6000 0018 (2520)

JARBIDGE PROJECT

FINAL REPORT

Kathy Hawley

January 29, 1982

JARBIDGE PROJECT
FINAL REPORT

INTRODUCTION

Jarbidge is an old mining town and district located 100 miles NNE of Elko, Nevada, in Elko County, 10 miles south of the Idaho border. Gold was discovered at Jarbidge in 1909 and mining began shortly thereafter. The majority of production occurred between 1917 and 1932 when Elkoro Mines was producing, primarily from the Long Hike Mine. Total production from the district was 900,000 tons of ore containing 433,880 oz Au, and 1,279,773 oz Ag valued at $10,110,348.00.

Freeport Exploration Company leased the 38 patented claims owned by Envirotech in August of 1979.

LAND STATUS

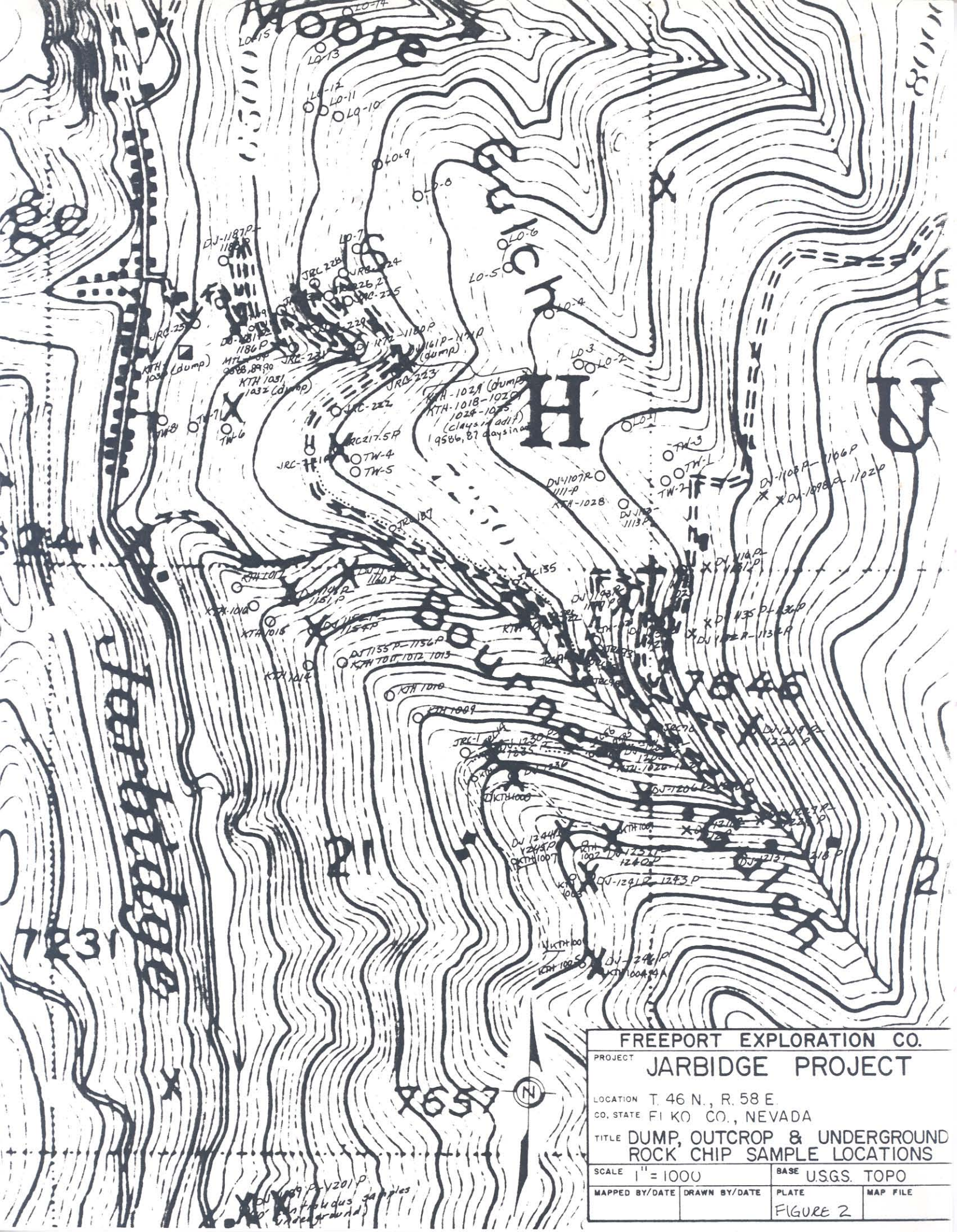
Envirotech owns the 38 patented claims (Fig. 1) which cover the Long Hike and North Star Mines and part of the Starlight. Adjacent claims to the east are held by Bourne Mining Co., Moab, Utah, (principals are Clayton Stocks and Hank Ruggerie).

GEOCHEMICAL SAMPLING

During 1980 geochemical sampling on the patented claims included surface and underground rock chip sampling and grab sampling of the various lithologies on the dumps. All surface sample locations are located on Figure 2.

Surface outcrop rock chip samples were taken wherever possible to determine the extent of mineralization at the surface. Outcrops are very


FLAXIE
MAIN
FAULT
SPRUCE
YELLOW JACKET
SPERANZA
YELLOW
STANDARD
MOTHER LODE
PARK
LEONARD
GOLD TOP
GRAY ROCK
MORNING GLORY
LONG HIKE 3
LONG HIKE FR
LONG HIKE 4
LONG HIKE 2
MIDNIGHT
NORTH FORK
ALICE
MIDNIGHT M
COCKWIGHT
MAG
MISS
EMORY
TREASURY
RELIANCE
BOURNE
NORTH STAR
NORTH STAR 3
MINNIE B
MINNIE 8
ALPHA
PAWNEE
BUSTER 3
O.K. 2
WHITE
CLIPPER
GREY ROCK
ELMORE
LAUREL
RIVERSIDE
MINNIE A
FRACTION
CABIN
LOG CHAIN
LOG CHAIN 2
SOLO CABIN
GULCH
JARBIDGE
TOWNSITE
JARBIDGE RIVER
CURVATURE SCALED 2 CHAINS


FREEPORT EXPLORATION CO.
PROJECT
JARBIDGE PROJECT
LOCATION T. 46 N., R. 58 E.
CO. STATE ELKO CO., NEVADA
TITLE DUMP, OUTCROP & UNDERGROUND ROCK CHIP SAMPLE LOCATIONS
SCALE 1" = 1000
BASE U.S.G.S. TOPO
MAPPED BY/DATE
DRAWN BY/DATE
PLATE
FIGURE 2
MAP FILE
N

limited (Fig. 2, Appendix A). The only samples that carried precious metal values were from outcropping veins.

Rock chip and soil samples were taken along the road cuts in an effort to get below surface soil and into C horizon or shallow outcrops. Values ran up to 41 ppm Au and 7 ppm Ag. Most of the 232 samples taken, however, carried no gold and only trace silver. Most anomalous samples were in strongly silicified zones along structures. (Appendix 1b., Fig. 2)

Dumps thoughout the district were sampled systematically to give an idea of wallrock grades in the mined areas. The dumps were consistantly anomalous with values up to 12.99 ppm Au and 115 ppm Ag. Indications of wallrock mineralization were encouraging. (Appendix 1c., Fig. 2)

The Mill Tunnel Level was opened and sampled in detail to determine alteration variation with depth, and to look for leakage from the proposed underlying ore body. Sample values were disappointing, though the presence of small quartz flooded breccia veins was encouraging (Fig. 3, Appendix 1d). Strong argillic alteration was wide spread, and did not vary significantly in the tunnel, but old underground mapping did suggest some changes beyond the accessible section of the workings.

GEOLOGIC MAPPING AND AIR PHOTO INTERPRETATION

The Jarbidge District is located along the southern edge of the Snake River Plain and in the northern edge of the Basin and Range. PreCambrian(?) and Paleozoic rocks were intruded by Cretaceous quartz monzonite and uplifted significantly to outcrop east of the crest of the Jarbidge Range and west toward the Mountain City highway. Tertiary rhyolites and younger basalts overlap the sedimentary assemblage from the north. These Tertiary rhyolites are the rocks which outcrop in the Jarbidge District. A sliver of

-1 clay fault gouge - kaoline, 83, + py
-2 silic breccia, hm/lm ± jar
-3
-4 chalcedonic vein
-5 fsp → hm/lm clays
-6 pink/wht ger w/ hairline 83, earthy lm vein 1" thick
-7 wht clay alt ger (small 87 eye) well fractured
-8 partly to mostly silic gdms, fsp → wht clay
-9 weak clay-sericite alt rhyolite porph, minor sulfides
-10 white, creamy, pinkish rhyolite w/ silicified veins w/
-11 coarse breccia w/ lm rich matrix - very rusty rock
-12 silic breccia w/ lm rich matrix - very related earthy lm
-13 83-clay veins w/ py; fsp → clay ± 83 sericite
Kspar in gdms multiple ages w/ goethite alt
-17 lm/hm clay w/ silicified breccia
-19 creamy hard to silic (maybe 87-ser) alt w/ 3 & 5 87 hairline fractures
-20 well silic w/ py along fractures locally may occ @ surface
-22 vein of goethite - jarosite probably
-24 jarosite - lm clays precip on adit surface (RAK .17 ppm Au)
-25 fragmented rhy porph alt by f.g. 87 veins ± chalcedony, later
-27 argillic ± sericite alt or rhyolite; fsp → clay mix
veins carry 87-py-malc-aspy, w/ some strong clay alt of rhy
2 sets fractures, minor lm.
-28 white to cream to blue ger - argillic alt
some sulfide bearing 87 vein zones
-29 mottled purple-pink to white ger - fsp alt is zoned
discontinuous 87 ribbon veinlets
-30 purple/pink to white mottled ger
83 ribbon microveinlets w/ clay alt away from them
-34 (31-32) black sooty vein material present here
white may be alt of the purple adjacent to veins
hm/lm vein, partly to mostly silic, some lm clay adjacent to fracture
-36 BLACK VEIN - 83 + f.g. sulfides ?
-37 hm + lm → jar veins up to 1" thick - Fe ox clay rimmed by grey 83
-38 red hm clay along fracture which shows brecciation along edges
-40 silic hm/lm vein - vein pinches and swells
-42 earthy lm ± goethite vein, some vuggy 87 ribbon veinlets
some lm into wall rock away from vein
CAVE / FAULT
-44 white ger - no ribbon veinlets of 87
-45 zone of many hm/lm ± SiO_2 fractures 6" to 1' apart
very rusty rock
-46 white clay alt ger, fsp alt wht to grey, generally rimmed by $CaCO_3$
-47 SiO_2 vein w/ pink fsp + goethite coating on fractures
-49 med hard white clay alt rhyolite
-50 lm along fractures
some veins w/ lt apple green clay
white and mottled pink/white rhyolite
lm veinlets + fracture coating
-52 silic breccia vein - zoned w/ color
grey, tan, purple, rust
-53 mottled white/grey ger, fairly to quite
hard, smokey 87 w/ 87 ribbon veinlets
-54 mottled pink/purple - wht
rhyolite, smokey 87
87 ribbon veinlets

complex vein systems 87 + goethite (400)
fsp → epidote ? or chl - sericite 15
+ jarosite
very silic gouge - vein w/ 1-4% py 18
+ grey sulfide
greenish grey alt rhyolite porph 21
w/ multi-phase hm veins
argillic alt rhyolite w/ jarosite 23
± goethite + clay vein, also
a hard green vein (alunite?)
strongly fractured zone w/ lm 26
filled fractures up to ½" wide
3 veinlet directions, some ep + chlorite
marked in charcoal on wall (200)

SiO_2 rich veins and SiO_2
flooded zone w/ py, asp, sph, 33
jarosite, hm, goethite
pink/wht mottled rhyolite 35
w/ ribbon veinlets ½" apart

wallrock between veins - purple/wht, purple
appears to be related to introduction of 39
something (probably) by the veins, rather
than a remnant.
clay altered rhyolite, lots of hairline
veinlets, some silic veins w/ adjacent 41
silicification
white to creamy ger w/ ribbon (200)
hairline 87 veinlets 43

white mod soft to med hard clay
alt rhyolite; core of fsp → clay
edge → ser. 48

(100)

white to pinkish tan 51
ger w/ some hairline
SiO_2 veinlets

JARBIDGE PROJECT
MILL TUNNEL LEVEL
Sample location and description

1" = 50'

1980 - 81 KTH

FIGURE 3

Cambrian(?) quartzite occurs along a major fault and quartz monzonite was intersected in some drill holes though it does not crop out on the surface.

Geologic mapping was completed with the help of old maps, color air photos and ground checking. Attemps to identify and map the various flows separated on the old maps were only moderately successful, so flows were lumped into older and younger rhyolites. The older rhyolites are the hosts for mineralization at Jarbidge and are quartz porphyry rhyolites which are strongly altered to clay-sericite assemblages. The younger rhyolites are not affected by the alteration related to the mineralization.

The old geologic maps (Fig. 4,5) show very complex structure and were certainly drawn with the aide of much underground information from areas now inaccessible. No explanation of the differences between the various mapped flows was discovered among the old maps.

Geologic mapping utilized color and black and white air photos which helped in the definition of lineaments as shown on Fig. 6. The major fabric consists of two sets of faults, northeast and northwest striking. Ground checking identified additional faults and allowed some distinguishing of "veins" which contained adularia in addition to the silicified breccia found cropping out locally along the faults. Figure 7 shows faults which were ground checked as well as those inferred from air photo work. Veins are located primarily on the basis of underground information reported in the literature.

Alteration in the Jarbidge District is strong and extensive. Thin section work shows strong argillic alteration at the surface and in the accessible underground workings over the area of the old mines. The rhyolites were devitrified and altered to a clay (montmorillonite or

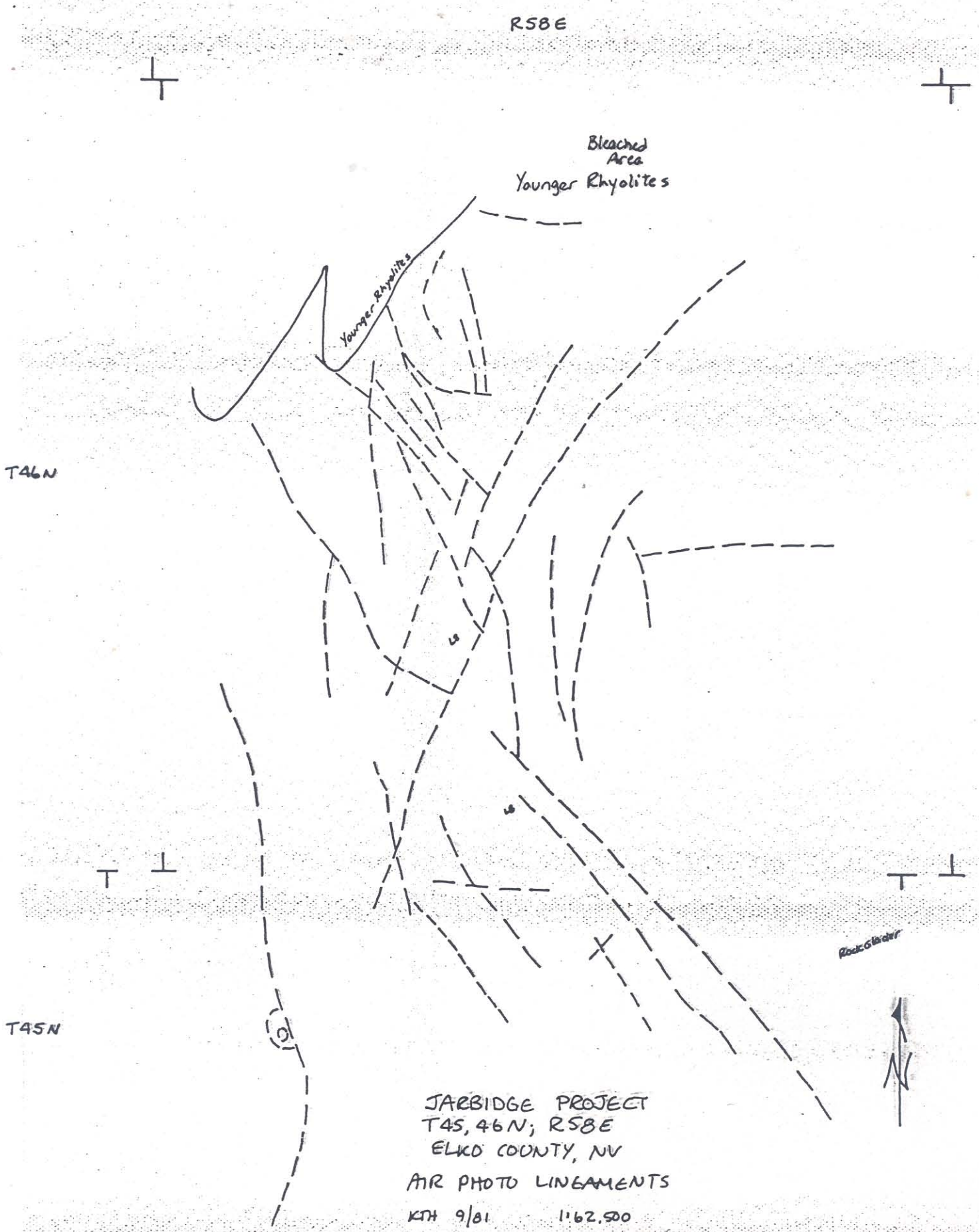

R58E
Bleached Area
Younger Rhyolites
Younger Rhyolites
T46N
T45N
Rock Glider
N
JARBIDGE PROJECT
T45, 46N; R58E
ELKO COUNTY, NV
AIR PHOTO LINEAMENTS
KTH 9/81 1:62,500

FIGURE 6


Buck Creek
Cow Creek
Corral Creek
Jarbidge
Deer Creek
Mahoney Ranger Sta
Jack Creek
Moore Gulch
Jarbidge
TRAIL
Bounce Gulch
Bear Creek
Jarbidge
H U M B O L D T
Jarbidge
Jack Creek Crater
Sawmill Ridge
Telephone Canyon
GOLD CREEK
Bonanza Gulch
SUCCESS MINE
ALTITUDE MINE
Jarbidge Pk
BLUSTER MINE
Deer Mtn
Bear Creek Meadows
REX MINE
Jumbo Pk
Gorge
Bear Creek Summit
Snowslide Gulch
Square Top
Danger Pt
N A T I O N A L
Matterhorn
Coon Pk
Pine Creek
East Fork
Dry Gulch
Coon Creek Summit
Cougar Pk
Perkins Cabin
Sawmill Cr
Fox Creek Pk
West Fk
Emerald L
NORMAN MINES
COPPER MOUNTAINS
COPPER

kaolinite) - sericite assemblage. In most samples the groundmass was a fine grained quartz-feldspar aggregate in which the feldspar had been replaced by even finer grained clays. These rhyolites have been cut locally by quartz flooded zones where brecciated rhyolite porphyry has been almost totally replaced by silica. Very fine grained sulfides are locally present in these zones. Hematite, limonite and jarosite are all present locally throughout the area. East of the southern quartzite outcrop and in the Pavlak Mine area typical greenish propylitically altered rhyolites are present.

The major faults show two types of alteration. Reefs of strongly iron stained, mostly silicified, brecciated rhyolite porphyry crop out locally through the area. These are about the only outcrops on the Envirotech claim block. Underground, some faults contain thick zones of pure kaolinite clay with remnant quartz eyes. The best example of this alteration type is at the end of the accessible part of the Mill Tunnel level. In the 6800 level portal and in the Alpha, thin seams of kaolinite along fractures are white to dark red, red-orange, light yellow and yellow brown. Adularia and adularia replaced by quartz are visible locally on the ground but the major indication of the presence of this assemblage in veins comes from the dumps. The veins mined in the past cropped out poorly or not at all which helps explain why the Jarbidge District was discovered so much later than other major producers in the state.

Production at Jarbidge came from rich pockets along the northwest striking quartz-adularia veins. The northeast striking faults which carry the strong clay zones did not contain ore at the levels mined, and offset the mineralized veins. These northwest trending structures are hydrother-

mally altered and are younger than the previous mineralizing episode. This more recent hydrothermal event suggested that a deeper target not directly related to the previously mined veins might exist.

Alteration, structure, dump values and past mineral activity all gave encouragement to drill.

DRILLING

Six drill holes were located and drilled in 1981 to test for a zone of extensive silicification containing a bulk tonnage of gold and silver mineralization. Holes (Fig. 7, Appendix 2) were located to test both northeast and northwest trending structures which because of different alteration along them indicated the possibility of two periods of mineralization. Holes J1 and J5 encountered strong silicification and quartz flooding type veinlets with fine grained pyrite ± other sulfides. This was the alteration we were predicting but it was barren. Holes J2 and J3 were drilled though argillically altered rhyolite porphyry into the buried quartz monzonite intrusive and did not encounter any pervasive silicification. Hole J4 was drilled through rhyolite prophyry, through the sliver of Cambrian quartzite and across the Flaxie fault into the buried intrusive. Hole J6 tested a zone of strong argillic alteration and crossed two major faults. The hole was stopped prior to the projected silicified zone. Assays are listed in Appendix 2. The only significant values encountered in the drilling were where Hole J2 crossed a small vein between 640' and 675'. This vein carried .066 oz/t Au and .633 oz/t Ag over 35' (fire assays).

REFERENCES

Beeson, J.J., (1936) Report on the Property or the Elkoro Mines Operating Company at Jarbidge, Nevada, Envirotech Files, 20 pg.

Coats, R.R., R.C. Green and L.D. Cress (1977) Mineral Resources of the Jarbidge Wilderness and Adjacent Areas, Elko County, Nevada, USGS Bull 1439, 79 pg.

Schrader, F.C., (1910) Field Notes on the Jarbidge Mining District, USGS Files, Denver; 48 pg, 55pg.

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APPENDIX IA (2520) 6000 0018

KTH, LO, TW Surface Rock Chip Samples

1/1

SAMPLE #	Au(ppm)	Ag(ppm)
KTH-1000 -JR	-.05	0.5
1001	.93	38.5
1002	-.05	0.6
1003	-.05	0.3
1004	-.05	-0.1
1004-A	171.43	107.0
1005	.69	2.7
1006	.05	0.1
1007	-.05	-0.1
1008	-.05	1.6
1009	-.05	0.3
KTH-1010 -JR	-.05	0.3
KTH-1011 -JR	41.83	50.0
1012	.31	9.7
1013	.14	0.7
1014	.10	0.3
1015	-.05	-0.1
1016	-.05	-0.1
1017	-.05	-0.1
1021	-.05	0.4
KTH-1022 -JR	-.05	0.3

SAMPLE #	Au(ppm)	Ag(ppm)
LO-1 -J	-.05	0.1
2	-.05	-0.1
3	-.05	-0.1
4	-.05	-0.1
5	-.05	0.1
6	-.05	-0.1
7	-.05	-0.1
8	-.05	0.1
9	-.05	-0.1
10	-.05	-0.1
11	-.05	-0.1
12	-.05	-0.1
13	-.05	-0.1
14	-.05	-0.1
LO-15 -J	-.05	-0.1

SAMPLE #	Au(ppm)	Ag(ppm)
TW-1 -J	-.05	-0.1
2	-.05	-0.1
3	-.05	-0.1
4	-.05	0.2
5	-.05	0.4
6	-.05	-0.1
8	-.05	-0.1
9	-.05	-0.1
TW-10 -J	-.05	-0.1

JRC- Jarbidge Road Cut 1/80

MONITOR GEOCHEMICAL LABORATORY

6000 0018 (2520)

744 South 5th Street • P. O. Box 1901 • Elko, Nevada 89801

Phone (702) 738-3236

APPENDIX 1B

Certificate of Analysis

Date: October 10, 1980

Invoice #: 3596

Client: Freeport Exploration Company
P.O. Box 1911
Reno, Nv. 89505

Client Order No.:

Date Received: 9/5/80

Analysis: Au, Ag, Mo

Analytical Methods: Au (acid leach) Ag, Mo-Atomic Absorption A.A. Roasted Cy Leach

cc: Kathy Hawley

SAMPLE #	roasted cy leach Au(ppm)	acid leach Au(ppm)	Ag(ppm)	Mo(ppm)
JRC-1	-.05		0.1	
2	-.05		0.1	
3	-.05		0.2	
4	-.05		0.3	
5	-.05		0.4	
6	-.05		0.7	
7	-.05		0.4	
8	-.05		0.7	
9	-.05		0.5	
10	-.05		0.4	
11	-.05		0.6	
12	-.05		0.4	
13	-.05		0.4	
14-R		-.05	0.6	6
15	.41		1.5	
16	.27		1.0	
17	-.05		0.7	
18	-.05		0.6	
JRC-19	-.05		0.3	

* Greater than 1000 ppm reported as percent (Assay)

** Break in numerical sequence

Road Cut
2/80

Freeport Expl. Co.
Kathy Hawley
10/10/80
Inv. # 3596

MONITOR GEOCHEMICAL LABORATORY

744 South 5th Street • P. O. Box 1901 • Elko, Nevada 89801
Phone (702) 738-3236

SAMPLE #	roasted cy leach Au(ppm)	acid leach Au(ppm)	Ag(ppm)	Mo(ppm)
JRC-20	-.05		0.3	
21	-.05		1.2	
22	-.05		0.2	
23	-.05		0.4	
24	-.05		1.0	
25	-.05		0.4	
26	-.05		0.3	
27	-.05		0.3	
28	-.05		0.3	
29	-.05		0.3	
30	-.05		0.6	
31	-.05		0.4	
32	-.05		0.3	
33	-.05		0.4	
34	-.05		0.2	
35	-.05		0.3	
36	-.05		0.2	
37	-.05		0.7	
38	-.05		0.4	
39	-.05		0.4	
40	-.05		0.5	
41	-.05		0.5	
42	-.05		0.3	
43	-.05		0.3	
44	.27		1.8	
45-R		-.05	0.3	7
46	-.05		0.5	
47-R		-.05	0.4	3
48-R		-.05	0.3	3
49-R		-.05	0.1	4
JRC-50-R		-.05	0.6	3

* Greater than 1000 ppm reported as percent (Assay)
** Break in numerical sequence

Road Cut
3/10

Freeport Expl. Co.
Kathy Hawley
10/10/80
In.. # 3596

MONITOR GEOCHEMICAL LABORATORY

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Phone (702) 738-3236

SAMPLE #	roasted cy leach Au(ppm)	acid leach Au(ppm)	Ag(ppm)	Mo(ppm)
JRC-51	-.05		0.4	
52-R		-.05	0.2	3
53-R		-.05	0.1	4
54	-.05		0.4	
55	-.05		0.2	
56	-.05		0.3	
57	-.05		0.5	
58-R		-.05	0.2	3
59-R		-.05	0.3	4
60-R		-.05	0.2	3
61-R		-.05	0.2	3
62-R		-.05	0.2	4
63-R		-.05	0.2	2
64-R		-.05	0.2	3
65	-.05		0.4	
66-R		-.05	0.2	3
67-R		-.05	0.3	3
68-R		-.05	0.5	5
69-R		-.05	0.4	5
70-R		-.05	0.2	6
71-R		-.05	0.2	4
72-R		-.05	-0.1	4
73-R		-.05	0.1	4
74-R		-.05	0.2	4
75-R		-.05	0.2	4
76-R		-.05	0.2	3
77-R		-.05	0.1	4
78-R		-.05	0.1	5
79-R		-.05	0.3	5
80-R		-.05	0.1	5
JRC-81-R		-.05	0.7	6

* Greater than 1000 ppm reported as percent (Assay)
** Break in numerical sequence

Road cut
4/10

Freeport Expl. Co.
Kathy Hawley
10/10/80
In. . # 3596

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Phone (702) 738-3236

SAMPLE #	roasted cy leach Au(ppm)	acid leach Au(ppm)	Ag(ppm)	Mo(ppm)
JRC-82-R		-.05	0.2	5
83-R		-.05	0.2	4
84-R		-.05	0.2	4
85-R		-.05	0.3	4
86-R		-.05	0.5	4
87-R		-.05	0.4	3
88	-.05		0.3	
89	-.05		0.3	
90	-.05		0.3	
91-R		-.05	0.2	4
92-R		-.05	0.1	4
93-R		-.05	0.2	3
94-R		-.05	-0.1	4
95-R		-.05	0.1	6
96-R		-.05	0.2	4
97-R		-.05	0.1	4
98-R		-.05	0.6	4
99	-.05		0.2	
100	-.05		0.3	
101-R		-.05	0.3	3
102-R		-.05	0.7	2
103-R		-.05	0.1	3
104	-.05		0.2	
105	-.05		0.4	
106	-.05		0.2	
107	-.05		0.2	
108-R		.05	0.2	5
109-R		-.05	-0.1	3
110-R		-.05	0.3	3
111	-.05		0.2	
JRC-112-R		-.05	0.3	3

* Greater than 1000 ppm reported as percent (Assay)
** Break in numerical sequence

Road Cut
5/10

Freeport Expl. Co.
Kathy Hawley
10/10/80
I. . # 3596

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Phone (702) 738-3236

SAMPLE #	roasted cy leach Au(ppm)	acid leach Au(ppm)	Ag(ppm)	Mo(ppm)
JRC-113	-.05		0.2	
114	-.05		0.3	
115	-.05		0.3	
116-R		-.05	0.1	2
117	-.05		0.2	
118	-.05		0.6	
119	-.05		0.5	
120	-.05		0.7	
121	-.05		0.6	
122	-.05		0.3	
123	-.05		0.1	
124	-.05		0.3	
125	-.05		0.5	
126-R		-.05	0.4	3
127-R		-.05	0.9	3
128	-.05		0.2	
129	-.05		0.6	
130	.10		0.7	
131	-.05		0.7	
132	-.05		0.3	
133	-.05		0.5	
134	-.05		0.4	
135	-.05		0.2	
136	-.05		0.3	
137	-.05		0.2	
138	-.05		0.5	
139	-.05		0.3	
140	-.05		0.2	
141-PR		-.05	0.5	3
142	-.05		0.3	
JRC-143	.10		0.2	

* Greater than 1000 ppm reported as percent (Assay)
** Break in numerical sequence

Road Cut
6/10

Freeport Expl. Co.
Kathy Hawley
10/10/80

Inv. # 3596

MONITOR GEOCHEMICAL LABORATORY

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Phone (702) 738-3236

SAMPLE #	roasted cy leach Au(ppm)	acid leach Au(ppm)	Ag(ppm)	Mo(ppm)
JRC-144	-.05		0.2	
145	-.05		0.2	
146	-.05		0.6	
147	.14		0.5	
148	-.05		0.5	
149	-.05		1.2	

by Joseph D. Kock
Analyst

* Greater than 1000 ppm reported as percent (Assay)
** Break in numerical sequence

6000 0018 (2520) Road Cut 7/10

MONITOR GEOCHEMICAL LABORATORY

744 South 5th Street • P. O. Box 1901 • Elko, Nevada 89801

Phone (702) 738-3236

Certificate of Analysis

Date: October 15, 1980

Invoice #: 3629 $485.40

Client: Freeport Exploration Company
P.O. Box 1911
Reno, Nv. 89505

Client Order No.:

Date Received: 9/5/80

Analysis: Au, Ag, Mo

Analytical Methods: Au (acid leach) Ag, Mo-Atomic Absorption Au-by A.A. Roasted Cy Leach

cc: Kathy Hawley

SAMPLE #	Au(ppm)	Au(ppm)	Ag(ppm)	Mo(ppm)
JRC-150	.10		0.8	
151-R		-.05	0.5	7
152-R		-.05	0.5	5
153-R		-.05	7.0	6
154-R		-.05	0.3	7
155-R		-.05	0.3	5
156	.05		0.3	
157	.10		0.5	
158	-.05		0.6	
159-R		-.05	0.4	6
160-R		-.05	0.4	7
161-R		-.05	0.2	4
162-R		-.05	0.2	5
163-R		-.05	0.1	4
164-R		-.05	0.3	5
165-R		-.05	0.7	12
166-R		-.05	0.1	4
167-R		-.05	0.2	5
JRC-168-R		-.05	0.1	5

* Greater than 1000 ppm reported as percent (Assay)

** Break in numerical sequence

Freeport Expl. Co.
Kathy Hawley
10/15/80
In# # 3629

MONITOR GEOCHEMICAL LABORATORY

744 South 5th Street • P. O. Box 1901 • Elko, Nevada 89801
Phone (702) 738-3236

Road cut
8/10

SAMPLE #	roasted cy leach Au(ppm)	acid leach Au(ppm)	Ag(ppm)	Mo(ppm)
JRC-169-R		-.05	0.1	4
170-R		-.05	-0.1	3
171-R		-.05	0.2	4
172-R		-.05	0.4	5
173-R		-.05	0.6	4
174-R		-.05	0.9	4
175-R		-.05	0.5	4
176-R		-.05	0.4	5
177-R		-.05	0.6	5
178-R		-.05	0.5	4
179-R		-.05	0.8	3
180-R		-.05	0.3	5
181-R		-.05	0.4	4
182-R		-.05	0.3	4
183-R		-.05	0.2	4
184-R		-.05	0.2	4
185-R		-.05	0.2	5
186	-.05		0.6	
187-R		-.05	0.4	16
188	.05		0.6	
189	-.05		0.9	
190	-.05		0.3	
191-R		-.05	0.6	4
192-R		-.05	0.6	5
193-R		-.05	0.6	4
194-R		-.05	1.0	4
195-R		-.05	0.8	4
196-R Dupl.		-.05	0.5	4
197-R		-.05	0.4	2
**198-R		-.05	1.0	4
JRC-196-R Dupl.		-.05	0.3	4

* Greater than 1000 ppm reported as percent (Assay)
** Break in numerical sequence

Road cut
9/10

Freeport Expl. Co.
Kathy Hawley
10/15/80

Inv. # 3629

MONITOR GEOCHEMICAL LABORATORY

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Phone (702) 738-3236

SAMPLE #	Au(ppm)	Au(ppm)	Ag(ppm)	Mo(ppm)
JRC-199-R		-.05	0.2	6
200-R		-.05	0.3	4
201-R		-.05	1.1	9
202-R		-.05	0.3	5
203-R		-.05	0.7	5
204-R		-.05	0.2	2
205-R		-.05	0.7	3
206-R		-.05	1.3	8
207-R		-.05	0.3	3
208	-.05		0.5	
209	-.05		0.6	
210-R		-.05	0.6	5
211-R		-.05	0.4	5
212-R		-.05	0.6	7
213-R		-.05	1.3	6
214-R		-.05	1.0	5
215-R		-.05	1.4	7
216-R		-.05	0.1	4
217-P		-.05	0.1	7
217.5-P		-.05	0.3	8
218	-.05		0.2	
219	-.05		0.1	
220	-.05		0.2	
JRC-221	-.05		0.1	

by Joseph D Koch
Analyst

* Greater than 1000 ppm reported as percent (Assay)
** Break in numerical sequence

60000018 (2520) Road Cut 10/10

MONITOR GEOCHEMICAL LABORATORY

744 South 5th Street • P. O. Box 1901 • Elko, Nevada 89801

Phone (702) 738-3236

Certificate of Analysis

Date: November 28, 1980

Invoice #: 3860

Client: Freeport Exploration Company
P. O. Box 1911
Reno, Nv. 89505

Client Order No.:

Date Received: 11/18/80

Analysis: Au, Ag

Analytical Methods: Au (acid leach) Ag-Atomic Absorption

cc: Kathy Hawley

SAMPLE #	Au(ppm)	Ag(ppm)
JRC-222 -R	-.05	0.1
223	.21	1.3
224	-.05	0.1
225	-.05	-0.1
226	-.05	0.1
227	-.05	-0.1
228	-.05	-0.1
229	-.05	-0.1
230	-.05	-0.1
231	-.05	-0.1
JRC-232 -R	-.05	-0.1

by Joseph D. Koch
Analyst

* Greater than 1000 ppm reported as percent (Assay)

** Break in numerical sequence

DJ- -J DUMP SAMPLES 1/2 APPENDIX IC

SAMPLE #	Au(ppm)	Ag(ppm)	Mo(ppm)
DJ-1098P-J	-.05	0.3	
1099P-J	.05	0.3	5
1100P-J	.10	0.3	
1101P-J	1.65	1.4	
1102P-J	.05	0.3	
1103P-J	4.11	3.6	
1104P-J	2.95	2.8	3
1105P-J	4.97	4.8	
1106P-J	.05	0.1	
1107P-J	12.99	40.0	
1108P-J	.05	0.3	4
1109P-J	-.05	0.1	
1110P-J	-.05	-0.1	
1111P-J	-.05	-0.1	
1112P-J	-.05	0.4	3
1113P-J	-.05	0.1	
1114P-J	.05	0.2	
1115P-J	-.05	0.2	
DJ-1116P-J	-.05	0.2	2
SAMPLE #	Au(ppm)	Ag(ppm)	Mo(ppm)
DJ-1117P-J	4.80	4.6	2
1118P-J	.27	0.5	6
1119P-J	.79	5.1	11
1120P-J	1.12	5.0	11
1121P-J	.62	6.6	4
1122P-J	1.27	4.5	
1123P-J	.79	3.8	
**1124P-J	.69	1.5	
1126P-J	-.05	1.0	
1127P-J	1.89	6.1	6
1128P-J	-.05	0.2	
1129P-J	1.47	4.0	
1130P-J	1.41	42.0	
1131P-J	-.05	0.7	
1132P-J	1.61	4.6	
1133P-J	.10	1.5	6
1134P-J	2.40	13.9	
1135P-J	4.25	13.0	
DJ-1136P-J	5.69	25.5	6

SAMPLE #	Au(ppm)	Ag(ppm)	Mo(ppm)
DJ-1137P-J	.14	0.5	
1138P-J	.34	1.1	9
1139P-J	.69	48.0	
1140P-J	.93	21.8	
1141P-J	-.05	1.2	
1142P-J	-.05	0.5	
1143P-J	2.02	54.0	13
1144P-J	1.71	36.0	
1145P-J	.34	10.8	
1146P-J	.17	1.8	
1147P-J	1.54	15.2	
1148P-J	-.05	0.6	
1149P-J	-.05	0.5	5
1150P-J	-.05	0.3	
1151P-J	-.05	0.2	
1152P-J	2.78	15.8	
1153P-J	3.02	9.2	
1154P-J	.38	3.1	5
1155P-J	4.73	13.9	
1156P-J	.51	2.2	
1157P-J	-.05	0.9	5
1158P-J	-.05	1.1	9
1159P-J	-.05	0.4	
1160P-J	-.05	0.5	
1161P-J	.27	2.9	9
1162P-J	.10	0.7	
1163P-J	.41	4.7	7
1164P-J	2.23	17.9	6
1165P-J	.62	16.6	8
1166P-J	.51	4.1	6
DJ-1167P-J	.31	3.0	
DJ-1168P-J	3.09	21.9	
1169P-J	2.88	15.1	
1170P-J	.24	5.5	
1171P-J	.10	2.1	
1172P-J	2.33	25.1	
1173P-J	.55	8.1	7
1174P-J	1.82	16.3	9
1175P-J	.05	12.8	6

DJ- -J DUMP SAMPLES 2/2

SAMPLE #	Au(ppm)	Ag(ppm)	Mo(ppm)
1176P-J	.14	3.0	
1177P-J	1.71	12.6	
1178P-J	.41	6.1	
1179P-J	.55	5.1	
1180P-J	.96	50.0	8
1181P-J	.65	30.5	
1182P-J	.69	5.1	
1183P-J	.58	3.0	
1184P-J	2.19	46.0	7
1185P-J	1.30	12.0	
1186P-J	-.05	0.9	
1187P-J	-.05	0.1	6
1188P-J	-.05	0.3	
1189P-JPM	4.77	42.0	7
1190P-JPM	-.05	0.4	6
1191P-JPM	-.05	0.2	6
1192P-JPM	-.05	0.3	7
1193P-JPM	-.05	0.2	5
1194P-JPM	-.05	0.1	5
1195P-JPM	-.05	0.1	5
1196P-JPM	-.05	0.2	4
1197P-JPM	-.05	4.6	8
DJ-1198P-JPM	-.05	6.0	9
DJ-1199P-JPM	-.05	0.4	8
1200P-JPM	-.05	0.3	7
1201P-JPM	-.05	0.2	7
1202P-JPM	.14	115.0	
1203P-JPM	-.05	1.5	7
1204P-JPM	-.05	15.5	
1205P-JPM	.14	2.6	
1206P-JPM	.34	55.0	
1207P-JPM	.24	43.5	
1208P-JPM	1.34	10.0	
1209P-JPM	3.84	20.4	10
1210P-JPM	.05	4.3	
1211P-JPM	-.05	13.6	
1212P-JPM	-.05	16.2	5

SAMPLE #	Au(ppm)	Ag(ppm)	Mo(ppm)
1213P-J	.27	103.0	
1214P-J	1.58	14.0	
1215P-J	2.26	17.1	12
1216P-J	.48	12.4	
DJ-1217P-J	.21	35.3	
DJ-1218P-J	4.73	32.2	
1219P-J	1.03	4.2	
1220P-J	-.05	1.2	18
1221P-J	.24	2.7	
1222P-J	-.05	1.0	
1223P-J	-.05	0.2	5
1224P-J	-.05	0.6	
1225P-J	.05	2.9	
1226P-J	-.05	2.7	
1227P-J	.05	1.2	11
1228P-J	.38	3.7	
1229P-J	.05	3.3	
1230P-J	.55	3.4	8
1231P-J	.62	3.6	
1232P-J	.99	2.1	
1233P-J	2.51	10.6	
1234P-J	.21	12.3	
1235P-J	.10	78.0	
DJ-1236P-J	4.46	19.1	

SAMPLE #	Au(ppm)	Ag(ppm)	Mo(ppm)
DJ-1237P-J	3.43	21.0	6
1238P-J	1.89	30.7	
1239P-J	.10	23.1	
1240P-J	-.05	0.6	
1241P-J	2.26	24.5	10
1242P-J	2.30	19.9	
1243P-J	-.05	0.8	
1244P-J	.93	23.7	
1245P-J	3.19	74.0	
DJ-1246P-J	-.05	0.7	

MILLTUNNEL LEVEL ROCK CHIP 1/2
6000 0018 (2520) APPENDIX 1D

MONITOR GEOCHEMICAL LABORATORY

744 South 5th Street • P. O. Box 1901 • Elko, Nevada 89801

Phone (702) 738-3236

Certificate of Analysis

Date: November 28, 1980

Invoice #: 3859

Client: Freeport Exploration Company
P. O. Box 1911
Reno, Nv. 89505

Client Order No.:

Date Received: 11/15/80

Analysis: Au, Ag

Analytical Methods: Au (acid leach) Ag-Atomic Absorption

cc: Kathy Hawley

SAMPLE #	Au(ppm)	Ag(ppm)	SAMPLE #	Au(ppm)	Ag(ppm)
MTL-1-A	-.05	0.1	MTL-20-A	-.05	0.2
2-A	-.05	0.1	21-A	-.05	-0.1
3-A	-.05	-0.1	22-A	-.05	-0.1
4-A	-.05	0.1	23-A	-.05	-0.1
5-A	-.05	-0.1	24-A	.17	0.6
6-A	-.05	-0.1	25-A	-.05	-0.1
7-A	-.05	-0.1	26-A	-.05	-0.1
8-A	-.05	-0.1	27-A	-.05	-0.1
9-A	-.05	-0.1	28-A	-.05	-0.1
10-A	-.05	-0.1	29-A	-.05	-0.1
11-A	-.05	0.1	30-A	-.05	-0.1
12-A	-.05	0.1	31-A	-.05	0.1
13-A	-.05	-0.1	32-A	-.05	-0.1
14-A	-.05	0.5	33-A	-.05	0.1
15-A	-.05	-0.1	34-A	-.05	-0.1
16-A	-.05	0.1	35-A	-.05	-0.1
17-A	-.05	0.2	36-A	-.05	1.0
18-A	-.05	0.1	37-A	-.05	0.1
MTL-19-A	-.05	0.1	MTL-38-A	-.05	0.1

* Greater than 1000 ppm reported as percent (Assay)

** Break in numerical sequence

eport Expl. Co.
Kathy Hawley
11/28/80

Inv. # 3859

MONITOR GEOCHEMICAL LABORATORY

MTL 2/2

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SAMPLE #	Au(ppm)	Ag(ppm)
MTL-39-A	-.05	-0.1
40-A	-.05	-0.1
41-A	-.05	-0.1
42-A	-.05	-0.1
43-A	-.05	-0.1
44-A	-.05	-0.1
45-A	-.05	-0.1
46-A	-.05	-0.1
47-A	-.05	0.2
48-A	-.05	-0.1
49-A	-.05	-0.1
50-A	-.05	-0.1
51-A	-.05	-0.1
52-A	-.05	-0.1
53-A	-.05	-0.1
MTL-54-A	-.05	-0.1

SAMPLE #	Au(ppm)	Ag(ppm)

by Joseph D. Koch
Analyst

* Greater than 1000 ppm reported as percent (Assay)
** Break in numerical sequence

PROJECT JARBIDGE HOLE NO. J1 SHEET 1 OF 16

6000 0018 (2520)

FREEPORT EXPLORATION COMPANY

JARBIDGE PROJECT, ELKO COUNTY, NV

GENERAL:

DRILL HOLE NO. J1 TOTAL DEPTH 840

COLLAR ELEV. _____ COORDINATES _____ N _____ E

BEARING _____ INCLINATION 60°

LOGGED BY KDH

REASON FOR TERMINATION plugged pipe and destroyed bit.

DRILL DATA: ROTARY RC CORE

DRILLER Tony Lopez / Becker

DATE STARTED 8/18/81 DATE COMPLETED 9/3/81

FOOTAGE PER SHIFT drill time (without breakdowns) @ 14'/hr average

45	4.5
360	8.5
70	10.0
25	11.0
20	4.5
40	9.5
80	12.0
840	60

14'/hr average at bit.

BOREHOLE SURVEY:

DEPTH								
ANGLE								
BEARING								

DRILLING PROBLEMS (SUMMARIZE) hit lots of water @ 578', couldn't blow hole w/ air available @ 720, took days off, came back and finished hole w/ booster for air supply. @ 840 plugged pipe, hoice and got it cleaned, then plugged it again and bulled out whole bit. Bit totally destroyed - decided to quit hole.

SAMPLE DATA:

SAMPLE NUMBER SEQUENCE J1-4 → J1-170

NUMBER OF SAMPLES 166

INTERVALS SAMPLED 5'

MINERALIZED INTERVAL:

FROM	TO	FIRE ASSAY GRADE	COLD CYANIDE GRADE	FROM	TO	FIRE ASSAY GRADE	COLD CYANIDE GRADE

GEOLOGIC SUMMARY OF HOLE:

0-110 mod soft pinkish to yellowish white to mod hard rhyolite - clay to clay-ser alt rhyolite; local py bearing qz veins

110-150 very hard locally completely qz flooded rhyolite w/ py veins

150-160 dk grey to rusty pattinaed andesite vein?

160-470 clay to clay ser alt rhyolite - different fluid than above - this one has much alt fsp xls and not much qz, some veins py

470-500 clay zone - qz eyes only recovered, clay grey to brownish grey

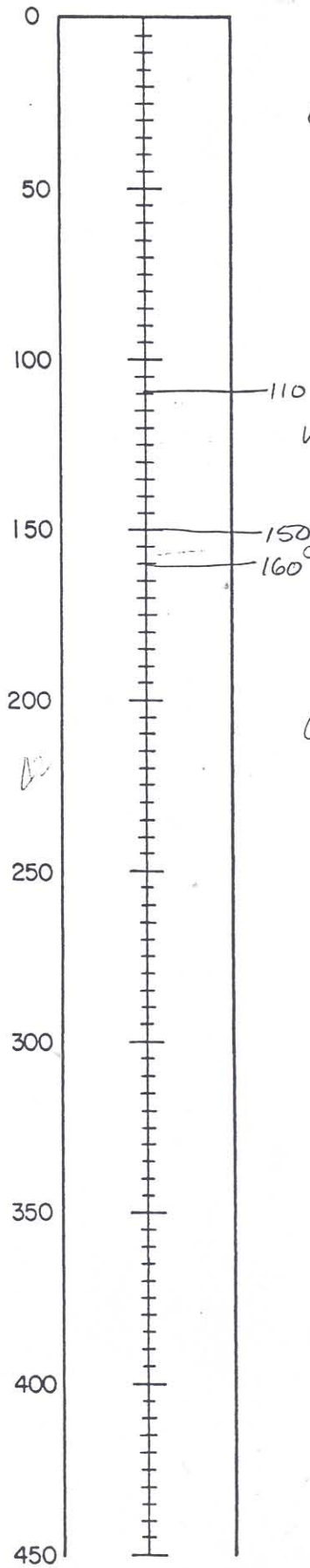
500-650 grey qz ser alt and qz flooded rhyolite

650-720 less qz flooded 715-720 large fracture zone w/ qz vein

720-795 speckled rhyolite local qz flooding

795-825 greenish clay to rhyolite 825-845 lighter color; speckled w/ some qz flooding

PROJECT JARBIDGE HOLE NO. J1 SHEET 2 OF 16



alt rhyolite
some Fe ox but not red

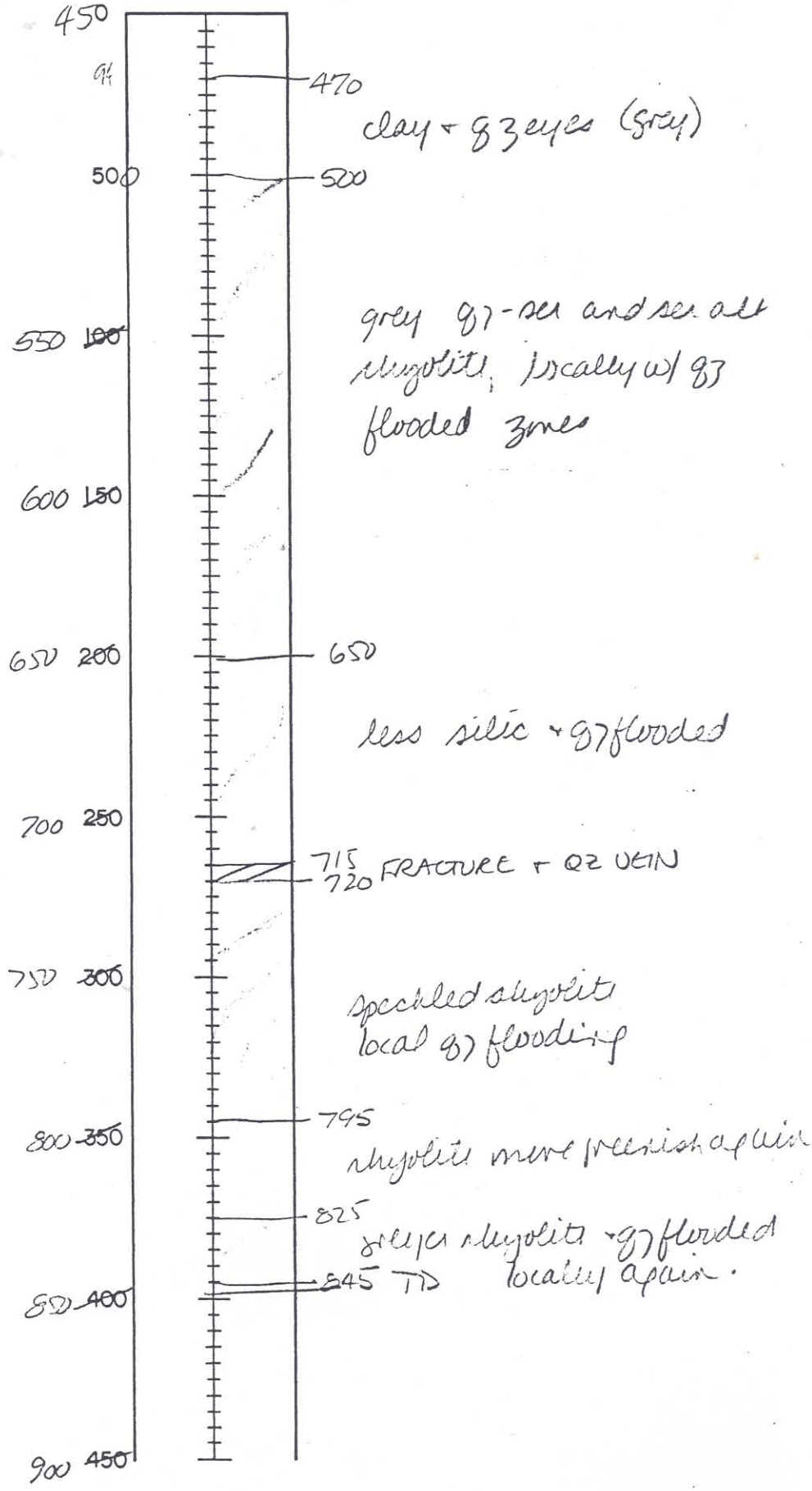
v hard locally qz flooded rhyolite

dk green to blue rhyolite ont???

clay to clay-ser alt rhyolite
yellowish to greenish

Scale: 1" = 50'

PROJECT JARBIDGE HOLE NO. J1 SHEET 3 OF 16



Scale: 1" = 50'

SAMPLE #	N.R. C. Cy Au(oz/ton)	N.R. C. Cy Ag(oz/ton)	Mo(ppm)
J1-6	-.001	.008	5
7	-.001	.005	5
8	-.001	.002	3
9	-.001	.004	3
10	-.001	.003	5
11	-.001	.004	3
12	-.001	.001	3
13	-.001	.002	3
14	-.001	.001	4
15	-.001	-.001	3
16	-.001	.001	2
17	-.001	.001	2
18	-.001	.001	1
19	-.001	.001	2
20	-.001	.001	1
21	-.001	.001	1
22	-.001	-.001	2
23	-.001	-.001	2
24	-.001	.001	2
25	-.001	-.001	2
26	-.001	-.001	2
27	-.001	-.001	3
28	-.001	-.001	3
29	-.001	.001	3
30	-.001	-.001	4
31	-.001	-.001	3
32	-.001	.001	3
33	-.001	.001	1
34	-.001	.001	2
J1-35	-.001	.001	1
J1-36	-.001	.001	-1
37	-.001	.001	-1
38	-.001	-.001	3
39	-.001	-.001	-1
40	-.001	-.001	1
41	-.001	-.001	1
42	-.001	-.001	1
43	-.001	.001	-1
44	-.001	-.001	1
45	-.001	-.001	3
46	-.001	.001	2
47	-.001	-.001	2
48	-.001	-.001	2
49	-.001	-.001	2
50	-.001	.070	3
51	-.001	.014	3
52	-.001	.003	3
53	-.001	.002	3
54	-.001	.003	4
55	-.001	.001	3
56	-.001	.001	2
57	-.001	.001	2
58	-.001	-.001	2

SAMPLE #	N.R. C. Cy Au(oz/ton)	N.R. C. Cy Ag(oz/ton)	Mo(ppm)
59	-.001	-.001	2
60	-.001	.001	3
61	-.001	-.001	3
62	-.001	-.001	2
63	-.001	-.001	2
64	-.001	-.001	-1
J1-65	-.001	-.001	1
J1-66	-.001	-.001	-1
67	-.001	-.001	-1
68	-.001	-.001	-1
69	-.001	-.001	-1
70	-.001	-.001	-1
71	-.001	-.001	1
72	-.001	.001	4
73	-.001	.001	4
74	-.001	-.001	4
75	-.001	-.001	3
76	-.001	-.001	3
77	-.001	-.001	3
78	-.001	-.001	3
79	-.001	-.001	2
80	-.001	-.001	2
81	-.001	-.001	3
82	-.001	-.001	3
83	-.001	-.001	1
84**	-.001	-.001	2
86	-.001	-.001	2
J1-85	-.002	.003	4
87	-.001	-.001	2
88	-.001	-.001	2
89	-.001	-.001	4
90	-.001	-.001	4
91	-.001	-.001	2
92	-.001	-.001	3
93	-.001	-.001	3
94	-.001	-.001	2
95	-.005	-.001	3
96	-.001	-.001	3
97	-.001	-.001	3
98	-.001	-.001	4
99	-.001	-.001	3
100	-.001	.001	4
101	-.001	.001	4
102	-.001	-.001	4
103	-.001	.001	5
104	-.001	.002	6
105	-.001	.001	5
J1-106	-.001	.001	5

SAMPLE #	N.R. C. Cy Au(oz/ton)	N.R. C. Cy Ag(oz/ton)	Mo(ppm)
J1-107	-.001	-.001	6
108	-.001	-.001	5
109	-.001	.001	6
110	-.001	.001	5
111	-.001	.001	6
112	-.001	-.001	4
113	-.001	.001	5
114	-.001	.001	5
115	-.001	.001	5
116	-.001	.003	5
117	-.001	.006	8
118	-.001	.004	7
119	-.001	.006	6
120	-.001	.005	6
120A	-.001	.010	6
121	-.001	.008	7
122	-.001	.015	8
123	-.001	.008	9
124	-.001	.004	7
125	-.001	.006	7
126	-.001	.006	4
127	-.001	.008	5
128	-.001	.007	14
129	-.001	.004	9
130	-.001	.005	9
131	-.001	.002	6
132	-.001	.002	6
133	-.001	-.001	6
134	-.001	.001	8
135	-.001	-.001	5
136	-.001	.001	5
137	-.001	.001	6
138	-.001	.001	5
139	-.001	.001	5
140	-.001	.001	5
141	-.001	.002	5
J1-142	-.001	.001	4
143	.001	.004	7
J1-144*	-.001	.004	8

SAMPLE #	Au(oz/ton)	Ag(oz/ton)	Mo(ppm
J1-145	-.002	.006	5
146	-.002	.003	3
147	-.002	.009	3
148	-.002	.006	4
149	-.002	-.003	3
150	-.002	.006	3
151	-.002	.003	6
152	-.002	.003	4
153	-.002	.006	5
154	-.002	.003	4
155	-.002	.006	6
156	-.002	.006	6
157	-.002	.009	6
158	-.002	.006	6
159	-.002	.006	6
160	-.002	.006	5
161	-.002	.009	6
162	-.002	.009	6
163	-.002	.003	5
164	-.002	.003	4
165	-.002	.012	7
166	-.002	.012	6
167	-.002	.009	6
168	-.002	.012	6
169**	-.002	.006	5

TL

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J1→J5	did not recover sample ~~[illegible]~~				0-25	25			
	sitting on built up pad								
J1-6	variety of stuff - mostly med hard prob				~~[illegible]~~	5			
	partly clay altered some rhyolite, qz eyes				25-30				
	all are small, fsps have bleached w/ some if								
	there were any, tr greenish alt, rock in								
	general wht to lt maroon; Fe ox are dk red								
	to mustard lm								
-7	mod to very hard chy, partly silic				30-35	5			
	qz clear to smokey, some lg eyes								
	Fe ox looks like all hm								
8	yellowish white - all fine chips				35-40	5			
	qz eyes small to tr lg? clear to smokey								
	Fe ox red to rusty orange brn (fsp fresh)								
	mostly mod to very hard to silic								
9	same as J1-8				40-45	5			
10	rhyolite lt grey w/ lots of rusty orange as				45-50	5			
	well; qz eyes smokey, small; gold looks								
	red Fe ox; some SiO_2 hairline veinlets								
	Prob went through a SiO_2 flooded								
	sulfide bearing vein. some py in vugs and w/								
	SiO_2 veins								
11	same as J1-10, larger chips,				50-55	5			
	still w/ sulfide veins - looks to be all py								
12	some white to salmony colored w/ some								
	rusty orange; mod soft to soft; smokey qz								
	eyes, fairly fresh fsps clean;								

PROJECT JACKBIDGE HOLE NO. J1 SHEET 4 OF 16

PROJECT JACKBIDGE HOLE NO. J1 SHEET 5 OF 16

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J1-13	some mod sgr rhyolite as in J1-12		fusion py		60-65	5			
	thes through another SiO_2 flooded zone w/								
	grey SiO_2 and tr v. fine py, also some very								
	rusty staining								
J1-14	rhy w/ chalky looking wht to pinkish				65-70	5			
	gdms that's very hard locally, small to lg								
	qz eyes, hm along some fractures,								
	hairline grey qz veins								
15	Same as J1-14				70-75	5			
16	same as J1-14				75-80	5			
17	same as J1-14, plag → clay				80-85	5			
18	Same as J1-14, w/ small sulfide vein				85-90	5			
	in blk hard glassy rock, py coarse in								
	vein								
19	mod hard mottled pink/wht devit. rhyolite				90-95	5			
	fsp → wht clay (small phenos); qz all smokey,								
	small to med, some hm, some rusty oxides								
20	pretty much same as J1-19, more rusty				95-100	5			
21?	rock, some well fractured w/ qz-py								
	veinlets				100-105	5			
22	mod sgr to mod hard mottled greyish wht				105-110	5			
	to pinkish rhyolite; small xular and lg								
	rounded smokey qz xls; small qz hairline								
	fractures, still tr py veinlets								
23	fairly sgr grey rhyolite w/ dk grey to blk				110-115	5			
	hairline fractures and loaded w/ pyrite								
24	20% same as J1-23				115-120	5			
	80% mottled pink/wht rhyolite								
	tr hm, lm clays								

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J1-25	mottled pink/wht rhyolite, local qz				120-125	5			
	inactive fractures and qz flooding, still								
	a tr py in veinlets, but not much								
J1-26	soft chalky clay altered rhyolite w/				125-130	5			
	small qz eyes and hairline qz veins (grey)								
	to qz flooded zones, LOADED w/ PYRITE								
J1-27	same as J1-26 (90%)				130-135	5			
	10% soft and rusty								
J1-28	50% same as J1-26 (REALLY LOADED w/	py			135-140	5			
	50% med hard rhyolite, sm. qz eyes,								
	w/ rusty and maroon fe-ox's								
29	soft to med hard lt grey to pinkish to				140-145	5			
	greenish rhyolite, lots of small qz eyes								
	some maroon and rusty fe ox, tr py								
30	med hard to silic rhyolite, lt to med tannish				145-150	5			
	grey w/ sm. to lg qz eyes, w/ a vein or 2 of								
	heavy py; tr rusty stained rock								
31	30% tan silic. rhyolite				150-155	5			
	40% ± whitish to lt gray softer rhyolite								
	(probably was a lot of clay too but								
	it all washed out)								
	30%, blk vitrophyre (?) w/ epidote altered								
	~~30%~~ fspa + tr qz [tr py]								
32	90% rusty brown rhyolite, w/ small				155-160	5			
	qz eyes, some speckled w/ white dots -								
	prob clay alt in gdms - silicified totally								
	10% bluish green very soft clay-chlorite								
	alt rhyolite								

PROJECT JACKBIDGE HOLE NO. J1 SHEET 6 OF 16

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J1-33	clay zone basically - w/ lots of very soft rhyolite - not many chips back and all small, greenish to green to maroon (2%)			FAULT	160-165	5			
34	very soft clay alt rhyolite - most of the cuttings are qz eyes! MESSY!				165-170	5			
J1-35	very soft clay alt rhyolite - return mostly qz eyes after sieving. tr py				170-175	5			
36	same as J1-35				175-180	5			
37	same as J1-35, maybe slightly harder some reddish maroon fe ox, some rhy. has blk qdms.				180-185	5			
38	med to lt grey med hard clay alt fsp rich rhyolite, tr brn qdms, tr hdr clear qz, some looks qz flooded, pretty chewed up.			NEW FLOW fsp rich	185-190	5			
39	same as J1-38, silica flooded zones are harder, darker grey and have disseminated py				190-195	5			
40	fsp rich rhyolite w/ v soft qdms, lots of clay alt - tr rusty alteration, couple % qz eyes in all - slightly greenish cast to things				195-200	5			
41	~~Sto~~ med hard to med soft rhyolite, qdms blue grey to olive grey to whitish, looks like combination chlorite/epidote alteration. fsp look. ep. alt. qz eyes small lt grey to clear				200-205	5			
42	basically same as 41				205-210	5			
43	rock got very soft - mostly ground up - small pieces and qz eyes - basically the same as 41 more rusty 1m fe ox				210-215	5			

PROJECT JARBRIDGE HOLE NO. J1 SHEET 7 OF 16

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roost AA oz/T	Cold CN oz/T
J1-44	v soft greenish to orangish tan rhyolite, lots of qz eyes – rest of rock, must have been ground up and floated off				215-220	5			
45	med hard crumbly greenish whi rhy, some qz hairline fractures, not many lg pieces				220-225	5			
46	lt greenish white mod soft crumbly rhyolite, fspo alt → clays, couple to qz eyes				225-230	5			
47	soft crumbly rhyolite, tannish wht – basically same as J1-46				230-235	5			
48	same as J1-46, maybe some K-alt – color is almost ngtv – kind of fleshy				235-240	5			
49	same as J1-46,				240-245	5			
50	same as J1-46 but lots softer w/ clay balls – most frags are qz eyes only			clay	245-250	5			
51	very soft greenish yellow rhyolite, fspo all clay altered, some white, some reddish, lots of spare qz eyes cause qtzms ground up				250-255	5			
52	same as J1-51, slightly bluer?				255-260	5			
53	rock a little harder here but basically the same as J1-51, is pinkish and green mixed w/ chlorite in qtzms and epidote in fspo(?) and dissem py in qtzms – not as distinctly along fractures as previously				260-265	5			
54	greenish grey rhyolite, crumbly, basically same as J1-51 but no pink really, still dissem py				265-270	5			
55	same as J1-51, soft crumbly qtzms				270-275	5			
56	same as J1-51, very soft & bluish				275-280	5			

PROJECT JACKBUDGE HOLE NO. J1 SHEET 8 OF 16

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J1-57	mod soft greenish rhyolite - greenish clay on				280-285	5			
	fractures not ~~so~~ quite as soft as above but								
	still has a lot of qz eyes, some shattering								
	w/ qz hairline fractures								
58	same as J1-57 but slightly softer and				285-290	5			
	lighter greenish white color some clay blobs lots of qz eyes				~~29~~				
59	same as J1-57, lt green, soft				290-295	5			
60	same as J1-57, slightly more competent				295-300	5			
	rock than 58 + 59, and w/ pyrite again								
61	same as J1-57				300-305	5			
62	same as J1-57, must be softer again -				305-310	5			
	ended up w/ lots of qz eyes								
63	same as J1-57				310-315	5			
64	same as J1-57				315-320	5			
65	same as J1-57				320-325	5			
66	same as J1-57 + CLAY 20% LG BLOBS			clay	325-330	5			
67	same as J1-57 soft, lots of qz eyes				330-335	5			
68	same as J1-57 slightly harder again				335-340	5			
69	same as J1-57 some harder, fair bit			clay	340-345	5			
	(lots of qz eyes) of clay in this interval								
70	same as J1-57				345-350	5			
71	same as J1-57				350-355	5			
72	20% same as J1-57, 70% SiO_2 flooded,				355-360	5			
	qz veined								
73	same rock as J1-57, but shattered				360-365	5			
	w/ silicification, hairline and layer qz								
	veins.								
74	same as J1-57 - softer again lots				365-370	5			
	of qz eyes								

PROJECT JACKBIDGE HOLE NO. J1 SHEET 9 OF 16

Sample Number	Description (same rock as JI-57 not quite as much)	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
JI-75	lt to med grey soft to silic rhyolite				370-375	5			
	some epidotized fsps, tr py, much wkes								
	pretty soft because there are lots of plain qz								
	eyes, tr hm in vugs and fractures								
76	same as JI-75				375-380	5			
77	same as JI-75, tr jarosite?				380-385	5			
78	same as JI-75				385-390	5			
79	same as JI-75 more qz eyes less wkness				390-395	5			
80	same as JI-75				395-400	5			
81	same as JI-75, some very red				400-405	5			
	brown qz eyes and a couple of green ones								
82	same as JI-75, softer, a few dark			clay	405-410	5			
	clays - rest is all qz eyes only, some								
	clay								
83	same as JI-75, fairly hard again				410-415	5			
84	mostly pink qz eyes from soft rhyolite				415-420	5			
	to clay, some black carbonaceous shale								
	w/ tr disseminated pyrite								
85	med to very soft rhyolite - lt to med grey				420-425	5			
	pretty silic again - like JI-75								
	increased amount py along some fractures								
86	mostly grey clay				425-430	5			
87	mostly grey clay				430-435	5			
88	mostly grey clay				435-440	5			
89	most hard to soft med to lt grey rhyolite				440-445	5			
	same as JI-75. Couple % pyrite here through								
	along veins some dusty qz along fractures								
	lots of plain qz eyes from soft to ones								

PROJECT TARBRIDGE HOLE NO. JI SHEET 10 OF 16

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J1-90	same as J1-89 lots qpy				445-450	5			
91	same as J1-89, slightly less py				450-455	5			
92	same as J1-89, still less py				455-460	5			
93	same as J1-89, a little more py again				460-465	5			
94	same as J1-89 tr py				465-470	5			
95	same as J1-89 - some clay, most				470-475	5			
	of sample qz eyes								
96	same as J1-89, lots of qz eyes				475-480	5			
	slightly more oxidized								
97	soft well ox rhyolite - probably				480-485	5			
	same as J1-89 but all the ~~soft~~								
	solid sample is qz eyes ± tr tarnish								
	altered fsp. only slight tr py								
98	same as J1-97				485-490	5			
99	clay and greenish to lt grey qz eyes				490-495	5			
100	grey clay and grey qz eyes - probably a				495-500	5			
	lot like the stuff at the back of the MTL -								
	may be some fault zone								
101	slightly harder than 100 - a few rhyolite				500-505	5			
	rock chips - fairly soft w/ qz hairline fractures -								
	mostly tr grey qz eyes								
102	lots of qz eyes of some shattered rhyolite				505-510	5			
	riddled w/ qz hairline fractures and								
	qz flooded, some py along fractures, lots qz eyes								
103	qz eyes plus some large chips of SiO_2				510-515	5			
104	flooded rhyolite, some qz after $CaCO_3$ = calcedonia								
	CHANGED TO ROCK BIT - sample								
	104 in same interval								

PROJECT JARBIDGE HOLE NO. J1 SHEET 11 OF 16

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J1-105	clayey to qz flooded rhyolite - maybe 10% flooded. 3-5% ox tan to pinkish rhyolite, 1-2% py along fractures				515-520	5			
106	same as J1-105				520-525	5			
107	same as J1-105, more hard rock, more large rock chips smaller percentage of qz eyes				525-530	5			
108	same as J1-105, slightly more competent				530-535	5			
109	fairly decent rock again - mod to very hard rhyolite - some qz flooded w/ assoc py some hairline qz veining in flooded zones rock is lt to med green with a faint yellow green cast to it. very fine blk specks locally				535-540	5			
110	50% same as J1-109 rest is soft - giving only qz eyes 3% ± oxidized rusty to gold rhyolite fracture zone				540-545	5			
111	same as J1-109				545-550	5'			
112	same as J1-109 - not much py any py				550-555	5'			
113	same as J1-109				555-560	5'			
114	same as J1-109, fractured here w/ hm ± lem oxides and stained chips (10%)				560-565	5'			
115	same as J1-109, but more clayey as there is a large % of plain qz eyes				565-570	5'			
116	same as J1-109 rock wise, but this is another fracture zone - some rusty oxides, and some chlorite and some epidote green fragments - lots of qz eyes.				570-575	5'			

PROJECT TARBIDGE HOLE NO. J1 SHEET 12 OF 16

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
JI-117	soft clay zone, then highly fractured				575-580	5'			
	SiO_2 flooded zone w/ some (tr) py. also								
	some adularia replaced by qz like same								
	as JI-109								
118	same as JI-117, but more clay and				580-585	5			
	clay alt rhyolite - lots of qz eyes								
119	sample is all clay balls and qz eyes				585-590	5			
120	grey rhyolite, SiO_2 flooded slightly,				590-595	5			
	~~mostly~~ some clay - ser alt, ~~to~~ mostly qz eyes								
JI-120A	speckled rhyolite - lt tannish grey groms,				595-600	5'			
	white clayey speckles and small qz eyes								
	tr py in SiO_2 flooded zones								
121	same as JI-120A w/ a couple large				600-605	5			
	qz phenos, and some hairline fractures								
122	same as JI-120A				605-610	5			
123	same as JI-120A, fractured (some				610-615	5			
	very large chunks), tr vein type material								
	w/ bladed xls, tr py								
124	same as JI-120A				615-620	5			
125	same as JI-120A, tr ox material				620-625	5			
126	same as JI-120A "				625-630	5			
127	same as JI-120A				630-635	5			
128	same as JI-120A				635-640	5			
129	same as JI-120A, tr ox material				640-645	5			
130	same as JI-120A				645-650	5			
131	same as JI-120A				650-655	5			
132	same as JI-120A				655-660	5			
133	same as JI-120A w/ jarosite mixed in w/				660-665	5			
	clays replacing feldspars								

PROJECT JARBRIDGE HOLE NO. JI SHEET 13 OF 16

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J1-134	greyish tan sdms speckled rhyolite as				665-670	5			
	in J1-120A has an almost sandy texture								
	some qz flooding, tr py, fairly soft zone too								
135	same as J1-134 tr py				670-675	5			
136	same as J1-134 small clay zone				675-680	5			
137	same as J1-134 w/ 20% soft ox fracture				680-685	5			
	zone - w/ minor qz and white, yellow,								
	pink and rusty ox rhyolite								
138	same as 134 tr py				685-690	5			
139	same as J1-134 tr yellow in fsp alt clay				690-695	5			
140	lt greenish grey qz eye rhyolite, hard,				695-700	5			
	some qz flooding, not speckled as above,								
	not as grainy								
141	same rock as J1-140, 20% oxidized to				700-705	5			
	salmon, yellow, rust etc - small chunks								
142	same as 140, ox as 141				705-710	5			
143	90% same as 140 w/ 141 oxidation				710-715	5			
	10% in fracture zone w/ bull qz vein								
	some drusy w/ qz needles								
144	large fracture zone in grey sdms rhyolite				715-720	5			
	w/ clay altered fsps, rhyolite is sheared up								
	and qz flooded among the qz vein material								
	tr pyrite [panned this sample and came								
	up w/ blk sand (very fine) and pyrite -								
	no nuggets (3)] stopped hole to wait for booster								
145	same as J1-141				720-725	5			
146	same as J1-141				725-730	5			
147	back to tan speckled rhyolite, somewhat				730-735	5			
	granular, tr grey veining, 5% ox to colors								

PROJECT JARBIDGE HOLE NO. J1 SHEET 14 OF 16

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J1-148	speckled rhyolite, tannish grey, hard,				735-740	5			
	1-2% ox to colors & reds								
149	same as J1-140, tr ox				740-745	5			
150	mod hard to hard tan & dns speckled				745-750	5			
	rhyolite, couple % small qz eyes some								
	hairline qz veins, some med dk grey veins								
151	same as J1-150, tr ox				750-755	5			
152	same as J1-150, tr ox				755-760	5			
153	same as J1-150, tr ox				760-765	5			
154	same as J1-150 tr ox				765-770	5			
155	same as J1-150 tr ox, tr py				770-775	5			
156	same as J1-150				775-780	5			
157	same as J1-150 short clay zone				780-785	5			
158	same as J1-150 tr py, some grey hairline				785-790	5			
	veinlets								
159	same as J1-150				790-795	5			
160	moderately to very hard greenish grey rhyolite				795-800	5			
	tr sugary crumbly w/ qz, tr py, tr ox								
161	same rhyolite as J1-160, w/ qz veins (1%)				800-805	5			
	some ox material and tr py in veins								
162	rhyolite more speckled as J1-150 again				805-810	5			
	tr ox material some clay								
163	same as J1-162				810-815	5			
164	same as J1-160				815-820	5			
165	green rhyolite, tannish speckled rhyolite				820-825	5			
	2-3% oxidized red and rusty material								
166	tan speckled alt rhyolite; qz ser alt plags				825-830	5			
	tr pinkish alt material								
167	same as J1-166				830-835	5			

PROJECT JARBIDGE HOLE NO. J1 SHEET 15 OF 16

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
JI-168	Same as JI-166, increased fine qz veins and qz flooding				835-840	5			
169	hit large fracture zone - in speckled Mugilite w/ qz/adularia vein - ad. replaced by qz, hairline qz fractures and very large chips. Chewed up bit, plugged pipe 3 times came out and quit hole				840-845	5			

PROJECT PARBIDGE HOLE NO. JI SHEET 16 OF 16

PROJECT JARBIDGE HOLE NO. J2 SHEET 1 OF 16

FREEPORT EXPLORATION COMPANY

JARBIDGE PROJECT, ELKO COUNTY, NV

GENERAL:

DRILL HOLE NO. J2 TOTAL DEPTH 975'

COLLAR ELEV. _____ COORDINATES _____ N _____ E

BEARING N45E INCLINATION 70°

LOGGED BY KTH

REASON FOR TERMINATION hole problems, close enough to target

DRILL DATA: ROTARY RC CORE

DRILLER Logan / Cowboy - Becker

DATE STARTED _____ DATE COMPLETED 9/13/81

FOOTAGE PER SHIFT _____

BOREHOLE SURVEY:

DEPTH								
ANGLE								
BEARING								

DRILLING PROBLEMS (SUMMARIZE) started having circulation problems toward the end - bussed out the hammer was plugged up and had some broken parts. Otherwise no particular problems.

SAMPLE DATA:

SAMPLE NUMBER SEQUENCE J2-4 → J2-195

NUMBER OF SAMPLES 192

INTERVALS SAMPLED 5'

MINERALIZED INTERVAL:

FROM	TO	FIRE ASSAY GRADE	COLD CYANIDE GRADE	FROM	TO	FIRE ASSAY GRADE	COLD CYANIDE GRADE

GEOLOGIC SUMMARY OF HOLE:

0-75 iron stained variably hard well ox siltstite, locally silicified

75-110 soft clayey Fe stained siltstite - small chips + qz eyes

110-165 qz eyes and grey clay

165-195 harder grey siltstite trough stiff soft

195-420 yellowish to lt grey mod hard qz sericite siltstite w/ Fe oxide fracture

420-775 grey siltstite, qz eyes get larger downhole, calcite veins, some brecciation, qz veins etc etc

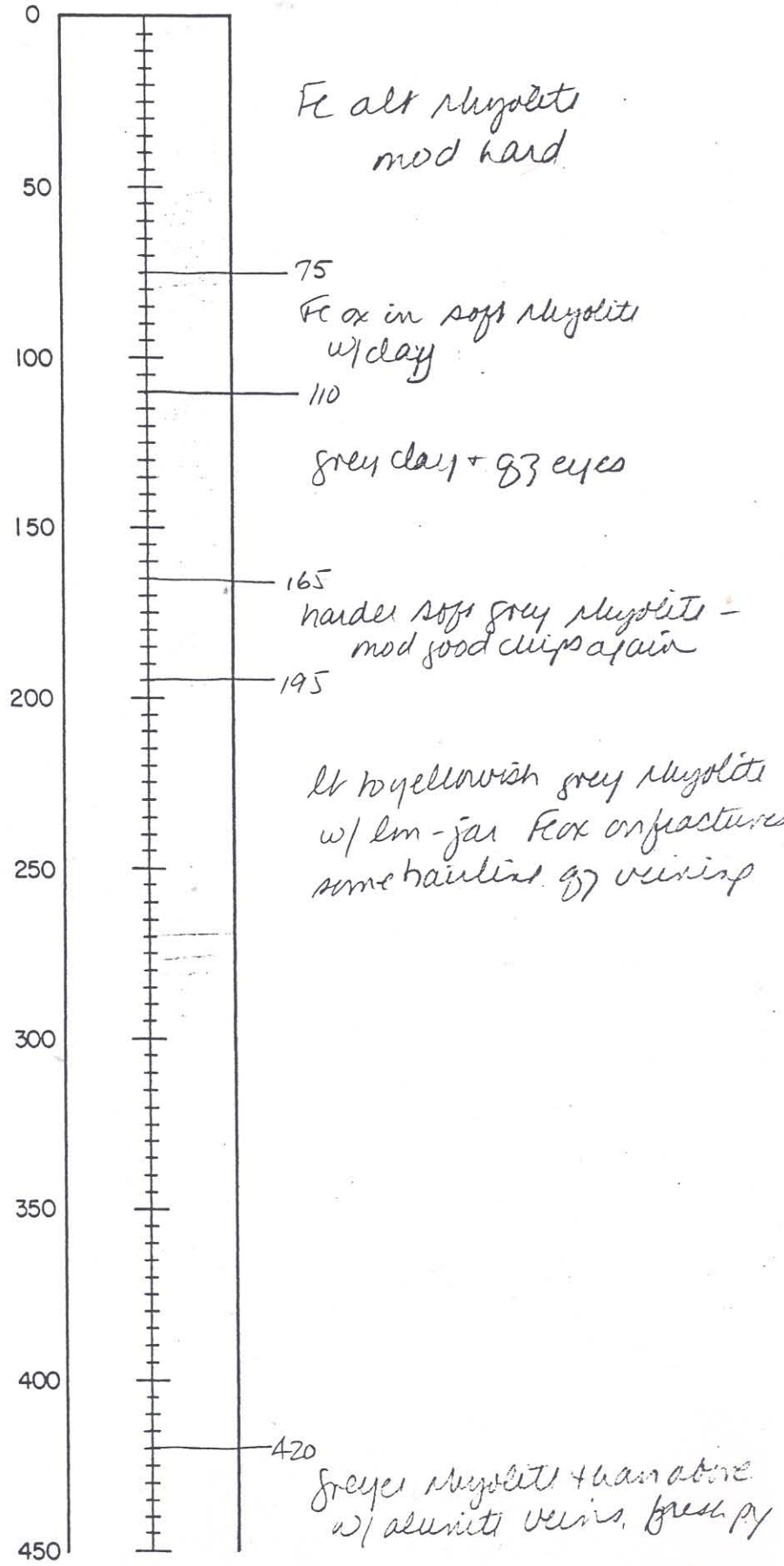
775-825 oxidized zone - fault? box pyrite clay propylitic alt

825-853 siltstite and interbedded volcaniclastics

853-890 weathered end on intrusive

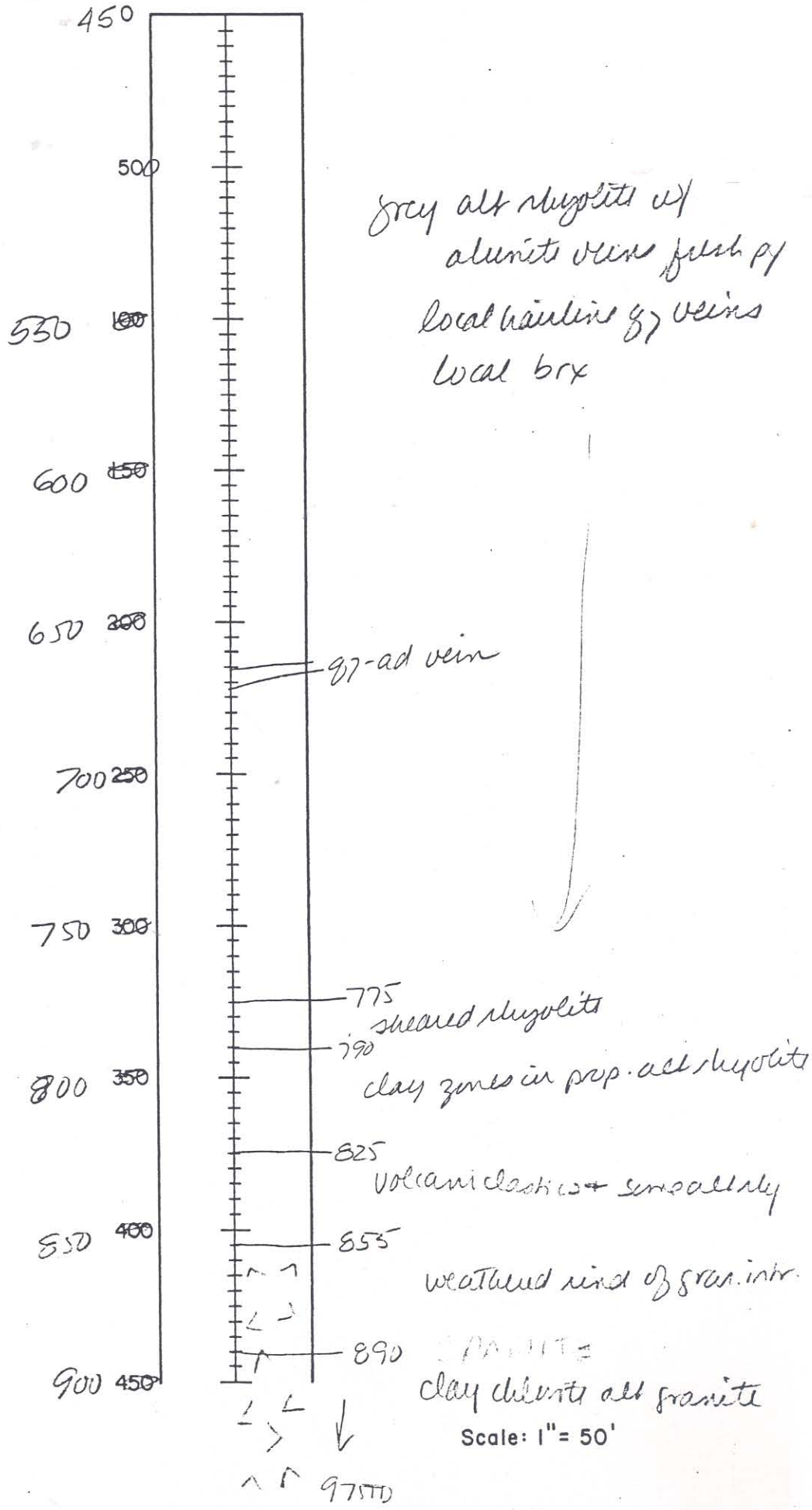
890-975 chlorite-clay altered intrusive w/ fair bit of py

PROJECT JACBIDGE HOLE NO. J2 SHEET 2 OF 10



Scale: 1" = 50'

PROJECT JARBIDGE HOLE NO. J2 SHEET 3 OF 16



SAMPLE #	R. Acid Au(oz/ton)	R. Acid Ag(oz/ton)	Fire Au(oz/ton)
J2-4	-.002	.012	
5	.006	.041	
6	.002	.018	
7	-.002	.009	
8	-.002	.009	
9	.022	.096	.022
10	-.002	.012	
11	.003	.015	
12	-.002	.020	
13	-.002	.038	
14	-.002	.015	
15	-.002	.012	
16	-.002	.003	
17	-.002	.003	
18	-.002	.003	
19	-.002	.003	
20	-.002	.012	
21	-.002	.020	
22	-.002	.006	
23	-.002	.006	
24	-.002	.006	
25	-.002	.006	
26	-.002	.003	
27	-.002	.003	
28	-.002	.003	
29	-.002	.009	
30	-.002	.006	
31	-.002	.003	
32	-.002	.006	
J2-33	-.002	.012	
J2-34	-.002	.015	
35	-.002	.015	
36	-.002	.009	
37	-.002	.006	
38	-.002	.003	
39	-.002	.003	
40	-.002	.018	
41	-.002	.012	
42	-.002	.015	
43	-.002	.006	
44	-.002	.003	
45	-.002	.003	
46	-.002	.003	
47	-.002	.006	
48	-.002	.006	
49	-.002	.003	
50	-.002	.006	
51	-.002	.006	
52	-.002	.006	
53	-.002	.006	
54	-.002	.006	
55	-.002	.006	
56	-.002	.003	
57	-.002	.009	
58	-.002	.003	

SAMPLE #	R. Acid Au(oz/ton)	R. Acid Ag(oz/ton)
59	-.002	.006
60	-.002	.006
61	-.002	.003
62	-.002	.009
63	-.002	.012
64	-.002	.009
65	.004	.029
66	-.002	.012
67	-.002	.006
68	-.002	.012
69	-.002	.009
70	-.002	.012
71	-.002	.006
72	-.002	.006
J2-73	-.002	.003
J2-74	-.002	.006
75	-.002	.003
76	-.002	-.003
77	-.002	-.003
78	-.002	-.003
79	-.002	.003
80	-.002	-.003
81	-.002	-.003
82	-.002	.003
83	-.002	.018
84	-.002	.009
85	-.002	.012
86	.003	.020
87	-.002	.015
88	-.002	.023
89	.004	.020
90	-.002	.026
91	-.002	.009
92	-.002	.020
93	-.002	.020
94	-.002	.023
95	-.002	.023
96	-.002	.009
97	-.002	.015
98	-.002	.015
99	.008	.029
100	-.002	.018
101	-.002	.029
102	-.002	.009
103	.003	.009
104	-.002	.015
105	.006	.020
106	-.002	.009
107	.011	.020
108	-.002	.018
109	-.002	.015
110	.003	.018
111	-.002	.015
112	.003	.015
113	.007	.032

SAMPLE #	R. Acid Au(oz/ton)	R. Acid Ag(oz/ton)	Fire Au(oz/ton)	Fire Ag(oz/ton
J2-114	.002	.029		
115	.002	.035		
116	.005	.093		
117	.036	.583	.048	.65
118	.007	.180		
119	.013	.222	.016	.10
120	.003	.067		
121	.003	.067		
122	.003	.073		
123	.003	.061		
124	.003	.050		
125	.003	.044		
126	.003	.044		
127	.002	.070		
128 @40	.002	.053		
129	.018	.088	.020	-.05
130	.007	.081		
131	.026	.630	.026	.50
132	.058	.840	.062	1.05
133	.022	.554	.024	.60
134	.050	1.23	.050	1.45
135 @75	.230	.878	.276	.75
136	.008	.105		
137	.004	.044		
138	.002	.023		
139	-.002	.023		
140	-.002	.018		
141	-.002	.020		
142	-.002	.029		
143	-.002	.050		
144	-.002	.026		
145	.002	.029		
146	.003	.035		
147	.004	.044		
148	-.002	.015		
149	.002	.023		
150	.002	.023		
151	-.002	.018		
152	-.002	.018		
J2-153	-.002	.015		
J2-154	-.002	.009		
155	.002	.044		
156	.006	.058		
157	.024	.082	.024	.10
158	.003	.020		
159	-.002	.003		
160	-.002	-.003		
161	-.002	.003		
162	.002	.006		
163	-.002	.006		
164	-.002	.015		
165	-.002	.018		
166	-.002	.015		
167	-.002	.009		
[illegible]	-.002	.009		

.059 .551 .005 .633

SAMPLE #	R. Acid Au(oz/ton)	R. Acid Ag(oz/ton)
169	-.002	.012
170	-.002	.009
171	-.002	.006
172	-.002	.015
173	-.002	.012
174	.004	.018
175	-.002	.015
176	-.002	.015
177	-.002	.015
178	-.002	.009
179	-.002	.009
180	-.002	.006
181	-.002	.015
182	-.002	.018
183	-.002	.015
184	-.002	.026
185	-.002	.026
186	-.002	.018
187	-.002	.018
188	.003	.012
189	.003	.018
190	-.002	.020
191	-.002	.012
192	-.002	.018
J2-193	-.002	.015
J2-194	.003	.018
195**	-.002	.009

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roost AA oz/T	Cold CN oz/T
1-3	NO RECOVERY FOR SAMPLE - ALL IN DUMP				0-15	15			
J2-4	red, cotuts, pink and grey rhyolite and		Qc		15-20	5			
	some wht qz, rock mod hard								
5	same as J2-4				20-25	5			
6	same as J2-4				25-30	5			
7	water and mud became very dk red				30-35	5			
	silicified and heavily hematite stained								
	vein in rhyolite, tr wht qz, but not many								
	qz veins - just well silic								
8	same as J2-7				35-40	5			
9	~~pretty much same as J2-5~~				40-45	5			
	→ fracture zone of qz veins in rhyolite -								
	less hm than above and below - coarse								
	fragments - greenish (ep?) all of plags								
10	still partly fractured rhyolite, pink to				45-50	5			
	greyish pink and silicified; then								
	90% same as J2-7								
11	same as J2-7, 10-15% soft greasy white				50-55	5			
	clay								
12	silicified rhyolite in fracture zone				55-60	5			
	tr qz but not much								
13	~~very~~ very hard purplish red silicified				60-65	5			
	rhyolite, some pieces have apparently								
	clay filled vugs								
14	same as J2-13				65-70	5			
15	same as J2-13				70-75	5			
16	very fine white to tannish white cuttings				75-80	5			
	some soft and easily breakable, some silic								
	some probably vein fill, most all rhyolite clay - sericite								

PROJECT TARBIDGE HOLE NO. J2 SHEET 5 OF 16

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J2-17	same as J2-16 - some layer chips of				80-85	5			
	same character, some clay blobs								
-18	same as J2-16, rock probably generally				85-90	5			
	softer w/ more individual qz eyes								
19	.75% same as J2-16				90-95	5			
	25% individual qz eyes								
20	almost all solid sample is qz eyes only				95-100	5			
	some yellowish or gold colored clays								
21	qz eyes plus some lm clays				100-105	5			
22	same as J2-21				105-110	5			
23	mud got distinctly grey, some yellow				110-115	5			
	chips but very small								
24	mostly qz eyes, tr py, some gold and				115-120	5			
	maroon chips								
25	almost all qz eyes, tr gold fines				120-125	5			
26	same as 25, more clay balls				125-130	5			
27	grey clay balls & qz eyes				130-135	5			
28	same as 27				135-140	5			
29	same as 27				140-145	5			
30	same as 27				145-150	5			
31	same as 27 - last 2' were very dk				150-155	5			
	grey - almost looked carbonaceous								
32	dark and lt grey clays & qz eyes				155-160	5			
33	med grey clay and qz eyes				160-165	5			
34	60% med dk grey siltstone, med soft and				165-170	5			
	crumbly, tr py, 40% med grey qz eyes								
35	same as J2-34, more pyrite, tr qz veins				170-175	5			
J2-36	ox yellowish grey tan siltstone, hard qz vein material				175-180	5			
	orange rusty Fe ox clay in this zone								

PROJECT TACBIDGE HOLE NO. J2 SHEET 6 OF 16

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roost AA oz/T	Cold CN oz/T
J2-37	med hard med lt grey rhyolite, well silicified, tr py, some reddish and rust fe ox stained chunks and some white clay 20-30% grey qz eyes				180-185	5			
38	grey rhyolite, tr py, lock med hard 45-50% grey qz eyes				185-190	5			
39	oxidized, fractured zone in med hard mostly silic rhyolite, some clay, lots of qz eyes				190-195	5			
40	lt tan med hard rhyolite, milky white chips & qz vein material, heavy rusty fm clay + stain in veins and in fractures				195-200	5			
41	tannish wht speckled rhyolite - silic w/ sericite probably, 10% qz vein material, lots of rusty fm				200-205	5			
42	some rhyolite as in J2-41, mostly qz ± adularia vein material w/ considerable fm				205-210	5			
43	silicified speckled rhyolite, mod to very hard tannish grey to pinkish, considerable rusty fm				210-215	5			
44	strong fracture zone in silicified speckled rhyolite w/ discontinuous grey chalcedonic veins, still lots of fm				215-220	5			
45	very hard silic tannish white rhyolite some lt grey rhyolite, less oxidation and fe ox than last few samples				220-225	5			
46	lt tannish white med to very hard rhyolite - softer where oxidized to pinks and maroons, hard where silic and white fm along fractures				225-230	5			

PROJECT TARBRIDGE HOLE NO. J2 SHEET 2 OF 10

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J2-47	med hard qz sec-alt rhyolite -				230-235	5			
	1m along fractures, some qz hairline								
	fractures								
48	pretty ox med to very hard ox to silic				235-240	5			
	rhyolite, mostly lt tannish wht, mostly to								
	dk brn Fe ox on fracture, some reddish								
	oxidation - some hm, fair bit of qz flooding								
	almost chalcedonic veins								
49	very hard tannish rhyolite, fairly silic				240-245	5			
	less Fe ox than above								
50	tannish white rhyolite, heavily qz				245-250	5			
	flooded, tr 1m Fe ox on fractures - rusty								
51	70% tannish med hard rhyolite				250-255	5			
	30% qz ± tr adularia vein,								
	1m (rusty) along fractures								
52	very hard mostly silic tannish wht				255-260	5			
	rhyolite, some med dk grey streaks; rusty								
	brown Fe ox on fractures								
53	same as J2-52, last 2' were very				260-265	5			
	orange, tr py, tr qz vein								
54	same as J2-52, fair bit of pink on				265-270	5			
	fractures								
55	brownish greenish rhyolite, med hard, prob.				270-275	5			
	clay sec alt, considerable brownish rust Fe ox								
56	fractured silic greenish tan rhyolite -				275-280	5			
	lots of brn-rust Fe ox								
57	silic tan rhyolite w/ 15% qz adularia				280-285	5			
	vein material								

PROJECT TARGINDGE HOLE NO. J2 SHEET 8 OF 16

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J2-58	mostly silic tannish rhyolite, not much quartz, tr brn-rust Fe ox				285-290	5			
59	same as J2-58, more Fe ox				290-295	5			
60	very hard partly silic rhyolite - looks like a fair bit of sericite as well - tr Fe ox. tr hairline qz veinlets				295-300	5			
61	fracture zone in same as J2-60				300-305	5			
62	mostly milky white qz vein material looks like some former adularia blades but not many				305-310	5			
63	some (maybe 10-15%) qz vein material, mostly heavily qz flooded rhyolite - doesn't look much different from 62 at a glance, but you can see phenos				310-315	5			
64	lt tan hard speckled rhyolite, mostly silicified w/ some qz hairline fractures, probably speckles are clay/sericite blobs in the phenos, tr py				315-320	5			
65	same as J2-64, more py, some vein qz				320-325	5			
66	basically same as J2-64, some darker grey blotches, some ox stuff w/ lm/hm stain well fractured				325-330	5			
67	same as J2-64, J2-66 - fractured w/ some chalcedonic qz veins (grey)				330-335	5			
68	well fractured lt grey rhyolite, v hard prob. qz-ser alt - lots of qz hairline fractures qz flooding, rusty lm on fracture				335-340	5			
69	hard tan to pay speckled rhyolite some tan-grey vein qz, some lm-hm ox in fractures				340-345	5			

PROJECT JACBIDGE HOLE NO. J2 SHEET 9 OF 10

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J2-70	very hard gy-ser alt rhyolite, some lim oxidation, lt tarnish grey				345-350	5			
71	Same as J2-70, w/tr milky qz vein material, some qz hairline veinlets, Tr py				350-355	5			
72	Same as J2-70, 71				355-360	5			
73	same as J2-70, 71 ~~less~~ fractured				360-365	5			
74	" less fractured				365-370	5			
75	" "				370-375	5			
76	" "				375-380	5			
77	" fract w/ inc lim				380-385	5			
78	" some soft greasy wht clay on fractures				385-390	5			
79	"				390-395	5			
80	" some gummy wht clay				395-400	5			
81	" some dk grey blotches				400-405	5			
82	" "				405-410	5			
83	" much lim				410-415	5			
84	" well fractured, some dk grey veinlets				415-420	5			
85	8050 Same as J2-70, 71				420-425	5			
	2050 darker grey brecciated - still hard and like rock below								
86	mod to very hard dark grey rhyolite some greenish white clay - maybe alunite				425-430	5			
J2-87	mod hard med grey rhyolite fspar → clay (wht) tr py, finely disseminated, a mod hard white clay (alunite?) coats many chips, some places its bluish white				430-435	5			
J2-88	Same as J2-87				~~436-440~~ ~~440-445~~	5			

PROJECT JACKBIDGE HOLE NO. J2 SHEET 10 OF 10

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J2-89	same as J2-87				440-445	5			
90	same as J2-87, slightly lighter rock				445-450	5			
91	"				450-455	5			
92	"				455-460	5			
93	"				460-465	5			
94	"				465-470	5			
95	"				470-475	5			
96	"				475-480	5			
97	"				480-485	5			
98	"				485-490	5			
99	"				490-495	5			
100	"				495-500	5			
101	" larger chunks hard white clay some chunks wht vein qz				500-505	5			
102	"				505-510	5			
103	" rock slightly lighter				510-515	5			
104	" "				515-520	5			
105	" "				520-525	5			
106	" "				525-530	5			
107	" "				530-535	5			
108	" "				535-540	5			
109	" w/ hairline qz veinlets				540-545	5			
110	" "				545-550	5			
111	"				550-555	5			
112	"				555-560	5			
113	"				560-565	5			
114	" tr hairline qz veinlets				565-570	5			
115	" "				570-575	5			
116	" "				575-580	5			

PROJECT TACBRIDGE HOLE NO. J2 SHEET 11 OF 12

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J2-117	same as J2-87 some qz veining (10%)				580-585	5			
	some larger chunks alunite								
118	same as J2-87 some wht qz vein material				585-590	5			
119	" "				590-595	5			
120	" "				595-600	5			
121	"				600-605	5			
122	" some wht qz and inc py -				605-610	5			
	in hairline veinlets w/ qz								
123	" bleached up w/ py in hairline				610-615	5			
	qz veins								
124	" tr qz vein material				615-620	5			
125	"				620-625	5			
126	"				625-630	5			
127	" tr greenish white clay				630-635	5			
	some darker grey alunite								
128	" w/ some darker grey alunite				635-640	5			
	prob qz flood zone, fop shows								
	up there better than in lt grey								
129	" w/ tr qz-adularia in altered				640-645	5			
	sed. is replaced by f.g qz								
130	"				645-650	5			
131	"				650-655	5			
132	" "				655-660	5			
133	" "				660-665	5			
134	" "				665-670	5			
135	white qz vein w/ remnant adularia				670-675	5			
	rocks, tr grey qz floated material								
136	10% qz vein material as in J2-135				675-680	5			
	rest is grey alunite mud and mud rock								

PROJECT JACKBIDGE HOLE NO. J2 SHEET 12 OF 16

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
	Sheared Sericitic w/ large qz eyes and								
	some hairline qz veins								
J2-137	Sheared 21 % dk grey sliyolite, same as				680-685	5			
	J2-136, tr qz vein material.								
J2-138	Same as J2-136, some white clay as well				685-690	5			
J2-139	med hard med lt grey sliyolite w/ large qz				690-695	5			
	eyes, slight greenish cast to it. w/ 3-5% qz								
	and tr hard white clay, w/ some hairline qz fractures								
140	same as J2-139, less qz				695-700	5			
141	same as J2-139, ~~w/ py and grey quartz veins~~				700-705	5			
142	" w/ py and grey quartz veins				705-710	5			
143	" "				710-715	5			
144	" w/ ~10% drusy qz veins				715-720	5			
145	" sliyolite slightly darker grey				720-725	5			
	some feps are greenish, ~10% qz								
146	" ~~w/ 3-5% qz~~ py "				725-730	5			
147	" ~~3-5% qz~~ ~10% qz, tr py				730-735	5			
148	" 3-5% qz				735-740	5			
149	" some w/ lg qz eyes, some w/ none				740-745	5			
150	med grey, mod hard sliyolite, lots w/ not				745-750	5			
	many qz eyes, tr qz, tr wht clay								
151	same as J2-150				750-755	5			
152	hard grey sliyolite, lg qz eyes, med sized feps				755-760	5			
	tr py, tr wht clay								
153	same as J2-152, tr hairline qz veins				760-765	5			
154	"				765-770	5			
155	well silicified speckled sliyolite - med grey				770-775	5			
	w/ tr pyrite								
J2-156	same as J2-155. Lots of pyrite				775-780	5			

PROJECT JARBRIDGE HOLE NO. J2 SHEET 12 OF 12

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J2-157	sheared up messed up grey rhyolite w/ lots of pyrite, then into a clay zone ~2-3' where seam is some clay and lots of qz eyes				780-785	5			
158	platy much same as J2-157 some qz eyes very rusty red				785-790	5			
159	all small chips of rhyolite and qz eyes - color from to grey, some greenish and some w/ rusty stain				790-795	5			
160	brownish green rhyolite, med hard w/ dissem py. looks like possibly some hole casts?				795-800	5			
161	small chips hard tan rhyolite, some grey clay, some qz eyes.				800-805	5			
162	small chips - hard grey rhyolite				805-810	5			
163	very hard greenish tan rhyolite w/ very rusty qz eyes - large ones				810-815	5			
164	same as J2-163 but qz eyes not as rusty				815-820	5			
165	same rhyolite as J2-163 mostly clear to rusty qz eyes and some clay				820-825	5			
166	mostly v. med hard to med soft silts unit - looks intra zone alluvial, lt-tannish green. some grey rhyolite w/ py				825-830	5			
167	looking like greenish tan rhyolite w/ lt. greenish shards? crumbly looking				830-835	5			
168	80% same as J2-167 20% grey to brownish rhyolite all small chips				835-840	5			

PROJECT TARBUCK HOLE NO. J2 SHEET 14 OF 16

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J2-169	Same as J2-167				840-845	5			
170	70% same as J2-167				845-850	5			
	rest is hard lt grey silic rhyolite								
171	dark green highly altered rhyolite ~~[illegible]~~		JNS		850-855	5			
	med hard w/ reddish brn alt bt, looks		??						
	like lots of clasts in it, also some large								
	qz eyes - almost looks like a skarn								
	rock - esp color wise								
172	same as J2-171				855-860	5			
173	same as J2-171, also some sheared				860-865	5			
	up grey rhyolite								
174	same as J2-171 w/ some sheared				865-870	5			
	up grey rhyolite and some fresher								
	looking blk bts								
175	same as J2-171, rock darker blk				870-875	5			
	w/ 5-7% qz								
176	same as J2-171				875-880	5			
177	same as J2-171				880-885	5			
178	same as J2-171 (~~40~~%)				885-890	5			
	white qz (~~20~~%)								
	rest is sheared up lt grey rhyolite w/								
	disseminated py -								
	qz in this sample is clear. looks a								
	lot like qz in an intrusive rock								
179	same rock as J2-171 but w/ less				890-895	5			
	green and more lt grey. A couple pieces								
	show a lot of pyrite								
180	coarse grained lt gray granite(?) w/ coarse				895-900	5			
	looking bt and coarse clear qz - fine clay-chl alt								

PROJECT JARBIDGE HOLE NO. J2 SHEET 15 OF 16

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J2-181	Same as J2-180 w/ some grey py				900-905	5			
	bearing rock - fair grained								
182	same as J2-180 looks like it contains				905-910	5			
	more Kaspar, also fair bit qz and some								
	fg grey rocks								
183	very soft int as J2-180 - highly				910-915	5			
	clay chlorite alt - breakable w/ fingers,								
	so soft much of what you see clear								
	to grey qz								
184	same as J2-183 but even softer -				915-920	5			
	sample is mostly qz eyes - tr py								
185	same as J2-184 some clay				920-925	5			
186	much the same as J2-184, also some harder				925-930	5			
	grey magnetite which could be contamination								
187	almost all large clear to grey qz,				930-935	5			
	some chlorite, some int chips				935-940				
188	same as J2-187				940-945	5			
189	same as J2-187				940-945	5			
190	same as J2-187				945-950	5			
191	same as J2-187				950-955	5			
192	same as J2-187				955-960	5			
193	same as J2-187				960-965	5			
194	same as J2-187 - some chips qz				965-970	5			
195	same as J2-187 "				970-975	5			
	TD'd hole because of return problems - found								
	hammer was plugged - probably because								
	we were pushing too hard in clayey ground								

PROJECT JARBRIDGE HOLE NO. J2 SHEET 16 OF 16

PROJECT JARBIDGE HOLE NO. J3 SHEET 1 OF 12

6000 0018 (2520)

FREEPORT EXPLORATION COMPANY

JARBIDGE PROJECT, ELKO COUNTY, NV

GENERAL:

DRILL HOLE NO. J3 TOTAL DEPTH 750'

COLLAR ELEV. _____ COORDINATES _____ N _____ E

BEARING S38W INCLINATION 60°

LOGGED BY KTH

REASON FOR TERMINATION clayey hole getting tight -

DRILL DATA: ROTARY RC CORE

DRILLER Cowin - Becker

DATE STARTED _____ DATE COMPLETED _____

FOOTAGE PER SHIFT _____

BOREHOLE SURVEY:

DEPTH								
ANGLE								
BEARING								

DRILLING PROBLEMS (SUMMARIZE) shale unit caved and contaminated sample below - also in intrusive there were clay zones frequently and they tightened on the pipe requiring hole to be blown clean regularly

SAMPLE DATA:

SAMPLE NUMBER SEQUENCE J3-2 to J3-150

NUMBER OF SAMPLES 149

INTERVALS SAMPLED 5'

MINERALIZED INTERVAL:

FROM	TO	FIRE ASSAY GRADE	COLD CYANIDE GRADE	FROM	TO	FIRE ASSAY GRADE	COLD CYANIDE GRADE

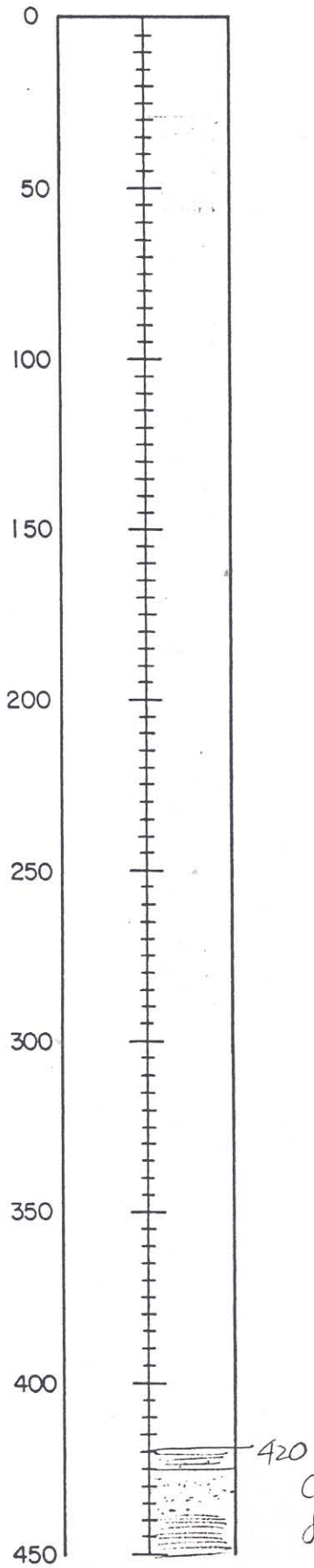
GEOLOGIC SUMMARY OF HOLE:

0 - 420 limes

420 - 468 black carbonaceous shale

468 - 750 intrusive diorite

PROJECT JARBIDGE HOLE NO. J3 SHEET 2 OF 12

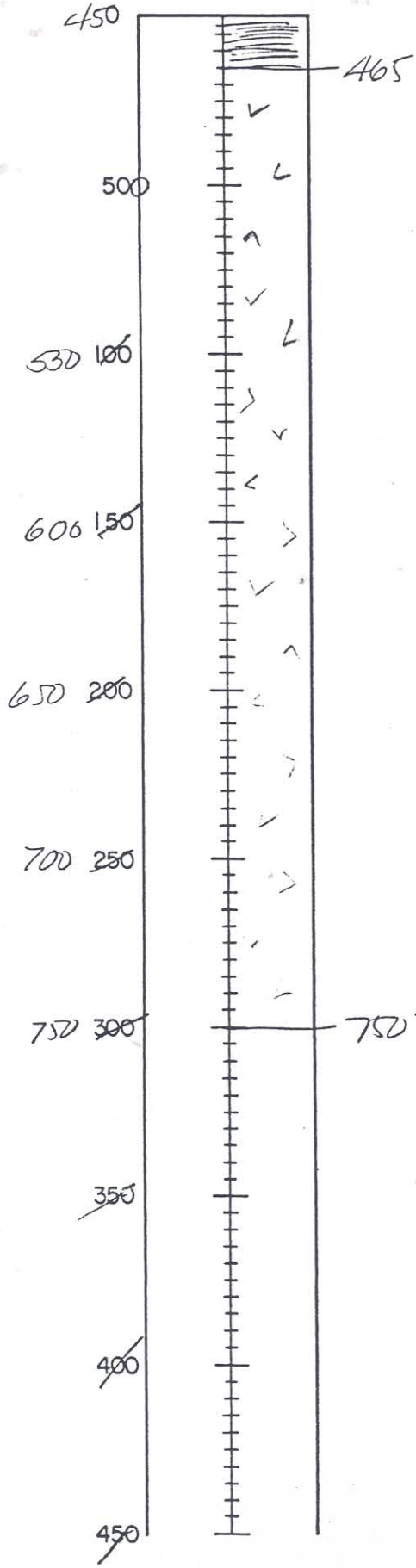


red hard grey to greenish
argillite, locally ox.
w/ lm down to 55'.
intermittent soft
zones throughout
w/ fresh py locally
on surfaces

coarse sdst (grey)
fading down to blue
pyritic shale

Scale: 1" = 50'

PROJECT JARBIDGE HOLE NO. J3 SHEET 3 OF 12



blk pyritic shale

clay chlorite alt granite w/ py

hole got fairly contaminated toward the bottom

mostly soft and small chips

GRANITE

EOH because of contamination and intrusive rock

Scale: 1" = 50'

SAMPLE #	Au(oz/ton)	Ag(oz/ton)
J3-2	-.002	.009
3	-.002	.012
4	-.002	.009
5	-.002	.012
6	-.002	.009
7	-.002	.009
8	-.002	.009
9	-.002	.015
10	-.002	-.003
11	-.002	.006
12	-.002	.009
13	-.002	-.003
14	-.002	-.003
15	-.002	-.003
16	-.002	-.003
17	-.002	.012
18	-.002	.009
19	-.002	.003
20	-.002	.003
J3-21	-.002	.003
J3-22	-.002	.006
23	-.002	.009
34	-.002	.006
25	-.002	.003
26	-.002	.009
27	-.002	.029
28	-.002	.020
29	-.002	.003
30	-.002	-.003
31	-.002	.003
32	-.002	-.003
33	-.002	.009
34	-.002	.012
35	-.002	.006
36	-.002	.006
37	-.002	.006
38	-.002	.003
39	-.002	-.003
40	-.003	-.003
J3-41	-.002	.006
J3-42	-.002	-.003
J3-43	-.002	-.003
J3-44	-.002	-.003
45	-.002	.006
46	-.002	.009
47	-.002	-.003
48	-.002	.003
49	-.002	.003
50	-.002	.015
51	-.002	-.003
52	-.002	-.003
53	-.002	-.003

SAMPLE #	Au(oz/ton)	Ag(oz/ton)
54	-.002	-.003
55	-.002	-.003
56	-.002	-.003
57	-.002	-.003
58	-.002	-.003
59	-.002	-.003
60	-.002	.003
61	-.002	.003
62	-.002	.003
63	-.002	.006
64	-.002	.006
65	-.002	.006
66	-.002	-.003
67	-.002	-.003
68	-.002	.009
69	-.002	.003
70	-.002	.003
71	-.002	.003
72	-.002	.003
73	-.002	-.003
74	-.002	-.003
75	-.002	-.003
76	-.002	-.003
77	-.002	-.003
78	-.002	-.003
79	-.002	-.003
80	-.002	-.003
81**	-.002	-.003
J3-82	-.002	-.003
83	-.002	-.003
84	-.002	-.003
85	-.002	-.003
86	-.002	-.003
87	-.002	-.003
88	-.002	-.003
89	-.002	-.003
90	-.002	.003
91	-.002	.003
92	-.002	.006
93	-.002	.015
94	-.002	.034
95	.003	.017
96	-.002	.017
97	-.002	.006
98	-.002	-.003
99	-.002	.006
100	-.002	.009
101	-.002	.003
102	-.002	.009
103	-.002	.003
104	-.002	.003
105	-.002	-.003
106	-.002	-.003
107	-.002	.003
108	-.002	.003
109	-.002	-.003

SAMPLE #	Au(oz/ton)	Ag(oz/ton)
111	-.002	.038
J3-112	-.002	.026
J3-113	-.002	.029
114	-.002	.035
115	-.002	.026
116	-.002	.015
117	-.002	.018
118	-.002	.015
119	-.002	.006
120	-.002	.009
121	-.002	-.003
122	-.002	.012
123	-.002	.015
124	-.002	.026
125	-.002	.015
126	-.002	.009
127	-.002	-.003
128	-.002	-.003
129	-.002	-.003
130**	-.002	-.003
J3-131	-.002	.006
132	-.002	.006
133	-.002	.003
134	-.002	,006
135	-.002	-.003
136	-.002	.006
137	-.002	.009
138	-.002	.093
139	-.002	.012
140	-.002	.006
141	-.002	.009
142	-.002	-.003
143	-.002	-.003
144	-.002	-.003
145	-.002	.009
146	-.002	.009
147	-.002	.006
J3-148	-.002	.006
149	-.002	-.003
J3-150	-.002	.015

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roost AA oz/T	Cold CN oz/T
J3-2	mostly tan and grey oxidized rhyolite		Qc		5-10	5			
	and soil								
3	mostly Qc same as J3-2		Qc/thy		10-15	5			
	some bleached & thick								
4	med hard lt grey rhyolite w/ lg				15-20	5			
	qz eyes some clay still, some rusty ox								
5	same as J3-4				20-25	5			
6	same as J3-4				25-30	5			
7	same as J3-4, more yellowish ox				30-35	5			
	than rusty								
8	darker grey rhyolite same texture				35-40	5			
	as J3-4, but darker and w/ tr dissem								
	pyrite, tr rusty ox								
9	same as J3-4				40-45	5			
10	same as J3-8				45-50	5			
11	same as J3-4				50-55	5			
12	same as J3-5				55-60	5			
13	med grey rhyolite - same texture				60-65	5			
	as J3-4, 5 same dissem py, not as dark								
	as J3-8, not much ox material								
14	same as J3-13				65-70	5			
15	same as J3-13				70-75	5			
16	same as J3-13				75-80	5			
17	same as J3-13				80-85	5			
18	grey-tan same - very thick zone - same				85-90	5			
	qz eyes throughout in the mass								
19	90% qz eyes				90-95	5			
	10% fine chips rhyolite								
20	mostly qz eyes w/ dissem py constituent				95-100	5			

PROJECT JAGUAR HOLE NO. J3 SHEET 5 OF 12

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Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J3-21	80% grey qz eyes w/ stringers of py				100-105	5			
	20% grey rhyolite - very small chips								
22	80% grey qz eyes w/ stringers of py				105-110	5			
	20% lt grey to greenish grey rhyolite -								
	very small chips - also w/ disseminated								
	fg. py								
23	fine chips of hard probably mostly qz-ser				110-115	5			
	alt med grey rhyolite - looks like more fsp								
	than above - clay-ser alt.								
24	same as J3-23				115-120	5			
25	same as J3-23, a little lighter grey				120-125	5			
	and w/ more qz eyes - softer zone								
26	med hard lt grey fsp rich rhyolite -				125-130	5			
	probably same as J3-23 etc above but								
	less altered. disem py - some greenish								
	chl alt blotches								
27	same as J3-26 fsp kind of sp green				130-135	5			
	large qz eyes, disseim py								
28	same as J3-26, 27				135-140	5			
29	greenish grey rhyolite, med hard, some				140-145	5			
	qz eyes, tr py disem on qz xls, frax								
	material								
30	same as J3-29				145-150	5			
31	same as J3-29				150-155	5			
32	same as J3-29				155-160	5			
33	same as J3-26 (back to grey rhyolite w/ qz eyes)				160-165	5			
34	same as J3-26 "				165-170	5			
35	same as J3-26 "				170-175	5			
36	same as J3-26 "				175-180	5			

PROJECT JAKBRIDGE HOLE NO. J3 SHEET 6 OF 12

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J3-37	fine chips of grey siltstite, 20% qz eyes				180-185	5			
	and 1-2% ox chips								
38	sheared looking grey to dk grey siltstite				185-190	5			
	w/ qz eyes and py in veinlets								
39	Same as J3-38 but slightly lighter				190-195	5			
	grey and maybe more qz eyes								
40	lt grey sheared siltstite (70%)				195-200	5			
	qz eyes w/ py veinlets (20%)								
41	lt grey mod to mod soft siltstite w/				200-205	5			
	grey qz eyes and green fspar - ser?								
	gdness post clay - ser alt, tr qz hairline								
	veinlets								
42	Hard greenish grey qtzr, mod sized				205-210	5			
	qz eyes, some greenish yellow fspar								
	tr diseem py in qz 1%								
43	grey siltstite - high % qz eyes				210-215	5			
44	grey siltstite, some tr to green alt				215-220	5			
45	grey siltstite, tr ox material				220-225	5			
46	qz eyes w/ tr diseem py and clay -				225-230	5			
	a few grey rock chips								
47	greenish grey med hard phyl alt siltstite				230-235	5			
	some (1%) qz eyes in vein, some whitish								
	blotches may have been fspr								
48	same as J3-47				235-240	5			
49	95% dk grey siltstite				240-245	5			
	5% ox misty material								
50	same as J3-47 w/ ~1% py				245-250	5			
51	same as J3-47				250-255	5			
52	same as J3-47				255-260	5			

PROJECT 7A23105 HOLE NO. J3 SHEET 7 OF 12

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J3-53	fine chips ~~[illegible]~~ green rhyolite and qz eyes				260-265	5			
	w/ 4-5% ox rusty chips - prob soft								
	fracture zone.								
54	~~[illegible]~~ green rhyolite ~~w/ [illegible] and some [illegible]~~ and qz eyes (15-20%) tr py				265-270	5			
55	same as J3-54				270-275	5			
56	same as J3-54				275-280	5			
57	same as J3-54 w/ 2-3% ox rusty rhyolite				280-285	5			
58	same as J3-54 but softer zone with				285-290	5			
	25-30% qz eyes								
59	same as J3-54				290-295	5			
60	same as J3-54				295-300	5			
61	same as J3-54, 2-3% rusty ox'd. chips				300-305	5			
62	back into more competent rock - fewer				305-310	5			
	white qz eyes - rock is med grey to lt grey								
	rhyolite - prob day or alt - most hard								
	chips and small qz eyes, med day alt zones								
	in the white portions the fs appear green -								
	either Au or ± chlorite								
63	same as J3-62, less wht rock.				310-315	5			
64	same as J3-62, "				315-320	5			
65	same as J3-62 but fractured up and				320-325	5			
	softer w/ 3-4% rusty ox'd chips								
66	same rock as J3-62 but sheared up in				325-330	5			
	this sample - also it has a more gree with carb								
67	same rock as J3-62, back to dk grey w/				330-335	5			
	some hairline veinlets containing pyrite								
68	same rock as J3-62 - softer zone w/ a				335-340	5			
	lot of fine qz eyes								
69	medium grey w/ J3-62 rock chips and rusty ox'd. chips, qz eyes				340-345	5			

PROJECT JACKSIDE HOLE NO. J3 SHEET 8 OF 12

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J3-70	DOH zone, rock sheared and w/more				345-350	5			
	greenish clay than above - lots of free qz eyes								
71	qz eyes and clay zone				350-355	5			
72	sample almost all qz eyes				355-360	5			
73	fracture zone w/ more rock chips than				360-365	5			
	stone - also some greyes and 3-4% oxidized								
	rock chips								
74	DOH zone - sample mostly qz eyes				365-370	5			
	and 1 small grey slightly clayey tray								
75	same as J3-74				370-375	5			
76	qz veined fracture zone - all small chips				375-380	5			
77	same as J3-76				380-385	5			
78	small lt to dk grey tray clayey slightly				385-390	5			
79	brown uncemented grey slightly				390-395	5			
	greenish yellow grey med hard clay (?)								
	cement								
80	same as J3-79				395-400	5			
81	qz eyes and small grey rock chips				400-405	5			
82	partly oxidized fracture zone				405-410	5			
83	mostly qz eyes - sample has a very				410-415	5			
	dark green appearance to it								
84	same as J3-83				415-420	5			
85	15% fractured ox slightly				420-425	5			
	85% laminated med hard blk carb shale								
86	greenish grey sandstone ?, fine to m.gr.				425-430	5			
	that looks like!								
87	same as J3-86				430-435	5			
88	med hard blk carb shale				435-440	5			
89	same as J3-88 w/ some ox rock intermixed				440-445	5			

PROJECT JACKPOT HOLE NO. J3 SHEET 9 OF 12

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roost AA oz/T	Cold CN oz/T
B90	same as J3-88 w/ 1-2% oxidized vein mat		sh		445-450	5			
91	same as J3-88		sh		450-455	5			
92	same as J3-88		sh		455-460	5			
93	"		sh		460-465	5			
94	oxidized fracture zone, ~~some~~ all fine chips.				465-470	5			
	some grey shale as above, some qz vein								
	material, some chlorite-qz rock.								
	Fox as hm & jar (tr)								
95	altered porphyritic intrusive rock -		INT		470-475	5			
	sheared w/ some hairline qz veining -								
	chips are mainly chlorite or qz or some								
	combination thereof. w/ tr disseminated py								
96	same as J3-95 w/ lots of contamination				475-480	5			
	from the shale unit								
97	same as J3-95				480-485	5			
98	same as J3-95 fracture zone in intrusive - w/ Fe ox and				485-490	5			
99	chlorite which is either a dike or								
	contamination more likely the latter								
100	same as J3-98				495-500	5			
101	sheared porphyritically altered intrusive				500-505	5			
	rock - still w/ tr disseminated py and some								
	shale contamination								
102	same as J3-101				505-510	5			
103	same as J3-101				510-515	5			
104	"				515-520	5			
105	" some oxidized				520-525	5			
106	"				525-530	5			
107	" some oxidized				530-535	5			
108	" some hm mat				535-540	5			

PROJECT TR23IDGF HOLE NO. J3 SHEET 10 OF 12

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J3-109	same as J3-101				540-545	5			
110	same as J3-101 some hm stain on g3				545-550	5			
111	" considerable hm stain on g3				550-555	5			
	fractured w/ clay zones								
112	" some [illegible] bt books are				555-560	5			
	very red, chlorite also present								
113	" w/ hm, jas oxides locally (tr)				560-565	5			
114	" g3 w/ pinkish cast				565-570	5			
115	"				-575	5			
116	"				-580	5			
117	"				-585	5			
118	"				-590	5			
119	"				-595	5			
120	"				-600	5			
121	"				-605	5			
122	"				-610	5			
123	" some flesh colored Kspar?				-615	5			
124	"				-620	5			
125	"				625	5			
126	" } altered zone - higher % g2 in sample				-630	5			
127	" } and [illegible]				-635	5			
128	"				-640	5			
129	" less green colored - more reddish				-645	5			
130	" "				-650	5			
131	" "				-655	5			
132	" "				-660	5			
133	" more greenish apatite				-665	5			
134	"				-670	5			
135	"				-675	5			

PROJECT TARBUDGE HOLE NO. J3 SHEET 11 OF 12

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J3-136	same as J3-101 mostly qz stained		INT		675-680	5			
137	" w/ clayballs & contamination				-685	5			
138	" w/ lots of clay				-690	5			
139	"				-695	5			
140	" mostly qz w/ some clayballs				-700	5			
141	" w/ red clayballs and red water				-705	5			
142	" distinct red cast to qz				-710	5			
	w/ red H_2O as J3-141								
143	" distinct red cast to qz				-715	5			
144	" "				-720	5			
145	" w/ few bit of contamination				-725	5			
146	" "				-730	5			
147	" "				-735	5			
148	" "				-740	5			
149	" "				-745	5			
150	" "				-750	5			
					TD				
	Quit hole because of (1) rock type								
	(2) clay causing sticking problems								
	(3) contamination from shale horizon								

PROJECT J3-136 HOLE NO. J3 SHEET 12 OF 12

PROJECT JARBIDGE HOLE NO. J4 SHEET 1 OF 11

6000 0018 (2520)

FREEPORT EXPLORATION COMPANY

JARBIDGE PROJECT, ELKO COUNTY, NV

GENERAL:

DRILL HOLE NO. J4 TOTAL DEPTH 250'

COLLAR ELEV. _____ COORDINATES _____ N _____ E

BEARING S42E INCLINATION 60°

LOGGED BY WH

REASON FOR TERMINATION drilled sufficient intrusive rock

DRILL DATA: ROTARY RC CORE

DRILLER Curran - Becker

DATE STARTED _____ DATE COMPLETED _____

FOOTAGE PER SHIFT _____

BOREHOLE SURVEY:

DEPTH								
ANGLE								
BEARING								

DRILLING PROBLEMS (SUMMARIZE) none

SAMPLE DATA:

SAMPLE NUMBER SEQUENCE J4-34 thru J4-148

NUMBER OF SAMPLES 146

INTERVALS SAMPLED 5'

MINERALIZED INTERVAL:

FROM	TO	FIRE ASSAY GRADE	COLD CYANIDE GRADE	FROM	TO	FIRE ASSAY GRADE	COLD CYANIDE GRADE

GEOLOGIC SUMMARY OF HOLE:

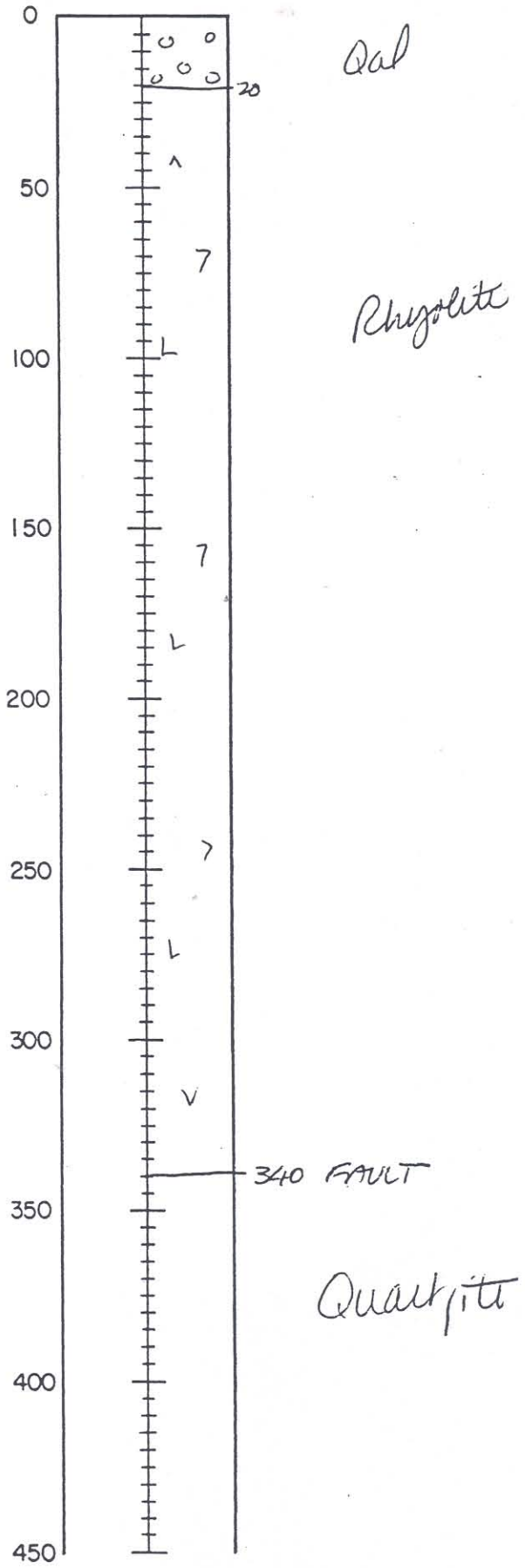
0-20 Qal

20-340 Qvr

340-525 Quartzite

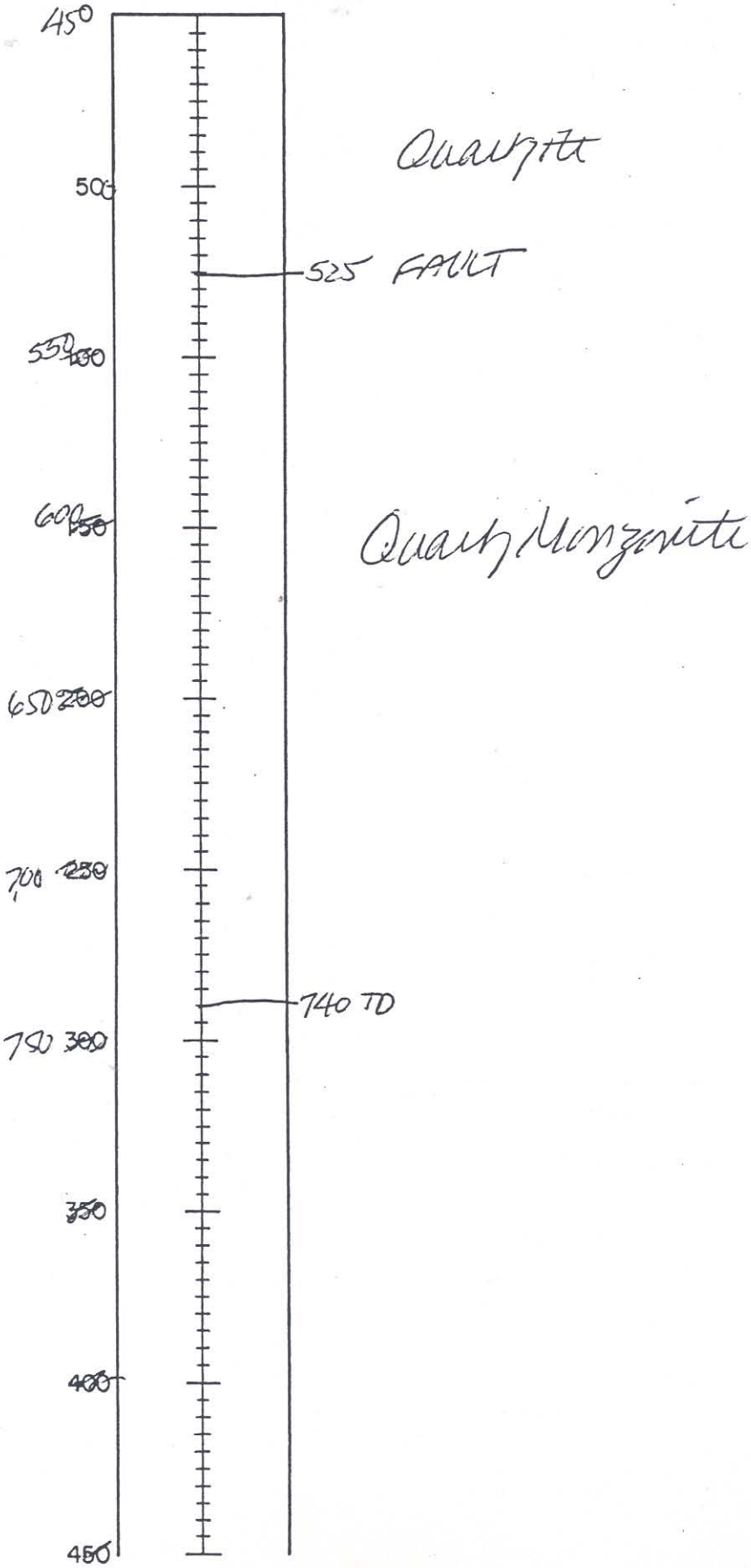
525-740 Quartz Monzonite

PROJECT _____ HOLE NO. _____ SHEET 2 OF 11



Scale: 1" = 50'

PROJECT _____ HOLE NO. _____ SHEET 3 OF 11



Scale: 1" = 50'

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SAMPLE #	Au(oz/ton)	Ag(oz/ton)
J4-3**	-.002	.009
5	-.002	.006
6	-.002	.012
7	-.002	.009
8	-.002	.006
9	-.002	.003
10	-.002	.006
11	-.002	.003
12	-.002	.012
13	-.002	.015
14	-.002	.006
15	-.002	.006
16	-.002	.006
17	-.002	.003
18	-.002	.009
19	-.002	.012
20	-.002	.015
21	-.002	.006
22	-.002	.003
23	-.002	.006
24	-.002	.006
25	-.002	.003
26	-.002	.003
27	-.002	.006
28	-.002	.009
29	-.002	.023
30	-.002	.009
31	-.002	.009
32	-.002	.012
J4-33	-.002	.012
J4-34	-.002	.009
35	-.002	.006
36	-.002	.009
37	-.002	.009
38	-.002	.015
39	-.002	.006
40	-.002	.009
41	-.002	.012
42	-.002	.006
43	-.002	.009
44	-.002	.012
45	-.002	.012
46	-.002	.009
47	-.002	.006
48	-.002	.003
49	-.002	.003
50	-.002	.006
51	-.002	.003
52	-.002	.003
53	-.002	.006
54	-.002	.006
55	.002	-.003
56	-.002	-.003
57	-.002	-.003
58	-.002	.003

SAMPLE #	Au(oz/ton)	Ag(oz/ton)
59	-.002	.003
60	-.002	.003
61	-.002	-.003
62	-.002	.003
63	-.002	.003
64	-.002	.003
65	-.002	.003
66	-.002	.006
67	-.002	.003
68	-.002	.006
69	-.002	.012
70	-.002	.003
71	-.002	.003
72	-.002	-.003
J4-73	-.002	-.003
J4-74	-.002	-.003
75	-.002	-.003
76	-.002	.003
77	-.002	-.003
78	-.002	-.003
79	-.002	-.003
80	-.002	-.003
81	-.002	.003
82	-.002	-.003
83	-.002	.012
84	-.002	.009
85	-.002	.006
86	-.002	.009
87	-.002	.012
88	-.002	.003
89	-.002	-.003
J4-90	-.002	.003
J4-91	-.002	.006
92	-.002	.003
93	-.002	-.003
94	-.002	.003
95	-.002	.003
96	-.002	.003
97	-.002	.003
98	-.002	.003
99	-.002	.009
100	-.002	.006
101	-.002	.003
102	-.002	.003
103	-.002	.003
104	-.002	-.003
105	-.002	.003
106	-.002	.006
107	-.002	.006
108	-.002	.003
109	-.002	.003
110	-.002	.003

SAMPLE #	Au(oz/ton)	Ag(oz/ton)
111	-.002	.009
112	-.002	-.003
113	-.002	-.003
114	-.002	-.003
115	-.002	.009
116	-.002	.003
117	-.002	.009
118	-.002	-.003
119	-.002	-.003
J4-120	-.002	-.003
J4-121	-.002	-.003
122	-.002	-.003
123	-.002	-.003
124	-.002	-.003
125	-.002	.003
126	-.002	-.003
127	-.002	-.003
128	-.002	.018
129	-.002	-.003
130	-.002	-.003
131	-.002	-.003
132	-.002	-.003
133	-.002	-.003
134	-.002	-.003
135	-.002	.009
136	-.002	-.003
137	-.002	-.003
138	-.002	-.003
139	-.002	-.003
140	-.002	-.003
141	-.002	-.003
142	-.002	.003
143	-.002	-.003
144	-.002	-.003
145	-.002	-.003
146	-.002	-.003
147	-.002	-.003
J4-148**	-.002	-.003

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J4-3	med soft to med hard per, tan to grey to purplish w/ lim stained clay		Qal		10-15	5			
4	no sample				15-20	5			
J4-5	very hard chalky looking grey rhyolite fgp → wht clay now, some jar stained clay		Qvr		20-25	5			
6	same as J4-5				25-30	5			
7	same as J4-5				30-35	5			
J4-8	med hard to hard greenish grey rhyolite, softer than J4-5 w/ fg eyes, some lim stained clay and whitish clay				35-40	5			
9	50 50 as J4-8 50 50 lt greenish wht f.g porph rhyolite flow or volcaniclasts - quite hard for sure, but that's what they look like				40-45	5			
10	Outcrop fg eyes, some hard brittle rhyolite as in J4-5, 8 very small chips				45-50	5			
11	same as J4-10				50-55	5			
12	mostly fg eyes, lt med hard lt grey rhyolite				55-60	5			
13	Same as J4-12				60-65	5			
14	"				65-70	5			
15	"				70-75	5			
16	" one chip of lt grey rhyolite				75-80				
17	" "				80-85	5			
18	" " lt gy				85-90	5			
19	grainy silic rhyolite, hard, lt to med grey w/ 1% ± py, fg, scattered throughout		py		90-95	5			
20	med hard med grey rhyolite conglomerate w/ fg eyes				95-100	5			
21	same as eyes - med hard wht nonporph. rhy				100-105	5			

PROJECT JAGGIDGE HOLE NO. J4 SHEET 2 OF 11

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J4-22	hard wht to pinkish qz-ser alt rhyolite		Qer		105-110	5			
	w/ smoky gray qz eyes, some loose qz-eyes								
23	same as J4-22, more qz eyes				110-115	5			
24	same as J4-22, finer eyes				115-120	5			
25	med hard greenish gray qer w/ trpy		py		120-125	5			
	tr lm clay, some med gray cherty looking								
26	same as J4-25				125-130	5			
27	same as J4-25 less py				130-135	5			
28	same as J4-25 more lm clay				135-140	5			
29	same as J4-25 with more lm				140-145	5			
30	" greyer, less lm				145-150	5			
31	" " "				150-155	5			
32	" " "				155-160	5			
33	"				-165	5			
34	"				-170	5			
35	"				-175	5			
36	"				-180	5			
37	"				-185	5			
38	"				-190	5			
39	"				-195	5			
40	"				-200	5			
41	"				-205	5			
42	"				-210	5			
43	"				-215	5			
44	" lighter gray w/ 10% wht qz vein				-220	5			
45	" slight inc in lm				-225	5			
46	"				-230	5			
47	"				-235	5			
48	"				-240	5			

PROJECT TREBIDGE HOLE NO. J4 SHEET 2 OF 11

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J4-49	same as J4-25		Qer		240-245	5			
50	"				-250				
51	" w/ tr lm				-255				
52	"				-260				
53	"				-265				
54	" w/ tr lm				-270				
55	"				-275				
56	"				-280				
57	" yellower				-285				
58	" mud grey				-290				
59	" yellower				-295				
60	" " w/ tr lm				-300				
61	" w/ tr lm				-305				
62	"				-310				
63	"				-315				
64	"				-320				
65	" some qz flooding				-325				
66	" clusters tr-1% py, particularly		py		-330				
	w/ qz veins								
67	"				-335				
68	" light grey, finer grained		py		-340				
	w/ py, trace to qzite								
69	highly pyritiferous dk grey shale w/		QZITE	QZITE	-345				
	some lm/lms stained with qzite								
70	very hard v lt tan to pinkish and tr				-350				
	greenish quartzite tr lm								
71	same as J4-70				-355				
72	"				-360				
J4-73	"				-365				

PROJECT JACKBIDGE HOLE NO. J4 SHEET 8 OF 11

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J4-74	same as J4-70		Qzite		365-370	5			
75	"				-375				
76	"				-380				
77	"				-385				
78	"				-390				
79	"				-395				
80	"				-400				
81	"				-405				
82	"				-410				
83	"				-415				
84	"				-420				
85	" few 50 lm				-425				
86	" tr lm				-430				
87	" "				-435				
88	" "				-440				
89	" "				-445				
90	"				-450				
91	"				-455				
92	"				-460				
93	"				-465				
94	"				-470				
95	"				-475				
96	"				-480				
97	"				-485				
98	"				-490				
99	"				-495				
100	"				-500				
101	"				-505				
102	"				-510				

PROJECT TAC3106C HOLE NO. J4 SHEET 8 OF 11

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roost AA oz/T	Cold CN oz/T
J4-103	same as J4-70		Qzt		510-575	5			
104	"		↓		-520	5			
105	"		↓		-525	5			
106	clay-ser-chl altered qz monzonite		QM		-530	5			
	drive to bluegreen, large grains qz				-				
107	same as J4-106				-535	5			
108	"				-540				
109	"				545				
110	"				-550				
111	"				-555				
112	"				-560				
113	" more bluegreen, higher % qz, clay				-565				
114	" "				-570				
115	" "				-575				
116	" "				-580				
117	" "				-585				
118	" "				-590				
119	" "				-595				
120	" "				-600				
121	" "				-605				
122	" "				-610				
123	" "				-615				
124	" "				-620				
125	" "				-625				
126	" "				-630				
127	" "				-635				
128	" "				-640				
129	" "				-645				
130	" "				-650				

PROJECT _____ HOLE NO. _____ SHEET 10 OF 11

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J4-131	same as J4-106 more blue green, more qz				650-655	S			
132	" "				-660				
133	" "				-665				
134	" "				-670				
135	" "				-675				
136	" "				-680				
137	" "				-685				
138	" "				-690				
139	" "				-695				
140	" "				-700				
141	" "				-705				
142	" "				-710				
143	" "				-715				
144	" "				-720				
145	" "				-725				
146	" "				-730				
147	" "				-735				
148	" "				-740				
	TD				TD				

PROJECT _____ HOLE NO. _____ SHEET 11 OF 11

PROJECT JARBIDGE HOLE NO. J5 SHEET 1 OF 13

6000 0018 (2520)

FREEPORT EXPLORATION COMPANY

JARBIDGE PROJECT, ELKO COUNTY, NV

GENERAL:

DRILL HOLE NO. J5 TOTAL DEPTH 905'

COLLAR ELEV. _____ COORDINATES _____ N _____ E

BEARING S40°E INCLINATION 60°

LOGGED BY KTH

REASON FOR TERMINATION _____

DRILL DATA: ROTARY RC CORE

DRILLER Dave Carman / Becker

DATE STARTED _____ DATE COMPLETED _____

FOOTAGE PER SHIFT _____

BOREHOLE SURVEY:

DEPTH								
ANGLE								
BEARING								

DRILLING PROBLEMS (SUMMARIZE) no real problems - just very hard and chewed up bits below 750'

SAMPLE DATA:

SAMPLE NUMBER SEQUENCE J5-5 through J5-182

NUMBER OF SAMPLES 177

INTERVALS SAMPLED 5'

MINERALIZED INTERVAL:

FROM	TO	FIRE ASSAY GRADE	COLD CYANIDE GRADE	FROM	TO	FIRE ASSAY GRADE	COLD CYANIDE GRADE

GEOLOGIC SUMMARY OF HOLE:

0-220 soft clayey iron stained highly altered rhyolite

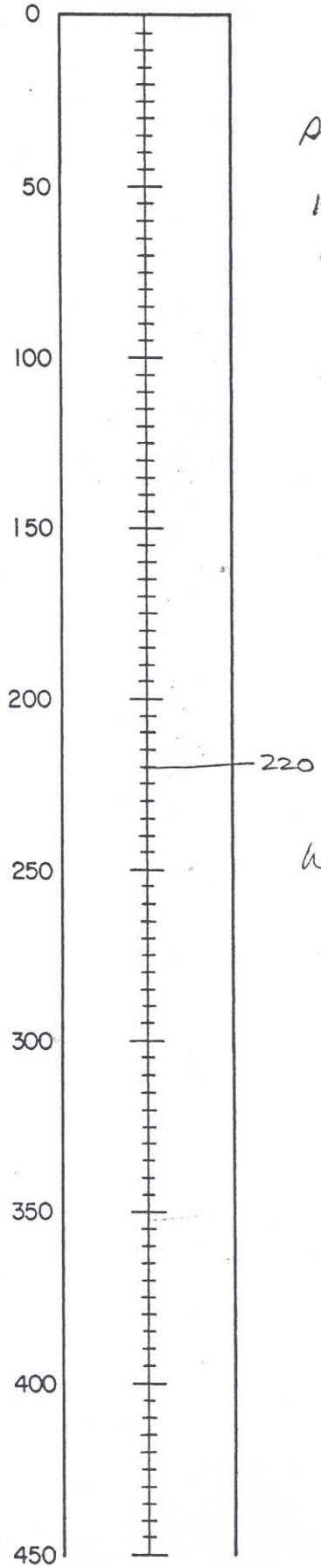
220-~580 very hard qz-ser alt and locally qz flooded rhyolite lm, pyrite trace Fe ox limited to fractures, rock generally lt grey locally pinkish or yellowish

slope thru 255 we have fresh py, above that all trace visible is ox Fe

580-850 mod hard medgrey qz-ser alt rhyolite frequently w/ small black specks which are probably py and locally w/ vein or blobby py. local Fe ox (lim ± hm, jar) through this zone, but mostly ~~lit visible~~ unoxidized

850-906 TD [illegible] rhyolite w/ local

PROJECT JARBIDGE HOLE NO. J5 SHEET ____ OF 13

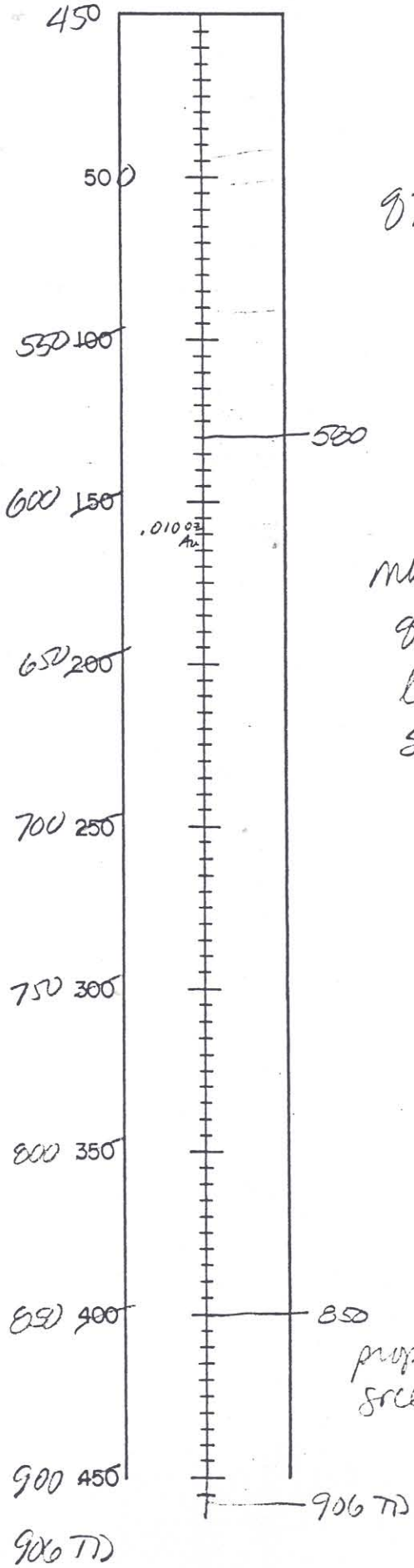


soft Fe stained rhyolite mostly bm/lm, tr jar locally

hard rhyolite, qz-ser alt and qz flooded, svey to penetrate w/ bm/hm along some fractures and local qz veins

Scale: 1" = 50'

PROJECT JARBIDGE HOLE NO. J5 SHEET ____ OF 13



Scale: 1" = 50'

SAMPLE #	R. Acid Au(oz/ton)	Ag(oz/ton)	Fire Au(oz/ton)
J5-115	-.002	.029	
116	-.002	.006	
117	-.002	.009	
118	-.002	.009	
119	-.002	.003	
120	-.002	.009	
121	.002	.023	
122	.010	.029	.010
J5-123	-.002	.009	
125	.007	.038	
126	.002	.026	
127	-.002	.026	
128	-.002	.012	
129	-.002	.029	
130	-.002	.012	
131	-.002	.009	
132	-.002	.009	
133	-.002	.018	
134	-.002	.018	
135	-.002	.020	
136	-.002	.018	
137	-.002	.006	
138	-.002	.003	
139	-.002	.023	
140	-.002	.006	
141	-.002	.006	
142	-.002	.006	
143	-.002	.009	
J5-144	-.002	.009	

SAMPLE #	Au(oz/ton)	Ag(oz/ton)
J5-145	-.002	.032
146	-.002	.020
147	-.002	.020
148	-.002	.009
149	-.002	.015
150	-.002	.012
151	-.002	.012
152	-.002	.006
153	-.002	.006
154	-.002	.018
155	.002	.029
156	-.002	.012
157	-.002	.023
158	-.002	.032
159	-.002	.023
160	-.002	.018
161	-.002	.029
162	-.002	.041
163	-.002	.023
164	-.002	.012
165	-.002	.009
166	-.002	.012
167	-.002	.023
168	-.002	.020
169	-.002	.015
170	-.002	.018
171	-.002	.015
172	-.002	.012
173	-.002	.012
174	-.002	.009
175	-.002	.003
176	-.002	.003
177	-.002	.006
178	-.002	.012
179	-.002	.006
180	-.002	-.003
181	-.002	.009
182**	-.002	.006

SAMPLE #	Au(oz/ton)	Ag(oz/ton)
J5-5	-.002	-.003
6	-.002	.009
7	-.002	.015
8	-.002	.009
9	-.002	-.003
10	-.002	-.003
11	-.002	-.003
12	-.002	-.003
13	-.002	-.003
13	-.002	-.003
15	-.002	-.003
16	-.002	-.003
17	-.002	-.003
18	-.002	-.003
19	-.002	-.003
20	-.002	-.003
21	-.002	-.003
22	-.002	-.003
23	-.002	-.003
24	-.002	-.003
25	-.002	-.003
26	-.002	-.003
27	-.002	-.003
28	-.002	-.003
29	-.002	-.003
30	-.002	-.003
31	-.002	-.003
32	-.002	-.003
33	-.002	-.003
J5-34	-.002	-.003
J5-35	-.002	-.003
36	-.002	-.003
37	-.002	-.003
38	-.002	-.003
39	-.002	-.003
40	-.002	-.003
41	-.002	-.003
42	-.002	-.003
43	-.002	-.003
44	-.002	-.003
45	-.002	.009
46	-.002	.006
47	-.002	.012
48	-.002	.020
49	-.002	.026
50	-.002	.026
51	-.002	.012
52	-.002	.003
53	-.002	.006
54	-.002	.012
55	-.002	.015
56	-.002	.026
57	.002	.026
58	.004	.032
59	.005	.064

SAMPLE #	Au(oz/ton)	Ag(oz/ton)
60	-.002	.032
61	-.002	.035
62	-.002	.035
63	.005	.053
J5-64	-.002	.058
J5-65	-.002	.032
66	-.002	.026
67	-.002	.018
68	-.002	.026
69	-.002	.038
70	-.002	.032
71	-.002	.023
72	-.002	.038
73	-.002	.026
74	-.002	.012
75	-.002	.015
76	-.002	.012
77	-.002	.006
78	-.002	.020
79	-.002	.020
80	-.002	.018
81	-.002	.012
82	-.002	.020
83	.002	.018
84**	.008	.029
J5-85	.008	.023
86	.002	.018
87	-.002	.015
88	-.002	.009
89	.002	.006
90	-.002	.015
91	.004	.026
92	.003	.006
93	-.002	.009
94	-.002	.009
95	-.002	.006
96	.002	.003
97	-.002	.006
98	-.002	.006
99	-.002	.012
100	-.002	.012
101	-.002	.006
102	-.002	.006
103	.002	.012
104	-.002	.006
105	-.002	.009
106	.003	.012
107	.003	.020
108	.003	.018
109	.003	.012
110	-.002	.012
111	.004	.009
112	-.002	.009
113	.006	.015
J5-114	-.002	.009

∡ OF HOLE 60° ~N42W

Sample Number	Description	Dip	Fe	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J5-5	fine chips oxidized hm stained rhyolite				20-25	5			
	and qz eyes - rock probably not very hard -								
	30-40% of chips are white clay - prob alunite								
6	Same as J5-5				25-30	5			
7	fine chips stained hm, ± tr spec hm, + golden		hm		30-35	5			
	alt rhyolite w/ qz eyes and 10-15% alunite								
8	Same as J5-5		hm		35-40	5			
9	Same as J5-7		hm		40-45	5			
10	Same as J5-7 some chalcedonic material		hm		45-50	5			
11	less Fe stained than above - most rock,		hm ± jar		50-55	5			
	qz eyes, some lm ± jar clay, 5-10% alunite		lm						
12	qz eyes, alunite clay and tr hm, jar?		hm jar?		55-60	5			
13	same as J5-12		"		60-65	5			
14	same as J5-12		"		65-70	5			
15	same as J5-12		"		70-75	5			
16	Same as J5-12		"		75-80	5			
17	same as J5-12		"		80-85	5			
18	same as J5-12 w/slightly larger very		"		85-90	5			
	rounded chips - and less Fe ox than above								
19	same as J5-12, some small rounded chunks clay				90-95	5			
20	" "				95-100	5			
21	" " tr lm		lm		100-105	5			
22	" lic amt hm		hm		105-110	5			
23	" more hm still, tr lm		lm		110-115	5			
24	" less hm than 23				115-120	5			
25	" more orange Fe ox				120-125	5			
26	" w/ hm + spec hm		spec hm		125-130	5			
27	" w/ lots of hm, tr jar?				130-135	5			
J5-28	" "				135-140	5			

PROJECT JACKBIDGE HOLE NO. J5 SHEET 5 OF 13

Sample Number	Description	Dip	Fe	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J5-29	qz eyes and alunite w/tr hm		hm		140-145	5			
30	hm clay zone, w/ a few qz eyes and some alunite		hm		145-150	5			
31	strongly hm-qz flooded zone - very small chips, some goe - jar but mostly hm		strong hm		150-155	5			
32	qz eyes, silic siltstone and alunite very strong hm staining - pervasive		hm		155-160	5			
33	mottly looking purplish red silic siltstone, tr alunite, fair amt hm, tr jar		hm tr jar		160-165	5			
34	same as J5-33, but w/ considerable jar and not nearly as much hm as 33		"		165-170	5			
35	fine chips of hard concordally fractured silic siltstone w/ jar + hm flooding		hm jar	XX XX XX	170-175	5			
36	mostly mottly looking silic siltstone a/w J5-33. main Fe ox is jar - mustard yel		jar	XX XX	175-180	5			
37	same as J5-33, less hm but still some, tr jar		hm tr jar	XX XX	180-185	5			
38	hairline qz veined silic mottly siltstone w/ some hm, jar, overall sample color pinkish grey, tr fresh py		hm jar	XX XX	185-190	5			
39	very hm stained, speckled w/ small hm dots - purple red; faint tr jar.		hm tr jar	XX XX	190-195	5			
40	silicified siltstone lt grey, w/ tr hm, lm			XX	195-200	5			
41	lt tarnish grey silic siltstone		none	XX	200-205	5			
42	same as J5-41 w/ slightly more hm, tr jar		hm, tr jar	XX	205-210	5			
43	pinkish purple siltstone w/ fair bit hm well silic		hm	XX XX	210-215	5			
44	same as J5-43		hm	XX	215-220				

PROJECT TARBRIDGE HOLE NO. J5 SHEET 6 OF 13

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J5-45	mostly silic tan to pinkish/purplish		tr lm jas	XX	220-225	5			
	tan Muscovite, tr lm, some jas								
46	same as J5-45		"	XX	225-230	5			
47	same as J5-45 jasroid hematite as		"	XX	230-235	5			
	separate pieces, Muscovite sometimes			XX					
	tan see bolt.								
48	same as J5-45		"	XX	235-240	5			
49	silicified muscovite-tan, hard-breaks			XX	240-245	5			
	more angularly than J5-45etc - probably			XX					
	more completely silicified, some K-spar, more			XX					
	lm-jas than lm								
50	same as J5-49			XX	245-250	5			
51	same as J5-49 - lapschunks			XX	250-255	5			
52	white, grey and gold silic muscovite w/		PY	XX	255-260	5			
	sec. lm on fractures and speckled w/pyrite								
	especially where greyer								
53	same as J5-52				260-265	5			
54	lt grey muscovite totally silic w/lm +				265-270	5			
	jas along fractures, speckled w/tr pyrite								
55	same as J5-54 but w/more tan musc				270-275	5			
	and more pink w/lm								
56	same as J5-54, more dk grey				275-280	5			
57	same as J5-54, more lm stained chips				280-285	5			
58	same as J5-54, slightly more lm-jas, lm.				285-290	5			
59	" mixed tan and grey, tr lm, jas				290-295	5			
60	" mostly grey w/ blotches and				295-300	5			
	veinlets of jas								
61	grey tan - in fracture zone				300-305	5			
62	" mottled blond chert grey				305-310	5			

PROJECT Talbot HOLE NO. J5 SHEET 7 OF 13

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roost AA oz/T	Cold CN oz/T
J5-63	same as J5-54 mottled lt + dk grey				310-315	5			
64	" tan w/ large alery fract				315-320	5			
65	" mostly grey, w/ gre = lem				320-325	5			
66	" "				325-330	5			
67	" "				330-335	5			
68	" tan, grey + pink (mine ox)				335-340	5			
69	" " w/ dark rock				340-345	5			
70	" mostly grey, some red/gold fe ox				345-350	5			
71	" "				350-355	5			
72	" "				355-360	5			
73	" w/ jas - gre fe ox.				360-365	5			
74	" " more ox than 73				365-370	5			
	Pyrrhotite fractured								
75	" mostly grey 1 pain w/ py				370-375	5			
76	" grey sheared w/ speckled py				375-380	5			
77	" pink and grey				380-385	5			
78	" pink and grey				385-390	5			
79	" "				390-395	5			
80	" " slightly more fract				395-400	5			
81	" tannish grey speckled silic rhy				400-405	5			
82	" 3% oxidized pink, rest grey				405-410	5			
83	" all greys				410-415	5			
84	" "				415-420	5			
85	" mostly grey w/ 2-3% pink + frag vein				420-425	5			
86	" 40% ox 65 pink + tan fractured				425-430	5			
87	" all grey				430-435	5			
88	" lt tannish grey, w/ tuffite + jas				435-440	5			
89	" " w/ hem, lim, ± jas				440-445	5			
90	" mostly lt grey w/ tr oxidized				445-450	5			

PROJECT JACBRIDGE HOLE NO. J5 SHEET 3 OF 13

∢ of hole – 60° N40W

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
75-91	Same as 75-54 lt tan grey w/ hairline qz				450-455	5			
92	" lt tan grey w/ tr bm 2m, fair				455-460	5			
93	" " w/ goe-lm + jointed				460-465	5			
	somewhat fractured								
94	" w/ lm-goe, some vug fract				465-470	5			
95	" well fract w/ tr lm				470-475	5			
96	" w/ lm-goe, not too fract				475-480	5			
97	" nicely unfractured some lm goe				480-485	5			
98	" fractured lt tan grey w/				485-490	5			
	bm-goe + some qz veins								
99	" same as 98				490-495	5			
100	" unfract, lt tan-pink grey,				495-500	5			
	tr lm goe								
101	" unfract, lt tan grey				500-505	5			
	not much Fe ox								
102	" grey tan-mat + pinkish grey				505-510	5			
	w/ jas veinlets								
103	" lt grey w/ qz veins, fairly fract				510-515	5			
	w/ lm goe veinlets + fracture fills								
104	" lt grey well fractured w/ goe				515-520	5			
	on fractures								
105	" lt grey, slightly fract, w/ goe				520-525	5			
	unfractured								
106	" lt grey, tr jas, not very fract				525-530	5			
107	" grays w/ qz, fine disp only				530-535	5			
108	" " tr limon				535-540	5			
109	" " not much Fe ox				540-545	5			
110	" grey and pink but Fe ox on fractures				545-550	5			
111	" grey and pinkish w/ tr lm goe				550-555	5			

PROJECT TAFBUNE HOLE NO. 75 SHEET 9 OF 13

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J5-112	same as J5-54 w/ grey + pink and lm/lm on fractures				555-560	5			
113	very hard grey rhyolite - qz sericite to mostly silicified, some qz hairline veinlets mostly small qz eyes				560-565	5			
114	same as J5-113, lm ± tr jasper fractures				565-570	5			
115	" "				570-575	5			
116	" " tr ser (greenish) replacing small fsp xls				575-580	5			
117	" tr lm-goethite on fractures				580-585	5			
118	" "				585-590	5			
119	" smaller chips, less Fe-ox some pieces look faintly silvery grey, w/ v.f.g py				590-595	5			
120	" "				595-600	5			
121	" ~~same greyer and darker than last couple samples, also lower g some py~~				600-605	5			
122	" same greyer than even the last couple samples, w/ some large glom of py, tr lm				605-610	5			
123	" some lt red grey, less dark than 122, some ser replacing the fsps				610-615	5			
124	" lm along fractures				615-620	5			
125	" same very dark grey rock some lm along fractures				620-625	5			
126	" back to plain appearance w/ tr lm				625-630	5			

PROJECT JACKBIDGE HOLE NO. J5 SHEET 10 OF 13

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J5-127	same as J5-113 lt tannish white, tr med grey again, some lm-jarosite fractures				630-635	5			
128	" "				635-640	5			
129	" small chips, mostly lt, tr lm				640-645	5			
130	" "				645-650	5			
131	" more darker grey again				650-655	5			
132	" more darker still, some qz flooded w/ visible by eye py globs in the flooded zones				655-660	5			
133	" darkish grey, some soft wht clay, tr lm qz flooded locally and speckled w/ dk py(?)				660-665	5			
134	" maybe slightly less qz flooding and wet - med grey - larger chips - still visible flecks yel py				665-670	5			
135	lt grey mod hard qz ser alt rhyolite - alt fsps still slightly visible (whiter than glass), tr py, tr lm				670-675	5			
136	same as J5-135				675-680	5			
137	" tr kaoline qz, tr wht clay				680-685	5			
138	"				685-690	5			
139	" qz phenocrys darkened, tr globby py				690-695	5			
140	" some globby and vein py				695-700	5			
141	"				700-705	5			
142	"				705-710	5			
143	" somewhat mottled				710-715	5			
144	" increasingly speckled w/ small blk py?				715-720	5			

PROJECT JARGBIDGE HOLE NO. J5 SHEET 11 OF 13

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J5-145	same as J5-135 some globby py, some speckled blk.				720-725	5			
146	" some speckled				725-730	5			
147	" some wht clay/py veinlets somewhat speckled				730-735	5			
148	" somewhat speckled				735-740	5			
149	" tr globby py,				740-745	5			
150	" more bleached than above				745-750	5			
151	" tr vein qz, slightly speckled tr white soft clay				750-755	5			
152	" qz locally rusty				755-760	5			
153	" some wht clay w/py				760-765	5			
154	" speckled w/ wht (some alt?)				765-770	5			
155	"				770-775	5			
156	"				775-780	5			
157	"				780-785	5			
158	" some wht clay				785-790	5			
159	" speckled w/ sm. blk py, looks like ox to jar.				790-795	5			
160	" "				795-800	5			
161	" "				800-805	5			
162	" somewhat speckled, some soft wht clay, some blebbier py				805-810	5			
163	" "				810-815	5			
164	" somewhat mottled lt + dk grey				815-820	5			
165	" "				820-825	5			
166	" "				825-830	5			
167	" " tr wht clay				830-835	5			
168	" " some greenish tint				835-840	5			

PROJECT JACKSIDE HOLE NO. J5 SHEET 12 OF 13

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J5-169	mottled greenish to lt tannish grey rhyolite.				840-845	5			
	very hard - pbb py ser alt, ± tr jar, some								
	vein pyrite, some soft white clay								
170	greenish grey rhyolite - getting into				845-850	5			
	lower grades of alteration than above in hole								
	tr py, tr ox, tr hairline qz veining								
171	same as J5-170				850-855	5			
172	" some py ± tr cp?, some vein qz				855-860	5			
173	lt tannish grey rhyolite, very hard,				860-865	5			
	qz-ser alt, tr py								
174	mixed tannish and greenish rhyolite				865-870	5			
	w/ tr py blebs, some vf hairline qz fractures								
175	mostly greenish alt rhyolite, tr py				870-875	5			
176	same as J5-174				875-880	5			
177	dark to yellowish green very hard				880-885	5			
	rhyolite tr py								
178	same as J5-177				885-890	5			
179	" tr vein qz				890-895	5			
180	" some vein qz				895-900	5			
181	" tr hairline qz				900-905	5			
182	"				905-906	5			
					TD=906'				

PROJECT JACKBIDGE HOLE NO. J5 SHEET 13 OF 13

PROJECT JARBIDGE HOLE NO. J6 SHEET 1 OF

6000 0018 (2520)

FREEPORT EXPLORATION COMPANY

JARBIDGE PROJECT, ELKO COUNTY, NV

GENERAL:

DRILL HOLE NO. J6 TOTAL DEPTH 508'

COLLAR ELEV. COORDINATES N E

BEARING S 80° E INCLINATION 45°

LOGGED BY WTH

REASON FOR TERMINATION pushed trains because running out of money, lost 2 cones in hole

DRILL DATA: ROTARY RC CORE

DRILLER Cowan/Logan - Becher

DATE STARTED DATE COMPLETED

FOOTAGE PER SHIFT

BOREHOLE SURVEY:

DEPTH								
ANGLE								
BEARING								

DRILLING PROBLEMS (SUMMARIZE) fractured inward last, tore up a bit partly because we pushed it - since we had to quit hole anyway

SAMPLE DATA:

SAMPLE NUMBER SEQUENCE

NUMBER OF SAMPLES

INTERVALS SAMPLED

MINERALIZED INTERVAL:

FROM	TO	FIRE ASSAY GRADE	COLD CYANIDE GRADE	FROM	TO	FIRE ASSAY GRADE	COLD CYANIDE GRADE

GEOLOGIC SUMMARY OF HOLE:

0-150 med to very soft fm stained siltstone, lots of clay alt

150-165 pinkish to grey clay

165-225 grey clay and qz eyes mainly

225-230 grey clay

230-340 med hard clay sericite siltstone w/ hm ± lm ± jar alt. and minor qz veins

340-380 med hard wht siltstone - clay ± sericite alt w/ small qz eyes

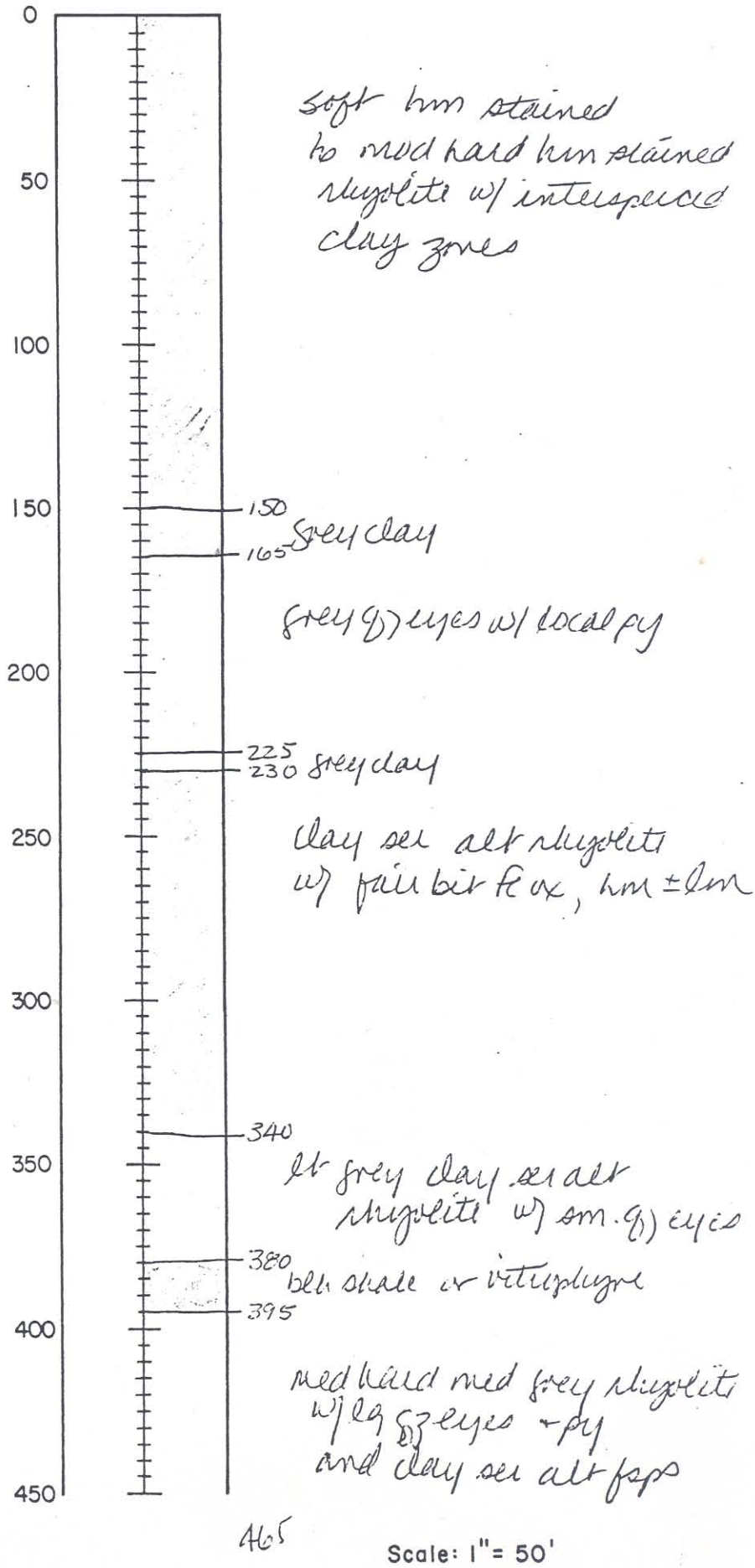
380-395 shale and silic shale - blk -- may be intrusive

395-465 grey qz rich siltstone w/ fsp alt → clay sr

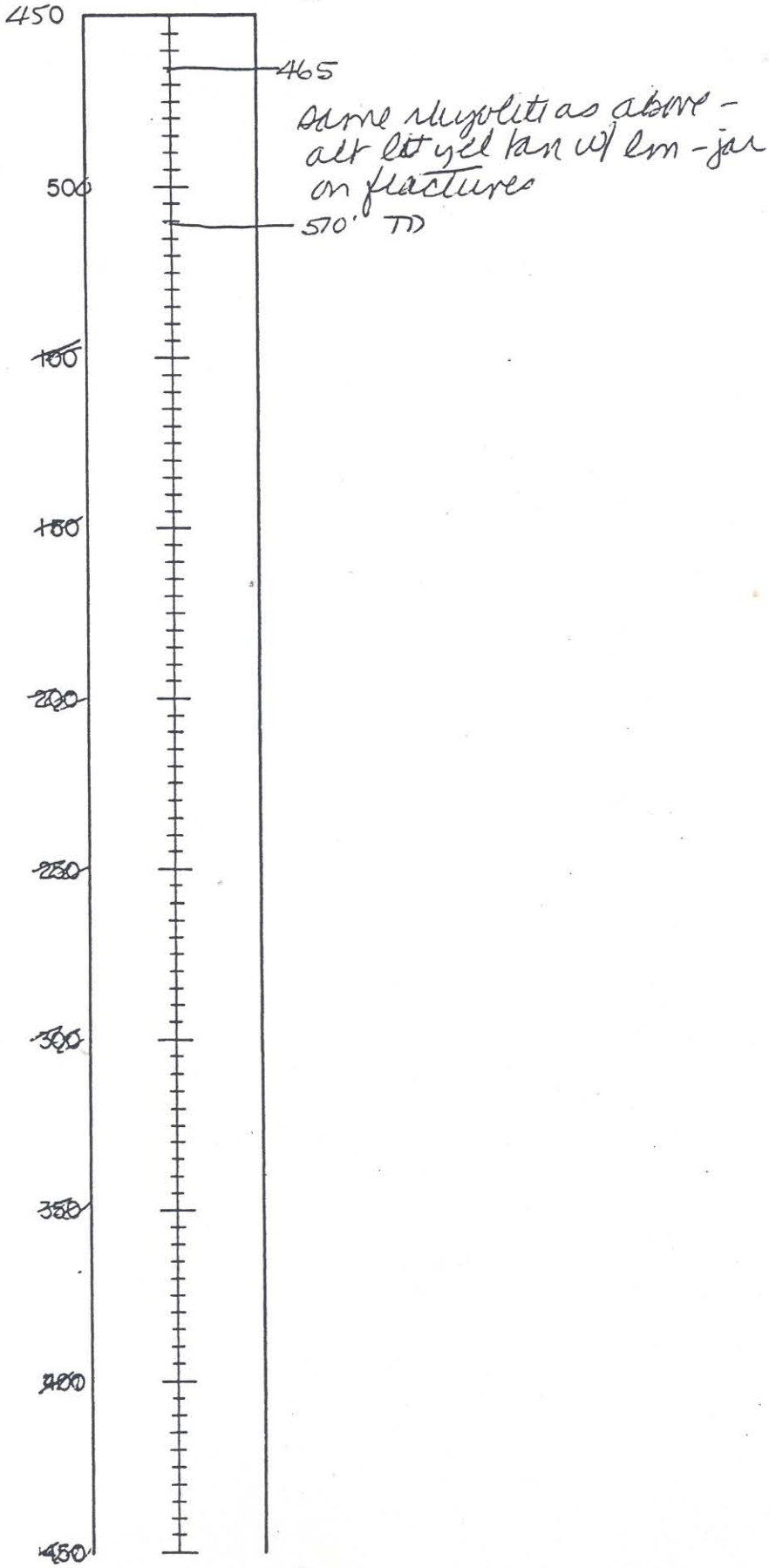
465-510 same siltstone as 395-465 but increasingly hard and w/ lm and jar particularly along fractures

510 TD

PROJECT JARBIDGE HOLE NO. J6 SHEET 2 OF 9



PROJECT JARBIDGE HOLE NO. J6 SHEET 3 OF 9



Scale: 1" = 50'

SAMPLE #	Au(oz/ton)	Ag(oz/ton)
J6-2	-.002	.003
3	-.002	-.003
4**	-.002	-.003
6	-.002	-.003
7	-.002	-.003
8	-.002	-.003
9	-.002	-.003
10	-.002	-.003
11	-.002	-.003
12	-.002	-.003
13	-.002	-.003
14	-.002	-.003
15	-.002	-.003
16	-.002	-.003
17	-.002	-.003
18	-.002	-.003
19	-.002	-.003
20	-.002	-.003
21	-.002	-.003
22	-.002	-.003
23	-.002	-.003
24	-.002	-.003
25	-.002	-.003
26	-.002	-.003
27	-.002	-.003
28	-.002	-.003
29	-.002	-.003
30	-.002	-.003
31	-.002	-.003
32	-.002	-.003
J6-33	-.002	-.003
34	-.002	-.003
35	-.002	-.003
36	-.002	-.003
37	-.002	-.003
38	-.002	-.003
39	-.002	-.003
J6-40**	-.002	-.003
41	-.002	-.003
J6-42	-.002	-.003
J6-43	-.002	-.003
44	-.002	-.003
45	-.002	-.003
46	-.002	.050
47	-.002	.006
48	-.002	.006
49	-.002	.003
50	-.002	.009
51	-.002	.018
52	-.002	.023
53	-.002	.029
54	-.002	.003
55	-.002	.006
56	.002	-.003
57	.002	-.003

SAMPLE #	Au(oz/ton)	Ag(oz/ton)
58	.004	.006
59	.003	.012
60	-.002	.003
61	.002	.006
62	.002	.006
63	.004	.009
64	.004	.018
65	.003	.038
66	.002	.061
67	.003	.058
68	.002	.020
69	.002	.053
70	-.002	.050
71	-.002	.041
72	-.002	.032
73	-.002	.032
74	.003	.067
75	-.002	.029
76	-.002	.009
77	-.002	.012
78	-.002	.012
79	-.002	.006
J6-80	-.002	.006
81	-.002	.012
82	-.002	.018
83	-.002	.012
84	-.002	.007
85	-.002	.012
-86	-.002	.006
87	-.002	.006
88	-.002	.006
89	-.002	.015
90	-.002	.006
91	-.002	.009
92	-.002	.009
93	-.002	.009
94	-.002	.006
95	-.002	.009
96	-.002	.006
97	-.002	.006
98	-.002	.006
99	-.002	.003
100	-.002	.003
101	-.002	-.003
J6-102	-.002	.006

Sample Number	Description	Dip	~~Int.~~	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J6-2	deep red clay w/ some rock chips		hm		5-10	5			
3	deep red clay, qz eyes and small chips		hm		10-15	5			
	soft q e r								
4	qz eyes and small chips of soft crumbly		hm		15-20	5			
	clay alt white and deep red rhyolite								
5	mostly very hm stained and fluxed		hm		20-25	5			
	Samples rhyolite - fairly soft								
6	no recovery				25-30	5			
7	same as J6-5 but variety of colors -		hm ±		30-35	5			
	red, white, yellow and salmon - lots of clay		tr jar?						
8	~~soft clay alteration rhyolite, qz eyes~~		lm jar		~~35-40~~	~~5~~			
8	soft crumbly rhyolite and qz eyes				~~40-45~~	~~5~~			
	hm and lm alt, plus some jar I think				35-40	5			
9	mostly clay and qz eyes - softer than J6-8				40-45	5			
10	mod soft easily broken rhyolite, white and				45-50	5			
	pink w/ red to almost black hm and tr lm		hm/lm						
11	same as J6-10, but partly silicified				50-55	5			
	or carrying silic. veins								
12	mostly clay and qz eyes - clay hm red		hm		55-60	5			
13	sticky pinkish white clay w/ some qz eyes		hm		60-65	5			
14	50% same as J6-13		hm		65-70	5			
	50% qz eyes								
15	same as J6-10		hm		70-75	5			
16	same as J6-8		hm		75-80	5			
17	"		hm		80-85	5			
18	" crumbly, frothy rhyolite		hm		85-90	5			
19	same as J6-12		hm ?		90-95	5			
20	"		tr jar		95-100	5			
21	" , looks like silic veins present		hm		100-105	5			

PROJECT JACGUDGE HOLE NO. J6 SHEET 4 OF 9

Sample Number	Description	Dip	~~Int.~~ Fe	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J6-22	clay and small chips of soft crumbly				105-110	5			
	whitish grey shyolite - not too many qz eyes								
	→ less hm than above ←								
23	same as J6-22				110-115	5			
24	same as J6-22 w/a majority of qz eyes				115-120	5			
25	qz eyes and and grey to salmon colored		trhm		120-125	5			
	clay								
26	same as J6-25		tr hm		125-130	5			
27	same as J6-25, some rock chips		hm		130-135	5			
28	same as J6-22		hm trhm		135-140	5			
29	mud to very hard pattty silicified salmon		hm specim		140-145	5			
	to dk pink colored shyolite, hm and specim								
	along fractures								
30	qz eyes, clay (whitish grey to pinkish) and		hm trjar?		145-150	5			
	tr rock chips								
31	mostly grey clay balls, some qz eyes				150-155	5			
32	same as J6-31				155-160	5			
33	"				160-165	5			
34	qz eyes predominately, lt grey clay		trace py		165-170	5			
	fresh py - tr to 1%, tr silic (qz flooded vein prob)								
35	qz eyes, small rock chips and small		py		170-175	5			
	globby py, grey to wht clay								
36	same as J6-35		py		175-180	5			
37	"		py		180-185	5			
38	"		py		185-190	5			
39	"		py		190-195	5			
40	" less py		py		195-200	5			
41	" even less py		tr py		200-205	5			
42	" darkes grey cast, no py				205-210	5			

PROJECT JARBIDGE HOLE NO. J6 SHEET 5 OF 9

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast AA oz/T	Cold CN oz/T
J6-43	same as J6-35 no py				210-215	5			
44	" tr ~~py~~ py		tr py		215-220	5			
45	" tr py		tr py		220-225	5			
46	all claystones - grey to slightly pinkish grey				225-230	5			
47	some grey qz eyes and tannish rock		hm, lm		230-235	5			
	chips, some silic rock, tr soft greasy		± tr jar	xx					
	whit clay, tr qz veining								
48	same as J6-47 w/ tr qz-adularia vein				235-240	5			
	material								
49	multicolored med hard slyplite w/ lots of		lm, lm		240-245	5			
	lm and some lm stain, some qz ± adularia								
	vein material								
50	same as J6-49, no vein material slyplite		tr "		245-250	5			
51	" "		tr "		250-255	5			
52	" tr vein material		tr "		255-260	5			
53	" tr whit clay, tr vein qz-ad		tr "		260-265	5			
54	" "				265-270	5			
55	" increased lox again		lm, lm		270-275	5			
56	" "		lm, lm		275-280	5			
57	" slyplite quite speckled				280-285	5			
	w/ clay altered fsps or gdms								
58	same as J6-49, tr vein qz, tr whit clay		lm, lm		285-290	5			
59	" some qz flood silic		tr lm, lm		290-295	5			
60	speckled tannish slyplite as J6-59		tr lm, lm		295-300	5			
	tr vein qz, tr hm, lm								
61	med soft to med hard tan, yellowish,				300-305	5			
	pinkish to purple slyplite w/ trace qz vein		lm, jar						
	material, some clay and lm-jar surfaces								
	and mixed w/ clay								

PROJECT JACBIDGE HOLE NO. J6 SHEET 6 OF 9

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roost AA oz/T	Cold CN oz/T
J6-62	same as 6-61, but w/ more lm red		lm		305-310	5			
63	same as 6-61, but less red tr lm ± jar?		tr lm jar?		310-315	5			
64	harder (med to quite hard) mostly reddish				315-320	5			
	~~[illegible]~~ slightly w/ tr qz veins, lm clay		lm hm						
	a lot like rock that occ's along veins								
65	same as J6-64, somewhat fractured		lm		320-325	5			
66	med hard partly silic pinkish tinnish		lm hm		325-330	5			
	wht slightly w/ small qz veins, tr lm, hm								
	on fractures, some qz flooding								
67	same as J6-66 w/ tr qz (adularia)				330-335	5			
	vein material								
68	same as J6-64		gee lm hm	Fault ?	335-340	5			
69	white/grey sample med hard lt grey slightly				340-345	5			
	and lots of qz eyes no fe-ox		none						
70	same as J6-69, no appreciable fe ox				345-350	5			
71	same as J6-69, slightly greener tr jar		tr jar		350-355	5			
72	same as J6-69 " no fe ox		none		355-360	5			
	tr clay								
73	same as J6-69 w/ inc fe ox on fractures		lm, gee		360-365	5			
	and some staining into rock, some chunks								
	very soft and crumbly								
74	greenish med hard slightly w/ lm, gee fe ox		~~[illegible]~~ lm, gee		365-370	5			
	and fe stained silic vein material								
75	same as 6-74 - mod crumbly rock		lm gee		370-375	5			
76	med hard mod crumbly slightly, tr lm		lm		375-380	5			
77	some clay, 10% slightly as 6-76				380-385	5			
	mostly greasy looking mod hard dk grey								
	to blk shale								
78	clay, qz eyes and lt grey silic w/ the shale			Fault	385-390	5			

PROJECT TACBLOCK HOLE NO. J6 SHEET 7 OF 9

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roost AA oz/T	Cold CN oz/T
J6-79	very hard grey rhyolite w/ grey qz eyes				390-395	5			
	and wht clay alt fsps, some has no phenos								
80	same as J6-79				395-400	5			
81	crumbly soft lt grey rhyolite, qz eyes				400-405	5			
	and shale unit contam., py in grey clay		py						
82	med hard clay ± sericite alt rhyolite,		py		405-410	5			
	crumbly, w/ f.g. py in some shearplanes								
83	same as J6-82 - some more competant rock		py		410-415	5			
84	same as J6-82 some good py cubes		py		415-420	5			
85	grey rhyolite w/ coarse grey py bearing		py		420-425	5			
	qz phenos and greenish to lt grey alt fsps								
86	same as J6-85		py		425-430	5			
87	same as J6-85		py		430-435	5			
88	same as J6-85		py		435-440	5			
89	same as J6-85, some soft wht clay, py		py		440-445	5			
90	same as J6-85 w/ red qz, prob due		(orange qz		445-450	5			
	to ~~oxistrolus~~ oxidation of contained		py		ox "				
91	same as J6-85 w/ red py qz		red qz		450-455	5			
92	same as J6-85, w/ more clay ± jar		jar?		455-460	5			
	alteration								
93	same as J6-85 w/ clay ± jar + lm alt		lm, jar?		460-465	5			
94	same as J6-85 w/ lm ± jar clay		lm, jar		465-470	5			
95	same as J6-85 "		lm, jar		470-475	5			
96	soft crumbly rhyolite as J6-85 w/		lm		475-480	5			
	some lm oxide and lots of qz eyes								
97	med hard grey (lt) rhyolite w/ lt qz eyes		lm		480-485	5			
	and lm oxide mottling the rock and								
	concentrated along fractures								
98	same as J6-97		lm		485-490	5			

PROJECT JACKSIDE HOLE NO. J6 SHEET 8 OF 9

Sample Number	Description	Dip	fm.	Graphic	Interval From To	DHT	Fire oz/T	Roast Au oz/T	Cold CN oz/T
J6-99	same as J6-97		1m		490-495	5			
100	"		1m		495-500	5			
101	"		1m		500-505	5			
102	"		1m		505-510	5			
	TD'd hole - needed to change								
	bit and had no more time - had								
	eaten 1 ~~too~~ cone								

PROJECT JACKBIDGE HOLE NO. J6 SHEET 9 OF 9

6000 0018 (2520)

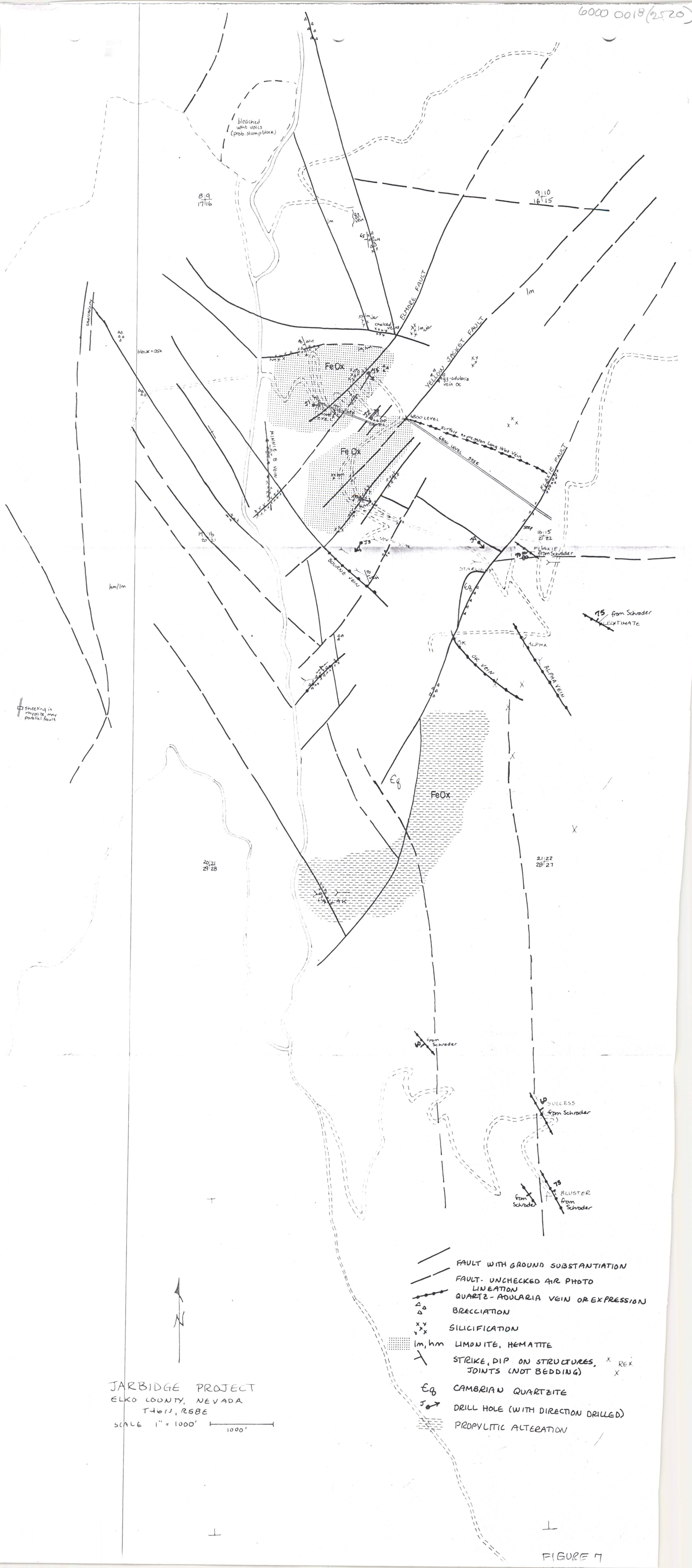
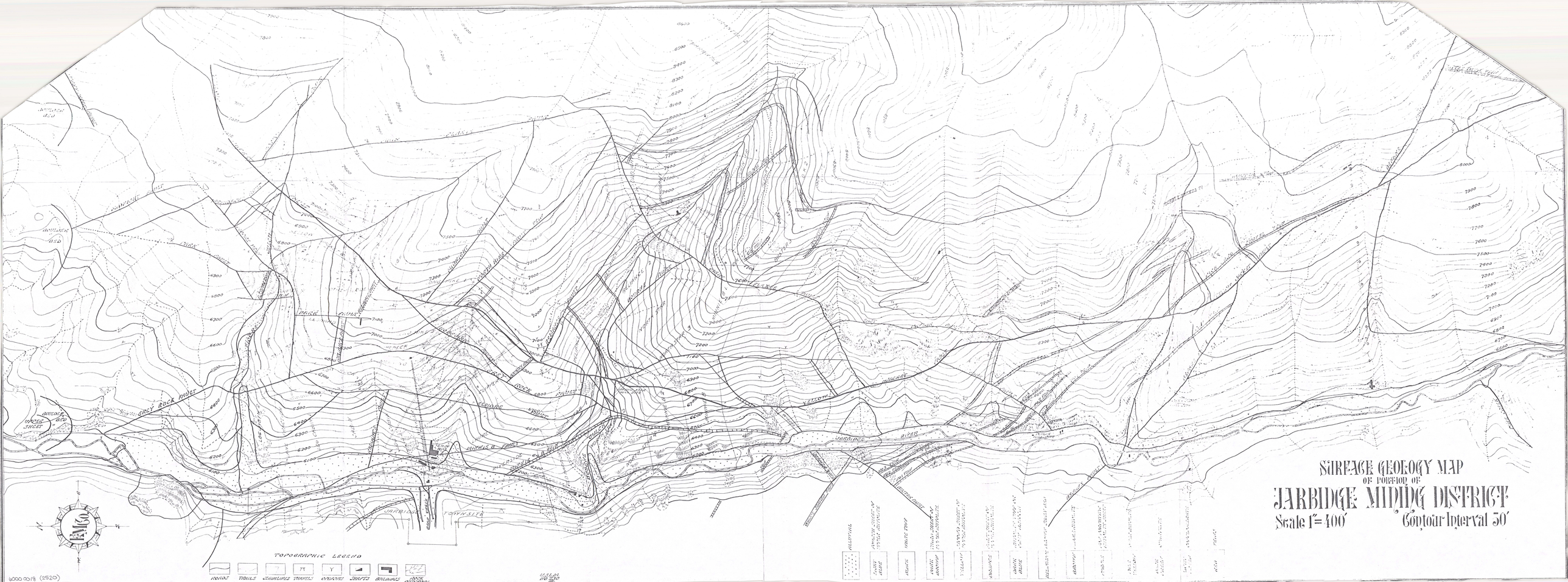


FIGURE 7



SURFACE GEOLOGY MAP
OF PORTION OF
JARBIDGE MINING DISTRICT
Scale 1" = 400' Contour Interval 50'

60000018 (2520)