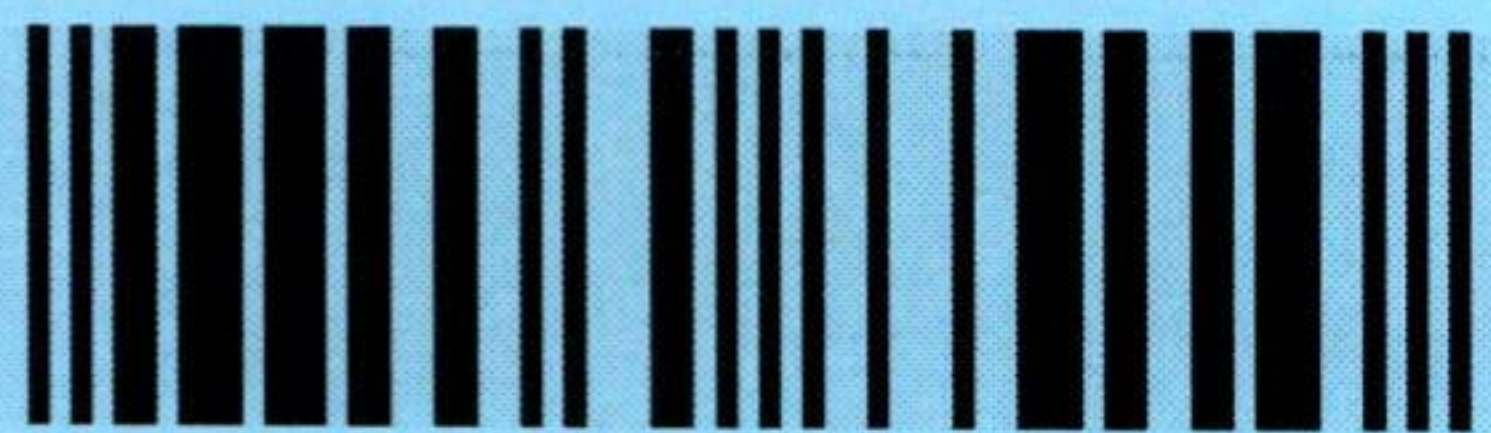




Initials: JM

File Name: 37646

Commodity: Au

Country: USA

State/Province: Nevada

County: Nye

Project: Smoky Project

Date: 4/15/1981

Title/Subject: Report on the Smoky Project

Notes: On the Sharonsteel claims.

- Oversize Doc(s)

☒ Assay Data

- Log(s)

Map Scale: -

T: 012N

R: 044E

S: -

SHARONSTEEL • Mining Division

AN **NVE** COMPANY

SHARON STEEL CORPORATION

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FOR INTER-OFFICE COMMUNICATION

TO: G.W. Hansen
FROM: C.J. Eppler
SUBJECT: Smoky Project, Nye County, Nevada

April 15, 1981

LOCATION:

Sharonsteel's 17 claims are roughly 73 miles NE of Tonopah in Big Smoky Valley, Nye County, Nevada. The claims are 12 miles east of Highway 8A and approximately 13 miles north of Round Mountain in the Northumberland caldera.

BACKGROUNDS:

Sharonsteel has possession of 17 claims acquired from a Mr. Hajeks, exploration manager of Zelon Geochemicals Services Inc., in 1975 based on his discovery of some anomalous molybdenum ion values from a spring on the eastern edge of the alkali flats. For 3 years Mr. G. Ryan for UV Industries supervised and conducted an I.P. Survey, geochemical survey, ground magnetic survey, and a drilling program. Then, in 1979 Leon Hansen Assoc. Inc. put together a geologic report consisting of old and new geochemical, geophysics, and mapping data.

TOPOGRAPHY:

Rolling hills make up most of Sharonsteel's claims. The vegetation is scarce, so visibility of the surrounding area is excellent. Rock outcrops are fairly abundant to enable the construction of a good geologic map which is badly needed.

GEOLOGY:

It is believed that this prospect is in the inner component of the Northumberland caldera. The Northumberland caldera, as defined by McKee, is roughly 20 miles in diameter and is situated in the west central Toquima Range. The western half is apparently buried beneath alluvium in the Big Smoky Valley. The Northeastern edge of the caldera consists of ash flows, land slide blocks, and chaotic rubble. The caldera itself consists of 1000' feet of the Northumberland Tuff which persists to the south, but much thinner in thickness. The time distribution of geologic events in the Northumberland caldera area is best exemplified by McKee's drawing (fig. 8). His drawings give an up to date illustration of the geology and structure of the Northumberland caldera.

The Northumberland tuff which overlies Paleozoic argillaceous carbonate beds is a composite ash flow sheet consisting of numerous individual ash flows in a sequence separated by partial cooling breaks, and locally there are at least two complete cooling breaks marked by lenses of sedimentary strata and zones of black vitrophyre. Along the southern part of the caldera, the tuff exhibits an eutaxitic fabric. Based on other Nevada tuff sheets, the Northumberland is considerably smaller. The Northumberland tuff is considered to be Oligocene 32.3 ± 1 m.y. old by K-Ar determination from the sanadine. The Northumberland tuff is gray-white, rich in crystals of rhyolite composition. The principal minerals are quartz and sanadine with biotite and plagioclase in minor amounts but ubiquitous.

Paleozoic chert are spread throughout the tuff, but are more abundant in the upper parts of the ash flow sheets.

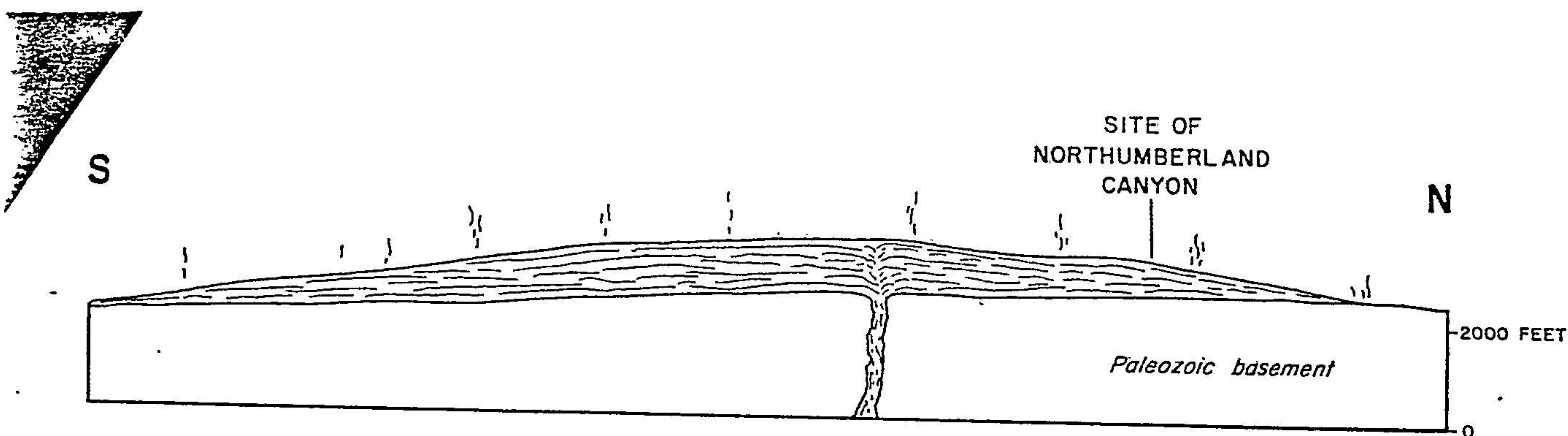
Just north of Mount Ziggurat, (fig. 2), is an east-west vertical fault. Along the fault, jasperoid silicification is often present along with brecciation and shearing that extends up to 10' wide. It is easily seen as resistant ridges that cut the carbonate formations. Also, intense folding and deformation of the carbonate sequence is present marginal to the Ziggurat fault. This east-west fault is believed to extend to Copper Hill where it offsets a northeast shear zone.

The northeastern shear zone through Copper Hill causes the lithology to be highly contorted and broken. Three shafts on Sharonsteel's claims penetrate this northeasterly trending mineralization zone. Pyrite, quartz, fluorspar, barite, and numerous oxides are the minerals that occupy this zone. Quartz up to 20' wide and a 2' barite vein are visible. Similar structures and attitudes have been seen up to 3/4 - 1½ mile to the west of Copper Hill along the north side of the Ziggurat fault. All of the surrounding rocks are the Paleozoic limestones that have been extremely folded.

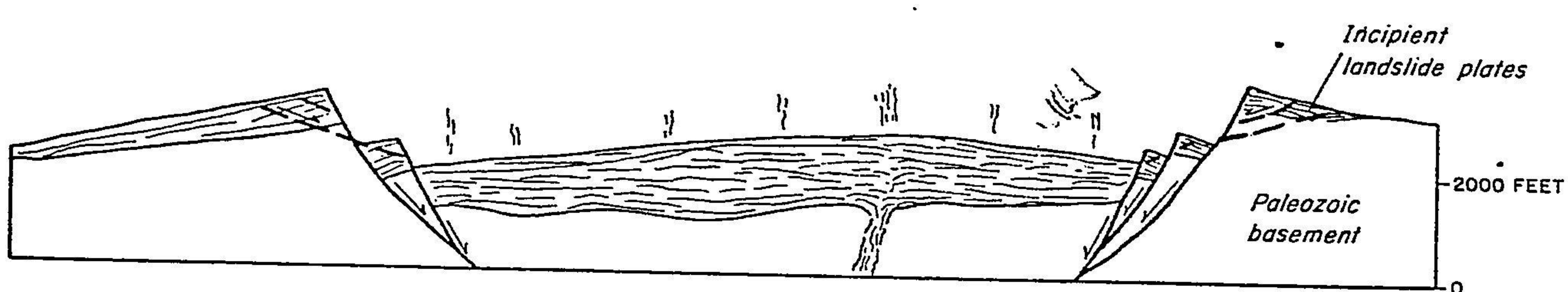
The Ziggurat fault is cut by a zone of intense shearing just north of Mt. Ziggurat. It trends N30 - 50W. Hypothetically, this shearing could be the result of the landslide blocks associated with the collapse of the caldera. No mineralization is evident in the NW fault.

GEOPHYSICS:

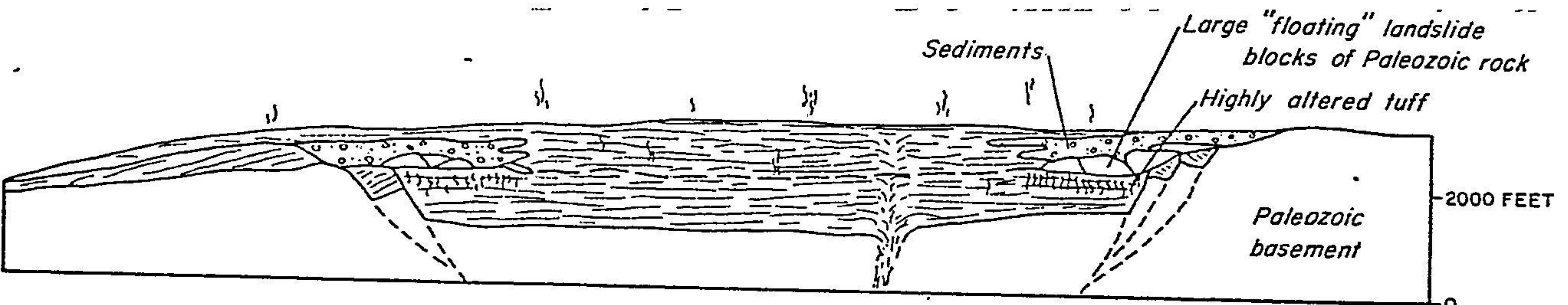
Briefly, the highest conductivity zones extend roughly in an east-west trend just North of Copper Hill. At the 800' level, the I.P. Survey registers 50 - 60 milliseconds. The zone widens as the survey extends to the 1200 and 2400' levels. All visible rock types are limestones that have been highly folded. As of this time no drilling has taken place in the I.P. highs. A magnetic low exists around Mey 10 and this correlates well with the I.P. high.



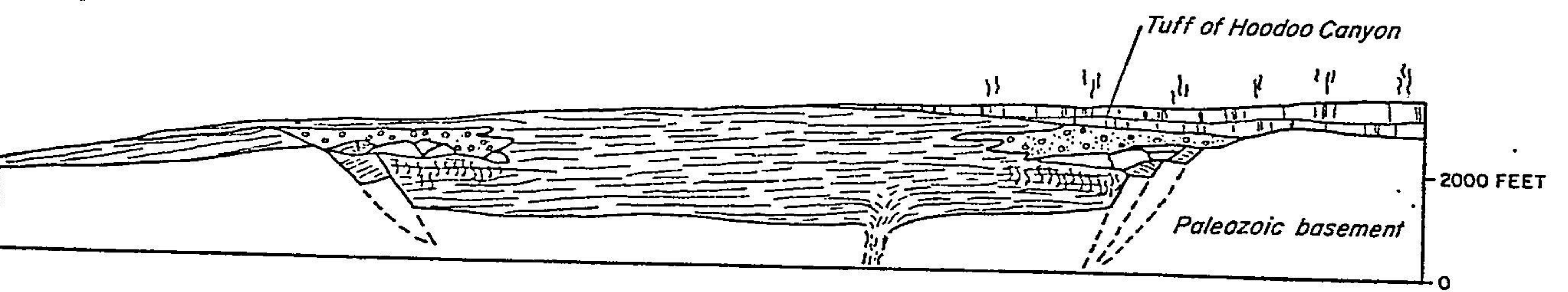
A. Initial eruptive stage about 33 m.y. ago. Emplacement of a thick composite ash-flow sheet.



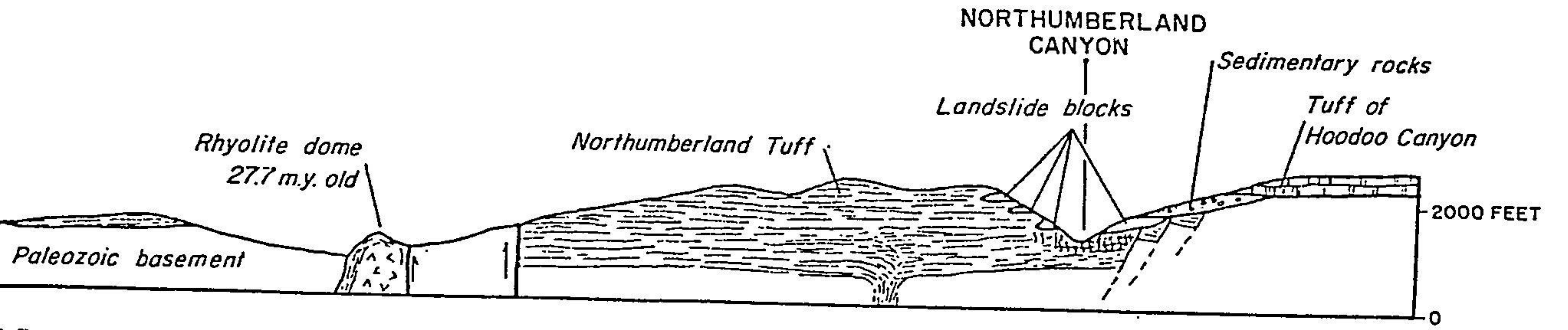
B. Collapse of ash-flow sheet to form caldera. The thick ash-flow sheet still hot and emitting vapor.



C. Caldera fill, mostly sedimentary rocks peripherally located and ash flows in central area. About 32-31 m.y. ago.



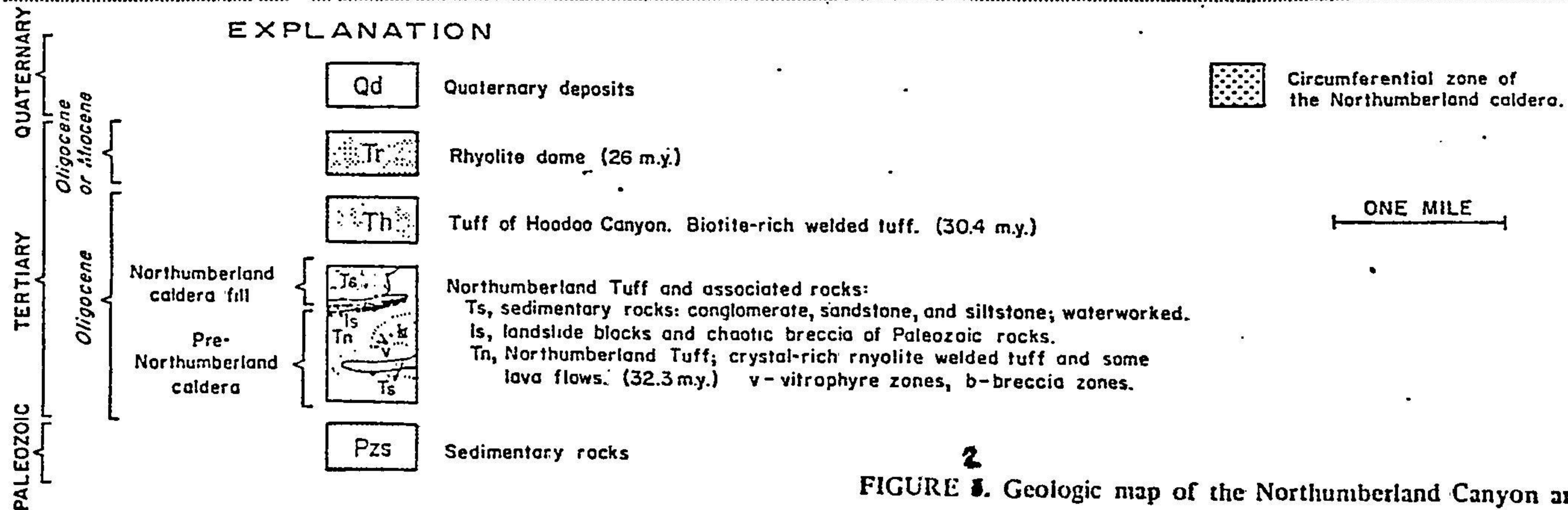
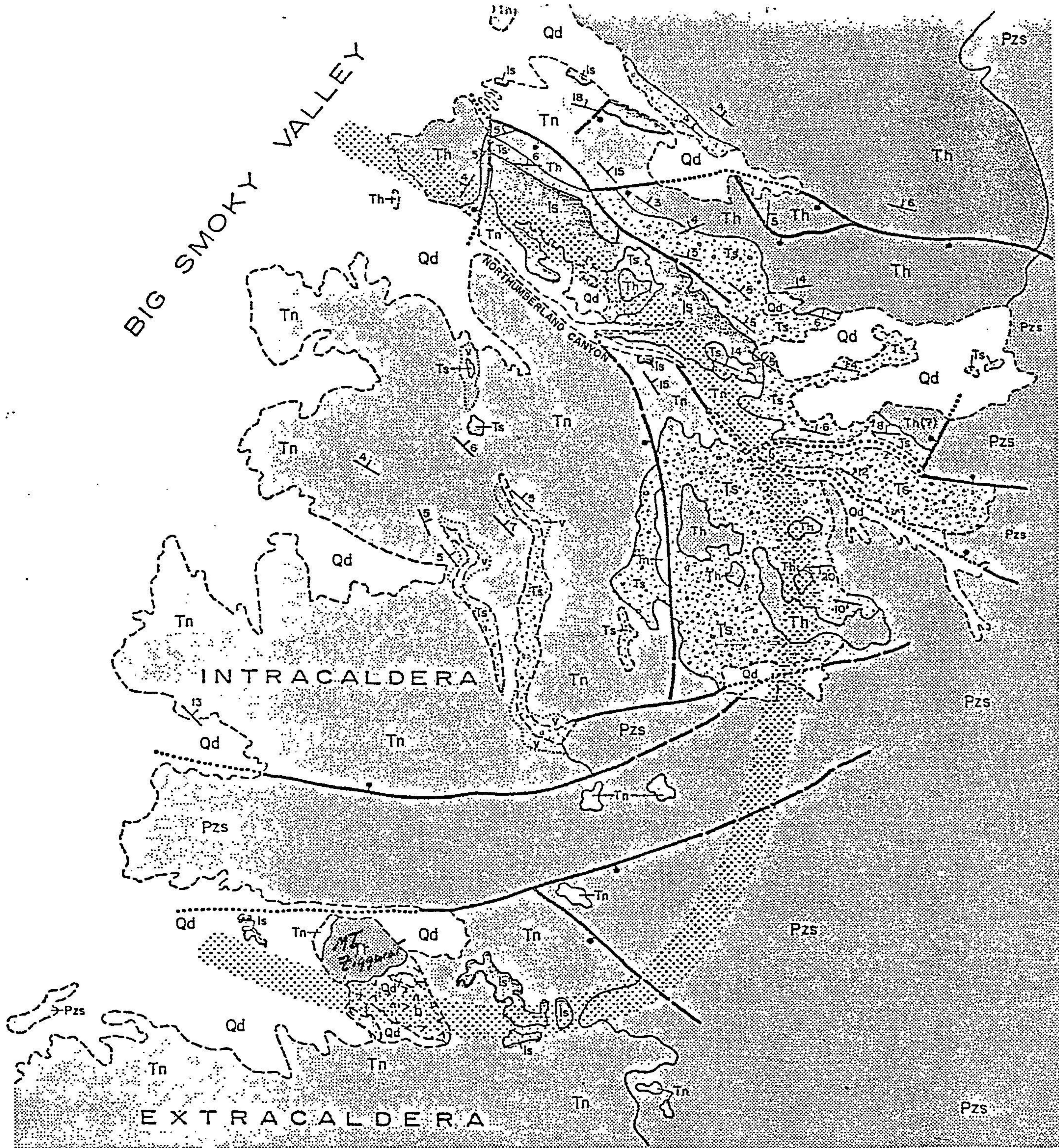
D. Volcano-tectonic cycle complete. Tuff of Hoodoo Canyon overlaps northern part (and possibly all) of filled caldera.



E. Present level of erosion, caldron structure modified by basin-and-range faulting.

14 MILES

FIGURE 8. Schematic inferred history of the Northumberland Canyon volcanic center and caldera. Horizontal scale approximate, vertical scale exaggerated about 2X.



2
FIGURE 3. Geologic map of the Northumberland Canyon area.

DRILLING:

Eight rotary holes have been drilled on the Smoky Project. Three holes, 80, 100 & 120 feet, have been drilled on or near Copper Hill. The average gold assay for the three holes is roughly .01 oz. per ton with .06 oz. per ton as the high and 0 as the low. All eight holes were drilled in folded, interbedded shales and limestones and not in the volcanics. Two of the holes, C-1-75 and A-1-75 go to a depth of 490' and 720 feet respectively with very negative results. The other three holes were shallow rotary holes with negative results.

Lithologic sections of the rotary holes with gold and silver assays have been added to Leon Hansens geologic map.

GEOCHEMICAL:

In 1977, Zelon Geochemical was contracted to complete a geochemical survey of the Smoky Project. The project was completed in March 1977. All assay work was performed by Sharonsteel's chemist in Midvale. The results indicate some positive targets just North of our claims. The soil samples have a high .019 with .01 and .05 oz. per ton irregularly along a N10°E to N40°E direction. Near the Mey 10 claim .01 and .005 oz. per ton samples were obtained. Almost all silver values average around .003 oz. per ton with five samples between .875 to 1.3 oz. per ton. These values follow along the small structures visible along the Copper Hill shear zone.

Leon Hansen performed a small geochemical survey, and his results only confirm Zelon's.

A more complete geochemical survey to the north of Sharonsteel's claims is warranted in case Noranda drops their claims in this area.

ECONOMICS:

Based on literature of Alvers & Kleinhaupl (1968) roughly 80 major tertiary volcanic centers have been recognized in Nevada, and 33 of the 80 have spatially related mineral deposits including mercury, gold, silver, fluorspar, antimony and possibly manganese. About 15 to 20 of the 80 volcanic centers are reportedly believed to be calderas with diameters ranging from 3 - 35 miles.

Twenty miles to the south, Manhattan Consolidated is mining in a gold and silver district. The ore is found in veins which cut tertiary volcanics and Paleozoic sediments; as stockworks in Paleozoic schists, and as replacements in Paleozoic limestone.

Gold in carbonaceous shale overlying quartz monzonite to the North. Small operations 60 - 70' thick.

Round Mtn. to the south is mining a volcanic tuff or rhyolite flow with gold associated with quartz veins.

Noranda has overstaked UV claims. The Noranda Zig claims extend in all directions beyond the area covered by our base maps.

CONCLUSIONS:

Sharonsteel needs to make a good geologic map with a geochemical survey of the Smoky area. At this time, Leon Hansen's work appears incomplete. I'm not sure if I can trust the I.P. data. There is the possibility that the high is a reflection of the highly contorted limestones and shale units, and not sulfides. A good geochemical analysis might give some answers concerning the questionable I.P. high.