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ORIGINAL COPR. 1910 BY J. C. PARKER

TRADE MK. REG. U.S. PAT. OFF.

stations

E → W

100' apart

lines

N → S

264' apart

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

Beach
Line A
2/10/66

Sta.	Time	Pol. & Range.	Read.	Rem.
0	12:01	+1	110	base
1	12:02	+1	130	
2	12:03	+1	148	
3	12:04	+1	168	
4	12:05	+1	170	
5	12:06	+1	208	
6	12:07	+1	233	
7	12:08	+1	158	
8	12:09	+1	78	gully (steep sided)
9	12:10	+1	140	
10	12:11	+1	157	
11	12:12	+1	143	
12	12:14	+1	162	
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				

TR. MK. REG. U.S. PAT. OFF.
ORIGINAL COPR. 1910 BY J. C. PARKER
LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Y	Corr	Corr Y
1050	0	1050
1150	0	1150
1370	0	1370
1580	0	1580
1550	0	1550
2050	+1	2051
2100	1	2101
1450	1	1451
880	1	881
1480	2	1482
1580	2	1582
1500	2	1502
1550	3	1553
1420	3	1423
1700	3	1703
1620	4	1624
1250	4	1254
1480	4	1484
1220	4	1224
1400	5	1405
1820	5	1825
1400	6	1406
1400	6	1406
1200	6	1206
1480	7	1487
1620	7	1620
1700	7	1707
1350	7	1357
1550	7	1557
1020	+	1027

Beach
Line A
2/11/66

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

ORIGINAL COPR. 1910 BY A. C. PARKER

Sta.	Time	Pol. Rnge.	Read.	Rem.	Flag.
0	9:16	+1	105	base	
1	9:17	+1	115	wide wash	
2	9:18	+1	137	" "	
3	9:19	+1	158	by stream	
4	9:20	+1	155		
5	9:21	+1	205		
6	9:22	+1	210		
7	9:23	+1	145		
8	9:26	+1	88	gully (steep)	
9	9:28	+1	148		
10	9:30	+1	158	rabbit (running)	
11	9:31	+1	150		
12	9:32	+1	155		
13	9:34	+1	142	prospect (50'N)	
14	9:35	+1	170		
15	9:37	+1	162		
16	9:38	+1	125		
17	9:39	+1	148		
18	9:40	+1	122	gully (steep)	
19	9:43	+1	140		
20	9:46	+1	182	hill top	
21	9:48	+1	140		
22	9:50	+1	140	prospect	
23	9:51	+1	120		
24	9:52	+1	148		
25	9:53	+1	162		
26	9:56	+1	170		
27	9:57	+1	135	Fence	
28	9:59	+1	155 102	(15'E 20)	

LEFAX, PHILA., PHIA 7, PA., MADE IN U.S.A.

	Con	Con
	+19	1289
	19	1299
	19	1369
	18	1388
	18	1368
	18	1218
	18	888
	18	1598
	17	1937
	17	1817
	17	2137
	17	~~2327~~ 2466
	16	1886
	16	1436
	16	1416
	16	1416
	16	1426
	15	1435
	15	1565
	15	1415
	14	1294
	14	1664
	13	1933
	13	1563
	12	1912
	12	1612
	12	1382
	11	1211
	+11	1291
	+20	1050

Beach
Line B
2/11/66

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

Sta.	Time	Pol. Rnge.	Read.	Rem.	Flag
0	10:55	+1	127	stream & gully	–
1	10:54	+1	128		
2	10:52	+1	135		
3	10:51	+1	137		
4	10:50	+1	135		–
5	10:49	+1	120	gully	
6	10:49	+1	87	by stream & gully	
7	10:47	+1	158		
8	10:46	+1	192		
9	10:45	+1	190		
10	10:43	+1	212		
11	10:42	+1	232		
12	10:41	+1	243 187	(20' E #12)	–
13	10:40	+1	148		
14	10:39	+1	140		
15	10:38	+1	140		
16	10:37	+1	141		
17	10:36	+1	142		–
18	10:35	+1	155		
19	10:33	+1	140		
20	10:30	+1	128	Top hill (marker)	
21	10:27	+1	165		
22	10:25	+1	192		
23	10:24	+1	155		
24	10:21	+1	190	top ridge	–
25	10:20	+1	160		
26	10:17	+1	137	Fence	
27	10:15	+1	120		
28	10:12	+1	128		–
A 0	10:58	+1	103	base	–

ORIGINAL COPR. 1910 BY J. C. PARKER
LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

	Cor	Cor 8
	+35	1785
		2105
		1785
		2385
		1985
		1685
from 11:50		1665
to 3:00		1615
108 drift		1555
from -40 to		1485
-30 or add		1435
average		1335
+35		1485
		1165
		1285
		1235
		1155
		1215
		1185
		1185
		1285
		1305
		1335
		1415
		2435
		2435
		1355
		1135
		1185
		1215
		1185
		1045 — 1050

Beach
Line C
2/11/66

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

Sta.	Time	Pol. & Rnge.	Read	Rem.	Flag.
0	11:58	+1	175		
1	11:59	+1	207		
2	12:00	+1	175		
3	12:01	+1	235		—
4	12:02	+1	195		
5	12:03	+1	165		
6	12:04	+1	163		
7	12:05	+1	158		
8	12:06	+1	152		
9	12:07	+1	145		
10	12:08	+1	140		—
11	12:09	+1	130		
12	12:10	+1	145 113	(30' W of 12) prospect	
13	12:11	+1	125		
14	12:12	+1	120		
15	12:13	+1	112	gully	—
16	12:14	+1	118		
17	12:15	+1	115		
18	12:16	+1	115		
19	12:18	+1	125	ridge	—
20	12:20	+1	127		
21	12:22	+1	127		
22	12:23	+1	139		
23	12:25	+1	240	(5' E of 23) gully	
24	12:26	+1	132	Fence	—
25	12:28	+1	110		
26	12:30	+1	115		
27	12:32	+1	118		
28	12:33	+1	115		—
A 0	11:50	+1	101	base	—

ORIGINAL COPR. 1910 BY J. C. PARKER

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

Cour	Cour8
+ 35	1215
	1215
	1185
	1285
	1285
	1215
	1255
	1455
	1255
	1245
	1215
	1155
	1235
	1235
	1215
	1235
	1215
	1215
	1295
	1255
	1355
	1235
	1155
	1155
	1185
	1535
	1265
	1215
	1155

Beach
Line D
2/11/66

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

Sta.	Time	Pol. & Rnge.	Read	Rem.	Flag.
0	1:30	+1	118		—
1	1:29	+1	118		
2	1:28	+1	115		
3	1:27	+1	125		
4	1:26	+1	125		—
5	1:25	+1	118		
6	1:24	+1	122		
7	1:23	+1	142		
8	1:22	+1	122		
9	1:21	+1	121		—
10	1:20	+1	118		
11	1:19	+1	112	prospects	
12	1:17	+1	127		
13	1:16	+1	120		
14	1:15	+1	118		
15	1:14	+1	120		—
16	1:13	+1	118		
17	1:12	+1	118		
18	1:10	+1	126		
19	1:06	+1	122	hill Top	—
20	1:05	+1	132		
21	1:03	+1	120		
22	12:59	+1	112		
23	12:57	+1	112	javalina dung	—
24	12:55	+1	115	stream	
25	12:54	+1	150	Fence	
26	12:53	+1	123		
27	12:52	+1	118	2 javalinas	
28	12:43	+1	112		—

ORIGINAL COPR. 1910 BY J. C. PARKER

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

Low	Cond
+ 35	1105
	1085
	1055
	1055
	1085
	1105
	1085
	1105
	1105
	1085
	1055
	1085
	1485
	1135
	1135
	1115
	1115
	1085
	1065
	1135
	1135
	1105
	1035
	1085
	1285
	1185
	1485
	1235
	1435
	1115

Beach
Line E
2/11/66

Sta.	Time	Pol. & Rnge.	Read.	Rem.	Flag.
0	1:41	+1	107		—
1	1:42	+1	105		
2	1:43	+1	102		
3	1:44	+1	102		
4	1:45	+1	105		
5	1:46	+1	107		—
6	1:47	+1	105		
7	1:48	+1	107		
8	1:49	+1	107		
9	1:50	+1	105	road	—
10	1:51	+1	102	rabbit	
11	1:52	+1	105		
12	1:53	+1	145	prospect	—
13	1:54	+1	110	stream	
14	1:55	+1	110		
15	1:57	+1	108		
16	1:58	+1	108		
17	1:59	+1	105		—
18	2:00	+1	103		
19	2:01	+1	110		
20	2:02	+1	110	hill Top	—
21	2:04	+1	107		
22	2:05	+1	100		
23	2:06	+1	185 125	(30' W of P2) stream	
24	2:07	+1	115		
25	2:08	+1	145	prospect	
26	2:09	+1	120	Fence	
27	2:10	+1	140		
28	2:12	+1	108	doves	—

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ORIGINAL DOPR. 1910 BY J. C. PARKER
LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Con	Comb
+35	955
	935
	985
	955
	915
	915
	955
	885
	915
	935
	955
	1155
	1065
	1005
	995
	965
	985
	1015
	985
	985
	955
	985
	1015
	985
	1215
	1215
	1055
	1075
	1095
	1055

Beach
Line F
8/11/66

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

Sta.	Time	Pol. Rnge.	Read.	Rem.	Flag
0	2:57	+1	92		—
1	2:56	+1	90		
2	2:55	+1	95		
3	2:54	+1	92	dove	—
4	2:53	+1	88		
5	2:52	+1	88		
6	2:51	+1	92		
7	2:50	+1	85	jackalope	
8	2:49	+1	88		
9	2:48	+1	90		
10	2:47	+1	92		
11	2:46	+1	112		—
12	2:45	+1	103		
13	2:44	+1	97		
14	2:43	+1	96		
15	2:42	+1	93.		
16	2:41	+1	95		—
17	2:40	+1	98		
18	2:39	+1	95		
19	2:38	+1	95		
20	2:37	+1	92		
21	2:36	+1	95		
22	2:35	+1	98		—
23	2:34	+1	95		
24	2:33	+1	118		
25	2:32	+1	118		
26	2:31	+1	102		
27	2:30	+1	104	Fence	
28	2:25	+1	106	plane	—
A0	3:00	+1	102	base	—

ORIGINAL COPR. 1910 BY J. C. PARKER

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

White ribbon
starting at 250' W of SABM

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT 372-69

LINE 1 HALF ____ SP. ____ DATE 3/25/6

PAGE 1

SEND										
RECEIVE	0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16	16-18	18-20
RANGE	10	30	30	30	30	30	30	100	30	30
DC 1	890	12.1	88	9.1	13.6	13.2	173	25.3	185	172
DC 2	885	11.2	81	10.3	14.5	14.0	172	26.1	181	180
DC 3	891	12.0	87	9.0	13.6	13.1	173	252	186	171
DC 4	887	11.5	82	10.5	14.7	14.0	173	262	180	171
DC 5	890	11.9	89	8.9	13.4	13.0		259	186	181
DC 6		11.5	79	10.5		14.0		255	180	171
DC 7		12.2	90					258		180
DC 8		11.4	79					256		170
DC AVG.										
AC 1	92	12.0	8.80	10.0	14.6	14.1	17.9	26.5	19.1	18.2
AC 2	91	11.9	8.75	10.0	14.6	14.1	17.9	26.3	19.1	18.2
AC AVG.										
S.P.	+14.6	+15.4	+42.8	-52.6	-1.1	-3.1	+1.8	-7.6	+3.7	+8.3
AC NOISE										
POT. RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT 372-69
LINE 1 HALF ____ SP. ____ DATE 8/25/69

SEND										
RECEIVE	20-22	22-24	24-26		Cal.					
RANGE	30	30	30		300					
DC 1	188	14.5	196		202.					
DC 2	194	151	204		202.					
DC 3	186	143	192		202.					
DC 4	194	152	208		202.					
DC 5	192	143	199							
DC 6	189	152	200							
DC 7	191		197							
DC 8	190		202							
DC AVG.										
AC 1	19.9	15.5	20.8		216.					
AC 2	19.9	15.5	20.8		216.					
AC AVG.										
S.P.	+16.4	-16.3	+1.9							
AC NOISE										
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT 272-69
LINE 1 HALF ____ SP. ____ DATE 3/28/69

PAGE 1

SEND	11:00				11:20	11:25				
RECEIVE	26-28	28-30	30-32	32-34	34-36	36-38		Cal.		
RANGE	30	30	100	100	100	100		300		
DC 1	221	228	380	305	550	930		205		
DC 2	221	226	365	307	531	900		205		
DC 3	221	227	378	305	560	935		204		
DC 4		228	367	307	520	898		205		
DC 5						936		205		
DC 6										
DC 7										
DC 8										
DC AVG.	22.1	22.70	37.22	30.60	54.2	91.65		204.75		
AC 1	21.4	21.9	35.9	29.7	52.7	88.0		20.0		
AC 2	21.4	22.0	35.8	29.8	52.7	87.9		20.0		
AC AVG.	21.4	21.95	35.85	29.75	52.7	87.95		20.0	AC/DC	Cal
S.P.	+24.4	-4.5	+4.7	0.0	+12.0	-5.1			0.977	
AC NOISE	1.4	1.6	2.0	1.0	1.0	2.3			—	use
POT RES.										0.982

Going West 0.0 at East End of line

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT 272-69

LINE 2 HALF ____ SP. ____ DATE 3/26/19

PAGE 1

SEND	Cal.		2:30		2:45	2:50	2:55	3:05	3:10	3:20
RECEIVE		0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16	16-18
RANGE	300	10	30	10	30	30	30	30	30	30
DC 1	204	641	88	931	108	126	158	201	186	277
DC 2	205	643	96	965	115	114	157	209	186	276
DC 3	204	639	85	914	108	126	154	203	186	277
DC 4	205	645	98	983	114	114	159	208	186	277
DC 5	204	625	82	905	107	125	154	205	186	276
DC 6		650	101	940	114	115		208	187	
DC 7		620	79	960	108			206	185	
DC 8				940				206		
DC AVG.										
AC 1	218.	643	9.1	9.8	11.3	12.5	16.2	21.3	19.4	28.7
AC 2	218.	644	9.1	9.7	11.3	12.5	16.2	21.3	19.4	28.6
AC AVG.										
S.P.		-12.4	+25.4	-4.5	+28.5	+23.4	-13.1	+16.6	-1.6	+7.3
AC NOISE										
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT 272-69

LINE 2 HALF ____ SP. ____ DATE 3/26/69

PAGE 2

SEND			3:35	3:40						
RECEIVE	18-20	20-22	22-24	24-26						
RANGE	30	30	30	30						
DC 1	131	146	176	130						
DC 2	132	149	168	126						
DC 3	133	147	177	136						
DC 4	130	147	166	120						
DC 5	135	151	179	143						
DC 6		144	166	131						
DC 7		152	179	126						
DC 8		142	165	135						
DC AVG.										
AC 1	13.6	15.3	18.0	13.4						
AC 2	13.6	15.3	18.0	13.5						
AC AVG.										
S.P.	+1.4	-1.3	+9.6	-5.0						
AC NOISE										
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT 222-69

LINE 2 HALF ____ SP. ____ DATE 3/28/69

PAGE 2

SEND	11:40					12:05				
RECEIVE	38-36	36-34	34-32	32-30	30-28	28-26				
RANGE	100	100	100	100	100	30				
DC 1	720	523	380	315	330	271				
DC 2	730	507	375	306	310	260				
DC 3	715	525	380	319	335	271				
DC 4	734	505	375	302	308	258				
DC 5	712	524			335	272				
DC 6										
DC 7										
DC 8										
DC AVG.	72.38	51.51	37.75	31.12	32.14	26.5				
AC 1	69.4	49.6	36.5	30.0	31.2	25.7				
AC 2	69.5	49.7	36.5	30.1	31.3	25.7				
AC AVG.	69.45	49.65	36.5	30.05	31.25	25.7				
S.P.	0.0	-11.8	-10.6	+5.2	-8.1	-13.0				
AC NOISE	2.3	1.9	1.6	1.7	1.0	1.3				
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT 272-69

LINE 3 HALF ____ SP. ____ DATE 3/27/69

PAGE 1

SEND	2:25	2:35			3:00	3:10	3:20			3:40
RECEIVE	0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16	16-18	18-20
RANGE	10	10	10	30	30	30	30	30	30	
DC 1	700	800	970	940	119	109	193	155	186	105
DC 2	681	795	990	951	121	113	195	148	178	103
DC 3	724	805	990	905	118	107	192	155	189	104
DC 4	660	790	990	980	122	113	197	150	178	105
DC 5	735	818	990	880	118	107	190	153	188	104
DC 6	643	785	1050	990	123	113	200		177	105
DC 7	737	822	980	870	118		190		188	104
DC 8		770	1050	1020					176	
DC AVG.										
AC 1	6.4	7.37	9.15	8.8	11.4	10.7	18.7	14.5	17.3	10.0
AC 2	6.38	7.35	9.23	8.75	11.4	10.7	18.7	14.5	17.3	10.0
AC AVG.										
S.P.	-5.3	+1.5	+25.2	-2.8	+39.7	-14.7	-9.0	-5.3	+7.0	-13.3
AC NOISE			4@ Tank E	6@ Tank W						
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT 272-69

LINE 3 HALF ____ SP. ____ DATE 3/22/69

PAGE 2

SEND	3:45									
RECEIVE	20-22	22-24	24-26			CN				
RANGE	30	30								
DC 1	245	198	104			195				
DC 2	238	186	102			195				
DC 3	245	192	103			195				
DC 4	244	184	100							
DC 5	245	195	98							
DC 6	244	181	106							
DC 7			97							
DC 8			106							
DC AVG.										
AC 1	23.7	18.2	9.9			191.5				
AC 2	23.7	18.2	9.8			191.5				
AC AVG.										
S.P.	-12.9	+45.5	-28.4							
AC NOISE										
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT 272-69
LINE 3 HALF ____ SP. ____ DATE 3/26/69

SEND	4:05		420	4:25						
RECEIVE	26-24	24-22	22-20	20-18	18-16	16-14	14-12	12-10	10-8	8-6
RANGE	30	30	30	30						
DC 1	113	178	255	112						
DC 2	112	171	256	79						
DC 3	112	181	260	112						
DC 4	113	169	252	79						
DC 5	111	183	263	112						
DC 6	114	172	248							
DC 7	110	176	269							
DC 8		173	244							
DC AVG.										
AC 1	11.7	18.2	27.2	Don't						
AC 2	11.7	18.1	27.1	get						
AC AVG.				jet						
S.P.	-50.7	+24.4	+81.1	reading						
AC NOISE				on AC						
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT 272-69

LINE 3 HALF ____ SP. ____ DATE 3/28/69

SEND	2:40		2:50		3:02	3:10				
RECEIVE	26-28	28-30	30-32	32-34	34-36	36-38				
RANGE	30	100	100	100	100	100				
DC 1	170	342	301	363	376	558				
DC 2	177	364	315	352	362	560				
DC 3	170	337	300	361	376	560				
DC 4	177	368	316	357	363	558				
DC 5		335	299			560				
DC 6										
DC 7										
DC 8										
DC AVG.	17.35	35.2	30.78	35.77	36.92	55.93				
AC 1	16.75	34.1	29.9	34.7	35.5	53.8				
AC 2	16.8	34.1	30.0	34.8	35.4	53.7				
AC AVG.	16.78	34.1	29.95	34.75	35.45	53.75				
S.P.	-5.1	+46.2	-7.5	+39.0	+7.9	-50.2				
AC NOISE	1.5	1.4	0.9	1.1	2.3	2.2				
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT 272-69

LINE 4 HALF ____ SP. ____ DATE ____

PAGE 4

SEND	3:25		3:45			4:05				
RECEIVE	38-36	36-34	34-32	32-30	30-28	28-26				
RANGE	100	287	30	30	100	30				
DC 1	410	275	242	254	305	136				
DC 2	423	292	232	245	310	129				
DC 3	411	273	257	256	313	138				
DC 4	424		226	243	295	128				
DC 5	408	(100)	260		325	137				
DC 6			226		287					
DC 7			263		325					
DC 8					287					
DC AVG.	41.7	28.2	24.2	24.98	30.78	13.29				
AC 1	40.3	27.4	25.1	25.3	30.8	13.2				
AC 2	40.3	27.6	25.3	25.4	30.6	13.1				
AC AVG.	40.3	27.5	25.2	25.35	30.7	13.15				
S.P.	+14.3	+48.2	-9.0	+27.3	-36.0	-30.3				
AC NOISE	1.6	0.7	-5.7	-3.2	-1.5	-0.8				
POT RES.										

Going W

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT 272-69
LINE 5 HALF ____ SP. ____ DATE 3/28/69

SEND	4:25					4:55				
RECEIVE	26-28	28-30	30-32	32-34	34-36	36-38				
RANGE	30	30	30	30	30	100				
DC 1	116	184	276	282	231	324				
DC 2	110	180	270	262	236	317				
DC 3	117	180	274	282	232	325				
DC 4	109	184	268	262	240	318				
DC 5	117		277	281	229	325				
DC 6										
DC 7										
DC 8										
DC AVG.	11.31	18.13	27.1	27.19	23.45	32.11				
AC 1	10.8	17.6	26.5	26.3	22.8	30.8				
AC 2	10.9	17.6	26.5	26.3	22.8	30.9				
AC AVG.	10.85	17.6	26.5	26.3	22.8	30.85				
S.P.	+33.3	+14.5	-24.5	+28.3	-38.0	+40.9				
AC NOISE	2.4	1.2	0.9	1.5	1.0	2.2				
POT RES.										

No. 813766

RECEIPT FOR CERTIFIED MAIL—20¢

SENT TO Charles Beach

STREET AND NO. 2133 E. Juanita

CITY, STATE, AND ZIP CODE Tucson, Arizona

POSTMARK OR DATE 7-22-66

If you want a return receipt, check which

☐ *10¢ shows to whom and when delivered*

☐ *35¢ shows to whom, when, and address where delivered*

If you want delivery only to addressee, check here ☐ *50¢ fee*

FEES ADDITIONAL TO 20¢ FEE

POD Form 3800
July 1963

NO INSURANCE COVERAGE PROVIDED—NOT FOR INTERNATIONAL MAIL

(See other side)

1. Stick postage stamps to your article to pay:

BASIC CHARGES
Certified fee—20¢
Postage (first-class or airmail)

OPTIONAL SERVICES
Return receipt (10¢ or 35¢)
Deliver to addressee only—50¢
Special delivery

2. If you want this receipt postmarked, stick the gummed stub on the left portion of the address side of the article, *leaving the receipt attached,* and present the article at a post office service window or hand it to your rural carrier. *(no extra charge)*
3. If you do not want this receipt postmarked, stick the gummed stub on the left portion of the address side of the article, detach and retain the receipt, and mail the article.
4. If you want a return receipt, write the certified-mail number and your name and address on a return receipt card, Form 3811, and attach it to the back of the article by means of the gummed ends. Endorse front of article RETURN RECEIPT REQUESTED. *(Fees—10¢ or 35¢.)*
5. If you want the article delivered only to the addressee, endorse it on the front DELIVER TO ADDRESSEE ONLY. *(Fee—50¢).* Place the same endorsement in line 2 of the return receipt card.
6. Save this receipt and present it if you make inquiry.

☆ GPO: 1963—O-685359

POST OFFICE DEPARTMENT
OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE, $300

POSTMARK OF DELIVERING OFFICE

FEB 23 1966

SPO

INSTRUCTIONS: Fill in items below and complete instructions on other side, if applicable. Moisten gummed ends, attach and hold firmly to back of article. Print on front of article RETURN RECEIPT REQUESTED.

RETURN TO

REGISTERED NO.	NAME OF SENDER HEINRICHS GEOEXPLORATION COMPANY
CERTIFIED NO. 813766	STREET AND NO. OR P. O. BOX 808 W. Grant Road • P. O. Box 5671
INSURED NO.	CITY, STATE, AND ZIP CODE Tucson, Arizona 85703 Phone: (Area 602) 6[illegible]578

POD Form 3811 Sep. 1963

C55—16—71548-6—F

Charles Beach

INSTRUCTIONS TO DELIVERING EMPLOYEE

☐ Deliver *ONLY* to addressee

☐ Show address where delivered

(Additional charges required for these services)

RECEIPT

Received the numbered article described on other side.

SIGNATURE OR NAME OF ADDRESSEE *(must always be filled in)*

Charles Beach

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

L. Snapp

DATE DELIVERED	SHOW WHERE DELIVERED *(only if requested)*
2-23-66	

C55—16—71548-5—F GPO

Beach, Charles P. Estate
P. O. Box 1631
Tucson, Arizona 85702

Attn: Judge Fred Fickett

Re: Arizona State Land Dept. Prospecting Permit, Lease No. 12239 Annual work requirments, Our Job #372-69

Gentlemen:

At the request of Judge Fickett on March 18, 1969, we hereby agreed to conduct certain exploration activities for the benefit of this parcel described as the north half of the southwest quarter plus the southeast quarter of the southwest quarter and the south half of the southeast quarter of T. 18 S., R. 12 E. Section 14, Pima County, Arizona consisting of two hundred acres.

It is agreed that our expenditures in this regard will be at least $2,000.00. We anticipate our crew will be able to initiate work on the premises on or about 20 March 1969, and the field work will be completed no later than Saturday 29 Marbh we would appreciate receiving your advance on account in the amount of $1500.00 immediately, with the $500.00 balance due upon receipt of our report of the work done and delivered to you.

Our statement for this amount is enclosed herewith for your records.

The following items are returned with this letter: Map "Charles P. Beach Property" Scale 4" = 1 mile
Geologic Log - DDH #3 , 10 pages
Beach's Mining Property Map by Dirk DenBaars, Cons. Geol.

Sincerely yours,
HEINRICHS GEOEXPLORATION CO.

WEH:jh

Walter E Heinrichs, Jr., President

Enclosures: as listed

March 20, 1969

S T A T E M E N T

BEACH, Charles P. Estate
P. O. Box 1631
Tucson, Arizona 85702

Our Job No. 372-69

Attn: Judge Fred Fickett

Advance on account, Annual Work Requirements,
Arizona State Land Dept.
Prospecting Permit,
Lease No. 12239

----------$1,500.00

(230) 656

February 24, 1966

Mr. Charles Beach
2153 E. Juanita
Tucson, Arizona

Re: Magnet Survey Report

Dear Mr. Beach:

We have discovered a typing error on the above report which should be corrected asffollows:

First Paragraph, Second line -"Section 15" should read "Section 14"

We are enclosing herewith the map by Dick Den Baars which you had requested be returned upon completion of the project.

Also enclosed is our statement.

Very truly yours,

HEINRICHS GEOEXPLORATION COMPANY

E. Grover Heinrichs, Vice President

pr

Encs:

February 22, 1966

Mr. Charles Beach
2153 E. Juanita
Tucson, Arizona

Re: Magnetic Survey

Dear Mr. Beach:

This is a short letter report on the magnetic survey done at your request on PP 590, N 1/2, SW 1/4, Section ~~15~~ 14, T 18 S, R 12 E, Pima County, Arizona on February 10 and 11, 1966, by Heinrichs Geoexploration Company.

A total of 6 east-west lines, each 2800 feet long, were run by Brunton and pace, using a vertical intensity Jalander fluxgate magnetometer. The lines were 264 feet apart and the station spacing was 100 feet. A base station was located at the northeast corner of the area.

The magnetic data appears to tie in quite well with the Den Baars work; however, this was not done due to limited time. The data was contoured on a 200 gamma interval and is presented in plan on a scale of approximately 1" = 250'.

In general, the magnetics increase to the north, becoming highest in the andesite flow (Ka). The contact between the Ka and Krs shows quite well as an abrupt increase. To the west, the two andesite dikes (TKa) show quite well as highs. A minor, narrow, north-south feature occurs in the center of the area correlating with prospect pits noted in the field and roughly correlating with a NNW fault indicated on the geology. The geologic information for this interpretation came from U.S.G.S. Bulletin 1112, Plate I, and the Geology of the Pima District by J. R. Cooper, et al.

The field work by was done by David Godfrey, Crew Chief and Rex Montierth, Technical Assistant. Data compilation and interpretation by the Geoex staff under the supervision of Chris S. Ludwig, Senior Geophysicist.

Respectfully submitted,

HEINRICHS GEOEXPLORATION COMPANY

Chris S. Ludwig

Chris S. Ludwig
Senior Geophysicist

APPROVED:

Registered Professional Engineer (Mining) CERTIFICATE EXPIRES DEC. 31, 19 WALTER E. HEINRICHS, JR. ARIZONA, U.S.A.

Walter E. Heinrichs, Jr.

Enc: Maps
1 - Sepia, Magnetometer Survey
1 - Blueline, Magnetometer, Survey
Scale: 1"=254'

extra cc of letter

February 11, 1966

Mr. Obed Lassen
State Land Commissioner
Phoenix, Arizona

Re: P.P. #590

Dear Sir:

At the request of Mr. Charles P. Beach, we are sending you the following information:

During the month of February 1966 to date Mr. Charles P. Beach has paidethe Heinrichs Geoexploration Company $327.50 (Three hundred and twenty-seven dollars and fifty cents) for professional services performed on his mining property located in the Twin Butte Mining District in Pima County.

Of this amount, $265.00 (Two hundred and Sixty-five dollars) was for a magnetometer survey to be credited to assessment work on P.P. #590 which he has requested you add to diamond core drilling cost previously reported by him.

Very truly yours,

HEINRICHS GEOEXPLORATION COMPANY

E. Grover Heinrichs
Vice President

EGH:jc

Subscribed to and sworn before me, this 11th day of February 1966.

_____
Notary Public

My commission expires:

Logged 2/8/66
Chris S. Ludwig

HEINRICHS GEOEXPLORATION COMPANY
808 W. Grant Road • P. O. Box 5671
Tucson, Arizona 85703
Phone: (Area 602) 623-0578

HOLE NO. 7
FROM 0 - 243' (Boxes 1 - 27)
ELEVATION
COORDINATES N E
DIRECTION
INCLINATION DEPTH
STARTED COMPLETED

SECTION	COL	GEOLOGY	SURVEY	% CORE RECOVERED	CORE ASSAYS SECTION	CORE ASSAYS CU.	SLUDGE ASSAYS SECTION	SLUDGE ASSAYS CU.
Andesite (or hypabyssal equivalent)	0	Andesite: surface weathered; dendrites of Mn oxides, iron oxides, some calcite all in fractures. Somewhat altered	0	75				
	10	Same as above except poor recovery & more alteration	10'	25				
	14'	Clayey zone (14.5'), possible fault, same rock as above	14' 14.5'	80				
		Relatively unweathered, less fractured andesite, still some Fe & Mn oxides in fractures some calcite. Steep fractures showing some clays & sericite. Fe & Mn oxides decreases with depth. Grain size fairly constant		95+				
	57'	Clay zones at 57' & 59.5' with increased grain size below 57'. Occasional specks of pyrite. Occasional xenoliths of limestone (?) altered to epidote. Pyrite increases with depth (due to less weathering with depth?). One calcite veinlet (1/4") has several chalcopyrite grains. Andesite.	57'	95+				
	78'	At 78' andesite becomes brecciated & contains possible foreign inclusions, more fracturing, increased clay. Grain size variable. Pyrite grains < 0.1%. Some steep shearing.	78'	95+				
	112	Broken zone (fault?) with clay & sericite	112'					
	117	Andesite breccia matrix fine grained with coarse breccia fragments. Scattered grains & veinlets of pyrite & chalcopyrite (<0.1%) clay in fractures with calcite	117'	80				
				95+				
	134	Same as above except breccia fragments (ls?) altered to epidote. Some calcite veinlets with pyrite. Some pyrite veinlets. Pyrite < 0.1%	134'					
				95+				
	170							

HEINRICHS GEOEXPLORATION COMPANY
808 W. Grant Road • P. O. Box 5671
Tucson, Arizona 85703
Phone: (Area 602) 623-0578

Logged 2/8/66 C.S.L.

HOLE NO. 7 continued
FROM
ELEVATION
COORDINATES N E
DIRECTION
INCLINATION DEPTH
STARTED COMPLETED

SECTION	COL	GEOLOGY	SURVEY	% CORE RECOVERED	CORE ASSAYS SECTION	CORE ASSAYS CU.	SLUDGE ASSAYS SECTION	SLUDGE ASSAYS CU.
		170						
	175'	Same as above with increased epidote in matrix and decreased brecciation (or more digestion) still minor pyrite.	175'	95+				
				95+				
	203'	Increased pyrite (1-5% in places) some chalcopyrite (?) should be assayed in case. Sulfides decrease with depth (and increased brecciation) to about 0.5-1% pyrite at bottom. Much epidote. Pyrite occurs as grains & veinlets	203'	95+				
	243	Bottom of hole	243'					

HEINRICHS GEOEXPLORATION COMPANY
608 Grant Road • P. O. Box 5671
Tucson, Arizona 85703
Phone: (Area 602) 623-0578

Logged 2/8/66
Chris S. Ludwig

HOLE NO. 7
FROM 0 - 243' (Boxes 1 - 27)
ELEVATION
COORDINATES N E
DIRECTION
INCLINATION DEPTH
STARTED COMPLETED

SECTION	COL	GEOLOGY	SURVEY	% CORE RECOVERED	CORE ASSAYS SECTION	CORE ASSAYS CU.	SLUDGE ASSAYS SECTION	SLUDGE ASSAYS CU.
Andesite (or hypabyssal equivalent)	0	Andesite: surface weathered; dendrites of Mn oxides, iron oxides, some calcite all in fractures. Somewhat altered	0	75				
	10	Same as above except poor recovery & more alteration	10'	25				
	14'	Clayey zone, possible fault, same rock as above (14.5)	14' / 14.5'	80				
		Relatively unweathered, less fractured andesite, still some Fe & Mn oxides in fractures some calcite. Steep fractures showing some clays & sericite. Fe & Mn oxides decreases with depth. Grain size fairly constant		95+				
	57'	Clay zones at 57' & 59.5' with increased grain size below 57'. Occasional specks of pyrite. Occasional xenoliths of limestone (?) altered to epidote. Pyrite increases with depth (due to less weathering with depth?). One calcite veinlet (1/4") has several chalcopyrite grains. Andesite.	57'	95+				
	78'	At 78' andesite becomes brecciated & contains possible foreign inclusions, more fracturing, increased clay. Grain size variable. Pyrite grains < 0.1%. Some steep shearing.	78'	95+				
	112	Broken zone (fault?) with clay & sericite	112'					
	117	Andesite breccia matrix fine grained with coarse breccia fragments. Scattered grains & veinlets of pyrite & chalcopyrite (<0.1%) clay in fractures with calcite	117'	80 / 95+				
	134	Same as above except breccia fragments (ls?) altered to epidote. Some calcite veinlets with pyrite. Some pyrite veinlets. Pyrite < 0.1%	134'	95+				
	170							

HEINRICHS GEOEXPLORATION COMPANY
308 Grant Road • P. O. Box 5671
Tucson, Arizona 85703
Phone: (Area 602) 623-0578

Logged 2/8/66 C.S.L.

HOLE NO. 7 continued
FROM.
ELEVATION
COORDINATES N E
DIRECTION
INCLINATION DEPTH
STARTED COMPLETED

SECTION	COL	GEOLOGY	SURVEY	% CORE RECOVERED	CORE ASSAYS SECTION	CORE ASSAYS CU.	SLUDGE ASSAYS SECTION	SLUDGE ASSAYS CU.
	170							
	175'	Same as above with increased epidote in matrix and decreased brecciation (or more digestion) still minor pyrite.	175'	95+				
				95+				
	203'	Increased pyrite (1-5% in places) some chalcopyrite (?) should be assayed in case. Sulfides decrease with depth (and increased brecciation) to about 0.5-1% pyrite at bottom. Much epidote. Pyrite occurs as grains & veinlets	203'	95+				
	243	Bottom of hole	243'					

Geologic Log - DDH #3
Beach Property, Pima District, Ariz.
SE¼, Section 14, 11S, R12E

Collar Elevation: Approx. 3400'
Attitude: Vertical
Depth: 1207'
Logged by: S.D. Welch & E.T. O'Malley, Ariz. Dep. of Mines, Jan. 1967

Drilled by: Hatler Bros.
Started: 1963, 1964, 1966
Core Size: Bx and Nx

From	To	Length Drilled	Length Core Recovery	%	Description
0	10.5	10.5'	0	0	Soil, weathered rock
10.5	11.5	1½'	9"	50	Weathered medium gray porphyritic andesite (Spec. at 10.5')
11.5	13	1½'	16"	89	Same, considerable magnetite
13	14	1'	12"	100	Same, broken core
14	15	1'	10"	83	Same
15	16	1'	9"	75	Same
16	18	1'	23"	64	Same
18	19.6	0.6'	5"	72	Same
19.6	21	1.4'	13"	76	Same
21	22	1'	7"	58	Same
22	23	1'	5"	42	Same
23	24	1'	12"	100	Medium gray porphyritic andesite, some agglomerate
24	25.2	1.2'	13"	93	Same
25.2	27	1.8'	21"	96	Same
27	29.7	2.7'	7"	22	Badly broken, FeO on fractures, epidote in included fragments
29.7	30.5	0.8'	9"	90	Same rock
30.5	31	0.5'	4"	67	Same
31	31.5	0.5'	4"	67	Same
31.5	32	0.5'	3"	50	Same
32	34	2'	22"	92	Medium gray porphyritic andesite, epidote
34	36.5	2½'	23"	77	Same
36.5	38	1½'	12"	67	Same
38	40.5	2½'	30"	100	Same
40.5	43.5	3'	36"	100	Same, 2" gouge at 42'
43.5	47	3½'	23"	55	Same, gouge zones
47	54	7'	17"	21	47-49', 48-54' crushed rock and gouge, py (Spec. 48')
54	56	2'	24"	100	Same gouge zone
56	57	1'	7"	58	Broken porphyritic andesite
57	59.5	2½'	29"	97	Same, epidote spots and patches
59.5	63.5	4'	46"	96	Same
63.5	65.5	2'	24"	100	Same, epidote
65.5	71	5½'	65"	100	Same, some partly absorbed fragments, epidote, fine grain py on seams.
71	75	5'	60"	100	Same
75	80	4'	47"	98	Same, some large patches of epidote
80	83	3'	35"	97	Same, less epidote, ghosts of absorbed fragments throughout (Spec. 80.5')
83	86.5	3½'	42"	100	Same, no epidote
86.5	88.5	2'	24"	100	Same
88.5	91.5	3'	30"	100	Same
91.5	95.5	4'	46"	96	Same, scattered epidote, calcite
95.5	97.2	1.7'	20"	100	Same
97.2	101	2.8'	23"	68	Same
101	103.5	2.5'	25"	83	Same, py on irregular seams

Beach Property - DDH #3 (Cont.)

From	To	Length Drilled	Length Core	% Recovery	Description
[illegible]	107	3.5'	40"	95	Same
107	110	3'	36"	100	Medium gray porphyritic andesite, epidote patches, absorbed fragments
110	115.5	5½'	54"	82	Same
115.5	119.5	4'	46"	96	Same, epidote"
119.5	125	5½'	63"	96	Same, py" (Spec. 120.5')
125	127	2'	18"	75	Same, occasional large patch of epidote
127	130	3'	34"	95	Same
130	135	5'	49"	82	Same, epidote"
135	136	1'	12"	100	Same
136	142.5	6½'	73"	94	Same
142.5	144	1½'	16"	100	Same, epidote"
144	147	3'	36"	100	Medium gray porphyritic andesite, spotty epidote, absorbed fragments
147	153	6'	70"	97	Same, py" on seams
153	161.5	8.5'	101"	98	Same
161.5	162	0.5'	5"	83	Same
162	168	6'	70"	97	Same, magnetite"
168	170	2'	23"	96	Same
170	172.2	1.2'	13"	93	Same, epidote patches
172.2	173.5	2.3'	24"	82	Same, strong epidote around edge included absorbed fragment
173.5	181	7½'	75"	83	Same, massive epidote 177.5-178', py on seams (Spec. 181')
[illegible]	182.5	1½'	18"	100	Same, patchy epidote
182.5	186	3½'	42"	100	Same
186	189	3'	25"	69	Same, broken core
189	190.5	1½'	13"	72	Broken medium gray porphyritic andesite, epidote", py" on seams
190.5	195	4½'	50"	93	Same
195	198	3'	36"	100	Same
198	198.5	½'	4"	67	Same
198.5	200	1½'	18"	100	Same
200	204.5	4½'	53"	98	Same
204.5	207	2½'	30"	100	Same
207	214	7'	78"	93	Same
214	217.5	3½'	35"	83	Same
217.5	219	1½'	18"	100	Same
219	222	3'	36"	100	Same
222	225	3'	34"	95	Same
225	226	1'	11"	92	Same
226	234.5	8½'	100"	83	Medium to light gray porphyritic andesite, absorbed fragment, epidote usually in fragments
234.5	235	½'	6"	100	Same
[illegible]	240.5	5½'	62"	94	Same, epidote"
[illegible]	244.5	4'	48"	100	Same
[illegible]	247	2½'	15"	50	Broken, same rock
[illegible]	[illegible]	5'	60"	100	Same rock
[illegible]	251.5	1½'	16"	89	Same, ghosts of absorbed inclusions
[illegible]	253	1½'	52"	96	Lotified medium gray porphyritic andesite, patchy epidote, ghosts of absorbed fragments
253	258	4'	48"	100	Same

Bench Property - DH #3 (Cont.)

From	To	Length Drilled	Length Core	% Rec.	Description
249	253	1'	5"	42	Same
253	256.5	3½'	40"	95	Same
256.5	272.7	6.2'	72"	90	Same, becoming darker with patchy epidote
272.7	278	5.3'	55"	86	Dark porphyritic andesite with lighter absorbed inclusions
278	282	4'	46"	98	Same, epidote and chlorite, few tourmaline xls.
282	283	1'	11"	92	Lighter porphyritic andesite, biotite, chlorite (Spec.283
283	287.5	4½'	51"	95	Same
287.5	291	3½'	42"	100	Same, patchy epidote
291	297	6'	63"	87	Same
297	301	4'	48"	100	Same
301	303	2'	13"	54	Broken, same rock
303	304.5	1½'	18"	100	Same rock, py⁻
304.5	310.5	6'	70"	97	Same
310.5	314.5	4'	48"	100	Same, some py
314.5	319.5	5'	60"	100	Same, panned concentrate shows py and galena⁻
319.5	322	2½'	30"	100	Medium to light gray porphyritic andesite
322	324	2'	21"	88	Same
324	330.5	6½'	73"	94	Same, at 326.5, 2" band of quartz with hornblende, magnetite and epidote
330.5	340	9½'	108"	77	Core reduced to 4x, dark gray porphyritic andesite
340	346	6'	72"	100	Same
346	347	1'	12"	100	Same
347	356	9'	105"	97	Same, some py on fractures 45° to core
356	357	1'	12"	100	Same, epidote, ghost of absorbed fragments with py
357	366	9'	108"	100	Same, (Spec. 365')
366	375	9'	108"	100	Same except more dense and darker
375	385	10'	118"	98	Same, magnetite, one speck of bornite?
385	394	9'	108"	100	Fresh appearing porphyritic andesite with light gray absorbed fragments
394	395	1'	12"	100	Same
395	404	9'	108"	100	Same, 401.5-403' light gray quartz zone with epidote, magnetite, hornblende at 45° to core
404	405	1'	12"	100	Same rock, patchy epidote
405	414	9'	105"	98	Same, py on seams
414	423	9'	108"	100	Same
423	424	1'	12"	100	Medium gray porphyritic andesite, py⁻, epidote⁻
424	432	8'	96"	100	Same
432	434	2'	12"	50	Same, broken
434	438	4'	48"	100	Same, 436-438 badly broken in places, py⁻ on seams
438	443	5'	47"	78	Same
443	449	6'	72"	100	Same
449	451.6	2.6'	27"	87	Same, badly broken and brecciated
451.6	455	3.4'	41"	100	Same
455	457.6	2.6'	15"	48	Shattered porphyritic andesite
457.6	459	1.4'	15"	94	Same (Spec. 457.5')
459	466	7'	73"	87	Same, biotite, magnetite
466	475	9'	101"	86	Same, 471-473' quartz zone w/py, fine grain py in absorb fragments (Spec. 469', 472')
475	483	8'	95"	99	Same, f.g. dissem. py, patchy epidote
483	484	1'	12"	100	Medium gray porphyritic andesite, no py
484	492	7'	84"	100	Same
492	[illegible]	2'	12"	50	Same, broken
[illegible]	[illegible]	3'	36"	100	Same, solid

Bench Property - DDH #3 (Cont.)

From	To	Length Drilled	Length Core Recovery	%	Description
[illegible]	[illegible]	6'	72"	100	Same
[illegible]	[illegible]	2½'	30"	100	Same. Tiny grain py
[illegible]	[illegible]	2½'	17"	56	503.5-503.7' same, 503.7-506' strong propy
[illegible]	[illegible]	[illegible]	60"	100	Medium gray porphyritic andesite, epidote, py
[illegible]	[illegible]	2½'	13"	100	Same but somewhat lighter and larger phenocryst of feldsp
[illegible]	[illegible]	7½'	87"	97	Same
520	[illegible]	1'	12"	100	Medium to light gray porphyritic andesite, epidote, py on seams, some dense beads, few absorbed fragments
521	[illegible]	8'	96"	100	Same
529	[illegible]	1'	12"	100	Same
530	[illegible]	6'	71"	99	Same
536	543.5	7½'	90"	100	Same, fragments fresher
543.5	[illegible]	1½'	18"	100	Same
545	549	4'	48"	100	Same
[illegible]	[illegible]	4'	58"	97	Same
[illegible]	[illegible]	2'	22"	92	Same
556	[illegible]	4'	48"	100	Same, calcite-gypsum on seams, occasional py, talc
560	[illegible]	1'	12"	97	Same
562	[illegible]	2'	24"	100	Same
566	569	3'	36"	100	Same
569	573	4'	48"	100	Same
573	575	2'	24"	100	Same
575	579	4'	46"	96	Same
[illegible]	[illegible]	6'	68"	95	Same
[illegible]	[illegible]	4'	48"	100	Same
593	597	4'	58"	97	Same
597	[illegible]	2'	24"	100	Same, broken 597.5-598.5'
599	[illegible]	6'	72"	100	Same
[illegible]	[illegible]	1'	10"	83	Same
[illegible]	[illegible]	5'	60"	100	Same
[illegible]	[illegible]	3'	36"	100	Same
614	615	1'	8"	67	Medium gray porphyritic andesite, spotty epidote
615	619	4'	43"	90	Same
619	622	3'	30"	83	Same
622	623	1'	4"	33	Same
623	629	6'	61"	85	Same
629	631	2'	24"	100	Same
631	634	3'	22"	63	Same, split core, 631-631', weak mineralization
634	640.5	6½'	65"	83	Same. PP Assay 631-641', 7.6' core, 0.017% Cu
640.5	643	5½'	23"	35	Same
643	648	2'	22"	92	Same
648	649	1'	11"	92	Same. PP Assay 641-651', 8.3' core, 0.017% Cu
649	652	3'	30"	83	Same, strong silicification, alteration, py
652	653	1'	12"	100	Same, epidote
653	657	4'	12"	25	Same
657	660	3'	21"	67	Same. PP Assay 651-661', 7.0' core, 0.017% Cu
[illegible]	[illegible]	[illegible]	30"	67	Same
[illegible]	[illegible]	1'	12"	100	Same
[illegible]	671	[illegible]	2"	3	Same, PP Assay 661-671', 4.4' core, 0.017% Cu
[illegible]	[illegible]	[illegible]	11"	18	Same, epidote spots
[illegible]	670.6	3.6'	27"	63	Same

Fogoh Property - DDH #3 (Cont.)

From	To	Length Drilled	Length Core Recovery	%	Description
679.6	681.6	2'	22"	96	Same, py, magnetite (2 Specs. 682')
					PD Assay 671-681', 5.7' core, 0.01[illegible]% Cu
					Geochem 681-681', ppm: Cu 75, Zn 55, Pb 1050, Mo 40
681.6	684	2.4'	25"	86	Same
684	686	2'	22"	92	Same
686	692	6'	70"	97	Medium gray porphyritic andesite, very fine grained py, magnetite+, gypsum" (Spec. 687')
					PD Assay 681-691', 10.4' core, 0.026% Cu
692	694	1'	23"	46	Same, altered mineralized zone 693-696', rock crushed
694	696	2'	24"	100	Same, altered mineralized zones 696-698', badly crushed 696-696.5 (Spec. 697')
696	706	8'	96"	100	Same, dark gray to black andesite, less porphyritic, py" on seams, no epidote
					PD Assay 691'-701', 10.1' core, 0.026% Cu
706	707	1'	11"	92	Same
707	716	9'	102"	93	Dense black andesite, epidote", py" on seams
					PD Assay 701'-711', 10.5' core, 0.017% Cu
716	722	6'	71"	98	Same, very fine grained py on seams w/calcite-gypsum"
					PD Assay 711'-721', 10.7' core, 0.010% Cu
722	725	3'	30'	87	Same
725	726	1'	17"	100	Lighter gray altered, slightly porphyritic andesite, qtz, calcite, py
726	730	4'	48"	100	Same, PD Assay 721-731', 10.9' core, 0.017% Cu
					Geochem 681-721', ppm; Cu 60, Zn 55, Pb 120, Mo 28
730	733	3'	34"	95	Same
733	736	3'	36"	100	Same, strongly altered zones and some fragments, dissem. min.
736	741	5'	58"	97	Medium gray, slightly porphyritic andesite, crushed 739-740', altered zones, py on seams (Spec. 739')
					PD Assay 731-741', 10.8' core, 0.016% Cu
741	746	5'	60"	100	Same, somewhat darker
746	750	4'	46"	96	Same, PD Assay 741-751', 10.2' core, 0.017% Cu
750	756	6'	70"	97	Same, very fine grain py
756	759	3'	35"	97	Medium gray, slightly porphyritic andesite, py, epidote
					PD Assay 751-761', 10.4' core, 0.017% Cu
759	766	7'	74"	88	Same 759-763', crushed, gouge, altered, py 763-766'
766	768	2'	20"	83	Light altered zone, sericite, py+ (Spec. 767')
768	775	7'	71"	85	Strongly sericitized, gouge, py+
					PD Assay, 761-771', 10.4' core, 0.010% Cu
775	779	4'	46"	96	Same 775-776', more porphyritic 776-779', py on seams
779	784	5'	58"	97	Same, crushed 782-783'
					PD Assay, 771-781', 10.7' core, 0.026% Cu
					Geochem. 731-781', ppm; Cu 45, Zn 20, Pb 50, Mo 25
784	786	2'	2"	2	Little core, badly altered
786	789	3'	29"	80	Crushed porphyritic andesite, altered, fine grained py
					PD Assay, 781-789', 8.5' core, 0.017% Cu
789	796	7'	61"	73	Dark mottled, slightly porphyritic, fragmental andesite, py+
796	801	5'	60"	100	Same, calcite on seams, py+
					PD Assay, 791-801', 9.4' core, 0.026% Cu
[illegible]	804	3'	35"	98	Same
804	809	5'	100"	95	Same, spotty epidote, py+
					PD Assay, 801-811', 10.6' core, 0.017% Cu
809	811	2'	12"	100	Same

Beach Property - DDH #3 (Cont.)

From	To	Length Drilled	Length Core	% Recovery	Description
814	820	6'	62"	86	Same, some included fragments
820	822	2'	23"	96	Same, magnetite in fractures and in rock PD Assay, 812-821', 10.2' core, 0.037% Cu
822	826	4'	42"	88	Mottled medium to dark gray, slightly porphyritic andesite epidote⁻, py⁻
826	832	6'	65"	85	Same 826-828', altered light tan gray 828-832', gouge⁻, py⁻ PD Assay 821-831', 8.3' core, 0.046% Cu Geochem. 781-831', ppm: Cu 45, Zn 15, Pb 30, Mo 35
832	836	4'	46"	100	Not split, mottled medium gray andesite, epidote⁻, py⁻, silicified zone 833-836', calcite seams
836	840	4'	48"	100	Same
840	843	3'	36"	100	Same, mottled with fragments, calcite seams at 45°
843	848	5'	60"	100	Same
848	849	1'	8"	67	Dense mottled fragmental andesite
849	853	4'	43"	100	Same
853	857	4'	48"	100	Same
857	859	2'	22"	92	Same
859	864	5'	60"	100	Same
864	866	2'	24"	100	Same, gypsum
866	867	1'	10"	83	Same 866-866.5', 866.5 to 867' light gray altered, epidote gypsum
867	870	3'	36"	100	Same light gray altered andesite
870	872	2'	20"	84	Same
872	874	2'	24"	100	Same
874	875	1'	12"	100	Same, calcite-gypsum seams, talc⁺
875	876	1'	12"	100	Mottled medium gray andesite
876	881	5'	38"	63	Same
881	885	4'	48"	100	Same
885	886	1'	9"	75	Same, epidote⁻
886	891	5'	60"	100	Same
891	895	4'	48"	100	Same
895	896	1'	12"	100	Same
896	898	2'	24"	100	Same
898	906	8'	96"	100	Same
906	907	1'	12"	100	Medium gray, slightly porphyritic andesite, py⁻
907	909	2'	24"	100	Same
909	912	3'	25"	69	Same, badly broken in spots
912	915	3'	36"	100	Same
915	920	5'	58"	97	Same, spots of fine grain py
920	923	3'	36"	100	Same
923	924	1'	9"	75	Same, broken core
924	926	2'	24"	100	Same, (Spec. 925')
926	931	5'	60"	100	Light gray, slightly porphyritic andesite, py on seam
931	932	1'	12"	100	Very light gray porphyritic, gradational boundary
932	936	4'	46"	96	Same, mottled, epidote blebs
936	938	2'	24"	100	Same
938	939	1'	12"	100	Same
939	944	5'	56"	97	Same
944	946	2'	24"	100	Same
946	949	3'	34"	95	Same, py, tourmaline on seam
949	952	3'	36"	100	Same, py
952	954	2'	11"	46	Same, broken core

Beach Property - DDH #3 (Cont.)

From	To	Length Drilled	Length Core	% Rec'very	Description
954	957	3'	33"	92	Crushed rock and gouge
957	959	2'	20"	83	957-958' light gray mottled, slightly porphyritic, py⁻; 958-959 dark and dense
959	961	2'	23"	96	Light gray mottled, disseм. fine grain py
961	962	1'	12"	100	Same
962	964	2'	24"	100	Darker mottled andesite
964	965	1'	12"	100	Same
965	966	1'	10"	83	Same
966	970	4'	47"	98	Same
970	975	5'	40"	67	Same, brecciated
975	976	1'	8"	67	Light gray, altered; py⁻; brecciated
976	979	3'	23"	64	Same, brecciated
979	980	1'	12"	100	Same
980	983	3'	36"	100	Same
983	987	4'	36"	75	Light gray, slightly porphyritic andesite, py⁻
987	988	1'	12"	100	Same
988	991	3'	32"	89	Light gray, talcy alteration, calcite, sericite, py⁺ 988-990; 990-991' light gray, slightly porphyritic
991	991.3	0.3'	3"	75	Medium gray porphyritic andesite
991.3	993	1.7'	20"	100	Same
993	994	1'	10"	83	Same
994	996	2'	23"	96	Same
996	998	2'	24"	100	Light to medium gray porphyritic andesite
998	1000	2'	24"	100	Same
1000	1001	1'	12"	100	Same
1001	1003	2'	20"	83	Same
1003	1005	2'	21"	88	Same
1005	1008	3'	33"	92	Light gray porphyritic andesite
1006	1009	3'	15"	42	Silicified med. gray andesite porphyry, epidote, chlorite in seams, specular hematite, cc?, magnetite, calcite on fractures (Sample at 1006) Microscopic- Dissem. py, talc, sericite, calcite, biotite, epidote. No Cu or moly on spectro. Magnetite or hematite not seen in specimen.
1009	1010	1'	12"	100	Same rock, talc and pyrite in 1st 6".
1010	1012	2'	23"	96	Same rock
1012	1013	1'	12"	100	Same rock, strongly silicified
1013	1016	3'	30"	83	Same rock
1016	1019	3'	25"	70	Lighter colored, granitic texture, less talc, py⁻, biotite⁺ some blocks of previous rock
1019	1020.5	1½'	18"	100	Silicified med. gray andesite porphyry, no py, some epidote
1020.5	1023.5	3'	35"	97	Same rock, some granitic zones, py⁻
1023.5	1026	2½'	30"	100	Same rock, py on seams only, moly? (Sample 1025') Microscopic - py, biotite, epidote, chlorite Spectro. - No Cu or Moly.
1026	1031	5'	60"	100	Same rock, brecciated, talc, py on seams with calcite, epidote
1031	1034	3'	29"	81	Same rock, less bx
1034	1036	2'	24"	100	Same rock, strongly silicified, biotite⁻, calcite coating, chlorite⁺, bx
1036	1040	4'	38"	81	Same rock, brecciated, hornblende ghosts, py on fractures
1040	1045	5'	58"	97	Same rock, talc⁺⁺, py⁻
1045	1049	4'	46"	96	Same rock, talc⁺⁺, py⁻

Beach Property - DDH #3 (Cont.)

From	To	Length Drilled	Length Core	% Rec'very	Description
1049	1053	4'	44"	96	Same rock, talc⁺⁺, py⁻
1053	1055	2'	24"	100	Same rock, talc⁺⁺, py⁻, strong calcite on seam
1055	1056	1'	12"	100	Same rock, gouge zone at 1055'
1056	1059.5	3½'	30"	83	Same rock, gouge zone at 1056', py⁻
1059.5	1063	3½'	38"	90	Same rock
1063	1068	5'	60"	100	Same rock
1068	1070	2'	23"	96	Same rock, strong calcite on seams, py⁻, epidote⁻
1070	1071	1'	11"	92	Same rock
1071	1073	2'	23"	96	Same rock, fine bx, calcite seams, epidote⁻
1073	1074	1'	12"	100	Same rock
1074	1078	4'	46"	96	Same rock, py⁻
1078	1080	2'	24"	100	Same rock, py⁻
1080	1083	3'	36"	100	Same rock, py⁻
1083	1086	3'	35"	97	Same rock, disseo. py⁻, py⁻ on fractures, hornblende in veinlets?
1086	1089	3'	35"	97	Same rock
1089	1091	2'	22"	92	Same rock, gouge at 1090.5', epidote blotches
1091	1095	4'	24"	50	Same rock, strong gouge in second half, core lost
1095	1096	1'	12"	100	Same rock, strong gouge with bx.
1096	1098	2'	24"	100	Same rock
1098	1100	2'	24"	100	Same rock
1100	1103	3'	33"	92	Same rock
1103	1106	3'	36"	100	Same rock, black tourmaline rosettes, ferromg laths
1106	1109	3'	35"	97	Same rock, strong silicification and tourmaline needles 1106-1106.5
1109	1111	2'	22"	92	Same rock, badly brecciated, calcite on seams, py⁻
1111	1113	2'	22"	92	Same rock, badly brecciated, calcite on seams, py⁻
1113	1115	2'	24"	100	Same rock, solid core, less alteration, epidote⁻
1115	1117	2'	----	0	Core missing
1117	1119	2'	22"	92	Silicified med. gray andesite, dense, little alteration, some bx
1119	1121	2'	24"	100	Silicified med. gray andesite, dense, little alteration, some bx
1121	1124	3'	36"	100	Silicified med. gray andesite, epidote⁻, very fine py⁻
1124	1126	2'	24"	100	Silicified porphyritic medium gray andesite (Sample 1125')
1126	1129	3'	30"	83	Silicified, light gray, porphyritic andesite
1129	1134	5'	58"	97	Silicified, light gray, porphyritic andesite, py on seams (Sample at 1133') Microscopic - Talc, sericite, py in seams and disseo. Spectro. - No Cu or moly.
1134	1138	4'	47"	98	Silicified, light gray, porphyritic andesite, cp⁻?, cc⁻? (Sample at 1134.5')
1138	1141.5	3½'	30"	75	Silicified, light gray, porphyritic andesite, epidote⁻
1141.5	1145	3½'	32"	80	Same
1145	1149	4'	40"	100	Same, cp⁻?, cc⁻? (Sample at 1147.5')
1149	1154	5'	58"	97	Darker porphyritic, silicified andesite, some bx
1154	1156	2'	24"	100	Same
1156	1159	3'	36"	100	Same w/some epidote, chlorite seams
1159	1161	2'	22"	96	Same
1161	1165	4'	44"	96	Same
1165	1167.5	2½'	42"	100	Same, py on some fractures
1167.5	1173	4½'	51"	95	Same to 1172', then strong qtz vn?, moly⁻?, py⁺ (Samples at 1172, 1173)

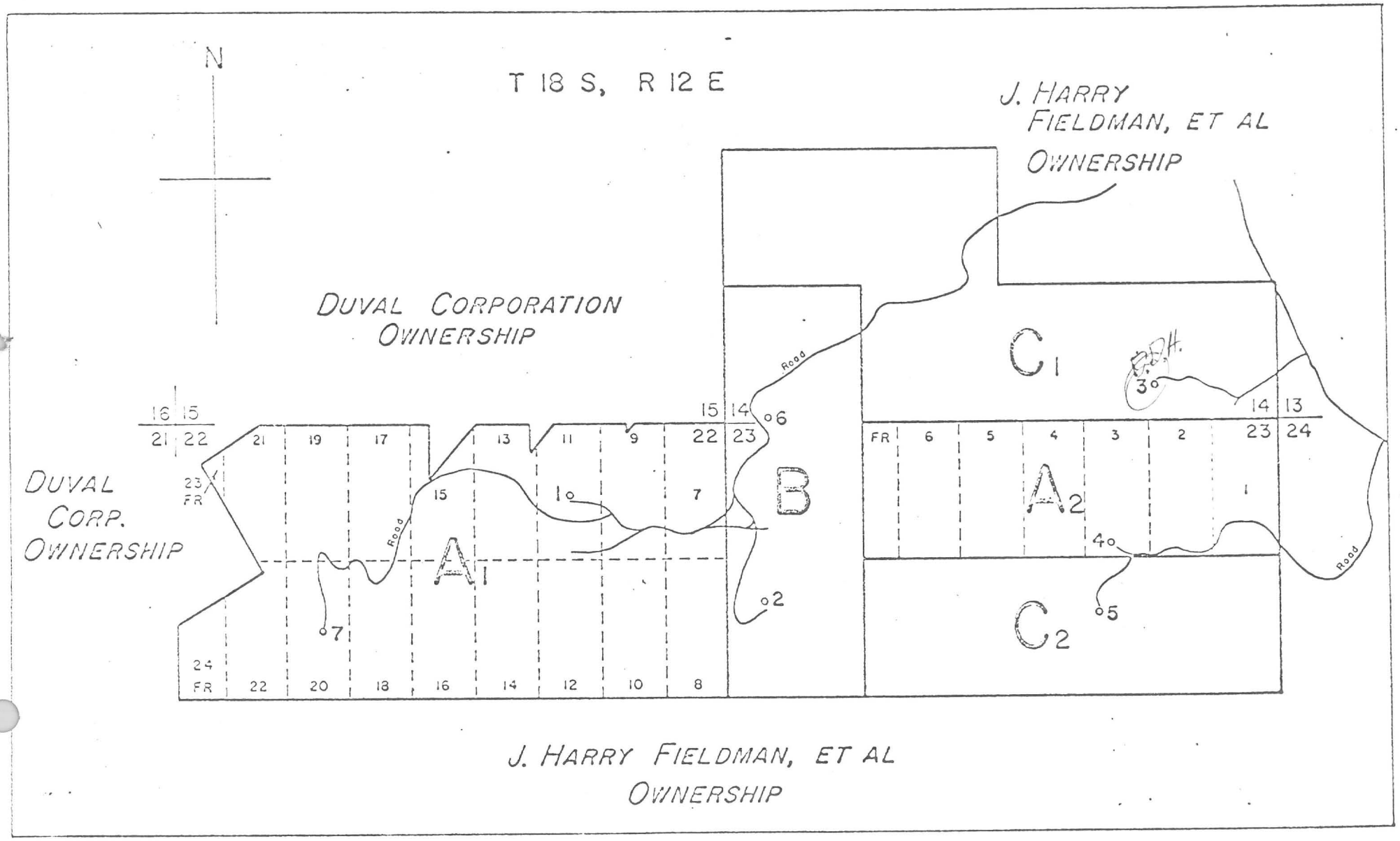
Ranch Property - DDH #3 (Cont.)

From	To	Length Drilled	Length Core	% Recovery	Description
- - - - - - continued - - - - - - - -					Microscopic - (1172') py in seams and dissem. talc, calcite, sericite Spectro. - No Cu or Moly. Same at 1173'
1173	1175	2'	24"	100	Flooded by qtz, moly-?, pyrite+ (Sample at 1175) Microscopic - gray black mineral is marmatite. cp, py, talc. Spectro. - No moly. shows Zn, Cu, Fe.
1175	1180	5'	60"	100	Dense dark andesite porphyry bx, py- on fracture
1180	1183	3'	34"	95	Brecciated dark gray andesite, py+ on fractures
1183	1184.5	1½'	12"	67	Same, strong silicification, py+ on fractures
1184.5	1185	½'	2"	33	Badly brecciated, silicified andesite, py+
1185	1187	2'	24"	100	Brecciated silicified andesite, py- on fractures
1187	1189	2'	24"	100	Dense dark gray andesite, py- only on fractures
1189	1195.5	6½'	78"	100	Dense dark gray andesite, fine dissem. py, bx
1195.5	1198.5	3'	34"	95	Dense dark gray andesite, bx, talc on seams
1198.5	1203	4½'	52"	97	Brecciated lighter gray porphyritic andesite bx, py-
1203	1206	3'	36"	100	Same to 1204.5, then gouge and silicified zones, py+, some py in very fine grained disseminations (Samples at 1205', 1206')
1206	1208.5	2½'	24"	80	Light greenish gray rock, f.g. py, chlorite, talc, sericite (Sample at 1207')
1208.5	1209.5	1'	4"	33	Badly broken light greenish gray rock, py-
1209.5	1212	1½'	14"	78	Broken med. green, finely porphyritic andesite, f.g. biotite, calcite on seams, hematite, talc, sericite, py-
1212	1215.5	2½'	26"	87	Broken med. to dark dense andesite, calcite and py on seams, talc, sericite
1215.5	1215	1½'	14"	78	Same rock, porphyritic streaks with f.g. biotite
1215	1216.5	1½'	17"	95	Dense dark andesite, f.g. biotite, py (Sample at 1216)
1216.5	1220.5	4'	40"	88	Dense slightly porphyritic and brecciated andesite, py and calcite on seams, biotite+ (Sample at 1217.5')
1220.5	1224	3½'	40"	95	Same
1224	1226.5	2½'	24"	80	Dense porphyritic andesite, strong silicification, f.g. py in bands
1226.5	1229	2½'	23"	77	Same
1229	1234	5'	44"	73	Same but more porphyritic (Sample at 1233')
1234	1238	4'	48"	100	Same
1238	1242	4'	34"	71	Same, broken, some dissem. py
1242	1245	3'	25"	70	Same, some bx
1245	1247	2'	24"	100	Same, chlorite, talc, sericite, calcite on seam
1247	1252.5	5½'	35"	38	Same, badly broken, calcite seams
1252.5	1253.5	1'	10"	83	Badly broken, med. dark andesite, gouge?
1253.5	1255.5	2'	23"	96	Same but more porphyritic
1255.5	1258	2½'	25"	83	Same but not as badly broken, py (Sample at 1257.5')
1258	1259	1'	8"	67	Porphyritic dark andesite (Sample at 1259')
1259	1260	1'	4"	33	Silicified andesite (Sample at 1259.5')
1260	1261	1'	5"	42	Badly broken andesite, gouge, py, calcite on seams, talc
1261	1263	2'	10"	42	Gouge, broken andesite fragments, calcite, talc, py
1263	1265	2'	20"	83	Badly broken, dark andesite, py (Sample at 1265')
1265	1266.5	1½'	11"	61	Same rock, py- (Sample at 1266')
1266.5	1268	1½'	5"	33	Badly broken dense dark greenish black andesite, talc,

Beach Property - DDH #3 (Cont.)

From	To	Length Drilled	Length Core	% Recovery	
1268	1268.5	1½'	12"	56	Same rock, biotite evident
1268.5	1271	2½'	23"	77	Lighter grey green, porphyritic, qtz-calcite-py stringers (Spec. at 1271.5')
1271	1274	3'	9"	37	Same rock, talc+, py+ on seams, broken rock
1274	1275	1'	10"	83	Still porphyritic, py and talc on seams
1275	1277	2'	18"	75	Same
1277	1278.5	1½'	4"	22	Same, very little core recovered, balance ground up
1278.5	1280	1½'	11"	61	Same, fine disem. py, less porphyritic, talc+
1280	1282	2'	1¼"	58	Slightly porphyritic, very fine grain dissem. py, talc+, strong silicification, lighter color
1282	1283	1'	4"	33	Light colored, porphyritic andesite, badly broken in drilling
1283	1284	1'	3"	25	Same, changing to darker rock due increase in biotite
1284	1285.5	1½'	2"	11	Recovered fragments indicate dark andesite, very fine grained py+
1285.5	1286	½'	1"	17	Same, py+
1286	1287	1'	2"	17	Badly ground up qtz seam with py and tourmaline (Spec.1287)

End of Hole



CHARLES P. BEACH PROPERTY

Scale 4" = 1 Mile

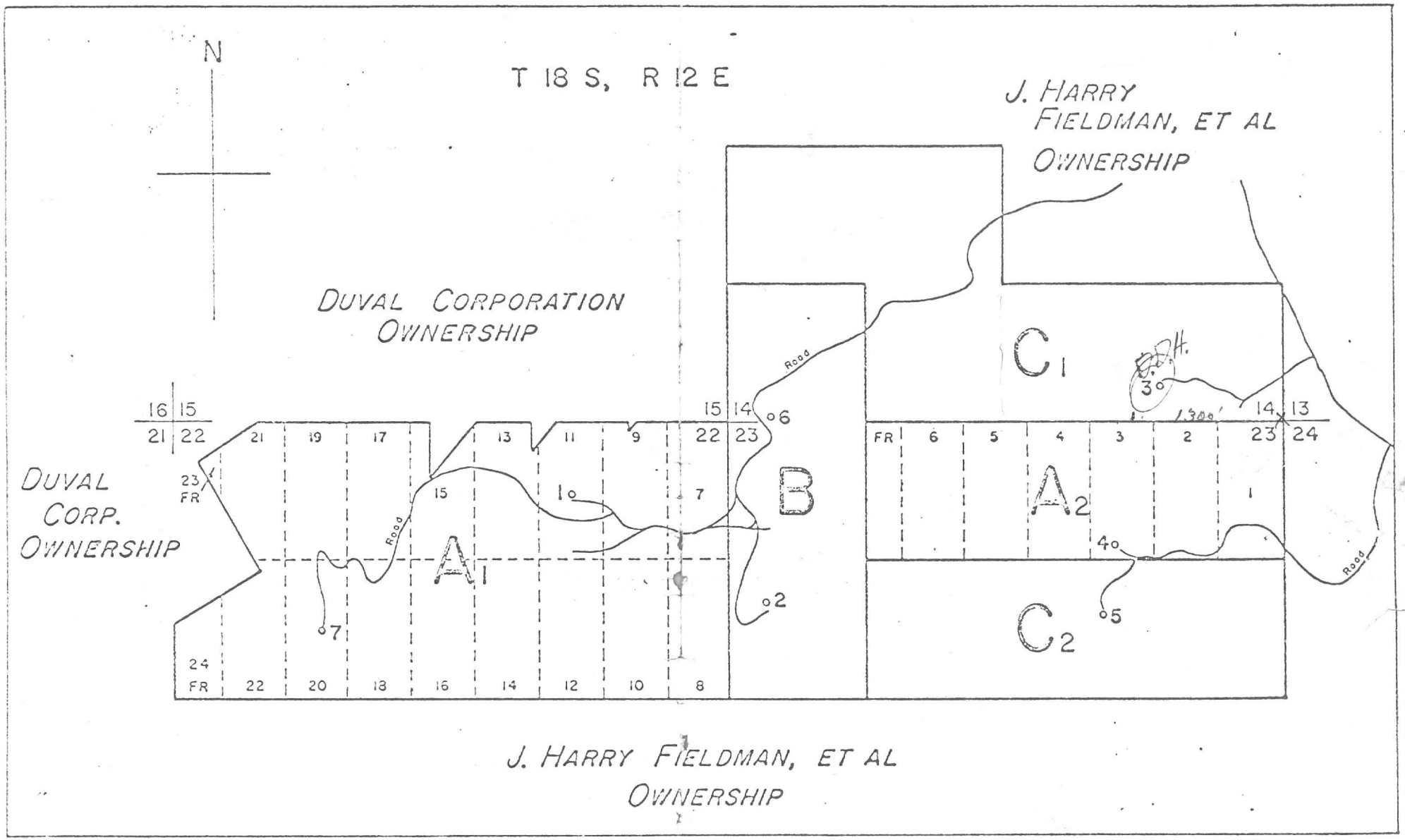
A1 – A2 – Unpatented Lode Claims (Federal)

B – – – – Mineral Lease (State)

C1 – C2 – Prospecting Permits (State)

o – – – – Approx. Drill Hole Locations

Map 2



CHARLES P. BEACH PROPERTY

Scale 4" = 1 Mile

$\frac{285}{4}$ (5280)

A1 – A2 – Unpatented Lode Claims (Federal)

B – – – – – Mineral Lease (State)

C1 – C2 – Prospecting Permits (State)

∘ – – – – Approx. Drill Hole Locations

Map 2

Y=0

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE 2

PROJECT 372-69
LINE 1 HALF ____ SP. ____ DATE 3/25/69

SEND X	.25	.30	.35 = 1000/2000							
RECEIVE	20-22	22-24	24-26		Cal.					
RANGE	30	30	30		300					
DC 1	188	14.5	196		202.					
DC 2	194	151	204		202.					
DC 3	186	143	192		202.					
DC 4	194	152	202		202.					
DC 5	192	143	199							
DC 6	189	152	200							
DC 7	191		197							
DC 8	190		202							
DC AVG.	19.03	14.75	19.93		202					
AC 1	19.9	15.5	20.8		216.					
AC 2	19.9	15.5	20.8		216.					
AC AVG.	19.90	15.5	20.8		216					
S.P.	+16.4	-16.3	+1.9							
AC NOISE	2.3	1.8	2.5	AC/DC cal =		1.069				
POT RES.	.412	.378	.343							
	123 19	88 20	108 23							

PFE
G(X)
Pot/27 mcf

Y=0

White ribbon
starting at 250' W of SABN

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE 1

PROJECT 372-69
LINE 1 HALF ____ SP. ____ DATE 3/25/69

SEND X	1000/2000 = .25	1200/2000 = .20	1500/2000 = .15	.10	.05	.00	.05	.10	.15	.20
RECEIVE	0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16	16-18	18-20
RANGE	10	30	30	20	50	30	30	100	30	30
DC 1	8.90	12.1	8.8	9.1	13.6	13.2	17.3	25.3	18.5	17.2
DC 2	8.85	11.2	8.1	10.3	14.5	14.0	17.2	26.1	18.1	18.0
DC 3	8.91	12.0	8.7	9.0	13.6	13.1	17.3	25.2	18.6	17.1
DC 4	8.87	11.5	8.2	10.5	14.7	14.0	17.3	26.2	18.3	17.1
DC 5	8.70	11.7	8.7	8.9	13.4	13.0		25.9	18.6	18.1
DC 6		11.5	7.9	10.5		14.0		25.5	18.0	17.1
DC 7		12.2	9.0					25.8		18.0
DC 8		11.4	7.9					25.6		17.0
DC AVG.	8.88	11.73	8.433	9.70	14.08	13.54	17.27	25.68	18.31	17.57
AC 1	9.2	12.0	8.9	10.0	14.6	14.1	17.9	26.5	19.1	18.2
AC 2	9.1	11.9	8.75	10.0	14.6	14.1	17.9	26.3	19.1	18.2
AC AVG.	9.15	11.95	8.775	10.0	14.6	14.1	17.9	26.4	19.1	18.2
S.P.	+14.6	+15.4	+42.8	-52.6	-1.1	-3.1	+1.8	-7.6	+3.7	+8.3
AC NOISE	3.8	5.0	2.8	3.7	3.1	2.7	3.2	4.0	2.5	3.2
POT RES.	.412	.442	.467	.483	.494	.500	.494	.483	.467	.492
	58 66	82 61	62 45	74 50	109 28	107 25	134 24	195 21	135 19	122 26

PFE
G(X)
Pot/27 mcf

Y = 330/2000 = 0.0825 = Cal. Weight

0.0 at East End of line

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE 1

PROJECT 272-69
LINE 2 HALF ____ SP. ____ DATE 3/26/69

	Cal.	0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16	16-18	18-20
SEND											
RECEIVE											
RANGE	300	10	30	10	30	30	30	30	30	30	30
DC 1	204	6.41	8.8	9.31	10.8	12.6	15.8	15.7	16.2	16.2	27.7
DC 2	205	6.43	9.6	9.65	11.5	11.4	15.7	15.9	16.6	16.6	22.6
DC 3	204	6.39	8.5	9.74	10.8	12.6	15.4	15.3	16.4	16.4	22.7
DC 4	205	6.45	9.8	9.83	11.4	11.4	15.9	20.3	18.4	18.4	22.7
DC 5	204	6.38	8.2	9.65	10.7	12.5	15.4	20.5	18.6	18.6	22.6
DC 6		6.41	10.1	9.40	11.4	11.5		20.8	18.7		
DC 7		6.40	7.9	9.40	10.8			20.6	18.5		
DC 8				9.40				20.6			
DC AVG.	204.5	6.388	9.09	9.47	11.0	11.99	15.65	20.6	18.61	27.66	
AC 1	217	6.43	9.1	9.8	11.3	12.5	16.2	21.3	19.4	28.7	
AC 2	218.	6.47	9.1	9.7	11.3	12.5	16.2	21.3	19.4	28.6	
AC AVG.	218	6.435	9.10	9.75	11.3	12.50	16.2	21.3	19.40	28.65	
S.P.		-12.4	+25.4	-1.5	+28.5	+22.4	-13.1	+16.6	-1.1	+7.3	
AC NOISE		5.8	6.5	3.5	3.8	2.3	3.0	2.1	2.3	2.9	

G(X)
PFE

PAGE 1

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT 272-69
LINE 3 HALF ____ SP. ____ DATE 3/27/69

SEND	2:25	2:35			3:00	3:10	3:20			3:40
RECEIVE	0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16	16-18	18-20
RANGE	10	10	10	30	30	30	30	30	30	
DC 1	700	800	970	940	119	109	193	155	186	105
DC 2	681	795	990	951	121	113	195	148	178	103
DC 3	724	805	990	905	118	107	192	155	189	104
DC 4	660	790	990	980	122	113	197	150	178	105
DC 5	735	818	990	880	112	107	190	153	188	104
DC 6	643	785	1050	990	123	113	200		177	105
DC 7	737	822	980	870	118		190		188	104
DC 8		770	1050	1020					176	
DC AVG.	6.94	8.00	9.98	9.366	12.01	11.02	19.43	15.18	18.26	10.42
AC 1	6.4	7.37	9.15	8.8	11.4	10.7	18.7	14.5	17.3	10.0
AC 2	6.38	7.35	9.23	8.75	11.4	10.7	18.7	14.5	17.3	10.0
AC AVG.	6.39	7.36	9.19	8.775	11.4	10.70	18.70	14.50	17.30	10.0
S.P.	-5.3	+1.5	+25.2	-2.8	+39.7	-14.7	-9.0	-5.3	+7.0	-13.3
PFE ~~AC NOISE~~	6.7	6.7	~~43.6~~ Tank E	~~62.4~~ Tank W	3.5	1.1	2.0	2.8	3.6	2.3
POT RES.										

PAGE 2

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT 272-69
LINE 3 HALF ____ SP. ____ DATE 3/27/69

SEND	3:45				In office					
RECEIVE	20-22	22-24	24-26		Cal.					
RANGE	30	30								
DC 1	245	188	104		195					
DC 2	238	186	102							
DC 3	245	192	103							
DC 4	244	184	100							
DC 5	245	195	98							
DC 6	244	181	106							
DC 7			97							
DC 8			106							
DC AVG.	24.38	18.83	10.20		195.0					
AC 1	23.7	18.2	9.9		191.5					
AC 2	23.7	18.2	9.8							
AC AVG.	23.70	18.2	9.85		191.5	AC/DC cal =	0.982			
S.P.	-12.9	+45.5	-28.4							
AC NOISE	1.0	1.6	1.7							
POT RES.										

Y = 0.165

PAGE 4

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT 272-69
LINE 3 HALF ____ SP. ____ DATE 3/26/69

SEND										
RECEIVE	6-4	4-2	2-0							
RANGE										
DC 1										
DC 2										
DC 3										
DC 4										
DC 5										
DC 6										
DC 7										
DC 8										
DC AVG.										
AC 1										
AC 2										
AC AVG.										
S.P.										
AC NOISE										
~~POT RES.~~					USED					

PFE

Y = $\frac{660}{4000}$ = 0.165

PAGE 3

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT 272-69
LINE 3 HALF ____ SP. ____ DATE 3/26/69

SEND	4:05		420	4:25						
RECEIVE	26-24	24 22	22-20	20-18	18-16	16-14	14-12	12-10	10-8	8-6
RANGE	30	30	30	30						
DC 1	113	178	255	112						
DC 2	112	171	256	79						
DC 3	112	181	260	112						
DC 4	113	169	252	71						
DC 5	111	183	262	112						
DC 6	114	172	248							
DC 7	110	176	269							
DC 8		175	244							
DC AVG.	11.23	17.50	25.68	9.55						
AC 1	11.7	18.2	27.2	Cut off						
AC 2	11.7	18.1	27.1							
AC AVG.	11.70	18.15	27.15							
S.P.	-50.7	+24.4	+81.1	reading						
AC NOISE				on AC						
~~POT RES.~~	2.3	2.8	0.8							

PFE

5000 ma

I

PAGE 2

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT 272-69
LINE 2 HALF ____ SP. ____ DATE 3/26/69

Y = 0.0825

SEND										
RECEIVE	18-20	20-22	22-24	3:40	3:35	24-26				
RANGE	30	30	30	30	30	30				
DC 1	131	146	176	130	176	130				
DC 2	132	149	168	126	168	126				
DC 3	133	147	177	136	177	136				
DC 4	130	147	166	120	166	120				
DC 5	135	141	177	143	177	143				
DC 6		144	166	131	166	131				
DC 7		152	179	122	179	122				
DC 8		142	165	125	165	125				
DC AVG.	13.2	14.77	17.22	12.96	17.22	12.96				
AC 1	13.6	15.3	18.0	13.4	18.0	13.4				
AC 2	13.6	15.3	18.0	13.5	18.0	13.5				
AC AVG.	13.6	15.3	18.00	13.45	18.00	13.45				
S.P.	+1.4	-1.3	+4.4	-3.0	+4.4	-3.0				
AC NOISE	3.5	2.9	2.0	2.7	2.0	2.7				

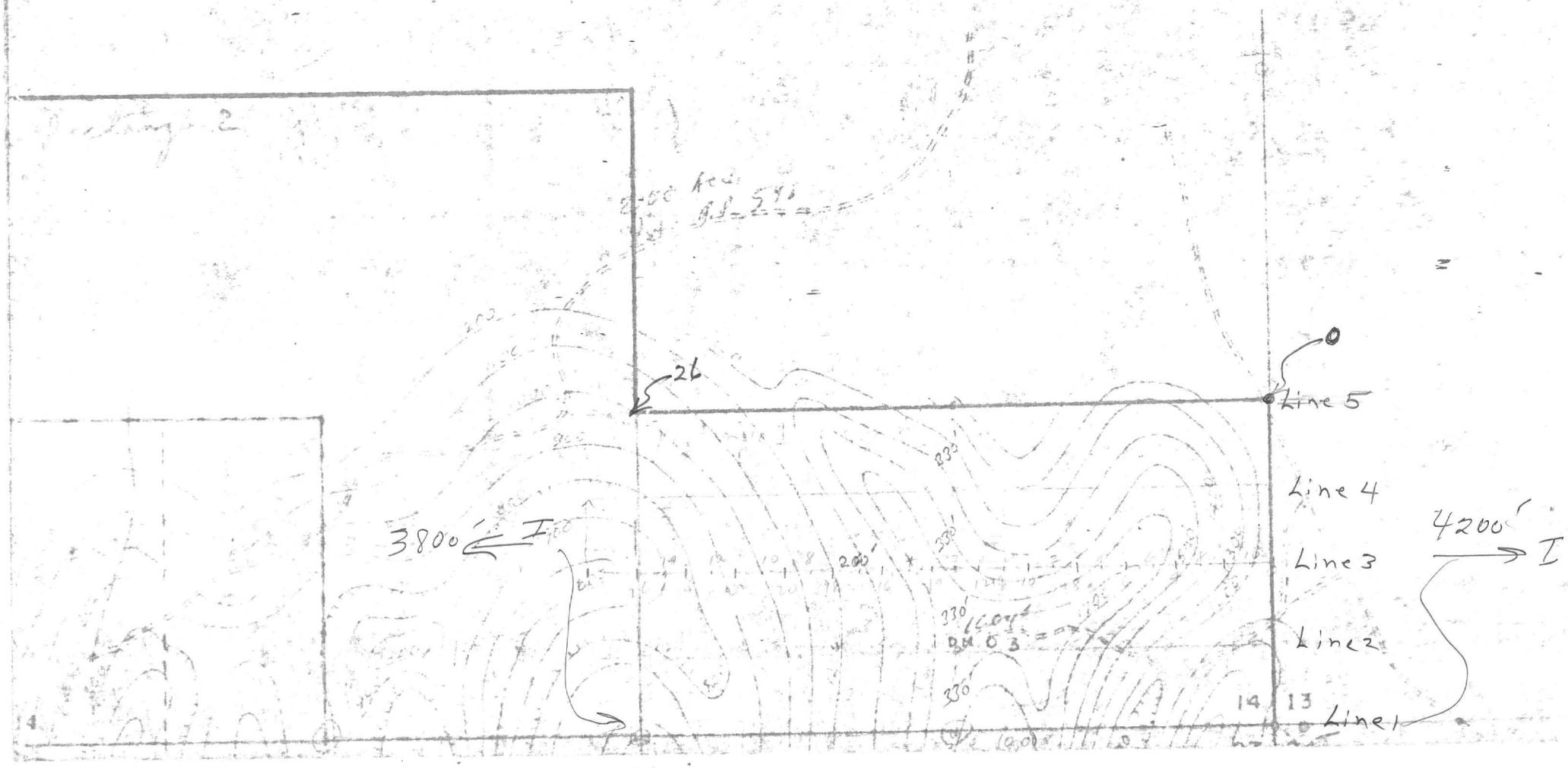
AC/DC Cal = 1.006

PFE

P. BEACH'S MINING PROPERTY,

AL LEASES AND PROSPECT PERMITS

R12E, PIMA COUNTY, ARIZ.



Bench Job Gradient I, P,

$l = 4000'$

$2a = 200'$

$I = 5000$ ma

$$\rho_a/2\pi = \frac{l^2}{2aI}\left[\Delta V\, G(X,Y)\right] = \frac{16{,}000{,}000}{200 \times 5000}\left[\Delta V\, G(X,Y)\right]$$

204.5
202
406.5
$\frac{1}{2}$ 203.00
$\frac{1}{2}$ 203.25

$$\boxed{\rho_a/2\pi = 16\, \Delta V\, G(X,Y)(DC\ Cal)}$$

DC Cal ≈ 0.984

or $\rho_a/2\pi = 15.74\, \Delta V G(X,Y)$

Line 2 $Y = 0.0825$

STA	X	G(X,Y)	V_{DC}	$\rho_a/2\pi$	PFE	MCF
0-2	.25	.418	6.388	42	5.8	138
2-4	.20	.448	9.09	64	6.5	102
4-6	.15	.471	9.47	70	3.5	50
6-8	.10	.489	11.0	85	3.8	45
8-10	.05	.501	11.99	95	2.3	24
10-12	.00	.507	15.65	125	3.0	24
12-14	.05	.501	20.6	162	3.1	19
14-16	.10	.489	18.61	143	2.3	16
16-18	.15	.471	27.66	205	2.9	14
18-20	.20	.448	13.2	93	3.5	38
20-22	.25	.418	19.77	97	2.9	30
22-24	.30	.376	17.22	102	2.0	20
24-26	.35	.349	12.96	71	2.7	38

DC cal 1.006

Line 3 $y = 0.165$

STA	X	G(X, y)	V_{DC}	$e_{DC}/2\pi$	PFE	MCF
0-2	.25	.439	6.94	48	6.7	140
2-4	.20	.465	8.00	59	6.7	114
4-6	.15	.488	9.98	77	6.6	86
6-8	.10	.506	9.366	75	4.8	64
8-10	.05	.517	12.01	98	3.5	36
10-12	.00	.522	11.02	91	1.1	12
12-14	.05	.517	19.43	158	2.0	13
14-16	.10	.506	15.18	121	2.8	23
16-18	.15	.488	18.26	140	3.6	26
18-20	.20	.465	9.55 10.42	70 76 73	— 2.3	30 32
20-22	.25	.439	25.68 24.38	177 168 172	0.8 1.0 0.9	5 6 5
22-24	.30	.407	17.50 18.83	112 121 116	2.8 1.6 2.2	25 13 19
24-26	.35	.372	11.23 10.20	46 60 63	2.3 1.7 2.0	35 28 32

15.74

1.091

.949

1.076

.908

S. P

	Line 1	Line 2	Line 3	Line 4	Line 5
0-2	+ 14.6	-12.4	-5.3		
2-4	+ 30.0	+ 13.0	-3.8		
4-6	+ 72.8	+ 8.5	21.4		
6-8	+ 20.2	+ 37.0	18.6		
8-10	+ 19.1	+ 60.4	58.3		
10-12	+ 16.0	+ 47.3	43.6		
12-14	+ 12.8	+ 63.9	34.6		
14-16	+ 10.2	+ 62.3	29.3		
16-18	+ 13.9	+ 69.6	36.3		
18-20	+ 22.2	+ 71.0	23.0		
20-22	+ 38.6	+ 69.7	10.1		
22-24	+ 22.3	+ 79.3	55.6		
24-26	+ 24.2	+ 74.3	27.2		
26-28	+ 48.6	+ 74.3	+ 22.1	+ 14.3	+ 33.3
28-30	+ 44.1	+ 62.5	+ 68.3	- 33.9	+ 47.8
30-32	+ 48.8	+ 51.9	+ 60.8	- 42.9	+ 23.3
32-34	+ 48.8	+ 57.1	+ 99.8	- 15.6	+ 51.6
34-36	+ 60.8	+ 49.0	+ 107.7	- 51.6	+ 13.6
36-38	+ 55.7	+ 36.0	+ 57.5	- 81.9	+ 54.5

Line 4 $Y = .2475$

	X	$G(XY)$	V_{DC}	$\frac{P_c}{2\pi}$	PFE	MCF
26-28	.40	.372	13.29	78	-0.8	-10
28-30	.45	.338	30.78	163	-1.5	-9.2
30-32	.50	.302	24.98	119	-3.2	-27
32-34	.55	.270	24.2	103	-5.7	-55
34-36	.60	.240	28.2	106	0.7	6.6
36-38	.65	.209	41.7	137	1.6	12

Line 5 $Y = .330$

	X	$G(XY)$	V_{DC}	$\frac{P_c}{2\pi}$	PFE	MCF
26-28	.40	.425	11.31	76	2.4	32
28-30	.45	.396	18.13	113	1.2	11
30-32	.50	.348	27.1	148	0.4	2.7
32-34	.55	.328	27.19	140	1.5	11
34-36	.60	.316	23.45	116	1.0	8.6
36-38	.65	.287	32.11	145	2.2	15

Line 1 — Y = 0
Line 2 — = 0.0825
Line 3 — = 0.165
Line 4 — = 0.2475
Line 5 — = 0.330

$\frac{P}{2\pi}$ = 16 (.982 DC cal) AV G(X,Y)
= 15.712

Line 1 Y = 0.0

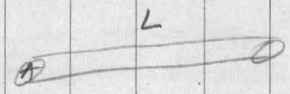
	X	G(X,Y)	V_{DC}	$\frac{P_{DC}}{2\pi}$	PFE	MCF
26-28	.40	.304	22.1	106	1.4	13
28-30	.45	.266	22.70	95	1.6	17
30-32	.50	.225	37.22	132	2.0	15
32-34	.55	.180	30.60	91	1.0	11
34-36	.60	.155	54.2	132	1.0	7.5
36-38	.65	.117	91.65	168	2.3	14

Line 2 Y = .0825

	X	G(X,Y)	V_{DC}	$\frac{P_{DC}}{2\pi}$	PFE	MCF
26-28	.40	.313	26.5	130	1.3	10
28-30	.45	.274	32.14	138	1.0	7.3
30-32	.50	.236	31.12	115	1.7	15
32-34	.55	.196	37.75	116	1.6	14
34-36	.60	.160	51.51	129	1.9	15
36-38	.65	.127	72.38	144	2.3	16

Line 3 Y = .165

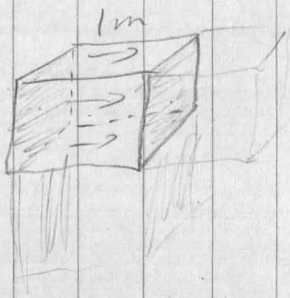
	X	G(X,Y)	V_{DC}	$\frac{P_{DC}}{2\pi}$	PFE	MCF
26-28	.40	.337	17.35	92	1.5	16
28-30	.45	.297	35.2	164	1.4	8.5
30-32	.50	.263	30.78	127	0.9	7.1
32-34	.55	.230	35.77	129	1.1	8.5
34-36	.60	.195	36.92	113	2.3	20
36-38	.65	.156	55.93	137	2.2	16

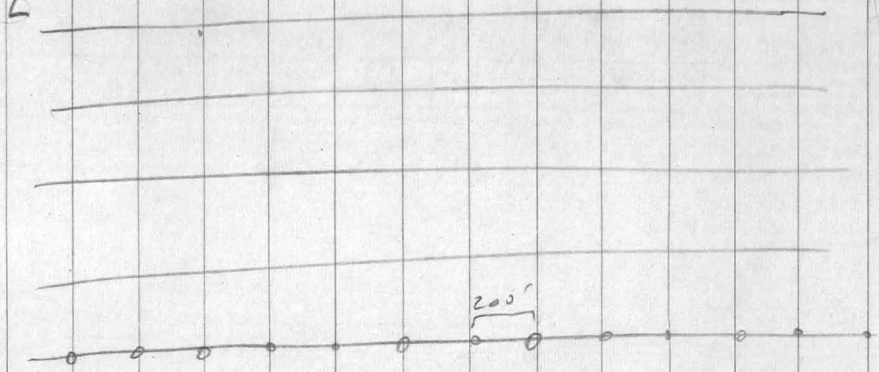


$$R \propto \frac{L}{A}$$

$$R = \rho \frac{L}{A}$$

$$\rho = \frac{R \cdot A}{L}$$





3600

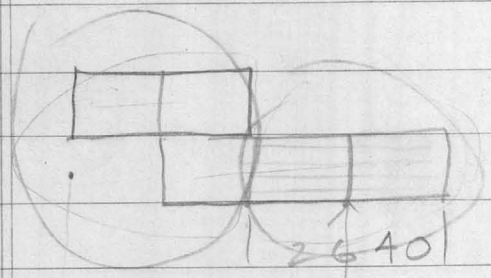
3600

8000

$\frac{5}{16}$ sq mi

3900
2
11700
7800

$\ell/2\pi \sim 40$ km ft andesites



16,000

$$\Delta V \simeq \frac{4a\,I}{\ell^2}\cdot\left(\frac{\ell a}{2\pi}\right)$$

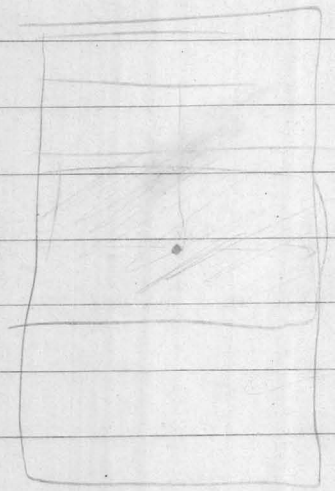
$8000' = 2\ell$

$\ell = 4000'$

$4a = I = 4000$ mm

$2a = 200'$

$$\Delta V \simeq \frac{8000\,(2a)}{16{,}000}\,(4p) = \frac{2a}{50} \rightarrow 4\text{ mm}$$



330
4)1320

14000
5

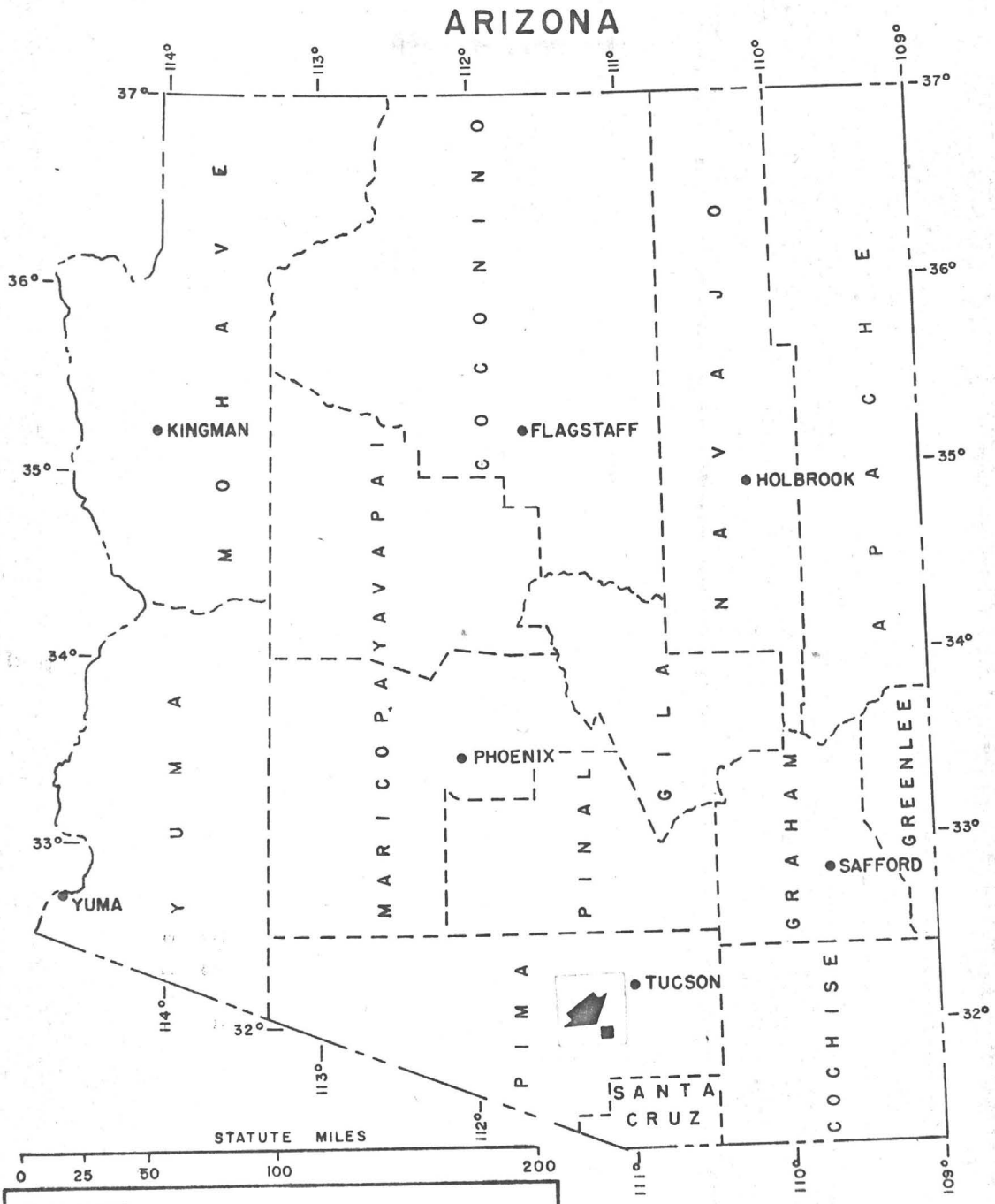
70

GENERAL LOCATION

INDUCED POLARIZATION SURVEY (GRADIENT ARRAY)
C. P. BEACH'S MINING PROPERTY - PIMA CO., ARIZONA

FOR

BEACH, CHARLES P. (ESTATE OF)
MARCH 1969



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GEOEXPLORATION COMPANY

BOX 5671 TUCSON, ARIZONA 85703
PH: 602/623-0578 CABLE: GEOEX, TUCSON

GEOPHYSICAL ENGINEERS SYDNEY VANCOUVER

T 18 S, R 12 E

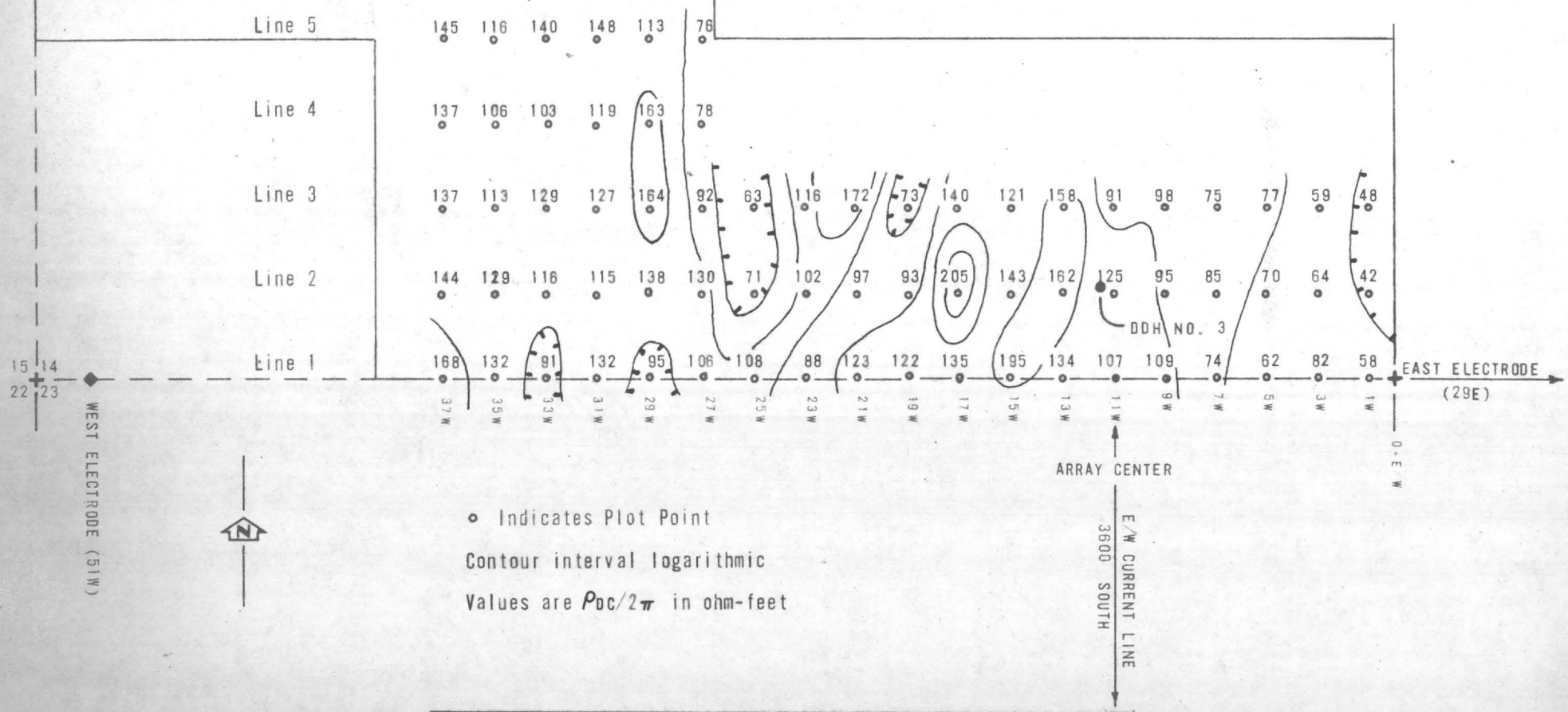
GRADIENT ARRAY INDUCED POLARIZATION LOCATION & INTERPRETATION PLAN (RESISTIVITY)

OF

C. P. BEACH'S MINING PROPERTY
PIMA COUNTY, ARIZONA
STATE PROSPECTING PERMIT LEASE NO. 12239

FOR

BEACH, CHARLES P. (ESTATE OF)



○ Indicates Plot Point

Contour interval logarithmic

Values are $\rho_{DC}/2\pi$ in ohm-feet

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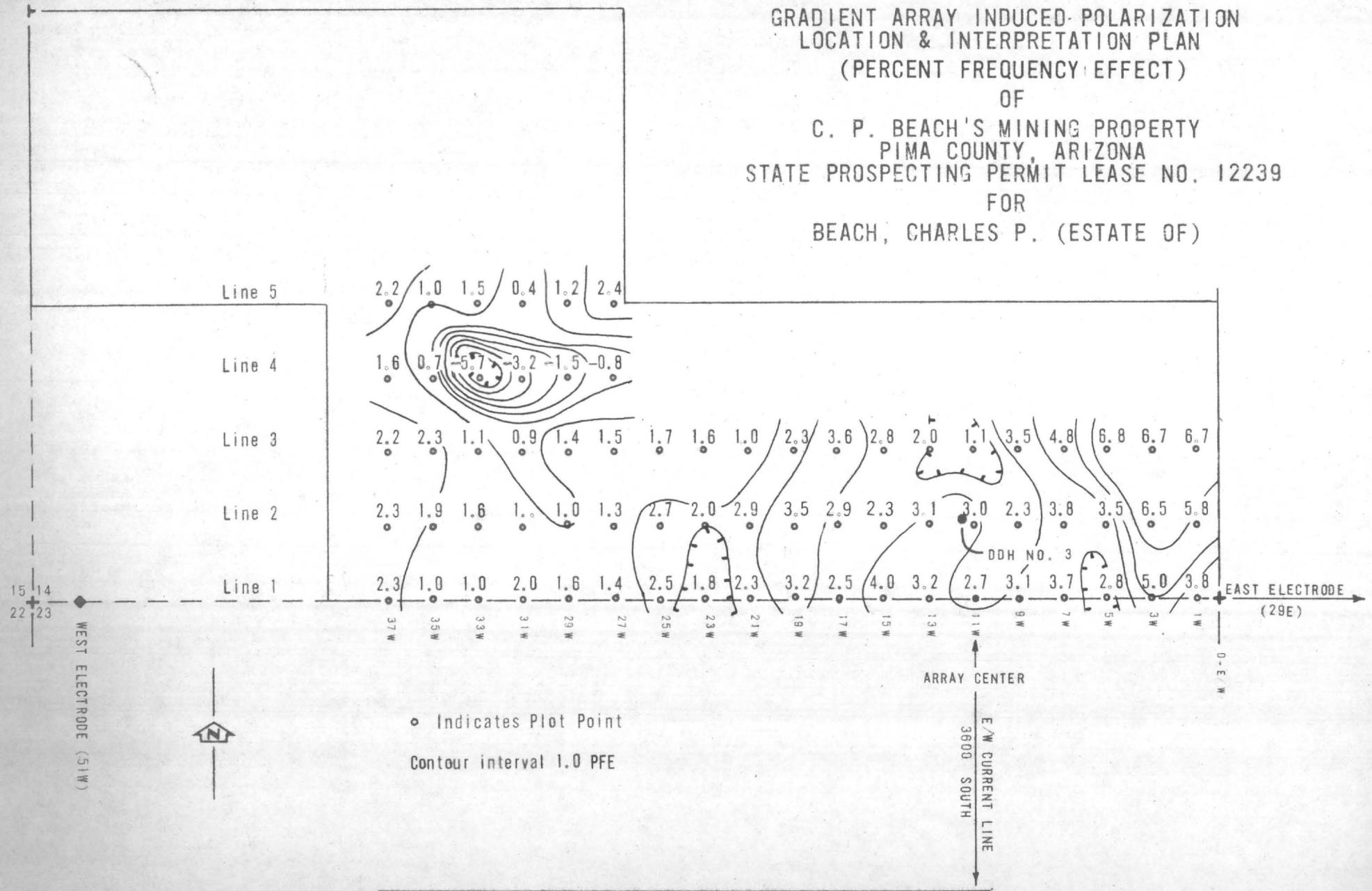
geophysical engineers
vancouver
sydney

MARCH 1969

SCALE: 1" = 600'

T 18 S, R 12 E

GRADIENT ARRAY INDUCED POLARIZATION LOCATION & INTERPRETATION PLAN (PERCENT FREQUENCY EFFECT) OF C. P. BEACH'S MINING PROPERTY PIMA COUNTY, ARIZONA STATE PROSPECTING PERMIT LEASE NO. 12239 FOR BEACH, CHARLES P. (ESTATE OF)



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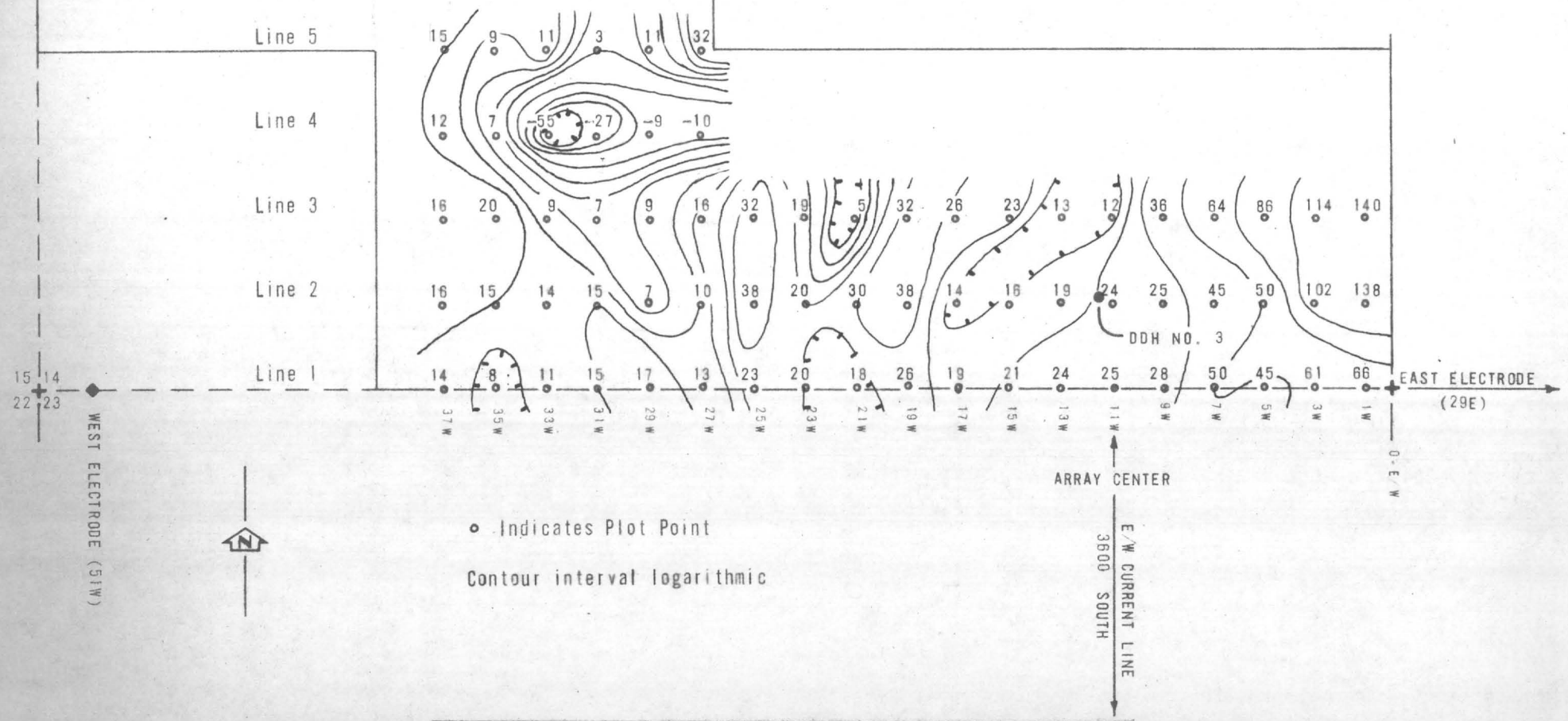
MARCH 1969

SCALE: 1" = 600'

T 18 S, R 12 E

GRADIENT ARRAY INDUCED POLARIZATION LOCATION & INTERPRETATION PLAN (METALLIC CONDUCTION FACTOR) OF C. P. BEACH'S MINING PROPERTY PIMA COUNTY, ARIZONA STATE PROSPECTING PERMIT LEASE NO. 12239 FOR BEACH, CHARLES P. (ESTATE OF)



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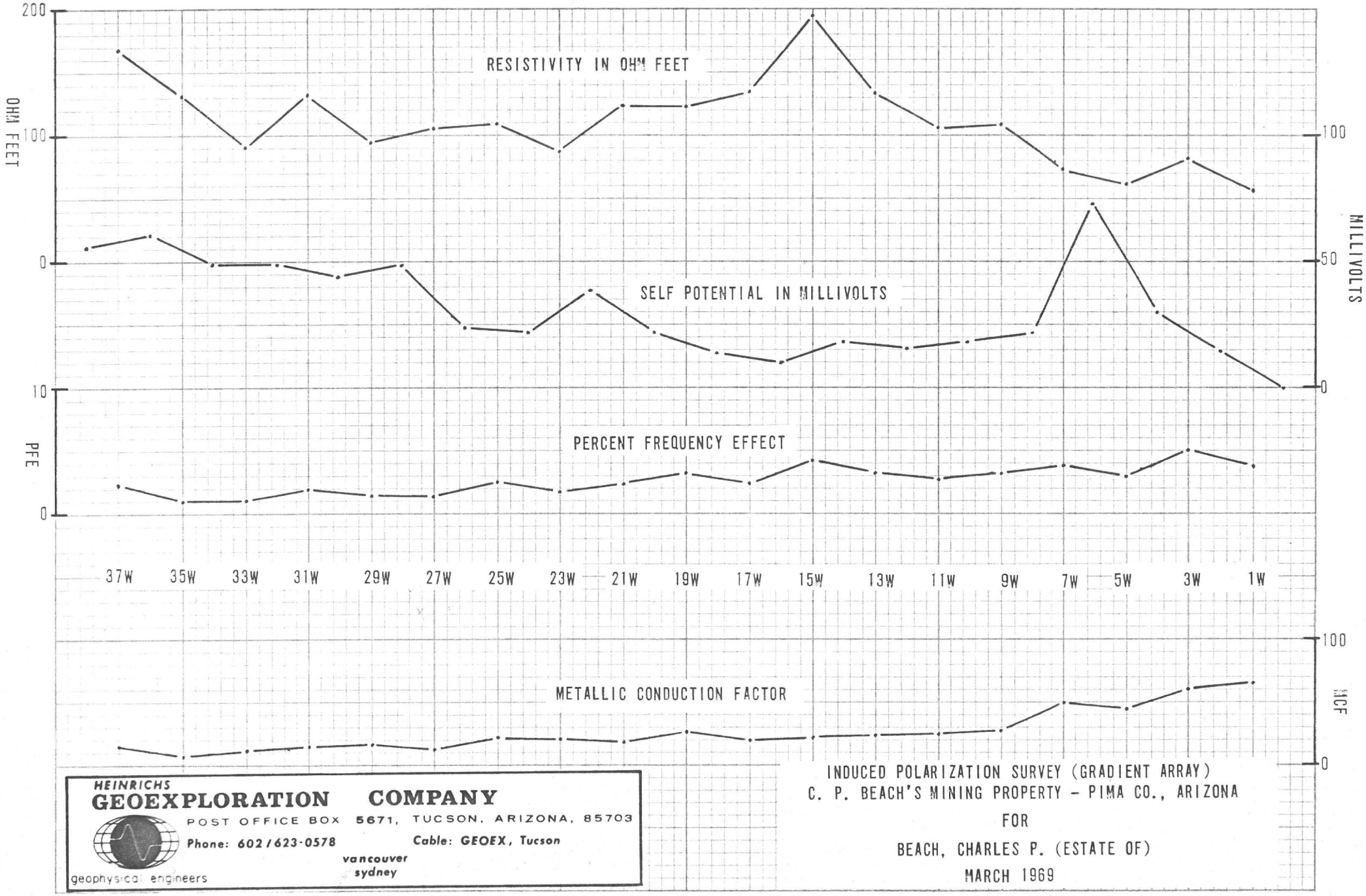
MARCH 1969

SCALE: 1" = 600'

K+E 10 X 10 TO THE INCH 46 0782
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.



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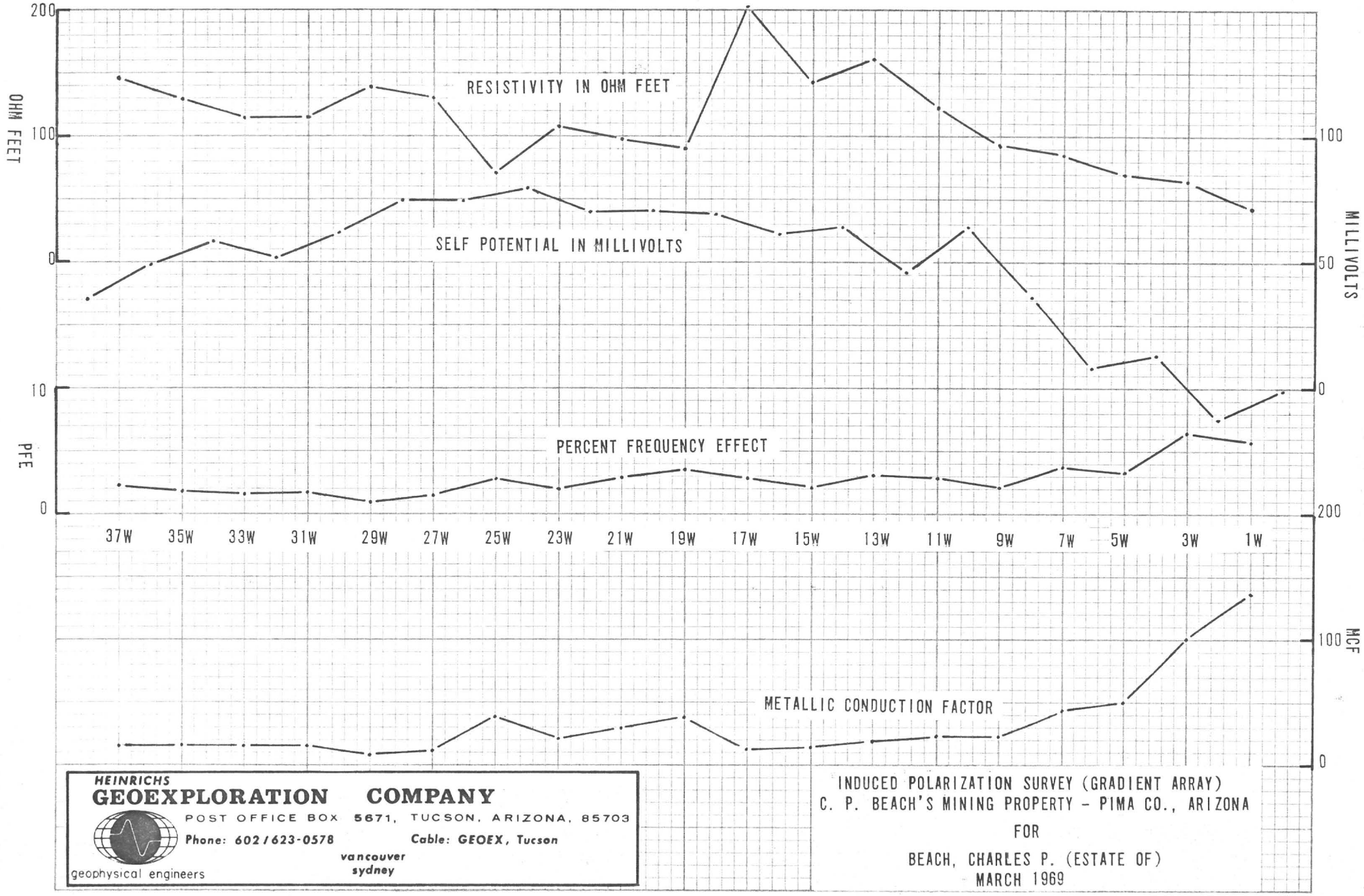
INDUCED POLARIZATION SURVEY (GRADIENT ARRAY)
C. P. BEACH'S MINING PROPERTY - PIMA CO., ARIZONA
FOR
BEACH, CHARLES P. (ESTATE OF)
MARCH 1969

LOOKING NORTH

PROFILES OF LINE 1

SCALE: 1" = 400'

K+E 10 X 10 TO THE INCH 46 0782
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.



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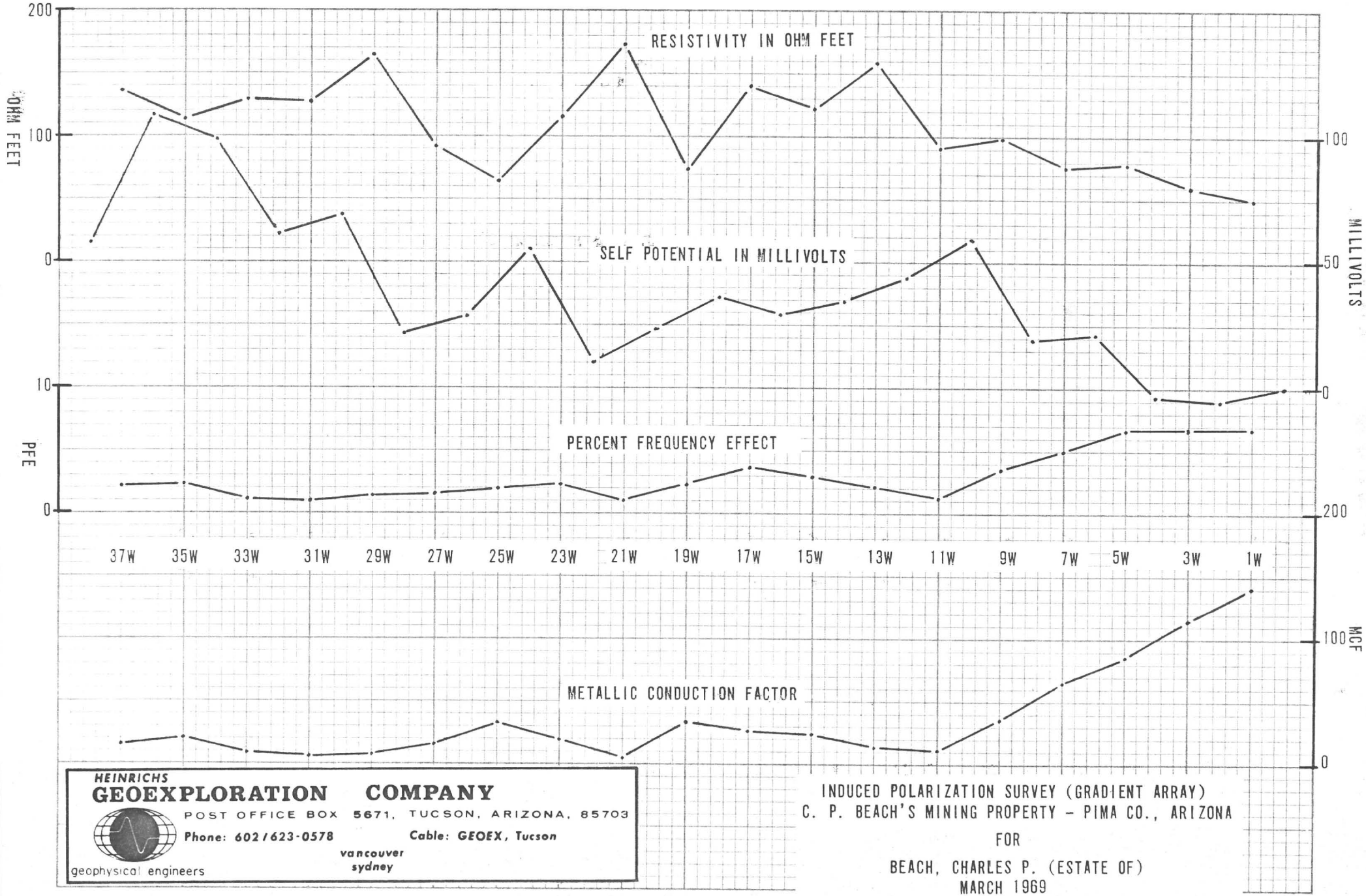
INDUCED POLARIZATION SURVEY (GRADIENT ARRAY)
C. P. BEACH'S MINING PROPERTY - PIMA CO., ARIZONA
FOR
BEACH, CHARLES P. (ESTATE OF)
MARCH 1969

LOOKING NORTH

PROFILES OF LINE 2

SCALE: 1" = 400'

K+E 10 X 10 TO THE INCH 46 0782
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.



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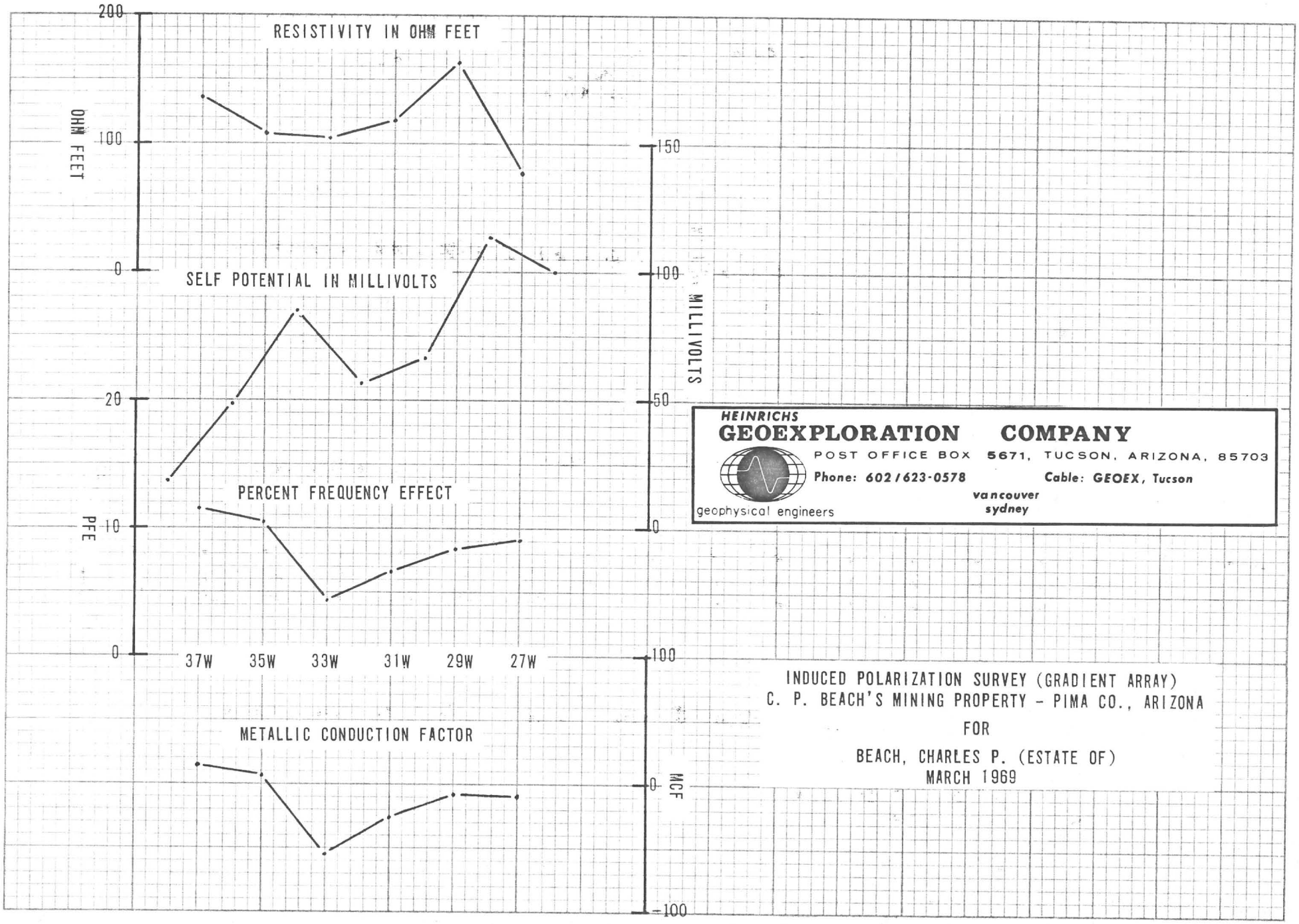
INDUCED POLARIZATION SURVEY (GRADIENT ARRAY)
C. P. BEACH'S MINING PROPERTY - PIMA CO., ARIZONA
FOR
BEACH, CHARLES P. (ESTATE OF)
MARCH 1969

LOOKING NORTH

PROFILES OF LINE 3

SCALE: 1" = 400'

K+E 10 X 10 TO THE INCH 46 0782
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.

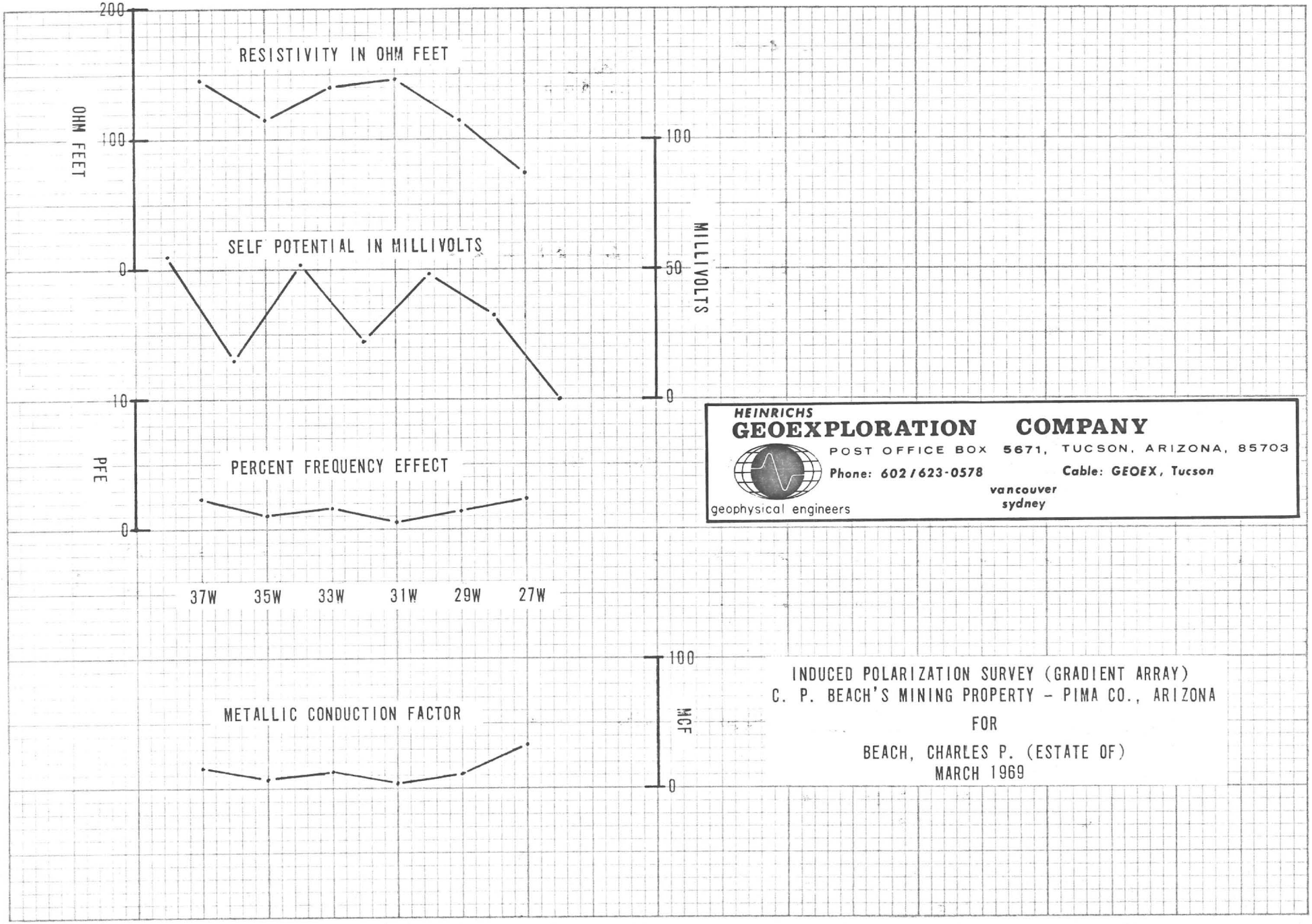


LOOKING NORTH

PROFILES OF LINE 4

SCALE: 1" = 400'

K+E 10 X 10 TO THE INCH 46 0782
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.



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INDUCED POLARIZATION SURVEY (GRADIENT ARRAY)
C. P. BEACH'S MINING PROPERTY - PIMA CO., ARIZONA
FOR
BEACH, CHARLES P. (ESTATE OF)
MARCH 1969

LOOKING NORTH

PROFILES OF LINE 5

SCALE: 1" = 400'

GRADIENT ARRAY
INDUCED POLARIZATION COMBINED ELECTRICAL
GEOPHYSICAL SURVEY

STATE PROSPECTING PERMIT LEASE # 12239
(C. P. Beach Mining Property)
Demetrie Wash Area
Pima County, Arizona

for

Charles P. Beach (Estate of)

March 1969

by

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

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INTRODUCTION

This is a report on the results of a combined electrical geophysical survey over parts of the Arizona State Land Department Prospecting Permit Lease No. 12239. This survey was conducted by Heinrichs Geoexploration Company at the request of Judge Fred Fickett and surveyed in the interim March 20 to March 29, 1969 and was briefly described in our letter dated March 31, 1969 to Judge Fickett.

This geophysical survey was basically induced polarization, including self potential measurements. Three parameters are measured with the induced polarization method: apparent resistivity, percent frequency effect and metallic conduction factor. These have been presented as contour plans and as profiles. The self potential data were plotted only as profiles

CONCLUSIONS, RECOMMENDATIONS AND INTERPRETATION

A very weak trend, somewhat anomalous in the percent frequency effects (PFE) and metallic conduction factors (MCF) is seen near D.D. H. #3 on Lines 1 and 2. This anomalism appears to correlate with the magnetic high around D.D. H. #3 as seen on the Den Baars magnetic plan. Therefore, it is likely that the cause of this I. P. anomaly is due to the near surface concentrations of magnetite seen in the drill hole rather than any potentially economic sulfide concentrations.

Moderate I. P. anomalism is noted on the east ends of Lines 1, 2, and 3 and roughly correlates with the area directly northeast of Demetrie Wash (which is likely fault or contact controlled). This anomaly is completely open-ended to the northeast past the property boundary. A self potential low is seen correlating with the I. P. effects and therefore the depth to top of the probable causative actively oxidizing sulfides is likely within several hundred feet of the surface.

This anomaly is strong enough to conceivably be of economic importance if the ratio of ore-mineral sulfides such as copper, molybdenum, lead, etc., to iron sulfides is high enough, or if other associated recoverable and saleable products are present such as gold, silver, etc.

A very minor I. P. anomaly is noted near 19W Lines 1, 2 and 3 and may be due to minor mineralization related to several generally north-south faults as noted in the U.S.G.S. Bulletin 1112 Geology map of this area.

An interesting pronounced I.P. low of unknown significance is noted near 33W Line 4. It may be related to a NNW striking fault noted on the geology map in that vicinity or could be due to an unobserved grounded object such as a pipeline or drill casing, etc., or perhaps an inductive coupling effect.

The resistivity is fairly uniform over the area except for a general decrease in level towards the east ends of Lines 1, 2 and 3, probably due to a rock type change associated with the mineralization suggested by the correlating I.P. and S. P. anomalism there. The minor high and low trends seen elsewhere on the survey are probably related respectively to fresher zones and more weathered (or altered) zones within the extrusive rocks.

The self potentials show relatively minor background variation over the area except for the low developing on the east ends of Lines 1, 2 and 3 as mentioned above.

It is recommended that this gradient I. P. and S. P. survey be extended to cover the rest of Lease #12239 and perhaps beyond if a land position can be gained (as to the northeast where an interesting anomalous trend is developing). Also, it is suggested that the area around 33W Line 4 be looked at for a cause of the negative anomaly there. Based on the results of an extended survey, one or two drill holes could be placed so as to possibly evaluate the property as to its likely economic mineral potential. Also, it would probably be advantageous if this property could be geologically and economically correlated with the adjoining Duval copper deposit in some mutually beneficial fashion.

PROCEDURES

For the induced polarization (I.P.) survey, the dual frequency system was utilized with sending frequencies of 0.05 and 1.0 Hz. The gradient array electrode configuration was used and on a station interval of 200 ft. and a line separation of 330 ft. In the gradient array I.P. system, a grounded current dipole is set up and an area more or less centered within this dipole and having a relatively uniform and horizontal electrical field is electrically surveyed along lines parallel to the current dipole. The grounded dipole in this case was 8,000 ft. long and oriented east-west roughly along the south section line of Section 14 and centered about 1,300 ft. west of the southeast corner of Section 14. The current dipole connecting wire was laid out in a rectangular fashion such that the east-west portion was actually about 3,600 ft. south of the south section line of Section 14 for purposes of reducing electromagnetic inductive coupling interference.

A total of five lines totalling 69 data stations were read and run mostly near D.D.H. #3 for correlative purposes. The self potential data were taken along with the I.P. data and plotted at the occupied stations whereas the I.P. parameters are plotted at the station midpoints.

The purpose of the survey was to map potential economically significant sulfide concentrations within the area investigated as well as defining the major electrically responsive geologic units.

For a further discussion on the I.P. method in general, see the "Basis of the Induced Polarization Method" accompanying this report. This discussion is mainly devoted to the I.P. method utilizing a dipole-dipole electrode configuration but some of the more general comments are applicable to this gradient array survey.

Heinrichs personnel involved in the field work were W. Rasmussen, geophysicist, B. Gaul and S. Miller, technical assistants. Computation and interpretation and report by C. S. Ludwig, Senior Geophysicist.

Respectfully submitted,
HEINRICHS GEOEXPLORATION COMPANY

C. S. Ludwig

C. S. Ludwig, Senior Geophysicist.

Approved:

W. E. Heinrichs, Jr.
President & General Manager

Registered Professional Engineer (Mining) CERTIFICATE EXPIRES DEC. 31, 19 69 ARIZONA, U.S.A.

April 3, 1969

HEINRICHS GEOEXPLORATION COMPANY

806 WEST GRANT ROAD, TUCSON, ARIZONA, 85703. P.O. BOX 5671. PHONE: (AREA CODE 602) 623-0578

February 11, 1966

Mr. Obed Lassen
State Land Commissioner
Phoenix, Arizona

Re: P.P. #590

Dear Sir:

At the request of Mr. Charles P. Beach, we are sending you the following information:

During the month of February 1966 to date Mr. Charles P. Beach has paid the Heinrichs Geoexploration Company $327.50 (Three hundred and twenty-seven dollars and fifty cents) for professional services performed on his mining property located in the Twin Butte Mining District in Pima County.

Of this amount, $265.00 (Two hundred and Sixty-five dollars) was for a magnetometer survey to be credited to assessment work on P.P. #590 which he has requested you add to diamond core drilling cost previously reported by him.

Very truly yours,

HEINRICHS GEOEXPLORATION COMPANY

E. Grover Heinrichs
Vice President

EGH:jc

Subscribed to and sworn before me, this 11th day of February 1966.

Patricia M. Routt
Notary Public

My commission expires: 11-5-69

MAGNETOMETER SURVEY
VERTICAL INTENSITY
CHARLES BEACH

HOLE No. 7 Box #1
FROM 1 – 10'
ELEVATION
COORDINATES N E
DIRECTION
INCLINATION DEPTH
STARTED COMPLETED

SECTION	COL	GEOLOGY	SURVEY	% CORE RECOV'D	CORE ASSAYS SECTION	CORE ASSAYS CU.	SLUDGE ASSAYS SECTION	SLUDGE ASSAYS CU.
		fine grained granodiorite						
		Like rock - some surface						
		weathering + Alteration						
		Calcite in fractures						
		and as open spaced filling.						
		dendritic manganese						
		in fractures. Rock fragments						
		from a few mm to 100+mm.						

HOLE 7 Box 2
FROM 10-21'
ELEVATION
COORDINATES N. E
DIRECTION
INCLINATION DEPTH
STARTED COMPLETED

SECTION	COL	GEOLOGY	SURVEY	% CORE RECOV-D	CORE ASSAYS SECTION	CORE ASSAYS CU.	SLUDGE ASSAYS SECTION	SLUDGE ASSAYS CU.
10'		continuation of granodiorite						
		like rock noted at surface.						
		notable surface						
		alteration and weathering						
		secondary calcite in fracture						
16		and as open space filling						
		Less Alteration and						
		decomposition.						
19								
		massive granodiorite like						
21		rock with sporatic						
		veinlets and open space						
		fillings of calcite						

HOLE 7 Box #3
FROM 21-30'
ELEVATION
COORDINATES N E
DIRECTION
INCLINATION DEPTH
STARTED COMPLETED

SECTION	COL	GEOLOGY	SURVEY	% CORE RECOV—D	CORE ASSAYS SECTION	CORE ASSAYS CU.	SLUDGE ASSAYS SECTION	SLUDGE ASSAYS CU.
21		continuation of granodiorite Type rock - Limonite on fractures of massive rock Limestone decreasing as secondary accessory mineral.						
30								

HOLE 7 Box 4
FROM 30 - 38'
ELEVATION
COORDINATES N E
DIRECTION
INCLINATION DEPTH
STARTED COMPLETED

SECTION	COL	GEOLOGY	SURVEY	% CORE RECOVERED	CORE ASSAYS SECTION	CORE ASSAYS CU.	SLUDGE ASSAYS SECTION	SLUDGE ASSAYS CU.
		continued granodiorite Like Type Rock calcite & Limonite in fractures.						

HOLE 7 Box 5
FROM 38-47
ELEVATION
COORDINATES N E
DIRECTION
INCLINATION DEPTH
STARTED COMPLETED

SECTION	COL	GEOLOGY	SURVEY	% CORE RECOV'D	CORE ASSAYS SECTION	CORE ASSAYS CU.	SLUDGE ASSAYS SECTION	SLUDGE ASSAYS CU.
		continuation of granodiorite Like Rock Limonite & calcite in fractures of fualy massive rock						

HOLE 7 Box B6
FROM 47-56
ELEVATION
COORDINATES N E
DIRECTION
INCLINATION DEPTH
STARTED COMPLETED

SECTION	COL.	GEOLOGY	SURVEY	% CORE RECOVERED	CORE ASSAYS SECTION	CORE ASSAYS CU.	SLUDGE ASSAYS SECTION	SLUDGE ASSAYS CU.
47		continued granodiorite type rock						
		calcite in fractures and open space						
		decreasing in limonite						
56								

HOLE N 7 Box 7
FROM 56 - 64
ELEVATION
COORDINATES N E
DIRECTION
INCLINATION DEPTH
STARTED COMPLETED

SECTION	COL	GEOLOGY	SURVEY	% CORE RECOVD	CORE ASSAYS SECTION	CORE ASSAYS CU.	SLUDGE ASSAYS SECTION	SLUDGE ASSAYS CU.
		continued granodiorite Type Rock with about 1% secondary calcite at 57 some very sparce and fine pyrite begins to appear determined Less than .005% by volume. also there is a noticeable increase in grain size						

HOLE No. 7 Box 8
FROM 64-73
ELEVATION
COORDINATES N E
DIRECTION
INCLINATION DEPTH
STARTED COMPLETED

SECTION	COL	GEOLOGY	SURVEY	% CORE RECOVERED	CORE ASSAYS SECTION	CORE ASSAYS CU.	SLUDGE ASSAYS SECTION	SLUDGE ASSAYS CU.
		granodiorite Like Type Rock. from 68-71' an increase in secondary calcite veinlets is noted. Some sparce chalcopyrite is noted in these veinlets. Total cu value less then .01%						

HOLE 7- Box 9
FROM 73'-83
ELEVATION
COORDINATES N E
DIRECTION
INCLINATION DEPTH
STARTED COMPLETED

SECTION	COL.	GEOLOGY	SURVEY	% CORE RECOVERED	CORE ASSAYS SECTION	CORE ASSAYS CU.	SLUDGE ASSAYS SECTION	SLUDGE ASSAYS CU.
		Continued granodiorite like type rock.						
		at approximately 78 feet rock becomes						
		more fractured and						
		becomes brecciated						
		Some pyrite and						
		chalcopyrite begins						
		to appear between						
		fragments in more						
		brecciated areas.						
		Cu value negligible						
		probable value of						
		less than .01%						

2/8/66 Logged C.S.L.

HOLE NO. 7
FROM 0 – 243' (Boxes 1 – 27)
ELEVATION
COORDINATES N. E
DIRECTION
INCLINATION DEPTH
STARTED COMPLETED

SECTION	COL	GEOLOGY	SURVEY	% CORE RECOVERY	CORE ASSAYS SECTION	CORE ASSAYS CU.	SLUDGE ASSAYS SECTION	SLUDGE ASSAYS CU.
	0	0 Andesite: surface weathered						
		1 dendrites of manganese oxides, iron oxides, some calcite in fractures		75				
		1.0 same as above except poor recovery & more alteration		25				
	14	14 clayey zone, possible fault same rock 14.5 as above		80				
		Relatively unweathered, less fractured andesite, Fe & Mn oxides in fractures some calcite, steep fractures showing some clays & sericite. Fe & Mn decreases with depth. grain size fairly constant		95+				
	57	57 clay zone at 57 and at 59.5 with increased grain size below 57 occasional specks of pyrite? Occasional sericite of ls? altered to epidote. Pyrite increases with depth (see weathering?) One calcite		95+				
	78	veinlet (1/4") has several cp grains						
		At 78 rock becomes brecciated & possible foreign inclusions, more fracturing increased clay. grain size variable pyrite grains < 0.1%. Continued steep shearing		95+				
	112	At 112 to 117 broken zone (fault?) clay & sericite		80				
	117	fine gr. matrix with coarse breccia fragments scattered grains & veinlets of py & cp <0.1% clay in fractures with calcite		95+				
	134	same as above except ls breccia fragments altered to epidote some calcite veinlets with py. & py veinlets <0.1%. ~~Little increase in matrix below 175 with decreased brecciation or more digestion still minor py to 202~~		95+				
	170							

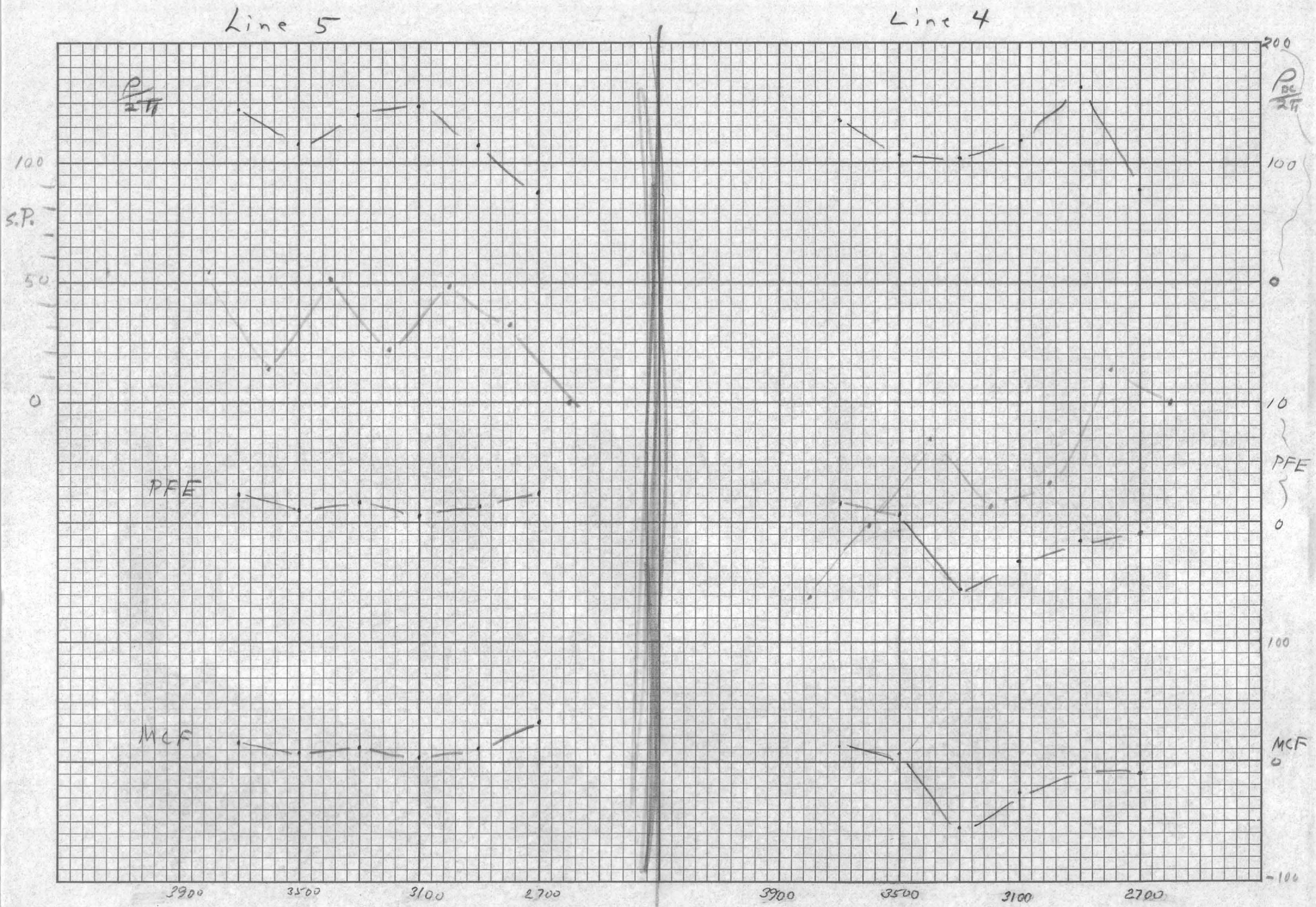
Andesite

58

HOLE NO. .....
FROM. .....
ELEVATION. .....
COORDINATES ..... N. ..... E
DIRECTION. .....
INCLINATION. ..... DEPTH. .....
STARTED ..... COMPLETED. .....

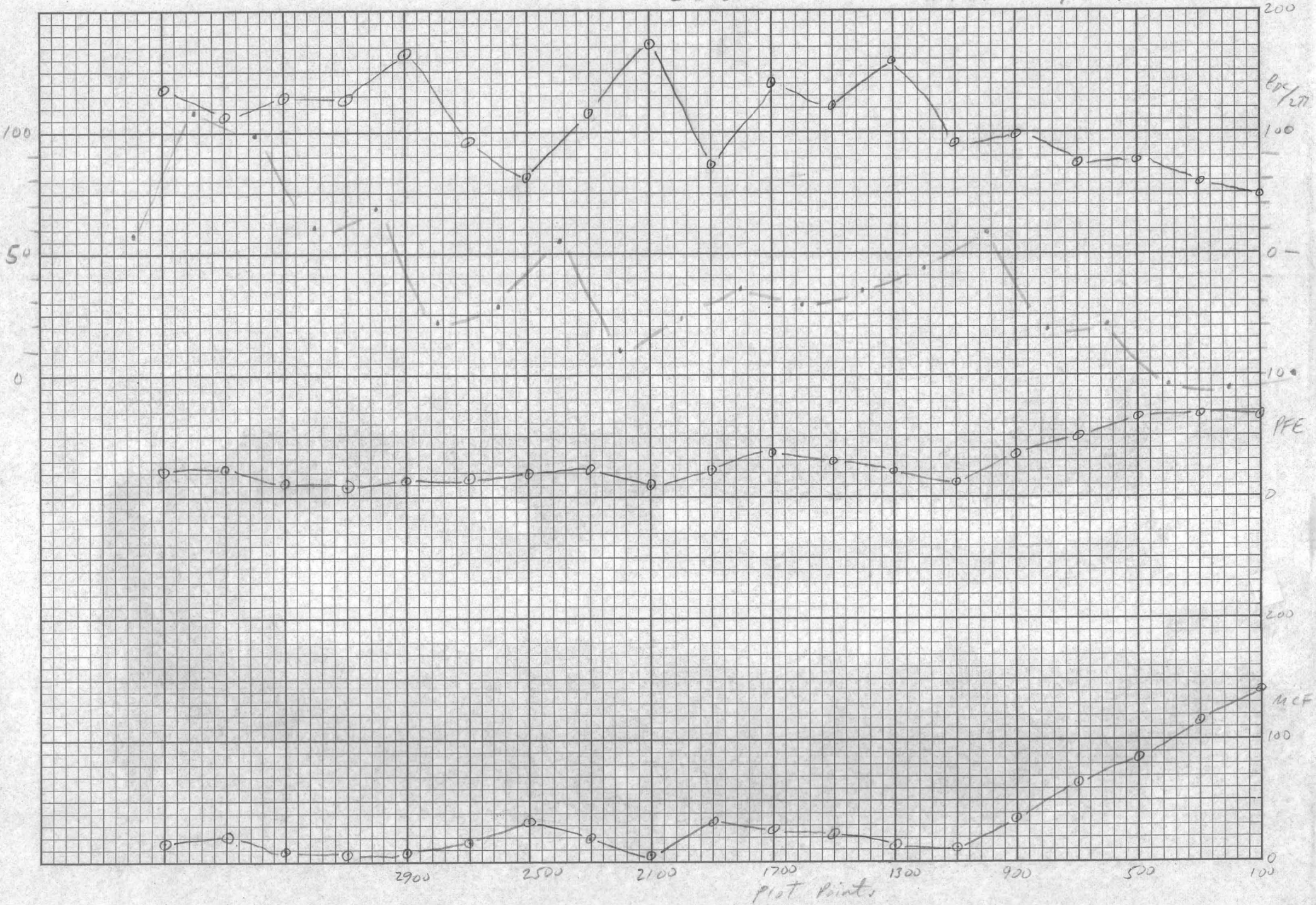
SECTION	COL	GEOLOGY	SURVEY	% CORE RECOVERED	CORE ASSAYS SECTION	CORE ASSAYS CU.	SLUDGE ASSAYS SECTION	SLUDGE ASSAYS CU.
	170	~~same brecciation in placed spots~~						
	175	Same as above with increased epidote in matrix and decreased brecciation (or more digestion) still minor py		95+				
	233	increased pyrite 1 to 5% in pieces possible py (should be assayed in case) decreasing with depth (increased brecciation) to about 0.5 – 1% py at bottom much epidote. Pyrite occurs in pieces & veinlets		95+				
Andesite								
bottom	243							

K+E 10 X 10 TO THE INCH 46 0782
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.



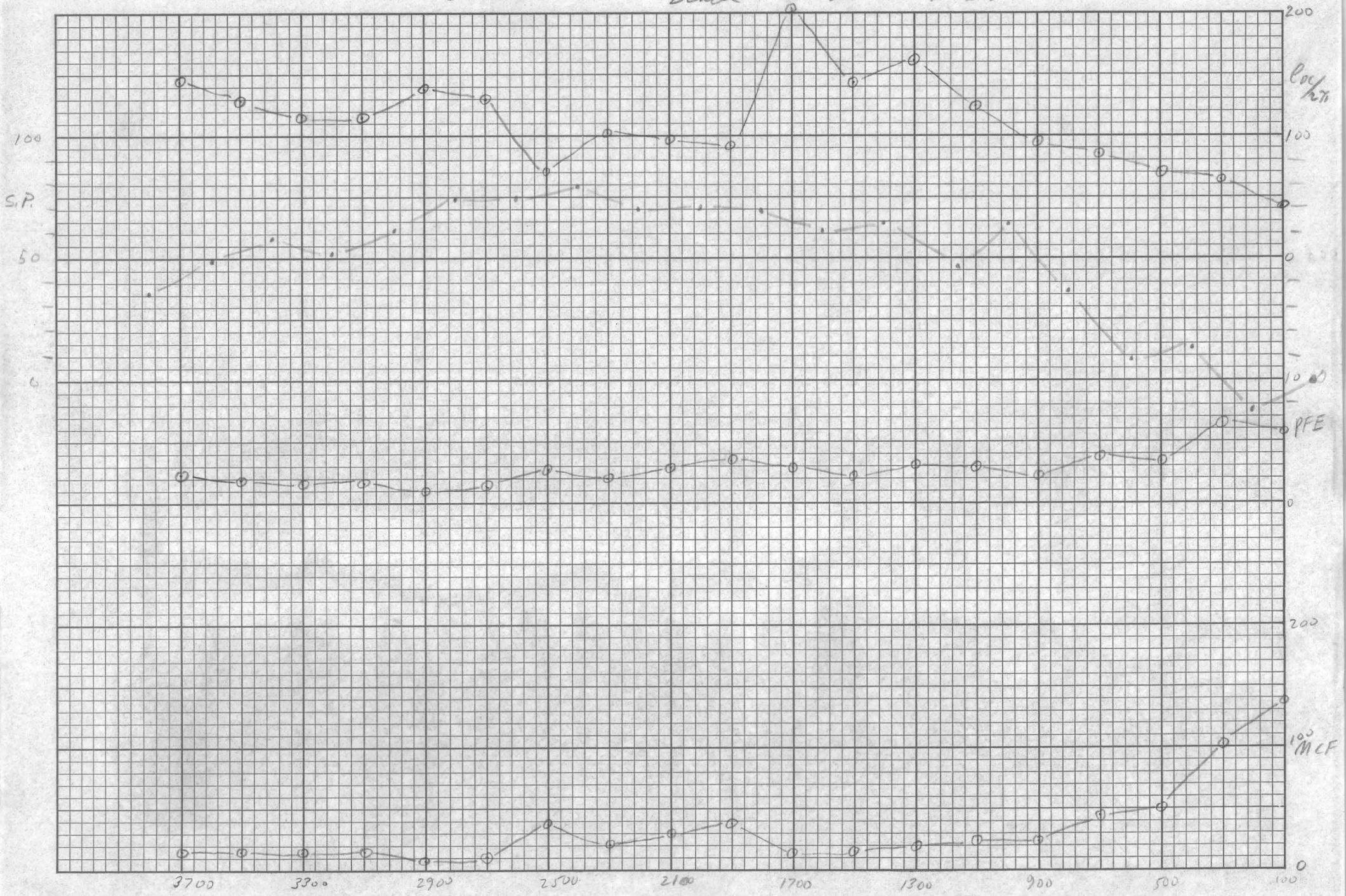
K+E 10 X 10 TO THE INCH 46 0782
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.

Line 3 Look N Bench Gradient I. R. 3/27/69



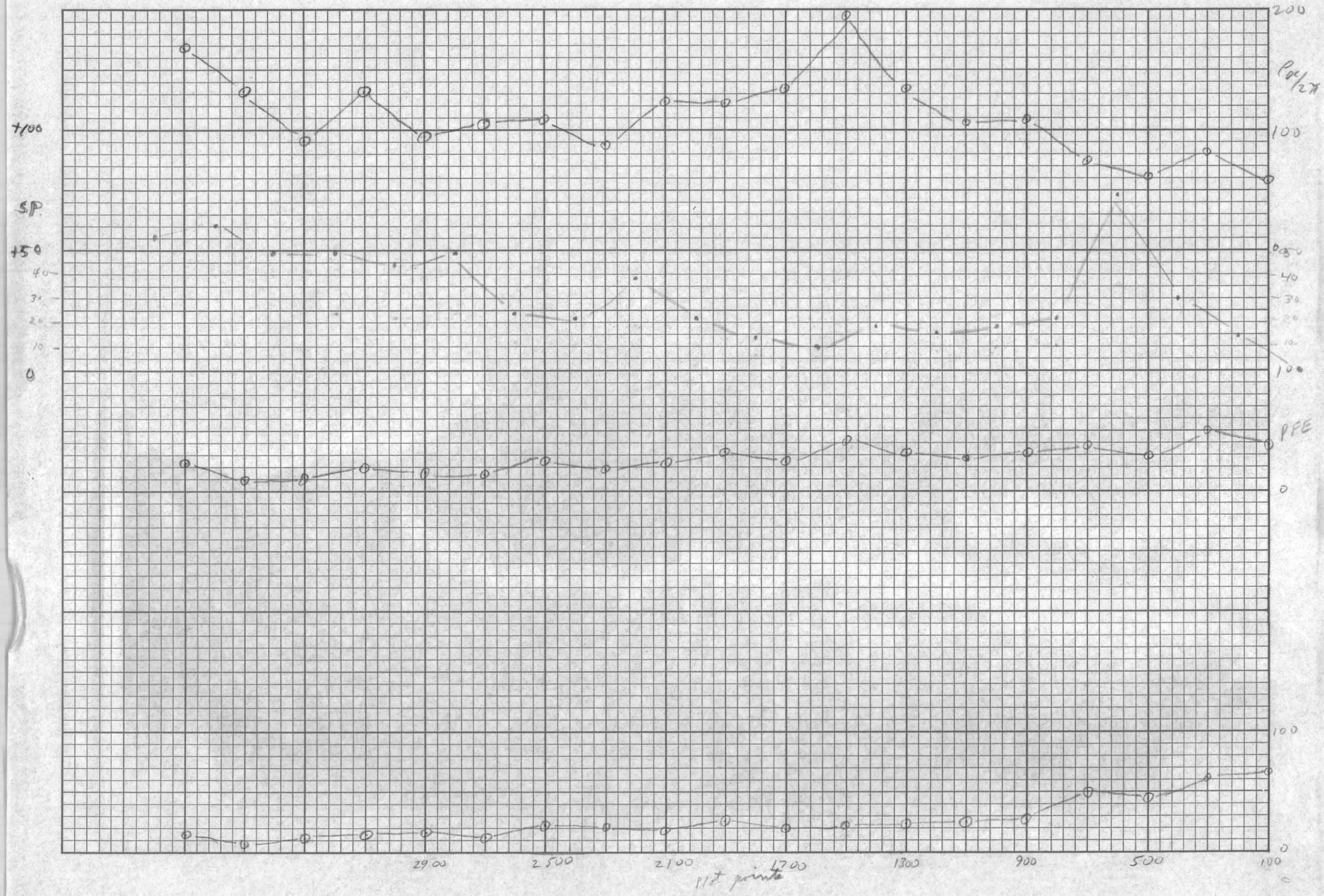
K+E 10 X 10 TO THE INCH 46 0782
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.

Line 2 Look N Bench Gradient I.P. 3/27/69



K+E 10 X 10 TO THE INCH 46 0782
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.

Line 1 Look N Bench Gradient I.f. 3/27/69



SPECIAL CONDITIONS

In order to minimize or prevent surface or underground waste and pollution and promote maximum conservation, permittee shall seal or separate oil, gas, helium, water, mineral or other natural resource strata in order to prevent their contents from passing into another stratum.

The Lessee agrees to indemnify, hold and save Lessor harmless against all loss, damage, liability, expense, costs and charges incident to or resulting in any way from any injuries to person or damage to property cause by or resulting from the use, condition or occupation of the land.

The Permittee shall not, for exploration purposes, enter upon that part of the permitted area encompassed by rights-of-way and permits granted to the Arizona State Highway Department without the express written permission of the State Highway Engineer and not then until the State Land Commissioner has in writing approved such entry.

The Permittee agrees that any mineral lease of a claim issued as a result of exploratory activity under this permit shall contain an additional and special condition denying the lessee entry to the area encompassed by those rights-of-way and permits mentioned next above for the purposes of extracting and shipping mineral unless and until the State Highway Engineer has given express written permission and not then until the State Land Commissioner has in writing approved such entry.

DESCRIPTION OF LAND UNDER PERMIT CONTAINED IN SUPPLEMENT ATTACHED HERETO AND MADE A PART HEREOF.

STATE OF ARIZONA
LAND DEPARTMENT

MO.	DAY	YR.
4	1	68

BEACH CHAS P ESTATE
P O BOX 1631
TUCSON ARIZONA 85702

KE	LEASE NUMBER
8	12239

COUNTY	LOCATION SEC	TOWNSHIP		RANGE		DESCRIPTION	ACRES		BEGINING C.C.	FUND	
10	14	18	S	12	E	N2SW SESW S2SE	200	00		31	4

LESSEE SIGNATURE: Estate of Charles P Beach deceased By Ruth Dyson

DATE April 8, 1968

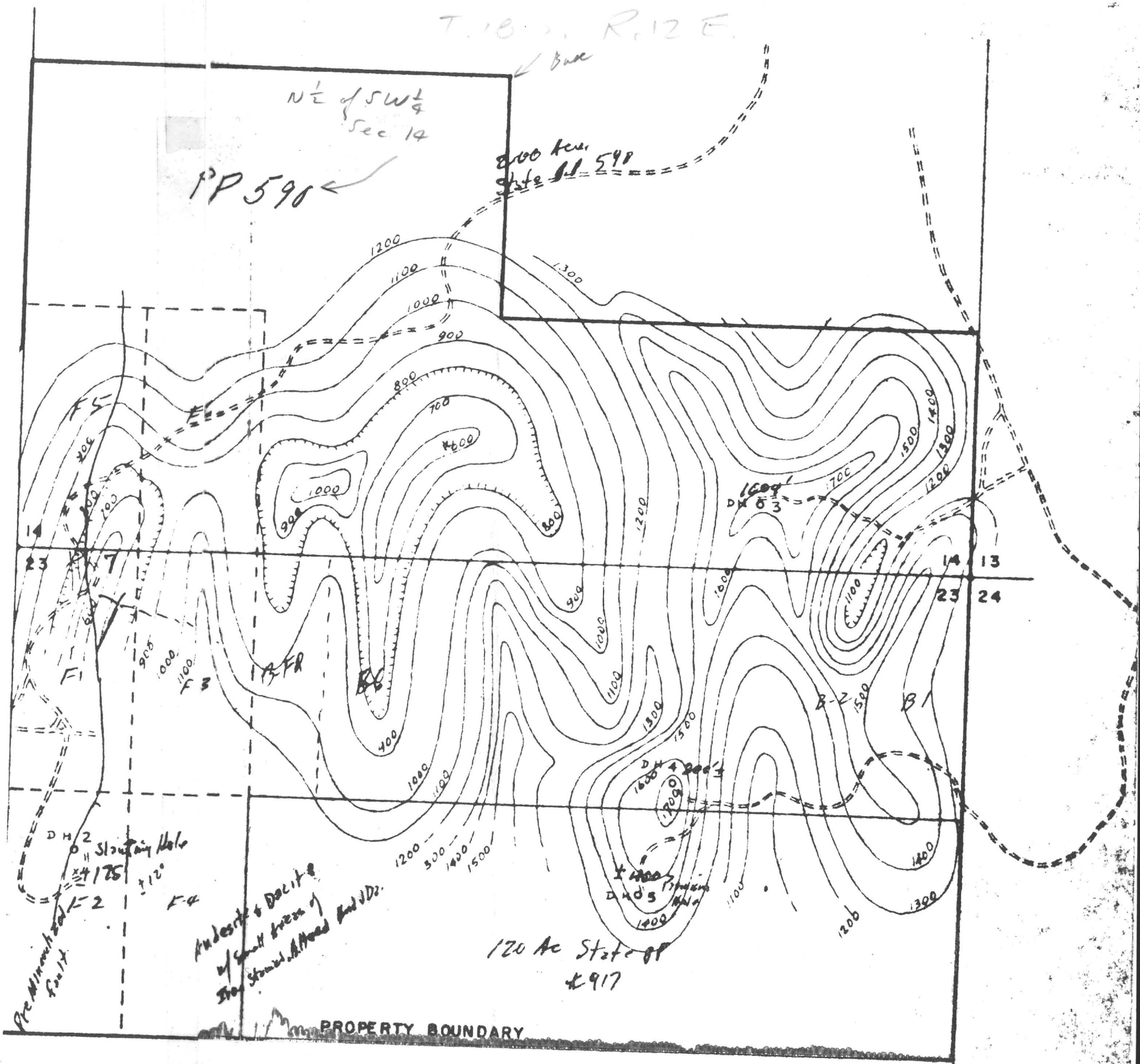
COMMISSIONER: Louis C Duncan

DATE APR 10 1968

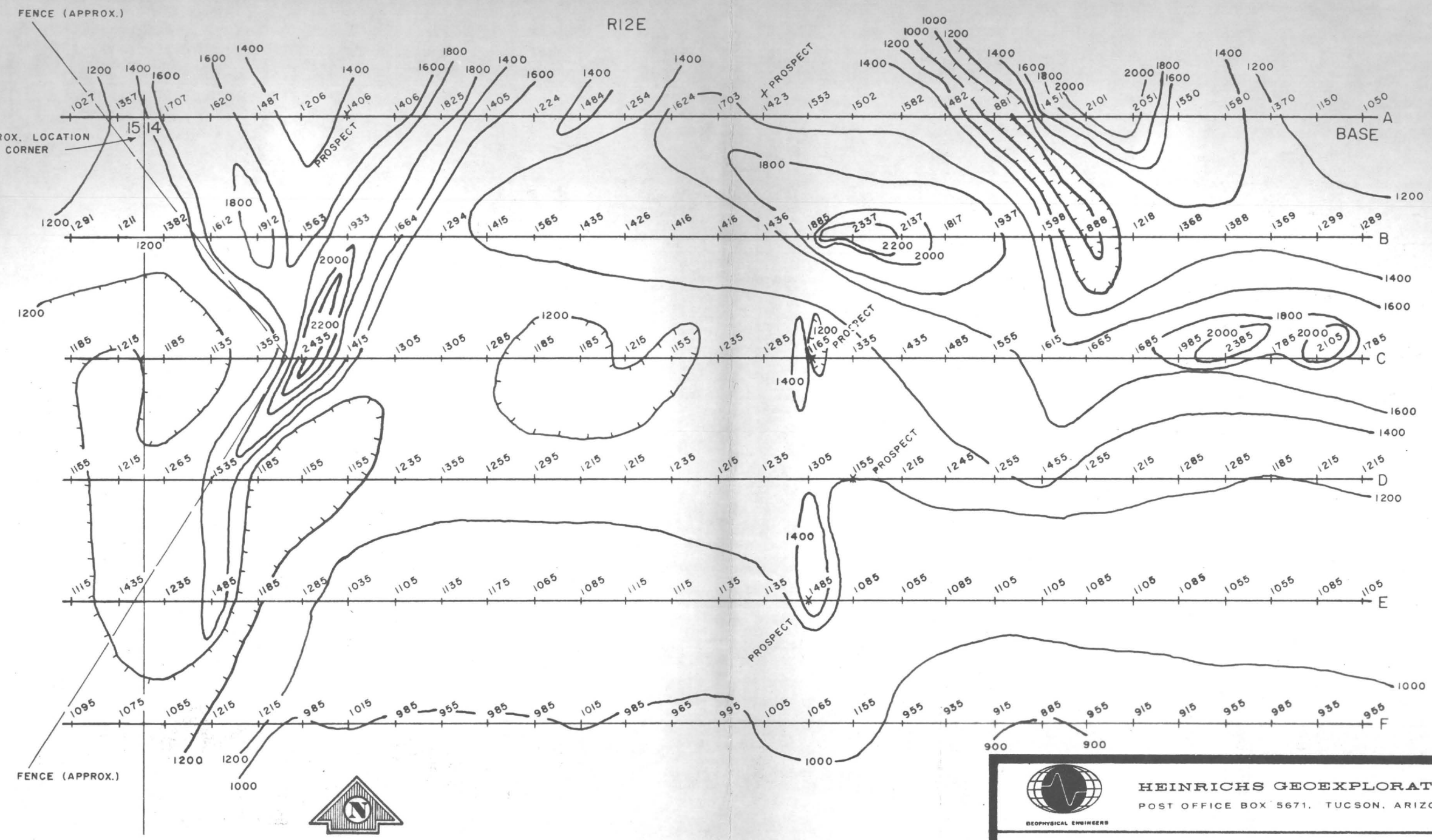
TOTAL ACREAGE 200 00

Beach

i, R12E, PIMA COUNTY, ARIZ.



ISODYNAMIC CONTOURS FOR Z IN GAMMA'S



INSTRUMENT SENSITIVITY APPROX. +/- 20γ
HORIZONTAL CONTROL BY BRUNTON & PACE

Registered Professional Engineer (Mining)
CERTIFICATE EXPIRES
DEC. 31, 1966
ARIZONA, U.S.A.

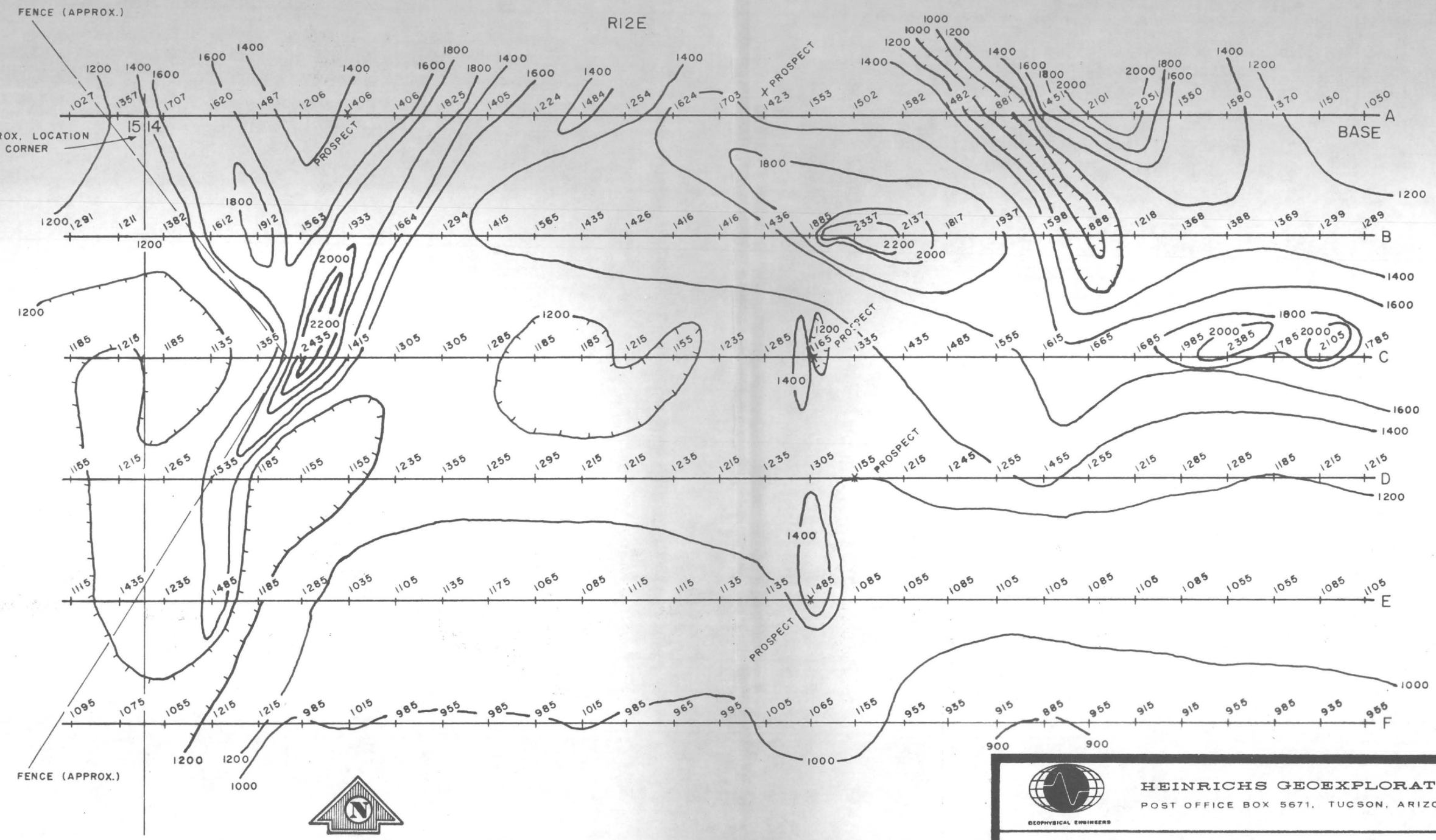
HEINRICHS GEOEXPLORATION CO.
GEOPHYSICAL ENGINEERS
POST OFFICE BOX 5671, TUCSON, ARIZONA, 85703

MAGNETOMETER SURVEY
(VERTICAL INTENSITY)
PP590 TWIN BUTTES, ARIZONA, AREA
FOR

CHARLES BEACH

Scale 1" = 254'

Date 21 FEBRUARY 1966



INSTRUMENT SENSITIVITY APPROX. +/- 20γ
HORIZONTAL CONTROL BY BRUNTON & PACE

HEINRICHS GEOEXPLORATION CO.
POST OFFICE BOX 5671, TUCSON, ARIZONA, 85703
GEOPHYSICAL ENGINEERS

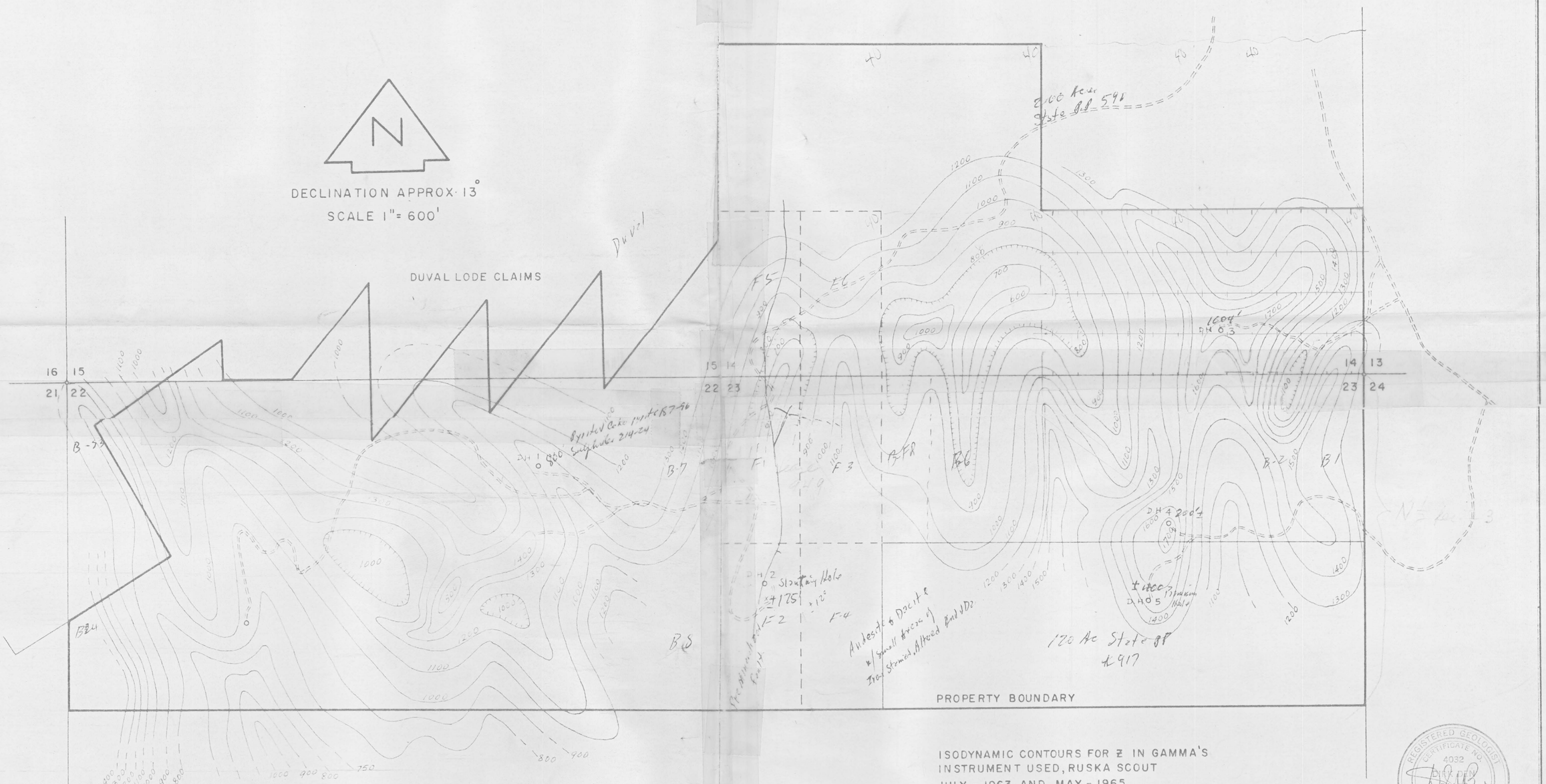
MAGNETOMETER SURVEY
(VERTICAL INTENSITY)
PP590 TWIN BUTTES, ARIZONA, AREA
FOR

CHARLES BEACH

Scale 1" = 254'

Date 21 FEBRUARY 1966

MAGNETOMETER SURVEY ON MR. C. P. BEACH'S MINING PROPERTY,
860 ACRES OF LODE CLAIMS, MINERAL LEASES AND PROSPECT PERMITS
IN SEC. 14, 22 AND 23, T18S, R12E, PIMA COUNTY, ARIZ.

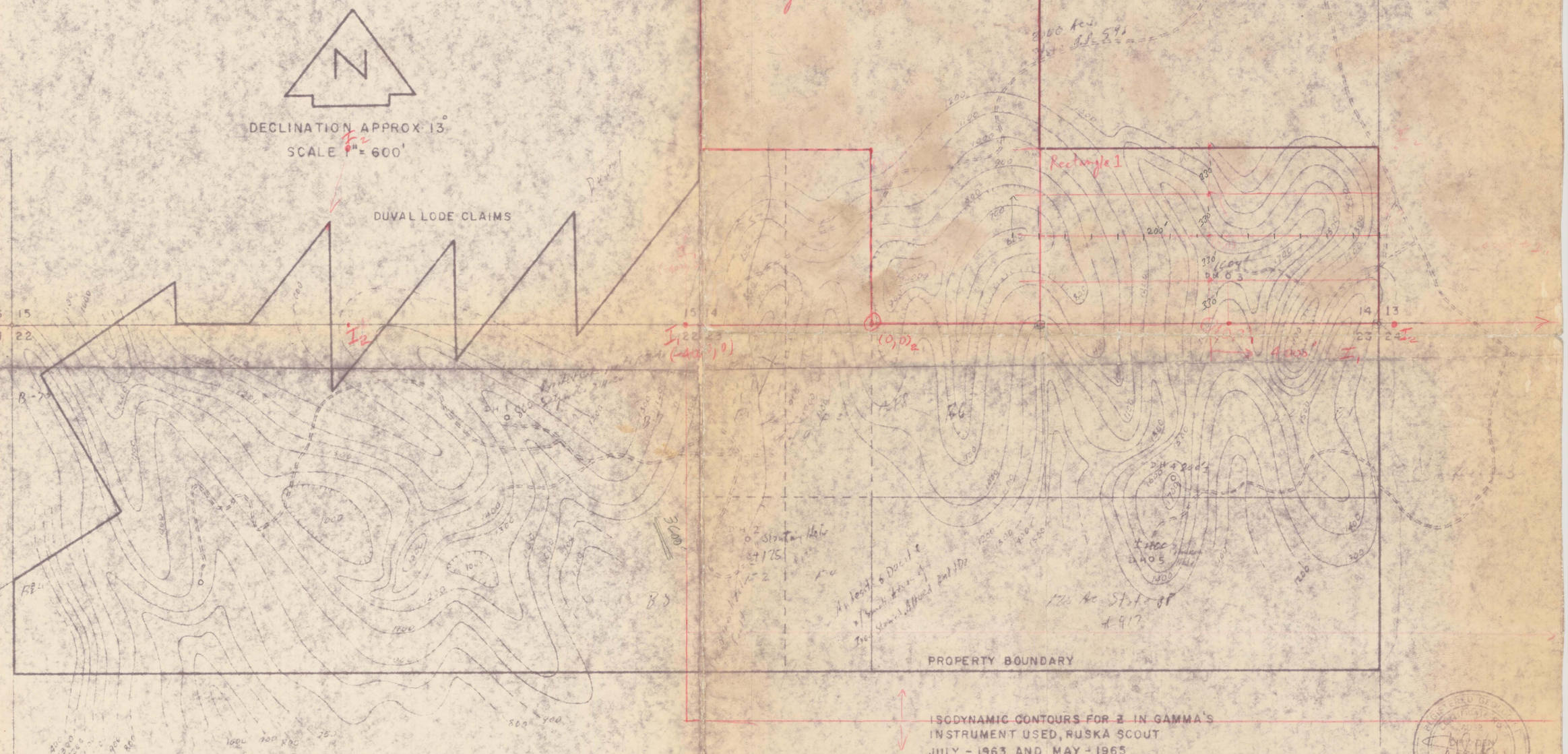


ISODYNAMIC CONTOURS FOR Z IN GAMMA'S
INSTRUMENT USED, RUSKA SCOUT
JULY - 1963 AND MAY - 1965

REGISTERED GEOLOGIST
CERTIFICATE NO. 4032
Date Signed 6/30/65
ARIZONA, U.S.A.

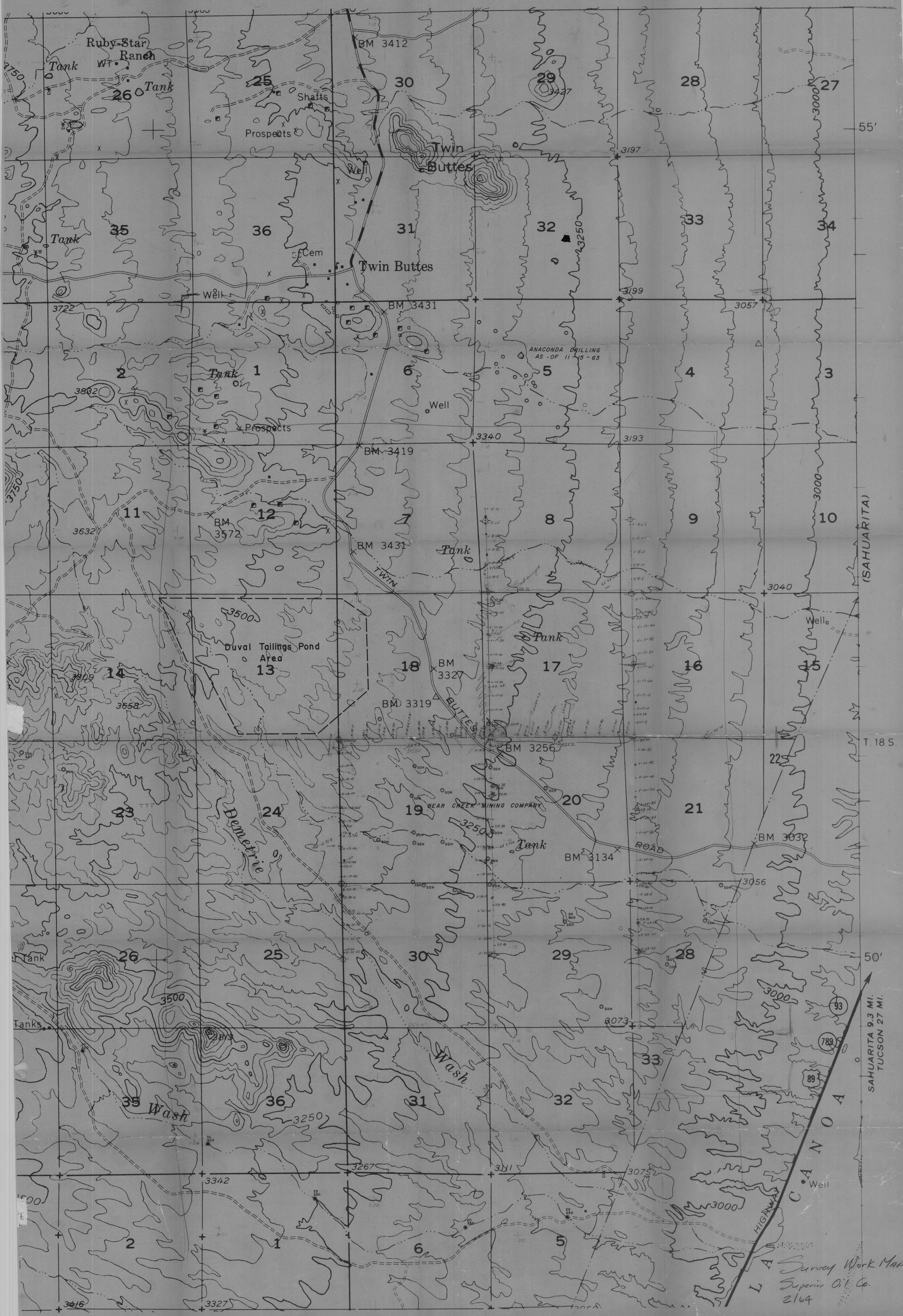
BY: Dirk Den Baars
Consulting Geologist

MAGNETOMETER SURVEY ON MR C P BEACH'S MINING PROPERTY, 860 ACRES OF LODE CLAIMS, MINERAL LEASES AND PROSPECT PERMITS IN SEC 14, 22 AND 23, T18S, R12E, PIMA COUNTY, ARIZ.



ISODYNAMIC CONTOURS FOR Z IN GAMMA'S
INSTRUMENT USED, RUSKA SCOUT
JULY - 1963 AND MAY - 1965

BY: Dirk Den Boers
Consulting Geologist


Ruby-Star Ranch
Tank
Tank
Tank
Shafts
Prospects
BM 3412
Twin Buttes
Well
Cem
Twin Buttes
Well
BM 3431
ANACONDA DRILLING AS OF 11-15-63
Tank
Prospects
Well
BM 3419
BM 3572
BM 3431
Tank
TWIN
BUTTES
Duval Tailings Pond Area
BM 3327
BM 3319
Tank
Well
BM 3256
BEAR CREEK MINING COMPANY
Demetrie
Tank
BM 3134
ROAD
BM 3032
Tank
Tanks
Wash
Wash
Well
LA CANADA
HIGHWAY
SAHUARITA 9.3 MI.
TUCSON 27 MI.
(SAHUARITA)
T. 18 S.
55'
50'
Survey Work Map
Superior Oil Co.
2/64

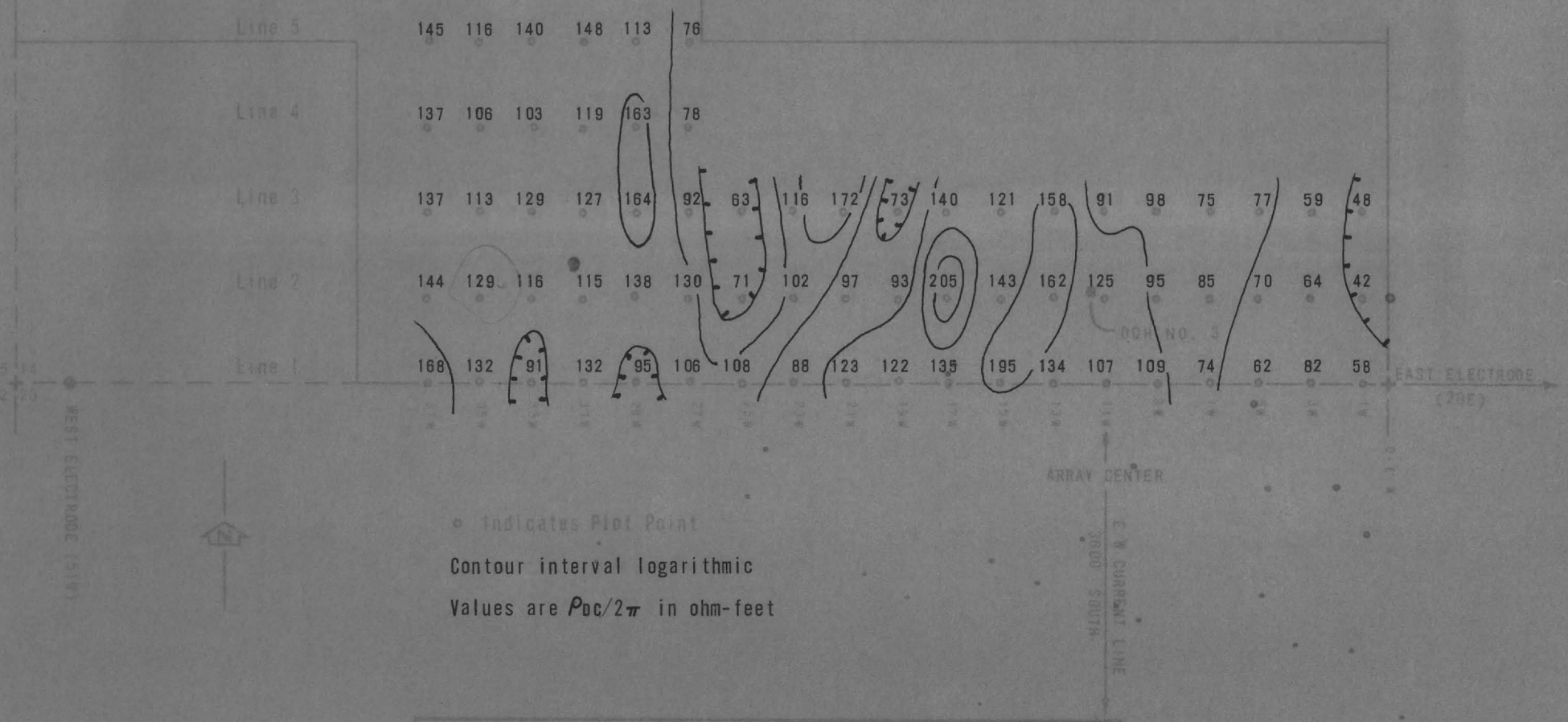
Beach Originals

T.12 S. R.12 E.

GRADIENT ARRAY INDUCED POLARIZATION LOCATION & INTERPRETATION PLAN (RESISTIVITY)

OF

C. P. BEACH'S MINING PROPERTY
PIMA COUNTY, ARIZONA
STATE PROSPECTING PERMIT LEASE NO. 12239
FOR
BEACH, CHARLES P. (ESTATE OF)



○ Indicates Plot Point

Contour interval logarithmic

Values are $\rho_{DC}/2\pi$ in ohm-feet

HEINRICHS
GEOEXPLORATION COMPANY
POST OFFICE BOX 5871, TUCSON, ARIZONA, 85703
Phone: 602/623-0578 Cable: GEOEX, Tucson
geophysical engineers
Vancouver
sydney

MARCH 1969

SCALE: 1" = 800'

T 18 S, R 12 E

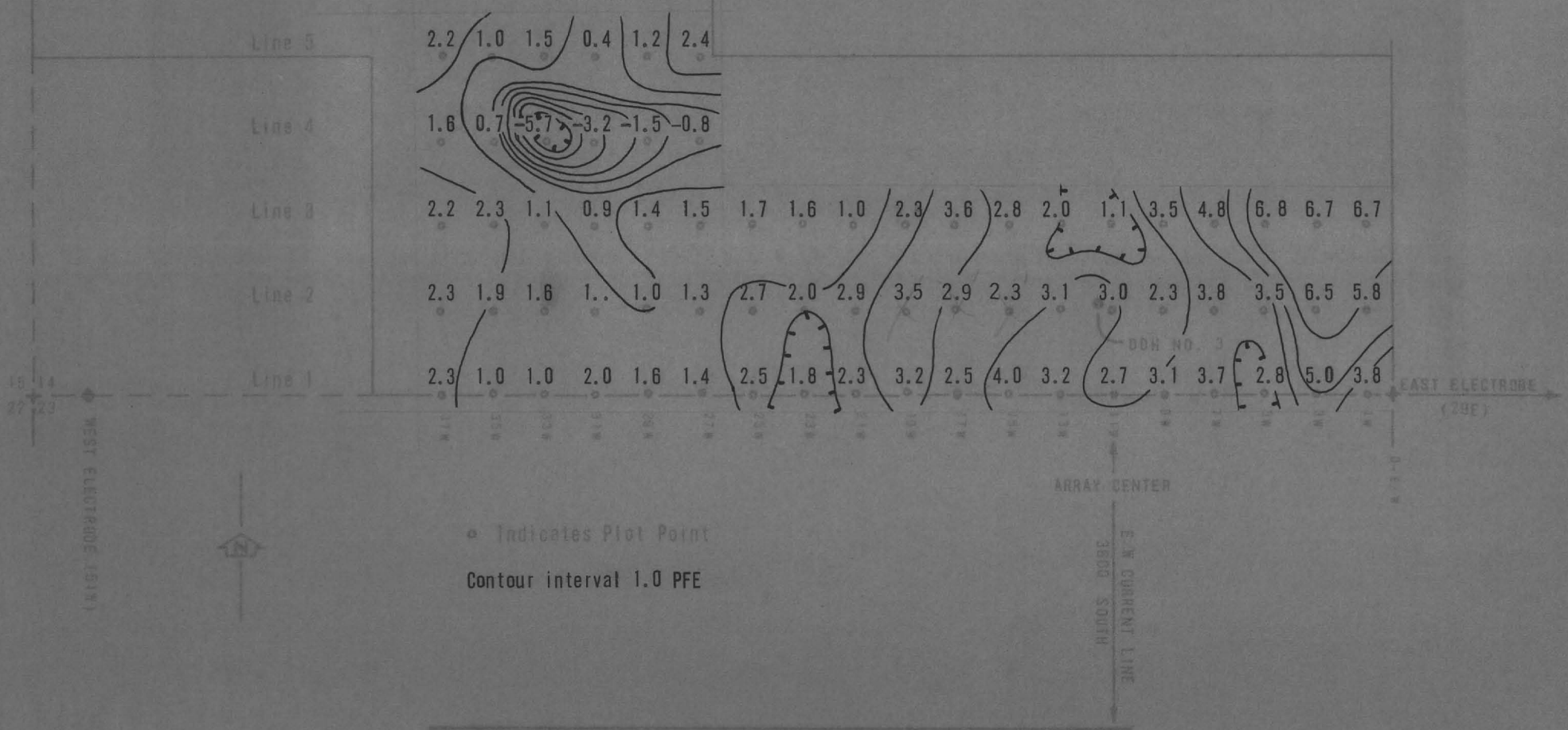
GRADIENT ARRAY INDUCED POLARIZATION LOCATION & INTERPRETATION PLAN (PERCENT FREQUENCY EFFECT)

OF

C. P. BEACH'S MINING PROPERTY
PIMA COUNTY, ARIZONA
STATE PROSPECTING PERMIT LEASE NO. 12239

FOR

BEACH, CHARLES P. (ESTATE OF)



• Indicates Plot Point

Contour interval 1.0 PFE

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

MARCH 1969

SCALE: 1" = 200'

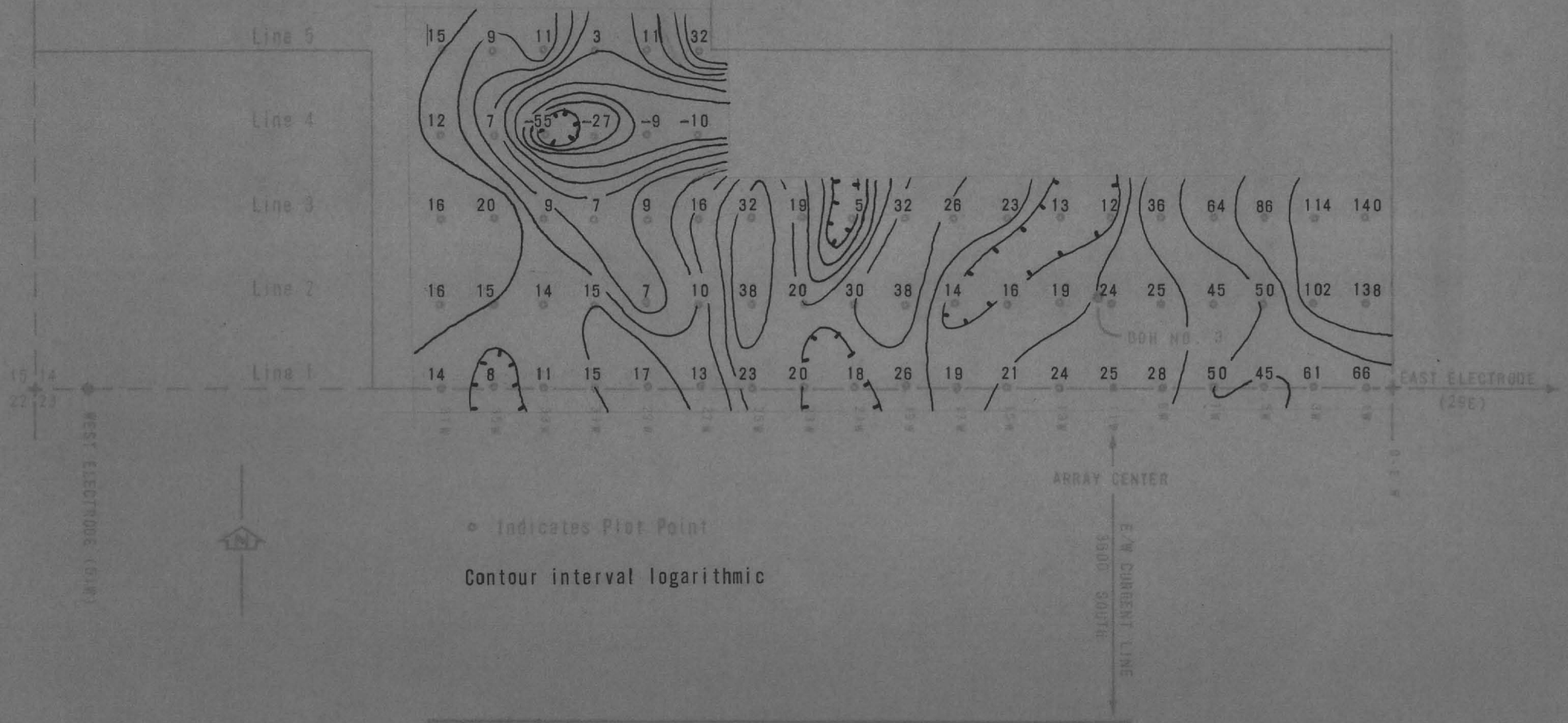
T 18 S, R 12 E

GRADIENT ARRAY INDUCED POLARIZATION LOCATION & INTERPRETATION PLAN

(METALLIC CONDUCTION FACTOR)

OF

C. P. BEACH'S MINING PROPERTY
PIMA COUNTY, ARIZONA
STATE PROSPECTING PERMIT LEASE NO. 12239
FOR
BEACH, CHARLES P. (ESTATE OF)



○ Indicates Plot Point

Contour interval logarithmic

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

MARCH 1969

SCALE: 1" = 800'

T 18 S, R 12 E

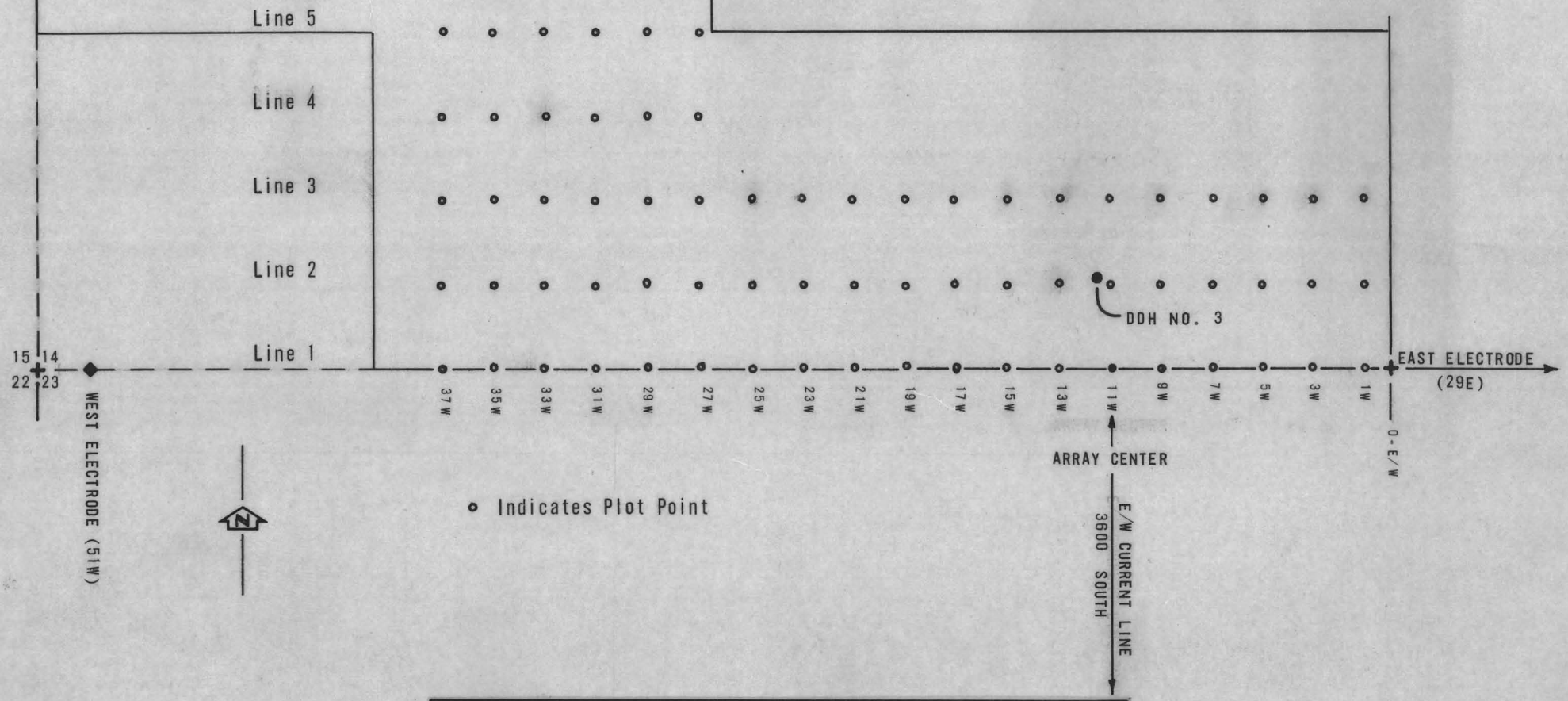
GRADIENT ARRAY INDUCED POLARIZATION LOCATION & INTERPRETATION PLAN

OF

C. P. BEACH'S MINING PROPERTY
PIMA COUNTY, ARIZONA
STATE PROSPECTING PERMIT LEASE NO. 12239

FOR

BEACH, CHARLES P. (ESTATE OF)



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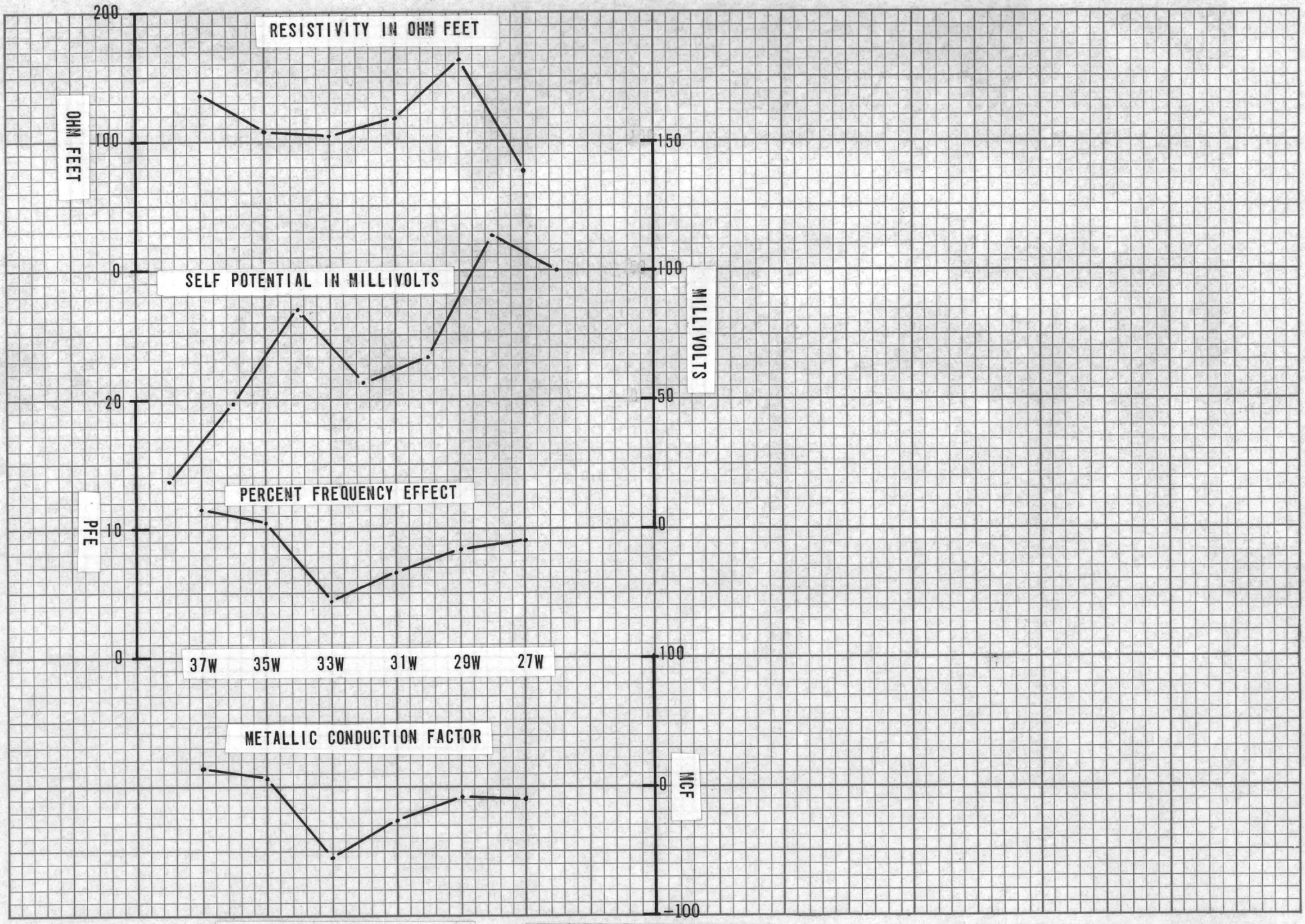
Phone: 602/623-0578 Cable: GEOEX, Tucson
geophysical engineers
vancouver
sydney

MARCH 1969

SCALE: 1" = 600'

K+E 10 X 10 TO THE INCH 46 0782
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.

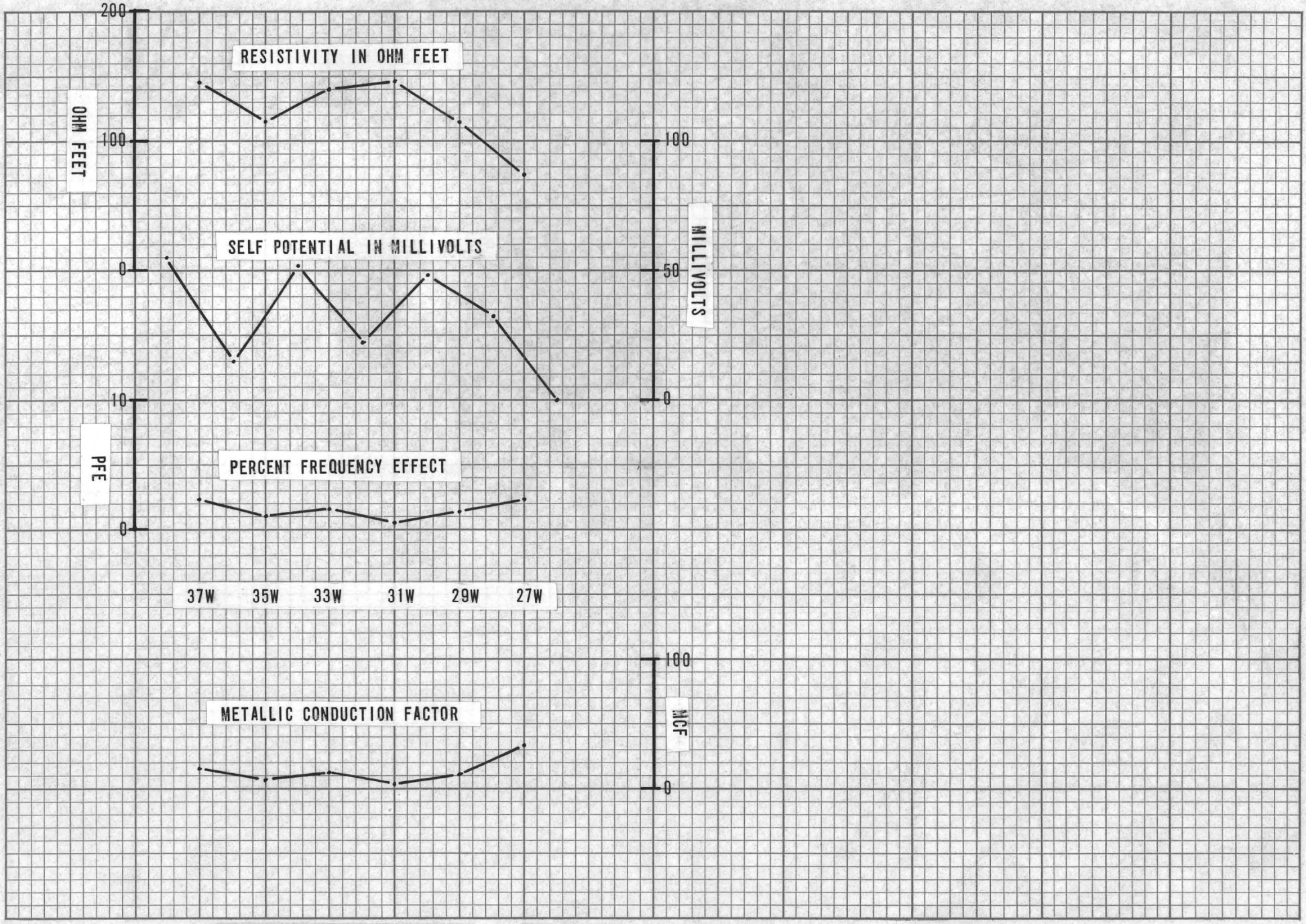


LOOKING NORTH

PROFILES OF LINE 4

SCALE: 1" = 400'

K+E 10 X 10 TO THE INCH 46 0782
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.

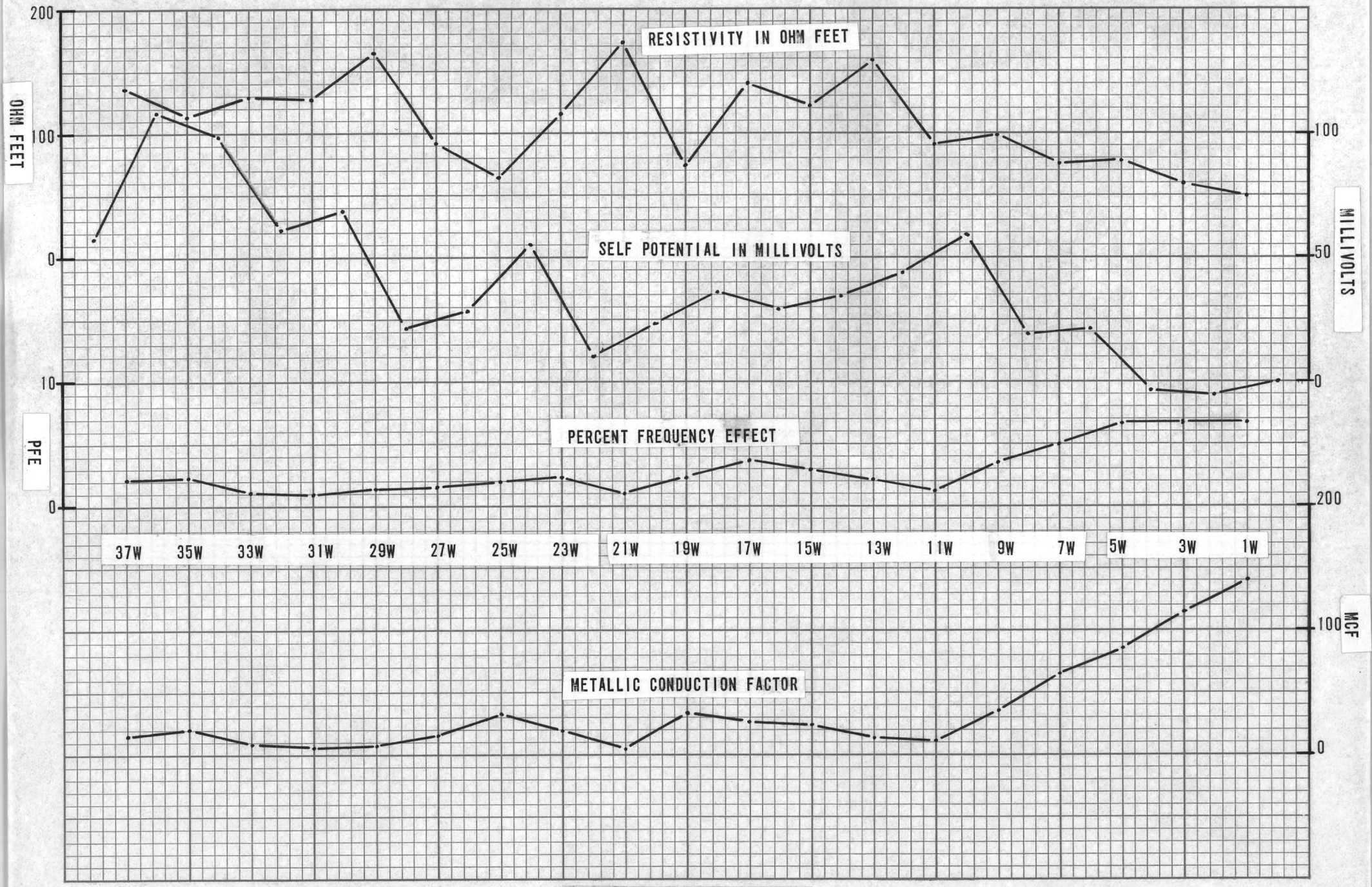


LOOKING NORTH

PROFILES OF LINE 5

SCALE: 1" = 400'

K+E 10 X 10 TO THE INCH 46 0782
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.

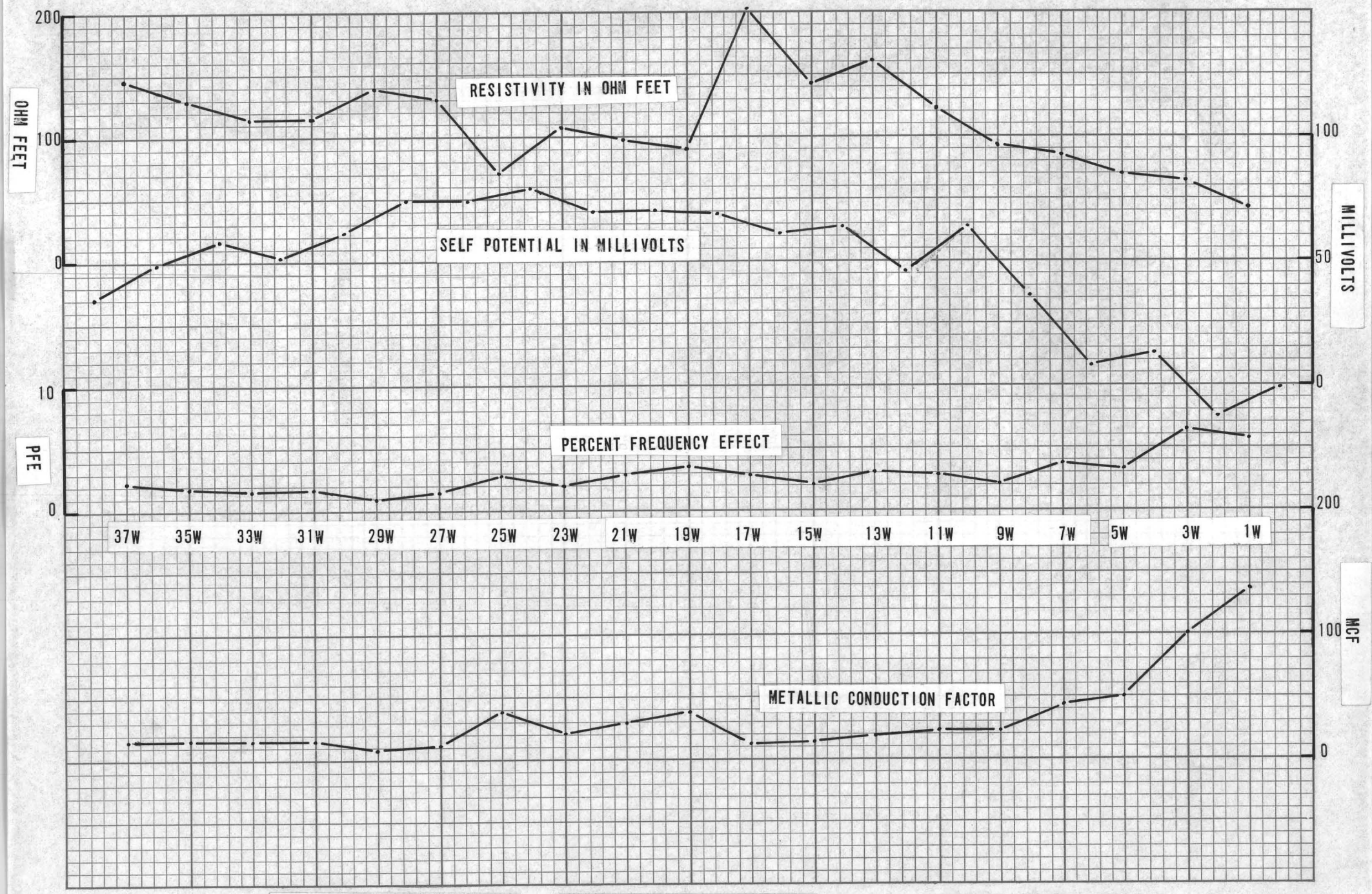


LOOKING NORTH

PROFILES OF LINE 3

SCALE: 1" = 400'

K+E 10 X 10 TO THE INCH 46 0782
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.

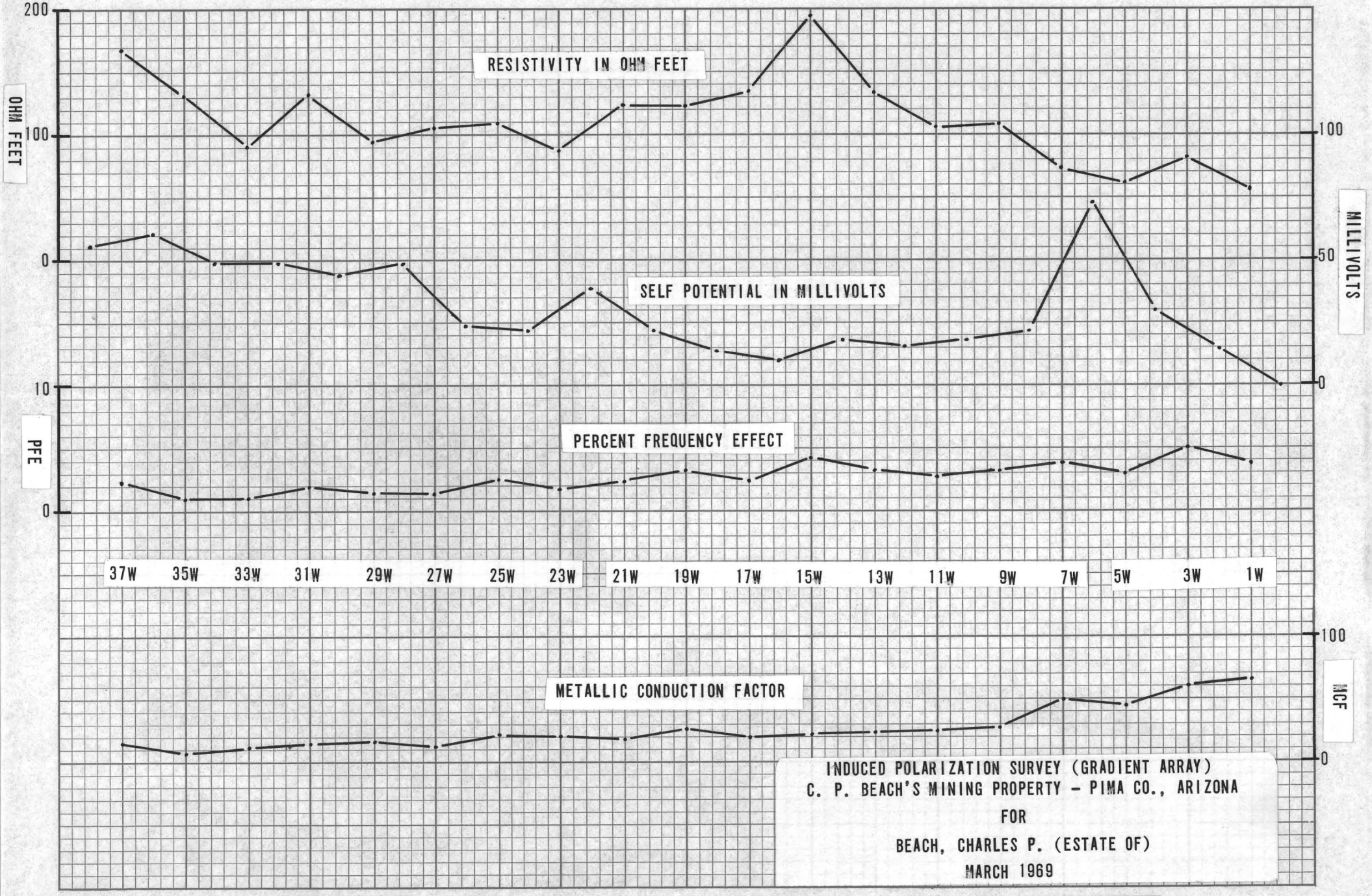


LOOKING NORTH

PROFILES OF LINE 2

SCALE: 1" = 400'

K+E 10 X 10 TO THE INCH 46 0782
7 X 10 INCHES MADE IN U.S.A.
KEUFFEL & ESSER CO.



LOOKING NORTH

PROFILES OF LINE I

SCALE: 1" = 400'