

NEW YORK CANYON PROJECT
PERSHING COUNTY, NEVADA

LOCATION AND ACCESS: The project sites, which consist of four separate parcels, are located in west-central Nevada, approximately 30 miles east of Lovelock. The property may be reached by paved and graded county roads leading from Interstate 80.

LEASE POSITION: T26N, R35E, Sections 26 and 34
T26N, R36E, Sections 21, 33 and 34
T25N, R35E, Sections 14, 21, 22 and 28

GEOHERMAL AND GEOLOGIC DESCRIPTION: Heat flows ranging from 4.4 HFU to 7.2 HFU are found in close proximity to the project sites. In addition to the thermal anomaly, a young intensely altered zone, containing native sulfur and mercury mineralization, which borders the southeast edge of the property, gives further indication of intense hydrothermal activity. Recent faulting along the Stillwater Range Front adjacent to the project sites is the probable conduit for transporting hydrothermal fluids to near surface levels.

ENERGY MARKETING POTENTIAL: The project site is located within 100 miles of the Reno-Sparks metropolitan area and within 30 miles of the Winnemucca-Reno power line.

APPENDIX I. NEW YORK CANYON

PROJECT: New York Canyon, Nevada. (11/11/80)

LOCATION: The property is centered on 117° 55' WLong., 40° 05' NLat. (T25-26N, R35-36E) east of Lovelock, Nevada, in the Basin and Range Province.

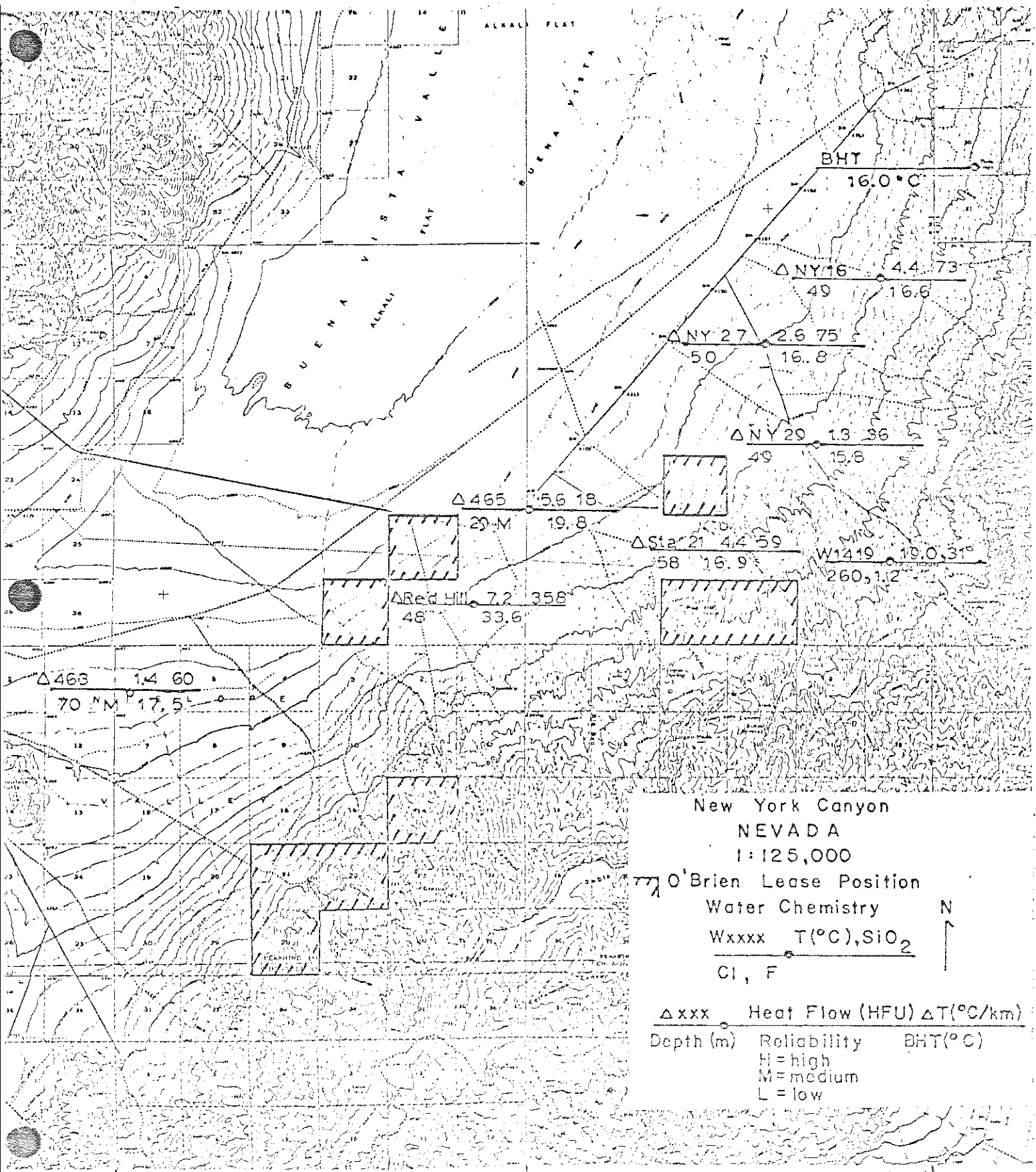
LEASE POSITION: T26N, R35E Sections 26 and 34
T26N, R36E Sections 21, 33 and 34
T25N, R35E Sections 14, 21, 22 and 28

AVAILABLE DATA: Figure I-1: The lease position is based on three heat flow values of 4.4, 5.6 and 7.2 HFUs in the Buena Vista Valley. A high bottom hole temperature (33.6°C at 48m) was measured in the Red Hill gradient hole. Background heat flow is slightly below average for Nevada.

GENERALIZED GEOLOGY: Figures I-2 and I-3: The Stillwater Range east of the property is composed largely of Jurassic and Triassic sediments and Quaternary-Tertiary basalts. These rocks have been extensively faulted and displaced. There are two anomalies, a high and a low, located southwest and east of the Buena Vista Windmill (SW¼, Sec. 18, T26N, R36E). The area of low heat flow at the mouth of Fence-maker Canyon is the result of cold recharge from the canyon. The heat flow high may result from a fault intersection associated with the Stillwater range fault system.

ASSESSMENT WORK COMPLETED: In June 1980 three 50m gradient holes were drilled and logged. These holes were relogged in August. Figure I-1 depicts the current data. Detailed geologic mapping of the lease position and the surrounding area was completed by Bill Teplov in June 1980 (Figures I-2 and I-3).

PROPOSED ASSESSMENT WORK: A mercury survey should be conducted. Large scale aerial photography should be obtained. Results of the mercury survey could indicate if additional drilling is necessary.



New York Canyon
NEVADA
1:125,000

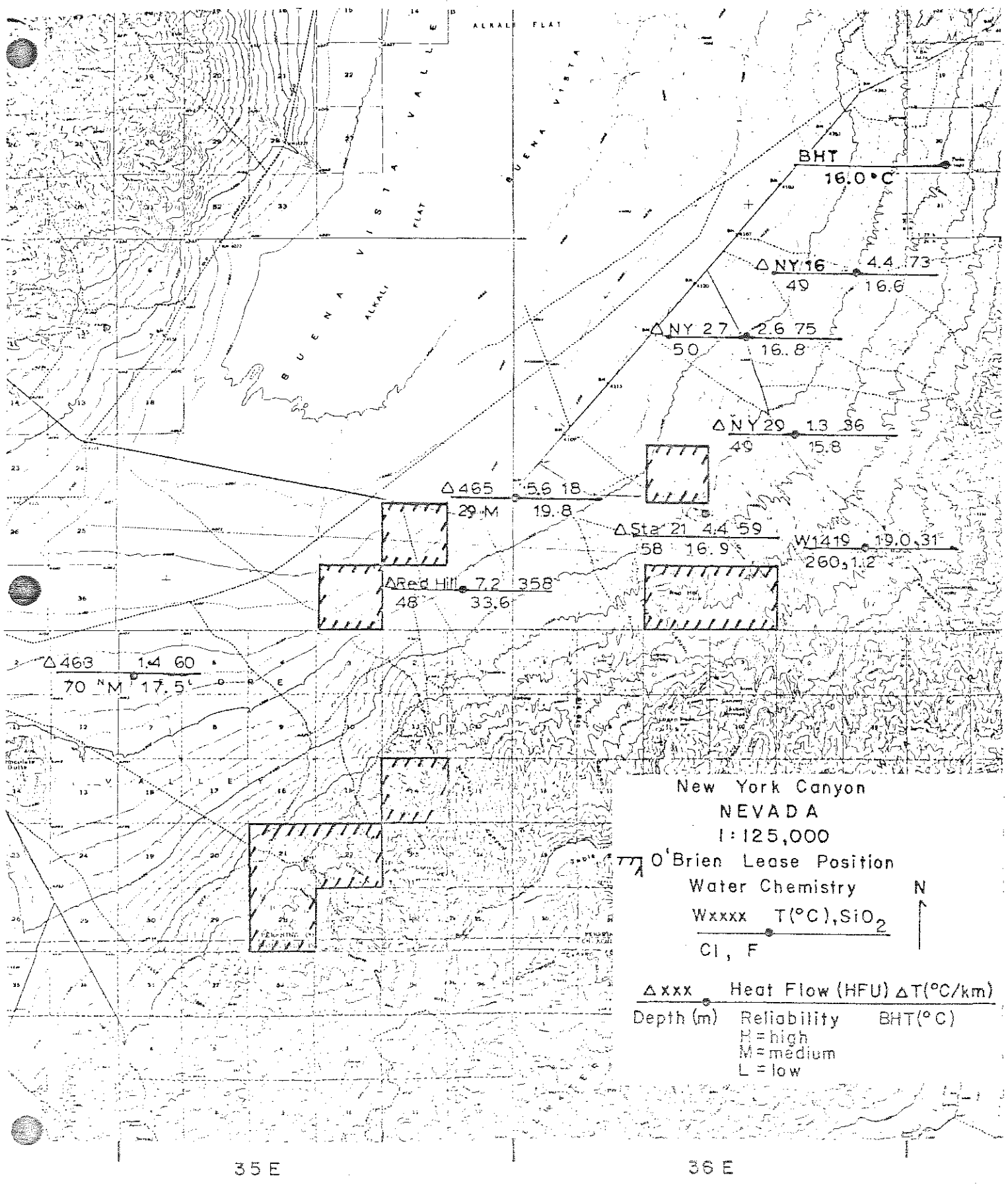
O'Brien Lease Position
Water Chemistry N
Wxxxx T(°C), SiO₂ ↑
Cl, F

Δxxx Heat Flow (HFU) ΔT(°C/km)
Depth (m) Reliability BHT(°C)
H = high
M = medium
L = low

35 E

36 E

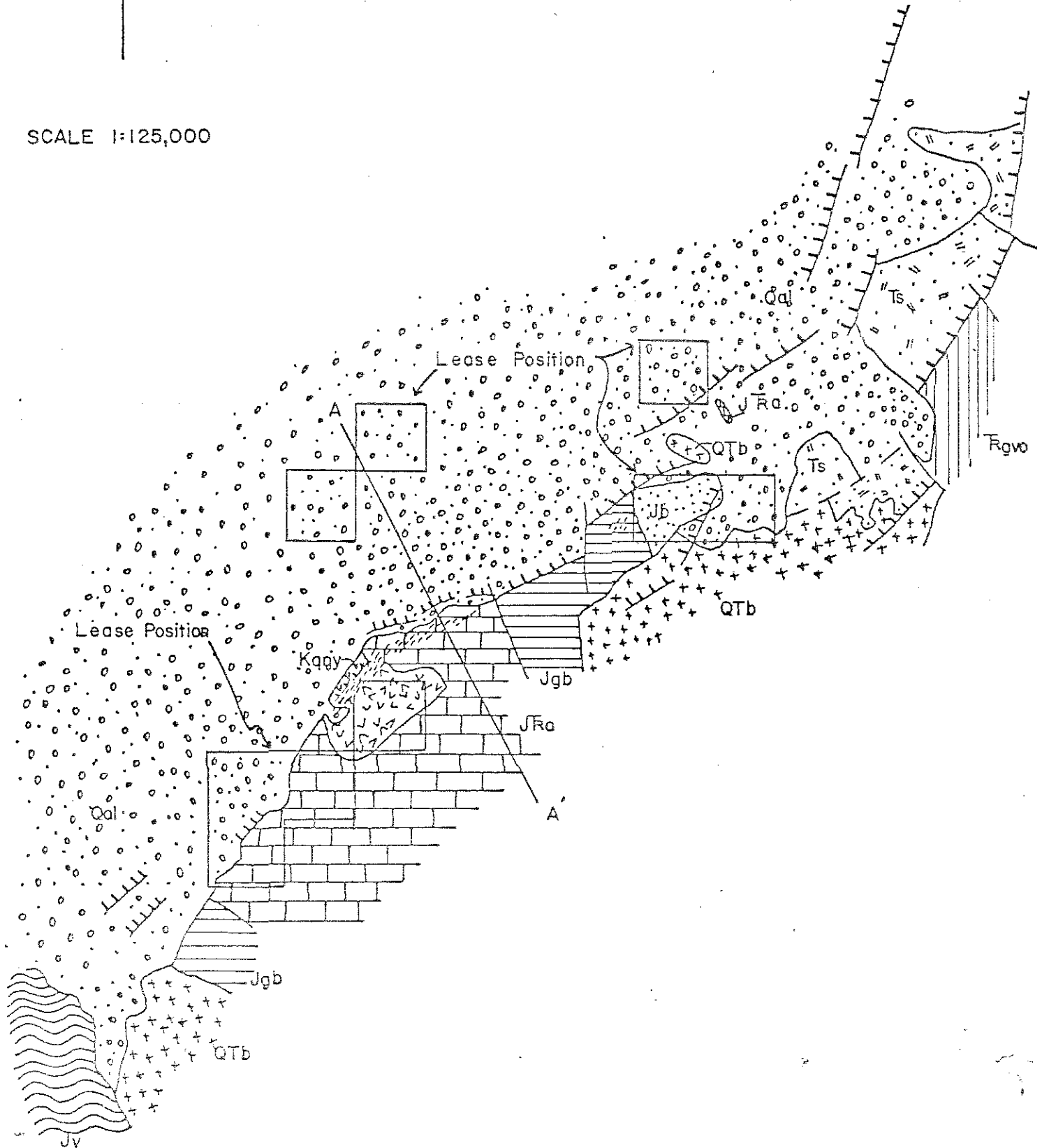
Figure I-1. Lease position, heat flow and water sample data for New York Canyon, NV



Geologic Map of the New York Canyon Property
and Surrounding Area, Pershing County, Nevada

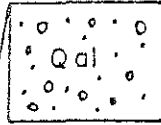


SCALE 1:125,000

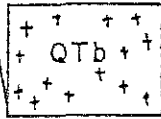


Legend for geologic map of the New York Canyon property and surrounding area, Pershing County, Nevada

Quaternary

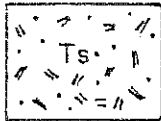


Quaternary alluvium



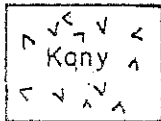
Quaternary-Tertiary basalt

Tertiary



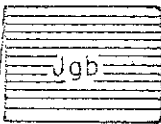
Tertiary tuffs, tuffaceous sandstone and siltstone

Cretaceous

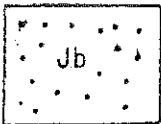


Quartz monzonite of New York Canyon

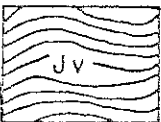
Jurassic



Jurassic gabbro



Bayer Ranch Formation; massive, well sorted quartz sandstone



Jurassic basalt

Jurassic-Triassic

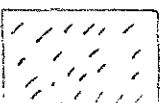


Auld Lange Syne Group; massive limestone interbedded with argillites

Triassic



Grass Valley and Osobb Formation; fine grained argillaceous sandstone



Zone of hydrothermal alteration

CROSS SECTION A-A' NEW YORK CANYON

HORIZONTAL SCALE 1"=2,000'

VERTICAL SCALE 1"=500'

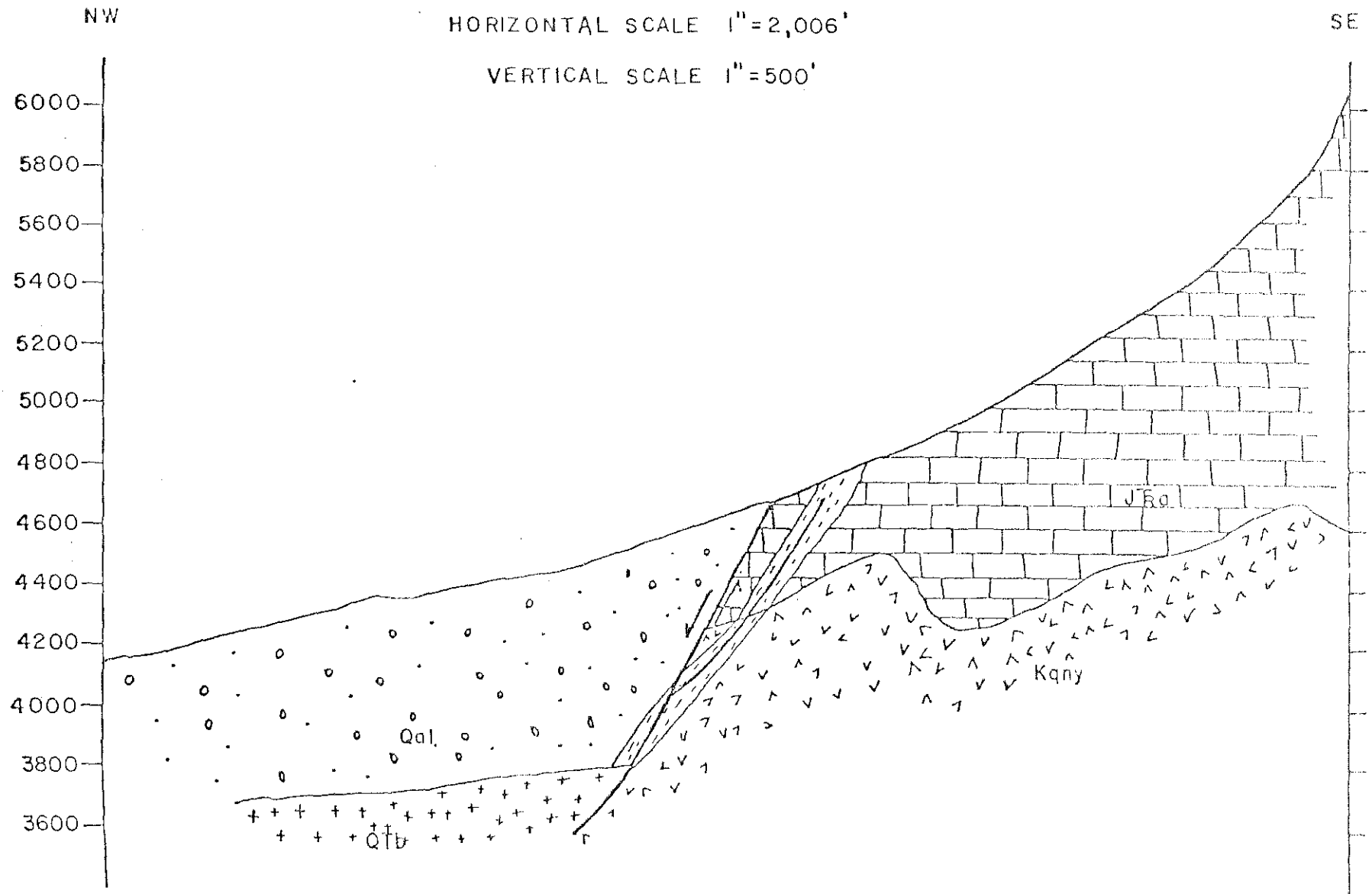
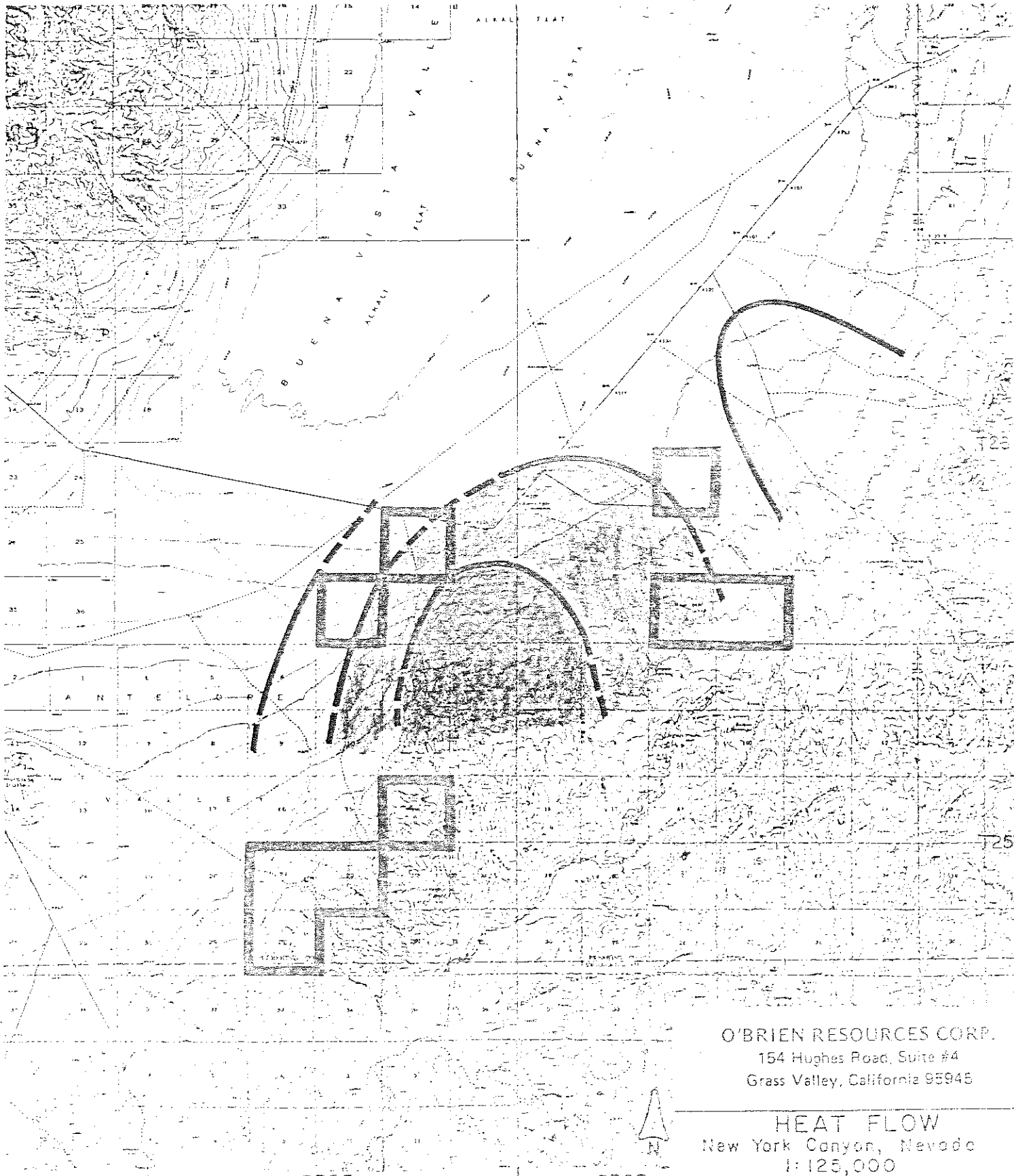






Figure I-3.



O'BRIEN RESOURCES CORP.
 154 Hughes Road, Suite #4
 Grass Valley, California 95945

HEAT FLOW
 New York Canyon, Nevada
 1:125,000

— lease position —

-  > 6.0 HFU
-  4.5-6.0 HFU
-  3.0-4.5 HFU
-  < 3.0 HFU

R35E

R36E