CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
3550 N. Central Ave, 2nd floor
Phoenix, AZ, 85012
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

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MAGNETOMETER NOTES for:

CHAPMAN MOOREHOUSE

RUBARB GROUP

SANTA CRUZ COUNTY ARIZONA

OCTOBER 1964

D. ANDERSON
R. JONES

10-13-64

(1)

LINE #1

STA	RANGE	READING		REMARKS	Time
BASE	-1	52			9.05
BASE	-1	118	Corrected		9.25
1	-1	67	660		9.30
2	-1	75	740		
3	-1	70	690		
4	-1	72	6[illegible]		
5	-1	62		IN WASH	
6	-1	85		TOP HILL	
7	-1	80			
8	-1	78			
9	-1	82			
10	-1	78		IN WASH	
11	-1	87			
12	-1	80			
13	-1	54		TOP HILL	
14	-1	74			
15	-1	55			
16	-1	87		IN WASH	
17	-1	80			
18	-1	73		TOP HILL	
19	-1	63			
20	-1	68			
21	-1	56			10.00
22	-1	65			
23	-1	72			
24	-1	54			
25	-1	58			
26	-1	60			
27	-1	47			

10-13-64

(2)

STA	RANGE	Reading	Remarks & Time
28	-1	66	
29	-1	70	
30	-1	50	
31	-1	72	
32	-1	72	
33	-1	56	
34	-1	42	
35	-1	48	
36	-1	46	
37	-1	41	
38	-1	15	
39	-1	10	
40	-1	50	End Center clame 11 & 1-16
41	-1	52	
42	-1	88	
43	-1	90	
44	-1	78	10:30
45	-1	85	
46	-1	92	
47	-1	94	
48	-1	118	Near wash
49	-1	102	In wash
50	-1	98	
51	-1	105	
52	-1	110	
53	-1	93	
54	-1	75	Loc. RAT # 21
55	-1	67	

10-13-64

(3)

STA	Range	Reading	Remarks & Time
Center	116	116 South	
1	-1	48	11:15
2	-1	62	
3	-1	48	
4	-1	35	
5	-1	43	
6	-1	71	
#1	-1	62	
2	-1	67	
3	-1	74	
4	-1	67	
5	-1	84	in wash
6	-1	78	
7	-1	67	
8	-1	74	
9	-1	62	11:45
10	-1	64	
11	-1	58	
12	-1	56	Top hill
13	-1	70	
14	-1	73	in wash
15	-1	75	Top hill
16	-1	75	
17	-1	87	
18	-1	68	Side hill
19	-1	75	in wash
20	-1	80	
21	-1	65	Side hill
22	-1	62	
23	-1	73	

10-13-64

(4)

STA	RANGE	Reading	Remarks & Time
24	-1	84	
25	-1	90	in wash
26	-1	78	"
27	-1	64	side hill
28	-1	55	"
29	-1	54	"
30	-1	85	"
31	-1	70	in wash
32	-1	87	"
33	-1	77	"
34	-1	115	"
35	-1	97	"
36	-1	30	"
37	-1	75	"
38	-1	110	" 12:15
39	-1	85	
40	-1	108	
From STA		40	To Line Boy Pump.
1	-1	102	
2	-1	85	Line Boy Pothole
			To " " Shaft
3	-1	96	Top hill
		143	50 FT ST.
4	-1	137	30 FT South Line Boy Sha.
	-1	100	50 FT. ST.
5	+1	50	100 FT. No. Line Boy Sha.
6		100	
7	+2	105	100 FT South SHAFT.
8	-1	62	150 FT. South "
9	+1	176	200 " " " 12:45

10-13-64

(5)

GTA	Range	Reading	Remarks & Time
9	+1	82	250 E South Shaft
10	-1	40	300 " " "
11	-1	40	350 " " "
12	-1	44	400 " " "
13	-1	55	450 " " "
	-1	120	BASE Check

factors

$+2 = 30$

$+1 = 10$

$-1 = -10$

10-14-64

LINE Bay Detail Mag. (6)

STA	RANGE	Reading		Remark & Time
BASE	-1	46		7:30
BASE	-1	117	NBO	7:45
0	-1	148	Center Line Bay	8:00
1	+1	245	South 45 west	
2	-1	43		
3	+1	20	2000	
4	+2	76	2280	
5	-1	34	340	
6	+1	02	20	
7	-1	46	460	
8	-1	48		
9	-1	50		
10	-1	42		
11	-1	57		
12	-1	52	South 60 west	
13	-1	53		
14	-1	52	520	
14 50FT	-1	53	530	North
100 ft	-1	52	52	
150 FT	-1	66	on outcrop	
200 FT	-1	54		
14 50 F	-1	53	South	
100 FT	-1	35	Near Border	8:30
150	-1	28		
200	-1	45		
13 50 F	-1	73	North	
100 F	-1	43		
150 F	-1	57		
200 F	-1	60		
13 50 ft	-1	57	South	
100 ft	-1	53	Near Border	

LINE 624

10-14-64

(7)

GTA	Range	Reading	Remarks & Time
150 FT.	-1	40	9:00
200 FT	-1	48	
12/50	-1	64	EAST. LINE 12
100	-1	68	ON Gr. ↓ Out Crop South
150	-1	50	bearing EAST
200	-1	62	
12/50	-1	52	West LINE 12
100	-1	51	SOUTH
150	-1	48	Bearing West
200	-1	42	
11/50	-1	60	west LINE 11-S
100	-1	56	Bearing West
150	-1	54	
200	-1	44	
11/50	-1	52	Bearing EAST LINE 11 S
100	-1	58	
150	-1	60	
200	-1	45	
10/50	-1	48	Bear. West. LINE 10 S
100	-1	80	Side hill near out Crop
150	-1	58	
200	-1	56	IN WASH
10/50	-1	55	Bear. EAST. 9.30
100	-1	54	Closed 200 Line 11
150	-1	46	
200	-1	43	
9/50	-1	55	Bear West
100	-1	40	
150	-1	42	Side hill
200	-1	60	IN WASH

10-14-64

(8)

LINE Boy

STA	RANGE	READING	REMARKS & TIME
58	-1	52	Bear EAST. LINE 9S
100	-1	53	
150	-1	44	
200	-1	40	
58	-1	52	Bear West LINE 8S
100	-1	60	
150	-1	62	Side hill
200	-1	63	in wash
8 50	-1	50	Bear EAST. LINE 8S
100	-1	52	10:00
150	-1	47	
200	-1	23	
Center	-1	155	Check Line Boy 10:00
7 50	-1	72	-7 B. West LINE 7S
100	-1	75	-7
150	-1	55	-7
200	-1	58	-7
7 50	-1	44	-7 B. EAST LINE 7S
100	-1	53	-7
150	-1	96	-7 Near Gr. Oct Crop
200	-1	45	-7
6 50	-1	04	B. West LINE 6S
100	-1	42	in wash
150	-1	52	" "
200	-1	48	Top hill
6 50	-1	47	B. EAST LINE 6S
100	-1	61	in wash
150	-1	72	
200	-1	62	
250	-1	25	

LINE Bay 10-14-64

(9)

DIURNAL

STA	Range	Reading		Remarks & Time
5 50	-1	66	-7	LINE 5S West. 10:30
100	-1	57		Side hill
150	-1	60		in wash
200	-1	71		Side hill
5 50	-1	26		B. EAST, LINE 5S
100	-1	72		in wash
150	-1	67		Top hill
200	-1	182		
250	+4	120		
300	-1	105		
4 50	-1	03		B. west LINE 4S
100	-1	44		
150	-1	49		
200	-1	92		in Deep wash
4 50	+2	156		EAST LINE 4S
100	-1	15		side hill 11:00
150	+1	03		
200	-1	106		
250	-1	145		
300	-1	75		
350	-1	77		
400	-1	77		
3 50	+2	204	6120	West. LINE 3S
100	-1	18	180	
150	-1	47	470	
200	-1	78	780	Side hill
250	-1	78	780	in wash
300	-1	55	550	12:00
3 50	+2	116	3480	(EAST ?) LINE 3S
100	+2	101	3030	
150	+2	107	3210	

LINE Boy

10-24-69

(10)

STA	RANGE	Reading	(+200)	REMARKS	TIME
200	-1	110	1100	LINE 3S.	12:00
250	-1	115	1150		
300	-1	97	970	IN WASH	
350	-1	75	750		
Center	-1	139	check	Line Boy	1:05
Base	-1	115	Check		12:40
50	+1	15	170	West	1:10
100	+1	05	70		
150	-1	52	500		
200	-1	84	820	Side hill	
250	-1	66	640	IN wash	
300	-1	42	400	Top hill	
350	-1	36	340		
50	-1	239	2370	EAST	LINE 2S
100	-3	82	8180	IN WASH	
150	-2	121	3610		
200	-1	167	1650		
250	-1	92	900		
300	-1	78	760		
350	-1	96	880		
50	+1	25	270	West	LINE 1S
100	+1	52	540		
150	-1	56	540		
200	-1	96	940	Side hill	
240	-1	175	1730	IN WASH	
250	-2	125	3730		
300	-1	35	330		
350	-1	56	540	Edge	Dump 1:45
50	-2	115	3430	EAST	LINE 1S
100	-1	223	2210		

Line Bay

10-14-64

(11)

+208

STA	Range	Reading		Remarks & Time
150	-1	152	1500	
200	-1	103	1010	
250	-1	86	840	
300	-1	95	930	
0 50	-1	107	1050	West — LINE 0
100	-1	96	940	↓ 2:15
150	-1	52	500	WEST
200	-1	74	720	↓
250	-1	64	620	
300	+4	126	37,880 ~~320~~	~~110 or -2~~
350	-1	50	480	
0 50	-1	176	1740	LINE 0
100	-1	125	1230	EAST
150	-1	117	1150	↓
200	-1	66	640	
250	-1	66	640	
300	-1	90	880	
Center	-1	139	Check	Line Bay 2:45
BASE	-1	114	Check	

10-15-64

(12)

LINE Boy

STA	RANGE	READING	REMARKS &	TIME
BASE	-1	46		7:35
BASE	-1	114		7:50
CENTER	-1	139	LINE BOY	8:05
		North	FROM STATION 0	
1	-1	118	15 FT. South of Shaft.	
2	-1	208	off Line Boy Dump	
3	-1	94		
4	-1	141	Mag. Out Crop.	
5	-1	117	going down Face Cliff	
6	-1	72		
7	-1	47	Bottom wash	
8	-1	104	side hill	
9	-1	67	+3	
10	-1	93	+3	
11	-1	87	+4	
11	-1	87	910 B west	LINE 11 N
50	-1	96	1000	
100	-1	88	920	8:30
150	-1	65	690	
200	-1	74	780	
250	-1	82	86 EAST	
11				
50	-1	81	85	
100	-1	88	92	
150	-1	88	92	
200	-1	75	79 Bottom wash	
250	-1	67	+4 710 EAST	LINE 10 N
10				
50	-1	83	+4 870	
100	-1	94	+4 980	
150	-1	91	+4 950 West Edge wash	9:00
200	-1	93	+4 970 East Edge wash.	
250	-1			

10-15-64

(13)

LINE Boy

STA	RANGE	READING		REMARKS & TIME
(10)	-1	88	920	LINE 10N
50	-1	87	910	West
100	-1	72	760	
150	-1	73	770	Ridge wash
200	-1	66	720	wash
250	-1	108	1120	LINE 9N
(9)	-1	103	1070	
50	-1	96	1000	
100	-1	84	880	Bottom wash 9:30
150	-1	94	980	on hill
200	-1	92	960	West
(9)	-1	96	1000	
100	-1	74	780	wash
150	-1	78	820	"
200	-1	88	920	Ridge wash
250	-1	105	1090	East LINE 8N
(8)	-1	118	1220	
50	-1	126	1300	in wash
100	-1	102	1040	Side hill 10:00
150	-1	93	970	" "
200	-1	95	990	West
(8)	-1	48	520	Bottom wash
50	-1	68	720	
100	-1	53	570	
150	-1	62	660	Side hill LINE 7 N
200	-1	88	920	East in wash
(7)	-1	94	980	" " 10:30
50	-1	105	1090	Side hill
100	-1	104	108	
150	-1	98	102	
200	-1			
250	-1			

Bose 117

10-15-69
(14)

Line Bay

STA	Range	Reading		Remarks & Time
(7) 50	-1	67	710	West. LINE 7N
100	-1	46	500	
150	-1	66	700	
200	-1	69	730	
250	-1	66	700	
Base	-1	113		Check 11:15
(6) 50	-1	81	830	EAST - Ed. Cliff LINE 6N
100	-1	100	102	11:30
150	-1	98	1000	
200	-1	122	1240	Side hill
250	-1	103	105	
50	-1	93	950	West.
100	-1	91	930	
150	-1	78	800	
200	-1	75	770	
250	-1	72	720	
(5) 50	-1	123	1250	EAST 12:00 LINE 5N
100	-1	150	1520	in wash
150	-1	115	1170	
200	-1	102	1040	
250	-1	104	1060	
50	-1	135	1370	W. Bearing W
100	-1	92	940	
150	-1	77	790	
200	-1	74	760	
250	-1	77	790	
50	-1	156	1580	EAST LINE 4N
100	-1	123	1250	in wash
150	-1	130	1320	
200	-1	108	1100	
250	-1	106	1080	

10-15-60

(15)

LINE Bay

STA	[illegible]	[illegible]		Remarks & Time
4/50	-1	106	1080	West 1:00
100	-1	78	800	LINE 4N
150	-1	92	940	
200	-1	83	850	
250	-1	78	800	
3/50	-1	173	1750	EAST LINE 3N
100	-1	147	1490	2:00
150	-1	182	1840	
200	-1	58	600	
250	-1	97	990	
3/50	-1	118	1200	West
100	-1	110	1120	
150	-1	94	960	
200	-1	78	800	
2/50	-1	148	1500	EAST Bearing LINE 2N
100	-1	135	1370	MAG. 2:30
150	-1	142	1440	IN WASH
200	-1	65	670	
2/50	-1	146	1420	Ed. OF Road West
100	-1	124	1260	
150	-1	68	700	
200	-1	73	750	
1/50	-1	175	1770	Center Road LINE 1N EAST
100	-1	138	1400	
150	-1	132	1340	
1/50	-1	170	172	ON Road. West
100	-1	85	870	
150	-1	82	840	
200	-1	78	800	
BASE	-1	115	118	Check 3:15

DIURNAL
-408

N-16-64
(16)

STA	Range	Reading		Remarks	Time
Base	-1	105			7:30
Base	-1	117			8:50
Line II		Gon			
0	-1	[illegible]	620	LINE 2	7:[illegible]
1	-1	57	530		
2	-1	58	540		
3	-1	70	740		
4	-1	[illegible]	840		
5	-1	[illegible]	900		
6	-1	[illegible]	900		
7	-1	[illegible]	780		
8	-1	[illegible]	1000		
9	-1	[illegible]	970		
10	-1	97	930		
11		92	880		
12		93	990		
13	-1	102	980		
14	-1	100	960		1030
15	-1	88	840		
16	-1	8[illegible]	830		
1	-1	72			
2	-1	101			
3		[illegible]			
2 Line 3				heading west.	
1		[illegible]			
2	-1	[illegible]			
3	-1	98			
4	-1	[illegible]			
5	-1	106			
6	-1	[illegible]			
7	-1	93			

11-26-64

(18)

STA	[illegible]	[illegible]		Remarks & Time	
8	-1	103			
9	-1	118			
10	-1	93			
11	-1	88			
12	-1	72			
Base	-1	121		check	12:30
				11-19-64	
Base	-1	111	Add 50		10:00
13	-1	65	700	side hill	
14	-1	65	700	"	
15	-1	54	590	"	
16	-1	28	320	"	
17	-1	43	480	"	
18	-1	44	490		
19	-1	44	490		
20	-1	75	800	in wash	
21	-1	72	770		
22	-1	68			
23	-1	64		side hill	
24	-1	42			10:30
25	-1	50			
26	-1	42			
27	-1	47			
28	-1	46			
29	-1	53			
30	-1	43			
31	-1	52			
32	-1	63			
33	-1	48			
34	-1	45			
35	-1	55			

11-19-64

(19)

STA	Range	Reading		Remarks & Time
36	-1	44		11:30
37	-1	47		
38	-1	58		
39	-1	68		
40	-1	76		Side hill
41	-1	82		"
42	-1	80		Top hill
43	-1	63		
44	-1	76		
45	-1	72		
46	-1	52		
47	-1	66		in wash
48	-1	75		side hill
49	-1	83		
50	-1	76		12:00
51	-1	68		
52	-1	78		
53	-1	84		
54	-1	68		
55	-1	48		
56	-1	42		
57	-1	66		
58	-1	60		
Line 4	-1	58	Add going EAST.	
1	-1	93	30	
2	-1	65		
3	+1	150		
4	-1	66		
5	-1	86		
6	-1	109		
7				

11-19-64

20

Sta	Range	Reading		Remarks	
8	-1	102	Add		
9	-1	107	30	IN wash	
10	-1	122		Sidehill	
11	-1	88			
12	-1	85			12;30
13	-1	83			
14	-1	84			
15	-1	104			
16	-1	64			
17	-1	63			
18	-1	68			
19	-1	48			
20	-1	48			
21	-1	36	Add		
22	-1	54	20		
23	-1	53			
24	-1	49			1;00
25	-1	51			
26	-1	56			
27	-1	48			
28	-1	39			
29	-1	38			
Base	-1	115		Check	1;50
30	-1	47			2;00
31	-1	38			
32	-1	49			
33	-1	78			
34	-1	58			
35	-1	59			
36	-1	43			

11-19-64

(21)

37	-1	28	Add	Side hill
38	+1	03	20	" "
39	-1	46		Top hill
40	-1	45		Side hill
41	-1	25		" "
42	-1	82		2:30
43	-1	72		" "
44	-1	73		" "
45	-1	82		" "
46	-1	80		" "
47	-1	76		" "
48	-1	92		" "
49	-1	93		" "
50	-1	56		" "
51	-1	104		" "
52	-1	75		
53	-1	62		
54	-1	93		
55	-1	77		
Lines 1	-1	48		Going FAST
2	-1	77		3:00
3	-1	85		
4	-1	92		
5	-1	68		
6	-1	76		
7	-1	72		
8	-1	68		
9	-1	68		
10	-1	58		
11	-1	62		

11-19-69

(22)

STA	Range	Reading	Remarks & Time
12	-1	64	
13	-1	68	
14	-1	66	
15	-1	74	3:30
16	-1	72	
17	-1	55	Top hill
18	-1	15	Side hill
19	-1	[illegible]	" "
20	-1	52	"
21	-1	47	" "
22	-1	55	" "
23	-1	56	" "
24	-1	68	Bottom hill
25	-1	48	
26	-1	23	
27	-1	50	
28	-1	54	
29	-1	55	
30	-1	34	4:00
31	-1	58	
BASE	-1	117	4:70

11-20-64

(23)

STA	Range	Reading	Remarks & Time	
Base	-1	108	+90	7:45
32	-1	34		
33	-1	33		
34	-1	33		8:00
35	-1	48		
36	-1	51		
37	-1	52		
38	-1	46		
39	-1	45		
40	-1	53	-80	
41	-1	51		
42	-1	56		
43	-1	57		
44	-1	68		
45	-1	73		
46	-1	74		
47	-1	80		
48	-1	92	70	
49	-1	98		
50	-1	121		
51	-1	112		
52	-1	98		8:36
53	-1	102		
54	-1	73		
55	-1	68	+60	
Line 6	-1	44	Going East	
1	-1	68		
2	-1	93		
3	-1	108		
4	-1	112		
5	-1	127		
6	-1			

11-20-64
(24)

STA	Range	Reading		Remarks & Time
7	-1	84	+50	
8	-1	95		
9	-1	95		
10	-1	77		9:00
11	-1	62		
12	-1	65		
13	-1	51		
14	-1	68	+40	
15	-1	52		
16	-1	60		
17	-1	48		
18	-1	60		
19	-1	53		
20	-1	48	+30	
21	-1	50		
22	-1	54		
23	-1	42		
24	-1	42		
25	-1	48	+20	9:30
26	-1	54		
27	-1	45		
28	-1	46		
29	-1	56		
30	-1	43	+10	
31	-1	38		
32	-1	43		
33	-1	57		
34	-1	49		
35	-1	45	0	
36	-1	46	0	
37	-1	52	0	

11-20-64

25

STA	Range	Reading		Remarks & Time	
38	-1	48	0		10:00
39	-1	68		Sidehill	
40	-1	[illegible]			
41	-1	48			
42	+1	10			
43	-1	20		Sidehill	
44	-1	23	-10	Sidehill	
45	-1	37			10:30
46	-1	48			
47		28			
48	+1	15			
49	-1	12			
50	-1	25			
51	-1	12			
52	-1	18			
53	-1	25			
54	-1	52	-20		
55	-1	24			
Line 7	-1	63	Going west	Sidehill	
2	-1	38			11:00
3	-1	44			
4	-1	50			
5	-1	53			
6	-1	47			
7	-1	77	-	Sidehill	
8	-1	43	30	" "	
9	-1	51		" "	
10	-1	62		" "	
11	-1	46			
12	-1	66			
13	-1	51			

11-20-64

26

STA	RANGE	Reading		Remark & Time
14	-1	53	-30	
15	-1	43		11:30
16	-1	82		
17	-1	52		
18	-1	56		Bottom hill
19	-1	43		
20	-1	72		
21	-1	34		
22	-1	38		
23	-1	34		
24	-1	44		12:00
25	-1	23	100 FT TO FAR SOUTH OF 8-10	
23	-1	38	100 FT. North of 7-23	
24	-1	38	" " " " 7-24	
25	-1	57	" " " " 7-25	
26	-1	76		
27	-1	54	-40	
28	-1	57		
29	-1	48		
30	-1	52		
31	-1	51		
32	-1	54		
33	-1	62		
34	-1	56		
35	-1	53		
36	-1	65		
37	-1	56		
38	-1	54		
39	-1	52		
40	-1	63		
41	-1	71		

11-20-64

27

SIP	Range	Reading		Remarks & Time
42	-1	630	-50	
43	-1	590		
44	-1	730		
45	-1	720		
46	-1	510		
47	-1	920		
48	-1	880		
49	-1	980		
50	-1	1160		
51	-1	1260		
52	-1	1230		
53	-1	940		
54	-1	930		
55	-1	840		
Base	-1	1210	-50	Check 2:00

11-21-64

28

STA	RANGE	Reading	Remarks & Time
BASE	-1	104	7:50
Line 8	-1	85	+120
2	-1	82	Going - EAST 8:00
3	-1	98	+110
4	-1	82	Taken on Rock Kern
5	-1	63	
6	-1	48	51-2
7	-1	75	Taken on Rock Kern
8	-1	53	+100
9	-1	68	
10	-1	56	Taken on Rock Kern
11	-1	50	8:30
12	-1	38	+90
13	-1	43	Taken on Rock Kern
14	-1	51	
15	-1	49	
16	-1	53	Taken on Rock Kern
17	-1	48	
18	-1	44	
19	-1	42	56 — 6
20	-1	48	+80
21	-1	47	
22	-1	53	56 + 6 8
23	-1	66	
24	-1	49	
25	-1	48	— 8
26	-1	45	9:00
27	-1	56	
28	-1	68	10 — 8
29	-1	58	N W ASH
30	-1	53	TOP hill

11-21-64

(28)

Sta	Range	Reading		Remarks & Time	
31	-1	60	+70	10	10:30
32	-1	51			
33	-1	52			
34	-1	47			
35	-1	56			
36	-1	37			
37	-1	68			
38	-1	56			
39	-1	50	+60		
40	-1	48			
41	-1	51	Col.	RAT 19-45-4	720
42	-1	58			
43	-1	54			
44	-1	36			11:00
45	-1	48			
46	-1	43			
47	-1	47			
48	-1	37			
49	-1	28			
50	-1	56		RAT 21	
51	-1	53	+50		
52	-1	82			
53	-1	116		End RAT 21	
Line 9	-1	106		Going West	
1	-1	102		Side hill	
3	-1	91		" "	
4	-1	78		" "	
5	-1	65		Top hill	11:30
6	-1	29		Side hill	
7	-1	90		" "	
8	-1	10		" "	

11-21-64

(29)

Sta	Range	Reading		Remarks & time	
9	-1	37	+40	side hill	
10	-1	50			
11	-1	45		Bottom hill	
12	-1	71			
13	-1	48			
14	-1	62			
15	-1	46			
16	-1	51			
17	-1	63			12:00
18	-1	58			
19	-1	65		in wash	
20	-1	70		" "	
21	-1	78		" "	
22	-1	47	+30		
23	-1	57			
24	-1	56			
25	-1	76		in wash	
26	-1	48			
27	-1	52			
28	-1	53			
29	-1	52			
30	-1	51			
31	-1	51			
32	-1	42			
33	-1	57			
34	-1	35			
35	-1	42			
36	-1	56			12:30
37	-1	58			
38	-1	51			
39	-1	33			

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(30)

Stn	Range	Reading	Remarks & Time			
40	-1	52	+30			
41	-1	50	+20			
42	-1	46				
43	-1	55				
44	-1	67				
45	-1	65				
46	-1	58				
Base	-1	114	+20 check			1:00
47	-1	62				
48	-1	57				
49	-1	66				
50	-1	74				
51	-1	99	Side	hill		
52	-1	96	Top	"		
53	-1	104				
54	-1	120				
55	-1	83				
56	-1	81				
57	-1	52				
58	-1	87				
59	-1	14			Side hill	
60	-1	77			" "	
61	-1	84			" "	
62	-1	78			Top hill	
63	-1	75			Side hill	
64	-1	88			"	
65	-1	94			"	"
66	-1	95				
67	-1	91				
68	-1	90				
69	-1	95				

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(51)

STA	Range	Reading		Remarks & Time
70	-1	85		Side hill
71	-1	82		" "
72	-1	68		" "
73	-1	78		top hill
74	-1	79		" "
75	-1	63		Side hill
76	-1	68		" "
77	-1	86		" "
78		15		Bottom
79	-1	4		
80	-1	83		
81	-1	82		
82	-1	62		
28	-1	63	43-41	22 Going west.
27	-1	62		
26	-1	76		
25	-1	63	43 —	
24	-1	71		Side hill
23	-1	62		" "
22	-1	68	45-43-22-20	" "
21	-1	63		
20	-1	68		
19	-1	63	45-20	
18	-1	56		
17	-1	48		
16	-1	43	47-45-20-18	
15	-1	65		
14	-1	68		
13	-1	57	18	
12	-1	76		
11	-1	76		

11-21-69

32

STA	Range	Reading	Remarks & Trees
10	-1	46	47-49-18-16
9	-1	69	
8	-1	67	
7	-1	60	16-49
6	-1	66	
5	-1	47	
4	-1	67	47-14-51-16
3	-1	86	
2	-1	72	
1	-1	45	14-51
BASE		16	Check 1

11-22-69
(33)

STA	Range	Reading	Remarks & Time
Base	-1	116	
Line 10 1	-1	38	Going EAST
2	-1	38	
3	-1	47	
4	-1	49	
5	-1	43	
6	-1	41	
7	-1	49	
8	-1	51	
9	-1	51	
10	-1	55	
11	-1	58	
12	-1	53	IN WASH
13	-1	51	
14	-1	49	
15	-1	22	
16	-1	37	
17	-1	37	
18	-1	37	
19	-1	48	
20	-1	29	
21	-1	38	
22	-1	49	
23	-1	56	
24	-1	64	
25	-1	61	
26	-1	38	
27	-1	48	
28	-1	48	
29	-1	48	
30	-1	49	

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(34)

STA	Range	Reading	Remarks & Time
31	-1	48	
Line 11	-1	64	Going west
1	-1	31	Line 11 150 F to far nor
2	-1	48	
3	-1	36	
4	-1	35	
5	-1	72	In wash
6	-1	43	
7	-1	51	
8	-1	53	
9	-1	36	
10	-1	77	
11	-1	60	
12	-1	52	
13	-1	63	
14	-1	50	
15	-1	54	
16	-1	58	
17	-1	45	
18	-1	58	
19	-1	50	
20	-1	41	
21	-1	62	
22	-1	37	
23	-1	46	
24	-1	65	
25	-1	66	
26	-1	58	
27	-1	67	
28	-1	48	
29	-1	60	
30	-1		

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35

STA	Range	Reading	Remarks & Time
31	-1	53	
Line 12	-1	46	Going East.
2	-1	53	
3	-1	54	
4	-1	62	
5	-1	64	
6	-1	65	
7	-1	68	
8	-1	62	
9	-1	57	
10	-1	53	
11	-1	59	
12	-1	58	
13	-1	52	
14	-1	49	
15	-1	44	
16	-1	47	
17	-1	57	
18	-1	57	
19	-1	61	
20	-1	57	200 Ft. From Line 11
21	-1	47	
22	-1	70	
23	-1	61	
24	-1	48	
25	-1	43	
26	-1	39	
27	-1	63	
28	-1	45	
29	-1	59	
30	-1	26	

11-22-64
(36)

STA	RANGE	READING		REMARKS & TIME
31	-1	38		
Line 213	-1	34		Going West
1				
2	+1	43	✓	
3	-1	49		150 From Sta 2
4	-1	56		
5	-1	43	✓	
6	-1	51		
7	-1	53		
8	-1	37	✓	
9	-1	37		
10	-1	37		
11	-1	58	✓	
12	-1	55		
13	-1	38		
14	-1	58	✓	
15	-1	54		
16	-1	67		
17	-1	48	✓	
18	-1	48		
19	-1	50		
20	-1	46	✓	
21	-1	42		
22	-1	50		
23	-1	54	✓	Fence 15 M. South
24	-1	45		
25	-1	45		
26	-1	50	✓	
27	-1	52		
28	-1	51		
29	-1	15	✓	

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(37)

STA	Range	Reading	Remarks & Time
Base Line	-1	117	Check
1	-1	51	Going East
2	-1	52	
3	-1	58	
4	-1	54	
5	-1	66	
6	-1	58	
7	-1	52	
8	-1	55	
9	-1	51	
10	-1	51	
11	-1	44	
12	-1	48	8 FT No. OF Fence
13	-1	42	
14	-1	48	
15	-1	48	
16	-1	56	
17	-1	48	
18	-1	36	
19	-1	49	
20	-1	39	
21	-1	57	
22	-1	44	
23	-1	40	
24	-1	54	
25	-1	46	
26	-1	37	
27	-1	30	Side hill
28	-1	26	" "
29	-1	05	" "

11-22-64
(38)

STA	RANGE	Reading	Remarks & Tan
56	-1	52	Line 7 Going west
57	-1	78	Side hill
58	-1	102	" "
59	-1	49	
60	-1	68	
BASE	-1	117	check

11-23-64

BASE	-1	113	
0	-1	93	No. 65, W, Line 1
0+50	-1	96	
1	-1	138	
1+50	-1	72	
2	-1	62	
2+50	-1	66	
3	-1	65	
3	-1	40	65° S. E. Line 2
2+50	+1	104	
2	-1	76	
1+50	-1	82	
1	-1	82	
0+50	-1	72	
0	-1	74	
+50	-1	80	Going S.E.
1	-1	102	
1+50	-1	124	ON ROAD
2	-1	86	Side hill
2+50	-1	68	" "
3	-1	58	TOP "
3	-1	77	Going N.E 65° Line 1
2+50	-1	72	

STA	Range	Reading		Remarks & Time
2	-1	74		Side hill
1+50	-1	70		" "
1	-1	68		
+50	-1	85		
3	-1	84	N.E. 65	Line 3
2+50	-1	82		
2	-1	48		
1+50	-1	63		Top hill
1	-1	76		Side hill
0+50	-1	86		Bottom hill
0	-1	73		
0+50	-1	66		North East 65°
1	-1	74		Top hill
+50	-1	64		Side hill
2	-1	78		Bottom hill
+50	-1	73		Side hill
3	-1	72		" "
BASE	-1	115		check

~~LINE 1 Bear N.~~

~~LINE 2 Bear EAST~~

500'

HEINRICHS GEOEXPLORATION COMPANY
INDUCED POLARIZATION SURVEY COMPUTATION SHEET

Page_____

Project Chapman Moorehouse Line 2"A" EAST Field date_____ Data page_____ Comp. date 12-3-69. Comp by J.P.M.

(A) Send	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2	4-5	3-4
(B) Receive	0-5	5-10	→	10-15	→	→	15-20	→	→	→	20-25	→
(C) n separation												
(D) I	800	1000	→	→	→	→	800	1000	→	→	→	→
(E) Vdc (avg)	244	1.36	113	184	24.1	22.6	191	40.9	7.75	8.73	43.5	12.8
(F) DCcal	.943	→	→	→	→	→	→	→	→	→	→	→
(G) Kn x 10^{-3}	1.5	1.5	6	1.5	6	15	15	6	15	30	6	15
(H) ρ dc=ExFxGx10^3/D	431	184	640	260	136	320	338	232	124	247	246	181
(I) Vac Σ												
(J) AC noise x 2	240	126	108	170	22.4	20.6	170	35.6	6.8	7.6	38.8	11.4
(K) Vac(corr) = $\sqrt{I^2 - J^2}$	.36	.3	→	→	→	→	.36	→	→	→	→	→
(L) AC-DC cal.	1.000	→	→	→	→	→	→	→	→	→	→	→
(M) ρ dc/ρac=ExL/K	1.016	1.031	1.046	1.082	1.076	1.097	1.023	1.150	1.190	1.150	1.121	1.123
(N) PFE=(M-1)(10^2)	1.6	3.1	4.6	8.2	7.6	9.7	12.3	15.0	14.0	15.0	12.1	12.3
(O) MCF=(M-1)(10^5)/H	4	17	7	32	56	30	36	65	113	61	49	68

Project_____ Line_____ Field date_____ Data page_____ Comp. date_____ Comp by_____

(A) Send	2-3	1-2	4-5	3-4	2-3	1-2			CAL			
(B) Receive	20-25	→	25-30	→	→	→						
(C) n separation												
(D) I	1000	→	→	→	→	→						
(E) Vdc (avg)	3.18	4.1	14.8	5.5	15.5	22.95			.943			
(F) DCcal	.943	→	→	→	→	→						
(G) Kn x 10^{-3}	30	52.5	15	30	52.5 ?	84 ?						
(H) ρ dc=ExFxGx10^3/D	90.0	203	209	155	76.8 ?	182.0 ?						
(I) Vac Σ	2.86	3.74	13.0	4.8	14.0	20.0						
(J) AC noise x 2	3.36	→	→	→	→	→						
(K) Vac (corr) = $\sqrt{I^2 - J^2}$									1.00			
(L) AC-DC cal.	1.00	→	→	→	→	→						
(M) ρdc/ρac =ExL/K	1.112	1.096	1.139	1.146	1.108	1.149						
(N) PFE=(M-1)(10^2)	11.2	9.6	13.9	14.6	10.8	14.9						
(O) MCF=(M-1)(10^5)/H	125	47	67	94	141	82						

HEINRICHS GEOEXPLORATION COMPANY
INDUCED POLARIZATION SURVEY COMPUTATION SHEET

Page 1

Project Chapman-Moore Line 2"A" 500' WEST Field date _____ Data page _____ Comp. date 12-3-69. Comp by J.P.M.

(A) Send	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5	1-2	2-3
(B) Receive	0-5W	5-10	→	10-15	→	→	15-20	→	→	→	20-25	→
(C) n separation												
(D) I	1200	→	→	→	→	1000	800	1000	1000	800	800	1000
(E) Vdc (avg)	160	377.5	89.0	124.0	71.5	22.9	17.3	36.9	34.7	13.8	42.9	13.2
(F) DCcal	.961	→	→	→	→	→	→	→	→	→	→	→
(G) Kn x 10^{-3}	1.5	1.5	6	1.5	6	15	1.5	6	15	30	6	15
(H) ρ dc=ExFxGx10^3/D	192	453	428	168	358	330	312	213	500	497	306	190
(I) Vac Σ	150	360	84.0	12.4	69.0	21.3	17.0	34.8	32.5	12.8	41.0	12.6
(J) AC noise x 2	.3	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36	.36
(K) Vac(corr) = $\sqrt{I^2 - J^2}$	—	—	—	—	—	—	—	—	—	—	—	—
(L) AC-DC cal.	1.000	→	→	→	→	→	→	→	→	→	→	→
(M) ρ dc/ρac=ExL/K	1.067	1.050	1.060	0	1.037	1.076	1.018	1.060	1.069	1.078	1.035	1.097
(N) PFE=(M-1)(10^2)	6.7	5.0	6.0	0	3.7	7.6	1.8	6.0	6.9	7.8	3.5	9.7
(O) MCF=(M-1)(10^5)/H	35	11	14	—	10	23	6	28	19	16	11	25

Project _____ Line _____ Field date _____ Data page _____ Comp. date _____ Comp by _____

(A) Send	3-4	4-5	1-2	2-3	3-4	4-5			CAL			
(B) Receive	20-25	→	25-30	→	→	→						
(C) n separation												
(D) I	1000	800	800	1000	1000	800						
(E) Vdc (avg)	15.5	7.5	23.5	8.8	11.75	6.1						
(F) DCcal	.961	→	→	→	→	→			.961			
(G) Kn x 10^{-3}	30	52.5	15	30	52.5	84						
(H) ρ dc=ExFxGx10^3/D	447	473	423	254	592	616						
(I) Vac Σ	14.6	6.8	22.8	8.4	10.9	5.7						
(J) AC noise x 2	.36	.36	.4	.4	.4	.4						
(K) Vac (corr) = $\sqrt{I^2 - J^2}$	—	—	—	—	—	—						
(L) AC-DC cal.	1.00	→	→	→	→	→			1.000			
(M) ρdc/ρac =ExL/K	1.065	1.103	1.031	1.048	1.078	1.070						
(N) PFE=(M-1)(10^2)	6.5	10.3	3.1	4.8	7.8	7.0						
(O) MCF=(M-1)(10^5)/H	15	22	7	19	13	11						

15
30
30
45

INDUCED POLARIZATION - RECEIVER NOTES PAGE 1

Project: RUBARB Line: 2-A GOING W. Int.Cal 49 Date: 1 Dec

Send	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5		
Rec.	0-5	5-10	→	10-15	→	→	15-20	→	→	→		
Time	300	300	100	300	100	30	300	30	30	30		
DC-1	80.0 80.0	189 190	44.0 45.0	62.0 62.0	36.0 35.5	11.7 11.1	89.0 85.0	18.4 18.5	17.0 17.7	6.8 7.0		
DC-2	80.0 80.0	188 189	44.0 45.0	62.0 62.0	36.0 35.5	11.8 11.2	89.0 85.0	18.4 18.5	17.0 17.9	6.8 7.0		
Σ	160.0	378	89.0	124.0	71.5	22.9	174.0	36.9	34.8	13.8		
DC-3	80.0 80.0	188 189	44.0 45.0	62.0 62.0	36.0 35.5	11.7 11.1	88.0 84.0	18.4 18.5	17.0 17.6	6.8 7.0		
Dc-4	80.0 80.0	188 189	44.0 45.0	62.0 62.0	36.0 35.5	11.8 11.2	88.0 84.0	18.4 18.5	17.0 17.7	6.8 7.0		
Σ	160.0	377	89.0	124.0	71.5	22.9	172.0	36.9	34.65	13.9		
DC-AV	160.0	377.5	89.0	124.0	71.5	22.9	173.0	36.9	34.7	13.8		
AC-1	75.0	180.0	42.0	62.0	34.5	10.7	85.0	17.4	16.3	6.4		
AC-2	75.0	180.0	42.0	62.0	34.5	10.6	85.0	17.4	16.2	6.4		
Σ	150.0	360.0	84.0	124.0	69.0	21.3	170.0	34.8	32.5	12.8		
S. P.	-8.0	-9.1		+1.4			-1.9	+1.0	+1.7			
AC-N	.15	.18		.18			.18					

INDUCED POLARIZATION - RECEIVER NOTES PAGE 2

Project: RUBARB Line: 2-A GOING W Int.Cal Date: 1 Dec

Send	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CAL		
Rec.	20-25	→	→	→	25-30	→	→	→				
Time	100	30	30	10	30	10	10	10				
DC-1	21.0 21.5	6.2 7.0	7.7 7.8	3.6 3.9	11.5 12.0	4.4 4.4	5.8 6.0	3.0 3.1		52.0 52.5		
DC-2	21.0 21.5	6.2 7.0	7.7 7.8	3.6 3.9	11.5 12.0	4.4 4.4	5.8 6.0	2.9 3.2		52.0 52.0		
Σ	42.5	13.2	15.5	7.5	23.5	8.8	11.8	6.1		104.0		
DC-3	21.0 21.5	6.2 7.0	7.7 7.8	3.6 3.9	11.5 12.0	4.4 4.4	5.70 6.00	3.0 3.1		52.0 52.5		
Dc-4	21.0 21.5	6.2 7.0	7.7 7.8	3.6 3.9	11.5 12.0	4.4 4.4	5.70 6.00	3.1 3.1		52.0 52.0		
Σ	42.5	13.2	15.5	7.5	23.5	8.8	11.70	6.1		104.0		
DC-AV	42.5	13.2	15.5	7.5	23.5	8.8	11.75	6.1		104.0		
AC-1	20.5	6.3	7.3	3.4	11.4	4.2	5.45	2.85		52.0		
AC-2	20.5	6.3	7.3	3.4	11.4	4.2	5.45	2.85		52.0		
Σ	41.0	12.6	14.6	6.8	22.8	8.4	10.90	5.70		104.		
S. P.	-4.5	-4.5	-3.6		+16.6	+13.8		+11.8				
AC-N	.18				.20							

INDUCED POLARIZATION - RECEIVER NOTES PAGE 1

Project: RUBARB Line: 2A GOING Int.Cal 49 Date: 1 DEC

Send	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2	CAL	
Rec.	0-5	5-10	→	10-15	→		15-20	→				
Time	300	300	100	300	30	30	300	30	10	10		
DC-1	120 124	65.0 65.0	57.0 56.0	92.0 92.0	12.0 12.1	11.3 11.3	95.0 96.0	20.4 20.5	3.8 4.0	4.3 4.4	53.0 53.0	
DC-2	120 124	65.0 65.0	57.0 56.0	92.0 92.0	12.0 12.1	11.3 11.3	95.0 96.0	20.4 20.5	3.7 4.0	4.3 4.4	53.0 53.0	
Σ	244	130.0	113.0	184.0	24.1	22.6	191.0	40.9	7.75	8.7	106.0	
DC-3	120 124	65.0 65.0	57.0 56.0	92.0 92.0	12.0 12.1	11.3 11.3	95.0 96.0	20.4 20.5	3.8 4.0	4.25 4.5	53.0 53.0	
Dc-4	120 124	65.0 65.0	57.0 56.0	92.0 92.0	12.0 12.1	11.3 11.3	95.0 96.0	20.4 20.5	3.7 4.0	4.25 4.5	53.0 53.0	
Σ	244	130.0	113.0	184.0	24.1	22.6	191.0	40.9	7.75	8.75	106.0	
DC-AV	244	130.0	18.0	184.0	24.1	22.6	191.0	40.9	7.75	8.73	106.0	
AC-1	120	63.0	54.0	85	11.2	10.3	85.0	17.8	3.4	3.8	53.5	
AC-2	120	63.0	54.0	85	11.2	10.3	85.0	17.8	3.4	3.8	53.5	
Σ	240	126.0	108.0	170.0	22.4	20.6	170.0	35.6	6.8	7.6	107.0	
S. P.	+8.5	+11.1	+10.6	-11.3			-6.2					
AC-N	.18	.15		.15			.18					

INDUCED POLARIZATION - RECEIVER NOTES PAGE 2

Project: RHUBARB Line: 24 GOING E Int.Cal 1 Date:

Send	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CAL		
Rec.	20-25	→	→	→	25-30	→	→	→				
Time	30	10	3	3	30	10	3	3				
DC-1	21.5 22.0	6.4 6.4	1.58 1.60	2.0 2.1	7.4 7.5	2.6 2.8	7.8 8.0	11.4 11.5		53.0 53.5		
DC-2	21.5 22.0	6.4 6.4	1.58 1.60	2.0 2.1	7.3 7.5	2.7 2.8	7.5 8.0	11.4 11.5		53.0 53.5		
Σ	43.5	12.8	3.18	4.1	14.8	5.5	15.5	22.9		106.5		
DC-3	21.5 22.0	6.4 6.4	1.58 1.60	2.0 2.1	7.3 7.5	2.7 2.8	7.5 8.0	11.0 12.0		53.0 53.5		
Dc-4	21.5 22.0	6.4 6.4	1.58 1.60	2.0 2.1	7.3 7.5	2.7 2.8	7.5 8.0	11.0 12.0		53.0 53.5		
Σ	43.5	12.8	3.18	4.1	14.8	5.5	15.5	23.0		106.5		
DC-AV	43.5	12.8	3.18	4.1	14.8	5.5	15.5	22.95		106.5		
AC-1	19.4	5.7	1.43	1.87	6.5	2.4	7.0	10.0		53.5		
AC-2	19.4	5.7	1.43	1.87	6.5	2.4	7.0	10.0		53.5		
Σ	38.8	11.4	2.86	3.74	13.0	4.8	14.0	20.0		107		
S. P.	-26.5				-35.1							
AC-N	.18				.18							

INDUCED POLARIZATION SENDER NOTES

Project: RhuBARB Line: II A Date: 12-1-64

Send	3-4	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5	1-2
Receive	CAL	0-5W	5-1W	→	1-1.5W	→		1.5-2W	→			2-2.5W
Time												
Range												
Current	1000	1200	1200	1200	1200	1200	1000	800	1000	1000	800	800

Send	2-3	3-4	4-5	1-2	2-3	3-4	4-5	3-4	1-2	2-3	1-2	3-4
Receive	→		→	2.5-3W	→			CAL	0-.5E	.5-1E	→	1-1.5
Time												
Range												
Current	1000	1000	800	800	1000	1000	800	1000	800	1000	1000	1000

INDUCED POLARIZATION SENDER NOTES

Project: RhuBARB Line: II A Date: 12-1-64

Send	2-3	1-2	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2	4-5	3-4
Receive	→	→	1.5-2E	→	→	→	2-2.5E	→	→	→	2.5-3E	—
Time												
Range												
Current	1000	1000	800	1000	1000	1000	1000	1000	1000	1000	1000	1000

Send	2-3	1-2	3-4									
Receive	→	→	CAL									
Time												
Range												
Current	1000	1000										

HEINRICHS GEOEXPLORATION COMPANY
INDUCED POLARIZATION SURVEY COMPUTATION SHEET

Page 1

Project RHUBARB Line II B GOING WEST Field date 12-2-64 Data page 1 Comp. date 12-4-64 Comp by F.M.J.

(A) Send		4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CAL
(B) Receive		0-5	5-10	→	10-15	→	→	15-20	→	→	→	sent	100
(C) n separation		100	100	30	100	30	10	100	30	10	10		
(D) I	4	1200	1200	1200	1200	1200	1200	1200	1200	1200	1000		
(E) Vdc (avg)	1 1	76	127	25.6	114	30	11.10	137	22.5	10.7	4.9		106
(F) DCcal	2	.943	→	→	→	→	→	→	→	→	→		943
(G) Kn x 10^{-3}	3	1.5	1.5	6	1.5	6	15	1.5	6	15	30		
(H) ρ dc=ExFxGx10^3/D		89.7	149.5	120.5	134.3	141.4	130.8	161.2	106	126	138.5		
(I) Vac Σ	2	61.0	104	22	95	25.6	9.70	110	18	8.76	4.8		106
(J) AC noise x 2		.30	.28	.28	.20	.20	.20	.36	.36	.36	.36		
(K) Vac(corr) = $\sqrt{I^2 - J^2}$													
(L) AC-DC cal.		1	→	→	→	→	→	→	→	→	→		
(M) ρ dc/ρac=ExL/K		1.245	1.222	1.163	1.20	1.170	1.144	1.245	1.25	1.223	1.020		
(N) PFE=(M-1)(10^2)		24.5	22.2	16.3	20.0	17.0	14.4	24.5	25.0	22.3	2.00		
(O) MCF=(M-1)(10^5)/H		273	148.5	135.3	149.0	120.5	110.0	152.0	236	177	14.45		

Project _____ Line _____ Field date _____ Data page _____ Comp. date _____ Comp by _____

(A) Send		1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5				
(B) Receive		20-25	→	→	→	25-30	→	→	→				
(C) n separation		100	10	10	30	30	10	3	3				
(D) I	4	1200	1200	1200	1000	1000	1200	1000	1000				
(E) Vdc (avg)	1 1	46.0	12.2	7.2	40.0	15.0	5.6	3.4	2.45				
(F) DCcal	2	.943	→	→	→	→	→	→	→				
(G) Kn x 10^{-3}	3	6	15	30	52.5	15	30	52.5	84				
(H) ρ dc=ExFxGx10^3/D	✓	216	143.5	169.6	1980.0	212 OK	132	168.3	194				
(I) Vac Σ	2	40.0	12.2	6.4	35.6	13.0	4.95	2.96	2.2				
(J) AC noise x 2		.36	.36	.36	.36	.25	.28	.28	.28				
(K) Vac (corr) = $\sqrt{I^2 - J^2}$									2.18				
(L) AC-DC cal.		1	→	→	→	→	→	→	→				
(M) ρdc/ρac =ExL/K		1.15	1.195	1.125	1.124	1.154	1.130	1.148	1.123				
(N) PFE=(M-1)(10^2)		15.0	19.5	12.5	12.4	11.54	13.0	14.8	12.3				
(O) MCF=(M-1)(10^5)/H		69.5	136.3	73.8	6.27	54.5	98.5	88	63.5				

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INDUCED POLARIZATION SURVEY COMPUTATION SHEET

Page 2

Project RHUBARB Line II B GOING E Field date 12-3-64 Data page 1 Comp. date 12-4-65 Comp by F.M.J.

(A) Send	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CAL
(B) Receive	0-5	5-10	→	10-15	→	→	15-20	→	→	→	Sent	100
(C) n separation												
(D) I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000		
(E) Vdc (avg) 1 1	108.2	50.45	21.3	51.17	12.32	7.04	52.5	10.22	3.45	2.58		107.5
(F) DCcal 2	.930	→	→	→	→	→	→	→	→	→		
(G) Kn x 10^{-3} 3	1.5	1.5	6	1.5	6	15	1.5	6	15	30		
(H) ρ dc=ExFxGx10^3/D	150.07	70.3	118.8	71.2	68.8	98.2	73.2	57.0	48.1	72.0		
(I) Vac Σ 3	91.6	45.5	18.4	46.3	10.40	6.40	40.1	8.43	29.5	2.27		107
(J) AC noise x 2	— 0	— 0	— 0	— 0	— 0	— 0	— 0	— 0	— 0	— 0		
(K) Vac(corr) = $\sqrt{I^2 - J^2}$	—	—	—	—	—	—	—	—	—	—		
(L) AC-DC cal. 2	.995	→	→	→	→	→	→	→	→	→		
(M) ρ dc/ρac=ExL/K	1.175	1.103	1.162	1.097	1.177	1.095	1.300	1.205	1.162	1.130		
(N) PFE=(M-1)(10^2)	17.5	10.3	16.2	9.7	17.7	9.5	30.0	20.5	16.2	13.0		
(O) MCF=(M-1)(10^5)/H	116.6	141	131.5	131.2	257.5	96.8	410	360	337	180.7		

Project ____ Line ____ Field date ____ Data page ____ Comp. date ____ Comp by ____

(A) Send	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2				
(B) Receive	20-25	→	→	→	25-30	→	→	→				
(C) n separation												
(D) I	1000	1000	1000	1000	1000	1000	1000	1000				
(E) Vdc (avg) 1 1	21.0	6.72	2.91	2.375	8.97	3.70	1.75	1.51				
(F) DCcal 2	.930	→	→	→	→	→	→	→				
(G) Kn x 10^{-3} 3	6	15	30	52.5	15	30	52.5	84				
(H) ρ dc=ExFxGx10^3/D	117.0	93.6	81.2	116.0	125	103.2	85.5	118				
(I) Vac Σ 3	17.80	5.70	2.55	2.11	7.97	3.29	1.60	1.44				
(J) AC noise x 2	.400	— 0	— 0	— 0	.30	— 0	— 0	— 0				
(K) Vac (corr) = $\sqrt{I^2 - J^2}$	—	—	—	—	—	—	—	—				
(L) AC-DC cal. 2	.995	→	→	→	→	→	→	→				
(M) ρdc/ρac =ExL/K	1.173	1.172	1.1135	1.118	1.118	1.118	1.087	1.042				
(N) PFE=(M-1)(10^2)	17.3	17.2	11.35	11.8	11.8	11.8	8.7	4.2				
(O) MCF=(M-1)(10^5)/H	147.9	184	139.9	101.7	94.5	114.2	101.7	135.6				

INDUCED POLARIZATION - RECEIVER NOTES PAGE 2

Project: RHUBARB Line: II Setup B GOING W Int.Cal _____ Date: 2 Dec

Send	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CAL		
Rec.	20-25	→	→	→	25-30	→	→	→				
Time	100	10	10	30	30	10	3	3				
DC-1	22.5 23.5	6.1 6.1	3.6 3.6	20.0 20.0	7.5 7.5	2.7 2.9	1.65 1.75	1.20 1.25		53.0 53.0		
DC-2	22.5 23.5	6.1 6.1	3.6 3.6	20.0 20.0	7.5 7.5	2.7 2.9	1.65 1.75	1.20 1.25		53.0 53.0		
Σ	46.0	12.2	7.2	40.0	15.0	5.6	3.40	2.45				
DC-3	22.5 23.5	6.1 6.1	3.6 3.6	20.0 20.0	7.5 7.5	2.7 2.9	1.65 1.75	1.20 1.25		53.0 53.0		
Dc-4	22.5 23.5	6.1 6.1	3.6 3.6	20.0 20.0	7.5 7.5	2.7 2.9	1.65 1.75	1.20 1.25		53.0 53.0		
Σ	46.0	12.2	7.2	40.0	15.0	5.6	3.40	2.45				
DC-AV	46.0	12.2	7.2	40.0	15.0	5.6	3.40	2.45				
AC-1	20.0	5.1	3.2	17.8	6.5	2.5	1.48	1.10		53.0		
AC-2	20.0	5.1	3.2	17.8	6.5	2.45	1.48	1.10		53.0		
Σ	46.0	10.2	6.4	35.6	13.0	4.95	2.96	2.20				
S. P.	+35.2		+34.2		-6.9							
AC-N	.18				.14							

INDUCED POLARIZATION - RECEIVER NOTES PAGE 1

Project: RHUBARB Line: II setup B GOING W Int.Cal _____ Date: 2 Dec

Send	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5		
Rec.	0-5	5-10	→	10-15	→		15-20	→				
Time	100	100	30	100	30	10	100	30	10	10		
DC-1	39.0 37.6	63.0 64.0	13.0 12.6	57.0 57.0	15.0 15.0	5.60 5.50	68.0 69.0	11.0 11.5	5.4 5.3	2.5 2.4		
DC-2	39.0 37.6	63.0 64.0	13.0 12.6	57.0 57.0	15.0 15.0	5.60 5.50	68.0 69.0	11.0 11.5	5.4 5.3	2.5 2.4		
Σ	76	127	25.0	114.0	30.0	11.10	137.0	22.5	10.7	4.9		
DC-3	39.0 37.0	63.0 64.0	13.0 12.6	57.0 57.0	15.0 15.0	5.60 5.50	68.0 69.0	11.0 11.5	5.4 5.3	2.5 2.4		
Dc-4	39.0 37.0	63.0 64.0	13.0 12.6	57.0 57.0	15.0 15.0	5.60 5.50	68.0 69.0	11.0 11.5	5.4 5.3	2.5 2.4		
Σ	76	127	25.6	114.0	30.0	11.10	137.	22.5	10.7	4.9		
DC-AV	76	127	25.6	114.0	30.0	11.10	137	22.5	10.7	4.9		
AC-1	30.5	52.0	11.0	47.5	12.8	4.85	55.0	9.00	4.38	2.4		
AC-2	30.5	52.0	11.0	47.5	12.8	4.85	55.0	9.00	4.38	2.4		
Σ	61	104	22	95	25.6	9.70	110	18	8.76	4.8		
S. P.	+26.6	+46.6	+46.9	+22.4	+22.3		-7.6		-6.2			
AC-N	.15	.14		.10			.18					

INDUCED POLARIZATION - RECEIVER NOTES PAGE _____

Project: RhuBARB Line: II B GOING E Int.Cal 52.5 Date: 12-3-64

Send	CAL	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2	4-5
Rec.	3-3.5	3.5-4	4-4.5	→	4.5-5	→	→	5-5.5	→	→	→	5.5-6 E
Time												
DC-1	53.5 54.0	54.0 54.2	25.2 25.2	10.3 10.0	25.4 25.8	6.10 6.25	3.40 3.75	26.5 26.0	5.10 5.05	1.78 1.72	1.22 1.38	10.8 10.2
DC-2	53.5 54.0	54.0 54.2	25.2 25.2	10.2 11.1	25.3 25.8	6.10 6.30	3.50 3.50	26.5 26.0	5.15 5.05	1.65 1.80	1.24 1.33	10.8 10.2
Σ	107.5	108.2	50.4	21.3	51.15	12.355	7.06	52.5	10.17	3.42	2.58	21.0
DC-3	53.5 54.0	54.3 54.2	25.1 25.3	10.2 11.1	25.5 25.7	6.20 6.05	3.42 3.70	26.5 26.0	5.20 5.05	1.75 1.75	1.30 1.28	10.8 10.2
Dc-4	53.5 54.0	54.0 54.2	25.1 25.3	10.2 11.1	25.5 25.7	6.20 6.00	3.50 3.65	26.5 26.0	5.15 5.15	1.68 1.78	1.30 1.28	10.8 10.2
Σ	107.5	108.2	50.5	21.3	51.2	12.30	7.13	52.5	10.27	3.48	2.58	21.0
DC-AV	107.5	108.2	50.45	21.3	51.17	12.32	7.04	52.5	10.22	3.45	2.58	21.0
AC-1	53.5	45.8	22.7	9.2	23.1	5.20	3.20	20.1	4.22	1.48	1.14	8.90
AC-2	53.5	45.8	22.8	9.2	23.2	5.20	3.20	20.0	4.21	1.47	1.13	8.90
Σ	107.0	91.6	45.5	18.4	46.3	10.40	6.40	40.1	8.43	2.95	2.27	17.80
S. P.		+25.6	+95.1		-5.1			+195				+12.8
AC-N		NO	NO		NO			NO				.20

INDUCED POLARIZATION - RECEIVER NOTES PAGE _____

Project: RhuBARB Line: II B GOING E Int.Cal 52.0 Date: 12-3-64

Send	3-4	2-3	1-2	4-5	3-4	2-3	1-2	3-3.5E				
Rec.	→		→	6-6.5E	→		→	CAL				
Time												
DC-1	3.30 3.35	1.50 1.46	1.20 1.18	4.50 4.54	1.77 1.93	1.00 .80	.65 .85	53.5 54.0				
DC-2	3.40 3.30	1.45 1.48	1.25 1.12	4.55 4.35	1.95 1.72	1.02 .78	.60 .90	53.5 54.0				
Σ	6.70	2.91	2.37	9.15	3.68	1.80	1.50	107.5				
DC-3	3.40 3.35	1.52 1.40	1.10 1.32	4.30 4.50	1.70 2.00	.95 .95	.92 .60	53.5 54.0				
Dc-4	3.55 3.15	1.35 1.55	1.32 1.02	4.40 4.40	1.78 2.00	1.00 .70	.62 .90	53.5 54.0				
Σ	6.74	2.91	2.38	8.80	3.74	1.75	1.52	107.5				
DC-AV	6.72	2.91	2.375	8.97	3.70	1.755	1.51					
AC-1	2.85	1.28	1.06	3.99	1.63	.80	.72	53.5				
AC-2	2.85	1.27	1.05	3.98	1.64	.80	.72	53.5				
Σ	5.70	2.55	2.11	7.97	3.29	1.60	1.44	107.0				
S. P.				-4.4								
AC-N				.15								

INDUCED POLARIZATION SENDER NOTES

Project: RHUBARB Line: II Date: 12-3-64

Send	2-3	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2	4-5
Receive	CAL	3.5-4 E	4-4.5 E	→	4.5-5 E	→	→	5-5.5 E	→	→	→	5.5-6 E
Time												
Range												
Current	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

Send	3-4	2-3	1-2	4-5	3-4	2-3	1-2
Receive	→	→	→	6-6.5 E	→	→	→
Time							
Range							
Current	1000	1000	1000	1000	1000	1000	1000

INDUCED POLARIZATION SENDER NOTES

Project: RhuBARB Line: II B Date: 12-2-64

Send	3-4	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5	1-2
Receive	CAL	3-3.5E	2.5-3E	→	2-2.5E	→		1.5-2E	→			1-1.5
Time												
Range												
Current	1000	1200	1200	1200	1200	1200	1200	1200	1200	1200	1000	1200

Send	2-3	3-4	4-5	1-2	2-3	3-4	4-5
Receive	→			.5-1E	→		
Time							
Range							
Current	1200	1200	1000	1000	1200	1000	1000

HEINRICHS GEOEXPLORATION COMPANY
INDUCED POLARIZATION SURVEY COMPUTATION SHEET

Page 1

Project RHUBARB Line I Field date 11-30-64 Data page 1 Comp. date 12-2-64. Comp by F.M.V.

GOING WEST

(A) Send		4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CAL
(B) Receive		0-5	5-10 →		10-15	→		15-20	→				
(C) n separation		300	300	100	300	100	30	300	30	30	10		
(D) I	4	1400	1200	1400	1000	1200	1400	1000	800	1000	1200		50
(E) Vdc (avg)	1	334	276	90.8	298	65.5	34.0	185.0	37.7	14.6	7.0		52
(F) DCcal	2	.961 →											.961
(G) Kn x 10^{-3}	3	1.5	1.5	6	1.5	6	15	1.5	6	15	30		
(H) ρ dc=ExFxGx10^3/D		343.5	331	374.0	430	314.5	350.5	266.9	271.9	210.5	168.0		
(I) Vac Σ	3	280	240	79.0	236	56	27.6	174.0	34.0	13.0	6.30		50.5
(J) AC noise x 2		.30	.24	.26	.26	.36	.36	.36	.36	.36	.36		
(K) Vac(corr) = $\sqrt{I^2 - J^2}$													
(L) AC-DC cal.	2	.971 →											.971
(M) ρ dc/ρac=ExL/K		1.193	1.150	1.150	1.225	1.134	1.195	1.031	1.076	1.090	1.077		
(N) PFE=(M-1)(10^2)		19.3	15.0	15.0	22.5	13.4	19.5	3.10	7.60	9.00	7.70		
(O) MCF=(M-1)(10^5)/H		56.3	45.3	40.2	52.3	42.7	55.7	11.51	28.0	42.75	45.75		

Project _____ Line _____ Field date _____ Data page _____ Comp. date _____ Comp by _____

(A) Send		1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5				
(B) Receive		20-25 →				25-30 →							
(C) n separation		30	30	10	3	30	10	3	3				
(D) I	4	800	800	1000	1000	800	800	1000	1000				
(E) Vdc (avg)	1	12.6	14.0	6.95	3.35	15.25	6.45	3.615	1.71				
(F) DCcal	2	.961 →											
(G) Kn x 10^{-3}	3	6	15	30	52.5	15	30	52.5	84				
(H) ρ dc=ExFxGx10^3/D		90.8	252.5	200	168.9	274.5	232.5	182.0	138				
(I) Vac Σ	3	11.76	12.8	6.1	3.0	13.8	5.8	3.13	1.58				
(J) AC noise x 2		.30	.30	.30	.30	.36	.36	.36	.36				
(K) Vac (corr) = $\sqrt{I^2 - J^2}$								3.14	1.533				
(L) AC-DC cal.	2	.971 →											
(M) ρdc/ρac =ExL/K		1.04	1.06	1.105	1.084	1.072	1.077	1.115	1.08				
(N) PFE=(M-1)(10^2)		4.00	6.00	10.5	8.40	7.20	7.70	11.5	8.00				
(O) MCF=(M-1)(10^5)/H		44.0	23.75	52.5	49.7	26.3	33.5	63.5	58.0				

HEINRICHS GEOEXPLORATION COMPANY
INDUCED POLARIZATION SURVEY COMPUTATION SHEET

Page 2

Project RHUBARB Line I (GOING EAST) Field date 30 Nov 64 Data page 1 Comp. date 3 DEC 64 Comp by F.M.J

(A) Send	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CAL
(B) Receive	0-5	5-10 →		10-15 →			15-20 →					
(C) n separation	300	300	100	100	30	10	100	30	30	10		
(D) I 4	800	800	800	1000	800	800	1200	1000	800	800	sent	50
(E) Vdc (avg) 1	221.5	156	45.0	123.6	32.7	14.0	132.8	40.0	15.85	8.35	rec	52
(F) DCcal 2	.976 →											.976
(G) Kn x 10^{-3} 3	1.5	1.5	6	1.5	6	15	1.5	6	15	30		
(H) ρ dc=ExFxGx10^3/D 1	405.0	285.5	329.0	180.	239.	256	161.5	234	289.5	306		
(I) Vac Σ 2	199.8	136.0	40.0	97.0	26.0	11.4	113.5	33.0	13.1	7.2		52
(J) AC noise x 2	.28	.28	.28	.20	.20	.20	.28	.28	.28	.28		
(K) Vac(corr) = $\sqrt{I^2 - J^2}$												
(L) AC-DC cal.	1 →											1
(M) ρ dc/ρac=ExL/K	1.106	1.147	1.115	1.268	1.257	1.228	1.169	1.212	1.210	1.160		
(N) PFE=(M-1)(10^2)	10.6	14.7	11.5	26.8	25.7	22.8	16.9	21.2	21.0	16.0		
(O) MCF=(M-1)(10^5)/H	26.2	51.5	35.0	148.9	107.5	89.2	104.6	90.7	72.7	52.3		

Project Line Field date Data page 2 Comp. date Comp by

(A) Send	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2				
(B) Receive	20-25 →				25-30 →							
(C) n separation	30	30	10	10	10	10	3	3				
(D) I 4	1200	1000	800	800	1200	1000	800	800				
(E) Vdc (avg) 1	41.55	21.6	10.7	6.2	10.7	6.7	3.925	2.55				
(F) DCcal 2	.976 →											
(G) Kn x 10^{-3} 3	6	15	30	52.5	15	30	52.5	84				
(H) ρ dc=ExFxGx10^3/D 1	202.5	307.0	428	397.5	130.5	196	251.5	266.5				
(I) Vac Σ	36.0	18.7	9.50	5.70	10.2	6.15	3.6	2.46				
(J) AC noise x 2	.26	.26	.26	.26	.36	.36	.36	.30				
(K) Vac (corr) = $\sqrt{I^2 - J^2}$												
(L) AC-DC cal.	1 →											
(M) ρdc/ρac =ExL/K	1.153	1.120	1.128	1.087	1.049	1.089	1.089	1.036				
(N) PFE=(M-1)(10^2)	15.3	12.0	12.8	8.70	4.90	8.90	8.90	3.60				
(O) MCF=(M-1)(10^5)/H	75.7	39.1	39.7	21.9	37.6	45.4	35.42	13.5				

INDUCED POLARIZATION - RECEIVER NOTES PAGE 1

Project: RUBARB Line: 1 GOING W. Int.Cal 5-3 Date: 30 Nov

Send	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5		
Rec.	0-5	5-10	→	10-15	→	→	15-20	→	→	→		
Time	300	300	100	300	100	30	300	30	30	10		
DC-1	167 167	137 139	44.8 46.0	148 150	33.5 32	17.0 17.0	92.0 93.0	18.8 18.8	7.1 7.5	3.6 3.4		
DC-2	167 167	137 139	44.8 46.0	148 150	33.5 32	17.0 17.0	92.0 94.0	18.8 19.0	7.1 7.5	3.6 3.4		
Σ	334	276	90.8	298	65.5	34.0	185.0	37.7	14.6	7.0		
DC-3	167 167	137 139	44.8 46.0	148 150	33.5 32	17.0 17.0	92.0 93.0	18.8 18.8	7.1 7.5	3.6 3.5		
Dc-4	167 167	137 139	44.8 46.0	148 150	33.3 32	17.0 17.0	92.0 93.0	18.8 19.0	7.2 7.5	3.6 3.4		
Σ	334	276	90.8	298	65.5	34.0	185.0	37.7	14.6	7.0		
DC-AV	334	276	90.8	298	65.5	34.0	185.0	37.7	14.6	7.0		
AC-1	140	125	39.5	118	28	13.8	87.0	17.0	6.5	3.15		
AC-2	140	115	39.5	118	28	13.8	87.0	17.0	6.5	3.15		
Σ	280	140	79.0	236	56	27.6	174.0	34.0	13.0	6.30		
S. P.	+11.2	+5.2	[illegible]	+13.9	+12.2		+11.1			+8.7		
AC-N	.15	.12	.13	.13	.18	.18	.18	.18	.18	.18		

INDUCED POLARIZATION - RECEIVER NOTES PAGE 2

Project: RUBARB Line: 1 GOING West Int.Cal 53 Date: 30 Nov

Send	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CAL		
Rec.	20-25 →				25-30 →					100		
Time	30	30	10	3	30	10	3	3				
DC-1	6.0 6.6	7.0 7.0	3.45 3.50	1.75 1.6	7.4 7.8	3.3 3.1	1.85 1.78	.84 .87		26.0 26.0		
DC-2	6.0 6.6	7.0 7.0	3.45 3.50	1.75 1.6	7.4 7.8	3.3 3.2	1.58 1.75	.84 .87		" "		
Σ	12.6	14.0	6.95	3.35	15.2	6.45	3.63	1.71		52.0		
DC-3	6.0 6.6	7.0 7.0	3.45 3.50	1.75 1.55	7.3 8.0	3.2 3.1	1.85 1.75	.84 .87		" "		
Dc-4	6.0 6.6	7.0 7.0	3.45 3.50	1.75 1.6	7.2 8.1	3.3 3.1	1.65 1.74	.84 .87		" "		
Σ	12.6	14.0	6.95	3.35	15.3	6.45	3.60	1.71		52.0		
DC-AV	12.6	14.0	6.95	3.35	15.25	6.45	3.615	1.71		52.0		
AC-1	5.88	6.4	3.05	1.50	6.9	2.9	1.55	.79		25		
AC-2	5.88	6.4	3.05	1.50	6.9	2.9	1.58	.79		25.5		
Σ	11.76	12.8	6.1	3.00	13.8	5.8	3.13	1.58		50.5		
S. P.	-9.4	-6.0	-4.8	-3.9	+22.5	+14.4	+16.1	+15.1				
AC-N	.15				.18							

INDUCED POLARIZATION - RECEIVER NOTES PAGE 1

Project: RUBARB Line: 1 GOINGE Int.Cal 52 Date: 30 Nov

Send	1-2	2-3	1-2	34	2-3	1-2	4-5	3-4	2-3	1-2		
Rec.	0-5	5-10	→	10-15	→	→	15-20	→	→	→		
Time	300	300	100	100	30	10	100	30	30	10		
DC-1	110.8 110.7	78 78	22.0 23.0	62.0 61.0	16.4 16.3	7.1 6.9	67.0 65.8	19.6 20.4	8.5 7.4	4.0 4.2		
DC-2	110.8 110.7	78 78	22.0 23.0	62.0 61.0	16.4 16.3	7.1 6.9	67.0 65.8	19.6 20.4	8.5 7.4	4.0 4.2		
Σ	221.5	156	45.0	123.0	32.7	14.0	132.8	40.0	15.9	8.2		
DC-3	110.8 110.7	78 78	22.0 23.0	62.0 61.0	16.4 16.3	7.1 6.9	67.0 65.8	19.6 20.4	8.5 7.3	4.2 4.1		
Dc-4	110.8 110.7	78 78	22.0 23.0	62.0 61.0	16.4 16.3	7.1 6.9	67.0 65.8	19.6 20.4	8.5 7.3	4.2 4.1		
Σ	221.5	156	45.0	123.0	32.7	14.0	132.8	40.0	15.8	8.3		
DC-AV	221.5	156	45.0	123.0	32.7	14.0	132.8	40.0	15.85	8.35		
AC-1	99.9	68.0	20.0	48.5	13.0	5.7	57.0	16.5	6.5	3.6		
AC-2	99.9	68.0	20.0	48.5	13.0	5.7	56.5	16.5	6.6	3.6		
Σ	199.8	136.0	40.0	97.0	26.0	11.4	113.5	33.0	13.1	7.2		
S. P.	+17.6	+0.8		+7.4			+15.0					
AC-N	.14	.14		.10			.14					

INDUCED POLARIZATION - RECEIVER NOTES PAGE 2

Project: RUBARB Line: 1 GOING EAST Int.Cal 52 Date: 30 Nov

Send	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CAL		
Rec.	20-25 →				25-30 →					100		
Time	30	30	10	10	10	10	3	3				
DC-1	21.5 20.0	10.0 11.0	5.5 5.2	3.0 3.2	5.5 5.2	3.4 3.3	1.98 1.94	1.20 1.35		26.0 26.0		
DC-2	21.5 20.0	10.0 11.0	5.5 5.2	3.0 3.2	5.5 5.2	3.4 3.3	1.98 1.94	1.20 1.35		26.0 26.0		
Σ	41.5	21.0	10.7	6.2	10.7	6.7	3.92	2.55				
DC-3	21.8 19.8	10.0 11.0	5.5 5.2	2.9 3.3	5.5 5.2	3.4 3.3	1.98 1.95	1.20 1.35		26.0 26.0		
Dc-4	21.8 19.8	10.0 11.0	5.5 5.2	2.9 3.3	5.5 5.2	3.4 3.3	1.98 1.95	1.20 1.35		26.0 26.0		
Σ	41.6	21.0	10.7	6.2	10.7	6.7	3.93	2.55				
DC-AV	41.55	21.0	10.7	6.2	10.7	6.7	3.925	2.55				
AC-1	18.0	9.4	4.75	2.85	5.1	3.1	1.8	1.23		26.0		
AC-2	18.0	9.3	4.75	2.85	5.1	3.05	1.8	1.23		26.0		
Σ	36.0	18.7	9.50	5.70	10.2	6.15	3.6	2.46				
S. P.	-13.5	-8.1	-6.0	-6.0	-1.2	-4.9	-6.7	-7.8				
AC-N	.13				.18			.15				

INDUCED POLARIZATION SENDER NOTES

Project: RhuBARB Line: I Date: 11-30-64

Send	4-5	2-3	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5	1-2
Receive	0-.5W	CAL	.5-1W	→	1-1.5W	→		1.5-2W	→			2-2.5W
Time												
Range												
Current	1400	500	1200	1400	1000	1200	1400	1000	800	1000	1200	800

Send	2-3	3-4	4-5	1-2	2-3	3-4	4-5	1-2	2-3	1-2	3-4	2-3
Receive	→			2.5-3W	→			0-.5E	.5-1E	→	1-1.5E	—
Time												
Range												
Current	800	1000	1000	800	800	1000	1000	800	800	800	1000	800

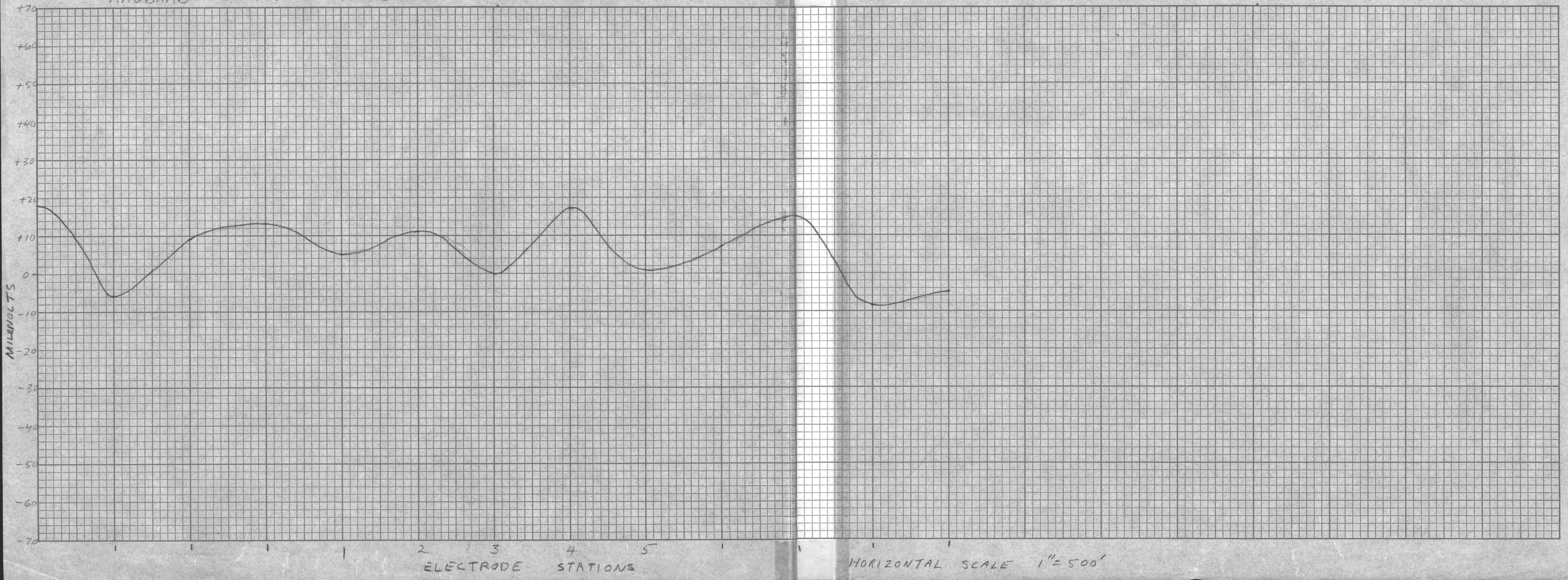
INDUCED POLARIZATION SENDER NOTES

Project: RHUBARB Line: I Date: 11-30-64

Send	1-2	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2	4-5	3-4	2-3
Receive	→	1.5-2E	→			2-2.5E	→			2.5-3E	→	
Time												
Range												
Current	800	1200	1000	800	800	1200	1000	800	800	1200	1000	800
Send	1-2	3-4										
Receive	→	CAL										
Time												
Range												
Current	800											

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

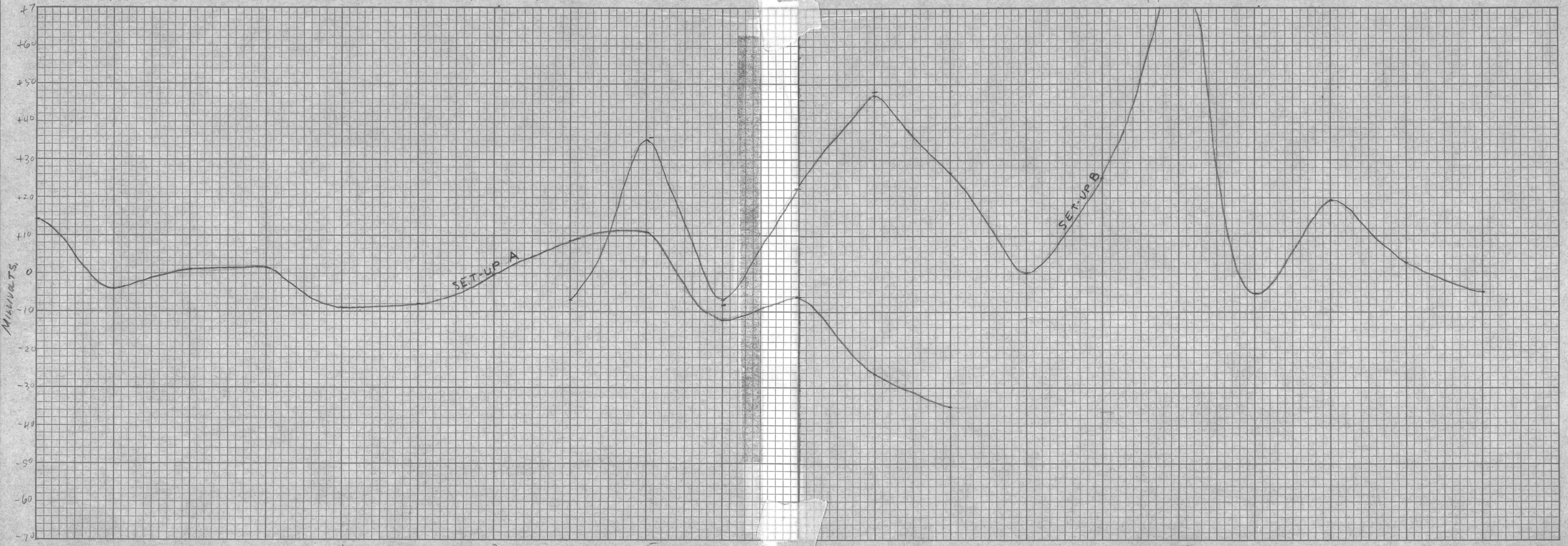
RHUBARB GROUP. SELF POTENTIAL LINE I. LOOKING NORTH.



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

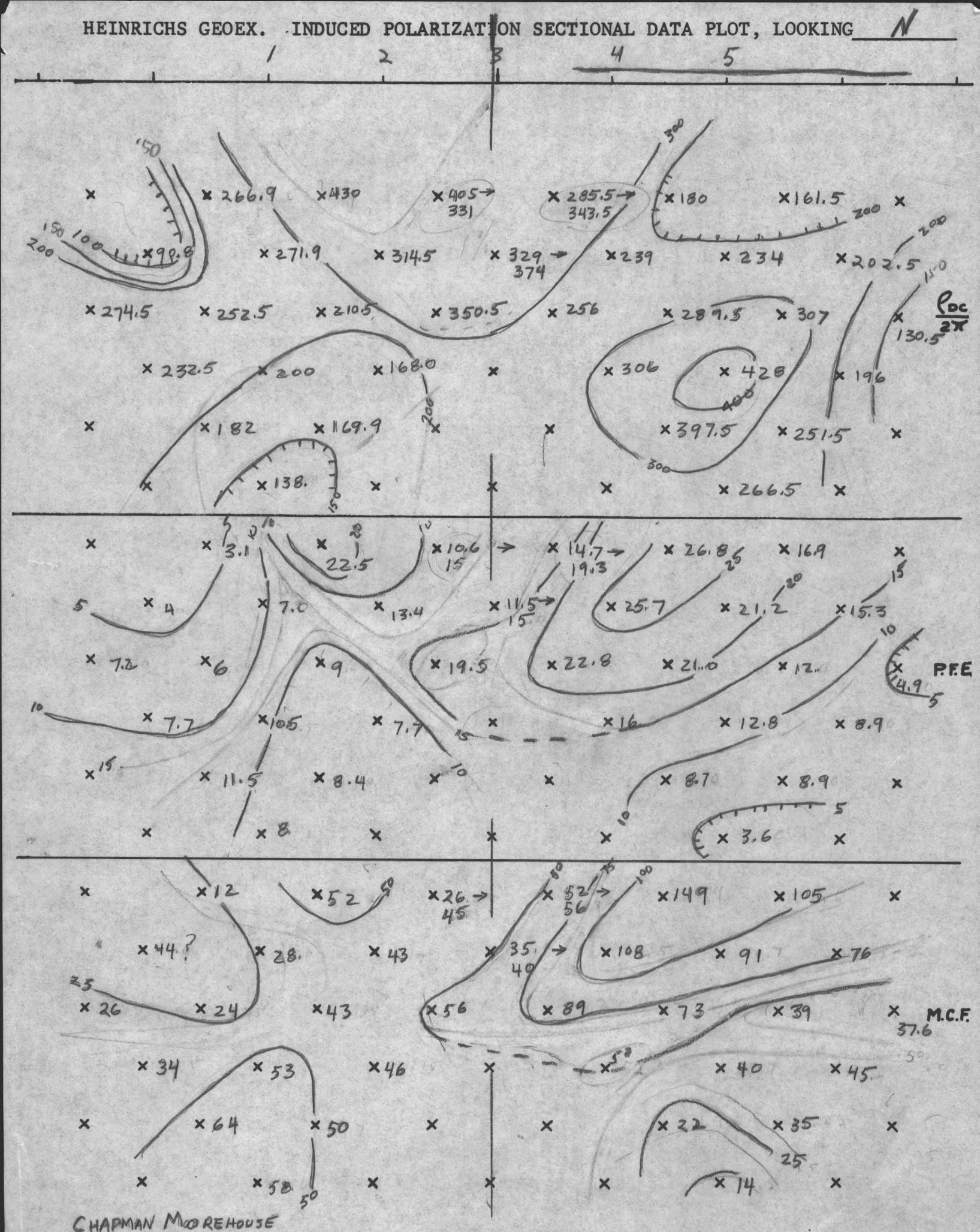
K+E 10 X 10 TO THE INCH 359-5DG
KEUFFEL & ESSER CO. MADE IN U.S.A.

RHUBARB GROUP SELF POTENTIAL LINE II A & B LOOKING NORTH



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

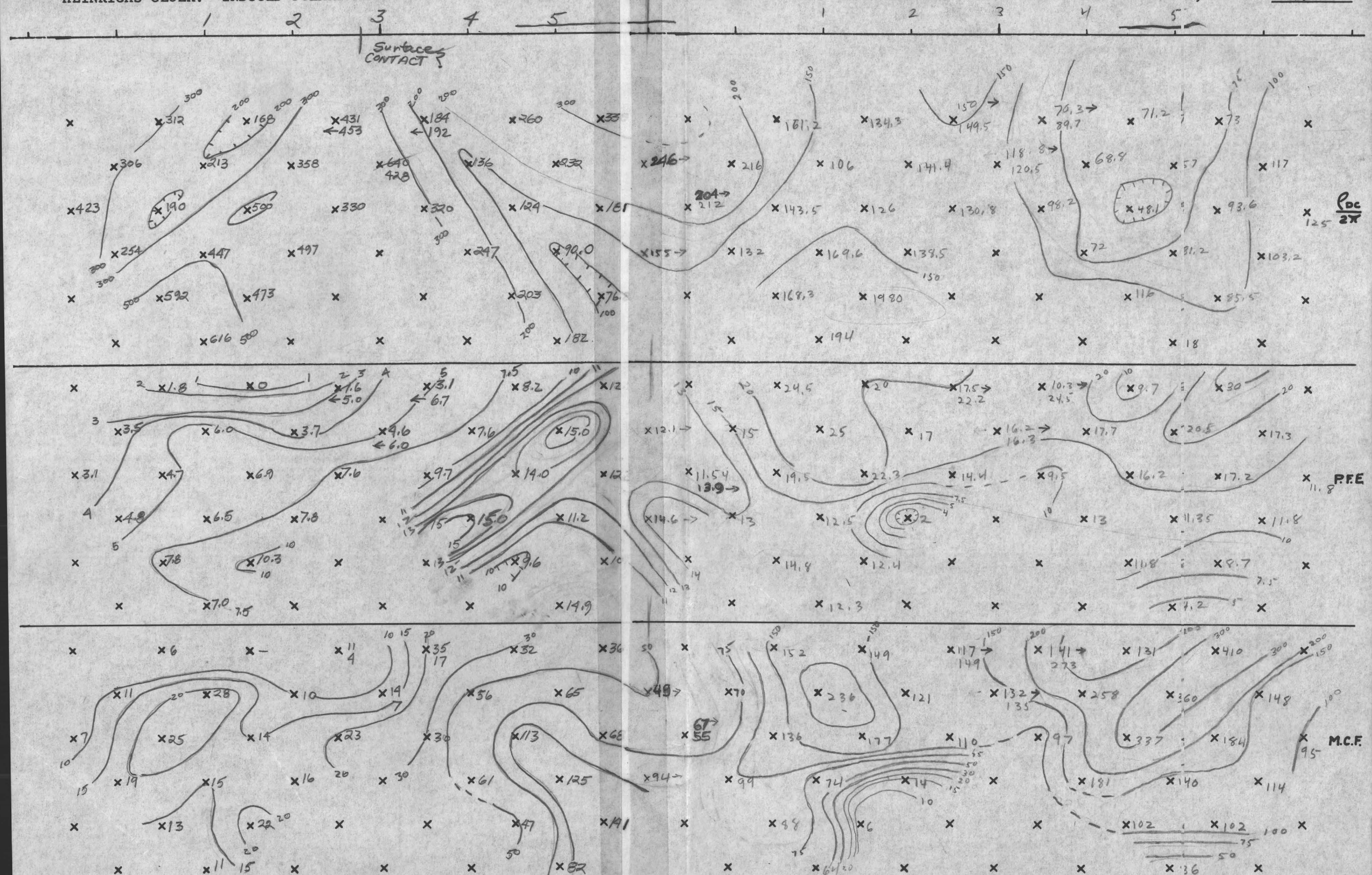
HEINRICHS GEOEX. INDUCED POLARIZATION SECTIONAL DATA PLOT, LOOKING N



CHAPMAN MOREHOUSE

AREA RHUBARB LINE 1 a = 500' SCALE: 1" = 500' DATE: 12/3/64

HEINRICHS GEOEX. INDUCED POLARIZATION SECTIONAL DATA PLOT, LOOKING N



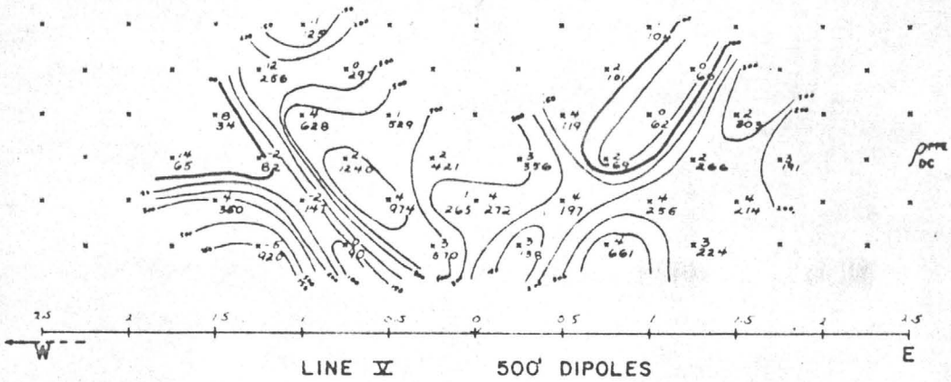
AREA Rubarb LINE IIA a = 500' SCALE: 1" = 500'

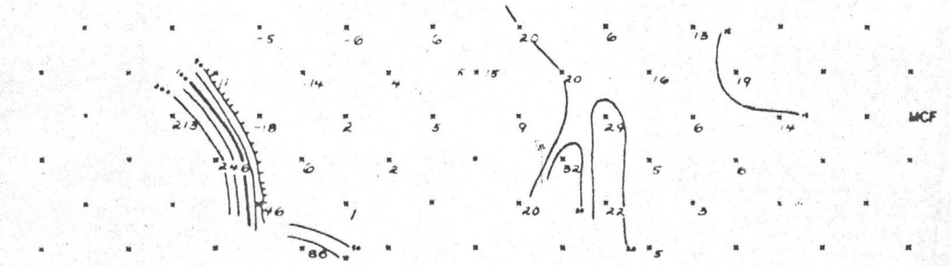
Chapman - Morehouse

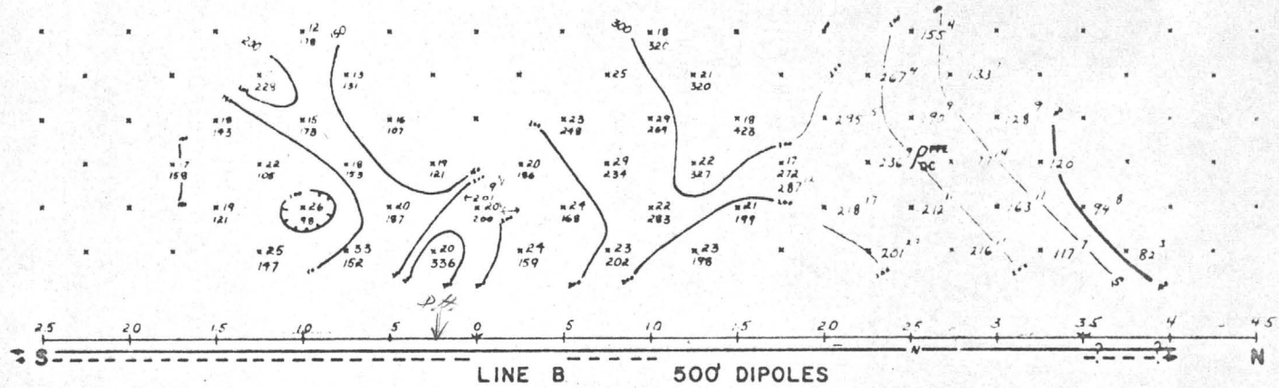
HEINRICHS GEOEX. INDUCED POLARIZATION SECTIONAL DATA PLOT, LOOKING N

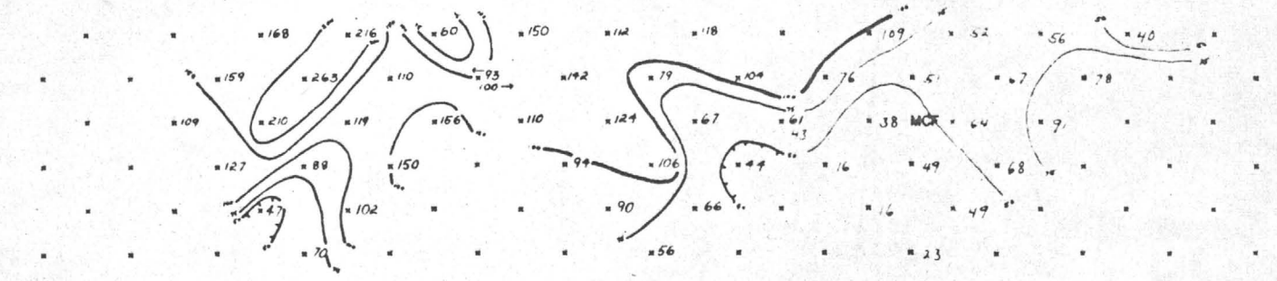
Chapman Morehouse Santa Cruz County, Ariz

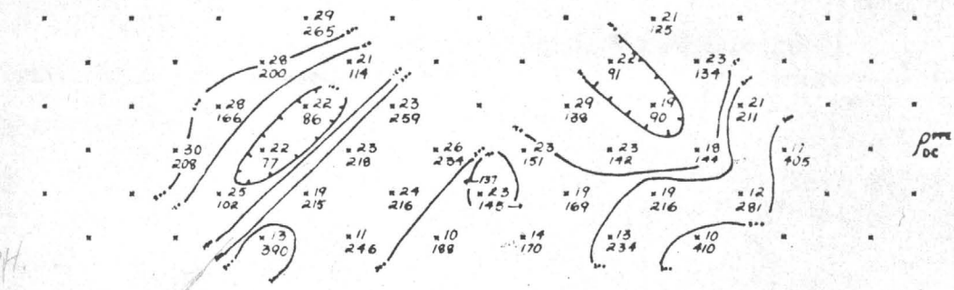
AREA RHUBARB LINE II B a = 500' SCALE: 1" = 500' DATE: 12/8/64

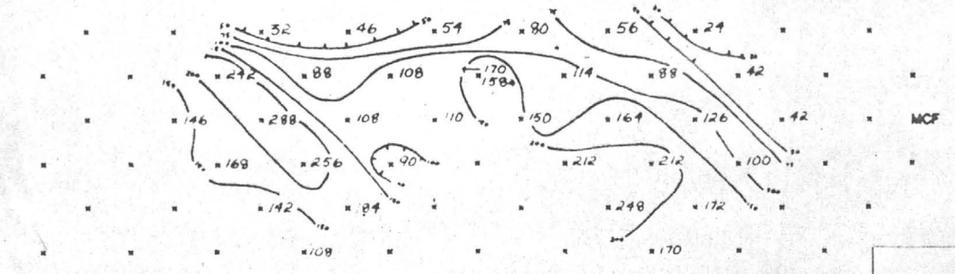












ANOMALY CLASSIFICATION LEGI

END OF LINE

NO ANOMALY

WEAK OR QUESTIONABLE AN

MODERATE ANOMALY

MODERATE TO STRONG ANOMA

STRONG ANOMALY

ANOMALY CONTINUES TO OR BEYOND LAST DATA POINT

LINE ALONG WHICH DATA WAS TAKEN

PRELIMINARY MAGNETIC INVESTIGATIONS

Rubarb - Line Boy - Villy
Claims

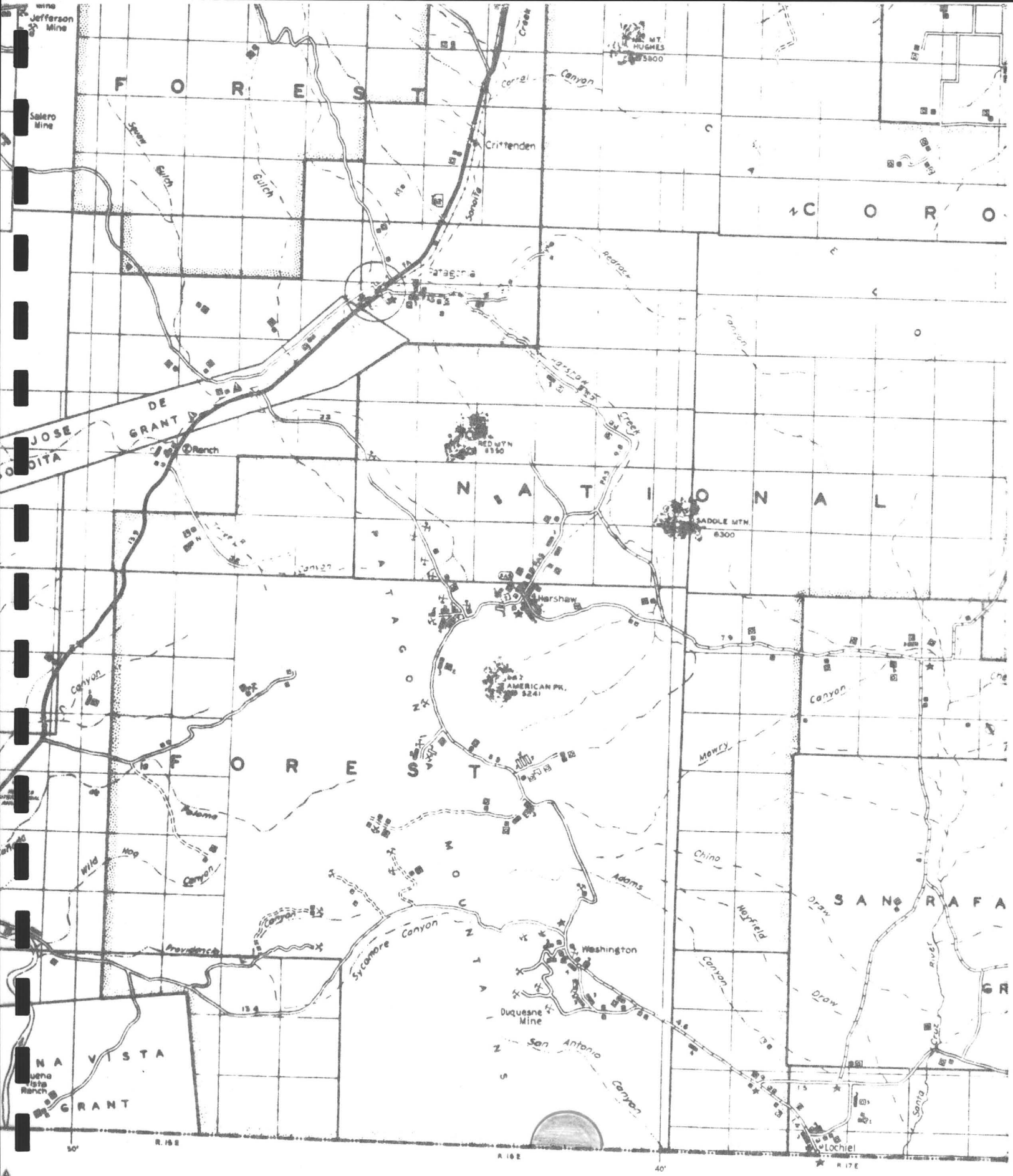
Santa Cruz County, Arizona

for

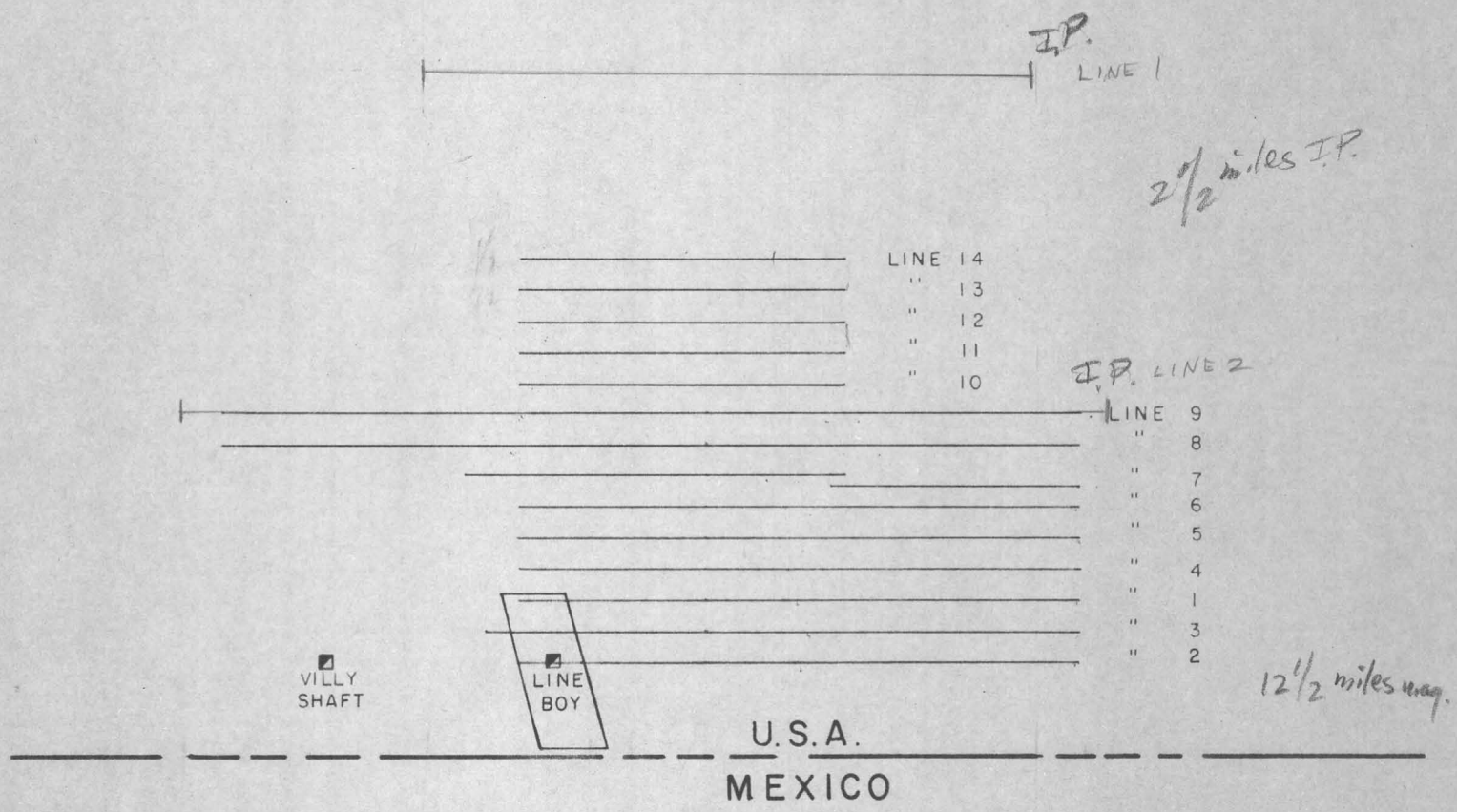
CHAPMAN MOREHOUSE MINING CORPORATION

October 1964

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



CHAPMAN - MOREHOUSE MINING CORPORATION
INDEX MAP
SANTA CRUZ COUNTY, ARIZONA
VILLY - LINE BOY, RUBARB CLAIMS



I.P. survey

INDEX TO MAGNETIC COVERAGE

RUBARB, LINE BOY AND VILLY CLAIMS

for

CHAPMAN MOREHOUSE MINING CORP.

by

HEINRICHS GEOEXPLORATION COMPANY

SCALE 1" = 1750'±

December 1964

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Introduction	1
Conclusions & Recommendations	1
Procedures	2
Sketch Plan Contour (Line Boy Area)	3

In Map Pocket:

Sheet #1 Rubarb Area Scale: 1" = 200', 200 gammas

Sheet #2 Villa Area Scale: 1" = 50 ft.

Sheet #3 Line Boy Area Scale: 1" = 50'

Sheet #4 Rubarb Area Scale: 1" = 200', 100 gammas

INTRODUCTION

Heinrichs Geoexploration Company, at the request of Mr. John Chapman and Mr. George Morehouse, conducted magnetic surveys over a portion of the Rubarb, Line Boy and Villy Claims, located in Santa Cruz County, Arizona, during the month of October, 1964.

The observations consisted of a detail survey over the exposed workings on the Line Boy and Villy Claims and a broader reconnaissance over the Rubarb Claims which overlap the Line Boy and Villy.

Results are presented in plan form showing contours of the intensity of the vertical component of the earth's magnetic field.

Mr. Dan Anderson was observer with Mr. Richard Jones as field assistant. Interpretation was by E. Grover Heinrichs and John Langs II; drafting by H. R. Moulinet.

CONCLUSIONS AND RECOMMENDATIONS

The regional association of magnetite and copper suggests a straight forward interpretive approach: i.e. the better targets appear to be in the vicinity of the greatest magnetic variations. However, other interesting areas were also designated on the basis of trend intersections.

The association of small breccia pipes with magnetic highs was mentioned in preliminary discussions, but further field investigation is needed to determine the economic possibilities in these areas. Particularly, continual careful correlation of the geophysics with all available detailed geology is required.

Areas of strong magnetic variation and trend intersections have been numbered and should be checked by further surface examination using other geological and geophysical techniques or drilling. If some of these recommended areas show economic potential, then the magnetic survey should be extended over the entire claim group.

In the Line Boy area, further magnetics are recommended to limit the southern extension of trend A-A' and the West-East extension of trend B-B'. A detailed survey of one of the strongest positive magnetic readings in the area (Anomaly 3, Line Boy Area) indicates an extremely local effect very near the surface. Likewise, further magnetic coverage will possibly trace Villy mineralization to the north and east.

As interest continues or localizes in any part of the project area, a more detailed study and analysis of some of the magnetic results in profile form may be warranted to determine precise factors related to size, shape, depth and cause of any particular zone or anomaly.

PROCEDURES

A portable Jalander magnetometer was employed for these magnetic observations. This instrument has a +/- 25 gamma sensitivity and measures the intensity of the vertical component of the earth's field. A base station was established at a central location and then auxiliary bases established near the area of a particular day's observations. Each reading has been corrected to an auxiliary base and the auxiliary base readings have been corrected to the main base reading.

Fourteen E-W Lines and 714 stations totaling 69,700 ft. of line observed in a reconnaissance fashion with 100 ft. between stations and 300 ft. between lines. More detailed coverage in the Villy area consisted of three NW-SE oriented lines spaced 60 ft. apart and 50 ft. between stations. A total of39 stations and 1,800 ft. of line were observed. Detailed magnetics in the Line Boy area consisted of 26 E-W lines and 266 stations spaced generally 50 ft. between lines and stations making a total here of 12,250 ft. observed. In the entire program, 1,019 station readings were taken covering 83,750 ft. of profile.

Respectfully submitted,
HEINRICHS GEOEXPLORATION COMPANY

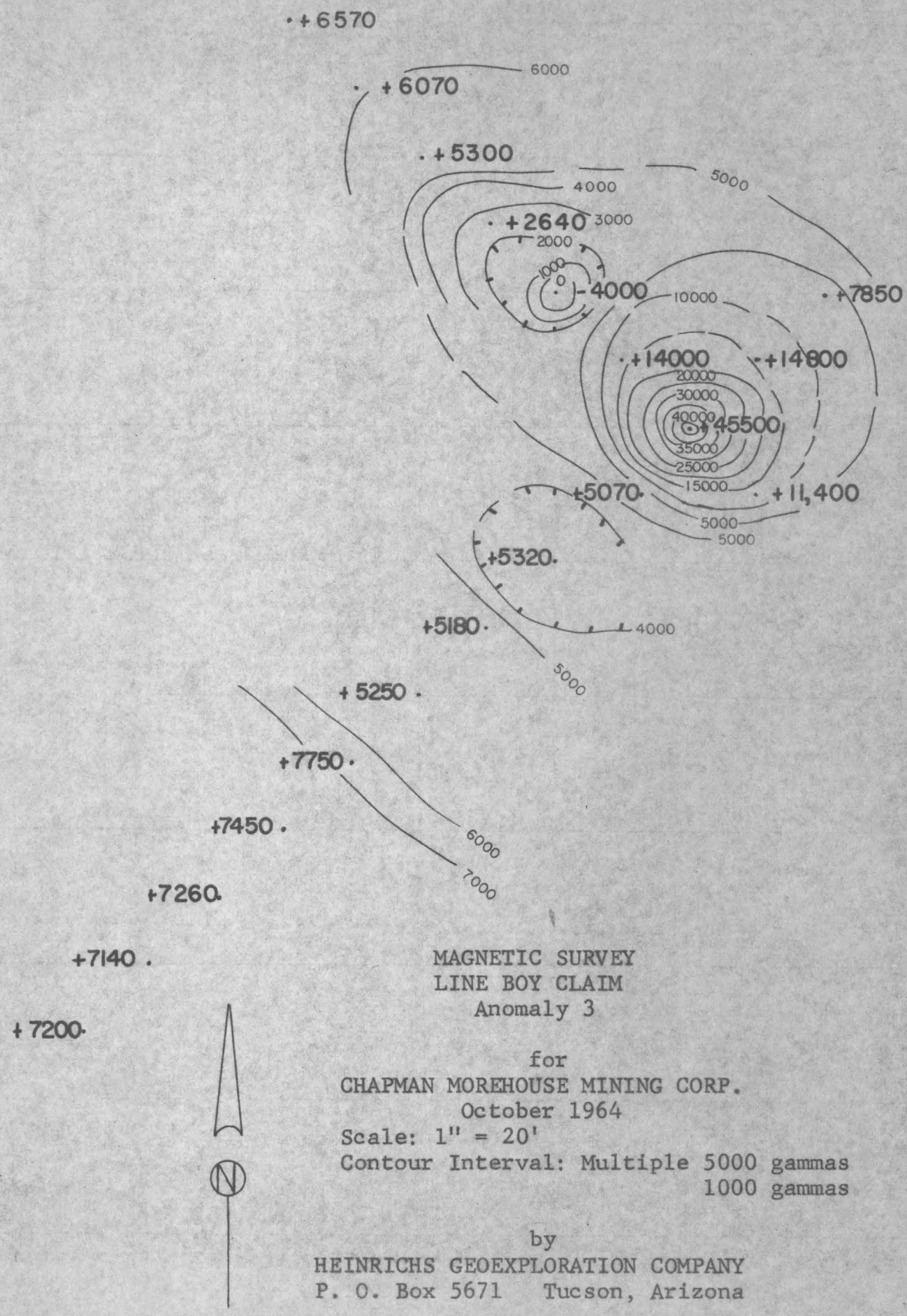
E. Grover Heinrichs

E. Grover Heinrichs

December 3, 1964

Approved: W. E. Heinrichs Jr.

Walter E. Heinrichs, Jr.



MAGNETIC SURVEY
LINE BOY CLAIM
Anomaly 3

for
CHAPMAN MOREHOUSE MINING CORP.
October 1964
Scale: 1" = 20'
Contour Interval: Multiple 5000 gammas
1000 gammas

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

INDUCED POLARIZATION SURVEY
RUBARB CLAIMS

Santa Cruz County, Arizona

November - December 1964

for
CHAPMAN-MOREHOUSE MINING COMPANY

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

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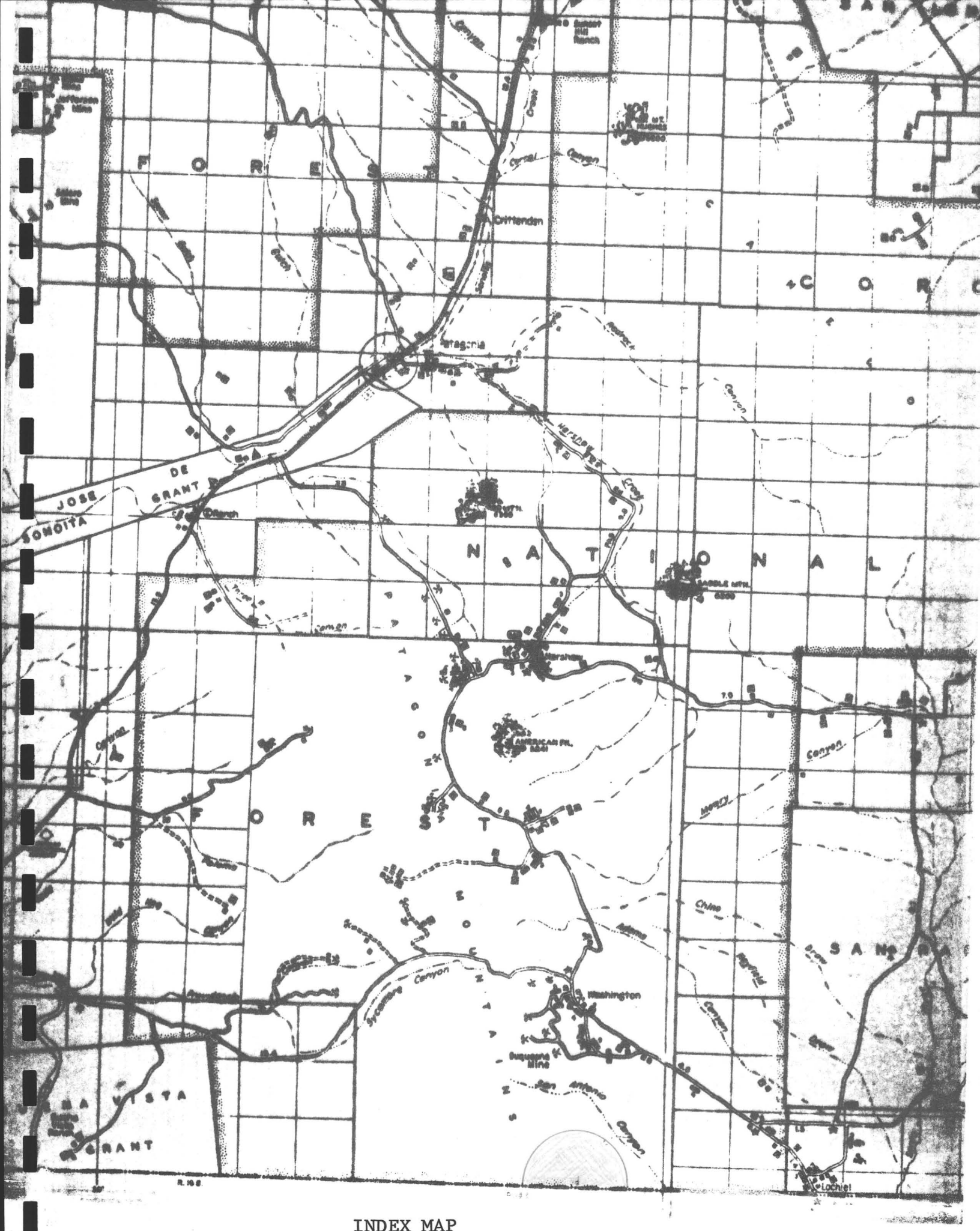
Conclusions and Recommendations	1
Procedures	2
Interpretation of Lines	3
Basis of I. P. Method	1a

In Map Pocket:

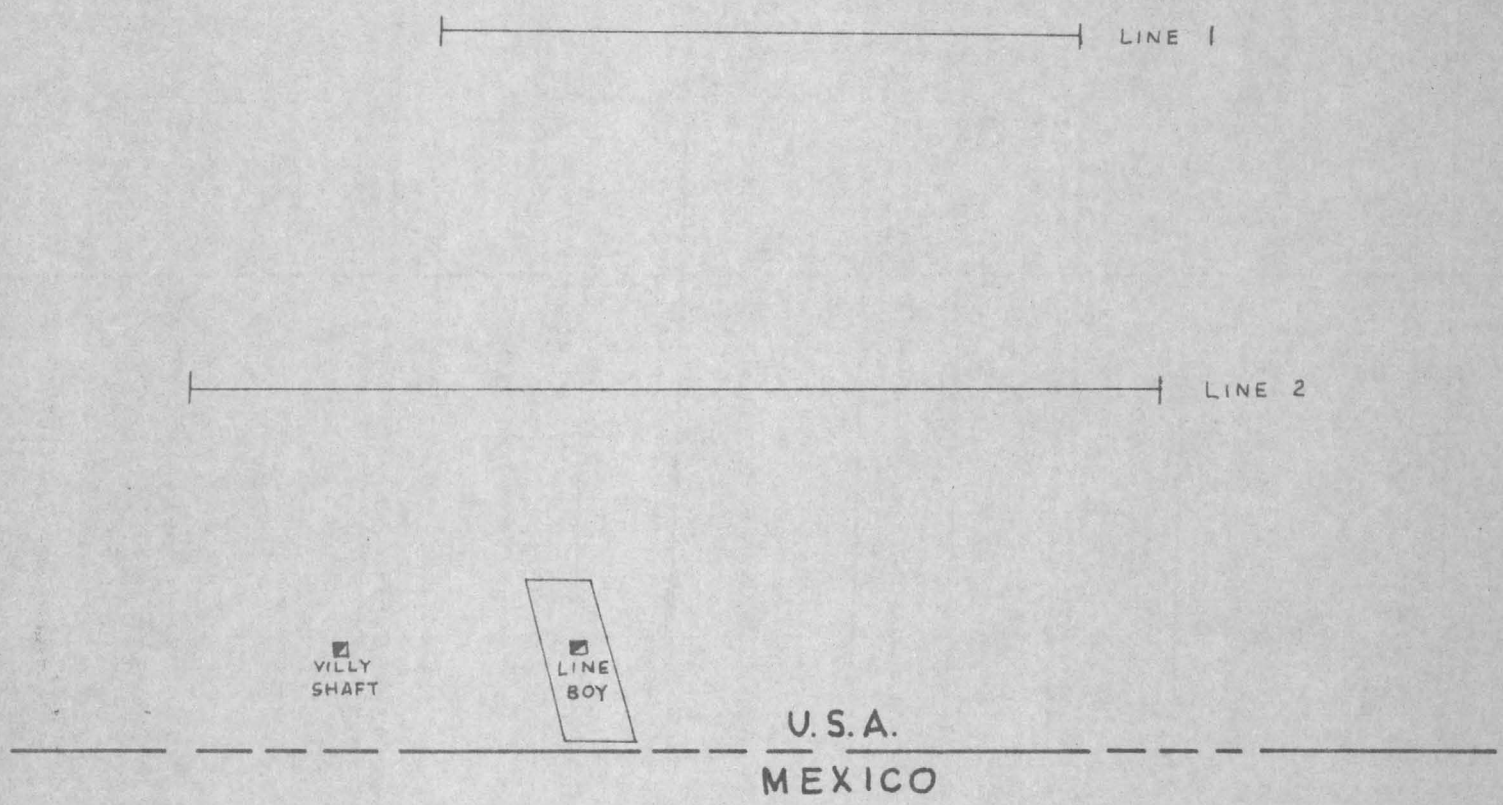
Sectional Data Sheets: Line 1 and Line 2, Spreads A and B

Self Potential Graphs: Line 1 and Line 2, Spreads A and B.

Induced Polarization Survey Location Map


F O R E S T
Crittenden
Patagonia
JOSE DE SONOITA GRANT
Ranch
N A T I O N A L
Harshaw
AMERICAN FIL.
F O R E S T
Washington
Duquesne Mine
San Antonio Canyon
Sycamore Canyon
Lochiel
VISTA
GRANT

INDEX MAP



INDEX TO I. P. SURVEY COVERAGE
RUBARB CLAIM AREA

FOR
CHAPMAN MOREHOUSE MINING CORP.

by
HEINRICHS GEOEXPLORATION COMPANY

Scale: 1" = 1,750' +/-

December 1964

INTRODUCTION

From November 16, 1964 through December 3, 1964 Heinrichs Geoexploration Company, at the request of Chapman-Morehouse Mining Company completed an induced polarization field survey over a portion of the Rubarb Claims, north of and centered about east-west on International Boundary Marker 113, Santa Cruz County, Arizona.

During these investigations, three anomalies of moderate intensity were found, one on each spread.

In the course of this work, two lines consisting of three spreads were run. The data are plotted on sectional data sheets showing the apparent resistivity, percent frequency effect, and metallic conduction factor contoured in vertical section. Self potential is plotted graphically.

GEOEX personnel on this project were Fred M. Johnson, geophysicist, Rex Montierth and Michael Salywon, geophysical technicians. For the final day, John Langs, geophysicist was also on the project.

CONCLUSIONS AND RECOMMENDATIONS

1. The induced polarization effects measured in two of the anomalous areas are relatively shallow and may decrease with depth. These are on Line 1, 1,000 ft.east of center spread and on Line 2, set-up B, 800 ft. east of center spread.

2. Further investigation of the anomalous area on Line 2, set-up A located 1,500 ft. east of center spread, to determine if the cause of anomalism is of economic importance, is recommended because this zone may relate to the known past productive trend.

3. An I. P. survey using wider dipole spacing would show if anomalism increases with and to a greater depth in the area.

4. The Self Potential (S.P.) recorded on Line 1 shows only random noise. The sharp S.P. drop on Line 2, set-ups A and B may be related to oxidizing sulfides. The I. P. effects in this area

indicate a general high background of sulfide content in the rocks and this self potential drop in the area could be important. Further S. P. work on a more careful spacing is recommended, independent of any future I. P. work.

5. In reference to discussions between Messers Chapman and W. Heinrichs related to the location of geochemical anomalism coincident with the past production trend and a somewhat lesser I. P. anomalism, it is one of many possible results which could have been reasonably predicted and expected. Broadly speaking, a slightly greater amount of sulfide is indicated towards the eastern portion of the I. P. survey area, which may be due to a formation or segregation difference or greater subsequent oxidation in the western portion. Slight to moderate anomalism increasing toward the eastern portion of the area is shown similarly in both GEOEX and Bear Creek results.

6. In order to gain most from the geological and drilling information and anything really practical beyond the present broad geophysical inferences, all data must be closely correlated on paper and then reviewed in detail discussion. Excessive prior verbal reference to many detailed facts not recorded and studied in writing can lead to needless misconception, confusion and mutual waste of time, money and effort without realizing the full potential benefit toward the ultimate objective.

PROCEDURES

The I. P. spreads were run chronologically by consecutive line number and respective set-up or spread letter as follows:

1) Line 1, east-west with its center located 200 ft. west of the north end center monument of claim 110.

2) Line 2, set-up A, ran east-west with its center located 100 ft. west of the north end center monument of claim 16.

3) Line 2, set-up B, ran east-west with its center located 200 ft. west of the north end center monument of claim 10.

4) Data on all three spreads were obtained by the dual frequency I. P. method, employing a dipole-dipole electrode configuration, of 500 ft. dipole spacings.

Apparent resistivities were measured at 0.1 and 3.0 cycles per second so as to obtain the three quantities, direct current resistivity, (rho DC/2pi), percent frequency effect (P.F.E.) and metallic conduction factor (MCF) necessary for interpretation.

INTERPRETATION OF LINES

Line 1: Showed nothing of interest. Resistivities were relatively low and frequency effects were high, but the lack of increase with depth gives at best, values of sulfide concentration of a questionable economic significance.

Line 2, Set-up A: Shows one anomaly of interest, 1,500 ft. east of center spread, which may be related to surface geology and appears to be a structure dipping steeply to the east. This anomalism may increase with depth and it it does, it would be of more importance.

Line 2, Set-up B: Showed nothing of interest because of the lack of depth. Resistivities were low in the anomalous area while frequency effects were high, but represent sulfide concentrations of questionable value.

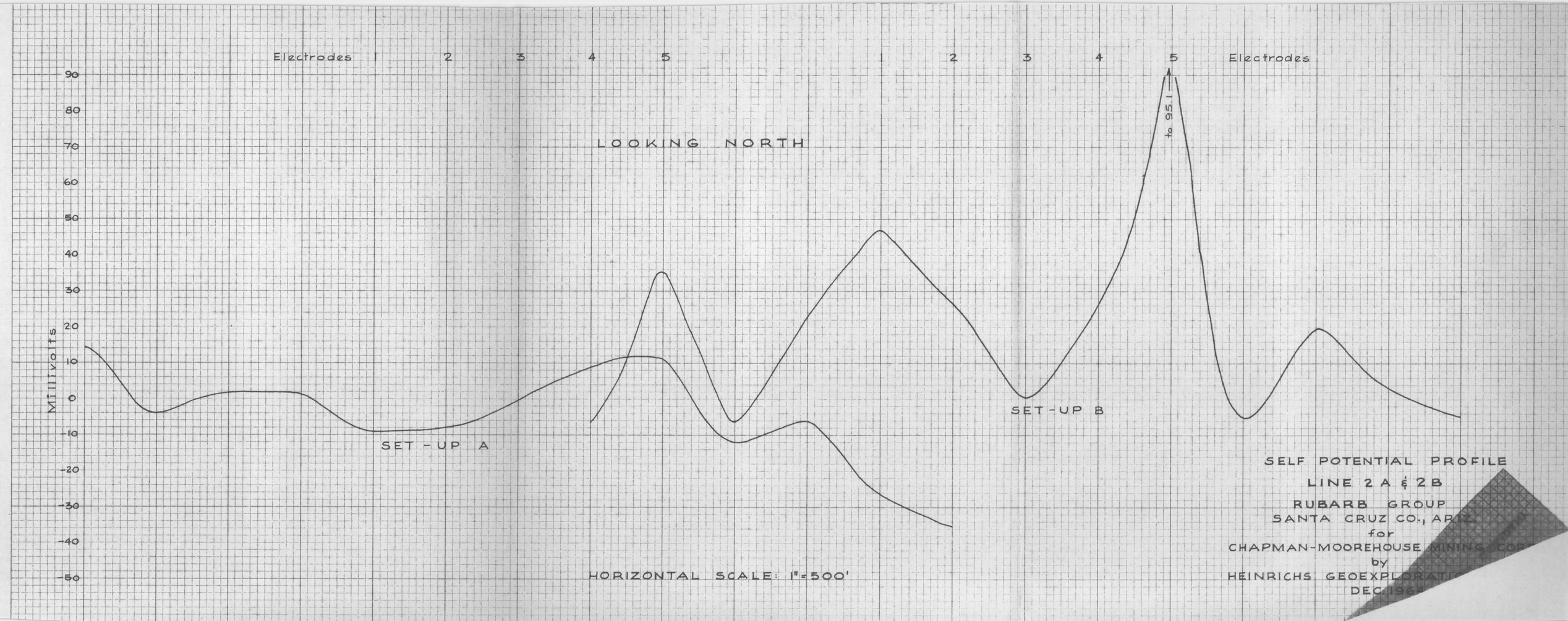
Respectfully submitted,
HEINRICHS GEOEXPLORATION CO.

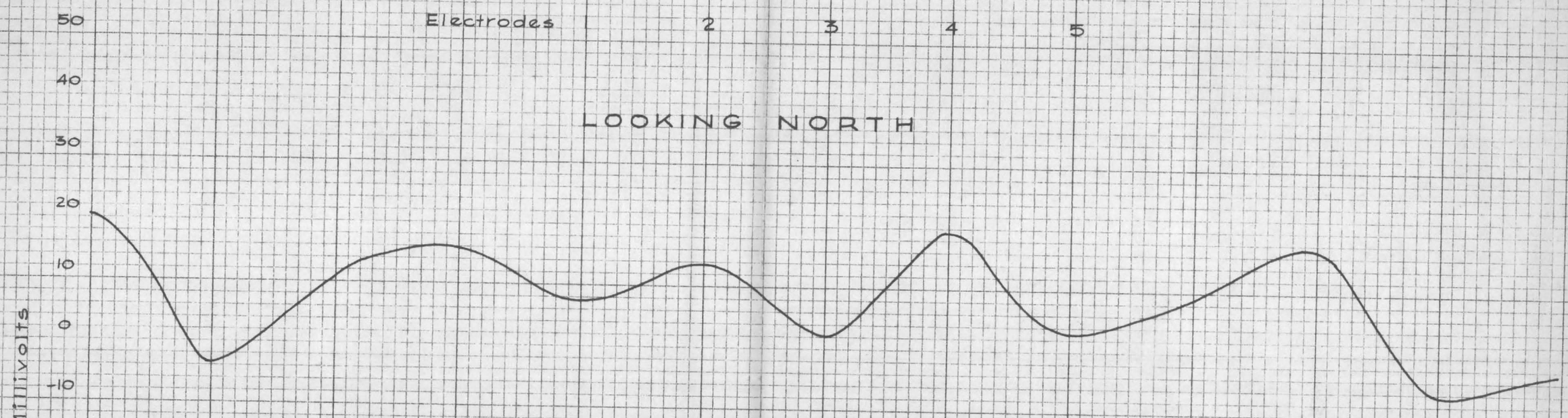
Fred M. Johnson

Fred M. Johnson
Geophysicist

Approved: W. E. Heinrichs Jr.
Walter E. Heinrichs, Jr.
President & General Manager

December 10, 1964
P. O. Box 5671
Tucson, Arizona 85703


Electrodes 1 2 3 4 5 1 2 3 4 5 Electrodes
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
-50
Millivolts
LOOKING NORTH
to 95.1
SET-UP A
SET-UP B
HORIZONTAL SCALE: 1"=500'
SELF POTENTIAL PROFILE
LINE 2A & 2B
RUBARB GROUP
SANTA CRUZ CO., ARIZ.
for
CHAPMAN-MOOREHOUSE MINING CO.
by
HEINRICHS GEOEXPLORATI
DEC 196



HORIZONTAL SCALE: 1" = 500'

SELF POTENTIAL PROFILE

LINE 1

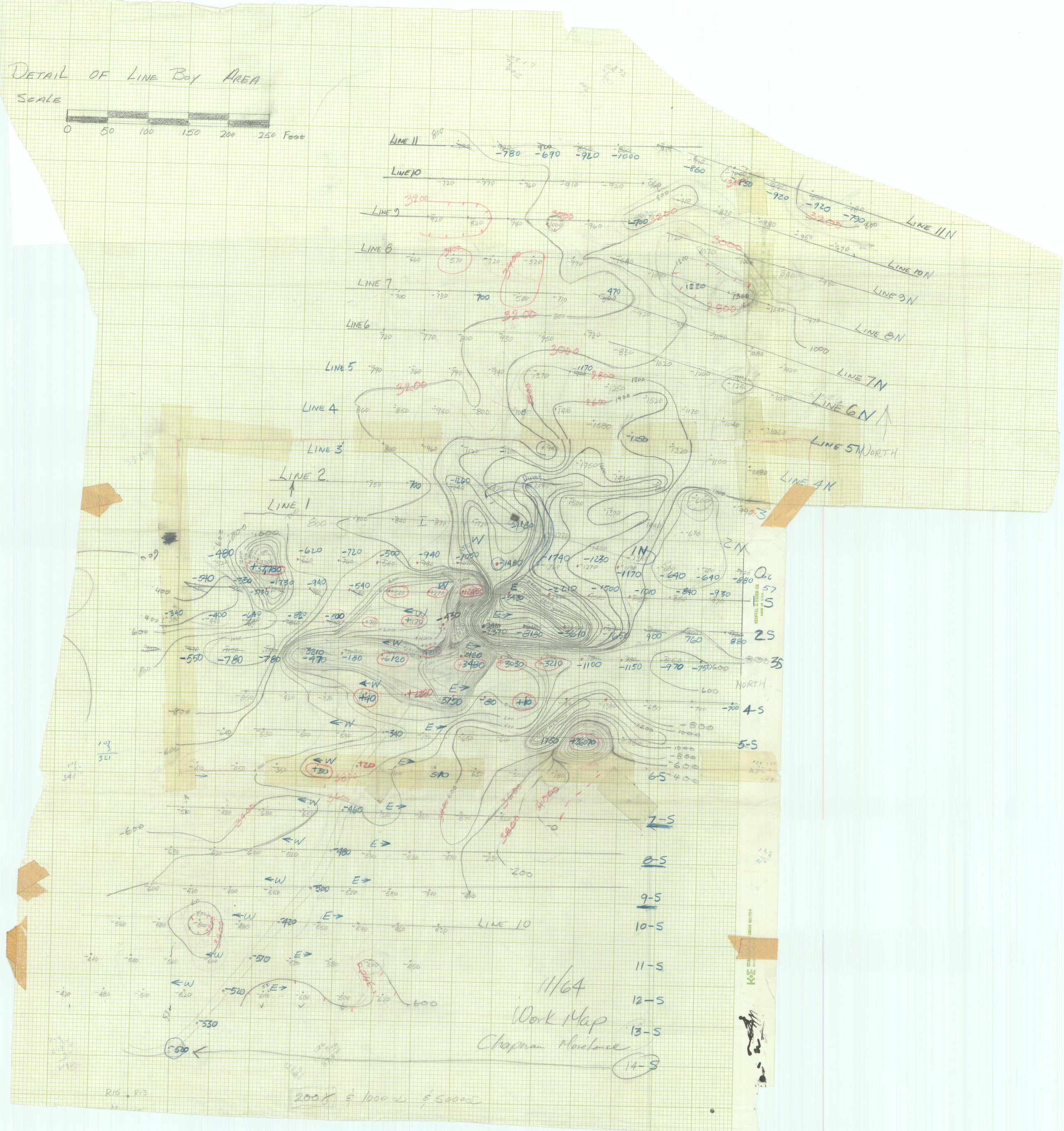
RUBARB GROUP
SANTA CRUZ CO., ARIZ.

for

CHAPMAN-MOOREHOUSE MINING CORP

by

HEINRICHS GEOEXPLORATION CO.
DEC. 1964


DETAIL OF LINE BOY AREA
SCALE
0 50 100 150 200 250 Feet
LINE 11
LINE 10
LINE 9
LINE 8
LINE 7
LINE 6
LINE 5
LINE 4
LINE 3
LINE 2
LINE 1
LINE 11N
LINE 10N
LINE 9N
LINE 8N
LINE 7N
LINE 6N
LINE 5N
LINE 4N
NORTH
LINE 10
2-S
4-S
5-S
6-S
7-S
8-S
9-S
10-S
11-S
12-S
13-S
14-S
11/64
Work Map
Chapman Morehouse

NORTH

SCALE

0 50 100 Feet

raise all values 1500ft

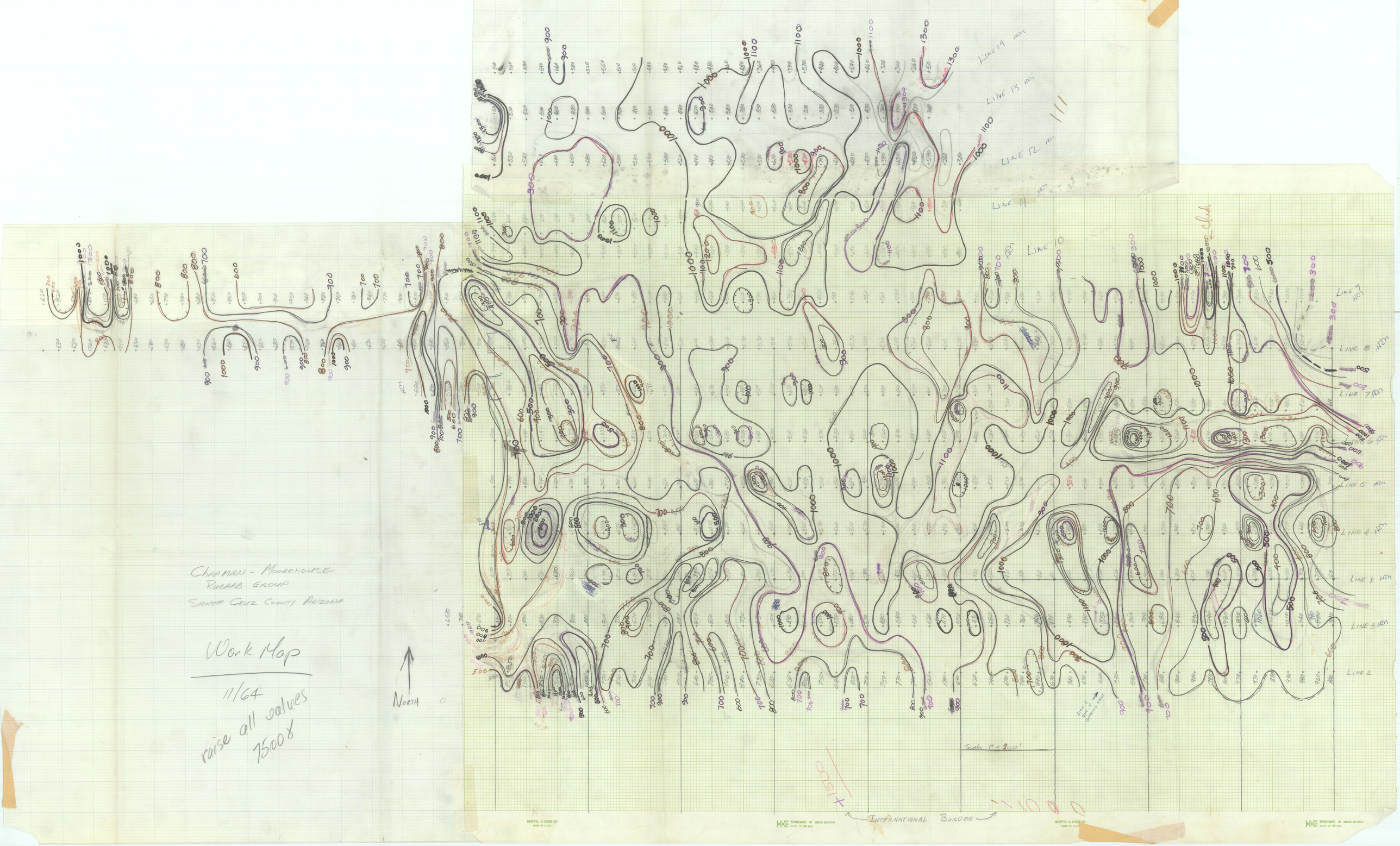
CONTOUR INTERVAL 100 ft

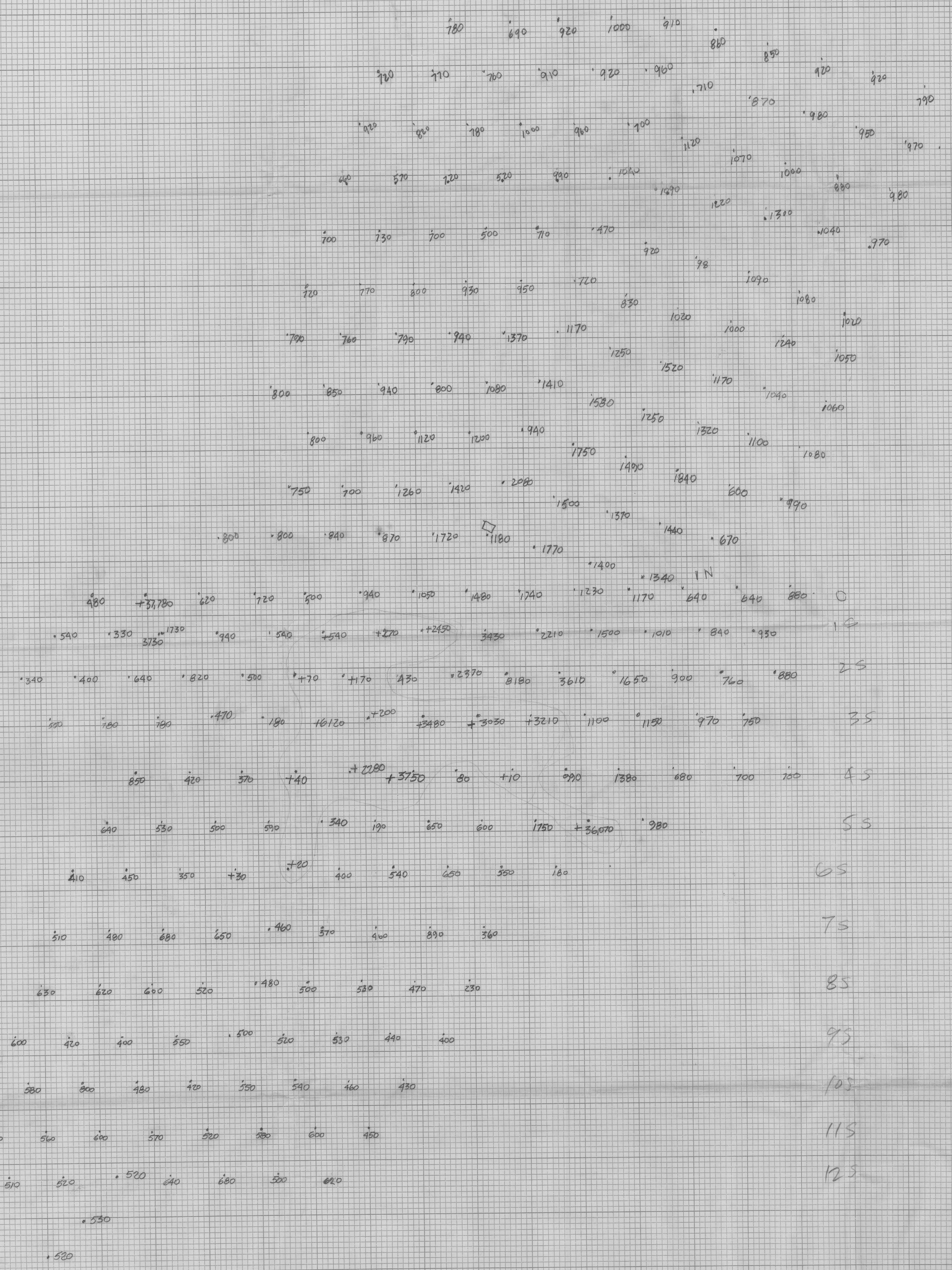
Villy Shaft Area
Chapman — Moorehouse
Rubarb Group
Santa Cruz County Arizona

Villy Shaft Area
Chapman Moorehouse
11/64
Work Map

KEUFFEL & ESSER CO.
MADE IN U.S.A.

K+E STANDARD ® CROSS SECTION
10×10 TO THE INCH


Chapman - Moorehouse
Rubarb Group
Santa Cruz County Arizona
Work Map
11/64
raise all values
7500'
North
Scale 1" = 200'
International Border
Line 14
Line 13
Line 12
Line 11
Line 10
Line 9
Line 8
Line 7
Line 6
Line 5
Line 4
Line 3
Line 2
KEUFFEL & ESSER CO.
MADE IN U.S.A.
K&E STANDARD CROSS SECTION
10 X 10 TO THE INCH



Line Ray
Magnetics
Workshop

7720 7810 7580 7500 7590 7640

7650

7780 7730 7740 7590 7580 7540 7580 7580

7780 7630 7520 7710

7580 7680 7720 7500 7540 7800 7550

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7840 7930 7780 7780 7510 7460 7500 7620

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7580 7530

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7780 7730 7700 7570 7550 7780 7420

7670 7450

7110 7740 7710 7560 7130 7330 7500 7260

7250 7450

6980

7700 7650 7580 7700 7420 7090 7330

6920 7460

7250 7440

7700 7540 7380 7300 7560 7180

6750 7400

6910 7420

6660

7750 7800 7240 7080 6420 7900

7000 7570

7130

7700 7700 7660 7630 6780 7320 7060 7830

6730

7100

7160

8020 16250 7880 7780 8000 7560 7450 7020 6760 7270 7330 7860 7860 7620

7960 7170 6710 7560 7960 9040 8720 10950 5170 6240 7000 7490 7660 7570

4770

8160 8100 7660 7680 8000 8570 8670 8120 6130 320 4840 6850 7600 7740 7620

7950 7720 7720 8130 8320 14620 8700 11980 11530 11710 7400 7350 7530 7750

7650 8080 8130 8540 10780 12250 8420 8510 7510 7120 7820 7800 7800

7860 7970 8000 7910 8160 8310 7850 7900 7250 44570 7520

8090 8050 8150 8530 8520 8100 7960 7850 7950 8320

7990 8120 7820 7850 8140 8130 8040 7610 8140

7870 7880 7900 7980 8020 8000 7970 8030 8270

7900 8080 8100 7950 8000 7980 7970 8060 8100

7940 7920 7700 8020 8080 7950 7960 8040 8070

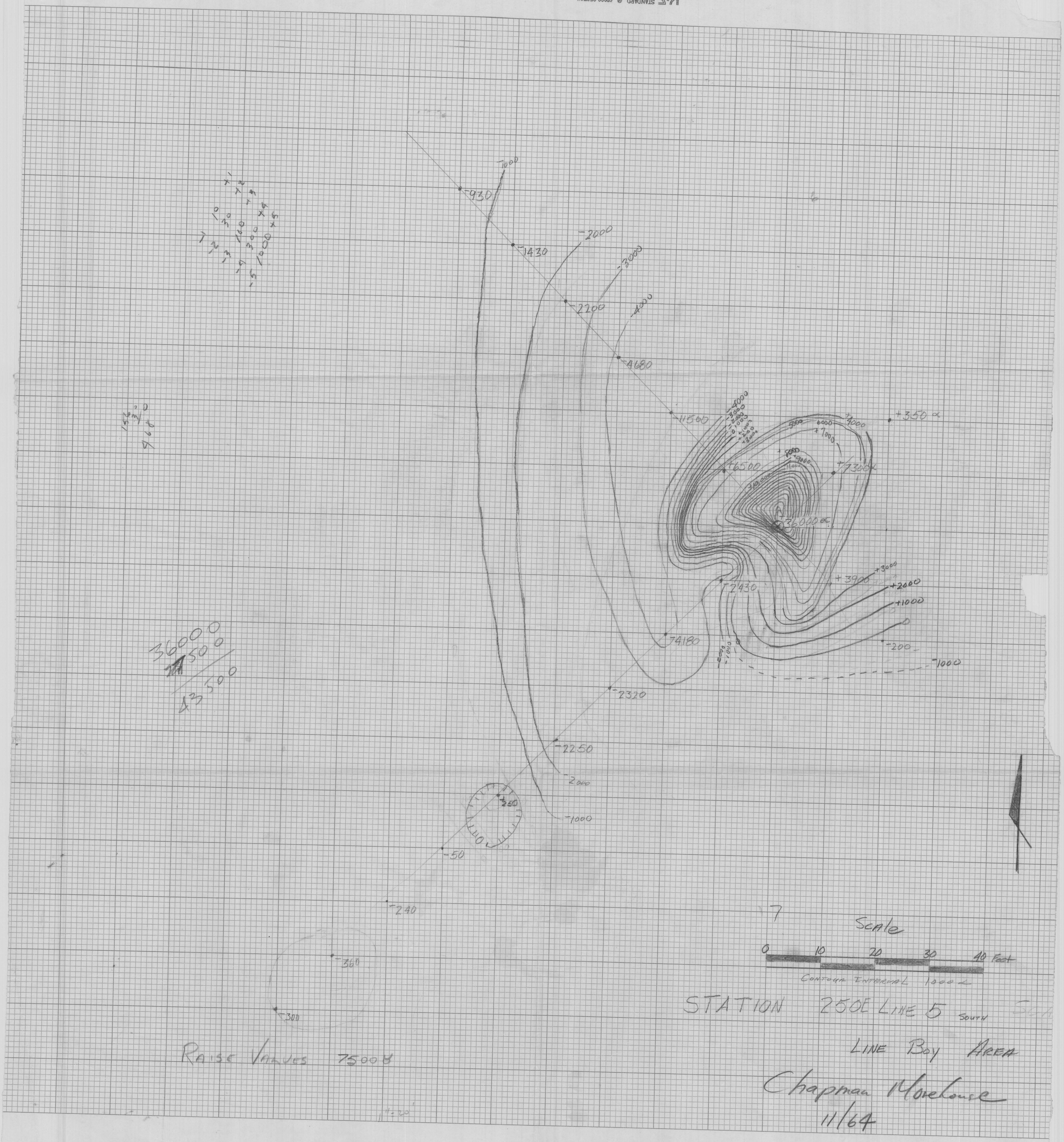
8060 7960 7940 7900 7930 7980 7920 7900 8050

8080 8020 7990 7980 7980 7860 7870 8000 7880

7970

7980

K&E STANDARD ® CROSS SECTION
10 X 10 TO THE INCH
KEUFFEL & ESSER CO.
MADE IN U.S.A.



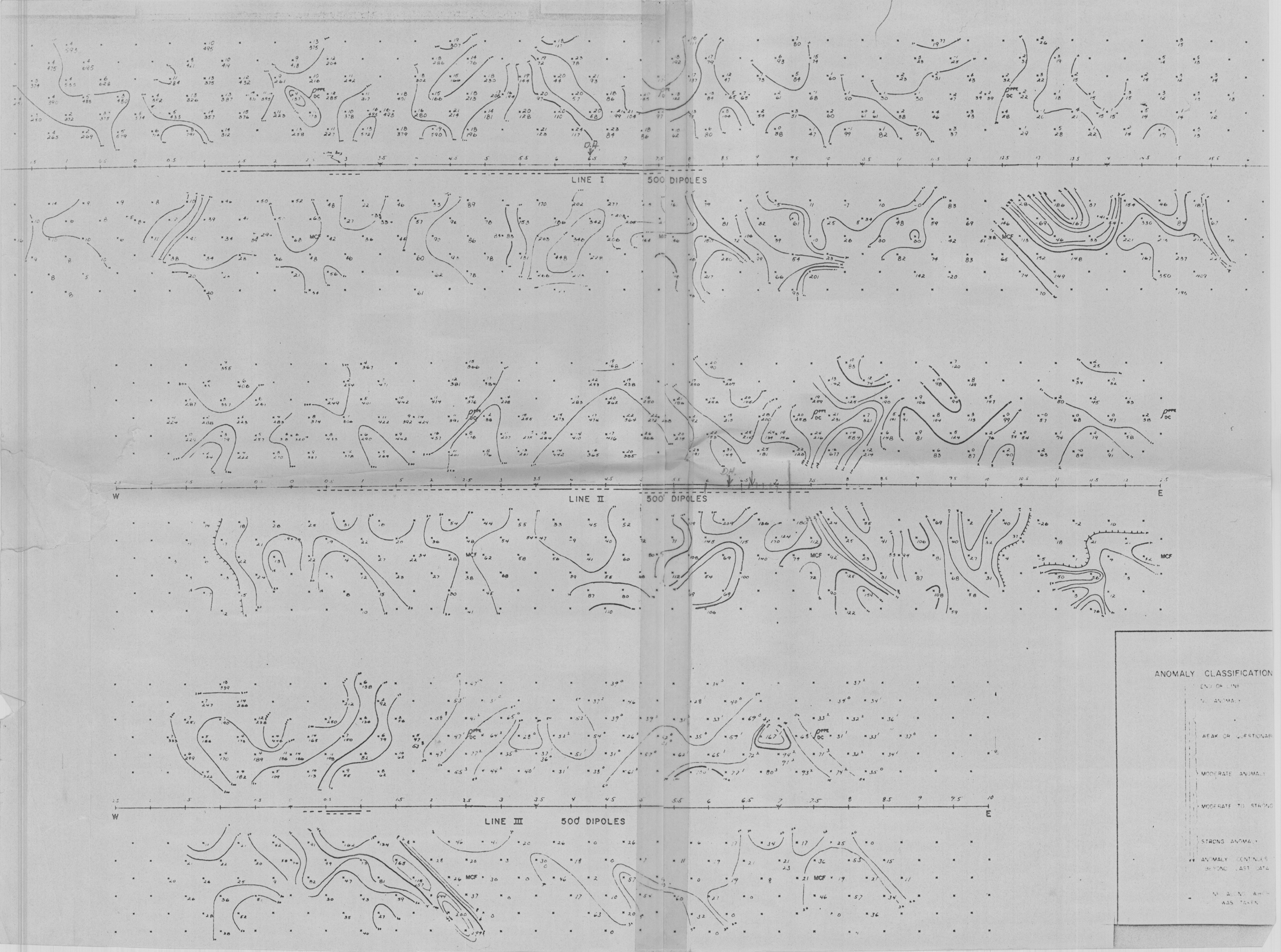
NOTES:
⊕ INDICATES DRILL HOLE FOR LOCATION WORK.

Indicates Magnetic Traverse Vertical Intensity

Look up our coverage (Mag?) (Willey file)

CHAPMAN ~~MOOREHOUSE~~ MORE MINING CORP.
RUBARB GROUP
SANTA CRUZ COUNTY, ——— ARIZONA

SCALE 1" = 500'
DATE 9-10-64


LINE I 500 DIPOLES
LINE II 500' DIPOLES
LINE III 500' DIPOLES
W
E
MCF
ANOMALY CLASSIFICATION
END OF LINE
NO ANOMALY
WEAK OR QUESTIONABLE
MODERATE ANOMALY
MODERATE TO STRONG
STRONG ANOMALY
ANOMALY CONTINUES BEYOND LAST DATA
LINE ALONG WHICH WAS TAKEN

INDICATES MAGNETIC TRAVERSE
(VERTICAL INTENSITY)

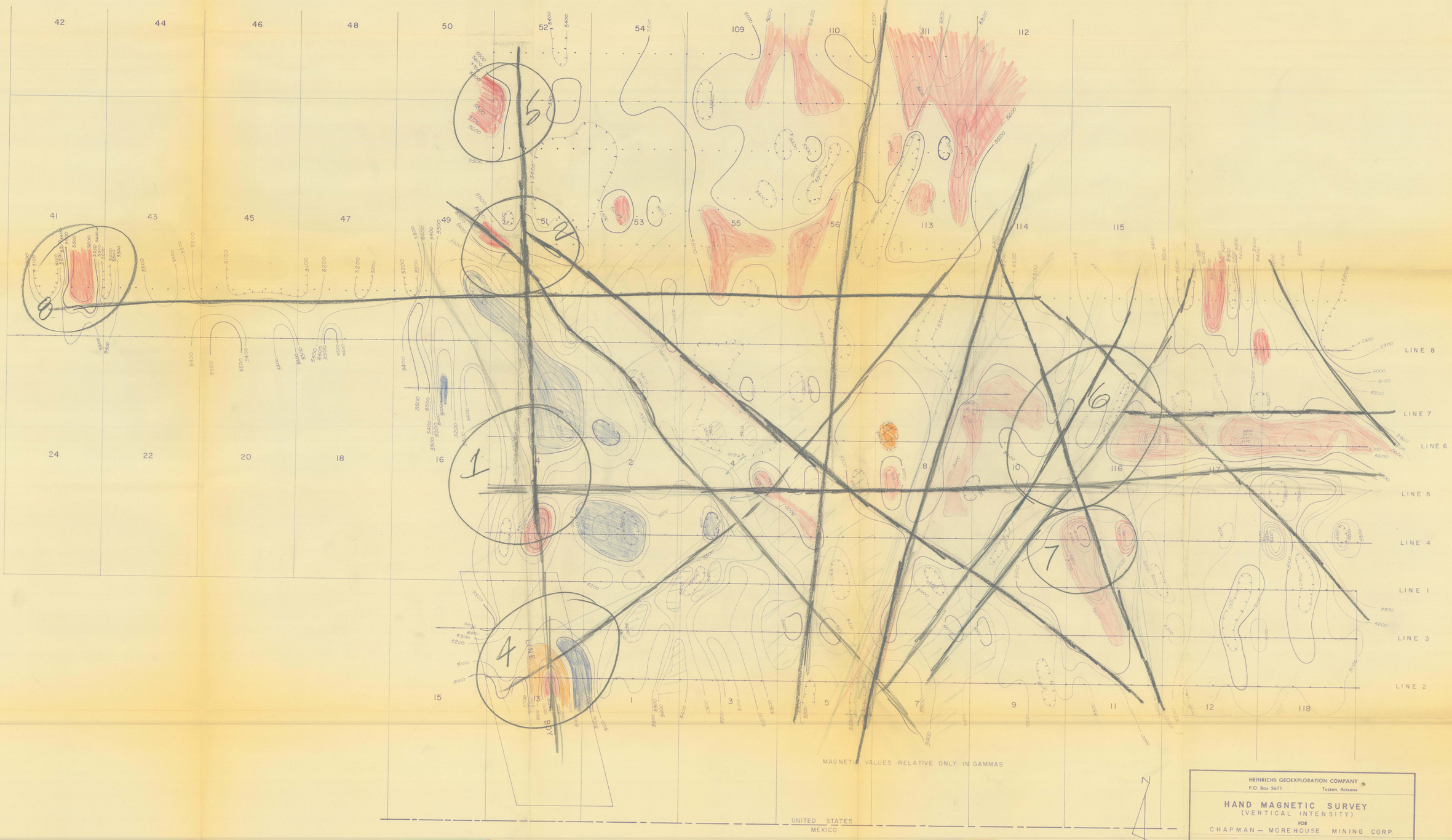
HEINRICHS GEOEXPLORATION COMPANY
P.O. Box 5671 Tucson, Arizona

FOR
CHAPMAN MOOREHOUSE MINING CORP

RUBARB GROUP

SANTA CRUZ COUNTY, ARIZONA

SCALE: 1" = 500'	CONTOUR INTERVAL:	REVISIONS
	DATA BY:	
DATE: OCT. 1964	SHEET OF	
DRAWN BY: I. B.	DRAWING NO.:	FILE:



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

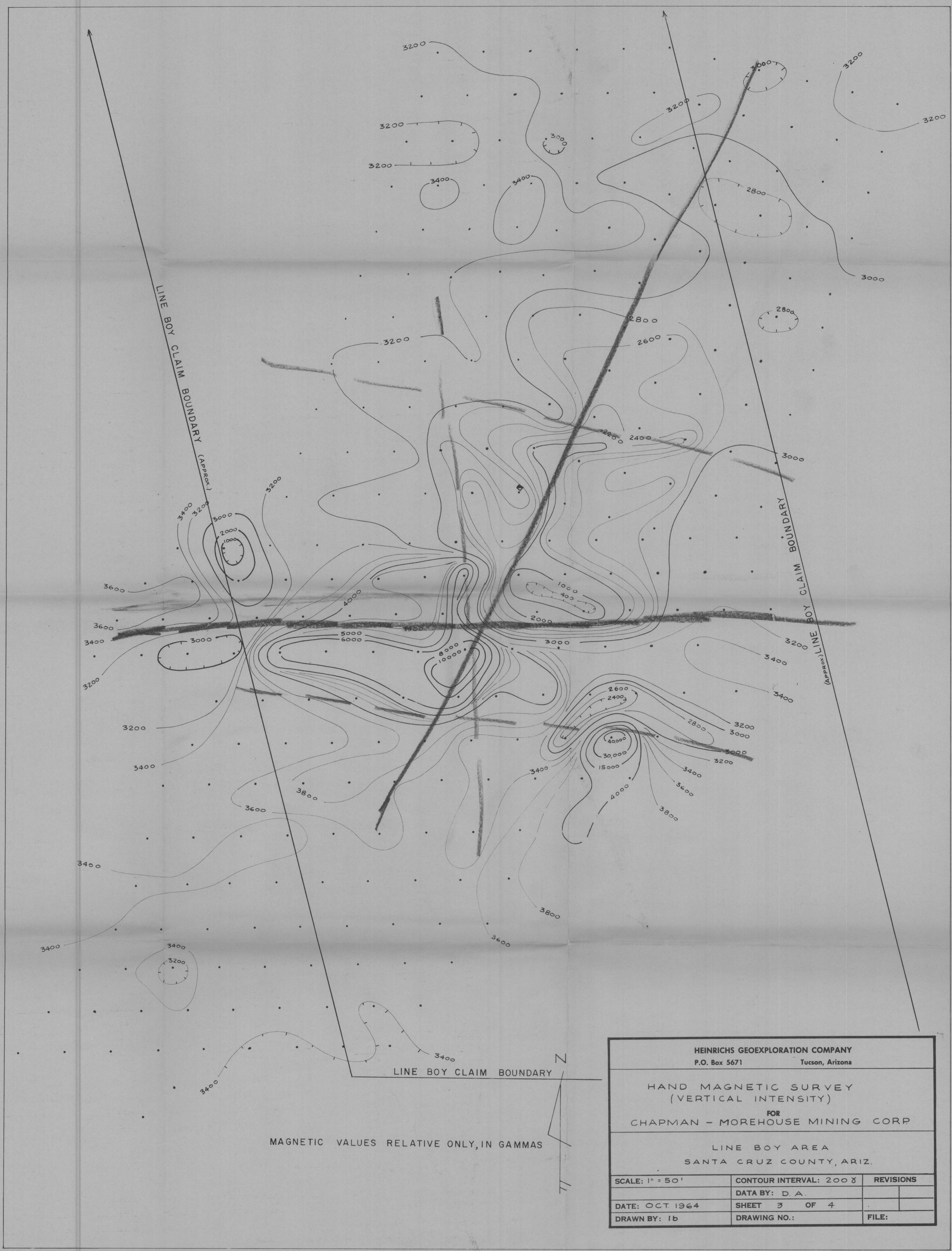
HAND MAGNETIC SURVEY
(VERTICAL INTENSITY)

FOR

CHAPMAN – MOREHOUSE MINING CORP.

RUBARB GROUP
SANTA CRUZ COUNTY, ARIZ.

SCALE: 1" = 200'	CONTOUR INTERVAL: 100 γ	REVISIONS
	DATA BY: D. A.	
DATE: NOV. 1964	SHEET 4 OF 4	
DRAWN BY: H.R.M.	DRAWING NO.:	FILE:

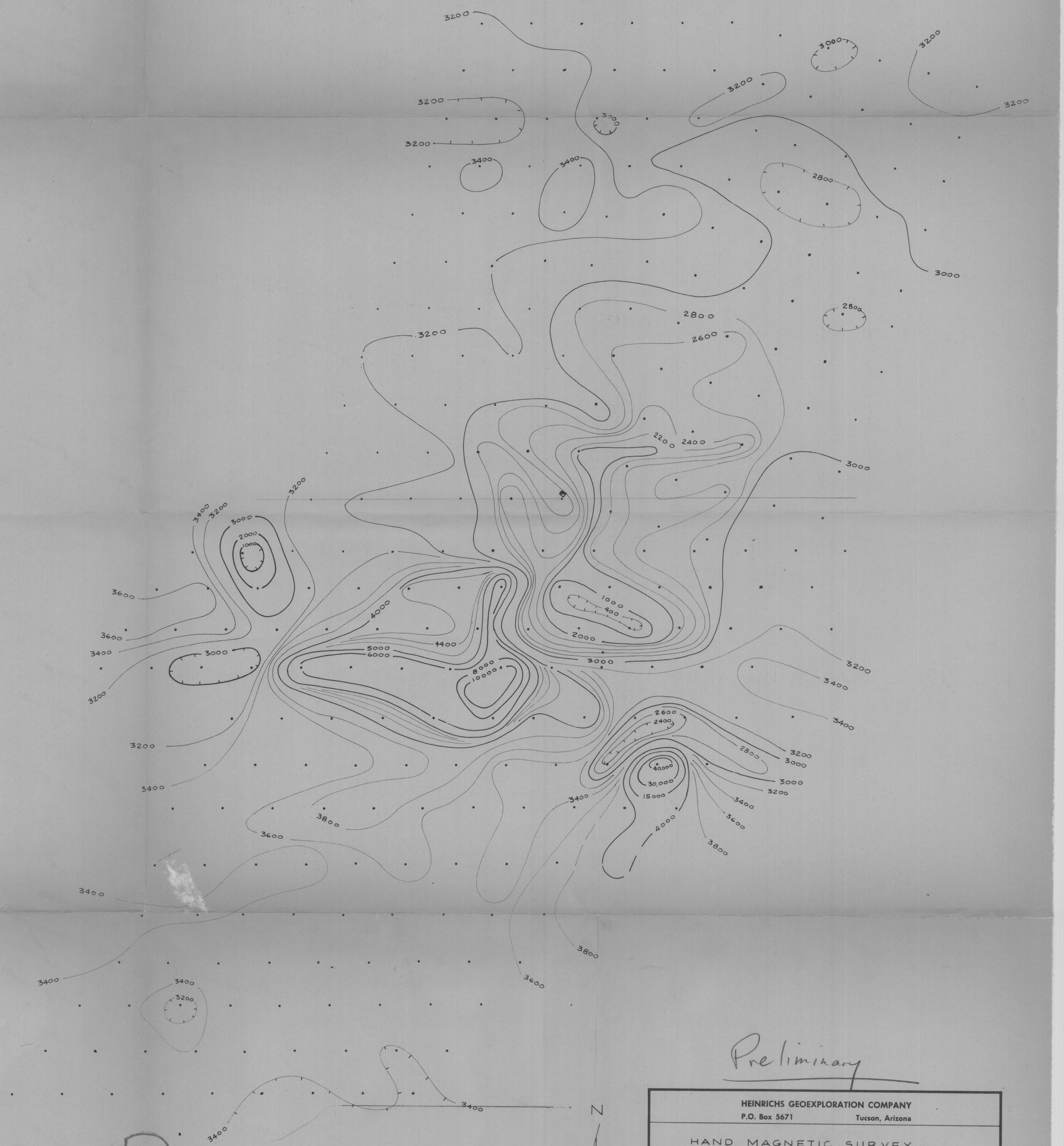


HEINRICHS GEOEXPLORATION COMPANY
P.O. Box 5671 Tucson, Arizona

HAND MAGNETIC SURVEY
(VERTICAL INTENSITY)
FOR
CHAPMAN - MOREHOUSE MINING CORP.

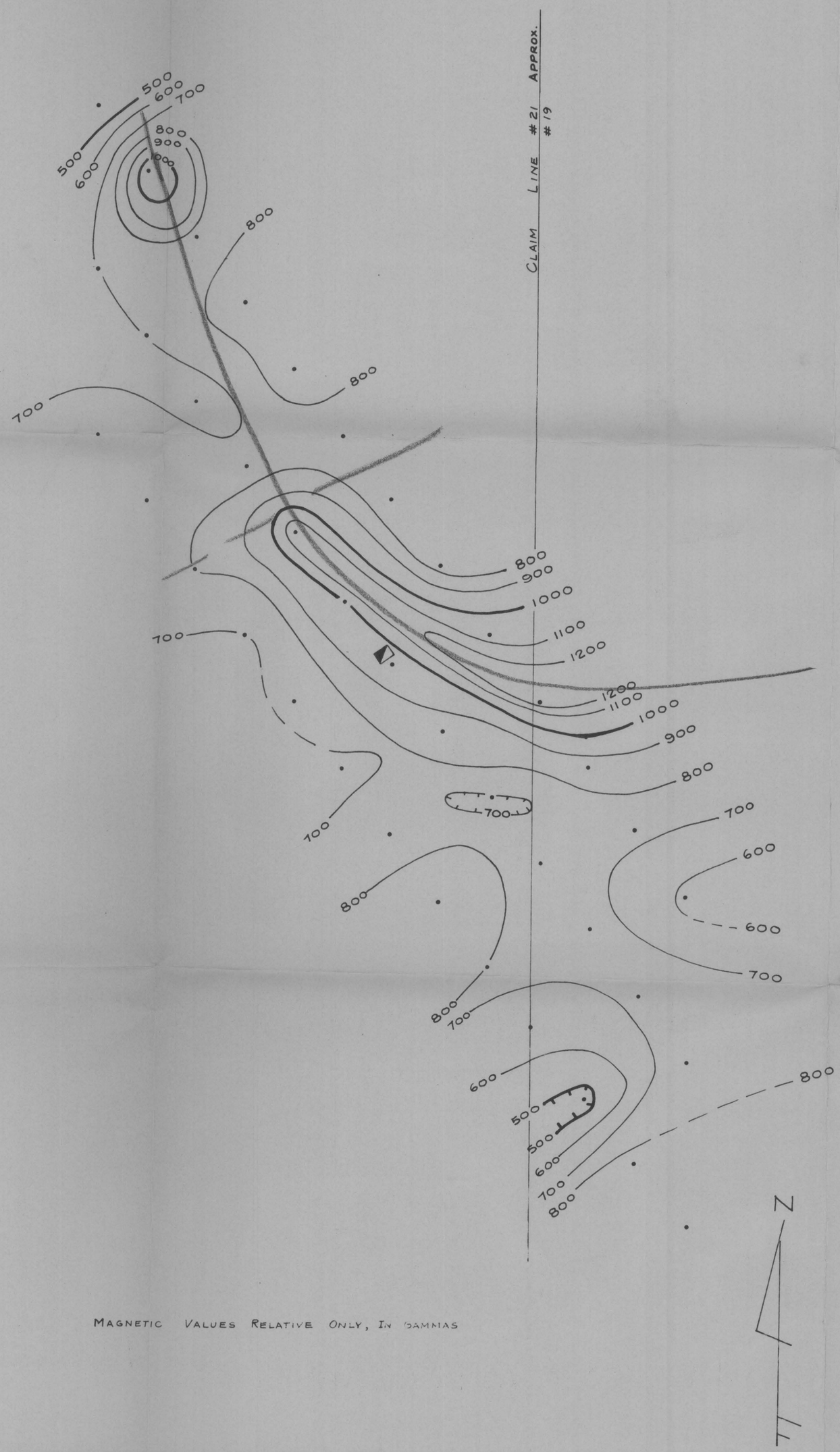
LINE BOY AREA
SANTA CRUZ COUNTY, ARIZ.

SCALE: 1" = 50'	CONTOUR INTERVAL: 200 γ	REVISIONS
	DATA BY: D. A.	
DATE: OCT. 1964	SHEET 3 OF 4	
DRAWN BY: lb	DRAWING NO.:	FILE:



Preliminary

HEINRICHS GEOEXPLORATION COMPANY P.O. Box 5671 Tucson, Arizona		
HAND MAGNETIC SURVEY (VERTICAL INTENSITY) FOR CHAPMAN MOOREHOUSE MINING CORP		
LINE BOY AREA SANTA CRUZ COUNTY, ARIZ.		
SCALE: 1" = 50'	CONTOUR INTERVAL: 200 γ	REVISIONS
	DATA BY: D. A.	
DATE: OCT. 1964	SHEET OF	
DRAWN BY:	DRAWING NO.:	FILE:



MAGNETIC VALUES RELATIVE ONLY, IN GAMMAS

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

HAND MAGNETIC SURVEY
(VERTICAL INTENSITY)
FOR
CHAPMAN - MOREHOUSE MINING CORP.

VILLY SHAFT AREA
RUBARB GROUP
SANTA CRUZ COUNTY, ARIZ.

SCALE: 1" = 50'	CONTOUR INTERVAL: 100 γ	REVISIONS
	DATA BY: D. A.	
DATE: OCT. 1964	SHEET 2 OF 4	
DRAWN BY: lb	DRAWING NO.:	FILE:

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

HAND MAGNETIC SURVEY
(VERTICAL INTENSITY)
FOR
CHAPMAN – MOREHOUSE MINING CORP

RUBARB GROUP
SANTA CRUZ COUNTY, ARIZ.

SCALE: 1" = 200'	CONTOUR INTERVAL: 200 γ	REVISIONS
	DATA BY: D. A.	
DATE: OCT. 1964	SHEET 1 OF 4	
DRAWN BY: lb	DRAWING NO.:	FILE:

NOTES:
⊕ INDICATES DRILL HOLE FOR LOCATION WORK.

Magnetic Location

INDICATES MAGNETIC TRAVERSE
(VERTICAL INTENSITY)

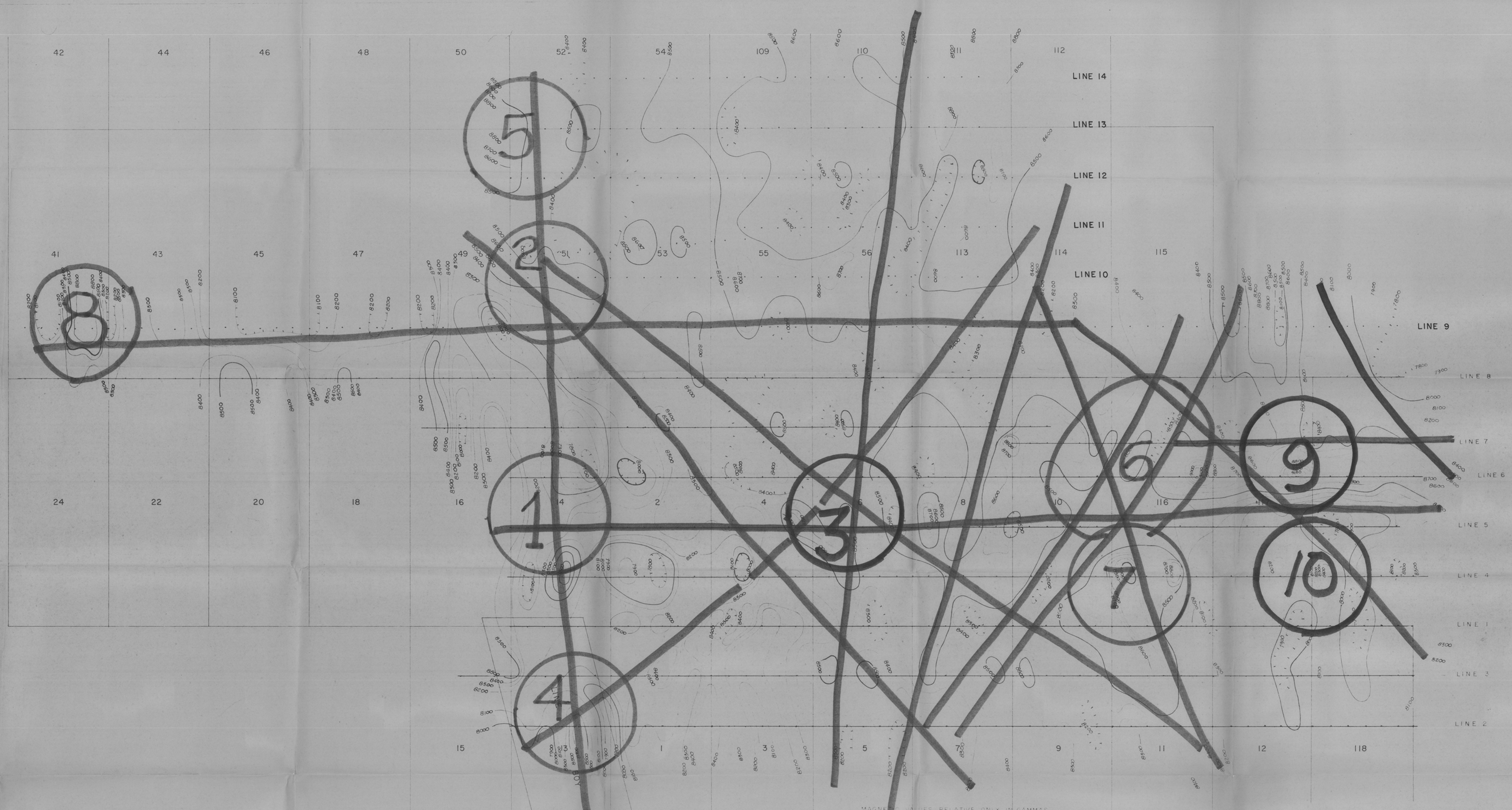
HEINRICHS GEOEXPLORATION COMPANY
P.O. Box 5671 Tucson, Arizona

FOR
CHAPMAN — MOOREHOUSE MINING CORP

RUBARB GROUP

SANTA CRUZ COUNTY, ARIZONA

SCALE: 1" = 500'	CONTOUR INTERVAL:	REVISIONS
	DATA BY:	
DATE: OCT. 1964	SHEET OF	
DRAWN BY: I.B.	DRAWING NO.:	FILE:



1 INDICATES AREA OF LOCAL INTEREST

INDICATES TRENDS

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

HAND MAGNETIC SURVEY
(VERTICAL INTENSITY)
FOR
CHAPMAN – MOREHOUSE MINING CORP.
RUBARB GROUP
SANTA CRUZ COUNTY, ARIZ

SCALE 1" = 200'	CONTOUR INTERVAL 100 G	REVISIONS
	DATA BY D. A.	
DATE NOV. 1964	SHEET 4 OF 4	
DRAWN BY H. R. M.	DRAWING NO.	FILE

ex tra copy

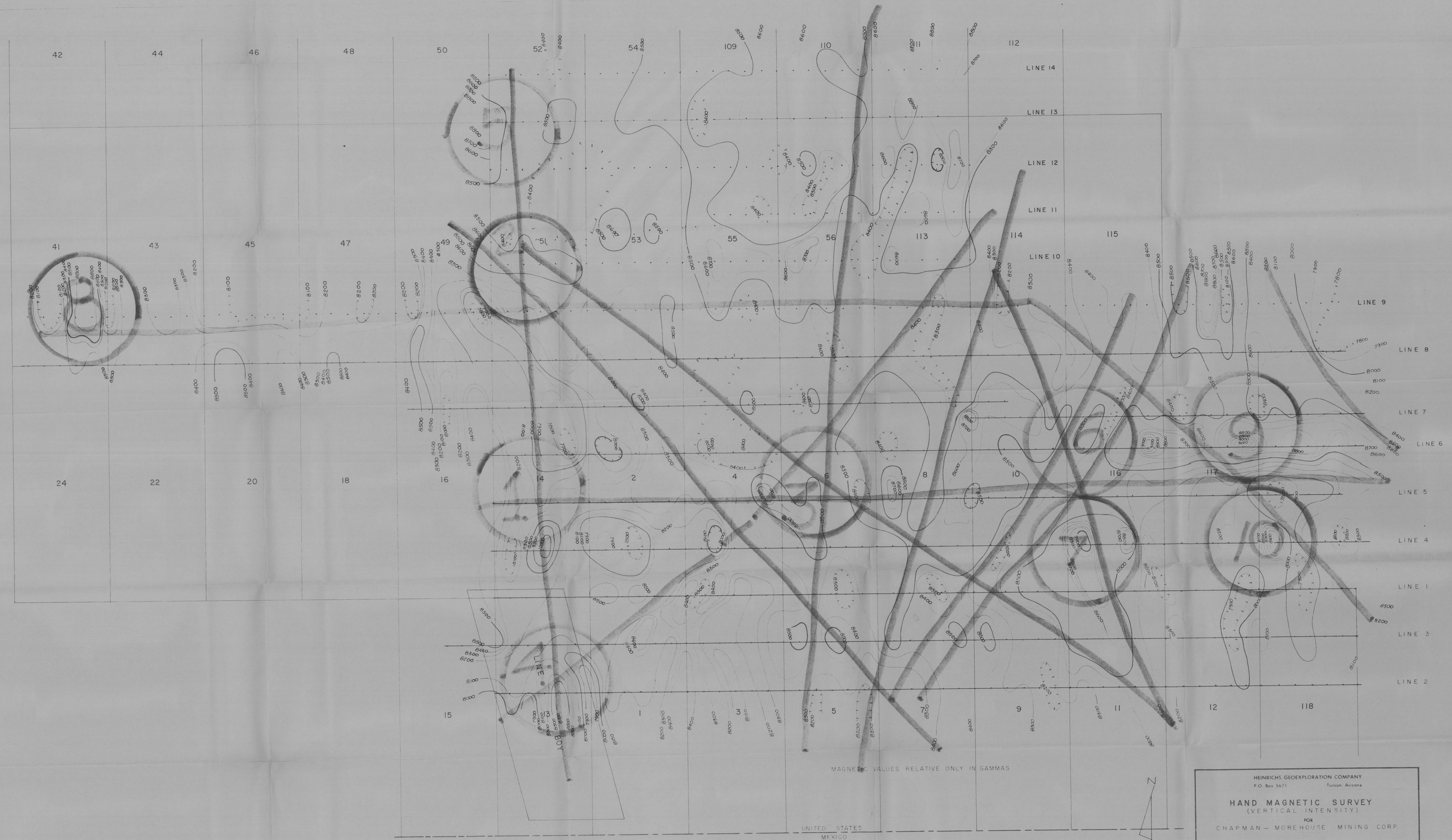
MAGNETIC VALUES RELATIVE ONLY IN GAMMAS

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

HAND MAGNETIC SURVEY
(VERTICAL INTENSITY)
FOR
CHAPMAN – MOREHOUSE MINING CORP

RUBARB GROUP
SANTA CRUZ COUNTY, ARIZ.

SCALE: 1" = 200'	CONTOUR INTERVAL: 200 δ	REVISIONS
	DATA BY D.A.	
DATE: OCT 1964	SHEET 1 OF 4	
DRAWN BY: lb	DRAWING NO.:	FILE:

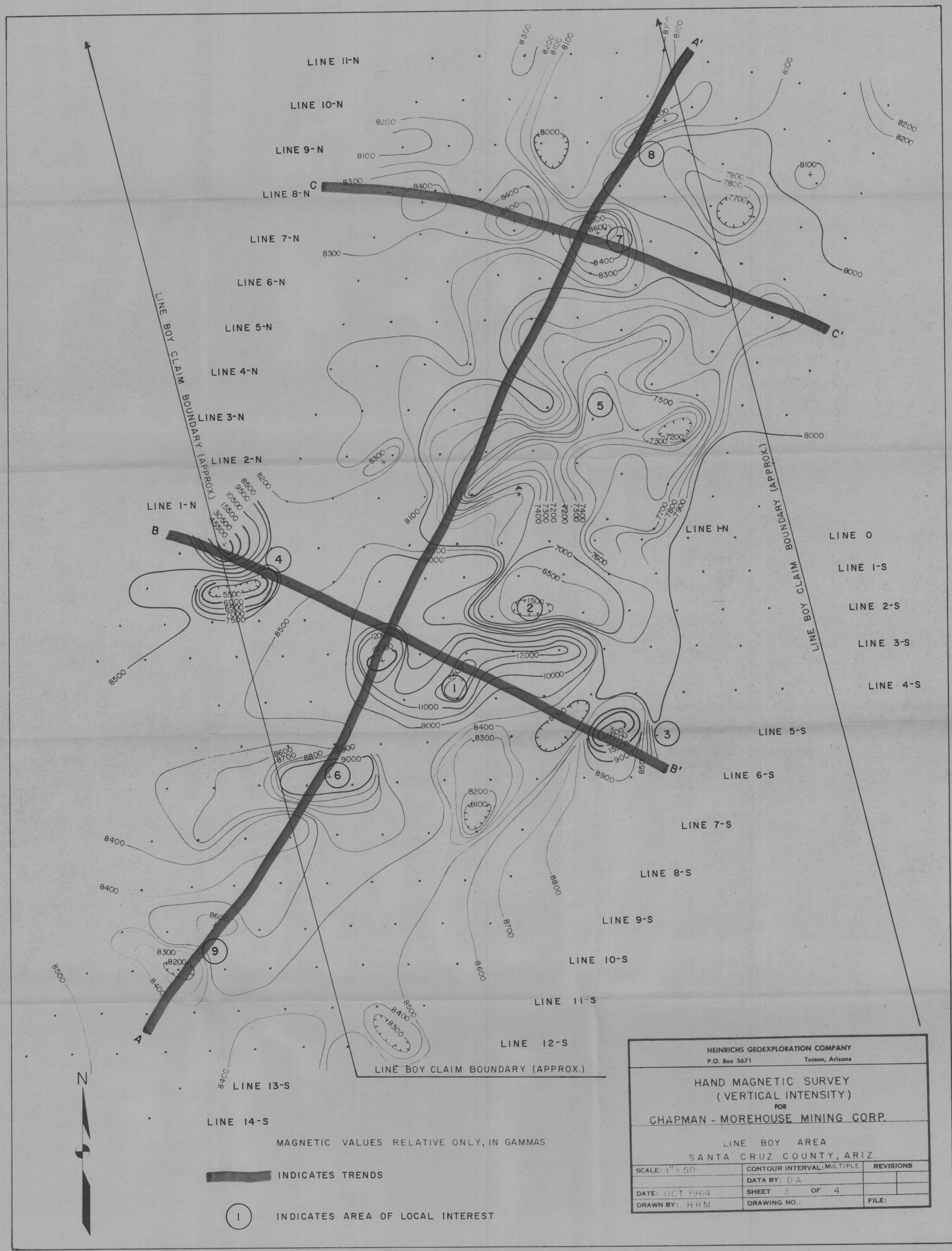


HEINRICHS GEOEXPLORATION COMPANY
P.O. Box 5671 Tucson, Arizona

HAND MAGNETIC SURVEY
(VERTICAL INTENSITY)
FOR
CHAPMAN – MOREHOUSE MINING CORP.

RUBARB GROUP
SANTA CRUZ COUNTY, ARIZ.

SCALE 1" = 200'	CONTOUR INTERVAL 100 γ	REVISIONS
	DATA BY D. A.	
DATE NOV. 1964	SHEET 4 OF 4	
DRAWN BY H R M	DRAWING NO.	FILE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LINE 10-N
LINE 9-N
LINE 8-N
LINE 7-N
LINE 6-N
LINE 5-N
LINE 4-N
LINE 3-N
LINE 2-N
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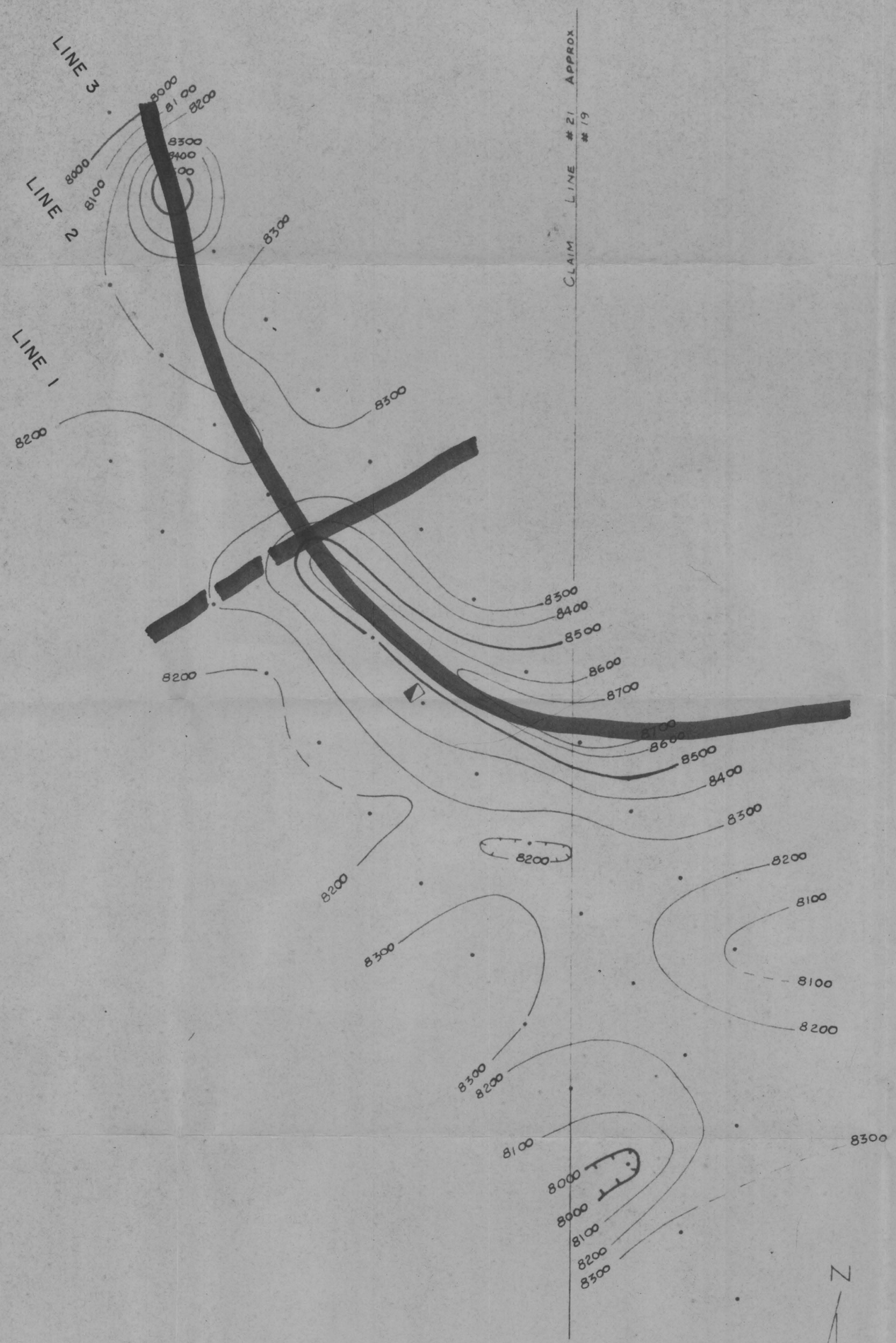
LINE 1-N
LINE 0
LINE 1-S
LINE 2-S
LINE 3-S
LINE 4-S
LINE 5-S
LINE 6-S
LINE 7-S
LINE 8-S
LINE 9-S
LINE 10-S
LINE 11-S
LINE 12-S
LINE 13-S
LINE 14-S
LINE BOY CLAIM BOUNDARY (APPROX.)
LINE BOY CLAIM BOUNDARY (APPROX.)
LINE BOY CLAIM BOUNDARY (APPROX.)
A
A'
B
B'
C
C'
N
MAGNETIC VALUES RELATIVE ONLY, IN GAMMAS
INDICATES TRENDS
INDICATES AREA OF LOCAL INTEREST
HEINRICHS GEOEXPLORATION COMPANY
P.O. Box 5671 Tucson, Arizona
HAND MAGNETIC SURVEY
(VERTICAL INTENSITY)
FOR
CHAPMAN - MOREHOUSE MINING CORP.
LINE BOY AREA
SANTA CRUZ COUNTY, ARIZ.
SCALE: 1" = 50
CONTOUR INTERVAL: MULTIPLE
DATA BY: D A
DATE: OCT 1964
SHEET 3 OF 4
DRAWN BY: H R M
DRAWING NO.:
REVISIONS
FILE:



MAGNETIC VALUES RELATIVE ONLY, IN GAMMAS

[redacted] INDICATES TRENDS

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

HAND MAGNETIC SURVEY
(VERTICAL INTENSITY)
FOR
CHAPMAN - MOREHOUSE MINING CORP

VILLY SHAFT AREA
RUBARB GROUP
SANTA CRUZ COUNTY, ARIZ

SCALE: 1" = 50'	CONTOUR INTERVAL: 100 γ	REVISIONS
	DATA BY: D A	
DATE: OCT 1964	SHEET 2 OF 4	
DRAWN BY: lb	DRAWING NO.:	FILE:

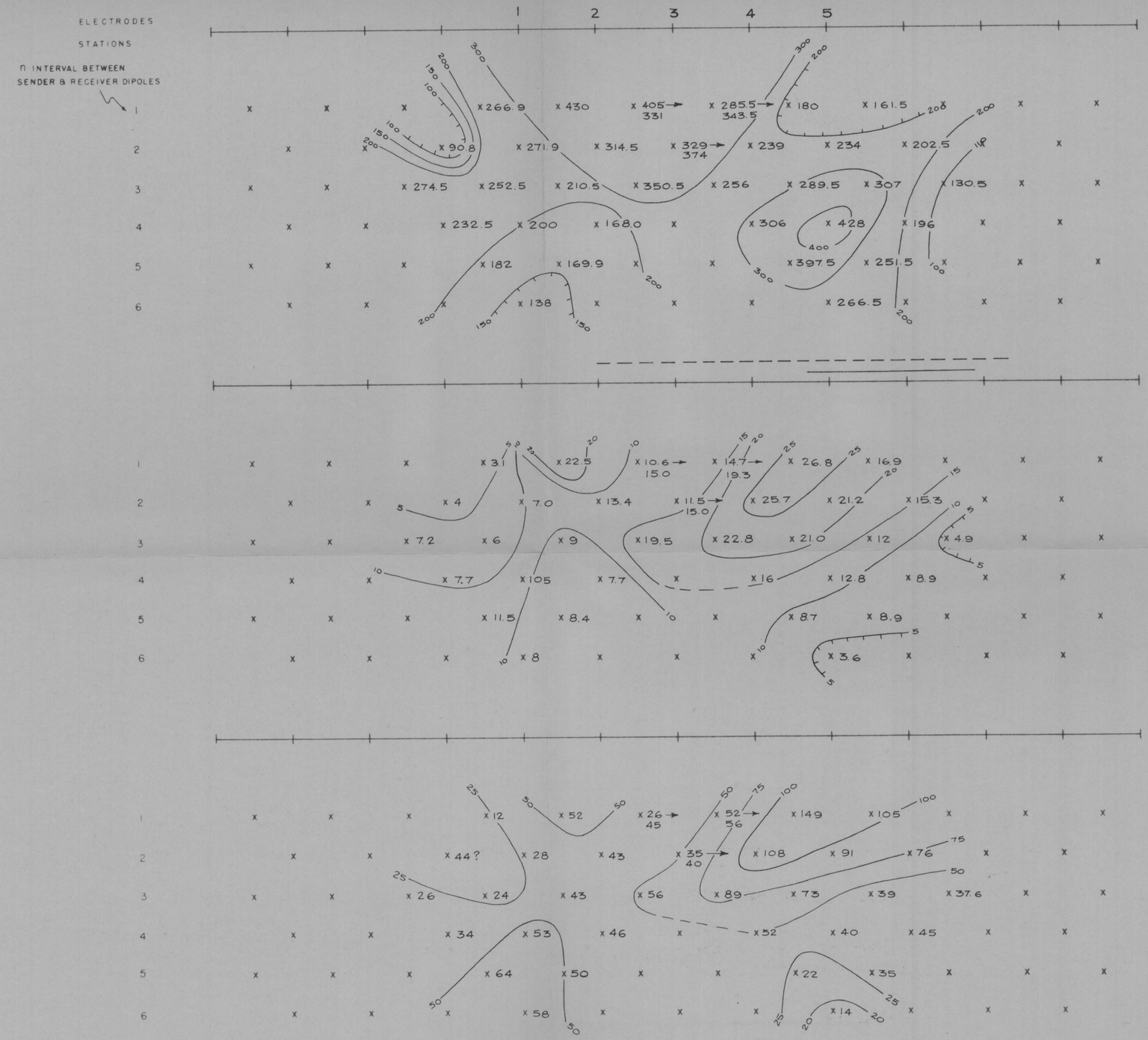
HEINRICHS GEOEXPLORATION COMPANY
P.O. Box 5671 Tucson, Arizona

INDUCED POLARIZATION SURVEY
LOCATION MAP
FOR
CHAPMAN MOORHOUSE MINING CORP

RUBARB GROUP

SANTA CRUZ COUNTY, ARIZONA

SCALE: 1" = 500'	CONTOUR INTERVAL:	REVISIONS
	DATA BY: F. J.	
DATE: DEC 1964	SHEET OF	
DRAWN BY: H.R.M.	DRAWING NO.:	FILE:



EXPLANATION

ELECTRODE ARRAY: 500' — n x 500' — 500'
SENDER DIPOLE — RECEIVER DIPOLE

RELATIVE ANOMALY STRENGTH

VERY WEAK — WEAK — MODERATE — STRONG

LOOKING NORTH

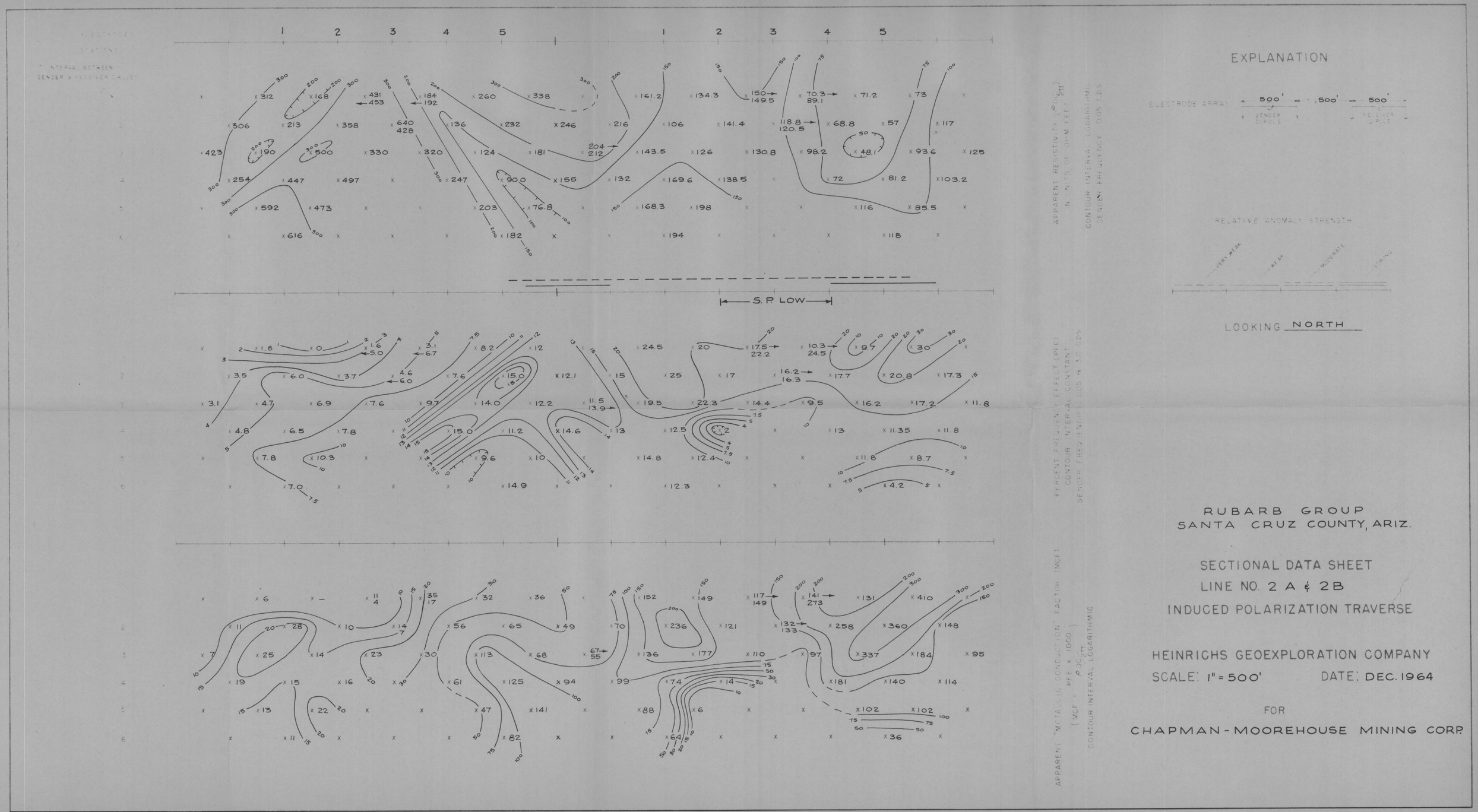
RUBARB GROUP
SANTA CRUZ COUNTY, ARIZ.

SECTIONAL DATA SHEET
LINE NO. 1
INDUCED POLARIZATION TRAVERSE

HEINRICHS GEOEXPLORATION COMPANY
SCALE: 1" = 500' DATE: DEC. 1964

FOR

CHAPMAN-MOOREHOUSE MINING CORP.



RUBARB GROUP
SANTA CRUZ COUNTY, ARIZ.

SECTIONAL DATA SHEET
LINE NO. 2 A & 2B
INDUCED POLARIZATION TRAVERSE

HEINRICHS GEOEXPLORATION COMPANY
SCALE: 1" = 500' DATE: DEC. 1964

FOR
CHAPMAN-MOOREHOUSE MINING CORP.