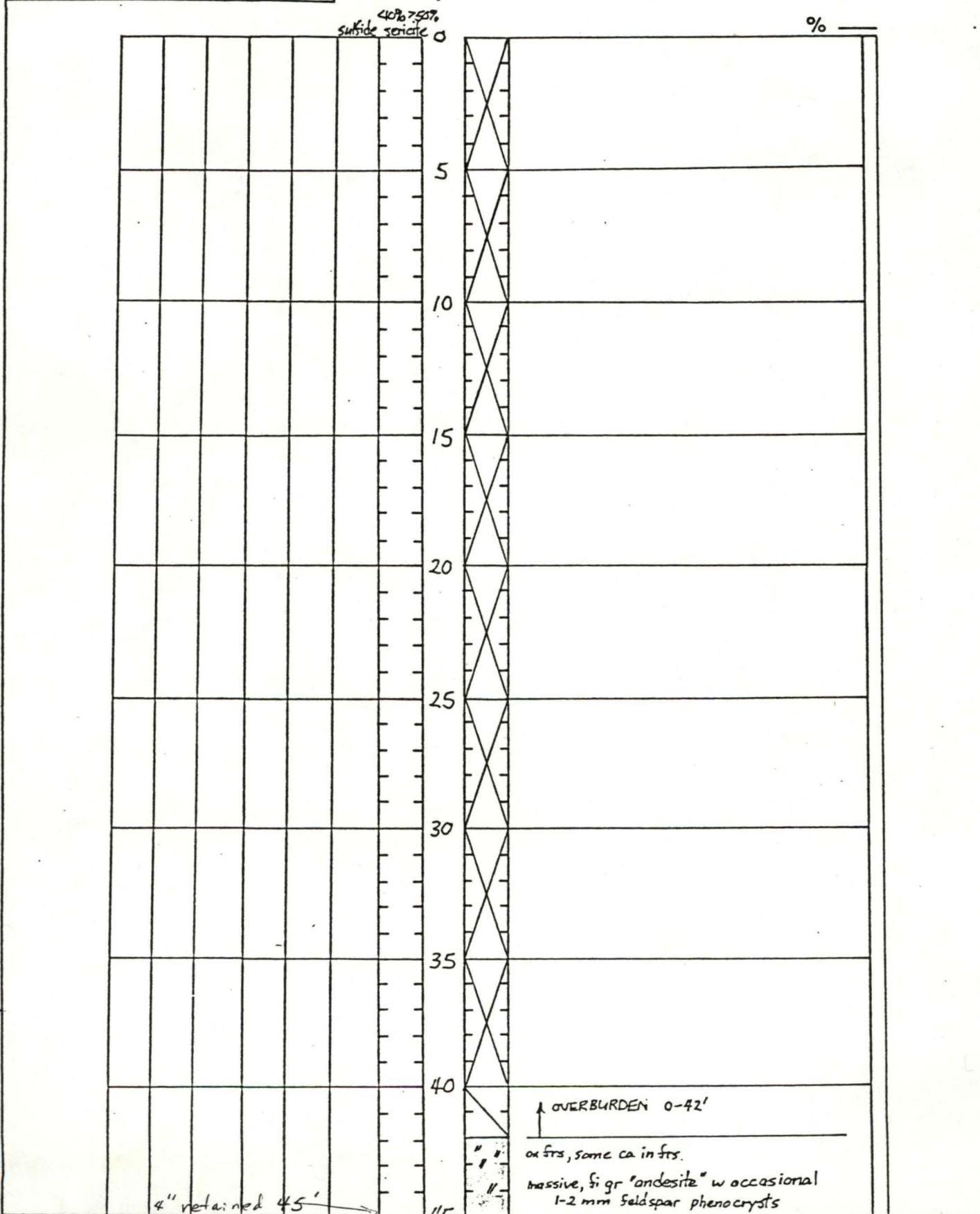


Hole No. GNJK-1 Property _____ Area Jones-Keystone Au Project
 County _____ State _____ Quad 1 T. D. 381
 Coordinates 354420, 700110
 Elev. _____ Bearing _____ Incl. _____ Contractor _____

Started 1/1 Completed 1/1 Casing _____
 Core Disposition _____ Logged By T.A. Paris



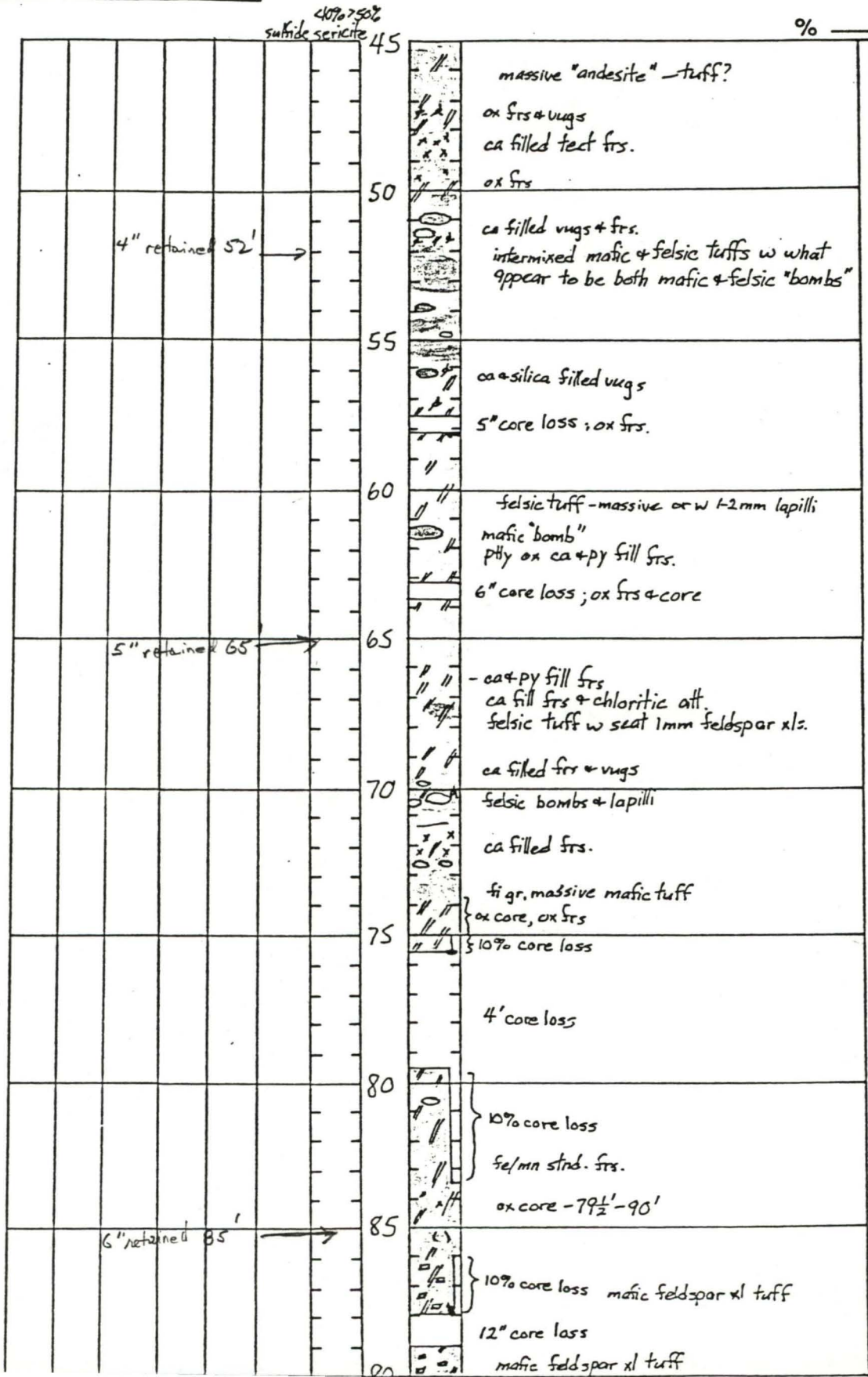
4" retained 45'

↑ OVERBURDEN 0-42'

ox fts, some ca in fts.
 massive, fi gr "andesite" w occasional
 1-2 mm feldspar phenocrysts

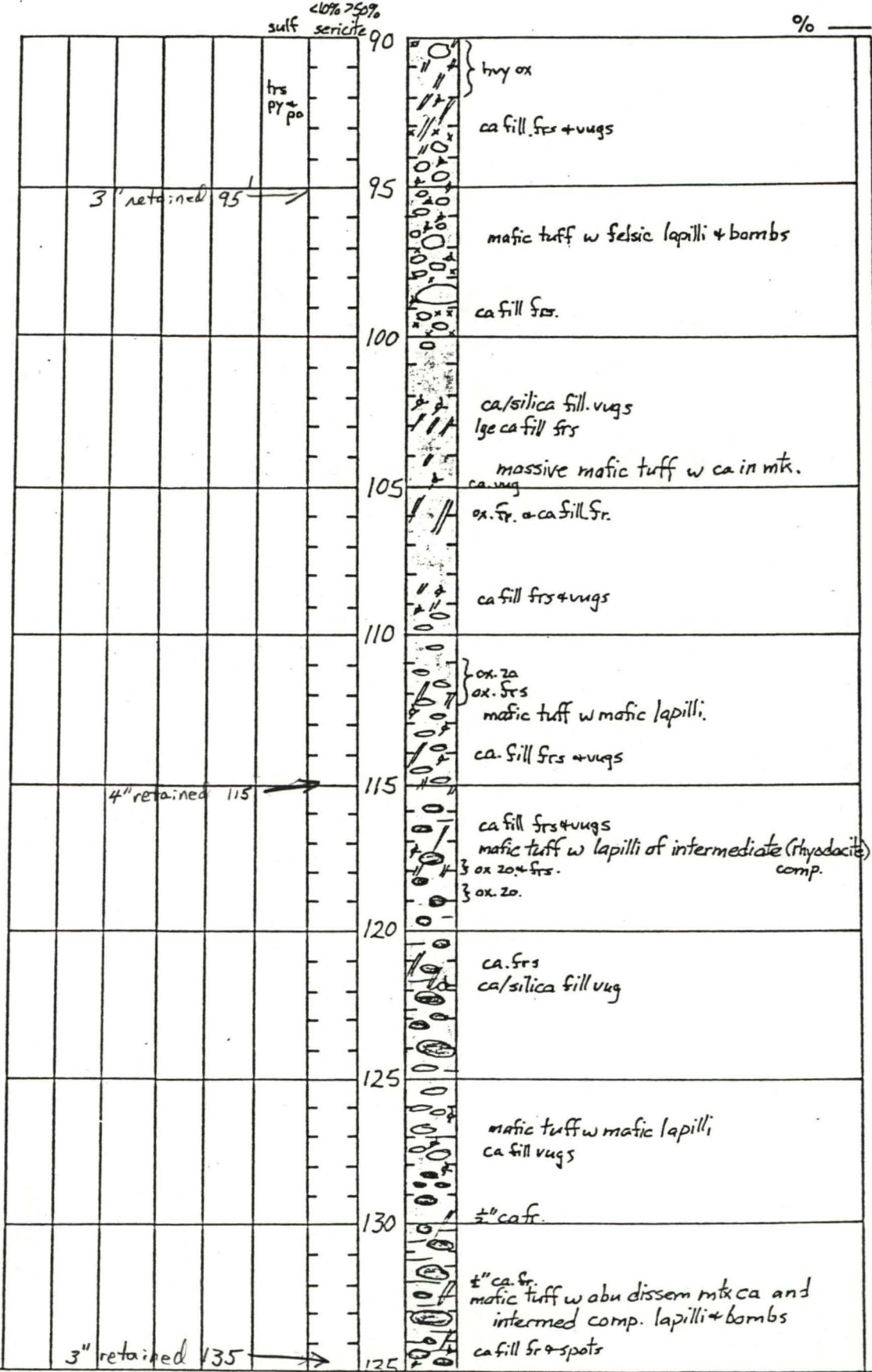
Hole No. GNJK-1 Property _____ Area _____
 County _____ State _____ Quad _____ T. D. _____
 Coordinates _____
 Elev. _____ Bearing _____ Incl. _____ Contractor _____

Started / / Completed / / Casing _____
 Core Disposition _____ Logged By _____



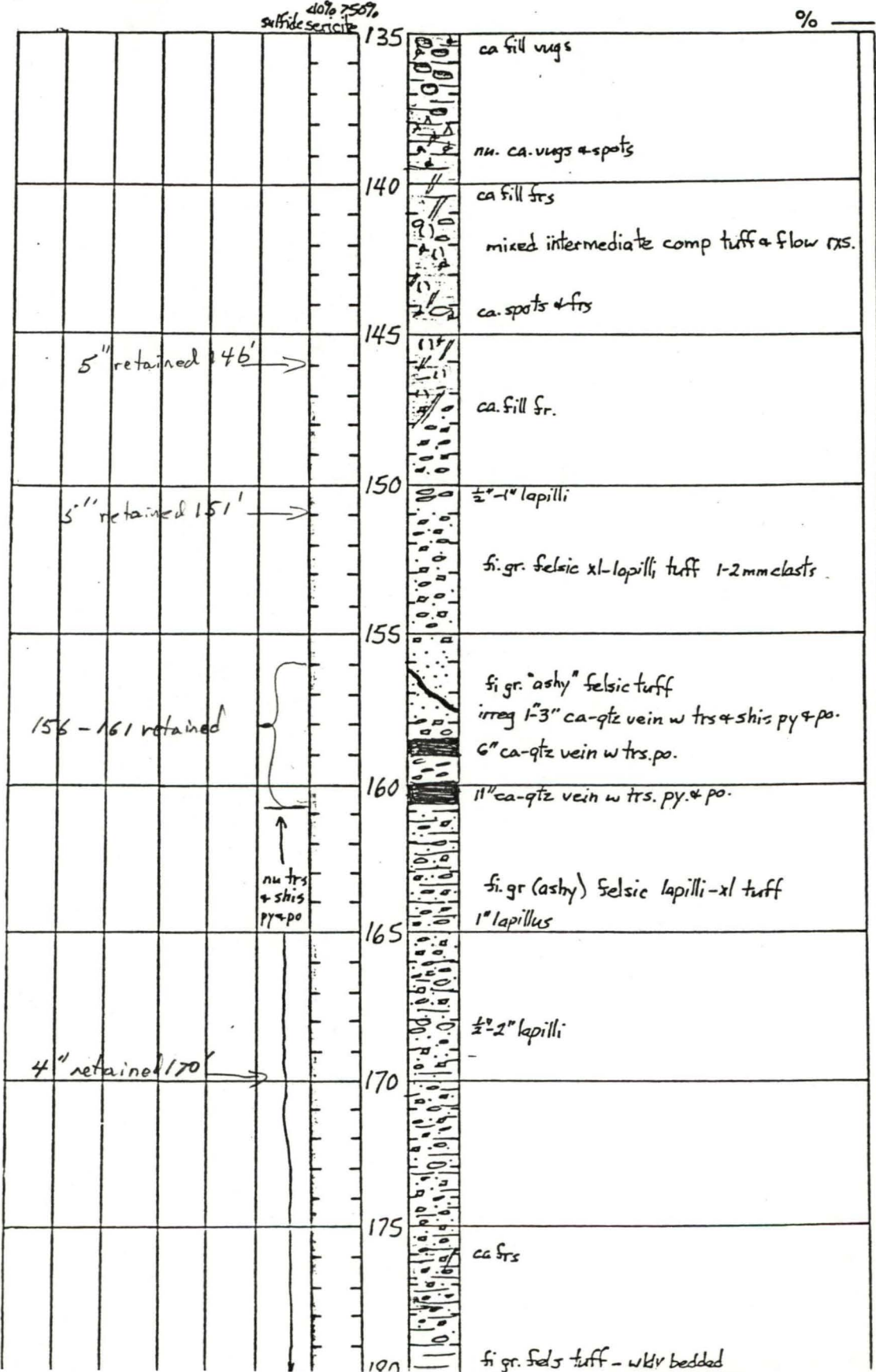
Hole No. GNJK-1 Property _____ Area _____
 County _____ State _____ Quad _____ T. D. _____
 Coordinates _____
 Elev. _____ Bearing _____ Incl. _____ Contractor _____

Started _____ / _____ / _____ Completed _____ / _____ / _____ Casing _____
 Core Disposition _____ Logged By _____



Hole No. GNJK-1 Property _____ Area _____
 County _____ State _____ Quad _____ T. D. _____
 Coordinates _____
 Elev. _____ Bearing _____ Incl. _____ Contractor _____

Started _____ / _____ / _____ Completed _____ / _____ / _____ Casing _____
 Core Disposition _____ Logged By _____



40% to 75% sulfide service

%

5" retained 146"

5" retained 151"

156-161 retained

nu trs & shis py & po.

4" retained 170"

ca fill vugs

nu. ca. vugs & spots

ca fill frs

mixed intermediate comp tuff & flow rx.

ca. spots & frs

ca. fill fr.

1/2-1" lapilli

fi. gr. felsic xl-lapilli tuff 1-2mm clasts

fi. gr. "ashy" felsic tuff
 irreg 1-3" ca-qtz vein w trs & shis py & po.
 6" ca-qtz vein w trs. po.

11" ca-qtz vein w trs. py. & po.

fi. gr (ashy) felsic lapilli-xl tuff
 1" lapillus

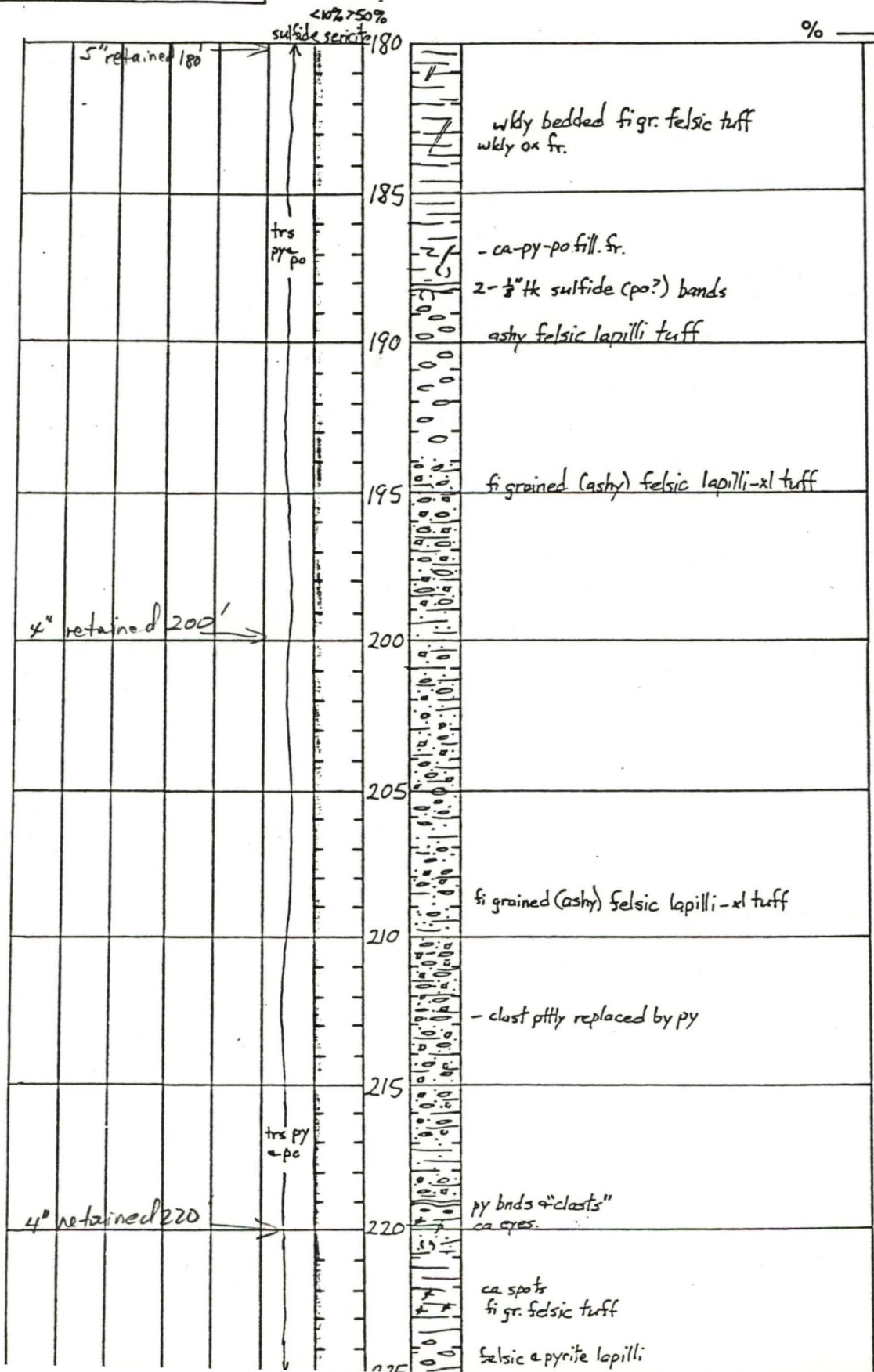
1/2-2" lapilli

ca frs

fi. gr. fels tuff - w/iv bedded

Hole No. GNIK-1 Property _____ Area _____
 County _____ State _____ Quad _____ T. D. _____
 Coordinates _____
 Elev. _____ Bearing _____ Incl. _____ Contractor _____

Started / / Completed / / Casing _____
 Core Disposition _____ Logged By _____



Hole No. GNJK-1 Property _____ Area _____

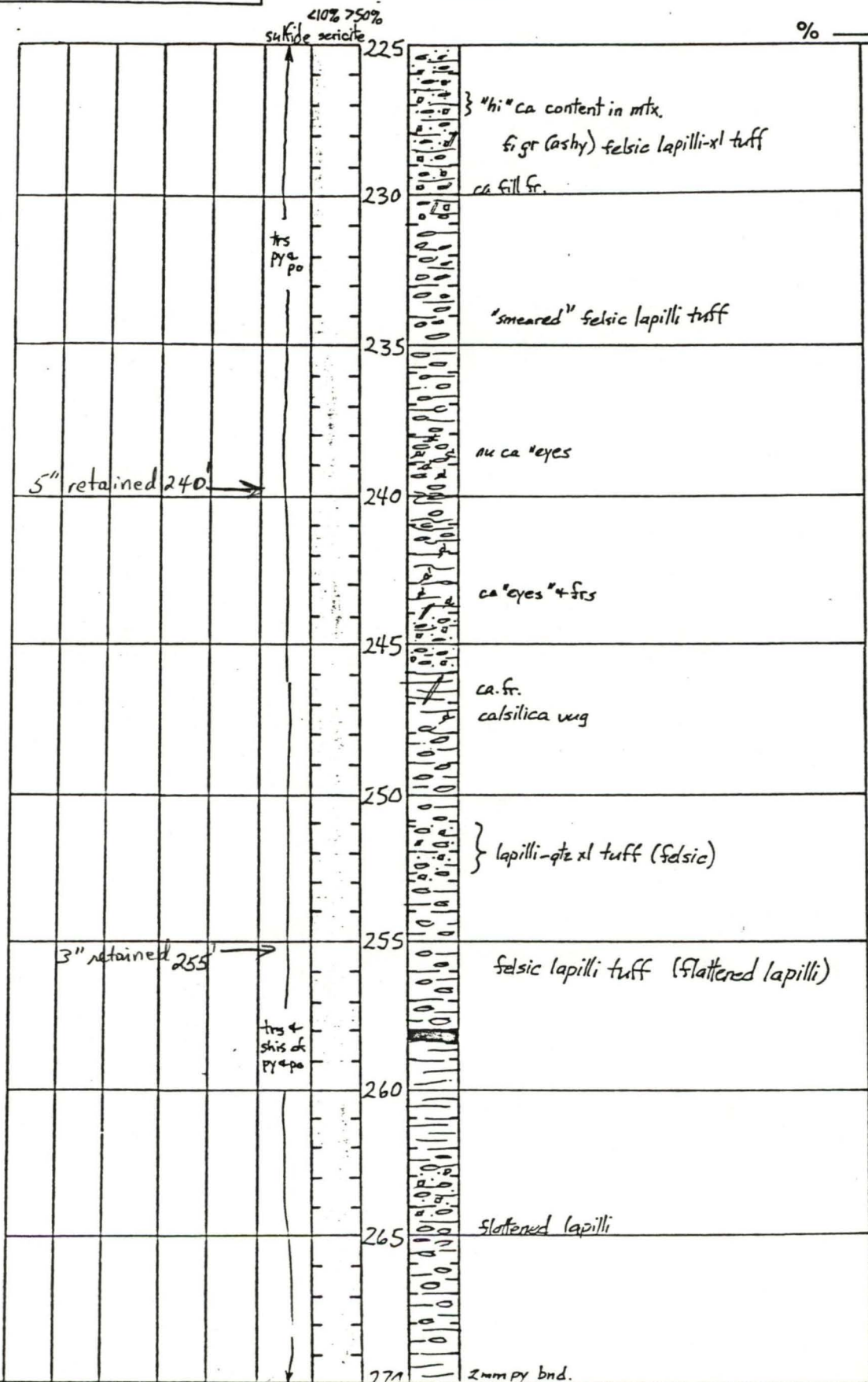
County _____ State _____ Quad _____ T. D. _____

Coordinates _____

Elev. _____ Bearing _____ Incl. _____ Contractor _____

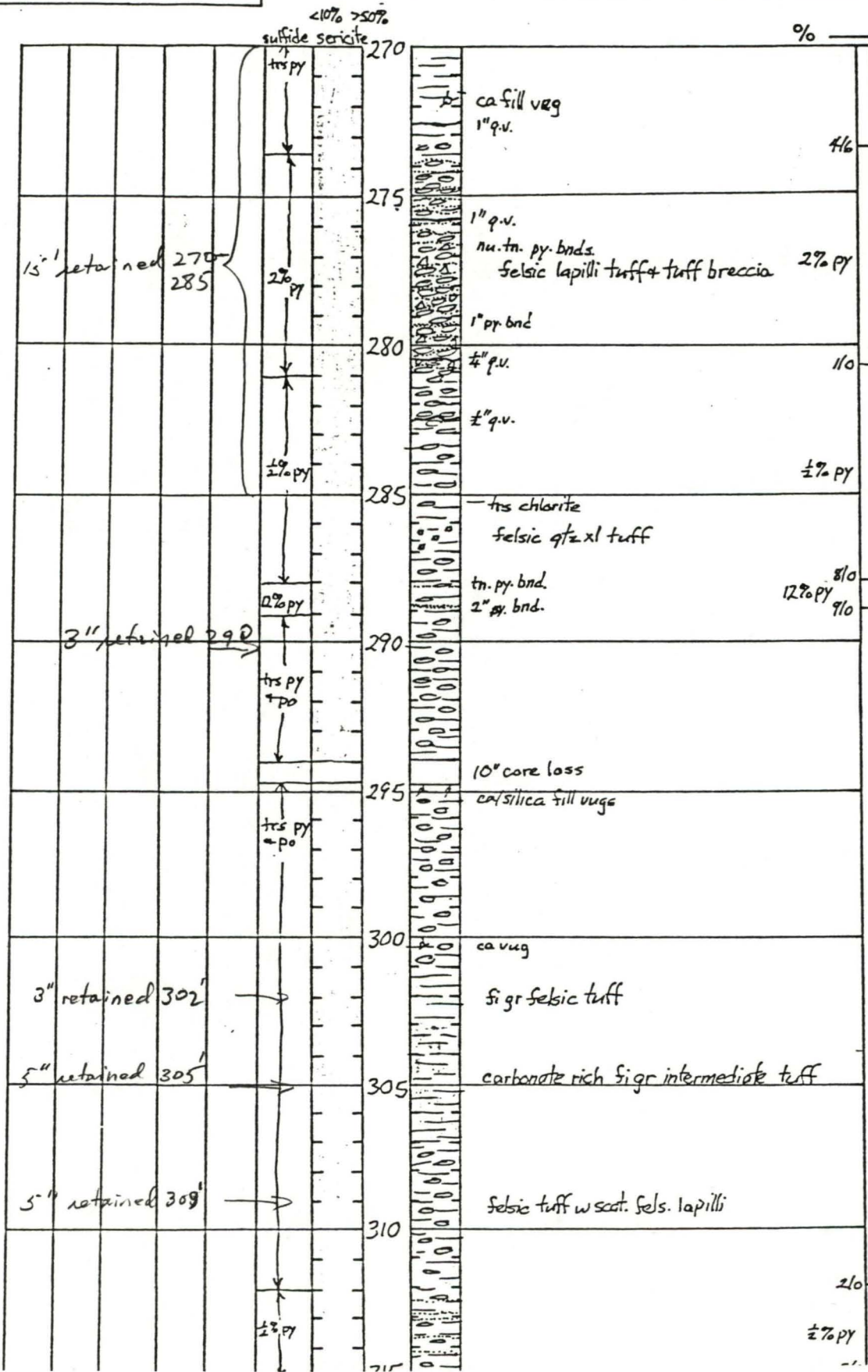
Started / / Completed / / Casing _____

Core Disposition _____ Logged By _____



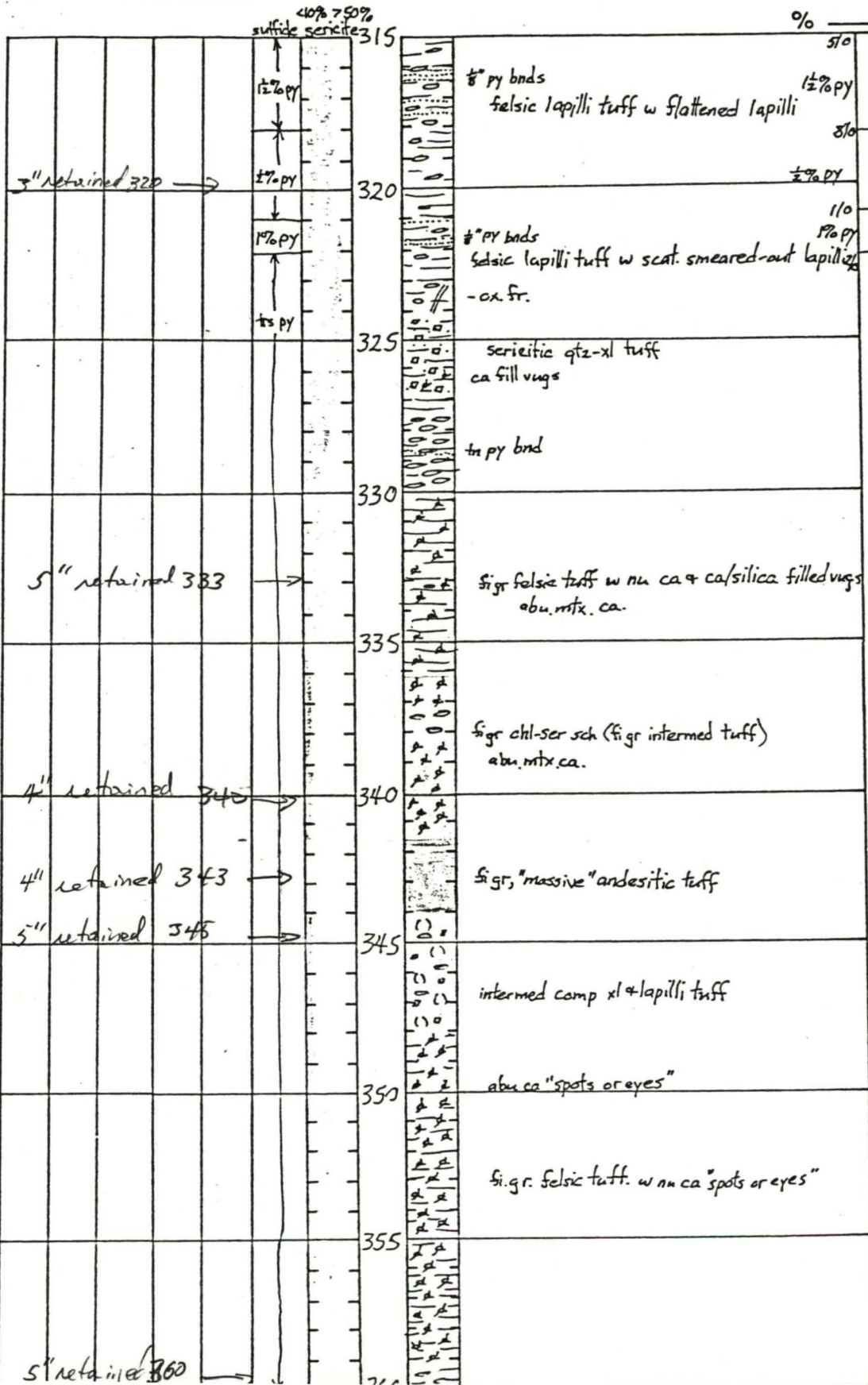
Hole No. GNJK-1 Property _____ Area _____
 County _____ State _____ Quad _____ T. D. _____
 Coordinates _____
 Elev. _____ Bearing _____ Incl. _____ Contractor _____

Started / / Completed / / Casing _____
 Core Disposition _____ Logged By _____



Hole No. GJNK-1 Property _____ Area _____
 County _____ State _____ Quad _____ T. D. _____
 Coordinates _____
 Elev. _____ Bearing _____ Incl. _____ Contractor _____

Started / / Completed / / Casing _____
 Core Disposition _____ Logged By _____



Hole No. GNJK-1 Property _____ Area _____

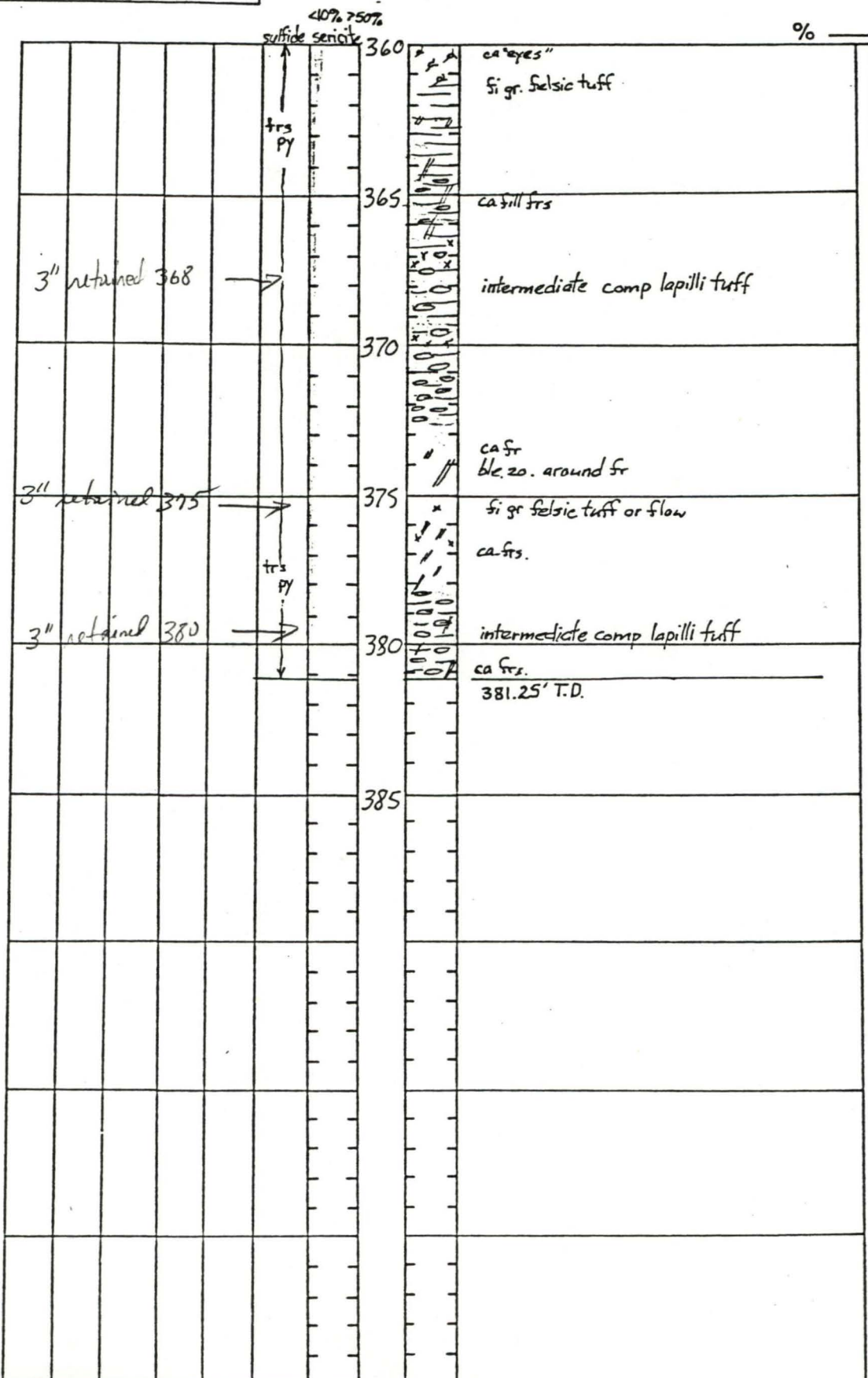
County _____ State _____ Quad _____ T. D. _____

Coordinates _____

Elev. _____ Bearing _____ Incl. _____ Contractor _____

Started / / Completed / / Casing _____

Core Disposition _____ Logged By _____



SPLIT SHEET

GNJK-1

SAMPLE #	INTERVAL	THICKNESS	SPLIT FOR
1	250-255	5	FOLIATION
2	255-260	5	
3	260-265	5	
4	265-270	5	
5	270-275	5	
6	275-280	5	
7	280-285	5	
8	285-290	5	
9	290-295	5	
10	295-300	5	
11	300-304	<u>4</u>	
12	304-308	<u>4</u>	
13	308-312	<u>4</u>	
14	312-316	<u>4</u>	
15	316-320	<u>4</u>	
16	320-325	5	
17	325-330	5	
18	330-335	5	
19	335-340	5	
20	340-345	5	
21	345-350	5	
22	350-354	<u>4</u>	
23	354-358	<u>4</u>	
24	358-362	<u>4</u>	

Finished splitting core and gave to Don Foss @ Blue Ridge Labs for assay on 3/18/70
 J. O. Paris

Blue Ridge Analytical Laboratory, Inc.

Post Office Box 7545 • Charlottesville • Virginia • 22906 • 804-973-4353

March 24, 1980

Job No. 760

U.S. Borax & Chemical Corp.
P.O. Box 10831
Knoxville, Tenn. 37919

Certificate of Analysis

Twenty-four samples assayed for Gold (Rush), in on Wed PM, out on Friday:

<u>Sample Number</u>	<u>ppm Au</u>	<u>Sample Number</u>	<u>ppm Au</u>
GNJK-1-1	.08	GNJK-1-13	.21
1-2	.08	1-14	.05
1-3	<.02	1-15	.26
1-4	<.02	1-16	.08
1-5	.70	1-17	<.02
1-6	1.35	1-18	.09
1-7	.70	1-19	.03
1-8	.57	1-20	<.02
1-9	.42	1-21	.05
1-10	.30	1-22	.60
1-11	.39	1-23	<.02
1-12	.23	1-24	<.02

Respectfully submitted:

Donald W. Foss
Donald W. Foss
President

DWF:jaw









- | | | |
|-----------------------|---------------------|----------------------|
| 1 Merrill | 12 Kindley | 23 Branson |
| 2 New Sawyer | 13 Parish | 24 Smith |
| 3 Allred | 14 Delft | 25 Goliham and Smith |
| 4 Copple, Spencer | 15 Redding | 26 Dowd |
| 5 and Ruth | 16 Pritchard | 27 Rush |
| 6 Jones and Laughlin | 17 Gray | 28 Gluyas |
| 7 Sawyer Complex | 18 McAllister | 29 Uharie |
| 8 Hoover Hill | 19 Newby | 30 Talbert and Hill |
| 9 Scarlett | 20 Spoon | 31 Griffin |
| 10 Jones-Keystone | 21 Pilot Mtn. No. 1 | 32 Stafford |
| 11 Southern Homestake | 22 Pilot Mtn. No. 2 | |

Figure 19. Randolph County Deposits

✓ RA-C-1-80 GNJK-1
RA-C-2-80 GNJK-2

LEGEND

- GNJK-1  U.S. Borax D.D.H.
- JK-1  Asarco D.D.H.
-  500' Total Depth
-  45° Inclinination
-  Soil Sample less than .1 ppm Au
-  Soil Sample greater than .1 ppm Au

 **U.S. GEOLOGICAL SURVEY**
EXPLORATION

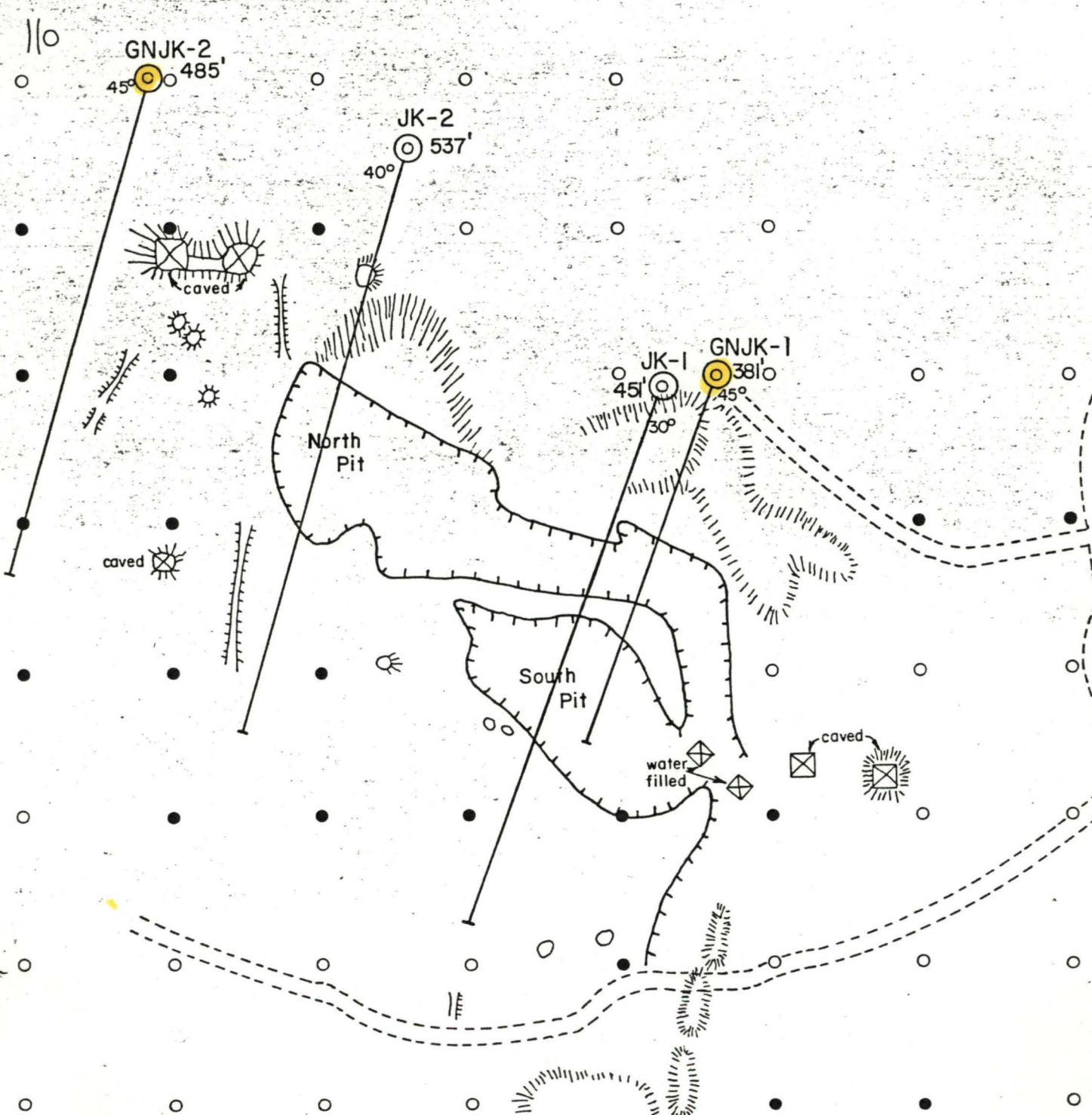
JONES KEYSTONE F
DRILL HOLE LOCAT

Exhibit 5

SCALE: 1" = 100'

Jones Keystone

600SW —
700SW —
800SW —
900SW —
000SW —
100SW —
200SW —
300SW —



A lease was obtained and detailed soil (exhibit 3), rock, and pit sampling and mapping were conducted in late 1979 - early 1980. Also in early 1980 core from three holes drilled by Asarco at the Jones-Keystone Mine was obtained on loan and logged (exhibit 4).

Data obtained from Asarco showed only non-economic gold mineralization. From our soil and rock sampling however, it was decided to drill our own holes. A contract was secured with Cementation Corporation of America for core drilling. Two holes were drilled in March 1980 (exhibit 5 - map; exhibit 6 - log).

D.D.H. GNJK-1 was drilled to investigate the quartz-sericite schist unit cropping out in the south pit of the main workings. The hole was drilled to a depth of 381 feet (linear) at an inclination of 45° and a bearing of S20°E. Stratigraphic picks made in the field place the top of the quartz-sericite schist unit at 270 feet and the top of the footwall lapilli tuff unit, of intermediate composition, at 365 feet.

A total of 24 split core samples from a 112 foot section of GNJK-1 were analyzed for gold. The sampled section includes the entire quartz-sericite schist unit. No interval in excess of five feet was found to contain more than 0.03 oz/tn Au (exhibit 7).

D.D.H. GNJK-2 was drilled to a depth of 485 feet (linear), also at an inclination of 45°, and a bearing of S20°E. The hole was located approximately 400 feet NW of GNJK-1 to examine bedrock underlying soil and soil float anomalies west of the main workings and the continuity of the quartz-sericite schist unit. The tops of the quartz-sericite schist and footwall lapilli tuff units were picked in the field at 270 feet and 435 feet, respectively.

Twenty-two split core samples from a 110 foot section of GNJK-2 were analyzed for Au. Again, the entire quartz-sericite schist unit was sampled. No value greater than 0.01 oz/tn Au was found, however, the entire zone averages 0.007 oz/tn Au indicating a broad zone of non-economic gold mineralization.

Upon completion of drilling well record forms were filed with the North Carolina Department of Natural Resources and Community Development (exhibit 8).

The following conclusions are supported by drill core and assay data:

- (1) Uneconomic, low-grade gold mineralization is hosted by a quartz-sericite schist unit, and continues down dip from the weathered and largely mined-out surface outcrop. This fact is further substantiated by data obtained from Asarco.
- (2) Gold values for fresh rock are lower than those reported in the literature for decomposed rock, however, it is not known if processes of supergene enrichment are responsible for the differences.



DAVIDSON CO
RANDOLPH CO

MOTLETA 2.4 MI.
ASHEBORO 12 MI.

720 000
FEET

3952
42.30°

3956

3954

3955

3953



Plate 8B. Shaft at Hoover Hill Mine

northeast-trending, sheared and brecciated zones of rhyolite. Older reports indicate that free gold was found along the planes of contact between the quartz in the shoots and the sheared rhyolite. Sphalerite is disseminated through the sheared and brecciated zones in the rhyolite. The color of the sphalerite ranges from reddish black to light greenish brown. Pyrite (auriferous?) is disseminated throughout, generally exhibiting good cubic outlines. Some pyrite has been smeared out along fractures while other pyrite was emplaced with the quartz that healed the fractures. The sphalerite is usually associated with the more fractured zones and is disseminated through the silicified zones and sheared, brecciated country rock. There is massive white orthoclase feldspar in the brecciated rhyolite that, along with the quartz, has healed fractures. The biotite in the breccia appears confined to clots or clusters, some of which show minor silicification. Chlorite is minor and is disseminated through the quartz-feldspar matrix. A few pieces of bornite have been observed in the breccia. The ore deposit is apparently fault controlled.

Jones-Keystone Mine (AuM)

Location: The Jones-Keystone mine is in western Randolph County, 11.7 miles west of Asheboro and 13.3 miles southwest of Randleman. To reach the mine, travel 1.0 mile southwest on SR 1344 from its intersection with U. S. Highway 64. Turn south (left) onto a farm road and go 0.65 mile. The mine is 100 yards S. 50° W. of the old farm road.

Workings: The mine was active in 1852 and was apparently operated until the Civil War. The mine was reopened in the late 1870's but was idle from 1881 to 1883. In 1884, the mine was reopened and was worked intermittently until 1903. A considerable amount of development work was undertaken in the 1930's but



Plate 8C. Open cut , Jones-Keystone Mine

there is no record of production. Mining was carried out in two large open pits and several shafts. In 1968, many large pits and shafts remained along with three Chilean mills and one or more cyanide vats.

Geology: Mining was concentrated in sheared, silicified, felsic volcanic rock. Minor quartz stringers in the silicified zone strike N. 30° to 48° E., and dip vertically. The silicified zone and the workings strike N. 60° E. and the zone dips 80° NW. Pyrite and pyrite cavities are disseminated throughout the zone.

Earlier reports indicate pyrophyllite composes a major portion of some samples. The silicified zones were said to be about 50 feet wide and iron-rich zones exposed were 30 feet wide. Gold was supposedly disseminated throughout the rock and a great deal of it was lost during processing because of the fineness of the gold.

Jones and Laughlin Mine (AuP)

Location: The Jones and Laughlin mine is in western Randolph County, 10.2 miles northwest of Asheboro and 9.3 miles west-southwest of Randleman. The mine is 510 feet due west of the intersection of SR 1408 and SR 1539.

Workings: One partially filled shaft was on the property in 1967. Apparently, only prospect work was carried out here.

Geology: Prospecting was carried out in a quartz vein enclosed by gray-green to black, porphyritic rhyolite. The quartz is fractured and healed with silica and contains pyrite altering to limonite in the fractures. Pyrite and chalcopyrite after pyrite are also in the fractures. The rhyolite contains disseminated vugs filled with limonite which has altered from pyrite. The rhyolite is fractured, and the phenocrysts, now altered, seem to have

Location:
County, 11
southwest
0.7 mile
mile south
miles south
1311 and
road and
of the road
south side
Workings:
on the prop
1890's, but
Geology:
iron-stained
40° E. and
altered to
rock contain
formed from
hematite in
no evidence

McAllister

Location:
southwest
four. The
road on the
site the inte
Follow the
direction. T
direction. T
and then go

Workings:
Civil War
feet deep.
trench 200
and trend
workings c
hill.

Geology:
zone of fel
dips 70° N
sericite-ch
arsenopyri
and silicifi
few relic c
rock. Epic
larite are
foot zone
inches by
limonite c