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

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GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

July 25, 1968

GEOEX
TUCSON, ARIZONA
JUL 27 1968
BOX 5671 TUCSON, ARIZONA 85703
Phone: (AREA 602) 623-0578

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

Dear Chris:

We have received your proposal letter on the induced polarization work in the Courtland-Gleeson area. And we have received the map showing your proposed lines in red on Courtland, but we have either not received or misplaced similar maps on Gleeson. We are enclosing two maps of Gleeson, one of which you may keep and return the other to us with the red lines.

Yours very truly,

GEOCHEMICAL SURVEYS

Bill
W. R. Ransone

WRR:sd
Enclosures

Geochem F
Chris L

VERITY & SMITH
ATTORNEYS AT LAW
SUITE 902 TRANSAMERICA BUILDING
177 NORTH CHURCH AVENUE
TUCSON, ARIZONA 85701

VICTOR H. VERITY
LEO N. SMITH
JAMES E. MUELLER
JOHN C. LACY

AREA CODE 602
TELEPHONE 622-7446

29 July 1968

GEOEX
JUL 30 1968
BOX 5671 TUCSON, ARIZONA 85703
Phone (AREA 602) 623-0578

Mr. E. Grover Heinrichs, Vice President
Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona 85703

Dear Grover:

Confirming our phone conversation of July 26 and your letter of the same date, I have examined the location notice for the Dot 46 lode mining claim attached to your letter.

With reference to the words "This claim, one and part of a contiguous group called Rip 1 through 104...", that statement is not a requirement of the law and does not void the location notice. The statement is not really misleading, as the sketch at the lower left of the notice shows the correct names of the surrounding claims in the group. In my opinion, it is not necessary to amend the location notice. However, if the exploration work indicates that the land has merit, I would recommend that an amended notice be posted and recorded for each of the claims for the purpose of discouraging anyone who might seek to take advantage of a technicality.

The photocopy which you sent me of Dot 46 does not show the date of location. There are some light marks which indicate that it might have been on the original from which the photocopy was made - I can't be sure. I call this to your attention so that you can check to make certain that the Dot 46 and all others were dated as of the date of location.

Very truly yours,

Victor H. Verity

Victor H. Verity

VHV:fh

GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

July 24, 1968

GEOEX
JUL 26 1968
BOX 5671 TUCSON, ARIZONA 85703
Phone: (AREA 602) 623-0578

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

Gentlemen:

In checking the Dot Claims 1-104 which you recently staked for us near Gleeson, we find that the reference to the contiguous group erronously referred to Rip 1-104 in Dot Claim location notices 39, 41-51, 53-56, 58, 60, 62, 64, 66, 78, 79, 81, 83-104.

Each claim is described as 600' x 1500', but as scaled on your plat many measure only approximately 500' x 1350'. We would appreciate your advice.

Yours very truly,

GEOCHEMICAL SURVEYS

R. S. Usry

R. S. Usry

RSU:sd

HEINRICHS GEOEXPLORATION COMPANY

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

July 11, 1968

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

Re: Proposed Induced Polarization Survey in the Courtland and Gleeson Areas, Cochise County, Arizona

Dear Mr. Ransone:

As you requested, here is a proposal on a recommended induced polarization program to help evaluate the economic potential of your geochemical anomalism in the Courtland and Gleeson Areas, Cochise County, Arizona.

Courtland Prospect

After inspecting the geochemical anomaly map and geologic maps of the area plus considering previous experience we've had in the general district, it is believed that much of the broad copper anomaly is in an area of deep cover. Therefore, rather deep penetration is recommended, say 1,000 foot dipoles which typically give resolvable penetration within the zone from about 300 to 1,200 or 1,500 feet below surface. Experience to the south of your area has shown this alluvial cover to be quite conductive necessitating the use of maximum power to obtain good data quality.

To initially evaluate this anomaly, north-south lines separated about one-half mile apart and centered on the geochemical anomalism are recommended. The north-south direction



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

is suggested so as to minimize the effect of the probable eastward deepening buried pediment. Also, it is recommended that the first north-south line be run through the center of Section 22 (T19S, R25E) where bedrock is likely nearest surface and exposed just to the west and then with this control, continuing out to the east on one-half mile spacings to cover the geochemical anomalism. Six single spread lines should suffice in covering the area on a reconnaissance basis. If electrical anomalism is encountered, fill-in detailed coverage can be run between the existing lines.

Gleeson Area

Since this molybdenum-copper geochemical anomaly occurs on an exposed quartz monzonite, less penetration and power than at Courtland will be needed and 750 foot dipole spaced lines are recommended separated about 2,000 feet. Four east-west single spread lines should cover the prospect sufficiently in a reconnaissance fashion unless interesting anomalism is encountered.

Three field weeks are estimated to run these ten lines not including any detailed follow-up work. For the Courtland Prospect, extra heavy duty gear is recommended and with a three man crew, can be contracted for $300.00 per day plus vehicle and other job related expenses as enumerated below. For the Gleeson Prospect, standard heavy duty gear should suffice and with a three man crew can be contracted for $275.00 per day plus expenses as below. A crew will be available for this project next week or the New Mexico crew can be used on termination of that project.

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 expenses 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 $7,500.00.

All property permits, trespassing liability and related costs incurred on behalf on 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: July 15, 1968

ACCEPTED BY: W. R. Ransone

TITLE: _____

CSL:jc
Enclosure

MOULINET
LOWERY
LEE
TR.MK. REG. U.S. PAT. OFF.

CLAIM STAKING

JOB#
B-274-68

GLEESON, ARIZONA

FOR

GEOCHEMICAL SURVEYS

LOCATION MONUMENTS
PREVIOUSLY SET IN THIS
AREA. USED OLD LOCATIONS
& SET CLAIM CORNERS
& END CENTERS —

SEPT 25 - 27, 1968

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LEE
LOWERY

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SEPT - 25, 1968

| TO | BS | RT | FS | VERT L | HORL | DIST |
|---|---|---|---|---|---|---|
| NEC 20 | TP LATH ON LINE | ~~B~~ ~~NW~~ | NW COR DOT 20 | 1°41' | 895 600 295 | 295' |
| " | " | 580 400 180 | TP-1E | 1°50' | 180 | 180' |
| TP-1E LATH | NEC 20 | 1500 1385 115 | NE 20 NW | 0° | 180° | 115 |
| TP-1E | " | 1310 900 410 | NEC 22 | 2°03' | 180° | 410 |
| TP-1E | " | 11.12 500 612 | TP-2E | 1°18' | 180° | 612' |
| TP-2E | | 892 800 92 | NE22 ~~TP-3E~~ NW24 | 0° | 180° | 92 |
| TP-2E | | | 1090 900 390 92 298 | | | |

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69 60
67 12
2 48

59 60
8 10
1 50

269 60
66 42
1 18

115
295
410

1225
500
725
2
0

295
202
93

612
410
202

1250
500
750

590

69 60
265 48
4 12

1180
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1475

885
590
1475

1465
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865

1240
500
740
2
1480

1235
500
735
2

MOULINET
Φ LEE
LOWE
SEPT 26, 8

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

B-274-68

| ⊼@ | B.S | Rt | F.S | Vert'l | Horl | Dist |
|---|---|---|---|---|---|---|
| Nec. 24 | NW 24 | 797<br>500<br>297 | NE 24<br>NW 26 | 4° 12' | 180° | 295 |
| " | ~~NE 26~~<br>NW 24 | 1185<br>300<br>885 | NE 26<br>NW 28 | 2° 15' | 180° | 885 |
| " | " | ~~NW 28~~<br>1238<br>500<br>738<br>2<br>1476 | NW 28 | 1° 10' | 180° | 1476 |

END THIS TRAVERSE EAST

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| | | | | | | |
|---|---|---|---|---|---|---|
| 1445<br>340<br>1145 | 1180<br>65 | | | | | |

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

MOULINET
LEE
LOWER
SEPT. 27, 8

| | | | | | | |
|---|---|---|---|---|---|---|
| @ | B.S. | R.I. | F.S | VERT ∠ | HOR ∠ | DIST |
| F.D. | T.P. | 34' | WEST | OF | LOC. MON | |
| | DOT 55 | | | | | |
| | DOT 56 | — | ON | LINE — | | |
| TP-1W | SEC 55 NEC 56 | 1330 1000 330 | SE 55 NE 56 | 2°30' | 180° | 329' |
| " | " | 765 500 265 | 53 \| 55 / 54 \| 56 | 7°30' | 180° | 261 |
| " | " | 1352 500 852 | 51 \| 53 / 52 \| 54 | 2°31' | 180° | 850 |
| SEC 51 NEC 52 | TP-1W | 695 400 295 | 49 \| 51 / 50 \| 52 | 0° | 180° | 295 |
| 49 \| 51 / 50 \| 52 | TP-1W | 1090 500 590 | 47 \| 49 / 48 \| 50 | 0° | 180° | 590 |
| " | " | 1090 500 590 2 1180 | 45 \| 47 / [illegible] \| 48 | 1°18' | 180° | 1180 |
| 45 \| 47 / [illegible] \| 48 | " | 1090 500 590 | 43 \| 45 / [illegible] | 1°29' | 180° | 590 |

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885

$$\begin{array}{r} 89\,60 \\ 88\,01 \\ \hline 1\,54 \end{array}$$

$$\begin{array}{r} 104 \\ 590 \\ \hline 114 \end{array}$$

$$\begin{array}{r} 295 \\ 114 \\ \hline 181 \\ 295 \\ \hline 476 \\ 295 \\ \hline 771 \end{array}$$

MOULINET
LEE
LOWE
TR.MK. REG. U.S. PAT. OFF.

| TO | BS | R.I | FS | VERT ∠ | HOR ∠ | DIST |
|---|---|---|---|---|---|---|
| SEC 43 | TR-1W | 695<br>400<br>295 | 41-43 | 1°01' | 180° | 295 |
| " | " | 1442<br>1000<br>442<br>x 2<br>884 | 39-41 | 0°43' | 180° | 884 |
| SEC 41 | " | 905<br>200<br>705 | TR-2W | 1°59' | 180° | 704 |
| TR-3W | TR-1W | 1481<br>1300<br>181 | ~~SEC 3~~<br>SE 37<br>SW 39 | 0° | 180° | 181 |
| TR-2W | " | 1272<br>500<br>772 | SW 37 | 0°40' | 180 | 772 |

END THIS TRAVERSE WEST

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1000
500
500

1087
500
587

15° 30'

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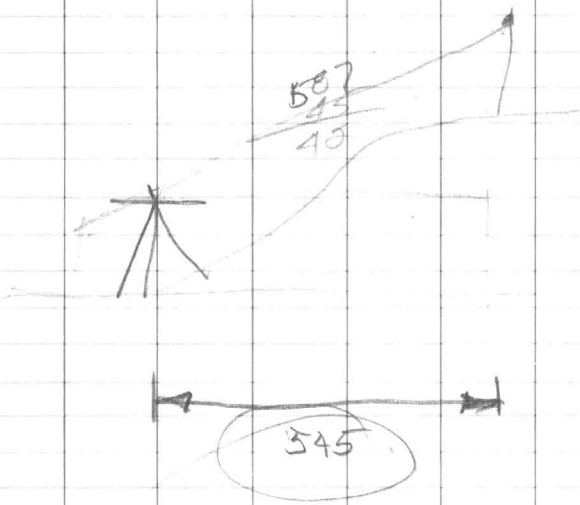
45
40



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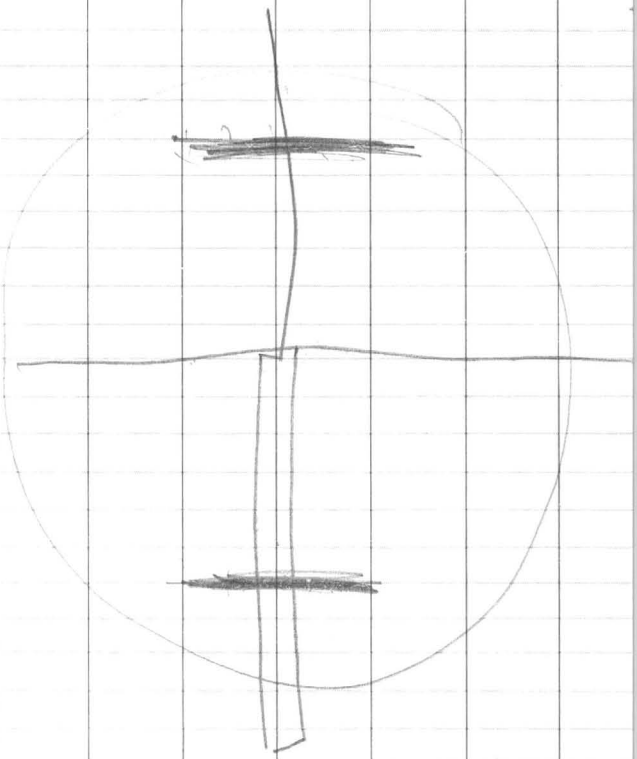

15

5

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156
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239

1450
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211

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180
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475
442
33
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328

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TRAVERSE SOUTH – 1400'

| ⊼@ | B.S | R.I. | FS | VERT L | HOR L | DIST |
|---|---|---|---|---|---|---|
| SEC 55 NEC 56 | SEC COR TO SOUTH | 1157<br>1000<br>157 | TP-1S | 3° 58'-30" | 180° | 156' |
| TP-1S | " | 1385<br>300<br>1085 | TP-2S | 1° 58' | 180° | 1083 |
| TP-2S | " | 1500<br>1290<br>210 | SEC 56 | 0° | 180 | 210' |
| | | END TRAVERSE SOUTH | | | | |
| SEC 56 | TP-2S | 1300<br>1000<br>300 | SE 56 | 6° 20' | 90° | 296 |
| SEC 56 | SE 56 | 717<br>600<br>117 | TP-1W | 7° 59' | 180° | 115 |
| TP-1W | SEC 56 | 1080<br>900<br>180 | SW 56<br>SE 54 | 0° | 180 | 180 |
| " | " | 1442<br>1000<br>442 | TP-2W | 1° 41' | 180' | 442 |
| TP-2W | ~~TP-1W~~ SEC 56 | 1483<br>1450<br>33 | SEC 54 | 0 | 180 | 33 |

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328
295
623
295
918

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222
73

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72
367
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662
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957

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| @ | B.S. | R.I. | F.S | VER L | HOR L | DIST |
|---|---|---|---|---|---|---|
| TP-2W | SEC 56 | 630<br>300<br>330 | SE 52<br>SW 54 | 6°01 | 180° | 326<br>+ 2<br>328 |
| " | SEC 56 | 1130<br>500<br>630 | SEC 52 | 1°19' | 180° | 630<br>-7<br>623 |
| " | " | 1420<br>500<br>920 | SW 52<br>SE 50 | 1°03' | 180° | 919 |
| " | " | 822<br>600<br>222 | TP 3W | 2°06' | | 222 |
| TP-3W | " | 572<br>500<br>72 | SEC 50 | 0° | 180° | 72 |
| TP-3W | " | 1367<br>1000<br>367 | SW 50<br>SE 48 | 0° | 180° | 367 |
| TP 3W | " | 1162<br>500<br>662 | SEC 48 | 0°54' | 180° | 662 |
| TP 3W | " | 1457<br>500<br>957 | SW 48 | 1°16' | 180 | 957 |

END TRAVERSE ~~SOUTH~~ WEST

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26960
26511
449

8959 60
8837 30
122 30

491
155
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~~1320~~
646
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MOULINET
LOWERY
LEE
SEPT. 2[illegible]68

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

B-271-68

| ⊼@ | B.S. | R.I. | F.S. | VERTL. | HOR ∠ | DIST. |
|---|---|---|---|---|---|---|
| | | TRAVERGE | NORTH | | | |
| SEC 55 NEC 56 | SEC COR TO SOUTH | 255 100 155 | TP-1N | 0° | 180° | 155' |
| TP-1N | " | 995 500 495 | TP-2N | 1°49 | 180° | 491 |
| TP-2N | TP-1N | 950 500 450 | TP-3N | 1°22'30" | 180 | 450 |
| TP-3N | " | 725 500 225 | SEC 28 NEC 55 | 1°09' | 180° | 225 |
| SEC 28 NEC 55 | " | 796 500 296 | SE 28 NE 55 | 1°35' | ~~180°~~ 270° | 296 |
| " | SE 28 NE 55 | 597 300 297 | 26\|28 53\|55 | 1°58' | 180° | 295 |
| 26\|28 53\|55 | " | 680 600 80 | TP-1W | 0° | 180 | 80 |
| TP-1W | " | ~~SEC 26 NEC 53~~ 1415 1200 215 | SEC 26 NEC 53 | 0° | 180° | 215 |

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335
215
120

295
120
175

215
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510
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| ⊼@ | B.S. | R.I. | F.S. | VERT L. | HOR L | DIST |
|---|---|---|---|---|---|---|
| TP-1W | " | 1500<br>990<br>510 | ~~[illegible]~~<br>24 \| 26<br>51 \| 53 | 0° | 180° | 510' |
| TP-1W | " | 1305<br>500<br>805 | SEC 24<br>NEC 51 | 0° | 180° | 805' |
| TP-1W | " | 1300<br>200<br>1100 | 22<br>~~[illegible]~~ \| 24<br>49 \| 51 | 0°25' | 180° | 1100 |
| 22 \| 24<br>49 \| 51 | TP-1W | 796<br>500<br>296 | SEC 22<br>NEC 49 | 1°55' | 180° | 295 |
| SEC 22<br>NEC 49 | " | 1095<br>800<br>295 | 20 22<br>47 49 | 0° | 180 | 295 |
| " | " | 790<br>200<br>590 | SEC 20<br>NEC 47 | 0°45' | 180° | 590 |
| " | " | 795<br>500<br>295 | SW 20<br>NW 47<br>NE 45 | 0° | 180° | 295 |

I.P. LINE 2 ~~[illegible]~~, STA 1000W
N 10°E ± 155 OF ~~[illegible]~~

~~[illegible]~~

SEC 20
NEC 47

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590
500
90

MOULINET
LOWERY
LEE

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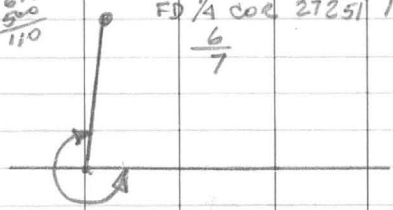
| ⊼@ | B.S | R.I | FS | VERT'L | HOR'L | DIST |
|---|---|---|---|---|---|---|
| SEC 20 NEC 47 | LINE | 610 / 500 / 110 | —1/4— FD 1/4 COR 6/7 | | 272°51' | 110' |
| " | TR 1W | 1290 / 700 / 590 | NEC 45 | 0°55' | 180 | 590 |
| NEC 45 | | 995 / 700 / 295 | NE 43 NW 45 | 1°55' | 180° | 295 |
| " | " | 790 / 200 / 590 | NEC 43 | 2°39' | 180° | 589 |
| NEC 43 | " | 895 / 600 / 295 | NE 41 NW 43 | 0°54' | 180° | 295 |
| " | " | 1000 / 500 / 500 | TR 2W | 1°55' | 180 | 500 |
| TR 2W | " | 790 / 700 / 90 | NEC 41 | 0° | 180° | 90 |



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$$\begin{array}{r} 295 \\ 90 \\ \hline 385 \\ 295 \\ \hline 680 \\ 295 \\ \hline 975 \\ 295 \\ \hline 1270 \end{array}$$

$$\begin{array}{r} 440 \\ 2 \\ \hline 180 \end{array}$$

$$\begin{array}{r} 1270 \\ 1180 \\ \hline 90 \end{array}$$

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| To | B.S. | R.I. | F.S. | VERT ∠ | HOR. ∠ | DIST |
|---|---|---|---|---|---|---|
| TR 2W | TP 1W | 885<br>500<br>385 | NE 39<br>NW 4 | 0° | 180 | 385' |
| TP-2W | " | 1382<br>700<br>682 | NE 39 | 0° | 180 | 682 |
| TP-2W | " | 1488<br>1000<br>488<br>2<br>976 | NW 39<br>NE 37 | 0° 33' | 180 | 976' |
| TP-2W | " | 1090<br>500<br>590<br>2<br>1180 | TP 3W<br>~~NE 3~~ | 0° | 180 | 1180 |
| TP 3W | " | 1492<br>1400<br>92 | NE 37 | 9°06 | 180° | 90 |
| TP-3W | " | 886<br>500<br>386 | NW 37 | 3°26 | 180° | 385 |

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Jackson

JOB B274-68 LINE 1C SPREAD 1

LOOKING W DATE 9/7/68 A= 1000'

CENTER 0.0 LABEL S/N FREQ. 1.0

COUPLING Yes

9-10-68
CS

N-S
a=1000'

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Courtland
LINE 1 HALF S SP. 1 DATE 9-7

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 4-5 | 3-4 | 4-5 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 |
| RECEIVE | 0-10 | 10-20 | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | 100-10 | 100-10 | 10-10 | 100-10 | 10-10 | 10-10 | 100-10 | 10-10 | 10-10 | 10-10 |
| DC 1 | +8.0 | +0.5 | +0.80 | -5.0 | +1.10 | +2.05 | +2.0 | -0.75 | +0.65 | +3.20 |
| DC 2 | +1.4 | +3.8 | +2.90 | +10.5 | +2.55 | -0.50 | +1.6 | +4.10 | +1.20 | +1.50 |
| DC 3 | +8.1 | +0.7 | +0.40 | -5.6 | +1.25 | +2.30 | +3.8 | -1.80 | +0.85 | +3.00 |
| DC 4 | +2.2 | +3.6 | +3.50 | +11.7 | +2.05 | -0.60 | -0.5 | +4.85 | +1.45 | -1.80 |
| DC 5 | +9.8 | +0.7 | +0.20 | -7.0 | +1.60 | +2.45 | +6.0 | -2.20 | +0.50 | +3.50 |
| DC 6 | +1.0 | +3.4 | +2.30 | +12.2 | +1.45 | +0.20 | -1.8 | +5.25 | +1.05 | -1.95 |
| DC 7 | +9.5 | +1.4 | +0.60 | -7.2 | +2.20 | +1.90 | +6.8 | +1.65 | +0.90 | +3.25 |
| DC 8 | +1.4 | +3.8 | +2.65 | +12.3 | +1.40 | +0.85 | -2.3 | +4.90 | +0.70 | -1.60 |
| DC AVG. | 14.72 | 16.43 | 5.126 | 15.96 | 5.406 | 2.293 | 21.23 | 5.292 | 2.335 | 1.126 |
| AC 1 | 14.2 | 16.2 | 4.96 | 15.7 | 5.23 | 2.19 | 21.0 | 5.14 | 2.24 | 1.05 |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AC AVG. | | | | | | | | | | |
| S.P. | 0 | +2.2 | | +2.5 | | | -1.8 | | | |
| AC NOISE | .03 | .02 | | .03 | | | .03 | | | |
| POT RES. | | G.F | at 1500' S | | & P.Line | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I.P. RECEIVER NOTES

PROJECT Geochem - Courtland

LINE 1 HALF S SP. 1 DATE 9-7

PAGE

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 1-2 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 | Cal | |
| RECEIVE | 40-50 | → | | → | 50-60 | → | | → | 1-2 | |
| RANGE | 10-10 | 10-10 | 10-10 | 100-1 | 10-10 | 10-10 | 1-100 | 1-100 | 100-10 | |
| DC 1 | +1.15 | -0.80 | -0.40 | +.040 | +1.55 | +1.40 | +.31 | +.010 | +0.20 | |
| DC 2 | +1.35 | +4.20 | +2.40 | +.110 | +1.00 | -0.60 | -.22 | +.095 | +0.55 | |
| DC 3 | +1.20 | -1.35 | -0.95 | +.035 | +0.40 | +0.75 | +.38 | -.015 | +0.20 | |
| DC 4 | +2.35 | +3.10 | +2.10 | +.040 | +1.35 | -0.05 | -.28 | +.170 | +0.55 | |
| DC 5 | 0 | -1.70 | -1.05 | +.105 | +0.60 | +1.60 | +.30 | -.060 | | |
| DC 6 | +2.85 | +4.00 | +2.95 | +.070 | +1.40 | -0.10 | -.29 | +.140 | | |
| DC 7 | +0.30 | -2.00 | -0.60 | -.025 | +0.45 | +0.65 | +.47 | -.080 | | |
| DC 8 | +2.20 | +2.90 | +1.80 | +.070 | +2.75 | +0.25 | -.33 | +.185 | | |
| DC AVG. | 5.259 | 2.294 | 1.139 | 0.591 | 2.409 | 1.154 | 0.630 | 0.375 | 100.8 | |
| AC 1 | 5.12 | 2.19 | 1.06 | 0.535 | 2.31 | 1.11 | 0.58 | 0.325 | 100.4 | |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 100.4 | |
| AC AVG. | | | | | | | | | | |
| S.P. | +5.8 | | | | -1.5 | | | | | |
| AC NOISE | .04 | | | | .04 | | | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I. P. SENDER NOTES

PAGE 2

PROJECT Geo Chem - COURTLAND

LINE 1 HALF S SP. 1 DATE 9-7

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 4-5 | 3-4 | 4-5 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 |
| RECEIVE | 0-10005 | 10-20 | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | Hi | Hi | → | Hi | → | → | Hi | → | → | → |
| VOLTAGE | 450 | 450 | 450 | 420 | 450 | 440 | 290 | 420 | 450 | 440 |
| 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 | 40-50 | → | → | → | 50-60 | → | → | → | | 1-2 |
| RANGE | Hi | → | → | → | Hi | → | → | → | | Hi |
| VOLTAGE | 290 | 420 | 450 | 440 | 290 | 420 | 450 | 440 | | 60 |
| CURRENT | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | 1.0 |

FREQUENCIES .01 1.0

SENDER NO. 66445

OPERATOR HIX

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS: 4-5 — Hi 5
3-4 — Hi 5
2-3 — Hi 6
1-2 — Hi 7

N-5, a = 1000'

Burr Brown Rec.

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Courtland

LINE 1 HALF N SP. 1 DATE 9-7

| SEND | 1-2 | 2-3 | 1-2 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 |
|---|---|---|---|---|---|---|---|---|---|---|
| RECEIVE | 0-10 | 10-20 | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | 100-10 | 100-10 | 10-10 | 100-10 | 10-10 | 10-10 | 100-10 | 10-10 | 10-10 | 10-10 |
| DC 1 | +7.8 | +5.0 | +2.00 | +2.0 | +2.65 | +0.60 | -7.6 | +0.60 | -0.60 | -0.70 |
| DC 2 | -2.5 | -2.5 | +0.60 | +8.0 | +2.90 | +0.85 | +13.6 | -0.405 | +1.85 | +0.70 |
| DC 3 | +8.5 | +7.8 | +1.75 | +2.5 | +4.20 | +0.05 | -8.2 | +0.90 | -0.25 | +0.65 |
| DC 4 | -2.8 | -3.8 | +0.30 | +9.6 | +3.00 | +1.80 | +14.0 | -0.38 | +2.80 | +1.00 |
| DC 5 | +8.0 | +8.5 | +2.85 | +2.0 | +5.70 | -0.30 | -10.0 | +0.80 | -1.40 | +0.20 |
| DC 6 | -1.5 | -6.3 | -0.40 | +6.5 | +1.30 | +2.05 | +15.0 | -0.44 | +3.50 | +0.40 |
| DC 7 | +7.0 | +9.5 | +3.30 | +1.5 | +4.35 | -1.10 | -10.1 | +0.62 | -2.10 | +0.45 |
| DC 8 | -1.2 | -8.0 | -0.65 | +5.0 | +1.40 | +2.20 | +15.8 | -0.38 | +4.05 | +1.00 |
| DC AVG. | 18.09 | 17.77 | 4.110 | 19.27 | 8.055 | 1.538 | 18.46 | 6.726 | 3.018 | 1.001 |
| AC 1 | 17.8 | 17.6 | 3.98 | 18.8 | 7.72 | 1.47 | 18.2 | 6.50 | 2.93 | 0.95 |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AC AVG. | | | | | | | | | | |
| S.P. | +2.3 | 0 | | -4.5 | | | +21.6 | on | | |
| AC NOISE | .03 | .02 | | .02 | | | .03 | back | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Courtland
LINE 1 HALF N SP. 1 DATE 9-7

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 4-5 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 | cal | |
| RECEIVE | 40-50 | → | → | → | 50-60 | → | → | → | 4-5 | |
| RANGE | 10-10 | 10-10 | 10-10 | 100-1 | 10-10 | 10-10 | 100-1 | 100-1 | +0.55 | |
| DC 1 | +2.30 | -1.60 | -2.05 | +0.75 | +1.95 | +1.55 | +2.35 | -0.22 | -0.25 | |
| DC 2 | +2.00 | +4.20 | +3.85 | +1.60 | -0.65 | +0.40 | -1.60 | +0.26 | +0.55 | |
| DC 3 | +3.00 | +1.45 | -2.45 | +0.30 | +4.05 | +0.80 | +2.95 | -0.26 | -0.25 | |
| DC 4 | +0.05 | +4.00 | +4.00 | +1.30 | -2.40 | +0.65 | -1.85 | +0.33 | | |
| DC 5 | +3.20 | -1.15 | -2.05 | +0.35 | +4.60 | +1.15 | +3.75 | -0.27 | | |
| DC 6 | +0.75 | +4.15 | +3.85 | +1.65 | -2.85 | +0.30 | -2.80 | +0.37 | | |
| DC 7 | +2.20 | -0.90 | -2.60 | -0.15 | +5.30 | +1.10 | +3.60 | -0.29 | | |
| DC 8 | +1.05 | +3.80 | +4.80 | +1.80 | -3.60 | +0.85 | -2.40 | +0.40 | | |
| DC AVG. | 6.304 | 2.742 | 1.485 | 0.900 | 2.743 | 1.350 | 0.781 | 0.501 | 100.4 | |
| AC 1 | 6.12 | 2.60 | 1.40 | 0.81 | 2.64 | 1.27 | 0.723 | 0.468 | 100.2 | |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| AC AVG. | | | | | | | | | | |
| S.P. | -10.7 | | | | +5.3 | | | | | |
| AC NOISE | .03 | | | | .02 | | | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I. P. SENDER NOTES

PROJECT Geo Chem - COURTLAND

LINE 1 HALF N SP. 1 DATE 9-2

PAGE 1

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 1-2 | 2-3 | 1-2 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 |
| RECEIVE | 0-10 no N | 10-20 | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | Hi | Hi | → | Hi | → | → | Hi | → | → | → |
| VOLTAGE | 290 | 430 | 290 | 460 | 430 | 290 | 450 | 460 | 430 | 290 |
| 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 | 40-50 | → | → | → | 50-60 | → | → | → | | 4-5 |
| RANGE | Hi | → | → | → | Hi | → | → | → | | Hi |
| VOLTAGE | 450 | 460 | 500 | 420 | 450 | 460 | 500 | 420 | | 90 |
| CURRENT | 5.0 | 5.0 | 6.0 | 7.0 | 5.0 | 5.0 | 6.0 | 7.0 | | 1.0 |

FREQUENCIES 0.1 1.0

SENDER NO. 6644S

OPERATOR HIX

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS:
1-2 — Hi - 7.0
2-3 — Hi - 6.0
3-4 — Hi - 5.0
4-5 — Hi - 5.0

HEINRICHS GEOEX B274-68 LINE 1C SPD 1 LOOKING WEST 9-7-68 A= 1000 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 | |
| 1472 | 1643 | 5126 | 1596 | 5406 | 2293 | 2123 | 5292 | 2335 | 1126 | DC | 5259 | 2294 | 1139 | 591 | 2409 | 1154 | 63 | 375 | 1008 | LEFT |
| 1472 | 1643 | 5126 | 1596 | 5406 | 2293 | 2123 | 5292 | 2335 | 1126 | | 5259 | 2294 | 1139 | 591 | 2409 | 1154 | 63 | 375 | 1008 | SIDE |
| 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | N | 2 | 3 | 4 | 5 | 3 | 4 | 5 | 6 | | |
| 14.72 | 16.43 | 5.126 | 15.96 | 5.406 | 2.293 | 21.23 | 5.292 | 2.335 | 1.126 | DCA | 5.259 | 2.294 | 1.139 | .591 | 2.409 | 1.154 | .630 | .375 | 100.8 | |
| 14.20 | 16.20 | 4.960 | 15.70 | 5.230 | 2.190 | 21.00 | 5.140 | 2.240 | 1.050 | AC1 | 5.120 | 2.190 | 1.060 | .535 | 2.310 | 1.110 | .580 | .325 | 100.4 | |
| 14.20 | 16.20 | 4.960 | 15.70 | 5.230 | 2.190 | 21.00 | 5.140 | 2.240 | 1.050 | AC2 | 5.120 | 2.190 | 1.060 | .535 | 2.310 | 1.110 | .580 | .325 | 100.4 | |
| 14.20 | 16.20 | 4.960 | 15.70 | 5.230 | 2.190 | 21.00 | 5.140 | 2.240 | 1.050 | ACA | 5.120 | 2.190 | 1.060 | .535 | 2.310 | 1.110 | .580 | .325 | 100.4 | |
| 8.76 | 9.78 | 12.20 | 9.50 | 12.87 | 13.65 | 12.64 | 12.60 | 13.90 | 13.40 | RHO | 12.52 | 13.65 | 13.56 | 12.31 | 14.34 | 13.74 | 13.12 | 12.50 | .992 | DC CAL |
| 3.3 | 1.0 | 2.9 | 1.3 | 3.0 | 4.3 | .7 | 2.5 | 3.8 | 6.8 | PFE | 2.3 | 4.3 | 7.0 | 10.0 | 3.9 | 3.6 | 8.2 | 14.9 | .996 | AC CAL |
| 371 | 104 | 241 | 132 | 230 | 314 | 55 | 202 | 275 | 508 | MCF | 184 | 317 | 518 | 815 | 270 | 259 | 624 | 1194 | | |
| .5 | .4 | 1.1 | .4 | 1.0 | 2.1 | .3 | 1.0 | 2.0 | 3.8 | CPFE | 1.0 | 2.0 | 3.7 | 6.7 | 1.9 | 3.7 | 6.2 | 9.6 | | |
| 2.8 | .6 | 1.9 | .8 | 2.0 | 2.2 | .4 | 1.5 | 1.8 | 3.0 | CCPFE | 1.3 | 2.3 | 3.3 | 3.4 | 1.9 | -.1 | 2.0 | 5.4 | | |
| 316 | 62 | 153 | 87 | 152 | 164 | 32 | 121 | 131 | 226 | CCMCF | 102 | 167 | 243 | 273 | 136 | -8 | 154 | 428 | | |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 6.000 | 7.000 | 5.000 | 5.000 | 6.000 | 7.000 | 1.000 | |
| 1809 | 1777 | 411 | 1927 | 8055 | 1538 | 1846 | 6726 | 3018 | 1001 | DC | 6304 | 2742 | 1485 | 9 | 2743 | 135 | 781 | 501 | 1004 | RIGHT |
| 1809 | 1777 | 411 | 1927 | 8055 | 1538 | 1846 | 6726 | 3018 | 1001 | | 6304 | 2742 | 1485 | 9 | 2743 | 135 | 781 | 501 | 1004 | SIDE |
| 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | N | 2 | 3 | 4 | 5 | 3 | 4 | 5 | 6 | | |
| 18.09 | 17.77 | 4.110 | 19.27 | 8.055 | 1.538 | 18.46 | 6.726 | 3.018 | 1.001 | DCA | 6.304 | 2.742 | 1.485 | .900 | 2.743 | 1.350 | .781 | .501 | 100.4 | |
| 17.80 | 17.60 | 3.980 | 18.80 | 7.720 | 1.470 | 18.20 | 6.500 | 2.930 | .950 | AC1 | 6.120 | 2.600 | 1.400 | .810 | 2.640 | 1.270 | .723 | .468 | 100.2 | |
| 17.80 | 17.60 | 3.980 | 18.80 | 7.720 | 1.470 | 18.20 | 6.500 | 2.930 | .950 | AC2 | 6.120 | 2.600 | 1.400 | .810 | 2.640 | 1.270 | .723 | .468 | 100.2 | |
| 17.80 | 17.60 | 3.980 | 18.80 | 7.720 | 1.470 | 18.20 | 6.500 | 2.930 | .950 | ACA | 6.120 | 2.600 | 1.400 | .810 | 2.640 | 1.270 | .723 | .468 | 100.2 | |
| 10.81 | 10.62 | 9.82 | 11.52 | 19.25 | 9.19 | 11.03 | 16.08 | 18.04 | 11.96 | RHO | 15.07 | 16.39 | 14.79 | 13.45 | 16.39 | 16.14 | 13.61 | 11.98 | .996 | DC CAL |
| 1.4 | .8 | 3.1 | 2.3 | 4.1 | 4.4 | 1.2 | 3.3 | 2.8 | 5.2 | PFE | 2.8 | 5.3 | 5.9 | 10.9 | 3.7 | 6.1 | 7.8 | 6.8 | .998 | AC CAL |
| 132 | 72 | 312 | 199 | 215 | 481 | 111 | 203 | 155 | 431 | MCF | 186 | 320 | 396 | 810 | 225 | 377 | 573 | 571 | | |
| .4 | .4 | 1.4 | .3 | .6 | 3.4 | .3 | .7 | 1.4 | 4.4 | CPFE | .8 | 1.6 | 3.3 | 6.0 | 1.6 | 3.0 | 5.9 | 10.1 | | |
| 1.1 | .4 | 1.6 | 2.0 | 3.6 | 1.0 | .9 | 2.5 | 1.4 | .8 | CCPFE | 2.0 | 3.6 | 2.5 | 4.9 | 2.1 | 3.1 | 1.9 | -3.2 | | |
| 99 | 37 | 167 | 171 | 184 | 112 | 80 | 158 | 76 | 67 | CCMCF | 132 | 222 | 170 | 365 | 127 | 192 | 140 | -271 | | |

Moore Business Forms, Inc.

JOB B274-68 LINE 2C SPREAD 1

LOOKING W DATE 9/19/68 A= 1000'

CENTER 0.0 LABEL S/N FREQ. 1.0

COUPLING Yes

Donta DC

9-25-68
as

N-S
a=1000'

PAGE

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem- Courtland
LINE 2 HALF S SP. 1 DATE 9-19

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 4-5 | 3-4 | 4-5 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 |
| RECEIVE | 0-10 | 10-20 | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | 100-10 | 100-10 | 10-10 | 100-10 | 10-10 | 10-10 | 100-10 | 10-10 | 10-10 | 10-10 |
| DC 1 | +2.4 | +8.2 | +1.34 | +11.8 | +4.20 | +1.20 | +6.2 | +5.40 | +1.25 | -0.64 |
| DC 2 | +13.5 | +7.9 | +4.42 | +4.3 | +1.90 | +1.90 | +11.7 | +1.65 | +1.60 | +3.40 |
| DC 3 | +1.7 | +8.3 | +0.90 | +12.6 | +5.35 | +0.75 | +5.7 | +5.18 | +1.03 | -0.30 |
| DC 4 | +14.6 | +7.9 | +4.50 | +3.6 | +0.20 | +3.60 | +11.7 | +1.30 | +1.98 | +2.50 |
| DC 5 | +1.5 | +8.5 | +1.25 | +14.2 | +6.30 | -0.55 | +4.4 | +5.05 | +0.64 | -1.20 |
| DC 6 | +14.4 | +8.0 | +4.80 | +2.0 | +0.45 | +3.10 | +11.8 | +2.05 | +2.36 | +3.20 |
| DC 7 | +0.6 | +8.5 | +0.85 | +15.6 | +6.30 | +0.25 | +5.8 | +3.80 | +0.43 | 0 |
| DC 8 | +15.5 | +8.0 | +4.36 | +1.7 | -1.10 | +4.05 | +11.7 | +2.05 | +2.35 | +3.00 |
| DC AVG. | 32.38 | 36.22 | 7.590 | 36.54 | 8.305 | 3.207 | 35.56 | 8.345 | 2.921 | 1.675 |
| AC 1 | 31.6 | 35.4 | 7.31 | 35.7 | 7.99 | 3.04 | 34.7 | 8.02 | 2.78 | 1.55 |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AC AVG. | | | | | | | | | | |
| S.P. | +6.1 | | -5.0 | | +14.6 | | -5.9 | | | |
| AC NOISE | .02 | | .02 | | .02 | | .04 | | | |
| POT RES. | | | | | | | | | | |

Buried cable, P.L. & G.F. at 2600' S

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Courtland
LINE 2 HALF S SP. 1 DATE 9-19

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 1-2 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 | cal | |
| RECEIVE | 40-50 | → | → | → | 50-60 | → | → | → | 1-2 | |
| RANGE | 10-10 | 10-10 | 10-10 | 1-100 | 10-10 | 10-10 | 1-100 | 1-100 | 100-10 | |
| DC 1 | +3.30 | +0.60 | -0.60 | +.045 | +~~4.00~~ | +1.95 | +.520 | +.040 | 0 | |
| DC 2 | +4.80 | +2.20 | +1.30 | +.160 | +3.60 | +0.45 | -.390 | +.085 | +.05 | |
| DC 3 | +3.20 | +0.24 | -0.80 | -.060 | | +1.70 | +.560 | +.040 | 0 | |
| DC 4 | +3.65 | +2.58 | +3.60 | +.180 | | -0.60 | -.405 | +.015 | +.05 | |
| DC 5 | +3.85 | +0.80 | -1.15 | +.020 | | +2.95 | +.525 | +.120 | | |
| DC 6 | +4.45 | +2.00 | +1.65 | +.180 | | -0.80 | -.400 | -.025 | | |
| DC 7 | +2.60 | -0.18 | 0 | -.005 | — | +3.00 | +.540 | +.170 | | |
| DC 8 | +5.20 | +4.16 | +3.20 | +.105 | — | +0.80 | -.440 | -.060 | | |
| DC AVG. | 10.10 | 2.983 | 1.294 | 0.874 | | 1.415 | 0.697 | 0.531 | 100.2 | |
| AC 1 | 9.72 | 2.84 | 1.21 | .795 | 3.70 | 1.30 | .630 | .475 | 100.26 | |
| AC 2 | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ | |
| AC AVG. | | | | | | | | | | |
| S.P. | +3.3 | | | | +11.5 | | | | | |
| AC NOISE | .02 | | | | .04 | | | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I. P. SENDER NOTES

PROJECT Geo Chem - COURTLAND
LINE 2 HALF S SP. 1 DATE 9-19

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 4-5 | 3-4 | 4-5 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 |
| RECEIVE | 0-1000'S | 10-20'S | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | Hi | Hi | Hi | Hi | → | → | Hi | → | → | → |
| VOLTAGE | 290 | 460 | 290 | 510 | 460 | 330 | 420 | 510 | 460 | 380 |
| CURRENT | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 7.0 | 6.0 | 6.0 | 6.0 | 8.0 |
| SEND | 1-2 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 | | CAL |
| RECEIVE | 40-50 | → | → | → | 50-60 | → | → | → | | 1-2 |
| RANGE | Hi | → | → | → | Hi | → | → | → | | Hi |
| VOLTAGE | 500 | 510 | 460 | 380 | 500 | 510 | 450 | 380 | | 60 |
| CURRENT | 7.0 | 6.0 | 6.0 | 8.0 | 7.0 | 6.0 | 6.0 | 8.0 | | 1.0 |

FREQUENCIES .01 1.0
SENDER NO. 66445
OPERATOR HIX
RECEIVER NO. 9741-1
OPERATOR PALMER

COMMENTS:

N-S
a=1000'

Burr Brown Rec.

HEINRICHS GEOEXPLORATION CO.

# I.P. RECEIVER NOTES

PROJECT Geochem - Courtland

LINE 2 HALF N SP. 1 DATE 9-19

PAGE

| SEND | 1-2 | 2-3 | 1-2 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 |
|---|---|---|---|---|---|---|---|---|---|---|
| RECEIVE | 0-10 | 10-20 | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | 100-10 | 100-10 | 10-10 | 100-10 | 10-10 | 10-10 | 100-10 | 10-10 | 10-10 | 10-10 |
| DC 1 | +7.0 | +5.8 | +3.40 | +10.2 | +5.38 | +2.85 | +8.6 | +5.20 | +1.80 | -0.35 |
| DC 2 | +21.0 | +7.8 | +3.00 | +1.4 | -0.20 | -0.80 | +4.0 | -0.25 | +0.30 | +1.85 |
| DC 3 | -2.0 | +7.7 | +3.42 | +12.3 | +4.15 | +3.25 | +9.9 | +4.45 | +2.00 | +0.25 |
| DC 4 | +19.0 | +7.6 | +3.08 | +1.6 | +1.95 | -0.30 | +3.8 | +0.45 | +0.15 | +1.10 |
| DC 5 | +12.0 | +6.5 | +3.40 | +15.6 | +2.20 | +4.00 | +10.6 | +3.95 | +2.40 | +0.65 |
| DC 6 | +16.4 | +9.7 | +2.10 | -3.7 | +3.05 | -2.40 | +1.8 | +1.36 | -0.64 | +0.82 |
| DC 7 | +10.2 | +5.4 | +4.85 | +17.6 | +1.70 | +5.45 | +12.0 | +2.76 | +3.18 | +1.30 |
| DC 8 | +17.6 | +7.8 | +1.55 | -6.2 | +3.35 | -2.50 | +2.3 | +2.35 | -1.40 | +0.26 |
| DC AVG. | ~~35.08~~ 36.7 | 32.34 | 8.819 | 31.77 | 6.846 | 2.984 | 32.38 | 7.006 | 2.418 | 1.395 |
| AC 1 | 34.9 | 31.6 | 8.50 | 31.1 | 6.60 | 2.85 | 31.7 | 6.77 | 2.31 | 1.31 |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AC AVG. | | | | | | | | | | |
| S.P. | +10.9 | -10.0 | | +17.2 | | | -0.5 | | | |
| AC NOISE | .03 | .02 | | .02 | | | .02 | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Courtland

LINE 2 HALF N SP. 1 DATE 9-19

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 4-5 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 | cal | |
| RECEIVE | 40-50 | → | → | → | 50-60 | → | → | → | 4-5 | |
| RANGE | 10-10 | 10-10 | 10-10 | 1-100 | 10-10 | 10-10 | 1-100 | 1-100 | 100-10 | |
| DC 1 | +2.20 | -0.20 | +1.35 | +.080 | -0.20 | +1.80 | +.225 | +.105 | 0 | |
| DC 2 | +2.95 | +1.70 | +0.60 | +.085 | +2.85 | -0.75 | -.160 | -.002 | 0 | |
| DC 3 | +1.50 | +0.78 | +0.70 | +.040 | -0.20 | +2.15 | +.260 | +.110 | 0 | |
| DC 4 | +3.35 | +0.64 | +0.85 | +.080 | +2.80 | -1.00 | -.175 | 0 | 0 | |
| DC 5 | +0.76 | +1.60 | -0.10 | +.020 | -0.50 | +2.60 | +.255 | +.100 | | |
| DC 6 | +4.35 | -0.10 | +2.30 | +.100 | +2.60 | -1.55 | -.180 | -.020 | | |
| DC 7 | -0.10 | +2.90 | -0.90 | -.001 | -0.50 | +2.80 | +.275 | +.100 | | |
| DC 8 | +5.40 | -1.90 | +2.80 | +.150 | +3.10 | -2.20 | -.180 | +.020 | | |
| DC AVG. | 7.977 | 2.382 | 1.094 | 0.746 | 2.721 | 1.078 | 0.586 | 0.450 | 99.80 | |
| AC 1 | 7.74 | 2.29 | 1.04 | .683 | 2.60 | 1.02 | .543 | .400 | 99.80 | |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| AC AVG. | | | | | | | | | | |
| S.P. | 0 | | | | -0.7 | | | | | |
| AC NOISE | .01 | | | | .02 | | | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I. P. SENDER NOTES

PROJECT Geo Chem-COURTLAND
LINE 2 HALF N SP. 1 DATE 9-19

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 1-2 | 2-3 | 1-2 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 |
| RECEIVE | 0-1000'N | 10-20N | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | Hi | Hi | Hi | Hi | → | → | Hi | → | → | → |
| VOLTAGE | 430 | 530 | * ~~430~~ | 480 | 530 | 510 | 290 | 480 | 530 | 510 |
| CURRENT | 6.0 | 6.0 | ~~6.0~~ | 6.0 | 6.0 | 7.0 | 6.0 | 6.0 | 6.0 | 7.0 |
| SEND | 4-5 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 | | CAL |
| RECEIVE | 40-50 | → | → | → | 50-60 | → | → | → | | 4-5 |
| RANGE | Hi | → | → | → | Hi | → | → | → | | Hi |
| VOLTAGE | 340 | 480 | 530 | 510 | 340 | 480 | 530 | 510 | | |
| CURRENT | 7.0 | 6.0 | 6.0 | 7.0 | 7.0 | 6.0 | 6.0 | 7.0 | | 1.0 |

FREQUENCIES 0.1 1.0
SENDER NO. 6644S
OPERATOR HIX
RECEIVER NO. 9741-1
OPERATOR PALMER

COMMENTS:
1-2 — 7.0
2-3 — 6.0
3-4 — 6.0
4-5 — 8.0

* 1-2
~~510~~
7.0

HEINRICHS GEOEX 8274-68 LINE 2C SPD 1 LOOKING WEST 9-19-68 A= 1000 FEET

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.000 | 6.000 | 6.000 | 6.000 | 6.000 | 7.000 | 6.000 | 6.000 | 6.000 | 8.000 | I | 7.000 | 6.000 | 6.000 | 8.000 | 7.000 | 6.000 | 6.000 | 8.000 | 1.000 | |
| 3238 | 3622 | 759 | 3654 | 8305 | 3207 | 3556 | 8345 | 2921 | 1675 | DC | 1010 | 2983 | 1294 | 874 | | 1415 | 697 | 531 | 1002 | LEFT |
| 3238 | 3622 | 759 | 3654 | 8305 | 3207 | 3556 | 8345 | 2921 | 1675 | | 1010 | 2983 | 1294 | 874 | | 1415 | 697 | 531 | 1002 | SIDE |
| 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | N | 2 | 3 | 4 | 5 | 3 | 4 | 5 | 6 | | |
| 32.38 | 36.22 | 7.590 | 36.54 | 8.305 | 3.207 | 35.56 | 8.345 | 2.921 | 1.675 | DCA | 10.100 | 2.983 | 1.294 | .874 | 0.000 | 1.415 | .697 | .531 | 100.2 | |
| 31.60 | 35.40 | 7.310 | 35.70 | 7.990 | 3.040 | 34.70 | 8.020 | 2.780 | 1.550 | AC1 | 9.720 | 2.840 | 1.210 | .795 | 3.700 | 1.300 | .630 | .475 | 100.2 | |
| 31.60 | 35.40 | 7.310 | 35.70 | 7.990 | 3.040 | 34.70 | 8.020 | 2.780 | 1.550 | AC2 | 9.720 | 2.840 | 1.210 | .795 | 3.700 | 1.300 | .630 | .475 | 100.2 | |
| 31.60 | 35.40 | 7.310 | 35.70 | 7.990 | 3.040 | 34.70 | 8.020 | 2.780 | 1.550 | ACA | 9.720 | 2.840 | 1.210 | .795 | 3.700 | 1.300 | .630 | .475 | 100.2 | |
| 16.16 | 18.07 | 15.15 | 18.23 | 16.58 | 13.72 | 17.74 | 16.66 | 14.58 | 12.54 | RHO | 17.28 | 14.89 | 12.91 | 11.45 | *000.0 | 14.12 | 12.17 | 11.13 | .998 | DC CAL |
| 2.5 | 2.3 | 3.8 | 2.4 | 3.9 | 5.5 | 2.5 | 4.1 | 5.1 | 8.1 | PFE | 3.9 | 5.0 | 6.9 | 9.9 | *000.0 | 8.8 | 10.6 | 11.8 | 1.000 | AC CAL |
| 153 | 128 | 253 | 129 | 238 | 400 | 140 | 243 | 348 | 643 | MCF | 226 | 338 | 538 | 868 | *00000 | 626 | 874 | 1059 | | |
| .2 | .2 | .8 | .2 | .7 | 2.0 | .2 | .7 | 1.9 | 4.1 | CPFE | .7 | 1.8 | 4.0 | 7.3 | 0.0 | 3.5 | 6.8 | 11.0 | | |
| 2.3 | 2.1 | 3.0 | 2.2 | 3.2 | 3.5 | 2.3 | 3.3 | 3.2 | 4.0 | CCPFE | 3.2 | 3.2 | 3.0 | 2.7 | *000.0 | 5.3 | 3.9 | .8 | | |
| 140 | 118 | 200 | 119 | 195 | 252 | 129 | 201 | 219 | 316 | CCMCF | 187 | 215 | 231 | 232 | *00000 | 376 | 318 | 70 | | |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.000 | 6.000 | 6.000 | 6.000 | 6.000 | 7.000 | 6.000 | 6.000 | 6.000 | 7.000 | I | 7.000 | 6.000 | 6.000 | 7.000 | 7.000 | 6.000 | 6.000 | 7.000 | 1.000 | |
| 3508 | 3234 | 8819 | 3177 | 6846 | 2984 | 3238 | 7006 | 2418 | 1395 | DC | 7977 | 2382 | 1094 | 746 | 2721 | 1078 | 586 | 45 | 998 | RIGHT |
| 3508 | 3234 | 8819 | 3177 | 6846 | 2984 | 3238 | 7006 | 2418 | 1395 | | 7977 | 2382 | 1094 | 746 | 2721 | 1078 | 586 | 45 | 998 | SIDE |
| 36.12 | | | | | | | | | | | | | | | | | | | | |
| 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | N | 2 | 3 | 4 | 5 | 3 | 4 | 5 | 6 | | |
| ~~35.08~~ | 32.34 | 8.819 | 31.77 | 6.846 | 2.984 | 32.38 | 7.006 | 2.418 | 1.395 | DCA | 7.977 | 2.382 | 1.094 | .746 | 2.721 | 1.078 | .586 | .450 | 99.80 | |
| 34.90 | 31.60 | 8.500 | 31.10 | 6.600 | 2.850 | 31.70 | 6.770 | 2.310 | 1.310 | AC1 | 7.740 | 2.290 | 1.040 | .683 | 2.600 | 1.020 | .543 | .400 | 99.80 | |
| 34.90 | 31.60 | 8.500 | 31.10 | 6.600 | 2.850 | 31.70 | 6.770 | 2.310 | 1.310 | AC2 | 7.740 | 2.290 | 1.040 | .683 | 2.600 | 1.020 | .543 | .400 | 99.80 | |
| 34.90 | 31.60 | 8.500 | 31.10 | 6.600 | 2.850 | 31.70 | 6.770 | 2.310 | 1.310 | ACA | 7.740 | 2.290 | 1.040 | .683 | 2.600 | 1.020 | .543 | .400 | 99.80 | |
| 17.58 | 16.20 | 17.67 | 15.92 | 13.72 | 12.81 | 16.22 | 14.04 | 12.11 | 11.98 | RHO | 13.70 | 11.93 | 10.96 | 11.21 | 11.68 | 10.80 | 10.28 | 10.82 | 1.002 | DC CAL |
| .5 | 2.3 | 3.8 | 2.2 | 3.7 | 4.7 | 2.1 | 3.5 | 4.7 | 6.5 | PFE | 3.1 | 4.0 | 5.2 | 9.2 | 4.7 | 5.7 | 7.9 | 12.5 | 1.000 | AC CAL |
| 29 | 145 | 212 | 135 | 272 | 367 | 132 | 248 | 386 | 542 | MCF | 223 | 337 | 474 | 823 | 398 | 526 | 771 | 1155 | | |
| .2 | .2 | .7 | .2 | .9 | 2.2 | .2 | .9 | 2.4 | 4.3 | CPFE | .9 | 2.4 | 4.9 | 7.5 | 2.5 | 4.9 | 8.3 | 11.4 | | |
| .3 | 2.1 | 3.1 | 1.9 | 2.8 | 2.5 | 1.9 | 2.6 | 2.3 | 2.1 | CCPFE | 2.1 | 1.6 | .3 | 1.8 | 2.2 | .7 | -.4 | 1.1 | | |
| 19 | 132 | 176 | 122 | 205 | 193 | 120 | 185 | 189 | 179 | CCMCF | 157 | 133 | 31 | 157 | 184 | 69 | -37 | 104 | | |

Moore Business Forms, Inc. f

631025

JOB B274-68 LINE 2G SPREAD 1

LOOKING N DATE 9/9/68 A= 500'

CENTER 0.0 LABEL W/E FREQ. 3.0

COUPLING Yes

Double DC

Done 9/11/68
C.S.

Burr Brown Rec

E-W
a=500'

HEINRICHS GEOEXPLORATION CO.

# I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Gleeson
LINE 2 HALF W SP. 1 DATE 9-9

| 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 | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 |
| DC 1 | +19.2 | +11.4 | +4.1 | +17.4 | +7.8 | +4.0 | +14.8 | +0.6 | +5.7 | +1.0 |
| DC 2 | +6.4 | +11.6 | +4.0 | +12.0 | +2.2 | +5.7 | +10.2 | +6.0 | +3.6 | +6.5 |
| DC 3 | +20.6 | +11.4 | +3.2 | +18.5 | +8.2 | +4.0 | +15.4 | +0.4 | +4.0 | +1.5 |
| DC 4 | +3.9 | +11.6 | +5.6 | +10.6 | +2.3 | +6.0 | +9.9 | +3.9 | +3.4 | +6.6 |
| DC 5 | +23.5 | | +2.0 | +20.3 | +7.9 | +4.1 | +15.7 | +3.6 | +4.5 | +0.3 |
| DC 6 | +2.1 | | +5.8 | +9.4 | +2.0 | +5.8 | +10.1 | +3.8 | +3.8 | +6.2 |
| DC 7 | +22.0 | | +0.6 | +21.7 | +8.1 | +4.2 | +16.6 | +1.8 | +5.4 | +1.5 |
| DC 8 | +1.0 | | +6.2 | +8.3 | +2.0 | +4.1 | +9.5 | +4.0 | +2.1 | +7.5 |
| DC AVG. | 51.27 | 43.60 | 13.38 | 54.60 | 16.86 | 16.70 | 49.69 | 10.81 | 15.41 | 12.18 |
| AC 1 | 50.0 | 42.1 | 13.0 | 53.1 | 16.35 | 16.2 | 48.4 | 10.5 | 15.0 | 11.8 |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| AC AVG. | | | | | | | | | | |
| S.P. | -0.5 | +1.8 | | -2.4 | | | +8.5 | | | |
| AC NOISE | .02 | .02 | | .03 | | | .02 | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Gleeson
LINE 2 HALF W SP. 1 DATE 9-9

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 100-10 | 100-10 | 10-10 | 100-10 | 100-10 | 10-10 | 10-10 | 100-10 | |
| DC 1 | +8.8 | +8.1 | -2.0 | +3.10 | +3.8 | +6.0 | +4.80 | +4.00 | +.55 | .3 |
| DC 2 | +9.7 | -2.0 | +9.8 | +1.25 | +12.3 | +4.2 | -1.25 | -0.70 | +.05 | |
| DC 3 | +8.0 | +8.1 | -2.5 | +2.95 | +2.4 | +4.6 | +5.00 | +4.15 | +.55 | |
| DC 4 | +11.4 | -1.4 | +10.0 | +1.80 | +14.0 | +6.0 | -1.20 | -0.55 | +.05 | |
| DC 5 | +8.3 | +7.7 | -2.0 | +2.35 | +1.0 | +2.0 | +4.60 | +4.00 | | |
| DC 6 | +10.5 | -0.4 | +10.2 | +2.45 | +15.0 | +7.2 | +0.20 | -0.10 | | |
| DC 7 | +6.8 | +8.3 | -2.3 | +1.55 | -0.5 | +4.2 | +5.80 | +3.20 | | |
| DC 8 | +12.3 | +2.2 | +10.0 | +3.00 | +17.0 | +5.0 | -2.00 | +0.65 | | |
| DC AVG. | 33.13 | 12.63 | 12.09 | 8.430 | 27.68 | 16.23 | 8.434 | 6.256 | 100.3 | |
| AC 1 | 32.2 | 12.3 | 11.9 | 8.21 | 26.9 | 15.75 | 8.32 | 6.08 | 99.95 | |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| AC AVG. | | | | | | | | | | |
| S.P. | -2.2 | | | | +1.5 | | | | | |
| AC NOISE | .02 | | | | .03 | | | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I. P. SENDER NOTES

PROJECT Geo Chem-GLEESON
LINE 2 HALF W SP. 1 DATE 9-9

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 4-5 | 3-4 | 4-5 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 |
| RECEIVE | 0-500'W | 5-10 W | → | 10-15 | → | → | 15-20 | → | → | → |
| RANGE | Hi | Hi | → | Hi | → | → | Hi | → | → | → |
| VOLTAGE | 90 | 80 | 90 | 50 | 80 | 180 | 50 | 50 | 250 | 360 |
| CURRENT | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 | 1.0 | 1.0 | 3.0 | 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 |
| VOLTAGE | 150 | 160 | 420 | 460 | 250 | 340 | 420 | 460 | | 50 |
| CURRENT | 3.0 | 3.0 | 5.0 | 5.0 | 5.0 | 6.0 | 5.0 | 5.0 | | 1.0 |

FREQUENCIES .65 3.0
SENDER NO. 66445
OPERATOR HIX
RECEIVER NO. 9741-1
OPERATOR PALMER

COMMENTS:
4-5 — Hi-5
3-4 — Hi-5
2-3 — Hi-7
1-2 — Hi-7

Burr Brown Rec

E-W, a=500'

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT Geochem - Gleeson

LINE 2 HALF E SP. 1 DATE 9-9

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 | 1000-10 | 100-10 | 100-10 | 100-10 |
| DC 1 | +10.0 | +12.4 | +4.0 | +9.5 | +8.0 | +8.7 | +75 | +24.9 | +8.6 | +5.9 |
| DC 2 | +11.8 | +11.4 | +2.6 | +26.2 | +3.5 | +2.0 | 0 | -21.8 | +6.5 | +3.0 |
| DC 3 | +12.5 | +11.9 | +4.4 | +5.7 | +4.3 | +7.8 | +95 | +21.4 | +7.7 | +5.2 |
| DC 4 | +8.4 | +14.0 | 0 | +29.6 | +5.0 | +2.2 | -14 | -22.0 | +6.4 | +3.6 |
| DC 5 | +15.5 | +14.2 | +8.2 | +0.8 | +5.7 | +6.4 | +98 | +4.5 | +8.3 | +6.0 |
| DC 6 | +6.3 | +15.8 | 0 | +33.4 | +7.6 | +4.0 | -42 | -4.5 | +5.0 | +2.0 |
| DC 7 | +18.2 | +11.6 | +6.4 | -1.5 | +2.3 | +5.8 | +130 | -2.0 | +10.3 | +6.0 |
| DC 8 | +3.8 | +16.1 | -0.6 | +37.7 | +6.2 | +6.4 | -40 | -1.0 | +6.0 | +2.4 |
| DC AVG. | 43.44 | 51.33 | 13.33 | 58.98 | 17.61 | 14.25 | 125.1 | 22.88 | 21.84 | 11.43 |
| AC 1 | 42.3 | 50.0 | 13.0 | 57.3 | 17.1 | 13.75 | 121 | 22.45 | 21.1 | 11.0 |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AC AVG. | | | | | | | | | | |
| S.P. | +4.0 | 0 | | +25.5 | | | -20.5 | | | |
| AC NOISE | .03 | .03 | | .04 | | | .03 | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Gleeson
LINE 2 HALF E SP. 1 DATE 9-9

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 | |
| DC 1 | +13.8 | +9.7 | +6.4 | +8.3 | +30.2 | +7.7 | +8.6 | +4.2 | 0 | |
| DC 2 | +16.2 | -1.0 | +4.3 | +3.0 | +5.6 | +6.1 | +4.2 | +8.4 | +.04 | |
| DC 3 | +11.7 | +12.3 | +5.7 | +7.0 | +32.0 | +13.9 | +14.0 | +3.8 | 0 | |
| DC 4 | +22.5 | -2.0 | +5.0 | +4.6 | 0 | +10.1 | +5.7 | +4.6 | +.04 | |
| DC 5 | +7.5 | +11.5 | +1.7 | +6.0 | +36.4 | +10.3 | +11.8 | +4.2 | | |
| DC 6 | +23.4 | +3.5 | +4.0 | +6.0 | -1.8 | +5.4 | -1.0 | +7.4 | | |
| DC 7 | +6.3 | +5.7 | +2.6 | +1.2 | +36.0 | +6.0 | +14.4 | +6.0 | | |
| DC 8 | +26.5 | +1.7 | +7.0 | +6.5 | -1.7 | +12.4 | +5.0 | +7.7 | | |
| DC AVG. | 48.74 | 14.51 | 12.88 | 12.50 | 54.54 | 23.38 | 19.70 | 13.08 | 99.47 | |
| AC 1 | 47.2 | 14.0 | 12.45 | 12.0 | 53.2 | 22.5 | 18.9 | 12.5 | 99.45 | |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| AC AVG. | | | | | | | | | | |
| S.P. | +5.0 | | | | +3.0 | | | | | |
| AC NOISE | .04 | | | | .04 | | | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I. P. SENDER NOTES

PROJECT Geo Chem-GLEESON

LINE 2 HALF E SP. 1 DATE 9-9



| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 1-2 | 2-3 | 1-2 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 |
| RECEIVE | 0-500'E | 5-10 E | → | 10-15 | → | → | 15-20 | → | → | → |
| RANGE | Hi | Hi | → | Hi | → | → | Hi | → | → | → |
| VOLTAGE | 40 | 50 | 40 | 80 | 50 | 40 | 80 | 80 | 100 | 90 |
| CURRENT | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 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 |
| VOLTAGE | 170 | 160 | 160 | 250 | 450 | 410 | 330 | 300 | | 80 |
| CURRENT | 2.0 | 2.0 | 3.0 | 5.0 | 5.0 | 5.0 | 6.0 | 6.0 | | 1.0 |

FREQUENCIES .05 3.0

SENDER NO. 6644S

OPERATOR HIX

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS:
1-2 — 7.
2-3 — 7.
3-4 — 5.
4-5 — 5.

HEINRICHS GEOEX B274-68 LINE 2 G SPD 1 LOOKING NORTH 9-9-68 A= 500 FEET

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 2.000 | 1.000 | 1.000 | 3.000 | 4.000 | I | 3.000 | 3.000 | 5.000 | 5.000 | 5.000 | 6.000 | 5.000 | 5.000 | 1.000 | |
| 5127 | 4360 | 1338 | 546 | 1686 | 167 | 4969 | 1081 | 1541 | 1218 | DC | 3313 | 1263 | 1209 | 843 | 2768 | 1623 | 8434 | 6256 | 1003 | LEFT |
| 5127 | 4360 | 1338 | 546 | 1686 | 167 | 4969 | 1081 | 1541 | 1218 | | 3313 | 1263 | 1209 | 843 | 2768 | 1623 | 8434 | 6256 | 1003 | SIDE |
| 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | N | 2 | 3 | 4 | 5 | 3 | 4 | 5 | 6 | | |
| 51.27 | 43.60 | 13.38 | 54.60 | 16.86 | 16.70 | 49.69 | 10.81 | 15.41 | 12.18 | DCA | 33.13 | 12.63 | 12.09 | 8.430 | 27.68 | 16.23 | 8.434 | 6.256 | 100.30 | |
| 50.00 | 42.10 | 13.00 | 53.10 | 16.35 | 16.20 | 48.40 | 10.50 | 15.00 | 11.80 | AC1 | 32.20 | 12.30 | 11.70 | 8.210 | 26.90 | 15.75 | 8.320 | 6.080 | 99.95 | |
| 50.00 | 42.10 | 13.00 | 53.10 | 16.35 | 16.20 | 48.40 | 10.50 | 15.00 | 11.80 | AC2 | 32.20 | 12.30 | 11.70 | 8.210 | 26.90 | 15.75 | 8.320 | 6.080 | 99.95 | |
| 50.00 | 42.10 | 13.00 | 53.10 | 16.35 | 16.20 | 48.40 | 10.50 | 15.00 | 11.80 | ACA | 32.20 | 12.30 | 11.70 | 8.210 | 26.90 | 15.75 | 8.320 | 6.080 | 99.95 | |
| 76.67 | 65.20 | 80.04 | 81.66 | 100.9 | 124.9 | 74.31 | 64.67 | 76.82 | 91.08 | RHO | 66.06 | 62.86 | 72.32 | 88.25 | 82.79 | 80.91 | 88.29 | 104.8 | .997 | DC CAL |
| 2.2 | 3.2 | 2.6 | 2.5 | 2.8 | 2.7 | 2.3 | 2.6 | 2.4 | 2.9 | PFE | 2.5 | 2.3 | 3.0 | 2.3 | 2.5 | 2.7 | 1.0 | 2.5 | .997 | AC CAL |
| 28 | 49 | 32 | 30 | 27 | 22 | 31 | 40 | 31 | 31 | MCF | 38 | 37 | 41 | 26 | 31 | 33 | 12 | 24 | | |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 2.000 | 2.000 | I | 2.000 | 2.000 | 3.000 | 5.000 | 5.000 | 5.000 | 6.000 | 6.000 | 1.000 | |
| 4344 | 5133 | 1333 | 5898 | 1761 | 1425 | 1251 | 2288 | 2184 | 1143 | DC | 4874 | 1451 | 1288 | 125 | 5454 | 2338 | 197 | 1308 | 9947 | RIGHT |
| 4344 | 5133 | 1333 | 5898 | 1761 | 1425 | 1251 | 2288 | 2184 | 1143 | | 4874 | 1451 | 1288 | 125 | 5454 | 2338 | 197 | 1308 | 9947 | SIDE |
| 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | N | 2 | 3 | 4 | 5 | 3 | 4 | 5 | 6 | | |
| 43.44 | 51.33 | 13.33 | 58.98 | 17.61 | 14.25 | 125.1 | 22.88 | 21.84 | 11.43 | DCA | 48.74 | 14.51 | 1288.0 | 12.50 | 54.54 | 23.38 | 19.70 | 13.08 | 99.47 | |
| 42.30 | 50.00 | 13.00 | 57.30 | 17.10 | 13.75 | 121.0 | 22.45 | 21.10 | 11.00 | AC1 | 47.20 | 14.00 | 1245.0 | 12.00 | 53.20 | 22.50 | 18.90 | 12.50 | 99.45 | |
| 42.30 | 50.00 | 13.00 | 57.30 | 17.10 | 13.75 | 121.0 | 22.45 | 21.10 | 11.00 | AC2 | 47.20 | 14.00 | 1245.0 | 12.00 | 53.20 | 22.50 | 18.90 | 12.50 | 99.45 | |
| 42.30 | 50.00 | 13.00 | 57.30 | 17.10 | 13.75 | 121.0 | 22.45 | 21.10 | 11.00 | ACA | 47.20 | 14.00 | 1245.0 | 12.00 | 53.20 | 22.50 | 18.90 | 12.50 | 99.45 | |
| 65.51 | 77.41 | 80.41 | 88.94 | 106.2 | 214.9 | 188.6 | 138.0 | 164.7 | 172.4 | RHO | 147.0 | 109.4 | *948.6 | 131.9 | 164.5 | 141.0 | 173.3 | 184.1 | 1.005 | DC CAL |
| 2.7 | 2.6 | 2.5 | 2.9 | 3.0 | 3.6 | 3.4 | 1.9 | 3.5 | 3.9 | PFE | 3.2 | 3.6 | 3.4 | 4.1 | 2.5 | 3.9 | 4.2 | 4.6 | 1.000 | AC CAL |
| 41 | 34 | 31 | 33 | 28 | 17 | 18 | 14 | 21 | 23 | MCF | 22 | 33 | 0 | 31 | 15 | 28 | 24 | 25 | | |

Moore Business Forms, Inc.

0106193

JOB B274-68 LINE 4G SPREAD 1

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

CENTER 0.0 LABEL W/E FREQ. 3.0

COUPLING Yes

Double DC

9.10.68
CS

E-W
a=500'

PAGE

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem - Gleeson
LINE 4 HALF W SP. 1 DATE 9-8

| 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- | 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 | +20.6 | +14.4 | +6.2 | +17.4 | +6.2 | +8.0 | +21.8 | +10.2 | +3.5 | +4.2 |
| DC 2 | +28.3 | +22.0 | +6.6 | +14.0 | +4.3 | +0.6 | +9.7 | 0 | +8.2 | +6.4 |
| DC 3 | +15.7 | +9.8 | +6.3 | +17.4 | +5.8 | +8.1 | +21.6 | +10.6 | +3.8 | +5.2 |
| DC 4 | +29.5 | +25.6 | +4.2 | +14.2 | +3.5 | +0.2 | +9.8 | +0.5 | +8.3 | +6.3 |
| DC 5 | +16.3 | +9.8 | +7.8 | +17.7 | +4.5 | +8.0 | +22.2 | +9.8 | +4.6 | +4.2 |
| DC 6 | +30.0 | +23.6 | +4.2 | +12.5 | +5.6 | +1.0 | +10.2 | +2.5 | +6.8 | +7.9 |
| DC 7 | +16.3 | +10.4 | +8.1 | +18.0 | +3.5 | +8.5 | +22.0 | +10.2 | +3.0 | +3.7 |
| DC 8 | +29.4 | +22.4 | +3.8 | +13.7 | +6.2 | 0 | +9.4 | +0.5 | +7.2 | +8.3 |
| DC AVG. | 82.30 | 71.31 | 23.50 | 56.56 | 15.08 | 14.64 | 58.69 | 18.91 | 16.42 | 14.27 |
| AC 1 | 80.0 | 69.6 | 22.9 | 55.0 | 14.6 | 14.2 | 57.1 | 18.35 | 15.85 | 13.7 |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AC AVG. | | | | | | | | | | |
| S.P. | +10.4 | +2.2 | | -7.2 | | | +2.0 | | | |
| AC NOISE | .02 | .02 | | .03 | | | .02 | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Gleeson
LINE 4 HALF W SP. 1 DATE 9-8

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 100-10 | 100-10 | 10-10 | 10-10 | 10-10 | 10-10 | 10-10 | 10-10 | 100-10 | |
| DC 1 | +5.5 | +8.5 | +0.85 | +1.00 | +0.45 | +1.65 | +2.90 | +0.90 | +.55 | |
| DC 2 | +0.8 | -1.4 | +2.45 | +2.25 | +0.35 | -0.62 | -2.10 | -0.18 | +.15 | |
| DC 3 | +6.4 | +9.6 | +0.95 | +0.50 | +1.50 | +1.55 | +3.35 | +0.77 | +.55 | |
| DC 4 | 0 | -2.1 | +2.95 | +3.00 | -1.05 | -1.00 | -2.55 | +0.20 | +.15 | |
| DC 5 | +6.0 | +9.7 | +1.20 | +0.10 | +2.10 | +2.00 | +3.20 | +0.65 | | |
| DC 6 | 0 | -1.9 | +2.00 | +3.05 | +1.55 | -0.85 | -2.58 | +0.22 | | |
| DC 7 | +6.6 | +9.8 | +1.84 | -0.05 | +2.80 | +2.05 | +3.16 | +0.54 | | |
| DC 8 | 0 | -2.6 | +1.65 | +3.30 | -2.60 | -1.40 | -2.94 | -0.20 | | |
| DC AVG. | 13.42 | 13.08 | 6.961 | 4.357 | 5.398 | 3.597 | 2.475 | 1.356 | 100.2 | |
| AC 1 | 13.1 | 12.7 | 6.78 | 4.20 | 5.31 | 3.55 | 2.44 | 1.32 | 99.83 | |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| AC AVG. | | | | | | | | | | |
| S.P. | -12.6 | | | | +8.6 | | | | | |
| AC NOISE | .03 | | | | .02 | | | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I. P. SENDER NOTES

PROJECT Geo Chem - GIFFSON

LINE 4 HALF W SP. 1 DATE 9-8

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 4-5 | 3-4 | 4-5 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 |
| RECEIVE | 0-500W | 5-10 | → | 10-15 | → | → | 15-20 | → | → | → |
| RANGE | Hi | Hi | → | Hi | → | → | Hi | → | → | → |
| VOLTAGE | 100 | 60 | 100 | 60 | 60 | 200 | 80 | 60 | 140 | 310 |
| CURRENT | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 | 1.0 | 1.0 | 2.0 | 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 |
| VOLTAGE | 160 | 260 | 280 | 420 | 420 | 340 | 420 | 520 | | 80 |
| CURRENT | 2.0 | 4.0 | 4.0 | 4.0 | 5.0 | 5.0 | 6.0 | 5.0 | | 1.0 |

FREQUENCIES .05 3.0

SENDER NO. 66445

OPERATOR HIK

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS:

Burr Brown

E-W, a=500'

HEINRICHS GEOEXPLORATION CO.

# I.P. RECEIVER NOTES

PAGE

PROJECT Geochem- Gleeson

LINE 4 HALF E SP. 1 DATE 9-8

| 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 | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 |
| DC 1 | +22.5 | +24.3 | +2.0 | +22.4 | +6.5 | +5.5 | +23.0 | +6.1 | +5.0 | +11.3 |
| DC 2 | +10.5 | +17.5 | +9.4 | +32.4 | +11.6 | +2.0 | +34.4 | +10.2 | +2.4 | -1.8 |
| DC 3 | +24.4 | +23.8 | +1.0 | +16.0 | +7.8 | +3.7 | +19.2 | +3.8 | +6.6 | +11.3 |
| DC 4 | +8.2 | +22.3 | +11.4 | +36.0 | +11.7 | +4.0 | +38.0 | +11.8 | +3.8 | -3.0 |
| DC 5 | +26.2 | +22.3 | -0.2 | +17.4 | +3.8 | +3.7 | +19.4 | +2.4 | +3.8 | +13.8 |
| DC 6 | +5.8 | +23.8 | +11.6 | +31.7 | +14.4 | +3.5 | +40.0 | +14.0 | +5.6 | -5.2 |
| DC 7 | +26.4 | +20.3 | +3.0 | +20.6 | +0.3 | +5.5 | +15.6 | 0 | +2.2 | +14.2 |
| DC 8 | +6.2 | +27.4 | +12.6 | +28.5 | +18.0 | +3.4 | +42.2 | +14.0 | +6.3 | -6.0 |
| DC AVG. | 71.16 | 82.43 | 23.52 | 86.87 | 29.88 | 12.08 | 94.05 | 24.05 | 12.93 | 12.96 |
| AC 1 | 69.5 | 80.2 | 22.9 | 84.3 | 29.0 | 11.7 | 91.2 | 23.3 | 12.5 | 12.5 |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AC AVG. | | | | | | | | | | |
| S.P. | +8.8 | -2.3 | | +0.6 | | | +8.2 | | | |
| AC NOISE | .02 | .02 | | .03 | | | .03 | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I.P. RECEIVER NOTES

PROJECT Geochem-Gleeson

LINE 4 HALF E SP. 1 DATE 9-8

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 | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 | |
| DC 1 | +9.7 | +4.2 | +2.5 | +7.6 | +1.7 | +6.5 | +2.0 | 0 | 0 | |
| DC 2 | +18.0 | +6.2 | +8.2 | -4.3 | +8.6 | +7.5 | +8.7 | +10.5 | +.42 | |
| DC 3 | +4.4 | +6.0 | +3.7 | +12.4 | +5.7 | +8.2 | 0 | -0.3 | 0 | |
| DC 4 | +22.5 | +7.6 | +7.5 | -7.8 | +7.7 | +8.0 | +10.3 | +10.0 | +.42 | |
| DC 5 | +7.6 | +7.6 | 0 | +16.3 | +7.0 | +6.4 | +1.0 | +2.0 | | |
| DC 6 | +24.0 | +8.2 | +8.0 | -9.2 | +6.3 | +8.0 | +10.2 | +7.7 | | |
| DC 7 | +1.5 | +6.2 | -2.5 | +14.3 | +9.2 | +7.6 | +0.6 | +1.2 | | |
| DC 8 | +26.0 | +5.8 | +11.6 | -6.2 | -0.3 | +7.6 | +10.4 | +8.0 | | |
| DC AVG. | 39.97 | 16.67 | 10.76 | 11.72 | 16.65 | 17.95 | 13.23 | 11.90 | 100.1 | |
| AC 1 | 38.6 | 16.0 | 10.3 | 11.4 | 16.0 | 17.2 | 12.7 | 11.4 | 99.87 | |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| AC AVG. | | | | | | | | | | |
| S.P. | +2.7 | | | | +2.3 | | | | | |
| AC NOISE | .03 | | | | .02 | | | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I. P. SENDER NOTES

PROJECT Geo Chem - GLEESON

LINE 4 HALF E SP. 1 DATE 9-8

PAGE 3

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 1-2 | 2-3 | 1-2 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 |
| RECEIVE | 0-500E | 5-10 → | → | 10-15 → | → | → | 15-20 → | → | → | → |
| RANGE | Hi | Hi → | → | Hi → | → | → | Hi → | → | → | → |
| VOLTAGE | 80 | 60 | 80 | 70 | 60 | 80 | 100 | 70 | 60 | 170 |
| CURRENT | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 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 |
| VOLTAGE | 100 | 70 | 60 | 170 | 100 | 140 | 130 | 260 | | 100 |
| CURRENT | 1.0 | 1.0 | 1.0 | 2.0 | 1.0 | 2.0 | 2.0 | 3.0 | | 1.0 |

FREQUENCIES .05 3.0

SENDER NO. 6645

OPERATOR HIX

RECEIVER NO. 9741-1

OPERATOR PALMER

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

HEINRICHS GEOEX  8274-68  LINE 4G  SPD 1  LOOKING NORTH  9-8-68  A= 500 FEET

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 2.000 | 1.000 | 1.000 | 2.000 | 3.000 | I | 2.000 | 4.000 | 4.000 | 4.000 | 5.000 | 5.000 | 6.000 | 5.000 | 1.000 | |
| 823 | 7131 | 235 | 5656 | 1508 | 1464 | 5869 | 1891 | 1642 | 1427 | DC | 1342 | 1308 | 6961 | 4357 | 5398 | 3597 | 2475 | 1356 | 1002 | LEFT |
| 823 | 7131 | 235 | 5656 | 1508 | 1464 | 5869 | 1891 | 1642 | 1427 | | 1342 | 1308 | 6961 | 4357 | 5398 | 3597 | 2475 | 1356 | 1002 | SIDE |
| 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | N | 2 | 3 | 4 | 5 | 3 | 4 | 5 | 6 | | |
| 82.30 | 71.31 | 23.50 | 56.56 | 15.08 | 14.64 | 58.69 | 18.91 | 16.42 | 14.27 | DCA | 13.42 | 13.08 | 6.961 | 4.357 | 5.398 | 3.597 | 2.475 | 1.356 | 100.20 | |
| 80.00 | 69.60 | 22.90 | 55.00 | 14.60 | 14.20 | 57.10 | 18.35 | 15.85 | 13.70 | AC1 | 13.10 | 12.70 | 6.780 | 4.200 | 5.310 | 3.550 | 2.440 | 1.320 | 99.83 | |
| 80.00 | 69.60 | 22.90 | 55.00 | 14.60 | 14.20 | 57.10 | 18.35 | 15.85 | 13.70 | AC2 | 13.10 | 12.70 | 6.780 | 4.200 | 5.310 | 3.550 | 2.440 | 1.320 | 99.83 | |
| 80.00 | 69.60 | 22.90 | 55.00 | 14.60 | 14.20 | 57.10 | 18.35 | 15.85 | 13.70 | ACA | 13.10 | 12.70 | 6.780 | 4.200 | 5.310 | 3.550 | 2.440 | 1.320 | 99.83 | |
| 123.2 | 106.8 | 140.7 | 84.67 | 90.30 | 109.6 | 87.86 | 113.2 | 122.9 | 142.4 | RHO | 40.18 | 48.95 | 52.10 | 57.07 | 16.16 | 21.54 | 21.61 | 22.74 | .998 | DC CAL |
| 2.5 | 2.1 | 2.2 | 2.5 | 2.9 | 2.7 | 2.4 | 2.7 | 3.2 | 3.8 | PFE | 2.1 | 2.6 | 2.3 | 3.4 | 1.3 | .9 | 1.1 | 2.3 | .996 | AC CAL |
| 20 | 19 | 16 | 29 | 32 | 25 | 27 | 24 | 26 | 27 | MCF | 51 | 53 | 44 | 59 | 79 | 44 | 49 | 103 | | |
| 0.0 | 0.0 | 0.0 | 0.0 | .0 | .1 | 0.0 | .0 | .1 | .1 | CPFE | .1 | .3 | .4 | .6 | 1.1 | 1.4 | 2.3 | 3.2 | | |
| 2.5 | 2.1 | 2.2 | 2.5 | 2.9 | 2.6 | 2.4 | 2.6 | 3.1 | 3.7 | CCPFE | 1.9 | 2.4 | 1.9 | 2.7 | .2 | -.5 | -1.2 | -.9 | | |
| 20 | 19 | 16 | 29 | 32 | 24 | 27 | 23 | 26 | 2[illegible] | CCMCF | 48 | 48 | 36 | 48 | 9 | -22 | -57 | -38 | | |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 2.000 | I | 1.000 | 1.000 | 1.000 | 2.000 | 1.000 | 2.000 | 2.000 | 3.000 | 1.000 | |
| 7116 | 8243 | 2352 | 8687 | 2988 | 1208 | 9405 | 2405 | 1293 | 1296 | DC | 3997 | 1667 | 1076 | 1172 | 1665 | 1795 | 1323 | 119 | 1001 | RIGHT |
| 7116 | 8243 | 2352 | 8687 | 2988 | 1208 | 9405 | 2405 | 1293 | 1296 | | 3997 | 1667 | 1076 | 1172 | 1665 | 1795 | 1323 | 119 | 1001 | SIDE |
| 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | N | 2 | 3 | 4 | 5 | 3 | 4 | 5 | 6 | | |
| 71.16 | 82.43 | 23.52 | 86.87 | 29.88 | 12.08 | 94.05 | 24.05 | 12.93 | 12.96 | DCA | 39.97 | 16.67 | 10.76 | 11.72 | 16.65 | 17.95 | 13.23 | 11.90 | 100.10 | |
| 69.50 | 80.20 | 22.90 | 84.30 | 29.00 | 11.70 | 91.20 | 23.30 | 12.50 | 12.50 | AC1 | 38.60 | 16.00 | 10.30 | 11.40 | 16.00 | 17.20 | 12.70 | 11.40 | 99.87 | |
| 69.50 | 80.20 | 22.90 | 84.30 | 29.00 | 11.70 | 91.20 | 23.30 | 12.50 | 12.50 | AC2 | 38.60 | 16.00 | 10.30 | 11.40 | 16.00 | 17.20 | 12.70 | 11.40 | 99.87 | |
| 69.50 | 80.20 | 22.90 | 84.30 | 29.00 | 11.70 | 91.20 | 23.30 | 12.50 | 12.50 | ACA | 38.60 | 16.00 | 10.30 | 11.40 | 16.00 | 17.20 | 12.70 | 11.40 | 99.87 | |
| 106.6 | 123.5 | 141.0 | 130.2 | 179.1 | 181.0 | 140.9 | 144.2 | 193.8 | 194.2 | RHO | 239.6 | 249.8 | 322.5 | 307.3 | 249.5 | 269.0 | 346.9 | 332.9 | .999 | DC CAL |
| 2.2 | 2.5 | 2.5 | 2.8 | 2.8 | 3.0 | 2.9 | 3.0 | 3.2 | 3.4 | PFE | 3.3 | 3.9 | 4.2 | 2.6 | 3.8 | 4.1 | 3.9 | 4.1 | .998 | AC CAL |
| 20 | 21 | 18 | 22 | 16 | 17 | 20 | 21 | 17 | 18 | MCF | 14 | 16 | 13 | 8 | 15 | 15 | 11 | 12 | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | .0 | 0.0 | 0.0 | .0 | .1 | CPFE | 0.0 | 0.0 | 0.0 | .1 | 0.0 | .0 | .1 | .1 | | |
| 2.2 | 2.5 | 2.5 | 2.8 | 2.8 | 3.0 | 2.9 | 3.0 | 3.2 | 3.4 | CCPFE | 3.3 | 3.9 | 4.2 | 2.5 | 3.8 | 4.1 | 3.9 | 4.1 | | |
| 20 | 21 | 18 | 22 | 16 | 16 | 20 | 21 | 16 | 17 | CCMCF | 14 | 16 | 13 | 8 | 15 | 15 | 11 | 12 | | |

0059503

HEINRICHS GEOEX  B274-68  LINE 2 ~~6~~  SPD 1  LOOKING NORTH  9-9-68  A= 500 FEET

INT

| | 30W | 25 | 20 | 15 | 10 | 5 | 0W/E | 5 | 10 | 15 | 20 | 25 | 30E | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |

RHO/2PI

| N | 30W | 25 | 20 | 15 | 10 | 5 | 0W/E | 5 | 10 | 15 | 20 | 25 | 30E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X74 | X82 | X66 ~~65~~ | X77 ~~77~~ | X89 | X189 | X | X | X | X |
| 2 | X | X | X | X66 | X65 | X101 | X80 ~~80~~ | X106 | X138 | X147 | X | X | X |
| 3 | X | X | X83 | X63 | X77 | X125 | X215 | X165 | X109 | X164 | X | X | X |
| 4 | X | X | X | X81 | X72 | X91 | X | X172 | X129 | X141 | X | X | X |
| 5 | X | X | X | X88 | X88 | X | X | X132 | X173 | X | X | X | X |
| 6 | X | X | X | X | X105 | X | X | X | X184 | X | X | X | X |

| | 30W | 25 | 20 | 15 | 10 | 5 | 0W/E | 5 | 10 | 15 | 20 | 25 | 30E | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |

PFE

| N | 30W | 25 | 20 | 15 | 10 | 5 | 0W/E | 5 | 10 | 15 | 20 | 25 | 30E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X2.3 | X2.5 | X2.7 ~~3.2~~ 3.0 | X2.6 ~~2.2~~ 2.4 | X2.9 | X3.4 | X | X | X | X |
| 2 | X | X | X | X2.5 | X2.6 | X2.8 | X2.5 ~~2.6~~ 2.6 | X3.0 | X1.9 | X3.2 | X | X | X |
| 3 | X | X | X2.5 | X2.3 | X2.4 | X2.7 | X3.6 | X3.5 | X3.6 | X2.5 | X | X | X |
| 4 | X | X | X | X2.7 | X3.0 | X2.9 | X | X3.9 | X3.4 | X3.9 | X | X | X |
| 5 | X | X | X | X1.0 | X2.3 | X | X | X4.1 | X4.2 | X | X | X | X |
| 6 | X | X | X | X | X2.5 | X | X | X | X4.6 | X | X | X | X |

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Moore Business Forms, Inc.

| | 30W | 25 | 20 | 15 | 10 | 5 | 0W/E | 5 | 10 | 15 | 20 | 25 | 30E | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8 | 6 | 8 | -1 | 1 | -1 | 0 | 4 | 4 | 30 | 9 | 14 | 17 | |
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |

MCF

| N | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X31 | X30 | X41→ ~~49~~ 44 | X34→ ~~28~~ 31 | X33 | X18 | X | X | X | X | |
| 2 | X | X | X | X38 | X40 | X27 | X31→ 32 | X28 | X14 | X22 | X | X | X | |
| 3 | X | X | X31 | X37 | X31 | X22 | X17 | X21 | X33 | X15 | X | X | X | |
| 4 | X | X | X | X33 | X41 | X31 | X | X23 | X26 | X28 | X | X | X | |
| 5 | X | X | X | X12 | X26 | X | X | X31 | X24 | X | X | X | X | |
| 6 | X | X | X | X | X24 | X | X | X | X25 | X | X | X | X | |

0106155

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HEINRICHS GEOEX  B274-68  LINE 4~~6~~  SPD 1  LOOKING NORTH  9-8-68  A= 500 FEET

INT  INT

1 2 3 4 5

30W 25 20 15 10 5 0W/E 5 10 15 20 25 30E SURFACE

RHO/2PI

| N | 30W | 25 | 20 | 15 | 10 | 5 | 0W/E | 5 | 10 | 15 | 20 | 25 | 30E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X88 | X85 | X107→ ~~107~~ | | X124→ ~~123~~ | X130 | X141 | X | X | X |
| 2 | X | X | X | X40 | X113 | X90 | X141→ ~~141~~ | X179 | X144 | X240 | X | X | X |
| 3 | X | X | X16 | X49 | X123 | X110 | X181 | X194 | X250 | X250 | X | X | X |
| 4 | X | X | X | X22 | X52 | X142 | X | X194 | X322 | X269 | X | X | X |
| 5 | X | X | X | X22 | X57 | X | X | X307 | X347 | X | X | X | X |
| 6 | X | X | X | X | X23 | X | X | X | X333 | X | X | X | X |

1 2 3 4 5

30W 25 20 15 10 5 0W/E 5 10 15 20 25 30E SURFACE

PFE

| N | 30W | 25 | 20 | 15 | 10 | 5 | 0W/E | 5 | 10 | 15 | 20 | 25 | 30E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X2.4 | X2.5 | X2.2→ ~~2.1~~ | | X2.5→ ~~2.5~~ | X2.8 | X2.9 | X | X | X |
| 2 | X | X | X | X2.1 | X2.7 | X2.9 | X2.5→ ~~2.2~~ 2.4 | X2.8 | X3.0 | X3.3 | X | X | X |
| 3 | X | X | X1.3 | X2.6 | X3.2 | X2.7 | X3.0 | X3.2 | X3.9 | X3.8 | X | X | X |
| 4 | X | X | X | X.9 | X2.3 | X3.8 | X | X3.4 | X4.2 | X4.1 | X | X | X |
| 5 | X | X | X | X1.1 | X3.4 | X | X | X2.6 | X3.9 | X | X | X | X |
| 6 | X | X | X | X | X2.3 | X | X | X | X4.1 | X | X | X | X |

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| | 30W | 25 | 20 | 15 | 10 | 5 | 0W/E | 5 | 10 | 15 | 20 | 25 | 30E | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | -6 | 7 | 5 | 12 | 10 | 0 | 9 | 7 | 8 | 16 | 19 | 21 | |
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | SURFACE |
| N | | | | | | | | | | | | | | MCF |
| 1 | X | X | X | X27 | X29 | X20→ ~~19~~ | X21→ ~~20~~ | X22 | X20 | X | X | X | X | |
| 2 | X | X | X | X51 | X24 | X32 | X18→ ~~16~~ X17 | X16 | X21 | X14 | X | X | X | |
| 3 | X | X | X79 | X53 | X26 | X25 | X17 | X17 | X16 | X15 | X | X | X | |
| 4 | X | X | X | X44 | X44 | X27 | X | X18 | X13 | X15 | X | X | X | |
| 5 | X | X | X | X49 | X59 | X | X | X8 | X11 | X | X | X | X | |
| 6 | X | X | X | X | X103 | X | X | X | X12 | X | X | X | X | |

| | 30W | 25 | 20 | 15 | 10 | 5 | 0W/E | 5 | 10 | 15 | 20 | 25 | 30E | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | SURFACE |
| N | | | | | | | | | | | | | | CCPFE |
| 1 | X | X | X | X2.4 | X2.5 | X2.2→ 2.1 | X2.5→ 2.5 | X2.8 | X2.9 | X | X | X | X | |
| 2 | X | X | X | X1.9 | X2.6 | X2.9 | X2.5→ 2.2 | X2.8 | X3.0 | X3.3 | X | X | X | |
| 3 | X | X | X.2 | X2.4 | X3.1 | X2.6 | X3.0 | X3.2 | X3.9 | X3.8 | X | X | X | |
| 4 | X | X | X | X-.5 | X1.9 | X3.7 | X | X3.4 | X4.2 | X4.1 | X | X | X | |
| 5 | X | X | X | X-1.2 | X2.7 | X | X | X2.5 | X3.9 | X | X | X | X | |
| 6 | X | X | X | X | X-.9 | X | X | X | X4.1 | X | X | X | X | |

0575598

| | 30W | 25 | 20 | 15 | 10 | 5 | 0W/E | 5 | 10 | 15 | 20 | 25 | 30E | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |
| 1 | X | X | X | X27 | X29 | X20→ 19 | | X21→ 20 | X22 | X20 | X | X | X | X |
| 2 | X | X | X | X48 | X23 | X32 | X18→ 16 | X16 | X21 | X14 | X | X | X | |
| 3 | X | X | X9 | X48 | X26 | X24 | X16 | X16 | X16 | X15 | X | X | X | |
| 4 | X | X | X | X-22 | X36 | X26 | X | X17 | X13 | X15 | X | X | X | |
| 5 | X | X | X | X-57 | X48 | X | X | X8 | X11 | X | X | X | X | |
| 6 | X | X | X | X | X-38 | X | X | X | X12 | X | X | X | X | |

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PAGE 1

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B-274-68

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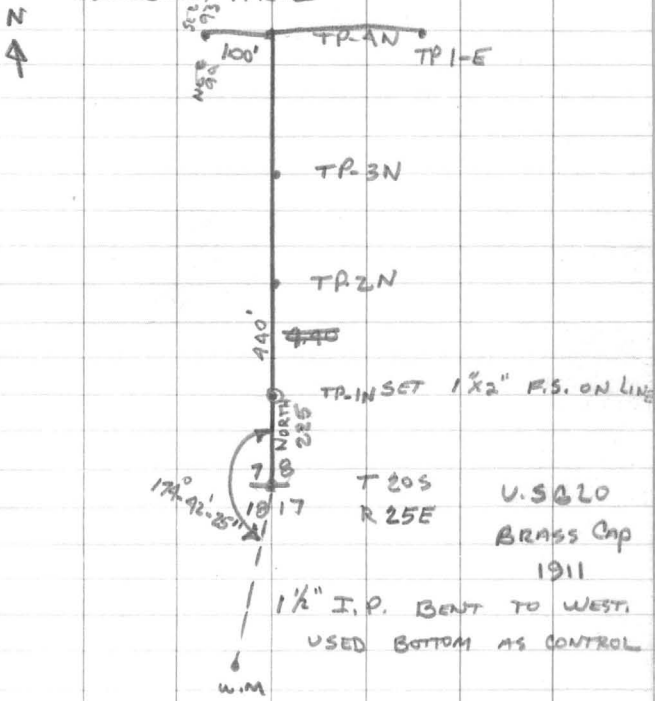


CONTROL LINE NORTH

| ⊼@ | B.S | R.I. | F.S | VERL | HOR. L | HOR DIST |
|---|---|---|---|---|---|---|
| 7 \| 8 / 18 \| 17 | 1x2 ST | 3.75 / 1.50 / 2.25 | 1x2 ST. | -0- | — | 2.25 |
| TP-1N | 7 \| 8 / 18 \| 17 | 7.20 / 2.80 / 4.40 | TP-2N | 2°04'-35" | 180° | 440 |
| TP-2N | TP-1N | 8.25 / 3.50 / 4.75 | TP-3N | -0- | 180° | 4.75 |
| TP-3N | 7 \| 8 / 18 \| 17 | 6.12 / 4.00 / 2.12 | TP-4N | 9°37'20" | 180° | 206 |
| | | | | | CH. + 4 | 210 |



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PAGE 2

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| ⊼@ | BS | R.I. | FS | VERTL | HORIZL | HOR. DIST |
|---|---|---|---|---|---|---|
| TP-4 | 7/8 18 17 | 5.53<br>4.50<br>1.03 | SEC 93<br>NEC 94 | 10° 10' | 90° | 100 |
| SEC. 93<br>NEC 94 | B.S ON HILL<br>20' E OF TP-4N | 8.46<br>5.00<br>3.46<br>x 2<br>6.92 | SEC 91<br>NEC 92 | 2° 39' 35" | 180° | 690 |
| SEC 91<br>NEC 92 | " | 9.95<br>7.00<br>2.95<br>x 2<br>5.90 | SEC 89<br>NEC 90 | ⊖ | 180° | 590 |
| SEC 89<br>NEC. 90 | " | 1.95<br>1.00<br>.95<br>x 2<br>1.90 | ℄ LONESOME ROAD | ⊖ | 180 | 190 |
| " | " | 13.95<br>11.00<br>2.95<br>x 2<br>5.90 | SCE 87<br>NCE 88 | 1° 39' | 180 | 590 |
| TP4 | 7/8 18 17 | 5.48<br>5.00<br>.48 | TP 1-E | 3° 30' 40" | 90° | 48' |
| TP-1E | B.S ON HILL | 10.45<br>5.00<br>5.45 | SEC 95<br>NEC 96 | 4° 09' | 180 | 542 |
| SEC 95<br>NEC 96 | " | 10.92<br>5.00<br>5.92 | SEC 97<br>NEC 98 | 3°-31 | 180 | 590 |

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PAGE 3

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| TR @ | BS | RI | F.S | VERT L | HOR L | DIST |
|---|---|---|---|---|---|---|
| SEC 97<br>NEC 98 | BS ON HILL | 1500<br>910<br>590 | SEC 99<br>NEC 100 | 0 | 180° | 590 |
| SEC 99<br>NEC 100 | " | 10.18<br>800<br>2.18 | TR-2E | 0 | 180° | 210 |
| TR-2E | " | 880<br>500<br>380 | SEC 101<br>SEC 102 | 3° 04' 20" | 180° | 379 |
| TR-2E | " | 1475<br>500<br>975<br>380<br>5 | SEC 103<br>NEC 104 | 2° 21' 40" | 180 | 973<br>- 3<br>970 |
| SEC 87<br>NEC 88 | " | 895<br>600<br>295<br>2<br>590 | SEC 85<br>NEC 86 | 1° 03' 40" | 180° | |
| SEC 85<br>NEC 86 | " | 698<br>500<br>198 | TR-1W | 3° 07' 40" | 180° | 197 |
| TR-1W | " | 793<br>400<br>393 | SEC 83<br>NEC 84 | 0 | 180° | 393 |
| SEC 83<br>NEC 84 | " | 770<br>5.00<br>270 | ~~SEC 83~~<br>~~NEC 84~~<br>TR-2W | 1° 36' 20" | 180° | 270 |
| TR-2W | " | 960<br>800<br>160<br>2<br>320 | SEC 81<br>NEC 82 | 1° 54' | 180 | 320 |
| TR-2W | " | 832<br>500<br>332<br>664 | TR-3W | 0 | 180 | 664 |

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| ↑@ | BS | R.I | FS | VERT ∠ | HOR ∠ | DIST |
|---|---|---|---|---|---|---|
| TP.3W | TP-2W | 7.23<br>6.00<br>1.23 | SEC 79<br>NEC 80 | 0°56'-40" | 180° | 246' |
| SEC 79<br>NEC 80 | TP-2W | 10.90<br>5.00<br>5.90 | SEC 77<br>NEC 78 | 1°07'50" | 180° | 590 |
| SEC. 77<br>NEC 78 | TP-2W | 10.90<br>5.00<br>590 | SEC 75<br>NEC 76 | 0°33'-30" | 180 | 590 |
| SEC 75<br>NEC 76 | " | 7.95<br>5.00<br>2.95<br>x 2<br>590 | SEC 73<br>NEC 74 | 0°59'20" | 180 | 590 |
| SEC 73<br>NEC 74 | TO | G.C. #94 | 30' DUE WEST ON LINE | | | |
| SEC 73<br>NEC 74 | TP2W | 4.03<br>3.00<br>103 | TP.3W | 1°18'30" | 180° | 103 |
| TP-3W | " | ~~SEC 71~~<br>~~NEC 72~~<br>12.87<br>8.00<br>4.87 | SEC 71<br>NEC 72 | 0 | 180° | 487 |
| TP-3W | " | 465<br>100<br>365<br>2<br>730 | TP-4W | 0 | 180° | 730 |
| TP-4W | | ~~1340~~<br>~~900~~<br>~~440~~<br>1500<br>500<br>290<br>2<br>580 | TP-5W | 0°11'10" | 180° | 580 |

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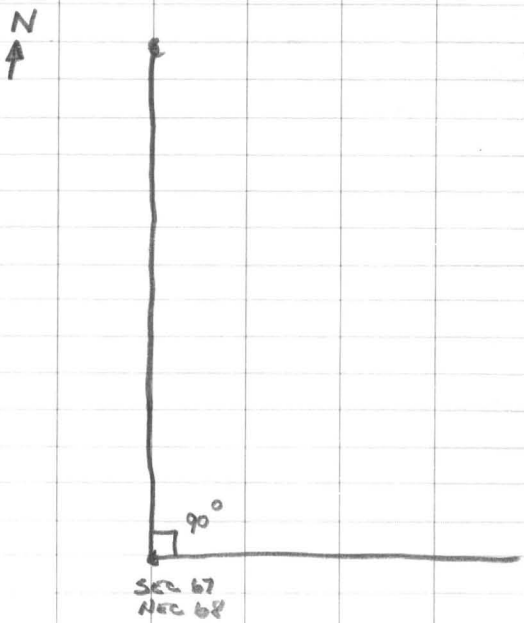
| To | BS | RI | FS | VERL | HORL | DIST |
|---|---|---|---|---|---|---|
| TP-5W | TP-3W | 10.34<br>8.00<br>2.39 | SEC. 69<br>NEC 76 | 3°28'40" | 180 | -2.33 |
| TP 5W | TP-3W | 678<br>500<br>178<br>2<br>356 | SEC 67<br>NEC 68 | 0 | 180 | 356 |

END OF TRAVERSE

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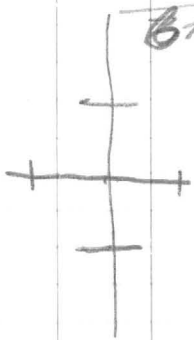

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| T@ | BS | RT. | FS | VERL | HORL | DIST. |
|---|---|---|---|---|---|---|
| SEC 67<br>NEC 68 | TP5W | 650<br>500<br>150<br>2<br>300 | TR1NW | 2°00' | 90° | 300 |
| TP1NW | SEC. 67<br>NEC 68 | 10.85<br>5.00<br>5.85<br>2<br>1170<br>15.10<br>9.15<br>5.85 | TP2NW | 1°58' | 180 | 1170 |
| TP2NW | " | 635<br>500<br>135 | TP3NW | 6°17 | 180° | 133 |
| TP3NW | " | 930<br>700<br>230 | TP4NW | 0°34'30" | 180 | 230 |
| TP4NW | TP3NW | 865<br>750<br>115 | T5NW | — | 180 | 115 |
| TP5NW | TP4NW | 875<br>200<br>675 | TP6NW | — | 180 | 675 |

END 1230

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| TC | BS | RI | FS | VERL | HOR. L | DIST |
|---|---|---|---|---|---|---|
| NEC 94 SEC 93 | 7/8 / 18 17 | 658 / 5.00 / 1.58 | TP 4N | 8° 20' | 180° | 155 |
| TP-4N | " | 1500 / 1100 / 400 | TP5N | -0- | 180 | 800 |
| TP-5N | " | 10.22 / 5.00 / 522 | TP6N | -0- | 180° | 522 |
| TP-6N | TP5N | 12.70 / 6.00 / 6.70 | TP 7N | -0- | 180° | 670 |
| TP-7N | " | 11.10 / 7.00 / 4.10 | TP8N | 7° 00' | 180 | 404 |
| TP-8N | " | 2.69 / 2.00 / 69 | SEC 55 NEC 56 | 0 | 180 | 69 |
| | | END THIS TRAVERSE NORTH | | | | |
| SEC 55 NEC 56 | " | 5.00 / 4.65 / 35 | TP-1W | 9° 33' 20" | 90° | 34' |
| TP 1W | SEC 55 NEC 56 | 958 / 400 / 558 | SEC 53 NEC 54 | 3° 48' 40" | 180 | 556 |
| SEC 53 NEC 54 | TP-1W | 1090 / 5.00 / 590 | SEC 51 NEC 52 | 1° 15 40' | 180' | 590 |
| SEC 51 NEC 52 | TP-1W | 880 / 500 / 380 | TP-2W | 0° 46' | 180 | 380 |

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JULY 1

| Π@ | BS | RI | FS | VERT L | HOR L | DIST |
|---|---|---|---|---|---|---|
| TP2W | TP1W | 1310<br>1100<br>210 | SEC 49<br>NEC 50 | 0 | 180 | 210 |
| TP-2W | " | 10.00<br>2.00<br>800 | SEC 47<br>NEC 48 | 0° 57' | 180 | 800' |
| SEC 47<br>NEC 48 | " | 610<br>500<br>110<br>2<br>220 | TR 3W | 3° 17' | 180 | 219 |
| TR3W | " | 528<br>300<br>228 | TP4W<br>E EDGE<br>OF ROAD | 2° 03' 20" | 180° | 228 |
| TP4W | " | 843<br>700<br>143 | SEC 45<br>NEC 46 | 0 | 180° | 143 |
| TP4W | " | 12.33<br>5.00<br>7.33 | SEC 43<br>NEC 44 | 1° 40' 20" | 180 | 7.33 |

TUE JULY 2

| | | | | | | |
|---|---|---|---|---|---|---|
| SEC 43<br>NEC 44 | " | 9.75<br>5.00<br>475 | TP-5W | 0° 50' | 180 | 475 |
| TP-5W | " | 615<br>500<br>115 | SEC 41<br>NEC 42 | 0 | 180 | 115 |
| SEC 41<br>NEC 42 | " | 1090<br>500<br>590 | SEC 39<br>NEC 40 | 1° 11' | 180' | 590 |

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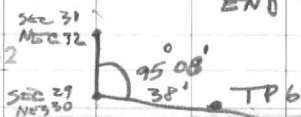
π MOULINET
& MARTINEZ
SALAS
B-27A-68 (9)
JULY 2-1965

| π @ | BS | R1 | FS | VERT | HORZ | DIST |
|---|---|---|---|---|---|---|
| SEC 41 NEC 42 | TP1W | 860<br>150<br>710 | TP6W | 2° 00' 10" | 180 | 709 |
| TP6W | SEC 41 NEC 42 | 971<br>500<br>471 | SEC 37 NEC 38 | 1° 50' | 180° | 471 |
| TP-6W | " | 14.20<br>10.00<br>4.20<br>x 2<br>8.40 | TP7W | — | 180° | 840 |
| TP-7W | TP6W | 811<br>700<br>111<br>2<br>222 | SEC 35 SEC 36 | — | 180° | 222' |
| TP 7W | " | 14.05<br>10.00<br>4.05<br>2<br>8.12 | SEC 33 NEC 34 | 1° 30' | 180 | 8 12 |
| SEC 33 NEC 34 | " | 675<br>500<br>175<br>2<br>350 | TP8W | 0° 54' | 180 | 350 |
| TP8W | " | 840<br>600<br>240 | SEC 31 NEC 32 | — | 180° | 240 |
| SEC 31 NEC 32 | " | 1090<br>500<br>590 | SEC 29 NEC 30 | 0° 19' 20" | 180° | 590 |

END TRAVERSE



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269 60
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328

MOULINET
MARTINEZ
SALAS

(10)

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| T@ | BS | RI | FS | VCAL | HORZ | DIST |
|---|---|---|---|---|---|---|
| SEC 55 NEC 56 | TP 5N | 5.05 1.50 / 155 | TP-9N | 0 | 180° | 155 |
| TP-9N | SEC 55 NEC 56 | 11.10 2.00 / 9.10 | TP10N | 1°53' | 180° | 909 |
| TP10N | " | 11.38 3.00 / 8.38 | TP.11N | 1°42' | 180 | 838 |
| TP11N | " | 11.62 2.00 / 462 | TP-12N | 0°45' | 180 | 462 |
| TP12N | " | 12.87 11.00 / 2.87 | TP SEC 27 NEC 28 | 4°30' | 180 | 285 |
| | | END | TRAV. | NORTH. | | |
| SEC 27 NEC 28 | TP-12N | 962 700 / 262 | TP-14N | 2°49' | 90° | 262 |
| TP 14N | SEC 27 NEC 28 | 9.65 8.00 / 1.65 2 / 330 | SEC 25 NEC 26 | 1°23' | 180° | 330 |
| TP-14N | | 14.98 5.00 / 9.98 | TP-24N | 2°40'40" | 180° | |

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78'
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3 45 40

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MOULINET
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SOLAS
B-274-68

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

JULY 3, 1968
7:10 AM

(11)

| TO | BS | RI. | FS | VERTZ | HORZ | DIST |
|---|---|---|---|---|---|---|
| SEC 55 NEC 56 | TP 5N | 10.55 / 5.00 / 5.55 | TP-1E | 3°45'40 | 270° | 553 |
| TP-1E | SEC 55 NEC 56 | CHAIN | 37' EAST TO SEC 57 NEC 58 | — | 180° | 37' |
| ~~SEC 57 NE~~ TP-1E | " | 848 / 200 / 648 | SEC 59 NEC 60 | 10°0'20" | 180° | 628 |
| SEC 59 NEC 60 | SEC 57 NEC 58 | 1090 / 500 / 590 | SEC 61 NEC 62 | 0 | 180° | 590' |
| SEC 61 NEC 62 | " | 840 / 300 / 640 | SEC 63 NEC 64 | 16°22'50" | 180° | 590' |
| " | " | 15.00 / 4.15 / 10.85 | TP-2E | 21 40 | 180° | 936' |
| TP-2E | " | CHAINED | TP-3E | 0° | 180° | 28 |
| TP 3E | TP-2E | 545 / 400 / 145' | TP4E | 19°17' | 180° | 130' |
| TP4E | TP-3E | 610 / 500 / 110 | NLS FENCE LINE | 24°26' | 180 | 92 |
| 42 TP4E | " | 602 / 500 / 102 | SEC 65 NEC 66 | 23°25' | 180 | 85 |

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~~1285~~
~~770~~
~~2055~~

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MOULINET
MARTINEL
SALAS

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

3 JULY (12)

| Tie | BS | RI | FS | Vert ∠ | Hor ∠ | Dist |
|---|---|---|---|---|---|---|
| TP-2W | SEC 25<br>NEC 26 | 10.78<br>10.00<br>.78 | SEC 23<br>NEC 24 | 0 | 180 | -78 |
| ~~TP-2W~~ | " | | ~~SEC 21~~<br>~~NEC 22~~ | | ~~180~~ | |
| TP-2W | " | 755<br>400<br>355 | TP-3W | 1°15'40" | 180 | 355 |
| TP-3W | " | 1258<br>1100<br>158 | SEC 21<br>NEC 22 | 0 | 180° | 158 |
| TP-3W | " | 10.68<br>500<br>5.68 | TP-4W | 1°43'30" | 180 | 568 |
| TP-4W | TP-3W | 1180<br>1000<br>1.80 | ~~TP-3W~~<br>SEC 19<br>NEC 20 | 0 | 180 | 180 |
| TP-4W | " | 1385<br>1000<br>385<br>2<br>770 | SEC 17<br>NEC 18 | 0°34' | 180 | 770 |
| TP-4W | " | 1145<br>500<br>645<br>2<br>1290 | ~~SEC 15~~<br>~~NEC 16~~<br>TP 5W | 3°17'30" | 180° | 1285 |
| TP-5W | TP-4W | 325<br>250<br>75 | SEC 15<br>NEC 16 | 0 | 180° | 75 |

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1215

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MOULINET
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SALAS

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3 JULY (13)

| @ | BS | R.I | F.S | VERL | HORL | DIST |
|---|---|---|---|---|---|---|
| TP5W | TP4W | 730<br>300<br>430 | TP-6W | 3°58'-30" | 180° | 428 |
| TP6W | TP4W | 538<br>300<br>238 | SEC 13<br>NEC 14 | 4°11' | 180° | 237 |
| SEC 13<br>NEC 14 | TP-6W | 755<br>200<br>555 | TP-7W | 2°31' | 180° | 555 |
| TP-7W | TP 6W | 800<br>765<br>35 | SEC 11<br>NEC 12 | 0 | 180° | 35 |
| TP-7W | " | 728<br>100<br>628 | SEC 9<br>NEC 10 | 4°13' | 180° | 624 |
| TP-7W | " | 1500<br>892<br>608<br>2<br>1216 | SEC 7<br>NEC 8 | 1°34' | 180° | 1215 |
| | | SET TP. FORWARD<br>NO READING | | | | |
| TP-8W | SEC 11<br>NEC 12 | 548<br>300<br>248 | SEC 7<br>NEC 8 | 4°38' | 180 | -246 |
| | | SET UP AT TP<br>SHOT BACK TO | | | SEC 7<br>NEC 8 | |
| TP8W | SEC 7<br>NEC 8 | 745<br>400<br>345 | SEC 5<br>NEC 6 | 0 | 180 | 345 |

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MARTINEZ
SALAS

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(14)

| ⊼@ | B.S. | R.I. | F.S. | VERT L | HOR L | DIST |
|---|---|---|---|---|---|---|
| SEC 5 NEC 6 | TP-8W | 1500 910 590 | SEC 3 NEC 4 | -0- | 180° | 590 |
| SEC 3 NEC 4 | TP8W | 1500 1205 295 x2 590 | SEC 1 NEC 2 | -0- | 180° | 590 |

END TRAVERSE

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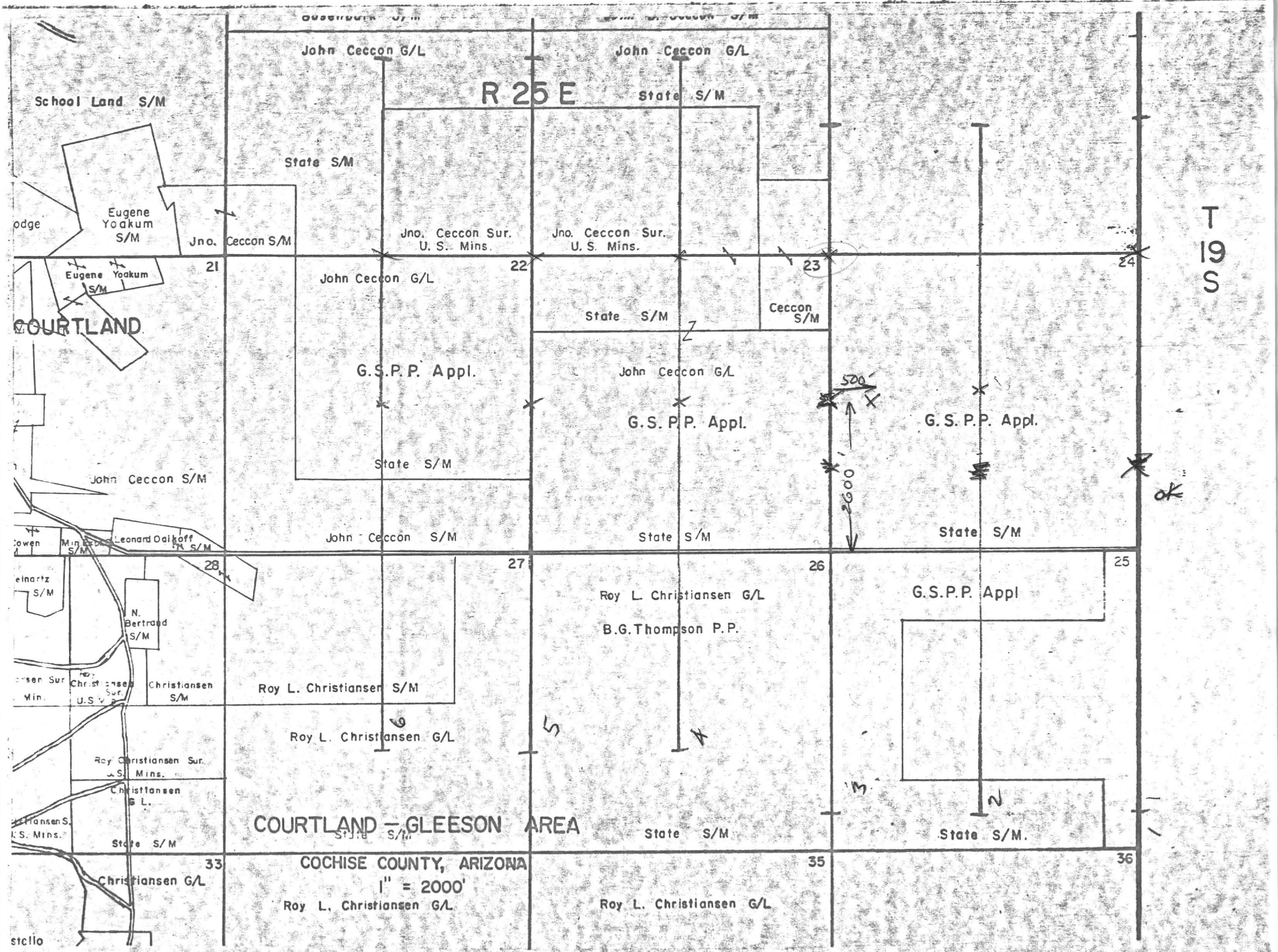

R 25 E
T 19 S
John Ceccon G/L
John Ceccon G/L
School Land S/M
State S/M
State S/M
Eugene Yoakum S/M
Jno. Ceccon S/M
Jno. Ceccon Sur. U. S. Mins.
Jno. Ceccon Sur. U. S. Mins.
Eugene Yoakum S/M
John Ceccon G/L
State S/M
Ceccon S/M
COURTLAND
G.S.P.P. Appl.
John Ceccon G/L
G.S.P.P. Appl.
G.S.P.P. Appl.
500'
2600'
ok
State S/M
John Ceccon S/M
John Ceccon S/M
State S/M
State S/M
Leonard Oalkoff S/M
N. Bertrand S/M
Roy L. Christiansen G/L
B.G. Thompson P.P.
G.S.P.P. Appl
Christiansen S/M
Roy L. Christiansen S/M
Roy L. Christiansen G/L
Roy Christiansen Sur. U.S. Mins.
Christiansen G L.
State S/M
State S/M
State S/M.
COURTLAND – GLEESON AREA
COCHISE COUNTY, ARIZONA
1" = 2000'
Christiansen G/L
Roy L. Christiansen G/L
Roy L. Christiansen G/L
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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

# OUTLAW MOUNTAIN QUADRANGLE
ARIZONA–COCHISE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
NE/4 GLEESON 15' QUADRANGLE

Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography from aerial photographs by ER–55 plotter
Aerial photographs taken 1956. Field check 1958

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

13°
TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1958

SCALE 1:24 000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

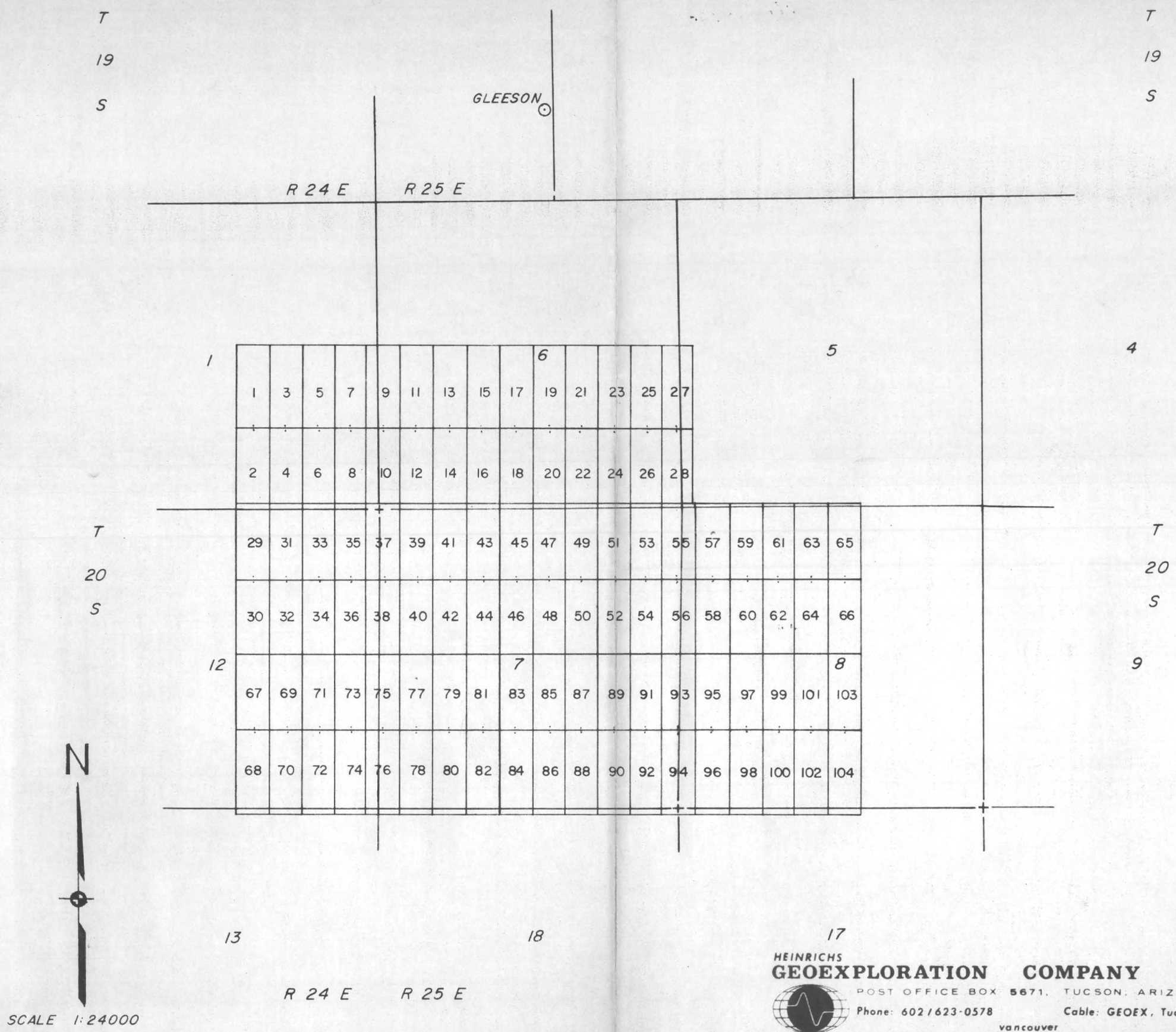
ARIZONA
QUADRANGLE LOCATION

ROAD CLASSIFICATION
Light-duty ——— Unimproved dirt - - - - -

OUTLAW MOUNTAIN, ARIZ.
NE/4 GLEESON 15' QUADRANGLE
N3137.5—W10945/7.5

1958

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.—1963-NS




SCALE 1:24000

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

· DENOTES LOCATION MONUMENT

DOT CLAIMS 1 THRU 104

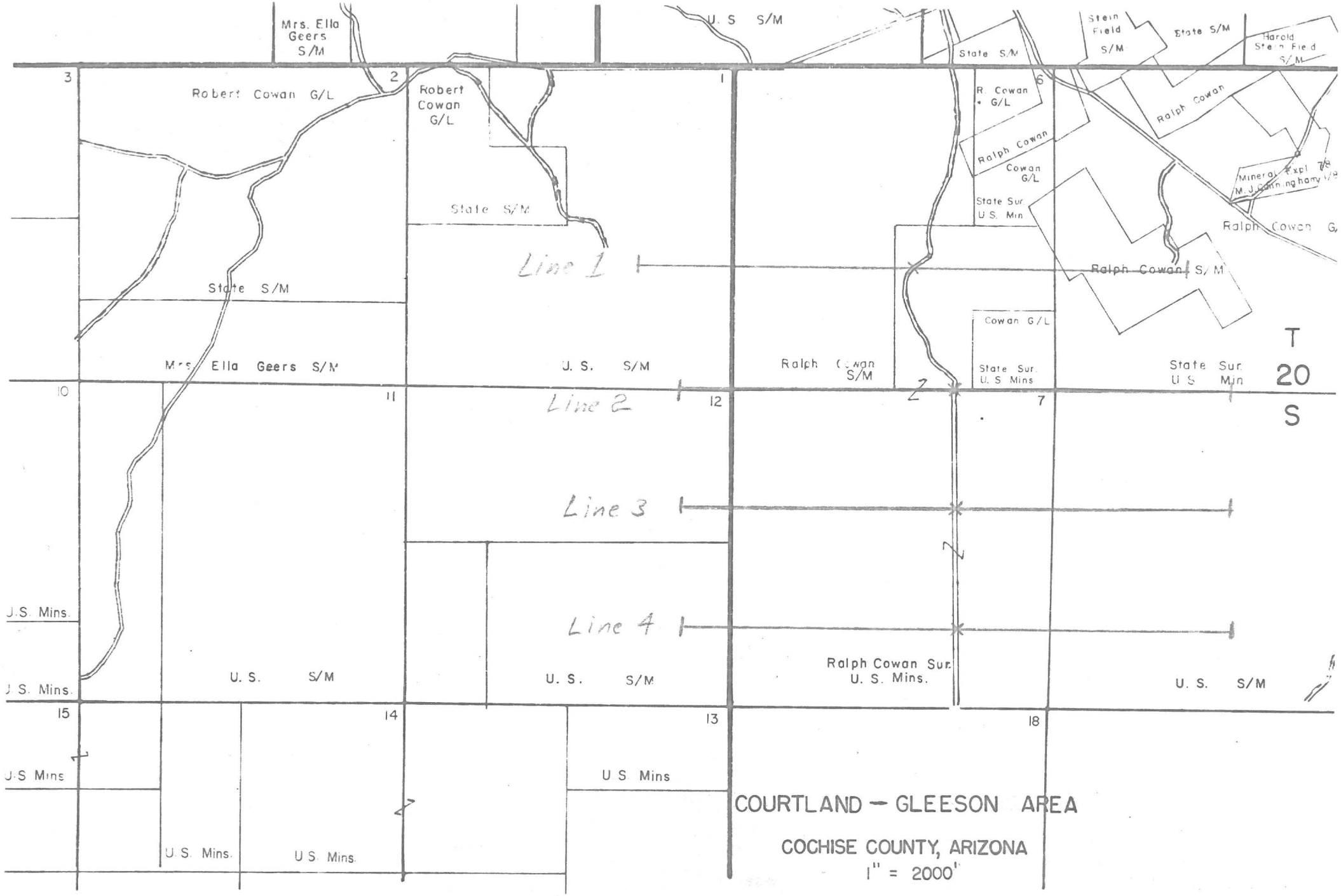
COCHISE COUNTY, ARIZ.

FOR

GEOCHEMICAL SURVEYS

TRANSIT STADIA SURVEY JUNE 28-JULY 3, 1968

JULY 11, 1968




COURTLAND — GLEESON AREA

COCHISE COUNTY, ARIZONA

1" = 2000'

Recommended I.P. coverage as per proposal of 7/11/68

R 24 E

# COURTLAND — GLEESON PROSPECT

COCHISE COUNTY, ARIZONA

SCALE 1" = 2000'

R24E R25E R25E

T20S

central

Sec. 6

Sec 1

1 3 5 7 9 11 13 15 17 19 21 23 25 27

2 4 6 8 10 12 14 16 18 20 22 24 26 28

29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65

30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66

Sec 12

Sec. 8

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68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104

Sec. 7

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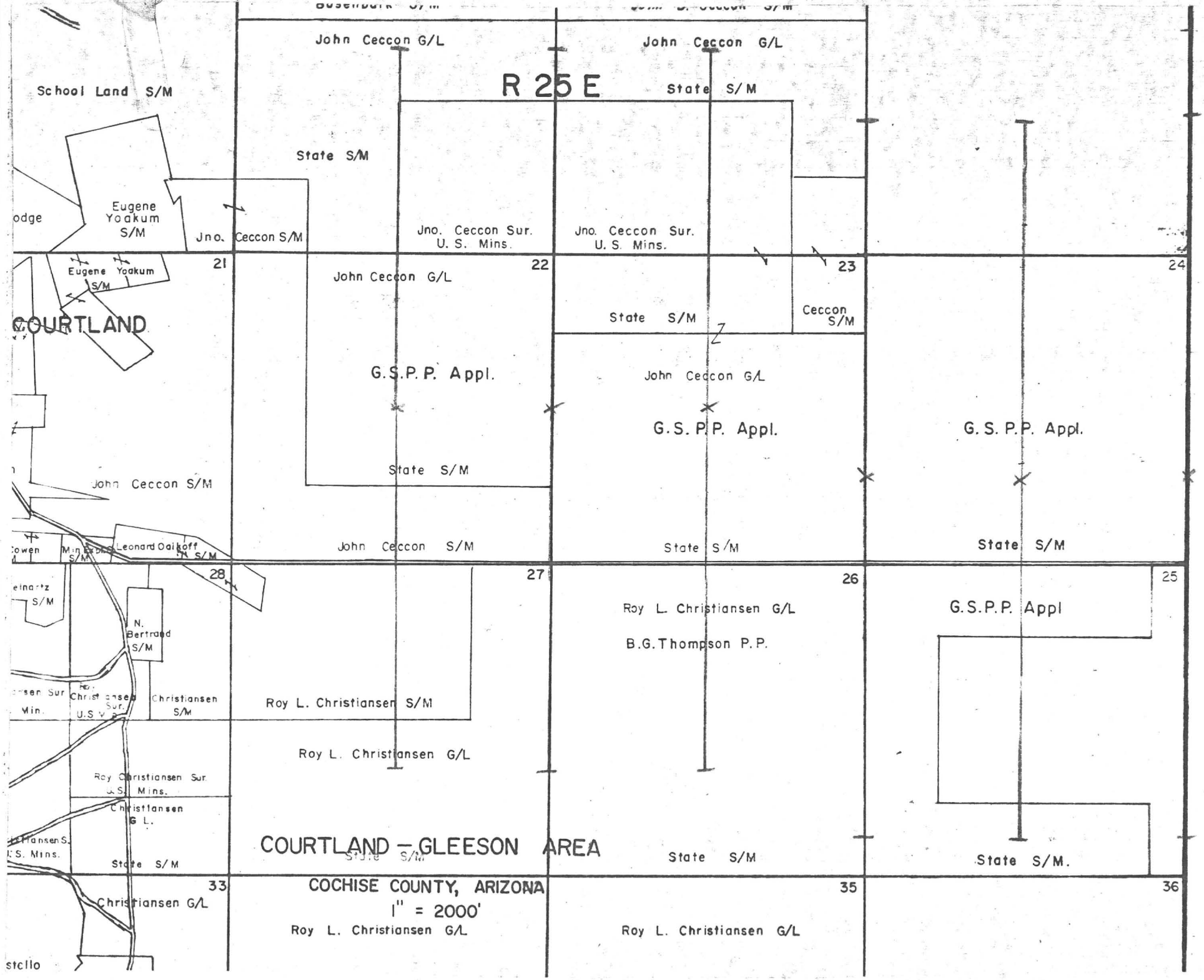
R 25 E
T 19 S
John Ceccon G/L
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School Land S/M
State S/M
State S/M
Eugene Yoakum S/M
Jno. Ceccon S/M
Jno. Ceccon Sur. U. S. Mins.
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Eugene Yoakum S/M
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COURTLAND
John Ceccon G/L
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G.S.P.P. Appl.
John Ceccon G/L
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COURTLAND - GLEESON AREA
COCHISE COUNTY, ARIZONA
1" = 2000'
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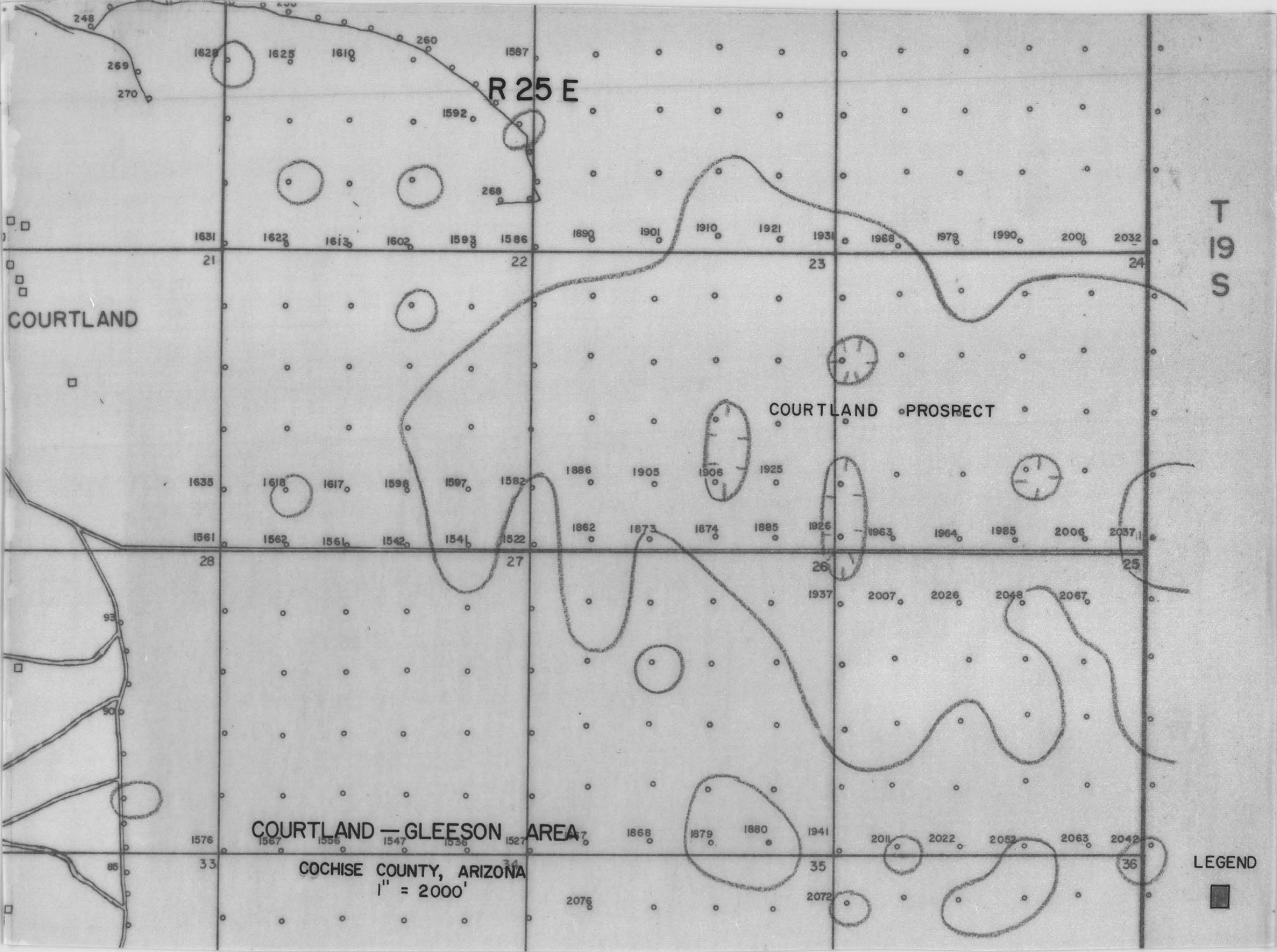
Christiansen G/L
Roy L. Christiansen G/L
Roy L. Christiansen G/L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COURTLAND
COURTLAND PROSPECT
COURTLAND — GLEESON AREA
COCHISE COUNTY, ARIZONA
1" = 2000'
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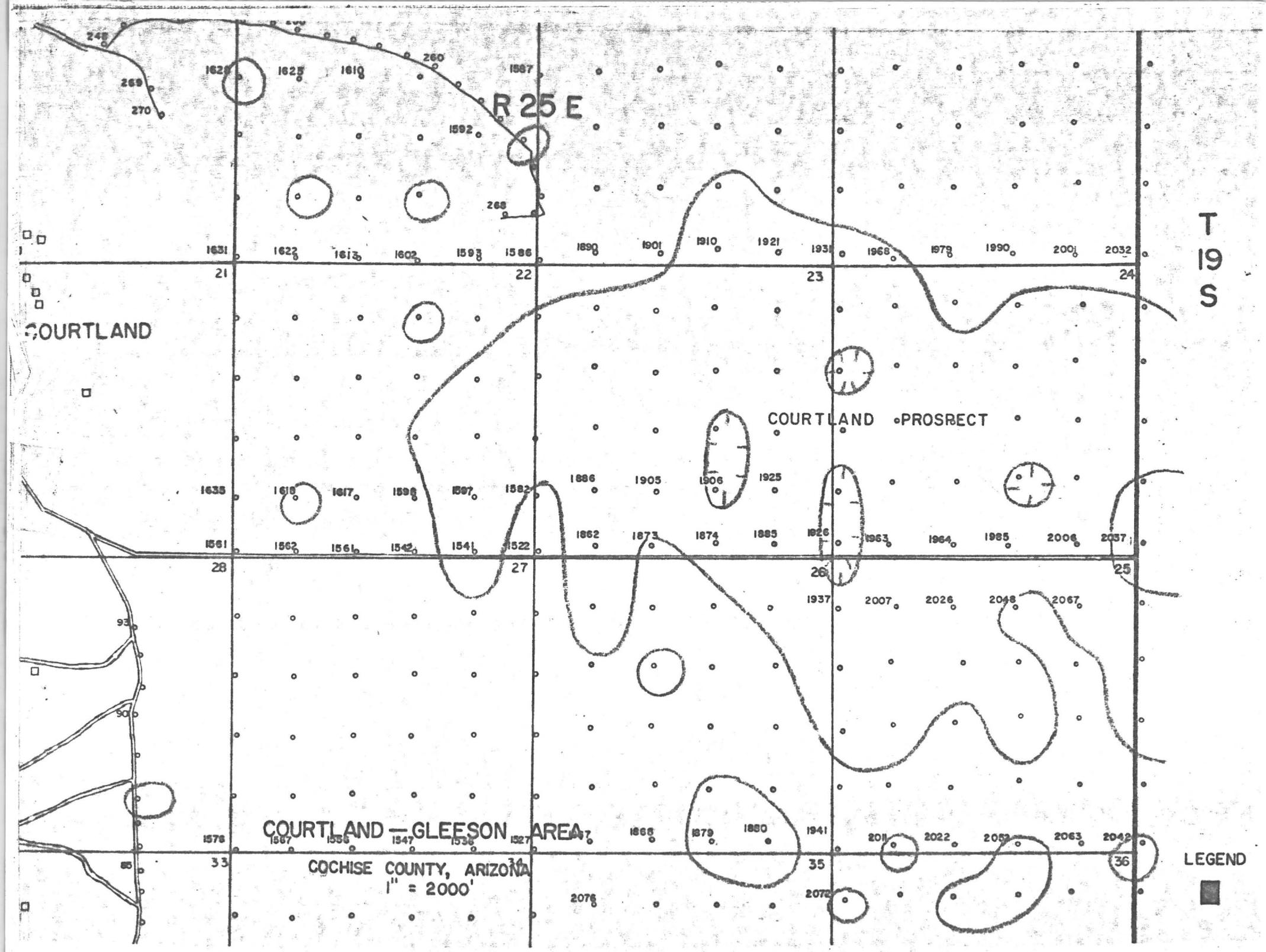
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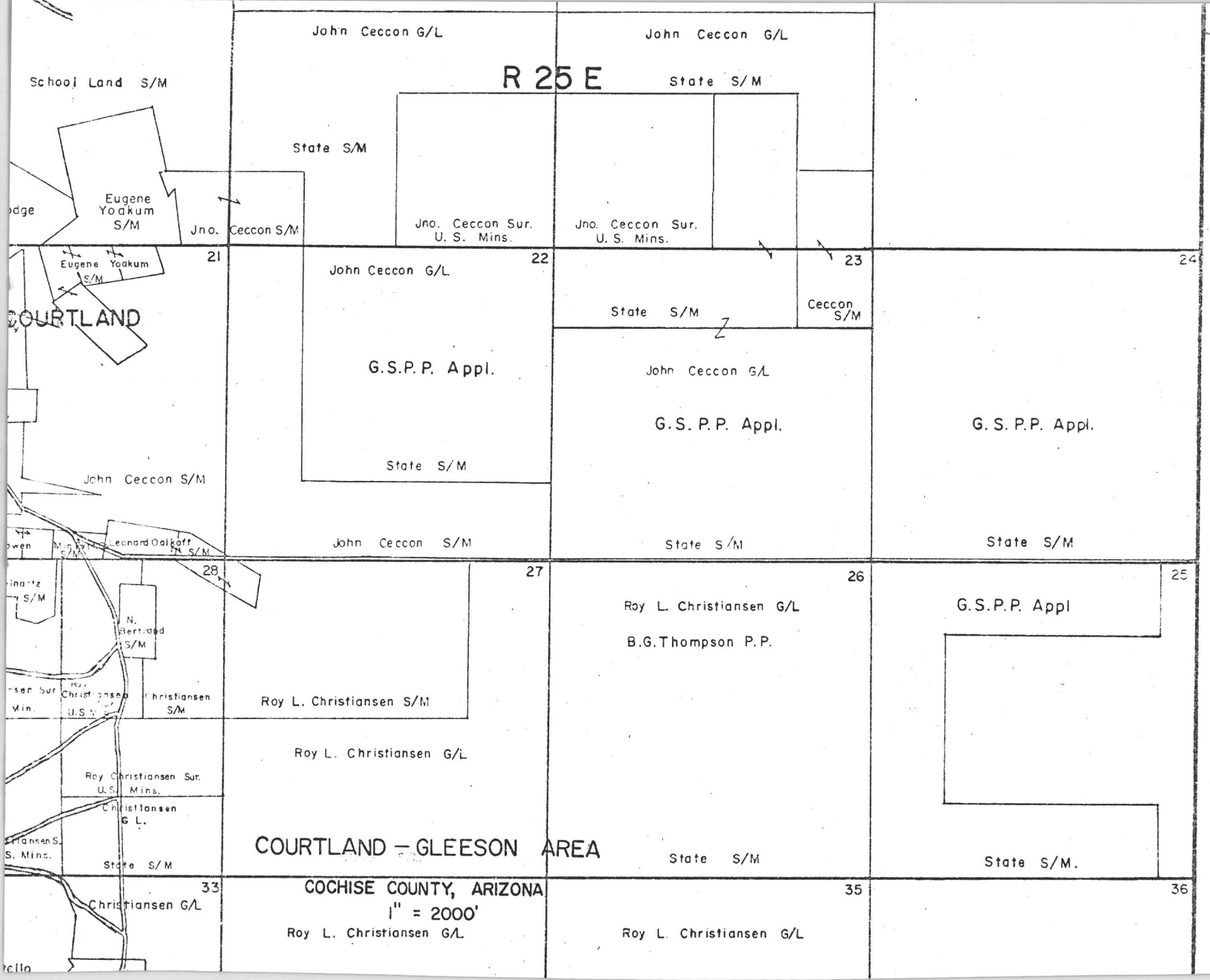
COURTLAND — GLEESON AREA
COCHISE COUNTY, ARIZONA
1" = 2000'
LEGEND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State S/M
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Roy L. Christiansen G/L
B.G.Thompson P.P.
Roy Christiansen Sur. U.S. Mins.
Christiansen G L.
COURTLAND — GLEESON AREA
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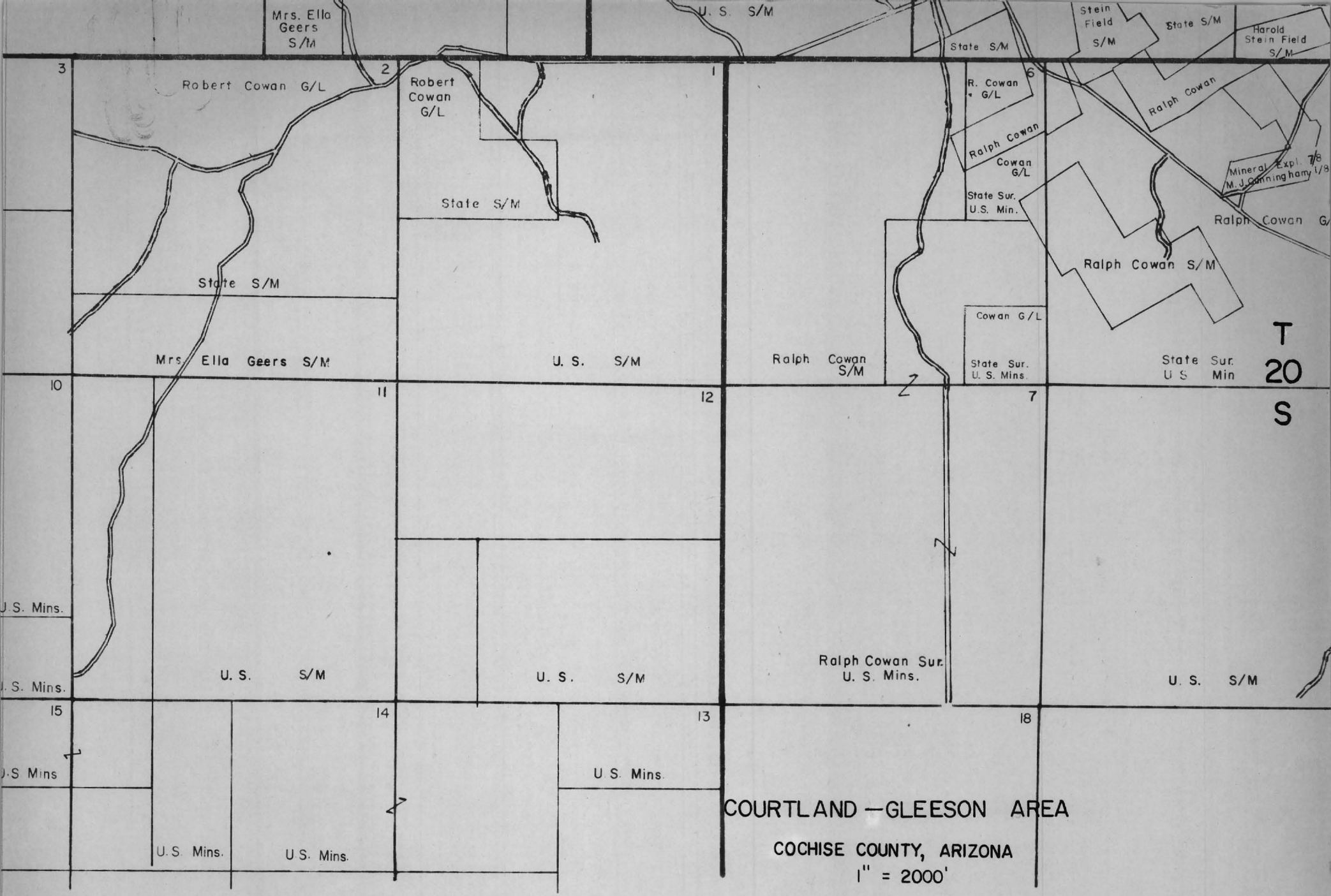
COCHISE COUNTY, ARIZONA
1" = 2000'


Mrs. Ella Geers S/M
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State S/M
Stein Field S/M
State S/M
Harold Stein Field S/M
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Robert Cowan G/L
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Robert Cowan G/L
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State S/M
State S/M
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U. S. S/M
Ralph Cowan S/M
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R. Cowan G/L
Ralph Cowan
Cowan G/L
State Sur. U.S. Min.
Ralph Cowan
Mineral Expl. M. J. Cunningham 7/8 1/8
Ralph Cowan G/
Ralph Cowan S/M
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COURTLAND—GLEESON AREA
COCHISE COUNTY, ARIZONA
1" = 2000'
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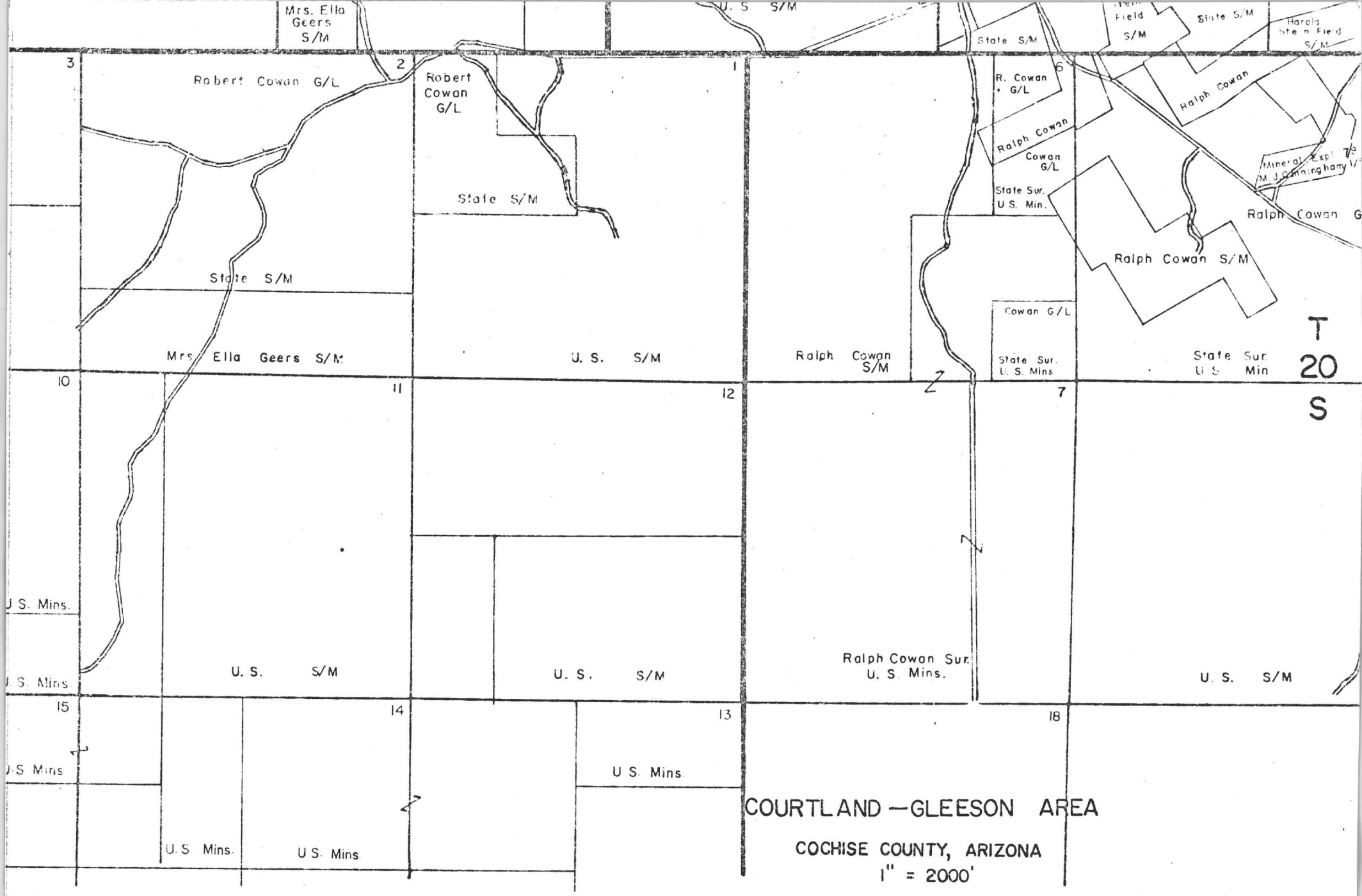
Mrs. Ella Geers S/M
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Mineral Expl. T/e M. J. Cunningham
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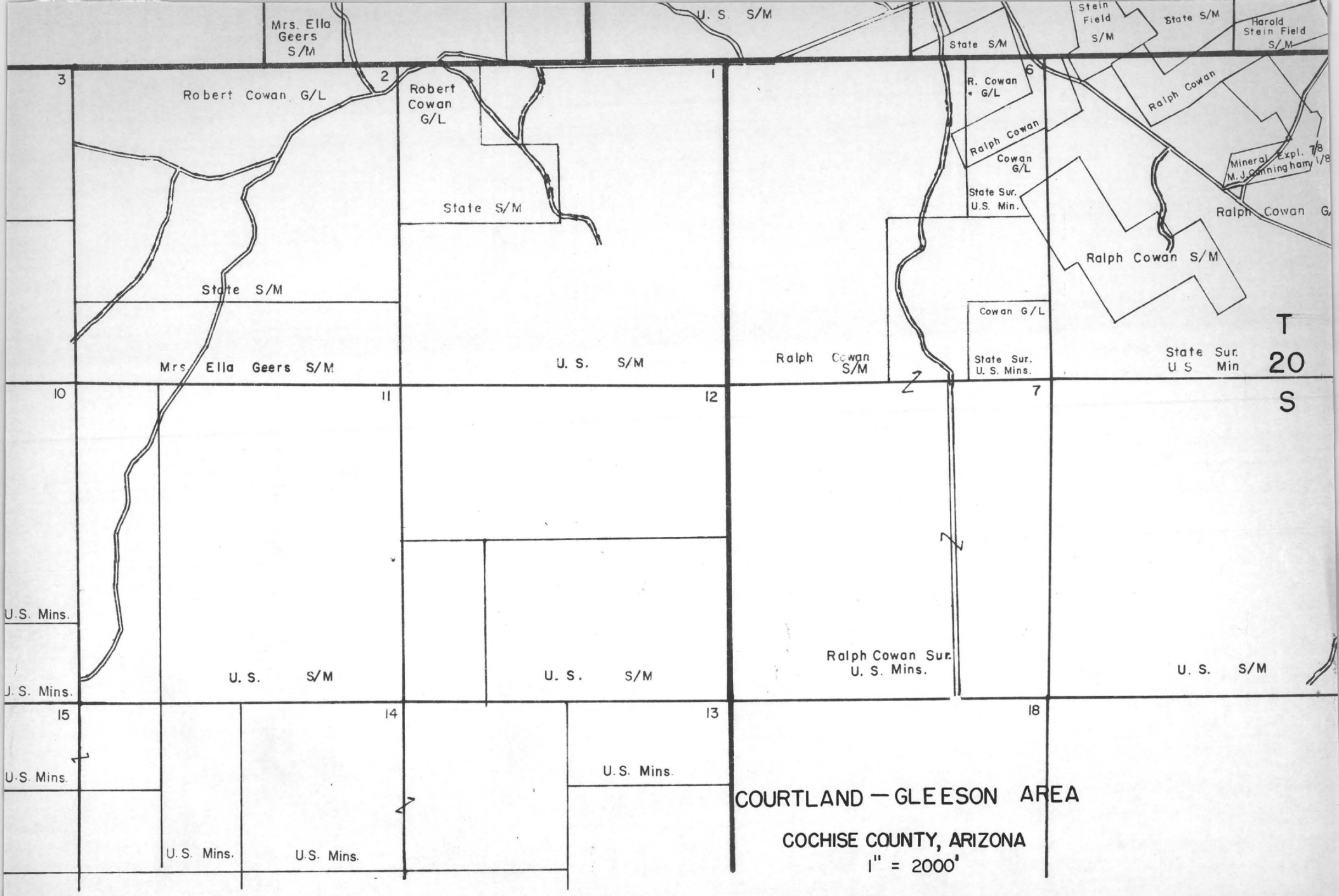
COURTLAND—GLEESON AREA
COCHISE COUNTY, ARIZONA
1" = 2000'
R 24 E


Mrs. Ella Geers S/M
U. S. S/M
State S/M
Stein Field S/M
State S/M
Harold Stein Field S/M
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Robert Cowan G/L
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Robert Cowan G/L
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State S/M
State S/M
Mrs. Ella Geers S/M
U. S. S/M
R. Cowan G/L
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Ralph Cowan
Ralph Cowan
Cowan G/L
State Sur. U.S. Min.
Mineral Expl. 7/8 M. J. Cunningham 1/8
Ralph Cowan G/L
Ralph Cowan S/M
Cowan G/L
Ralph Cowan S/M
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Ralph Cowan Sur. U. S. Mins.
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U.S. Mins.
COURTLAND — GLEESON AREA
COCHISE COUNTY, ARIZONA
1" = 2000'
R 24 E

GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

June 19, 1968

GEOEX
GEOLOGICAL ENGINEERS
TUCSON, ARIZONA

JUN 21 1968

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

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

Dear Chris:

This will confirm my phone conversation with you today to have your claim staking crew stake the following areas: the S/2 of Section 6, all of Section 7 and the W/2 of Section 8, T20S, R25E; also the SE corner of Section 1 and E/2 of Section 12 in T20S, R24E.

It is my understanding that you will be able to get at this the early part of next week. Please let us know if there is any change in these plans.

Yours very truly,

Philip B. Stewart

PBS:sd

GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

August 28, 1968

AUG 31 1968

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

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

Dear Chris:

We have permits for your geophysical work at the Courtland Prospect from Christiansen and Grizzle; and Mrs. Ceccon will give permission if one of your men will go by to see her. She lives on the ground.

It will be more convenient for us to do the Courtland Area first; provided this will not interfere with the type of equipment to be used. Our current prospecting permits expire on September 15 and will have to be renewed unless we complete the work between now and then. Please keep in touch both as to the permit situation and your equipment problem, if any.

Very truly yours,

GEOCHEMICAL SURVEYS

W. R. Ransone

W. R. Ransone

WRR:tjc

FROM THE DESK OF:
Raleigh Usry

Mr Ludwig,

In the event you haven't received copies of our permits at Courtland, here are copies.

MEMBER AMERICAN HEREFORD ASSOCIATION
Breeding Modern Herefords

JOHN B. & DAMILEY J. CECCON
OWNERS

TEL.: (602) 642-3521

C LAZY J RANCH
COURTLAND STAR ROUTE
ELFRIDA, ARIZONA
85610

HEINRICHS GEOEX
GEOPHYSICAL ENGINEERS
TUCSON, ARIZONA

SEP 7 1968

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

August 31, 1968

H. O. Rowland, Jr.
203 Crescendo Building
Abilene, Texas 79601

Dear Mr. Rowland:

I refer to your letter of August 26 in which you request permission to perform a geophysical survey on my property. Permission is granted with the following understandings and provisions:

1. That I be personally contacted by the survey crew prior to initiation of work so that I can provide keys to locked gates and explain procedures related to the cattle on the premises.

2. That exploratory work in the vicinity of watering holes be completed in a timely manner to prevent excessive denial of these places to the cattle.

3. That any cores drilled be capped when abandoned. This can be done in any manner that will prevent injury to the livestock such as placing a large stone over the hole.

4. It is understood that in guarantying Geochemical Surveys' responsibility for all damages incurred during surveying and drilling operations, you are acting as agent. If you are not, I would appreciate notification by Geochemical Surveys of this guaranty.

5. If water is encountered during drilling, I would appreciate notification of this fact as well as any other pertinent information.

6. That on completion of the survey, I be so informed, keys returned, and the general area of activity outlined.

It should be understood that several of the above provisions are necessitated by the nature of the business I am in. All animals on the ranch, with the exception of the many jack-rabbits, occasional deer, and stray hunters, are Registered Hereford cattle. The value of the animals, as well as the breeding practices involved, require strict control over the herds.

I wish you the best of luck in your survey and remain,

Yours truly,

Damiley J. Ceccon

(Mrs.) Damiley J. Ceccon

RESIDENCE
RT. 1 - BOX 2
ANSON, TEXAS
A/C 915 823-1603

**H. O. (Herb) Rowland, Jr.**
"LANDMAN"
203 CRESCENDO BLDG.
A/C 915 672-1940
ABILENE, TEXAS 79601

LEASES
ROYALTY
UNITIZATION
POOLING

August 26, 1968

Mr. Roy Christiansen
118 North 1st St.,
Tombstone, Arizona.

Dear Roy:

In line with our agreement and on behalf of Geochemical Surveys, 2505 Turtle Creek Blvd., Dallas, Texas, I would like to obtain your written permission to do geophysical work on the property which you ~~own or~~ RLC lease out of Sections 26, 27, 28, 34 and 35, T-19-S, R-25-E, Cochise County, Arizona. The work to be done would use only light equipment however we would like your permission to do core work if we feel it desirable.

The work willbe done by Geochemical Surveys or its contractors, however Geochemical will assume full responsible for all damages caused by operations conducted under this permitt.

I would appreciate your written approval by signing, in the space provided the copyof this letter and returning the same to me in the enclosed stamped envelope.

Further, in line with your request, we will advise you of any water encountered in the event core holes are drilled on the above property under this permitt.

Yours truly,
Herb
H. O. Rowland, Jr.

HOR/gr

PERMISSION, AS ABOVE REQUESTED, IS HEREBY GRANTED ON THIS THE 29 DAY OF AUGUST 1968.

Roy Christiansen
Roy Christiansen, Mgr. HC Ranch

note: the patented portions of sec 27 + 28 are listed in a mineral lease to another Company.

RESIDENCE
RT. 1 - BOX 2
ANSON, TEXAS
A/C 915 823-1603

**H. O. (Herb) Rowland, Jr.**
"LANDMAN"
203 CRESCENDO BLDG.
A/C 915 672-1940
ABILENE, TEXAS 79601

LEASES
ROYALTY
UNITIZATION
POOLING

August 26, 1968

Mr. Lewis Grizzle
Elfrida, Arizona.

Dear Mr. Grizzle:

In line with our agreement and on behalf of Geochemical Surveys, 2505 Turtle Creek Bldv., Dallas, Texas, I would like to obtain your written permission to do geophysical work on the property which you own or lease out of Sections 24 and 25, T-19-S, R-25-E, Cochise County, Arizona. The work to be done would use only light equipment however we would like your permission to do core work if we feel it desirable.

The work will be done by Geochemical Surveys or its contractors, however Geochemical will assume full responsible for all damages caused by opertions conducted under this permitt.

I would appreciate your written approval by signing, in the space provided, the copy of this letter and returning the same to me in the enclosed stamped envelope.

Further, in line with your request, we will advise you of any water encountered in the event core holes are drilled on the above property under this permitt.

Yours truly,

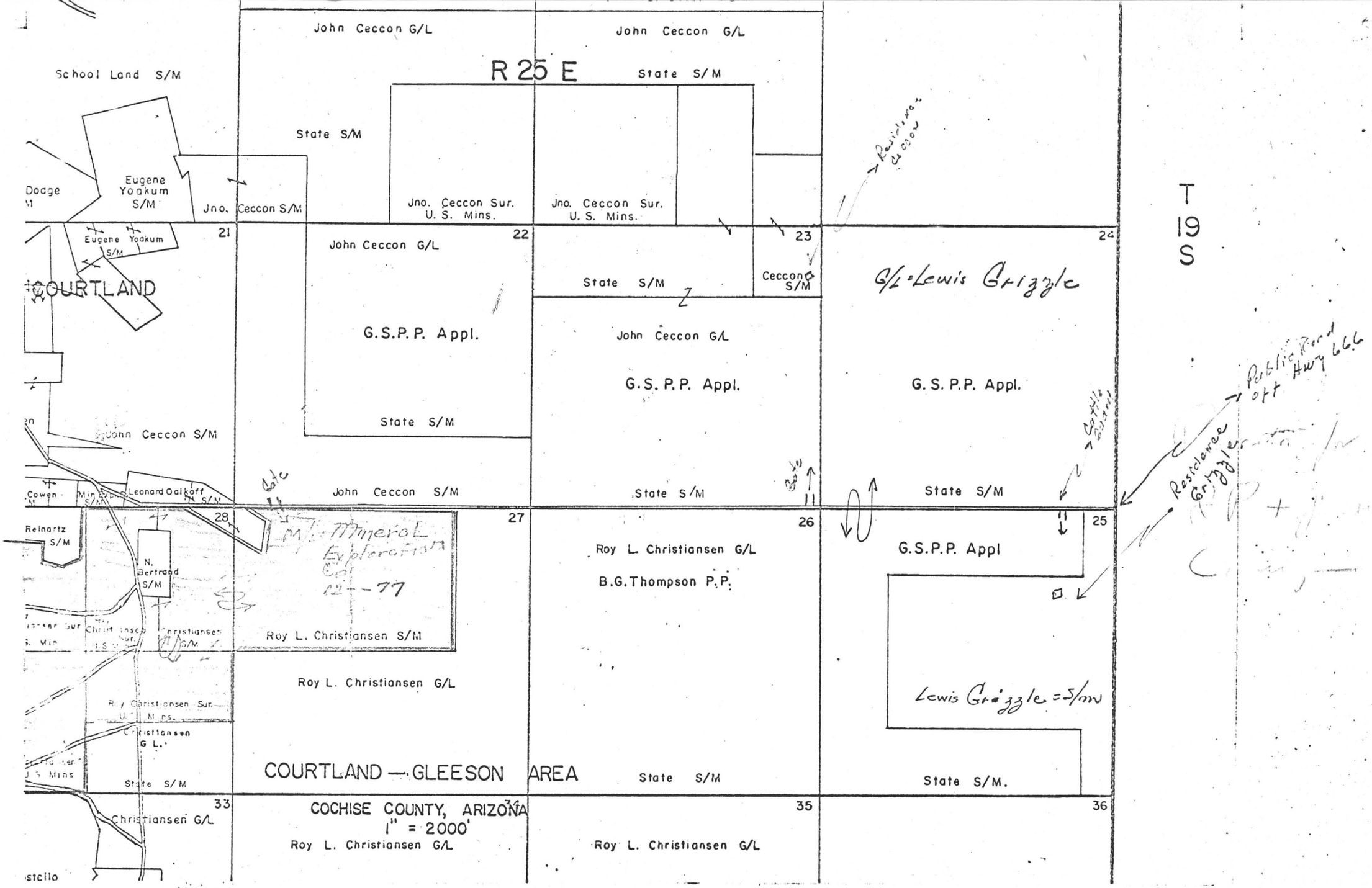
H. O. Rowland, Jr.

HOR/gr

PERMISSION, AS ABOVE REQUESTED, IS HEREBY GRANTED ON THIS THE 28 DAY OF AUGUST 1968.

Lewis Grizzle

Lewis Grizzle



R 25 E
T 19 S
John Ceccon G/L
John Ceccon G/L
School Land S/M
State S/M
State S/M
Dodge
Eugene Yoakum S/M
Jno. Ceccon S/M
Jno. Ceccon Sur. U. S. Mins.
Jno. Ceccon Sur. U. S. Mins.
Eugene Yoakum S/M
21
22
23
24
John Ceccon G/L
State S/M
Ceccon S/M
G/L Lewis Grizzle
COURTLAND
G.S.P.P. Appl.
John Ceccon G/L
G.S.P.P. Appl.
G.S.P.P. Appl.
State S/M
John Ceccon S/M
Leonard Oalkoff S/M
John Ceccon S/M
State S/M
State S/M
Cowen
Reinartz S/M
28
27
26
25
N. Bertrand S/M
Roy L. Christiansen G/L
B.G.Thompson P.P.
G.S.P.P. Appl
Roy L. Christiansen S/M
Roy L. Christiansen G/L
Lewis Grizzle = S/m
Christiansen G L.
State S/M
COURTLAND — GLEESON AREA
State S/M
State S/M.
33
34
35
36
Christiansen G/L
COCHISE COUNTY, ARIZONA
1" = 2000'
Roy L. Christiansen G/L
Roy L. Christiansen G/L
Public Road off Hwy 666
Residence Grizzle
Cattle Guard
Gate
Gate

RESIDENCE
RT. 1 - BOX 2
ANSON, TEXAS
A/C 915 823-1603

**H. O. (Herb) Rowland, Jr.**
"LANDMAN"
203 CRESCENDO BLDG.
A/C 915 672-1940
ABILENE, TEXAS 79601

HEINRICHS GEOEX

LEASES
ROYALTY
UNITIZATION
POOLING

September 4, 1968

SEP 9 1968

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

In re: Courtland-Gleeson
Prospect
Cochise County, Ariz.

Mr. R. S. Usry
Geochemical Surveys
P. O. Box 19508
Dallas, Texas. 75219

Dear Raleigh:

Enclosed is the original letter from Mrs. John B. Ceccon wherein she grants permission to enter into her ranch, subject to certain provisions.

By copy of this letter to Mr.Chris Ludwig, I am forwarding a copy of the letter from Mrs. Ceccon.

Yours truly,

H. O. Rowland, Jr.

ec: Mr. Chris Ludwig
Hienrich Geoexploration Co.
818 Grant Road
Tucson, Arizona.

MEMBER AMERICAN HEREFORD ASSOCIATION
Breeding Modern Herefords

JOHN B. & DAMILEY J. CECCON
OWNERS

TEL.: (602) 642-3521

C LAZY J RANCH
COURTLAND STAR ROUTE
ELFRIDA, ARIZONA
85610

August 31, 1968

H. O. Rowland, Jr.
203 Crescendo Building
Abilene, Texas 79601

Dear Mr. Rowland:

I refer to your letter of August 26 in which you request permission to perform a geophysical survey on my property. Permission is granted with the following understandings and provisions:

1. That I be personally contacted by the survey crew prior to initiation of work so that I can provide keys to locked gates and explain procedures related to the cattle on the premises.

2. That exploratory work in the vicinity of watering holes be completed in a timely manner to prevent excessive denial of these places to the cattle.

3. That any cores drilled be capped when abandoned. This can be done in any manner that will prevent injury to the livestock such as placing a large stone over the hole.

4. It is understood that in guarantying Geochemical Surveys' responsibility for all damages incurred during surveying and drilling operations, you are acting as agent. If you are not, I would appreciate notification by Geochemical Surveys of this guaranty.

5. If water is encountered during drilling, I would appreciate notification of this fact as well as any other pertinent information.

6. That on completion of the survey, I be so informed, keys returned, and the general area of activity outlined.

It should be understood that several of the above provisions are necessitated by the nature of the business I am in. All animals on the ranch, with the exception of the many jack-rabbits, occasional deer, and stray hunters, are Registered Hereford cattle. The value of the animals, as well as the breeding practices involved, require strict control over the herds.

I wish you the best of luck in your survey and remain,

Yours truly,

Damiley J. Ceccon

(Mrs.) Damiley J. Ceccon

JOB B274-68 LINE 3 C SPREAD 1

LOOKING W DATE 9/20/68 A= 1000'

CENTER 0.0 LABEL S/N FREQ. 1.0

COUPLING Yes

1N½ only! Double DC

9.25.68
CA

N-S
a=1000'

Burr Brown Rec.

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem- Courtland
LINE 3 HALF N SP. 1 DATE 9-20

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 1-2 | 2-3 | 1-2 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 |
| RECEIVE | 0-10 | 10-20 | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | 100-10 | 100-10 | 10-10 | 100-10 | 100-10 | 10-10 | 100-10 | 10-10 | 10-10 | 10-10 |
| DC 1 | +12.2 | +9.5 | +2.38 | +11.2 | ~~-3.3~~ -3.5 | +1.90 | +6.2 | +2.85 | +1.95 | +3.45 |
| DC 2 | +7.8 | +11.8 | +2.60 | +8.0 | +10.0 | +1.03 | +9.7 | +2.83 | +0.15 | -2.50 |
| DC 3 | +9.8 | +10.0 | +3.00 | +12.2 | -3.5 | +1.50 | +6.0 | +2.78 | +2.80 | +4.50 |
| DC 4 | +7.5 | +12.4 | -4.00 | +6.4 | +10.2 | +1.40 | +10.0 | +3.00 | +0.20 | -3.20 |
| DC 5 | +10.0 | +9.6 | +9.60 | +13.2 | -4.0 | +0.82 | +5.7 | +2.43 | +2.40 | +3.10 |
| DC 6 | +8.2 | +12.0 | -0.40 | +6.5 | +10.2 | +1.40 | +11.6 | +3.24 | +0.25 | +0.90 |
| DC 7 | +10.1 | +9.6 | +4.80 | +12.2 | -4.0 | +0.64 | +4.1 | +2.44 | +1.70 | -0.80 |
| DC 8 | +6.4 | +11.8 | +4.30 | +7.8 | +10.0 | +2.05 | +11.8 | +2.98 | +0.40 | +3.20 |
| DC AVG. | 43.00 | 52.29 | 8.491 | 49.57 | 10.32 | 3.125 | 40.50 | 9.641 | 3.964 | 1.556 |
| AC 1 | 42.1 | 51.2 | 8.22 | 48.6 | 10.0 | 3.00 | 39.7 | 9.36 | 3.34 | 1.48 |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AC AVG. | | | | | | | | | | |
| S.P. | +7.3 | +2.4 | | -5.9 | | | +9.5 | | | |
| AC NOISE | .02 | .02 | | .02 | | | .02 | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Courtland
LINE 3 HALF N SP. 1 DATE 9-20

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 4-5 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 | Cal | |
| RECEIVE | 40-50 | → | | → | 50-60 | → | | → | 4-5 | |
| RANGE | 10-10 | | | | | | | | 100-10 | |
| DC 1 | +2.40 | | | | | | | | -.05 | |
| DC 2 | +1.20 | | | | | | | | -.35 | |
| DC 3 | +3.15 | | | | | | | | -.05 | |
| DC 4 | +1.10 | | | | | | | | -.35 | |
| DC 5 | +3.40 | | | | | | | | | |
| DC 6 | +1.00 | | | | | | | | | |
| DC 7 | +4.45 | | | | | | | | | |
| DC 8 | +0.40 | | | | | | | | | |
| DC AVG. | 7.614 | | | | | | | | 99.80 | |
| AC 1 | 7.39 | | | | | | | | 100.0 | |
| AC 2 | ✓ | | | | | | | | ✓ | |
| AC AVG. | | | | | | | | | | |
| S.P. | +3.9 | | | | | | | | | |
| AC NOISE | .02 | | | | | | | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I. P. SENDER NOTES

PROJECT Geo Chem - COURTLAND
LINE 3 HALF N SP. 1 DATE 9-20

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 1-2 | 2-3 | 1-2 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 |
| RECEIVE | 0-1000'N | 10-20N | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | Hi | Hi | → | Hi | → | → | Hi | → | → | → |
| VOLTAGE | 480 | 440 | 480 | 430 | 440 | 480 | 460 | 430 | * 380 | 480 |
| CURRENT | 6.0 | 8.0 | 6.0 | 8.0 | 8.0 | 6.0 | 7.0 | 8.0 | 7.0 | 6.0 |
| SEND | 4-5 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 | | CAL |
| RECEIVE | 40-50 | → | → | → | 50-60 | → | → | → | | 4-5 |
| RANGE | Hi | → | → | → | | | | | | Hi |
| VOLTAGE | 460 | | | | | | | | | 60 |
| CURRENT | 7.0 | C | | | | | | | | 1.0 |

FREQUENCIES 0.1 1.0
SENDER NO. 66445
OPERATOR Hix
RECEIVER NO. 9741-1
OPERATOR PALMER

COMMENTS:
1-2 — 6.0 - Hi * Jumping out
2-3 — 8.0 - Hi
3-4 — 8.0 - Hi
4-5 — 7.0 - Hi

HEINRICHS GEOEX  8274-68  LINE 3C  SPD 1  LOOKING WEST  9-20-68  A= 1000 FEET

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.000 | 8.000 | 6.000 | 8.000 | 8.000 | 6.000 | 7.000 | 8.000 | 7.000 | 6.000 | I | 7.000 | 7.000 | 7.000 | 7.000 | 7.000 | 7.000 | 7.000 | 7.000 | 1.000 | |
| 43 | 5229 | 8491 | 4957 | 1032 | 3125 | 405 | 9641 | 3464 | 1556 | DC | 7614 | | | | | | | | 998 | LEFT |
| 43 | 5229 | 8491 | 4957 | 1032 | 3125 | 405 | 9641 | 3464 | 1556 | | 7614 | | | | | | | | 998 | SIDE |
| 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | N | 2 | 3 | 4 | 5 | 3 | 4 | 5 | 6 | | |
| 43.00 | 52.29 | 8.491 | 49.57 | 10.32 | 3.125 | 40.50 | 9.641 | 3.464 | 1.556 | DCA | 7.614 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 99.8 | |
| 42.10 | 51.20 | 8.220 | 48.60 | 10.00 | 3.000 | 39.70 | 9.360 | 3.340 | 1.480 | AC1 | 7.390 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 100.0 | |
| 42.10 | 51.20 | 8.220 | 48.60 | 10.00 | 3.000 | 39.70 | 9.360 | 3.340 | 1.480 | AC2 | 7.390 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 100.0 | |
| 42.10 | 51.20 | 8.220 | 48.60 | 10.00 | 3.000 | 39.70 | 9.360 | 3.340 | 1.480 | ACA | 7.390 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 100.0 | |
| 21.54 | 19.65 | 17.02 | 18.63 | 15.51 | 15.66 | 17.39 | 14.49 | 14.88 | 15.59 | RHO | 13.08 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | 1.002 | DC CAL |
| 2.3 | 2.3 | 3.5 | 2.2 | 3.4 | 4.4 | 2.2 | 3.2 | 3.9 | 5.3 | PFE | 3.2 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | 1.002 | AC CAL |
| 109 | 119 | 206 | 118 | 220 | 279 | 128 | 221 | 264 | 343 | MCF | 248 | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | | |
| .1 | .2 | .7 | .2 | .8 | 1.7 | .2 | .8 | 1.8 | 3.1 | CPFE | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 2.2 | 2.2 | 2.8 | 2.0 | 2.6 | 2.7 | 2.0 | 2.4 | 2.1 | 2.2 | CCPFE | 2.3 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | | |
| 102 | 111 | 166 | 109 | 170 | 170 | 117 | 163 | 140 | 142 | CCMCF | 173 | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | | |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | I | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | |
| | | | | | | | | | | DC | | | | | | | | | 1 | RIGHT |
| | | | | | | | | | | | | | | | | | | | 1 | SIDE |
| 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | N | 2 | 3 | 4 | 5 | 3 | 4 | 5 | 6 | | |
| 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | DCA | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 100.0 | |
| 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | AC1 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 100.0 | |
| 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | AC2 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 100.0 | |
| 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | ACA | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 100.0 | |
| *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | RHO | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | 1.000 | DC CAL |
| *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | PFE | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | 1.000 | AC CAL |
| *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | MCF | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | | |
| 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | CCPFE | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | *000.0 | | |
| *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | CCMCF | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | *00000 | | |

Moore Business Forms, Inc.

031029

JOB B274-68 LINE 4C SPREAD 1

LOOKING W DATE 9/11/68 A= 1000'

CENTER 0.0 LABEL S/N FREQ. 1.0

COUPLING Yes

Double DC

a-17-68
CD

N-S
Burr Brown Rec. d=1000'

HEINRICHS GEOEXPLORATION CO.

# I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Courtland
LINE 4 HALF 5 SP. 1 DATE 9-11

| SEND | 4-5 | 3-4 | 4-5 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 |
|---|---|---|---|---|---|---|---|---|---|---|
| RECEIVE | 0-10 | 10-20 | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | 100-10 | 100-10 | 10-10 | 100-10 | 10-10 | 10-10 | 100-10 | 10-10 | 10-10 | 10-10 |
| DC 1 | +8.0 | +9.5 | +2.10 | +11.5 | +2.05 | +1.94 | +9.6 | +4.15 | +1.42 | +2.40 |
| DC 2 | +5.2 | +3.5 | +2.62 | +5.8 | +2.80 | +0.70 | +5.8 | +1.05 | +1.72 | -0.70 |
| DC 3 | +9.5 | +10.4 | +1.37 | +10.3 | +1.95 | +1.86 | +9.4 | +4.60 | +1.95 | +2.65 |
| DC 4 | +3.8 | +2.0 | +4.20 | +4.4 | +2.95 | +0.62 | +6.1 | +0.80 | +1.18 | -1.20 |
| DC 5 | +10.4 | +12.4 | +2.60 | +11.6 | +1.56 | +2.10 | +8.3 | +4.40 | +2.14 | +2.90 |
| DC 6 | +2.0 | +2.3 | +4.15 | +3.6 | +3.90 | +0.62 | +7.0 | +0.78 | +1.10 | -1.50 |
| DC 7 | +12.2 | +9.7 | +0.82 | +11.8 | +1.85 | +2.35 | +8.1 | +4.75 | +2.00 | +3.20 |
| DC 8 | +1.8 | +4.4 | +3.60 | +3.6 | +2.35 | -0.05 | +7.2 | +0.40 | +1.00 | +2.00 |
| DC AVG. | 41.29 | 39.23 | 8.346 | 39.19 | 8.426 | 3.131 | 33.86 | 8.087 | 3.901 | 1.469 |
| AC 1 | 40.6 | 38.55 | 8.08 | 38.4 | 8.18 | 3.00 | 33.1 | 7.82 | 3.74 | 1.39 |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AC AVG. | | | | | | | | | | |
| S.P. | 0 | -4.3 | | +2.2 | | | -6.8 | | | |
| AC NOISE | .02 | .02 | | .03 | | | .03 | | | |
| POT RES. | ~~[illegible]~~ | ~~ground~~ | ~~[illegible]~~ | ~~[illegible]~~ | [illegible] | Power | line 26 | 50'S | | |

HEINRICHS GEOEXPLORATION CO.

# I.P. RECEIVER NOTES

PAGE

PROJECT Geochem- Courtland

LINE 34 HALF 5 SP. 1 DATE 9-14

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 1-2 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 | Cal | |
| RECEIVE | 40-50 | → | → | → | 50-60 | → | → | → | 1-2 | |
| RANGE | 10-10 | 10-10 | 10-10 | 1-100 | 10-10 | 10-10 | 10-10 | 1-100 | 100-10 | |
| DC 1 | +4.20 | +1.50 | +1.22 | ~~+1.040~~ | +3.02 | +0.65 | +1.85 | -.100 | +.24 | |
| DC 2 | +1.20 | +1.10 | +0.94 | +055 035 | 0 | +1.25 | -0.65 | +.200 | -.21 | |
| DC 3 | +3.05 | +1.15 | +0.75 | +010 060 | +2.35 | +1.03 | +2.90 | -.110 | +.24 | |
| DC 4 | +2.35 | +1.65 | +1.30 | +085 110 | -0.70 | +0.22 | -0.85 | +.140 | -.21 | |
| DC 5 | +2.05 | +0.80 | +0.54 | -015 080 | +4.30 | +1.94 | +1.20 | -.090 | | |
| DC 6 | +2.35 | +2.15 | +1.55 | +140 040 | -2.25 | +0.42 | +1.00 | +.200 | | |
| DC 7 | +2.25 | +0.15 | +0.40 | -050 040 | +4.80 | +1.56 | +1.05 | -.090 | | |
| DC 8 | +2.20 | +2.42 | +1.70 | 036 | -2.65 | -0.24 | 0 | +.140 | | |
| DC AVG. | 6.835 | 2.958 | 1.874 | .7807 | 2.614 | 1.495 | 1.098 | .5056 | 100.2 | |
| AC 1 | 6.60 | 2.83 | 1.775 | .756 | 2.49 | 1.40 | 1.00 | .467 | 100.2 | |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| AC AVG. | | | | | | | | | | |
| S.P. | -1.6 | | | | +2.8 | | | | | |
| AC NOISE | .02 | | | | .03 | | | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I. P. SENDER NOTES

PROJECT Geo Chem-COURTLAND

LINE 4 HALF S SP. 1 DATE 9-10

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 4-5 | 3-4 | 4-5 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 |
| RECEIVE | 0-1000'S | 10-20 → | | 20-30 → | | | 30-40 → | | | |
| RANGE | Hi | Hi | Hi | Lo | Hi | Hi | Hi | Hi | Hi | Hi |
| VOLTAGE | 450 | 380 | 450 | 540 | 380 | 450 | 520 | 530 | 470 | 440 |
| CURRENT | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 5.0 | 4.0 |
| SEND | 1-2 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 | | CAL |
| RECEIVE | 40-50 → | | | | 50-60 → | | | | | 1-2 |
| RANGE | Lo | Hi | Hi | Hi | Lo | Hi | Hi | Hi | | Hi |
| VOLTAGE | 520 | 530 | 460 | 440 | 520 | 530 | 460 | 440 | | 120 |
| CURRENT | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 4.0 | 5.0 | 4.0 | | 1.0 |

FREQUENCIES .1 1.0

SENDER NO. 66445

OPERATOR HIX

RECEIVER NO. 9741-1

OPERATOR PALMER

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

a = 1000
N-S

PAGE

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem - Courtland
LINE 4 HALF N SP. 1 DATE 9-11

| SEND | 1-2 | 2-3 | 1-2 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 |
|---|---|---|---|---|---|---|---|---|---|---|
| RECEIVE | 0-10 | 10-20 | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | 100-10 | 100-10 | 10-10 | 100-10 | 10-10 | 10-10 | 100-10 | 100-10 | 10-10 | |
| DC 1 | +8.0 | +4.3 | +1.05 | +5.8 | +2.45 | +1.35 | +20.2 | +2.20 | +1.95 | -0.20 |
| DC 2 | +5.5 | +10.6 | +3.65 | +8.0 | +2.00 | +0.80 | -8.5 | -1.60 | +0.20 | +1.60 |
| DC 3 | +8.0 | +5.6 | +0.70 | +6.0 | +2.60 | +1.60 | +19.0 | +2.30 | +2.85 | -0.10 |
| DC 4 | +5.5 | +10.0 | +3.50 | +7.8 | +1.70 | +0.70 | -8.2 | -1.70 | +0.40 | +2.00 |
| DC 5 | | +5.8 | +0.90 | +6.2 | +2.60 | +1.95 | +20.2 | +2.20 | +1.40 | -0.30 |
| DC 6 | | +10.0 | +2.95 | +7.7 | +1.55 | 0 | -10.0 | -1.70 | +1.00 | +2.60 |
| DC 7 | | +6.3 | +0.90 | +6.5 | +2.90 | +2.10 | +21.8 | +2.20 | +1.85 | -0.45 |
| DC 8 | | +8.8 | +3.60 | +7.6 | +1.40 | +0.25 | -11.5 | -1.65 | -0.20 | +2.05 |
| DC AVG. | 39.58 | 41.48 | 8.333 | 37.30 | 8.288 | 3.024 | 35.45 | 10.28 | 3.542 | 1.600 |
| AC 1 | 38.9 | 40.7 | 8.12 | 36.6 | 8.07 | 2.91 | 34.9 | 10.0 | 3.42 | 1.51 |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AC AVG. | | | | | | | | | | |
| S.P. | 0 | -1.9 | | +4.7 | | | +6.4 | | | |
| AC NOISE | .03 | .03 | | .03 | | | .03 | | | |
| POT RES. | | | | P.L. | 2500' | N. | | | | |

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem - Courtland
LINE S4 HALF N SP. 1 DATE 9-10

PAGE

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 4-5 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 | cal | |
| RECEIVE | 40-50 | → | → | → | 50-60 | → | → | → | 4-5 | |
| RANGE | 10-10 | 10-10 | 10-10 | 1-100 | 10-10 | 10-10 | 1-100 | | 100-10 | |
| DC 1 | +9.2 | +2.45 | +1.55 | +.065 | +0.20 | +2.10 | +.065 | -.035 | +.78 | |
| DC 2 | | +0.05 | +0.50 | +.080 | +1.20 | -0.40 | +.040 | +.080 | +.05 | |
| DC 3 | | +2.00 | +1.05 | +.045 | +0.80 | +2.30 | +.070 | +.005 | +.78 | |
| DC 4 | MISS | +0.40 | +0.65 | +.040 | +0.85 | -0.55 | +.075 | +.020 | +.05 | |
| DC 5 | | +2.75 | +1.40 | +.120 | +0.82 | +2.40 | 0 | +.050 | | |
| DC 6 | | -0.65 | +0.55 | -.050 | +1.20 | +0.75 | +.065 | +.030 | | |
| DC 7 | — | +2.90 | +1.60 | +.155 | +0.35 | +2.55 | +.010 | +.020 | | |
| DC 8 | — | -0.20 | +0.40 | +.035 | +1.80 | -0.40 | +.105 | +.060 | | |
| DC AVG. | — | 4.423 | 1.826 | .9259 | 2.959 | 2.041 | .9313 | .5160 | 101.0 | |
| AC 1 | 7.86 | 4.30 | 1.73 | .863 | 2.87 | 1.95 | .882 | .485 | 100.6 | |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | |
| AC AVG. | | | | | | | | | | |
| S.P. | -1.8 | | | | -1.3 | | | | | |
| AC NOISE | .04 | | | | .02 | | | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I. P. SENDER NOTES

PROJECT Geo Chem - COURTLAND

LINE 4 HALF N SP. 1 DATE 9-11

PAGE 9

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 1-2 | 2-3 | 1-2 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 |
| RECEIVE | 0-1000'N | 10-20N | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | Hi | Hi | → | Hi | → | → | Hi | → | → | |
| VOLTAGE | 500 | 510 | 500 | 360 | 510 | 500 | 430 | 450 | 500 | 500 |
| CURRENT | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 |
| SEND | 4-5 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 | | CAL |
| RECEIVE | 40-50 | → | → | → | 50-60 | → | → | → | | 4-5 |
| RANGE | Hi | → | → | → | Hi | → | → | → | | Hi |
| VOLTAGE | 430 | 450 | 500 | 500 | 430 | 450 | 500 | 500 | | 100 |
| CURRENT | 4.0 | 5.0 | 4.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | | 1.0 |

FREQUENCIES .1 1.0

SENDER NO. 6644S

OPERATOR MIX

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS:

IEINRICHS GEOEX B274-68 LINE 4C SPD 1 LOOKING WEST 9-11-68 A= 1000 FEET

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 5.000 | 4.000 | I | 4.000 | 4.000 | 5.000 | 4.000 | 4.000 | 4.000 | 5.000 | 4.000 | 1.000 | |
| 4129 | 3923 | 8346 | 3919 | 8426 | 3131 | 3386 | 8087 | 3901 | 1469 | DC | 6835 | 2958 | 1874 | 7807 | 2614 | 1495 | 1098 | 5056 | 1002 | LEFT |
| 4129 | 3923 | 8346 | 3919 | 8426 | 3131 | 3386 | 8087 | 3901 | 1469 | | 6835 | 2958 | 1874 | 7807 | 2614 | 1495 | 1098 | 5056 | 1002 | SIDE |
| 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | N | 2 | 3 | 4 | 5 | 3 | 4 | 5 | 6 | | |
| 41.29 | 39.23 | 8.346 | 39.19 | 8.426 | 3.131 | 33.86 | 8.087 | 3.901 | 1.469 | DCA | 6.835 | 2.958 | 1.874 | .781 | 2.614 | 1.495 | 1.098 | .506 | 100.2 | |
| 40.60 | 38.55 | 8.080 | 38.40 | 8.180 | 3.000 | 33.10 | 7.820 | 3.740 | 1.390 | AC1 | 6.600 | 2.830 | 1.775 | .756 | 2.490 | 1.400 | 1.000 | .467 | 100.2 | |
| 40.60 | 38.55 | 8.080 | 38.40 | 8.180 | 3.000 | 33.10 | 7.820 | 3.740 | 1.390 | AC2 | 6.600 | 2.830 | 1.775 | .756 | 2.490 | 1.400 | 1.000 | .467 | 100.2 | |
| 40.60 | 38.55 | 8.080 | 38.40 | 8.180 | 3.000 | 33.10 | 7.820 | 3.740 | 1.390 | ACA | 6.600 | 2.830 | 1.775 | .756 | 2.490 | 1.400 | 1.000 | .467 | 100.2 | |
| 30.91 | 29.36 | 24.99 | 29.33 | 25.23 | 23.44 | 25.34 | 24.21 | 23.36 | 21.99 | RHO | 20.46 | 22.14 | 22.44 | 20.45 | 19.57 | 22.38 | 23.01 | 21.19 | .998 | DC CAL |
| 1.7 | 1.8 | 3.3 | 2.1 | 3.0 | 4.4 | 2.3 | 3.4 | 4.3 | 5.7 | PFE | 3.6 | 4.5 | 5.6 | 3.3 | 5.0 | 6.8 | 9.8 | 8.3 | 1.000 | AC CAL |
| 55 | 60 | 132 | 70 | 119 | 186 | 91 | 141 | 184 | 258 | MCF | 174 | 204 | 249 | 160 | 255 | 303 | 426 | 390 | | |
| .1 | .1 | .4 | .1 | .4 | 1.0 | .1 | .4 | 1.0 | 2.0 | CPFE | .5 | 1.1 | 2.0 | 3.6 | 1.3 | 2.0 | 3.1 | 5.0 | | |
| 1.6 | 1.7 | 2.9 | 2.0 | 2.6 | 3.4 | 2.2 | 3.0 | 3.3 | 3.7 | CCPFE | 3.0 | 3.4 | 3.6 | -.3 | 3.7 | 4.8 | 6.7 | 3.2 | | |
| 52 | 57 | 115 | 67 | 103 | 143 | 86 | 123 | 141 | 167 | CCMCF | 148 | 155 | 161 | -14 | 189 | 215 | 293 | 153 | | |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 5.000 | 4.000 | 4.000 | I | 4.000 | 5.000 | 4.000 | 4.000 | 4.000 | 5.000 | 4.000 | 4.000 | 1.000 | |
| 3958 | 4148 | 8333 | 373 | 8288 | 3024 | 3545 | 1028 | 3542 | 16 | DC | | 4423 | 1826 | 9259 | 2959 | 2041 | 9313 | 516 | 101 | RIGHT |
| 3958 | 4148 | 8333 | 373 | 8288 | 3024 | 3545 | 1028 | 3542 | 16 | | | 4423 | 1826 | 9259 | 2959 | 2041 | 9313 | 516 | 101 | SIDE |
| 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | N | 2 | 3 | 4 | 5 | 3 | 4 | 5 | 6 | | |
| 39.58 | 41.48 | 8.333 | 37.30 | 8.288 | 3.024 | 35.45 | 10.28 | 3.542 | 1.600 | DCA | 0.000 | 4.423 | 1.826 | .926 | 2.959 | 2.041 | .931 | .516 | 101.0 | |
| 38.90 | 40.70 | 8.120 | 36.60 | 8.070 | 2.910 | 34.90 | 10.00 | 3.420 | 1.510 | AC1 | 7.860 | 4.300 | 1.730 | .863 | 2.870 | 1.950 | .882 | .485 | 100.6 | |
| 38.90 | 40.70 | 8.120 | 36.60 | 8.070 | 2.910 | 34.90 | 10.00 | 3.420 | 1.510 | AC2 | 7.860 | 4.300 | 1.730 | .863 | 2.870 | 1.950 | .882 | .485 | 100.6 | |
| 38.90 | 40.70 | 8.120 | 36.60 | 8.070 | 2.910 | 34.90 | 10.00 | 3.420 | 1.510 | ACA | 7.860 | 4.300 | 1.730 | .863 | 2.870 | 1.950 | .882 | .485 | 100.6 | |
| 29.39 | 30.80 | 24.75 | 27.70 | 24.62 | 22.46 | 26.32 | 24.43 | 26.30 | 23.76 | RHO | *000.0 | 26.28 | 27.12 | 24.06 | 21.97 | 24.25 | 24.20 | 21.46 | .990 | DC CAL |
| 1.3 | 1.5 | 2.2 | 1.5 | 2.3 | 3.5 | 1.2 | 2.4 | 3.2 | 5.5 | PFE | *000.0 | 2.5 | 5.1 | 6.9 | 2.7 | 4.3 | 5.2 | 6.0 | .996 | AC CAL |
| 46 | 49 | 90 | 54 | 93 | 156 | 45 | 98 | 120 | 233 | MCF | *00000 | 93 | 189 | 285 | 123 | 175 | 214 | 278 | | |
| .1 | .1 | .4 | .1 | .4 | 1.1 | .1 | .4 | .9 | 1.8 | CPFE | 0.0 | .9 | 1.5 | 2.9 | 1.1 | 1.8 | 2.9 | 5.0 | | |
| 1.3 | 1.4 | 1.8 | 1.4 | 1.9 | 2.4 | 1.1 | 2.0 | 2.3 | 3.7 | CCPFE | *000.0 | 1.6 | 3.6 | 4.0 | 1.6 | 2.5 | 2.3 | 1.0 | | |
| 43 | 46 | 73 | 51 | 76 | 108 | 41 | 81 | 87 | 156 | CCMCF | 1000 | 60 | 133 | 165 | 72 | 102 | 95 | 47 | | |

46879

Moore Business Forms, Inc.

JOB B274-68 LINE 5C SPREAD 1

LOOKING W DATE 9/18/68 A= 1000'

CENTER 0,0 LABEL S/N FREQ. 1.0

COUPLING Yes Double DC

| | | |
|---|---|---|
| 900 | 800 | 1600 |
| 37 | 47 | 30 |
| 24 | 17 | 53 |

9.25.68

n-5
a = 1000'

PAGE

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PROJECT Geochem - Courtland
LINE 5 HALF 5 SP. 1 DATE 9-18

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 4-5 | 3-4 | 4-5 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 |
| RECEIVE | 0-10 | 10-20 | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | 100-10 | 100-10 | 10-10 | 100-10 | 10-10 | 10-10 | 100-10 | 10-10 | 10-10 | 10-10 |
| DC 1 | +3.2 | +6.5 | -1.5 | +8.3 | +1.90 | +2.90 | +6.0 | +1.90 | +0.80 | 0 |
| DC 2 | +6.3 | +2.2 | +6.0 | +2.2 | +0.85 | -0.60 | +5.2 | +1.85 | +0.95 | +1.90 |
| DC 3 | +3.4 | +6.5 | -1.9 | +8.5 | +2.60 | +2.20 | +4.8 | +0.85 | +0.65 | +0.25 |
| DC 4 | +6.5 | +3.4 | +5.8 | +2.4 | +1.05 | +0.15 | +5.6 | +2.30 | +1.35 | +1.55 |
| DC 5 | +3.5 | +6.0 | -1.9 | +10.0 | +2.10 | +1.45 | +5.0 | +1.25 | +0.45 | 0 |
| DC 6 | +7.0 | +3.5 | +5.8 | +0.2 | +0.40 | +0.60 | +5.8 | +2.55 | +2.25 | +1.75 |
| DC 7 | +4.0 | +6.2 | -1.8 | +11.6 | +3.90 | +2.10 | +5.6 | -0.20 | +0.35 | +0.40 |
| DC 8 | +6.4 | +3.7 | +5.7 | -1.0 | -0.65 | +0.80 | +4.2 | +3.60 | +2.55 | +2.60 |
| DC AVG. | 62.51 | 49.67 | 10.17 | 46.05 | 9.445 | 4.151 | 43.53 | 8.572 | 3.860 | 2.272 |
| AC 1 | 62.0 | 49.2 | 9.97 | 45.5 | 9.28 | 4.04 | 43.0 | 8.41 | 3.75 | 2.17 |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AC AVG. | | | | | | | | | | |
| S.P. | -11.6 | +3.0 | | +4.8 | | | 0 | | | |
| AC NOISE | .02 | .02 | | .03 | | | .02 | | | |
| POT RES. | | | | P.L. 2600' S | | | | | | |

HEINRICHS GEOEXPLORATION CO.
I.P. RECEIVER NOTES

PAGE

PROJECT Geochem-Courtland
LINE 5 HALF 5 SP. 1 DATE 9-18

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 1-2 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 | Cal | |
| RECEIVE | 40-50 | → | → | → | 50-60 | → | → | → | 1-2 | |
| RANGE | 10-10 | 10-10 | 10-10 | 10-10 | 10-10 | 10-10 | 10-10 | 1-100 | 100-10 | |
| DC 1 | +2.00 | -0.35 | +1.45 | +0.40 | -1.50 | +1.30 | -1.25 | +.265 | 0 | |
| DC 2 | +1.60 | +2.00 | -0.50 | 0 | +3.00 | 0 | +2.90 | -.220 | -.30 | |
| DC 3 | +1.45 | +0.60 | +2.80 | +2.30 | -1.65 | +0.60 | -2.00 | +.340 | 0 | |
| DC 4 | +1.60 | +1.00 | -0.75 | +0.20 | +4.70 | +1.60 | +1.90 | -.155 | -.30 | |
| DC 5 | +2.10 | -0.10 | +1.20 | +0.95 | -3.40 | -1.00 | -0.30 | +.210 | | |
| DC 6 | +1.55 | +2.25 | +0.45 | +0.55 | +6.40 | +1.45 | +1.00 | -.110 | | |
| DC 7 | +2.05 | -0.25 | +1.45 | +2.20 | -4.40 | -0.70 | -0.25 | +.290 | | |
| DC 8 | +1.40 | +3.20 | +0.40 | -0.70 | +6.85 | +1.50 | +1.65 | -.205 | | |
| DC AVG. | 8.222 | 3.623 | 2.110 | 1.416 | 3.075 | 1.778 | 1.189 | 0.815 | 99.80 | |
| AC 1 | 8.05 | 3.52 | 2.03 | 1.33 | 2.97 | 1.73 | 1.14 | .760 | 99.95 | |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| AC AVG. | | | | | | | | | | |
| S.P. | +1.0 | | | | +2.3 | | | | | |
| AC NOISE | .02 | | | | .03 | | | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I. P. SENDER NOTES

PAGE

PROJECT Geo Chem-COURTLAND

LINE 5 HALF S SP. 1 DATE 9

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 4-5 | 3-4 | 4-5 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 |
| RECEIVE | 0-1000's | 1000-2000 | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | Hi | Lo | Hi | Lo | Lo | Hi | Lo | → | → | Hi |
| VOLTAGE | 460 | 670 | 4.60 | 740 | 660 | 460 | 540 | 740 | 660 | 460 |
| 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 | 40-50 | → | → | → | 50-60 | → | → | → | | 1-2 |
| RANGE | Lo | → | → | Hi | Lo | → | → | Hi | | Hi |
| VOLTAGE | 540 | 740 | 660 | 460 | 540 | 740 | 660 | 460 | | 130 |
| CURRENT | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | | 1.0 |

FREQUENCIES 0.1 1.0

SENDER NO. 6644S

OPERATOR HIX

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS:

N-S
a=1000'

Burr Brown Rec

HEINRICHS GEOEXPLORATION CO.

# I.P. RECEIVER NOTES

PROJECT Geochem- Courtland
LINE 5 HALF N SP. 1 DATE 9-18

PAGE

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 1-2 | 2-3 | 1-2 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 |
| RECEIVE | 0-10 | 10-20 | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | 100-10 | 100-10 | 10-10 | 100-10 | 10-10 | 10-10 | 100-10 | 10-10 | 10-10 | 10-10 |
| DC 1 | +4.5 | +9.7 | +2.3 | +1.3 | -0.78 | -0.35 | +2.4 | +2.22 | +0.45 | +1.45 |
| DC 2 | +4.3 | -0.3 | +0.8 | +8.5 | +3.20 | +2.00 | +8.5 | +0.65 | +1.04 | 0 |
| DC 3 | +5.4 | +10.3 | +3.5 | +1.6 | +0.24 | -0.55 | +2.8 | +2.04 | +0.75 | +1.42 |
| DC 4 | +5.0 | -0.6 | +0.2 | +9.6 | +2.56 | +2.40 | +8.0 | +0.10 | +1.00 | 0 |
| DC 5 | +4.4 | +11.4 | +3.8 | 0 | +0.50 | -0.95 | +3.7 | +2.78 | +0.57 | +1.44 |
| DC 6 | +4.6 | -0.6 | -0.5 | +10.3 | +1.76 | +2.60 | +7.8 | -0.35 | +1.02 | -0.18 |
| DC 7 | +4.4 | +11.6 | +4.2 | -0.5 | +0.85 | -0.76 | +3.0 | +3.04 | +1.05 | +1.38 |
| DC 8 | +5.7 | -1.5 | -0.6 | +11.5 | +2.25 | +2.60 | +8.3 | -0.26 | +0.65 | -0.18 |
| DC AVG. | 49.47 | 62.31 | 10.15 | 58.71 | 9.541 | 3.369 | 48.46 | 8.232 | 3.235 | 1.667 |
| AC 1 | 49.0 | 61.8 | 9.97 | 58.2 | 9.40 | 3.28 | 47.9 | 8.10 | 3.15 | 1.60 |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AC AVG. | | | | | | | | | | |
| S.P. | -1.0 | +5.1 | | -2.5 | | | +6.6 | | | |
| AC NOISE | .02 | .02 | | .03 | | | .03 | | | |
| POT RES. | | P.L. at 1950'N | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT Geochem - Courtland

LINE 5 HALF N SP. 1 DATE 9-18

PAGE

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 4-5 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 | Cal | |
| RECEIVE | 40-50 | → | | → | 50-60 | → | | → | 4-5 | |
| RANGE | 10-10 | 10-10 | 10-10 | 10-10 | 10-10 | 10-10 | 10-10 | 1-100 | 100-10 | |
| DC 1 | +18.5 | +0.20 | +2.60 | +2.30 | +1.15 | +0.43 | +1.90 | +.095 | -.22 | |
| DC 2 | +1.00 | +1.50 | -1.60 | -1.25 | +0.30 | -0.18 | -0.55 | +.050 | +.36 | .07 |
| DC 3 | +1.65 | +0.22 | +2.36 | +2.26 | +1.35 | +2.20 | +1.85 | +.010 | -.22 | |
| DC 4 | +1.20 | +1.54 | -0.84 | -1.15 | +0.60 | -1.25 | -1.05 | +.080 | +.36 | |
| DC 5 | +1.76 | -0.30 | +2.00 | +1.80 | +1.90 | +2.05 | +1.83 | +.060 | | |
| DC 6 | +0.60 | +2.24 | -0.84 | -1.05 | -0.50 | -0.60 | -0.90 | -.010 | | |
| DC 7 | +2.60 | -0.42 | +2.30 | +1.95 | +3.20 | +1.36 | +2.40 | +.040 | | |
| DC 8 | -0.10 | +1.38 | -1.95 | -1.15 | -1.60 | +0.25 | -1.55 | +.035 | 100.4 | |
| DC AVG. | 8.088 | 2.160 | 1.703 | 0.995 | 3.745 | 1.966 | 1.214 | 0.802 | 100.3 | |
| AC 1 | 7.95 | 3.08 | 1.65 | 0.95 | 3.65 | 1.91 | 1.16 | 0.76 | ~~100.26~~ | |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| AC AVG. | | | | | | | | | | |
| S.P. | 0 | | | | +2.6 | | | | | |
| AC NOISE | .02 | | | | .03 | | | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I. P. SENDER NOTES

PROJECT Geo Chem-COURTLAND

LINE 5 HALF N SP. 1 DATE 9-



| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 1-2 | 2-3 | 1-2 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 |
| RECEIVE | 0-1000'N | 10-20N | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | LO | LO | LO | LO | LO | LO | HI | LO | → | → |
| VOLTAGE | 550 | 760 | 550 | 680 | 760 | 550 | 470 | 680 | 760 | 550 |
| 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 | 40-50 | → | → | → | 50-60 | → | → | → | | 4-5 |
| RANGE | HI | LO | → | → | HI | LO | → | → | | HI |
| VOLTAGE | 470 | 680 | 760 | 550 | 470 | 680 | 760 | 550 | | 110 |
| CURRENT | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | | 1.0 |

FREQUENCIES .1 1.0

SENDER NO. 66445

OPERATOR HIX

RECEIVER NO. 9741-1

OPERATOR PALMER

COMMENTS:
1-2 — 4.1 — LO
2-3 — 4.0 — LO
3-4 — 4.0 — LO
4-5 — 4.0 — HI

HEINRICHS GEOEX 8274-68 LINE 5C SPD 1 LOOKING WEST 9-18-68 A= 1000 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 | |
| 6251 | 4967 | 1017 | 4605 | 9445 | 4151 | 4353 | 8572 | 386 | 2272 | DC | 8222 | 3623 | 211 | 1416 | 3075 | 1778 | 1189 | 815 | 998 | LEFT |
| 6251 | 4967 | 1017 | 4605 | 9445 | 4151 | 4353 | 8572 | 386 | 2272 | | 8222 | 3623 | 211 | 1416 | 3075 | 1778 | 1189 | 815 | 998 | SIDE |
| 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | N | 2 | 3 | 4 | 5 | 3 | 4 | 5 | 6 | | |
| 62.51 | 49.67 | 10.170 | 46.05 | 9.445 | 4.151 | 43.53 | 8.572 | 3.860 | 2.272 | DCA | 8.222 | 3.623 | 2.110 | 1.416 | 3.075 | 1.778 | 1.189 | .815 | 99.80 | |
| 62.00 | 49.20 | 9.970 | 45.50 | 9.280 | 4.040 | 43.00 | 8.410 | 3.750 | 2.170 | AC1 | 8.050 | 3.520 | 2.030 | 1.330 | 2.970 | 1.730 | 1.140 | .760 | 99.95 | |
| 62.00 | 49.20 | 9.970 | 45.50 | 9.280 | 4.040 | 43.00 | 8.410 | 3.750 | 2.170 | AC2 | 8.050 | 3.520 | 2.030 | 1.330 | 2.970 | 1.730 | 1.140 | .760 | 99.95 | |
| 62.00 | 49.20 | 9.970 | 45.50 | 9.280 | 4.040 | 43.00 | 8.410 | 3.750 | 2.170 | ACA | 8.050 | 3.520 | 2.030 | 1.330 | 2.970 | 1.730 | 1.140 | .760 | 99.95 | |
| 46.98 | 37.33 | 30.57 | 34.61 | 28.39 | 31.19 | 32.71 | 25.77 | 29.01 | 34.15 | RHO | 24.72 | 27.23 | 31.71 | 37.24 | 23.11 | 26.72 | 31.27 | 34.30 | 1.002 | DC CAL |
| 1.0 | 1.1 | 2.2 | 1.4 | 1.9 | 2.9 | 1.4 | 2.1 | 3.1 | 4.9 | PFE | 2.3 | 3.1 | 4.1 | 6.6 | 3.7 | 2.9 | 4.5 | 7.4 | 1.002 | AC CAL |
| 21 | 30 | 71 | 39 | 68 | 93 | 42 | 81 | 106 | 142 | MCF | 93 | 113 | 129 | 178 | 160 | 110 | 142 | 216 | | |
| .0 | .1 | .3 | .1 | .3 | .7 | .1 | .4 | .8 | 1.1 | CPFE | .4 | .8 | 1.3 | 1.7 | 1.0 | 1.6 | 2.1 | 2.8 | | |
| .9 | 1.0 | 1.9 | 1.3 | 1.6 | 2.2 | 1.3 | 1.7 | 2.3 | 3.7 | CCPFE | 1.9 | 2.3 | 2.8 | 5.0 | 2.7 | 1.4 | 2.4 | 4.6 | | |
| 20 | 28 | 61 | 37 | 56 | 71 | 40 | 66 | 80 | 109 | CCMCF | 76 | 83 | 90 | 134 | 115 | 51 | 76 | 135 | | |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | |
| 4947 | 6231 | 1015 | 5871 | 9541 | 3369 | 4846 | 8232 | 3235 | 1667 | DC | 8088 | 316 | 1703 | 995 | 3745 | 1966 | 1214 | 802 | 1004 | RIGHT |
| 4947 | 6231 | 1015 | 5871 | 9541 | 3369 | 4846 | 8232 | 3235 | 1667 | | 8088 | 316 | 1703 | 995 | 3745 | 1966 | 1214 | 802 | 1004 | SIDE |
| 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | N | 2 | 3 | 4 | 5 | 3 | 4 | 5 | 6 | | |
| 49.47 | 62.31 | 10.150 | 58.71 | 9.541 | 3.369 | 48.46 | 8.232 | 3.235 | 1.667 | DCA | 8.088 | 3.160 | 1.703 | .995 | 3.745 | 1.966 | 1.214 | .802 | 100.4 | |
| 49.00 | 61.80 | 9.970 | 58.20 | 9.400 | 3.280 | 47.90 | 8.100 | 3.150 | 1.600 | AC1 | 7.950 | 3.080 | 1.650 | .950 | 3.650 | 1.910 | 1.160 | .760 | 100.3 | |
| 49.00 | 61.80 | 9.970 | 58.20 | 9.400 | 3.280 | 47.90 | 8.100 | 3.150 | 1.600 | AC2 | 7.950 | 3.080 | 1.650 | .950 | 3.650 | 1.910 | 1.160 | .760 | 100.3 | |
| 49.00 | 61.80 | 9.970 | 58.20 | 9.400 | 3.280 | 47.90 | 8.100 | 3.150 | 1.600 | ACA | 7.950 | 3.080 | 1.650 | .950 | 3.650 | 1.910 | 1.160 | .760 | 100.3 | |
| 36.95 | 46.55 | 30.33 | 43.86 | 28.51 | 25.17 | 36.20 | 24.60 | 24.17 | 24.91 | RHO | 24.17 | 23.61 | 25.44 | 26.01 | 27.98 | 29.37 | 31.74 | 33.55 | .996 | DC CAL |
| .9 | .7 | 1.7 | .8 | 1.4 | 2.6 | 1.1 | 1.5 | 2.6 | 4.1 | PFE | 1.6 | 2.5 | 3.1 | 4.6 | 2.5 | 2.8 | 4.6 | 5.4 | .999 | AC CAL |
| 23 | 16 | 56 | 18 | 49 | 104 | 30 | 62 | 107 | 164 | MCF | 68 | 106 | 122 | 178 | 89 | 96 | 143 | 162 | | |
| .1 | .0 | .3 | .1 | .3 | .9 | .1 | .4 | 1.0 | 1.7 | CPFE | .4 | 1.0 | 1.7 | 2.6 | .8 | 1.4 | 2.0 | 2.8 | | |
| .8 | .7 | 1.4 | .7 | 1.1 | 1.7 | 1.0 | 1.1 | 1.6 | 2.4 | CCPFE | 1.2 | 1.5 | 1.4 | 2.0 | 1.7 | 1.4 | 2.5 | 2.6 | | |
| 21 | 15 | 46 | 17 | 37 | 67 | 28 | 45 | 67 | 95 | CCMCF | 50 | 63 | 57 | 77 | 61 | 49 | 79 | 77 | | |

630254

Moore Business Forms, Inc.

JOB B274-68 LINE 6C SPREAD 1

LOOKING W DATE 9/12/68 A= 1000'

CENTER 0.0 LABEL S/N FREQ. 1.0

COUPLING Yes

Double DC 9-17-68 CA

N-S
a=1000'

Burr Brown Rec.

HEINRICHS GEOEXPLORATION CO.

# I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Courtland

LINE 6 HALF S SP. 1 DATE 8-12

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 4-5 | 3-4 | 4-5 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 |
| RECEIVE | 0-10 | 10-20 | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 | 10-10 | 100-10 | 100-10 | 10-10 | 10-10 |
| DC 1 | +3.0 | +5.0 | +3.6 | -0.5 | +1.7 | +0.75 | +3.7 | +3.0 | +2.70 | +2.45 |
| DC 2 | +2.2 | +4.0 | +2.0 | +9.5 | 0 | +1.60 | +6.2 | 0 | -3.60 | +2.00 |
| DC 3 | +6.0 | +2.6 | +2.4 | +2.0 | +3.5 | -1.70 | -2.0 | +6.2 | +2.80 | +2.35 |
| DC 4 | +5.6 | +8.0 | -0.6 | +8.2 | +1.4 | +1.90 | +7.0 | -2.6 | -1.20 | -1.40 |
| DC 5 | +4.0 | +5.6 | 0 | +1.7 | +2.3 | -0.10 | 0 | +4.6 | +4.50 | +0.10 |
| DC 6 | +3.0 | +6.3 | +2.0 | +8.4 | +0.4 | +2.30 | +13.6 | -3.0 | -2.00 | -3.10 |
| DC 7 | +8.2 | +4.3 | +2.3 | +3.2 | +2.8 | -2.70 | -0.6 | +8.0 | +2.50 | +3.50 |
| DC 8 | +2.2 | +4.5 | +2.3 | +8.3 | +1.6 | +5.20 | +8.0 | -3.6 | -1.25 | -0.90 |
| DC AVG. | 61.45 | 76.81 | 10.31 | 81.53 | 13.92 | 4.451 | 67.32 | 14.88 | 6.023 | 2.610 |
| AC 1 | 61.0 | 76.3 | 10.15 | 81.0 | 13.75 | 4.39 | 6.69 | 14.7 | 5.97 | 2.55 |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AC AVG. | | | | | | | | | | |
| S.P. | -10.3 | +11.2 | | -6.8 | | | +3.1 | | | |
| AC NOISE | .02 | .02 | | .02 | | | .03 | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Courtland

LINE 6 HALF 5 SP. 1 DATE 9-12

| SEND | 1-2 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 | cal | |
|---|---|---|---|---|---|---|---|---|---|---|
| RECEIVE | 40-50 | → | → | → | 50-60 | → | → | → | 1-2 | |
| RANGE | 100-10 | 10-10 | 10-10 | 10-10 | 10-10 | 10-10 | | | 100-10 | |
| DC 1 | +3.5 | +1.50 | +0.30 | +4.00 | +2.10 | -1.50 | | | +.43 | |
| DC 2 | 0 | -2.90 | -2.90 | -2.20 | -0.80 | | | | 0 | |
| DC 3 | +4.6 | +2.70 | +3.90 | +2.40 | +3.20 | | | | +.43 | |
| DC 4 | +3.4 | +1.25 | -3.00 | -3.40 | -1.40 | | | | 0 | |
| DC 5 | +4.4 | +3.40 | +7.00 | +5.00 | +4.40 | | | | | |
| DC 6 | -2.2 | -0.85 | +0.20 | -1.40 | -2.40 | — | — | — | | |
| DC 7 | +7.7 | +4.00 | -2.20 | +5.00 | +4.60 | — | — | — | | |
| DC 8 | +2.5 | -1.80 | +5.40 | -3.60 | -2.70 | | | | 100.6 | |
| DC AVG. | 18.50 .30 | 7.870 .11 | 4.183 .023 | 2.550 .080 | 7.104 .104 | | | | 100.4 | |
| AC 1 | 18.2 | 7.76 | 4.10 | 2.47 | 7.00 | — | — | — | ~~100.36~~ | |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ | |
| AC AVG. | | | | | | | | | | |
| S.P. | +3.0 | | | | | | | | | |
| AC NOISE | .04 | | | | | | | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I. P. SENDER NOTES

**PROJECT** Geo-chem-COURTLAND
LINE 6 HALF S SP. 1 DATE 9-12

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 4-5 | 3-4 | 4-5 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 |
| RECEIVE | 0-1000's | 10-20s | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | Hi | Hi | → | Hi | → | → | Hi | → | → | → |
| VOLTAGE | 430 | 440 | 430 | 520 | 440 | 430 | 440 | 520 | 440 | 430 |
| CURRENT | 4.0 | 5.0 | 4.0 | 5.0 | 5.0 | 4.0 | 4.0 | 5.0 | 5.0 | 4.0 |
| SEND | 1-2 | 2-3 | 3-4 | 4-5 | 1-2 | 2-3 | 3-4 | 4-5 | | CAL |
| RECEIVE | 40-50 | → | → | → | 50-60 | → | → | → | | 1-2 |
| RANGE | Hi | → | → | → | Hi | → | → | → | | Hi |
| VOLTAGE | 440 | 520 | 440 | 530 | 440 | * 420 | 440 | 420 | | 110 |
| CURRENT | 4.0 | 5.0 | 5.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.0 | | 1.0 |

FREQUENCIES 0.1 1.0
SENDER NO. 6644S
OPERATOR HIX
RECEIVER NO. 9741-1
OPERATOR PALMER

COMMENTS:
4-5 - 4.0 * 520
3-4 — 5.0 5.0
2-3 — 5.0
1-2

N-5
a=1000'

Burr Brown Rec.

HEINRICHS GEOEXPLORATION CO.

I.P. RECEIVER NOTES

PROJECT Geochem - Courtland

LINE 6 HALF N SP. 1 DATE 9-12

PAGE

| SEND | 1-2 | 2-3 | 1-2 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 |
|---|---|---|---|---|---|---|---|---|---|---|
| RECEIVE | 0-10 | 10-20 | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | 100-10 | 100-10 | 100-10 | 100-10 | 100-10 | 10-10 | 100-10 | 100-10 | 10-10 | 10-10 |
| DC 1 | +5.6 | +2.0 | +1.2 | +11.4 | +1.5 | +0.10 | +3.5 | 0 | +1.50 | +0.90 |
| DC 2 | +1.0 | +4.4 | +2.2 | -5.6 | +2.0 | -0.60 | +2.1 | +3.8 | +1.00 | -1.00 |
| DC 3 | +4.2 | +1.6 | +0.8 | +11.7 | 0 | +1.00 | +5.9 | 0 | +1.10 | +2.45 |
| DC 4 | +2.2 | +4.2 | +2.4 | -6.0 | 0 | +0.60 | +2.2 | +0.5 | -0.90 | -0.40 |
| DC 5 | +3.6 | +2.3 | 0 | +12.4 | +2.0 | +1.50 | +7.8 | +3.6 | +0.35 | +2.05 |
| DC 6 | +2.6 | +4.2 | +2.4 | -6.6 | 0 | -0.25 | +2.6 | +3.8 | +0.45 | -1.30 |
| DC 7 | +4.0 | +2.2 | 0 | +14.3 | +2.2 | +1.30 | +5.4 | 0 | +1.15 | +3.30 |
| DC 8 | +2.4 | +4.0 | +2.6 | -7.8 | 0 | -1.60 | +2.4 | +4.2 | +0.30 | -2.60 |
| DC AVG. | 61.05 | 60.66 | 10.24 | 71.56 | 10.20 | 4.120 | 65.16 | 15.70 | 4.298 | 2.340 |
| AC 1 | 60.75 | 60.35 | 10.1 | 71.25 | 10.1 | 4.08 | 64.75 | 15.5 | 4.24 | 2.28 |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AC AVG. | | | | | | | | | | |
| S.P. | +3.1 | -4.6 | - | -4.9 | | | +11.6 | | | |
| AC NOISE | .03 | .02 | | .03 | | | .01 | | | |
| POT RES. | | | | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I.P. RECEIVER NOTES

PAGE

PROJECT Geochem - Courtland

LINE 6 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 | 40-50 | → | → | → | 50-60 | → | → | → | 4-5 | |
| RANGE | 100-10 | 10-10 | 10-10 | 10-10 | 10-10 | 10-10 | 10-10 | 1-100 | 100-10 | |
| DC 1 | +6.6 | +3.00 | +0.60 | -0.45 | -0.20 | +0.75 | +1.90 | +.080 | +.55 | .95 |
| DC 2 | -4.0 | -0.90 | +0.55 | +1.40 | +2.75 | +0.65 | -0.55 | -.100 | -.10 | .22 |
| DC 3 | +7.8 | +3.40 | +0.20 | 0 | -1.20 | +0.40 | +1.20 | +.125 | +.55 | |
| DC 4 | -3.7 | -1.95 | +0.45 | +1.75 | +3.30 | 0 | +0.45 | .0 | -.10 | |
| DC 5 | +6.3 | +5.60 | 0 | -1.10 | -2.00 | +1.60 | +1.60 | +.180 | | |
| DC 6 | -4.0 | -3.50 | +1.20 | +1.75 | +3.10 | -0.15 | -0.40 | -.045 | | |
| DC 7 | +8.1 | +5.30 | +1.40 | -0.07 | -0.20 | +1.90 | +1.30 | -.020 | | |
| DC 8 | -4.0 | -3.40 | 0 | +1.10 | +4.40 | -1.00 | +0.45 | +.115 | | |
| DC AVG. | 11.77 .11 | 6.031 .111 | 2.359 .057 | 1.478 .058 | 4.272 .112 | 2.901 .001 | 1.678 .088 | .8939 .0201 | 100.6 | |
| AC 1 | 11.6 | 5.92 | 2.30 | 1.42 | 4.16 | 2.84 | 1.61 | .860 | 100.4 | |
| AC 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| AC AVG. | | | | | | | | | | |
| S.P. | +9.7 | | | | -6.9 | | | | | |
| AC NOISE | .02 | | | | .02 | | | | | |
| POT RES. | P.L | 4000 | N | | | | | | | |

HEINRICHS GEOEXPLORATION CO.

# I. P. SENDER NOTES

PROJECT Geo Chem - COURTLAND
LINE 6 HALF N SP. 1 DATE 9-12

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SEND | 1-2 | 2-3 | 1-2 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 |
| RECEIVE | 0-1000'N | 10-20N | → | 20-30 | → | → | 30-40 | → | → | → |
| RANGE | Hi | Hi | → | Hi | → | → | Hi | → | → | → |
| VOLTAGE | 460 | 420 | 460 | 360 | 420 | 460 | 440 | 450 | 420 | 450 |
| CURRENT | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 |
| SEND | 4-5 | 3-4 | 2-3 | 1-2 | 4-5 | 3-4 | 2-3 | 1-2 | | CAL |
| RECEIVE | 40-50 | → | → | → | 50-60 | → | → | → | | 4-5 |
| RANGE | Hi | → | → | → | Hi | → | → | → | | Hi |
| VOLTAGE | 440 | 450 | 420 | 450 | T440 | 450 | 530 | 450 | | 100 |
| CURRENT | 4.0 | 5.0 | 4.0 | 4.0 | 4.0 | 5.0 | 5.0 | 4.0 | | 1.0 |

FREQUENCIES .1 1.0
SENDER NO. 66445
OPERATOR HIX
RECEIVER NO. 9741-1
OPERATOR PALMER

COMMENTS:
1-2 — 4.0 - Hi
2-3 — 4.0 - Hi - 5.6
3-4 — 5.0 - Hi
4-5 — 4.0 - Hi

HEINRICHS GEOEX B274-68 LINE 6C SPD 1 LOOKING WEST 9-12-68 A= 1000 FEET

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.000 | 5.000 | 4.000 | 5.000 | 5.000 | 4.000 | 4.000 | 5.000 | 5.000 | 4.000 | I | 4.000 | 5.000 | 5.000 | 5.000 | 4.000 | 4.000 | 5.000 | 4.000 | 1.000 | |
| 6145 | 7681 | 1031 | 8153 | 1392 | 4451 | 6732 | 1488 | 6023 | 261 | DC | 185 | 787 | 4183 | 255 | 7104 | | | | 1006 | LEFT |
| 6145 | 7681 | 1031 | 8153 | 1392 | 4451 | 6732 | 1488 | 6023 | 261 | | 185 | 787 | 4183 | 255 | 7104 | | | | 1006 | SIDE |
| 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | N | 2 | 3 | 4 | 5 | 3 | 4 | 5 | 6 | | |
| 61.45 | 76.81 | 10.31 | 81.53 | 13.92 | 4.451 | 67.32 | 14.88 | 6.023 | 2.610 | DCA | 18.50 | 7.870 | 4.183 | 2.550 | 7.104 | 0.000 | 0.000 | 0.000 | 100.6 | |
| 61.00 | 76.30 | 10.15 | 81.00 | 13.75 | 4.390 | 66.90 | 14.70 | 5.970 | 2.550 | AC1 | 18.20 | 7.760 | 4.100 | 2.470 | 7.000 | 0.000 | 0.000 | 0.000 | 100.4 | |
| 61.00 | 76.30 | 10.15 | 81.00 | 13.75 | 4.390 | 66.90 | 14.70 | 5.970 | 2.550 | AC2 | 18.20 | 7.760 | 4.100 | 2.470 | 7.000 | 0.000 | 0.000 | 0.000 | 100.4 | |
| 61.00 | 76.30 | 10.15 | 81.00 | 13.75 | 4.390 | 66.90 | 14.70 | 5.970 | 2.550 | ACA | 18.20 | 7.760 | 4.100 | 2.470 | 7.000 | 0.000 | 0.000 | 0.000 | 100.4 | |
| 45.81 | 45.81 | 30.75 | 48.63 | 33.21 | 33.18 | 50.19 | 35.50 | 35.92 | 38.92 | RHO | 55.17 | 46.94 | 49.90 | 53.23 | 52.96 | *000.0 | *000.0 | *000.0 | .994 | DC CAL |
| .5 | .5 | 1.4 | .5 | 1.0 | 1.2 | .4 | 1.0 | .7 | 2.1 | PFE | 1.4 | 1.2 | 1.8 | 3.0 | 1.3 | *000.0 | *000.0 | *000.0 | .998 | AC CAL |
| 12 | 10 | 45 | 9 | 31 | 36 | 9 | 29 | 19 | 55 | MCF | 26 | 26 | 37 | 57 | 24 | *00000 | *00000 | *00000 | | |
| .0 | .0 | .3 | .0 | .3 | .6 | .0 | .3 | .6 | 1.0 | CPFE | .1 | .4 | .7 | 1.0 | .3 | 0.0 | 0.0 | 0.0 | | |
| .5 | .4 | 1.1 | .4 | .8 | .6 | .4 | .8 | .1 | 1.2 | CCPFE | 1.3 | .8 | 1.1 | 2.0 | .9 | *000.0 | *000.0 | *000.0 | | |
| 11 | 9 | 35 | 8 | 23 | 17 | 8 | 22 | 3 | 31 | CCMCF | 24 | 17 | 23 | 38 | 18 | 1000 | 1000 | 1000 | | |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 5.000 | 4.000 | 4.000 | I | 4.000 | 5.000 | 4.000 | 4.000 | 4.000 | 5.000 | 5.000 | 4.000 | 1.000 | |
| 6105 | 6066 | 1024 | 7156 | 102 | 412 | 6516 | 157 | 4298 | 234 | DC | 1177 | 6031 | 2359 | 1478 | 4272 | 2901 | 1678 | 8939 | 1006 | RIGHT |
| 6105 | 6066 | 1024 | 7156 | 102 | 412 | 6516 | 157 | 4298 | 234 | | 1177 | 6031 | 2359 | 1478 | 4272 | 2901 | 1678 | 8939 | 1006 | SIDE |
| 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 | N | 2 | 3 | 4 | 5 | 3 | 4 | 5 | 6 | | |
| 61.05 | 60.66 | 10.24 | 71.56 | 10.20 | 4.120 | 65.16 | 15.70 | 4.298 | 2.340 | DCA | 11.77 | 6.031 | 2.359 | 1.478 | 4.272 | 2.901 | 1.678 | .894 | 100.6 | |
| 60.75 | 60.35 | 10.10 | 71.25 | 10.10 | 4.080 | 64.75 | 15.50 | 4.240 | 2.280 | AC1 | 11.60 | 5.920 | 2.300 | 1.420 | 4.160 | 2.840 | 1.610 | .860 | 100.4 | |
| 60.75 | 60.35 | 10.10 | 71.25 | 10.10 | 4.080 | 64.75 | 15.50 | 4.240 | 2.280 | AC2 | 11.60 | 5.920 | 2.300 | 1.420 | 4.160 | 2.840 | 1.610 | .860 | 100.4 | |
| 60.75 | 60.35 | 10.10 | 71.25 | 10.10 | 4.080 | 64.75 | 15.50 | 4.240 | 2.280 | ACA | 11.60 | 5.920 | 2.300 | 1.420 | 4.160 | 2.840 | 1.610 | .860 | 100.4 | |
| 45.51 | 45.22 | 30.54 | 53.35 | 30.42 | 30.72 | 48.58 | 37.46 | 32.04 | 34.89 | RHO | 35.10 | 35.97 | 35.17 | 38.57 | 31.85 | 34.60 | 35.03 | 37.32 | .994 | DC CAL |
| .3 | .3 | 1.2 | .2 | .8 | .8 | .4 | 1.1 | 1.2 | 2.4 | PFE | 1.3 | 1.7 | 2.4 | 3.9 | 2.5 | 1.9 | 4.0 | 3.7 | .998 | AC CAL |
| 6 | 7 | 39 | 4 | 26 | 25 | 9 | 29 | 36 | 70 | MCF | 36 | 46 | 67 | 101 | 78 | 56 | 115 | 100 | | |
| .0 | .0 | .3 | .0 | .3 | .7 | .0 | .2 | .7 | 1.1 | CPFE | .3 | .6 | 1.1 | 1.6 | .7 | 1.1 | 1.8 | 2.5 | | |
| .2 | .3 | .9 | .2 | .5 | .1 | .4 | .9 | .5 | 1.3 | CCPFE | 1.0 | 1.1 | 1.3 | 2.3 | 1.8 | .8 | 2.2 | 1.3 | | |
| 5 | 6 | 29 | 4 | 16 | 2 | 8 | 23 | 16 | 38 | CCMCF | 29 | 31 | 36 | 60 | 57 | 24 | 64 | 34 | | |

48022

Moore Business Forms, Inc.

HEINRICHS GEOEX B274-68 LINE 10 SPD 1 LOOKING WEST 9-7-68 A= 1000 FEET

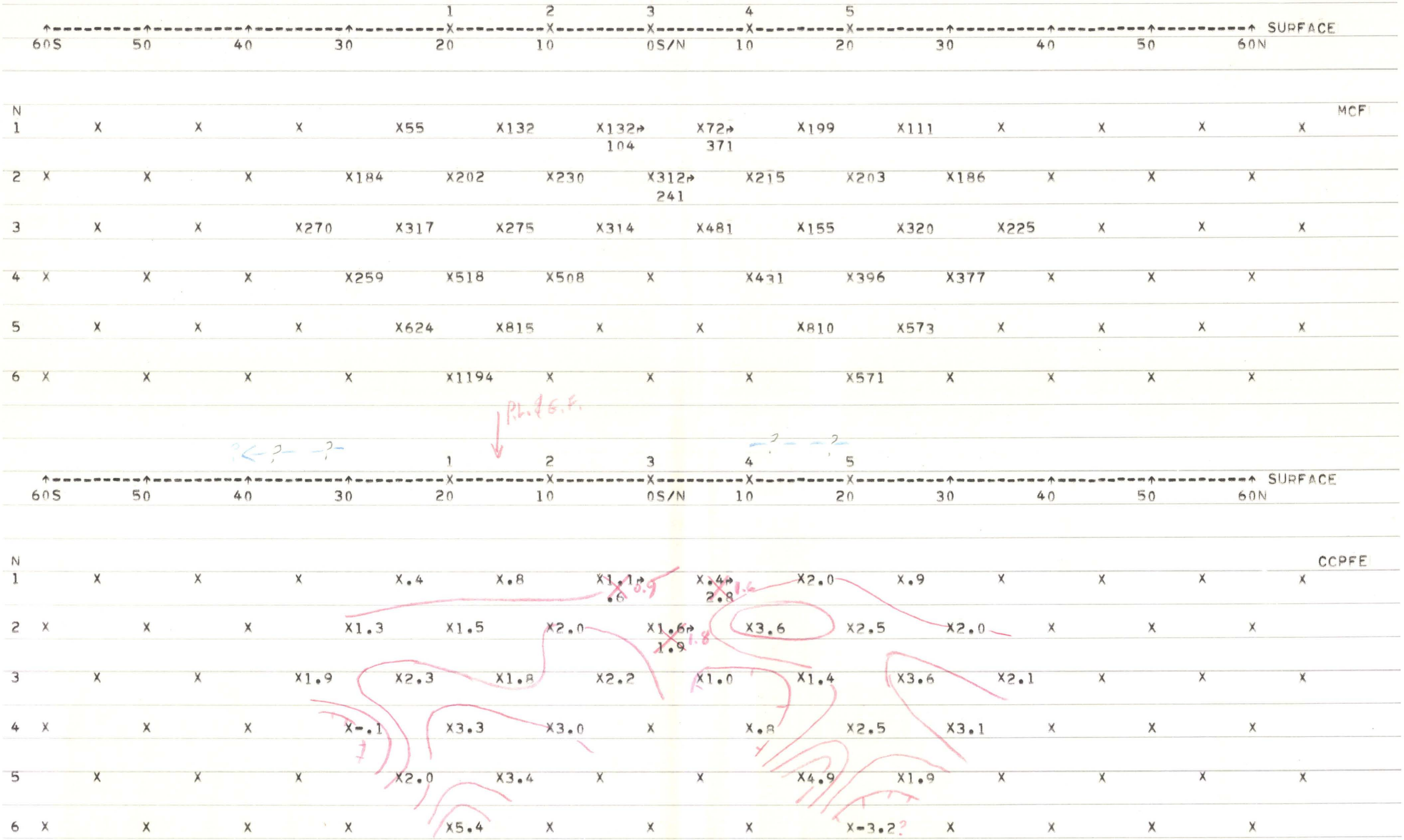
12000 7000
67000 38000

| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |
| N | | | | | | | | | | | | | | RHO/2PI |
| 1 | X | X | X | X13 | X9.5 | X11→ ~~10~~ | X11→ ~~8.8~~ 10 | X12 | X11 | X | X | X | X | |
| 2 | X | X | X | X13 | X13 | X13 | X10→ 12 11 | X19 | X16 | X15 | X | X | X | |
| 3 | X | X | X14 | X14 | X14 | X14 | X9.2 | X18 | X16 | X16 | X | X | X | |
| 4 | X | X | X | X14 | X14 | X13 | X | X12 | X15 | X16 | X | X | X | |
| 5 | X | X | X | X13 | X12 | X | X | X13 | X14 | X | X | X | X | |
| 6 | X | X | X | X | X12 | X | X | X | X12 | X | X | X | X | |

| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |
| N | | | | | | | | | | | | | | PFE |
| 1 | X | X | X | X.7 | X1.3 | X1.4→ ~~1.0~~ 1.2 | X.8→ ~~3.3~~ 2.0 | X2.3 | X1.2 | X | X | X | X | |
| 2 | X | X | X | X2.3 | X2.5 | X3.0 | X3.1→ ~~2.9~~ 3.0 | X4.1 | X3.3 | X2.8 | X | X | X | |
| 3 | X | X | X3.9 | X4.3 | X3.8 | X4.3 | X4.4 | X2.8 | X5.3 | X3.7 | X | X | X | |
| 4 | X | X | X | X3.6 | X7.0 | X6.8 | X | X5.2 | X5.9 | X6.1 | X | X | X | |
| 5 | X | X | X | X8.2 | X10.0 | X | X | X10.9 | X7.8 | X | X | X | X | |
| 6 | X | X | X | X | X14.9 | X | X | X | X6.8 | X | X | X | X | |

USE PFEC

05 5568



| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | SURFACE |

MCF

| N | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X55 | X132 | X132→ 104 | X72→ 371 | X199 | X111 | X | X | X | X | |
| 2 | X | X | X | X184 | X202 | X230 | X312→ 241 | X215 | X203 | X186 | X | X | X | |
| 3 | X | X | X270 | X317 | X275 | X314 | X481 | X155 | X320 | X225 | X | X | X | |
| 4 | X | X | X | X259 | X518 | X508 | X | X431 | X396 | X377 | X | X | X | |
| 5 | X | X | X | X624 | X815 | X | X | X810 | X573 | X | X | X | X | |
| 6 | X | X | X | X | X1194 | X | X | X | X571 | X | X | X | X | |

P.L. & G.F.

| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | SURFACE |

CCPFE

| N | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X.4 | X.8 | X1.1→ .6 5.9 | X.4→ 2.8 1.6 | X2.0 | X.9 | X | X | X | X | |
| 2 | X | X | X | X1.3 | X1.5 | X2.0 | X1.6→ 1.9 1.8 | X3.6 | X2.5 | X2.0 | X | X | X | |
| 3 | X | X | X1.9 | X2.3 | X1.8 | X2.2 | X1.0 | X1.4 | X3.6 | X2.1 | X | X | X | |
| 4 | X | X | X | X-.1 | X3.3 | X3.0 | X | X.8 | X2.5 | X3.1 | X | X | X | |
| 5 | X | X | X | X2.0 | X3.4 | X | X | X4.9 | X1.9 | X | X | X | X | |
| 6 | X | X | X | X | X5.4 | X | X | X | X-3.2? | X | X | X | X | |

0575572

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 9 | 3 | 5 | 2 | 0 | 0 | 2 | 2 | -3 | 19 | 8 | 13 | |
| | | | | 1 | 2 | 3 | 4 | 5 | | | | | SURFACE |
| 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | |

CCMCF

| N | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | X | | X | | X | X32 | X87 | X99→ ~~62~~ 82 | X37→ ~~316~~ 160 | X171 | X80 | X | X | X | X |
| 2 | X | | X | | X | X102 | X121 | X152 | X167→ ~~153~~ 164 | X184 | X158 | X132 | X | X | X | |
| 3 | | X | | X | | X136 | X167 | X131 | X164 | X112 | X76 | X222 | X127 | X | X | X |
| 4 | X | | X | | X | X-8 | X243 | X226 | X | X67 | X170 | X192 | X | X | X | |
| 5 | | X | | X | | X | X154 | X273 | X | X | X365 | X140 | X | X | X | X |
| 6 | X | | X | | X | X | X428 | X | X | X | X-271 | X | X | X | X | |

0575587

HEINRICHS GEOEX  B274-68  LINE 2  SPD 1  LOOKING WEST  9-19-68  A= 1000 FEET

12000  7000

| N | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |
| 1 | X | X | X | X18 | X18 | X18→ 18 | X16→ 16 | X16 | X16 | X | X | X | X | RHO/2PI |
| 2 | X | X | X | X17 | X17 | X17 | X18→ 16 15 | X14 | X14 | X14 | X | X | X | |
| 3 | X | X | X-- | X15 | X15 | X14 | X13 | X12 | X12 | X12 | X | X | X | |
| 4 | X | X | X | X14 | X13 | X13 | X | X12 | X11 | X11 | X | X | X | |
| 5 | X | X | X | X12 | X11 | X | X | X11 | X10 | X | X | X | X | |
| 6 | X | X | X | X | X11 | X | X | X | X11 | X | X | X | X | |

10 $\rho_1$

100 $\rho_2$

| N | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |
| 1 | X | X | X | X2.5 | X2.4 | X2.5→ 2.3 2.9 | X2.3→ 2.5 | X2.2 | X2.1 | X | X | X | X | PFE |
| 2 | X | X | X | X3.9 | X4.1 | X3.9 | X3.8→ 3.8 | X3.7 | X3.5 | X3.1 | X | X | X | |
| 3 | X | X | X-- | X5.0 | X5.1 | X5.5 | X4.7 | X4.7 | X4.0 | X4.7 | X | X | X | |
| 4 | X | X | X | X8.8 | X6.9 | X8.1 | X | X6.5 | X5.2 | X5.7 | X | X | X | |
| 5 | X | X | X | X10.6 | X9.9 | X | X | X9.2 | X7.9 | X | X | X | X | |
| 6 | X | X | X | X | X11.8 | X | X | X | X12.5 | X | X | X | X | |

USE CCPFE

631022

| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |

MCF

| N | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X140 | X129 | X29→ 128 | X145→ 153 | X135 | X132 | X | X | X | X | | |
| 2 | X | X | X | X226 | X243 | X238 | X212→ 253 | X272 | X248 | X223 | X | X | X | | |
| 3 | X | X | X-- | X338 | X348 | X400 | X367 | X386 | X337 | X398 | X | X | X | | |
| 4 | X | X | X | X626 | X538 | X643 | X | X542 | X474 | X526 | X | X | X | | |
| 5 | X | X | X | X874 | X868 | X | X | X823 | X771 | X | X | X | X | | |
| 6 | X | X | X | X | X1059 | X | X | X | X1155 | X | X | X | X | | |
| | 25 | 13 | 10 | ? ← ? 16 | ? 1 | 6 | 0 | 11 | 1 | 18 | 17 | 17 | 16 | | |

| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |

CCPFE

| N | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X2.3 | X2.2 | X~~2.3~~→ ~~2.1~~ 2.7 | X2.1→ ~~2.3~~ 2.2 | X1.9 | X1.9 | X | X | X | X | | |
| 2 | X | X | X | X3.2 | X3.3 | X3.2 | X3.1→ 3.0 | X2.8 | X2.6 | X2.1 | X | X | X | | |
| 3 | X | X | X-- | X3.2 | X3.2 | X3.5 | X2.5 | X2.3 | X1.6 | X2.2 | X | X | X | | |
| 4 | X | X | X | X5.3 | X3.0 | X4.0 | X | X2.1 | X.3 | X.7 | X | X | X | | |
| 5 | X | X | X | X3.9 | X2.7 | X | X | X1.8 | X-.4 | X | X | X | X | | |
| 6 | X | X | X | X | X.8 | X | X | X | X1.1 | X | X | X | X | | |

631023

Moore Business Forms, Inc.

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | | 2 | | 3 | | 4 | | 5 | | | |
| | 60S | 50 | 40 | 30 | | 20 | | 10 | | 0S/N | | 10 | | 20 | 30 | 40 | 50 | 60N | SURFACE |
| N | | | | | | | | | | | | | | | | | | | CCMCF |
| 1 | | X | X | X | | X129 | | X119 | | X~~19~~ 150 ~~118~~ | | X~~132~~ 138 ~~140~~ | | X122 | X120 | X | X | X | X |
| 2 | X | X | X | | X187 | | X201 | | X195 | | X~~176~~ 194 ~~200~~ | | X205 | X185 | X157 | X | X | X | |
| 3 | | X | X | X-- | | X215 | | X219 | | X252 | | X193 | | X189 | X133 | X184 | X | X | X |
| 4 | X | X | X | | X376 | | X231 | | X316 | | X | | X179 | X31 | X69 | X | X | X | |
| 5 | | X | X | X | | X318 | | X232 | | X | | X | | X157 | X-37 | X | X | X | X |
| 6 | X | X | X | X | | X70 | | X | | X | | X | | X104 | X | X | X | X | |

7000 3000

HEINRICHS GEOEX B274-68 LINE 3 SPD 1 LOOKING WEST 9-20-68 A= 1000 FEET

| | 1 | 2 | 3 | 4 | 5 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SURFACE | ~~60S~~ | ~~50~~ | ~~40~~ | ~~30~~ | 20S | 10 | 0S/N | 10 | 20 | 30 | 40 | 50N | ~~60N~~ |

RHO/2PI

| N | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | X | X | X | X17 | X19 | X--> 20 | X--> 22 | X-- | X-- | X | X | X | X |
| 2 | X | X | X | X13 | X14 | X16 | X--> 17 | X-- | X-- | X-- | X | X | X | |
| 3 | | X | X | X-- | X-- | X15 | X16 | X-- | X-- | X-- | X-- | X | X | X |
| 4 | X | X | X | X-- | X-- | X16 | X | X-- | X-- | X-- | X | X | X | |
| 5 | | X | X | X | X-- | X-- | X | X | X-- | X | X | X | X |
| 6 | X | X | X | X | X-- | X | X | X | X-- | X | X | X | X | |

Flip! actually N½

| | 1 | 2 | 3 | 4 | 5 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SURFACE | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N |

PFE

| N | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | X | X | X | X2.2 | X2.2 | X--> 2.3 | X--> 2.3 | X-- | X-- | X | X | X | X |
| 2 | X | X | X | X3.2 | X3.2 | X3.4 | X--> 3.5 | X-- | X-- | X-- | X | X | X | |
| 3 | | X | X | X-- | X-- | X3.9 | X4.4 | X-- | X-- | X-- | X-- | X | X | X |
| 4 | X | X | X | X-- | X-- | X5.3 | X | X-- | X-- | X-- | X | X | X | |
| 5 | | X | X | X | X-- | X-- | X | X | X-- | X-- | X | X | X | X |
| 6 | X | X | X | X | X-- | X | X | X | X-- | X | X | X | X | |

USE PFE

631026

| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |

MCF

| N | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X128 | X118 | X→ 119 | X→ 109 | X-- | X-- | X | X | X | X | |
| 2 | X | X | X | X248 | X221 | X220 | X→ 206 | X-- | X-- | X-- | X | X | X | |
| 3 | X | X | X-- | X-- | X264 | X279 | X-- | X-- | X-- | X-- | X | X | X | |
| 4 | X | X | X | X-- | X-- | X343 | X | X-- | X-- | X-- | X | X | X | |
| 5 | X | X | X | X-- | X-- | X | X | X-- | X-- | X | X | X | X | |
| 6 | X | X | X | X | X-- | X | X | X | X-- | X | X | X | X | |

0 7 9 3 13 17 —

| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |

CCPFE

| N | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X2.0 | X2.0 | X→ 2.2 | X→ 2.2 | X-- | X-- | X | X | X | X | |
| 2 | X | X | X | X2.3 | X2.4 | X2.6 | X→ 2.8 | X-- | X-- | X-- | X | X | X | |
| 3 | X | X | X-- | X-- | X2.1 | X2.7 | X-- | X-- | X-- | X-- | X | X | X | |
| 4 | X | X | X | X-- | X-- | X2.2 | X | X-- | X-- | X-- | X | X | X | |
| 5 | X | X | X | X-- | X-- | X | X | X-- | X-- | X | X | X | X | |
| 6 | X | X | X | X | X-- | X | X | X | X-- | X | X | X | X | |

No contour

031027

Moore Business Forms, Inc.

| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |
| N | | | | | | | | | | | | | | CCMCF |
| 1 | X | X | X | X117 | X109 | X--> 111 | X--> 102 | X-- | X-- | X | X | X | X | |
| 2 | X | X | X | X173 | X163 | X170 | X--> 166 | X-- | X-- | X-- | X | X | X | |
| 3 | X | X | X-- | X-- | X140 | X170 | X-- | X-- | X-- | X-- | X | X | X | |
| 4 | X | X | X | X-- | X-- | X142 | X | X-- | X-- | X-- | X | X | X | |
| 5 | X | X | X | X-- | X-- | X | X | X-- | X-- | X | X | X | X | |
| 6 | X | X | X | X | X-- | X | X | X | X-- | X | X | X | X | |

12000 7000

HEINRICHS GEOEX B274-68 LINE 40 SPD 1 LOOKING WEST 9-11-68 A= 1000 FEET

| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |

RHO/2PI

| N | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X25 | X29 | X29 ~~29~~ | X31 ~~31~~ | X28 | X26 | X | X | X | X | |
| 2 | X | X | X | X20 | X24 | X25 | X25 ~~25~~ | X25 | X24 | X-- | X | X | X | |
| 3 | X | X | X20 | X22 | X23 | X23 | X22 | X26 | X26 | X22 | X | X | X | |
| 4 | X | X | X | X22 | X22 | X22 | X | X24 | X27 | X24 | X | X | X | |
| 5 | X | X | X | X23 | X20 | X | X | X24 | X24 | X | X | X | X | |
| 6 | X | X | X | X | X21 | X | X | X | X21 | X | X | X | X | |

| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |

PFE

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | X | X | X | X2.3 | X2.1 | X1.3 ~~1.8~~ 1.6 | X1.5 ~~1.7~~ 1.6 | X1.5 | X1.2 | X | X | X | X | |
| | X | X | X | X3.6 | X3.4 | X3.0 | X2.2 ~~3.3~~ 2.8 | X2.3 | X2.4 | X-- | X | X | X | |
| USE | X | X | X5.0 | X4.5 | X4.3 | X4.4 | X3.5 | X3.2 | X2.5 | X2.7 | X | X | X | |
| | X | X | X | X6.8 | X5.6 | X5.7 | X | X5.5 | X5.1 | X4.3 | X | X | X | |
| CCPFE | X | X | X | X9.8 | X3.3 | X | X | X6.9 | X5.2 | X | X | X | X | |
| | X | X | X | X | X8.3 | X | X | X | X6.0 | X | X | X | X | |

498788

Moore Business Forms, Inc.

49981

1 2 3 4 5

SURFACE

60S 50 40 30 20 10 0S/N 10 20 30 40 50 60N

MCF

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| X | X | X | X91 | X70 | X46→ 60 | X49→ 55 | X54 | X45 | X | X | X | X |
| X | X | X | X174 | X141 | X119 | X90→ 132 | X93 | X98 | X-- | X | X | X |
| X | X | X255 | X204 | X184 | X186 | X156 | X120 | X93 | X123 | X | X | X |
| X | X | X | X303 | X249 | X258 | X | X233 | X189 | X175 | X | X | X |
| X | X | X | X426 | X160 | X | X | X285 | X214 | X | X | X | X |
| X | X | X | X | X390 | X | X | X | X278 | X | X | X | X |

? ? ? ?

1 2 3 4 5

SURFACE

60S 50 40 30 20 10 0S/N 10 20 30 40 50 60N

CCPFE

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| X | X | X | X2.2 | X2.0 | X1.3→ ~~1.7~~ 1.5 | X1.4→ ~~1.6~~ 1.5 | X1.4 | X1.1 | X | X | X | X |
| X | X | X | ~~X3.0~~ | X3.0 | X2.6 | X1.8→ ~~2.9~~ 2.1 | X1.9 | X2.0 | X-- | X | X | X |
| X | X | X3.7 | X3.4 | X3.3 | X3.4 | X2.4 | X2.3 | X1.6 | X1.6 | X | X | X |
| X | X | X | X4.8 | X3.6 | X3.7 | X | X3.7 | X3.6 | X2.5 | X | X | X |
| X | X | X | X6.7 | X-.3 | X | X | X4.0 | X2.3 | X | X | X | X |
| X | X | X | X | X3.2 | X | X | X | X1.0 | X | X | X | X |

Moore Business Forms, Inc. f

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -8 | -11 | -9 | -2 | -4 | 0 | 0 | 0 | -2 | 3 | 9 | 7 | 6 | |
| | | | | 1 | 2 | 3 | 4 | 5 | | | | | |
| 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | SURFACE |

CCMCF

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | X | X | X | X86 | X67 | X43 ~~X32~~ 57 | X46 ~~X48~~ 58 | X51 | X41 | X | X | X | X |
| X | X | X | X148 | X123 | X103 | X73 ~~X96~~ 115 | X76 | X81 | X1000 | X | X | X | |
| | X | X | X189 | X155 | X141 | X143 | X108 | X87 | X60 | X72 | X | X | X |
| X | X | X | X215 | X161 | X167 | X | X156 | X133 | X102 | X | X | X | |
| | X | X | X | X293 | X-14 | X | X | X165 | X95 | X | X | X | X |
| X | X | X | X | X153 | X | X | X | X47 | X | X | X | X | |

4980

HEINRICHS GEOEX 8274-68 LINE 50 SPD 1 LOOKING WEST 9-18-68 A= 1000 FEET

12000 7000

| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |

RHO/2PI

| N | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X33 | X35 | X37 37 | X47 47 | X44 | X36 | X | X | X | X | |
| 2 | X | X | X | X25 | X26 | X28 | X30 31 | X29 | X25 | X24 | X | X | X | |
| 3 | X | X | X23 | X27 | X29 | X31 | X25 | X24 | X24 | X28 | X | X | X | |
| 4 | X | X | X | X27 | X32 | X34 | X | X25 | X25 | X29 | X | X | X | |
| 5 | X | X | X | X31 | X37 | X | X | X26 | X32 | X | X | X | X | |
| 6 | X | X | X | X | X34 | X | X | X | X34 | X | X | X | X | |

| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |

PFE

| N | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X1.4 | X1.4 | X.9 1.1 | X.7 1.0 | X.8 | X1.1 | X | X | X | X | |
| 2 | X | X | X | X2.3 | X2.1 | X1.9 | X1.7 2.2 | X1.4 | X1.5 | X1.6 | X | X | X | |
| 3 | X | X | X3.7 | X3.1 | X3.1 | X2.9 | X2.6 | X2.6 | X2.5 | X2.5 | X | X | X | |
| 4 | X | X | X | X2.9 | X4.1 | X4.9 | X | X4.1 | X3.1 | X2.8 | X | X | X | |
| 5 | X | X | X | X4.5 | X6.6 | X | X | X4.6 | X4.6 | X | X | X | X | |
| 6 | X | X | X | X | X7.4 | X | X | X | X5.4 | X | X | X | X | |

USE CC PFE

830255

Moore Business Forms, Inc.

| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | SURFACE |

MCF

| N | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X42 | X39 | X23→ 30 | X16→ 21 | X18 | X30 | X | X | X | X |
| 2 | X | X | X | X93 | X81 | X68 | X56→ 71 | X49 | X62 | X68 | X | X | X |
| 3 | X | X | X160 | X113 | X106 | X93 | X104 | X107 | X106 | X89 | X | X | X |
| 4 | X | X | X | X110 | X129 | X142 | X | X164 | X122 | X96 | X | X | X |
| 5 | X | X | X | X142 | X178 | X | X | X178 | X143 | X | X | X | X |
| 6 | X | X | X | X | X216 | X | X | X | X162 | X | X | X | X |

| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | SURFACE |

CCPFE

| N | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X1.3 | X1.3 | X.[illegible]→ 0.9 | X.[illegible]→ 0.8 | X.7 | X1.0 | X | X | X | X |
| 2 | X | X | X | X1.9 | X1.7 | X1.6 | X1.4→ 1.6 | X1.1 | X1.1 | X1.2 | X | X | X |
| 3 | X | X | X2.7 | X2.3 | X2.3 | X2.2 | X1.7 | X1.6 | X1.5 | X1.7 | X | X | X |
| 4 | X | X | X | X1.4 | X2.8 | X3.7 | X | X2.4 | X1.4 | X1.4 | X | X | X |
| 5 | X | X | X | X2.4 | X5.0 | X | X | X2.0 | X2.5 | X | X | X | X |
| 6 | X | X | X | X | X4.6 | X | X | X | X2.6 | X | X | X | X |

Moore Business Forms, Inc.

030252

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -1 | -3 | -4 | -4 | -9 | -12 | 0 | -1 | 4 | 1 | 8 | 8 | 11 | |
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | SURFACE |
| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | |
| N | | | | | | | | | | | | | | CCMCF |
| 1 | | X | X | X | X40 | X37 | X21 24 | X15 20 17 | X17 | X28 | X | X | X | X |
| 2 | X | X | X | X76 | X66 | X56 | X46 51 53 | X37 | X45 | X50 | X | X | X | |
| 3 | | X | X | X115 | X83 | X80 | X71 | X67 | X67 | X63 | X61 | X | X | X |
| 4 | X | X | X | X51 | X90 | X109 | X | X95 | X57 | X49 | X | X | X | |
| 5 | | X | X | X | X76 | X134 | X | X | X77 | X79 | X | X | X | X |
| 6 | X | X | X | X | X135 | X | X | X | X77 | X | X | X | X | |

12000 7000

HEINRICHS GEOEX B274-68 LINE 60 SPD 1 LOOKING WEST 9-12-68 A= 1000 FEET

48825

| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |

RHO/2PI

| N | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X50 | X49 | X46 ~~46~~ | X45 ~~46~~ | X53 | X49 | X | X | X | X | |
| 2 | X | X | X | X55 | X35 | X33 | X31 ~~31~~ | X30 | X37 | X35 | X | X | X | |
| 3 | X | X | X53 | X47 | X36 | X33 | X31 | X32 | X36 | X32 | X | X | X | |
| 4 | X | X | X | X-- | X50 | X39 | X | X35 | X35 | X35 | X | X | X | |
| 5 | X | X | X | X-- | X53 | X | X | X39 | X35 | X | X | X | X | |
| 6 | X | X | X | X | X-- | X | X | X | X37 | X | X | X | X | |

| | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N | SURFACE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | | |

PFE

| N | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X.4 | X.5 | X.3 ~~.5~~ 0.4 | X.3 ~~.5~~ 0.4 | X.2 | X.4 | X | X | X | X | |
| 2 | X | X | X | X1.4 | X1.0 | X1.0 | X1.2 ~~1.4~~ 1.3 | X.8 | X1.1 | X1.3 | X | X | X | |
| 3 | X | X | X1.3 | X1.2 | X.7 | X1.2 | X.8 | X1.2 | X1.7 | X2.5 | X | X | X | |
| 4 | X | X | X | X-- | X1.8 | X2.1 | X | X2.4 | X2.4 | X1.9 | X | X | X | |
| 5 | X | X | X | X-- | X3.0 | X | X | X3.9 | X4.0 | X | X | X | X | |
| 6 | X | X | X | X | X-- | X | X | X | X3.7 | X | X | X | X | |

Moore Business Forms, Inc.

48824

MCF

| N | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | SURFACE |
| 1 | X | X | X | X9 | X9 | X6→ 10 | X7→ 12 | X4 | X9 | X | X | X | X |
| 2 | X | X | X | X26 | X29 | X31 | X39→ 45 | X26 | X29 | X36 | X | X | X |
| 3 | X | X | X24 | X26 | X19 | X36 | X25 | X36 | X46 | X78 | X | X | X |
| 4 | X | X | X | X-- | X37 | X55 | X | X70 | X67 | X56 | X | X | X |
| 5 | X | X | X | X-- | X57 | X | X | X101 | X115 | X | X | X | X |
| 6 | X | X | X | X | X-- | X | X | X | X100 | X | X | X | X |
| | X | 0 | -3 | -6 | 1 | -10 | 0 | 3 | -2 | -7 | 5 | 15 | 8 |

CCPFE

| N | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | | | | SURFACE |
| 1 | X | X | X | X.4 | X.4 | X.2→ .4 0.3 | X.3→ .5 0.4 | X.2 | X.4 | X | X | X | X |
| 2 | X | X | X | X1.3 | X.8 | X.8 | X.9→ 1.1 1.0 | X.5 | X.9 | X1.0 | X | X | X |
| 3 | X | X | X.9 | X.8 | X.1 | X.6 | X.1 | X.5 | X1.1 | X1.8 | X | X | X |
| 4 | X | X | X | X-- | X1.1 | X1.2 | X | X1.3 | X1.3 | X.8 | X | X | X |
| 5 | X | X | X | X-- | X2.0 | X | X | X2.3 | X2.2 | X | X | X | X |
| 6 | X | X | X | X | X-- | X | X | X | X1.3 | X | X | X | X |

CCMCF

| N | 60S | 50 | 40 | 30 | 20 | 10 | 0S/N | 10 | 20 | 30 | 40 | 50 | 60N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | X | X | X8 | X8 | X5 9 | X6 11 | X4 | X8 | X | X | X | X |
| 2 | X | X | X | X24 | X22 | X23 | X29 35 | X16 | X23 | X29 | X | X | X |
| 3 | X | X | X | X18 | X17 | X3 | X17 | X2 | X16 | X31 | X57 | X | X | X |
| 4 | X | X | X | X~~1000~~ | X23 | X31 | X | X38 | X36 | X24 | X | X | X |
| 5 | X | X | X | X | X~~1000~~ | X38 | X | X | X60 | X64 | X | X | X | X |
| 6 | X | X | X | X | X~~1000~~ | X | X | X | X34 | X | X | X | X |

48827

GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

August 7, 1968

GEOEX
AUG 9 1968
BOX 5671 TUCSON, ARIZONA 85703
Phone (AREA 602) 623-0578

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

Dear Chris:

Start E to W w of 8/27/68

We have received your letter and map of August 2, outlining the IP program for the Gleeson Prospect in Sections 1 and 12, T20S, R24E and 5-8, T20S, R25E. The lines as indicated on the map appear satisfactory.

Due to our land situation we would prefer to start first on the Courtland Prospect in Sections 13-16, 22-27, T19S, R25E before beginning on the prospect south of Gleeson. This IP work is to begin when we have completed the IP program in the Carmen area.

Enclosed with this letter is a copy of your recommendation proposal for these areas which we have signed and approved.

Yours very truly,

GEOCHEMICAL SURVEYS

Ed Reagor

E. C. Reagor

ECR:sd
Enclosure

GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

June 19, 1968

30

GEOEX
GEOPHYSICAL ENGINEERS
TUCSON, ARIZONA

JUN 21 1968

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

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

2 3/4

Dear Chris:

This will confirm my phone conversation with you today to have your claim staking crew stake the following areas: the S/2 of Section 6, all of Section 7 and the W/2 of Section 8, T20S, R25E; also the SE corner of Section 1 and E/2 of Section 12 in T20S, R24E.

1/2

It is my understanding that you will be able to get at this the early part of next week. Please let us know if there is any change in these plans.

1

1/2

1/4

1/2

Yours very truly,

Philip

Philip B. Stewart

PBS:sd

GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

June 28, 1968

HOEX
TUCSON, ARIZONA
JUL 1 1968
BOX 5671 TUCSON, ARIZONA 85703
Phone: (AREA 602) 623-0576

Mr. Chris Ludwig
Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Dear Mr. Ludwig:

We are sending under separate cover molybdenum and copper geochemical maps and land ownership maps on the Gleeson and Courtland Prospects.

We have applied for prospecting permits from the State of Arizona on Sections 22, 23, 24 and 25 at Courtland. No permits were in force at the time of our application so we expect to receive those permits on or about July 13.

Yours very truly,

GEOCHEMICAL SURVEYS

W. R. Ransone

W. R. Ransone

WRR:bac

GEOCHEMICAL SURVEYS
2505 TURTLE CREEK BOULEVARD
DALLAS, TEXAS 75219

MAILING ADDRESS
P. O. BOX 19508

TELEPHONE
LAKESIDE 1-5145

September 20, 1968

GEOEX
SEP 21 1968
BOX 5671 TUCSON, ARIZONA 85703
Phone: (AREA 602) 623-0578

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

Dear Mr. Ludwig:

Confirming your conversation with Bill Ransone, we would like to have the corner posts staked on the 20 Gleeson claims outlined in red on the plat attached. We are quite interested in claims 10, 12, 14, 16 and 18, however, they appear to have been staked on Cowan fee land and it will not be necessary to complete the staking of these claims as we have a lease from Cowan. You will note the dates of the original posting and the requirement that the corners posts be staked prior to 90 days from the original date.

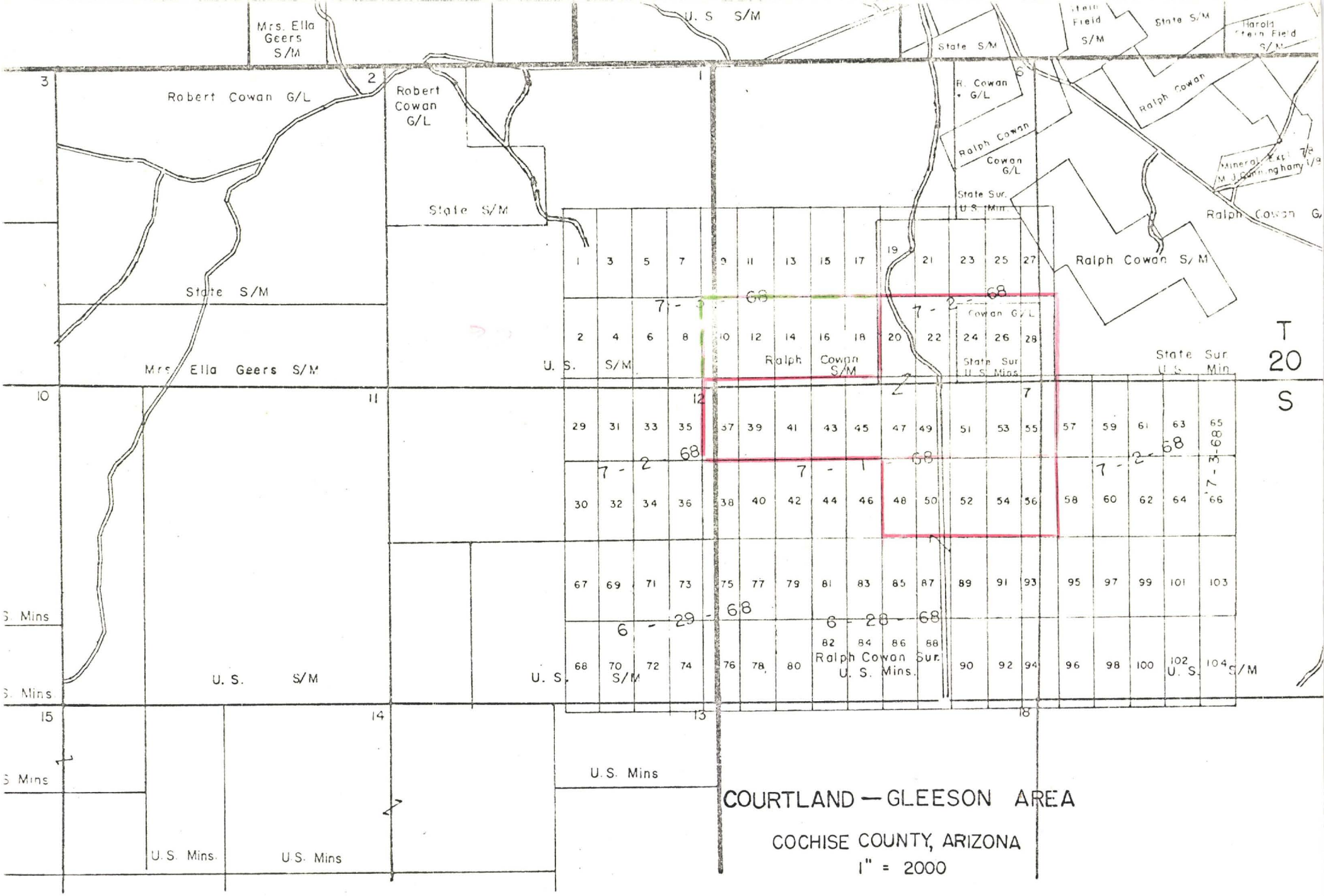
Yours very truly,

GEOCHEMICAL SURVEYS

R. S. Usry

RSU/es

Enclosure




COURTLAND — GLEESON AREA

COCHISE COUNTY, ARIZONA

1" = 2000

R 24 E

R 25 E

I.P.
for
GeoChem
at
Gilel. Co. Ar.

# INDUCED POLARIZATION, RESISTIVITY AND SELF POTENTIAL ELECTRICAL GEOPHYSICAL RECONNAISSANCE

## GLEESON AREA

## COCHISE COUNTY, ARIZONA

For

Geochemical Surveys

October 1968

By

Heinrichs Geoexploration Company
P. O. Box 5671 Tucson, Arizona 85703
Phone: 623-0578 Area Code: 602

TABLE OF CONTENTS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|---|---|
| GENERAL LOCATION | |
| INTRODUCTION, OBJECTIVE & PROCEDURES | 1 |
| CONCLUSIONS, RECOMMENDATIONS AND INTERPRETATION | 3 |
| INDUCED POLARIZATION LOCATION PLAN | 1a |
| IN MAP POCKET (total 2 pieces) | |
| Sectional Data Sheets (both a=500') | |
| Line 2 | |
| Line 4 | |

GENERAL LOCATION
of
GLEESON AREA
for
GEOCHEMICAL SURVEYS

# ARIZONA

HEINRICHS
**GEOEXPLORATION COMPANY**
BOX 5671 TUCSON, ARIZONA 85703
PH: 602/623-0578 CABLE: GEOEX, TUCSON
GEOPHYSICAL ENGINEERS SYDNEY VANCOUVER

## INTRODUCTION, OBJECTIVE AND PROCEDURES

At the request of Mr. W. R. Ransone, of Geochemical Surveys, Heinrichs Geoexploration Company conducted a reconnaissance electrical geophysical survey consisting of induced polarization (I. P.), resistivity and self potential techniques, in the Gleeson Area, Cochise County, Arizona. The field work was done on September 8 and 9, 1968.

Two lines were run (Lines 2 and 4) of the four lines initially proposed. Both are oriented east-west and are centered on High Lonesome Road. Line 2 runs down section line 6/7 and Line 4 is centered about 4,000 feet south of Line 2.

The dual frequency I. P. technique was used on this survey with sending frequencies of 0.05 and 3.0 Hz. The collinear dipole-dipole electrode configuration was used with a dipole spacing of 500 feet. This spacing typically gives resolvable penetration within the zone from about 150 to 600 or 750 feet below surface.

A total surface coverage of 12,000 feet was obtained of which 7,000 feet is subsurface plotted data.

The purpose of this survey was to determine if there is any sulfide mineral relationship to a geochemical molybdenum anomaly found in the area by Geochemical Surveys and to map any associated electrically responsive geologic structures.

Data are presented on Sectional Data Sheets, one for each line, showing resistivity, percent frequency effect (PFE) and metallic conduction factor (MCF) contoured in section and self potential in profile form. An Induced Polarization Location Plan is also included and shows the line locations relative to the land net and geochemical anomalism.

Heinrichs personnel involved in the field work were R. Palmer, geophysical crew chief and G. Hix and D. Erickson, technical assistants. Report and interpretation by Chris S. Ludwig, Senior Geophysicist, with the assistance of the Geoex Tucson staff.

## CONCLUSIONS, RECOMMENDATIONS AND INTERPRETATION

No definitely anomalous polarization effects were seen on either line. Both lines show a slight increase in the background response with depth, particularly in the more highly resistive zones. At best, the total indicated polarizable content is likely well less than 1/2 percent by volume (less than about one percent by weight) and is therefore probably not of economic interest for its sulfide polarizable content, at least to a depth below the surface of about 750 feet. On the other hand, the geochemical anomalism should nevertheless be tested on its own merit alone as the molybdenum geochemical anomalism could conceivably be resulting from economic concentrations of non-polarizable molybdenum mineralization (oxidized molybdenum minerals).

The resistivity shows several electrical contrasts of possible interest. The Gleeson quartz monzonite has an intermediate resistivity where traversed. The contact between this quartz monzonite and the Sugarloaf quartz latite may show as an electrical interface near 15E Line 2 and 17.5E Line 4. If so, it shows the latite to be rather high in resistivity and to perhaps dip gently west under the quartz monzonite. On Line 4 near 17.5W there is a sharp drop in resistivity likely representing the contact between the quartz monzonite and the recent tuffs and andesites to the west. This geology is as per J. Gilluly and R. S. Cannon, Jr., 1938.

The self potentials show no anomalous variation along the lines, suggesting a lack of appreciable quantities of actively oxidizing sulfides within several hundred feet of the surface in accordance with the I. P. results.

It is recommended that no further electrical geophysical work be undertaken until the geochemical drilling results are obtained. If an interesting zone is encountered in this initial drilling it should be determined if it corresponds to any, perhaps subtle, features mapped by the electrical geophysics that could be further delineated and extended electrically.

Respectfully submitted,

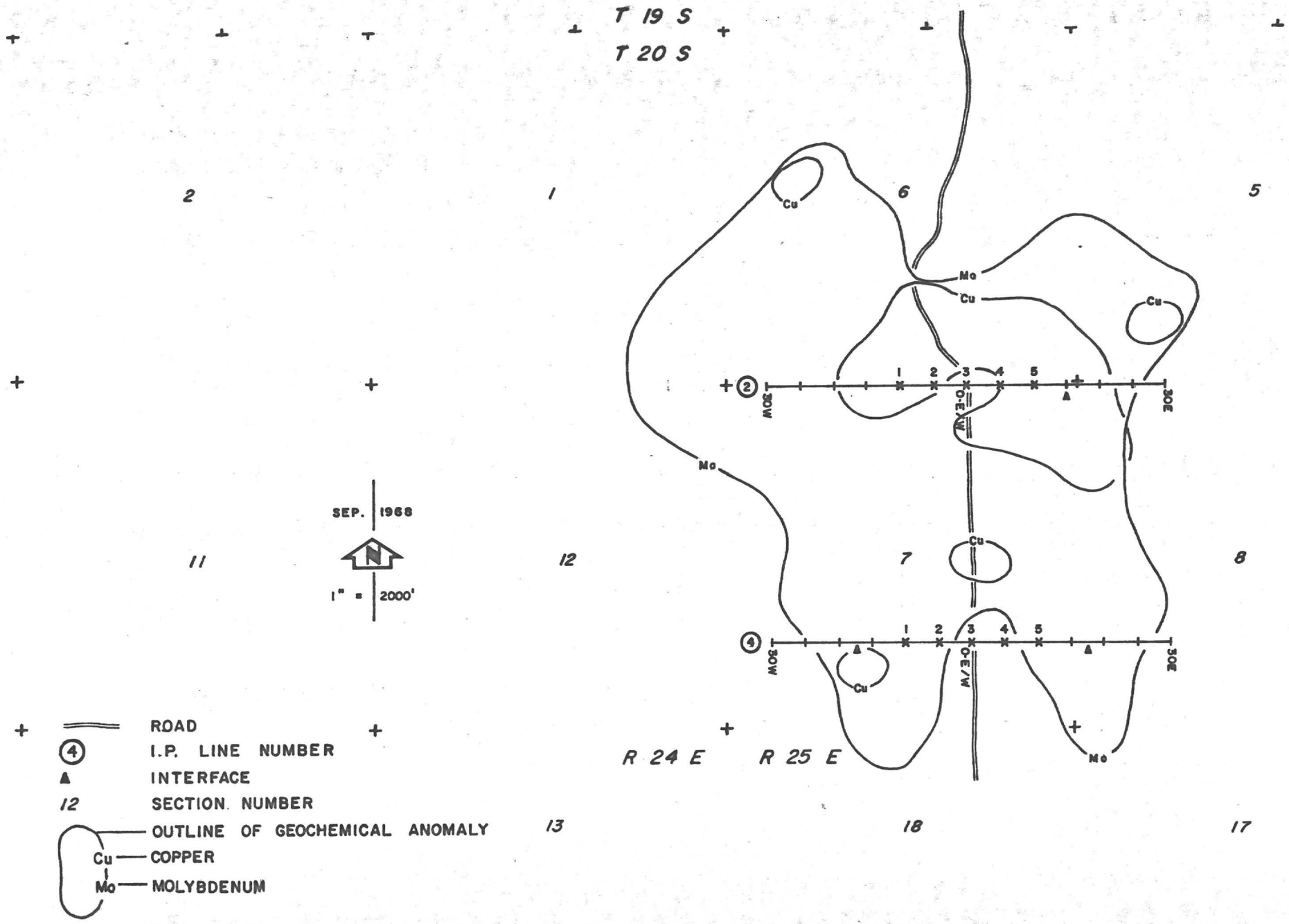
HEINRICHS GEOEXPLORATION COMPANY

Chris S. Ludwig

Chris S. Ludwig
Sr. Geophysicist

APPROVED: _____
Walter E. Heinrichs
President and General Manager

October 1, 1968
Tucson, Arizona

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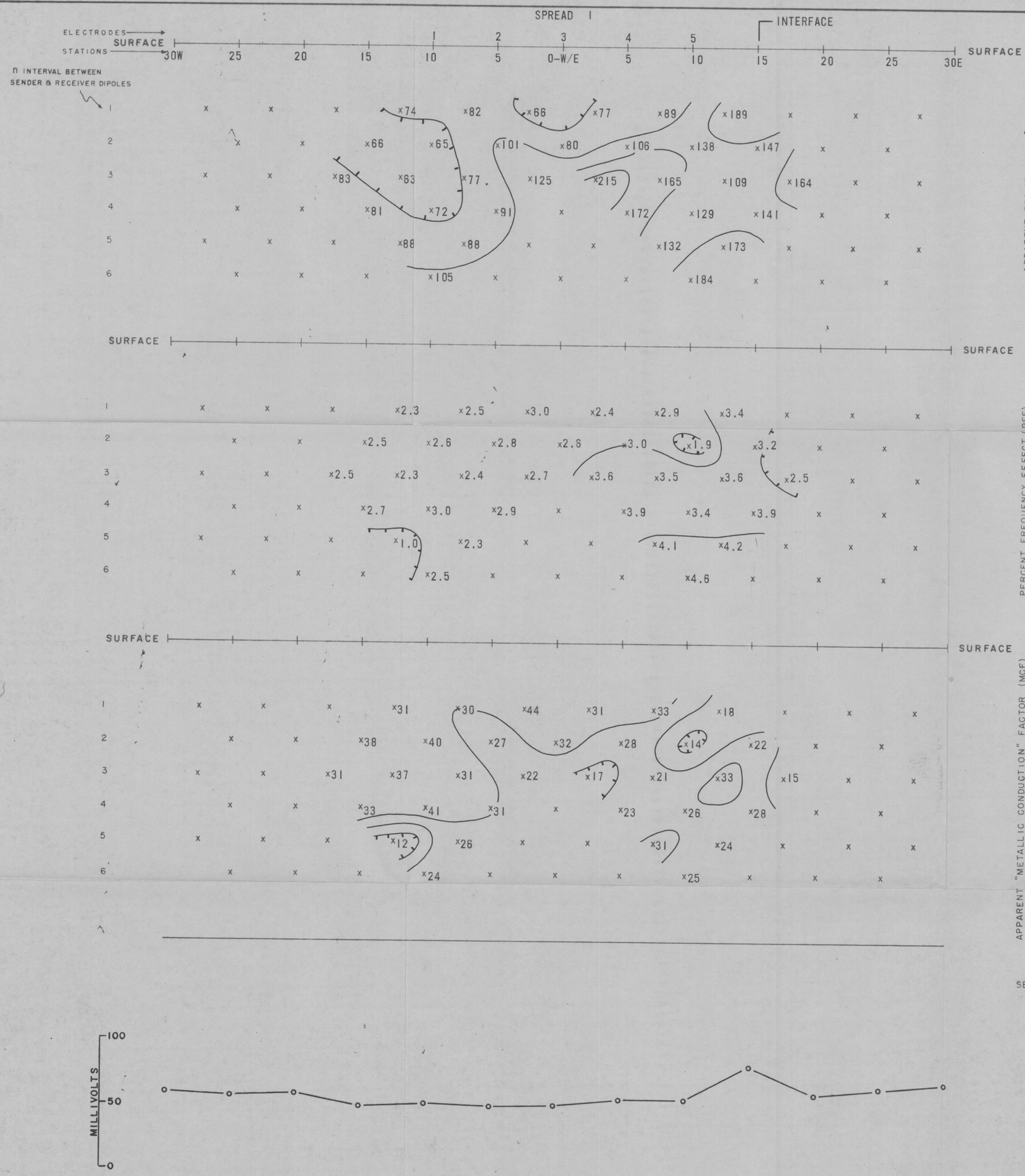
POST OFFICE BOX 5671, TUCSON, ARIZONA, 85703
Phone: 602/623-0578 Cable: GEOEX, Tucson
vancouver
sydney
geophysical engineers

INDUCED POLARIZATION LOCATION AND INTERPRETATION PLAN
GLEESON AREA — COCHISE COUNTY, ARIZONA
FOR — GEOCHEMICAL SURVEYS

OVERLAYS BASE MAP BY GEOCHEMICAL SURVEYS

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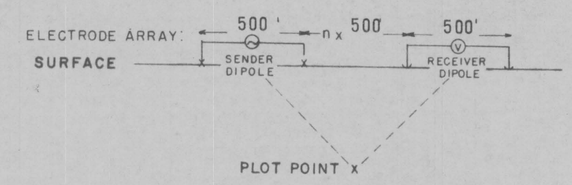


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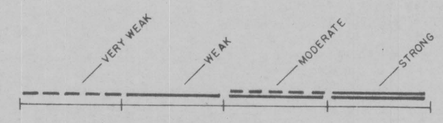


LOOKING NORTH

GLEESON AREA

# SECTIONAL DATA SHEET

LINE NO. 2 (SPREAD I)

INDUCED POLARIZATION TRAVERSE

HEINRICHS GEOEXPLORATION COMPANY

SCALE: 1" = 500' DATE: SEP 1968

FOR

GEOCHEMICAL SURVEYS

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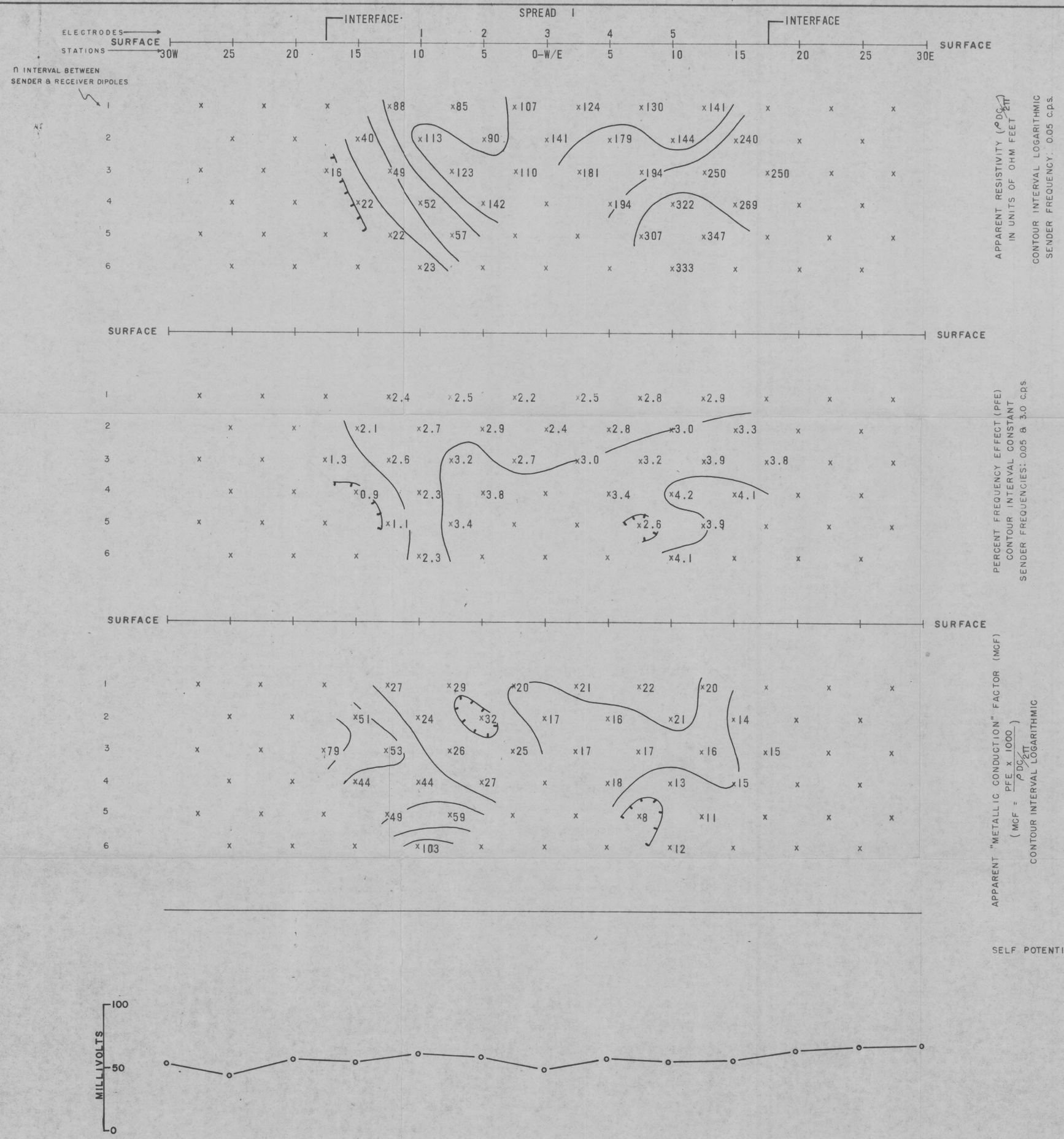


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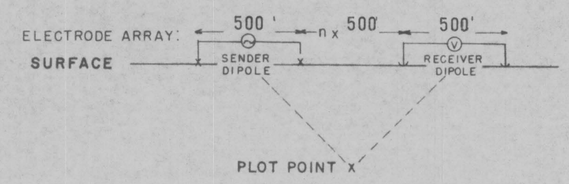


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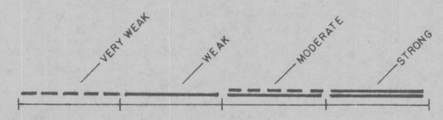


LOOKING NORTH

GLEESON AREA

# SECTIONAL DATA SHEET

LINE NO. 4 (SPREAD I)

INDUCED POLARIZATION TRAVERSE

HEINRICHS GEOEXPLORATION COMPANY

SCALE: 1" = 500' DATE: SEP 1968

FOR

GEOCHEMICAL SURVEYS

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HEINRICHS GEOEXPLORATION COMPANY

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

July 11, 1968

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

Re: Proposed Induced Polarization Survey in the Courtland and Gleeson Areas, Cochise County, Arizona

Dear Mr. Ransone:

As you requested, here is a proposal on a recommended induced polarization program to help evaluate the economic potential of your geochemical anomalism in the Courtland and Gleeson Areas, Cochise County, Arizona.

Courtland Prospect

After inspecting the geochemical anomaly map and geologic maps of the area plus considering previous experience we've had in the general district, it is believed that much of the broad copper anomaly is in an area of deep cover. Therefore, rather deep penetration is recommended, say 1,000 foot dipoles which typically give resolvable penetration within the zone from about 300 to 1,200 or 1,500 feet below surface. Experience to the south of your area has shown this alluvial cover to be quite conductive necessitating the use of maximum power to obtain good data quality.

To initially evaluate this anomaly, north-south lines separated about one-half mile apart and centered on the geochemical anomalism are recommended. The north-south direction



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

is suggested so as to minimize the effect of the probable eastward deepening buried pediment. Also, it is recommended that the first north-south line be run through the center of Section 22 (T19S, R25E) where bedrock is likely nearest surface and exposed just to the west and then with this control, continuing out to the east on one-half mile spacings to cover the geochemical anomalism. Six single spread lines should suffice in covering the area on a reconnaissance basis. If electrical anomalism is encountered, fill-in detailed coverage can be run between the existing lines.

Gleeson Area

Since this molybdenum-copper geochemical anomaly occurs on an exposed quartz monzonite, less penetration and power than at Courtland will be needed and 750 foot dipole spaced lines are recommended separated about 2,000 feet. Four east-west single spread lines should cover the prospect sufficiently in a reconnaissance fashion unless interesting anomalism is encountered.

Three field weeks are estimated to run these ten lines not including any detailed follow-up work. For the Courtland Prospect, extra heavy duty gear is recommended and with a three man crew, can be contracted for $300.00 per day plus vehicle and other job related expenses as enumerated below. For the Gleeson Prospect, standard heavy duty gear should suffice and with a three man crew can be contracted for $275.00 per day plus expenses as below. A crew will be available for this project next week or the New Mexico crew can be used on termination of that project.

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 expenses 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 $7,500.00.

All property permits, trespassing liability and related costs incurred on behalf on 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

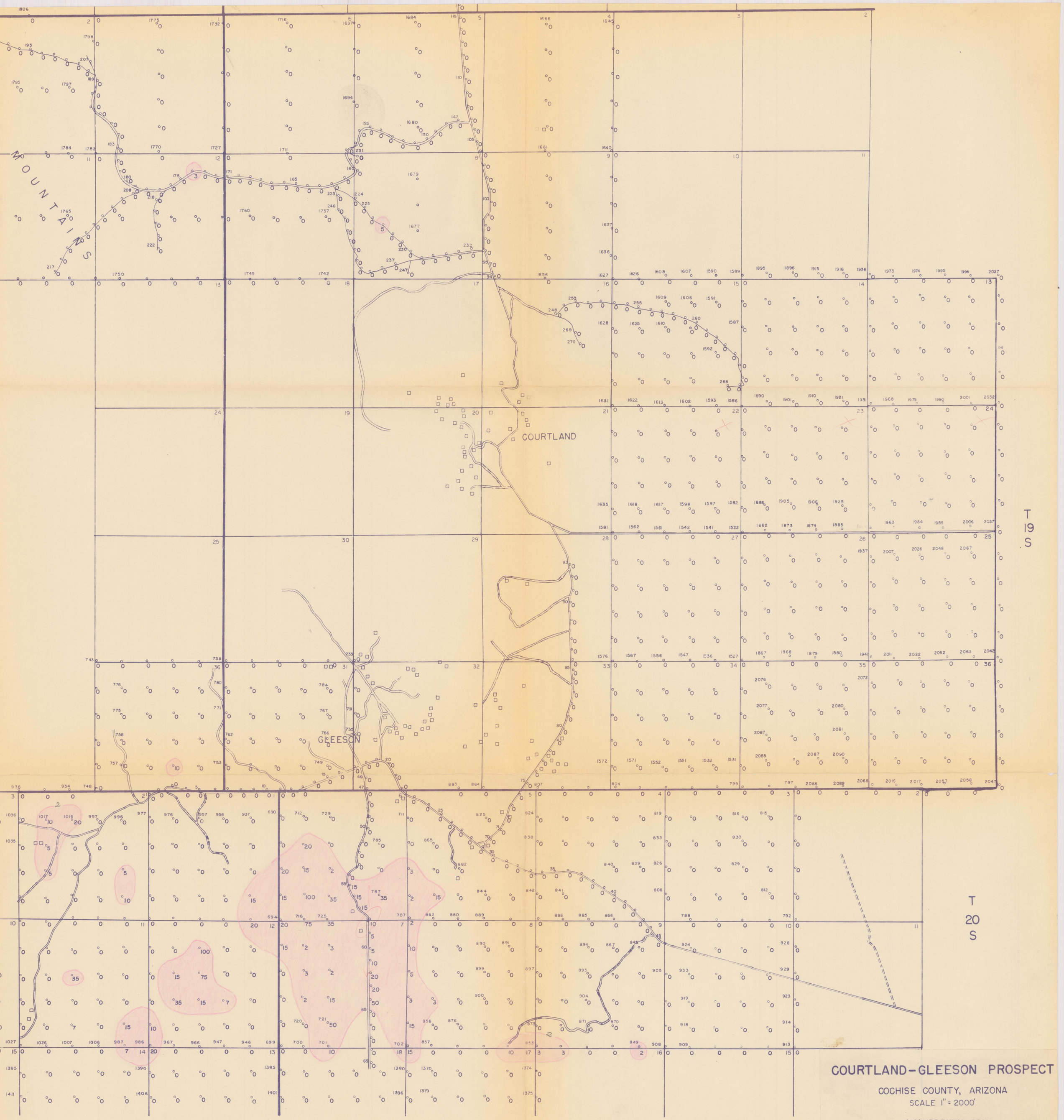
Chris S. Ludwig
Senior Geophysicist

DATE: 8-7-68

ACCEPTED BY: G. C. Ransone

TITLE: Partner

CSL:jc
Enclosure



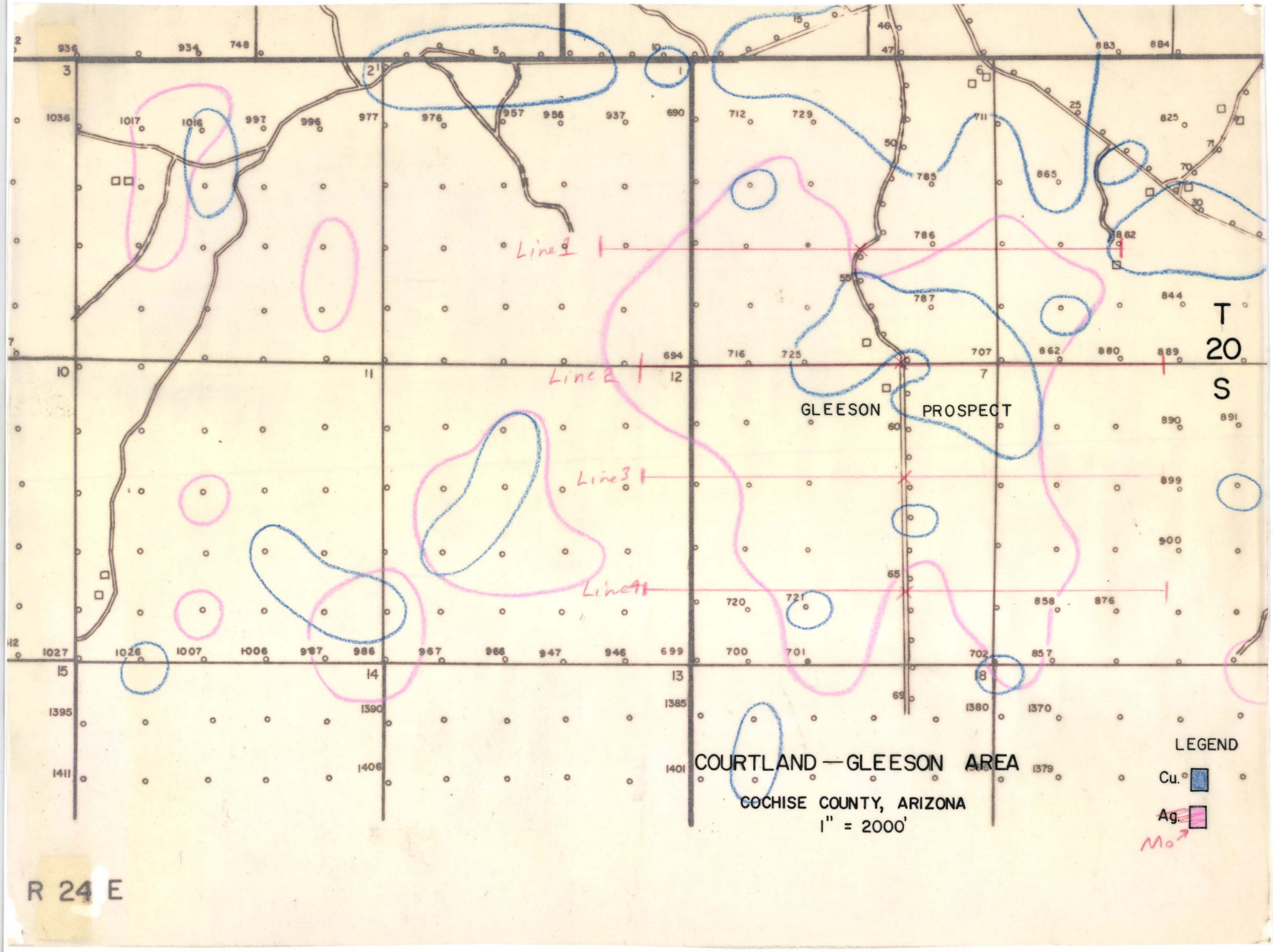

# COURTLAND-GLEESON PROSPECT

COCHISE COUNTY, ARIZONA

SCALE 1" = 2000'

MOLYBDENUM PPM

JULY 12, 1968


T 20 S
R 24 E
GLEESON PROSPECT
Line 1
Line 2
Line 3
Line 4
COURTLAND — GLEESON AREA
COCHISE COUNTY, ARIZONA
1" = 2000'
LEGEND
Cu.
Ag.
Mo

I.P., & S.P.
Cat., Co., Ariz.
Geoch. Sur.

# INDUCED POLARIZATION, RESISTIVITY AND SELF POTENTIAL ELECTRICAL GEOPHYSICAL SURVEY COURTLAND AREA COCHISE COUNTY, ARIZONA

For

Geochemical Surveys

September 1968

By

Heinrichs Geoexploration Company
P. O. Box 5671 Tucson, Arizona 85703
Phone: 623-0578 Area Code: 602

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| CONCLUSIONS AND RECOMMENDATIONS | 3 |
| INTERPRETATION | 4 |
| INDUCED POLARIZATION LOCATION AND INTERPRETATION PLAN | 1a |

IN MAP POCKET: (total 7 pieces)

Sectional Data Sheets (all a = 1,000')
Line 1
Line 2
Line 3
Line 4
Line 5
Line 6

GENERAL LOCATION
of
COURTLAND AREA
for
GEOCHEMICAL SURVEYS

**ARIZONA**

HEINRICHS
**GEOEXPLORATION COMPANY**
BOX 5671 TUCSON, ARIZONA 85703
PH: 602/623-0578 CABLE: GEOEX, TUCSON
GEOPHYSICAL ENGINEERS
SYDNEY VANCOUVER

# INTRODUCTION

At the request of Mr. W. R. Ransone of Geochemical Surveys, Heinrichs Geoexploration Company conducted a reconnaissance induced polarization, resistivity, and self potential electrical geophysical survey over parts of the Courtland Area, Cochise County, Arizona. This work was done in the interim September 6 to September 20, 1968.

A total of five and one half spreads of data were obtained, all on a 1,000 foot dipole spacing and a one half mile line separation. The lines are all oriented north-south and are run more or less down the section lines and section centers. See the attached plan for details of line location. This coverage consists of 67,000 feet of surface coverage of which 38,000 feet is subsurface plotted data.

The induced polarization technique used was the dual frequency system with sending frequencies of 0.05 and 1.0 Hz. The electrode configuration utitlized was the collinear dipole-dipole array which on a 1,000 foot dipole spacing typically gives resolvable penetration within the zone from about 300 to 1,200 or 1,500 feet below surface.

The purpose of this survey was to determine the sulfide relation to a broad copper geochemical delineated by Geochemical Surveys. Also certain electrically responsive geologic units and structures in the area of the geochemical anomaly were geophysically mapped.

Data are presented on Sectional Data Sheets, one for each line showing resistivity, percent frequency effect (PFE) and metallic conduction factor (MCF) contoured in section with self potential plotted in profile form. In this case, because of the large dipoles and low resistivity material encountered in the area, a first order electromagentic inductive coupling correction has been applied to the PFE and MCF to help accentuate any sulfide polarization effects. An induced Polarization Location and Interpretation Plan is also included and shows the surface projected anomalism in relation to the land net and the geochemical anomalism.

Heinrichs personnel involved in the field work were R. Palmer, geophysical crew chief; G. Hix and D. Erickson, technical assistants. Report and interpretation by Chris S. Ludwig, Senior Geophysicist with the assistance of the Tucson Geoex staff.

## CONCLUSIONS AND RECOMMENDATIONS

There is no definite sulfide indication on any of the six lines. There are zones of increased apparent polarization response at depth on Lines 1, 2, 4, and 5 but it is very weak response. Also, it may arise solely from non-correctible electromagnetic inductive coupling interference caused by the quite low resistivity on these lines. This response therefore is of questionable significance. Moreover, the indicated depth of response is between 1,000 and 1,500 feet which makes it unlikely as the source of the geochemical anomalism. Nevertheless there is some spatial correlation between the geochemical and I. P. anomalism.

Bedrock was likely seen on Lines 5 and 6 and is probably on the order of 1,000 feet below surface. No bedrock indications were noted on Lines 1, 2, 3, and 4, thereby implying a bedrock depth in excess of 1,500 feet. On the other hand, there may be too little or no electrical contrast between the alluvium and bedrock making the interface between them undetectible. This situation can arise when the bedrock is a volcanic tuff or other very porous rock permeated with rather saline water.

All the lines, except for Line 1, electrically suggest a two-layered alluvium: the upper layer being more resistive than the lower layer. This could be due to relatively dry alluvium overlying water saturated alluvium or possible relatively sandy alluvium overlying more clayey alluvium.

In general, the resistivity decreases to the east probably due to increased salinity and clay content within the alluvial fill in that direction.

It is believed that the source of the geochemical anomalism is within the alluvium and likely resulted from the erosion of the mineralized rocks which outcrop to the west.

No further electrical work is recommended over the copper geochemical anomaly unless favorable new facts come to light. If the geochemical anomalism is drilled on its own merit and interesting results are seen correlating with the very weak I. P. anomalism, additional electrical work could be useful to better delineate and possibly extend the zone of interest.

## INTERPRETATION

### Line 1

The resistivities show a three layer situation on this line with a relatively conductive upper layer, resistive middle layer and conductive lower layer, particularly on the north half of the spread. This can be reasonably interpreted as being caused solely by variations in composition and/or salinity of the permeating ground water within the alluvium. No resistivities suggestive of crystalline bedrock were noted.

Two zones of very weak questinable I. P. response were found, one between 10N and 20N and the other appears south of 30S for an indeterminate distance. This very weak response is likely caused by electromagnetic inductive coupling interference caused in turn by the very low resistivities.

The self potential response is background in amplitude variation along the entire traverse.

### Line 2

The conductive upper layer seen on Line 1 is absent or not detected on Line 2. A relatively resistive upper layer on a conductive lower layer is noted, however. The thickness of the upper layer varies from about 750 feet on the north end of the spread to as much as 1,500 feet on the south end. Again, no typical resistive bedrock response is noted.

The polarization response is mostly background with possible very weak questionable effects from 10S to at least 30S. No significant self potential anomalism was found.

### Line 3

Only a portion of the north half of this line was surveyed. It shows the two-layer situation again with resistive material overlying conductive material. The overlying material is about 1,000 feet thick. The I. P. effects are all background in amplitude and there is no significant self potential response.

Line 4

This line also shows a two layer situation similar to Lines 2 and 3 but the upper layer is probably only about 500 feet thick. No bottom is seen on the lower conductive layer, implying crystalline bedrock is at least 1,500 feet below the surface.

Very weak questionable polarization response is noted from 0 N/S to at least 30S at depth. The north half on the line show background I. P. effects. Again there is no important self potential variation.

Line 5

This line has a three layer resistivity pattern with a resistive upper layer, conductive middle layer, and resistive lower layer. The upper two layers are probably alluvium and the lower layer is quite possibly bedrock. If so, the depth to bedrock is on the order of 1,000 feet.

Very weak questionable polarization response is noted from about 10S to 10N and appears to come from at least 1,000 feet below surface. No significant self potential anomalism was seen.

Line 6

Line 6 shows a similar three layer resistivity pattern to that of Line 5. Again bedrock appears about 1,000 feet deep perhaps becoming shallower to the south.

The polarization response on this line is entirely background in character as is the self potential response.

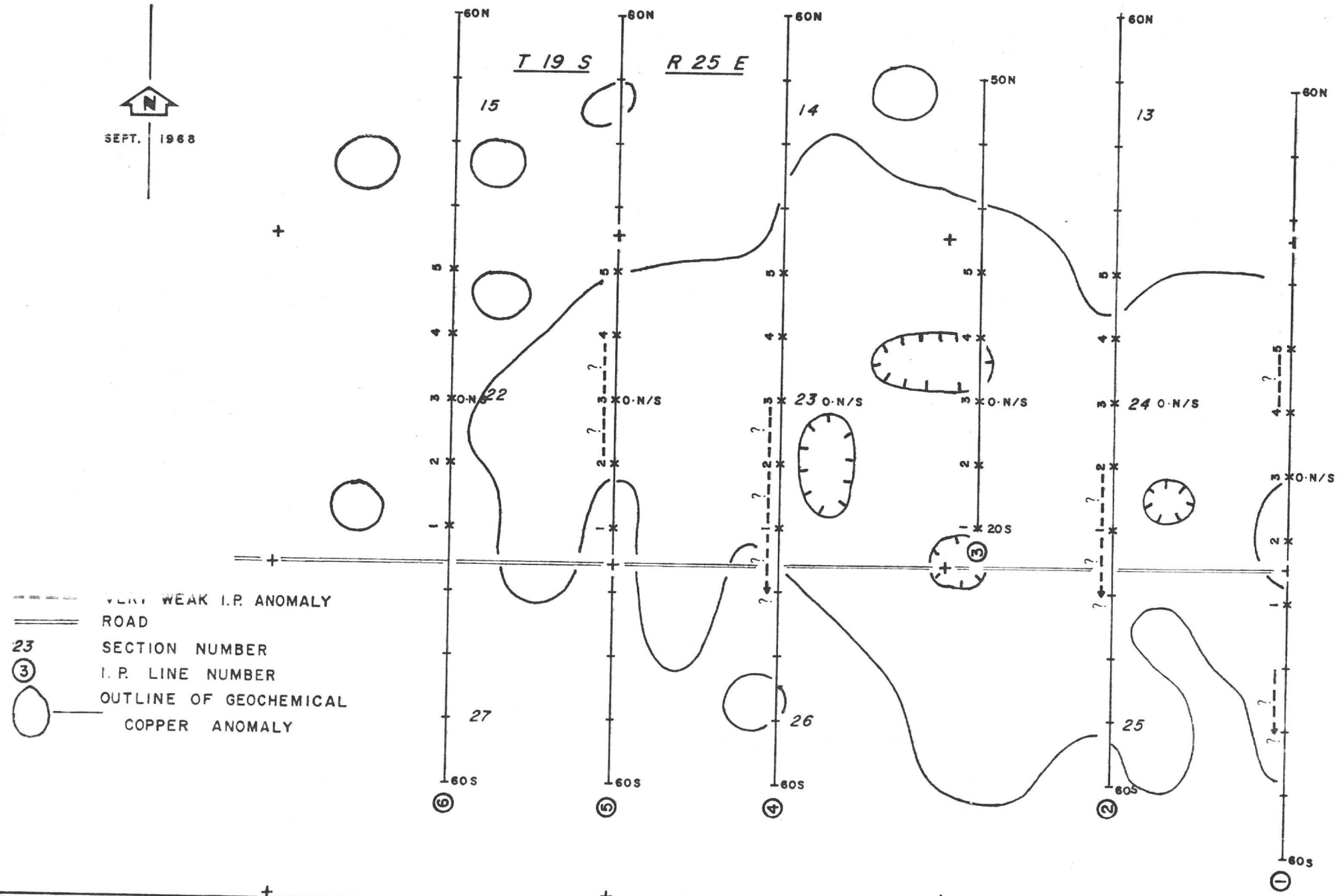
Respectfully submitted,
HEINRICHS GEOEXPLORATION COMPANY

Chris S. Ludwig

Chris S. Ludwig
Senior Geophysicist

APPROVED: W. E. Heinrichs Jr.
Walter E. Heinrichs
President & General Manager

October 3, 1968
Tucson, Arizona

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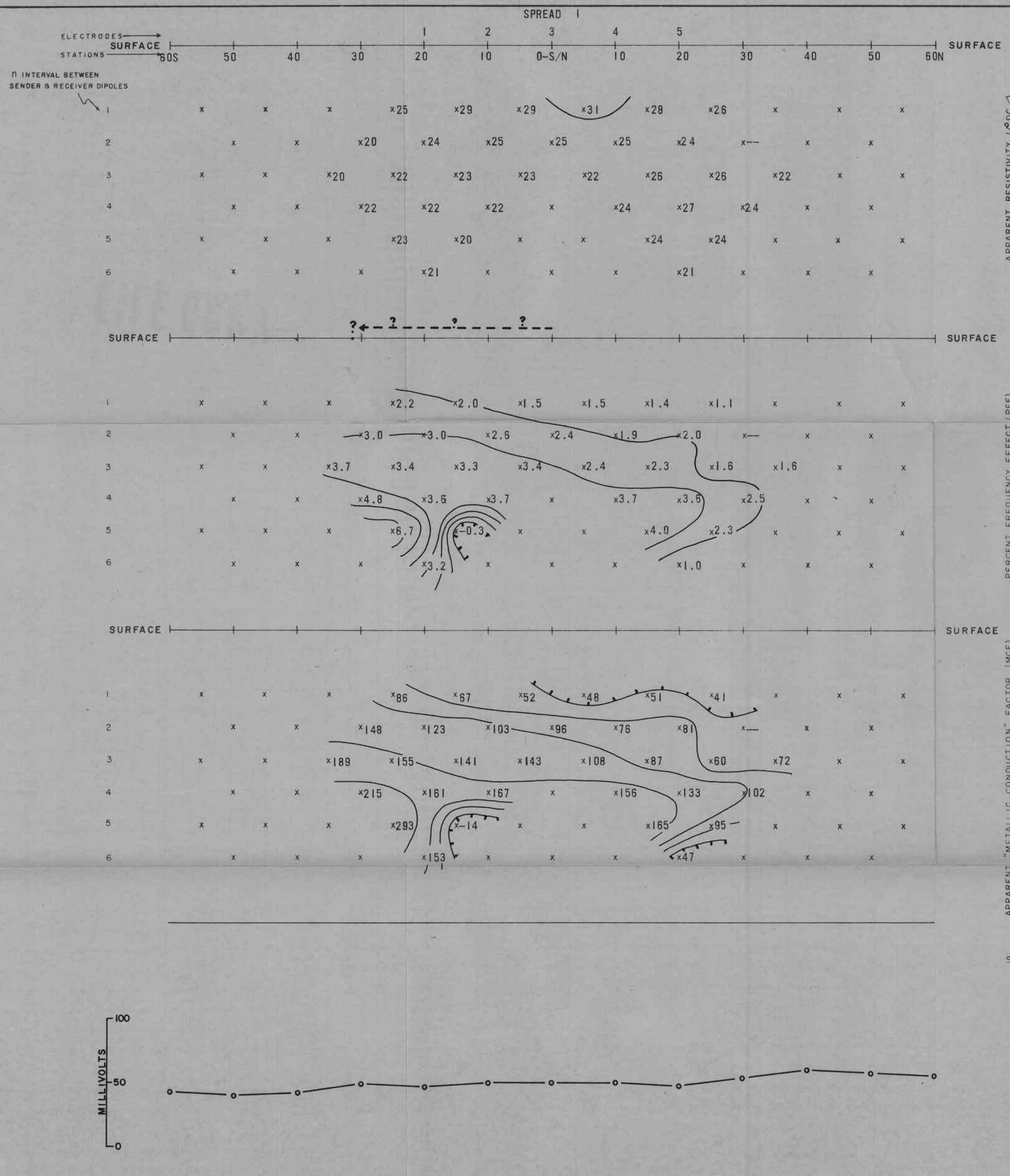
vancouver
sydney

INDUCED POLARIZATION LOCATION AND INTERPRETATION PLAN
COURTLAND AREA — COCHISE COUNTY, ARIZONA
FOR — GEOCHEMICAL SURVEYS
SCALE: 1" = 2000' — OVERLAYS BASE MAP BY GEOCHEMICAL SURVEYS

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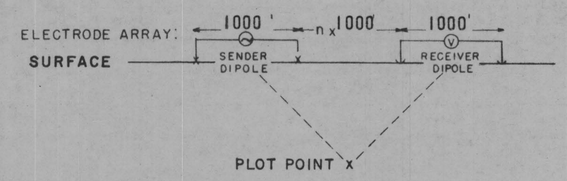
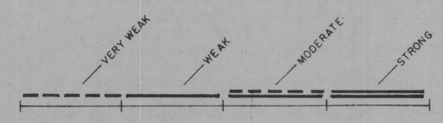



RELATIVE ANOMALY STRENGTH




LOOKING WEST

FILE COPY

COURTLAND AREA

# SECTIONAL DATA SHEET
## LINE NO. 4 (SPREAD 1)
## INDUCED POLARIZATION TRAVERSE

HEINRICHS GEOEXPLORATION COMPANY

SCALE: 1" = 1000' DATE: SEP 1968

FOR

GEOCHEMICAL SURVEYS

HEINRICHS
GEOEXPLORATION COMPANY
POST OFFICE BOX 5671, TUCSON, ARIZONA, 85703
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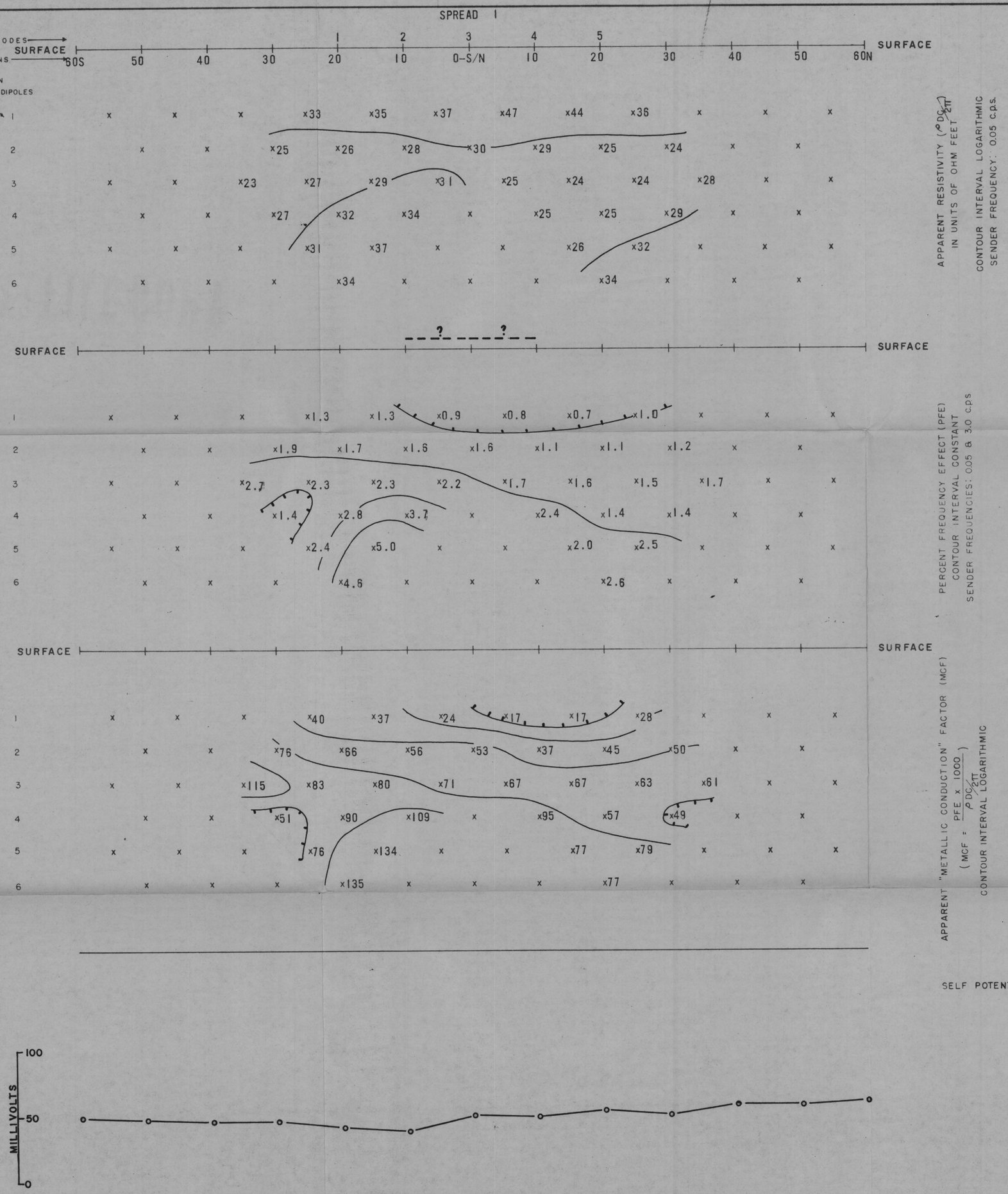
sydney

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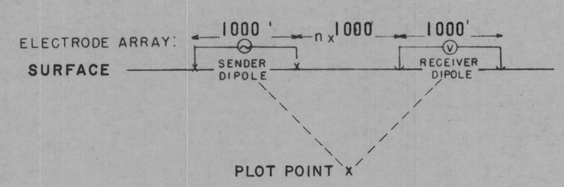


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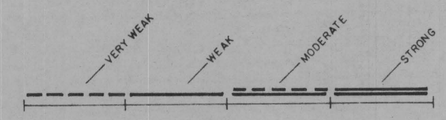


LOOKING WEST

FILE COPY

COURTLAND AREA

SECTIONAL DATA SHEET

LINE NO. 5 (SPREAD 1)

INDUCED POLARIZATION TRAVERSE

HEINRICHS GEOEXPLORATION COMPANY

SCALE: 1" = 1000' DATE: SEP 1968

FOR

GEOCHEMICAL SURVEYS

HEINRICHS
GEOEXPLORATION COMPANY
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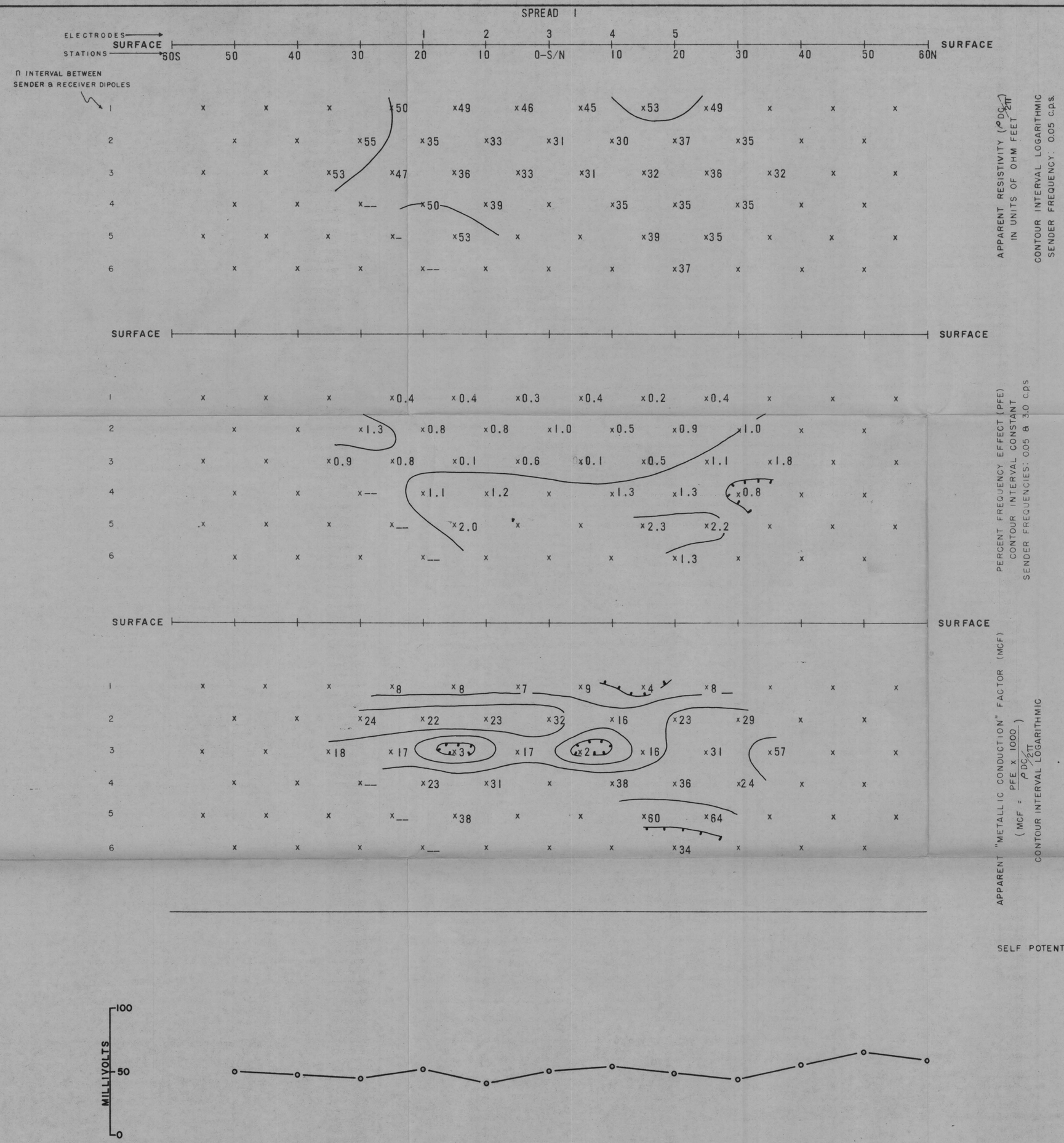


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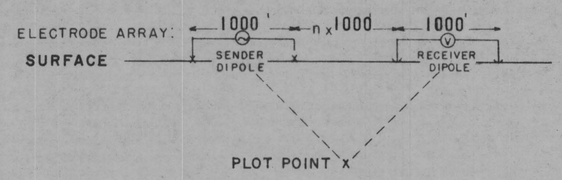


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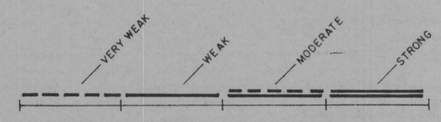


LOOKING WEST

**FILE COPY**

COURTLAND AREA

SECTIONAL DATA SHEET

LINE NO. 6 (SPREAD 1)

INDUCED POLARIZATION TRAVERSE

HEINRICHS GEOEXPLORATION COMPANY

SCALE: 1" = 1000' DATE: SEP 1968

FOR

GEOCHEMICAL SURVEYS

HEINRICHS
GEOEXPLORATION COMPANY
POST OFFICE BOX 5671, TUCSON, ARIZONA, 85703
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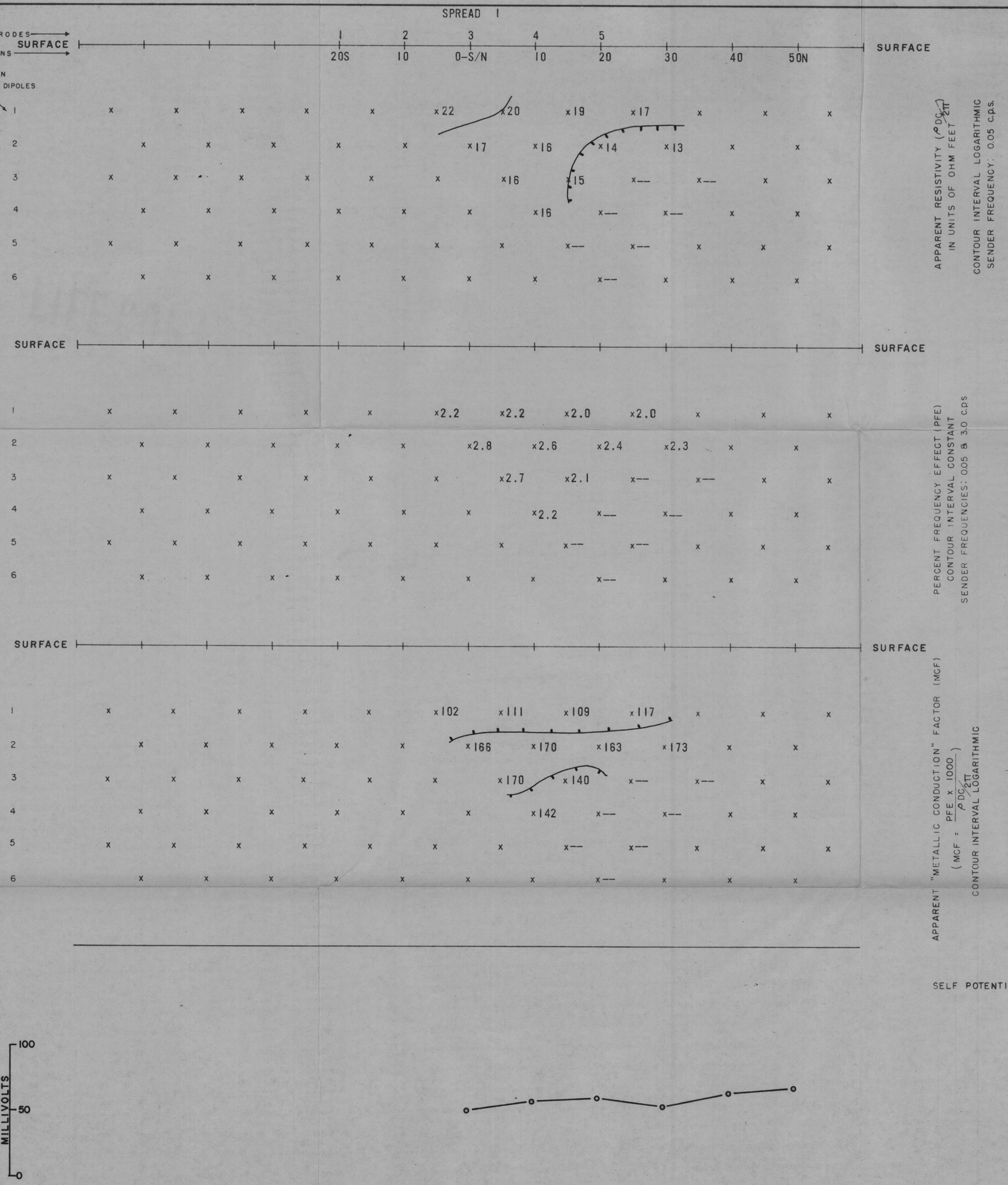
vancouver
sydney

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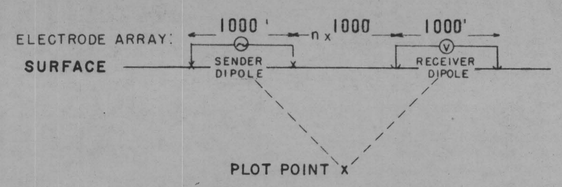


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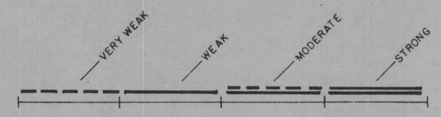



LOOKING WEST

FILE COPY

COURTLAND AREA

SECTIONAL DATA SHEET

LINE NO. 3 (SPREAD 1)

INDUCED POLARIZATION TRAVERSE

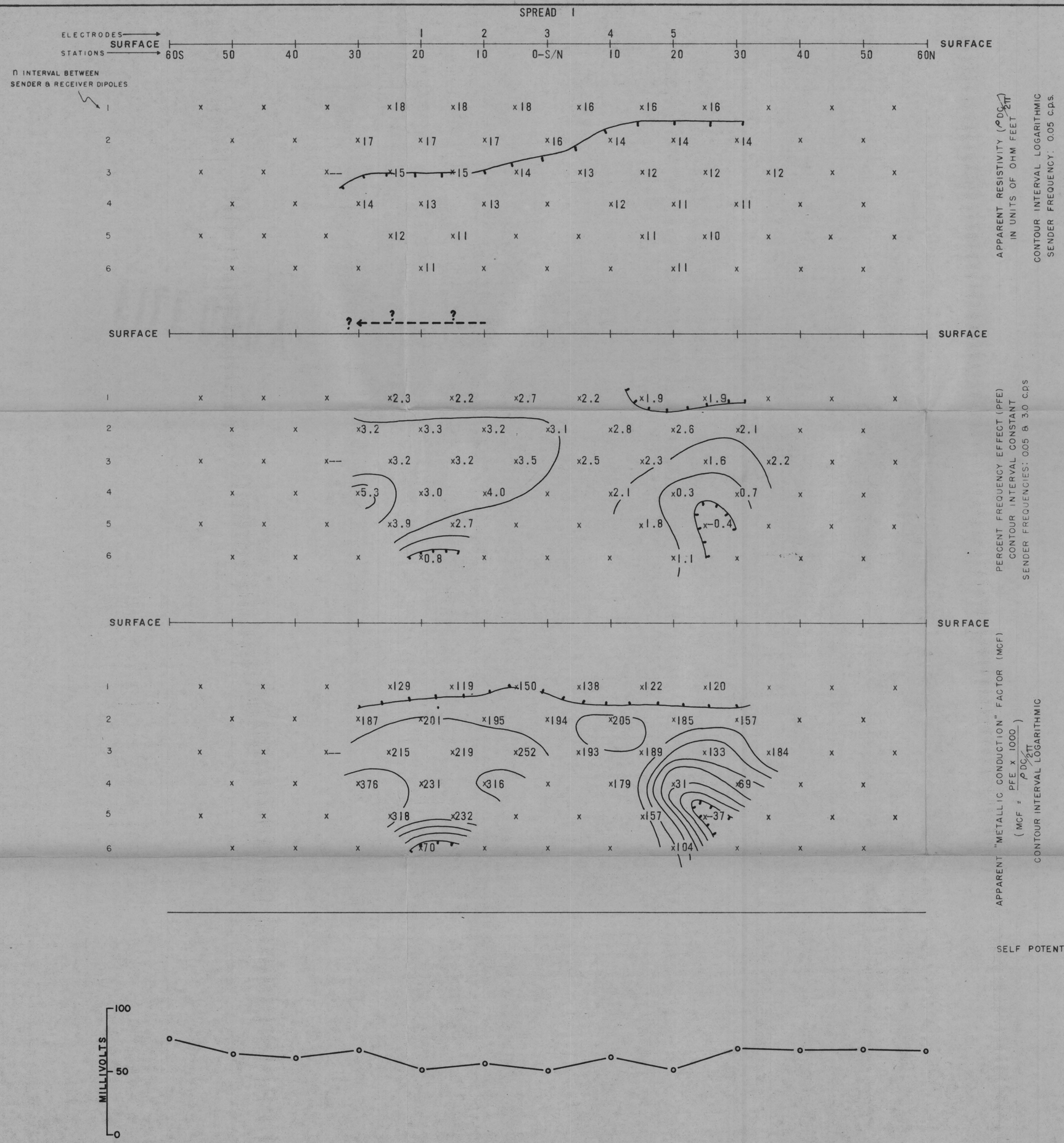
HEINRICHS GEOEXPLORATION COMPANY

SCALE: 1" = 1000' DATE: SEP 1968

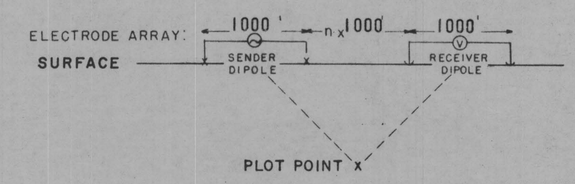
FOR FILE

GEOCHEMICAL SURVEYS

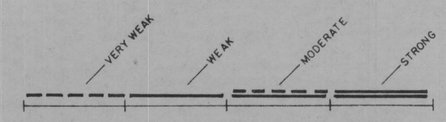
HEINRICHS
GEOEXPLORATION COMPANY
POST OFFICE BOX 5671, TUCSON, ARIZONA, 85703
Phone: 602/623-0578 Cable: GEOEX, Tucson
geophysical engineers
vancouver
sydney




## EXPLANATION




RELATIVE ANOMALY STRENGTH




LOOKING WEST

FILE COPY

COURTLAND AREA

SECTIONAL DATA SHEET

LINE NO. 2 (SPREAD 1)

INDUCED POLARIZATION TRAVERSE

HEINRICHS GEOEXPLORATION COMPANY

SCALE: 1" = 1000' DATE: SEP 1968

FOR

GEOCHEMICAL SURVEYS

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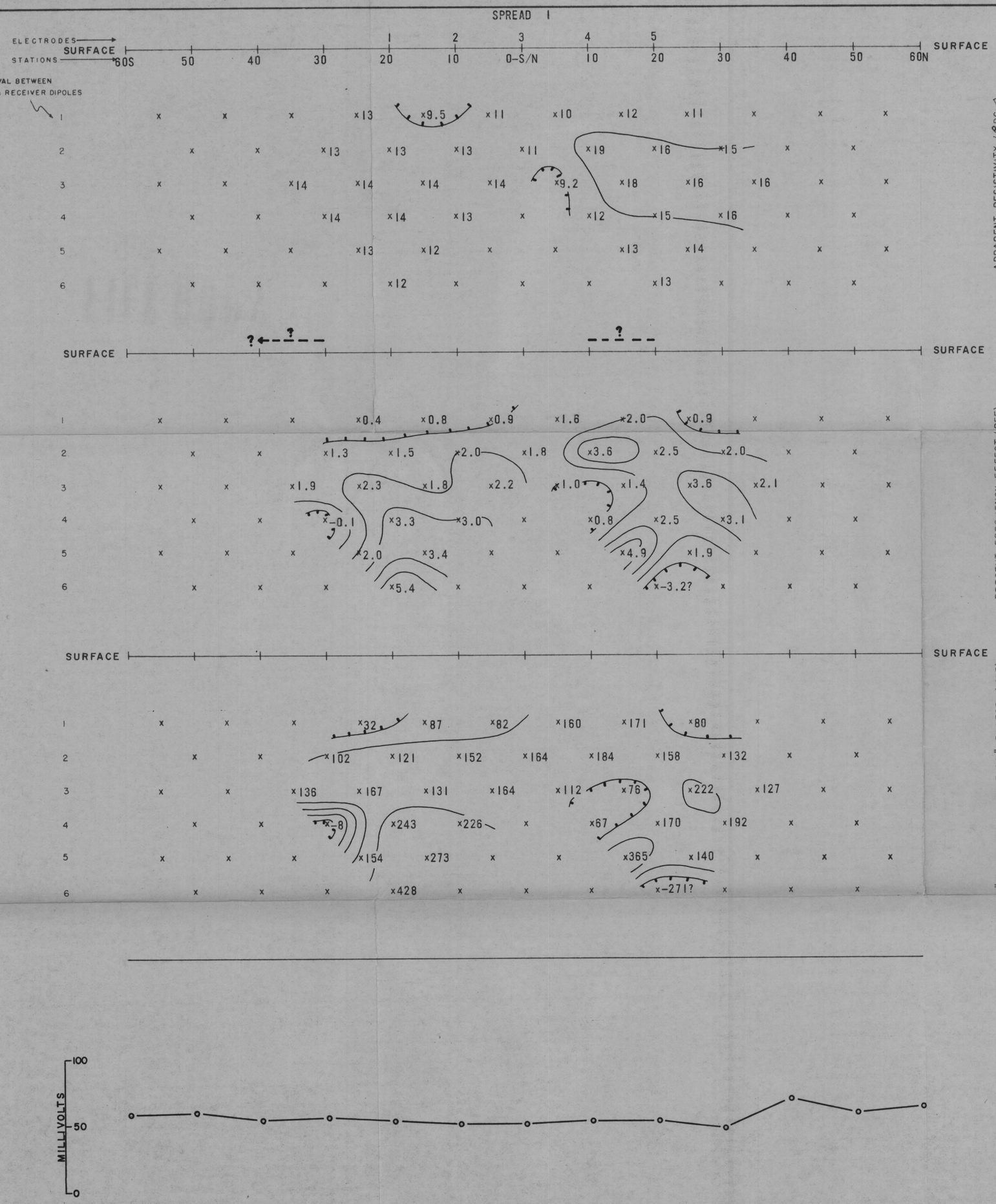


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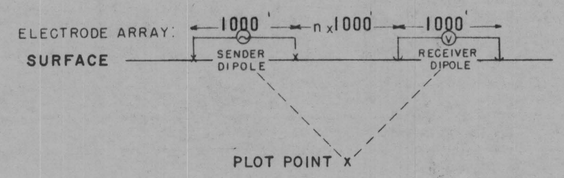


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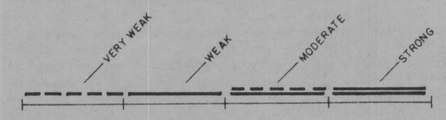


LOOKING WEST

FILE COPY

COURTLAND AREA

SECTIONAL DATA SHEET

LINE NO. 1 (SPREAD 1)

INDUCED POLARIZATION TRAVERSE

HEINRICHS GEOEXPLORATION COMPANY

SCALE: 1" = 1000' DATE: SEP 1968

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Pearce Dist. — 9AM ~~Friday~~ Thursday

earn 50% by spending ~ $750,000 on prop.

Lots of data. Most data in Tucson

Bill Daffron ☐ 268-5080

8015 Mtn Road Pl.

up Pennsylvania - S. on Penn.

to Mtn Rd (1 blk S of Fwy)

turn Left, left on Mtn Rd Pl.

last office bldg on left.

upstairs

☒ Tijeras Greenstone

- carbonate exhalite ?

1,341,000 Tons Pearce

55,000 lbs Cu = .041 lbs/Ton

Au - 138,409 = .1032 oz/T Au = $30

Ag - 12,020,000 = 8.9635 oz/T Ag = 50

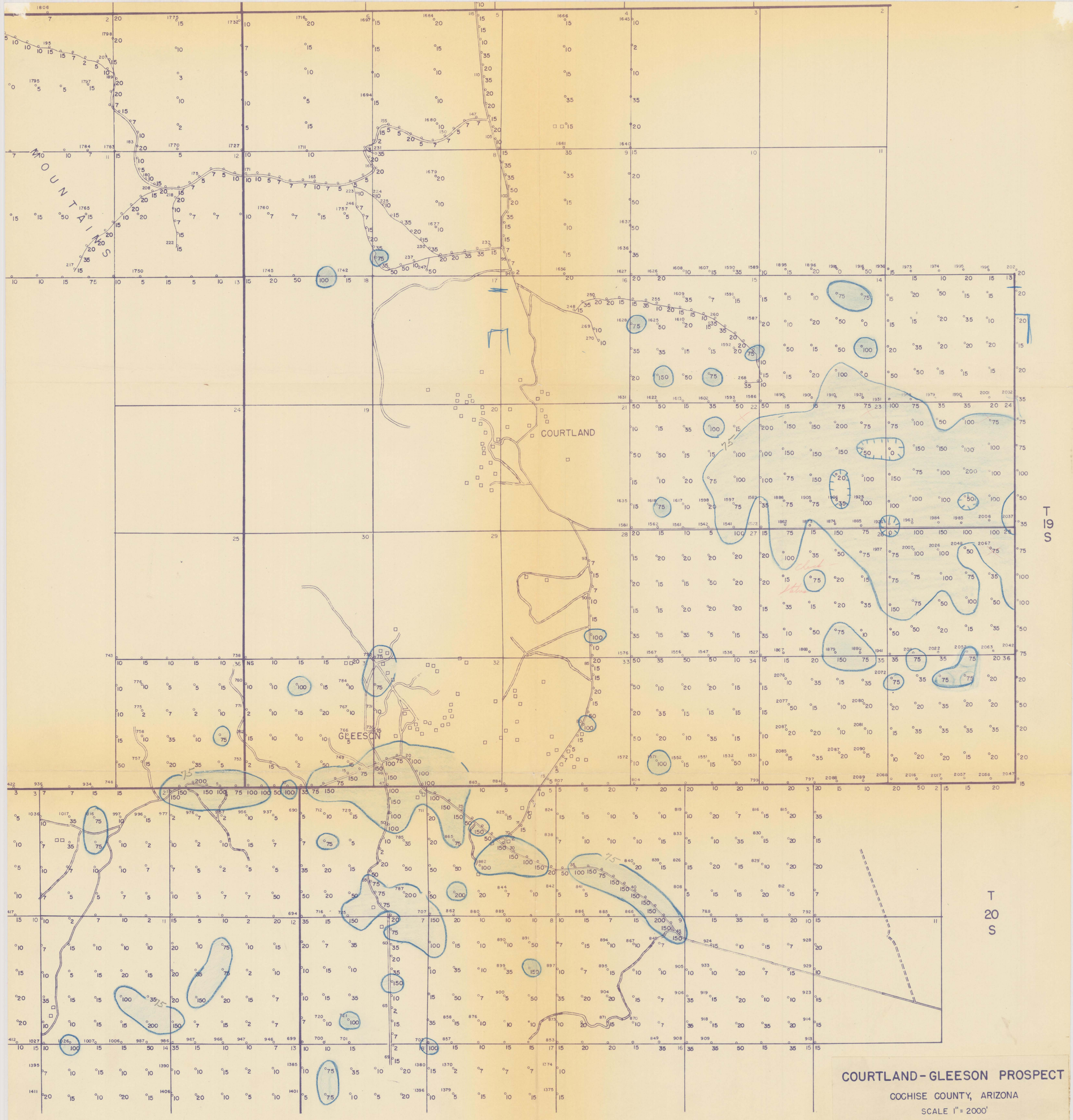
80

12 = 60

$4 = 25

$85

- Rich Richardson - Fluid Inclusions
- Not at NV Tech




COURTLAND-GLEESON PROSPECT

COCHISE COUNTY, ARIZONA

SCALE 1" = 2000'

COPPER P.P.M.

JULY 12, 1968

SCANNED 4/16/2010 NJN