HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT Geo Chem - CARMEN

LINE I-2 HALF N SP. 2 DATE 8-26

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SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	35-40N	40-45	→	45-50	→	→	50-55	→	→	→
RANGE	Hi	Hi	→	Hi	→	→	Hi	→	→	→
VOLTAGE	400	440	400	320	440	400	450	320	440	400
CURRENT	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CAL
RECEIVE	55-60	→	→	→	60-65	→	→	→		4-5
RANGE	Hi	→	→	→	Hi	→	→	→		Hi
VOLTAGE	450	320	440	400	450	320	440	400		100
CURRENT	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		1.0

FREQUENCIES .05 3.0

SENDER NO. 66445

OPERATOR HN

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS: 1-2 — 4
2-3 — 4
3-4 — 6
4-5 — 4

HEINRICHS GEOEX B259-68 LINE 1-2 SPD 2 LOOKING WEST 8-26-68 A= 500 FEET

4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	I	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	1.000	
7148	9436	2765	7213	1935	7952	7762	2214	8804	4647	DC	2411	9909	4713	2719	9167	4459	2397	1576	1004	LEFT
7148	9436	2765	7213	1935	7952	7762	2214	8804	4647		2411	9909	4713	2719	9167	4459	2397	1576	1004	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
71.48	94.36	27.65	72.13	19.35	7.952	77.62	22.14	8.804	4.647	DCA	24.11	9.909	4.713	2.719	9.167	4.459	2.397	1.576	100.4	
67.50	90.60	25.60	69.70	18.50	7.550	75.60	21.50	8.490	4.420	AC1	23.20	9.600	4.520	2.590	8.750	4.440	2.230	1.460	100.0	
67.50	90.60	25.60	69.70	18.50	7.550	75.60	21.50	8.490	4.420	AC2	23.20	9.600	4.520	2.590	8.750	4.440	2.230	1.460	100.0	
67.50	90.60	25.60	69.70	18.50	7.550	75.60	21.50	8.490	4.420	ACA	23.20	9.600	4.520	2.590	8.750	4.440	2.230	1.460	100.0	
26.70	35.24	41.31	26.94	28.91	29.70	28.99	33.08	32.88	34.71	RHO	36.02	37.01	35.21	35.54	34.24	33.31	31.34	32.96	.996	DC CAL
5.5	3.7	7.6	3.1	4.2	4.9	2.3	2.4	3.3	4.7	PFE	3.5	2.8	3.9	4.6	4.3	.0	7.1	7.5	.996	AC CAL
205	106	183	114	145	165	78	78	100	134	MCF	97	76	109	128	127	1	225	228		
.1	.0	.1	.1	.2	.5	.1	.2	.4	.8	CPFE	.2	.4	.7	1.2	.4	.8	1.4	2.0		
5.4	3.7	7.4	3.0	4.0	4.4	2.2	2.4	2.9	4.0	CCPFE	3.3	2.4	3.1	3.4	3.9	-.8	5.6	5.5		
203	105	180	112	137	148	76	72	87	114	CCMCF	93	66	88	94	115	-23	180	167		

4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	I	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	1.000	
1055	7865	2835	1484	2658	1498	1985	3050	9063	6147	DC	4496	1019	3919	2923	3488	9286	3991	3106	1004	RIGHT
1055	7865	2835	1484	2658	1498	1985	3050	9063	6147		4496	1019	3919	2923	3488	9286	3991	3106	1004	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
105.5	78.65	28.35	148.4	26.58	14.98	198.5	30.50	9.063	6.147	DCA	44.96	10.190	3.919	2.923	34.88	9.286	3.991	3.106	100.4	
102.0	75.50	26.90	141.0	25.30	14.10	188.0	28.70	8.610	5.780	AC1	42.00	9.500	3.710	2.740	31.60	8.460	3.660	2.820	100.0	
102.0	75.50	26.90	141.0	25.30	14.10	188.0	28.70	8.610	5.780	AC2	42.00	9.500	3.710	2.740	31.60	8.460	3.660	2.820	100.0	
102.0	75.50	26.90	141.0	25.30	14.10	188.0	28.70	8.610	5.780	ACA	42.00	9.500	3.710	2.740	31.60	8.460	3.660	2.820	100.0	
39.40	29.38	42.36	55.43	39.71	55.95	74.14	45.57	33.85	45.92	RHO	67.17	38.06	29.28	38.21	130.3	69.37	52.17	64.97	.996	DC CAL
3.0	3.8	5.0	4.8	4.6	5.8	5.2	5.8	4.8	5.9	PFE	4.6	6.8	5.2	6.3	9.9	9.3	8.6	9.7	.996	AC CAL
77	128	117	87	117	104	70	128	143	129	MCF	99	180	178	164	76	134	165	149		
.0	.1	.1	0.0	.1	.2	0.0	.1	.4	.5	CPFE	.1	.4	1.0	1.1	.1	.3	.7	.8		
3.0	3.7	4.8	4.8	4.5	5.6	5.2	5.7	4.4	5.4	CCPFE	6.6	6.5	4.3	5.2	9.9	9.0	7.9	8.9		
76	126	114	87	113	100	70	124	131	118	CCMCF	98	170	146	135	76	130	151	137		

Moore Business Forms, Inc.

JOB B259-68 LINE 1-3 SPREAD 1

LOOKING W DATE 8/9/68 A= 500'

CENTER 0.0 LABEL S/N FREQ. 3.0

COUPLING Yes

Note: Use red DC avg - ignore decimal & punch in twice - Do Not Use Black D.C.a AC as usual

Burr-Brown Rec. N-S, a=500

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen

LINE I-3 HALF S SP. 1 DATE 8-9

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500	500-1000 →		1000-1500 →			1500-2000 →			
RANGE	100-10	100-10	100-10	100-10	100-10	10-10	100-10	100-10	10-10	10-10
DC 1	+[illegible]5	+36.1	+2.2	+31.8	+8.6	+4.40	+32.0	+12.3	+4.58	+2.65
DC 2	.16	+14.2	+12.1	+38.0	+7.7	+2.42	+35.0	+10.6	+6.20	+2.80
DC 3	.5	+37.8	+1.8	+32.2	+8.6	+3.98	+32.0	+13.0	+4.85	+2.78
DC 4	3.8[illegible]	+13.0	+13.8	+37.6	+7.8	+2.60	+36.3	+40.0	+6.57	+2.62
DC 5	-1[illegible]	+39.4	+0.6	+33.2	+8.3	+3.76	+30.2	+13.5	+3.40	+2.78
DC 6	+3.8[illegible]	+11.7	+13.8	+36.3	+7.8	+2.60	+37.2	+10.0	+6.84	+1.42
DC 7	-1[illegible]		+0.2	+33.7	+8.3	+4.06	+29.8	+14.0	+2.85	+4.40
DC 8	[illegible]		+14.1	+35.8	+7.9	+2.64	+37.7	+9.5	+7.60	+1.38
DC AVG.	41.10	57.37	12.02	86.20	16.51	5.378	72.36	23.57	8.934	3.529
AC 1	41.7	54.8	11.3	82.7	15.7	5.05	69.0	22.4	7.91	3.26
AC 2	41.7	54.8	✓	✓	✓	✓	✓	✓	7.93	✓
AC AVG.										
S.P.	~~+65.0~~ 0.0	- 8.7		.02 (AC)			(AC) .03			
AC NOISE	.2	.12		+6.2			0			
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen

LINE I-3 HALF S SP. 1 DATE 8-9

SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5	cal	
RECEIVE	2000-2500 →				2500-3000 →				1-2	
RANGE	100-10	10-10	10-10	10-10	10-10	10-10	10-10	10-10	100-10	
DC 1	+10.0	+4.90	+3.20	+4.22	+3.02	+4.90	3.82+	+0.85	+.8	
DC 2	+8.3	+5.76	+2.60	-0.80	+3.60	+1.80	-1.40	+1.20	+.9	
DC 3	+10.3	+5.20	+3.34	+4.42	+3.90	+5.66	+3.25	+1.22	+.8	
DC 4	+9.0	+5.96	+1.95	-1.10	+1.90	+3.15	-1.42	+0.70	+.9	
DC 5	+10.5	+4.85	+3.80	+4.60	+4.70	+3.95	+4.60	+2.20		
DC 6	+8.5	+4.85	+1.90	-1.35	+1.50	+3.40	-1.00	+0.15		
DC 7	+10.5	+5.44	+4.40	+4.83	+5.02	+4.40	+4.80	+2.20		
DC 8	+9.6	+5.22	+1.15	-1.05	+0.90	+2.30	-1.95	-0.15		
DC AVG.	20.01	9.820	4.203	1.934	6.803	4.331	2.090	1.067	101.45	
AC 1	19.0	9.30	3.92	1.76	6.48	3.96	1.95	0.96	100.6	
AC 2	19.1	✓	3.91	✓	✓	✓	✓	✓	✓	
AC AVG.										
S.P.	-6.7				-3.5					
AC NOISE	.03				.02					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT Geo Chem - CARMEN

LINE I-3 HALF S SP. 1 DATE 8-

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SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-5005	5-10	→	10-15	→	→	15-20	→	→	→
RANGE	Hi	Hi	→	Hi	→	→	Hi	→	→	→
VOLTAGE	470	520	460	470	520	460	540	470	510	460
CURRENT	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CAL
RECEIVE	20-25	→	→	→	25-30	→	→	→		1-2
RANGE	Hi	→	→	→	Hi	→	→	→		Hi
VOLTAGE	540	470	510	460	540	460	510	460	110	220
CURRENT	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	1.0	~~2.0~~

FREQUENCIES .05 3.0

SENDER NO. 66445

OPERATOR HN

RECEIVER NO. ~~7451R~~ B.B

OPERATOR PALMER -

COMMENTS:
1-2 - Hi - 5
2-3 - Hi - 5
3-4 - Hi - 5
4-5 - Hi - 5

N-S

Burr-Brown Rec. a=500'

PAGE

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT Geochem-Camen

LINE I-3 HALF N SP. 1 DATE 8-9

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500	500-1000 →		1000-1500 →		→	1500-	2000 →		→
RANGE	100-10	100-10	100-10	100-10	100-10	10-10	100-10	100-10	10-10	10-10
DC 1	29.2 +	+22.2	+6.0	+31.5	+18.5	+3.60	+43.5	+3.5	+3.80	+1.62
DC 2	+21.8	+19.2	+8.1	+22.0	+0.2	+4.00	+50.0	+12.2	+4.22	+3.20
DC 3	+30.0	+23.6	+6.3	+32.0	+18.0	+4.20	+43.5	+5.5	+3.74	+1.40
DC 4	+22.0	+19.2	+7.5	+21.5	0	+4.20	+50.0	+12.0	+3.80	+3.40
DC 5	+28.4	+24.3	+8.0	+33.2	+18.2	+3.40		+6.0	+3.80	+0.60
DC 6	+21.8	+18.8	+6.3	+20.0	0	+4.60		+10.8	+3.50	+3.20
DC 7	+30.2		+9.0	+34.2	+16.2	+3.20		+6.2	+420	+0.80
DC 8	+21.7		+5.5	+19.8	-0.5	+5.20		+11.8	3.44	+4.10
DC AVG.	57.57	44.59	12.03	70.89	18.11	8.080	97.78	20.86	7.849	3.901
AC 1	5.50	42.4	11.3	68.2	17.3	7.68	93.1	20.0	7.46	3.68
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AC AVG.										
S.P.	.10	.07		.07			.05			
AC NOISE	+28.0	-41.5		+15.8			+1.39			
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE I-3 HALF N SP. 1 DATE 8-9

SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2	cal	
RECEIVE	2000 -	2500 -	→	→	2500 -	3000 -	→	→	4-5	
RANGE	100-10	10-10	10-10	10-10	10-10	10-10	10-10	10-10	300	
DC 1	+6.5	+2.60	+4.65	0	+1.80	+3.90	+0.75	+2.60	+.76	
DC 2	+8.2	+3.75	-0.60	+2.55	+5.80	+0.10	+2.10	+0.60	+.82	
DC 3	+8.0	+3.15	+4.80	+0.45	+1.40	+5.20	+1.10	+2.70	+.32	
DC 4	+7.5	+0.40	-0.60	+1.60	+7.00	-0.30	+2.85	-0.90	+.82	
DC 5	+8.3	+4.20	+5.70	+0.20	-0.10	+5.00	+0.65	+2.70	+.35	
DC 6	+6.5	+1.90	-2.20	+1.50	+7.65	+0.10	+3.70	+0.50	+.84	
DC 7	+9.5	+4.20	+5.80	+0.85	-0.80	+5.15	+0.60	+2.40	+.40	
DC 8	+6.0	+1.40	-2.00	+1.50	+8.80	-0.70	+3.70	-0.40	+.86	
DC AVG.	14.43	6.550	3.313	1.863	8.005	4.611	2.749	1.670	100.94	
AC 1	13.6	6.27	3.11	1.75	7.63	4.37	2.56	1.54	100.3	
AC 2	13.7	✓	✓	✓	✓	✓	✓	✓	100.4	
AC AVG.										
S.P.	+1.0				—					
AC NOISE	.10				.08					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

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PROJECT Geo Chem - CARMEN

LINE F-3 HALF N SP. 1 DATE 8

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500N	5-10 →	→	10-15 →	→	→	15-20 →	→	→	→
RANGE	Hi	Hi →	→	Hi →	→	→	Hi →	→	→	→
VOLTAGE	540	460	540	500	460	540	450	500	450	540
CURRENT	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CAL
RECEIVE	20-25 →	→	→	→	25-30 →	→	→	→		4-5
RANGE	Hi →	→	→	→	Hi →	→	→	→		Hi
VOLTAGE	450	500	450	540	450	500	450	540		90
CURRENT	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		1.0

FREQUENCIES .05 3.0

SENDER NO. 66445

OPERATOR HN

RECEIVER NO. 9741-1

OPERATOR DALMER

COMMENTS:

HEINRICHS GEOEX 8259-68 LINE 1-3 SPD 1 LOOKING WEST 8-9-68 A= 500 FEET

5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	I	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	1.000	
4410	5737	1202	862	1651	5378	7236	2357	8434	3529	DC	2001	983	4203	1934	6803	4331	209	1067	10145	LEFT
4410	5737	1202	862	1651	5378	7236	2357	8434	3529		2001	983	4203	1934	6803	4331	209	1067	10145	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
44.10	57.37	12.02	86.20	16.51	5.378	72.36	23.57	8.434	3.529	DCA	20.01	9.830	4.203	1.934	6.803	4.331	2.090	1.067	101.4	
41.70	54.80	11.30	82.70	15.70	5.050	69.00	22.40	7.910	3.260	AC1	19.00	9.300	3.920	1.760	6.480	3.960	1.950	.960	100.6	
41.70	54.80	11.30	82.70	15.70	5.050	69.00	22.40	7.930	3.260	AC2	19.10	9.300	3.910	1.760	6.480	3.960	1.950	.960	100.6	
41.70	54.80	11.30	82.70	15.70	5.050	69.00	22.40	7.920	3.260	ACA	19.05	9.300	3.915	1.760	6.480	3.960	1.950	.960	100.6	
13.04	16.97	14.22	25.49	19.53	15.90	21.40	27.88	24.94	20.87	RHO	23.67	29.07	24.86	20.02	20.12	25.61	21.63	17.67	.986	DC CAL
4.9	3.8	5.5	3.4	4.3	5.6	4.0	4.3	5.6	7.3	PFE	4.2	4.8	6.5	9.0	4.1	8.5	6.3	10.2	.992	AC CAL
373	225	385	132	219	352	187	156	224	352	MCF	176	166	260	448	204	330	290	578		
.2	.1	.6	.1	.4	1.2	.1	.2	.6	1.5	CPFE	.3	.5	1.2	2.5	.8	1.1	2.3	4.4		
4.7	3.7	4.9	3.3	3.9	4.4	3.9	4.1	5.0	5.9	CCPFE	3.9	4.3	5.3	6.4	3.3	7.3	4.0	5.8		
359	217	344	129	199	280	182	147	199	281	CCMCF	163	148	212	321	162	286	184	328		

5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	I	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	1.000	
5757	4454	1203	7089	1811	808	9778	2086	7844	3901	DC	1443	655	3313	1863	8005	4611	2749	167	10094	RIGHT
5757	4454	1203	7089	1811	808	9778	2086	7844	3901		1443	655	3313	1863	8005	4611	2749	167	10094	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
57.57	44.54	12.03	70.89	18.11	8.080	97.78	20.86	7.844	3.901	DCA	14.43	6.550	3.313	1.863	8.005	4.611	2.749	1.670	100.9	
55.00	42.40	11.30	68.20	17.30	7.680	93.10	20.00	7.460	3.680	AC1	13.60	6.270	3.110	1.750	7.630	4.370	2.560	1.540	100.3	
55.00	42.40	11.30	68.20	17.30	7.680	93.10	20.00	7.460	3.680	AC2	13.70	6.270	3.110	1.750	7.630	4.370	2.560	1.540	100.4	
55.00	42.40	11.30	68.20	17.30	7.680	93.10	20.00	7.460	3.680	ACA	13.65	6.270	3.110	1.750	7.630	4.370	2.560	1.540	100.3	
17.11	13.24	14.30	21.07	21.53	24.01	29.06	24.80	23.31	23.19	RHO	17.15	19.47	19.69	19.38	23.79	27.41	28.60	27.79	.991	DC CAL
4.1	4.4	5.8	3.3	4.1	4.6	4.4	3.7	4.5	5.4	PFE	5.1	3.9	5.9	5.8	4.3	4.9	6.8	7.8	.994	AC CAL
237	335	408	158	189	191	152	149	194	232	MCF	297	198	300	301	181	179	236	281		
.1	.2	.6	.1	.3	.7	.1	.3	.7	1.3	CPFE	.5	.9	1.6	2.6	.7	1.0	1.6	2.5		
3.9	4.3	5.3	3.2	3.7	3.9	4.4	3.4	3.8	4.1	CCPFE	4.6	3.0	4.3	3.2	3.6	3.9	5.2	5.3		
230	321	367	154	173	164	150	138	165	176	CCMCF	270	153	219	165	152	141	180	191		

JOB B259-68 LINE 1-4 SPREAD 1

LOOKING W DATE 8/11/68 A= 500'

CENTER 0.0 LABEL S/N FREQ. 3.0

COUPLING Yes

Burr Brown Rec.

N-S
a = 500'

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT _
LINE I-4

HEINRICHS GEOEXPLORATION CO
I.P. RECEIVER NOTES 5 1/2

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500	500-1000 →		1000-1500		→	2000-	2500		→
RANGE	100-10	100-10	10-10	100-10	100-10	10-10	100-10	100-10	100-10	10-10
DC 1	+32.5	+32.0	+2.15	58.5 +	+18.4	+3.40	+32.0	+15.7	+6.6	+4.40
DC 2	+39.8	+41.7	+3.85	+47.8	+8.5	+4.20	+22.4	+14.4	+10.4	+0.70
DC 3	+29.6	+31.7	+2.05	+60.0	+19.5	+3.60	+32.3	+13.9	+6.0	+4.85
DC 4	+46.5	+43.7	+3.80	+48.5	+8.3	+1.60	+20.6	+16.4	+10.4	+0.65
DC 5	+25.4	+30.2	+3.65	+60.4	+18.4	+4.05	+31.7	+13.7	+5.7	+6.60
DC 6	+49.6	+43.4	+4.40	+47.8	+8.0	+3.15	+21.6	+17.2	+10.4	-0.30
DC 7	+20.4	+30.2	+0.75	+60.0	+18.2	+3.95	+32.0	+14.0	+6.3	+6.00
DC 8	+54.0	+45.6	+4.90	+47.8	+8.8	+3.15	+22.4	+17.4	+10.3	-2.05
DC AVG.	68.44	81.41	7.185	100.0	25.95	8.040	50.48	21.52	12.52	4.961
AC 1	64.8	77.7	6.87	94.6	24.6	7.70	47.8	20.0	11.7	4.68
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AC AVG.										
S.P.	+17.9	+2.0		-10.5			+2.8			
AC NOISE	.04	.05		.04			.05			
POT RES.								1 ST	Set	

PAGE

Geochem - Carmen

HALF S SP. 1 DATE 8-11

1-2	2-3	3-4	4-5
1500-	2000	→	→
100-10	100-10	100-10	10-10
+14.6	+9.5	+5.0	+2.80
+9.7	+18.3	+4.6	+2.55
+17.9	+6.4	+5.5	+3.20
+8.2	+20.3	+6.0	+0.40
+19.8	+4.5	+6.0	-1.80
+7.2	+20.0	+6.2	+2.20
+18.8	+4.8	+4.5	-1.30
+6.0	+20.0	+6.2	+6.00
54.21	28.07	11.35	4.938
52.9	26.8	10.8	4.80
✓	✓	✓	✓
+13.2			
.10			
2 NO	Set		

PAGE

PROJECT Geochem - Carmen

LINE I-4 HALF S SP. 1 DATE 8-11

1-2	2-3	3-4	4-5	cal	
2500-	3000	→	→	1-2	
10-10	10-10	10-10	10-10	100-10	
-2.20	+2.65	+1.95	+2.00	+0.65	
+4.40	+1.60	+0.40	-0.80	+0.20	
-2.20	+3.00	+1.40	+2.02	+0.65	
+6.35	+1.05	+1.10	-1.25	+0.25	
+1.15	+4.40	+0.60	+2.80	+0.65	
+2.20	-0.15	+1.60	-2.20	+0.25	
+0.40	+5.40	+0.60	+3.25		
+3.35	-0.10	+2.00	-2.20		
7.634	5.867	3.180	1.523	100.62	
7.45	5.63	3.07	1.47	100.15	
✓	✓	✓	✓	100.20	
				100.18	
+3.9					
.03					
	3 Rd	Set			

N-5

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PAGE 2

PROJECT Geo Chem - CARMEN

LINE ~~#~~ 1-4 HALF S SP. 1 DATE 8-13

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500S	5-10S	→	10-15	→	→	15-20	→	→	→
RANGE	HI	HI	→	HI	→	→	HI	→	→	→
VOLTAGE	190	520	190	220	520	470	200	230	520	470
CURRENT	2.0	5.0	2.0	2.0	5.0	5.0	2.0	2.0	5.0	5.0
SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CHL
RECEIVE	20-25	→	→	→	25-30	→	→	→		1-2
RANGE	HI	→	→	→	HI	→	→	→		HI
VOLTAGE	520	460	520	470	520	460	520	470		100
CURRENT	5.0	4.0	5.0	5.0	5.0	4.0	5.0	5.0		1.0

FREQUENCIES .05 3.0

SENDER NO. 6644S

OPERATOR HIX

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS:

Burr-Brown N-5, a=500'

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT Geochem - Carmen

LINE I-4 HALF N SP. 1 DATE 8-12

PAGE

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500	500-1000	→	1000 -	1500	→	1500 - 2000			→
RANGE			100-10	100-10	100-10	100-10	100-10	100-10	100-10	10-10
DC 1			+5.80	+4.60	+22.2	+5.8	+31.7	+6.00	+6.00	+0.45
DC 2			+8.00	+4.70	+19.6	+1.7	+19.7	+20.2	+4.00	+0.10
DC 3			+5.80	+4.50	+21.8	+5.8	+31.5	+5.50	+5.80	+1.20
DC 4			+8.00	+4.78	+20.0	+1.0	+18.0	+22.0	+3.00	+0.45
DC 5				+4.56	+22.4	+6.2	+32.0	+5.00	+6.00	+0.95
DC 6				+4.78	+21.0	+1.8	+18.0	+22.5	+4.30	+0.35
DC 7				+4.54	+20.0	+5.8	+33.5	+3.60	+6.10	+0.80
DC 8				+4.70	+20.2	+1.0	+17.6	+22.2	+3.70	-0.20
DC AVG.	—	—	17.29	20.21	46.79	9.967	74.23	29.93	11.59	2.727
AC 1	—	—	16.6	8.97	4.47	9.60	71.7	28.6	11.1	2.67
AC 2	—	—	✓	8.98	✓	✓	✓	✓	✓	✓
AC AVG.										
S.P.	+1.8	+6.2		-5.1			+11.0			
AC NOISE		.02		.05			.02			
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE I-4 HALF N SP. 1 DATE 8-12

SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2	cal	
RECEIVE	2000-2500				2500-3000				4-5	
RANGE	100-10	10-10	10-10	10-10	10-10	10-10	10-10	1-100	100-10	
DC 1	+5.50	+3.80	+0.95	+1.70	+2.82	+1.20	+0.15	.017 −	+0.50	
DC 2	+3.80	+3.50	+2.20	−0.20	0	+2.45	+1.95	.019 +	−0.15	
DC 3	+5.90	+2.70	+1.40	+0.90	+3.60	+0.25	+0.85	.018 −	+0.46	
DC 4	+3.90	+4.00	+2.35	−0.30	−1.20	+3.40	+1.75	.006 −	−0.10	
DC 5	+4.20	+3.00	+0.80	+1.10	+4.00	−0.15	+0.45	.013 +	+0.45	
DC 6	+4.00	+5.05	+0.60	−0.65	−1.90	+3.40	+1.60	.017 −	−0.08	
DC 7	+4.50	+4.05	+1.40	+1.00	+4.85	−0.45	+0.95	.019 +	+0.44	
DC 8	+4.10	+5.40	+0.85	−0.85	−1.80	+3.42	+1.50	.013 −	−0.08	
DC AVG.	12.84	8.314	4.408	1.303	4.101	3.540	2.440	0.815	100.18	
AC 1	12.4	7.93	4.27	1.27	3.96	3.38	2.32	0.82	100.0	
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	
AC AVG.										
S.P.	0					+6.0				
AC NOISE	.02					.03				
POT RES.										

N-5 I-4

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT Geo Chem- CARMEN

LINE ~~N-5~~ I HALF N SP. 1 DATE 8-12

PAGE 1

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500N	5-10 N	→	10-15	→	→	15-20	→	→	→
RANGE		Hi	Hi	Hi	Hi	Hi	Hi	Hi	Hi	Hi
VOLTAGE	—	470	520	440	470	520	190	220	230	200
CURRENT	—	4.0	5.0	4.0	4.0	5.0	2.0	2.0	2.0	2.0
SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CAL
RECEIVE	20-25	→	→	→	25-30	→	→	→		4-5
RANGE	Hi	Hi	Hi	Hi	Hi	Hi	Hi	Hi		Hi
VOLTAGE	190	220	230	200	190	220	230	200		90
CURRENT	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		1.0

FREQUENCIES .05 3.0

SENDER NO. 6641/5

OPERATOR HUX

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS:
1-2 Hi - 5.0
2-3 Hi - 4.0
3-4 - Hi - 4.0
4-5 - Hi - 5.0

HEINRICHS GEOEX B259-68 LINE 1-4 SPD 1 LOOKING WEST 8-11-68 A= 500 FEET

2.000	5.000	2.000	2.000	5.000	5.000	2.000	2.000	5.000	5.000	I	5.000	4.000	5.000	5.000	5.000	4.000	5.000	5.000	1.000	
6844	8141	7185	1000	2595	804	5048	2152	1252	4961	DC	5421	2807	1135	4938	7634	5867	3180	1523	10062	LEFT
6844	8141	7185	1000	2595	804	5048	2152	1252	4961		5421	2807	1135	4938	7634	5867	3180	1523	10062	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
68.44	81.41	7.185	100.00	25.95	8.040	50.48	21.52	12.52	4.961	DCA	54.21	28.07	11.35	4.938	7.634	5.867	3.180	1.523	100.6	
64.80	77.70	6.870	94.60	24.60	7.700	47.80	20.00	11.70	4.680	AC1	52.90	26.80	10.80	4.800	7.450	5.630	3.070	1.470	100.2	
64.80	77.70	6.870	94.60	24.60	7.700	47.80	20.00	11.70	4.680	AC2	52.90	26.80	10.80	4.800	7.450	5.630	3.070	1.470	100.2	
64.80	77.70	6.870	94.60	24.60	7.700	47.80	20.00	11.70	4.680	ACA	52.90	26.80	10.80	4.800	7.450	5.630	3.070	1.470	100.2	
51.01	24.27	21.42	74.54	30.95	23.97	37.63	64.16	37.33	29.58	RHO	64.65	104.6	67.68	51.53	22.76	43.73	33.18	25.43	.994	DC CAL
5.2	4.3	4.1	5.3	5.0	4.0	5.2	7.2	6.6	5.6	PFE	2.0	4.3	4.7	2.4	2.0	3.8	3.2	3.2	.996	AC CAL
101	179	194	71	163	166	137	111	176	188	MCF	32	41	69	47	90	86	95	125		
.0	.1	.3	0.0	.2	.7	.0	.1	.4	.9	CPFE	.1	.1	.3	.7	.7	.6	1.3	2.8		
5.1	4.3	3.8	5.3	4.8	3.3	5.1	7.1	6.2	4.6	CCPFE	2.0	4.2	4.3	1.7	1.3	3.2	1.8	.4		
101	176	178	71	157	138	136	110	166	156	CCMCF	31	40	64	33	58	74	55	15		

0.000	4.000	5.000	4.000	4.000	5.000	2.000	2.000	2.000	2.000	I	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	1.000	
		1729	9021	4679	9967	7423	2993	1159	2727	DC	1284	8314	4408	1303	4101	354	244	815	10018	RIGHT
		1729	9021	4679	9967	7423	2993	1159	2727		1284	8314	4408	1303	4101	354	244	815	10018	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
0.000	0.000	17.29	9.021	4.679	9.967	74.23	29.93	11.59	2.727	DCA	12.84	8.314	4.408	1.303	4.101	3.540	2.440	.815	100.2	
0.000	0.000	16.60	8.970	4.470	9.600	71.70	28.60	11.10	2.670	AC1	12.40	7.930	4.270	1.270	3.960	3.380	2.320	.820	100.0	
0.000	0.000	16.60	8.980	4.470	9.600	71.70	28.60	11.10	2.670	AC2	12.40	7.930	4.270	1.270	3.960	3.380	2.320	.820	100.0	
0.000	0.000	16.60	8.975	4.470	9.600	71.70	28.60	11.10	2.670	ACA	12.40	7.930	4.270	1.270	3.960	3.380	2.320	.820	100.0	
*000.0	*000.0	20.71	3.38	7.01	29.85	55.57	89.63	86.77	40.83	RHO	38.45	62.24	66.00	34.14	30.70	53.00	63.93	34.17	.998	DC CAL
*000.0	*000.0	4.0	.3	4.5	3.6	3.3	4.5	4.2	2.0	PFE	3.4	4.7	3.0	2.4	3.4	4.5	5.0	-.8	.998	AC CAL
*00000	*00000	192	98	641	122	60	50	49	48	MCF	81	75	46	71	110	86	78	-23		
.1	.0	.4	1.2	1.5	.5	0.0	.0	.1	.6	CPFE	.1	.2	.3	1.3	.5	.4	.5	1.9		
*999.9	*000.0	3.6	-.8	3.0	3.1	3.3	4.4	4.1	1.3	CCPFE	3.2	4.5	2.7	1.1	2.9	4.1	4.4	-2.7		
1000	1000	175	-246	424	105	60	49	47	33	CCMCF	84	72	41	33	94	78	69	-79		

1413 MOORE BUSINESS FORMS, INC.

JOB B259-68 LINE 2-1 SPREAD 1

LOOKING W DATE 9/4/68 A= 500'

CENTER 0.0 LABEL S/N FREQ. 3.0

COUPLING Yes

Double DC

9.9.68
CA

N-S
Burr-Brown a=500

PAGE

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem-Carmen
LINE II-1 HALF S1/2 SP. 1 DATE 9-4

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500	500-1000 →		1000-	1500 →		1500-	2000 →		
RANGE	100-10	100-10	100-10	100-10	100-10	10-10	100-10	100-10	100-10	10-10
DC 1	~~[illegible]~~	+24.4	+12.3	+8.3	+5.7	+0.45	+5.9	+6.1	+7.0	+1.56
DC 2	+18.2	+18.0	-3.4	+5.7	+4.1	+2.25	-2.0	+4.0	+1.6	+0.60
DC 3	+20.8	+26.0	+13.0	+6.2	+4.3	-2.16	+7.2	+7.9	+5.5	+1.76
DC 4	+18.3	+15.6	-3.6	+8.0	+6.0	+4.85	-4.5	+4.1	+3.7	+0.10
DC 5	+20.8	+26.5	+13.5	+6.2	+2.4	-0.50	+10.1	+8.0	+4.7	+2.22
DC 6	+18.3	+15.0	-4.0	+6.0	+2.3	+2.80	-6.1	+4.3	+3.8	+1.70
DC 7	+20.8	+25.6	+13.8	+8.1	+6.3	+1.96	+11.7	+7.8	+4.6	+0.60
DC 8		+14.4	-4.3	+3.9	-1.0	+1.10	-7.3	+4.3	+3.7	+1.22
DC AVG.	48.25	76.99	13.08	36.26	12.50	4.563	19.92	22.79	11.92	2.760
AC 1	46.3	74.9	12.6	35.6	12.1	4.42	19.7	22.2	11.5	2.64
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AC AVG.										
S.P.	-1.5	+7.2		-4.4			0			
AC NOISE	.03	.02		.03			.03			
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE II-1 HALF 5 SP. 1 DATE 9-4

SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5	cal	
RECEIVE	2000 -	2500	→	→	2500 -	3000	→	→	1-2	
RANGE	100-10	100-10	10-10	10-10	100-10	100-10	10-10	10-10	100-10	
DC 1	+1.5	+4.5	+2.18	+1.38	+0.5	+2.1	+1.60	+2.00	+.40	
DC 2	+6.0	+1.8	+3.18	+0.63	+5.7	+5.2	+5.20	+1.25	-.10	
DC 3	-3.5	+5.8	+1.56	+1.38	-7.5	+4.0	+4.40	+1.05	+.40	
DC 4	+6.5	+1.5	+3.34	+0.58	+14.0	+13.5	+2.50	+1.85	-.10	
DC 5	-2.4	+5.9	+1.56	+1.56	-7.7	-4.3	-1.40	+8.50		
DC 6	+8.0	+0.6	+3.78	-3.50	+14.2	+12.2	+9.90	-5.24		
DC 7	-4.0	+6.1	+1.24	+4.80	-7.6	-2.4	-2.40	+7.60		
DC 8	+7.8	+0.4	+3.96	-2.70	+13.9	+12.5	+10.00	-5.20		
DC AVG.	13.52	11.55	7.283	2.458	12.26	11.51	7.743	2.882	100.0	
AC 1	13.3	11.2	7.03	2.39	12.0	11.0	7.40	2.69	99.85	
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	
AC AVG.										
S.P.	+2.0				+3.2					
AC NOISE	.04				.06					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PAGE 1

PROJECT Geo Chem - CARMEN

LINE II-1 HALF S SP. 1 DATE 9-4

SEND	4-5	3-4	4-5	2-3	3-9	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500S	5-10	→	10-15	→	→	15-20	→	→	→
RANGE	Hi	Hi	→	Hi	→	→	Hi	→	→	→
VOLTAGE	430	230	430	130	230	430	140	260	470	430
CURRENT	3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0	3.0
SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CAL
RECEIVE	20-25	→	→	→	25-30	→	→	→		1-2
RANGE	Hi	→	→	~~Lo~~	Hi	→	→	Lo		Hi
VOLTAGE	280	260	470	580	280	260	470	570		40
CURRENT	6.0	6.0	6.0	4.0	6.0	6.0	6.0	4.0		1.0

FREQUENCIES .05 3.0

SENDER NO. 66445

OPERATOR HIX

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS:

4-5 — 3.0 — Hi
3-4 — 6.0 — Hi
2-3 — 6.0 — Hi
1-2 — 6.0 — Hi

Burr Brown N-S a = 500'

PAGE

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem - Carmen
LINE II-1 HALF N SP. 1 DATE 9-5

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500	500-1000 →		1000-	1500 →		1500-	2000 →		
RANGE	100-10	100-10	100-10	100-10	100-10	10-10	100-10	100-10	100-10	10-10
DC 1	+25.8	+20.5	+6.8	+3.7	+14.4	+0.55	+18.1	+6.2	+1.9	+4.85
DC 2	+14.6	+15.9	+2.3	+0.5	+7.6		+12.3	+11.3	+12.5	+0.55
DC 3	+25.8	+22.3	+6.2	~~+3.7~~	~~+15.7~~		+23.7	+8.3	-2.4	+4.40
DC 4	+15.6	+15.6	+2.5	~~+2.1~~	~~+8.2~~		+7.7	+12.0	+13.8	+1.18
DC 5	+26.2	+23.4	+6.1	~~+4.0~~	~~+7.8~~		+25.8	+7.7	-3.2	+7.45
DC 6	+15.4	+14.1	+3.5	+3.6	+9.4		+5.7	+13.3	+14.3	-2.30
DC 7	+26.0	+24.2	+5.8	+5.7	+18.2		+26.5	+6.6	-3.9	+7.85
DC 8	+15.7	+14.0	+4.1	+4.2	+8.3		+5.0	+10.3	+14.8	+2.55
DC AVG.	77.86	48.70	13.36	66.25	33.49	13.96	44.32	25.46	11.66	7.646
AC 1	75.8	46.8	12.9	~~78.3~~ 31.4	~~74.8~~ 31.9	13.2	42.7	24.5	11.1	7.32
AC 2	✓	✓	✓	✓	✓		✓	✓	✓	✓
AC AVG.										
S.P.	-8.4	+10.0		-44.2			+15.1			
AC NOISE	.02	.02		.03			.02			
POT RES.				Readings on back						

3-4	2-3	1-2
+ 31.6	+10.2	+10.2
+ 20.5	+20.5	+ 0.5
+32.4	+10.0	+10.4
+19.4	+21.5	+ 0.3
+34.0	+10.2	+10.8
+22.4	+21.0	+ 4.1
+30.2	+14.5	+ 6.4
+22.2	+16.5	+ 4.4

63.6	31.9	13.2
100-10	100-10	100-10

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen

LINE II-1 HALF N SP. 1 DATE 9-5

SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2	cal	
RECEIVE	2000-2500 →				2500-3000 →				4-5	
RANGE	100-10	100-10	100-10	10-10	10-10	10-10	10-10	10-10	100-10	
DC 1	+9.7	+6.0	+6.3	+0.05	+2.00	+4.38	+4.16	+1.40	+.60	
DC 2	+6.5	+10.5	+8.4	+6.20	+4.83	+5.40	+4.62	+2.56	-.15	
DC 3	+10.6	+9.0	+5.8	+0.20	+3.15	+4.00	+3.50	+1.10	+.60	
DC 4	+4.7	+8.2	+9.2	+5.60	+4.00	+5.95	+4.75	+2.70	-.15	
DC 5	+14.0	+11.4	+4.5	+4.35	+3.00	+4.30	+3.90	+1.75		
DC 6	-3.5	+6.0	+10.0	+1.50	+5.35	+6.20	+4.60	+2.30		
DC 7	+22.3	+13.6	+4.0	+4.65	+1.05	+4.00	+4.40	+1.65		
DC 8	-9.7	+4.0	+10.6	+0.55	+6.15	+5.32	+3.74	+1.60		
DC AVG.	18.78	18.71	13.32	6.806	8.074	9.876	7.175	4.164	100.1	
AC 1	18.0	17.8	12.6	6.48	7.71	9.38	7.35	3.97	99.83	
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	
AC AVG.										
S.P.	+7.3				-16.7					
AC NOISE	.03				.03					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT Geo. Chem - CARMEN

LINE II - 1 HALF N SP. 1 DATE 9-5

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500N	5-10	→	10-15	→	→	15-20	→	→	→
RANGE	Hi	Hi	→	Hi	→	→	Hi	→	→	→
VOLTAGE	140	130	140	*230	*410	390	*440	470	260	390
CURRENT	3.0	3.0	3.0	6.0	3.6A	6.0	3.0	6.0	6.0	8.0
SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CHL
RECEIVE	20-25	→	→	→	25-30	→	→	→		4-5
RANGE	Hi	→	→	→	Hi	→	→	→		Hi
VOLTAGE	440	470	360	390	440	470	360	390		140
CURRENT	3.0	6.0	8.0	8.0	3.0	6.0	8.0	8.0		1.0

FREQUENCIES 105 3.6

SENDER NO. 66445

OPERATOR HIR

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS: * Power off S.R.

* 1-2 - 290-L
* 2-3 - 260-L
* 3-4 - 470-L

HEINRICHS GEOEX B259-68 LINE 2-1 SPD 1 LOOKING WEST 9-4-68 A= 500 FEET

3.000	3.000	3.000	3.000	3.000	3.000	3.000	6.000	6.000	3.000	I	6.000	6.000	6.000	4.000	6.000	6.000	6.000	4.000	1.000	
4825	7699	1308	3626	1250	4563	1992	2279	1192	276	DC	1352	1155	7283	2458	1226	1151	7743	2882	1000	LEFT
4825	7699	1308	3626	1250	4563	1992	2279	1192	276		1352	1155	7283	2458	1226	1151	7743	2882	1000	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
48.25	76.99	13.08	36.26	12.50	4.563	19.92	22.79	11.92	2.760	DCA	13.52	11.55	7.283	2.458	12.26	11.51	7.743	2.882	100.00	
46.30	74.90	12.60	35.60	12.10	4.420	19.70	22.20	11.50	2.640	AC1	13.30	11.20	7.030	2.390	12.00	11.00	7.400	2.690	99.85	
46.30	74.90	12.60	35.60	12.10	4.420	19.70	22.20	11.50	2.640	AC2	13.30	11.20	7.030	2.390	12.00	11.00	7.400	2.690	99.85	
46.30	74.90	12.60	35.60	12.10	4.420	19.70	22.20	11.50	2.640	ACA	13.30	11.20	7.030	2.390	12.00	11.00	7.400	2.690	99.85	
24.12	38.49	26.16	18.13	25.00	22.81	9.96	22.79	29.80	27.60	RHO	13.52	28.87	36.41	32.26	30.65	57.55	67.75	60.52	1.000	DC CAL
4.1	2.6	3.7	1.7	3.2	3.1	1.0	2.5	3.5	4.4	PFE	1.5	3.0	3.4	2.7	2.0	4.5	4.5	7.0	.998	AC CAL
168	68	140	94	126	135	97	110	117	159	MCF	111	103	95	83	66	78	66	115		
.1	.0	.3	.1	.3	.7	.3	.3	.5	1.0	CPFE	.6	.5	.7	1.4	.5	.4	.5	.9		
4.0	2.6	3.4	1.6	2.9	2.4	.7	2.2	3.0	3.4	CCPFE	.9	2.5	2.7	1.3	1.5	4.1	4.0	6.1		
165	67	130	87	115	104	70	96	101	122	CCMCF	64	85	75	41	50	71	59	100		

3.000	3.000	3.000	6.000	7.600	6.000	3.000	6.000	6.000	8.000	I	3.000	6.000	8.000	8.000	3.000	6.000	8.000	8.000	1.000	
7786	487	1336	6625	3349	1396	4432	2546	1166	7646	DC	1878	1871	1332	6806	8074	9876	7775	4164	1001	RIGHT
7786	487	1336	6625	3349	1396	4432	2546	1166	7646		1878	1871	1332	6806	8074	9876	7775	4164	1001	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
77.86	48.70	13.36	66.25	33.49	13.96	44.32	25.46	11.66	7.646	DCA	18.78	18.71	13.32	6.806	8.074	9.876	7.775	4.164	100.10	
75.80	46.80	12.90	63.60	31.90	13.20	42.70	24.50	11.10	7.320	AC1	18.00	17.80	12.60	6.480	7.710	9.380	7.350	3.970	99.83	
75.80	46.80	12.90	63.60	31.90	13.20	42.70	24.50	11.10	7.320	AC2	18.00	17.80	12.60	6.480	7.710	9.380	7.350	3.970	99.83	
75.80	46.80	12.90	63.60	31.90	13.20	42.70	24.50	11.10	7.320	ACA	18.00	17.80	12.60	6.480	7.710	9.380	7.350	3.970	99.83	
38.89	24.33	26.69	16.55	26.41	34.87	22.14	25.43	29.12	28.64	RHO	37.52	46.73	49.90	44.62	40.33	49.33	50.97	43.68	.999	DC CAL
2.4	3.8	3.3	3.9	4.7	5.5	3.5	3.6	4.8	4.2	PFE	4.1	4.8	5.4	4.7	4.4	5.0	5.5	4.6	.997	AC CAL
63	155	123	235	178	157	159	143	164	146	MCF	108	103	109	106	110	101	108	105		
.0	.1	.2	.1	.3	.4	.1	.3	.5	1.0	CPFE	.2	.3	.5	.9	.3	.5	.7	1.4		
2.4	3.7	3.0	3.8	4.4	5.1	3.4	3.4	4.2	3.2	CCPFE	3.9	4.6	5.0	3.9	4.1	4.5	4.8	3.2		
62	152	114	227	168	145	155	133	146	111	CCMCF	104	98	100	86	102	92	93	74		

Moore Business Forms, Inc.

JOB B259-68 LINE 2-1 SPREAD 2

LOOKING W DATE 9/5/68 A= 500'

CENTER 35.0 LABEL N/N FREQ. 3.0

COUPLING Yes

Double DC

9.9.68
ct

Borr-Brown a = 500' N-S See back

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT Geochem - Carmen

LINE II-1 HALF S SP. 2 DATE 9-5

PAGE

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	35-30N	30-25N	→	25-20N	→	→	20-15N	→	→	→
RANGE		100-10	100-10	100-10	100-10	100-10	100-10	100-10	10-10	10-10
DC 1		+35.3	+6.2	+14.6	+30.0	+4.0	+15.5	+7.9	+1.85	+4.80
DC 2		+51.7	+8.4	+29.8	-14.0	+10.4	+15.0	+2.4	+5.05	+2.50
DC 3		+34.0	+6.1	+11.6	+19.6	+3.4	+15.5	+8.1	+1.80	+4.64
DC 4		+51.9	+9.7	+32.3	-3.8	+10.8	+15.0	+2.3	+5.10	+1.95
DC 5		+35.4	+5.4	+8.3	+12.3	+3.8		+7.9	+1.86	+5.06
DC 6		+51.8	+10.1	+35.6	+3.7	+10.6		+2.4	+4.97	+1.65
DC 7	—	+34.3	+4.2	+6.0	+12.0	+3.6		+7.8	+2.20	+5.54
DC 8	—	+51.4	+10.5	+37.7	+4.0	+12.3		+2.5	+4.75	+1.05
DC AVG.		58.42	18.95	60.64	21.37	14.53	45.93	13.02	8.437	6.517
AC 1	—	54.1	18.2	58.5	20.7	13.8	44.4	12.5	8.09	6.17
AC 2	—	✓	✓	✓	✓	✓	✓	✓	✓	✓
AC AVG.										
S.P.	+4.2	+11.6		-9.3			-21.4			
AC NOISE	.02	.03		.03			.02			
POT RES.										

Power line criss cross

between 2500 - 3000 N

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE II-1 HALF S SP. 2 DATE 9-5

SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5	col	
RECEIVE	15-10N	→	→	→	10-5N	→	→	→	1-2	
RANGE	100-10	10-10	10-10	10-10	10-10	10-10	10-10	10-10	100-10	
DC 1	+6.5	+2.60	+2.75	+2.58	+3.62	+4.40	+3.24	+3.15	+.05	
DC 2	+7.8	+6.00	+4.42	+4.60	+3.40	+2.95	+1.40	+0.65	+.56	
DC 3	+7.5	+3.15	+3.20	+2.35	+4.06	+3.75	+2.25	+4.00	+.05	
DC 4	+7.0	+5.70	+5.10	+5.20	+3.85	+2.85	+1.94	+1.35	+.56	
DC 5	+8.2	+2.95	+3.60	+1.55	+2.77	+4.10	+2.22	+3.15		
DC 6	+6.5	+4.60	+4.35	+5.80	+4.18	+3.20	+1.75	+0.25		
DC 7	+7.7	+3.35	+2.50	+0.70	+3.30	+3.00	+2.30	+2.65		
DC 8	+7.0	+5.04	+4.22	+6.20	+4.45	+4.20	+1.55	+1.60		
DC AVG.	18.44	9.272	6.971	5.831	~~[illegible]~~ 4.702	6.372	3.904	3.506	100.1	
AC 1	17.7	8.85	6.59	5.48	7.67	6.03	3.70	3.30	99.83	
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	
AC AVG.										
S.P.	+45.3				-6.4					
AC NOISE	.03				.03					
POT RES.					4.5					

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT Geo Chem - CARMEN
LINE II-1 HALF S SP. 2 DATE 9-5

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	35-30N	30-25	→	25-20	→	→	20-15	→	→	→
RANGE		Hi	Hi	Lo	Hi	Hi	Lo	Hi	Hi	Hi
VOLTAGE		380	300	470	500	510	780	470	500	510
CURRENT	—	3.0	3.0	3.0	4.0	5.0	3.0	3.0	4.0	5.0
SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CHL
RECEIVE	15-10	→	→	→	10-5	→	→	→		1-2
RANGE	Lo	Hi	Hi	Hi	Lo	Lo	Hi	Hi		Hi
VOLTAGE	780	470	500	510	760	610	500	510		240
CURRENT	3.0	3.0	4.0	5.0	3.0	4.0	4.0	5.0		1.0

FREQUENCIES .05 3.0
SENDER NO. 6644S
OPERATOR Hix
RECEIVER NO. 9741-1
OPERATOR PALMER.

COMMENTS: 4-5 — 5 — Hi
3-4 — 4 — Hi
2-3 — 3 — Hi Lo — 4
1-2 — 3 — Lo

a = 500'
N-S

Burr Brown Rec.

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT Geochem - Carmen

LINE II-1 HALF N SP. 2 DATE 9-5

PAGE

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	35-40N	40-45N	→	45-50N	→	→	50-55N	→	→	→
RANGE	100-10	100-10	100-10	100-10	~~100-10~~ ~~+9.9~~	10-10	100-10	100-10	10-10	10-10
DC 1	+8.0	+9.5	+9.0	+14.5	+9.9	+2.85	+19.8	+11.7	+3.40	+1.20
DC 2	+29.0	+32.0	+36.0	+24.5	+2.0	+4.76	+38.2	+2.0	+2.50	+2.40
DC 3	+10.5	+12.0	+3.0	+12.4	+12.1	+1.95	+17.8	+10.5	+3.30	+2.30
DC 4	+29.0	+37.4	+32.4	+24.3	+0.5	+6.20	+38.0	+2.4	+2.95	+1.80
DC 5	+10.5	+2.0	+7.8	+10.2	+14.3	+1.55	+17.6	+10.5	+2.20	+2.65
DC 6	+36.0	+34.0	+36.0	+27.8	-2.1	+6.84	+39.5	+2.3	+4.00	+0.80
DC 7	+9.5	+2.0	+9.4	+10.7	+16.3	+0.60	+17.5	+10.1	+1.50	+3.60
DC 8	+36.0	+33.5	+35.0	+28.2	-3.8	+7.00	+39.5	+2.8	+5.40	-0.40
DC AVG.	73.09	53.71	20.29	62.88	17.56	8.983	85.13	18.14	7.378	4.269
AC 1	71.0	57.7	18.2	61.0	16.9	8.60	82.3	17.5	7.08	4.07
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AC AVG.										
S.P.	+12.1	-6.9		-19.8			+28.4			
AC NOISE	.03	.03		.04			.06			
POT RES.	G.F.	3900'N								

a = 5001
N-S

Burr Brown Rec.

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT Geochem - Carmen

LINE II-1 HALF N SP. 2 DATE 9-5

PAGE

SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2	cal	
RECEIVE	55-60	N →	→	→	60-65	N →	→	→	4-5	
RANGE	100-10	10-10	10-10	10-10	100-10	10-10	10-10	10-10	100-10	
DC 1	+9.6	+5.00	+2.20	+1.60	+4.8	+3.25	+1.10	+1.25	-0.05	
DC 2	+6.5	0	+0.70	+1.45	+3.5	+0.60	+1.42	+0.60	+0.65	
DC 3	+9.8	+6.50	+3.20	+1.15	+4.5	+2.56	+1.40	+1.40	-0.05	
DC 4	+6.0	-2.00	+0.98	+0.35	+4.0	+0.80	+0.95	+0.36	+0.65	
DC 5	+8.4	+8.80	+2.90	+1.60	+3.7	+2.50	+1.40	+1.75		
DC 6	+6.0	-3.80	+0.70	+0.35	+6.1	+1.30	+1.20	-0.50		
DC 7	+9.0	+9.90	+2.90	+1.60	+2.4	+1.45	+1.20	+1.60		
DC 8	+7.7	-3.60	+1.60	+0.55	+6.0	+2.25	1.80	+0.40		
DC AVG.	21.48	7.067	4.350	2.088	12.72	4.991	3.329	1.676	100.2	
AC 1	20.7	6.78	4.16	1.98	12.3	4.82	3.20	1.59	99.85	
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	
AC AVG.										
S.P.	+9.8				-7.8					
AC NOISE	.05				✓					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT Geo Chem - CARMEN

LINE H-1 HALF N SP. 2 DATE 4-5

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	35-40N	40-45	→	4-5-50	→		50-55	→		→
RANGE	LO	HI	LO	HI	HI	LO	HI	HI	HI	LO
VOLTAGE	750	460	740	500	450	740	510	600	450	740
CURRENT	3.0	3.0	3.0	4.0	3.0	3.0	5.0	4.0	3.0	3.0
SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CHL
RECEIVE	55-60	→		→	60-65	→		→		4-5
RANGE	HI	HI	LO	LO	HI	HI	LO	LO		HI
VOLTAGE	510	500	610	730	510	500	610	730		100
CURRENT	5.0	4.0	4.0	3.0	5.0	4.0	4.0	3.0		1.0

FREQUENCIES .05 3.0

SENDER NO. 66445

OPERATOR HIX

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS: 1-2 — 3.0 — LO
2-3 — 3.0 — HI — 4.0 — LO
3-4 — 4.0 — HI
4-5 — 5.0 — HI

HEINRICHS GEOEX B259-68 LINE 2-1 SPD 2 LOOKING WEST 9-5-68 A= 500 FEET

3.000	3.000	3.000	3.000	4.000	5.000	3.000	3.000	4.000	5.000	I	3.000	3.000	4.000	5.000	3.000	4.000	4.000	5.000	1.000	
	5842	1825	6064	2137	1453	4593	1302	8437	6517	DC	1844	9272	6971	5831	7702	6372	3904	3506	1001	LEFT
	5842	1825	6064	2137	1453	4593	1302	8437	6517		1844	9272	6971	5831	7702	6372	3904	3506	1001	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
0.000	58.42	18.25	60.64	21.37	14.53	45.93	13.02	8.437	6.517	DCA	18.44	9.272	6.971	5.831	7.702	6.372	3.904	3.506	100.10	
0.000	54.10	18.20	58.50	20.70	13.80	44.40	12.50	8.090	6.170	AC1	17.70	8.850	6.590	5.480	7.670	6.030	3.700	3.300	99.83	
0.000	54.10	18.20	58.50	20.70	13.80	44.40	12.50	8.090	6.170	AC2	17.70	8.850	6.590	5.480	7.670	6.030	3.700	3.300	99.83	
0.000	54.10	18.20	58.50	20.70	13.80	44.40	12.50	8.090	6.170	ACA	17.70	8.850	6.590	5.480	7.670	6.030	3.700	3.300	99.83	
*000.0	29.18	36.46	30.29	32.02	43.55	22.94	26.01	31.61	39.02	RHO	36.84	46.31	52.23	61.16	38.47	47.74	51.19	58.84	.999	DC CAL
*000.0	7.7	.0	3.4	3.0	5.0	3.2	3.9	4.0	5.3	PFE	3.9	4.5	5.5	6.1	.1	5.4	5.2	6.0	.997	AC CAL
*00000	264	0	112	92	115	138	149	127	137	MCF	106	97	105	100	4	113	102	101		
.1	.1	.2	.1	.2	.3	.1	.3	.5	.2	CPFE	.2	.3	.4	.6	.4	.5	.7	.9		
*999.9	7.6	-.2	3.3	2.8	4.7	3.1	3.6	3.5	4.7	CCPFE	3.7	4.2	5.1	5.5	-.2	4.9	4.5	5.0		
1000	262	-4	110	86	108	134	139	112	120	CCMCF	102	91	97	90	-5	103	88	85		

3.000	3.000	3.000	4.000	3.000	3.000	5.000	4.000	3.000	3.000	I	5.000	4.000	4.000	3.000	5.000	4.000	4.000	3.000	1.000	
7309	5371	2029	6288	1756	8983	8513	1814	7378	4269	DC	2148	7067	4350	2088	1272	4991	3329	1676	1002	RIGHT
7309	5371	2029	6288	1756	8983	8513	1814	7378	4269		2148	7067	4350	2088	1272	4991	3329	1676	1002	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
73.09	53.71	20.29	62.88	17.56	8.983	85.13	18.14	7.378	4.269	DCA	21.48	7.067	4.350	2.088	12.72	4.991	3.329	1.676	100.20	
71.00	51.70	18.20	61.00	16.90	8.600	82.30	17.50	7.080	4.070	AC1	20.70	6.780	4.160	1.980	12.30	4.820	3.200	1.590	99.85	
71.00	51.70	18.20	61.00	16.90	8.600	82.30	17.50	7.080	4.070	AC2	20.70	6.780	4.160	1.980	12.30	4.820	3.200	1.590	99.85	
71.00	51.70	18.20	61.00	16.90	8.600	82.30	17.50	7.080	4.070	ACA	20.70	6.780	4.160	1.980	12.30	4.820	3.200	1.590	99.85	
36.47	26.80	40.50	23.53	35.05	44.83	25.49	27.16	36.82	42.60	RHO	25.72	26.45	32.56	36.47	38.08	37.36	43.61	46.83	.998	DC CAL
2.6	3.5	11.1	2.7	3.5	4.1	3.1	3.3	3.8	4.5	PFE	3.4	3.9	4.2	5.1	3.1	3.2	3.7	5.0	.997	AC CAL
71	132	274	116	101	91	121	121	104	106	MCF	132	146	129	139	80	85	84	108		
.0	.1	.1	.1	.2	.3	.1	.2	.4	.6	CPFE	.3	.6	.8	1.2	.4	.7	.9	1.3		
2.5	3.5	11.0	2.6	3.4	3.8	3.0	3.1	3.5	3.9	CCPFE	3.1	3.3	3.4	3.9	2.7	2.5	2.7	3.8		
70	129	270	112	96	85	118	112	94	93	CCMCF	122	124	104	108	71	67	63	81		

Moore Business Forms, Inc.

JOB B259-68 LINE 2-2 SPREAD 1

LOOKING West DATE 8/27/68 A= 500'

CENTER 0.0 LABEL S/N FREQ. 3.0

COUPLING Yes

Double DC

ab
9.4.68

a = 500'
N-S

Burr-Brown Rec

PAGE

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT Geochem - Carmen

LINE II-2 HALF S SP. 1 DATE 8-27

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500	500-1000 →		1000-	1500 →		1500-	2000 →		
RANGE	100-10	100-10	100-10	1000-10	100-10	10-10	1000-10	100-10	10-10	10-10
DC 1	+14.2	+24.4	+5.9	-10	+1.0	+2.15	-15	+12.4	+2.60	+1.34
DC 2	+24.6	+26.0	+7.2	+75	+22.6	+5.20	+94	+2.4	+5.20	+1.90
DC 3	+8.4	+26.2	+5.6	-10	+1.7	+2.20	-58	+11.6	+3.00	+1.45
DC 4	+35.6	+24.4	+8.0	+82	+22.4	+4.82	+140	+1.8	+4.85	+1.76
DC 5	-6.8	+30.4	+4.2	-30	+0.3	+2.10	-112	+12.3	+3.25	-1.40
DC 6	+44.5	+21.4	+8.2	+103	+23.6	+4.80	+186	+0.3	+4.20	+4.96
DC 7	-13.5	+31.0	+3.6	-36	+0.2	+2.80	-138	+14.0	+3.55	-1.76
DC 8	+51.0	+21.0	+8.8	+94	+22.2	+4.80	+200	-0.3	+4.00	+5.05
DC AVG.	45.59	51.80	14.53	111.2	24.18	8.713	109.9	20.69	8.311	3.595
AC 1	43.8	49.2	13.9	108	23.0	8.35	107	20.0	7.92	3.40
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AC AVG.										
S.P.	+7.6	-5.9		+1.7			+4.9			
AC NOISE	.04	.03		.04 3			.03 2			
POT RES.								G.F.	1900'	

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE II-2 HALF S SP. 1 DATE

SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5	cal	
RECEIVE	2000 - 2500 →				2500 - 3000 →				1-2	
RANGE	100-10	10-10	10-10	10-10	10-10	10-10	10-10	10-10	100-10	
DC 1	+14.2	+2.82	+1.76	+0.55	+0.38	+0.26	0	-0.10	+.35	
DC 2	-6.5	0	+0.40	+0.25	+2.80	+1.00	+1.20	+0.62	+.05	
DC 3	+15.6	+2.40	+2.00	+0.62	-0.50	+0.78	+0.22	+0.45	+.35	
DC 4	-7.8	+0.05	+0.35	+0.35	+3.95	+0.57	+0.82	+0.15	+.05	
DC 5	+16.3	+2.00	+1.66	+0.80	-1.65	+0.97	+0.65	+0.40		
DC 6	-8.5	+2.70	+0.84	0	+5.15	+0.58	+0.70	+0.05		
DC 7	+17.5	-0.10	+1.25	+1.00	-2.45	+1.03	+1.00	+1.00		
DC 8	-10.0	+2.76	+1.22	-0.20	+5.40	-0.04	+0.20	-0.50		
DC AVG.	13.01	4.731	2.484	1.206	6.086	2.882	1.767	0.964	100.2	
AC 1	12.6	4.59	2.37	1.16	5.94	2.81	1.70	0.93	100.0	
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	
AC AVG.										
S.P.	+1.1				+5.5					
AC NOISE	.02				.02					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PAGE 7

PROJECT Geo Chem-CARMEN

LINE II-2 HALF S SP. 1 DATE 8-28

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500'S	5-10	→	10-15	→	→	15-20	→	→	→
RANGE	LO	HI	LO	HI	HI	LO	HI	HI	HI	LO
VOLTAGE	600	350	900	240	480	900	220	240	480	900
CURRENT	2.0	3.0	3.0	4.0	4.0	3.0	4.0	4.0	4.0	3.0
SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CAL
RECEIVE	20-25	→	→	→	25-30	→	→	→		1-2
RANGE	HI	HI	HI	LO	HI	HI	HI	LO		HI
VOLTAGE	220	240	470	900	220	240	470	900		50
CURRENT	4.0	4.0	4.0	3.0	4.0	4.0	4.0	3.0		1.0

FREQUENCIES .05 3.0

SENDER NO. 66945

OPERATOR HIX

RECEIVER NO. 9241-1

OPERATOR PALMER

COMMENTS:
4-5 – Lo – 3.0
3-4 – Hi – 4.0
2-3 – Hi – 7.0
1-2 Hi – 7.0

Burr-Brown

a = 500
N-S

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen

LINE II-2 HALF N SP. 1 DATE

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500	500-1000 →		1000-1500 →			1500-2000 →			
RANGE	100-10	100-10	100-10	100-10	100-10	100-10	100-10	100-10	100-10	100-10
DC 1	+35.8	+38.0	+8.5	+41.6	+12.2	+7.7	+38.4	+17.8	+14.2	+7.8
DC 2	+29.6	+29.7	+8.6	+56.4	+14.5	+7.4	+38.4	+18.0	+8.0	+7.7
DC 3	+47.4	+34.0	+8.0	+38.6	+12.4	+7.5	+40.0	+17.8	+13.8	+8.4
DC 4	+23.6	+28.6	+9.8	+57.6	+14.2	+8.0	+37.8	+18.0	+8.6	+5.8
DC 5	+54.4	+39.6	+7.0	+38.4	+12.0	+6.4	+39.4		+13.8	+9.7
DC 6	+8.3	+29.0	+10.0	+58.4	+14.0	+8.0	+38.4		+7.7	+4.2
DC 7	+70.0	+42.0	+7.5	+38.0	+13.4	+6.4	+39.0		+14.2	+12.0
DC 8	-4.0	+26.5	+10.4	+58.0	+14.3	+8.5	+38.0		+6.4	+5.2
DC AVG.	69.36	91.56	19.36	82.72	23.44	10.73	67.87	26.99	18.49	11.58
AC 1	65.8	88.2	18.5	77.9	22.1	9.99	64.0	25.2	17.4	10.8
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AC AVG.										
S.P.	+52.2	+5.1		-16.6			+7.5			
AC NOISE	.04	.03		.03			.04			
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE II-2 HALF N SP. 1 DATE

SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2	cal	
RECEIVE	2000-2500	→			2500-3000	→			4-5	
RANGE	100-10	100-10	100-10	10-10	10-10	10-10	10-10	10-10	100-10	
DC 1	+6.0	+2.4	+2.2	+2.80	+3.84	+1.40	+1.60	+2.16	+.80	
DC 2	+16.2	+10.2	+8.4	+4.44	+1.05	+3.35	+2.55	+1.40	-.20	
DC 3	-0.3	+2.2	+1.8	+2.40	+4.56	+0.85	+1.40	+2.22	+.80	
DC 4	+22.6	+9.5	+8.3	+3.40	+0.20	+3.65	+2.30	+1.86	-.20	
DC 5	-2.2	+4.3	+2.1	+2.60	+5.60	+0.55	+1.60	+1.60		
DC 6	+22.2	+8.6	+8.2	+3.80	-0.80	+3.85	+2.40	+1.80		
DC 7	-3.0	+4.5	+2.5	+3.20	+6.65	-0.15	+1.65	+1.65		
DC 8	+23.5	+8.2	+8.8	+4.05	-1.70	+4.10	+2.55	+1.80		
DC AVG.	18.70	10.61	9.536	5.602	4.902	3.352	3.560	2.409	99.6	
AC 1	17.7	9.97	9.01	5.27	4.64	3.14	3.36	2.23	99.3	
AC 2	✓	✓	✓	✓	✓	✓			✓	
AC AVG.										
S.P.	+16.3				-10.0					
AC NOISE	.07				.06					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT Geo Chem - CARMEN

LINE II-2 HALF N SP. 1 DATE 8-28

PAGE 8

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500'N	5-10 →		10-15 →			15-20 →			
RANGE	Hi	Hi	Hi	Hi	Hi	Hi	Lo	Hi	Hi	Hi
VOLTAGE	210	230	210	460	230	270	890	460	350	440
CURRENT	4.0	4.0	4.0	4.0	4.0	5.0	3.0	4.0	6.0	8.0
SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CAL
RECEIVE	20-25 →				25-30 →					4-5
RANGE	Lo	Hi	Hi	Hi	Lo	Hi	Hi	Hi		Hi
VOLTAGE	890	470	420	440	890	470	420	430		280
CURRENT	3.0	4.0	7.0	8.0	3.0	4.0	7.0	8.0		1.0

FREQUENCIES .05 3.0

SENDER NO. 66445

OPERATOR HIX

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS: 1-2 — Hi — 7.0
2-3 — Hi — 7.0
3-4 — Hi — 4.0
4-5 — Lo — 3.0

HEINRICHS GEOEX B259-68 LINE 2-2 SPD 1 LOOKING WEST 8-27-68 A= 500 FEET

2.000	3.000	3.000	4.000	4.000	3.000	4.000	4.000	4.000	3.000	I	4.000	4.000	4.000	3.000	4.000	4.000	4.000	3.000	1.000	
4559	5180	1453	1112	2418	8713	1099	2069	8311	3595	DC	1301	4731	2484	1206	6086	2882	1767	964	1002	LEFT
4559	5180	1453	1112	2418	8713	1099	2069	8311	3595		1301	4731	2484	1206	6086	2882	1767	964	1002	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
45.59	51.80	14.53	111.2	24.18	8.713	109.9	20.69	8.311	3.595	DCA	13.01	4.731	2.484	1.206	6.086	2.882	1.767	.964	100.2	
43.80	49.20	13.90	108.0	23.00	8.350	107.0	20.00	7.920	3.400	AC1	12.60	4.590	2.370	1.160	5.940	2.810	1.700	.930	100.0	
43.80	49.20	13.90	108.0	23.00	8.350	107.0	20.00	7.920	3.400	AC2	12.60	4.590	2.370	1.160	5.940	2.810	1.700	.930	100.0	
43.80	49.20	13.90	108.0	23.00	8.350	107.0	20.00	7.920	3.400	ACA	12.60	4.590	2.370	1.160	5.940	2.810	1.700	.930	100.0	
34.12	25.85	29.00	41.62	36.20	43.48	41.13	30.97	31.10	35.88	RHO	19.48	17.71	18.59	21.06	22.78	21.57	23.15	26.94	.998	DC CAL
3.9	5.1	4.3	2.8	4.9	4.1	2.5	3.2	4.7	5.5	PFE	3.0	2.9	4.6	3.8	2.3	2.4	3.7	3.4	.998	AC CAL
114	196	149	66	136	95	61	105	152	154	MCF	156	162	247	178	99	109	161	128		
.0	.1	.2	.0	.2	.3	.0	.2	.5	.7	CPFE	.4	1.0	1.7	2.4	.7	1.4	2.1	2.6		
3.8	5.0	4.1	2.7	4.8	3.8	2.5	3.0	4.3	4.8	CCPFE	2.7	1.9	2.9	1.4	1.5	.9	1.6	.9		
112	194	141	65	131	88	60	98	137	134	CCMCF	137	105	155	65	68	43	70	32		

4.000	4.000	4.000	4.000	4.000	5.000	3.000	4.000	6.000	8.000	I	3.000	4.000	7.000	8.000	3.000	4.000	7.000	8.000	1.000	
6936	9156	1936	8272	2344	1073	6787	2699	1849	1158	DC	1870	1061	9536	5602	4902	3352	3560	2409	996	RIGHT
6936	9156	1936	8272	2344	1073	6787	2699	1849	1158		1870	1061	9536	5602	4902	3352	3560	2409	996	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
69.36	91.56	19.36	82.72	23.44	10.730	67.87	26.99	18.49	11.58	DCA	18.70	10.610	9.536	5.602	4.902	3.352	3.560	2.409	99.60	
65.80	88.20	18.50	77.90	22.10	9.990	64.00	25.20	17.40	10.80	AC1	17.70	9.970	9.010	5.270	4.640	3.140	3.360	2.230	99.30	
65.80	88.20	18.50	77.90	22.10	9.990	64.00	25.20	17.40	10.80	AC2	17.70	9.970	9.010	5.270	4.640	3.140	3.360	2.230	99.30	
65.80	88.20	18.50	77.90	22.10	9.990	64.00	25.20	17.40	10.80	ACA	17.70	9.970	9.010	5.270	4.640	3.140	3.360	2.230	99.30	
26.11	34.47	29.16	31.14	35.30	32.32	34.07	40.65	46.41	43.60	RHO	37.55	39.95	41.03	36.91	24.61	25.24	26.81	25.40	1.004	DC CAL
5.1	3.5	4.3	5.9	5.7	7.1	5.7	6.8	5.9	6.9	PFE	5.3	6.1	5.5	6.0	5.3	6.4	5.6	7.7	.997	AC CAL
195	101	149	188	163	219	168	167	128	158	MCF	142	153	135	162	217	255	210	303		
.1	.0	.2	.1	.2	.4	.0	.1	.3	.5	CPFE	.2	.3	.6	1.1	.6	1.2	1.7	2.8		
5.0	3.4	4.1	5.8	5.6	6.6	5.7	6.6	5.7	6.3	CCPFE	5.2	5.8	4.9	4.8	4.7	5.3	3.9	4.9		
192	100	141	187	158	205	167	163	122	145	CCMCF	138	144	120	131	190	209	145	193		

JOB B259-68 LINE 2-2 SPREAD 2

LOOKING West DATE 8/29/68 A= 500'

CENTER 35.0 LABEL N/N FREQ. 3.0

COUPLING Yes

Double DC

CL
9-4-68

a = 500'
N-S

Burr Brown Rec.

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT Geochem- Carmen

LINE II-2 HALF 5 SP. 2 DATE

PAGE

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	35-30N	30-25N	→	25-20N	→	→	20-15N	→	→	→
RANGE	1000-10	100-10	100-10	1000-10	100-10	100-10	1000-10	100-10	100-10	100-10
DC 1	+105	+14.6	+13.4	+20	+12.5	+5.6	+38.0	+18.6	+4.3	+7.7
DC 2	-43	+13.2	+13.0	+20	-9.8	+8.4	+17.0	+22.0	+5.6	+6.3
DC 3	+140	+14.3	+13.4	+60	+11.8	+5.8	+30.0	+18.6	+4.3	+7.7
DC 4	-70	+13.5	+12.4	-05	-9.5	+8.3	+30.0	+22.0	+5.6	+9.8
DC 5	+176	+14.3	+13.6	+74	+12.0	+6.1	+5.0			+7.6
DC 6	-98	+13.5	+12.0	-20	-8.8	+7.8	+55.0			+6.5
DC 7	+185		+13.6	+68	+11.6	+6.3	0			+7.8
DC 8	-86		+12.0	-15	-10.0	+7.7	+55.0			+7.7
DC AVG.	125.5	52.79	31.60	103.9	18.12	16.71	115.6	52.13	12.20	13.23
AC 1	120	51.4	30.3	101	18.0	16.0	113	50.1	11.7	12.5
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AC AVG.										
S.P.	+2.8	+4.2		+2.7			-4.7			
AC NOISE	.03	.02		.03			.04			
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE II-2 HALF 5 SP. 2 DATE

SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5	cal	
RECEIVE	15-10N	→	→	→	10-5N	→	→	→	1-2	
RANGE	100-10	100-10	10-10	10-10	10-10	10-10	10-10	10-10	100-10	
DC 1	+8.6	+17.0	+3.85	+4.75	+3.40	+4.20	+1.90	+4.25	+.25	
DC 2	+14.2	+4.2	+1.00	+2.30	+9.80	+8.20	-0.40	-0.40	+.20	
DC 3	+10.6	+19.5	+4.60	+6.15	+7.00	+2.20	+3.80	+3.90	+.25	
DC 4	+16.4	+3.5	+2.35	+0.40	+6.70	+4.95	-2.40	+0.40	+.20	
DC 5	+9.0	+19.5	+2.75	+7.30	+5.90	+3.70	+3.50	+5.70		
DC 6	+18.5	+3.7	+2.10	+0.55	+7.50	+7.30	-1.65	+2.00		
DC 7	+10.7	+18.6	+3.20	+7.25	+3.70	+2.20	+6.40	+3.15		
DC 8	+17.4	+3.7	+3.15	+1.40	+7.40	+9.50	-2.40	-0.40		
DC AVG.	25.92	16.333	4.339	5.436	9.837	7.316	2.169	3.028	100.2	
AC 1	24.6	15.2	4.06	5.05	9.18	6.81	2.04	2.79	100.0	
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	
AC AVG.										
S.P.	+4.4				+18.5					
AC NOISE	.04				.04					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT Geo Chem - CARMEN

LINE II-2 HALF S SP. 2 DATE 8-29

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SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	35-30	30-25	→	25-20	→	→	20-15	→	→	→
RANGE	Hi	Hi	→	Hi	→	→	Hi	→	→	→
VOLTAGE	300	140	300	150	140	300	420	150	140	290
CURRENT	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CHL
RECEIVE	15-10	→	→	→	10-5	→	→	→		1-2
RANGE	Hi	→	→	→	Hi	→	→	→		Hi
VOLTAGE	420	150	140	290	420	150	140	290		70
CURRENT	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		1.0

FREQUENCIES .05 3.0

SENDER NO. 6645

OPERATOR Hix

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS:

a=500'
N-S

Burr Brown Rec.

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen

LINE II-2 HALF N SP. 2 DATE 8-29

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	35-40N	40-45N →		45-50N		→	50-55N			→
RANGE	100-10	1000-10	100-10	100-10	100-10	100-10	100-10	100-10	100-10	10-10
DC 1	+10.2	+25	+4.0	+28.5	+19.8	+8.3	+45	+5.6	+5.5	+0.74
DC 2	+16.1	+64	+20.8	+24.0	+12.0	+20.0	+76	+6.2	+8.5	-0.20
DC 3	+9.8	+38	+4.2	+26.4	+18.0	+9.4	+54	+5.5	+4.5	+0.80
DC 4	+16.5	+42	+20.4	+25.0	+11.7	+1.5	+80	+6.3	+8.8	-0.22
DC 5	+9.8	+45	+4.5	+25.5	+18.0	+10.1	+36	+4.7	+4.2	+0.80
DC 6	+17.0	+42	+20.3	+25.5	+11.5	+0.5	+82	+6.7	+9.7	-0.26
DC 7	+9.6	+60	+4.8	+24.6	+19.5	+10.4	+30	+4.4	+4.0	+0.84
DC 8	+17.6	+24	+20.2	+26.0	+10.3	0	+70	+7.2	+9.8	-0.35
DC AVG.	52.72	122.5	31.54	65.35	31.51	13.30	125.9	14.07	13.38	6.438
AC 1	51.4	118	30.3	62.8	30.0	12.5	120	13.5	12.7	6.41
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AC AVG.										
S.P.	+1.5	+7.8		-3.9			-3.3			
AC NOISE	.02	.03		.03			.02			
POT RES.				x-x-x-x-GF-x-x-						

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE II-2 HALF N SP. 2 DATE

SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2	cal	
RECEIVE	55-60N	→		→	60-65N	→		→	4-5	
RANGE	100-10	10-10	10-10	10-10	100-10	10-10	10-10	10-10	100-10	
DC 1	+15.4	+2.00	+2.05	+2.05	+10.0	+3.46	+0.65	+2.80	+.64	
DC 2	+14.0	+3.05	+5.35	+1.98	+8.2	+1.00	+8.45	+0.15	+.05	
DC 3	+15.4	+1.20	+1.50	+1.60	+11.4	+2.10	+1.80	+3.35	+.64	
DC 4	+14.0	+3.84	+6.10	+2.24	+8.0	+2.26	+7.80	+0.16	+.05	
DC 5		+0.25	+0.80	+1.02	+11.7	+0.96	+2.20	+3.86		
DC 6		+4.62	+6.60	+2.84	+7.5	+3.15	+6.54	-0.66		
DC 7		-0.54	+0.10	+0.58	+12.0	+0.10	+3.15	+4.05		
DC 8		+5.24	+7.25	+3.34	+7.2	+4.15	+5.84	-1.00		
DC AVG.	22.07	6.199	7.409	3.945	17.26	4.061	8.054	2.909	100.3	
AC 1	30.6	5.97	7.05	3.76	16.3	3.87	7.58	2.74	~~100.17~~	
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	~~100.18~~	
AC AVG.									100.0	
S.P.	+5.5				+10.2					
AC NOISE	.02				.03					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

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PROJECT Geo Chem - CARMEN

LINE II-2 HALF 1 SP. 2 DATE 8-29

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	35-40N	40-45	→	45-50	→	→	50-55	→	→	→
RANGE	Hi	Hi	Hi	Hi	→	→	Hi	→	→	→
VOLTAGE	460	160	450	140	160	440	300	140	160	440
CURRENT	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CAL
RECEIVE	55-60	→	→	→	60-65	→	→	→		4-5
RANGE	Hi	→	→	→	Hi	→	→	→		Hi
VOLTAGE	300	140	160	440	300	140	240	440		50
CURRENT	6.0	6.0	6.0	6.0	6.0	6.0	9.0	6.0		1.0

FREQUENCIES .05 3.0

SENDER NO. 6644-5

OPERATOR HIX

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS:
1-2 — Hi-6.
2-3 — Hi-9.
3-4 — Hi-9
4-5 — Hi-9

HEINRICHS GEOEX B259-68 LINE 2-2 SPD 2 LOOKING WEST 8-29-68 A= 500 FEET

6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000	I	6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000	1.000	
1255	5279	3160	1039	1812	1671	1156	5213	122	1323	DC	2592	1633	4339	5436	9837	7316	2169	3028	1002	LEFT
1255	5279	3160	1039	1812	1671	1156	5213	122	1323		2592	1633	4339	5436	9837	7316	2169	3028	1002	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
125.5	52.79	31.60	103.9	18.12	16.71	115.6	52.13	12.20	13.23	DCA	25.92	16.33	4.339	5.436	9.837	7.316	2.169	3.028	100.2	
120.0	51.40	30.30	101.0	18.00	16.00	113.0	50.10	11.70	12.50	AC1	24.60	15.20	4.060	5.050	9.180	6.810	2.040	2.790	100.0	
120.0	51.40	30.30	101.0	18.00	16.00	113.0	50.10	11.70	12.50	AC2	24.60	15.20	4.060	5.050	9.180	6.810	2.040	2.790	100.0	
120.0	51.40	30.30	101.0	18.00	16.00	113.0	50.10	11.70	12.50	ACA	24.60	15.20	4.060	5.050	9.180	6.810	2.040	2.790	100.0	
31.31	13.17	31.54	25.92	18.08	41.69	28.84	52.03	30.44	66.02	RHO	25.87	40.74	21.65	47.47	24.54	36.51	18.94	42.31	.998	DC CAL
4.4	2.5	4.1	2.7	.5	4.2	2.1	3.8	4.1	5.6	PFE	5.2	7.2	6.7	7.4	6.9	7.2	6.1	8.3	.998	AC CAL
140	190	129	103	26	101	73	74	134	85	MCF	199	177	308	156	283	198	323	197		
.1	.2	.2	.1	.4	.3	.1	.1	.5	.3	CPFE	.3	.3	1.4	.8	.6	.7	2.7	1.4		
4.3	2.3	3.9	2.6	.0	3.9	2.0	3.7	3.6	5.3	CCPFE	4.9	6.9	5.2	6.6	6.3	6.5	3.4	6.9		
138	176	123	100	2	94	71	72	118	80	CCMCF	189	169	242	139	257	178	179	162		

6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000	6.000	I	6.000	6.000	6.000	6.000	6.000	6.000	9.000	6.000	1.000	
5272	1225	3154	6535	3151	1330	1259	1407	1338	6438	DC	3207	6199	7409	3945	1726	4061	8054	2909	1003	RIGHT
5272	1225	3154	6535	3151	1330	1259	1407	1338	6438		3207	6199	7409	3945	1726	4061	8054	2909	1003	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
52.72	122.5	31.54	65.35	31.51	13.30	125.9	14.07	13.38	6.438	DCA	32.07	6.199	7.409	3.945	17.26	4.061	8.054	2.909	100.3	
51.40	118.0	30.30	62.80	30.00	12.50	120.0	13.50	12.70	6.410	AC1	30.60	5.970	7.050	3.760	16.30	3.870	7.580	2.740	100.0	
51.40	118.0	30.30	62.80	30.00	12.50	120.0	13.50	12.70	6.410	AC2	30.60	5.970	7.050	3.760	16.30	3.870	7.580	2.740	100.0	
51.40	118.0	30.30	62.80	30.00	12.50	120.0	13.50	12.70	6.410	ACA	30.60	5.970	7.050	3.760	16.30	3.870	7.580	2.740	100.0	
13.14	30.53	31.45	16.29	31.42	33.15	31.38	14.03	33.35	32.09	RHO	31.97	15.45	36.93	34.42	43.02	20.24	46.84	40.60	.997	DC CAL
2.3	3.5	3.8	3.7	4.7	6.1	4.6	3.9	5.0	.1	PFE	4.5	3.5	4.8	4.6	5.6	4.6	5.9	5.9	.997	AC CAL
172	115	120	230	150	183	147	279	151	4	MCF	140	228	129	134	130	228	127	144		
.2	.1	.2	.1	.2	.4	.1	.4	.4	.8	CPFE	.2	1.2	.7	1.3	.3	1.5	.8	1.5		
2.1	3.4	3.6	3.6	4.5	5.7	4.5	3.3	4.6	-.7	CCPFE	4.3	2.3	4.1	3.3	5.3	3.1	5.1	4.3		
158	113	114	222	144	170	145	236	138	-22	CCMCF	134	151	111	97	123	152	109	106		

050669

JOB B259-68 LINE 2-3 SPREAD 1

LOOKING West DATE 8/25/68 A= 500'

CENTER 0.0 LABEL S/N FREQ. 3.0

COUPLING Yes

Double DC

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT II-3 Geochem - Carmen
LINE ~~[illegible]~~ HALF S SP. 1 DATE

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500	500-1000 →		1000-1500 →			1500-	2000-		→
RANGE	100-10	100-10	100-10	100-10	10-10	10-10	100-10	10-10	10-10	10-10
DC 1	+5.6	+2.3	+2.0	+3.4	+1.30	+1.02	+8.4	+2.90	+0.84	+1.85
DC 2	+1.3	+22.4	+4.1	+11.8	+3.00	+0.10	+6.4	+1.35	+1.58	+1.05
DC 3	+10.2	+3.8	+1.7	+2.2	+0.20	+1.15	+9.5	+3.05	-0.85	+0.35
DC 4	-3.5	+8.0	+2.4	+12.0	+4.05	-0.15	+6.3	+0.75	+1.15	+1.60
DC 5	+12.3	+6.4	+3.6	+2.4	-2.05	+1.65	+9.8	+3.45	+0.65	-0.60
DC 6	-4.6	+14.4	+2.0	+12.2	+5.36	-0.25	+6.3	+0.35	+2.70	+1.85
DC 7	+12.6	+12.2	+6.3	+1.7	-1.90	+2.15	+9.8	+3.80	+1.00	-0.95
DC 8	-5.3	+8.2	-0.5	+12.5	+5.05	-1.10	+6.3	-0.15	+2.55	+2.05
DC AVG.	28.31	47.44	10.80	35.62	7.40	2.44	42.49	8.842	2.833	1.215
AC 1	27.9	46.4	10.5	34.9	7.23	2.37	41.7	8.64	2.72	1.14
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AC AVG.										
S.P.	+23.1	-15.5		-1.5			-3.4			
AC NOISE	.04	.03		.03			.02			
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE II-3 HALF S SP. 1 DATE

SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5	cal	
RECEIVE	20-2500	→		→	2500-3000	→		→	1-2	
RANGE	100-10	10-10	10-10	1-100	10-10	10-10	10-10	10-10	100-10	
DC 1	+14.0	+1.15	-1.05	~~-0.08~~	+1.06	+0.45	+0.10	+0.84	+.50	
DC 2	-9.6	-1.05	+2.05	+0.62	+2.05	+0.38	+0.35	-0.35	+.05	
DC 3	+16.0	+3.30	-0.85		-0.20	+0.65	+0.20	+1.20	+.50	
DC 4	-11.7	-1.63	+1.60		+3.00	+0.40	+0.68	-0.76	+.05	
DC 5	+6.8	+4.05	-2.20	NOISE	-1.10	+0.80	-0.35	+1.45		
DC 6	-1.5	+2.35	+3.00		+3.90	0	+1.20	-0.96		
DC 7	+8.0	+6.20	-2.10		-1.80	+1.20	-0.40	+1.62		
DC 8	-3.5	-4.80	+3.00		+4.50	-0.35	+1.35	-1.20		
DC AVG.	10.69	2.984	1.298	—	4.353	1.460	0.7844	0.5949	99.73	
AC 1	10.4	2.88	1.27	0.863	4.23	1.41	0.75	0.56	99.45	
AC 2	✓	✓	✓	✓	✓	✓	✓		✓	
AC AVG.										
S.P.	+15.0				-0.5					
AC NOISE	.04				.02					
POT RES.							✗	✗		

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT Geochem-CARMEN
LINE II-3 HALF S SP. 1 DATE 8-25

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0.5005	5-20 →		10-15 →			15-20			
RANGE	HI	LO	HI	LO	LO	HI	LO	LO	LO	
VOLTAGE	460	920	460	720	910	460	700	710	890	460
CURRENT	3.0	3.0	3.0	2.0	3.0	3.0	2.0	2.0	3.0	3.0
SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CAL
RECEIVE	20-25 →				25-30 →					1-2
RANGE	LO	LO	LO	LO	LO	LO	LO	LO		HI
VOLTAGE	700	700	880	610	700	700	870	610		340
CURRENT	2.0	2.0	3.0	4.0	2.0	2.0	3.0	4.0		1.0

FREQUENCIES .05 3.0
SENDER NO. 6644 S
OPERATOR HIX
RECEIVER NO. 9741-1
OPERATOR PARMER

COMMENTS: 4-5 — HI - 3
3-4 — LO - 3
2-3 — LO - 2
1-2 — LO - 2

N-3

Burr Brown Rec. a=500'

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen

LINE II-3 HALF N SP. 1 DATE

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500	500-1000 →		1000-1500 →			1500-	2000 →		
RANGE	100-10	100-10	10-10	100-10	10-10	10-10	100-10	100-10	10-10	10-10
DC 1	+12.0	+3.7	+0.80	+4.0	+1.40	+2.05	+2.2	-0.5	+0.60	+0.60
DC 2	+0.5	+5.5	+3.00	+6.5	0	+1.80	+2.6	+4.0	-0.80	+1.55
DC 3	+14.2	+2.2	-0.25	-2.2	+4.42	0	+1.5	-0.2	+2.44	+0.25
DC 4	-1.0	+10.2	+3.78	+12.6	-3.02	+3.77	+5.5	+3.8	-0.85	+1.63
DC 5	+16.0	-7.7	-0.40	-7.8	+7.20	-2.05	-0.4	-0.2	+2.40	-0.10
DC 6	-2.4	+16.0	+3.70	+18.0	-5.58	+5.85	+6.6	+3.6	-0.70	+2.22
DC 7	+17.5	-13.4	-0.24	-12.5	+9.90	-3.95	-2.2	0	+2.64	-0.55
DC 8	-3.7	+21.5	+3.62	+23.2	-8.20	+7.80	+7.4	+3.4	-0.75	+2.36
DC AVG.	31.30	19.00	7.249	29.45	8.326	4.348	26.36	11.63	4.352	2.633
AC 1	30.6	18.7	7.08	29.1	8.19	4.20	26.1	11.45	4.28	2.54
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AC AVG.	~~-0.8~~									
S.P.	-0.8	+7.7		+26.0			0			
AC NOISE	.05	.06		.03			.04			
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE II-3 HALF N SP. 1 DATE

SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2	cal	
RECEIVE	20-2500	→			25-3000	→			4-5	
RANGE	100-10	10-10	10-10	10-10	10-10	10-10	10-10	10-10	100-10	
DC 1	-3.7	+3.56	+1.06	+1.16	-3.00	+2.05	-1.10	+1.05	-0.03	
DC 2	+6.4	-2.16	-0.26	+0.60	+0.60	-0.20	+1.60	-0.55	+0.70	
DC 3	-2.2	-0.80	+1.86	+0.60	+4.20	+0.90	-0.65	+1.62	-0.03	
DC 4	+5.7	+2.50	-0.66	+1.44	-6.40	+1.40	+1.00	-1.05	+0.70	
DC 5	-1.8	-1.00	+2.45	+0.14	+10.00	-0.66	-0.30	+2.10		
DC 6	+4.6	+1.75	-1.80	+1.80	+0.90	+2.45	+0.95	-1.45		
DC 7	-1.0	-0.18	+3.24	-0.80	+3.00	-1.70	+0.20	+2.60		
DC 8	+4.5	+1.84	-2.54	+2.40	-4.20	+3.35	+0.45	-1.85		
DC AVG.	10.16	5.861	2.556	1.709	3.961	2.615	1.235	0.931	100.3	
AC 1	9.99	5.81	2.49	1.63	3.88	2.53	1.20	~~0.819~~	100.0	
AC 2	✓	✓	✓	✓	✓	✓	✓	0.89	✓	
AC AVG.										
S.P.	-7.4				+2.2					
AC NOISE	.04				.03					
POT RES.					over					

+800
-900

+1.40
-1.80
+4.20
-400
+640
-6.00
+8.40
-800

3.844

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT Geo Chem - CARMEN

LINE II-3 HALF N SP. 1 DATE 8-25

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500N	5-10 →		15-20 →			20-25 →			
RANGE	Lo	Lo	Lo	Lo	Lo	Lo	Hi	Lo	Lo	Lo
VOLTAGE	680	670	680	830	660	680	440	830	660	680
CURRENT	2.0	2.0	2.0	3.0	2.0	2.0	3.0	3.0	2.0	2.0
SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CAL
RECEIVE	25-30			→	30-35			→		4-5
RANGE	Hi	Lo	Lo	Lo	Hi	Lo	Lo	Lo		Hi
VOLTAGE	440*	820	650	680	440	810	650	680		140
CURRENT	3.0	3.0	2.0	2.0	3.0	3.0	2.0	2.0		1.0

FREQUENCIES .05 3.0

SENDER NO. 6644

OPERATOR

RECEIVER NO.

OPERATOR

COMMENTS: * Acting up

HEINRICHS GEOEX 8259-68 LINE 2-3 SPD 1 LOOKING WEST 8-25-68 A= 500 FEET

3.000	3.000	3.000	2.000	3.000	3.000	2.000	2.000	3.000	3.000	I	2.000	2.000	3.000	4.000	2.000	2.000	3.000	4.000	1.000	
2831	4744	1080	3562	740	244	4249	8842	2833	1215	DC	1069	2984	1298		4353	146	7844	5949	9973	LEFT
2831	4744	1080	3562	740	244	4249	8842	2833	1215		1069	2984	1298		4353	146	7844	5949	9973	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
28.31	47.44	10.80	35.62	7.400	2.440	42.49	8.842	2.833	1.215	DCA	10.69	2.984	1.298	0.000	4.353	1.460	.784	.595	99.73	
27.90	46.40	10.50	34.90	7.230	2.370	41.70	8.640	2.720	1.140	AC1	10.40	2.880	1.270	.863	4.230	1.410	.750	.560	99.45	
27.90	46.40	10.50	34.90	7.230	2.370	41.70	8.640	2.720	1.140	AC2	10.40	2.880	1.270	.863	4.230	1.410	.750	.560	99.45	
27.90	46.40	10.50	34.90	7.230	2.370	41.70	8.640	2.720	1.140	ACA	10.40	2.880	1.270	.863	4.230	1.410	.750	.560	99.45	
14.19	23.78	21.66	26.79	14.84	12.23	31.95	26.60	14.20	12.18	RHO	32.16	22.44	13.02	*000.0	32.74	21.96	13.76	12.53	1.003	DC CAL
1.2	2.0	2.6	1.8	2.1	2.7	1.6	2.1	3.9	6.3	PFE	2.5	3.3	1.9	*000.0	2.6	3.3	4.3	5.9	.997	AC CAL
83	82	119	66	139	218	50	77	272	515	MCF	78	148	147	*00000	80	148	312	474		
.2	.1	.3	.1	.6	1.6	.1	.3	1.3	3.0	CPFE	.2	.7	2.7	1.2	.4	1.4	4.1	6.7		
1.0	1.9	2.2	1.7	1.5	1.0	1.6	1.8	2.5	3.3	CCPFE	2.3	2.6	-.8	*998.8	2.2	1.9	.2	-.8		
72	79	103	64	101	85	49	68	178	272	CCMCF	72	115	-62	1000	67	85	16	-64		

2.000	2.000	2.000	3.000	2.000	2.000	3.000	3.000	2.000	2.000	I	3.000	3.000	2.000	2.000	3.000	3.000	2.000	2.000	1.000	
313	19	7249	2945	8326	4348	2636	1163	4352	2633	DC	1016	5861	2556	1709	3961	2615	1235	931	1003	RIGHT
313	19	7249	2945	8326	4348	2636	1163	4352	2633		1016	5861	2556	1709	3961	2615	1235	931	1003	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
31.30	19.00	7.249	29.45	8.326	4.348	26.36	11.63	4.352	2.633	DCA	10.160	5.861	2.556	1.709	3.961	2.615	1.235	.931	100.3	
30.60	18.70	7.080	29.10	8.190	4.200	26.10	11.45	4.280	2.540	AC1	9.990	5.810	2.490	1.630	3.880	2.530	1.200	.890	100.0	
30.60	18.70	7.080	29.10	8.190	4.200	26.10	11.45	4.280	2.540	AC2	9.990	5.810	2.490	1.630	3.880	2.530	1.200	.890	100.0	
30.60	18.70	7.080	29.10	8.190	4.200	26.10	11.45	4.280	2.540	ACA	9.990	5.810	2.490	1.630	3.880	2.530	1.200	.890	100.0	
23.40	14.21	21.68	14.68	24.90	32.51	13.14	23.19	32.54	39.38	RHO	20.26	29.22	38.23	44.73	19.75	26.07	32.32	38.99	.997	DC CAL
2.0	1.3	2.1	.9	1.4	3.2	.7	1.3	1.4	3.4	PFE	1.4	.6	2.3	4.5	1.8	3.1	2.6	4.3	.997	AC CAL
85	92	96	61	54	99	53	55	42	85	MCF	69	20	61	101	90	117	81	110		
.1	.2	.3	.2	.3	.4	.2	.3	.4	.6	CPFE	.4	.5	.7	.9	.9	1.1	1.4	1.6		
1.9	1.1	1.7	.7	1.1	2.8	.5	1.0	.9	2.7	CCPFE	1.0	.1	1.7	3.6	.9	1.9	1.2	2.7		
81	80	81	51	43	85	39	42	29	69	CCMCF	51	2	44	81	46	75	38	69		

Moore Business Forms, Inc.

JOB B259-68 LINE 2-3 SPREAD 2

LOOKING West DATE 8/23/68 A= 500'

CENTER 35.0 LABEL N/N FREQ. 3.0

COUPLING Yes

Double DC

CA
9.4.68

N-S
Burr Brown Rec. a = 500'

PAGE

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem- Carmen
LINE II-3 HALF 5 SP. 2 DATE 8-28

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	35-30N	30-25N	→	25-20N	→	→	20-15N	→	→	→
RANGE	100-10	100-10	100-10	100-10	100-10	100-10	100-10	100-10	100-10	10-10
DC 1	+26.3	+20.5	+6.4	+26.8	+8.6	+3.8	+14.2	+5.5	+4.0	+2.64
DC 2	+15.5	+20.3	+6.0	+10.3	+6.3	+5.6	+9.7	+7.8	+4.1	+2.78
DC 3	+26.8	+22.0	+6.4	+26.8	+8.6	+3.8	+14.2	+6.1	+5.8	+2.62
DC 4	+15.7	+20.0	+6.0	+10.3	+6.3	+5.6	+9.7	+7.8	+2.1	+2.40
DC 5	+27.7	+22.5						+6.0	+6.1	+2.98
DC 6	+15.8	+19.5						+7.7	+1.8	+2.05
DC 7	+27.7	+23.5						+6.1	+6.1	+5.20
DC 8	+16.4	+19.0						+7.7	+1.8	-0.15
DC AVG.	82.05	75.01	17.62	75.36	25.45	13.07	60.80	22.69	11.01	6.795
AC 1	79.9	72.9	17.0	73.5	24.7	12.6	59.6	22.0	10.6	6.52
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AC AVG.										
S.P.	-1.0	-0.8		+9.4			+2.3			
AC NOISE	.03	0.2		.03			.04			
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE II-3 HALF 5 SP. 2 DATE 8-23

SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5	cal	
RECEIVE	15-10N	→	→	→	10-5N	→	→	→	1-2	
RANGE	100-10	100-10	10-10	10-10	100-10	10-10	10-10	10-10	100-10	
DC 1	+1.4	+5.7	+3.38	+2.20	+8.2	+3.00	+1.17	+0.78	+.22	
DC 2	+15.4	+2.6	+1.76	+1.56	-2.0	+1.70	+2.60	+1.40	+.62	
DC 3	-3.5	+7.8	+5.06	+1.56	+7.8	+3.00	+0.82	+0.42	+.25	
DC 4	+21.6	-0.6	+1.02	+2.42	-1.7	+1.54	+3.60	+1.90	+.63	
DC 5	-8.2	+10.6	+5.60	-1.00	+8.1	+2.90	+0.25	+0.25	+.30	
DC 6	+23.5	-2.3	+0.98	+4.62	-2.4	+1.30	+3.82	+2.14	+.63	
DC 7	-11.4	+12.2	+5.82	-1.38	+8.2	+3.35	-0.85	+0.15	+.34	
DC 8	+27.7	-3.8	+0.10	+5.70	-2.3	+0.95	+4.60	+1.80	+.63	
DC AVG.	31.84	15.84	9.284	4.208	11.90	6.815	4.468	2.178	100.3	
AC 1	31.1	15.4	8.97	4.04	11.6	6.59	4.28	2.07	99.8	
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	
AC AVG.										
S.P.	-29.2				0					
AC NOISE	.03				.04					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PAGE 2

PROJECT Geo Chem - CARMEN

LINE II-3 HALF S SP. 2 DATE 8-23

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	35-30N	30-25	→	25-20	→	→	20-15	→	→	→
RANGE	Hi	Hi	→	Hi	→	→	Hi	→	→	→
VOLTAGE	270	160	270	160	160	420	160	160	160	410
CURRENT	6.0	6.0	6.0	6.0	6.0	9.0	6.0	6.0	6.0	9.0
SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CAL
RECEIVE	15-10	→		→	10-5	→	→	→		1-2
RANGE	Hi	→	→	→	Hi	→	→	→		Hi
VOLTAGE	260	250	240	410	260	250	240	400		30
CURRENT	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0		1.0

FREQUENCIES .05 3.0

SENDER NO. 6644 5

OPERATOR HIX

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS:

Burr Brown Rec. a=500' N-S

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT Geochem-Carmen

LINE II-3 HALF N/2 SP. 2 DATE 8-23

PAGE

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	35-40N	40-45N →		45-50N	→		50-55N →			
RANGE	100~~m~~-10	100-10	100-10	1000-10	100-10	100-10	100-10	100-10	100-10	10-10
DC 1	+24.0	+17.0	+14.3	0	~~+2.2~~	+10.1	+13.8	+16.2	+3.9	+1.60
DC 2	+14.0	+25.6	-3.0	+70	~~+2.0~~	-0.5	+29.8	+0.3	+7.5	+3.03
DC 3	+24.0	+15.8	+14.0	-22	~~+2.2~~	+10.1	+12.5	+16.2	+4.0	+1.84
DC 4	+14.0	+28.2	-3.6	+80	~~+2.0~~	-1.0	+30.5	+0.3	+7.0	+2.86
DC 5		+13.7	+14.3	-18	+4.5	+10.4	+13.5		+4.2	+2.04
DC 6		+30.0	-2.5	+65	+11.5	-1.7	+30.3		+7.4	+2.60
DC 7		+13.5	+14.1	-14	+4.5	+10.7	+13.5		+4.1	+2.40
DC 8		+30.2	-3.0	+78	+11.5	-2.0	+30.3		+7.0	+2.42
DC AVG.	75.14	82.75	17.76	103.9	24.80	12.16	66.07	24.83	13.47	5.230
AC 1	73.5	80.6	17.2	101	24.0	11.7	63.9	24.0	12.9	4.99
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AC AVG.										
S.P.	-1.0	+3.0		-7.4			-7.8			
AC NOISE	.03	.03		.04			.02			
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE II-3 HALF N SP. 2 DATE 8-23

SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2	cal	
RECEIVE	55-60N	→		→	60-65N	→		→	4-5	
RANGE	100-10	100-10	100-10	10-10	100-10	100-10	10-10	10-10	100-10	
DC 1	+22.5	+9.5	+17.6	+3.60	+5.6	+6.4	+1.98	+2.00	+.43	
DC 2	+19.5	+17.4	-5.0	+2.94	+10.2	+5.7	+4.62	+1.40	0	
DC 3	+20.0	+8.2	+19.4	+3.75	+5.6	+6.5	+1.22	+2.05	+.43	
DC 4	+21.4	+18.6	-6.2	+2.05	+10.8	+5.4	+5.76	+1.00	0	
DC 5	+18.5	+6.8	+21.5	+4.80	+5.2	+7.0	+0.28	+2.80		
DC 6	+23.5	+20.0	-7.7	+1.42	+10.8	+5.4	+6.24	+0.35		
DC 7	+16.5	+5.7	+20.2	+5.64	+5.4	+6.7	-0.05	+3.25		
DC 8	+24.5	+21.8	-7.8	+0.75	+11.5	+5.5	+6.84	+0.20		
DC AVG.	69.34	37.62	15.97	6.695	21.61	13.61	6.351	2.891	100.0	
AC 1	67.3	36.3	15.3	6.37	20.8	13.0	6.03	2.72	99.8	
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	
AC AVG.										
S.P.	+8.7				0					
AC NOISE	.02				.03					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PAGE 1

PROJECT Geo-Chem. CARMEN

LINE II-3 HALF N SP. 2 DATE 8-27

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	35-40N	40-45	→	45-50	→	→	50-55	→	→	→
RANGE	Hi	Hi	→	Hi	→	→	Hi	→	→	→
VOLTAGE	170	170	170	160	170	260	290	160	250	260
CURRENT	6.0	6.0	6.0	6.0	6.0	9.0	6.0	6.0	9.0	9.0
SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CAL
RECEIVE	55-60	→	→	→	60-65	→	→	→		4-5
RANGE	Hi	→	→	→	Hi	→	→	→		Hi
VOLTAGE	440	240	250	260	430	240	250	260		40
CURRENT	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0		1.0

FREQUENCIES .05 3.0

SENDER NO. 66445

OPERATOR HIX

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS:

1-2 — 9-

2-3 — 9.

3-4 — 9.

4-5 — 9.

2-0

9.0

HEINRICHS GEOEX B259-68 LINE 2-3 SPD 2 LOOKING WEST 8-23-68 A= 500 FEET

6.000	6.000	6.000	6.000	6.000	9.000	6.000	6.000	6.000	9.000	I	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	1.000	
8205	7501	1762	7536	2545	1307	608	2269	1101	6795	DC	3184	1584	9284	4208	119	6815	4468	2178	1003	LEFT
8205	7501	1762	7536	2545	1307	608	2269	1101	6795		3184	1584	9284	4208	119	6815	4468	2178	1003	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
82.05	75.01	17.62	75.36	25.45	13.07	60.80	22.69	11.01	6.795	DCA	31.84	15.84	9.284	4.208	11.90	6.815	4.468	2.178	100.30	
79.90	72.90	17.00	73.50	24.70	12.60	59.60	22.00	10.60	6.520	AC1	31.10	15.40	8.970	4.040	11.60	6.590	4.280	2.070	99.80	
79.90	72.90	17.00	73.50	24.70	12.60	59.60	22.00	10.60	6.520	AC2	31.10	15.40	8.970	4.040	11.60	6.590	4.280	2.070	99.80	
79.90	72.90	17.00	73.50	24.70	12.60	59.60	22.00	10.60	6.520	ACA	31.10	15.40	8.970	4.040	11.60	6.590	4.280	2.070	99.80	
20.45	18.70	17.57	18.78	25.37	21.72	15.15	22.62	27.44	22.58	RHO	21.16	26.32	30.85	24.47	19.77	22.65	25.99	20.27	.997	DC CAL
2.2	2.4	3.1	2.0	2.5	3.2	1.5	2.4	3.4	3.7	PFE	1.9	2.3	3.0	3.6	2.1	2.9	3.9	4.7	.995	AC CAL
107	127	178	108	99	148	99	114	122	164	MCF	88	89	97	149	105	128	149	232		
.1	.1	.4	.1	.3	.8	.2	.3	.6	1.3	CPFE	.3	.6	.9	2.0	.9	1.3	1.8	3.7		
2.1	2.3	2.7	1.9	2.3	2.5	1.4	2.3	2.8	2.4	CCPFE	1.5	1.8	2.1	1.7	1.2	1.6	2.1	1.0		
102	121	153	102	89	113	89	102	102	104	CCMCF	72	67	68	69	61	69	79	48		

6.000	6.000	6.000	6.000	6.000	9.000	6.000	6.000	9.000	9.000	I	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	1.000	
754	8275	1776	1039	2480	1216	6607	2483	1347	5230	DC	6934	3762	1597	6695	2161	1361	6351	2891	1000	RIGHT
754	8275	1776	1039	2480	1216	6607	2483	1347	5230		6934	3762	1597	6695	2161	1361	6351	2891	1000	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
75.40	82.75	17.76	103.9	24.80	12.16	66.07	24.83	13.47	5.230	DCA	69.34	37.62	15.97	6.695	21.61	13.61	6.351	2.891	100.00	
73.50	80.60	17.20	101.0	24.00	11.70	63.90	24.00	12.90	4.990	AC1	67.30	36.30	15.30	6.370	20.80	13.00	6.030	2.720	99.80	
73.50	80.60	17.20	101.0	24.00	11.70	63.90	24.00	12.90	4.990	AC2	67.30	36.30	15.30	6.370	20.80	13.00	6.030	2.720	99.80	
73.50	80.60	17.20	101.0	24.00	11.70	63.90	24.00	12.90	4.990	ACA	67.30	36.30	15.30	6.370	20.80	13.00	6.030	2.720	99.80	
18.85	20.69	17.76	25.97	24.80	20.27	16.52	24.83	22.45	17.43	RHO	46.23	62.70	53.23	39.05	34.02	45.37	37.05	26.98	1.000	DC CAL
2.4	2.5	3.0	2.7	3.1	3.7	3.2	3.3	4.2	4.6	PFE	2.8	3.4	4.2	4.9	3.7	4.5	5.1	6.1	.998	AC CAL
126	119	172	103	126	184	193	131	188	264	MCF	61	55	78	125	102	99	138	225		
.1	.1	.4	.1	.3	.8	.1	.3	.7	1.9	CPFE	.1	.2	.4	1.1	.4	.5	1.1	2.6		
2.3	2.4	2.6	2.6	2.9	2.9	3.1	3.0	3.5	2.7	CCPFE	2.7	3.3	3.7	3.8	3.3	4.0	4.0	3.5		
120	114	147	100	115	142	185	120	155	151	CCMCF	59	52	70	98	92	87	107	129		

JOB B 259-68 LINE 3-1 SPREAD 1

LOOKING West DATE 7/24/68 A= 500'

CENTER 0.0 LABEL S/N FREQ. 3.0

COUPLING Yes

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE III-1 HALF 5 SP. 1 DATE 7-24

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500	500-1000 →		1000-1500 →			1500-2250 →			
RANGE	300	300	100	1000	100	30	300	100	10	10
DC 1	1670	166	423	356	336	139	119	303	782	508
DC 2	1680	164	400	356	317	143	119	284	802	502
DC 3	1670	166	423	356	336	139	119	303	770	520
DC 4	1680	164	400	356	317	143	119	284	817	494
DC 5									758	526
DC 6									826	483
DC 7									745	537
DC 8									840	478
DC AVG.										
AC 1	159.8	158.	39.6	340.	31.3	13.5	114.	28.2	7.57	4.87
AC 2	159.8	158.	39.6	340.	31.3	13.5	114.	28.2	7.57	4.87
AC AVG.										
S.P.	+7.7	-19.4		+2.9			-0.5			
AC NOISE	.07	.07		.07			.08			
POT RES.										

a = 500'

PAGE

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem - Carmen
LINE III - 1 HALF 5 SP. 1 DATE 7-24

SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5	cal	
RECEIVE	2000 —	2500	→	→	2500 -	3000	→	→	1-2	
RANGE	100	30	30	10	30	30	10	10	300	
DC 1	352	194	840	722	231	151	732	588	2100	
DC 2	356	207	810	634	219	149	700	625	2100	
DC 3	352	193	850	724	234	150	754	604	2100	
DC 4	356	209	800	630	217	149	682	623	2100	
DC 5		192	850	735	234	150	750	600		
DC 6		209	800	626	216	151	674	610		
DC 7		191	860	738	235	149	758	606		
DC 8		211	790	622	215	151	675	602		
DC AVG.										
AC 1	33.9	19.3	7.90	6.45	21.45	14.3	6.78	5.77	203.5	
AC 2	33.9	19.3	7.90	6.47	21.55	14.3	6.80	5.77	203.5	
AC AVG.										
S.P.	-10.0				-13.8					
AC NOISE	.08				.08					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PAGE 2

PROJECT Geo Chem - CARMEN

LINE III-1 HALF S SP. 1 DATE 7-24

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500S	500-1000	→	1000-1500	→	→	1500-2000	→	→	→
RANGE	Hi	Hi	Hi	Hi	Hi	Hi	Hi	→	→	→
VOLTAGE	480	200	480	320	200	480	420	320	200	480
CURRENT	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CAL
RECEIVE	2000	2500	→	→	2500	3000	→	→		1-2
RANGE	Hi	→	→	→	Hi	→	→	→		Hi
VOLTAGE	420	320	200	480	420	320	200	480		210
CURRENT	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		2.0

FREQUENCIES .05 3.0

SENDER NO. 66415

OPERATOR HIX

RECEIVER NO. 7651 R

OPERATOR PACHER

COMMENTS:

a = 500'
N-S

PAGE

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem - Carmen
LINE III - 1 HALF N SP. 1 DATE 7-24

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500	500-1000 →		1000-1500 →			1500 -	2250 →		
RANGE		300	100	300	100	30	1000	100	100	30
DC 1	—	166	424	2310	538	166	324	754	297	124
DC 2	—	165	383	2320	558	191	324	750	300	132
DC 3		166	424	2310	538	166	324	754	297	124
DC 4		165	383	2320	558	191	324	750	300	132
DC 5										
DC 6										
DC 7										
DC 8										
DC AVG.										
AC 1	—	164.	39.5	223.5	52.6	17.3	317.	72.3	28.5	12.4
AC 2	—	164.	39.5	223.5	52.6	17.3	317.	72.3	28.5	12.4
AC AVG.										
S.P.	+11.2	+18.0		-8.1			-11.7			
AC NOISE		.07		.06			.07			
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem - Carmen
LINE III - 1 HALF N SP. 1 DATE 7-24

PAGE

SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2	cal	
RECEIVE	2000 -	2500 →			2500 -	3000 →			4-5	
RANGE	100	30	30	10	100	30	30	10	300	
DC 1	678	254	1440	764	282	125	845	414	2095	
DC 2	680	251	1355	582	260	120	800	448	2095	
DC 3	678	254	1440	760	282	125	845	406	2095	
DC 4	680	251	1345	578	260	120	800	456	2095	
DC 5			1450	374				400		
DC 6			1335	576				464		
DC 7			1465	776				382		
DC 8			1320	566				498		
DC AVG.										
AC 1	65.7	24.3	13.55	6.54	26.2	11.7	7.95	4.17	205.0	
AC 2	65.7	24.3	13.55	6.54	26.2	11.7	7.95	4.14	205.0	
AC AVG.										
S.P.	-6.5				-11.9					
AC NOISE	.07				.08					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

Geo-Chem

PROJECT CARMEN

LINE III-1 HALF N SP. 1 DATE 7-29

PAGE 1

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500N	500-1000	→	1000-1500	→		1500-2000	→		→
RANGE	Hi	LO	LO	Hi	Hi	Hi	Hi	Hi	Hi	Hi
VOLTAGE		320	430	200	320	430	490	200	320	420
CURRENT	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CAC
RECEIVE	0000-2500	→		→	2500-3000	→		→		4-5
RANGE	Hi	→		→	Hi	→		→		Hi
VOLTAGE	490	200	320	420	480	200	320	420		240
CURRENT	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		2.0

FREQUENCIES .05 3.0

SENDER NO. 66405

OPERATOR HIX

RECEIVER NO. 7651 R

OPERATOR PALMER

COMMENTS: 1-2 Hi
2-3 Hi
3-4
4-5 "

HEINRICHS GEOEX B259-68 LINE 3-1 SPD 1 LOOKING WEST 7-24-68 A= 500 FEET

4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	I	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	2.000		
167	166	423	356	336	139	119	303	782	508	DC	352	194	84	722	231	151	732	588	21	LEFT	
168	164	400	356	317	143	119	284	802	502		356	207	81	634	219	149	700	625	21	SIDE	
								770	520			193	85	724	234	150	754	604			
								817	494			209	80	630	217	149	682	623			
								758	526			192	85	735	234	150	750	600			
								826	483			209	80	626	216	151	674	610			
								745	537			191	86	738	235	149	758	606			
								840	478			211	79	622	215	151	675	602			
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6			
167.5	165.0	41.15	356.0	32.65	14.10	119.0	29.35	7.899	5.079	DCA	35.40	20.05	8.264	6.799	22.54	14.99	7.174	6.090	210.0		
159.8	158.0	39.60	340.0	31.30	13.50	114.0	28.20	7.570	4.870	AC1	33.90	19.30	7.900	6.450	21.45	14.30	6.780	5.770	203.5		
159.8	158.0	39.60	340.0	31.30	13.50	114.0	28.20	7.570	4.870	AC2	33.90	19.30	7.900	6.470	21.55	14.30	6.800	5.770	203.5		
159.8	158.0	39.60	340.0	31.30	13.50	114.0	28.20	7.570	4.870	ACA	33.90	19.30	7.900	6.460	21.50	14.30	6.790	5.770	203.5		
59.82	58.93	58.79	127.1	46.64	50.36	42.50	41.93	28.21	36.28	RHO	50.57	71.61	59.03	84.98	80.51	107.0	89.67	121.8	.952	DC CAL	
1.6	1.2	.7	1.5	1.1	1.2	1.2	.9	1.1	1.1	PFE	1.2	.7	1.4	2.0	1.6	1.6	2.4	2.3	.969	AC CAL	
26	20	12	12	23	24	27	20	39	29	MCF	24	9	23	23	20	14	27	19			

4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	I	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	2.000		
	166	424	231	538	166	324	754	297	124	DC	678	254	1440	764	282	125	845	414	2095	RIGHT	
	165	383	232	538	191	324	750	300	132		680	251	1355	582	260	120	800	448	2095	SIDE	
								297					1440	760				406			
								300					1345	578				456			
													1450	774				400			
													1335	576				464			
													1465	776				382			
													1320	566				478			
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6			
0.000	165.5	40.35	231.5	53.80	17.85	324.0	75.20	29.85	12.80	DCA	67.90	25.25	13.96	6.730	27.10	12.25	8.225	4.289	209.5		
0.000	164.0	39.50	223.5	52.60	17.30	317.0	72.30	28.50	12.40	AC1	65.70	24.30	13.55	6.540	26.20	11.70	7.950	4.170	205.0		
0.000	164.0	39.50	223.5	52.60	17.30	317.0	72.30	28.50	12.40	AC2	65.70	24.30	13.55	6.540	26.20	11.70	7.950	4.140	205.0		
0.000	164.0	39.50	223.5	52.60	17.30	317.0	72.30	28.50	12.40	ACA	65.70	24.30	13.55	6.540	26.20	11.70	7.950	4.155	205.0		
*000.0	59.25	57.78	82.88	77.04	63.90	116.0	107.7	106.9	91.65	RHO	97.23	90.39	99.93	84.33	97.02	87.71	103.1	85.98	.955	DC CAL	
*000.0	-1.3	-.0	1.4	.1	1.0	.0	1.8	2.5	1.0	PFE	1.1	1.7	.8	.7	1.2	2.5	1.2	1.0	.979	AC CAL	
*00000	-21	-1	16	1	15	0	17	23	11	MCF	12	19	8	8	13	28	12	12			

JOB B-259-68 LINE 4-1 SPREAD 1

LOOKING N43 W DATE 7/31/68 A= 500

CENTER 0.0 LABEL SW/NE FREQ. 3.0

COUPLING Yes

S47°W
a = 500'

PAGE

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem - Carmen
LINE ~~IV~~ - 1 HALF SW SP. 1 DATE 7-31

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500	500-1000 →		1000-1500 →			1500-2000 →			
RANGE		1000	300	1000	300	100	1000	100	100	100
DC 1		347	1250	414	118	680	303	645	338	238
DC 2		347	1250	414	119	674	304	655	359	275
DC 3		347	1250	414	118	684	303	644	339	243
DC 4		347	1250	414	119	686	304	657	358	272
DC 5						684		642	340	240
DC 6						666		657	358	270
DC 7						686		643	334	243
DC 8						665		656	362	275
DC AVG.										
AC 1		337.	120.5	398.	114.	65.0	297.	63.0	33.7	24.6
AC 2		337.	120.5	397.	114.	65.0	297.	63.0	33.7	24.6
AC AVG.										
S.P.	-7.0	+3.8		-1.7			-4.4			
AC NOISE		.06		.06			.06			
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem - Carmen
LINE II-1 HALF SW SP. 1 DATE 7-31

PAGE

SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5	Col.	
RECEIVE	2000-2500	→		→	2500-3000	→		→	1-2	
RANGE	100	30	30	30	100	30	30	10	300	
DC 1	744	248	1800	1390	280	985	790	718	2085	
DC 2	737	233	1650	1390	276	1045	780	640	2085	
DC 3	744	251	1785	1380	281	985	770	744	2085	
DC 4	737	231	1670	1390	276	1045	800	637	2085	
DC 5		246	1780	1400	282		760	726		
DC 6		235	1685	1370	275		800	650		
DC 7		246	1740	1385	282		755	754		
DC 8		234	1720	1360	276		810	618		
DC AVG.										
AC 1	72.2	23.4	16.65	13.25	27.2	9.85	7.50	6.56	205.0	
AC 2	72.2	23.4	16.65	13.25	27.2	9.85	7.50	6.56	205.0	
AC AVG.										
S.P.	-0.6				+7.3					
AC NOISE	.07				.07					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT GeoChem - CANADA

LINE II-1 HALF SW SP. 1 DATE 2-31

PAGE 1

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500sh	5-10 →		10-15	→		15-20 →			
RANGE		Hi	Hi	Hi	Hi	Hi	Hi	Hi	Hi	Hi
VOLTAGE		470	400	460	470	400	340	460	470	400
CURRENT	—	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CAL
RECEIVE	20-25 →				25-30 →					1-2
RANGE	Hi	Hi	Hi	Hi	Hi	Hi	Hi	Hi		Hi
VOLTAGE	340	460	470	400	340	460	470	400		170
CURRENT	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		2.0

FREQUENCIES .05 3.0

SENDER NO. 6644S

OPERATOR HCY

RECEIVER NO. 7651R

OPERATOR PALMER

COMMENTS: 1-2 — 4-5
2-3 — 4
3-4 — 4
4-5 — 4-5

N47°E
a=500'

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem-Carmen
LINE IV-1 HALF NE SP. 1 DATE 7-31

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500	500-1000 →		1000-1500 →			1500-2000 →			
RANGE	1000	1000	300	1000	300	100	3000	300	100	100
DC 1	355	323	127	646	950	519	1055	190	450	283
DC 2	356	325	125	645	940	508	1052	188	446	286
DC 3	355	323	127	646	950	519	1055	190	444	281
DC 4	356	325	125	645	940	508	1052	188	454	294
DC 5									440	280
DC 6									456	290
DC 7									440	280
DC 8									457	292
DC AVG.										
AC 1	336.	306	120.0	610.	89.8	48.8	990.	177.	42.3	26.8
AC 2	336.	306	120.0	610.	89.8	48.8	990.	177.	42.3	26.8
AC AVG.										
S.P.	-3.1	-4.5		+1.7			-10.8			
AC NOISE	.08	.08		.07			.08			
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen

LINE IV-1 HALF NE SP. 1 DATE 7-31

SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2	cal	
RECEIVE	2000-	2500	→	→	2500-	3000	→	→	4-5	
RANGE	300	100	30	30	300	100	30	30	300	
DC 1	246	695	231	156	945	322	116	850	2095	
DC 2	247	712	212	167	953	346	118	960	2095	
DC 3	246	695	231	156	945	322	114	840	2095	
DC 4	247	712	212	167	953	346	120	970	2095	
DC 5							117	820		
DC 6							120	980		
DC 7							115	830		
DC 8							121	980		
DC AVG.										
AC 1	232.	66.4	20.9	15.3	89.9	31.6	11.0	8.45	203.0	
AC 2	232.	66.4	20.9	15.3	89.9	31.6	11.0	8.45	203.0	
AC AVG.										
S.P.	-2.4				+15.3					
AC NOISE	.06				.07					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT Geo Chem- CARMEN

LINE ~~W-I~~ HALF NE SP. 1 DATE 7-31

PAGE 2

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-5 NE	5-10 →		10-15 →			15-20 →			
RANGE	Hi	Hi	Hi	Hi	Hi	Hi	Hi	Hi	Hi	Hi
VOLTAGE	340	460	340	460	460	340	400	460	460	330
CURRENT	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		Cal
RECEIVE	20-25 →				25-30 →					4.5
RANGE	Hi	Hi	Hi	Hi	Hi	Hi	Hi	Hi		Hi
VOLTAGE	400	460	460	330	400	460				200
CURRENT	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		2.0

FREQUENCIES .05 3.0

SENDER NO. 66445

OPERATOR HIX

RECEIVER NO. 7651R

OPERATOR PALMER

COMMENTS:

HEINRICHS GEOEX B259-68 LINE 4-1 SPD 1 'LOOKING N43W 7-31-68 A= 500 FEET

4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	I	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	2.000		
	347	125	414	118	680	303	645	338	232	DC	744	248	1800	1390	280	985	790	718	2085	LEFT	
	347	125	414	119	674	304	655	359	275		737	233	1650	1390	276	1045	780	640	2085	SIDE	
					684		644	339	243			251	1785	1380	281		770	744			
					666		657	358	272			231	1670	1390	276		800	637			
					684		642	340	240			246	1780	1400	282		760	726			
					666		657	358	270			235	1685	1370	275		800	650			
					686		643	334	243			246	1740	1385	282		755	754			
					665		656	362	275			234	1720	1360	276		810	618			
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6			
0.000	347.0	125.0	414.0	118.5	67.61	303.5	64.98	34.83	25.71	DCA	74.05	24.04	17.24	13.84	27.86	10.150	7.807	6.884	208.5		
0.000	337.0	120.5	397.0	114.0	65.00	297.0	63.00	33.70	24.60	AC1	72.20	23.40	16.65	13.25	27.20	9.850	7.500	6.560	205.0		
0.000	337.0	120.5	397.0	114.0	65.00	297.0	63.00	33.70	24.60	AC2	72.20	23.40	16.65	13.25	27.20	9.850	7.500	6.560	205.0		
0.000	337.0	120.5	397.0	114.0	65.00	297.0	63.00	33.70	24.60	ACA	72.20	23.40	16.65	13.25	27.20	9.850	7.500	6.560	205.0		
*000.0	124.8	179.9	148.9	170.5	243.2	109.2	93.49	125.3	184.9	RHO	106.5	86.49	124.0	174.3	100.2	73.02	98.29	138.7	.959	DC CAL	
*000.0	1.2	2.0	2.5	2.2	2.3	.5	1.4	1.6	2.7	PFE	.8	1.0	1.8	2.7	.7	1.3	2.3	3.2	.983	AC CAL	
*00000	10	11	17	13	9	4	15	13	15	MCF	8	12	15	16	7	18	24	23			

4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	I	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	2.000		
355	323	127	646	95	519	1055	190	450	283	DC	246	695	231	156	945	322	116	85	2095	RIGHT	
356	325	125	645	94	508	1052	188	446	286		247	712	212	~~157~~ 167	953	346	118	96	2095	SIDE	
								444	281								114	84			
								454	294								120	97			
								440	280								117	82			
								456	290								120	98			
								440	280								115	83			
								457	292								121	98			
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6			
355.5	324.0	126.0	645.5	94.50	51.35	1053.5	189.0	44.76	28.55	DCA	246.5	70.35	22.15	~~15.65~~ 16.15	94.90	33.40	11.75	9.021	209.5		
336.0	306.0	120.0	610.0	89.90	48.80	990.0	177.0	42.30	26.80	AC1	232.0	66.40	20.90	15.30	89.90	31.60	11.00	8.450	203.0		
336.0	306.0	120.0	610.0	89.90	48.80	990.0	177.0	42.30	26.80	AC2	232.0	66.40	20.90	15.30	89.90	31.60	11.00	8.450	203.0		
336.0	306.0	120.0	610.0	89.90	48.80	990.0	177.0	42.30	26.80	ACA	232.0	66.40	20.90	15.30	89.90	31.60	11.00	8.450	203.0		
127.3	116.0	180.4	231.1	135.3	183.8	377.1	270.6	160.3	204.4	RHO	353.0	251.8	158.6	196.1	339.7	239.1	147.2	180.9	.955	DC CAL	
2.5	2.6	1.7	2.5	1.9	2.0	3.1	3.5	2.5	3.2	PFE	3.0	2.7	2.7	~~2.9~~ 3.3	2.3	2.4	3.5	3.5	.969	AC CAL	
20	22	10	11	14	11	8	13	16	16	MCF	8	11	17	~~15~~ 12	7	10	24	19			

JOB B-259-68 LINE 4-2 SPREAD 1

LOOKING N29W DATE 8/1/68 A= 500'

CENTER 0.0 LABEL SW/NE FREQ. 3.0

COUPLING Yes

S61°W

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT Geochem - Carmen

LINE IV-2 HALF SW SP. 1 DATE 8-1

PAGE

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500	500-1000 →		1000-1500 →			1500-2000 →			
RANGE		300	300	1000	100	100	300	100	30	~30
DC 1	—	277	1000	356	526	270	2700	360	103	114
DC 2	—	275	970	356	538	292	2710	356	108	118
DC 3		277	1000	356	526	270	2700	360	103	114
DC 4		275	970	356	538	292	2710	356	108	118
DC 5										
DC 6										
DC 7										
DC 8										
DC AVG.										
AC 1	—	264.5	94.5	338.	51.0	26.7	258.5	34.3	10.1	11.1
AC 2	—	265.0	94.5	338.	51.0	26.7	258.5	34.3	10.1	11.1
AC AVG.										
S.P.	-3.0	+9.1		-0.4			-1.2			
AC NOISE		.09		.08			.07			
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE IV-2 HALF SW SP. 1 DATE 8-1

SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5	cal	
RECEIVE	2000-2500 →				2500-3000 →				1-2	
RANGE	100	30	10	10	30	10	10	3	300	
DC 1	310	104	417	285	1500	664	354	199	2080	
DC 2	306	105	403	270	1360	635	320	241	2085	
DC 3	310	104	416	284	1545	678	340	196	2080	
DC 4	306	105	402	270	1320	624	332	239	2085	
DC 5			416	286	1580	696	330	230		
DC 6			412	266	1290	600	336	202		
DC 7			410	284	1610	706	324	246		
DC 8			416	274	1265	590	336	210		
DC AVG.										
AC 1	29.8	10.0	3.95	2.63	13.75	6.20	3.18	2.06	201.5	
AC 2	29.8	10.0	3.95	2.63	13.75	6.20	3.18	2.06	201.5	
AC AVG.										
S.P.	+0.8				+9.9					
AC NOISE	.06				.06					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT Geo Chem - CARMEN
LINE IV 2 HALF SW SP. 1 DATE 8-1

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500'SW	5-10SW	→	10-15	→	→	15-20	→	→	→
RANGE		Hi	→	Hi	→	→	Hi	→	→	→
VOLTAGE		250	200	300	250	200	470	300	250	360
CURRENT	—	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	7.0
SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CAL.
RECEIVE	20-25	→	→	→	25-30	→	→	→		1-2
RANGE	Hi	→	→	→	Hi	→	→	→		Hi
VOLTAGE	470	460	380	300	470	460	380	300		240
CURRENT	4.0	6.0	6.0	6.0	4.0	6.0	6.0	6.0		2.0

FREQUENCIES .05 3.0
SENDER NO. 6645
OPERATOR HIX
RECEIVER NO. 7651R
OPERATOR PALMER

COMMENTS:

N 61°E
a = 500'

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE IV-2 HALF NE SP. 1 DATE 8-1

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500	500-1000 →		1000-1500 →			1500-2000 →			
RANGE	300	300	300	300	300	100	1000	300	100	100
DC 1	2740	2450	1000	2650	990	702	415	1040	586	518
DC 2	2735	2455	1005	2635	995	706	415	1030	594	524
DC 3	2740	2450	1000	2650	990	702	415	1040	586	518
DC 4	2735	2455	1005	2635	995	706	415	1030	594	524
DC 5										
DC 6										
DC 7										
DC 8										
DC AVG.										
AC 1	265.0	236.5	97.0	~~255.0~~	96.0	68.0	400.	99.5	56.5	49.8
AC 2	265.0	236.5	97.0	255.0/255.0	96.0	68.2	400.	99.5	56.5	49.8
AC AVG.										
S.P.	-6.3	-3.5		-3.6			+7.9			
AC NOISE	.07	.07		.07			.08			
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem - Carmen
LINE III-2 HALF NE SP. 1 DATE 8-1

PAGE

SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2	col	
RECEIVE	2000-2500 →				2500-3000 →				4-5	
RANGE	300	100	100	100	100	30	30	30	300	
DC 1	1550	537	384	388	383	161	153	176	2085	
DC 2	1570	560	416	416	395	167	160	180	2090	
DC 3	1550	537	384	388	383	161	153	176	2085	
DC 4	1570	560	416	416	395	167	160	180	2090	
DC 5										
DC 6										
DC 7										
DC 8										
DC AVG.										
AC 1	150.0	52.6	38.3	38.2	37.5	15.8	14.95	16.95	204.5	
AC 2	150.0	52.6	38.3	38.2	37.5	15.8	14.95	16.95	204.5	
AC AVG.										
S.P.	-2.9				-1.8					
AC NOISE	.09				.08					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT Geo Chem - CARMEN

LINE IV-2 HALF NE SP. 1 DATE 8-1

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-5 OONE	5-10 →		10-15 →			15-20 →			
RANGE	Hi	Hi	Hi	Hi	Hi	Hi	Hi	Hi	Hi	Hi
VOLTAGE	480	300	480	250	300	480	200	250	300	480
CURRENT	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CH1
RECEIVE	20-25 →				25-30 →					4-5
RANGE	Hi →				Hi →					Hi
VOLTAGE	200	250	300	480	200	250	~~480~~ 300	Hi		100
CURRENT	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		2.0

FREQUENCIES .05 3.0

SENDER NO. 66445

OPERATOR HIR

RECEIVER NO. 7651K

OPERATOR PALMER

COMMENTS:

HEINRICHS GEOEX B259-68 LINE 4-2 SPD 1 LOOKING N29W 8-1-68 A= 500 FEET

4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	7.000	I	4.000	6.000	6.000	4.000	4.000	6.000	6.000	6.000	2.000		
277	1000	356	526	270	270	360	103	114		DC	310	104	417	285	1500	664	354	199	2080	LEFT	
275	970	356	538	292	271	356	108	118			306	105	403	270	1360	635	320	241	2085	SIDE	
													416	284	1545	678	340	196			
													402	270	1320	624	332	239			
													416	286	1580	696	330	230			
													412	266	1290	600	336	202			
													410	284	1610	706	324	246			
													416	274	1265	590	336	210			
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6			
0.000	276.0	98.50	356.0	53.20	28.10	270.5	35.80	10.55	11.60	DCA	30.80	10.45	4.108	2.771	14.41	6.523	3.324	2.226	208.2		
0.000	264.5	94.50	338.0	51.00	26.70	258.5	34.30	10.10	11.10	AC1	29.80	10.00	3.950	2.630	1 .75	6.200	3.180	2.060	201.5		
0.000	265.0	94.50	338.0	51.00	26.70	258.5	34.30	10.10	11.10	AC2	29.80	10.00	3.950	2.630	13.75	6.200	3.180	2.060	201.5		
0.000	264.7	94.50	338.0	51.00	26.70	258.5	34.30	10.10	11.10	ACA	29.80	10.00	3.950	2.630	13.75	6.200	3.180	2.060	201.5		
*000.0	99.40	141.9	128.2	76.64	101.2	97.42	51.57	38.00	47.74	RHO	44.37	25.09	19.73	23.28	51.90	31.32	27.94	29.94	.960	DC CAL	
*000.0	.9	.9	1.9	.9	1.8	1.3	1.0	1.1	1.1	PFE	.0	1.1	.6	1.9	1.4	1.8	1.1	4.6	.968	AC CAL	
*00000	9	6	15	12	18	13	19	28	23	MCF	0	44	32	83	27	57	41	153			
0.0	0.0	0.0	0.0	.1	.1	0.0	.1	.4	.5	CPFE	.1	.6	1.6	2.1	.2	.9	1.7	2.3			
*000.0	.9	.9	1.9	.9	1.7	1.3	.9	.7	.6	CCPFE	-.1	.5	-1.0	-.2	1.2	.9	-.5	2.3			
1000	9	6	15	11	17	13	17	19	13	CCMCF	-3	19	-49	-7	53	30	-18	77			

4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	I	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	2.000		
2740	2450	1000	2650	990	702	415	1040	586	518	DC	155	537	384	388	383	161	153	176	2085	RIGHT	
2735	2455	1005	2635	995	706	415	1030	594	524		157	560	416	416	395	167	160	180	2090	SIDE	
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6			
273.7	245.2	100.25	264.2	99.25	70.40	415.0	103.50	59.00	52.10	DCA	156.0	54.85	40.00	40.20	38.90	16.40	15.65	17.80	208.7		
265.0	236.5	97.00	255.0	96.00	68.00	400.0	99.50	56.50	49.80	AC1	150.0	52.60	38.30	38.20	37.50	15.80	14.95	16.95	204.5		
265.0	236.5	97.00	255.0	96.00	68.20	400.0	99.50	56.50	49.80	AC2	150.0	52.60	38.30	38.20	37.50	15.80	14.95	16.95	204.5		
265.0	236.5	97.00	255.0	96.00	68.10	400.0	99.50	56.50	49.80	ACA	150.0	52.60	38.30	38.20	37.50	15.80	14.95	16.95	204.5		
98.35	88.11	144.1	94.94	142.6	252.9	149.1	148.7	212.0	374.4	RHO	224.2	197.1	287.4	505.5	139.8	117.8	196.8	358.1	.958	DC CAL	
1.2	1.6	1.2	1.5	1.3	1.3	1.6	1.9	2.3	2.5	PFE	1.9	2.2	2.3	3.1	1.6	1.7	2.6	2.9	.980	AC CAL	
12	18	9	16	9	5	11	13	11	7	MCF	8	11	8	6	12	14	13	8			
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	CPFE	0.0	.0	.0	0.0	.1	.1	.1	.1			

1.2	1.6	1.2	1.5	1.3	1.3	1.6	1.9	2.3	2.5	CCPFE	1.9	2.1	2.3	3.1	1.6	1.5	2.4	2.8
12	18	9	16	9	5	11	13	11	7	CCMCF	8	11	8	6	11	13	12	8

JOB B259-68 LINE 5-1 SPREAD 1

LOOKING N57W DATE 8/20/68 A= 500'

CENTER 0.0 LABEL SW/NE FREQ. 3.0

COUPLING Yes Double D.C.

a = 500'
Burr Brown Rec. S 33°W

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem - Carmen
LINE V-1 HALF SW SP. 1 DATE 8-20

PAGE

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500	500-1000 →		1000-1500 →			1500-2000 →			
RANGE	1000-10	1000-10	1000-10	1000-10	100-10	100-10	1000-10	100-10	100-10	100-10
DC 1	+95	+95	+7	+142	+8.2	+4.5	+25	~~+0.1~~ +4	+4.2	0
DC 2	-20	+24	+30	0	+3.4	+2.0	+95	+3.2	+1.0	+6.0
DC 3	+105	+86	+20	+125	+7.8	+7.2	-20	0	+6.0	-0.5
DC 4	-25	+30	+22	+6	+3.8	+2.6	+136	+3.0	+1.5	+6.5
DC 5	+125	+88	+20	+120	+7.5	+5.8	-62	+0.3.0	+5.8	0
DC 6	-42	+22	+6	+20	+3.8	+1.8	+164	+3.0	+1.0	+6.0
DC 7	+142	+85	+45	+102	+7.8	+6.2	-70	+0.2.0	+3.8	
DC 8	-60	+22	-10	+15	+4.2	+3.5	+184	+3.2.0	+2.2	
DC AVG.	271.3	428.6	111.0	332.4	43.38	19.92	216.0	68.28	15.62	10.30
AC 1	267.	423.	109.	326.	42.8	19.5	211.	68.1	15.3	10.0
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AC AVG.										
S.P.	+23.8	+3.7		-2.0			-1.5			
AC NOISE	.04	.03		.04			.03	X		
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE I-1 HALF SW SP. 1 DATE 8-20

SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5	cal	
RECEIVE	2000-2500 →				2500-3000 →				1-2	
RANGE	100-10	100-10	100-10	10-10	100-10	100-10	10-10	10-10	100-10	
DC 1	+20.0	+18.0	+6.8	+4.10	+5.7	+2.2	+0.55	+4.40	+.37	
DC 2	+16.2	+1.5	-2.0	+1.25	+16.0	+10.5	+1.65	-0.35	-.02	
DC 3	+21.0	+20.2	+6.2	+1.60	+5.0	+1.0	+2.20	+4.40	+.37	
DC 4	+20.0	-1.5	-3.5	+2.65	+17.8	+11.5	+1.20	-0.10	-.02	
DC 5	+13.5	+20.5	+5.8	+2.35	+3.5	+2.0	+2.60	+4.10		
DC 6	+21.5	-0.5	-4.0	+0.95	+20.0	+10.2	+1.10	-0.50		
DC 7	+19.0	+24.5	+5.0	+3.20	+2.0	0	+2.30	+3.20		
DC 8	+25.0	-1.0	-1.4	+2.00	+19.5	+13.5	+0.70	-0.15		
DC AVG.	90.50	41.25	11.25	9.155	41.30	22.42	7.687	6.984	100.1	
AC 1	88.6	40.2	11.1	8.94	40.2	21.8	7.52	6.80	99.96	
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	99.96	
AC AVG.										
S.P.	+6.0				-3.5					
AC NOISE	.06				.04					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT GeoChem-CARMEN

LINE V-1 HALF SW SP. 1 DATE 8-21

PAGE 2

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-5005W	5-10	→	10-15	→	→	15-20	→	→	→
RANGE	HI	H	→	HI	→	→	HI	→	→	→
VOLTAGE	280	220	280	350	220	280	400	350	220	280
CURRENT	6.0	6.0	6.0	3.0	6.0	6.0	3.0	3.0	6.0	6.0
SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CAL.
RECEIVE	20-25	→	→	→	25-30	→	→	→		1-2
RANGE	HI	→	→	→	HI	→	→	→		HI
VOLTAGE	390	350	220	280	390	340	220	280		120
CURRENT	3.0	3.0	6.0	6.0	3.0	3.0	6.0	6.0		1.0

FREQUENCIES .05 3.0

SENDER NO. 66445

OPERATOR HIX

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS: 4-5 — 8 —
3-4 — 9 —
2-3 — 4 —
1-2 — 3 —

Check last station to north
Missed 1 reading. Maybe
1st or last reading.

a = 500'
N 33°E

Burr Brown Rec

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT Geochem - Carmen

LINE V-1 HALF NE SP. 1 DATE 8-20

PAGE

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500	500-1000 →		1000-1500 →			1500-2000 →			
RANGE	1000-10	1000-10	100-10	1000-10	100-10	100-10	1000-10	100-10	100-10	100-10
DC 1	+65	+25	+7.8	-16	+19.0	+4.5	+114	+10.0	+14.4	+8.5
DC 2	-35	+16	+12.2	+72	+9.0	+11.5	+94	+3.5	+2.5	0
DC 3	+85	+25	+9.8	-20	+15.5	-0.5	+130	+11.5	+12.1	+4.0
DC 4	-40	+20	+14.2	+80	+2.5	+14.5	+92	+1.0	-2.5	-4.2
DC 5	+110	+25	+6.4	-20	+17.5	+3.8	+118	+8.2	+12.0	+9.5
DC 6	-65	+40	+13.2	+95	+10.0	+14.0	+96	-0.5	+2.0	+5.2
DC 7	+115	+15	+6.2	-22	+18.0	-2.2	+137	+10.2	+18.5	+14.5
DC 8	-75	+36	+13.6	+78	+3.0	+11.8	+90	+1.6	-3.5	+2.0
DC AVG.	214.4	133.5	56.34	187.1	61.99	34.10	600.0	37.17	27.52	18.59
AC 1	212.	131.	55.3	184.	60.8	33.4	589.	36.6	26.8	18.1
AC 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AC AVG.										
S.P.	+9.4	-2.4		-2.1			+4.5			
AC NOISE	.03	.04		.04			.03			
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem - Carmen
LINE IV-1 HALF NE SP. 1 DATE 8-20

PAGE

SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2	cal	
RECEIVE	2000-	2500	→	→	2500-	3000-	→	→	4-5	
RANGE	1000-10	100-10	100-10	100-10	100-10	100-10	100-10		100-10	
DC 1	+142	-18.0	+6.8	+4.2	+7.8	+2.0	+6.4		0	
DC 2	-115	+26.4	+6.0	+3.0	+20.5	+6.0	-3.8		+.58	
DC 3	+145	-7.0	+10.2	+8.5	+6.0	+1.8	+9.8		0	
DC 4	-84	+17.5	+4.0	+2.2	+15.8	+5.6	+4.2		+.58	
DC 5	+150	-1.0	+5.0	+2.5	+7.4	+2.0	+3.0			
DC 6	-118	+6.5	+10.2	+10.4	+20.0	+2.0	+6.5			
DC 7	+146	+2.5	+8.2	+7.5	+7.4	+5.8	+6.4			
DC 8	-100	+5.5	+6.0	-0.5	+26.0	+5.4	+2.4			
DC AVG.	140.1	17.65	25.51	18.81	65.74	11.38	18.44	—	100.3	
AC 1	139.	17.1	24.8	18.3	64.4	11.0	18.0	—	100.0	
AC 2	✓	✓	✓	✓	✓	✓	✓	—	✓	
AC AVG.										
S.P.	-3.4									
AC NOISE	.03									
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT Geo Chem - CHAIMEN

LINE I-1 HALF NE SP. 1 DATE 8-21

PAGE 1

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	050 NE	5-10	→	10-15	→	→	15-20	→	→	→
RANGE	HI	HI	→	HI	→	→	HI	→	→	→
VOLTAGE	380	330	380	210	330	370	270	210	330	370
CURRENT	3.0	3.0	3.0	6.0	3.0	3.0	6.0	6.0	3.0	3.0
SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CAL
RECEIVE	20-25	→	→	→	25-30	→	→	→		4-5
RANGE	HI	→	→	→	HI	→	→	→		HI
VOLTAGE	270	210	440	500	270	210	440	500		40
CURRENT	6.0	6.0	4.0	4.0	6.0	6.0	4.0	4.0		1.0

FREQUENCIES .05 3.0

SENDER NO. 66445

OPERATOR HIX

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS:

HEINRICHS GEOEX B259-68 LINE 5-1 SPD 1 LOOKING N57W 8-20-68 A= 500 FEET

6.000	6.000	6.000	3.000	6.000	6.000	3.000	3.000	6.000	6.000	I	3.000	3.000	6.000	6.000	3.000	3.000	6.000	6.000	1.000	
2713	4286	111	3324	4338	1992	216	6828	1562	103	DC	905	4125	1125	9155	4130	2242	7687	6984	1001	LEFT
2713	4286	111	3324	4338	1992	216	6828	1562	103		905	4125	1125	9155	4130	2242	7687	6984	1001	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
271.3	428.6	111.0	332.4	43.38	19.92	216.0	68.28	15.62	10.30	DCA	90.50	41.25	11.25	9.155	41.30	22.42	7.687	6.984	100.10	
267.0	423.0	109.0	326.0	42.80	19.50	211.0	68.10	15.30	10.00	AC1	88.60	40.20	11.10	8.940	40.20	21.80	7.520	6.800	99.96	
267.0	423.0	109.0	326.0	42.80	19.50	211.0	68.10	15.30	10.00	AC2	88.60	40.20	11.10	8.940	40.20	21.80	7.520	6.800	99.96	
267.0	423.0	109.0	326.0	42.80	19.50	211.0	68.10	15.30	10.00	ACA	88.60	40.20	11.10	8.940	40.20	21.80	7.520	6.800	99.96	
67.76	107.0	110.9	166.0	43.34	49.75	107.9	136.4	39.01	51.45	RHO	180.8	206.0	56.19	80.03	206.3	224.0	67.19	97.68	.999	DC CAL
1.5	1.2	1.7	1.8	1.2	2.0	2.2	.1	1.9	2.9	PFE	2.0	2.5	1.2	2.3	2.6	2.7	2.1	2.6	.999	AC CAL
22	11	15	11	28	40	21	1	50	51	MCF	11	12	22	28	13	12	31	26		
0.0	0.0	.0	0.0	.1	.2	0.0	0.0	.3	.4	CPFE	0.0	0.0	.4	.4	0.0	.1	.5	.5		
1.5	1.2	1.7	1.8	1.1	1.8	2.2	.1	1.6	2.4	CCPFE	2.0	2.5	.8	1.9	2.6	2.6	1.6	2.1		
22	11	15	11	25	35	21	1	41	47	CCMCF	11	12	15	23	13	12	23	21		

3.000	3.000	3.000	6.000	3.000	3.000	6.000	6.000	3.000	3.000	I	6.000	6.000	4.000	4.000	6.000	6.000	4.000	4.000	1.000	
2144	1335	5634	1871	6199	341	6	3717	2752	1859	DC	1401	1765	2551	1881	6574	1138	1844		1003	RIGHT
2144	1335	5634	1871	6199	341	6	3717	2752	1859		1401	1765	2551	1881	6574	1138	1844		1003	SIDE
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
214.4	133.5	56.34	187.1	61.99	34.10	600.0	37.17	27.52	18.59	DCA	140.1	17.65	25.51	18.81	65.74	11.38	18.44	0.000	100.3	
212.0	131.0	55.30	184.0	60.80	33.40	589.0	36.60	26.80	18.10	AC1	139.0	17.10	24.80	18.30	64.40	11.00	18.00	0.000	100.0	
212.0	131.0	55.30	184.0	60.80	33.40	589.0	36.60	26.80	18.10	AC2	139.0	17.10	24.80	18.30	64.40	11.00	18.00	0.000	100.0	
212.0	131.0	55.30	184.0	60.80	33.40	589.0	36.60	26.80	18.10	ACA	139.0	17.10	24.80	18.30	64.40	11.00	18.00	0.000	100.0	
106.9	66.55	112.3	46.64	123.6	170.0	149.6	37.04	137.2	185.3	RHO	139.7	43.99	190.8	246.1	163.9	56.73	241.3	*000.0	.997	DC CAL
.8	1.6	1.6	1.4	1.7	1.8	1.6	1.3	2.4	2.4	PFE	.5	2.9	2.6	2.5	1.8	3.1	2.1	*000.0	.997	AC CAL
8	24	14	30	13	11	10	34	17	13	MCF	4	66	13	10	11	55	9	*00000		
0.0	0.0	.0	.0	0.0	.0	0.0	.2	.1	.1	CPFE	0.0	.3	.1	.1	.0	.4	.1	2.6		
.8	1.6	1.5	1.4	1.7	1.7	1.6	1.1	2.3	2.3	CCPFE	.5	2.6	2.5	2.4	1.7	2.8	2.1	*997.4		
8	24	14	29	13	10	10	30	17	13	CCMCF	4	59	13	10	11	49	9	1000		

0596690

JOB B259-68 LINE 6-1 SPREAD 1

LOOKING N10W DATE 8-8-68 A= 500'

CENTER 0.0 LABEL S/N FREQ. 3.0

COUPLING Yes

S 80°W
a = 500'

PAGE

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem - Carmen
LINE VI-1 HALF SW SP. 1 DATE 8-8

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500	500-1000 →		1000-1	500 →		1500-2000 →			
RANGE	300	1000	100	300	100	30	300	100	100	30
DC 1	1300	395	525	1790	565	1355	2750	507	278	890
DC 2	1300	395	543	1795	575	1265	2740	501	300	900
DC 3	1300	395	525	1790	565	1350	2750	507	278	890
DC 4	1300	395	543	1795	575	1270	2740	501	300	900
DC 5						1360				
DC 6						1270				
DC 7						1355				
DC 8						1275				
DC AVG.										
AC 1	124.5	377.	51.5	170.5	54.4	12.55	260.5	48.3	27.7	8.48
AC 2	124.5	377.	51.5	170.5	54.4	12.55	260.5	48.3	27.7	8.48
AC AVG.										
S.P.	+6.0	+1.5		+0.5			+3.5			
AC NOISE	.06	.06		.06			.07			
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen
LINE VI-1 HALF SW SP. 1 DATE 8-8

SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5	Cal	
RECEIVE	2000-2500 →			→	2500-3000 →			→	1-2	
RANGE	300	100	30	30	100	30	30	10	300	
DC 1	116	322	221	750	562	175	136	482	2095	
DC 2	117	316	224	745	574	175	126	462	2095	
DC 3	116	322	221	755	562	177	140	502	2095	
DC 4	117	316	224	715	574	174	124	480	2095	
DC 5				780		176	138	522		
DC 6				720		174	125	444		
DC 7				765		179	140	504		
DC 8				710		172	121	476		
DC AVG.										
AC 1	111.	30.3	21.35	7.10	53.9	16.7	12.5	4.56	204.5	
AC 2	111.	30.3	21.35	7.10	53.9	16.7	12.5	4.56	204.5	
AC AVG.										
S.P.	+8.7				-4.7					
AC NOISE	.07				.07					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PAGE 3

PROJECT Geo Chem-CARMEN

LINE VI-1 HALF SW SP. ____ DATE 8-8

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500SW	5-10	→	10-15	→	→	15-20	→	→	→
RANGE	Hi	Hi	→	Hi	→	→	Hi	→	→	→
VOLTAGE	240	410	240	480	410	240	430	480	410	240
CURRENT	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CAL
RECEIVE	20-25	→	→	→	25-30	→	→	→		1-2
RANGE	Hi	→	→	→	Hi	→	→	→		Hi
VOLTAGE	430	480	400	240	430	480	400	240		170
CURRENT	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		2.0

FREQUENCIES .05 3.0

SENDER NO. 6644 S

OPERATOR HIX

RECEIVER NO. 7651 R

OPERATOR PALMER

COMMENTS: 1-2
2-3 - 5.0 - Hi
3-4
4-5

N 80°E
a = 500'

PAGE

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem - Carmen
LINE VI-1 HALF NE SP. 1 DATE 8-8

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500	500-1000 →		1000-1500 →			1500-2000 →			
RANGE	1000	300	100	300	100	30	300	100	30	30
DC 1	393	129	543	1490	334	1960	2090	655	208	149
DC 2	393	130	523	1490	305	2000	2100	686	209	143
DC 3	393	129	543	1490	334	1960	2090	655	208	149
DC 4	393	130	523	1490	305	2000	2100	686	209	143
DC 5										
DC 6										
DC 7										
DC 8										
DC AVG.										
AC 1	376.	124.	51.4	141.5	30.5	18.85	199.5	64.0	19.8	13.9
AC 2	376.	124.	51.4	141.5	30.5	18.85	199.5	64.0	19.8	13.9
AC AVG.										
S.P.	+7.4	+8.5		+16.1			-8.7			
AC NOISE	.09	.07		.07			.07			
POT RES.										

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem - Carmen
LINE VI-1 HALF NE SP. 1 DATE 8-8

PAGE

SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2	cal	
RECEIVE	2000-2500 →				2500-3000 →				4-5	
RANGE	100	30	30	30	30	30	10	10	300	
DC 1	368	261	990	780	151	143	623	537	209	
DC 2	381	259	970	760	166	145	620	552	209	
DC 3	368	261	990	780	144	144	634	498	209	
DC 4	381	259	970	760	170	144	624	560	209	
DC 5					140	146	622	540		
DC 6					174	144	660	582		
DC 7					140	145	602	466		
DC 8					175	140	656	524		
DC AVG.										
AC 1	35.8	24.8	9.40	7.35	14.9	13.7	5.94	5.00	203.	
AC 2	35.8	24.8	9.40	7.35	14.9	13.7	5.94	5.00	203.	
AC AVG.										
S.P.	-6.8				+4.6					
AC NOISE	.06				.08					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PROJECT Geo-Chem-CARMEN

LINE W-1 HALF NE SP. 1 DATE 8-8

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500 NE	5-10	→	10-15	→	→	15-20	→	→	→
RANGE	Hi	Hi	Hi	Hi	→	→	Hi	→	→	→
VOLTAGE	440	480	440	400	480	440	240	400	480	440
CURRENT	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CAL
RECEIVE	20-25	→	→	→	25-30	→	→	→		4-5
RANGE	Hi	→	→	→	Hi	→	→	→		Hi
VOLTAGE	240	400	480	440	240	400	480	440		290
CURRENT	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		2.0

FREQUENCIES .05 3.0

SENDER NO. 6645

OPERATOR Hex

RECEIVER NO. 7651R

OPERATOR PALMER

COMMENTS:

HEINRICHS GEOEX B259-68 LINE 6-1 SPD 1 LOOKING N10W 8-8-68 A= 500 FEET

5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	I	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	2.000	
13	395	525	1790	565	1355	275	507	278	89	DC	116	322	221	750	562	175	136	482	2095	LEFT
13	395	543	1795	575	1265	274	501	300	90		117	316	224	745	574	175	126	462	2095	SIDE
					1350									755		177	140	502		
					1270									715		174	124	480		
					1360									780		176	138	522		
					1270									720		174	125	444		
					1355									765		179	140	504		
					1275									710		172	121	476		
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
130.0	395.0	53.40	179.2	57.00	13.12	274.5	50.40	28.90	8.950	DCA	116.5	31.90	22.25	7.443	56.80	17.55	13.16	4.847	209.5	
124.5	377.0	51.50	170.5	54.40	12.55	260.5	48.30	27.70	8.480	AC1	111.0	30.30	21.35	7.100	53.90	16.70	12.50	4.560	204.5	
124.5	377.0	51.50	170.5	54.40	12.55	260.5	48.30	27.70	8.480	AC2	111.0	30.30	21.35	7.100	53.90	16.70	12.50	4.560	204.5	
124.5	377.0	51.50	170.5	54.40	12.55	260.5	48.30	27.70	8.480	ACA	111.0	30.30	21.35	7.100	53.90	16.70	12.50	4.560	204.5	
37.23	113.1	61.17	51.34	65.30	37.58	78.62	57.74	82.77	51.26	RHO	133.5	91.36	127.4	74.61	162.7	100.5	132.0	77.74	.955	DC CAL
1.9	2.3	1.2	2.6	2.3	2.1	2.9	1.9	1.8	3.0	PFE	2.5	2.8	1.7	2.3	2.9	2.6	2.8	3.8	.976	AC CAL
52	20	20	51	35	55	36	32	22	59	MCF	18	30	14	31	18	26	21	48		

5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	I	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	2.000	
393	129	543	149	334	196	2090	655	208	149	DC	368	261	99	78	151	143	623	537	209	RIGHT
393	130	523	149	305	200	2100	686	209	143		381	259	97	76	166	145	620	552	209	SIDE
															144	144	634	498		
															170	144	624	560		
															140	146	622	540		
															174	144	660	582		
															140	145	602	466		
															175	140	656	524		
1	1	2	1	2	3	1	2	3	4	N	2	3	4	5	3	4	5	6		
393.0	129.5	53.30	149.0	31.95	19.80	209.5	67.05	20.85	14.60	DCA	37.45	26.00	9.800	7.700	15.67	14.42	6.288	5.326	209.0	
376.0	124.0	51.40	141.5	30.50	18.85	199.5	64.00	19.80	13.90	AC1	35.80	24.80	9.400	7.350	14.90	13.70	5.940	5.000	203.0	
376.0	124.0	51.40	141.5	30.50	18.85	199.5	64.00	19.80	13.90	AC2	35.80	24.80	9.400	7.350	14.90	13.70	5.940	5.000	203.0	
376.0	124.0	51.40	141.5	30.50	18.85	199.5	64.00	19.80	13.90	ACA	35.80	24.80	9.400	7.350	14.90	13.70	5.940	5.000	203.0	
112.8	37.18	61.21	42.78	36.69	56.84	60.14	77.00	59.86	83.83	RHO	43.00	74.64	56.27	77.37	44.99	82.80	63.18	85.63	.957	DC CAL
1.5	1.4	.7	2.3	1.7	2.0	2.0	1.8	2.3	2.0	PFE	1.6	1.8	1.3	1.8	2.2	2.2	2.8	3.5	.971	AC CAL
13	39	12	53	48	36	33	23	38	24	MCF	37	25	22	23	48	27	45	41		

JOB B259-68 LINE 6-2 SPREAD 1

LOOKING N10W DATE 8/7/68 A= 500'

CENTER 0.0 LABEL S/N FREQ. 3.0

COUPLING Yes

S 80°W
a = 500'

PAGE

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem- Carmen
LINE VI-2 HALF SW SP. 1 DATE 8-7

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-500	500-1000 →		1000-1500 →			1500-2000 →			
RANGE	300	300	100	300	100	30	300	100	100	30
DC 1	1105	1670	268	152	542	161	225	520	314	115
DC 2	1105	1660	278	153	525	138	226	534	336	117
DC 3	1105	1670	268	152	542	161	225	520	314	114
DC 4	1105	1660	278	153	525	139	226	534	336	120
DC 5						165				115
DC 6						138				118
DC 7						159				113
DC 8						132				118
DC AVG.										
AC 1	106.5	160.5	26.4	147.	51.7	14.4	217.	50.5	31.3	11.1
AC 2	106.5	160.5	26.4	147.	51.7	14.4	217.	50.5	31.3	11.1
AC AVG.										
S.P.	+0.6	+3.7		+4.4			+6.9			
AC NOISE	.06	.06		.06			.06			
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen

LINE ~~VI~~ VI-2 HALF SW SP. 1 DATE 8-7

SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5	cal	
RECEIVE	2000-2500 →				2500-3000 →				1-2	
RANGE	300	100	100	30	100	30	30	10	300	
DC 1	1140	442	312	134	260	126	970	418	2075	
DC 2	1135	462	358	161	248	113	1080	458	2075	
DC 3	1125	443	336	124	260	126	950	406	2075	
DC 4	1130	467	365	131	246	116	1090	458	2075	
DC 5	1130	422	334	114	258	122	995	402		
DC 6	1145	446	354	145	254	110	1110	436		
DC 7	1140	425	326	151	262	124	1000	414		
DC 8	1120	466	358	149	248	112	1040	446		
DC AVG.										
AC 1	108.5	42.6	33.4	13.4	24.4	11.4	9.80	4.07	204.5	
AC 2	108.5	42.6	33.4	13.4	24.4	11.4	9.80	4.07	204.5	
AC AVG.										
S.P.	+8.9				-6.3					
AC NOISE	.07				.07					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PAGE 1

PROJECT Geo Chem - CARMEU

LINE VI-2 HALF SW SP. 1 DATE 8-7

SEND	4-5	3-4	4-5	2-3	3-4	4-5	1-2	2-3	3-4	4-5
RECEIVE	0-5 00'S4	5-10 →	→	10-15 →	→	→	15-20 →	→	→	→
RANGE	Hi	Hi	Hi	Hi →	→	→	Hi →	→	→	→
VOLTAGE	410	490	410	370	490	410	260	370	490	410
CURRENT	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
SEND	1-2	2-3	3-4	4-5	1-2	2-3	3-4	4-5		CAL
RECEIVE	20-25 →	→	→	→	25-30 →	→	→	→		1-2
RANGE	Hi →	→	→	→						Hi
VOLTAGE	260	370	490	410	260	370	490	410		100
CURRENT	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		2.0

FREQUENCIES .05 3.0

SENDER NO. 6645

OPERATOR HIX

RECEIVER NO. 765 (R

OPERATOR PACHER

COMMENTS: 1-2 / 4-5 — 5.A., Hi

N 80° E

PAGE

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem ~ Carmen
LINE VI-2 HALF NE SP. 1 DATE 8-7

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500	500-1000 →		1000-1500 →			1500-2000 →			
RANGE	300	300	100	300	100	30	300	100	30	10
DC 1	171.	1120	274	1250	295	110	960	382	134	700
DC 2	171	1090	284	1210	273	118	970	404	139	655
DC 3	171	1120	268	1250	298	109	960	382	135	740
DC 4	171	1090	286	1210	268	120	970	404	139	642
DC 5			266		300	107			131	706
DC 6			290		266	121			136	640
DC 7			262		302	106			129	704
DC 8			296		263	122			133	624
DC AVG.										
AC 1	161.	104.5	26.0	115.5	26.5	10.8	91.0	37.4	12.55	6.37
AC 2	161.	104.5	26.0	115.5	26.5	10.8	91.0	37.4	12.55	6.37
AC AVG.										
S.P.	+2.8	-15.7		+12.5			-11.2			
AC NOISE	.07	.07		.08			.08			
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Carmen

LINE II-2 HALF NE SP. 1 DATE 8-7

SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2	Cal	
RECEIVE	2000-	2500	→	→	2500-	3000	→	→	4-5	
RANGE	100	30	10	10	30	30	10	10	300	
DC 1	274	1760	640	383	165 153	114	517	336	210	
DC 2	266	1610	746	402	156 161	120	522	350	210	
DC 3	274	1790	652	376	160 150	115	524	300	210	
DC 4	266	1590	756	380	154 160	125	546	346	210	
DC 5		1810	652	410	151 149	117	564	344		
DC 6		1580	737	384	154 164	124	538	342		
DC 7		1810	640	392	151 149	115	568	380		
DC 8		1570	740	382	159 163	120	520	326		
DC AVG.										
AC 1	25.6	16.05	6.44	3.64	14.7	11.3	5.06	3.22	201.	
AC 2	25.6	16.05	6.44	3.64	14.8	11.3	5.06	3.20	201.	
AC AVG.										
S.P.	+18.4				-3.0					
AC NOISE	.07				.08					
POT RES.										

HEINRICHS GEOEXPLORATION CO.

I. P. SENDER NOTES

PAGE 2

PROJECT Geo Chem - CARMEN

LINE VI-2 HALF NE SP. 1 DATE 8-7

SEND	1-2	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2
RECEIVE	0-500 NE	5-10	→	10-15	→	→	15-20	→	→	→
RANGE	Hi	Hi	→	Hi	→	→	Hi	→	→	→
VOLTAGE	260	360	260	490	360	260	400	490	360	260
CURRENT	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
SEND	4-5	3-4	2-3	1-2	4-5	3-4	2-3	1-2		CAL
RECEIVE	20-25	→	→	→	25-30	→	→	→		4-5
RANGE	Hi	→	→	→	Hi	→	→	→		Hi
VOLTAGE	400	490	360	260	400	490	360	260		160
CURRENT	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		2.0

FREQUENCIES .05 3.0

SENDER NO. 66445

OPERATOR HIX

RECEIVER NO. 7651R

OPERATOR PALMER

COMMENTS: — 5, — Hi —

POST OFFICE DEPARTMENT
OFFICIAL BUSINESS

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

HOUSTON, TEXAS
PM
3 SEP
1968

IYHR:
INTERNATIONAL

POSTMARK OF DELIVERING OFFICE

INSTRUCTIONS: Show name and address below and complete instructions on other side, where applicable. Moisten gummed ends, attach and hold firmly to back of article. Print on front of article *RETURN RECEIPT REQUESTED.*

RETURN TO

NAME OF SENDER
Henrich Dietz

STREET AND NO. OR P.O. BOX
P.O. Box 5671

POST OFFICE, STATE, AND ZIP CODE
Tucson, Arizona 85703

POD Form 3811 Apr. 1967

c55—16—71548-10

Victor Sanchez

INSTRUCTIONS TO DELIVERING EMPLOYEE

☐ Show to whom, date, and address where delivered

☐ Deliver ONLY to addressee

(Additional charges required for these services)

SEP 19 1968

RECEIPT

Received the numbered article described below.

REGISTERED NO.

CERTIFIED NO. 873772

INSURED NO.

DATE DELIVERED SEP 16 1968

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

Phone: (AREA 602) 6[illegible]0578

Donald Moore

2 SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

D Johnson

3 SHOW WHERE DELIVERED *(only if requested)*

(City Service)

c55—16—71548-10 GPO

1 2 3 4 5

20 25 30 35N 40 45 50 55 60 65N SURFACE

CCPFE

X X2.3 X3.7 X4.4 X3.8 X6.0 X7.4 X X X X
4.4 --

X3.2 X1.9 X3.9 X4.7 X3.8 X5.9 X6.1 X X X
4.8

X3.4 X3.2 X1.4 X5.0 X5.4 X5.4 X4.7 X-- X X X

X2.6 X2.8 X2.5 X X5.8 X4.4 X-- X X X

X X3.5 X4.5 X X X5.0 X-- X X X X

X X4.9 X X X X-- X X X X

13259-68

L 1-1
S-2

1 2 3 4 5

20 25 30 35N 40 45 50 55 60 65N SURFACE

CCMCF

X X85 X118 X171 X89 X227 X118 X X X X
168 1000

X93 X90 X167 X90 X82 X242 X75 X X X
91

X76 X101 X78 X88 X125 X162 X140 X1000 X X X

X65 X109 X57 X X130 X94 X1000 X X X

X X106 X75 X X X83 X1000 X X X X

X X67 X X X X1000 X X X X

179430

Blaine Lewis Patagonia
Ph 394-2319

Smoddy's Office # BEYERLE SAND
& Gravel INC.
Nogales 287-2035

Mrs. Kathlin

GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

August 8, 1968

Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona 85703

Attention: Mr. Chris Ludwig

Enclosed is a copy of your letter of August 6, 1968, recommending additional induced polarization coverage of geochemical anomaly #1 in the Carmen area which we have approved.

You are aware of the expiration dates of the Federal claims on this prospect. We hope that you will contact us at your earliest convenience in order that we may locate two shallow core holes to hold our leases on Carmen claims #111-130.

Very truly yours,

GEOCHEMICAL SURVEYS

E. C. Reagor

E. C. Reagor

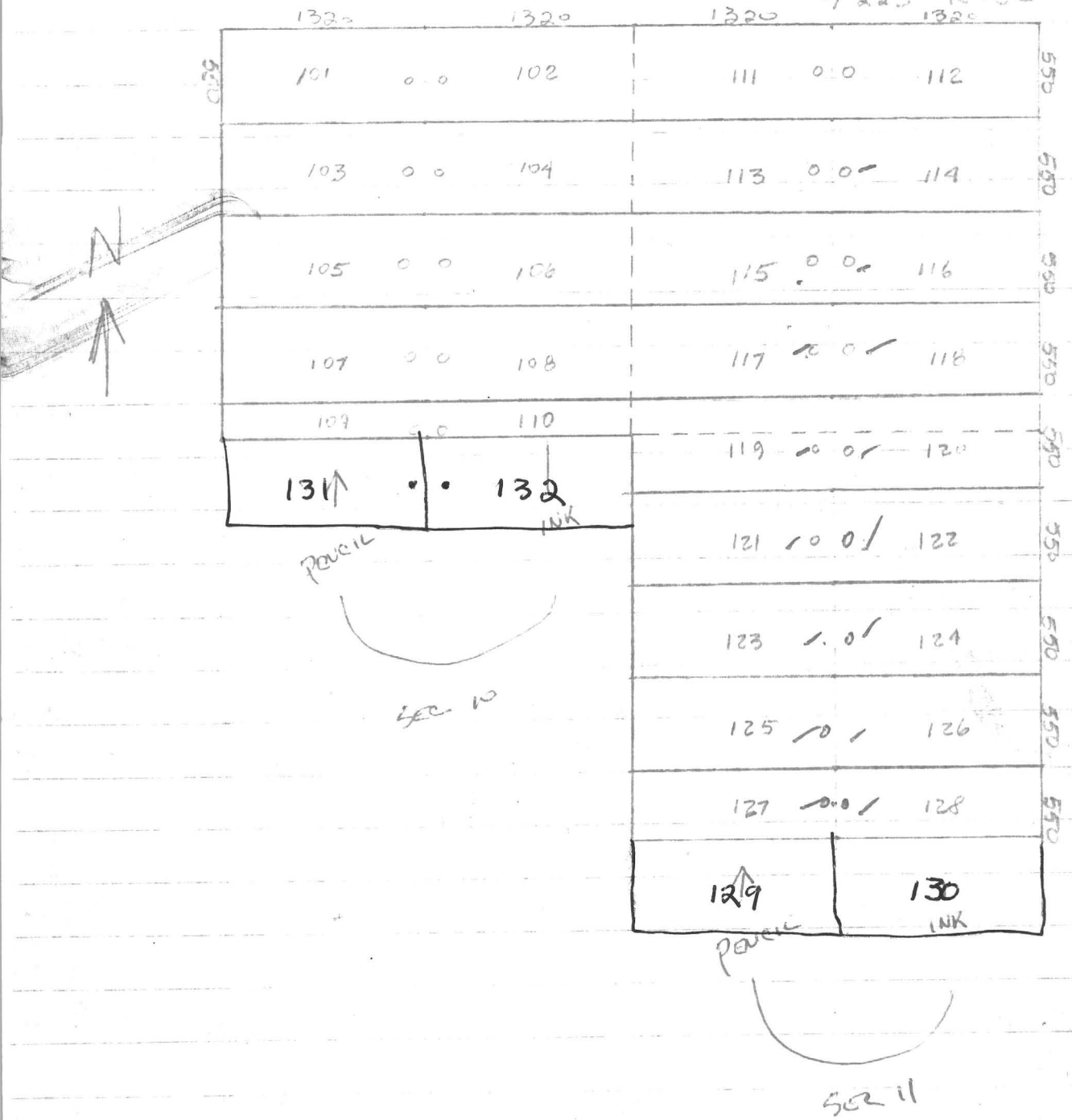
ECR:sd
Enclosure

HEINRICHS GEOEX
GEOPHYSICAL ENGINEERS
TUCSON, ARIZONA

AUG 10 1968

BOX 5671 TUCSON, ARIZONA 85703
Phone: (AREA 602) 623-0578

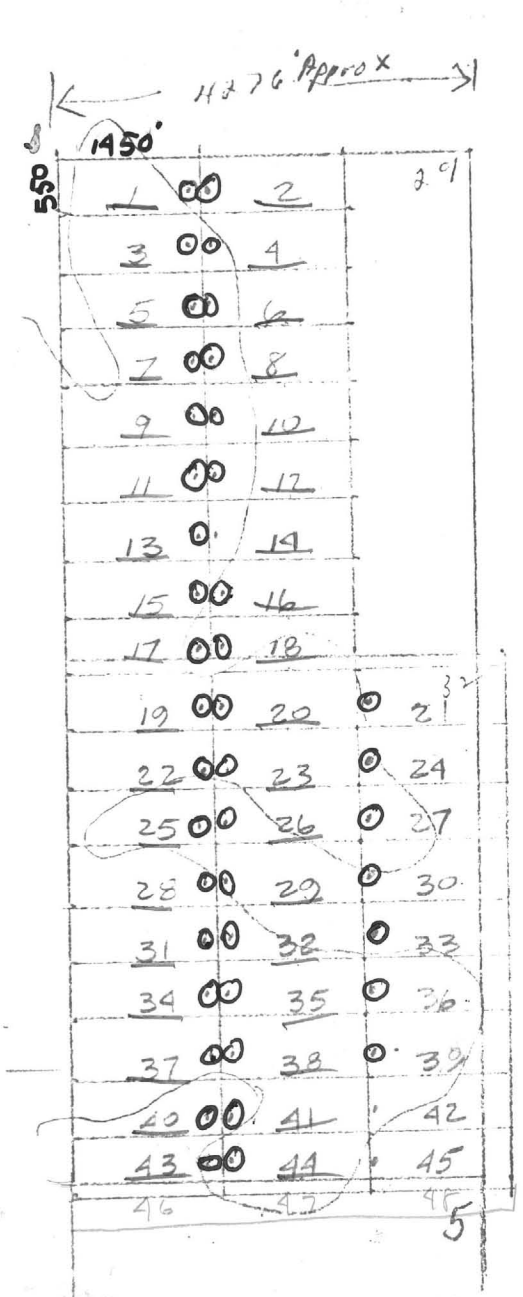
CARMEN GROUP SECS. 10 & 11
T22S R15E



R 15 E

Santa Cruz County

CARMEN CLAIM GROUP



T
21
S

45 Claim

B-259-68

August 13, 1968

Mr. E. C. Reagor
Geochemical Surveys
P. O. Box 19508
Dallas, Texas 75219

Dear Mr. Reagor:

As per our phone conversation today, I've suggested two drill sites to validate the Carmen Mining claims 111 through 130, Patagonia, Santa Cruz County, Arizona.

One drill hole is recommended within Carmen 130 approximately between I.P. Lines 1-1 and 1-2 just north of section lines 11/14. This hole will test a zone of weak I.P. anomalism correlating with the approximate center of the multiple element geochemical anomaly (#1). This hole would serve to validate Carmen claims 121-130.

The second hole is suggested in Carmen 120 near station 27.5 N I.P. to test a moderate strength I.P. anomaly near the north fringe of the geochemical anomaly (#1). This will validate Carmen 111-120.

These holes have been located without benefit of the detailed I.P. work, so they may not be in an optimum location. However, they will certainly help evaluate this prospect; more so than just randomly spotting these within the claims to satisfy only the legal requirements. Ideally, these holes should go at least 500 feet in depth.

Someone from our I.P. crew and/or survey crew will be available to spot these sites for the Metler Brothers Drilling Contractors this week. Also, they can help in any road work planning.

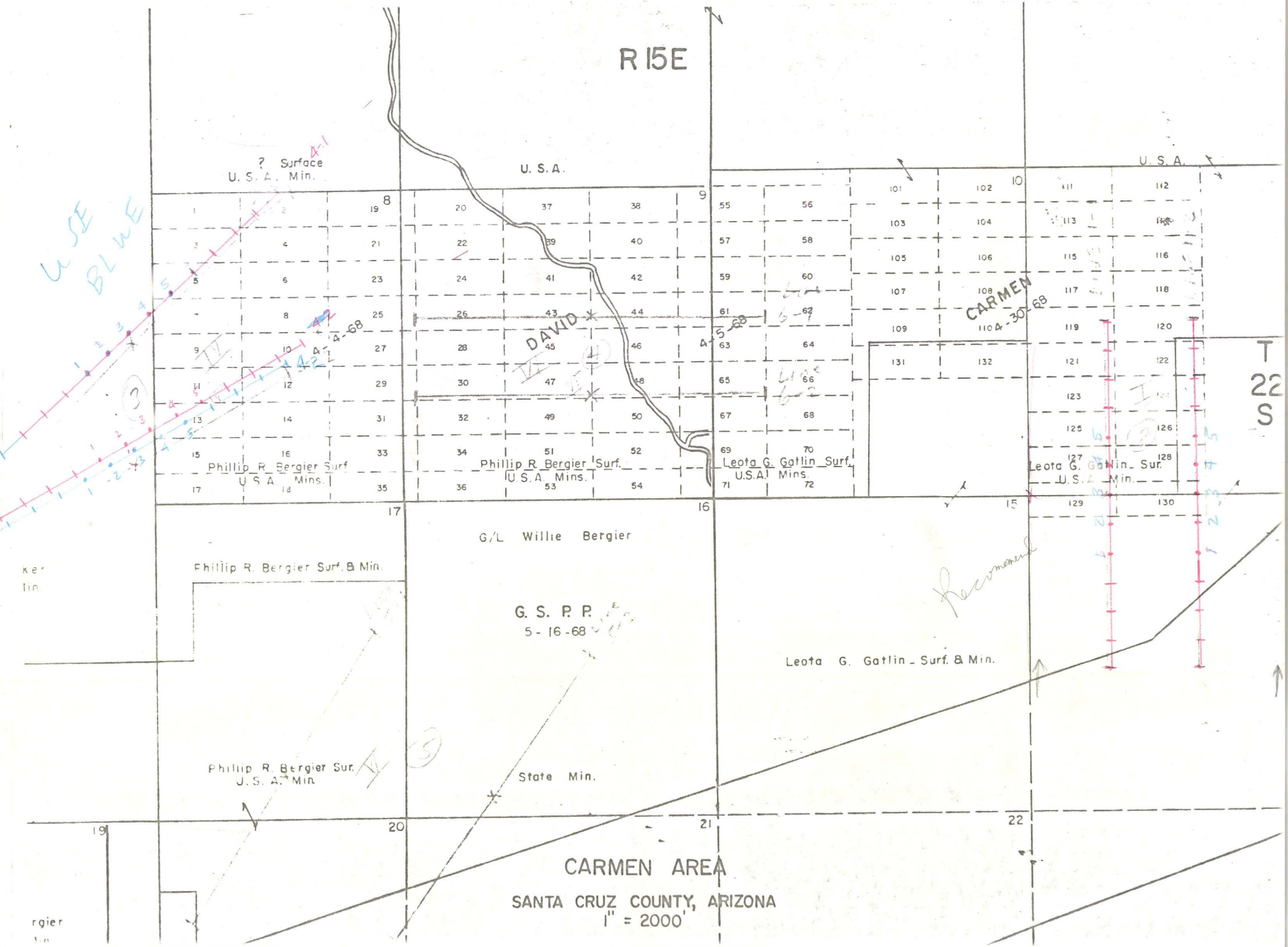
Enclosed, please find a sketch showing the location of these two recommended sites. If you have any questions, please let us know.

Sincerely,

HEINRICHS GEOEXPLORATION COMPANY

Chris S. Ludwig
Senior Geophysicist

CSL:jc
Enclosure


R 15E
T 22 S
? Surface
U. S. A. Min.
U. S. A.
U. S. A.
DAVID
CARMEN
Phillip R. Bergier Surf
U. S. A. Mins.
Phillip R. Bergier Surf.
U. S. A. Mins.
Leota G. Gatlin Surf.
U.S.A. Mins.
Leota G. Gatlin Surf.
U. S. A. Min.
G/L Willie Bergier
Phillip R. Bergier Surf. & Min.
G. S. P. P.
5 - 16 - 68
Leota G. Gatlin - Surf. & Min.
Phillip R. Bergier Sur.
U. S. A. Min.
State Min.
CARMEN AREA
SANTA CRUZ COUNTY, ARIZONA
1" = 2000'

R 15 E

T 22 S

? Surface
U. S. A. Min.

U. S. A.

Southern Boundary of Bear Creek M.C. Claims

Recommended drill site to validate claims

DAVID

CARMEN

A-4-68

A-5-68

A-30-68

Phillip R. Bergier Surf.
U. S. A. Mins.

Phillip R. Bergier Surf.
U. S. A. Mins.

Leota G. Gatlin Surf.
U.S.A. Mins.

Leota G. Gatlin Surf.
U.S.A. Min.

G/L Willie Bergier

Phillip R. Bergier Surf. & Min.

HEINRICHS GEOEX

GEOPHYSICAL ENGINEERS

Phillip R. Bergier Surf.
U. S. A. Min.

G. S. P. P.
5-16-68

Leota G. Gatlin Surf. & Min.

State Min.

Recommended additional IP coverage plus extending Lines 1-1 & 1-2 one spread north and possible extending Line 1-3 & 1-4 another spread north if 1-1 & 1-2 are still interesting to the north.

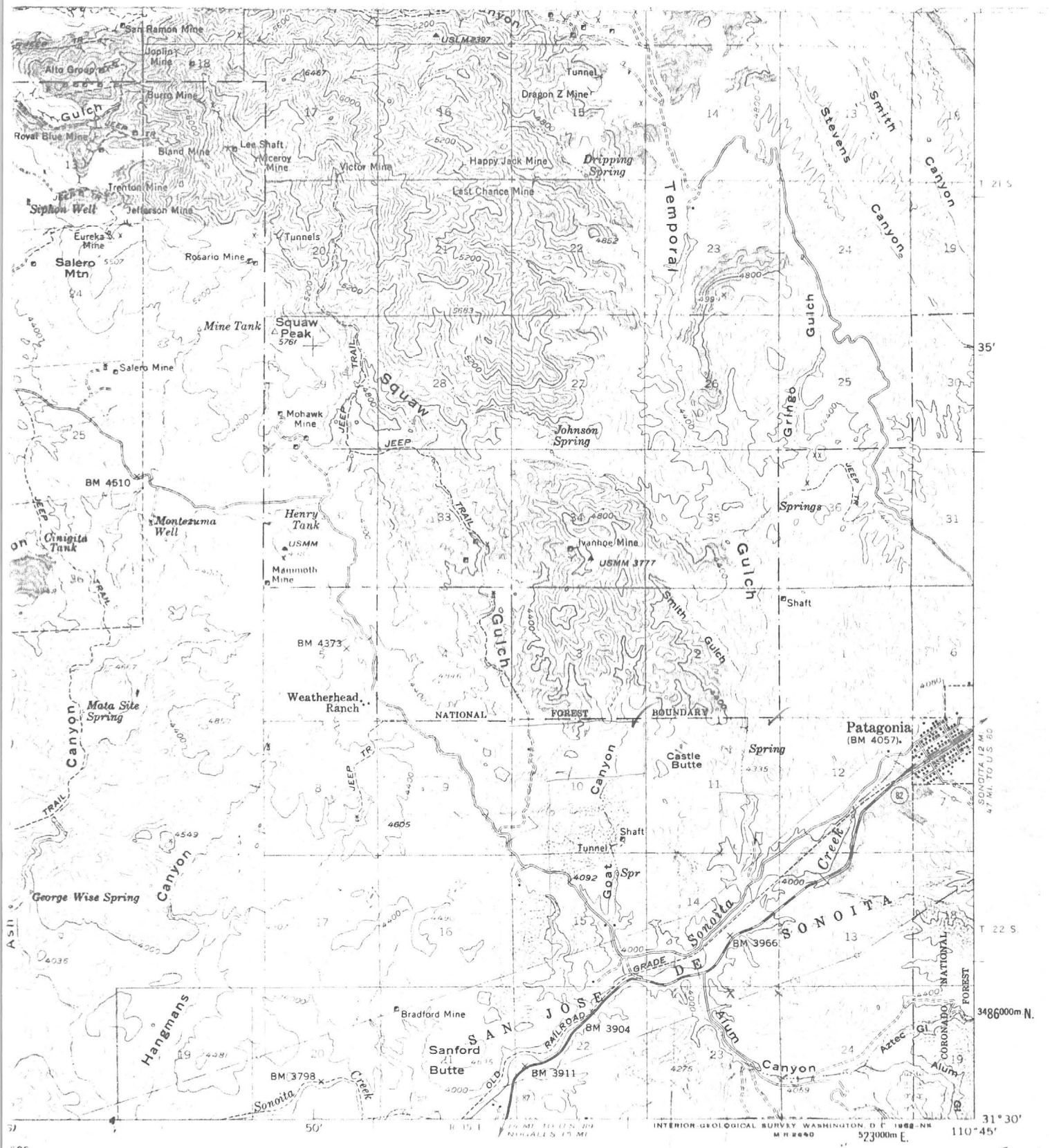
8/13/68

8/9/68

CARMEN AREA

SANTA CRUZ COUNTY, ARIZONA

1" = 2000'

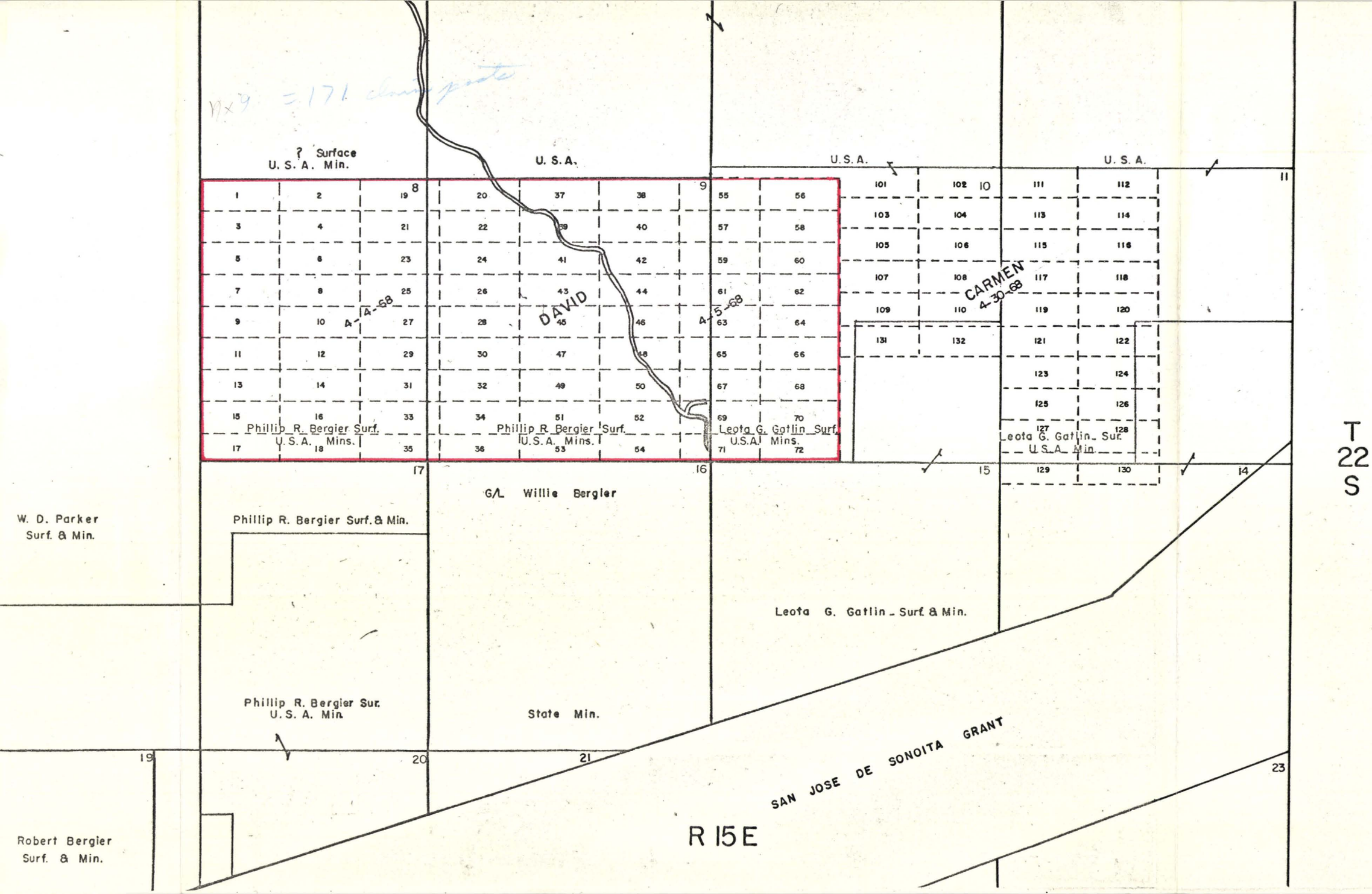


MAP ACCURACY STANDARDS
25, COLORADO OR WASHINGTON 25, D. C.
SYMBOLS IS AVAILABLE ON REQUEST

MOUNT WRIGHTSON, ARIZ.

N3130—W11045/15

1958


? Surface
U. S. A. Min.
U. S. A.
U. S. A.
U. S. A.
8
9
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11
DAVID
4-4-68
4-5-68
CARMEN
4-30-68
Phillip R. Bergier Surf.
U. S. A. Mins.
Phillip R. Bergier Surf.
U. S. A. Mins.
Leota G. Gatlin Surf.
U.S.A. Mins.
Leota G. Gatlin Sur.
U. S. A. Min.
17
16
15
14
G/L Willie Bergier
W. D. Parker
Surf. & Min.
Phillip R. Bergier Surf. & Min.
Leota G. Gatlin - Surf. & Min.
Phillip R. Bergier Sur.
U. S. A. Min.
State Min.
19
20
21
23
SAN JOSE DE SONOITA GRANT
Robert Bergier
Surf. & Min.
R 15 E
T
22
S

GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

September 10, 1968

SEP 12 1968

BOX 5671 TUCSON, ARIZONA 85703
Phone: (AREA 602) 623-0578

Mr. Chris S. Ludwig
Senior Geophysicist
Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona 85703

Dear Mr. Ludwig:

We received the sectional data sheets on the Carmen Area in today's mail; however, we need the maps as soon as possible.

Done

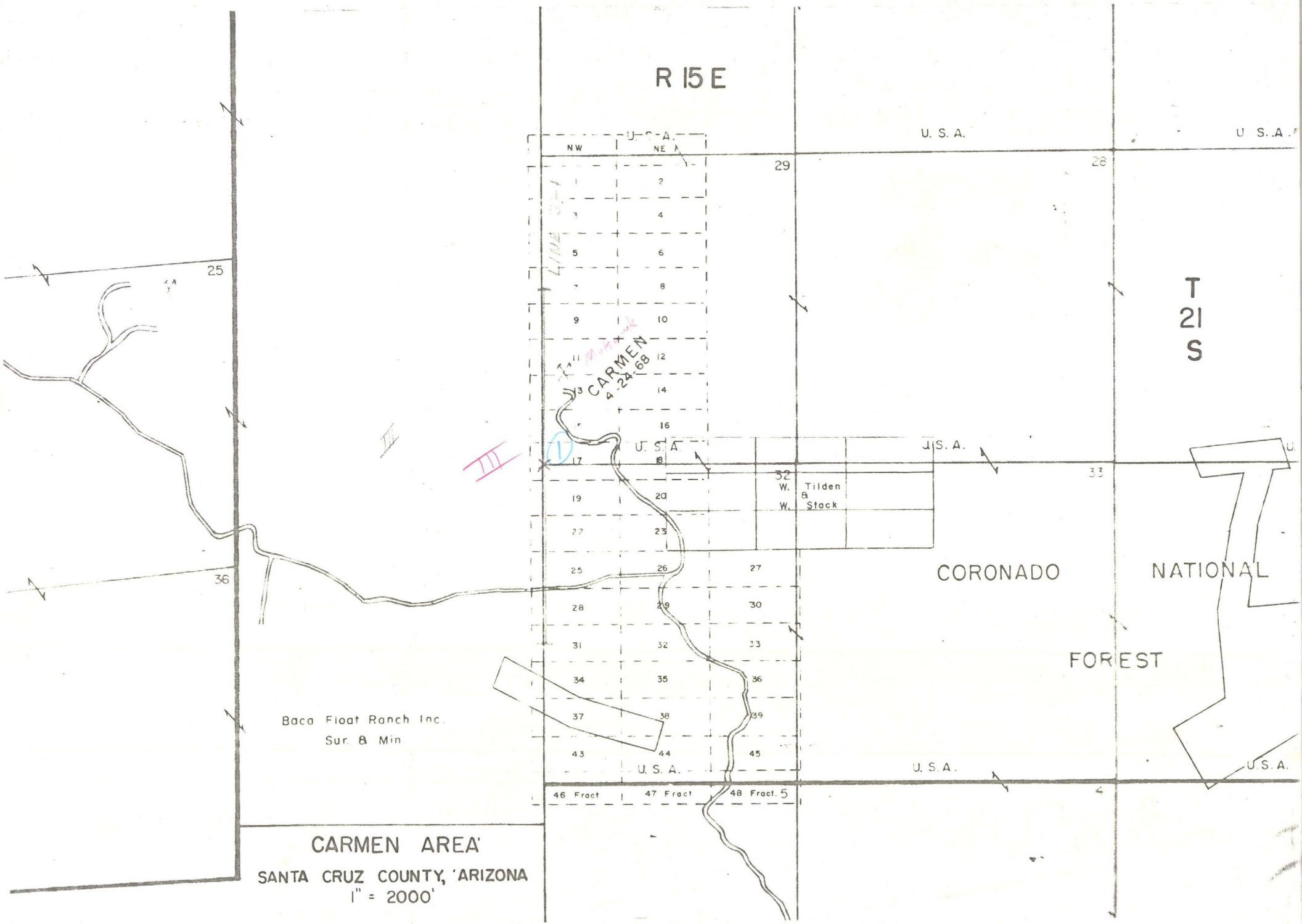
Sincerely,

GEOCHEMICAL SURVEYS

Bill

W. R. Ransone

WRR:tjc



CARMEN AREA

SANTA CRUZ COUNTY, ARIZONA

1" = 2000'

HEINRICHS GEOEXPLORATION COMPANY

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

August 6, 1968

Mr. W. R. Ransone
Geochemical Surveys
P. O. Box 19508
Dallas, Texas 75219

Dear Mr. Ransone:

As per our telephone conversation yesterday, I've enclosed a plan sketch of a portion of the Carmen Area, Santa Cruz County, Arizona, showing recommended additional induced polarization coverage over geochemical anomaly #1. Very weak to moderate I.P. effects are seen correlating quite well with this geochemical anomalism on I.P. Lines 1-1 and 1-2. Therefore, additional coverage is warranted to better define this reconnaissance I.P. anomalism in order to properly locate future drilling.

It is recommended that Lines 1-1 and 1-2 be extended one spread to the north and that Lines 1-3 and 1-4 be run 1,500 feet east of Line 1-2 and 1,500 feet west of Line 1-1, respectively. Also it may be necessary to extend Line 1-3 and/or Line 1-4 further north. An east-west line through the best I.P. response may also be helpful to spot the initial drilling.

Charges and details would be as per our proposal of July 22, 1968. If about six additional spreads of new coverage are run, it will cost an estimated $3,500.00.

MINERAL ENGINEERING CONSULTANTS AND CONTRACTORS. GEOPHYSICAL, GEOLOGICAL AND ECONOMIC APPRAISALS.

Indication of your understanding and approval of the above by executing as provided below on the attached copy of this letter and returning it to us will be most appreciated.

Very truly yours,

HEINRICHS GEOEXPLORATION COMPANY

Chris S. Ludwig

Chris S. Ludwig
Senior Geophysicist

APPROVED BY: G. G. Kruger

TITLE: Partner

DATE: 8-8-68

CSL:jc
Enclosure

July 22, 1968

Mr. W. R. Ransone
Geochemical Surveys
P. O. Box 19508
Dallas, Texas 75219

Re: Proposed I.P. Survey in the Carmen Area, near Patagonia, Santa Cruz County, Arizona

Dear Mr. Ransone:

As you requested last week during our conference, here is a proposal on running an induced polarization survey over the Carmen Area, near Patagonia, Santa Cruz County, Arizona.

Since all six areas are on outcrop or presumed very shallow alluvium and have rather limited size geochemical anomalism, 500 foot dipoles on the I.P. coverage are recommended. This spacing typically gives resolvable penetration within the zone from about 150 to 600 or 750 feet below surface. Also, because of the rather small dipole spacing, standard duty gear should suffice and will allow fair portability which in this area could be of importance.

Line spacing and orientation has been chosen to cover the geochemical anomalism on a reconnaissance basis. If anomalism is encountered, fill-in detail coverage may prove necessary to locate proper drilling targets. Three sketch maps are included herewith showing the recommended I.P. coverage.

This I.P. will be run in such an order as to evaluate the soonest expiring claims first and Area II will be left until the surface permits are obtained, as you requested.

The recommended coverage is:

Area I, 2 spreads	Area IV, 2 spreads
Area II, 6 spreads	Area V, 2 spreads
Area III, 1 spread	Area VI, 2 spreads

Total of 15 spreads. About four field weeks will be necessary to run these lines not counting any follow-up coverage.

The standard duty I.P. gear with a three man crew can be contracted for $250.00 per day plus vehicle and other job related expenses as enumerated below. The New Mexico I.P. crew you have been using is available to start this project now.

On a monthly basis, a reduced rate of $10.00 each work day will be credited at the end of each calendar month of field work. Vehicle expenses are $12.00 per day plus 12¢ per mile. Living and miscellaneous job related expensed charged at our cost. Office work such as compilation, computation, and reports are at $125.00 per staff day. Communications and supplies will be charged at our cost. Standby time for weather or at client's request and travel time at one-half the daily rate. Breakdown of our equipment in excess of one hour per day will be made up or not charged.

Total estimated cost on these two prospects exclusive of follow-up coverage but including reports and interpretation is $9,000.00.

All property permits, trespassing liability and related costs incurred on behalf of client will be assumed by client. Charges for extra equipment and personnel employed, if mutually agreed on, are extra.

Geoex will save client harmless from all Workmen's Compensation, public liability and property damage liability incurred by GEOEX employees.

Preliminary reports or copies of rough field plotting sheets will be available as work progresses.

Payments due on presentation. Billings may be submitted periodically with final statement after completion of final report.

Indication of your understanding and approval of the above by executing as provided below on the attached copy of this letter and returning it to us will be most appreciated.

Very truly yours,

HEINRICHS GEOEXPLORATION COMPANY

Chris S. Ludwig

Chris S. Ludwig
Senior Geophysicist

DATE:_____

ACCEPTED BY:_____

TITLE:_____

CSL: jc
Enclosures 3

B-259

GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

July 29, 1968

HEINRICHS GEOEX
GEOPHYSICAL ENGINEERS
TUCSON, ARIZONA

AUG 22 1968

BOX 5671 TUCSON, ARIZONA 85703
Phone: (AREA 602) 623-0578

E. H. Blue and Associates
303 North Central Avenue
Phoenix, Arizona

Gentlemen:

Pursuant to a telephone conversation on this date between Mr. Blue and Mr. Howard Twitty, we request permission to conduct an induced polarization geophysical survey on lands owned by you in the following area:

Sections 13, 14, 15, 19, 20, 21, 22, 23, 24 and 27
T22S, R15E, Santa Cruz County, Arizona

Geochemical Surveys will be fully responsible for all damages incurring as a result of this work and agrees to completely restore any surface damage caused by this survey.

Upon completion of all exploration work and after a reasonable time, Geochemical Surveys agrees to furnish E. H. Blue and Associates information obtained in the survey of the lands owned by E. H. Blue and Associates.

Subject to termination upon thirty days written notice to Geochemical Surveys this permit shall be for a period of sixty days.

Please indicate your approval by signing and returning one copy of this letter.

Yours very truly,

GEOCHEMICAL SURVEYS

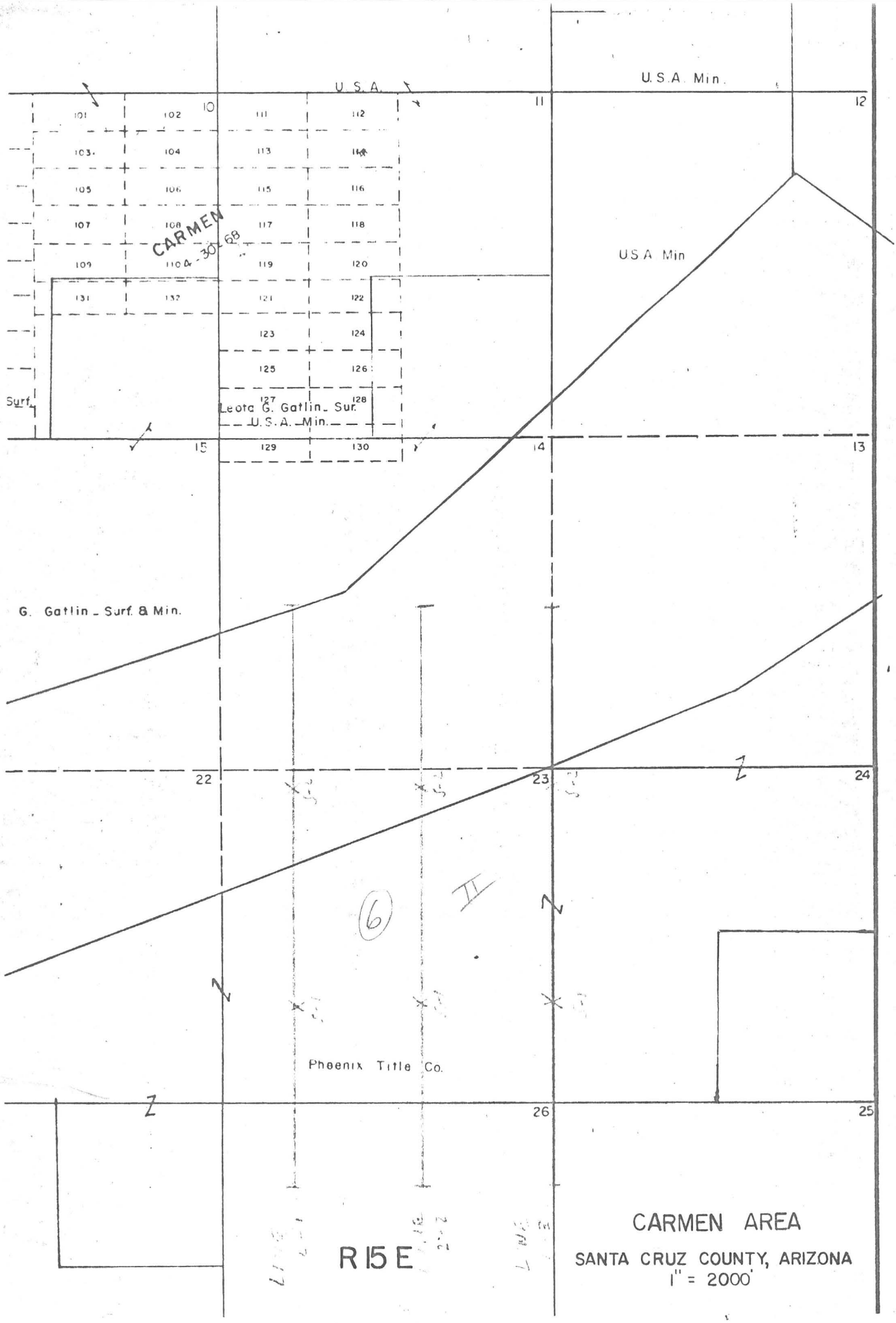
W. R. Ransone

W. R. Ransone

WRR:sd
cc: Mr. Howard Twitty
Heinrichs Geoexploration

AGREED TO AND ACCEPTED
this the 12 day of Aug, 1968.

E. H. Blue & Associates


U.S.A.
U.S.A. Min.
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CARMEN
30-68
Surf.
Leota G. Gatlin - Sur.
U.S.A. - Min.
15
14
13
U S A Min
G. Gatlin - Surf. & Min.
T
22
S
22
23
24
6
II
Phoenix Title Co.
26
25
R 15 E
CARMEN AREA
SANTA CRUZ COUNTY, ARIZONA
1" = 2000'

TO Geochemical Surveys
2505 Turtle Creek Road
Dallas, Texas 19508

Attention: Mr. Ransone

HEINRICHS GEOEX
GEOPHYSICAL ENGINEERS TUCSON, ARIZONA

HEINRICHS GEOEXPLORATION COMPANY
808 W. GRANT ROAD - P. O. BOX 5671
TUCSON, ARIZONA 85703
Area Code 602 Phone 623-0578
Geophysical Exploration Research Engineering

SUBJECT: DATE: 5/25/68

END FOLD

Gentlemen:

Enclosed are one each original copies of the recorded claims for the Carmen Group, Patagonia Area, Arizona, and the schematic maps showing locations. (Total: 80 claims)

Please file

Very truly yours,

HEINRICHS GEOEXPLORATION COMPANY

H. R. Moulinet /dh
H. R. Moulinet
Senior Draftsman

HRM: jc
Enclosures

1ST FOLD

PLEASE REPLY TO → SIGNED

HEINRICHS GEOEX GEOPHYSICAL ENGINEERS TUCSON, ARIZONA

JUN 13 1968

BOX 5671 TUCSON, ARIZONA 85703
Phone: (AREA 602) 623-0578

Received

DATE 6-11-68 SIGNED Miss Beverly Clemens

SEND WHITE AND PINK COPIES WITH CARBON INTACT. PINK COPY IS RETURNED WITH REPLY.

GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

April 30, 1968

RETURN TO: Raymond E.Kay
P.O.Box 1009
Tucson,Arizona
85702
Phone 326-2845

E.H.Blue and Associates
303 North Central Avenue
Phoenix,Arizona

Re:Geochemical and geophysical permit

Dear Sir:

Pursuant to our telephone conversation on this date, we request permission to conduct a soil analysis survey in the following area:

T22S,R15E,sections:14,15,19,20,21,22,23,Santa Cruz County,Arizona.

Furthermore if the results of this survey prove interesting enough this permit will be extended to cover geophysical work and the drilling of test holes upon notice of the date and extent of this work.

Geochemical Surveys will be fully responsible for all damages during the course of,or as a result of this work, which might be incurred by them or any contractor in their employ.

Upon completion of all exploration work and after a reasonable time if Geochemical Surveys has no further interest in this area it is understood that they will make available to E.H.Blue and Associates the information gathered in this survey in those areas in which they have a controlling interest.

Please indicate your approval by signing and returning one copy of this letter.

* Approved this 9 day of May 1968

By: E. H. Blue

Yours very truly,
Raymond E. Kay
Raymond E. Kay

* Subject to attached.

E. H. Blue & Associates

FIRST FEDERAL BUILDING
3003 NORTH CENTRAL AVENUE
PHOENIX, ARIZONA 85012

Attachment to Letter Agreement dated April 30, 1968 with Geochemical Surveys.

It is further understood and agreed

1. That this permission to conduct a soil analysis survey is given only for those portions of the area described that are owned or controlled by the undersigned.

2. That Geochemical Surveys agree to completely restore any surface damage caused by this survey.

3. That this permission is not assignable without the written consent of the parties hereto.

4. That this permission is subject to termination at anytime by E. H. Blue & Associates upon 30 day written notice to Geochemical Surveys and/or Raymond Kay, P. O. Box 1009, Tucson, Arizona.

Approved:

Geochemical Surveys

By: Raymond E. Kay

E. H. Blue & Associates

By: E. H. Blue

EHB:rs

GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219
MAILING ADDRESS
P. O. BOX 19508
TELEPHONE
LAKESIDE 1-5145

May 16, 1968

Return to: Raymond E. Kay
P.O.Box 1009
Tucson, Arizona
85702
Phone 326-2845

Mrs. Leota Gatlin
Patagonia, Arizona

Re: Geophysical Permit

Dear Mrs. Gatlin:

We are very sorry that we have been unsuccessful in repeated attempts to contact you personally and we are taking this means to notify you of our plans to conduct a geophysical program and possibly drill some test holes in an area to the west of Patagonia and adjoining some of your property. We respectfully request permission to conduct a portion of this work in the following area:

R15E,T22S,sections 10,11,14,15, Santa Cruz County, Arizona.

We have permission from Mr. Bergiers in Patagonia and are currently working on his property. If you have any questions please feel free to call me collect in Tucson or contact Mr. Bergiers.

The geophysical work would be done by a geophysical contractor using lightweight vehicles wherever possible. If the results of this work proved interesting enough we would like to drill some test holes to depths of 500 to 1000 feet. Prior to drilling any test holes or building any new roads we will notify you and reach an agreement on the proposed locations.

We will assume full responsibility for any damages during the course of, or as a result of this work, which might be incurred by us or any contractor in our employ.

Your favorable consideration of this work will be greatly appreciated and we hope you will indicate your approval by signing and returning one copy of this letter.

Approved this 20 day of
May 1968
BY: Leota L Gatlin

Yours very truly,
Raymond E. Kay
Raymond E. Kay

GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

April 30, 1968

RETURN TO: Raymond E.Kay
P.O.Box 1009
Tucson,Arizona
85702
Phone 326-2845

E.H.Blue and Associates
303 North Central Avenue
Phoenix,Arizona

Re:Geochemical and geophysical permit

Dear Sir:

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T22S,R15E,sections:14,15,19,20,21,22,23,Santa Cruz County,Arizona.

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Upon completion of all exploration work and after a reasonable time if Geochemical Surveys has no further interest in this area it is understood that they will make available to E.H.Blue and Associates the information gathered in this survey in those areas in which they have a controlling interest.

Please indicate your approval by signing and returning one copy of this letter.

* Approved this 9 day of May 1968

By: E H Blue

Yours very truly,
Raymond E. Kay
Raymond E. Kay

* Subject to attached.

E. H. Blue & Associates

FIRST FEDERAL BUILDING
3003 NORTH CENTRAL AVENUE
PHOENIX, ARIZONA 85012

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4. That this permission is subject to termination at anytime by E. H. Blue & Associates upon 30 day written notice to Geochemical Surveys and/or Raymond Kay, P. O. Box 1009, Tucson, Arizona.

Approved:

Geochemical Surveys

By: Raymond E. Kay

E. H. Blue & Associates

By: E. H. Blue

EHB:rs

GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

May 16, 1968

Return to: Raymond E. Kay
P.O.Box 1009
Tucson, Arizona
85702
Phone 326-2845

Mrs. Leota Gatlin
Patagonia, Arizona

Re: Geophysical Permit

Dear Mrs. Gatlin:

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R15E,T22S,sections 10,11,14,15, Santa Cruz County, Arizona.

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We will assume full responsibility for any damages during the course of, or as a result of this work, which might be incurred by us or any contractor in our employ.

Your favorable consideration of this work will be greatly appreciated and we hope you will indicate your approval by signing and returning one copy of this letter.

Approved this 20 day of May 1968

BY: Leota Gatlin

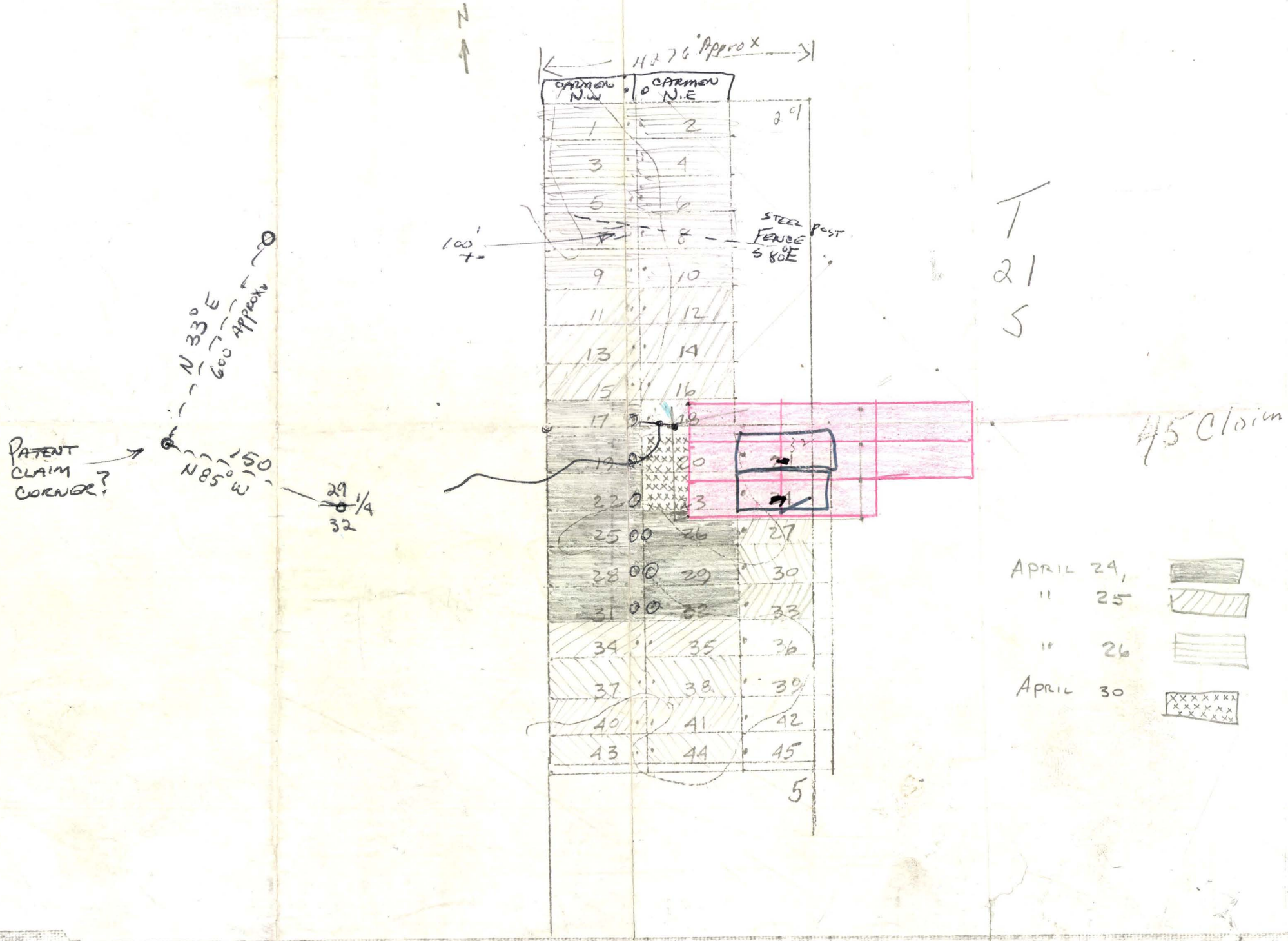
Yours very truly,

Raymond E. Kay

Raymond E. Kay

R 15 E

Santa Cruz County,



GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

July 29, 1968

HEINRICHS GEOEX
JUL 31 1968

BOX 5671 TUCSON, ARIZONA 85703
Phone: (AREA 602) 623-0578

E. H. Blue and Associates
303 North Central Avenue
Phoenix, Arizona

Gentlemen:

Pursuant to a telephone conversation on this date between Mr. Blue and Mr. Howard Twitty, we request permission to conduct an induced polarization geophysical survey on lands owned by you in the following area:

Sections 13, 14, 15, 19, 20, 21, 22, 23, 24 and 27
T22S, R15E, Santa Cruz County, Arizona

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Subject to termination upon thirty days written notice to Geochemical Surveys this permit shall be for a period of sixty days.

Please indicate your approval by signing and returning one copy of this letter.

Yours very truly,

GEOCHEMICAL SURVEYS

W. R. Ransone

WRR:sd
cc: Mr. Howard Twitty
Heinrichs Geoexploration

AGREED TO AND ACCEPTED
this the ____ day of _____, 1968.

_____
E. H. Blue & Associates

GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

June 25, 1968

HEINRICHS GROUP
GEOCHEMICAL CHEMISTS
TUCSON, ARIZONA

JUN 27 1968

BOX 5671 TUCSON, ARIZONA 85703
Phone: (AREA 602) 623-0578

Heinrichs Geoexploration Company
P. O. Box 5681
Tucson, Arizona

Gentlemen:

Enclosed is a plat showing location of David Claims #1 - # 72 in the Carmen Area. We would like these fully staked as soon as possible. Also enclosed are copies of the location notices for these claims in case a claim post is down they can be repapered.

Yours very truly,

GEOCHEMICAL SURVEYS

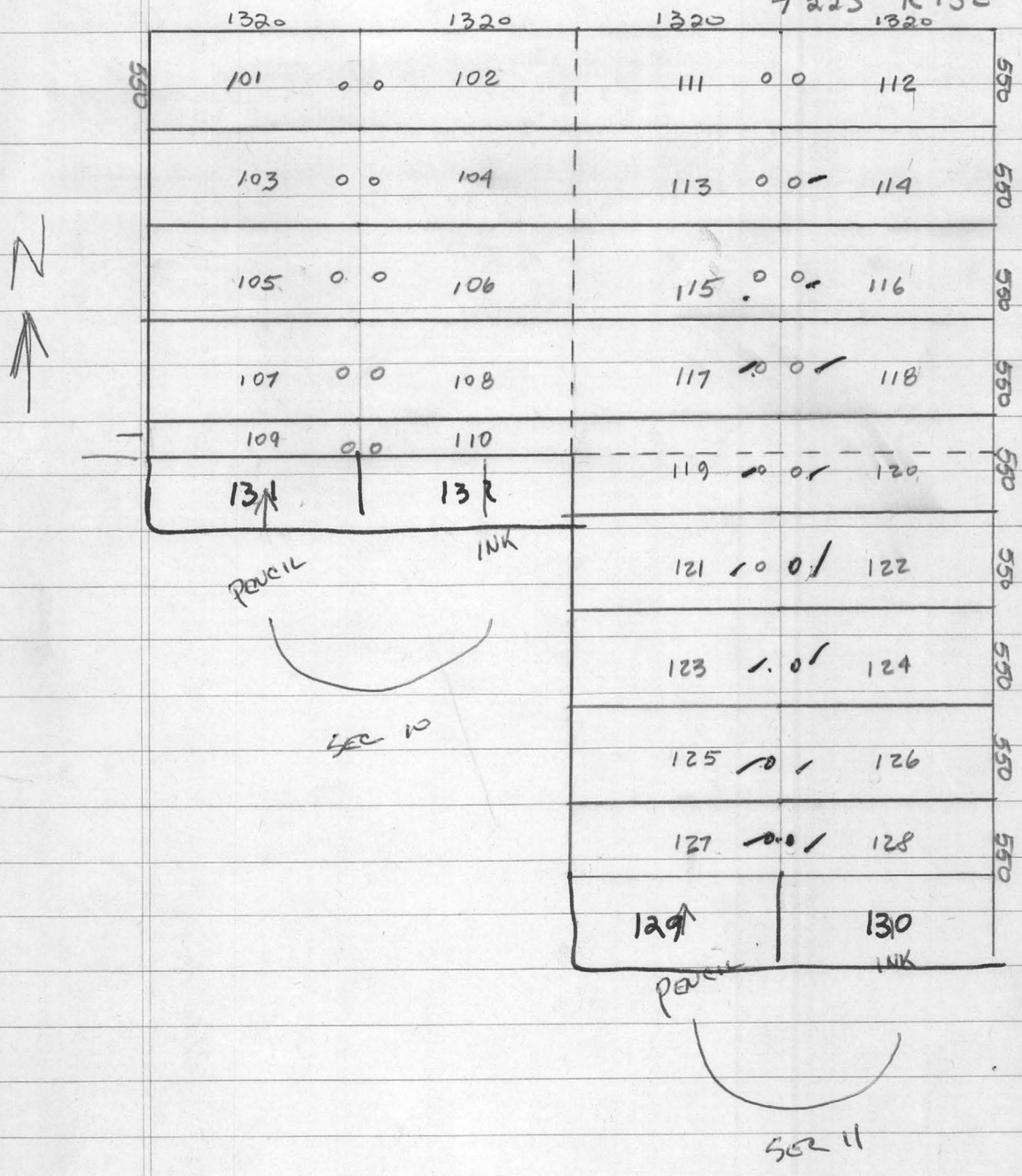
Harold Horning
bac

Harold Horning

HH:bac

Enclosures

CARMEN GROUP SECS. 10 & 11
T22S R15E



GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

April 18, 1968

B-259-68

Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona 85703

HEINRICHS GEOEX
GEOPHYSICAL ENGINEERS
TUCSON, ARIZONA

APR 20 1968

BOX 5671 TUCSON, ARIZONA 85703
Phone: (AREA 602) 623-0578

Attention: Mr. Chris Ludwig

Gentlemen:

Enclosed is a map showing the position of the claims which we would like for you to stake at your earliest convenience on our Carmen Prospect, Section 29 and 32, R15E, T21S, Santa Cruz County, Arizona. All we would like at this time is the placing of the discovery posts.

Very truly yours,

GEOCHEMICAL SURVEYS

W. R. Ransone

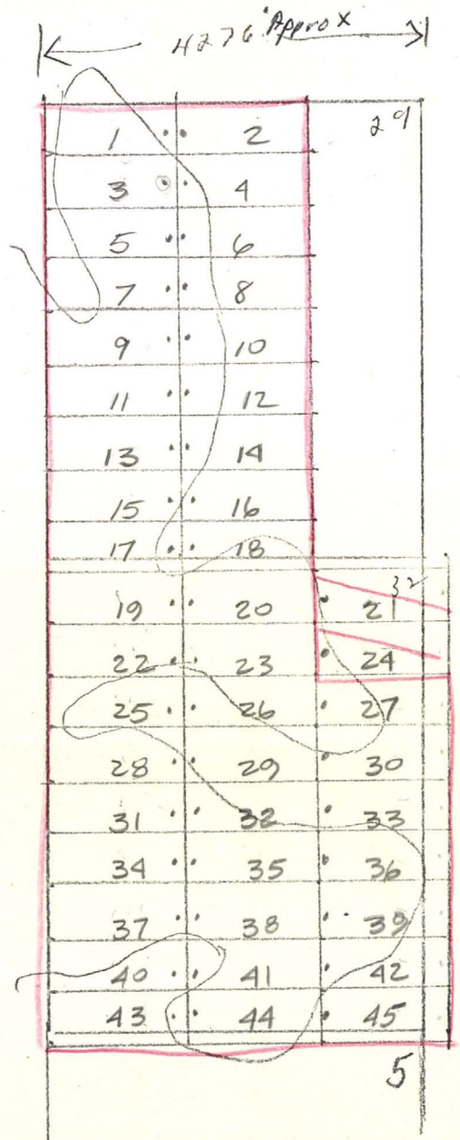
W. R. Ransone

WRR:sd
Enclosure

R 15 E

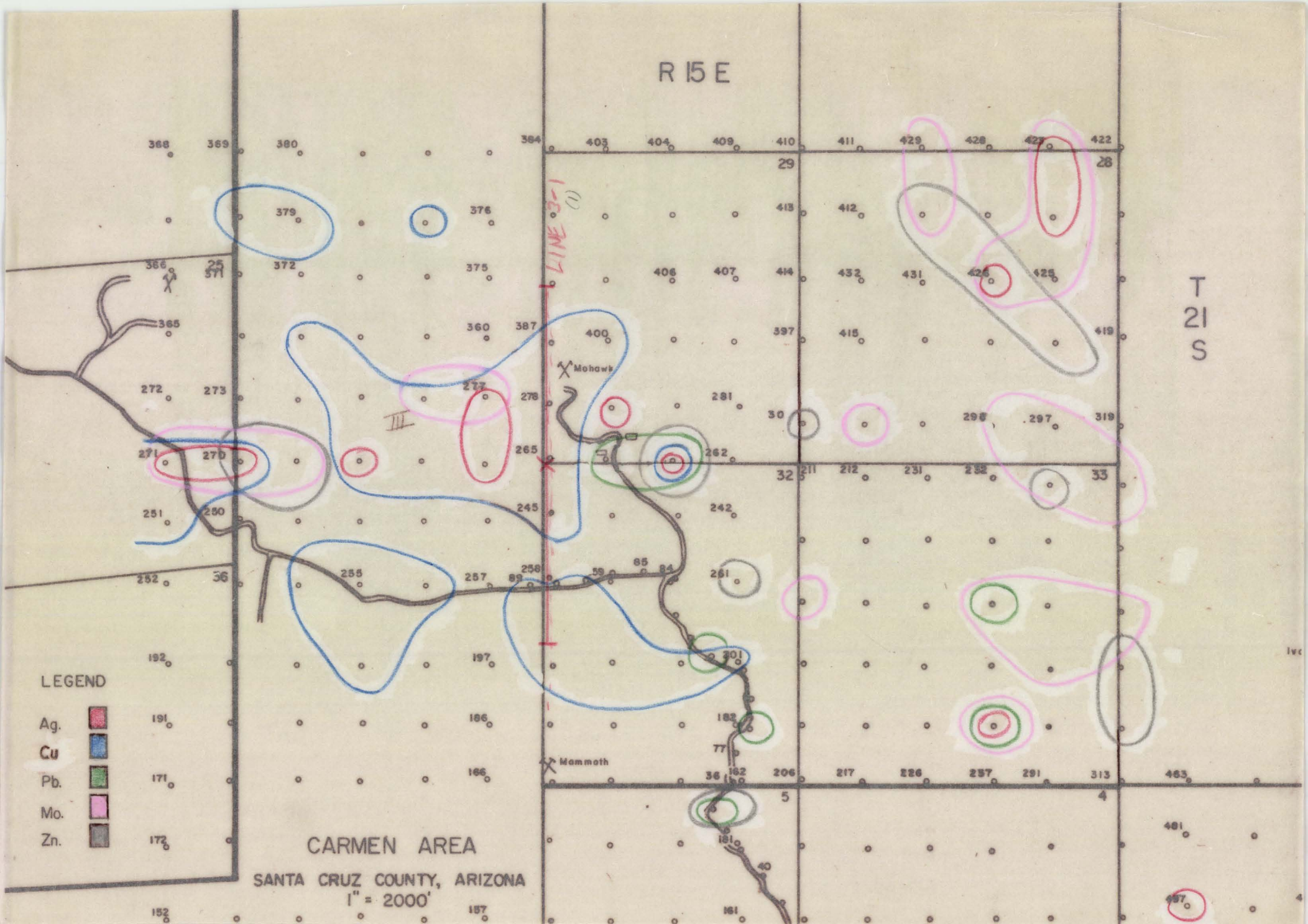
Santa Cruz County, Arizona

N



T
21
S

45 Claims


R 15 E
T 21 S
LINE 3-1
Mohawk
Mammoth
LEGEND
Ag.
Cu
Pb.
Mo.
Zn.
CARMEN AREA
SANTA CRUZ COUNTY, ARIZONA
1" = 2000'

500

2 3 4 MILES

12000 15000 18000 21000 FEET

3 4 5 KILOMETERS

L 80 FEET
EA LEVEL

ROAD CLASSIFICATION

Heavy-duty — Light-duty

Medium-duty — Unimproved dirt

State Route

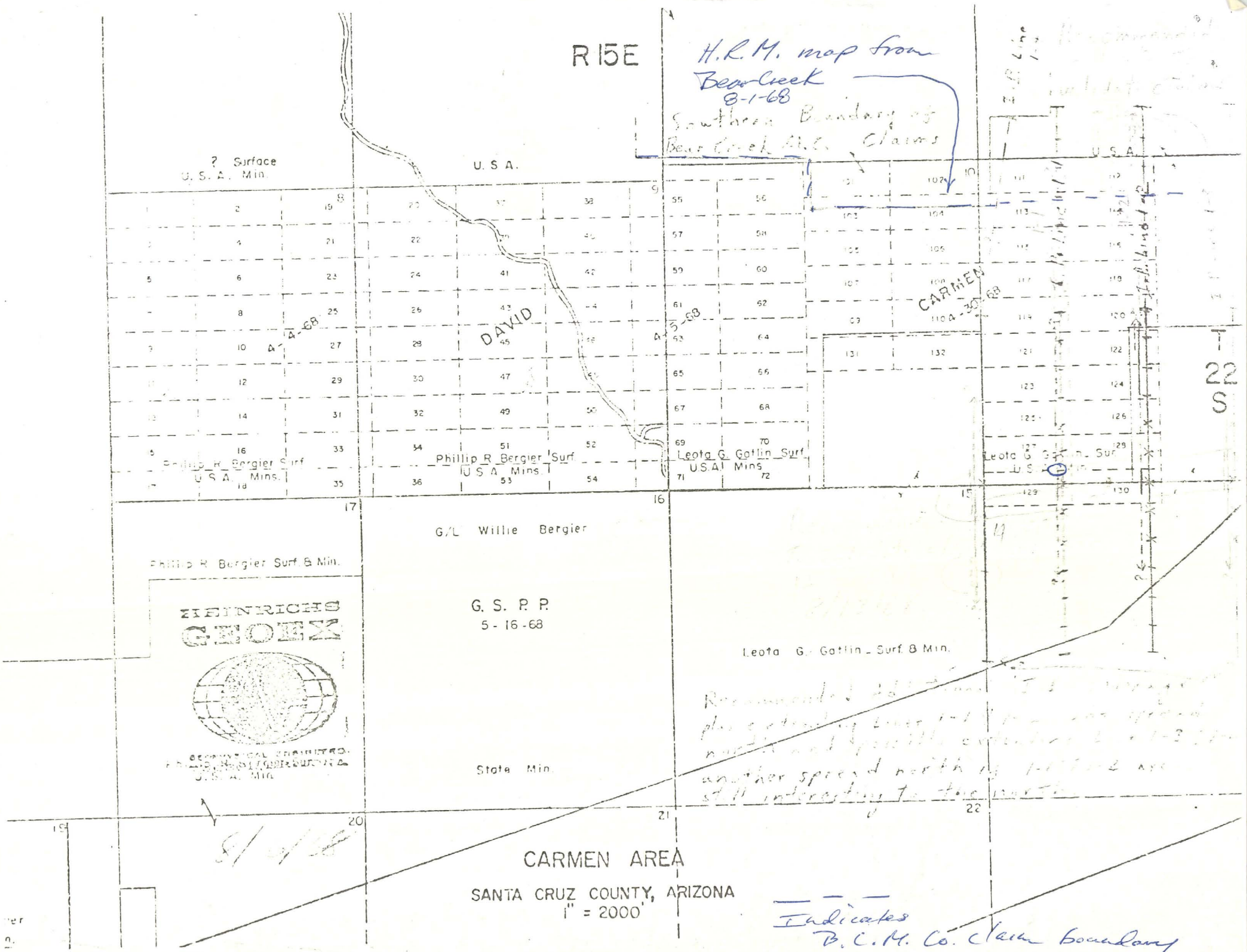
QUADRANGLE LOCATION

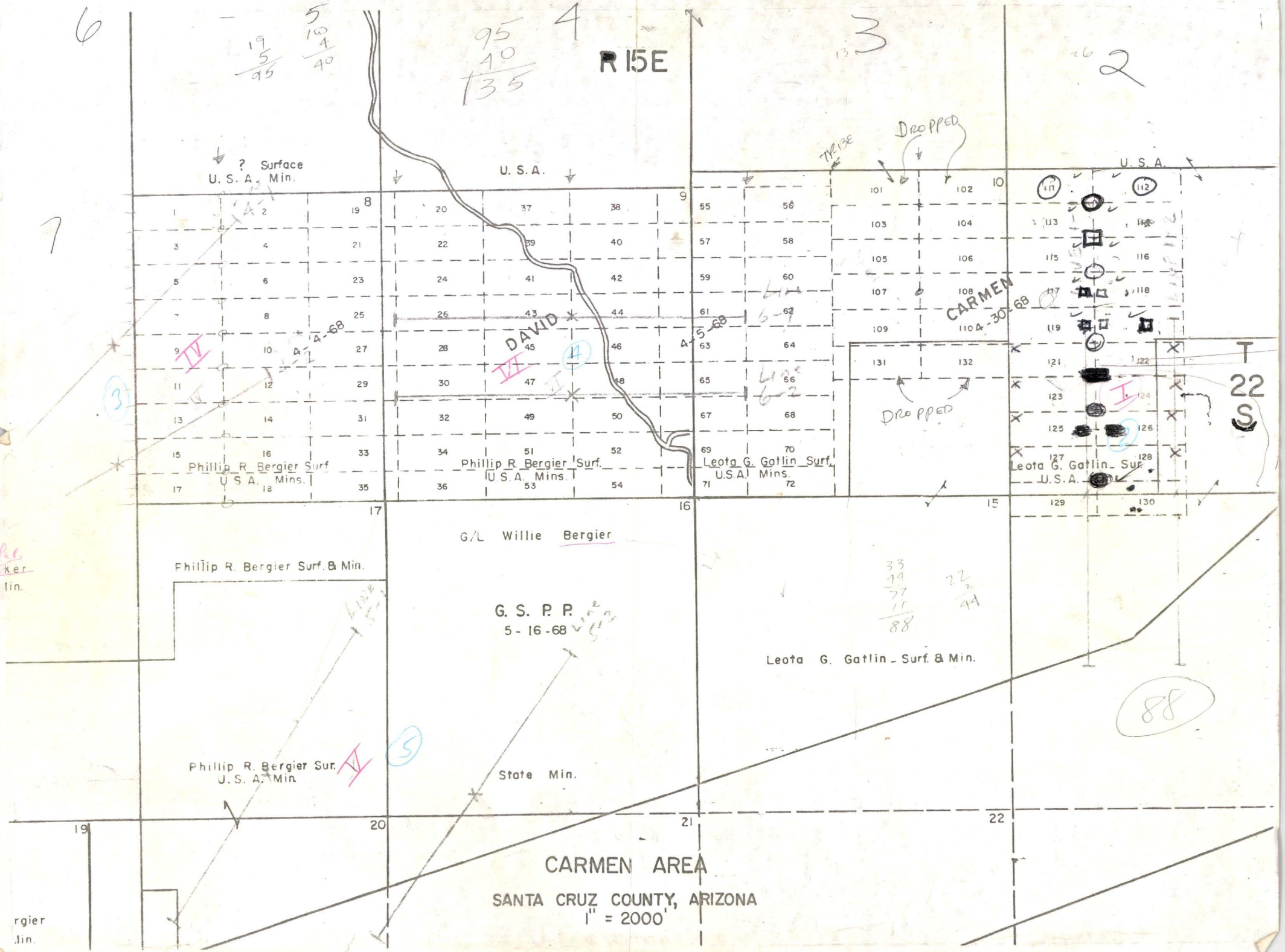
MAP ACCURACY STANDARDS
25, COLORADO OR WASHINGTON 25, D. C.
SYMBOLS IS AVAILABLE ON REQUEST

MOUNT WRIGHTSON, ARIZ.

N3130—W11045/15

1958


R 15E
H.R.M. map from Bear Creek 8-1-68
Southern Boundary of Bear Creek M.C. Claims
? Surface
U. S. A. Min.
U. S. A.
U.S.A.
DAVID
A-5-68
CARMEN
A-30-68
Phillip R. Bergier Surf.
U.S.A. Mins.
Phillip R. Bergier Surf.
U.S.A. Mins.
Leota G. Gatlin Surf.
U.S.A. Mins.
Leota G. Gatlin Surf.
U.S.A. Mins.
T 22 S
G/L Willie Bergier
Phillip R. Bergier Surf. & Min.
HEINRICHS
GEOEX
G. S. P. P.
5-16-68
Leota G. Gatlin Surf. & Min.
State Min.
CARMEN AREA
SANTA CRUZ COUNTY, ARIZONA
1" = 2000'
Indicates B.C.M. Co. Claim boundary


R 15E
T 22 S
? Surface
U. S. A. Min.
U. S. A.
DAVID
CARMEN
DROPPED
Phillip R. Bergier Surf
U. S. A. Mins.
Phillip R. Bergier Surf.
U. S. A. Mins.
Leota G. Gatlin Surf.
U.S.A. Mins.
Leota G. Gatlin Surf.
U.S.A.
G/L Willie Bergier
Phillip R. Bergier Surf. & Min.
G. S. P. P.
5 - 16 - 68
Leota G. Gatlin - Surf. & Min.
Phillip R. Bergier Sur.
U. S. A. Min.
State Min.
CARMEN AREA
SANTA CRUZ COUNTY, ARIZONA
1" = 2000'

CHRIS — THIS CAN GO IN

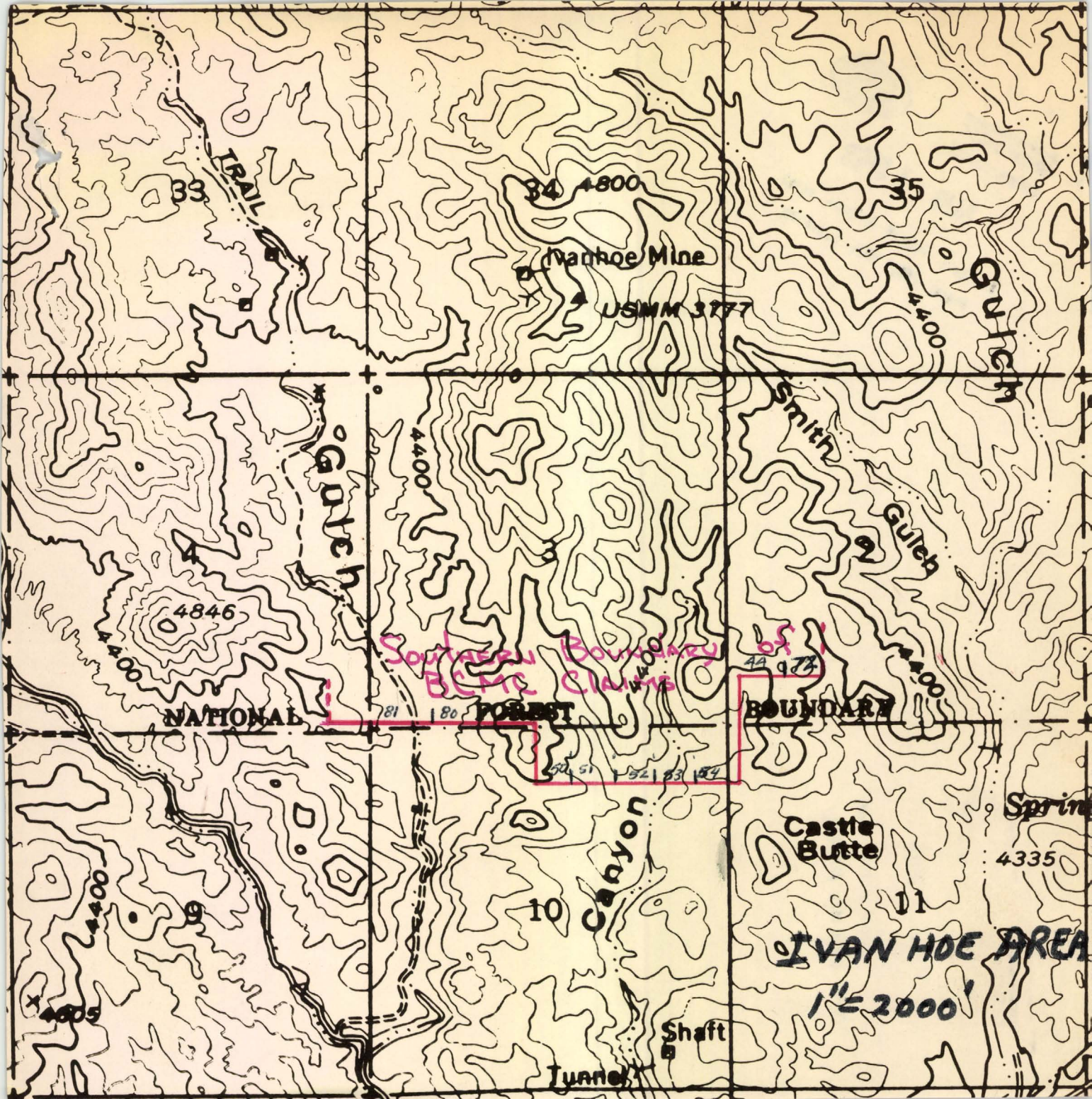
GEOCHEM FILE —

I HAVE MADE A COPY

OF IT —

— THANKS

BERT


33
34
4800
35
TRAIL
Ivanhoe Mine
USMM 3777
4400
Gulch
Smith
Gulch
Gulch
4400
3
2
4
4846
4400
Southern Boundary of BLM Claims
4400
44
43
4400
NATIONAL
81
80
FOREST
BOUNDARY
50
51
52
53
54
Spring
Castle Butte
4335
Canyon
10
11
9
4400
IVAN HOE AREA
1" = 2000'
4405
Shaft
Tunnel

AUG 3 1968

TUCSON, ARIZONA 85706
Phone: (AREA 602) 623-0578

AUG 3 1968

BOX 5671 TUCSON, ARIZONA 85706
Phone (AREA 602) 623-0578

Noel H Orbaker
B. C.
W. Grant
Mrs for Bert

BERT!

HE WASNT IN BUT WILL
CALL US TOMORROW
L.S.L.

Bear Creek Mining Company

1714 West Grant Road

Tucson, Arizona,84705

TUCSON, AZ ANNEX MHU
AUG 1 PM
1968

U.S. POSTAGE 6c FRANKLIN D. ROOSEVELT

U.S. POSTAGE 6c FRANKLIN D. ROOSEVELT

HEINRICHS GEOEX
GEOPHYSICAL PROSPECTING
TUCSON, ARIZONA

AUG 3 1968

BOX 5671 TUCSON, ARIZONA 85703
Phone: (AREA 602) 623-8578

Heinrichs Geoexploration Co.

808 West Grant Road

Tucson, Arizona,85705

Geochem F

~~Tickler file~~
copies: Don C.
Stover
Walt

CONFIDENTIAL OFFICE USE ONLY

Claim Group Carmen for Geochemical Surveys Job No. 259-68

Claim No.	Date Staked	Date Recorded	Claim Corners Due Date - 90 days	shaft Drill &or location/ Due Date - 120 days
Dot 1 - 18	July 3, 1968	July 12, 1968	Oct. 1, 1968	Oct. 31, 1968
Dot 19- 38	July 2, 1968	July 12, 1968	Sept. 30, 1968	Oct. 30, 1968
Dot 39- 56	July 1, 1968	July 12, 1968	Sept. 29, 1968	Oct. 29, 1968
Dot 57- 64	July 2, 1968	July 12, 1968	Sept. 30, 1968	Oct. 30, 1968
Dot 65& 66	July 3, 1968	July 12, 1968	Oct. 1, 1968	Oct. 31, 1968
Dot 66- 77	June 29, 1968	July 12, 1968	Sept. 27, 1968	Oct. 27, 1968
Dot 78-104	June 28, 1968	July 12, 1968	Sept. 26, 1968	Oct. 26, 1968

Claim Group Carmen for Geochemical Surveys Job No. 259-68

1-20	April 24,1968	May 21, 1968	July 23, 1968	Aug. 21, 1968
22-45	April 24,1968	May 21, 1968	July 23, 1968	Aug. 21, 1968
Carmen Northeast	April 26,1968	May 21, 1968	July 25, 1968	Aug. 24, 1968
Carmen Northeast	April 26,1968	May 21, 1968	July 25, 1968	Aug. 24, 1968
Carmen 46 Fraction	April 26,1968	May 21, 1968	July 25, 1968	Aug. 24, 1968
Carmen 47 Fraction	April 26,1968	May 21, 1968	July 25, 1968	Aug. 24, 1968
Carmen 48 Fraction	April 26,1968	May 21, 1968	July 25, 1968	Aug. 24, 1968
Carmen 101-132	April 30,1968	May 21, 1968	July 29, 1968	Aug. 28, 1968

Claim Group Rip for Russell Badgett, Jr. Job No. 262-68

1-16	June 5, 1968	June 19, 1968	Sept. 3, 1968	Oct. 3, 1968
17-19	June 6, 1968	June 19, 1968	Sept. 4, 1968	Oct. 4, 1968
20-30	June 4, 1968	June 19, 1968	Sept. 2, 1968	Oct. 2, 1968
31-47	June 3, 1968	June 19, 1968	Sept. 1, 1968	Oct. 1, 1968
48-57	June 4, 1968	June 19, 1968	Sept. 2, 1968	Oct. 2, 1968
58-75	June 7, 1968	June 19, 1968	Sept. 5, 1968	Oct. 5, 1968
76-84	June 6, 1968	June 19, 1968	Sept. 4, 1968	Oct. 4, 1968
85,86,90	June 19, 1968	June 19, 1968	Sept. 17, 1968	Oct. 17, 1968
87,88,89	June 18, 1968	June 19, 1968	Sept. 16, 1968	Oct. 16, 1968
91-108	June 11, 1968	June 19, 1968	Sept. 9, 1968	Oct. 9, 1968
109-128	June 12, 1968	June 19, 1968	Sept. 10, 1968	Oct. 10, 1968
129-130	June 11, 1968	June 19, 1968	Sept. 9, 1968	Oct. 9, 1968

Doc 090
page 626
file no. 17809
May 21, 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the Carmen 47 Fraction lode mining claim was located by W. R. RANSONE on April 25, 1968. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is East-West and is situated in the Wrightson Mining District, Santa Cruz County, Arizona. This claim runs from the location monument or stake on which the notice is posted 1450 feet in a Westerly direction to the West center end monument or stake and 1450 feet in a Easterly direction from the location monument or stake to the East center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

This claim is contiguous with Carmen 1 through 45 and Carmen 46 Fraction and is approximately 8½ miles from Mt. Wrightson and is located in T21S, R15E.

Carmen 43	Carmen 44
Carmen 46 Fraction	Carmen 47 Fraction

N ↑

W. R. RANSONE

By: Henie Mauhiet, Agent
Locator

Witness: D. E McCoy

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Doc 090
page 627
Fee No 17810
May 21, 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the Carmen 48 Fraction lode mining claim was located by W. R. RANSONE on April 25, 19 68. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is EAST-WEST and is situated in the WRIGHTSON Mining District, SANTA CRUZ County, Arizona. This claim runs from the location monument or stake on which the notice is posted 50 feet in a WESTERLY direction to the WEST center end monument or stake and 1450 feet in a EASTERLY direction from the location monument or stake to the EAST center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

This claim is contiguous with Carmen 1 through 45 and Carmen 46 Fraction and Carmen 47 Fraction and is approximately 8½ miles south-southeasterly of Mount Wrightson and is located in T21S, R15E, [redacted].

Carmen 43	Carmen 44	Carmen 45
Carmen 46 Fraction	Carmen 47 Fraction	Carmen 48 Fraction

N ↑

W. R. RANSONE

BY: [signature] ,AGENT
Locator

Witness: Don McCoy

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Book 090
Page 681
File 17864
May 21, 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the CARMEN 111 lode mining claim was located by W. R. RANSONE on APRIL 30, 1968. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is EAST WEST and is situated in the WRIGHTSON Mining District, SANTA CRUZ County, Arizona. This claim runs from the location monument or stake on which the notice is posted 50 feet in a EASTERLY direction to the EAST center end monument or stake and 1450 feet in a WESTERLY direction from the location monument or stake to the WEST center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

THIS CLAIM CONTIGUOUS WITH THE CARMEN CLAIMS 101 THRU 110 AND 112 THRU 128 AND LIE APPROX. 2 MILES WEST OF PATAGONIA, ARIZONA, AND IS LOCATED IN SECTION ~~10~~, T22S. R15E.

	CAR	
	CARMEN 111	CARMEN 112
	CARMEN 113	CARMEN 114

N ↑

W. R. RANSONE
BY: [signature], AGENT
Locator
WITNESS: Norman F. Clark

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Book 090
Page 682
Fee No 17865
May 21, 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the CARMEN 112 lode mining claim was located by W. R. RANSONE on April 30, 1968. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is East-West and is situated in the WRIGHTSON Mining District, SANTA CRUZ County, Arizona. This claim runs from the location monument or stake on which the notice is posted 50 feet in a Westerly direction to the West center end monument or stake and 1450 feet in a Easterly direction from the location monument or stake to the East center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

This claim is contiguous with the Carmen Claims 101 through 111 and 113 through 128 and lies approx. 2 miles west of Patagonia, Arizona, and is located in Section 11, T22S, R15E.

CARMEN 111	CARMEN 112	
CARMEN 113	CARMEN 114	

N ↑

W. R. RANSONE

BY: Harie Moulinet, Agent
Locator

Witness: Norman F Clark

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Dock 090
Page 683
Fee No. 17866
May 21, 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the CARMEN 113 lode mining claim was located by W. R. RANSONE on APRIL 30, 1968. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is EAST WEST and is situated in the WRIGHTSON Mining District, SANTA ~~CRUX~~ CRUZ County, Arizona. This claim runs from the location monument or stake on which the notice is posted 50 feet in a EASTERLY direction to the EAST center end monument or stake and 1450 feet in a WESTERLY direction from the location monument or stake to the WEST center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

THIS CLAIM CONTIGUOUS WITH THE CARMEN CLAIMS 101 THRU 112 AND 114 THRU 128 AND LIE APPROX. 2 MILES WEST OF PATAGONIA, ARIZONA, AND IS LOCATED IN SECTION 11, T22S, R15E.

CARMEN 111	CARMEN 112
CARMEN 113	CARMEN 114
CARMEN 115	CARMEN 116

N ↑

W. R. RANSONE
BY: [signature] AGENT
Locator
WITNESS: Norman L Clark

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Book 090
Page 684
Seq No. 17867
May 21, 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the CARMEN 114 lode mining claim was located by W. R. RANSONE on April 30, 1968. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is EAST-WEST and is situated in the WRIGHTSON Mining District, SANTA CRUZ County, Arizona. This claim runs from the location monument or stake on which the notice is posted 50 feet in a Westerly direction to the West center end monument or stake and 1450 feet in a Easterly direction from the location monument or stake to the East center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

This claim is contiguous with the Carmen Claims 101 through 113 and 115 through 128 and lies approx. 2 miles west of Patagonia, Arizona, and is located in Section 11, T22S, R15E.

Carmen 111	Carmen 112	
Carmen 113	Carmen 114	
Carmen 115	Carmen 116	

N ↑

W. R. RANSONE

BY: [signature] Locator, Agent

Witness: [signature]

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Book 090
Page 685
Fee No. 17868
May 21, 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the CARMEN 115 lode mining claim was located by W. R. RANSONE on APRIL 30, 1968. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is EAST WEST and is situated in the WRIGHTSON Mining District, SANTA CRUZ County, Arizona. This claim runs from the location monument or stake on which the notice is posted 50 feet in a EASTERLY direction to the EAST center end monument or stake and 1450 feet in a WESTERLY direction from the location monument or stake to the WEST center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

THIS CLAIM CONTIGUOUS WITH THE CARMEN CLAIMS 103 THRU 114 AND 116 THRU 128 AND LIE APPROX. 2 MILES WEST OF PATAGONIA, ARIZONA, AND IS LOCATED IN SECTION [illegible], T22S., R15E.

	CARMEN 113	CARMEN 114
N ↑	CARMEN 115	CARMEN 116
	CARMEN 117	CARMEN 118

W. R. RANSONE

BY: [signature] AGENT
Locator

WITNESS: Norman F Clark

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Book 090
Page 686
Fee No 17869
May 21, 1968
Santa Cruz Co

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the CARMEN 116 lode mining claim was located by W. R. RANSONE on April 30, 1968. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is East-West and is situated in the Wrightson Mining District, Santa Cruz County, Arizona. This claim runs from the location monument or stake on which the notice is posted 50 feet in a Westerly direction to the West center end monument or stake and 1450 feet in a Easterly direction from the location monument or stake to the East center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

This claim is contiguous with the Carmen Claims 101 through 115 and 117 through 128 and lies approx. 2 miles west of Patagonia, Arizona, and is located in Section 11, T22S, R15E.

CARMEN 113	CARMEN 114	
CARMEN 115	CARMEN 116	
CARMEN 117	CARMEN 118	

N ↑

W. R. RANSONE

BY: [signature], AGENT
Locator

Witness: [signature]

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Book 090
Page 688
Fee No. 17871
May 21, 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the CARMEN 118 lode mining claim was located by W. R. RANSONE on April 30, 19 68. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is EAST-WEST and is situated in the WRIGHTSON Mining District, SANTA CRUZ County, Arizona. This claim runs from the location monument or stake on which the notice is posted 50 feet in a Westerly direction to the West center end monument or stake and 1450 feet in a Easterly direction from the location monument or stake to the East center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

This claim is contiguous with the Carmen Claims 101 through 117 throug and 119 through 128 and lies approx. 2 miles west of Patagonia, Arizona, and is located in Section 11, T22S, R15E.

CARMEN 115	CARMEN 116	
CARMEN 117	CARMEN 118	
CARMEN 119	CARMEN 120	

N ↑

W. R. RANSONE
BY: [signature] ,AGENT
Locator
Witness: Norman F Clark

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Doc 090
Page 701
Seq 17884
May 31, 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the COMMON 131 **lode mining claim** was located by W. R. LAWSON on APRIL 3, 19 68. **This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is** EAST AND WEST **and is situated in the** WHITE PINE **Mining District,** SANTA CRUZ **County, Arizona. This claim runs from the location monument or stake on which the notice is posted** 0 **feet in a** EAST **direction to the** EAST **center end monument or stake and** 1450 **feet in a** WESTERLY **direction from the location monument or stake to the** WEST **center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.**

THIS CLAIM IS CONTIGUOUS WITH COMMON CLAIMS 101 THRU 130 & 132 & LIES APPROX 2 MILES WEST OF PATAGONIA, ARIZONA & IS LOCATED IN SEC. 10 T22S R15E.

N ↑

COMMON 109	COMMON 110
COMMON 131 (0 Loc)	COMMON 132

W. R. LAWSON
W. R. Lawson, Agent
Locator
Witness: [illegible] Clark

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Book 090
Page 702
Fee No. 17885
May 21, 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the Common 132 **lode mining claim** was located by W. R. Kaufman on April 30, 1968. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is East - West and is situated in the Wrightson **Mining District,** Santa Cruz **County, Arizona. This claim runs from the location monument or stake on which the notice is posted** 25 **feet in a** Westerly **direction to the** West **center end monument or stake and** 1475 **feet in a** Easterly **direction from the location monument or stake to the** East **center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.**

Tying in on the boundary with the One Dollar, and that is approx. 2 miles West of Patagonia Mts. & Lake Mary and South of Tank Canyon

N

Common 129	Common 110
Common 131	Common 133

W. R. Kaufman
By: [signature], Agent
Locator
Witness: [illegible]

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

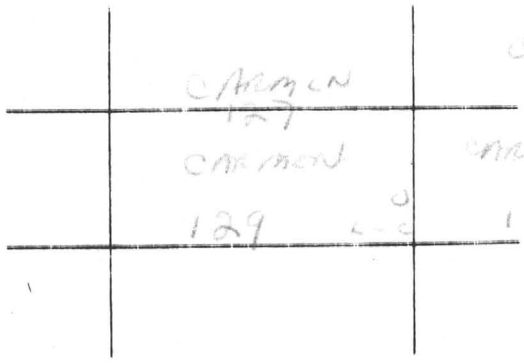
Dock 090
Page 699
Fee no. 17882
May 21, 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the CARMEN 129 lode mining claim was located by W. R. RANSOME on APRIL 30, 1968. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is EAST WEST and is situated in the WRIGHTSON Mining District, SANTA CRUZ County, Arizona. This claim runs from the location monument or stake on which the notice is posted 50 feet in a EASTERLY direction to the EAST center end monument or stake and 1450 feet in a WESTERLY direction from the location monument or stake to the WEST center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

THIS CLAIM IS CONTIGUOUS WITH THE CARMEN 1 CLAIM, THE CARMEN 128 & 130 AND LIES APPROX. QUARTER MILE FROM PATAGONIA ARIZ & IS LOCATED IN SEC 11 T 22S R. 15E

N



CARMEN W. R. RANSOME
By W. R. Ransome, Agent
Locator

WITNESS: Norman L. Clark

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Doc # 090
Page 700
Fee No 17883
May 24 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the Carmen 130 lode mining claim was located by W. K. Ramsey on 30 April, 19.....
This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is East-West and is situated in the Wrightson Mining District, Santa Cruz County, Arizona. This claim runs from the location monument or stake on which the notice is posted 50 feet in a Westerly direction to the West center end monument or stake and 1450 feet in a Easterly direction from the location monument or stake to the East center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

This claim is contiguous with the Carmen Mining Co. 121 thru 127 & lies approx. 2 miles from Patagonia, Ariz. & is located in Sec 11 T22S R15E

Carmen 127	Carmen 128	
Carmen 129	Carmen 130	

W. K. Ramsey
Locator

Witness: Marman & Clark

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Book 090
Page 674
Fee No. 017857
May 21, 1968
Santa Cruz Co

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the CARMEN 104 lode mining claim was located by W. R. RANSONE on APRIL 30, 1968. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is EAST WEST and is situated in the WRIGHTSON Mining District, SANTA CRUZ County, Arizona. This claim runs from the location monument or stake on which the notice is posted 50 feet in a WESTERLY direction to the WEST center end monument or stake and 1450 feet in a EASTERLY direction from the location monument or stake to the EAST center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

THIS CLAIM CONTIGUOUS WITH THE CARMEN CLAIMS 101 THRU 103 and 105 THRU 128 AND LIE APPROX. 2 MILES WEST OF PATAGONIA, ARIZONA, AND IS LOCATED IN SECTION 10, T22S, R15E.

N ↑

Carmen 101	Carmen 102
Carmen 103	Carmen 104
Carmen 105	Carmen 106

W. R. RANSONE

BY: [signature] AGENT
Locator

WITNESS: Norman F Clark

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Book 090
Page 675
Seq No. 17858
May 21, 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the CARMEN 105 lode mining claim was located by W. R. RANSONE on APRIL 30, 1968. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is EAST WEST and is situated in the WRIGHTSON Mining District, SANTA CRUZ County, Arizona. This claim runs from the location monument or stake on which the notice is posted 50 feet in a EASTERLY direction to the EAST center end monument or stake and 1450 feet in a WESTERLY direction from the location monument or stake to the WEST center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

THIS CLAIM IS CONTIGUOUS WITH THE CARMEN CLAIMS 101 THRU 104 AND 106 THRU 128 AND LIE APPROX. 2 MILES WEST OF PATAGONIA, ARIZONA, AND IS LOCATED IN SECTION 10, T22S, R15E.

	CARMEN 103	CARMEN 104
N ↑	CARMEN 105	CARMEN 106
	CARMEN 107	CARMEN 108

W. R. RANSONE
BY: [signature], AGENT
Locator
WITNESS: Norman F Clark

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Book 290
Page 676
Fee No. 15859
May 31, 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the CARMEN 106 lode mining claim was located by W. R. RANSONE on APRIL 30, 1968. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is EAST WEST and is situated in the WRIGHTSON Mining District, SANTA CRUZ County, Arizona. This claim runs from the location monument or stake on which the notice is posted 50 feet in a WESTERLY direction to the WEST center end monument or stake and 1450 feet in a EASTERLY direction from the location monument or stake to the EAST center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

THIS CLAIM CONTAGIOUS WITH THE CARMEN CLAIMS 101 THRU 105 AND 107 THRU 128 AND LIE APPROX. 2 MILES WEST OF PATAGONIA, ARIZONA, AND IS LOCATED IN SECTION 10, T22S, R15E.

CARMEN 103	CARMEN 104	
CARMEN 105	CARMEN 106	
CARMEN 107	CARMEN 108	

N ↑

W. R. RANSONE
BY: [signature], AGENT
Locator
WITNESS: Norman L Clark

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Book 890
Page 677
Fee No. 17860
May 21, 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the CARMEN 107 lode mining claim was located by W. R. RANSONE on APRIL 30, 1968. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is EAST WEST and is situated in the WRIGHTSON Mining District, SANTA CRUZ County, Arizona. This claim runs from the location monument or stake on which the notice is posted 50 feet in a EASTERLY direction to the EAST center end monument or stake and 1450 feet in a WESTERLY direction from the location monument or stake to the WEST center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

THIS CLAIM IS CONTIGUOUS WITH THE CARMEN CLAIMS 101 THRU 106 AND 108 THRU 128 AND LIE APPROX. 2 MILES WEST OF PATAGONIA, ARIZONA, AND IS LOCATED IN SECTION 10, T22S, R15E.

CARMEN 105	CARMEN 106
CARMEN 107	CARMEN 108
CARMEN 109	CARMEN 110

N ↑

W. R. RANSONE

BY: [signature], AGENT
Locator

WITNESS: Norman F Clark

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Book 090
Page 676
Fee No 17861
May 31, 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the CARMEN 108 lode mining claim was located by W. R. RANSONE on APRIL 30, 1968. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is EAST WEST and is situated in the WRIGHTSON Mining District, SANTA CRUZ County, Arizona. This claim runs from the location monument or stake on which the notice is posted 50 feet in a WESTERLY direction to the WEST center end monument or stake and 1450 feet in a EASTERLY direction from the location monument or stake to the EAST center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

THIS CLAIM CONTIGUOUS WITH THE CARMEN CLAIMS 101 THRU 107 AND 109 THRU 128 AND LIE APPROX. 2 MILES WEST OF PATAGONIA, ARIZONA, AND IS LOCATED IN SECTION 10, T22S, R15E.

CARMEN 105	CARMEN 106	
CARMEN 107	CARMEN 108	
CARMEN 109	CARMEN 110	

N ↑

W. R. RANSONE
BY: [signature] AGENT
Locator
WITNESS: [signature]

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.

Book 090
Page 679
Fee No 17862
May 21, 1968
Santa Cruz Co.

Notice of Location
(LODE)

NOTICE IS HEREBY GIVEN that the CARMEN 109 lode mining claim was located by W. R. RANSONE on APRIL 30, 1968. This claim is 1,500 feet in length along the vein or deposit of mineral-bearing rock in place and 300 feet in width on each side of the middle of said vein or deposit at which this notice is posted. The general course of this claim is EAST WEST and is situated in the WRIGHTSON Mining District, SANTA CRUZ County, Arizona. This claim runs from the location monument or stake on which the notice is posted 50 feet in a EASTERLY direction to the EAST center end monument or stake and 1450 feet in a WESTERLY direction from the location monument or stake to the WEST center end monument or stake, and is also marked by two corner monuments or stakes at each end of the claim, one on each side of and 300 feet from the center end monuments or stakes, making the claim in the form of a parallelogram.

THIS CLAIM CONTIGUOUS WITH THE CARMEN CLAIMS 101 THRU 108 AND 110 THRU 128 AND LIE APPROX. 2 MILES WEST OF PATAGONIA, ARIZONA, AND IS LOCATED IN SECTION 10, T22S, R15E.

	CARMEN 107	CARMEN 108
N ↑	CARMEN 109	CARMEN 110

W. R. RANSONE

BY: [signature] Locator, AGENT

WITNESS: Norman F Clark

Write on the above lines the locality of the claim with reference to some natural object or permanent monument whereby the claim can be identified. Give the section, township and range if known and, if possible, the direction and distance from the nearest public survey marker. It is advisable to make a sketch in the space above, showing the adjoining and overlapping claims. If this is an amendment of a location notice, give the name and book and page of recording of the claim being amended.