarn is again exposed at the top of a prominent ridge. Somewhat loose and discontinuous skarn outcrops in this area suggest that the skarn may be as thick as 60 ft. in places. Cu mineralization is present in outcrops, but is seemingly less intense than that near the old workings. Assay results from six composite garnet skarn samples collected at the ridge top range from .006 to .90 percent Cu with a median value of .02 percent.

The Donovan's Camp area represents one of the better possibilities for improving the overall Korn Kob reserve situation due to (1) the well developed nature of the garnet skarn--similar to that found in the "south" and "north pits", (2) the potential for higher grade copper as evidenced in outcrop samples near the old Donovan workings, and (3) the fact that the area has never been drill tested and the chance that the skarn zone may thicken down dip.

Piety Hill Area

A thin (5-15 ft.) garnet skarn zone was noted outcropping across the top of a small knob on the northwest flank of Piety Hill. This zone is exposed over an area of about 150 ft. X 50 ft. and is nearly horizontal. No copper minerals were noted in the skarn with the exception of a small (2 ft.) pod permeated with chrysocolla-bearing quartz veinlets. Assays from five composite

samples, however, indicate fairly high zinc values as reported below:

Sample	Cu %	Zn %	Au(opt)	Ag(opt)
1	.98	2.88	.001	nil
2	.02	0.82	.002	nil
3	.01	1.31	.001	.01
4	.01	0.52	nil	nil
5	.01	1.24	nil	nil

Another very thin (1.5 ft. thick) exposure of chrysocolla bearing garnet skarn was noted 1000 ft. to the southeast of the above "zinc skarn". At this location quartz-sericite schist can be seen in the footwall which in turn is on top of diorite feldspar porphyry (Leatherwood?). Hanging wall to the skarn, pervasive tremolote alteration is evident. Two chip samples taken across the narrow skarn assayed 3.32 and 1.70 percent copper and .79 and .17 percent zinc, respectively. Mapping (1 in. = 500 ft.) and sampling in the area will be completed during the first week of October.

NORTHEAST TREND

The Northeast Trend is a roughly north-south trending zone thought to be a structural (thrust?) contact between Cambrian Bolsa quartzites and the overlying Abrigo/Martin calc-sediments. The trend was traversed and mapped at 1 in. = 500 ft. where it crosses the Budge claim block--about 3 miles. At this point it doesn't appear that contact between the Bolsa and Abrigo is structural as very little brecciation or slickenside development is evident. Generally the Bolsa formation is quite hematitic and scattered pyrite casts are evident. The overlying Abrigo and Martin limestone formations are relatively fresh and no tactite (calc-silicate) nor copper minerals were noted. A total of 20 outcrop chip samples were collected mostly from hematitic/limonitic zones in the quartzite and limestone. Results have been received from 13 of the samples. Cu, Zn, Au and Ag values are all less than .02 %, .03 %, .002 opt and .09 opt, respectively. At this point the Northeast Trend appears to be of lower priority from an exploration standpoint.

NORTHWEST TREND

The Northwest Trend is a continuation of the Korn Kob Paleozoic geologic section between the "north pit" area and Cottonwood Cove Springs four miles to the northwest. Rocks include the Abrigo/Martin formation carbonates in (fault?) contact with

either sheared diorite porphyry (Leatherwood?), diabase or Bolsa Quartzite. A total of 10 outcrop chip samples were collected along the Northwest Trend, mostly from sheared diorite porphyry, or from iron oxide zones in the quartzite and carbonates. No calc-silicate alteration was evident in the limestones. Assay results received from 7 of the 10 samples indicate no anomalous Au, Ag, Cu or Zn contents.

It should be mentioned that about one mile of the Northwest Trend is buried under Tertiary and Quaternary gravels just north of the "north pit". One of two holes (KK-25) during prior exploration did encounter the Trend north of Buehman Canyon. In this hole, limestones were silicated above the footwall schist but skarn mineralization was not encountered. It is possible that the hole was drilled too far to the east (down dip) as the schist was intersected 600 ft. below the collar. A future exploration hole placed 250 ft. west of KK-25 would be warranted to trace the northwest extension of the "north pit" deposit across Buehman Canyon.

KORN KOB AREA AIRBORNE MAGNETIC SURVEY

Joe Anzman, consulting geophysicist, visited the Korn Kob site during September to get a "hands on" look at the Korn Kob skarn and to offer advice regarding the viability of magnetics as an exploration tool and an opinion concerning the best method of carrying out a magnetics survey, i.e., ground, helicopter or fixed wing aircraft. Joe indicated that for a first pass survey, ground magnetics would be unrealistic considering terrain, time involved and the associated costs. In a September memo, Joe indicated that he had contacted Aerodat Ltd., Dighem Ltd., and Airmag Surveys, Inc. about costs to fly the Southeast, Northwest and Northeast Trends. Apparently, Dighem and Aerodat would fly the survey using helicopters at an estimated cost of $35,000 while Airmag Surveys uses fixed wing aircraft and would fly the survey for about $12,000. These costs are exclusive of an additional $2,000 to $3,000 for compilation of magnetic contour maps. Joe has indicated that the fixed wing aircraft would fly roughly 400 ft. above the surface while the helicopters might fly somewhat lower. As far as mobilization is concerned, Joe wasn't sure from where the Aerodat and Dighem helicopters would originate, but indicated that the Airmag Surveys aircraft were based in Oklahoma.

LAND STATUS-UPDATE

During the month, Bob Gilmore, Mineral Land Consultant, finalized a Title 30 agreement with Jack Kelley as drafted by John Lacy. At Mr. Kelley's request, the property buyout provision was dropped. Also, Bob has made arrangements to meet with Mr. Goff and his lawyer, and Mr. Kellogg during the week of October 15.

Attachments: Map 1

A.F. Budge (Mining) Ltd.

To: A.F. Budge
C.A. O'Brien
R.R. Short
D.A. Allen
J.W. Norby

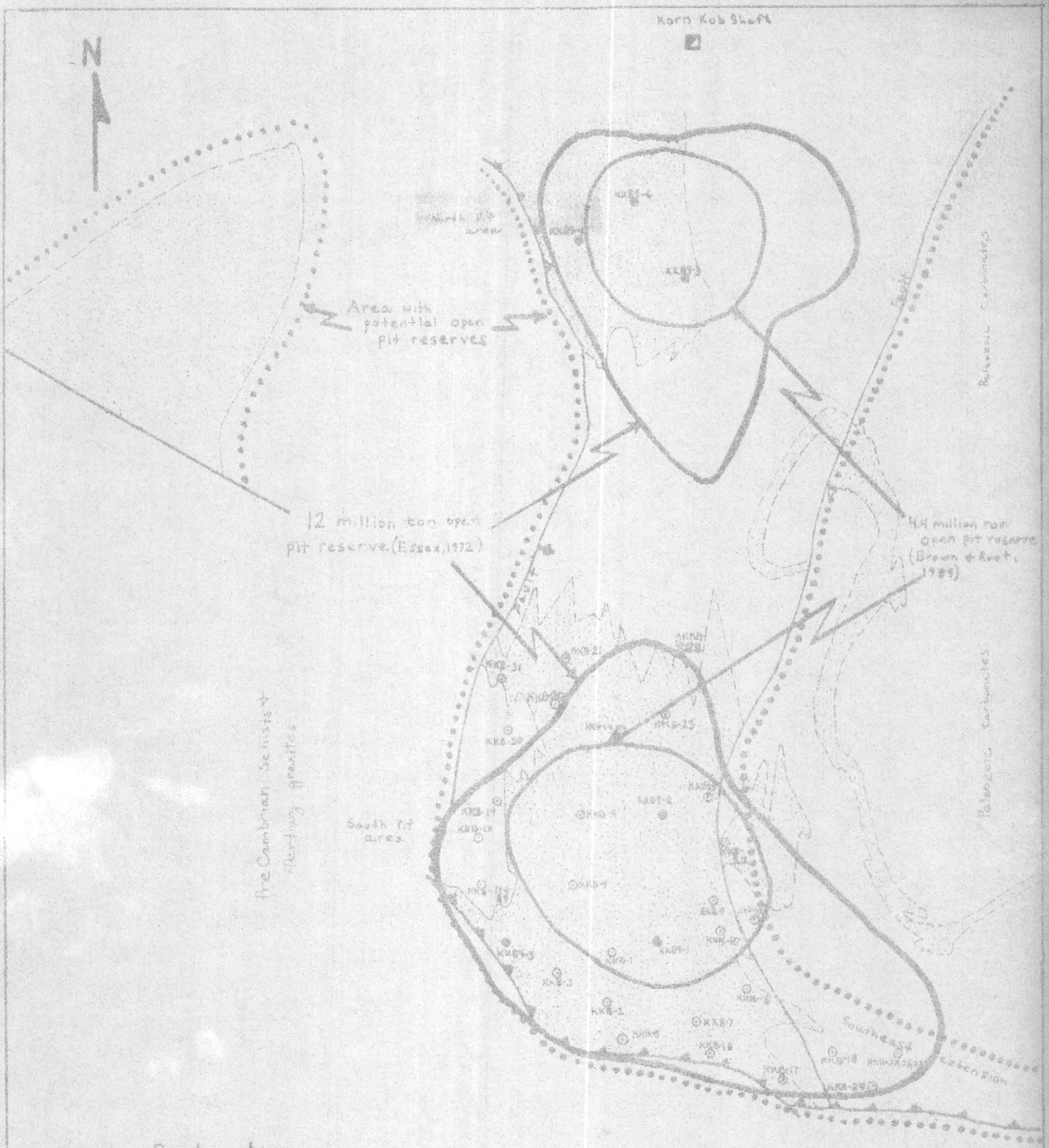
Date: 12-15-89

From: J.R. Bosco

Subject: Korn Kob Project
Weekly Drill Report
December 10 - December 15, 1989

During the period, December 10 to December 15, three reverse circulation drill holes, KKB 28 - KKB 30, were completed and a fourth hole, KKB-31, remained in progress at 200 feet (Figure 1). Total drill footage to date is 9620 feet.

Assay results have been received from holes KKB 21 - KKB 24. As summerized on table 1, KKB-23 located near the north edge of the South Pit (Site 35) intercepted 300 feet grading .475 percent Cu between 230 and 530 feet. Interestingly, examination of the recently completed hole KKB-28 located 130 feet north of KKB-23, at site 36, indicates two low-lime skarn alteration zones with copper potential. These skarn zones occur between the vertical intervals 260 - 275 feet and 455 - 505 feet. Copper analyses from KKB-21, 22 and 24 are less significant than those in KKB-23.



Explanation:

- Reverse Circ. Drill Hole Location
- Core Drill Hole location
- Cu Bearing Skarn
- Geologic Contact
- Fault
- Thrust/Gravity Fault

KORN KOB PROPERTY

Preliminary Geologic/Location Map

Pima County, Arizona

Scale: 1in. ≃ 300ft. October, 1989

Figure 1

Hole Completion Log

(Reverse Circulation)

Table 1

Hole Number	Site Number	Total Depth (ft)	Date Completed	Major Intercepts	Total % Cu
KKB-1	28	300	10-18-89	0-235 0-140	.42 .47
KKB-2	44	240	10-19-88	0-115 115-165	.45 .24
KKB-3	17	190	10-30-89	35-145 0-145	.46 .38
KKB-4	16	310	10-31-89	0-235 0-255	.53 .53
KKB-5	26	400	11-1-89	0-140 140-240 240-360 0-360	.52 .17 .48 .41
KKB-6	7	350	11-2-89	0-48 48-85 85-170 170-280 0-280	.25 .46 .21 .34 .38
KKB-7	5	270	11-4-89	118-150 170-225	.60 .26
KKB-8	45	140	11-4-89	0-55 0-85	.43 .39
KKB-9	18	500	11-8-89	125-240 300-450 125-450	.34 .53 .41
KKB-10	19	460	11-14-89	170-195 310-400	.55 .38
KKB-11	14	200	11-14-89	25-75 115-140 or 25-140	.60 .36 .40
KKB-12	21	580	11-16-89	435-470	.43
KKB-13	22	240	11-17-89	135-185 85-185	.55 .44
KKB-14	27	500	11-18-89	280-365 280-440	.49 .37
KKB-15	29	400	11-19-89	160-265 360-390	.34 .60
KKB-16	6	110	11-19-89	0-65	.43
KKB-17	8	100	11-20-89	5-45	.52
KKB-18	9	200	11-20-89	0-145	.74
KKB-19	24	240	11-20-89	0-185	.39
KKB-20	34	480	12-2-89	65-85 335-390	.29 .53

Rebar

Hole Completion Log
(Reverse Circulation)

Table 1 (cont)

Hole Number	Site Number	Total Depth (ft)	Date Completed	Major Intercepts	Total % Cu
KKB-21	33	410	12-3-89	285-315	.47
KKB-22	20	315	12-4-89	150-190 225-250	.20 .40
KKB-23	35	580	12-7-89	230-530	.48
KKB-24	10	110	12-7-89	No Significant interval	
KKB-25	12	275	12-8-89		
KKB-26	12(S45°W/-45°)	235	12-9-89		
KKB-27	12(S8°E/-45°)	250	12-9-89		
KKB-28	36	540	12-11-89		
KKB-29	14(S70°W/-45°)	175	12-11-89		
KKB-30	25	280	12-14-89		
KKB-31	31	200 in Progress			
		9620 total			

Broken Bit

Summary Logs

KKB-28 Site 36 Final Depth 540 ft

0-60 ft.	Andesite dike
60-170	thin alternating sequences, Limestone/skarn
170-195	garnet skarn
195-260	alternating Limestone and skarn
260-375	garnet magnetite skarn w FeOx
375-405	crystalline Limestone (Marble)
405-455	alternating sequences of Limestone/skarn
455-505	garnet-magnetite skarn, partly Limey
505-540	Quartz-Mica Schist

KKB-29 Site 14 (S 70° W/ -45°) Final depth 175 ft

0-30 ft.	Mixed Limestone/garnet skarn
30-120 ft	Garnet-magnetite skarn, FeOx w. occ. CuOx
120-175	Quartz-Mica Schist

KKB-30 Site 25 Final Depth 280 ft

0-20 ft	garnet-magnetite skarn with Calc-Silicate
20-30	diabase dike
30-45	Calc-Silicate with minor garnet skarn
45-85	garnet-magnetite skarn
85-110	Magnetite skarn, occ. CuOx
110-125	Limey magnetite skarn
125-190	Magnetite skarn
190-230	Garnet-magnetite skarn
230-280	Quartz-Mica Schist

Summary Logs (Cont.)

KKB-31 Site 31 (200) in progress

0-25 ft.	Limey Skarn
25-50	garnet-Amphibole Skarn
50-85	garnet-Magnetite-Amphibole Skarn
85-120	Alternating limestone/garnet Skarn, sparse CuO
120-200	Magnetite-garnet Skarn, occ. CuOx.

A.F. Budge (Mining) Ltd.

To: A.F. Budge
C.A. O'Brien
R.R. Short
D.A. Allen
J.W. Norby

Date 12-11-89

John, the drill is on site 25 (KKB-30). Drilled to 200' (Dec. 12-12). Mostly skarn - good looker. Hole will continue.
+ KKB-29 (site 14, 570'W -45) went to 175'. Rob says good skarn.
* KKB-28 (site 35) went to 545. Don't have details yet.
regards, Jim

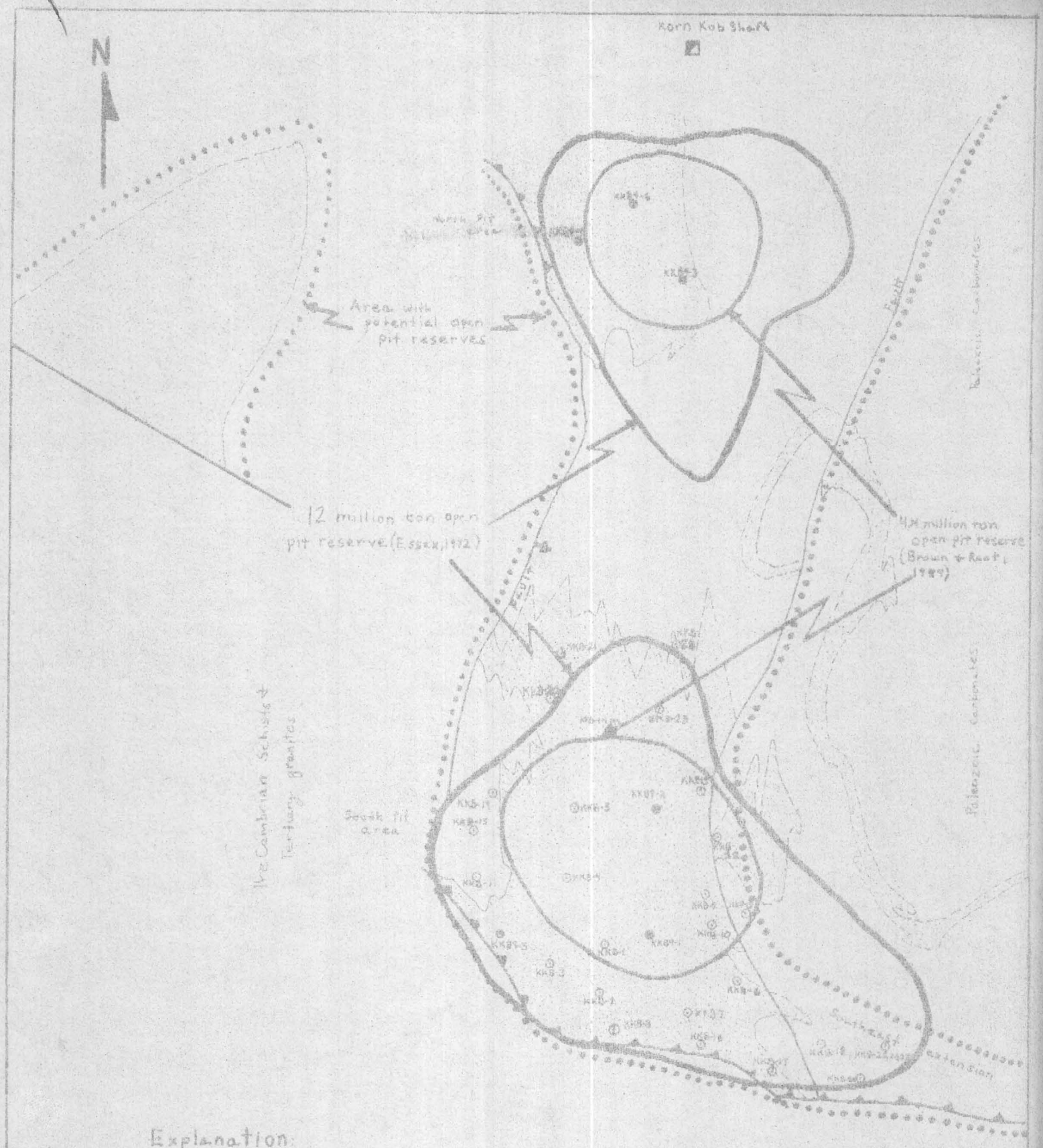
From: J.R. Bosco

Subject: Korn Kob Project
Weekly Drill Report
December 1 - December 10, 1989

Eight reverse circulation drill holes KKB-20 to KKB-27 were completed during the period, December 1 to December 10, and a ninth hole KKB-28 remained in progress at 425 feet (Figure 1). Drill footage for the period was 2910 feet, bringing the the total project footage to 8850 feet.

Assay results have been received from hole KKB-20 located near the northwest edge of the South Pit. As summarized on table 1, KKB-20 penetrated a 55 foot section, at depth (335-390 ft.), grading .53 percent Cu. Results from KKB-21 through KKB-24 are expected later this week. Samples from KKB-25 through KKB-28 will be transported to the lab on 12-13-89.

Of the holes drilled during the period, KKB-23 (site 35) appears particularly well mineralized. Although assays are pending, KKB-23 encountered strong skarnification with occassional CuOx staining between 265-375 feet and between 435 and 505 feet.



Explanation:

- Reverse Circ. Drill Hole Location
- Core Drill Hole location
- Ore Bearing Skarn
- Geologic Contact
- Fault
- Thrust/Gravity Fault

KORN KOB PROPERTY

Preliminary Geologic/Location Map

Pima County, Arizona

Scale: 1in. ≃ 300 ft.

October, 1989

Figure 1

Hole Completion Log
(Reverse Circulation)

Table 1

Hole Number	Site Number	Total Depth (FL)	Date Completed	Major Intercepts	Total % Cu
KKB-1	28	300	10-18-89	0-235 0-140	.42 .47
KKB-2	44	240	10-19-88	0-115 115-165	.45 .24
KKB-3	17	190	10-30-89	35-145 0-145	.46 .38
KKB-4	16	310	10-31-89	0-235 0-255	.55 .53
KKB-5	26	400	11-1-89	0-140 140-240 240-360 0-360	.52 .19 .46 .41
KKB-6	7	330	11-2-89	0-45 45-85 85-170 170-280 0-380	.23 .46 .21 .54 .38
KKB-7	5	270	11-4-89	115-130 170-225	.60 .26
KKB-8	45	140	11-4-89	0-55 0-85	.45 .39
KKB-9	18	500	11-8-89	125-260 300-450 125-450	.34 .53 .41
KKB-10	19	460	11-14-89	170-195 310-400	.55 .38
KKB-11	14	200	11-14-89	25-75 115-140 25-140	.60 .36 .40
KKB-12	21	580	11-16-89	435-470	.43
KKB-13	22	240	11-17-89	135-185 85-185	.55 .44
KKB-14	27	500	11-18-89	280-365 280-440	.49 .37
KKB-15	29	460	11-19-89	160-205 360-390	.33 .60
KKB-16	6	110	11-19-89	0-65	.43
KKB-17	8	100	11-20-89	5-45	.52
KKB-18	9	200	11-20-89	0-145	.74
KKB-19	24	240	11-20-89	0-185	.39
KKB-20	34	480	12-2-89	65-85 335-390	.29 .53

Hole Completion Log
(Reverse Circulation)

Table 1 (cont)

Hole Number	Site Number	Total Depth (ft)	Date Completed	Major Intercepts	Total % Cu
KKB-21	33	410	12-3-89		
KKB-22	20	315	12-4-89		
KKB-23	35	580	12-7-89		
KKB-24	10	110	12-7-89		
KKB-25	12	275	12-8-89		
KKB-26	12(S45°W/-45°)	235	12-9-89		
KKB-27	12(S8°E/-45°)	250	12-9-89		
KKB-28	36	425 in progress			
		Total 8850 ft.			

Summary Logs

KKB-20 Site 34 Final depth 480 ft.

0-70 ft.	Limestone and Calc-Silicate
70-100 ft.	garnet skarn, minor CuOx
100-315 ft.	alternating thin sequences of Limestone/skarn, occ. CuOx
315-385	Garnet-Magnetite Skarn
385-480	Qtz-Mica Schist and Epidotized Quartzite

KKB-21 Site 33 Final depth 410 ft.

0-85 ft.	Limey skarn, occassional CuOx
85-295	alternating thin sequences Limestone/skarn/Calc-Silicate
295-410	Quartz-Mica Schist

KKB-22 Site 20 Final Depth 315 ft.

0-65 ft.	Limestone and Calc-Silicate
65-90	Calc-Silicate
90-150	Slightly Limey garnet-Magnetite Skarn, occ. CuOx
150-215	Mixed Limestone and garnet skarn, occ. CuOx
215-245	garnet skarn, occ. CuOx
245-265	limey garnet skarn, occ. CuOx
265-315	Thin alternating garnet skarn and Limestone

* Abandoned at 315 ft. after losing part of bit in the Hole. Will redrill.

Drill Logs

KKB-23 Site 35 Final depth 580 ft.

0-70 ft.	Limey garnet skarn, occ. CuOx
90-120	Calc-silicate
120-265	Limey garnet skarn, occ. CuOx
265-300	Garnet skarn
300-375	Garnet-Magnetite skarn, abundant CuOx
375-435	Limey garnet-magnetite skarn, occ. Limestone
435-505	Garnet-magnetite skarn, occ. CuOx
505-525	Limey garnet-magnetite skarn, occ. CuOx
525-580	Quartz-Mica Schist

KKB-24 Site 10 Final Depth 110 ft

0-40 ft.	Limey skarn with Limestone
40-50 ft	garnet skarn
50-110 ft.	quartz Mica Schist

KKB-25 Site 12 Final depth 275 ft

0-135	Predominantly limestone minor skarn
135-175	Limey garnet skarn, rare CuOx
175-225	alternating garnet skarn and limestone
225-275	Quartz-Mica Schist

KKB-26 Site 12 (545° w/-45°) Final depth 235 ft

0-145 ft	Limestone with minor garnet skarn
145-190	Limey garnet skarn, minor CuOx
190-235	quartz-mica schist

Drill Logs (Cont.)

KKB-27 Site 12 (S 9° E / 45°) Final Depth 250 ft

0-120 ft	Limestone with Subordinant Calc-Silicate
120-135	Limestone with minor garnet Skarn
135-170	Limey garnet, Amphibole Skarn, occ Qwox
170-205	alternating Limestone and Skarn
205-250	quartz-Mica Schist

KKB-28 Site 36 425 ft. (In Progress)

0-60 ft	Andesite dike
60-170	Thin alternating sequences Limestone/Skarn
170-195	garnet Skarn
195-260	alternating Limestone and Skarn
260-375	garnet-Magnetite Skarn, Red Fe_2O_3
375-(425)	alternating Limestone and garnet Skarn

October, 1989

A.F. Budge (Mining) Ltd.

To: A.F. Budge
C.A. O'Brien
R.R. Short
D.A. Allan
J.W. Norby

Date: 12-22-89

From: J.R. Bosco

Subject: Korn Kob Project
Weekly Drill Report
December 15 - December 18, 1989

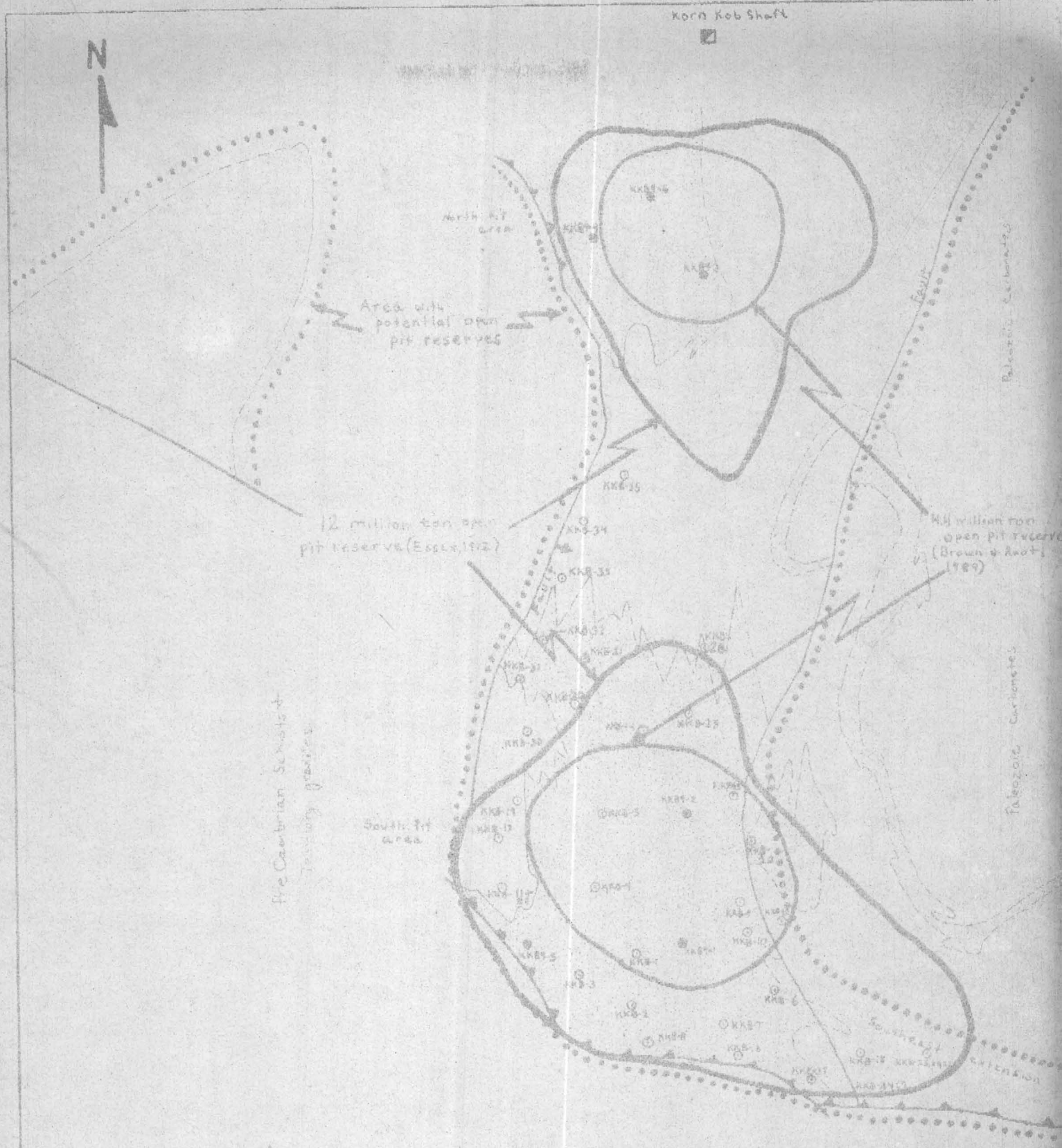
During the period December 15 to December 18, five reverse circulation drill holes KKB-31 through KKB-35 were completed. Drilling stopped on the 18th for the holiday season and will resume around January 5, 1990. Total project drill footage to date is 10,450 ft.

Drill holes KKB-31 - KKB-35 tested the western (up-dip) edge of the Korn Kob skarn horizon between the north and south deposits (Figure 1). Drill tests in the area between the two deposits are exploratory in nature because of the limited amount of holes (3) drilled during prior exploration programs and because potential skarn mineralization is mostly covered by a limestone capping. This area is important to the overall mine scheme and may considerably increase the Korn Kob ore reserve if stripping the limestone cap can be justified. As noted in the enclosed summary logs, visual examination of drill cuttings from hole KKB-31 indicates the presence of mineralized skarn between 25-85 feet and between 120-200 feet. Similarly, KKB-32 shows mineralized skarn between 0-70 feet and between 80-145 feet. KKB-34 and 35 show that the skarn zones become discontinuous and limey northward with thin alternating layers of skarn and limestone. In hole KKB-33, much of the geology was observed

by a steeply dipping, post alteration, andesite dike encountered between 20 and 110 feet. Small amounts of skarn material mixed with the Andesite in the cuttings point out that the dike does contact skarn. Since the amount and distribution of skarn in KKB-33 remains unclear, the hole may have to be redrilled (depending on results from surrounding holes) by moving north about 20 feet.

Following the holiday break drilling will resume in the "middle knob" area, between the north and south skarn deposits. Planned holes at sites 37, 38, 40, 42, 43, 46, 47 and 69 will test the down-dip extension of skarn mineralization north of KKB-23 which encountered 300 ft. of .48 percent Cu. Additionally, angle holes are planned along the western edge of the south skarn deposit to better delineate and test that contact. Drilling will also begin in the north deposit area.

Assay results have been received from holes KKB-25 (vertical) and KKB-26 (S45°W/-45°), drilled from site 12 along the southeast skarn extension. As summarized on table 1, KKB-25 intersected 20 feet grading .29 percent Cu between 210 and 230 feet while KKB-26 cut 30 feet grading .46 percent Cu between 165-195 feet. Both mineralized intervals occur at the Pre-Cambrian schist fault contact.



Explanation

- Reverse Circ. Drill Hole Location
- Core Drill Hole location
- Cu Bearing Skarn
- Geologic Contact
- Fault
- Thrust/Gravity Fault

KORN KOB PROPERTY

Preliminary Geologic/Location Map

Pima County, Arizona

Scale: 1in. ≈ 300 ft. October, 1989

Figure 2

Hole Completion Log
(Reverse Circulation)

Table 1

Hole Number	Site Number	Total Depth (ft)	Date Completed	Major Intercepts	Total % Cu
KKB-1	28	300	10-18-89	0-235 0-140	.42 .47
KKB-2	44	240	10-19-88	0-115 115-165	.45 .24
KKB-3	17	190	10-30-89	35-145 0-145	.46 .38
KKB-4	16	310	10-31-89	0-235 0-355	.55 .53
KKB-5	26	400	11-1-89	0-140 110-240 240-360 0-360	.52 .19 .46 .37
KKB-6	7	330	11-2-89	0-45 45-85 85-170 170-280 0-280	.23 .46 .121 .54 .98
KKB-7	5	270	11-4-89	118-150 170-225	.60 .20
KKB-8	45	140	11-4-89	0-55 0-85	.45 .39
KKB-9	18	500	11-8-89	125-260 300-450 125-450	.34 .53 .41
KKB-10	19	460	11-14-89	170-195 310-400	.55 .38
KKB-11	14	200	11-14-89	25-75 115-140 25-140	.60 .36 .40
KKB-12	21	580	11-16-89	435-470	.43
KKB-13	22	240	11-17-89	135-185 85-185	.56 .44
KKB-14	27	500	11-18-89	280-365 280-440	.49 .37
KKB-15	29	460	11-19-89	160-265 360-390	.33 .60
KKB-16	6	110	11-19-89	0-68	.43
KKB-17	8	100	11-20-89	5-45	.52
KKB-18	7	200	11-20-89	0-145	.74
KKB-19	24	240	11-20-89	0-185	.39
KKB-20	34	480	12-2-89	45-85 335-390	.29 .53

Hole Completion Log
(Reverse Circulation)

Table 1 (cont)

Hole Number	Site Number	Total Depth (ft)	Date Completed	Major Intercepts	Total % Cu
KKB-21	33	410	12-3-89	285-315	.47
KKB-22	20	315	12-4-89	150-170 225-250	.20 .40
KKB-23	35	580	12-7-89	230-530	.48
KKB-24	10	110	12-7-89	No Significant Interval	
KKB-25	12	275	12-8-89	210-260	.29
KKB-26	12 (345°W/-45°)	235	12-9-89	165-195	.46
KKB-27	12 (58°E/-45°)	250	12-9-89		
KKB-28	36	540	12-11-89		
KKB-29	14 (370°W/-45°)	175	12-11-89		
KKB-30	25	280	12-14-89		
KKB-31	31	320	12-16-89		
KKB-32	32	200	12-17-89		
KKB-33	39	200	12-17-89		
KKB-34	60	160	12-18-89		
KKB-35	48	150	12-18-89		
		Total 10,450 ft			

Summary Logs

KKB-31 — Site 31 — Final Depth 320 feet

0-25 ft	Limey Skarn
25-50 ft.	garnet-Amphibole Skarn
50-85 ft.	garnet-Magnetite-Amphibole Skarn
85-120	Alternating Limestone/garnet skarn, sparse CuOx
120-165	garnet Skarn
165-200	garnet-Magnetite Skarn, occ. CuOx
200-260	Limey garnet Skarn
260-320	Quartz-Mica Schist

KKB-32 — Site 32 — Final Depth 200 feet

0-70 ft	garnet Skarn; sporadic CuOx
70-80	Mixed skarn and limestone
80-130	Garnet Skarn, occ. CuOx
130-145	Garnet-Magnetite Skarn, occ. CuOx
145-200	quartz-Mica Schist

KKB-33 — Site 39 — Final depth 200 feet

0-20 ft	Calc-Silicate
20-65 ft	Andesite Porphyry dike
65-70	Andesite porphyry with garnet skarn
70-85	garnet skarn
85-90	Andesite porphyry dike with garnet skarn
90-100	Andesite porphyry dike
100-110	Andesite porphyry/skarn/limestone
110-120	garnet skarn and Chlorite-biotite Schist
120-190	Epidotized impure quartzite
190-200	Andesite Porphyry dike

Summary Logs (cont.)

KKB-34 Site 60 Final depth 160 ft.

0-10 ft.	Limey garnet skarn
10-40	Limestone mixed with garnet skarn
40-65	Limey garnet skarn
65-110	quartz vein and garnet skarn, sparse WOx
110-160	Epidotized impure quartzite

KKB-35 Site 48 Final depth 150 ft.

0-105 ft.	thin alternating sequences Limestone/skarn
105-150	quartz-Mica schist

A.F. Budge (Mining) Ltd.

To: J.W. Norby

Date: Feb. 5, 1990

Copies: A.F. Budge
R.R. Short
C.A. O'Brien
D.H. Allen
R.M. Guthrie
File

From: J.R. Bosco

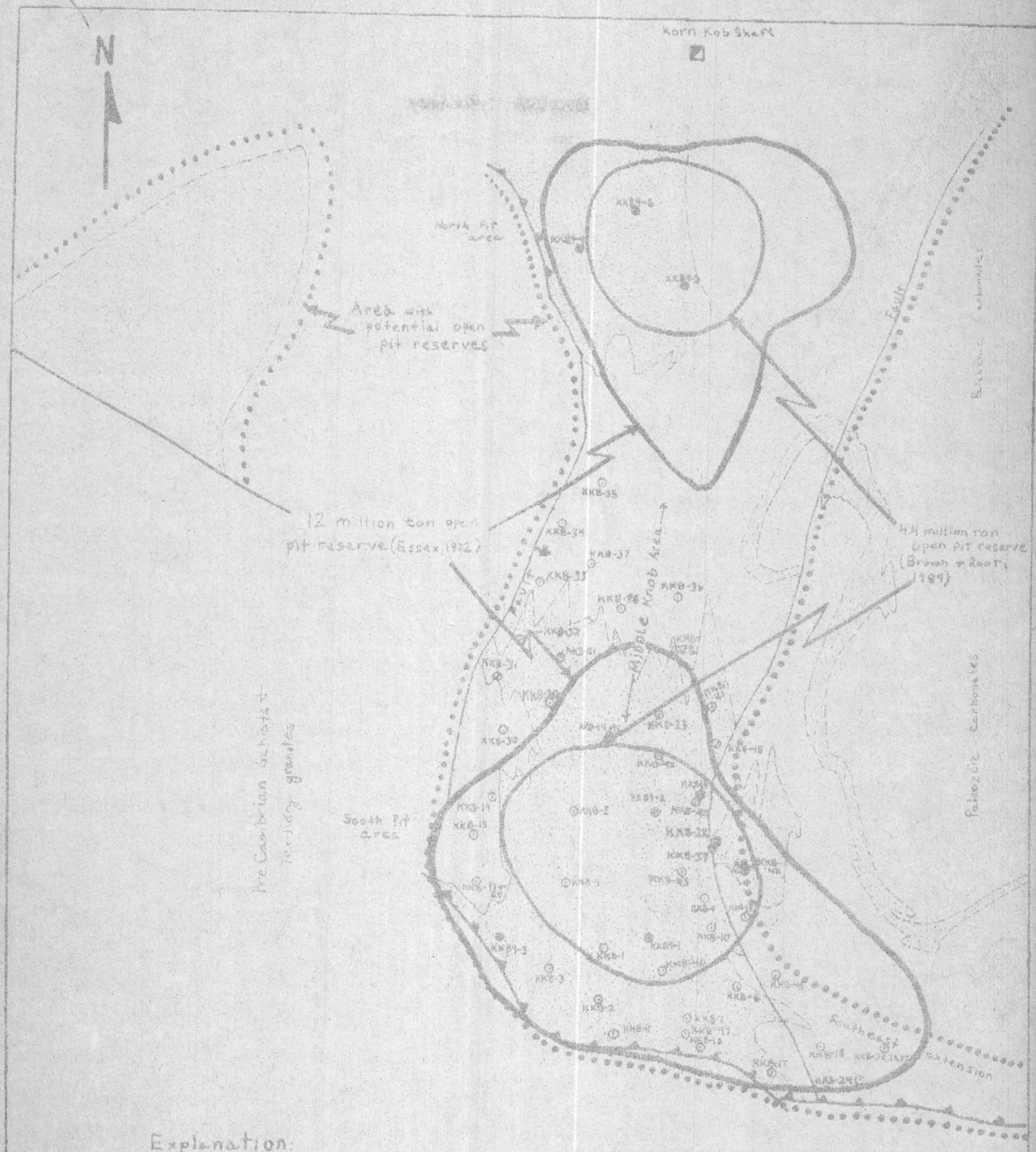
Subject: Korn Kob Project
Drilling Update
January 20 - February 5, 1990

During the period January 20 to February 5, Seven reverse circulation drill holes KKB-41 through KKB-47 were completed and an eighth hole KKB-48 remained in progress at 235 feet (Figure. These holes, all located in the South Pit area, were designed to better define the eastern edge of the South skarn and to test areas where tighter control was needed for assurance of grade continuity. Drilling during the period amounted to 3395 feet, bringing the total project reverse circulation drill footage to 16,230 feet.

As noted on the attached summary Log Sheets, KKB-42 (Site A) encountered fairly continuous skarn with FeOx/CuOx between 175 and 475 feet. This hole appears comparable to KKB-23 located 125 feet to the north which cut 300 feet grading .48 percent Cu between 230 and 580 feet. KKB-43 (site F) located 260 feet (S10° E) of KKB-42 encountered

Skarn alteration with scattered CuOx between 50-440 feet. These two holes (KKB-42 and KKB-43 appear to be located, respectively, on NW and SE limbs, toward the nose, of a gently folded synformal structure whose axial plane may plunge roughly N50°E along a topographic draw. Skarn alteration toward the nose of this possible structure appears somewhat thickened or possibly giving that appearance in vertical drill holes due to steepened dip. KKB-44 located 150 feet east of KKB-4 at sight E shows diminished alteration with scattered skarn lenses typically less than 50 feet thick. This hole (KKB-44) tested the South skarn near its eastern edge where rocks are downdropped along a prominent north-south trending fault.

KKB-45, 46 and 47 were all located in the South portion of the South skarn body for better grade control. KKB-45 (Site I) cut garnet and garnet/magnetite skarn with with occasional FeOx and CuOx between 215 and 335 feet. KKB-46 (Site K) also cut garnet and garnet/magnetite skarn with scattered FeOx/CuOx between 35 and 115 feet and between 130 and 270 feet. KKB-47 (Site L) was noted to have garnet skarn with moderate FeOx and scattered CuOx between 0 and 120 feet.



Explanation:

- Reverse Circ. Drill Hole Location
- Core Drill Hole location
- Cu. Bearing Skarn
- Geologic Contact
- Fault
- Thrust/Gravity Fault

KORN KOB PROPERTY

Preliminary Geologic/Location Map

Pima County, Arizona

Scale 1in. ≃ 300 ft. October, 1989

Figure 1

Summary Logs

KKB-41	Site 37	Final Depth 630 ft.
5-20 Ft.	Garnet Skarn with quartz vein	
20-30 Ft.	Pegmatite	
30-140	Alternating Limestone and garnet Skarn	
140-155	Limey Skarn	
155-170	Quartz Vein	
170-300	garnet skarn (CuOx 140-240)	
300-410	Alternating Limestone and garnet Skarn	
410-440	Limestone	
440-575	Alternating Limestone + garnet Skarn	
575-630	epidotized quartzite	

KKB-42	Site A	Final Depth 520 Ft
0-10 Ft.	garnet-Amphibole Skarn	
10-20	Alternating Limestone + Skarn	
20-50	Limey Skarn with CuOx	
50-150	Alternating Skarn, Calc-Silicate and Limeston	
150-175	Limey Skarn with CuOx	
175-475	garnet + garnet/magnetite skarn (scattered co	
475-520	quartz-Mica Schist and quartzite	

KKB-43	Site F	Final Depth 560 Ft.
0-25 Ft.	quartz vein + pegmatite with CuOx	
25-50	Limey Skarn with CuOx	
50-440	garnet + garnet/magnetite skarn, scattered CuOx	
440-445	Mixed Skarn and quartz-Mica Schist	
445-560	quartz-Mica Schist	

Summary Logs (Cont.)

KKB-44	Site E	Final Depth 565 Ft.
0-185 ft	Alternating Limestone and garnet skarn	
185-235	Limey garnet skarn with cuox	
235-425	Alternating Limestone and garnet skarn	
425-455	Garnet Skarn, partly Limey	
455-515	Alternating Garnet Skarn and Limestone	
515-565	Quartz-Mica Schist and quartzite	

KKB-45	Site I	Final Depth 400 Ft.
0-90 ft	Predominantly Limestone with lesser garnet skarn	
90-125	garnet skarn, moderate FeOx	
125-175	Limestone	
175-215	alternating limestone and skarn	
215-335	garnet-magnetite skarn, scattered FeOx/cuox	
335-345	Mixed qtz.-Mica Schist and skarn, FeOx	
345-400	Quartz-Mica Schist	

KKB-46	Site K	Final Depth 320 Ft
0-35 ft.	Calc-Silicate, minor skarn	
35-115	garnet-magnetite and magnetite skarn (occ. cuo	
115-130	Calc-Silicate	
130-270	garnet-magnetite skarn (Abd. qtz vein), FeOx-rare cuo	
270-285	Mixed Schist and skarn	
285-320	quartz-mica Schist	

Hole Completion Log
(Reverse Circulation)

Table 1

Hole Number	Site Number	Total Depth (ft)	Date Completed	Major Intercepts	Total % Cu
KKB-1	28	300	10-18-89	0-235 0-140	.42 .47
KKB-2	44	240	10-19-88	0-115 115-165	.45 .24
KKB-3	17	190	10-30-89	35-145 0-145	.46 .38
KKB-4	16	310	10-31-89	0-235 0-255	.53 .53
KKB-5	26	400	11-1-89	0-140 140-240 240-360 0-360	.52 .19 .46 .51
KKB-6	7	330	11-2-89	0-45 45-85 85-170 170-280 0-280	.23 .46 .21 .54 .38
KKB-7	5	270	11-4-89	115-130 170-225	.60 .26
KKB-8	45	140	11-4-89	0-55 0-85	.45 .31
KKB-9	18	500	11-13-89	125-260 300-450 or 125-450	.34 .53 .41
KKB-10	19	460	11-14-89	65-170 170-195 or 65-195 245-295 310-400	.23 .35 .30 .39 .38
KKB-11	14	200	11-14-89	25-75 115-140 or 25-140	.60 .36 .40
KKB-12	21	580	11-16-89	455-470	.43
KKB-13	22	240	11-17-89	135-185 85-185	.55 .44
KKB-14	27	560	11-18-89	280-365 280-440	.49 .37
KKB-15	29	460	11-19-89	160-265 360-390	.33 .60
KKB-16	6	110	11-19-89	0-65	.43
KKB-17	8	100	11-20-89	5-45	.52
KKB-18	9	200	11-20-89	0-145	.74
KKB-19	24	240	11-20-89	0-185	.39
KKB-20	34	480	12-2-89	65-85 335-390	.21 .53

Hole Completion Log
(Reverse Circulation)

Table 1 (cont.)

Hole Number	Site Number	Total Depth (ft)	Date Completed	Major Intercepts	Total % Cu
KKB-21	33	410	12-3-89	285-315	.47
KKB-22	20	315	12-4-89	180-110 225-250	.20 .40
KKB-23	35	580	12-7-89	230-530	.48
KKB-24	10	110	12-7-89	No Significant Interval	
KKB-25	12	275	12-8-89	210-230	.29
KKB-26	12(S45°W/-45°)	235	12-9-89	185-195	.46
KKB-27	12(S8°E/-45°)	250	12-9-89	125-145	.29
KKB-28	36	540	12-11-89	290-360 490-520	.30 .43
KKB-29	14(S70°W/-45°)	175	12-11-89	20-60 60-125 or 20-125	.39 .25 .30
KKB-30	25	280	12-14-89	15-30 45-235	.29 .49
KKB-31	31	320	12-16-89	60-85 110-125 150-170 210-245	.74 .51 .44 .25
KKB-32	32	200	12-17-89	15-70 85-105 120-160	.48 .28 .48
KKB-33	39	200	12-17-89	0-15 110-125	.23 .31
KKB-34	60	160	12-18-89	30-50 60-70 or 30-70	.28 .62 .40
KKB-35	48	150	12-18-89	95-110	.40
KKB-36	43	520	1-8-90	265-345	.27
KKB-37	40	285	1-12-90	225-250	.29
KKB-38	41	460	1-14-90	10-30 295-395	.34 .58
KKB-39 redrill of KKB-22	20	600	1-17-90	95-130 145-195< 315-405 420-470	.28 .27 .46 .22
KKB-40 redrill of KKB-15	29	520	1-18-90	105-135 160-385	.37 .36

Hole Completion Log
(Reverse Circulation)

Table 1 (cont.)

Hole Number	Site Number	Total Depth (ft)	Date Completed	Major Intercepts	Total % Cu
KKB-41	37	630	1-26-90	140-245	.26
KKB-42	A	520	1-28-90		
KKB-43	F	560	1-29-90		
KKB-44	E	565	1-31-90		
KKB-45	I	400	2-3-90		
KKB-46	K	320	2-3-90		
KKB-47	L	165	2-4-90		
KKB-48	B	235 in progress			

TOTAL
16,230

A.F. Budge (Mining) Ltd.

To: A.F. Budge
C.A. O'Brien
R.R. Short
D.A. ALLen
J.W. Norby

Date: January 20, 1990

COPIES: AF BUDGE
RR SHORT
CA O'BRIEN
DA ALLEN
R.M. GUTHRIE
File

From: J.R. Bosco

Subject: Korn Kob Project
Drilling Update
January 5 - January 20, 1990

During the period January 5 to January 20, Five reverse circulation drill holes, KKB-36 through KKB-40 were completed (Figure 1). Holes KKB-36, 37 and 38 were designed to test the relatively unexplored area between the North and South skarn deposits, while KKB-39 and 40 tested the eastern edge of the South skarn adjacent to abandoned holes KKB-22 and KKB-15, respectively. Drilling during the period amounted to 2385 Feet, bringing the total project footage to 12,835 Feet.

RVC

Based on drill cuttings, hole KKB-39 (drilled 15 Feet SW of KKB-22) is skarnified with scattered FeOx/CuOx Showings between 100-250 feet and between 315-370 feet. Similarly, KKB-40 (located 15 feet SW of KKB-15) appears mineralized between 100-230 feet. Holes KKB-36, 37 and 38 drilled between the known North and South skarn deposits show relatively discontinuous skarn alteration. This is particularly the case in holes

KKB-36 and 37. Hole KKB-38 (site 41), however, is skarnified and mineralized with FeOx/CuOx between 300-375 ft. A characteristic of holes drilled between the two skarn bodies is that the quartz-mica schist footwall unit, typical in holes to the south, thins, interfingers with and eventually becomes dominated by an altered quartzite footwall unit in holes toward the northwest side of the Middle Knob. The association between the schist and quartzite units and their relationship to the Korn Kob mineralization continues to be investigated.

Ten holes remain to be completed in the South skarn area. Concurrently, assay, metallurgical and geological data will continue to be entered into the Medsystem (computer) data base for purposes of cross section generation and ore reserve calculation.

Assay results have been received from holes KKB-30 through KKB-35 which tested the NW edge of the South skarn. As noted on Table 1, KKB-30 cut 190 ft., between 45-235 ft., grading .49 percent Cu. Results from KKB-31 show discontinuous intervals of Cu mineralization roughly typified by 20 ft. of ore seperated by 20 ft of waste. KKB-32 cut 55 ft., between 15-70 ft., grading .48 percent Cu. Results from KKB-33 should be discounted as poor assay results reflect a zone between 20-110 ft. which penetrated mostly post-mineralization andesite dike. KKB-34 cut 40 ft., between 30-70 ft.

grading .40 percent Cu.

Summary Logs

KKB-36 Site 43 Final Depth 520 ft.

0-220 ft.	Alternating thin sequences of Limestone/garnet skarn
220-265	Andesite porphyry dike
265-270	Garnet Skarn
270-285	Andesite porphyry
285-325	Altered (garnetized) quartzite
325-360	Garnet-Magnetite Skarn, CuOx
360-375	Garnet epidote Skarn
375-415	Hit drift, Lost sample Return
415-440	Mixed Limey skarn and Biotite-Chlorite schist
440-520	Altered quartzite with subordinant schist.

KKB-37 Site 40 Final Depth 285 ft.

0-100 ft.	Mixed limestone and calc-silicate
100-145	Andesite Porphyry dike
145-185	Garnet-Amphibole skarn
185-210	Andesite porphyry
215-250	Garnet-Amphibole skarn with lesser calc-silicat
250-265	Altered quartzite
265-285	Lost Circ. Hung, but recovered, drill rods.

Summary Logs (cont.)

KKB-38 Site 41 Final Depth 460 Ft.

0-25 ft.	Limey Skarn
25-80 ft.	Mixed Limestone and Calc-Silicate
80-105	predom. garnet skarn, somewhat Limey
105-155	Andesite porphyry
155-235	Limey garnet skarn, minor calc-silicate
235-270	Garnet skarn
270-300	Mixed Limestone and garnet skarn
300-375	Garnet-Magnetite-Amphibole skarn, CuOx
375-400	Altered quartzite
400-465	Quartz-Mica Schist

KKB-39 Site 20 Final depth: 600 ft.

(Redrill of KKB-22)

0-40 ft.	Limey garnet skarn
40-100	Limestone intercalated with garnet skarn
100-155	Garnet-Amphibole Skarn, partly Limey, occ. Cu
155-255	Garnet-Magnetite skarn, occ. CuOx
255-300	Mixed Limestone + Calc-Silicate
300-350	Garnet and Garnet-Magnetite skarn, occ. CuOx
350-415	Limey Garnet skarn
415-450	Mixed limestone and garnet skarn
450-465	Limey garnet skarn
465-600	Altered Quartzite + schist.

Summary Logs. (Cont.)

KKB-40 Site 29 Final Depth 520 Ft.

(Redrill of KKB-15)

0-65 Ft.	Alternating Limestone and garnet skarn
65-95 Ft.	Limey garnet skarn
95-240	Garnet and garnet-Magnetite skarn, occ. Cuox
240-265	garnet skarn, partly Limey
265-295	Mixed skarn and Calc-silicate
295-315	Garnet skarn
315-355	Garnet skarn mixed with Limestone
355-380	Garnet skarn
380-460	Mixed Limestone and garnet skarn
460-495	Quartz-Mica Schist
495-520	Altered Quartzite

Hole Completion Log
(Reverse Circulation)

Table 1

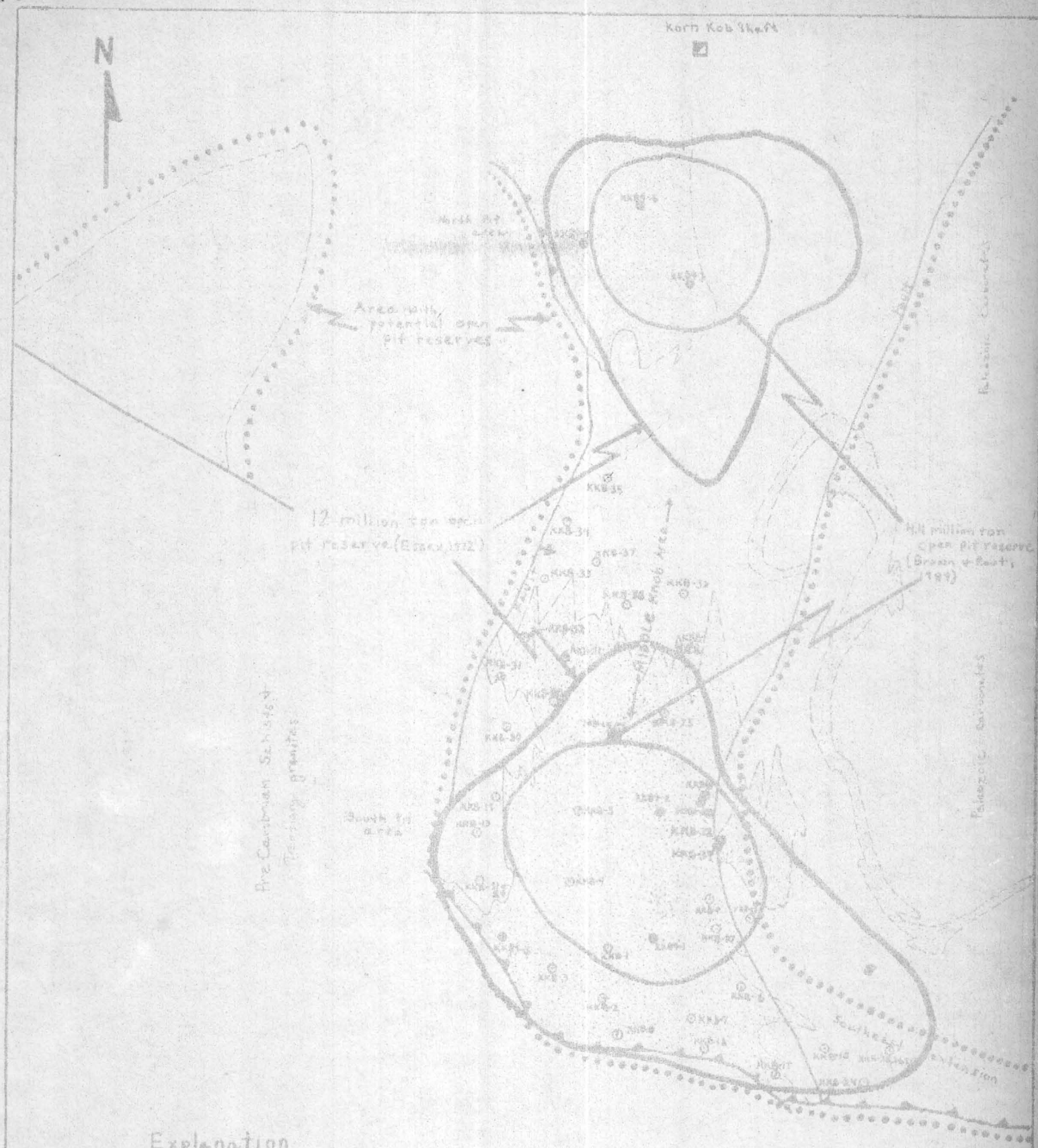
Hole Number	Site Number	Total Depth (ft)	Date Completed	Major Intercepts	Total % Cu
KKB-1	28	300	10-18-89	0-235 0-140	.42 .47
KKB-2	44	240	10-19-88	0-115 115-165	.45 .24
KKB-3	17	190	10-30-89	35-145 0-145	.46 .38
KKB-4	16	310	10-31-89	0-235 0-255	.55 .53
KKB-5	26	400	11-1-89	0-140 140-240 240-360 0-360	.32 .19 .46 .41
KKB-6	7	330	11-2-89	0-45 45-85 85-170 170-280 0-280	.29 .46 .21 .34 .38
KKB-7	5	270	11-4-89	115-150 170-225	.60 .26
KKB-8	45	140	11-4-89	0-85 0-85	.45 .39
KKB-9	18	500	11-[illegible]-89	125-260 300-450 or 125-450	.34 .53 .41
KKB-10	19	460	11-14-89	65-170 170-195 or 65-195 265-295 310-400	.33 .55 .50 .29 .38
KKB-11	14	200	11-14-89	25-75 115-140 or 25-140	.60 .35 .40
KKB-12	21	580	11-16-89	435-470	.43
KKB-13	22	240	11-17-89	135-185 85-185	.58 .44
KKB-14	27	500	11-18-89	280-365 280-440	.49 .37
KKB-15	29	460	11-19-89	160-265 360-390	.33 .60
KKB-16	6	110	11-19-89	0-65	.43
KKB-17	8	100	11-20-89	5-45	.52
KKB-18	9	200	11-20-89	0-145	.74
KKB-19	24	240	11-20-89	0-185	.39
KKB-20	34	480	12-2-89	65-85 335-390	.29 .53

Hole Completion Log
(Reverse Circulation)

Table 1 (cont)

Hole Number	Site Number	Total Depth (ft)	Date Completed	Major Intercepts	Total % Cu
KKB-21	33	410	12-3-89	285-315	.47
KKB-22	20	315	12-4-89	150-190 225-250	.20 .40
KKB-23	35	580	12-7-89	230-530	.48
KKB-24	10	110	12-7-89	No Significant interval	
KKB-25	12	275	12-8-89	210-230	.29
KKB-26	12(S45°W/-45°)	235	12-9-89	165-195	.46
KKB-27	12(S 8°E/-45°)	250	12-9-89	125-145	.29
KKB-28	36	540	12-11-89	290-360 490-520	.30 .43
KKB-29	14(S70°W/-45°)	175	12-11-89	20-60 60-125 or 20-125	.39 .25 .30
KKB-30	25	280	12-14-89	15-30 45-235	.29 .49
KKB-31	31	320	12-16-89	60-85 110-125 150-170 210-245	.34 .51 .44 .25
KKB-32	32	200	12-17-89	15-70 85-105 120-160	.48 .28 .48
KKB-33	39	200	12-17-89	0-15 110-125	.23 .31
KKB-34	60	160	12-18-89	20-30 60-70 or 30-70	.28 .62 .40
KKB-35	48	150	12-18-89	95-110	.40
KKB-36	43	520	1-8-90		
KKB-37	40	285	1-12-90		
KKB-38	41	460	1-14-90		
KKB-39 redrill of KKB-22	20	600	1-17-90		
KKB-40 redrill of KKB-15	29	520	1-18-90		

TOTAL
12,835 ft.



Explanation

- Reverse Circ. Drill Hole Location
- Core Drill Hole location
- Cu Bearing Skarn
- Geologic Contact
- Fault
- Thrust/Gravity Fault

KORN KOB PROPERTY

Preliminary Geologic/Location Map

Pima County, Arizona

Scale: 1in ≃ 300 ft

October, 1989

Figure 1

A. F. Budge (Mining) Ltd.

DATE: May 1, 1990

TO: John Norby

FROM: Jim Bosco

SUBJECT: Korn Kob Project
Monthly Report, April, 1990

DRILLING

First phase drilling which focused primarily on the Forest Service portion of the Korn Kob project area ended on March 1, 1990. During this phase, sixty-one reverse circulation and six core holes were completed totaling 20,800 and 1,505 feet, respectively. Upon drilling termination, samples from core holes KK89-1,2,3,5 and 6 were split and submitted for total Cu analyses. To date, results have been received from KK89-1,2 and 5 samples and the weighted averages for these appear below:

*KK89-1,	0 - 190,	= 190 feet	@ .40 % Cu
*KK89-2,	168 - 233,	= 65 feet	@ .365 % Cu
	233 - 276,	= 43 feet	@ .104 % Cu
	276 - 356,	= 80 feet	@ .308 % Cu
	356 - 430.5	= 74.5 feet	@ .204 % Cu
or	168 - 430.5	= 265.5 feet	@ .259 % Cu
*KK89-5,	7 - 92.5	= 85.5 feet	@ .188 % Cu

Samples from KK89-1 and 2 were sent to the Vulture mine site on April 30, for acid consumption and column leach testing. Samples from the remaining holes--KK89-3,4,5 and 6--will be sent shortly to Vulture for metallurgical testing.

MINTEC RESERVE

In early April, Mintec, Inc. completed a preliminary geologic reserve estimate based on total Cu results from Budge's, as well as, earlier drilling carried out in the southern portion of the Korn Kob deposit (reference Mintec reserve sheets). The reserve only considered geology in the dip direction (cross section). Currently geology is being added to the long sections (strike direction) in order to more accurately detail structure and zones with high lime content. From the geology oriented in the strike and dip directions, Mintec will plot 20 ft. bench level maps upon which the geology will be further refined and a more detailed geologic and mineable reserve will be based.

Mintec is also working on an average acid consumption estimate based on soluble Cu cutoff grades from KKB holes. Thus far, the acid consumption averages generally vary between about 7 and 15

pounds of consumed acid per pound of potentially recoverable Cu, given acid soluble Cu cutoffs (in skarn material) between .5 and .15 percent Cu, respectively. With selective mining, the acid consumption should decrease. Using just the KKB holes, acid consumption extrapolation is generally less than 200 feet (100 ft. from each hole).

PROPERTY

To date 276 claims (as noted below) have been staked on federal mineral lands surrounding the original 98 claim Korn Kob block.

Donovan Block, D-1 through D-60
Bullock Block, BK-1 through BK-24
Buehman Block, B-1 through B-154
Lone Hill Block, LH-43 through LH-80

Of the 276 claims, 238 were filed with the BLM and Pima County during April. Nineteen claims were rejected by the BLM, all of which belong to the Buehman block (B137-154 and B-108). Twelve of these claims appear to have been rejected in error and should be recoverable with an amended filing. The 12 claims were rejected because the land in the E1/2 of section 5 and the N1/2 of section 8 (T12S, R18E), was given to the state of Arizona in 1986. Following the land transfer, the mineral rights were reserved (not open to claims) for two years, thus giving the state an opportunity to acquire these rights. According to Tom Wrightmeyer of the BLM (and for reasons unknown to him), Arizona never did obtain the mineral rights. Therefore, following the designated two year grace period, the minerals should have been reopened for claim. However, the BLM plat maps continued to indicate that these properties had not yet been removed from the reserved list. This error resulted in the BLM's rejection of Budge's 12 claims (B-138, 140, 142 and 144-152). The State does have surface ownership to these 12 claims, and prospecting permits may be required for exploration. Claims B-108, 137, 139, 141, 143, 153 and 154 were rejected because they are on state and private mineral land.

In addition to the above claim group, Budge has applied for state prospecting permits in Sections 11, 12, 13 and 14, T12S, R17E. Prospecting permits will also be applied for in Sections 8, 17, 19 and 20, T12S, R18E (parcel D).

ENVIRONMENTAL

Approximately 72 cubic yards of oil/diesel contaminated soil was excavated from the Korn Kob project area and transported to the Vulture site for remediation (aeration) on April 20. Also during the month, five water bars were constructed along the "short cut" road between the "north and south pit" areas, as requested by the Forest Service. These cuts are designed to control erosion and sedimentation by dispersing runoff water.

Eric Muehlberger of Dames and Moore, Ltd. forwarded a report to the Santa Catalina district of the Forest Service documenting his water quality survey in Buehman Canyon. The survey was contracted by Budge partially in response to allegations by the Sierra Club that iridescent skims on pools in Buehman Canyon were the result of "petroleum product spillage." Muehlberger's report noted that analyses of the skims indicate that they are humic acid, a by-product of organic decay. Muehlberger also noted that one surface water sample in the canyon did contain trace amounts of gasoline; but he questioned the validity of the results when later repeat samples failed to indicate the presence of petroleum.

(Note: An updated claim map is forthcoming)

A. F. Buage (Mining) Ltd.

DATE: June 29, 1990

TO: John Norby

FROM: Jim Bosco

SUBJECT: Korn Kob Copper Project
Monthly Report, June, 1990

PRELIMINARY ECONOMIC EVALUATION

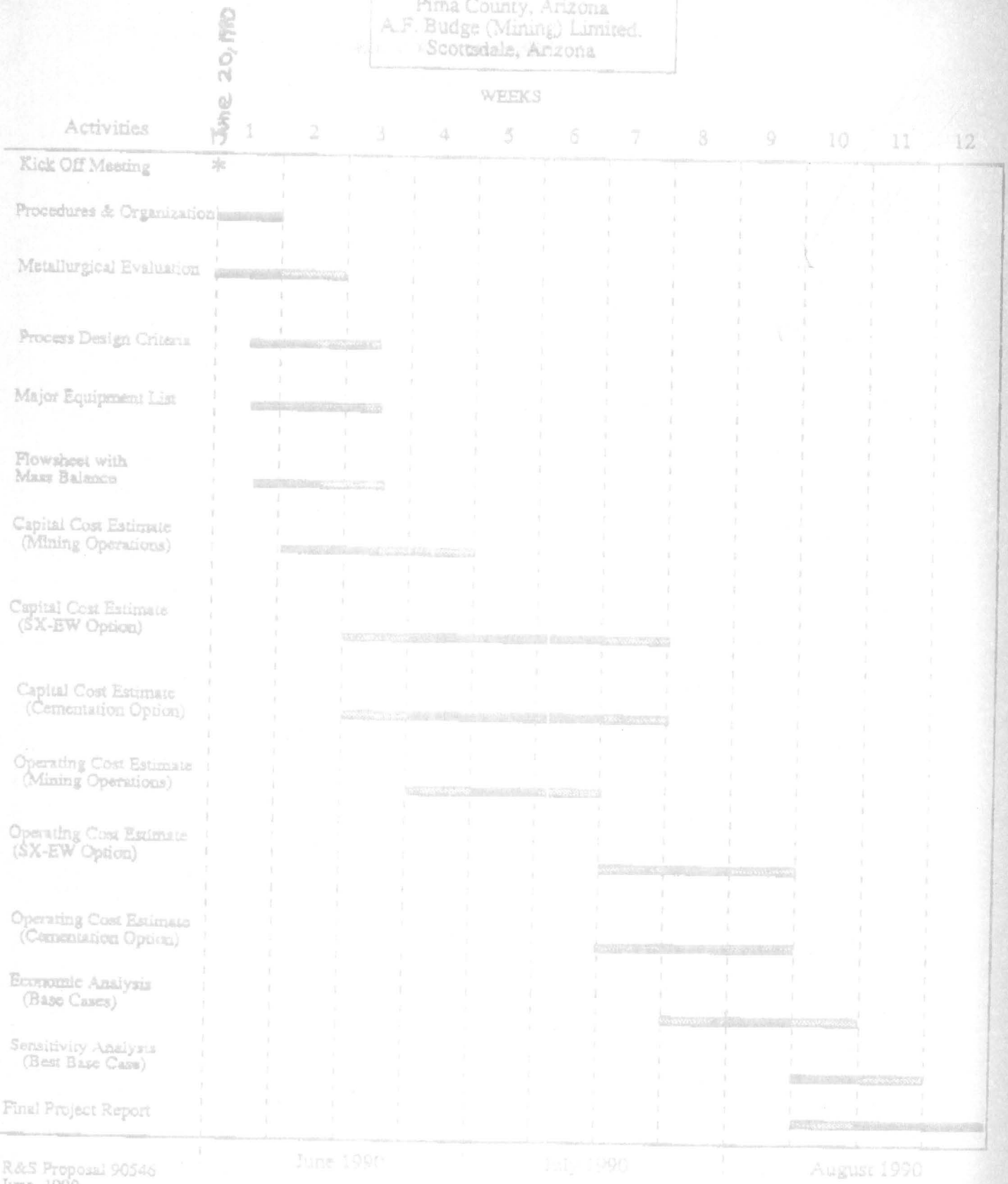
During the middle of the month (June 20), Roberts and Shaefer Company began a preliminary evaluation of the economics involved with mining the Korn Kob copper oxide deposit. For this study Roberts and Shaefer has subcontracted mining and geological consultants from Derry, Michner, Booth and Wahl and will incorporate a model SX system provided by the French firm Krebs and an EW system provided by the Tucson firm Dremco. The study assumes a 7,500 tpd mining operation and will explore cement copper, as well as, SX-EW production.

In scope, the feasibility study will focus on a single South Pit mining scenario, however information from previous exploration in the North Pit area will also be evaluated for potential additions to the overall minable reserve. Capital and operating costs will be estimated and a "base case" economic analysis covering the life of the potential Korn Kob mine will be prepared. The base case analysis considers revenue vs. capital and operating costs, mining rate, strip ratio and ore grade. In addition, using the base case economic model, the Korn Kob deposit will be evaluated for sensitivity to changes in capital and operating costs, market copper price and plant recovery. This preliminary feasibility study is expected to be completed with a final report due to Buage September (see attached project schedule--from Buage & Shaefer proposal 90546).

Sets of cross section and level sections along with corresponding block grades are being printed and will be sent to David Rhoades, geologist, and Glen Ottemann, Mining Engineer, both of Derry, Michener, Booth and Wahl. Roberts' main functions in the feasibility study is to supply the Korn Kob geology and computer generated reserve estimates. Michener will evaluate the reserves and devise a mine plan based on economics and physical factors. In addition DMB & W is being sent Rock Quality Descriptor and geologic logs along with 1 in. = 100 ft. topographic maps of the Korn Kob area.

PROJECT SCHEDULE

Komkob Copper Project
Pima County, Arizona
A.F. Budge (Mining) Limited.
Scottsdale, Arizona



R&S Proposal 90546
June, 1990

MINTEC RESERVE

Mintec completed a second geologic reserve for the Korn Kob South Pit area on June 26. This estimate is based on a updated computer block model which uses geology produced on 20 ft. bench level maps. The estimate gives tons and average grade at cut offs ranging from 0 to .5 percent Cu using total Cu grade and a series of acid penalized total copper grades at $.65, $.80, $1.00 and $1.20 (simulated market prices) as the cut off basis. Both inverse distance cubed and polygonal weighting methods were used for total copper estimates, however only inverse distance cubed was used for the acid penalized estimates.

As seen on table 1. tons and grade increased slightly from the earlier geologic reserve estimate to the current estimate. The increased reserve is primarily due to geological refinement in the vicinity of angle hole KKB-57 (western edge of the southern skarn). KKB-57 appears to have been drilled into the nose of the prominent synformal structure which defines the footwall schist at Korn Kob. This structure is probably the result of faulting or folding due to uplift caused by the Cretaceous/Tertiary Catalina granite-gneiss intrusion. In the prior geologic estimate (cross section) KKB-57 was poorly understood and given less geologic weight as it was drilled obliquely to the section plane in an area (fold nose) where lithologic strike direction changes from nearly cross section perpendicular to nearly cross section parallel (long section).

It is also notable from the current total Cu based reserve estimate that acid consumption (lbs./ton) increases with higher Cu grade within skarn material. This is opposite of what may have been expected. In trying to understand this trend, Steve Wolfe (Mintec) performed statistical analyses on both KKB and KK series acid consumption data. The results indicated that KK acid data increases from [illegible] to 150 lb./ton between the respective 0 and .5 total Cu cut off grades. The KKB series, on the other hand, shows an opposite trend with acid consumption decreasing with increased total Cu grades--61 to 53 lb./ton between 0 and .5 cutoffs, respectively (see appendix 1). Statistics also show KK acid data to be roughly two times higher than KKB data. Possibly by combining the acid data (as done in the ore reserve calculation) an overall average is arrived at.

Core samples and R.C. drill cuttings of mineralized skarn material are currently being collected to check specific gravity measurements used in the present geologic reserve estimate.

UPDATED KORN KOB GEOLOGIC RESERVE (KORN MATERIAL ONLY)
BASED ON BENCH LEVEL GEOLOGY
Note: ( ) indicates data from earlier cross section estimate

CUT OFF	TONS(MILLION)	AVE. GRADE	LBS.CU(MILLION)
	TOTAL CU-INVERSE DISTANCE CUBED		
.0	16.5(16.3)	.339(.326)	111.7
.1	15.6(15.1)	.356(.348)	110.7
.2	13.7(13.1)	.384(.378)	105.1
.3	9.7(9.1)	.440(.437)	85.6
.4	5.7(5.3)	.510(.504)	45.3
	TOTAL CU-POLYGONAL		
.0	16.5	.335	110.4
.1	14.2	.380	108.2
.2	11.8	.428	101.2
.3	8.6	.499	85.4
.4	5.7	.576	65.5
	ACID PENALIZED TOTAL CU @ $165 INVERSE DISTANCE CUBED		
.0	16.5	.270	88.9
.1	14.2	.306	87.1
.2	11.0	.351	77.4
.3	6.6	.420	55.7
.4	3.3	.501	32.8
	ACID PENALIZED TOTAL CU @ $0/LB -INVERSE DISTANCE CUBED		
.0	16.5	.279	91.9
.1	14.4	.314	90.4
.2	11.4	.357	81.2
.3	7.1	.424	60.3
.4	3.6	.503	36.4
	ACID PENALIZED TOTAL CU @ $1 20/LB -INVERSE DISTANCE CUBED		
.0	16.5	.288	94.9
.1	14.5	.322	93.7
.2	11.7	.363	85.1
.3	7.6	.427	64.1
.4	3.9	.505	39.9
	ACID PENALIZED TOTAL CU @ $1 20/LB -INVERSE DISTANCE CUBED		
.0	16.5	.294	96.9
.1	14.6	.327	95.6
.2	11.9	.368	87.5
.3	7.7	.429	67.5
.4	4.2	.505	42.3

Figure 1

PROPERTY SITUATION

CLAIMS

A total of 366 contiguous claims (7324 acres) have been staked around the Korn Kob property. Two hundred thirty-two of these claims have been filed with the BLM and Pima County Recorder's office (14 of these claims need to be amended). The remaining 134 claims must be filed by July 16, 1990. The claim stake contractor, Lon [illegible] of [illegible], has indicated that posts on roughly half of the 192 claims which were staked using plastic pipe have been capped.

STATE PROSPECTING PERMITS

State prospecting permits are being applied for state parcels A and B which comprise 720 acres located on the north side of Buehman Canyon (Sec's 2, 11, 12 and 14; T12S, R17E). State prospecting permits for the 1120 acre parcel C (sects.8,17,18, 19 and 20; T12S, R18E) have been applied for.

PRIVATE HOLDINGS

During the month, Graf (Independent land man) contacted M. A. Matcha (Sturgis recently filed) and J. C. Goff regarding the possibilities of leasing mineral rights to their patented properties near Korn Kob. Goff's 160 acre property is of interest as it is situated along the same structural trend (potentially mineralized) as Korn Kob and may be an important section of a possible haul road should Korn Kob reach production. Matcha's land is desirable as it is relatively flat and appears useful for a possible EW [illegible]. According to Al Graf neither land owner had immediate reservations about a lease agreement, but both indicated their interest in selling their respective properties. Before [illegible] the lease agreements, Al wanted to include a copy of [illegible] annual report. The leases will be mailed shortly.

Al Graf has also been negotiating a surface damage agreement in property situated near Kellogg on which is mineral rights (claims), however, surface ownership is held privately. The agreement will compensate the surface owner for road and drill pad installation, but, will also include a provision giving Budge the option to purchase properties if it desires. The status of the surface damage agreements is outlined below:

Goff-expecting agreement in the mail.

Kellogg-Currently looking over the agreement. Al's opinion is that Kellogg has no [illegible] through using the north cess road; however, [illegible] land which would be of concern.

Wilson and First Interstate Bank [illegible] by its owner by a Mrs. Wilson who [illegible] and About to die. Apparently the property is [illegible] by the Bank for Jack Kelly (the husband of [illegible] daughter or granddaughter). Al feels the situation is [illegible] and that Bugge should forego the surface [illegible] and post a BLM bond to acquire right to use the surface.

MISCELLANEOUS

The old Korn Kob shaft was [illegible] during the month, using existing timbers [illegible] and plywood. The shaft cover measures [illegible] is also enclosed by barbed wire and posted with danger signs.

All sample rejects from [illegible] Kob drilling have been cataloged and placed [illegible] Roughly 40 percent of the rejects are in Bugge's [illegible] warehouse. The remainder are at Mountain States [illegible] be transported to the warehouse as time allows.

North Pit, western [illegible] drill holes have been plotted on the [illegible] cartographic mylars and are currently being digitized. [illegible] corresponding drill hole data is being entered into the Bugge standard data files. The modified data set has yet to be estimated.

As mentioned above [illegible] sets of long, cross and level section maps along [illegible] are being printed and will be sent to Denver, Kitchener, Bugge and Hall's Denver and Toronto offices for geologic and [illegible] respectively.

FUTURE

Steve Wolfe at Mineral [illegible] in pit reserve on July 2. The in pit reserve will [illegible] outlines ranging from optimistic to moderate [illegible] estimations of Cu prices vs. operating cost. [illegible] exploration reserves will be broken down by [illegible] grades.

North Pit, western [illegible] immediately north of the Korn Kob shaft and [illegible] east of the North Pit will continue to [illegible] reconnaissance mapping and sampling on the new claims and state [illegible] are planned to begin in early July.

RUN# 2074. PAGE 4 [illegible]

KKB Holes

* A. F. BUDGE PROJECT -- JANUARY 1990 *

* TOTCU STATISTICS WITHIN SKARN ZONE [illegible]

STATISTICAL ANALYSIS OF BUDGET.DAT [illegible]
MINIMUM VALUE= 0.0000 ELEVATIONS: [illegible]

CUTOFF GRADE *	WEIGHT #	% INTERVALS ABOVE CUTOFF	[illegible]	[illegible]	
0.000	8829.5	100.000	[illegible]	[illegible]	TOTCU
	7032.0	100.000	[illegible]	[illegible]	ASCU
	7032.0	100.000	[illegible]	[illegible]	ACDTN
0.050	7662.5	86.783	[illegible]	[illegible]	TOTCU
	6872.0	97.725	[illegible]	[illegible]	ASCU
	6872.0	97.725	[illegible]	38.806	ACDTN
0.100	6683.0	75.689	[illegible]	[illegible]	TOTCU
	6377.0	90.685	[illegible]	[illegible]	ASCU
	6377.0	90.685	[illegible]	[illegible]	ACDTN
0.150	5849.0	66.245	[illegible]	[illegible]	TOTCU
	5658.0	80.461	[illegible]	[illegible]	ASCU
	5658.0	80.461	[illegible]	[illegible]	ACDTN
0.200	5183.0	58.705	[illegible]	[illegible]	TOTCU
	5028.0	71.502	[illegible]	[illegible]	ASCU
	5028.0	71.502	[illegible]	[illegible]	ACDTN
0.250	4496.0	50.943	[illegible]	[illegible]	TOTCU
	4388.0	62.400	[illegible]	[illegible]	ASCU
	4388.0	62.400	[illegible]	[illegible]	ACDTN
0.300	3898.0	44.147	[illegible]	[illegible]	TOTCU
	3813.0	54.224	[illegible]	[illegible]	ASCU
	3813.0	54.224	[illegible]	[illegible]	ACDTN
0.350	3353.0	37.975	[illegible]	[illegible]	TOTCU
	3283.0	46.687	[illegible]	[illegible]	ASCU
	3283.0	46.687	[illegible]	[illegible]	ACDTN
0.400	2768.0	31.315	[illegible]	[illegible]	TOTCU
	2710.0	38.538	[illegible]	[illegible]	ASCU
	2710.0	38.538	[illegible]	[illegible]	ACDTN
0.450	2311.0	26.174	[illegible]	[illegible]	TOTCU
	2256.0	32.082	[illegible]	[illegible]	ASCU
	2256.0	32.082	[illegible]	[illegible]	ACDTN
0.500	1960.5	22.204	[illegible]	[illegible]	TOTCU
	1920.5	27.311	[illegible]	[illegible]	ASCU
	1920.5	27.311	[illegible]	[illegible]	ACDTN

Appendix 1

RUN# 2073. PAGE [illegible]

* A. F. BUDGE PROJECT [illegible] JANUARY [illegible] *

* TOTOU STATISTICS [illegible]

K.K. Drill holes

STATISTICAL ANALYSIS OF [illegible]
MINIMUM VALUE= 0.0000 [illegible]

CUTOFF GRADE	#BLOCKS	% INTERVALS ABOVE CUTOFF	[illegible]	[illegible]	[illegible]
0.000	3618.0	100.000	[illegible]	[illegible]	[illegible]
	2730.0	100.000	[illegible]	[illegible]	[illegible]
	2710.0	100.000	[illegible]	[illegible]	[illegible]
0.050	3060.0	84.647	[illegible]	[illegible]	[illegible]
	2700.0	98.901	[illegible]	[illegible]	[illegible]
	2680.0	98.893	[illegible]	[illegible]	[illegible]
0.100	2819.0	77.870	[illegible]	[illegible]	[illegible]
	2625.0	98.154	[illegible]	[illegible]	[illegible]
	2610.0	98.310	[illegible]	[illegible]	[illegible]
0.150	2580.0	71.389	[illegible]	[illegible]	[illegible]
	2490.0	91.209	[illegible]	[illegible]	[illegible]
	2480.0	91.513	[illegible]	[illegible]	[illegible]
0.200	2275.0	62.922	[illegible]	[illegible]	[illegible]
	2225.0	81.502	[illegible]	[illegible]	[illegible]
	2213.0	81.754	[illegible]	[illegible]	[illegible]
0.250	2090.0	57.613	[illegible]	[illegible]	[illegible]
	2060.0	75.498	[illegible]	[illegible]	[illegible]
	2030.0	75.640	[illegible]	[illegible]	[illegible]
0.300	1955.0	54.066	[illegible]	[illegible]	[illegible]
	1925.0	70.513	[illegible]	[illegible]	[illegible]
	1918.0	70.664	[illegible]	[illegible]	[illegible]
0.350	1740.0	48.133	[illegible]	[illegible]	[illegible]
	1720.0	63.008	[illegible]	[illegible]	[illegible]
	1715.0	63.284	[illegible]	[illegible]	[illegible]
0.400	1465.0	40.526	[illegible]	[illegible]	[illegible]
	1450.0	53.114	[illegible]	[illegible]	[illegible]
	1443.0	53.321	[illegible]	[illegible]	[illegible]
0.450	1185.0	32.780	[illegible]	[illegible]	[illegible]
	1175.0	43.040	[illegible]	[illegible]	[illegible]
	1170.0	43.172	[illegible]	[illegible]	[illegible]
	940.0	26.000	[illegible]	[illegible]	[illegible]
	930.0	34.066	[illegible]	[illegible]	[illegible]
	925.0	34.133	[illegible]	[illegible]	[illegible]

Appendix 1

DATE: July 30, 1990

TO: John Norby

FROM: Jim Bosco

SUBJECT: KORN KOB PROJECT--JULY MONTHLY UPDATE

The three principal activities concerning the Korn Kob project during July were:

1. Mintec's economic pit designs and pit reserves
2. Geologic mapping
3. Removal of survey control panels used in the topographic mapping of the Korn Kob area

MINTEC'S MINABLE PIT DESIGNS AND WITHIN PIT RESERVE ESTIMATES

On July 12th, Mintec completed four economic pit designs and a series of reserve estimates (existing within) to each pit. The pits were designed using four market Cu prices--$.65, $.80, $1.00 and $1.20--along with assumed operating costs. Capital costs were not considered in the pit designs. Each pit design represents that part of the Korn Kob skarn (north area excluded) which can be economically mined given the various market Cu prices and the assumed operating costs. (Please see the memo dated July 18 for the complete assumptions and conditions used in the estimate.) Ore tons and ave. ave. Cu grade at the economic (break-even) cutoff for each pit design are summarized below:

	ECONOMIC CUTOFF	ORE TONS	AVE. % Cu GRADE
$ .65 PIT	.350	2,069,650	.492
$ .80 PIT	.270	5,037,034	.429
$1.00 PIT	.210	7,946,170	.367
$1.20 PIT	.170	11,621,652	.350

GEOLOGIC MAPPING

Mapping of the "North Pit" area (at a scale of 1 in. = 100 ft.) was completed on July 26th. At the surface, the north area is characterized by a relatively small central zone (roughly 350 ft. X 200 ft. in plan) of highly fractured and well mineralized (FeOx/CuOx) skarn. Based on mapping as well as prior drilling, an eastern portion of this central zone appears to have been down-dropped along a north-south trending normal fault. At this time it appears that the eastern down-dropped block holds the best potential for additional reserves. To the west of the central zone, the rocks consist of a less fractured/mineralized quartzite (arenaceous calc-sediment?) which shows occasional relict bedding. The actual contact between the mineralized central zone

and the western quartzite is very difficult to discern and may be the result of faulting.

To digress briefly from the mapping topic, it is noted that prior drilling in the North Pit area (involving 15 holes) has mostly tested beneath the vertical (line alignment) skarn. Only two of these holes have tested the down-dropped eastern block with one hole (GX-1) averaging roughly .41 % Cu from 178-317 ft., and the other (PIMA-3, located 300 feet to the northeast) averaging roughly .12 % Cu from 152-329 ft. These Cu grades are noted to be rough estimates because several samples in the mineralized zone were lost while coring. A reserve estimate performed for Keystone Minerals (undocumented somewhere in Keystone's compilation report) indicates 2.35 million tons averaging .537 percent Cu exist in the North Pit area at a cut-off of .20 percent Cu. However, widely spaced holes in the North Pit area forced a 125 ft. radius of influence to be employed for this estimate.

Mapping (conducted by Kevin Gutteridge) is also ongoing just north of the North Pit area across Buenman Canyon. This area is being mapped to look for a continuation of the Korn Kob deposit along its northerly trend. Scattered skarn pods, on the order of tens of feet, are evident but mineralization and alteration appear relatively weak. Approximately five chip samples have been collected and will be sent for Cu assay. At this time it does not appear that drilling is warranted, although a possibility of skarn at depth (down-dropped) does exist.

Areas to be mapped in the future are ranked in order of priority below (please see Figure 1 for locations).

1. Western Quartzite--based on two prior drill holes and surface channel samples, only low-grade Cu (less than .15 %) is indicated. The possibility for higher grade zones does exist as prior drilling did not adequately test this target. The western quartzite is probably a skarnified limestone (like the main Korn Kob skarn) but with a higher original sand component. The greater silica content appears to have made it less receptive to Cu mineralization. The target is to look for less siliceous and/or highly altered zones.

2. Donovan's--The area is a southeastern extension of the main Korn Kob deposit. In places, the skarn appears to be relatively high grade based on FeOx/CuOx contents. Skarn exposures are only about 10-20 feet thick; however, the area has never been drill tested to look for a thickening at depth.

3. Northeastern Chrysocolla Showing--A northwest trend of garnetized limestone carrying scattered chrysocolla occurs just east of the North Pit area. First pass examinations indicate that the mineralization is confined to a narrow (15-20 ft.thick) horizon/formation which has a strike length of roughly 1500 ft. Chrysocolla contents appear to be sporadic throughout the formation but a closer look is planned along with outcrop mapping/sampling.

4. Mapping/prospecting will be conducted throughout Budge's claim block with emphasis placed on the northwest-southeast thrust trend on which the Korn Kob deposit is situated.

SURVEY PANELS

A total of 18 paper panels (color) were used as survey control points for topographic mapping of the Korn Kob area have been collected to rid the negative visual impact and to establish a more permanent (steel pipe) marker. Panel locations are indicated on Figure 1. Two panel points could not be reestablished, but both were surveyed as part of the 1.5 X 1.5 mile area already mapped. If need be, topographic mapping can be expanded beyond the current 1.5 square mile area to include six square miles as indicated on Figure 1.

MISCELLANEOUS

NORTH PIT DRILL HOLE DATA--All data from prior drilling, including Budge's core drilling in the North Pit area, has been entered into Mintec's computer files. The data, from 15 holes, include total Cu, geology and acid consumption. Old drill holes have also been located in the field and digitized into the computer. North Pit drill hole cross sections have been submitted by Mintec and these will be used to help interpret geology and plan future drilling.

SPECIFIC GRAVITY--Specific gravity results from 30 South Pit drill holes have been received from Mountain States' Tucson Lab. Most of the samples are actually composites of similar rock material from nearby but differing KKB series drill holes. Twenty-six of the samples are from various skarn types while four samples are from mixed skarn and limestone.

The S.G. results have been weight averaged according to prevalence of a particular skarn type within the over all "south portion" of the deposit. Based on S.G. results, a weight per volume factor has been applied to the samples using the following formula:

$$\text{weight per unit volume} = \frac{2000 \text{ lbs./ton}}{\text{S.G.} \times 62.4 \text{ lbs.H2O per cu. ft.}}$$

As indicated on Table 1, the new S.G. results and tonnage factors, used for skarn material, support those previously used by Mintec in their computer generated reserve estimates (10.4 cu.ft./ton in both cases). However, new results from mixed skarn and limestone samples differ somewhat from those used in the reserve estimates (11.41 vs. 11.4 cu. ft./ton, respectively). This difference may not be significant because rocks assigned to the "mixed" category in the reserve estimates include more limestone (lighter) material than those "mixed" units represented in the recent S.G. tests.

CLAIMS--One hundred twenty-three claims were filed during the month with the BLM in Phoenix and the Pima County Recorder in Tucson. All intended claims are now filed except for nine which need to be amended. Budge's claim group, including the nine claims mentioned above and the original 98 from Dirk, totals 463.

ENVIRONMENTAL--A field meeting was held on July 19th between Budge and Forest Service personnel to discuss rehabilitation of existing drill roads. The Forest Service pointed out seven specific sites which they feel need rehabilitation. Recommended rehabilitation involves some reseeding, either in-sloping or out-sloping roads depending on conditions and construction of water diversion barriers (water bars). This rehabilitation work is expected to begin during the first week of August and should take 4 to 5 days to complete.

OTHER--As requested by Keystone Minerals, old Callahan core holes KK-26, 27 and 28 were transferred from storage at Mr. Elmo Nelson's home to the Budge warehouse in Tucson.

Attachments: Figure 1
Table 1

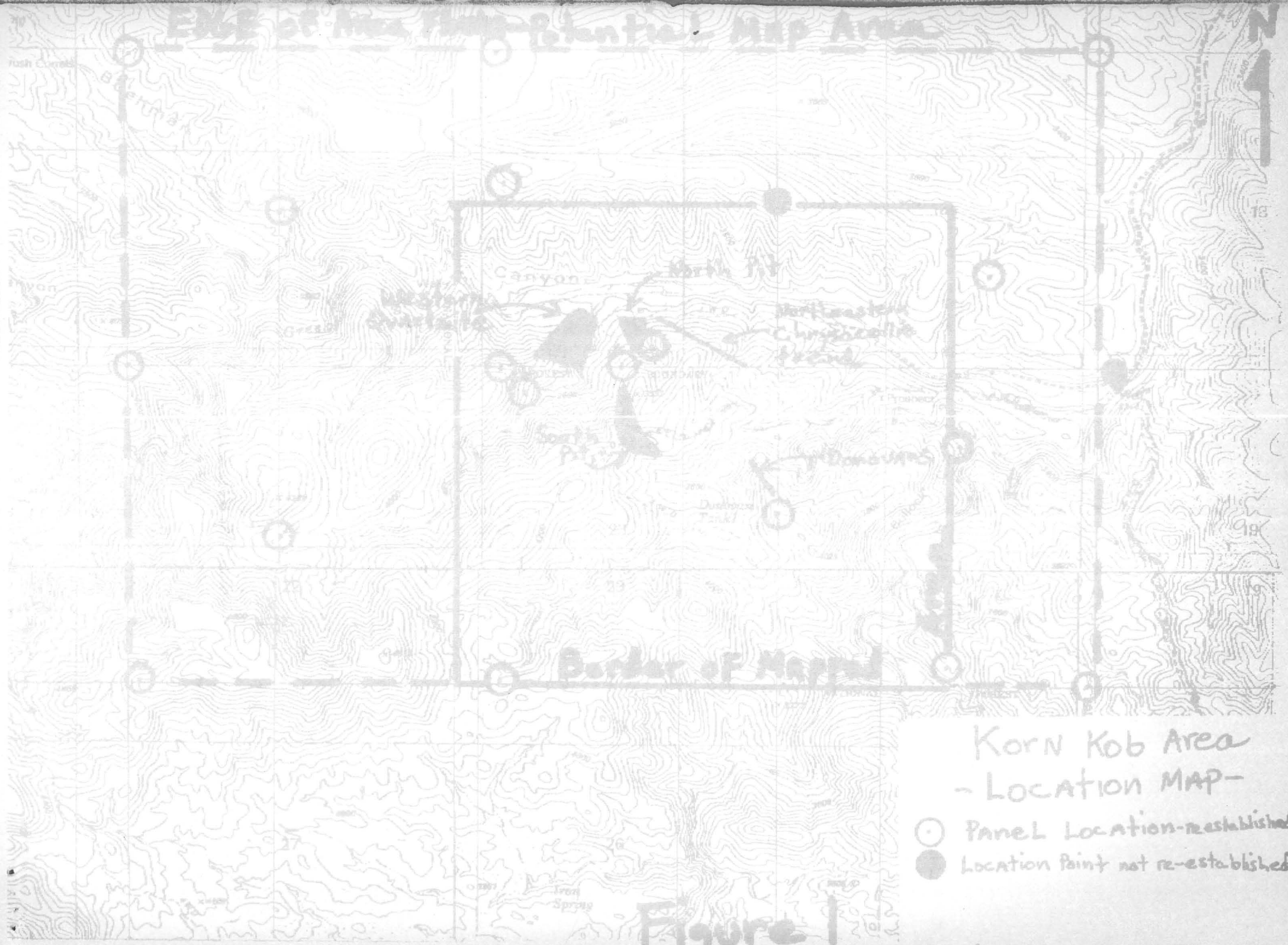

Canyon
North Pit
Western Overlook
Northeastern Chrysocolla Trend
South Pit
Dunbar Tank
Iron Spring
Border of Mapped
Korn Kob Area
- Location MAP -
Panel Location-reestablished
Location Point not re-established
Scale: 1 in. = 2000 Ft

Figure 1

TABLE 1. PAGE 1

SPECIFIC GRAVITIES AND TONNAGE FACTORS FOR [illegible] AND SKARN/L.S. MATERIAL
KORN KOB PROPERTY

SAMPLE NUMBER	SPECIFIC GRAVITY	CU. FT. PER TON	ROCK TYPE	% OF ALL SKARN TYPES	FROM DRILL HOLE SAMPLES:
1	3.33	9.63	GSK	31 %	KKB-50-120,KKB-18-25
2	3.08	10.41	"	"	KKB-47-20, KKB-7-95
3	3.33	9.63	"	"	KKB-10-180, KKB-9-185
4	3.08	10.41	"	"	KKB-51-75
5	2.86	11.21	"	"	KKB-23-270, KKB-28-265
6	3.33	9.63	"	"	KKB-58-70, KKB-32-70
7	3.08	10.41	"	"	KKB-57-120, KKB-13-125
AVERAGE	3.16	10.16			

SAMPLE NUMBER	SPECIFIC GRAVITY	CU. FT. PER TON	ROCK TYPE	% OF ALL SKARN	FROM DRILL HOLE SAMPLES:
8	3.08	10.41	MSK	11 %	KKB-8-10, KKB-2-90
9	3.08	10.41	"	"	KKB-29-100, KKB-11-125
10	3.08	10.41	"	"	KKB-53-385, KKB-42-355
AVERAGE	3.08	10.41			

SAMPLE NUMBER	SPECIFIC GRAVITY	CU. FT. PER TON	ROCK TYPE	% OF ALL SKARN	FROM DRILL HOLE SAMPLES:
11	3.08	10.41	GMSK	36 %	KKB-17-20, KKB-18-85
12	3.33	9.63	"	"	KKB-45-260, KKB-11-125
13	3.08	10.41	"	"	KKB-3-30
14	3.08	10.41	"	"	KKB-13-145, KKB-56-120
15	3.33	9.63	"	"	KKB-30-55, KKB-31-70
16	3.03	10.58	"	"	KKB-38-345, KKB-21-300
17	3.08	10.41	"	"	KKB-43-235, KKB-39-320
AVERAGE	3.14	10.19			

SAMPLE NUMBER	SPECIFIC GRAVITY	CU. FT. PER TON	ROCK TYPE	% OF ALL SKARN	FROM DRILL HOLE SAMPLES:
22	2.85	11.21	LSK	13 %	KKB-31-230, KKB-30-200
23	2.86	11.21	"	"	KKB-9-300
25	2.86	11.21	"	"	KKB-46-60
AVERAGE	2.86	11.21			

TABLE 1, PAGE 2

SAMPLE NUMBER	SPECIFIC GRAVITY	CU. FT. PER TON	ROCK TYPE	SKARN	FROM DRILL HOLE SAMPLES:
26	2.86	11.21	[illegible]	[illegible]	KKB-39-150
27	3.08	10.41			KKB-37-240
28	2.99	10.72			KKB-53-415
AVERAGE	2.98	10.77			

SAMPLE NUMBER	SPECIFIC GRAVITY	CU. FT. PER TON	ROCK TYPE	SKARN	FROM DRILL HOLE SAMPLES:
29	2.86	11.21	CHLORITE-	[illegible]	KKB-9-255
30	2.86	11.21	BIOTITE UNIT		KKB-4-245
AVERAGE	2.86	11.21			

THE WEIGHT AVERAGED SPECIFIC GRAVITY FOR ALL SKARN MATERIAL IS:	3.08
THE WEIGHT AVERAGED CUBIC FEET/TON FACTOR FOR SKARN MATERIAL IS:	10.4

SAMPLE NUMBER	SPECIFIC GRAVITY	CU. FT. PER TON	ROCK TYPE	FROM DRILL HOLE SAMPLES
18	3.17	10.11	SKSK	KKB-14-105, KKB-20-245
19	2.86	11.21	[illegible]	KKB-[illegible]-160, KKB-54-220
20	2.86	11.21	[illegible]	KKB-29-25
21	2.86	11.21	SKARN	KKB-31-115, KKB-21-160
AVERAGE	2.94	10.91		

THE AVERAGE SPECIFIC GRAVITY FROM HIGH FINES SKARN/L.S. SAMPLES IS	2.94
THE AVERAGE CUBIC FEET/TON FACTOR FROM THE ABOVE FOUR SAMPLES IS:	10.91

NOTE: sample 24 is disregarded as it appeared to be contaminated with oil