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El Cobre.

Δ"A" 4x6x8 8/50W Shaft Hy Feox Gn. 20' wide

1- ¢ Ctr. Hy FeO Br-Blk. N50E - FH 30' N. Tr. 50' long. N15W

2- {N End. Rd. S32°W. - 15' on line E. Hy Feox - Some CuOx -
{Some alt. N.50E - Gn. crumbly.

3- Gn N50E - Frac - thin - S55°E 45°SW. FeO.

4- Top of Ridge - S35°W Hy Feox 40' S. wide.

5 N. end of "S" tr. strongly sil'd Gn.

6. ¢ of Md. Tr. - 1 N & 1 S. S40E 50' long - 30 SE - 1 N?

7. Tr. 30/25 Mod CuOx - St. Feox Tan Red. Qtz ch. OC.

8. SE end of curved tr. of 7

9 SE end of "S" tr.

10. Junction Rds. N22E. N43W. S.25W. Tan to Br Res.

11. {Ctr of Hy Feox area - 2 Strikes. N35W N55E. alt.
{ Qtz - SPKs CuOx. Frh Gn between 11 & 10 on SE

12. Hy Feox Qtz Sil. N34W

13. {Hy Feox on fract 3' wide N75W - 100' NW. (50' SE
{N42E 70°W dip. Hy Feox on Frac. - Alt.

14. Ctr of Hy Feox - N42W - 30 NS & 100' EW. Alt. Qtz

15 {20' on line - Large Grained Gn. N27°E Fine gr. on top
{ Irreg. cont.? Fine East coarse W - ? white ground Color

16 - Edge of color tan E wh. west. ¢ Rd Tr.

20' BK on line And. Dke - N65E 65°N. Tr area of Hy Feox

Nov. 2, 1961

17- Dk gr. Gnd dike. N20E 20'-offset
15' W - and 30' S. (15')

18.- Mid of RKs - △ "B"

19- Edge of tan color - Hy Feox E. wh west.

20- Junction 2 ctr. S82W & N70W - 40 ft each

21- Inst 2 ctr. N50 & 70W - 30' area Hy Feox
S.30W - 6x6x8 shaft - quox Fissure N25E-45E 6" Fe4°
Gn N42°E Vert. HW Fine gr- FW coarse - alt. No sul.

22- {Hy 4' wide zone Feox Cgox N50E Vert. Alt. No sul.
{40' along strike end of cresent tr.

23 west End Hy Feox 4' wide N45W zone. 15' S a parallel one

24- area of Hy Feox N57°W zone 33°SW alt. Csor Gn
H.W Fine gr. Gn zone goes 60' E.

Nov. 3, 1961

#25- area Hy Feox N65W - 40' long. Crse Gn.

#26- " " " N60W " "
N30E - 2' Hy Feox & from pt. N60W 30'. then SW 30'

#27 4' zone Hy Fe N60W 20' w. Crs Gn in area

#28- Sta "C" Hy Fine gr. Feox △ 67W 100' (15' NW of Pt)
Feox S.30E 70' - Sm alt. Crse Gn

DIETZGEN NO. 385-5

El Cobre.

#29 - {Feox N30W - 20'SE & 10'SW N30W - 20' Some spec.
{40' W. Crse Gn N35E 65W.

#30 - Feox spk Cuox - S38E - 40° SW. Crse Gn - some Alt.

#31 - Hy Feox veinlet Cuox - S15W Alt. ~~[illegible]~~ barite Sil'd No sul.

#32 - Hy Feox (spec) N50W - 30' same Alt.

#33 - 4x6x8 Pit S40W. - Alt. Crse Gn cont. N53W - 55° SW.
Fine Gr Gn on top. Pieces Cuox on pile - none in sh.

#34 - Sta "B" - on Feox - F.gr. Gn. S75W. 30'

Sta "B"

#35 4' wide Feox (some spec) S35E - 30' Joins EW zone 72° S.
Cuox on EW. + 10' = wash

#36 Feox zone S-35E - 60' to SE

#37 - {N. end of S25W - gray green fine gr. Gn - 3 parallel 3'(10) 3'(5)
{10' - east. + 10' = Crse gr Gn - f.gr Gn contact S25W.

#38 {East end N70W Fe zone 30' x 20' crse Gn. Some Cuox spks
{on S edge. Some alt. - East side wash

#39 {W. End EW zone 8' - Spks Cuox. Hy wh Alax. 40' S on line =
{gray grn Fgr. Gn. dike 6' wide crosses wash. - #39 + 70 = wash.

#40 - ℄ RD then N25W - from pt. N60E 30' to NS - 8' wide Fe zone
Cuox. 60' N to wash Fe crosses wash

#41 - ℄ 80' wide N25E gy gr. f.gr. Gn dike. FW passes 10' W of sta.
80° W dip - small qtz strg. Epotitized Gr? West. shot
above wash.

#42 - NW Hy Fe 15' ~~EW~~ ~~S-E~~ E 65° S. zone - cuts dike Sil'd. Also N25E
zone Feo - shot = wash.

#43 - Top of Fe outcrop. N55E 65° S & N55E

#44 - Ctr 10' wide N25E Feox 80' long. S30W to C.C. 62'
in gy gr. dike?

#45 2X4 wh top cc Fr. Gn? wh. Aluv. Fe Aluv.
70' @ Rt LS E. Epidote on frac.

#46. 2X4 wh top Dis. El Cobre Group 2 #7. 1400' from
South & 100' from North

#47 - 2' Fe zone S85E Vert. cuts gr gr dike - in wash.

#48 {2X4 wh pt. Disc El Toro Group 3 #2 1400' south
& 100' N.

#49 - {FW. Gy Gr Gn. Dike N10E 80W 20' wide - 70' long
Hy Fe 6' zone - sp cu ox parallel dike.

#50 - 2X4 wh pt. cc.

#51 - Hy Fe N10W - W side 25' wide.

Samp. "J"

#52 NS - 25 WE 150 NW - 70' SE wide Fe - dike zone
Go back on line - Hy Fe in dike Cu ox, sul - Moly? N15E?
N75W - 70' = 6X6X8 - on 5' Fe zone. No Cu ox

#53 - {Incline S45W - Cu ox sil/fis. N50W 35°SW. cuts fgr gn.
dike N45E - 55W.
On Fe area - 20' dia - pt + 204 @ S88W = Incl.
N10E

#54 {8' Fe zone in dike S43W 30' then wash
Dike S62W - 30' East of Fe' Pieces cu ox in Pile

#55 Hy Fe zone 8' wide S80E. 30'W 40'E. Gnst. N33E - Fe.
on line 70' 2X4 wh pt Disc. El Toro Group 8 - No 7 1400' S
100' Northerly -

#56 {℄ Hy Fe. Gy Gr dike N23E 80' wide - 63°W Wash 25' on line
to table.

Sta. "D"

#57 ℄ Rd - N5E & S.40W

#58 ℄ Rd S5E & N55E as "S"

DIETZGEN NO. 385-5

El Cobre.

#59 4X6X8 Pit - N50W 55°S Feox seam - Crse Gn?
alt.

#60 - 2X4 - wh pt. CC.

#61 2X4 wh pt Dis. El Toro Group 3 No3 - 400'S
(100'N. ¢ Rd 10'E. N15E - S00S

#62 - cc wh pt 2X4 - 15'E. of pt.

#63 - 2X4 wh Pt. Dis El Cobra Group 2 No8

#64 - 2' zone Hy Fe, pieces Cu ox. sil. Crse Gn?

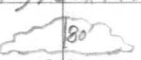
#65 - Pt + 70' on line - Feox S30W - 37E. 100'SW. Pieces Cuox
FW. alt. HW Feox

#66 S67E 37°S 1' Feox Cuox in place. Fe. Crse Gn?

#67 - Sta "E" - Crse gn - Fgr. Gn. N.40W to Sta "A"

#68 Feox S20W 30' 45°W in Fgr. Gn. FW = Crse Gn?
Alt'd in spots

#69 S75E 42S Pit (Round -) Feox in stringer Rot. crse Gn.?

#70 Cntr of Irreg. Feox - 

S15W - S70E 65S
Crse Gn on west. Sm alt.

Sta "E"

#71 Irreg. contact Fine (North) Crse - (South) S60E.

#72 - 15' wide Fe. Fgr. W Crse E. N50E 40' long.

#73 - Pt on Fe (same as #72). 10'S. is 6X6X8 pit.
N42W Fe zone - Junction in pit. Copper spks 72-73
70N. Alt.

#74 { 6x6x8 Pit. N35E st. 45°E
S80E And. Dike Fgr. gr.

#75 - { 4d. on N.30W Fe zone Crse. Alt. Sp.
Cuox

#76 - Pit 4x6x8 N50E 60NW. Cuox inplace. FW. Highly Alt. HW. Fgr. much fec. Hy FeOx area N35W 100ft from
pt. St. is N35W to Pt. 72-73 Zone.

(70 W)
#77 - Pit 4x6x8 - N50E on Fgr. Fr. Dike. Cuox on dump.

#78 Disc. 2x4 wh. pt - El Cobre Gr. 2 No 3. 1400' S 100' N.
[(Adit. N70°W - 24' then N.55W. ±40') Highly alt Crse gr. No structure, FeO on frac. - Adit S.45E 50' from present trench from Pt to Adit.

#79. 10-15' wide Fe zone ± N55W 70'N 70'S. Rot Crsegr.

#80 - Pit - Cuox Fe 1' zone N15W 80W. Fe - 30' wide. Alt.

#81 - Weird Fe zone. N45°W - 8 - 60' Crsegr. Out N45E 20'
SPKs Cu inplace in alt.

#82 - E end Fe Zn N80W - 15' wide 100' ...

150' NW 100' SW.
#83 - N45W - 35°SW & N45E in N. Pit of 3. - Cuox on NE

#84 - N80W Fe (dead - dike fgr.) And? 50' Each way.

#85 - E end And Dike - N60W 70' some Fe st. Dead - Crse gr
Both sides

#87 - sta "F" top of Hill.
~~#86~~
~~#86~~
sta F
88 2x4 wh Post.

DIETZGEN NO. 385-5

El Cobre.

#89 Area of dead Fe. N 35E - Crse gr. Fgr on top.

#90 - W. end S 35E Fe Crse gr. 120' SE

#91 - Fe zn - N 55W - 80 SW 5' Crse gr. Fgr. top. at point
turns S 30E 70 - NW 70'

#92 - N. 50E Fe zn. dead. Fgr.

#93 - N 35W - Barite 6" some Fe st.

#94 - N 55W zn Fe Cuox. [(N 70W - Barite Fldsp 36° S.) in F.Hr.
SE 50' it turns to S 55 E)]

#95 - Disc. 2x4 El Gato Gr. I - No 8. 1400 S 100 N.
Fresh - Diorite - epidote

11-7-61 - windy

Sta "F."
96 - Sta "G" on Dead Feo.

97 Same as 83.

#98 Same as 80

#99 " " 81

#100 " " 84

#101 " " 85

#102 - 15' N is N 15E & N 55W Fe zones - alt. Some Ind Cuox

#103 4x6x8 Pit N35W 60 SW. Hy Feo - No cuox 100 NW
100' SE 40' wide

#104 - E end And. Dike N45W, east to wash is
area of Hy dead Feox

#105 - S75°E Fe zone 20' wide 100+NW. 300'SE. Dead
widens to east - some spots alt. in crse gr.

#106 - Edge of Fe zn on S. N35W zn. Stops at wash.
which is 100 on line to table.

#107 - S15E zone Fe 45°SW Cuox spks. Alt. Crsegr.

#108 - 4x6x8 pit N15W 45SW - Alt, Fe. Some dead Fe.
Crsegr. No Cuox

Sta 95

#109, on S70°E And. Dike? Fe zone. NW ±30 SE 40'
40' wide at pit.

#110 - E-W. And Dike. Dead FeO. 30' each way

#111 - {2x4 wh pt. cc. Fr. Diorite - epidote Fe in
Crsegr. 30' on line N55E

112 N75W Fe zone - ltt. 20'. Disc. El Gato Grl-3 1400S 100N
13 S7E. 98' from pt

113 - Sta "H" on Dead FeO in Frac. Spec. Hem.

Sta "H"

114 - N-55W And Dike Dead FeO. 70' NW 50 SE

#115 NE Cor Grl-3 cc 2x4 wh pt

#116 N50-60°E zone Fe - Dead in frac. Crsegr. - Wash
W 15' - Both sides wash 3 past Sta H. 60' wide

#117 Last evidence of Crsegr. Alt. Fe. St.

#118 S67W 36' to pit. Hy FeO dead S.60°E 90S Alt. Crsegr.
H.W. Fgr. dead Fe. Cat Tr. N45E 100' W of pit

DIETZGEN NO. 385-5

El Cobre.

#119- Sta. "J" on Gniess

(Crse Gr.)
#120 20' wide zone Feo Dead. N60E 20' SW 60 NE

#121 - {N75E 35SE Fe zone. dead. also N35E for
100' SW. 40' NE

#122 S75E Fe 30' wide Dead. 100' each way. Crse gr.

Note. entire area west of Sta H. is iron.

Nov. 8, 1961

Sta "K."

#123 Pt + 15' on line = Fe - Cuox sp zone S65W - NE 40
Small pit NE - Qtz stg. N35E. Alt. Crse gr.

#124 - Pt + 35' = HW wide dike. Cuox sp at shot. Qtz stg.
(And)

#125 N80E - 25°S Cuox Feo. Alt. Crse gr. N35E also Fe
zone with Cuox @ 50°E on vert. in wash

#126 - HW. Fgr And Dike also Junct of S15E Fe zone cutting
Dike - with Cuox Alt. N80E - 35S cuts ↑

#127 HW S15W 80E dike Fgr. gray dk gr. some epidote

#128 - In Dike S27W - goes under cover to NE.

#129 Top of pit in west wash Hy area of Fe Cuox
Alt. with some dike mat. Main zone N10E - other N55W
20° SW. Cuox on this

#130 On Dike & Fe Zone. N17°E. 80°E 30' E - 20' W on W edge
west wash.

#131 - Area of 2 pits 1 is 4x6x20, & has N60W & N50E Alt Frac
with Cuox - Trend of Fe zone is N15E. Dike on W & E
Expose 50' S of pt & 50' N of pt. Dike trends N25E
on East to N-S on W. Cuox 50' S of pits. Sta "L"

#132 S55E 45Sw Fe 10' wide - Cuox - cuts Dike
N35E Strike 85E - Fw dike 30' w.
#133 - Dike splits here - N10E & N37E.
85W. 85E
#134 - Station "M"
100' N.
#135 - Dis. 2x4 wh Pt. El Gato Gr. 2 #2 1400' S.

Sta M. 8' S.
#136 - 2x4 wh pt Small Fe outcrop. wash 30' on line

#137 - Pit on Fe Cuox N25E 70°E Fissure - Fe W to #136. 1st Fe Cuox Fiss - S40W. Vert. S of Pit & Pt for 40' Fgr Fw Crsegr Hw. in Pit.

#138 Dis 2x4 whpt. El Gato Gr 1-7 1400' S - 100' N.

#139 - 2x4 wh Pt - Smallstk = G-1 6/1 S/S MN 7 2
40' each.
#140 Jct. 2 Cut Tr. S25W & S60W. Live Fe in S25W Cuox spks Alt. Fe zn N45E ↗ at S end S60W Tr N70°W Fe zn spks cuox.
50' E = N45W - 15NE slip with Cuox spks Crse gr.

#141 - { Pit N, Cut Tr (S) S15E 25' curved ↗ ↘ / Cuox Fe N80W. Alt. Crse gr. }
#142 - Pit 4x6 on S85W Fe Cuox zn. Alt. Crse gr.

#143 - 160' on line (S.63E) to old Sta #119

100' N
#144 - 2x4 Whpt. Disc El Gato Gr 1-2, 1400 S
Pit 10' E, Pit 20' N45E. Catr. 30' W - S45W 40'
Area of Dead Feox

#145 2x4 wh Pt. SE cor El Gato Gr 1-#1 New Rd 20' W.
N45E then S70E Just N of #144

DIETZGEN NO. 385-5

El Cobre.

#146 - S80E & S80W

#147 - Dis El gato Gr. 1 #1 S45E dist. 40' on E S43W to #147

#148 - 2x4 wh Pt. NE cor El Gato Gr. 1 #1.

#149 - 2x4 wh pt (NW cor ? Gr 1 #6 NE. cor. ? Gr 1 #1) N76E to #147 100N 1400S

#150 - 2x4 - Disc - 15' W on line with #149 Phis, N45E El Gato Gr 1 #6

#151 - 2x4 Wh pt is 6' N 71E towards #150 (NW cor Gr 1 #6 - NE cor Gr 1 #1

#152 W. End S. lfd Dead Fe. Dike. ? Qtz.

#153 Pit on S'lfd Dike (Qtz) Strain 100' E. 30' wide. Rds 100' 375W. Rd E 100' N25E

#154 Incline Sh. 40' - on N85W 50°S 4' wide Cuox Fe. Alt. dists Gr. of Dike N45E as exposed to NE 100' Phis & Cuox exposed 65' E & 70' W. Alt.

#155 N30W Fe & Cuox in Alt

#156 4x6 Pit. East Pit 2 by 10' - N20W Fe Cuox Alt dists Dike. N30E 65 E. 2nd pt. N30W 40S. Fe in Spk Cuox

Nov. 4th

Stal'

#157 N55E & 80W ¢ Rd.

#158 ¢ Rd S15W

#159 Pit with a Fe Cuox Ins. N55W 60S @ S side & N75W 80 N on N side.

#160 ℄ Rd S. 40W then S to wash - also N to other pt.

#161 - From Pt Sh Bears S 35W - 50'. Spec Hem Zn as
S 80W - 50S. Green Schist? N. 20E, Main wash
West 20'. Fe Zn - 150' E. - Same as #162 W.

#162. N. 20' from Pt = Incl. Shaft 40' deep. on S 85° W Fe (spec)
Zn. Sp. CuOx. - Schist N. 10 E. 3rd pit on strike w
60'

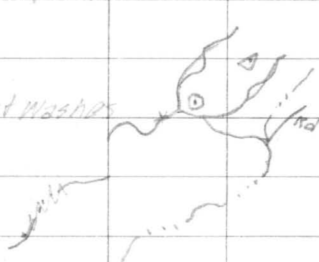
#163 Disc. 2x4 wh pt E/ Cobre Gr. 2-1. NE. #6 - Gr2
NW G1-2 15 S 77 W

#164. N 42E - 12' = Disc. E/ Cobre Gr 2-6 - also N 42E &
also - S 77E: 60' 15 4x6x8 Pit on S 75E - 20E Zn,
No rock change - Schist green

#165 S 76W 15' to 2x4 wh pt. NW Gr 2-6 NE Gr 3-1 N 76E
& to #164 - Schist green
#166 - 4 Pits on S 75W line #1 has N-S-60E
Fe CuOx also N 70E - 80S Fe CuOx. #3 - S 85W Fe CuOx
#4 - Schist. Cafe. 100' S - 30' long S. 60W.

#167 - Sta. "P" - on Schist? Hill

sta "P"
#168 Pt + 100' = Jnct Washes



#169 - Jct. Rd & wash

100' on line back = N 55 E Fe O Dead spec. 60W

El Cobre.

#170- Pt. on New Rd - S.15E ± N60 W.

#171- Jct. New Rd & old - old N53E to wash and W. as St NW

#172 - N. Side Massive Fe Zn 20' wide Dead. N55W. A S15W 35°E Joins at pt. wash Pt +40'

#173 { center Hy spoo Fe Silicf'd zone 15' wide N35E
{ 50' long - Small plug N60E 70 ft.

#174 Sta "R"

Sta "R"

#175 ¢ New Rd. S.65E & N80W

#176 { 4x6 Pit. on N80W 45°S Fe CuOx Fiss. then Turns
{ in Pit to S47E 55°SW. catr 60' Alt, Sugary Qtz

#177 { 4x6x25 Shaft. No Structure - 20' Rotten And.?
{ Catr. N5' - cut Silicif. zn. - Fe Live - Rd. 30' N.

#178 - Hy Fe Zn N20E & N55E as Y in Shist (N15E)
Some Qtz. Dead FeO

#179 - Y in Rd. S57E, N62 & N35W as run around

#180 2x4 Wh Pt. Disc El Conejo Gr. 4-7 1400' S. 100' N.

181 catr. N57W cuts S15N Fe CuOx wh Qtz stg.

#182. Pit 4x6 - on N80E dead Fe zone 60' S.

#183 { Hy Fe Zone Some live. Silifd, Some CuOx spks 200'
{ S80W 150' N80E 45SE. Schist N20E

#184. Sta. "S" - on Schist Hill. N22E.

Nov 10, 1961

#185 - 2x4 Wh pt. cc - on Schist area at Dead FeO
Sch = N20E 90-80W. - FeZn N55E 40 W of Pt

Roy Pogue

More Qtz Veins in area.

Note - N20E Fe Zn - dead 40 w. of Std. "S"

#186 Intof 2 Fe Zns N40E & N85E Dead

#187 - Area of S27W Fe Zn Silif'd. & N-S Fe Zn 30' W of pt.

#188 S 20-40 wide Fe Zn N15E on top Ridge - S 100' N80E. (Some spec - Silif'd. Qtz Vein. Schist N50E 80NW

#189 - Pit - Fe Quay N85E & N55W - both 75 SE & SW. (Std. Silic. - Qtz - little Alt. - Silif'd Zn parallels Schist. (Schist N15E (Spec Nem.)

#190 S40E Fe Qtz 80SW - Live - Spec. Nem. Alt. No Oxox

#191 - S55E Fe Silif'd Live Zn - Spec.

#192 Cut on line S. Fe Zn S-low 40SE No Vis. Min. (Qtz Std., para Nels E. side Pit.

#193 Std "T") - Schist N15E Much Basalt Float.

#194 - Area of N50W Live - dead Fe Silif'd, Qtz Spec Nem

#195 - Shaft on N80W 40S Silif'd Qtz Live - dead Fe O (Some Alt on FW, Spec. No Vis Oxox. Some pieces on dump

#196 - N5E Fe live Zn Silif'd, Qtz

#197 - N35E Fe Zn 20' wide to W, 65 SE. Dead. Schist N15E

Std "T"

#198 2x4 wh pt. El Canejo Gr. 4 #2 1400'9-100N

#199 N30W Fe Zn Dead. Some Spec. Sch. N50E 65 NW

#200 S85E 45S Fe Zn. Dead Some Spec, Qtz.

El Cobre.

#201 - ℄ Rd N.15W - & S.

#202 ℄ Rd - S 40W as ⌒ 5" curve to Wash

#203 - Jnct. of Rds

#204 ℄ Rd. N10W

#205 Aprox posit. of Sch - Dior. Contact. N75W Fe live zn in dead area. Silif'd Spks Cuox. Float contact passes 80' E Sta "T"

#206 - N60E & N65W live Fe zn - in Schist N20E

#207 - N45W FeCuox zn in schist. Alt. Silif'd Spec Hem.

#208 - Cut on S.70°W 50S. FeCuox Silif'd Qtz. Some Schist showing in bottom.

#209 - Contact S.60W 70NW. Sch N.22E

#210 - Contact - N45E? - Hard to see.

#211 - Contact No strike poss. Float only

#212 - N10E Fe live dead - Qtz zn. Spec Hem.

#213 - S70W - 45S - live FeCuox & N75W 30E Alt Fe slip. in wash
Spec Hem Silif'd. Shist w. side wash

"CC"
#214 Pit on N50W - 70SW FeCuox Cu gr. Alt. Feldspars

#215 Stat. "W"

#216 - Catr. Sv. 60'

#217 { N60W Fe Zn Some Spec Some Live Fe.
{ Qtz - Crse gr. diorite
#218 - 2 YL wh Pt Cc.

#219 - N80E @ 40N fault, some Fe. Crsegr. Feld. Alt.

Note - Ny Feo exposed on Both sides wash from where Rd crosses - North

Nov. 15, 1961

sta W"
#220 { Sta "X" - on top of Hill - Dead Feo Fgr. gr. Qtz. A N45W - Fe (live) Zn - Som Alt. - 30' S of "X" Crsegr. N60W 60SW
#221 { Area of dead FeO - on top of hill - Crsegr. Some spots Live Feo - Somewhat silicf'd. Zn of Qtz Live FeO about 60' N. of pt.

#222 A N55W 40° SW Fe Zn. Som liv. crosses wash to E Wash = 40' E of pt. Wash is N50E & S10W. Crsgr & Fgr Gn. Entire area 200' dia is Fe Stained.

#223 - Jnct - 3 Zns - Fe ox dead - som liv - alt N30W & N70W and Qtz Zn N25E som liv Fe. - Crse gr.
#224 - Pit - Fe-Cuox N5W - 60W. & N25E 75NW Qt with som liv. Fe - No Cuox. Crse gr. (Qtz turns to N10W
#225 - Last exposure liv Fe Cuox Zn - S30E - toward Pit 224 Fine gr. on surface. -
#226 { Small showing N75E Fgr. Fe Cuox Zn. Cu. Also N55W in Crse gr. Fe & Cu ox stain.
#227 - N80E Fe Liv. Zn Dead N. Som Alt. Silifd. Fgr.

#228 Fault Zn? N35W (N30W.) 60SW. Bom Breccia HW. Fresh Fgr gn HW. Fe area Not Fault See 222. Wash 40' W of Pt. S curve S30W - course N30W.

E/ Cobre.

#229 Short N85W Dead Fe with some Liv. Fe.
Orsegr & For. mix
#230 4' wide N65W And Dike

NOV 16, 1961

#231 Cut - Breccia zn S. 40W. Fe zn N 40W - Some liv. No Cu ox - A.H. Cu pieces on dump.
#232 - N70W Fe0 dead - Orsegr.

#233 - 2x4 wh pt. cc. Orsegr. Fresh.

#234 - N55W - Liv Fe zn - S.H. No Cu ox exposed

#235 - N50W Fe zn. Some liv. Orsegr.

#236 - Qtz. S. 60W.

#237 - S.H. Fe zn N30W in Gen Fe zn. 55°S. Orsegr.

238 - ℄ Rd S32W to "S" curve 300' N47E.

239 - ℄ Rd N-32 E

240 - ℄ Rd S11-W - 100' ℄ N11E 130' to T Inst. then S65W & S66E

241 - ℄ Rd S16E 150' ℄ N16W (60' to Inst.) then 200' N. {And. Dike (S38E 60S) crosses Pt. 3E 150'
242 Std "y" - Rd 20' E'

Std. "y"
#243 2x4 wh. Pt. cc. 80' on line = Wash.

DIETZGEN NO. 365-S

#244 From Pt on east side wash S40W 40' to Pit with N80E & N30W Fe zns - No cu - but live Fe alt. Sil. 60W

60S
#245 {Jnct S70E And, & S40E Fe zn liv. no cu. an E-W {Fe liv zn 20' N. (Pt west side of wash.)

#246 - N15E Liv Fe zn. alt. Fgr.

#247 - 2x4 wh pt. (6's. pt) SE cor Gr 1-3 & NE Gr 1-4

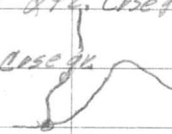
#248 {₵ Road at curve - wide swing to table and Gen { N82W dir. - wide swing & 5 curves to North.

#249 - {N60W Fe liv zn - No duox. alt Crse gn {Rock sample A & B

#250 - 2x4 wh pt. cc.

#251 - {A N42W - 30' wide Fe zn Liv. NW 60' Qtz. Crse gr. {also some Fgr. - dead Fe in

#252 - N55W Fe. Sem liv. spec. Qtz. Crse gr.



#253. Jnct Rd. S.23E & S.60E

#254 - 2x4 wh pt - Elgato Gr - #9.

#255 - N30W 55SW & N40E 60SE Fe zn. alt Sil'd
No duox

#256 - Sta "Z" on top of hill. Fgr pink Gn.

#257 - Pit on S.63W Fe duox zn. 60S. in Fgr. gn. Silifd. Alt.

#258 - Small N80W Fe liv zn. qtz, alt, no duox Crse. & Fgn

#259 - Pit on S.30W Fe duox zn. Qtz. Alt Fgr. Main Wash 60'N
Hy Fe in Wash all way to sta.

El Cobre

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A "P" Samp. 0

#260 N10E Hy Fe Zn (Spec) some liv Qtz some Alt

#261 · Dit on 3 Fe Zone N55E - N20W N85W. Spec. Qtz, some liv Fe. (Specks Cu ox in Spec Fe) Some grn dike mat. Schist N40E

#262 { 2 Fe Zn liv in dead with Cu ox · N50W - (1) 85S (-) 60S
{ Sil'if'd. Alt. Grn dike mat. Gen Str = S40W.

#263 Dark S52E with liv Fe. Alt. Qtz No Strike.

#264 · Grn dike mat. S60W & N60W. Some Fe liv. N40E about 15' S60W. from Pt. Spec Hem. Alt. Sil'if'd. Much Epidote in and around Dike.

#265. { Contact - ? N20E. east - Schist west = dike (grn-epidote) mat. Some liv Fe along cont. Samp. E? F

#266. { Float contact - Grn Mat. SE & Grau. to NW. Samp. "E" Some Alt.

#267 2x4 wh pt. NW Cor Gr. 2 #6. NE Cor. Gr 3 #1

#268 2x4 wh pt. Disc El Toro. Gr. 3 #1. Contact ? S. of Pt 20' but hard to pick out.

#269 · Pt. to 2x4 wh pt = S53W 20'. NE cor Gr 3 #6 NW Gr 3 #1

#270 · 2x4 wh pt. El Toro Disc. Gr. 3 #6. Pt + 5 @ L w.

#271 · 2x4 wh pt. NW Cor Gr 3 #6 & NE Cor Gr 4 #1

#272 Cntr. N55E

#273 - Contact ? Grn Dike mat. E. Gr W. N10E 20' on line 100' Mo Rd Is = N35E Strike dip 50° SE

DIETZGEN NO. 385-S

#274 . Peg. Dike S52E. W = grn mat. E = Schist.
~~Shists~~ Plan. dips 35° SW?

#275 - 15' on line Liv. Fe Zn in N30°E Schist.

#276 - Catr. N40W.

#277 - {Ex Hy Fe Zn N35W 50°NE - 150' SE som liv. Fe
{mostly dead - in schist N25E 80E.

#278 Hy Fe Zn N60W - Quox in par'l Qtz fissure 45°NE
40' on line = wash. - Schist. N40E. A parallel Fe Zn
20' closer to sta.

"Z" sta.

#279 {P.T. of Rd - N20E as wide Cur to Jnct. S.
{& S.65W as "S" curve.

#280 Catr. S32W & NE - West side wash.

#281 - {Hy Fe Zn N50E 70SE - som liv Fe. Silifd. Crse & Fgr.
{E side wash - white ton - W side. som Alt. spec Fe
{Some Dike mat on Zn 200 N50E.

80SE

#282 {Fe Zn N50E & N70W 45NE. som LIV Fe.
{Fgr & Crse gr. - Middle wash.

#283 - {Shir Fe Zn N30W 30NE - Crs gr. w side. west wash
{Hy Fe area up wash to discovery

#284 - ℄ Rd. S65E. - NW to Jnct.

#285 Fault - N80W 80N. offsets dike 5' - (N20E,
crsc & Fgr. Area north of fault is Fe dead with
som liv. N80W liv Zn 20' N.

#286 - ℄ Rd. N70E.

#287 - N15W 55°W fault. Gouge-Breccia turns to S63E
65° SW. Mostly Silica (qtz) both sides F-W gray - NW.
light grn & Crse gr. diorite

El Cobre.

#288 - Liv Fe zn N70W - in wash.

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Sta "2"

#289 Sta A-1 near catr. & Rd. Fine gr. Orsegr Fgr & pink feldspar orse complex (Schist also) between stas.

Sta A-1

#290 Catr. Exposing N50E. Liv Feox (Red) - (yel) Cuox

291 {Cd - 2x4 wh pt. end of catr. 40' @ Rt L to east. El Gato
{Disc Grl - 5 - S45°E 128'

#292 - 2x4 wh pt - cc. 6' W at Rt Ls.

#293 - 2x4 wh Pt. Disc El Gato Grl-10 Orsegr - Fgr. Fresh

#294 {Small Fe ox outcrop - Intersect N85E & N55E Liv
{Fe cuox zones, Alt, Silifd. Fgr. & orsegr. Alt

#295 {Mouth of cut to N. on N20E fiss. Feox Hy 70E
{Liv Fe - some spec. No Cu.

#296 - 2x4 wh pt. SE Cor Grl-4; NE Cor. Grl-5

297 - Pt. Rd. to Sta as flat "S" to Inter. NW

#298 - Dis. Povan #1 - 750N 750S. 17' @ Rt L S to Δ Rks wh.

#299 {Catr. due S. dir cutting N55E Hy Liv Fe Cuox spec
{Nem. Δ wh md Rks 

#300 {Δ wh Rks Cat Scratch Fiss SE of Δ pit with Fe Cuox
{on E side - pit filled in. No strike poss. (N50W 40NE?)

#1 Dis 2x4 wh pt - Povan #2 - 750N.

#2 - Sta B1 Float - Fgr. (Med gr gn or Sch) Orse gr. Some
Augite or amphibole.

#3 - ℄ Rd - N85E

#4 - ℄ Rd S85W & back to #3

#5 {N70E structure - 40°NW. - Mod Fe (dead) on N - weaker on S. Much Qtz Both sides. Crsegr. Both sides - Some Fgr & And-dike (Easterly for dike) Nedge wash.

#6 - W. side Wash - S 50 E struct. NE = Hy Fe and And. dike on East side trending N40E (Rt Ls) wash to #5 & S. 35W. (30°) Hy dead Fe! Fgr. Crsegr. Gen Flow lines Crseg Fgr = N45W & 60SW. Wash then N15W 175' then Z, S65W.

#7. ℄ Rd S75E & N50W

#8. Inct Rd as Y N.60E & S. to △Sta.

#9 {Area of Hy dead Feox S.60E with Hy dead Feo in 125' Radius. 40' on line = S60W Cntr & pit. Much Qtz, Fe & Cngr alt divr. - Qtz part of S60W Peg dike. of Qtz Mica. Wh △ RKs 10' SE pit.

#10 2x4 wh pt. Disc Povan #3. 750N 750S.

#11 - Pt + 30 NE @ Rt Ls = S35E FeO dead Zn. in Crse & Fgr area. Mat. in wash 100' back on line = FeO area.

#12 - Pt on Hill as Sta, C-1

#13 - ℄ Rd - N82W into wash for 250+'

#14 - ℄ Rd. Btm of U to North. E limb N35E up wash as zigzag. W limb N35W 100' Then N80W

Sta, C-1

#15 {△ Wh RK Disc Povan #4 - 750N 750S. - 50' Feo' & car on line = wash & Rd.

#16 - {20' @ Rt L to E = N10W orange Red Feox. Also N30E 60E Zn - Pk Crsegr. - Fgr.

#17 - N15W 45E Lv - Dead Fe Zn in Fgr. turns to S.40E (on top of hill)

El Cobre

#18 - Outcrop dead FeOx Zn N30W Fgr.

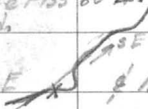
#19 { Area of And. dike - No dir. poss; some mod Red FeOx
{ Gen. trend N30E.

#20 { N10W - 60W - Fe Zn - Lin.? HW. Fgr. FW - Hy Fe conty
{ Wash is S10E 40' from pt.

#21 { On W side Wash - S80E 65S Fe Zn (red) - HW to #20 Fe
{ FW. Barren - N20E

#22 { Dike Mat. some Fe (Red) (Schist?) (Fgr Mat) Crse & Fgr. Silica
{ with dike. - Parallel Fe Fiss 80' E. - Much red color in
Washes to east to Rd.

#23 ¢ Rd at pass. S63E & N40W.



#24 - Sta D-1 on top of hill. Fgr.

#25 - ¢ Rd. N72W & Back to #23.

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Sta D-1

#26 { 2x4 wh Pt - Dis. Povan No 5 - at Rt ∠s S - Wash = 40; Rd
{ = 70E Hill. Dark Gn - N40W

#27 { N40W dark grn-gy Gneiss mat. W. side Wash, along wash
{ to SE - E = Fgr. Gn. Wash circles Hill & Sta - to North

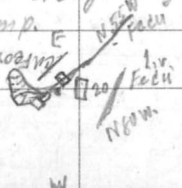
#28 - N of Pt extremely Fgr, blanchet. S = Aluminum
E = Fr Fgr. & Crse gn - No FeOx

#29 { Jnct - 2 structures - (1) - on line of pt & (2) N80E with
{ some Fe - Breccia and Grn dike on S. Fresh Fgr (silica) and
{ N20W crse gr dk grn Gn.

#30 { Same N80E Structure as 29 - No dike mat. N = Very
{ Fgr (silica) S = crse gr dk grn Gn.

#31 - Sta on dump. Fgr crse gr on dump - dead FeOx. Alt.

Sta E-1



Disc Povan #7

#32 - ¢ Rd - E - W, in wash

#33 ¢ Rd - out of wash - 50' W & 110' E back into wash

#34 ¢ Rd - W 55 ft to No.

Sta "T"

#35 St 2 F-1

Sta F-1

#36 2x4 wh pt. Disc. E Cone jo Gr 4-3. Cal. S use 20 SE. - 30' long. Orse-Fgr.

#37 Catr. S 45 W - 30' wide & 15' wide at SW. 70' long.

#38 - 2x4 wh pt. Disc. E/Trio Gr 3-8, - Pt 3' N @ R+L

#39 - Contact N 20 E? Case-Fgr E - Schist w. some interfingering

#40. S End N 20 W catr. 30'. On line 30' = N 70 E catr. 30' long - on line 45' E-W catr. 40' long. and continues around N. W to East. for 120'. Cuox Fe or exposed in N 70 E dr. in N 50 W dead Fe Zone.

#41 @ W. side wash N 45 E & 20 E. dike contact

#42 {Catr N 20 E Exposes N 80 W Fe Zn Near S end of catr around hill #40.

#43 Cut on Hy N 20 W Fe O Zn Lv-Alt. No Cuox. on E side Main Wash.

#44 Shaft E, cut w on E side of spur wash on N 80 E Fe Cuox Zn. Orse gr-Fgr. Silic.

El Cobre

#45 Dike? Fe Lim Cuox N50E – dtr N40E – N45W & E.W.

#46 2 XC wh pt. cc. – Much Basalt Float. Crse gr.

#47 – N50?E Fe Cuox Zn in Crse-Fgr. Rhy. Silic'd.

#48 – Disc Eleanejo Gr. A-8 △ wh Rks. Much Basalt Float.

#49 – SAN50E Fe-Cuox small outcrop-float.? Dike Mat. N side
Crse gr. S. side

#50 – Sta. G-1 much Basalt Float on Ridge SE-NW.

#51 – Contact – Tuff-Rhy – Fgr Crse gr.

#52 – Pt +10' on line = (Schist-Gn) E – (Tuff Rhy) W.

#53 – Sta. H-1 on schist.

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Sta H-1

#54 @ station – N25E Fe deposit in Schist N30E
also N61E for 130' = N10W Fe zn.

#55 Pt +17' W @ Pt +42 = Disc. 2 X wh pt. El Oro Gr. 5-2.
Pt +30' W @ " " = 8' N10W Zn Fe Liv. Dec. Qtz. Schist
Pt +30' on line = Wash E, 9 W.

#56 – Typ. Shaft S25W on N60W Fe Qtz Zn @ 38° SW. Sunlight Fe. Schist N45 E, 85 NW. Some Cuox. About 60' on Incline. Sample 8' side wash – large dump. Also Fe Zn parallel to Schist Towards N. – nothing in back

#57 Contact – Gen. Tr. N35W – SW = Red Tuf-Rhy – NE = Schist. SW. much Basalt Float. Eastward tunnel to S80E

#58 Contact S65E & S80W – N = Red Tuf-Rhy – S = Crse-Fgr. Cuox Float.

DIETZGEN NO. 365-S

#59 {Contact - N45W & S80E N&E = Red Tuf. Rhy
{S&W = crse-Fgr.

#60 - Contact - N65E - Sch. W - crsegr Fgr E! Schist - N20E

#61 - Hy N55E dead Fe Zn some liv. CuOx. 40' back on line = out to S. - on zone 50SE. Schist few ft to W = N-S.

#62 - Face of N out on #61 - Top of ridge. Schist = N-S-75W.

#63 - Top of Rk on top of Ridge - 65 ft toward 41 = ~~Schist~~ crsegr. Tuf. Rhy contact about N80E. ~~Crsegr~~ & Schist = 40' more towards #61. N27°E. Interfingering

#64 Pt on Ridge - Schist N-S. Tuf-Rhy cont = pt + 50' on line Prom. Rhy-Knob = S60W @ 200' Rhy cont - Gen. Tr = S30E & N65W as arc.

#65 2x4 Wh Pt. Disc El. Ora Gr 5-7. Small stake - N57W. 220'? Schist N30E

#66 - Fe-Qtz outcrop. Zn N30E, schist N15E. Small stake N87W. 140'? = SW cor, Gr5-1 SE Cor Gr5-6
NW cor 5-7 SW

#67 - 2 Fe Zn on Pit S75W 70SE & N75W 45SW. Schist N15E liv Fe, Qtz ~~No~~ CuOx as small specks

#68 - Qtz, silica Hy spec Fe N20E - offset 50' E each 150 N. from this point - total 600' N.

#69. S. side Main wash, branch to NW, long, & to SW. short

~~#69~~

Sta G-1

#70 Sta J-1

El Cobre

Sta J-1

#71 2xu wh pt. El Oro Gr 5 #8 - RHy

#72 wh Δ RHy cc?

#73. Float contact RHy W, Crse Fgr E

#74 " " " " " " "

#75 Δ wh RHy - SE con Gr 5 #7 ℄ SW con Gr 5 #2. N 12 E 185' = 3hz ft - 20' deep on N 65 W 80 NE Hy Fe Zn. Alt - cuox, contact, RHy (gray to SW)

#76 - Mouth of N 18 W 36' cut ℄ 70' adit in Hy Fe Zn - Lix. N 25 W structure - 60 SW. Alt Fgr, some +2. RHy? cuox on dump.

#77. Cut (N.) on N 70 W Fe cuox Zn. Vert ℄ dips 36 S. cuox on both, Crse ℄ Fgr to east.

#78 - Δ wh RHy. cc. Fgr - crse gr.

#79. 2x4 wh Pt. Disc El Oro Gr 5 #3.

#80 - Float contact? RHy gr S ℄ W - Fg N ℄ E

#81 - " " " " " " " " irregular to #80

#82 End of Rd S 55 E for 120', then N 53 E 250', then S 85 E to P 83.

#83 ℄ Rd. X ——— East

#84 ℄ Rd at Junct. in wash. S 72 W

#85 ℄ ℄ end Rd (Branch.)

#86 - Sta. K-1 - Rd 150' N. on Fgr.

DIETZGEN NO. 385-S

Sta K-1
#87 { ℄ U in Rd - N15E (west) and wide curve E
{ to wash.
#88 - ℄ Rd at curve N37W 120' to Junct of Rd to wash & towards sta. S15W 150' to Junct Rd East - Also 100' S15W. beyond Junct.

#89 - ℄ cur in Rd. N55E 150' & S20W [S20W] to Junct.
wash 100' back on line towards
#90 - ℄ Rd. N42W ~~past~~ sta. S38E ~~to~~ Pt 91

as curve.
#91 - ℄ Rd N18W towards #90 & S20W towards 87

Sta K-1 Nov. 25, 1961

#92 Small stake. SE cor Gr. 5 #8 & SW cor. Gr 5 #3.

#93 - Contact SE-NW - Tuf-Rh - S & W. crsegr N & E

#94 Contact [Float] E-W - Tuf-Rhy S. Fgr crse - N.

#95 contact [Float] SE-NW. Tuf Rhy S & W - Fgr N & E

#96 - Contact 10' back on line - S15E - Tuf Rhy S & W. crse-Fgr NE
& wash Pt +50' on line.
#97 - Contact - SE NW - to #96? SW dang. NE = crse Fgr.

#98. Contact - W & S at pt. crse Fgr N, E, Tuf Rhy W & S - makes wide curve to S to #97 - Underlays. crse-Fgr?

#99 - Sta. K-1 crsegr.

300' then N5E
#100 - E side wash at Junct. N45W & Branch = N75E
crse gr Fgr - Bleached - No Fe Gen st N60E & 50NW.

E/ Cobre

#101- Pt + N80W 120' = wash and N. of line - Start of wide spread Fe dead.

Sta E-1
#102 N45W Fe Zn. 50' wide. 100' on line = N40W Fe liv Zn

#103 { W side of wash & end of Rd. Hy Fe in wash 200' N & 200' S.
#104 N55W dead Fe Zn som liv. Alt Silif'd spec Hem.

#105- Δ wh RKs. Disc Povan #8 Hy Fe Zn. N70W & 15' back on line N10W. 50NE = Hy Cuox. Fe. Spec. Crse gr. Hy Alt.

#106- Shaft 60' deep on N50W Fe Zn live. Cuox Alt silif'd.
#107- Interfingering Schist & crse-Fgr. Schist N.30E
#108- Contact N60W. S = Hy Fe crse Fgr. N = grn BK por. Med gr. No Fe.
#109- ℄ Rd.

#110 ℄ Rd. back to 109 - West as wide curve to S. Fe progressively weaker to S.
#111- ℄ Rd. Liv Fe o near pt 32 - N10W. No Cuox (in wash

#112- Pt + 15' @ Rt ls N = Disc Δ wh RKs Povan 6. on 50' wide Fe Zn - some liv - heads toward ℄ part of Fe Zn at Sta. Cuox in spots.

#113. W. Bank of N-S wash (to Rd) S50E & N40W 10' wide liv Fe Cuox-Zn. crse gr. Hy Fe S & N. 75' S = N80E Fe Cuox and 50' S = N70W Fe Cuox Zn

#114 - W. Bank wash. Northern limit of Fe Zn.

DIETZGEN NO. 385-5

#115 Contact N80W S = Crse-Fgr, W = grn Blk, med gr. W. Bank Wash. And Dike east side wash.

#116. Contact - Crse-Fgr - N. & Grn Blk to S. - West Bank-wash.. And Plug 20' to North.

Sta. M-1
#117 Jnct 2 Fe Zn (live) N70W & N55E spec Cu ox

#118 - 2x4 wh Pt. Disc El Cobre-Gr 2-4

#119 Sta N-1

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Sta N-1
#120 2x4 wh pt cc. 100' @ Rt L's 8W = ~~8~~ 40E Cotr 50' Crse gr Fgr - pink
#121 - △ P-1 - Disc. 45' back on line. El Cobre Gr 2 #5

△ P-1
#122 { 2x4 wh pt. N85W Cotr. 50' back on line. N side Wash (40's) crse-Fgr N. Blk - Breccia S. Bank. East end of cotr 2 ~~8~~ 35E Hy Fe Zn across wash

#123 - { 2x4 Wh pt - Disc El Cobre Gr-2-10 Rd N60W to Wash - 150'
#124 2x4 wh pt. cc.

#125. S. Bank Wash - Rd Joins wash 40' back on line. Tuf Rhy in N Bank. Contact 170' back on line. Tuf Rhy S cu crse Fgr NE - across wash?

#126 - 2x4 wh pt. No small stake - cc. crse gr. F.gr. Top of Knoll S55W to △ RK on Hill SW.

El Cobre.

#127 {2x4 wh pt & small stake. SE cor Gr 1-5
{S58W to 126

#128 - Contact S5W - W = Tuf Rhy cong. E = Crse Fg.

#129 - W. Bank Wash - Contact - S65E - S = Cong. Tuf Rhy -
N = Dike And & Crse-Fgr.

#130 N15W - N59E to Flag. N68W to "W"
dc

Δ "W"

#131 Shaft W. side wash. Curox in And dike - N70W?
Som Feo. - Sample - ore - RK, 50 Ft on line - Shaft
in alluvium & Hy Fe Crse gr. 75' on line = Rd
N10W as S & S10W as S. South of pt = Tuf Rhy?

#132 - Junct Rd - N75E, N70W ⌒ and towards "W" a
run around.

#133 {Possible Contact N30W - SW Tuf Rhy - NE Crse Fgn
{Much Fe from Tuf. Runaround Joins Rd 40' towards W.

134 Junct Rd on W U curve. - N52E

#135 ℄ Rd. E 100' W 110'

#136 - Contact N55W And (Tuf Rhy) SW - Crse Fgr NE.

#137 - 2x4 wh Pt. Disc Elcobre Gr 2 # 9

#138 - 2x4 wh pt = Pt + S64E 125'. cc.

#139 - {2x4 wh Pt = Pt + S65E 220' = Disc Gr 2 # 4
{Hy. Dead Fe Outcrop N60E, drill'd - 75' N of Rt ∠s

#140 ℄ Rd N20E & S15W as flat S

calcite.
#141 cotr N10W. ~~Ftz~~ Fiss

#142 2x4 Wh Pt 22' @ Rt ∠s W of Pt. cc. on Tuf-Rhy.
Rhy about 200' N.

DIETZGEN NO. 385-5

#T43 { 2X4 wh Pt. Disc El Toro Gr 3 #4. Pit
15' back on line. N55W 65NE Fe Liv Cu ox Zn.
Crsegr. RHy cont. S70E & N5E Rhy N & E.
as a big blob.

#144 - 2X4 wh Pt. cc. on crsegr. Fgr.

#145 { Pt + S7E 260'? = 2X4 wh pt Disc? - Triangulate
from cc on top of Ridge.
#146 ₵ Rd S15W 230' then S30E? then + SW
again. also N48E
#147 - ₵ Rd 30' @ Rt Ls E. S15W & N65E. Wash = 60' W
Rt Ls - crse Fgr in wash.

Δ L-1
#148 ₵ Rd. N73W S.36E

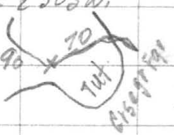
#149 - 2X4 Wh Pt. Disc. El Conejo Gr. 4 #9.

#150 - 2X4 wh pt cc.

#151 - 2X4 wh pt. Disc El Conejo Gr 4 #4. N27-30E to cc
of. #145.

#152 { Resist Tuf Rhy gray dike N55W 45SW 300' long. 150'N
last exposed Tuf RHy. Rd 20' SW parallels dike
70' SE Strike is S30E & 50SW.

#153 - ₵ Rd N63W N73E 90



#154 Pt. Rd N57W - N33E. N74E to wh pt.
N52-30 to wh pt.

E/Cobre

#155 2x4 wh pt - pt + 40' on line N48E & N54E to wh posts.

#156 2x4 wh pt. — Dis. 2x4 wh pt E/Arroyo Gr 4-10 bears, N63E-300'

#157 Sta. R-1 - on top of hill.

#158 Pt + 30' S64W = 2x4 wh pt Disc. E/Oro Gr 5-9
cc-2x4 wh pt = S64W. 250 ft. Rd 40' w @ Rt Ls, thence
Rd 135' @ Rt Ls at pt. S43W-300' & N39E
Then more NE

#159 7x4 wh pt. Small st. SE of Gr. 5 #9, & SW of Gr 5 #4
Rd 80' @ Rt Ls W.

#160 - Pt + 34' @ Rt Ls SE to Disc E/Oro Gr 5 #4
1400' S & 100 N.

#161 Pt on Rd S57W. & N5E - 120' N5E = Inat to S75E

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BRANCH OFFICES
PHOENIX
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DENVER
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ST. LOUIS

December 1, 1961

Mr. Richard E. Mieritz
Provan Mining Company
5614 North 7th Street
Phoenix, Arizona

Dear Mr. Mieritz :-

For your proposed drilling northeast of Agua Caliente, Arizona, we submit the following proposal.

1. Mobilization & demobilization ---------- $ 200.00

2. Drilling

	AX or BXWL	NXWL	NC or Collar pipe
0 to 500 ft	6.10	6.60	7.50
500 to 1000 ft	6.60		

3. Reaming, if necessary, 2.90 per foot for all sizes.
4. Cementing, if necessary, 10.60 per hour plus cost of cement or cement substitutes, including drilling mud.
5. Core boxes are available at 1.00 per box.
6. If as much as 1000 feet is drilled there will be no charge for mob or demob.
7. Thanks for calling on us, we willbe on the property no later than December 7th. I will keep you informed.

Sincerely Yours
J E Roberts
J.E.Roberts
District Mgr.

T2S R10W. 1

Phoenix, Arizona, October 4, 1916.

Dr. H. H. Temple,

Phoenix, Arizona.

Dear Sir:

Please find herewith my report on preliminary examination of the Copper Camp property.

LOCATION:

The property is located in the Little Big Horn Mining District, Maricopa County, Arizona, about 80 miles West from Phoenix. The nearest available railroad point is Palo Verde, 42 miles distant, which is the present Western terminus of the Arizona Eastern Railroad.

CLAIMS:

The property consists of 47 located lode mining claims, all held by possessory title.

GEOLOGY:

The fundemental rocks are Schist and Porphyries. Laying outside of the mineralized area, especially to the North, is a granitic formation which forms an irrigular contact with the Schist. There has not been a sufficient amount of work done on this contact to determine its mineral value, but at one point, where a shallow excavation has been made, it is proven to be mineralized. Carrying some copper and a large percentage of iron,

all oxidized. There are many porphyry exposures, on the property, consisting mostly of granite porphyry with some monzonite. A prominent feature of the western portion of the area is the remains of an adisitic lava flow, characterized by large rock masses, many of which are much worn and rounded, showing that immense erosion has taken place. There are many gulches, often exposing the formation to a depth of 20 feet and frequently good Copper Ore in small quantity can be seen at these points.

DEVELOPMENTS:

Near the eastern end of the property a shaft has been sunk to a depth of 110 feet. It was inaccessable at the time of my visit, but from the dump, I concluded that the amount of copper found was not large. There was a small amount of good looking copper carbonate on the dump, probably occuring in bunches.

Near the north central portion of the property, there have been several shallow shafts sunk, all showing some good copper ore.

Further South an excavation of unknown but shallow depth has developed what is said to be a permanent water supply. The water stands to within about 15 feet of the surface. There are many shallow openings done probably for assessment purposes but which do not tend to develop the property.

ORE OCCURRENCES:

Parallelling the East and West Contact, and several

hundred feet in width for a length of approximately 3,000 feet, in the North Central portion of the property there is an area which is very promising for the development of good bodies of ore. The general formation is Schistose, intruded with granite porphyry, with some monzonite. The ore occurs in innumerable small veins of altered porphyry, quartz, and sometimes having a thickness of a foot or more. The occurrance of the ore is indicated by a dark colored silicious rock surrounded by the lighter colored debris. These dark rock exposures may have an area of from ¼ to several acres, all carrying a large percentage of iron oxides. In some places the formation in which the ore is found has the appearance of a vein and again it may be simply a bunch of ore. Development might prove the existance of a body of dissiminated ore in this area, but too little work has been done to base an opinion. To the West of the wagon road, in a gulch there are several exposures of copper ore in a similar brown schist and iron stained quartz occuring as small streaks and stringers.

All work to date has been done in the oxidized zone, no sulphides having been found with the exception of an occasional small particle of chalcocite.

ROADS:

There is a good automobile road from Phoenix, to within 8 miles of the property. From there on the road is rough in places with some short stretches of sand, but there is

portion, but which would probably be included in 5 or 6 claims, occur many bunches and streaks of ore, both in the schist, and porphyry all of good grade. Development might prove that there existed a body of ore either in a vein or dyke of shipping grade, or a body of dissiminated ore, which would require concentration on the ground. Until the oxidized zone is passed through and sulphides found, no prediction as to the future value of the property would be of much value. Should a zone of enriched secondary ore be found next to the oxidized zone I believe that the quantity would be sufficient to insure a profitable mine. Or, on the other hand should it be proven that the oxidized zone rests immediately upon the unaltered formation, in which event any ore found, would be of a primary character, it would undoubtedly be of a much lower grade in the valuable metals and contain a large percentage of iron. The surface indications rather point to a zone of enriched ore.

While the location is not all that could be desired, on account of the distance from the railroad it presents no difficulties that cannot be easily overcome, as a small outlay of money would construct a good road for trucks with no heavy grades.

With the road built, or the present one repaired, a truck should make a round trip each day from the mine to the railroad.

no difficulty in negotiating it with a Ford. This road passes by Palo Verde Station, the nearest railroad point.

WATER:

There is no doubt but that a sufficient quantity of water can be developed on the property for any future use, as is evidenced by the amount proven as referred to above.

LUMBER, WOOD, ETC.

There is a plentiful supply of wood for domestic purposes in the usual desert growths, consisting of Mesquite, Palo Verde and Iron wood. Timber and lumber for mining purposes would have to be hauled in from the railroad. For power purposes, internal combustion engines would be the most economical for small units at least.

CONCLUSION:

The value of the property in its present stage of development is entirely prospective. That it contains some good ore is a proven fact but intelligent prospecting and development would be necessary to prove its value. The general formation is not unlike that in which some of the large productive copper mines of the Southwest are found, viz., Altered schists and porphyryetic intrusions, carrying a large amount of iron oxide.

In an area of undetermined size on the North Central

RECOMMENDATIONS:

Before deciding on any plan for development, some prospecting should be done to further determine as near as possible, the occurrence of the ore. Should it be probable that there exists a body of dissiminated ore, then the ground should be drilled. If the ore is confined to dykes or veins, a shaft should be sunk and the ground opened by levels from the shaft.

The prospecting work would determine the best location for the shaft.

Respectfully,

(S i g n e d) R. W. Hollis,
Mining Engineer.

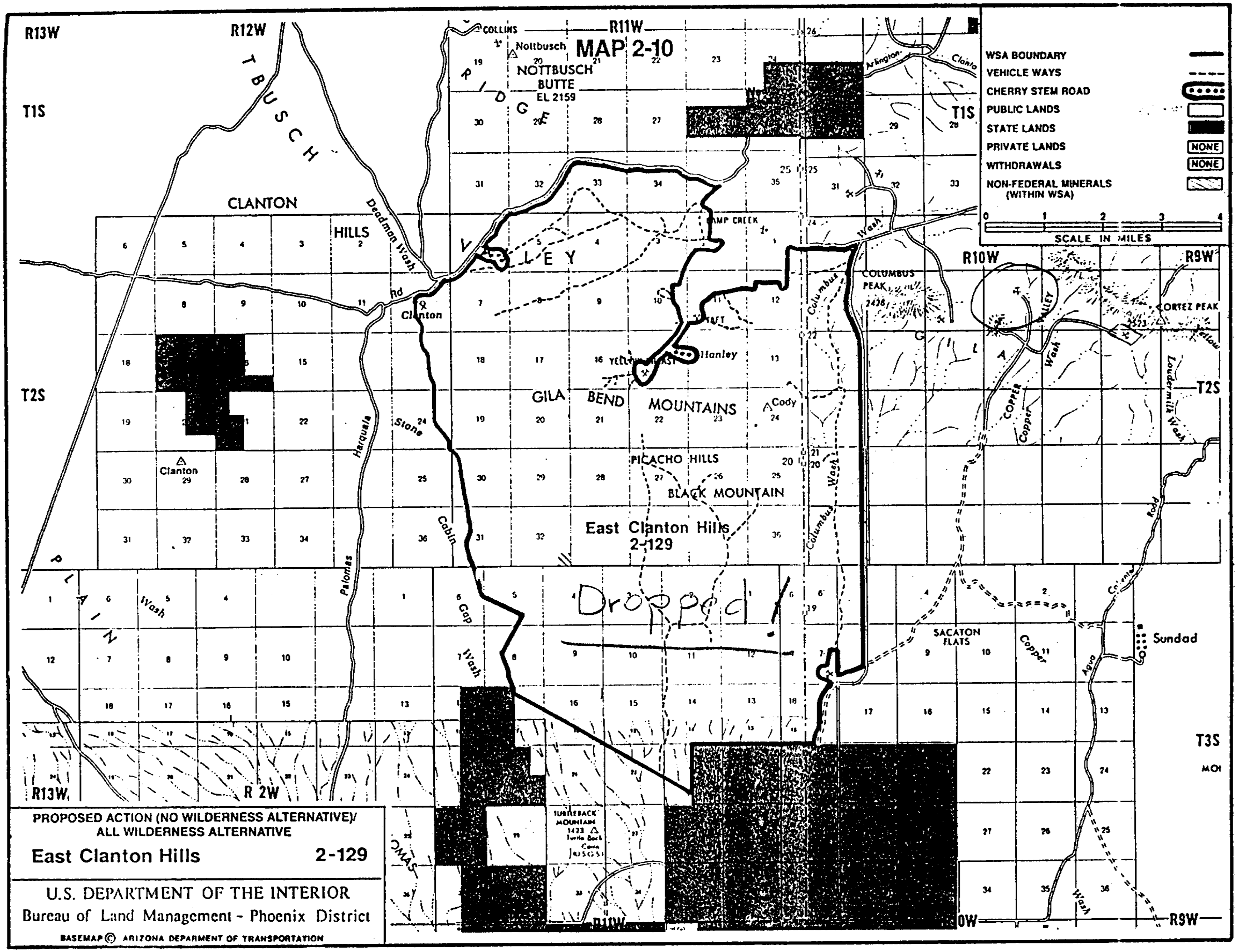
Assay returns from Samples taken by R. W. Hollis

on the Copper Camp Property,

October 2, 3, 1916.

No.	% Cu.	Oz. Au.	Description when taken.
1	4.85	Trace	Dump from cut on East side of gulch about 1,000 feet West of where we camped--Selected.
2	0.15	0.02	Iron stained schist about 200 feet West of No. 1. 4' taken from open cut.
3	12.80	0.06	Dump 12-foot shaft, near South side property--Selected.
4	0.65	Trace	Dump 12-foot shaft. 300' North of No. 3.
5	3.90	0.08	Dump 10-foot shaft. 100' South of shaft with windlass.
6	4.20	0.10	Dump of shaft with windlass.
7	10.90	0.10	Dump of 25-foot shaft 50 feet West of No. 6.
8	5.20	0.04	Dump of 16-foot shaft. 400 ft. West of No.7.
9	3.70	Trace	First opening East of Camp.
10	- -	Trace	Croppings West of camp, iron oxide and quartz.
0	- -	Trace	Croppings from large dyke East of Camp.

Map 2-10


MAP 2-10
WSA BOUNDARY
VEHICLE WAYS
CHERRY STEM ROAD
PUBLIC LANDS
STATE LANDS
PRIVATE LANDS NONE
WITHDRAWALS NONE
NON-FEDERAL MINERALS (WITHIN WSA)
SCALE IN MILES
0 1 2 3 4
R13W
R12W
R11W
R10W
R9W
T1S
T2S
T3S
NOTTBUSCH BUTTE EL 2159
Nottbusch
COLLINS
TBUSCH RIDGE
CLANTON HILLS
VALLEY
Clanton
Deadman Wash
Harquala
Stone
Cabin
Gap Wash
Palomas
PLAIN
GILA BEND MOUNTAINS
Hanley
Cody
PICACHO HILLS
BLACK MOUNTAIN
East Clanton Hills 2-129
Dropped!
Columbus Wash
COLUMBUS PEAK 2428
CORTEZ PEAK
Arlington
Clanton
COPPER
Copper Wash
Loudermilk Wash
SACATON FLATS
Sundad
Agua
Road
TURTLEBACK MOUNTAIN
PROPOSED ACTION (NO WILDERNESS ALTERNATIVE)/ ALL WILDERNESS ALTERNATIVE
East Clanton Hills 2-129
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management - Phoenix District
BASEMAP © ARIZONA DEPARMENT OF TRANSPORTATION

A

GEOLOGIC APPRAISAL

and

EXPLORATION REPORT

of the

EL COBRE COPPER PROPERTY

in the

EAGLE TAIL MINING DISTRICT

T. 2 S. - R. 10 W.

Maricopa County, Arizona

by

Richard E. Mieritz
Consulting Mining Engineer
Phoenix, Arizona

January 15, 1962

TABLE OF CONTENTS

* * * * * * * *

Inclusions

Sample Identification Numbers and Assays

Index Map-Southwest Arizona
Composite Diamond Drill Log- 3 sheets
Surface and Geologic Map--Folded.

INTRODUCTION

At the request of Messrs. Alex Prohoroff and Guy Vanlandingham Jr., Phoenix and Arlington, Arizona, respectively and principal owners of the Provan Mining Co., Phoenix, Arizona, the author was engaged to examine and evaluate the Companys' El Cobre copper property in West Central Maricopa County, Arizona. As part of the program and coincident with the evaluation, study, etc, a hole was diamond drilled to gain geologic information and evidence in this relatively unknown area.

CONCLUSIONS

As a result of the geologic evidence obtained from the field mapping, regional evaluation and the drilling of a single hole as well as the authors knowledge concerning low grade copper deposits, the following conclusions are forwarded:

(1)- Regional geology (structure) in part, indicates one of two large scale features, (1)-a doming or anticlinal effect in the area of the deposit was created by a non-outcropping, at depth, magma, or (2)- a terrific low-angle thrust faulted, overriding block was created to have the various rock types in their present position.

(2)- The local area contains favorable host rocks as Schist and Monzonite porphyry.

(3)- The wide-spread but limited copper oxide and abundant iron oxide mineralization indicated on the surface suggest an outline of a hub with six spokes wherein each set of spokes parallel in direction the three known major trends of mineralization common to Arizona regional structural geology, namely, NNW., NNE., and ENE.

(4)- The weak but consistant copper content encountered in the drill hole its entire length is typical of cappings common to major low-grade disseminated copper deposits in Arizona and elsewhere, and

(5)- The many geologic features exhibited all point to the possibility and potential of strong copper mineralization at some undeterminable depth in a quantity which should class the possible discovery as major in importance.

PROPERTY and LOCATION

The El Cobre copper property consists of 62 contiguous, unpatented standard lode mining claims situated

in an unsurveyed area but which approximates Secs. 10, 11, 12, 14 and 15, T. 2 S., R. 10 W., G. & S. R. B. & M., Maricopa County, Arizona.

Said claims are in three blocks, one of 50 claims, the second of 8 claims and the third of 4 claims. They are identified by name as follows:

El Gato, Group 1, 1-10 Inclusive. Povan 1-8 Inclusive
El Cobre, Group 2, 1-10 " " " .
El Toro, Group 3, 1-10 " " " . Povan 9-12 " " "
El Canejo, Group 4, 1-10 " " .
El Oro, Group 5, 1-10 " " " .

All claims have been properly recorded and ample work completed to constitute legal and valid claims.

Location-wise, the property is 19 airline miles north of the old historic town of Agua Caliente which is 13 miles by road north of Sentinel, a small community on the Southern Pacific Railroad and U. S. Highway 80, some 33 miles southwest of Gila Bend, a town of 1500 on the same highway.

Access to the property by car from Sentinel is north 13 miles over a graveled, county road, thence east and mostly north some 19 miles over a similar graveled, county maintained road paralleling the Phoenix branch of the Southern Pacific Railroad for six miles and on the old Agua Caliente-Arlington road to Sundad, a former U. S. "prisoner-of-war" area. One half mile north of Sundad, a mine road traverses the small hills and washes northwesterly 10 miles to the property.

The area at the property is void of power, gas, water, etc. Gila Bend is the nearest town for supplies, however, Phoenix is but 64 miles further northeast on U. S. 80.

Prominent land marks near the area are Montezuma Head, Columbus Peak and Cortez Peak, the latter two being part of the Gila Bend mountain range, the property lying between the two peaks at the southern base near the western portion of the range.

Drainage in the area is to the south.

REGIONAL GEOLOGY

Except for a few isolated reminants of sediments, the regional area, 15 to 20 mile radius from the property, is basically composed of igneous rocks and the very early Cambrian and Pre-Cambrian rocks. An extensive basalt

flow, typical of Arizona occurances, caps several hills as float in the area of the deposit as well as "in place" capping of much of the surrounding area for several miles in all directions. Observed dips and projections of this lava flow indicate a doming or anticlinal structure has centered itself in the immediate area of the property, at least the longer axis, easterly-westerly, has and might therefor be considered as one of the major structures of the deposit.

Rock-wise, regionally and locally, there are many types exposed, namely, Pre-Cambrian-Cambrian gneiss, and schist, Pre-Cambrian granitoids, Cambrian ? limestone, Cretaceous tuff and rhyolite, andesite dikes, probably Tertiary, monzonite porphyry and Quaternary basalt flows as well as Quaternary sand-gravel.

LOCAL GEOLOGY

The included Surface and Geology Map indicates the geologic pattern as expressed on the surface. Rock types as mapped by plane table survey include Schist (hornblende and mica, not differentiated), Gneiss (either granitic or dioritic and includes two types, not differentiated) (coarse grained with feldspar as the major constituent, mica as intermediate and quartz the minor constituent as contrasted to the fine grained type where quartz is the major constituent and both the feldspar and mica the very minor constituents; Tuff and Rhyolite as a prominent outcropping at the south end of the property, monzonite porphyry ? as a narrow outcropping band at the north and underlying? the schist and gneiss; a granitoid which makes up the western end of the Gila Bend mountains and small narrow andesite dikes.

Structurally, the schist and gneiss are in contact with each other in a N. 25° E. direction which itself is a second major structural feature in the area and forms one of the main drainages as well as dividing the property in half from the southwest to the northeast. This same gneiss is also in contact with schist in about the same direction approximately ¼ mile east of the most easterly claim of the property. The narrow band of monzonite porphyry ? is in contact on its southside with both the schist and gneiss in a general easterly-westerly direction at the north end of the property and in contact with the granitoid on its north side. The tuff-rhyolite blowout is in contact in a northwest-southeast direction on its northern extremity with both the schist and gneiss at the south end of the property, a probable third major structural feature in the area. Small andesite dikes cut both the schist and gneiss.

Exposed also are small quartz veins, a prominent ironized silica vein, small calcite stringers and a

small reminant of limestone near the tuff-rhyolite-gneiss contact.

MINERALIZATION

Copper mineralization, principally as oxides, malachite, chrysocolla and some azurite, is confined to the schist and gneiss within the boundary of the property. More specifically, the greater copper mineralization occurs within an area approximately 1500 feet on each side of the schist gneiss contact for a distance of some 4500 feet. The area of influence is outlined on the included Surface and Geology Map. This irregular outline suggests a parallelism to intersecting spokes of a wheel, the directions of which are NNW, NNE and ENE; the typical structural pattern common to many copper deposits in Arizona.

Copper mineralization observed within the boundary is associated with the thin fractures in both the schist and gneiss, the strikes of which vary in all directions.

Associated with copper mineralization is an orange-red limonite iron, usually as halos. The copper-iron combine is always associated with small but numerous dull red-brown limonite iron, an alteration product of the micas in both the schist and gneiss. Alteration of the feldspar in the gneiss is also quite extensive in and around these indigenous iron areas.

In the initial stage of claim location work, many of these iron areas were trenched with a cat-dozer and more frequently than not, small thin fractures of copper oxide minerals were uncovered which actually showed no surface expression. Therefor, copper mineralization may be much more closely spaced than indicated on the included Geology Map because all small indigenous iron areas were not platted.

DEVELOPMENT

The entire area is numerously dotted with small pits, shafts, etc on the many copper outcroppings. More recent work consists of many cat trenches, roads and a diamond drill hole designated on the Geologic Map as D. D. H. Nº 1.

DIAMOND DRILLING

The drill hole had as its objective the intersection and penetration of the suspected magma ? re-

sponsible for the anticlinal structural effect and possibly the source of the existing copper mineralization exhibited on the present surface and (2) the intersection and penetration of the monzonite porphyry ? which may or not be the suspected magma and which might underlay both the schist and gneiss.

This being an unknown area of geology in depth, the drill hole was spotted to obtain the best possible test of the mineralized gneiss as well as to cater to the above mentioned objectives. A geologic and physical log of the 787 foot drill hole is included at the end of this report.

Boyles Bros. Drilling Company drilled the hole using NC, NX and BX wire-line bits. The various depths to which each size was used is indicated on the log. Overall core recovery exceeded 85%. Sludge tanks were at location but were not used because of the excellent core recovery. Drilling commenced December 8, 1961 and the hole was finished January 5, 1962, twenty-four actual drilling shifts averaged 32.7 feet per shift. Water recovery was good, exceeding 85% throughout the hole. A ten foot core barrel-wire-line, was used.

Drilling was supervised by the writer who took up residence at the project in a small house trailer.

SAMPLE PREPARATION

All core recovered was split using a core splitter manufactured by Boyles Bros. One half the core was returned to the standard cardboard core boxes for storage and future reference. The remaining half was crushed through a ¼ inch laboratory jaw crusher and quartered by a Jones type splitter, quartered only when the particular sample was to be assayed for copper. One quarter became the sample for assaying, the other three quarters for the sludge board and storage for any future use.

The pulp reject from the assayed samples have been saved and stored.

The sludge board was prepared by taking a pint volume portion-about a pound in weight-of the crushed sample and panning same to a concentrate approximating 2½" in length and 1" across at its greatest width in the groove of the pan. Portions of the coarse, medium and small sizes of rock were also saved during the panning operation. After the particular sample had been dried, the various sized pieces of rock and concentrate were glued to a pine board 4 inches in width and 48 inches in length. The respective

depths of samples were scaled on the board at 10 feet to the inch. Depths and copper assays were lettered on the right hand margin in black and red ink respectively. Check assays of samples by a second assay firm were lettered in orange ink beneath the initial assay.

Arizona Assay Office in Phoenix completed the initial assays and Jacobs Assay Office in Tucson completed the check sample assays.

The practice followed for selecting samples to be assayed was dictated by the presence or absence of visible copper mineralization. When absent, usually each 3rd or 4th sample was assayed. When present, either to the naked eye or by use of a geologist glass, successive samples were designated for sampling. Samples were assayed for total copper only.

All remaining core (split), crushed samples and pulp rejects are stored at the residence of Mr. Guy Van Landingham Jr. at Arlington, Arizona. The sludge board is in the poessession of the writer. Both the split core and sludge board are available for observation.

Samples sent to assayers were identified by number only. Sample identification numbers and samples are separately listed in this report.

RESULTS OF DRILLING

The drill hole was stopped at a depth of 787 feet because of limited finances. Except for several andesite dikes, 14 feet of mica schist and the usual small quartz stringers, the drill hole penetrated 696 feet of gneiss of varying degrees of alteration and indigenous limonitic iron oxide. The remaining 91 feet penetrated chloritic schist, a pegmatite dike, a brecciated zone and bottomed in a transitional zone type rock not readily identified.

Limonitic iron oxide is present throughout the entire length of the hole, thus indicating a full column of "capping" which has not been completely penetrated by the drilling. Although not visible to the naked eye and extremely difficult to ascertain with a glass, the copper assays indicate a consistant and persistant presence of copper bearing minerals either in the oxide or sulphide form from top to bottom. The range of copper content is typical of "capping" present in other major low-grade deposits within the state, and should thusly serve to justify the possible presence of stronger copper mineralization at depth.

A noteworthy observation is the persistant

occurance of the orange-red limonitic iron oxide the full length of the hole and more encouraging the appearance of both the black sooty type and purple-red boxwork type limonitic iron oxide from 406 feet to the bottom and also, the fact that both types of the latter iron oxide appear on the fractures and as extremely fine disseminations. These occurances are extremely meaningful to the geologist familar with low-grade copper deposit "cappings".

RECOMMENDATIONS

To definitely ascertain whether strong disseminated mineralization lies beneath the weakly mineralized area (copper-wise) as outlined in the Geologic Map, at least two holes must be drilled at strategic locations within the outline and the present hole must be deepened.

Each hole must penetrate at least a 1200 foot section unless bottomed at a shallower depth for geologic reasons. The two additional holes must be drilled no closer than 1400 feet and on a "square with the world" grid system using D. D. H. Nº 1 as an intersecting position of a 200 foot square grid.

The above program would require an expenditure of approximately $35,000.00 including roads to drill sites, drill site construction, contract drilling, sampling and assaying, supervision, etc.

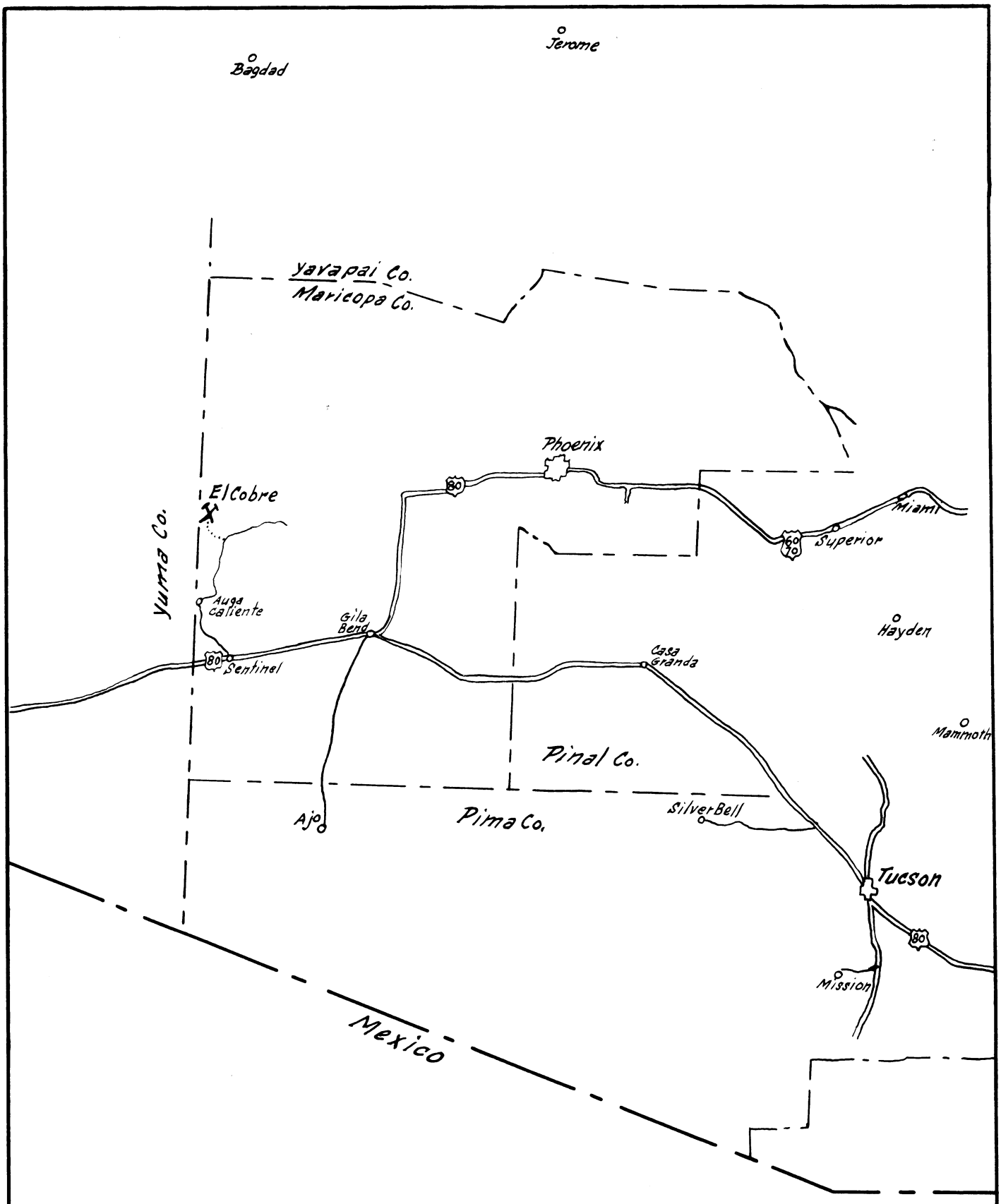
Respectfully submitted.

Richard E. Mieritz, P. E.
Phoenix, Arizona

January 15, 1962

SAMPLE IDENTIFICATION RECORD--D. D. H. Nº 1.
EL COBRE PROJECT

Samp. No.	Depth	% Cu.	Samp. No.	Depth	% Cu.	Samp. No.	Depth	% Cu.
101	8.0		151	237.0	.01	201	537.0	.03
102	11.6		152	243.0		202	542.0	.015
103	15.9		153	247.0		203	547.0	.025
104	18.2		154	256.0	.02	204	552.0	.02
105	21.4		155	260.0		205	557.0	.02
106	26.0	.02	156	266.5		206	562.0	.02
107	30.2		157	269.5	.03	207	567.0	.025
108	35.2		158	274.5		208	572.0	.025 Tr.
109	40.3	.02	159	278.6		209	577.0	.015
110	45.2		160	283.0	.04	210	582.0	
111	49.9		161	287.0		211	587.0	
112	54.7	.05	162	295.2		212	592.0	.02
113	58.6		163	302.5	.03	213	597.0	
114	63.4		164	309.5		214	604.0	
115	68.2	.02	165	314.4		215	610.5	.025
116	72.8		166	320.7	.07 .02	216	617.0	
117	77.4		167	327.0		217	622.0	
118	82.1	.36 .59	168	331.2		218	627.0	.015
119	86.6		169	337.0	.03	219	632.0	
120	91.0		170	341.0		220	637.0	
121	95.0	.03	171	345.0		221	642.0	.04 .02
122	100.0		172	349.0	.18	222	647.0	
123	105.4		173	351.8		223	652.0	
124	110.0	.01	174	357.0		224	657.0	.01
125	115.6		175	362.0	.02	225	662.0	
126	120.6		176	367.0		226	667.0	
127	126.0	.02	177	371.1		227	671.0	.02
128	131.0		178	377.0	.05	228	677.0	
129	136.0		179	383.4		229	682.0	
130	141.2	.01	180	388.2		230	687.0	.02
131	144.6		181	396.0	Tr	231	692.0	
132	148.0		182	401.0		232	697.0	
133	156.1	.03	183	406.0		233	702.0	.03
134	163.3		184	412.0	.015	234	707.0	
135	167.0		185	416.0		235	712.0	
136	171.0	.02 Tr.	186	421.7	.01	236	717.0	.02
137	176.2		187	427.0		237	722.0	
138	180.9		188	435.0	.025	238	727.0	
139	185.5	.015	189	441.5		239	732.0	
140	190.0		190	446.0	.015	240	737.0	.01
141	193.0		191	453.4		241	741.0	
142	197.4	.01	192	460.6	.01 Tr.	242	747.0	
143	200.7		193	468.0	.03	243	752.0	
144	204.2		194	477.0	.03	244	757.0	
145	207.0	.02	195	487.0	.025	245	762.0	.01
146	211.2		196	497.0	.04	246	767.0	
147	217.0		197	507.0	.025	247	772.0	
148	222.0	.03	198	517.0	.015	248	777.0	
149	227.0		199	527.0	.035	249	782.0	
150	231.0		200	532.0	.02	250	787.0	.015 Tr.



INDEX MAP
SOUTHWEST ARIZONA

SCALE: 1" = 27.5 MILES

JAN., 1962

R. E. MIERITZ, P.E. PHX, ARIZ

COMPOSITE DIAMOND DRILL LOG

HOLE Nº 1 Sheet 1 of 3

COMPANY: Provan Mining Co. MINE: El Cobre CLAIM: El Cobre, Gr 2-2 DISTRICT: Eagle Tail

COUNTY: Maricopa STATE: Arizona TWS: 2 S RGE: 10 W SEC: un-surv'd. N.S. E.W.

BEARING: Vertical ANGLE: Vert. ELEVATION: FT. T.D.: 787 FT. DATE STARTED: 12-8-61 DATE COMP: 1-5-62

DEPTH	ELEV.	ROCK TYPE	GEOLOGIC DESCRIPTION & REMARKS	HOLE: ——— CASING: — —	CORE SIZE	CORE RUNS	CORE REC.%	MINERALIZATION	ASSAYS % Tot. Cu.	ASSAYS % check
5			Fill	3 5/8"	NC					
10			Gneiss, of two types, intermixed, on surface and in depth.							
15			(1) Coarse grained, feldspars, quartz & mica, laminated.							
20			(2) Fine grained, quartz, mica, some feldspars, laminae			20				
25			still visible. Both types relatively fresh to 29'.						.02	
30			29', Heavy Fe, alteration of mica, also feldspars, to 95'.	3.0"	NX WL.					
35			Iron has dull red brown color (dead). Fractures							
40			3"-4" apart. Fe on fractures & disseminated			40			.02	
45										
50			52-54, thin seams orange-red Fe with sparse specks							
55			CuOx minerals, malachite, chrysocolla, etc. (Fe-live)						.05	
60						60				
65										
70									.02	
75										
80			80.5'-2" wide Or-rd Fe zone, CuOx minerals 65° dip			80			.36	.59
85										
90										
95			95'-Relatively fresh, micas slightly altered. Type 1. to						.03	
100			126'	2 3/8"	BX W.L	100				
105										
110									.01	
115										
120						120				
125			126' Mixture of types 1 & 2 to 295.2' with varying						.02	
130			degrees of "dead" Fe in frac. & dissem. Feldspars							
135			altered slightly. Fractures becoming more							
140			numerous, 1" to 2" apart.			140			.01	
145										
150										
155			156'-Badly broken (breccia) possible Fault Zone.						.03	
160			Stronger alteration below. More frequent			160				
165			occurance of Or-rd Fe.							
170									.02	Tr.
175										
180			178'-Small area quartz, Or-rd & blk Fe.			180				
185									.015	
190										
195									.01	
200			198'-Strong Or-rd Fe. Qtz zone. Blk Fe. All Fe to 232.			200				
205									.02	
210										
215										
220						220			.03	
225										
230										
235			232'-Very heavy (dead Fe), some Or-rd Fe. Gouge 236-37						.01	
240						240				
245										
250									.02	
255										
260						260				
265										
270									.03	
275										
280						280			.04	
285										
290										
295			295.2'-Type 1-Relatively fresh to 302.5'.							
300						300			.03	

20% 60% 100%

COMPOSITE DIAMOND DRILL LOG

HOLE Nº 1 Sheet 2 of 3

COMPANY: Provan Mining Co. MINE: El Cobre CLAIM: El Cobre Gr. 2-2 DISTRICT: Eagle Tail.

COUNTY: Maricopa STATE: Arizona TWS: 2-S. RGE: 10 W. SEC: Un-Surv'd N.S. _____ E.W. _____

BEARING: Vertical ANGLE: Vert. ELEVATION: _____ FT. T.D.: 787 FT. DATE STARTED: 12-8-61 DATE COMP: 1-5-62

DEPTH	ELEV.	ROCK TYPE	GEOLOGIC DESCRIPTION & REMARKS	HOLE: ——— CASING: — —	CORE SIZE	CORE RUNS	CORE REC.%	MINERALIZATION	ASSAYS % Tot. Cu.	ASSAYS % Check
305			302.5 - Type 2. Heavy dead Fe. Some Or-rd Fe. Much alteration.	2 3/8"	BX W.L.				.03	
310										
315									.07	.02
320						320				
325			329 - Gouge. ± 1 Ft.							
330									.03	
335			336 - Small Andesite dike. Heavy Fe hides character.							
340			337 - Type 2. Some calcite stringers. Small quartz veins at 349', 351.5', sugary.			340			.18	
345										
350			354.5 Small Andesite dike.							
355										
360			365 - Type 2. Strong dead Fe, some Or-rd Fe as disseminations. Dead Fe decreases to 406			360			.02	
365										
370										
375									.05	
380						380				
385										
390										
395									Tr	
400			406 - Type 1 - Pink cast. Moderate dead Fe with black-purple-red Fe as disseminations and on fractures.			400				
405										
410									.015	
415										
420						420			.01	
425			427-28 - 1/8" to 1" wide greenish-gray andesite dikes.							
430									.025	
435										
440						440				
445									.015	
450			454-55 Some Or-rd Fe.							
455										
460			462 & 64. Small Andesite dikes, 4"-5"			460			.01	Tr.
465									.03	
470										
475									.03	
480			485 Andesite porphyry dike to 497.			480				
485									.025	
490										
495									.04	
500						500				
505									.025	
510			509 - 3" Andesite dike.							
515									.015	
520			523 - Mica Schist. Similar to surface exposed. Purple-red sooty Fe as disseminations on laminae.			520			.035	
525									.02	
530			Specks of sulphides (Fe & Cu) indicated.						.03	
535									.015	
540			537-42 Type 1. - Schist-Gneiss contact 70°			540			.025	
545									.02	
550			532 - Start of purple-red Fe, box work.						.02	
555									.02	
560			565 & 62 - Quartz seams, some epidote, Native copper,			560			.025	
565			565.5 Andesite dike. Lin quartz & Schist						.025	Tr.
570									.015	
575			574 - Type 1, 577 - Type 2, 580. Type 1							
580						580				
585			587 - Type 2. Purple-Red Fe on frac. & disseminations. Some spec. hematite.						.02	
590										
595										
600						600				

20% 60% 100%

COMPOSITE DIAMOND DRILL LOG

HOLE Nº 1 Sheet 3 of 3

COMPANY: Provan Mining MINE: El Cobre CLAIM: El Cobre Gr. 2-2 DISTRICT: Eagle Tail

COUNTY: Maricopa STATE: Arizona TWS: 2-S. RGE: 10 W. SEC: 4th Said N.S. _____ E.W. _____

BEARING: Vertical ANGLE: Vert. ELEVATION: _____ FT. T.D.: 787 FT. DATE STARTED: 12-8-61 DATE COMP: 1-5-62

DEPTH	ELEV.	ROCK TYPE	GEOLOGIC DESCRIPTION & REMARKS	HOLE: —— CASING: — —	CORE SIZE	CORE RUNS	CORE REC.%	MINERALIZATION	ASSAYS % Tot. Cu.	ASSAYS % Check
605			608 - Type 1 - Heavy Or-rd Fe.	2 3/8"	Bx W.L.					
610			613 - Type 2 & Type 1 intermixed to 696½'. Moderate Fe throughout but less altered.						.025	
615										
620						620			.015	
625										
630										
635										
640						640			.04	.02
645										
650			648 Small Andesite dike. Spec. hematite stringers.							
655									.01	
660						660				
665									.02	
670										
675										
680						680			.02	
685										
690										
695			696½ - Chloritic Schist, many slips & veinlets of quartz & Spec. hem. Contact 30° dip.							
700						700			.03	
705										
710			708 - Laminae 45° dip.							
715									.02	
720						720				
725										
730			730 - Andesite dike. Some spec. hem.							
735			734 Pegmatite dike. Pink east Moscovite Mica.						.01	
740			742½ - Chloritic Schist. Some epidote.			740				
745										
750										
755			757 - Brecciated Zone. Contact horizontal. Some Or-rd. Fe., epidote. Feldspars strongly altered.						.01	
760						760				
765										
770			772 - Porphyritic rock - transitional in character. Feldspars, (large), quartz, epidate, some black mineral as specks. Some indications of sulphides.							
775										
780						780				
785									.015	Tr.
790							20% 60% 100%			
795										
800						800				
805										
810										
815										
820						820				
825										
830										
835										
840						840				
845										
850										
855										
860						860				
865										
870										
875										
880						880				
885										
890										
895										
900						900				

ARIZONA REG'D MINING ENGINEER
1338 WEST THOMAS ROAD
PHOENIX, ARIZONA 85013
TELEPHONE 279-7354

Richard E. Mieritz

MINING CONSULTANT

GEOLOGY
EXPLORATION
EVALUATION
FEASIBILITY
OPERATION

November 22, 1965

Mr. B. Jacobs
Jacobs Assay Office
30 South Main Street
Tucson, Arizona

Dear Mr. Jacobs:

Herewith are 31 samples which are numbered as follows:

1- 20	1- 88	1-123	3- 6	3- 26
1- 26	1- 90	1-125	3- 8	3- 28
1- 40	1- 92	1-127	3- 12	3- 33
1- 46	1- 97	1-129	3- 14	3- 38
1- 54	1-100		3- 17	3- 42
1- 56	1-117		3- 19	
1- 58	1-119		3- 22	
	1-121			

All the above samples should be run for copper. Using the above samples I would like you to make up composite samples (volumn is okay) as follows:

Composite 1-A, samples 1-54, 1-56 and 1-58.

Composite 1-B, samples 1-88, 1-90 and 1-92.

Composite 1-C, samples 1-97 and 1-100.

Composite 1-D, samples 1-117, 1-119, 1-121.

Composite 1-E, samples 1-125, 1-125 and 1-127.

Composite 3-A, Samples 3- 6 and 3- 8.

Composite 3-B, Samples 3-17, 3-19 and 3-22.

Composite 3-C, Samples 3-26, 3-28 and 3-33.

Composite 3-D, Samples 3-38 and 3-42.

All nine of the composite samples I wish run for gold and silver.

After receiving the results for the copper, gold and silver I may advise you to run all or part of the composite samples for moly and nickel.

Please save pulps and remaining crude (crushed) material for me. Send all correspondence to me at 5822 North 22nd Place, Phoenix, Ariz. 85016.

Sincerely,

R. E. Mieritz

November 27, 1965

Jacobs Assay Office
30 South Main Street
Tucson, Arizona

Dear Mr. Jacobs:

It is hoped you had a happy Thanksgiving and didn't add too many pounds to the waistline.

I believe you will receive this letter on Monday, November 29 and it is just to advise you that I will call you direct on Tuesday morning, November 30 at 9:00 AM. All I wish to know is the total cost for the 31 copper assays and the 9 each gold and silver assays: Would also like to know the cost per assay for Moly and also for nickel. I would like this information so I can "bill" my client at the end of the month.

When you have finished the copper, gold and silver, send me the results and the cost and I shall immediately send you a check for the amount plus what ever moly and nickel assays I would like run.

Thanks very much. I may see you again on Monday, December 6, 1965, as I am coming down on Sunday for the Annual A.I.M.E. dinner.

Sincerely yours,

R. E. Mieritz,

November 22, 1965

Mr. B. Jacobs
Jacobs Assay Office
30 South Main Street
Tucson, Arizona

Dear Mr. Jacobs:

Herewith are 31 samples which are numbered as follows:

1- 20	1- 88	1-123	3- 6	3- 26
1- 26	1- 90	1-125	3- 8	3- 28
1- 40	1-992	1-227	3- 12	3- 33
1- 46	1-997	1-129	3- 14	3- 38
1-554	1-100		3- 17	3- 42
1- 56	1-117		3- 19	
1- 58	1-119		3- 22	
	1-121			

All the above samples should be run for copper. Using the above samples I would like you to make up composite samples (volumn is okay) as follows:

Composite 1-A, samples 1-54, 1-56 and 1-58.

Composite 1-B, samples 1-88, 1-90 and 1-92.

Composite 1-C, samples 1-97 and 1-100.

Composite 1-D, samples 1-117, 1-119, 1-121.

Composite 1-E, samples 1-125, 1-125 and 1-127.

Composite 3-A, Samples 3- 6 and 3- 8.

Composite 3-B, Samples 3-17, 3-19 and 3-22.

Composite 3-C, Samples 3-26, 3-28 and 3-33.

Composite 3-D, Samples 3-38 and 3-42.

All nine of the composite samples I wish run for gold and silver.

After receiving the results for the copper, gold and silver I may advise you to run all or part of the composite samples for moly and nickel.

Please save pulps and remaining crude (crushed) material for me. Send all correspondence to me at 5822 North 22nd Place, Phoenix, Ariz. 85016.

Sincerely,

R. E. Mieritz

30 So. Main St.
P. O. Box 1889

DUPLICATE

Jacobs Assay Office

Registered Assayers

PHONE Main 2-0813

Certifieate No. 57464

Tucson, Arizona, Dec. 1st 1965

Sample Submitted by Mr. Richard E Merritz - Phoenix Ariz

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Per cent Wet Assay	Per cent Wet Assay
		$					
# 1-20				Trace			
27				Trace			
40				0.02			
46				0.05			
54				0.03			
56				0.02			
58				Trace			
88				Trace			
90				0.02			
92				0.07			
97				0.04			
100				0.05			
117				0.05			
119				0.03			
121				0.05			
123				0.03			
125				0.02			
127				0.08			
129				0.05			
# 3-6				0.03			
8				0.03			
12				0.02			
14				Trace			
17				Trace			
19				Trace			
22				Trace			
26				0.02			
28				0.04			
33				0.12			
38				0.03			
42				0.03			
Composites							
1-A = 1-54, 1-56, 1-58		Trace	0.5				
B = 1-88, 1-90, 1-92		Trace	0.3				
C = 1-97, 1-100		Trace	0.2				
D = 1-117, 1-119, 1-121		Trace	0.4				
E = 1-123, 1-125, 1-127		Trace	0.3				
3-A = 3-6, 3-8	0.005	0.17	0.8				
B = 3-17, 3-19, 3-22		Trace	0.4				
C = 3-26, 3-28, 3-33		Trace	0.4				
D = 3-38, 3-42	0.005	0.17	0.7				

* Gold Figured $35.00 per oz. Troy

Charges $ 77.00

Very respectfully

Ben P Jacobs

December 13, 1965
1031 South Carnegie Drive
Tucson, Arizona *
85710

Mr. Richard E. Mieritz
Mining Consultant
5822 North 22nd Place
Phoenix, Arizona

RE JMG 1006

Dear Mr. Mieritz:

Your mineralized drill core specimen submitted to R. T. O'Haire of the Arizona Bureau of Mines was submitted to me, along with a thin-section and polished face of the core, for further study. I am returning the polished core, and will discuss it supposing that you are holding the narrow end of the core downward.

Thin Section Examination

On the right side of the specimen you will note a coarse dark silicate phase. Cursory examination suggests this to be an altered (chloritized) quartz diorite rock. Mafic minerals (now chloritized) were amphibole and minor augite; felsic minerals are slightly argillized plagioclase and minor interstitial quartz. At the left is a fine-grained rock, also chloritized, and not identifiable with confidence in the small specimen provided. It appears to be a variably and finely porphyritic finer grained compositional equivalent of the coarse material - whether it is a clot, a chilled phase, or a separate material cannot be answered with this specimen.

The sulfide band down the center of the specimen controls an envelope of chlorite-epidote-calcite and appreciable quartz. Its sulfide mineralogy is described next. The alteration is unusual in that two chlorites are involved; clinochlore replaces amphibole, and the chlorite mineral pennine replaces both amphibole and augite.

Polished Surface Examination

As mentioned above, the coarse and fine grained silicate portions of the specimen are divided by a band of

coarser sulfides and a veinlet (approx. 1/8" wide) which arcs off into the finer phase. The clot, or band, of coarse yellowish white sulfides nearest the narrow end of the specimen is composed of granular anhedral pyrite (FeS_2), with minor interstitial hematite (Fe_2O_3) (described more fully below) and shreds of chalcopyrite ($CuFeS_2$). The patch of distinctly brassy yellow sulfide just above the center of the specimen is composed of highly anhedral, silicate-interstitial chalcopyrite (free of any exsolution or replacement products) with sparse associated blades and plates of molybdenite (MoS_2). The upper portion of the 1/8" veinlet is pyrite with hematite and minor chalcopyrite. The portion of that same veinlet which arcs off to the lower left consists of predominant bladed hematite with some silicate-carbonate gangue and minor chalcopyrite.

The coarse silicate portion of the specimen (at right) carries trace disseminated ultrafine grained chalcopyrite in mafic mineral sites. That which megascopically appears to be an opaque mineral in the fine grained silicate portion is actually leucoxene, an alteration product (TiO_2) of mafic silicates. This area contains only very rare ultrafine disseminated chalcopyrite and pyrite. The microveinlets in this area contain hematite, again with trace chalcopyrite.

The specimen appears to be one of a mineralized quartz diorite(?), and shows both a sulfide and oxide event. The oxide event, which produced the bladed hematite noted above, is presumably late and possibly of supergene affinity. No secondary copper sulfides were noted, however, and marginal replacement of hypogene sulfides by supergene minerals was not found. Hematite's genesis is somewhat ambivalent - it might occur as either a hypogene or supergene phase.

I trust that this information will be useful to you. If I can be of further assistance please let me know. Please be advised that the above comments on opaque minerals are explicit and confident, but that nothing can be said regarding the possible presence of precious metals beyond the fact that they might occur in solution in chalcopyrite and/or pyrite, but that they do not form separate mineral phases in this specimen. The sulfide data

are firm, the petrographic data being limited by the combined effects of minimal sample material and obscuring alteration.

Sincerely yours,

John M. Guilbert

JMG/s

cc: R. T. O'Haire

For services rendered.....$15.00

December 16, 1965

Mr. John M. Guilbert
1031 South Carnegie Dr.
Tucson, Arizona, 85710

Dear Mr. Guilbert:

Thank you kindly for your mineralogical report on the thin section and polished surface specimen submitted to you by Mr. R. T. O'Haire.

My prime interest was to make sure that the "off-color" pyrite observed with the hand lense was not a nickel mineral. The pyrite might still be nickeliferous to some extent but not to the degree which it was hoped. Polishing the specimen no doubt removed the "odd tarnish" I observed with the hand lense.

Enclosed please find my check in the amount of fifteen ($15.00) dollars, your fee for the service.

Thanking you again, I remain,

Very truly yours,

R. E. Mieritz, P.E.

P.S. Received your second letter with the polished specimen.

Composite Drill Log

Hole No. 1

TYPE DRILL HOLE: Diamond

PROPERTY: Harqua DEPOSIT: _____ COORDINATES: N. _____ E. _____

BEARING: _____ ANGLE: -90° ELEV: _____ TOTAL DEPTH: 643 feet

DATE STARTED: _____ DATE COMPLETED: _____ DRILLED BY: Provan Mining.

HOLE DEPTH	LEVEL ELEV.	HOLE. REAM. CASING.	CORE PULLS	CORE REC. % (20 40 60 80)	ROCK TYPE	GEOLOGIC DESCRIPTION & REMARKS	ASSAYS % Cu.	ASSAYS %
		3"	10					Ag. Au. Mo.
			18			**ANDESITE**, green-gray, alt'd, fine grain. Qtz seams, 1/8", yel-tan limonite, calcite seams, mud 18-21'.		
			28			Thin seams red hematite @ 47 & below		
		BX	38			Specks sulphide @ 50 in red hem		
		WL	48			seams (py, cpy) also dissem'd.		
			58					
			68			Bands of diorite, 2 to 5 feet wide.		
			78					
			88			Andesite silicified in area, chloritic in others.		
100			98				Tr.	
			106					
			114			Sulphides (py, cpy) to 133', spks to peassize in hem veinlets, dissem'd.		
			122					
			130			No sulphides, 133 to 140', sulphides	Tr.	
			138			140 to 149, no sul. to 155. Diorite		
			146			seam 140 to 149, alt'd.		
			154			155' **DIORITE**, relatively fresh, qtz seams		
			162			with sulphides (py, cpy). Bands of		
			169			fine grained andesite throughout.		
			174			Red hematite seams with sulphides,		
			181			some boxwork. Good Fe staining.		
			189					
200			199			Qtz seams increasing in width, ¼".	.02	
			209					
			218			All core crushed, 209 to 230.		
			230			Mineralized veinlets approx. 2' apart to 240'. Approx. 1' apart below 240'	.05	
			240					
			250					
			260			No sulphides 252 to 259'.		
			270				.03	0.5
			280				.02	Tr.
			290			No qtz seams below 298'. Thin calcite seams below 298'. Sulphides in red (spec.) hematite seams. Also dissem. below 298'.	Tr.	
300			300					
			310					
			320					
			330					
			340					
			350					
			360			Qtz seams to 377 are barren.		
			370					
			380					
			385					
			395			388' **ANDESITE**, with thin calcite seams to 401. Gouge @ 401'.		
400								

Comp

1A

R.E.M.

Composite Drill Log

Hole No. 1

TYPE DRILL HOLE: Diamond

PROPERTY: Harqua DEPOSIT: _____ COORDINATES: N. _____ E. _____

BEARING: _____ ANGLE: -90° ELEV: _____ TOTAL DEPTH: 643 feet

DATE STARTED: _____ DATE COMPLETED: _____ DRILLED BY: Provan Mining.

HOLE DEPTH	LEVEL ELEV.	HOLE.—— REAM.– – CASING.===	CORE PULLS	CORE REC.% 20 40 60 80	ROCK TYPE	GEOLOGIC DESCRIPTION & REMARKS	ASSAYS % Cu.	ASSAYS %	Comp.
			403						
			410			409' DIORITE, as previously discribed. Thin qtz seams, hem seams, sulphide in both and dissem. Some qtz seams barren. Frequency of both type vein		Ag. Au. Mo.	
			420						
			430						
			440			lets or seams increasing.	Tr.	0.3	
		BX	450				.02	Tr.	1B
		WL	460			Sulphide mineralization increasing in strength.	.07		
			470						
			480						
			490				.04	0.2	
500			500				.05	Tr.	1C
			510			506' ANDESITE, chloritic, brecciated in appearance. Very few qtz and hem seams, little sulphide.			
			520						
			530			530' DIORITE, fine grained, thin seams green andesite, some hem seams.			
			540			544' ANDESITE, chloritic, as above.			
			550						
			560			554' DIORITE, fine to coarse grain. Some qtz and spec. hem seams, little to no sulphide. Sul. in hem only.			
			570						
			580						
			590			586' ANDESITE, altered, with some bands fresh, silicified diorite. Sul. in	.05	0.4	
600			600			spec. hem. seams and dissem.	.03	Tr.	1D
			610				.05		
			620			620' DIORITE, fine grain, seams green andesite, all silicified. Sulphide	.03	0.3	
			630			in hem seams and dissem'd. Some calcite veinlets.	.02	Tr.	1E
			640				.08		
			643				.05		

R.E.M.

Composite Drill Log

Hole No. 3

TYPE DRILL HOLE: Diamond

PROPERTY: Harqua DEPOSIT: COORDINATES: N. E.

BEARING: ANGLE: -90° ELEV: TOTAL DEPTH:

DATE STARTED: DATE COMPLETED: DRILLED BY: Provan Mining

HOLE DEPTH	LEVEL ELEV.	HOLE. REAM. CASING.	CORE PULLS	CORE REC. % 20 40 60 80	ROCK TYPE	GEOLOGIC DESCRIPTION & REMARKS	ASSAYS % Cu.	ASSAYS %	Comp
		3"	10			**ANDESITE & DIORITE**, a mixture, altered and bleached, white, brwn, grn, grey. Red, tan and yel FeO_x seams.		Ag. Au. Mo.	
			15						
			25				.03	0.8	
			35			37' **DIORITE**, fine grained, with one to two foot bands of andesite. Many thin qtz seams, many red to tan hem seams, a few calcite veinlets. Reddish cast throughout.	.03	.005	3A
		BX	45						
		WL	55				.02		
			65				Tr.		
			75						
			85			81' **ANDESITE**, fine grained, grn. Much red, tan, yel FeO_x to 85'. Breccia appearance to 85'. Red FeO_x 99-112'.	Tr.	0.4	
			95				Tr.	Tr.	3B
100			105			112' **DIORITE**, fresh, Red FeO_x cast, red hem seams, specks sulphide at 127'. Andesite 121-26' Diorite altered 131-45' Andesitic 145-52, light grey, tan Andesitic 154-55, chloritic.	Tr.		
			116						
			126				.02		
			136					0.4	
			147½				.04	Tr.	3C
			156½				.12		
			162						
			168½						
			182			Sulphide in hem veinlets and dissem. 175-96; coarse and fine grain diorite. Few hem veinlets 196 to 217'.			
			191½				.03	0.7	
200			201					.005	3D
			212				.03		
			218			217' **ANDESITE**, chloritic, brown calcite veinlets, few hem seams.			
			225			228' **DIORITE**, heavy hornblende			
			233			236' **ANDESITE**, greenish grading to grey. Sparse hem seams.			
			243½						
			252½						
			263			261' **DIORITE**, somewhat altered, a few qtz veinlets, a few hem seams, water course(?) at 272, lost water.			
			267½						
300									

R.E.M.