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INTRODUCTION

On the 15th of February 1969, Heinrichs Geoexploration Company of Tucson, Arizona conducted an aerial magnetic survey in portions of R. 21 W., T. 24 and 25 S. located south of Steins Pass, Hidalgo County, New Mexico. This survey was performed at the request of Mr. Frank Nelson, regional geologist, Freeport Exploration Company, and covered an area three miles wide east-west and five miles long north-south on lines flown north-south and spaced one quarter mile apart.

INTERPRETATION

Geologically, the area is divided almost in half along an east-west line through the middle of Sections 26, 27 and 28, T. 24 S., R. 21 W. North of this line the surface rocks are all volcanic, and predominately andesitic, according to the geology map by Gillerman and McCahee (see reference note appended). South of this line, the mapped surface geology is considerably more complex and includes intrusive and extrusive rocks as well as a northwestward trending finger of sedimentary rocks in the south-center of the area. The magnetics seem to correlate with and confirm the above mentioned geology quite well. The northern portion is generally quite variable in magnetic intensity as can be expected in extrusive rocks. In the southern portion of the area the sedimentary rocks are mapped by a broad general low which grades into a rather strong high toward the south western corner where extrusives again occur.

Major magnetic lineations trend east-west, northwest-southeast, and northeast-southwest. Quite apparent is the noticeable lack of any pronounced north-south lineations. Lineations I and II correlate with and most certainly are mapping the two major fault systems shown on the geologic map. Other lineations may likewise be due to structural features, although not shown on the geologic map and for this reason may be important geologically.

Five magnetic anomalies and/or anomalous zones will be discussed in some detail owing to their possible relation to economic occurrences of mineralization and/or their magnitude which also makes them of interest.

Anomaly Zone 1 contains a strong magnetic high which is near the intersection of several major magnetic lineations as well as the projected intersections of two major faults. The magnetic high appears to have a source which is at or very near surface, probably much less than 500 feet deep and is likely due to major concentrations of magnetite within the andesite. While the magnetic high itself is probably of little interest, the general area

HEINRICHS GEOEXPLORATION COMPANY

warrants further examination, due to its location in relation to the known geology and magnetic lineations. It is recommended that several I. P. lines be run across the anomalous zone to determine if there are sulfides present in the subsurface.

Anomaly 2 is a strong magnetic high very similar to that mentioned previously. The source depth is again at or near surface and probably caused by concentrations of magnetite in the andesite. A ground geologic examination of this anomaly is recommended after it has been precisely located by ground magnetics.

Anomaly Zone 3 is a fairly broad magnetic low which may represent alteration in the andesite and/or a thin section of it. Because of the economic implications brought out by this low, it is recommended that several I. P. traverses be run to get some idea of the thickness of the andesite and at the same time obtain information relating to the possible occurrence of sulfides. Ground coverage should be extended to include the associated magnetic high southeast of the low.

Anomaly Zone 4 lies along the contact between the Tertiary quartz latite and the Bobcat Hill conglomerate. As this anomaly may be due to a near surface concentration of magnetic material and other associated mineralization along this contact, a geologic examination as well as several ground magnetic traverses should be made. Further work should be dependent on this preliminary examination.

Anomaly 5 is a weak magnetic high which likely is caused by concentrations of magnetic material along the mapped fault contact. This magnetic anomaly may well be associated with the occurrence of mineralization at the Carbonate Hill Mine. This anomaly points up the problems one often encounters in the interpretation of magnetic data i.e., small and rather obscure anomalies can be of as much or more economic interest as the very pronounced ones. Thus the importance of correlating geology with geophysics in an exploration program is very apparent.

PROCEDURES

Survey flight lines were all flown north-south with the exception of the two tie lines which were oriented east-west. Fourteen lines and two tielines were flown for a total of 73.5 line miles. Flight lines were spaced one quarter mile apart and flown at an average altitude of 500 ft. above terrain.

A Cessna 206 aircraft with a Varian Model 4937A proton precession absolute total intensity measuring magnetometer was used for the survey. Magnetometer sensitivity is ± one gamma as used, on the one hertz sample rate. Accessory equipment included a ten inch chart recorder for the magnetic data, 35mm camera for recording flight path, and a radar altimeter with recorder to monitor and record terrain clearance. Sensitivity of the altimeter is ± one percent at 500 ft. terrain clearance. Flight line recovery was accomplished by correlating the 35mm negatives with high altitude photographs supplied by Freeport. The recovered flight path and magnetic data was then plotted on a 1:24,000 scale base map titled "Aerial Magnetic Plan, Hidalgo County, New Mexico" and contoured on a 20 gamma interval. No regional gradient has been removed from the raw data due to the small area involved. Fifty thousand gammas have arbitrarily been subtracted from the observed magnetic data. The average scale of the magnetic and altitude records is approximately two inches to one mile on the ground although this figure can vary as much as ± 25% depending on wind conditions.

The fiducial marks shown on the plan map represent actual points recovered on the photographs, and are considered to be accurate within ± 50 ft. However, after transferral to base maps at larger scales, reproductions, etc., it is estimated these points are probably accurate to ± 250 ft. on the ground. If later correlation or checking of the magnetic data is performed by the client, it will be observed that the fiducial marks shown on the records are different than those shown on the films. The fiducial marks shown on the records are tied to the photo numbers on the enclosed list in Appendix 1.

Anomaly depth determinations were made using the Peter's half-slope technique with an index of 1.6. Although the estimated depths using this procedure are only approximate (± 30%), they are considered to be sufficiently accurate for a preliminary evaluation. If more precise depth information is considered necessary at a later date, more sophisticated techniques can be used to obtain more accurate information.

TECHNICAL NOTE

It should be remembered that the magnetic data obtained from the aircraft is total intensity. If attempts are made to verify anomalies on the ground with a vertical intensity measuring magnetometer (which is commonly used in ground work) somewhat differently shaped anomalies will be observed. This effect is in addition to the amplitude and width changes caused by nearer proximity to the target when on the ground. In view of these factors, and the ± 250 foot accuracy in plotting, it becomes apparent that some leeway should be given when trying to locate anomalies on the ground. It is for this reason that anomalous zones rather than specific points are plotted on the interpretation map. The placement of magnetic lineation lines on magnetic contour maps is also approximate and does not necessarily pinpoint the position of specific geologic structures. Reasons for this apparent inaccuracy may be due to the depth of causative bodies, varying magnetic character in the subsurface, as well as the anomaly location with respect to target as mentioned above.

An examination of the altimeter records indicates that the prescribed terrain clearance of 500 ft. was maintained within ± 20% and no significant anomalies are due to changes in altitude with respect to the ground. The Geologic Map of the Central Peloncillo Mountains by Gillerman and McGehee, 1954-55 was used as an interpretational aid.

Respectfully submitted,
HEINRICHS GEOEXPLORATION CO.

John F. Matthews, Jr.
Geophysicist

Approved:
Walter H. Heinrichs, Jr.
President & General Manager

March 7, 1969
Tucson, Arizona

Holes 1A & 1B

Rocky Mountain Geochemical Corporation

2050 EAST 14TH STREET
TUCSON, ARIZONA 85719

Phone 622-5701
Area Code: 602

CERTIFICATE OF ANALYSES

Date July 27, 1971

Client Humble Oil & Refining Co.
P.O. Box 120
Denver, Colorado 80201

Report on: 28 Samples

Submitted by: Mr. Ken Powers

Date Received: July 21, 1971

Analysis: Copper, Molybdenum, Lead, Zinc, and Silver

Remarks: Molybdenum determined colorimetrically. All others determined by atomic absorption.

Job No. 71-7-31T

cc: Enclosed
RMGC: SLC
file

MHH:rg

All values are reported in parts per million unless specified otherwise. A minus sign (–) is to be read "less than" and a plus sign (+) "greater than." Values in parenthesis are estimates. This analytical report is the confidential property of the above mentioned client and for the protection of this client and ourselves we reserve the right to forbid publication or reproduction of this report or any part thereof without written permission.

ND = Non Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.28 ppm % Mo. x 1.6683 = % MoS_2

Sample No.		ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	ppm Silver
2780-2	50- 60	10	4	40	45	-1
"	290- 300	110	6	20	15	-1
"	320- 330	25	2	70	60	-1
"	490- 500	350	3	30	30	-1
"	590- 600	180	2	40	50	-1
"	610- 620	145	8	110	130	-1
2780-2	620- 630	115	6	40	80	-1
2780-1B	750- 758	260	19	-10	45	-1
"	970- 980	310	117	-10	65	-1
"	2080-2090	810	+300=.042%	-10	100	-1
"	1310-1320	910	80	10	80	-1
"	640- 650	610	10	010	50	-1
"	710- 720	80	19	-10	20	-1
"	750- 758	410	9	-10	40	-1
"	850- 860	30	43	-10	15	-1
"	930- 940	100	46	-10	40	-1
"	970- 980	305	108	10	55	-1
"	1050-1060	50	120	-10	25	-1
"	1160-1170	10	22	40	110	-1
"	1260-1270	5	122	-10	50	-1
"	1310-1320	+1000=0.11%	+300=.035%	10	80	-1
"	1320-1333	+1000=0.16%	190	10	80	-1
"	1480-1490	80	+300=0032%	10	60	-1
"	1560-1570	25	54	30	90	-1
2780-1B	1680-1690	40	+300=.088%	80	100	-1

Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	ppm Silver
2780-1B 1710-1720	300	10	10	75	-1
" 1820-1830	35	7	160	95	-1
2780-1B 1910-1920	95	23	120	175	-1

ROCKY MOUNTAIN GEOCHEMICAL CORPORATION

Tucson, Arizona July 27, 1971

By Martin H. Hibbetts

Martin H. Hibbetts

Rocky Mountain Geochemical Corporation

2050 EAST 14TH STREET
TUCSON, ARIZONA 85719

Phone 622-5702
Area Code 602

CERTIFICATE OF ANALYSES

Date September 27, 1971

Client Humble Oil & Refining Company
R02513
403 S. Plumer
Tucson, Arizona 85719

Report on: 61 Samples

Submitted by: Dr. J. McKnight

Date Received: September 7, 1971

Analysis: Copper, Molybdenum, Lead, Zinc, and Silver

Remarks: Molybdenum determined colorimetrically. All others determined by atomic absorption.
Job No. 71-9-35T
cc: Enclosed
RMGC: SLC
file
MHH:eg

Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	ppm Silver
2540-E2 1176-1190	0.13%	17	80	0.-5%	7
" 1230-1240	450	19	50	-5	1
" 1270-1280	0.17%	4	40	10	3
" 1390-1400	0.11%	50	40	05	2
" 1410-1420	1020	24	120	-5	3
" 1496-1498.5	410	4	50	0.26%	4
" 1580-1590	440	24	110	-5	2

All values are reported in parts per million unless specified otherwise. A minus sign (-) is to be read "less than" and a plus sign (+) "greater than." Values in parenthesis are estimates. This analytical report is the confidential property of the above mentioned client and for the protection of this client and ourselves we reserve the right to forbid publication or reproduction of this report or any part thereof without written permission.

ND = Non Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.28 ppm % Mo x 1.6683 = % MoS_2

Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	ppm Silver
2540-E2					
1694-1700	0.17%	10	40	10	1
" 1780-1790	585	9	60	100	-1
" 1830-1840	310	7	50	55	-1
2540-E2					
1980-1990	420	10	60	60	-1
2780-2					
" 70- 80	0.18%	1	0.80%	1120	4
" 120- 130	490	4	2.30%	0.10%	-1
" 250- 260	420	8	40	30	-1
" 320- 330	70	5	90	60	-1
" 410- 420	635	4	40	20	-1
" 530- 540	420	6	40	20	-1
" 610- 620	240	4	140	100	-1
" 710- 720	170	13	120	110	-1
" 850- 860	100	241	100	210	-1
" 950- 960	60	44	70	45	-1
" 1030-1040	380	28	360	0.27%	-1
" 1040-1050	240	24	190	0.26%	-1
" 1150-1160	325	36	160	0.11%	-1
" 1160-1170	210	16	200	720	-1
" 1280-1290	140	24	3.70%	2140%	-1
" 1380-1390	370	31	80	130	-1
2780-2					
1430-1440	320	23	180	195	-1
2780-1B					
2100-2105	935	-1	20	60	1
2780-3					
175- 185	595	9	30	15	-1
" 225- 235	870	12	30	70	-1
2780-3					
300- 315	545	11	30	40	-1

Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	ppm Silver
3096 R 8	30	5	0.36%	0.13%	-1
" W 8	20	2	0.84%	0.19%	-1
" " 13	30	4	440	820	-1
" " 17	765	-1	0.84%	0.42%	10
" " 31	30	10	920	20	-1
" " 34	130	2	0.44%	1020	3
" " 35	60	2	2.05%	0.22%	28
" " 49	40	2	20	-5	-1
" " 52	30	19	30	-5	-1
" " 56	50	48	20	-5	-1
" " 59	130	36	30	-5	-1
" " 63	25	50	30	-5	-1
" " 69	130	9	60	-5	-1
" " 72	90	15	30	35	-1
" " 75	100	6	40	-5	-1
" " 78	60	3	20	-5	-1
" " 92	40	52	40	-5	-1
" " 95	70	40	50	-5	-1
" " 97	25	55	140	-5	-1
" " 17A	340	4	3.48%	2.22%	38
" " 117A	40	2	750	300	16
" " 117B	50	-1	0.17%	790	20
" " 117C	1.81%	2	0.35%	0.26%	+500=49.55 oz./t.
3096 W 117D	0.58%	-1	24.8%	0.46%	+500=35.92 oz./t.

MOUNTAIN G CHEMICAL C PORATIO
Ar, Arizona September 27, 197
By
Martin . Ribbett

Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	ppm Silver
3096 W 117E	150	3	0.22%	290	30
" " 117F	40	7	360	60	4
" " 135	40	11	60	5	-1
" " 136	5	-1	70	250	-1
3096 W 137	110	29	40	15	2

Oil Drilling Co.
401 S. Plumer
Tucson, Arizona 85719

Report on: 6" Samples

Submitted by: Mr. J. Mc[illegible]

Date Received: September [illegible], 1971

Analysis: Copper, [illegible]

Remarks: Molybdenum [illegible] All others determined by [illegible]
Job No. [illegible]
cc: [illegible]
File
Billing

ROCKY MOUNTAIN GEOCHEMICAL CORPORATION
Tucson, Arizona September 27, 1971
By Martin H. Hibbetts
Martin H. Hibbetts

Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	ppm Silver
[illegible]					
1175-1190	0.13%	17	80	-5	7
" [illegible]	450	19	50	-5	1
" 1270-1280	0.17%	4	40	10	3
" 1290-1300	0.11%	50	40	85	2
" 1410-1420	1020	24	120	-5	5
" 1445-1455	410	4	50	0.26%	4
" 1580-1590	440	24	110	-5	3

All values are expressed in parts per million unless specified otherwise. A minus sign (-) is to be read "less than" and a plus sign (+) [illegible] than. Values are parts per million estimates. This analytical report is the confidential property of the above mentioned client and for the use of the client and its assigns. We reserve the right to forbid publication or reproduction of this report or any part thereof without our written permission.

Not [illegible] Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.28 ppm % Mo. x 1.6[illegible] = [illegible]

Duplicate

Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	ppm Silver
2540-E2					
1694-1700	0.17%	10	40	10	1
" 1780-1790	585	9	60	100	-1
" 1830-1840	310	7	50	55	-1
2540-E2					
1980-1990	420	10	60	60	-1
2780-2					
70- 80	0.18%	1	0.80	1120	4
" 120- 130	490	4	2.30	0.10	-1
" 250- 260	420	8	40	30	-1
" 320- 330	70	5	90	60	-1
" 410- 420	635	4	40	20	1
" 530- 540	420	6	40	20	-1
" 610- 620	240	4	140	100	1
" 710- 720	170	13	120	110	-1
" 850- 860	100	241	100	210	-1
" 950- 960	60	44	70	45	-1
" 1030-1040	380	28	360	0.27%	-1
" 1040-1050	240	24	190	0.26%	-1
" 1150-1160	325	36	160	0.11%	-1
" 1160-1170	210	16	200	720	-1
" 1280-1290	140	24	3.70	140	-1
" 1380-1390	370	31	80	130	-1
2780-2					
1430-1440	320	23	180	195	-1
2780-1B					
2100-2105	935	-1	20	60	1
2780-3					
175- 185	595	9	30	15	-1
" 225- 235	870	12	30	70	-1
2780-3					
300- 315	545	11	30	40	-1

Holes 3A & 3B

Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	ppm Silver
2540-E2 1694-1700	0.17%	10	40	10	1
" 1780-1790	585	9	60	100	-1
" 1830-1840	310	7	50	55	-1
2540-E2 1980-1990	420	10	60	60	-1
2780-2 70- 80	0.18%	1	0.80	120	4
" 120- 130	490	4	0.30	0.10	-1
" 250- 260	420	8	40	30	-1
" 320- 330	70	5	90	60	-1
" 410- 420	635	4	40	20	1
" 530- 540	420	6	40	20	-1
" 610- 620	240	4	140	100	1
" 710- 720	170	13	120	110	-1
" 850- 860	100	241	100	210	-1
" 950- 960	60	44	70	45	-1
" 1030-1040	380	28	360	0.27%	-1
" 1040-1050	240	24	190	0.26%	-1
" 1150-1160	325	36	160	0.11%	-1
" 1160-1170	210	16	200	720	-1
" 1280-1290	140	24	3.70	140	-1
" 1380-1390	370	31	80	130	-1
2780-2 1430-1440	320	23	180	195	-1
2780-1B 2100-2105	935	-1	20	60	1
2780-3 175- 185	595	9	30	15	-1
" 225- 235	870	12	30	70	-1
2780-3 300- 315	545	11	30	40	-1

Submitted by - L. R. Rice (Lordsburg)

6-14-71
Project #2780

ANALYTICAL REPORT

Sample No.	PPM Cu	PPM Mo	PPM Pb	PPM Zn	PPM Ag
1-2780-220	54	16	84	23	1.3
225	49	26	64	40	1.4
230	54	11	44	48	1.1
235	44	13	54	34	1.3
240	57	11	70	36	2.4
245	40	14	100	30	< 1.0
250	39	14	82	41	1.5
255	34	14	60	44	< 1.0
260	27	16	43	23	1.1
265	24	20	56	25	1.2
270	28	14	56	23	1.7
275	33	11	58	29	1.2
280	33	11	72	27	1.4
285	28	1	43	29	< 1.0
290	49	14	178	31	1.6
295	36	20	58	30	< 1.0
300	43	13	227	33	< 1.0
305	78	14	104	40	1.6
310	65	11	164	39	< 1.0
315	53	6	102	37	< 1.0
320	36	19	68	28	< 1.0
325	33	11	56	35	1.7
330	31	6	50	41	1.4
335	29	9	90	33	2.0
340	36	6	322	46	1.9
345	34	13	84	40	1.3
350	51	9	56	37	1.9
355	290	4	52	54	1.9
360	667	26	86	97	2.9
365	578	11	147	68	1.9
370	589	13	137	62	2.0
375	690	11	193	64	2.0
380	649	11	74	80	1.8
385	626	10	74	82	1.8
390	483	14	356	85	3.2
395	310	4	80	70	2.2
400	215	4	72	69	2.2
405	351	6	116	72	2.1
410	240	9	66	72	1.9
415	209	7	66	60	2.1
420	294	13	60	60	2.6
425	491	9	94	67	2.4
430	486	9	66	49	2.9
435	322	9	280	52	2.6
440	320	6	125	61	2.5
445	455	10	98	59	2.8
450	638	16	48	56	2.9
455	377	11	66	64	3.7
460	307	14	110	70	3.0
465	404	16	244	67	2.8
470	304	10	191	57	2.1

	PPM Cu	PPM Mo	PPM Pb	PPM Zn	PPM Ag
475	615	14	139	41	2.2
480	377	14	135	49	1.6
485	218	13	82	41	1.7
490	343	13	78	50	1.5
495	67	19	112	35	1.2
500	74	11	202	45	1.6
505	191	24	94	74	1.6
510	453	23	58	86	1.6
515	396	19	44	75	1.2
520	576	26	44	68	1.2
525	413	11	74	54	1.3
530	429	13	327	57	1.4
535	433	19	82	76	1.4
540	390	16	58	84	1.2
545	540	13	90	95	1.7
550	587	19	76	247	1.5
555	450	50	68	117	1.4
560	245	20	275	91	1.5
565	343	16	74	82	1.8

Hole 2

Sample No.		ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	ppm Silver
2780-2	50- 60	10	4	40	45	-1
"	290- 300	110	6	20	15	-1
"	320- 330	25	2	70	60	-1
"	490- 500	350	3	30	30	-1
"	590- 600	180	2	40	50	-1
"	610- 620	145	8	110	130	-1
2780-2	620- 630	115	6	40	80	-1
2780-1B	750- 758	260	19	-10	45	-1
"	970- 980	310	117	-10	65	-1
"	2080-2090	810	+300=.042%	-10	100	-1
"	1310-1320	910	80	10	80	-1
"	640- 650	610	10	10	50	-1
"	710- 720	80	19	-10	20	-1
"	750- 758	410	9	-10	40	-1
"	850- 860	30	43	-10	15	-1
"	930- 940	100	46	-10	40	-1
"	970- 980	305	108	10	55	-1
"	1050-1060	50	120	-10	25	-1
"	1160-1170	10	22	40	110	-1
"	1260-1270	5	122	-10	50	-1
"	1310-1320	+1000=0.11%	+300=.035%	10	80	-1
"	1320-1333	+1000=0.16%	190	10	80	-1
"	1480-1490	80	+300=0032%	10	60	-1
"	1560-1570	25	54	30	90	-1
2780-1B	1680-1690	40	+300=.088%	80	100	-1

Marvin H. Gibbetts

DATE STARTED December, 1970

DATE COMPLETED

DIAMOND DRILL ASSAY LOG

SHEET NO 1

2780

HOLE NO 1A-B

COORDIATES

COLLAR ELEVATION

BEDROCK ELEVATION

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	S. G.	Sample No.	Cu	Mo	Pb	Zn	Au	Ag
20	24	5'	N/A chips		5 7/8"		1-2780-20	176	19	150	22		
25	29	5'	"		"		" 25	125	11	130	49		
30	34	5'	"		"		30	168	17	47	15		
35	39	5'	"		"		35	116	29	45	18		
40	44	5'	"		"		40	170	13	40	12		
45	49	5'	"		"		45	476	18	31	18		
50	54	5'	"		"		50	634	9	46	20		
55	59	5'	"		"		55	487	6	193	19		
60	64	5'	"		"		60	132	6	51	23		
65	69	5'	"		"		65	84	3	40	18		
70	74	5'	"		"		70	72	13	45	18		
75	79	5'	"		"		75	75	7	61	21		
80	84	5'	"		"		80	230	12	239	29		
85	89	5'	"		"		85	77	8	93	19		
90	94	5'	"		"		90	125	13	108	32		
95	99	5'	"		"		95	84	6	70	21		
100	104	5'	"		"		100	68	10	30	22		
105	109	5'	"		"		105	45	6	27	20		
110	114	5'	"		"		110	156	44	598	131		
115	119	5'	"		"		115	57	68	159	48		
120	124	5'	"		"		120	53	46	186	44		
125	129	interval	missing		"		—	—	—	—	—		
130	134	5'	N/A, chips		"		130	40	16	586	22		
135	139	5'	"		"		135	37	6	184	37		
140	144	5'	"		"		140	33	6	208	27		
145	149	5'	"		"		145	38	9	642	21		
150	154	5'	"		"		150	58	11	653	21		
155	159	5'	"		"		155	52	6	136	17		
160	164	5'	"		"		160	46	11	184	16		
165	169	5'	"		"		165	69	12	157	15		
170	174	5'	"		"		170	56	13	592	16		
175	179	5'	"		"		175	45	7	108	16		
180	184	5'	"		"		180	45	9	188	20		
185	189	5'	"		"		185	70	10	202	16		
190	194	5'	"		"		190	335	75	356	15		
195	199	5'	"		"		195	226	27	141	18		
200	204	5'	"		"		200	126	38	213	127		
205	209	5'	"		"		205	65	8	69	49		
210	214	5'	"		"		210	60	8	71	60		
215	219	5'	"		"		215	77	12	226	130		

DATE STARTED December, 1970

DATE COMPLETED

DIAMOND DRILL ASSAY LOG

SHEET NO. 1

HOLE NO 1A-B

COORDIATES _____ _____

COLLAR ELEVATION _____ BEDROCK ELEVATION _____

Footage From	Footage To	Interval	Measured Core Recovery	% Recovery	Hole Size	S. G.	Sample No.	Cu	Mo	Pb	Zn	Au	Ag		
20	24	5'	N/A chip		5 7/8"		1-2730-20	176	19	150	22				
25	29	5'	"		"		" 25	125	11	130	49				
30	34	5'	"		"		30	168	17	47	15				
35	39	5'	"		"		35	116	29	45	18				
40	44	5'	"		"		40	170	13	40	12				
45	49	5'	"		"		45	476	18	31	18				
50	54	5'	"		"		50	634	9	46	20				
55	59	5'	"		"		55	487	6	193	19				
60	64	5'	"		"		60	132	6	51	23				
65	69	5'	"		"		65	84	3	40	18				
70	74	5'	"		"		70	72	13	45	18				
75	79	5'	"		"		75	75	7	61	21				
80	84	5'	"		"		80	230	12	239	29				
85	89	5'	"		"		85	77	8	93	19				
90	94	5'	"		"		90	125	13	108	32				
95	99	5'	"		"		95	84	6	70	21				
100	104	5'	"		"		100	68	10	30	22				
105	109	5'	"		"		105	95	6	27	20				
110	114	5'	"		"		110	156	44	598	131				
115	119	5'	"		"		115	57	68	159	48				
120	124	5'	"		"		120	53	46	586	44				
125	129	interval	missing		"		—	—	—	—	—				
130	134	5'	N/A, chips		"		130	40	16	506	22				
135	139	5'	"		"		135	37	6	288	37				
140	144	5'	"		"		140	33	6	203	27				
145	149	5'	"		"		145	38	9	242	21				
150	154	5'	"		"		150	58	11	653	21				
155	159	5'	"		"		155	52	6	136	17				
160	164	5'	"		"		160	46	11	184	16				
165	169	5'	"		"		165	64	12	157	15				
170	174	5'	"		"		170	56	13	598	16				
175	179	5'	"		"		175	45	7	108	16				
180	184	5'	"		"		180	45	9	188	20				
185	189	5'	"		"		185	70	10	202	16				
190	194	5'	"		"		190	335	75	356	15				
195	199	5'	"		"		195	226	27	248	18				
200	204	5'	"		"		200	126	38	213	127				
205	209	5'	"		"		205	65	8	64	49				
210	214	5'	"		"		210	60	8	71	60				
215	219	5'	"		"		215	77	12	226	130				

PROJECT: Lordsburg, New Mexico REPORT NO. C-02-20

SAMPLE TYPE: Drill Core NO. OF SAMPLES: 53 DATE SUBMITTED: 7-21-71

SUBMITTED BY: John McKnight PROJECT NO. #2780

Samples run by rocky Mtn. Geochem 7-15-71

Sample No. 1-B	PPM Ag	PPM Cu	PPM Mo	PPM Pb	PPM Zn
1350-1360	1.6	192	330	492	420
1360-1370	1.3	176	57	125	145
1370-1380	1.4	175	58	143	175
1380-1390	1.3	155	62	120	145
1390-1394	1.2	113	69	92	150
1394-1400	1.3	88	286	31	120
1400-1410	1.2	28	326	25	74
1410-1420	1.5	85	44	79	250
1420-1430	1.6	9[illegible]	46	20	86
1430-1440	1.4	87	59	11	63
1440-1450	1.6	44	44	12	84
1450-1460	1.4	61	39	147	102
1460-1470	1.2	65	30	11	88
1470-1480	1.1	85	29	9	81
1480-1490	1.4	85	209	12	82
1490-1500	1.4	175	19	11	83
1500-1510	1.5	138	36	10	87
1510-1520	SAMPLE MISSING				
1520-1530	1.2	84	48	31	75
1530-1540	1.4	48	32	45	90
1540-1554	1.2	65	69	12	79
1554-1560	1.3	28	28	9	88
1560-1570	1.1	37	43	10	105
1570-1580	1.2	37	24	9	107
1580-1597.5	1.2	98	38	32	107
1597.5-1603	1.6	64	11	198	225
1820-1830	1.	48	10	125	147
1830-1840	1.1	35	14	16	119
1840-1850	1.5	90	6	126	110
1850-1860	1.9	230	7	795	150
1860-1870	1.6	75	14	24	128
1870-1880	1.5	60	7	59	120
1880-1890	1.3	78	6	8	107
1890-1900	1.3	50	11	10	102
1900-1910	1.7	34	6	25	116
1910-1920	2.1	100	21	73	175
1920-1930	1.5	48	5	29	122
1930-1940	1.5	120	3	26	185
1940-1950	1.5	35	41	35	120
1950-1960	1.6	57	17	45	119
1960-1970	1.1	86	14	26	105
1970-1980	1.0	55	9	10	105
1980-1990	1.1	36	18	12	115
1990-2000	1.2	24	6	14	108

Run twice see other sheet for comparis

Sample No. 1-B	PPM Ag	PPM Cu	PPM Mo	PPM Pb	PPM Zn
2000-2010	1.8	34	14	77	115
2010-2020	1.1	25	8	34	95
2020-2030	1.2	49	11	18	99
2030-2040	1.4	24	9	24	150
2040-2050	1.0	24	8	12	101
2050-2060	8.3	185	6	1475	970
2060-2070	1.0	160	9	16	110
2070-2080	1.0	145	21	134	270
2080-2090	1.0	1100	18	21	91
2090-2095	3.1	3050	20	22	147

REPORT NO. C-3-71

SAMPLE TYPE Split Core

NO. OF SAMPLES 2

DATE SUBMITTED 4/7/71

SUBMITTED BY John McKnight

REMARKS 1 Check Samples

PROJECT NO. 2VEC-3B

SAMPLE CONCENTRATION

Sample No	Tube No			Cu			Mo			Pb			Zn			Ag	
357-360				277			7			35			60			12	
360-370				204			13			36			57			2.0	

SAMPLE TYPE: DRILL CORE

NO. OF SAMPLES: 16

REMARKS: 1 GRAM SAMPLES

DATE SUBMITTED: 7/[illegible]/77

SUBMITTED BY: [illegible]

PROJECT NO.: [illegible]

SAMPLE CONCENTRATION

Sample No	Tube No			PPM Cu		PPM Mo	2σ 4.1	PPM Ni	2σ [illegible]	PPM Zn	0.1σ 1.2	PPM Ag
"B"												
2095-2100	157			2300		6	1.0	12	54.1	132	[illegible]	[illegible]
2100-2105	158			1650		4	1.0	12	51.7	125	[illegible]	[illegible]
2105-2110	159			37		3	0.7	<10	42.2	102	1.4	<1.0
2110-2115	160			29		1	0.7	<10	42.6	94	1.1	<1.0
2115-2120	161			34		24	1.4	17	46.3	106	1.4	<1.0
2120-2125	162			32		17	1.4	17	39.1	84	1.1	<1.0
2125-2130	163			55		4	1.3	16	33.3	82	1.2	<1.0
2130-2135	164			41		3	1.5	22	45.2	102	1.6	<1.0
2135-2140	165			220		1	1.3	16	46.7	117	1.6	<1.0
2140-2145	166			81		6	1.2	15	47.6	97	1.6	<1.0
2145-2150	167			30		6	1.1	13	[illegible]	208	1.0	<1.0
2150-2160	168			30		4	0.8	10	31.2	64	1.4	<1.0
2160-2170	169			51		6	1.9	23	49.9	89	1.7	<1.0
2170-2180	170			320		8	0.9	11	43.1	96	2.0	<1.0
2180-2190	171			143		9	0.8	10	47.9	111	1.8	<1.0
2190-2198	172			77		10	1.1	13	51.3	122	1.6	<1.0

PROJECT Ardsburg

REPORT NO. C-[illegible]-39

SAMPLE TYPE Drill Cuttings NO. OF SAMPLES 42

DATE SUBMITTED 7/21/71

SUBMITTED BY John McKinnon

REMARKS 1 Grab Samples

PROJECT NO. 2780-2

SAMPLE CONCENTRATION

Sample No	Tube No			PPM Cu			PPM Mo	2.5 [illegible] 200 1500		PPM Pb			PPM Zn	0.16 3.6 0.60		PPM Ag		
2780-2																		
520-530	[illegible]			165		050	7	3.6		56			60	[illegible]	[illegible]	1.2		
530-540	[illegible]			186		[illegible]	7	3.1		156			116	2.1	[illegible]	1.4		
540-550	[illegible]			132		[illegible]	6	3.1		136			124	2.1	[illegible]	1.4		
730-740	[illegible]			97		[illegible]	6	6.1		105			146	2.0	[illegible]	1.6		
740-750	[illegible]			94		[illegible]	7	4.0		73			132	1.9	[illegible]	1.2		
750-760	[illegible]			77		[illegible]	9	2.4		37			145	1.5	[illegible]	1.0		
760-770	[illegible]			66		050	7	2.5		39			98	1.5	[illegible]	1.0		
770-780	[illegible]			93		[illegible]	5	2.9		49			124	1.8	[illegible]	1.2		
780-790	[illegible]			127		[illegible]	6	4.9		75			172	1.9	[illegible]	1.2		
790-800	[illegible]			110		[illegible]	6	3.3		59			125	1.2	[illegible]	1.5		
800-810	[illegible]			86		[illegible]	5	2.8		44			124	1.9	[illegible]	1.3		
810-820	[illegible]			78		030	4	3.0		47			144	2.0	[illegible]	1.4		
820-830	[illegible]			90		070	10	7.5		117			124	[illegible]	[illegible]	1.4		
830-840	[illegible]			165		105	15	3.7		73			147	[illegible]	[illegible]	1.6		
840-850	[illegible]			75		155	22	3.4		53			119	1.0	[illegible]	1.3		
850-860	[illegible]			104	A	[illegible]	200	14.7	0601	230		100x	280	[illegible]	0123	2.0		
860-870	[illegible]			105		500	72	12.0	0455	185			152	[illegible]	[illegible]	1.9		
870-880	[illegible]			66		320	46	12.9	0505	198			144	2.9	0123	1.9		
880-890	[illegible]			68		305	44	8.6		134			120	2.0	[illegible]	1.4		
890-900	[illegible]			94		295	41	5.1		127			90	[illegible]	[illegible]	1.4		
900-910	[illegible]			72		190	27	6.1		95			82	1.8	[illegible]	1.2		
910-920	[illegible]			48		390	56	3.7		58			32	1.2	0052	<1.0		
920-930	[illegible]			65		195	28	3.3		52			52	1.1	[illegible]	<1.0		
930-940	[illegible]			63		150	20	2.9		45			46	1.0	[illegible]	<1.0		
940-950	[illegible]			71		210	30	2.5		39			46	1.2	0052	<1.0		
950-960	[illegible]			66		300	43	5.2		81			86	1.4	[illegible]	<1.0		
960-970	[illegible]			76		150	21	4.6		75			98	1.4	[illegible]	<1.0		
970-980	[illegible]			82		150	21	10.2	0467	156			111	2.3	[illegible]	1.6		
980-990	[illegible]			94		160	23	5.2		81		100x	250	[illegible]	[illegible]	1.2		
990-1000	[illegible]			86		215	31	6.3		98		[illegible]	320	2.1	[illegible]	1.4		
1000-1010	[illegible]			92		260	37	14.3	0620	207		100x	860	[illegible]	0150	2.4		
1010-1020	[illegible]			110		145	21	9.1		142		100x	769	2.2	0097	1.5		
1020-1030	[illegible]			121		125	18	19.2	0926	309		[illegible]	1500	[illegible]	[illegible]	3.4		
1030-1040	[illegible]			326		205	29	20.9	1018	339		[illegible]	3100	[illegible]	[illegible]	4.4		
1040-1050	[illegible]			217		150	21	[illegible]	1110	390		100x	3200	[illegible]	[illegible]	3.0		
1050-1060	[illegible]			85		110	16	4.2		67		100x	320	1.7	[illegible]	1.2		
1060-1070	[illegible]			146		120	17	[illegible]		125		[illegible]	400	[illegible]	[illegible]	1.7		
1070-1080	[illegible]			108		370	53	10.7	0472	157		[illegible]	340	[illegible]	[illegible]	1.9		
1080-1090	[illegible]			115		110	16	9.7		136		[illegible]	360	[illegible]	[illegible]	1.6		
1090-1100	[illegible]			159		100	14	8.5		128		[illegible]	350	[illegible]	[illegible]	1.7		
1100-1110	[illegible]			142		220	31	7.1		111		100x	260	[illegible]	[illegible]	1.7		
1110-1120	[illegible]			204		350	50	11.6	0535	178		[illegible]	320	[illegible]	[illegible]	2.6		

PROJECT [illegible]

REPORT NO. [illegible]

SAMPLE TYPE Core Cuttings

NO. OF SAMPLES [illegible]

DATE SUBMITTED 7/10/71

SUBMITTED BY T. McCaughey

REMARKS 1 gram samples

PROJECT NO. 27020-3

SAMPLE CONCENTRATION

Sample No	Tube No	PPM Cu	PPM Mo	Fe 357	PPM Pb	PPM Zn	PPM Ag
27020-3							
15-20		250	10		68	38	2.2
20-30		220	4		59	37	1.7
30-40		358	9		43	37	1.7
40-50		119	5		43	33	1.1
50-60		32	9		64	67	1.7
60-70		285	4		67	45	1.3
70-80		1900	4		110	105	1.2
80-90		160	5	10	68	47	1.3
90-100		225	6	9	68	38	2.3
100-110		235	12		57	30	1.3
110-120		124	5		64	33	1.7
120-130		480	2		64	22	1.0
130-140		605	8		89	29	2.3
140-150		321	8		100	51	2.1
150-160		400	8		98	77	2.9
160-170		391	6		64	50	2.0
170-180		212	9		220	137	2.3
180-190		120	7		107	70	2.2
190-200		118	6		52	43	1.3
200-210		437	5		75	43	1.7
210-220		239	10		89	55	2.4
220-230		125	9		86	120	1.3
230-240		210	6		46	34	1.3
240-250		370	6		61	40	1.3
250-260		440	6		79	59	2.2
260-270		200	6		67	39	1.3
270-280		210	4		136	80	2.3
280-290		215	8		107	41	1.7
290-300		183	3		61	30	1.3
300-310		205	4		52	32	1.3
310-320		72	3		68	64	1.0
320-330		84	4		125	91	1.3
330-340		36	6		89	76	1.3
340-350		82	2		64	58	1.3
350-360		109	4		139	85	[illegible]
360-370		250	3		98	104	[illegible]
370-380		180	3		75	50	[illegible]
380-390		1[illegible]	5		86	52	[illegible]
390-400		205	5		61	39	[illegible]
400-410		225	3		96	49	[illegible]
410-420		100	3		64	36	[illegible]
420-430		280	4		89	34	1.3
430-440		234	4		164	42	1.0

LE TYPE Rock Cuttings NO. OF SAMPLES

REMARKS 1 gram samples

REPORT NO.

DATE SUBMITTED 7/12/71

SUBMITTED BY J McKnight

PROJECT NO. 3720-2

SAMPLE CONCENTRATION

Sample No	Tube No	PPM Cu	PPM Mo	PPM Pb	PPM Zn	Fe %	PPM Ag
3720-2							
440-450		100	3	64	39		2.2
450-460		119	0	52	32		1.6
460-470		158	3	70	32		1.9
470-480		140	4	68	46		2.0
480-490		204	4	50	61		1.9
490-500		399	9	50	38		1.8
500-510		255	5	57	34		1.9
510-520		310	4	29	39		1.5
520-530		226	3	118	35		1.5
530-540		293	4	57	32		1.1
540-550		279	14	39	25		1.1
550-560		310	3	18	29		1.5
560-570		242	4	20	27		1.1
570-580		200	4	18	26		1.5
580-590		192	11	22	29		1.7
590-600		219	2	18	38		1.7
600-610		227	2	18	35		1.1
610-620		220	4	107	23		1.1
620-630		185	4	89	72		1.1
630-640		236	4	51	57		1.1
640-650		155	4	61	106		1.7
650-660		125	4	28	51		1.1
660-670		102	3	21	38		1.5
670-680		147	4	18	50		1.1
680-690		140	5	28	59		1.1
690-700		176	4	25	41		1.1

*-Sent to Rocky Mtn Geochem August 12, 1971

PROJECT [illegible]

REPORT NO. [illegible]

SAMPLE TYPE Pulp

NO. OF SAMPLES 15

DATE SUBMITTED 7/21/91

SUBMITTED BY John McKnight

REMARKS 1 gram Sample

Pulps from Rocky Mtn Geochem.

PROJECT NO. 2280-18

SAMPLE CONCENTRATION

Sample No	Tube No			PPM Cu			PPM Mo	Fe %	3.2	PPM Pb			PPM Zn	0.1% 4.1	Fe 13%	PPM Ag		
"18"																		
40-650				713			12	2.5	[illegible]	32			40	2.8	[illegible]	1.7		
[illegible]-720				135			24	1.8	[illegible]	23			43	1.5	[illegible]	1.0		
50-860				32			40	2.0	[illegible]	25			47	1.8	[illegible]	1.1		
30-940				571			132	[illegible]	[illegible]	31			67	2.0	[illegible]	1.8		
50-1060				117			265	2.0	[illegible]	26			53	1.9	[illegible]	1.1		
[illegible]-1120				44			30	2.1	[illegible]	27			120	2.2	[illegible]	4.1		
260-1220				25			197	1.7	[illegible]	22			65	1.2	[illegible]	1.0		
20-1350				1870			266	2.0	[illegible]	26			105	2.6	[illegible]	1.6		
180-1450				119			336	1.9	[illegible]	24			94	1.6	[illegible]	1.0		
50-1570				85			29	1.9	[illegible]	24			136	2.4	[illegible]	1.5		
50-1690				81			223	[illegible]	0029	1260		10%	910	2.1	[illegible]	1.3		
10-1720				418			8	[illegible]	0137	40			136	1.9	[illegible]	1.1		
20-1830				63			12	4.3	0191	56			155	2.0	[illegible]	1.8		
10-1920				126			21	2.57	1302	38		10%	350	5.7	[illegible]	3.5		
90-2095				2930			44	5.5	0155	45			163	5.9	[illegible]	3.6		
[illegible]			2097	Fe	2232													
[illegible]			2253	Fe	2125													

REPORT NO. [illegible]

SAMPLE TYPE
DRILL CUTTINGS & CORE NO. OF SAMPLES 36

DATE SUBMITTED 8-12-71
SUBMITTED BY John McKnight

REMARKS 1 Gram Samples

PROJECT NO. 2780-2

1130 THRU 1200 ARE CUTTINGS; 1202 THRU 1493 ARE CORE

SAMPLE CONCENTRATION

Sample No	Tube No			Cu		Mo	28 205	4.8 20.7	0.014 1464 Pb	F=2336 F=3404		Zn	0.14 1.05	6.1 37.0	2.3	F=9153 F=1233
2780-2				—	—	—	—	—	—			—	—	—	—	
1130-1140	54			103	185	26	9.6	[illegible]	149			231	5.2	[illegible]	2.1	
1140-1150	55			84	100	14	5.5	[illegible]	131			257	4.2	[illegible]	1.7	
1150-1160	56			209	260	37	12.5	[illegible]	197			1640	5.9	[illegible]	3.2	
1160-1170	57			300	125	19	36.5	[illegible]	671			711	11.0	[illegible]	6.3	
1170-1180	58			112	070	10	12.4	[illegible]	196			248	4.6	[illegible]	1.5	
1180-1190	59			87	165	24	12.4	[illegible]	196			163	4.6	[illegible]	1.9	
1190-1200	60			65	115	16	8.3	0376	128			138	4.1	[illegible]	[illegible]	
1202-1212	61			58	125	18	6.3	[illegible]	66			142	3.5	[illegible]	1.6	
1212-1220	62			81	195	28	4.1	0209	49			105	2.2	[illegible]	1.1	
1220-1230	63			34	070	10	5.3	0236	55			86	1.4	[illegible]	<1	
1230-1240	64			70	150	21	13.4	[illegible]	213			131	4.9	[illegible]	2.0	
1240-1250	65			69	160	23	5.1	0227	53			116	1.6	[illegible]	<1	
1250-1260	66			108	115	16	6.9	0311	73			183	2.9	[illegible]	1.1	
1260-1270	67			72	085	6	15.9	0702	256			408	5.1	[illegible]	2.[illegible]	
1270-1280	68			47	090	13	3.2	0141	33			110	1.0	[illegible]	<1	
1280-1290	69			166	085	12	5.3	0236	55			201	1.3	[illegible]	<1	
1290-1300	70			72	150	21	4.0	0177	41			106	0.7	[illegible]	<1	
1300-1310	71			70	070	10	4.5	[illegible]	47			96	1.5	[illegible]	<1	
1310-1320	72			62	085	12	4.9	0218	51			158	3.1	0127	1.3	
1320-1330	73			77	120	17	2.6	0114	27			74	2.4	[illegible]	1.[illegible]	
1330-1340	74			76	080	11	3.1	0137	32			65	2.0	[illegible]	<1	
1340-1350	75			47	300	43	3.2	0141	33			72	1.7	[illegible]	<1	
1350-1360	76			92	080	11	2.8	0123	29			48	2.9	[illegible]	1.2	
1360-1370	77			78	040	6	1.0	[illegible]	10			54	1.8	[illegible]	<1	
1370-1380	78			55	060	9	2.8	0123	29			78	2.2	[illegible]	<1	
1380-1390	79			310	175	25	14.1	0660	225			485	6.5	[illegible]	2.7	
1390-1400	80			104	055	8	4.2	[illegible]	43			278	3.6	[illegible]	1.5	
1400-1410	81			50	045	6	2.8	0123	29			82	2.3	[illegible]	<1	
1410-1420	82			61	135	19	4.1	0182	43			297	2.4	[illegible]	1.4	
1420-1430	83			60	075	11	2.8	0123	29			59	2.6	[illegible]	1.0	
1430-1440	84			179	095	12	11.9	[illegible]	187			170	4.6	[illegible]	1.9	
1440-1450	85			82	165	24	6.8	0306	71			315	3.8	[illegible]	1.5	
1450-1460	86			43	160	23	2.5	0110	26			72	2.8	[illegible]	1.1	
1460-1470	87			52	070	10	2.0	0123	29			80	3.3	[illegible]	1.3	
1470-1480	88			43	150	21	3.6	0155	36			55	3.0	[illegible]	1.2	
1480-1493	89			68	095	14	2.9	0125	30			65	3.0	[illegible]	1.2	

DRILL CUTTINGS NO. OF SAMPLES 23

REMARKS 1 GRAM SAMPLES

DATE SUBMITTED 2/20/81

SUBMITTED BY John McKnight

PROJECT NO. [illegible]

SAMPLE CONCENTRATION

Sample No	Tube No	PPM Cu	PPM Mo	2σ 4.1	PPM Pb	2σ 20.5	PPM Zn	2σ 4.2	PPM Ag
# 3A									
105-115	134	545	11	3.5	43	54.0	132		2.0
115-125	135	320	5	3.3	40	42.0	93		1.7
125-135	136	300	5	3.4	41	42.1	93		1.5
135-145	[illegible]	283	4	2.3	23	40.6	88		1.4
145-155	139	410	4	4.1	50	41.4	91		1.8
155-165	140	515	6	2.4	29	40.6	91		1.8
165-175	140	585	9	3.5	43	39.4	85		2.0
175-185	141	680	7	3.4	41	41.6	91		2.1
185-195	142	680	9	2.5	31	41.6	91		2.1
195-205	143	465	7	3.0	37	33.5	69		2.0
205-215	144	450	9	1.7	21	33.5	60		2.0
215-225	145	430	6	1.8	22	28.6	57		1.3
225-235	146	450	9	2.6	32	30.7	62		1.5
235-245	147	390	7	2.6	32	33.4	69		<1.0
245-255	148	320	13	2.5	31	29.0	59		<1.0
255-265	149	300	4	1.4	17	28.0	56		1.0
265-275	150	300	4	1.4	17	34.4	72		<1.0
275-285	151	300	9	1.9	23	27.0	53		<1.0
285-295	152	345	7	1.9	23	24.9	49		<1.0
295-305	153	390	9	2.4	29	21.9	42		1.1
305-315	154	460	7	1.1	13	21.1	40		<1.0
315-325	155	420	13	1.2	15	23.3	45		<1.0
325-335	MISSING								
335-345	156	380	4	1.4	17	22.2	43		<1.0

REPORT NO. [illegible]

SAMPLE TYPE Split Core

NO. OF SAMPLES 9

DATE SUBMITTED 9/16/71

SUBMITTED BY J. M. Knight

REMARKS 1 gram Samples

PROJECT NO. 2786-3[illegible]

SAMPLE CONCENTRATION

Sample No	Tube No			PPM Cu	PPM Mo			PPM Pb			PPM Zn		PPM Ag
278-279	[illegible]	[illegible]	[illegible]	334	7			34			44		1.[illegible]
293-305	[illegible]	[illegible]	[illegible]	366	10			37			47		1.7
305-310	[illegible]	[illegible]	[illegible]	336	12			37			46		1.7
310-325	[illegible]	[illegible]	[illegible]	415	12			38			47		1.[illegible]
325-335.5	[illegible]	[illegible]	[illegible]	319	11			36			46		1.[illegible]
335.5-344	[illegible]	[illegible]	[illegible]	160	5			37			54		[illegible]
344-350	[illegible]	[illegible]	[illegible]	930	5			40			55		2.[illegible]
350-360	[illegible]	[illegible]	[illegible]	810	7			42			63		2.[illegible]
360-367.5	[illegible]	[illegible]	[illegible]	472	15			42			52		1.8
3 x C	120	[illegible]	1351										
[illegible]	102	[illegible]	1957										

1-8

Rocky Mountain Geochemical Corporation

2050 EAST 14TH STREET
TUCSON, ARIZONA 85719

Phone 622-5702
Area Code: 602

CERTIFICATE OF ANALYSES

Date July 15, 1971

Client Humble Oil & Refining Co.
P.O. Box 120
Denver, Colorado 80201

Report on: 15 Samples

Submitted by: Mr. J. McKnight

Date Received: July 12, 1971

Analysis: Copper, Molybdenum, Lead, Zinc, and Silver

Remarks: Molybdenum determined colorimetrically. All others determined by atomic absorption.

Job No. 71-7-17T

cc: Enclosed
RMGC: SLC
file

MHH:rg

All values are reported in parts per million unless specified otherwise. A minus sign (–) is to be read "less than" and a plus sign (+) "greater than." Values in parenthesis are estimates. This analytical report is the confidential property of the above mentioned client and for the protection of this client and ourselves we reserve the right to forbid publication or reproduction of this report or any part thereof without written permission.

ND = Non Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.28 ppm % Mo. x 1.6683 = %MoS_2

2780-1B
Pulps prepared by RMGC

Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	ppm Silver
640- 650	780	13	20	65	-1
710- 720	140	29	-10	30	-1
850- 860	20	122	10	35	-1
930-940	680	+300=.078%	10	85	-1
1050-1060	120	+300=.059%	-10	55	-1
1160-1170	30	43	50	120	-1
1260-1270	20	+300=.032%	10	70	-1
1320-1330	+1000=.16%	262	10	105	1
1480-1490	115	+300=.070%	-10	100	-1
1560-1570	80	57	-10	130	-1
1680-1690	50	288	1000	540	-1
1710-1720	415	8	20	95	-1
1820-1830	50	14	40	120	-1
1910-1920	110	39	470	270	-1
2090-2095	+1000=.28%	36	30	105	1

ROCKY MOUNTAIN GEOCHEMICAL CORPORATION

Tucson, Arizona July 15, 1971

By Martin H. Hibbetts

Martin H. Hibbetts

Rocky Mountain Geochemical Corporation

2050 EAST 14TH STREET
TUCSON, ARIZONA 85719

Phone 622-5702
Area Code: 602

CERTIFICATE OF ANALYSES

Date: August 17, 1971

Client: Humble Oil & Refining Company
R02513
P.O. Box 120
Denver, Colorado 80201

Report on: 18 Samples

Submitted by: Mr. Ken Powers

Date Received: August 12, 1971

Analysis: Copper, Molybdenum, Lead, Zinc, and Silver

Remarks: Molybdenum determined colorimetrically. All others determined by atomic absorption.

Job No. 71-8-33T

cc: Enclosed
RMGC: SLC
file

MHH:rg

ROCKY MOUNTAIN GEOCHEMICAL CORPORATION
Tucson, Arizona August 17, 1971

All values are reported in parts per million unless specified otherwise. A minus sign (–) is to be read "less than" and a plus sign (+) "greater than." Values in parenthesis are estimates. This analytical report is the confidential property of the above mentioned client and for the protection of this client and ourselves we reserve the right to forbid publication or reproduction of this report or any part thereof without written permission.

ND = Non Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.28 ppm % Mo. x 1.6683 = % MoS_2

Sample No. n	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	ppm Silver
2540 EZ 1176-1190	+1000=0.15%	13	50	10	6
" 1230-1240	405	30	40	15	-1
" 1270-1280	+1000=0.14%	7	20	20	-1
" 1390-1400	+1000=0.12%	28	50	5	-1
" 1410-1420	645	24	250	15	-1
" 1496-1498½	605	6	30	+1000=.39%	-1
" 1580-1590	680	10	120	35	-1
" 1694-1700	+1000=0.11%	4	30	25	-1
2540 EZ 1780-1790	520	11	10	115	-1
2780-2 70- 80	+1000=0.21%	8	90	150	1
" 250- 260	400	6	10	70	-1
" 410- 420	510	2	10	40	-1
" 530- 540	250	5	20	40	-1
" 710- 720	150	7	50	110	-1
" 850- 860	80	182	230	250	-1
" 950 910	45	32	40	90	-1
" 1030-1040	300	25	300	+1000=.25%	-1
2780-2 1040-1050	210	12	390	+1000=.22%	-1

ROCKY MOUNTAIN GEOCHEMICAL CORPORATION

Tucson, Arizona August 17, 1971

By Martin H. Hibbetts

Martin H. Hibbetts

Rocky Mountain Geochemical Corporation
2050 EAST 14TH STREET
TUCSON, ARIZONA 85719
Phone 622-5702
Area Code: 602

CERTIFICATE OF ANALYSES

Date August 17, 1971

Client Humble Oil & Refining Company
RO2513
P.O. Box 120
Denver, Colorado 80201

Report on: 18 Samples

Submitted by: Mr. Ken Powers

Date Received: August 12, 1971

Analysis: Copper, Molybdenum, Lead, Zinc, and Silver

Remarks: Molybdenum determined colorimetrically. All others determined by atomic absorption.

Job No. 71-8-33T

cc: Enclosed

RMGC: SLC

file

MHH:rg

All values are reported in parts per million unless specified otherwise. A minus sign (–) is to be read "less than" and a plus sign (+) "greater than." Values in parenthesis are estimates. This analytical report is the confidential property of the above mentioned client and for the protection of this client and ourselves we reserve the right to forbid publication or reproduction of this report or any part thereof without written permission.

ND = Non Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.28 ppm % Mo. x 1.6683 = % MoS_2

Sample No. n		ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	ppm Silver
2540 EZ	1176-1190	+1000=0.15%	13	50	10	6
"	1230-1240	405	30	40	15	-1
"	1270-1280	+1000=0.14%	7	20	20	-1
"	1390-1400	+1000=0.12%	28	50	5	-1
"	1410-1420	645	24	250	15	-1
"	1496-1498½	605	6	30	+1000=.39%	-1
"	1580-1590	680	10	120	35	-1
"	1694-1700	+1000=0.11%	4	30	25	-1
2540 EZ	1780-1790	520	11	10	115	-1
2780-2	70- 80	+1000=0.21%	8	90	150	1
"	250- 260	400	6	10	70	-1
"	410- 420	510	2	10	40	-1
"	530- 540	250	5	20	40	-1
"	710- 720	150	7	50	110	-1
"	850- 860	80	182	230	230	-1
"	950 910	45	32	40	90	-1
"	1030-1040	300	25	300	+1000=.25%	-1
2780-2	1040-1050	210	12	390	+1000=.22%	-1

ROCKY MOUNTAIN GEOCHEMICAL CORPORATION

Tucson, Arizona August 17, 1971

By Martin H. Hibbetts

Martin H. Hibbetts

HUMBLE OIL & REFINING COMPANY

TUCSON, ARIZONA 85719

MINERALS DEPARTMENT

(602) 622-8801

403 S. PLUMER AVE.

PROJECT: Lordsburg, New Mexico

SAMPLE TYPE: Drill Core

PROJECT NO.: 2780

Report No. C-02-12

Date Submitted: 6-22-71

By: John McKnight

(samples run 7-15-71 by Rocky Mtn. Geochem. * Samples to be submitted July 21, 1971 to Rock Mtn Geochem

1-B	PPM Cu	PPM Mo	PPM PB	PPM Zn	PPM Ag
565 - 580	160	9	35	60	1.8
580 - 590	108	12	26	54	1.5
590 - 600	193	14	20	51	1.4
600 - 610	435	13	19	52	1.0
610 - 620	504	24	18	53	1.3
620 - 630	534	16	23	62	1.5
630 - 640	189	16	24	56	1.1
(640 - 650	597	7	28	88	1.7
650 - 660	549	11	23	75	1.6
660 - 670	272	17	23	51	< 1.0
670 - 680	35	39	32	25	< 1.0
680 - 690	24	16	26	24	< 1.0
690 - 700	71	24	22	36	< 1.0
700 - 710	280	106	20	46	1.0
(710 - 720	105	21	18	48	< 1.0
720 - 730	97	9	17	44	< 1.0
730 - 740	170	6	13	55	1.0
740 - 750	98	12	19	59	< 1.0
* 750 - 758	362	12	141	67	1.2
758 - 770	140	23	20	56	1.1
770 - 778	113	114	14	50	1.1
778 - 782	56	43	15	54	< 1.0
782 - 790	100	26	25	62	1.1
790 - 800	47	29	20	56	< 1.0
800 - 810	66	6	21	58	1.0
810 - 814	64	9	16	52	1.2
814 - 830	69	24	19	56	1.2
830 - 840	102	10	22	60	1.1
840 - 850	23	41	22	51	1.2
(850 - 860	37	37	21	47	1.2
860 - 870	37	19	23	58	1.2
870 - 880	63	30	22	68	1.2
880 - 890	45	117	22	53	1.3
890 - 900	71	26	37	26	1.1
900 - 909	145	19	30	20	< 1.0
909 - 920	67	40	24	56	1.2
920 - 930	33	27	36	66	1.3

1-B

	PPM Cu	PPM Mo	PPM Pb	PPM Zn	PPM Ag
(930 - 940	125	49	36	68	1.3
940 - 950	48	19	19	62	1.2
950 - 960	39	19	20	51	1.2
960 - 970	40	94	20	43	1.1
*970 - 980	278	94	25	68	1.5
980 - 990	95	13	23	61	1.4
990 - 1000	77	18	23	49	1.2
1000 - 1010	48	31	22	43	1.2
1010 - 1020	25	132	23	53	1.1
1020 - 1030	39	183	23	48	1.3
1030 - 1040	40	152	25	61	1.1
1040 - 1050	29	41	24	42	1.1
(1050 - 1060	64	58	25	49	1.2
1060 - 1070	143	10	49	74	1.2
1070 - 1078	257	14	24	61	1.3
1078 - 1081½	81	14	42	51	<1.0
1081½ - 1090	99	59	25	48	1.1
1090 - 1100	164	42	24	49	1.0
1100 - 1110	25	26	22	42	<1.0
1110 - 1120	67	56	22	51	<1.0
1120 - 1130	26	380	22	52	1.1
1130 - 1140	23	52	21	52	1.0
1140 - 1150	42	14	21	56	1.0
1150 - 1160	37	43	23	71	1.1
(1160 - 1170	39	26	92	110	1.4
1170 - 1180	120	34	318	550	2.0
1180 - 1190	105	43	21	64	1.1
1190 - 1200	15	25	19	55	1.0
1200 - 1210	54	6	21	54	1.1
1210 - 1220	49	137	19	54	1.0
1220 - 1230	22	252	18	46	1.0
1230 - 1240	150	44	1296	630	12.0
1240 - 1250	29	39	15	49	<1.0
1250 - 1260	29	26	16	57	1.0
(1260 - 1270	22	65	15	63	<1.0
1270 - 1282	26	16	18	71	<1.0
1282 - 1285.5	22	54	19	64	1.2
1285.5 - 1290	152	9	1251	1190	5.6
1290 - 1300	320	66	741	150	6.7
1300 - 1310	49	163	24	64	1.2
*1310 - 1320	1166	306	22	89	1.7
(1320 - 1333	1436	163	23	87	2.0
1333 - 1340	106	74	109	136	1.1
1340 - 1350	210	189	362	390	1.6
1554 - 1560	44	28	161	102	1.5
(1560 - 1570	175	150	40	119	1.3
1570 - 1580	55	36	32	108	1.5
1580 - 1587.5	72	152	33	99	1.5
1597.5- 1603	40	11	348	155	1.8

Other sheet — run twice weak solts on other sheet

(contd.)

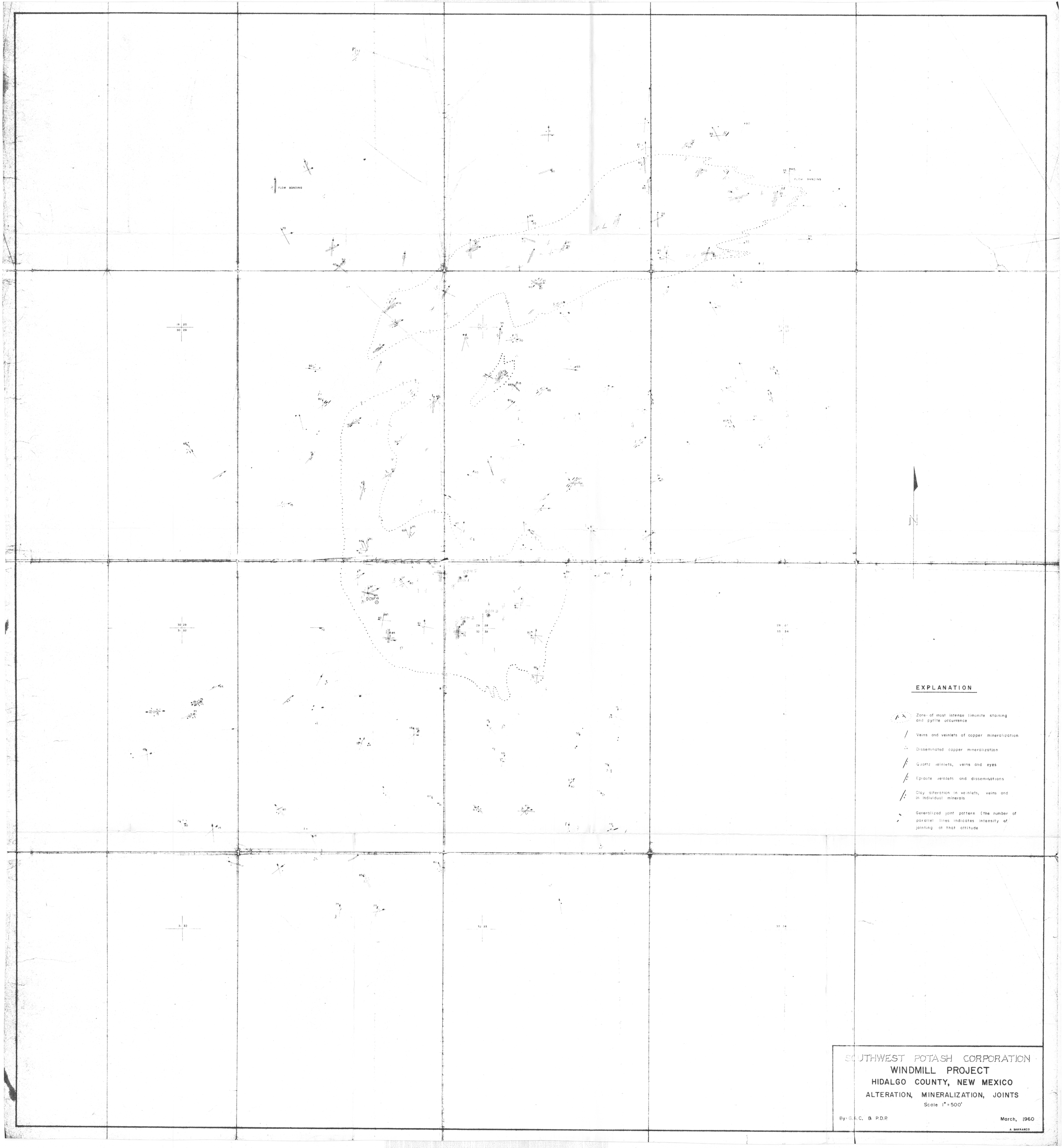
1603 - 1613	94	14	1038	320	3.1
1613 - 1622	41	29	20	108	1.1
1622 - 1630	17	34	16	58	1.1
1640 - 1650	24	64	28	49	1.1
1650 - 1660	26	9	128	65	1.1
1660 - 1670	22	14	143	53	1.1
1670 - 1680	33	49	46	69	1.2
1680 - 1690	42	286	82	109	1.3
1690 - 1700	18	10	32	68	1.3
1700 - 1710	179	121	105	163	1.4
1710 - 1720	300	8	35	139	1.7
1720 - 1730	250	24	179	198	1.7
1730 - 1740	190	26	55	144	1.4
1750 - 1760	66	26	147	156	1.4
1760 - 1770	134	18	212	171	1.6
1770 - 1780	163	12	23	128	1.2
1780 - 1790	78	16	22	111	1.2
1790 - 1800	201	18	646	245	2.0
1800 - 1810	165	11	161	142	1.8
1810 - 1820	196	9	2780	115	7.7

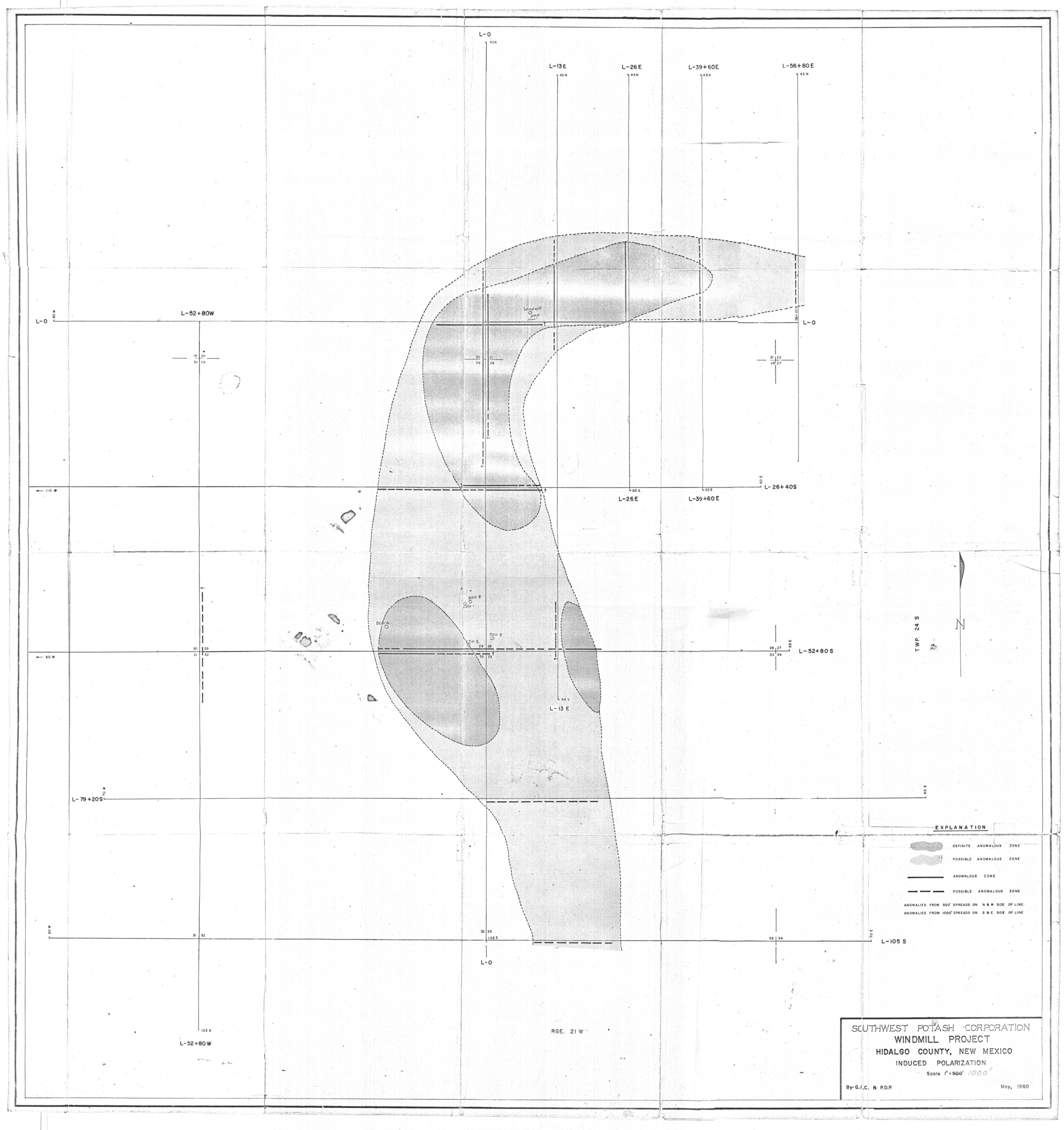
PROJECT NO. 2540

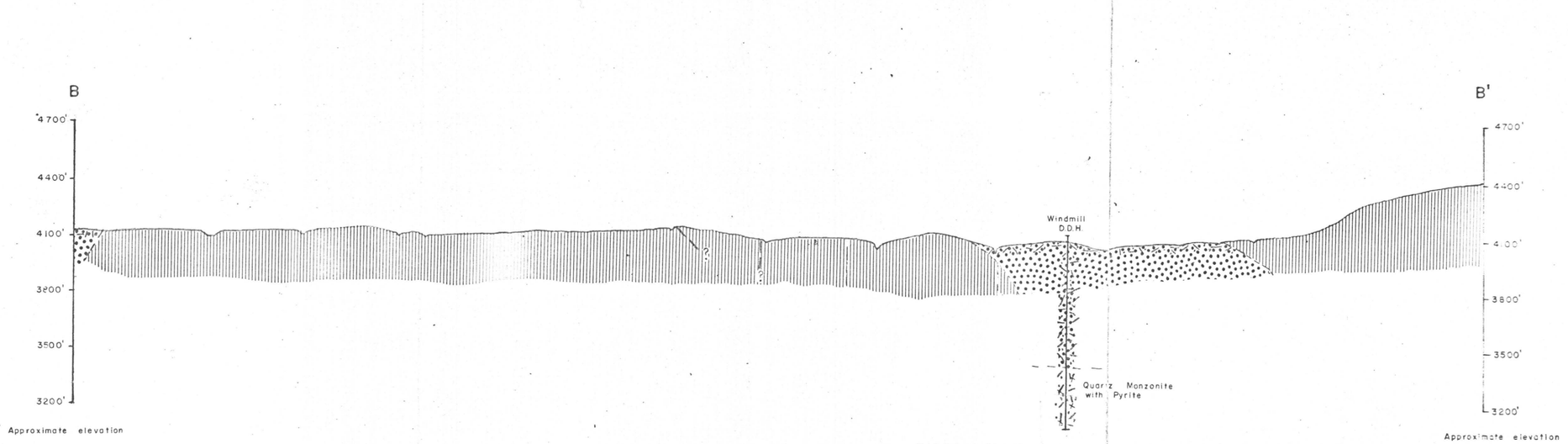
#2

1196 - 1205	108	9	22	32	1.4

R. L. Graner


FLOW BANDING
FLOW BANDING
DDH 5
DDH 4
DDH 3
DDH 2
N
EXPLANATION
Zone of most intense limonite staining and pyrite occurrence
Veins and veinlets of copper mineralization
Disseminated copper mineralization
Quartz veinlets, veins and eyes
Epidote veinlets and disseminations
Clay alteration in veinlets, veins and in individual minerals
Generalized joint pattern (the number of parallel lines indicates intensity of jointing at that attitude
SOUTHWEST POTASH CORPORATION
WINDMILL PROJECT
HIDALGO COUNTY, NEW MEXICO
ALTERATION, MINERALIZATION, JOINTS
Scale 1" = 500'
By: G.E.C. & P.D.P.
March, 1960
A. BARRANCO


L-0
L-13E
L-26E
L-39+60E
L-56+80E
L-52+80W
L-26+40S
L-52+80S
L-13 E
L-79+20S
L-105 S
L-52+80W
Windmill
DDH 1
DDH 2
DDH 3
DDH 4
DDH 5
TWP. 24 S
RGE. 21 W
N
EXPLANATION
DEFINITE ANOMALOUS ZONE
POSSIBLE ANOMALOUS ZONE
ANOMALOUS ZONE
POSSIBLE ANOMALOUS ZONE
ANOMALIES FROM 500' SPREADS ON N & W SIDE OF LINE.
ANOMALIES FROM 1000' SPREADS ON S & E SIDE OF LINE
SOUTHWEST POTASH CORPORATION
WINDMILL PROJECT
HIDALGO COUNTY, NEW MEXICO
INDUCED POLARIZATION
Scale 1" = ~~500'~~ 1000'
By: G.J.C. & P.D.P.
May, 1960



EXPLANATION

- ANDESITE
- TUFF
- CONTACT
- FAULT
- IRON OXIDE and PYRITE

SOUTHWEST POTASH CORPORATION

WINDMILL PROJECT

HIDALGO COUNTY, NEW MEXICO

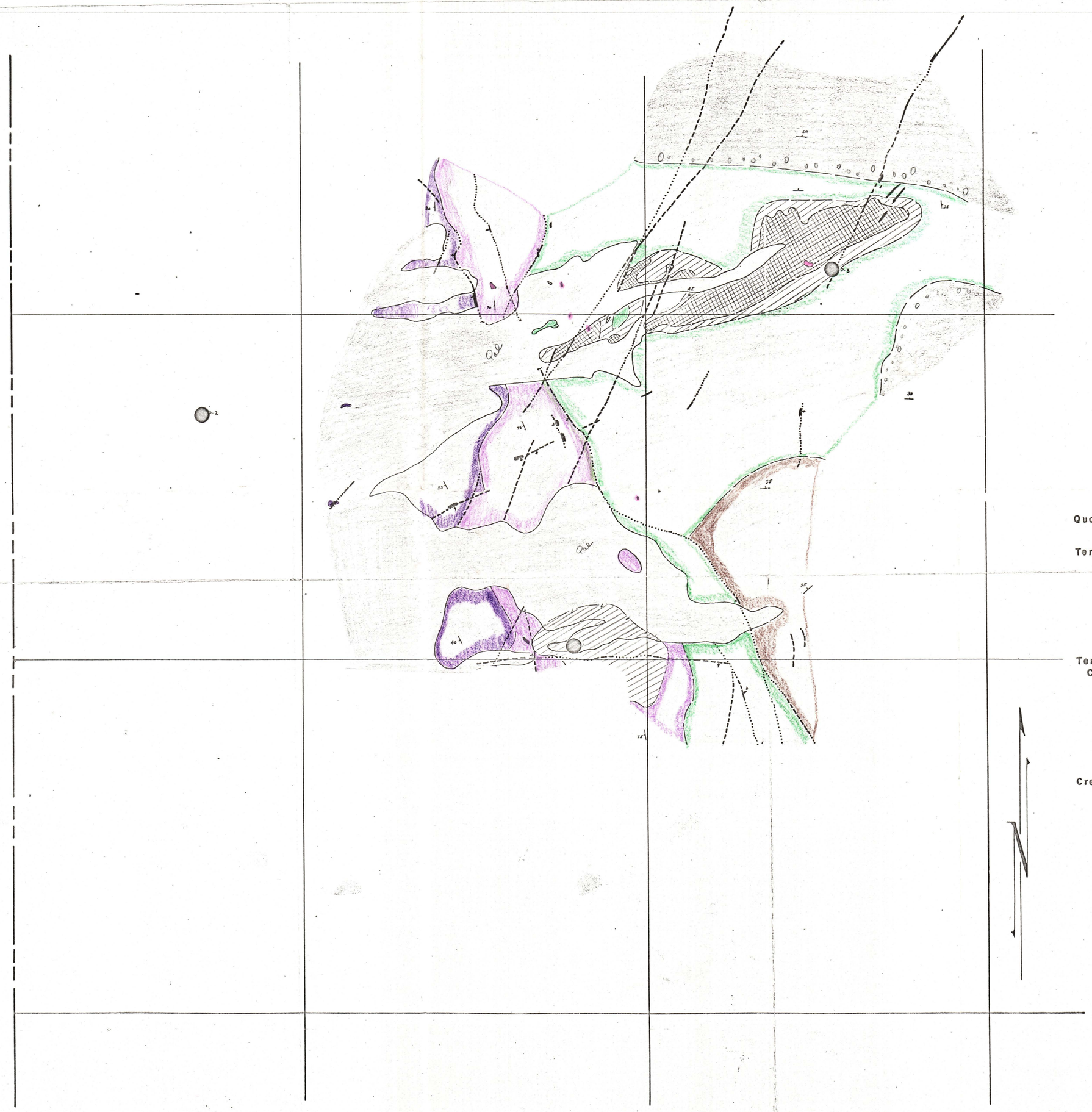
VERTICAL SECTION B-B'

Scale 1" = 500'

By: P. D.P.

MARCH, 1960

A. Barranco



LEGEND

Quaternary
- Gravels

Tertiary
- Basalt Dikes

Tertiary or Cretaceous
- Intrusive Quartz Monzonite Porphyry
- Acid to Basic Volcanics
- Intermediate to Acid Volcanics — includes Minor Basic Volcanics
- Andesitic Agglomerate
- Andesitic to Basaltic Volcanics
- Sedimentary and Volcanic Rocks — Includes Bobcat Hill Cgl. and Quartzlatite

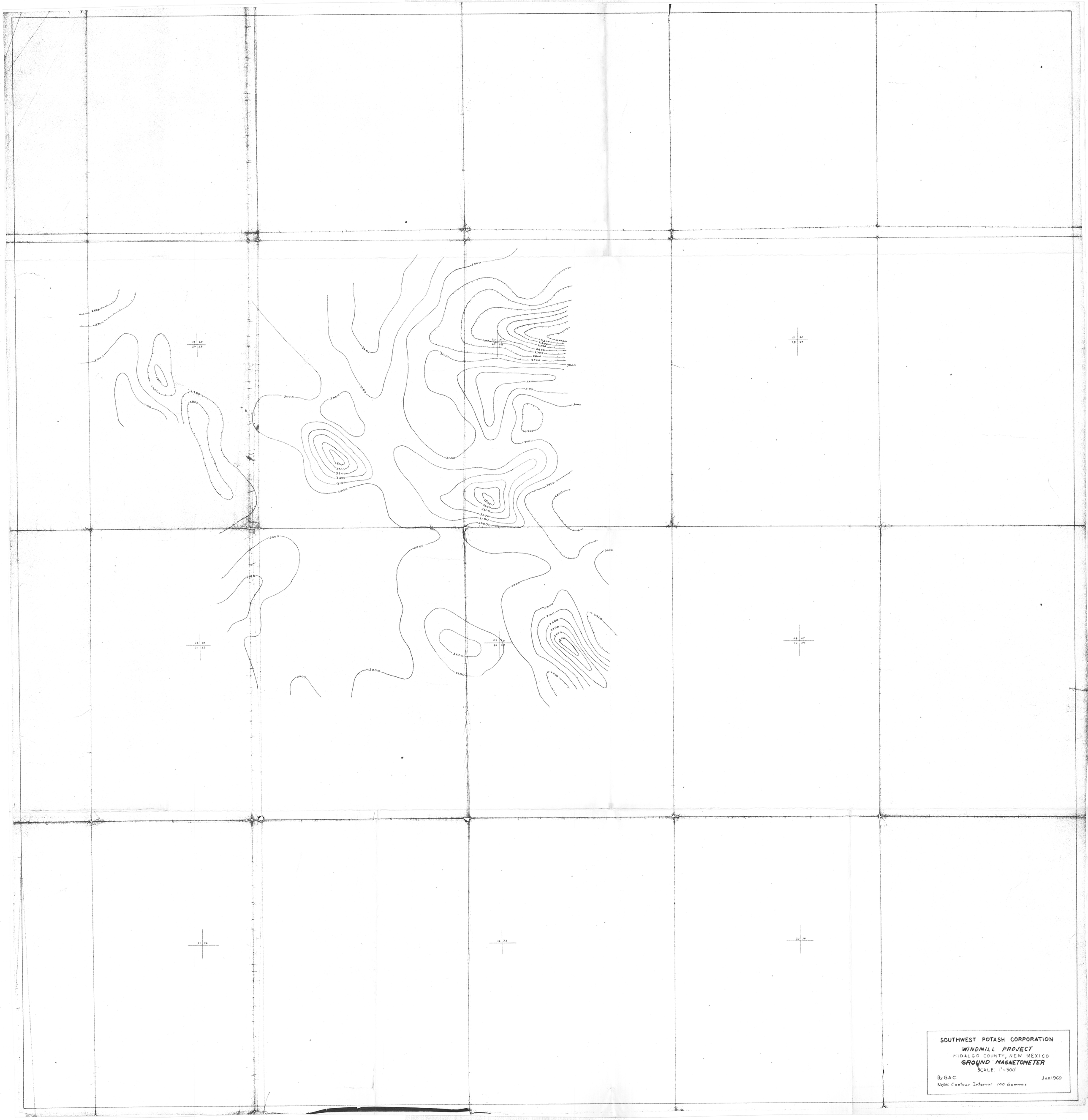
Cretaceous
- Sedimentary Rocks — Includes Johnny Bull Ss and Still Ridge Fm.

- Contact
- Fault
- Shear Zone
- Quartz Vein
- Copper Mineralization
- Intense Alteration — Intensely Brecciated Rock with Kaolinitic, Silicic, Sericitic, and Pyritic Alteration — contains Oxidized Sulfide Veinlets.
- Strong Alteration — Brecciated Rock with Silicic, Sericitic, and Pyritic Alteration.

PELONCILLO PROJECT

Geology

Scale 1" = 1000'


SOUTHWEST POTASH CORPORATION
WINDMILL PROJECT
HIDALGO COUNTY, NEW MEXICO
GROUND MAGNETOMETER
SCALE 1" = 500'
By G.A.C.
Jan. 1960
Note: Contour Interval 100 Gammas

Adams - West Claims

CENTRAL PELONCILLO MOUNTAINS

CHARGEABILITY OVERLAY

Scale 1" = 1000'

Contour Interval in millisecs

March 1965

Adams - West Claims

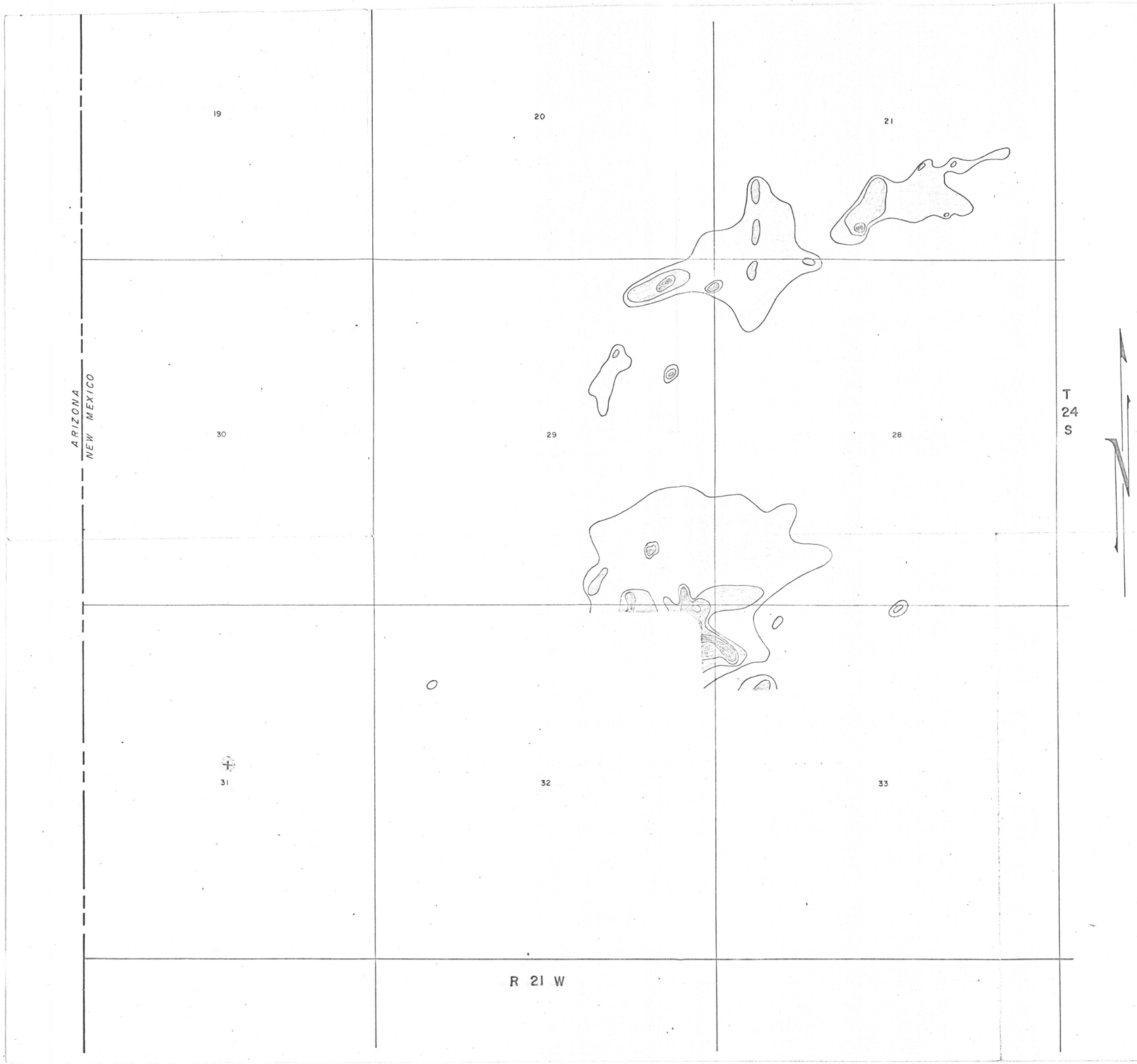
CENTRAL PELONCILLO MOUNTAINS

RESISTIVITY OVERLAY

Scale 1" = 1000'

Contour interval in ohm-meters

March 1965



LEGEND

- 0 - 1 ppm Mo
- 2 - 4 ppm Mo
- 5 - 9 ppm Mo
- 10 - 19 ppm Mo
- 20 + ppm Mo

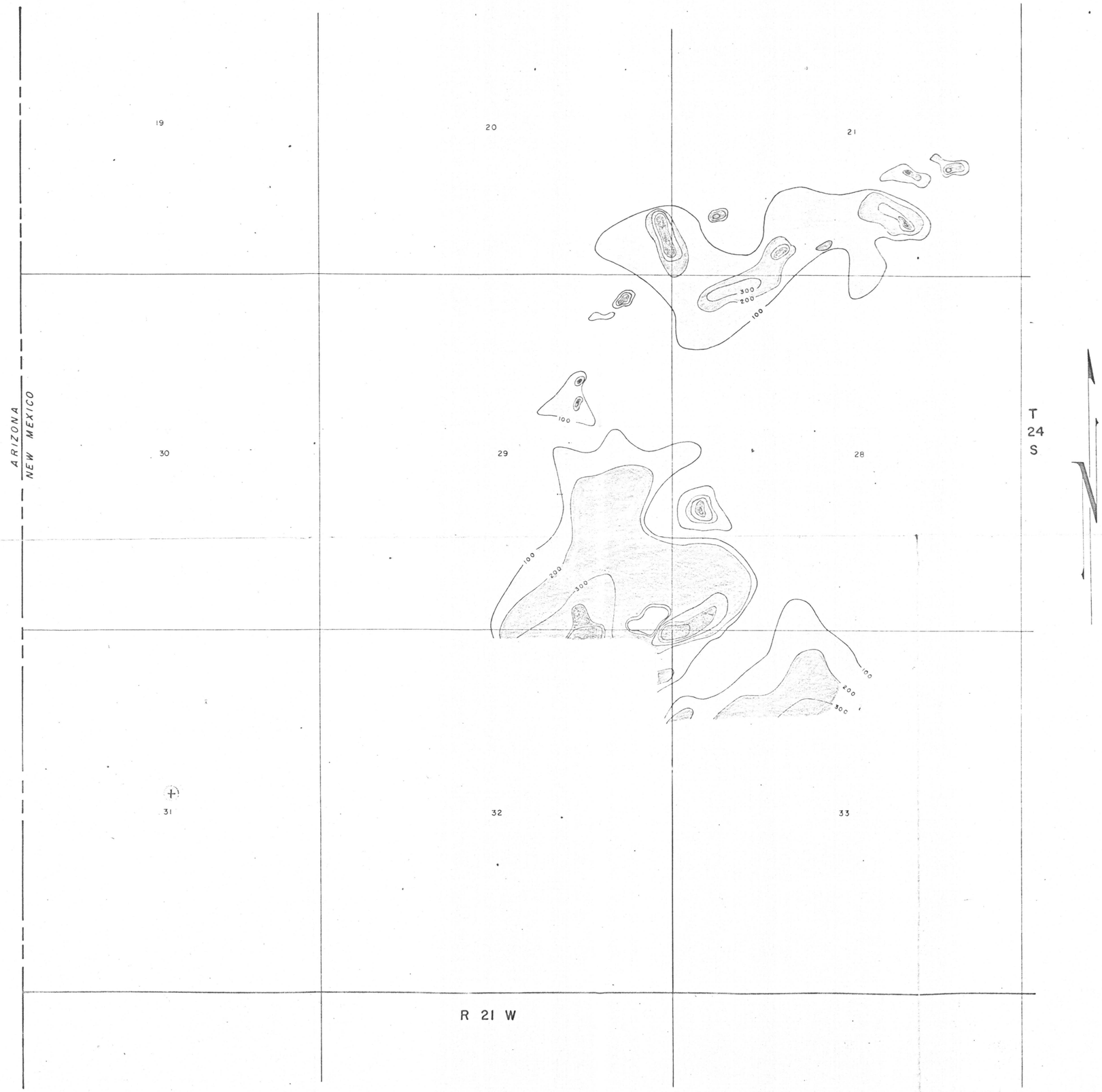
Adams - West Claims

CENTRAL PELONCILLO MOUNTAINS

MOLYBDENUM GEOCHEMICAL OVERLAY

Scale 1" = 1000'

March 1965



LEGEND

- 0 - 100 ppm Cu
- 101 - 200 ppm Cu
- 201 - 400 ppm Cu
- 401 - 600 ppm. Cu
- 601+ ppm Cu

Adams - West Claims

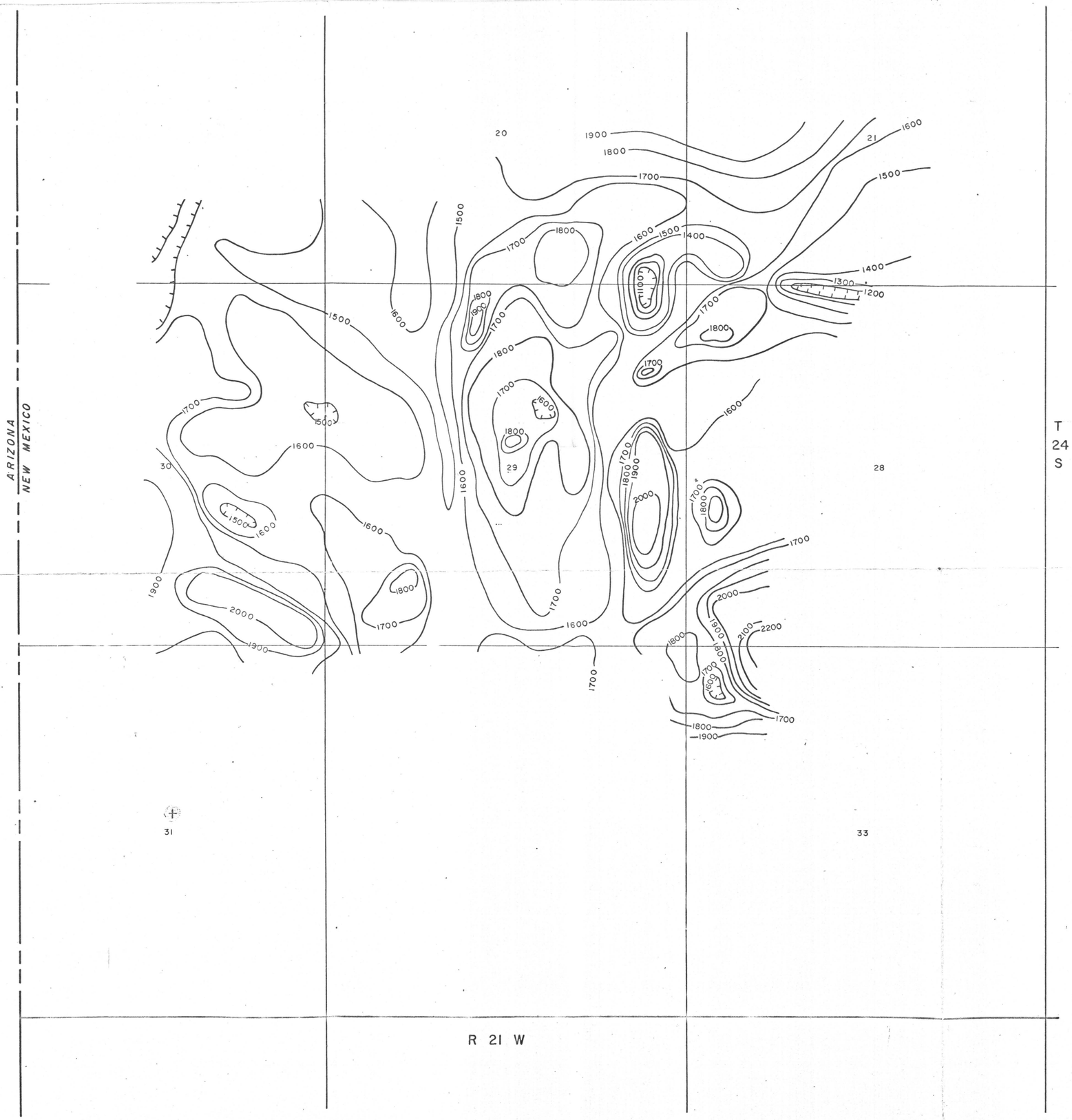
CENTRAL PELONCILLO MOUNTAINS

COPPER GEOCHEMICAL OVERLAY

Scale 1" = 1000'

Contour Interval = 100 ppm

March 1965



Adams - West Claims

CENTRAL PELONCILLO MOUNTAINS

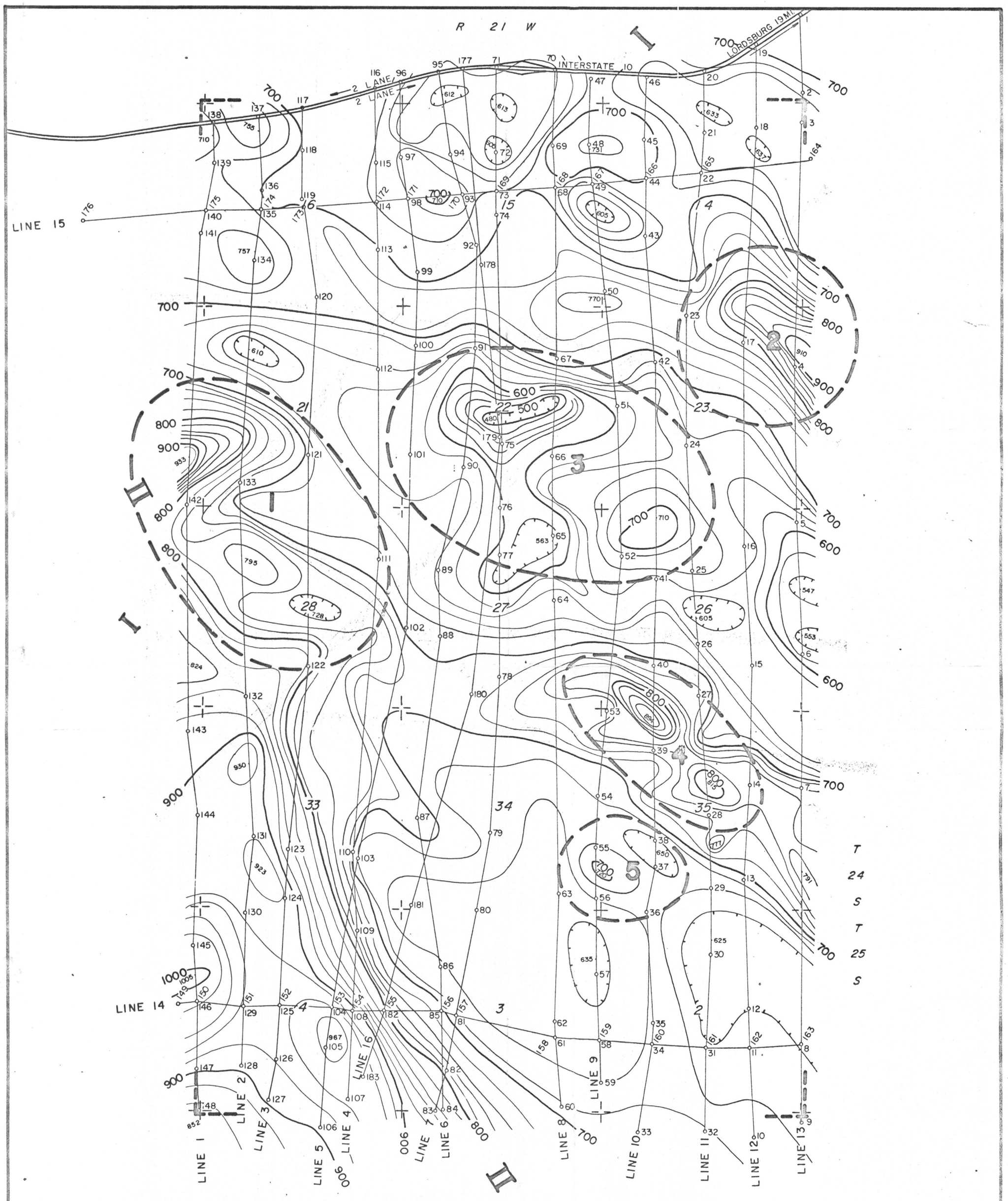
GROUND MAGNETIC SURVEY

Scale 1" = 1000'

Contour Interval = 100 gammas

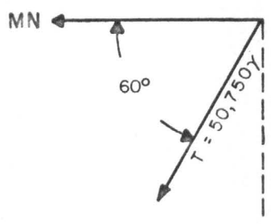
March 1965

Data by The Superior Oil Company - J. V. Tingley



JOB. NO. B-348-69

EXPLANATION



INCLINATION

LIMITS OF CONTRACTED SURVEY

1043 FLIGHT LINE WITH FIDUCIALS

2 ANOMALY

MAGNETIC LINEATION

900 MAGNETIC CONTOUR

APPROXIMATE MEAN DECLINATION

LAND NET BASE DATA FROM U.S.G.S.

HEINRICHS
GEOEXPLORATION COMPANY
POST OFFICE BOX 5671, TUCSON, ARIZONA, 85703
Phone: 602/623-0578 Cable: GEOEX, Tucson
geophysical engineers
vancouver
sydney

AERIAL MAGNETIC PLAN
HIDALGO COUNTY, NEW MEXICO

CONTOUR INTERVAL = 20γ TERRAIN CLEARANCE = 500 FT.

FLIGHT INTERVAL = 0.25 MILE MAGNETIC DATUM = 50,000γ

FOR

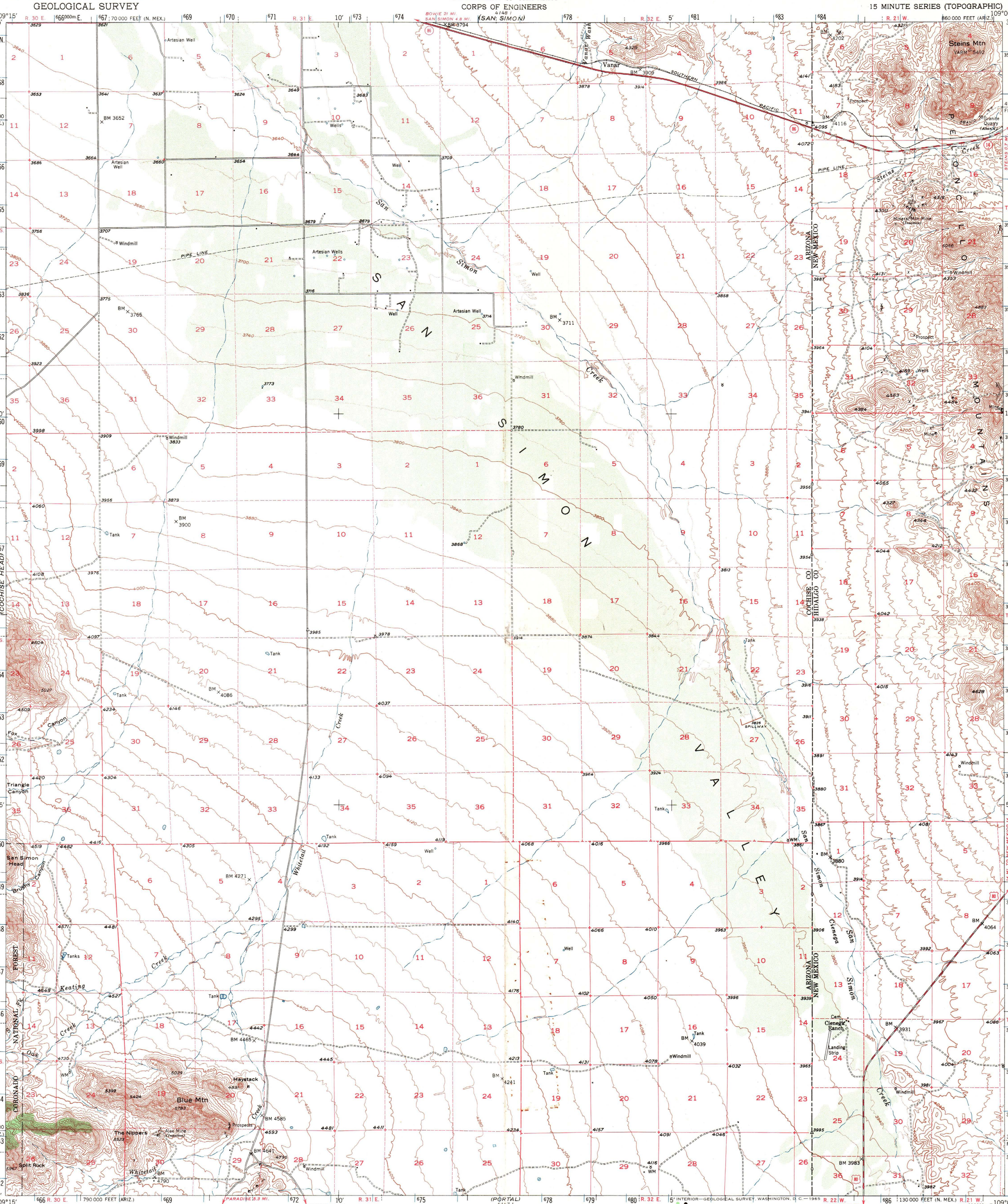
FREEPORT EXPLORATION COMPANY

SCALE 1:24000 | DRAWN BY HRM | DATE FEB 1969

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

VANAR QUADRANGLE
ARIZONA-NEW MEXICO
15 MINUTE SERIES (TOPOGRAPHIC)



Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography from aerial photographs by multiplex methods and by plane-table surveys 1950
Aerial photographs taken 1947.

Polyconic projection. 1927 North American datum
10,000-foot grid based on Arizona coordinate system, east zone, and New Mexico coordinate system, west zone

Dashed land lines indicate approximate location

1000-meter Universal Transverse Mercator grid ticks, zone 12, shown in blue

UTM GRID AND 1950 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:62 500

CONTOUR INTERVAL 40 FEET
DOTTED LINES REPRESENT HALF-INTERVAL CONTOURS
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225 OR WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1965

ROAD CLASSIFICATION
Heavy-duty — 4 LANE | 6 LANE — Light-duty
Medium-duty — 4 LANE | 6 LANE — Unimproved dirt
U. S. Route — State Route

VANAR, ARIZ.-N. MEX.
N3200—W10900/15
1950
AMS 4148 II—SERIES V798