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```
01♦LBL "GRAP
02 "Z 2"
03 PROMPT
04 X↑2
05 "X"
06 PROMPT
07 STO 02
08 X↑2
09 /
10 1
11 +
   LN
   4.68
   *
   "ROH"
   PROMPT
   *
   "T"
   PROMPT
   *
21 STO 01
22 "Z 1"
23 PROMPT
24 X↑2
25 RCL 02
26 X↑2
27 /
28 1
```

TIDE
0.

DRIFT
.1287392379
TIDE
.1287392379

TIDE
0.

DRIFT
.1287392379

F.AIR
-22.9619501
S. BOUGUER
-128.2210645

F.T.
13.41
F.V.
2817.517
LAT.
31.5558
ELV.
3133.8

F.AIR
-23.4207721
S. BOUGUER
-129.1944805

F.T.
13.48
F.V.
2817.306
LAT.
31.5557
ELV.
3141.7

F.AIR
-22.8921374
S. BOUGUER
-128.9333052

F.T.
13.56
F.V.
2815.661
LAT.
31.5556
ELV.
3155.8

F.AIR
-23.2892303
S. BOUGUER
-129.8077726

F.T.
14.07
F.V.
2814.285
LAT.
31.5555
ELV.
3172.2

F.AIR
-23.1938707
S. BOUGUER
-130.2676736

F.T.
14.18
F.V.
2813.471
LAT.
31.5555
ELV.
3184.1

F.AIR
-22.9536842
S. BOUGUER
-130.4304006

F.T.
14.25
F.V.
2812.784
LAT.
31.5554
ELV.
3196.1

F.AIR
-22.5396162
S. BOUGUER
-130.4226413

F.T.
14.32
F.V.
2812.23
LAT.
31.5553
ELV.
3207.

F.AIR
-22.0892527
S. BOUGUER
-130.3413498

F.T.
14.4
F.V.
2811.676
LAT.
31.5552
ELV.
3217.9

F.AIR
-21.6410354
S. BOUGUER
-130.2622122

F.T.
14.46
F.V.
2811.019
LAT.
31.5551
ELV.
3229.

F.AIR
-21.2279378
S. BOUGUER
-130.2749745

F.T.
14.54
F.V.
2810.528
LAT.
31.5548
ELV.
3236.6

F.AIR
-21.0289038
S. BOUGUER
-130.2832907

F.T.
15.02
F.V.
2809.314
LAT.
31.5545
ELV.
3233.5

F.AIR
-20.664972
S. BOUGUER
-130.4916379

F.T.
15.09
F.V.
2808.194
LAT.
31.5543
ELV.
3269.

F.AIR
-20.3542534
S. BOUGUER
-130.7059071

F.T.
15.17
F.V.
2807.077
LAT.
31.5541
ELV.
3283.9

F.AIR
-20.0999516
S. BOUGUER
-130.9550898

F.T.
15.24
F.V.
2806.209
LAT.
31.5538
ELV.
3295.3

F.AIR
-19.8865453
S. BOUGUER
-131.1287512

F.T.
15.3
F.V.
2805.342
LAT.
31.5535
ELV.
3307.9

F.AIR
-19.5581077
S. BOUGUER
-131.22703

F.T.
15.37
F.V.
2804.862
LAT.
31.5531
ELV.
3317.9

F.AIR
-19.0472422
S. BOUGUER
-131.0548357

1

DIRECT GEODETIC
PROBLEM SOL'N

LATITUDE 1
DEG ?
32.
MIN ?
0.
SEC ?
0.

LONGITUDE 1
DEG ?
111.
MIN ?
0.
SEC ?
0.

AZIMUT 1-2 ? (DMS)
209.5

DISTANCE ?
5529.54

LATITUDE 2
31. DEG
57. MIN
24.25349 SEC

LONGITUDE 2
111. DEG
1. MIN
44.74968 SEC

AZIMUT 2-1 (DMS)
29.49045245

2

DIRECT GEODETIC
PROBLEM SOL'N

LATITUDE 1
DEG ?
32.
MIN ?
0.
SEC ?
0.

LONGITUDE 1
DEG ?
111.
MIN ?
0.
SEC ?
0.

AZIMUT 1-2 ? (DMS)
215.

DISTANCE ?
6292.947692

LATITUDE 2
31. DEG
57. MIN
12.61726 SEC

LONGITUDE 2
111. DEG
2. MIN
17.44197 SEC

AZIMUT 2-1 (DMS)
34.5847214

3

```
DIRECT GEODETIC
PROBLEM SOL'N


 LATITUDE      1
  DEG ?
          32.
  MIN ?
           0.
  SEC ?
           0.

LONGITUDE      1
  DEG ?
         111.
  MIN ?
           0.
  SEC ?
           0.

AZIMUT 1-2 ?    (DMS)
        218.

DISTANCE ?
 7097.639856

 LATITUDE      2
          31.      DEG
          56.      MIN
     58.38276      SEC

LONGITUDE      2
         111.      DEG
           2.      MIN
      46.3839      SEC

AZIMUT 2-1      (DMS)
 37.58318919


--------------------
```

4

DIRECT GEODETIC
PROBLEM SOL'N

LATITUDE 1
DEG ?
32.
MIN ?
0.
SEC ?
0.

LONGITUDE 1
DEG ?
111.
MIN ?
0.
SEC ?
0.

AZIMUT 1-2 ? (DMS)
221.

DISTANCE ?
7922.946816

LATITUDE 2
31. DEG
56. MIN
45.8215 SEC

LONGITUDE 2
111. DEG
3. MIN
17.91039 SEC

AZIMUT 2-1 (DMS)
40.58152023

DIRECT GEODETIC 3
PROBLEM SOL'N

LATITUDE 1
DEG ?
32.
MIN ?
0.
SEC ?
0.

LONGITUDE 1
DEG ?
111.
MIN ?
0.
SEC ?
0.

AZIMUT 1-2 ? (DMS)
223.

DISTANCE ?
8789.519124

LATITUDE 2
31. DEG
56. MIN
31.2387 SEC

LONGITUDE 2
111. DEG
3. MIN
48.22769 SEC

AZIMUT 2-1 (DMS)
42.57591556

7

DIRECT GEODETIC
PROBLEM SOL'N

LATITUDE 1
DEG ?
32.
MIN ?
0.
SEC ?
0.

LONGITUDE 1
DEG ?
111.
MIN ?
0.
SEC ?
0.

AZIMUT 1-2 ? (DMS)
218.

DISTANCE ?
9160.907256

LATITUDE 2
31. DEG
56. MIN
5.57541 SEC

LONGITUDE 2
111. DEG
3. MIN
34.71719 SEC

AZIMUT 2-1 (DMS)
37.58063206

6

DIRECT GEODETIC
PROBLEM SOL'N

LATITUDE 1
DEG ?
32.
MIN ?
0.
SEC ?
0.

LONGITUDE 1
DEG ?
111.
MIN ?
0.
SEC ?
0.

AZIMUT 1-2 ? (DMS)
210.5

DISTANCE ?
8418.130992

LATITUDE 2
31. DEG
56. MIN
5.29004 SEC

LONGITUDE 2
111. DEG
2. MIN
44.25989 SEC

AZIMUT 2-1 (DMS)
30.48330347

From the desk of..

Vic Kral

Rich—

I can't seem to find a sketch showing samples ∴ am giving you a reproduction of your notes, as well as the analyses.

Vic

Recd: 7/31/80 - P.M.
[illegible]
M.A.

"The Next round may hit"

In several cases we could not find the nail, therefore guesed where it might have been. In later work I specifically mentioned if the area was level.

Remember TP means "turning point" therefore has no significance.

Jia 8/21/80 pm.

23
323
333
323
10

Mark— Attached are reproductions of all Twin Buttes Levels. Also the map showing in green the lines run. All lines were on closed loops. The greatest error of closure was 0.8' which was adjusted. I also had to make corrections for actual BM elevations vs those shown on the Topo.

May I call your attention to #31 being about 600-700' off the Mission road rather than right next to it in your Lat. & Long. estimates.

If you have any question please call— I hope all is self explanatory.

over

line	①	209.5	31° 57' 24"	13.4	tics	111° 01' 45"
	②	215	31° 57' 12"	15.25		111° 02' 17"
	③	218	31° 56' 58"	17.2		111° 02' 46"
	④	221	31° 56' 46"	19.2		111° 03' 18"
	⑤	223	31° 56' 31	21.3		111° 03' 48"

TB-9	204	21.1
TB-01	208.5	17.9

(22)

HPR -28	31° 55' 13"	111° 3' 26"
HPR -29	31° 55' 7'	111° 3' 24"
HPR -30	31° 55' 02"	111 03 22"
HPR -31	31° 55' 00"	111° 3' 23"

TBR - 0	31° 56' 5"	111° 1' 8"
TBR - 1	31° 55' 59"	111° 1' 15"
TBR - 2	31° 55' 58"	111° 1' 22"
TBR - 3	31° 55' 57"	111° 1' 29"
TBR - 4	31° 55' 56"	111° 1' 35"
TBR - 5	31° 55' 55"	111° 1' 41"
TBR - 6	31° 55' 55"	111° 1' 44"
TBR - 7	31° 55' 54"	111° 1' 49"
TBR - 8	31° 55' 53"	111° 1' 55"
TBR - 9	31° 55' 52"	111° 2' 01"
TBR -10	31° 55' 51"	111° 2' 07"
TBR -11	31° 55' 48"	111° 2' 14"
TBR -12	31° 55' 45"	111° 2' 21"
TBR -13	31° 55' 43"	111° 2' 27"
TBR -14	31° 55' 41"	111° 2' 32"
TBR -15	31° 55' 38'	111° 2' 39"
TBR -16	31° 55' 35"	111° 2' 43"
TBR -17	31° 55' 31"	111° 2' 48"

25.7

209.5

HPR - 1	31° 57' 22"	111° 4' 35"
HPR - 2	31° 57' 17	111° 4' 31"
HPR - 3	31° 57' 12"	111° 4' 27"
HPR - 4	31° 57' 6"	111° 4' 24"
HPR - 5	31° 57' 1"	111° 4" 20"
HPR - 6	31° 56' 56"	111° 4' 16"
HPR - 7	31° 56' 52"	111° 4' 12"
HPR - 8	31° 56' 49"	111° 4' 8"
HPR - 9	31° 56' 46"	111° 4' 3"
HPR - 10	31° 56' 42"	111° 3' 59"
HPR - 11	31° 56' 39"	111° 3 57"
HPR - 12	31° 56' 34"	111° 3' 54"
HPR - 13	31° 56' 28"	111° 3' 53"
HPR - 14	31° 36' 23"	111° 3' 51"
HPR - 15	31° 56' 18"	111° 3' 49"
HPR - 16	31° 56' 12"	111° 3' 48"
HPR - 17	31° 56' 7"	111° 3' 46"
HPR - 18	31° 56' 1"	111° 3' 44"
HPR - 19	31° 55' 56"	111° 3' 43"
HPR - 20	31° 55' 51"	111° 3' 41"
HPR - 21	31° 55' 45"	111° 3' 39"
HPR - 22	31° 55' 40"	111° 3' 37"
HPR - 23	31° 55' 34"	111° 3' 36"
HPR - 24	31° 55' 29"	111° 3' 34"
HPR - 25	31° 56' 11"	111° 3' 57"
HPR - 26	31° 55' 24"	111° 3' 31"
HPR - 27	31° 55' 18"	111° 3 29"

(27)

	TB -88	31° 57' 24"	111° 01' 45"
	TB -34	31° 57' 12"	"
	TB -33	31° 57' 6"	"
	TB -32	31° 57' 00"	"
27-34	TB -31	31° 56' 54"	"
	TB -30	31° 56' 48"	"
	TB -29	31° 56' 42"	"
	TB -28	31° 56' 36"	"
	TB -27	31° 56' 31"	"
	TB -85	31° 57' 16"	111° 02' 17"
	TB -84	31° 57' 10"	"
	TB -83	31° 57' 05"	"
79-85	TB -82	31° 56' 58"	"
	TB -81	31° 56' 53"	"
	TB -80	31° 56' 48"	"
	TB -79	31° 56' 42"	"
	TB -10	31° 56' 37"	"
	TB -0	31° 56' 30"	"
	TB -1	31° 56' 24"	"
1-10	TB -2	31° 56' 19"	"
	TB -3	31° 56' 14"	"
	TB -4	31° 56' 9"	"
	TB -5	31° 56' 3"	"
	TB -6	31° 55' 58"	"
	TB -7	31° 55' 53"	"
	TB -8	31° 55' 47"	"
	TB -9	31° 55' 42"	"

TB- 44	31° 56' 48'	111° 1' 51"	
TB - 45	"	111° 1' 58"	
TB - 46	"	111° 2' 4"	44-62
TB -47	"	111° 2' 10"	
TB -48	"	111° 2' 17"	
TB -49	"	111° 2' 23"	
TB -50	"	111° 2' 29"	
TB -51	"	111° 2' 35"	
TB -52	"	111° 2' 42"	
TB -53	"	111° 2' 48" ✓	
TB -54	"	111° 2' 54"	
TB -55	"	111° 3' 1"	
TB -56	"	111° 3' 7"	
TB -57	"	111° 3' 13"	
TB -58	"	111° 3' 20"	
TB -59	"	111° 3' 26"	
TB -60	"	111° 3' 32"	
TB -61	"	111° 3' 38"	
TB -62	"	111° 3' 44"	
TB- 35	31° 56' 52"	111° 4' 30"	
TB - 36	31° 56' 48"	111° 4' 25"	
TB -37	31° 56' 44"	111° 4' 29"	
TB -38	31° 56' 41"	111° 4' 33"	35-43
TB -39	31° 56' 37"	111° 4' 38"	
TB -40	31° 56' 38"	111° 4' 42"	
TB -41	31° 56' 29"	111° 4' 46"	
TB -42	31° 56' 25"	111° 4' 50"	
TB -43	31° 56' 21"	111° 4' 55"	

(5)

23-26

TB- 23	31° 56' 31'	111° 02' 11"
TB- 24	"	111° 02' 4"
TB- 25	"	111° 01' 58"
TB- 26	"	111° 01' 51"

TB- 87 31° 57' 24" 111° 02' 46"

(28)

	TB- 86	31° 57' 12"	111° 02' 46"
	TB- 69	31° 57' 24"	111° 03' 18"
69-78	TB -70	31° 57' 18"	"
	TB -71	31° 57' 12"	"
	TB -72	31° 57' 6"	"
	TB -73	31° 57' 01"	"
	TB -74	31° 56' 55"	"
	TB -75	31° 56' 49"	"
	TB -76	31° 56' 44"	"
	TB -77	31° 56' 38"	"
	TB -78	31° 56' 32"	"
	TB -66	31° 57' 24" ✓	111° 03' 48
	TB -65	31° 57' 18" ✓	"
63-68	TB -64	31° 57' 12" ✓	"
	TB -63	31° 57' 5" ✓	"
	TB -67	31° 56' 48"	"
	TB -68	31° 56' 38"	"
	TB - 12	31° 56' 5"	111° 3' 42"
	TB -13	"	111° 3' 35"
	TB -14	"	111° 3' 29"
	TB -15	"	111° 3' 22"
	TB -16	"	111° 3' 16"
12-22	TB -17	"	111° 3' 10"
	TB - 18	"	111° 3' 3"
	TB -19	"	111° 2' 57"
	TB -20	"	111° 2' 50"
	TB -21	"	111° 2' 44"
	TB - 22	31° 56' 18"	111° 2' 44"

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GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00001
SEQUENCE NO.

BAS - UA
STATION IDENT

AZ
STATE

PM
COUNTY

08
MONTH

04
DAY

80
YEAR

DEG. LATITUDE . MINUTES

X O F
STATION TYPE

BEDROCK

MAP

GEOLOGY PRIMARY

DEG. LONGITUDE . MINUTES

6219
METER TYPE OR NUMBER

GEOLOGY SECONDARY

ELEVATION .

F
UNIT

B
CONTROL

GEOLOGY TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2893.309	538		MA
2	2893.308	541		MA
3	2893.319	544		MA RPZ
4	.312			

GRAVITY OBSERVATION FORM

00044
Sequence No.

BAS-4A
Station Ident

AZ
State

PM
County

08
Month

04
Day

80
Year

Deg. Latitude

Minutes

Station Type: X

Bedrock

Map

Geology — PRIMARY

Deg. Longitude

Minutes

6219
Meter Type or Number

Geology — SECONDARY

Elevation

F
Unit Control

Geology — TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	2894 704	1706		MA	
2	2894 721	1707		MA	
3	2894 714	1708		MA	
4	713				

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GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00002
SEQUENCE NO.

HPR - 0001 STATION IDENT | AZ STATE | PM COUNTY | 08 MONTH | 04 DAY | 80 YEAR

31 57 . 22 DEG. LATITUDE MINUTES | . . X STATION TYPE | ? BEDROCK | MAP | GEOLOGY PRIMARY

111 04 . 35 DEG. LONGITUDE MINUTES | 6219 METER TYPE OR NUMBER | GEOLOGY SECONDARY

3455 . 3 ELEVATION | F UNIT CONTROL | GEOLOGY TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2798 . 675	0718		MA
2	2798 . 662	0719		MA
3	2798 . 645	0720		MA
4	. 661			

Helmit Cong.

Sample Taken

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GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00003
SEQUENCE NO.

APR - 0002 STATION IDENT | AZ STATE | PM COUNTY | 08 MONTH | 04 DAY | 80 YEAR

31 DEG. 57 . 17 MINUTES LATITUDE | 00 STATION TYPE | X BEDROCK | MAP | GEOLOGY PRIMARY

111 DEG. 04 . 31 MINUTES LONGITUDE | 6219 METER TYPE OR NUMBER | GEOLOGY SECONDARY

3453 . 7 ELEVATION | F UNIT | CONTROL | GEOLOGY TERTIARY

	READING		TIME	QUALITY	OBSERVER
1	2798	. 276	0729		MA
2	2798	. 271	0730		MA
3	2798	. 275	0731		MA
4		. 274			

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GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00004
SEQUENCE NO.

HPR - 0003
STATION IDENT

AZ
STATE

PM
COUNTY

08
MONTH

04
DAY

80
YEAR

31 57 . 12
DEG. LATITUDE MINUTES

6 0 X
STATION TYPE

BEDROCK

MAP

GEOLOGY

PRIMARY

111 04 . 27
DEG. LONGITUDE MINUTES

G219
METER TYPE OR NUMBER

GEOLOGY

SECONDARY

3457 . 8
ELEVATION

F
UNIT

CONTROL

GEOLOGY

TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2797 . 849	0736		MA
2	2797 . 841	0737		MA
3	2797 . 845	0738		MA
4	. 845			

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GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00005
SEQUENCE NO.

APR - 0004 STATION IDENT | AZ STATE | PM COUNTY | 08 MONTH | 04 DAY | 80 YEAR

31 57 . 06 DEG. LATITUDE MINUTES | 0 0 Y STATION TYPE | BEDROCK | MAP | GEOLOGY PRIMARY

111 04 . 24 DEG. LONGITUDE MINUTES | 6219 METER TYPE OR NUMBER | GEOLOGY SECONDARY

3456 . 6 ELEVATION | F UNIT | CONTROL | GEOLOGY TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2797 . 849	0744		MA
2	2797 . 835	0745		MA
3	2797 . 854	0746		MA
4	. 846			

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GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00006
SEQUENCE NO.

APR - 0005 STATION IDENT | AZ STATE | PM COUNTY | 08 MONTH | 04 DAY | 80 YEAR

31 57 . 01 DEG. LATITUDE MINUTES | 6 3 STATION TYPE | X BEDROCK | MAP | GEOLOGY PRIMARY

111 04 . 20 DEG. LONGITUDE MINUTES | 6219 METER TYPE OR NUMBER | GEOLOGY SECONDARY

3442 . 8 ELEVATION | F UNIT | CONTROL | GEOLOGY TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2798 . 885	0751		MA
2	2798 . 855	0752		MA
3	2798 . 852	0754		MA
4	. 864			

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GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00007
SEQUENCE NO.

HPR - 0006 STATION IDENT | AZ STATE | PM COUNTY | 08 MONTH | 04 DAY | 80 YEAR

31 DEG. 56 . 56 MINUTES LATITUDE | 0 0 STATION TYPE | X BEDROCK | MAP | GEOLOGY PRIMARY

111 DEG. 04 . 16 MINUTES LONGITUDE | 6219 METER TYPE OR NUMBER | GEOLOGY SECONDARY

3442 . 0 ELEVATION | F UNIT | CONTROL | GEOLOGY TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	~~2798~~ . 687	0801		MA
2	2798 . 755	0803		MA
3	2798 . 765	0804		MA
4	2798 . 760	0805		MA

760

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GRAVITY OBSERVATION FORM

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0123456789X

00008
SEQUENCE NO.

HPR - 0007 STATION IDENT | AZ STATE | PM COUNTY | 08 MONTH | 04 DAY | 80 YEAR

31 56 . 52 DEG. LATITUDE MINUTES | 8 0 X STATION TYPE | BEDROCK | MAP | GEOLOGY PRIMARY

111 04 . 12 DEG. LONGITUDE MINUTES | 6219 METER TYPE OR NUMBER | GEOLOGY SECONDARY

3436 . 8 ELEVATION | F UNIT | CONTROL | GEOLOGY TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2799 . 971	0828		MA
2	2799 . 995	0829		MA
3	2799 . 977	0830		MA
4	. 981			

UNIVERSITY OF ARIZONA DEPARTMENT OF GEOSCIENCES
GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00009
SEQUENCE NO.

HPR - 0008 STATION IDENT | AZ STATE | PM COUNTY | 08 MONTH | 04 DAY | 80 YEAR

31 56 . 49 DEG. LATITUDE MINUTES | 0 0 X STATION TYPE | BEDROCK | MAP | GEOLOGY PRIMARY

111 04 . 08 DEG. LONGITUDE MINUTES | 6219 METER TYPE OR NUMBER | GEOLOGY SECONDARY

3439 . 5 ELEVATION | F UNIT | CONTROL | GEOLOGY TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2798 . 594	0836		MA
2	2798 . 594	0837		MA
3	2798 . 589	0838		MA
4	. 592			

UNIVERSITY OF ARIZONA DEPARTMENT OF GEOSCIENCES
GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00010
SEQUENCE NO.

APR - 0009 STATION IDENT | AZ STATE | PM COUNTY | 08 MONTH | 04 DAY | 80 YEAR

31 56 . 46 DEG. LATITUDE MINUTES | 0 0 X STATION TYPE | BEDROCK | MAP | GEOLOGY PRIMARY

111 04 . 03 DEG. LONGITUDE MINUTES | 6219 METER TYPE OR NUMBER | GEOLOGY SECONDARY

3430 . 6 ELEVATION | F UNIT | CONTROL | GEOLOGY TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2798 . 790	0842		MA
2	2798 . 791	0843		MA
3	2798 . 796	0844		MA
4	. 792			

UNIVERSITY OF ARIZONA DEPARTMENT OF GEOSCIENCES
GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00011
SEQUENCE NO.

HPR - 0010 STATION IDENT | AZ STATE | PM COUNTY | 08 MONTH | 04 DAY | 80 YEAR

31 56 . 42 DEG. LATITUDE MINUTES | 0 0 X STATION TYPE | BEDROCK | MAP | GEOLOGY PRIMARY

111 03 . 59 DEG. LONGITUDE MINUTES | 6219 METER TYPE OR NUMBER | GEOLOGY SECONDARY

3422 . 0 ELEVATION | F UNIT | CONTROL | GEOLOGY TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2800 . 042	0852		MA
2	2800 . 046	0853		MA
3	2800 . 035	0854		MA
4	. 041			

UNIVERSITY OF ARIZONA DEPARTMENT OF GEOSCIENCES
GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00012
SEQUENCE NO.

HPR - 0011 STATION IDENT

AZ STATE

PM COUNTY

08 MONTH

04 DAY

80 YEAR

31 56 . 39 DEG. LATITUDE MINUTES

0 0 X STATION TYPE

BEDROCK

MAP

GEOLOGY PRIMARY

111 03 . 57 DEG. LONGITUDE MINUTES

6219 METER TYPE OR NUMBER

GEOLOGY SECONDARY

3404 . 6 ELEVATION

F UNIT

CONTROL

GEOLOGY TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	~~2799 . 501~~	0859		MA
2	2799 . 542	0900		MA
3	2799 . 555	0901		MA
4	2799 . 544	0903		MA

547

UNIVERSITY OF ARIZONA DEPARTMENT OF GEOSCIENCES
GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00013
SEQUENCE NO.

HPR - 0012 STATION IDENT | AZ STATE | PM COUNTY | 08 MONTH | 04 DAY | 80 YEAR

31 56 . 34 DEG. LATITUDE MINUTES | 6 0 X STATION TYPE | BEDROCK | MAP | GEOLOGY PRIMARY

111 03 . 54 DEG. LONGITUDE MINUTES | 6219 METER TYPE OR NUMBER | GEOLOGY SECONDARY

3412 . 6 ELEVATION | F UNIT | CONTROL | GEOLOGY TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2798 . 910	0908		MA
2	2798 . 911	0909		MA
3	2798 . 920	0910		MA
4	. 914			

UNIVERSITY OF ARIZONA DEPARTMENT OF GEOSCIENCES
GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00014
SEQUENCE NO.

HPR - 0013 STATION IDENT | AZ STATE | PM COUNTY | 08 MONTH | 04 DAY | 80 YEAR

31 56 . 28 DEG. LATITUDE MINUTES | 0 0 [X] STATION TYPE | BEDROCK | MAP | GEOLOGY PRIMARY

111 03 . 53 DEG. LONGITUDE MINUTES | 6219 METER TYPE OR NUMBER | GEOLOGY SECONDARY

3418 . 1 ELEVATION | F UNIT CONTROL | GEOLOGY TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2798 . 571	0915		MA
2	2798 . 577	0916		MA
3	2798 . 580	0917		MA
4	. 576			

UNIVERSITY OF ARIZONA DEPARTMENT OF GEOSCIENCES
GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00015
SEQUENCE NO.

APR - 0014 STATION IDENT | AZ STATE | PM COUNTY | 08 MONTH | 04 DAY | 80 YEAR

31 56 . 23 DEG. LATITUDE MINUTES | 0 0 X STATION TYPE | BEDROCK | MAP | PRIMARY GEOLOGY

111 03 . 51 DEG. LONGITUDE MINUTES | 6219 METER TYPE OR NUMBER | SECONDARY GEOLOGY

3422 . 5 ELEVATION | F UNIT | CONTROL | TERTIARY GEOLOGY

	READING	TIME	QUALITY	OBSERVER
1	2798 . 170	0929		MA
2	2798 . 181	0930		MA
3	2798 . 168	0931		MA
4	. 173			

UNIVERSITY OF ARIZONA DEPARTMENT OF GEOSCIENCES
GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00016
SEQUENCE NO.

HPR - 0015 STATION IDENT | AZ STATE | PM COUNTY | 08 MONTH | 04 DAY | 80 YEAR

31 DEG. LATITUDE | 56 . 18 MINUTES | 0 0 STATION TYPE | ☒ BEDROCK | ☐ MAP | ☐☐☐ GEOLOGY PRIMARY

111 DEG. LONGITUDE | 03 . 49 MINUTES | 6219 METER TYPE OR NUMBER | ☐☐☐ GEOLOGY SECONDARY

☐3421 . 7 ELEVATION | F UNIT | ☐ CONTROL | ☐☐☐ GEOLOGY TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	☐2798 . 150	0935	☐	MA
2	☐2798 . 156	0936	☐	MA
3	☐2798 . 158	0937	☐	MA
4	☐☐☐☐☐ . 155	☐☐☐☐	☐	

UNIVERSITY OF ARIZONA DEPARTMENT OF GEOSCIENCES
GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00017
SEQUENCE NO.

HPR - 0016
STATION IDENT

AZ
STATE

PM
COUNTY

08
MONTH

04
DAY

80
YEAR

31 56 . 12
DEG. LATITUDE MINUTES

0 0 X
STATION TYPE

BEDROCK

MAP

GEOLOGY
PRIMARY

111 03 . 48
DEG. LONGITUDE MINUTES

6219
METER TYPE OR NUMBER

GEOLOGY
SECONDARY

3428 . 5
ELEVATION

F
UNIT

CONTROL

GEOLOGY
TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2797 . 818	0945		
2	2797 . 809	0946		
3	2797 . 800	0947		
4	. 809			

UNIVERSITY OF ARIZONA DEPARTMENT OF GEOSCIENCES
GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00018
SEQUENCE NO.

HPR-0017 STATION IDENT | AZ STATE | PM COUNTY | 08 MONTH | 04 DAY | 80 YEAR

31 56 . 07 DEG. LATITUDE MINUTES | 0 0 X STATION TYPE | BEDROCK | MAP | GEOLOGY PRIMARY

111 03 . 46 DEG. LONGITUDE MINUTES | 6219 METER TYPE OR NUMBER | GEOLOGY SECONDARY

3427 . 4 ELEVATION | F UNIT | CONTROL | GEOLOGY TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2797 . 799	0952		MA
2	2797 . 780	0953		MA
3	2797 . 792	0954		MA
4	. 790			

UNIVERSITY OF ARIZONA DEPARTMENT OF GEOSCIENCES
GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS USE A #2 PENCIL.

0123456789X

00019
SEQUENCE NO.

HPR-0018 STATION IDENT | AZ STATE | PM COUNTY | 08 MONTH | 04 DAY | 80 YEAR

31 56 . 01 DEG. LATITUDE MINUTES | 0 0 X STATION TYPE | BEDROCK | MAP | GEOLOGY PRIMARY

111 03 . 44 DEG. LONGITUDE MINUTES | 6219 METER TYPE OR NUMBER | GEOLOGY SECONDARY

3424 . 8 ELEVATION | F UNIT | CONTROL | GEOLOGY TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2798 . 102	1000		MA
2	2798 . 102	1001		MA
3	2798 . 095	1002		MA
4	. 100			

GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00026
SEQUENCE NO.

HPR - 0019
STATION IDENT

AZ
STATE

PM
COUNTY

08
MONTH

04
DAY

80
YEAR

31 55 . 56
DEG. LATITUDE MINUTES

0 0 X
STATION TYPE

BEDROCK

MAP

GEOLOGY — PRIMARY

111 03 . 43
DEG. LONGITUDE MINUTES

C219
METER TYPE OR NUMBER

GEOLOGY — SECONDARY

3419 . 6
ELEVATION

F
UNIT

CONTROL

GEOLOGY — TERTIARY

	READING		TIME	QUALITY	OBSERVER
1	2798	. 346	1029		MA
2	2798	. 349	1030		MA
3	2798	. 352	1031		MA
4		. 349			

GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00021
SEQUENCE NO.

APR-0020
STATION IDENT

A2
STATE

PM
COUNTY

08
MONTH

04
DAY

80
YEAR

31 55 . 51
DEG. LATITUDE MINUTES

0 0 X
STATION TYPE

BEDROCK MAP

PRIMARY GEOLOGY

111 03 . 41
DEG. LONGITUDE MINUTES

6219
METER TYPE OR NUMBER

SECONDARY GEOLOGY

3413 . 9
ELEVATION

F
UNIT

CONTROL

TERTIARY GEOLOGY

	READING	TIME	QUALITY	OBSERVER
1	2798 . 743	1035		MA
2	2798 . 740	1036		MA
3	2798 . 744	1037		MA
4	. 742			

GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00022
SEQUENCE NO.

HPR - 0021 STATION IDENT

AZ STATE

PM COUNTY

08 MONTH

04 DAY

80 YEAR

31 55 . 45 DEG. LATITUDE MINUTES

0 0 STATION TYPE

[X] BEDROCK

[ ] MAP

[ ] GEOLOGY PRIMARY

111 03 . 39 DEG. LONGITUDE MINUTES

6219 METER TYPE OR NUMBER

[ ] GEOLOGY SECONDARY

3416 . 3 ELEVATION

F UNIT

[ ] CONTROL

[ ] GEOLOGY TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2798 . 607	1040		MA
2	2798 . 600	1041		MA
3	2798 . 600	1042		MA
4	. 602			

GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00023
SEQUENCE NO.

HPR - 0022
STATION IDENT

AZ
STATE

PM
COUNTY

08
MONTH

04
DAY

80
YEAR

31 55 . 40
DEG. LATITUDE MINUTES

0 0 X
STATION TYPE

BEDROCK

MAP

GEOLOGY
PRIMARY

111 03 . 37
DEG. LONGITUDE MINUTES

6219
METER TYPE OR NUMBER

GEOLOGY
SECONDARY

34008 . 3
ELEVATION

F
UNIT

CONTROL

GEOLOGY
TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2799.075	1047		MA
2	2799.076	1048		MA
3	2799.077	1049		MA
4	.076			

GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00024
SEQUENCE NO.

HPR - 0023
STATION IDENT

AZ
STATE

PM
COUNTY

08
MONTH

04
DAY

80
YEAR

31 55 . 34
DEG. LATITUDE MINUTES

0 0 X
STATION TYPE

BEDROCK MAP

PRIMARY GEOLOGY

111 03 . 36
DEG. LONGITUDE MINUTES

6219
METER TYPE OR NUMBER

SECONDARY GEOLOGY

03405 . 6
ELEVATION

F
UNIT

CONTROL

TERTIARY GEOLOGY

	READING	TIME	QUALITY	OBSERVER
1	2798 . 888	1058		MA
2	2798 . 853	1059		MA
3	2798 . 860	1100		MA
4	. 867			

GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00025
SEQUENCE NO.

APR - 0024
STATION IDENT

AZ
STATE

PM
COUNTY

08
MONTH

04
DAY

80
YEAR

31 55 . 29
DEG. LATITUDE MINUTES

0 0 X
STATION TYPE

BEDROCK

MAP

GEOLOGY
PRIMARY

111 03 . 34
DEG. LONGITUDE MINUTES

6219
METER TYPE OR NUMBER

GEOLOGY
SECONDARY

3412 . 2
ELEVATION

F
UNIT

CONTROL

GEOLOGY
TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2798.301	1127		MA
2	2798.300	1128		MA
3	2798.305	1129		MA
4	.302			

GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00026
SEQUENCE NO.

APR - 0025
STATION IDENT

AZ
STATE

PM
COUNTY

08 MONTH

04 DAY

80 YEAR

31 56 . 11
DEG. LATITUDE MINUTES

0 0 X
STATION TYPE

BEDROCK

MAP

GEOLOGY PRIMARY

111 03 . 57
DEG. LONGITUDE MINUTES

B219
METER TYPE OR NUMBER

GEOLOGY SECONDARY

3449 . 5
ELEVATION

F
UNIT

CONTROL

GEOLOGY TERTIARY

	READING		TIME	QUALITY	OBSERVER
1	2796	.541	1138		MA
2	2796	.544	1139		MA
3	2796	.546	1140		MA
4		.544			

GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00027
SEQUENCE NO.

TBR - 0001
STATION IDENT

AZ
STATE

PM
COUNTY

08
MONTH

04
DAY

80
YEAR

31 55 . 59
DEG. LATITUDE MINUTES

0 0 [X]
STATION TYPE

[ ] BEDROCK

[ ] MAP

001 PRIMARY
GEOLOGY

111 01 . 15
DEG. LONGITUDE MINUTES

6214
METER TYPE OR NUMBER

[ ] [ ] [ ] SECONDARY
GEOLOGY

3118 . 6
ELEVATION

F S
UNIT CONTROL

[ ] [ ] [ ] TERTIARY
GEOLOGY

	READING		TIME	QUALITY	OBSERVER
1	2019	. 287	1325		PZ
2	2819	. 327	1328		PZ
3	2019	. 312	1330		PZ
4		. 309			

GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00028
SEQUENCE NO.

TBR - 0002
STATION IDENT

A2 STATE

PM COUNTY

08 MONTH

04 DAY

80 YEAR

31 DEG. LATITUDE

55 . 58 MINUTES

0 0 STATION TYPE

[X]

[ ] BEDROCK

[ ] MAP

001 GEOLOGY PRIMARY

111 DEG. LONGITUDE

01 . 22 MINUTES

6214 METER TYPE OR NUMBER

[ ] GEOLOGY SECONDARY

[ ] GEOLOGY TERTIARY

03133 . 8
ELEVATION

F S
UNIT CONTROL

	READING		TIME	QUALITY	OBSERVER
1	02817	. 520	1340	[ ]	PZ
2	02817	. 510	1341	[ ]	PZ
3	02817	. 521	1342	[ ]	PZ
4	[ ]	. 517	[ ]	[ ]	

GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00029
SEQUENCE NO.

TBR - 0003
STATION IDENT

AZ
STATE

PM
COUNTY

08
MONTH

04
DAY

80
YEAR

31 55 . 57
DEG. LATITUDE MINUTES

00 X
STATION TYPE

BEDROCK

MAP

001
GEOLOGY
PRIMARY

111 01 . 29
DEG. LONGITUDE MINUTES

6214
METER TYPE OR NUMBER

GEOLOGY
SECONDARY

3141 . 7
ELEVATION

U S
UNIT CONTROL

GEOLOGY
TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2817 . 301	1347		PZ
2	2817 . 309	1348		PZ
3	2817 . 308	1349		PZ
4	. 306			

GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00030
SEQUENCE NO.

TBR - 0004
STATION IDENT

AZ
STATE

PM
COUNTY

08
MONTH

04
DAY

80
YEAR

31 55 . 56
DEG. LATITUDE MINUTES

0 0 X
STATION TYPE

BEDROCK

MAP

001
GEOLOGY

PRIMARY

111 01 . 35
DEG. LONGITUDE MINUTES

6214
METER TYPE OR NUMBER

GEOLOGY

SECONDARY

3155 . 8
ELEVATION

U
UNIT

S
CONTROL

GEOLOGY

TERTIARY

	READING	TIME	QUALITY	OBSERVER
1	2815 . 594	1355		PZ
2	2815 . 660	1356		PZ
3	2815 . 663	1357		PZ
4	2815 . 661 (661.)			PZ

GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00031
SEQUENCE NO.

TBR - 0005
STATION IDENT

AZ
STATE

PM
COUNTY

08
MONTH

04
DAY

80
YEAR

31 55 . 55
DEG. LATITUDE MINUTES

0 0 [X]
STATION TYPE

[ ] BEDROCK

[ ] MAP

001 PRIMARY
GEOLOGY

111 01 . 41
DEG. LONGITUDE MINUTES

[ ] METER TYPE OR NUMBER

[ ] SECONDARY
GEOLOGY

3172 . 2
ELEVATION

U
UNIT

S
CONTROL

[ ] TERTIARY
GEOLOGY

	READING		TIME	QUALITY	OBSERVER
1	2814	288	1406		PZ
2	2814	285	1407		PZ
3	2814	282	1408		PZ
4		285			

GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00032
SEQUENCE NO.

TBR - 0006
STATION IDENT

AZ
STATE

PM
COUNTY

08
MONTH

04
DAY

80
YEAR

31 55 . 55
DEG. LATITUDE MINUTES

0 0 F
STATION TYPE

BEDROCK

MAP

001
GEOLOGY
PRIMARY

111 01 . 44
DEG. LONGITUDE MINUTES

METER TYPE OR NUMBER

GEOLOGY
SECONDARY

3184 . 1
ELEVATION

U
UNIT

5
CONTROL

GEOLOGY
TERTIARY

	READING		TIME	QUALITY	OBSERVER
1	2813 . 474		1417		PZ
2	2813 . 468		1418		PZ
3	2813 . 470		1419		PZ
4	. 471				

GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00033
SEQUENCE NO.

TBR - 0007
STATION IDENT

AZ
STATE

PM
COUNTY

08
MONTH

04
DAY

80
YEAR

31 55 . 54
DEG. LATITUDE MINUTES

00 [X]
STATION TYPE

[ ] BEDROCK

[ ] MAP

001 PRIMARY
GEOLOGY

111 01 . 49
DEG. LONGITUDE MINUTES

6214
METER TYPE OR NUMBER

[ ] [ ] [ ] SECONDARY
GEOLOGY

03196 . 1
ELEVATION

U S
UNIT CONTROL

[ ] [ ] [ ] TERTIARY
GEOLOGY

	READING	TIME	QUALITY	OBSERVER
1	2812 . 784	1424	[ ]	PZ
2	2812 . 784	1425	[ ]	PZ
3	2812 . 783	1426	[ ]	PZ
4	[ ] . 784	[ ]	[ ]	

UNIVERSITY OF ARIZONA DEPARTMENT OF GEOSCIENCES
GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.
0123456789X

00034
SEQUENCE NO.

TBR - 0008
STATION IDENT

AZ
STATE

PM
COUNTY

08
MONTH

04
DAY

80
YEAR

31 55 . 53
DEG. LATITUDE MINUTES

B 0 X
STATION TYPE

☐ BEDROCK ☐ MAP

001 PRIMARY
GEOLOGY

111 01 . 55
DEG. LONGITUDE MINUTES

G214
METER TYPE OR NUMBER

☐☐☐ SECONDARY
GEOLOGY

☐32070 . 0
ELEVATION

U S
UNIT CONTROL

☐☐☐ TERTIARY
GEOLOGY

1	☐2812 . 232	1431	☐	PZ
	READING	TIME	QUALITY	OBSERVER
2	☐2812 . 231	1432	☐	PZ
	READING	TIME	QUALITY	OBSERVER
3	☐2812 . 228	1433	☐	PZ
	READING	TIME	QUALITY	OBSERVER
4	☐☐☐☐☐ . 230	☐☐☐☐	☐	
	READING	TIME	QUALITY	OBSERVER

UNIVERSITY OF ARIZONA DEPARTMENT OF GEOSCIENCES
GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.
0123456789X

00035
SEQUENCE NO.

TBR - 0009
STATION IDENT

AZ STATE

PM COUNTY

08 MONTH

04 DAY

80 YEAR

31 55 . 52
DEG. LATITUDE MINUTES

0 0 X
STATION TYPE

BEDROCK

MAP

001 PRIMARY GEOLOGY

111 02 . 01
DEG. LONGITUDE MINUTES

4214
METER TYPE OR NUMBER

SECONDARY GEOLOGY

3217 . 9
ELEVATION

F S
UNIT CONTROL

TERTIARY GEOLOGY

	READING	TIME	QUALITY	OBSERVER
1	2811 . 676	1439		PZ
2	2811 . 676	1440		PZ
3	2811 . 675	1441		PZ
4	. 676			

UNIVERSITY OF ARIZONA DEPARTMENT OF GEOSCIENCES

GRAVITY OBSERVATION FORM

PRINT YOUR NUMERALS LIKE THIS. USE A #2 PENCIL.

0123456789X

00036
SEQUENCE NO.

TBR - 0010
STATION IDENT

AZ
STATE

PM
COUNTY

08 MONTH 04 DAY 80 YEAR

31 55 . 51
DEG. LATITUDE MINUTES

0 0 ~~1~~
STATION TYPE

BEDROCK MAP

001 PRIMARY GEOLOGY

111 02 . 07
DEG. LONGITUDE MINUTES

G214
METER TYPE OR NUMBER

SECONDARY GEOLOGY

3229 . 0
ELEVATION

F S
UNIT CONTROL

TERTIARY GEOLOGY

	READING	TIME	QUALITY	OBSERVER
1	2811 . 010	1445		PZ
2	2811 . 025	1446		PZ
3	2811 . 023	1447		PZ
4	. 019			

GRAVITY OBSERVATION FORM

00037
Sequence No.

TBR - 0011 — Station Ident
AZ — State
PM — County
08 — Month
04 — Day
80 — Year

31 — Deg. Latitude
55 — Minutes
48 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
02 — Minutes
14 — Minutes
6214 — Meter Type or Number
Geology — SECONDARY

3236 — Elevation
6
F — Unit
S — Control
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	28105	528	1453		PZ	
2	28105	528	1454		PZ	
3	28105	528	1455		PZ	
4		528				

GRAVITY OBSERVATION FORM

00038
Sequence No.

TBR-0012 — Station Ident
AZ — State
Pm — County
08 — Month
04 — Day
80 — Year

31 — Deg. Latitude
55 — Minutes
45 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
02 — Minutes
21 — Minutes
G214 — Meter Type or Number
Geology — SECONDARY

3253 — Elevation
5 — Unit
F — Control
9
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2809	315	1501		PZ	
2	2809	314	1502		PZ	
3	2809	314	1503		PZ	
4		314				

GRAVITY OBSERVATION FORM

00039
Sequence No.

TBR - 0013 — Station Ident
AZ — State
PM — County
08 — Month
04 — Day
80 — Year

31 — Deg. Latitude
55 — Minutes
43 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
02 — Minutes
27 — Minutes
6214 — Meter Type or Number
Geology — SECONDARY

3269 — Elevation
0
F — Unit Control
5
Geology — TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	2808	196	1508		PZ	
2	2808	193	1509		PZ	
3	2808	194	1510		PZ	
4		194			PZ	

GRAVITY OBSERVATION FORM

00040
Sequence No.

TBR - 0014 — Station Ident
AZ — State
PM — County
08 — Month
04 — Day
80 — Year

31 — Deg. Latitude
55 — Minutes
41 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
02 — Minutes
32 — Minutes
6214 — Meter Type or Number
Geology — SECONDARY

3283 — Elevation
9 — Unit
F — Control
S
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2807	081	1516		PZ	
2	2807	079	1517		PZ	
3	2807	070	1518		PZ	
4		077				

GRAVITY OBSERVATION FORM

00041
Sequence No.

TBR - 0015 — Station Ident
AZ — State
PM — County
08 — Month
04 — Day
8 — Year

31 — Deg. Latitude
55 — Minutes
38 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
02 — Minutes
39 — Minutes
G214 — Meter Type or Number
Geology — SECONDARY

3295 — Elevation
3 — Unit
F — Control
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2806	210	1523		PZ	
2	2806	209	1524		PZ	
3	2806	208	1525		PZ	
4		209				

GRAVITY OBSERVATION FORM

00042
Sequence No.

TBR - 0016 | AZ | PM | 08 | 04 | 80
Station Ident | State | County | Month | Day | Year

31 55 35 | F | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 02 43 | G214 | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3307 9 | F | S | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2805 324	1529		PZ	
2	2805 352	1530		PZ	
3	2805 349	1531		PZ	
4	342				

GRAVITY OBSERVATION FORM

P/C

00043
Sequence No.

TBR - 0017 | AZ | PM | 08 | 04 | 80
Station Ident | State | County | Month | Day | Year

31 | 55 | 31 | | | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 02 | 48 | 6214 | 001 SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

33317 | 9 | F | S | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	28048 863	1536		PZ	
2	28048 861	1537		PZ	
3	28048 862	1538		PZ	
4	862				

GRAVITY OBSERVATION FORM

00044
Sequence No.

BAS - 00UA — Station Ident
AZ — State
PM — County
08 — Month
05 — Day
80 — Year

Deg. Latitude — Minutes — Station Type: B — Bedrock — Map — Geology: ~~PR~~IMARY

Deg. Longitude — Minutes — Meter Type or Number: GZ14 — Geology: SECONDARY

Elevation — Unit — Control — Geology: TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	Z894	552	0537		PZ	
2	Z894	550	0538		PZ	
3	Z894	552	0539		PZ	
4		551				

GRAVITY OBSERVATION FORM

00062
Sequence No.

BAS - UA
Station Ident

AZ
State

PM
County

08
Month

05
Day

80
Year

Deg. Latitude

Minutes

B
Station Type

Bedrock

Map

Geology
PRIMARY

Deg. Longitude

Minutes

6214
Meter Type or Number

Geology
SECONDARY

Elevation

Unit Control

Geology
TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	2894	770	1830		PZ	50.5
2	2894	769	1831		PZ	
3	2894	770	1832		PZ	
4		770				

GRAVITY OBSERVATION FORM

00045
Sequence No.

TBR - 0000 | AZ | Pm | 08 | 04 (5) | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 05 | | | F | X | | 010 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 01 | 08 | G214 | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3108 | 4 | F | S | | | | TERTIARY
Elevation | Unit Control | Geology

010 — limestone

Sample taken near By #1

	Reading	Time	Quality	Observer	Temp.
1	2820 968	722		PZ	
2	2820 972	723		PZ	
3	2820 975	726		PZ	
4	972				

GRAVITY OBSERVATION FORM

00046
Sequence No.

TWB - 0001 | AZ | PM | 08 | 05 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 24 | | | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 02 | 17 | 6214 | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

·3229 | 0 | F | S | | | | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2812	038	829		PZ	
2	2812	028	830		PZ	
3	2812	030	831		PZ	
4		032				

GRAVITY OBSERVATION FORM

00047
Sequence No.

TB - 0002 | AZ | PM | 08 | 05 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 19 | | | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 02 | 17 | | | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3224 | 0 | F | S | | | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2812	134	849	PZ	
2	2812	145	850	PZ	
3	2812	145	851	PZ	
4		141			

GRAVITY OBSERVATION FORM

00048
Sequence No.

TB - 0003 | AZ | PM | 08 | 04 | 80
Station Ident | State | County | Month | Day | Year

31 56 | 14 | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 02 | 17 | G214 | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3234 | 3 | F S | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2811 268	907		PZ	
2	2811 265	908		PZ	
3	2811 259	909		PZ	
4	264				

50 - 75 ft
from this corner

24 | 25
21 | 22

0
0.1
2
0.1
3

Put on map

GRAVITY OBSERVATION FORM

00049
Sequence No.

TB - 0004 — Station Ident
AZ — State
PM — County
08 — Month
05 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
09 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
02 — Minutes
17 — Minutes
Meter Type or Number
Geology — SECONDARY

3242 — Elevation
3 — Unit
F — Control
U
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	28105	521	918		PZ	
2	28105	523	919		PZ	
3	28105	522	920		PZ	
4		522				

GRAVITY OBSERVATION FORM

00050
Sequence No.

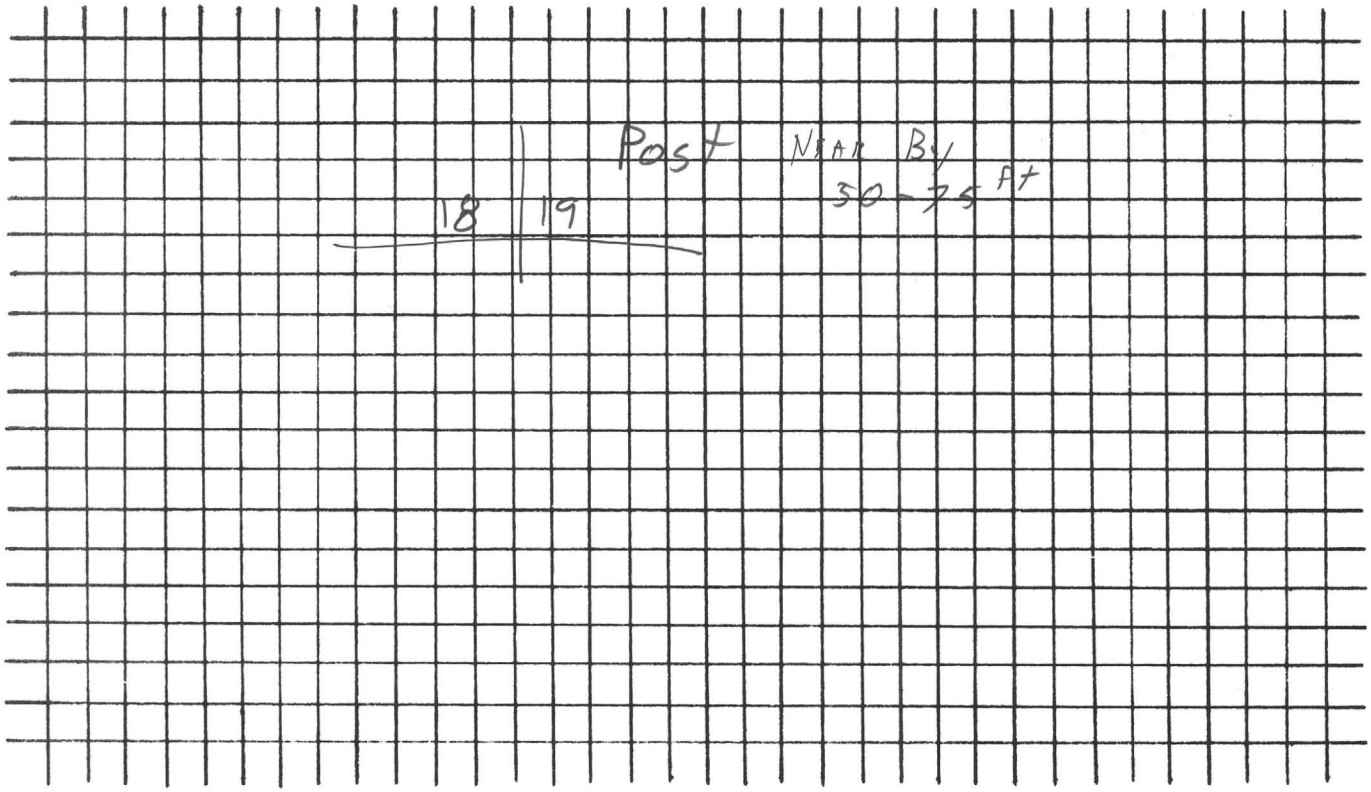
TB - 0005 — Station Ident
AZ — State
Pm — County
08 — Month
05 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
03 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
02 — Minutes
17 — Minutes
Meter Type or Number
Geology — SECONDARY

3244 — Elevation
5
F — Unit
S — Control
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2810	063	935		PZ	50+
2	2810	061	936		PZ	
3	2810	061	937		PZ	
4		062				



GRAVITY OBSERVATION FORM

00051
Sequence No.

TB - 0006 | AZ | PM | 08 | 05 | 80
Station Ident | State | County | Month | Day | Year

31 | 55 | 58 | | | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 02 | 17 | 6214 | | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3241 | 3 | F | 5 | | | | | TERTIARY
Elevation | Unit Control | Geology

	Reading		Time	Quality	Observer	Temp.
1	28105	125	946		PZ	
2	28105	127	947		PZ	
3	28105	125	948		PZ	
4		126				

GRAVITY OBSERVATION FORM

00052
Sequence No.

Station Ident	State	County	Month	Day	Year
TB - 0007	AZ	PM	08	05	80

Deg. Latitude	Minutes	Station Type	Bedrock	Map	Geology	
31 55	53	F			001	PRIMARY

Deg. Longitude	Minutes	Meter Type or Number	Geology	
111 02	17	6214		SECONDARY

Elevation		Unit Control		Geology	
3241	6	F	S		TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2810	005	958		PZ	
2	2810	003	959		PZ	
3	2810	005	1000		PZ	
4		004				

IN WASH

GRAVITY OBSERVATION FORM

00053
Sequence No.

TB - 0008 | AZ | PM | 08 | 05 | 80
Station Ident | State | County | Month | Day | Year

31 | 55 | 47 | | | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 02 | 17 | 6214 | | | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3245 | S | F | S | | | | | | TERTIARY
Elevation | Unit Control | Geology

	Reading		Time	Quality	Observer	Temp.
1	2809	740	1011		PZ	
2	2809	739	1012		PZ	
3	2809	740	1013		PZ	
4		740				

GRAVITY OBSERVATION FORM

Sequence No.: 00054

Station Ident	State	County	Month	Day	Year
TB - 0009	AZ	PM	08	05	80

Deg. Latitude	Minutes	Station Type	Bedrock	Map	Geology (PRIMARY)
31 55	42	F			001

Deg. Longitude	Minutes	Meter Type or Number	Geology (SECONDARY)
111 02	17	6214	

Elevation		Unit	Control	Geology (TERTIARY)
3244	3	F	S	

	Reading		Time	Quality	Observer	Temp.
1	2809	933	1036		PZ	
2	2809	931	1037		PZ	
3	2809	931	1038		PZ	
4		932				

GRAVITY OBSERVATION FORM

00055
Sequence No.

TB - 0000 — Station Ident
AZ — State
PM — County
08 — Month
05 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
30 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
02 — Minutes
17 — Minutes
6214 — Meter Type or Number
Geology — SECONDARY

3229 — Elevation
8 — Unit
F — Control
S
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	28125	215	1109		PZ	
2	28125	214	1110		PZ	
3	28125	216	1111		PZ	
4		214				

73 FT FROM FENCE (SECTION LINE)

IN WASH

GRAVITY OBSERVATION FORM

Field	Value
Sequence No.	0 0 0 5 6
Station Ident	T B _ - 0 0 1 0
State	A Z
County	P M
Month	0 8
Day	0 5
Year	8 0
Deg. Latitude	3 1
Minutes (Latitude)	5 6 · 3 7
Station Type	_ _ F
Bedrock	
Map	
Geology PRIMARY	0 0 1
Deg. Longitude	1 1 1
Minutes (Longitude)	0 2 · 1 7
Meter Type or Number	6 2 1 4
Geology SECONDARY	
Elevation	_ 3 2 3 1 · 6
Unit	F
Control	S
Geology TERTIARY	

	Reading		Time	Quality	Observer	Temp.
1	_ 2 8 1 2	2 8 6	1 1 2 0		PZ	
2	_ 2 8 1 2	2 8 4	1 1 2 1		PZ	
3	_ 2 8 1 2	2 8 5	1 1 2 2		PZ	
4		2 8 5			PZ	

ON Road

GRAVITY OBSERVATION FORM

00057
Sequence No.

HPR-0026 — Station Ident
AZ — State
pm — County
08 — Month
05 — Day
80 — Year

31 — Deg. Latitude
55 — Minutes
24 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
03 — Minutes
31 — Minutes
6214 — Meter Type or Number
Geology — SECONDARY

3403 — Elevation
0
F — Unit Control
S
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2800	123	1640		PZ	
2	2800	123	1641		PZ	
3	2800	123	1642		PZ	
4		123				

GRAVITY OBSERVATION FORM

00058
Sequence No.

HPR - 0027 | AZ | Pm | 08 | 05 | 80
Station Ident | State | County | Month | Day | Year

31 | 55 | 18 | | | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 03 | 29 | 6214 | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

| 3411 | 1 | F | S | | | | TERTIARY
Elevation | Unit Control | Geology

	Reading		Time	Quality	Observer	Temp.
1	2799	433	1646		PZ	
2	2799	435	1647		PZ	
3	2799	437	1648		PZ	
4		435				

GRAVITY OBSERVATION FORM

00058
Sequence No.

HPR-0028 — Station Ident
AZ — State
PM — County
08 — Month
05 — Day
80 — Year

31 — Deg. Latitude
55 — Minutes
13 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
03 — Minutes
26 — Minutes
Meter Type or Number
Geology — SECONDARY

03410 — Elevation
8 — Unit
F — Unit
S — Control
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2799	329	1651		PZ	
2	2799	328	1652		PZ	
3	2799	329	1653		PZ	
4		329				

GRAVITY OBSERVATION FORM

00059
Sequence No.

HPR - 0029 | AZ | PM | 08 | 05 | 80
Station Ident | State | County | Month | Day | Year

31 55 07 | F | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 03 24 | 6214 | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3401 5 | F | 5 | TERTIARY
Elevation | Unit Control | Geology

	Reading		Time	Quality	Observer	Temp.
1	2800	059	1657		PZ	
2	2800	059	1658		PZ	
3	2800	060	1659		PZ	
4		059				

GRAVITY OBSERVATION FORM

00060
Sequence No.

HPR - 0030 — Station Ident
AZ — State
Pm — County
08 — Month
05 — Day
80 — Year

31 — Deg. Latitude
55 — Minutes
02 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
03 — Minutes
22 — Minutes
Meter Type or Number
Geology — SECONDARY

3406 — Elevation
8 — Unit
F — Control
S
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2799	926	1704		PZ	
2	2799	928	1705		PZ	
3	2999	936	1706			
4		928				

GRAVITY OBSERVATION FORM

00061
Sequence No.

HPR-0031 — Station Ident
AZ — State
PM — County
08 — Month
05 — Day
80 — Year

31 — Deg. Latitude
55 — Minutes
00 — Minutes
F — Station Type
☒ — Bedrock
☐ — Map
010 — Geology — PRIMARY

111 — Deg. Longitude
03 — Minutes
21 — Minutes
6214 — Meter Type or Number
☐☐☐ — Geology — SECONDARY

03405 — Elevation
8 — Unit Control
S — Unit Control
☐☐☐ — Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2800	424	1727		PZ	
2	2800	423	1728		PZ	
3	2800	423	1729		PZ	
4		423				

Samples of
Bedrock
OFF old
Mission
Road
well
Flagged

Twin Betts

GRAVITY OBSERVATION FORM

00063
Sequence No.

BAS - UA
Station Ident

AZ
State

PM
County

08
Month

06
Day

80
Year

Deg. Latitude

Minutes

B
Station Type

Bedrock

Map

~~Geology~~ PRIMARY

Deg. Longitude

Minutes

6214
Meter Type or Number

Geology SECONDARY

Elevation

~~Unit Control~~

Geology TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	2894	680	530	PZ	50.5
2	2894	682	531	PZ	
3	2894	689	532	PZ	
4		684			

GRAVITY OBSERVATION FORM

00096
Sequence No.

BAS - - - 9A — Station Ident
AZ — State
PM — County
08 — Month
06 — Day
80 — Year

Deg. Latitude — Minutes — [X] Station Type — Bedrock — Map — Geology — PRIMARY

Deg. Longitude — Minutes — Meter Type or Number — Geology — SECONDARY

Elevation — F Unit Control — Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2894	729	1805		RPZ	50.5
2	2894	728	1806		RPZ	
3	2894	728	1807		RPZ	
4		728				

GRAVITY OBSERVATION FORM

00064
Sequence No.

7B - 12 — Station Ident
A2 — State
PM — County
08 — Month
06 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
05 — Minutes
[ ] [ ] [X] — Station Type
[ ] — Bedrock
[ ] — Map
001 — Geology — PRIMARY

111 — Deg. Longitude
03 — Minutes
42 — Minutes
6219 — Meter Type or Number
[ ][ ][ ] — Geology — SECONDARY

[ ]3417 — Elevation
3 — Unit
F — Control
[ ] — Unit Control
[ ][ ][ ] — Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2799	643	0721	F	MA	50.5
2	2799	651	0722		MA	
3	2799	649	0723		MA	
4		648				

GRAVITY OBSERVATION FORM

00065
Sequence No.

TB - 13 | AZ | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 05 | | | X | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 03 | 35 | 6219 | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3403 | 0 | F | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2800 515	0730		MA	
2	~~2800 566~~	0731		MA	
3	2800 516	0732		MA	
4	2800 517	0733		MA	

516

GRAVITY OBSERVATION FORM

00066
Sequence No.

TB - 14 | A2 | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 05 | X | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 03 | 29 | 6219 | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3389 | 8 | F | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2801 230	0743		MA	
2	2801 216	0744		MA	
3	2801 219	0745		MA	
4	222				

At claimpost for Twinkle #2,3,4

GRAVITY OBSERVATION FORM

00067
Sequence No.

TB-015 — Station Ident
AZ — State
PM — County
08 — Month
06 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
05 — Minutes
Station Type: X
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
03 — Minutes
22 — Minutes
6219 — Meter Type or Number
Geology — SECONDARY

3373 — Elevation
0
F — Unit Control
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2802	189	0800		MA	
2	2802	205	0801		MA	
3	2802	202	0802		MA	
4		199				

GRAVITY OBSERVATION FORM

00068
Sequence No.

1B - 016 | A2 | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 05 | | | X | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 03 | 16 | 6219 | | | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3360 | 0 | F | | | | | | | TERTIARY
Elevation | Unit Control | Geology

	Reading		Time	Quality	Observer	Temp.
1	2803	975	0810		MA	
2	2803	965	0811		MA	
3	280	967	0812		MA	
4		969				

GRAVITY OBSERVATION FORM

00069
Sequence No.

TB - 17 | A2 | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 56 | 05 | X | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 03 | 10 | 6219 | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3344 | 4 | F | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2803 925	0829		MA	
2	2803 900	0830		MA	
3	2803 905	0831		MA	
4	910				

GRAVITY OBSERVATION FORM

00070
Sequence No.

TB-0018 — Station Ident
AZ — State
PM — County
08 — Month
06 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
05 — Station Type
X — Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
03 — Minutes
6219 — Meter Type or Number
Geology — SECONDARY

3339 — Elevation
3 — Unit Control
F
Geology — TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	2804 250	0840		MA	
2	2804 244	0841		MA	
3	2804 242	0842		MA	
4	245				

GRAVITY OBSERVATION FORM

00071
Sequence No.

TB - 0019 | AZ | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 05 | [ ] [ ] [X] | [ ] | [ ] | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 02 | 57 | 6219 | [ ][ ][ ] SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

[ ] 3328 | 5 | F | [ ] | [ ][ ][ ] TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2805	962	0853	[ ]	MA	
2	2805	956	0854	[ ]	MA	
3	2805	965	0855	[ ]	MA	
4	[ ][ ][ ][ ][ ]	961	[ ][ ][ ][ ]	[ ]		

GRAVITY OBSERVATION FORM

72
Sequence No.

1B - 0020 — Station Ident
AZ — State
PM — County
08 — Month
06 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
05 — Minutes
Station Type: ☒
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
02 — Minutes
50 — Minutes
6219 — Meter Type or Number
Geology — SECONDARY

3315 — Elevation
9 — Unit Control
F
Geology — TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	2805	725	0902	MA	
2	2805	730	0903	MA	
3	2805	725	0904	MA	
4		727			

GRAVITY OBSERVATION FORM

Sequence No.: 73

Station Ident: TB-0021 | State: AZ | County: PM | Month: 08 | Day: 06 | Year: 80

Deg. Latitude: 31 | Minutes: 56.05 | Station Type: X | Bedrock: | Map: | Geology: 001 PRIMARY

Deg. Longitude: 111 | Minutes: 02.44 | Meter Type or Number: G219 | Geology: SECONDARY

Elevation: 3398.5 | Unit: P | Control: | Geology: TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	2806.920	0913		MA	
2	2806.920	0914		MA	
3	2806.920	0915		MA	
4	.920				

GRAVITY OBSERVATION FORM

00074
Sequence No.

TB - 0022 | AZ | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 56 18 | F | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 02 44 | 6214 | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3390 4 F 5 | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	28077	699	946	MA	Hot
2	28077	732	947	MA	
3	28077	746	948	MA	
4		726			

GRAVITY OBSERVATION FORM

00075
Sequence No.

TB - 0023 — Station Ident
AZ — State
PM — County
08 — Month
06 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
31 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
02 — Minutes
11 — Minutes
6214 — Meter Type or Number
Geology — SECONDARY

3217 — Elevation
6
F — Unit Control
S
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2813	212	1031		PZ	
2	2813	244	1032		PZ	
3	2813	236	1033		PZ	
4		231				

START ON ROAD.

GRAVITY OBSERVATION FORM

00076
Sequence No.

FB - 0024 | AZ | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 31 | | | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 02 | 04 | | | | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3200 | 6 | F | S | | | | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	~~2814 409~~	1038		PZ	
2	2814 439	1039		PZ	
3	2814 460	1040		PZ	
4	2814 453			PZ	

.451

GRAVITY OBSERVATION FORM

00077
Sequence No.

KB0 - 0025 | AZ | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 31 | | | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 01 | 58 | 6214 | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3194 | | F | 5 | | | | TERTIARY
Elevation | Unit Control | Geology

	Reading		Time	Quality	Observer	Temp.
1	2814	795	1046		PZ	
2	2814	792	1047		PZ	
3	2814	795	1048		PZ	
4		794				

GRAVITY OBSERVATION FORM

00078
Sequence No.

TB - 0026 | AZ | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 31 | | | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 01 | 51 | | | | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3180 | 2 | F | S | | | | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2815	800	1051	F	PZ	
2	2815	814	1052		PZ	
3	2815	816	1053		PZ	
4		810				

GRAVITY OBSERVATION FORM

00079
Sequence No.

TB - 0027 — Station Ident
AZ — State
PM — County
08 — Month
06 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
31 — Minutes
Station Type: F
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
01 — Minutes
45 — Minutes
6214 — Meter Type or Number
Geology — SECONDARY

03167 — Elevation
8
F — Unit Control
S
Geology — TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	28166 99	1057		PZ	
2	28166 700	1058		PZ	
3	28166 700	1059		PZ	
4	700				

GRAVITY OBSERVATION FORM

00030
Sequence No.

TB - 0028 | AZ | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 56 36 | F | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 01 45 |
Deg. Longitude | Minutes | Meter Type or Number | SECONDARY Geology

3166 4 F S | TERTIARY Geology
Elevation | Unit Control

	Reading	Time	Quality	Observer	Temp.
1	2817 068	1106		PZ	
2	2817 080	1107		PZ	
3	2817 079	1108		PZ	
4	076				

GRAVITY OBSERVATION FORM

00081
Sequence No.

TB - 0029 — Station Ident
AZ — State
PM — County
08 — Month
06 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
42 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
01 — Minutes
45 — Minutes
Meter Type or Number
Geology — SECONDARY

3162 — Elevation
8
F — Unit Control
S
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	28173	473	1115		PZ	
2	28179	499	1116		PZ	
3	28179	499	1117		PZ	
4		490				

GRAVITY OBSERVATION FORM

00087
Sequence No.

TB - 0030 — Station Ident
AZ — State
PM — County
08 — Month
06 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
48 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
01 — Minutes
45 — Minutes
GZ14 — Meter Type or Number
Geology — SECONDARY

3158 — Elevation
5
F — Unit Control
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	28117	813	1122		PZ	
2	28117	815	1123		PZ	
3	28113	814	1124		PZ	
4		814				

GRAVITY OBSERVATION FORM

00083
Sequence No.

TB - 0031 | AZ | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 56 54 | F | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 01 45 | 6214 | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3160 | 6 | F | S | TERTIARY
Elevation | Unit | Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2817 746	1127		PZ	
2	2817 747	1128		PZ	
3	2817 746	1129		PZ	
4	746				

GRAVITY OBSERVATION FORM

00084
Sequence No.

HB - 0032 | AZ | PM | 08 | 06 | 86
Station Ident | State | County | Month | Day | Year

31 57 00 | . F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 01 45 | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3158 7 F S | | TERTIARY
Elevation | Unit Control | Geology

87

	Reading	Time	Quality	Observer	Temp.
1	27188	897	1132		PZ	
2	27188	892	1133		PZ	
3	27188	895	1134		PZ	
4		895				

GRAVITY OBSERVATION FORM

00085
Sequence No.

TB - 0033 — Station Ident
AZ — State
PM — County
08 — Month
06 — Day
80 — Year

31 57 06 — Deg. Latitude, Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 01 45 — Deg. Longitude, Minutes
G214 — Meter Type or Number
Geology — SECONDARY

3147 — Elevation
1 — Unit Control
S
Geology — TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	2818 769	1138		PZ	
2	2818 807	1139		PZ	
3	2818 804	1140		PZ	
4	793				

GRAVITY OBSERVATION FORM

00086
Sequence No.

TB - 0034 | AZ | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 57 12 | F | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 01 45 | 6214 | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3153 2 | F | 5 | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	28188 612	1144		PZ	
2	28188 611	1145		PZ	
3	28188 610	1146		PZ	
4	611				

GRAVITY OBSERVATION FORM

00087
Sequence No.

TB - 0035 | AZ | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 52 | | | X | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 04 | 30 | 6219 | | | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3447 | 4 | F | | | | | | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2799	974	1443		mA	50.5
2	2799	945	1444		mA	
3	2	950	1445		mA	
4		956				

Indicate

GRAVITY OBSERVATION FORM

00088
Sequence No.

1B - 0036 | AZ | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 56 48 | | | X | X | | 030 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 04 25 | C219 | | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | | | Geology

3467 6 | F | | 030-ANDESITE | | | TERTIARY
Elevation | Unit Control | | | | Geology

	Reading	Time	Quality	Observer	Temp.
1	2798 650	1502		MA	
2	2798 614			MA	
3	2798 641			MA	
4	635				

GRAVITY OBSERVATION FORM

00089
Sequence No.

TB - 0037 | AZ | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 44 | | | X | X | | 030 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 04 | 29 | 6219 | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3472 | 5 | P | | 030 - Andesite | | | TERTIARY
Elevation | Unit Control | Geology

	Reading		Time	Quality	Observer	Temp.
1	2798	268	1513		MA	
2	2798	255	1514		MA	
3	2798	259	1515		MA	
4		261				

GRAVITY OBSERVATION FORM

00090
Sequence No.

TB-0038 | AZ | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 41 | | | X | X | | 030 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 04 | 33 | 6219 | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3482 | Z | P | | 030-Andesite | TERTIARY
Elevation | Unit Control | Geology

	Reading		Time	Quality	Observer	Temp.
1	2797	475	1529		MA	
2	2797	475	1530		MA	
3	2797	475	15		MA	
4		475				

GRAVITY OBSERVATION FORM

00091
Sequence No.

TB-0039 — Station Ident
AZ — State
PM — County
08 — Month
06 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
37 — Minutes
Station Type: X
Bedrock
Map
Geology — PRIMARY

111 — Deg. Longitude
04 — Minutes
38 — Minutes
G219 — Meter Type or Number
Geology — SECONDARY

3476 — Elevation
2 — Unit Control
P
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2796	706	1542		MA	
2	2796	700	1543		MA	
3	2796	705	1544		MA	
4		704				

GRAVITY OBSERVATION FORM

00092
Sequence No.

1B - 0040 | AZ | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 38 | | | X | X? | | 03 | PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 04 | 42 | 6219 | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3503 | 3 | P | | TERTIARY
Elevation | Unit Control | Geology

Sample #4
Andesite

	Reading	Time	Quality	Observer	Temp.
1	2796 139	1601		MA	50.75
2	~~2796~~ 076	1602		MA	
3	2796 111	1603		MA	
4	2796 130	1604			

.127

GRAVITY OBSERVATION FORM

00093
Sequence No.

TB - 0041 | AZ | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 56 29 | X | PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 04 46 | G219 | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3512 2 | F | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2795 672	1615		MA	
2	2795 678	1616		MA	
3	2795 673	1617		MA	
4	674				

GRAVITY OBSERVATION FORM

00094
Sequence No.

1B - 0042 | AZ | PM | 08 | 06 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 25 | [ ] [ ] [X] | [ ] | [ ] | [ ][ ][ ] PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 04 | 50 | 6219 | [ ][ ][ ] SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

[ ]3530 | 5 | F | [ ] | [ ][ ][ ] TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2794 372	1628	[ ]	MA	
2	2794 366	1629	[ ]	MA	
3	2794 370	1630	[ ]	MA	
4	[ ][ ][ ][ ][ ] 369	[ ][ ][ ][ ]	[ ]		

GRAVITY OBSERVATION FORM

P/C

00095
Sequence No.

1B-0043 — Station Ident
AZ — State
PM — County
08 — Month
06 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
21 — Minutes
X — Station Type
Bedrock
Map
Geology — PRIMARY

111 — Deg. Longitude
04 — Minutes
55 — Minutes
6219 — Meter Type or Number
Geology — SECONDARY

3540 — Elevation
1
F — Unit Control
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2794	024	1641		MA	
2	2794	031	1642		MA	
3	2794	016	1643		MA	
4		024				

GRAVITY OBSERVATION FORM

00097
Sequence No.

BAS - UA
Station Ident

AZ
State

PM
County

08
Month

07
Day

80
Year

Deg. Latitude

Minutes

F
Station Type

Bedrock

Map

Geology — PRIMARY

Deg. Longitude

Minutes

6214
Meter Type or Number

Geology — SECONDARY

Elevation

Unit Control

Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2894	690	5222		PZ	
2	2894	691	5223		MA	
3	2894	691	5224		PZ	
4		690				

GRAVITY OBSERVATION FORM

143
Sequence No.

BAS - UA
Station Ident

AZ
State

PM
County

08
Month

07
Day

80
Year

Deg. Latitude

Minutes

B
Station Type

Bedrock

Map

Geology

PRIMARY

Deg. Longitude

Minutes

6214
Meter Type or Number

Geology

SECONDARY

Elevation

Unit Control

Geology

TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	2894 811	1654		NX	OK
2	2894 795	1655		NX	
3	2894 790	1658		NX	
4	799				

GRAVITY OBSERVATION FORM

00098
Sequence No.

TB - 0044 — Station Ident
AZ — State
PM — County
08 — Month
07 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
48 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
01 — Minutes
51 — Minutes
G214 — Meter Type or Number
Geology — SECONDARY

3277 — Elevation
9
F — Unit Control
5
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2817	220	714		PZ	
2	2817	219	715		PZ	
3	2817	195	716		PZ	
4		211				

GRAVITY OBSERVATION FORM

00099
Sequence No.

TB - 0045 | AZ | PM | 08 | 07 | 80
Station Ident | State | County | Month | Day | Year

31 56 48 | F | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 01 58 | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3181 0 | F S | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2816 398	726		PZ	
2	2816 398	727		PZ	
3	2816 399	728		PZ	
4	398				

GRAVITY OBSERVATION FORM

00100
Sequence No.

TB - 0046 | AZ | PM | 08 | 07 | 80
Station Ident | State | County | Month | Day | Year

31 56 48 | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 02 04 | 6214 | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3197 5 | F S | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2815 247	732		PZ	
2	2815 246	733		PZ	
3	2815 245	734		PZ	
4	246				

GRAVITY OBSERVATION FORM

Sequence No.: 1 0 1

Station Ident: J B - 0 0 4 7

State: A Z

County: P M

Month: 0 8

Day: 0 7

Year: 8 0

Deg. Latitude: 3 1

Minutes: 5 6 4 8

Station Type: F

Bedrock:

Map:

Geology (PRIMARY): 0 0 1

Deg. Longitude: 1 1 1

Minutes: 0 2 1 0

Meter Type or Number: G Z 1 4

Geology (SECONDARY):

Elevation: 3 2 0 6

Unit: 3

Control: F S

Geology (TERTIARY):

	Reading	Time	Quality	Observer	Temp.
1	2814 6 5 3	7 4 1		PZ	
2	2814 6 5 5	7 4 2		PZ	
3	2814 6 4 6	7 4 3		PZ	
4	6 5 1				

GRAVITY OBSERVATION FORM

0 1 0 2
Sequence No.

J B - 0 0 4 8 — Station Ident
A Z — State
P M — County
0 8 — Month
0 7 — Day
8 0 — Year

3 1 — Deg. Latitude
5 6 — Minutes
4 8 — Minutes
F — Station Type
Bedrock
Map
0 0 1 — Geology — PRIMARY

1 1 1 — Deg. Longitude
0 2 — Minutes
1 7 — Minutes
Meter Type or Number
Geology — SECONDARY

3 2 2 0 — Elevation
2
F S — Unit Control
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2813	705	750		PZ	
2	2813	727	751		PZ	
3	2813	735	752		PZ	
4		722				

GRAVITY OBSERVATION FORM

00103
Sequence No.

TB - 0049 — Station Ident
AZ — State
PM — County
08 — Month
07 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
48 — Minutes
F — Station Type
001 — Geology — PRIMARY

111 — Deg. Longitude
02 — Minutes
23 — Minutes
6214 — Meter Type or Number
Geology — SECONDARY

3228 — Elevation
6 — Unit
F — Unit Control
5
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2813	000	758		PZ	
2	2813	000	759		PZ	
3	2813	000	800		PZ	
4		000				

GRAVITY OBSERVATION FORM

104							
Sequence No.							
TB - 0050	AZ	PM	08	07	8r		
Station Ident	State	County	Month	Day	Year		
31 56	48	F			001	PRIMARY	
Deg. Latitude	Minutes	Station Type	Bedrock	Map	Geology		
111 02	29					SECONDARY	
Deg. Longitude	Minutes	Meter Type or Number			Geology		
3239	7	F S				TERTIARY	
Elevation		Unit Control			Geology		

	Reading	Time	Quality	Observer	Temp.
1	2812 150	807		PZ	
2	2812 148	808		PZ	
3	2812 142	809		PZ	
4	147				

GRAVITY OBSERVATION FORM

00105
Sequence No.

TB - 0051 — Station Ident
AZ — State
PC — County
08 — Month
07 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
48 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
02 — Minutes
35 — Minutes
6214 — Meter Type or Number
Geology — SECONDARY

03256 — Elevation
7 — Unit
F — Control
S
Geology — TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	28106	876	824	K	PZ	ok
2	28106	877	825		PZ	
3	28106	877	826		PZ	
4		877				

GRAVITY OBSERVATION FORM

106							
Sequence No.							
TB - 0052	AZ	PM	08	07	80		
Station Ident	State	County	Month	Day	Year		
31 56	48	F			001	PRIMARY	
Deg. Latitude	Minutes	Station Type	Bedrock	Map	Geology		
111 02	42					SECONDARY	
Deg. Longitude	Minutes	Meter Type or Number			Geology		
3269	8	F S				TERTIARY	
Elevation		Unit Control			Geology		

	Reading	Time	Quality	Observer	Temp.
1	2809 885	831		PZ	
2	2809 876	832		PZ	
3	2809 880	833		PZ	
4	880				

GRAVITY OBSERVATION FORM

00107
Sequence No.

TB - 0053 — Station Ident
AZ — State
Pm — County
08 — Month
07 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
48 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
02 — Minutes
48 — Minutes
6214 — Meter Type or Number
Geology — SECONDARY

3281 — Elevation
5 — Unit
F — Control
S
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2809	094	841		PZ	
2	2809	095	842		PZ	
3	2809	092	843		PZ	
4		094				

GRAVITY OBSERVATION FORM

00108
Sequence No.

TB - 0054 | AZ | PM | 08 | 07 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 48 | | | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 02 | 54 | GZ14 | | | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3295 | 3 | F | S | | | | | | TERTIARY
Elevation | Unit Control | Geology

	Reading		Time	Quality	Observer	Temp.
1	2808	149	849		PZ	
2	2808	167	850		PZ	
3	2808	173	851		PZ	
4		163				

GRAVITY OBSERVATION FORM

00109
Sequence No.

TB - 0055 — Station Ident
AZ — State
Pm — County
08 — Month
07 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
48 — Minutes
Station Type: F
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
03 — Minutes
01 — Minutes
GZ14 — Meter Type or Number
Geology — SECONDARY

3306 — Elevation
4 — Unit
F — Control
S
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2807	530	858		PZ	
2	2807	530	859		PZ	
3	2807	530	900		PZ	
4		530				

GRAVITY OBSERVATION FORM

00110
Sequence No.

TB - 0056 — Station Ident
AZ — State
PM — County
08 — Month
07 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
48 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
03 — Minutes
07 — Minutes
Meter Type or Number
Geology — SECONDARY

33136 — Elevation
F — Unit
S — Control
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	28071	163	905		PZ	
2	28071	160	906		PZ	
3	28071	160	907		PZ	
4		161				

GRAVITY OBSERVATION FORM

Sequence No.: 0 0 1 1 1

Station Ident	State	County	Month	Day	Year
T B - 0 0 5 7	A Z	P Z	0 8	0 7	8 0

Deg. Latitude	Minutes	Station Type	Bedrock	Map	Geology
3 1 5 6	4 8	F			0 0 1 PRIMARY

Deg. Longitude	Minutes	Meter Type or Number	Geology
1 1 1 0 3	1 3	6 2 1 4	SECONDARY

Elevation	Unit	Control	Geology
3 3 2 7 7	F	S	TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2 8 0 6	2 0 3	9 1 1		PZ	
2	2 8 0 6	2 0 5	9 1 2		PZ	
3	2 8 0 6	2 0 7	9 1 3		PZ	
4		2 0 5				

GRAVITY OBSERVATION FORM

0 0 1 1 2
Sequence No.

T B - 0 0 5 8 — Station Ident
A Z — State
P M — County
0 8 — Month
0 7 — Day
8 0 — Year

3 1 — Deg. Latitude
5 6 — Minutes
4 8 — Minutes
F — Station Type
1 — Bedrock
Map
0 0 1 — Geology — PRIMARY

1 1 1 — Deg. Longitude
0 3 — Minutes
2 0 — Minutes
Meter Type or Number
Geology — SECONDARY

3 3 3 8 — Elevation
0
F — Unit Control
5
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2805	390	919		PZ	
2	2805	391	920		PZ	
3	2805	389	921		PZ	
4		390				

GRAVITY OBSERVATION FORM

00113
Sequence No.

TB - 0059 | AZ | PM | 08 | 07 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 48 | | | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 03 | 26 | | | | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

03352 | 9 | F | S | | | TERTIARY
Elevation | Unit | Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	02804	382	938		PZ	
2	02804	431	939		PZ	
3	02804	429	940		PZ	
4		414				

GRAVITY OBSERVATION FORM

0014
Sequence No.

TB - 0060 — Station Ident
AZ — State
PM — County
08 — Month
07 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
48 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
03 — Minutes
32 — Minutes
Meter Type or Number
Geology — SECONDARY

3366 — Elevation
4 — Unit
F — Unit
5 — Control
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2803	725	945		PZ	
2	2803	726	946		PZ	
3	2803	726	947		PZ	
4		726				

GRAVITY OBSERVATION FORM

00115
Sequence No.

TB - 0061 — Station Ident
AZ — State
Pm — County
08 — Month
07 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
48 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
03 — Minutes
38 — Minutes
Meter Type or Number
Geology — SECONDARY

3377 — Elevation
8 — Unit
F — Control
Geology — TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	2803	173	9558	PZ	
2	2803	175	1000	PZ	
3	2803	176	1001	PZ	
4		175			

GRAVITY OBSERVATION FORM

0 0 1 1 6							
Sequence No.							
T B - 0 0 6 2	A Z	P M	0 8	0 7	8 8		
Station Ident	State	County	Month	Day	Year		
3 1 5 6 4 8		F			0 0 1	PRIMARY	
Deg. Latitude Minutes	Station Type		Bedrock	Map	Geology		
1 1 1 0 3 4 4	G 2 1 4					SECONDARY	
Deg. Longitude Minutes	Meter Type or Number				Geology		
3 3 8 7 6	F S					TERTIARY	
Elevation	Unit Control				Geology		

	Reading	Time	Quality	Observer	Temp.
1	2 8 0 2 6 8 3	1 0 0 5		PZ	
2	2 8 0 2 6 8 5	1 0 0 6		PZ	
3	2 8 0 2 6 8 7	1 0 0 7		PZ	
4	6 8 5				

GRAVITY OBSERVATION FORM

00117
Sequence No.

TB - 0063 — Station Ident
AZ — State
PM — County
08 — Month
07 — Day
80 — Year

31 — Deg. Latitude
57 — Minutes
05 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
03 — Minutes
48 — Minutes
Meter Type or Number
Geology — SECONDARY

33887 — Elevation
F — Unit
5 — Control
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	28027	879	1017		PZ	
2	28027	878	1018		PZ	
3	28027	876	1019		PZ	
4		878				

5/2/2

GRAVITY OBSERVATION FORM

00118
Sequence No.

TB - 0064 | AZ | Pm | 08 | 07 | 80
Station Ident | State | County | Month | Day | Year

31 | 57 | 12 | | | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 03 | 48 | | | | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3376 | 6 | F | S | | | | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	28036	664	1024		PZ	
2	28036	668	1025		PZ	
3	28036	668	1026		PZ	
4		667				

GRAVITY OBSERVATION FORM

00119
Sequence No.

FB - 0065 | AZ | Pm | 08 | 07 | 80
Station Ident | State | County | Month | Day | Year

31 | 57 | 18 | | | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 03 | 48 | | | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3381 | 5 | F | S | | | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2803	551	1036		Pz	
2	2803	550	1032		Pz	
3	2803	541	1034		Pz	
4		547				

GRAVITY OBSERVATION FORM

00120
Sequence No.

TB - 0066 | AZ | PM | 08 | 07 | 80
Station Ident | State | County | Month | Day | Year

31 57 24 | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 03 48 | G214 | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3376 8 | F | S | TERTIARY
Elevation | Unit Control | Geology

	Reading		Time	Quality	Observer	Temp.
1	2803	726	1039		PZ	
2	2803	729	1040		PZ	
3	2803	729	1041		PZ	
4		728				

GRAVITY OBSERVATION FORM

0 0 1 2 1
Sequence No.

H B - 0 0 6 7 — Station Ident
A Z — State
P M — County
0 8 — Month
0 7 — Day
8 0 — Year

3 1 — Deg. Latitude
5 6 — Minutes
4 8 — Minutes
F — Station Type
Bedrock
Map
Geology — PRIMARY

1 1 1 — Deg. Longitude
0 3 — Minutes
4 8 — Minutes
G Z 1 4 — Meter Type or Number
Geology — SECONDARY

3 4 0 0 — Elevation
3 — Unit
Control
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2801	319	1047		PZ	
2	2801	320	1048		PZ	
3	2801	319	1049		PZ	
4		319				

GRAVITY OBSERVATION FORM

00122
Sequence No.

TB - 0068 — Station Ident
AZ — State
PA — County
08 — Month
07 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
38 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
03 — Minutes
48 — Minutes
6214 — Meter Type or Number
Geology — SECONDARY

3400 — Elevation
0
F — Unit
C — Control
Geology — TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	28000	992	1055		PZ	
2	28001	007	1056		PZ	
3	28001	006	1057		PZ	
4	28001	002				

Ave →

GRAVITY OBSERVATION FORM

00123
Sequence No.

TB - 0069 | AZ | PM | 08 | 07 | 80
Station Ident | State | County | Month | Day | Year

31 | 57 | 24 | | | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 03 | 18 | G214 | | | | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3318 | Z | F | S | | | | | | TERTIARY
Elevation | Unit Control | Geology

	Reading		Time	Quality	Observer	Temp.
1	2807	340	1325		PZ	
2	2807	353	1326		PZ	
3	2807	355	1327		PZ	
4		349				

GRAVITY OBSERVATION FORM

00124
Sequence No.

TB - 0070 — Station Ident
AZ — State
PM — County
08 — Month
04 — Day
80 — Year

31 — Deg. Latitude
57 — Minutes
18 — Minutes
F — Station Type
Bedrock
Map
000 — Geology — PRIMARY

111 — Deg. Longitude
03 — Minutes
18 — Minutes
Meter Type or Number
Geology — SECONDARY

3324 — Elevation
7 — Unit
F — Unit
S — Control
Geology — TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	2806	718	1334		PZ	Hot
2	2806	756	1335		PZ	
3	2806	761	1336		PZ	
4		745				

GRAVITY OBSERVATION FORM

0 6 1 2 5
Sequence No.

T B _ - 0 0 7 1 — Station Ident
A Z — State
P a — County
0 8 — Month
0 7 — Day
8 0 — Year

3 1 — Deg. Latitude
1 2 — Minutes
5 7
_ _ F — Station Type
_ — Bedrock
_ — Map
0 0 1 — Geology PRIMARY

1 1 1 — Deg. Longitude
0 3
1 8 — Minutes
~~_ _ _ _~~ — Meter Type or Number
_ _ _ — Geology SECONDARY

_ 3 3 3 2 — Elevation
6
F S — Unit Control
_ _ _ — Geology TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	_ 2 8 0 6	1 4 9	1 3 4 2		PZ	
2	_ 2 8 0 6	1 4 8	1 3 4 3		PZ	
3	_ 2 8 0 6	1 4 8	1 3 4 4		PZ	
4		1 4 8				

GRAVITY OBSERVATION FORM

00126
Sequence No.

TB - 0072 | AZ | pm | 08 | 07 | 80
Station Ident | State | County | Month | Day | Year

31 | 57 | 06 | | | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 03 | 18 | ~~[illegible]~~ | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3332 | 4 | F | S | | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2806	131	1348		PZ	
2	2806	137	1349		PZ	
3	2806	137	1350		PZ	
4		135				

GRAVITY OBSERVATION FORM

00127
Sequence No.

TB - 0073 | 1Z | Pm | 08 | 07 | 80
Station Ident | State | County | Month | Day | Year

31 57 | 01 | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 03 | 18 | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3333 | 4 | F | S | | TERTIARY
Elevation | Unit Control | Geology

	Reading	Time	Quality	Observer	Temp.
1	2806 042	1357		PZ	
2	2806 057	1358		PZ	
3	2806 058	1400		PZ	
4	052				

GRAVITY OBSERVATION FORM

00128
Sequence No.

TB - 0074 | AZ | PN | 08 | 07 | 80
Station Ident | State | County | Month | Day | Year

31 | 56 | 55 | | | F | | | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

111 | 03 | 18 | ~~[illegible]~~ | | | SECONDARY
Deg. Longitude | Minutes | Meter Type or Number | Geology

3337 | 7 | F | S | | | TERTIARY
Elevation | Unit Control | Geology

	Reading		Time	Quality	Observer	Temp.
1	2805	420	1406		PZ	110°
2	2805	421	1407		PZ	
3	2805	422	1408		PZ	
4		421				

GRAVITY OBSERVATION FORM

00129
Sequence No.

TB - 0075 — Station Ident
AZ — State
PM — County
08 — Month
07 — Day
80 — Year

31 — Deg. Latitude
56 — Minutes
49 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
03 — Minutes
18 — Minutes
GZ14 — Meter Type or Number
Geology — SECONDARY

3336 — Elevation
1 — Unit
F — Unit
S — Control
Geology — TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	28055	155	1414		PZ	
2	28055	158	1415		PZ	
3	28055	160	1416		PZ	
4		158				

GRAVITY OBSERVATION FORM

130							
Sequence No.							
TB - 0076	AZ	PM	08	07	80		
Station Ident	State	County	Month	Day	Year		
31 56	44	F			001	PRIMARY	
Deg. Latitude	Minutes	Station Type	Bedrock	Map	Geology		
111 03	18					SECONDARY	
Deg. Longitude	Minutes	Meter Type or Number			Geology		
3339	7	F S				TERTIARY	
Elevation		Unit Control			Geology		

	Reading	Time	Quality	Observer	Temp.
1	2804 640	1423		PZ	
2	2804 648	1424		PZ	
3	2804 650	1425		PZ	
4	646				

GRAVITY OBSERVATION FORM

131							
Sequence No.							
TB - 0077	AZ	PM	08	07	80		
Station Ident	State	County	Month	Day	Year		
31 56	38	F			001	PRIMARY	
Deg. Latitude	Minutes	Station Type	Bedrock	Map	Geology		
111 03	18					SECONDARY	
Deg. Longitude	Minutes	Meter Type or Number			Geology		
3339	3	F S				TERTIARY	
Elevation		Unit Control			Geology		

	Reading	Time	Quality	Observer	Temp.
1	2804 526	1337		PZ	
2	2804 521	1338		PZ	
3	2804 519	1339		PZ	
4	522				

GRAVITY OBSERVATION FORM

Sequence No.	132						
Station Ident	TB - 0078	State	AZ	County	PM	Month 08	Day 07	Year 80
Deg. Latitude	31 56	Minutes	32	Station Type	F	Bedrock	Map	Geology 001 PRIMARY
Deg. Longitude	111 03	Minutes	18	Meter Type or Number	G214			Geology SECONDARY
Elevation	3355	Unit Control	8	F S				Geology TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	2803 345	1442		PZ	
2	2803 345	1443		PZ	
3	2803 345	1444		PZ	
4	2803 345				

GRAVITY OBSERVATION FORM

Sequence No.	133						
Station Ident	TB - 0079	State	AZ	County	PM	Month 08	Day 07	Year 80
Deg. Latitude	31 56	Minutes	42	Station Type	F	Bedrock	Map	Geology 001 PRIMARY
Deg. Longitude	111 02	Minutes	17	Meter Type or Number				Geology SECONDARY
Elevation	3223	Unit Control	2	F S				Geology TERTIARY

	Reading	Time	Quality	Observer	Temp.
1	2813 111	1358		PZ	Very Hot
2	2813 111	1359		PZ	
3	2813 111	1460		PZ	
4	111				

GRAVITY OBSERVATION FORM

134							
Sequence No.							
TB - 0080	AZ	PM	08	07	80		
Station Ident	State	County	Month	Day	Year		
31 56	48	F			001	PRIMARY	
Deg. Latitude	Minutes	Station Type	Bedrock	Map	Geology		
111 02	17					SECONDARY	
Deg. Longitude	Minutes	Meter Type or Number			Geology		
3225	4	F S				TERTIARY	
Elevation		Unit Control			Geology		

	Reading	Time	Quality	Observer	Temp.
1	2813 185	1504		PZ	
2	185	1505		PZ	
3	185	1506		PZ	
4	185				

GRAVITY OBSERVATION FORM

135							
Sequence No.							
TB - 0081	AZ	PM	08	07	80		
Station Ident	State	County	Month	Day	Year		
31 56	53	F			001	PRIMARY	
Deg. Latitude	Minutes	Station Type	Bedrock	Map	Geology		
111 02	17	GZ14				SECONDARY	
Deg. Longitude	Minutes	Meter Type or Number			Geology		
3213	S	F S				TERTIARY	
Elevation		Unit Control			Geology		

	Reading	Time	Quality	Observer	Temp.
1	2814 101	1419		PZ	
2	2814 101	1426		PZ	
3	2814 100	1421		PZ	
4	101				

GRAVITY OBSERVATION FORM

Sequence No.: 1 3 6

Station Ident: T B - 0 0 8 2

State: A Z

County: P M

Month: 0 8

Day: 0 7

Year: 8 0

Deg. Latitude: 3 1

Minutes: 5 6 5 8

Station Type: F

Bedrock:

Map:

Geology (PRIMARY): 0 0 1

Deg. Longitude: 1 1 1 0 2

Minutes: 1 7

Meter Type or Number: ~~[illegible]~~

Geology (SECONDARY):

Elevation: 3 2 1 9

Unit: 3

Control: F S

Geology (TERTIARY):

	Reading	Time	Quality	Observer	Temp.
1	2 8 1 4 0 8 2	1 4 2 5		PZ	
2	2 8 1 4 0 8 3	1 4 2 6		PZ	
3	2 8 1 4 0 7 6	1 4 2 7		PZ	
4	0 8 0				

GRAVITY OBSERVATION FORM

137							
Sequence No.							
TB - 0083		AZ	PM	08	07	80	
Station Ident		State	County	Month	Day	Year	
31 57	05		F			001	PRIMARY
Deg. Latitude	Minutes		Station Type	Bedrock	Map	Geology	
111 02	17	G214					SECONDARY
Deg. Longitude	Minutes	Meter Type or Number				Geology	
3217	6	F	9				TERTIARY
Elevation		Unit Control				Geology	

1	2814	182	1531		PZ	
	Reading		Time	Quality	Observer	Temp.
2	281	181	1532		PZ	
	Reading		Time	Quality	Observer	Temp.
3	281	181	1533		PZ	
	Reading		Time	Quality	Observer	Temp.
4		181				
	Reading		Time	Quality	Observer	Temp.

GRAVITY OBSERVATION FORM

0 0 1 3 8
Sequence No.

T B - 0 0 8 4 | A Z | P M | 0 8 | 0 7 | 8 0
Station Ident | State | County | Month | Day | Year

3 1 | 5 7 | 1 6 | | | F | | | 0 0 1 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

1 1 1 | 0 2 | 1 7 | Meter Type or Number | SECONDARY
Deg. Longitude | Minutes | Geology

3 2 1 7 | 3 | F | S | TERTIARY
Elevation | Unit Control | Geology

	Reading		Time	Quality	Observer	Temp.
1	2814	348	1437		PZ	
2	2814	347	1438		PZ	
3	2814	351	1439		PZ	
4		349				

GRAVITY OBSERVATION FORM

00139
Sequence No.

TB - 0085 — Station Ident
AZ — State
PM — County
08 — Month
07 — Day
80 — Year

31 — Deg. Latitude
57 — Minutes
16 — Minutes
F — Station Type
Bedrock
Map
001 — Geology — PRIMARY

111 — Deg. Longitude
02 — Minutes
17 — Minutes
0214 — Meter Type or Number
Geology — SECONDARY

3204 — Elevation
9
F — Unit Control
S
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2815	300	1442		PZ	
2	2815	301	1444		PZ	
3	2815	305	1546		PZ	
4		302				

GRAVITY OBSERVATION FORM

0 0 1 4 0
Sequence No.

T B - 0 0 8 6 — Station Ident
A Z — State
P M — County
0 8 — Month
0 7 — Day
8 0 — Year

3 1 — Deg. Latitude
5 7 — Minutes
1 2 — Minutes
F — Station Type
Bedrock
Map
0 0 1 — Geology — PRIMARY

1 1 1 — Deg. Longitude
0 2 — Minutes
4 6 — Minutes
6 2 1 4 — Meter Type or Number
Geology — SECONDARY

3 1 6 6 — Elevation
5
F — Unit Control
S
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	2810	745	1456		PZ	
2	2810	744	1457		PZ	
3	2810	745	1458		PZ	
4		745				

GRAVITY OBSERVATION FORM

00141
Sequence No.

TB - 0087 | AZ | PM | 08 | 07 | 80
Station Ident | State | County | Month | Day | Year

31 57 24 | F | 001 PRIMARY
Deg. Latitude | Minutes | Station Type | Bedrock | Map | Geology

Deg. Longitude | Minutes | GZ14 | SECONDARY
Meter Type or Number | Geology

3165 | 1 | F | S | TERTIARY
Elevation | Unit Control | Geology

	Reading		Time	Quality	Observer	Temp.
1	Z811	000	1609		PZ	
2	Z811	000	1610		PZ	
3	Z811	000	1611		PZ	
4		000				

GRAVITY OBSERVATION FORM

00142
Sequence No.

TB - 0088 — Station Ident
AZ — State
PM — County
08 — Month
07 — Day
80 — Year

31 — Deg. Latitude
57 — Minutes
24 — Minutes
F — Station Type
001 — Geology — PRIMARY

111 — Deg. Longitude
01 — Minutes
45 — Minutes
6214 — Meter Type or Number
Geology — SECONDARY

3143 — Elevation
8
F — Unit Control
5
Geology — TERTIARY

	Reading		Time	Quality	Observer	Temp.
1	28199	993	1616		PZ	
2	28199	994	1617		PZ	
3	28199	996	1618		PZ	
4		994				

Vic Kral (702) 358-0210
Collect

836 E. York Wy Sparks, NV 89431

INDEX

1 Twin Buttes } Misson Rd & BM J-114
3 " " } & K-114 Stats 1-30
3-6 Twin Buttes Rd BM K-114 to W-114
& Stats. 0-17
7 E on Helmet Pk Rd to Av Uno & #66
8-105 W line from #6 on Mission 35-43 & return
11 Stat 25 on Dupont Rd.
12 E line from 17 on Miss. 12-22
13 Continue N to del Toro + Av. Tres to 22
13 N + S across Twin Buttes Rd. N to
& 14 del Toro & Av. Quatro 9 to 00 to 10
15-16 N on Ave 4 to Curly Horn E to Av. 5
- 79-82 & 47-44 & 31-32
16-18 W on Curly Horn to Ave 1 + N to Helmet
48-66
19- 5 on Ave 2 to Toro then E to Ave 3
to tie w/22 line 74-78 to TP
19-21 On Toro E from Ave 4 to Ave 5
N on Ave 5 to Helmet W to Ave 3
S on Ave 3 to Curly Horn 0-23-34
- 88-87-86 to 53
22 73 to 69 & loop back on Ave 2
22 On Ave 4, 82-85 rerun to
correct error. END LEVELS

1/

8/9/80 Twin Buttes Levels

47920 Lv. Richs 4am

~~4.3 gate~~

7.7 shaft

8.0 main Rd

9.7 Mission Rd gate 75

Kral + Kelly Kennedy

Stat.	BS	HI	FS	Elev	
BM J-114	6.3			3454.6 ~~3455.0~~	going N
HPR #4		60.9 ~~61.3~~	2.3	56.6 ~~57.0~~	56.6
TP			1.9	59.0 ~~59.4~~	
	8.2	67.2 ~~67.6~~			
#3			9.4	~~58.2~~	57.8
TP			5.8	61.4 ~~61.8~~	
	2.1	63.5 ~~63.9~~			
#1			8.2	55.3 ~~55.7~~	55.3
	going		South		
BM J-114	2.2	57.2		3455.2 ~~3455.6~~	
HPR #5			14.0	~~43.2~~	42.8
~~TP~~					
HPR #6			14.8	~~42.4~~	42.0
	4.5	46.9			
#7			9.7	~~37.2~~	36.8
#8			7.1	~~39.8~~	39.5
TP			13.5	~~33.4~~	33.1
	0.8	34.2			
#9			3.3	~~30.9~~	30.6
#10			11.9	~~22.3~~	22.0

2/

Stat.	BS	HI	FS	Elev	
	2.3	24.6			
TP			14.4	3410.2	
	7.7	17.9			
#11			13.1	~~04.8~~	04.6
#12			5.1	~~12.8~~	12.6
TP			0.5	17.4	
	9.9	27.3			
#13			9.0	~~18.2~~	18.-
#14			4.7	~~22.6~~	22.5
#15			5.5	~~21.8~~	21.7
	11.6	33.4			
#16			4.8	~~28.6~~	28.5
#17			6.0	27.4	
#18			8.6	24.8	
TP			9.9	23.5	
	1.7	25.2			
#19			5.6	19.6	
#20			11.5	~~13.7~~	13.9
#21			9.1	~~16.4~~	16.3
	7.2	23.3			
#22			15.2	~~08.1~~	8.3
#24			11.3	~~12.0~~	12.2
	8.2	20.6 ~~20.7~~			
#23			14.9	05.6 ~~05.3~~	
K-114			9.2	~~14.0~~	34.11.4
TP			14.4	~~05.8~~ 6.2	0.8 low

Loop - 2 - B

Loop 1 - 2 - A

10/12/80 NO

3/

	BS	HI	FS	Elev.	
				05.8	
	10.5	~~16.3~~ 16.7		3403.8	
#26			12.9	~~03.4~~	03.8
#27			4.9	~~11.8~~	11.8
28			5.3	~~11.4~~	11.5
29		13.2	15.2	~~01.5~~	01.9
	11.7	~~12.8~~	~~11.7~~	~~6.8~~	
30			6.4	~~06.4~~	07.1
	Lv. field 2:15 pm				
8/10/80	Kral + Kelly	Lv. Town 4:45			going East
HPR #24	3.2	16.2		12.3 ~~34.0~~	
TP			11.4	~~04.8~~ 04.3	Top fence Post
	0.0	04.8	~~7.3~~		
TP	~~0.7~~		7.3	3397.5	
	0.7	98.2			
TP			13.8	84.4	+1
	0.1	84.5			
TP			14.0	70.5	
	0.5	71.0			
TP			13.3	57.7	+3
	0.0	57.7			
TP			14.8	42.9	
	1.2	44.1			
TP			13.7	30.4	
	0.1	30.5			

4

Stat	BS	HI	FS	Elev	
		30.5			+3
TBR #17			12.1	~~33.184~~	17.9
	0.5	18.9			
#16			10.1	~~08.8~~	7.9
TP			13.5	05.4	
	1.4	06.8			+4
#15			11.1	~~32.95.7~~	95.3
	0.8	96.5			
#14			12.3	~~84.3~~	83.9
	0.6	84.9			
TP			14.8	70.1	
	0.1	70.2			+5
#13			0.9	~~69.3~~	69.0
TP			13.8	56.4	
	0.8	57.3			
#12			3.4	~~53.8~~	53.5
TP			14.9	42.3	+6
	0.1	42.4			
#11			5.6	~~36.8~~	36.6
#10			13.3	~~29.1~~	29.0 +7
	1.7	30.8			
#9			12.8	~~18.0~~	17.9
	1.3	19.3			
8			12.2	~~07.0~~	+8
TP			15.0	32.94.2	
	0.3	32.04.5			

5/

Stat	BS	HI	FS	Elev	
		3204.5		95.7	+9
#7			8.5	31~~96.0~~	96.1
TP			11.0	93.5	post on RR
	0.2	3193.7		84.3	+1.0
#6			9.6	~~84.1~~	BM= 84.1
TP			14.9	78.8	
	1.8	80.6			
#5			8.6	~~72.0~~	72.2
TP			14.6	66.0	
	0.0	66.0			55.8
(#4) ~~#5~~ 4			10.4	~~55.6~~	2 - #5's No #4
TP			14.0	52.0	+5
	0.1	52.1			
#3			10.6	~~41.5~~	41.7
TP			13.9	~~38.2~~	
	1.5	39.7			
#2			6.1	33.6	33.8
TP			14.1	25.6	
	0.4	26.0			18.6
#1			7.6	~~18.4~~	Red mail Bx
TP			13.1	12.9	+6
	1.6	14.5			08.4
#0			6.3	~~08.2~~	LS OC.
	8.4	16.6	~~14.6~~		turn back on Loop
TP			0.3	16.3	
	12.3	28.6			

6

Stat	BS	HI	FS	Elev.	
		28.6			
#1			10.2	3118.4	18.6
TP			0.2	28.4	
	12.0	40.4			
TP			0.3	40.1	
	14.9	55.0		41.7	
#3			13.6	~~41.4~~	
TP			0.8	54.2	
	14.1	68.3		55.8	
~~#5~~ 4			12.8	55.5	
TP			0.3	68.0	
	13.2	81.2		72.2	
#5			9.1	~~72.1~~	
TP			0.5	80.7	
	7.8	88.5			
BMW-114			4.6	~~3183.9~~	3184
#6			4.4	~~84.1~~ 84.3	3184.1
				3184.1	corrected

Looped ale to use No adjustment

7/

Stat	BS	HI	FS	Elev.
	going E on Hel. Pk. Rd.			
HPR #1	2^{3}	57^{6} ~~58^{0}~~		55^{3} ~~3455^{7}~~
TP			14^{9}	42^{7} ~~43^{1}~~
	2^{0}	44^{7} ~~45^{1}~~		
TP			14^{1}	30^{3} ~~30^{7}~~
	0^{4}	30^{7} ~~31^{1}~~		
TP			15^{0}	15^{7} ~~16^{1}~~
	1^{3}	17^{0} ~~17^{4}~~		
TP			13^{2}	03^{8} ~~04^{2}~~
	0^{5}	04^{3} ~~04^{7}~~		
TP			14^{5}	33 ~~90^{2}~~ 84^{8}
	1^{5}	91^{3} ~~91^{7}~~		
#66			14^{3}	3377^{0} use 3376^{8}

Lv. field 1:45 pm check flagging to drilling for Bill Loveall

8/11 pm Lv Tucson 48425 to check gravity points

#1	54.65		
No #2			
#3	54.85		
#4	51.95		
#10	52.55		
#14	53.0+	24	54.05
17	53.3+ = ~~53.5+~~	26	54.15
20	53.65	27	54.25
22	53.85	28	54.35
		29	~~54.45+~~
		30	54.6

Need elevations of BM J-114, K-114, W-114

3455 3412 3184

USGS Menlo 415-323-8111

Phoenix

J-114 3454.570

K-114 3411.358

W-114 3184.055

1935? 8

8/15/80 Kral + Kell, Lv. town 9 am field 9:45

Stat	BS	HI	FS	Elev.	
HPR #3				3457^{8}	
	6^{1}	63^{9}			
HPR #2			10^{2}	53^{7}	
HPR #6	8^{3}	50^{3}		3442^{0}	
TP			3^{9}	46^{4}	
	6^{2}	52^{6}			
35			5^{3}	47^{4}	No #
TP			1^{3}	51^{3}	
	14^{6}	65^{9}			NE Ctr. Bent 13
TP			2^{1}	63^{8}	
	10^{0}	73^{8}			
36			6^{2}	67^{6}	Can't find Nail
TP			0^{5}	73^{3}	

9/

Stat	BS	HI	FS	Elev	
	14^{8}	88^{1}		$34\,73^{3}$	
TB #37			15^{6}	72^{5}	use 72^{6}
TB #38			5^{9}	82^{2}	
TP			0^{7}	87^{4}	NW Ctr Berth 18
	14^{7}	$35\,02^{1}$			
TB #39			5^{9}	96^{2}	finally found nail
TP			2^{8}	99^{3}	
	15^{1}	14^{4}			
TP #40			11^{1}	03^{3}	
TP			0^{1}	$35\,14^{3}$	SE Ctr Bert 15
	13^{9}	28^{2}			
#41			16^{0}	12^{3}	
TP			0^{8}	27^{4}	
	14^{8}	42^{2}			
#42			11^{7}	30^{5}	
#43			2^{1}	40^{1}	
	2^{4}	42^{5}			Turn back
TP			12^{1}	30^{4}	
#42			11^{9}	30^{6}	
	2^{8}	33^{4}			
TP			13^{5}	19^{9}	
	0^{1}	20^{0}			
#41			7^{8}	12^{2}	
TP			13^{0}	07^{0}	
	1^{8}	8^{8}			

10

Stat	BS	HI	FS	Elev.	
#40		08^{8}	5^{6}	03^{2}	
TP	1^{8}		14^{1}	94^{7}	
	1^{8}	96^{5}			
TP			1^{4}	95^{1}	
	2^{1}	97^{2}			
#38			15^{9}	82^{2}	
TP			14^{4}	82^{8}	
	1^{0}	83^{8}			
#37			11^{1}	72^{7}	use 72^{6}
TP			13^{5}	70^{3}	
	5^{5}	75^{8}			
TP			9^{9}	65^{9}	
	2^{7}	68^{6}			
~~#36~~ TP			8^{7}	59^{9}	
	0^{6}	60^{5}			
35			13^{1}	47^{4}	
TP			13^{4}	47^{1}	
	3^{6}	50^{7}			
#6			8^{8}	41^{9}	d2 as is

11/

Stat	BS	HI	FS	Elev.	
#16	14.9	43.4		3428.5	
TP			0.1	43.3	
	7.8	51.1			
#25			1.6	49.5	
	1.3	50.8			Turn back
TP			13.4	37.4	
	3.1	40.5			
#16			12.0	28.5	
#30				34 ~~06.4~~ 6.8	07.1
	8.7	15.~~4~~ 5			
#31			9.8	05.~~7~~ 9	06.0
	9.8	15.~~4~~ 5			
#29			14.0	~~01.1~~ 1.5	1.9
TP			4.6	10.~~1~~ 9	11.4
	5.0	15.~~8~~ 9			
28			5.1	~~10.1~~ 10.8	11.5
27			4.8	~~10.7~~ 11.1	11.8
26		14.7	12.9	~~0.26~~ 3.0	3.7
	11.2	~~14.3~~			11.4
BMK-114			3.9	~~10.4~~ 10.8	34 11.4

use corrected elevations

8/16/80 Kral + Kelly 5:15 am. 12-22 12

Stat	BS	HI	FS	Elev.	
17	5.2	32.6		34 27.4	
TP			13.1	19.5	
	6.9	26.4			
#12			9.1	17.3	
	3.6	20.9			
TP			9.0	12.0 ~~11.7~~	
	0.1	12.0			
#13			9.1	03.0 ~~02.7~~	
	1.5	4.4			
TP			8.6	33 96.0 ~~95.8~~	
	1.1	96.9			
#14			7.3	89.8 ~~89.6~~	see note in back
TP			11.5	85.4	
	2.3	87.7			
#15			15.0	73.0 ~~72.7~~	
	0.9	73.6			
#16			13.9	60.0 ~~59.7~~	
	5.2	64.9			
TP			14.9	50.4 ~~50.0~~	
	2.3	52.3			
#17			8.3	44.4 ~~44.0~~	
#18			13.4	~~38.9~~ 39.3	
	3.0	41.9			
~~#19~~ TP			14.0	28.4 ~~27.9~~	
	1.4	29.3			

13/

Stat.	BS	HI	FS	Elev.	
~~#20~~ 19		29^{3}	1^{3}	33 ~~28~~	28^{5}
TP			13^{5}	~~15^{8}~~ 16^{4}	
	1^{1}	16^{9}			
#20			1^{6}	~~15^{3}~~	15^{9}
TP			14^{2}	02^{7}	
	1^{8}	4^{5}			
#21			6^{7}	98^{5} ~~99^{8}~~	cant find nail
TP			4^{9}	99^{6}	
	2^{1}	01^{7}			
#22			12^{0}	90^{4} ~~89^{7}~~	± 0.2 mile N of 21
TP S side Camino del Toro ¢ Av. Tres			8^{9}	~~92^{8}~~ 93^{6}	in fence cont. N
go S on N-S Brushline					
TBR #12	0^{7}	54^{2}		3253^{5}	
TP			9^{8}	44^{4}	
	5^{7}	50^{1}			
TB #8			4^{6}	45^{5}	
			8^{9}	41^{2}	
	4^{8}	46^{0}			
TB #9			1^{7}	44^{3}	cant find nail
	7^{8}	52^{1}			Loop back
#8			6^{6}	45^{5}	
TP			3^{3}	48^{8}	on Rd. 48^{8}
	7^{0}	55^{8}			
TBR #12			2^{4}	53^{4}	

14

Stat	BS	HI	FS	Elev.	
TBR 12	2^{4}	55^{9}		3253^{5}	go N
TP			14^{2}	41^{7}	
	11^{6}	53^{3}			
TP			10^{0}	43^{3}	
	4^{8}	48^{1}			
#7			6^{5}	41^{6}	
#5			3^{6}	44^{5}	TP
#6			6^{8}	41^{3}	
BS TP	3^{1}	47^{6}			
#4			5^{3}	42^{3}	
#3			13^{3}	34^{3}	
TP			14^{8}	32^{8}	
	4^{1}	36^{9}			
#2			12^{9}	24^{0}	
BS to 32^{8}	5^{2}	38^{0}			
#1			9^{0}	29^{0}	
TP			5^{1}	32^{9}	
	5^{9}	38^{8}			
TP			8^{4}	30^{4}	
	6^{2}	36^{6}			
#00			6^{8}	29^{8}	
TP			4^{5}	32^{1}	in del Toro
	4^{6}	36^{7}			Av Quatro
#10			5^{1}	31^{6}	on Ave Quatro

15/ 8/19 Vic + Ken Lu Tucson 7am
North on Ave 4

Stat	+BS	HI	-FS	Elev	
#10				3231^{6}	
	5.49		6.02	=.53	
Peg	5.72		5.29	.43	
Test	5.29		5.72	.43	
	5.78		5.23	.55	
Rent	Level				
	3^{1}	34^{7}			
~~#79~~ TP			6^{4}	28^{3}	~~No nail~~ ??
	5^{4}	33^{7}	~~6^{4}~~		
✓ 79	~~5^{4}~~		10^{5}	23^{2}	No Nail
80			8^{3}	25^{4}	Nail
	3^{9}	29^{3}			
TP			14^{7}	14^{6}	
	13^{8}	28^{4}			
✓ #81			14^{9}	13^{5}	Nail
✓ 82			9^{1}	19^{3}	No mark assume rd intersect
✓ 83			10^{9}	17^{5}	No Nail
BS #82	6^{2}	25^{5}			
✓ #48			5^{3}	20^{2}	Nail
	4^{2}	24^{4}			
~~#84~~			4^{5}	19^{9}	Nail
~~TP~~			14^{3}	10^{1}	on Av 4
~~BS #84~~	2^{4}	22^{3}			
~~TP~~ E on del Yucca			12^{5}	09^{8}	
~~BS Av 4 TP~~	3^{7}	13^{8}			
~~85~~			6^{2}	07^{6}	No Nail
~~TP on Helmet~~			10^{2}	03^{6}	E side Rd

16

Stat	BS	HI	F.S.	Elev.	
BS 82	1.1	20^{4}		3219^{3}	
✓ 47			14^{1}	06^{3}	Nail
	2^{7}	9^{0}			
✓ 46			11^{5}	3197^{5}	Nail
	0^{6}	98^{1}			
TP			14^{7}	83^{4}	
	0^{7}	84^{1}			
✓ 45			3^{1}	81^{0}	Nail
✓ 44			15^{2} 14^{7}_{5}		Nail
TP			12^{0}	72^{1}	
	1^{2}	73^{3}			
TP			14^{8}	58^{5}	
	7^{2}	65^{7}			
✗ TB 32			7^{0}	58^{7}	Nail
✗ #31			5^{2}	60^{5}	Nail
✓ #48	14^{8}	35^{0}		3220^{2}	Nail
✓ 49			6^{4}	28^{6}	
TP	~~0^{3}~~		0^{3}	34^{7}	
	13^{4}	48^{1}			
50			8^{4}	39^{7}	No Nail
TP			0^{5}	47^{6}	
	14^{6}	62^{2}			
51			5^{5}	56^{7}	Nail
TP			0^{3}	61^{9}	
			4 pm		

8/20/80 Vic + Ken 7am

Stat	BS	HI	FS	Elev.	
TP				3261.9	
	15.0	76.9			
✓ TB 52			7.1	69.8	Nail
TP	~~0.2~~		0.2	76.7	
	14.3	91.0			
✓ 53			9.5	81.5	Nail
	~~0.1~~		0.1	90.9	
	14.8	05.7			
✓ 54			10.4	95.3	Nail
			0.5	05.2	
	14.9	20.1			
✓ ~~55~~			13.7	06.4	Nail
✓ 56			6.5	13.6	✓
TP			0.4	19.7	
	14.3	34.0			
✓ 57			6.3	27.7	Nail
TP			0.1	33.9	
	11.5	45.4			
Ave Dos { TB 73 ✓			12.0	33.4	Av Dos to North
Ave Dos { TB 74 ✓			7.7	37.7	Av Dos to South
✓ 58			7.4	38.0	Nail
TP			0.7	44.7	
	14.3	59.0			
✓ 59			6.1	3352.9	Nail
TP			0.0	59.0	

Stat	BS	HI	FS	Elev.	
	14.4	73.4		3359.0	
✓ #60			7.0	66.4	No Nail (Level)
TP			0.4	73.0	
	14.8	87.8			
✓ 61			10.0	77.8	Nail (Level)
✓ 62			0.2	87.6	No Nail Ave Uno
	8.7	96.3			
			~~5.8~~		
TP			1.9	94.4	
	13.1	07.5			
# 67			7.2	00.3	Uno South Nail
	#68 lost				
BS #67	2.4	02.7			
62			15.1	87.6	
✓ #63			14.0	88.7	Uno North Nail
	2.3	91.0			
✓ 64			14.4	76.6	intersected Yucca Nail
65			9.5	81.5	Nail
66			14.2	3376.8	

Stat	BS	HI	FS	Elev.	
#74	4.0	41.7		3337.7	Nail Ave Dos South
75			5.6	36.1	Nail
76			2.0	39.7	Nail
	14.8	54.5			
77			15.2	39.3	Nail
TP			0.0	54.5	
	6.1	60.6			
78			4.8	55.8	Nail
TP			14.5	46.1	9° E on Toro
	0.7	46.8			
TP			14.3	32.5	
	0.0	32.5			
TP			14.6	17.9	
	1.0	18.9			
TP			14.1	04.8	
	0.8	5.6			
old sside TP Toro & Av Tres			12.0	3293.6	
0-0	4.9	34.7		3229.8	90 E
TP			10.5	24.2	
	2.6	26.8			
TB 23			9.2	17.6	
TP			14.2	12.6	

Stat	BS	HI	FS	Elev.	
	0.7	12.8		3212.6	
24			12.3	0.6	No Nail
TP			12.3	0.5	
	0.5	01.0			
25			7.0	3194.0	Nail
TP			13.7	87.3	
	0.9	88.2			
26			8.9	80.2	Nail
TP			14.9	73.3	
	1.1	74.4			Ave 5
27			6.6	67.8	on Corner w/ Toro Nail
28			8.9	66.4	Nail
	5.5	71.9			
29			9.1	62.8	Nail
TP			9.1	62.8	
	1.2	64.0			
30			5.5	58.5	No Nail Fair level
31			3.4	60.6	Nail
32			5.3	58.7	Nail
	2.5	61.2			
33			14.1	47.1	Nail
34			8.0	53.2	"
TP			12.9	48.3	
	1.7	50.0			
88			6.2	43.8	Helena Rd Nail

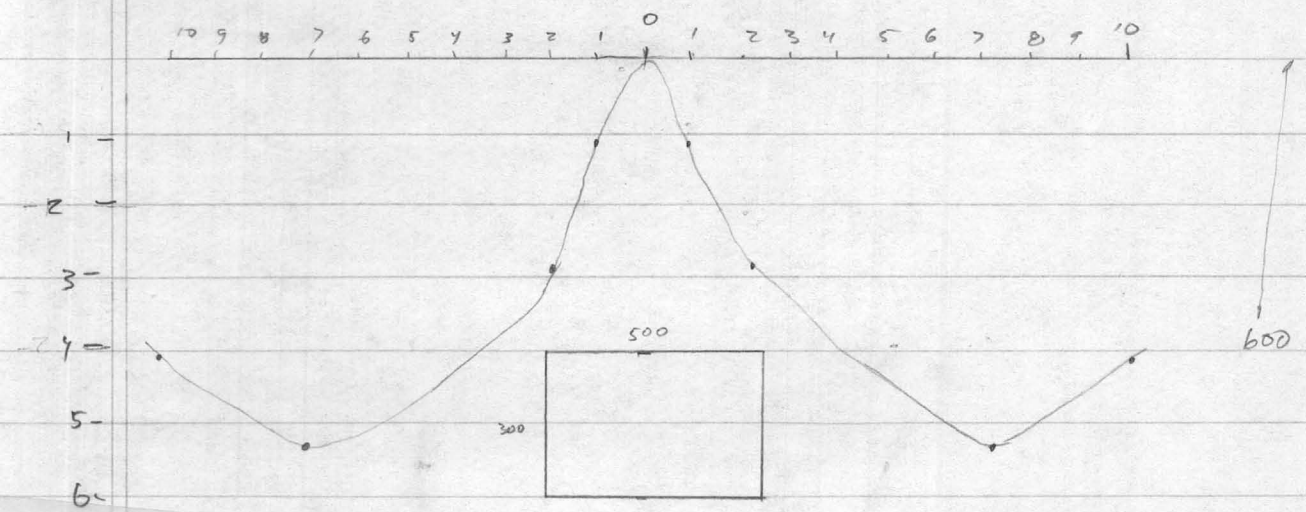
24/ Stat.	BS	HI	FS	Elev.	
		50.2		~~3145.8~~	
TP			0.1	3149.9	
	13.1	63.0			
TP			0.1	62.9	
	15.0	77.9			
TP			0.0	77.9	
	14.7	92.6			
TP			0.2	92.4	
	14.3	3206.7			
Hel-Av 4 TP			5.9	3200.8	
	14.9	15.7			
TP	~~0.2~~		0.2	15.5	
	14.6	30.1			
TP			0.6	29.5	
	14.7	44.2			
TP			0.0	44.2	
	14.2	58.4			
TP			0.1	58.3	
	13.0	71.3			
✓TB 87			6.2	65.1	No Nail S side of Hel R & Av 3
✓ 86			4.8	66.5	No nail
TP			0.5	70.8	
	9.0	79.8			
TP			0.0	79.8	
	5.7	85.5			
53			4.3	3281.2	use 81.5

Stat	BS	HI	FS	Elev.	
#73	6.3	39.7		3233.4	
72			7.3	32.4	Nail
71			7.1	32.6	✓
	3.5	36.1			
70			11.4	24.7	No Nail
TP			14.2	21.9	
	10.9	32.8			
69			14.6	18.2	Nail
	15.0	33.2			
74			0.6	32.6	Nail
	6.3	38.9			
72			6.4	32.5	Nail
73			5.5	33.4	
✓98	4.9	25.1		3220.2	
✓82			5.8	19.3	19.3
✓83			7.5	17.6	No Nail
	6.1	23.7			
✓84			6.4	17.3	Nail
			14.6	9.1	
	2.9	12.0			
✓85			7.1	4.9	No Nail
TP			11.5	0.5	
	7.9	8.4			
TP N side Hel. L Av 4			7.6	0.8	3200.8

Should BE 3333.4

22

Job
1454



Block → 600 ft Below surface

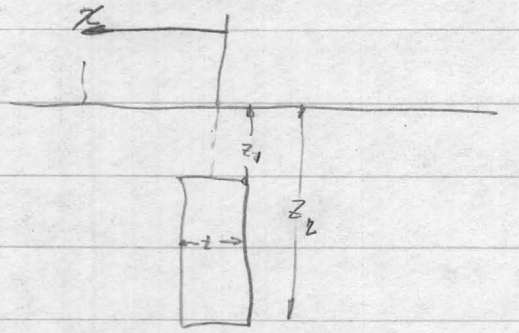
500 ft wide

300 ft long

Grav. anomaly of 1.97 mgals

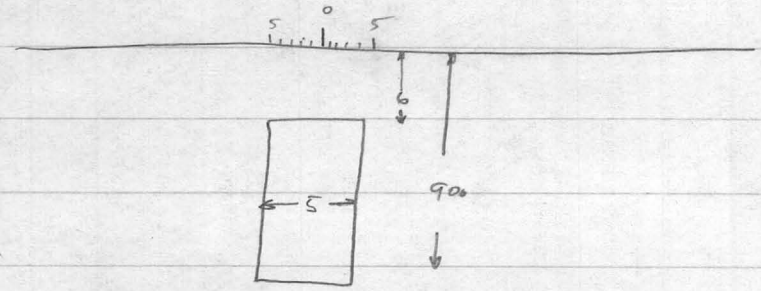
Job # 1454

$$g_z = 4.68\, \rho\, t \left[\frac{\log\left(1 + \frac{z_2^2}{x^2}\right)}{\left(1 + \frac{z_1^2}{x^2}\right)} \right]$$



Vertical component of gravitational field for a vertical sheet.

$\rho = 0.4$



$Z_2 = 9$

$x = ?$ 2.5

$\rho = +0.4$

$T = 5$

$Z_1 = 6$

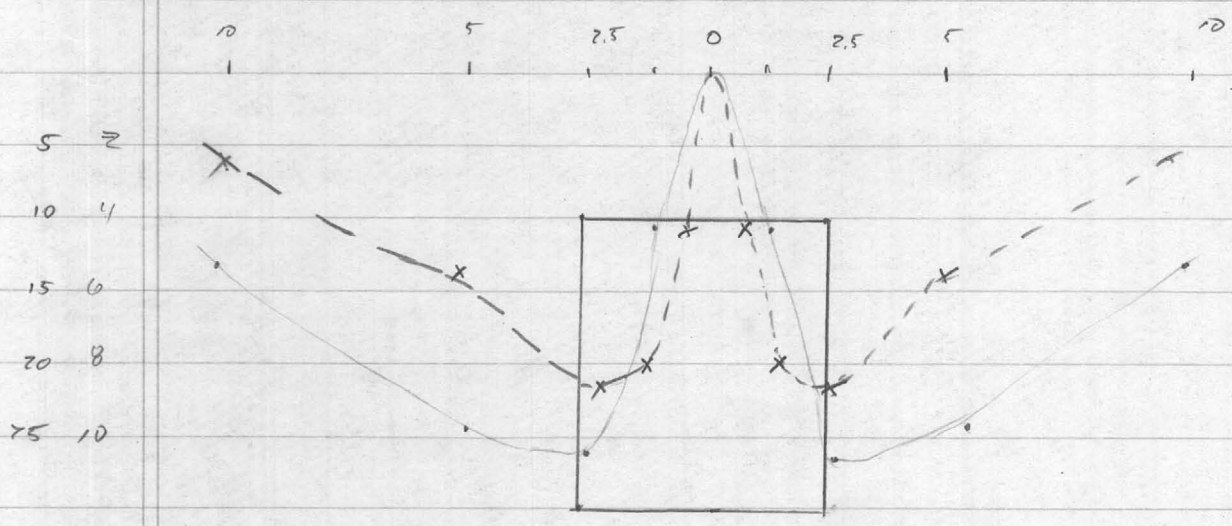
$\rho = -0.4$	g	$\rho = 0.4$
$x = 0.5$		0.37
$x = 1$	-0.41	1.11
2	-1.01	2.86
		3.65
5	-1.97	5.54
7	-1.94	5.26
10	-1.59	4.08
20		1.58

0
-1

0.15

#7

2.64
6.76

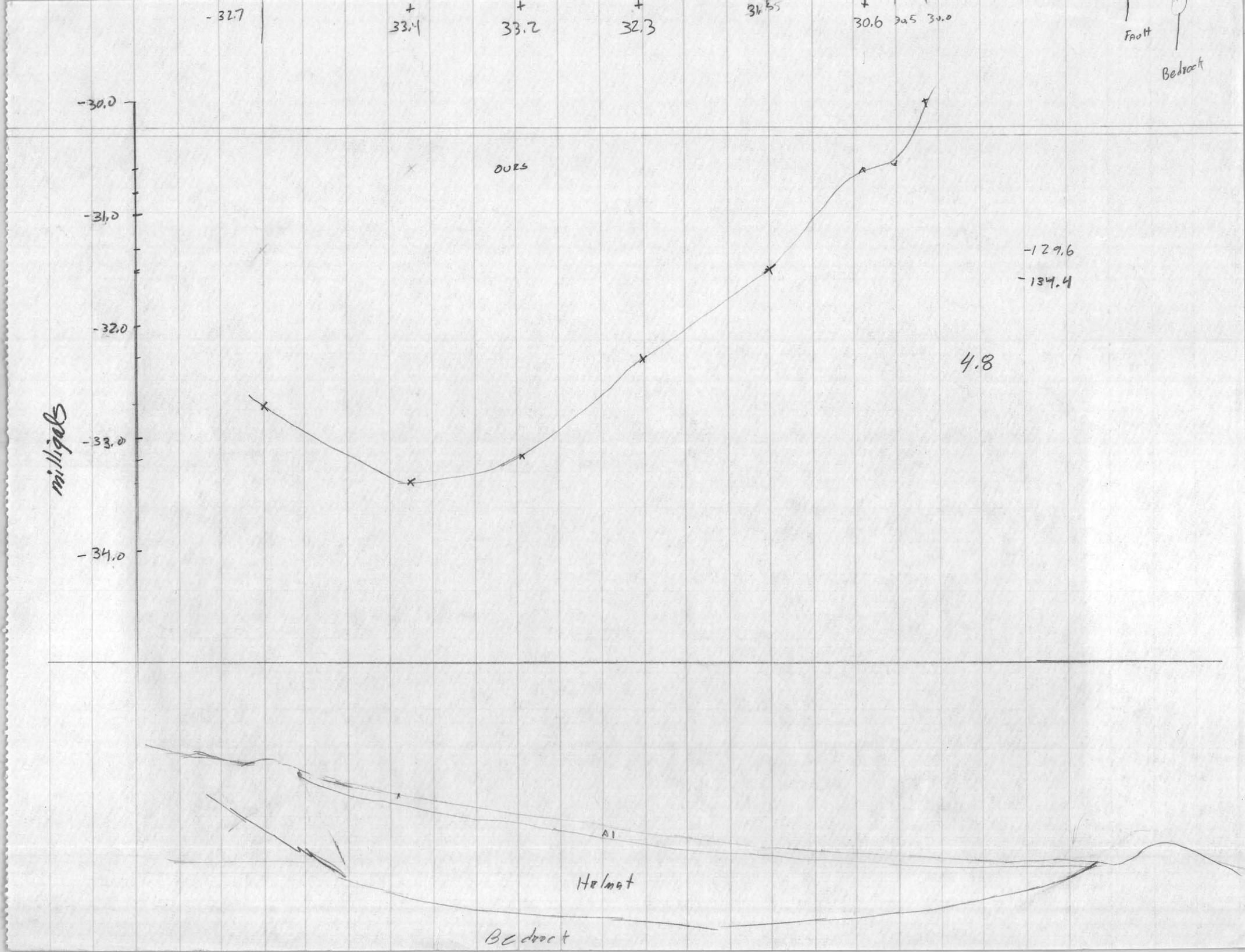


0.1	0.83	0.09
0.5	10.83	—
1	20.62	4.12
2.5	21.27	10.11
5	13.0	9.94
10	5.5	5.09

$\Delta\sigma = 10.11$ $d = 3$ (•)

$\Delta\sigma = 5.54$ $d = 6$

$\Delta\sigma = 21.27$ $d = 1$ (x)


-32.7
33.4
33.2
32.3
30.6
30.0
Fault
Bedrock
-30.0
-31.0
-32.0
-33.0
-34.0
milligals
OURS
-129.6
-134.4
4.8
A1
Helmet
Bedrock

ppm

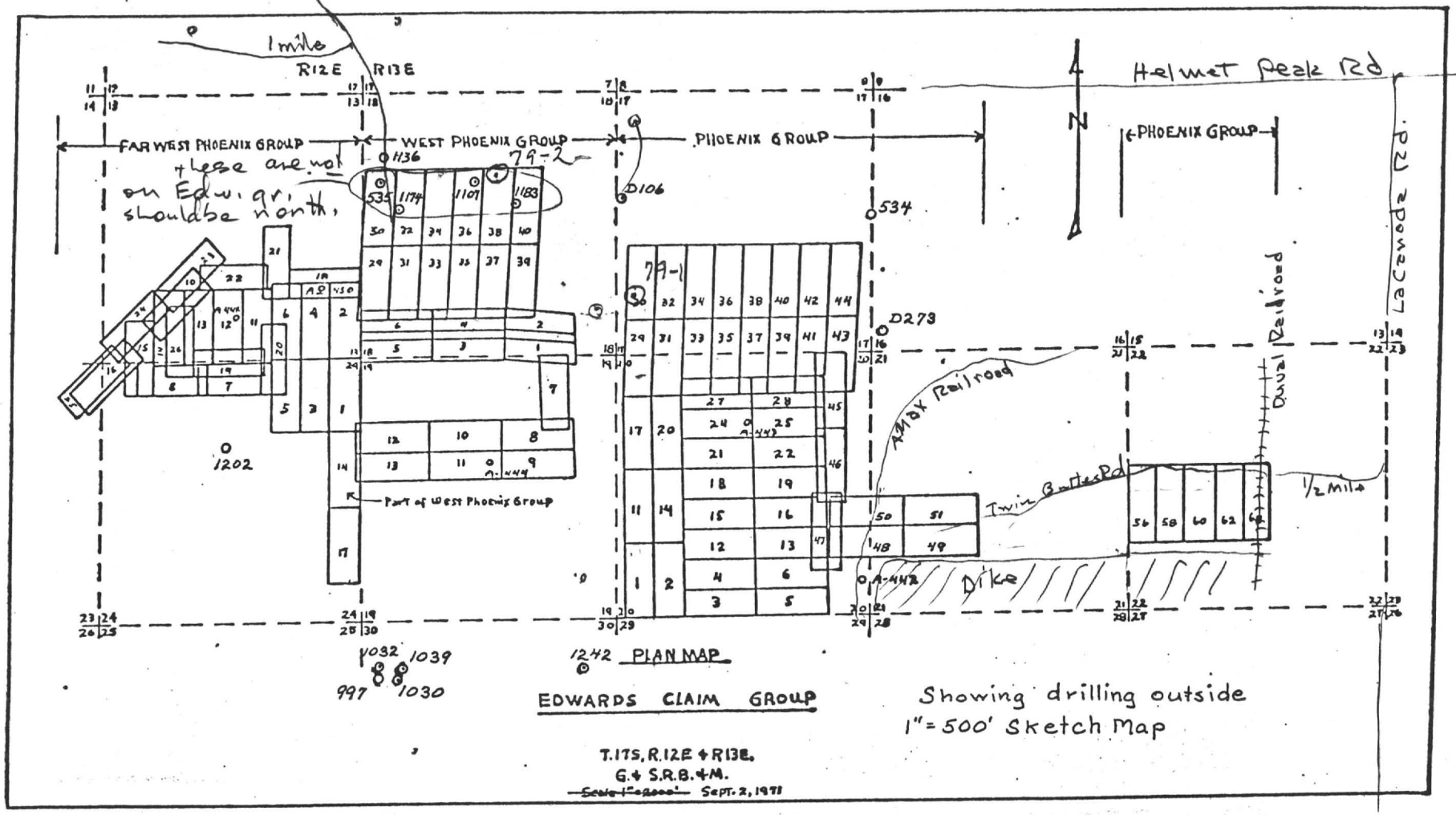
	Cu	Mo
1	450	87
2	295	123
3	440	105
4	365	84
5	—	—
6	—	—
7	495	101
8	475	88
9	550	135
10	525	118
11	440	100
12	485	91
13	450	101
14	445	101
15	700	146
16	505	109
17	350	83
18	480	85
19	275	66
20	355	107
21	440	93
22	—	—
23	380	83

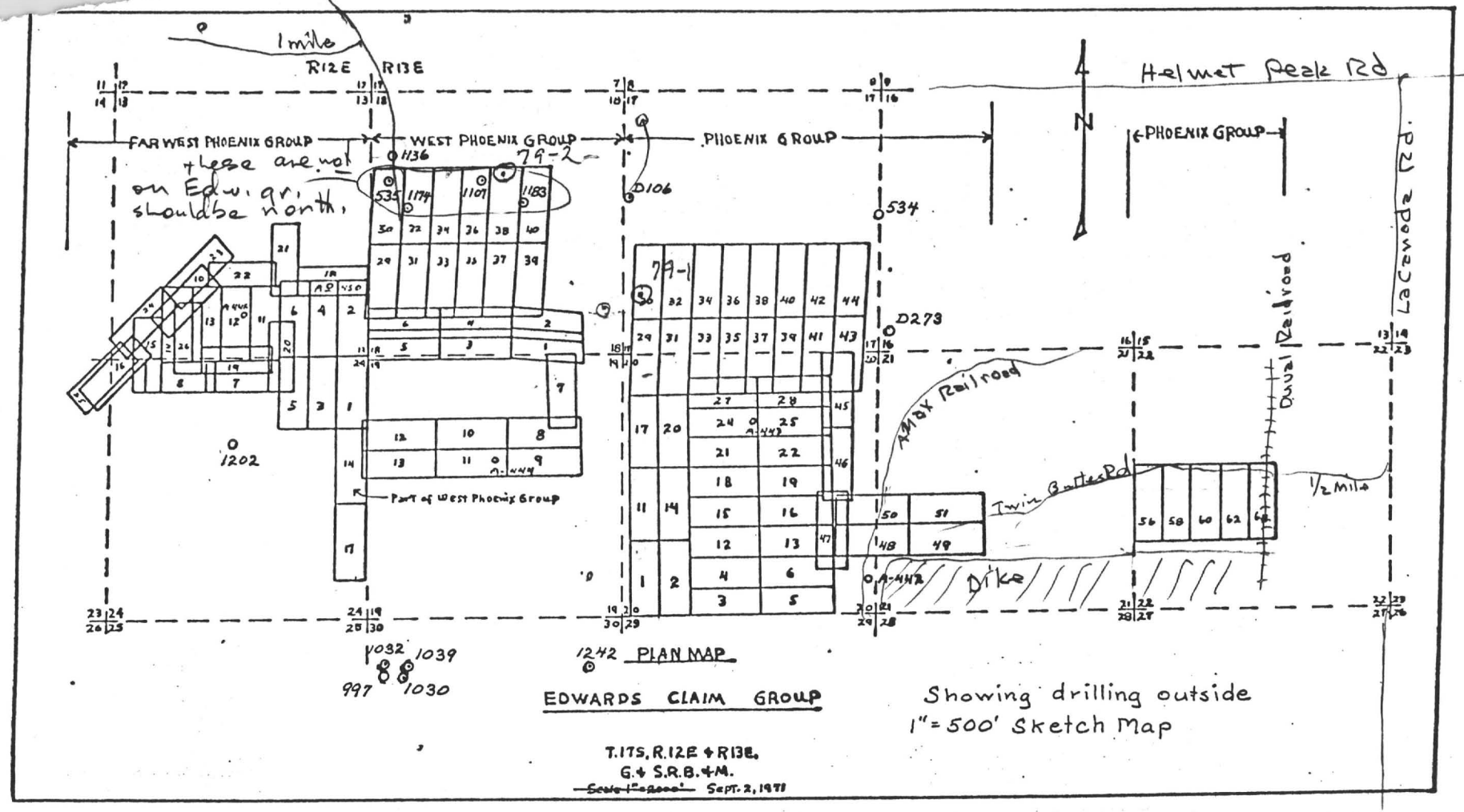
August 29 1979

Traverse A-A' Floral Geochem & Radiometric

Sta.	Sample Number		CPS.	Comments
A	GE001	RL-79	40	Mesquite
250	GE002	RL-79	38	Acacia
500	GE003	RL-79	38	Acacia Near Loc. Pt.
750	GE004	RL-79	40	Acacia 50' N of Line
1000	GE005	RL-79	42	Mesquite 50' Se of Line
1250	GE006	RL-79	42	Mesquite 15' W. of Line
1500	GE007	RL-79	40	Mesquite
1750	GE008	RL-79	38	Mesquite S. of pt.
2000	GE009	RL-79	36	Mesquite 75' W. of pt.
2250	GE010	RL-79	40	Mesquite
2500	GE011	RL-79	35	Mesquite
2750	GE012	RL-79	42	Mesquite 75' Sew of pt
3000 (A)'	GE013	RL-79	36	Acacia 40' S of pt
B	GE014	RL-79	38	Mesquite 15' E
250	GE015	RL-79	36	Mesquite in wash w/trash
500	GE016	RL-79	38	Mesquite 10' E of pt
750	GE017	RL-79	36	Acacia
1000	GE018	RL-79	38	Mesquite
1250	GE019	RL-79	36	Acacia 10' E of pt
1500	GE020	RL-79	38	Acacia 10' E of Rd
1750	GE021	RL-79	36	Mesquite
2000	GE022	RL-79	36	Mesquite 15' S of Line

Sta	Sample No		CPS	Comments	
2250			34	No Floral Sample	
2500			34	No Floral Sample	
2750	GE023	RL-79	34	Mesquite 40' Se	
3000 (B')			36	No Floral Sample	


1 mile
R12E
R13E
Helmet Peak Rd
FAR WEST PHOENIX GROUP
WEST PHOENIX GROUP
PHOENIX GROUP
PHOENIX GROUP
these are not on Edw. gr. should be north.
79-2
79-1
D106
D273
534
1202
Part of West Phoenix Group
AMax Railroad
Twin Butte Rd
Dike
Duval Railroad
Lacanada Rd
1/2 Mile
1032
1039
997
1030
1242
PLAN MAP
EDWARDS CLAIM GROUP
Showing drilling outside
1" = 500' Sketch Map
T.17S, R.12E + R13E.
G. + S.R.B. + M.
Sept. 2, 1971


1 mile
R12E
R13E
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FAR WEST PHOENIX GROUP
WEST PHOENIX GROUP
PHOENIX GROUP
PHOENIX GROUP
these are not on Edw. gr. should be north.
79-2
79-1
1136
535
1174
1107
1183
D106
534
D273
1202
Part of West Phoenix Group
AMax Railroad
Twin Buttes Rd
Dike
Dual Railroad
LaCanada Rd
1/2 Mile
1032
1039
997
1030
1242
PLAN MAP
EDWARDS CLAIM GROUP
Showing drilling outside
1" = 500' Sketch Map
T.17S, R.12E + R13E.
G. + S.R.B. + M.
Sept. 2, 1971

HEINRICHS GEOEXPLORATION COMPANY

P.O. BOX 5964, TUCSON, ARIZONA 85703. 806 WEST GRANT ROAD. PHONE: (602) 623-0578

October 6, 1980

Mr. Victor E. Kral
Exploration Geologist
836 E. York Way
Sparks, NV 89431

Re: Gravity Survey
Edwards Claim Group
GEOEX #1454

Dear Vic:

Transmitted herewith are two (2) copies of our report on the Gravity Survey of Edwards Claim Group.

The survey results are good, but as for identifying individual slip blocks, it appears the only encouragement would be along the eastern edge of the field area.

After you have had a chance to review the report, be sure to let us know any questions that arise and we will try to answer them.

It was a pleasure to have this opportunity to conduct this survey for you.

Best personal regards.

Faithfully,

Heinrichs GEOEXploration Co.

Mark E. Anders

Mark E. Anders
Geophysicist - Geologist

MEA:mt
Enclosures: 2

October 6, 1980

Mr. Victor E. Kral
Exploration Geologist
836 E. York Way
Sparks, NV 89431

Re: Gravity Survey
Edwards Claim Group
GEOEX #1463

Dear Vic:

Transmitted herewith are two (2) copies of our report on the Gravity Survey of Edwards Claim Group.

The survey results are good, but as for identifying individual slip blocks, it appears the only encouragement would be along the eastern edge of the field area.

After you have had a chance to review the report, be sure to let us know any questions that arise and we will try to answer them.

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Best personal regards.

Faithfully,

Heinrichs GEOEXploration Co.

Mark E. Anders
Geophysicist - Geologist

MEA:mt
Enclosures: 2

Gravity Survey

of

Edwards Claims Group

Sec. 13, 24 T.17S., R.12E.

Sec. 16, 17, 18, 19, 20, 29 T.17S., R.13E.

U.S.G.S. Twin Buttes 15' Quadrangle

Pima County, Arizona

August - September 1980

for

C. George Edwards

Tucson, Arizona

by

Heinrichs GEOEXploration Company, (Inc.)

P.O. Box 5964

Tucson, AZ 85703

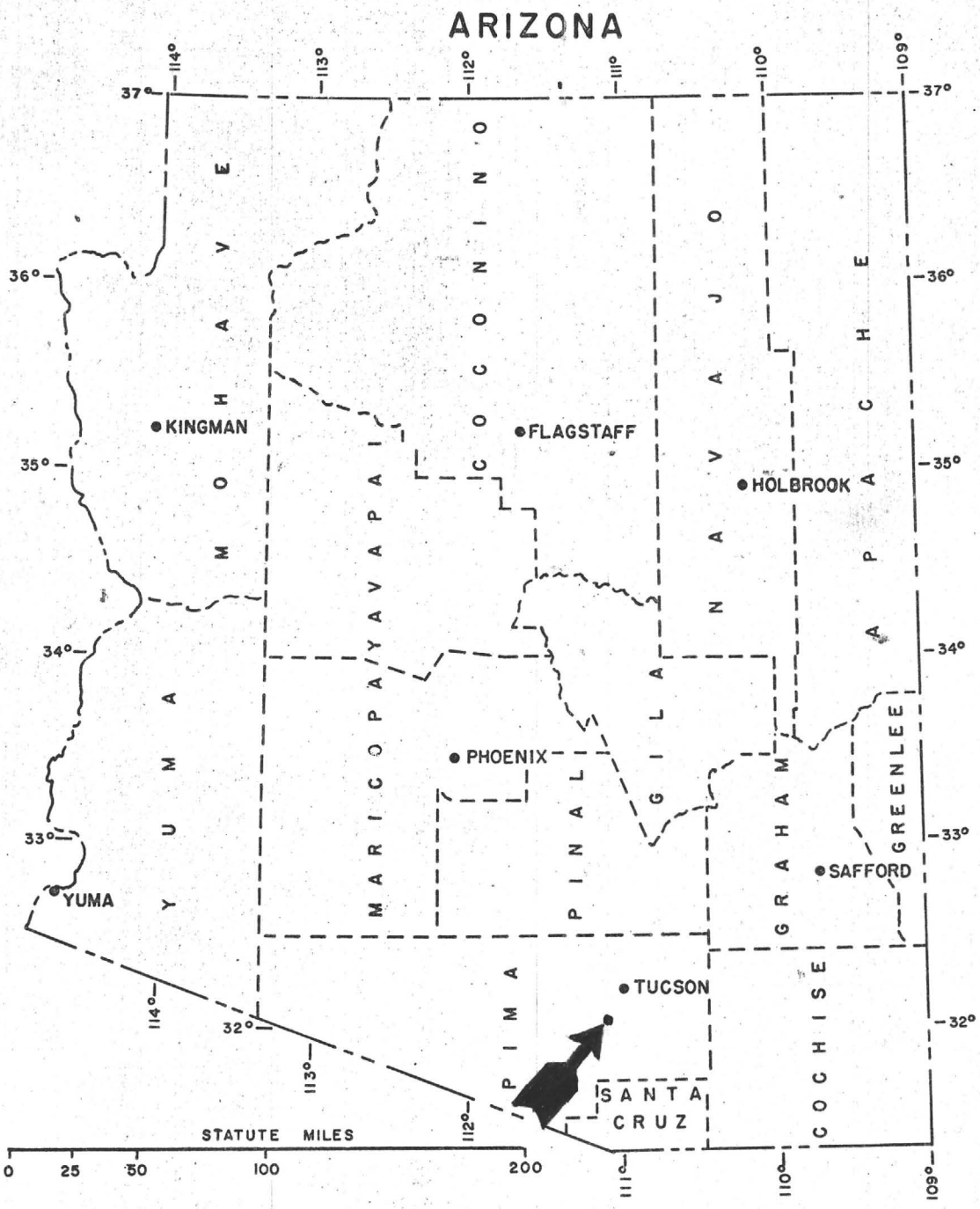
Job #1454

C O N T E N T S

	Page #
Index Map	
Introduction	1
Procedures	1
Basis of Gravity Method	2
Interpretation	4
Conclusions - Recommendations	5
Acknowledgements	6
Complete Bouguer Anomaly Map	
Station Location Map	

GENERAL LOCATION OF

Edwards Claims Group



HEINRICHS GEOEXPLORATION COMPANY
806 W. GRANT RD., P.O. BOX 5964 TUCSON, ARIZ. 85703. PH: (602) 623-0578

Introduction

At the request of Mr. Vic Kral, private consultant, Reno, Nevada, on behalf of Mr. C. George Edwards, Heinrichs GEOEXploration Company conducted a gravity survey of sections 13 and 24 in T.17S., R.12E., and sections 16, 17, 18, 19, 20, 21, 30 in T.17S., R.13E., Pima County, Arizona, as indicated on accompanying plan map, about 20-25 miles south of Tucson, Arizona. Area is approximately at 3300 feet elevation and, for the most part, is flat except for several hills (Twin Buttes, Helmet Peak, etc.). Soil development is quite good. Floral cover is of typical Sonoran Desert variety. Four wheel drive was not needed because of the large number of roads. Where roads were not available the survey was conducted on foot.

Field work was done during the interim August 4 through August 7, 1980, with Mark E. Anders, Geophysicist-Geologist, assisted by Patrick Zeller, Geophysical Technician, and under the general supervision of Walter E. Heinrichs, Jr., Registered Professional Geological Engineer - Geophysicist.

Purpose of this work was to delineate subsurface geology, with particular emphasis on locating higher density sedimentary rocks within the alluvium, or Helmet fanglomerate.

Procedures

A plan map of the area at a scale of 1:31,680 (2" = 1 mile) was obtained from GEOEX files. Prior regional gravity work had been done and the results published by Bear Creek Mining Company and Donald Plouff of the U.S.G.S.

These data were reviewed in order to plan how best to execute additional coverage to gain maximum advantage from the total information available.

Introduction

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These data were reviewed in order to plan how best to execute additional coverage to gain maximum advantage from the total information available.

LaCoste and Romberg gravimeter S/N G-219 was employed. Base station readings were taken every morning and evening at the base station located at the University of Arizona. A total of 135 field stations were occupied, 31 of these were located on Mission Road (HPR 1 - HPR 31) at a spacing of 0.1 miles (see location map), another 18 were located on Twin Buttes Road (TBR 0 - TBR 17), and the rest (TB 0 - TB 88) were located in various positions in the field area (see location map).

Elevations for each station were surveyed in by Vic Kral and Kelly Kennedy. Data was originally reduced to simple Bouguer values by GEOEX using a TI-59 calculator. However, because of the volume of numbers involved to obtain Complete Bouguer Values (with terrain corrections), Digitgraph Computer Systems Company, Tucson, Arizona, computed the Complete Bouguer Values. While the spacing of most stations was established by truck odometer, a few were located in Brunton and tape.

Data results are presented on a contoured plan map, with gravity values in units of millegals and contour interval being 0.5 milligals.

Basis of Gravity Method

In reduction of field gravity data to Complete Bouguer Values there are various corrections that are applied to the data. The following equations show these corrections.

$$C.B.V. = g_{obs} + g_{fa} - (g_b + g_{cc} - g_{tc}) - g_r$$

where C.B.V. = Complete Bouguer Value

g_{obs} = Observed gravity value on the ISGN 71 gravity standard

g_{fa} = Free air correction

g_{cc} = Curvature correction

g_{tc} = Terrain correction

g_t = Theoretical sea-level gravity of the GRS 67

Free Air Correction	Corrects for vertical decrease in gravity with increase in elevation
Curvature Correction	Is used to reduce the gravity effect of the infinite slab to that of a spherical cap curved to the radius of the earth
Bouguer Correction	Removes gravity effect of mass between sea level and the field station
Terrain Correction	Corrects for the effect of topography and its variance from the Bouguer slab.
Theoretical Gravity	Is used to calculate the theoretical gravity at sea level. The equation used was developed in 1967 and is called "Geodetic Reference System". GRS 67 replaces the older 1930 International Gravity Formula of 1930 (IGF 30).
Observed Gravity	Is the value calculated for each base station In this case we used the base station at the University of Arizona with an established value of 979,240.15. This value is from the International Gravity Standardization Net (IGSN67) datum. IGSN67 values represent "an effort to standardize worldwide gravity measurements to a common datum".

This survey shows all complete Bouguer values being negative. When all corrections are made and there are still negative values, this indicates crustal densities that are subnormal. The gravity method works on the basis of finding rock units that are of a relatively higher or lower density than the surrounding country rock.

Interpretation

Gravity values go from a high of -129.6 mgals on the east, to a low of -144.4 mgals on the Helmet Peak Profile to the west. By comparing the gravity contours with the geologic map of the area, there is good correlation.

Two basic rock units exposed in the field area are the Helmet fanglomerate which includes andesite flows, and a series of Paleozoic sedimentary rocks. Density determination of these units, based on surface-grab hand samples, were made and are shown in the table below:

Table 1:	Density	(g./c.c.)
Andesite	2.65	"
Fanglomerate	2.57	"
Paleozoics:		
Limestone	2.70	"
Silicated Limestone (Andradite?)	3.27	"

Purpose of the survey was to locate blocks of higher density limestone, which are situated in the alluvium and or Helmet fanglomerate. Because of the density contrast between these blocks and the country rock Bouguer values will increase as the higher density material is approached, and will decrease as lower density material is approached if the gravity contrast is enough and the relative size, shape, position and distance below surface of the blocks are within certain required limitations.

In this case the density contrast is not great (see Table 1) and therefore the maximum change (Δg_z) as observed on the whole survey is only 4.8 millegals, Bouguer values.

A Bouguer low exists on the western end of the field area and is correlated with a thick section of Helmet fanglomerate, of low density, that

crops out in the area. As you proceed east from the corner of Mission Road and Helmet Peak Road for approximately one mile there is relatively no gravitational variation, this is due to Helmet fanglomerate being covered with a thin blanket of alluvium. Proceeding east and southeast from the corner there is a sharp rise in the values showing a thinning of Helmet fanglomerate in contact with the higher density quartz monzonite bedrock material. Approximately -130.0 milligals is the largest Bouguer value encountered on this survey and the related gravity highs correlate with thinning Helmet fanglomerate and a higher density bedrock that the fanglomerate is covering.

From the geologic map it appears that this higher density bedrock is a Paleozoic limestone and/or quartz monzonite that occurs at the S.E. corner of the field area and in the vicinity of Twin Buttes proper. The San Xavier thrust fault represents the discontinuity between younger rocks (Helmet fanglomerate) and older rocks (Paleozoic sediments and quartz monzonite).

Conclusions and Recommendations

Gravity values in the area have a relatively small variation between maximum and minimum observed. A gravity low exists along the far western edge of the area and can be correlated with the low density Helmet fanglomerate. Proceeding west the gravity values increase, this can be tied to thinning of the Helmet fanglomerate and at the same time the higher density basement rock is getting closer to the surface. Contact between the Helmet fanglomerate and the basement rock is along the San Xavier thrust fault.

Geologic map of the region shows a lineation of hills along the San Xavier thrust fault. These hills are mostly Paleozoic sediment. As the fault is approached the gravity values keep getting larger and as the fault is passed going toward the east the gravity decreases.

Drill hole information in section 19 shows slide block locations of Paleozoic sediments. From the gravity data we cannot locate these blocks. There is a possibility that there are some more of these high density blocks along the NE edge of the area (see map). These may be inferred by the gravity high that exists in that area. Alternatively this high could be caused by an irregularity in the bedrock surface.

Acknowledgements

We wish to thank Mr. Vic Kral for his assistance and cooperation in providing us with drill hole data and his work in providing elevations for each of the gravity field stations. All of this helped to maximize the efficiency of our efforts.

Respectfully submitted,

Heinrichs GEOEXploration Co. (Inc.)

Mark E. Anders
Geophysicist - Geologist

Walter E. Heinrichs, Jr.
Geological Engineer - Geophysicist
P.E. & C.P.G.

MEA,WEH: mt

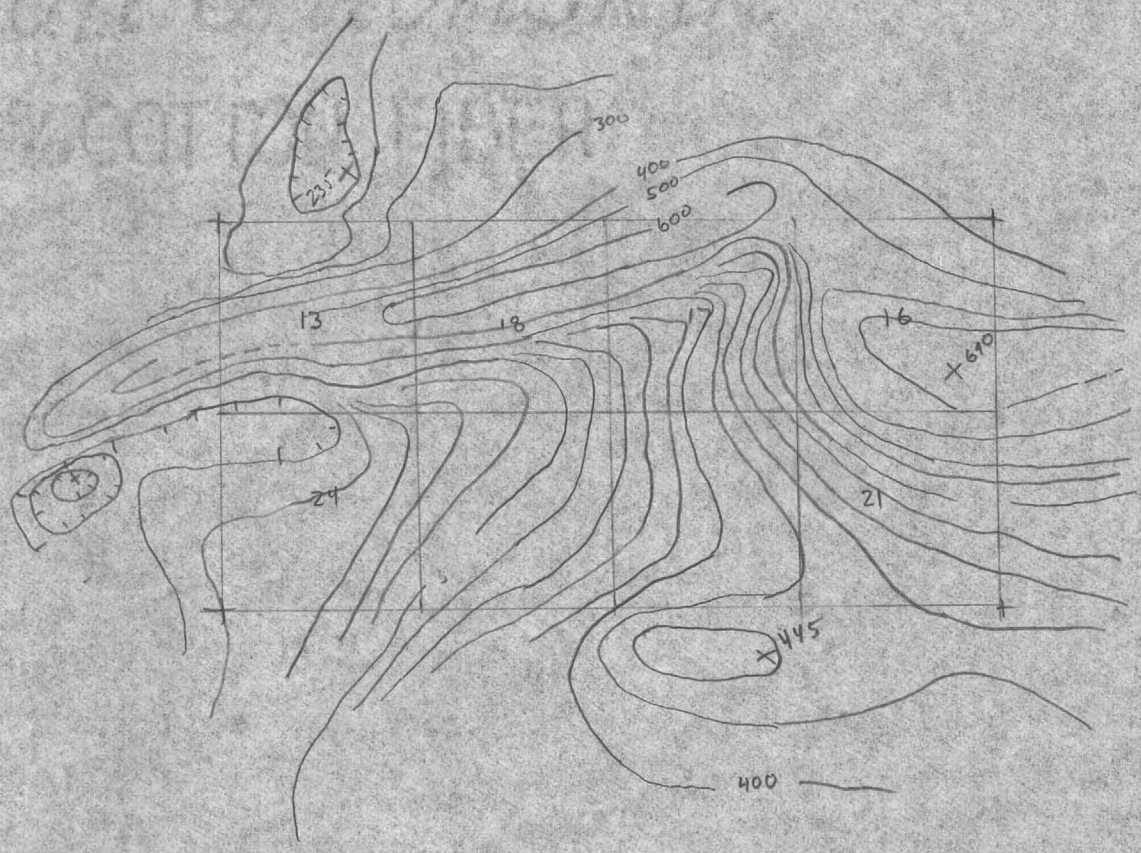
Job #1454
6 October 1980
Tucson, AZ 85703
P.O. Box 5964
(602) 623-0578

7/30/80 Job # 1959

HEINRICHS GEOEXPLORATION COMPANY

P. O. BOX 5964, TUCSON, ARIZONA 85703. 806 WEST GRANT ROAD. PHONE: (602) 623-0578

Scale = 1 : 62,500 Mag. Anomally



older or younger

HEINRICHS GEOEXPLORATION COMPANY

P.O. BOX 5964, TUCSON, ARIZONA 85703. 806 WEST GRANT ROAD. PHONE: (602) 623-0578

STATEMENT

October 6, 1980

Mr. Victor E. Kral
Exploration Geologist
836 E. York Way
Sparks, NV 89431

Re: Gravity Survey
Edwards Claims Group
GEOEX #1454

Professional Fees & Services:

Field Data Acquired

137 Gravity Stations - Read and Processed and Interpreted ----------$4500.00

(301)

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)
Witness my hand and Official Seal.

Indexed	Paged	Bloc[illegible]

I hereby certify that the within instrument was filed for record in Pima County, State of Arizona
IDA MAE SMYTH
County Recorded
By Grace Sanders
Deputy

No.
Book 6115 Page 1304-1306
Date: SEP 18 1979 -3 25 PM
Request of: C. G. Edwards
Fee: 3.00

AFFIDAVIT OF LABER PERFORMED AND IMPROVEMENTS MADE

Phoenix Group 3 -- 1978-1979

STATE OF ARIZONA)
) ss.
COUNTY OF PIMA)

C. G. EDWARDS, being duly sworn, deposes and says:

That he is a citizen of the United States of America, is more than twenty one years of age, and resides at Tucson, Pima County, Arizona (P.O. Box 35579, Tucson, Arizona 85740).

That he is personally acquainted with the mining claims listed on Schedule A, attached hereto, situate in the Pima Mining District, Pima County, Arizona, the location notices of which are recorded in the Office of the County Recorder of Pima County Pima County, in the books and on the pages listed on Schedule A.

That between September 1, 1978 and September 1, 1979, work and improvements worth more than $500.00 were made and performed for the benefit of the claims, by and at the expense of C. G. Edwards, owner of the claims, for the purpose of complying with the laws of the United Sates and the State of Arizona pertaining to annual assessment work.

That in addition to the labor and expenses of the owner, A Bio-geochemical survey was conducted upon the claims by the taking and assaying of both "old wood" and "new wood" cuttings of mature mesquite trees, which method has been recognized as more valuable than soil sampling in determining metalliferous values at substantial depth below ground surface. Cuttings were taken at approximately 250 foot intervals along the traverses shown on the claim plat attached hereto. The assays were relatively high in Cu and Mo. In addition, scintillation counts were taken along the traverses. The count was greater along A-A, doubtless due to a nearby cultural feature.

That the survey was under the direction of Victor E. Kral, a geologist with more than forty years experience (Arizona registration number 10164), and was performed by Richard J. Lundin, a geologist with over ten years experience.

Victor E. Kral, 836 East York Way, Sparks, Nevada 89431

Richard J. Lundin, 3425 West Bardot, Tucson, Arizona 85704

Owner: C. G. Edwards
C. G. Edwards

Subscribed and sworn to before me this 18 day of September, 1979

Ruth T. Jennings
Notary Public

My Commission expires:
July 12, 1983

6115-1306

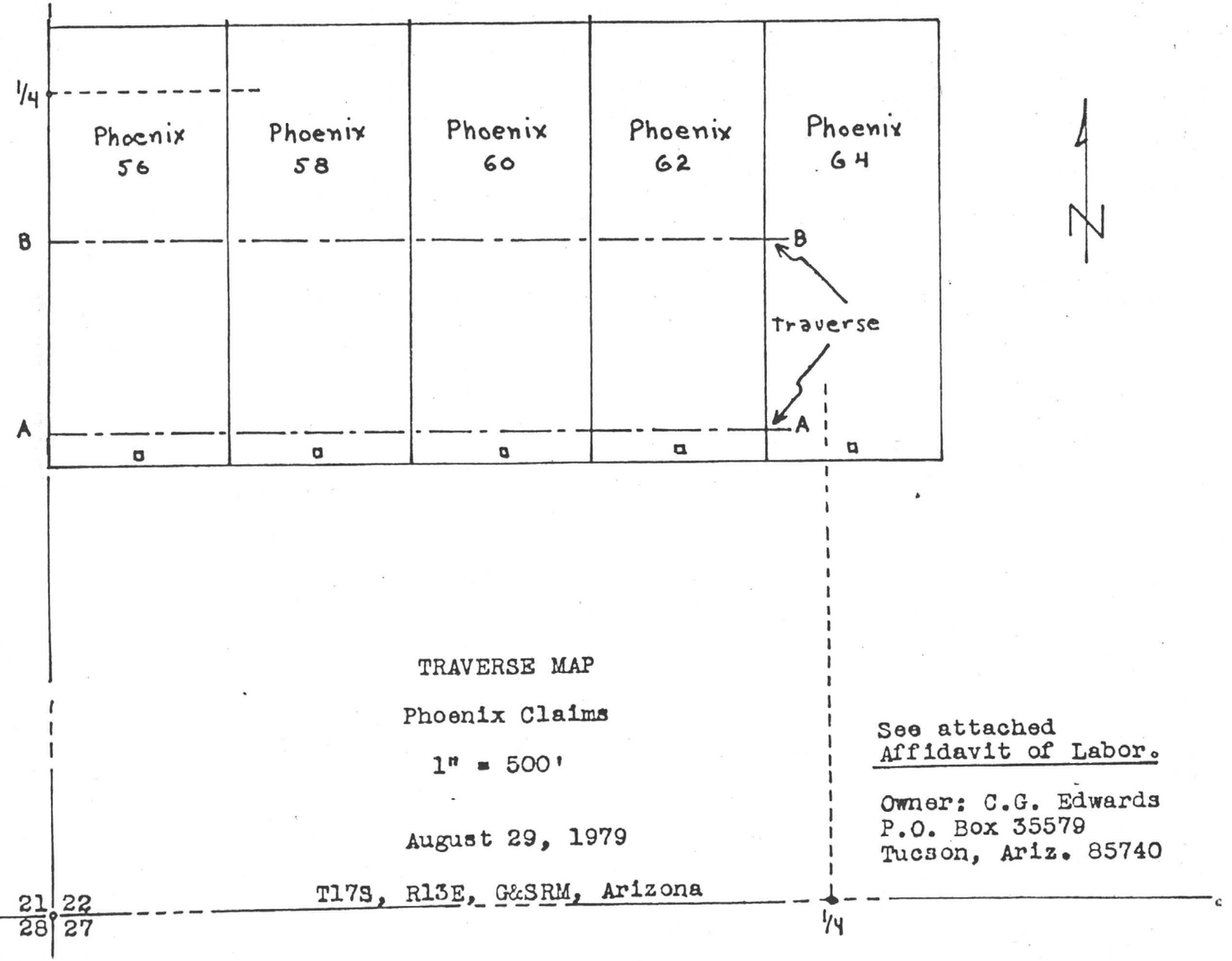
SCHEDULE A

Phoenix Group 3 -- 1978-1979

Five unpatented lode mining claims situate in the Pima Mining District, Pima County, Arizona, the location notices of which are recorded in the Office of the County Recorder of Pima County, Arizona, in the books and on the pages listed below:

B.L.M. Serial No.	Name of Claim	Book	Page	Location Notice Posted: G & SRM, Arizona Sec.	Twp.	Range
_____	Phoenix No. 56	3706	541	22	17S	13E
_____	Phoenix No. 58	"	543	"	"	"
_____	Phoenix No. 60	"	545	"	"	"
_____	Phoenix No. 62	"	547	"	"	"
_____	Phoenix No. 64	"	549	"	"	"

Phoenix Group 3
1978 - 1979



TRAVERSE MAP

Phoenix Claims

1" = 500'

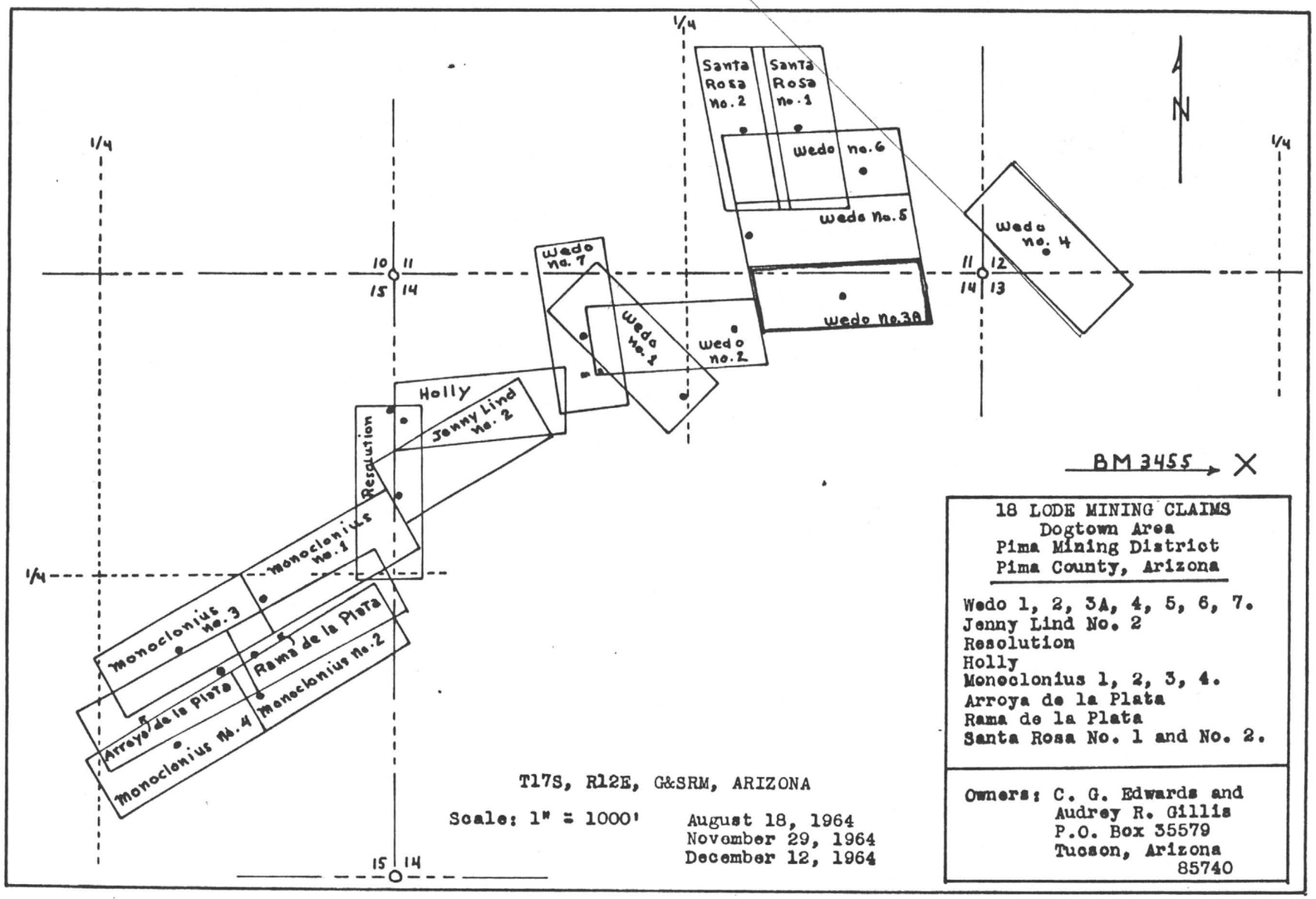
August 29, 1979

T17S, R13E, G&SRM, Arizona

See attached
Affidavit of Labor.

Owner: C.G. Edwards
P.O. Box 35579
Tucson, Ariz. 85740

6115 1306



18 LODE MINING CLAIMS
Dogtown Area
Pima Mining District
Pima County, Arizona

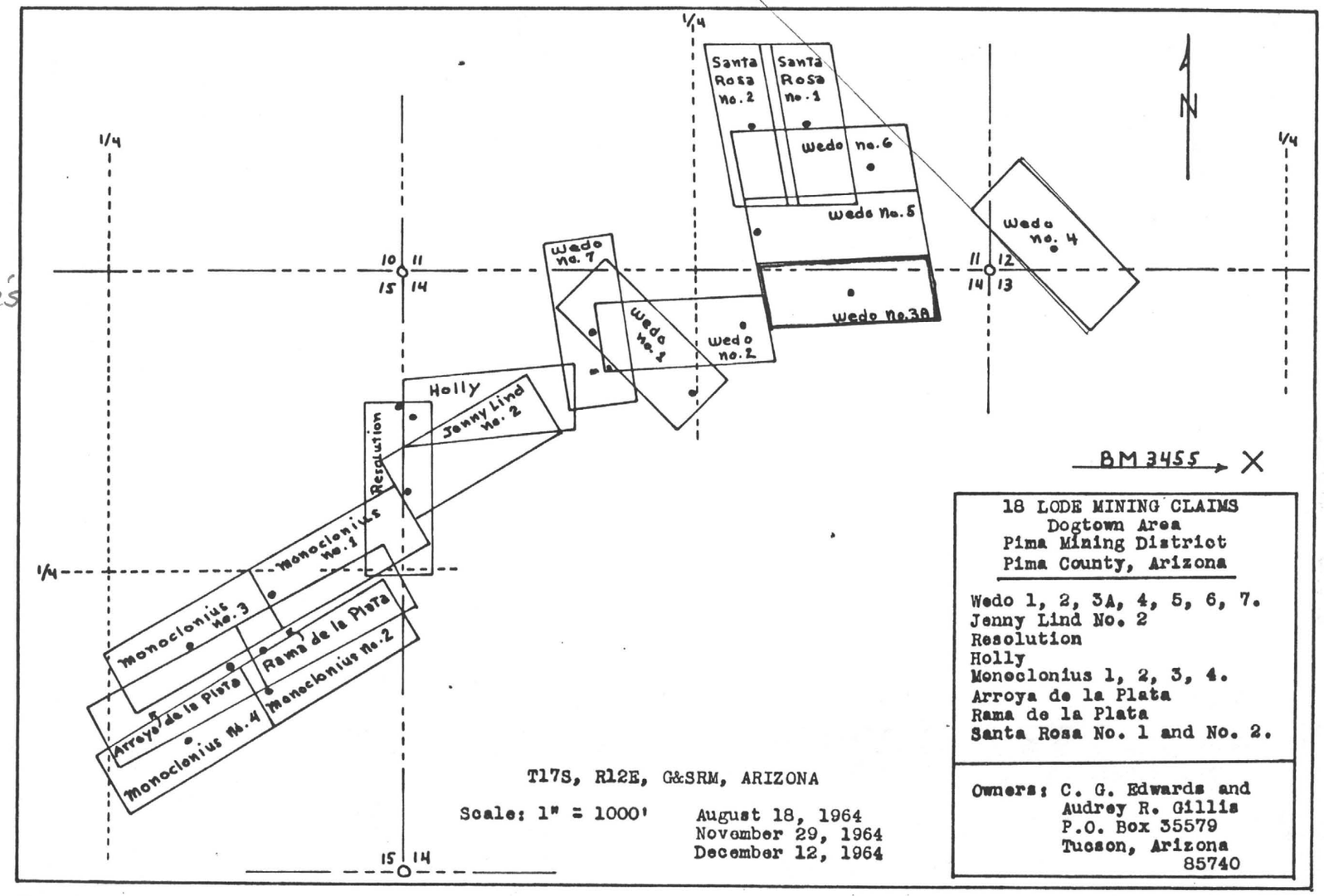
Wedo 1, 2, 3A, 4, 5, 6, 7.
Jenny Lind No. 2
Resolution
Holly
Monoclonius 1, 2, 3, 4.
Arroya de la Plata
Rama de la Plata
Santa Rosa No. 1 and No. 2.

Owners: C. G. Edwards and
Audrey R. Gillis
P.O. Box 35579
Tucson, Arizona
85740

LODE CLAIM: Wedo No. 3 Amended OWNERS: C. G. Edwards & Audrey R. Gillis
P.O. Box 35579, Tucson, Arizona 85740

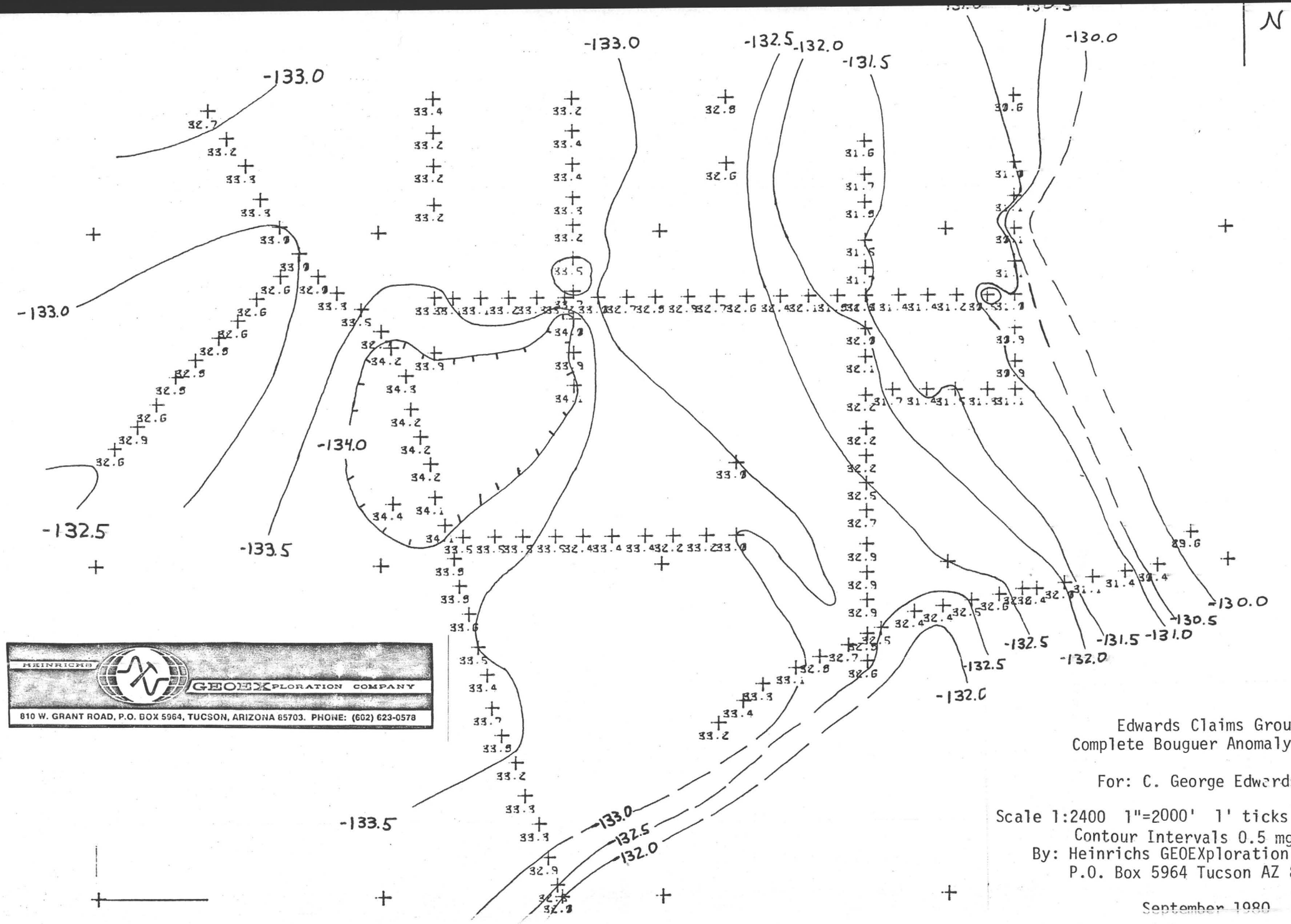
CLAIM COURSE: E-W, in the ~~N~~E 1/4, Sec. 14 & SE 1/4 Sec. 11, T17S, R12E, T17S, R12E, G&SRM, Arizona. The ~~N~~S E claim corner is in the N~~S~~E 1/4 of Section 14, about _____ feet WEST, and _____ feet South of the NE corner of Section 14.

This sketch shows George's 18 claims (as compared with the map of all claims)



LODE CLAIM: Wedo No. 3 Amended OWNERS: C. G. Edwards & Audrey R. Gillis
P.O. Box 35579, Tucson, Arizona 85740

CLAIM COURSE: E-W, in the NE 1/4, Sec. 14 & SE 1/4 Sec. 11, T17S, R12E, T17S, R12E, G&SRM, Arizona. The SE claim corner is in the NE 1/4 of Section 14, about _____ feet WEST, and _____ feet South of the NE corner of Section 14.

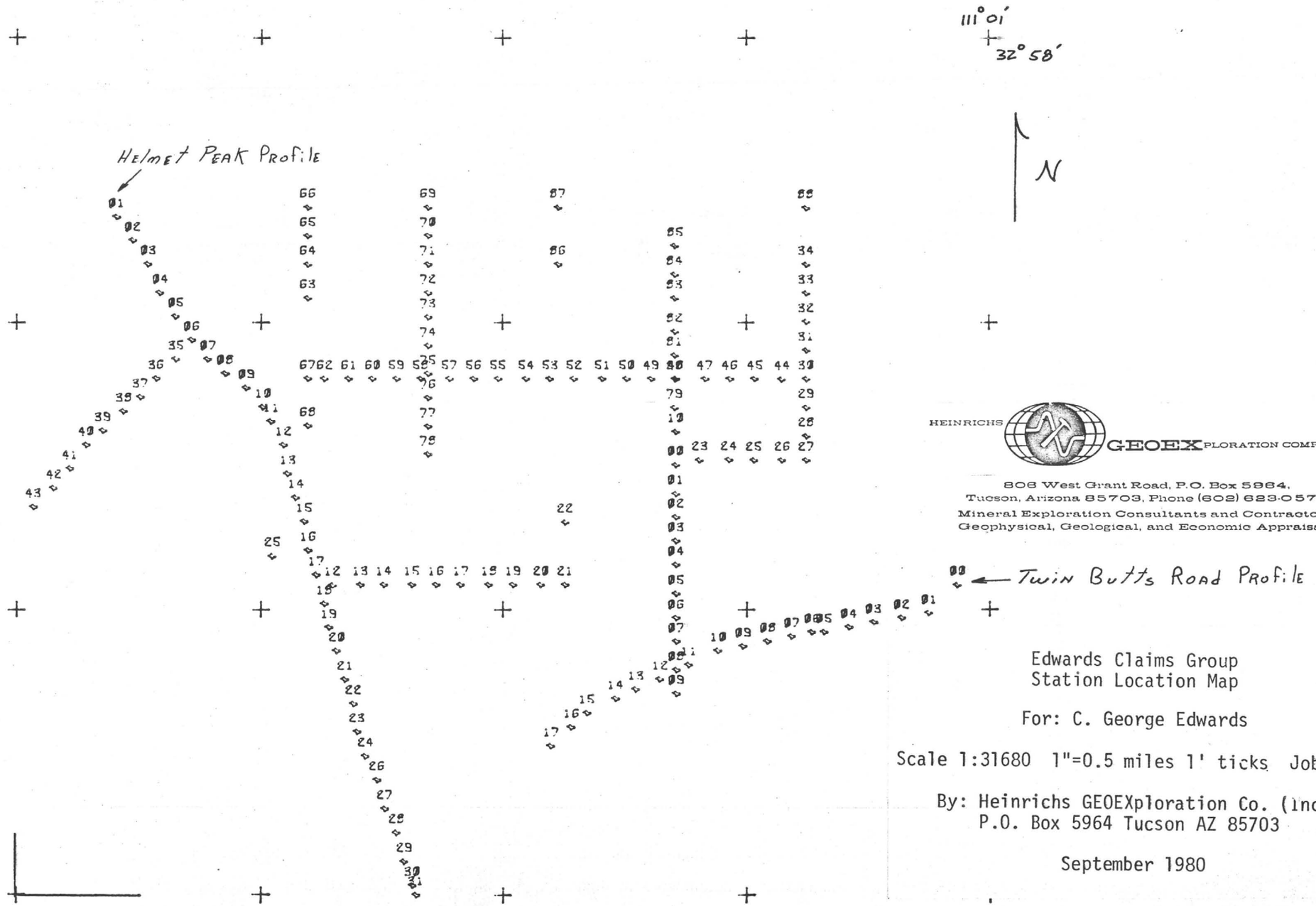


Edwards Claims Group
Complete Bouguer Anomaly Map

For: C. George Edwards

Scale 1:2400 1"=2000' 1' ticks Job #1463
Contour Intervals 0.5 mgals
By: Heinrichs GEOEXploration Co. (Inc.)
P.O. Box 5964 Tucson AZ 85703

September 1980



HEINRICHS GEOEXPLORATION COMPANY
806 West Grant Road, P.O. Box 5964,
Tucson, Arizona 85703, Phone (602) 623-0578
Mineral Exploration Consultants and Contractors
Geophysical, Geological, and Economic Appraisals

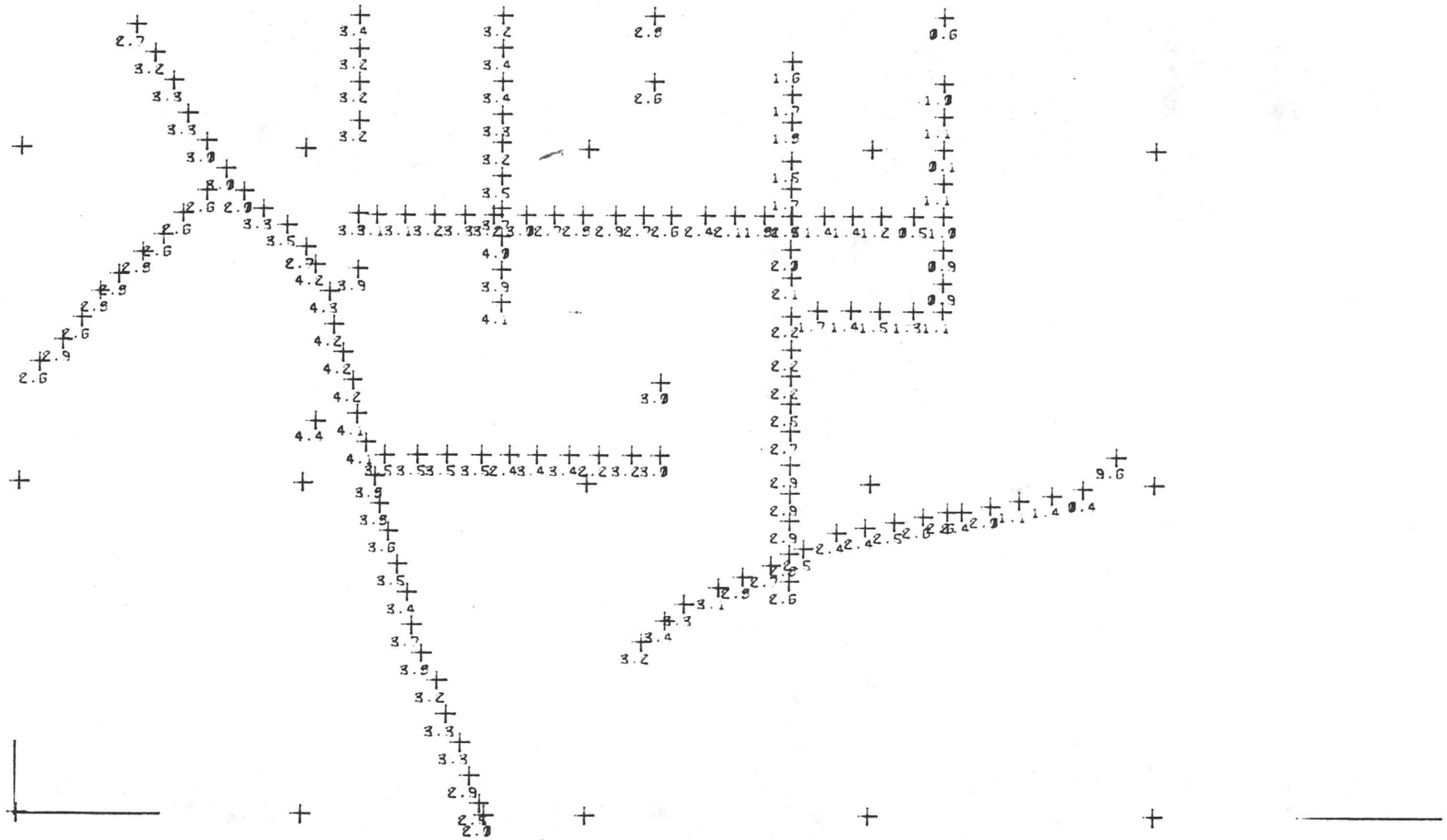
Edwards Claims Group
Station Location Map

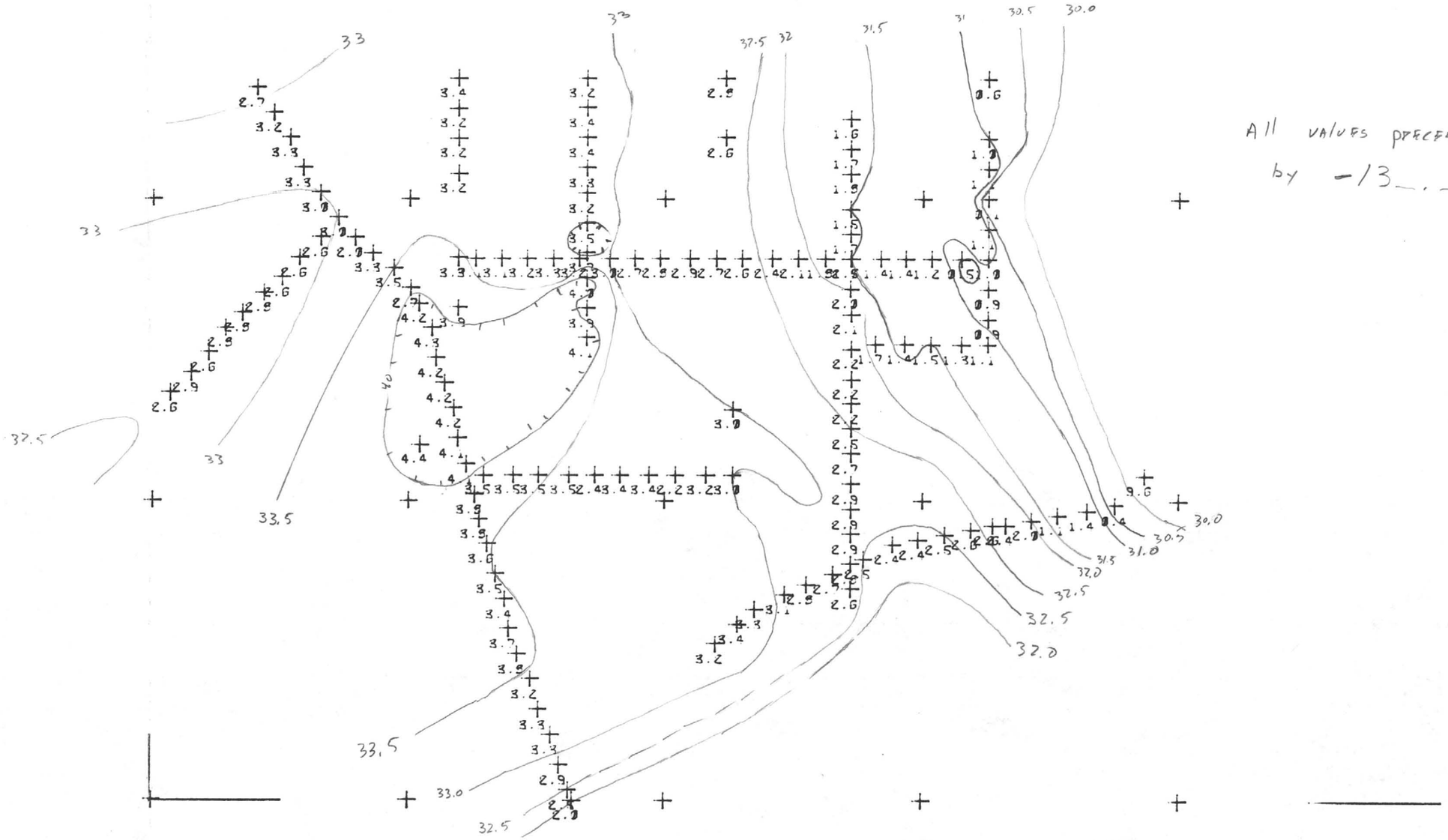
For: C. George Edwards

Scale 1:31680 1"=0.5 miles 1' ticks Job#1463

By: Heinrichs GEOEXploration Co. (Inc.)
P.O. Box 5964 Tucson AZ 85703

September 1980





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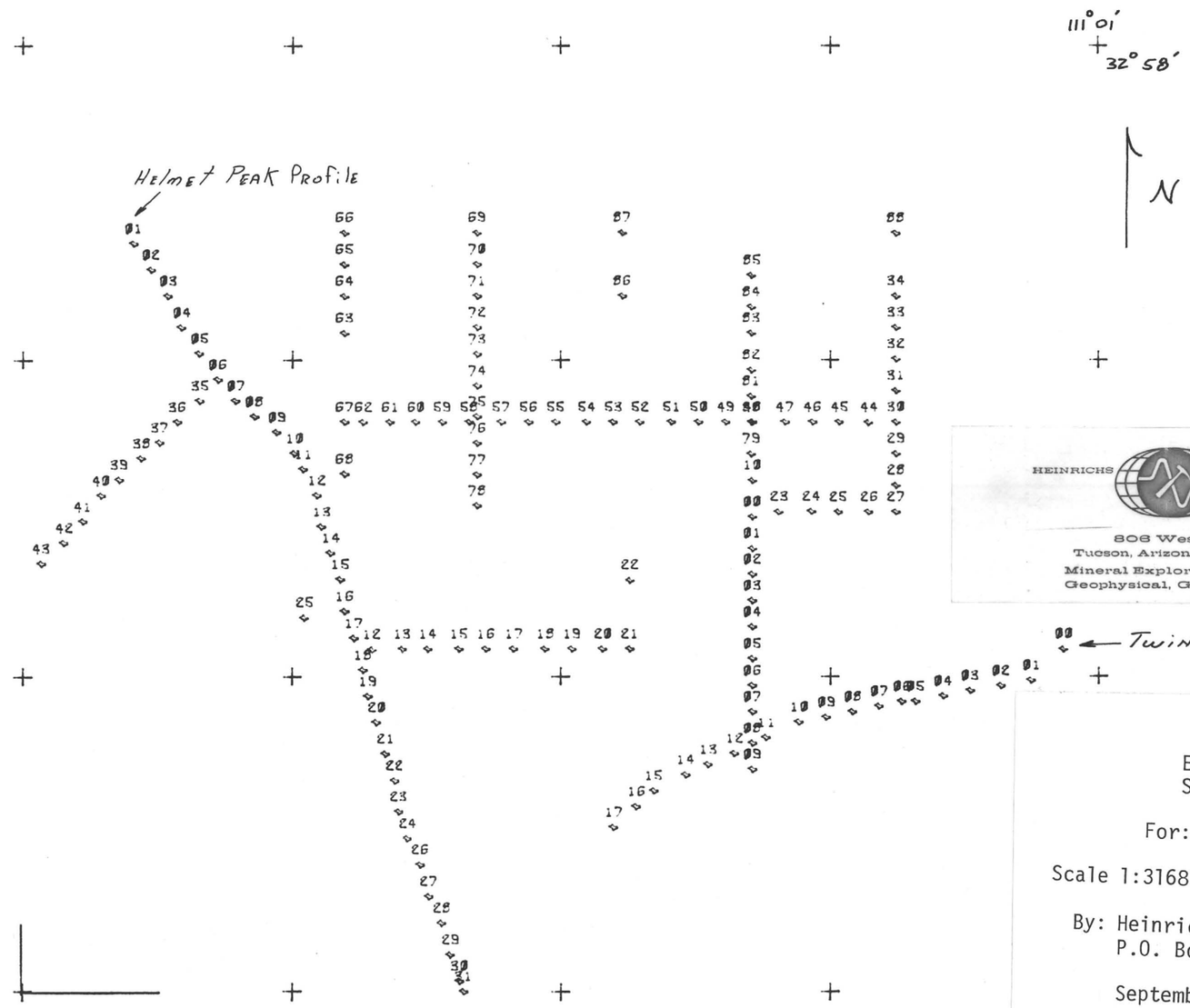

HEINRICHS GEOEXPLORATION COMPANY
806 West Grant Road, P.O. Box 5964,
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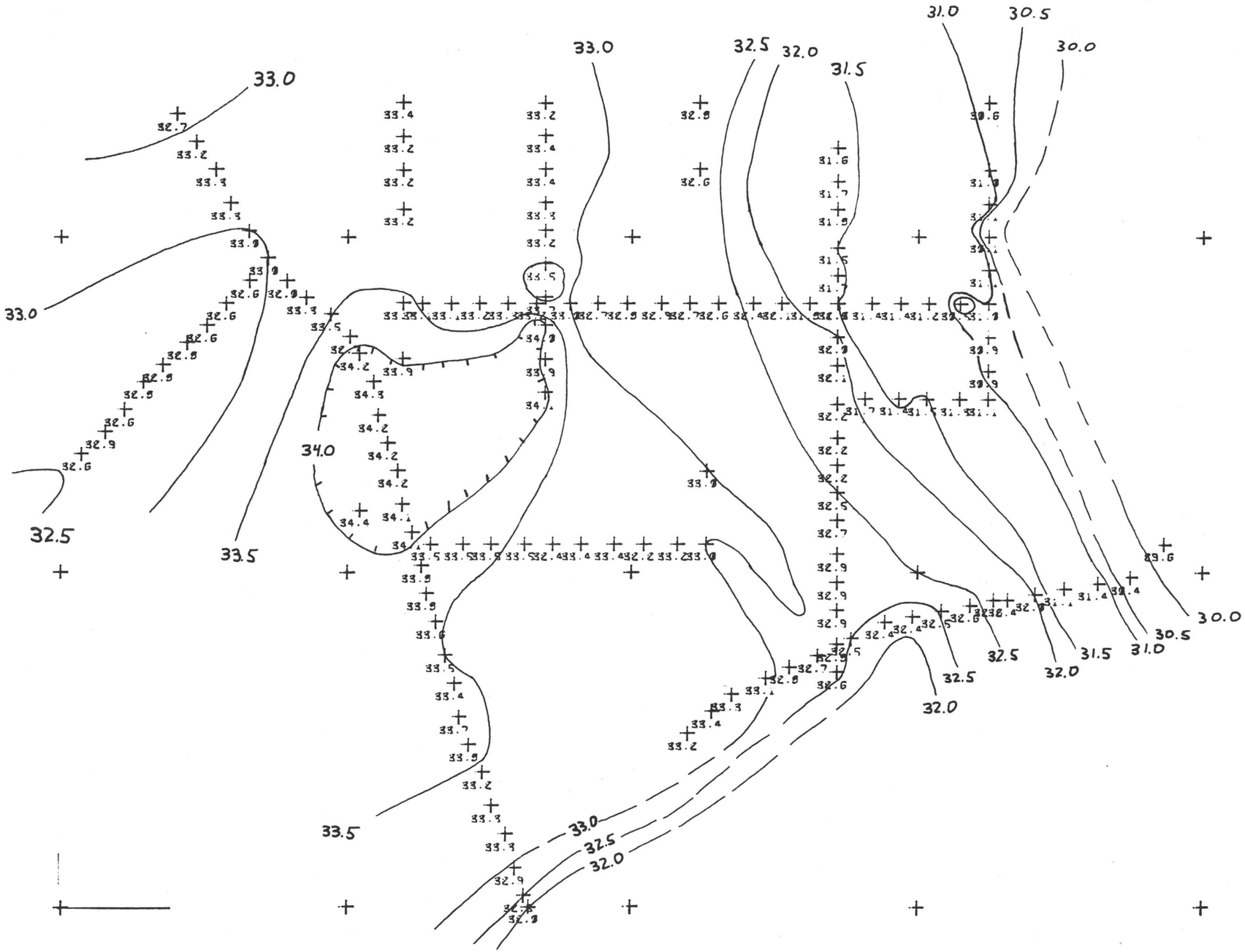
Edwards Claims Group
Station Location Map

For: C. George Edwards

Scale 1:31680 1"=0.5 miles 1' ticks

By: Heinrichs GEOEXploration Co. (Inc.)
P.O. Box 5964 Tucson AZ 85703

September 1980 Job #1454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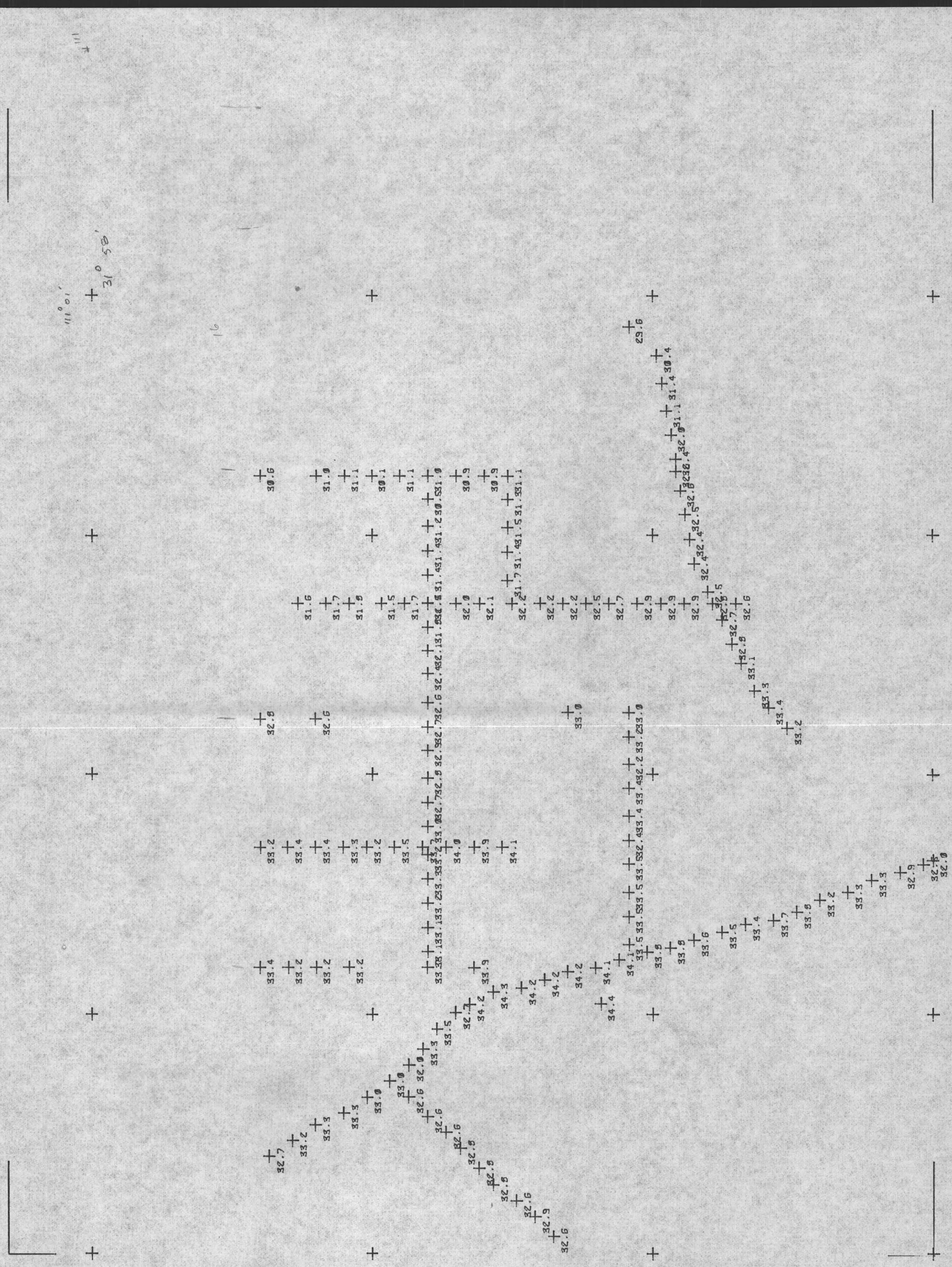
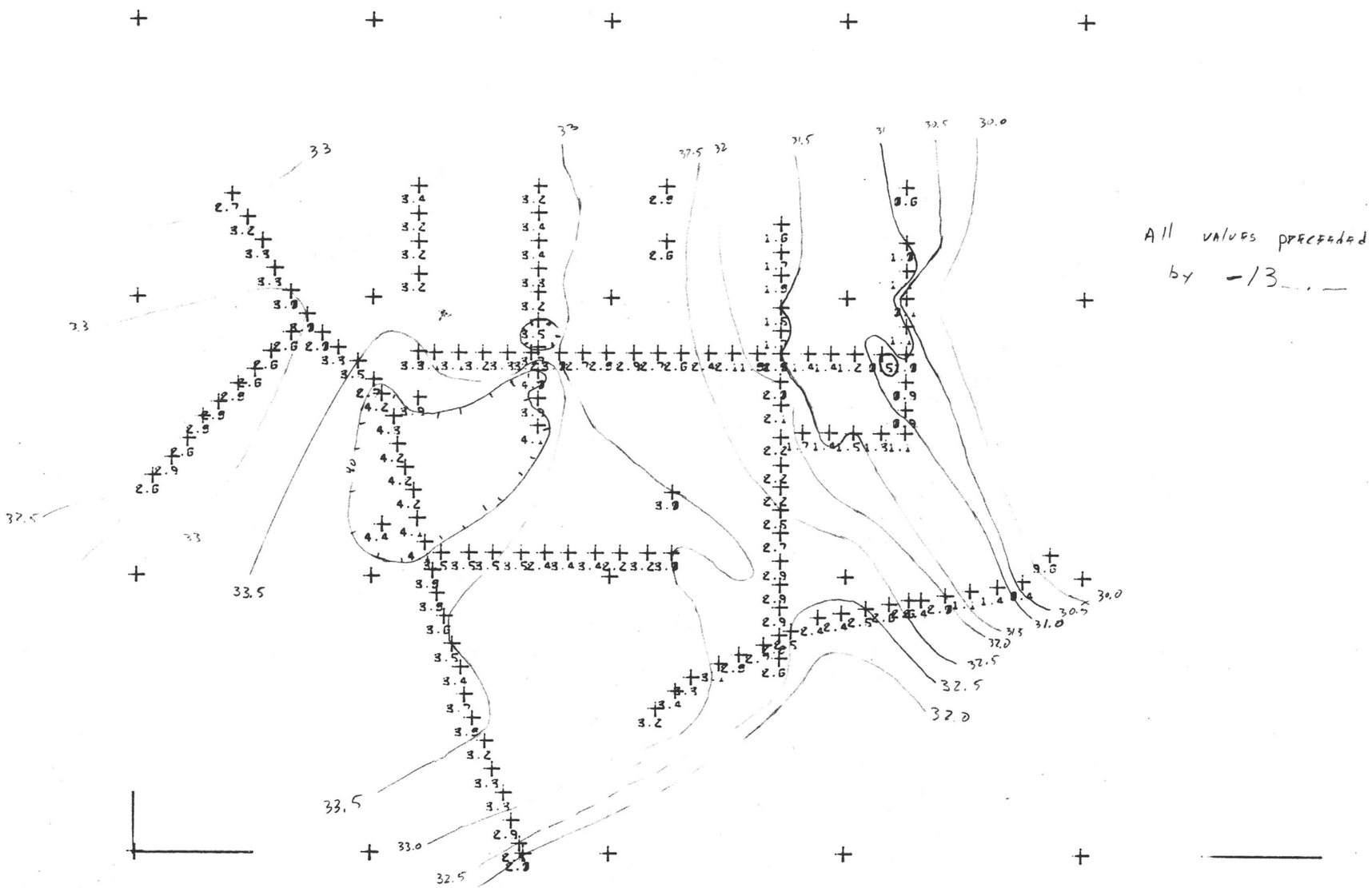

111°01'
31°58'



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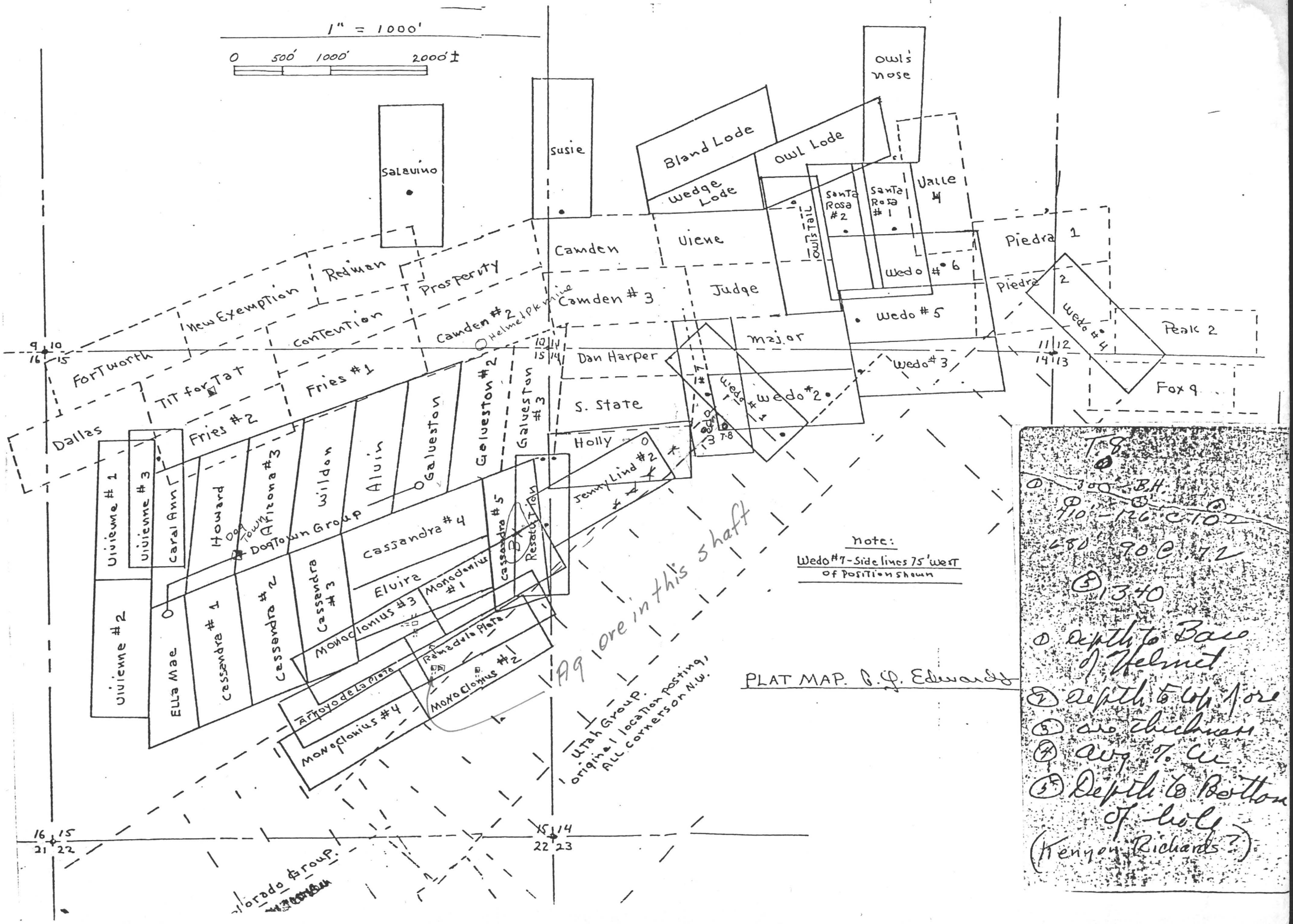
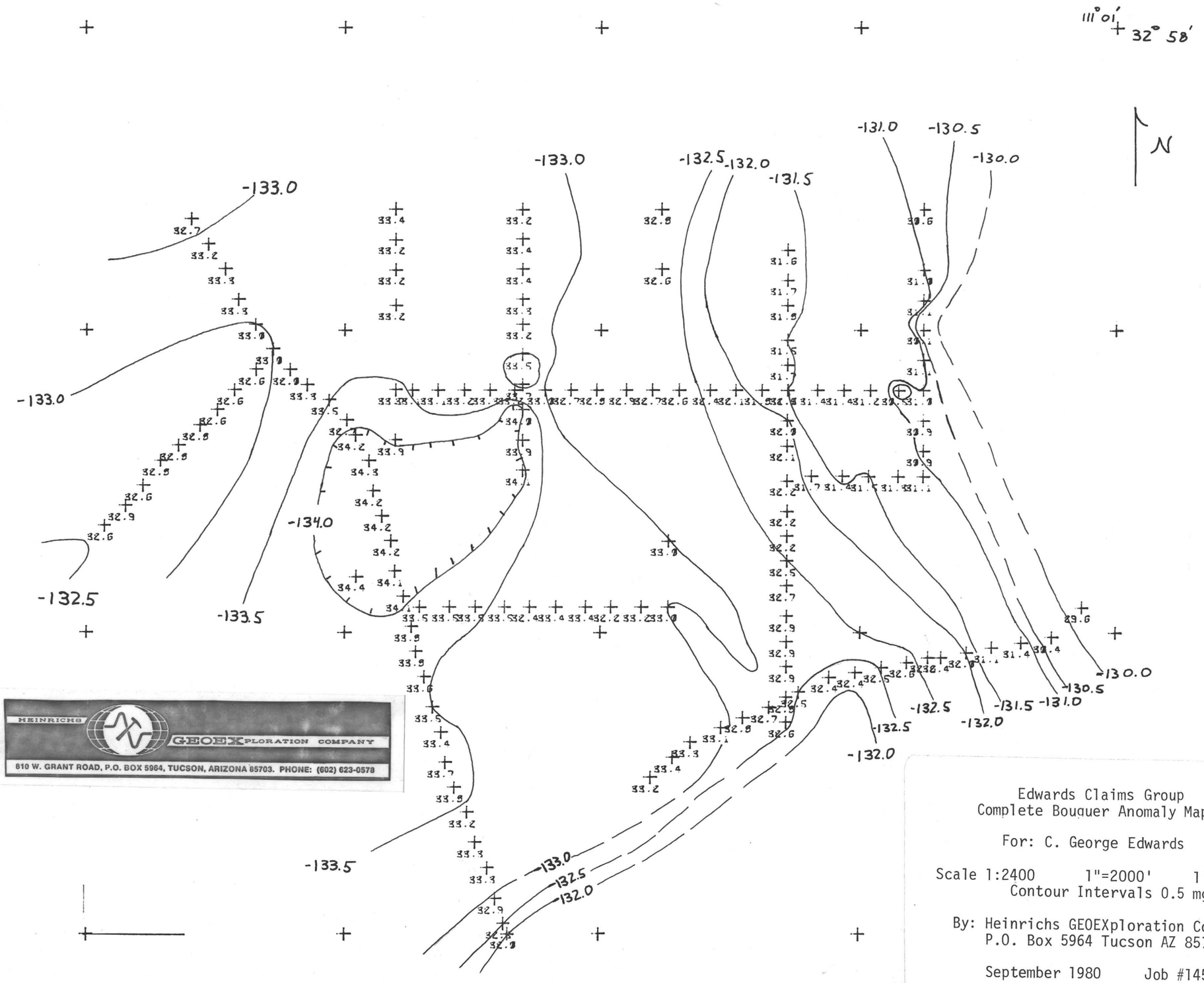

1" = 1000'
0 500' 1000' 2000' ±
Salavino
Susie
Bland Lode
Owl Lode
Owl's nose
Wedge Lode
Santa Rosa #2
Santa Rosa #1
Valle 4
Owl's Tail
Camden
Viene
Piedra 1
Piedra 2
Wedo #6
Redman
Prosperity
New Exemption
Contention
Camden #2
Helmet Pk mine
Camden #3
Judge
Wedo #5
Wedo #4
Peak 2
Fortworth
Major
Dan Harper
Wedo #3
Tit for Tat
Fries #1
Galveston #2
Galveston #3
S. State
Wedo #2
Fox 9
Dallas
Fries #2
Holly
Jenny Lind #2
Vivienne #1
Vivienne #3
Caral Ann
Howard
Arizona #3
Wildon
Alvin
Galveston
Dog Town
Dog Town Group
Cassandra #4
Cassandra #5
Resolution
Elvira
Monoclonius #1
Monoclonius #3
Vivienne #2
Ella Mae
Cassandra #1
Cassandra #2
Cassandra #3
Ramada la Plata
Arroyo de la Plata
Monoclonius #2
Monoclonius #4
Ag ore in this shaft
Utah Group.
original location posting,
All corners on N.W.
Colorado Group.
note:
Wedo #7 - Side lines 75' west of position shown
PLAT MAP. G. G. Edwards
T.8
① 300' B.H.
② 410' - 126 @ 1.02
③ 680' 90 @ .72
⑤ 1340
① Depth to Base of Helmet
② depth to top of ore
③ ore thickness
④ avg % Cu
⑤ Depth to Bottom of holy
(Kenyon Richards?)



HEINRICHS GEOEXPLORATION COMPANY
810 W. GRANT ROAD, P.O. BOX 5964, TUCSON, ARIZONA 85703. PHONE: (602) 623-0578

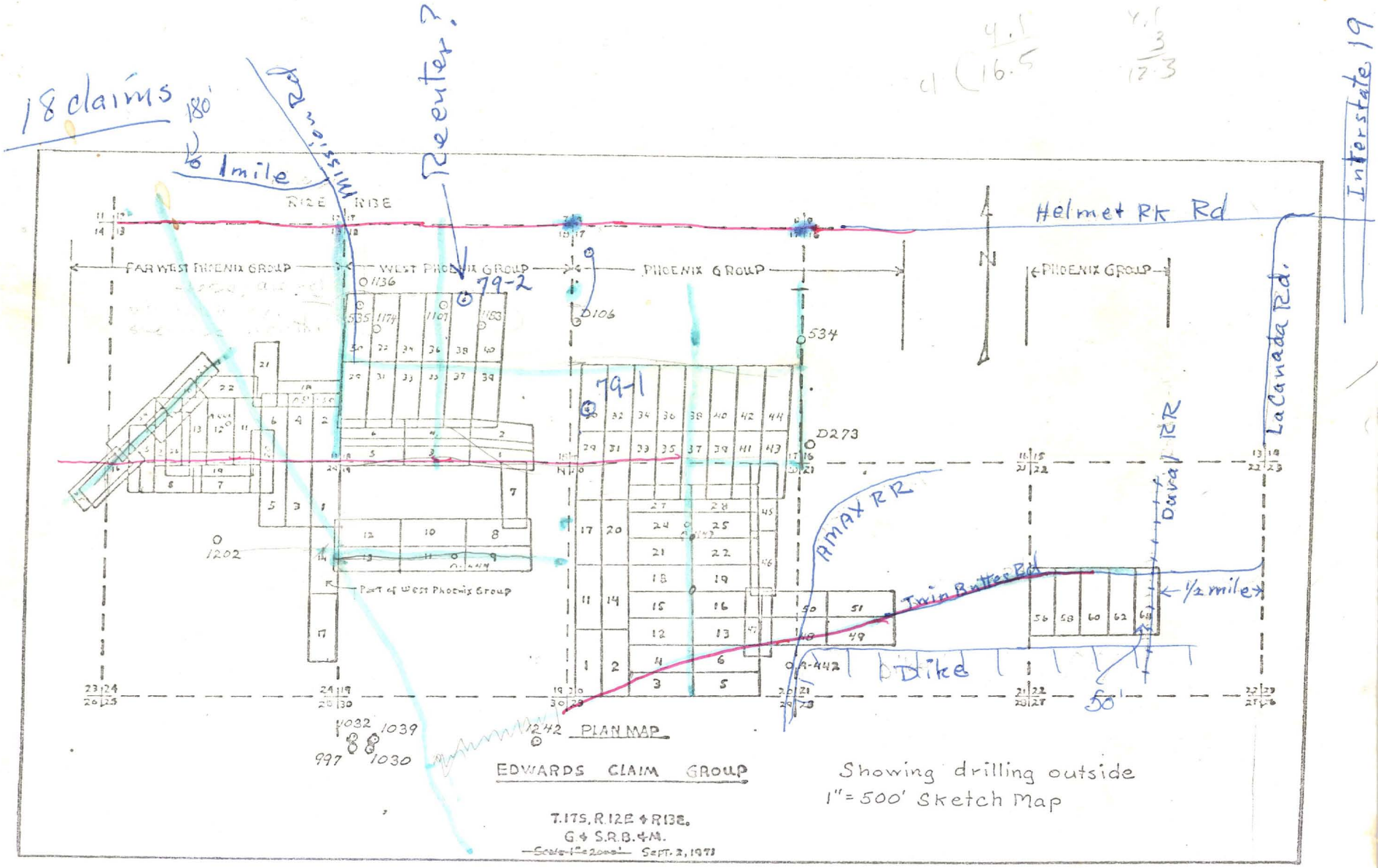
Edwards Claims Group
Complete Bouguer Anomaly Map

For: C. George Edwards

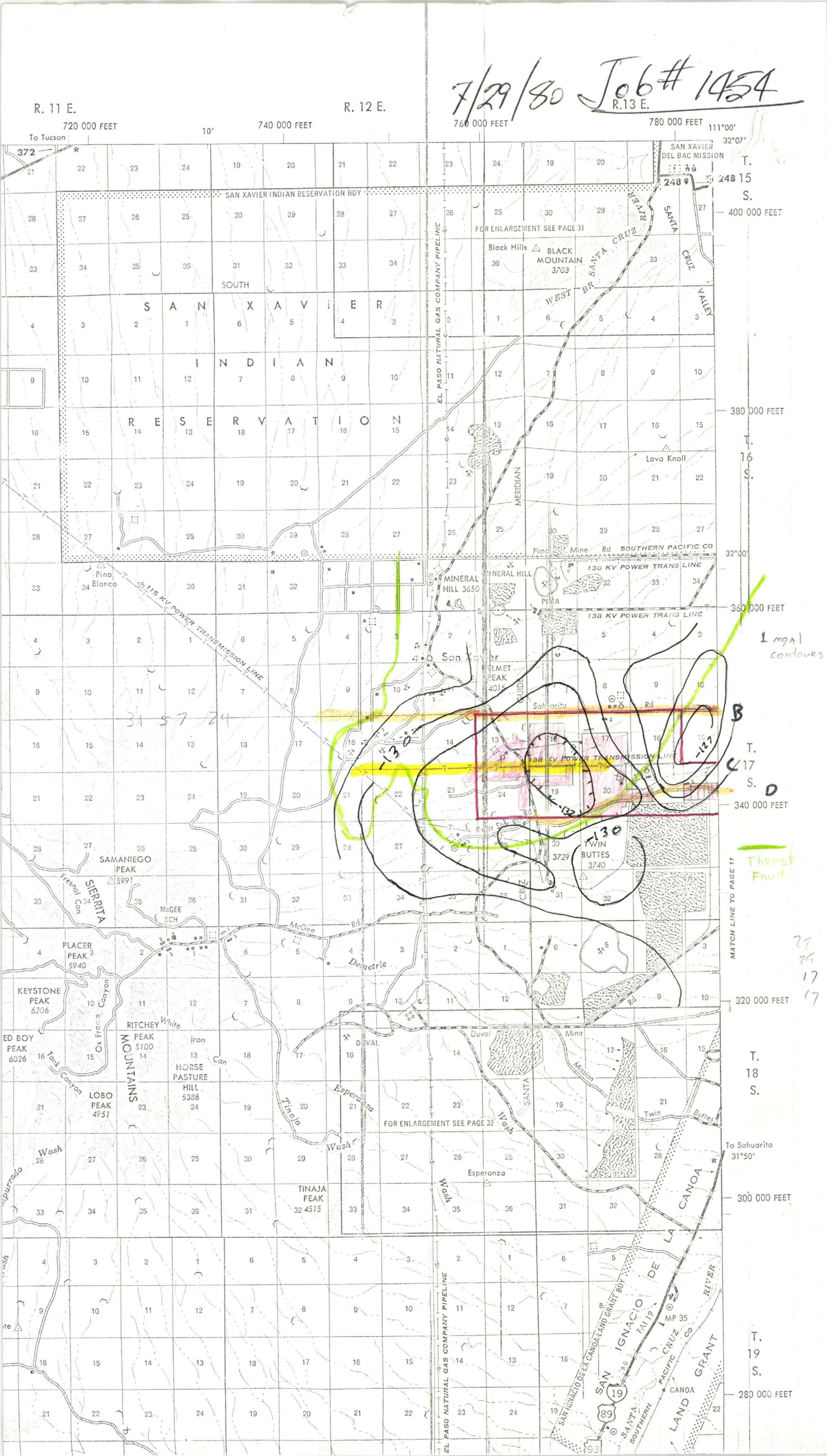
Scale 1:2400 1"=2000' 1' ticks
Contour Intervals 0.5 mgals

By: Heinrichs GEOEXploration Co. (Inc.)
P.O. Box 5964 Tucson AZ 85703

September 1980 Job #1454


18 claims
180'
½ 1 mile
Missouri
Reenter?
R12E R13E
Helmet Rk Rd
Interstate 19
FAR WEST PHOENIX GROUP
WEST PHOENIX GROUP
PHOENIX GROUP
PHOENIX GROUP
79-2
79-1
D106
534
D273
1136
1202
Part of West Phoenix Group
AMAX RR
Twin Butte Rd
½ mile
Dike
50'
La Canada Rd.
Davis RR
1032
1039
997
1030
1242
PLAN MAP
EDWARDS CLAIM GROUP
T.17S, R.12E & R13E.
G & S.R.B.&M.
Scale 1"=200'
Sept. 2, 1973
Showing drilling outside
1" = 500' Sketch Map

7/29/80 Job# 1454

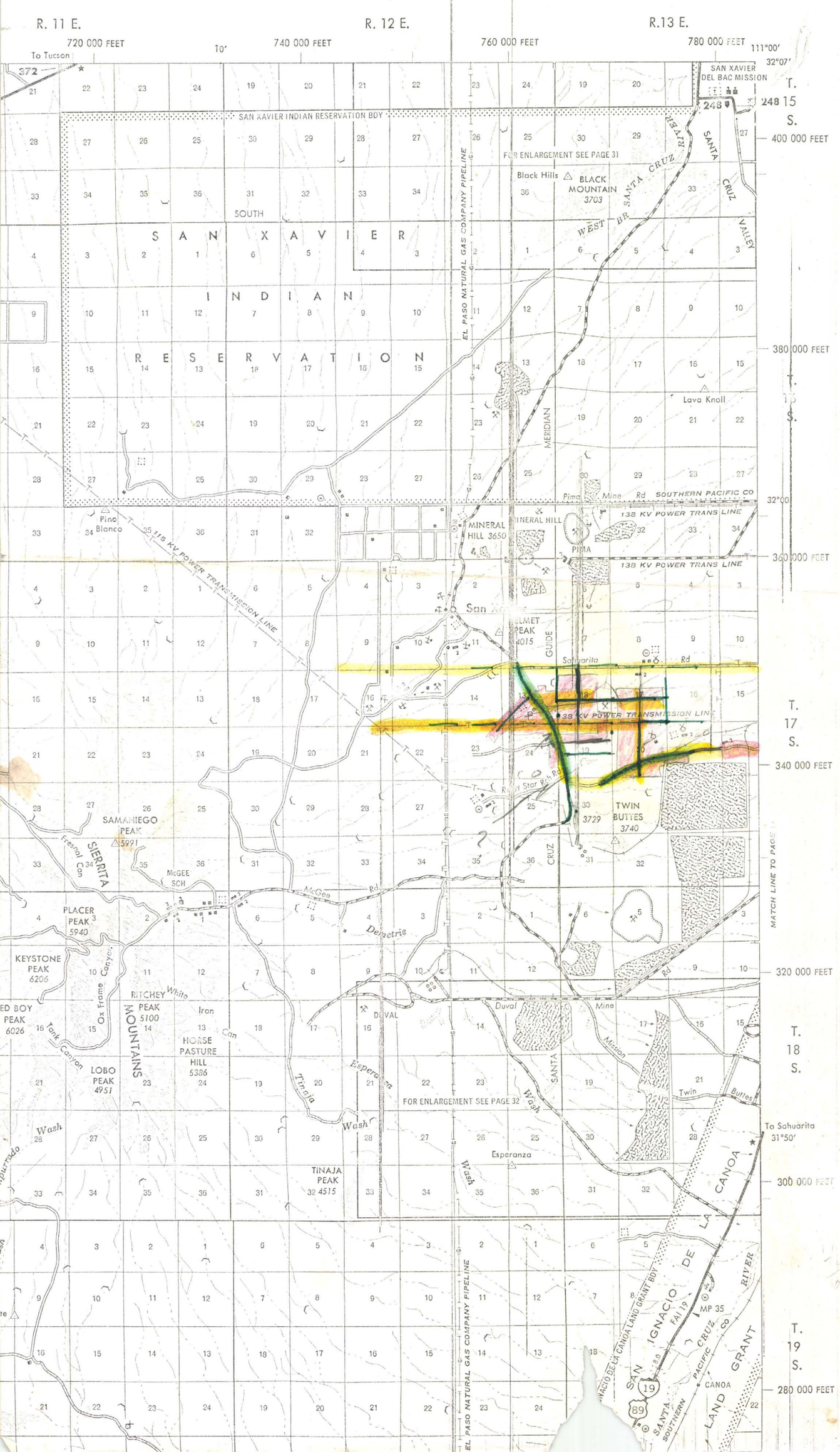


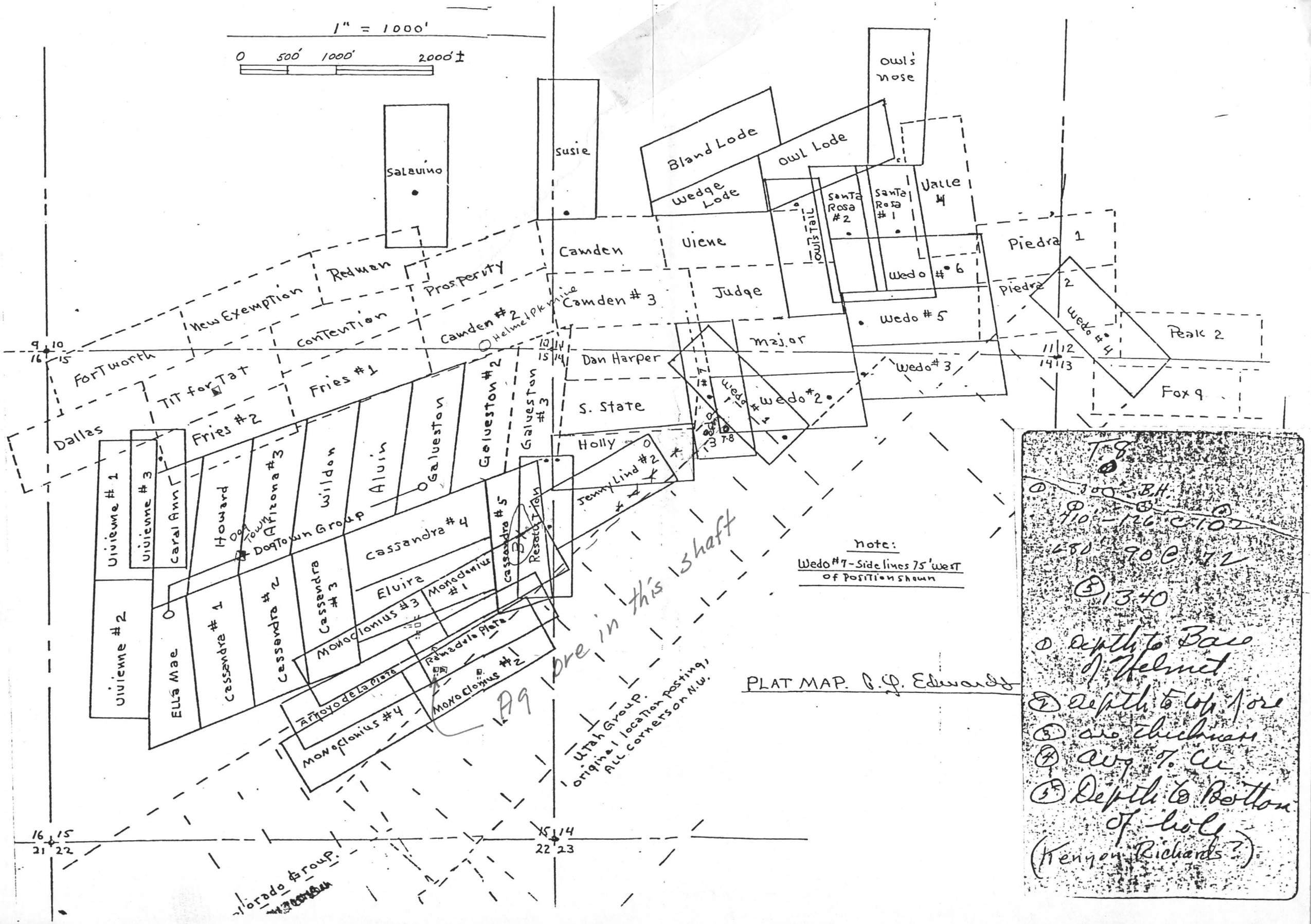
7/30/80

Job # 1454

Already Collected data

Proposed NEW stations




1" = 1000'
0 500' 1000' 2000' ±
Salavino
Susie
Bland Lode
Owl Lode
Owl's nose
Wedge Lode
Santa Rosa #2
Santa Rosa #1
Valle 4
Owl's Tail
Camden
Viene
Piedra 1
Piedra 2
Wedo #6
Wedo #5
Wedo #4
Wedo #3
Wedo #2
Wedo #1
Wedo #7
Judge
Major
Camden #3
Camden #2
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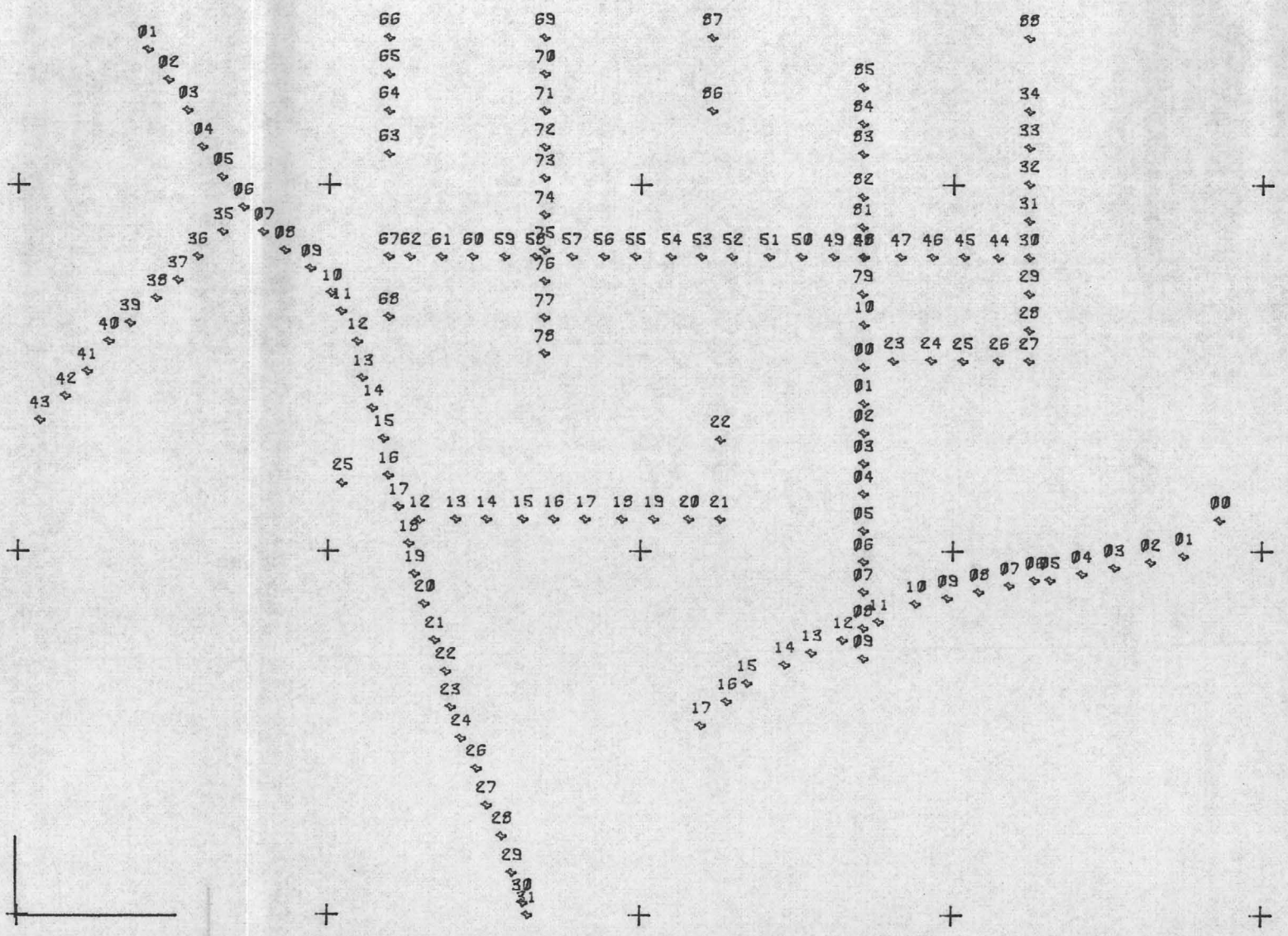
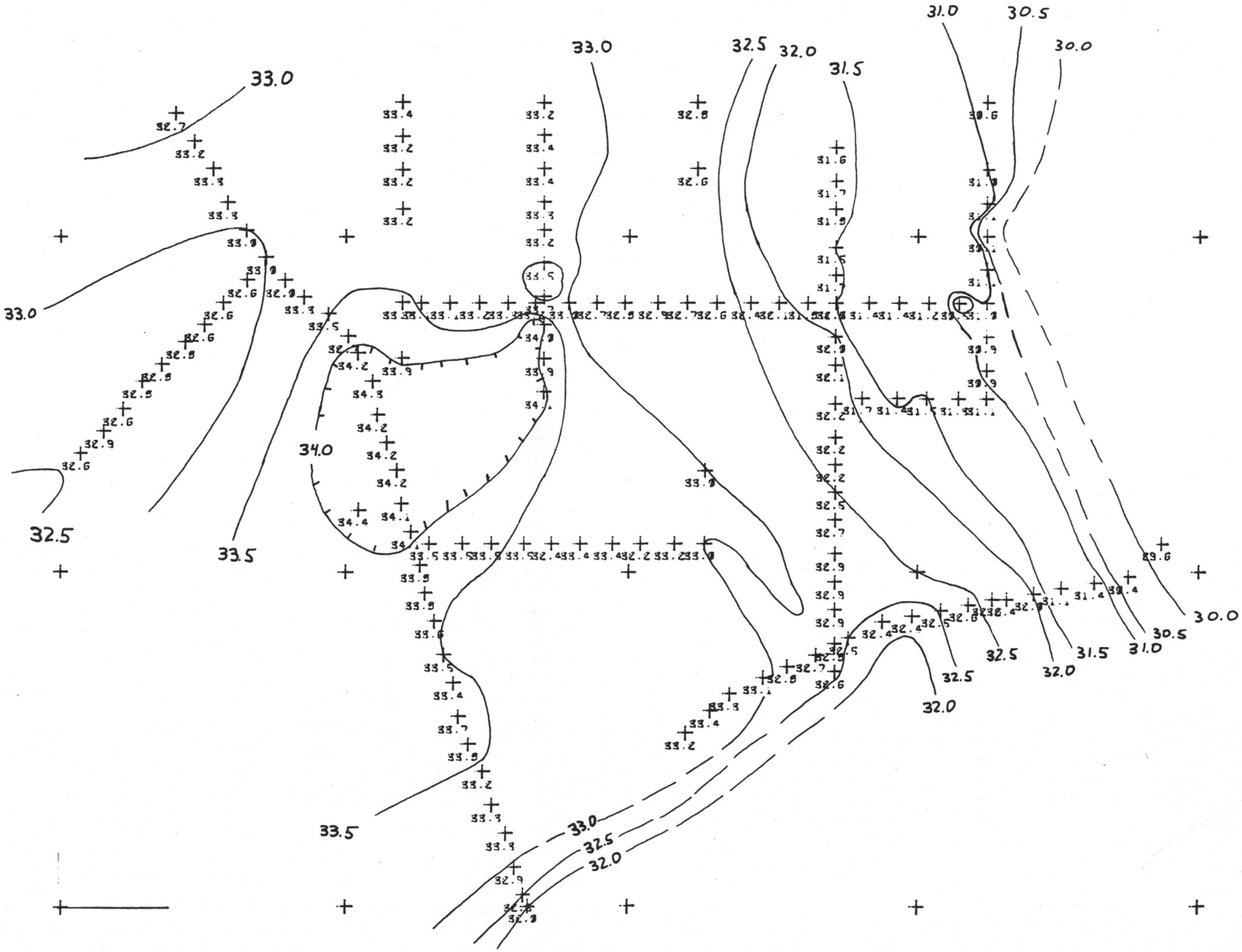
Redman
Prosperity
New Exemption
Contention
Fortworth
Tit for Tat
Fries #1
Fries #2
Dallas
Dan Harper
S. State
Holly
Jenny Lind #2
Galveston #2
Galveston #3
Galveston
Alvin
Wildon
Arizona #3
Howard
Caral Ann
Vivienne #1
Vivienne #3
Vivienne #2
Dog Town
Dog Town Group
Cassandra #4
Cassandra #5
Cassandra #3
Cassandra #2
Cassandra #1
Elvira
Monoclonius #1
Monoclonius #3
Monoclonius #2
Monoclonius #4
Ramada la Plata
Arroyo de la Plata
Ella Mae
Resolution
Peak 2
Fox 9
Utah Group.
original location posting,
All corners on N.W.
Colorado Group.
Ag ore in this shaft
note:
Wedo #7 - Side lines 75' west of position shown
PLAT MAP. G.G. Edwards
T.8
① 300' B.H.
410' - 126 @ 1.02
680' - 90 @ .72
⑤ 1340
① Depth to Base of Helmet
② Depth to top of ore
③ ore thickness
④ avg. % Cu
⑤ Depth to Bottom of hole
(Kenyon Richards?)

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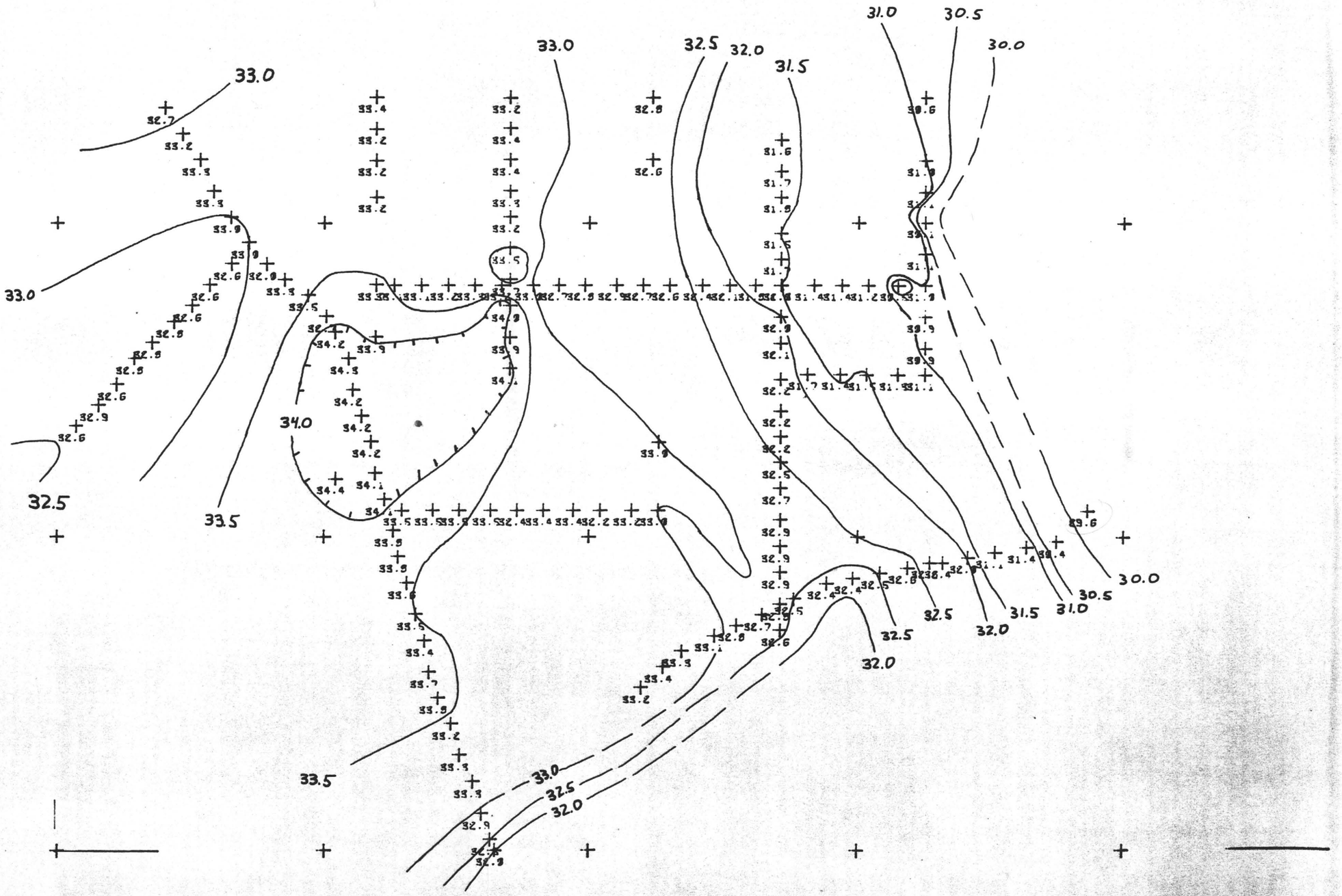
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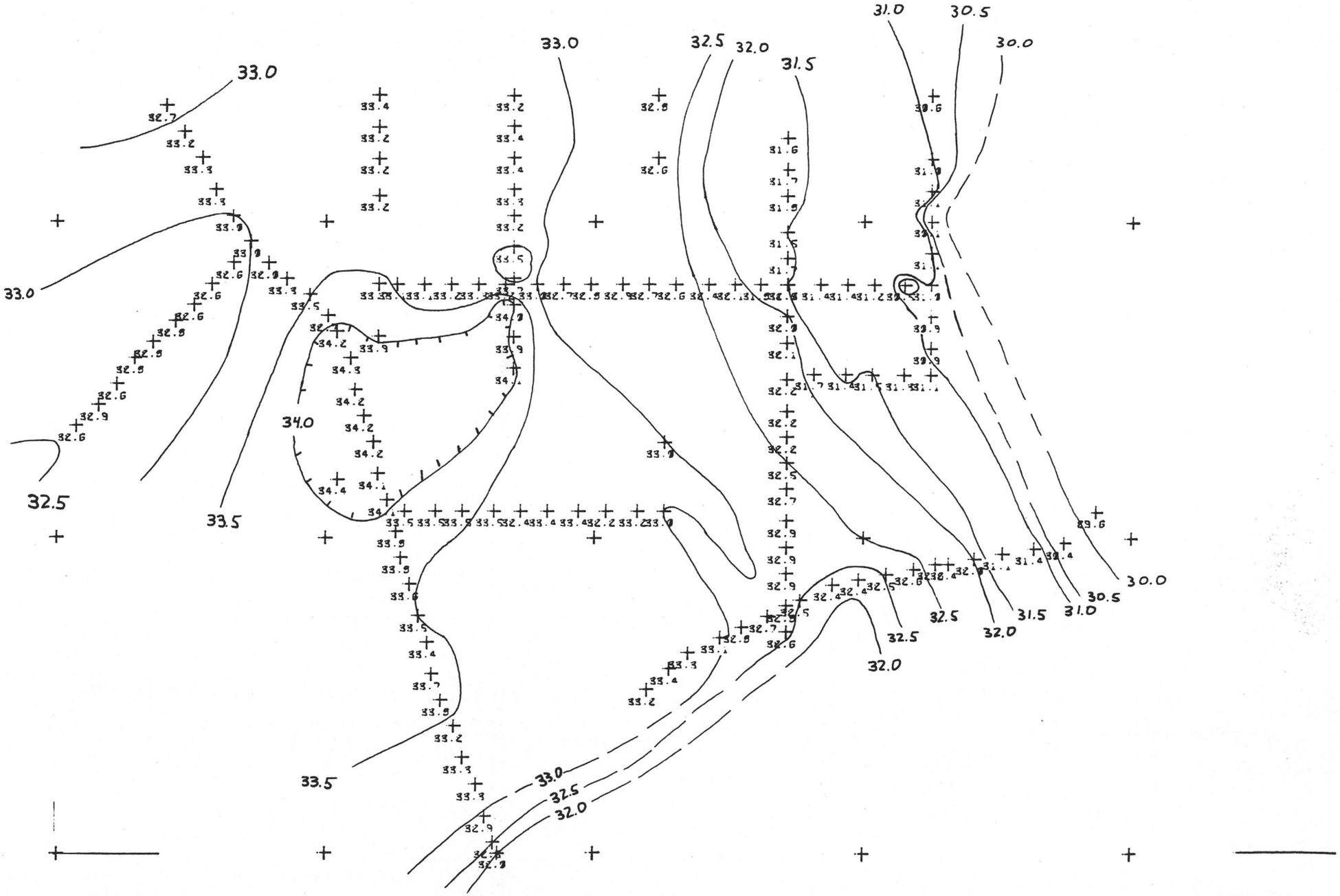
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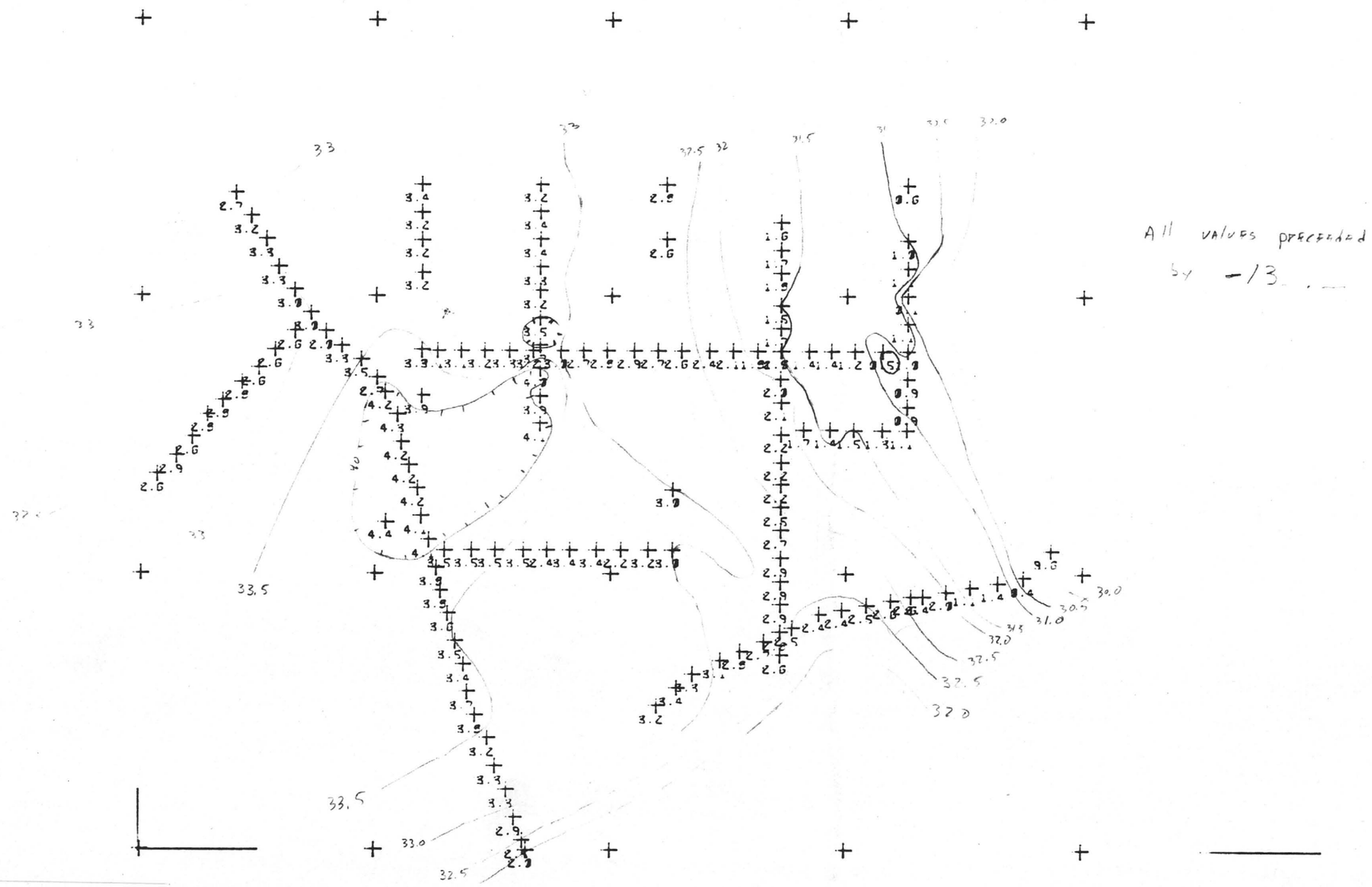

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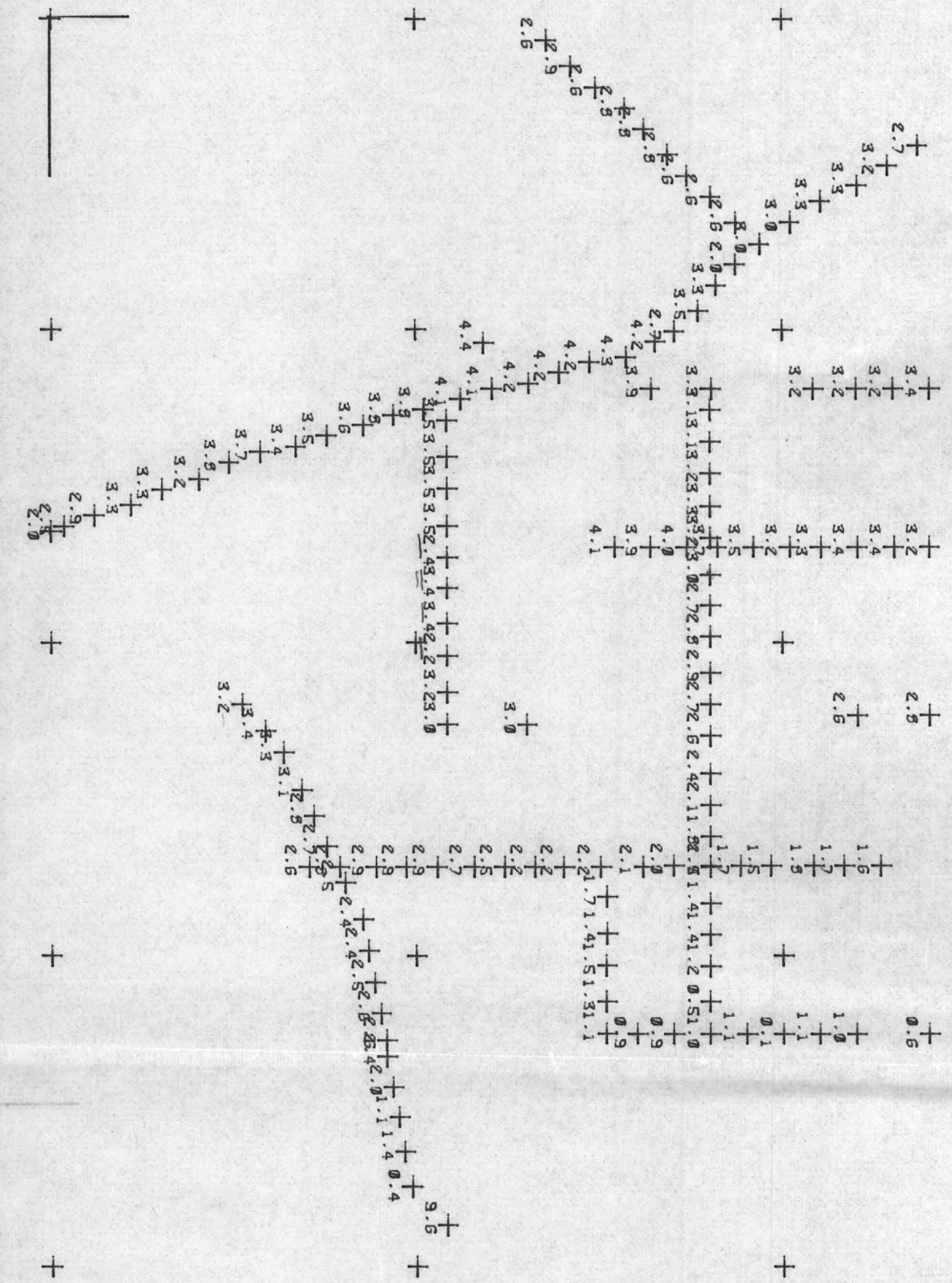


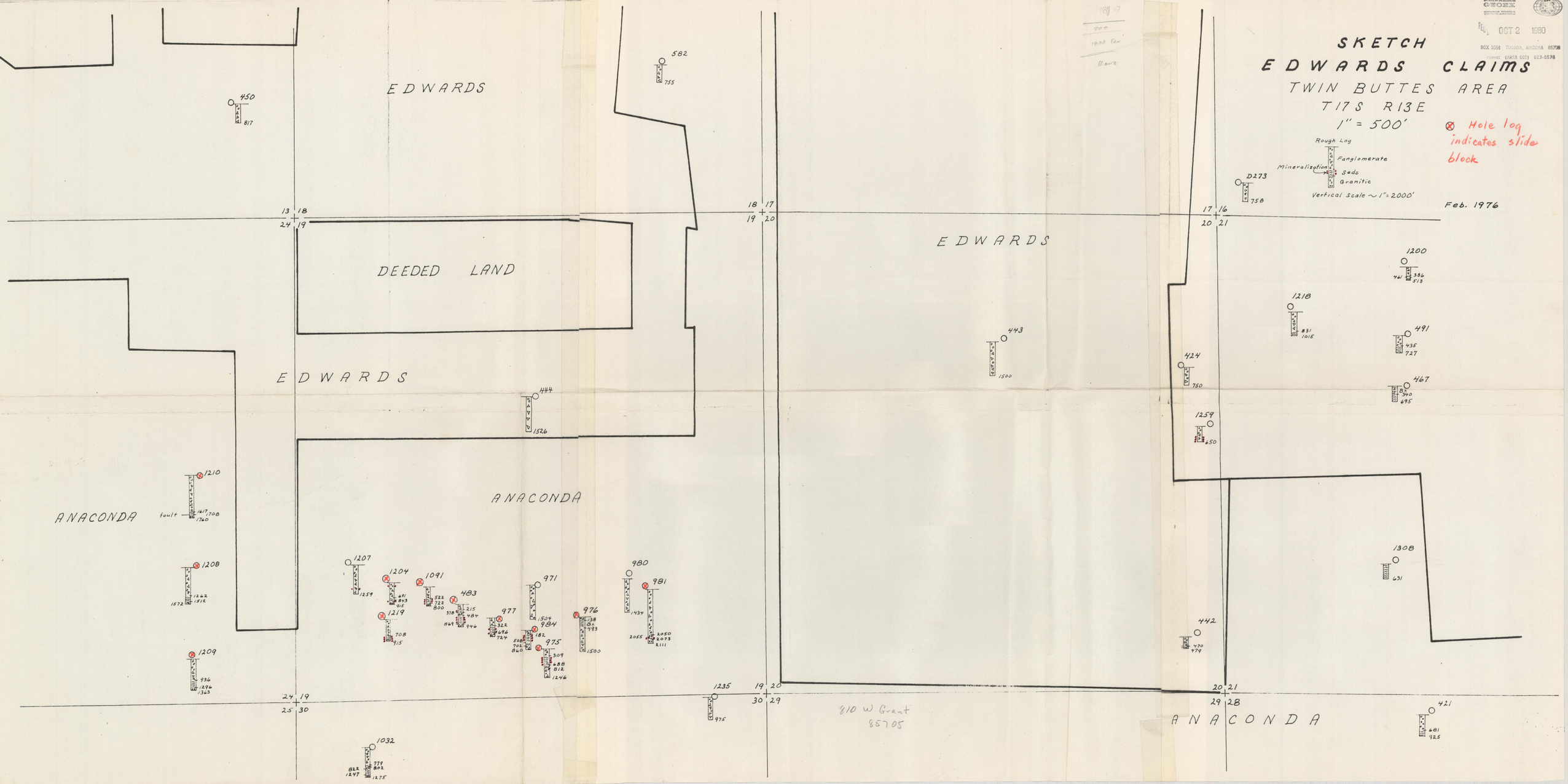
SKETCH
EDWARDS CLAIMS
TWIN BUTTES AREA
T17S R13E

1" = 500'

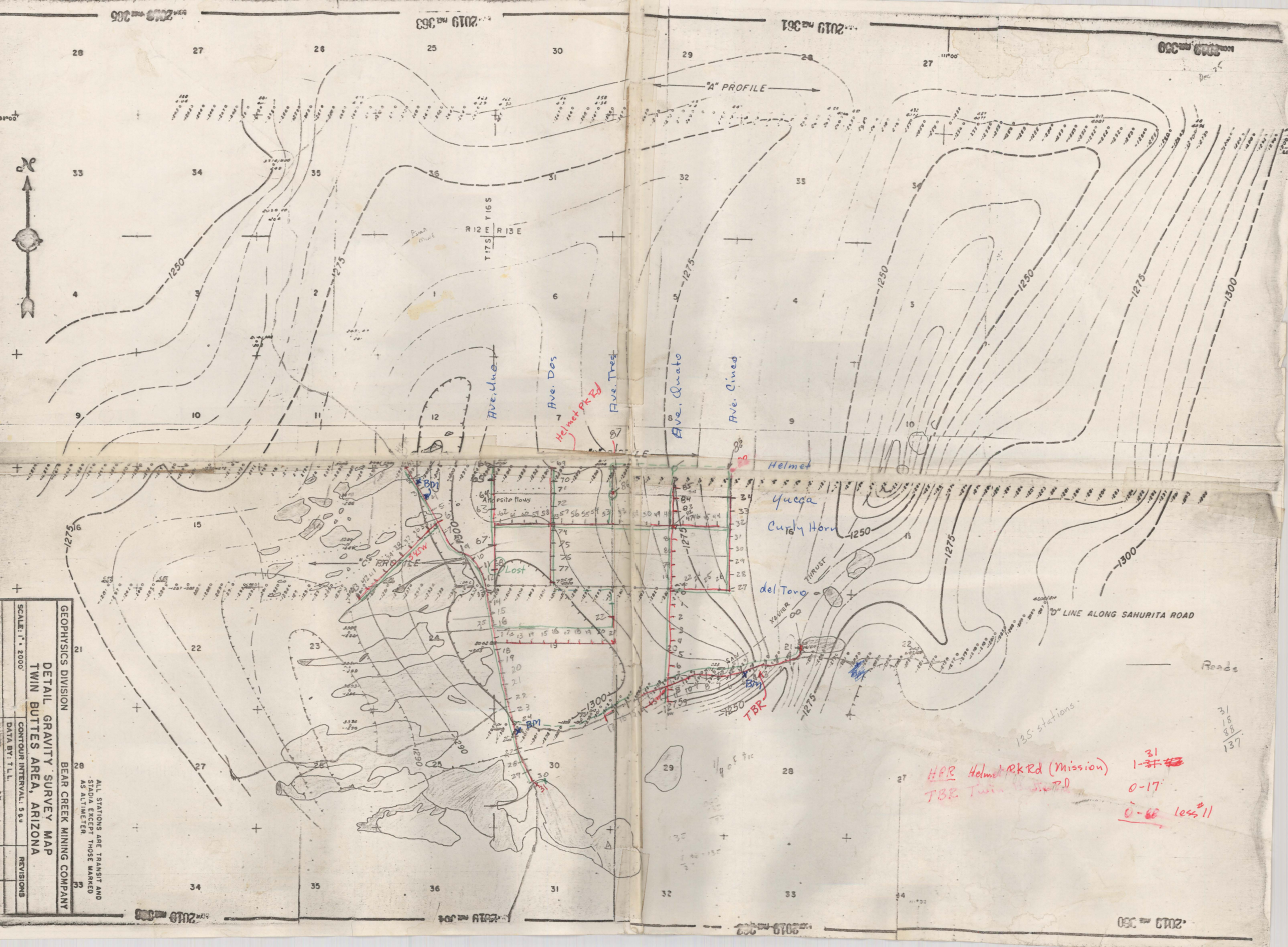
⊗ Hole log indicates slide block

Rough Log
Fanglomerate
Mineralization
Seds
Granitic
Vertical Scale ~ 1" = 2000'

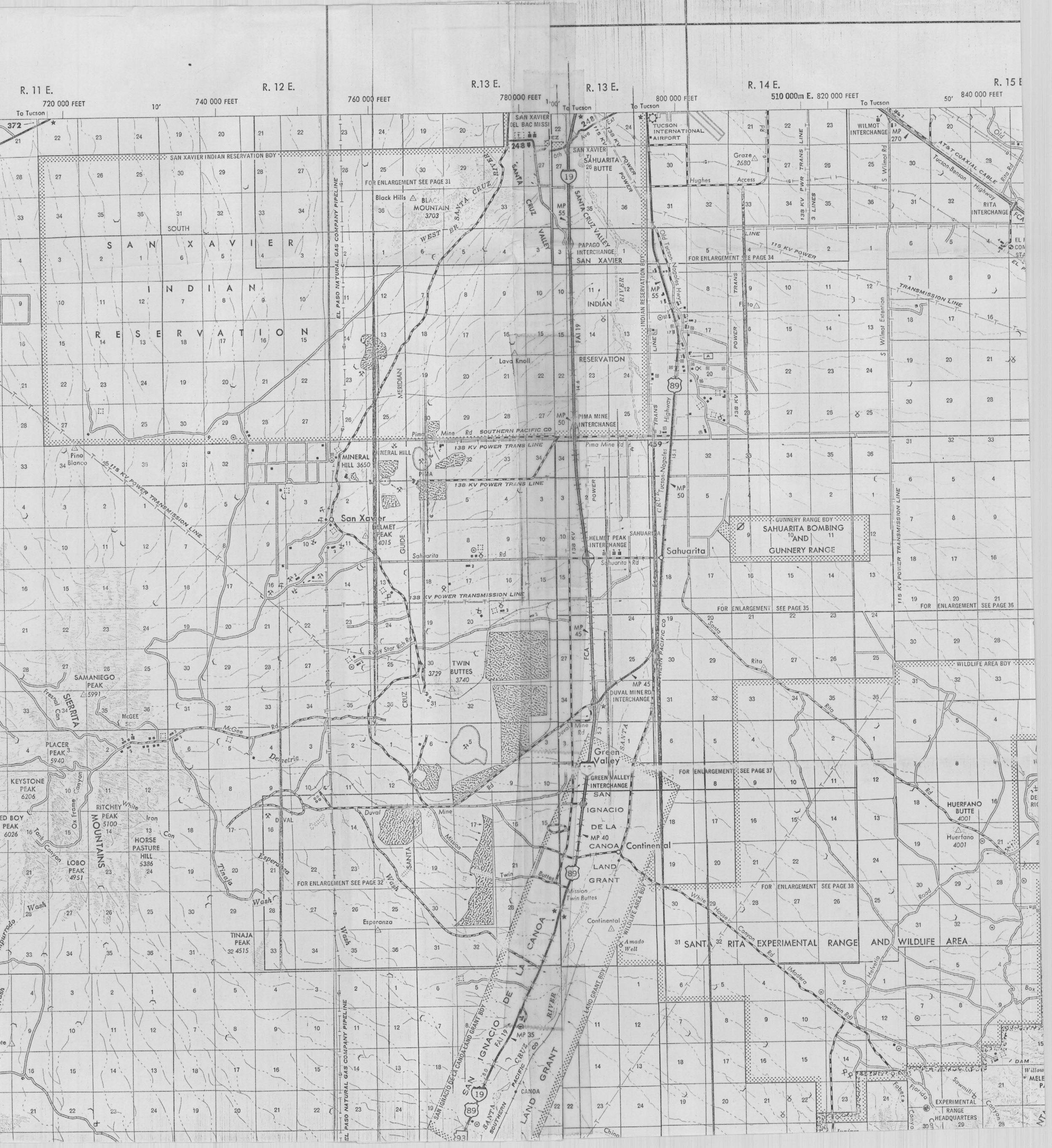
Feb. 1976



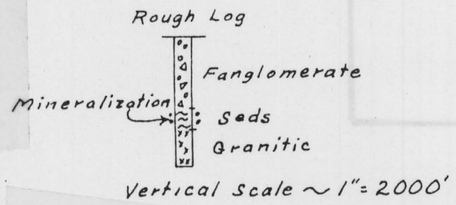
OCT 2 1980
BOX 5994 TUCSON, ARIZONA 85703
PHONE: (AREA 602) 623-0578



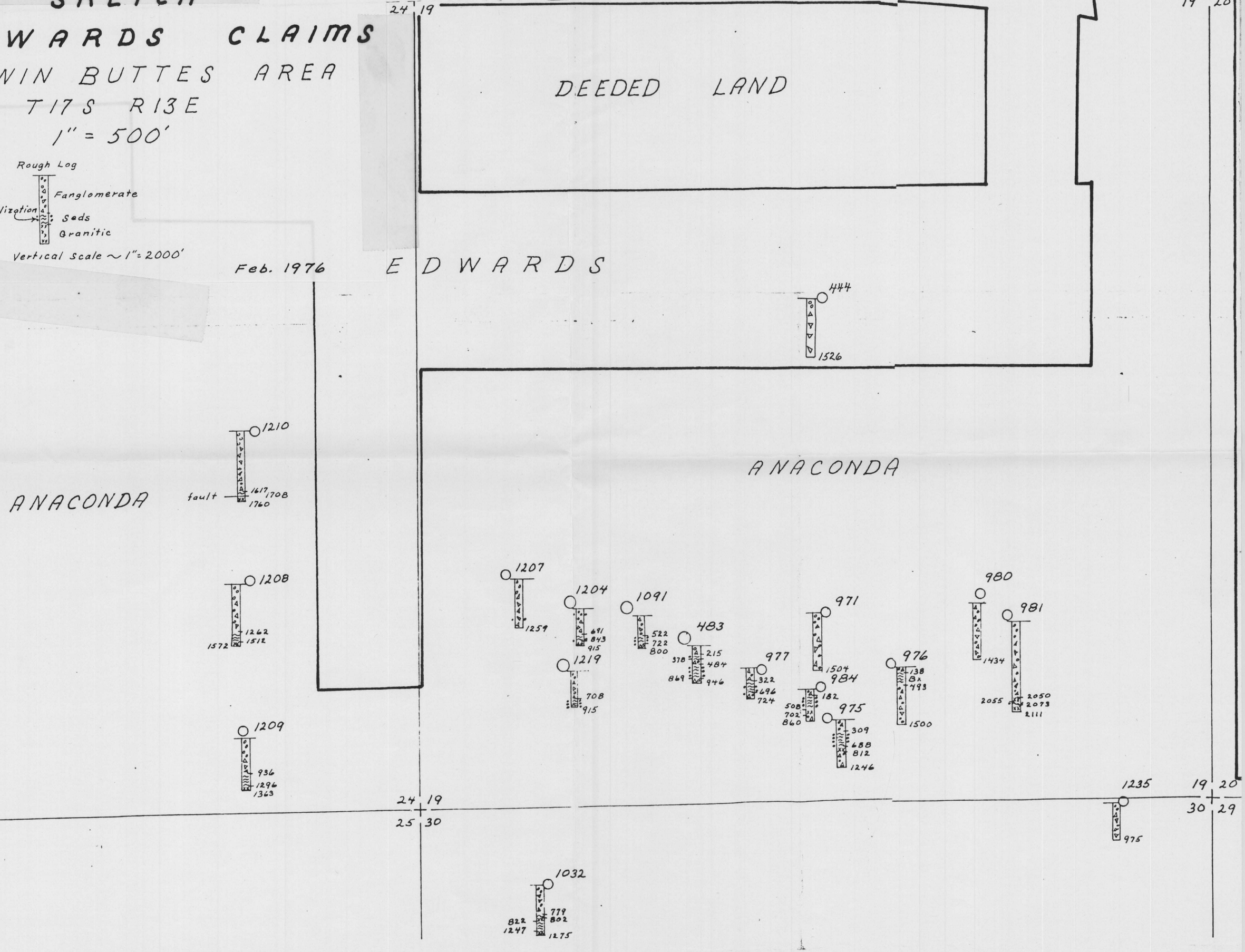
"A" PROFILE
"C" PROFILE
"D" LINE ALONG SAHURITA ROAD
R 12 E
R 13 E
T 16 S
T 17 S
Ave. Uno
Ave. Dos
Ave. Tres
Ave. Quato
Ave. Cinco
Helmet Pk Rd
Helmet
Yucca
Curly Horn
del Toro
Andesite flows
Lost
BM
TBR
Roads
135 stations
HPR Helmet Pk Rd (Mission)
TBR Twin Buttes Rd
1-31
0-17
0-88 less #11
31
18
88
137
GEOPHYSICS DIVISION
BEAR CREEK MINING COMPANY
DETAIL GRAVITY SURVEY MAP
TWIN BUTTES AREA, ARIZONA
SCALE: 1" = 2000'
CONTOUR INTERVAL: 5 gu
DATA BY: T.L.L.
REVISIONS
ALL STATIONS ARE TRANSIT AND STADIA EXCEPT THOSE MARKED AS ALTIMETER


R. 11 E.
R. 12 E.
R. 13 E.
R. 13 E.
R. 14 E.
R. 15 E
720 000 FEET
740 000 FEET
760 000 FEET
780 000 FEET
800 000 FEET
510 000m E.
820 000 FEET
840 000 FEET
To Tucson
SAN XAVIER INDIAN RESERVATION BDY
SOUTH
SAN XAVIER
INDIAN
RESERVATION
FOR ENLARGEMENT SEE PAGE 31
Black Hills
BLACK MOUNTAIN 3703
WEST BR SANTA CRUZ RIVER
SANTA CRUZ VALLEY
SAN XAVIER DEL BAC MISSI
SAHUARITA BUTTE
TUCSON INTERNATIONAL AIRPORT
WILMOT INTERCHANGE
MP 270
AT&T COAXIAL CABLE
Tucson-Benson Highway
RITA INTERCHANGE
PAPAGO INTERCHANGE
SAN XAVIER
Old Tucson-Nogales Hwy
115 KV POWER TRANSMISSION LINE
138 KV POWER TRANS LINE
FOR ENLARGEMENT SEE PAGE 34
Graze 2680
Hughes Access
S Wilmot Rd
S Wilmot Extension
Rita Rd
EL PASO NATURAL GAS COMPANY PIPELINE
INDIAN RESERVATION BDY
Lava Knoll
MERIDIAN
PIMA MINE INTERCHANGE
Pima Mine Rd
SOUTHERN PACIFIC CO
MINERAL HILL 3650
Pino Blanco
San Xavier
HELMET PEAK 4015
HELMET PEAK INTERCHANGE
Sahuarita
GUNNERY RANGE BDY
SAHUARITA BOMBING AND GUNNERY RANGE
138 KV POWER TRANSMISSION LINE
FOR ENLARGEMENT SEE PAGE 35
FOR ENLARGEMENT SEE PAGE 36
115 KV POWER TRANSMISSION LINE
Rocky Star Rch Rd
TWIN BUTTES 3740
SAMANIEGO PEAK 5991
SIERRITA MOUNTAINS
McGEE SCH
McGee Rd
PLACER PEAK 5940
Demetrie Rd
KEYSTONE PEAK 6206
RITCHEY PEAK 5100
HORSE PASTURE HILL 5386
LOBO PEAK 4951
Tinaja Wash
Esperanza Wash
FOR ENLARGEMENT SEE PAGE 32
TINAJA PEAK 4515
Esperanza
Duval Mine Rd
DUVAL MINE RD INTERCHANGE
Green Valley
GREEN VALLEY INTERCHANGE
FOR ENLARGEMENT SEE PAGE 37
SAN IGNACIO DE LA CANOA LAND GRANT
Continental
Mission Twin Buttes
Amado Well
WILDLIFE AREA BDY
FOR ENLARGEMENT SEE PAGE 38
SANTA RITA EXPERIMENTAL RANGE AND WILDLIFE AREA
White House Canyon Rd
Madera Canyon Rd
Helvetia
HUERFANO BUTTE 4001
Huerfano Road
Florida Canyon
Sawmill Canyon
EXPERIMENTAL RANGE HEADQUARTERS
LAND GRANT BDY
SAN IGNACIO DE LA CANOA LAND GRANT BDY
MP 35
CANOA
SOUTHERN PACIFIC CO
EL PASO NATURAL GAS COMPANY PIPELINE
Chino
WILDLIFE AREA BDY

SKETCH
EDWARDS CLAIMS
TWIN BUTTES AREA
T17S R13E
1" = 500'



Feb. 1976



SKETCH

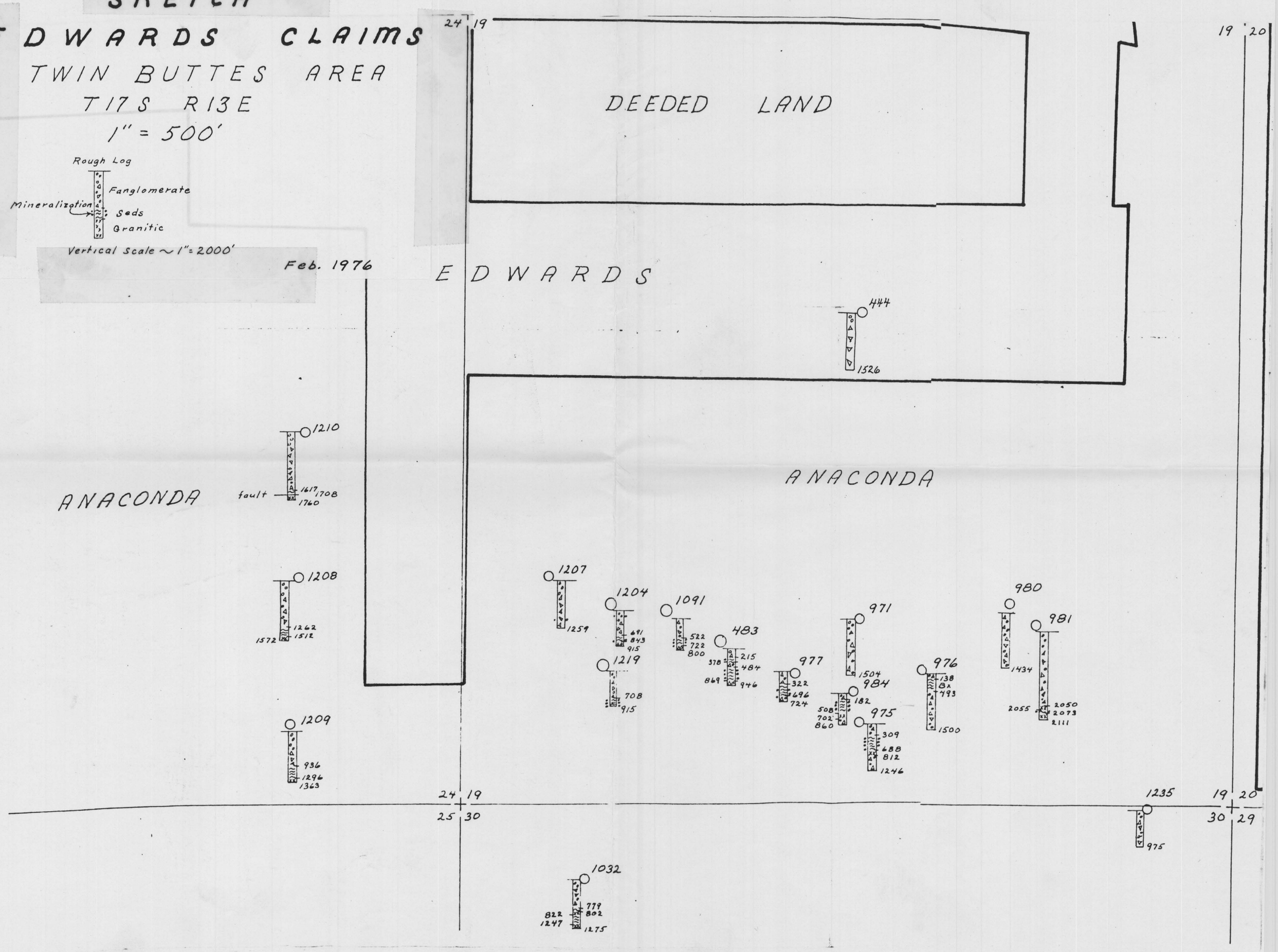
EDWARDS CLAIMS

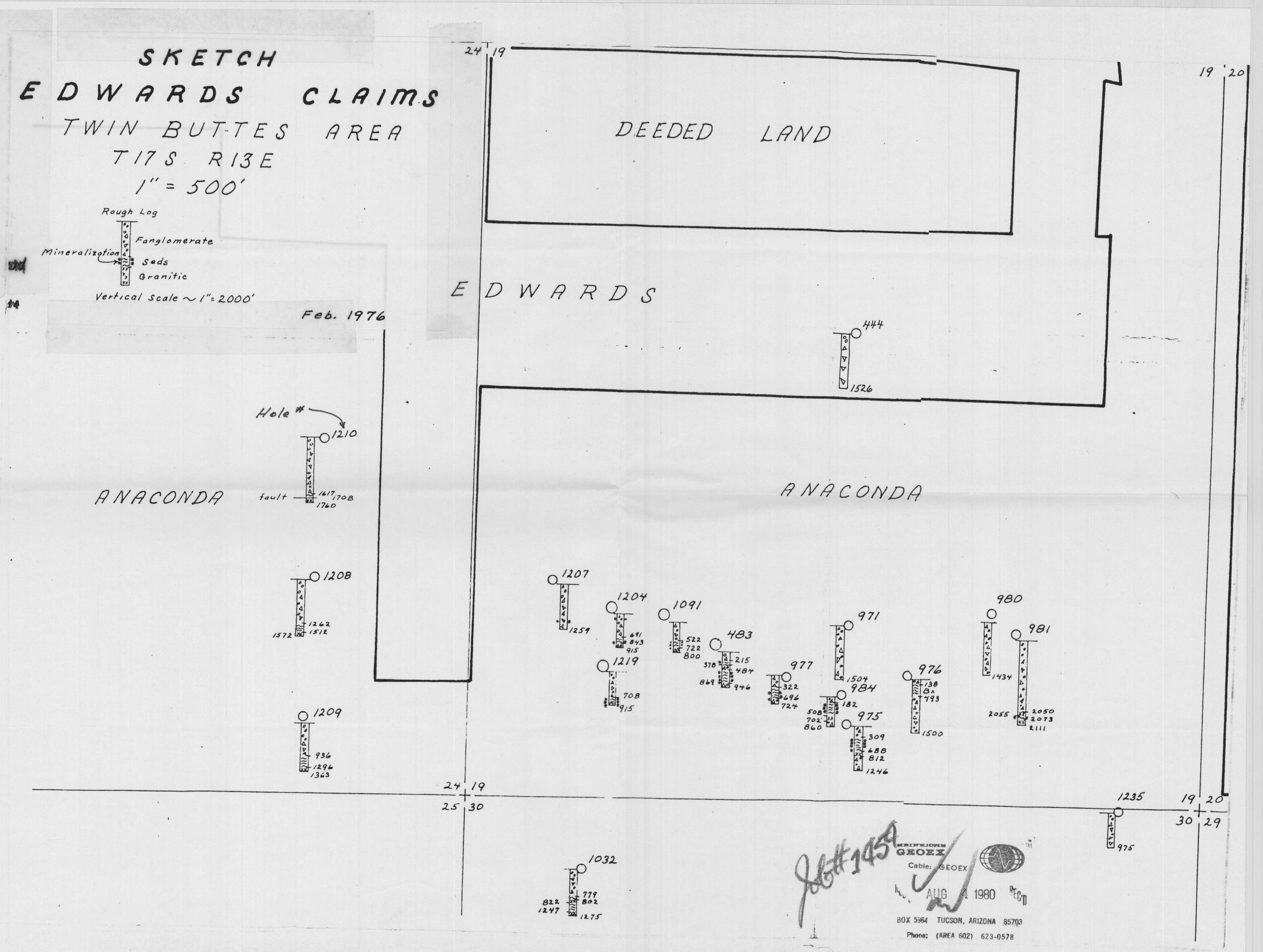
TWIN BUTTES AREA

T17S R13E

1" = 500'

Feb. 1976




SKETCH
EDWARDS CLAIMS
TWIN BUTTES AREA
T17S R13E
1" = 500'
Rough Log
Fanglomerate
Mineralization
Seds
Granitic
Vertical Scale ~ 1" = 2000'
Feb. 1976
DEEDED LAND
EDWARDS
ANACONDA
ANACONDA
Hole #
fault
1210
1617
1708
1760
1208
1262
1512
1572
1209
936
1296
1363
1207
1259
1204
691
843
915
1219
708
915
1091
522
722
800
483
215
378
484
869
946
977
322
696
724
971
1504
984
182
508
702
860
975
309
688
812
1246
976
138
Bx
493
1500
980
1434
981
2055
2050
2073
2111
1235
975
1032
779
802
822
1247
1275
444
1526
24 19
25 30
19 20
30 29
Job #1454
GEOEX
Cable: GEOEX
AUG 4 1980
BOX 5964 TUCSON, ARIZONA 85703
Phone: (AREA 602) 623-0578

SKETCH

EDWARDS CLAIMS

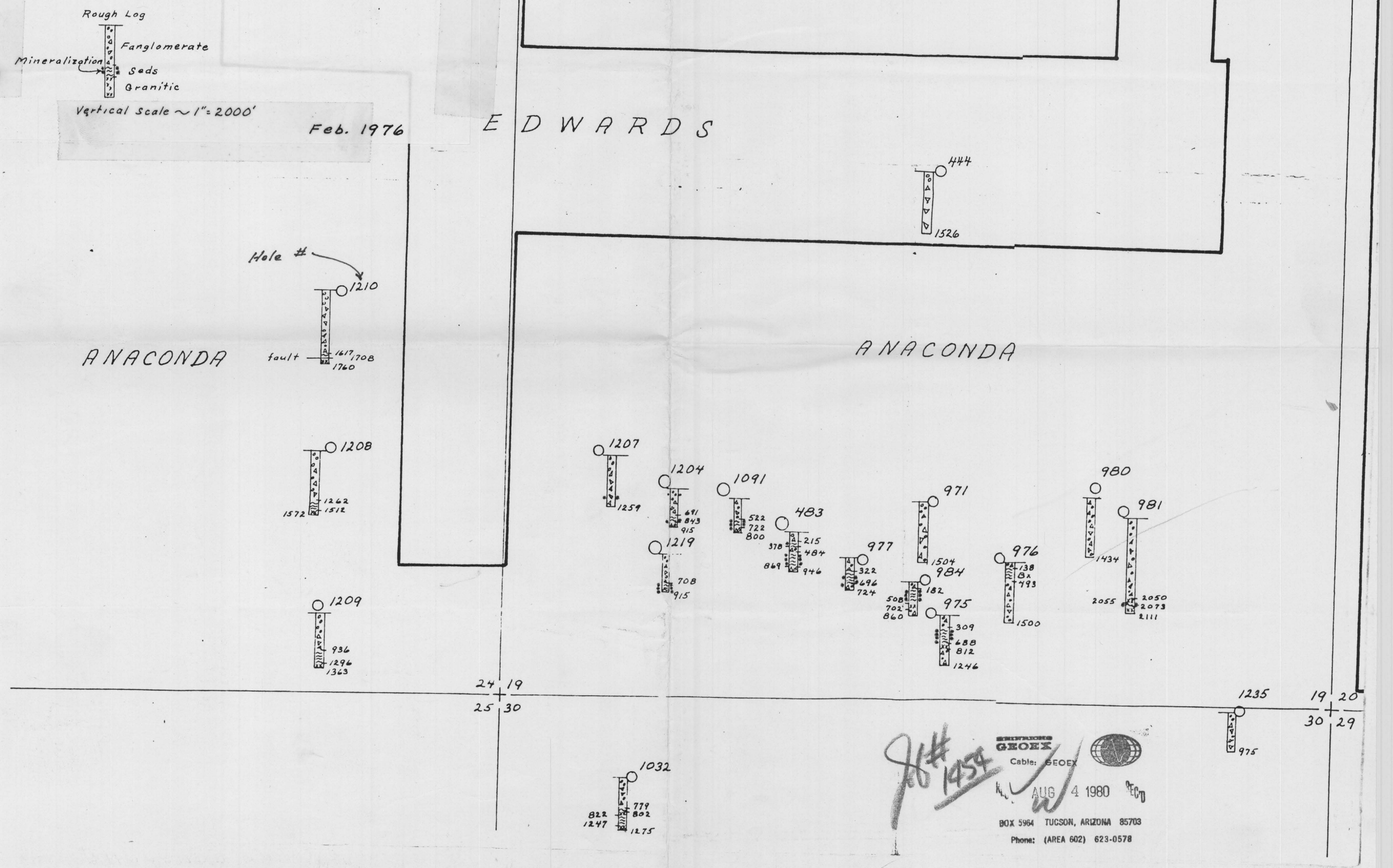
TWIN BUTTES AREA

T17S R13E

1" = 500'

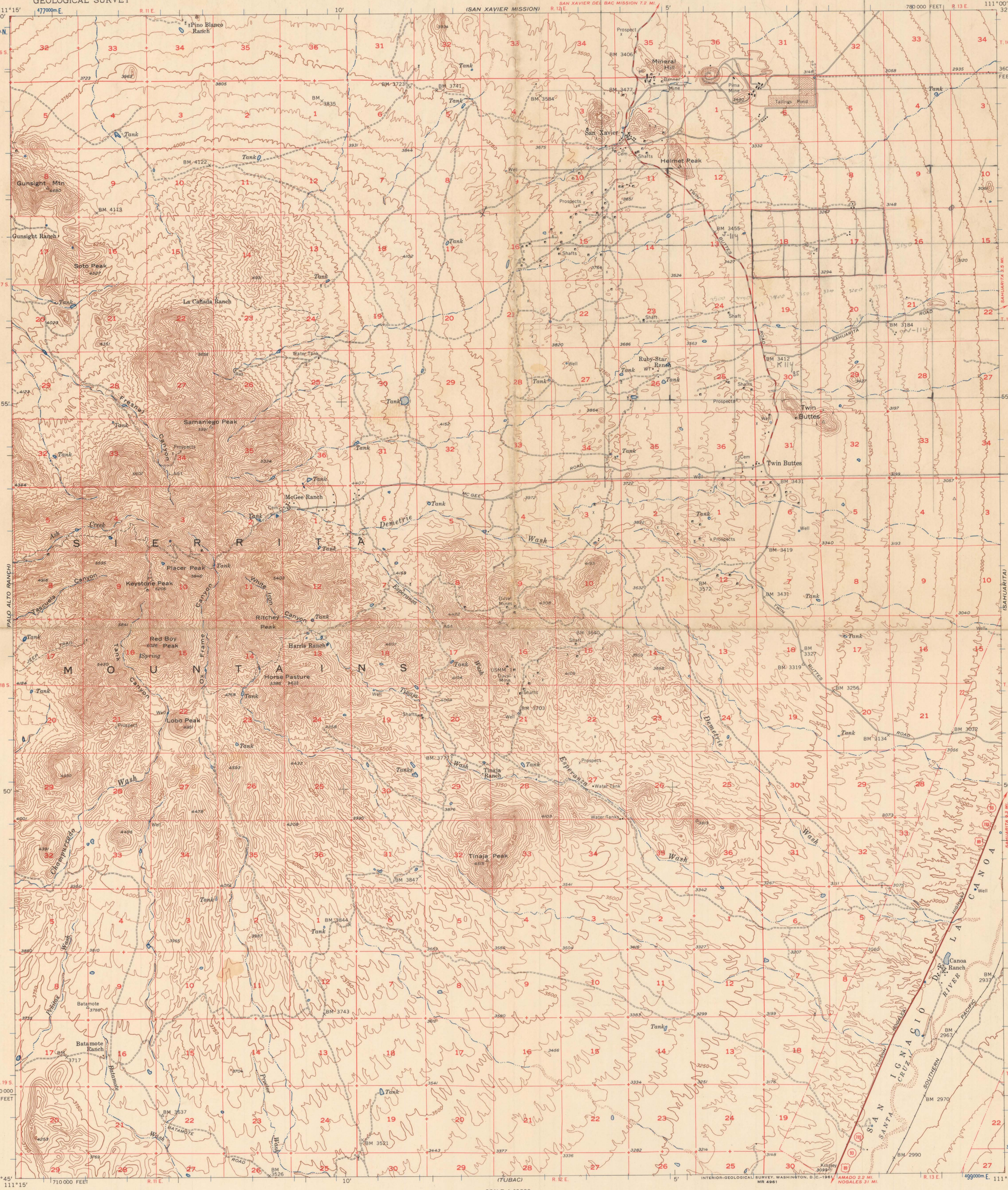
Vertical Scale ~ 1" = 2000'

Feb. 1976



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

TWIN BUTTES QUADRANGLE
ARIZONA—PIMA CO.
15 MINUTE SERIES (TOPOGRAPHIC)



Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, and USCE

Topography by planetable surveys 1938–39
Culture revision and field check 1957

Polyconic projection. 1927 North American datum
10,000-foot grid based on Arizona coordinate system, central zone
1000-meter Universal Transverse Mercator grid ticks, zone 12, shown in blue

13°
TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1957

SCALE 1:62500

1 ½ 0 1 2 3 4 MILES

3000 0 3000 6000 9000 12000 15000 18000 21000 FEET

1 .5 0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 50 FEET
DATUM IS MEAN SEA LEVEL

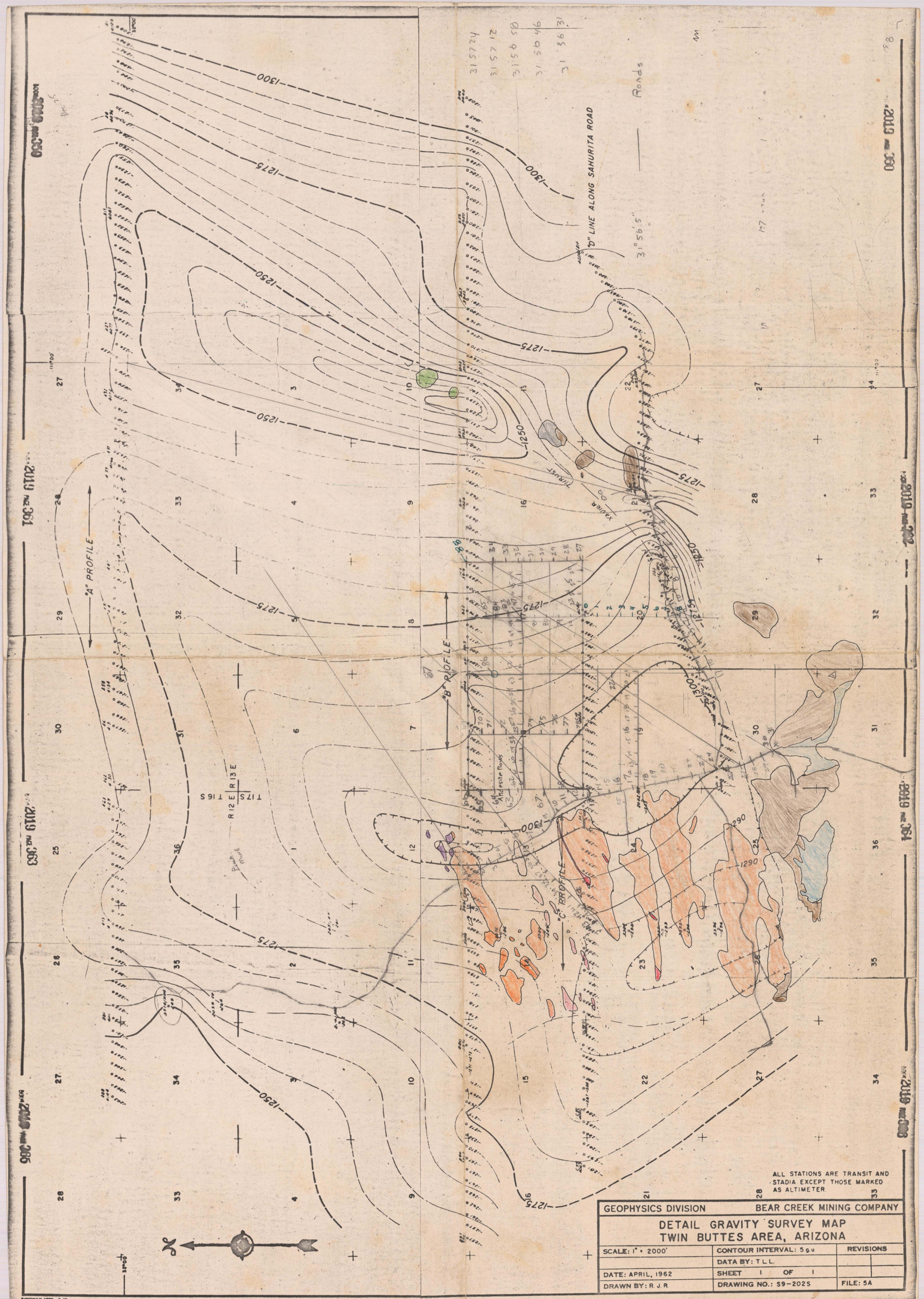
ARIZONA
QUADRANGLE LOCATION

ROAD CLASSIFICATION
Heavy-duty — Light-duty
Unimproved dirt
U. S. Route — State Route

TWIN BUTTES, ARIZ.
N3145—W11100/15

1957

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



ALL STATIONS ARE TRANSIT AND STADIA EXCEPT THOSE MARKED AS ALTIMETER.

GEOPHYSICS DIVISION	BEAR CREEK MINING COMPANY	
DETAIL GRAVITY SURVEY MAP TWIN BUTTES AREA, ARIZONA		
SCALE: 1" = 2000'	CONTOUR INTERVAL: 5 g.u.	REVISIONS
	DATA BY: T.L.L.	
DATE: APRIL, 1962	SHEET 1 OF 1	
DRAWN BY: R.J.R.	DRAWING NO.: S9-202S	FILE: 5A