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National Uranium Resource Evaluation

**NURE AERIAL GAMMA-RAY AND MAGNETIC
RECONNAISSANCE SURVEY OF PORTIONS
OF NEW MEXICO, ARIZONA AND TEXAS**

FINAL REPORT

VOLUME II F

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE

CARSON HELICOPTERS, INC.

GEOSCIENCE DIVISION 32-H Blooming Glen Rd. Perkasie, Penna. 18944

September 1981

PREPARED FOR U.S. DEPARTMENT OF ENERGY
Grand Junction Office, Colorado

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EL PASO QUADRANGLE

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UNDER CONTRACT NO. DE-AC13-76GJ01664
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ABSTRACT

The results of a high-sensitivity, aerial gamma-ray spectrometer and magnetometer survey of the El Paso, two degree quadrangle, New Mexico, are presented. Instrumentation and methods are described in Volume I of this final report. The work was done by Carson Helicopters Inc., and Carson Helicopters was assisted in the interpretation by International Exploration, Inc. The work was performed for the U.S. Department of Energy - National Uranium Resource Evaluation (NURE) program.

A total of 72 statistically significant eU anomalies were identified in this quadrangle. Of this number 20 were considered to be of sufficient intensity to warrant field investigations, however, many of these anomalies appear to be wholly, or in part, associated with various unconsolidated Quaternary deposits. Only three of the 20 can, with certainty be identified with bedrock; one with a Quaternary flow, one with Cambrian sandstone and one with a Precambrian granite.

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1.0 GEOLOGY AND RADIOACTIVE MINERAL DEPOSITS

1.1 GENERAL STATEMENT

The El Paso Quadrangle of southern New Mexico and westernmost Texas is located to the southeast of the Colorado Plateau and adjoins northernmost Mexico. The study area is located within the southernmost portions of the New Mexico Rocky Mountains, and includes the city of El Paso, Texas.

1.2 GEOLOGY

The El Paso Quadrangle contains Precambrian igneous to Quaternary sedimentary rocks that reflect a complex geologic history. A Precambrian complex of quartzite, sandstone, shale, granite and rhyolite is exposed in the Franklin Mountains to the north of the town of El Paso, Texas. These rocks were deformed about 1.2 to 1.4 billion years ago during the Mazatzal orogenic event. Deposited on these units are a sequence of Cambrian to Permian shallow marine dolomites, limestones, shales, and sandstones along with some intermittent Permian conglomerates that reflect adjacent high areas. These rocks crop out in the Franklin and Haeco Mountains to the north and east of El Paso, Texas, and represent the remnants of the ancestral Rocky Mountains.

The presence of Cretaceous redbeds and conglomerates near the Tres Hermanas and West Potrillo Mountains indicates the beginning of the Laramide orogenic activity that eventually folded and faulted all of the Precambrian to Mesozoic lithologic units. The Laramide compressional movements created N-S trending ridges and basins that influence the present day course of the Rio Grande River.

By late Tertiary time the Laramide orogenic movements terminated and the study area was subject to extensional and rift tectonics. These normal faults trend N-S, following the Laramide structural grain, and this episode of the deformation was also accompanied by wide-spread Tertiary volcanism. Numerous volcanic vents penetrate the West Potrillo Mountains. Thus, by the late Cenozoic the Rio Grande basins down-dropped along normal faults that bound both sides of the basin. Lastly, Quaternary sands and gravels alluviated the low lying basins covering many of the major normal faults.

1.3 STRUCTURAL GEOLOGY

The general structure of the El Paso Quadrangle is relatively simple. The N-S trending ridges are separated by alluviated valleys. Most of the mapped faults trend N-S reflecting both Laramide compressional and late Tertiary extensional deformations. This trend is present on the magnetic total field map and the most obvious magnetic linears trend N-S across the study area.

1.4 RADIOACTIVE MINERALS

There is one known uranium prospect in the El Paso Quadrangle within the United States. This prospect (High Hope group prospect) lies on the western flank of the Carrizalillo Hills in the western portion of the survey area. However, no production has been reported from this prospect. There is a mine or quarry on Guzmans Mountain, but we were not able to determine the nature of the mining operation on the basis of existing information.

2.0 DATA INTERPRETATION

2.1 GENERAL

The El Paso Quadrangle is dominated by N-S trending ridges and alluviated valleys that are predominantly the result of block faulting along N-S trending normal faults. There is almost 3000 ft of local relief over the Franklin Mountains, and over 1000 ft of relief typify the N-S trending topographic elements.

The major lithologic units and the Rio Grande River follow the dominant structural trend, and the washes trend E-W off of the ridges into the valleys.

2.2 COMMENTARY ON RADIOMETRIC PROFILES

Anomalies 40 and 41 have very high potassium values, as high as 6.6 sigma. This could be due to the presence of evaporites, or outwash from the surrounding volcanic mountains in the bolsons located in the valley. Evaporites high in potassium such as potash usually yield high K^{40} anomalies.

Anomalies 70, 63, and 64 are located in the city of El Paso, which makes these anomalies somewhat suspect.

There are extremely high thorium counts over the Tres Hermanas Mountains in the western section of the quadrangle. These values are as high as 22 PPM and are attributed to the stocks, laccoliths, dikes, sills and other intrusions found in the area. Another factor making these values high would be bare rock exposed on the top of the mountains and low flight altitude over the mountains.

2.3 URANIUM HISTOGRAMS

The high eU and eTh occurrences are found in unit P_{eg} where the eU mean value is 3.9 ppm and the eTh is 17.4 ppm. This information was tallied from 64 records which are statistically significant. Other potentially good units are PCL, COB, and PCR. However, due to the relatively small size of the El Paso Quadrangle, these units do not occur often enough to yield a statistically significant number of records.

2.4 URANIUM ANOMALY MAPS

Selected and Preferred Anomalies

A total of 72 statistically significant eU anomalies were found within the El Paso Quadrangle (Table 3). Of the 72 significant eU anomalies, 20 have been selected as preferred anomalies, as they exhibit relative enrichment of eU over eTh and K, and have uranium ppm greater than 3 standard deviations (sigma) relative to their individual rock units. These preferred anomalies are often associated with more than one lithologic type.

Preferred Anomalies

<u>Symbol</u>	<u>Lithologic Type</u>	<u>No. of times the rock type is associated with a preferred anomaly</u>
Qb	Lacustrine and Fluvial Deposits	11
Qs	Wind Blown Sand	5
Qf	Colluvium Sand and Gravel	5
Qal	Alluvium Sand and Gravel	3
Qu	Undivided Sand and Gravel	3
Qba	Volcanic Flows	1
Cob	Sandstone	1
peg	Granite	1

These preferred anomalies appear to have a potential of indicating true uranium enrichment, and may warrant additional investigation. The selection has taken into account the statistical adequacy of the sampling.

Lithologic Histograms

Several of the lithologic types exhibit non-gaussian uranium histograms. For example, the undivided quaternary deposits (Qu) histogram is skewed toward high values, and terminates at about 6 ppm uranium. This unit has a mean of 2.9 ppm uranium. The recent colluvium material (Qf) histogram is also skewed toward high values and has a mean of 2.8 ppm uranium, while the Tertiary conglomerate (Qtg) histogram exhibits a similar pattern, averaging 2.3 ppm uranium. Furthermore, the PreCambrian granite (peg) his-

togram is skewed toward the right and averages 3.9 ppm uranium, making this unit the most responsive rock type within the study area.

Anomalies 1, 8, 9, 10, 24, 25, 26, and 66

These anomalies within recent sedimentary deposits occur in a high eU zone along the eastern flank of the Franklin Mountains. A strong N-S trending magnetic linear exists beneath this area and these anomalies may be related to this magnetic structure. Anomalies 9, 10, and 24 occur in colluvium, lacustrine, fluvial and wind blown sands, and have a response of 3.9, 4.2, and 3.9 sigma respectively.

Anomalies 7, 18, 19, and 20

These anomalies flank the western side of the Franklin Mountains along the Rio Grande flood plain. These anomalies, which occur primarily within Quaternary alluvium, undifferentiated deposits, and the Hueco limestone, do not correlate with strong magnetic linears. However, outcrops of PreCambrian granite in the Franklin Mountains indicate that this mountainous region was uplifted relative to the surrounding low lying areas.

Anomalies 40 and 41

Anomalies 40 and 41, occurring to the west of the Carrizalillo Hills, are associated with lacustrine and fluvial deposits which lie near Tertiary volcanic rocks. Weak N-S trending magnetic linears exist beneath this region, and the area is characterized by very high K values. There is a uranium prospect (High Hope group prospect) in this area. However, no production has been reported from this prospect. Anomalies 40 and 41 are apparently related to this prospect.

Anomalies 43 and 46

These anomalies lie along a moderately strong N-S trending magnetic linear that occurs south of the Tertiary volcanic rocks of the Tres Hermanas Mountains. The anomalies are within lacustrine and fluvial deposits.

Anomalies 56 and 57

These anomalies, which are associated with lacustrine and fluvial deposits, occupy a low lying area near Coyote Hill. A number of N-S trending and short wavelength magnetic linears exist beneath this area, and this region appears to have been subjected to block faulting.

Anomaly 59

This anomaly, to the south of Guzmans Lookout Mountain, is in a volcanic vent field. Many N-S trending magnetic linears typify this area.

Anomaly 62

Anomaly 62 occurs on Comanche Peak, adjacent to the city of El Paso, Texas. In this area, N-S trending outcrops of Bliss sandstone and PreCambrian granites parallel the strike of the Franklin Mountains. A N-E trending fault is associated with this anomaly. Anomaly 62 has a maximum response of 4.1 sigma.

+
 LEGEND
 □ STATISTICALLY SIGNIFICANT ANOMALIES
 ■ PREFERRED ANOMALIES

SCALE 1:500 000

FIGURE 1 EL PASO QUADRANGLE

TABLE 1

DESCRIPTION OF MAP UNITSSEDIMENTARY

Qu	UNDIVIDED QUATERNARY DEPOSITS Sand, gravel, clay, caliche, and terrace deposits.
Qs	WINDBLOWN SAND (QUATERNARY)
Qal	ALLUVIUM (QUATERNARY) Sand, gravel, and terrace deposits.
Qb	LACUSTRINE AND FLUVIAL DEPOSITS (QUATERNARY) Clay, Silt, sand and gypsum in boisons.
Qf	COLLUVIUM AND FANS (QUATERNARY) Sand and gravel.
Qao	OLDER ALLUVIUM (TERTIARY) Sand, gravel, terrace deposits, and caliche.
Qtg	GILA CONGLOMERATE (TERTIARY) Conglomerate.
Qtb	BOLSON DEPOSITS (TERTIARY) Clay, Sand, and gravel.
Ku	UNDIVIDED CRETACEOUS ROCKS Redbeds, sandstone, limestone, and conglomerate.
Pal	UNDIVIDED PALEZOIC ROCKS Dolomite, limestone, sandstone, shale, and marl.
Ph	HUECO LIMESTONE (PERMIAN) Limestone, dolomite, sandstone, shale, mudstone and conglomerate.
Pm	MAGDALENA FORMATION (PENNSYLVANIAN) Limestone, shale, and marl.
DM	UNDIVIDED DEVONIAN AND MISSISSIPPIAN ROCKS Limestone, shale, and chert.
SOE	UNDIVIDED SILURIAN ORDOVICIAN AND CAMBRIAN ROCKS Dolomite, limestone, and sandstone.
Sf	FUSSELMAN DOLOMITE (SILURIAN) Dolomite, dolomitic limestone and limestone

Om	MONTOYA FORMATION (ORDOVICIAN) Dolomite, limestone and sandstone.
Oe	EL PASO FORMATION (ORDOVICIAN) Limestone, dolomite and sandstone.
EOB	BLISS SANDSTONE (ORDOVICIAN AND CAMBRIAN) Sandstone.
pEu	UNDIVIDED PRECAMBRIAN ROCKS Basalt boulders, mudstone, limestone, hornfels, conglomerate, dolomite, diabase, rhyolite, sandstone, quartzite, siltstone, and shale.
pEl	LANORIA QUARTZITE (PRECAMBRIAN) Sandstone, quartzite, siltstone, and shale.

IGNEOUS

Qv	Undivided volcanic rocks, ash cinders, lapilli, and breccia (QUATERNARY)
Qba	Basalt flows (QUATERNARY)
QTba	Basalt and basaltic andesite flows. (QUATERNARY)
Qts	UNDIVIDED SANTA FE GROUP (QUATERNARY)
Ti	INTRUSIVE IGNEOUS ROCKS (TERTIARY) Stocks laccoliths, silts, and dikes.
Tv	EXTRUSIVE ROCKS (TERTIARY)
Tvu	Quartz latite, latite and andesite.
Tvl	Quartz latite, rhyolite, and andesite.
TKi	INTRUSIVE ROCKS (TERTIARY) Stocks, laccoliths, dikes, silts, and other intrusions.
pEg	Granite (PRECAMBRIAN)
per	Rhyolite. (PRECAMBRIAN)

TABLE 2

COMPARISON OF GEOLOGIC MAP SYMBOLS WITH COMPUTER DESIGNATIONS

Computer Code	MAP UNIT CODE	DATA CODE
101	Qu	QU
102	Qs	QS
103	Qal	QAL
104	Qb	QB
105	Qf	QF
106	Qao	QAO
107	Qv	QV
108	Qba	QBA
109	QTg	QTG
110	QTb	QTB
111	QTba	QTBA
112	QTS	QTS
113	Ti	TI
114	Tv	TV
115	Tvu	TVU
116	Tvl	TVL
117	Tki	TKI
201	Ku	KU
301	Pal	PAL
302	Ph	PH
303	Pm	PM
304	Dm	DM
305	SOe	SOE
306	Sf	SF
307	Om	OM
308	Oe	OE
309	EOb	COB
401	pEu	PCU
402	pEl	PCL
403	pEg	PCG
404	pEr	PCR

2.5 CONCLUSIONS

Many of the preferred anomalies appear to be related to the N-S trending magnetic linears that exist in the study area. The majority of these anomalies occur in low lying areas adjacent to what appears to be uplifted fault blocks.

2.6 SUGGESTIONS FOR FURTHER WORK

Further work can be considered in three general categories:

- (a) Airborne follow-up
- (b) Ground studies
- (c) Sub-surface studies

An airborne follow-up could be used to more accurately define certain areas in question. The areas in question in this quadrangle are along the Tres Hermanas Mountains, the Carrizalillo Hills, and the Franklin Mountains in the northern half of the quadrangle. This detailed survey could be used as a base for a ground reconnaissance and sub-surface study. A program to evaluate the radon gas content of both groundwater and soil would be of great value.

TABLE 3 - EQUIVALENT URANIUM ANOMALIES - EL PASO NH 13-1

		Number of Points																
Anom.	F.L.		eU			eTh			K			eU/eTh			eU/K			
No.	No.	Geo. Fm.	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	Sigma
1*	59	Qs,Qb,Qf	6	1	2	-	-	2	1	1	-	1	-	-	3	-	1	
2	59	Qb	4	-	-	-	-	-	-	-	-	2	2	-	3	1	-	
3	59	Qb	5	-	-	-	-	-	-	-	-	2	1	1	1	4	-	
4	59	Qs,Qb	4	-	-	-	-	-	-	-	-	-	1	-	3	1	-	
5	200	Qb	2	1	-	1	-	-	-	-	-	-	-	-	3	-	-	
6	206	QTg	2	1	-	-	-	-	-	-	-	3	-	-	1	2	-	
7*	60	Qal	1	1	1	-	-	-	-	-	-	3	-	-	2	-	-	
8*	60	QU,Qf	4	5	1	1	7	1	6	2	-	-	-	-	-	-	-	
9*	60	Qf,Qb	4	8	1	1	2	-	3	-	-	3	1	-	6	4	-	
10*	60	Qb,Qs	6	2	2	2	2	1	3	3	-	1	-	1	2	3	1	
11	60	Qs	6	4	-	3	1	-	6	-	-	3	-	-	6	1	-	
12	60	Qb,Qs	3	1	-	1	-	-	1	-	-	1	1	-	2	-	-	
13	60	Qs	2	1	-	1	-	-	-	-	-	1	-	1	2	1	-	
14	200	Qb	3	2	-	-	-	-	-	-	-	-	-	-	4	-	-	
15	200	Qb	4	1	-	4	-	-	-	-	-	-	-	-	2	-	-	
16	201	TKi	2	1	-	-	-	-	1	-	-	-	-	-	-	-	-	
17	206	QTg	2	2	-	-	-	-	-	-	-	1	2	-	1	2	1	
18*	61	Qal	7	5	1	8	2	-	-	-	-	2	-	-	6	-	-	
19*	61	Qal,Qs,QU	2	3	3	-	-	4	1	1	-	2	-	-	3	1	2	
20*	61	QU,Ph	12	6	2	10	1	3	11	-	3	-	-	-	-	-	-	
21	61	QU	3	4	-	4	3	-	4	3	-	-	-	-	-	-	-	
22	207	pCr	3	1	-	1	1	-	1	1	-	1	-	-	-	-	-	
23	207		-	2	-	1	-	1	-	-	2	-	-	-	-	-	-	
24*	61	Qf	4	6	5	2	9	4	6	9	-	-	-	-	-	-	-	
25*	61	Qb	15	6	2	-	-	-	-	-	-	6	12	5	3	7	13	
26*	61	Qs,Qb	10	14	7	9	-	-	9	2	-	9	9	3	9	12	3	
27	62	Qb	4	3	-	5	-	-	1	-	-	-	-	-	-	-	-	
28	62	Qb	4	-	-	2	-	-	-	-	-	-	-	-	-	-	-	
29	62	Qb	7	1	-	3	-	-	2	-	-	-	-	-	1	-	-	
30	62	Qb,Qba	1	3	-	1	1	-	-	-	-	2	-	-	-	1	1	

* PREFERRED ANOMALIES

TABLE 3 EQUIVALENT URANIUM ANOMALIES - Continued

			Number of Points															
Anom. No.	F.L. No.	Geo. Fm.	1	2	eU 3	1	eTh 2	3	1	K 2	3	1	eU/eTh 2	3	1	eU/K 2	3	Sigma
31	62	Qb	4	-	-	4	-	-	2	-	-	-	-	-	-	-	-	
32	62	Qb	4	-	-	3	1	-	3	-	-	-	-	-	-	-	-	
33	62	Tvu	5	1	-	1	-	-	1	-	-	-	-	-	-	-	-	
34	201	Qb	4	1	-	-	-	-	2	-	-	-	-	-	1	-	-	
35	62	Qba	5	-	-	-	2	-	5	-	-	2	-	-	-	-	-	
36	203	Qba	4	-	-	-	-	-	3	1	-	2	1	-	-	-	-	
37	62	QBA	2	1	-	-	-	-	3	-	-	-	-	-	-	1	-	
38	62	Qal	-	2	-	-	-	-	-	-	-	-	-	2	-	2	-	
39	62	Ph	4	-	-	-	-	-	-	-	-	2	-	-	1	-	-	
40*	63	Qb	2	2	-	2	2	-	-	-	4	-	-	-	-	-	-	
41*	63	Qb	2	4	1	3	4	-	-	-	7	-	-	-	-	-	-	
42	200	Qb	5	5	-	3	7	-	-	-	10	-	-	-	-	-	-	
43*	63	Qb	2	-	1	3	-	-	-	-	-	-	-	-	-	1	-	
44	63	Qb	3	2	-	5	-	-	-	-	-	-	-	-	1	-	-	
45	63	Qb	3	1	-	4	-	-	-	-	-	-	-	-	-	-	-	
46*	63	QTg,Qb	11	9	1	17	4	-	14	1	-	-	-	-	2	-	-	
	201																	
47	201	Tvu,Qb	1	2	-	1	2	-	1	2	-	-	-	-	-	-	-	
48	201	Qb	4	1	-	5	-	-	3	-	-	-	-	-	-	-	-	
49	63	Qb	2	1	-	2	1	-	3	-	-	-	-	-	-	-	-	
50	63	Qb	2	3	-	1	4	-	4	1	-	-	-	-	-	-	-	
51	63	Qb	9	2	-	2	9	-	10	1	-	-	-	-	-	-	-	
52	63	Qb	-	2	-	2	-	-	-	-	-	-	-	-	2	-	-	
53	63	Qba,Qb	2	1	-	1	-	1	1	1	-	-	-	-	-	-	-	
54	63	Qb	3	1	-	2	-	-	2	-	-	-	-	-	1	-	-	
55	63	Qb	5	1	-	-	-	-	-	-	-	-	-	-	1	-	-	
	202																	

* PREFERRED ANOMALIES

TABLE 3 EQUIVALENT URANIUM ANOMALIES - Continued

			<u>Number of Points</u>															
Anom.	F.L.		eJ			eTh			K			eU/eTh			eU/K			
No.	No.	Geo. Fm.	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	<u>Sigma</u>
56*	63	Qb	3	1	1	-	-	-	-	-	-	1	-	-	3	1	-	
57	63	Qb	3	-	1	-	-	-	-	-	-	-	-	-	-	1	-	
58	63	Qba, Qb	-	2	-	-	-	-	1	-	-	-	2	-	-	-	-	
59*	63	Qba	4	1	1	-	-	-	3	-	-	1	2	1	2	-	-	
60	63	Qba	4	-	-	-	-	-	-	-	-	3	1	-	1	-	-	
61	63	Qal	4	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
62*	63	COB, pCg, Qf	5	-	3	-	-	3	-	1	2	-	-	-	2	-	-	
63	63	Qao	4	-	-	-	-	-	-	-	-	4	-	-	4	-	-	
64	63	Qao, QTb	3	1	-	1	-	-	-	-	-	1	1	-	3	-	1	
65	63	Qb, Qs	-	2	-	1	-	-	-	-	-	2	-	-	-	1	1	
66*	63	Qs	3	-	1	-	-	-	-	-	-	1	2	-	2	1	1	
67	63	Qs	2	1	-	-	-	-	-	-	-	1	-	1	1	-	1	
68	63	Qs	3	1	-	-	-	-	-	-	-	3	-	-	2	1	-	
69	63	Qf, Pm	3	1	-	-	-	-	-	-	-	1	-	1	2	1	1	
70	207	Qal	-	1	-	-	-	-	-	-	-	1	-	1	-	1	1	
71	71	Qal	3	1	-	2	-	-	-	-	-	-	-	-	-	-	-	
72	71	Qal	7	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
	209																	

* PREFERRED ANOMALIES

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3.2 MAPS

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NURE AERIAL GAMMA-RAY AND MAGNETIC
RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH13-1 QUADRANGLE
FLIGHT LINE BASE MAP
1979
BY: CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN ROAD PERKASIE, PENNA. 18944
PREPARED FOR
DEPARTMENT OF ENERGY

EXPLANATION

INDIVIDUAL SAMPLES ARE PLOTTED AT 20 SAMPLE INTERVALS AND IDENTIFIED BY RECORD NUMBER AT INTERVALS OF 500 SAMPLES.

AVERAGED SAMPLES ARE ANNOTATED IF THE DEVIATION OF THE AVERAGED SAMPLE, FROM THE MEAN OF ITS CORRESPONDING ROCK UNIT, IS GREATER THAN ± 1 STANDARD DEVIATION. THE DEVIATION INTERVALS ANNOTATED ARE 1 TO 2, 2 TO 3, AND 3 OR GREATER.

TRAVERSE LINE DEVIATIONS ARE INDICATED BY SOLID CIRCLES AND TIE LINES BY SQUARES. NORTH OR EAST ARE POSITIVE AND SOUTH OR WEST ARE NEGATIVE.

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY

TEXAS-NEW MEXICO-EL PASO NH13-1 QUADRANGLE

ANOMALY MAP - URANIUM

1979

BY: CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN ROAD PERKASIE, PENNA. 18944

PREPARED FOR
DEPARTMENT OF ENERGY

EXPLANATION

INDIVIDUAL SAMPLES ARE PLOTTED AT 20 SAMPLE INTERVALS AND IDENTIFIED BY RECORD NUMBER AT INTERVALS OF 500 SAMPLES.

AVERAGED SAMPLES ARE ANNOTATED IF THE DEVIATION OF THE AVERAGED SAMPLE, FROM THE MEAN OF ITS CORRESPONDING ROCK UNIT, IS GREATER THAN ± 1 STANDARD DEVIATION. THE DEVIATION INTERVALS ANNOTATED ARE 1 TO 2, 2 TO 3, AND 3 OR GREATER.

TRAVERSE LINE DEVIATIONS ARE INDICATED BY SOLID CIRCLES AND TIE LINES BY SQUARES. NORTH OR EAST ARE POSITIVE AND SOUTH OR WEST ARE NEGATIVE.

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE

ANOMALY MAP - THORIUM

1979

BY: CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN ROAD PERKASIE, PENNA. 18944

PREPARED FOR
DEPARTMENT OF ENERGY

EXPLANATION

INDIVIDUAL SAMPLES ARE PLOTTED AT 20 SAMPLE INTERVALS AND IDENTIFIED BY RECORD NUMBER AT INTERVALS OF 500 SAMPLES.

AVERAGED SAMPLES ARE ANNOTATED IF THE DEVIATION OF THE AVERAGED SAMPLE, FROM THE MEAN OF ITS CORRESPONDING ROCK UNIT, IS GREATER THAN ± 1 STANDARD DEVIATION. THE DEVIATION INTERVALS ANNOTATED ARE 1 TO 2, 2 TO 3, AND 3 OR GREATER.

TRAVERSE LINE DEVIATIONS ARE INDICATED BY SOLID CIRCLES AND THE LINES BY SQUARES. NORTH OR EAST ARE POSITIVE AND SOUTH OR WEST ARE NEGATIVE.

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE

ANOMALY MAP - POTASSIUM

1979

BY: CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN ROAD PERKASIE, PENNA. 18944

PREPARED FOR
DEPARTMENT OF ENERGY

EXPLANATION

INDIVIDUAL SAMPLES ARE PLOTTED AT 20 SAMPLE INTERVALS AND IDENTIFIED BY RECORD NUMBER AT INTERVALS OF 500 SAMPLES.

AVERAGED SAMPLES ARE ANNOTATED IF THE DEVIATION OF THE AVERAGED SAMPLE, FROM THE MEAN OF ITS CORRESPONDING ROCK UNIT, IS GREATER THAN ± 1 STANDARD DEVIATION. THE DEVIATION INTERVALS ANNOTATED ARE 1 TO 2, 2 TO 3, AND 3 OR GREATER.

TRAVERSE LINE DEVIATIONS ARE INDICATED BY SOLID CIRCLES AND TIE LINES BY SQUARES. NORTH OR EAST ARE POSITIVE AND SOUTH OR WEST ARE NEGATIVE.

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE

ANOMALY MAP-URANIUM/THORIUM

1979

BY: CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN ROAD PERKASIE, PENNA. 18944

PREPARED FOR
DEPARTMENT OF ENERGY

EXPLANATION
 INDIVIDUAL SAMPLES ARE PLOTTED AT 20 SAMPLE INTERVALS AND IDENTIFIED BY RECORD NUMBER AT INTERVALS OF 500 SAMPLES.
 AVERAGED SAMPLES ARE ANNOTATED IF THE DEVIATION OF THE AVERAGED SAMPLE, FROM THE MEAN OF ITS CORRESPONDING ROCK UNIT, IS GREATER THAN ± 1 STANDARD DEVIATION. THE DEVIATION INTERVALS ANNOTATED ARE 1 TO 2, 2 TO 3, AND 3 OR GREATER.
 TRAVERSE LINE DEVIATIONS ARE INDICATED BY SOLID CIRCLES AND TIE LINES BY SQUARES. NORTH OR EAST ARE POSITIVE AND SOUTH OR WEST ARE NEGATIVE.

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
ANOMALY MAP - URANIUM/POTASSIUM
 1979
 BY: CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN ROAD PERKASIE, PENNA. 18944
 PREPARED FOR
 DEPARTMENT OF ENERGY

EXPLANATION

INDIVIDUAL SAMPLES ARE PLOTTED AT 20 SAMPLE INTERVALS AND IDENTIFIED BY RECORD NUMBER AT INTERVALS OF 500 SAMPLES.

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TRAVERSE LINE DEVIATIONS ARE INDICATED BY SOLID CIRCLES AND TIE LINES BY SQUARES. NORTH OR EAST ARE POSITIVE AND SOUTH OR WEST ARE NEGATIVE.

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE ANOMALY MAP - THORIUM/POTASSIUM
1979
BY: CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN ROAD PERKASIE, PENNA. 18944
PREPARED FOR DEPARTMENT OF ENERGY

CONTOUR INTERVAL 50 GAMMAS

SCALE 1:500,000

EL PASO NH 13-1
MAGNETIC

CONTOUR INTERVAL 0.50 PPM

SCALE 1:500,000

EL PASO NH 13-1
URANIUM

CONTOUR INTERVAL 1.0 PPM

SCALE 1:500,000

EL PASO NH 13-1
THORIUM

CONTOUR INTERVAL 25%

SCALE 1:500,000

EL PASO NH 13-1
POTASSIUM

CONTOUR INTERVAL 0.10 UNITS

SCALE 1:500,000

EL PASO NH 13-1
URANIUM/THORIUM

CONTOUR INTERVAL 0.50 UNITS

SCALE 1:500,000

EL PASO NH 13-1
URANIUM/POTASSIUM

CONTOUR INTERVAL 0.50 UNITS

SCALE 1:500,000

EL PASO NH 13-1
THORIUM/POTASSIUM

SCALE 1:500,000

↑ FLOODED SAMPLE VALUES OF
N.U.T. INDICATES DATA FAILED
STATISTICAL ADEQUACY TEST

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979
BY CARSON HELICOPTERS, INC. 32-M BLOOMING OLEN RD. PERKASIE, PA 18944 PREPARED FOR DEPARTMENT OF ENERGY

P 60

↑ FLAGGED SAMPLE VALUES OF
N.U.T. INDICATED DATA FAILED
STATISTICAL ADEQUACY TEST

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979
BY CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN RD. PERKASIE, PA 18944
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STATISTICAL ADEQUACY TEST

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979
BY CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN RD. PERKASIE, PA 18944
PREPARED FOR DEPARTMENT OF ENERGY

SCALE 1:500,000

↑ FLOODED SAMPLE VALUES OF
R.U.T. INDICATES DATA FAILED
STATISTICAL ADEQUACY TEST

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979
BY CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN RD. PERKASIE, PA 18944
PREPARED FOR DEPARTMENT OF ENERGY

TL/K
4.00/DIV

BI/TL
0.20/DIV

BI/K
2.00/DIV

K
0.4 PERCENT/DIV

TL
1.0 PPM/DIV

BI
1.0 PPM/DIV

BI COR
1.0 PPM/DIV

TC
400-0.5/DIV

ALT
100 FT/DIV

MAG
100 GAMMAS/DIV

P 63

SCALE 1:500,000

↑ FLAGGED SAMPLE VALUES OF
H.V.T. INDICATES DATA FAILED
STATISTICAL ACCURACY TEST

NURE AERIAL GAMMA-RAY AND MAGNETIC
RECONNAISSANCE SURVEY

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES
1979

BY CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN RD. PERKASIE, PA 18944

PREPARED FOR
DEPARTMENT OF ENERGY

P 64

↑ FLOODED SAMPLE VALUES OF
N.U.T INDICATES DATA FAILED
STATISTICAL ADEQUACY TEST

SCALE 1:500,000

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979
BY CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN RD. PERKASIE, PA 18944 PREPARED FOR DEPARTMENT OF ENERGY

↑ FLOODED SAMPLE VALUES OF
H.U.T. INDICATES DATA FAILED
STATISTICAL ADEQUACY TEST

SCALE 1:500,000

NURE AERIAL GAMMA-RAY AND MAGNETIC
RECONNAISSANCE SURVEY

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES

1979

BY CARSON HELICOPTERS, INC. 32-M BLOOMING GLEN RD. PERKASIE, PA 18944

PREPARED FOR
DEPARTMENT OF ENERGY

↑ FLOODED SAMPLE VALUES OF
N.U.T. INDICATES DATA FAILED
STATISTICAL ADEQUACY TEST

SCALE 1:500,000

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979
BY CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN RD. PERKASIE, PA 18944
PREPARED FOR DEPARTMENT OF ENERGY

* FLAGGED SAMPLE VALUES BY
N.U.T. INDICATES DATA FAILED
STATISTICAL Adequacy TEST

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY	
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979	
BY CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN RD. PERKASIE, PA 18944 PREPARED FOR DEPARTMENT OF ENERGY

↑ FLAGGED SAMPLE VALUES OF
N.U.T. INDICATES DATA FAILED
STATISTICAL ADEQUACY TEST

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979
BY CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN RD. PERKASIE, PA 18944 PREPARED FOR DEPARTMENT OF ENERGY

↑ FLOODED SAMPLE VALUES OF
N.U.T INDICATES DATA FAILED
STATISTICAL ADEQUACY TEST

<p>NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY</p> <p>TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979</p> <p>BY CARSON HELICOPTERS, INC. 32-M BLOOMING GLEN RD. PERKASIE, PA 18944</p> <p>PREPARED FOR DEPARTMENT OF ENERGY</p>

P 70

↑ FLOODED SAMPLE VALUES OF
N.U.T. INDICATES DATA FAILED
STATISTICAL ADEQUACY TEST

SCALE 1:500,000

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979
BY CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN RD. PERKASIE, PA 18944
PREPARED FOR DEPARTMENT OF ENERGY

↑ FLAGGED SAMPLE VALUES OF
N.U.T INDICATED DATA FAILED
STATISTICAL ADEQUACY TEST

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979
BY CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN RD. PERKASIE, PA 18944 PREPARED FOR DEPARTMENT OF ENERGY

↑ FLAGGED SAMPLE VALUES OF
K.U.T INDICATES DATA FAILED
STATISTICAL ADEQUACY TEST

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979
BY CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN RD. PERKASIE, PA 18944 PREPARED FOR DEPARTMENT OF ENERGY

↑ FLOODED SAMPLE VALUES OF
N.U.T. INDICATES DATA FAILED
STATISTICAL ADEQUACY TEST

SCALE 1:500,000

NURE AERIAL GAMMA-RAY AND MAGNETIC
RECONNAISSANCE SURVEY

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES

1979

BY CARSON HELICOPTERS, INC. 32-H BLOOMING OLEN RD. PERKASIE, PA 18944

PREPARED FOR
DEPARTMENT OF ENERGY

↑ FLAGGED SAMPLE VALUES OF
N.U.T INDICATED DATA FAILED
STATISTICAL ADEQUACY TEST

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979
BY CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN RD. PERKASIE, PA 18944 PREPARED FOR DEPARTMENT OF ENERGY

↑ FLAGGED SAMPLE VALUES OF
N.D. INDICATES DATA FAILED
STATISTICAL ADEQUACY TEST

NIIRF AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979
BY CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN RD. PERKASIE, PA 18944 PREPARED FOR DEPARTMENT OF ENERGY

⊕ FLAGGED SAMPLE VALUES OF
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STATISTICAL ADEQUACY TEST

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH-13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979
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N.O.T INDICATES DATA FAILED
STATISTICAL ADEQUACY TEST

SCALE 1:500,000

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979
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↑ FLAGGED SAMPLE VALUES OF
N.U.T. INDICATES DATA FAILED
STATISTICAL ADEQUACY TEST

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY	
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979	
BY CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN RD. PERKASIE, PA 18944	
PREPARED FOR DEPARTMENT OF ENERGY

↑ FLAGGED SAMPLE VALUES OF
N.U.T. INDICATES DATA FAILED
STATISTICAL ADEQUACY TEST

SCALE 1:500,000

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979
BY CARSON HELICOPTERS, INC. 32-M BLOOMING GLEN RD. PERKASIE, PA 18944 PREPARED FOR DEPARTMENT OF ENERGY

TL 209

SCALE 1:500,000

↑ FLAGGED SAMPLE VALUES OF
N.U.T INDICATED DATA FAILED
STATISTICAL ADEQUACY TEST

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE RADIOMETRIC MULTIPLE PARAMETER STACKED PROFILES 1979
BY CARSON HELICOPTERS, INC. 32-M BLOOMING GLEN RD. PERKASIE, PA 18944 PREPARED FOR DEPARTMENT OF ENERGY

MAG
40 GAMMAS/DIV

56280
56080
55880
55680
55480
55280
55080
54880
54680
54480

DIURNAL
40 GAMMAS/DIV

50120

ALT
100 FT/DIV

500
0

TEMP
5.00 DEGREES/DIV

0

BAR ALT
10.00 MM/DIV

650
600

P 59

56360 56200 56000 55800 55600 55400 55200 55000 54800 54600 54400 54200 54000 53800 53600 53400 53200 53000 33000 33200 33400 33600 33800 34000 34220

SCALE 1:500,000

↑ EXCEEDS ALTITUDE SPECIFICATIONS

NURE AERIAL GAMMA-RAY AND MAGNETIC
RECONNAISSANCE SURVEY

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
MAGNETIC AND ANCILLARY STACKED PROFILE DATA
1979

BY CARSON HELICOPTERS, INC. 32-H BLOOMING OLEN RD. PERKASIE, PA 18944

PREPARED FOR
DEPARTMENT OF ENERGY

MNC.
40 GRAMS/DIV

DIURNAL
40 GRAMS/DIV

ALT
100 FT/DIV

TEMP
5.00 DEGREES/DIV

BAR ALT
10.00 MM/DIV

P 60

SCALE 1:500,000

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY	
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE	
MAGNETIC AND ANCILLARY STACKED PROFILE DATA	
1979	
BY CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN RD. PERKASIE, PA 18944	
PREPARED FOR DEPARTMENT OF ENERGY	

↑ EXCEEDS ALTITUDE SPECIFICATIONS

P 61

↑ EXCEEDS ALTITUDE SPECIFICATIONS

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE MAGNETIC AND ANCILLARY STACKED PROFILE DATA 1979
BY CARSON HELICOPTERS, INC. 32-H BLOOMING OLEN RD. PERKASIE, PA 18944
PREPARED FOR DEPARTMENT OF ENERGY

MAG
40 GAMMAS/DIV

DIURNAL
10 GAMMAS/DIV

ALT
100 FT/DIV

TEMP
5.00 DEGREES/DIV

BAR ALT
10.00 MMHG/DIV

P 62

SCALE 1:500,000

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE MAGNETIC AND ANCILLARY STACKED PROFILE DATA 1979
BY CARSON HELICOPTERS, INC. 32-M BLOOMING GLEN RD. PERKASIE, PA 18944
PREPARED FOR DEPARTMENT OF ENERGY

MAG
40 GAMMAS/DIV

DIURNAL
40 GAMMAS/DIV

ALT
100 FT/DIV

TEMP
9.00 DEGREES/DIV

BAR ALT
10.00 MMHG/DIV

P 63

SCALE 1:500,000

↑ EXCEEDS ALTITUDE SPECIFICATIONS

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE MAGNETIC AND ANCILLARY STACKED PROFILE DATA 1979
BY CARSON HELICOPTERS, INC. 32-M BLOOMING OLEN RD. PERKASIE, PA 18944 PREPARED FOR DEPARTMENT OF ENERGY

SCALE 1:500,000

↑ EXCEEDS ALTITUDE SPECIFICATIONS

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE MAGNETIC AND ANCILLARY STACKED PROFILE DATA 1979
BY CARSON HELICOPTERS, INC. 32-M BLOOMING GLEN RD. PERKASIE, PA 18944
PREPARED FOR DEPARTMENT OF ENERGY

↑ EXCEEDS ALTITUDE SPECIFICATIONS

SCALE 1:500,000

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE MAGNETIC AND ANCILLARY STACKED PROFILE DATA
1979
BY CARSON HELICOPTERS, INC. 32-H BLOOMING OLEN RD. PERKASIE, PA 18944
PREPARED FOR DEPARTMENT OF ENERGY

P 66

↑ EXCEEDS ALTITUDE SPECIFICATIONS

NURE AERIAL GAMMA-RAY AND MAGNETIC RECONNAISSANCE SURVEY
TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE MAGNETIC AND ANCILLARY STACKED PROFILE DATA 1979
BY CARSON HELICOPTERS, INC. 32-H BLOOMING GLEN RD. PERKASIE, PA 18944 PREPARED FOR DEPARTMENT OF ENERGY

MAG
40 GAMMAS/DIV

DIURNAL
40 GAMMAS/DIV

ALT
100 FT/DIV

TEMP
9.00 DEGREES/DIV

BAR ALT
10.00 MM/DIV

P 67

↑ REFERENCE ALTITUDE SPECIFICATIONS

SCALE 1:500,000

NURC AERIAL GAMMA-RAY AND MAGNETIC
RECONNAISSANCE SURVEY

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
MAGNETIC AND ANCILLARY STACKED PROFILE DATA

1979

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SCALE 1:500,000

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MAG
40 GAMMAS/DIV

DIURNAL
40 GAMMAS/DIV

ALT
100 FT/DIV

TEMP
5.00 DEGREES/DIV

BAR ALT
10.00 MMHG/DIV

P 69

44996 45200 45400 45533

✦ REFERS TO FITTING SPECIFICATIONS

SCALE 1:500,000

NURE AERIAL GAMMA-RAY AND MAGNETIC
RECONNAISSANCE SURVEY

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TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE

GEOLOGIC UNIT GU

POTASSIUM%
RECORDS 176

25. X
23. X
22. X
21. X
20. X XX
18. X XX
17. X XX
16. XXXX
15. XXXX
13. XXXX XX
12. XXXX XXX
11. XXXX XXX
10. XXXX XXXX
8. XXXX XXXX X
7. XXXXX XXXXXX
6. XXXXXX XXXXXX
5. XXXXXXXXXXXXXXX
3. XXXXXXXXXXXXXXX X X
2. XXXXXXXXXXXXXXX X X X
1. XXXXXXXXXXXXXXXXXX
0.....

C 4

MEAN 1.7 SIGMA 0.9

U/K RATIO

RECORDS 172

45. X
42. X
40. X
38. X
36. X
33. XX
31. XX
29. XX
27. XX
24. XX
22. XX
20. XXX
18. XXXX
15. XXXXX
13. XXXXX
11. XXXXX
9. XXXXX
6. XXXXX X
4. XXXXXXXXXXXXX
2. XXXXXXXXXXXXXXX
0.....

C 6

MEAN 1.9 SIGMA 0.7

URANIUM PPM
RECORDS 174

22. XX
21. XX
20. XX
19. XX
18. XX
17. XX
16. XXX
14. XXXXXX
13. XXXXXX
12. XXXXXX
11. XXXXXX
10. XXXXXX
9. XXXXXX X
8. XXXXXXXX X X
6. XXXXXXXXXXXX X X
5. XXXXXXXXXXXXXXX
4. XXXXXXXXXXXXXXX
3. XXXXXXXXXXXXXXX
2. XXXXXXXXXXXXXXX
1. XXXXXXXXXXXXXXX
0.....

C 6

MEAN 2.9 SIGMA 1.2

U/T RATIO

RECORDS 170

28. X
27. X
26. X
24. X
23. X
21. XX X
20. XXXX
18. XXXXX
17. XXXXX
15. XXXXX
14. XXXXX
13. XXXXX
11. XXXXXXX
10. XXXXXXX
8. XXXXXXX
7. XXXXXXX
5. XXXXXXXX X
4. XXXXXXXXXXXX X
2. XXXXXXXXXXXX X
1. XXXXXXXXXXXXXXX XX
0.....

C 1

MEAN 0.4 SIGMA 0.2

THORIUM PPM
RECORDS 173

42. X
39. X
37. X
35. X
33. X
31. XX
29. XX
27. XX
25. XX
23. XX
21. XX
18. XX
16. XX
14. XX
12. XX X
10. XXXX X
8. XXXX X XX X
6. XXXXXX XX X
4. XXXXXX XXXX XXX
2. XXXXXXXXXXXXXXX
0.....

1 27

MEAN 8.8 SIGMA 6.5

T/K RATIO

RECORDS 172

26. X
24. X
23. X
22. X
20. XX
19. XX
18. XX
16. XXX
15. XXXX X
14. XXXXXX
13. XXXXXX
11. XXXXXXXXXXX
10. XXXXXXXXXXX
9. XXXXXXXXXXX
7. XXXXXXXXXXX
6. XXXXXXXXXXX
5. XXXXXXXXXXX
3. XXXXXXXXXXXXXXX
2. XXXXXXXXXXXXXXX
1. XXXXXXXXXXXXXXX
0.....

C 8

MEAN 4.7 SIGMA 1.4

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT GS

POTASSIUM%
RECORDS 1126

357. X
339. X
321. X
303. XX
285. XX
267. XX
249. XX
232. XX
214. XX
196. XXX
178. XXX
160. XXX
142. XXX
124. XXX
107. XXXX
89. XXXX
71. XXXX
53. XXXX
35. XXXXX
17. XXXXXX

0.....
C 2
MEAN 1.8 SIGMA 0.2

U/K RATIO
RECORDS 1101

237. X
225. XX
213. XX
201. XX
189. XX
177. XXX
165. XXX
154. XXX
142. XXX
130. XXX
118. XXXX
106. XXXXX
94. XXXXX
82. XXXXX
71. XXXXX
59. XXXXXXX
47. XXXXXXX
35. XXXXXXX
23. XXXXXXX
11. XXXXXXX

0.....
C 3
MEAN 1.2 SIGMA 0.3

URANIUM PPM
RECORDS 1101

250. X
237. X
225. X
212. XX
200. XX
187. XX
175. XX
162. XX
150. XXXX
137. XXXX
125. XXXX
112. XXXX
100. XXXXX
87. XXXXX
75. XXXXXX
62. XXXXXX
50. XXXXXXX
37. XXXXXXX
25. XXXXXXX
12. XXXXXXXXXX

0.....
C 5
MEAN 2.1 SIGMA 0.5

L/T RATIO
RECORDS 1101

221. X
209. X
195. XX
187. XX
176. XX
165. XX
154. XXXX
143. XXXX
132. XXXX
121. XXXX
110. XXXX
99. XXXXX
88. XXXXX
77. XXXXX
66. XXXXXXX
55. XXXXXXX
44. XXXXXXX
33. XXXXXXX
22. XXXXXXX
11. XXXXXXXXXX

0.....
C 1
MEAN 0.5 SIGMA 0.1

THORIUM PPM
RECORDS 1126

311. X
295. X
279. X
264. X
248. XXX
233. XXX
217. XXX
202. XXX
186. XXX
171. XXX
155. XXX
139. XXX
124. XXX
108. XXXX
93. XXXXX
77. XXXXX
62. XXXXX
46. XXXXX
31. XXXXXXX
15. XXXXXXX

0.....
C 11
MEAN 4.6 SIGMA 0.8

T/K RATIO
RECORDS 1126

252. XX
240. XX
227. XX
215. XX
202. XXX
189. XXX
177. XXX
164. XXX
151. XXX
139. XXX
126. XXXX
113. XXXXX
101. XXXXX
88. XXXXX
75. XXXXX
63. XXXXX
50. XXXXX
37. XXXXXXX
25. XXXXXXX
12. XXXXXXXXXX

0.....
C 5
MEAN 2.6 SIGMA 0.4

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT GAL

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT 32

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE

GEOLOGIC UNIT OF

POTASSIUM%
RECORDS 371

88. X
84. X
80. X
75. X
71. X
66. XX
62. XX
57. XX
53. XX
48. XXX
44. XXX
40. XXX
35. XXX
31. XXX
26. XXXXX
22. XXXXXX
17. XXXXXX
13. XXXXXX
8. X XXXXXX XXX
4. XXXXXXXXXXXXXXXX
0.....

C 4

MEAN 1.7 SIGMA 0.6

U/K RATIO

RECORDS 364

107. X
101. X
96. XX
90. XX
85. XX
80. XX
74. XX
69. XX
64. XX
58. XX
53. XX
48. XXX
42. XXXX
37. XXXX
32. XXXX
26. XXXX
21. XXXXX
16. XXXXX
10. XXXXX
5. XXXXXXXX
0.....

C 6

MEAN 1.7 SIGMA 0.7

URANIUM PPM
RECORDS 371

83. X
79. X
75. X
71. X
67. XX
63. XX
58. XXX
54. XXX
50. XXX
46. XXX
42. XXX
37. XXXX
33. XXXX
29. XXXX
25. XXXXXX
21. XXXXXX
16. XXXXXXXX
12. XXXXXXXX
8. XXXXXXXXX
4. XXXXXXXXXXXXXXXX
0.....

C 6

MEAN 2.8 SIGMA 0.8

U/T RATIO

RECORDS 364

105. X
99. X
94. X
89. X
84. XX
78. XXX
73. XXX
68. XXX
63. XXX
57. XXX
52. XXX
47. XXX
42. XXX
36. XXX
31. XXXX
26. XXXX
21. XXXX
15. XXXXX
10. XXXXX
5. XXXXXXXX
0.....

C 2

MEAN 0.5 SIGMA 0.2

THORIUM PPM
RECORDS 368

103. X
98. XX
93. XX
88. XX
83. XX
78. XX
72. XX
67. XX
62. XX
57. XX
52. XXX
46. XXX
41. XXX
36. XXX
31. XXXX
26. XXXX
20. XXXX
15. XXXXXX
10. XXXXXX
5. XXXXXXXX XXX
0.....

1 23

MEAN 6.2 SIGMA 3.1

T/K RATIO

RECORDS 364

76. X
72. X
68. X
64. XX
60. XX
57. XX
53. XXX
49. XXX
45. XXX
41. XXXX
38. XXXXX
34. XXXXX
30. XXXXX
26. XXXXX
22. XXXXX
19. XXXXXXXX
15. XXXXXXXX
11. XXXXXXXX X
7. XXXXXXXXXXXX
3. XXXXXXXXXXXX
0.....

C 7

MEAN 3.6 SIGMA 0.8

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT QAO
URANIUM PPM
RECORDS 46

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT QV

POTASSIUM%
RECORDS 8

U/K RATIO
RECORDS 6

URANIUM PPM
RECORDS 7

L/T RATIO
RECORDS 6

THORIUM PPM
RECORDS 8

T/K RATIO
RECORDS 8

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT QEA

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT GTG

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT QT2

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
 GEOLOGIC UNIT QTEA
 URANIUM PPM
 RECORDS 4

TEXAS-NEW MEXICO-EL PASO NH. 13-1 QUADRANGLE
GEOLOGIC UNIT QTS

POTASSIUM%
RECORDS 18

URANIUM PPM
RECORDS 18

THORIUM PPM
RECORDS 18

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT TV
URANIUM PPM
RECORDS 46

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT TVU
URANIUM PPM
RECORDS 59

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
 GEOLOGIC UNIT TVL
 URANIUM PPM
 RECORDS 31

TEXAS-NEW MEXICO-EL PASO NH 13-1 GLADRANGLE
GEOLOGIC UNIT TKI
URANIUM PPM
RECORDS 53

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT KU

POTASSIUM%
RECORDS 16

MEAN 1.4 SIGMA 0.9
U/K RATIO
RECORDS 16

MEAN 1.9 SIGMA 1.0

URANIUM PPM
RECORDS 16

MEAN 1.9 SIGMA 0.4
L/T RATIO
RECORDS 16

MEAN 0.5 SIGMA 0.2

THORIUM PPM
RECORDS 16

MEAN 4.6 SIGMA 3.2
T/K RATIO
RECORDS 16

MEAN 3.6 SIGMA 1.0

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT PAL

POTASSIUM%
RECORDS 8

MEAN 0.4 SIGMA 0.1
U/K RATIO
RECORDS 1

MEAN 2.2 SIGMA 0.0

URANIUM PPM
RECORDS 8

MEAN 1.4 SIGMA 0.2
U/T RATIO
RECORDS 1

MEAN 0.7 SIGMA 0.0

THORIUM PPM
RECORDS 5

MEAN 1.8 SIGMA 0.2
T/K RATIO
RECORDS 1

MEAN 3.2 SIGMA 0.0

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT FH
URANIUM PPM
RECORDS 106

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT PM

POTASSIUM%
RECORDS 34

MEAN 1.1 SIGMA 0.7
U/K RATIO
RECORDS 31

MEAN 3.0 SIGMA 2.0

URANIUM PPM
RECORDS 34

MEAN 2.6 SIGMA 0.7
L/T RATIO
RECORDS 29

MEAN 0.6 SIGMA 0.5

THORIUM PPM
RECORDS 31

MEAN 5.6 SIGMA 3.6
T/K RATIO
RECORDS 29

MEAN 4.3 SIGMA 1.5

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT DM
URANIUM PPM
RECORDS 19

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT SF
URANIUM PPM
RECORDS 28

THORIUM PPM
RECORDS 19

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT OE
URANIUM PPM
RECORDS 47

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE

GEOLOGIC UNIT COB

URANIUM PPM
RECORDS 8

THORIUM PPM
RECORDS 6

POTASSIUM%
RECORDS 8

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
 GEOLOGIC UNIT PCL
 URANIUM PPM
 RECORDS 18

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
GEOLOGIC UNIT PCG
URANIUM PPM
RECORDS 64

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE

GEOLOGIC UNIT PCR

URANIUM PPM
RECORDS 19

THORIUM PPM
RECORDS 17

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE

STATISTICAL SUMMARY

CODE	UNIT	RECS	*** K ***		*** U ***		*** T ***		*** U/K ***		*** U/T ***		*** T/K ***	
			MEAN	ST.DEV.	MEAN	ST.DEV.	MEAN	ST.DEV.	MEAN	ST.DEV.	MEAN	ST.DEV.	MEAN	ST.DEV.
101.	GU	174.0	1.7	0.9	2.9	1.2	8.8	6.5	1.9	0.7	0.4	0.2	4.7	1.4
102.	QS	1101.0	1.8	0.2	2.1	0.5	4.6	0.8	1.2	0.3	0.5	0.1	2.6	0.4
103.	QAL	635.0	1.7	0.3	2.4	0.6	7.0	1.7	1.5	0.5	0.4	0.1	4.0	0.8
104.	QB	2944.0	2.4	0.6	2.2	0.6	8.1	3.5	0.9	0.3	0.3	0.1	3.2	0.9
105.	GF	371.0	1.7	0.6	2.8	0.8	6.2	3.1	1.7	0.7	0.5	0.2	3.6	0.8
106.	QAO	46.0	1.7	0.3	2.2	0.6	4.7	0.7	1.5	0.8	0.5	0.2	2.9	0.6
107.	QV	7.0	1.7	0.2	1.4	0.2	4.5	1.0	0.8	0.2	0.3	0.1	2.7	0.5
108.	QBA	532.0	1.9	0.4	1.8	0.4	6.1	1.1	0.9	0.3	0.3	0.1	3.2	0.7
109.	QTG	207.0	2.2	0.6	2.3	0.6	8.2	3.7	1.1	0.3	0.3	0.2	3.6	0.9
110.	QTB	162.0	1.8	0.2	2.1	0.4	4.9	0.7	1.2	0.4	0.4	0.1	2.7	0.5
111.	QTBA	4.0	2.1	0.1	2.2	0.2	9.6	0.5	1.1	0.1	0.2	0.0	4.6	0.2
112.	QTS	18.0	1.4	0.5	1.6	0.3	4.3	0.9	1.4	0.8	0.4	0.1	3.4	1.0
114.	TV	46.0	2.6	0.3	2.0	0.4	8.3	1.4	0.8	0.2	0.2	0.1	3.2	0.4
115.	TVU	59.0	3.5	0.9	2.9	0.6	15.5	5.8	0.9	0.2	0.2	0.1	4.3	1.0
116.	TVL	31.0	3.6	1.3	2.6	0.8	11.5	4.5	0.8	0.2	0.2	0.1	3.2	0.7
117.	TKI	53.0	3.3	0.9	2.5	0.6	16.2	6.0	0.8	0.3	0.2	0.1	4.8	0.8
201.	KU	16.0	1.4	0.8	1.9	0.4	4.6	3.2	1.9	1.0	0.5	0.2	3.6	1.0
301.	PAL	8.0	0.4	0.1	1.4	0.2	1.8	0.2	2.2	0.0	0.7	0.0	3.2	0.0
302.	PH	106.0	0.8	0.5	2.6	0.7	3.6	3.2	3.5	1.4	0.8	0.3	4.1	1.1
303.	PM	34.0	1.1	0.7	2.6	0.7	5.6	3.6	3.0	2.0	0.6	0.5	4.8	1.5
304.	DM	19.0	0.8	0.4	2.3	0.5	3.8	0.9	2.7	0.7	0.6	0.1	4.3	0.7
306.	SF	28.0	0.7	0.4	1.9	0.5	3.3	1.2	2.4	0.7	0.6	0.2	3.8	0.5
308.	OE	47.0	0.9	0.6	2.1	0.8	4.5	3.3	2.3	0.6	0.6	0.3	4.1	1.1
309.	COB	8.0	1.7	0.9	3.0	1.2	9.7	5.2	1.9	0.5	0.4	0.1	4.4	1.1
402.	FCL	18.0	2.5	1.0	3.3	1.0	11.5	4.9	1.4	0.4	0.3	0.1	4.5	0.8
403.	PCG	64.0	3.0	1.0	3.9	1.0	17.4	6.9	1.4	0.3	0.2	0.1	5.6	1.1
404.	PCR	19.0	2.4	1.0	3.5	1.4	14.2	6.0	1.5	0.4	0.3	0.1	5.2	1.2

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
STATISTICAL SUMMARY OF GECLOGIC UNITS BY LINE 59

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
101.	GU	8.0	1.5 0.5	2.0 0.7	5.1 1.8	1.7 1.3	0.4 0.3	3.7 1.1
102.	QS	49.0	1.8 0.1	2.2 0.5	5.0 0.8	1.2 0.3	0.4 0.1	2.7 0.4
103.	GAL	68.0	1.6 0.5	2.2 0.5	6.3 2.0	1.7 1.1	0.4 0.2	4.1 0.9
104.	GB	489.0	2.5 0.6	2.0 0.6	8.4 3.1	0.8 0.3	0.3 0.1	3.3 0.8
105.	GF	46.0	1.6 0.7	3.0 0.5	6.6 2.2	2.0 1.0	0.5 0.2	3.9 0.5
107.	QV	4.0	1.6 0.2	1.3 0.3	4.6 0.7	0.9 0.2	0.3 0.0	2.8 0.4
108.	GBA	163.0	1.9 0.3	1.4 0.3	5.9 0.9	0.8 0.2	0.2 0.1	3.2 0.6
109.	GTG	23.0	2.4 0.6	2.0 0.6	6.7 3.2	0.8 0.1	0.2 0.1	3.5 0.7
112.	GTS	8.0	1.7 0.2	1.4 0.2	4.5 0.5	0.9 0.1	0.3 0.1	2.7 0.4
302.	PH	28.0	0.8 0.4	2.4 0.5	3.1 0.8	3.4 1.4	0.9 0.3	3.9 1.0
303.	PM	4.0	0.5 0.1	2.8 0.3	2.5 0.7	5.1 1.8	1.0 0.4	4.9 0.0
304.	DM	4.0	0.3 0.0	2.0 0.4	1.9 0.0	0.0 0.0	0.0 0.0	0.0 0.0
402.	PCL	4.0	1.1 0.1	2.0 0.3	4.5 0.6	2.0 0.5	0.5 0.0	4.1 0.7

STATISTICAL SUMMARY OF GECLOGIC UNITS BY LINE 60

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
101.	GU	37.0	1.6 0.8	3.0 0.7	6.2 5.3	2.4 1.1	0.5 0.3	5.0 1.0
102.	GS	75.0	1.9 0.1	2.3 0.7	5.2 0.7	1.2 0.4	0.4 0.1	2.7 0.4
103.	GAL	37.0	1.9 0.1	2.1 0.7	6.9 1.7	1.1 0.4	0.3 0.1	3.7 0.8
104.	GB	352.0	2.5 0.5	2.0 0.6	8.3 3.5	0.8 0.3	0.2 0.1	3.3 1.0
105.	GF	71.0	1.8 0.5	2.9 0.9	7.1 3.6	1.7 0.3	0.4 0.1	3.9 0.9
108.	GBA	56.0	2.0 0.4	1.5 0.3	6.7 2.0	0.8 0.2	0.2 0.1	3.5 0.7
109.	GTG	45.0	2.2 0.4	2.1 0.6	9.4 2.9	0.9 0.2	0.2 0.0	4.2 0.8
114.	TV	16.0	2.7 0.3	1.9 0.3	9.1 1.3	0.7 0.1	0.2 0.1	3.4 0.3
117.	TKI	4.0	1.6 0.5	1.7 0.3	6.4 2.1	1.1 0.3	0.3 0.1	4.2 0.8
302.	PH	26.0	0.9 0.5	2.6 0.3	3.5 1.8	3.3 1.5	0.8 0.3	4.1 0.6
303.	PM	10.0	1.3 0.6	2.0 0.2	7.2 2.3	1.8 0.5	0.3 0.1	6.0 1.5
306.	SF	6.0	0.3 0.1	1.4 0.3	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
308.	CE	4.0	0.4 0.2	1.4 0.6	2.6 0.0	3.3 0.6	0.7 0.0	4.2 0.0
403.	PCG	8.0	1.9 1.3	2.7 1.1	11.5 7.1	1.7 0.6	0.4 0.2	4.6 0.9

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
 STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 61

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
101.	GU	46.0	2.6 0.8	4.3 1.0	16.4 5.8	1.7 0.3	0.3 0.1	6.1 1.3
102.	QS	46.0	1.9 0.1	3.0 0.8	5.4 1.5	1.6 0.4	0.6 0.2	2.8 0.7
103.	GAL	26.0	1.8 0.1	3.2 0.7	8.3 1.7	1.7 0.4	0.4 0.1	4.5 1.0
104.	QB	434.0	2.3 0.6	2.1 0.7	7.8 3.5	0.9 0.4	0.3 0.1	3.3 1.0
105.	QF	54.0	1.8 0.8	3.1 1.2	7.5 4.5	1.8 0.7	0.5 0.2	4.0 0.9
108.	GEA	70.0	1.7 0.3	1.8 0.3	5.8 0.8	1.1 0.3	0.3 0.1	3.4 0.6
109.	GTG	39.0	2.4 0.7	2.1 0.5	9.5 4.8	0.9 0.2	0.3 0.1	3.7 1.0
111.	QTBA	4.0	2.1 0.1	2.2 0.2	9.6 0.5	1.1 0.1	0.2 0.0	4.6 0.2
112.	GTS	4.0	0.8 0.1	1.7 0.1	3.3 0.6	2.0 0.2	0.5 0.1	4.0 0.7
114.	TV	12.0	2.2 0.2	1.9 0.4	6.7 0.8	0.9 0.2	0.3 0.1	3.1 0.5
115.	TVU	7.0	3.0 0.2	2.7 0.3	16.1 1.3	0.9 0.1	0.2 0.0	5.4 0.3
116.	TVL	10.0	2.7 0.5	1.9 0.5	9.2 3.3	0.7 0.1	0.2 0.0	3.4 0.5
117.	TKI	23.0	3.6 0.4	2.4 0.5	17.9 3.4	0.7 0.1	0.1 0.0	4.9 0.6
201.	KII	9.0	1.0 0.8	1.8 0.3	4.2 4.3	2.3 1.0	0.6 0.3	3.8 0.6
302.	PH	29.0	0.9 0.7	2.6 0.9	4.7 5.7	3.1 1.1	0.8 0.3	4.5 1.4
402.	FCL	5.0	2.9 0.2	3.6 0.9	16.4 1.8	1.2 0.2	0.2 0.1	5.6 0.6

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
 STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 62

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
101.	QU	41.0	1.4 0.4	2.3 0.7	5.8 2.4	1.7 0.5	0.4 0.1	3.9 0.7
102.	QS	107.0	1.7 0.2	2.0 0.4	4.6 0.7	1.2 0.4	0.5 0.1	2.7 0.5
103.	QAL	25.0	1.6 0.1	2.5 0.6	7.0 1.6	1.6 0.5	0.4 0.2	4.3 0.9
104.	QB	514.0	2.5 0.5	2.3 0.6	8.1 3.6	1.0 0.3	0.3 0.1	3.2 1.0
105.	QF	21.0	1.1 0.4	2.8 0.7	4.1 1.0	2.7 1.4	0.7 0.4	3.7 0.6
108.	GBA	111.0	2.0 0.5	2.0 0.4	5.8 0.8	1.1 0.3	0.3 0.1	3.1 0.7
109.	GTG	30.0	2.1 0.6	2.4 0.4	7.2 4.0	1.2 0.3	0.4 0.2	3.2 0.9
115.	TVU	19.0	4.1 0.3	3.2 0.4	20.0 1.4	0.8 0.1	0.2 0.0	4.9 0.4
201.	KU	5.0	1.6 0.7	2.1 0.4	4.9 0.4	1.6 0.8	0.4 0.1	3.5 1.6
302.	PH	21.0	0.6 0.2	3.0 0.7	2.8 0.8	4.6 1.2	1.1 0.3	4.2 0.7
303.	PM	5.0	0.6 0.2	3.3 0.4	2.4 0.7	5.3 1.3	1.5 0.6	3.7 0.9
306.	SF	5.0	1.1 0.2	2.4 0.6	4.0 1.1	2.2 0.7	0.6 0.2	3.6 0.5
308.	OE	7.0	0.5 0.1	1.7 0.4	1.9 0.3	2.6 0.6	0.9 0.0	3.6 0.4

STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 63

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
101.	QU	22.0	0.9 0.2	2.2 0.6	3.4 1.4	2.4 0.5	0.7 0.2	3.7 0.9
102.	QS	124.0	1.7 0.2	2.3 0.5	4.4 0.9	1.4 0.3	0.5 0.1	2.5 0.5
103.	QAL	25.0	1.4 0.4	2.6 0.3	5.1 1.7	2.1 0.7	0.5 0.2	3.8 0.7
104.	QB	471.0	2.5 0.7	2.5 0.6	8.0 3.9	1.0 0.3	0.4 0.1	3.1 1.0
105.	QF	29.0	1.7 0.7	3.2 1.1	6.0 5.0	2.0 0.9	0.7 0.3	3.2 1.0
106.	GAO	10.0	1.2 0.1	3.2 0.4	4.6 0.5	2.7 0.6	0.7 0.1	3.9 0.5
108.	GBA	62.0	2.0 0.4	2.2 0.4	6.1 0.8	1.1 0.2	0.4 0.1	3.1 0.6
109.	GTG	20.0	2.4 0.6	2.8 0.7	9.1 4.8	1.1 0.2	0.4 0.1	3.5 1.1
116.	TVL	11.0	5.0 0.5	3.2 0.6	14.0 2.8	0.6 0.1	0.2 0.1	2.8 0.4
117.	TKI	6.0	2.4 0.2	2.4 0.4	8.4 1.5	1.0 0.2	0.3 0.1	3.5 0.4
301.	FAL	7.0	0.3 0.1	1.4 0.2	1.8 0.2	0.0 0.0	0.0 0.0	0.0 0.0
303.	PM	4.0	0.6 0.1	3.4 0.5	2.8 0.8	5.9 1.7	1.2 0.5	4.2 0.8
304.	DM	7.0	0.8 0.2	2.2 0.5	3.5 0.6	2.7 0.7	0.6 0.1	4.3 0.7
306.	SF	7.0	0.6 0.2	2.0 0.3	2.6 0.9	2.9 0.4	0.7 0.1	4.0 0.5
308.	OE	6.0	0.6 0.2	1.4 0.3	2.8 0.0	2.3 0.5	0.6 0.0	2.6 0.0

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 64

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
102.	QS	58.0	1.8 0.2	2.1 0.5	4.3 0.8	1.2 0.4	0.5 0.1	2.5 0.4
103.	GAL	59.0	1.3 0.2	2.2 0.5	4.7 0.8	1.7 0.5	0.5 0.1	3.6 0.6
104.	QB	37.0	1.7 0.2	2.2 0.4	4.6 0.7	1.3 0.3	0.5 0.1	2.6 0.4
105.	QF	30.0	1.5 0.2	2.3 0.3	5.0 1.0	1.6 0.3	0.5 0.1	3.4 0.5
106.	GAO	10.0	1.7 0.2	2.2 0.3	4.5 0.6	1.3 0.3	0.5 0.1	2.7 0.4
110.	GTB	25.0	1.4 0.1	2.4 0.3	4.3 0.5	1.7 0.3	0.6 0.1	3.1 0.5
308.	CE	8.0	1.1 0.3	2.2 0.3	3.5 0.6	2.1 0.4	0.6 0.1	3.3 0.6

STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 65

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
102.	QS	89.0	1.8 0.1	1.9 0.4	4.4 0.8	1.1 0.2	0.4 0.1	2.5 0.5
103.	GAL	31.0	1.7 0.1	2.3 0.3	6.8 0.9	1.4 0.2	0.3 0.1	4.0 0.4
104.	QB	13.0	1.9 0.1	2.1 0.4	4.7 0.6	1.2 0.3	0.5 0.1	2.5 0.3
105.	QF	21.0	1.4 0.3	2.2 0.4	5.0 1.0	1.6 0.3	0.4 0.1	3.5 0.5
106.	GAO	10.0	1.8 0.2	2.1 0.3	4.6 0.6	1.1 0.2	0.4 0.1	2.5 0.4
110.	GTB	21.0	2.0 0.1	2.1 0.4	5.2 0.6	1.1 0.3	0.4 0.1	2.7 0.4

STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 66

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
102.	QS	75.0	1.8 0.1	2.0 0.4	4.5 0.7	1.1 0.2	0.4 0.1	2.5 0.4
103.	GAL	34.0	1.8 0.2	2.6 0.4	7.2 1.1	1.5 0.3	0.4 0.1	3.9 0.5
105.	QF	5.0	1.7 0.2	2.2 0.2	5.2 0.6	1.3 0.2	0.4 0.0	3.0 0.4
106.	GAO	10.0	1.8 0.1	1.9 0.4	4.8 0.8	1.0 0.2	0.4 0.1	2.6 0.4
110.	GTB	7.0	1.9 0.1	2.4 0.4	5.1 0.6	1.3 0.2	0.5 0.1	2.7 0.3

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 67

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
102.	GS	80.0	1.8 0.1	1.8 0.4	4.5 0.6	1.0 0.2	0.4 0.1	2.5 0.3
103.	GAL	41.0	1.8 0.4	2.5 0.6	7.7 1.9	1.4 0.3	0.3 0.1	4.3 0.6
104.	GB	18.0	1.7 0.1	1.8 0.3	4.7 0.6	1.0 0.2	0.4 0.1	2.7 0.3
110.	GTB	13.0	1.9 0.2	2.4 0.3	5.0 0.9	1.3 0.2	0.5 0.1	2.6 0.4

STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 68

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
102.	GS	65.0	1.8 0.1	1.9 0.3	4.5 0.8	1.0 0.2	0.4 0.1	2.5 0.4
103.	GAL	40.0	1.8 0.1	2.4 0.4	7.5 0.8	1.3 0.3	0.3 0.1	4.1 0.5
104.	GB	11.0	1.7 0.1	1.9 0.3	4.9 0.5	1.1 0.2	0.4 0.1	2.9 0.3
110.	GTB	19.0	1.9 0.1	2.0 0.4	5.1 0.7	1.1 0.2	0.4 0.1	2.7 0.3

STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 69

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
102.	GS	49.0	1.8 0.1	1.8 0.4	4.4 0.8	1.0 0.2	0.4 0.1	2.5 0.4
103.	GAL	37.0	1.9 0.1	2.4 0.4	7.5 1.2	1.3 0.3	0.3 0.1	4.0 0.6
110.	GTB	18.0	1.9 0.1	1.9 0.4	5.0 0.8	1.0 0.2	0.4 0.1	2.6 0.4

STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 70

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
102.	GS	46.0	1.8 0.1	1.9 0.4	4.3 0.6	1.0 0.2	0.4 0.1	2.4 0.3
103.	GAL	40.0	1.9 0.1	2.3 0.4	8.0 1.1	1.2 0.2	0.3 0.1	4.2 0.6
110.	GTB	14.0	1.9 0.1	2.1 0.2	4.8 0.7	1.1 0.1	0.5 0.1	2.5 0.4

STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 71

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
102.	GS	25.0	1.8 0.1	2.0 0.4	4.9 0.7	1.1 0.3	0.4 0.1	2.7 0.4
103.	GAL	32.0	1.9 0.1	2.7 0.4	8.4 0.9	1.4 0.2	0.3 0.1	4.4 0.5
110.	GTB	9.0	1.9 0.2	1.8 0.3	5.2 0.7	1.0 0.2	0.4 0.1	2.8 0.4

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 72

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
103.	GAL	38.0	1.8 0.3	2.7 0.7	7.9 1.4	1.5 0.3	0.3 0.1	4.4 0.5

STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 200

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
104.	QB	116.0	3.3 1.0	2.9 0.4	12.4 1.8	1.0 0.3	0.2 0.0	4.0 0.8
109.	GTG	5.0	2.7 0.1	2.0 0.6	10.1 0.5	0.7 0.2	0.2 0.1	3.7 0.2

STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 201

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
104.	QB	48.0	3.0 0.5	3.0 0.5	13.0 2.8	1.0 0.3	0.2 0.1	4.3 0.6
115.	TVU	24.0	3.4 1.2	3.1 0.7	14.9 6.2	1.0 0.3	0.2 0.1	4.3 0.7
116.	TVL	8.0	3.0 1.1	2.5 0.8	11.7 6.5	0.8 0.1	0.2 0.1	3.6 0.9
117.	TKI	20.0	3.6 1.1	2.9 0.6	18.5 6.0	0.9 0.5	0.2 0.1	5.1 0.6
303.	PM	7.0	2.1 0.7	2.6 0.7	8.9 4.7	1.3 0.5	0.3 0.1	4.2 1.2

STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 202

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
104.	GB	110.0	2.7 0.2	2.7 0.4	10.5 0.9	1.0 0.2	0.3 0.0	3.9 0.5

STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 203

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
104.	GB	67.0	2.7 0.2	2.2 0.3	6.1 0.6	0.8 0.1	0.4 0.1	2.3 0.3
108.	GBA	27.0	2.7 0.2	2.2 0.3	6.5 1.0	0.8 0.1	0.3 0.1	2.4 0.4
115.	TVU	9.0	2.9 0.2	2.1 0.4	7.0 0.9	0.7 0.1	0.3 0.1	2.4 0.3

STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 204

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
104.	GB	73.0	2.2 0.2	1.9 0.3	6.2 1.1	0.9 0.2	0.3 0.1	2.9 0.6
108.	GBA	31.0	1.9 0.2	1.9 0.3	6.7 0.7	1.0 0.1	0.3 0.1	3.5 0.5
114.	TV	18.0	2.7 0.1	2.2 0.4	8.6 0.2	0.8 0.2	0.3 0.1	3.2 0.3

STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 205

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
103.	GAL	14.0	1.9 0.1	2.3 0.3	4.9 0.6	1.2 0.2	0.5 0.1	2.6 0.4
104.	GB	85.0	2.0 0.2	2.0 0.3	4.8 0.5	1.0 0.2	0.4 0.1	2.4 0.4
108.	GBA	12.0	1.8 0.1	2.0 0.3	5.1 0.6	1.1 0.2	0.4 0.1	2.8 0.4

TEXAS-NEW MEXICO-EL PASO NH 13-1 QUADRANGLE
 STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 206

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
104.	GB	57.0	2.0 0.1	2.4 0.4	4.6 0.7	1.2 0.2	0.5 0.1	2.3 0.4
109.	GTG	45.0	1.8 0.1	2.6 0.5	5.7 1.0	1.4 0.3	0.5 0.1	3.1 0.6

STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 207

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
101.	QU	20.0	1.4 0.7	2.2 0.7	6.2 5.0	1.7 0.4	0.4 0.1	4.0 0.9
308.	OE	19.0	1.3 0.7	2.7 0.8	6.3 4.0	2.2 0.7	0.5 0.3	4.8 1.1
309.	COB	6.0	1.6 1.0	2.9 1.3	10.4 5.8	2.0 0.5	0.4 0.1	4.8 0.9
402.	PCL	9.0	3.1 0.7	3.6 0.8	12.7 2.0	1.2 0.1	0.3 0.0	4.2 0.4
403.	PCG	48.0	3.3 0.7	4.2 0.7	19.2 5.8	1.3 0.2	0.2 0.1	5.8 1.1
404.	PCR	17.0	2.7 0.8	3.7 1.3	14.2 6.0	1.4 0.2	0.3 0.1	5.2 1.2

STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 208

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
102.	QS	78.0	1.8 0.1	1.9 0.4	4.8 0.6	1.0 0.2	0.4 0.1	2.6 0.3
103.	GAL	65.0	1.8 0.2	2.3 0.4	7.5 1.4	1.3 0.3	0.3 0.1	4.2 0.6
104.	GB	41.0	1.8 0.2	1.8 0.4	4.8 0.5	1.0 0.3	0.4 0.1	2.7 0.4
106.	GAO	6.0	2.0 0.2	1.6 0.3	5.4 0.7	0.8 0.2	0.3 0.1	2.7 0.4
110.	GTB	19.0	1.9 0.1	2.1 0.4	4.9 0.7	1.1 0.3	0.4 0.1	2.6 0.4

STATISTICAL SUMMARY OF GEOLOGIC UNITS BY LINE 209

CODE	UNIT	RECS	*** K ***	*** U ***	*** T ***	*** U/K ***	*** U/T ***	*** T/K ***
			MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.	MEAN ST.DEV.
102.	GS	133.0	1.8 0.1	2.0 0.4	4.4 0.7	1.1 0.2	0.5 0.1	2.5 0.4
103.	GAL	20.0	1.8 0.1	2.8 0.6	7.6 1.1	1.5 0.3	0.4 0.1	4.1 0.7
104.	GB	6.0	1.8 0.1	2.5 0.5	6.2 1.1	1.4 0.4	0.4 0.1	3.4 0.7
105.	QF	94.0	1.8 0.4	2.5 0.5	5.9 1.7	1.4 0.4	0.4 0.1	3.3 0.5
110.	GTB	16.0	1.8 0.2	2.2 0.4	5.2 0.7	1.2 0.3	0.4 0.1	2.9 0.4
304.	DM	5.0	1.0 0.3	2.7 0.4	4.0 0.3	2.9 0.8	0.7 0.1	4.4 0.9
306.	SF	8.0	0.9 0.2	1.8 0.2	3.5 1.2	2.2 0.7	0.6 0.3	3.9 0.6