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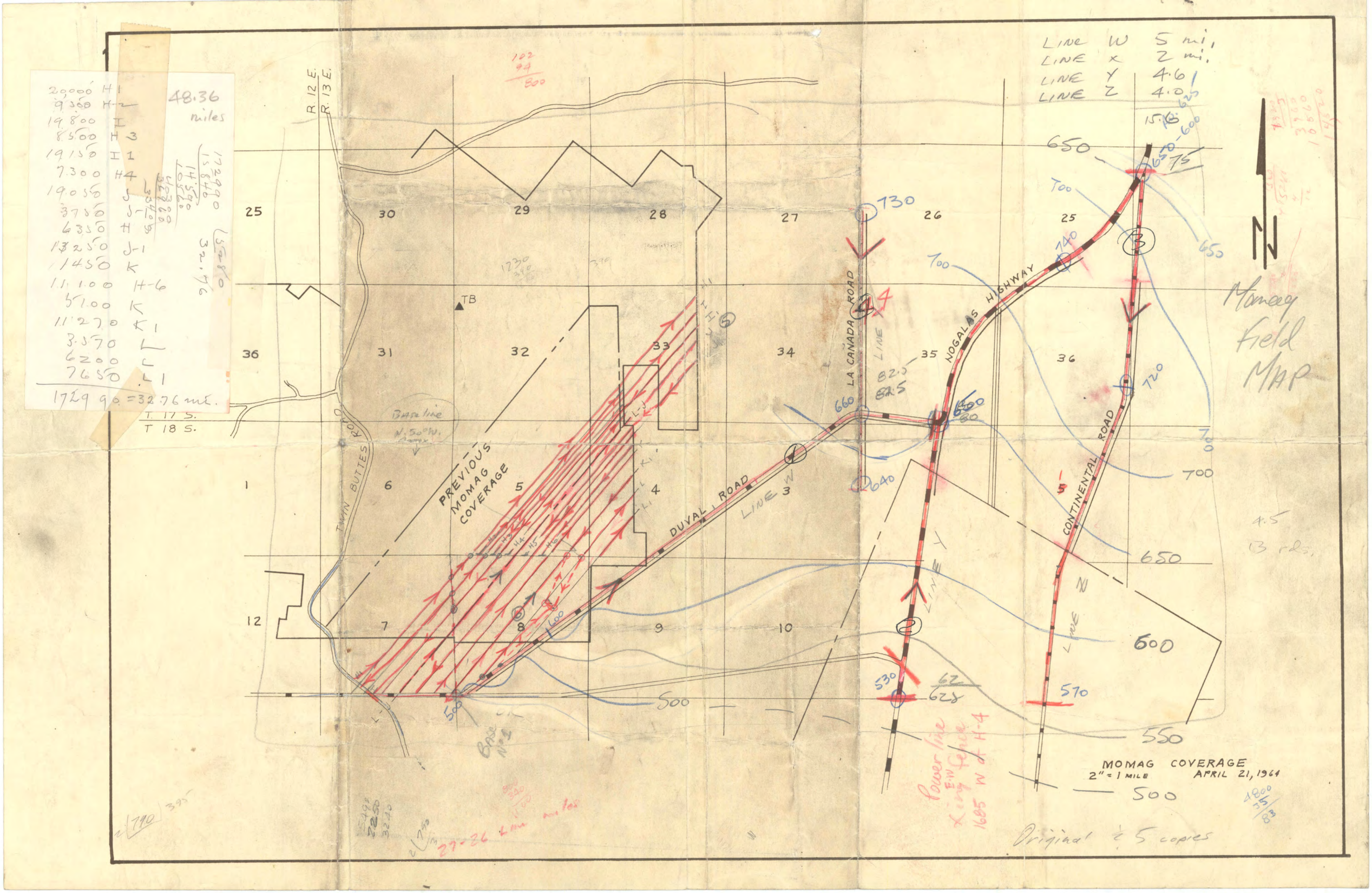

LINE W 5 mi.
LINE X 2 mi.
LINE Y 4.6
LINE Z 4.0
20000 H1
9500 H-2
19800 I
8500 H3
19150 I1
7300 H4
19050 J
3750 J-1
6350 H5
13250 J-1
1450 K
11100 H-6
5100 K
11270 K1
3570 L
6200 L
7650 L1
172990 = 32.76 mi.
48.36 miles
R. 12 E.
R. 13 E.
T. 17 S.
T 18 S.
TB
PREVIOUS MOMAG COVERAGE
TWIN BUTTES ROAD
DUVAL ROAD
LA CAÑADA ROAD
NOGALES HIGHWAY
CONTINENTAL ROAD
LINE W
LINE Y
LINE Z
Base line
Power line
Xing fence
1685 W of H-4
Mamag Field MAP
MOMAG COVERAGE
2" = 1 MILE
APRIL 21, 1964
Original & 5 copies

5280
3
15840
1320
14520

8740
2640
11380

R12E

T 16 S

T 17 S

LINE 1
LINE 2
LINE 3
LINE 4
LINE 5
LINE 6
LINE 7
LINE 8
LINE 9
LINE 10
LINE 11
LINE 12
LINE 13
LINE 14
LINE 15
LINE 16
LINE 17
LINE 18
LINE 19
LINE 20
LINE 21
LINE 22

34
35
36
3
2
1
10
11
12

Quarry Pit
Slag Area
Tailings Area
Banner Mine
San Xavier Mine
Indexes
TWIN BUTTES ROAD

N

HEINRICHS GEOEXPLORATION COMPANY
P.O. Box 5671 Tucson, Arizona

MAGNETIC CONTOUR MAP
FOR
THE ANACONDA COMPANY

MINERAL HILL AREA
PIMA COUNTY, ARIZONA

SCALE: 1" = 500'	CONTOUR INTERVAL:	REVISIONS
	DATA BY: J.W.M.	
DATE: March 1963	SHEET 1 OF 4	
DRAWN BY: i.b.	DRAWING NO.: 1	FILE:

16/7/63

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STA	+	H.I.	-	ELEV	REMARKS
95+00	7.13	23.21	5.46	17.75	
90+00	1.20	18.95	11.40	07.55	
85+00	4.92	12.47	11.98	00.49	
	12.64	13.13	0.60	12.53	
80+00	7.74	20.27	3.69	16.58	
75+00	8.51	25.09	5.14	19.95	
70+00	1.28	21.23	2.29	18.94	
65+00	7.30	26.24	10.57	15.67	
60+00	6.91	23.58	2.81	19.77	
55+00	6.69	26.46	10.79	15.67	
50+00	8.00	23.67	1.22	22.45	
45+00	5.97	28.42	4.25	24.17	
40+00	6.91	31.08	9.97	21.11	
35+00	8.51	29.62	1.71	27.91	
30+00	5.53	33.44	7.86	25.58	
25+00	6.40	31.98	4.70	27.28	
20+00	3.62	30.90	11.11	19.79	
	5.15	24.94	6.28	18.66	
15+00	4.41	23.07	6.05	17.02	
10+00	6.77	23.79	6.45	17.34	
5+00	5.87	23.21	8.74	14.47	
	0.20	14.67	11.81	2.86	
C-O	3.32	6.18	11.62	94.56	
			10.2	95.97	
				3195.97	
	12.90	08.87	2.23	6.64	
	7.80	14.44	0.41	14.03	
	12.46	26.49	0.26	26.23	
	9.37	35.60	1.55	34.05	

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8.14	42.19	5.30	36.89	
7.06	43.95	2.52	41.43	

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ANACONDA		TWIN BUTTES				
STA	+	H.I	-	ELEV		
F-00	9.44	3250.49	11.12	3239.37	Bm	F-00
			2.55	47.94	3241	05
5+00	6.20	54.14	11.01	43.13		
	12.94	56.07	2.22	53.85		
10+00	5.34	59.19	2.55	56.64		
15+00	5.30	61.94	0.71	61.23		
20+00	8.10	69.33	11.90	57.43		
25+00	6.42	63.85	4.10	59.75		
30+00	11.26	71.01	5.02	65.99		
35+00	4.76	70.75	8.13	62.62		
40+00	3.17	65.79	12.57	53.22		
	12.65	65.87	4.78	61.09		
45+00	2.64	63.73	4.94	58.79		
50+00	3.21	62.00	1.66	60.34		
	3.80	64.14	10.40	53.74		
55+00	5.60	59.34	3.94	55.40		
	0.52	55.92	7.83	48.09		
60+00	5.20	53.29	4.27	49.02		
65+00	12.07	61.09	1.75	59.34		
70+00	5.43	64.77	6.70	58.07		
	5.39	63.46	5.98	57.48		
75+00	6.69	64.17	6.26	57.91		
80+00	12.86	70.77	10.40	60.37		
85+00	0.75	61.12	5.68	55.44		
	4.58	60.02	12.67	47.35		
90+00	3.64	50.99	6.89	44.10		
95+00	8.20	52.30	4.24	48.06		
100+00	1.67	49.73	10.55	39.18		
	7.88	47.06	4.38	42.68		
105+00	6.29	48.97	5.69	43.28		

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ANACONDA STA	+	TWIN BUTTES H-I.	−	ELEV	REMARKS
"F"	10.43	53.71	5.61	48.10	
110+00	6.21	54.31	6.04	48.27	
115+00	7.46	55.73	4.77	50.96	
120+00	8.14	59.10	12.26	46.84	
125+00	8.84	55.68	4.72	50.96	END OF
130+00	3.25	54.21	7.38	46.83	"F" LINE
135+00	7.36	54.19	5.47	48.72	
F 135				48.72	
	2.01	50.73	11.96	38.77	
	1.43	40.20	10.97	29.23	
	0.55	29.78	12.60	17.18	
G 135	4.12	21.30	7.48	13.82	
G 135				3213.82	
130+00	4.50	18.32	4.91	13.41	
125+00	6.68	20.09	7.03	13.06	
	9.84	22.90	9.53	13.37	
120+00	5.64	19.01	4.89	14.12	
115+00	6.57	20.69	3.14	17.55	
110+00	1.93	19.48	5.88	13.60	
105+00	4.41	18.01	5.80	12.21	
100+00	1.08	13.29	9.31	04.98	
	12.28	17.26	1.18	16.08	

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(H)

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ANACONDA TWIN BUTTES

STA.	+	H.I.	−	ELEV	REMARKS
F-0	9.45	3250.50	11.12	3239.38	BEGINNING
			4.08	3246.42	OF "F" LINE
5+00	2.55	48.97	5.85	43.12	B.M. 3241.05
	13.08	56.20	5.72	50.48	
10+00	10.19	60.67	4.07	56.60	
15+00	5.20	61.80	0.60	61.20	
20+00	8.30	69.50	12.10	57.40	
	7.13	64.53	4.15	60.38	
25+00	5.13	65.51	5.78	59.73	
30+00	11.04	70.77	4.80	65.97	
35+00	2.72	68.69	6.09	62.60	
40+00	3.61	66.21	13.02	53.19	
	13.14	66.33	5.34	60.99	
45+00	3.19	64.18	5.48	58.70	STAKE WAS OUT
50+00	3.66	62.36	2.11	60.25	
	2.01	62.26	7.59	54.67	
55+00	6.13	60.80	5.46	55.34	
	5.07	60.41	11.77	48.64	
60+00	4.87	53.51	3.56	49.95	
65+00	11.40	61.35	1.08	60.27	
70+00	4.09	64.36	5.38	58.98	
75+00	5.03	64.01	5.20	58.81	
80+00	13.84	72.65	11.42	61.23	
85+00	1.34	62.57	6.30	56.27	
	4.50	60.77	11.79	48.98	
90+00	1.96	50.94	5.98	44.96	
95+00	7.53	52.49	3.56	48.93	
100+00	1.96	50.89	10.84	40.05	
	7.79	47.84	4.52	43.32	
105+00	5.87	49.19	5.03	44.16	

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ANACONDA STA.	+	TWIN BUTTES H.I.	−	ELEV	REMARKS
110+00	8.27	325.43	2.97	32.4946	
115+00	6.48	55.94	3.80	52.14	
120+00	8.00	60.14	12.12	48.02	
125+00	8.88	46.90	4.77	42.13	END OF
130+00	3.13	45.26	7.25	38.01	"F" LINE
F135+00	5.92	43.93	4.06	39.87	
				39.87	
F135+00	0.37	40.24	12.29	27.95	
	0.20	28.15	12.43	15.72	
	1.58	17.30	6.29	11.01	
G135+00	1.44	12.45	7.47	04.98	

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7/10/63

ANACONDA TWIN BUTTES

STA	+	H.I.	−	ELEV	REMARKS
G-O	4.70	104.70	6.12	98.58	B.M. 100.00
			7.89	96.81	IRON PIPE
	5.98	102.79	12.58	90.21	G-O
	3.94	94.15	12.29	81.86	
	1.71	83.57	12.24	71.33	
H-O	1.60	72.93	11.90	61.03	
	11.21	72.24	0.44	71.80	
	11.82	83.62	2.69	80.93	
	10.36	91.29	2.44	88.85	
	10.93	99.78	1.67	98.11	
	7.05	105.16	5.03	100.13	

INST. MAN R. PALMER

ROD J. CONDON

" E. CAMPBELL

REC. F. HEINRICHS

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(1A)

10/7/63

ANACONDA TWIN BUTTES

STA	+	H.I.	−	ELEV	REMARKS
G-O	12.66	112.66	14.08	98.58	B.M 100.00
			0.83	111.83	G-O
5+00	8.68	120.51	2.02	119.49	IRON PIPE
10+00	8.44	126.93	5.61	121.32	↓ ACT.
	5.41	126.73	2.79	123.94	8197.13
15+00	2.91	126.85	5.89	120.96	
			2.58	124.27	
20+00	6.75	131.02	7.24	123.78	
	7.79	131.57	1.63	129.94	
25+00	6.64	136.58	5.36	131.22	
30+00	5.06	136.28	6.78	129.50	
35+00	7.16	136.66	4.85	131.81	
	1.97	133.78	5.58	128.20	
40+00	5.28	133.48	8.42	125.06	
45+00	9.91	134.97	6.85	128.12	
50+00	3.79	131.91	5.45	126.46	
55+00	1.89	128.35	8.67	119.68	
60+00	10.70	130.38	6.65	123.73	
65+00	2.86	126.59	6.90	119.69	
70+00	10.06	129.75	6.79	122.96	
75+00	2.87	125.83	1.84	123.99	
80+00	5.86	129.85	9.22	120.63	11/7/63
	2.78	123.41	6.96	116.45	
85+00	0.38	116.83	12.23	104.60	R PALMER
90+00	11.64	116.24	4.54	111.70	J. CONDON
95+00	10.83	122.53	0.59	121.94	E. CAMPBELL
	1.99	123.93	12.25	111.68	
100+00	3.94	115.62	6.37	109.25	
105+00	10.14	119.39	1.92	117.47	
110+00	5.33	122.80	3.93	118.87	

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(2) (A)

ANACONDA TWIN BUTTES

STA	+	H.I	−	ELEV
"G"	3.71	122.58	4.37	118.21
115+00	8.52	126.73	3.89	122.84
120+00	0.79	123.63	4.21	119.42
	7.80	127.22	5.90	121.31
125+00	4.37	125.69	7.33	118.36
130+00	6.50	124.86	6.13	118.73
135+00	4.44	123.17	4.02	119.15
G135-				119.15
	3.57	122.72	11.16	111.56
	7.29	118.85	4.12	114.73
	2.00	116.73	9.19	107.54
	0.52	108.06	9.59	98.47
	2.29	100.76	10.24	90.52
	0.17	90.69	7.05	83.64
	0.62	84.26	12.26	72.00
H 110	1.61	73.61	7.83	65.78
H 110				65.78
	7.80	73.58	2.50	71.08
105+00	4.66	75.74	5.70	70.04
100+00	6.20	76.24	6.67	69.57
	5.66	75.23	11.11	64.12
95+00	3.50	67.62	8.44	59.18
	12.28	71.46	0.48	70.98

END OF "G" LINE

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(3) (A)

ANACONDA STA	+	H.I	−	TWIN BUTTES ELEV	REMARKS
90+00	9.19	80.17	12.39	67.78	
85+00	8.96	76.74	10.65	66.09	
80+00	11.91	78.00	3.28	74.72	
75+00	5.93	80.65	8.01	72.64	
	6.30	78.94	4.55	74.39	
70+00	6.62	81.01	2.65	78.36	
65+00	6.71	85.07	2.04	83.03	12/7/63
	4.28	87.31	5.08	82.23	
60+00	7.76	89.99	4.32	85.67	
55+00	3.10	88.77	8.68	80.09	
50+00	10.98	91.07	2.27	88.80	
45+00	3.47	92.27	7.96	84.31	
40+00	8.30	92.61	3.10	89.51	
35+00	7.34	98.85	5.91	90.94	
30+00	4.72	95.66	4.55	91.11	
25+00	5.71	96.82	8.85	87.97	
20+00	5.51	93.48	6.96	86.52	
15+00	6.11	92.63	6.57	86.12	
10+00	4.76	90.88	13.42	77.46	END OF
5+00	5.50	82.96	9.13	73.83	
	2.60	76.43	13.16	63.27	"H" LINE
H-0	8.88	72.15	11.01	61.14	
H+0					
	11.01	72.15	0.85	71.30	
	12.44	83.74	0.62	83.12	
	10.59	93.71	0.88	92.83	
	8.20	101.03	1.84	99.19	
G-0	5.97	105.16	4.95	100.21	

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LINE II

STA	+	H.I	−	ELEV	BM	PA-5
0+00	5.96	2856.95	4.32	52.63	#1	
	2.67	55.30	3.16	52.14	2850	99
5+00	6.73	58.87	4.31	54.56		
10+00	6.80	61.36	2.52	58.84		
	4.97	63.81	6.55	57.26		
15+00	5.49	62.75	3.94	58.81		
20+00	3.39	62.20	5.69	56.51		
	12.08	68.59	5.27	63.32		
25+00	5.87	69.19	3.96	65.23		
	5.51	70.74	4.89	65.85		
30+00	3.85	69.70	5.25	64.45		
	4.88	69.33	6.53	62.80		
35+00	6.39	69.19	3.91	65.28		
40+00	8.03	73.31	6.90	66.41		
	8.00	74.41	3.50	70.91		
45+00	3.37	74.28	5.70	68.58		
	9.15	77.73	3.44	74.29		
50+00	8.19	82.48	10.80	71.68		
II 50+00				71.68		
	11.77	83.45	0.34	83.11		
	8.44	91.55	0.09	91.46		
	9.34	2900.80	0.82	99.98		
	12.40	12.38	0.12	2912.26		
I 50+00	6.29	18.55	5.09	13.46		

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I 50+00				29.13.46
45+00	2.92	16.38	7.10	09.28
40+00	2.71	11.99	8.26	03.73
35+00	6.75	10.48	4.70	05.78
30+00	1.92	07.70	6.56	01.14
25+00	8.81	09.95	6.23	03.72
20+00	7.80	11.52	9.32	02.20
15+00	3.61	05.81	5.78	00.03
10+00	4.59	04.62	4.98	99.64
5+00	5.38	05 02	8.29	96.73
I 0+00	3.92	00.65	7.73	92.92
	0.33	92.25	8.17	84.08
	0.41	84.49	12.69	71.80
	0.35	72.15	12.31	59.84
	2.66	62.50	7.48	55.02
	2.59			

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STA	+	H.I.	−	ELEV	REMARKS
SE 119+05 B-O-N				3439.48	18+08 B-O M-LL
M-LL 2+00	4.55	3444.03	5.42	38.61	3439.99 B.M
	0.36	38.97	11.49	27.48	
M-LL 4+00	8.38	35.86	10.62	25.24	
M-LL 6+00			7.04	28.82	3406 B.M.
M-LL 8+00	8+99	37.81	3.83	33.98	34.77 B.M
			12.59	15.22	
10+00	4+50	19.72	7.69	12.03	
12+00			5.06	14.66	
14+00			7.23	12.49	
16+00	5+20	17.69	6.85	10.84	
18+00	7.16	18.00	9.25	8.75	
23+00	3.34	12.09	7.25	4.84	
	0.21	05.05	13.22	3391.73	
28+00	3.16	3394.89	7.84	87.05	
33+00	1.15	88.20	1.82	86.38	
38+00	0.60	86.98	8.30	78.68	
	6.41	85.09	12.86	72.23	
60+00	12.54	84.77	2.94	81.83	
	0.02	81.85	13.64	68.21	
	1.16	69.37	12.66	56.71	
55+00	0.73	57.44	5.85	51.59	
	7.61	59.20	0.43	58.77	
50+00	6.98	65.75	5.05	60.70	
	13.66		2.39		
45+00	0.57		6.55		
	1.13		12.96		
	0.25		10.90		
40+00	2.51		7.77		
	7.01		12.72		

LEFAX PHILADELPHIA 7, PA., MADE IN U.S.A.

ORIGINAL COPR. 1910 BY J. O. PARKER

TR. MK. REG. U.S. PAT. OFF.

STA	+	H.I.	−	ELEV	REMARKS
35+00	0.90		7.71		
	2.83		12.99		
30+00	1.91		12.84		
	8.21		12.33		
25+00	3.12		7.69		
L 50				3360.70	
	4.45	3365.15	2.01	63.14	
	9.83	72.97	0.35	72.62	
	9.53	82.15	0.23	81.92	
	11.60	93.52	0.71	92.81	
	13.37	3406.18	4.35	3401.83	
	13.00	14.83	0.76	14.07	
	12.79	26.86	0.67	26.19	
	12.79	38.98	0.26	38.72	
	12.00	50.72	0.27	50.45	
	6.44	56.89	6.42	50.47	
	12.94	63.41	0.85	63.56	
	12.80	76.36	2.84	73.52	
	5.99	79.51	2.40	77.11	

LEFAX PHILADELPHIA 7, PA. MADE IN U.S.A.

ORIGINAL COPR. 1919 BY J. O. PARKER

TR. MK. REG. U.S. PAT. OFF.

31.38	L.O+00
10.19	+
41.57	H.I
9.40	+ ~~6+00~~
32.17	6+00
4.40	~~4+00~~
37.17	4+00
5.36	+
42.53	H.I
10.70	-
31.83	2+00
1.18	
41.35	0+00
6.56	+
47.91	H.I
8.82	
39.09	0+00
13.00	
52.09	H.I
4.05	
48.04	4+00
6.45	
54.49	H.I
5.50	
48.99	6+00
4.80	
53.79	H.I
8.88	
44.91	8+00

LEFAX PHILADELPHIA 7, PA., MADE IN U.S.A.

End Rec 3 Line Z
@ Rd junction Continental Rd
& Continental Feed Pen Rd
@ So. Side Sec 12 T. 18 S., R. 13 E.

South on Continental Rd.

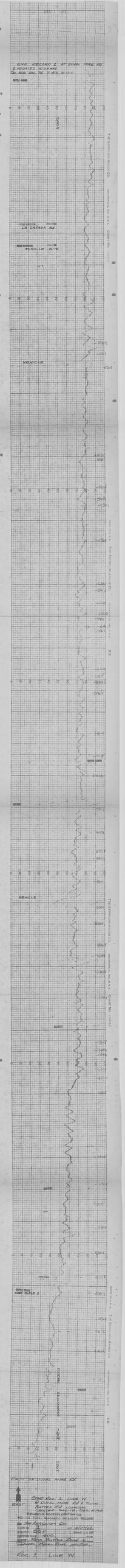
Start Rec. 3 Line Z at rd. junction Nogales highway and Continental Rd. West side Sec 24 T. 17 S., R. 13 E.

HEINRICHS GEOEXPLORATION CO.
MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: The Anaconda Co.
RECORD NO. 3 DATE 4/27/64
SENSITIVITY 50γ GAMMAS/⅕ In. S.D.
HORIZONTAL SCALE 400 FT./In.
LOCATION Twin Buttes Proj. Pima Co., Ariz.

Rec. 3 Line Z

END REC. 2. LINE Y
AT Rd. junction NOGALES
Highway & CONTINENTAL Rd.
WEST SIDE SEC. 24, T.17S.
R.13 E.
AUTOMOBILE OR TRUCK
CULVERT
BRIDGE AT
SANTA CRUZ RIVER
THE ESTERLINE-ANGUS CO.
DUVAL MINE ROAD
CATTLE GUARD
AUTOMOBILE OR TRUCK
BRIDGE
AUTOMOBILE OR TRUCK
NORTH ON Nogales High.
START REC. 2 at Rd. junction NOGALES
Highway & GREEN VALLEY Housing
Development, So. Side Sec. 11 T.18S. R13E.
MOMAG TOTAL MAGNETIC INTENSITY RECORD
FOR: THE ANACONDA Co.
RECORD NO. 2
DATE 4/27/64
SENSITIVITY 50γ GAMMAS/½ In. S.D.
HORIZONTAL SCALE 400 FT./In.
LOCATION TWIN BUTTES Proj.
PIMA Co. ARIZ.
INDIANAPOLIS, IND., U.S.A.
Rec. 2 LINE Y


END RECORD 1 AT DUVAL MINE RD.
& NOGALES HIGHWAY
So. side Sec. 35 T18S, R13E.
LA CAÑADA Rd.
MISSILE SITE
VEHICLE
VEHICLE
DUVAL ADJUSTMENT
EAST ON DUVAL MINE Rd.
EAST
START Rec. 1 LINE W.
@ DUVAL MINE Rd & TWIN
BUTTES Rd JUNCTION
CENTER SEC. 18, T18S, R13E
MEINZER GEOEXPLORATION CO.
MOBILE TOTAL MAGNETIC INTENSITY RECORD
BY The ANACONDA CO.
1
4/27/64
50 γ
400
Twin Buttes Road &
Duval Mine Road junction
Rec. 1 LINE W
THE ESTERLINE-ANGUS CO.
CHART NO. 17491X

END Rec. 4 LINE X
@ 1/4 cor. between Sec. 3/2
T.18S., R.13E.

6400'

0 10 20 30 40 50 60 70 80 90 100

500'

DUVAL ROAD

6500'

6700'

6800'

6900'

7000'

7100'

7200'

7300'

DIURNAL ADJUSTMENT -20¢

AUTOMOBILE OR TRUCK

500'

7300'

SOUTH ON LA CAÑADA Rd

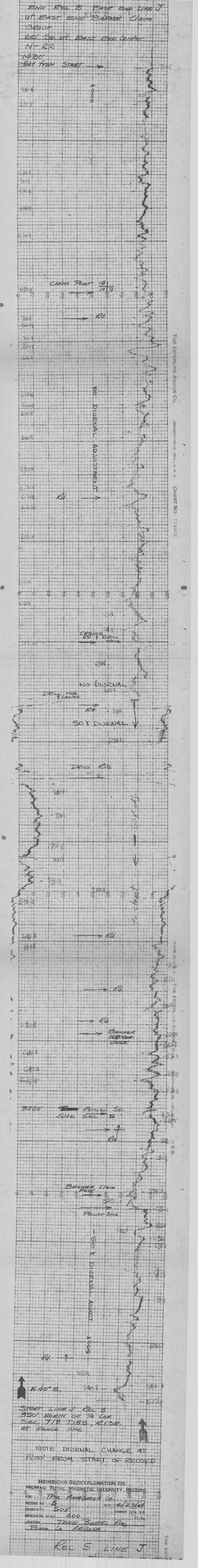
START REC. 4 LINE X at JUNCTION OF LA CAÑADA Rd. and SANTO THOMAS HOUSING DEVELOPMENT @ 1/4 CORNER Sec 27/26 T.17S., R.13E.

HEINRICHS GEOEXPLORATION CO.
MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: The ANACONDA Co.
RECORD NO: 4 DATE 4/27/64
SENSITIVITY 50¢ GAMMAS / ½ In. S.D.
HORIZONTAL SCALE 400 FT./In.
LOCATION TWIN BUTTES Proj.
PIMA Co., ARIZ.

REC. 4 LINE X

MADE IN U.S.A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17491X E.S.



END Rec. 5 EAST END LINE J
at EAST END BANNER Claim
GROUP
60' So. of EAST END Center
N-22
14700'
feet from START
Claim Post 18/19
Rd.
NO DIURNAL ADJUSTMENT
Rd.
CASING Rd. & DRILL HOLE
NO DIURNAL
DRILL HOLE & CASING
Rd.
50γ DIURNAL
DRILL RIG
50γ adj.
To start
Rd.
Rd.
Rd.
BANNER
3220'
Fence So. Side Sec. 5
Rd.
BANNER Claim
Post
Power line
50γ DIURNAL ADJUST.
Rd.
N.40° E.
START LINE J Rec. 5
350' NORTH OF 1/4 COR.
Sec. 7/8 T.18S., R.13E.
AT Fence line
NOTE DIURNAL CHANGE AT
1200' FROM START OF RECORD
HEINRICHS GEOEXPLORATION CO.
MOMAG TOTAL MAGNETIC INTENSITY RECORD
FOR: The Anaconda Co.
RECORD NO. 5
DATE 4/27/64
SENSITIVITY 50γ
SUMMARY 1/16 S.E.
HORIZONTAL SCALE 400 FT./IN.
LOCATION: Tenn Butte Proj.
Pima Co. ARIZONA
Rec. 5 LINE J
THE ESTERLINE-ANGUS CO.
INDIANAPOLIS, IND., U.S.A.
CHART NO. 17491X
MADE IN U.S.A.

END K1 REC. 6 @ FENCE
So. Side Sec 5 1120' WEST OF
NE COR. LEG 8 & SE COR SEC. 5

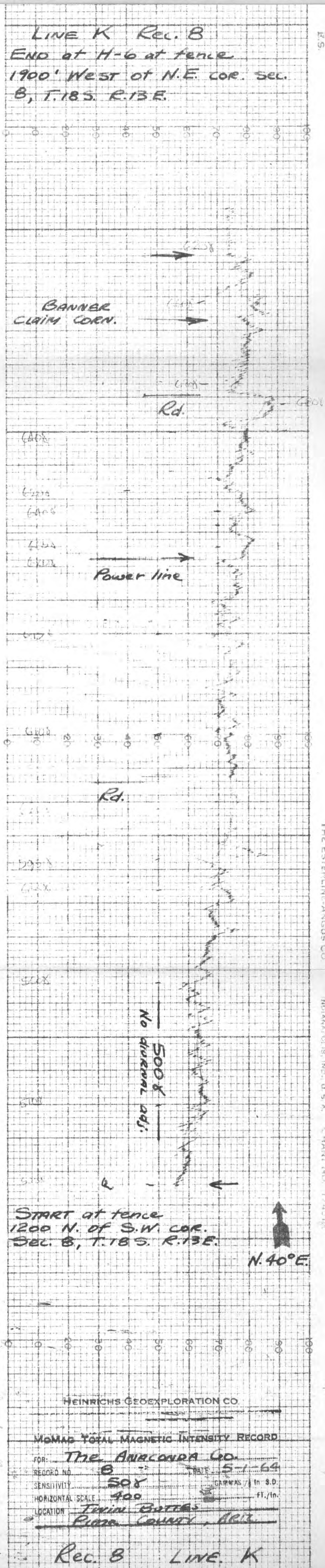
START REC. 6 LINE K-1
at So. WEST CORNER Sec. 8
T. 18 S., R. 13 E.
N. of DUVAL Mine Rd. & EAST of
N. - S. Fence.

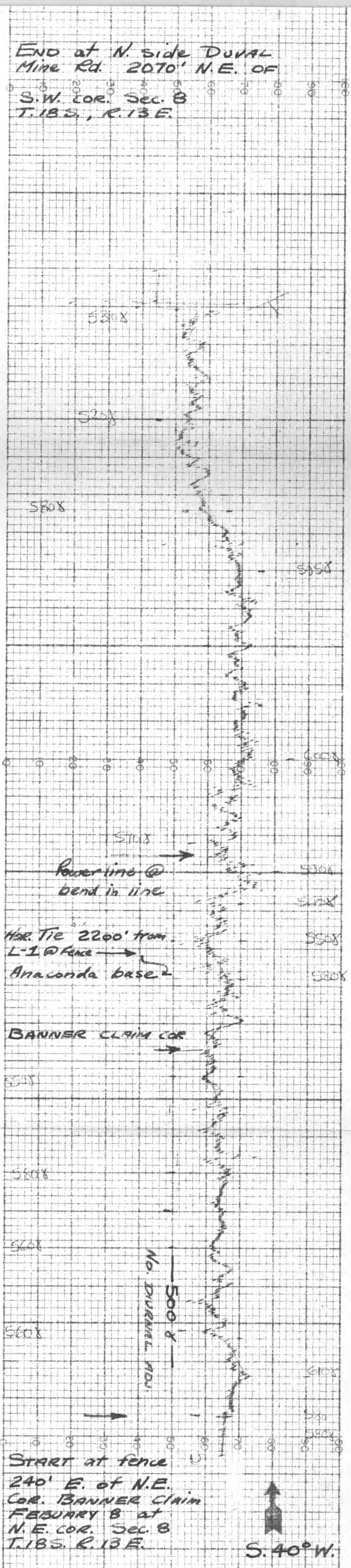
HEINRICHS GEOEXPLORATION CO.
MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA CO.
RECORD NO. 6 DATE 4/27/64
SENSITIVITY 50 γ GAMMAS / ½ In. S.D.
HORIZONTAL SCALE 400 FT./In.
LOCATION TWIN BUTTES Proj.
PIMA Co. ARIZONA

Rec. 6 LINE K-1

No record 1


LINE K Rec. 8
END at H-6 at fence
1900' WEST of N.E. COR. SEC.
8, T.18S. R.13E.
BANNER
CLAIM CORN.
Rd.
Power line
Rd.
500γ
No diurnal adj.
START at fence
1200 N. of S.W. COR.
SEC. 8, T.18S. R.13E.
N.40°E.
HEINRICHS GEOEXPLORATION CO.
MoMAG TOTAL MAGNETIC INTENSITY RECORD
FOR: The ANACONDA Co.
RECORD NO. 8
DATE 5-1-64
SENSITIVITY 50γ
GAMMAS / in S.D.
HORIZONTAL SCALE 400
FT./in.
LOCATION Twin Buttes
Pima County, Ariz.
Rec. 8 LINE K
No Rec. 7
THE ESTERLINE-ANGUS CO.
INDIANAPOLIS, IND., U.S.A.
CHART NO. 174018



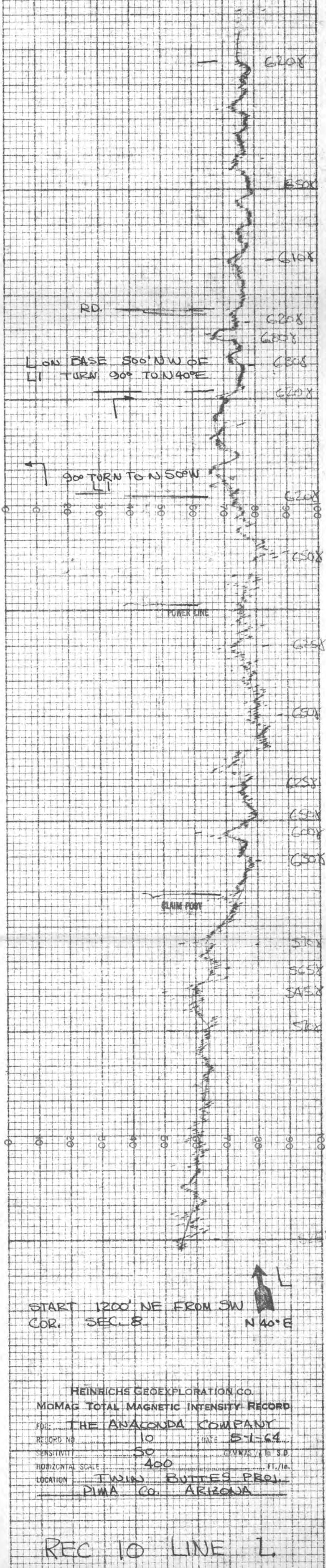
HEINRICHS GEOEXPLORATION CO.
MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: The ANACONDA Co.
RECORD NO. 9 DATE 5-1-64
SENSITIVITY 50 GAMMAS/½ In. S.D.
HORIZONTAL SCALE 400 FT./In.
LOCATION Twin Buttes
Pima County, Ariz.

Rec. 9 LINE L-1

THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17491X
MADE IN U.S.A. THE ESTERLINE-ANGUS CO.

END AT FENCE S SIDE SEC 5
1120' W OF NE COR FEB 8
& SE COR SEC 5



THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17401X

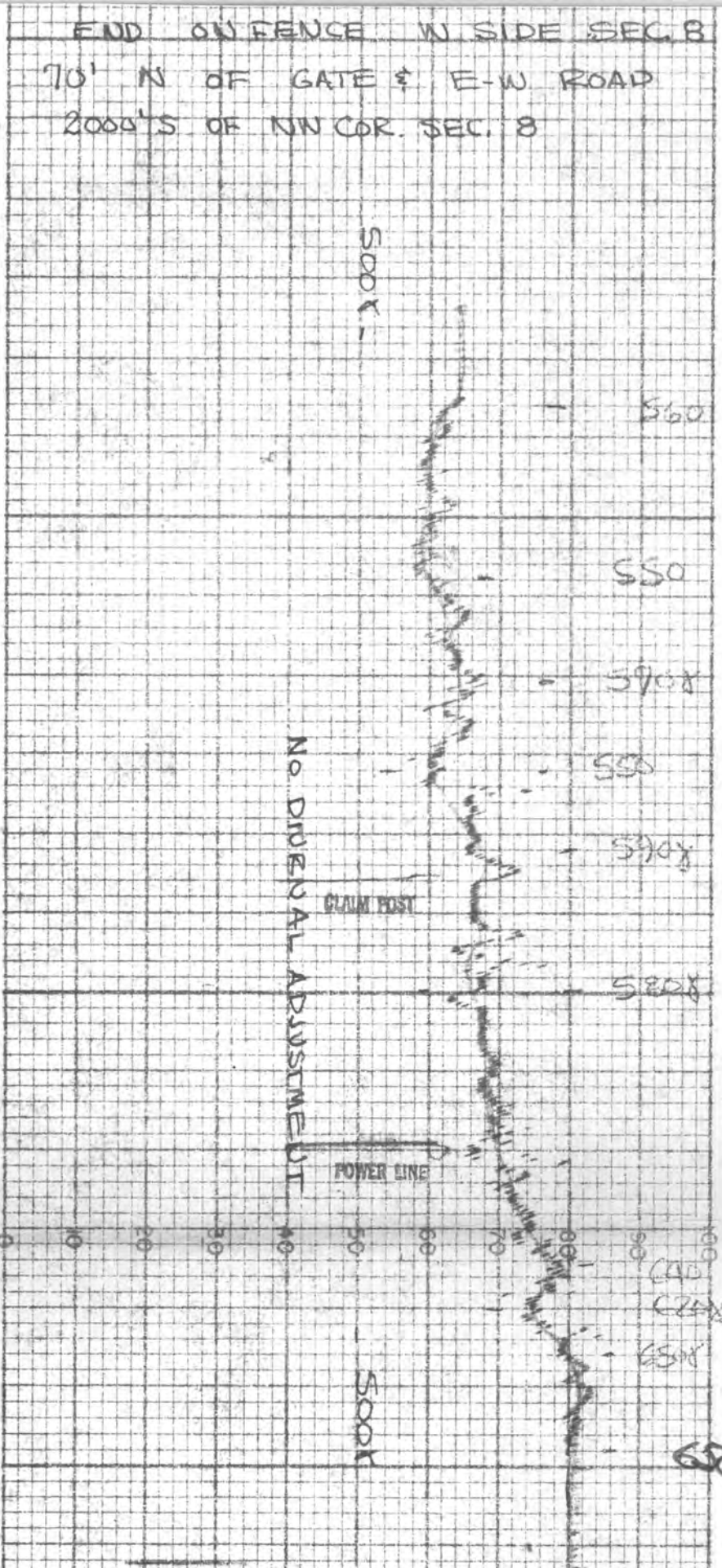
HEINRICHS GEOEXPLORATION CO.
MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY
RECORD NO 10 DATE 5-1-64
SENSITIVITY 50 GAMMAS / in S.D.
HORIZONTAL SCALE 400 FT./in.
LOCATION TWIN BUTTES PROJ.
PIMA Co. ARIZONA

REC 10 LINE L.

MADE IN U.S.A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS

END ON FENCE W SIDE SEC. 8
70' N OF GATE & E-W ROAD
2000'S OF NW COR. SEC. 8



START ON FENCE S. SIDE OF SEC. 5 1830' FROM NW COR SEC 8 AT FENCE

I

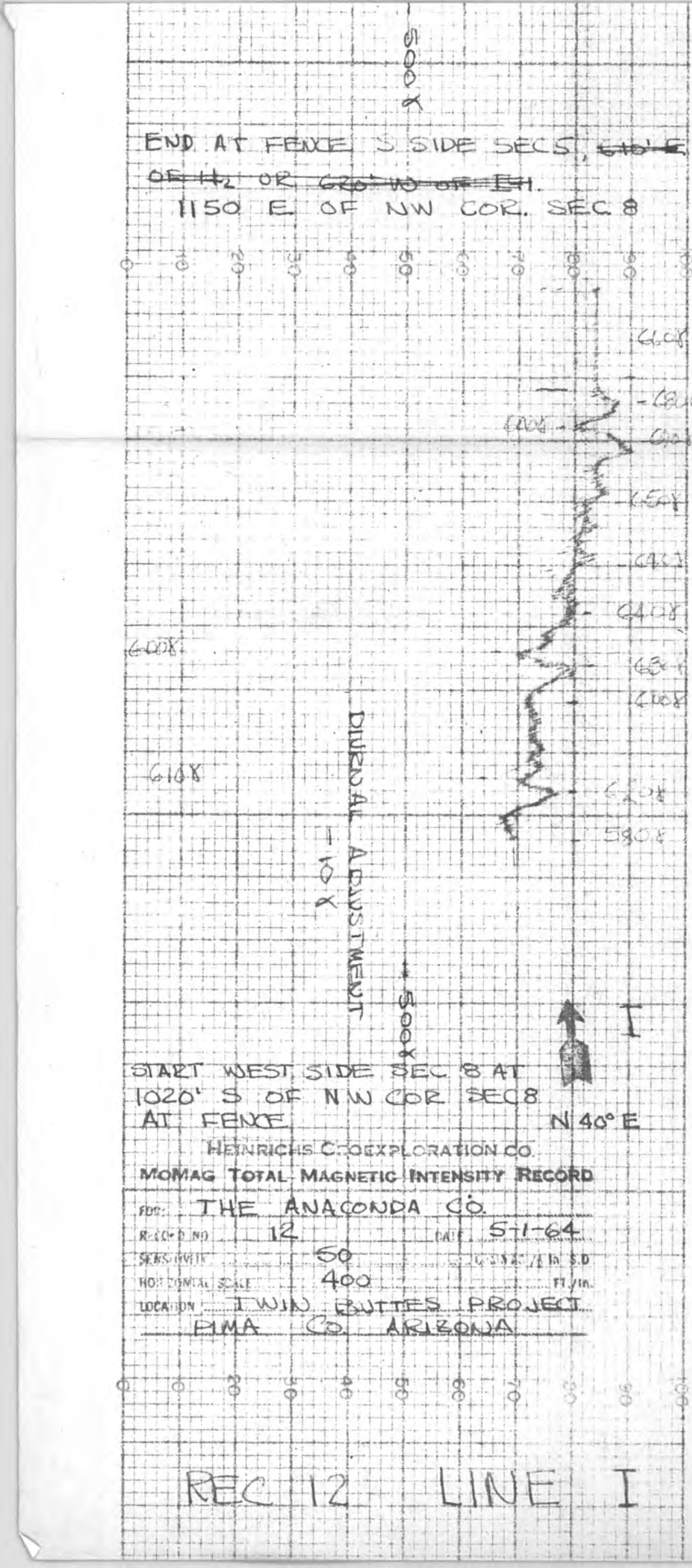
S 40° W

HEINRICHS GEOEXPLORATION CO.
McMAG TOTAL MAGNETIC INTENSITY RECORD

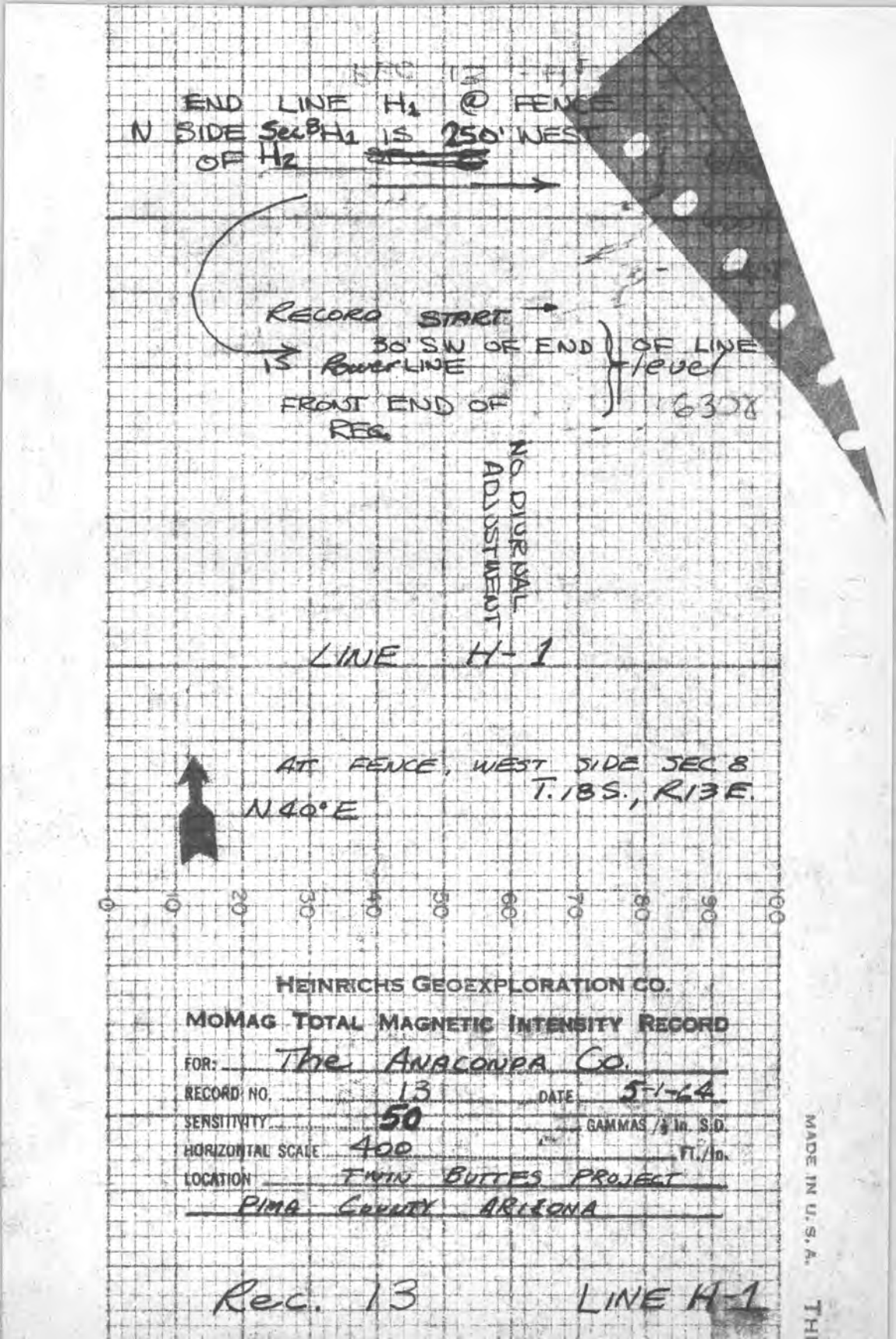
FOR: THE ANACONDA COMPANY
RECORD NO. 11 DATE 5-11-64
SENSITIVITY 50 GAMMAS 7/8 in. = 8.0
HORIZONTAL SCALE 400 FT./in.
LOCATION TWIN BUTTES PROJ.
PIMA CO., ARIZONA

REC 11 LINE I 1

MADE IN U.S.A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A.



THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17401X



END LINE H_1 @ FENCE
N SIDE Sec 8 H_1 IS 250' WEST
OF H_2

RECORD START
30' SW OF END OF LINE
IS Power LINE level
FRONT END OF
REC.

6308

NO DIURNAL ADJUSTMENT

LINE H-1

AT FENCE, WEST SIDE SEC 8
T. 18 S., R 13 E.

N 40° E

0 10 20 30 40 50 60 70 80 90 100

HEINRICHS GEOEXPLORATION CO.

MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: The Anaconda Co.

RECORD NO. 13 DATE 5-1-64

SENSITIVITY 50 GAMMAS / ½ In. S.D.

HORIZONTAL SCALE 400 Ft./In.

LOCATION Twin Buttes Project
Pima County Arizona

Rec. 13 LINE H-1

MADE IN U.S.A. THI

END @ TWIN BUTTES - DUVAL Mine Rd. JUNCTION So. Side Sec. 7, T. 18 S. R. 13 E. 2170' E. of S.W. cor. Sec. 7

START FROM WEST SIDE SECT. 8, T. 18 S. R. 13 E. @ Red & white flag, 1870' So. of N.W. cor. Sec. 8.

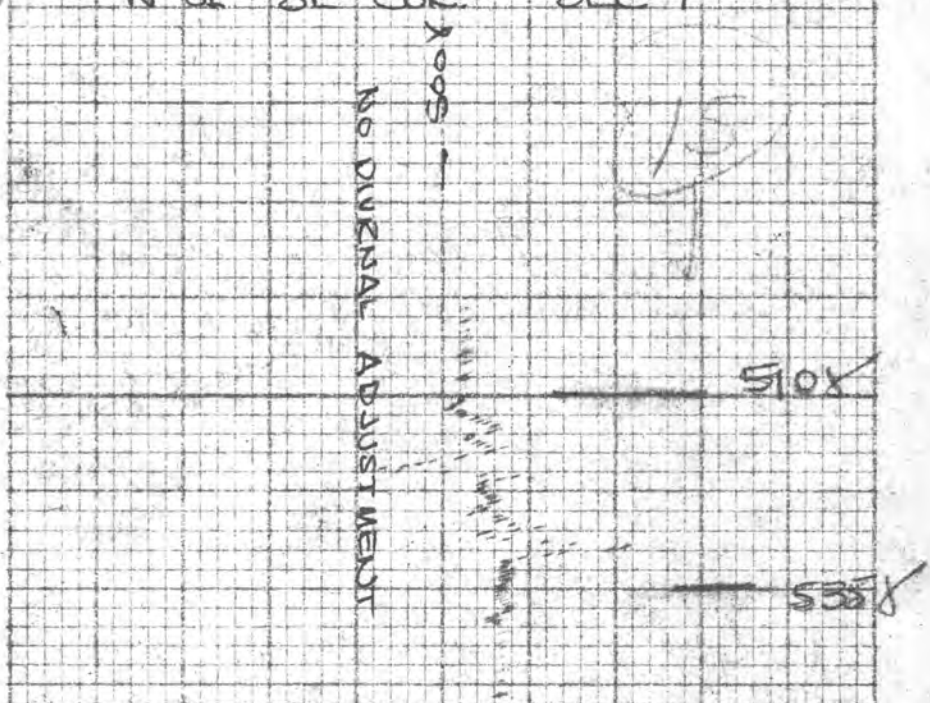
HEINRICHS GEOEXPLORATION CO.
MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY
RECORD NO. 14 DATE 5-1-64
SENSITIVITY 50 GAMMAS /4 to S.D.
HORIZONTAL SCALE 400 FT./in.
LOCATION TWIN BUTTES
PIMA COUNTY ARIZONA

Rec. 14 LINE I-1

THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17491X

ENDS S. SIDE SEC 7. 290'
W OF SE COR. SEC 7



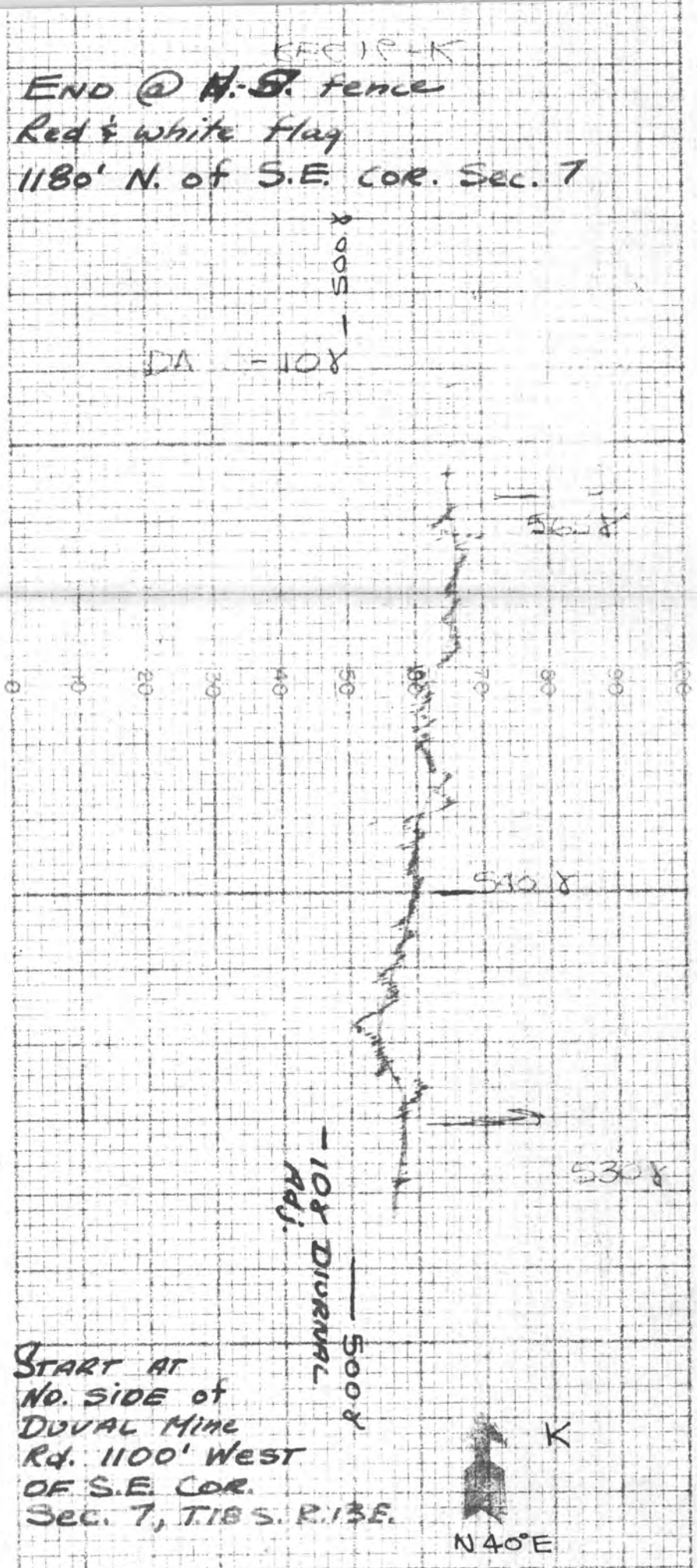
STARTS 350' N OF SE COR
SEC 7 ON FENCE LINE

REC. IS
LINE K1

500γ

HEINRICHS GEOEXPLORATION CO.
MoMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY
RECORD NO. 15 DATE 5-5-64
SENSITIVITY 50 γ/in
HORIZONTAL SCALE 1" = 400 ft/in
LOCATION TWIN BUTTES PROJECT PIMA CO. ARIZ.



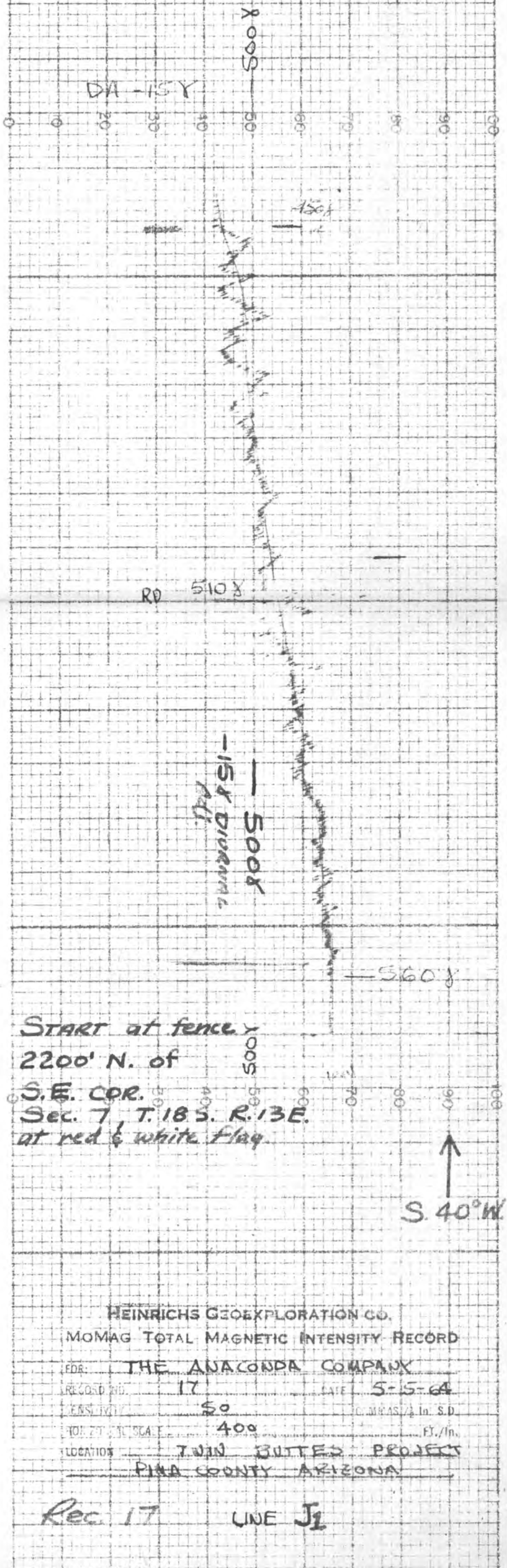
HEINRICHS GEOEXPLORATION CO.
MCMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY
RECORDED BY: 16 5-5-64
SENSITIVITY: 50 In. S.D.
HORIZONTAL SCALE: 400 Ft./In.
LOCATION: TWIN BUTTES PROJECT
PIMA COUNTY ARIZONA

Rec. 16 LINE K

THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17491K

END at fence N. side
DUVAL Mine Rd. 1930' E. of
S.E. cor. Sec. 7, T.18S., R.13E



HEINRICHS GEOEXPLORATION CO.
MoMAG TOTAL MAGNETIC INTENSITY RECORD

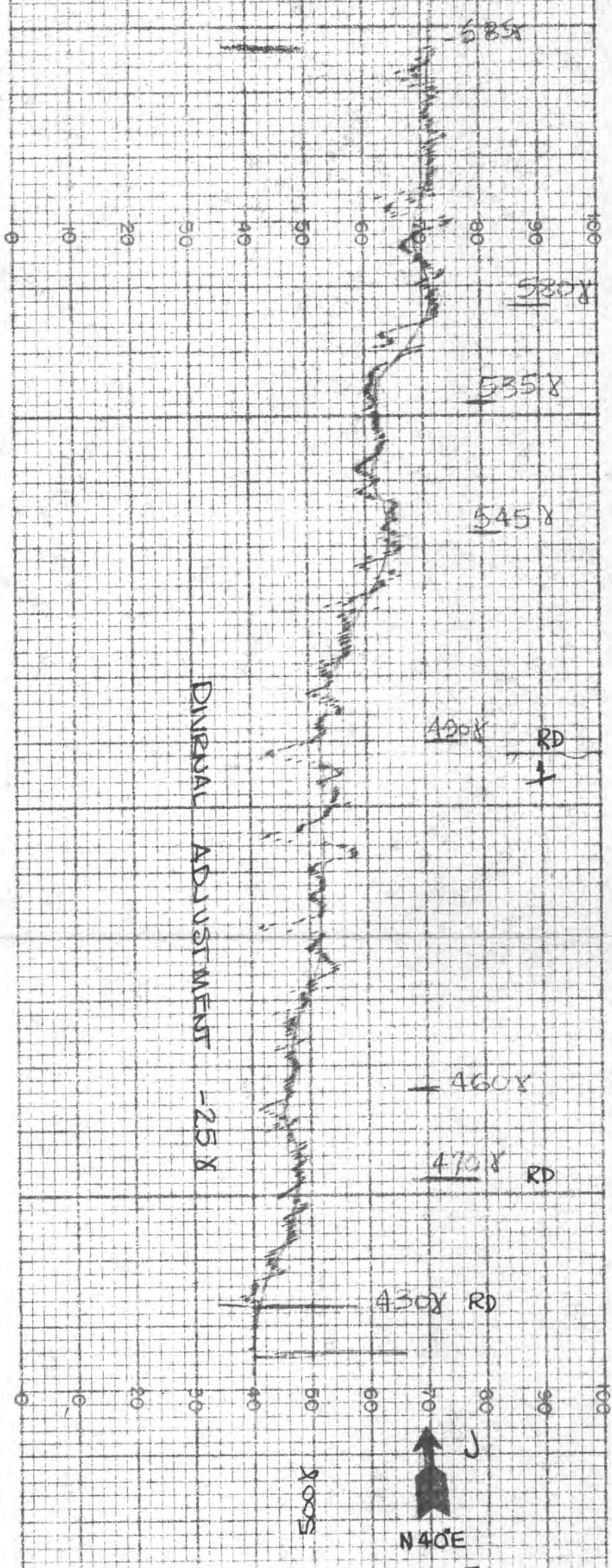
FOR: THE ANACONDA COMPANY
RECORD NO. 17 DATE 5-5-64
SENSITIVITY 50 GAMMAS/½ In. S.D.
HOR. & VERT. SCALE 400 FT./In.
LOCATION TWIN BUTTES PROJECT
PIMA COUNTY ARIZONA

Rec. 17 LINE J1

MADE IN U.S.A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. E.S.

REC 18-7

END AT FENCE WEST SIDE
SEC 8 AT RED & WHITE FLAG
3000' N OF SW COR SEC 8.



START AT S. SIDE SEC. 7
2650' N OF S.E. COR. SEC 7
& 500' E OF TWIN BUTTES RD

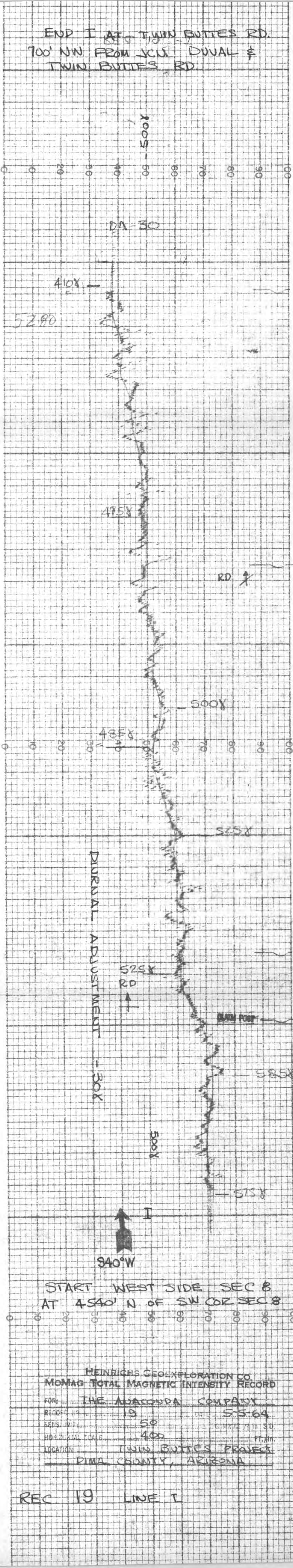
HEINRICH'S GEOEXPLORATION CO.
MoMag TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY
RECORD #: 18 DATE: 5-5-64
LENS: IV/I 50 CAMMAS 1/2 In. S.D.
HOR. ZONTAL SCALE: 400 FT./In.
LOCATION: TWIN BUTTES PROJECT
PIMA COUNTY ARIZONA

REC. 18 LINE J

THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17491X

END I AT - TWIN BUTTES RD.
700' NW FROM JCT. DUVAL & TWIN BUTTES RD.



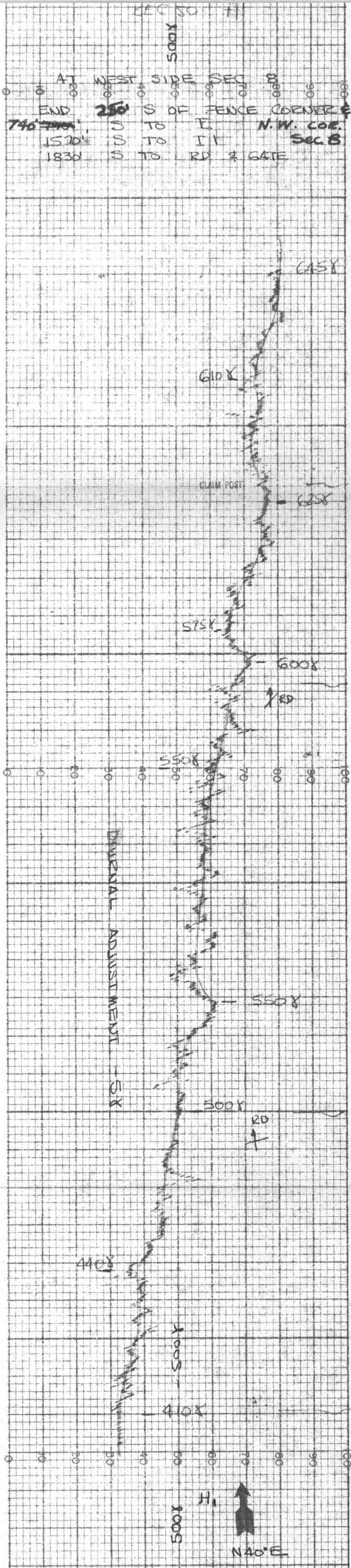
START WEST SIDE SEC 8
AT 4540' N OF SW COR SEC 8

HEINRICHS GEOEXPLORATION CO.
MoMag TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY
RECORD NO. 19 DATE 5-5-64
SENS. IN γ 50 CHART 73 in. S.D.
HORIZONTAL SCALE 400 FT./IN.
LOCATION TWIN BUTTES PROJECT
PIMA COUNTY, ARIZONA

REC 19 LINE I

NO. 17491X
MADE IN U.S.A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A.
E.S.



HEINRICHS GEOEXPLORATION CO.

MoMag Total Magnetic Intensity Record

FOR: THE ANACONDA COMPANY

RECORD # 20 DATE 5-5-64

SENSITIVITY 50 GAMMAS ½ IN. S.D.

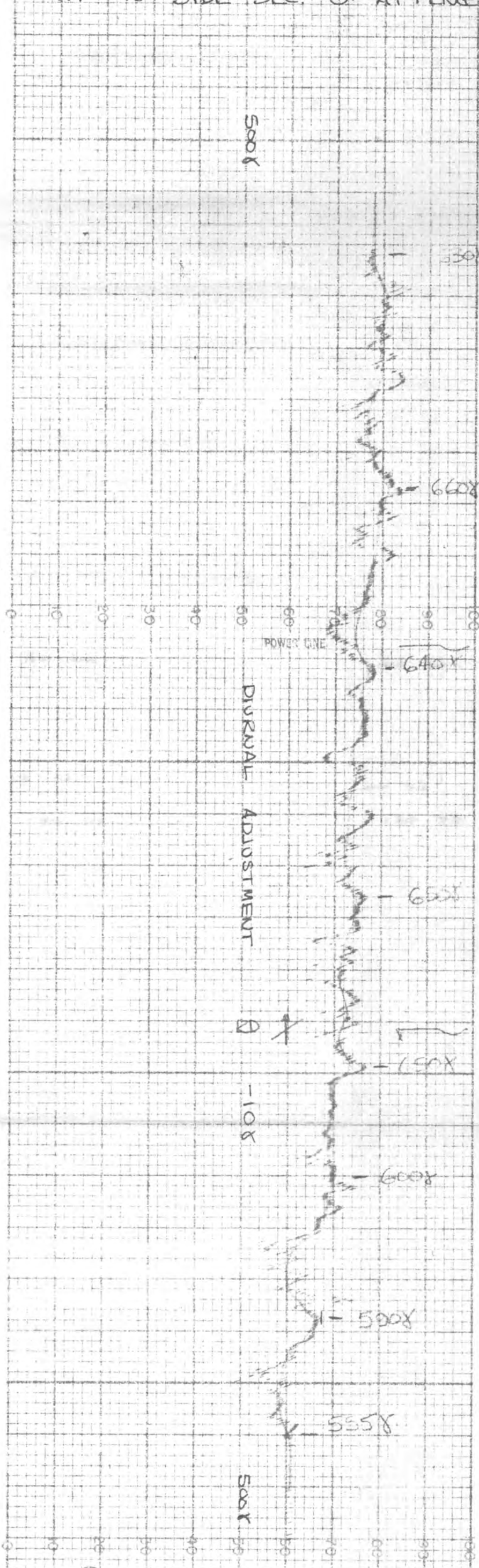
HORIZONTAL SCALE 400 FT./IN.

LOCATION TWIN BUTTES PROJECT
PIMA COUNTY ARIZONA

Rec. 20 LINE H-1

THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17491X
MADE IN U.S.A. THE ESTERLINE-ANGUS CO

END 4450 FROM START
AT N SIDE SEC. 8 AT FENCE



BEGINS W. SIDE SEC 8
60' SE OF BCC FEB 21
SOUTH WEST CORNER.

HEINRICHS GEOEXPLORATION CO.
MoMAG TOTAL MAGNETIC INTENSITY RECORD
THE ANACONDA COMPANY
21 5-5-64
50 S.D
400 FT./In.
LOCATION TWIN BUTTES PROJECT
PIMA COUNTY ARIZONA

REC 21 — LINE J1

MADE IN U.S.A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. E.S.

END LINE I AT EAST

1/2 Sec. 33
520' S. of
No. LINE
Sec. 33
T.17S. R.13E.

1005

710X

0 10 20 30 40 50 60 70 80 90 100

690X CLAIM POST

670X PROSPECT PIT

1000X

630X

650X

BANNER Claim Boundary
LINE I R&W Hag

650X CLAIM POST

RD

610X

Adobe Ruin

HOUSE or BUILDINGS

0 10 20 30 40 50 60 70 80 90 100

625X

I-61

640X

PROSPECT PIT

CLAIM POST

RD 650X

660X CLAIM POST

0 10 20 30 40 50 60 70 80 90 100

RD 710X CLAIM POST

JAN. 46

735X

730X

710X

AUTOMOBILE OR TRUCK

DDH

740X

610X

CLAIM POST

DDH

740X

0 10 20 30 40 50 60 70 80 90 100

650X

No DIURNAL ADJ.

ANACONDA
BASE 0+00

630X

650X

RD

Rd

Road

START So. SIDE
Sec. 5, T.18S.
R.13E.
1030' E. of S.W. Cor.
at fence

N46°E
I

1005

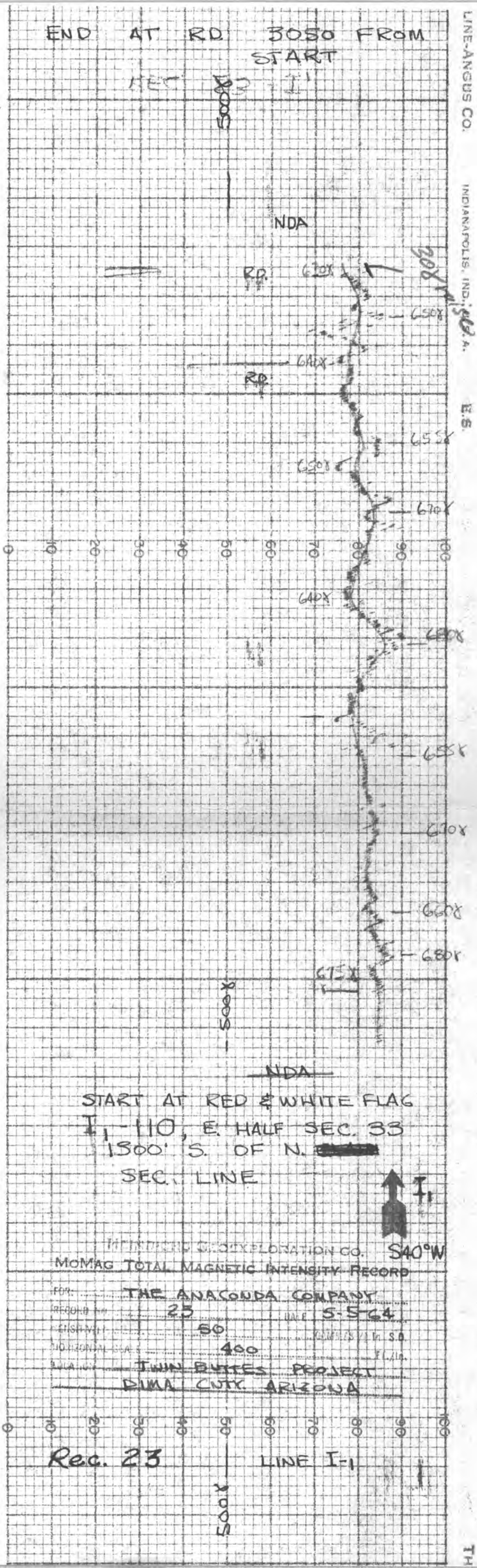
HEINRICHS GEOEXPLORATION CO.
MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY 5-7-64
RECORD NO. 25
SENSITIVITY 50
HOR. ZONE 400
LOCATION TWIN BUTTES PROJECT
PIMA COUNTY ARIZONA

Rec. 25 LINE 1

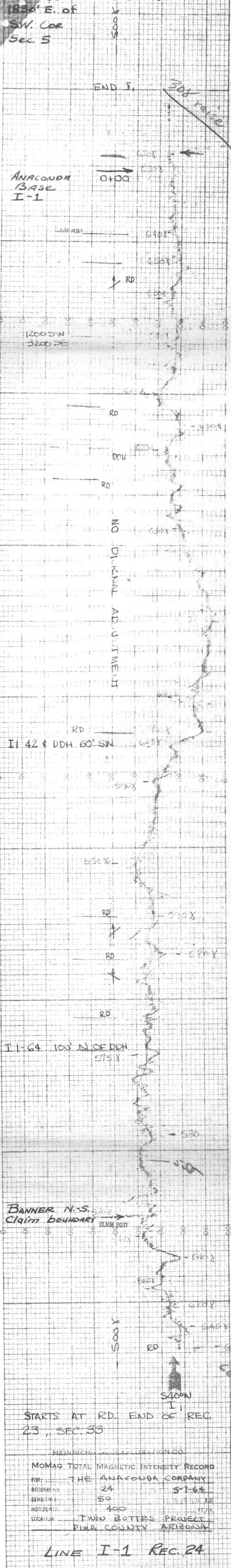
THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17491X

MADE IN U.S.A. THE ESTERLINE-ANGUS CO INDIANAPOLIS, IND., U.S.A.


END AT RD 3050 FROM START
NDA
RD.
RD.
670γ
650γ
640γ
655γ
650γ
670γ
640γ
680γ
655γ
670γ
660γ
680γ
675γ
500γ
NDA
START AT RED & WHITE FLAG
I1-110, E. HALF SEC. 33
1300' S. OF N. [redacted]
SEC. LINE
I1
S40°W
MOMAG TOTAL MAGNETIC INTENSITY RECORD
FOR: THE ANACONDA COMPANY
RECORD NO. 23
DATE 5-5-64
SENSITIVITY 50
HORIZONTAL SCALE 400
LOCATION TWIN BUTTES PROJECT
PIMA CNTY. ARIZONA
0 10 20 30 40 50 60 70 80 90 100
Rec. 23
LINE I-1
500γ
LINE-ANGUS CO.
INDIANAPOLIS, IND.
E.S.

END AT S. SIDE SEC 5
8870 FROM START.

1880' E. of
S.W. Cor
Sec. 5



STARTS AT RD. END OF REC.
23, SEC. 33

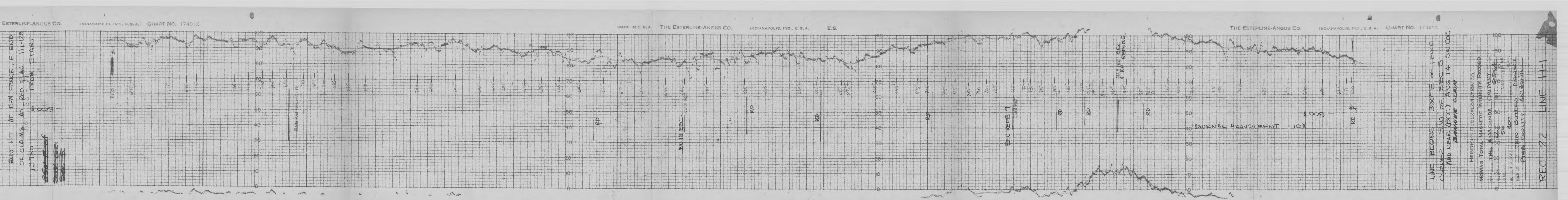
HEINRICH EXPLORATION CO.

MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY
RECORD NO. 24 5-7-64
SENSITIVITY 50 GAMMAS PER INCH
HORIZONTAL SCALE 400 FT./IN.
LOCATION TWIN BUTTES PROJECT
PIMA COUNTY ARIZONA

LINE I-1 REC. 24

THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17491X
MADE IN U.S.A. THE ESTERLINE-ANGUS CO INDIANAPOLIS, IND., U.S.A.



END H-1 AT E-W FENCE, E END OF CLAIMS AT RED FLAG H1-128

13750 FROM START

LINE BEGINS 390' E OF FENCE CORNER S.W. OF SEC 5 AND NEAR (BCC) AUG 14 SW COR.

BANNER CLAIM

HEINRICHS GEOEXPLORATION CO.

MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY

RECORD NO. 22 DATE 5-5-64

SENSITIVITY 50 GAMMAS/1/8 IN. S.D.

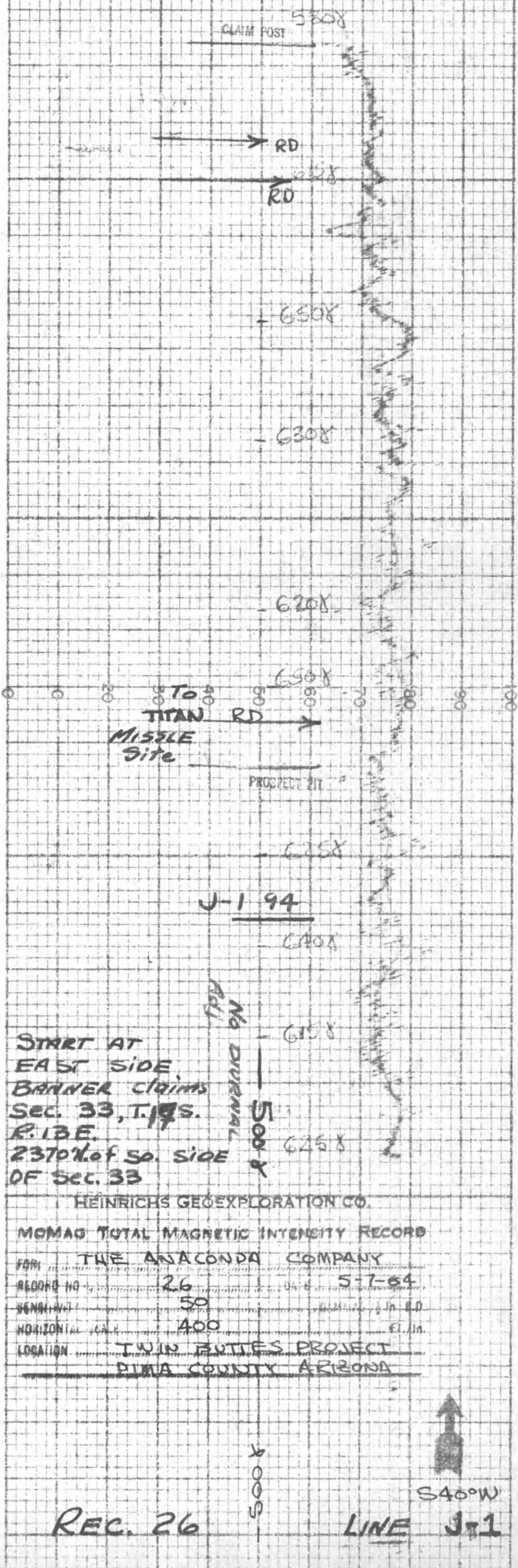
HORIZONTAL SCALE 400 FT./IN.

LOCATION TWIN BUTTES PROJECT PIMA COUNTY ARIZONA

REC 22 LINE H-1

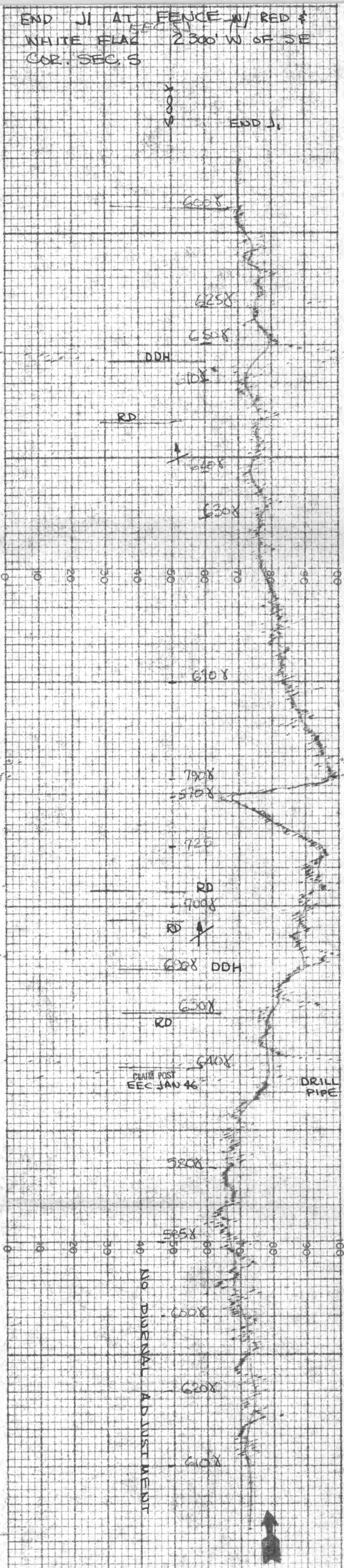
ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17491X
MADE IN U.S.A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. E.S.
THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17491X

END AT H-S Red & white flag at BANNER Claim Boundary West 1/2 Sec. 33 & Sec. 4; 180' So. of COMMON Sec. LINE & 1210' E. of west side Sec. 4, T.18S., R.13E.



THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17491X

END J1 AT FENCE W/ RED & WHITE FLAG 2300' W OF SE COR. SEC. 5



EAST CLAIM BOUNDRY WEST J1
HALF SEC. 4, 1420' E OF & 380'S OF NW COR. SEC. 4.

HEINRICHS GEOEXPLORATION CO.

MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY

RECORD #: 27

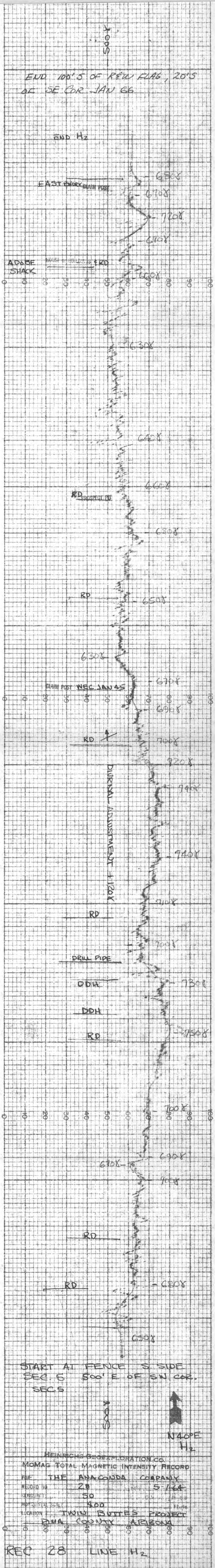
SENSITIVITY: 50

HORIZONTAL: 400 FT/IN

LOCATION: TWIN BUTTES PROJECT
PIMA COUNTY, ARIZONA

REC 27 · LINE J1

MADE IN U.S.A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. E.S.



THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17491X MADE IN U.S.A.

END AT FENCE & SIDE SEC 5
1400' E OF SW COR SEC 5

END H_3

650X

C10X

0+00

700X

600X

EEC WILSON
WEC ARTHUR

CLAIM POST

C10X

600X

50X

700X

C0X

700X

DDH

730X

RD DDH

RD

RD

AUTOMOBILE OR TRUCK

650X

DDH W/RIG

710X

730X

RD

C35X

C10X

RD

C30X

C10X

RD

RD

C10X

C20X

C10X

DIURNAL ADJUSTMENT +130X

C40X

C5OX

50X

START AT SE COR. JANGS.

H_3

S40°W

HEINRICHS GEOEXPLORATION CO.
MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY
RECORD NO. 29 DATE 5-7-64
SENSITIVITY 50 GAMMAS / IN. S.D.
HORIZONTAL SCALE 400 Ft./In.
LOCATION TWIN BUTTES PROJECT
PIMA COUNTY ARIZONA

REC 29 LINE H_3

MADE IN U.S.A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. E.S. CHART NO. 17491X

END AT S. SIDE SEC 33
116' N. OF E.E CENTER JAN 63
AT RED & WHITE FLAG
7300' FROM START

500X

END H4

7,42

6400

6500

6000

6250

6350

6450

RD

6350

DDH

T-RD JCN

6250

6200

6500

6900

RD

7300

7400

RD

7100

7900

7800

7900

8100

7900

7600

7400

6800

RD

6700

7200

RD

6900

6700

6800

6900

7000

7100

DIURNAL ADJUST MENT -10X

500S

N40°E
H4

START AT S SIDE SEC 5

HEINRICHS GEOEXPLORATION CO

McMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY
RECORD NO 30 5-8-64
SENSITIVITY 50 GAMMAS / ½ In. S.D.
HORIZONTAL SCALE 400 FT./In.
LOCATION TWIN BUTTES PROJECT
PIMA COUNTY ARIZONA

REC 30 = LINE H4

MADE IN U.S.A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A.

END AT FENCE S. SIDE
SEC 5 6400' FROM START

0 10 20 30 40 50 60 70 80 90 100

100S

END H5

DIURNAL ADJUSTMENT -15γ

500γ

START E. SIDE OF CLAIMS, S. SIDE
SEC 33 AT REC, 26

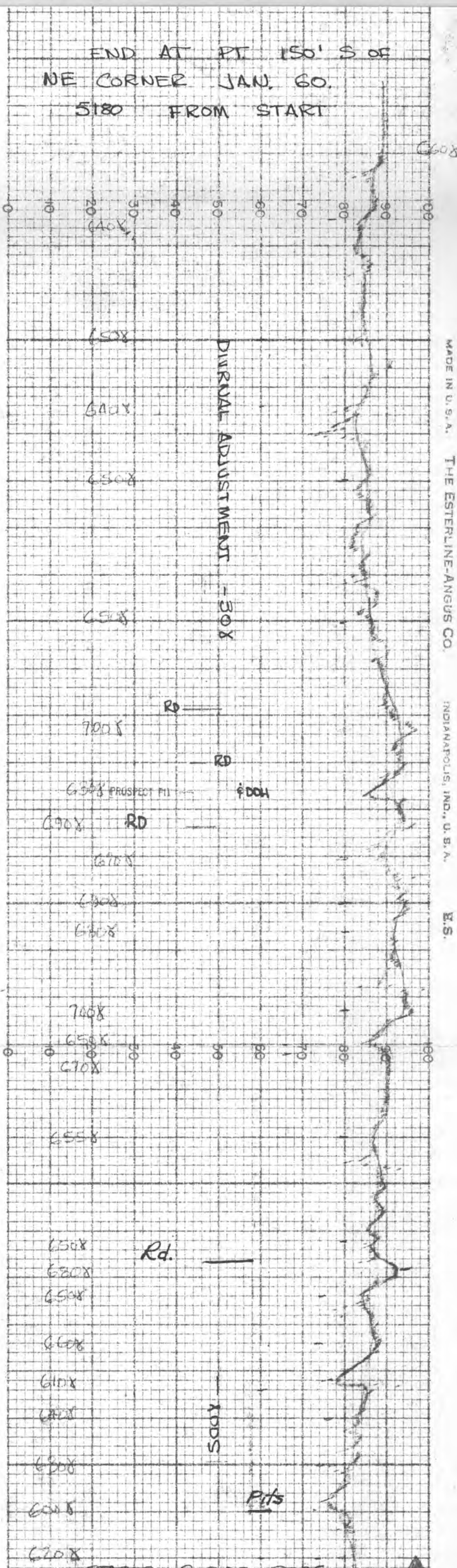
S 40° W
H5

HEINRICHS GEOEXPLORATION CO.
MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY
RECORD NO. 31 DATE 5-8-64
SENSITIVITY 50 GAMMAS / ½ in. S.D.
HORIZONTAL SCALE 400 FT./in.
LOCATION TWIN BUTTES PROJECT
PIMA COUNTY, ARIZONA

LINE H5

MADE IN U.S.A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. E.S.
THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17491X

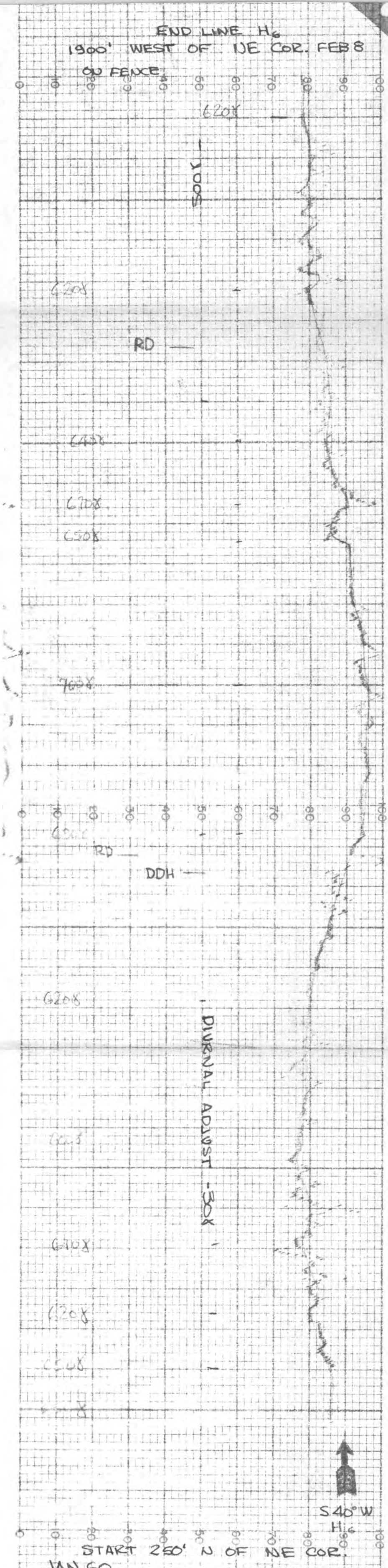


HEINRICHS GEOEXPLORATION CO.
MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY
RECORD NO. 32 DATE 5-8-64
SENSITIVITY 50 GAMMAS /½ In. S.D.
HORIZONTAL SCALE 400 FT./In.
LOCATION TWIN BUTTES PROJECT
PIMA COUNTY, ARIZONA.

LINE K Rec. 32

MADE IN U.S.A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. E.S.



THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17491X

HEINRICHS GEOEXPLORATION CO.

MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY

RECORD NO. 33 DATE 5-8-64

SENSITIVITY 50 GAMMAS/1/16 IN. S.D.

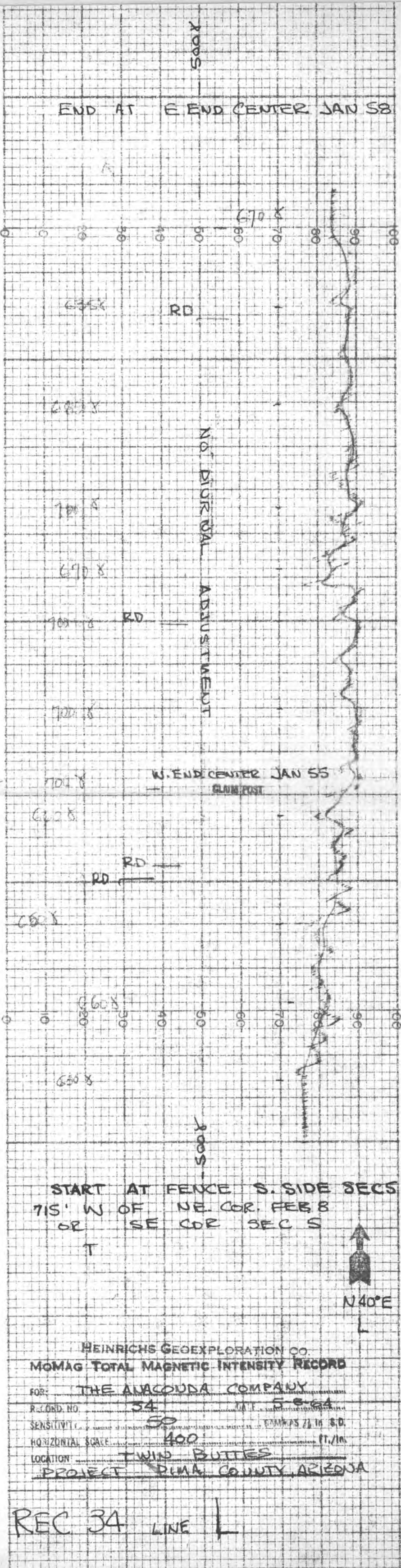
HORIZONTAL SCALE 400 FT./IN.

LOCATION TWIN BUTTES

PROJECT, PIMA COUNTY, ARIZONA

REC 33 - LINE H6

NO. 17491X



HEINRICHS GEOEXPLORATION CO

MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY

RECORD NO. 34 DATE 5-8-64

SENSITIVITY 50 GAMMAS 7" IN S.D.

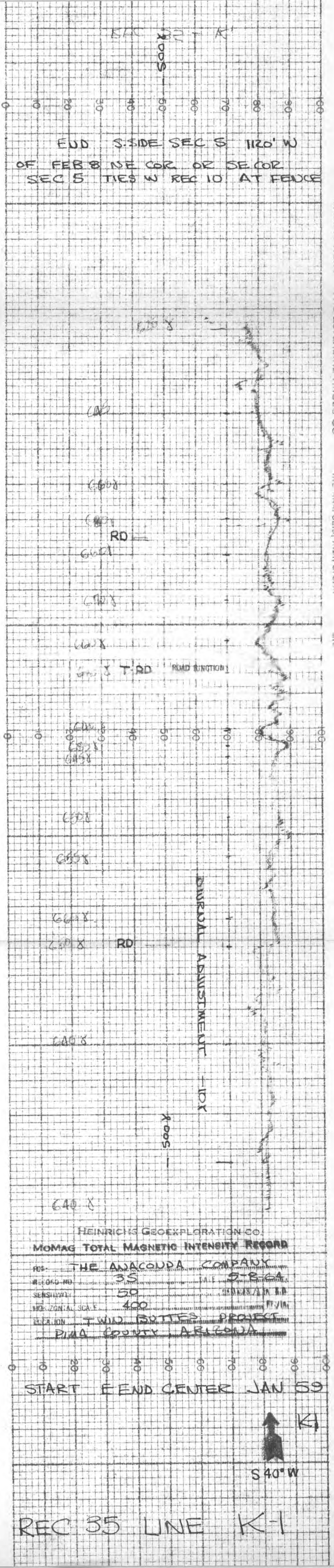
HORIZONTAL SCALE 400 FT./IN.

LOCATION TWIN BUTTES

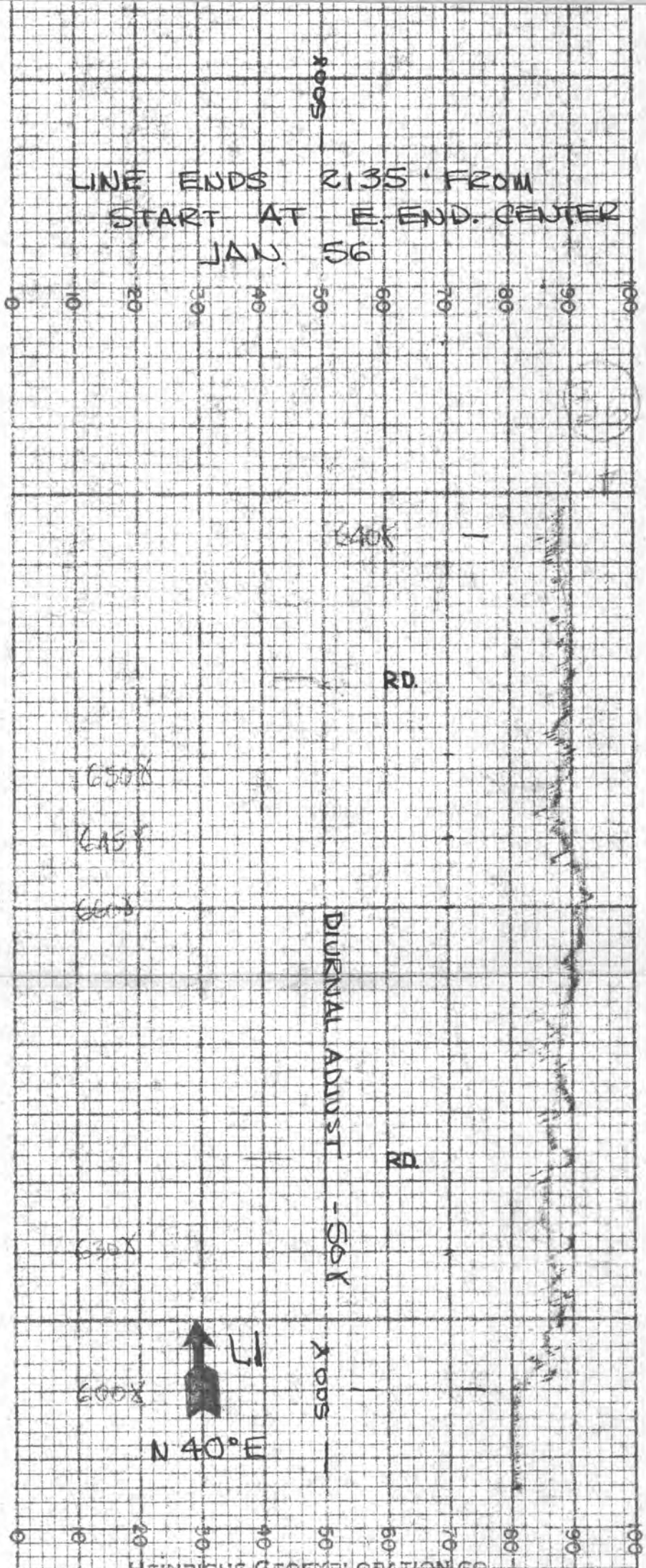
PROJECT PIMA COUNTY, ARIZONA

REC 34 LINE L

MADE IN U.S.A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND.



500γ
END S.SIDE SEC 5 1120' W
OF FEB 8 NE COR OR SE COR
SEC 5 TIES W REC 10 AT FENCE
RD
T-RD
ROAD JUNCTION
DIURNAL ADJUSTMENT -10γ
500γ
HEINRICHS GEOEXPLORATION CO.
MoMAG TOTAL MAGNETIC INTENSITY RECORD
FOR: THE ANACONDA COMPANY
RECORD NO. 35
DATE 5-8-64
SENSITIVITY 50
HORIZONTAL SCALE 400
LOCATION TWIN BUTTES PROJECT
PIMA COUNTY ARIZONA
START E END CENTER JAN 59
K-1
S 40° W
REC 35 LINE K-1



THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. CHART NO. 17491X

HEINRICHS GEOEXPLORATION CO.

MoMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY

RECORD NO. 36 DATE 5-8-64

SENSITIVITY 50 GAMMAS /½ in. S.D.

HORIZONTAL SCALE 400 FT./in.

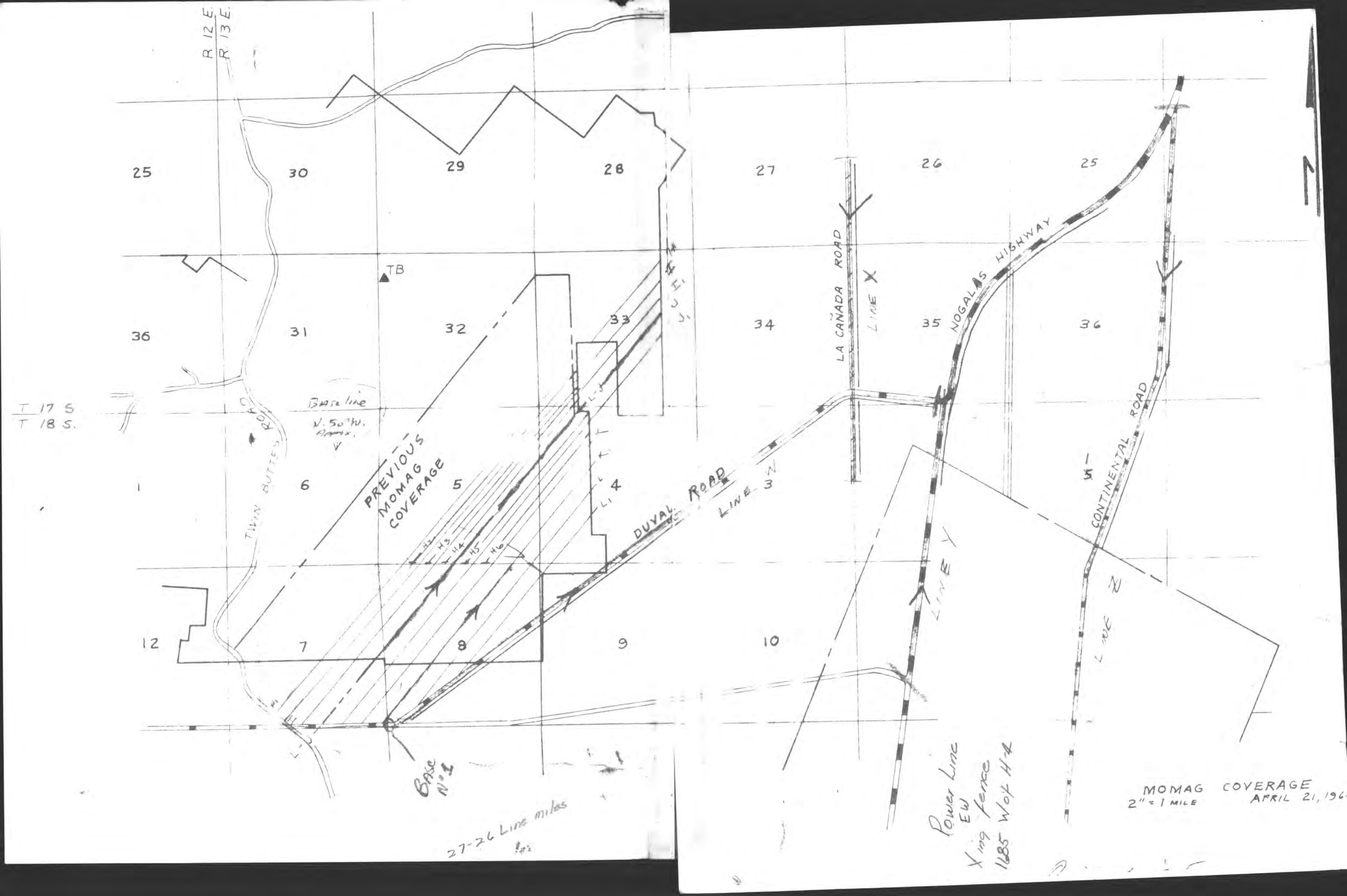
LOCATION TWIN BUTTES PROJECT
PIMA COUNTY, ARIZONA

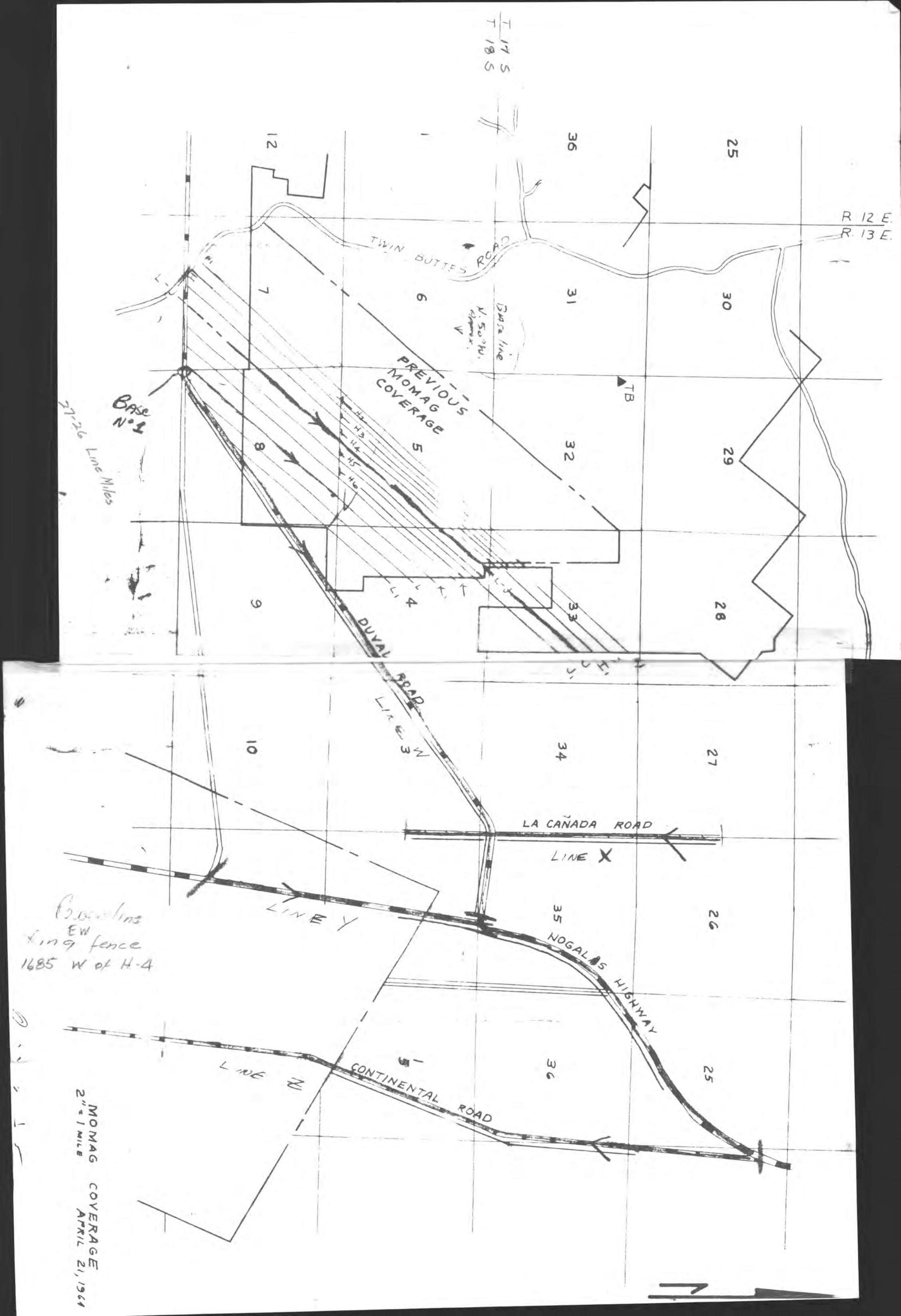
REC. 36 LINE L-1

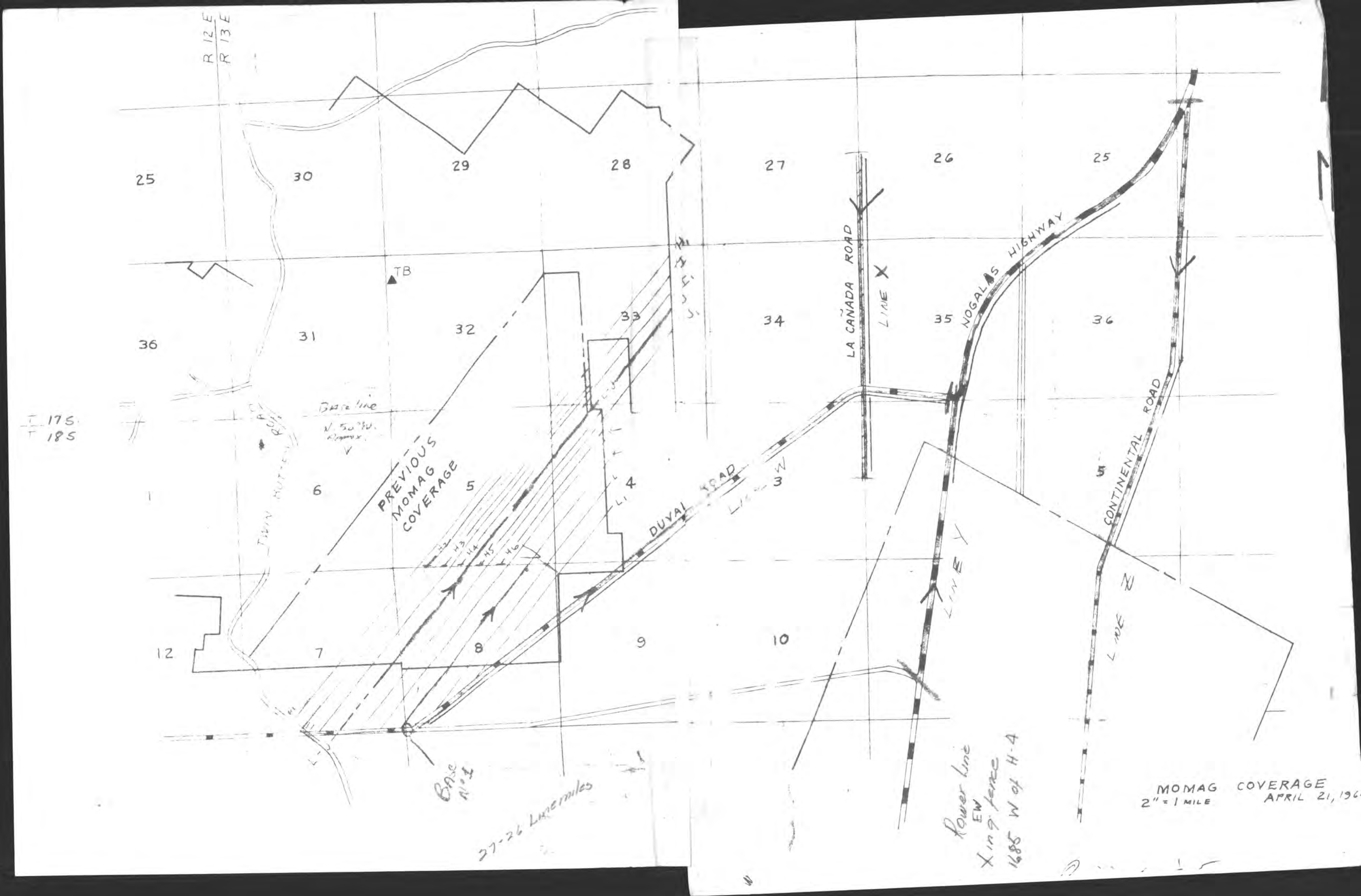
LINE STARTS 240' E.
OF FEB 8

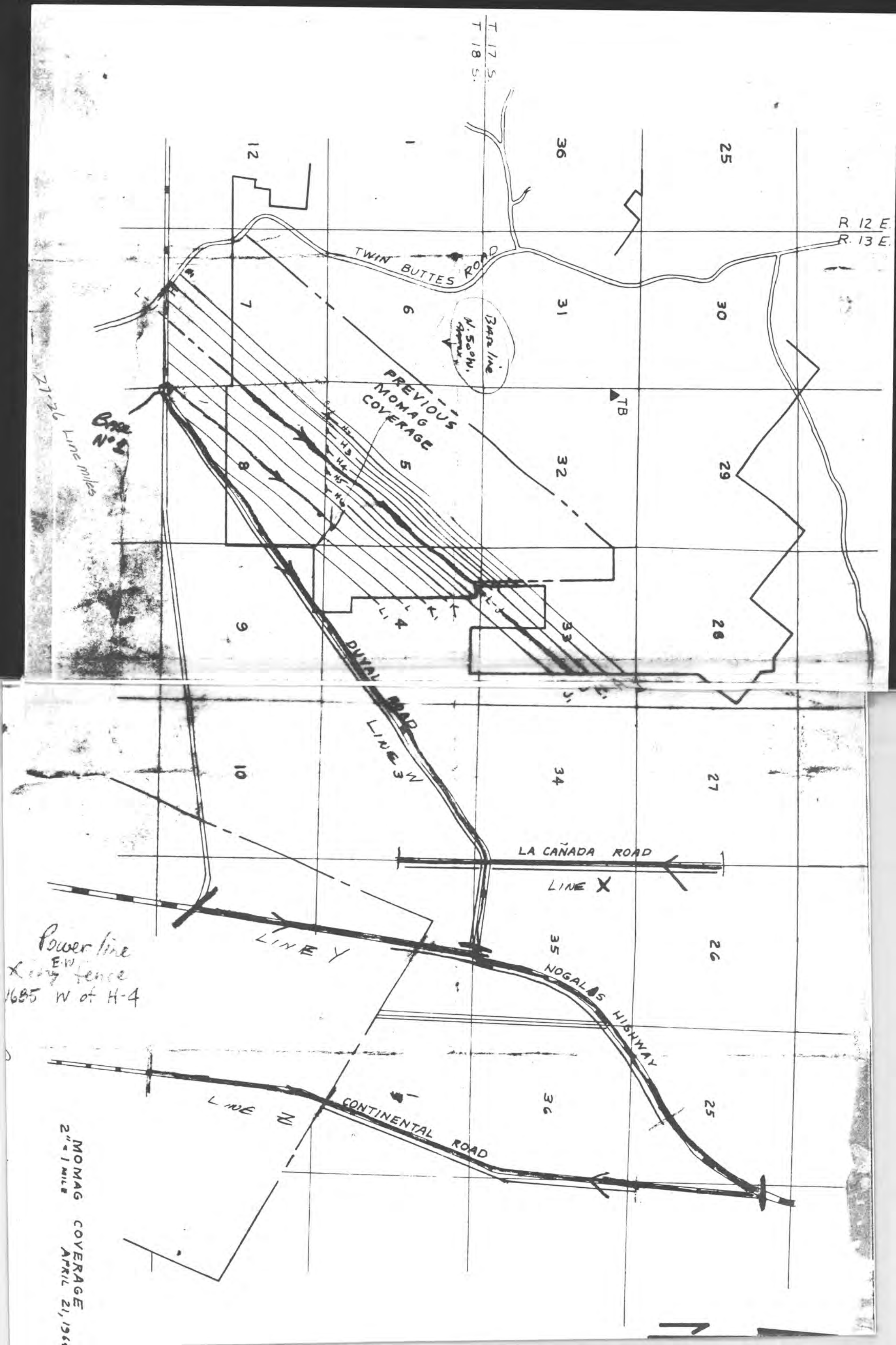
REC. 36 LINE L-1

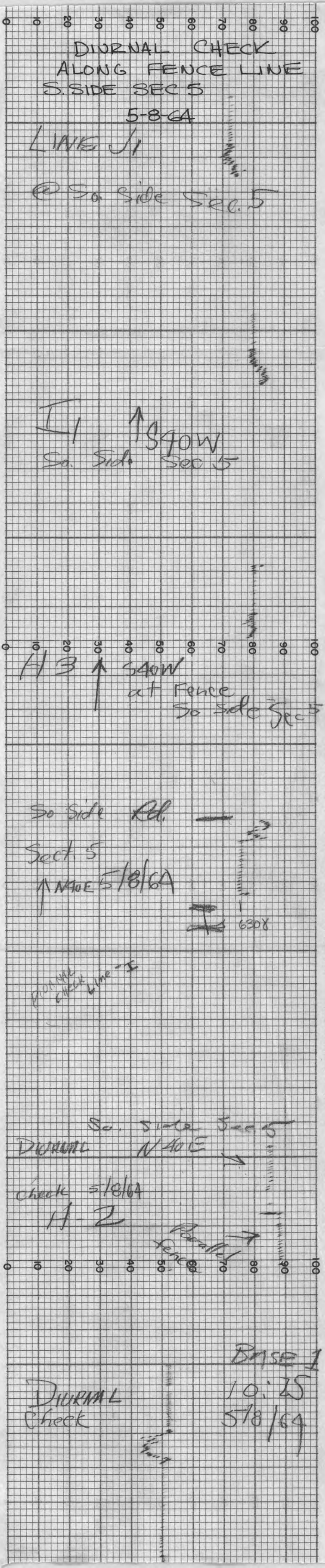
INSERT
Scale 2" = 1 Mile
May, 1964.
R. 12 E.
R. 13 E.
T. 17 S.
T. 18 S.
TWIN BUTTES ROAD
LA CAÑADA ROAD
LINE X
LINE Y
LINE Z
LINE W
PREVIOUS MOMAG COVERAGE
PRESENT COVERAGE
DUVAL ROAD
CONTINENTAL ROAD
NOGALES HIGHWAY
MAG. BASE
LINE "F" (Previous Coverage)
LINE "G" (Previous Coverage)
Cattle Guard
Power Line & Pipe Line
Magnetic Base
Base L-1
Power Line.
Pipe Line.
Cattle Guard
Fence
Magnetic Record number & direction of travel.
Previous Magnetic coverage.
5/1963 used to contour.
Note:
Old Magnetic data (5/63) lowered 200 Gammas to conform to new base.
Magnetic base arbitrary.
Record No. 7 not plotted.
Total record mileage = 48.36 miles.
HEINRICHS GEOEXPLORATION COMPANY
P.O. Box 5671
Tucson, Arizona
MAGNETIC MAP
TOTAL INTENSITY BY MOBILE MAGNETOMETER
FOR
THE ANACONDA COMPANY
TWIN BUTTES AREA
PIMA COUNTY, ARIZONA.
SCALE: 1" = 500'
Data position = 5%
DATE: May, 1964
DRAWN BY: R.P.L.
CONTOUR INTERVAL: 50γ
DATA BY: J.W.M., E.G.H.
SHEET 1 OF 1
DRAWING NO.:
REVISIONS
FILE:


R 12 E.
R 13 E.
T 17 S
T 18 S.
25
30
29
28
27
26
25
36
31
32
33
34
35
36
1
6
5
4
3
5
12
7
8
9
10
TB
Base line
N. 50° W.
Approx.
PREVIOUS MOMAG COVERAGE
TWIN BUTTES ROAD
DUVAL ROAD
LINE W
LA CAÑADA ROAD
LINE X
NOGALES HIGHWAY
CONTINENTAL ROAD
LINE Y
LINE Z
Base No 1
27-26 Line miles
Power Line
EW
Xing fence
1685 W of H-4
MOMAG COVERAGE
2" = 1 MILE
APRIL 21, 196

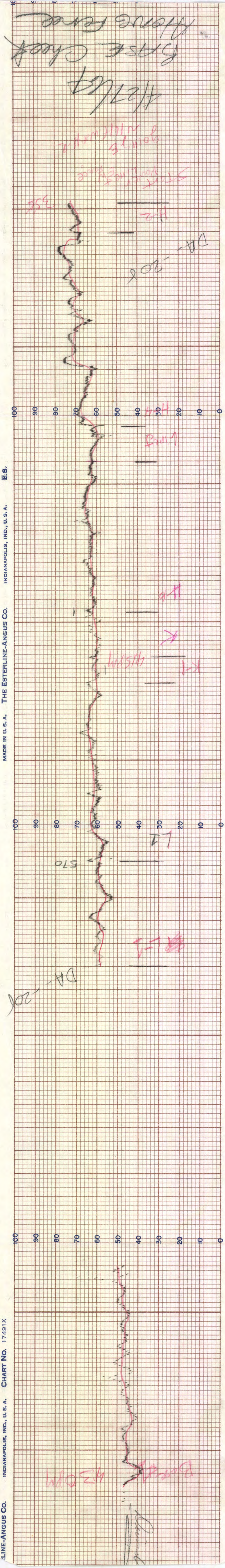

T 17 S
T 18 S
R 12 E.
R. 13 E.
TWIN BUTTES ROAD
Base line
N. 50°W.
PREVIOUS MOMAG COVERAGE
TB
BASE N°1
27-26 Line Miles
H2
H3
H4
H5
H6
DUVAL ROAD
LINE W
LA CAÑADA ROAD
LINE X
LINE Y
NOGALES HIGHWAY
LINE Z
CONTINENTAL ROAD
Baseline
EW
King fence
1685 W of H-4
MOMAG COVERAGE
2" = 1 MILE
APRIL 21, 1964


R 12 E
R 13 E
T 17 S
T 18 S
25
30
29
28
27
26
25
36
31
32
33
34
35
36
TB
Base line
N. 50° W.
PREVIOUS MOMAG COVERAGE
TWIN BUTTES
6
5
4
3
5
12
7
8
9
10
H2
H3
H4
H5
H6
DUVAL ROAD
LINE W
LA CAÑADA ROAD
LINE X
NOGALES HIGHWAY
CONTINENTAL ROAD
LINE Y
LINE Z
Base No 1
27-26 Line miles
Power line
EW
X ing fence
1685 W of H-4
MOMAG COVERAGE
2" = 1 MILE
APRIL 21, 196


T. 17 S.
T. 18 S.
R. 12 E.
R. 13 E.
TWIN BUTTES ROAD
Base line
N. 500 W.
PREVIOUS MOMAG COVERAGE
TB
Base No 1
27-26 Line miles
DUVAL ROAD
LINE W
LA CAÑADA ROAD
LINE X
LINE Y
NOGALES HIGHWAY
LINE Z
CONTINENTAL ROAD
Power line
E.W.
X ing fence
1685 W of H-4
MOMAG COVERAGE
2" = 1 MILE
APRIL 21, 196

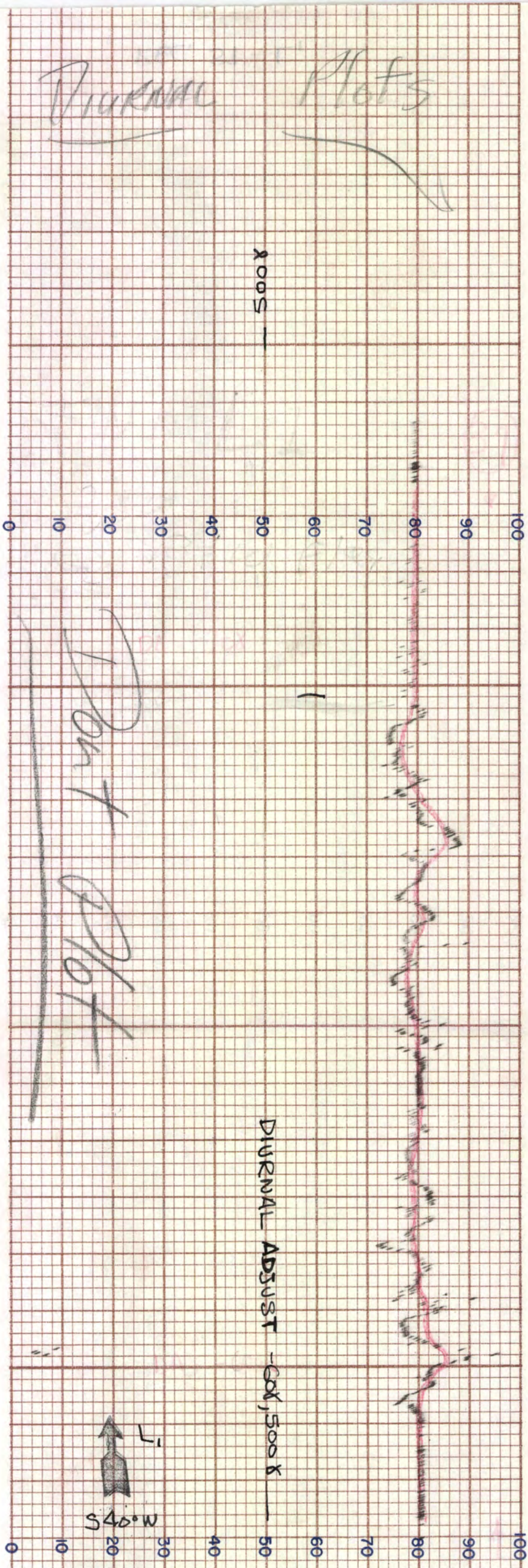


MADE IN U.S.A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. E.S.



MADE IN U. S. A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U. S. A. E.S.

THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U. S. A. CHART NO. 17491X



HEINRICHS GEOEXPLORATION CO.

MOMAG TOTAL MAGNETIC INTENSITY RECORD

FOR: THE ANACONDA COMPANY

RECORD NO 37 DATE 5-8-64

SENSITIVITY 50 GAMMAS/½ In. S.D.

HORIZONTAL SCALE 400 FT./In.

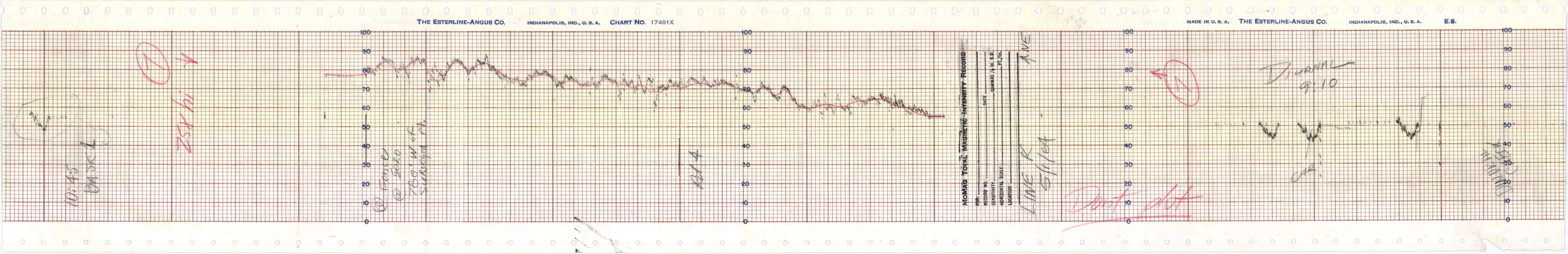
LOCATION TWIN BUTTES PROJECT
PIMA COUNTY, ARIZONA

REC 37 LINE L1

MADE IN U.S.A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U.S.A. E.S.

THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U. S. A. CHART NO. 17491X

MADE IN U. S. A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U. S. A. E.S.



L-2

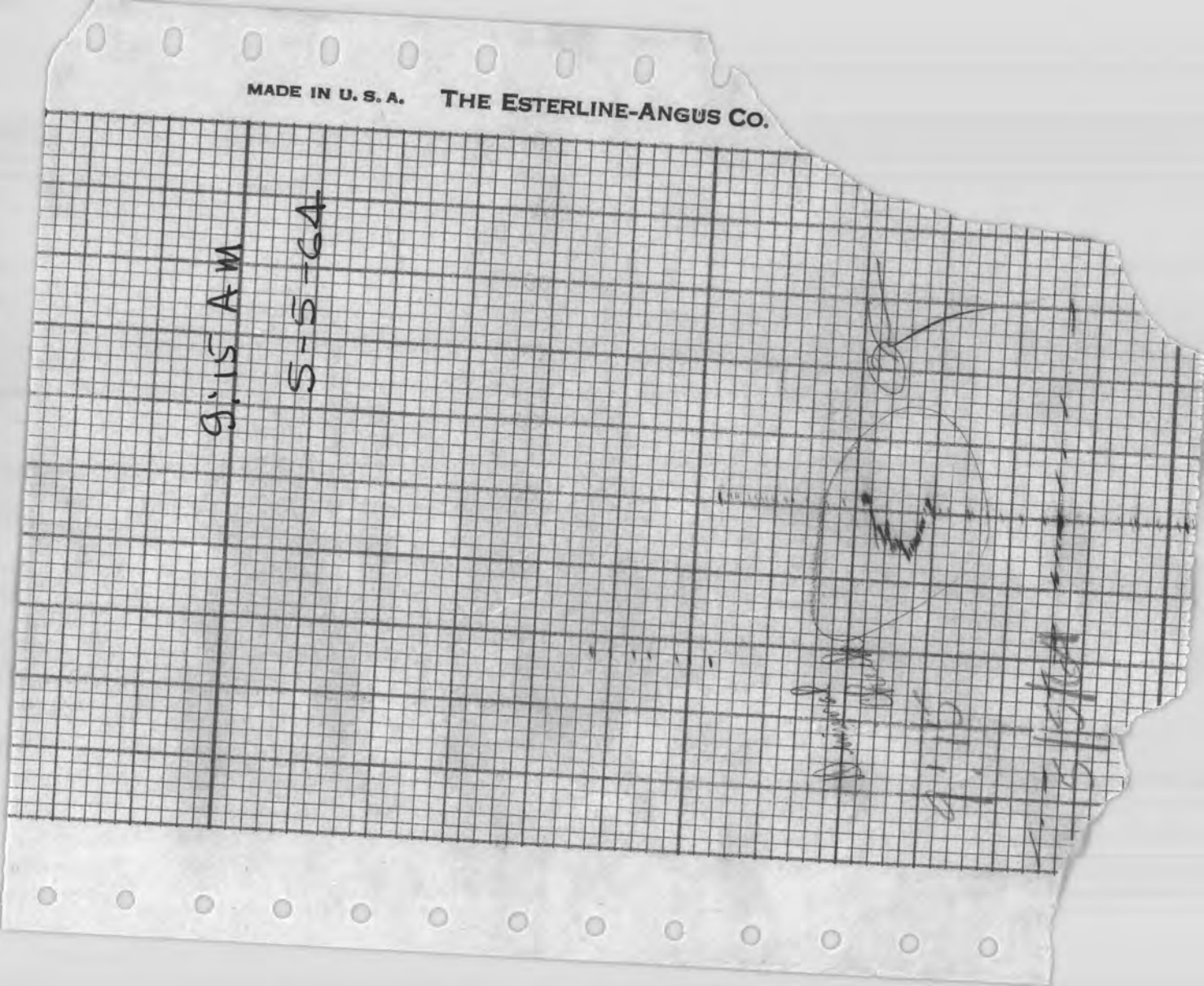
760.0

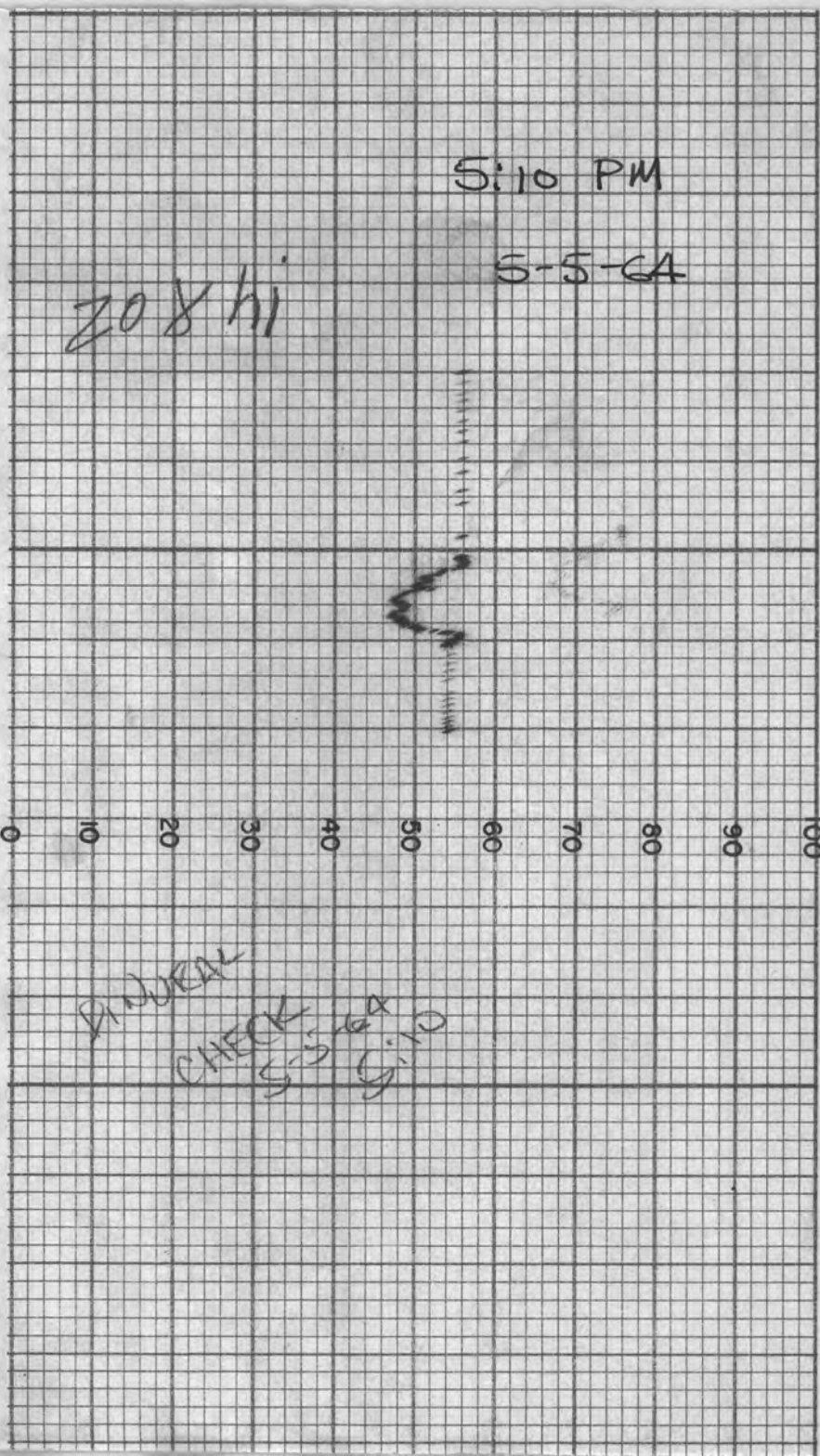
or

73.107

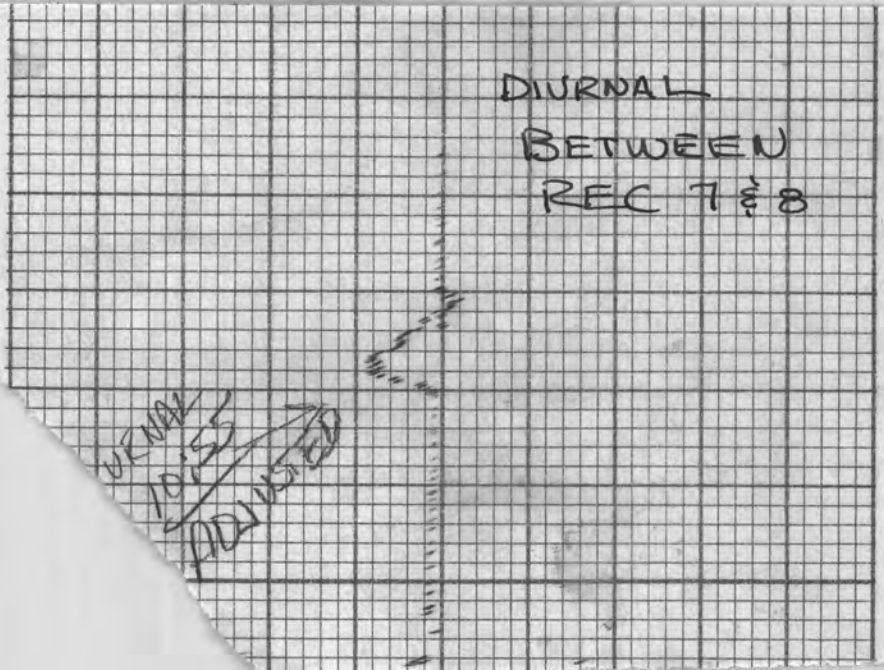
elw - 2965.84

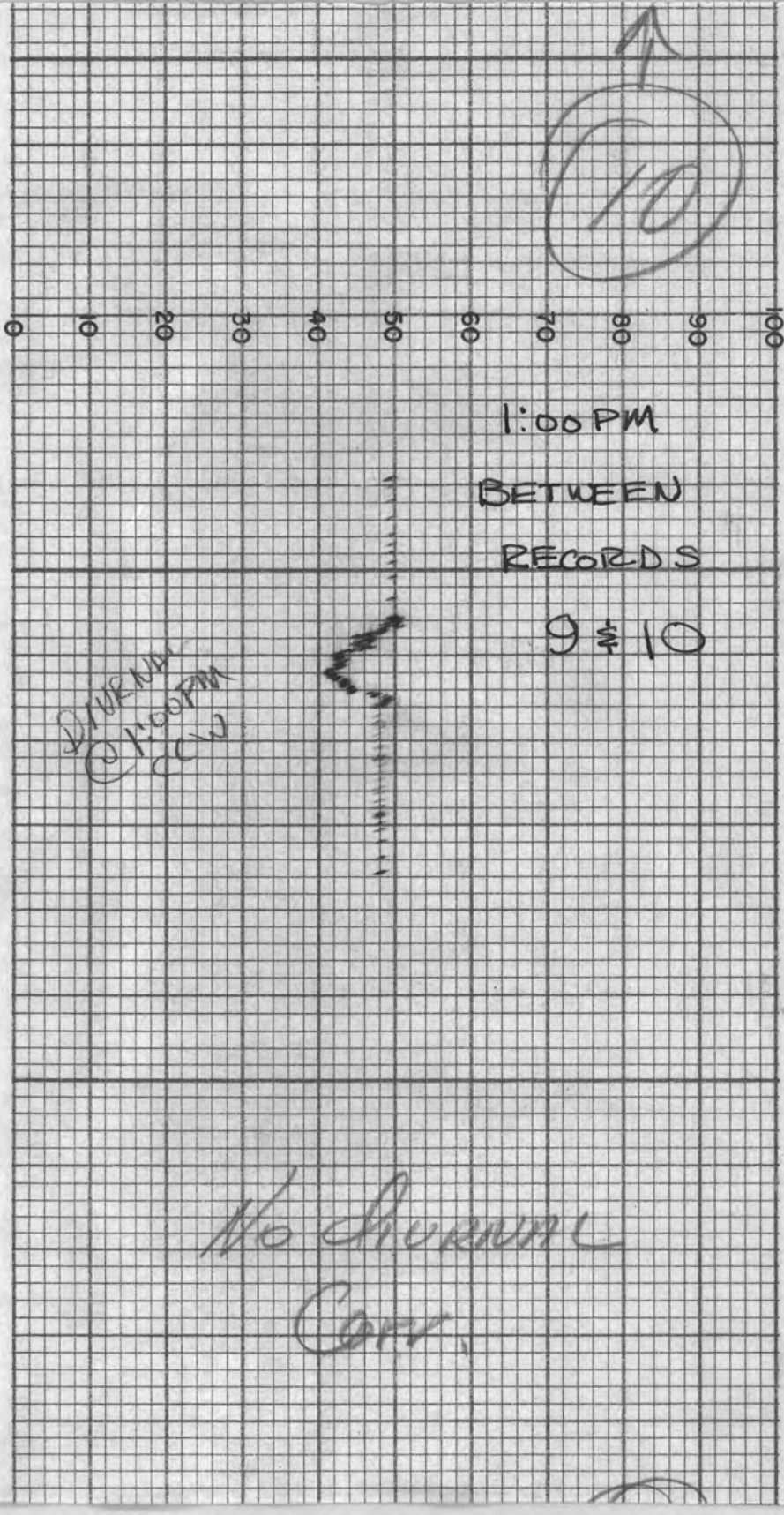
MADE IN U. S. A. THE ESTERLINE-ANGUS CO.

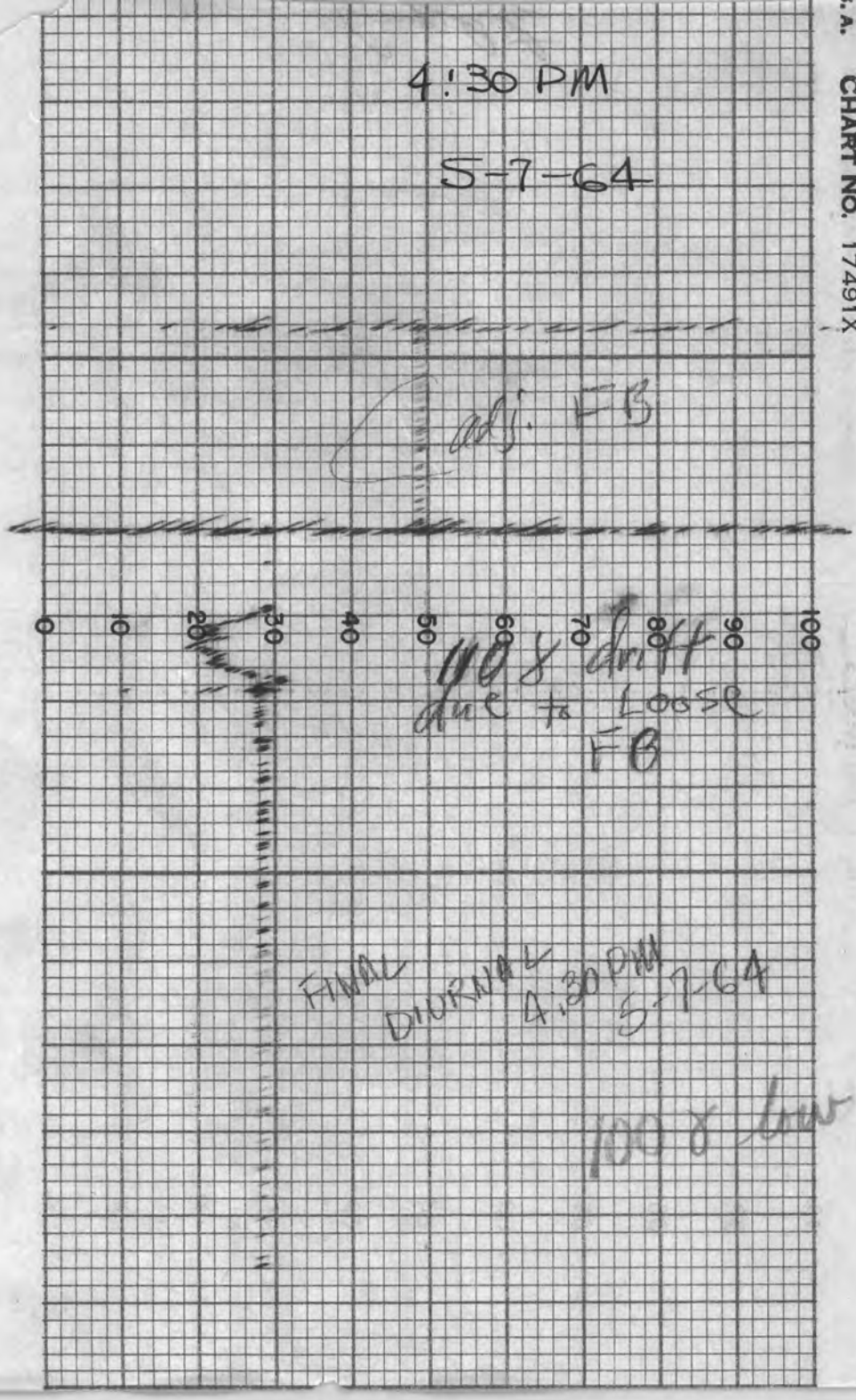




MADE IN U.S.A. THE ESTER

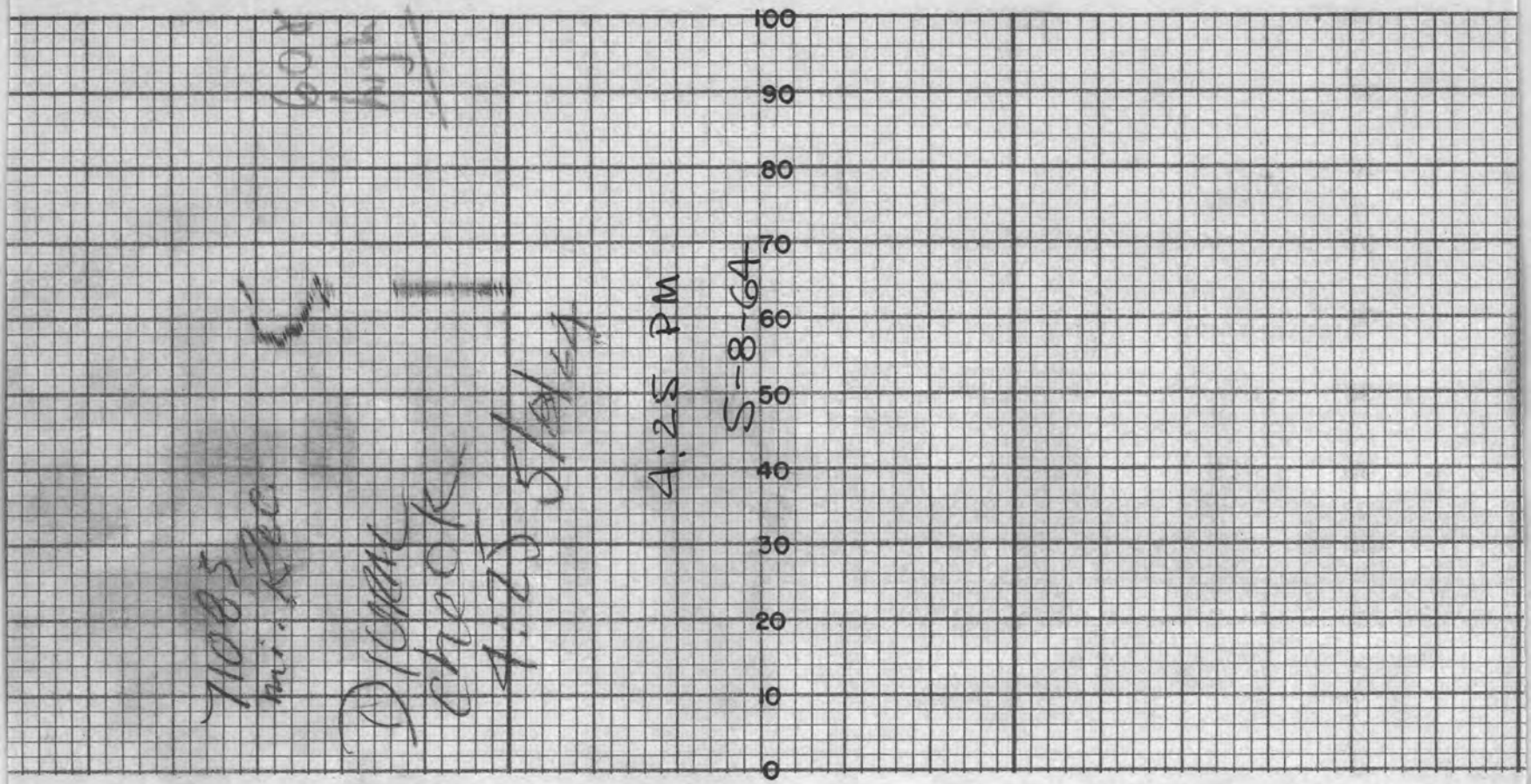

DIURNAL
BETWEEN
REC 7 & 8
URNAL
10:55
ADJUSTED


E.S.
10
0
10
20
30
40
50
60
70
80
90
100
1:00 PM
BETWEEN
RECORDS
9 & 10
DIURNAL
@ 1:00 PM
CCW
No Diurnal
Corr.

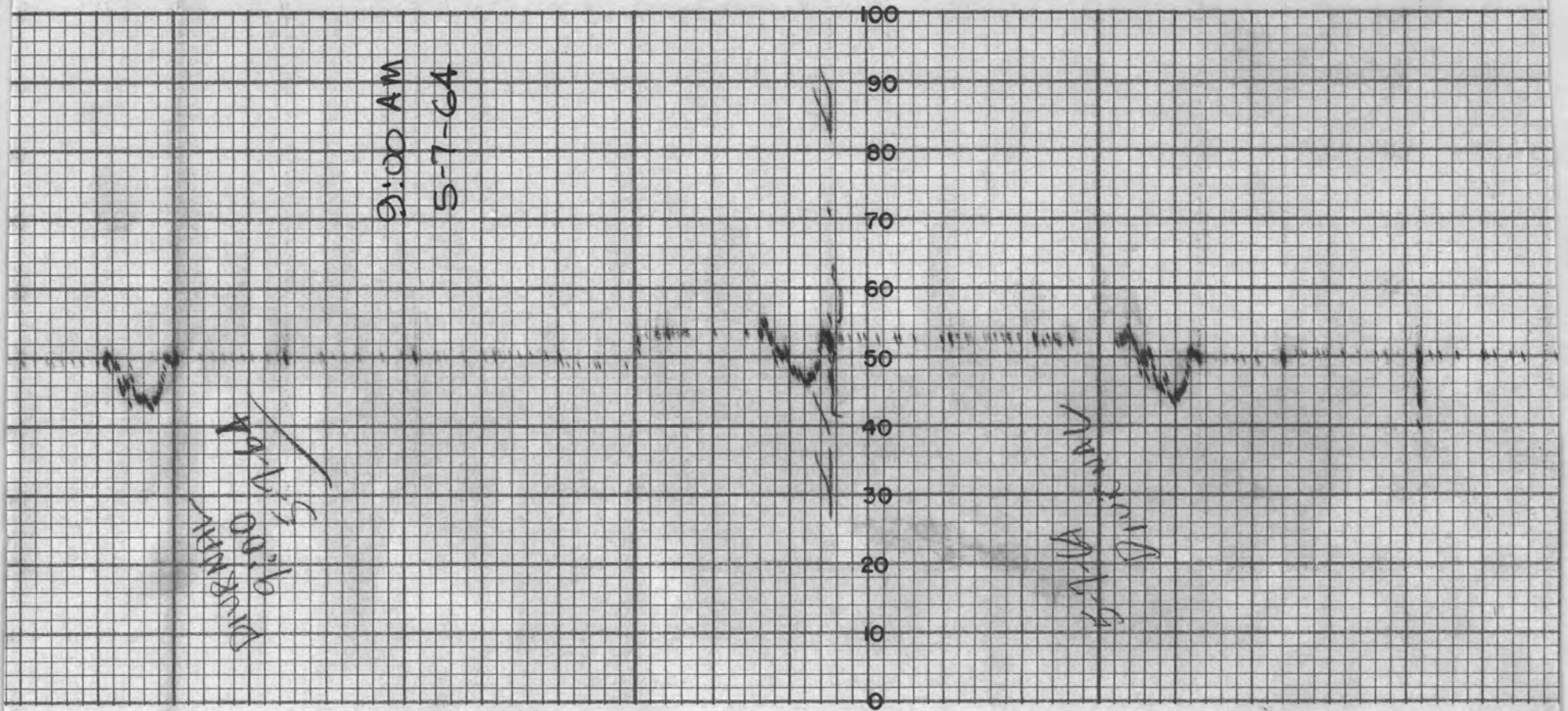


C.A. CHART NO. 17491X

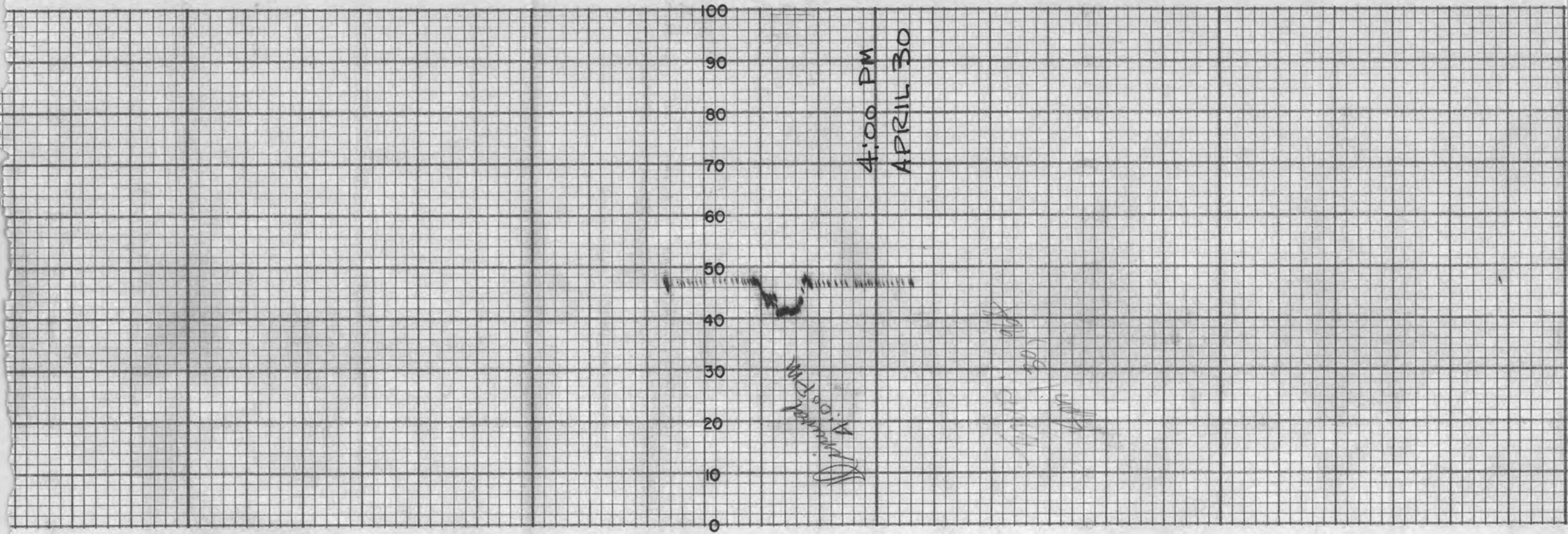
OLIS, IND., U. S. A. CHART NO. 17491X

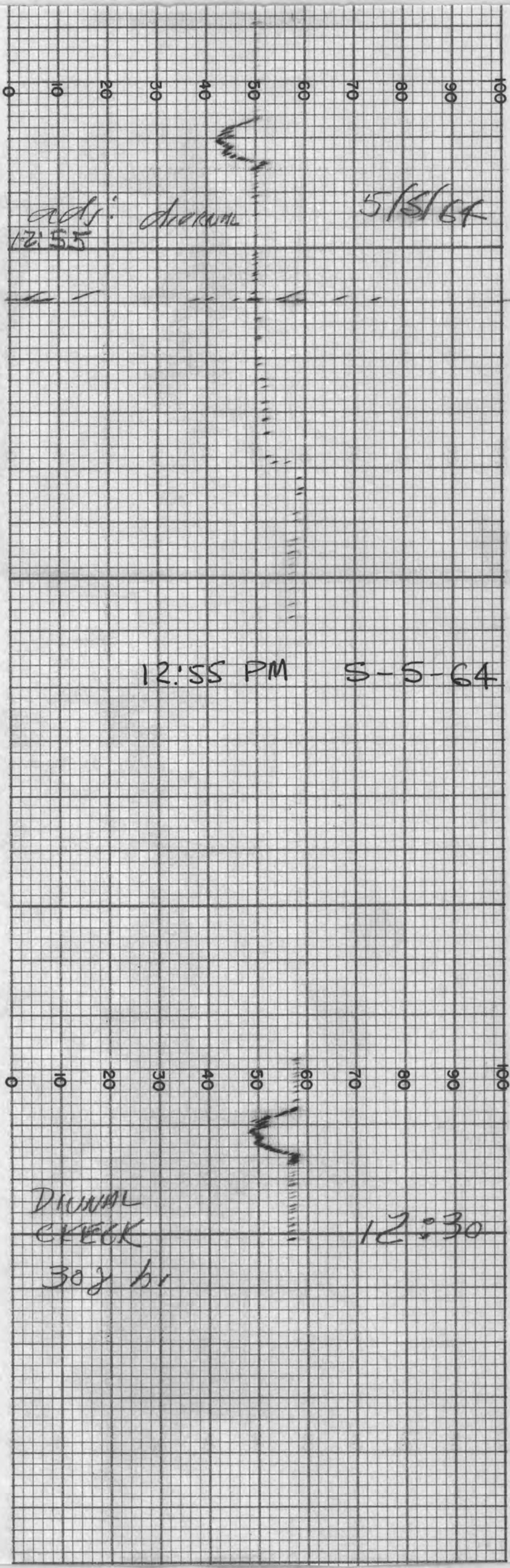


INDIANAPOLIS, IND., U. S. A. CHART NO. 17491X

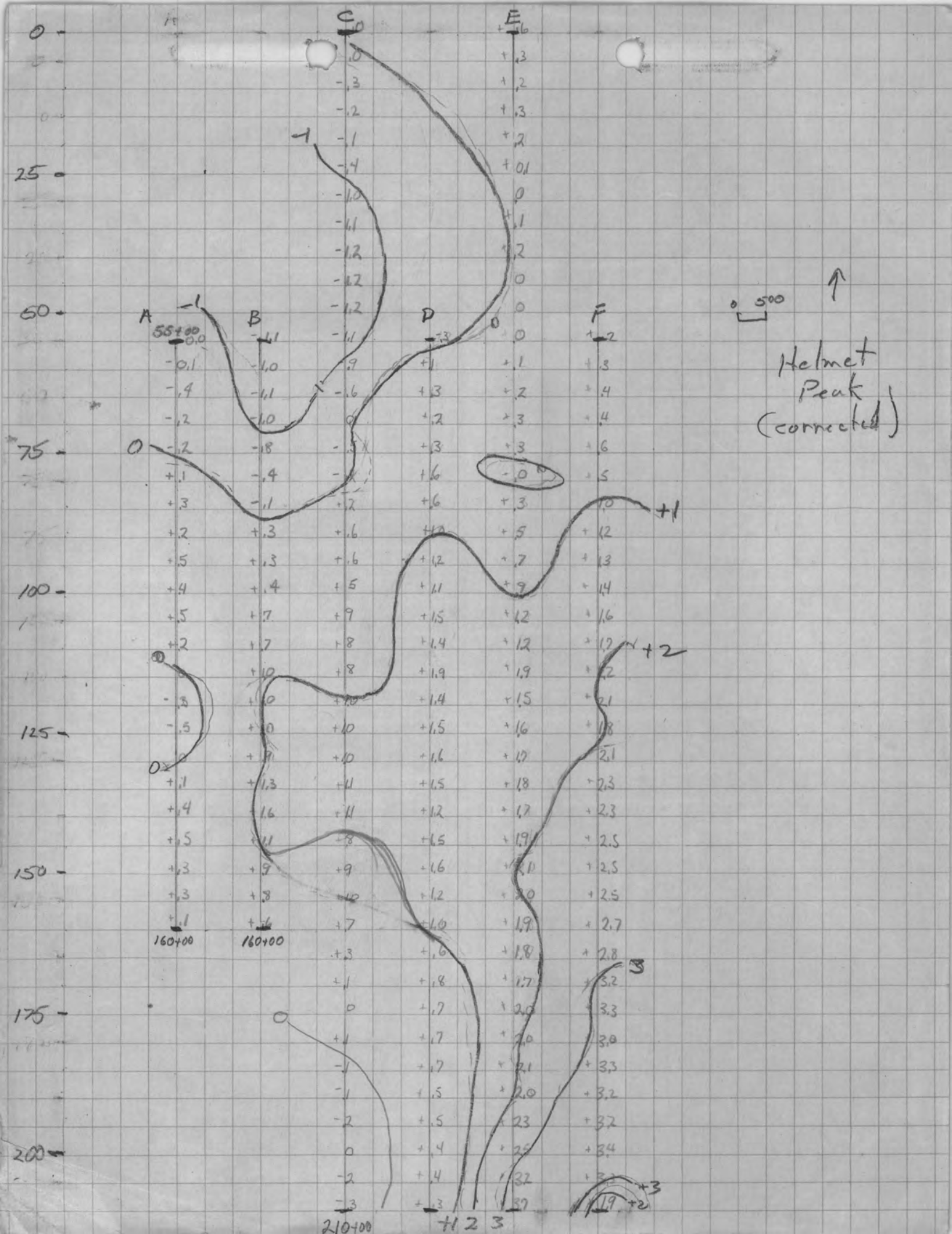


MADE IN U. S. A. THE ESTERLINE-ANGUS CO. INDIANAPOLIS, IND., U. S. A.

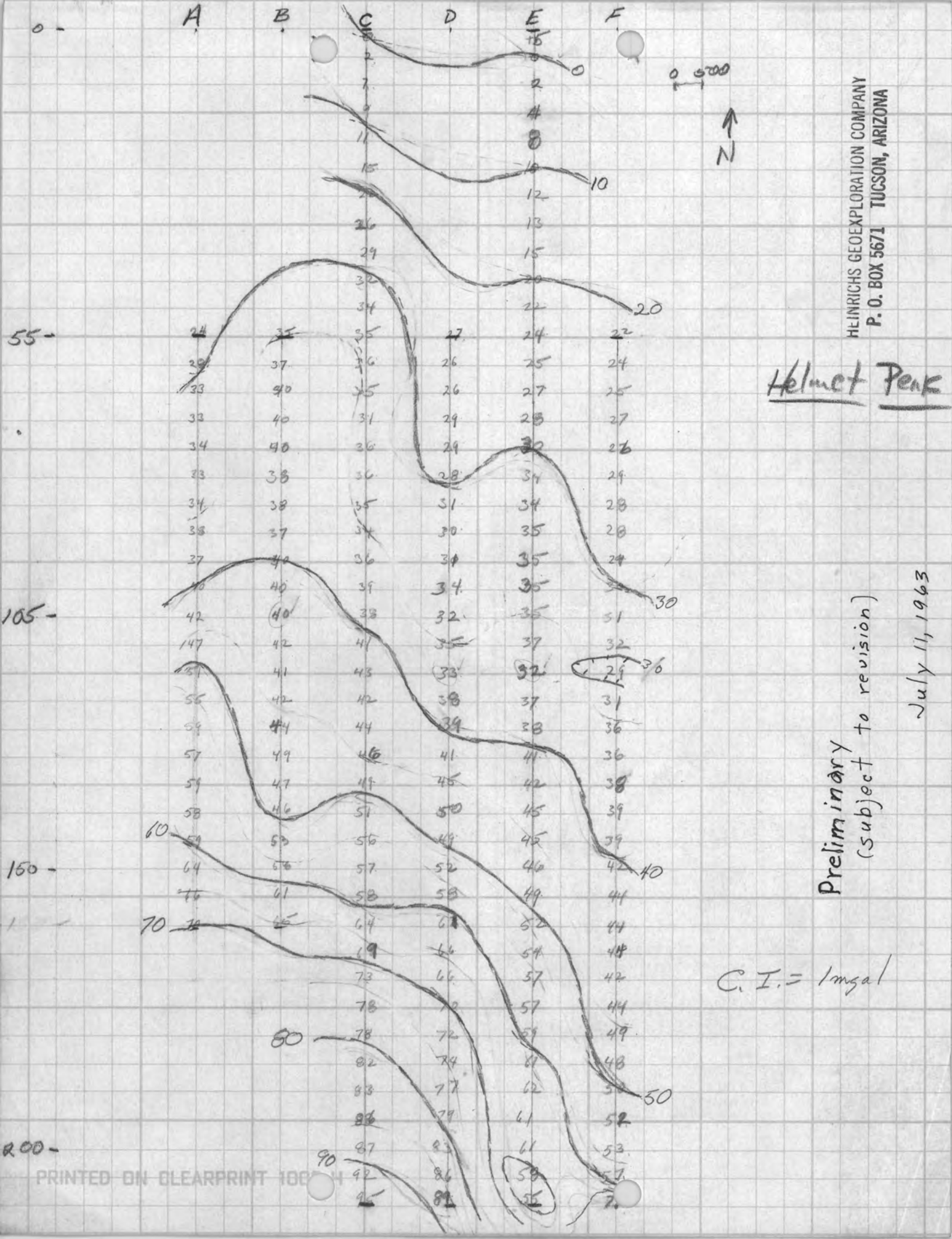




THE ESTERLINE-ANGUS CO. INDIANAP



A
B
C
D
E
F
55+00
160+00
160+00
210+00
0
25
50
75
100
125
150
175
200
0 500
Helmet Peak (corrected)



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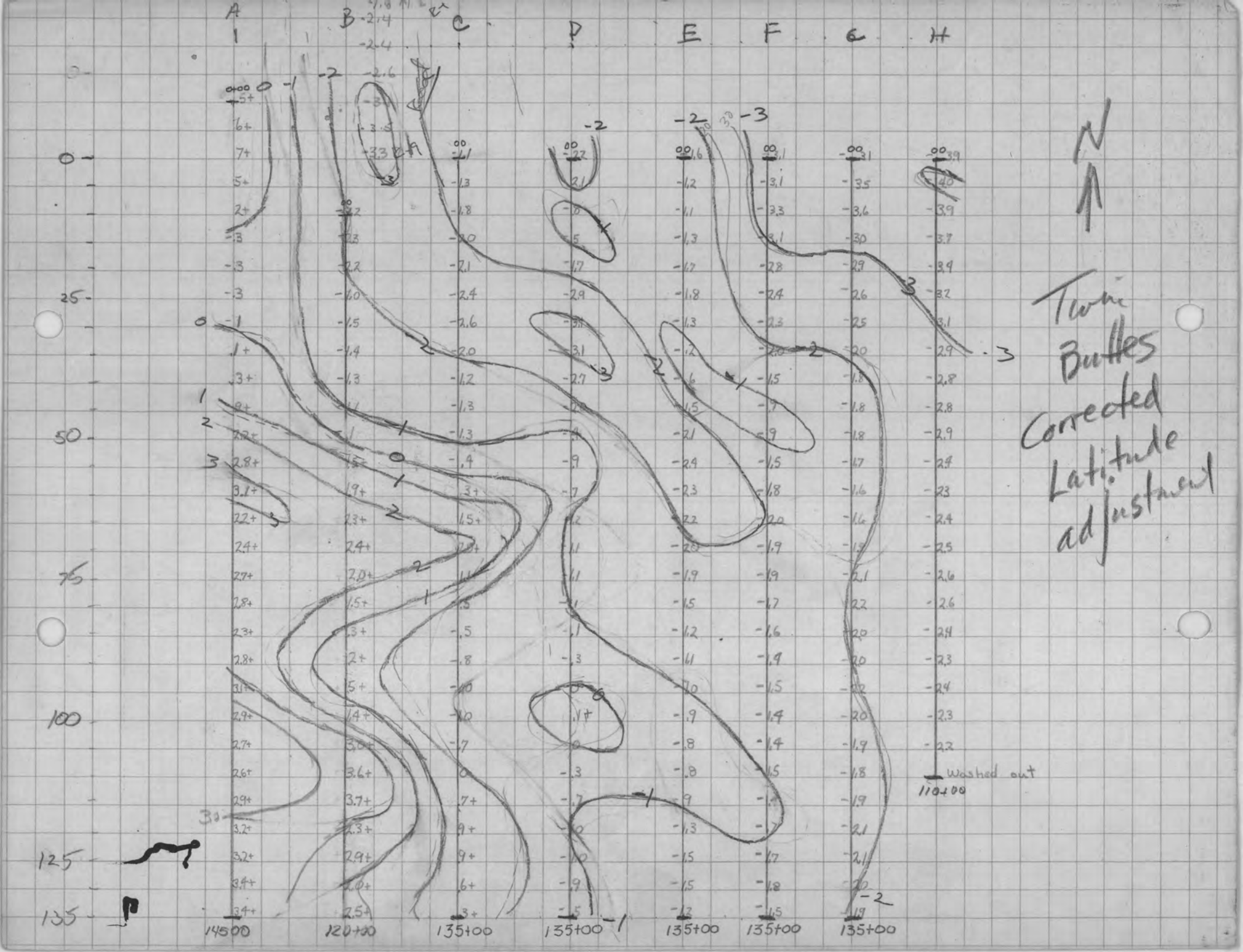
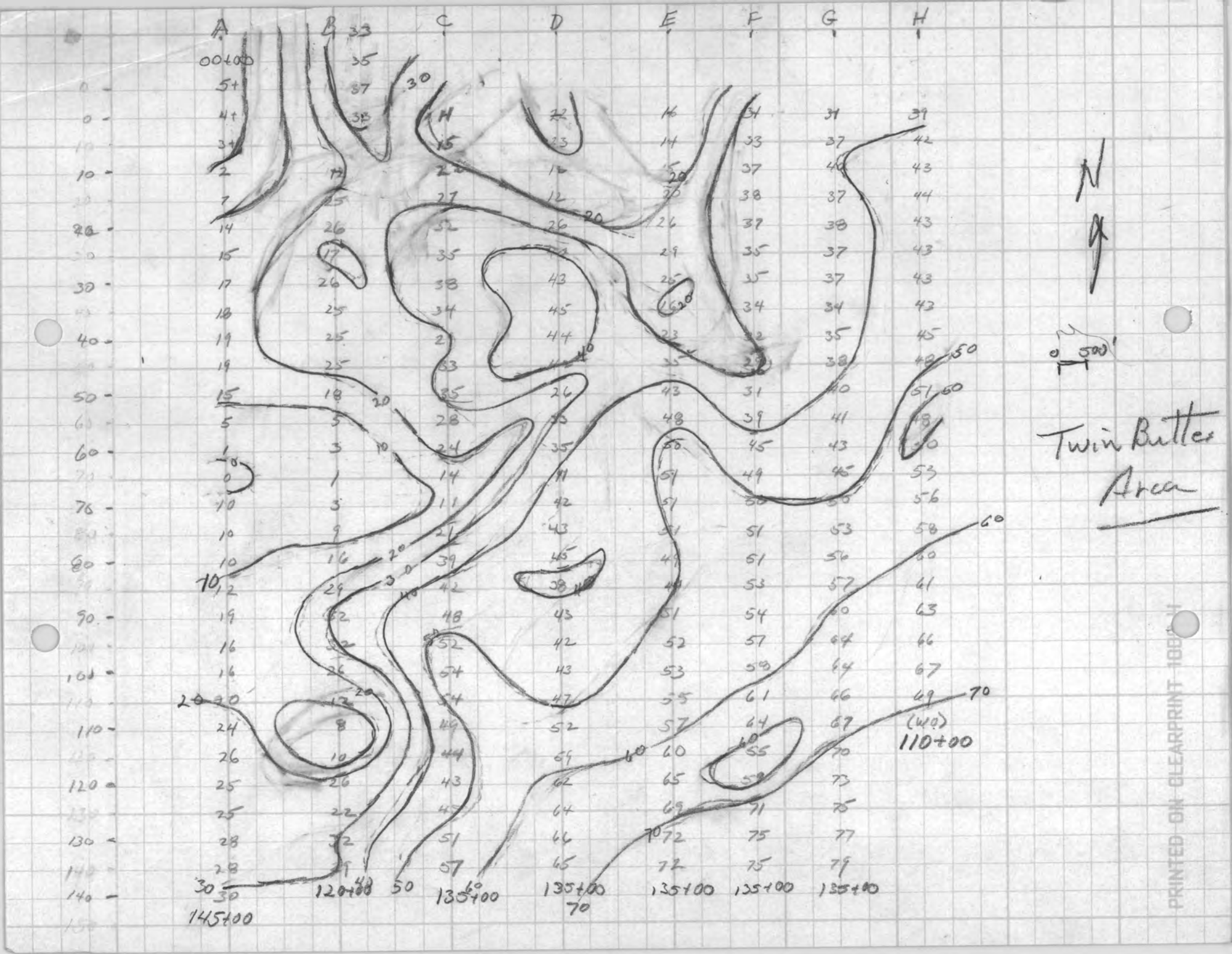

A
B
C
D
E
F
G
H
0
25
50
75
100
125
135
Twin Buttes
Corrected
Latitude
adjustment
N
Washed out
145+00
120+00
135+00
135+00
135+00
135+00
135+00
110+00

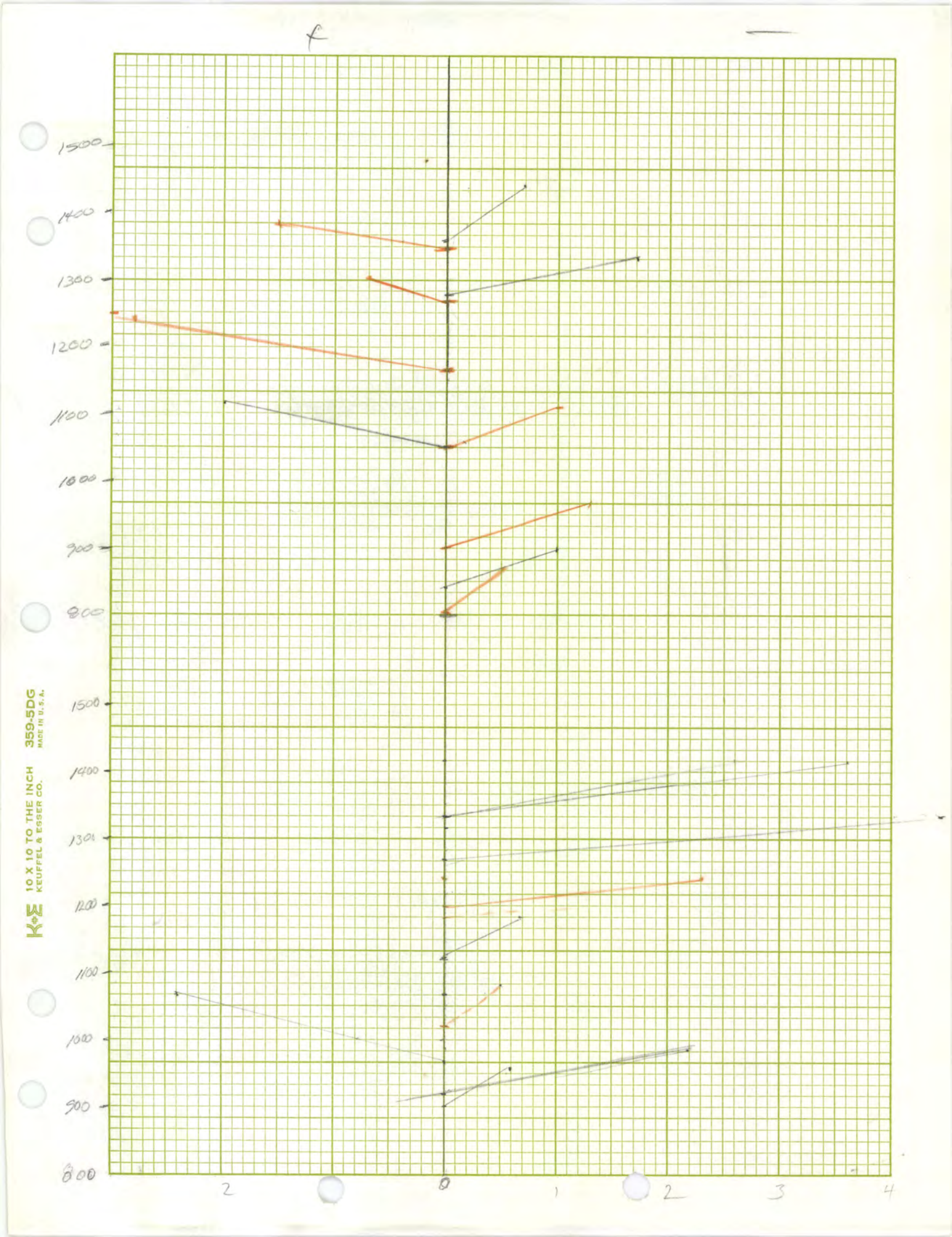

A
B
C
D
E
F
G
H
N
0 500'
Twin Butte Area
145+00
120+00
135+00
135+00
135+00
135+00
110+00
(40)

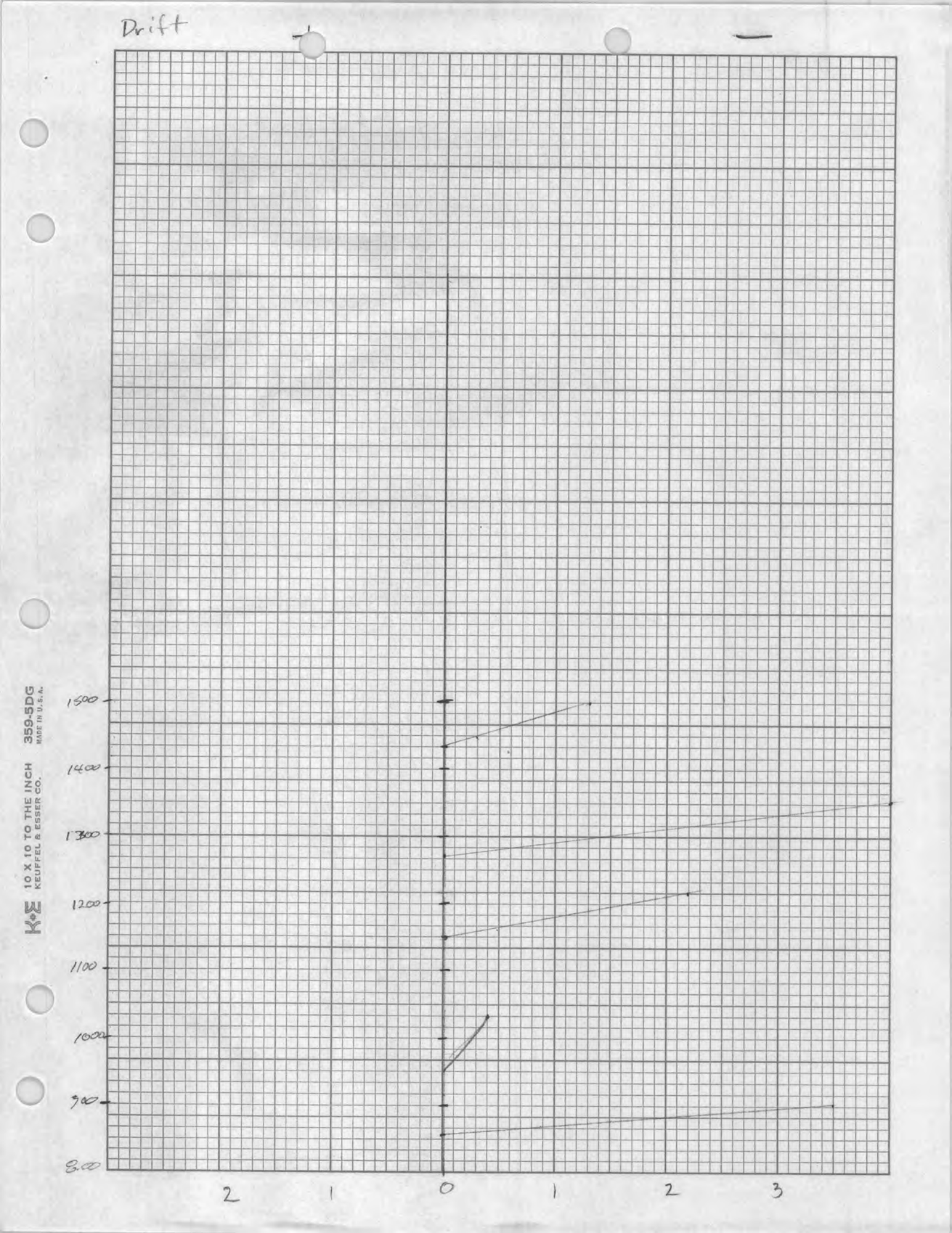
Helmet Peak

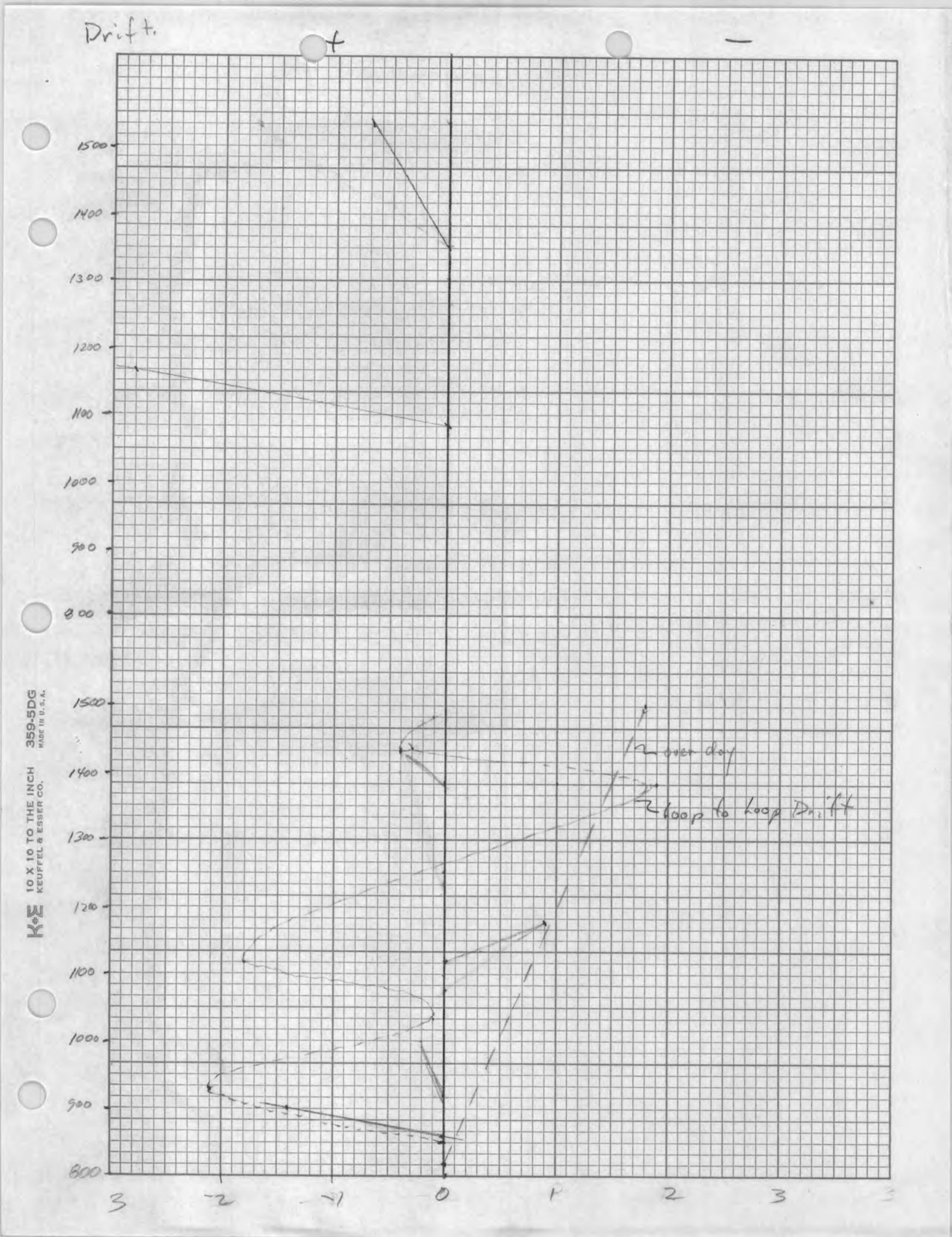
Anaconda

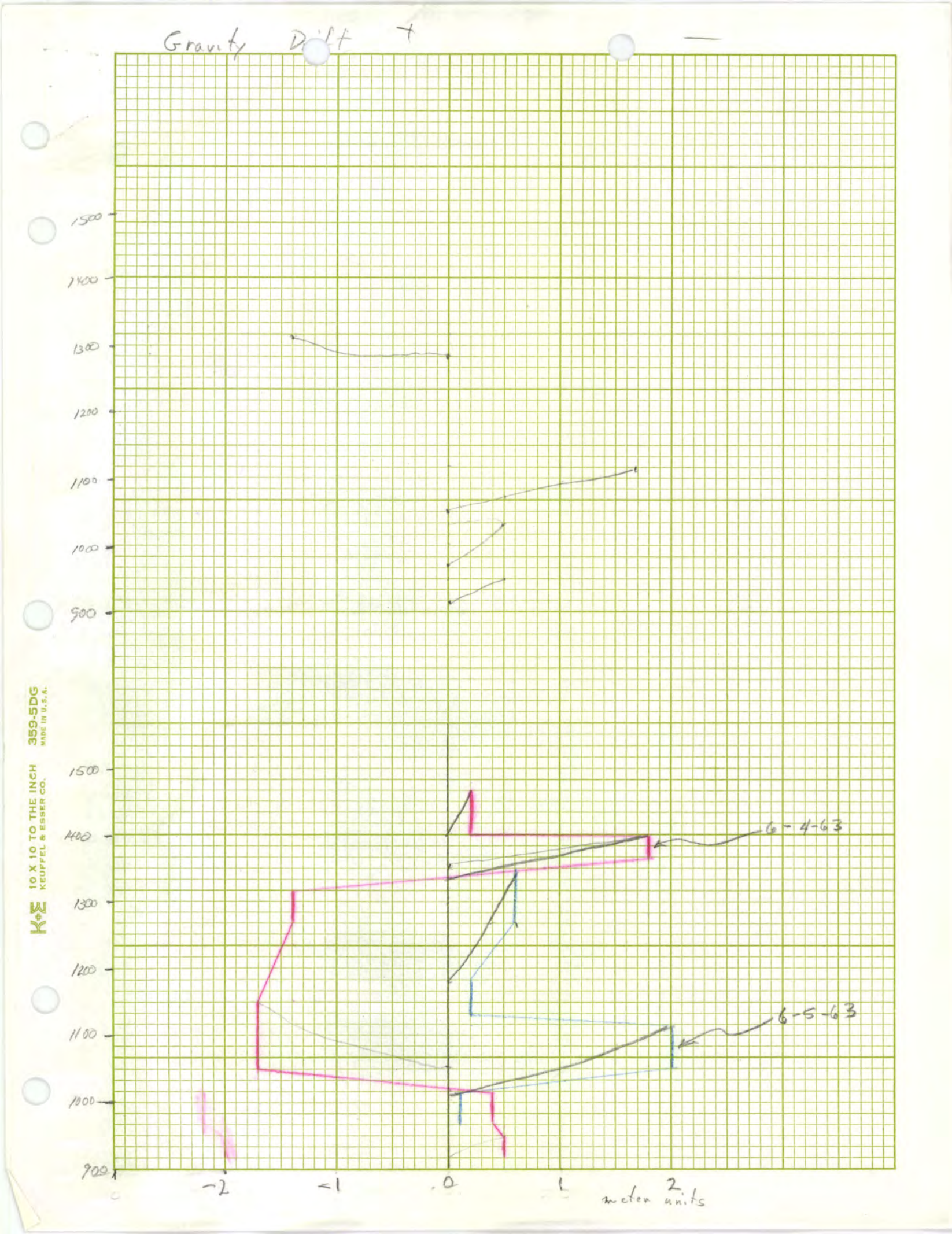
Gravity

WWC 8-6-63


1500
1400
1300
1200
1100
1000
900
800
1500
1400
1300
1200
1100
1000
900
800
2
0
1
2
3
4
10 X 10 TO THE INCH
KEUFFEL & ESSER CO.
359-5DG
MADE IN U.S.A.


Drift
1500
1400
1300
1200
1100
1000
900
800
2
1
0
1
2
3
10 X 10 TO THE INCH
KEUFFEL & ESSER CO.
359-5DG
MADE IN U.S.A.


Drift.
+
−
1500
1400
1300
1200
1100
1000
900
800
1500
1400
1300
1200
1100
1000
900
800
over day
loop to loop Drift
3
-2
-1
0
1
2
3
10 X 10 TO THE INCH 359-5DG
KEUFFEL & ESSER CO. MADE IN U.S.A.


Gravity Drift + —
1500
1400
1300
1200
1100
1000
900
1500
1400
1300
1200
1100
1000
900
-2
-1
0
1
2
meter units
6-4-63
6-5-63
10 X 10 TO THE INCH
KEUFFEL & ESSER CO.
359-5DG
MADE IN U.S.A.

COLORADO EXPLORATION COMPANY GOLDEN, COLORADO

GRAVITY METER DATA SHEET

Area Headmet Pk Inst.No. World-Wide Calib. Factor .096194

Date 5-29-63 Operator WWC Ass't Oper.

	Sta. No.	Time	Inst. Read.	Drft Corr	Sta. Grav.
Drift-May 29 1963	3477	10:55	433.3		
	3477	11:42	430.4	+2.9	
	3477	13:05	429.9	-.5	
	3477	13:35	431.6	+1.7	-2.4
	3477	15:25	430.9	-1.5	
5-31-63	L 2	10:45	765.9		
	L 2	13:05	766.2	+.3	+.7
	L 2	14:45	766.6	+.4	
Overday 6-4-63	L 2	8:45	782.6		
	L 2	15:15	785.2	+2.6	
Overday 6-5-63	C 110	9:45	682.8		
	C 110	14:10	684.2	+1.4	

	Sta. No.	Time	Inst. Read.	Drft Corr	Sta. Grav.
Line C		6-4-63 Drift			
Time Zone		Am Drift			
9:10 -	9:35	+0.5			
9:44 -	10:20	+0.4			
10:30 -	11:35	-1.7			
12:42 -	13:10	-1.4			
13:46 -	13:55	+1.8			
14:04 -	14:50	+.2			
Line C		6-5-63 Drift			
9:45 -	10:20	+.1			
10:30 -	11:05	+2.0			
11:15	11:50	+.2			
12:45	13:30	+.6			

L2

E 1-0 2-0 3-0 4-0 5-0 6-.1 7-.1 8-0 = .2 x 1/100

F 1- 2- 3- 4- 5- 6- 7- 8- = 0

G 0

H 0

I .1 + .1 + .1 + .1 + .1 .2 = .7

J. .2 1 = 1.2

K. .2 .2 1 = 1.4

L. 1

.2 + .7 + 1.2 + 1.4 = .003.5

Terrain for L2 = .035 mgal

C-210

E 0

F 0

G 0

H .0 .1 ~~+ .1 + .1 + .6 = 1.1~~

I 1.1

J .1 .1 .1 .1 .1 = .5.

K .1 .1 .1 = .3

L .1 .1 .1 .2 .5

1.1 + .5 + .3 + .5 2.4

C-210 — .024 mgal

Drift

Curves

Gravity

E-90

F-20

400.4

Re-Run Above Sta.

Tie with BM

BM - 13:05 - 324.4 - 324.4

E-90 - 13:56 - 400.4 - 400.4

F-20 - 13:29 - 415.9 - 415.9

BM - 14:36 - 324.7 - 324.6

C-65 14:16 - 444.9 - 444.9

AN = 44.2

E-90 - 404.6

F-20 = 420.1

G-65 = 444.9

404.6
3.6
408.2 = E-90

410.11
1.2
8.9
8.2
.7

394.5
+.2
395.0

421.7
.7
422.4
18.7
3.7

415.9
.4
416.3

Input Information — Twin Buttes ①

Date	Stat	Read	Loop	Drift Line	Argon Net Value	Miles N or S	Elevation in feet
	BM 341/2 K 114	406.0	0	0	0	0 (-)	3411.36
7-11-63	A-00	306.6	0	0	0	0	3581.88
	A-05	339.5	-.2	0	0	.095	3528.53
	A-10	358.7	-.7	0	0	.189	3498.43
	A-15	363.3	-.9	0	0	.284	3484.49
	A-20	357.6	0	-.7	0	.379	3486.65
	A-25	356.6	0	-.7	0	.474	3479.21
	A-30	356.6	0	-.7	0	.568	3479.77
	A-35	355.4	0	-.7	0	.663	3479.45
	A-40	353.0	0	-.3	0	.758	3482.03
	A-45	356.7	0	-.3	0	.852	3477.24
	A-50	353.0	0	-.3	0	.947	3485.55
	A-55	357.3	0	-.3	0	1.042	3486.73
7-12-63	A-60	364.3	0	-.3	+3.2	1.136	3489.18
	A-65	367.0	-.1	0	3.2	1.231	3492.77
	A-70	345.0	-.3	0	3.2	1.325	3531.39
	A-75	311.9	-.5	0	3.2	1.470	3572.66
	A-80	368.0	-.6	0	3.2	1.515	3482.06
	A-85	369.6	.2	-.6	3.2	1.609	3479.70
	A-90	365.5	.3	-.6	3.2	1.704	3484.97
	A-95	365.4	.4	-.6	3.2	1.799	3477.48
	A-100	373.2	.6	-.6	3.2	1.894	3470.42
	A-105	363.5	.7	-.6	3.2	1.988	3488.07
	A-110	359.9	.8	-.6	3.2	2.083	3487.68
	A-115	380.2	.1	-.3	3.2	2.178	3450.29
	A-120	372.4	.2	-.3	3.2	2.272	3461.21
	A-125	362.6	.3	-.3	3.2	2.367	3481.34
	A-130	370.8	.4	-.3	3.2	2.462	3469.91

PRINTED ON CLEARPRINT 1000-H

TB ②

Date	Station	Read	Loop	Drift Line	Area Net Volume	Miles N or S	Elevation
	BM 3412	406.0	0	0	0	0 (—)	3411.36
7-12-63	A-135	360.7	.6	+.3	3.2	2.556	3480.70
	A-140	373.0	0	.3	3.2	2.651	3463.56
	A-145	348.3	0	.3	3.2	2.746	3503.55
	B-120	386.9	+.1	.3	3.2	2.367	3433.82
	B-115	404.8	+.1	.3	3.2	2.272	3415.57
	B-110	392.5	.1	.7	3.2	2.178	3433.26
	B-105	393.7	.2	.7	3.2	2.083	3439.54
	B-100	403.6	.3	.7	3.2	1.988	3429.98
	B-95	400.7	.4	.7	3.2	1.894	3436.13
	B-90	412.0	.6	.7	3.2	? 1.799	3408.72
7-15-63	B-85	385.1	-.2	0	12.1	1.704	3416.31
	B-80	378.7	-.3	0	12.1	1.609	3415.00
	B-75	369.5	-.4	0	12.1	1.515	3428.52
	B-70	361.5	-.7	0	12.1	1.470	3445.83
	B-65	380.6	0	-.2	12.1	1.325	3432.36
	B-60	376.0	.1	-.2	12.1	1.231	3450.15
	B-55	392.1	.1	-.2	12.1	1.136	3432.44
	B-50	384.1	.2	-.2	12.1	1.042	3449.03
	B-45	347.4	0	-.9	12.1	.947	3501.09
	B-40	342.9	0	-.9	12.1	.852	3504.42
	B-35	372.3	-.1	-.9	12.1	.758	3432.16
	B-30	359.4	-.1	-.9	12.1	.663	3439.87
	B-25	356.7	0	-.2	12.1	.568	3440.64
	B-20	357.1	.1	-.2	12.1	.474	3439.17
	B-15	355.3	.1	-.2	12.1	.379	3438.84
	B-10	364.1	+.2	-.2	12.1	.284	3437.63
7-16-63	B-05	359.9	0	0	4.8	.189	3438.79

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TB (3)

Date	Stat	Read	Loop	DRift Line	Area Net Values	Miles No. S	Elev.
	BM 3412					0 (←)	3411.36
7-16-63	B-I No.	359.8	0	0	4.8	.0951	3439.82
	B-00	361.0	-.1	0	4.8	0	3456.31
	C-00	298.9	0	-.7	4.8	0	3560.21
	C-05	385.0	0	-.7	4.8	.095	3415.52
	C-10	388.1	-.1	0	4.8	.189	3399.62
	C-15	387.3	-.1	-.7	4.8	.284	3396.68
	C-20	383.8	-.1	-.7	4.8	.379	3395.77
	C-25	384.0	0	-.8	4.8	.474	3391.62
	C-30	377.4	0	-.8	4.8	.568	3398.77
	C-35	385.5	.1	-.8	4.8	.663	3395.25
	C-40	391.1	.1	-.8	4.8	.758	3395.84
	C-45	395.1	.2	-.8	4.8	.852	3384.31
	C-50	391.0	.3	-.8	4.8	.947	3389.54
	C-55	401.9	0	-.8	4.8	1.042	3384.67
	C-60	405.0	-.1	-.8	4.8	1.136	3389.07
	C-65	369.8	-.2	-.8	4.8	1.231	3465.50
	C-70	388.5	-.3	-.8	4.8	1.325	3441.16
	C-75	411.4	-.4	-.8	4.8	1.470	3388.75
7-17-63	C-80	404.3	0	0	-2.4	1.515	3383.40
	C-85	402.6	0	0	-2.4	1.609	3382.02
	C-90	395.8	0	0	-2.4	1.704	3385.47
	C-95	392.9	0	0	-2.4	1.799	3386.08
	C-100	395.1	.1	0	-2.4	1.894	3379.85
7-18-63	C-105	397.6	.2	0	+4.4	1.988	3367.47
	C-110	395.5	.3	0	4.4	2.083	3379.54
	C-115	404.4	.4	0	4.4	2.178	3375.66

PRINTED ON CLEARPRINT 1000H

Date	Stat.	Read	Loop	Drift Line	Accepted Values	Miles N or S	Elev.
	BM 3412					@ (-)	3411.36
7-18-63	C-120	405.6	.5	0	4.4	2.272	3376.73
	C-125	408.8	.6	0	4.4	2.367	3370.80
	C-130	407.8	.7	0	4.4	2.462	3364.07
	C-135	391.0	.7	1.1	4.4	2.556	3380.89
	D-135	421.6	1.5	1.1	4.4	2.556	3316.45
	D-130	416.6	1.9	1.1	4.4	2.462	3320.95
	D-125	415.4	2.2	1.1	4.4	2.367	3323.98
	D-120	409.0	0	3.3	4.4	2.272	3330.10
	D-115	410.1	0	3.3	4.4	2.178	3337.43
	D-110	423.9	0	3.3	4.4	2.083	3324.68
	D-105	416.0	0	3.3	4.4	1.988	3342.64
	D-100	427.1	0	3.3	4.4	1.894	3330.14
	D-95	417.7	6	3.3	4.4	1.799	3345.19
	D-90	422.8	0	1.2	4.4	1.704	3338.06
	D-85	418.4	0	1.2	4.4	1.609	3344.34
	D-80	408.4	0	1.2	4.4	1.515	3354.87
	D-75	414.4	0	1.2	4.4	1.470	3346.14
	D-70	410.6	-.1	1.2	4.4	1.325	3350.65
	D-65	407.9	-.1	1.2	4.4	1.231	3355.28
	D-60	427.9	-.2	1.2	4.4	1.136	3331.96
	D-55	422.2	-.2	1.2	4.4	1.042	3342.08
7-19-63	D-50	419.0	0	0	5.5	.947	3335.87
	D-45	408.3	0	0	5.5	.852	3344.79
	D-40	405.5	0	0	5.5	.758	3345.10
	D-35	400.9	0	0	5.5	.663	3348.47

PRINTED ON CLEARPRINT 1000-H

Date	Stat.	Read	Loop	Drift Line	Area Net Values	Miles N or S	Elev
	BM 3412					0 (-)	3411.36
	D-30	400.9	0	0	5.5	,568	3349.83
	D-25	407.4	0	-.5	5.5	.474	3344.16
	D-20	419.1	0	-.5	5.5	.379	3345.67
	D-15	429.1	-.1	-.5	5.5	.284	3350.62
	D-10	376.2	.1	-.5	5.5	.189	3434.85
	D-05	267.1	.2	+.7	5.5	.095	3589.87
	D-00	268.6	.3	+.7	5.5	0	3588.99
7-29-63	E-00	412.3	0	0	42.4	0	3305.40
	E-05	421.5	-.1	0	42.4	.095	3296.39
	E-10	419.4	-.2	0	42.4	.189	3298.54
	E-15	412.7	-.3	0	42.4	.284	3304.41
	E-20	413.3	0	-.9	42.4	.379	3296.14
	E-25	410.4	-.1	-.9	42.4	.474	3297.84
	E-30	415.1	-.1	-.9	42.4	.568	3299.05
	E-35	430.1	-.2	.9	42.4	.663	3290.32
	E-40	420.3	0	-1.2	42.4	,758	3298.26
	E-45	408.0	+.1	-1.2	42.4	.852	3298.90
	E-50	404.3	.2	-1.2	42.4	.947	3293.23
	E-55	405.0	.3	-1.2	42.4	1.042	3286.94
	E-60	408.8	0	-1.2	42.4	1.136	3278.84
	E-65	401.0	-.1	-1.2	42.4	1.231	3291.41
	E-70	399.8	-.2	-1.2	42.4	1.325	3295.66
	E-75	399.7	-.3	-1.2	42.4	1.470	3298.59
	E-80	405.6	0	-1.0	42.4	1.515	3293.33
	E-85	412.9	-.1	-1.0	42.4	1.609	3283.36

PRINTED ON CLEARPRINT 1000-H

Date	Stat	Read	Drift Loop	Drift Line	Area Value	Net Miles Nors	Elev
	BM 3412					0 (-)	3411.36
7-29-63	E-90	410.1	-.2	-1.0	42.4	-1.7040	3286.17
↓	E-95	413.2	0	+.7	42.4	-1.7990	3277.92
	E-100	410.9	-.1	.7	42.4	-1.8940	3282.29
(Cont'd on Bottom of next page)	E-105	400.1	-.1	.7	42.4	-1.9880	3298.28
	E-110	408.8	-.2	.7	42.4	-2.0830	3283.19
	E-115	398.9	-.1	.7	42.4	-2.1780	3295.54
	E-120	397.3	-.1	.7	42.4	-2.2720	3292.41
	E-125	394.5	-.2	.7	42.4	-2.3670	3292.65
	E-130	389.2	0	.3	42.4	-2.4620	3297.57
	E-135	399.2	0	.3	42.4	-2.5560	3283.49
	↑ Space Due to error on my Part WNC ↓						
7-30-63	F-00	432.8	0	-.4	3.7	0	3241.05
↑	F-05	429.5	0	-.3	3.7	-.0950	3244.81
	F-10	418.8	0	-.3	3.7	-.1890	3258.32
	F-15	415.5	0	-.3	3.7	-.2840	3262.91
	F-20	420.5	.1	-1.1	3.7	-.3790	3259.11
	F-25	422.3	0	-1.1	3.7	-.4740	3261.43
	F-30	419.6	0	-1.1	3.7	-.5680	3267.67
	F-35	424.2	.3	-1.4	3.7	-.6630	3264.30
7-30-63	F-40	433.7	.3	-1.4	3.7	-.7580	3254.86

PRINTED ON CLEARPRINT 1000-H

Date	Stat	Read	Loop	Drift Line	Area Net Values	Miles N or S	Elev.
	BM 3412					0. (-)	3411.36
7-30-63	F-45	433.7	.1	-1.4	3.7	-.8520	3260.43
	F-50	432.0	0	-1.4	3.7	-.9470	3261.90
	F-55	427.9	-.2	-.8	3.7	-1.0420	3257.04
	F-60	426.1	-.1	-.8	3.7	-1.1360	3250.66
	F-65	417.9	-.1	-.8	3.7	-1.2310	3260.98
	F-70	418.5	0	-.8	3.7	-1.3250	3259.71
	F-75	418.8	0	-.8	3.7	-1.4200	3259.55
	F-80	417.8	0	-.8	3.7	-1.5150	3262.01
	F-85	420.5	0	-.8	3.7	-1.6090	3257.08
	F-90	427.2	0	-.8	3.7	-1.7040	3246.44
	F-95	422.0	-.1	0	3.7	-1.7990	3250.40
also on next page →	F-100	426.5	0	0	3.7	-1.8940	3241.52
7-30-63	F-105	422.8	0	0	3.7	-1.9880	3245.62
	F-110	421.7	-.1	.8	42.4	-2.0830	3250.61
	F-115	429.7	0	.8	42.4	-2.1780	3253.30
	F-120	429.9	0	.8	42.4	-2.2720	3249.18
	F-125	415.7	0	.8	42.4	-2.3670	3253.30
	F-130	415.9	0	.8	42.4	-2.4620	3249.17
7-29-63	F-135	415.5	0	.8	42.4	-2.5560	3251.06
	G-135	428.5	0	.4	42.4 4.2	-2.5560	3216.16
	G-130	429.6	0	.4	4.2	-2.4620	3215.75
	G-125	431.0	0	.4	4.2	-2.3670	3215.40
	G-120	431.2	-1.0	1.0	4.2	-2.2720	3216.46
	G-115	430.5	-.7	1.0	4.2	-2.1780	3219.89
7-31-63	G-110	434.5	-.5	1.0	4.2	-2.0830	3215.94

PRINTED ON CLEARPRINT 1000-H

Date	Stat	Read	Drift Loop	Drift Line	Area Net Values	Miles N or S	Elev
	BM 3412					0 (—)	3411.36
	G-105	435.2	−.2	1.0	4.2	−1.9880	3214.55
	G-100	442.3	.2	−.3	4.2	−1.8940	3206.32
	G-95	433.6	.1	−.3	4.2	−1.7990	3219.09
	G-90	442.9	0	−.3	4.2	−1.7040	3208.89
	G-85	449.2	−.6	0	4.2	−1.6090	3201.83
	G-80	439.5	−.4	0	4.2	−1.5150	3217.92
	G-75	440.0	−.2	0	4.2	−1.4700	3221.29
7-31-63	G-70	441.2	−.1	0	4.2	−1.3250	3220.28
	G-65	448.0	−.2	.2	3.7	−1.2310	3217.01
	G-60	446.0	−.1	.2	3.7	−1.1360	3221.11
	G-55	449.4	0	.2	3.7	−1.0420	3217.01
	G-50	445.2	0	.2	3.7	−.9470	3223.79
	G-45	444.4	0	.3	3.7	−.8520	3225.51
	G-40	448.8	0	.3	3.7	−.7580	3222.45
	G-35	444.1	0	.3	3.7	−.6630	3229.25
	G-30	442.1	0	.3	3.7	−.5680	3226.92
	G-25	438.7	0	+.3	3.7	−.4740	3228.62
	G-20	441.9	0	0	3.7	−.3790	3221.13
	G-15	442.8	0	0	3.7	−.2840	3218.36
	G-10	439.8	0	0	3.7	−.1890	3218.68
	G-05	442.8	0	0	3.7	−.0950	3215.81
7-30-63	G-00	459.4	0	0	3.7	0	???? 3197.13
	H-00					0	3158.27

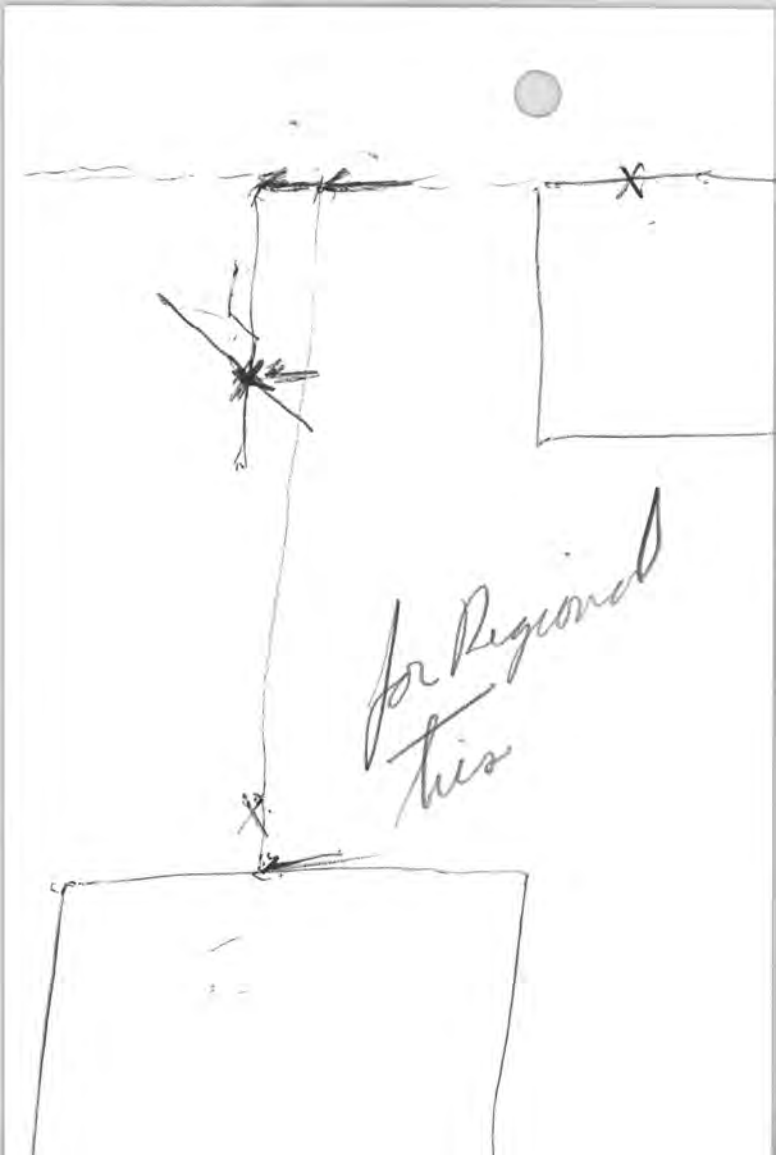
PRINTED ON CLEARPRINT 1000-H

Date	Stat	Read	Loop	Drift Line	Area Net Value	Miles No. S	Elev.
	BM 3412					0	3411.36
	H-00	476.7	0	.3	42.41.9		3158.27
	H-05	466.7	0	.3	1.9	-.0910	3170.96
	H-10	464.7	0	.3	1.9	-.1890	3174.59
	H-15	459.4	.2	.3	1.9	-.2840	3183.25
	H-20	461.4	.1	.3	1.9	-.3790	3183.65
	H-25	462.1	0	.3	1.9	-.4740	3185.10
	H-30	461.6	.2	0	1.9	-.5680	3188.24
	H-35	462.5	.1	0	1.9	-.6630	3188.07
	H-40	462.5	0	0	1.9	-.7580	3186.64
	H-45	463.4	0	0	1.9	-.8520	3181.44
	H-50	458.2	0	0	1.9	-.9470	3185.93
	H-55	466.6	.2	-.8	4.2	-1.0420	3177.22
	H-60	462.4	.1	-.8	4.2	-1.1360	3182.80
	H-65	462.7	0	-.8	4.2	-1.2310	3180.16
	H-70	463.5	0	-.8	4.2	-1.3250	3175.49
	H-75	466.4	0	-.8	4.2	-1.4200	3169.77
	H-80	463.9	0	-.8	4.2	-1.5150	3171.85
	H-85	469.9	-.1	-1.2	4.2	-1.6090	3163.22
	H-90	467.4	0	-1.2	4.2	-1.7040	3164.91
	H-95	471.6	0	-1.2	4.2	-1.7990	3156.31
	H-101	465.2	0	-1.2	4.2	-1.8940	3166.70
7-31-63	H-105	463.4	0	-1.2	4.2	-1.9880	3167.17
	(H-110) Lost in Rain "Washed out"					-2.0830	3162.91

PRINTED ON CLEARPRINT 1000-H

Date	stat.	Read	Drift + Loop	Drift + Line	Ar Net values	Miles N or S	Elevation
Line R on Road from BM-K 114 In To Twin Buttes Area							
R-1	401	304.5	0	0	42.41.9	+, 7580	3448.17
R-2	352	309.3	0		1.9	+ 6630	3433.68
R-3	303	320.6	0		1.9	+, 5680	3414.74
R-4	254	333.6	0	0	1.9	+ 4740	3395.47
R-5	205	335.8	0	0	1.9	+ 3791	3389.88
R-6	156	324.2	0	0	1.9	+ 2840	3404.06
R-7	107	314.9	0	0	1.9	+, 1890	3416.77
R-8	58	321.1	0	0	1.9	+.0 9510	3410.51
R-9	09	326.4	0	0	1.9	0	3404.93

PRINTED ON CLEARPRINT 1000-H


for Regional
this

Regional Ties Pima District

BM 3412 (K114) 410.9
BM 3406 (H-114) 513.4
L-2 768.0
BM 3431x (T114) 396.7
BM 3431(s) (J-335) 391.1

7-10-63

Mineral Hill

BM 3412 (K114) 370.3
MW-SE 00 412.8
L-M 00 418.3
BM (A115) 406.4

7-19-63

Helmek Pk Area L-2 = 760.0 Ref. (Oldmeter)
T. B. Area BM K114 = Ref 406.0
Min H. Area M-00 Ref 406.3

L-2 = 768.0 ≈ 760.0 ΔR = -8.0
BM K114 = 410.9
BM K114 = 370.3 + 40.6 = 410.9
~~BM (H114) 513.4~~
~~BM H114~~

To Put Areas in same relative order of Magnitude subtract 8.0 scale div from T.B. & M.H. readings This will be all that's needed for T.B. Area But for M.H. area also add 40.6 SD units to all readings.

Must Also take into consideration Tol. Change
T B - Base is ____ miles S of L-0
M H - Base is ____ miles S of L-0

May 21, 1964

Mr. G. S. Ryan
The Anaconda Company
Geophysical Branch Office
940 W. Prince Road
Tucson, Arizona

Dear Pat:

Attached you will find an original mylar drawing and five blue line copies of the results of our MoMag survey conducted in the Twin Buttes Area as requested in your letter dated April 21, 1964. In addition, I am enclosing the original magnetic tapes numbered 1 through 36. Record No. 7 has not been included for it was rerun by Record No.8. All magnetic tapes indicate the horizontal location at the beginning and end of the record as well as the direction of travel and the Anaconda line number.

Claim corners when observed within a few feet of the line were noted on the record as were drill holes and other identifying features such as an old adobe ruin.

The old magnetic data was arbitrarily lowered 200 gammas to conform with the new data and using this correction factor seems to fit relatively well.

The increased sensitivity I think has shown some interesting things, particularly on Record No. 31 and No. 27 about 2,000 ft. north and 600 feet west of the SE corner of Sec. 5.

The recon lines along the highways to the east have shown a broad-deep NW - SE trending feature about a mile and one half northeast of the junction of the Duval Mine Road and Nogales Highway.

If you have any questions, please let me know.

Our statement is enclosed.

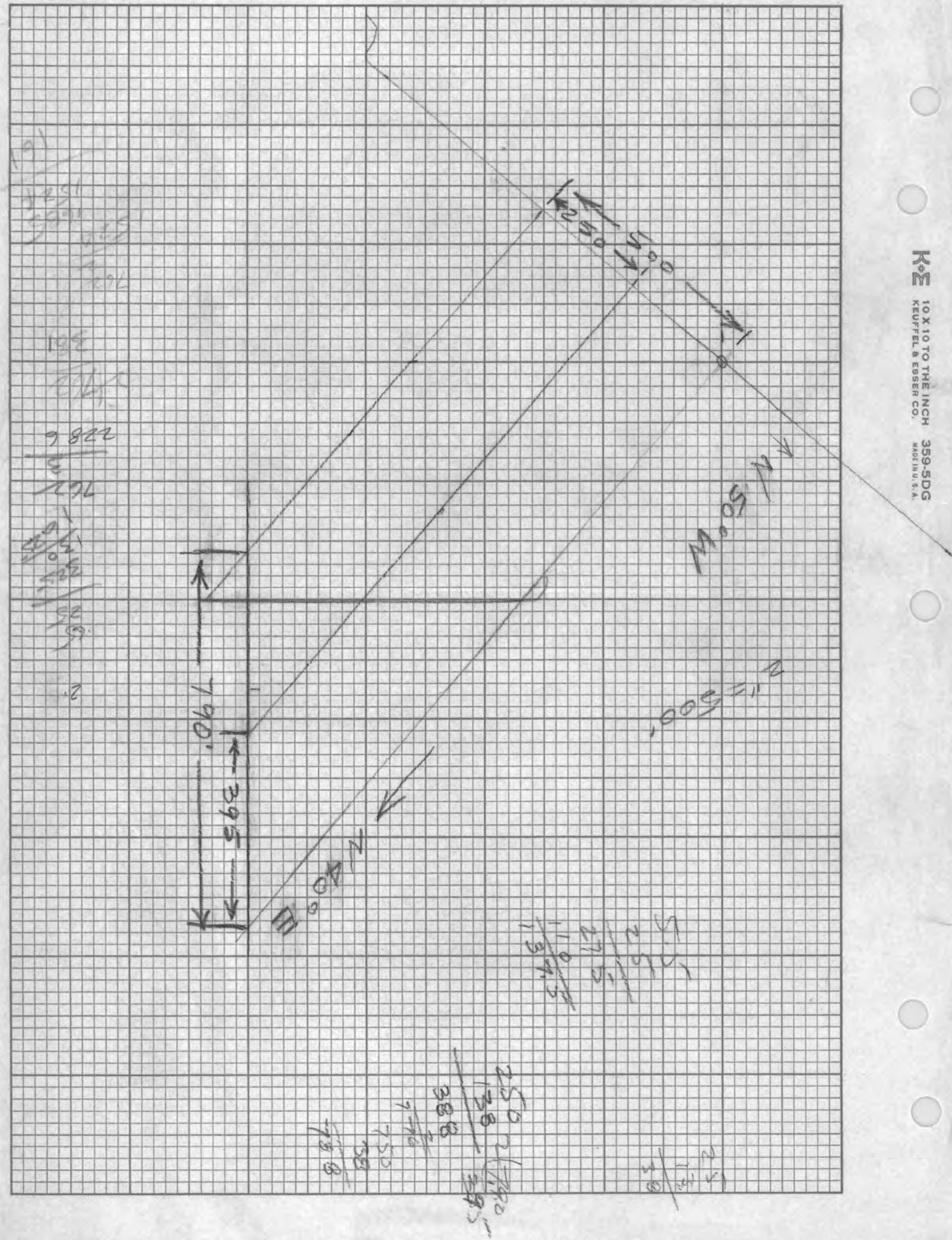
Very truly yours,

HEINRICHS GEOEXPLORATION CO.

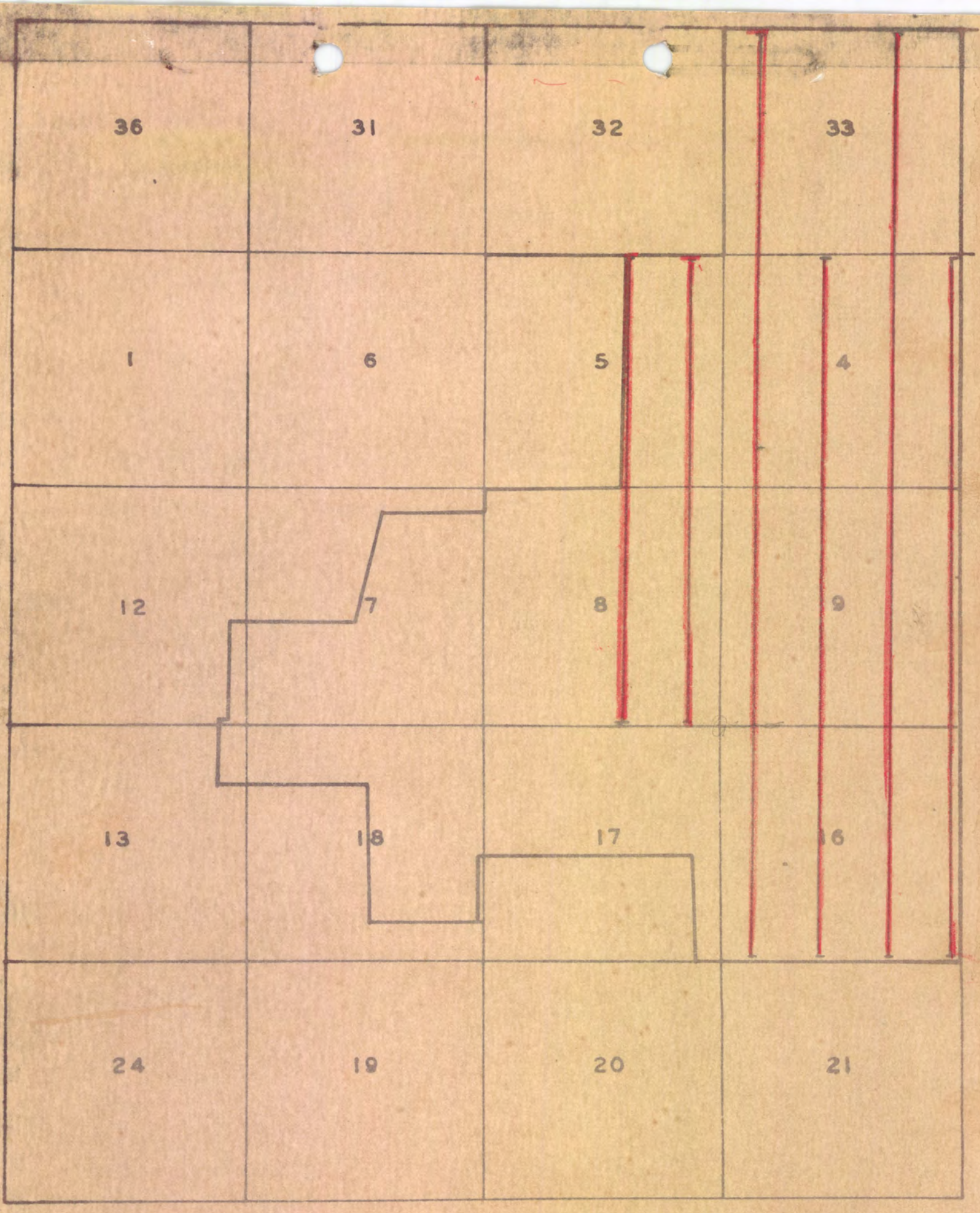
E. Grover Heinrichs
Vice President

EGH:jh

Enclosures



K+E 10 X 10 TO THE INCH 359-5DG
KEUFFEL & ESSER CO. MADE IN U.S.A.



PROPOSED GRAVITY LINES
HELMET PEAK AREA
PIMA COUNTY, ARIZONA

SCALE: 2" = 1 MILE DATE: APRIL 1963

PROPOSAL FOR TWIN BUTTE WORK

A) MOMAG

1) Lines - 2 lines totaling 6½ miles

2) Area - East side of Twin Butte property as shown on accompanying sketch

3) Control - Use I.P. lines F & I

4) Data - Profiles only

5) Report - No report or interpretation at this time

6) Cost - Preliminary estimate $165 - $ 245

B) GRAVITY

1) Lines - 9 lines totaling 21 miles @ 1# sta/mile = 21

2) Area - As shown on accompanying sketch

3) Spacing - Lines: 4 @ 1500', 4 @ 2000' and 1 along road (as shown). Stations: 500'.

4) Accuracy - 0.3' between stations; 1' over all

5) Scale - 1" equals 500'

6) Contour - 1 milligal intervals

7) Report - No report or interpretation at this time

8) Cost - Preliminary estimate $ 3500

9) Ties - Tie to benchmarks where available and to Bear Creek's work

11
21
21
231

@ 20 sta./day = 12 days
= 2 weeks +

PROPOSAL FOR HELMET PEAK WORK

A) MOMAG

1) Lines - 5 lines each 4 miles long

2) Area - Sections 33 - 4 - 9 - 16 (N-S)

3) Scale - 1" equals 500'

4) Report - No report or interpretation at this time

5) Cost - Preliminary estimate: $500 - $750

B) GRAVITY

1) Lines - 6 lines totaling 18 miles

2) Area - See sketch

3) Spacing - Lines: 1500' Stations: 500'

4) Accuracy - 0.3' between stations; 1' over all

5) Scale - 1" equals 500'

6) Contour - 1 milligal intervals

7) Report - No report or interpretation at this time

8) Cost - Preliminary estimate: $3000

9) Ties - Tie to benchmarks where available and to Bear Creek's work

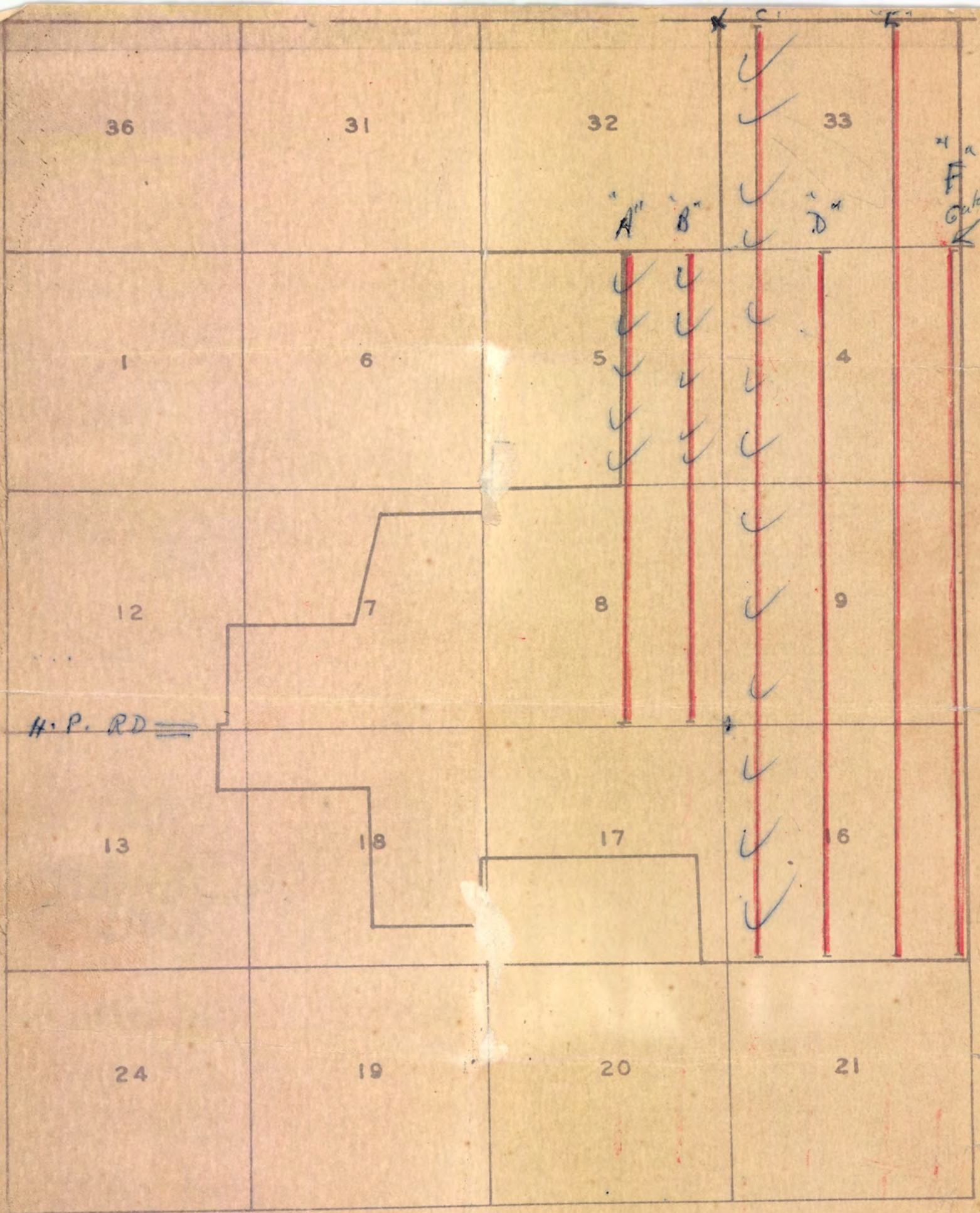
@ 11 Sta/mile =

18
11
18
18
198

@ 20 sta/day = 10 days

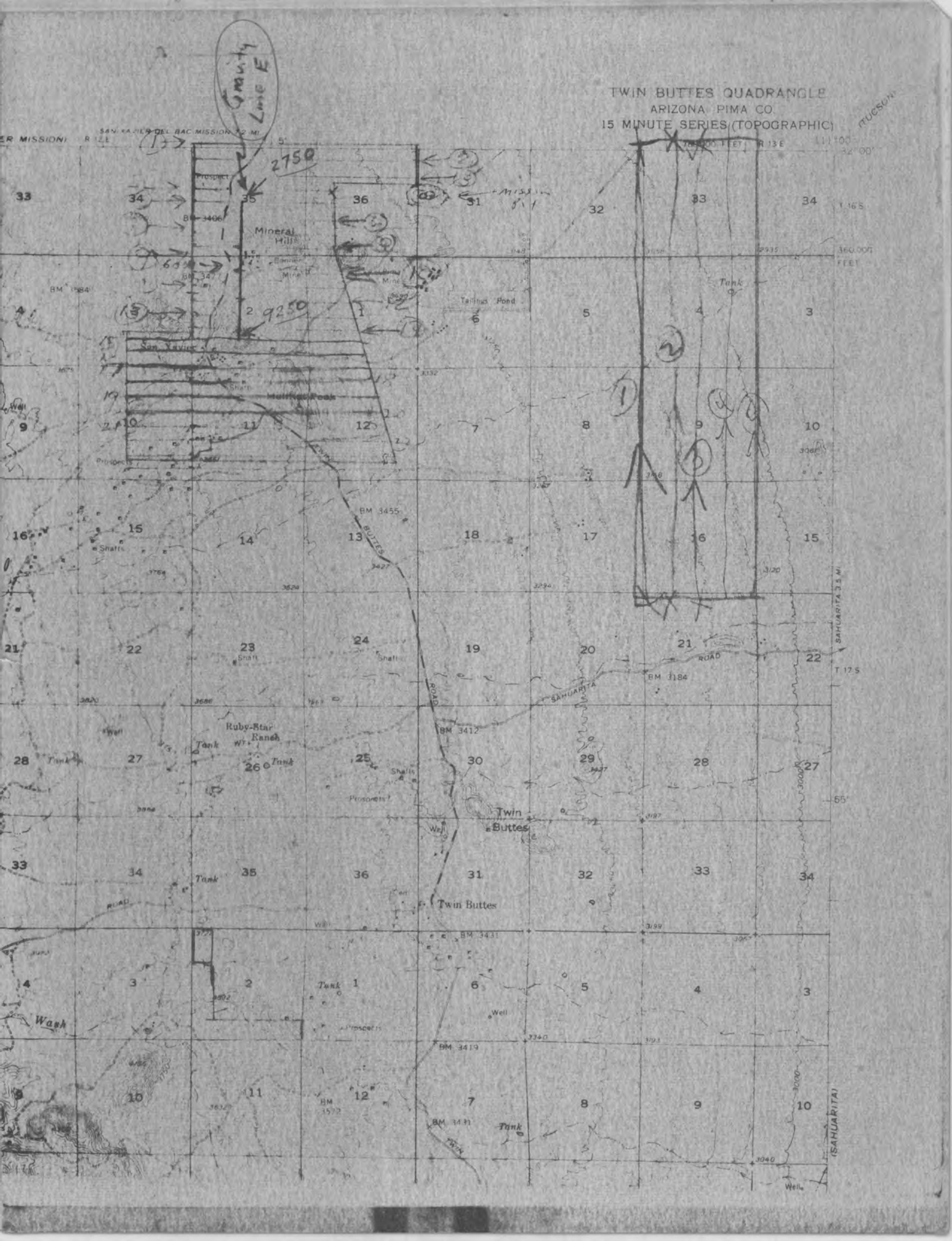
= 2 weeks. -

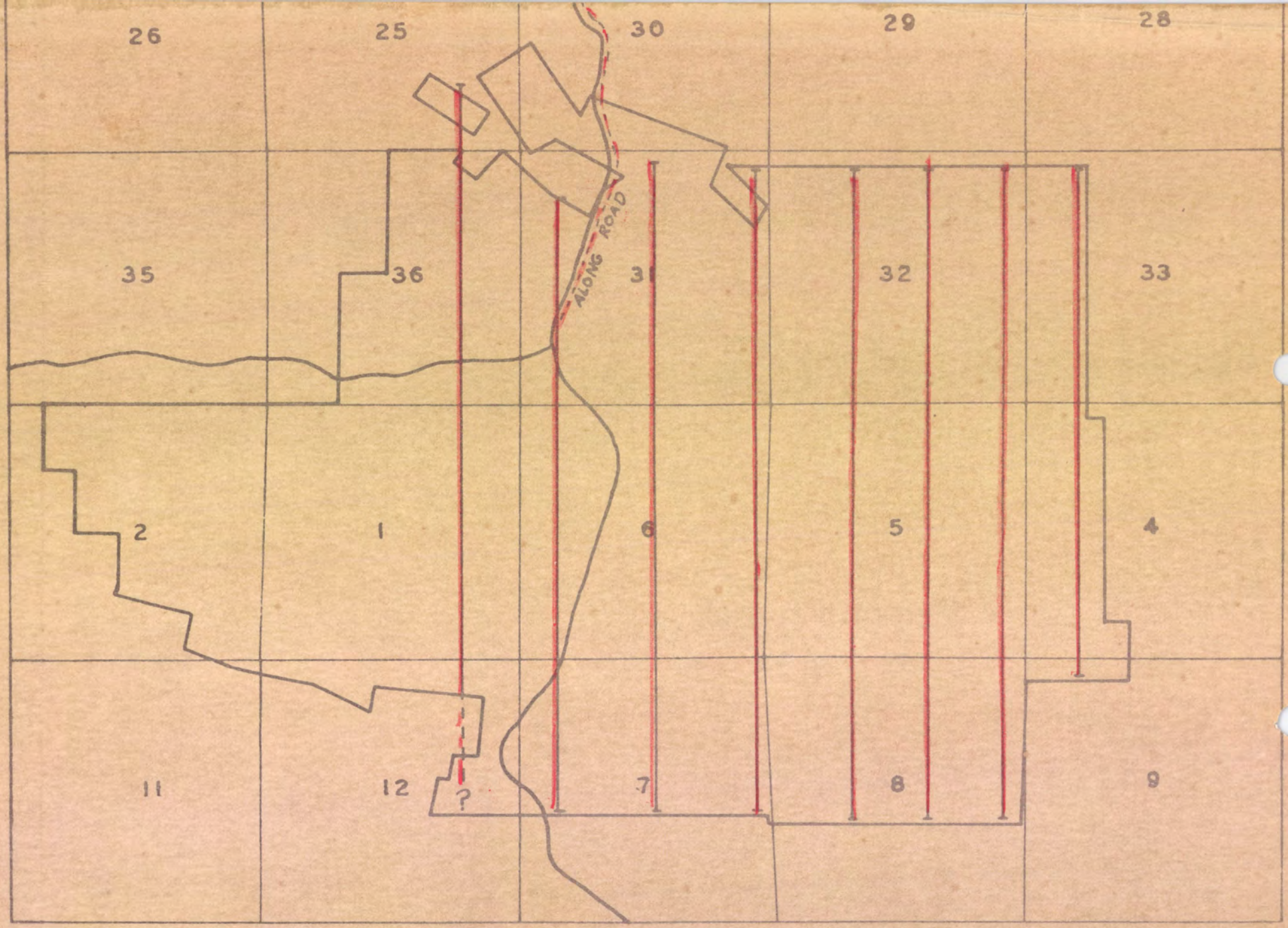
+ Surveying



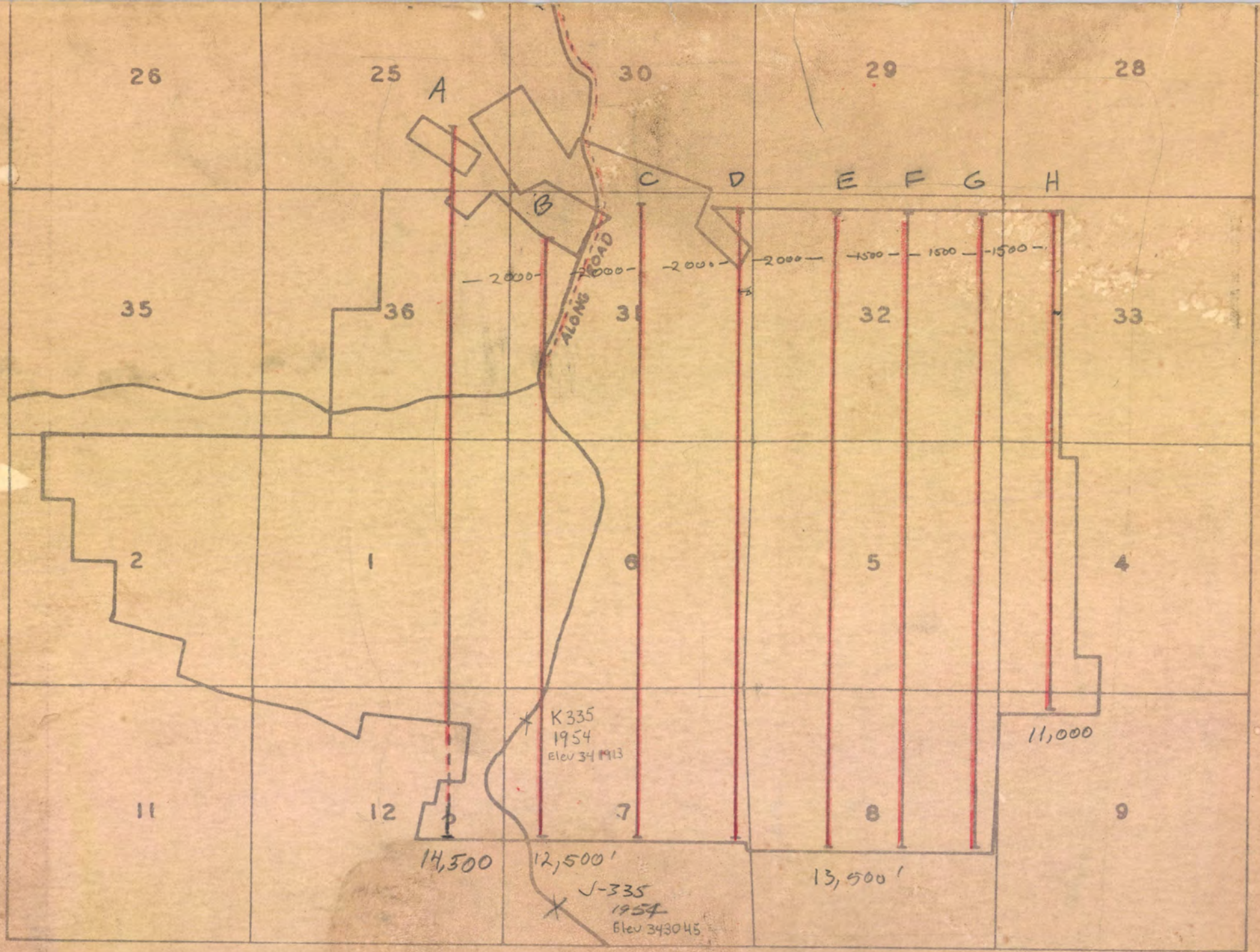
PROPOSED GRAVITY LINES
HELMET PEAK AREA
PIMA COUNTY, ARIZONA

SCALE: 2" = 1 MILE DATE: APRIL 1963


TWIN BUTTES QUADRANGLE
ARIZONA PIMA CO.
15 MINUTE SERIES (TOPOGRAPHIC)
Gravity Line E
2750
9250
Mineral Hill
Tailings Pond
San Xavier
Halfway Peak
Ruby-Star Ranch
Twin Buttes
Twin Buttes
Tank
Wash
SAHUARITA ROAD
SAHUARITA 3.5 MI
(SAHUARITA)
(TUCSON)
R 12 E
R 13 E
T 16 S
T 17 S
BM 3406
BM 3455
BM 3412
BM 3184
BM 3431
BM 3419
BM 3572
BM 3584
Prospect
Shafts
Well
Tank
Prospects
Mine
Mission
360,000 FEET
32°00'
111°00'
55'

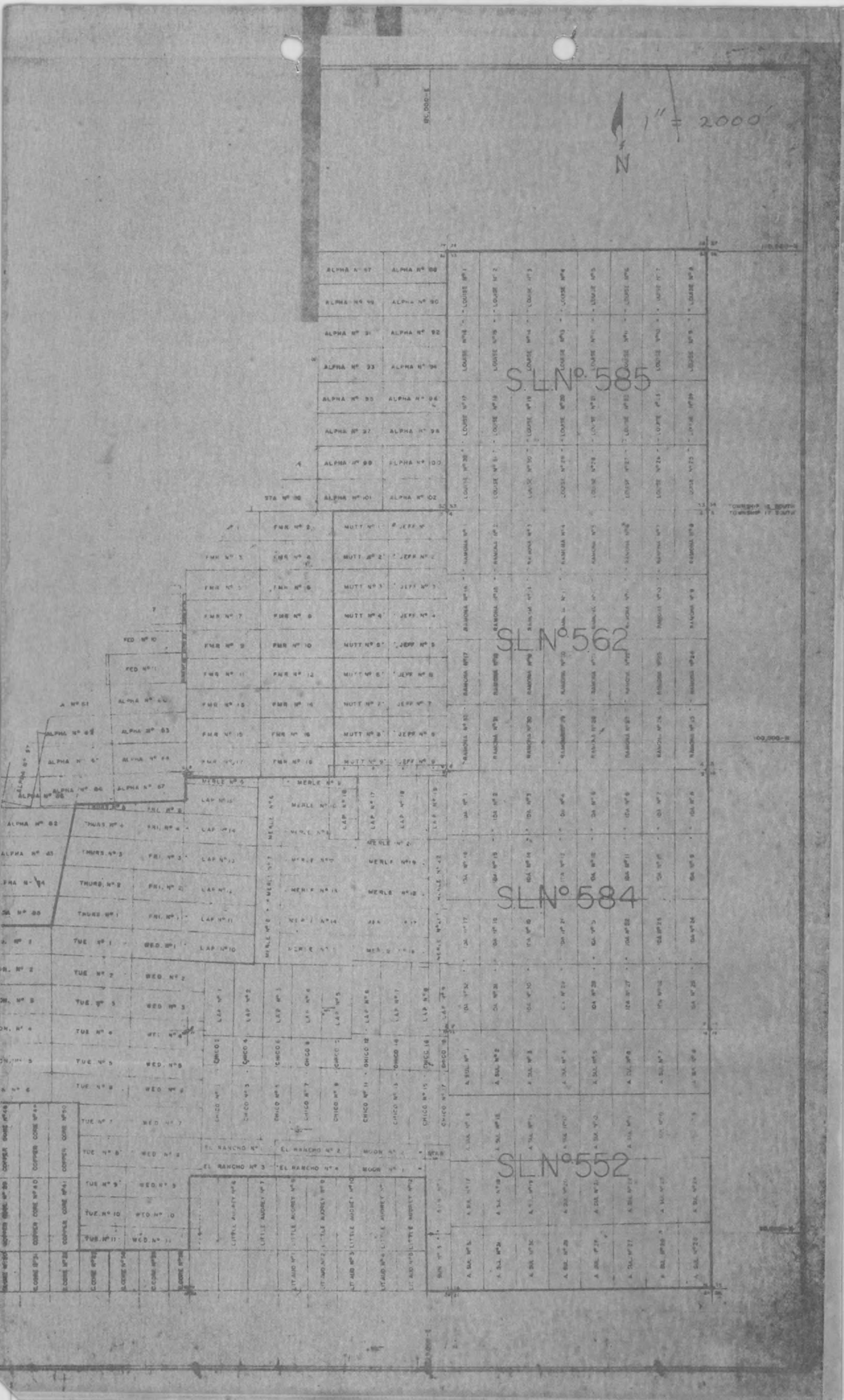


PROPOSED GRAVITY LINES
TWIN BUTTES AREA
PIMA COUNTY, ARIZONA



PROPOSED GRAVITY LINES

TWIN BUTTES AREA


1" = 2000'
N
S.L.N°585
S.L.N°562
S.L.N°584
S.L.N°552

ICHS GEOEXPLORATION COMPANY
POST OFFICE BOX 5671
TUCSON, ARIZONA

8/27/63

4 Sets – I.B.M. Calculation Sheets

5 – Sheets Mineral Hill Area.

13 – " Twin Buttes "

Sets of 18 " Total

M.R. Ryan – A.C.M.

Copy #1

IBM DATA SHEETS

MINERAL HILL AREA — 5 sheets

TWIN BUTTS AREA — 18 sheets

TOTAL — 23 SHEETS

(to be inserted in back of reports)

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-MH-AN 1 OF 3 — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/22	S-E060	REFER	410.8	0.0	0.0	410.8	410.8	.0000	40.226	3432.16	206.788	247.013	N/A	247.013	REFERENCE	
	N-W000		406.5	0.0	0.0	406.5	406.5	.0080-	39.795	3441.36	207.342	247.137	N/A	247.137	.124	.050
	N-W020		407.7	0.0	0.0	407.7	407.7	.0107-	39.909	3439.11	207.206	247.116	N/A	247.116	.103	.042
	N-W040		402.2	0.0	0.0	402.2	402.2	.0134-	39.368	3448.04	207.744	247.112	N/A	247.112	.099	.040
	N-W060		403.4	0.0	0.0	403.4	403.4	.0161-	39.482	3448.96	207.800	247.282	N/A	247.282	.269	.109
	N-W080		406.6	0.1	0.0	406.7	406.7	.0188-	39.802	3444.85	207.552	247.354	N/A	247.354	.341	.138
	N-W100		417.6	0.1	0.0	417.7	417.7	.0215-	40.876	3428.44	206.564	247.439	N/A	247.439	.426	.173
	N-W120		419.7	0.1	0.0	419.8	419.8	.0242-	41.078	3425.37	206.379	247.457	N/A	247.457	.444	.180
	N-W140		418.1	0.2	0.0	418.3	418.3	.0268-	40.928	3427.41	206.501	247.430	N/A	247.430	.417	.169
	N-W190		412.3	0.3	0.0	412.6	412.6	.0937-	40.292	3436.38	207.042	247.334	N/A	247.334	.321	.130
	N-W240		426.4	0.4	0.0	426.8	426.8	.1607-	41.604	3417.98	205.933	247.537	N/A	247.537	.524	.212
	N-W290		417.2	0.3	1.8	419.3	419.3	.2276-	40.791	3427.98	206.536	247.326	N/A	247.326	.313	.127
	N-W340		414.4	0.7	1.8	416.9	416.9	.2946-	40.477	3432.92	206.833	247.310	N/A	247.310	.297	.120
	N-W390		411.0	1.1	1.8	413.9	413.9	.3615-	40.105	3442.20	207.393	247.497	N/A	247.497	.484	.196
	N-W440		406.1	1.4	1.8	409.3	409.3	.4285-	39.576	3448.92	207.797	247.373	N/A	247.373	.360	.146
	N-W490		411.2	1.7	1.8	414.7	414.7	.4954-	40.026	3447.69	207.723	247.749	N/A	247.749	.736	.298
	E-6000		417.2	2.1	1.8	421.1	421.1	.5624-	40.574	3445.21	207.574	248.148	N/A	248.148	1.135	.459
	S-E020		412.9	0.0	0.0	412.9	412.9	.0054-	40.425	3431.81	206.767	247.191	N/A	247.191	.178	.072
	S-E040		407.9	0.0	0.0	407.9	407.9	.0027-	39.938	3437.17	207.089	247.028	N/A	247.028	.015	.006
	S-E080		415.8	0.0	0.0	415.8	415.8	.0027-	40.712	3424.16	206.306	247.018	N/A	247.018	.004	.002
	S-E100		418.6	0.0	0.0	418.6	418.6	.0054-	40.983	3420.96	206.113	247.096	N/A	247.096	.083	.033
	S-E120		421.6	0.0	0.0	421.6	421.6	.0080-	41.274	3416.99	205.874	247.147	N/A	247.147	.134	.054
	S-E140		425.4	0.0	0.0	425.4	425.4	.0107-	41.643	3412.22	205.586	247.229	N/A	247.229	.216	.087
	S-E190		432.8	0.1	0.0	432.9	432.9	.0776-	42.298	3497.87	210.747	253.045	N/A	253.045	6.032	2.442

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963 PAGE NO. 2

AREA-080263-MH-AN 1 OF 3
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/22	S-E240		437.9	0.1	0.0	438.0	438.0	.1446-	42.719	3486.83	210.082	252.801	N/A	252.801	5.788	2.343

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-MH-AN 2 OF 3 DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/23	M-0000	REFERS	406.4	0.0	0.0	406.4	406.3	.0000	39.785	3431.16	206.727	246.512	N/A	246.512	REFERENCE	
	B-A115	NETTIE	398.0	0.0	0.0	398.0	397.9	.0000-	38.962	3465.15	208.775	247.738	N/A	247.738	1.225	.497
	M-0200	S	413.6	0.0	0.0	413.6	413.5	.0378	40.534	3421.39	206.139	246.673	N/A	246.673	.161	.065
	M-0400	S	415.0	0.0	0.0	415.0	414.9	.0757	40.716	3419.93	206.051	246.767	N/A	246.767	.254	.103
	M-0600	S	408.0	0.0	0.0	408.0	407.9	.1136	40.075	3430.67	206.698	246.773	N/A	246.773	.261	.106
	M-0800	S	405.9	0.0	0.0	405.9	405.8	.1515	39.914	3433.72	206.882	246.795	N/A	246.795	.283	.115
	M-1000	S	395.7	0.0	0.0	395.7	395.6	.1893	38.959	3448.28	207.759	246.718	N/A	246.718	.206	.084
	M-1200	S	395.9	0.0	0.0	395.9	395.8	.2272	39.023	3448.91	207.797	246.820	N/A	246.820	.308	.125
	M-1400	S	391.2	0.1	0.0	391.3	391.2	.2651	38.618	3458.66	208.384	247.002	N/A	247.002	.490	.199
	M-1900	S	376.6	0.1	0.0	376.7	376.6	.3597	37.299	3481.26	209.746	247.045	N/A	247.045	.533	.216
	M-2400	S	386.7	0.1-	2.5	389.1	389.0	.4544	38.624	3462.21	208.598	247.222	N/A	247.222	.710	.288
	M-2900	S	375.5	0.2-	2.5	377.8	377.7	.5490	37.629	3477.16	209.499	247.128	N/A	247.128	.616	.250
	M-3400	S	388.3	0.3-	2.5	390.5	390.4	.6437	38.984	3450.57	207.897	246.881	N/A	246.881	.368	.149
	M-3900	S	389.1	0.4-	2.5	391.2	391.1	.7384	39.163	3446.78	207.668	246.832	N/A	246.832	.320	.130
	M-0000	N	404.3	0.0	2.1	406.4	406.3	.0000-	39.785	3431.16	206.727	246.512	N/A	246.512	.000-	.000-
	M-0200	BASE N	403.2	0.1	2.1	405.4	405.3	.0378-	39.643	3430.34	206.678	246.321	N/A	246.321	.192-	.078-
	M-0400	N	412.4	0.2	2.1	414.7	414.6	.0757-	40.509	3416.90	205.868	246.377	N/A	246.377	.135-	.055-
	M-0600	N	410.3	0.3	2.1	412.7	412.6	.1136-	40.268	3420.52	206.086	246.355	N/A	246.355	.158-	.064-
	M-0800	N	405.9	0.4	2.1	408.4	408.3	.1515-	39.803	3425.63	206.394	246.197	N/A	246.197	.315-	.128-
	M-1000	N	414.5	0.5	2.1	417.1	417.0	.1893-	40.610	3413.75	205.678	246.289	N/A	246.289	.223-	.091-
	M-1200	N	412.5	0.6	2.1	415.2	415.1	.2272-	40.380	3416.33	205.834	246.214	N/A	246.214	.299-	.121-
	M-1400	N	414.3	0.7	2.1	417.1	417.0	.2651-	40.521	3414.16	205.703	246.225	N/A	246.225	.288-	.117-
	M-1600	N	416.6	0.8	2.1	419.5	419.4	.3030-	40.712	3412.50	205.603	246.315	N/A	246.315	.197-	.080-
	M-1800	N	417.1	1.0	2.1	420.2	420.1	.3409-	40.736	3410.42	205.478	246.214	N/A	246.214	.299-	.121-

STOCK FORM 14116_P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-MH-AN 2 OF 3 DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/23	M-2300	N	421.1	0.3-	4.3	425.1	425.0	.4355-	41.105	3406.52	205.243	246.348	N/A	246.348	.165-	.067-

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-MH-AN 3 OF 3 — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/23	M-0000	REFERS	406.4	0.0	0.0	406.4	406.5	.0000	39.804	3431.16	206.727	246.532	N/A	246.532	REFERENCE	
	M-2800	N	433.8	0.6	4.3	438.7	438.8	.5301-	42.345	3388.85	204.178	246.523	N/A	246.523	.009-	.004-
	M-3300	N	433.6	0.8-	4.3	437.1	437.2	.6247-	42.077	3388.18	204.138	246.215	N/A	246.215	.317-	.129-
	M-3800	N	437.0	1.0-	4.3	440.3	440.4	.7193-	42.280	3380.48	203.674	245.953	N/A	245.953	.578-	.235-
07/24	L-6000	LINE L	442.3	1.4-	4.3	445.2	444.1	.8139-	42.531	3383.62	203.863	246.394	N/A	246.394	.138-	.056-
	L-5500		471.0	0.0	0.0	471.0	469.9	.9085-	44.946	3353.29	202.036	246.982	N/A	246.982	.450	.182
	L-5000		464.9	0.1-	0.0	464.8	463.7	1.0030-	44.228	3362.44	202.587	246.815	N/A	246.815	.283	.115
	L-4500		465.5	0.1-	0.0	465.4	464.3	1.0970-	44.176	3367.23	202.876	247.052	N/A	247.052	.520	.211
	L-4000	OK	432.9	0.0	0.0	432.9	431.8	1.1920-	40.882	3339.49	201.204	242.087	N/A	242.087	4.445-	1.803-
	L-3500		495.1	0.0	0.0	495.1	494.0	1.2870-	46.862	3326.97	200.450	247.311	N/A	247.311	.780	.316
	L-3000		509.3	0.0	0.0	509.3	508.2	1.3820-	48.140	3305.88	199.179	247.320	N/A	247.320	.788	.320
	L-2500		~~514.8~~ 514.8	0.1	0.0	414.9 514.9	413.8 513.8	1.4760-	38.786 48.786	3297.19	198.656	237.442 247.442	N/A	237.442 247.442	~~9.090-~~ 0.910	~~3.687-~~

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/11	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	A-0000	LINE A	306.6	0.0	0.0	306.6	306.6	.0000-	30.022	3581.88	215.808	245.831	N/A	245.831	.541	.220
	A-0050		339.5	0.2-	0.0	339.3	339.3	.0950	33.336	3528.53	212.594	245.930	N/A	245.930	.640	.261
	A-0100		358.7	0.7-	0.0	358.0	358.0	.1890	35.277	3498.43	210.780	246.058	N/A	246.058	.768	.313
	A-0150		363.3	0.9-	0.0	362.4	362.4	.2840	35.820	3484.49	209.941	245.760	N/A	245.760	.470	.192
	A-0200		357.6	0.0	0.7-	356.9	356.9	.3790	35.393	3486.65	210.071	245.463	N/A	245.463	.173	.071
	A-0250		356.6	0.0	0.7-	355.9	355.9	.4740	35.406	3479.21	209.622	245.029	N/A	245.029	.261-	.107-
	A-0300		356.6	0.0	0.7-	355.9	355.9	.5680	35.517	3479.77	209.656	245.173	N/A	245.173	.117-	.048-
	A-0350		355.4	0.0	0.7-	354.7	354.7	.6630	35.511	3479.45	209.637	245.147	N/A	245.147	.143-	.058-
	A-0400		353.0	0.0	0.3-	352.7	352.7	.7580	35.426	3482.03	209.792	245.219	N/A	245.219	.071-	.029-
	A-0450		356.7	0.0	0.3-	356.4	356.4	.8520	35.899	3477.24	209.504	245.403	N/A	245.403	.113	.046
	A-0500		353.0	0.0	0.3-	352.7	352.7	.9470	35.648	3485.55	210.004	245.653	N/A	245.653	.363	.148
	A-0550		357.3	0.0	0.3-	357.0	357.0	1.0420	36.181	3486.73	210.075	246.256	N/A	246.256	.966	.394

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA
1963

GRAVITY CALCULATIONS

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/12	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	A-0600	LINE A	364.3	0.0	0.3-	364.0	367.2	1.1360	37.290	3489.18	210.223	247.513	N/A	247.513	2.223	.906
	A-0650		367.0	0.1-	0.0	366.9	370.1	1.2310	37.685	3492.77	210.439	248.125	N/A	248.125	2.835	1.156
	A-0700		345.0	0.3-	0.0	344.7	347.9	1.3250	35.622	3531.39	212.766	248.388	N/A	248.388	3.098	1.263
	A-0750		311.9	0.5-	0.0	311.4	314.6	1.4700	32.531	3572.66	215.253	247.784	N/A	247.784	2.494	1.017
	A-0800		368.0	0.6-	0.0	367.4	370.6	1.5150	38.068	3482.06	209.794	247.862	N/A	247.862	2.572	1.049
	A-0850		369.6	0.2	0.6-	369.2	372.4	1.6090	38.354	3479.70	209.652	248.006	N/A	248.006	2.716	1.107
	A-0900		365.5	0.3	0.6-	365.2	368.4	1.7040	38.074	3484.97	209.969	248.044	N/A	248.044	2.754	1.123
	A-0950		365.4	0.4	0.6-	365.2	368.4	1.7990	38.186	3477.48	209.518	247.704	N/A	247.704	2.414	.984
	A-1000		373.2	0.6	0.6-	373.2	376.4	1.8940	39.081	3470.42	209.093	248.173	N/A	248.173	2.883	1.176
	A-1050		363.5	0.7	0.6-	363.6	366.8	1.9880	38.251	3488.07	210.156	248.407	N/A	248.407	3.117	1.271
	A-1100		359.9	0.8	0.6-	360.1	363.3	2.0830	38.020	3487.68	210.133	248.152	N/A	248.152	2.863	1.167
	A-1150		380.2	0.1	0.3-	380.0	383.2	2.1780	40.080	3450.29	207.880	247.960	N/A	247.960	2.670	1.088
	A-1200		372.4	0.2	0.3-	372.3	375.5	2.2720	39.436	3461.21	208.538	247.974	N/A	247.974	2.684	1.094
	A-1250		362.6	0.3	0.3-	362.6	365.8	2.3670	38.598	3481.34	209.751	248.349	N/A	248.349	3.059	1.247
	A-1300		370.8	0.4	0.3-	370.9	374.1	2.4620	39.522	3469.91	209.062	248.584	N/A	248.584	3.294	1.343
	A-1350		360.7	0.6	0.3	361.6	364.8	2.5560	38.722	3480.70	209.712	248.434	N/A	248.434	3.144	1.282
	A-1400		373.0	0.0	0.3	373.3	376.5	2.6510	39.979	3463.56	208.679	248.659	N/A	248.659	3.369	1.373
	A-1450	FND A	348.3	0.0	0.3	348.6	351.8	2.7460	37.672	3503.55	211.089	248.761	N/A	248.761	3.471	1.415

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/12	B-K114	REFERR	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	B-1200	LINE B	386.9	0.1	0.3	387.3	390.5	2.3670-	35.459	3433.82	206.888	242.347	N/A	242.347	2.943-	1.200-
	B-1150		404.8	0.1	0.3	405.2	408.4	2.2720-	37.323	3415.57	205.788	243.111	N/A	243.111	2.179-	.888-
	B-1100		392.5	0.1	0.7	393.3	396.5	2.1780	41.382	3433.26	206.854	248.236	N/A	248.236	2.946	1.201
	B-1050		393.7	0.2	0.7	394.6	397.8	2.9830	42.455	3439.54	207.232	249.687	N/A	249.687	4.397	1.793
	B-1000		403.6	0.3	0.7	404.6	407.8	1.9880	42.266	3429.98	206.656	248.922	N/A	248.922	3.632	1.481
	B-0950		400.7	0.4	0.7	401.8	405.0	1.8940	41.881	3436.13	207.027	248.908	N/A	248.908	3.618	1.475
	B-0900		412.0	0.6	0.7	413.3	416.5	1.7990	42.896	3408.72	205.375	248.271	N/A	248.271	2.981	1.215
07/15	B-0850	LINE B	385.1	0.2-	0.0	384.9	397.0	1.7040	40.875	3416.31	205.833	246.707	N/A	246.707	1.417	.578
	B-0800		378.7	0.3-	0.0	378.4	390.5	1.6090	40.127	3415.00	205.754	245.880	N/A	245.880	.591	.241
	B-0750		369.5	0.4-	0.0	369.1	381.2	1.5150	39.106	3428.52	206.568	245.674	N/A	245.674	.384	.157
	B-0700		361.5	0.7-	0.0	360.8	372.9	1.4700	38.240	3445.83	207.611	245.851	N/A	245.851	.561	.229
	B-0650		380.6	0.0	0.2-	380.4	392.5	1.3250	39.989	3432.36	206.800	246.789	N/A	246.789	1.499	.611
	B-0600		376.0	0.1	0.2-	375.9	388.0	1.2310	39.438	3450.15	207.872	247.310	N/A	247.310	2.020	.823
	B-0550		392.1	0.1	0.2-	392.0	404.1	1.1360	40.903	3432.44	206.805	247.708	N/A	247.708	2.418	.986
	B-0500		384.1	0.2	0.2-	384.1	396.2	1.0420	40.019	3449.03	207.804	247.823	N/A	247.823	2.533	1.033
	B-0450		347.4	0.0	0.9-	346.5	358.6	.9470	36.226	3501.09	210.941	247.167	N/A	247.167	1.877	.765
	B-0400		342.9	0.0	0.9-	342.0	354.1	.8520	35.674	3504.42	211.141	246.815	N/A	246.815	1.525	.622
	B-0350		372.3	0.1-	0.9-	371.3	383.4	.7580	38.432	3432.16	206.788	245.220	N/A	245.220	.070-	.028-
	B-0300		359.4	0.1-	0.9-	358.4	370.5	.6630	37.058	3439.87	207.252	244.310	N/A	244.310	.980-	.400-
	B-0250		356.7	0.0	0.2-	356.5	368.6	.5680	36.760	3440.64	207.299	244.059	N/A	244.059	1.231-	.502-
	B-0200		357.1	0.1	0.2-	357.0	369.1	.4740	36.699	3439.17	207.210	243.909	N/A	243.909	1.381-	.563-

STOCK FORM 14118-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/15	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	B-0150		355.3	0.1	0.2-	355.2	367.3	.3790	36.411	3438.84	207.190	243.601	N/A	243.601	1.689-	.689-
	B-0100		364.1	0.2	0.2-	364.1	376.2	.2840	37.171	3437.63	207.117	244.288	N/A	244.288	1.002-	.408-
07/16	B-0050		359.9	0.0	0.0	359.9	364.7	.1890	35.933	3438.79	207.187	243.120	N/A	243.120	2.170-	.884-
	B-0005		359.8	0.0	0.0	359.8	364.6	.0951	35.813	3439.82	207.249	243.062	N/A	243.062	2.228-	.908-
	B-0000	END B	361.0	0.1-	0.0	360.9	365.7	.0000-	35.809	3456.31	208.243	244.052	N/A	244.052	1.238-	.505-
	C-0000	LINE C	298.9	0.0	0.7-	298.2	303.0	.0000-	29.670	3560.21	214.503	244.172	N/A	244.172	1.118-	.456-
	C-0050		385.0	0.0	0.7-	384.3	389.1	.0950	38.212	3415.52	205.785	243.997	N/A	243.997	1.293-	.527-
	C-0100		388.1	0.1-	0.0	388.0	392.8	.1890	38.685	3399.62	204.827	243.512	N/A	243.512	1.778-	.725-
	C-0150		387.3	0.1-	0.7-	386.5	1091.3	.2840	107.194	3396.68	204.650	311.843	N/A	311.843	66.554	27.133
	C-0200		383.8	0.1-	0.7-	383.0	387.8	.3790	38.418	3395.77	204.595	243.013	N/A	243.013	2.276-	.928-
	C-0250		384.0	0.0	0.8-	383.2	388.0	.4740	38.549	3391.62	204.345	242.895	N/A	242.895	2.395-	.977-
	C-0300		377.4	0.0	0.8-	376.6	381.4	.5680	38.014	3398.77	204.776	242.789	N/A	242.789	2.501-	1.019-
	C-0350		385.5	0.1	0.8-	384.8	389.6	.6630	38.928	3395.25	204.564	243.492	N/A	243.492	1.798-	.733-
	C-0400		391.1	0.1	0.8-	390.4	395.2	.7580	39.588	3395.84	204.599	244.187	N/A	244.187	1.103-	.450-
	C-0450		395.1	0.2	0.8-	394.5	399.3	.8520	40.100	3384.31	203.905	244.004	N/A	244.004	1.286-	.524-
	C-0500		391.0	0.3	0.8-	390.5	395.3	.9470	39.820	3389.54	204.220	244.039	N/A	244.039	1.251-	.510-
	C-0550		401.9	0.0	0.8-	401.1	405.9	1.0420	40.969	3384.67	203.926	244.895	N/A	244.895	.395-	.161-
	C-0600		405.0	0.1-	0.8-	404.1	408.9	1.1360	41.373	3389.07	204.191	245.565	N/A	245.565	.275	.112
	C-0650		369.8	0.2-	0.8-	368.8	373.6	1.2310	38.028	3465.50	208.796	246.824	N/A	246.824	1.535	.626
	C-0700		388.5	0.3-	0.8-	387.4	392.2	1.3250	39.960	3441.16	207.330	247.290	N/A	247.290	2.000	.815
	C-0750		411.4	0.4	0.8-	411.0	415.8	1.4700	42.441	3388.75	204.172	246.613	N/A	246.613	1.323	.539

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/17	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	C-0800	LINE C	404.3	0.0	0.0	404.3	401.9	1.5150	41.133	3383.40	203.850	244.983	N/A	244.983	.307-	.125-
	C-0850		402.6	0.0	0.0	402.6	400.2	1.6090	41.077	3382.02	203.767	244.843	N/A	244.843	.447-	.182-
	C-0900		395.8	0.0	0.0	395.8	393.4	1.7040	40.522	3385.47	203.975	244.497	N/A	244.497	.793-	.323-
	C-0950		392.9	0.0	0.0	392.9	390.5	1.7990	40.350	3386.08	204.011	244.361	N/A	244.361	.929-	.379-
	C-1000		395.1	0.1	0.0	395.2	392.8	1.8940	40.687	3379.85	203.636	244.322	N/A	244.322	.967-	.394-
07/18	C-1050		397.6	0.2	0.0	397.8	402.2	1.9880	41.717	3367.47	202.890	244.607	N/A	244.607	.683-	.278-
	C-1100		395.5	0.3	0.0	395.8	400.2	2.0830	41.633	3379.54	203.617	245.250	N/A	245.250	.040-	.016-
	C-1150		404.4	0.4	0.0	404.8	409.2	2.1780	42.626	3375.66	203.384	246.009	N/A	246.009	.719	.293
	C-1200		405.6	0.5	0.0	406.1	410.5	2.2720	42.863	3376.73	203.448	246.311	N/A	246.311	1.022	.416
	C-1250		408.8	0.6	0.0	409.4	413.8	2.3670	43.298	3370.80	203.091	246.389	N/A	246.389	1.099	.448
	C-1300		407.8	0.7	0.0	408.5	412.9	2.4620	43.322	3364.07	202.685	246.007	N/A	246.007	.717	.292
	C-1350	END C	391.0	0.7	1.1	392.8	397.2	2.5560	41.895	3380.89	203.699	245.593	N/A	245.593	.303	.124
	D-1350	LINE D	421.6	1.5	1.1	424.2	428.6	2.5560	44.969	3316.45	199.816	244.785	N/A	244.785	.505-	.206-
	D-1300		416.6	1.9	1.1	419.6	424.0	2.4620	44.408	3320.95	200.087	244.496	N/A	244.496	.794-	.324-
	D-1250		415.4	2.2	1.1	418.7	423.1	2.3670	44.209	3323.98	200.270	244.479	N/A	244.479	.811-	.331-
	D-1200		409.0	0.0	3.3	412.3	416.7	2.2720	43.471	3336.10	201.000	244.471	N/A	244.471	.819-	.334-
	D-1150		410.1	0.0	3.3	413.4	417.8	2.1780	43.468	3337.43	201.080	244.548	N/A	244.548	.742-	.302-
	D-1100		423.9	0.0	3.3	427.2	431.6	2.0830	44.708	3324.68	200.312	245.020	N/A	245.020	.270-	.110-
	D-1050		416.0	0.0	3.3	419.3	423.7	1.9880	43.823	3342.64	201.394	245.217	N/A	245.217	.073-	.030-
	D-1000		427.1	0.0	3.3	430.4	434.8	1.8940	44.799	3330.14	200.641	245.440	N/A	245.440	.150	.061
	D-0950		417.7	0.0	3.3	421.0	425.4	1.7990	43.767	3345.19	201.548	245.315	N/A	245.315	.025	.010

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/19	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	D-0500	LINE D	419.0	0.0	0.0	419.0	424.5	.9470	42.679	3355.87	202.191	244.870	N/A	244.870	.420-	.171-
	D-0450		408.3	0.0	0.0	408.3	413.8	.8520	41.520	3344.79	201.524	243.043	N/A	243.043	2.247-	.916-
	D-0400		405.5	0.0	0.0	405.5	411.0	.7580	41.135	3345.10	201.542	242.677	N/A	242.677	2.613-	1.065-
	D-0350		400.9	0.0	0.0	400.9	406.4	.6630	40.573	3348.47	201.745	242.318	N/A	242.318	2.972-	1.211-
	D-0300		400.9	0.0	0.0	400.9	406.4	.5680	40.462	3349.83	201.827	242.289	N/A	242.289	3.001-	1.224-
	D-0250		407.4	0.0	0.5-	406.9	412.4	.4740	40.939	3344.16	201.486	242.424	N/A	242.424	2.866-	1.168-
	D-0200		419.1	0.0	0.5-	418.6	424.1	.3790	41.973	3345.67	201.577	243.549	N/A	243.549	1.741-	.710-
	D-0150		429.1	0.0	0.5-	428.6	434.1	.2840	42.840	3350.62	201.875	244.715	N/A	244.715	.575-	.234-
	D-0100		376.2	0.0	0.5-	375.7	381.2	.1890	37.549	3434.85	206.950	244.499	N/A	244.499	.791-	.323-
	D-0 50		267.1	0.0	0.7	267.8	273.3	.0950	26.873	3589.87	216.290	243.163	N/A	243.163	2.127-	.867-
	D-0000	END	D 268.6	0.0	0.7	269.3	274.8	.0000-	26.908	3588.99	216.237	243.145	N/A	243.145	2.145-	.874-

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL

INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC

LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/29	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	E--090	LINE E	410.1	0.2-	1.0-	408.9	451.3	1.7040	46.192	3286.17	197.992	244.184	N/A	244.184	1.106-	.451-
	E--095		413.2	0.0	0.7	413.9	456.3	1.7990	46.793	3277.92	197.495	244.288	N/A	244.288	1.002-	.409-
	E--100		410.9	0.1-	0.7	411.5	453.9	1.8940	46.669	3282.29	197.758	244.427	N/A	244.427	.863-	.352-
	E--105		400.1	0.1-	0.7	400.7	443.1	1.9880	45.722	3298.28	198.721	244.444	N/A	244.444	.846-	.345-
	E--110		408.8	0.2-	0.7	409.3	451.7	2.0830	46.676	3283.19	197.812	244.488	N/A	244.488	.802-	.327-
	E--115		398.9	0.1-	0.7	399.5	441.9	2.1780	45.828	3295.54	198.556	244.384	N/A	244.384	.906-	.369-
	E--120		397.3	0.1-	0.7	397.9	440.3	2.2720	45.782	3292.41	198.368	244.149	N/A	244.149	1.141-	.465-
	E--125		394.5	0.2-	0.7	395.0	437.4	2.3670	45.609	3292.65	198.382	243.991	N/A	243.991	1.299-	.529-
	E--130		389.2	0.0	0.3	389.5	431.9	2.4620	45.182	3297.57	198.679	243.861	N/A	243.861	1.429-	.583-
	E--135	END E	399.2	0.0	0.3	399.5	441.9	2.5560	46.272	3283.49	197.830	244.102	N/A	244.102	1.188-	.484-
	F--135	LINE F	415.5	0.0	0.8	416.3	458.7	2.5560	47.917	3251.06	195.876	243.793	N/A	243.793	1.497-	.610-
	F--130		415.9	0.0	0.8	416.7	459.1	2.4620	47.845	3249.17	195.762	243.608	N/A	243.608	1.682-	.686-
	F--125		415.7	0.0	0.8	416.5	458.9	2.3670	47.714	3253.30	196.011	243.726	N/A	243.726	1.564-	.638-
	F--120		429.9	0.0	0.8	430.7	473.1	2.2720	48.993	3249.18	195.763	244.756	N/A	244.756	.534-	.218-
	F--115		429.7	0.0	0.8	430.5	472.9	2.1780	48.863	3253.30	196.011	244.875	N/A	244.875	.415-	.169-
	F--110		421.7	0.1-	0.8	422.4	464.8	2.0830	47.959	3250.61	195.849	243.808	N/A	243.808	1.482-	.604-
	F--105		422.8	0.0	0.0	422.8	426.5	1.9880	44.097	3245.62	195.549	239.645	N/A	239.645	5.645-	2.301-

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL

INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC

LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/29	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	E-0000	LINE E	412.3	0.1-	0.0	412.2	454.6	.0000	44.514	3305.40	199.150	243.665	N/A	243.665	1.625-	.663-
	E-0050		421.5	0.2-	0.0	421.3	463.7	.0950	45.517	3296.39	198.607	244.125	N/A	244.125	1.165-	.475-
	E-0100		419.4	0.3-	0.0	419.1	461.5	.1890	45.412	3299.94	198.821	244.233	N/A	244.233	1.057-	.431-
	E-0150		412.7	0.0	0.0	412.7	455.1	.2840	44.897	3304.41	199.091	243.988	N/A	243.988	1.302-	.531-
	E-0200		413.3	0.1-	0.9-	412.3	454.7	.3790	44.969	3296.14	198.592	243.562	N/A	243.562	1.728-	.705-
	E-0250		410.4	0.1-	0.9-	409.4	451.8	.4740	44.797	3297.84	198.695	243.492	N/A	243.492	1.798-	.733-
	E-0300		415.1	0.2-	0.9-	414.0	456.4	.5680	45.358	3299.05	198.768	244.125	N/A	244.125	1.165-	.475-
	E-0350		430.1	0.0	0.9-	429.2	471.6	.6630	46.957	3290.32	198.242	245.199	N/A	245.199	.091-	.037-
	E-0400		420.3	0.	1.2-	419.1	461.5	.7580	46.080	3298.28	198.721	244.801	N/A	244.801	.489-	.199-
	E-0450		408.0	0.1	1.2-	406.9	449.3	.8520	44.996	3298.90	198.759	243.754	N/A	243.754	1.536-	.626-
	E-0500		404.3	0.2	1.2-	403.3	445.7	.9470	44.755	3293.23	198.417	243.172	N/A	243.172	2.118-	.864-
	E-0550		405.0	0.3	1.2-	404.1	446.5	1.0420	44.945	3286.94	198.038	242.983	N/A	242.983	2.307-	.941-
	E-0600		408.8	0.0	1.2-	407.6	450.0	1.1360	45.398	3278.84	197.550	242.948	N/A	242.948	2.342-	.955-
	E-0650		401.0	0.1-	1.2-	399.7	442.1	1.2310	44.736	3291.41	198.307	243.043	N/A	243.043	2.247-	.916-
	E-0700		399.8	0.2-	1.2-	398.4	440.8	1.3250	44.719	3295.66	198.564	243.282	N/A	243.282	2.008-	.819-
	E-0750		399.7	0.3-	1.2-	398.2	440.6	1.4700	44.869	3298.59	198.740	243.609	N/A	243.609	1.681-	.685-
	E-0800		405.6	0.0	1.0-	404.6	447.0	1.5150	45.549	3293.33	198.423	243.972	N/A	243.972	1.318-	.537-
	E-0850		412.9	0.1-	1.0-	411.8	454.2	1.6090	46.364	3283.36	197.822	244.187	N/A	244.187	1.103-	.450-

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/30	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	G--000	LINE G	459.4	0.0	0.0	459.4	505.5	.0000-	49.499	3197.13	192.627	242.126	N/A	242.126	3.164-	1.290-
	G--005		442.8	0.0	0.0	442.8	488.9	.0950	47.985	3215.81	193.753	241.737	N/A	241.737	3.553-	1.448-
	G--010		439.8	0.0	0.0	439.8	485.9	.1890	47.801	3218.68	193.925	241.727	N/A	241.727	3.563-	1.453-
	G--015		442.8	0.0	0.0	442.8	488.9	.2840	48.207	3218.36	193.906	242.113	N/A	242.113	3.177-	1.295-
	G--020		441.9	0.0	0.0	441.9	488.0	.3790	48.230	3221.13	194.073	242.303	N/A	242.303	2.987-	1.218-
	G--025		438.7	0.0	0.3	439.0	485.1	.4740	48.057	3228.62	194.524	242.582	N/A	242.582	2.708-	1.104-
	G--030		442.1	0.0	0.3	442.4	488.5	.5680	48.501	3226.92	194.422	242.923	N/A	242.923	2.367-	.965-
	G--035		444.1	0.0	0.3	444.4	490.5	.6630	48.808	3229.25	194.562	243.370	N/A	243.370	1.920-	.783-
	G--040		448.8	0.0	0.3	449.1	495.2	.7580	49.380	3222.45	194.153	243.532	N/A	243.532	1.757-	.716-
	G--045		444.4	0.0	0.3	444.7	490.8	.8520	49.059	3225.51	194.337	243.396	N/A	243.396	1.894-	.772-
	G--050		445.2	0.0	0.2	445.4	491.5	.9470	49.239	3223.79	194.233	243.473	N/A	243.473	1.817-	.741-
	G--055		449.4	0.0	0.2	449.6	495.7	1.0420	49.762	3217.01	193.825	243.587	N/A	243.587	1.703-	.694-
	G--060		446.0	0.1-	0.2	446.1	492.2	1.1360	49.530	3221.11	194.072	243.602	N/A	243.602	1.688-	.688-
	G--065		448.0	0.2-	0.2	448.0	494.1	1.2310	49.827	3217.01	193.825	243.652	N/A	243.652	1.638-	.668-
	G--070		441.2	0.1-	0.0	441.1	487.7	1.3250	49.311	3220.28	194.022	243.333	N/A	243.333	1.957-	.798-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/30	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	F--000	LINE F	432.8	0.0	0.4-	432.4	478.5	.0000-	46.855	3241.05	195.273	242.128	N/A	242.128	3.162-	1.289-
	F--005		429.5	0.0	0.3-	429.2	475.3	.0950	46.653	3244.81	195.500	242.153	N/A	242.153	3.137-	1.279-
	F--010		418.8	0.0	0.3-	418.5	464.6	.1890	45.716	3258.32	196.314	242.029	N/A	242.029	3.261-	1.329-
	F--015		415.5	0.0	0.3-	415.2	461.3	.2840	45.504	3262.91	196.590	242.094	N/A	242.094	3.196-	1.303-
	F--020		420.5	0.1	1.1-	419.5	465.6	.3790	46.036	3259.11	196.361	242.398	N/A	242.398	2.892-	1.179-
	F--025		422.3	0.0	1.1-	421.2	467.3	.4740	46.314	3261.43	196.501	242.816	N/A	242.816	2.474-	1.009-
	F--030		419.6	0.0	1.1-	418.5	464.6	.5680	46.160	3267.67	196.877	243.038	N/A	243.038	2.252-	.918-
	F--035		424.2	0.3	1.4-	423.1	469.2	.6630	46.722	3264.30	196.674	243.397	N/A	243.397	1.893-	.772-
	F--040		433.7	0.3	1.4-	432.6	478.7	.7580	47.764	3254.86	196.105	243.870	N/A	243.870	1.420-	.579-
	F--045		433.7	0.1	1.4-	432.4	478.5	.8520	47.855	3260.43	196.441	244.296	N/A	244.296	.994-	.405-
	F--050		432.0	0.0	1.4-	430.6	476.7	.9470	47.790	3261.90	196.529	244.320	N/A	244.320	.970-	.396-
	F--055		427.9	0.2-	0.8-	426.9	473.0	1.0420	47.539	3257.04	196.237	243.776	N/A	243.776	1.514-	.617-
	F--060		426.1	0.1-	0.8-	425.2	471.3	1.1360	47.483	3250.66	195.852	243.336	N/A	243.336	1.954-	.797-
	F--065		417.9	0.1-	0.8-	417.0	463.1	1.2310	46.792	3260.98	196.474	243.266	N/A	243.266	2.024-	.825-
	F--070		418.5	0.0	0.8-	417.7	463.8	1.3250	46.971	3259.71	196.398	243.368	N/A	243.368	1.922-	.783-
	F--075		418.8	0.0	0.8-	418.0	464.1	1.4700	47.170	3259.55	196.388	243.558	N/A	243.558	1.732-	.706-
	F--080		417.8	0.0	0.8-	417.0	463.1	1.5150	47.125	3262.01	196.536	243.661	N/A	243.661	1.628-	.664-
	F--085		420.5	0.0	0.8-	419.7	465.8	1.6090	47.500	3257.08	196.239	243.739	N/A	243.739	1.551-	.632-
	F--090		427.2	0.0	0.8-	426.4	472.5	1.7040	48.268	3246.44	195.598	243.866	N/A	243.866	1.424-	.581-
	F--095		422.0	0.1-	0.0	421.9	468.0	1.7990	47.939	3250.40	195.837	243.775	N/A	243.775	1.515-	.618-
	F--100		426.5	0.0	0.8	427.3	473.4	1.8940	48.579	3241.52	195.302	243.880	N/A	243.880	1.409-	.575-

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/31	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	H--105	LINE H	463.4	0.0	1.2-	462.2	508.8	1.9880	52.156	3167.17	190.822	242.978	N/A	242.978	2.312-	.943-
	H--100		465.2	0.0	1.2-	464.0	510.6	1.8940	52.222	3166.70	190.794	243.015	N/A	243.015	2.275-	.927-
	H--095		471.6	0.0	1.2-	470.4	517.0	1.7990	52.737	3156.31	190.168	242.904	N/A	242.904	2.386-	.973-
	H--090		467.4	0.0	1.2-	466.2	512.8	1.7040	52.214	3164.91	190.686	242.900	N/A	242.900	2.390-	.974-
	H--085		469.9	0.1-	1.2-	468.6	515.2	1.6090	52.337	3163.22	190.584	242.921	N/A	242.921	2.369-	.966-
	H--080		463.9	0.0	0.8-	463.1	509.7	1.5150	51.688	3171.85	191.104	242.792	N/A	242.792	2.498-	1.018-
	H--075		466.4	0.0	0.8-	465.6	512.2	1.4700	51.880	3169.77	190.979	242.859	N/A	242.859	2.431-	.991-
	H--070		463.5	0.0	0.8-	462.7	509.3	1.3250	51.426	3175.49	191.323	242.749	N/A	242.749	2.540-	1.036-
	H--065		462.7	0.0	0.8-	461.9	508.5	1.2310	51.238	3180.16	191.605	242.842	N/A	242.842	2.448-	.998-
	H--060		462.4	0.1	0.8-	461.7	508.3	1.1360	51.106	3182.80	191.764	242.870	N/A	242.870	2.420-	.987-
	H--055		466.6	0.2	0.8-	466.0	512.6	1.0420	51.417	3177.22	191.428	242.845	N/A	242.845	2.445-	.997-

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL

INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC

LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/31	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	G--075	LINE G	440.0	0.2-	0.0	439.8	486.4	1.4700	49.354	3221.29	194.083	243.437	N/A	243.437	1.853-	.756-
	G--080		439.5	0.4-	0.0	439.1	485.7	1.5150	49.338	3217.92	193.880	243.218	N/A	243.218	2.072-	.845-
	G--085		449.2	0.6-	0.0	448.6	495.2	1.6090	50.379	3201.83	192.910	243.289	N/A	243.289	2.001-	.816-
	G--090		442.9	0.0	0.3-	442.6	489.2	1.7040	49.903	3208.89	193.336	243.239	N/A	243.239	2.051-	.836-
	G--095		433.6	0.1	0.3-	433.4	480.0	1.7990	49.114	3219.09	193.950	243.064	N/A	243.064	2.226-	.908-
	G--100		442.3	0.2	0.3-	442.2	488.8	1.8940	50.087	3206.32	193.181	243.268	N/A	243.268	2.022-	.824-
	G--105		435.2	0.2-	1.0	436.0	482.6	1.9880	49.590	3214.55	193.677	243.267	N/A	243.267	2.023-	.825-
	G--110		434.5	0.5-	1.0	435.0	481.6	2.0830	49.604	3215.94	193.760	243.364	N/A	243.364	1.926-	.785-
	G--115		430.5	0.7-	1.0	430.8	477.4	2.1780	49.304	3219.89	193.998	243.302	N/A	243.302	1.988-	.810-
	G--120		431.2	1.0-	1.0	431.2	477.8	2.2720	49.454	3216.46	193.792	243.245	N/A	243.245	2.045-	.834-
	G--125		431.0	0.0	0.4	431.4	478.0	2.3670	49.585	3215.40	193.728	243.312	N/A	243.312	1.977-	.806-
	G--130		429.6	0.0	0.4	430.0	476.6	2.4620	49.559	3215.75	193.749	243.308	N/A	243.308	1.982-	.808-
	G--135	END G	428.5	0.0	0.4	428.9	475.5	2.5560	49.562	3216.16	193.774	243.335	N/A	243.335	1.955-	.797-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263 TB AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
08/01	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	H--050	LINE H	458.2	0.0	0.6	458.8	503.1	.9470	50.375	3185.93	191.952	242.328	N/A	242.328	2.962-	1.208-
	H--045		463.4	0.0	0.0	463.4	507.7	.8520	50.714	3181.44	191.682	242.396	N/A	242.396	2.894-	1.180-
	H--040		462.5	0.0	0.0	462.5	506.8	.7580	50.516	3186.64	191.995	242.511	N/A	242.511	2.779-	1.133-
	H--035		462.5	0.1	0.0	462.6	506.9	.6630	50.414	3188.07	192.081	242.495	N/A	242.495	2.795-	1.139-
	H--030		461.6	0.2	0.0	461.8	506.1	.5680	50.224	3188.24	192.091	242.316	N/A	242.316	2.974-	1.213-
	H--025		462.1	0.0	0.3	462.4	506.7	.4740	50.173	3185.10	191.902	242.075	N/A	242.075	3.215-	1.311-
	H--020		461.4	0.1	0.3	461.8	506.1	.3790	50.002	3183.65	191.815	241.817	N/A	241.817	3.473-	1.416-
	H--015		459.4	0.2	0.3	459.9	504.2	.2840	49.705	3183.25	191.791	241.495	N/A	241.495	3.794-	1.547-
	H--010		464.7	0.0	0.3	465.0	509.3	.1890	50.093	3174.59	191.269	241.362	N/A	241.362	3.928-	1.602-
	H--005		466.7	0.0	0.3	467.0	511.3	.0950	50.178	3170.96	191.050	241.228	N/A	241.228	4.062-	1.656-
	H--000	END H	476.7	0.0	0.3	477.0	521.3	.0000-	51.046	3158.27	190.286	241.331	N/A	241.331	3.958-	1.614-
	R--900	ROAD	326.4	0.0	0.0	326.4	370.7	.0000-	36.299	3404.93	205.147	241.446	N/A	241.446	3.844-	1.567-
	R--800		321.1	0.0	0.0	321.1	365.4	.0951-	35.668	3410.51	205.483	241.152	N/A	241.152	4.138-	1.687-
	R--700		314.9	0.0	0.0	314.9	359.2	.1890-	34.951	3416.77	205.860	240.811	N/A	240.811	4.479-	1.826-
	R--600		324.2	0.0	0.0	324.2	368.5	.2840-	35.750	3404.06	205.095	240.845	N/A	240.845	4.445-	1.812-
	R--500		335.8	0.0	0.0	335.8	380.1	.3790-	36.774	3389.88	204.240	241.015	N/A	241.015	4.275-	1.743-
	R--400		333.6	0.0	0.0	333.6	377.9	.4740-	36.447	3395.47	204.577	241.025	N/A	241.025	4.265-	1.739-
	R--300		320.6	0.0	0.0	320.6	364.9	.5680-	35.064	3414.74	205.738	240.802	N/A	240.802	4.488-	1.830-
	R--200		309.3	0.0	0.0	309.3	353.6	.6630-	33.846	3433.68	206.879	240.725	N/A	240.725	4.565-	1.861-
	R--100	END R	304.5	0.0	0.0	304.5	348.8	.7850-	33.233	3448.17	207.752	240.985	N/A	240.985	4.305-	1.755-

STOCK FORM 14116-P

COPY #2

IBM DATA SHEETS

MINERAL HILL AREA — 5 SHEETS

TWIN BUTTS AREA — 8 SHEETS

TOTAL — 13 SHEETS

(to be inserted in back of reports)

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-MH-AN 1 OF 3 — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/22	S-E060	REFER	410.8	0.0	0.0	410.8	410.8	.0000	40.226	3432.16	206.788	247.013	N/A	247.013	REFERENCE	
	N-W000		406.5	0.0	0.0	406.5	406.5	.0080-	39.795	3441.36	207.342	247.137	N/A	247.137	.124	.050
	N-W020		407.7	0.0	0.0	407.7	407.7	.0107-	39.909	3439.11	207.206	247.116	N/A	247.116	.103	.042
	N-W040		402.2	0.0	0.0	402.2	402.2	.0134-	39.368	3448.04	207.744	247.112	N/A	247.112	.099	.040
	N-W060		403.4	0.0	0.0	403.4	403.4	.0161-	39.482	3448.96	207.800	247.282	N/A	247.282	.269	.109
	N-W080		406.6	0.1	0.0	406.7	406.7	.0188-	39.802	3444.85	207.552	247.354	N/A	247.354	.341	.138
	N-W100		417.6	0.1	0.0	417.7	417.7	.0215-	40.876	3428.44	206.564	247.439	N/A	247.439	.426	.173
	N-W120		419.7	0.1	0.0	419.8	419.8	.0242-	41.078	3425.37	206.379	247.457	N/A	247.457	.444	.180
	N-W140		418.1	0.2	0.0	418.3	418.3	.0268-	40.928	3427.41	206.501	247.430	N/A	247.430	.417	.169
	N-W190		412.3	0.3	0.0	412.6	412.6	.0937-	40.292	3436.38	207.042	247.334	N/A	247.334	.321	.130
	N-W240		426.4	0.4	0.0	426.8	426.8	.1607-	41.604	3417.98	205.933	247.537	N/A	247.537	.524	.212
	N-W290		417.2	0.3	1.8	419.3	419.3	.2276-	40.791	3427.98	206.536	247.326	N/A	247.326	.313	.127
	N-W340		414.4	0.7	1.8	416.9	416.9	.2946-	40.477	3432.92	206.833	247.310	N/A	247.310	.297	.120
	N-W390		411.0	1.1	1.8	413.9	413.9	.3615-	40.105	3442.20	207.393	247.497	N/A	247.497	.484	.196
	N-W440		406.1	1.4	1.8	409.3	409.3	.4285-	39.576	3448.92	207.797	247.373	N/A	247.373	.360	.146
	N-W490		411.2	1.7	1.8	414.7	414.7	.4954-	40.026	3447.69	207.723	247.749	N/A	247.749	.736	.298
	E-6000		417.2	2.1	1.8	421.1	421.1	.5624-	40.574	3445.21	207.574	248.148	N/A	248.148	1.135	.459
	S-E020		412.9	0.0	0.0	412.9	412.9	.0054-	40.425	3431.81	206.767	247.191	N/A	247.191	.178	.072
	S-E040		407.9	0.0	0.0	407.9	407.9	.0027-	39.938	3437.17	207.089	247.028	N/A	247.028	.015	.006
	S-E080		415.8	0.0	0.0	415.8	415.8	.0027-	40.712	3424.16	206.306	247.018	N/A	247.018	.004	.002
	S-E100		418.6	0.0	0.0	418.6	418.6	.0054-	40.983	3420.96	206.113	247.096	N/A	247.096	.083	.033
	S-E120		421.6	0.0	0.0	421.6	421.6	.0080-	41.274	3416.99	205.874	247.147	N/A	247.147	.134	.054
	S-E140		425.4	0.0	0.0	425.4	425.4	.0107-	41.643	3412.22	205.586	247.229	N/A	247.229	.216	.087
	S-E190		432.8	0.1	0.0	432.9	432.9	.0776-	42.298	3497.87	210.747	253.045	N/A	253.045	6.032	2.442

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-MH-AN 1 OF 3 — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/22	S-E240		437.9	0.1	0.0	438.0	438.0	.1446-	42.719	3486.83	210.082	252.801	N/A	252.801	5.788	2.343

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-MH-AN 2 OF 3 — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/23	M-0000	REFERS	406.4	0.0	0.0	406.4	406.3	.0000	39.785	3431.16	206.727	246.512	N/A	246.512	REFERENCE	
	B-A115	NETTIE	398.0	0.0	0.0	398.0	397.9	.0000-	38.962	3465.15	208.775	247.738	N/A	247.738	1.225	.497
	M-0200	S	413.6	0.0	0.0	413.6	413.5	.0378	40.534	3421.39	206.139	246.673	N/A	246.673	.161	.065
	M-0400	S	415.0	0.0	0.0	415.0	414.9	.0757	40.716	3419.93	206.051	246.767	N/A	246.767	.254	.103
	M-0600	S	408.0	0.0	0.0	408.0	407.9	.1136	40.075	3430.67	206.698	246.773	N/A	246.773	.261	.106
	M-0800	S	405.9	0.0	0.0	405.9	405.8	.1515	39.914	3433.72	206.882	246.795	N/A	246.795	.283	.115
	M-1000	S	395.7	0.0	0.0	395.7	395.6	.1893	38.959	3448.28	207.759	246.718	N/A	246.718	.206	.084
	M-1200	S	395.9	0.0	0.0	395.9	395.8	.2272	39.023	3448.91	207.797	246.820	N/A	246.820	.308	.125
	M-1400	S	391.2	0.1	0.0	391.3	391.2	.2651	38.618	3458.66	208.384	247.002	N/A	247.002	.490	.199
	M-1900	S	376.6	0.1	0.0	376.7	376.6	.3597	37.299	3481.26	209.746	247.045	N/A	247.045	.533	.216
	M-2400	S	386.7	0.1-	2.5	389.1	389.0	.4544	38.624	3462.21	208.598	247.222	N/A	247.222	.710	.288
	M-2900	S	375.5	0.2-	2.5	377.8	377.7	.5490	37.629	3477.16	209.499	247.128	N/A	247.128	.616	.250
	M-3400	S	388.3	0.3-	2.5	390.5	390.4	.6437	38.984	3450.57	207.897	246.881	N/A	246.881	.368	.149
	M-3900	S	389.1	0.4-	2.5	391.2	391.1	.7384	39.163	3446.78	207.668	246.832	N/A	246.832	.320	.130
	M-0000	N	404.3	0.0	2.1	406.4	406.3	.0000-	39.785	3431.16	206.727	246.512	N/A	246.512	.000-	.000-
	M-0200	BASE N	403.2	0.1	2.1	405.4	405.3	.0378-	39.643	3430.34	206.678	246.321	N/A	246.321	.192-	.078-
	M-0400	N	412.4	0.2	2.1	414.7	414.6	.0757-	40.509	3416.90	205.868	246.377	N/A	246.377	.135-	.055-
	M-0600	N	410.3	0.3	2.1	412.7	412.6	.1136-	40.268	3420.52	206.086	246.355	N/A	246.355	.158-	.064-
	M-0800	N	405.9	0.4	2.1	408.4	408.3	.1515-	39.803	3425.63	206.394	246.197	N/A	246.197	.315-	.128-
	M-1000	N	414.5	0.5	2.1	417.1	417.0	.1893-	40.610	3413.75	205.678	246.289	N/A	246.289	.223-	.091-
	M-1200	N	412.5	0.6	2.1	415.2	415.1	.2272-	40.380	3416.33	205.834	246.214	N/A	246.214	.299-	.121-
	M-1400	N	414.3	0.7	2.1	417.1	417.0	.2651-	40.521	3414.16	205.703	246.225	N/A	246.225	.288-	.117-
	M-1600	N	416.6	0.8	2.1	419.5	419.4	.3030-	40.712	3412.50	205.603	246.315	N/A	246.315	.197-	.080-
	M-1800	N	417.1	1.0	2.1	420.2	420.1	.3409-	40.736	3410.42	205.478	246.214	N/A	246.214	.299-	.121-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-MH-AN 2 OF 3 DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/23	M-2300 N		421.1	0.3-	4.3	425.1	425.0	.4355-	41.105	3406.52	205.243	246.348	N/A	246.348	.165-	.067-

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-MH-AN 3 OF 3 — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/23	M-0000	REFERS	406.4	0.0	0.0	406.4	406.5	.0000	39.804	3431.16	206.727	246.532	N/A	246.532	REFERENCE	
	M-2800	N	433.8	0.6	4.3	438.7	438.8	.5301-	42.345	3388.85	204.178	246.523	N/A	246.523	.009-	.004-
	M-3300	N	433.6	0.8-	4.3	437.1	437.2	.6247-	42.077	3388.18	204.138	246.215	N/A	246.215	.317-	.129-
	M-3800	N	437.0	1.0-	4.3	440.3	440.4	.7193-	42.280	3380.48	203.674	245.953	N/A	245.953	.578-	.235-
07/24	L-6000	LINE L	442.3	1.4-	4.3	445.2	444.1	.8139-	42.531	3383.62	203.863	246.394	N/A	246.394	.138-	.056-
	L-5500		471.0	0.0	0.0	471.0	469.9	.9085-	44.946	3353.29	202.036	246.982	N/A	246.982	.450	.182
	L-5000		464.9	0.1-	0.0	464.8	463.7	1.0030-	44.228	3362.44	202.587	246.815	N/A	246.815	.283	.115
	L-4500		465.5	0.1-	0.0	465.4	464.3	1.0970-	44.176	3367.23	202.876	247.052	N/A	247.052	.520	.211
	L-4000	OK	432.9	0.0	0.0	432.9	431.8	1.1920-	40.882	3339.49	201.204	242.087	N/A	242.087	4.445-	1.803-
	L-3500		495.1	0.0	0.0	495.1	494.0	1.2870-	46.862	3326.97	200.450	247.311	N/A	247.311	.780	.316
	L-3000		509.3	0.0	0.0	509.3	508.2	1.3820-	48.140	3305.88	199.179	247.320	N/A	247.320	.788	.320
	L-2500		~~514.8~~ 514.8	0.1	0.0	414.9	413.8	1.4760-	38.786	3297.19	198.656	237.442	N/A	237.442	~~9.090-~~	~~3.687-~~

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/11	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	A-0000	LINE A	306.6	0.0	0.0	306.6	306.6	.0000-	30.022	3581.88	215.808	245.831	N/A	245.831	.541	.220
	A-0050		339.5	0.2-	0.0	339.3	339.3	.0950	33.336	3528.53	212.594	245.930	N/A	245.930	.640	.261
	A-0100		358.7	0.7-	0.0	358.0	358.0	.1890	35.277	3498.43	210.780	246.058	N/A	246.058	.768	.313
	A-0150		363.3	0.9-	0.0	362.4	362.4	.2840	35.820	3484.49	209.941	245.760	N/A	245.760	.470	.192
	A-0200		357.6	0.0	0.7-	356.9	356.9	.3790	35.393	3486.65	210.071	245.463	N/A	245.463	.173	.071
	A-0250		356.6	0.0	0.7-	355.9	355.9	.4740	35.406	3479.21	209.622	245.029	N/A	245.029	.261-	.107-
	A-0300		356.6	0.0	0.7-	355.9	355.9	.5680	35.517	3479.77	209.656	245.173	N/A	245.173	.117-	.048-
	A-0350		355.4	0.0	0.7-	354.7	354.7	.6630	35.511	3479.45	209.637	245.147	N/A	245.147	.143-	.058-
	A-0400		353.0	0.0	0.3-	352.7	352.7	.7580	35.426	3482.03	209.792	245.219	N/A	245.219	.071-	.029-
	A-0450		356.7	0.0	0.3-	356.4	356.4	.8520	35.899	3477.24	209.504	245.403	N/A	245.403	.113	.046
	A-0500		353.0	0.0	0.3-	352.7	352.7	.9470	35.648	3485.55	210.004	245.653	N/A	245.653	.363	.148
	A-0550		357.3	0.0	0.3-	357.0	357.0	1.0420	36.181	3486.73	210.075	246.256	N/A	246.256	.966	.394

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/12	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	A-0600	LINE A	364.3	0.0	0.3-	364.0	367.2	1.1360	37.290	3489.18	210.223	247.513	N/A	247.513	2.223	.906
	A-0650		367.0	0.1-	0.0	366.9	370.1	1.2310	37.685	3492.77	210.439	248.125	N/A	248.125	2.835	1.156
	A-0700		345.0	0.3-	0.0	344.7	347.9	1.3250	35.622	3531.39	212.766	248.388	N/A	248.388	3.098	1.263
	A-0750		311.9	0.5-	0.0	311.4	314.6	1.4700	32.531	3572.66	215.253	247.784	N/A	247.784	2.494	1.017
	A-0800		368.0	0.6-	0.0	367.4	370.6	1.5150	38.068	3482.06	209.794	247.862	N/A	247.862	2.572	1.049
	A-0850		369.6	0.2	0.6-	369.2	372.4	1.6090	38.354	3479.70	209.652	248.006	N/A	248.006	2.716	1.107
	A-0900		365.5	0.3	0.6-	365.2	368.4	1.7040	38.074	3484.97	209.969	248.044	N/A	248.044	2.754	1.123
	A-0950		365.4	0.4	0.6-	365.2	368.4	1.7990	38.186	3477.48	209.518	247.704	N/A	247.704	2.414	.984
	A-1000		373.2	0.6	0.6-	373.2	376.4	1.8940	39.081	3470.42	209.093	248.173	N/A	248.173	2.883	1.176
	A-1050		363.5	0.7	0.6-	363.6	366.8	1.9880	38.251	3488.07	210.156	248.407	N/A	248.407	3.117	1.271
	A-1100		359.9	0.8	0.6-	360.1	363.3	2.0830	38.020	3497.68	210.133	248.152	N/A	248.152	2.863	1.167
	A-1150		380.2	0.1	0.3-	380.0	383.2	2.1780	40.080	3450.29	207.880	247.960	N/A	247.960	2.670	1.088
	A-1200		372.4	0.2	0.3-	372.3	375.5	2.2720	39.436	3461.21	208.538	247.974	N/A	247.974	2.684	1.094
	A-1250		362.6	0.3	0.3-	362.6	365.8	2.3670	38.598	3481.34	209.751	248.349	N/A	248.349	3.059	1.247
	A-1300		370.8	0.4	0.3-	370.9	374.1	2.4620	39.522	3469.91	209.062	248.584	N/A	248.584	3.294	1.343
	A-1350		360.7	0.6	0.3	361.6	364.8	2.5560	38.722	3480.70	209.712	248.434	N/A	248.434	3.144	1.282
	A-1400		373.0	0.0	0.3	373.3	376.5	2.6510	39.979	3463.56	208.679	248.659	N/A	248.659	3.369	1.373
	A-1450	END A	348.3	0.0	0.3	348.6	351.8	2.7460	37.672	3503.55	211.089	248.761	N/A	248.761	3.471	1.415

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READ-ING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/12	B-K114	REFERR	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	B-1200	LINE B	386.9	0.1	0.3	387.3	390.5	2.3670-	35.459	3433.82	206.888	242.347	N/A	242.347	2.943-	1.200-
	B-1150		404.8	0.1	0.3	405.2	408.4	2.2720-	37.323	3415.57	205.788	243.111	N/A	243.111	2.179-	.888-
	B-1100		392.5	0.1	0.7	393.3	396.5	2.1780	41.382	3433.26	206.854	248.236	N/A	248.236	2.946	1.201
	B-1050		393.7	0.2	0.7	394.6	397.8	2.9830	42.455	3439.54	207.232	249.687	N/A	249.687	4.397	1.793
	B-1000		403.6	0.3	0.7	404.6	407.8	1.9880	42.266	3429.98	206.656	248.922	N/A	248.922	3.632	1.481
	B-0950		400.7	0.4	0.7	401.8	405.0	1.8940	41.881	3436.13	207.027	248.908	N/A	248.908	3.618	1.475
	B-0900		412.0	0.6	0.7	413.3	416.5	1.7990	42.896	3408.72	205.375	248.271	N/A	248.271	2.981	1.215
07/15	B-0850	LINE B	385.1	0.2-	0.0	384.9	397.0	1.7040	40.875	3416.31	205.833	246.707	N/A	246.707	1.417	.578
	B-0800		378.7	0.3-	0.0	378.4	390.5	1.6090	40.127	3415.00	205.754	245.880	N/A	245.880	.591	.241
	B-0750		369.5	0.4-	0.0	369.1	381.2	1.5150	39.106	3428.52	206.568	245.674	N/A	245.674	.384	.157
	B-0700		361.5	0.7-	0.0	360.8	372.9	1.4700	38.240	3445.83	207.611	245.851	N/A	245.851	.561	.229
	B-0650		380.6	0.0	0.2-	380.4	392.5	1.3250	39.989	3432.36	206.800	246.789	N/A	246.789	1.499	.611
	B-0600		376.0	0.1	0.2-	375.9	388.0	1.2310	39.438	3450.15	207.872	247.310	N/A	247.310	2.020	.823
	B-0550		392.1	0.1	0.2-	392.0	404.1	1.1360	40.903	3432.44	206.805	247.708	N/A	247.708	2.418	.986
	B-0500		384.1	0.2	0.2-	384.1	396.2	1.0420	40.019	3449.03	207.804	247.823	N/A	247.823	2.533	1.033
	B-0450		347.4	0.0	0.9-	346.5	358.6	.9470	36.226	3501.09	210.941	247.167	N/A	247.167	1.877	.765
	B-0400		342.9	0.0	0.9-	342.0	354.1	.8520	35.674	3504.42	211.141	246.815	N/A	246.815	1.525	.622
	B-0350		372.3	0.1-	0.9-	371.3	383.4	.7580	38.432	3432.16	206.788	245.220	N/A	245.220	.070-	.028-
	B-0300		359.4	0.1-	0.9-	358.4	370.5	.6630	37.058	3439.87	207.252	244.310	N/A	244.310	.980-	.400-
	B-0250		356.7	0.0	0.2-	356.5	368.6	.5680	36.760	3440.64	207.299	244.059	N/A	244.059	1.231-	.502-
	B-0200		357.1	0.1	0.2-	357.0	369.1	.4740	36.699	3439.17	207.210	243.909	N/A	243.909	1.381-	.563-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963 PAGE NO. 1

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/15	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	B-0150		355.3	0.1	0.2-	355.2	367.3	.3790	36.411	3438.84	207.190	243.601	N/A	243.601	1.689-	.689-
	B-0100		364.1	0.2	0.2-	364.1	376.2	.2840	37.171	3437.63	207.117	244.288	N/A	244.288	1.002-	.408-
07/16	B-0050		359.9	0.0	0.0	359.9	364.7	.1890	35.933	3438.79	207.187	243.120	N/A	243.120	2.170-	.884-
	B-0005		359.8	0.0	0.0	359.8	364.6	.0951	35.813	3439.82	207.249	243.062	N/A	243.062	2.228-	.908-
	B-0000	END B	361.0	0.1-	0.0	360.9	365.7	.0000-	35.809	3456.31	208.243	244.052	N/A	244.052	1.238-	.505-
	C-0000	LINE C	298.9	0.0	0.7-	298.2	303.0	.0000-	29.670	3560.21	214.503	244.172	N/A	244.172	1.118-	.456-
	C-0050		385.0	0.0	0.7-	384.3	389.1	.0950	38.212	3415.52	205.785	243.997	N/A	243.997	1.293-	.527-
	C-0100		388.1	0.1-	0.0	388.0	392.8	.1890	38.685	3399.62	204.827	243.512	N/A	243.512	1.778-	.725-
	C-0150		387.3	0.1-	0.7-	386.5	1091.3	.2840	107.194	3396.68	204.650	311.843	N/A	311.843	66.554	27.133
	C-0200		383.8	0.1-	0.7-	383.0	387.8	.3790	38.418	3395.77	204.595	243.013	N/A	243.013	2.276-	.928-
	C-0250		384.0	0.0	0.8-	383.2	388.0	.4740	38.549	3391.62	204.345	242.895	N/A	242.895	2.395-	.977-
	C-0300		377.4	0.0	0.8-	376.6	381.4	.5680	38.014	3398.77	204.776	242.789	N/A	242.789	2.501-	1.019-
	C-0350		385.5	0.1	0.8-	384.8	389.6	.6630	38.928	3395.25	204.564	243.492	N/A	243.492	1.798-	.733-
	C-0400		391.1	0.1	0.8-	390.4	395.2	.7580	39.588	3395.84	204.599	244.187	N/A	244.187	1.103-	.450-
	C-0450		395.1	0.2	0.8-	394.5	399.3	.8520	40.100	3384.31	203.905	244.004	N/A	244.004	1.286-	.524-
	C-0500		391.0	0.3	0.8-	390.5	395.3	.9470	39.820	3389.54	204.220	244.039	N/A	244.039	1.251-	.510-
	C-0550		401.9	0.0	0.8-	401.1	405.9	1.0420	40.969	3384.67	203.926	244.895	N/A	244.895	.395-	.161-
	C-0600		405.0	0.1-	0.8-	404.1	408.9	1.1360	41.373	3389.07	204.191	245.565	N/A	245.565	.275	.112
	C-0650		369.8	0.2-	0.8-	368.8	373.6	1.2310	38.028	3465.50	208.796	246.824	N/A	246.824	1.535	.626
	C-0700		388.5	0.3-	0.8-	387.4	392.2	1.3250	39.960	3441.16	207.330	247.290	N/A	247.290	2.000	.815
	C-0750		411.4	0.4	0.8-	411.0	415.8	1.4700	42.441	3388.75	204.172	246.613	N/A	246.613	1.323	.539

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-T8-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/17	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	C-0800	LINE C	404.3	0.0	0.0	404.3	401.9	1.5150	41.133	3383.40	203.850	244.983	N/A	244.983	.307-	.125-
	C-0850		402.6	0.0	0.0	402.6	400.2	1.6090	41.077	3382.02	203.767	244.843	N/A	244.843	.447-	.182-
	C-0900		395.8	0.0	0.0	395.8	393.4	1.7040	40.522	3385.47	203.975	244.497	N/A	244.497	.793-	.323-
	C-0950		392.9	0.0	0.0	392.9	390.5	1.7990	40.350	3386.08	204.011	244.361	N/A	244.361	.929-	.379-
	C-1000		395.1	0.1	0.0	395.2	392.8	1.8940	40.687	3379.85	203.636	244.322	N/A	244.322	.967-	.394-
07/18	C-1050		397.6	0.2	0.0	397.8	402.2	1.9880	41.717	3367.47	202.890	244.607	N/A	244.607	.683-	.278-
	C-1100		395.5	0.3	0.0	395.8	400.2	2.0830	41.633	3379.54	203.617	245.250	N/A	245.250	.040-	.016-
	C-1150		404.4	0.4	0.0	404.8	409.2	2.1780	42.626	3375.66	203.384	246.009	N/A	246.009	.719	.293
	C-1200		405.6	0.5	0.0	406.1	410.5	2.2720	42.863	3376.73	203.448	246.311	N/A	246.311	1.022	.416
	C-1250		408.8	0.6	0.0	409.4	413.8	2.3670	43.298	3370.80	203.091	246.389	N/A	246.389	1.099	.448
	C-1300		407.8	0.7	0.0	408.5	412.9	2.4620	43.322	3364.07	202.685	246.007	N/A	246.007	.717	.292
	C-1350	END C	391.0	0.7	1.1	392.8	397.2	2.5560	41.895	3380.89	203.699	245.593	N/A	245.593	.303	.124
	D-1350	LINE D	421.6	1.5	1.1	424.2	428.6	2.5560	44.969	3316.45	199.816	244.785	N/A	244.785	.505-	.206-
	D-1300		416.6	1.9	1.1	419.6	424.0	2.4620	44.408	3320.95	200.087	244.496	N/A	244.496	.794-	.324-
	D-1250		415.4	2.2	1.1	418.7	423.1	2.3670	44.209	3323.98	200.270	244.479	N/A	244.479	.811-	.331-
	D-1200		409.0	0.0	3.3	412.3	416.7	2.2720	43.471	3336.10	201.000	244.471	N/A	244.471	.819-	.334-
	D-1150		410.1	0.0	3.3	413.4	417.8	2.1780	43.468	3337.43	201.080	244.548	N/A	244.548	.742-	.302-
	D-1100		423.9	0.0	3.3	427.2	431.6	2.0830	44.708	3324.68	200.312	245.020	N/A	245.020	.270-	.110-
	D-1050		416.0	0.0	3.3	419.3	423.7	1.9880	43.823	3342.64	201.394	245.217	N/A	245.217	.073-	.030-
	D-1000		427.1	0.0	3.3	430.4	434.8	1.8940	44.799	3330.14	200.641	245.440	N/A	245.440	.150	.061
	D-0950		417.7	0.0	3.3	421.0	425.4	1.7990	43.767	3345.19	201.548	245.315	N/A	245.315	.025	.010

OCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TS-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/19	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	D-0500	LINE D	419.0	0.0	0.0	419.0	424.5	.9470	42.679	3355.87	202.191	244.870	N/A	244.870	.420-	.171-
	D-0450		408.3	0.0	0.0	408.3	413.8	.8520	41.520	3344.79	201.524	243.043	N/A	243.043	2.247-	.916-
	D-0400		405.5	0.0	0.0	405.5	411.0	.7580	41.135	3345.10	201.542	242.677	N/A	242.677	2.613-	1.065-
	D-0350		400.9	0.0	0.0	400.9	406.4	.6630	40.573	3348.47	201.745	242.318	N/A	242.318	2.972-	1.211-
	D-0300		400.9	0.0	0.0	400.9	406.4	.5680	40.462	3349.83	201.827	242.289	N/A	242.289	3.001-	1.224-
	D-0250		407.4	0.0	0.5-	406.9	412.4	.4740	40.939	3344.16	201.486	242.424	N/A	242.424	2.866-	1.168-
	D-0200		419.1	0.0	0.5-	418.6	424.1	.3790	41.973	3345.67	201.577	243.549	N/A	243.549	1.741-	.710-
	D-0150		429.1	0.0	0.5-	428.6	434.1	.2840	42.840	3350.62	201.875	244.715	N/A	244.715	.575-	.234-
	D-0100		376.2	0.0	0.5-	375.7	381.2	.1890	37.549	3434.85	206.950	244.499	N/A	244.499	.791-	.323-
	D-0 50		267.1	0.0	0.7	267.8	273.3	.0950	26.873	3589.87	216.290	243.163	N/A	243.163	2.127-	.867-
	D-0000	END D	268.6	0.0	0.7	269.3	274.8	.0000-	26.908	3588.99	216.237	243.145	N/A	243.145	2.145-	.874-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/29	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	E--090	LINE E	410.1	0.2-	1.0-	408.9	451.3	1.7040	46.192	3286.17	197.992	244.184	N/A	244.184	1.106-	.451-
	E--095		413.2	0.0	0.7	413.9	456.3	1.7990	46.793	3277.92	197.495	244.288	N/A	244.288	1.002-	.409-
	E--100		410.9	0.1-	0.7	411.5	453.9	1.8940	46.669	3282.29	197.758	244.427	N/A	244.427	.863-	.352-
	E--105		400.1	0.1-	0.7	400.7	443.1	1.9880	45.722	3298.28	198.721	244.444	N/A	244.444	.846-	.345-
	E--110		408.8	0.2-	0.7	409.3	451.7	2.0830	46.676	3283.19	197.812	244.488	N/A	244.488	.802-	.327-
	E--115		398.9	0.1-	0.7	399.5	441.9	2.1780	45.828	3295.54	198.556	244.384	N/A	244.384	.906-	.369-
	E--120		397.3	0.1-	0.7	397.9	440.3	2.2720	45.782	3292.41	198.368	244.149	N/A	244.149	1.141-	.465-
	E--125		394.5	0.2-	0.7	395.0	437.4	2.3670	45.609	3292.65	198.382	243.991	N/A	243.991	1.299-	.529-
	E--130		389.2	0.0	0.3	389.5	431.9	2.4620	45.182	3297.57	198.679	243.861	N/A	243.861	1.429-	.583-
	E--135	END E	399.2	0.0	0.3	399.5	441.9	2.5560	46.272	3283.49	197.830	244.102	N/A	244.102	1.188-	.484-
	F--135	LINE F	415.5	0.0	0.8	416.3	458.7	2.5560	47.917	3251.06	195.876	243.793	N/A	243.793	1.497-	.610-
	F--130		415.9	0.0	0.8	416.7	459.1	2.4620	47.845	3249.17	195.762	243.608	N/A	243.608	1.682-	.686-
	F--125		415.7	0.0	0.8	416.5	458.9	2.3670	47.714	3253.30	196.011	243.726	N/A	243.726	1.564-	.638-
	F--120		429.9	0.0	0.8	430.7	473.1	2.2720	48.993	3249.18	195.763	244.756	N/A	244.756	.534-	.218-
	F--115		429.7	0.0	0.8	430.5	472.9	2.1780	48.863	3253.30	196.011	244.875	N/A	244.875	.415-	.169-
	F--110		421.7	0.1-	0.8	422.4	464.8	2.0830	47.959	3250.61	195.849	243.808	N/A	243.808	1.482-	.604-
	F--105		422.8	0.0	0.0	422.8	426.5	1.9880	44.097	3245.62	195.549	239.645	N/A	239.645	5.645-	2.301-

HEINRICHS GEOEXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/29	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	E-0000	LINE E	412.3	0.1-	0.0	412.2	454.6	.0000	44.514	3305.40	199.150	243.665	N/A	243.665	1.625-	.663-
	E-0050		421.5	0.2-	0.0	421.3	463.7	.0950	45.517	3296.39	198.607	244.125	N/A	244.125	1.165-	.475-
	E-0100		419.4	0.3-	0.0	419.1	461.5	.1890	45.412	3299.94	198.821	244.233	N/A	244.233	1.057-	.431-
	E-0150		412.7	0.0	0.0	412.7	455.1	.2840	44.897	3304.41	199.091	243.988	N/A	243.988	1.302-	.531-
	E-0200		413.3	0.1-	0.9-	412.3	454.7	.3790	44.969	3296.14	198.592	243.562	N/A	243.562	1.728-	.705-
	E-0250		410.4	0.1-	0.9-	409.4	451.8	.4740	44.797	3297.84	198.695	243.492	N/A	243.492	1.798-	.733-
	E-0300		415.1	0.2-	0.9-	414.0	456.4	.5680	45.358	3299.05	198.768	244.125	N/A	244.125	1.165-	.475-
	E-0350		430.1	0.0	0.9-	429.2	471.6	.6630	46.957	3290.32	198.242	245.199	N/A	245.199	.091-	.037-
	E-0400		420.3	0.	1.2-	419.1	461.5	.7580	46.080	3298.28	198.721	244.801	N/A	244.801	.489-	.199-
	E-0450		408.0	0.1	1.2-	406.9	449.3	.8520	44.996	3298.90	198.759	243.754	N/A	243.754	1.536-	.626-
	E-0500		404.3	0.2	1.2-	403.3	445.7	.9470	44.755	3293.23	198.417	243.172	N/A	243.172	2.118-	.864-
	E-0550		405.0	0.3	1.2-	404.1	446.5	1.0420	44.945	3286.94	198.038	242.983	N/A	242.983	2.307-	.941-
	E-0600		408.8	0.0	1.2-	407.6	450.0	1.1360	45.398	3278.84	197.550	242.948	N/A	242.948	2.342-	.955-
	E-0650		401.0	0.1-	1.2-	399.7	442.1	1.2310	44.736	3291.41	198.307	243.043	N/A	243.043	2.247-	.916-
	E-0700		399.8	0.2-	1.2-	398.4	440.8	1.3250	44.719	3295.66	198.564	243.282	N/A	243.282	2.008-	.819-
	E-0750		399.7	0.3-	1.2-	398.2	440.6	1.4700	44.869	3298.59	198.740	243.609	N/A	243.609	1.681-	.685-
	E-0800		405.6	0.0	1.0-	404.6	447.0	1.5150	45.549	3293.33	198.423	243.972	N/A	243.972	1.318-	.537-
	E-0850		412.9	0.1-	1.0-	411.8	454.2	1.6090	46.364	3283.36	197.822	244.187	N/A	244.187	1.103-	.450-

DOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-T8-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/30	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	G--000	LINE G	459.4	0.0	0.0	459.4	505.5	.0000-	49.499	3197.13	192.627	242.126	N/A	242.126	3.164-	1.290-
	G--005		442.8	0.0	0.0	442.8	488.9	.0950	47.985	3215.81	193.753	241.737	N/A	241.737	3.553-	1.448-
	G--010		439.8	0.0	0.0	439.8	485.9	.1890	47.801	3218.68	193.925	241.727	N/A	241.727	3.563-	1.453-
	G--015		442.8	0.0	0.0	442.8	488.9	.2840	48.207	3218.36	193.906	242.113	N/A	242.113	3.177-	1.295-
	G--020		441.9	0.0	0.0	441.9	488.0	.3790	48.230	3221.13	194.073	242.303	N/A	242.303	2.987-	1.218-
	G--025		438.7	0.0	0.3	439.0	485.1	.4740	48.057	3228.62	194.524	242.582	N/A	242.582	2.708-	1.104-
	G--030		442.1	0.0	0.3	442.4	488.5	.5680	48.501	3226.92	194.422	242.923	N/A	242.923	2.367-	.965-
	G--035		444.1	0.0	0.3	444.4	490.5	.6630	48.808	3229.25	194.562	243.370	N/A	243.370	1.920-	.783-
	G--040		448.8	0.0	0.3	449.1	495.2	.7580	49.380	3222.45	194.153	243.532	N/A	243.532	1.757-	.716-
	G--045		444.4	0.0	0.3	444.7	490.8	.8520	49.059	3225.51	194.337	243.396	N/A	243.396	1.894-	.772-
	G--050		445.2	0.0	0.2	445.4	491.5	.9470	49.239	3223.79	194.233	243.473	N/A	243.473	1.817-	.741-
	G--055		449.4	0.0	0.2	449.6	495.7	1.0420	49.762	3217.01	193.825	243.587	N/A	243.587	1.703-	.694-
	G--060		446.0	0.1-	0.2	446.1	492.2	1.1360	49.530	3221.11	194.072	243.602	N/A	243.602	1.688-	.688-
	G--065		448.0	0.2-	0.2	448.0	494.1	1.2310	49.827	3217.01	193.825	243.652	N/A	243.652	1.638-	.668-
	G--070		441.2	0.1-	0.0	441.1	487.7	1.3250	49.311	3220.28	194.022	243.333	N/A	243.333	1.957-	.798-

DOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/30	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	F--000	LINE F	432.8	0.0	0.4-	432.4	478.5	.0000-	46.855	3241.05	195.273	242.128	N/A	242.128	3.162-	1.289-
	F--005		429.5	0.0	0.3-	429.2	475.3	.0950	46.653	3244.81	195.500	242.153	N/A	242.153	3.137-	1.279-
	F--010		418.8	0.0	0.3-	418.5	464.6	.1890	45.716	3258.32	196.314	242.029	N/A	242.029	3.261-	1.329-
	F--015		415.5	0.0	0.3-	415.2	461.3	.2840	45.504	3262.91	196.590	242.094	N/A	242.094	3.196-	1.303-
	F--020		420.5	0.1	1.1-	419.5	465.6	.3790	46.036	3259.11	196.361	242.398	N/A	242.398	2.892-	1.179-
	F--025		422.3	0.0	1.1-	421.2	467.3	.4740	46.314	3261.43	196.501	242.816	N/A	242.816	2.474-	1.009-
	F--030		419.6	0.0	1.1-	418.5	464.6	.5680	46.160	3267.67	196.877	243.038	N/A	243.038	2.252-	.918-
	F--035		424.2	0.3	1.4-	423.1	469.2	.6630	46.722	3264.30	196.674	243.397	N/A	243.397	1.893-	.772-
	F--040		433.7	0.3	1.4-	432.6	478.7	.7580	47.764	3254.86	196.105	243.870	N/A	243.870	1.420-	.579-
	F--045		433.7	0.1	1.4-	432.4	478.5	.8520	47.855	3260.43	196.441	244.296	N/A	244.296	.994-	.405-
	F--050		432.0	0.0	1.4-	430.6	476.7	.9470	47.790	3261.90	196.529	244.320	N/A	244.320	.970-	.396-
	F--055		427.9	0.2-	0.8-	426.9	473.0	1.0420	47.539	3257.04	196.237	243.776	N/A	243.776	1.514-	.617-
	F--060		426.1	0.1-	0.8-	425.2	471.3	1.1360	47.483	3250.66	195.852	243.336	N/A	243.336	1.954-	.797-
	F--065		417.9	0.1-	0.8-	417.0	463.1	1.2310	46.792	3260.98	196.474	243.266	N/A	243.266	2.024-	.825-
	F--070		418.5	0.0	0.8-	417.7	463.8	1.3250	46.971	3259.71	196.398	243.368	N/A	243.368	1.922-	.783-
	F--075		418.8	0.0	0.8-	418.0	464.1	1.4700	47.170	3259.55	196.388	243.558	N/A	243.558	1.732-	.706-
	F--080		417.8	0.0	0.8-	417.0	463.1	1.5150	47.125	3262.01	196.536	243.661	N/A	243.661	1.628-	.664-
	F--085		420.5	0.0	0.8-	419.7	465.8	1.6090	47.500	3257.08	196.239	243.739	N/A	243.739	1.551-	.632-
	F--090		427.2	0.0	0.8-	426.4	472.5	1.7040	48.268	3246.44	195.598	243.866	N/A	243.866	1.424-	.581-
	F--095		422.0	0.1-	0.0	421.9	468.0	1.7990	47.939	3250.40	195.837	243.775	N/A	243.775	1.515-	.618-
	F--100		426.5	0.0	0.8	427.3	473.4	1.8940	48.579	3241.52	195.302	243.880	N/A	243.880	1.409-	.575-

ACK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/31	8-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	H--105	LINE H	463.4	0.0	1.2-	462.2	508.8	1.9880	52.156	3167.17	190.822	242.978	N/A	242.978	2.312-	.943-
	H--100		465.2	0.0	1.2-	464.0	510.6	1.8940	52.222	3166.70	190.794	243.015	N/A	243.015	2.275-	.927-
	H--095		471.6	0.0	1.2-	470.4	517.0	1.7990	52.737	3156.31	190.168	242.904	N/A	242.904	2.386-	.973-
	H--090		467.4	0.0	1.2-	466.2	512.8	1.7040	52.214	3164.91	190.686	242.900	N/A	242.900	2.390-	.974-
	H--085		469.9	0.1-	1.2-	468.6	515.2	1.6090	52.337	3163.22	190.584	242.921	N/A	242.921	2.369-	.966-
	H--080		463.9	0.0	0.8-	463.1	509.7	1.5150	51.688	3171.85	191.104	242.792	N/A	242.792	2.498-	1.018-
	H--075		466.4	0.0	0.8-	465.6	512.2	1.4700	51.880	3169.77	190.979	242.859	N/A	242.859	2.431-	.991-
	H--070		463.5	0.0	0.8-	462.7	509.3	1.3250	51.426	3175.49	191.323	242.749	N/A	242.749	2.540-	1.036-
	H--065		462.7	0.0	0.8-	461.9	508.5	1.2310	51.238	3180.16	191.605	242.842	N/A	242.842	2.448-	.998-
	H--060		462.4	0.1	0.8-	461.7	508.3	1.1360	51.106	3182.80	191.764	242.870	N/A	242.870	2.420-	.987-
	H--055		466.6	0.2	0.8-	466.0	512.6	1.0420	51.417	3177.22	191.428	242.845	N/A	242.845	2.445-	.997-

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/31	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	G--075	LINE G	440.0	0.2-	0.0	439.8	486.4	1.4700	49.354	3221.29	194.083	243.437	N/A	243.437	1.853-	.756-
	G--080		439.5	0.4-	0.0	439.1	485.7	1.5150	49.338	3217.92	193.880	243.218	N/A	243.218	2.072-	.845-
	G--085		449.2	0.6-	0.0	448.6	495.2	1.6090	50.379	3201.83	192.910	243.289	N/A	243.289	2.001-	.816-
	G--090		442.9	0.0	0.3-	442.6	489.2	1.7040	49.903	3208.89	193.336	243.239	N/A	243.239	2.051-	.836-
	G--095		433.6	0.1	0.3-	433.4	480.0	1.7990	49.114	3219.09	193.950	243.064	N/A	243.064	2.226-	.908-
	G--100		442.3	0.2	0.3-	442.2	488.8	1.8940	50.087	3206.32	193.181	243.268	N/A	243.268	2.022-	.824-
	G--105		435.2	0.2-	1.0	436.0	482.6	1.9880	49.590	3214.55	193.677	243.267	N/A	243.267	2.023-	.825-
	G--110		434.5	0.5-	1.0	435.0	481.6	2.0830	49.604	3215.94	193.760	243.364	N/A	243.364	1.926-	.785-
	G--115		430.5	0.7-	1.0	430.8	477.4	2.1780	49.304	3219.89	193.998	243.302	N/A	243.302	1.988-	.810-
	G--120		431.2	1.0-	1.0	431.2	477.8	2.2720	49.454	3216.46	193.792	243.245	N/A	243.245	2.045-	.834-
	G--125		431.0	0.0	0.4	431.4	478.0	2.3670	49.585	3215.40	193.728	243.312	N/A	243.312	1.977-	.806-
	G--130		429.6	0.0	0.4	430.0	476.6	2.4620	49.559	3215.75	193.749	243.308	N/A	243.308	1.982-	.808-
	G--135	END G	428.5	0.0	0.4	428.9	475.5	2.5560	49.562	3216.16	193.774	243.335	N/A	243.335	1.955-	.797-

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263 TB AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
08/01	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	H--050	LINE H	458.2	0.0	0.6	458.8	503.1	.9470	50.375	3185.93	191.952	242.328	N/A	242.328	2.962-	1.208-
	H--045		463.4	0.0	0.0	463.4	507.7	.8520	50.714	3181.44	191.682	242.396	N/A	242.396	2.894-	1.180-
	H--040		462.5	0.0	0.0	462.5	506.8	.7580	50.516	3186.64	191.995	242.511	N/A	242.511	2.779-	1.133-
	H--035		462.5	0.1	0.0	462.6	506.9	.6630	50.414	3188.07	192.081	242.495	N/A	242.495	2.795-	1.139-
	H--030		461.6	0.2	0.0	461.8	506.1	.5680	50.224	3188.24	192.091	242.316	N/A	242.316	2.974-	1.213-
	H--025		462.1	0.0	0.3	462.4	506.7	.4740	50.173	3185.10	191.902	242.075	N/A	242.075	3.215-	1.311-
	H--020		461.4	0.1	0.3	461.8	506.1	.3790	50.002	3183.65	191.815	241.817	N/A	241.817	3.473-	1.416-
	H--015		459.4	0.2	0.3	459.9	504.2	.2840	49.705	3183.25	191.791	241.495	N/A	241.495	3.794-	1.547-
	H--010		464.7	0.0	0.3	465.0	509.3	.1890	50.093	3174.59	191.269	241.362	N/A	241.362	3.928-	1.602-
	H--005		466.7	0.0	0.3	467.0	511.3	.0950	50.178	3170.96	191.050	241.228	N/A	241.228	4.062-	1.656-
	H--000	END H	476.7	0.0	0.3	477.0	521.3	.0000-	51.046	3158.27	190.286	241.331	N/A	241.331	3.958-	1.614-
	R--900	ROAD	326.4	0.0	0.0	326.4	370.7	.0000-	36.299	3404.93	205.147	241.446	N/A	241.446	3.844-	1.567-
	R--800		321.1	0.0	0.0	321.1	365.4	.0951-	35.668	3410.51	205.483	241.152	N/A	241.152	4.138-	1.687-
	R--700		314.9	0.0	0.0	314.9	359.2	.1890-	34.951	3416.77	205.860	240.811	N/A	240.811	4.479-	1.826-
	R--600		324.2	0.0	0.0	324.2	368.5	.2840-	35.750	3404.06	205.095	240.845	N/A	240.845	4.445-	1.812-
	R--500		335.8	0.0	0.0	335.8	380.1	.3790-	36.774	3389.88	204.240	241.015	N/A	241.015	4.275-	1.743-
	R--400		333.6	0.0	0.0	333.6	377.9	.4740-	36.447	3395.47	204.577	241.025	N/A	241.025	4.265-	1.739-
	R--300		320.6	0.0	0.0	320.6	364.9	.5680-	35.064	3414.74	205.738	240.802	N/A	240.802	4.488-	1.830-
	R--200		309.3	0.0	0.0	309.3	353.6	.6630-	33.846	3433.68	206.879	240.725	N/A	240.725	4.565-	1.861-
	R--100	END R	304.5	0.0	0.0	304.5	348.8	.7850-	33.233	3448.17	207.752	240.985	N/A	240.985	4.305-	1.755-

Copy #3

I.B.M. DATA SHEETS

MINERAL HILL AREA — 5 sheets
TWIN BUTTS AREA — 8 sheets

TOTAL — 13 sheets

(to be inserted in back of reports)

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963 PAGE NO. 1

AREA-080263-MH-AN 1 OF 3 DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/22	S-E060	REFER	410.8	0.0	0.0	410.8	410.8	.0000	40.226	3432.16	206.788	247.013	N/A	247.013	REFERENCE	
	N-W000		406.5	0.0	0.0	406.5	406.5	.0080-	39.795	3441.36	207.342	247.137	N/A	247.137	.124	.050
	N-W020		407.7	0.0	0.0	407.7	407.7	.0107-	39.909	3439.11	207.206	247.116	N/A	247.116	.103	.042
	N-W040		402.2	0.0	0.0	402.2	402.2	.0134-	39.368	3448.04	207.744	247.112	N/A	247.112	.099	.040
	N-W060		403.4	0.0	0.0	403.4	403.4	.0161-	39.482	3448.96	207.800	247.282	N/A	247.282	.269	.109
	N-W080		406.6	0.1	0.0	406.7	406.7	.0188-	39.802	3444.85	207.552	247.354	N/A	247.354	.341	.138
	N-W100		417.6	0.1	0.0	417.7	417.7	.0215-	40.870	3428.44	206.564	247.439	N/A	247.439	.426	.173
	N-W120		419.7	0.1	0.0	419.8	419.8	.0242-	41.078	3425.37	206.379	247.457	N/A	247.457	.444	.180
	N-W140		418.1	0.2	0.0	418.3	418.3	.0268-	40.928	3427.41	206.501	247.430	N/A	247.430	.417	.169
	N-W190		412.3	0.3	0.0	412.6	412.6	.0937-	40.292	3436.38	207.042	247.334	N/A	247.334	.321	.130
	N-W240		426.4	0.4	0.0	426.8	426.8	.1607-	41.604	3417.98	205.933	247.537	N/A	247.537	.524	.212
	N-W290		417.2	0.3	1.8	419.3	419.3	.2276-	40.791	3427.98	206.536	247.326	N/A	247.326	.313	.127
	N-W340		414.4	0.7	1.8	416.9	416.9	.2946-	40.477	3432.92	206.833	247.310	N/A	247.310	.297	.120
	N-W390		411.0	1.1	1.8	413.9	413.9	.3615-	40.105	3442.20	207.393	247.497	N/A	247.497	.484	.196
	N-W440		406.1	1.4	1.8	409.3	409.3	.4285-	39.576	3448.92	207.797	247.373	N/A	247.373	.360	.146
	N-W490		411.2	1.7	1.8	414.7	414.7	.4954-	40.026	3447.69	207.723	247.749	N/A	247.749	.736	.298
	E-6000		417.2	2.1	1.8	421.1	421.1	.5624-	40.574	3445.21	207.574	248.148	N/A	248.148	1.135	.459
	S-E020		412.9	0.0	0.0	412.9	412.9	.0054-	40.425	3431.81	206.767	247.191	N/A	247.191	.178	.072
	S-E040		407.9	0.0	0.0	407.9	407.9	.0027-	39.938	3437.17	207.089	247.028	N/A	247.028	.015	.006
	S-E080		415.8	0.0	0.0	415.8	415.8	.0027-	40.712	3424.16	206.306	247.018	N/A	247.018	.004	.002
	S-E100		418.6	0.0	0.0	418.6	418.6	.0054-	40.983	3420.96	206.113	247.096	N/A	247.096	.083	.033
	S-E120		421.6	0.0	0.0	421.6	421.6	.0080-	41.274	3416.99	205.874	247.147	N/A	247.147	.134	.054
	S-E140		425.4	0.0	0.0	425.4	425.4	.0107-	41.643	3412.22	205.586	247.229	N/A	247.229	.216	.087
	S-E190		432.8	0.1	0.0	432.9	432.9	.0776-	42.298	3497.87	210.747	253.045	N/A	253.045	6.032	2.442

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-MH-AN 1 OF 3 DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/22	S-E240		437.9	0.1	0.0	438.0	438.0	.1446-	42.719	3486.83	210.082	252.801	N/A	252.801	5.788	2.343

STOCK FORM 14116_P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-MH-AN 2 OF 3 DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/23	M-0000	REFERS	406.4	0.0	0.0	406.4	406.3	.0000	39.785	3431.16	206.727	246.512	N/A	246.512	REFERENCE	
	B-A115	NETTIE	398.0	0.0	0.0	398.0	397.9	.0000-	38.962	3465.15	208.775	247.738	N/A	247.738	1.225	.497
	M-0200	S	413.6	0.0	0.0	413.6	413.5	.0378	40.534	3421.39	206.139	246.673	N/A	246.673	.161	.065
	M-0400	S	415.0	0.0	0.0	415.0	414.9	.0757	40.716	3419.93	206.051	246.767	N/A	246.767	.254	.103
	M-0600	S	408.0	0.0	0.0	408.0	407.9	.1136	40.075	3430.67	206.698	246.773	N/A	246.773	.261	.106
	M-0800	S	405.9	0.0	0.0	405.9	405.8	.1515	39.914	3433.72	206.882	246.795	N/A	246.795	.283	.115
	M-1000	S	395.7	0.0	0.0	395.7	395.6	.1893	38.959	3448.28	207.759	246.718	N/A	246.718	.206	.084
	M-1200	S	395.9	0.0	0.0	395.9	395.8	.2272	39.023	3448.91	207.797	246.820	N/A	246.820	.308	.125
	M-1400	S	391.2	0.1	0.0	391.3	391.2	.2651	38.618	3458.66	208.384	247.002	N/A	247.002	.490	.199
	M-1900	S	376.6	0.1	0.0	376.7	376.6	.3597	37.299	3481.26	209.746	247.045	N/A	247.045	.533	.216
	M-2400	S	386.7	0.1-	2.5	389.1	389.0	.4544	38.624	3462.21	208.598	247.222	N/A	247.222	.710	.288
	M-2900	S	375.5	0.2-	2.5	377.8	377.7	.5490	37.629	3477.16	209.499	247.128	N/A	247.128	.616	.250
	M-3400	S	388.3	0.3-	2.5	390.5	390.4	.6437	38.984	3450.57	207.897	246.881	N/A	246.881	.368	.149
	M-3900	S	389.1	0.4-	2.5	391.2	391.1	.7384	39.163	3446.78	207.668	246.832	N/A	246.832	.320	.130
	M-0000	N	404.3	0.0	2.1	406.4	406.3	.0000-	39.785	3431.16	206.727	246.512	N/A	246.512	.000-	.000-
	M-0200	BASE N	403.2	0.1	2.1	405.4	405.3	.0378-	39.643	3430.34	206.678	246.321	N/A	246.321	.192-	.078-
	M-0400	N	412.4	0.2	2.1	414.7	414.6	.0757-	40.509	3416.90	205.868	246.377	N/A	246.377	.135-	.055-
	M-0600	N	410.3	0.3	2.1	412.7	412.6	.1136-	40.268	3420.52	206.086	246.355	N/A	246.355	.158-	.064-
	M-0800	N	405.9	0.4	2.1	408.4	408.3	.1515-	39.803	3425.63	206.394	246.197	N/A	246.197	.315-	.128-
	M-1000	N	414.5	0.5	2.1	417.1	417.0	.1893-	40.610	3413.75	205.678	246.289	N/A	246.289	.223-	.091-
	M-1200	N	412.5	0.6	2.1	415.2	415.1	.2272-	40.380	3416.33	205.834	246.214	N/A	246.214	.299-	.121-
	M-1400	N	414.3	0.7	2.1	417.1	417.0	.2651-	40.521	3414.16	205.703	246.225	N/A	246.225	.288-	.117-
	M-1600	N	416.6	0.8	2.1	419.5	419.4	.3030-	40.712	3412.50	205.603	246.315	N/A	246.315	.197-	.080-
	M-1800	N	417.1	1.0	2.1	420.2	420.1	.3409-	40.736	3410.42	205.478	246.214	N/A	246.214	.299-	.121-

STOCK FORM 14116-P

AREA-080263-MH-AN 2 OF 3 DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/23	M-2300 N		421.1	0.3-	4.3	425.1	425.0	.4355-	41.105	3406.52	205.243	246.348	N/A	246.348	.165-	.067-

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-MH-AN 3 OF 3 — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READ- ING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/23	N-0000	REFERS	406.4	0.0	0.0	406.4	406.5	.0000	39.804	3431.16	206.727	246.532	N/A	246.532	REFERENCE	
	N-2800	N	433.8	0.6	4.3	438.7	438.8	.5301-	42.345	3388.85	204.178	246.523	N/A	246.523	.009-	.004-
	N-3300	N	433.6	0.8-	4.3	437.1	437.2	.6247-	42.077	3388.18	204.138	246.215	N/A	246.215	.317-	.129-
	N-3800	N	437.0	1.0-	4.3	440.3	440.4	.7193-	42.280	3380.48	203.674	245.953	N/A	245.953	.578-	.235-
07/24	L-6000	LINE L	442.3	1.4-	4.3	445.2	444.1	.8139-	42.531	3383.62	203.863	246.394	N/A	246.394	.138-	.056-
	L-5500		471.0	0.0	0.0	471.0	469.9	.9085-	44.946	3353.29	202.036	246.982	N/A	246.982	.450	.182
	L-5000		464.9	0.1-	0.0	464.8	463.7	1.0030-	44.228	3362.44	202.587	246.815	N/A	246.815	.283	.115
	L-4500		465.5	0.1-	0.0	465.4	464.3	1.0970-	44.176	3367.23	202.876	247.052	N/A	247.052	.520	.211
	L-4000	OK	432.9	0.0	0.0	432.9	431.8	1.1920-	40.882	3339.49	201.204	242.087	N/A	242.087	4.445-	1.803-
	L-3500		495.1	0.0	0.0	495.1	494.0	1.2870-	46.862	3326.97	200.450	247.311	N/A	247.311	.780	.316
	L-3000		509.3	0.0	0.0	509.3	508.2	1.3820-	48.140	3305.88	199.179	247.320	N/A	247.320	.788	.320
	L-2500		519.8 ~~514.8~~	0.1	0.0	414.9	413.8	1.4760-	38.786	3297.19	198.656	237.442	N/A	237.442	~~9.090-~~	~~3.687-~~

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/11	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	A-0000	LINE A	306.6	0.0	0.0	306.6	306.6	.0000-	30.022	3581.88	215.808	245.831	N/A	245.831	.541	.220
	A-0050		339.5	0.2-	0.0	339.3	339.3	.0950	33.336	3528.53	212.594	245.930	N/A	245.930	.640	.261
	A-0100		358.7	0.7-	0.0	358.0	358.0	.1890	35.277	3498.43	210.780	246.058	N/A	246.058	.768	.313
	A-0150		363.3	0.9-	0.0	362.4	362.4	.2840	35.820	3484.49	209.941	245.760	N/A	245.760	.470	.192
	A-0200		357.6	0.0	0.7-	356.9	356.9	.3790	35.393	3486.65	210.071	245.463	N/A	245.463	.173	.071
	A-0250		356.6	0.0	0.7-	355.9	355.9	.4740	35.406	3479.21	209.622	245.029	N/A	245.029	.261-	.107-
	A-0300		356.6	0.0	0.7-	355.9	355.9	.5680	35.517	3479.77	209.656	245.173	N/A	245.173	.117-	.048-
	A-0350		355.4	0.0	0.7-	354.7	354.7	.6630	35.511	3479.45	209.637	245.147	N/A	245.147	.143-	.058-
	A-0400		353.0	0.0	0.3-	352.7	352.7	.7580	35.426	3482.03	209.792	245.219	N/A	245.219	.071-	.029-
	A-0450		356.7	0.0	0.3-	356.4	356.4	.8520	35.899	3477.24	209.504	245.403	N/A	245.403	.113	.046
	A-0500		353.0	0.0	0.3-	352.7	352.7	.9470	35.648	3485.55	210.004	245.653	N/A	245.653	.363	.148
	A-0550		357.3	0.0	0.3-	357.0	357.0	1.0420	36.181	3486.73	210.075	246.256	N/A	246.256	.966	.394

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TO-AN — DATUM PLAN = SEA LEVEL

INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC

LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/12	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	A-0600	LINE A	364.3	0.0	0.3-	364.0	367.2	1.1360	37.290	3489.18	210.223	247.513	N/A	247.513	2.223	.906
	A-0650		367.0	0.1-	0.0	366.9	370.1	1.2310	37.685	3492.77	210.439	248.125	N/A	248.125	2.835	1.156
	A-0700		345.0	0.3-	0.0	344.7	347.9	1.3250	35.622	3531.39	212.766	248.388	N/A	248.388	3.098	1.263
	A-0750		311.9	0.5-	0.0	311.4	314.6	1.4700	32.531	3572.66	215.253	247.784	N/A	247.784	2.494	1.017
	A-0800		368.0	0.6-	0.0	367.4	370.6	1.5150	38.068	3482.06	209.794	247.862	N/A	247.862	2.572	1.049
	A-0850		369.6	0.2	0.6-	369.2	372.4	1.6090	38.354	3479.70	209.652	248.006	N/A	248.006	2.716	1.107
	A-0900		365.5	0.3	0.6-	365.2	368.4	1.7040	38.074	3484.97	209.969	248.044	N/A	248.044	2.754	1.123
	A-0950		365.4	0.4	0.6-	365.2	368.4	1.7990	38.186	3477.48	209.518	247.704	N/A	247.704	2.414	.984
	A-1000		373.2	0.6	0.6-	373.2	376.4	1.8940	39.081	3470.42	209.093	248.173	N/A	248.173	2.883	1.176
	A-1050		363.5	0.7	0.6-	363.6	366.8	1.9880	38.251	3488.07	210.156	248.407	N/A	248.407	3.117	1.271
	A-1100		359.9	0.8	0.6-	360.1	363.3	2.0830	38.020	3487.68	210.133	248.152	N/A	248.152	2.863	1.167
	A-1150		380.2	0.1	0.3-	380.0	383.2	2.1780	40.080	3450.29	207.880	247.960	N/A	247.960	2.670	1.088
	A-1200		372.4	0.2	0.3-	372.3	375.5	2.2720	39.436	3461.21	208.538	247.974	N/A	247.974	2.684	1.094
	A-1250		362.6	0.3	0.3-	362.6	365.8	2.3670	38.598	3481.34	209.751	248.349	N/A	248.349	3.059	1.247
	A-1300		370.8	0.4	0.3-	370.9	374.1	2.4620	39.522	3469.91	209.062	248.584	N/A	248.584	3.294	1.343
	A-1350		360.7	0.6	0.3	361.6	364.8	2.5560	38.722	3480.70	209.712	248.434	N/A	248.434	3.144	1.282
	A-1400		373.0	0.0	0.3	373.3	376.5	2.6510	39.979	3463.56	208.679	248.659	N/A	248.659	3.369	1.373
	A-1450	END A	348.3	0.0	0.3	348.6	351.8	2.7460	37.672	3503.55	211.089	248.761	N/A	248.761	3.471	1.415

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-060263-T8-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/12	B-K114	REFERR	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	B-1200	LINE B	386.9	0.1	0.3	387.3	390.5	2.3670-	35.459	3433.82	206.888	242.347	N/A	242.347	2.943-	1.200-
	B-1150		404.8	0.1	0.3	405.2	408.4	2.2720-	37.323	3415.57	205.788	243.111	N/A	243.111	2.179-	.888-
	B-1100		392.5	0.1	0.7	393.3	396.5	2.1780	41.302	3433.26	206.854	248.236	N/A	248.236	2.946	1.201
	B-1050		393.7	0.2	0.7	394.6	397.8	2.9830	42.455	3439.54	207.232	249.687	N/A	249.687	4.397	1.793
	B-1000		403.6	0.3	0.7	404.6	407.8	1.9880	42.266	3429.98	206.656	248.922	N/A	248.922	3.632	1.481
	B-0950		400.7	0.4	0.7	401.8	405.0	1.8940	41.881	3436.13	207.027	248.908	N/A	248.908	3.618	1.475
	B-0900		412.0	0.6	0.7	413.3	416.5	1.7990	42.896	3408.72	205.375	248.271	N/A	248.271	2.981	1.215
07/15	B-0850	LINE B	385.1	0.2-	0.0	384.9	397.0	1.7040	40.875	3416.31	205.833	246.707	N/A	246.707	1.417	.578
	B-0800		378.7	0.3-	0.0	378.4	390.5	1.6090	40.127	3415.00	205.754	245.880	N/A	245.880	.591	.241
	B-0750		369.5	0.4-	0.0	369.1	381.2	1.5150	39.106	3428.52	206.568	245.674	N/A	245.674	.384	.157
	B-0700		361.5	0.7-	0.0	360.8	372.9	1.4700	38.240	3445.83	207.611	245.851	N/A	245.851	.561	.229
	B-0650		380.6	0.0	0.2-	380.4	392.5	1.3250	39.989	3432.36	206.800	246.789	N/A	246.789	1.499	.611
	B-0600		376.0	0.1	0.2-	375.9	386.0	1.2310	39.438	3450.15	207.872	247.310	N/A	247.310	2.020	.823
	B-0550		392.1	0.1	0.2-	392.0	404.1	1.1360	40.903	3432.44	206.805	247.708	N/A	247.708	2.418	.986
	B-0500		384.1	0.2	0.2-	384.1	396.2	1.0420	40.019	3449.03	207.804	247.823	N/A	247.823	2.533	1.033
	B-0450		347.4	0.0	0.9-	346.5	358.6	.9470	36.226	3501.09	210.941	247.167	N/A	247.167	1.877	.765
	B-0400		342.9	0.0	0.9-	342.0	354.1	.8520	35.674	3504.42	211.141	246.815	N/A	246.815	1.525	.622
	B-0350		372.3	0.1-	0.9-	371.3	383.4	.7580	38.432	3432.16	206.788	245.220	N/A	245.220	.070-	.028-
	B-0300		359.4	0.1-	0.9-	358.4	370.5	.6630	37.058	3439.87	207.252	244.310	N/A	244.310	.980-	.400-
	B-0250		356.7	0.0	0.2-	356.5	368.6	.5680	36.760	3440.64	207.299	244.059	N/A	244.059	1.231-	.502-
	B-0200		357.1	0.1	0.2-	357.0	369.1	.4740	36.699	3439.17	207.210	243.909	N/A	243.909	1.381-	.563-

STOCK FORM 14116_P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-T8-AN — DATUM PLAN = SEA LEVEL

INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC

LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/15	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	B-0150		355.3	0.1	0.2-	355.2	367.3	.2790	36.411	3438.84	207.190	243.601	N/A	243.601	1.689-	.689-
	B-0100		364.1	0.2	0.2-	364.1	376.2	.2840	37.171	3437.63	207.117	244.288	N/A	244.288	1.002-	.408-
07/16	B-0050		359.9	0.0	0.0	359.9	364.7	.1890	35.933	3438.79	207.187	243.120	N/A	243.120	2.170-	.884-
	B-0005		359.8	0.0	0.0	359.8	364.6	.0951	35.813	3439.82	207.249	243.062	N/A	243.062	2.228-	.908-
	B-0000	END B	361.0	0.1-	0.0	360.9	365.7	.0000-	35.809	3456.31	208.243	244.052	N/A	244.052	1.238-	.505-
	C-0000	LINE C	298.9	0.0	0.7-	298.2	303.0	.0000-	29.670	3560.21	214.503	244.172	N/A	244.172	1.118-	.456-
	C-0050		385.0	0.0	0.7-	384.3	389.1	.0950	38.212	3415.52	205.785	243.997	N/A	243.997	1.293-	.527-
	C-0100		388.1	0.1-	0.0	388.0	392.8	.1890	38.685	3399.62	204.827	243.512	N/A	243.512	1.778-	.725-
	C-0150		387.3	0.1-	0.7-	386.5	1091.3	.2840	107.194	3396.68	204.650	311.843	N/A	311.843	66.554	27.133
	C-0200		383.8	0.1-	0.7-	383.0	387.8	.3790	38.418	3395.77	204.595	243.013	N/A	243.013	2.276-	.928-
	C-0250		384.0	0.0	0.8-	383.2	388.0	.4740	38.549	3391.62	204.345	242.895	N/A	242.895	2.395-	.977-
	C-0300		377.4	0.0	0.8-	376.6	381.4	.5680	38.014	3398.77	204.776	242.789	N/A	242.789	2.501-	1.019-
	C-0350		385.5	0.1	0.8-	384.8	389.6	.6630	38.928	3395.25	204.564	243.492	N/A	243.492	1.798-	.733-
	C-0400		391.1	0.1	0.8-	390.4	395.2	.7580	39.588	3395.84	204.599	244.187	N/A	244.187	1.103-	.450-
	C-0450		395.1	0.2	0.8-	394.5	399.3	.8520	40.100	3384.31	203.905	244.004	N/A	244.004	1.286-	.524-
	C-0500		391.0	0.3	0.8-	390.3	395.3	.9470	39.820	3389.54	204.220	244.039	N/A	244.039	1.251-	.510-
	C-0550		401.9	0.0	0.8-	401.1	405.9	1.0420	40.969	3384.67	203.926	244.895	N/A	244.895	.395-	.161-
	C-0600		405.0	0.1-	0.8-	404.1	408.9	1.1360	41.373	3389.07	204.191	245.565	N/A	245.565	.275	.112
	C-0650		369.8	0.2-	0.8-	368.8	373.6	1.2310	38.028	3465.50	208.796	246.824	N/A	246.824	1.535	.626
	C-0700		388.5	0.3-	0.8-	387.4	392.2	1.3250	39.960	3441.16	207.330	247.290	N/A	247.290	2.000	.815
	C-0750		411.4	0.4	0.8-	411.0	415.8	1.4700	42.441	3388.75	204.172	246.613	N/A	246.613	1.323	.539

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-T8-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/17	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	C-0800	LINE C	404.3	0.0	0.0	404.3	401.9	1.5150	41.133	3383.40	203.850	244.983	N/A	244.983	.307-	.125-
	C-0850		402.6	0.0	0.0	402.6	400.2	1.6090	41.077	3382.02	203.767	244.843	N/A	244.843	.447-	.182-
	C-0900		395.8	0.0	0.0	395.8	393.4	1.7040	40.522	3385.47	203.975	244.497	N/A	244.497	.793-	.323-
	C-0950		392.9	0.0	0.0	392.9	390.5	1.7990	40.350	3386.08	204.011	244.361	N/A	244.361	.929-	.379-
	C-1000		395.1	0.1	0.0	395.2	392.8	1.8940	40.687	3379.85	203.636	244.322	N/A	244.322	.967-	.394-
07/18	C-1050		397.6	0.2	0.0	397.8	402.2	1.9880	41.717	3367.47	202.890	244.607	N/A	244.607	.683-	.278-
	C-1100		395.5	0.3	0.0	395.8	400.2	2.0830	41.633	3379.54	203.617	245.250	N/A	245.250	.040-	.016-
	C-1150		404.4	0.4	0.0	404.8	409.2	2.1780	42.626	3375.66	203.384	246.009	N/A	246.009	.719	.293
	C-1200		405.6	0.5	0.0	406.1	410.5	2.2720	42.863	3376.73	203.448	246.311	N/A	246.311	1.022	.416
	C-1250		408.8	0.6	0.0	409.4	413.8	2.3670	43.298	3370.80	203.091	246.389	N/A	246.389	1.099	.448
	C-1300		407.8	0.7	0.0	408.5	412.9	2.4620	43.322	3364.07	202.685	246.007	N/A	246.007	.717	.292
	C-1350	END C	391.0	0.7	1.1	392.8	397.2	2.5560	41.895	3380.89	203.699	245.593	N/A	245.593	.303	.124
	D-1350	LINE D	421.6	1.5	1.1	424.2	428.6	2.5560	44.969	3316.45	199.816	244.785	N/A	244.785	.505-	.206-
	D-1300		416.6	1.9	1.1	419.6	424.0	2.4620	44.408	3320.95	200.087	244.496	N/A	244.496	.794-	.324-
	D-1250		415.4	2.2	1.1	418.7	423.1	2.3670	44.209	3323.98	200.270	244.479	N/A	244.479	.811-	.331-
	D-1200		409.0	0.0	3.3	412.3	416.7	2.2720	43.471	3336.10	201.000	244.471	N/A	244.471	.819-	.334-
	D-1150		410.1	0.0	3.3	413.4	417.8	2.1780	43.468	3337.43	201.080	244.548	N/A	244.548	.742-	.302-
	D-1100		423.9	0.0	3.3	427.2	431.6	2.0830	44.708	3324.68	200.312	245.020	N/A	245.020	.270-	.110-
	D-1050		416.0	0.0	3.3	419.3	423.7	1.9880	43.823	3342.64	201.394	245.217	N/A	245.217	.073-	.030-
	D-1000		427.1	0.0	3.3	430.4	434.8	1.8940	44.799	3330.14	200.641	245.440	N/A	245.440	.150	.061
	D-0950		417.7	0.0	3.3	421.0	425.4	1.7990	43.767	3345.19	201.548	245.315	N/A	245.315	.025	.010

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TS-AN — DATUM PLAN = SEA LEVEL

INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC

LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/19	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	0-0500	LINE 0	419.0	0.0	0.0	419.0	424.5	.9470	42.679	3355.87	202.191	244.870	N/A	244.870	.420-	.171-
	0-0450		408.3	0.0	0.0	408.3	413.8	.8520	41.520	3344.79	201.524	243.043	N/A	243.043	2.247-	.916-
	0-0400		405.5	0.0	0.0	405.5	411.0	.7580	41.135	3345.10	201.542	242.677	N/A	242.677	2.613-	1.065-
	0-0350		400.9	0.0	0.0	400.9	406.4	.6630	40.573	3348.47	201.745	242.318	N/A	242.318	2.972-	1.211-
	0-0300		400.9	0.0	0.0	400.9	406.4	.5680	40.462	3349.83	201.827	242.289	N/A	242.289	3.001-	1.224-
	0-0250		407.4	0.0	0.5-	406.9	412.4	.4740	40.939	3344.16	201.486	242.424	N/A	242.424	2.866-	1.168-
	0-0200		419.1	0.0	0.5-	418.6	424.1	.3790	41.973	3345.67	201.577	243.549	N/A	243.549	1.741-	.710-
	0-0150		429.1	0.0	0.5-	428.6	434.1	.2840	42.840	3350.62	201.875	244.715	N/A	244.715	.575-	.234-
	0-0100		376.2	0.0	0.5-	375.7	381.2	.1890	37.549	3434.85	206.950	244.499	N/A	244.499	.791-	.323-
	0-0 50		267.1	0.0	0.7	267.8	273.3	.0950	26.873	3589.87	216.290	243.163	N/A	243.163	2.127-	.867-
	0-0000	END	268.6	0.0	0.7	269.3	274.8	.0000-	26.908	3588.99	216.237	243.145	N/A	243.145	2.145-	.874-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-T8-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READ-ING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/29	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	E--090	LINE E	410.1	0.2-	1.0-	408.9	451.3	1.7040	46.192	3286.17	197.992	244.184	N/A	244.184	1.106-	.451-
	E--095		413.2	0.0	0.7	413.9	456.3	1.7990	46.793	3277.92	197.495	244.288	N/A	244.288	1.002-	.409-
	E--100		410.9	0.1-	0.7	411.5	453.9	1.8940	46.669	3282.29	197.758	244.427	N/A	244.427	.863-	.352-
	E--105		400.1	0.1-	0.7	400.7	443.1	1.9880	45.722	3298.28	198.721	244.444	N/A	244.444	.846-	.345-
	E--110		408.8	0.2-	0.7	409.3	451.7	2.0830	46.676	3283.19	197.812	244.488	N/A	244.488	.802-	.327-
	E--115		398.9	0.1-	0.7	399.5	441.9	2.1780	45.828	3295.54	198.556	244.384	N/A	244.384	.906-	.369-
	E--120		397.3	0.1-	0.7	397.9	440.3	2.2720	45.782	3292.41	198.368	244.149	N/A	244.149	1.141-	.465-
	E--125		394.5	0.2-	0.7	395.0	437.4	2.3670	45.609	3292.65	198.382	243.991	N/A	243.991	1.299-	.529-
	E--130		389.2	0.0	0.3	389.5	431.9	2.4620	45.182	3297.57	198.679	243.861	N/A	243.861	1.429-	.583-
	E--135	END E	399.2	0.0	0.3	399.5	441.9	2.5560	46.272	3283.49	197.830	244.102	N/A	244.102	1.188-	.484-
	F--135	LINE F	415.5	0.0	0.8	416.3	458.7	2.5560	47.917	3251.06	195.876	243.793	N/A	243.793	1.497-	.610-
	F--130		415.9	0.0	0.8	416.7	459.1	2.4620	47.845	3249.17	195.762	243.608	N/A	243.608	1.682-	.686-
	F--125		415.7	0.0	0.8	416.5	458.9	2.3670	47.714	3253.30	196.011	243.726	N/A	243.726	1.564-	.638-
	F--120		429.9	0.0	0.8	430.7	473.1	2.2720	48.993	3249.18	195.763	244.756	N/A	244.756	.534-	.218-
	F--115		429.7	0.0	0.8	430.5	472.9	2.1780	48.863	3253.30	196.011	244.875	N/A	244.875	.415-	.169-
	F--110		421.7	0.1-	0.8	422.4	464.8	2.0830	47.959	3250.61	195.849	243.808	N/A	243.808	1.482-	.604-
	F--105		422.8	0.0	0.0	422.8	426.5	1.9880	44.097	3245.62	195.549	239.645	N/A	239.645	5.645-	2.301-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-060263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/29	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	E-0000	LINE E	412.3	0.1-	0.0	412.2	454.6	.0000	44.514	3305.40	199.150	243.665	N/A	243.665	1.625-	.663-
	E-0050		421.5	0.2-	0.0	421.3	463.7	.0950	45.517	3296.39	198.607	244.125	N/A	244.125	1.165-	.475-
	E-0100		419.4	0.3-	0.0	419.1	461.5	.1890	45.412	3299.94	198.821	244.233	N/A	244.233	1.057-	.431-
	E-0150		412.7	0.0	0.0	412.7	455.1	.2840	44.897	3304.41	199.091	243.988	N/A	243.988	1.302-	.531-
	E-0200		413.3	0.1-	0.9-	412.3	454.7	.3790	44.969	3296.14	198.592	243.562	N/A	243.562	1.728-	.705-
	E-0250		410.4	0.1-	0.9-	409.4	451.8	.4740	44.797	3297.84	198.695	243.492	N/A	243.492	1.798-	.733-
	E-0300		415.1	0.2-	0.9-	414.0	456.4	.5680	45.358	3299.05	198.768	244.125	N/A	244.125	1.165-	.475-
	E-0350		430.1	0.0	0.9-	429.2	471.6	.6630	46.957	3290.32	198.242	245.199	N/A	245.199	.091-	.037-
	E-0400		420.3	0.	1.2-	419.1	461.5	.7580	46.080	3298.28	198.721	244.801	N/A	244.801	.489-	.199-
	E-0450		408.0	0.1	1.2-	406.9	449.3	.8520	44.996	3298.90	198.759	243.754	N/A	243.754	1.536-	.626-
	E-0500		404.3	0.2	1.2-	403.3	445.7	.9470	44.755	3293.23	198.417	243.172	N/A	243.172	2.118-	.864-
	E-0550		405.0	0.3	1.2-	404.1	446.5	1.0420	44.945	3286.94	198.038	242.983	N/A	242.983	2.307-	.941-
	E-0600		408.8	0.0	1.2-	407.6	450.0	1.1360	45.398	3278.84	197.550	242.948	N/A	242.948	2.342-	.955-
	E-0650		401.0	0.1-	1.2-	399.7	442.1	1.2310	44.736	3291.41	198.307	243.043	N/A	243.043	2.247-	.916-
	E-0700		399.8	0.2-	1.2-	398.4	440.8	1.3250	44.719	3295.66	198.564	243.282	N/A	243.282	2.008-	.819-
	E-0750		399.7	0.3-	1.2-	398.2	440.6	1.4700	44.869	3298.59	198.740	243.609	N/A	243.609	1.681-	.685-
	E-0800		405.6	0.0	1.0-	404.6	447.0	1.5150	45.549	3293.33	198.423	243.972	N/A	243.972	1.318-	.537-
	E-0850		412.9	0.1-	1.0-	411.8	454.2	1.6090	46.364	3283.36	197.822	244.187	N/A	244.187	1.103-	.450-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/30	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	G--000	LINE G	459.4	0.0	0.0	459.4	505.5	.0000-	49.499	3197.13	192.627	242.126	N/A	242.126	3.164-	1.290-
	G--005		442.8	0.0	0.0	442.8	488.9	.0950	47.985	3215.81	193.753	241.737	N/A	241.737	3.553-	1.448-
	G--010		439.8	0.0	0.0	439.8	485.9	.1890	47.801	3218.68	193.925	241.727	N/A	241.727	3.563-	1.453-
	G--015		442.8	0.0	0.0	442.8	488.9	.2840	48.207	3218.36	193.906	242.113	N/A	242.113	3.177-	1.295-
	G--020		441.9	0.0	0.0	441.9	488.0	.3790	48.230	3221.13	194.073	242.303	N/A	242.303	2.987-	1.218-
	G--025		438.7	0.0	0.3	439.0	485.1	.4740	48.057	3228.62	194.524	242.582	N/A	242.582	2.708-	1.104-
	G--030		442.1	0.0	0.3	442.4	488.5	.5680	48.501	3226.92	194.422	242.923	N/A	242.923	2.367-	.965-
	G--035		444.1	0.0	0.3	444.4	490.5	.6630	48.808	3229.25	194.562	243.370	N/A	243.370	1.920-	.783-
	G--040		448.8	0.0	0.3	449.1	495.2	.7580	49.380	3222.45	194.153	243.532	N/A	243.532	1.757-	.716-
	G--045		444.4	0.0	0.3	444.7	490.8	.8520	49.059	3225.51	194.337	243.396	N/A	243.396	1.894-	.772-
	G--050		445.2	0.0	0.2	445.4	491.5	.9470	49.239	3223.79	194.233	243.473	N/A	243.473	1.817-	.741-
	G--055		449.4	0.0	0.2	449.6	495.7	1.0420	49.762	3217.01	193.825	243.587	N/A	243.587	1.703-	.694-
	G--060		446.0	0.1-	0.2	446.1	492.2	1.1360	49.530	3221.11	194.072	243.602	N/A	243.602	1.688-	.688-
	G--065		448.0	0.2-	0.2	448.0	494.1	1.2310	49.827	3217.01	193.825	243.652	N/A	243.652	1.638-	.668-
	G--070		441.2	0.1-	0.0	441.1	487.7	1.3250	49.311	3220.28	194.022	243.333	N/A	243.333	1.957-	.798-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/30	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	F--000	LINE F	432.8	0.0	0.4-	432.4	478.5	.0000-	46.855	3241.05	195.273	242.128	N/A	242.128	3.162-	1.289-
	F--005		429.5	0.0	0.3-	429.2	475.3	.0950	46.653	3244.81	195.500	242.153	N/A	242.153	3.137-	1.279-
	F--010		418.8	0.0	0.3-	418.5	464.6	.1890	45.716	3258.32	196.314	242.029	N/A	242.029	3.261-	1.329-
	F--015		415.5	0.0	0.3-	415.2	461.3	.2840	45.504	3262.91	196.590	242.094	N/A	242.094	3.196-	1.303-
	F--020		420.5	0.1	1.1-	419.5	465.6	.3790	46.036	3259.11	196.361	242.398	N/A	242.398	2.892-	1.179-
	F--025		422.3	0.0	1.1-	421.2	467.3	.4740	46.314	3261.43	196.501	242.816	N/A	242.816	2.474-	1.009-
	F--030		419.6	0.0	1.1-	418.5	464.6	.5680	46.160	3267.67	196.877	243.038	N/A	243.038	2.252-	.918-
	F--035		424.2	0.3	1.4-	423.1	469.2	.6630	46.722	3264.30	196.674	243.397	N/A	243.397	1.893-	.772-
	F--040		433.7	0.3	1.4-	432.6	478.7	.7580	47.764	3254.86	196.105	243.870	N/A	243.870	1.420-	.579-
	F--045		433.7	0.1	1.4-	432.4	478.5	.8520	47.859	3260.43	196.441	244.296	N/A	244.296	.994-	.405-
	F--050		432.0	0.0	1.4-	430.6	476.7	.9470	47.790	3261.90	196.529	244.320	N/A	244.320	.970-	.396-
	F--055		427.9	0.2-	0.8-	426.9	473.0	1.0420	47.539	3257.04	196.237	243.776	N/A	243.776	1.514-	.617-
	F--060		426.1	0.1-	0.8-	425.2	471.3	1.1360	47.483	3250.66	195.852	243.336	N/A	243.336	1.954-	.797-
	F--065		417.9	0.1-	0.8-	417.0	463.1	1.2310	46.792	3260.98	196.474	243.266	N/A	243.266	2.024-	.825-
	F--070		418.5	0.0	0.8-	417.7	463.8	1.3250	46.971	3259.71	196.398	243.368	N/A	243.368	1.922-	.783-
	F--075		418.8	0.0	0.8-	418.0	464.1	1.4700	47.170	3259.55	196.388	243.558	N/A	243.558	1.732-	.706-
	F--080		417.8	0.0	0.8-	417.0	463.1	1.5150	47.125	3262.01	196.536	243.661	N/A	243.661	1.628-	.664-
	F--085		420.5	0.0	0.8-	419.7	465.8	1.6090	47.500	3257.08	196.239	243.739	N/A	243.739	1.551-	.632-
	F--090		427.2	0.0	0.8-	426.4	472.5	1.7040	48.268	3246.44	195.598	243.866	N/A	243.866	1.424-	.581-
	F--095		422.0	0.1-	0.0	421.9	468.0	1.7990	47.939	3250.40	195.837	243.775	N/A	243.775	1.515-	.618-
	F--100		426.5	0.0	0.8	427.3	473.4	1.8940	48.579	3241.52	195.302	243.880	N/A	243.880	1.409-	.575-

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL

INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC

LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/31	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	H--105	LINE H	463.4	0.0	1.2-	462.2	508.8	1.9880	52.156	3167.17	190.822	242.978	N/A	242.978	2.312-	.943-
	H--100		465.2	0.0	1.2-	464.0	510.6	1.8940	52.222	3166.70	190.794	243.015	N/A	243.015	2.275-	.927-
	H--095		471.6	0.0	1.2-	470.4	517.0	1.7990	52.737	3156.31	190.168	242.904	N/A	242.904	2.386-	.973-
	H--090		467.4	0.0	1.2-	466.2	512.8	1.7040	52.214	3164.91	190.686	242.900	N/A	242.900	2.390-	.974-
	H--085		469.9	0.1-	1.2-	468.6	515.2	1.6090	52.337	3163.22	190.584	242.921	N/A	242.921	2.369-	.966-
	H--080		463.9	0.0	0.8-	463.1	509.7	1.5150	51.688	3171.65	191.104	242.792	N/A	242.792	2.498-	1.018-
	H--075		466.4	0.0	0.8-	465.6	512.2	1.4700	51.880	3169.77	190.979	242.859	N/A	242.859	2.431-	.991-
	H--070		463.5	0.0	0.8-	462.7	509.3	1.3250	51.426	3175.49	191.323	242.749	N/A	242.749	2.540-	1.036-
	H--065		462.7	0.0	0.8-	461.9	508.5	1.2310	51.238	3180.16	191.605	242.842	N/A	242.842	2.448-	.998-
	H--060		462.4	0.1	0.8-	461.7	508.3	1.1360	51.106	3182.80	191.764	242.870	N/A	242.870	2.420-	.987-
	H--055		466.6	0.2	0.8-	466.0	512.6	1.0420	51.417	3177.22	191.428	242.845	N/A	242.845	2.445-	.997-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/31	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	G--075	LINE G	440.0	0.2-	0.0	439.8	486.4	1.4700	49.354	3221.29	194.083	243.437	N/A	243.437	1.853-	.756-
	G--080		439.5	0.4-	0.0	439.1	485.7	1.5150	49.338	3217.92	193.880	243.218	N/A	243.218	2.072-	.845-
	G--085		449.2	0.6-	0.0	448.6	495.2	1.6090	50.379	3201.83	192.910	243.289	N/A	243.289	2.001-	.816-
	G--090		442.9	0.0	0.3-	442.6	489.2	1.7040	49.903	3208.89	193.336	243.239	N/A	243.239	2.051-	.836-
	G--095		433.6	0.1	0.3-	433.4	480.0	1.7950	49.114	3219.09	193.950	243.064	N/A	243.064	2.226-	.908-
	G--100		442.3	0.2	0.3-	442.2	488.8	1.8940	50.087	3206.32	193.181	243.268	N/A	243.268	2.022-	.824-
	G--105		435.2	0.2-	1.0	436.0	482.6	1.9880	49.590	3214.55	193.677	243.267	N/A	243.267	2.023-	.825-
	G--110		434.5	0.5-	1.0	435.0	481.6	2.0830	49.604	3215.94	193.760	243.364	N/A	243.364	1.926-	.785-
	G--115		430.5	0.7-	1.0	430.8	477.4	2.1780	49.304	3219.89	193.998	243.302	N/A	243.302	1.988-	.810-
	G--120		431.2	1.0-	1.0	431.2	477.8	2.2720	49.454	3216.46	193.792	243.245	N/A	243.245	2.045-	.834-
	G--125		431.0	0.0	0.4	431.4	478.0	2.3670	49.585	3215.40	193.728	243.312	N/A	243.312	1.977-	.806-
	G--130		429.6	0.0	0.4	430.0	476.6	2.4620	49.559	3215.75	193.749	243.308	N/A	243.308	1.982-	.808-
	G--135	END G	428.5	0.0	0.4	428.9	475.5	2.5560	49.562	3216.16	193.774	243.335	N/A	243.335	1.955-	.797-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263 TO AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
08/01	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	H--050	LINE H	458.2	0.0	0.6	458.8	503.1	.9470	50.375	3185.93	191.952	242.328	N/A	242.328	2.962-	1.208-
	H--045		463.4	0.0	0.0	463.4	507.7	.8520	50.714	3181.44	191.682	242.396	N/A	242.396	2.894-	1.180-
	H--040		462.5	0.0	0.0	462.5	506.8	.7580	50.516	3186.64	191.995	242.511	N/A	242.511	2.779-	1.133-
	H--035		462.5	0.1	0.0	462.6	506.9	.6630	50.414	3188.07	192.081	242.495	N/A	242.495	2.795-	1.139-
	H--030		461.6	0.2	0.0	461.8	506.1	.5680	50.224	3188.24	192.091	242.316	N/A	242.316	2.974-	1.213-
	H--025		462.1	0.0	0.3	462.4	506.7	.4740	50.173	3185.10	191.902	242.075	N/A	242.075	3.215-	1.311-
	H--020		461.4	0.1	0.3	461.8	506.1	.3790	50.002	3183.65	191.815	241.817	N/A	241.817	3.473-	1.416-
	H--015		459.4	0.2	0.3	459.9	504.2	.2840	49.705	3183.25	191.791	241.495	N/A	241.495	3.794-	1.547-
	H--010		464.7	0.0	0.3	465.0	509.3	.1890	50.093	3174.59	191.269	241.362	N/A	241.362	3.928-	1.602-
	H--005		466.7	0.0	0.3	467.0	511.3	.0950	50.178	3170.96	191.050	241.228	N/A	241.228	4.062-	1.656-
	H--000	END H	476.7	0.0	0.3	477.0	521.3	.0000-	51.046	3158.27	190.286	241.331	N/A	241.331	3.958-	1.614-
	R--900	ROAD	326.4	0.0	0.0	326.4	370.7	.0000-	36.299	3404.93	205.147	241.446	N/A	241.446	3.844-	1.567-
	R--800		321.1	0.0	0.0	321.1	365.4	.0951-	35.668	3410.51	205.483	241.152	N/A	241.152	4.138-	1.687-
	R--700		314.9	0.0	0.0	314.9	359.2	.1890-	34.951	3416.77	205.860	240.811	N/A	240.811	4.479-	1.826-
	R--600		324.2	0.0	0.0	324.2	368.5	.2840-	35.750	3404.06	205.095	240.845	N/A	240.845	4.445-	1.812-
	R--500		335.8	0.0	0.0	335.8	380.1	.3790-	36.774	3389.88	204.240	241.015	N/A	241.015	4.275-	1.743-
	R--400		333.6	0.0	0.0	333.6	377.9	.4740-	36.447	3395.47	204.577	241.025	N/A	241.025	4.265-	1.739-
	R--300		320.6	0.0	0.0	320.6	364.9	.5680-	35.064	3414.74	205.738	240.802	N/A	240.802	4.488-	1.830-
	R--200		309.3	0.0	0.0	309.3	353.6	.6630-	33.846	3433.68	206.879	240.725	N/A	240.725	4.565-	1.861-
	R--100	END R	304.5	0.0	0.0	304.5	348.8	.7850-	33.233	3448.17	207.752	240.985	N/A	240.985	4.305-	1.755-

STOCK FORM 14116-P

Copy #4

E.B.N DATA SHEETS

MINERAL HILL AREA — 5 sheets

TWIN BUTTS AREA — 8 sheets

TOTAL — 13 sheets

(to be inserted in back of reports)

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-NH-AN 1 OF 3 — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/22	S-8060	REFER	410.8	0.0	0.0	410.8	410.8	.0000	40.226	3432.16	206.788	247.013	N/A	247.013	REFERENCE	
	N-W000		406.5	0.0	0.0	406.5	406.5	.0080-	39.795	3441.36	207.342	247.137	N/A	247.137	.124	.050
	N-W020		407.7	0.0	0.0	407.7	407.7	.0107-	39.909	3439.11	207.206	247.116	N/A	247.116	.103	.042
	N-W040		402.2	0.0	0.0	402.2	402.2	.0134-	39.368	3448.04	207.744	247.112	N/A	247.112	.099	.040
	N-W060		403.4	0.0	0.0	403.4	403.4	.0161-	39.482	3448.96	207.800	247.282	N/A	247.282	.269	.109
	N-W080		406.6	0.1	0.0	406.7	406.7	.0188-	39.802	3444.85	207.552	247.354	N/A	247.354	.341	.138
	N-W100		417.6	0.1	0.0	417.7	417.7	.0215-	40.876	3428.44	206.564	247.439	N/A	247.439	.426	.173
	N-W120		419.7	0.1	0.0	419.8	419.8	.0242-	41.078	3425.37	206.379	247.457	N/A	247.457	.444	.180
	N-W140		418.1	0.2	0.0	418.3	418.3	.0268-	40.928	3427.41	206.501	247.430	N/A	247.430	.417	.169
	N-W190		412.3	0.3	0.0	412.6	412.6	.0937-	40.292	3436.38	207.042	247.334	N/A	247.334	.321	.130
	N-W240		426.4	0.4	0.0	426.8	426.8	.1607-	41.604	3417.98	205.933	247.537	N/A	247.537	.524	.212
	N-W290		417.2	0.3	1.8	419.3	419.3	.2276-	40.791	3427.98	206.536	247.326	N/A	247.326	.313	.127
	N-W340		414.4	0.7	1.8	416.9	416.9	.2946-	40.477	3432.92	206.833	247.310	N/A	247.310	.297	.120
	N-W390		411.0	1.1	1.8	413.9	413.9	.3615-	40.105	3442.20	207.393	247.497	N/A	247.497	.484	.196
	N-W440		406.1	1.4	1.8	409.3	409.3	.4285-	39.576	3448.92	207.797	247.373	N/A	247.373	.360	.146
	N-W490		411.2	1.7	1.8	414.7	414.7	.4954-	40.026	3447.69	207.723	247.749	N/A	247.749	.736	.298
	E-6000		417.2	2.1	1.8	421.1	421.1	.5624-	40.574	3445.21	207.574	248.148	N/A	248.148	1.135	.459
	S-8020		412.9	0.0	0.0	412.9	412.9	.0054-	40.425	3431.81	206.767	247.191	N/A	247.191	.178	.072
	S-E040		407.9	0.0	0.0	407.9	407.9	.0027-	39.938	3437.17	207.089	247.028	N/A	247.028	.015	.006
	S-E080		415.8	0.0	0.0	415.8	415.8	.0027-	40.712	3424.16	206.306	247.018	N/A	247.018	.004	.002
	S-E100		418.6	0.0	0.0	418.6	418.6	.0054-	40.983	3420.96	206.113	247.096	N/A	247.096	.083	.033
	S-E120		421.6	0.0	0.0	421.6	421.6	.0080-	41.274	3416.99	205.874	247.147	N/A	247.147	.134	.054
	S-E140		425.4	0.0	0.0	425.4	425.4	.0107-	41.643	3412.22	205.586	247.229	N/A	247.229	.216	.087
	S-E190		432.8	0.1	0.0	432.9	432.9	.0776-	42.298	3497.87	210.747	253.045	N/A	253.045	6.032	2.442

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-060263-MH-AN 1 OF 3 — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/22	S-E240		437.9	0.1	0.0	438.0	438.0	.1446-	42.719	3486.83	210.082	252.801	N/A	252.801	5.788	2.343

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-060263-MN-AN 2 OF 3 — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/23	M-0000	REFERS	406.4	0.0	0.0	406.4	406.3	.0000	39.785	3431.16	206.727	246.512	N/A	246.512	REFERENCE	
	B-A115	NETTIE	398.0	0.0	0.0	398.0	397.9	.0000-	38.962	3465.15	208.775	247.738	N/A	247.738	1.225	.497
	M-0200	S	413.6	0.0	0.0	413.6	413.5	.0378	40.534	3421.39	206.139	246.673	N/A	246.673	.161	.065
	M-0400	S	415.0	0.0	0.0	415.0	414.9	.0757	40.716	3419.93	206.051	246.767	N/A	246.767	.254	.103
	M-0600	S	408.0	0.0	0.0	408.0	407.9	.1136	40.075	3430.67	206.698	246.773	N/A	246.773	.261	.106
	M-0800	S	405.9	0.0	0.0	405.9	405.8	.1515	39.914	3433.72	206.882	246.795	N/A	246.795	.283	.115
	M-1000	S	395.7	0.0	0.0	395.7	395.6	.1893	38.959	3448.28	207.759	246.718	N/A	246.718	.206	.084
	M-1200	S	395.9	0.0	0.0	395.9	395.8	.2272	39.023	3448.91	207.797	246.820	N/A	246.820	.308	.125
	M-1400	S	391.2	0.1	0.0	391.3	391.2	.2651	38.618	3458.66	208.384	247.002	N/A	247.002	.490	.199
	M-1900	S	376.6	0.1	0.0	376.7	376.6	.3597	37.299	3481.26	209.746	247.045	N/A	247.045	.533	.216
	M-2400	S	386.7	0.1-	2.5	389.1	389.0	.4544	38.624	3462.21	208.598	247.222	N/A	247.222	.710	.288
	M-2900	S	375.5	0.2-	2.5	377.8	377.7	.5490	37.629	3477.16	209.499	247.128	N/A	247.128	.616	.250
	M-3400	S	388.3	0.3-	2.5	390.5	390.4	.6437	38.984	3450.57	207.897	246.881	N/A	246.881	.368	.149
	M-3900	S	389.1	0.4-	2.5	391.2	391.1	.7384	39.163	3446.78	207.668	246.832	N/A	246.832	.320	.130
	M-0000	N	404.3	0.0	2.1	406.4	406.3	.0000-	39.785	3431.16	206.727	246.512	N/A	246.512	.000-	.000-
	M-0200	BASE N	403.2	0.1	2.1	405.4	405.3	.0378-	39.643	3430.34	206.678	246.321	N/A	246.321	.192-	.078-
	M-0400	N	412.4	0.2	2.1	414.7	414.6	.0757-	40.509	3416.90	205.868	246.377	N/A	246.377	.135-	.055-
	M-0600	N	410.3	0.3	2.1	412.7	412.6	.1136-	40.268	3420.52	206.086	246.355	N/A	246.355	.158-	.064-
	M-0800	N	405.9	0.4	2.1	408.4	408.3	.1515-	39.803	3425.63	206.394	246.197	N/A	246.197	.315-	.128-
	M-1000	N	414.5	0.5	2.1	417.1	417.0	.1893-	40.610	3413.75	205.678	246.289	N/A	246.289	.223-	.091-
	M-1200	N	412.5	0.6	2.1	415.2	415.1	.2272-	40.380	3416.33	205.834	246.214	N/A	246.214	.299-	.121-
	M-1400	N	414.3	0.7	2.1	417.1	417.0	.2651-	40.521	3414.16	205.703	246.225	N/A	246.225	.288-	.117-
	M-1600	N	416.6	0.8	2.1	419.5	419.4	.3030-	40.712	3412.50	205.603	246.315	N/A	246.315	.197-	.080-
	M-1800	N	417.1	1.0	2.1	420.2	420.1	.3409-	40.736	3410.42	205.478	246.214	N/A	246.214	.299-	.121-

STOCK FORM 14116-P

AREA-080263-MH-AN 2 OF 3 DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/23	M-2300 N		421.1	0.3-	4.3	425.1	425.0	.4355-	41.105	3406.92	205.243	246.348	N/A	246.348	.165-	.067-

HEINRICHS GEOEXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-MH-AN 3 OF 3 — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/23	N-0000	REFERS	406.4	0.0	0.0	406.4	406.5	.0000	39.804	3431.16	206.727	246.532	N/A	246.532	REFERENCE	
	N-2800	N	433.8	0.6	4.3	438.7	438.8	.5301-	42.345	3388.85	204.178	246.523	N/A	246.523	.009-	.004-
	N-3300	N	433.6	0.8-	4.3	437.1	437.2	.6247-	42.077	3388.18	204.138	246.215	N/A	246.215	.317-	.129-
	N-3800	N	437.0	1.0-	4.3	440.3	440.4	.7193-	42.280	3380.48	203.674	245.953	N/A	245.953	.578-	.235-
07/24	L-6000	LINE L	442.3	1.4-	4.3	445.2	444.1	.8139-	42.531	3383.62	203.863	246.394	N/A	246.394	.138-	.056-
	L-5500		471.0	0.0	0.0	471.0	469.9	.9085-	44.946	3353.29	202.036	246.982	N/A	246.982	.450	.182
	L-5000		464.9	0.1-	0.0	464.8	463.7	1.0030-	44.228	3362.44	202.587	246.815	N/A	246.815	.283	.115
	L-4500		465.5	0.1-	0.0	465.4	464.3	1.0970-	44.176	3367.23	202.876	247.052	N/A	247.052	.520	.211
	L-4000	OK	432.9	0.0	0.0	432.9	431.8	1.1920-	40.882	3339.49	201.204	242.087	N/A	242.087	4.445-	1.803-
	L-3500		495.1	0.0	0.0	495.1	494.0	1.2670-	46.862	3326.97	200.450	247.311	N/A	247.311	.780	.316
	L-3000		509.3	0.0	0.0	509.3	508.2	1.3820-	48.140	3305.88	199.179	247.320	N/A	247.320	.788	.320
	L-2500		~~514.8~~ 514.8	0.1	0.0	414.9	413.8	1.4760-	38.786	3297.19	198.656	237.442	N/A	237.442	~~9.090-~~	~~3.687-~~

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TS-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.69 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060290 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/11	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	A-0000	LINE A	306.6	0.0	0.0	306.6	306.6	.0000-	30.022	3581.88	219.809	245.831	N/A	245.831	.541	.220
	A-0050		339.5	0.2-	0.0	339.3	339.3	.0950	33.336	3528.53	212.594	245.930	N/A	245.930	.640	.261
	A-0100		358.7	0.7-	0.0	358.0	358.0	.1890	35.277	3498.43	210.780	246.058	N/A	246.058	.768	.313
	A-0150		363.3	0.9-	0.0	362.4	362.4	.2840	35.820	3484.49	209.941	245.760	N/A	245.760	.470	.192
	A-0200		357.6	0.0	0.7-	356.9	356.9	.3790	35.393	3486.65	210.071	245.463	N/A	245.463	.173	.071
	A-0250		356.6	0.0	0.7-	355.9	355.9	.4740	35.406	3479.21	209.622	245.029	N/A	245.029	.261-	.107-
	A-0300		356.6	0.0	0.7-	355.9	355.9	.5680	35.517	3479.77	209.656	245.173	N/A	245.173	.117-	.048-
	A-0350		355.4	0.0	0.7-	354.7	354.7	.6630	35.511	3479.45	209.637	245.147	N/A	245.147	.143-	.058-
	A-0400		353.0	0.0	0.3-	352.7	352.7	.7580	35.426	3482.03	209.792	245.219	N/A	245.219	.071-	.029-
	A-0450		356.7	0.0	0.3-	356.4	356.4	.8520	35.899	3477.24	209.504	245.403	N/A	245.403	.113	.046
	A-0500		353.0	0.0	0.3-	352.7	352.7	.9470	35.648	3485.55	210.004	245.653	N/A	245.653	.363	.148
	A-0550		357.3	0.0	0.3-	357.0	357.0	1.0420	36.181	3486.73	210.075	246.256	N/A	246.256	.966	.394

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/12	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	A-0600	LINE A	364.3	0.0	0.3-	364.0	367.2	1.1360	37.290	3489.18	210.223	247.513	N/A	247.513	2.223	.906
	A-0650		367.0	0.1-	0.0	366.9	370.1	1.2310	37.685	3492.77	210.439	248.125	N/A	248.125	2.835	1.156
	A-0700		345.0	0.3-	0.0	344.7	347.9	1.3250	35.622	3531.39	212.766	248.388	N/A	248.388	3.098	1.263
	A-0750		311.9	0.5-	0.0	311.4	314.6	1.4700	32.531	3572.66	215.253	247.784	N/A	247.784	2.494	1.017
	A-0800		368.0	0.6-	0.0	367.4	370.6	1.5150	38.068	3482.06	209.794	247.862	N/A	247.862	2.572	1.049
	A-0850		369.6	0.2	0.6-	369.2	372.4	1.6090	38.354	3479.70	209.652	248.006	N/A	248.006	2.716	1.107
	A-0900		365.5	0.3	0.6-	365.2	368.4	1.7040	38.074	3484.97	209.969	248.044	N/A	248.044	2.754	1.123
	A-0950		365.4	0.4	0.6-	365.2	368.4	1.7990	38.186	3477.48	209.518	247.704	N/A	247.704	2.414	.984
	A-1000		373.2	0.6	0.6-	373.2	376.4	1.8940	39.081	3470.42	209.093	248.173	N/A	248.173	2.883	1.176
	A-1050		363.5	0.7	0.6-	363.6	366.8	1.9880	38.251	3488.07	210.156	248.407	N/A	248.407	3.117	1.271
	A-1100		359.9	0.8	0.6-	360.1	363.3	2.0830	38.020	3487.68	210.133	248.152	N/A	248.152	2.863	1.167
	A-1150		380.2	0.1	0.3-	380.0	383.2	2.1780	40.080	3450.29	207.880	247.960	N/A	247.960	2.670	1.088
	A-1200		372.4	0.2	0.3-	372.3	375.5	2.2720	39.436	3461.21	208.538	247.974	N/A	247.974	2.684	1.094
	A-1250		362.6	0.3	0.3-	362.6	365.8	2.3670	38.598	3481.34	209.751	248.349	N/A	248.349	3.059	1.247
	A-1300		370.8	0.4	0.3-	370.9	374.1	2.4620	39.522	3469.91	209.062	248.584	N/A	248.584	3.294	1.343
	A-1350		360.7	0.6	0.3	361.6	364.8	2.5560	38.722	3480.70	209.712	248.434	N/A	248.434	3.144	1.282
	A-1400		373.0	0.0	0.3	373.3	376.5	2.6510	39.979	3463.56	208.679	248.659	N/A	248.659	3.369	1.373
	A-1450	END A	348.3	0.0	0.3	348.6	351.8	2.7460	37.672	3503.55	211.089	248.761	N/A	248.761	3.471	1.415

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-T8-AN — DATUM PLAN = SEA LEVEL

INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC

LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/12	8-K114	REFERR	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	8-1200	LINE 8	386.9	0.1	0.3	387.3	390.5	2.3670-	35.459	3433.82	206.888	242.347	N/A	242.347	2.943-	1.200-
	8-1150		404.8	0.1	0.3	405.2	408.4	2.2720-	37.323	3415.57	205.788	243.111	N/A	243.111	2.179-	.888-
	8-1100		392.5	0.1	0.7	393.3	396.5	2.1780	41.382	3433.26	206.854	248.236	N/A	248.236	2.946	1.201
	8-1050		393.7	0.2	0.7	394.6	397.8	2.9830	42.455	3439.54	207.232	249.687	N/A	249.687	4.397	1.793
	8-1000		403.6	0.3	0.7	404.6	407.8	1.9880	42.266	3429.98	206.656	248.922	N/A	248.922	3.632	1.481
	8-0950		400.7	0.4	0.7	401.8	405.0	1.8940	41.881	3436.13	207.027	248.908	N/A	248.908	3.618	1.475
	8-0900		412.0	0.6	0.7	413.3	416.5	1.7990	42.696	3408.72	205.375	248.271	N/A	248.271	2.981	1.215
07/15	8-0850	LINE 8	385.1	0.2-	0.0	384.9	397.0	1.7040	40.875	3416.31	205.833	246.707	N/A	246.707	1.417	.578
	8-0800		378.7	0.3-	0.0	378.4	390.5	1.6090	40.127	3415.00	205.754	245.880	N/A	245.880	.591	.241
	8-0750		369.5	0.4-	0.0	369.1	381.2	1.5150	39.106	3428.52	206.568	245.674	N/A	245.674	.384	.157
	8-0700		361.5	0.7-	0.0	360.8	372.9	1.4700	38.240	3445.83	207.611	245.851	N/A	245.851	.561	.229
	8-0650		380.6	0.0	0.2-	380.4	392.5	1.3250	39.989	3432.36	206.800	246.789	N/A	246.789	1.499	.611
	8-0600		376.0	0.1	0.2-	375.9	388.0	1.2310	39.438	3450.15	207.872	247.310	N/A	247.310	2.020	.823
	8-0550		392.1	0.1	0.2-	392.0	404.1	1.1360	40.903	3432.44	206.805	247.708	N/A	247.708	2.418	.986
	8-0500		384.1	0.2	0.2-	384.1	396.2	1.0420	40.019	3449.03	207.804	247.823	N/A	247.823	2.533	1.033
	8-0450		347.4	0.0	0.9-	346.5	358.6	.9470	36.226	3501.09	210.941	247.167	N/A	247.167	1.877	.765
	8-0400		342.9	0.0	0.9-	342.0	354.1	.8520	35.674	3504.42	211.141	246.815	N/A	246.815	1.525	.622
	8-0350		372.3	0.1-	0.9-	371.3	383.4	.7580	38.432	3432.16	206.788	245.220	N/A	245.220	.070-	.028-
	8-0300		359.4	0.1-	0.9-	358.4	370.5	.6630	37.058	3439.87	207.252	244.310	N/A	244.310	.980-	.400-
	8-0250		356.7	0.0	0.2-	356.5	368.6	.5680	36.760	3440.64	207.299	244.059	N/A	244.059	1.231-	.502-
	8-0200		357.1	0.1	0.2-	357.0	369.1	.4740	36.699	3439.17	207.210	243.909	N/A	243.909	1.381-	.563-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-T8-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.69 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/15	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	B-0150		355.3	0.1	0.2-	355.2	367.3	.3790	36.411	3438.84	207.190	243.601	N/A	243.601	1.689-	.689-
	B-0100		364.1	0.2	0.2-	364.1	376.2	.2840	37.171	3437.63	207.117	244.288	N/A	244.288	1.002-	.408-
07/16	B-0050		359.9	0.0	0.0	359.9	364.7	.1890	35.933	3438.79	207.187	243.120	N/A	243.120	2.170-	.884-
	B-0005		359.8	0.0	0.0	359.8	364.6	.0951	35.813	3439.82	207.249	243.062	N/A	243.062	2.228-	.908-
	B-0000	END B	361.0	0.1-	0.0	360.9	365.7	.0000-	35.809	3456.31	208.243	244.052	N/A	244.052	1.238-	.505-
	C-0000	LINE C	298.9	0.0	0.7-	298.2	303.0	.0000-	29.670	3560.21	214.503	244.172	N/A	244.172	1.118-	.456-
	C-0050		385.0	0.0	0.7-	384.3	389.1	.0950	38.212	3415.52	205.785	243.997	N/A	243.997	1.293-	.527-
	C-0100		388.1	0.1-	0.0	388.0	392.8	.1890	38.685	3399.62	204.827	243.512	N/A	243.512	1.778-	.725-
	C-0150		387.3	0.1-	0.7-	386.5	1091.3	.2840	107.194	3396.68	204.650	311.843	N/A	311.843	66.554	27.133
	C-0200		383.8	0.1-	0.7-	383.0	387.8	.3790	38.418	3395.77	204.595	243.013	N/A	243.013	2.276-	.928-
	C-0250		384.0	0.0	0.8-	383.2	388.0	.4740	38.549	3391.62	204.345	242.895	N/A	242.895	2.395-	.977-
	C-0300		377.4	0.0	0.8-	376.6	381.4	.5680	38.014	3398.77	204.776	242.789	N/A	242.789	2.501-	1.019-
	C-0350		385.5	0.1	0.8-	384.8	389.6	.6630	38.928	3395.25	204.564	243.492	N/A	243.492	1.798-	.733-
	C-0400		391.1	0.1	0.8-	390.4	395.2	.7580	39.588	3395.84	204.599	244.187	N/A	244.187	1.103-	.450-
	C-0450		395.1	0.2	0.8-	394.5	399.3	.8520	40.100	3384.31	203.905	244.004	N/A	244.004	1.286-	.524-
	C-0500		391.0	0.3	0.8-	390.3	395.3	.9470	39.820	3389.54	204.220	244.039	N/A	244.039	1.251-	.510-
	C-0550		401.9	0.0	0.8-	401.1	405.9	1.0420	40.989	3384.67	203.926	244.895	N/A	244.895	.395-	.161-
	C-0600		405.0	0.1-	0.8-	404.1	408.9	1.1360	41.373	3389.07	204.191	245.565	N/A	245.565	.275	.112
	C-0650		369.8	0.2-	0.8-	368.8	373.6	1.2310	38.028	3465.50	208.796	246.824	N/A	246.824	1.535	.626
	C-0700		388.5	0.3-	0.8-	387.4	392.2	1.3250	39.960	3441.16	207.330	247.290	N/A	247.290	2.000	.815
	C-0750		411.4	0.4	0.8-	411.0	415.8	1.4700	42.441	3388.75	204.172	246.613	N/A	246.613	1.323	.539

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/17	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	C-0800	LINE C	404.3	0.0	0.0	404.3	401.9	1.9150	41.133	3383.40	203.850	244.983	N/A	244.983	.307-	.125-
	C-0850		402.6	0.0	0.0	402.6	400.2	1.6090	41.077	3382.02	203.767	244.843	N/A	244.843	.447-	.182-
	C-0900		395.8	0.0	0.0	395.8	393.4	1.7040	40.522	3385.47	203.975	244.497	N/A	244.497	.793-	.323-
	C-0950		392.9	0.0	0.0	392.9	390.5	1.7990	40.350	3386.08	204.011	244.361	N/A	244.361	.929-	.379-
	C-1000		395.1	0.1	0.0	395.2	392.8	1.8940	40.687	3379.85	203.636	244.322	N/A	244.322	.967-	.394-
07/18	C-1050		397.6	0.2	0.0	397.8	402.2	1.9880	41.717	3367.47	202.890	244.607	N/A	244.607	.683-	.278-
	C-1100		395.5	0.3	0.0	395.8	400.2	2.0830	41.633	3379.54	203.617	245.250	N/A	245.250	.040-	.016-
	C-1150		404.4	0.4	0.0	404.8	409.2	2.1780	42.626	3375.66	203.384	246.009	N/A	246.009	.719	.293
	C-1200		405.6	0.5	0.0	406.1	410.5	2.2720	42.863	3376.73	203.448	246.311	N/A	246.311	1.022	.416
	C-1250		408.8	0.6	0.0	409.4	413.8	2.3670	43.298	3370.80	203.091	246.389	N/A	246.389	1.099	.448
	C-1300		407.8	0.7	0.0	408.5	412.9	2.4620	43.322	3364.07	202.685	246.007	N/A	246.007	.717	.292
	C-1350	END C	391.0	0.7	1.1	392.8	397.2	2.5560	41.895	3380.89	203.699	245.593	N/A	245.593	.303	.124
	D-1350	LINE D	421.6	1.5	1.1	424.2	428.6	2.5560	44.969	3316.45	199.816	244.785	N/A	244.785	.505-	.206-
	D-1300		416.6	1.9	1.1	419.6	424.0	2.4620	44.408	3320.95	200.087	244.496	N/A	244.496	.794-	.324-
	D-1250		415.4	2.2	1.1	418.7	423.1	2.3670	44.209	3323.98	200.270	244.479	N/A	244.479	.811-	.331-
	D-1200		409.0	0.0	3.3	412.3	416.7	2.2720	43.471	3336.10	201.000	244.471	N/A	244.471	.819-	.334-
	D-1150		410.1	0.0	3.3	413.4	417.8	2.1780	43.468	3337.43	201.080	244.548	N/A	244.548	.742-	.302-
	D-1100		423.9	0.0	3.3	427.2	431.6	2.0830	44.708	3324.68	200.312	245.020	N/A	245.020	.270-	.110-
	D-1050		416.0	0.0	3.3	419.3	423.7	1.9880	43.823	3342.64	201.394	245.217	N/A	245.217	.073-	.030-
	D-1000		427.1	0.0	3.3	430.4	434.8	1.8940	44.799	3330.14	200.641	245.440	N/A	245.440	.150	.061
	D-0950		417.7	0.0	3.3	421.0	425.4	1.7990	43.767	3345.19	201.548	245.315	N/A	245.315	.025	.010

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-T8-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/19	8-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	0-0500	LINE 0	419.0	0.0	0.0	419.0	424.5	.9470	42.679	3355.87	202.191	244.870	N/A	244.870	.420-	.171-
	0-0450		408.3	0.0	0.0	408.3	413.8	.8520	41.520	3344.79	201.524	243.043	N/A	243.043	2.247-	.916-
	0-0400		405.5	0.0	0.0	405.5	411.0	.7580	41.135	3345.10	201.542	242.677	N/A	242.677	2.613-	1.065-
	0-0350		400.9	0.0	0.0	400.9	406.4	.6630	40.573	3348.47	201.745	242.318	N/A	242.318	2.972-	1.211-
	0-0300		400.9	0.0	0.0	400.9	406.4	.5680	40.462	3349.83	201.827	242.289	N/A	242.289	3.001-	1.224-
	0-0250		407.4	0.0	0.5-	406.9	412.4	.4740	40.939	3344.16	201.486	242.424	N/A	242.424	2.866-	1.168-
	0-0200		419.1	0.0	0.5-	418.6	424.1	.3790	41.973	3345.67	201.577	243.549	N/A	243.549	1.741-	.710-
	0-0150		429.1	0.0	0.5-	428.6	434.1	.2840	42.840	3350.62	201.875	244.715	N/A	244.715	.575-	.234-
	0-0100		376.2	0.0	0.5-	375.7	381.2	.1890	37.549	3434.85	206.950	244.499	N/A	244.499	.791-	.323-
	0-0 50		267.1	0.0	0.7	267.8	273.3	.0950	26.873	3589.87	216.290	243.163	N/A	243.163	2.127-	.867-
	0-0000	END	268.6	0.0	0.7	269.3	274.8	.0000-	26.908	3588.99	216.237	243.145	N/A	243.145	2.145-	.874-

STOCK FORM 14116_P

HEINRICHS GEOEXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-T8-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/29	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	E--090	LINE E	410.1	0.2-	1.0-	408.9	451.3	1.7040	46.192	3286.17	197.992	244.184	N/A	244.184	1.106-	.451-
	E--095		413.2	0.0	0.7	413.9	456.3	1.7990	46.793	3277.92	197.495	244.288	N/A	244.288	1.002-	.409-
	E--100		410.9	0.1-	0.7	411.5	453.9	1.8940	46.669	3282.29	197.758	244.427	N/A	244.427	.863-	.352-
	E--105		400.1	0.1-	0.7	400.7	443.1	1.9880	45.722	3298.28	198.721	244.444	N/A	244.444	.846-	.345-
	E--110		408.8	0.2-	0.7	409.3	451.7	2.0830	46.676	3283.19	197.812	244.488	N/A	244.488	.802-	.327-
	E--115		398.9	0.1-	0.7	399.5	441.9	2.1780	45.828	3295.54	198.556	244.384	N/A	244.384	.906-	.369-
	E--120		397.3	0.1-	0.7	397.9	440.3	2.2720	45.782	3292.41	198.368	244.149	N/A	244.149	1.141-	.465-
	E--125		394.5	0.2-	0.7	395.0	437.4	2.3670	45.609	3292.65	198.382	243.991	N/A	243.991	1.299-	.529-
	E--130		389.2	0.0	0.3	389.5	431.9	2.4620	45.182	3297.57	198.679	243.861	N/A	243.861	1.429-	.583-
	E--135	END E	399.2	0.0	0.3	399.5	441.9	2.5560	46.272	3283.49	197.830	244.102	N/A	244.102	1.188-	.484-
	F--135	LINE F	415.5	0.0	0.8	416.3	458.7	2.5560	47.917	3251.06	195.876	243.793	N/A	243.793	1.497-	.610-
	F--130		415.9	0.0	0.8	416.7	459.1	2.4620	47.845	3249.17	195.762	243.608	N/A	243.608	1.682-	.686-
	F--125		415.7	0.0	0.8	416.5	458.9	2.3670	47.714	3253.30	196.011	243.726	N/A	243.726	1.564-	.638-
	F--120		429.9	0.0	0.8	430.7	473.1	2.2720	48.993	3249.18	195.763	244.756	N/A	244.756	.534-	.218-
	F--115		429.7	0.0	0.8	430.5	472.9	2.1780	48.863	3253.30	196.011	244.875	N/A	244.875	.415-	.169-
	F--110		421.7	0.1-	0.8	422.4	464.8	2.0830	47.959	3250.61	195.849	243.808	N/A	243.808	1.482-	.604-
	F--105		422.8	0.0	0.0	422.8	426.5	1.9880	44.097	3245.62	195.549	239.645	N/A	239.645	5.645-	2.301-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/29	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	E-0000	LINE E	412.3	0.1-	0.0	412.2	454.6	.0000	44.314	3305.40	199.150	243.665	N/A	243.665	1.625-	.663-
	E-0050		421.5	0.2-	0.0	421.3	463.7	.0950	45.517	3296.39	198.607	244.125	N/A	244.125	1.165-	.475-
	E-0100		419.4	0.3-	0.0	419.1	461.5	.1890	45.412	3299.94	198.821	244.233	N/A	244.233	1.057-	.431-
	E-0150		412.7	0.0	0.0	412.7	455.1	.2840	44.897	3304.41	199.091	243.988	N/A	243.988	1.302-	.531-
	E-0200		413.3	0.1-	0.9-	412.3	454.7	.3790	44.969	3296.14	198.592	243.562	N/A	243.562	1.728-	.705-
	E-0250		410.4	0.1-	0.9-	409.4	451.8	.4740	44.797	3297.84	198.695	243.492	N/A	243.492	1.798-	.733-
	E-0300		415.1	0.2-	0.9-	414.0	456.4	.5680	45.358	3299.05	198.768	244.125	N/A	244.125	1.165-	.475-
	E-0350		430.1	0.0	0.9-	429.2	471.6	.6630	46.957	3290.32	198.242	245.199	N/A	245.199	.091-	.037-
	E-0400		420.3	0.	1.2-	419.1	461.5	.7580	46.080	3298.28	198.721	244.801	N/A	244.801	.489-	.199-
	E-0450		408.0	0.1	1.2-	406.9	449.3	.8520	44.996	3298.90	198.759	243.754	N/A	243.754	1.536-	.626-
	E-0500		404.3	0.2	1.2-	403.3	445.7	.9470	44.755	3293.23	198.417	243.172	N/A	243.172	2.118-	.864-
	E-0550		405.0	0.3	1.2-	404.1	446.5	1.0420	44.945	3286.94	198.038	242.983	N/A	242.983	2.307-	.941-
	E-0600		408.8	0.0	1.2-	407.6	450.0	1.1360	45.398	3278.84	197.550	242.948	N/A	242.948	2.342-	.955-
	E-0650		401.0	0.1-	1.2-	399.7	442.1	1.2310	44.736	3291.41	198.307	243.043	N/A	243.043	2.247-	.916-
	E-0700		399.8	0.2-	1.2-	398.4	440.8	1.3250	44.719	3295.66	198.564	243.282	N/A	243.282	2.008-	.819-
	E-0750		399.7	0.3-	1.2-	398.2	440.6	1.4700	44.869	3298.59	198.740	243.609	N/A	243.609	1.681-	.685-
	E-0800		405.6	0.0	1.0-	404.6	447.0	1.5150	45.549	3293.33	198.423	243.972	N/A	243.972	1.318-	.537-
	E-0850		412.9	0.1-	1.0-	411.8	454.2	1.6090	46.364	3283.36	197.822	244.187	N/A	244.187	1.103-	.450-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-T8-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/30	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	209.534	245.290	N/A	245.290	REFERENCE	
	G--000	LINE G	459.4	0.0	0.0	459.4	505.5	.0000-	49.499	3197.13	192.627	242.126	N/A	242.126	3.164-	1.290-
	G--005		442.8	0.0	0.0	442.8	488.9	.0950	47.985	3215.81	193.753	241.737	N/A	241.737	3.553-	1.448-
	G--010		439.8	0.0	0.0	439.8	485.9	.1890	47.801	3218.68	193.925	241.727	N/A	241.727	3.563-	1.453-
	G--015		442.8	0.0	0.0	442.8	488.9	.2840	48.207	3218.36	193.906	242.113	N/A	242.113	3.177-	1.295-
	G--020		441.9	0.0	0.0	441.9	488.0	.3790	48.230	3221.13	194.073	242.303	N/A	242.303	2.987-	1.218-
	G--025		438.7	0.0	0.3	439.0	485.1	.4740	48.057	3228.62	194.524	242.582	N/A	242.582	2.708-	1.104-
	G--030		442.1	0.0	0.3	442.4	488.5	.5680	48.501	3226.92	194.422	242.923	N/A	242.923	2.367-	.965-
	G--035		444.1	0.0	0.3	444.4	490.5	.6630	48.808	3229.25	194.562	243.370	N/A	243.370	1.920-	.783-
	G--040		448.8	0.0	0.3	449.1	495.2	.7580	49.380	3222.45	194.153	243.532	N/A	243.532	1.757-	.716-
	G--045		444.4	0.0	0.3	444.7	490.8	.8520	49.059	3225.51	194.337	243.396	N/A	243.396	1.894-	.772-
	G--050		445.2	0.0	0.2	445.4	491.5	.9470	49.239	3223.79	194.233	243.473	N/A	243.473	1.817-	.741-
	G--055		449.4	0.0	0.2	449.6	495.7	1.0420	49.762	3217.01	193.825	243.587	N/A	243.587	1.703-	.694-
	G--060		446.0	0.1-	0.2	446.1	492.2	1.1360	49.530	3221.11	194.072	243.602	N/A	243.602	1.688-	.688-
	G--065		448.0	0.2-	0.2	448.0	494.1	1.2310	49.827	3217.01	193.825	243.652	N/A	243.652	1.638-	.668-
	G--070		441.2	0.1-	0.0	441.1	487.7	1.3250	49.311	3220.28	194.022	243.333	N/A	243.333	1.957-	.798-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/30	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	F--000	LINE F	432.8	0.0	0.4-	432.4	478.5	.0000-	46.855	3241.05	195.273	242.128	N/A	242.128	3.162-	1.289-
	F--005		429.5	0.0	0.3-	429.2	475.3	.0950	46.653	3244.81	195.500	242.153	N/A	242.153	3.137-	1.279-
	F--010		418.8	0.0	0.3-	418.5	464.6	.1890	45.716	3258.32	196.314	242.029	N/A	242.029	3.261-	1.329-
	F--015		415.5	0.0	0.3-	415.2	461.3	.2840	45.504	3262.91	196.590	242.094	N/A	242.094	3.196-	1.303-
	F--020		420.5	0.1	1.1-	419.5	465.6	.3790	46.036	3259.11	196.361	242.398	N/A	242.398	2.892-	1.179-
	F--025		422.3	0.0	1.1-	421.2	467.3	.4740	46.314	3261.43	196.501	242.816	N/A	242.816	2.474-	1.009-
	F--030		419.6	0.0	1.1-	418.5	464.6	.5680	46.160	3267.67	196.877	243.038	N/A	243.038	2.252-	.918-
	F--035		424.2	0.3	1.4-	423.1	469.2	.6630	46.722	3264.30	196.674	243.397	N/A	243.397	1.893-	.772-
	F--040		433.7	0.3	1.4-	432.6	478.7	.7580	47.764	3254.86	196.105	243.870	N/A	243.870	1.420-	.579-
	F--045		433.7	0.1	1.4-	432.4	478.5	.8520	47.859	3260.43	196.441	244.296	N/A	244.296	.994-	.405-
	F--050		432.0	0.0	1.4-	430.6	476.7	.9470	47.790	3261.90	196.529	244.320	N/A	244.320	.970-	.396-
	F--055		427.9	0.2-	0.8-	426.9	473.0	1.0420	47.539	3257.04	196.237	243.776	N/A	243.776	1.514-	.617-
	F--060		426.1	0.1-	0.8-	425.2	471.3	1.1360	47.483	3250.66	195.852	243.336	N/A	243.336	1.954-	.797-
	F--065		417.9	0.1-	0.8-	417.0	463.1	1.2310	46.792	3260.98	196.474	243.266	N/A	243.266	2.024-	.825-
	F--070		418.5	0.0	0.8-	417.7	463.8	1.3250	46.971	3259.71	196.398	243.368	N/A	243.368	1.922-	.783-
	F--075		418.8	0.0	0.8-	418.0	464.1	1.4700	47.170	3259.55	196.388	243.558	N/A	243.558	1.732-	.706-
	F--080		417.8	0.0	0.8-	417.0	463.1	1.5150	47.125	3262.01	196.536	243.661	N/A	243.661	1.628-	.664-
	F--085		420.5	0.0	0.8-	419.7	465.8	1.6090	47.500	3257.08	196.239	243.739	N/A	243.739	1.551-	.632-
	F--090		427.2	0.0	0.8-	426.4	472.5	1.7040	48.268	3246.44	195.598	243.866	N/A	243.866	1.424-	.581-
	F--095		422.0	0.1-	0.0	421.9	468.0	1.7990	47.939	3250.40	195.837	243.775	N/A	243.775	1.515-	.618-
	F--100		426.5	0.0	0.8	427.3	473.4	1.8940	48.579	3241.52	195.302	243.880	N/A	243.880	1.409-	.575-

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 9671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/31	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	H--105	LINE H	463.4	0.0	1.2-	462.2	508.8	1.9880	52.156	3167.17	190.822	242.978	N/A	242.978	2.312-	.943-
	H--100		465.2	0.0	1.2-	464.0	510.6	1.8940	52.222	3166.70	190.794	243.015	N/A	243.015	2.275-	.927-
	H--095		471.6	0.0	1.2-	470.4	517.0	1.7990	52.737	3156.31	190.168	242.904	N/A	242.904	2.386-	.973-
	H--090		467.4	0.0	1.2-	466.2	512.8	1.7040	52.214	3164.91	190.686	242.900	N/A	242.900	2.390-	.974-
	H--085		469.9	0.1-	1.2-	468.6	515.2	1.6090	52.337	3163.22	190.584	242.921	N/A	242.921	2.369-	.966-
	H--080		463.9	0.0	0.8-	463.1	509.7	1.5150	51.688	3171.85	191.104	242.792	N/A	242.792	2.498-	1.018-
	H--075		466.4	0.0	0.8-	465.6	512.2	1.4700	51.880	3169.77	190.979	242.859	N/A	242.859	2.431-	.991-
	H--070		463.5	0.0	0.8-	462.7	509.3	1.3250	51.426	3175.49	191.323	242.749	N/A	242.749	2.540-	1.036-
	H--065		462.7	0.0	0.8-	461.9	508.5	1.2310	51.238	3180.16	191.605	242.842	N/A	242.842	2.448-	.998-
	H--060		462.4	0.1	0.8-	461.7	508.3	1.1360	51.106	3182.80	191.764	242.870	N/A	242.870	2.420-	.987-
	H--055		466.6	0.2	0.8-	466.0	512.6	1.0420	51.417	3177.22	191.428	242.845	N/A	242.845	2.445-	.997-

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READ-ING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/31	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	G--075	LINE G	440.0	0.2-	0.0	439.8	486.4	1.4700	49.354	3221.29	194.083	243.437	N/A	243.437	1.853-	.756-
	G--080		439.5	0.4-	0.0	439.1	485.7	1.5150	49.338	3217.92	193.880	243.218	N/A	243.218	2.072-	.845-
	G--085		449.2	0.6-	0.0	448.6	495.2	1.6090	50.379	3201.83	192.910	243.289	N/A	243.289	2.001-	.816-
	G--090		442.9	0.0	0.3-	442.6	489.2	1.7040	49.903	3208.89	193.336	243.239	N/A	243.239	2.051-	.836-
	G--095		433.6	0.1	0.3-	433.4	480.0	1.7990	49.114	3219.09	193.950	243.064	N/A	243.064	2.226-	.908-
	G--100		442.3	0.2	0.3-	442.2	488.8	1.8940	50.087	3206.32	193.181	243.268	N/A	243.268	2.022-	.824-
	G--105		435.2	0.2-	1.0	436.0	482.6	1.9880	49.590	3214.55	193.677	243.267	N/A	243.267	2.023-	.825-
	G--110		434.5	0.5-	1.0	435.0	481.8	2.0830	49.604	3215.94	193.760	243.364	N/A	243.364	1.926-	.785-
	G--115		430.5	0.7-	1.0	430.8	477.4	2.1780	49.304	3219.89	193.998	243.302	N/A	243.302	1.988-	.810-
	G--120		431.2	1.0-	1.0	431.2	477.8	2.2720	49.454	3216.46	193.792	243.245	N/A	243.245	2.045-	.834-
	G--125		431.0	0.6	0.4	431.4	478.0	2.3670	49.585	3215.40	193.728	243.312	N/A	243.312	1.977-	.806-
	G--130		429.6	0.0	0.4	430.0	476.6	2.4620	49.559	3215.75	193.749	243.308	N/A	243.308	1.982-	.808-
	G--135	END G	428.5	0.0	0.4	428.9	475.5	2.5560	49.562	3216.16	193.774	243.335	N/A	243.335	1.955-	.797-

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263 TB AN — DATUM PLAN = SEA LEVEL

INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC

LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
08/01	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	H--050	LINE H	458.2	0.0	0.6	458.8	503.1	.9470	50.375	3185.93	191.952	242.328	N/A	242.328	2.962-	1.208-
	H--045		463.4	0.0	0.0	463.4	507.7	.8520	50.714	3181.44	191.682	242.396	N/A	242.396	2.894-	1.180-
	H--040		462.5	0.0	0.0	462.5	506.8	.7580	50.916	3186.64	191.995	242.911	N/A	242.911	2.779-	1.133-
	H--035		462.5	0.1	0.0	462.6	506.9	.6630	50.414	3188.07	192.081	242.495	N/A	242.495	2.795-	1.139-
	H--030		461.6	0.2	0.0	461.8	506.1	.5680	50.224	3188.24	192.091	242.316	N/A	242.316	2.974-	1.213-
	H--025		462.1	0.0	0.3	462.4	506.7	.4740	50.173	3185.10	191.902	242.075	N/A	242.075	3.215-	1.311-
	H--020		461.4	0.1	0.3	461.8	506.1	.3790	50.002	3183.65	191.815	241.817	N/A	241.817	3.473-	1.416-
	H--015		459.4	0.2	0.3	459.9	504.2	.2840	49.705	3183.25	191.791	241.495	N/A	241.495	3.794-	1.547-
	H--010		464.7	0.0	0.3	465.0	509.3	.1890	50.093	3174.59	191.269	241.362	N/A	241.362	3.928-	1.602-
	H--005		466.7	0.0	0.3	467.0	511.3	.0950	50.178	3170.96	191.050	241.228	N/A	241.228	4.062-	1.656-
	H--000	END H	476.7	0.0	0.3	477.0	521.3	.0000-	51.046	3158.27	190.286	241.331	N/A	241.331	3.958-	1.614-
	R--900	ROAD	326.4	0.0	0.0	326.4	370.7	.0000-	36.299	3404.93	205.147	241.446	N/A	241.446	3.844-	1.567-
	R--800		321.1	0.0	0.0	321.1	365.4	.0951-	35.668	3410.51	205.483	241.152	N/A	241.152	4.138-	1.687-
	R--700		314.9	0.0	0.0	314.9	359.2	.1890-	34.951	3416.77	205.860	240.811	N/A	240.811	4.479-	1.826-
	R--600		324.2	0.0	0.0	324.2	368.5	.2840-	35.750	3404.06	205.095	240.845	N/A	240.845	4.445-	1.812-
	R--500		335.8	0.0	0.0	335.8	380.1	.3790-	36.774	3389.88	204.240	241.015	N/A	241.015	4.275-	1.743-
	R--400		333.6	0.0	0.0	333.6	377.9	.4740-	36.447	3395.47	204.577	241.025	N/A	241.025	4.265-	1.739-
	R--300		320.6	0.0	0.0	320.6	364.9	.5680-	35.064	3414.74	205.738	240.802	N/A	240.802	4.488-	1.830-
	R--200		309.3	0.0	0.0	309.3	353.6	.6630-	33.846	3433.68	206.879	240.725	N/A	240.725	4.565-	1.861-
	R--100	END R	304.5	0.0	0.0	304.5	348.8	.7850-	33.233	3448.17	207.752	240.985	N/A	240.985	4.305-	1.755-

STOCK FORM 14116_P

Gravity Computations Area - Helmet Peak Average Density = 2.65gm/cc Latitude Correction = 1.174 mgal/mile
Instrument - Worth-Wide Factor = 0.096194 mgal/Div Datum Plan = Sea Level Combined Bouguer + free Air Correction = 0.06025 mgal/ft.

Date	Stations & Remarks	Reading	Drift Loop	Drift Line	Reading Correct for Drift	Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Miles Nor S of Base +N -S	Latitude Correction Value	Reading Correct for Latitude	Elevation in feet	Combined Bouguer + free Air	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient Sta ~ Sta	Gravity Values w/resp To exist info
6-20-63																			
	F-145	840.0	-.7	4.4	843.7	-122.0	721.7	69.423	-2.746	-3.223	66.200	3015.93	181.709	247.909		247.909	3.887		
	F-150	839.8	.8	0	840.6	-122.0	718.6	69.125	-2.841	-3.335	65.790	3018.38	181.857	247.647		247.647	4.149		
	F-155	836.0	.8	.4	837.2	-122.0	715.2	68.797	-2.935	-3.445	65.352	3021.16	182.024	247.376		247.376	4.420		
	F-160	835.8	.8	1	837.6	-122.0	715.6	68.836	-3.030	-3.557	65.279	3022.24	182.089	247.368		247.368	4.428		
	F-165	836.5	.8	1.5	838.8	-122.0	716.8	68.951	-3.125	-3.668	65.283	3023.45	182.162	247.447		247.447	4.349		
	F-170	839.5	.8	1.8	842.1	-122.0	720.1	69.269	-3.219	-3.779	65.490	3022.43	182.101	247.591		247.591	4.205		
	F-175	836.5	.8	2.0	839.3	-122.0	717.3	68.999	-3.314	-3.850	65.109	3025.05	182.259	247.368		247.368	4.428		
	F-180	832.7	-.3	.2	832.6	-122.0	710.6	68.355	-3.409	-4.002	64.353	3030.37	182.579	246.932		246.932	4.864		
	F-185	831.9	-.3	.3	831.9	-122.0	709.9	68.288	-3.503	-4.112	64.176	3034.54	182.831	247.007		247.007	4.789		
	F-190	828.5	-.3	.4	828.6	-122.0	706.6	67.970	-3.598	-4.224	63.746	3038.51	183.070	246.816		246.816	4.980		
	F-195	826.2	-.3	.5	826.3	-122.0	704.3	67.749	-3.693	-4.335	63.424	3039.77	183.146	246.570		246.570	5.226		
	F-200	806.3	-.3	-.5	805.5	-122.0	683.5	65.748	-3.788	-4.447	61.301	3073.20	185.160	246.461		246.461	5.335		
	F-205	814.9	-.3	-.9	813.7	-122.0	691.7	66.537	-3.882	-4.557	61.980	3056.10	184.130	246.110		246.110	5.686		
	F-210	806.4	-.3	-1.1	805.0	-122.0	683.0	65.700	-3.977	-4.668	61.032	3044.65	183.440	244.472		244.472	7.324		

-End Helmet Pk Area-

45-568 5118

Gravity Computations — Area - Helmet Peak — Instrument - World Wide — Factor = 0.096194 mgal/Div — Average Density = 2.65 gm/cc — Datum Plane = Sea Level — Latitude Correction = 1.174 mgal/mile — Combined Bouguer + free Air Correction = 0.06025 mgal/ft.

Date	Station & Remarks	Reading	Drift Loop	Drift Line	Reading Correct for Drift	Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Miles N. or S. of Base +N -S	Latitude Correction Value	Reading Correct for Latitude	Elevation in feet	Combined Bouguer + free Air	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals (+)	Gradient Sta. to Sta.	Gravity Value w/resp to existing Info
6-18-63	E-55	837.0	-3.5	-3	833.2	+93.5	739.7	70.154	-1.041	-1.222	69.932	2478.24	179.438	249.370		249.370	2.426		
	E-60	835.1	-3.5	-4	831.2	+93.5	737.7	70.962	-1.136	-1.333	69.624	2481.18	179.616	249.245		249.445	2.551		
	E-65	832.6	-3.8	-2	828.6	+93.5	735.1	70.712	-1.231	-1.445	69.267	2485.16	179.873	249.140		249.140	2.656		
	E-70	829.8	-3.8	-3	825.7	+93.5	732.2	70.433	-1.325	-1.555	68.878	2489.04	180.086	248.967		248.967	2.829		
	E-75	826.1	-3.8	-4	822.4	+93.5	728.4	70.067	-1.420	-1.664	68.403	2493.41	180.473	248.876		248.975	2.924		
	E-80	821.1	-3.8	-7	817.6	+93.5	719.1	69.173	-1.515	-1.778	67.395	3004.69	181.032	248.427		248.427	3.369		
	E-85	915.4	-3.8	-11	810.5	+93.5	717.0	68.971	-1.609	-1.888	67.082	3010.00	181.352	248.434		248.434	3.362		
	E-90	815.0	0	-6.5	808.5	+93.5	715.0	68.778	-1.704	-2.000	66.778	3012.06	181.476	248.254		248.254	3.542		
	E-95	815.4	0	-6.5	808.9	+93.5	715.4	68.817	-1.799	-2.112	66.705	3014.79	181.641	248.346		248.346	3.450		
	E-100	811.8	0	-6.5	805.3	+93.5	711.8	68.470	-1.894	-2.223	66.247	3021.41	182.039	248.286		248.286	3.510		
	E-105	809.6	-.1	-6.6	803.0	+93.5	709.5	68.249	-1.988	-2.333	65.916	3026.58	182.351	248.267		248.267	3.529		
	E-110	808.0	-.1	-6.5	801.4	+93.5	707.9	68.095	-2.083	-2.445	65.650	3027.66	182.417	248.067		248.067	3.729		
	E-115	809.4	0	-4.3	805.1	+93.5	711.6	68.451	-2.178	-2.556	65.895	3032.77	182.724	248.619		248.619	3.177		
	E-120	800.2	0	-4.3	795.9	+93.5	702.4	67.566	-2.272	-2.667	64.899	3039.13	183.155	248.054		248.054	3.742		
	E-125	798.0	0	-4.3	793.7	+93.5	700.2	67.355	-2.367	-2.778	64.577	3044.16	183.410	247.987		247.987	3.809		
	E-130	794.1	.1	-4.3	789.9	+93.5	696.4	66.986	-2.462	-2.890	64.096	3047.69	183.623	247.719		247.719	4.078		
6-19-63																			
	L-2	974.9	0	0	974.9	-114.9	760.0	73.107	0	0	73.107	2966.84	178.1	251.796		251.796	0		
	E-0	914.8	0	0	914.8	-114.9	799.9	76.945	0	0	76.945	2911.92	175.443	252.388		252.388	+0.592		
	E-50	857.9	0	0	857.9	-114.9	743.0	71.472	-.946	-1.111	70.361	2964.46	179.199	249.560		249.560	2.436		
	E-45	965.5	0	-.1	965.4	-114.9	759.5	72.963	-.852	-1.000	71.963	2944.73	178.624	249.817		249.817	1.979		
	E-40	873.3	0	-.2	873.1	-114.9	758.2	72.934	-.757	-0.889	72.045	2958.00	179.279	250.324		250.324	1.472		
	E-35	874.6	0	-.4	874.2	-114.9	759.3	73.040	-.663	-0.777	72.263	2958.04	178.221	250.484		250.484	1.312		
	E-30	877.4	0	-.4	876.8	-114.9	761.9	73.290	-.568	-0.666	72.624	2953.00	177.972	250.546		250.546	1.250		
	E-25	883.7	0	-.8	882.9	-114.9	769.0	73.976	-.474	-0.555	73.421	2945.06	177.436	250.760		250.760	1.038		
	E-20	890.5	-3.2	0	887.3	-114.9	772.4	74.300	-.378	-0.444	73.856	2940.04	177.173	251.029		251.029	0.769		
	E-15	858.1	-3.2	0	854.9	-114.9	780.0	75.034	-.284	-0.333	74.698	2932.83	176.703	251.401		251.401	0.397		
	E-10	903.6	-3.2	0	900.4	-114.9	785.5	75.560	-.189	-0.222	75.338	2925.32	176.250	251.588		251.588	0.208		
	E-5	908.0	-3.2	-.1	904.5	-114.9	789.6	75.954	-.094	-0.111	75.832	2921.23	176.007	251.839		251.839	+0.043		
	E-130	809.5	0	0	809.5	+113.1	696.4	66.986	-2.462	-2.890	64.096	3047.69	183.623	247.719		247.719	4.024		
	E-135	806.1	0	-.5	806.6	+113.1	693.5	66.710	-2.556	-3.000	63.710	3052.11	183.889	247.599		247.599	4.144		
	E-140	801.7	0	-.6	802.3	+113.1	689.2	66.296	-2.651	-3.112	63.184	3056.16	184.133	247.317		247.317	4.426		

Gravity Computations — Area

Instrument - World-Wide — Factor = 0.096194 mgal/Div — Average Density = 2.65 gm/cc — Datum Plan = Sea Level — Latitude Correction = 1.174 mgal/mile — Combined Bouguer & Free Air Correction = 0.06025 mgal/ft

Date	Stations & Remarks	Reading	Drift Loop	Drift Line	Reading Correct for Drift	Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Miles N. or S. of Base +N -S	Latitude Correction Value	Reading correct for Latitude	Elevation in feet	Combined Bouguer + free air Corr.	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient sta.-sta.	Gravity Value with respect to existing Info.
6-11-63	Line A																(-1)		
	A -105	672.1	0	0	672.1	- 57.3	614.8	59.140	- 1.484	- 2.335	56.887	3166.19	190.760	247.580		247.580	- 4.276		
	A -110	665.8	-.9	0	664.9	- 57.3	607.6	58.447	- 2.083	- 2.4455	56.002	3171.99	191.1112	247.114		247.114	- 4.682		
	A -115	658.6	-1.5	0	657.1	- 57.3	599.8	57.697	- 2.478	- 2.556	55.141	3174.26	191.550	246.691		246.691	- 5.105		
	A -120	656.9	-2	0	654.9	- 57.3	597.6	57.485	- 2.272	- 2.667	54.818	3173.73	191.578	246.396		246.396	- 5.400		
	A -125	646.6	-.2	-.6	645.8	- 57.3	588.5	56.610	- 2.367	- 2.778	53.832	3168.64	192.115	245.947		245.947	- 5.849		
	A -130	650.0	-.2	-.6	649.2	- 57.3	591.9	56.937	- 2.462	- 2.890	54.047	3169.55	192.194	246.241		246.241	- 5.555		
	A -135	643.0	-.3	-.6	642.1	- 57.3	584.8	56.254	- 2.556	- 3.000	53.254	3167.85	192.670	245.924		245.924	- 5.872		
	A -140	643.3	-.3	+.6	642.4	- 57.3	585.1	56.283	- 2.65	- 3.112	53.171	3200.34	192.820	245.991		245.991	- 5.805		
	A -145	645.9	0	1.2	647.1	- 57.3	589.8	56.735	- 2.746	- 3.223	53.512	3197.49	192.247	245.759		245.759	- 5.937		
	A -150	638.4	0	1.2	639.6	- 57.3	582.3	56.013	- 2.841	- 3.335	52.678	3191.12	192.748	245.424		245.424	- 6.272		
	A -155	630.4	0	1.2	631.6	- 57.3	574.3	55.244	- 2.935	- 3.445	51.799	3209.50	193.372	245.171		245.171	- 6.525		
	A -160	626.1	+.5	1.0	627.6	- 57.3	570.3	54.859	- 3.030	- 3.557	51.302	3210.96	193.460	244.762		244.762	- 7.034		
	Line B. B -160	652.4	1.3	1.0	654.7	- 57.3	597.4	57.466	- 3.030	- 3.557	53.909	3176.04	191.356	245.261		245.261	- 6.535		
	B -155	660.3	0	.8	661.1	- 57.3	603.8	58.082	- 2.933	- 3.445	54.636	3171.18	191.063	245.699		245.699	- 6.097		
	B -150	664.1	.7	.8	665.6	- 57.3	608.3	58.515	- 2.841	- 3.335	55.180	3167.24	190.826	246.006		246.006	- 5.790		
	B -145	668.5	1.6	.8	671.8	- 57.3	614.5	59.111	- 2.746	- 3.223	55.888	3163.03	190.572	246.460		246.460	- 5.336		
	B -140	674.1	2.2	.8	677.1	- 57.3	619.8	59.621	- 2.651	- 3.112	56.509	3164.35	190.652	247.161		247.161	- 4.635		
	B -135	673.3	2.2	.8	676.8	- 57.3	619.5	59.592	- 2.556	- 3.000	56.592	3161.43	190.476	247.068		247.068	- 4.728		
	B -130	676.8	0	.8	677.6	- 57.3	620.3	59.669	- 2.463	- 2.890	56.779	3155.87	190.441	247.220		246.220	- 4.876		
	B -125	686.4	-.3	.8	685.9	- 57.3	628.6	60.467	- 2.367	- 2.778	57.689	3148.59	189.702	247.391		247.391	- 4.705		
	B -120	686.6	-.5	.8	686.9	- 57.3	629.6	60.563	- 2.272	- 2.667	57.896	3148.44	189.705	247.601		247.601	- 4.195		
	B -115	687.8	-.6	.8	688.0	- 57.3	630.7	60.669	- 2.176	- 2.556	58.113	3146.24	189.560	247.673		247.673	- 4.123		
	B -110	692.2	-.9	.8	692.1	- 57.3	634.8	61.063	- 2.082	- 2.445	58.618	3136.63	188.985	247.603		247.603	- 4.193		

45-568 5118

Gravity Computations Area: Helmet Peak Instrument: World-Wide Factor = 0.096194 mgal/Div Average Density = 2.65 gm/cc Datum Plane = Sea Level Latitude Correction = 1.174 mgal/mile Combined Bouguer & Free Air Correction = 0.06025 mgal/ft.

Date	Station & Remarks	Reading	Drift (2000 ft/Line)	Reading Correct for Drift	Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Miles N or S of Base (+N -S)	Latitude Correction Value	Reading Correct for Latitude	Elevation in feet	Combined Bouguer + Free Air	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals (-1)	Gradient Sta-Sta	Gravity Values w/new Datum into
6-19-63	E-145	800.6	0 .8	801.4	-113.1	688.3	66.210	-2.746	-3.223	62.987	3056.22	184.321	247.314			4.482		
	E-150	801.8	0 1.2	803.0	-113.1	689.9	66.346	-2.841	-3.337	63.009	3056.93	184.180	247.209			4.587		
	E-155	799.6	0 1.5	801.1	-113.1	688.0	66.181	-2.935	-3.445	62.736	3056.99	184.183	246.919			4.877		
	E-160	794.9	1.2 +.2	795.9	-113.1	682.8	65.681	-3.030	-3.557	62.124	3061.14	184.433	246.557			5.239		
	E-165	793.5	1.2 -.4	794.3	-113.1	681.2	65.521	-3.125	-3.668	61.859	3062.44	184.512	246.371			5.427		
	E-170	791.1	1.2 -.5	792.8	-113.1	679.7	65.383	-3.219	-3.779	61.604	3062.44	184.512	246.116			5.680		
	E-175	793.3	1.2 -.6	793.9	-113.1	680.8	65.488	-3.314	-3.890	61.598	3062.80	184.5333	246.131			5.665		
	E-180	790.0	1.2 -1.0	790.2	-113.1	677.1	65.132	-3.408	-4.002	61.130	3067.46	184.814	245.944			5.852		
	E-185	788.6	-1.1 1.2	788.7	-113.1	675.6	64.988	-3.503	-4.112	60.876	3068.26	184.863	245.782			6.056		
	E-190	784.3	.4 -.2	784.5	-113.1	671.4	64.584	-3.598	-4.224	60.360	3075.09	185.274	245.634			6.162		
	E-195	784.9	.4 -.2	785.1	-113.1	672.0	64.642	-3.693	-4.335	60.307	3077.52	185.408	245.715			6.081		
	E-200	784.1	.4 -.3	784.2	-113.1	671.1	64.555	-3.788	-4.447	60.108	3080.14	185.578	245.686			6.110		
	E-205	787.2	.4 -.4	787.2	-113.1	674.1	64.844	-3.882	-4.557	60.287	3082.10	185.696	245.983			5.813		
	E-210	788.2	.4 -.5	788.1	-113.1	675.0	64.930	-3.977	-4.668	60.262	3081.12	185.758	246.260			5.536		
6-20-63	L-2	882.0	0 0	882.0	-122.0	760.0	73.107	0	0	73.107	2996.84	178....	251.796			0		
	E-55	887.2	0 0	887.2	-122.0	765.2	73.607	-1.0447	1.222	-72.385	2942.37	177.354	249.644			2.152		
	E-60	882.9	0 -.1	882.8	-122.0	760.8	73.184	-1.1134	1.333	-71.851	2946.33	177.576	249.367			2.429		
	E-65	880.5	0 -.2	880.3	-122.0	758.3	72.943	-1.231	1.445	-71.498	2950.34	177.778	249.268			2.528		
	E-70	875.8	0 -.3	875.5	-122.0	753.5	72.482	-1.325	1.555	-70.927	2957.24	178.173	248.100			2.696		
	E-75	873.1	0 -.3	872.8	-122.0	750.8	72.222	-1.420	1.664	-70.447	2964.40	178.605	249.168			2.628		
	E-80	870.4	0 -.4	870.0	-122.0	748.0	71.953	-1.515	1.778	-70.175	2966.31	178.720	248.855			2.941		
	E-85	868.4	0 -.5	868.4	-122.0	746.4	71.847	-1.609	1.888	-69.959	2972.08	179.067	249.026			2.770		
	E-90	866.0	-.3 3.8	869.5	-122.0	747.5	71.945	-1.704	2.000	+69.945	2977.31	179.141	249.046			2.750		
	E-95	860.2	-.5 3.8	863.4	-122.0	741.5	71.327	-1.798	2.112	+69.215	2983.17	179.675	248.350			2.906		
	E-100	860.8	-.6 3.8	864.0	-122.0	742.0	71.375	-1.894	2.223	-69.152	2982.37	179.627	248.839			2.957		
	E-105	858.0	-.7 3.8	861.1	-122.0	739.1	71.096	-1.988	2.333	+68.763	2986.64	179.945	248.708			3.088		
	E-110	857.1	-.8 3.8	860.1	-122.0	738.1	71.000	-2.083	2.444	-68.556	2988.16	180.036	248.591			3.205		
	E-115	855.5	1.0 3.8	860.3	-122.0	738.3	71.020	-2.178	2.556	-68.464	2984.51	180.419	248.883			2.913		
	E-120	852.6	-.2 +4.4	856.8	-122.0	734.8	70.683	-2.272	2.667	-68.016	2988.67	180.669	248.685			3.111		
	E-125	847.1	-.3 +4.4	851.2	-122.0	729.2	70.144	-2.367	2.778	-67.366	3001.69	180.851	248.247			3.579		
	E-130	844.9	-.4 +4.4	848.9	-122.0	726.9	69.923	-2.462	2.890	-67.033	3007.17	181.181	248.214			3.582		
	E-135	841.9	-.5 +4.4	845.9	-122.0	723.8	69.625	-2.556	3.001	-66.555	3010.70	181.396	248.024			3.772		
	E-140	839.6	-.6 +4.4	843.4	-122.0	721.4	69.394	-2.651	3.112	-66.282	3011.65	181.632	247.914			3.882		

HEINRICHS GEOEXPLORATION COMPANY

P.O. Box 5671 TUCSON, ARIZONA

GRAVITY COMPUTATIONS — AREA Helmet Peak (refer. pt. 22) — AVERAGE DENSITY = 2.65 gm/cc — LATITUDE CORRECTION = 1.358 mgal/mile

INSTRUMENT - WORLD-WIDE — FACTOR = 0.096194 mgal / Div. — DATUM PLAN = SEA LEVEL — COMBINED BOUGUER + FREE AIR CORRECTION = 0.06025 mgal / ft

DATE	STATIONS & REMARKS	Reading	Drift Loop	Drift Line	Reading Correct for Drift	Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Miles N. or S. of Base +N. -S.	Latitude Correction Value	Reading Correct for Latitude	Elevation in feet	Combined Bouguer + free air Corr.	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient Sta. - Sta.	Gravity Values with respect to existing Info.
6-4-63	Louise 2 (North Area)	782.6	0	0	0	-22.6	760.0	73.197		0	70.107	2765.84	178.	251.786	0.335	251.786	0		
	Line C C-5	769.8	0	0	769.8	-22.6	747.2	71.876	+.0947	-.1141	71.767	2985.25	179.861	251.926		251.626	.170		
	C-10	762.6	-.3	0	762.3	-22.6	739.7	71.755	-.1844	-.2272	70.938	2993.37	180.051	251.084		251.084	.512		
	C-15	755.4	-.3	0	755.1	-22.6	732.5	70.481	-.2941	-.3233	70.148	3000.73	180.193	250.941		250.941	.854		
	C-20	754.5	-.1	-1.4	753.0	-22.6	730.4	70.264	-.3788	-.4444	69.815	3003.40	180.954	250.770		250.770			
	C-25	747.1	-.3	-1.4	745.4	-22.6	722.8	69.529	-.4795	-.5555	68.973	3009.99	181.351	250.325		250.325			
	C-30	739.2	-.3	-1.4	736.5	-22.6	713.9	68.673	-.5682	-.6664	68.006	3017.70	181.816	249.822		249.822			
	C-35	725.7	.1	.1	725.9	-22.6	703.3	67.653	-.6649	-.7777	66.876	3026.81	182.365	249.241		249.241	2.554		
	C-40	718.5	.5	.1	719.1	-22.6	696.5	66.999	-.7576	-.8887	66.110	3033.71	182.785	248.895		248.895	2.901		
	C-45	710.7	1.1	.1	711.9	-22.6	689.3	66.306	-.8523	-1.000	65.306	3042.64	183.319	248.625		248.625	3.171		
	C-50	704.5	1.5	.1	706.1	-22.6	683.5	65.748	-.9466	-1.111	64.637	3049.46	183.760	248.397		248.397	3.399		
	C-55	705.4	0	0	705.4	-22.6	682.8	65.681	-1.0417	-1.222	64.459	3051.84	183.896	248.355		248.355	3.441		
	C-60	700.5	0	0	700.5	-22.6	677.9	65.209	-1.136	-1.333	63.876	3058.55	184.357	248.213		248.213	3.583		
	C-65	698.5	.5	0	699.0	-22.6	676.4	65.065	-1.231	-1.445	63.620	3062.61	184.703	248.323		248.323	3.473		
	C-70	693.9	.8	0	694.7	-22.6	672.1	64.633	-1.325	-1.555	63.078	3072.83	185.441	248.202		248.202			
	C-75	691.4	-.2	.8	692.0	-22.6	669.4	64.372	-1.419	-1.665	62.707	3078.49	185.879	248.146		248.146	3.650		
	C-80	688.6	-.5	.8	688.9	-22.6	666.3	64.094	-1.515	-1.778	62.316	3084.76	185.856	248.172		248.172	3.624		
	C-85	690.0	-.8	.8	690.0	-22.6	667.4	64.199	-1.609	-1.889	62.311	3087.38	186.014	248.329		248.329	3.471		
	C-90	689.2	-1.2	.8	688.8	-22.6	666.2	64.084	-1.704	-2.000	62.084	3092.35	186.314	248.398		248.398	3.398		
	C-95	690.1	-.2	-1.6	688.3	-22.6	665.7	64.036	-1.799	-2.112	61.924	3096.74	186.277	248.241		248.241	3.555		
	C-100	684.3	-.2	-1.6	682.5	-22.6	659.9	63.478	-1.894	-2.223	61.255	3107.33	186.644	247.844		247.844	3.897		
	C-105	683.7	-.3	-1.6	681.8	-22.6	659.2	63.411	-1.989	-2.333	61.078	3110.06	186.959	248.032		248.032	3.764		
	C-110	678.7	-.5	-1.6	676.8	-22.6	654.2	62.930	-2.083	-2.445	60.485	3118.50	187.497	247.891		247.891			
6-5-63	Line C cont'd C-115	679.1	0	0	679.1	-28.6	650.5	62.574	-2.178	-2.556	60.018	3111.82	187.487	247.505		247.505	4.241		
	C-120	677.2	0	0	677.2	-28.6	648.6	62.391	-2.272	-2.667	59.724	3117.91	187.854	247.578		247.578	4.218		
	C-125	676.2	0	0	676.2	-28.6	647.6	62.295	-2.367	-2.778	59.517	3118.84	187.916	247.433		247.433	4.363		
	C-130	671.5	+.1	0	671.6	-28.6	643.0	61.853	-2.462	-2.890	58.963	3125.25	188.270	247.234		247.234	4.557		
	C-135	667.5	-.1	-.7	666.9	-28.6	638.3	61.414	-2.556	-3.000	58.414	3130.49	188.612	246.606		246.606	4.990		
	C-140	664.3	-.1	-.7	663.5	-28.6	634.9	60.938	-2.651	-3.112	57.826	3134.11	188.830	246.656		246.656	5.140		
	C-145	660.0	-.1	-.7	659.2	-28.6	630.6	60.506	-2.746	-3.223	57.283	3135.78	188.931	246.214		246.214	5.582		
	C-150	657.4	-.3	-.7	656.4	-28.6	627.8	60.246	-2.841	-3.335	56.911	3139.86	189.116	246.027		246.027	5.769		
	C-155	654.4	-.1	-.7	653.6	-28.6	625.0	59.968	-2.935	-3.445	56.523	3143.92	189.421	245.924		245.924	5.872		
	C-160	649.0	0	-.3	647.7	-28.6	619.1	59.553	-3.030	-3.557	55.996	3143.08	189.370	245.366		245.366	6.430		
	C-165	642.3	0	-.3	641.0	-28.6	612.4	58.909	-3.125	-3.668	55.241	3148.09	189.692	244.813		244.813	6.983		
	C-170	636.5	0	-.3	635.2	-28.6	606.6	58.351	-3.219	-3.779	54.572	3152.13	189.913	244.487		244.487	7.309		
	C-175	634.2	-.1	-.3	633.8	-28.6	601.2	57.851	-3.314	-3.890	53.961	3154.63	190.066	244.027		244.027	7.769		
	C-180	633.1	-.1	-.3	632.7	-28.6	604.1	58.206	-3.409	-4.002	54.204	3150.54	189.820	244.024		244.024	7.772		
	C-185	630.0	-.3	-1.5	628.2	-28.6	599.6	57.677	-3.503	-4.112	53.565	3154.19	190.036	243.641		243.641	8.155		
	C-190	629.8	-.4	-1.5	627.9	-28.6	599.3	57.649	-3.598	-4.224	53.425	3155.17	190.098	243.523		243.523	8.273		
	C-195	626.2	-.4	-1.5	624.3	-28.6	595.7	57.312	-3.693	-4.337	52.967	3157.92	190.258	243.225		243.225	8.571		
	C-200	620.9	-.4	-1.5	619.0	-28.6	590.4	56.792	-3.788	-4.447	52.345	3166.13	190.759	243.104		243.104	8.692		
	C-205	616.6	-.5	-1.5	614.6	-28.6	586.0	56.369	-3.886	-4.557	51.812	3166.69	190.793	242.605		242.605	9.191		
	End Line C C-210	615.5	-.6	-1.5	613.4	-28.6	584.8	56.254	-3.977	-4.668	51.586	3166.18	190.761	242.347	0.024	242.347	9.449		

45-500 5110

Gravity Computations

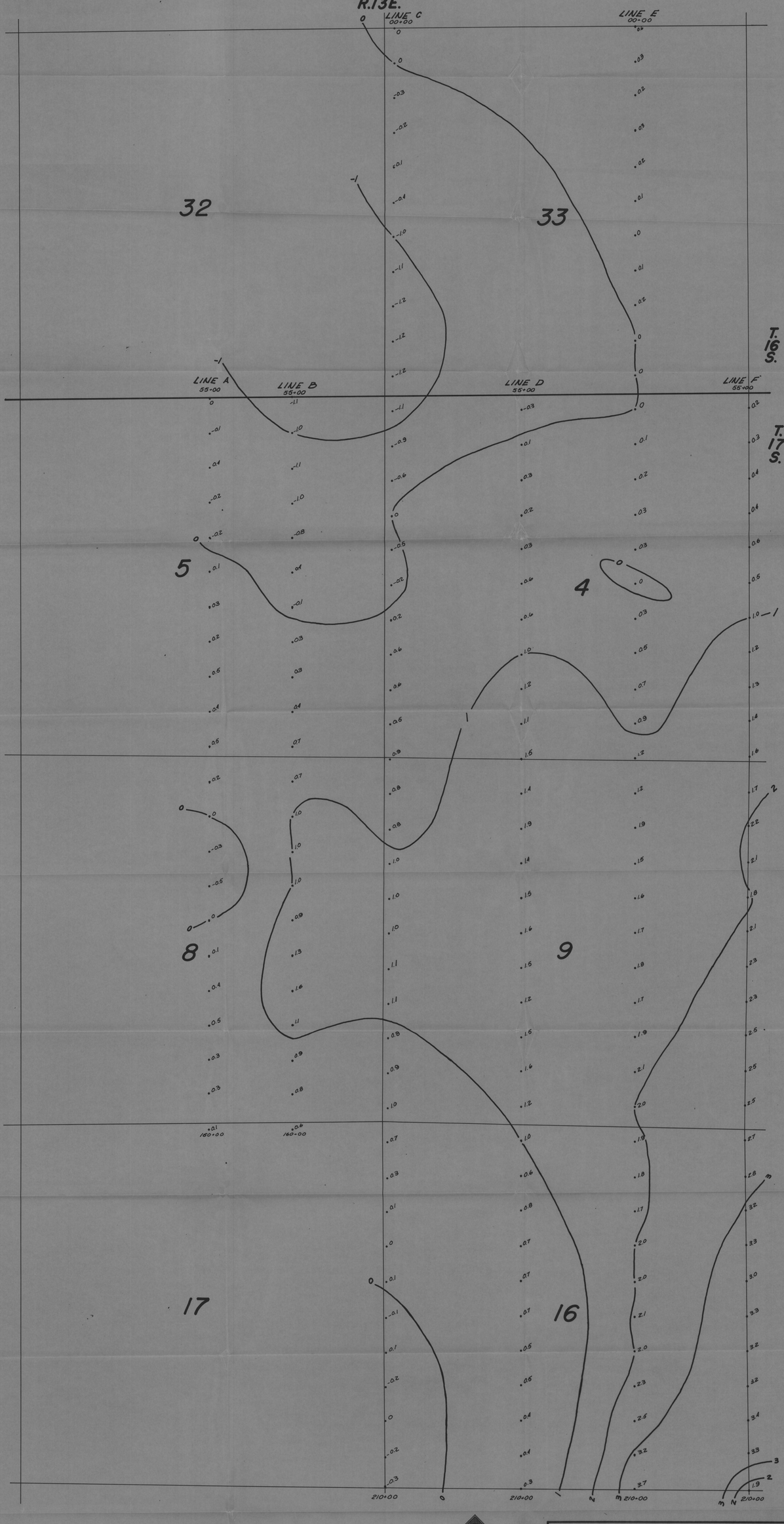
Area – Helmet Peak (refer. pt. L2)
Instrument – World-Wide Factor = 0.096194 mgal/Div
Average Density = 2.65 gm/cc Datum Plane = Sea Level
Latitude Correction = 1.174 mgal/mile
Combined Bouguer+free Air Correction = 0.06025 mgal/ft.

Date	Station & Remarks	Reading	Drift Loop	Drift Line	Reading Correct for Drift	Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Miles Nor S of Base +N -S	Latitude Correction Value	Reading Correct for Latitude	Elevation in feet	combined Bouguer+free air Correction	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient Stat+Stat	Gravity Values w/re to Existing Information
5-29-63	BM 3477	433.3	0	0	433.3		433.3	41.6680				3477.00	209.489	251.180		251.180			
	BM 3477	430.4	2.9	0	433.3		433.3	41.6680				3477.00	209.489	251.180		251.180			
	Line #60	456.0	1.2	0	457.2		457.2	43.979				3445.21	207.573	251.552		251.552			
	Line #60	455.9	2.8	0	458.7		458.7	43.599				3445.21	207.573	251.172		251.172			
	BM 3406 (BCtie)	497.2	3.4	0	500.6		500.6	48.156				3496.26	205.227	253.381		253.381			
	BM 3406 (Bctie)	497.0	3.4	.2	500.6		500.6	48.156				3496.26	205.227	253.381		253.381			
	BM 3477	429.9	3.4	.2	433.5		433.5	41.700				3477.00	209.489	251.189		251.189			
	BM 3406 (Bctie)	497.7	1.7	.1	499.5		499.5	48.048				3496.26	205.227	253.275		253.275			
	Louise 2	757.3	1.7	.4	759.4		759.4	73.049				2966.06	178.741	251.790		251.790			
	Louise 2	758.5	1.7	.5	760.1		760.1	73.117				2966.66	178.741	251.858		251.858			
	Louise 2	757.7	1.7	.6	760.0		760.0	73.107				2966.66	178.741	251.848		251.848			
5-31-63	Louise 2	765.9	0	0	765.9	-5.9	760.0	73.107				2966.66	178.741	251.848		251.848			
	SE 8 1/2	627.6	-1	0	627.5	-5.9	621.6	59.704				3141.43	184.271	244.065		244.065			
	SE 8 1/2	627.6	-1	0	627.4	-5.9	621.5	59.784				3141.43	184.271	244.055		244.055			
	BM 3412	402.4	-3	-1	402.0	-5.9	396.1	38.102											
	BM 3184	555.4	-3	-2	556.9	-5.9	551.0	53.002											
	BM 3431	388.4	-3	-2	383.9	-5.9	378.0	36.346				3184.04	181.938	244.840		244.840			
6-5-63	B-105	662.4																	
6-7-63	L-2	748.4	0	0	748.4	-39.4	709.00	73.107	0	0	73.107	2966.66	178.741	251.848		251.848	+.052		
	C-0	791.1	.2	0	791.3	-38.4	752.9	72.424	0	0	72.424	2976.73	179.347	251.771		251.771	-.025		
	Line B B-55	703.2	0	0	703.2	-38.4	664.8	63.950	1.0417	-1.222	62.728	3080.27	185.586	248.314		248.314	7.492		
	B-60	698.4	.2	0	698.6	-38.4	660.2	63.307	1.136	-1.333	62.174	3085.41	185.895	248.069		248.069	3.727		
	B-65	693.0	.4	0	693.4	-38.4	655.0	63.007	1.231	-1.445	61.562	3091.72	186.276	247.838		247.838	3.496		
	B-70	689.7	.7	0	690.4	-38.4	652.0	62.718	1.325	-1.555	61.163	3098.24	186.668	247.831		247.831	3.965		
	B-75	687.3	.8	0	688.1	-38.4	649.7	63.497	1.420	-1.725	60.772	3104.60	187.052	247.824		247.824	3.472		
	B-80	686.1	1.0	0	687.1	-38.4	648.8	62.902	1.515	-1.778	60.629	3110.57	187.399	248.028		248.028	3.768		
	B-85	684.6	.1	1.4	683.1	-38.4	644.8	62.8776	1.609	-1.888	60.1053	3119.15	187.928	248.050		248.054	3.749		
	B-90	681.0	.1	1.4	682.5	-38.4	644.1	61.988	1.704	-2.000	59.988	3123.23	188.174	248.132		248.132	3.681		
	B-95	676.4	.1	1.4	674.1	-38.4	638.5	61.419	1.799	-2.112	59.307	3129.02	188.523	247.830		247.830	3.466		
	B-100	672.8	.1	1.4	674.3	-38.4	635.9	61.180	1.894	-2.223	58.9447	3134.17	188.834	247.7791		247.7791	3.415		
	End Y & Line B B-105	671.6	.2	1.4	673.5	-38.4	635.1	61.0683	1.988	-2.333	58.760	3136.76	188.989	247.749		247.749	3.441		
	Line A A-105	655.6	.0	1.6	655.2	-38.4	616.8	59.140	1.988	-2.333	56.807	3136.19	188.762	247.509		247.509	4.287		
	A-100	653.7	.0	1.6	655.3	-38.4	616.9	59.342	1.894	-2.223	57.119	3165.12	190.663	247.817		247.817	3.979		
	A-95	659.5	.1	1.6	661.2	-38.4	622.8	59.508	1.799	-2.112	57.396	3158.21	190.292	248.079		248.079	3.747		
	A-90	661.7	.0	1.6	663.3	-38.4	624.9	60.084	1.704	-2.000	58	3153.08	189.973	247.978		247.978	3.818		
	A-85	663.6	-.3	2.1	666.0	-38.4	629.6	60.563	1.604	-1.888	58.675	3148.43	189.692	248.367		248.367	3.429		
	A-80	668.4	+.4	1.7	670.7	-38.4	632.3	60.823	1.515	-1.778	59.045	3143.69	189.407	248.462		248.462	3.334		
	A-75	672.5	-.8	2.7	674.4	-38.4	636.0	61.179	1.420	-1.725	58.454	3137.22	189.017	248.471		248.471			
	A-70	673.1	.1	.8	674.8	-38.4	641.4	61.698	1.325	-1.555	60.144	3126.21	188.354	248.498		248.498			
	A-65	674.3	.2	.8	675.3	-38.4	641.9	61.746	1.231	-1.445	60.302	3124.52	188.252	248.554		248.554			
	A-60	688.1	.3	.8	689.2	-38.4	650.8	62.603	1.136	-1.333	61.270	3115.47	187.707	248.977		248.977	2.819		
	A-55	693.0	.3	.8	694.1	-38.4	655.7	63.074	1.0417	-1.222	61.852	3110.54	187.410	249.362		249.362	2.434		

Gravity Computations - Helmet Pk. Average Density = 2.65 gm/cc Latitude Correction = 1.17 mgal/mile

Factor = 0.096194 mgal/Div Datum Plan = Sea Level Combined Bouguer + free Air Correction = 0.06025 mgal/ft.

						Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Miles N. or S. of Base +N -S	Latitude Correction Value	Reading Correct for Latitude	Elevation in feet	Combined Bouguer + free Air Corr.	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient Sta - Sta.	Gravity Value w/respect to existing Info
6-17-63	3 17 12	708.6	0	0	708.6	-87.0	621.6	59.794	0	0	59.794	3141.12	189.252	249.046		249.046	2.750		
	D-160	734.5	0	0	734.5	-87.0	647.5	62.285	-3.030	-3.557	58.728	3102.46	186.923	245.651		245.651	6.193		
	D-165	727.7	0	-.1	727.6	-87.0	640.6	61.621	-3.125	-3.668	57.953	3088.34	187.277	245.230		245.230	6.566		
	D-170	729.9	0	-.2	729.7	-87.0	642.7	61.823	-3.219	-3.779	58.044	3106.74	187.18	245.225		245.225	6.571		
	D-175	727.4	0	-.3	727.1	-87.0	640.1	61.578	-3.314	-3.890	57.688	3104.72	187.056	244.742		244.742	7.054		
	D-180	721.8	0	-.4	721.4	-87.0	634.4	61.028	-3.409	-4.002	57.026	3112.63	187.538	244.558		244.558	7.238		
	D-185	720.5	-2.1	+.8	719.2	-87.0	632.2	60.813	-3.503	-4.112	56.701	3115.33	187.698	244.399		244.399	7.397		
	D-190	724.1	-2.1	+.9	719.9	-87.0	632.9	60.881	-3.598	-4.224	56.657	3111.62	187.475	244.132		244.132	7.664		
	D-195	718.4	-2.1	1.1	717.4	-87.0	630.4	60.640	-3.693	-4.335	56.305	3144.84	187.620	243.925		243.925	7.871		
	D-200	713.4	-2.1	1.2	712.5	-87.0	625.5	60.169	-3.788	-4.447	55.722	3117.23	187.916	243.638		243.638	8.158		
	D-205	706.0	-2.1	1.5	705.4	-87.0	618.4	59.486	-3.882	-4.557	54.929	3125.00	188.281	243.210		243.210	8.586		
	D-210	700.8	-2.1	2.0	700.7	-87.0	613.7	59.034	-3.977	-4.668	54.366	3129.74	188.564	242.935		242.935	8.861		
	D-155	739.1	-.1	+.5	738.3	-87.0	651.3	62.651	-2.835	-3.445	59.206	3100.90	186.829	246.035		246.035	5.761		
	D-150	745.2	-.2	+.5	745.5	-87.0	658.5	63.343	-2.841	-3.335	60.008	3096.91	186.588	246.596		246.596	5.200		
	D-145	747.2	-.3	+.5	747.4	-87.0	660.4	63.526	-2.746	-3.226	60.300	3060.48	184.642	246.942		246.942	4.854		
	D-140	741.6	-.3	+.5	741.8	-87.0	654.8	62.986	-2.651	-3.112	59.874	3095.02	186.774	246.648		246.648	5.148		
	D-135	755.6	-.6	-.2	754.8	-87.0	667.8	64.238	-2.556	-3.000	61.238	3087.80	186.335	247.573		247.573	4.223		
	D-130	759.7	-.6	-.8	758.3	-87.0	671.3	64.575	-2.462	-2.890	61.685	3087.22	186.005	247.690		247.690	4.106		
	D-125	764.7	-.6	+.2	762.9	-87.0	675.9	65.017	-2.367	-2.778	62.239	3081.64	185.671	247.910		247.910	3.886		
	D-120	772.1	-.6	+.8	772.3	-87.0	685.3	65.921	-2.272	-2.667	63.254	3070.75	185.012	248.016		248.016	3.780		
	D-115	777.0	1.9	-.8	778.1	-87.0	691.1	66.477	-2.178	-2.556	63.921	3069.43	184.933	248.471		248.471	3.325		
	D-110	769.6	1.9	-1.2	770.4	-87.0	683.4	65.738	-2.083	-2.445	63.293	3069.60	184.943	248.256		248.256	3.540		
	D-105	772.6	1.9	+.5	776.0	-87.0	689.0	66.277	-1.988	-2.335	63.944	3064.36	184.627	248.571		248.571	3.225		
	D-100	775.3	1.9	-2.3	774.9	+87.0	687.9	66.171	-1.894	-2.223	63.948	3062.01	184.486	248.434		248.434	3.362		
6-18-63																			
	D-100	781.4	0	0	781.4	+93.5	687.9	66.171	-1.894	-2.223	63.948	3062.01	184.486	248.434		248.434	3.362		
	D-95	789.1	0	-.1	789.0	+93.5	695.5	66.902	-1.799	-2.112	64.790	3052.68	183.923	248.714		248.714	3.082		
	D-70	791.6	0	-.4	791.2	+93.5	697.7	67.114	-1.704	-2.000	65.114	3048.15	183.671	248.785		248.785	3.011		
	D-85	791.4	0	-.6	790.8	+93.5	696.9	67.037	-1.609	-1.888	65.149	3046.09	183.532	248.681		248.681	3.115		
	D-80	792.2	0	-.6	791.6	+93.5	697.5	67.096	-1.515	-1.778	65.318	3040.83	183.240	248.796		248.796	2.988		
	D-75	797.1	0	-1.4	795.7	+93.5	702.2	67.547	-1.420	-1.667	65.880	3038.13	183.050	248.930		248.930	2.854		
	D-70	799.8	0	-.8	799.0	+93.5	704.5	67.769	-1.325	-1.555	66.213	3031.53	182.649	248.862		248.862	2.934		
	D-65	807.5	-3.5	-.1	803.9	+93.5	710.4	68.336	-1.231	-1.445	66.891	3026.73	182.360	249.251		249.251	2.545		
	D-60	809.8	-3.5	-.1	806.2	+93.5	712.7	68.557	-1.136	-1.334	67.223	3020.01	181.955	249.178		249.178	2.620		
	D-55	810.7	-3.5	-.2	807.0	+93.5	713.5	68.634	-1.041	-1.222	67.412	3015.66	181.693	249.105		249.105	2.693		

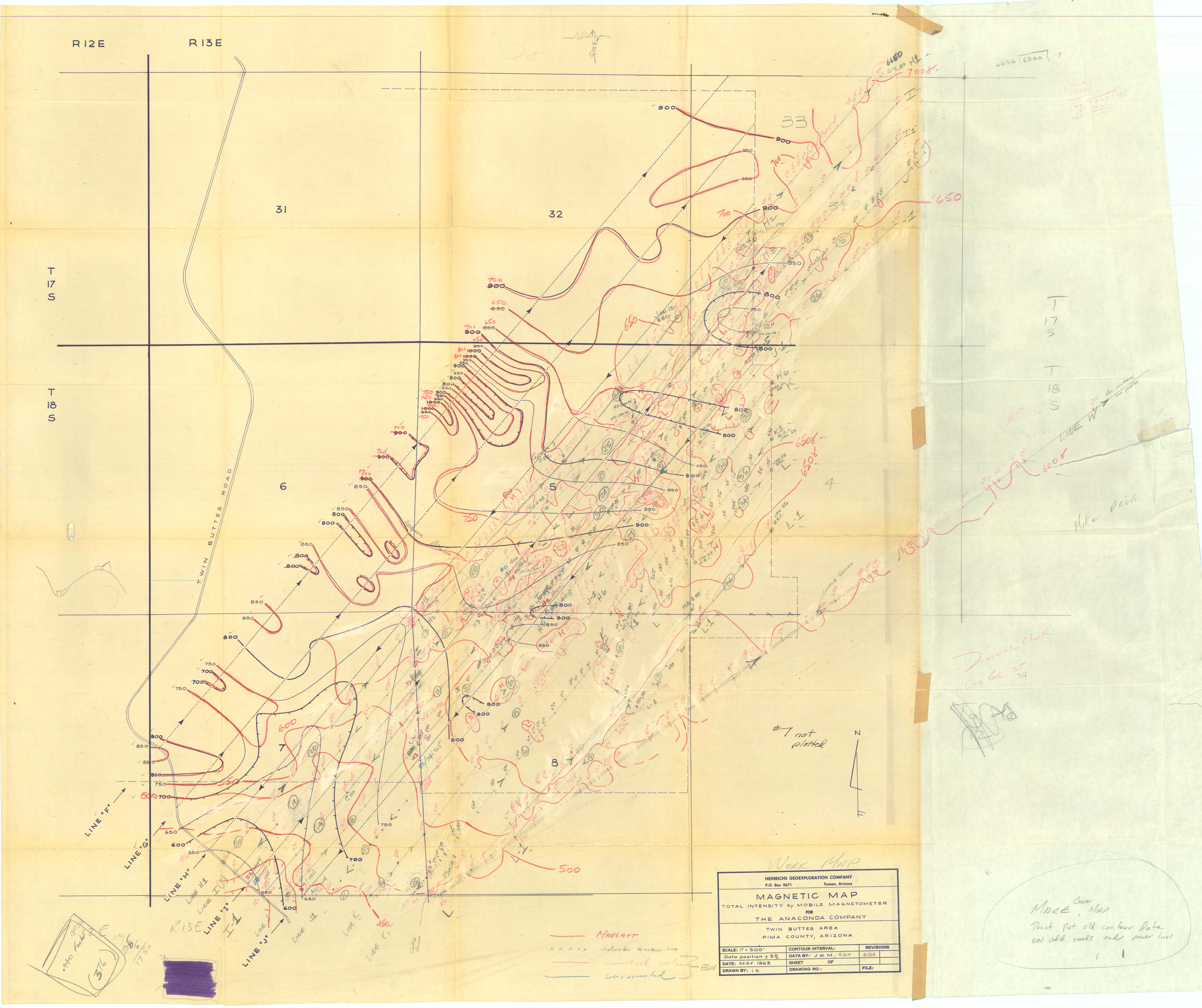


HEINRICHS GEOEXPLORATION COMPANY
P.O. Box 5671 Tucson, Arizona

GRAVITY SURVEY
FOR
THE ANACONDA COMPANY

HELMET PEAK AREA
PIMA COUNTY, ARIZONA

SCALE: 1" = 500'	CONTOUR INTERVAL: 1 MGALS	REVISIONS
UNITS IN MGALS	DATA BY: W. W. C.	
DATE: AUGUST 1963	SHEET 3 OF 4	
DRAWN BY: G.D.P.	DRAWING NO.:	FILE:


R12E
R13E
T 17 S
T 18 S
31
32
33
6
5
7
8
TWIN BUTTES ROAD
LINE "F"
LINE "G"
LINE "H"
LINE "I"
LINE "J"
LINE H1
LINE J1
LINE K
LINE K1
LINE W
Hike Davis
Diurnal Clock
Line Rec. 35 34
#7 not plotted
N
Work Map
HEINRICHS GEOEXPLORATION COMPANY
P.O. Box 5671 Tucson, Arizona
MAGNETIC MAP
TOTAL INTENSITY by MOBILE MAGNETOMETER
FOR
THE ANACONDA COMPANY
TWIN BUTTES AREA
PIMA COUNTY, ARIZONA
SCALE: 1" = 500'
Data position ± 5%
DATE: MAY 1963
DRAWN BY: i.b.
CONTOUR INTERVAL:
DATA BY: J.W.M.; EGH
SHEET OF
DRAWING NO.:
REVISIONS
5/64
FILE:
MARLATT
indicates fence line
corrected value
uncorrected
EGH
MAKE Base MAP
Do not put old contour data ON old roads and power lines

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HEINRICHS GEOEXPLORATION COMPANY
P.O. Box 5671 TUCSON, ARIZONA

GRAVITY COMPUTATIONS — AREA Helmet Peak (refer. pt. L2) — AVERAGE DENSITY = 2.65 gm/cc — LATITUDE CORRECTION = 1.~~356~~ 174 mgal/mile
INSTRUMENT - WORLD-WIDE — FACTOR = 0.096194 mgal/Div. — DATUM PLAN = SEA LEVEL — COMBINED BOUGUER + FREE AIR CORRECTION = 0.06025 mgal/ft

DATE	STATIONS & REMARKS	Reading	Drift Loop.	Drift Line	Reading Correct for Drift	Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Miles N. or S. of Base +N. -S.	Latitude Correction Value	Reading Correct for Latitude	Elevation in feet	Combined Bouguer + free air Corr.	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient Sta. - Sta.	Gravity Values with respect to existing Info.
6-4-63	Louise 2 (North Area)	782.6	0	0	0	-22.6	760.0	73.107		0	70.107	2965.84	178.	251.716	0.035	251.702	0 (-)		
	Line C C-5	769.8	0	0	769.8	-22.6	747.2	71.876	+.0947	-.111	71.765	2985.25	179.861	251.626		251.626	-.170		
	C-10	762.6	-.3	0	762.3	-22.6	739.7	71.165	-.1944	-.222	70.938	2993.37	180.351	251.284		251.284	-.512		
	C-15	755.6	-.3	0	755.3	-22.6	732.7	70.481	-.2944	-.333	70.148	3000.73	180.793	250.941		250.941	-.855		
	C-20	754.5	-.1	-1.4	753.0	-22.6	730.4	70.260	+.3783	-.444	69.815	3008.40	180.954	250.770		250.770	-		
	C-25	747.1	-.3	-1.4	745.4	-22.6	722.8	69.529	+.4735	-.555	68.973	3009.99	181.351	250.325		250.325	-		
	C-30	738.2	-.3	-1.4	736.5	-22.6	713.9	68.673	-.5684	-.666	68.006	3017.70	181.816	249.822		249.822	-		
	C-35	725.7	.1	.1	725.9	-22.6	703.3	67.653	+.6639	-.777	66.876	3026.81	182.365	249.241		249.241	- 2.554		
	C-40	718.5	.5	.1	719.1	-22.6	696.5	66.999	+.7576	-.888	66.110	3033.77	182.785	248.895		248.895	- 2.901		
	C-45	710.7	1.1	.1	711.9	-22.6	689.3	66.306	+.8523	-1.000	65.306	3042.64	183.319	248.625		248.625	- 3.171		
	C-50	704.5	1.5	.1	706.1	-22.6	683.5	65.748	-.9466	-1.111	64.637	3049.96	183.760	248.397		248.397	- 3.399		
	C-55	705.4	0	0	705.4	-22.6	682.8	65.681	-1.0417	-1.222	64.459	3051.89	183.876	248.335		248.335	- 3.461		
	C-60	700.5	0	0	700.5	-22.6	677.9	65.209	-1.1366	-1.333	63.876	3057.55	184.217	248.213		248.213	- 3.583		
	C-65	698.5	.5	0	699.0	-22.6	676.4	65.065	-1.2311	-1.445	63.620	3065.61	184.703	248.323		248.323	- 3.473		
	C-70	693.9	.8	0	694.7	-22.6	672.1	64.653	-1.3255	-1.555	63.098	3072.88	185.144	248.202		248.202	-		
	C-75	691.4	-.2	.8	692.0	-22.6	669.4	64.392	-1.4210	-1.667	62.725	3078.49	185.479	248.146		248.146	- 3.650		
	C-80	688.6	-.5	.8	688.9	-22.6	666.3	64.094	-1.5157	-1.778	62.316	3084.76	185.856	248.172		248.172	- 3.624		
	C-85	690.0	-.8	.8	690.0	-22.6	667.4	64.199	-1.6094	-1.889	62.311	3087.33	186.014	248.325		248.325	- 3.471		
	C-90	688.2	-1.2	.8	688.8	-22.6	666.2	64.084	-1.7044	-2.000	62.084	3092.35	186.314	248.398		248.398	- 3.398		
	C-95	660.1	-.2	-1.6	658.3	-22.6	635.7	64.036	-1.7991	-2.112	61.924	3094.74	186.277	248.201		248.201	- 5.595		
	C-100	684.3	-.2	-1.6	682.5	-22.6	659.9	63.478	-1.8944	-2.223	61.255	3097.82	186.644	247.899		247.899	- 3.897		
	C-105	683.7	-.3	-1.6	681.8	-22.6	659.2	63.411	-1.9893	-2.333	61.078	3100.06	186.959	248.032		248.032	- 3.764		
	C-110	678.7	-.3	-1.6	676.8	-22.6	654.2	62.929	-2.0835	-2.445	60.483	3104.50	187.497	247.891		247.891	-		
6-5-63	Line C cont'd C-115	678.1	0	0	678.1	-22.6	655.5	62.574	-2.1778	-2.556	60.018	3111.82	187.487	247.505		247.505	- 4.249		
	C-120	677.2	0	0	677.2	-22.6	654.6	62.391	-2.2722	-2.667	59.724	3117.49	187.854	247.578		247.578	- 4.218		
	C-125	676.2	0	0	676.4	-22.6	653.6	62.295	-2.3667	-2.778	59.517	3118.84	187.916	247.433		247.433	- 4.363		
	C-130	671.5	-.1	0	671.4	-22.6	648.8	61.833	-2.4612	-2.890	58.943	3125.25	188.290	247.234		247.234	- 4.557		
	C-135	667.5	-.1	-.7	666.8	-22.6	637.2	61.294	-2.5566	-3.000	58.294	3130.44	188.612	246.906		246.906	- 4.885		
	C-140	664.3	-.5	-.7	663.1	-22.6	633.5	60.938	-2.6511	-3.112	57.826	3134.11	188.850	246.656		246.656	- 5.140		
	C-145	660.0	-.1	-.7	659.4	-22.6	629.0	60.506	-2.746	-3.223	57.283	3135.78	189.191	246.214		246.214	- 5.582		
	C-150	657.4	-.3	-.7	656.4	-22.6	626.3	60.246	-2.841	-3.335	56.911	3138.86	189.416	246.027		246.027	- 5.769		
	C-155	654.4	-1.9	-.7	651.8	-22.6	623.2	59.948	-2.935	-3.445	56.503	3143.92	189.721	245.924		245.924	- 5.872		
	C-160	649.0	0	-.3	647.7	-22.6	619.1	58.553	-3.030	-3.557	55.856	3143.08	189.370	245.366		245.366	- 6.430		
	C-165	642.3	0	-.3	641.0	-22.6	612.4	58.909	-3.125	-3.668	55.241	3148.69	189.672	244.913		244.913	- 6.883		
	C-170	636.5	0	-.3	635.2	-22.6	606.6	58.351	-3.219	-3.778	54.572	3152.13	189.915	244.487		244.487	- 7.309		
	C-175	631.2	-.1	-.3	629.8	-22.6	601.2	57.831	-3.314	-3.890	53.941	3154.63	190.066	244.007		244.007	- 7.789		
	C-180	635.1	-.1	-.3	633.7	-22.6	605.1	58.206	-3.409	-4.002	54.204	3150.54	189.820	244.024		244.024	- 7.772		
	C-185	630.0	-.3	-1.5	628.2	-22.6	599.6	57.677	-3.505	-4.112	53.565	3154.14	190.036	243.601		243.601	- 8.195		
	C-190	629.8	-.4	-1.5	627.9	-22.6	599.3	57.649	-3.598	-4.224	53.425	3155.17	190.098	243.523		243.523	- 8.273		
	C-195	626.2	-.4	-1.5	624.3	-22.6	595.7	57.302	-3.693	-4.335	52.967	3157.92	190.258	243.225		243.225	- 8.571		
	C-200	620.9	-.4	-1.5	619.0	-22.6	590.4	56.792	-3.788	-4.447	52.345	3166.13	190.759	243.104		243.104	- 8.692		
	C-205	616.6	-.5	-1.5	614.6	-22.6	586.0	56.369	-3.882	-4.557	51.812	3166.69	190.793	242.605		242.605	- 9.191		
	End Line C C-210	615.5	-.6	-1.5	613.4	-22.6	584.8	56.254	-3.977	-4.668	51.586	3166.18	190.761	242.347	0.024	242.347	- 9.449		

Gravity Computations — Area — Helmet Peak (referred to L2) — Average Density = 2.65 gm/cc — Latitude Correction = 1.174 mgal/mile

Instrument — World-Wide Factor = 0.096194 mgal/Div — Datum Plane = Sea Level — Combined Bouguer+free Air Correction = 0.06025 mgal/Ft.

Date	Station & Remarks	Reading	Drift Loop	Drift Line	Reading Corrected for Drift	Area Net Correction Value	Reading Corrected for Area Net	Reading in mgals	Miles North or South of Base +N −S	Latitude Correction Value	Reading Corrected for Latitude	Elevation in feet	Combined Bouguer+free air Correction	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient Stat→Stat	Gravity Values w/o Existing Information
5-29-63	BM 3477	433.3	0	0	433.3		433.3	41.680				3477.00	209.489	251.180		251.180			
	BM 3477	430.4	2.9	0	433.3		433.3	41.680				3477.00	209.489	251.180		251.180			
	Line #60	456.0	1.0	0	457.2		457.2	43.979				3445.21	207.573	251.552		251.552			
	Line #60	448.9	2.8	0	452.7		452.7	43.599				3445.21	207.573	251.172		251.172			
	BM 3406 (BC tie)	497.2	3.4	0	500.6		500.6	48.156				3406.26	205.227	253.381		253.381			
	BM 3406 (BC tie)	497.0	3.4	.2	500.6		500.6	48.156				3406.26	205.227	253.381		253.381			
	BM 3477	429.9	3.4	.2	433.5		433.5	41.700				3477.00	209.489	251.189		251.189			
	BM 3406 (BC tie)	497.7	1.7	1.1	499.5		499.5	48.048				3406.26	205.227	253.275		253.275			
	Louise 2	757.3	1.7	1.4	759.4		759.4	73.044				2966.66	178.741	251.785		251.785			
	Louise 2	757.5	1.7	1.5	760.1		760.1	73.117				2966.66	178.741	251.858		251.858			
	Louise 2	757.7	1.7	1.6	760.0		760.0	73.107				2966.66	178.741	251.848		251.848			
5-31-63	Louise 2	766.9	0	0	766.9	-5.9	760.0	73.107				2966.66	178.741	251.848		251.848			
	SC 8/17 17/16	627.6	-1	0	627.5	-5.9	621.6	59.744				3141.43	189.271	249.065		249.065			
	SC 8/17 17/16	627.6	-.2	0	627.4	-5.9	621.5	59.734				3141.43	189.271	249.055		249.055			
	BM 3412	402.4	-.3	-1	402.0	-5.9	396.1	38.102											
	BM 3184	559.4	-.3	.2	556.9	-5.9	551.0	53.002				3184.04	189.834	244.840		244.840			
	BM 3431	384.4	-.3	-2	383.9	-5.9	378.0	36.361											
6-5-63	B-105	662.4																	
6-7-63	L-2	798.4	0	0	798.4	-38.4	760.00	73.107	0	0	73.107	2966.66	178.741	251.848		251.848	+ .052		
	C-0	791.1	.2	0	791.3	-38.4	752.9	72.424	0	0	72.424	2976.73	179.347	251.771		251.771	− .025		
	Line B B-55	703.2	0	0	703.2	-38.4	664.8	63.950	1.0417	-1.222	62.728	3080.27	185.586	248.314		248.314	3.482		
	B-60	698.4	.2	0	698.6	-38.4	660.2	63.507	1.136	-1.333	62.174	3085.41	185.895	248.069		248.069	3.727		
	B-65	693.0	.4	0	693.4	-38.4	655.0	63.007	1.231	-1.445	61.562	3091.92	186.276	247.838		247.838	3.958		
	B-70	687.7	.7	0	688.4	-38.4	652.0	62.713	1.325	-1.555	61.163	3098.24	186.668	247.831		247.831	3.965		
	B-75	687.3	.8	0	688.1	-38.4	649.7	62.497	1.420	-1.725	60.772	3104.60	187.052	247.824		247.824	3.972		
	B-80	686.1	1.0	0	687.1	-38.4	648.8	62.407	1.515	-1.778	60.629	3110.37	187.399	248.028		248.028	3.768		
	B-85	681.6	.1	1.4	683.1	-38.4	644.8	62.026	1.609	-1.888	60.138	3119.15	187.928	248.056		248.056	3.740		
	B-90	681.0	.1	1.4	682.5	-38.4	644.1	61.958	1.704	-2.000	59.958	3123.23	188.174	248.132		248.132	3.664		
	B-95	675.4	.1	1.4	676.9	-38.4	638.5	61.419	1.799	-2.112	59.307	3129.02	188.523	247.830		247.830	3.966		
	B-100	672.8	.1	1.4	674.3	-38.4	635.9	61.180	1.894	-2.223	58.957	3134.19	188.834	247.791		247.791	4.005		
	End ½ Line B B-105	674.9	.2	1.4	673.5	-38.4	635.1	61.092	1.988	-2.333	58.760	3136.76	188.989	247.749		247.749	4.047		
	Line A A-105	655.6	0	1.6	653.2	-38.4	614.8	59.140	1.988	-2.333	56.807	3166.19	190.762	247.569		247.569	4.227		
	A-100	653.7	0	1.6	655.3	-38.4	616.9	59.342	1.894	-2.223	57.119	3165.12	190.698	247.817		247.817	3.979		
	A-95	659.5	.1	1.6	661.2	-38.4	622.8	59.909	1.799	-2.112	57.796	3158.31	190.292	248.079		248.079	3.717		
	A-90	666.7	.2	1.6	668.3	-38.4	629.9	60.594	1.704	-2.000	58.298	3153.08	189.973	247.973		247.973	3.823		
	A-85	663.6	-.3	2.1	666.0	-38.4	627.6	60.373	1.609	-1.888	58.485	3148.43	189.692	248.367		248.367	3.429		
	A-80	669.4	-.4	2.7	670.7	-38.4	632.3	60.823	1.515	-1.778	59.045	3148.49	189.407	248.462		248.462	3.334		
	A-75	672.5	-.8	2.7	674.4	-38.4	636.0	61.179	1.420	-1.725	59.454	3137.22	189.017	248.471		248.471			
	A-70	675.4	.1	.8	677.8	-38.4	641.4	61.698	1.325	-1.555	60.144	3126.21	188.354	248.498		248.498			
	A-65	675.3	.2	.8	676.3	-38.4	641.9	61.747	1.231	-1.445	60.302	3124.52	188.252	248.554		248.554			
	A-60	668.1	.3	.8	669.2	-38.4	630.8	60.683	1.136	-1.333	61.270	3115.47	187.707	248.977		248.977	2.815		
	A-55	673.6	.3	.8	674.1	-38.4	635.7	63.074	1.041	-1.222	61.852	3110.54	187.410	249.362		249.362	2.434		

2/

Gravity Computations Area - Helmet Peak Average Density = 2.65 gm/cc Latitude Correction = 1.174 mgal/mile

Instrument - Worden-Wide Factor = 0.096194 mgal/Div Datum Plan = Sea Level Combined Bouguer + free Air Correction = 0.06025 mgal/ft.

Date	Stations & Remarks	Reading	Drift Loop	Drift Line	Reading Correct for Drift	Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Meter Nor Set Base +N -S	Latitude Correction Value	Reading Correct for Latitude	Elevation in feet	Combined Bouguer + Free Air	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient Sta-Sta	Gravity Values w/reap To next sta
6-20-63																			
	F-145	840.0	-.7	4.4	843.7	-122.0	721.7	69.423	-2.746	-3.223	66.200	3015.93	181.709	247.509		247.904	3.887		
	F-150	834.8	.8	0	840.6	-122.0	718.6	69.125	-2.841	-3.335	65.790	3018.38	181.857	247.647		247.647	4.146		
	F-155	836.0	.8	.4	837.2	-122.0	715.2	68.797	-2.935	-3.445	65.352	3021.16	182.024	247.376		247.376	4.420		
	F-160	835.8	.8	1	837.6	-122.0	715.6	68.836	-3.030	-3.557	65.279	3022.24	182.089	247.368		247.368	4.428		
	F-165	830.5	.8	1.5	838.8	-122.0	716.8	68.951	-3.125	-3.668	65.283	3023.45	182.162	247.447		247.448	4.349		
	F-170	839.5	.8	1.8	842.1	-122.0	720.1	69.269	-3.219	-3.779	65.490	3022.43	182.101	247.541		247.541	4.207		
	F-175	836.5	.8	2.0	839.3	-122.0	717.3	68.999	-3.314	-3.890	65.109	3025.05	182.259	247.368		247.368	4.428		
	F-180	832.7	-.3	.2	832.6	-122.0	710.6	68.355	-3.409	-4.002	64.353	3030.37	182.579	246.932		246.732	4.864		
	F-185	831.9	-.3	.3	831.9	-122.0	709.9	68.288	-3.503	-4.112	64.176	30 34.54	182.831	247.007		247.007	4.789		
	F-190	828.5	-.3	.4	828.6	-122.0	706.6	67.970	-3.598	-4.224	63.746	3038.51	183.090	246.816		246.816	4.980		
	F-195	826.2	-.3	.5	826.3	-122.0	704.3	67.749	-3.693	-4.337	63.424	3039.77	183.166	246.570		246.570	5.226		
	F-200	800.3	-.3	-.5	805.5	-122.0	683.5	65.748	-3.788	-4.447	61.301	3073.20	185.180	246.481		246.481	5.315		
	F-205	814.9	-.3	-.5	813.7	-122.0	691.7	66.537	-3.882	-4.557	61.980	3036.10	184.130	246.110		246.110	5.686		
	F-210	806.4	-.3	+1.1	805.0	-122.0	683.0	65.700	-3.977	-4.668	61.032	3044.65	183.640	244.672		244.672	7.324		

-End Helmet Pk Area-

6/

Gravity Computation — Area — Helmet Pk. — Area Control — World Wide

Factor = 0.096194 mgal/Div

Average Density = 2.65 gm/cc
Datum Plan = Sea Level

Latitude Correction = 1.174 mgal/mile
Combined Bouguer & Free Air Correction = 0.06025 mgal/Ft.

Date	Stations & Remarks	Dial Reading	Drift	Reading Corrected for Drift	Area Net Correction Value	Reading Corrected for Area Net	Reading in mgals	Miles N. or S. of Base +N −S	Latitude Correction Value	Reading Corrected for Latitude	Elevation in feet	Combined Bouguer & Free Air Corr.	Bouguer Value in mgals	Terrain Corrections mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient Sta. – Sta.	Gravity Values w/respect to existing Info
6-17-63	3/17	708.6	0 0	708.6	−87.0	621.6	59.794	0	0	59.794	3141.12	189.252	249.046		249.046	2.750		
	D-160	734.5	0 0	734.5	−87.0	647.5	62.285	−3.030	−3.567	58.718	3102.46	186.923	245.641		245.641	6.145		
	D-165	727.7	0 −.1	727.6	−87.0	640.6	61.621	−3.125	−3.668	57.953	3098.34	186.677	244.630		244.630	6.366		
	D-170	729.4	0 −.2	729.2	−87.0	642.2	61.823	−3.219	−3.779	58.044	3106.74	187.181	245.225		245.225	6.571		
	D-175	727.4	0 −.3	727.1	−87.0	640.1	61.573	−3.314	−3.890	57.683	3104.72	187.059	244.742		244.742	7.054		
	D-180	721.8	0 −.4	721.4	−87.0	634.4	61.025	−3.409	−4.002	57.023	3112.63	187.535	244.558		244.558	7.238		
	D-185	720.5	−2.1 +1.8	720.2	−87.0	633.2	60.911	−3.503	−4.112	56.799	3115.33	187.698	244.397		244.397	7.397		
	D-190	724.1	−2.1 +1.9	719.9	−87.0	632.9	60.881	−3.598	−4.224	56.657	3111.62	187.475	244.132		244.132	7.664		
	D-195	718.4	−2.1 +1.1	717.4	−87.0	630.4	60.640	−3.693	−4.335	56.305	3114.84	187.620	243.925		243.925	7.871		
	D-200	713.4	−2.1 +1.2	712.5	−87.0	625.5	60.169	−3.788	−4.447	55.722	3117.28	187.816	243.538		243.538	8.258		
	D-205	706.0	−2.1 +1.5	705.4	−87.0	618.4	59.486	−3.882	−4.557	54.929	3125.00	188.281	243.210		243.210	8.586		
	D-210	700.8	−2.1 +2.0	700.7	−87.0	613.7	59.034	−3.977	−4.668	54.366	3124.74	188.265	242.935		242.935	8.861		
	D-155	739.1	−1.1 +1.5	738.3	−87.0	651.3	62.651	−2.835	−3.345	59.306	3100.90	186.829	246.035		246.035	5.761		
	D-150	745.2	−2 +1.5	745.5	−87.0	658.5	63.343	−2.841	−3.334	60.008	3096.91	186.588	246.596		246.596	5.200		
	D-145	747.2	−1.3 +1.5	747.4	−87.0	660.4	63.526	−2.746	−3.226	60.300	3060.48	184.392	244.692		244.692	4.934		
	D-140	746.6	−.3 +1.5	746.8	−87.0	659.8	63.468	−2.651	−3.112	60.357	3095.02	186.474	246.831		246.831	4.965		
	D-135	755.6	−.6 +.2	754.8	−87.0	667.8	64.238	−2.556	−3.000	61.238	3081.80	186.035	247.277		247.277	4.519		
	D-130	754.7	−.6 −.8	753.3	−87.0	671.3	64.575	−2.462	−2.890	61.685	3087.22	186.005	247.690		247.690	4.106		
	D-125	764.7	−.6 +.2	762.9	−87.0	675.9	65.017	−2.367	−2.778	62.239	3081.69	185.671	247.910		247.910	3.886		
	D-120	772.1	−.6 −.18	769.7	−87.0	682.7	65.671	−2.272	−2.667	63.004	3070.75	185.012	248.016		248.016	3.780		
	D-115	779.0	1.9 −.6	774.1	−87.0	687.1	66.094	−2.178	−2.556	63.538	3069.43	184.933	248.471		248.471	3.325		
	D-110	769.6	1.9 −1.2	770.6	−87.0	683.6	65.758	−2.083	−2.445	63.313	3049.60	184.743	248.056		248.056	3.540		
	D-105	772.6	1.9 −1.5	776.0	−87.0	689.0	66.277	−1.988	−2.333	63.944	3064.36	184.627	248.571		248.571	3.235		
	D-100	775.3	1.9 −2.3	774.9	−87.0	687.9	66.171	−1.894	−2.223	63.948	3062.01	184.486	248.434		248.434	3.372		
6-18-63																		
	D-100	781.4	0 0	781.4	−93.5	687.9	66.171	−1.894	−2.223	63.948	3062.01	184.486	248.434		248.434	3.372		
	D-95	789.6	0 −.1	789.5	−93.5	695.5	66.902	−1.799	−2.112	64.790	3052.68	183.925	248.715		248.715	3.091		
	D-70	791.6	0 −.4	791.2	−93.5	697.7	67.114	−1.704	−2.000	65.114	3048.15	183.651	248.765		248.765	3.041		
	D-85	791.4	0 −1.0	790.4	−93.5	696.9	67.037	−1.609	−1.888	65.149	3046.15	183.532	248.681		248.681	3.115		
	D-80	792.2	0 −1.2	791.0	−93.5	702.5	67.576	−1.515	−1.779	65.798	3040.83	183.240	248.806		248.806	2.988		
	D-75	797.1	0 −1.4	795.7	−93.5	702.2	67.547	−1.420	−1.667	65.880	3038.13	183.076	248.928		248.928	2.868		
	D-70	799.8	0 −1.8	798.0	−93.5	704.5	67.768	−1.325	−1.557	66.211	3031.53	182.669	248.862		248.862	2.934		
	D-65	802.5	−3.5 −.1	803.9	−93.5	710.4	68.336	−1.231	−1.445	66.891	3026.73	182.360	249.251		249.251	2.547		
	D-60	809.8	−3.5 −.1	806.2	−93.5	712.7	68.557	−1.136	−1.336	67.221	3020.01	181.955	249.176		249.176	2.622		
	D-55	810.7	−3.5 −1.2	807.0	−93.5	713.5	68.634	−1.042	−1.224	67.410	3017.66	181.813	249.105		249.105	2.693		

3/

45-568 5118

Gravity Computations Area Helmet Peak Average Density = 2.65 gm/cc Latitude Correction = 1.174 mgal/mile
Instrument - World Wide Factor = 0.096194 mgal/Div Datum Plan = Sea Level Combined Bouguer & Free Air Correction = 0.06025 mgal/ft.

Date	Station & Remarks	Reading	Drift 2000 / hour	Reading Corrected for Drift	Area Net Correction Value	Reading Corrected for Area Net	Reading in mgals	Miles North or South of Base +N -S	Latitude Correction Value	Reading Corrected for Latitude	Elevation in feet	Combined Bouguer & Free Air	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals (-)	Gradient Sta - Sta.	Gravity Values w/new Datum into
6-19-63	E-145	800.6	0 .8	801.4	-113.1	688.3	66.210	-2.746	-3.223	62.987	3056.22	184.132	247.314			4.488		
	E-150	801.8	0 1.2	803.0	-113.1	689.9	66.344	-2.841	-3.334	63.029	3056.93	184.180	247.209			4.587		
	E-155	799.6	0 1.5	801.1	-113.1	688.0	66.181	-2.935	-3.445	62.736	3056.99	184.183	246.919			4.877		
	E-160	794.9	1.2 +.2	795.9	-113.1	682.8	65.681	-3.030	-3.557	62.124	3061.14	184.433	246.557			5.239		
	E-165	793.5	1.2 -.4	794.3	-113.1	681.2	65.527	-3.126	-3.668	61.859	3062.44	184.512	246.371			5.427		
	E-170	792.1	1.2 -.5	792.8	-113.1	679.7	65.383	-3.219	-3.779	61.604	3062.44	184.512	246.116			5.680		
	E-175	793.3	1.2 -.6	793.9	-113.1	680.8	65.488	-3.314	-3.890	61.598	3062.90	184.5333	246.131			5.665		
	E-180	790.0	1.2 -1.0	790.2	-113.1	677.1	65.132	-3.409	-4.002	61.130	3067.46	184.814	245.944			5.852		
	E-185	788.6	-1.1 1.2	788.7	-113.1	675.6	64.988	-3.503	-4.112	60.876	3068.26	184.863	245.782			6.056		
	E-190	784.3	.4 -.2	784.5	-113.1	671.4	64.584	-3.599	-4.224	60.360	3075.09	185.274	245.634			6.162		
	E-195	784.9	.4 -.2	785.1	-113.1	672.0	64.642	-3.693	-4.335	60.307	3077.22	185.408	245.715			6.081		
	E-200	784.1	.4 -.3	784.2	-113.1	671.1	64.555	-3.788	-4.447	60.108	3080.14	185.578	245.686			6.110		
	E-205	787.2	.4 -.4	787.2	-113.1	674.1	64.844	-3.882	-4.557	60.287	3082.10	185.696	245.983			5.813		
	E-210	788.2	.4 -.5	788.1	-113.1	675.0	64.930	-3.977	-4.668	60.262	3087.12	185.998	246.260			5.536		
6-20-63																		
	L-2	882.0	0 0	882.0	-122.0	760.0	73.107	0	0	73.107	2965.84	178.622	251.716			0		
	F-55	887.2	0 0	887.2	-122.0	765.2	73.607	-1.0447	1.2222	+72.385	2942.07	177.259	249.644			2.152		
	F-60	882.9	0 -.1	882.8	-122.0	760.8	73.184	-1.139	1.333	-71.851	2946.33	177.516	249.367			2.429		
	F-65	880.5	0 -.2	880.3	-122.0	758.3	72.943	-1.231	1.445	-71.498	2950.54	177.770	249.068			2.728		
	F-70	875.8	0 -.3	875.5	-122.0	753.5	72.482	-1.326	1.555	-70.927	2957.24	178.173	248.100			2.696		
	F-75	873.1	0 -.3	872.8	-122.0	750.8	72.222	-1.420	1.666	-70.447	2964.40	178.605	248.188			2.638		
	F-80	870.4	0 -.4	870.0	-122.0	748.0	71.953	-1.515	1.778	-70.175	2966.31	178.720	248.855			2.401		
	F-85	869.4	0 -.5	868.9	-122.0	746.9	71.847	-1.609	1.888	-69.959	2972.08	179.067	249.026			2.770		
	F-90	866.0	-.3 3.8	869.5	-122.0	747.5	71.905	-1.704	2.000	+69.905	2973.31	179.141	249.046			2.750		
	F-95	860.2	-.5 3.8	863.5	-122.0	741.5	71.327	-1.799	2.112	+69.215	2982.17	179.675	248.850			2.906		
	F-100	860.8	-.6 3.8	864.0	-122.0	742.0	71.375	-1.894	2.223	+69.152	2982.37	179.687	248.839			2.957		
	F-105	858.0	-.7 3.8	861.1	-122.0	739.1	71.096	-1.988	2.333	+68.763	2988.64	179.945	248.708			3.088		
	F-110	857.1	-.8 3.8	860.1	-122.0	738.1	71.000	-2.083	2.444	-68.556	2988.16	180.036	248.591			3.205		
	F-115	855.5	1.0 3.8	860.3	-122.0	738.3	71.020	-2.179	2.556	+68.464	2994.51	180.419	248.883			2.913		
	F-120	852.6	-.2 +4.4	856.8	-122.0	734.8	70.683	-2.272	2.667	-68.016	2998.67	180.669	248.685			3.111		
	F-125	847.1	-.3 +4.4	851.2	-122.0	729.2	70.144	-2.367	2.778	-67.366	3001.69	180.851	248.247			3.579		
	F-130	844.9	-.4 +4.4	848.9	-122.0	726.9	69.923	-2.462	2.890	-67.033	3007.17	181.181	248.214			3.582		
	F-135	841.9	-.5 +4.4	845.9	-122.0	723.8	69.625	-2.556	3.000	-66.625	3010.70	181.396	248.028			3.825		
	F-140	839.6	-.6 +4.4	843.4	-122.0	721.4	69.394	-2.651	3.112	-66.282	3014.65	181.632	247.914			3.882		

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Gravity Computations — Area - Helmet Peak — Instrument - World Wide — Factor = 0.096194 mgal/Div — Datum Plan = Sea Level — Average Density = 2.65 gm/cc — Latitude Correction = 1.174 mgal/mile — Combined Bouguer + Free Air Correction = 0.06045 mgal/ft.

Date	Station & Remarks	Reading	Drift Loop	Drift Line	Reading Correct for Drift	Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Miles N. or S. of Base +N −S	Latitude Correction Value	Reading Correct for Latitude	Elevation in feet	Combined Bouguer + Free Air	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals (+)	Gradient Sta. to Sta.	Gravity Values w/resp to existing Info
6-18-63	E-55	837.0	-3.5	-3	833.2	-93.5	739.7	71.154	-1.041	-1.222	69.932	2978.24	179.438	249.370		249.370	2.426		
	E-60	835.1	-3.5	-4	831.2	-93.5	737.7	70.962	-1.136	-1.333	69.629	2981.18	179.616	249.245		249.245	2.551		
	E-65	832.6	-3.8	-2	828.6	-93.5	735.1	70.712	-1.231	-1.445	69.267	2985.46	179.873	249.140		249.140	2.656		
	E-70	829.8	-3.8	-3	825.7	-93.5	732.2	70.433	-1.325	-1.555	68.878	2984.04	180.089	248.967		248.967	2.829		
	E-75	826.1	-3.8	-4	822.1	-93.5	728.4	70.067	-1.420	-1.664	68.3998	2975.41	180.473	248.872		248.872	2.924		
	E-80	817.1	-3.8	-7	813.6	-93.5	719.1	69.173	-1.515	-1.778	67.395	3004.69	181.032	248.427		248.427	3.369		
	E-85	815.4	-3.8	-11	810.5	-93.5	717.0	68.971	-1.609	-1.888	67.083	3010.00	181.352	248.434		248.434	3.362		
	E-90	815.0	0	-6.5	808.5	-93.5	715.0	68.778	-1.704	-2.000	66.778	3012.06	181.476	248.254		248.254	3.542		
	E-95	813.4	0	-5.5	808.9	-93.5	715.4	68.817	-1.799	-2.112	66.705	3014.79	181.641	248.346		248.346	3.450		
	E-100	811.8	0	-6.5	805.3	-93.5	711.8	68.470	-1.894	-2.223	66.247	3021.41	182.039	248.286		248.286	3.510		
	E-105	809.6	-.1	-6.5	803.0	-93.5	709.5	68.249	-1.988	-2.333	65.916	3026.58	182.351	248.267		248.267	3.529		
	E-110	808.0	-.1	-6.5	801.4	-93.5	707.9	68.095	-2.083	-2.445	65.650	3027.66	182.417	248.067		248.067	3.729		
	E-115	809.4	0	-4.3	805.1	-93.5	711.6	68.451	-2.178	-2.556	65.895	3032.77	182.724	248.619		248.619	3.177		
	E-120	800.2	0	-4.3	795.9	-93.5	702.4	67.566	-2.272	-2.667	64.899	3039.93	183.155	248.054		248.054	3.742		
	E-125	798.0	0	-4.3	793.7	-93.5	700.2	67.355	-2.367	-2.778	64.577	3044.16	183.410	247.987		247.987	3.809		
	E-130	794.1	.1	-4.3	789.9	-93.5	696.4	66.986	-2.462	-2.890	64.100	3047.69	183.623	247.723		247.723	4.073		
6-19-63	K-2	874.9	0	0	874.9	-114.9	760.0	73.107	0	0	73.107	2963.84	178.[illegible]	251.714		251.714	0		
	E-0	714.8	0	0	714.8	-114.9	599.9	76.945	0	0	76.945	2911.92	175.413	252.358		252.358	+0.592		
	E-50	852.9	0	0	852.9	-114.9	743.0	71.472	-.946	-1.111	70.361	2974.46	179.149	249.510		249.510	2.436		
	E-45	865.5	0	-.1	865.4	-114.9	750.5	72.193	-.852	-1.000	71.193	2964.73	178.624	249.817		249.817	1.729		
	E-40	873.3	0	+.2	873.1	-114.9	758.2	72.934	-.757	-0.889	72.045	2958.00	178.279	250.324		250.324	1.472		
	E-35	874.6	0	+.4	874.2	-114.9	759.3	73.040	-.663	-0.777	72.263	2958.04	178.221	250.484		250.484	1.312		
	E-30	877.4	0	+.6	876.8	-114.9	761.9	73.290	-.568	-0.666	72.624	2953.70	177.972	250.596		250.596	1.200		
	E-25	883.7	0	-.8	882.9	-114.9	768.0	73.876	-.474	-0.555	73.321	2945.06	177.434	250.760		250.760	1.038		
	E-20	890.5	-3.2	0	887.3	-114.9	772.4	74.300	-.379	-0.444	73.856	2940.64	177.173	251.029		251.029	0.767		
	E-15	898.1	-3.2	0	894.9	-114.9	780.0	75.034	-.284	-0.333	74.698	2932.83	176.703	251.401		251.401	0.395		
	E-10	903.6	-3.2	0	900.4	-114.9	785.5	75.560	-.189	-0.222	75.338	2925.32	176.250	251.588		251.588	0.208		
	E-5	908.0	-3.2	+.1	904.5	-114.9	789.6	75.949	-.094	-0.111	75.838	2921.28	176.007	251.889		251.889	+0.093		
	E-130	809.5	0	0	809.5	-114.9	696.4	66.989	-2.402	-2.890	64.099	3047.69	183.618	247.707		247.707	4.024		
	E-135	806.1	0	.5	806.6	-114.9	693.5	66.710	-2.556	-3.00	63.710	3054.N	183.889	247.599		247.599	4.132		
	E-140	801.7	0	.6	802.3	-114.9	689.2	66.296	-2.651	-3.112	63.184	3056.16	184.133	247.317		247.317	4.414		

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Gravity Computations — Area — Average Density = 2.65 gm/cc — Latitude Correction = 1.174 mgal/mile

Instrument - World-Wide — Factor = 0.096194 mgal/Div — Datum Plan = Sea Level — Combined Bouguer + Free Air Correction = 0.06025 mgal/ft

Date	Stations & Remarks	Reading	Drift Loop	Drift Line	Reading Correct for Drift	Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Miles N. or S. of Base +N -S	Latitude Correction Value	Reading Correct for Latitude	Elevation in feet	Combined Bouguer + free air Corr.	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient Sta. - Sta.	Gravity Value with respect to existing Inter.
6-11-63	Line A																(-)		
	A -105	672.1	0	0	672.1	- 57.3	614.8	59.140	- 1.984	- 2.330	56.887	3166.19	190.765	247.580		247.579	- 4.226		
	A -110	665.9	-.9	0	664.9	- 57.3	607.6	58.447	- 2.083	- 2.445	56.002	3171.99	191.112	247.114		247.114	- 4.682		
	A -115	658.6	-1.5	0	657.1	- 57.3	599.8	57.697	- 2.178	- 2.556	55.141	3179.26	191.550	246.691		246.691	- 5.105		
	A -120	656.9	-2.	0	654.9	- 57.3	597.6	57.485	- 2.272	- 2.667	54.818	3177.73	191.516	246.334		246.334	- 5.462		
	A -125	646.6	-.2	-.6	645.8	- 57.3	588.5	56.600	- 2.367	- 2.778	53.832	3198.64	192.115	245.947		245.947	- 5.849		
	A -130	650.0	-.2	-.6	649.2	- 57.3	591.9	56.937	- 2.462	- 2.890	54.047	3189.55	192.194	246.241		246.241	- 5.555		
	A -135	643.0	-.3	-.6	642.1	- 57.3	584.8	56.254	- 2.556	- 3.000	53.254	3197.85	192.670	245.924		245.924	- 5.872		
	A -140	643.3	-.3	-.6	642.4	- 57.3	585.1	56.293	- 2.65	- 3.112	53.181	3200.34	192.820	245.991		245.991	- 5.805		
	A -145	645.9	0	.12	647.1	- 57.3	589.8	56.755	- 2.744	- 3.223	53.532	3197.49	192.647	246.179		246.179	- 5.617		
	A -150	638.4	0	.12	639.6	- 57.3	582.3	56.043	- 2.841	- 3.335	52.708	3199.12	192.743	245.451		245.451	- 6.345		
	A -155	630.4	0	.12	631.6	- 57.3	574.3	55.244	- 2.935	- 3.445	51.799	3204.50	193.072	244.871		244.871	- 6.925		
	A -160	626.1	+.5	.10	627.6	- 57.3	570.3	54.859	- 3.030	- 3.557	51.302	3210.46	193.460	244.762		244.762	- 7.034		
	Line B																		
	B - 160	652.4	1.3	.40	654.7	- 57.3	597.4	57.466	- 3.030	- 3.557	53.909	3176.04	191.356	245.261		245.261	- 6.535		
	B - 155	660.3	0	.18	661.1	- 57.3	603.8	58.082	- 2.935	- 3.445	54.636	3171.8	191.063	245.699		245.699	- 6.097		
	B - 150	664.1	.7	.18	665.6	- 57.3	608.3	58.515	- 2.841	- 3.335	55.180	3167.24	190.836	246.016		246.016	- 5.780		
	B - 145	669.5	1.5	.18	671.8	- 57.3	614.5	59.111	- 2.746	- 3.223	55.888	3163.03	190.572	246.460		246.460	- 5.336		
	B - 140	674.1	2.2	.18	677.1	- 57.3	619.8	59.621	- 2.651	- 3.112	56.509	3164.35	190.652	247.161		247.161	- 4.635		
	B - 135	673.3	2.2	.18	676.8	- 57.3	619.5	59.592	- 2.556	- 3.000	56.592	3161.43	190.476	247.068		247.068	- 4.728		
	B - 130	676.8	0	.18	677.6	- 57.3	620.3	59.669	- 2.460	- 2.890	56.779	3155.87	190.141	246.920		246.920	- 4.876		
	B - 125	686.4	-.3	.18	685.9	- 57.3	628.6	60.467	- 2.367	- 2.778	57.689	3148.59	189.702	247.391		247.391	- 4.405		
	B - 120	686.6	-.5	.18	686.9	- 57.3	629.6	60.563	- 2.272	- 2.667	57.896	3148.64	189.705	247.601		247.601	- 4.195		
	B - 115	687.8	-.6	.18	688.0	- 57.3	630.7	60.669	- 2.176	- 2.556	58.113	3146.24	189.566	247.679		247.679	- 4.122		
	B - 110	692.2	-.9	.18	692.1	- 57.3	634.8	61.063	- 2.083	- 2.445	58.618	3136.68	188.985	247.603		247.603	- 4.198		

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1.1747

Gravity Computations — Area — Average Density = 2.65 gm/cc — Latitude Correction = ~~1.35~~ mgal/mile

Instrument - World-Wide — Factor = 0.096194 mgal/Div — Datum Plan = Sea Level — Combined Bouguer + Free Air Correction = 0.06025 mgal/ft

Date	Stations & Remarks	Reading	Drift Loop	Drift Line	Reading Correct for Drift	Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Miles N. or S. of Base +N -S	Latitude Correction Value	Reading correct for Latitude	Elevation in feet	Combined Bouguer + free air Corr.	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient Sta. - Sta.	Gravity Value with respect to existing Info.
6-11-63	Line A																		
	A -105	672.1	0	0	672.1	- 57.3	614.8	59.140	- 2.47	- 2.851	56.289	3166.19	190.7652	247.054		247.054	- 4.749		
	A -110	665.9	-1.9	0	664.4	- 57.3	607.6	58.447	- 2.4	- 2.987	55.460	3171.99	191.1124	246.572		246.572	- 5.231		
	A -115	658.6	-1.5	0	657.1	- 57.3	599.8	57.697	- 2.4	- 3.123	54.574	3179.26	191.550	246.124		246.124	- 5.679		
	A -120	656.9	-2	0	654.9	- 57.3	597.6	57.485	- 2.4	- 3.259	54.226	3178.12	191.518	245.744		245.744	- 6.059		
	A -125	646.6	-2	-.6	645.0	- 57.3	588.3	56.589	- 2.5	- 3.395	53.194	3189.64	192.115	245.309		245.309	- 6.493		
	A -130	650.0	-2	-.6	649.2	- 57.3	592.1	56.957	- 2.6	- 3.530	53.427	3189.56	192.194	245.621		245.621	- 6.181		
	A -135	643.5	-1.3	-.6	642.1	- 57.3	584.8	56.254	- 2.7	- 3.666	52.588	3197.85	192.670	245.258		245.258	- 6.544		
	A -140	643.3	-1.3	-1.6	642.4	- 57.3	585.1	56.283	- 2.8	- 3.802	52.481	3200.34	192.820	245.301		245.301	- 6.501		
	A -145	645.9	0	1.2	647.1	- 57.3	589.8	56.735	- 2.9	- 3.938	52.797	3192.49	192.347	245.144		245.144	- 6.658		
	A -150	638.4	0	1.2	639.6	- 57.3	582.3	56.013	- 3.0	- 4.074	51.939	3199.12	192.746	244.685		244.685	- 7.117		
	A -155	630.4	0	1.2	631.6	- 57.3	574.3	55.244	- 3.1	- 4.209	51.035	3209.50	193.372	244.407		244.407	- 7.395		
	A -160	626.1	-1.5	1.0	627.6	- 57.3	570.3	54.899	- 3.2	- 4.345	50.554	3212.96	193.460	244.014		244.014	- 7.788		
	Line B																		
	B - 160	652.4	1.8	1.0	654.7	- 57.3	597.4	57.466	- 3.2	- 4.345	53.121	3176.04	191.356	244.477		244.477	- 7.325		
	B - 155	660.3	0	1.8	662.1	- 57.3	604.8	58.081	- 3.1	- 4.209	53.872	3171.18	191.063	244.935		244.935	- 6.867		
	B - 150	664.1	.7	1.8	666.6	- 57.3	608.3	58.414	- 3.0	- 4.074	54.340	3167.24	190.826	245.166		245.166	- 6.636		
	B - 145	668.5	1.6	1.8	671.8	- 57.3	614.5	59.111	- 2.9	- 3.938	55.173	3163.03	190.572	245.745		245.745	- 6.057		
	B - 140	674.1	2.2	1.8	677.1	- 57.3	619.8	59.621	- 2.8	- 3.802	55.819	3164.35	190.652	246.471		246.471	- 5.331		
	B - 135	673.8	2.2	1.8	676.8	- 57.3	619.5	59.592	- 2.7	- 3.666	55.926	3161.43	190.476	246.402		246.402	- 5.400		
	B - 130	676.8	0	1.8	677.6	- 57.3	620.3	59.669	- 2.6	- 3.530	56.139	3155.87	190.141	246.280		246.280	- 5.522		
	B - 125	685.4	-1.3	1.8	685.9	- 57.3	628.6	60.467	- 2.5	- 3.395	57.072	3148.39	189.702	246.774		246.774	- 5.028		
	B - 120	686.6	-1.5	1.8	686.9	- 57.3	629.6	60.563	- 2.4	- 3.259	57.304	3148.64	189.705	247.009		247.009	- 4.793		
	B - 115	687.8	-1.6	1.8	688.0	- 57.3	630.7	60.669	- 2.3	- 3.123	57.546	3146.24	189.560	247.106		247.106	- 4.696		
	B - 110	692.2	-1.9	1.8	692.1	- 57.3	634.8	61.063	- 2.2	- 2.987	58.076	3136.48	188.964	247.040		247.040	- 4.762		

Gravity Computations — Area - Helmet Peaks — Instrument - Worth-Wide — Factor = 0.096194 mgal/Div — Average Density = 2.65 gm/cc — Datum Plan = Sea Level — Latitude Correction = 1.174 mgal/mile — Combined Bouguer + free Air Correction = 0.06025 mgal/ft.

Date	Stations & Remarks	Reading	Drift Loop	Drift Line	Reading Correct for Drift	Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Miles Nor S of Base +N -S	Latitude Correction Value	Reading Correct for Latitude	Elevation in feet	Combined Bouguer + free Air	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient Sta - Sta	Gravity Values w/resp To exist info
6-20-63																			
	F-145	840.0	-.7	4.4	843.7	-122.0	721.7	69.423	-2.746	-3.223	66.200	3015.93	181.709	247.909		247.909	3.887		
	F-150	839.8	.8	0	840.6	-122.0	718.6	69.125	-2.841	-3.335	65.790	3019.38	181.857	247.647		247.647	4.149		
	F-155	836.0	.8	.4	837.2	-122.0	715.2	68.797	-2.935	-3.445	65.352	3021.16	182.024	247.376		247.376	4.420		
	F-160	835.8	.8	1	837.6	-122.0	715.6	68.836	-3.030	-3.557	65.279	3022.24	182.089	247.368		247.368	4.428		
X	F-165	836.5	.8	1.5	838.8	-122.0	716.8	68.951	-3.125	-3.668	65.283	3023.45	182.692	247.~~345~~ 347		247.~~345~~ 347	~~4.451~~	4.349	
	F-170	839.5	.8	1.8	842.1	-122.0	720.1	69.269	-3.219	-3.779	65.490	3022.43	182.101	247.591		247.591	4.205		
	F-175	836.5	.8	2.0	839.3	-122.0	717.3	68.989	-3.314	-3.890	65.109	3025.05	182.259	247.368		247.368	4.428		
	F-180	832.7	-.3	.2	832.6	-122.0	710.6	68.355	-3.409	-4.002	64.353	3030.37	182.579	246.932		246.932	4.864		
	F-185	831.9	-.3	.3	831.9	-122.0	709.9	68.288	-3.503	-4.112	64.176	3034.54	182.831	247.007		247.007	4.789		
X	F-190	828.5	-.3	.4	828.6	-122.0	706.6	67.970	-3.598	-4.224	63.746	3038.51	183.070	246.816		246.816	4.980	4.980	
X	F-195	826.2	-.3	.5	826.~~3~~ 4	-122.0	704.~~3~~ 4	67.7~~44~~ 59	-3.693	-4.335	63.~~414~~ 424	3039.77	183.146	246.~~360~~ 370		246.~~360~~ 370	5.236	5.226	
	F-200	806.3	-.3	-.5	805.5	-122.0	683.5	65.748	-3.788	-4.447	61.301	3073.80	185.160	246.461		246.461	5.335		
	F-205	814.9	-.3	-.9	813.7	-122.0	691.7	66.537	-3.982	-4.557	61.980	3056.10	184.130	246.110		246.110	5.686		
	F-210	806.4	-.3	-1.1	805.0	-122.0	683.0	65.700	-3.977	-4.668	61.032	3044.65	183.440	244.472		244.472	7.324		

-End Helmet Pk Area-

HEINRICHS GEOEXPLORATION COMPANY

P.O. Box 5671 TUCSON, ARIZONA

1.1747

GRAVITY COMPUTATIONS — AREA Helmet Peak (refer. pt. L2) — AVERAGE DENSITY = 2.65 gm/cc — LATITUDE CORRECTION =1.358 mgal/mile

INSTRUMENT - WORLD-WIDE — FACTOR = 0.096194 mgal / Div. — DATUM PLAN = SEA LEVEL — COMBINED BOUGUER + FREE AIR CORRECTION = 0.06025 mgal / ft

DATE	STATIONS & REMARKS		Reading	Drift Loop	Drift Line	Reading Correct for Drift	Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Miles N. or S. of Base +N. -S.	Latitude Correction Value	Reading Correct for Latitude	Elevation in feet	Combined Bouguer + free air Corr.	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient Sta. - Sta.	Gravity Values with respect to existing Info.
6-4-63	Louise 2 (North Area)		782.6	0	0	0.0	+22.6	760.0	73.107	0	0	70.107	2766.66	178.744	251.848	0.035	251.848	0		
	Line C	C-5	769.8	0	0	769.8	+22.6	747.2	71.876	-.4	-.1358	71.940	2985.25	179.861	251.601		251.601	0.247		
		C-10	762.6	-.3	0	762.3	+22.6	739.7	70.465	-.8	-.2716	70.677	2993.37	180.344	251.021		251.021	0.827		
		C-15	755.6	-.3	0	755.3	+22.6	732.7	70.487	-1.2	-.4074	70.854	3000.73	180.798	250.652		250.652	1.196		
		C-20	754.5	-.1	-1.4	752.6	+22.6	730.0	70.221	-1.4	-.4432	69.678	3003.40	180.959	250.637		250.637	1.211		
		C-25	747.1	-.3	-1.4	745.0	+22.6	722.4	69.490	-1.5	-.6790	68.811	3009.99	181.352	250.162		250.162	1.686		
		C-30	738.2	-.3	-1.4	736.5	+22.6	714.9	68.483	-1.6	-.8148	67.668	3017.70	181.816	249.484		249.484	2.364		
		C-35	725.7	.1	.1	725.9	+22.6	703.3	67.653	-1.7	-.9506	66.703	3026.81	182.365	249.047		249.047	2.801		
		C-40	718.5	.5	.1	719.1	+22.6	696.5	66.999	-1.8	-1.086	65.913	3033.79	182.785	248.698		248.698	3.150		
		C-45	710.7	.1	.1	711.9	+22.6	689.3	66.306	-1.9	-1.222	65.084	3042.64	183.319	248.403		248.403	3.445		
		C-50	704.5	1.5	.1	706.1	+22.6	683.5	65.748	-2.0	-1.358	64.390	3049.96	183.760	248.150		248.150	3.698		
		C-55	705.4	0	0	705.4	+22.6	682.8	65.681	-2.1	-1.493	64.188	3051.89	183.876	248.064		248.064	3.784		
		C-60	700.5	0	0	700.5	+22.6	677.9	65.209	-2.2	-1.629	63.580	3057.55	184.338	247.917		247.917	3.931		
		C-65	698.5	.5	0	699.0	+22.6	676.4	65.065	-2.3	-1.765	63.300	3065.61	184.703	247.768		247.768	4.080		
		C-70	693.9	.8	0	694.7	+22.6	672.1	64.634	-2.4	-1.901	62.733	3072.88	185.144	247.877		247.877	3.971		
		C-75	691.4	-.2	.8	692.0	+22.6	669.4	64.392	-2.5	-2.037	62.355	3078.49	185.479	247.834		247.834	4.014		
		C-80	688.6	-.5	.8	688.9	+22.6	666.3	64.094	-2.6	-2.172	61.922	3084.76	185.856	247.778		247.778	4.070		
		C-85	690.0	-.8	.8	690.0	+22.6	667.4	64.199	-2.7	-2.308	61.891	3087.38	186.014	247.905		247.905	3.943		
		C-90	689.2	-1.2	.8	688.8	+22.6	666.2	64.084	-2.8	-2.444	61.640	3092.35	186.314	247.654		247.654	4.194		
		C-95	690.1	-.2	-1.6	688.3	+22.6	665.7	64.036	-2.9	-2.580	61.456	3094.74	186.277	247.733		247.733	4.115		
		C-100	684.3	-.2	-1.6	682.5	+22.6	659.9	63.478	-3.0	-2.716	60.762	3097.83	186.644	247.406		247.406	4.442		
		C-105	683.7	-.3	-1.6	681.8	+22.6	659.2	63.411	-3.1	-2.851	60.560	3103.06	186.959	247.599		247.599	4.249		
		C-110	678.7	-.3	-1.6	676.8	+22.6	654.2	62.929	-3.2	-2.987	59.942	3110.50	187.408	247.737		247.737	4.111		
6-5-63	Line C cont'd	C-115	679.1	0	0	679.1	-28.6	650.5	62.574	-3.3	-3.123	59.451	3111.82	187.487	246.938		246.938	4.910		
		C-120	677.2	0	0	677.2	-28.6	648.6	62.391	-3.4	-3.259	59.132	3117.54	187.854	246.986		246.986	4.862		
		C-125	676.2	0	0	676.2	-28.6	647.6	62.295	-3.5	-3.395	58.900	3118.98	187.940	246.840		246.840	5.008		
		C-130	671.5	-.4	0	671.1	-28.6	642.5	61.833	-3.6	-3.530	58.303	3125.25	188.340	246.644		246.644	5.204		
		C-135	667.5	-.9	-.7	665.9	-28.6	637.3	61.298	-3.7	-3.666	57.632	3130.49	188.682	246.290		246.290	5.558		
		C-140	664.3	-1.4	-.7	662.1	-28.6	633.5	60.938	-3.8	-3.802	57.136	3134.11	188.880	246.016		246.016	5.832		
		C-145	660.0	-1.7	-.7	657.6	-29.6	629.0	60.506	-3.9	-3.938	56.568	3135.79	188.931	245.637		245.637	6.211		
		C-150	657.4	-1.8	-.7	654.9	-29.6	626.3	60.246	-4.0	-4.074	56.172	3138.86	189.116	245.488		245.488	6.360		
		C-155	654.4	-1.9	-.7	651.8	-28.6	623.2	59.948	-4.1	-4.209	55.739	3143.92	189.421	245.420		245.420	6.428		
		C-160	649.0	0	-1.3	647.7	-28.6	619.1	57.338	-4.2	-4.345	55.004	3143.08	189.370	244.374		244.374	7.474		
		C-165	642.3	0	-1.3	641.0	-28.6	612.4	58.709	-4.3	-4.481	54.228	3148.09	189.672	244.100		244.100	7.748		
		C-170	636.5	0	-1.3	635.2	-29.6	606.6	58.151	-4.4	-4.617	53.534	3152.13	189.916	243.450		243.450	8.398		
		C-175	631.2	-.1	-1.3	629.8	-29.6	601.2	57.652	-4.5	-4.753	52.899	3154.63	190.066	242.965		242.965	8.883		
		C-180	633.1	-.1	-1.3	631.7	-28.6	603.1	57.808	-4.6	-4.888	52.920	3150.54	189.820	242.740		242.740	9.108		
		C-185	630.0	-.3	-1.5	628.2	-28.6	599.6	57.477	-4.7	-5.024	52.453	3154.14	190.036	242.489		242.489	9.359		
		C-190	629.8	-.4	-1.5	627.9	-29.6	598.3	57.449	-4.8	-5.160	52.289	3155.17	190.098	242.407		242.407	9.441		
		C-195	626.2	-.4	-1.5	624.3	-29.6	594.7	57.103	-4.9	-5.296	51.807	3157.92	190.258	242.307		242.307	9.541		
		C-200	620.9	-.4	-1.5	618.0	-29.6	588.4	56.497	-5.0	-5.432	51.065	3166.13	190.759	242.318		242.318	9.530		
		C-205	616.6	-.5	-1.5	614.6	-29.6	585.0	56.178	-5.1	-5.567	50.611	3166.69	190.793	242.405		242.405	9.443		
	End Line C	C-210	615.5	-.6	-1.5	613.4	-29.6	583.8	56.068	-5.2	-5.703	50.365	3166.18	190.762	242.372	0.024	242.372	9.476		

45-568 5118

Gravity Computations — Area - Twin Buttes — Instrument - World Wide No. 3 — Factor = .09792 mgal/Div — Average Density = 2.65 gm/cc — Datum Plan = Sea Level — Latitude Correction = 1.174 mgal/mile — Combined Bouguer + free Air Correction = 0.06025 mgal/ft.

Date	Stations & Remarks	Reading	Drift Line	Drift Loop	Reading Correct for Drift	Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Miles N or S. of Base +N -S	Latitude Correction Value	Reading Correct for Latitude	Elevation in feet	Combined Bouguer + free Air Corr	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient Sta - Sta.	Gravity Values w/resp. to existing Info
7-10-63	BM 3412 (K 114)	410.9	0	0	410.9	—	410.9												
	BM 3406 (H 114) BCTC	513.4	0	0	513.4	—	513.4												
	L 2 (Base North Area)	768.1	0	.1	768.1	—	768.1					2965.84							
	L 2 (Base North Area)	767.6	0	-.1	767.6	—	767.6					2965.84							
	BM 3406 (H-114)	513.3	0	-.2	513.3	—	513.3												
	BM 3412 (K-114)	411.2	0	-.3	411.2	—	411.2												
	BM 3431 (T-114) (N)	396.4	0	-.3	396.4	—	396.4												
	BM 3431 (J-335) (S)	390.7	0	.4	390.7	—	390.7												
	C - 15	387.3	-1	+.7		4.8	391.3	38.316	.2845	0.333	37.1783	3346.68	201.649	242.632	2.658				
	D - 90	422.8	0	1.2	424.0	4.4	428.4	41.948	1.704	2.000	39.948	3338.06	201.118	241.066	4.284				
	D - 85	418.4	0	1.2	419.6	4.4	424.0	41.909	1.604	1.883	40.021	3344.34	201.496	241.517	3.773				
	D - 80	408.4	0	1.2	409.6	4.4	413.0	40.440	1.515	1.778	38.662	3354.87	202.130	240.792	4.498				
	D - 75	414.4	.2	1.2	416.6	4.4	420.0	41.126	1.470	1.725	39.401	3346.14	201.604	241.005	4.285				
	D - 70	410.6	.1	1.2	411.7	4.4	416.1	40.744	1.325	1.555	39.189	3350.65	201.876	241.065	4.226				
	D - 65	407.9	.1	1.2	409.0	4.4	413.4	40.480	1.231	1.445	39.035	3355.08	202.155	241.190	4.100				
	D - 60	427.9	.2	1.2	429.9	4.4	433.3	42.428	1.136	1.333	41.095	3331.96	200.750	241.809	3.481				
	D - 55	422.2	-.2	1.2	423.2	4.4	427.7	41.880	1.042	1.223	40.658	3342.08	201.360	242.018	3.272				

45-368 5118

Gravity Computations Area - Helmet Peak Average Density = 2.65 gm/cc Latitude Correction = 1.174 mgals/mile
Instrument - World Wide Factor = 0.09614 mgal/Div Datum Plan = Sea Level Combined Bouguer + Free Air Correction = 0.602 mgals/ft

Date	Station & Remarks	Reading	Drift Loop	Drift Line	Reading Correct for Drift	Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Miles N or S. of Base +N −S	Latitude Correction Value	Reading Correct for Latitude	Elevation in feet	Combined Bouguer + Free Air	Bouguer Values in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals (+)	Gradient Sta. v Sta.	Gravity w/map to existing info
6-18-63	E-55	837.0	-3.5	-3	833.2	-93.5	739.7	71.154	-1.047	-1.229	69.932	2479.24	179.438	249.370		249.370	2.426		
	E-60	835.1	-3.5	-4	831.2	-93.5	737.7	70.962	-1.136	-1.333	69.629	2481.08	179.646	249.275		249.445	2.551		
	E-65	832.6	-3.8	-4	828.6	-93.5	735.1	70.712	-1.231	-1.445	69.267	2485.46	179.873	249.140		249.140	2.656		
	E-70	829.8	-3.8	-3	825.7	-93.5	732.2	70.433	-1.326	-1.555	68.878	2489.04	180.089	248.967		248.967	2.824		
*	E-75	826.1	-3.8	-4	822.1	-93.5	728.4	70.067	-1.420	-1.666	68.401	2495.41	180.473	248.845		248.845	2.984	2.904	
	E-80	821.1	-3.8	-7	817.0	-93.5	723.1	69.573	-1.515	-1.778	67.795	3004.69	181.052	248.427		248.427	3.369		
	E-85	815.4	-3.8	-11	810.5	-93.5	717.0	69.021	-1.609	-1.888	67.082	3010.00	181.352	248.434		248.434	3.292		
	E-90	815.0	0	-6.5	808.5	-93.5	715.0	68.778	-1.704	-2.000	66.778	3012.06	181.476	248.254		248.254	3.042		
*	E-95	815.4	0	-7.5	808.9	-93.5	715.4	68.817	-1.799	-2.112	66.705	3014.79	181.641	248.346		248.346	3.450	3.450	
														248.377					
*	E-100	811.8	0	-6.5	805.3	-93.5	711.8	68.470	-1.894	-2.223	66.247	3021.41	182.039	248.286		248.286	3.510	3.510	
	E-105	809.6	-.1	-6.5	803.0	-93.5	709.5	68.249	-1.988	-2.333	65.916	3026.58	182.351	248.267		248.267	3.529		
	E-110	808.0	-.1	-5.5	801.4	-93.5	707.9	68.095	-2.083	-2.445	65.650	3027.68	182.417	248.067		248.067	3.729		
	E-115	809.4	0	-4.3	805.1	-93.5	711.6	68.451	-2.178	-2.556	65.895	3032.77	182.724	248.619		248.619	3.177		
	E-120	800.1	0	-4.3	795.9	-93.5	702.4	67.566	-2.272	-2.667	64.899	3034.13	183.155	248.054		248.054	3.742		
	E-125	798.0	0	-4.3	793.7	-93.5	700.2	67.355	-2.367	-2.778	64.577	3044.16	183.410	247.987		247.987	3.809		
*	E-130	794.1	.1	-4.3	789.9	-93.5	696.4	66.986	-2.462	-2.890	64.096	3044.69	183.423	247.519		247.777	4.019		
6-19-63																			
	L-2	974.9	0	0	974.9	-114.9	760.0	73.107	0	0	73.107	2965.30	178.685	251.792		251.786	0		
	E-0	744.8	0	0	844.8	-114.9	729.9	70.245	0	0	70.245	2911.92	175.443	252.388		252.388	+0.592		
	E-50	857.9	0	0	857.9	-114.9	743.0	71.472	-.946	-1.111	70.361	2974.26	179.194	249.560		249.560	1.336		
	E-45	865.5	0	-1	865.4	-114.9	750.5	72.193	-.852	-1.000	71.193	2984.73	178.624	249.817		249.817	1.479		
	E-40	873.3	0	-2	873.1	-114.9	758.2	72.934	-.757	-0.889	72.045	2958.00	178.279	250.324		250.324	1.472		
	E-35	874.6	0	-4	874.2	-114.9	759.3	73.040	-.663	-0.777	72.263	2959.04	178.221	250.484		250.484	1.312		
	E-30	877.4	0	-6	876.8	-114.9	761.9	73.290	-.568	-0.666	72.624	2953.10	178.972	250.546		250.596	1.200		
*	E-25	883.7	0	-8	882.9	-114.9	768.0	73.876	-.474	-0.555	73.321	2945.06	179.436	250.760		250.760	1.038		
	E-20	890.5	-3.2	0	887.3	-114.9	772.4	74.300	-.378	-0.444	73.856	2940.04	177.173	251.029		251.029	0.769		
*	E-15	858.1	-5.4	0	852.7	-114.9	737.8	71.000	-.284	-0.333	70.667	2932.83	176.703	251.362		251.796	0.402	0.395	
	E-10	903.6	-3.2	0	900.4	-114.9	785.5	75.560	-.188	-0.222	75.338	2925.32	176.250	251.588		251.588	0.209		
	E-5	908.0	-3.2	+.1	904.9	-114.9	789.6	75.954	-.094	-0.111	75.843	2921.28	176.057	251.650		251.650	+0.053		
*	E-130	809.5	0	0	809.5	-113.1	696.4	66.986	-2.462	-2.970	64.049	3047.69	183.470	247.519		247.777	4.077	4.024	
	E-135	806.1	0	.5	806.6	-113.1	693.5	66.710	-2.556	-3.080	63.710	3052.11	183.889	247.599		247.599	4.197		
	E-140	801.7	0	.6	802.3	-113.1	689.2	66.296	-2.651	-3.192	63.184	3056.16	184.133	247.317		247.317	4.479		

Gravity Computation Form — Helmet Pk.

Factor = 0.096194 mgal/Div. Average Density = 2.65 gm/cc. Datum Plan = Sea Level. Latitude Correction = 1.174 mgal/mile. Combined Bouguer + free Air Correction = 0.06025 mgal/Ft.

						Area Net Correction Value	Reading Correct for Area Net	Reading in mgals	Miles N. or S. of Base +N −S	Latitude Correction Value	Reading Correct for Latitude	Elevation in Feet	Combined Bouguer + free Air Corr	Bouguer Value in mgals	Terrain Corrections mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient Sta→Sta.	Gravity Value w/resp to existing info
6-17-63	9/17	708.6	0	0	708.6	−87.0	621.6	59.794	0	0	59.794	3141.12	189.252	249.046		249.046	3.750		
	D-160	734.5	0	0	734.5	−87.0	647.5	62.285	−3.030	−3.557	58.728	3102.46	186.926	245.654		245.654	6.142		
	D-165	727.7	0	−.1	727.6	−87.0	640.6	61.621	−3.125	−3.668	57.953	3108.34	187.277	245.230		245.230	6.566		
	D-170	729.9	0	−.2	729.7	−87.0	642.7	61.823	−3.219	−3.779	58.044	3196.74	187.18	245.225		245.225	6.571		
	D-175	727.4	0	−.3	727.1	−87.0	640.1	61.573	−3.314	−3.890	57.683	3104.72	187.054	244.742		244.742	7.054		
	D-180	724.8	0	−.4	724.4	−87.0	637.4	61.325	−3.409	−4.002	57.323	3112.63	187.535	244.858		244.858	7.238		
	D-185	720.5	−2.1	+1.8	719.2	−87.0	632.2	60.813	−3.503	−4.113	56.701	3115.33	187.698	244.399		244.399	7.397		
	D-190	726.1	−2.1	+.9	724.9	−87.0	637.9	60.881	−3.598	−4.224	56.657	3111.62	187.475	244.132		244.132	7.664		
	D-195	718.4	−2.1	+.1	717.4	−87.0	630.4	60.640	−3.693	−4.335	56.305	3114.04	187.620	243.925		243.925	7.871		
	D-200	713.4	−2.1	+.2	712.5	−87.0	625.5	60.164	−3.788	−4.447	55.717	3117.23	187.816	243.533		243.533	8.263		
	D-205	706.0	−2.1	+.5	704.4	−87.0	618.4	59.486	−3.882	−4.557	54.929	3125.00	188.281	243.210		243.210	8.586		
	D-210	700.8	−2.1	+.0	700.7	−87.0	613.7	59.034	−3.977	−4.668	54.366	3129.79	188.569	242.935		242.935	8.861		
	D-155	729.1	−.1	+.5	729.3	−87.0	651.3	62.651	−2.835	−3.446	59.206	3100.90	186.829	246.034		246.034	5.761		
	D-150	745.2	−.2	+.5	745.5	−87.0	658.5	63.343	−2.840	−3.334	60.009	3096.91	186.588	246.596		246.596	5.200		
	D-145	747.2	−.3	+.5	747.4	−87.0	660.4	63.526	−2.746	−3.226	60.300	3046.48	184.562	246.862		246.862	4.934		
	D-140	746.6	−.3	+.5	746.8	−87.0	659.8	63.468	−2.651	−3.112	60.357	3095.02	186.474	246.831		246.831	4.965		
	D-135	755.6	−.6	+.2	755.2	−87.0	668.2	64.238	−2.651	−3.000	61.238	3091.80	186.235	247.277		247.277	4.519		
	D-130	759.7	−.6	−.8	758.3	−87.0	671.3	64.576	−2.462	−2.880	61.696	3087.22	186.005	247.680		247.680	4.116		
	D-125	764.7	−.6	+.2	764.3	−87.0	675.9	65.017	−2.367	−2.778	62.239	3081.66	185.671	247.910		247.910	3.886		
	D-120	772.1	−.6	−.8	770.7	−87.0	683.7	65.671	−2.272	−2.667	63.004	3079.75	185.512	248.016		248.016	3.780		
	D-115	777.0	−.6	−.8	774.1	−87.0	687.1	66.044	−2.178	−2.556	63.538	3069.43	184.933	248.471		248.471	3.327		
	D-110	769.6	−.6	−1.2	767.6	−87.0	680.6	65.458	−2.083	−2.445	63.013	3069.60	184.943	248.256		248.256	3.540		
	D-105	777.6	−.6	−.5	776.0	−87.0	689.0	66.277	−1.988	−2.333	63.944	3064.36	184.627	248.571		248.571	3.225		
*	D-100	775.3	−.6	−2.3	774.4	−87.0	687.4	66.171	−1.894	−2.223	64.748	3062.01	184.486	249.434		249.434	2.362	3.361	
6-18-63																			
*	D-100	781.4	0	0	781.4	−93.5	687.9	66.171	−1.894	−2.223	64.748	3062.01	184.486	249.434		249.434	2.362	3.361	
*	D-95	789.1	0	−.1	789.0	−93.5	695.5	66.902	−1.799	−2.112	64.790	3052.63	183.923	248.734		248.734	3.065	3.082	
	D-70	791.6	0	−.4	791.2	−93.5	697.7	67.114	−1.704	−2.000	65.114	3048.1	183.641	248.755		248.755	3.044		
	D-85	791.4	0	−1.0	790.4	−93.5	696.9	67.037	−1.609	−1.888	65.149	3046.6	183.532	248.681		248.681	3.118		
	D-80	797.2	0	−1.2	796.0	−93.5	702.5	67.576	−1.515	−1.778	65.798	3040.33	183.210	248.008		248.008	2.788		
*	D-75	797.1	0	−1.4	795.7	−93.5	702.2	67.547	−1.420	−1.667	65.880	3038.13	183.080	248.960		248.960	2.836	2.848	
	D-70	799.8	0	−1.0	798.8	−93.5	705.3	67.768	−1.325	−1.555	66.213	3031.93	182.644	248.862		248.862	2.934		
	D-65	807.5	−3.5	−.1	803.9	−93.5	710.4	68.256	−1.231	−1.445	66.811	3026.23	182.360	249.251		249.251	2.545		
	D-60	809.8	−3.5	−.1	806.2	−93.5	712.7	68.564	−1.136	−1.334	67.230	3020.01	181.555	249.176		249.176	2.620		
	D-55	810.7	−3.5	−.74	806.0	−93.5	712.5	68.634	−1.042	−1.224	67.410	3019.96	181.643	249.105		249.105	2.691		

Gravity Computations — Area – Helmet Peak (reference - L2) — Average Density = 2.65 gm/cc — Latitude Correction = ~~1.358~~ 1.1747 mgal/mile

Instrument – World-Wide — Factor = 0.09694 mgal/div — Datum Plane = Sea Level — Combined Bouguer + free Air Correction = 0.06025 mgal/ft

Date	Station & Remarks	Reading	Drift Loop	Drift Line	Reading Corrected for Drift	Area Net Correction Value	Reading Corrected for Area Net	Reading in mgals	Meter Nor Set Base +N -S	Latitude Correction Value	Reading Corrected for Latitude	Elevation in feet	Combined Bouguer + free air Correction	Bouguer Value in mgals	Terrain Correction mgals	Gravity Value mgals	Gravity Anomaly mgals	Gradient Stat – Stat	Gravity Values w/out to Existing Information
5-29-63	BM 3477	433.3	0	0	433.3		433.3	41.6680				3477.00	209.489	251.180		251.180			
	BM 3477	430.4	2.9	0	433.3		433.4	41.6775				3477.00	209.489	251.584		251.584			
	Line #60	456.0	1.2	0	457.2		457.2	43.9390				3445.21	207.578	251.554		251.554			
	Line #60	445.9	2.8	0	448.7		448.7	43.1347				3445.21	207.578	251.554		251.554			
	BM 3406 (Beta)	497.2	3.4	0	500.6		500.6	48.1358				3406.26	205.227	253.381		253.381			
	BM 3406 (Beta)	497.0	3.4	.2	500.6		500.6	48.1358				3406.26	205.227	253.381		253.381			
	BM 3477	429.9	3.4	.2	433.5		433.5	41.7000				3477.00	209.489	251.189		251.189			
	BM 3406 (Beta)	497.7	.7	.1	498.5		498.5	48.0448				3406.26	205.227	253.275		253.275			
	Louise 2	757.3	1.7	1.4	759.4		759.4	73.0994				2966.06	178.741	251.718		251.718			
	Louise 2	757.5	1.7	1.5	760.1		760.1	73.1167				2966.06	178.741	251.858		251.858			
	Louise 2	757.7	1.7	1.6	760.0		760.0	73.1067				2966.06	178.741	251.848		251.848			
5-31-63	Louise 2	760.5	0	0	760.5	-5.6	760.0	73.1067				2966.06	178.741	251.848		251.848			
	SE 8 11/16	627.6	-1	0	627.5	-5.9	621.6	59.7944				3141.43	189.271	249.065		249.065			
	SE 21 11/16	627.6	-1.2	0	627.4	-5.9	621.5	59.7849				3141.43	189.271	249.055		249.055			
	BM 3412	402.4	-1.3	-1	402.0	-5.9	396.1	38.1022											
	BM 3184	557.4	-1.3	-1.2	556.9	-5.9	551.0	53.0032											
	BM 3431	384.4	-1.3	-1.2	383.9	-5.9	378.0	36.3611				3184.64	189.858	244.844		244.844			
6-5-63	B-105	662.4	?																
6-7-63	L-2	798.4	0	0	798.4	-39.4	760.00	73.1067		0		73.1067	2966.06	178.741		251.848			
	C-0	791.1	.2	0	791.3	-38.4	752.9	72.4044		0		72.4244	2976.73	179.348		251.772		-6.079	
Line B	B-55	708.2	0	0	708.2	-38.4	669.8	63.9500		-1.1	-1.4435	66.4265	3080.27	185.586		249.012		-8.3377	
	B-60	698.4	.2	0	698.6	-38.4	660.2	63.5067		-1.2	-1.4759	67.9826	3085.41	185.895		247.778		-4.1786	
	B-65	693.0	.4	0	693.4	-38.4	655.0	63.0067		-1.3	-1.5083	67.2442	3091.72	186.276		247.276		-4.1786	
	B-70	687.7	.7	0	688.4	-38.4	652.0	62.7178		-1.4	-1.5407	68.2584	3098.24	186.668		247.485		-4.1786	
	B-75	683.3	.8	0	684.1	-38.4	645.7	62.1107		-1.5	-1.5731	68.2838	3104.60	187.052		247.472		-4.1786	
	B-80	686.1	1.0	0	687.1	-38.4	648.7	62.3994		-1.6	-1.6055	68.0049	3110.57	187.410		247.814		-4.1786	
	B-85	681.6	1.1	1.4	683.1	-38.4	644.7	62.0147		-1.7	-1.6379	67.6526	3119.15	187.928		247.957		-4.1786	
	B-90	681.0	1.1	1.4	682.5	-38.4	644.1	61.9569		-1.8	-1.6703	67.6272	3123.23	188.179		247.956		-4.1786	
	B-95	675.4	1.1	1.4	676.9	-38.4	638.5	61.4178		-1.9	-1.7027	67.1205	3129.02	188.543		247.564		-4.1786	
	B-100	672.8	1.1	1.4	674.3	-38.4	635.9	61.1678		-2.0	-1.7351	66.9029	3134.19	188.858		247.526		-4.1786	
Ext'd Line	B-105	674.1	.2	1.4	673.5	-38.4	635.1	61.0902		-2.1	-1.7675	66.8577	3136.76	188.999		247.856		-4.1786	
Line A	A-105	655.6	0	1.6	653.2	-38.4	614.8	59.1440		-2.1	-1.7675	64.9115	3140.19	189.762		247.673		-4.1786	
	A-100	653.7	0	1.6	655.3	-38.4	616.9	59.3467		-2.0	-1.7351	65.0818	3165.12	191.668		247.814		-4.1786	
	A-95	659.5	.1	1.6	661.2	-38.4	622.8	59.9156		-1.9	-1.7027	65.6183	3158.21	191.282		248.200		-4.1786	
	A-90	661.7	0	1.6	663.3	-38.4	624.9	60.1056		-1.8	-1.6703	65.7759	3153.08	190.973		248.034		-4.1786	
	A-85	666.6	-.3	2.7	668.0	-38.4	629.6	60.5567		-1.7	-1.6379	66.1946	3148.43	190.692		248.047		-4.1786	
	A-80	669.4	-.4	2.7	670.7	-38.4	632.3	60.8223		-1.6	-1.6055	66.4278	3143.49	190.407		248.035		-4.1786	
	A-75	672.5	-.8	2.7	674.4	-38.4	636.0	61.1922		-1.5	-1.5731	66.7653	3137.22	190.017		248.183		-4.1786	
	A-70	675.1	.1	.8	674.8	-38.4	636.4	61.1967		-1.4	-1.5407	66.7374	3136.21	189.956		247.693		-4.1786	
	A-65	678.3	.2	.8	680.3	-38.4	641.8	61.7178		-1.3	-1.5083	67.2261	3124.52	189.232		248.458		-4.1786	
	A-60	698.1	.3	.8	699.2	-38.4	660.8	63.5433		-1.2	-1.4759	69.0192	3115.47	187.707		248.726		-4.1786	
	A-55	693.0	.3	.8	694.1	-38.4	655.7	63.0974		-1.1	-1.4435	68.5409	3110.54	187.440		248.981		-4.1786	

45-568 5118

Gravity Computations — Arrow Helmet Area — Average Density = ~~2.65 gm/cc~~ — Latitude Correction = 1.174 mgal/mile

Instrument - World-wide — Factor = ~~0.0167~~ mgal/Div — Datum Plane = ~~Sea~~ Level — Combined Bouguer & Free Air Correction = 0.06025 mgal/ft.

Date	Station	℄	Remarks	Reading	Drift Loss	Drift Gain	Reading Corrected for Drift	Arrow Net Correction	Reading Corrected for Arrow Net	Reading in mgals	Miles North or South of Base	Latitude Correction	Reading Corrected for Latitude	Elevation in feet	Combined Bouguer + Free Air	Bouguer Values in mgals	Terrain Corrections mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient Sta. - Sta.	Gravity Values Interpolated from trend into
								Value			+N -S	Value									
6-19-63	X		E-145	800.6	0	.8	801.4	+113.1	688.3	66.210	-2.746	-3.223	62.987	3056.22	183.3216	246.513	247.3[illegible]	246.513	5.283	[illegible]	4.482
			E-150	801.8	0	1.2	803.0	+113.1	689.9	66.344	-2.841	-3.355	63.029	3056.93	183.3608	246.547	247.204	246.547	5.156	4.691	
			E-155	799.6	0	1.5	801.1	+113.1	688.0	66.181	-2.935	-3.443	62.736	3056.99	183.3672	246.308	246.919	246.308	5.498	4.814	
			E-160	794.9	1.2	+.2	795.9	-113.1	682.8	65.681	-3.030	-3.507	62.174	3061.14	183.6921	245.945	246.557	245.945	5.831	5.230	
			E-165	793.5	1.2	-.4	794.3	-113.1	681.2	65.529	-3.125	-3.648	61.859	3062.44	183.7849	245.758	246.371	245.758	6.029	5.445	
			E-170	792.1	1.2	-.5	792.8	-113.1	679.7	65.383	-3.219	-3.779	61.604	3062.44	183.7849	245.503	246.116	245.503	6.193	5.590	
11:34 am		X	E-175	793.3	1.2	-.6	793.9	-113.1	680.8	65.498	-3.314	-3.890	61.608	3062.80	183.8081	245.519	246.131	245.519	6.277	[illegible]	5.1165
			E-180	790.0	1.2	1.0	790.2	-113.1	677.1	65.132	-3.409	-4.002	61.130	3067.46	184.0857	245.330	245.944	245.330	6.464	5.853	
		X	E-185	788.6	-1.1	1.2	788.7	-113.1	675.6	64.988	-3.503	-4.112	60.876	3068.26	184.[illegible]	245.125	245.[illegible]	245.125	6.671	[illegible]	6.0956
			E-190	784.3	.4	-.2	784.5	-113.1	671.4	64.584	-3.598	-4.224	60.360	3075.09	184.6516	245.019	245.634	245.019	6.797	6.162	
			E-195	784.9	.4	-.2	785.1	-113.1	672.0	64.642	-3.693	-4.335	60.307	3077.32	184.7993	245.100	245.715	245.100	6.456	6.091	
			E-200	784.1	.4	-.3	784.2	-113.1	671.1	64.565	-3.788	-4.447	60.118	3080.14	184.9884	245.070	245.686	245.070	6.726	6.410	
			E-205	787.2	.4	-.4	787.2	+113.1	674.1	64.844	-3.884	-4.557	60.287	3084.10	185.2536	246.367	245.982	246.367	6.429	6.0[illegible]	
			E-210	788.2	.4	-.5	788.1	+113.1	675.0	64.930	-3.979	-4.668	60.262	3091.12	185.7236	245.653	246.260	245.653	6.142	5.[illegible]	
6-20-63																					
			L-2	882.0	0	0	882.0	+122.0	760.0	73.107	0	0	73.107	296.90	178.689	251.796	251.796	251.796	0	0	
			F-55	887.2	0	0	887.2	-122.0	765.2	73.607	-.0447	-1.222	+72.385	2942.37	177.[illegible]	249.056	249.644	249.056	2.740	2.[illegible]	
			F-60	882.9	0	-.1	883.0	-122.0	761.0	73.184	-1.134	-1.333	-71.851	2946.33	179.5276	248.778	249.367	248.778	3.018	2.[illegible]	
			F-65	880.5	0	-.2	880.3	-122.0	758.3	72.943	-1.231	-1.444	-71.498	2950.34	177.7780	248.[illegible]77	249.[illegible]	248.877	3.[illegible]	[illegible]	
			F-70	876.8	0	-.3	876.5	-122.0	754.5	72.582	-1.326	-1.555	-70.927	2957.24	178.[illegible]	248.[illegible]	249.[illegible]	248.509	3.287	2.[illegible]	
	X		F-75	873.1	0	-.3	872.8	-122.0	750.8	72.222	-1.420	-1.[illegible]	-70.[illegible]	2964.33	178.[illegible]	248.[illegible]	249.[illegible]	248.5[illegible]	3.287	[illegible]	2.698
			F-80	870.4	0	-.4	870.0	-122.0	748.0	70.983	-1.515	-1.778	-70.175	2964.34	178.[illegible]20	248.[illegible]	248.[illegible]	248.301	3.[illegible]	[illegible]	
	X		F-85	868.9	0	-.5	868.4	-122.0	746.4	71.8447	-1.609	-1.888	-69.956	2972.08	178.[illegible]	248.432	249.026	248.432	3.304	[illegible]	2.779
			F-90	866.0	-.3	3.8	866.5	-122.0	744.5	71.[illegible]	-1.704	-2.000	-69.[illegible]	2973.31	178.[illegible]	248.452	249.046	248.452	3.340	[illegible]	
			F-95	860.2	-.5	3.8	863.5	-122.0	741.5	71.327	-1.[illegible]	-2.112	-69.215	2973.17	179.[illegible]	248.[illegible]	249.[illegible]	248.214	3.302	[illegible]	
			F-100	860.8	-.6	3.8	864.0	-122.0	742.0	71.375	-1.8[illegible]	-2.243	+69.132	2982.37	179.[illegible]	248.240	249.[illegible]	248.243	3.353	[illegible]	
			F-105	858.0	-.7	3.8	861.1	-122.0	739.1	71.096	-1.[illegible]	-2.333	+68.763	2986.[illegible]	179.[illegible]	248.[illegible]	248.[illegible]	248.110	3.684	[illegible]	
			F-110	857.1	-.8	3.8	860.1	-122.0	738.1	71.000	-2.[illegible]	-2.444	-68.[illegible]	2993.[illegible]	180.[illegible]	247.[illegible]	248.[illegible]	247.[illegible]	3.[illegible]	[illegible]	
			F-115	855.5	1.0	3.8	860.3	-122.0	738.3	71.020	-2.[illegible]	-2.556	+68.464	2994.51	180.[illegible]	248.[illegible]	248.[illegible]	248.284	3.512	[illegible]	
			F-120	856.6	-.2	+4.4	856.8	-122.0	734.8	70.683	-2.[illegible]	-2.667	+68.016	2993.67	180.[illegible]	248.[illegible]	248.[illegible]	248.486	3.[illegible]	[illegible]	
			F-125	847.1	-.3	+4.4	851.2	-122.0	729.2	70.144	-2.[illegible]	-2.778	-67.366	3001.69	180.851	248.277	248.[illegible]	248.277	3.[illegible]	[illegible]	
			F-130	841.[illegible]	-.4	+4.4	846.1	-122.0	726.4	69.[illegible]	-2.[illegible]	-2.890	-67.033	3007.17	181.181	248.214	248.[illegible]	248.214	3.582	[illegible]	
	X		F-135	841.9	-.5	+4.4	[illegible]	-122.0	[illegible]	[illegible]	-2.[illegible]	-3.[illegible]	-66.[illegible]	3010.70	181.394	248.269	248.[illegible]	248.269	3.527	[illegible]	3.775
			F-140	838.6	-.6	+4.4	842.4	-122.0	720.4	69.344	-2.[illegible]	-3.112	-66.282	3014.65	181.632	247.[illegible]	247.[illegible]	247.[illegible]	3.[illegible]	[illegible]	

HEINRICHS GEOEXPLORATION COMPANY

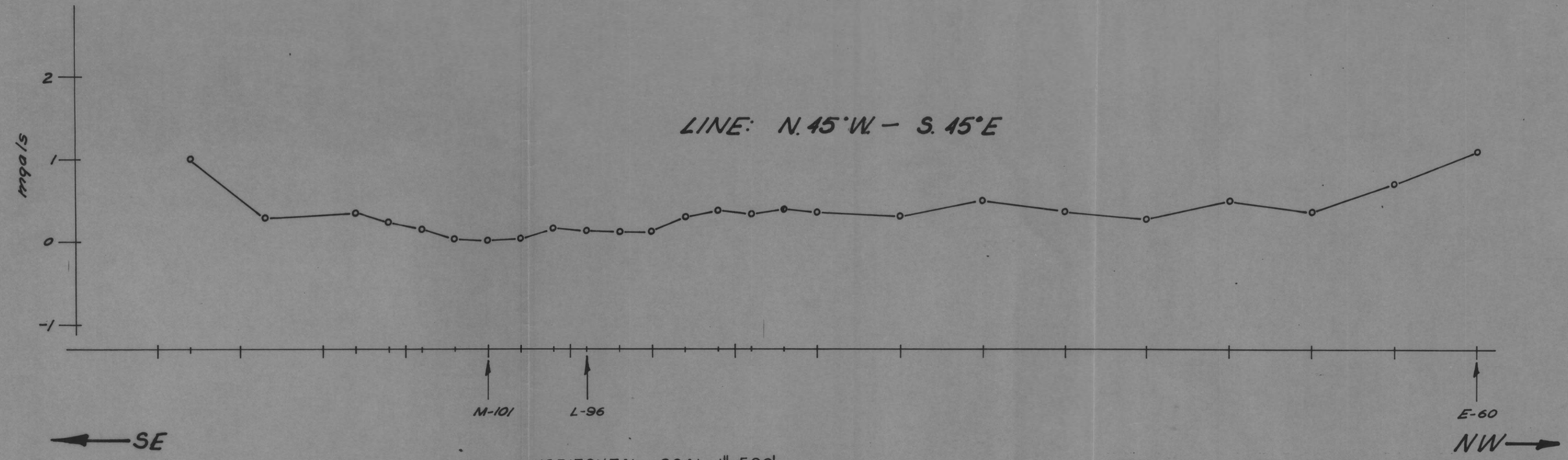
P.O. Box 5671 TUCSON, ARIZONA

GRAVITY COMPUTATIONS — AREA Helmet Peak (refer, pt. L2) — AVERAGE DENSITY = 2.65 gm/cc — LATITUDE CORRECTION = 1.358 mgal/mile

INSTRUMENT - WORLD-WIDE — FACTOR = 0.096194 mgal / Div. — DATUM PLAN = SEA LEVEL — COMBINED BOUGUER + FREE AIR CORRECTION = 0.06025 mgal / ft

DATE	STATIONS & REMARKS	Reading	Drift Loop	Drift Line	Reading Correct for Drift	Area Net Correction Value	Reading Correct for Area - Net	Reading in mgals	Miles N. or S. of Base +N. -S.	Latitude Correction Value	Reading Correct for Latitude	Elevation in feet	Combined Bouguer + free air Corr.	Bouguer Value in mgals	Terrain Correction mgals	Gravity Values mgals	Gravity Anomaly mgals	Gradient Sta. - Sta.	Gravity Values with respect to existing Info.
6-4-63	Louise 2 (North Area)	782.6	0	0	0.0	+22.6	760.0	73.107		0	70.707	2765.84	179.	251.786	0.035	251.786	0 (-1)		
	Line C C-5	769.8	0	0	769.8	+22.6	747.2	71.876	+.0947	-.1111	71.765	2985.25	179.861	251.626		251.626	.170		
	C-10	762.6	-.3	0	762.3	+22.6	739.7	71.155	-.1894	-.2222	70.933	2993.37	180.051	251.284		251.284	.512		
	C-15	755.4	-.3	0	755.1	+22.6	732.7	70.481	-.2841	-.3333	70.148	3000.73	180.193	250.941		250.941	.855		
	C-20	754.5	-.1	-1.4	753.0	+22.6	730.4	70.260	-.3788	-.4444	69.815	3003.40	180.954	250.770		250.770			
	C-25	747.1	-.3	-1.4	745.4	+22.6	722.8	69.529	-.4735	-.5555	68.973	3004.99	181.351	250.325		250.325			
	C-30	738.2	-.3	-1.4	736.5	+22.6	713.9	68.673	-.5682	-.6666	68.006	3017.70	181.816	249.822		249.822			
	C-35	725.7	1.1	1.1	725.9	+22.6	703.3	67.653	-.6629	-.7777	66.876	3026.81	182.365	249.241		249.241	2.554		
	C-40	718.5	.5	1.1	719.1	+22.6	696.5	66.999	-.7576	-.8889	66.110	3033.77	182.785	248.895		248.895	2.901		
	C-45	710.7	1.1	1.1	711.9	+22.6	689.3	66.306	-.8523	-1.000	65.306	3042.64	183.319	248.625		248.625	3.171		
	C-50	704.5	1.5	1.1	706.1	+22.6	683.5	65.748	-.9466	-1.111	64.637	3049.46	183.760	248.397		248.397	3.399		
	C-55	705.4	0	0	705.4	+22.6	682.8	65.681	-1.0417	-1.222	64.459	3051.84	183.876	248.335		248.335	3.461		
	C-60	705.5	0	0	705.5	+22.6	677.9	65.209	-1.1364	-1.333	63.876	3054.55	184.353	248.213		248.213	3.583		
	C-65	698.5	.5	0	699.0	+22.6	676.4	65.065	-1.2311	-1.445	63.620	3065.61	184.703	248.323		248.323	3.473		
	C-70	693.9	.8	0	694.7	+22.6	672.1	64.633	-1.3258	-1.555	63.078	3072.83	185.144	248.282		248.282			
	C-75	691.4	-.2	.8	692.0	+22.6	669.4	64.392	-1.4205	-1.6725	62.447	3078.49	185.479	248.146		248.146	3.650		
	C-80	689.6	-.5	.8	689.9	+22.6	668.3	64.094	-1.5152	-1.778	62.316	3084.76	185.856	248.172		248.172	3.624		
	C-85	690.0	-.8	.8	690.0	+22.6	667.4	64.199	-1.6099	-1.8836	62.311	3087.32	186.014	248.325		248.325	3.471		
	C-90	689.2	-1.3	.8	688.8	+22.6	666.2	64.084	-1.7046	-2.0892	62.084	3092.35	186.314	248.398		248.398	3.398		
	C-95	690.1	-.2	-1.6	688.3	+22.6	665.7	64.036	-1.7993	-2.1112	61.924	3094.74	186.277	248.201		248.201	3.595		
	C-100	684.8	-.2	-1.6	683.5	+22.6	657.9	63.478	-1.8940	-2.2238	61.255	3097.82	186.644	247.889		247.889	3.907		
	C-105	683.7	-.3	-1.6	681.8	+22.6	659.2	63.411	-1.9887	-2.3337	61.078	3103.06	186.959	248.032		248.032	3.764		
	C-110	678.7	-.3	-1.6	676.8	+22.6	654.2	62.930	-2.0834	-2.4445	60.483	3110.50	187.401	247.884		247.884			
6-5-63	Line C cont'd C-115	679.1	0	0	679.1	+28.6	650.5	62.574	-2.178	-2.556	60.018	3111.82	187.487	247.505		247.505	4.291		
	C-120	677.2	0	0	677.2	+28.6	648.6	62.391	-2.272	-2.667	59.724	3117.44	187.854	247.578		247.578	4.218		
	C-125	676.2	0	0	676.2	+28.6	647.6	62.295	-2.367	-2.778	59.517	3118.94	187.916	247.633		247.633	4.363		
	C-130	671.5	+.1	0	671.6	+28.6	642.8	61.833	-2.462	-2.890	58.943	3125.25	188.270	247.239		247.239	4.757		
	C-135	665.5	-.1	-.7	665.8	+28.6	637.2	61.294	-2.556	-3.000	58.294	3130.49	188.612	246.906		246.906	4.890		
	C-140	664.3	-1.5	-.7	662.1	+28.6	633.5	60.938	-2.651	-3.112	57.826	3134.11	188.830	246.656		246.656	5.140		
	C-145	660.0	-1.7	-.7	657.6	+28.6	629.0	60.506	-2.746	-3.223	57.283	3135.79	189.931	246.214		246.214	5.582		
	C-150	657.4	-1.8	-.7	654.9	+28.6	626.3	60.246	-2.841	-3.335	56.911	3139.86	189.116	246.027		246.027	5.769		
	C-155	654.4	-1.9	-.7	651.8	+28.6	623.2	59.948	-2.935	-3.445	56.503	3143.92	189.421	245.424		245.424	5.872		
	C-160	649.0	0	-.43	647.7	+28.6	619.1	59.553	-3.030	-3.557	55.956	3143.08	189.370	245.366		245.366	5.930		
	C-165	642.3	0	-1.3	641.0	+28.6	612.4	58.909	-3.125	-3.668	55.241	3148.09	189.672	244.913		244.913	6.383		
	C-170	636.5	0	-1.3	635.2	+28.6	606.6	58.351	-3.219	-3.779	54.572	3152.13	189.915	244.487		244.487	6.809		
	C-175	631.2	-.1	-1.3	629.8	+28.6	601.2	57.831	-3.314	-3.890	53.941	3154.63	190.066	244.007		244.007	7.289		
	C-180	633.1	-.1	-1.3	633.7	+28.6	605.1	58.206	-3.409	-4.002	54.204	3150.54	189.820	244.024		244.024	7.272		
	C-185	630.0	-.3	-1.45	628.2	+28.6	599.6	57.677	-3.503	-4.112	53.565	3154.14	190.036	243.601		243.601	8.195		
	C-190	629.8	-.4	-1.5	627.9	+28.6	599.3	57.649	-3.598	-4.224	53.425	3155.17	190.098	243.523		243.523	8.273		
	C-195	626.2	-.4	-1.5	624.3	+28.6	595.7	57.302	-3.693	-4.335	52.967	3157.92	190.258	243.225		243.225	8.571		
	C-200	620.9	-.4	-1.5	619.0	+28.6	590.4	56.792	-3.788	-4.447	52.345	3166.13	190.759	243.104		243.104	8.692		
	C-205	616.6	-.5	-1.45	614.6	+28.6	586.3	56.369	-3.882	-4.557	51.812	3166.69	190.793	242.605		242.605	9.191		
	End Line C C-210	615.5	-.6	-1.45	613.4	+28.6	584.8	56.254	-3.977	-4.668	51.586	3166.98	190.761	242.347	0.024	242.347	9.449		

File Helmet Peak
Anaconda



0' 500'

HORIZONTAL SCAL: 1"=500'
VERTICAL SCALE: 1= 1.0 mgals
ρ=2.65 GM/CC
LOOKING WEST

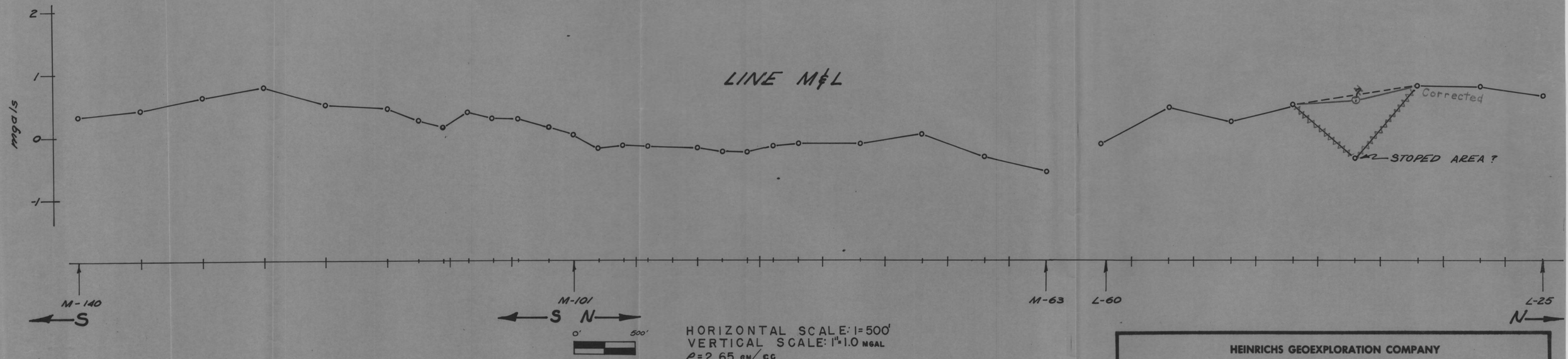
HEINRICHS GEOEXPLORATION COMPANY
P.O. Box 5671 Tucson, Arizona

GRAVITY PROFILE

FOR
THE ANACONDA COMPANY

MINERAL HILL AREA
PIMA COUNTY, ARIZONA
SEC. 12 T. 17 S., R. 12 E.

SCALE: 1"=500'	CONTOUR INTERVAL:	REVISIONS
	DATA BY: W. W. C.	
DATE: AUGUST 1963	SHEET 1 OF 4	
DRAWN BY: G.D.P.	DRAWING NO.:	FILE:



HORIZONTAL SCALE: 1=500'
VERTICAL SCALE: 1"=1.0 MGAL
ρ=2.65 GM/CC
LOOKING WEST

HEINRICHS GEOEXPLORATION COMPANY
P.O. Box 5671 Tucson, Arizona

GRAVITY PROFILE

FOR
THE ANACONDA COMPANY

MINERAL HILL AREA
PIMA COUNTY, ARIZONA
SEC. 1 & 12 T. 17 S. R. 12 E

SCALE: 1"=500'	CONTOUR INTERVAL:	REVISIONS
	DATA BY: W. W. C.	
DATE: AUGUST 1963	SHEET 2 OF 4	
DRAWN BY: G.D.P.	DRAWING NO.:	FILE:

HEINRICHS GEOEXPLORATION COMPANY
POST OFFICE BOX 5671
TUCSON, ARIZONA

TWIN BUTTES AREA
GRAVITY AND LEVEL NOTES
FIELD NOTES, BASIC CALCULATIONS AND
PRELIMINARY SKETCHES

for

THE ANACONDA COMPANY

August 1963

GRAVITY INVESTIGATIONS

PIMA MINING DISTRICT

Pima County, Arizona

for

THE ANACONDA COMPANY

COPY

July 1963

by
HEINRICHS GEOEXPLORATION COMPANY
P. O. Box 5671 Tucson, Arizona

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Introduction	1
Calculations	1
Area Descriptions	
Helmet Peak	3
Twin Buttes	3
Mineral Hill	3
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APPENDIX

Mineral Hill NW-SE 45° Profile Sheet 1 of 4
Mineral Hill Lines M and L Profile Sheet 2 of 4

MAP POCKET

Helmet Peak Contour Plan----------Sheet 3 of 4
Twin Buttes Contour Plan----------Sheet 4 of 4
Helmet Peak Hand Calculation Sheets 7 Sheets

Original Field Gravity Notes, Level Notes, Elevation Sheets
Helmet Peak Area, Twin Buttes Area, Mineral Hill Area
(With original copy only)
TO BIND IN BACK WHEN RECEIVED

Mineral Hill IBM Calculation Sheets-------5 sheets
Twin Buttes IBM Calculation Sheets--------13 sheets
(To be submitted later)

HELMET PEAK AREA

The Helmet Peak Area consists of six north-south lines totaling 18 miles. The line spacing is 1,500 feet with a station separation of 500 feet. Specifically the Helmet Peak Area lies within sections 4, 5, 8, 9 and 16 of T 17 S and Section 33 of T 16 S, all in R 13 E. Two hundred fifteen gravity stations were included in this survey.

TWIN BUTTES AREA

The Twin Buttes Area consists of nine north-south lines totaling 21 miles. The line spacing varies from 2,000 feet to 1,500 feet with a station separation of 500 feet. Specifically the Twin Buttes Area lies within Sections 31, 32, and 33 of T 17 S and Sections 4, 5, 7 and 8 of T 18 S, all in R 13 E. Two hundred twenty-five gravity stations were included in this survey.

MINERAL HILL AREA

The Mineral Hill Area consists of two lines, one north-south and the other N 45° W, totaling 19,000 feet. The station separation varied from 200 feet to 500 feet radiating outward from the point of intersection of the two lines. Specifically the Mineral Hill Area lies within Sections 1, 2 and 12 of T 17 S, R 12 E. Sixty gravity stations were included in this survey.

INTRODUCTION

The area of gravity investigation is located about 30 miles south of Tucson, Arizona on the eastern flank of the Sierrita Mountains. This report discusses the method of investigation and the procedure involved in the calculation of three detailed gravity surveys run in this area for The Anaconda Company.

CALCULATIONS

The readings from the World-Wide Gravity Meter, used in this project, were corrected for station elevation, density of the surface material, latitude, and in some instances, the surrounding topography. In this report topographic conditions have not been considered in the calculations but for precise interpretation certain stations within the Twin Buttes and Mineral Hill areas may warrant topographic consideration. Generally, these stations are located upon the exposed bedrock complex.

The various quantitative factors used in the gravity calculations consist of a latitude correction factor derived for 32° north latitude and a correction of 1.174 milligals per mile from a chosen zero point. A combined Bouguer and free air correction of 0.06025 milligals per foot of elevation which takes into account the station elevation and the density of the

surface material is very influential and when varied, greatly effects the final gravity value. In this case, a density of 2.65 gm/cc, representing the density of the bedrock complex was used.

Because of the geologic or bedrock exposure conditions present within the designated areas a density of 2.65 gm/cc is not as applicable to numerous stations within these areas and for a qualitative interpretation of the gravity values these stations probably should be recalculated using at least three, and possibly four, different density values. Due to the complexity of gravity calculations this qualitative approach is sometimes avoided because of the additional cost and time involved. At present GEOEX has the facilities of an IBM 1410 digital computer which has been programed to receive and calculate the gravity stations allowing for different values of density and may be computed on any base within the area. The use of this type of data processing allows for fast and comparatively inexpensive gravity determinations which leads to better qualitative interpretations of the data.

AREA DESCRIPTIONS

Gravity surveys have been conducted over three areas on the eastern flank of the Sierrita Mountains. The areas consisted of the Helmet Peak Area, Twin Buttes Area and Mineral Hill Area, all are located within five miles of each other.

On the north-south profile, in the Mineral Hill Area, station L-40 appears to be in error, considering the general trend of the profile. Six days after the original gravity value was determined the station was redetermined and the two values repeated. A filled stope has been reported to be in the vicinity of this gravity station which would explain the divergence in the gravity values. An additional profile of 100 foot or possibly 50 foot station separation is recommended between station L-45 and L-35 as a further check.

Respectfully submitted,

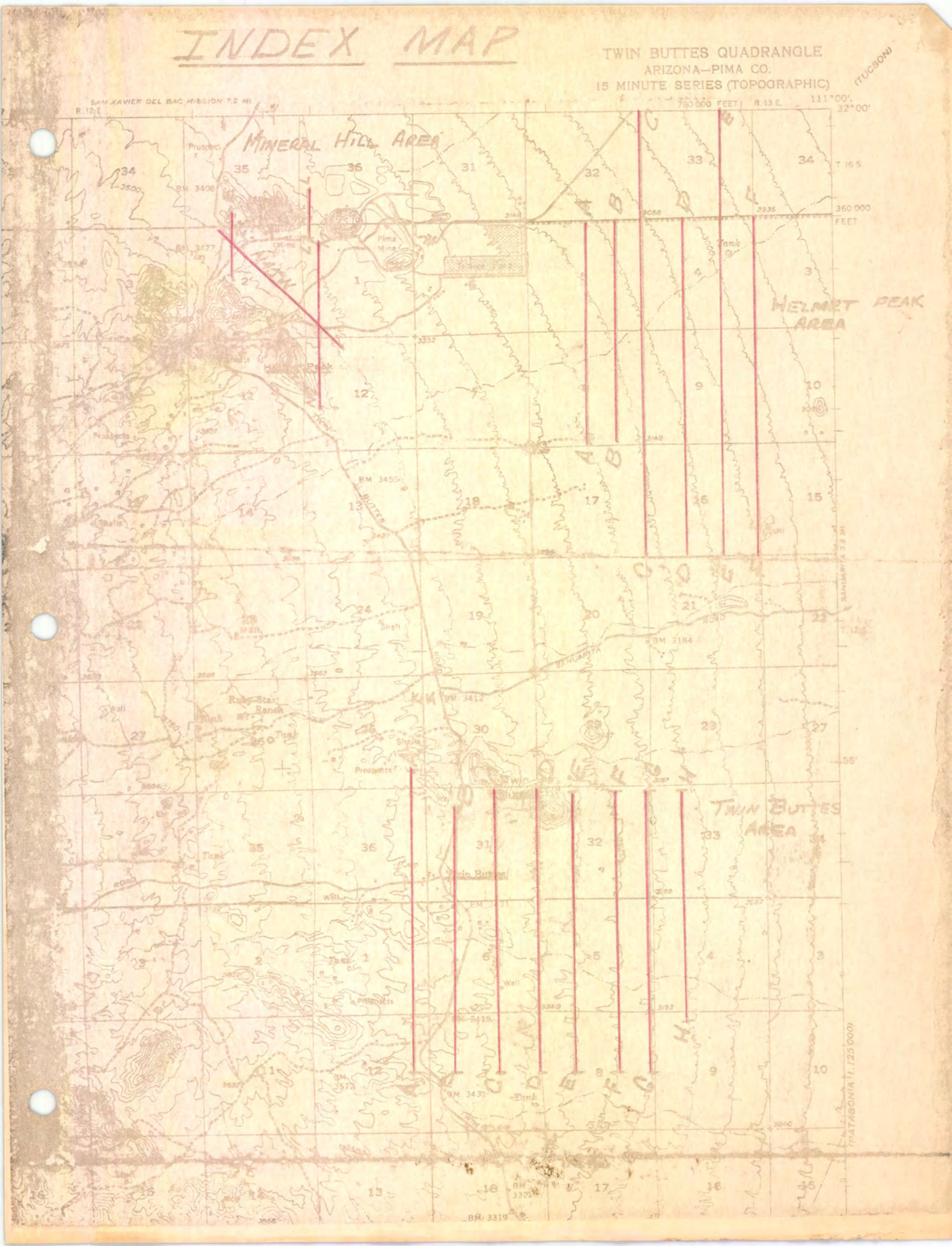
HEINRICHS GEOEXPLORATION COMPANY

W. W. Carey

W. W. Carey
Geophysicist

August 7, 1963
P. O. Box 5671
Tucson, Arizona 857

INDEX MAP


TWIN BUTTES QUADRANGLE
ARIZONA—PIMA CO.
15 MINUTE SERIES (TOPOGRAPHIC)
(TUCSON)
SAN XAVIER DEL BAC MISSION 7.2 MI.
R. 12 E.
780 000 FEET
R. 13 E.
111°00'
32°00'
T. 16 S.
360 000 FEET
MINERAL HILL AREA
HELMET PEAK AREA
TWIN BUTTES AREA
Pima Mine
Helmet Peak
Ruby Star Ranch
Twin Buttes
BM 3406
BM 3477
BM 3455
BM 3184
BM 3412
BM 3431
BM 3572
BM 3319
SAHUARITA ROAD
SANTA RITA 3.8 MI.
(PATAGONIA 1:125 000)

HEINRICHS GRAVDATA

PROJECT NO: 134-633580

AREA CODE: 080263-TB-AN A

1 punch only if filled in 41 80

INSTRUMENT FACTOR: 097920 (53–58)

LATITUDE CORRECTION: 11740 (59 60–63)

COMBINED B & F CORRECTION: 060250 (64–69)

gang all cards

1–6	7–11	12–17	18–21	22–23	24–25	26–29	30–35	36–42
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	G-000	Line G	459▲4	▲0	▲	46▲7	00▲0000	03197▲13
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	G-045		444▲4	▲	0▲3	▲	▲852$\bar{0}$	2551
	G-050		445▲2	▲	▲2	▲	0▲947$\bar{0}$	2379
	G-055		449▲4	0▲0	▲2	▲	1▲042$\bar{0}$	1701
	G-060		446▲0	0▲$\bar{1}$	▲2	00▲	01▲136$\bar{0}$	03221▲11
	G-065		448▲0	▲$\bar{2}$	▲2	003▲7	01▲231$\bar{0}$	1701
	G-070		441▲2	0▲$\bar{1}$	0▲0	046▲6	01▲325$\bar{0}$	03220▲28

HEINRICHS GRAVDATA

PROJECT NO: 134-633580

AREA CODE: 0 B 0 2 6 3 - T B - A N (1 … 41) A (80)

punch only if filled in

INSTRUMENT FACTOR: 0 9 7 9 2 0 (53 … 58)

LATITUDE CORRECTION: 1 ▲ 1 7 4 0 (59 60 … 63)

COMBINED B & F CORRECTION: 0 6 0 2 5 0 (64 … 69)

gang all cards

1 … 6	7 … 11	12 … 17	18, 20, 21	22, 23	24, 25	26, 28, 29	30, 31, 32, … 35	36, … 40, 42
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	E 1 - 1 0 9 0	LINIE 1E	4 1 1 0 ▲ 1	0 ▲ 2̄	1 ▲ 0	0 1 4 2 ▲ 4	0 1 ▲ 7 1 0 1 4 1 0̄	0 3 1 2 1 8 1 6 ▲ 1 7
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	E 1 - 1 1 1 0		4 1 0 8 ▲ 8	0 ▲ 2̄	0 ▲ 7	1 4 2 ▲ 4	1 2 ▲ 0 1 8 3 1 0̄	1 2 1 8 1 3 ▲ 1 1 9
	E 1 - 1 1 1 5		3 1 9 1 8 ▲ 9	0 ▲ 1̄	0 ▲ 7	1 ▲ 2 ▲ 4	1 2 ▲ 1 1 7 1 8 1 0̄	1 2 1 9 1 5 ▲ 5 1 4
	E 1 - 1 1 2 0		3 1 9 1 7 ▲ 3	0 ▲ 1̄	0 ▲ 7	1 ▲ 2 ▲ 4	1 2 ▲ 2 1 7 1 2 1 0̄	1 2 1 9 1 2 ▲ 4 1 1
	E 1 - 1 1 2 5		3 1 9 1 4 ▲ 5	0 ▲ 2̄	0 ▲ 7	1 ▲ 2 ▲ 4	1 2 ▲ 3 1 6 1 7 1 0̄	1 2 1 9 1 2 ▲ 6 1 5
	E 1 - 1 1 3 0		3 1 8 9 ▲ 2	0 ▲ 0	0 ▲ 3	1 ▲ 2 ▲ 4	1 2 ▲ 4 1 6 1 2 1 0̄	1 2 1 9 1 7 ▲ 5 1 7
	E 1 - 1 1 3 5	END 1E	3 1 9 1 9 ▲ 2	0 ▲ 0	0 ▲ 3	1 4 2 ▲ 4	1 2 ▲ 5 1 5 1 6 1 0̄	1 2 1 8 1 3 ▲ 4 1 9
072963	F 1 - 1 1 3 5	LINE 1F	4 1 1 5 ▲ 5	0 ▲ 0	0 ▲ 8	0 4 2 ▲ 4	0 1 2 ▲ 5 1 5 1 6 1 0̄	0 3 1 2 5 1 1 ▲ 0 1 6
	F 1 - 1 1 3 0		4 1 1 5 ▲ 9	▲	▲ 8	1 ▲ 2 ▲ 4	1 2 ▲ 4 1 6 1 2 1 0̄	1 2 1 4 9 ▲ 1 7
	F 1 - 1 1 2 5		4 1 1 5 ▲ 7	▲	▲ 8	1 ▲ 2 ▲ 4	1 2 ▲ 3 1 6 1 7 1 0̄	1 2 1 5 1 3 ▲ 3 1 0
	F 1 - 1 1 2 1 0		4 1 2 1 9 ▲ 9	▲	▲ 8	1 ▲ 2 ▲ 4	1 2 ▲ 2 1 7 1 2 1 0̄	1 2 1 4 9 ▲ 1 8
	F 1 - 1 1 1 1 5		4 1 2 1 9 ▲ 7	▲	▲ 8	1 ▲ 2 ▲ 4	1 2 ▲ 1 1 7 1 8 1 0̄	1 2 1 5 1 3 ▲ 3 1 0
	F 1 - 1 1 1 0		4 1 2 1 1 ▲ 7	0 ▲ 1̄	0 ▲ 8	0 1 4 1 2 ▲ 4	1 2 ▲ 0 1 8 1 3 1 0̄	1 2 1 5 1 0 ▲ 6 1 1
	F 1 - 1 1 0 1 5		4 1 2 1 2 ▲ 8	0 ▲ 0	0 ▲ 0	0 1 0 1 3 ▲ 7	0 1 ▲ 9 1 8 1 8 1 0̄	0 3 1 2 1 4 5 ▲ 6 1 2

HEINRICHS GRAVDATA

4

PROJECT NO: 134-633580

AREA CODE: 080263-TB-AN A

1 punch only if filled in 41 80

INSTRUMENT FACTOR: 097920

53 58

LATITUDE CORRECTION: 11740

59 60 63

COMBINED B & F CORRECTION: 060250

61 69

gang all cards

1 6	7 11	12 17	18 20 21	22 23	24 25	26 28 29	30 31 32 35	36 40 42
071163	BK114	Refer	4060	00	00	0000	0000000	0341136
	A00000	Line A	3066	00	00	0000	0000000	0358188
	A00050		3395	0$\bar{2}$	00	0000	000950$\bar{0}$	0352853
	A0110		3587	0$\bar{7}$	00		001890$\bar{0}$	0349843
	A0115		3633	0$\bar{9}$	00		002840$\bar{0}$	0348449
	0120		3576	00	0$\bar{7}$		3790$\bar{0}$	0348665
	0125		3566	00	0$\bar{7}$		4740$\bar{0}$	0347921
	0130		3566	00	0$\bar{7}$		5680$\bar{0}$	0347977
	0135		3554	00	0$\bar{7}$		6630$\bar{0}$	0347945
	0140		3530	00	0$\bar{3}$		7580$\bar{0}$	0348203
	0145		3567	00	0$\bar{3}$		8520$\bar{0}$	0347724
	0150		3530	00	0$\bar{3}$		9470$\bar{0}$	0348555
	0155		3573	00	0$\bar{3}$		10420$\bar{0}$	0348673

HEINRICHS GRAVDATA

PROJECT NO: 134-633580

AREA CODE: 018012163 - TIB - IAN (1 … 41) A (80)

punch only if filled in

INSTRUMENT FACTOR: 0.9712.0 (53 … 58)

LATITUDE CORRECTION: 1.7140 (59 60 … 63)

COMBINED B & F CORRECTION: 06.0215.0 (61 … 69)

gang all cards

1 … 6	7 … 11	12 … 17	18, 20, 21	22, 23	24, 25	26, 28, 29	30, 31, 32, 35	36, 40, 42
			A	A	A	A	A	A
017/12163	BIK/// 4	Reifeiri	410 16 Λ 0	0 Λ 0	0 Λ 0	0.0.0 Λ 0	0.0 Λ 0.0.0.0	0.3.1.4.1 / / Λ 3.1.6
	A.0.1.6.0.0	Lilmie, A	3.1.6.4 Λ 3	0 Λ 0	0 Λ 3̄	0 0.3 Λ 2	0 / Λ / 3.1.6.1.0̄	0.3.1.4.8.1.9.1 / 1.8
	A.0.1.6.5.0		3.1.6.7 Λ 0	0 Λ 1̄	0 Λ 0	0 0.3 Λ 2	0 / Λ 2.3.1 / 1.0̄	0.3.1.4.9.1.2 Λ 7.7
	A.0.1.7.0.0		3.1.4.5 Λ 0	0 Λ 3̄	0 Λ 0	0.1.0.3 Λ 2	0 / Λ 3.2.5.1.0̄	0.3.1.5.1.3.1 / Λ 3.1.9
	A.0.1.7.5.1		3.1.1 / Λ 9	0 Λ 5̄	0 Λ 0	1 / 1 Λ 4	1 / Λ 4.7.1.0.1.0̄	1.5.1.7.1.2 Λ 6.1.6
	1.0.8.1.0.1		3.1.6.1.8 Λ 0	0 Λ 6̄	0 Λ 0	1 / 1 Λ	1 / Λ 5.1 / 1.5.1.0̄	1.1.4.1.8.1.2 Λ 0.1.6
	1.0.8.1.5.1		3.1.6.1.9 Λ 6	0 Λ 2	0 Λ 6̄	1 / 1 Λ	1 / Λ 6.1.0.1.9.1.0̄	1.1.4.1.7.1.9 Λ 7.1.0
	1.0.9.1.0.1		3.1.6.1.5 Λ 5̄	0 Λ 3	0 Λ 6̄	1 / 1 Λ	1 / Λ 7.1.0.4.1.0̄	1.1.4.1.8.1.4 Λ 9.1.7
	1.0.9.1.5.1		3.1.6.1.5 Λ 4	0 Λ 4	0 Λ 6̄	1 / 1 Λ	1 / Λ 7.1.9.1.9.1.0̄	1.1.4.1.7.1.7 Λ 4.1.8
	1 / 1.0.1.0.1		3.1.7.1.3 Λ 2	0 Λ 6	0 Λ 6̄	1 / 1 Λ	1 / Λ 8.1.9.1.4.1.0̄	1.1.4.1.7.1.0 Λ 4.1.2
	1 / 1.0.1.5.1		3.1.6.1.3 Λ 5	0 Λ 7	0 Λ 6̄	1 / 1 Λ	1 / Λ 9.1.8.1.8.1.0̄	1.1.4.1.8.1.8 Λ 0.1.7
	1 / 1 / 1.0.1		3.1.5.1.9 Λ 9	0 Λ 8	0 Λ 6̄	1 / 1 Λ	1 2 Λ 0.1.8.1.3.1.0̄	1.1.4.1.8.1.7 Λ 6.1.8
	1 / 1 / 1.5.1		3.1.8.1.0 Λ 2	0 Λ 1	0 Λ 3̄	1 / 1 Λ	1 2 Λ / 1.7.1.8.1.0̄	1.1.4.1.5.1.0 Λ 2.1.9
	1 / 1.2.1.0.1		3.1.7.1.2 Λ 4	0 Λ 2	0 Λ 3̄	1 / 1 Λ	1 2 Λ 2.1.7.1.2.1.0̄	1.1.4.1.6.1 / Λ 2.1 /
	1 / 1.2.1.5.1		3.1.6.1.2 Λ 6	0 Λ 3	0 Λ 3̄	1 / 1 Λ	1 2 Λ 3.1.6.1.7.1.0̄	1.1.4.1.8.1 / Λ 3.1.4
	1 / 1.3.1.0.1		3.1.7.1.0 Λ 8	0 Λ 4	0 Λ 3̄	1 / 1 Λ	1 2 Λ 4.1.6.1.2.1.0̄	1.1.4.1.6.1.9 Λ 9.1 /
	1 / 1.3.1.5.1		3.1.6.1.0 Λ 7	0 Λ 6	0 Λ 8̄	1 / 1 Λ	1 2 Λ 5.1.5.1.6.1.0̄	1.1.4.1.8.1.0 Λ 7.1.0
	1 / 1.4.1.0.1		3.1.7.1.3 Λ 0	0 Λ 0	0 Λ 3̄	1 / 1 Λ	1 2 Λ 6.1.5.1 / 1.0̄	1.1.4.1.6.1.3 Λ 5.1.6
	1 / 1.4.1.5.1	END A	3.1.4.8 Λ 3	0 Λ 0	0 Λ 3̄	1 / 1 Λ	1 2 Λ 7.1.4.1.6.1.0̄	1.1.5.1.0.1.3 Λ 5.1.5
			A	A	A	A	A	A
			A	A	A	A	A	A
			A	A	A	A	A	A
			A	A	A	A	A	A
			A	A	A	A	A	A

HEINRICHS GRAVDATA

PROJECT NO: 134-633580

AREA CODE: 0181012161 31-17 1B1-1B1N1 (1 … 41) A (80)

punch only if filled in

INSTRUMENT FACTOR: 0191719121 0 (53–58)

LATITUDE CORRECTION: 1A1171410 (5960–63)

COMBINED B & F CORRECTION: 0161012151 0 (61–69)

gang all cards

1 … 6	7 … 11	12 … 17	18	20,21	22,23	24,25	26	28,29	30,31,32 … 35	36 … 40	42
				A	A	A		A	A	A	
0171121613	B1K1/1/14	Rei/Fieivir	4101640	0A0	0A0	0101040	0101010101		0131411/1A316		
	B1/1201 0	Lu inie 1B	3181619	0A1	0A3	0101321	9231617 1 0		0131413181812		
	B1/1151 0		4101481	0A1	0A3	0101321	9232717 9		0131411 5A517		
	B1/1101 0		3191285	0A1	0A7	1 1 A	123A1 7181 0̄		1314131 3A216		
	B1/1051 0		3191317	0A2	0A7	1 1 A	12A981310̄		1314131 9A514		
	B1/1001 0		4101316	0A3	0A7	1 1 A	1A9181810̄		1314121 9A918		
	B1/0951 0		4100A17	0A4	0A7	1 1 A	1A8191410̄		1314131 6A113		
	B1/0901 0		4112A0	0A6	0A7	1 1 A	1A7191910̄		1314101 8A712		
				A	A	A		A	A	A	
				A	A	A		A	A	A	
0171151613	B1/0181510	Li/inie 1B	3181581	0A2̄	0A0	0112A1	01A7101410̄		0131411 6A31/		
	B1/0181010		3171881	0A3̄	0A0	0112A1	01A6101810̄		0131411 5A010		
	B1/0171510		3161951	0A4̄	0A0	0112A1	01A5111510̄		0131412 8A512		
	1171 01		161A51	0A7̄	0A0	1 1 A	1A4121010̄		1314151 8A813		
	16151		18101A6	0A0	0A2̄	1 1 A	1A3125 1 0̄		1314131 2A316		
	1610 1		1716A0	0A1	0A2̄	1 1 A	1A2131 1 0̄		1314151 0A115		
	15151		1913A1	0A1	0A2̄	1 1 A	1A1131 6 1 0̄		1314131 2A414		
	1510 1		1814A1	0A2	0A2̄	1 1 A	1A0141 2 1 0̄		1314141 9A013		
	1451		1417A4	0A0	0A9̄	1 1 A	10A9141 7 1 0̄		1315101 1A019		
	14101		1412A9	0A0	0A9̄	1 1 A	10A8151 2 1 0̄		1315101 4A412		
	1351		1712A3	0A1̄	0A9̄	1 1 A	10A7151 8 1 0̄		1314131 2A116		
	13101		1519A4	0A1̄	0A9̄	1 1 A	10A6161 3 1 0̄		1314131 9A817		
	1251		1516A7	0A0	0A2̄	1 1 A	10A5161 8 1 0̄		1314141 0A614		
	12101		1517A1	0A1	0A2̄	1 1 A	10A4171 4 1 0̄		1314131 9A117		

HEINRICHS GRAVDATA

PROJECT NO: 134-633580

AREA CODE: 018101216131-17181-1AM (1 … 41 … 80)

punch only if filled in

INSTRUMENT FACTOR: 019719130 (53–58)

LATITUDE CORRECTION: LA1714101 (59 60 – 63)

COMBINED B & F CORRECTION: 016101215101 (61 – 69)

gang all cards

1–6	7–11	12–17	18, 20,21	22,23	24,25	26, 28,29	30,31,32–35	36–40, 42
012115613	BIK1 1 F	RieHeri	4101640	0A0	0A0	0101010	0101010101	0131411A31C
121212121	B101/5101		3151543	0A1	0A2	01/12A1	0103171910	0131413181814
121212121	B101/1010		3161A1	A2	0A2	01/12A1	0102181410	0131413171613
012116613	B101015101		3151941	0A0	0A0	0101418	0101181910	0131413181719
	B101010151		3151941	0A0	0A0	0101418	0101091511	0131413191812
	B1010101	EINDI B	3161A10	0A1	0A0	0101418	0101010101	0131415161A31
	C1010101	KLINIG C	2191A1	0A0	0A1	1C1 1A1	0101010101	1151610A211
	C1001510		3181510	0A0	0A1	1 1 A	1A0191511	1141115A512
	C1011011		3181A1	0A1	0A0	1 1 A	1A1819101	1131919A612
	C1011511		3181743	0A1	0A1	1 1 A	1A2184101	1131916A618
	C1012101		3181318	0A1	0A1	1 1 A	1A3171910	1131915A717
	C1012511		3181410	0A0	0A8	1 1 A	1A4171410	1131911A612
	C1013101		3171741	0A0	0A8	1 1 A	1A5161810	1131918A717
	C1013511		3181511	0A1	0A8	1 1 A	1A6131310	1131915A215
	C1014101		3191A1	0A1	0A8	1 1 A	1A7151810	1131915A814
	C1014511		3191511	0A2	0A8	1 1 A	1A8151210	1131814A311
	C1015101		3191A0	0A3	0A8	1 1 A	1A9141710	1131819A514
	C1015511		4101A91	0A0	0A8	1 1 A	1A0141210	1131814A617
	C1016101		4101511	0A1	0A8	1 1 A	1A1131610	1131819A017
	C1016511		3161918	0A2	0A8	1 1 A	1A2131110	1141615A510
	C1017101		3181815	0A3	0A8	1 1 A	1A3121510	1141411A116
	C1017511		4111A4	0A4	0A8	1 1 A	1A4171010	1131818A715

HEINRICHS GRAVDATA

PROJECT NO: 134-633580

AREA CODE: 0 8 0 2 6 3 - T B - A N | A
1 — 41 — 80

punch only if filled in

INSTRUMENT FACTOR: 0 9 7 9 2 0
53 — 58

LATITUDE CORRECTION: 1 1 7 4 0
59 60 — 63

COMBINED B & F CORRECTION: 0 6 0 2 5 0
64 — 69

gang all cards

1 — 6	7 — 11	12 — 17	18 — 20 21	22 23	24 25	26 — 28 29	30 31 32 — 35	36 — 40 42
0 7 1 7 6 3	B K 1 1 4̄	Refer	4 0 6 0	0 0	0 0	0 0 0 0	0 0 0 0 0 0	0 3 4 1 1 3 6
	C 0 8 0 0	Line C	4 0 4 3	0 0	0 0	0 0 2 4̄	0 1 5 1 5 0̄	0 3 3 8 3 4 0
	C 0 8 5 0		4 0 2 6	0 0	0 0	0 0 2 4̄	0 1 6 0 9 0̄	0 3 3 8 2 0 2
	C 0 9 0 0		3 9 5 8	0 0	0 0	0 0 2 4̄	0 1 7 0 4 0̄	0 3 3 8 5 4 7
	C 0 9 5 0		3 9 2 9	0 0	0 0	0 0 2 4̄	0 1 7 9 9 0̄	0 3 3 8 6 0 8
	C 1 0 0 0		3 9 5 1	0 1	0 0	0 0 2 4̄	0 1 8 9 4 0̄	0 3 3 7 9 8 5
0 7 1 8 6 3	C 1 0 5 0		3 9 7 6	0 2	0 0	0 0 4 4	0 1 9 8 8 0̄	0 3 3 6 7 4 7
	C 1 1 0 0		3 9 5 5	0 3	0 0	0 0 4 4	0 2 0 8 3 0̄	0 3 3 7 9 5 4
	C 1 1 5 0		4 0 4 4	0 4	0 0	0 0 4 4	0 2 1 7 8 0̄	0 3 3 7 5 6 6
	C 1 2 0 0		4 0 5 6	0 5	0 0		0 2 2 7 2 0̄	0 3 3 7 6 7 3
	C 1 2 5 0		4 0 8 8	0 6	0 0		3 6 7 0̄	7 0 8 0
	C 1 3 0 0		4 0 7 8	0 7	0 0		4 6 2 0̄	6 4 0 7
	C 1 3 5 0	END C	3 9 1 0	0 7	1 1		5 5 6 0̄	8 0 8 9
	D 1 3 5 0	Line D	4 2 1 6	1 5	1 1		5 5 6 0̄	1 6 4 5
	D 1 3 0 0		4 1 6 6	1 9	1 1		4 6 2 0̄	2 0 9 5
	D 1 2 5 0		4 1 5 4	2 2	1 1		3 6 7 0̄	2 3 9 8
	D 1 2 0 0		4 0 9 0	0 0	3 3		2 7 2 0̄	3 6 1 0
	D 1 1 5 0		4 1 0 1	0 0	3 3		1 7 8 0̄	3 7 4 3
	D 1 1 0 0		4 2 3 9	0 0	3 3		0 8 3 0̄	2 4 6 8
	D 1 0 5 0		4 1 6 0	0 0	3 3		1 9 8 8 0̄	4 2 6 4
	D 1 0 0 0		4 2 7 1	0 0	3 3		1 8 9 4 0̄	3 0 1 4
	D 0 9 5 0		4 1 7 7	0 0	3 3		1 7 9 9 0̄	4 5 1 9

HEINRICHS GRAVDATA

9

PROJECT NO: 134-633580

AREA CODE: 0802163-TB-AN (1–41) A (80)

punch only if filled in

INSTRUMENT FACTOR: 0979920 (53–58)

LATITUDE CORRECTION: 1 1740 (59 60–63)

COMBINED B & F CORRECTION: 0602510 (64–69)

gang all cards

1–6	7–11	12–17	18–21	22–23	24–25	26–29	30–35	36–42
071963	BK11$\bar{4}$	Refer	406 0	0 0	0 0	000 0	00 0 000	0341 1 36
	D0500	Line D	419 0	0 0	0 0	005 5	00 9470$\bar{0}$	0335 5 87
	D0450		408 3	0 0	0 0	005 5	00 8520$\bar{0}$	0334 4 79
	D0400		405 5	0 0	0 0	005 5	00 7580$\bar{0}$	0334 5 10
	D0350		400 9	0 0	0 0	005 5	00 6630$\bar{0}$	0334 8 47
	D0300		400 9	0 0	0 0		00 5680$\bar{0}$	0334 9 83
	D0250		407 4	0 0	0 $\bar{5}$		4740$\bar{0}$	344 1 6
	D0200		419 1	0 0	0 $\bar{5}$		3790$\bar{0}$	345 6 7
	D0150		429 1	0 0	0 $\bar{5}$		2840$\bar{0}$	350 6 2
	D0100		376 2	0 0	0 $\bar{5}$		1890$\bar{0}$	434 8 5
	D0 50		267 1	0 0	0 7		0950$\bar{0}$	589 8 7
	D0000	END D	268 6	0 0	0 7		0000	588 9 9

10

HEINRICHS GRAVDATA

PROJECT NO: 134-633580

AREA CODE: 0802163-TB-AM A
1 41 80

punch only if filled in

INSTRUMENT FACTOR: 0979200
53 58

LATITUDE CORRECTION: 1A1740
59 60 63

COMBINED B & F CORRECTION: 0602500
64 69

gang all cards

1 6	7 11	12 17	18 20 21	22 23	24 25	26 28 29	30 31 32 35	36 40 42
0729613	BM114	Reyer	406A0	0A0	0A0	0010A0	00A0000	03411A36
	E0000	Line E	412A3	0A1	0A0	0424	00A0000	03305A40
	E0050		421A5	0A2	0A0	0424	00A0950	03296A39
	E0100		419A4	0A3	0A0	0424	00A1890	299A94
	E0150		412A7	A0	0A0	A	A2840	304A41
	E0200		413A3	A1	A9	A	A3790	296A14
	E0250		410A4	A1	A9	A	A4740	297A84
	E0300		415A1	A2	A9	A	A5680	299A05
	E0350		430A1	A0	A9	A	A6630	290A32
	E0400		420A3	A	1A2	A	A7580	298A28
	E0450		408A0	A1	1A2	A	A8520	298A90
	E0500		404A3	A2	1A2	A	A9470	293A23
	E0550		405A0	A3	1A2	A	1A0420	286A94
	E0600		408A8	A0	1A2	A	1A1360	278A84
	E0650		401A0	A1	1A2	A	1A2310	291A41
	E0700		399A8	A2	1A2	A	1A3250	295A66
	E0750		399A7	A3	1A2	A	1A4700	298A59
	E0800		405A6	A0	1A0	A	1A5150	293A33
	E0850		412A9	A1	1A0	A	1A6090	283A36

HEINRICHS GRAVDATA

11

PROJECT NO: 134-633580

AREA CODE: 080263-TB-AN A

1 41 80

punch only if filled in

INSTRUMENT FACTOR: 097920

53 58

LATITUDE CORRECTION: 11740

59 60 63

COMBINED B & F CORRECTION: 060250

64 69

gang all cards

1 6	7 11	12 17	18 20 21	22 23	24 25	26 28 29	30 31 32 35	36 40 42
073163	BK11$\bar{4}$	Refer1	406 0	0 0	0 0	000 0	0000000	03411 36
	G-075	Line G	440 0	$\bar{2}$		4 2	1470$\bar{0}$	03221 29
	G-080		439 5	$\bar{4}$		4 2	1515$\bar{0}$	1792
	G-085		449 2	$\bar{6}$	0 0		1609$\bar{0}$	0183
	G-090		442 9	0	0 $\bar{3}$		1704$\bar{0}$	0889
	G-095		433 6	1	0 $\bar{3}$		1799$\bar{0}$	1909
	G-100		442 3	2	0 $\bar{3}$		1894$\bar{0}$	0632
	G-105		435 2	$\bar{2}$	1 0		1988$\bar{0}$	1455
	G-110		434 5	$\bar{5}$	1 0	004 2	0208 3$\bar{0}$	03215 94
	G-115		430 5	$\bar{7}$	1 0		2178$\bar{0}$	1989
	G-120		431 2	1 $\bar{0}$	1 0		2272$\bar{0}$	1646
	G-125		431 0	0 0	0 4		2367$\bar{0}$	1540
	G-130		429 6	0 0	0 4		2462$\bar{0}$	1575
	G-135	END G	428 5	0 0	0 4	004 2	0255 6$\bar{0}$	03216 16

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-NH-AN 1 OF 3 DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV AVERAGE DENSITY = 2.69 GM/CC
LATITUDE CORRECTION = 1.1740 COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/22	S-8060	REFER	410.8	0.0	0.0	410.8	410.8	.0000	40.228	3432.16	206.788	247.013	N/A	247.013	REFERENCE	
	N-W000		406.5	0.0	0.0	406.5	406.5	.0080-	39.795	3441.36	207.342	247.137	N/A	247.137	.124	.050
	N-W020		407.7	0.0	0.0	407.7	407.7	.0107-	39.909	3439.11	207.206	247.116	N/A	247.116	.103	.042
	N-W040		402.2	0.0	0.0	402.2	402.2	.0134-	39.368	3448.04	207.744	247.112	N/A	247.112	.099	.040
	N-W060		403.4	0.0	0.0	403.4	403.4	.0161-	39.482	3448.96	207.800	247.282	N/A	247.282	.269	.109
	N-W080		406.6	0.1	0.0	406.7	406.7	.0188-	39.802	3444.85	207.552	247.354	N/A	247.354	.341	.138
	N-W100		417.6	0.1	0.0	417.7	417.7	.0215-	40.876	3428.44	206.564	247.439	N/A	247.439	.426	.173
	N-W120		419.7	0.1	0.0	419.8	419.8	.0242-	41.078	3425.37	206.379	247.457	N/A	247.457	.444	.180
	N-W140		418.1	0.2	0.0	418.3	418.3	.0268-	40.928	3427.41	206.501	247.430	N/A	247.430	.417	.169
	N-W190		412.3	0.3	0.0	412.6	412.6	.0937-	40.292	3436.38	207.042	247.334	N/A	247.334	.321	.130
	N-W240		426.4	0.4	0.0	426.8	426.8	.1607-	41.804	3417.98	205.933	247.537	N/A	247.537	.524	.212
	N-W290		417.2	0.3	1.8	419.3	419.3	.2276-	40.791	3427.98	206.536	247.326	N/A	247.326	.313	.127
	N-W340		414.4	0.7	1.8	416.9	416.9	.2946-	40.477	3432.92	206.833	247.310	N/A	247.310	.297	.120
	N-W390		411.0	1.1	1.8	413.9	413.9	.3615-	40.105	3442.20	207.393	247.497	N/A	247.497	.484	.196
	N-W440		406.1	1.4	1.8	409.3	409.3	.4285-	39.576	3448.92	207.797	247.373	N/A	247.373	.360	.146
	N-W490		411.2	1.7	1.8	414.7	414.7	.4954-	40.026	3447.69	207.723	247.749	N/A	247.749	.736	.298
	E-6000		417.2	2.1	1.8	421.1	421.1	.5624-	40.574	3445.21	207.574	248.148	N/A	248.148	1.135	.459
	S-8020		412.9	0.0	0.0	412.9	412.9	.0054-	40.425	3431.81	206.767	247.191	N/A	247.191	.178	.072
	S-8040		407.9	0.0	0.0	407.9	407.9	.0027-	39.938	3437.17	207.089	247.028	N/A	247.028	.015	.006
	S-8080		415.8	0.0	0.0	415.8	415.8	.0027-	40.712	3424.16	206.306	247.018	N/A	247.018	.004	.002
	S-8100		418.6	0.0	0.0	418.6	418.6	.0054-	40.983	3420.96	206.113	247.096	N/A	247.096	.083	.033
	S-8120		421.6	0.0	0.0	421.6	421.6	.0080-	41.274	3416.99	205.874	247.147	N/A	247.147	.134	.054
	S-8140		425.4	0.0	0.0	425.4	425.4	.0107-	41.643	3412.22	205.586	247.229	N/A	247.229	.216	.087
	S-8190		432.8	0.1	0.0	432.9	432.9	.0776-	42.298	3497.87	210.747	253.045	N/A	253.045	6.032	2.442

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-NH-AN 1 OF 3 — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER & FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/22	S-E240		437.9	0.1	0.0	438.0	438.0	.1446-	42.719	3486.83	210.082	252.801	N/A	252.801	5.788	2.343

HEINRICHS GEOEXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-060263-MH-AN 2 OF 3 — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/23	M-0000	REFERS	406.4	0.0	0.0	406.4	406.3	.0000	39.789	3431.16	206.727	246.512	N/A	246.512	REFERENCE	
	B-A115	NETTIE	398.0	0.0	0.0	398.0	397.9	.0000-	38.962	3465.15	208.779	247.738	N/A	247.738	1.225	.497
	M-0200	S	413.6	0.0	0.0	413.6	413.5	.0378	40.534	3421.39	206.139	246.673	N/A	246.673	.161	.065
	M-0400	S	415.0	0.0	0.0	415.0	414.9	.0757	40.716	3419.93	206.051	246.767	N/A	246.767	.254	.103
	M-0600	S	408.0	0.0	0.0	408.0	407.9	.1136	40.075	3430.67	206.698	246.773	N/A	246.773	.261	.106
	M-0800	S	405.9	0.0	0.0	405.9	405.8	.1515	39.914	3433.72	206.882	246.795	N/A	246.795	.283	.115
	M-1000	S	395.7	0.0	0.0	395.7	395.6	.1893	38.959	3448.28	207.759	246.718	N/A	246.718	.206	.084
	M-1200	S	395.9	0.0	0.0	395.9	395.8	.2272	39.023	3448.91	207.797	246.820	N/A	246.820	.308	.125
	M-1400	S	391.2	0.1	0.0	391.3	391.2	.2651	38.618	3458.66	208.384	247.002	N/A	247.002	.490	.199
	M-1900	S	376.6	0.1	0.0	376.7	376.6	.3597	37.299	3481.26	209.746	247.045	N/A	247.045	.533	.216
	M-2400	S	386.7	0.1-	2.5	389.1	389.0	.4544	38.624	3462.21	208.598	247.222	N/A	247.222	.710	.288
	M-2900	S	375.5	0.2-	2.5	377.8	377.7	.5490	37.629	3477.16	209.499	247.128	N/A	247.128	.616	.250
	M-3400	S	388.3	0.3-	2.5	390.5	390.4	.6437	38.984	3450.57	207.897	246.881	N/A	246.881	.368	.149
	M-3900	S	389.1	0.4-	2.5	391.2	391.1	.7384	39.163	3446.78	207.668	246.832	N/A	246.832	.320	.130
	M-0000	N	404.3	0.0	2.1	406.4	406.3	.0000-	39.789	3431.16	206.727	246.512	N/A	246.512	.000-	.000-
	M-0200	BASE N	403.2	0.1	2.1	405.4	405.3	.0378-	39.643	3430.34	206.678	246.321	N/A	246.321	.192-	.078-
	M-0400	N	412.4	0.2	2.1	414.7	414.6	.0757-	40.509	3416.90	205.868	246.377	N/A	246.377	.135-	.055-
	M-0600	N	410.3	0.3	2.1	412.7	412.6	.1136-	40.269	3420.52	206.086	246.355	N/A	246.355	.158-	.064-
	M-0800	N	405.9	0.4	2.1	408.4	408.3	.1515-	39.803	3425.63	206.394	246.197	N/A	246.197	.315-	.128-
	M-1000	N	414.5	0.5	2.1	417.1	417.0	.1893-	40.610	3413.75	205.678	246.289	N/A	246.289	.223-	.091-
	M-1200	N	412.5	0.6	2.1	415.2	415.1	.2272-	40.380	3416.33	205.834	246.214	N/A	246.214	.299-	.121-
	M-1400	N	414.3	0.7	2.1	417.1	417.0	.2651-	40.521	3414.16	205.703	246.225	N/A	246.225	.288-	.117-
	M-1600	N	416.6	0.8	2.1	419.5	419.4	.3030-	40.712	3412.50	205.603	246.315	N/A	246.315	.197-	.080-
	M-1800	N	417.1	1.0	2.1	420.2	420.1	.3409-	40.736	3410.42	205.478	246.214	N/A	246.214	.299-	.121-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-MH-AN 2 OF 3 — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/23	M-2300 N		421.1	0.3-	4.3	425.1	425.0	.4355-	41.105	3406.32	205.243	246.348	N/A	246.348	.165-	.067-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-MH-AN 3 OF 3 — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READ-ING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/23	N-0000	REFERS	406.4	0.0	0.0	406.4	406.5	.0000	39.804	3431.16	206.727	246.532	N/A	246.532	REFERENCE	
	N-2800	N	433.8	0.6	4.3	438.7	438.8	.5301-	42.345	3388.85	204.178	246.523	N/A	246.523	.009-	.004-
	N-3300	N	433.6	0.8-	4.3	437.1	437.2	.6247-	42.077	3386.18	204.138	246.215	N/A	246.215	.317-	.129-
	N-3800	N	437.0	1.0-	4.3	440.3	440.4	.7193-	42.280	3380.48	203.674	245.953	N/A	245.953	.579-	.235-
07/24	L-6000	LINE L	442.3	1.4-	4.3	445.2	444.1	.8139-	42.531	3383.62	203.863	246.394	N/A	246.394	.138-	.056-
	L-5500		471.0	0.0	0.0	471.0	469.9	.9085-	44.946	3353.29	202.036	246.982	N/A	246.982	.450	.182
	L-5000		464.9	0.1-	0.0	464.8	463.7	1.0030-	44.228	3362.44	202.587	246.815	N/A	246.815	.283	.115
	L-4500		465.5	0.1-	0.0	465.4	464.3	1.0970-	44.170	3367.23	202.876	247.052	N/A	247.052	.520	.211
	L-4000		432.9	0.0	0.0	432.9	431.8	1.1920-	40.882	3339.49	201.204	242.087	N/A	242.087	4.445-	1.803-
	L-3500		495.1	0.0	0.0	495.1	494.0	1.2870-	46.862	3326.97	200.450	247.311	N/A	247.311	.780	.316
	L-3000		509.3	0.0	0.0	509.3	508.2	1.3820-	48.140	3305.88	199.179	247.320	N/A	247.320	.788	.320
	L-2500		414.8	0.1	0.0	414.9	413.8	1.4760-	38.786	3297.19	198.656	237.442	N/A	237.442	9.090-	3.687-
			514.8			514.9	513.8		48.780			247.442		247.442	.910	
Correction	L-4000		441.1	0.0	0.0	441.1	483.0	1.1920	45.886	3339.49	201.204	247.090	N/A	247.090	.558	.226
Checked	R.P. 9/9/63 C.S.L 9/16/63		OK													

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 9671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-000263-TS-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060290 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/11	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	A-0000	LINE A	306.6	0.0	0.0	306.6	306.6	.0000-	30.022	3581.88	215.808	245.831	N/A	245.831	.541	.220
	A-0050		339.5	0.2-	0.0	339.3	339.3	.0950	33.336	3528.33	212.594	245.930	N/A	245.930	.640	.261
	A-0100		358.7	0.7-	0.0	358.0	358.0	.1890	35.277	3498.43	210.780	246.058	N/A	246.058	.768	.313
	A-0150		363.3	0.9-	0.0	362.4	362.4	.2640	35.820	3484.49	209.941	245.760	N/A	245.760	.470	.192
	A-0200		357.6	0.0	0.7-	356.9	356.9	.3790	35.393	3486.65	210.071	245.463	N/A	245.463	.173	.071
	A-0250		356.6	0.0	0.7-	355.9	355.9	.4740	35.406	3479.21	209.622	245.029	N/A	245.029	.261-	.107-
	A-0300		356.6	0.0	0.7-	355.9	355.9	.5680	35.517	3479.77	209.656	245.173	N/A	245.173	.117-	.048-
	A-0350		355.4	0.0	0.7-	354.7	354.7	.6630	35.511	3479.45	209.637	245.147	N/A	245.147	.143-	.058-
	A-0400		353.0	0.0	0.3-	352.7	352.7	.7580	35.426	3482.03	209.792	245.219	N/A	245.219	.071-	.029-
	A-0450		356.7	0.0	0.3-	356.4	356.4	.8520	35.899	3477.24	209.504	245.403	N/A	245.403	.113	.046
	A-0500		353.0	0.0	0.3-	352.7	352.7	.9470	35.648	3485.55	210.004	245.653	N/A	245.653	.363	.148
	A-0550		357.3	0.0	0.3-	357.0	357.0	1.0420	36.181	3486.73	210.075	246.256	N/A	246.256	.966	.394

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA
1963

GRAVITY CALCULATIONS

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	GOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/12	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	A-0600	LINE A	364.3	0.0	0.3-	364.0	367.2	1.1360	37.290	3489.18	210.223	247.513	N/A	247.513	2.223	.906
	A-0650		367.0	0.1-	0.0	366.9	370.1	1.2310	37.685	3492.77	210.439	248.125	N/A	248.125	2.835	1.156
	A-0700		345.0	0.3-	0.0	344.7	347.9	1.3250	35.622	3531.39	212.766	248.388	N/A	248.388	3.098	1.263
	A-0750		311.9	0.5-	0.0	311.4	314.6	1.4700	32.531	3572.66	215.253	247.784	N/A	247.784	2.494	1.017
	A-0800		368.0	0.6-	0.0	367.4	370.6	1.5150	38.068	3482.06	209.794	247.862	N/A	247.862	2.572	1.049
	A-0850		369.6	0.2	0.6-	369.2	372.4	1.6090	38.354	3479.70	209.652	248.006	N/A	248.006	2.716	1.107
	A-0900		365.5	0.3	0.6-	365.2	368.4	1.7040	38.074	3484.97	209.969	248.044	N/A	248.044	2.754	1.123
	A-0950		365.4	0.4	0.6-	365.2	368.4	1.7990	38.166	3477.48	209.518	247.704	N/A	247.704	2.414	.984
	A-1000		373.2	0.6	0.6-	373.2	376.4	1.8940	39.081	3470.42	209.093	248.173	N/A	248.173	2.883	1.176
	A-1050		363.5	0.7	0.6-	363.6	366.8	1.9880	38.251	3488.07	210.156	248.407	N/A	248.407	3.117	1.271
	A-1100		359.9	0.8	0.6-	360.1	363.3	2.0830	38.020	3487.68	210.133	248.152	N/A	248.152	2.863	1.167
	A-1150		380.2	0.1	0.3-	380.0	383.2	2.1780	40.080	3450.29	207.880	247.960	N/A	247.960	2.670	1.088
	A-1200		372.4	0.2	0.3-	372.3	375.5	2.2720	39.436	3461.21	208.538	247.974	N/A	247.974	2.684	1.094
	A-1250		362.6	0.3	0.3-	362.6	365.8	2.3670	38.598	3481.34	209.751	248.349	N/A	248.349	3.059	1.247
	A-1300		370.8	0.4	0.3-	370.9	374.1	2.4620	39.522	3469.91	209.062	248.584	N/A	248.584	3.294	1.343
	A-1350		360.7	0.6	0.3	361.6	364.8	2.5560	38.722	3480.70	209.712	248.434	N/A	248.434	3.144	1.282
	A-1400		373.0	0.0	0.3	373.3	376.5	2.6510	39.979	3463.56	208.679	248.659	N/A	248.659	3.369	1.373
	A-1450	END A	348.3	0.0	0.3	348.6	351.8	2.7460	37.672	3503.55	211.089	248.761	N/A	248.761	3.471	1.415

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 9671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-T8-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE M+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/12	B-K114	REFERR	406.0	0.0	0.0	406.0	406.0	.0000	39.796	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	B-1200	LINE B	386.9	0.1	0.3	387.3	390.5	2.3670-	35.459	3433.82	206.888	242.347	N/A	242.347	2.943-	1.200-
	B-1150		404.8	0.1	0.3	405.2	408.4	2.2720-	37.323	3415.57	205.788	243.111	N/A	243.111	2.179-	.888-
	B-1100		392.5	0.1	0.7	393.3	396.5	2.1780	41.382	3433.26	206.854	248.236	N/A	248.236	2.946	1.201
	B-1050		393.7	0.2	0.7	394.6	397.8	2.0830	42.455	3439.54	207.232	249.687	N/A	249.687	4.397	1.793
	B-1000		403.6	0.3	0.7	404.6	407.8	1.9880	42.266	3429.98	206.656	248.922	N/A	248.922	3.632	1.481
	B-0950		400.7	0.4	0.7	401.8	405.0	1.8940	41.881	3436.13	207.027	248.908	N/A	248.908	3.618	1.475
	B-0900		412.0	0.6	0.7	413.3	416.5	1.7990	42.896	3408.72	205.375	248.271	N/A	248.271	2.981	1.215
07/15	B-0850	LINE B	385.1	0.2-	0.0	384.9	397.0	1.7040	40.875	3416.31	205.833	246.707	N/A	246.707	1.417	.578
	B-0800		378.7	0.3-	0.0	378.4	390.5	1.6090	40.127	3419.00	205.754	245.880	N/A	245.880	.591	.241
	B-0750		369.5	0.4-	0.0	369.1	381.2	1.5150	39.106	3428.52	206.368	245.474	N/A	245.474	.384	.157
	B-0700		361.5	0.7-	0.0	360.8	372.9	1.4200	38.240	3445.83	207.611	245.851	N/A	245.851	.561	.229
	B-0650		380.6	0.0	0.2-	380.4	392.5	1.3250	39.989	3432.36	206.800	246.789	N/A	246.789	1.499	.611
	B-0600		376.0	0.1	0.2-	375.9	388.0	1.2310	39.438	3450.15	207.872	247.310	N/A	247.310	2.020	.823
	B-0550		392.1	0.1	0.2-	392.0	404.1	1.1360	40.903	3432.44	206.805	247.708	N/A	247.708	2.418	.986
	B-0500		384.1	0.2	0.2-	384.1	396.2	1.0420	40.019	3449.03	207.804	247.823	N/A	247.823	2.533	1.033
	B-0450		347.4	0.0	0.9-	346.5	358.6	.9470	36.226	3501.09	210.941	247.167	N/A	247.167	1.877	.765
	B-0400		342.9	0.0	0.9-	342.0	354.1	.8520	35.674	3504.42	211.141	246.815	N/A	246.815	1.525	.622
	B-0350		372.3	0.1-	0.9-	371.3	383.4	.7580	38.432	3432.16	206.788	245.220	N/A	245.220	.070-	.028-
	B-0300		359.4	0.1-	0.9-	358.4	370.5	.6630	37.058	3439.87	207.252	244.310	N/A	244.310	.980-	.400-
	B-0250		356.7	0.0	0.2-	356.5	368.6	.5680	36.760	3440.64	207.299	244.059	N/A	244.059	1.231-	.502-
	B-0200		357.1	0.1	0.2-	357.0	369.1	.4740	36.699	3439.17	207.210	243.909	N/A	243.909	1.381-	.563-

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READ-ING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE R+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/15	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.796	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	B-0150		355.3	0.1	0.2-	355.2	367.3	.3790	36.411	3438.84	207.190	243.601	N/A	243.601	1.689-	.689-
	B-0100		364.1	0.2	0.2-	364.1	376.2	.2840	37.171	3437.63	207.117	244.288	N/A	244.288	1.002-	.408-
07/16	B-0050		359.9	0.0	0.0	359.9	364.7	.1890	35.933	3438.79	207.187	243.120	N/A	243.120	2.170-	.884-
	B-0005		359.8	0.0	0.0	359.8	364.6	.0951	35.813	3439.82	207.249	243.062	N/A	243.062	2.228-	.908-
	B-0000	END B	361.0	0.1-	0.0	360.9	365.7	.0000-	35.809	3456.31	208.243	244.052	N/A	244.052	1.238-	.505-
	C-0000	LINE C	298.9	0.0	0.7-	298.2	303.0	.0000-	29.670	3560.21	214.503	244.173	N/A	244.173	1.118-	.456-
	C-0050		389.0	0.0	0.7-	384.3	389.1	.0950	38.212	3415.32	205.785	243.997	N/A	243.997	1.293-	.527-
	C-0100		388.1	0.1-	0.0	388.0	392.8	.1890	38.685	3399.62	204.827	243.512	N/A	243.512	1.778-	.725-
	C-0150		387.3	0.1-	0.7-	386.5	1091.3	.2840	107.194	3396.68	204.650	311.843	N/A	311.843	66.554	27.133
	C-0200		383.8	0.1-	0.7-	383.0	387.8	.3790	38.418	3395.77	204.595	243.013	N/A	243.013	2.276-	.928-
	C-0250		384.0	0.0	0.8-	383.2	388.0	.4740	38.549	3391.62	204.345	242.895	N/A	242.895	2.395-	.977-
	C-0300		377.4	0.0	0.8-	376.6	381.4	.5680	38.014	3398.77	204.776	242.789	N/A	242.789	2.501-	1.019-
	C-0350		385.5	0.1	0.8-	384.8	389.6	.6630	38.928	3395.25	204.564	243.492	N/A	243.492	1.798-	.733-
	C-0400		391.1	0.1	0.8-	390.4	395.2	.7580	39.586	3395.84	204.599	244.187	N/A	244.187	1.103-	.450-
	C-0450		395.1	0.2	0.8-	394.5	399.3	.8520	40.100	3384.31	203.905	244.004	N/A	244.004	1.286-	.524-
	C-0500		391.0	0.3	0.8-	390.5	395.3	.9470	39.820	3389.54	204.220	244.039	N/A	244.039	1.251-	.510-
	C-0550		401.9	0.0	0.8-	401.1	405.9	1.0420	40.989	3384.67	203.926	244.895	N/A	244.895	.395-	.161-
	C-0600		405.0	0.1-	0.8-	404.1	408.9	1.1360	41.373	3389.07	204.191	245.565	N/A	245.565	.279	.112
	C-0650		369.8	0.2-	0.8-	368.8	373.6	1.2310	38.028	3465.50	208.796	246.824	N/A	246.824	1.539	.626
	C-0700		358.5	0.3-	0.8-	357.4	362.2	1.3250	36.960	3441.16	207.330	247.290	N/A	247.290	2.005	.815
	C-0750		411.4	0.4	0.8-	411.0	415.8	1.4700	42.441	3388.75	204.172	246.613	N/A	246.613	1.323	.539

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/17	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	249.290	N/A	249.290	REFERENCE	
	C-0800	LINE C	404.3	0.0	0.0	404.3	401.9	1.9150	41.133	3383.40	203.850	244.983	N/A	244.983	.307-	.125-
	C-0850		402.6	0.0	0.0	402.6	400.2	1.6090	41.077	3382.02	203.767	244.843	N/A	244.843	.447-	.182-
	C-0900		399.8	0.0	0.0	399.8	393.4	1.7040	40.522	3385.47	203.975	244.497	N/A	244.497	.793-	.323-
	C-0950		392.9	0.0	0.0	392.9	390.5	1.7990	40.350	3386.08	204.011	244.361	N/A	244.361	.929-	.379-
	C-1000		395.1	0.1	0.0	395.2	392.8	1.8940	40.687	3379.85	203.636	244.322	N/A	244.322	.967-	.394-
07/18	C-1050		397.6	0.2	0.0	397.8	402.2	1.9880	41.717	3367.47	202.890	244.607	N/A	244.607	.683-	.278-
	C-1100		395.5	0.3	0.0	395.8	400.2	2.0830	41.633	3379.94	203.617	245.250	N/A	245.250	.040-	.016-
	C-1150		404.4	0.4	0.0	404.8	409.2	2.1780	42.626	3375.66	203.384	246.009	N/A	246.009	.719	.293
	C-1200		405.6	0.5	0.0	406.1	410.5	2.2720	42.883	3376.73	203.448	246.311	N/A	246.311	1.022	.416
	C-1250		408.8	0.6	0.0	409.4	413.8	2.3670	43.298	3370.80	203.091	246.389	N/A	246.389	1.099	.448
	C-1300		407.8	0.7	0.0	408.5	412.9	2.4620	43.322	3364.07	202.685	246.007	N/A	246.007	.717	.292
	C-1350	END C	391.0	0.7	1.1	392.8	397.2	2.5560	41.895	3380.89	203.699	245.593	N/A	245.593	.303	.124
	D-1350	LINE D	421.6	1.5	1.1	424.2	428.6	2.5560	44.969	3316.45	199.816	244.785	N/A	244.785	.505-	.206-
	D-1300		416.6	1.9	1.1	419.6	424.0	2.4620	44.408	3320.99	200.087	244.496	N/A	244.496	.794-	.324-
	D-1250		415.4	2.2	1.1	418.7	423.1	2.3670	44.209	3323.98	200.270	244.479	N/A	244.479	.811-	.331-
	D-1200		409.0	0.0	3.3	412.3	416.7	2.2720	43.471	3336.10	201.000	244.471	N/A	244.471	.819-	.334-
	D-1150		410.1	0.0	3.3	413.4	417.8	2.1780	43.468	3337.43	201.080	244.548	N/A	244.548	.742-	.302-
	D-1100		423.9	0.0	3.3	427.2	431.6	2.0830	44.708	3324.68	200.312	245.020	N/A	245.020	.270-	.110-
	D-1050		416.0	0.0	3.3	419.3	423.7	1.9880	43.823	3342.64	201.394	245.217	N/A	245.217	.073-	.030-
	D-1000		427.1	0.0	3.3	430.4	434.8	1.8940	44.799	3330.14	200.641	245.440	N/A	245.440	.150	.061
	D-0950		417.7	0.0	3.3	421.0	425.4	1.7990	43.767	3345.19	201.548	245.315	N/A	245.315	.025	.010

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/19	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.796	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	0-0500	LINE 0	419.0	0.0	0.0	419.0	424.5	.9470	42.679	3359.87	202.191	244.870	N/A	244.870	.420-	.171-
	0-0450		408.3	0.0	0.0	408.3	413.8	.8520	41.820	3344.79	201.524	243.043	N/A	243.043	2.247-	.916-
	0-0400		405.5	0.0	0.0	405.5	411.0	.7580	41.135	3345.10	201.542	242.677	N/A	242.677	2.613-	1.065-
	0-0350		400.9	0.0	0.0	400.9	406.4	.6630	40.573	3348.47	201.745	242.318	N/A	242.318	2.972-	1.211-
	0-0300		400.9	0.0	0.0	400.9	406.4	.5680	40.462	3349.83	201.827	242.289	N/A	242.289	3.001-	1.224-
	0-0250		407.4	0.0	0.5-	406.9	412.4	.4740	40.939	3344.16	201.486	242.424	N/A	242.424	2.866-	1.168-
	0-0200		419.1	0.0	0.5-	418.6	424.1	.3790	41.973	3345.67	201.577	243.549	N/A	243.549	1.741-	.710-
	0-0150		429.1	0.0	0.5-	428.6	434.1	.2840	42.840	3350.62	201.875	244.715	N/A	244.715	.575-	.234-
	0-0100		376.2	0.0	0.5-	375.7	381.2	.1890	37.549	3434.89	206.950	244.499	N/A	244.499	.791-	.323-
	0-0 50		267.1	0.0	0.7	267.8	273.3	.0950	26.873	3589.87	216.290	243.163	N/A	243.163	2.127-	.867-
	0-0000	END	0 268.6	0.0	0.7	269.3	274.8	.0000-	26.908	3588.99	216.237	243.145	N/A	243.145	2.145-	.874-

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/29	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	E--090	LINE E	410.1	0.2-	1.0-	408.9	451.3	1.7040	46.192	3286.17	197.992	244.184	N/A	244.184	1.106-	.451-
	E--095		413.2	0.0	0.7	413.9	456.3	1.7990	46.793	3277.92	197.495	244.288	N/A	244.288	1.002-	.409-
	E--100		410.9	0.1-	0.7	411.5	453.9	1.8940	46.669	3282.29	197.758	244.427	N/A	244.427	.863-	.352-
	E--105		400.1	0.1-	0.7	400.7	443.1	1.9880	45.722	3298.28	198.721	244.444	N/A	244.444	.846-	.345-
	E--110		408.8	0.2-	0.7	409.3	451.7	2.0830	46.676	3283.19	197.812	244.488	N/A	244.488	.802-	.327-
	E--115		398.9	0.1-	0.7	399.5	441.9	2.1780	45.828	3295.54	198.556	244.384	N/A	244.384	.906-	.369-
	E--120		397.3	0.1-	0.7	397.9	440.3	2.2720	45.782	3292.41	198.368	244.149	N/A	244.149	1.141-	.465-
	E--125		394.5	0.2-	0.7	395.0	437.4	2.3670	45.609	3292.65	198.382	243.991	N/A	243.991	1.299-	.529-
	E--130		389.2	0.0	0.3	389.5	431.9	2.4620	45.182	3297.57	198.679	243.861	N/A	243.861	1.429-	.583-
	E--135	END E	399.2	0.0	0.3	399.5	441.9	2.5560	46.272	3283.49	197.830	244.102	N/A	244.102	1.188-	.484-
	F--135	LINE F	415.5	0.0	0.8	416.3	458.7	2.5560	47.917	3251.06	195.876	243.793	N/A	243.793	1.497-	.610-
	F--130		415.9	0.0	0.8	416.7	459.1	2.4620	47.845	3249.17	195.762	243.608	N/A	243.608	1.682-	.686-
	F--125		415.7	0.0	0.8	416.5	458.9	2.3670	47.714	3253.30	196.011	243.726	N/A	243.726	1.564-	.638-
	F--120		429.9	0.0	0.8	430.7	473.1	2.2720	48.993	3249.18	195.763	244.756	N/A	244.756	.534-	.218-
	F--115		429.7	0.0	0.8	430.5	472.9	2.1780	48.863	3253.30	196.011	244.875	N/A	244.875	.415-	.169-
	F--110		421.7	0.1-	0.8	422.4	464.8	2.0830	47.959	3250.61	195.849	243.808	N/A	243.808	1.482-	.604-
	F--105		422.8	0.0	0.0	422.8	436.5	1.9880	44.097	3245.62	195.549	239.646	N/A	239.646	5.645-	2.301-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER & FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READ-ING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/29	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.796	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	E-0000	LINE E	412.3	0.1-	0.0	412.2	454.6	.0000	44.914	3305.40	199.150	243.665	N/A	243.665	1.625-	.663-
	E-0050		421.5	0.2-	0.0	421.3	463.7	.0950	45.917	3296.39	198.607	244.125	N/A	244.125	1.165-	.475-
	E-0100		419.4	0.3-	0.0	419.1	461.5	.1890	45.412	3299.94	198.821	244.233	N/A	244.233	1.057-	.431-
	E-0150		412.7	0.0	0.0	412.7	455.1	.2840	44.897	3304.41	199.091	243.988	N/A	243.988	1.302-	.531-
	E-0200		413.3	0.1-	0.9-	412.3	454.7	.3790	44.869	3296.14	198.592	243.562	N/A	243.562	1.728-	.705-
	E-0250		410.4	0.1-	0.9-	409.4	451.8	.4740	44.797	3297.84	198.695	243.492	N/A	243.492	1.798-	.733-
	E-0300		415.1	0.2-	0.9-	414.0	456.4	.5680	45.358	3299.05	198.768	244.125	N/A	244.125	1.165-	.475-
	E-0350		430.1	0.0	0.9-	429.2	471.6	.6630	46.957	3290.32	198.242	245.199	N/A	245.199	.091-	.037-
	E-0400		420.3	0.	1.2-	419.1	461.5	.7580	46.080	3298.28	198.721	244.801	N/A	244.801	.489-	.199-
	E-0450		408.0	0.1	1.2-	406.9	449.3	.8520	44.996	3298.90	198.759	243.754	N/A	243.754	1.536-	.626-
	E-0500		404.3	0.2	1.2-	403.3	445.7	.9470	44.795	3293.23	198.417	243.172	N/A	243.172	2.118-	.864-
	E-0550		405.0	0.3	1.2-	404.1	446.5	1.0420	44.945	3286.94	198.038	242.983	N/A	242.983	2.307-	.941-
	E-0600		408.8	0.0	1.2-	407.6	450.0	1.1360	45.398	3278.84	197.550	242.948	N/A	242.948	2.342-	.955-
	E-0650		401.0	0.1-	1.2-	399.7	442.1	1.2310	44.736	3291.41	198.307	243.043	N/A	243.043	2.247-	.916-
	E-0700		399.8	0.2-	1.2-	398.4	440.8	1.3250	44.719	3295.66	198.564	243.282	N/A	243.282	2.008-	.819-
	E-0750		399.7	0.3-	1.2-	398.2	440.6	1.4200	44.869	3298.59	198.740	243.609	N/A	243.609	1.681-	.685-
	E-0800		405.8	0.0	1.0-	404.6	447.0	1.5150	45.349	3293.33	198.423	243.972	N/A	243.972	1.318-	.537-
	E-0850		412.9	0.1-	1.0-	411.8	454.2	1.6090	46.364	3283.36	197.822	244.187	N/A	244.187	1.103-	.450-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TS-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060290 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/30	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.786	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	G--000	LINE G	459.4	0.0	0.0	459.4	505.5	.0000-	49.499	3197.13	192.627	242.126	N/A	242.126	3.164-	1.290-
	G--005		442.8	0.0	0.0	442.8	488.9	.0950	47.985	3215.81	193.793	241.737	N/A	241.737	3.553-	1.448-
	G--010		439.8	0.0	0.0	439.8	485.9	.1890	47.801	3218.68	193.925	241.727	N/A	241.727	3.563-	1.453-
	G--015		442.8	0.0	0.0	442.8	488.9	.2840	48.207	3218.36	193.906	242.113	N/A	242.113	3.177-	1.295-
	G--020		441.9	0.0	0.0	441.9	488.0	.3790	48.230	3221.13	194.073	242.303	N/A	242.303	2.987-	1.218-
	G--025		438.7	0.0	0.3	439.0	485.1	.4740	48.057	3228.62	194.524	242.582	N/A	242.582	2.708-	1.104-
	G--030		442.1	0.0	0.3	442.4	488.5	.5680	48.501	3226.92	194.422	242.923	N/A	242.923	2.367-	.965-
	G--035		444.1	0.0	0.3	444.4	490.5	.6630	48.808	3229.25	194.562	243.370	N/A	243.370	1.920-	.783-
	G--040		448.8	0.0	0.3	449.1	495.2	.7580	49.380	3222.45	194.153	243.532	N/A	243.532	1.757-	.716-
	G--045		444.4	0.0	0.3	444.7	490.8	.8520	49.059	3225.51	194.337	243.396	N/A	243.396	1.894-	.772-
	G--050		445.2	0.0	0.2	445.4	491.5	.9470	49.239	3223.79	194.233	243.473	N/A	243.473	1.817-	.741-
	G--055		449.4	0.0	0.2	449.6	495.7	1.0420	49.762	3217.01	193.825	243.587	N/A	243.587	1.703-	.694-
	G--060		446.0	0.1-	0.2	446.1	492.2	1.1360	49.930	3221.11	194.072	243.602	N/A	243.602	1.688-	.688-
	G--065		448.0	0.2-	0.2	448.0	494.1	1.2310	49.827	3217.01	193.825	243.652	N/A	243.652	1.638-	.668-
	G--070		441.2	0.1-	0.0	441.1	487.7	1.3250	49.311	3220.28	194.022	243.333	N/A	243.333	1.957-	.798-

STOCK FORM 14116-P

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097020 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READ-ING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/30	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	F--000	LINE F	432.8	0.0	0.4-	432.4	478.5	.0000-	46.855	3241.05	195.273	242.128	N/A	242.128	3.162-	1.289-
	F--005		429.5	0.0	0.3-	429.2	475.3	.0950	46.653	3244.81	195.500	242.153	N/A	242.153	3.137-	1.279-
	F--010		418.8	0.0	0.3-	418.5	464.6	.1890	45.716	3256.32	196.314	242.029	N/A	242.029	3.261-	1.329-
	F--015		415.5	0.0	0.3-	415.2	461.3	.2840	45.504	3262.91	196.590	242.094	N/A	242.094	3.196-	1.303-
	F--020		420.5	0.1	1.1-	419.5	465.6	.3790	46.036	3259.11	196.361	242.398	N/A	242.398	2.892-	1.179-
	F--025		422.3	0.0	1.1-	421.2	467.3	.4740	46.314	3261.43	196.501	242.816	N/A	242.816	2.474-	1.009-
	F--030		419.6	0.0	1.1-	418.5	464.6	.5680	46.160	3267.67	196.877	243.038	N/A	243.038	2.252-	.918-
	F--035		424.2	0.3	1.4-	423.1	469.2	.6630	46.722	3264.30	196.674	243.397	N/A	243.397	1.893-	.772-
	F--040		433.7	0.3	1.4-	432.6	478.7	.7580	47.764	3254.86	196.109	243.870	N/A	243.870	1.420-	.579-
	F--045		433.7	0.1	1.4-	432.4	478.5	.8520	47.855	3260.43	196.441	244.296	N/A	244.296	.994-	.405-
	F--050		432.0	0.0	1.4-	430.6	476.7	.9470	47.790	3261.90	196.529	244.320	N/A	244.320	.970-	.396-
	F--055		427.9	0.2-	0.8-	426.9	473.0	1.0420	47.539	3257.04	196.237	243.776	N/A	243.776	1.514-	.617-
	F--060		426.1	0.1-	0.8-	425.2	471.3	1.1360	47.483	3250.66	195.852	243.336	N/A	243.336	1.954-	.797-
	F--065		417.9	0.1-	0.8-	417.0	463.1	1.2310	46.792	3260.98	196.474	243.266	N/A	243.266	2.024-	.825-
	F--070		418.5	0.0	0.8-	417.7	463.8	1.3250	46.971	3259.71	196.398	243.368	N/A	243.368	1.922-	.783-
	F--075		418.8	0.0	0.8-	418.0	464.1	1.4200	47.170	3259.55	196.388	243.558	N/A	243.558	1.732-	.706-
	F--080		417.8	0.0	0.8-	417.0	463.1	1.5150	47.129	3262.01	196.536	243.661	N/A	243.661	1.628-	.664-
	F--085		420.5	0.0	0.8-	419.7	465.8	1.6090	47.500	3257.08	196.239	243.739	N/A	243.739	1.551-	.632-
	F--090		427.2	0.0	0.8-	426.4	472.5	1.7040	48.268	3246.44	195.598	243.866	N/A	243.866	1.424-	.581-
12	F--095		422.0	0.1-	0.0	421.9	468.0	1.7990	47.939	3250.40	195.837	243.775	N/A	243.775	1.515-	.618-
11																
10	F--100		426.5	0.0	0.8	427.3	473.4	1.8940	48.579	3241.52	195.302	243.880	N/A	243.880	1.409-	.575-
9																
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STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-060263-TG-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/31	B-K114	REFERE	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	M--105	LINE H	463.4	0.0	1.2-	462.2	508.8	1.9880	52.156	3167.17	190.822	242.978	N/A	242.978	2.312-	.943-
	M--100		465.2	0.0	1.2-	464.0	510.6	1.8940	52.222	3166.70	190.794	243.015	N/A	243.015	2.275-	.927-
	M--095		471.6	0.0	1.2-	470.4	517.0	1.7990	52.737	3156.31	190.168	242.904	N/A	242.904	2.386-	.973-
	M--090		467.4	0.0	1.2-	466.2	512.8	1.7040	52.214	3164.91	190.686	242.900	N/A	242.900	2.390-	.974-
	M--085		469.9	0.1-	1.2-	468.6	515.2	1.6090	52.337	3163.22	190.584	242.921	N/A	242.921	2.369-	.966-
	M--080		463.9	0.0	0.8-	463.1	509.7	1.5150	51.688	3171.85	191.104	242.792	N/A	242.792	2.498-	1.018-
	M--075		466.4	0.0	0.8-	465.6	512.2	1.4200	51.880	3169.77	190.979	242.859	N/A	242.859	2.431-	.991-
	M--070		463.5	0.0	0.8-	462.7	509.3	1.3250	51.426	3175.49	191.323	242.749	N/A	242.749	2.540-	1.036-
	M--065		462.7	0.0	0.8-	461.9	508.5	1.2310	51.238	3180.16	191.605	242.842	N/A	242.842	2.448-	.998-
	M--060		462.4	0.1	0.8-	461.7	508.3	1.1360	51.106	3182.80	191.764	242.870	N/A	242.870	2.420-	.987-
	M--055		466.6	0.2	0.8-	466.0	512.6	1.0420	51.417	3177.22	191.428	242.845	N/A	242.845	2.445-	.997-

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-060263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060290 MGAL/FT

DATE	STA.	REMARK	READ-ING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/31	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	G--075	LINE G	440.0	0.2-	0.0	439.8	486.4	1.4700	49.354	3221.29	194.083	243.437	N/A	243.437	1.853-	.756-
	G--080		439.5	0.4-	0.0	439.1	485.7	1.5150	49.338	3217.92	193.880	243.218	N/A	243.218	2.072-	.845-
	G--085		449.2	0.6-	0.0	448.6	495.2	1.6090	50.379	3201.83	192.910	243.289	N/A	243.289	2.001-	.816-
	G--090		442.9	0.0	0.3-	442.6	489.2	1.7040	49.903	3208.89	193.336	243.239	N/A	243.239	2.051-	.836-
	G--095		433.6	0.1	0.3-	433.4	480.0	1.7990	49.114	3219.09	193.950	243.064	N/A	243.064	2.226-	.908-
	G--100		442.3	0.2	0.3-	442.2	488.8	1.8940	50.087	3206.32	193.181	243.268	N/A	243.268	2.022-	.824-
	G--105		435.2	0.2-	1.0	436.0	482.6	1.9880	49.590	3214.55	193.677	243.267	N/A	243.267	2.023-	.825-
	G--110		434.5	0.5-	1.0	435.0	481.8	2.0830	49.604	3215.94	193.760	243.364	N/A	243.364	1.926-	.785-
	G--115		430.5	0.7-	1.0	430.8	477.4	2.1780	49.304	3219.89	193.998	243.302	N/A	243.302	1.988-	.810-
	G--120		431.2	1.0-	1.0	431.2	477.8	2.2720	49.494	3216.46	193.792	243.285	N/A	243.285	2.005-	.834-
	G--125		431.0	0.0	0.4	431.4	478.0	2.3670	49.585	3215.40	193.728	243.312	N/A	243.312	1.977-	.806-
	G--130		429.6	0.0	0.4	430.0	476.6	2.4620	49.539	3215.75	193.749	243.308	N/A	243.308	1.982-	.808-
	G--135	END G	428.5	0.0	0.4	428.9	475.5	2.5560	49.562	3216.16	193.774	243.335	N/A	243.335	1.955-	.797-

STOCK FORM 14116-P

H E I N R I C H S G E O E X P L O R A T I O N C O M P A N Y

P.O. BOX 9671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263 TO AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
08/01	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	H--050	LINE H	458.2	0.0	0.6	458.8	503.1	.9470	50.375	3185.93	191.952	242.328	N/A	242.328	2.962-	1.208-
	H--045		463.4	0.0	0.0	463.4	507.7	.8520	50.714	3181.44	191.682	242.396	N/A	242.396	2.894-	1.180-
	H--040		462.5	0.0	0.0	462.5	506.8	.7580	50.516	3186.64	191.999	242.511	N/A	242.511	2.779-	1.133-
	H--035		462.5	0.1	0.0	462.6	506.9	.6630	50.414	3188.07	192.081	242.495	N/A	242.495	2.795-	1.139-
	H--030		461.6	0.2	0.0	461.8	506.1	.5680	50.224	3188.24	192.091	242.316	N/A	242.316	2.974-	1.213-
	H--025		462.1	0.0	0.3	462.4	506.7	.4740	50.173	3185.10	191.902	242.075	N/A	242.075	3.215-	1.311-
	H--020		461.4	0.1	0.3	461.8	506.1	.3790	50.002	3183.65	191.815	241.817	N/A	241.817	3.473-	1.416-
	H--015		459.4	0.2	0.3	459.9	504.2	.2840	49.705	3183.25	191.791	241.495	N/A	241.495	3.794-	1.547-
	H--010		464.7	0.0	0.3	465.0	509.3	.1890	50.093	3174.99	191.269	241.362	N/A	241.362	3.928-	1.602-
	H--005		466.7	0.0	0.3	467.0	511.3	.0950	50.178	3170.96	191.050	241.228	N/A	241.228	4.062-	1.656-
	H--000	END H	476.7	0.0	0.3	477.0	521.3	.0000-	51.046	3158.27	190.286	241.331	N/A	241.331	3.958-	1.614-
	R--900	ROAD	326.4	0.0	0.0	326.4	370.7	.0000-	36.299	3404.93	205.147	241.446	N/A	241.446	3.844-	1.567-
	R--800		321.1	0.0	0.0	321.1	365.4	.0951-	35.668	3410.51	205.483	241.152	N/A	241.152	4.138-	1.687-
	R--700		314.9	0.0	0.0	314.9	359.2	.1890-	34.951	3416.77	205.860	240.811	N/A	240.811	4.479-	1.826-
	R--600		324.2	0.0	0.0	324.2	368.5	.2840-	35.750	3404.06	205.095	240.845	N/A	240.845	4.445-	1.812-
	R--500		335.8	0.0	0.0	335.8	380.1	.3790-	36.774	3389.88	204.240	241.013	N/A	241.013	4.279-	1.743-
	R--400		333.6	0.0	0.0	333.6	377.9	.4740-	36.447	3395.47	204.577	241.025	N/A	241.025	4.269-	1.739-
	R--300		320.6	0.0	0.0	320.6	364.9	.5680-	35.064	3414.74	205.738	240.802	N/A	240.802	4.488-	1.830-
	R--200		309.3	0.0	0.0	309.3	353.6	.6630-	33.846	3433.68	206.879	240.725	N/A	240.725	4.565-	1.861-
	R--100	END R	304.5	0.0	0.0	304.5	348.8	.7580-	33.233	3448.17	207.752	240.985	N/A	240.985	4.305-	1.755-

STOCK FORM 14116-P

Mineral Hill

Gravity and Level Notes
5 IBM Calculation Sheets
for
The Anaconda Company
August, 1963

P. Head

Calculation

Check

— Do Not Use

for final

Reference —

— ∞ —

Helmut Pk. Area

Twin Buttes

Gravity Computations

—— o ——

Anaconda

Area Code

080263 - TB - AN

HEINRICHS EXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/11	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	A-0000	LINE A	306.6	0.0	0.0	306.6	306.6	.0000	30.022	3581.88	215.808	245.831	N/A	245.831	.541	.220
	A-0050		339.5	0.2-	0.0	339.3	339.3	.0950-	33.113	3528.53	212.594	245.707	N/A	245.707	.417	.170
	A-0100		358.7	0.7-	0.0	358.0	358.0	.1890-	34.833	3498.43	210.780	245.614	N/A	245.614	.324	.132
	A-0150		363.3	0.9-	0.0	362.4	362.4	.2840-	35.153	3484.49	209.941	245.093	N/A	245.093	.197-	.080-
	A-0200		357.6	0.0	0.7-	356.9	356.9	.3790-	34.503	3486.65	210.071	244.573	N/A	244.573	.717-	.292-
	A-0250		356.6	0.0	0.7-	355.9	355.9	.4740-	34.293	3479.21	209.622	243.916	N/A	243.916	1.374-	.560-
	A-0300		356.6	0.0	0.7-	355.9	355.9	.5680-	34.183	3479.77	209.656	243.839	N/A	243.839	1.451-	.592-
	A-0350		355.4	0.0	0.7-	354.7	354.7	.6630-	33.954	3479.45	209.637	243.591	N/A	243.591	1.699-	.693-
	A-0400		353.0	0.0	0.3-	352.7	352.7	.7580-	33.646	3482.03	209.792	243.439	N/A	243.439	1.851-	.755-
	A-0450		356.7	0.0	0.3-	356.4	356.4	.8520-	33.898	3477.24	209.504	243.402	N/A	243.402	1.888-	.770-
	A-0500		353.0	0.0	0.3-	352.7	352.7	.9470-	33.425	3485.55	210.004	243.429	N/A	243.429	1.861-	.759-
	A-0550		357.3	0.0	0.3-	357.0	357.0	1.0420-	33.734	3486.73	210.075	243.810	N/A	243.810	1.480-	.604-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/12	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	A-0600	LINE A	364.3	0.0	0.3-	364.0	367.2	1.1360-	34.623	3489.18	210.223	244.846	N/A	244.846	.444-	.181-
	A-0650		367.0	0.1-	0.0	366.9	370.1	1.2310-	34.795	3492.77	210.439	245.234	N/A	245.234	.056-	.023-
	A-0700		345.0	0.3-	0.0	344.7	347.9	1.3250-	32.511	3531.39	212.766	245.277	N/A	245.277	.013-	.005-
	A-0750		311.9	0.5-	0.0	311.4	314.6	1.4700-	29.080	3572.66	215.253	244.333	N/A	244.333	.957-	.390-
	A-0800		368.0	0.6-	0.0	367.4	370.6	1.5150-	34.511	3482.06	209.794	244.305	N/A	244.305	.985-	.402-
	A-0850		369.6	0.2	0.6-	369.2	372.4	1.6090-	34.576	3479.70	209.652	244.228	N/A	244.228	1.062-	.433-
	A-0900		365.5	0.3	0.6-	365.2	368.4	1.7040-	34.073	3484.97	209.969	244.043	N/A	244.043	1.247-	.508-
	A-0950		365.4	0.4	0.6-	365.2	368.4	1.7990-	33.962	3477.48	209.518	243.480	N/A	243.480	1.810-	.738-
	A-1000		373.2	0.6	0.6-	373.2	376.4	1.8940-	34.634	3470.42	209.093	243.726	N/A	243.726	1.564-	.637-
	A-1050		363.5	0.7	0.6-	363.6	366.8	1.9880-	33.583	3488.07	210.156	243.739	N/A	243.739	1.551-	.632-
	A-1100		359.9	0.8	0.6-	360.1	363.3	2.0830-	33.129	3487.68	210.133	243.262	N/A	243.262	2.028-	.827-
	A-1150		380.2	0.1	0.3-	380.0	383.2	2.1780-	34.966	3450.29	207.880	242.846	N/A	242.846	2.444-	.996-
	A-1200		372.4	0.2	0.3-	372.3	375.5	2.2720-	34.102	3461.21	208.538	242.640	N/A	242.640	2.650-	1.081-
	A-1250		362.6	0.3	0.3-	362.6	365.8	2.3670-	33.040	3481.34	209.751	242.791	N/A	242.791	2.499-	1.019-
	A-1300		370.8	0.4	0.3-	370.9	374.1	2.4620-	33.741	3469.91	209.062	242.804	N/A	242.804	2.486-	1.014-
	A-1350		360.7	0.6	0.3	361.6	364.8	2.5560-	32.720	3480.70	209.712	242.433	N/A	242.433	2.857-	1.165-
	A-1400		373.0	0.0	0.3	373.3	376.5	2.6510-	33.755	3463.56	208.679	242.434	N/A	242.434	2.856-	1.164-
	A-1450	FND A	348.3	0.0	0.3	348.6	351.8	2.7460-	31.224	3503.55	211.089	242.313	N/A	242.313	2.977-	1.214-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/12	B-K114	REFERR	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	√B-1200	LINE B	386.9	0.1	0.3	387.3	390.5	2.3670- -(2x 27780)	41.017 35.561	3433.82	206.888	247.904 242.349	N/A	247.904	~~2.614~~ 2.941-	~~1.066~~
	√B-1150		404.8	0.1	0.3	405.2	408.4	2.2720- -(2x 2.667)	42.658 37.324	3415.57	205.788	248.446 242.112-	N/A	248.446	~~3.156~~ 3.178-	1.287
	B-1100		392.5	0.1	0.7	393.3	396.5	2.1780-	36.268	3433.26	206.854	243.122	N/A	243.122	2.168-	.884-
	B-1050		393.7	0.2	0.7	394.6	397.8	2.9830-	35.451	3439.54	207.232	242.683	N/A	242.683	2.607-	1.063-
	B-1000		403.6	0.3	0.7	404.6	407.8	1.9880-	37.598	3429.98	206.656	244.254	N/A	244.254	1.036-	.422-
	B-0950		400.7	0.4	0.7	401.8	405.0	1.8940-	37.434	3436.13	207.027	244.461	N/A	244.461	.829-	.338-
	B-0900		412.0	0.6	0.7	413.3	416.5	1.7990-	38.672	3408.72	205.375	244.047	N/A	244.047	1.243-	.507-
07/15	B-0850	LINE B	385.1	0.2-	0.0	384.9	397.0	1.7040-	36.874	3416.31	205.833	242.706	N/A	242.706	2.584-	1.053-
	√B-0800		378.7	0.3-	0.0	378.4	390.5	1.6090-	36.349	3415.00	205.754	242.103	N/A	242.103	3.187-	1.299-
	√B-0750		369.5	0.4-	0.0	369.1	381.2	1.5150-	35.548	3428.52	206.568	242.117	N/A	242.117	3.173-	1.294-
	B-0700		361.5	0.7-	0.0	360.8	372.9	1.4700-	34.789	3445.83	207.611	242.400	N/A	242.400	2.890-	1.178-
	B-0650		380.6	0.0	0.2-	380.4	392.5	1.3250-	36.878	3432.36	206.800	243.678	N/A	243.678	1.612-	.657-
	B-0600		376.0	0.1	0.2-	375.9	388.0	1.2310-	36.548	3450.15	207.872	244.419	N/A	244.419	.871-	.355-
	B-0550		392.1	0.1	0.2-	392.0	404.1	1.1360-	38.236	3432.44	206.805	245.040	N/A	245.040	.250-	.102-
	B-0500		384.1	0.2	0.2-	384.1	396.2	1.0420-	37.573	3449.03	207.804	245.377	N/A	245.377	.087	.035
	B-0450		347.4	0.0	0.9-	346.5	358.6	.9470-	34.002	3501.09	210.941	244.943	N/A	244.943	.347-	.141-
	B-0400		342.9	0.0	0.9-	342.0	354.1	.8520-	33.673	3504.42	211.141	244.815	N/A	244.815	.475-	.194-
	B-0350		372.3	0.1-	0.9-	371.3	383.4	.7580-	36.653	3432.16	206.788	243.440	N/A	243.440	1.850-	.754-
	B-0300		359.4	0.1-	0.9-	358.4	370.5	.6630-	35.501	3439.87	207.252	242.753	N/A	242.753	2.537-	1.034-
	B-0250		356.7	0.0	0.2-	356.5	368.6	.5680-	35.426	3440.64	207.299	242.725	N/A	242.725	2.565-	1.046-
	B-0200		357.1	0.1	0.2-	357.0	369.1	.4740-	35.586	3439.17	207.210	242.796	N/A	242.796	2.494-	1.017-

HEINRICHS EXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/15	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	B-0150		355.3	0.1	0.2-	355.2	367.3	.3790-	35.521	3438.84	207.190	242.711	N/A	242.711	2.579-	1.051-
	B-0100		364.1	0.2	0.2-	364.1	376.2	.2840-	36.504	3437.63	207.117	243.621	N/A	243.621	1.669-	.680-
07/16	B-0050		359.9	0.0	0.0	359.9	364.7	.1890-	35.490	3438.79	207.187	242.677	N/A	242.677	2.613-	1.065-
	B-0005		359.8	0.0	0.0	359.8	364.6	.0951-	35.590	3439.82	207.249	242.839	N/A	242.839	2.451-	.999-
	B-0000	END B	361.0	0.1-	0.0	360.9	365.7	.0000	35.809	3456.31	208.243	244.052	N/A	244.052	1.238-	.505-
	C-0000	LINE C	298.9	0.0	0.7-	298.2	303.0	.0000	29.670	3560.21	214.503	244.172	N/A	244.172	1.118-	.456-
	C-0050		385.0	0.0	0.7-	384.3	389.1	.0950-	37.989	3415.52	205.785	243.774	N/A	243.774	1.516-	.618-
	C-0100		388.1	0.1-	0.0	388.0	392.8	.1890-	38.241	3399.62	204.827	243.068	N/A	243.068	2.222-	.906-
	C-0150		387.3	0.1-	0.7-	386.5	1091.3	.2840-	106.527	3396.68	204.650	311.177	N/A	311.177	65.887+	26.861
	C-0200		383.8	0.1-	0.7-	383.0	387.8	.3790-	37.528	3395.77	204.595	242.124	N/A	242.124	3.166-	1.291-
	C-0250		384.0	0.0	0.8-	383.2	388.0	.4740-	37.436	3391.62	204.345	241.782	N/A	241.782	3.508-	1.430-
	C-0300		377.4	0.0	0.8-	376.6	381.4	.5680-	36.680	3398.77	204.776	241.456	N/A	241.456	3.834-	1.563-
	C-0350		385.5	0.1	0.8-	384.8	389.6	.6630-	37.371	3395.25	204.564	241.935	N/A	241.935	3.355-	1.368-
	C-0400		391.1	0.1	0.8-	390.4	395.2	.7580-	37.808	3395.84	204.599	242.407	N/A	242.407	2.883-	1.175-
	C-0450		395.1	0.2	0.8-	394.5	399.3	.8520-	38.099	3384.31	203.905	242.004	N/A	242.004	3.286-	1.340-
	C-0500		391.0	0.3	0.8-	390.5	395.3	.9470-	37.596	3389.54	204.220	241.816	N/A	241.816	3.474-	1.416-
	C-0550		401.9	0.0	0.8-	401.1	405.9	1.0420-	38.522	3384.67	203.926	242.449	N/A	242.449	2.841-	1.158-
	C-0600		405.0	0.1-	0.8-	404.1	408.9	1.1360-	38.706	3389.07	204.191	242.897	N/A	242.897	2.393-	.975-
	C-0650		369.8	0.2-	0.8-	368.8	373.6	1.2310-	35.138	3465.50	208.796	243.934	N/A	243.934	1.356-	.553-
	C-0700		388.5	0.3-	0.8-	387.4	392.2	1.3250-	36.849	3441.16	207.330	244.179	N/A	244.179	1.111-	.453-
	C-0750		411.4	0.4	0.8-	411.0	415.8	1.4700-	38.989	3388.75	204.172	243.162	N/A	243.162	2.128-	.868-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/17	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	C-0800	LINE C	404.3	0.0	0.0	404.3	401.9	1.5150-	37.575	3383.40	203.850	241.425	N/A	241.425	3.865-	1.576-
	C-0850		402.6	0.0	0.0	402.6	400.2	1.6090-	37.299	3382.02	203.767	241.065	N/A	241.065	4.225-	1.722-
	C-0900		395.8	0.0	0.0	395.8	393.4	1.7040-	36.521	3385.47	203.975	240.496	N/A	240.496	4.794-	1.954-
	C-0950		392.9	0.0	0.0	392.9	390.5	1.7990-	36.126	3386.08	204.011	240.137	N/A	240.137	5.153-	2.101-
	C-1000		395.1	0.1	0.0	395.2	392.8	1.8940-	36.239	3379.85	203.636	239.875	N/A	239.875	5.415-	2.207-
07/18	C-1050		397.6	0.2	0.0	397.8	402.2	1.9880-	37.050	3367.47	202.890	239.940	N/A	239.940	5.350-	2.181-
	C-1100		395.5	0.3	0.0	395.8	400.2	2.0830-	36.742	3379.54	203.617	240.359	N/A	240.359	4.931-	2.010-
	C-1150		404.4	0.4	0.0	404.8	409.2	2.1780-	37.512	3375.66	203.384	240.895	N/A	240.895	4.395-	1.792-
	C-1200		405.6	0.5	0.0	406.1	410.5	2.2720-	37.529	3376.73	203.448	240.977	N/A	240.977	4.313-	1.758-
	C-1250		408.8	0.6	0.0	409.4	413.8	2.3670-	37.740	3370.80	203.091	240.831	N/A	240.831	4.459-	1.818-
	C-1300		407.8	0.7	0.0	408.5	412.9	2.4620-	37.541	3364.07	202.685	240.226	N/A	240.226	5.064-	2.064-
	C-1350	END C	391.0	0.7	1.1	392.8	397.2	2.5560-	35.893	3380.89	203.699	239.592	N/A	239.592	5.698-	2.323-
	D-1350	LINE D	421.6	1.5	1.1	424.2	428.6	2.5560-	38.968	3316.45	199.816	238.784	N/A	238.784	6.506-	2.652-
	D-1300		416.6	1.9	1.1	419.6	424.0	2.4620-	38.628	3320.95	200.087	238.715	N/A	238.715	6.575-	2.681-
	D-1250		415.4	2.2	1.1	418.7	423.1	2.3670-	38.651	3323.98	200.270	238.921	N/A	238.921	6.369-	2.597-
	D-1200		409.0	0.0	3.3	412.3	416.7	2.2720-	38.136	3336.10	201.000	239.136	N/A	239.136	6.154-	2.509-
	D-1150		410.1	0.0	3.3	413.4	417.8	2.1780-	38.354	3337.43	201.080	239.434	N/A	239.434	5.856-	2.387-
	D-1100		423.9	0.0	3.3	427.2	431.6	2.0830-	39.817	3324.68	200.312	240.129	N/A	240.129	5.161-	2.104-
	D-1050		416.0	0.0	3.3	419.3	423.7	1.9880-	39.155	3342.64	201.394	240.549	N/A	240.549	4.741-	1.933-
	D-1000		427.1	0.0	3.3	430.4	434.8	1.8940-	40.352	3330.14	200.641	240.993	N/A	240.993	4.297-	1.752-
	D-0950		417.7	0.0	3.3	421.0	425.4	1.7990-	39.543	3345.19	201.548	241.091	N/A	241.091	4.199-	1.712-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/19	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	D-0500	LINE D	419.0	0.0	0.0	419.0	424.5	.9470-	40.455	3355.87	202.191	242.646	N/A	242.646	2.644-	1.078-
	D-0450		408.3	0.0	0.0	408.3	413.8	.8520-	39.519	3344.79	201.524	241.043	N/A	241.043	4.247-	1.732-
	D-0400		405.5	0.0	0.0	405.5	411.0	.7580-	39.355	3345.10	201.542	240.898	N/A	240.898	4.392-	1.791-
	D-0350		400.9	0.0	0.0	400.9	406.4	.6630-	39.016	3348.47	201.745	240.762	N/A	240.762	4.528-	1.846-
	D-0300		400.9	0.0	0.0	400.9	406.4	.5680-	39.128	3349.83	201.827	240.955	N/A	240.955	4.335-	1.767-
	D-0250		407.4	0.0	0.5-	406.9	412.4	.4740-	39.826	3344.16	201.486	241.311	N/A	241.311	3.979-	1.622-
	D-0200		419.1	0.0	0.5-	418.6	424.1	.3790-	41.083	3345.67	201.577	242.660	N/A	242.660	2.630-	1.072-
	D-0150		429.1	0.0	0.5-	428.6	434.1	.2840-	42.174	3350.62	201.875	244.049	N/A	244.049	1.241-	.506-
	D-0100		376.2	0.0	0.5-	375.7	381.2	.1890-	37.105	3434.85	206.950	244.055	N/A	244.055	1.235-	.503-
	D-0 50		267.1	0.0	0.7	267.8	273.3	.0950-	26.650	3589.87	216.290	242.940	N/A	242.940	2.350-	.958-
	D-0000	END	268.6	0.0	0.7	269.3	274.8	.0000	26.908	3588.99	216.237	243.145	N/A	243.145	2.145-	.874-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/29	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	E-0000	LINE E	412.3	0.1-	0.0	412.2	454.6	.0000-	44.514	3305.40	199.150	243.665	N/A	243.665	1.625-	.663-
	E-0050		421.5	0.2-	0.0	421.3	463.7	.0950-	45.294	3296.39	198.607	243.901	N/A	243.901	1.388-	.566-
	E-0100		419.4	0.3-	0.0	419.1	461.5	.1890-	44.968	3299.94	198.821	243.790	N/A	243.790	1.500-	.612-
	E-0150		412.7	0.0	0.0	412.7	455.1	.2840-	44.230	3304.41	199.091	243.321	N/A	243.321	1.969-	.803-
	E-0200		413.3	0.1-	0.9-	412.3	454.7	.3790-	44.079	3296.14	198.592	242.672	N/A	242.672	2.618-	1.067-
	E-0250		410.4	0.1-	0.9-	409.4	451.8	.4740-	43.684	3297.84	198.695	242.379	N/A	242.379	2.911-	1.187-
	E-0300		415.1	0.2-	0.9-	414.0	456.4	.5680-	44.024	3299.05	198.768	242.792	N/A	242.792	2.498-	1.019-
	E-0350		430.1	0.0	0.9-	429.2	471.6	.6630-	45.401	3290.32	198.242	243.642	N/A	243.642	1.647-	.672-
	E-0400		420.3	0.	1.2-	419.1	461.5	.7580-	44.300	3298.28	198.721	243.022	N/A	243.022	2.268-	.925-
	E-0450		408.0	0.1	1.2-	406.9	449.3	.8520-	42.995	3298.90	198.759	241.754	N/A	241.754	3.536-	1.442-
	E-0500		404.3	0.2	1.2-	403.3	445.7	.9470-	42.531	3293.23	198.417	240.948	N/A	240.948	4.342-	1.770-
	E-0550		405.0	0.3	1.2-	404.1	446.5	1.0420-	42.498	3286.94	198.038	240.536	N/A	240.536	4.754-	1.938-
	E-0600		408.8	0.0	1.2-	407.6	450.0	1.1360-	42.730	3278.84	197.550	240.280	N/A	240.280	5.010-	2.042-
	E-0650		401.0	0.1-	1.2-	399.7	442.1	1.2310-	41.845	3291.41	198.307	240.153	N/A	240.153	5.137-	2.094-
	E-0700		399.8	0.2-	1.2-	398.4	440.8	1.3250-	41.608	3295.66	198.564	240.171	N/A	240.171	5.119-	2.087-
	E-0750		399.7	0.3-	1.2-	398.2	440.6	1.4700-	41.418	3298.59	198.740	240.158	N/A	240.158	5.132-	2.092-
	E-0800		405.6	0.0	1.0-	404.6	447.0	1.5150-	41.992	3293.33	198.423	240.415	N/A	240.415	4.875-	1.988-
	E-0850		412.9	0.1-	1.0-	411.8	454.2	1.6090-	42.586	3283.36	197.822	240.409	N/A	240.409	4.881-	1.990-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL

INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC

LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/29	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	E--090	LINE E	410.1	0.2-	1.0-	408.9	451.3	1.7040-	42.191	3286.17	197.992	240.183	N/A	240.183	5.107-	2.082-
	E--095		413.2	0.0	0.7	413.9	456.3	1.7990-	42.569	3277.92	197.495	240.064	N/A	240.064	5.226-	2.131-
	E--100		410.9	0.1-	0.7	411.5	453.9	1.8940-	42.222	3282.29	197.758	239.980	N/A	239.980	5.310-	2.165-
	E--105		400.1	0.1-	0.7	400.7	443.1	1.9880-	41.054	3298.28	198.721	239.776	N/A	239.776	5.514-	2.248-
	E--110		408.8	0.2-	0.7	409.3	451.7	2.0830-	41.785	3283.19	197.812	239.597	N/A	239.597	5.693-	2.321-
	E--115		398.9	0.1-	0.7	399.5	441.9	2.1780-	40.714	3295.54	198.556	239.270	N/A	239.270	6.020-	2.454-
	E--120		397.3	0.1-	0.7	397.9	440.3	2.2720-	40.447	3292.41	198.368	238.815	N/A	238.815	6.475-	2.640-
	E--125		394.5	0.2-	0.7	395.0	437.4	2.3670-	40.051	3292.65	198.382	238.434	N/A	238.434	6.856-	2.795-
	E--130		389.2	0.0	0.3	389.5	431.9	2.4620-	39.401	3297.57	198.679	238.080	N/A	238.080	7.210-	2.939-
	E--135	END E	399.2	0.0	0.3	399.5	441.9	2.5560-	40.270	3283.49	197.830	238.100	N/A	238.100	7.190-	2.931-
	F--135	LINE F	415.5	0.0	0.8	416.3	458.7	2.5560-	41.915	3251.06	195.876	237.792	N/A	237.792	7.498-	3.057-
	F--130		415.9	0.0	0.8	416.7	459.1	2.4620-	42.065	3249.17	195.762	237.827	N/A	237.827	7.463-	3.042-
	F--125		415.7	0.0	0.8	416.5	458.9	2.3670-	42.157	3253.30	196.011	238.168	N/A	238.168	7.122-	2.904-
	F--120		429.9	0.0	0.8	430.7	473.1	2.2720-	43.659	3249.18	195.763	239.422	N/A	239.422	5.868-	2.392-
	F--115		429.7	0.0	0.8	430.5	472.9	2.1780-	43.749	3253.30	196.011	239.761	N/A	239.761	5.529-	2.254-
	F--110		421.7	0.1-	0.8	422.4	464.8	2.0830-	43.068	3250.61	195.849	238.917	N/A	238.917	6.373-	2.598-
	F--105		422.8	0.0	0.0	422.8	426.5	1.9880-	39.429	3245.62	195.549	234.978	N/A	234.978	10.312-	4.204-

3.7

HEINRICHS EXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/30	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	F--000	LINE F	432.8	0.0	0.4-	432.4	436.1	.0000	42.703	3241.05	195.273	237.976	N/A	237.976	7.314-	2.982-
	F--005		429.5	0.0	0.3-	429.2	432.9	.0950-	42.278	3244.81	195.500	237.778	N/A	237.778	7.512-	3.063-
	F--010		418.8	0.0	0.3-	418.5	422.2	.1890-	41.120	3258.32	196.314	237.434	N/A	237.434	7.856-	3.203-
	F--015		415.5	0.0	0.3-	415.2	418.9	.2840-	40.685	3262.91	196.590	237.276	N/A	237.276	8.014-	3.267-
	F--020		420.5	0.1	1.1-	419.5	423.2	.3790-	40.995	3259.11	196.361	237.356	N/A	237.356	7.934-	3.234-
	F--025		422.3	0.0	1.1-	421.2	424.9	.4740-	41.050	3261.43	196.501	237.551	N/A	237.551	7.739-	3.155-
	F--030		419.6	0.0	1.1-	418.5	422.2	.5680-	40.675	3267.67	196.877	237.552	N/A	237.552	7.738-	3.155-
	F--035		424.2	0.3	1.4-	423.1	426.8	.6630-	41.014	3264.30	196.674	237.688	N/A	237.688	7.602-	3.099-
	F--040		433.7	0.3	1.4-	432.6	436.3	.7580-	41.833	3254.86	196.105	237.938	N/A	237.938	7.352-	2.997-
	F--045		433.7	0.1	1.4-	432.4	436.1	.8520-	41.703	3260.43	196.441	238.144	N/A	238.144	7.146-	2.913-
	F--050		432.0	0.0	1.4-	430.6	434.3	.9470-	41.415	3261.90	196.529	237.944	N/A	237.944	7.346-	2.995-
	F--055		427.9	0.2-	0.8-	426.9	430.6	1.0420-	40.941	3257.04	196.237	237.178	N/A	237.178	8.112-	3.307-
	F--060		426.1	0.1-	0.8-	425.2	428.9	1.1360-	40.664	3250.66	195.852	236.516	N/A	236.516	8.773-	3.577-
	F--065		417.9	0.1-	0.8-	417.0	420.7	1.2310-	39.750	3260.98	196.474	236.224	N/A	236.224	9.066-	3.696-
	F--070		418.5	0.0	0.8-	417.7	421.4	1.3250-	39.708	3259.71	196.398	236.105	N/A	236.105	9.184-	3.744-
	F--075		418.8	0.0	0.8-	418.0	421.7	1.4700-	39.567	3259.55	196.388	235.955	N/A	235.955	9.335-	3.806-
	F--080		417.8	0.0	0.8-	417.0	420.7	1.5150-	39.416	3262.01	196.536	235.952	N/A	235.952	9.338-	3.807-
	F--085		420.5	0.0	0.8-	419.7	423.4	1.6090-	39.570	3257.08	196.239	235.809	N/A	235.809	9.481-	3.865-
	F--090		427.2	0.0	0.8-	426.4	430.1	1.7040-	40.115	3246.44	195.598	235.713	N/A	235.713	9.577-	3.904-
	F--095		422.0	0.1-	0.0	421.9	425.6	1.7990-	39.563	3250.40	195.837	235.399	N/A	235.399	9.891-	4.032-
	F--100		426.5	0.0	0.8	427.3	431.0	1.8940-	39.980	3241.52	195.302	235.282	N/A	235.282	10.008-	4.080-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/30	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	G--000	LINE G	459.4	0.0	0.0	459.4	463.1	.0000	45.347	3197.13	192.627	237.974	N/A	237.974	7.316-	2.983-
	G--005		442.8	0.0	0.0	442.8	446.5	.0950-	43.610	3215.81	193.753	237.362	N/A	237.362	7.928-	3.232-
	G--010		439.8	0.0	0.0	439.8	443.5	.1890-	43.206	3218.68	193.925	237.131	N/A	237.131	8.159-	3.326-
	G--015		442.8	0.0	0.0	442.8	446.5	.2840-	43.388	3218.36	193.906	237.294	N/A	237.294	7.996-	3.260-
	G--020		441.9	0.0	0.0	441.9	445.6	.3790-	43.188	3221.13	194.073	237.261	N/A	237.261	8.029-	3.273-
	G--025		438.7	0.0	0.3	439.0	442.7	.4740-	42.793	3228.62	194.524	237.317	N/A	237.317	7.973-	3.250-
	G--030		442.1	0.0	0.3	442.4	446.1	.5680-	43.015	3226.92	194.422	237.437	N/A	237.437	7.853-	3.201-
	G--035		444.1	0.0	0.3	444.4	448.1	.6630-	43.100	3229.25	194.562	237.662	N/A	237.662	7.628-	3.110-
	G--040		448.8	0.0	0.3	449.1	452.8	.7580-	43.448	3222.45	194.153	237.601	N/A	237.601	7.689-	3.135-
	G--045		444.4	0.0	0.3	444.7	448.4	.8520-	42.907	3225.51	194.337	237.244	N/A	237.244	8.046-	3.280-
	G--050		445.2	0.0	0.2	445.4	449.1	.9470-	42.864	3223.79	194.233	237.097	N/A	237.097	8.193-	3.340-
	G--055		449.4	0.0	0.2	449.6	453.3	1.0420-	43.164	3217.01	193.825	236.989	N/A	236.989	8.301-	3.384-
	G--060		446.0	0.1-	0.2	446.1	449.8	1.1360-	42.711	3221.11	194.072	236.783	N/A	236.783	8.507-	3.468-
	G--065		448.0	0.2-	0.2	448.0	451.7	1.2310-	42.785	3217.01	193.825	236.610	N/A	236.610	8.680-	3.539-
	G--070		441.2	0.1-	0.0	441.1	445.3	1.3250-	42.048	3220.28	194.022	236.070	N/A	236.070	9.220-	3.759-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL

INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC

LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/31	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	G--075	LINE G	440.0	0.2-	0.0	439.8	444.0	1.4700-	41.751	3221.29	194.083	235.833	N/A	235.833	9.457-	3.855-
	G--080		439.5	0.4-	0.0	439.1	443.3	1.5150-	41.629	3217.92	193.880	235.509	N/A	235.509	9.781-	3.988-
	G--085		449.2	0.6-	0.0	448.6	452.8	1.6090-	42.449	3201.83	192.910	235.359	N/A	235.359	9.930-	4.048-
	G--090		442.9	0.0	0.3-	442.6	446.8	1.7040-	41.750	3208.89	193.336	235.086	N/A	235.086	10.204-	4.160-
	G--095		433.6	0.1	0.3-	433.4	437.6	1.7990-	40.738	3219.09	193.950	234.688	N/A	234.688	10.602-	4.322-
	G--100		442.3	0.2	0.3-	442.2	446.4	1.8940-	41.488	3206.32	193.181	234.669	N/A	234.669	10.621-	4.330-
	G--105		435.2	0.2-	1.0	436.0	440.2	1.9880-	40.770	3214.55	193.677	234.447	N/A	234.447	10.843-	4.420-
	G--110		434.5	0.5-	1.0	435.0	439.2	2.0830-	40.561	3215.94	193.760	234.321	N/A	234.321	10.969-	4.472-
	G--115		430.5	0.7-	1.0	430.8	435.0	2.1780-	40.038	3219.89	193.998	234.037	N/A	234.037	11.253-	4.588-
	G--120		431.2	1.0-	1.0	431.2	435.4	2.2720-	39.967	3216.46	193.792	233.759	N/A	233.759	11.531-	4.701-
	G--125		431.0	0.0	0.4	431.4	435.6	2.3670-	39.875	3215.40	193.728	233.603	N/A	233.603	11.687-	4.765-
	G--130		429.6	0.0	0.4	430.0	434.2	2.4620-	39.626	3215.75	193.749	233.375	N/A	233.375	11.915-	4.857-
	G--135	END G	428.5	0.0	0.4	428.9	433.1	2.5560-	39.408	3216.16	193.774	233.182	N/A	233.182	12.108-	4.936-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS GEOEXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263 TB AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
08/01	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	H--050	LINE H	458.2	0.0	0.6	458.8	460.7	.9470-	44.000	3185.93	191.952	235.952	N/A	235.952	9.338-	3.807-
	H--045		463.4	0.0	0.0	463.4	465.3	.8520-	44.562	3181.44	191.682	236.244	N/A	236.244	9.046-	3.688-
	H--040		462.5	0.0	0.0	462.5	464.4	.7580-	44.584	3186.64	191.995	236.579	N/A	236.579	8.711-	3.551-
	H--035		462.5	0.1	0.0	462.6	464.5	.6630-	44.705	3188.07	192.081	236.787	N/A	236.787	8.503-	3.467-
	H--030		461.6	0.2	0.0	461.8	463.7	.5680-	44.739	3188.24	192.091	236.830	N/A	236.830	8.460-	3.449-
	H--025		462.1	0.0	0.3	462.4	464.3	.4740-	44.908	3185.10	191.902	236.810	N/A	236.810	8.480-	3.457-
	H--020		461.4	0.1	0.3	461.8	463.7	.3790-	44.961	3183.65	191.815	236.775	N/A	236.775	8.514-	3.471-
	H--015		459.4	0.2	0.3	459.9	461.8	.2840-	44.886	3183.25	191.791	236.677	N/A	236.677	8.613-	3.511-
	H--010		464.7	0.0	0.3	465.0	466.9	.1890-	45.497	3174.59	191.269	236.766	N/A	236.766	8.524-	3.475-
	H--005		466.7	0.0	0.3	467.0	468.9	.0950-	45.803	3170.96	191.050	236.853	N/A	236.853	8.436-	3.439-
	H--000	END H	476.7	0.0	0.3	477.0	478.9	.0000	46.894	3158.27	190.286	237.180	N/A	237.180	8.110-	3.306-
	R--900	ROAD	326.4	0.0	0.0	326.4	328.3	.0000+666	32.147	3404.93	205.147	237.294	N/A	237.294	7.996-	3.260-
	R--800		321.1	0.0	0.0	321.1	323.0	.0951+666	31.740	3410.51	205.483	237.223	N/A	237.223	8.067-	3.289-
	R--700		314.9	0.0	0.0	314.9	316.8	.1890+444	31.243	3416.77	205.860	237.103	N/A	237.103	8.187-	3.338-
	R--600		324.2	0.0	0.0	324.2	326.1	.2840+222	32.265	3404.06	205.095	237.360	N/A	237.360	7.930-	3.233-
	R--500		335.8	0.0	0.0	335.8	337.7	.3790+0	33.513	3389.88	204.240	237.753	N/A	237.753	7.537-	3.073-
	R--400		333.6	0.0	0.0	333.6	335.5	.4740+222	33.409	3395.47	204.577	237.986	N/A	237.986	7.304-	2.978-
	R--300		320.6	0.0	0.0	320.6	322.5	.5680+444	32.246	3414.74	205.738	237.984	N/A	237.984	7.306-	2.978-
	R--200		309.3	0.0	0.0	309.3	311.2	.6630+666	31.251	3433.68	206.879	238.130	N/A	238.130	7.160-	2.919-
	R--100	END R	304.5	0.0	0.0	304.5	306.4	.7850+888	30.924	3448.17	207.752	238.677	N/A	238.677	6.613-	2.696-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS GEOEXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/31	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	H--105	LINE H	463.4	0.0	1.2-	462.2	466.4	1.9880-	43.336	3167.17	190.822	234.158	N/A	234.158	11.132-	4.538-
	H--100		465.2	0.0	1.2-	464.0	468.2	1.8940-	43.623	3166.70	190.794	234.416	N/A	234.416	10.874-	4.433-
	H--095		471.6	0.0	1.2-	470.4	474.6	1.7990-	44.361	3156.31	190.168	234.528	N/A	234.528	10.761-	4.387-
	H--090		467.4	0.0	1.2-	466.2	470.4	1.7040-	44.061	3164.91	190.686	234.747	N/A	234.747	10.543-	4.298-
	H--085		469.9	0.1-	1.2-	468.6	472.8	1.6090-	44.408	3163.22	190.584	234.992	N/A	234.992	10.298-	4.198-
	H--080		463.9	0.0	0.8-	463.1	467.3	1.5150-	43.979	3171.85	191.104	235.083	N/A	235.083	10.207-	4.161-
	H--075		466.4	0.0	0.8-	465.6	469.8	1.4700-	44.277	3169.77	190.979	235.256	N/A	235.256	10.034-	4.091-
	H--070		463.5	0.0	0.8-	462.7	466.9	1.3250-	44.163	3175.49	191.323	235.487	N/A	235.487	9.803-	3.997-
	H--065		462.7	0.0	0.8-	461.9	466.1	1.2310-	44.195	3180.16	191.605	235.800	N/A	235.800	9.490-	3.869-
	H--060		462.4	0.1	0.8-	461.7	465.9	1.1360-	44.287	3182.80	191.764	236.051	N/A	236.051	9.239-	3.767-
	H--055		466.6	0.2	0.8-	466.0	470.2	1.0420-	44.819	3177.22	191.428	236.246	N/A	236.246	9.044-	3.687-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-TB-AN Twin Buttes
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/11	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	A-0000	LINE A	306.6	0.0	0.0	306.6	306.6	.0000	30.022	3581.88	215.808	245.831	N/A	245.831	.541	.220
	A-0050		339.5	0.2-	0.0	339.3	339.3	.0950-	33.113	3528.53	212.594	245.707	N/A	245.707	.417	.170
	A-0100		358.7	0.7-	0.0	358.0	358.0	.1890-	34.833	3498.43	210.780	245.614	N/A	245.614	.324	.132
	A-0150		363.3	0.9-	0.0	362.4	362.4	.2840-	35.153	3484.49	209.941	245.093	N/A	245.093	.197-	.080-
	A-0200		357.6	0.0	0.7-	356.9	356.9	.3790-	34.503	3486.65	210.071	244.573	N/A	244.573	.717-	.292-
	A-0250		356.6	0.0	0.7-	355.9	355.9	.4740-	34.293	3479.21	209.622	243.916	N/A	243.916	1.374-	.560-
	A-0300		356.6	0.0	0.7-	355.9	355.9	.5680-	34.183	3479.77	209.656	243.839	N/A	243.839	1.451-	.592-
	A-0350		355.4	0.0	0.7-	354.7	354.7	.6630-	33.954	3479.45	209.637	243.591	N/A	243.591	1.699-	.693-
	A-0400		353.0	0.0	0.3-	352.7	352.7	.7580-	33.646	3482.03	209.792	243.439	N/A	243.439	1.851-	.755-
	A-0450		356.7	0.0	0.3-	356.4	356.4	.8520-	33.898	3477.24	209.504	243.402	N/A	243.402	1.888-	.770-
	A-0500		353.0	0.0	0.3-	352.7	352.7	.9470-	33.425	3485.55	210.004	243.429	N/A	243.429	1.861-	.759-
	A-0550		357.3	0.0	0.3-	357.0	357.0	1.0420-	33.734	3486.73	210.075	243.810	N/A	243.810	1.480-	.604-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/12	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	A-0600	LINE A	364.3	0.0	0.3-	364.0	367.2	1.1360-	34.623	3489.18	210.223	244.846	N/A	244.846	.444-	.181-
	A-0650		367.0	0.1-	0.0	366.9	370.1	1.2310-	34.795	3492.77	210.439	245.234	N/A	245.234	.056-	.023-
	A-0700		345.0	0.3-	0.0	344.7	347.9	1.3250-	32.511	3531.39	212.766	245.277	N/A	245.277	.013-	.005-
	A-0750		311.9	0.5-	0.0	311.4	314.6	1.4700-	29.080	3572.66	215.253	244.333	N/A	244.333	.957-	.390-
	A-0800		368.0	0.6-	0.0	367.4	370.6	1.5150-	34.511	3482.06	209.794	244.305	N/A	244.305	.985-	.402-
	A-0850		369.6	0.2	0.6-	369.2	372.4	1.6090-	34.576	3479.70	209.652	244.228	N/A	244.228	1.062-	.433-
	A-0900		365.5	0.3	0.6-	365.2	368.4	1.7040-	34.073	3484.97	209.969	244.043	N/A	244.043	1.247-	.508-
	A-0950		365.4	0.4	0.6-	365.2	368.4	1.7990-	33.962	3477.48	209.518	243.480	N/A	243.480	1.810-	.738-
	A-1000		373.2	0.6	0.6-	373.2	376.4	1.8940-	34.634	3470.42	209.093	243.726	N/A	243.726	1.564-	.637-
	A-1050		363.5	0.7	0.6-	363.6	366.8	1.9880-	33.583	3488.07	210.156	243.739	N/A	243.739	1.551-	.632-
	A-1100		359.9	0.8	0.6-	360.1	363.3	2.0830-	33.129	3487.68	210.133	243.262	N/A	243.262	2.028-	.827-
	A-1150		380.2	0.1	0.3-	380.0	383.2	2.1780-	34.966	3450.29	207.880	242.846	N/A	242.846	2.444-	.996-
	A-1200		372.4	0.2	0.3-	372.3	375.5	2.2720-	34.102	3461.21	208.538	242.640	N/A	242.640	2.650-	1.081-
	A-1250		362.6	0.3	0.3-	362.6	365.8	2.3670-	33.040	3481.34	209.751	242.791	N/A	242.791	2.499-	1.019-
	A-1300		370.8	0.4	0.3-	370.9	374.1	2.4620-	33.741	3469.91	209.062	242.804	N/A	242.804	2.486-	1.014-
	A-1350		360.7	0.6	0.3	361.6	364.8	2.5560-	32.720	3480.70	209.712	242.433	N/A	242.433	2.857-	1.165-
	A-1400		373.0	0.0	0.3	373.3	376.5	2.6510-	33.755	3463.56	208.679	242.434	N/A	242.434	2.856-	1.164-
	A-1450	FND A	348.3	0.0	0.3	348.6	351.8	2.7460-	31.224	3503.55	211.089	242.313	N/A	242.313	2.977-	1.214-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/12	B-K114	REFERR	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	B-1200	LINE B	386.9	0.1	0.3	387.3	390.5	2.3670	41.017	3433.82	206.888	247.904	N/A	247.904	2.614	1.066
	B-1150		404.8	0.1	0.3	405.2	408.4	2.2720	42.658	3415.57	205.788	248.446	N/A	248.446	3.156	1.287
	B-1100		392.5	0.1	0.7	393.3	396.5	2.1780-	36.268	3433.26	206.854	243.122	N/A	243.122	2.168-	.884-
	B-1050		393.7	0.2	0.7	394.6	397.8	2.9830-	35.451	3439.54	207.232	242.683	N/A	242.683	2.607-	1.063-
	B-1000		403.6	0.3	0.7	404.6	407.8	1.9880-	37.598	3429.98	206.656	244.254	N/A	244.254	1.036-	.422-
	B-0950		400.7	0.4	0.7	401.8	405.0	1.8940-	37.434	3436.13	207.027	244.461	N/A	244.461	.829-	.338-
	B-0900		412.0	0.6	0.7	413.3	416.5	1.7990-	38.672	3408.72	205.375	244.047	N/A	244.047	1.243-	.507-
07/15	B-0850	LINE B	385.1	0.2-	0.0	384.9	397.0	1.7040-	36.874	3416.31	205.833	242.706	N/A	242.706	2.584-	1.053-
	B-0800		378.7	0.3-	0.0	378.4	390.5	1.6090-	36.349	3415.00	205.754	242.103	N/A	242.103	3.187-	1.299-
	B-0750		369.5	0.4-	0.0	369.1	381.2	1.5150-	35.548	3428.52	206.568	242.117	N/A	242.117	3.173-	1.294-
	B-0700		361.5	0.7-	0.0	360.8	372.9	1.4700-	34.789	3445.83	207.611	242.400	N/A	242.400	2.890-	1.178-
	B-0650		380.6	0.0	0.2-	380.4	392.5	1.3250-	36.878	3432.36	206.800	243.678	N/A	243.678	1.612-	.657-
	B-0600		376.0	0.1	0.2-	375.9	388.0	1.2310-	36.548	3450.15	207.872	244.419	N/A	244.419	.871-	.355-
	B-0550		392.1	0.1	0.2-	392.0	404.1	1.1360-	38.236	3432.44	206.805	245.040	N/A	245.040	.250-	.102-
	B-0500		384.1	0.2	0.2-	384.1	396.2	1.0420-	37.573	3449.03	207.804	245.377	N/A	245.377	.087	.035
	B-0450		347.4	0.0	0.9-	346.5	358.6	.9470-	34.002	3501.09	210.941	244.943	N/A	244.943	.347-	.141-
	B-0400		342.9	0.0	0.9-	342.0	354.1	.8520-	33.673	3504.42	211.141	244.815	N/A	244.815	.475-	.194-
	B-0350		372.3	0.1-	0.9-	371.3	383.4	.7580-	36.653	3432.16	206.788	243.440	N/A	243.440	1.850-	.754-
	B-0300		359.4	0.1-	0.9-	358.4	370.5	.6630-	35.501	3439.87	207.252	242.753	N/A	242.753	2.537-	1.034-
	B-0250		356.7	0.0	0.2-	356.5	368.6	.5680-	35.426	3440.64	207.299	242.725	N/A	242.725	2.565-	1.046-
	B-0200		357.1	0.1	0.2-	357.0	369.1	.4740-	35.586	3439.17	207.210	242.796	N/A	242.796	2.494-	1.017-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/15	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	B-0150		355.3	0.1	0.2-	355.2	367.3	.3790-	35.521	3438.84	207.190	242.711	N/A	242.711	2.579-	1.051-
	B-0100		364.1	0.2	0.2-	364.1	376.2	.2840-	36.504	3437.63	207.117	243.621	N/A	243.621	1.669-	.680-
07/16	B-0050		359.9	0.0	0.0	359.9	364.7	.1890-	35.490	3438.79	207.187	242.677	N/A	242.677	2.613-	1.065-
	B-0005		359.8	0.0	0.0	359.8	364.6	.0951-	35.590	3439.82	207.249	242.839	N/A	242.839	2.451-	.999-
	B-0000	END B	361.0	0.1-	0.0	360.9	365.7	.0000	35.809	3456.31	208.243	244.052	N/A	244.052	1.238-	.505-
	C-0000	LINE C	298.9	0.0	0.7-	298.2	303.0	.0000	29.670	3560.21	214.503	244.172	N/A	244.172	1.118-	.456-
	C-0050		385.0	0.0	0.7-	384.3	389.1	.0950-	37.989	3415.52	205.785	243.774	N/A	243.774	1.516-	.618-
	C-0100		388.1	0.1-	0.0	388.0	392.8	.1890-	38.241	3399.62	204.827	243.068	N/A	243.068	2.222-	.906-
	C-0150		387.3	0.1-	0.7-	386.5	1091.3	.2840-	106.527	3396.68	204.650	311.177	N/A	311.177	65.887	26.861
	C-0200		383.8	0.1-	0.7-	383.0	387.8	.3790-	37.528	3395.77	204.595	242.124	N/A	242.124	3.166-	1.291-
	C-0250		384.0	0.0	0.8-	383.2	388.0	.4740-	37.436	3391.62	204.345	241.782	N/A	241.782	3.508-	1.430-
	C-0300		377.4	0.0	0.8-	376.6	381.4	.5680-	36.680	3398.77	204.776	241.456	N/A	241.456	3.834-	1.563-
	C-0350		385.5	0.1	0.8-	384.8	389.6	.6630-	37.371	3395.25	204.564	241.935	N/A	241.935	3.355-	1.368-
	C-0400		391.1	0.1	0.8-	390.4	395.2	.7580-	37.808	3395.84	204.599	242.407	N/A	242.407	2.883-	1.175-
	C-0450		395.1	0.2	0.8-	394.5	399.3	.8520-	38.099	3384.31	203.905	242.004	N/A	242.004	3.286-	1.340-
	C-0500		391.0	0.3	0.8-	390.5	395.3	.9470-	37.596	3389.54	204.220	241.816	N/A	241.816	3.474-	1.416-
	C-0550		401.9	0.0	0.8-	401.1	405.9	1.0420-	38.522	3384.67	203.926	242.449	N/A	242.449	2.841-	1.158-
	C-0600		405.0	0.1-	0.8-	404.1	408.9	1.1360-	38.706	3389.07	204.191	242.897	N/A	242.897	2.393-	.975-
	C-0650		369.8	0.2-	0.8-	368.8	373.6	1.2310-	35.138	3465.50	208.796	243.934	N/A	243.934	1.356-	.553-
	C-0700		388.5	0.3-	0.8-	387.4	392.2	1.3250-	36.849	3441.16	207.330	244.179	N/A	244.179	1.111-	.453-
	C-0750		411.4	0.4	0.8-	411.0	415.8	1.4700-	38.989	3388.75	204.172	243.162	N/A	243.162	2.128-	.868-

HEINRICHS EXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/17	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	C-0800	LINE C	404.3	0.0	0.0	404.3	401.9	1.5150-	37.575	3383.40	203.850	241.425	N/A	241.425	3.865-	1.576-
	C-0850		402.6	0.0	0.0	402.6	400.2	1.6090-	37.299	3382.02	203.767	241.065	N/A	241.065	4.225-	1.722-
	C-0900		395.8	0.0	0.0	395.8	393.4	1.7040-	36.521	3385.47	203.975	240.496	N/A	240.496	4.794-	1.954-
	C-0950		392.9	0.0	0.0	392.9	390.5	1.7990-	36.126	3386.08	204.011	240.137	N/A	240.137	5.153-	2.101-
	C-1000		395.1	0.1	0.0	395.2	392.8	1.8940-	36.239	3379.85	203.636	239.875	N/A	239.875	5.415-	2.207-
07/18	C-1050		397.6	0.2	0.0	397.8	402.2	1.9880-	37.050	3367.47	202.890	239.940	N/A	239.940	5.350-	2.181-
	C-1100		395.5	0.3	0.0	395.8	400.2	2.0830-	36.742	3379.54	203.617	240.359	N/A	240.359	4.931-	2.010-
	C-1150		404.4	0.4	0.0	404.8	409.2	2.1780-	37.512	3375.66	203.384	240.895	N/A	240.895	4.395-	1.792-
	C-1200		405.6	0.5	0.0	406.1	410.5	2.2720-	37.529	3376.73	203.448	240.977	N/A	240.977	4.313-	1.758-
	C-1250		408.8	0.6	0.0	409.4	413.8	2.3670-	37.740	3370.80	203.091	240.831	N/A	240.831	4.459-	1.818-
	C-1300		407.8	0.7	0.0	408.5	412.9	2.4620-	37.541	3364.07	202.685	240.226	N/A	240.226	5.064-	2.064-
	C-1350	END C	391.0	0.7	1.1	392.8	397.2	2.5560-	35.893	3380.89	203.699	239.592	N/A	239.592	5.698-	2.323-
	D-1350	LINE D	421.6	1.5	1.1	424.2	428.6	2.5560-	38.968	3316.45	199.816	238.784	N/A	238.784	6.506-	2.652-
	D-1300		416.6	1.9	1.1	419.6	424.0	2.4620-	38.628	3320.95	200.087	238.715	N/A	238.715	6.575-	2.681-
	D-1250		415.4	2.2	1.1	418.7	423.1	2.3670-	38.651	3323.98	200.270	238.921	N/A	238.921	6.369-	2.597-
	D-1200		409.0	0.0	3.3	412.3	416.7	2.2720-	38.136	3336.10	201.000	239.136	N/A	239.136	6.154-	2.509-
	D-1150		410.1	0.0	3.3	413.4	417.8	2.1780-	38.354	3337.43	201.080	239.434	N/A	239.434	5.856-	2.387-
	D-1100		423.9	0.0	3.3	427.2	431.6	2.0830-	39.817	3324.68	200.312	240.129	N/A	240.129	5.161-	2.104-
	D-1050		416.0	0.0	3.3	419.3	423.7	1.9880-	39.155	3342.64	201.394	240.549	N/A	240.549	4.741-	1.933-
	D-1000		427.1	0.0	3.3	430.4	434.8	1.8940-	40.352	3330.14	200.641	240.993	N/A	240.993	4.297-	1.752-
	D-0950		417.7	0.0	3.3	421.0	425.4	1.7990-	39.543	3345.19	201.548	241.091	N/A	241.091	4.199-	1.712-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740
DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/19	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	D-0500	LINE D	419.0	0.0	0.0	419.0	424.5	.9470-	40.455	3355.87	202.191	242.646	N/A	242.646	2.644-	1.078-
	D-0450		408.3	0.0	0.0	408.3	413.8	.8520-	39.519	3344.79	201.524	241.043	N/A	241.043	4.247-	1.732-
	D-0400		405.5	0.0	0.0	405.5	411.0	.7580-	39.355	3345.10	201.542	240.898	N/A	240.898	4.392-	1.791-
	D-0350		400.9	0.0	0.0	400.9	406.4	.6630-	39.016	3348.47	201.745	240.762	N/A	240.762	4.528-	1.846-
	D-0300		400.9	0.0	0.0	400.9	406.4	.5680-	39.128	3349.83	201.827	240.955	N/A	240.955	4.335-	1.767-
	D-0250		407.4	0.0	0.5-	406.9	412.4	.4740-	39.826	3344.16	201.486	241.311	N/A	241.311	3.979-	1.622-
	D-0200		419.1	0.0	0.5-	418.6	424.1	.3790-	41.083	3345.67	201.577	242.660	N/A	242.660	2.630-	1.072-
	D-0150		429.1	0.0	0.5-	428.6	434.1	.2840-	42.174	3350.62	201.875	244.049	N/A	244.049	1.241-	.506-
	D-0100		376.2	0.0	0.5-	375.7	381.2	.1890-	37.105	3434.85	206.950	244.055	N/A	244.055	1.235-	.503-
	D-0 50		267.1	0.0	0.7	267.8	273.3	.0950-	26.650	3589.87	216.290	242.940	N/A	242.940	2.350-	.958-
	D-0000	END D	268.6	0.0	0.7	269.3	274.8	.0000	26.908	3588.99	216.237	243.145	N/A	243.145	2.145-	.874-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL

INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC

LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/29	B-K114	REFER	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	E-0000	LINE E	412.3	0.1-	0.0	412.2	454.6	.0000-	44.514	3305.40	199.150	243.665	N/A	243.665	1.625-	.663-
	E-0050		421.5	0.2-	0.0	421.3	463.7	.0950-	45.294	3296.39	198.607	243.901	N/A	243.901	1.388-	.566-
	E-0100		419.4	0.3-	0.0	419.1	461.5	.1890-	44.968	3299.94	198.821	243.790	N/A	243.790	1.500-	.612-
	E-0150		412.7	0.0	0.0	412.7	455.1	.2840-	44.230	3304.41	199.091	243.321	N/A	243.321	1.969-	.803-
	E-0200		413.3	0.1-	0.9-	412.3	454.7	.3790-	44.079	3296.14	198.592	242.672	N/A	242.672	2.618-	1.067-
	E-0250		410.4	0.1-	0.9-	409.4	451.8	.4740-	43.684	3297.84	198.695	242.379	N/A	242.379	2.911-	1.187-
	E-0300		415.1	0.2-	0.9-	414.0	456.4	.5680-	44.024	3299.05	198.768	242.792	N/A	242.792	2.498-	1.019-
	E-0350		430.1	0.0	0.9-	429.2	471.6	.6630-	45.401	3290.32	198.242	243.642	N/A	243.642	1.647-	.672-
	E-0400		420.3	0.	1.2-	419.1	461.5	.7580-	44.300	3298.28	198.721	243.022	N/A	243.022	2.268-	.925-
	E-0450		408.0	0.1	1.2-	406.9	449.3	.8520-	42.995	3298.90	198.759	241.754	N/A	241.754	3.536-	1.442-
	E-0500		404.3	0.2	1.2-	403.3	445.7	.9470-	42.531	3293.23	198.417	240.948	N/A	240.948	4.342-	1.770-
	E-0550		405.0	0.3	1.2-	404.1	446.5	1.0420-	42.498	3286.94	198.038	240.536	N/A	240.536	4.754-	1.938-
	E-0600		408.8	0.0	1.2-	407.6	450.0	1.1360-	42.730	3278.84	197.550	240.280	N/A	240.280	5.010-	2.042-
	E-0650		401.0	0.1-	1.2-	399.7	442.1	1.2310-	41.845	3291.41	198.307	240.153	N/A	240.153	5.137-	2.094-
	E-0700		399.8	0.2-	1.2-	398.4	440.8	1.3250-	41.608	3295.66	198.564	240.171	N/A	240.171	5.119-	2.087-
	E-0750		399.7	0.3-	1.2-	398.2	440.6	1.4700-	41.418	3298.59	198.740	240.158	N/A	240.158	5.132-	2.092-
	E-0800		405.6	0.0	1.0-	404.6	447.0	1.5150-	41.992	3293.33	198.423	240.415	N/A	240.415	4.875-	1.988-
	E-0850		412.9	0.1-	1.0-	411.8	454.2	1.6090-	42.586	3283.36	197.822	240.409	N/A	240.409	4.881-	1.990-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/29	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	E--090	LINE E	410.1	0.2-	1.0-	408.9	451.3	1.7040-	42.191	3286.17	197.992	240.183	N/A	240.183	5.107-	2.082-
	E--095		413.2	0.0	0.7	413.9	456.3	1.7990-	42.569	3277.92	197.495	240.064	N/A	240.064	5.226-	2.131-
	E--100		410.9	0.1-	0.7	411.5	453.9	1.8940-	42.222	3282.29	197.758	239.980	N/A	239.980	5.310-	2.165-
	E--105		400.1	0.1-	0.7	400.7	443.1	1.9880-	41.054	3298.28	198.721	239.776	N/A	239.776	5.514-	2.248-
	E--110		408.8	0.2-	0.7	409.3	451.7	2.0830-	41.785	3283.19	197.812	239.597	N/A	239.597	5.693-	2.321-
	E--115		398.9	0.1-	0.7	399.5	441.9	2.1780-	40.714	3295.54	198.556	239.270	N/A	239.270	6.020-	2.454-
	E--120		397.3	0.1-	0.7	397.9	440.3	2.2720-	40.447	3292.41	198.368	238.815	N/A	238.815	6.475-	2.640-
	E--125		394.5	0.2-	0.7	395.0	437.4	2.3670-	40.051	3292.65	198.382	238.434	N/A	238.434	6.856-	2.795-
	E--130		389.2	0.0	0.3	389.5	431.9	2.4620-	39.401	3297.57	198.679	238.080	N/A	238.080	7.210-	2.939-
	E--135	END E	399.2	0.0	0.3	399.5	441.9	2.5560-	40.270	3283.49	197.830	238.100	N/A	238.100	7.190-	2.931-
	F--135	LINE F	415.5	0.0	0.8	416.3	458.7	2.5560-	41.915	3251.06	195.876	237.792	N/A	237.792	7.498-	3.057-
	F--130		415.9	0.0	0.8	416.7	459.1	2.4620-	42.065	3249.17	195.762	237.827	N/A	237.827	7.463-	3.042-
	F--125		415.7	0.0	0.8	416.5	458.9	2.3670-	42.157	3253.30	196.011	238.168	N/A	238.168	7.122-	2.904-
	F--120		429.9	0.0	0.8	430.7	473.1	2.2720-	43.659	3249.18	195.763	239.422	N/A	239.422	5.868-	2.392-
	F--115		429.7	0.0	0.8	430.5	472.9	2.1780-	43.749	3253.30	196.011	239.761	N/A	239.761	5.529-	2.254-
	F--110		421.7	0.1-	0.8	422.4	464.8	2.0830-	43.068	3250.61	195.849	238.917	N/A	238.917	6.373-	2.598-
	F--105		422.8	0.0	0.0	422.8	426.5	1.9880-	39.429	3245.62	195.549	234.978	N/A	234.978	10.312-	4.204-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/30	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	F--000	LINE F	432.8	0.0	0.4-	432.4	436.1	.0000	42.703	3241.05	195.273	237.976	N/A	237.976	7.314-	2.982-
	F--005		429.5	0.0	0.3-	429.2	432.9	.0950-	42.278	3244.81	195.500	237.778	N/A	237.778	7.512-	3.063-
	F--010		418.8	0.0	0.3-	418.5	422.2	.1890-	41.120	3258.32	196.314	237.434	N/A	237.434	7.856-	3.203-
	F--015		415.5	0.0	0.3-	415.2	418.9	.2840-	40.685	3262.91	196.590	237.276	N/A	237.276	8.014-	3.267-
	F--020		420.5	0.1	1.1-	419.5	423.2	.3790-	40.995	3259.11	196.361	237.356	N/A	237.356	7.934-	3.234-
	F--025		422.3	0.0	1.1-	421.2	424.9	.4740-	41.050	3261.43	196.501	237.551	N/A	237.551	7.739-	3.155-
	F--030		419.6	0.0	1.1-	418.5	422.2	.5680-	40.675	3267.67	196.877	237.552	N/A	237.552	7.738-	3.155-
	F--035		424.2	0.3	1.4-	423.1	426.8	.6630-	41.014	3264.30	196.674	237.688	N/A	237.688	7.602-	3.099-
	F--040		433.7	0.3	1.4-	432.6	436.3	.7580-	41.833	3254.86	196.105	237.938	N/A	237.938	7.352-	2.997-
	F--045		433.7	0.1	1.4-	432.4	436.1	.8520-	41.703	3260.43	196.441	238.144	N/A	238.144	7.146-	2.913-
	F--050		432.0	0.0	1.4-	430.6	434.3	.9470-	41.415	3261.90	196.529	237.944	N/A	237.944	7.346-	2.995-
	F--055		427.9	0.2-	0.8-	426.9	430.6	1.0420-	40.941	3257.04	196.237	237.178	N/A	237.178	8.112-	3.307-
	F--060		426.1	0.1-	0.8-	425.2	428.9	1.1360-	40.664	3250.66	195.852	236.516	N/A	236.516	8.773-	3.577-
	F--065		417.9	0.1-	0.8-	417.0	420.7	1.2310-	39.750	3260.98	196.474	236.224	N/A	236.224	9.066-	3.696-
	F--070		418.5	0.0	0.8-	417.7	421.4	1.3250-	39.708	3259.71	196.398	236.105	N/A	236.105	9.184-	3.744-
	F--075		418.8	0.0	0.8-	418.0	421.7	1.4700-	39.567	3259.55	196.388	235.955	N/A	235.955	9.335-	3.806-
	F--080		417.8	0.0	0.8-	417.0	420.7	1.5150-	39.416	3262.01	196.536	235.952	N/A	235.952	9.338-	3.807-
	F--085		420.5	0.0	0.8-	419.7	423.4	1.6090-	39.570	3257.08	196.239	235.809	N/A	235.809	9.481-	3.865-
	F--090		427.2	0.0	0.8-	426.4	430.1	1.7040-	40.115	3246.44	195.598	235.713	N/A	235.713	9.577-	3.904-
	F--095		422.0	0.1-	0.0	421.9	425.6	1.7990-	39.563	3250.40	195.837	235.399	N/A	235.399	9.891-	4.032-
	F--100		426.5	0.0	0.8	427.3	431.0	1.8940-	39.980	3241.52	195.302	235.282	N/A	235.282	10.008-	4.080-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC
LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/30	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	G--000	LINE G	459.4	0.0	0.0	459.4	463.1	.0000	45.347	3197.13	192.627	237.974	N/A	237.974	7.316-	2.983-
	G--005		442.8	0.0	0.0	442.8	446.5	.0950-	43.610	3215.81	193.753	237.362	N/A	237.362	7.928-	3.232-
	G--010		439.8	0.0	0.0	439.8	443.5	.1890-	43.206	3218.68	193.925	237.131	N/A	237.131	8.159-	3.326-
	G--015		442.8	0.0	0.0	442.8	446.5	.2840-	43.388	3218.36	193.906	237.294	N/A	237.294	7.996-	3.260-
	G--020		441.9	0.0	0.0	441.9	445.6	.3790-	43.188	3221.13	194.073	237.261	N/A	237.261	8.029-	3.273-
	G--025		438.7	0.0	0.3	439.0	442.7	.4740-	42.793	3228.62	194.524	237.317	N/A	237.317	7.973-	3.250-
	G--030		442.1	0.0	0.3	442.4	446.1	.5680-	43.015	3226.92	194.422	237.437	N/A	237.437	7.853-	3.201-
	G--035		444.1	0.0	0.3	444.4	448.1	.6630-	43.100	3229.25	194.562	237.662	N/A	237.662	7.628-	3.110-
	G--040		448.8	0.0	0.3	449.1	452.8	.7580-	43.448	3222.45	194.153	237.601	N/A	237.601	7.689-	3.135-
	G--045		444.4	0.0	0.3	444.7	448.4	.8520-	42.907	3225.51	194.337	237.244	N/A	237.244	8.046-	3.280-
	G--050		445.2	0.0	0.2	445.4	449.1	.9470-	42.864	3223.79	194.233	237.097	N/A	237.097	8.193-	3.340-
	G--055		449.4	0.0	0.2	449.6	453.3	1.0420-	43.164	3217.01	193.825	236.989	N/A	236.989	8.301-	3.384-
	G--060		446.0	0.1-	0.2	446.1	449.8	1.1360-	42.711	3221.11	194.072	236.783	N/A	236.783	8.507-	3.468-
	G--065		448.0	0.2-	0.2	448.0	451.7	1.2310-	42.785	3217.01	193.825	236.610	N/A	236.610	8.680-	3.539-
	G--070		441.2	0.1-	0.0	441.1	445.3	1.3250-	42.048	3220.28	194.022	236.070	N/A	236.070	9.220-	3.759-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS EXPLORATION COMPANY
P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS 1963

AREA-080263-TB-AN
INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV
LATITUDE CORRECTION = 1.1740

DATUM PLAN = SEA LEVEL
AVERAGE DENSITY = 2.65 GM/CC
COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/31	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	G--075	LINE G	440.0	0.2-	0.0	439.8	444.0	1.4700-	41.751	3221.29	194.083	235.833	N/A	235.833	9.457-	3.855-
	G--080		439.5	0.4-	0.0	439.1	443.3	1.5150-	41.629	3217.92	193.880	235.509	N/A	235.509	9.781-	3.988-
	G--085		449.2	0.6-	0.0	448.6	452.8	1.6090-	42.449	3201.83	192.910	235.359	N/A	235.359	9.930-	4.048-
	G--090		442.9	0.0	0.3-	442.6	446.8	1.7040-	41.750	3208.89	193.336	235.086	N/A	235.086	10.204-	4.160-
	G--095		433.6	0.1	0.3-	433.4	437.6	1.7990-	40.738	3219.09	193.950	234.688	N/A	234.688	10.602-	4.322-
	G--100		442.3	0.2	0.3-	442.2	446.4	1.8940-	41.488	3206.32	193.181	234.669	N/A	234.669	10.621-	4.330-
	G--105		435.2	0.2-	1.0	436.0	440.2	1.9880-	40.770	3214.55	193.677	234.447	N/A	234.447	10.843-	4.420-
	G--110		434.5	0.5-	1.0	435.0	439.2	2.0830-	40.561	3215.94	193.760	234.321	N/A	234.321	10.969-	4.472-
	G--115		430.5	0.7-	1.0	430.8	435.0	2.1780-	40.038	3219.89	193.998	234.037	N/A	234.037	11.253-	4.588-
	G--120		431.2	1.0-	1.0	431.2	435.4	2.2720-	39.967	3216.46	193.792	233.759	N/A	233.759	11.531-	4.701-
	G--125		431.0	0.0	0.4	431.4	435.6	2.3670-	39.875	3215.40	193.728	233.603	N/A	233.603	11.687-	4.765-
	G--130		429.6	0.0	0.4	430.0	434.2	2.4620-	39.626	3215.75	193.749	233.375	N/A	233.375	11.915-	4.857-
	G--135	END G	428.5	0.0	0.4	428.9	433.1	2.5560-	39.408	3216.16	193.774	233.182	N/A	233.182	12.108-	4.936-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

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HEINRICHS GEOEXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263-TB-AN — DATUM PLAN = SEA LEVEL

INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC

LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT --- LP.	DRIFT --- LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
07/31	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	H--105	LINE H	463.4	0.0	1.2-	462.2	466.4	1.9880-	43.336	3167.17	190.822	234.158	N/A	234.158	11.132-	4.538-
	H--100		465.2	0.0	1.2-	464.0	468.2	1.8940-	43.623	3166.70	190.794	234.416	N/A	234.416	10.874-	4.433-
	H--095		471.6	0.0	1.2-	470.4	474.6	1.7990-	44.361	3156.31	190.168	234.528	N/A	234.528	10.761-	4.387-
	H--090		467.4	0.0	1.2-	466.2	470.4	1.7040-	44.061	3164.91	190.686	234.747	N/A	234.747	10.543-	4.298-
	H--085		469.9	0.1-	1.2-	468.6	472.8	1.6090-	44.408	3163.22	190.584	234.992	N/A	234.992	10.298-	4.198-
	H--080		463.9	0.0	0.8-	463.1	467.3	1.5150-	43.979	3171.85	191.104	235.083	N/A	235.083	10.207-	4.161-
	H--075		466.4	0.0	0.8-	465.6	469.8	1.4700-	44.277	3169.77	190.979	235.256	N/A	235.256	10.034-	4.091-
	H--070		463.5	0.0	0.8-	462.7	466.9	1.3250-	44.163	3175.49	191.323	235.487	N/A	235.487	9.803-	3.997-
	H--065		462.7	0.0	0.8-	461.9	466.1	1.2310-	44.195	3180.16	191.605	235.800	N/A	235.800	9.490-	3.869-
	H--060		462.4	0.1	0.8-	461.7	465.9	1.1360-	44.287	3182.80	191.764	236.051	N/A	236.051	9.239-	3.767-
	H--055		466.6	0.2	0.8-	466.0	470.2	1.0420-	44.819	3177.22	191.428	236.246	N/A	236.246	9.044-	3.687-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416

HEINRICHS GEOEXPLORATION COMPANY

P.O. BOX 5671, TUCSON, ARIZONA

GRAVITY CALCULATIONS — 1963 —

AREA-080263 TB AN — DATUM PLAN = SEA LEVEL

INSTRUMENT- WORLD-WIDE, FACTOR= 0.097920 MGAL/DIV — AVERAGE DENSITY = 2.65 GM/CC

LATITUDE CORRECTION = 1.1740 — COMBINED BOUGUER + FREE AIR CORRECTION = 0.060250 MGAL/FT

DATE	STA.	REMARK	READING	DRIFT LP.	DRIFT LN.	READ+ DRIFT CORR.	READ+ AREA NET	MILES TO BASE N+,S-	READING + LAT. CORR.	ELEVATION IN FEET	C B + F A CORRECTION	BOUGUER VALUE IN MGAL	TERR. CORR.	GRAVITY VALUE IN MGAL	GRAVITY ANOMALY IN MGAL	PERCENT DEVIATE
08/01	B-K114	REFERI	406.0	0.0	0.0	406.0	406.0	.0000	39.756	3411.36	205.534	245.290	N/A	245.290	REFERENCE	
	H--050	LINE H	458.2	0.0	0.6	458.8	460.7	.9470-	44.000	3185.93	191.952	235.952	N/A	235.952	9.338-	3.807-
	H--045		463.4	0.0	0.0	463.4	465.3	.8520-	44.562	3181.44	191.682	236.244	N/A	236.244	9.046-	3.688-
	H--040		462.5	0.0	0.0	462.5	464.4	.7580-	44.584	3186.64	191.995	236.579	N/A	236.579	8.711-	3.551-
	H--035		462.5	0.1	0.0	462.6	464.5	.6630-	44.705	3188.07	192.081	236.787	N/A	236.787	8.503-	3.467-
	H--030		461.6	0.2	0.0	461.8	463.7	.5680-	44.739	3188.24	192.091	236.830	N/A	236.830	8.460-	3.449-
	H--025		462.1	0.0	0.3	462.4	464.3	.4740-	44.908	3185.10	191.902	236.810	N/A	236.810	8.480-	3.457-
	H--020		461.4	0.1	0.3	461.8	463.7	.3790-	44.961	3183.65	191.815	236.775	N/A	236.775	8.514-	3.471-
	H--015		459.4	0.2	0.3	459.9	461.8	.2840-	44.886	3183.25	191.791	236.677	N/A	236.677	8.613-	3.511-
	H--010		464.7	0.0	0.3	465.0	466.9	.1890-	45.497	3174.59	191.269	236.766	N/A	236.766	8.524-	3.475-
	H--005		466.7	0.0	0.3	467.0	468.9	.0950-	45.803	3170.96	191.050	236.853	N/A	236.853	8.436-	3.439-
	H--000	END H	476.7	0.0	0.3	477.0	478.9	.0000	46.894	3158.27	190.286	237.180	N/A	237.180	8.110-	3.306-
	R--900	ROAD	326.4	0.0	0.0	326.4	328.3	.0000	32.147	3404.93	205.147	237.294	N/A	237.294	7.996-	3.260-
	R--800		321.1	0.0	0.0	321.1	323.0	.0951	31.740	3410.51	205.483	237.223	N/A	237.223	8.067-	3.289-
	R--700		314.9	0.0	0.0	314.9	316.8	.1890	31.243	3416.77	205.860	237.103	N/A	237.103	8.187-	3.338-
	R--600		324.2	0.0	0.0	324.2	326.1	.2840	32.265	3404.06	205.095	237.360	N/A	237.360	7.930-	3.233-
	R--500		335.8	0.0	0.0	335.8	337.7	.3790	33.513	3389.88	204.240	237.753	N/A	237.753	7.537-	3.073-
	R--400		333.6	0.0	0.0	333.6	335.5	.4740	33.409	3395.47	204.577	237.986	N/A	237.986	7.304-	2.978-
	R--300		320.6	0.0	0.0	320.6	322.5	.5680	32.246	3414.74	205.738	237.984	N/A	237.984	7.306-	2.978-
	R--200		309.3	0.0	0.0	309.3	311.2	.6630	31.251	3433.68	206.879	238.130	N/A	238.130	7.160-	2.919-
	R--100	END R	304.5	0.0	0.0	304.5	306.4	.7850	30.924	3448.17	207.752	238.677	N/A	238.677	6.613-	2.696-

ALLIED EGRY BUSINESS SYSTEMS, LA FORM 6416