

5290 0073

U. S. G. S. (344)
Item 73

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SUMMARY REPORT ON

MONTE CRISTO (MURPHY) TUNGSTEN PROPERTY
White Pine County, Nevada

By
H. N. WITT

August, 1940

This property, submitted by Mr. Vilas F. Adams of Kingman, Arizona, was taken under option early in July from the owners, J. G. O'Brien, Murphy Bros., et al, of Ely, Nevada.

The property consists of 30 claims all held by recent location. It is situated in the White Pine Range near Monte Cristo Springs.

The property is reached via Highway 40 east from Ely, about 40 miles to the old Hamilton road and thence south about 17 miles on good dirt road to Monte Cristo Springs.

The region is one of steep topography on the west flank of the White Pine Range. Elevations vary from 6500' at Monte Cristo Springs to over 9000' at the crest of the range. The group of claims extends for a distance of 2 miles in a North South direction with a width of 3 to 5 claims. Four precipitous canyons cut across the area, the range in altitude between gulches and ridges being as

great as 2000 feet, the top of some of the ridges exceeding 8000 feet in altitude.

No development work has been done on the property, nor had all of the location work been completed when the option was granted. This work was subsequently completed by the company. A aerial survey by Fairchild was made on July 5 prior to commencement of sampling. Four claim corners shown on the attached claim map were marked on the ground with large white crosses, to serve as controls for the aerial survey. These points are clearly visible on the accompanying aerial photographs. These photographs, 61 contact prints, are numbered 128 to 188 inclusive. Due to lack of familiarity with the country the area was "overflowed" and only a portion of the print covers the area of the claim map within which the sampling was done. These photos have been segregated into two groups. One group covers the area of the claims and includes photos 132 to 137, 148 to 153, 163 to 167 and 180 to 184. On these photos are indicated in ink the areas sampled and the claim corners marked with crosses. The second group of contact prints covers the balance of the area photographed.

This property was reported to contain an enormous deposit of low grade tungsten ore contained in wide garnet zones continuous for 2 miles across the 4 major canyons. Granitic intrusives were also reported. The preliminary examination, with the ultra violet lamp, made in the Cabin Group area seemed to bear out the statement as to size of

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ledges and the wide distribution of scheelite. Therefore, camp was established at Monte Cristo Springs, crushing and grinding equipment for adequate panning of samples was installed and bulldozer roads were built up the 4 principal canyons, Cabin Gulch, Hoppe Canyon, Little Fair Canyon and Saw Mill Canyon (see claim map and aerial photographs).

Mr. O. W. Terry was made field foreman in charge of sampling.

Before sampling commenced, I spent 3 days in geological reconnaissance and 3 nights in ultra violet lamp reconnaissance in order to outline the areas to be sampled. This reconnaissance showed the garnet ledges to lack the size or continuity indicated in Cabin Gulch but the property still showed considerable areas of what appeared to be low grade scheelite ores that might be cheaply mined and milled.

No intrusives were found. The area reported to be granitic, the light colored dome like hill between the mouths of Hoppe Canyon and \$80,000 Gulch, proved to be a much disturbed limestone seamed with quartz veinlets. Some gold production had come from this area in the past. One pocket valued at \$80,000 was reported found in \$80,000 Gulch but subsequent prospecting has found little else.

The garnet/^{ledges} are replacements in a series of limestones (probably Paleozoic) that have been much faulted and folded and probably overlie a granitic intrusive body which is not yet exposed by erosion. In the southern portion of the property these beds are relatively flat lying in broad folds often faulted (see attached cross section). In the northerly and

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westerly portions beds stand at high angles usually with steep westerly dips. Due to the early collapse of the sampling campaign no detailed geologic work was completed.

Four areas were sampled in detail. These areas and sample numbers are indicated on the claim map and aerial photos. The detail of each area is shown on the individual sketches attached hereto.

All samples were 5-foot cuts, each weighing about 50#. There were packed off the ridges by pack horses and hauled off to camp by trucks. They were first crushed to 1/4" and put through a Jones sample splitter, retaining a 5# cut. This cut was then ground in pulverizer to 20 mesh. Exactly 1# was weighed out from the pulp for panning and the remainder conserved for check assay. The panning procedure was constantly checked by examining concentrates and tails under the ultra violet lamp. A final concentrate was weighed on pulp scales and the result expressed in percentage of scheelite (80% WO_3). The panner on this job although an experienced gold panner had no previous experience with scheelite and his concentrates proved to be dirty and consequently overweight.

This was in part due to the presence of fluorescent Powellite and the endeavor of the panner to save all heavy fluorescent material in his concentrates. Not all samples were panned before the examination was terminated. The attached list shows the results on those that were panned.

As a check on the first lot of samples panned, 6 of the conserved samples were sent to Hanks for assay with the following results:

Sample No.	Goldfield Consolidated CaWO ₄ Results from panning	Hanks' analyses WO ₃
1	0.528	0.10
13	.132	0.07
14	.132	0.08
15	.396	0.07
31	.330	0.17
32	.854	0.18

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These results indicated that something besides scheelite was being saved in the concentrate and this mineral was showing fluorescence under the lamp. A sample showing excellent fluorescence but low panning results was sent to the U. S. Geological Survey for examination. The Survey reported that this sample contained Powellite but no scheelite. The sampling was thereupon stopped and the property abandoned.

SAMPLED AREAS:

Cabin Gulch Claim: The location of the samples within this area is shown on the attached sketch by Mr. Terry. The scheelite bearing area is one of partially garnetized scheelite bearing limestone, much folded and faulted and banded east^{and} west by fault contacts with slate. Some relatively high grade ledges exist but the average grade is low probably not in excess of 4/10 of 1%. Some of the fluorescent material shows a yellowish color under the lamp and may be Powellite but no separate determinations were made on specimens in this area.

Cabin Gulch No. 5: This area covers the ridge top just south of the Cabin Gulch area. In it is a wide zone of garnet alteration showing some good ore under the lamp, and some wide areas of low grade ore. The sampling indicates that it is not of commercial grade.

Cabin Gulch No. 4: This area is on the same ridge but west of Cabin Gulch No. 5 area in a small area of garnetization. Results are low.

Steel King No. 1: Some quartz float found in Hoppe Canyon showed fluorescent minerals under the lamp. This small area of quartz veinlets in limestone was therefore partially sampled. The result was disappointing.

Steel King No. 3: Mr. Terry has made 3 sketches of the sampling on this claim and one diagramatic east-west section, all attached hereto. The cross section shows the flat attitude of the beds in this section. The limestones are slightly garnetized and some of them are seamed through by quartz veinlets occasionally carry fluorescent minerals. It was therefore hoped that these beds might constitute large bodies of low grade ore that could be cheaply mined by open cut methods. However, the sampling showed the values to be too erratic and too low grade to be of interest.

CONCLUSIONS:

This property proved a grievous disappointment not only due to lack of continuity of scheelite mineralization, but also due to the very low grade of scheelite ore and the wide spread presence of Powellite. The values and the extent of mineralization are not sufficient to warrant further development.

Respectfully submitted,

Robert H. Mott

RESULTS OF PANNING

- MONTE CRISTO PROPERTY

<u>Sample No.</u>	<u>Weight</u>	<u>Weight of Conc. Gms.</u>	<u>% Scheelite</u>	<u>Remarks</u>
1	1 lb.	1.100	✓ .528	0.10 WO ₃ (Hanks)
2	1 lb.	3.742	✓ .814	
3	1 lb.	.900	.198	
4	1 lb.	3.300	✓ .726	
5	1 lb.	2.100	.462	
6	1 lb.	1.800	.396	
7	1 lb.	1.400	.308	
8	1 lb.	.500	.110	
9	1 lb.	.700	.154	
10	1 lb.	1.240	.264	
11	1 lb.	.300	.066	
12	1 lb.	.600	.132	
13	1 lb.	.600	.132	0.07 WO ₃ (Hanks)
14	1 lb.	.600	.132	0.08
15	1 lb.	1.800	.396	0.07
16	1 lb.	1.800	.396	
17	1 lb.	1.700	.374	
18	1 lb.	2.200	.484	
19	1 lb.	.700	.154	
20	1 lb.	1.800	.396	
21	1 lb.	4.400	✓ .968	

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<u>Sample No.</u>	<u>Weight</u>	<u>Weight of Conc. Gms.</u>	<u>% Scheelite</u>	<u>Remarks</u>
22	1 lb.	.500	.088	
23	1 lb.	2.100	.462	
24	1 lb.	1.100	.242	
25	1 lb.	1.400	.308	
26	1 lb.	2.100	.330	
27	1 lb.	1.500	.484	
28	1 lb.	.100	.022	
29	1 lb.	2.800	see note	
30	1 lb.	.100	.022	
31	1 lb.	1.500	.330	
32	1 lb.	3.900	.854	
33	1 lb.	1.500	.330	
34	1 lb.	1.000	.220	
35	1 lb.	8.400	✓ 1.848	
36	1 lb.	2.000	.440	
37	1 lb.	1.000	.220	
38	1 lb.	.900	.198	
39	1 lb.	2.900	✓ .638	
40	1 lb.	6.900	✓ 1.518	
41	1 lb.			
42	1 lb.	.700	.154	
43	1 lb.			
44	1 lb.			
45	1 lb.	2.800	✓ .616	
46	1 lb.	1.100	.242	
47	1 lb.	2.000	.440	

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0.17 W₂O₃ (Hanks)

0.18

<u>Sample No.</u>	<u>Weight</u>	<u>Weight of Conc. Gms.</u>	<u>% Scheelite</u>	<u>Remarks</u>
48	1 lb.	.500	.110	
49	1 lb.	1.600	.352	
50	1 lb.	4.400	.968	
51	1 lb.	.500	.110	
52	1 lb.	1.200	.264	
53	1 lb.	2.100	.462	
54	1 lb.	2.100	.462	
55	1 lb.	1.000	.220	
56	1 lb.	.700	.154	
57	1 lb.			
58	1 lb.	.200	.044	
59	1 lb.	None		
60	1 lb.	.100	.022	
61	1 lb.	.100	.022	
62	1 lb.	.100	.022	
63	1 lb.	.100	.022	
64	1 lb.	.100	.022	
65	1 lb.	.100	.022	
66	1 lb.	.100	.022	
67	1 lb.	.100	.022	
68	1 lb.	.100	.022	
69	1 lb.	.200	.044	
70	1 lb.	.100	.022	
71	1 lb.	.100	.022	
72	1 lb.			
73	1 lb.	.100	.022	
74				

Samples 1-60
CABIN GULCH

CABIN GULCH
#4

CABIN GULCH
#5

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<u>Sample No.</u>	<u>Weight</u>	<u>Weight of Conc. Gms.</u>	<u>% Scheelite</u>	<u>Remarks</u>
75				
76	1 lb.	.100	.022	
77				
78	1 lb.	.100	.022	
79	1 lb.	.100	.022	
80				
81	1 lb.	.100	.022	
82				
83	1 lb.	.400	.088	
84				
85	1 lb.	.100	.022	
86				
87				
88				
89				
90				
91	1 lb.	.100	.022	
92				
93	1 lb.	.100	.022	
94	1 lb.	.100	.022	
95	1 lb.	.800	.176	
96				
97	1 lb.	.100	.022	

CABIN GULCH #5

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-5- (A)

<u>Sample No.</u>	<u>Weight</u>	<u>Weight of Conc. Gms.</u>	<u>% Scheelite</u>	<u>Remarks</u>
98				
99	1 lb.	.100	.022	
CABIN GULCH # 5 100				
101	1 lb.	.100	.022	
102	1 lb.	.100	.022	
103	1 lb.	.600	.132	
104	1 lb.	.700	.154	
105	1 lb.	.100	.022	
106				
107	1 lb.	.100	.022	
CABIN GULCH # 4 108	1 lb.			
109	1 lb.			
110				
111	1 lb.	.500	.110	
112	1 lb.	.100	.022	
113	1 lb.	.800	.176	
114	1 lb.	.100	.022	
115	1 lb.	.200	.044	
116	1 lb.	.100	.022	
CABIN GULCH #5 117				
118	1 lb.	.100	.022	
119				
120	1 lb.	.100	.022	
121				
122	1 lb.	.300	.066	
123				

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-6- (A)

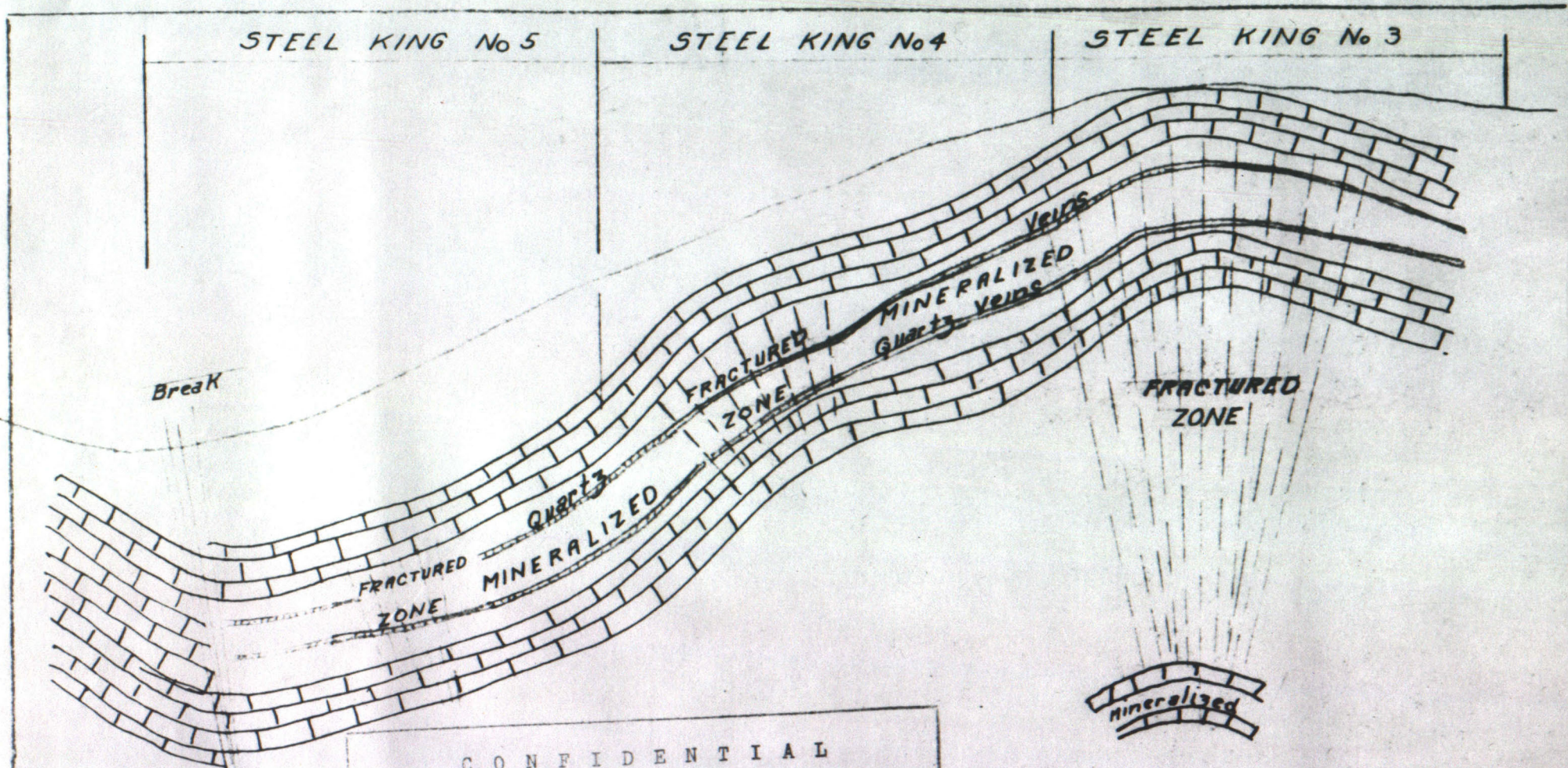
	<u>Sample No.</u>	<u>Weight</u>	<u>Weight of Conc. Gms.</u>	<u>% Scheelite</u>	<u>Remarks</u>
CARBON GULLCH # 5	124	1 lb.	.300	.066	
↑	125	1 lb.	.100	.022	
	126	1 lb.	1.100	.242	
	127	1 lb.	.100	.022	
STEEL KING No. 1.	128	1 lb.	.500	.110	
	129	1 lb.	.500	.110	
	130	1 lb.	.100	.022	
↓	131	1 lb.	.600	.132	
↑	132				
	133	1 lb.	.500	.110	
	134				
	135	1 lb.	.100	.022	
	136	1 lb.	.100	.022	
STEEL KING #4	137	1 lb.	.100	.022	
	138				
↓	139				
	140	1 lb.	.300	.066	
	141				
	142				
	143				
	144	1 lb.	.100	.022	
	145	1 lb.	.100	.022	

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NOTE

sample 29: In changing over to new pulveriser sample was ground too fine. Also particles of very fine solder (babbit) in sample. Entire weight of sample 2 gm. 800 mgs. About 800 mgs. of impurities in sample.



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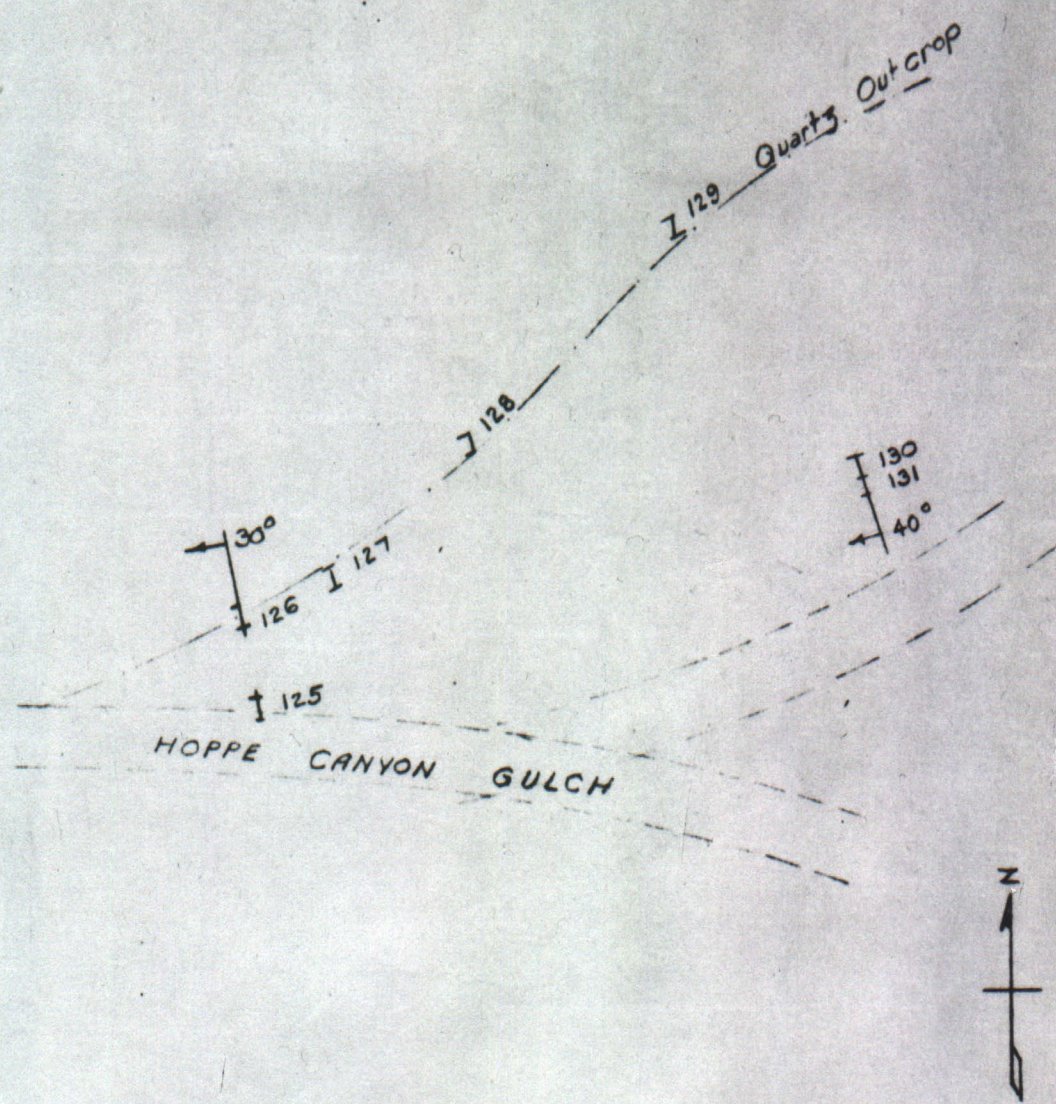
**GOLDFIELD CONSOLIDATED MINES CO.
MONTE CRISTO PROPERTY**

**IDEAL SECTION
LOOKING NORTH**

ALONG RIDGE NORTH OF LITTLEFAIR CANYON

SCALE - 1" = 200 FT.

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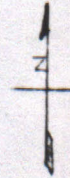
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PLAN OF
PRELIMINARY SAMPLES ON
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STEEL KING No 1
North Side of Gulch

Scale - 1" = 40ft

DWG No 206. Sheet 2



150 153

150 154 156 157 158 159

150 160 161

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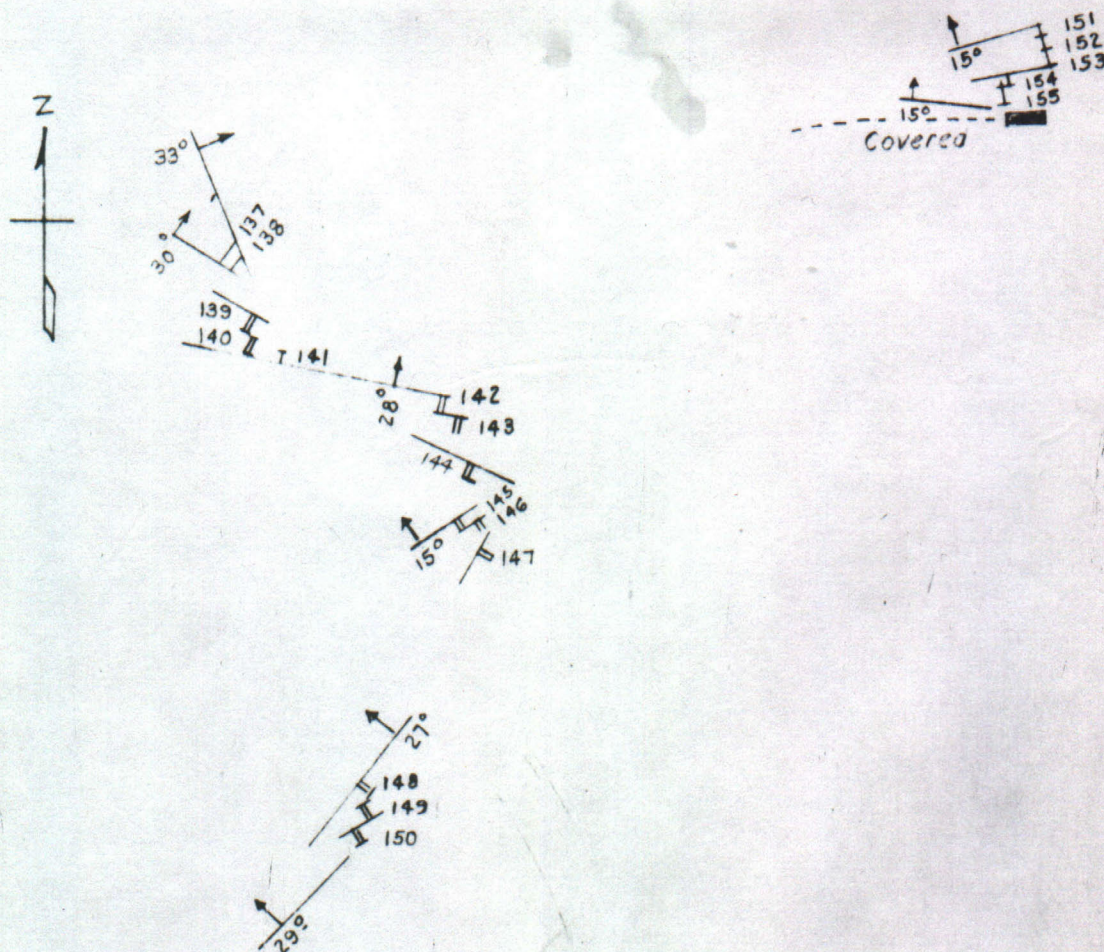
PLAN OF
PRELIMINARY SAMPLES ON
MONTE CRISTO PROPERTY

STEEL KING No 3
EASTERN PORTION

North Side of Littlefair Canyon

Scale 1" = 40ft.

DWG No. 206. Sheet 3



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PLAN OF

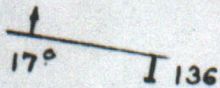
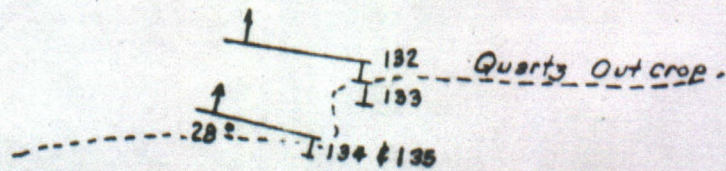
PRELIMINARY SAMPLES ON
MONTE CRISTO PROPERTY

STEEL KING No 3
CENTRAL PORTION

North Side of Little fair Canyon

Scale 1" = 40 ft.

DWG. No. 206 - Sheet 4



RIDGE

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PLAN OF
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STEEL KING No 3

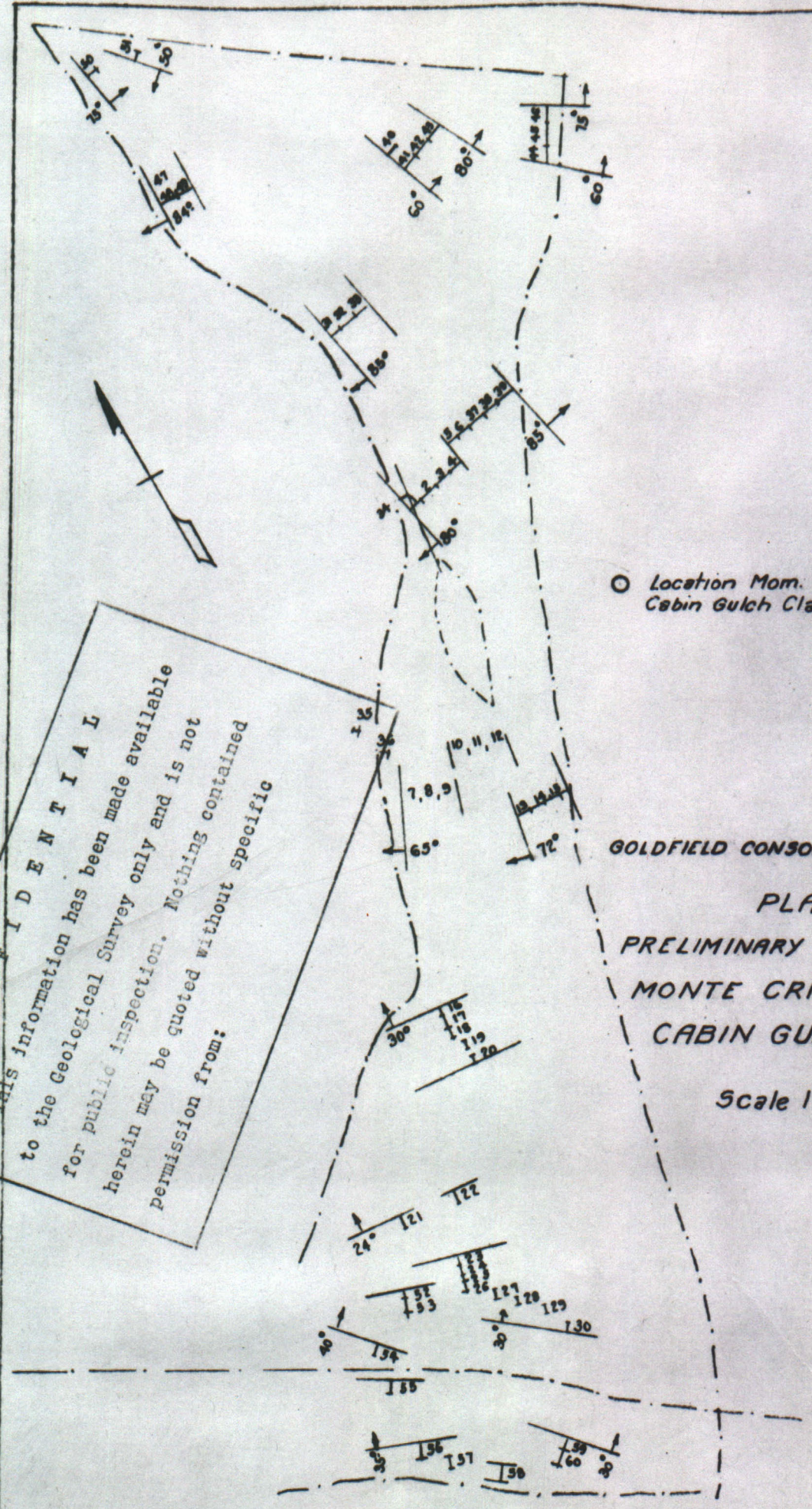
South Side of Hoppe Canyon

Scale 1" = 40ft.

DWG No. 206 - Sheet 5

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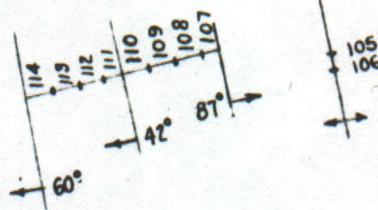


○ Location Mon.
Cabin Gulch Claim

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**PLAN OF
PRELIMINARY SAMPLES ON
MONTE CRISTO PROPERTY
CABIN GULCH CLAIM**

Scale 1" = 40ft.

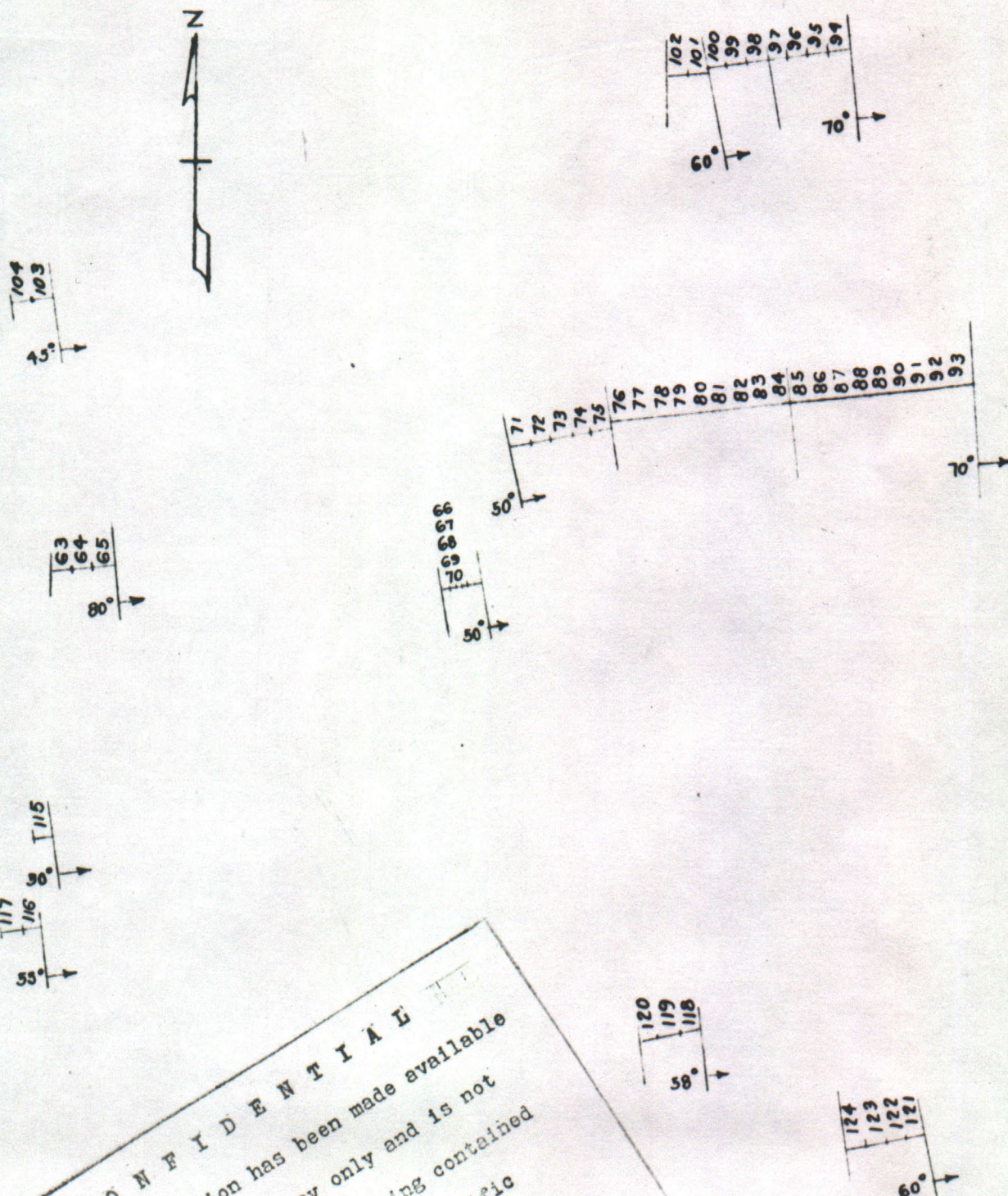


Location Monument
Cabin Gulch No. 4.

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CABIN GULCH No 4

Scale - 1" = 40 ft.



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PLAN OF
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CABIN GULCH No. 5

Scale 1" = 40 ft.

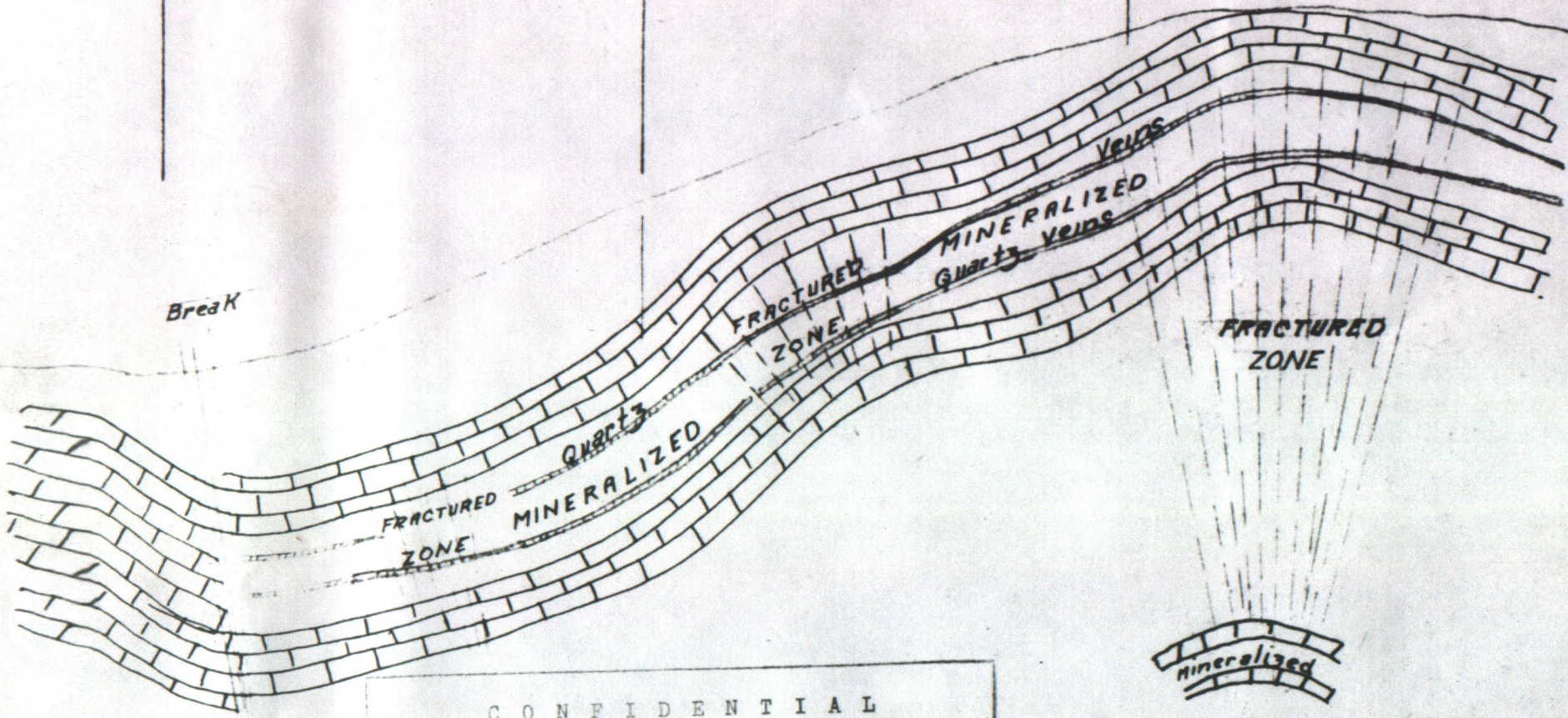
DWG No. 206 Sheet 8

STEEL KING No 5

STEEL KING No 4

STEEL KING No 3

Break



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MONTE CRISTO PROPERTY

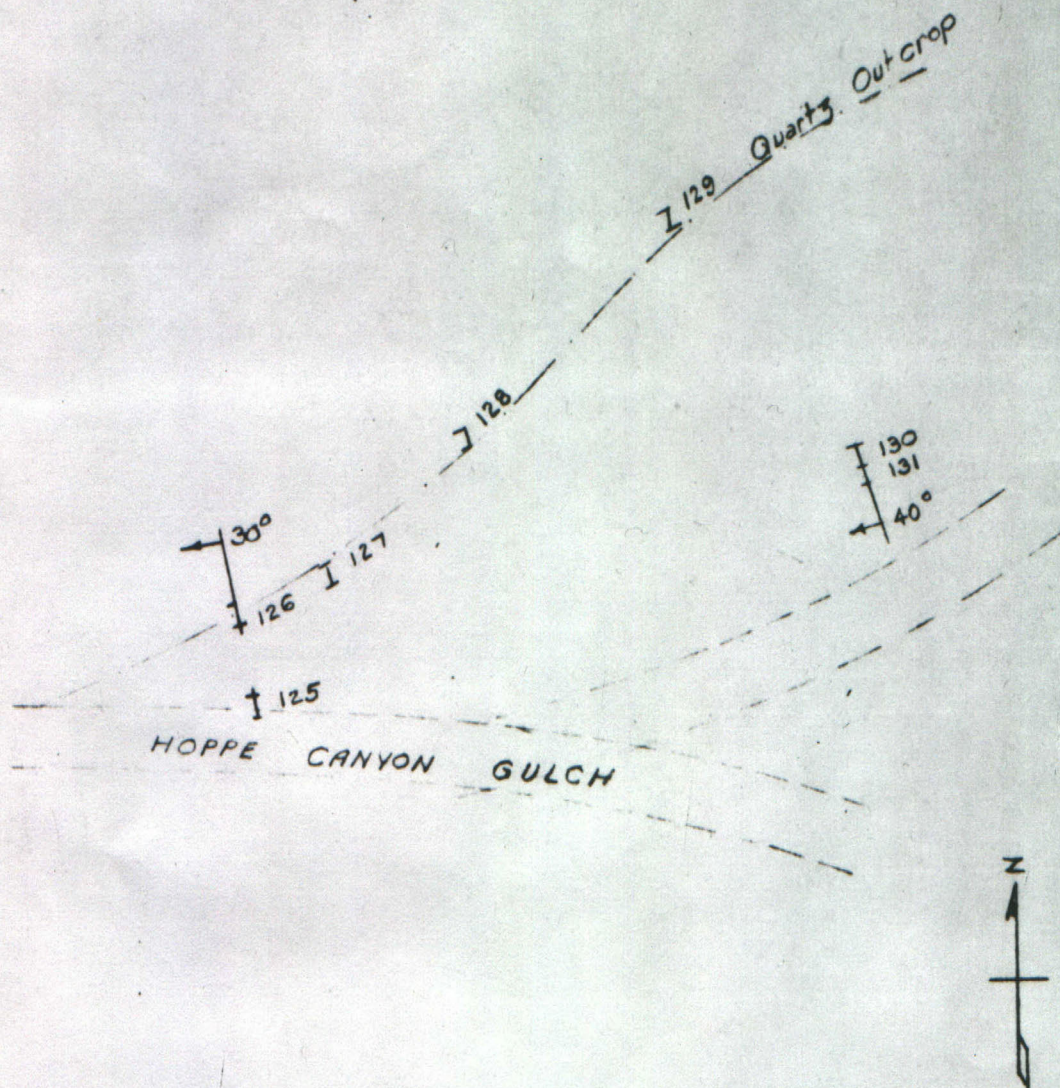
IDEAL SECTION
LOOKING NORTH

ALONG RIDGE NORTH OF LITTLEFAIR CANYON

SCALE - 1" = 200 FT.

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PLAN OF
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STEEL KING No 1

North Side of Gulch

Scale - 1" = 40ft

DWG No 206. Sheet 2



152 I 153

150 154 156 157 158 159

150 160 161

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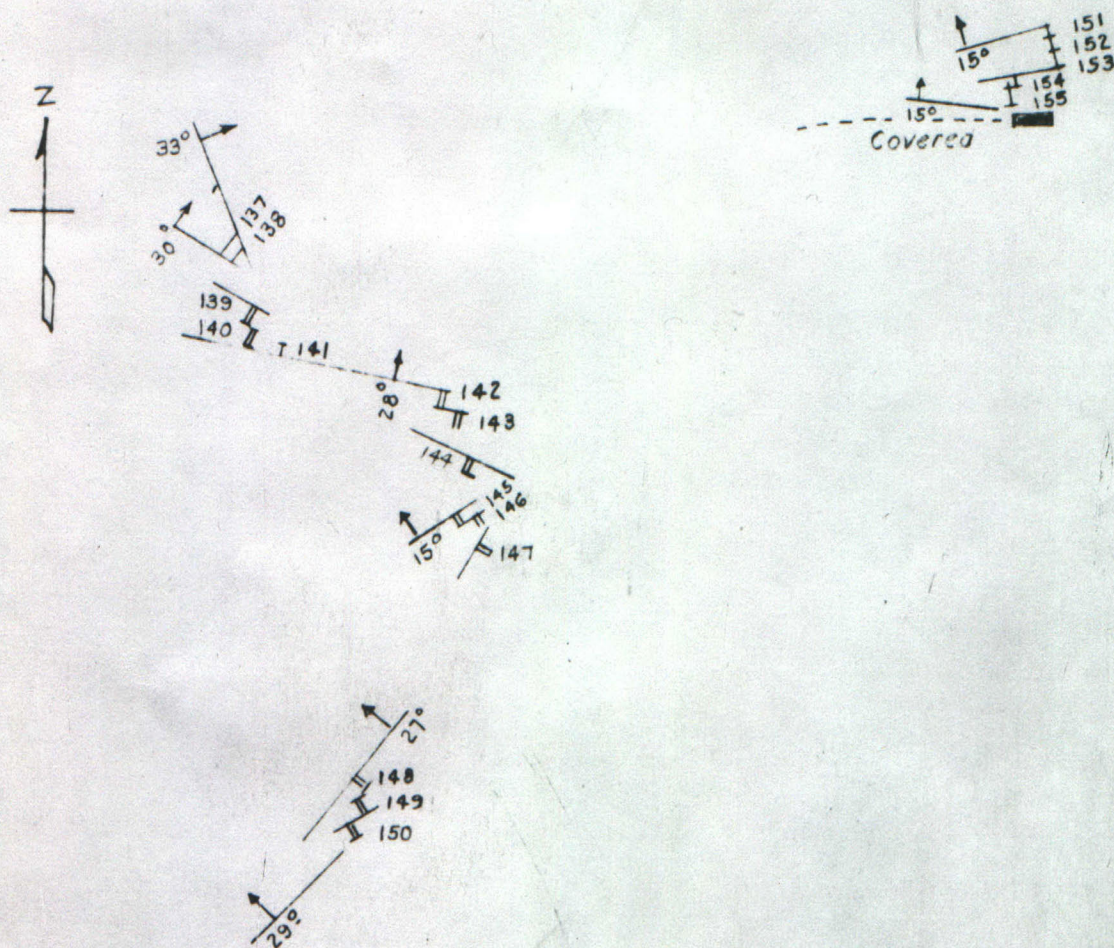
PLAN OF PRELIMINARY SAMPLES ON MONTE CRISTO PROPERTY

STEEL KING No 3
EASTERN PORTION

North Side of Littlefair Canyon

Scale 1" = 40ft.

DWG No. 206- Sheet 3



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PLAN OF

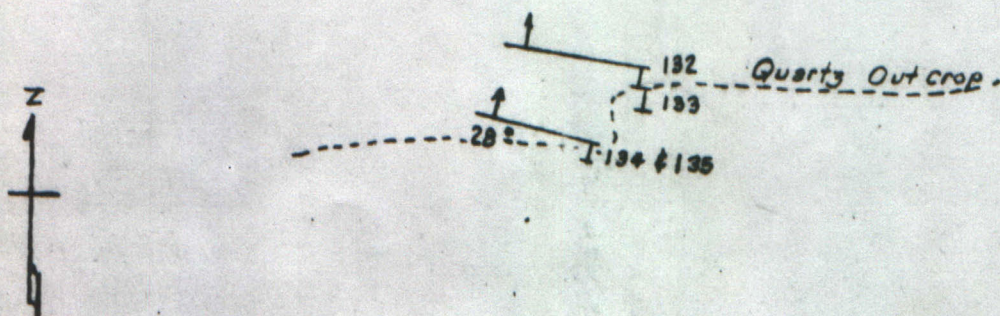
PRELIMINARY SAMPLES ON
MONTE CRISTO PROPERTY

STEEL KING No 3
CENTRAL PORTION

North Side of Little fair Canyon

Scale 1" = 40 ft.

DWG. No. 206 - Sheet 4



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PLAN OF
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MONTE CRISTO PROPERTY
STEEL KING No. 3
South Side of Hoppe Canyon

Scale 1" = 40ft.

DWG No. 206 - Sheet 5

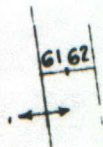
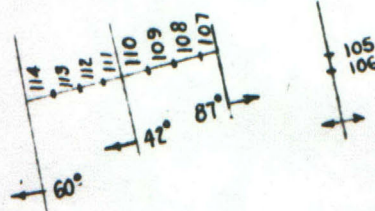
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○ Location Mon.
 Cabin Gulch Claim

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**PLAN OF
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 MONTE CRISTO PROPERTY
 CABIN GULCH CLAIM**

Scale 1" = 40ft.



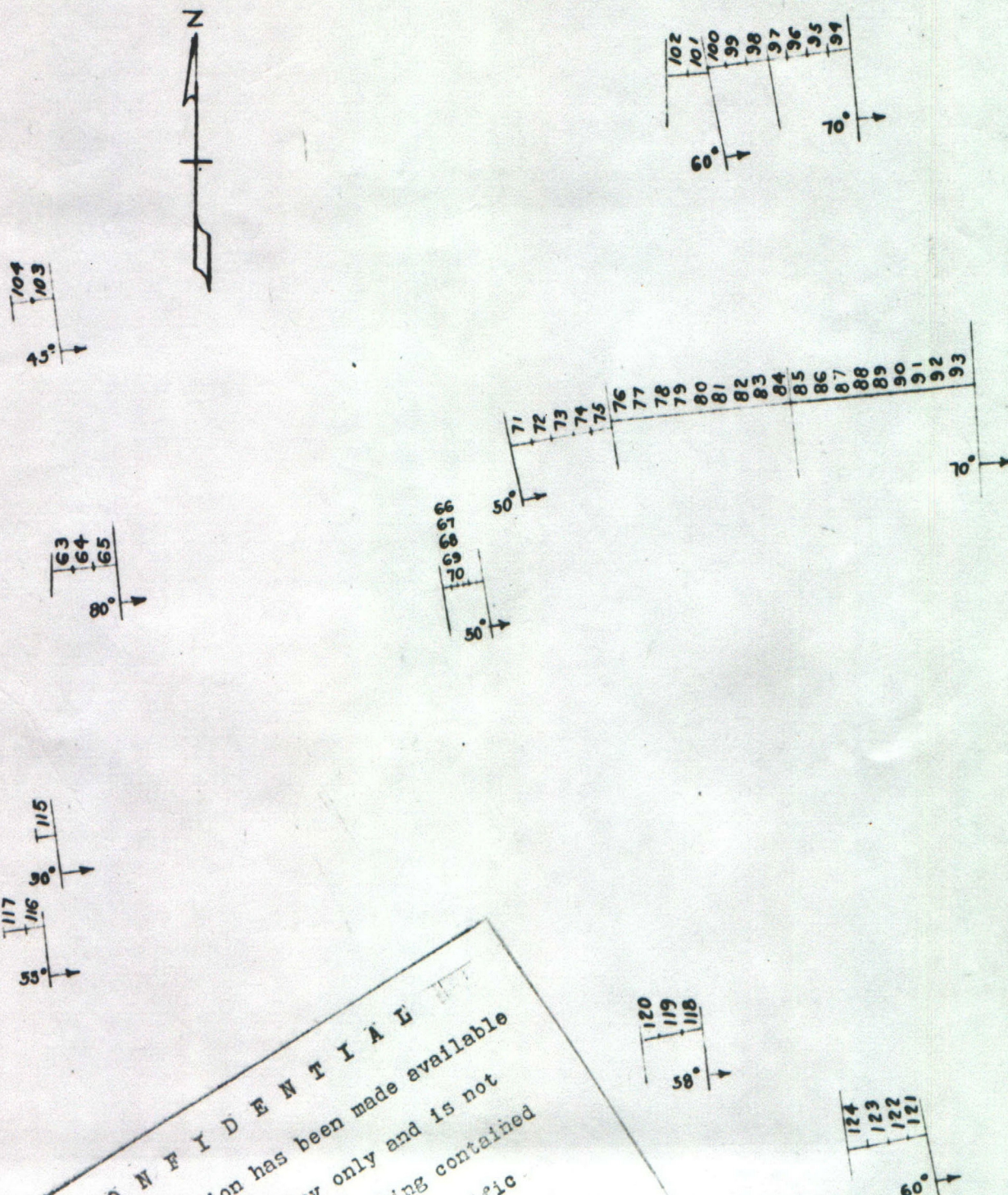
Location Monument
Cabin Gulch No. 4.

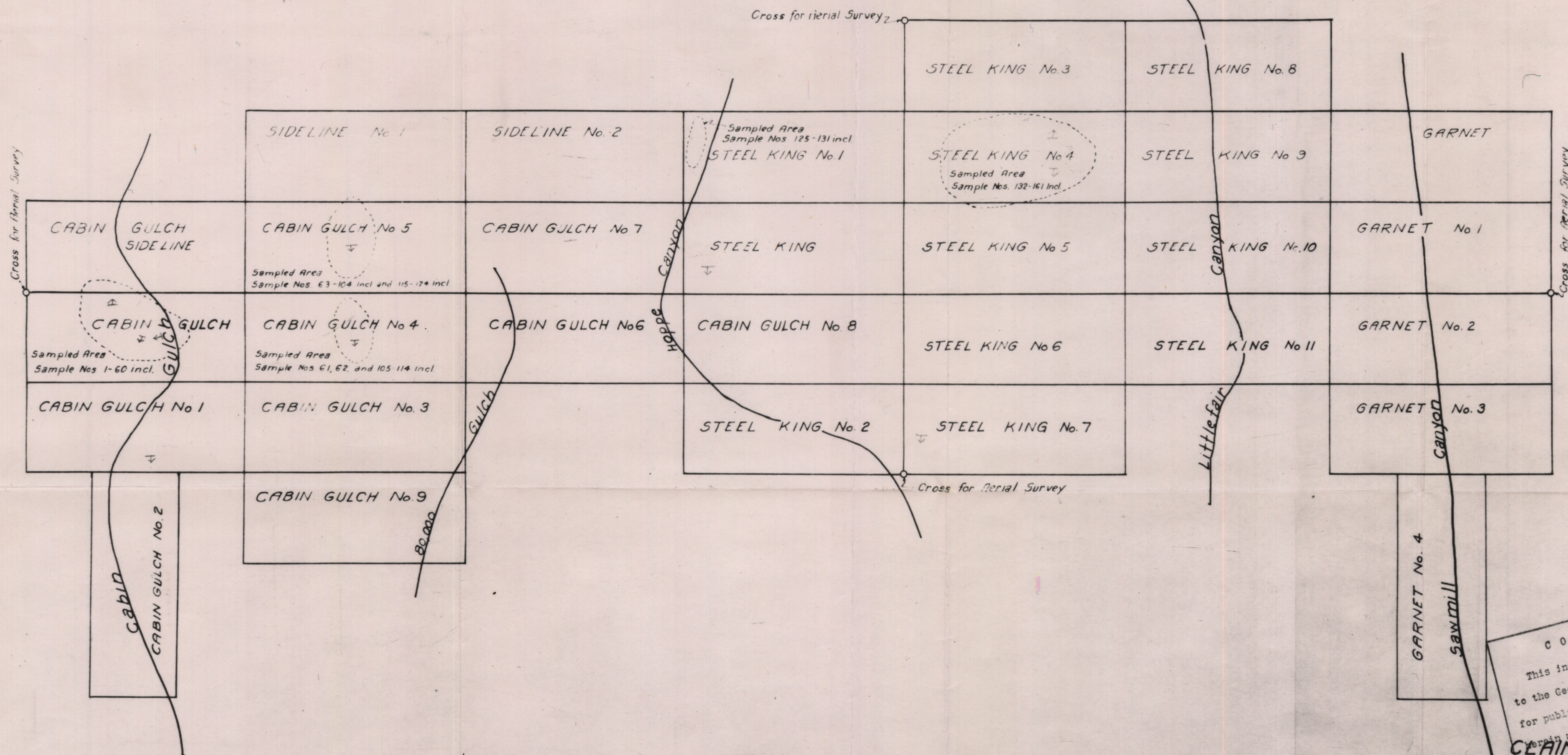
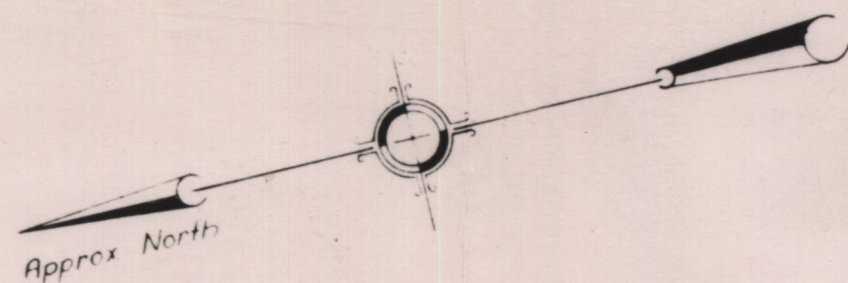
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**PLAN OF
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CABIN GULCH No 4**

Scale - 1" = 40 Ft.





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CLAIM MAP

MONTE CRISTO TUNGSTEN DEPOSIT

WHITE PINE MINING DISTRICT

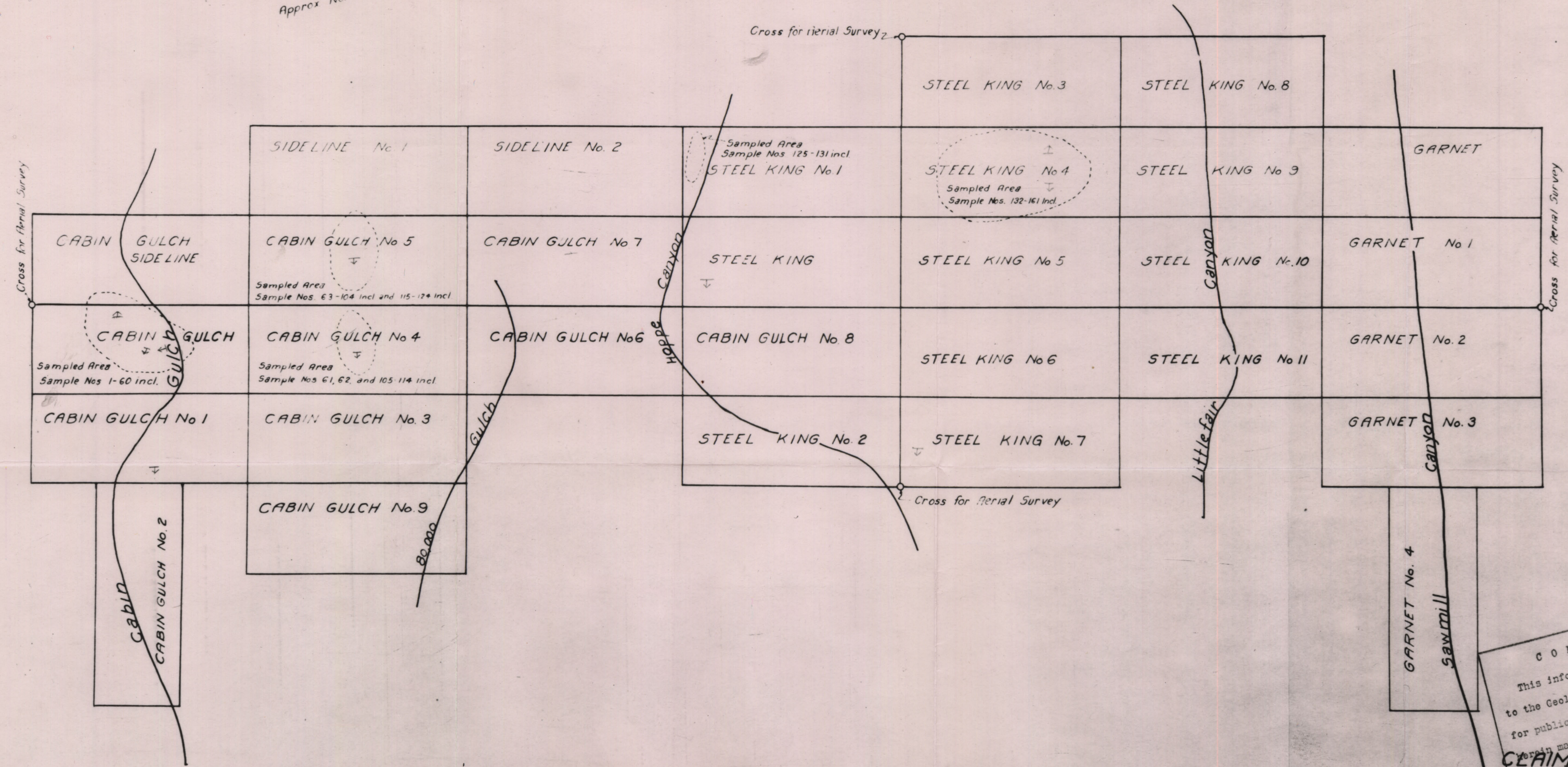
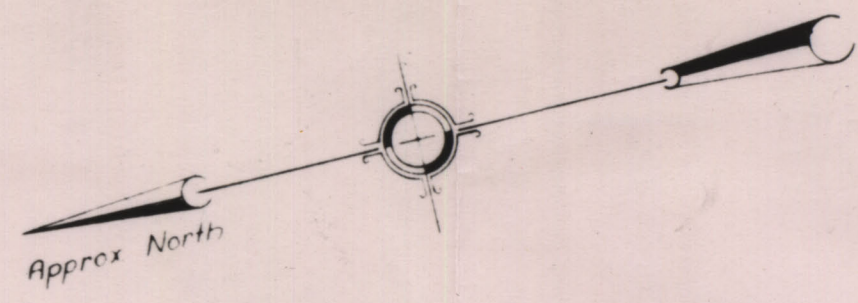
WHITE PINE COUNTY

NEVADA

SCALE 1" = 500 FT.

To accompany report of H.N. Witt dated July 1940
For Goldfield Consolidated Mines Co.

5290 0073



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MONTE CRISTO TUNGSTEN DEPOSIT
WHITE PINE MINING DISTRICT
WHITE PINE COUNTY NEVADA

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