✓ Wood. 10/27/59

Hole #2 Get Afmag xfer. Friday 10 AM

Tucson.

Re: Hal Wonock 10/3/59

17 th Douglas.

18th 23 Statement for Landoffice.
to the Walt & Hal.

Small map. Plug data.
Plug down Afmag.
Geodem. Cost to date)

2½ Sec.

GOLD FIBRE

100
50 ⟌ 5000
500
250/day 1000'
500 3000/day = ½ mile

10/3/59

John Wood.

October 34.

Affidavit & Geochem. Oct Prod.

37 S – 3 E 1040 PPM.

3 adjacent 40%

---

3 copies of S.P. profile

Drill hole, E.M. on SE. Missouri

$25.00/acre

Fed Claims 9.03
8.08

T.S. today at 461' in drill hole #1

J. Wood. 11/2/59

S.E. Missouri

Mag.

I.P. & P.P.

AFMAG.

2000'

MR. Taylor Sr. 65 feet

Check what being done. etc.

Am. Zinc

" Metals

S.E. Rollo ways

Mining World.

Week from today for 2 weeks.

CW & G.

P-1-A & Calif

10/22/59

J. Wood:

105 all across Sec 9 Check 1 300 to 400' 15 to off

also other 3 lines as possible.

2 days.

Fly Douglas Mon Nite El Paso

9:30 AM Tues P.U.

Thursday meet at Tucson.

Meet Ward. at L.A.

Vol. Mag.
Andesite
broken Magnetite.
6' East Fri

Olson QM u/TSi

Gallagher. Checks
Receipt. copy of Invoice.

Tellurium.

1096.09
125.00
971.09

1096.09

996.09
100.00
1096.09

2 more
160 + tax
160
160
176

2 Mi E-S-E of Liq Call Cowan.

118'

Sec 21

50, 60,000 gallons. 4" Pipe

Border Motel.

7:00

10

10-1-59

AFMAG.	2800' - 4 HRS =	8 MH.
GEO CHEM	1 MI - 4 HRS	8 MH.

10-2-59

AFMAG.	8800' 7 HRS	14 MH.
GEO CHEM	1 HR. HELPING.	2 MH.

A O C

P-1-A October 1959

Production

	Date	Production	
Geochem	1st	2½ miles	(Fair, Clark, Valdez I.) 8hrs, 4hrs, 4hrs
	2nd	4 miles	(Fair, Marlatt) Valdez, Clark 4hrs ea.
	3rd	6 miles	(Fair, Clark, Marlatt)

AFMAG	1st	28+00' – 8 hours	(Clark & Valdez) 4hrs, 4hrs
	2nd	88+00' – 14 hours	(Clark 7, Valdez 7)

GOLDFIBRE

9/29/59

Cowan Wed. or Thursday

1

Death Valley. Back Wed.
Noon

4.5 (57)

15 min

9/30/59

Oliver Graham. 0.85¢ Patagonia

Al: Tues-14S – 1¼ W (from H.L.-West)
Wed-18S – 13W to 29W 1.0=E dip / 0.77

Charlie –: 30S.? – 1M. done – 1½ E (2M. E H.L. conflict)
8 Sta

---

if No can find anyone.
~~Start~~ line: 22S : E-2Mi
W-1M.

Charlie:
below 24S.
on 28S or 30S going W. will be flagged
or 26S E or W

~~[illegible]~~

Phone Call from Al Clark: 9/30/59
at Tomb
collect 1 Main 4202
10-15 Minutes ±
mhl

9/26/59.

P-1-A

Semi final – Final ? maps.

1.- Agricg High frequency (510 cps.)

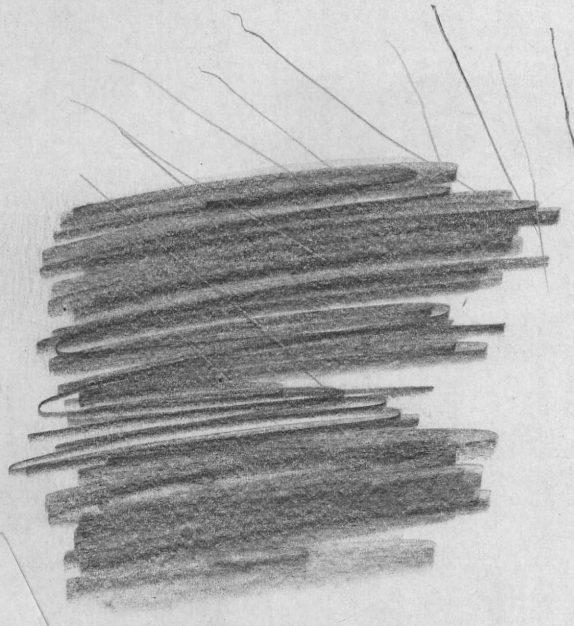
2.- " Low " (150 cps)

3.- No Agricg

All to same or similar base, same scale.

4" = 1 Mile as geol plan.

transparencies from which 3 positive films each will be made, we will keep originals.



V. Wood. 9/25/59

Surveying

2 man crew = 100.00/day

3 " " = 150/day. 111 or 112 days.

Elev. control on some
central located brass cap.
transit-level.

Engineers B.M. near fork.
to Hanson ranch.

Geodetic
Mike stops every day to
John Wood at Alb.

15 days.
200 average/day
3000
400.00/posts.

3400.00 15 20.00 Subs.
300.00 Subs. 300

3700.00
500 Vehicle
#4200.00 = 4500.00 budget.
by John.

Finish Afinay by 30th if possible.

3 Positive films, each of Afinay & Money.

Afinay progress summary and total for project
Money " " "
& Geodetic

Repeat Checken - Run.

Line 24S – 12E to 1 @ 150E of 1/4 cor. 33E Sta 160' East 1/4 Corner E.

23 Sept – 28S – 13E – 39E
al & Don Dean.
(w/ J Wood)

Send screen. for next monday.

8/1/59

John Wood office: Alpine 6-1675
Home: " 5 6878
Chappel 2 5981

Call Starr.
Noon plane. few errands and home.
late afternoon at desk office
early Tues.

Geochem. kit on 245.
detail.
325 etc. closing 245.
3 PM & 5 P.M. Biltmore this Friday leave
5:35 PM Plane for
Albuquerque.

5.65 for 17 Minutes
$.57 (10%)
6.22

9/18/59

6:45 } 25 minutes 16 Km in
7:10 }

Afmag – 2 miles – 2 days more. 3.50 + Hx

2 lines on each set of 5 tide done.
" " 1/2

Monday –:
4 Miles W of base line on Hamms not done.
8 See Done #7, 16, 17, 19, 20, ½, 2 below that
½ of other one.
between 16–17 – NW–SE trend.
Stops from Sugar Loaf. 2nd hill
Some anomalies ½s

9/18/59

7:15 Monday evening conference. or
7:27 Tues Morning. on Mo May by Afternoon.

#2.80 + tax (11) 12 Minute (11 minutes) results

Ever Make pass at Corvon Monday if
Hal has data ready.

In Monday Dec 9/16/59

Line 32 S – SW Cor of Sec 20 – ½ 2 mi ✓
SE " " 21

Line 30 S – West of 20 " ✓
E " " 21

" 28 S (1/4 (19 & 20)) 3 " ✓
1/4 – 22 & 23

" 26 S West of 20 3 " ✓
E " 22

" 24 S SW of 19 2 " ✓
SE " 16

" 22 S Hilonsome Road 2 1/4 " ✓
in Sec 18
To E end of 16

Line 24 S to
" 32 S – N-S on Hilonsome 1 " ✓

4 – 1320' each way 1 "

SW – of 17 to Valley Bowl N — 3 1/2 "

(16 1/4 asked for) 19 3/4 "

John Wood call.: 9/15/59

25 th Sept complete Jasteon State claims

No Mag by end of Month - estimate Calif Job.

John leaving for Calif today
will call again Friday Nite 18th.

May not complete Afton this week. will try.

GOLD FIBRE

AFMAG:

345 acres Sec 29

(13E - 26E)

9/16/59 Call from Bill in Tonk.

22 minutes $-3.35 + 11\%$ 3.35

37 3.35

3.72 .3685 = 37

Chg C.C W&G

9/19/52

77 posts needed

to stake each unstaked

corner of both

Chuza groups.

---

84 posts needed to

stake 4 new federal

claims — Chaco 107, 108, 109

& 110

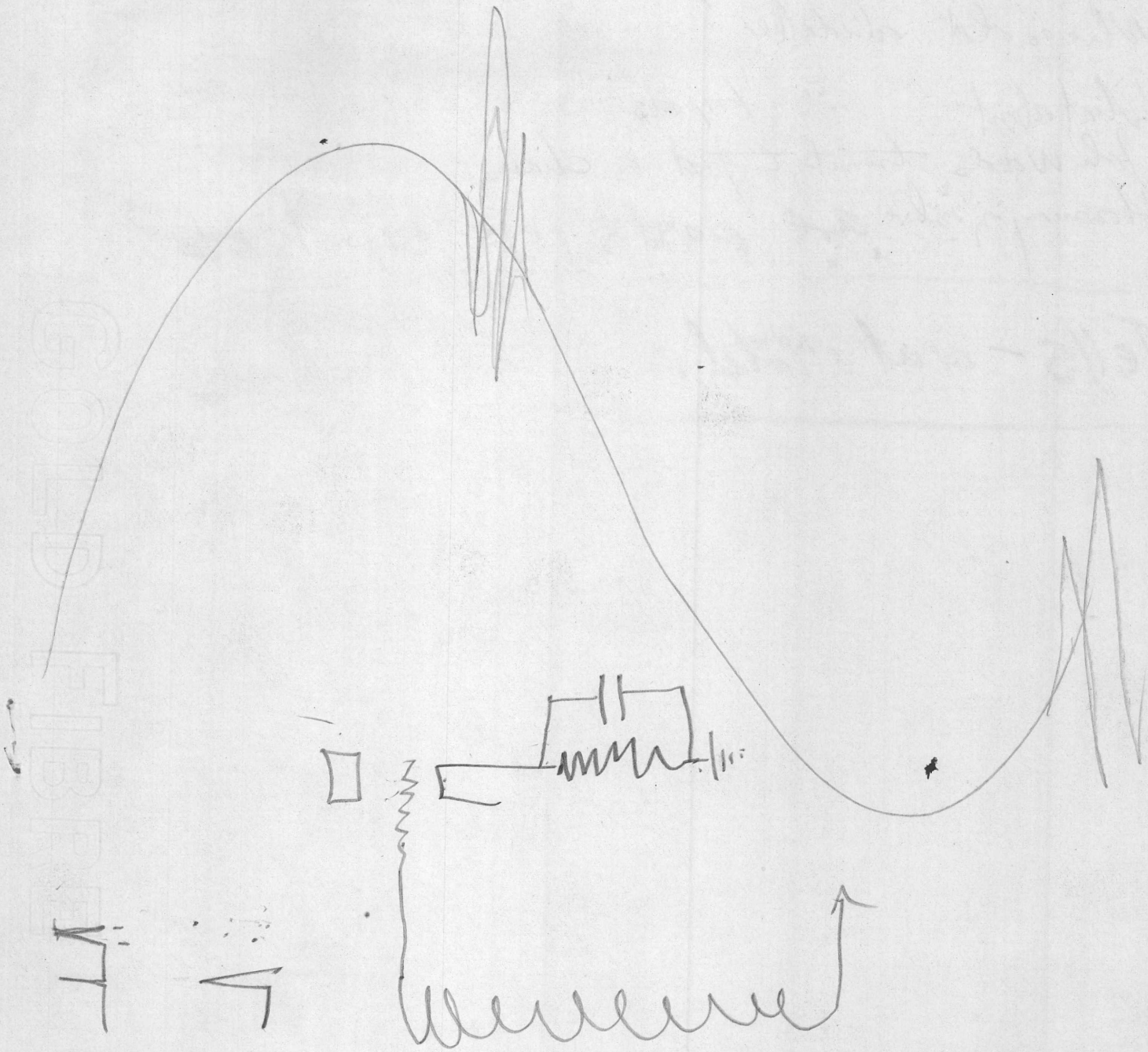
9/14/59

Call to Esser in Wickaberg -:

Where is old alidade?

What about .. tripods
John Woods ~~transit, tripod~~ & chains
Howmany & where are posts, pegs signals etc?

Tells - or at Motel.



(from Frank Metler 9-11-59)

Kitt Peak

Drilling water hole S56W at 2° up
NX - collored in dirt

Re John Wood, P-1-A
Quote $75.00 per shift + $3.00/foot for coring
+ $1.50/foot for rock bitting.

This is for normal drilling reduction →

If NX all the way to about 500', above costs + reaming at $3.00/ft during shift time at usual 75.00/shift. If cementing done, the usual 75.00/shift plus the cost of the cement.

If NX beyond about 500', must be open to renegotiations in the light of the drilling to the 500'. Might continue at same rate, might charge an extra cost per hundred feet.
For example: 3.00/ft for 1st 500
3.40/ft from 500-600
3.80/ft " 600-700
etc.

If they can get water from Telles they will haul it for free. If have to get it at any distance, such as Elfrida or Grizzlo's there will be haulage charge.

6
.10
.60

NE cor Sec 25 - 4 More claims

State notices recorded to day.

Air Mail Notices Today

Posted Monday

Chaco. 1-7 - 110

Patton

Tellez bronze posts. No Al plates

& clips.

In post holes dig 2 ft each use Magic Markers.

within 30 days west of posts on State. ✓

set and page polite claim.

take another

9/9/59

Gross, Pat Shut at Coon again. to get him to read a ~~letter~~ draft of a proposed. ~~agreement~~ agreement.

75.00
150.00
3.00

VX all the way.

Terrain at death valley
w/ Stuyer re:
cost & time Mo May.
flash sand etc.
10,700 acres.

8" / mile photo to Gallpit etc.

Vancouver - (Ted)
15°-16°-V dips plunging anticline.
12-0's - Hi So, several readings.

2.5
.25
2.50
1.10

Parkway Inc.
Cherry 4-5496

9/4/59

Hal Warnock, State:

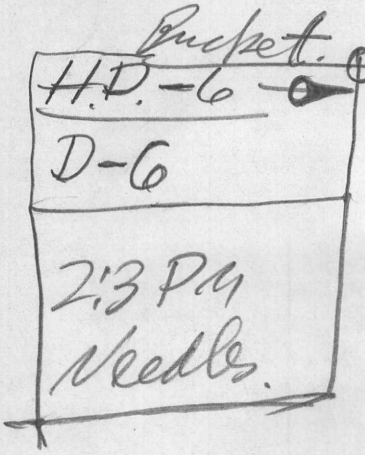
Drill any 160 acres -:

drilling & G.P. may be

acceptable.

4113 E. Wittier

AH-5-6878 John Wood.



Denver on Wed.

9/5/59.

Tuesday.

9/6/59.

Ted Gallagher called: HD-6 not adequate.

Neff located D-7?

" to fly up tomorrow to aid as can.

RV.

Operator & Oiler chain. 9/5/59

HD-6G Bucket loader.

D-6

Pat. Turner. Allis Chalmers.

Ax 8-1397

Weights Spec.

Eqpt: Tonite

1:30 at Vixon

At Shoshone at 5:30

Pickup & Welder Ahead engine

4 holes / 12 hrs.	15
3 hrs / hole.	60

GOLD FIBRE

Odell Power,
At Eadsland at Miami
W.V. Pilarski Mgr.
Contract Drill Div
Ivey Manufacturing Co.
900 Woodland Ave,
Mishawaka, Ind.

Letter; re: P-1-A. drilling

Shoshone Motel
" #1 (General Store)
T.C., San Bernardino - 1214?

John Wood: 6/26/59

Re: Cal Plats etc.

almost certain that

the same statutes are still in effect

per other recent similar investigations

in check with competent legal authority

at that time

Pafford & Associates — Don Jones (official V.P.?)

1908 W. Beverly Blvd

LA 57, Cal.

Phone: DUnkirk 5-5464

Stitzer -

$500.00/Section or $8000.00 ± map, 2 way radio, Stadia

$1600.00 minimum determine old corners, establish centers.

$150.00/day check w/highway & county engineers & surveyors dept.

Plats

500 40/0000

Land plats & notes etc. $200.00 ±

#200.00

T 20½ N
T 20 N } R 4E SBBM
T 19 N

Inyo & San Bernardino Counties

Sunday Nite or Mon. Jan - advise → Mat John ↑ T.S. Platt. order. by Phone Copies.
Mail → El Rancho Motel
Baker, Calif after Sat. P.M. 8/29

No May week of 31 Aug - Sept 4.
Pats & Surveying 27th.
No S.P. yet. maybe tomorrow.
" leave for alb. Tomorrow - Sat afternoon, Las Vegas 98% definite.
John will call Sunday to Confirm Stetzer.
" back Alb. 7 Sept
Blow sand re: ditcher & dozer.

Metlers minim 1500' - Sec 16 & 17 2 or 3 setups.
3 shifts Rock to B.R. then one ½ to Start high one recovery
No Sludge. after checking bore recovery
include putting in Boxes. Boxes furnished by client
they furnish water truck.
" arrange for
½ pay for water. via Metlers.

also check Joy.

70
20
1400 1000

John Wood. 8/18/59

1. Put discovery on ground. 1st

2. Tue afternoon or Eve.

3. Only Owen & Tellez or 1 sec or 2 sec.

4. Geo. make approaches initially.

(a)

(b) Martin Gentry, via Hal if Geo. not contact,

5. (a) Surface segregate & apart.
restore or compensate.

(b) Minerals need 18 Mo - 2 yrs to establish by fee.
royalty

6. Tombstone B.P.M. will call Lee.

7. 350.00/day or Monday.

8/17/59

Water Source for drilling 2

Dips, conductivity, ¼ Ratios — specs of 1

allotter. less than 1

16S 55E sec

re sur 2 miles in Sec 7 & 12

¼ west of 9

Sa
Rented 1-ton stake. —

Sunday Nite → Thursday drive over. Meet Friday at Tomb.

Survey crew 1 on Monday

1 Man 3 — 2×2-9"

4 - 2 man crews.

P

4 Augers. cor post

2 Transit ~~#~~ 2-3 man crews.

finishing nails.

25' paced on and center.

---

40 E

24S - W0E - 39 E on 400' ①

20S - 39E - 16 E - 800'

4 E E

3 3/4

198

200

4 - 2 man crews.

3 — 3 Man Survey Crew.

Johnsburg Training Stake.

12" stake.

200

2 x 2 Stake. H.I.

17 Miles.

J.P.
Dis

Friday — 8/15/59

Monday computing E/I or geochem.

ratios tabulated St. Med. Weak.

depth

4 copies

mail Monday Nite.

Land 1/4 mi staff E.W. 3 miles 245 N/S the Fed

2/3 of 2 sec State land. 9-20-21 exact tally in 15

Next fri afternoon meet Hal & John. Friday Nite.

Thursday nite Tombstone

Wed will call.

P-1-A

8/5/59

1. Continue AFMAG as assigned (see Proposal Memo & B.L. Print of 8/4/59) dashed red lines added at 1/4 mile intervals fill in & extensions & repeats.

2. S.P. line 24 S. preliminary to test for oxidizing sulfide above 200' ±

3. 1000 State land notices after seeing Vic on 8/10/59

August 5, 1959

PROJECT P- 1 - A

Proposed AFMAG lines supplemental to 8/4/59 :

Line	Distance from BL		Profile Mile
6S	0.5 W	0.5E	1.0
10S	1.0W	2.0E	3.0
14S	1.0W	2.5E	3.5
18S	2.0W	2.5E	4.5
22S	2.0W	0.75E	2.75
26S	2.0W	(0-1 & 2-3)=2.0E	4.0
28S	1.0W	0.5E	1.5
30S	1.0W	3.0E	4.0
			24.25

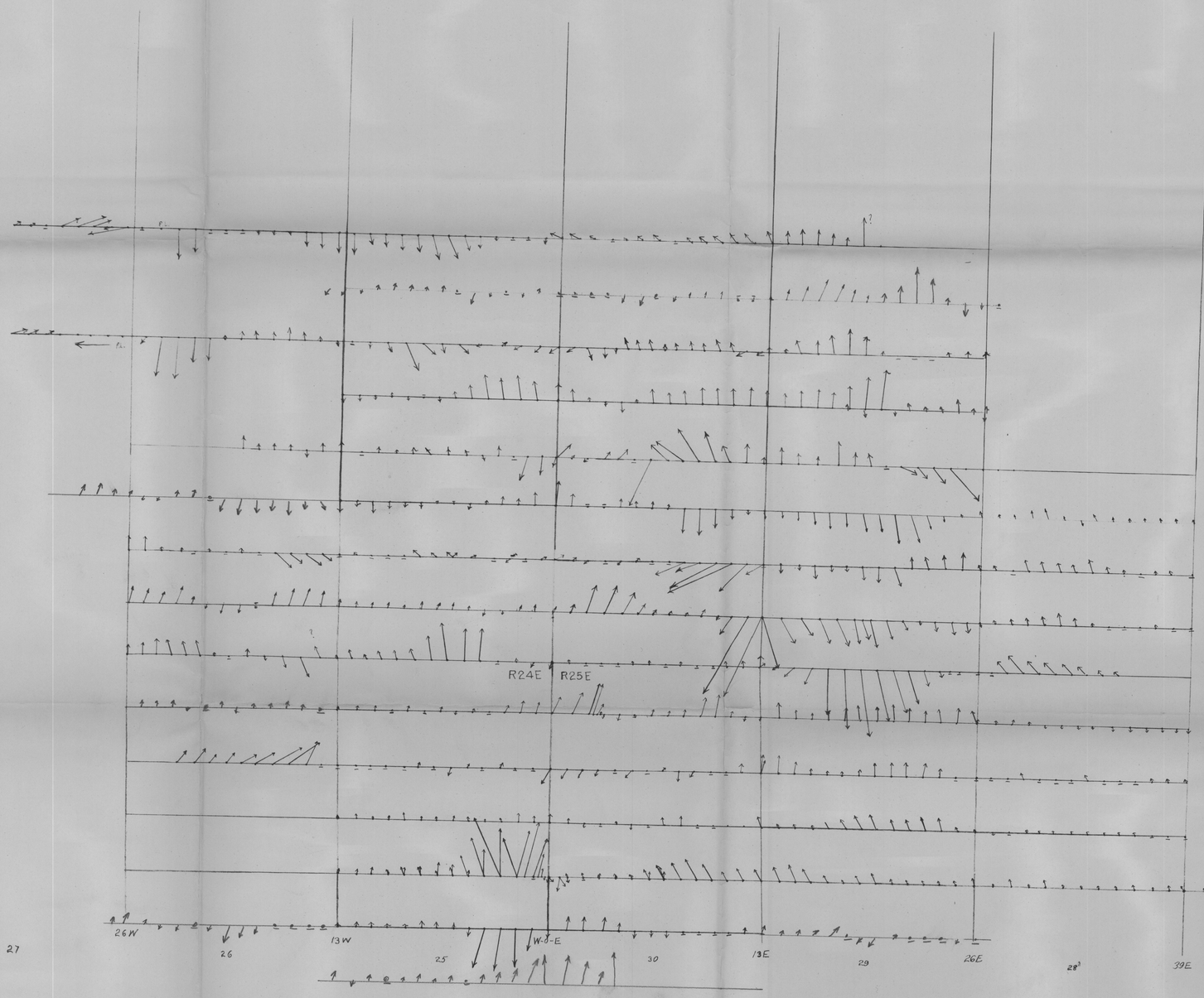
3 miles per day under good weather conditions

Proposed Self Potential Line:

24S	2.0W	3.0E	5.0

1 to 1.5 miles per day ($150.00 crew/day)

Line 3R N



COURTLAND-GLEESON AREA
COCHISE COUNTY, ARIZONA

PROJECT P-1-A

AFMAG SURVEY

FOR

CHAPMAN, WOOD & GRISWOLD, ALBUQUERQUE, NEW MEXICO

BY

HEINRICHS GEOEXPLORATION CO.
TUCSON, ARIZONA

DATE 9/12/59

High Frequency Azimuth Only

J. Wood: Considerations for applications of

Re: ~~Applications~~ Geophysics in SE. Missouri.

Dear John:

Relative the above and your call of

2 Nov 1959:

Either directly and/or indirectly, geophysics has contributed very much to the resultant activities in the area. Initial impetus toward a revival of interest ~~in the area~~, the last several years, was the development of substantial iron by a combine of St. Joe Lead and Bethlehem Steel. This was the direct result of drilling a prominent U.S.G.S. and/or State aerial magnetic high. Earlier work had assumed and/or indicated, these highs were mostly a reflection of larger submarginal concentrations of magnetite in the deeper basement rocks. However, it is now known that at least some of them are smaller, shallower concentrations of higher grade magnetite.

Theoretically, the natural free field methods, such as gravity and magnetics, have no direct depth limitations, because that is based on absorption or reflection and diminution of returned energy etc., encountered in most of the other methods. At any point, your measurement is a total integrated resultant of all effects which boil down to relative size, shape, distance away and physical property contrast (density or magnetic susceptibility as the case may be). Thus, larger structures may be delineated to great depths while tiny features will only show up when very shallow.

The case in Joint seems to relate to two general types of environment. One is in the "basement porphyry" itself and the other is at or near the "shoreline" contacts or "pinch outs" of the sediments where they lap on to the porphyry or are severely arched over the underlying porphyry.

~~Ideally, the ideal approach as follows~~ Naturally, in actual practice there have been a multitude of geological-geophysical combinations, variations, omissions, and results, but the ideal approach has been as follows:

1. Regional airborne magnetics, followed or checked by regional gravity data, both State, U.S.G.S., and private @ $100.00/sq mile.
2. More detailed ground magnetics and occasionally gravity, at $100.00 to 500.00 per sq mile
3. Induced potential or pulse potential electrical surveys. $1000.00-2000.00 per sq mile.
4. Seismics @ $3000.00-$5000.00/sq mile.
5. Drill hole methods, 10¢ to 50¢/foot/hole.

~~Geophysical methods, only the related~~

Joe Barton. Lamont. L.S. Knobs. | I.P. Nephr.

Because of magnetite association with basement structure the 3 basement magnetite deposits and some pyrrotite in the sedimentary deposits successful method, Magnetics has been by far the most used and both in direct detection; as well as in indirect related structural delineation. Not enough detail gravity work has been done to be able to fully evaluate its usefulness. So far the regional results have not been too helpful. Most of the targets are too deep for the electrical methods, except I.P. & P.P. work, which several of the companies are now using, with success as far as reported; but it should help down to 2000' ±. If aeromag works anywhere to these depths it should work here just as well.

Jack Jones.
Joint Bourn Mineral Conference at St Louis.

Joe Barton — 14 Claims
Verbennium, St. Joe.

Am Metal
" Zinc (Boss) Fe & Base Metal. Cu.
A.S.&R. 10,000 acres So. of Palmer Fault.
Magnet Cove.
Dresser.
N.J. Zinc
Magnet Cove.
Shannon City - Kennecott
Reynolds - St. Jo. " & Am. Metals.
National - N.J./St Louis
Ind Independence 2 oz for Iron. So of that So of River.

Churn then P.P. 250/foot.
Pea Ridge Small Anomalies.

3 gravities have flown.

'43 Work.
State Gravity Regional

GOLDEN

In the past, seismic has been too expensive for much work to have been done, but now the relative economics are much better and there will be occasional favorable applications, because of its relative unlimited depth resolution. Drill hole methods will be of occasional secondary help, but cannot be used as a primary approach.

As near as I have been able to determine, what roads and/or terrain permit, the area might be ideal for initial process of wildcat areas or in detailing or extending known areas where applicable. we have had several tentative inquiries but so far no work in the area. Apparently considerable hand work is being done to pick up things missed, or detail lacking, in the aerial work.

Hope this will help some. Let me know if more is needed. May get some additional info at L.A.

Sincerely,

Encl: Extra copy
Memo.
3 each, Lines 325 & 245 SP.

FIBRE GOLD

Advance Sheet
Subject To Correction

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PEARCE QUADRANGLE
ARIZONA—COCHISE CO.
15 MINUTE SERIES (TOPOGRAPHIC)

Mapped, edited, and published by the Geological Survey
Control by USGS, USC&GS, and USCE
Compiled in 1959 from 1:24 000 scale maps of Outlaw Mtn., Hay Mts., Potter Mtn., and Gleeson SE 7.5 minute quadrangles, surveyed 1957-1958
Topography from aerial photographs by ER-55 plotter
Aerial photographs taken 1955. Field check 1957-1958
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
Dashed land lines indicate approximate locations
Unchecked elevations are shown in brown

APPROXIMATE MEAN DECLINATION, 1958

CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL

SCALE 1:48 000

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER 2, 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 - - - - - -

This area also covered by 1:24 000 scale maps of Outlaw Mtn. 1958, Hay Mts. 1957, Potter Mts. 1958 and Gleeson SE 1958 7.5 minute quadrangles

GLEESON, ARIZ.
N3135—W10945/15
1958

R24E R25E

10 11 12 7 8

32N

16 15 14 13 18 17

28N

EXPLANATION

24N

21 22 23 24 19 20

T 19 S

20N

16N

28 27 26 25 30 29

12N

8N

33 34 35 36 31 4N 32

LINE 0

4 3 2 1 6 5 4

4 S

T 20 S

9 7 8 12S 9

16 15 14 13 18 17 20S 16

R24E R25E

COURTLAND – GLEESON AREA
COCHISE COUNTY, ARIZONA

PROJECT P-1-A
AFMAG SURVEY
FOR
CHAPMAN, WOOD & GRISWOLD, ALBUQUERQUE, NEW MEXICO
BY
HEINRICHS GEOEXPLORATION CO.
TUCSON, ARIZONA

DATE July 22, 1959

Low Frequency Azimuth Only
↗ indicates direction & degree of tilt

↑ To Gleeson

Rec. #27 9-18-59

9-16-59

Rec. #28 9-18-59

Rec. #29 9-18-59

Rec. #7

Rec. #30 9-18-59

Rec. #14 9-17-59

Rec. #15 9-17-59

Rec. #16 9-17-59

Rec. #17 9-17-59

9-16-59 Rec. #6

Rec. #18 9-18-59

Rec. #5 9-16-59

Rec #19 9-18-59

Rec. #1 9-16-59

Rec. #20 9-18-59

Rec. #21

Rec. #3 9-16-59

Rec. #22 9-18-59

Rec. #23

Rec. #24 9-18-59

Rec. #4 9-16-59

Rec. #25 9-18-29

Rec #26 9-18-59

Rec. #11 9-17-59

Rec. #9 9-17-59

Rec. #10 9-17-59

Rec. #13 9-17-59

Rec. #12 9-17-59

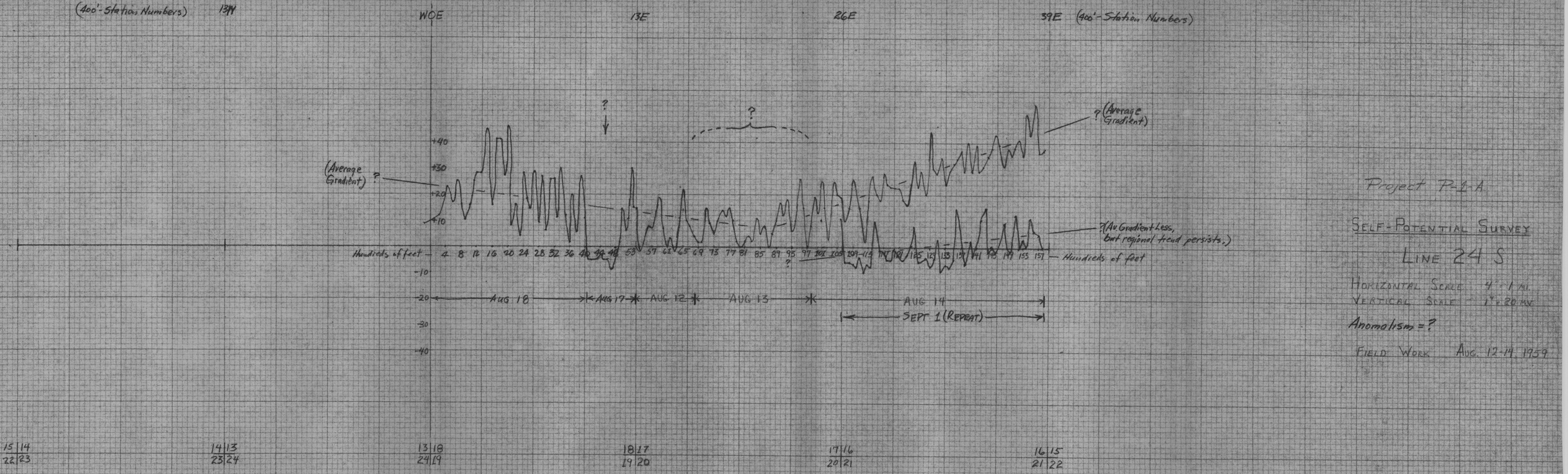
Rec. #2 9-16-59

8 7 18 17 16 20 21 29 28 30 31 32

There is Only ONE GENUINE FLEX-O-GLASS

There is Only ONE GENUINE FLEX-O-GLASS Made Only By Ware Bros.

FLEX-O-GLASS



Project P-1-A

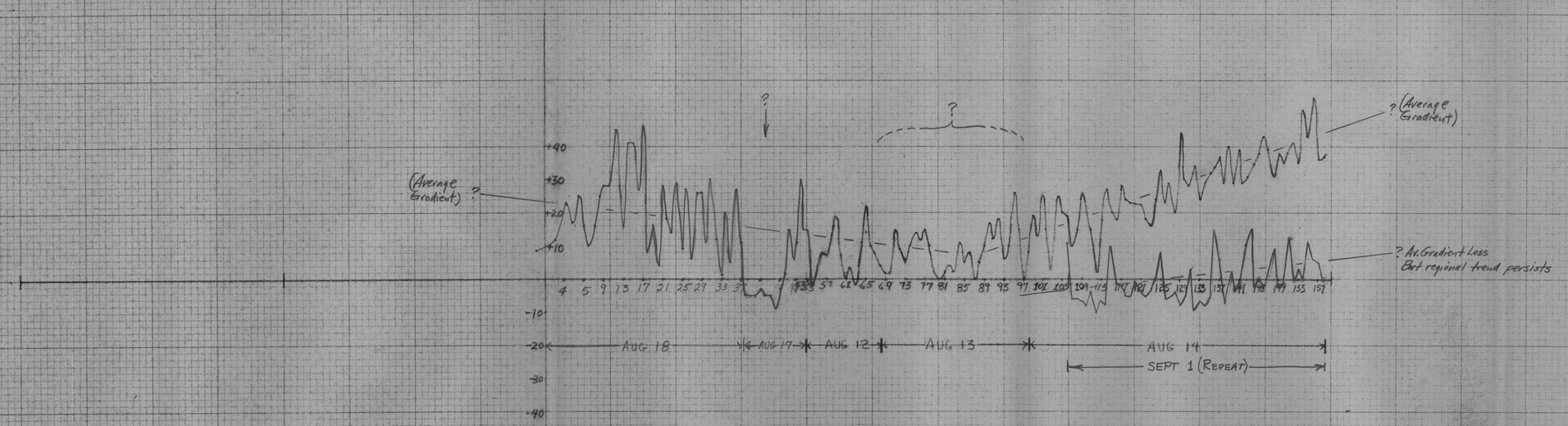
SELF-POTENTIAL SURVEY

LINE 24 S

HORIZONTAL SCALE 4" = 1 MI.
VERTICAL SCALE 1" = 20 MV.

Anomalism = ?

FIELD WORK AUG. 12-19, 1939



Project P-1-A

SELF-POTENTIAL SURVEY

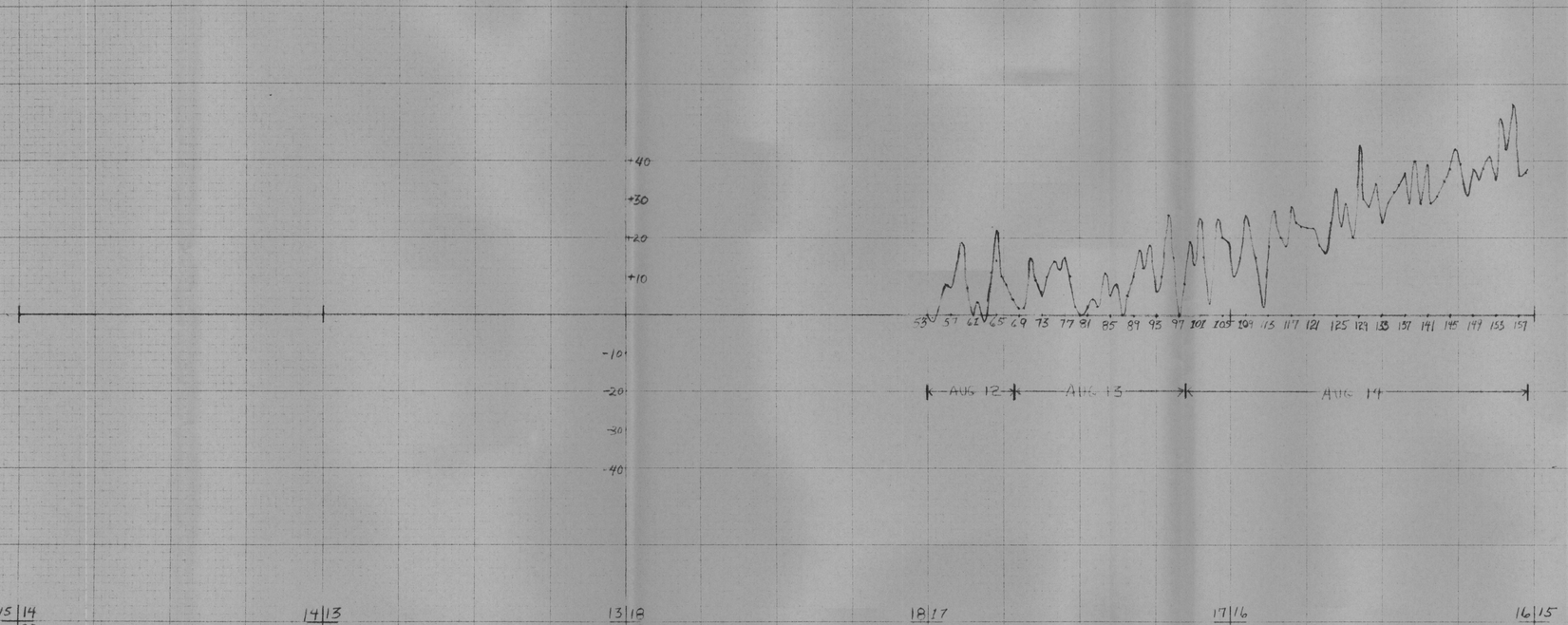
LINE 24 S

HORIZONTAL SCALE 4" = 1 MI.
VERTICAL SCALE 1" = 20 MV

Anomalies - ?

FIELD WORK AUG. 12-14, 1959

15 | 14 22 | 23	14 | 13 23 | 24	13 | 18 24 | 19	18 | 17 19 | 20	17 | 16 20 | 21	16 | 15 21 | 22



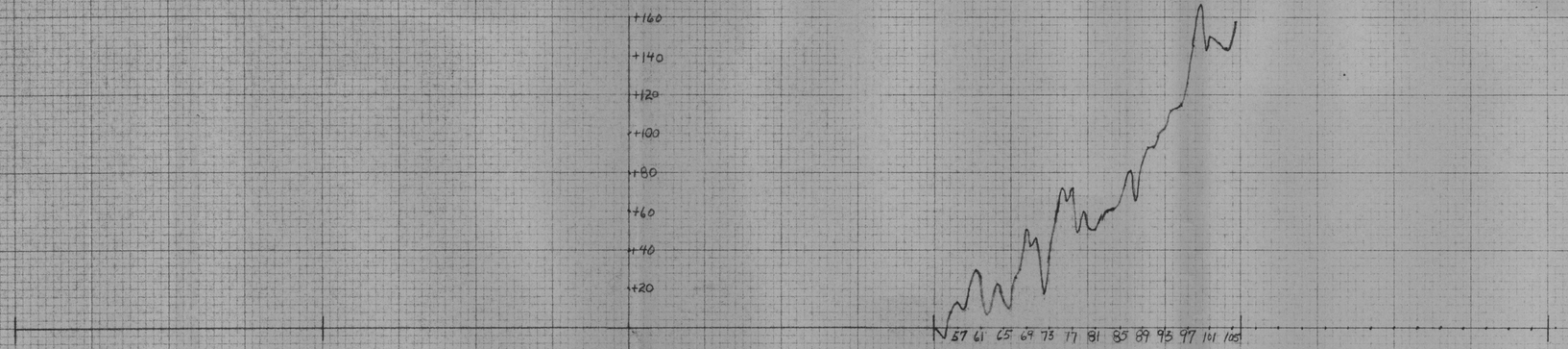
Project P-1-A

SELF-POTENTIAL SURVEY

LINE 24 S

HORIZONTAL SCALE 4" = 1 MI.
VERTICAL SCALE 1" = 20 MV

FIELD WORK AUG 12-14, 1954



15|14
22|23

14|13
25|24

13|18
24|19

18|17
19|20

17|16
20|21

16|15
21|22

Project P-1-A

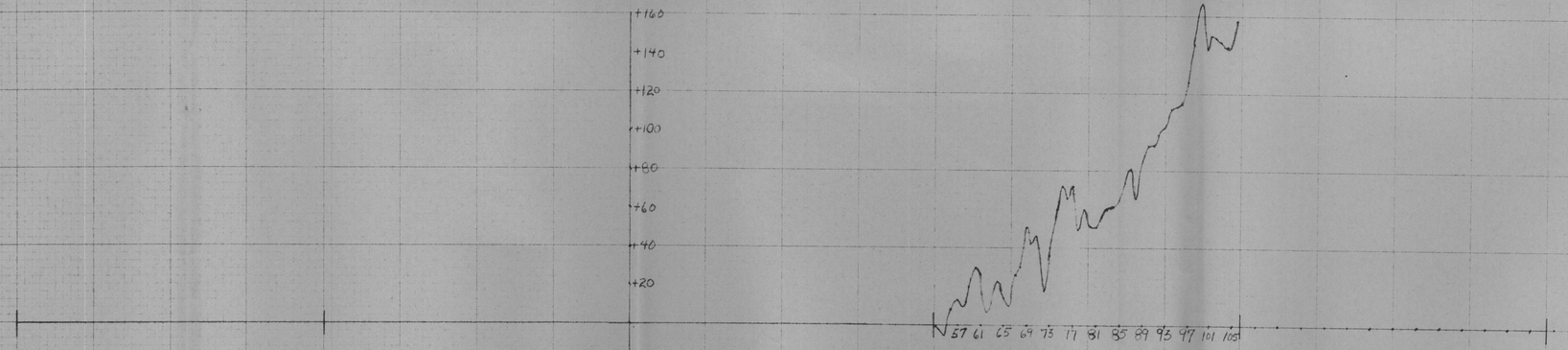
SELF-POTENTIAL SURVEY

LINE 24 S

HORIZONTAL SCALE 4" = 1 mi

VERTICAL SCALE 1" = 40 MV.

FIELD WORK AUG. 11, 1959



15|14
22|23

14|13
23|24

13|18
24|19

18|17
19|20

17|16
20|21

16|15
21|22

Project P-1-A

SELF-POTENTIAL SURVEY

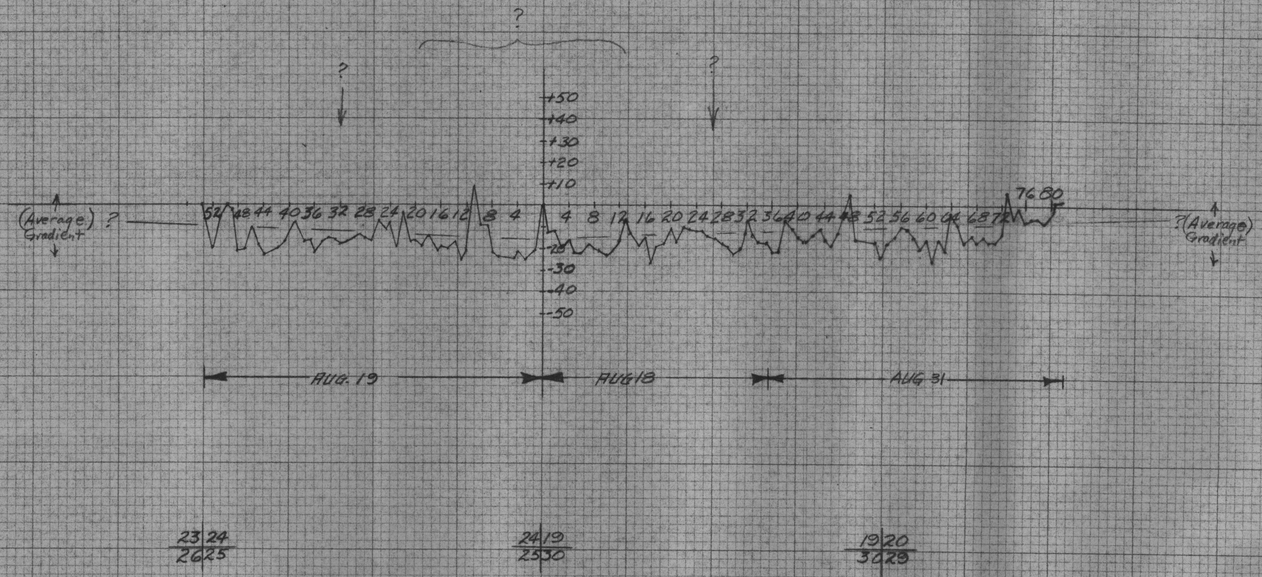
LINE 24 S

HORIZONTAL SCALE 4" = 1 MI.

VERTICAL SCALE 1" = 40 M.V.

FIELD WORK AUG. 11, 1959

(400'-Station Numbers) 26W 13W W O E 13E 26E (400'-Station Numbers)



PROJECT P-1-A

SELF-POTENTIAL SURVEY

LINE 32 S.

HORIZONTAL SCALE 4" = 1 MI.
VERTICAL SCALE 1" = 40 MV.

WEAK ANOMALISM - ?

FIELD WORK DONE AUG. 18-19, 1939

To Gleeson

Rec. #27 9-18-59

Rec. #28 9-18-59

Rec. #29 9-18-59

Rec. #30 9-18-59

Rec. #14 9-17-59

Rec. #15 9-17-59

Rec. #16 9-17-59

Rec. #17 9-17-59

Rec. #18 9-18-59

Rec #19 9-18-59

Rec. #20 9-18-59

Rec. #22 9-18-59

Rec. #24 9-18-59

Rec #25 9-18-59

Rec. #26 9-18-59

Rec. #23

Rec. #21

Rec. #11 9-17-59

Rec. #9 9-17-59

Rec. #10 9-17-59

Rec. #13 9-17-59

Rec. #12 9-17-59

Rec. #8

Rec. #6

Rec. #5 9-16-59

Rec. #1 9-16-59

Rec. #3 9-16-59

Rec. #2 9-16-59

Rec. #4 9-16-59

Tksi

Qtb

Tsl

Tst

8

16

17

18

20

21

30

29

28

31

32

Area Gleason

8	9
17	16

Location Line 32 N Station 14E

1. Battery Test

A' 41
A² 41
A³ 45
B' 45
B² 41

2. Balance Check

Deviation 1/2 Division

3 A.C. Gain Check

	lev 1	lev 2
A High Frequency Max	40	40
High Frequency Instr. Noise	8	8
B Low Frequency Max	40	40
Low Frequency Instr. Noise	6	0

4 Signal to Noise Ratio

	Low	High
A Instrument Noise	5	38
B System Noise	20	55
Ratio	1/4	2/3

AFMAG DAILY LOG

Date: 7/24/59

Area: Gleason

Location: Line 4 S Sta 13 E

1. Battery Test:

A^1 41
A^2 41
A^3 45
B^1 44
B^2 41

2. Balance Check:

Deviation 1/3 Divisions

3. A. C. Gain Check

	Lev I	Lev 2
a. High Frequency Maximum	40	40
High Frequency Instrument Noise.	0	0
B. Low Frequency Maximum	40	40
Low Frequency Instrument Noise	0	0

4. Signal to Noise Ratio

	LOW	HIGH
a. Instrument Noise	4	35
b. System Noise	60+	60+

	LOW	HIGH
Ratio:	1/15	1/2

AFMAG DAILY LOG

Date: 7/23/59

Area: Gleason

Location: Line 16 S STA 0E

1. Battery Test:

A^1 41
A^2 41
A^3 43
B^1 45
B^2 41

2. Balance Check:

Deviation 1/2 Divisions

3. A. C. Gain Check

	Lev. 1	Lev. 2
a. High Frequency Maximum	40	40
High Frequency Instrument Noise.	0	1
B. Low Frequency Maximum	40	40
Low Frequency Instrument Noise	3	1

4. Signal to Noise Ratio

	LOW	HIGH
a. Instrument Noise	6	38
b. System Noise	50	50+

	LOW	HIGH
Ratio:	1/8	4/5

4 35
30 60+

AFMAG DAILY LOG

Date: 7/22/59

Area: Gleeson

Location: Line 225 Sta 9E

1. Battery Test:

A^1 41
A^2 43
A^3 45
B^1 45
B^2 41

2. Balance Check:

Deviation 1/2 Divisions

3. A. C. Gain Check

	Lev 1	Lev 2
a. High Frequency Maximum	40	40
High Frequency Instrument Noise.	6	4
B. Low Frequency Maximum	40	40
Low Frequency Instrument Noise	4	2

4. Signal to Noise Ratio

	Low	High
a. Instrument Noise	4	35
b. System Noise	30	60+

Ratio:	Low	High
	1:8	1:2

AFMAG DAILY LOG

Date: 7/21/53

Area: Gleason

Location: Line 28 S 2+ 13E

1. Battery Test:

A^1 41
A^2 42
A^3 45
B^1 44
B^2 41

2. Balance Check:

Deviation 1/2 Divisions

3. A. C. Gain Check

	LEV 1	LEV 2
a. High Frequency Maximum	40	40
High Frequency Instrument Noise.	10	3
B. Low Frequency Maximum	40	40
Low Frequency Instrument Noise	4	2

4. Signal to Noise Ratio

	LEV 1 LO	LEV 1 HI	
a. Instrument Noise	4	35	
b. System Noise	20	60+	1

Ratio: LO 5/1 HI 7/1

AFMAG DAILY LOG

Date: 7/20/50

Area: Gleeson

Location: Sta 13E Line 205

1. Battery Test:

A^1 42

A^2 42

A^3 46

B^1 46

B^2 42

2. Balance Check:

Deviation 1/3 Divisions

3. A. C. Gain Check

	Lev 1	Lev 2
a. High Frequency Maximum	40	40
High Frequency Instrument Noise	0	0
b. Low Frequency Maximum	40	40
Low Frequency Instrument Noise	1	0

4. Signal to Noise Ratio

a. Instrument Noise_____

b. System Noise_____

Ratio:_____

AFMAG DAILY LOG

Date: 7/18/59

Area: Gleason

Location: Sta 13 E 52+80 E

1. Battery Test:
   - A^1 41
   - A^2 41
   - A^3 45
   - B^1 44
   - B^2 41

2. Balance Check:

   Deviation ½ Divisions

3. A. C. Gain Check

	Lev 1	Lev 2
a. High Frequency Maximum	40	40
High Frequency Instrument Noise	0	0
b. Low Frequency Maximum	40	40
Low Frequency Instrument Noise	3	0

4. Signal to Noise Ratio

	Low	High
a. Instrument Noise	5	3
b. System Noise	40	40

Ratio: _____

AFMAG DAILY LOG

Date: 7-17-59

Area: Gleeson

Location: 18 | 17 / 19 | 20

1. Battery Test:
   - A^1 42
   - A^2 42
   - A^3 46
   - B^1 44
   - B^2 42

2. Balance Check:
   Deviation 1/2 Divisions

3. A. C. Gain Check

	Lev 1	Lev 2
a. High Frequency Maximum	40	40
High Frequency Instrument Noise	1	0
b. Low Frequency Maximum	40	40
Low Frequency Instrument Noise	1	0

4. Signal to Noise Ratio

	Lo	Hi
a. Instrument Noise	0	4
b. System Noise	40	45

Ratio: — | 10/1

AFMAG DAILY LOG

Date: 7/16/59

Area: Gleeson

Location: Line 125 Sta 15E

1. Battery Test:

A^1 42

A^2 42

A^3 46

B^1 44

B^2 41

2. Balance Check:

Deviation 0 Divisions

3. A. C. Gain Check

	Lev 1	Lev 2
a. High Frequency Maximum	40	40
High Frequency Instrument Noise	4	0
b. Low Frequency Maximum	25	40
Low Frequency Instrument Noise	4	0

4. Signal to Noise Ratio

	Low	High
a. Instrument Noise	0	4
b. System Noise	20	30

Ratio: _____

AFMAG DAILY LOG

Date: 7/15/59

Area: Gleeson

Location: Line 12 S Sta 25W ¼ corner 10/11

		8:30	11:00
1. Battery Test:	A^1	43	42
	A^2	43	42
	A^3	47	46
	B^1	45	46
	B^2	42	42
2. Balance Check:			
Deviation		½	½ Divisions

3. A. C. Gain Check (Under Power Line)	Lev 1	Lev 2
a. High Frequency Maximum	40	40
High Frequency Instrument Noise	0	0
b. Low Frequency Maximum	40	40
Low Frequency Instrument Noise	2	1

4. Signal to Noise Ratio	LOW	HIGH
a. Instrument Noise	1	3
b. System Noise	20	25
	20:1	8:1

Ratio: _____

AFMAG DAILY LOG

Date: 7/14/59

Area: Gleason

Location: Line 85 Sta. 0 E

1. Battery Test:
   - A^1 44
   - A^2 44
   - A^3 48
   - B^1 45
   - B^2 43

2. Balance Check:

   Deviation 0 Divisions

3. A. C. Gain Check

	Lev 1	Lev 2
a. High Frequency Maximum	40+	40
High Frequency Instrument Noise	0	0
b. Low Frequency Maximum	40	40
Low Frequency Instrument Noise	2+	0

4. Signal to Noise Ratio

   a. Instrument Noise 510μ ±2 150μ ±1

   b. System Noise ±25 " ±12

Ratio: 1/12

AFMAG DAILY LOG

Date: 7-13-59

Area: Gleeson.

Location: Line 8.S. Sta 13E.

1. Battery Test:

A^1 44+

A^2 44+

A^3 49

B^1 46

B^2 44

2. Balance Check:

Deviation 0 Divisions

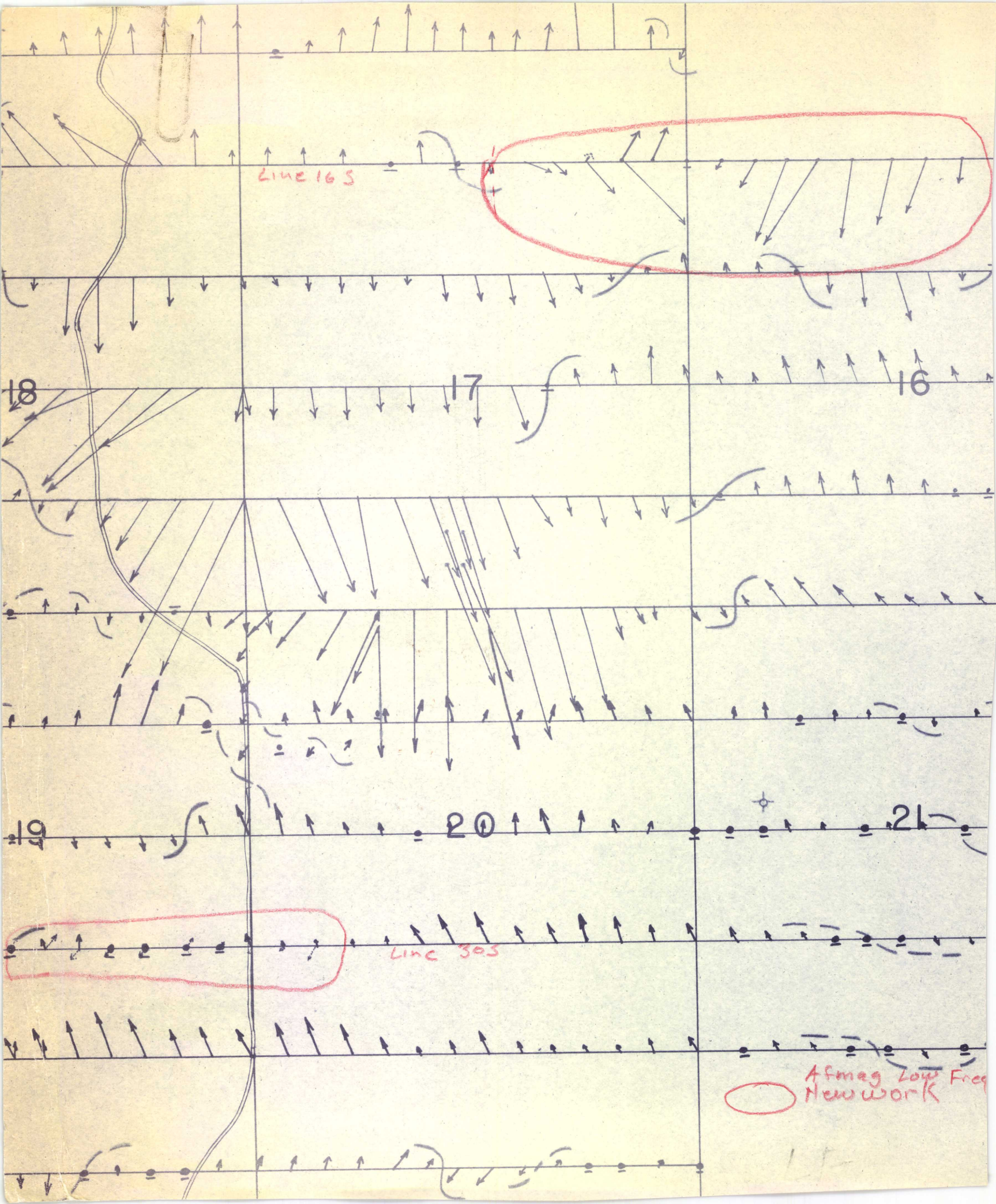
3. A. C. Gain Check	LEV # 1	LEV # 2
a. High Frequency Maximum	50+ ½ gain	50+ ½ gain
High Frequency Instrument Noise	0	0
b. Low Frequency Maximum	50+ ¾ gain	50+ ¾ gain
Low Frequency Instrument Noise	0	0

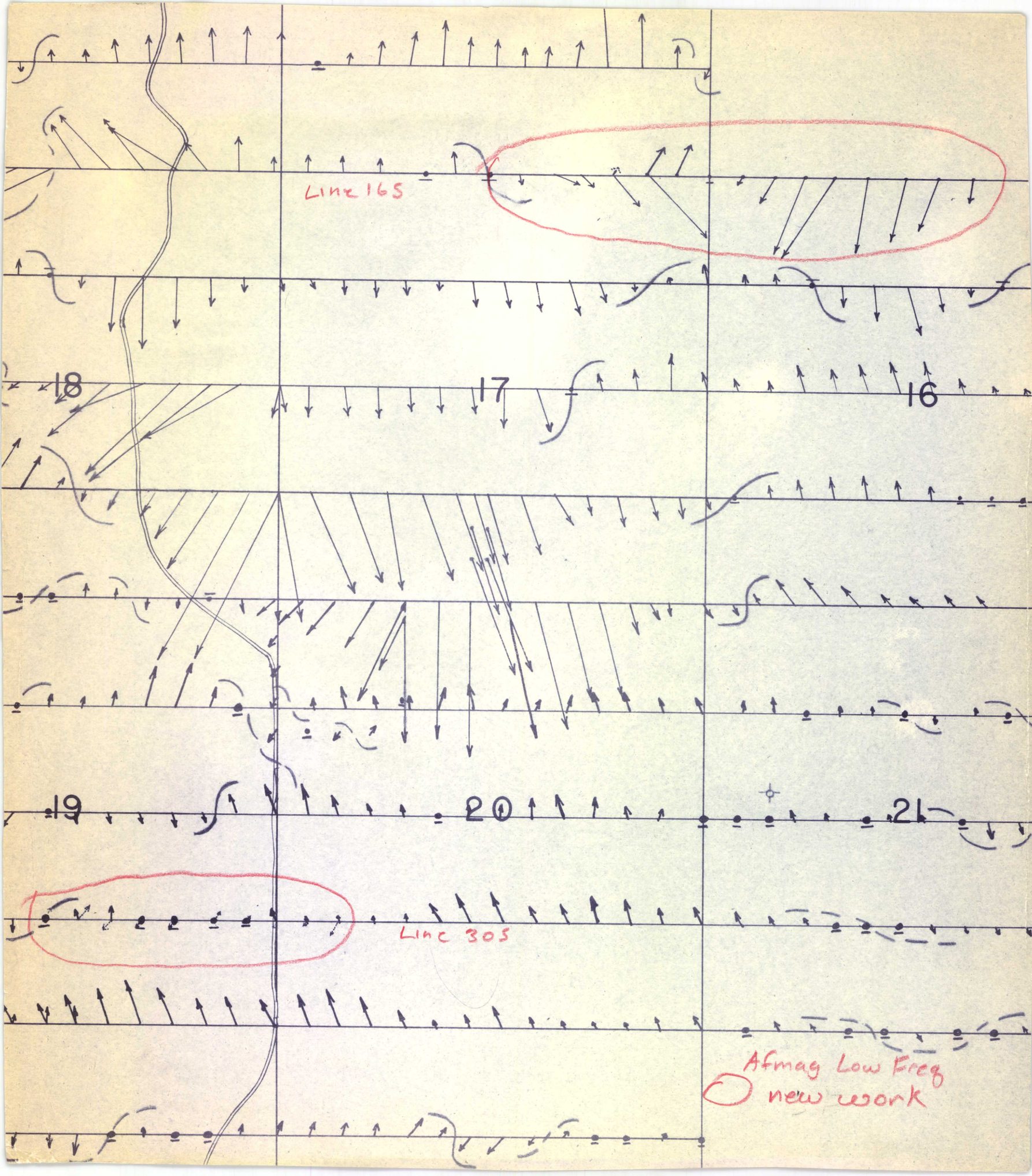
4. Signal to Noise Ratio

a. Instrument Noise_____

b. System Noise_____

Ratio:_____


Line 165
18
17
16
19
20
21
Line 305
Afmag Low Freq
New work


Line 165
18
17
16
19
20
21
Line 305
Afmag Low Freq
new work

November 18, 1959

Mr. John A. Wood
Chapman, Wood & Griswold
P. O. Box 8302
Albuquerque, New Mexico

Dear John:

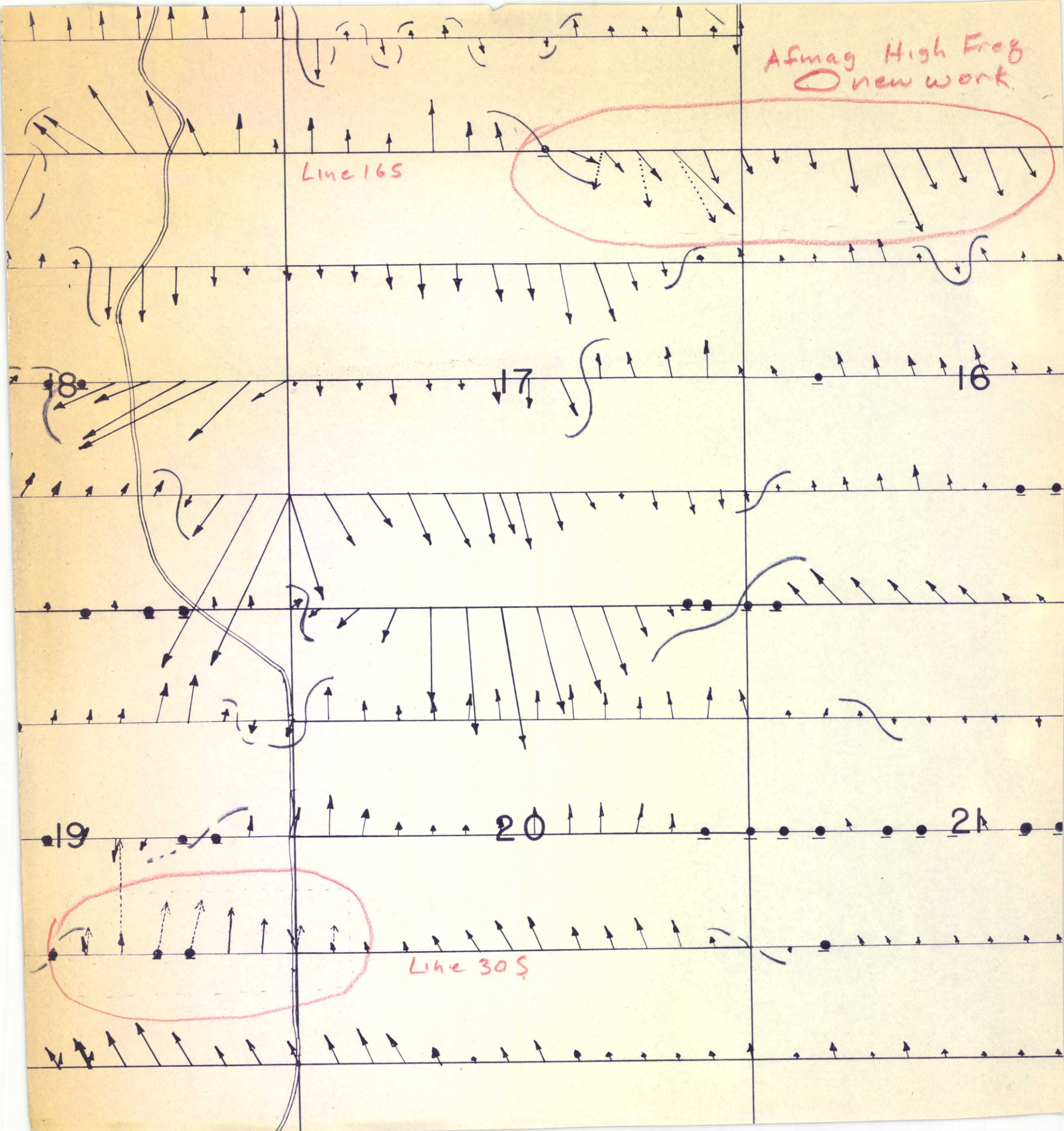
This is the basic cost data you requested. You or Hal may wish to add, delete or extract if submitted to the State. Vehicle costs will add proportionately to the State total about $400.00 more, and interpretation and compilation, etc., about another $400.00, estimated.

Sincerely,

Walter E. Heinrichs, Jr.

WEH:jh
Encl. (2)
cc: H. C. Warnock (cost memo only)

P. S. Also enclosed is memorandum regarding discussions with Stan Ward ih L. A.


Afmag High Freq
New work
Line 16S
18
17
16
19
20
21
Line 30S

November 18, 1959

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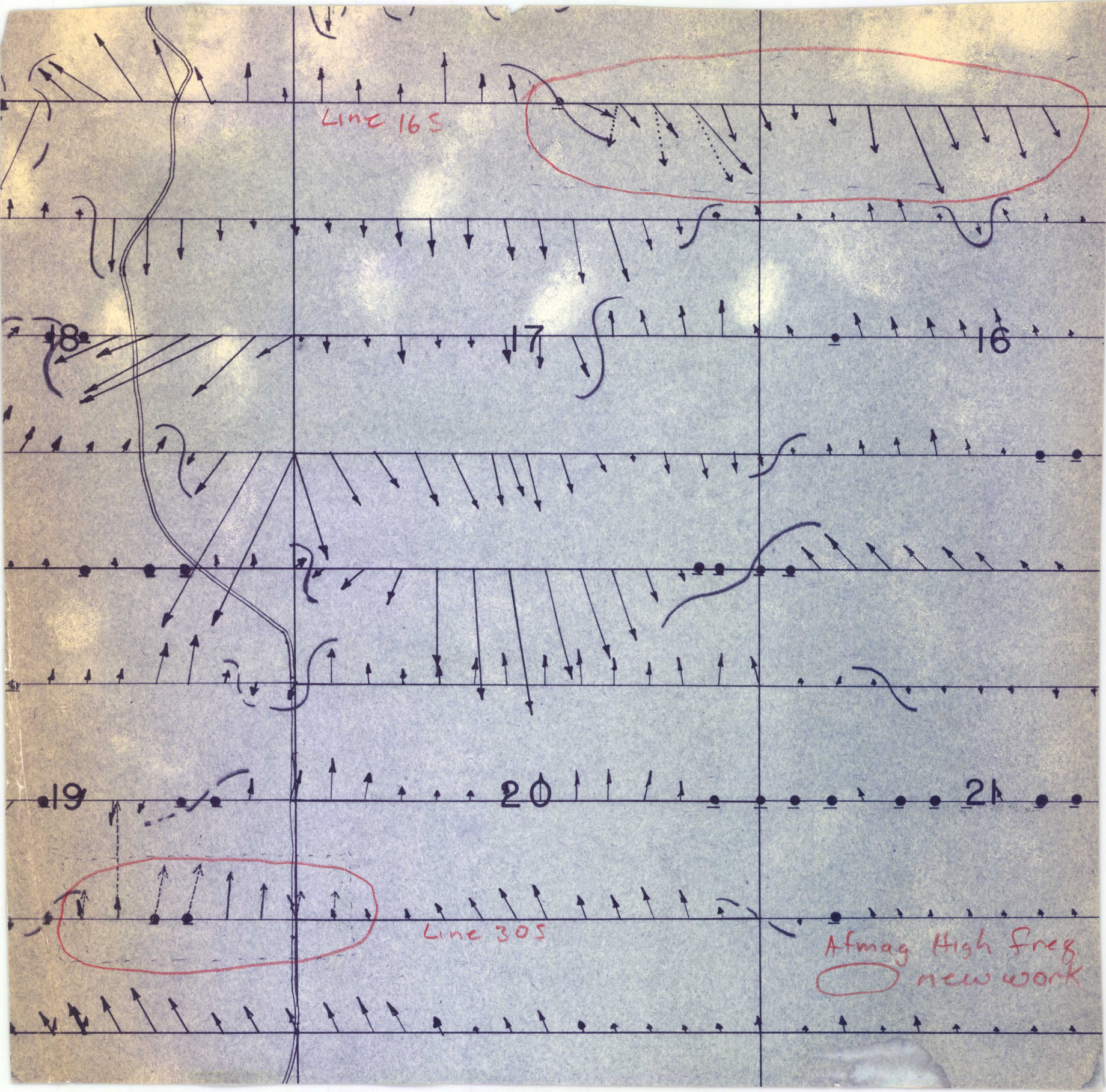
Line 16S
18
17
16
19
20
21
Line 30S
Afmag High freq
new work

T. 20 S.

R. 24 E. R. 25 E.

PROPERTY MAP
SOUTH GLEESON AREA
COCHISE COUNTY, ARIZONA
PROJECT P-I-A
SCALE: 8" = 1 Mile
CHAPMAN, WOOD & GRISWOLD DRAWING NO. 604
AUGUST 1959

State grazing lease
Federal land
Open to mineral entry
Fee land

Land Status

WEH

WEH
Land Map
P-1-A

HEINRICHS GEOEXPLORATION COMPANY
MINERAL ENGINEERING CONSULTANTS AND CONTRACTORS
GEOPHYSICAL, GEOLOGICAL AND ECONOMIC APPRAISALS
TUCSON, ARIZONA

WALTER E. HEINRICHS, JR.
E. GROVER HEINRICHS

PHONE: MAIN 2-4202
806-808 WEST GRANT ROAD
MAIL: P. O. BOX 5671

November 18, 1959

MEMORANDUM

Re: Conferences at S. E. G. in Los Angeles
November 9-12,1959

P-1-A AFMAG results
with S. H. Ward and Phil Hallof of McPhar.

On the afternoon of Monday, 9 November 1959 I went over the AFMAG data with Ward with the following comments resulting:

1. Very tough AFMAG area. Some local areas are adverse for unknown reasons.

2. Definite adverse local weather conditions influence quantitative effect unknown at present. Evidence extremely poor base station checks.

3. Random tilt pattern, "amusing, but confusing".

4. Reliable dip determinations very indefinite.

5. Now appears N-S lines might have been better than E-W and interpretation from N-S profiles should be included.

6. Preponderance of S tilts probably due to regional effects?

7. By far best cross-over at 6 1/2 E on 22S

8. Cannot explain or understand "anti directional" anomalism between 32S and 34S from 0 to 5W, where large arrows point away from each other.

9. General effect is probably due to block faulting in the "granite" (Gleeson quartz monzonite), and/or strong surface or near surface chemical conductivity (strong absorption or masking effect?)

10. A sketch of Stan's interpretation is attached herewith.

Following these committed expressions we went over the magnetic, S.P. and Geochem results with no change in the AFMAG conclusions. Tuesday evening, I was able to corner Ward and Hallof together. Hallof felt very strong as per #1 above and strongly confirmed convictions and convinced Stan as per #9 above although he had just heard about the data and had only seen the base station plots.

Afmag Base Station Readings

Project P-1-A
Afmag Survey
July - 1959

Hi-L ——— Base

10:40 A.M. 7/30/59
OK

10:50 A.M. 7/30/59
OK (180° of above)

6:10 A.M. 7/31/59
OK

10:55 A.M. 7/31/59
OK

8:25 A.M. 7/29/59
N.G.

3:30 PM "
N.G.

8:45AM 8/1/59

6:20 AM 8-5-59

2:10 PM "

Base
Line 28 N. Sta 30+00 E.

11:45 A.M. 7/31/59
OK

Unreadable: 2:05 P.M. "

N.G. 2:15 P.M. 7/27/59

N.G. 5:10 PM "

N.G. 9:00 A.M. 7/28/59

N.G. 1:00 P.M. "
(GAIN WAY DOWN)

OK? 9:25 A.M. 7/29/59. ——— 9:40 AM 7-29-59 (180° OF READING TO LEFT)

OK? 10:15 AM " ——— 10:30 AM 7-29-59 (180° OF READING TO LEFT.

OK? 1:50 PM "

OK 6:00 AM 8/1/59

N.G. 6:30 AM "
UNREADABLE

N.G. 7:15 AM "
UNREADABLE

N.G. 8:00 AM "

LINE 20 S? BASE

OK? 6:50-7:00 AM. 8/18/59

1:00 P.M. 8/17/59

7:15 A.M. 8/20/59

2:10 p.m. 8/20/59

Unreadable 8/31/59

" 9/1/59

6:15 A.M. 9/2/59

7:30 A.M. 9/3/59

7:45 A.M. 9/4/59

Unreadable 9/5/59

8:00 AM 9-30-59

↑ indicates 150 Cps.
↑ " 510 Cps.

SCALE:
10° = 1 inch

8:25 A.M. 9/9/59

8:00 A.M. 9/10/59

4:30 p.m. 9/22/59

3:00 p.m. 9/23/59

11:40 A.M. 9/24/59

8:00 A.M. 9/25/

9:45 A.M. 9/26/

2:30 PM - 10-2-59

8:35 AM 9-29-

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

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

The question was then asked, "Could these type of results respond from over a relatively large disseminated sulfide mass?" Hallof felt they very well could, Ward was less definite.

If the method is as generally reported, my own conclusion now is that we have just not encountered any strong conductivity contrasts such as a large massive sulfide in a dry insulating host rock unless they are extremely deep (1500' +), and that the effects are from more discreet contrasts of a widely varying size, shape and nature, such as a combination of faults, fissures and contacts. Unfortunately, this still does not help too much to define or eliminate economic possibilities. My own hope is that, eventually, there may be enough encouragement to justify I.P. work.

Walter E. Heinrichs, Jr.

cc: J. Wood (2)

2 Oct 1959

Last Army dol.