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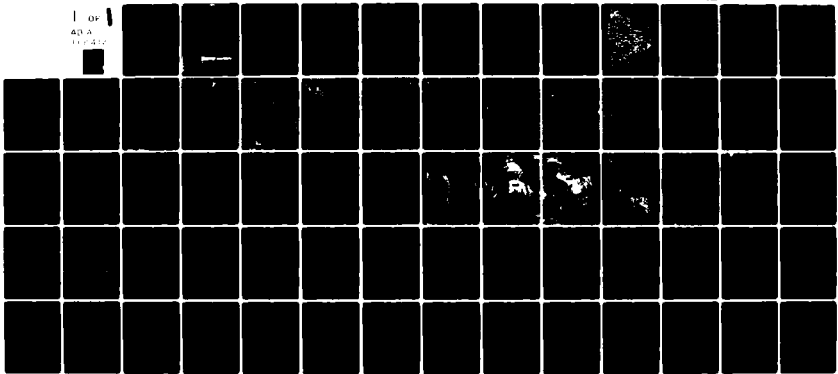
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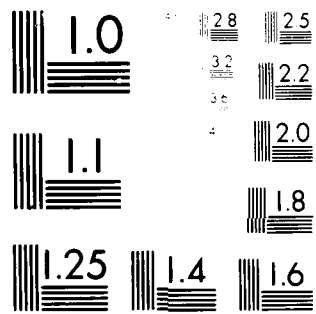
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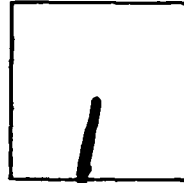
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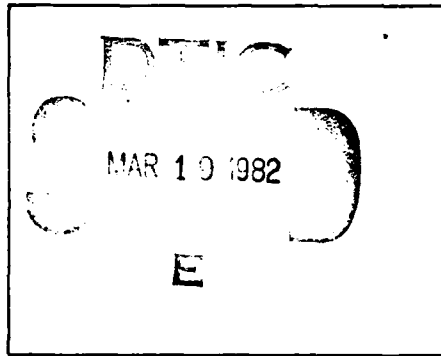
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MX SITING INVESTIGATION

GRAVITY SURVEY - SEVIER DESERT VALLEY

UTAH

Prepared for:

U.S. Department of the Air Force
Ballistic Missile Office (BMO)
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24 January 1981

fugro NATIONAL, INC.

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Results of the gravity survey in the Sevier Desert Valley of Utah Central Utah project indicate that the gravimetry in the central part of the study area overlies, or is interrelated with, a thick sequence of dense basaltic rocks the thickness is about equal to the area of the survey, where the gravimetry is interpreted to be covered through low thick deposits in the central part of the area may make the location of a		

FOREWORD

Methodology and Characterization studies during Fiscal Years 1977 and 1978 (FY 77 and 78) included gravity surveys in ten valleys in Arizona (five), Nevada (two), New Mexico (two), and California (one). The gravity data were obtained for the purpose of estimating the gross structure and shape of the basins and the thickness of the valley fill. There was also the possibility of detecting shallow rock in areas between boring locations. Generalized interpretations from these surveys were included in Fugro National's Characterization Reports (FN-TR-26a through e).

During the FY 77 surveys, measurements were made to form an approximate 1-mile grid over the study areas and contour maps showing interpreted depth to bedrock were made. In FY 79, the decision was made to concentrate on verifying and refining suitable area boundaries. This decision resulted in a reduction in the gravity program. Instead of obtaining gravity data on a grid, the reduced program consisted of obtaining gravity measurements along profiles across the valleys where Verification studies were also performed.

The Defense Mapping Agency (DMA), St. Louis was requested to provide gravity data from its library to supplement the gravity profiles. For Big Smoky, Hot Creek, and Big Sand Springs valleys, a sufficient density of library data was available to permit construction of interpreted contour maps instead of just two-dimensional cross sections.

In late summer of FY 79, supplementary funds became available to begin data reduction. At that time, inner zone terrain corrections were begun on the library data and the profiles from Big Smoky Valley, Nevada, and Butler and La Posa valleys, Arizona. The profile data from Whirlwind, Hamlin, Snake East, White River, Garden and Coal valleys, Nevada, became available from the field in early October 1979.

A continuation of gravity interpretations has been incorporated into the FY 80 program, and the results are being summarized in a series of valley reports. Reports covering Nevada-Utah gravity studies will be numbered, "FN-TR-33-", followed by the abbreviation for the subject valley. In addition, more detailed reports of the results of FY 77 surveys in Dry Lake and Ralston valleys, Nevada, were prepared. Verification studies continued in FY 80, and gravity studies are included in the program. DMA will continue to obtain the field measurements, and there was a return to the grid pattern. The interpretation of the grid data allows the production of contour maps which will be valuable in the deep basin structural analysis needed for computer

modeling in the water resources program. The gravity interpretations will also be useful in Nuclear Hardness and Survivability (NH&S) evaluations.

The basic decisions governing the gravity program are made by BMO following consultation with TRW, Inc., Fugro National, and the DMA. Conduct of the gravity studies is a joint effort between DMA and Fugro National. The field work, including planning, logistics, surveying, and meter operation is done by the Defense Mapping Agency Hydrographic/Topographic Center (DMAHTC), headquartered in Cheyenne, Wyoming. DMAHTC reduces the data to Simple Bouguer Anomaly (see Section A1.4, Appendix A1.0). The Defense Mapping Agency Aerospace Center (DMAAC), St. Louis, calculates outer zone terrain corrections.

Fugro National provides DMA with schedules showing the valleys with the highest priorities. Fugro National also recommended locations for the profiles in the FY 79 studies with the constraints that they should follow existing roads or trails. Any required inner zone terrain corrections are calculated by Fugro National prior to making geologic interpretations.

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1.0 INTRODUCTION

1.1 Objective

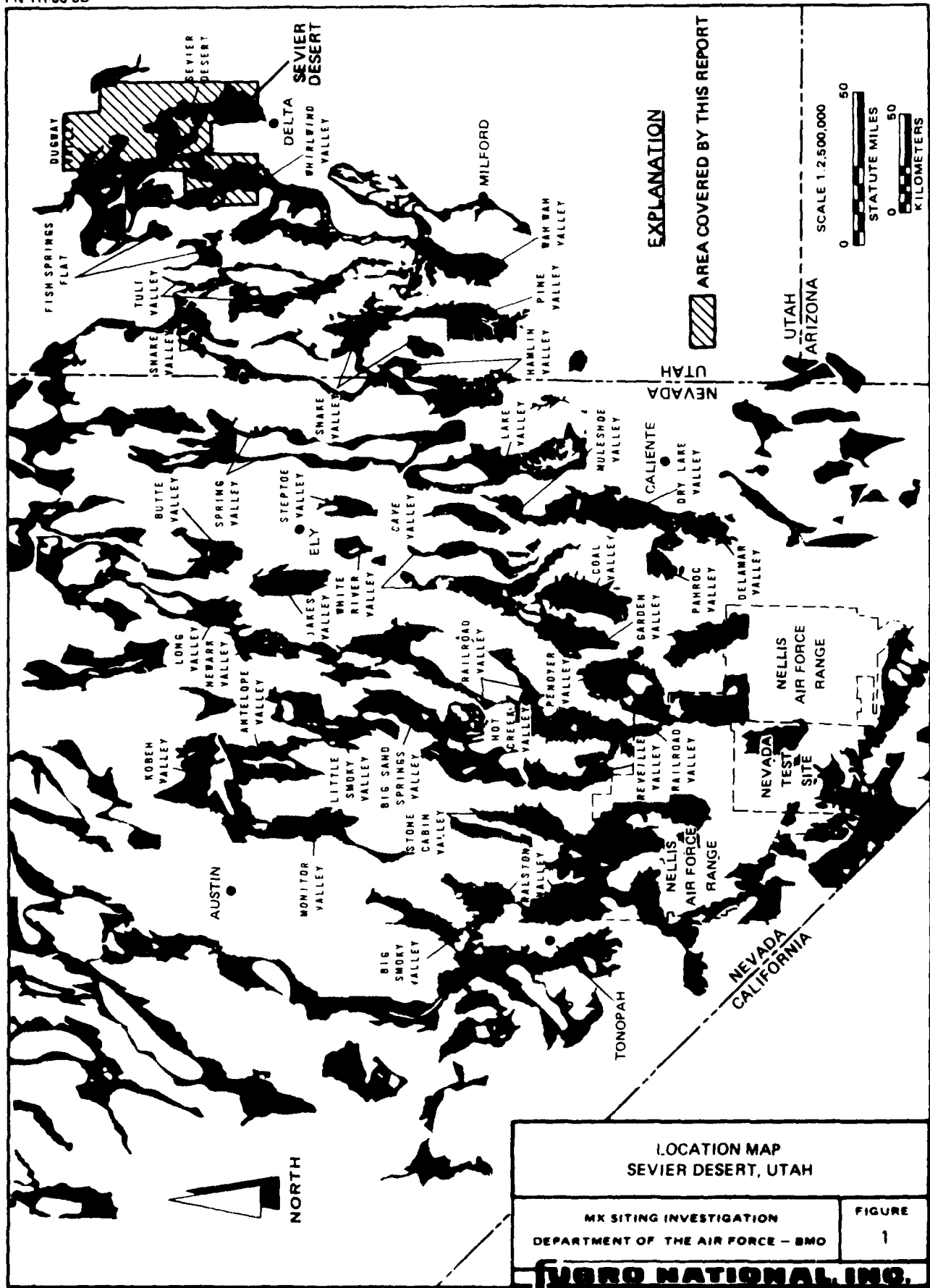
Gravity measurements were made in Sevier Desert Valley for the purpose of estimating the overall shape of the structural basin, the thickness of alluvial fill, and the location of concealed faults. The estimates will be useful in modeling the dynamic response of ground motion in the basin and evaluating groundwater resources.

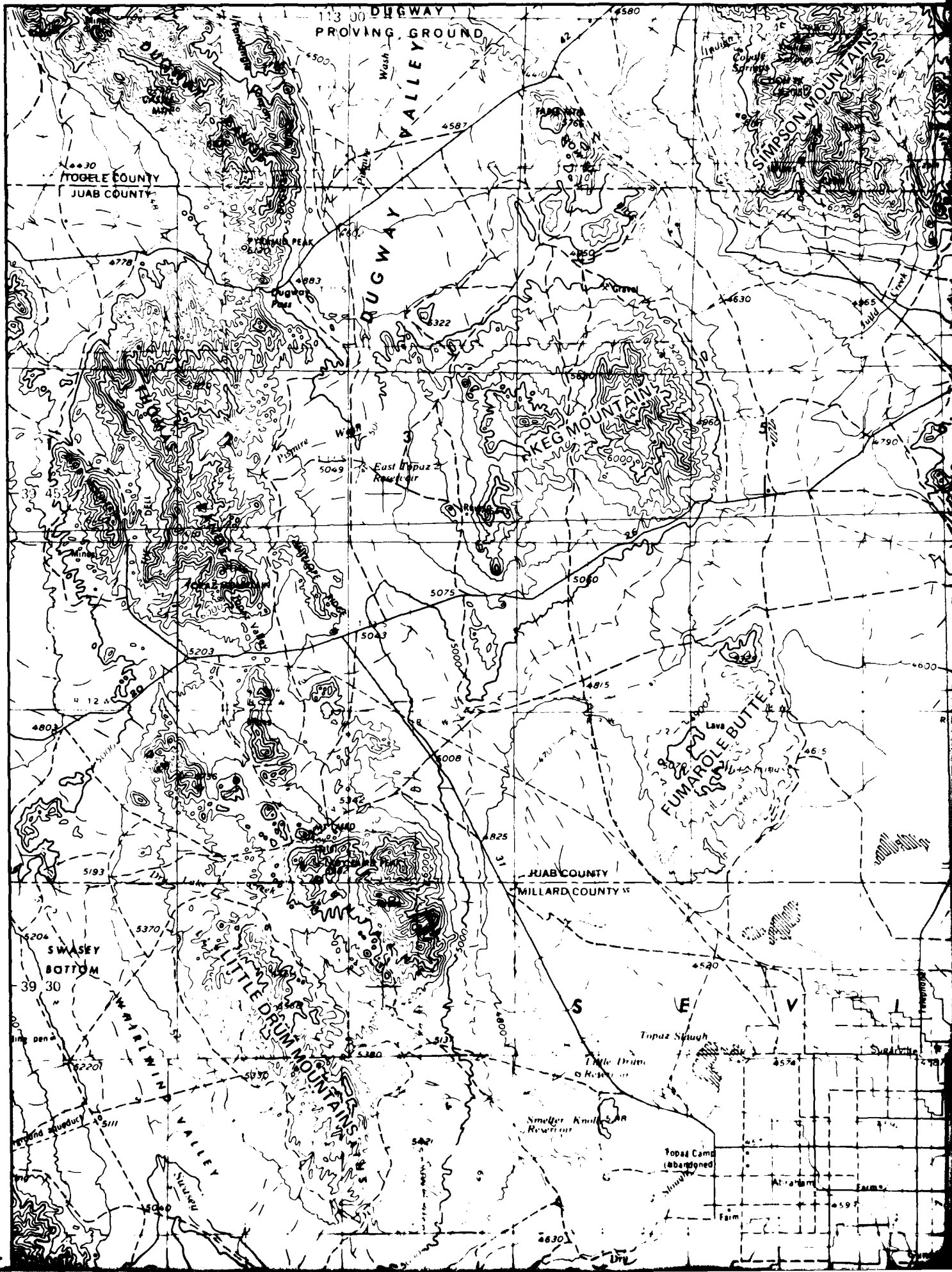
1.2 Location

Sevier Desert is located (see Figure 1) in west central Utah in Tooele, Juab, and Millard counties. It is north of Sevier Lake; its center lying approximately 20 miles north of Delta, Utah. Sevier Desert is a broad, irregularly shaped valley. The part of the valley covered by this report is bounded (Figure 2) on the north by Dugway Proving Ground, Sheeprock Mountain, and Simpson Mountains, to the east by Gilson Mountain, to the west by Dugway Valley and the McDowell Mountains (Keg Mountain), and to the south by Whirlwind Valley and the inhabited area surrounding Delta, Utah. Access is fair along a system of unmaintained roads as well as U.S. Highway 50 which cuts across the southeast corner of the area. Most of the valley is undeveloped rangeland.

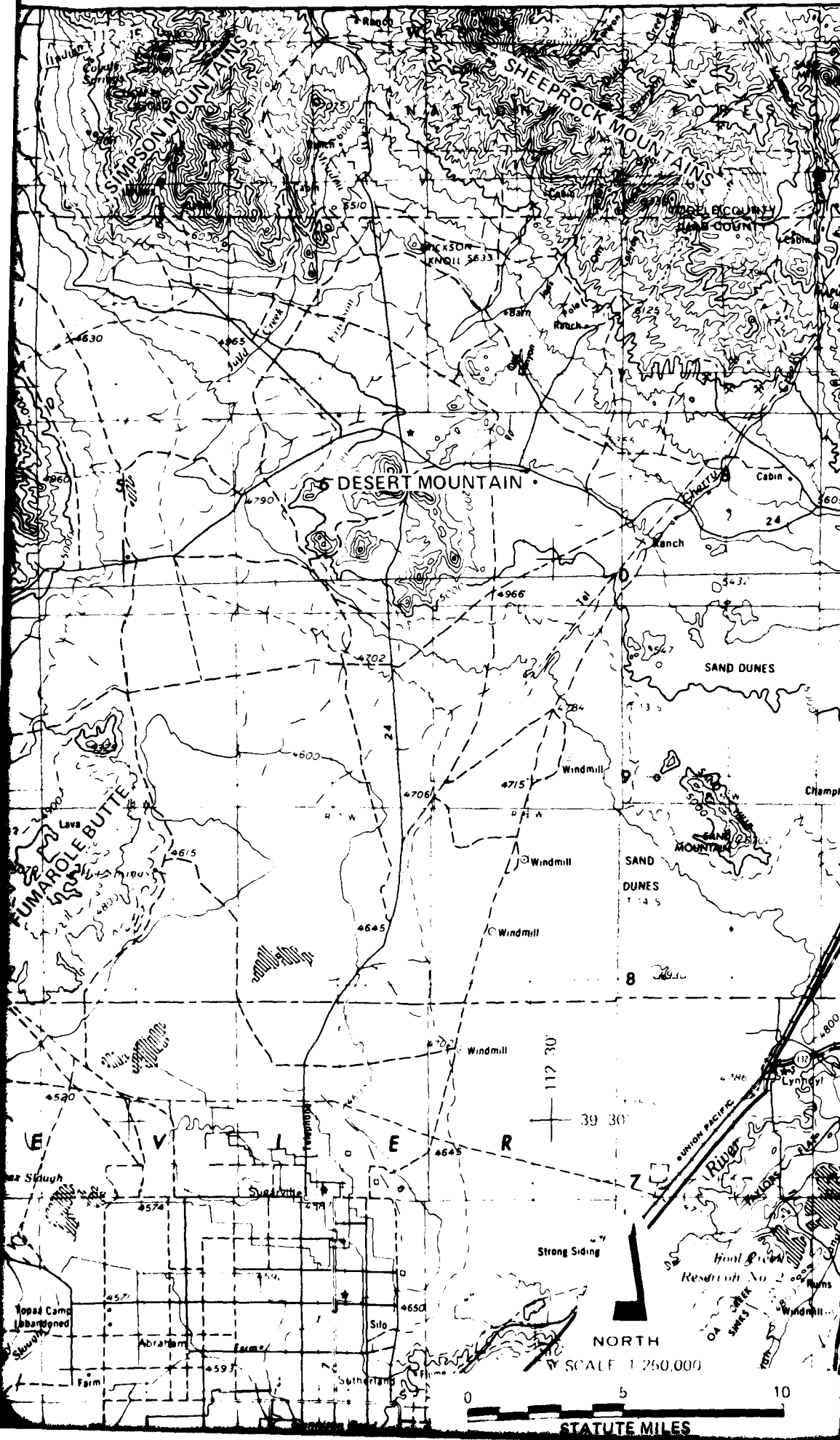
1.3 Scope of Work

Gravity measurements were made by the Defense Mapping Agency Hydrographic-Topographic Center/Geodetic Survey Squadron (DMA HTC/GSS).





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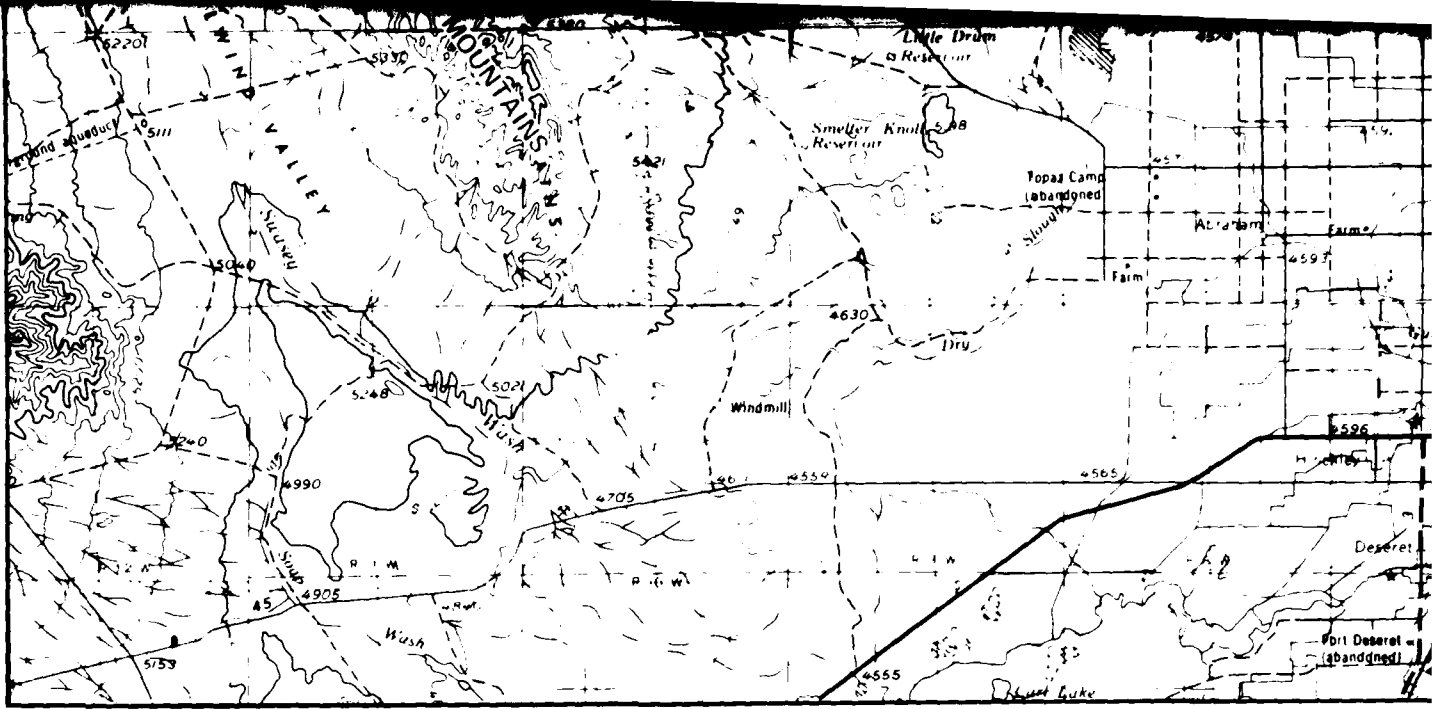


NORTH

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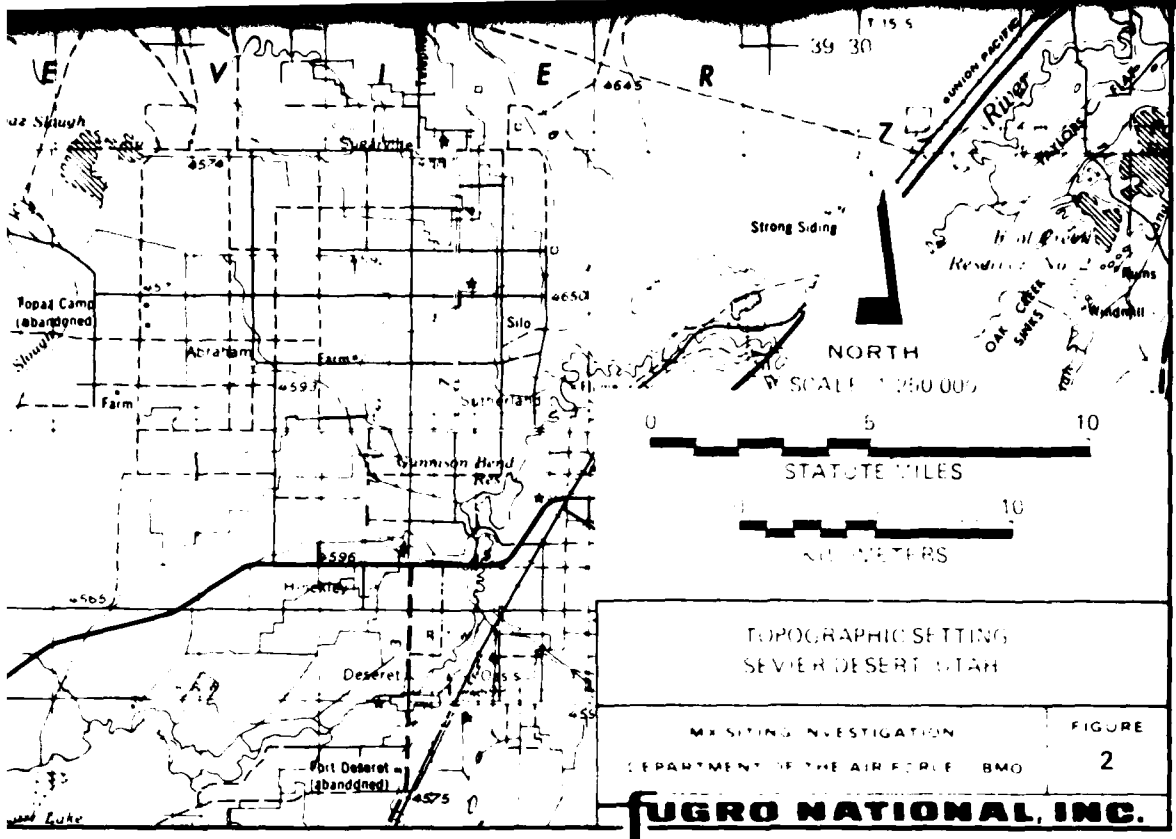
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TOPOGRAPHIC SETTING
SEVIER DESERT, UTAH

MA SITING INVESTIGATION
DEPARTMENT OF THE AIR FORCE BMO

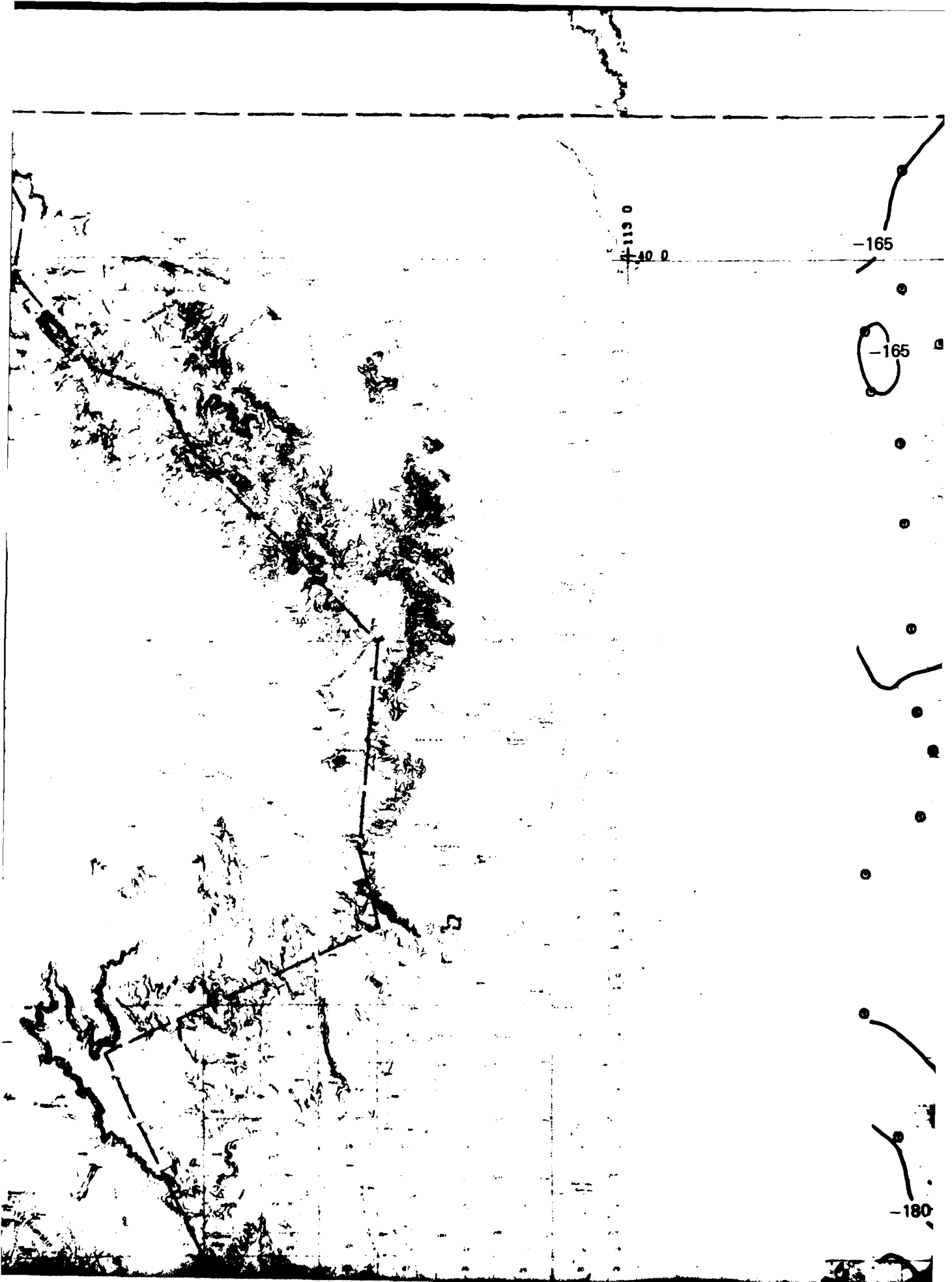
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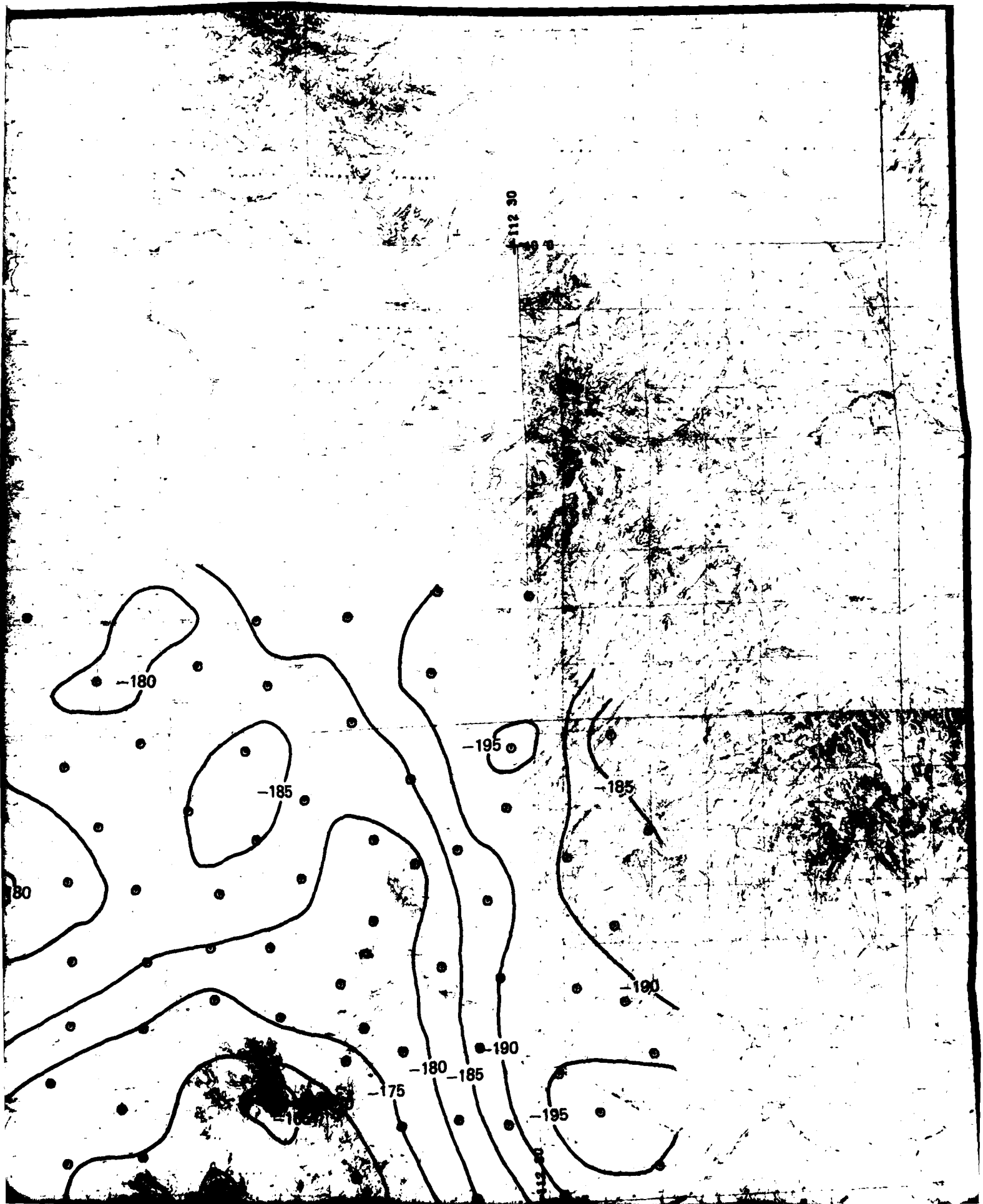
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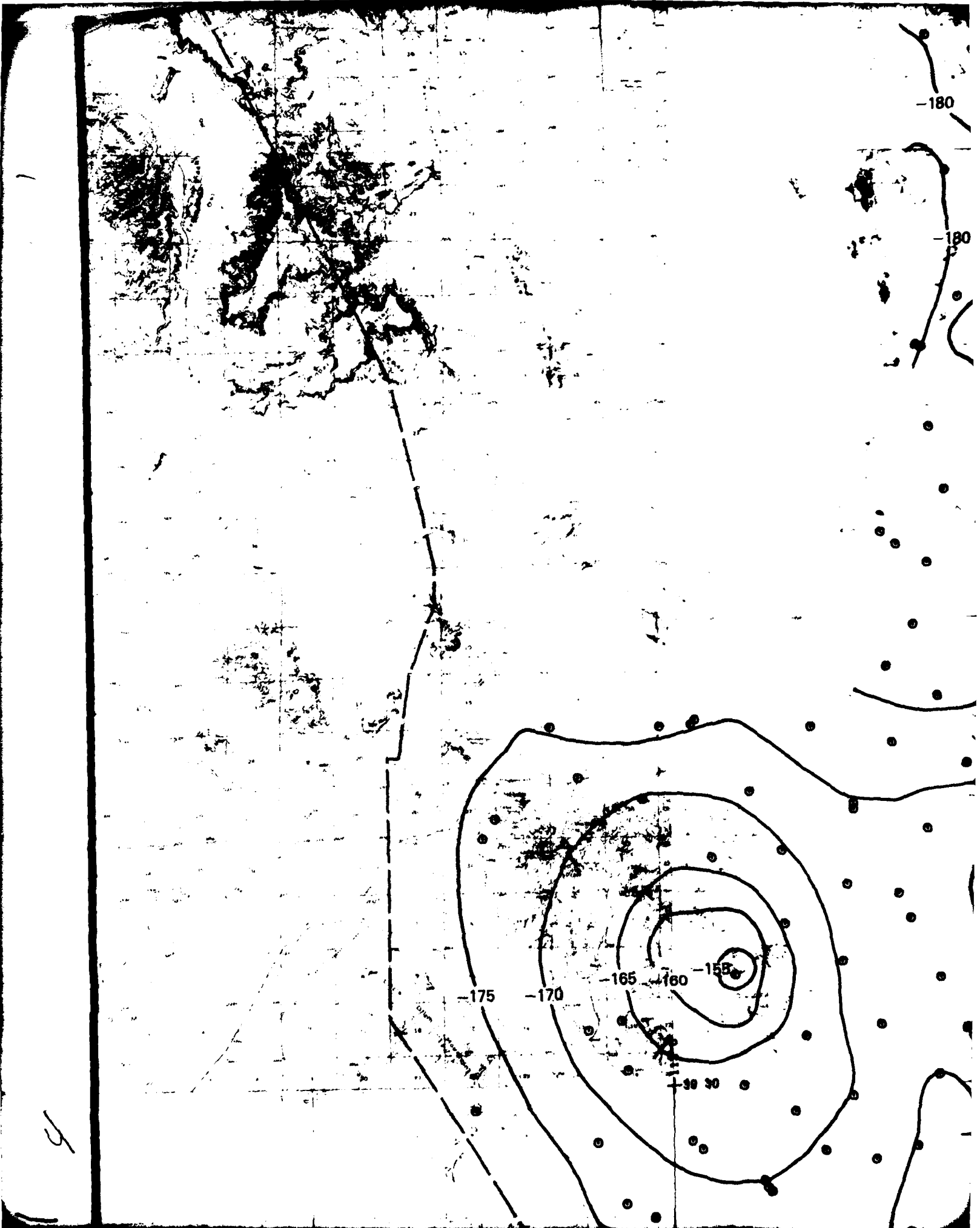
Dugway and Sevier Desert valleys were studied together, but the results are presented in separate reports. The region containing both valleys lies between latitudes $39^{\circ}30'$ and $40^{\circ}05'$ and between longitudes $112^{\circ}15'$ and $113^{\circ}00'$. There are 879 gravity stations in this region. The stations on bedrock were used to establish a common regional gravity trend for the two valleys. For the purpose of this report, Sevier Desert Valley is the area bounded by latitudes $39^{\circ}20'$ and $40^{\circ}00'$ and by longitudes $112^{\circ}30'$ and $112^{\circ}55'$ (Figure 2). The area is approximately 50 miles (80 km) long and 30 miles (48 km) wide. The gravity stations were distributed throughout the valley at an approximate interval of 1.4 miles (2.3 km). Drawing 1 is a Complete Bouguer Anomaly (CBA) and gravity station map.

Station elevations were established within a tolerance of 5 feet (1.5 m). This tolerance limits the gravity precision to 0.3 milligals.



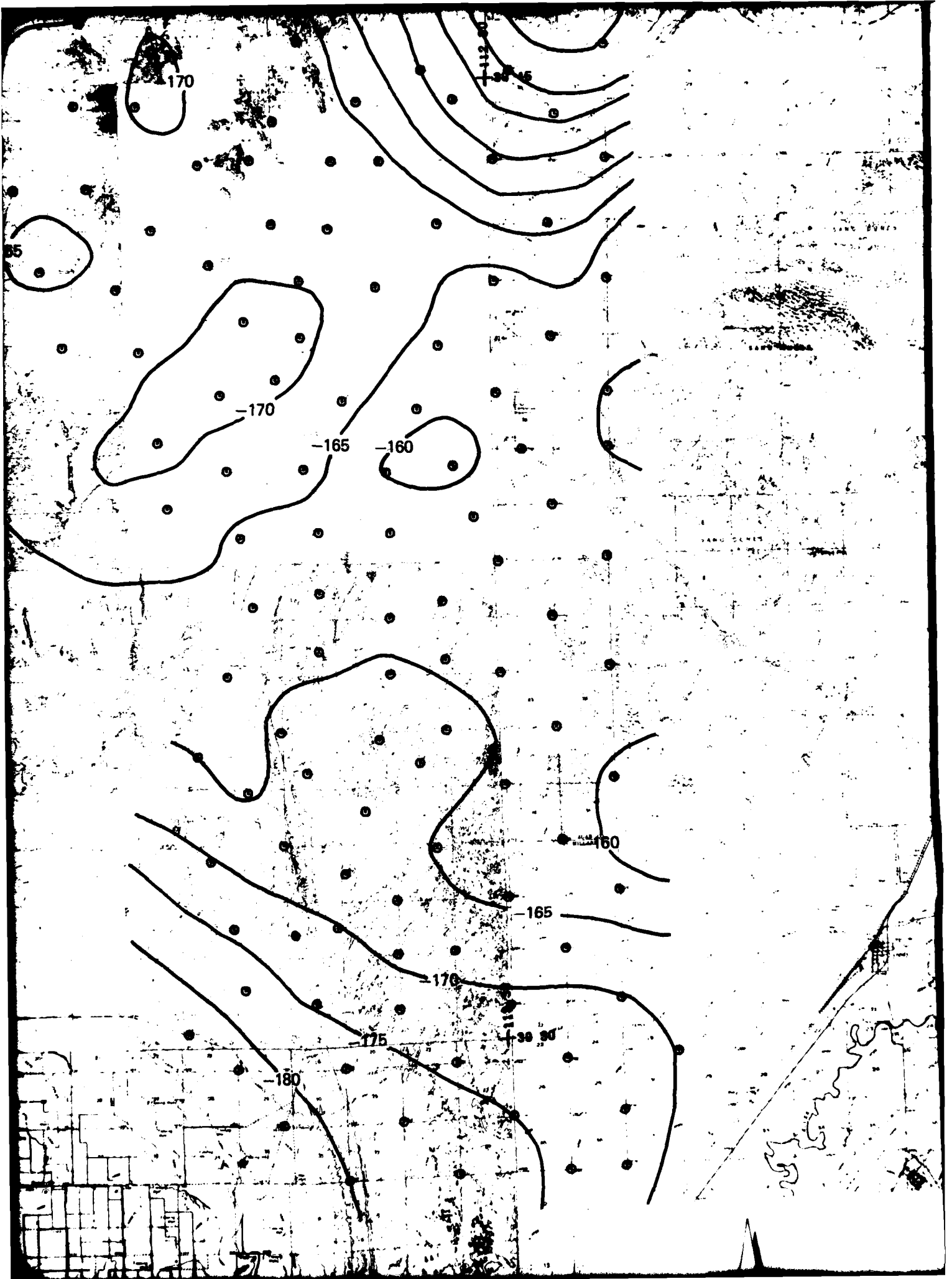




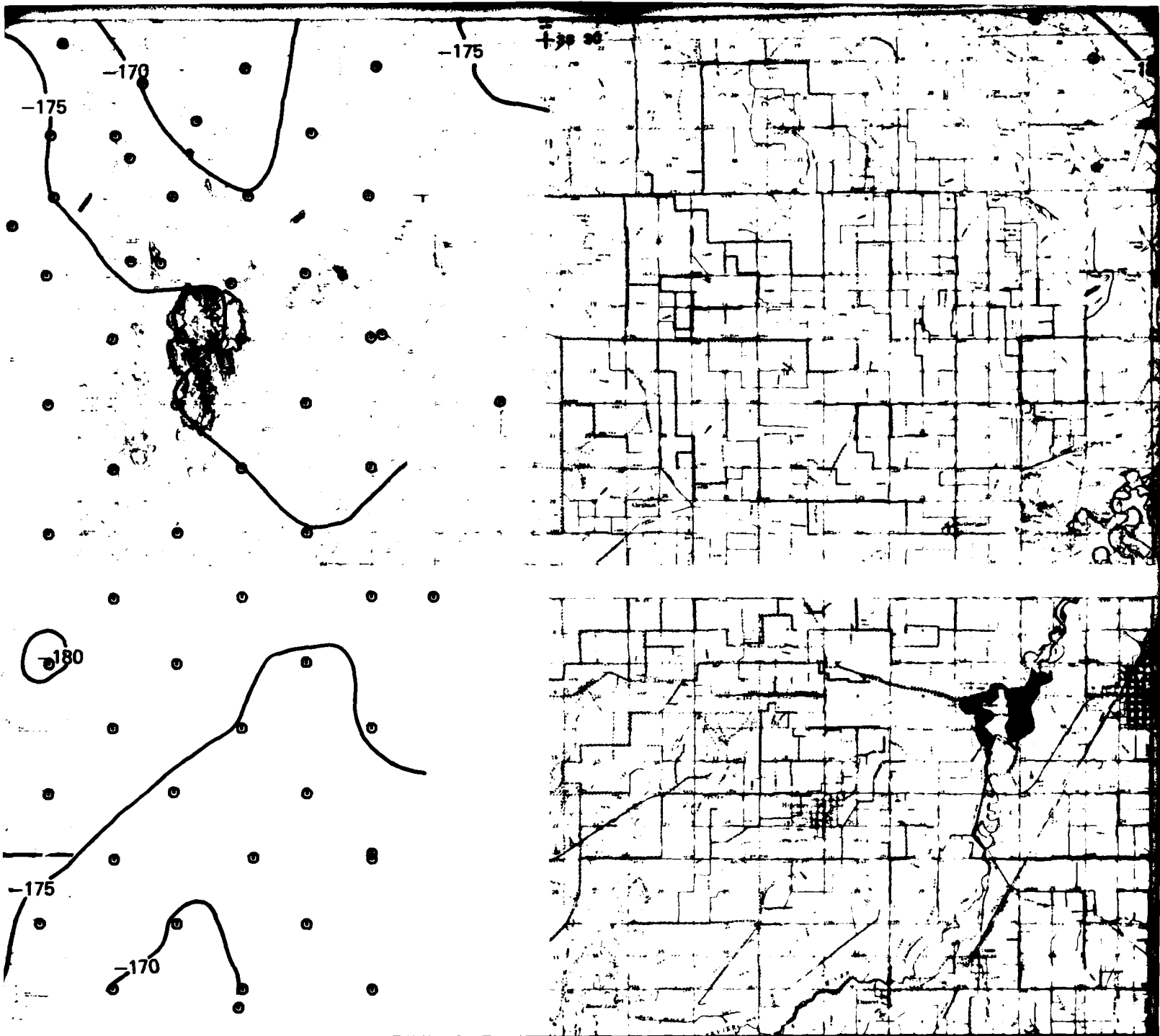


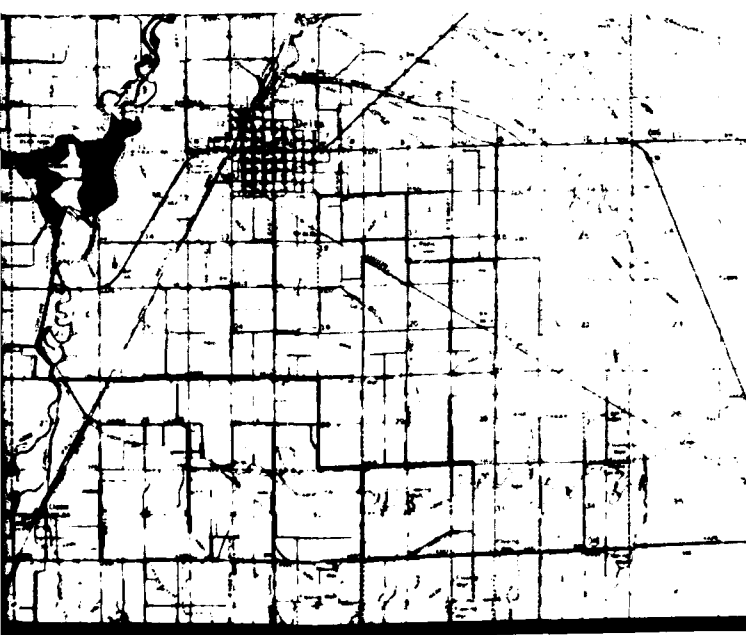
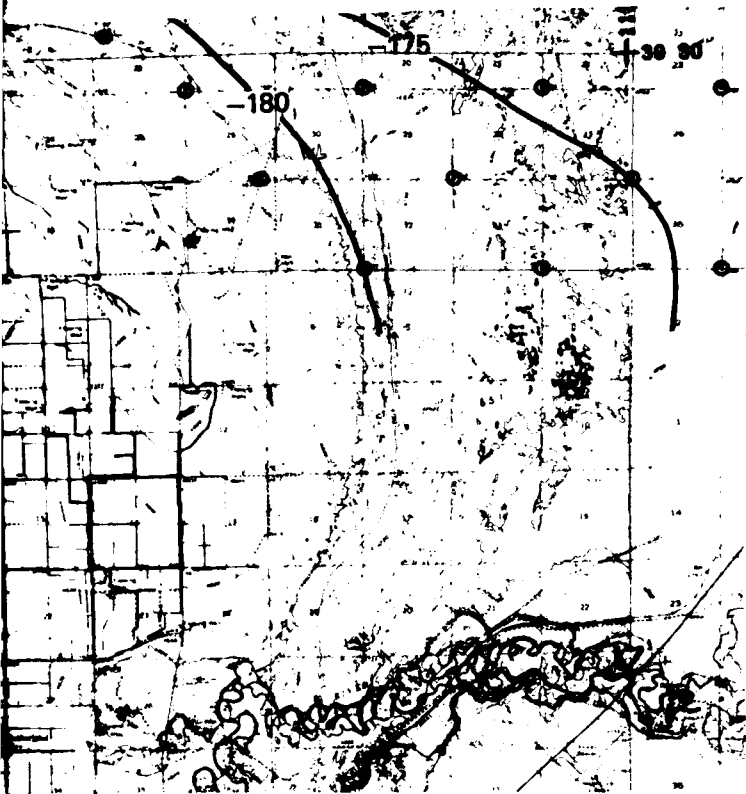
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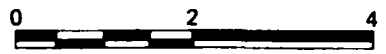




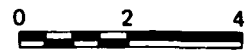


NORTH

SCALE 1: 125,000



STATUTE MILES



KILOMETERS

EXPLANATION

- GRAVITY FIELD STATIONS
 - 175 — CBA GRAVITY CONTOURS
- CONTOUR INTERVAL = 5 MILLIGALS

COMPLETE BOUGUER ANOMALY CONTOURS
SEVIER DESERT, UTAH

MX SITING INVESTIGATION
DEPARTMENT OF THE AIR FORCE - BMO

DRAWING
1

FUGRO NATIONAL, INC.

2.0 GRAVITY DATA REDUCTION

DMAHTC/GSS obtained the basic observations for the new stations and reduced them to Simple Bouguer Anomalies (SBA) as described in Appendix A1.0. Up to three levels of terrain corrections were applied to convert the SBA to the Complete Bouguer Anomaly (CBA). First, the Defense Mapping Agency Aerospace Center (DMAAC), St. Louis, used its library of digitized terrain data and a computer program to calculate corrections out to 104 miles (167 km) from each station. When the program could not calculate the terrain effects near a station, a ring template was used to estimate the effect of terrain within approximately 3000 feet (914 m) of the station. The third level of terrain corrections was applied to those stations where 10 feet (3 m) or more of relief was observed within 130 feet (40 m). In these cases, the elevation differences were measured in the field at a distance of 130 feet (40 m) along six directions from the stations. These data were used to calculate the effect of the very near relief. The principal facts for the Sevier Desert Valley stations are listed in Appendix A 2.0.

3.0 GEOLOGIC SUMMARY

The Sevier Desert Valley lies within the Basin and Range physiographic province. Sevier Desert is a broad valley extending approximately 20 miles (32 km) in a north-south direction. For the purposes of this study, however, only the area north of Delta, Utah, and east of Baker Hot Springs is considered. The northern and eastern boundaries of the valley are the Simpson Mountains, Sheepprock Mountains, Gilson Mountain, and Canyon Mountains (Figure 2).

Rocks and structures have been recognized in the Sevier Desert area from six major orogenic and depositional events occurring from the late Precambrian to the Miocene and possibly the late Pleistocene (Hintze and Baer, 1979). Early Paleozoic sedimentary rocks, deposited in the Cordilleran miogeosyncline, crop out in the surrounding mountains and underlie the valley-fill deposits (Hintze and Baer, 1979). Sevier Desert lies on the southern edge of the late Paleozoic Oquirrh Basin and scattered occurrences of late Paleozoic rocks crop out in the Gilson Mountains (Stokes, 1963). The late Triassic to early Cenozoic Sevier Orogeny accounted for the majority of the folding and faulting observed in the mountains surrounding the Sevier Desert. During this orogenic event, there was general uplift accompanied by 40 to 100 miles (64 to 160 km) of eastward translation of Paleozoic strata along west dipping thrust faults. These structures were only mildly affected by the early Cenozoic Laramide Orogeny. Oligocene volcanism resulted

in thick deposits of ash flow tuffs, lava flows, stocks, and laccoliths. The present valley configuration is probably largely the result of east-west extension and associated block faulting during the late Tertiary and Quaternary periods. The probable major zones of crustal weakness below the area may be marked by the Quaternary basalt flows and cones which trend northerly into the valley from the south.

Sevier Desert is underlain by a variable thickness of Miocene to Holocene basin-fill deposits. The deeper portions of the valley are approximately 8500 feet (2591 m) deep (Hintze and Baer, 1979) with basin-fill consisting of sandstone, shale, limestone, basalt, evaporites, conglomerate, and tuff. The surficial deposits consist of lacustrine clayey sands to gravelly sands deposited in Pleistocene Lake Bonneville (Stokes, 1963) and alluvial deposits, all with varying degrees of cementation.

4.0 INTERPRETATION

The basis of interpretation is the Complete Bouguer Anomaly (CBA). The CBA is defined in Appendix A1.4.

A valley filled with alluvium which has a lower density than the surrounding bedrock will create a negative anomaly. Interpretation entails the removal of regional trends leaving the gravitational reflection of the valley fill.

The gravity stations are distributed approximately on an evenly spaced grid over the portion of Sevier Desert being considered as a potential siting area for the MX missile. This area is basically restricted to public lands. Stations in surrounding areas are much more irregularly spaced.

The CBA data are reduced to a set of values at the points of a uniformly spaced geographic array, or grid. The gridding process is done using an algorithm which computes a value at each grid point using the gravity station data within a circular area around the grid point. A bell-shaped weighting function assigns greater weight to the nearer data points. The grid-point spacing is chosen to match the average data spacing. A 2-kilometer grid spacing was used for this analysis. Figure 3 shows the CBA contoured from gridded values and the gravity stations used to compute the grid values.

4.1 REGIONAL-RESIDUAL SEPARATION

A fundamental step in gravity interpretation is isolation of the part of the CBA which represents the geologic feature of

interest, in this case the valley fill. The valley fill has a lower density than the bedrock and therefore creates a negative gravity anomaly. The portion of the CBA which corresponds to this alluvial material is called the "residual anomaly."

The CBA contains long-wave-length components from deep and broad geologic structures extending far beyond the valley. These long-wave-length components are called the regional gravity. Shorter wave-length components due to near-surface variations in density are called the residual (anomaly) values. Two methods were used to estimate the regional gravity:

1. Several upward continuation calculations were made to calculate the gravitational field as it would appear at higher elevations; and
2. A second order polynomial surface was calculated to fit the bedrock (Paleozoic sedimentary strata) CBA values around Sevier Desert and Dugway Valley.

The upward continuation was used because the limited number of Paleozoic outcrops in the area and the poor distribution of bedrock stations around Sevier desert do not provide a good basis for second order trend surface calculation. The regional surface used in the model calculations was a composite derived from the two methods. The regional trend was subtracted from the CBA to obtain the residual anomaly. The residual anomaly was used to calculate a simple geologic model which fits the gravity data and is consistent with geologic knowledge from other sources.

4.2 DENSITY SELECTION

The construction of a geologic model from the residual anomaly requires selection of a value for the mean density contrast between basin fill and underlying rock.

Since only very general density information is available, the geologic interpretation of the gravity data can be only a coarse approximation. A one-percent change in the density used for the alluvial fill would result in a four-percent change in the calculated thickness of the fill material.

In order to estimate the density of the valley fill material, density was calculated at 13 shallow boring sites in Sevier Desert. The borings ranged in depth from 101 feet (30 m) to 181 feet (55 m). The average densities from borings ranged from 1.71 g/cm³ to 2.08 g/cm³, with a grand average of 1.98 g/cm³. Because the density is expected to increase with depth (the increase in bulk density associated with increasing age and thickness of overburden is discussed by Woolard, 1962 and by Grant and West, 1965), an average fill density of 2.3 g/cm³ was used.

The basement material underlying the Sevier Desert is thought to be similar to the Paleozoic carbonate rocks which are found in the surrounding mountain ranges. Published values of the densities of carbonate rocks typically range between 2.6 and 2.8 g/cm³. The Paleozoic carbonate rocks in Utah are generally reported to be relatively high in density, being on the order of 2.8 g/cm³. This value was selected to represent the density of

the basement rock. The density contrast used in the modeling process was therefore -0.5 g/cm^3 . This density contrast is further supported by density determinations from a previous gravity study near the center of Sevier Desert Valley in the area of Desert Mountain (Calkins, 1972).

4.3 MODELING

Modeling was done with the aid of a computer program which calculates an iterative three-dimensional solution of gravity anomaly data (Cordell, 1970). The gravity anomaly is represented by discrete values on a two-dimensional grid. The source of the anomaly (the low-density valley fill) is represented by a set of vertical prism elements. The tops of the prisms lie in a common horizontal plane. The bottoms of the prisms collectively represent the bottom of the valley fill. Each prism has a cross-sectional area equal to one grid square and a uniform density. A grid square of 2 kilometers by 2 kilometers was selected as representative of the gravity station distribution. Computation was continued for eight iterations of mutually interactive prism adjustments. The root-mean-square of the differences between the observed CBA nodal values and the gravity values calculated from the model is less than 0.5 milligal.

The calculated thickness of the valley fill depends upon the density contrast (i.e., fill density minus rock density). Because neither density is perfectly known, nor even uniform, the

calculated thickness should be expected to contain a corresponding degree of uncertainty. The calculated thickness of fill, or interpreted depth to rock, is contoured in Drawing 2.

4.4 DISCUSSION OF RESULTS

Gravity data were not obtained in the south central part of the Sevier Desert area nor was the area bounded by observations on bedrock. As a result, the interpreted model is poorly defined over much of the area.

The dominant feature of the mapped area is a broad subsurface high covering the central part of the Sevier Desert area. The alluvial thickness in this area generally is calculated to be less than 1000 feet (305 m). Fumarole Butte and Desert Mountain are included within this region. Fumarole Butte is a late Pleistocene Basaltic lava flow, and Desert Mountain contains Tertiary age granitoid igneous intrusions into Paleozoic meta-sedimentary rocks and Tertiary rhyolites. An aeromagnetic map of Utah (Zietz and others, 1976) shows relatively short wavelength, high-intensity magnetic anomalies throughout this region.

Oil-well data from the southern part of the central high (Smith and others, 1978) indicate that the top of Tertiary volcanics and sedimentary rocks is at about 2000 feet (600 m) deep, and that Paleozoic basement is greater than 8000 feet (2500 m) deep. All of these facts indicate that the central gravity high at least partly reflects the abundance of dense basalts interbedded with the basin fill. Similar aged volcanics in the adjacent

areas did not yield such high gravity values because they are silicic lavas and tuffs with densities similar to alluvial basin fill.

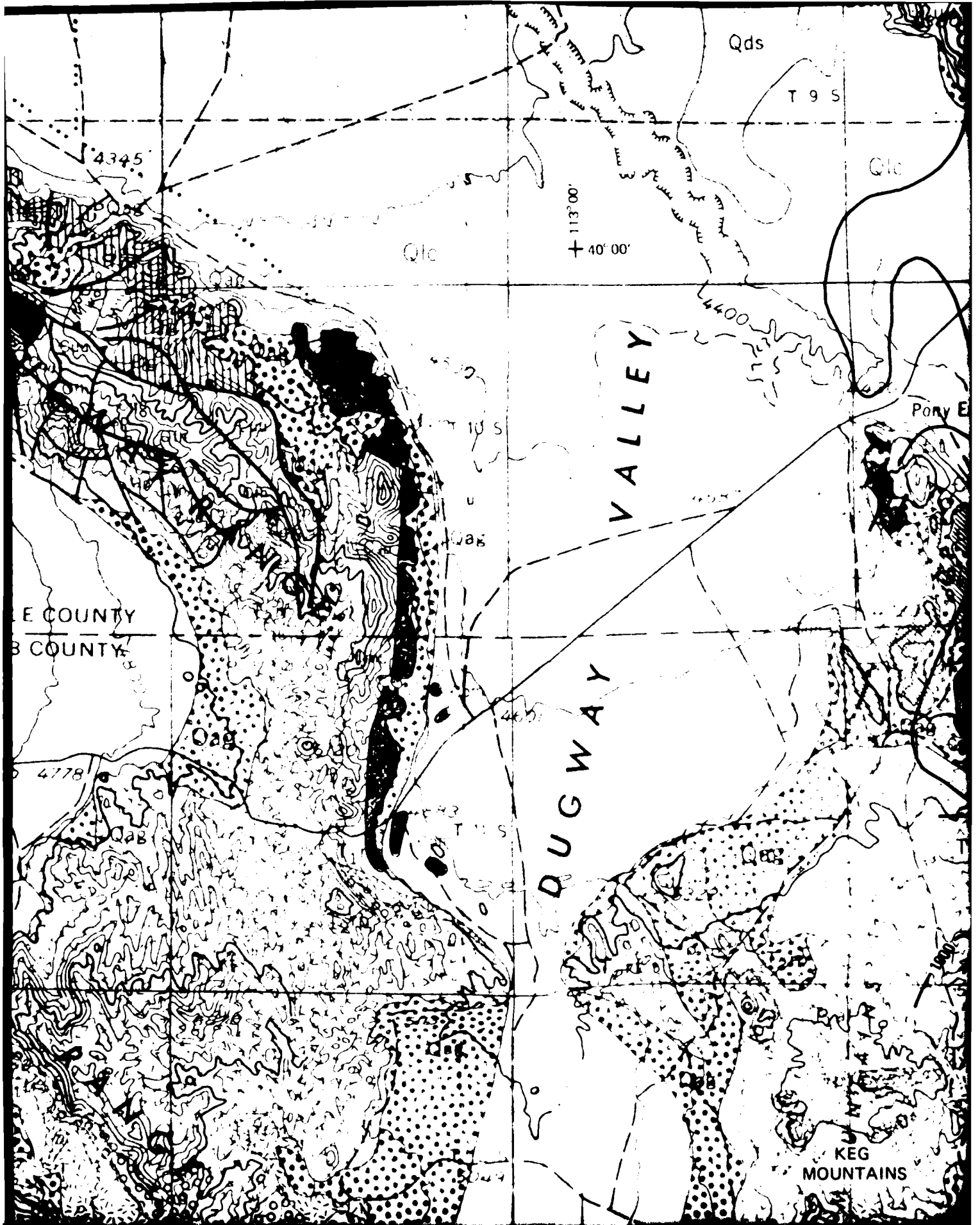
The gravity interpretation shows a narrow graben system separating the central subsurface high from the Keg Mountains to the west and northwest. This system contains two deep narrow basins. Their axes trend north-northeast, and both grabens dip to the north. The axis of the southern basin is about 3 miles (5 km) west of the northern axis. The faults bounding the southern basin are shown (Drawing 2) to extend south so that they pass along the eastern side of the Drum Mountains generally coinciding with surface faults in that area.

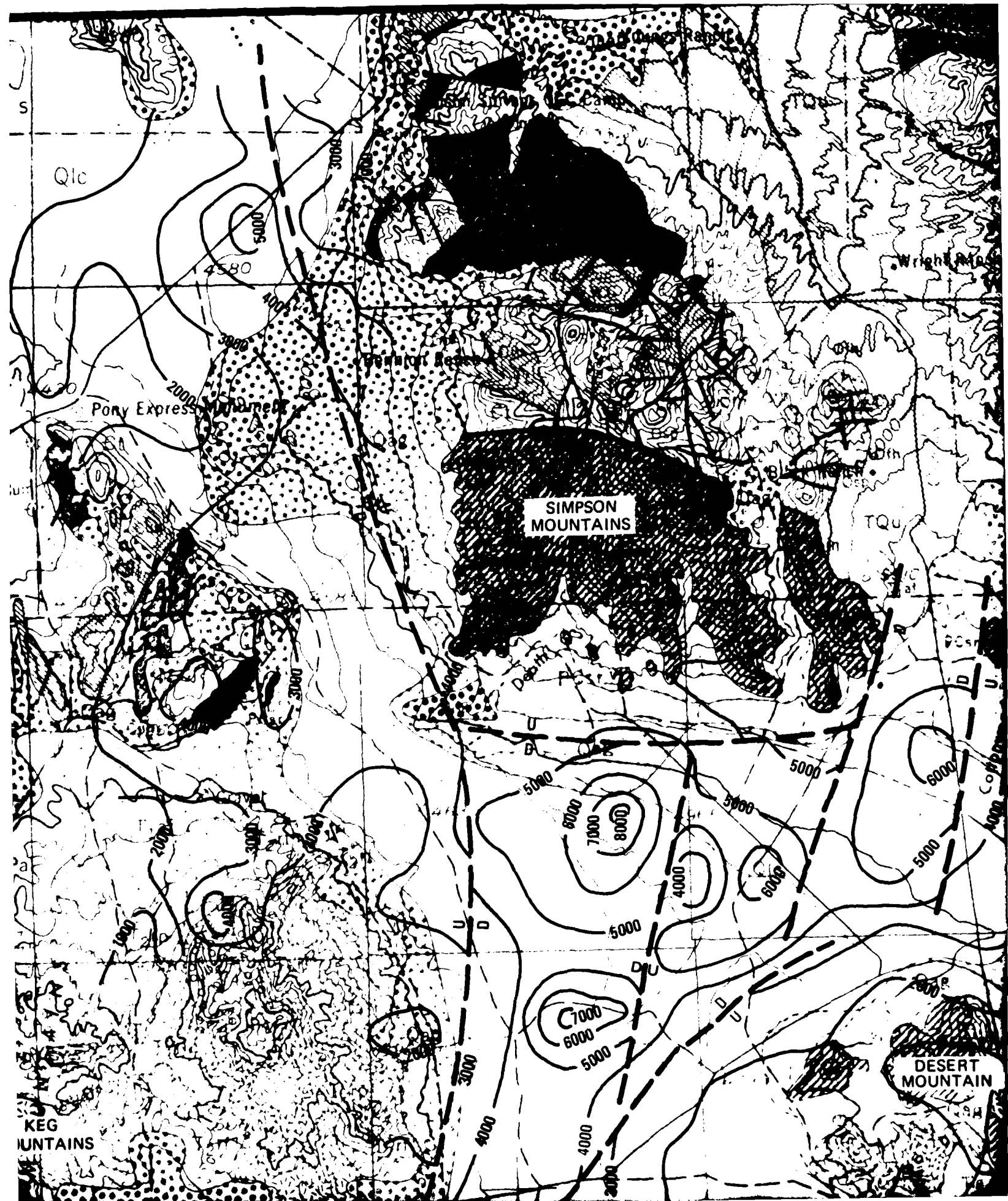
The western and northwestern margin of the central gravity high is interpreted as a long curvilinear fault system but may simply mark the edge of the subsurface basalt flows interbedded with the alluvial basin fill. However, Holocene surface ruptures in alluvium and through the surface basalts of Fumarole Butte suggest a fault system even though the gravity data do not indicate large vertical displacements in this region.

There are no gravity data covering the south-central part of the area shown in Drawing 2, but two factors indicate that the basin fill is very thick in this area. The wild cat oil well (Smith and others, 1978) in this area penetrated interbedded volcanics and alluvial deposits to its total depth of 8000 feet (2500 m) without reaching Paleozoic basement. The limited

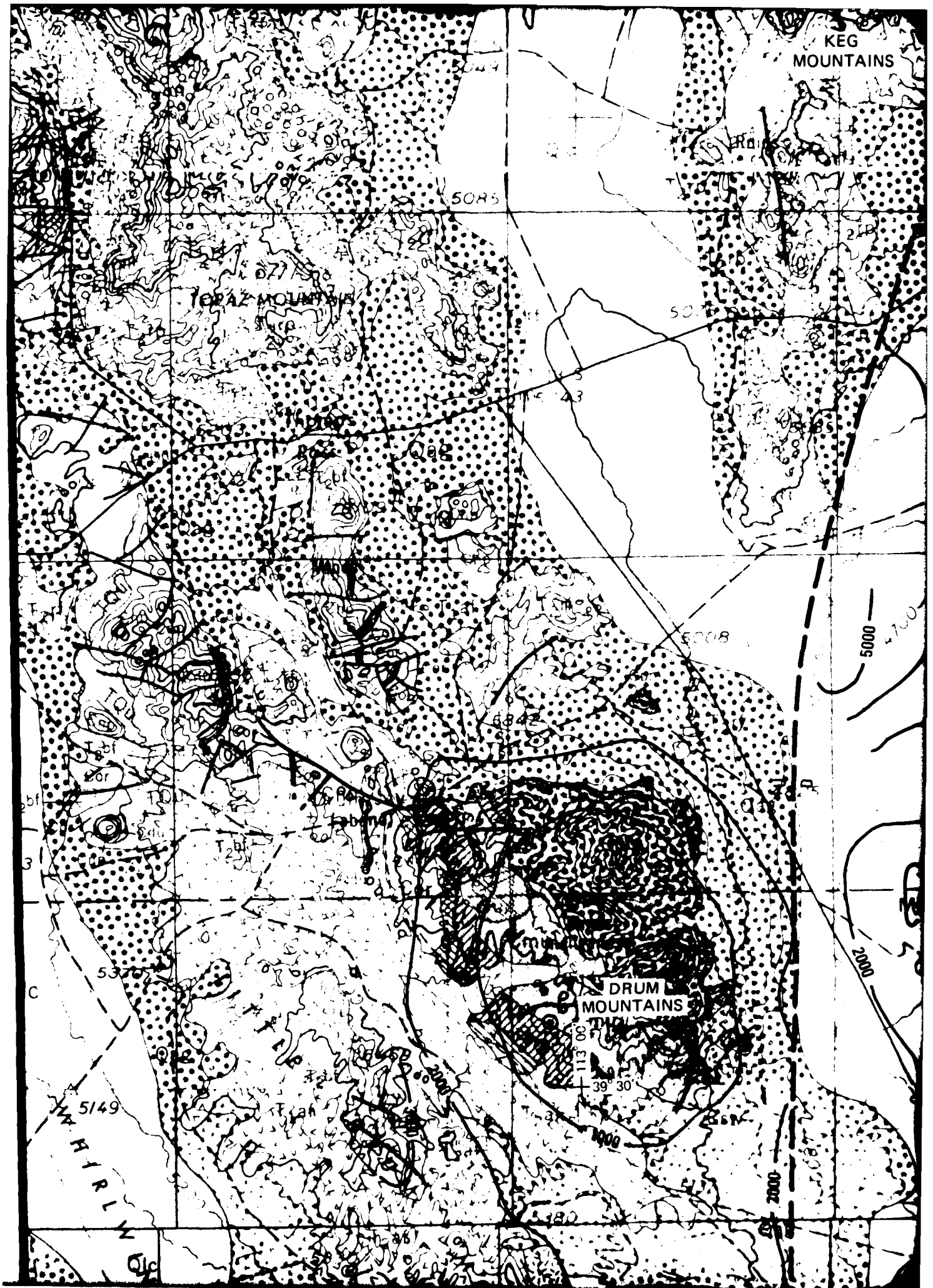
gravity data in the southeastern part of Drawing 2 suggest that the basin floor dips to the southwest.

North and northeast of the central subsurface high, the interpretation shows a complex subsurface structure that includes deep basins associated with the margins of the Simpson and Sheeprock mountains.









KEG MOUNTAINS

TOPAZ MOUNTAINS

DRUM MOUNTAINS

5085

5075

5008

5370

5149

1130

39° 30'

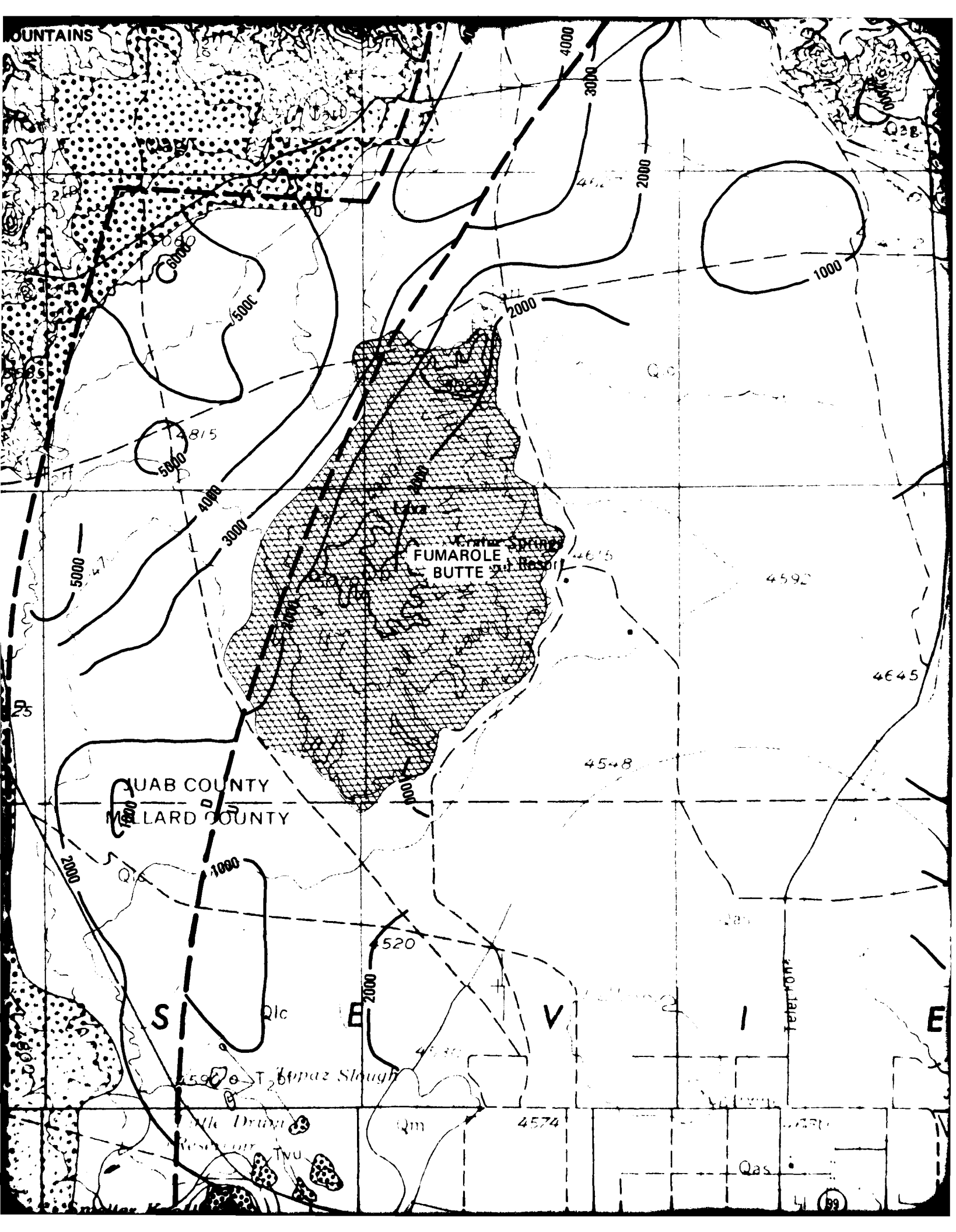
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MOUNTAINS



JUAB COUNTY
GARFIELD COUNTY

FUMAROLE BUTTE

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Twpaz Slough

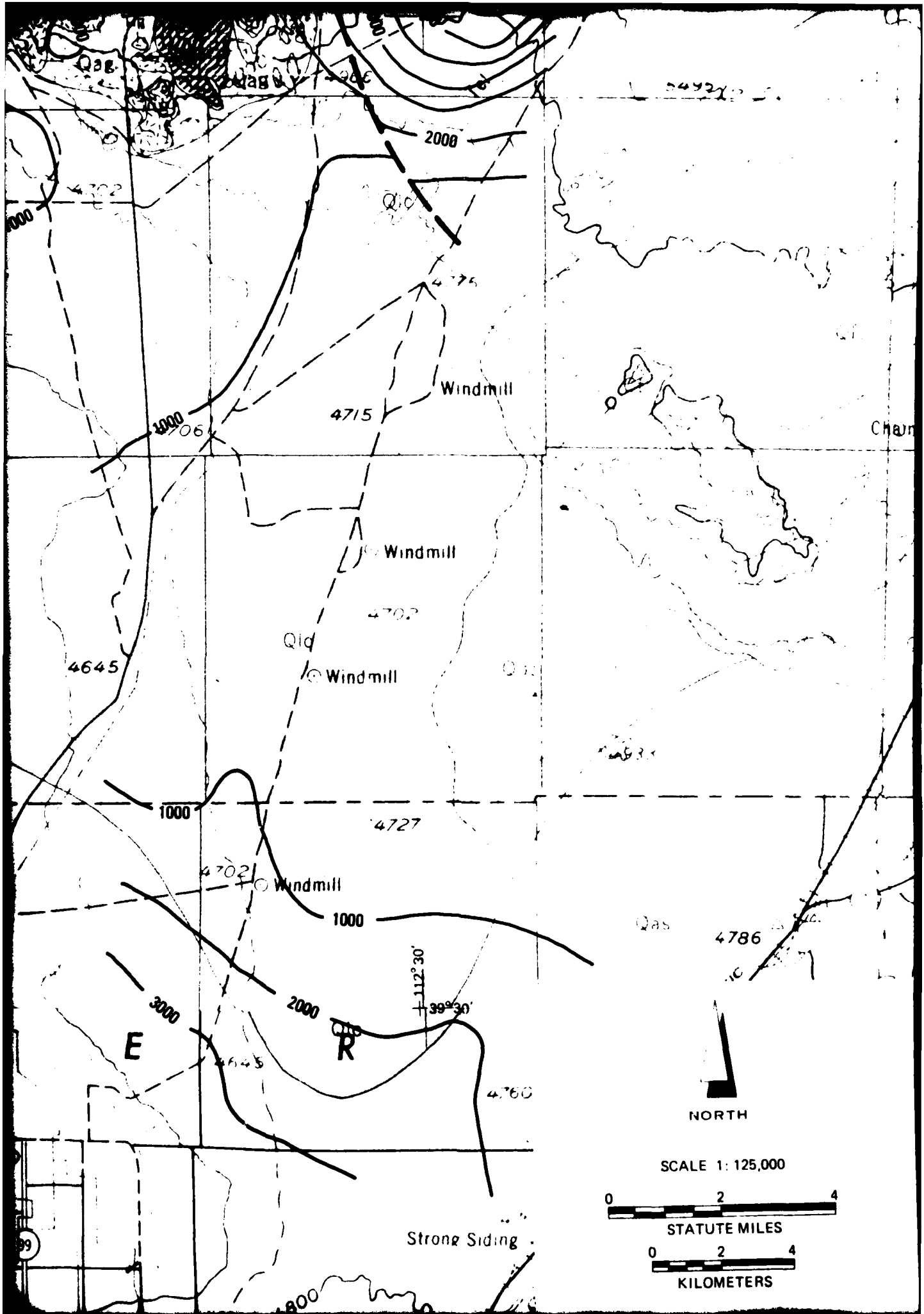
Little Drain Reservoir

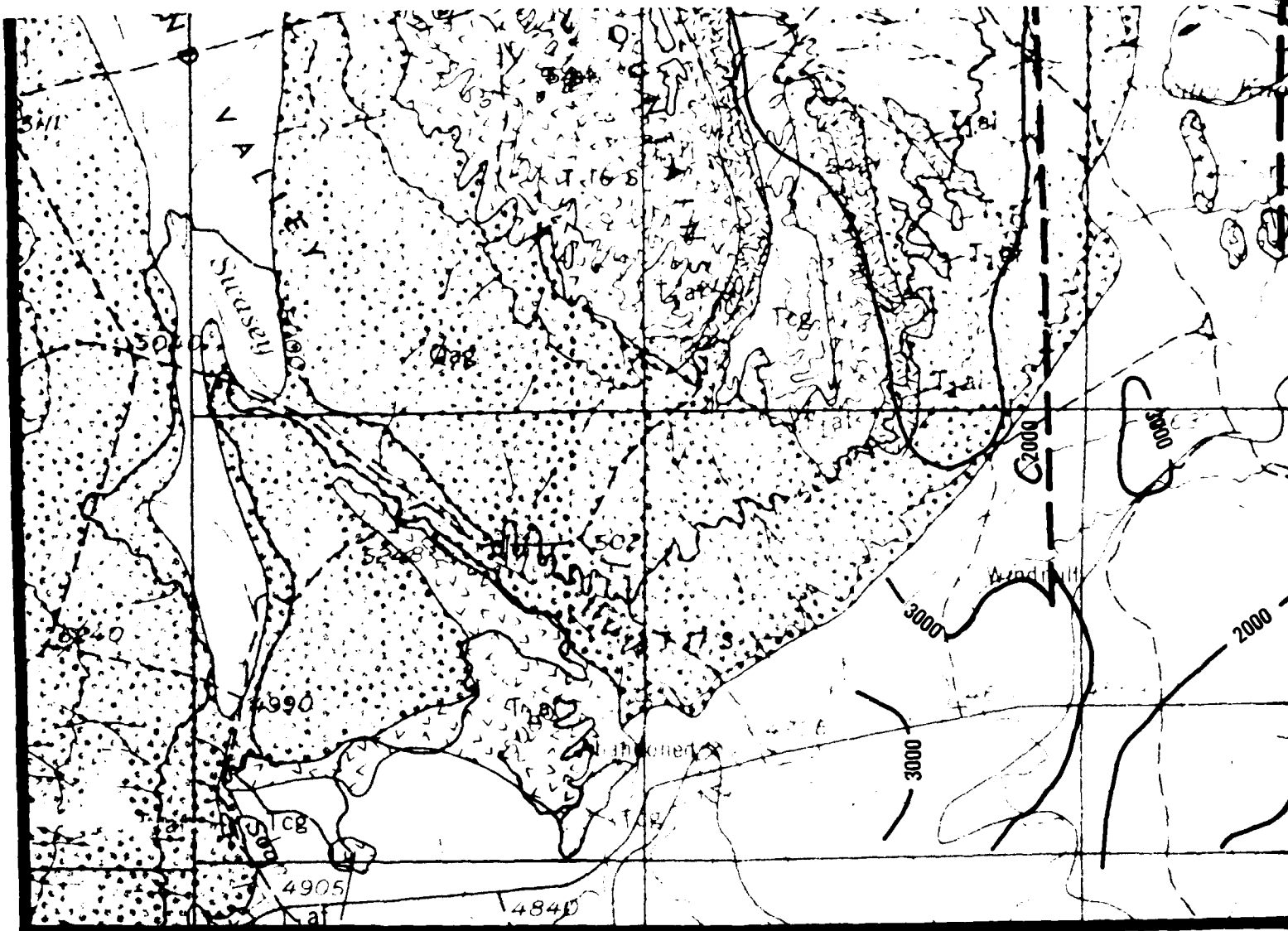
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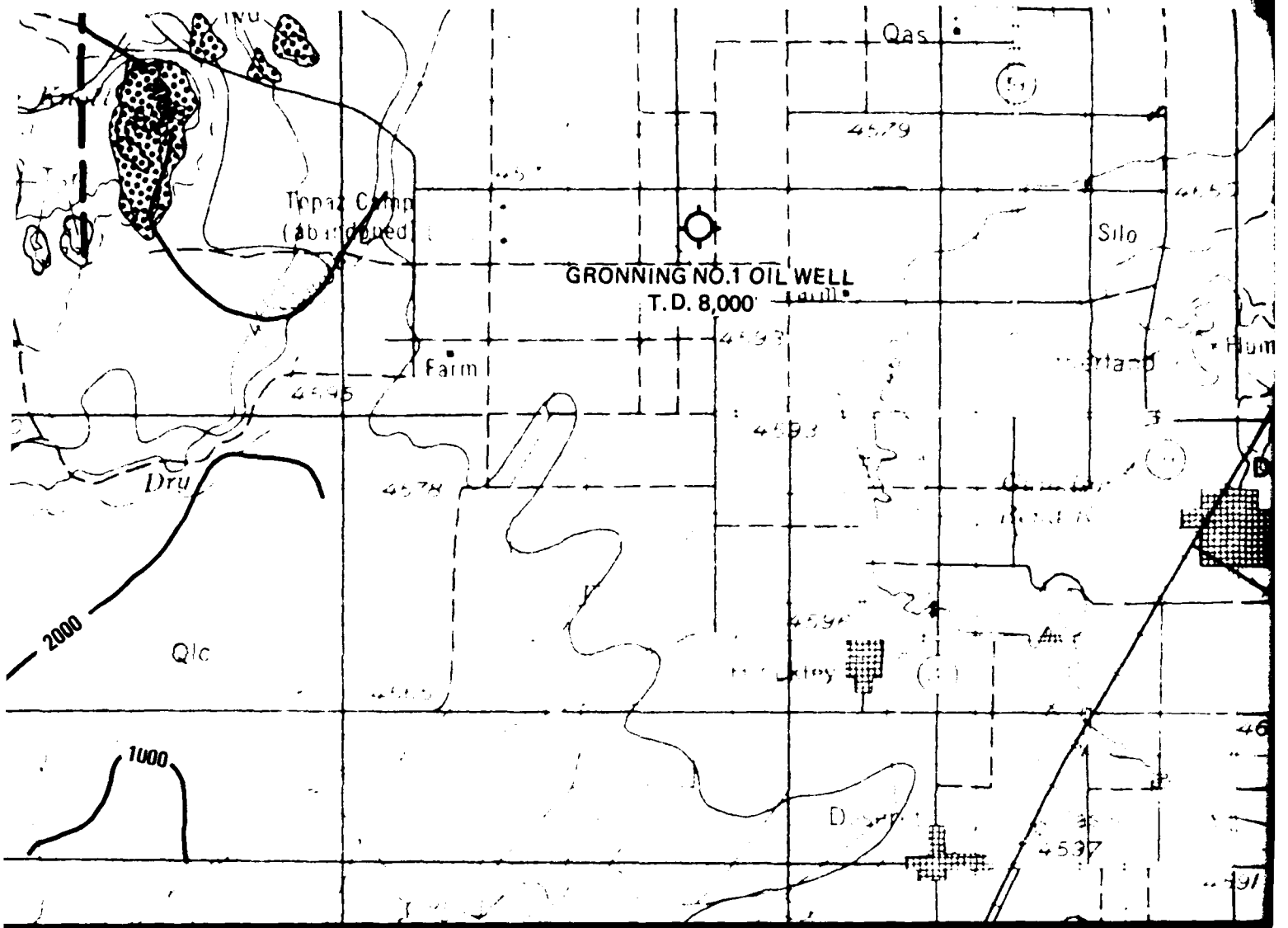
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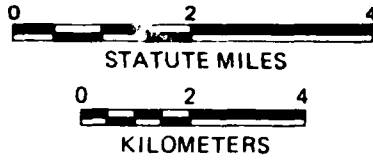
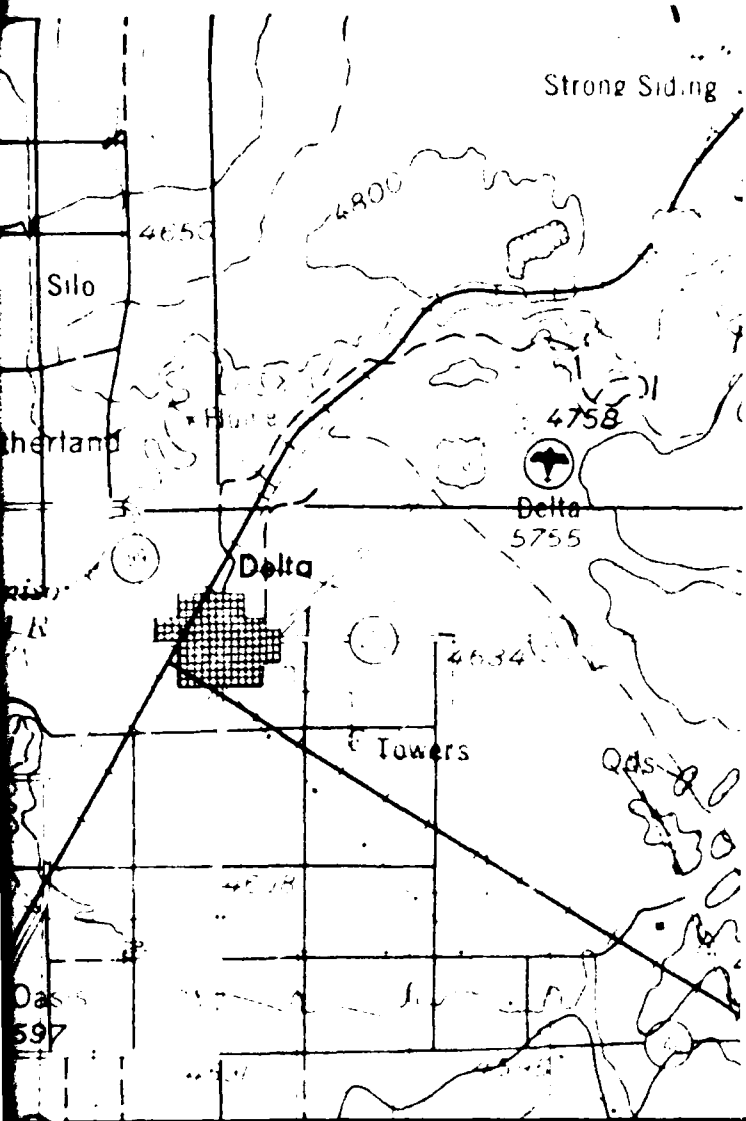


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





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EXPLANATION

-  GRAVITY INFERRED FAULT LOCATIONS
 -  FAULTS SHOWN ON GEOLOGIC BASE MAP
 -  ALLUVIAL MATERIAL
 -  ROCK (ALL PATTERNS)
- CONTOUR INTERVAL = 1000 FT
- DEPTH CALCULATIONS BASED ON DENSITY CONTRAST OF -0.5 g/cm^3
- GEOLOGIC BASE MAP: L. F. Hintze, 1963

INTERPRETED DEPTH TO BEDROCK SEVIER DESERT, UTAH	
MX SITING INVESTIGATION DEPARTMENT OF THE AIR FORCE - BMO	DRAWING 2
FUGRO NATIONAL, INC.	

5.0 CONCLUSIONS

The interpretation shown in Drawing 2 is consistent with information from photogeology, surface mapping, and published regional geology.

Two factors which adversely affect the results are: 1) the limited areal coverage of the gravity data; and 2) the widespread occurrence of volcanic materials in the section.

It is likely that the alluvium in the central part of the study area overlies or is interbedded with a thick sequence of dense basalts and that the basalt is absent around the edges of the Sevier Desert where the alluvium is interpreted to be several thousand feet thick. Around the edges, the alluvium may be underlain by Paleozoic sedimentary rocks.

The basalts in the central part of the area may mark the location of a fundamental crustal break through which they were extruded.

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APPENDIX A1.0

GENERAL PRINCIPLES OF THE
GRAVITY EXPLORATION METHOD

A1.0 GENERAL PRINCIPLES OF THE GRAVITY
EXPLORATION METHOD

A1.1 GENERAL

A gravity survey involves measurement of differences in the gravitational field between various points on the earth's surface. The gravitational field values being measured are the same as those influencing all objects on the surface of the earth. They are generally associated with the force which causes a one-gm mass to be accelerated at 980 cm/sec^2 . This force is normally referred to as a one-g force.

Even though in many applications the gravitational field at the earth's surface is assumed to be constant, small but distinguishable differences in gravity occur from point to point. In a gravity survey, the variations are measured in terms of milligals. A milligal is equal to 0.001 cm/sec^2 or 0.00000102 g . The differences in gravity are caused by geometrical effects, such as differences in elevation and latitude, and by lateral variations in density within the earth. The lateral density variations are a result of changes in geologic conditions. For measurements at the surface of the earth, the largest factor influencing the pull of gravity is the density of all materials between the center of the earth and the point of measurement.

To detect changes produced by differing geological conditions, it is necessary to detect differences in the gravitational field as small as a few milligals. To recognize changes due to

geological conditions, the measurements are "corrected" to account for changes due to differences in elevation and latitude.

Given this background, the basic concept of the gravitational exploration method, the anomaly, can be introduced. If, instead of being an oblate spheroid characterized by complex density variations, the earth were made up of concentric, homogeneous shells, the gravitational field would be the same at all points on the surface of the earth. The complexities in the earth's shape and material distribution are the reason that the pull of gravity is not the same from place to place. A difference in gravity between two points which is not caused by the effects of known geometrical differences, such as in elevation, latitude, and surrounding terrain, is referred to as an "anomaly."

An anomaly reflects lateral differences in material densities. The gravitational attraction is smaller at a place underlain by relatively low density material than it is at a place underlain by a relatively high density material. The term "negative gravity anomaly" describes a situation in which the pull of gravity within a prescribed area is small compared to the area surrounding it. Low-density alluvial deposits in basins such as those in the Nevada-Utah region produce negative gravity anomalies in relation to the gravity values in the surrounding mountains which are formed by more dense rocks.

The objective of gravity exploration is to deduce the variations in geologic conditions that produce the gravity anomalies identified during a gravity survey.

A1.2 INSTRUMENTS

The sensing element of a LaCoste and Romberg gravimeter is a mass suspended by a zero-length spring. Deflections of the mass from a null position are proportional to changes in gravitational attraction. These instruments are sealed and compensated for atmospheric pressure changes. They are maintained at a constant temperature by an internal heater element and thermostat. The absolute value of gravity is not measured directly by a gravimeter. It measures relative values of gravity between one point and the next. Gravitational differences as small as 0.01 milligal can be measured.

A1.3 FIELD PROCEDURES

The gravimeter readings were calibrated in terms of absolute gravity by taking readings twice daily at nearby USGS gravity base stations. Gravimeter readings fluctuate because of small time-related deviations due to the effect of earth tides and instrument drift. Field readings were corrected to account for these deviations. The magnitude of the tidal correction was calculated using an equation suggested by Goguel (1954):

$$C = P + N \cos \phi (\cos \phi + \sin \phi) + S \cos \phi (\cos \phi - \sin \phi)$$

where C is the tidal correction factor, P, N, and S are time-related variables, and ϕ is the latitude of the observation point. Tables giving the values of P, N, and S are published annually by the European Association of Exploration Geophysicists.

The meter drift correction was based on readings taken at a designated base station at the start and end of each day. Any difference between these two readings after they were corrected for tidal effects was considered to have been the result of instrumental drift. It was assumed that this drift occurred at a uniform rate between the two readings. Corrections for drift were typically only a few hundredths of a milligal. Readings corrected for tidal effects and instrumental drift represented the observed gravity at each station. The observed gravity values represent the total gravitational pull of the entire earth at the measurement stations.

A1.4 DATA REDUCTION

Several corrections or reductions are made to the observed gravity to isolate the portion of the gravitational pull which is due to the crustal and near-surface materials. The gravity remaining after these reductions is called the "Bouguer Anomaly." Bouguer Anomaly values are the basis for geologic interpretation. To obtain the Bouguer Anomaly, the observed gravity is adjusted to the value it would have had if it had been measured at the geoid, a theoretically defined surface which approximates the surface of mean sea level. The difference between the "adjusted" observed gravity and the gravity at the geoid calculated for a theoretically homogeneous earth is the Bouguer Anomaly.

Four separate reductions, to account for four geometrical effects, are made to the observed gravity at each station to arrive at its Bouguer Anomaly value.

a. Free-Air Effect: Gravitational attraction varies inversely as the square of the distance from the center of the earth. Thus corrections must be applied for elevation. Observed gravity levels are corrected for elevation using the normal vertical gradient of:

$$FA = -0.09406 \text{ mg/ft } (-0.3086 \text{ milligals/meter})$$

where FA is the free-air effect (the rate of change of gravity with distance from the center of the earth). The free-air correction is positive in sign since the correction is opposite the effect.

b. Bouguer Effect: Like the free-air effect, the Bouguer effect is a function of the elevation of the station, but it considers the influence of a slab of earth materials between the observation point on the surface of the earth and the corresponding point on the geoid (sea level). Normal practice, which is to assume that the density of the slab is 2.67 grams per cubic centimeter was followed in these studies. The Bouguer correction (B_C), which is opposite in sign to the free-air correction, was defined according to the following formula.

$$B_C = 0.01276 (2.67) h_f \text{ (milligals per foot)}$$

$$B_C = 0.04185 (2.67) h_m \text{ (milligals per meter)}$$

where h_f is the height above sea level in feet and h_m is the height in meters.

c. Latitude Effect: Points at different latitudes will have different "gravities" for two reasons. The earth (and the geoid) is spheroidal, or flattened at the poles. Since points at higher latitudes are closer to the center of the earth than points near the equator, the gravity at the higher latitudes is larger. As the earth spins, the centrifugal acceleration causes a slight decrease in gravity. At the higher latitudes where the earth's radii are smaller, the centrifugal acceleration diminishes. The gravity formula for the Geodetic Reference System, 1967, gives the theoretical value of gravity at the geoid as a function of latitude. It is:

$$g = 978.0381 (1 + 0.0053204 \sin^2 \phi - 0.0000058 \sin^2 2\phi) \text{ gals}$$

where g is the theoretical acceleration of gravity and ϕ is the latitude in degrees. The positive term accounts for the spheroidal shape of the earth. The negative term adjusts for the centrifugal acceleration.

The previous two corrections (free air and Bouguer) have adjusted the observed gravity to the value it would have had at the geoid (sea level). The theoretical value at the geoid for the latitude of the station is then subtracted from the adjusted observed gravity. The remainder is called the Simple Bouguer Anomaly (SBA). Most of this gravity represents the effect of material beneath the station, but part of it may be due to irregularities in terrain (upper part of the Bouguer slab) away from the station.

d. Terrain Effect: Topographic relief around the station has a negative effect on the gravitational force at the station. A nearby hill has upward gravitational pull and a nearby valley contributes less downward attraction than a nearby material would have. Therefore, the corrections are always positive. Corrections are made to the SBA when the terrain effects were 0.1 milligal or larger. Terrain corrected Bouguer values are called the Complete Bouguer Anomaly (CBA). When the CBA is obtained, the reduction of gravity at individual measurement points (stations) is complete.

A1.5 INTERPRETATION

The first step in interpretation is to separate the portion of the CBA that might be caused by the light-weight, basin-fill material overlying the heavier bedrock material which forms the surrounding mountains and presumably the basin floor. Since the valley-fill sediments are absent at the stations read in the mountains, the CBA values at bedrock stations are used as the basis for constructing a second order polynomial surface to represent a regional field over the valley. A regional field is an estimation of the values the CBA would have had if the light-weight sediments (the anomaly) had not been there.

Where there are insufficient bedrock stations to define a satisfactory regional trend, a regional may be estimated by the process of upward continuation of the CBA field.

In Potential Theory, a field normal to a surface, regardless of its actual source, may be considered as originating in an areal

distribution of mass on that surface, and if the field strength is known the surface density of mass (grams per square centimeter) can be calculated. The observed gravity field at the surface of the earth approximately fulfills the requirements of this theory: thus the observed (Bouguer anomaly) field can be used to compute a surficial distribution of mass which would reproduce the field, and most importantly, account for the gravity field anywhere above the surface of observation. On this basis, the Bouguer anomaly field is readily "continued" to level surfaces above the ground.

An important property of such "upward continuation" is that the resultant field (which can be represented by a contour map), with increasing altitudes of continuation, changes more with respect to shallow sources than it does with respect to deeper sources. The anomalous parts of the field ascribed to shallow density distributions tend to vanish as the continuation is carried upward whereas the field produced by deeper sources changes only slightly, so that upward continuations produce "regional"-type fields. Residual separations then can be made for the purpose of "pin-pointing" shallow sources such as the alluvial fill.

The difference between the CBA and the regional field is called the "residual" field or residual anomaly. The residual field is the interpreter's estimation of the gravitational effect of the geologic anomaly. The zero value of the residual anomaly is not exactly at the rock outcrop line but at some distance on the "rock" side of the contact. The reason for this is found in the

explanation of the terrain effect. There is a component of gravitational attraction from material which is not directly beneath a point.

If the "regional" is well chosen, the magnitude of the residual anomaly is a function of the thickness of the anomalous (fill) material and the density contrast. The density contrast is the difference in density between the alluvial and bedrock material. If this contrast were known, an accurate calculation of the thickness could be made. In most cases, the densities are not well known and they also vary within the study area. In these cases, it is necessary to use typical densities for materials similar to those in the study area.

If the selected average density contrast is smaller than the actual density contrast, the computed depth to bedrock will be greater than the actual depth and vice-versa. The computed depth is inversely proportional to the density contrast. A ten percent error in density contrast produces a ten percent error in computed depth. An iterative computer program is used to calculate a subsurface model which will yield a gravitational field to match (approximately) the residual gravity anomaly.

SFVIER DESERT, UTAH GRAVITY DATA

STATION IDENT.	LAT. DEG MIN	LONG. DEG MIN	FLV. +CODE	TER-COR. IN/OUT	NORTH UTM	EAST UTM	ORSV GRAV	THEC GRAV	FAA	CHA +1000
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SD0205	394187	1123385	4732U	0	62439518	36589168862214207			-816	83107
SD0206	394099	1123385	4703U	0	55439355	36586168678214077			-1141	82873
SD0207	394267	1123324	4803Y	0	67439665	36679168589214326			-538	83148
SD0208	394372	1123314	4898Y	0	88439859	36696168156214481			-232	83150
SD0210	394443	1122860	5001B	0	73439979	37347165782214587			-1742	81274
SD0211	394374	1122759	4995S	0	75439849	37489166775214484			-703	82335
SD0212	394374	1122987	4928S	0	67439854	37164166800214484			-1309	81950
SD0213	394274	1122877	4900S	0	66439667	37318167720214336			-505	82849
SD0214	394185	1122989	4834S	0	60439505	37155168822214205			108	83681
SD0215	394187	1122761	4904S	0	74439503	37481168445214207			387	83735
SD0217	393701	1124973	4957U	0	66438662	34301166261213488			-578	82581
SD0220	393549	1124920	4886U	0	54438379	34371166688213263			-594	82795
SD0222	393449	1124808	4858U	0	49438191	34528166758213114			-640	82840
SD0224	393316	1124849	4738V	0	44437946	34464167429212918			-900	82984
SD0225	394464	1123262	5154Y	0	96440027	36774166541214618			426	82904
SD0226	394372	1123217	4905Y	0	75439856	36835168116214481			-206	83139
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SD0228	394274	1123102	4856V	0	63439672	36996168476214336			-163	83338
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SD0236	393795	1123209	4726S	0	46438789	36828168857213627			-296	83631
SD0237	393889	1123216	4686S	0	48438963	36821169646213766			-22	84043
SD0238	394001	1123302	4695S	0	53439172	36702168969213932			-781	83259
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SD0253	393576	1123554	4637U	0	43438392	36327169003213302			-663	83564
SD0254	393683	1123497	4692U	0	43438589	36413168839213461			-468	83572
SD0255	393489	1123441	4723U	0	42438228	36486168110213173			-617	83316
SD0256	393315	1123442	4663V	0	41437906	36479168239212916			-796	83341
SD0257	393175	1123424	4692U	0	40437647	36501167356212709			-1199	82838
SD0258	393066	1123384	47001T	0	41437448	36554166884212551			-1437	82574

SEVIER DESERT, UTAH GRAVITY DATA

STATION IDENT.	LAT. DEG MIN	LONG. DEG MIN	ELFV. +CODE	TEMP-COR. IN/100 FT	NORTH UTM	EAST UTM	ORSV GRAV	THEO GRAV	FAA	GRA +1000
SD0259	393185	1123336	47390	0	44437063	36027167277212723			-849	83031
SD0260	393270	11233194	47392	0	43437820	36054167508212849			-745	83134
SD0261	393426	1123390	47320	0	43438110	36557167843213080			-706	83197
SD0262	393613	1123360	46890	0	43438456	36006168784213357			-448	83602
SD0263	393703	1123357	46970	0	44438622	36013168980213491			-310	83714
SD0264	393664	1123214	47230	0	45438546	36817168670213433			-317	83620
SD0265	393577	1123215	47210	0	44438385	36813168383213304			-494	83448
SD0266	393476	1123241	47230	0	43438199	36772168131213155			-578	83356
SD0267	393365	1123275	47300	0	42437995	36720167816212990			-663	83247
SD0268	393227	1123216	47500	0	43437738	36800167553212786			-532	83310
SD0269	393140	1123217	47460	0	43437577	36796167302212657			-693	83162
SD0270	393053	1123216	47500	0	44437416	36795166749212526			-1079	82764
SD0271	393142	1123102	47500	0	43437578	36961167390212660			-570	83272
SD0272	393307	1123132	47360	0	43437884	36923167958212904			-378	83511
SD0273	393439	1123161	47230	0	43438129	3688616807213100			-577	83357
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SD0276	393689	1123106	47100	0	46438590	36972168915213470			-231	83750
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SD0278	393923	11229384	47500	0	53439019	37220169077213816			-41	83811
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SD0282	393227	1122991	47585	0	44437733	37122167825212786			-186	83630
SD0283	393052	1122992	47465	0	44437409	37116166901212527			-963	82893
SD0284	393139	1122879	47505	0	46437567	37280167334212655			-622	83224
SD0285	393315	1122878	47585	0	45437893	37287168105212916			-36	83781
SD0286	393491	1122882	47505	0	46438218	37287168244213177			-233	83612
SD0287	393663	1122883	47605	0	48438537	37290168777213431			140	83953
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SD0292	393584	1122770	47615	0	49438388	37450168508213314			3	83868
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SD0294	393234	1122768	47785	0	46437740	37442167991212796			161	83911
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SD0300	393844	1122641	48765	0	59438866	37642168286213699			473	83901
SD0301	393584	1122521	47875	0	54438382	37806168316213314			50	83777
SD0303	393410	1122519	47825	0	50438060	37804168434213057			378	84118
SD0304	393231	1122541	47698	0	50437730	37767167836212791			-77	83707
SD0305	393056	1122541	47745	0	52437406	37752167107212533			-509	83269
SD0306	393144	1122427	47805	0	53437566	37926167122212663			-559	83101
SD0307	393323	1122408	47775	0	52437897	37960167777212926			-197	83562

SEVIER DESERT, UTAH GRAVITY DATA

STATION IDENT.	LAT. DEG MIN	LONG. DEG MIN	FLV. +CODE	TER-COR. IN/OUT	NORTH UTM	EAST UTM	OBSV GRAV	THEO GRAV	FAA	CHA +1000
SD0308	393502	112239	347831T	U	55438228	3798716820	0213193		18	83759
SD0310	393401	112229	647812T	U	56438039	3812316797	1213044		-81	83669
SD0311	393230	112231	54786S	U	55437723	3809116701	6212791		-736	82996
SD0312	393410	112207	248169T	U	67438050	3844416766	0213057		-66	83572
SD0313	393278	112215	447851T	U	61437808	3832316713	1212862		-701	83040
SD0314	392968	112265	44779H	U	49437246	3759716671	2212402		-717	83072
SD0315	392883	112254	247820	U	57437086	3775516682	8212277		-448	83299
SD0316	392739	112263	04779D	U	58436822	3762516660	1212064		-490	83268
SD0317	392631	112278	947664T	U	51436625	3739416621	5211904		-834	82960
SD0318	392794	112277	04778D	U	49436926	3742616626	5212145		-916	82876
SD0319	392881	112276	94778D	U	48437087	3743016635	2212274		-959	82793
SD0320	392966	112288	14765D	U	45437247	3727216640	0212400		-1159	82634
SD0321	392792	112288	24764D	U	46436925	3726516611	3212142		-1197	82600
SD0322	392687	112299	64758H	U	46436734	3709916581	2211987		-1419	82406
SD0323	392879	112299	34750S	U	44437089	3710916625	0212271		-1321	82522
SD0324	392966	112310	54736U	U	43437253	3695116657	3212400		-1257	82633
SD0325	392792	112310	64733U	U	44436931	3694416598	6212142		-1616	82285
SD0326	392592	112305	34759U	U	47436560	3701416561	9211846		-1442	82373
SD0327	392682	112317	34750S	U	44436729	3684516557	0211980		-1710	82133
SD0328	392879	112321	74737U	U	42437094	3678816608	7212271		-1607	82279
SD0329	392966	112333	04726U	U	42437258	3662916624	8212400		-1678	82245
SD0330	392792	112333	04657U	U	42436936	3662316617	9212142		-2139	82019
SD0331	392879	112346	24639U	U	39437100	3643716627	1212271		-2345	81872
SD0332	392966	112355	44645U	U	39437264	3630716632	7212400		-2362	81835
SD0333	395320	112411	75623S	U	298441633	3558216373	8215887		770	81889
SD0011	395949	112490	14778S	U	185442818	3448917031	2216820		-1547	82342
SD0015	395838	112497	94752S	U	141442615	3437417080	2216655		-1136	82798
SD0016	395855	112486	24960S	U	178442643	3454116912	7216680		-878	82383
SD0017	395895	112474	95227S	U	255442714	3470316744	0216740		-109	82318
SD0018	395831	112454	26097S	U	434442590	3499516216	8216645		2908	82545
SD0019	395773	112477	5202S	U	214442489	3466216743	3216559		-172	82299
SD0020	395768	112489	44920S	U	166442483	3449216959	5216552		-657	82276
SD0023	395684	112479	15161S	U	194442325	3463516750	3216427		-354	82237
SD0024	395614	112492	14808S	U	156442199	3444816969	9216323		-1378	82379
SD0027	395533	112483	94869S	U	169442047	3456116906	1216203		-1321	82241
SD0028	395566	112472	5225C	U	219442105	3472516888	1216252		-199	82199
SD0030	395473	112467	15219C	U	231441931	3479916669	5216114		-302	82127
SD0031	395424	112479	24715C	U	197441844	3462416978	6216041		-1886	82230
SD0032	395447	112490	44533C	U	174441890	3446617113	9216076		-2279	82434
SD0033	395405	112460	25219C	U	268441804	3489416665	1216013		-246	82221
SD0034	395306	112465	34776C	U	236441622	3481816915	8215866		-1765	82175
SD0035	395321	112478	44581C	U	175441653	3463217050	2215886		-2278	82273
SD0036	395314	112489	74549S	U	148441644	3447117117	4215878		-1896	82276
SD0038	395296	112448	75209S	U	210441599	3505416619	0215852		-641	81803
SD0039	395321	112434	44540S	U	257441641	3525416470	7215888		14	81717
SD0042	395333	112389	25510S	U	236441651	3590416467	1215906		619	82062
SD0043	395354	112368	15399S	U	166441684	3620516516	3215936		35	81781

SEVIER DESERT, UTAH GRAVITY DATA

STATION IDENT.	LAT. DEG MIN	LONG. DEG MIN	ELFV. +CODE	TER-COR. IN/OUT	NORTH UTM	EAST UTM	OBSV GRAV	THEO GRAV	FAA	CBA +1000
SD0044	395422	1123554	5460S	0	162441807	36388164496216038			-159	81381
SD0045	395423	1123361	5652S	0	187441804	36063163244216040			396	81305
SD0046	395457	1123176	5980S	0	248441862	36928160943216091			1133	80984
SD0048	395331	1123193	5632S	0	191441630	36900162513215903			-387	80595
SD0049	395262	1123359	5377S	0	140441506	36061165078215801			-121	81680
SD0050	395323	1123535	5342S	0	142441623	36412165287215691			-332	81590
SD0053	395073	1122757	5837Y	0	201441142	37513161909215520			1322	81615
SD0054	395035	1122923	5563Y	0	147441075	37275163039215464			-77	81096
SD0056	394830	1122909	5312Y	0	108440696	37289163845215160			-1325	80665
SD0057	394806	1122811	5355Y	0	115440649	37428163700215125			-1029	80821
SD0058	394698	1122952	5154Y	0	90440453	37224164479214965			-1983	80529
SD0059	394723	1122758	5318Y	0	101440494	37501163597215002			-1357	80605
SD0061	394636	1122872	5145Y	0	87440336	37336164334214873			-2120	80419
SD0062	394550	1122759	5119Y	0	85440174	37495164462214745			-2110	80516
SD0063	394511	1122952	5014Y	0	76440107	37218165543214688			-1950	81016
SD0064	395210	1123033	5750Y	0	169441402	37124161569215724			-41	80517
SD0065	395169	1123240	5385Y	0	135441331	36827164748215663			-237	81531
SD0066	395147	1123462	5201S	0	115441296	36510166186215630			-498	81677
SD0067	395222	1123589	5206Y	0	124441438	36332165637215741			-1112	81256
SD0068	395131	1123711	5078Y	0	113441273	36155160574215607			-1245	81548
SD0069	395085	1123572	5093Y	0	108441184	36351166303215538			-1307	81431
SD0070	395079	1123321	5282S	0	119441167	36709165947215530			127	82230
SD0071	395117	1123045	5582Y	0	151441230	37104162673215586			-380	80732
SD0072	395056	1123148	5406Y	0	125441120	36955163717215495			-903	80784
SD0074	395027	1123475	5102Y	0	103441074	36488166610215452			-829	81673
SD0075	395003	1123651	5006Y	0	97441034	36236166797215417			-1511	81512
SD0076	394920	1123673	4961S	0	91440881	36202167479215294			-1129	82041
SD0077	394920	1123550	5002Y	0	96440878	36377167279215294			-943	82093
SD0078	394955	1123329	5142Y	0	122440937	36694166540215345			-416	82166
SD0079	394975	1123088	5376Y	0	112440968	37038164245215375			-537	81239
SD0080	394854	1123068	5267Y	0	104440744	37063164543215196			-1086	81049
SD0081	394877	1123191	5232Y	0	103440790	36888165500215230			-493	81765
SD0082	394862	1123402	5084Y	0	102440767	36587166838215208			-526	82236
SD0083	394812	1123531	5057Y	0	112440678	36401167042215134			-501	82363
SD0084	394840	1123666	4932Y	0	104440733	36209168040215175			-713	82569
SD0086	394739	1123397	5223Y	0	101440539	36590166173215026			306	82593
SD0087	394748	1123276	5170U	0	91440553	36763166182215039			-203	82254
SD0088	394746	1123113	5177U	0	89440545	36995165106215036			-1210	81222
SD0089	394624	1123059	5075Y	0	83440318	37068165439214855			-1657	81117
SD0090	394636	1123161	5086Y	0	84440343	36923166023214873			-987	81750
SD0091	394632	1123282	5175Y	0	99440339	36750166258214867			92	82541
SD0094	394513	1123129	4986Y	0	79440115	36965166719214691			-1050	82023
SD0095	395236	1123805	5198Y	0	182441469	36024166361215763			-485	81968
SD0096	395201	1123964	5179Y	0	156441409	35796166252215710			-721	81771
SD0097	395238	1124178	5219Y	0	209441483	35493165801215766			-850	81559
SD0098	395179	1124308	4986Y	0	161441377	35305167102215676			-1654	81501
SD0099	395215	1124434	5027H	0	164441447	35127167100215731			-1325	81694

SEVTER DESERT, UTAH GRAVITY DATA

STATION IDENT.	LAT. DEG MIN	LONG. DEG MIN	ELEV. +CODE	TEMP. IN/IRT	NORTH ITM	EAST ITM	ORSV GRAV	THEO GRAV	FAA	CRA +1000
SD0142	394802	1124680	4896V	0	149440690	34761167955215119			-1090	82360
SD0144	394691	1124726	5165S	0	178440094	34690166430214960			76	82636
SD0146	394623	1124568	4681S	0	114440356	34914168679214853			-2124	82024
SD0147	394520	1124660	4876S	0	118440168	34771167439214701			-1375	82112
SD0148	394478	1124570	4712Y	0	82440088	34906168027214636			-2270	81741
SD0149	394466	1124777	5046Y	0	128440071	34610166347214621			-787	82130
SD0154	394388	1124917	5126Y	0	115439931	34407165362214505			-904	81728
SD0155	394360	1124789	4912V	0	89439876	34589166991214464			-1248	82088
SD0156	394424	1124668	4816H	0	85439991	34764167479214559			-1758	81901
SD0157	394334	1124614	4683Y	0	67439823	34838168055214425			-2300	81794
SD0158	394277	1124509	45981T	0	69439714	34986168720214341			-2348	82038
SD0160	394247	1124694	4917Y	0	76439670	34435166398214296			-1627	81679
SD0164	394130	1124864	4771H	0	57439452	34473167150214123			-2066	81716
SD0185	394131	1124708	4686H	0	58439450	34696168146214124			-1874	82201
SD0166	394186	1124566	4623Y	0	66439547	34901168246214206			-1856	82442
SD0167	394055	1124789	4765Y	0	55439311	34576167412214012			-1758	82045
SD0168	394007	1124970	4794U	0	53439228	34317166722213941			-2105	81597
SD0171	393922	1124941	4782U	0	50439070	34355166895213815			-1919	81821
SD0172	393940	1124913	4898U	0	51439096	34696167305213841			-444	82902
SD0174	393801	1124671	4924Y	0	52438838	34737167255213636			6	83246
SD0175	393838	1124906	4836V	0	48438913	34402166994213691			-1187	82366
SD0177	394496	1124404	4600U	0	81440116	35144168716214665			-2661	81730
SD0178	394481	1124159	4680U	0	63440082	35493169254214643			-1348	82753
SD0179	394461	1124002	4724U	0	67440041	35717169211214613			-947	83006
SD0180	394466	1123837	4790U	0	99440046	35953168944214621			-600	83161
SD0181	394338	1123816	4714U	0	65439808	35978169524214431			-547	83440
SD0182	394338	1123963	4675U	0	58439812	35768169677214431			-762	83352
SD0183	394362	1124117	4650U	0	59439861	35549169519214466			-1189	83010
SD0184	394415	1124283	4633U	0	61439963	35314168985214545			-1963	82297
SD0185	394387	1124485	4599U	0	74439917	35024168634214504			-2591	81797
SD0186	394317	1124381	4601U	0	60439785	35170168924214400			-2178	82189
SD0187	394273	1124230	4614U	0	55439699	35384169188214335			-1726	82592
SD0188	394243	1124067	4619U	0	56439639	35016169750214291			-1073	83229
SD0189	394211	1123914	4629U	0	54439576	35834170100214243			-583	83683
SD0190	394180	1123761	4647U	0	56439515	36051169654214197			-814	83393
SD0191	394092	1123872	4612U	0	50439355	35890169443214066			-1224	83096
SD0192	394126	1124025	4600U	0	51439422	35672169737214117			-1092	83270
SD0193	394156	1124177	4599U	0	52439481	35456169399214162			-1483	82883
SD0194	394218	1124368	4592U	0	58439601	35185169230214253			-1813	82584
SD0195	394143	1124483	4608Y	0	63439466	35016169473214142			-1306	83040
SD0196	394100	1124328	4695U	0	53439382	35238169459214076			-438	83602
SD0197	394462	1123712	4947Y	0	105440035	36131167639214615			-423	82809
SD0198	394270	1123687	4724U	0	63439679	36160169330214330			-545	83406
SD0199	394082	1123718	4626U	0	51439332	36110169344214052			-1176	83096
SD0201	394214	1123572	4704U	0	62439573	36323169024214248			-960	83058
SD0202	394369	1123589	4839Y	0	111439860	36303168462214477			-477	83129
DM0032	395314	1125431	5296S	46	239441659	33709168598215878			566	82782

SEVIER DESERT, UTAH GRAVITY DATA

STATION IDENT.	LAT. DEG MIN	LONG. DEG MIN	ELEV. +CODE	TFR-COR. IN/OUT	NORTH UTM	EAST UTM	UNSV GRAV	THEO GRAV	FAA	CRA +1000
SD0100	395134	1124410	4849C	0	133441297	35158167952215611			-2027	81568
SD0101	395112	1124225	4867Y	0	134441251	35421167384215578			-2393	81141
SD0102	395124	1124092	4954Y	0	139441270	35611167134215596			-1842	81400
SD0103	395108	1123896	5060Y	0	114441235	35890166746215573			-1209	81647
SD0104	395010	1123822	4939Y	0	100441052	35992167257215427			-1692	81563
SD0105	395024	1123961	4922Y	0	100441081	35795167083215448			-2047	81266
SD0106	395011	1124092	4954Y	0	101441061	35607167383215429			-1426	81778
SD0107	395021	1124225	4784Y	0	105441083	35418167595215444			-2829	80960
SD0108	395026	1124376	4690S	0	115441096	35203168458215451			-2858	81261
SD0109	394907	1124370	4644Y	0	93440876	35207168479215274			-2693	81560
SD0110	394928	1124244	4723Y	0	88440911	35386168479215305			-2381	81598
SD0111	394909	1124103	4769Y	0	85440872	35588167995215277			-2404	81416
SD0112	394902	1123954	4838B	0	84440855	35800167737215267			-2002	81581
SD0113	394899	1123802	4891Y	0	87440846	36017167794215263			-1442	81963
SD0114	394795	1123807	4888Y	0	87440854	36006168221215109			-889	82527
SD0115	394801	1123956	4810B	0	77440669	35794168397215117			-1455	82216
SD0116	394798	1124116	4806V	0	71440667	35566168069215113			-1820	81859
SD0117	394797	1124229	4768V	0	71440668	35404167968215112			-2274	81535
SD0118	394797	1124342	4679Y	0	77440672	35243168384215112			-2696	81423
SD0119	394739	1124487	4585U	0	108440568	35034169360215026			-2519	81951
SD0120	394684	1124324	4762U	0	67440462	35265167951214944			-2180	81645
SD0121	394695	1124191	4775H	0	66440479	35455168229214960			-1797	81983
SD0122	394709	1124002	4803Y	0	73440500	35725168811214981			-971	82720
SD0124	394593	1123820	4992Y	0	103440280	35981167803214809			-29	83048
SD0125	394583	1123973	4844Y	0	70440266	35762168640214795			-569	82979
SD0126	394610	1124145	4760U	0	64440320	35518168832214834			-1209	82620
SD0127	394563	1124229	4703Y	0	65440236	35396168945214765			-1563	82462
SD0128	394597	1124327	4655A	0	74440301	35257168655214815			-2356	81841
SD0129	394616	1124444	4600B	0	93440340	35091168901214843			-2654	81750
SD0130	395201	1124641	4724C	0	163441464	34831169461215740			-1824	82227
SD0131	395226	1124794	4547C	0	163441519	34615170525215780			-2468	82187
SD0132	395233	1124955	4729C	0	111441558	34390169757215809			-1550	82432
SD0133	395085	1124943	4935H	0	120441269	34396168108215577			-1031	82258
SD0134	395106	1124759	4657C	0	121441285	34653169989215593			-1778	82458
SD0135	395149	1124568	4691C	0	149441336	34936169263215639			-2233	81917
SD0136	395068	1124544	4614H	0	129441182	34965169449215516			-2653	81741
SD0137	395007	1124702	4818C	0	112441096	34736168537215444			-1568	82112
SD0139	394923	1124753	5206C	0	260440935	34662166138215313			-182	82322
SD0140	394976	1124532	4587C	0	116441013	34980169609215381			-2608	81663
SD0141	394864	1124521	4593S	0	114440800	34990169631215211			-2358	82091
SD0003	40 211	1124787	4810S	0	201443300	34661171352217209			-593	83202
SD0005	40 123	1124902	4640C	0	162443140	34494171804217079			-1616	82726
SD0009	40 56	1124992	4554S	0	134443019	34363171891216979			-2233	82368
SD0010	40 36	1124791	5076S	0	281442976	34649169254216949			73	83041
SD0334	394616	1124823	5098S	32	460440350	34550160196214843			1802	81837
SD0029	395510	1124516	6507S	46	732441995	35021158117216169			3190	81774

SEVIER DESERT, UTAH GRAVITY DATA

STATION IDENT.	LAT. DEG MIN	LONG. DEG MIN	ELFV. +CODE	TER-COR. IN/OUT	NORTH UTM	EAST UTM	ORSV GRAV	THEO GRAV	FAA	CRA +1000
SD0041	395434	1124030	7054S	17	966441841	35710154438216050			4760	81690
SD0052	395224	1122830	6230Y	39	220441423	37414159328215745			2217	81227
SD0055	394926	1122828	5710Y	5	140440872	37407162013215302			447	81117
SD0060	394706	1122502	5577Y	12	111440457	37866162343214977			-148	80953
SD0073	395038	1123237	5607Y	5	155441089	36828163751215469			1050	82080
SD0085	394788	1123353	5442Y	12	126440629	36854164590215098			706	82283
SD0209	394433	1123434	5407Y	7	157439974	36527165180214572			1493	83215
SD0047	395629	1123294	6654S	38	413442183	36765156936216345			3216	80972
SD0051	395445	1122992	6507S	5	370441836	37190157350216073			2519	80700
SD0123	394668	1123859	5538S	163	415440420	35928163882214920			1681	82770
SD0218	393694	1124815	5278V	41	168438644	34527164141213477			334	82541
SD0302	393398	1122641	4930V	33	70438041	37629168037213039			1393	84681
SD0004	40 121	1124703	5450S	20	773443131	34777167092217076			1305	83510
SD0007	40 125	1125243	4506C	0	73443154	34009173366217081			-1314	83391
SD0014	395875	1125101	4565S	0	104442687	34201172115216710			-1638	82890
SD0042	394689	1123562	6480V	922520440451		36353157007214952			3043	83554
SD0093	394558	1123379	5914S	941014440204		36610161402214757			2304	83241
SD0159	394250	1124730	47438	0	64439671	34669167812214301			-1855	82032
SD0173	394002	1124561	5171U	44	384439207	34902165654213924			386	83178
SD0200	394125	1123504	4682U	0	55439406	36417168885214116			-1170	82916
SD0203	394374	1123484	4953Y	0	122439866	36454167960214484			87	83315
SD0216	394098	1122875	4837S	0	60439341	37315168490214076			-67	83495
SD0218	393694	1124815	5278V	82	464438644	34527164141213477			334	82878
SD0279	393750	1122991	4753C	0	48438700	37139168814213560			-18	83819
SD0309	393754	1122346	5702V	941245438693		38061162566213560			2663	84554
1097	395473	112467152192T		0	226441931	34799166694216114			-320	82106
U181	395102	112467746299T		0	123441245	34776170311215564			-1700	82633
U182	394902	112458346578T		0	110440872	34903169836215267			-1600	82620
3193	394158	112451446257T		0	62439494	34975169497214165			-1140	83142
U263	394063	112472247119T		0	61439324	34674167948214024			-1740	82251
U260	393438	112454945830T		0	52438163	34898168427213099			-1560	82862
U259	393242	112464645738T		0	43437804	34750168363212808			-1410	83033
U258	393062	112451345597T		0	37437467	34936167551212542			-2080	82397
U279	392512	112458545709T		0	35436451	34613166586211729			-2130	82315
U316	392250	112470245928T		0	34435970	34636166104211341			-2020	82344
U193	394869	112528156299T		0	158440832	33906164506215219			2240	83218
U192	394902	112524056299T		0	170440892	33966164926215267			2610	83600
U188	394912	112491154869T		0	242440900	34435164696215282			1020	82572
U191	395012	112520853478T		0	131441094	34016166412215431			1280	83191
U187	395019	112483649757T		0	139441096	34544168096215441			-520	82639
U206	395024	112597948560T		0	84441140	32916168744215448			-1010	82514
U189	395080	112504051837T		0	129441215	34258166959215531			180	82649

SEVIER DESERT, UTAH GRAVITY DATA

STATION IDENT.	LAT. DEG MIN	LONG. DEG MIN	ELEV. +CORR	TFR-COR. IN/OUT	NORTH UTM	EAST UTM	OBSV GRAV	THEO GRAV	FAA	GRA +1000
U190	395214	11252644	4949RT	0	86441469	3394416843	1215730	-730	82466	
1607	395256	11254014	8809T	0	88441551	3375016906	3215792	-810	82626	
1096	395722	1125473	0	0	221442416	3366617262	9216484	-1210	83330	
1608	395875	1125101	0	0	222442687	3420117212	6216711	-1630	82800	
SD0150	394452	1125135	5367V	0	118440056	3409816426	5214600	173	81986	
SD0151	394361	1125227	5201V	0	90439890	3396316477	0214465	-749	81602	
SD0152	394306	1125144	5103V	0	84439786	3408616509	0214384	-1270	81409	
SD0153	394343	1125029	5144V	0	99439851	3424616544	1214438	-589	81965	
SD0161	394187	1125033	4924V	0	66439563	3423416596	6214207	-1903	81366	
SD0162	394137	1125188	4940R	0	63439475	3401616568	8214134	-1957	81257	
SD0163	394098	1125014	4859V	0	59439398	3425616631	7214076	-2032	81454	
SD0169	394022	1125139	4847R	0	56439261	3407616628	6213963	-2064	81461	
SD0170	393899	1125127	4801R	0	52439033	3408916645	9213780	-2142	81535	
SD0176	393796	1125018	4829U	0	49438839	3424116675	3213626	-1431	82146	
SD0219	393571	1125118	4707U	0	48438426	3408916732	4213295	-1676	82318	
SD0221	393489	1125131	4670V	0	48438274	3406716759	1213173	-1636	82484	
SD0223	393402	1125018	4643U	0	54438110	3422616791	4213045	-1439	82779	
SD0012	395933	1125003	4620S	0	143442792	3434317146	4216797	-1857	82528	
SD0013	395970	1125117	4533S	0	98442864	3418217227	5216852	-1919	82718	
SD0021	395775	1125129	4559S	0	106442503	3415817251	3216562	-1147	83400	
SD0022	395688	1125016	4818S	0	116442339	3431517022	25216433	-870	82814	
SD0025	395576	1125160	4498S	0	123442136	3410617190	4216266	-2036	82746	
SD0026	395513	1125017	4489S	0	163442015	3430717146	1216173	-2472	82381	
SD0001	40 213	1125243	4511S	0	77443317	3461217389	8217213	-864	83827	
SD0002	40 213	1125013	4524S	0	102443310	3433917286	0217213	-1781	82891	
SD0006	40 124	1125129	4508S	0	88443149	3417117294	7217080	-1713	83000	
SD0008	40 40	1125243	4505C	0	76442997	3400617296	7216955	-1596	83115	
SD0158	394952	1125050	6260C	37	878441025	3424015898	4215376	2522	82086	
SD0037	395292	11251385	4901T	1	313441610	3412616479	2215845	613	82202	
SD0143	394747	1125044	7305V	181	345440599	3423915151	4215038	5232	81681	
WW0026	392250	1125036	4575U	0	37435980	3415616625	6211341	-2031	82401	
WW0001	393315	1125131	4620U	0	51437953	3406016808	3212916	-1357	82937	
WW0002	393260	1124829	45919T	0	51437842	3449116832	1212834	-1302	83087	
WW0003	393242	1125032	4603U	0	50437815	3419916830	3212806	-1189	83161	
WW0004	393195	1124906	4588V	0	44437724	3437816812	0212738	-1444	82952	
WW0005	393182	1125137	4596U	0	47437707	3404716827	0212720	-1198	83173	
WW0006	393141	1124793	4577U	0	40437621	3453816794	3212654	-1644	82783	
WW0007	393140	1125018	4592U	0	44437626	3421616832	25212657	-1121	83262	
WW0008	393053	1124906	4581U	0	40437461	3437316793	6212528	-1483	82932	
WW0009	393053	1125131	4592V	0	45437468	3405016816	5212528	-1150	83233	
WW0010	392967	1124793	4564U	0	38437299	3453216761	0212401	-1844	82628	
WW0011	392966	1125016	4585U	0	41437304	3420916804	6212400	-1207	83196	
WW0012	392879	1124906	4571U	0	39437139	3436616762	5212271	-1631	82818	
WW0013	392897	1125104	4626U	0	43437179	3408316775	7212296	-1008	83257	
WW0014	392792	1124810	4563V	0	38436976	3450116750	7212142	-1696	82779	
WW0015	392792	1125018	4568U	0	42436982	3420316754	9212142	-1437	82443	
WW0016	392685	1124922	4593U	0	40436781	3433616735	9211984	-1403	82472	

SEVIER DESERT, UTAH GRAVITY DATA

STATION IDENT.	LAT. DEG MIN	LONG. DEG MIN	ELEV. +CODE	TER-FLR. IN/OUT	NORTH UTM	EAST UTM	ORSV GRAV	THEC GRAV	FAA	CRA +1000
WW0017	392672	1125051	46460	0	69436761	34151166611211965			-1430	82792
WW0018	392599	1124810	45730	0	37436619	34494167265211857			-1558	82882
WW0019	392598	1125035	47650	0	56436623	34171165924211855			-1090	82714
WW0020	392511	1124923	45840	0	41436459	34328167012211727			-1577	82829
WW0021	392510	1125148	47530	0	49436464	34005165662211725			-1335	82503
WW0022	392425	1124811	45640	0	36436297	34486166734211599			-1917	82553
WW0023	392424	1125036	46080	0	42436302	34163166446211596			-1788	82537
WW0024	392337	1124923	45780	0	36436137	34322166516211470			-1872	82549
WW0025	392251	1124811	45670	0	35435975	34479166186211342			-2180	82279
WW0027	392162	1124925	45610	0	35435814	34312166411211211			-1879	82600
WW0028	392161	1125150	45630	0	39435818	33989166041211209			-2228	82248
WW0029	392074	1124812	45700	0	34435648	34471166072211680			-2004	82444
WW0030	392074	1125038	45580	0	36435654	34147166176211080			-2011	82479
WW0031	391986	1124925	45610	0	33435488	34306166371210951			-1659	82818
WW0032	391988	1125156	45520	0	36435499	33974166162210954			-1954	82556
WW0033	391898	1124812	45640	0	33435322	34465166227210820			-1644	82822
WW0034	391900	1125018	45551	0	34435332	34169166338210823			-1619	82819
WW0035	391810	1124926	45550	0	33435153	34298166270210691			-1555	82942
WW0036	391811	1125151	45510	0	35435171	33974166379210692			-1488	83028
WW0037	391722	1124813	45550	0	33434997	34457165985210560			-1710	82787
WW0038	391723	1125038	45570	0	33435005	34134166211210562			-1466	83024
WW0039	391636	1124925	45540	0	33434841	34293165939210434			-1640	82861
WW0040	391636	1125145	45590	0	34434847	33976166205210434			-1327	83157
WW0041	391564	1124847	45660	0	33434705	34402165817210327			-1542	82918
WW0042	391549	1125040	45520	0	33434683	34124166152210305			-1317	83190
WW0043	391811	1125825	46650	0	43435192	33006164823210692			-1969	82163
WW0044	391812	1125600	45880	0	39435186	33329165027210694			-2492	81899
WW0045	391812	1125390	45610	0	36435180	33631165940210694			-1832	82648
WW0046	391719	1125712	46400	0	39435018	33165164735210556			-2156	82057
WW0047	391725	1125488	45630	0	37435022	33487165557210565			-2068	82406
WW0048	391724	1125263	45500	0	35435013	33810166242210563			-1504	83013
WW0049	391629	1125824	46510	0	40434855	33000164603210423			-2052	82125
WW0050	391632	1125600	45780	0	38434853	33322164966210427			-2380	82044
WW0051	391655	1125343	45561	0	35434888	33693166008210462			-1580	82916
WW0052	391545	1125712	46000	0	38434696	33158164656210294			-2355	81994
WW0053	391550	1125489	45660	0	36434698	33478165707210306			-1631	82831
WW0054	391550	1125264	45510	0	34434692	3802166168210306			-1312	83201
U318	391519	1125353	45548	0	34434637	33673165964210261			-1440	83054
U317	391698	1125045	45518	0	33434959	34123166183210525			-1510	82993
2374	391905	1124813	45545	0	33435335	34464166324210831			-1650	82843
2373	391907	1125497	46102	0	39435359	33481165045210834			-2410	81899
U278	392603	1124796	45719	0	37436026	34523167272211863			-1570	82877
2477	392700	1125172	46844	0	52436816	33978166498212007			-1430	82842
U280	392752	1125428	47789	0	54436920	33613165777212083			-1340	82614
U281	392828	1125795	51368	0	84437072	33090164463212196			510	83094
2478	392846	1125810	50955	0	99437106	33069164535212223			240	82979

SEVIER DESERT, UTAH GRAVITY DATA

STATION IDENT	LAT. DFG	LONG. MTN	ELEV. +CODE	TEMP-COR. IN/OUT	NORTH UTM	EAST UTM	OHSV GRAV	THEO. GRAV	FAA	CRA +1000
U276	392847	112522145890T	U	46437089	33914167193212224	-1850	82548			
U282	392911	112596153130T	U	105437231	32855163533212319	1180	83175			
U275	393077	112537246647T	U	60437519	33706166954212564	-1720	82430			
U274	393308	112552847057T	U	100437952	33492167138212906	-1490	82550			
U268	393312	112492046388T	U	47437941	34363168308212912	-960	83267			
U273	393452	112562148248T	U	109438221	33364166592213119	-1130	82519			
U272	393589	112595052349T	U	113438484	32899164162213322	70	82353			
U267	393603	112513347178T	U	48438485	34069167330213343	-1620	82328			
U270	393700	112581150079T	U	81438685	33102165529213486	-840	82161			
U269	393754	112573649318T	U	69438783	33212165972213566	-1190	82059			
U271	393842	112593950220T	U	76438952	32925164689213697	-1760	81186			
U265	393866	112553048540T	U	65438984	33511166352213732	-1710	81795			
U266	393934	112521748150T	U	53439100	33961166223213833	-2310	81323			
U264	394012	112498747910T	U	55439238	34293166647213949	-2220	81485			
U207	394121	112594349380T	U	71439468	32931165450214110	-2200	81031			
U199	394181	112547350089T	U	125439565	33605165465214199	-1610	81435			
U200	394193	112565650748T	U	90439593	33344165866214217	-600	82180			
U196	394249	112527150597T	U	82439684	33896165146214300	-1550	81282			
U198	394351	112505050919T	U	95439867	34216165464214451	-1080	81645			
U197	394422	112485150659T	U	139439992	34503165953214556	-940	81919			
U201	394427	112568554508T	U	119440026	33312164162214563	860	82409			
U203	394506	112587451870T	U	84440178	33045164668214680	-1010	81384			
U194	394617	112526856358T	U	146440365	33915163112214845	1270	82216			
U204	394699	112576154318T	U	114440532	33214164292214967	410	82024			
U185	394722	112466149600T	U	138440542	34785167920215001	-410	82808			
U285	394862	112573952549T	U	126440833	33252165971215208	190	82406			
DW0218	393582	1125959 5246Y	U	116438472	32886164189213312	247	82471			
DW0219	393576	1125709 4927Y	U	91438453	33243165862213302	-1074	82212			
DW0220	393473	1125837 5386Y	U	227438266	33056163470213150	1008	82865			
DW0221	393378	1125770 5410Y	U	276438089	33148163272213009	1176	83006			
DW0223	393261	1125766 5330R	U	349437872	33149163925212836	1249	83419			
DW0225	393077	1125721 5345Y	U	266437530	33206163472212564	1209	83245			
DW0226	393094	1125565 4805H	U	101437557	33430166221212589	-1149	82563			
DW0227	393200	1125647 4880H	U	168437755	33317166220212746	-603	82921			
DW0228	393268	1125503 4682Y	U	90437877	33526167304212847	-1483	82639			
DW0229	393323	1125636 4830H	U	149437983	33338166470212926	-1005	82670			
DW0230	393443	1125620 4790Y	U	113438204	33365166600213105	-1429	82347			
DW0231	393549	1125540 4795H	U	71438398	33484166573213263	-1567	82150			
DW0232	393623	112544547779T	U	60438532	33623166429213372	-1979	81784			
DW0233	393671	112555248159T	U	65438624	33472166285213443	-1837	81802			
DW0234	393713	112565048750T	U	67438704	33333166067213505	-1562	81678			
DW0235	393738	1125495 4812U	U	57438746	33556166277213542	-1982	81663			
DW0236	393692	1125347 4767U	U	57438656	33766166494213474	-2120	81678			
DW0237	393545	112525347090T	U	51438382	33895167243213256	-1706	82290			
DW0238	393515	1125385 4741Y	U	59438330	33705167091213213	-1506	82382			
DW0239	393421	1125281 4662R	U	52438153	33650167698213073	-1503	82648			

SEVIER DESERT, UTAH GRAVITY DATA

STATION IDENT.	LAT. DEG MIN	LONG. DEG MIN	ELEV. +CODE	TER-COR. IN/OUT	NORTH UTM	EAST UTM	OBSV GRAV	THEC GRAV	FAA	CHA +1000
DW0240	393411	1125467	4715H	U	67438140	33583167378213058			-1311	82675
DW0241	393316	1125355	4636U	U	60437961	33740168259212918			-1032	83216
DW0242	393210	1125293	4615H	U	55437763	33824168160212761			-1170	83144
DW0243	393173	1125444	4677Y	U	69437699	33607167226212706			-1467	82650
DW0244	393088	1125386	4685H	U	64437540	33686167013212580			-1479	82605
DW0245	393081	1125282	4627U	U	52437524	33835167809212570			-1218	83052
DW0246	393014	1125445	4758H	U	74437405	33599166321212470			-1375	82471
DW0247	393002	1125331	4672Y	U	58437380	33762166957212453			-1530	82593
DW0248	393660	1125192	4746U	U	52438593	33986167024213427			-1741	82124
DW0249	392948	1125195	4621U	U	46437276	33955167639212373			-1249	83036
DW0250	392878	1125243	4657U	U	50437147	33883167119212270			-1327	82840
DW0251	392792	1125148	4630U	U	44436986	34016167152212142			-1420	82832
DW0252	392703	1125224	4674U	U	49436823	33904166556212011			-1470	82638
DW0253	392604	1125139	5102U	U	136436638	34022163525211864			-325	82409
DW0254	392337	1125148	4596V	U	42436144	33999166152211470			-2064	82303
DW0255	392598	1125259	4766Y	U	53436630	33850165529211855			-1476	82322
DW0256	392423	1125259	4736Y	U	45436306	33843165481211597			-1547	82345
DW0257	392336	1125372	4633C	U	64436149	33677165743211466			-2126	82136
DW0258	392423	1125483	4744H	U	54436313	33521165249211597			-1703	82170
DW0259	392510	1125371	4741Y	U	66436471	33685165543211725			-1567	82329
DW0260	392597	1125483	4800Y	U	57436635	33528165329211854			-1354	82332
DW0261	392684	1125372	4740Y	U	52436792	33691165866211983			-1511	82374
DW0262	392762	1125507	4825Y	U	60436941	33500165477212098			-1213	82391
DW0263	392792	1125354	4707Y	U	52436992	33721166366212142			-1681	82517
DW0264	392879	1125355	4699Y	U	53437153	33723166522212271			-1529	82407
DW0265	392900	1125491	4805Y	U	62437196	33529165896212302			-1190	82484
DW0267	392893	1125683	5008Y	U	85437189	33253165077212291			-86	82918
DW0268	392878	1125578	4895Y	U	73437156	33403165380212270			-824	82553
DW0269	392785	1125613	4931Y	U	67436987	33349164436212132			-1698	81550
DW0270	392719	1125699	5005Y	U	68436867	33223164773212034			-160	82837
DW0271	392646	1125571	4890Y	U	60436728	33404165052211927			-657	82525
DW0272	392597	1125707	5002C	U	67436642	33207164543211854			-239	82768
DW0273	392510	1125595	4868Y	U	60436477	33364165008211725			-906	82550
DW0274	392449	1125716	4954Y	U	67436368	33188164643211635			-372	82798
DW0275	392379	1125754	5021Y	U	75436240	33131164036211531			-244	82706
DW0276	392336	1125595	4780H	U	58436156	33357165039211468			-1445	82309
DW0277	392261	1125726	4881U	U	69436021	33166164734211357			-690	82732
DW0278	392296	1125883	57359T	U	436436091	32942158753211409			1327	82199
DW0279	392423	1125932	54859T	U	127436327	32877160930211597			962	82378
DW0280	392510	1125819	5160C	U	81436484	33043163290211725			125	82606
DW0281	392595	1125878	5145Y	U	85436643	32961163587211851			149	82886
DW0283	392684	1125819	5092Y	U	75436806	33050164121211983			58	82766
DW0284	392762	1125903	5170Y	U	80436953	32932163836212098			392	82818
DW0285	392835	1125803	5141C	U	85437085	33079164401212205			576	83127
DW0286	392897	1125940	5292Y	U	100437204	32885163632212296			1137	83186
DW0287	392956	1125745	5087Y	U	118437307	33167165035212385			523	83296
DW0288	392998	1125851	5497Y	U	182437386	33017162544212447			1829	83263

SEVIER DESERT, UTAH GRAVITY DATA

STATION IDENT.	LAT. DEG MIN	LONG. DEG MIN	ELEV. +CODE	TER-COR. IN/OUT	NORTH UTM	EAST UTM	OBSV GRAV	THEO GRAV	FAA	CHA +1000
DW0295	392160	1125824	448760T	0	66435837	3302116430	3211208	-1019	82417	
DW0296	392072	1125712	4688S	0	53435671	3317916503	3211077	-1929	82135	
DW0297	391985	1125824	4714U	0	50435513	3301416459	3210949	-1905	81977	
DW0298	391900	1125712	4622S	0	43435353	3317216502	26210823	-2302	81976	
DW0299	391899	1125488	4566V	0	39435304	3349416540	9210822	-2441	82025	
DW0300	391985	1125600	4584U	0	43435506	3333616530	0210949	-2512	81696	
DW0301	392073	1125487	4574U	0	44435666	3350216574	2211079	-2293	82150	
DW0302	392160	1125600	46791T	0	53435830	3334316551	9211208	-1657	82438	
DW0304	392249	1125259	4567S	0	51435984	3383616607	6211339	-2285	82188	
DW0304	392249	1125259	4567S	0	51435984	3383616607	6211339	-2285	82189	
DW0305	392161	1125372	4562S	0	48435825	3367016583	6211209	-2443	82005	
DW0306	392074	1125262	4558S	0	39435661	3382516593	1211080	-2257	82236	
DW0307	391986	1125374	4555U	0	39435501	3366116595	8210951	-2128	82376	
DW0308	391898	1125260	45508T	0	36435335	3382116605	7210820	-1937	82577	
DW0309	395868	1125395	4508H	0	66442683	3378317272	5216700	-1552	83139	
DW0027	395949	1125242	4511S	0	78442829	3400417308	7216820	-1282	83409	
DW0028	395863	1125241	4536S	0	80442669	3400217300	5216693	-1002	83607	
DW0030	395762	1125346	4410U	0	102442486	3384517336	4216543	-1680	83381	
DW0031	395526	1125277	5103S	0	174442047	3393716823	3216193	63	82832	
DW0034	395600	1125465	4548S	0	86442190	3367217214	6216302	-1378	83203	
DW0035	395799	1125529	4475U	0	65442560	3358917326	2216598	-1224	83577	
DW0036	395888	1125540	4413U	0	63442725	3357717379	1216730	-1412	83600	
DW0037	395951	1125468	4509U	0	63442839	3368217295	8216823	-1436	83249	
DW0038	395951	1125692	4393U	0	57442846	3336317390	7216823	-1577	83497	
DW0039	395778	1125692	4509U	0	57442526	3335617255	9216566	-1579	83100	
DW0040	395690	1125580	4512U	0	64442360	3351217261	7216436	-1359	83316	
DW0041	395596	1125692	4523U	0	64442189	3334917229	5216296	-1438	83200	
DW0042	395516	1125577	4554S	0	69442038	3350917197	1216178	-1351	83185	
DW0043	395428	1125691	4572U	0	66441878	3334417129	2216047	-1729	82742	
DW0044	395316	1125633	4667U	0	74441069	3342217052	9215881	-1434	82723	
DW0045	395316	1125803	4608U	0	69441675	3317917047	7215881	-2041	82311	
DW0046	395430	1125918	4543U	0	64441889	3302017135	4216050	-1945	82624	
DW0047	395516	1125606	4530U	0	63442045	3318317190	2216178	-1646	82966	
DW0048	395604	1125918	4509U	0	60442211	3302717193	1216309	-1945	82736	
DW0049	395690	1125806	4511U	0	58442367	3319017238	9216436	-1596	83075	
DW0050	395778	1125919	4501U	0	56442533	3303317233	2216566	-1879	82825	
DW0051	395866	1125805	4492S	0	55442692	3319917279	8216697	-1627	83107	
DW0052	395951	1125916	4483U	0	53442853	3304517295	5216823	-1683	83080	
DW0109	395235	1125882	4645R	0	72441527	3306317002	7215761	-2023	82206	
DW0110	395141	1125917	4722H	0	75441355	3301016933	3215622	-1849	82119	
DW0111	395007	1125759	4977H	0	98441102	3323016787	7215423	-706	82415	
DW0114	394821	1125972	5149Y	0	92440764	3291616626	3215147	-429	82102	
DW0115	394730	1125872	5262Y	0	101440593	3305716510	1215012	-390	81763	
DW0116	394652	1125745	5548Y	0	144440444	3323516357	6214896	891	82112	
DW0117	394598	1125924	5167Y	0	82440350	3297716519	2214816	-999	81459	
DW0125	394972	1125330	5374Y	0	123441024	3384016598	9215371	1192	82986	
DW0126	395073	1125533	4986Y	0	109441217	3355516823	2215520	-369	82735	

SEVIER DESERT, UTAH GRAVITY DATA

STATION IDENT.	LAT. DEG MIN	LONG. DEG MIN	ELEV. +CODE	TER-COR. IN/OUT	NORTH UTM	EAST UTM	GRSV GRAV	TREC GRAV	FAA	CRA +1000
DW0127	395123	1125712	4808Y	0	82441315	33301168884215595	-1465	82216		
DW0128	395228	1125724	4692H	0	73441509	33288169708215751	-1633	82239		
DW0129	395186	1125578	4803Y	0	81441427	33495169488215688	-1000	82698		
DW0131	395086	1125277	5208Y	0	106441233	33920166722215540	194	82537		
DW0132	395208	1125261	4977H	0	84441458	33948168363215721	-519	82589		
DW0133	393795	1125175	4762Y	0	51438842	34016166568213627	-2056	81685		
DW0135	394360	1125354	52470T	0	100439892	33782164582214464	-503	81701		
DW0136	394262	1125397	5126H	0	91439712	33717165285214319	-795	81613		
DW0137	394229	1125304	50561T	0	78439648	33848165259214270	-1430	81403		
DW0138	394133	1125344	4981H	0	69439472	33787165722214127	-1531	81549		
DW0139	394016	1125295	4870H	0	59439254	33853166138213954	-1987	81462		
DW0140	393954	1125427	5001Y	0	69439143	33662165390213863	-1409	81603		
DW0141	393907	1125285	4825H	0	53439052	33863166208213793	-2178	81418		
DW0142	393789	1125325	4786Y	0	55438835	33801166456213618	-2122	81609		
DW0143	393837	1125466	48379T	0	57438928	33601166170213689	-1991	81565		
DW0144	393886	1125561	5055Y	0	82439022	33467165160213762	-1031	81610		
DW0146	394054	1125457	4980H	0	67439329	33623165960214010	-1188	81495		
DW0147	394055	1125578	5277Y	0	105439335	33450163968214012	-383	81724		
DW0148	394185	1125485	51352T	0	89439573	33588165591214205	-289	82286		
DW0149	394190	1125575	51991T	0	82439584	33485165659214212	375	82725		
DW0150	394295	1125626	5385Y	0	134439780	33391164537214367	849	82616		
DW0152	394464	1125428	55951T	0	126440087	33680162953214618	990	82033		
DW0153	394382	1125709	5466Y	0	115439944	33276163872214496	616	82286		
DW0154	394273	1125749	5138H	0	87439743	33214165268214335	-714	81649		
DW0155	394186	1125691	51050T	0	80439581	33294165881214206	-283	82385		
DW0156	394165	1125779	50259T	0	71439545	33167165654214175	-1223	81706		
DW0157	394056	1125766	4970Y	0	67439343	33181165943214013	-1299	81816		
DW0158	394055	1125682	5051Y	0	73439338	33301166108214012	-376	82475		
DW0159	393936	1125791	4924H	0	65439121	33140165818213636	-1678	81592		
DW0160	393960	1125668	4980Y	0	66439162	33317166029213671	-977	82104		
DW0161	393822	1125699	4885Y	0	65438908	33267166249213666	-1447	81957		
DW0162	393794	1125848	49639T	0	74438660	33053165414213625	-1496	81647		
DW0163	393752	1125742	4932Y	0	69438779	33203165982213563	-1166	82081		
DW0164	393924	1125915	4962H	0	67439103	32963165116213818	-1819	81256		
DW0165	394054	1125916	4968C	0	65439344	32967165162214010	-2096	81024		
DW0166	394138	1125883	49731T	0	67439498	33017165450214135	-1686	81220		
DW0167	394245	1125948	5007H	0	73439698	32929165251214293	-1924	81072		
DW0168	394297	1125861	5083Y	0	78439791	33055165244214370	-1292	81649		
DW0169	394397	1125882	5146H	0	90439977	33029165085214519	-1006	81532		
DW0170	394494	1125847	5258Y	0	85440155	33083164753214663	-427	81724		
DW0217	393663	1125802	50239T	0	83438617	33114165622213431	-530	82417		
DW0019	40 39	1125805	4435U	0	53443012	33206173803216954	-1416	83516		
DW0020	40 214	1125806	4459U	0	55443336	33212174239217214	-1015	83432		
DW0022	40 37	1125580	4515U	0	64443002	33526173372216951	-1091	83532		
DW0023	40 212	1125580	4475U	0	55443325	33533173836217211	-1263	83529		
DW0025	40 38	1125355	4504U	0	66442997	33846173186216952	-1404	83301		
DW0026	40 214	1125355	4499U	0	65443322	33853173687217214	-1190	83530		

SFVIER DESERT, UTAH GRAVITY DATA

STATION IDENT.	LAT. DEG MIN	LONG. DEG MIN	ELEV. +CODE	TER-COR. IN/OUT	NORTH UTM	EAST UTM	GRSV GRAY	THEO GRAY	FAA	GRA +1000
DW0018	40 126	1125918	44570	4	52443177	330491738	37217083	-1305	83549	
DW0145	393974	1125585	5351Y	25	171439185	334371637	11213892	176	82121	
DW0216	393699	1125960	5227Y	19	90438688	328891638	46213484	-448	81829	
DW0113	394856	1125708	5595Y	33	178440821	332961640	08215199	1465	82593	
DW0118	394586	1125672	5910Y	123	62440320	333371611	84214798	122	80932	
DW0120	394679	1125473	6345Y	126	304440486	336251584	82214937	3262	62111	
DW0130	395158	1125426	5288Y	4	206441371	337101664	18215647	534	82708	
DW0123	394867	1125538	5830Y	21	235440836	335391624	26215215	2078	82450	
DW0124	394982	1125611	5334Y	18	149441051	334401657	39215386	550	82525	
DW0021	40 125	1125692	44700	0	126443166	333701738	17217081	-1199	83680	
DW0024	40 125	1125466	44940	0	60443161	336921736	06217081	-1185	83547	
DW0029	395687	1125240	4413S	0	149442344	339961728	96216431	-2008	83089	
DW0033	395438	1125444	4706H	0	86441889	336961707	80216062	-996	83039	
DW0112	394924	1125874	5410Y	52	501440952	330621644	70215300	84	82185	
DW0134	394436	1125279	5273Y	0	102440031	338921645	84214577	-369	81748	
DW0151	394313	1125505	5484Y	0	142439810	335641637	13214394	929	82367	
DW0222	393368	1125916	7208S	86	3307438075	329381500	50212995	5746	84244	
DW0224	393179	1125871	7045V	108	3073437724	329951518	85212715	5478	84630	
DW0286	392980	1125625	4963Y	0	97437348	333401655	52212420	-164	83006	
DW0282	392686	1125983	5306Y	0	102436815	328151627	91211985	739	82744	
DW0303	392250	1125483	46469T	0	53435993	335151655	00211341	-2091	82105	

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