GRAVITY METER EXPLORATION COMPANY
1321 ESPERSON BUILDING
HOUSTON 2, TEXAS

PHONE CAPITOL 9018 CABLE TORSALEX

INTERPRETATION OF AEROMAGNETIC SURVEY

OF

BLOCK II, NORTHWEST TERRITORIES, CANADA

FOR

AEROMAGNETIC SURVEYS, LIMITED AND ASSOCIATES

APRIL 13, 1953

SUMMARY

This report covers the interpretation of the aeromagnetic survey of Block II, Northwest Territories, included within longitudes 120° 40' W. - 120° 00' W. and latitudes 60° 28'N. - 61° 10' N. The area is mapped at scale 1" = 1 mile, and the observed data are presented on four maps: Northwest, Northeast, Southwest, and Southeast.

A structural map of the regional configuration of the basement surface, contoured at an interval of 1000 feet (subsea datum) at a scale of 1" = 3 miles, has been prepared entirely from magnetic depth estimates made on intrabasement anomalies. Residual anomalies suggesting local relief of the basement surface are superimposed on the observed data. Outlines of the postulated basement disturbances are shown within each anomaly and are also included on the Basement Structural Contour Map.

The basement map indicates that the basement surface is conspicuously flat over the major portion of the survey at a general level of -2000 feet. This flatness is disturbed primarily by a relatively rapid thickening of the sedimentary section in the southwestern corner of the survey where the basement depth deepens to -6000 feet. A secondary disturbance to the flattening is a synclinal axis trending northward near the eastern edge of the survey along which the basement deepens to -4000 feet.

The area is indicated by the magnetic data to have an unusually large amount of local basement disturbances. Eighty-nine local residual anomalies are resolved. Fifteen of these are graded good, twenty five fair, and forty nine poor.

A Second Vertical Derivative Map, scale 1" = 1 mile was also prepared to assist in the computation of magnetic depth estimates and to aid in the resolution of the residual

anomalies. This map is colored red and yellow. A more or less accurate generalization is the fact that the basement rocks under the red areas will be more highly polarized or contain more ferromagnetic minerals than the adjacent yellow areas. The derivative map shows in a very striking fashion that these basement petrographic units are aligned northwesterly. This alignment gives rise to the so called northwesterly basement "grain".

Note that the outlines of the eighty nine local basement disturbances are superimposed on the derivative map.

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Observed Aeromagnetic Map, with local anomalies superimposed, Sheets NW, NE, SW, SE, Scale 1" = 1 mi.; observed data contoured at an interval of 10 gammas; residual anomalies contoured at an interval of 5 gammas.

Second Vertical Derivative Map, with outlines of local areas of interest superimposed, Sheets NW, NE, SW, SE, scale 1" = 1 mi.; contour interval 2×10^{15} cgs.

Basement Structural Contour Map, with structural basement contours (interval 1000 ft., datum, sea level), individual magnetic depth estimates, and local areas of interest superimposed on a composite of the four observed magnetic maps; scale 1" = 3 mi.

INTRODUCTION:

The interpretation of the aeromagnetic data attempts to resolve the observed magnetic anomalies into two categories intrabasement and suprabasement anomalies. The intrabasement anomalies are those which, because of their large areal size and large amplitude, must originate from large magnetization contrasts within the basement (i.e., igneous or metamorphic) rocks. These large magnetization contrasts are assumed to originate at the basement surface and to extend infinitely downward with vertical sides. With these assumptions, estimates of the depths to the tops of these anomalously magnetized bodies may be made or, conversely, the thickness of the sedimentary section may be estimated.

After these large features are resolved and are employed for the determination of the sedimentary thickness, residual anomalies remain which may be placed in other categories. The category of principal interest is the suprabasement type, anomalies which are of such shape and amplitude that they can be assumed to rise from vertically thin sheets of magnetized rock, for example, from relief of the basement surface. Another group of anomalies include disturbances from the ground surface. These produce sharp and erratic anomalies which are easily separable from those related to basement rocks.

The analysis is based on the study of the observed data, both the observed maps and the flight profiles, together with a second vertical derivative map. The second vertical derivative approximates the curvature of the observed magnetic field, and areas shaded red on the derivative map are areas of positive curvature, those shaded yellow, of negative curvature. All observed anomalies have curvature or derivative anomalies, and, in general, the large derivative anomalies, large in area and in amplitude, are the derivative anomalies of the large observed, or intrabasement, anomalies. Also, in a general way, the small and sharp derivative features are anomalies which are not intrabasement in origin and which, therefore, may be indicative of local basement relief, surface disturbances, and other sundry

causes. Therefore, the derivative map assists in the resolution of the intrabasement and suprabasement features although it is at the same time affected by any other anomalies that may be present.

THE OBSERVED AEROMAGNETIC MAPS (Sheets NW, NE, SW, and SE):

The observed magnetic data of the four sheets are not dominated by any particular set of features but are, on the otherhand, an almost uninterrupted series of anomalies. The presence of so many anomalies is attributed to the relatively small basement depth and to the great magnetic heterogeniety of the basement.

The eighty nine residual magnetic features are superimposed on the observed magnetic maps. These will be discussed in the last section.

THE SECOND VERTICAL DERIVATIVE AEROMAGNETIC MAP(Sheets NW, NE, SW and SE):

These maps, colored red and yellow, are prepared by a grid calculation for the second vertical derivative. The derivative approximates the curvature of an anomaly so that derivative maxima coincide, for the most part, with observed maxima. Likewise, the derivative minima coincide with observed minima. Also, the zero derivative occurs approximately over the edge of the magnetic disturbance. Therefore, the red areas are, in a general way, superimposed over basement rock units that contain more ferromagnetic minerals than the adjacent rocks. These rock units are the main source of the magnetic anomalies, and the derivative maps delineate these disturbances much more clearly than the observed maps.

The northwesterly orientation of the greater part of the intrabasement rock units is very conspicuous on the derivative map. This banding creates the so called "grain" of the basement. This grain is not structural in origin but must be derived from petrographic variations of the basement rock. However, the orientation of most of these features may be the result of regional adjustments of the intrabasement rock units.

The outlines of the local basement disturbances have been reproduced on the derivative maps. Sometimes intrabasement units have corresponding structural relief. For example, residual anomaly 38 F on Sheet NE. In other cases the residual feature transects the intrabasement features as, for example, 54 F on Sheet SW.

It should be emphasized that the spacing of the grid used in the calculation of the derivatives was selected to emphasize the intrabasement anomalies rather than the suprabasement or structural type. It was considered more important to delineate the intrabasement features for the purpose of developing an accurate basement structural contour map. Therefore, the basement map is the most important result of this analysis.

BASEMENT STRUCTURAL CONTOUR MAP:

The four sheets of the observed aeromagnetic data were joined together to form the base map for the basement map. The composite map is at scale 1" = 3 miles.

The individual magnetic depth estimates are shown on this map, graded good, fair, and poor with three, two, and one underlines respectively. A fourth category is that group with the suffix "S" which means that the estimates were made on residual anomalies, that is on a surface rather than a intrabasement anomaly.

The estimates were computed without regard to any other geophysical or geological data, and they have been contoured without consideration of any other data. The contours show that the major position of the survey is at a general level of -2000 feet. The basement deepens quite rapidly from this flat area in the southwestern corner of the survey to a level of -6000 feet. In addition, a synclinal axis apparently runs northward through the eastern portion of the survey where the basement deepens to -4000 feet.

The area in the southwestern corner of the survey, which is a shelf zone between the flat area to the northeast and the basement to the southwest, is the most interesting regional feature developed.

THE RESIDUAL MAGNETIC ANOMALIES (Sheets NW, NE, SW, and SE):

The residual magnetic anomalies are superimposed on the observed magnetic data and are contoured at an interval of 5 gammas. In addition to the contours, the periphery of the contouring area of interest is shown. In some cases this periphery is simply a fault trace. Again, the anomalies are graded G, F, and P for good, fair, and poor.

The analysis attempts to classify every magnetic anomaly that has been resolved into its proper category. If an anomaly is considered to be intrabasement, it serves as a basis for estimating basement depths. Other anomalies must be put into the suprabasement category, indicating basement structure, and into miscellaneous categories, such as near surface disturbances. Of course the suprabasement type of anomaly can be caused by sheets of magnetic material within the basement as well as on the surface of the basement. Therefore, the suprabasement, or the residual anomaly, does not necessarily mean that basement structure is present. Further effort must be made through geophysical and geological studies to choose the residual anomalies that are most likely to originate from basement structure and to have superimposed sedimentary structure.

The grading of the anomalies is a step in this selective process. The anomalies can be graded on the basis of their magnetic dependability but those that are high graded are believed to have some geological merit as well as good magnetic dependability. For example, the good anomalies are chosen with due consideration to their location on the Basement Structural Contour Map.

Table I. below, gives some of the pertinent facts about each anomaly anticipating that these facts may be useful in the future employment of the anomalies.

TABLE I

Residual Anomalies

No.*	Location	Amplitude	Orientation	Derivative Correspondence	Basement Depth(Ft.)**
1-P	NW	5	N S	Fair	2000
2 P	NW	15	N S	None	2000
3 P	NW	25	NE	None	2000
4 P	NW	10	NW	Poor	2000
5 F	NW	30	NW	Fair	2000
6 F	NW	10	None	Good	2200
7 P	NW	15	N S	None	2500
8 P	NW	10	WNW	None	2000
9 F	NW	15	N S	Fair	2000
10 F	NW	15	NW	Poor	2000
11 P	NW	10	N S	Fair	2400
12 P	NW	10	None	None	2600
13 F	NW	5	N S	Good	2400
14 G	NW	15	N S	None	2800
15 P	NW	10	NW	Poor	2200
16 P	NW	10	N S	Poor	2700
17 P	NW	5	NE	Fair	2800
18 G	NW	10	NNE	Fair	2600
19 G	NW	25	NNE	Fair	2600
20-P	NW	10	N S	None	2500
21 G	NW	10	NW	Good	2800
22 F	NW	10	NW	Poor	2600
23 P	NW	10	NE	None	1900
24-P	NW	10	NW	Poor	2100
25-P	NW	5	None	Good	2100
26 P	NW	20	N-S	Poor	1800
27 P	NW	15	NNE	None	2200
28 P	NW	5	NW	None	2400
29 G	NE	10	NW	Fair	2000
30-F	NE	15	NW	Good	2400
31 G	NE	15	NW	Good	2500
32 F	NE	10	NW	Good	2400
33-P	NE	10	NW	None	4000
34-G	NE	25	N-S	None	2600
35 P	NE	5	NW	None	2000
36 P	NE	5	NW	Fair	2000
37 P	NE	5	NW	Poor	2900
38-F	NE	20	NW	Good	2500
39 G	NE	20	NE	Good	2500
40 G	NE	35	NW	Good	2200
41 F	NE	5	NE	Good	2800

* G - Good, F - Fair, P - Poor

** Basement Structural Contour Map

No.*	Location	Amplitude	Orientation	Derivative Correspondence	Basement Depth (Ft.)**
42 P	NE	5	NE	None	2300
43 P	N	5	NE	Good	2800
44 F	N	5	NW	Good	2900
45 P	N	5	N	Fair	2600
46 P	N	10	NW	None	2400
47	N	10	N	None	2000
48 F	SW	5	NW	Good	2100
49	SW	10	N	Poor	2500
50 P	SW	5	NW	Good	2500
51	SW	10	N	Good	2000
52 G	SW	10	N S	Good	2200
53 P	SW	5	N S	None	2000
54 P	SW	5	NE	None	2000
55 F	SW	20	N	Good	2500
56 F	SW	5	NW	None	6000
57 G	SW	10	N	Good	3900
58 F	SW	25	NW	Good	3800
59 F	SW	5	NW	Good	2400
60 G	SW	20	NW	Good	3500
61 P	SW	10	N	Good	4700
62 P	SW	5	NW	None	4700
63 P	SW	5	N	Good	2300
64 F	SW	10	NNE	Good	2600
65 P	SW	5	N	Good	3500
66 P	SW	5	NNW	Fair	3000
67 G	SW	10	N S	Poor	2400
68 G	SW	10	N	Good	2800
69	SW	17	N	Good	2800
70	SE	10	NW	Good	2600
71	SE	3	N	None	2100
72 F	SE	15	N	Good	1100
73 P	SE	10	NNE	Good	3000
74 F	SE	20	NE	Good	3500
75	SE	10	NN	Poor	2400
76 P	SE	12	NE	Good	3500
77	SE	5	N	Good	3000
78 P	SE	20	NW	Good	2500
79	SE	15	N	Poor	2500
80 P	SE	10	N	Good	2700
81 P	SE	5	NE	None	1600
82 P	SE	5	N S	None	2000
83 P	SE	20	N	Good	3000
84 P	SE	35	NNW	Fair	2600
85 P	SE	5	NNW	Fair	3200
86 G	SE	15	N S	Fair	3200

* G Good, F Fair, P Poor

** Basement Structural Contour Map

No.*	Location	Amplitude	Orientation	Derivative Correspondence	Basement Depth (Ft.) **
87	SE	20	N-S	Fair	2200
88	SE	14	NNE	Fair	3000
89	SE	10	NNW	Good	3000

TOTAL 15 Good
25 Fair
40 Poor

GRAVITY METER EXPLORATION COMPANY

BY _____
Nelson C. Steen

NCS:rnn
Encs.

PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY

PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY

AREA OF POSSIBLE LOCAL BASEMENT RELIEF
G=GOOD F=FAIR P=POOR

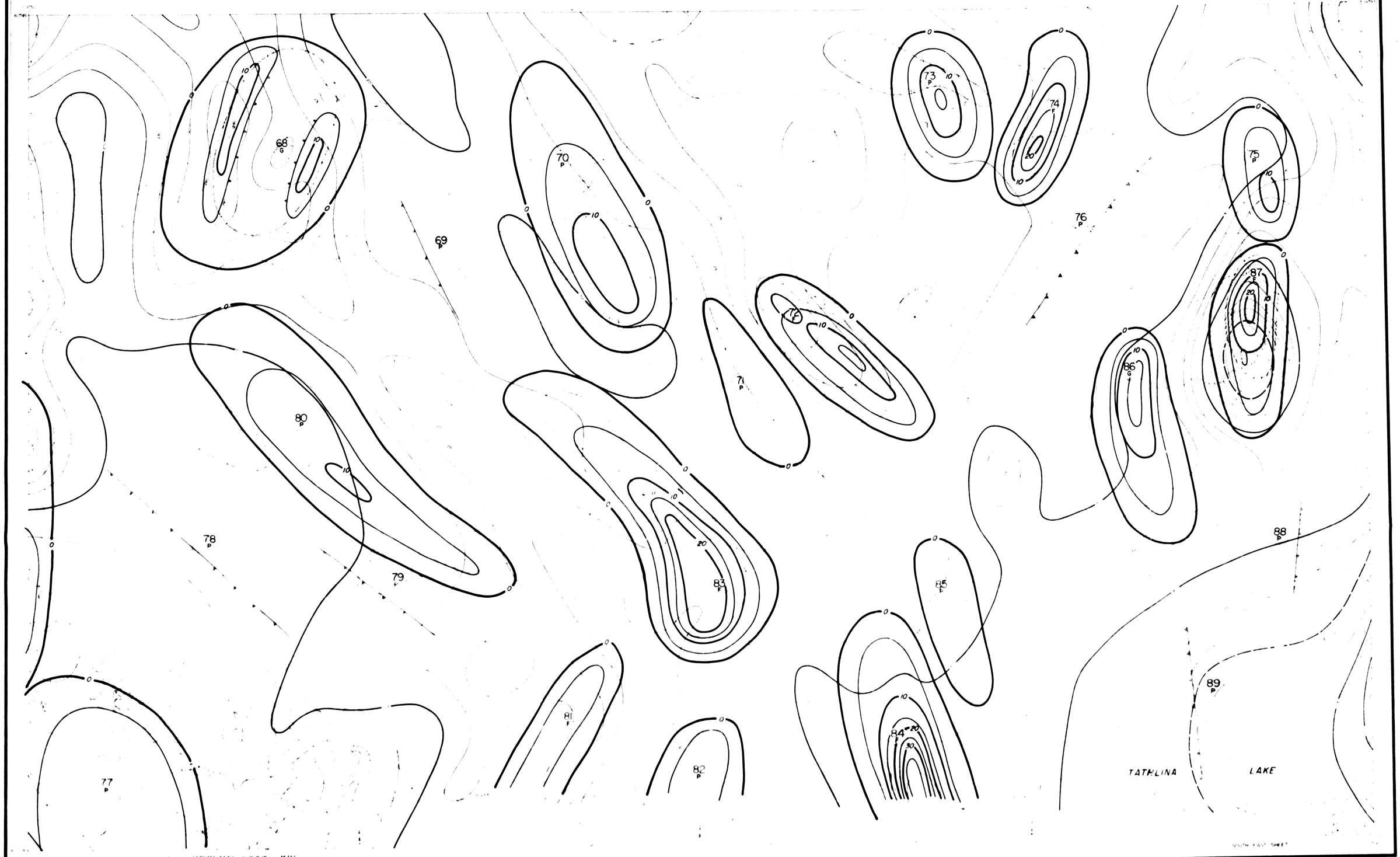
FAULT

-24 DEPTH ESTIMATE (FT. 100)
GOOD FAIR POOR

S LOCAL BASEMENT RELIEF

BASEMENT STRUCTURAL CONTOUR MAP
INTERVAL 1000 FT. DATUM SEA LEVEL
DERIVED FROM MAGNETIC DEPTH ESTIMATES

PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY



RESIDUAL MAGNETIC ANOMALIES
CONTOUR INTERVAL 5 GAMMAS

LOCAL AREA OF INTEREST

FAULT

INTERPRETED BY
GRAVITY METER EXPLORATION COMPANY
HOUSTON, TEXAS

REPORT APR. 3, 1953

508-P-Y-7

PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY

SOUTH WEST SHEET

AEROMAGNETIC SURVEYS LIMITED

RESIDUAL MAGNETIC ANOMALIES
CONTOUR INTERVAL 5 GAMMAS

LOCAL AREA OF INTEREST

FAULT

INTERPRETED BY
GRAVITY METER EXPLORATION COMPANY
HOUSTON, TEXAS

REPORT APR. 13, 1953

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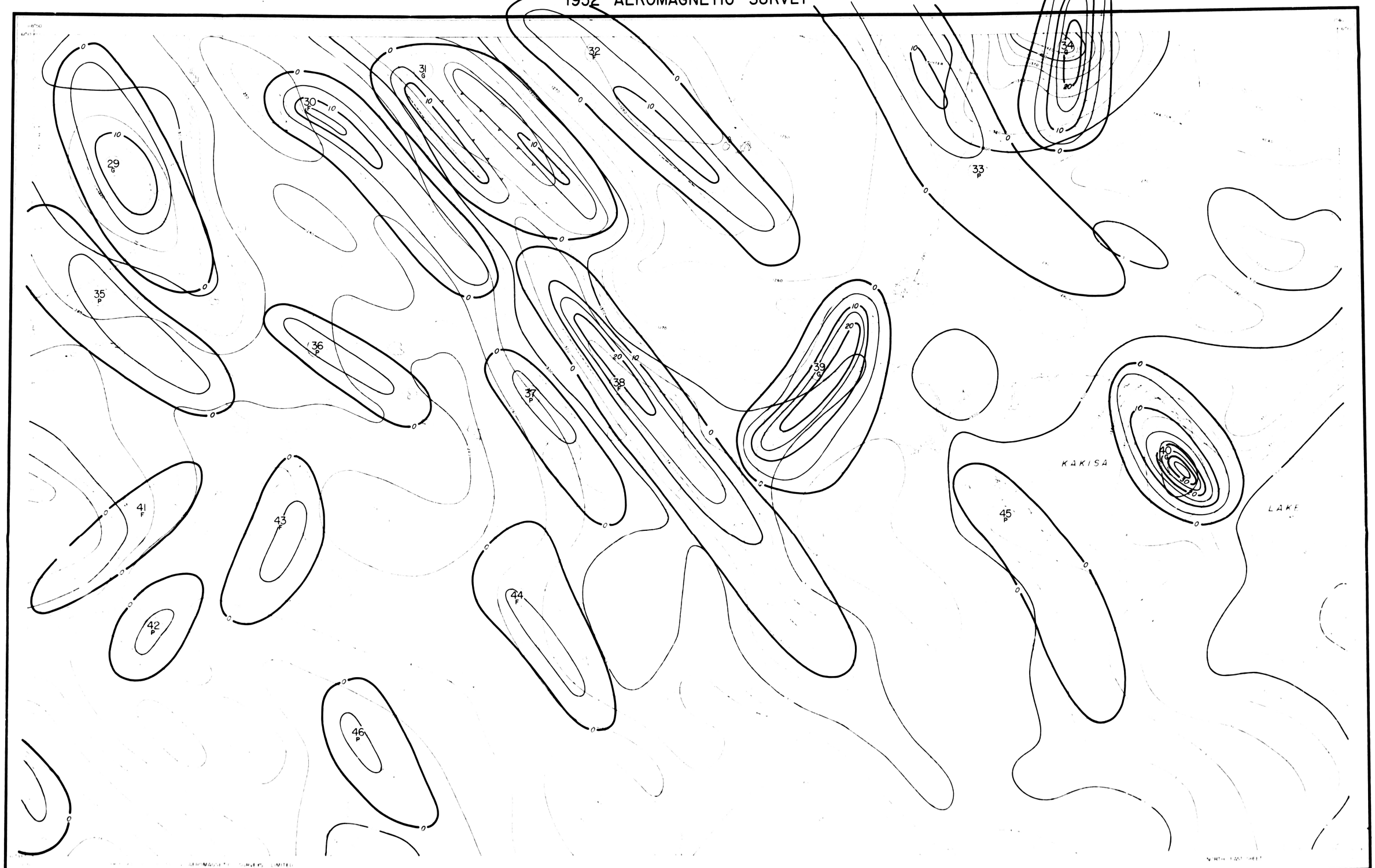
508-7-4-7

PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY



RESIDUAL MAGNETIC ANOMALIES
CONTOUR INTERVAL 5 GAMMAS

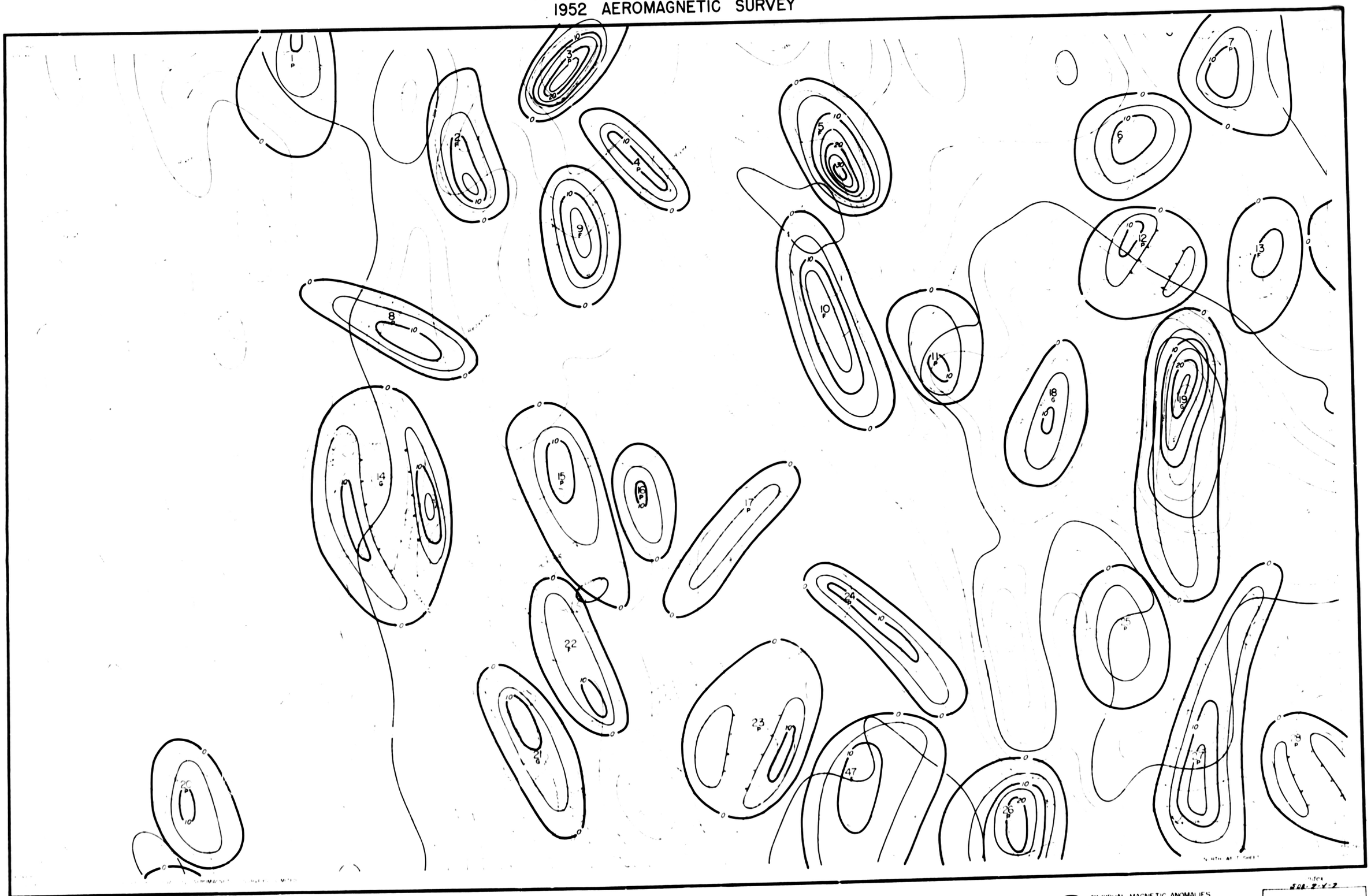
LOCAL AREA OF INTEREST

FAULT

INTERPRETED BY
GRAVITY METER EXPLORATION COMPANY
HOUSTON, TEXAS REPORT APR 15, 1953

508-2-Y-9

PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY



RESIDUAL MAGNETIC ANOMALIES
CONTOUR INTERVAL 5 GAMMAS

LOCAL AREA OF INTEREST

FAULT

INTERPRETED BY
GRAVITY METER EXPLORATION COMPANY
HOUSTON, TEXAS

REPORT APR. 15, 1953

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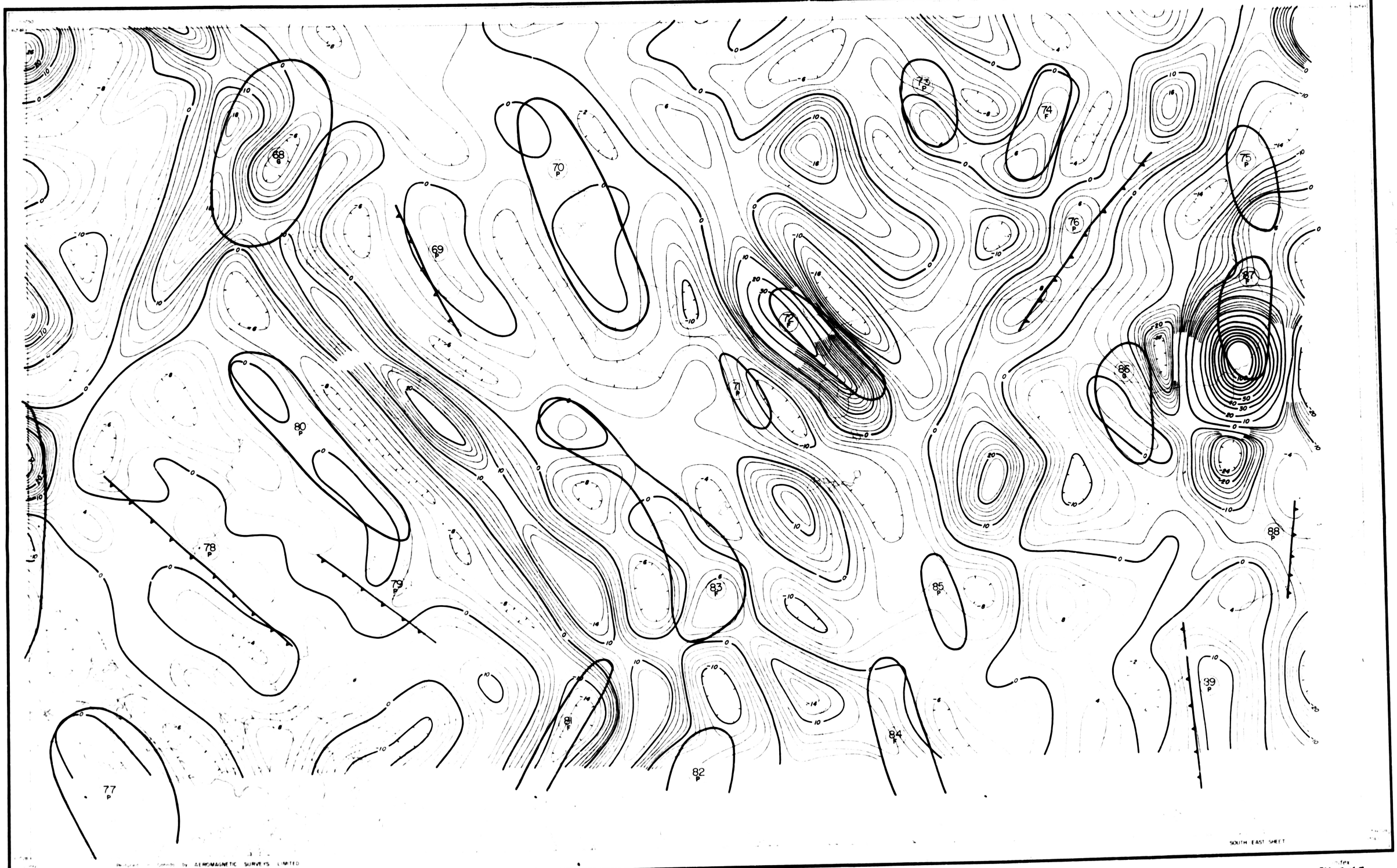
SGA-2-V-2

PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY



Compiled and Drawn by AEROMAGNETIC SURVEYS LIMITED

SCALE

1 inch to 1 Mile

SECOND VERTICAL DERIVATIVE MAP

CONTOUR INTERVAL 2×10^{-6} CGS

CALCULATED BY

GRAVITY METER EXPLORATION COMPANY

HOUSTON, TEXAS REPORT APRIL 15, 1953

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PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY

Produced in cooperation by AEROMAGNETIC SURVEYS LIMITED

MEAN FLIGHT LINE SPACING ... MILES
ALTITUDE 2500 FEET ABOVE SEA LEVEL
100 GAMMA CONTOUR
50 GAMMA CONTOUR
20 GAMMA CONTOUR
10 GAMMA CONTOUR
MAGNETIC LOW
FLIGHT LINES

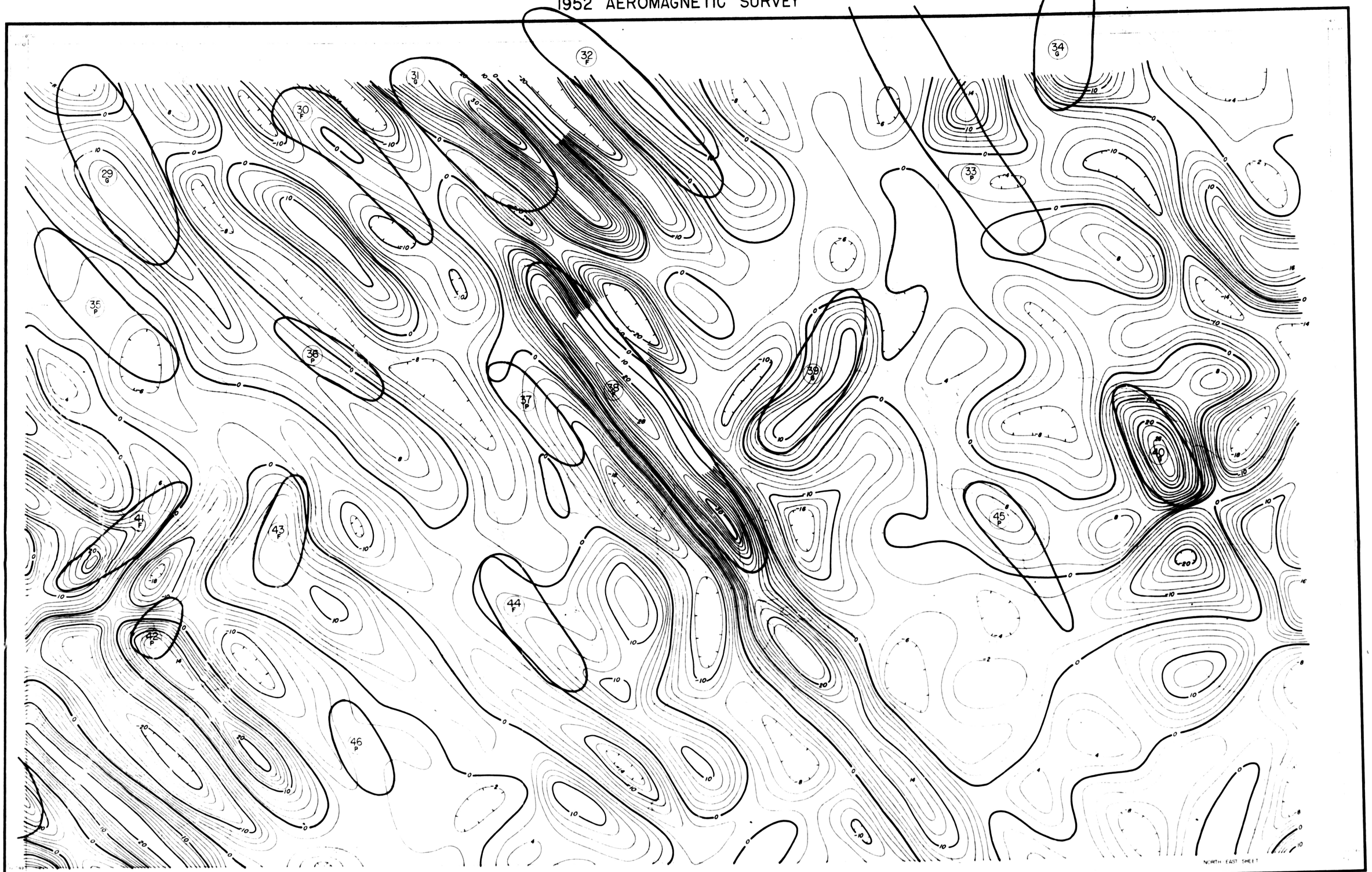
SECOND VERTICAL DERIVATIVE MAP

CONTOUR INTERVAL ... GAMMAS

COMPILED BY
GRAVITY METER EXPLORATION COMPANY
HOUSTON, TEXAS REPORT APRIL 15, 1953

501 2-Y-2

PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY



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SECOND VERTICAL DERIVATIVE MAP

CONTOUR INTERVAL 2×10^{-6} CGS

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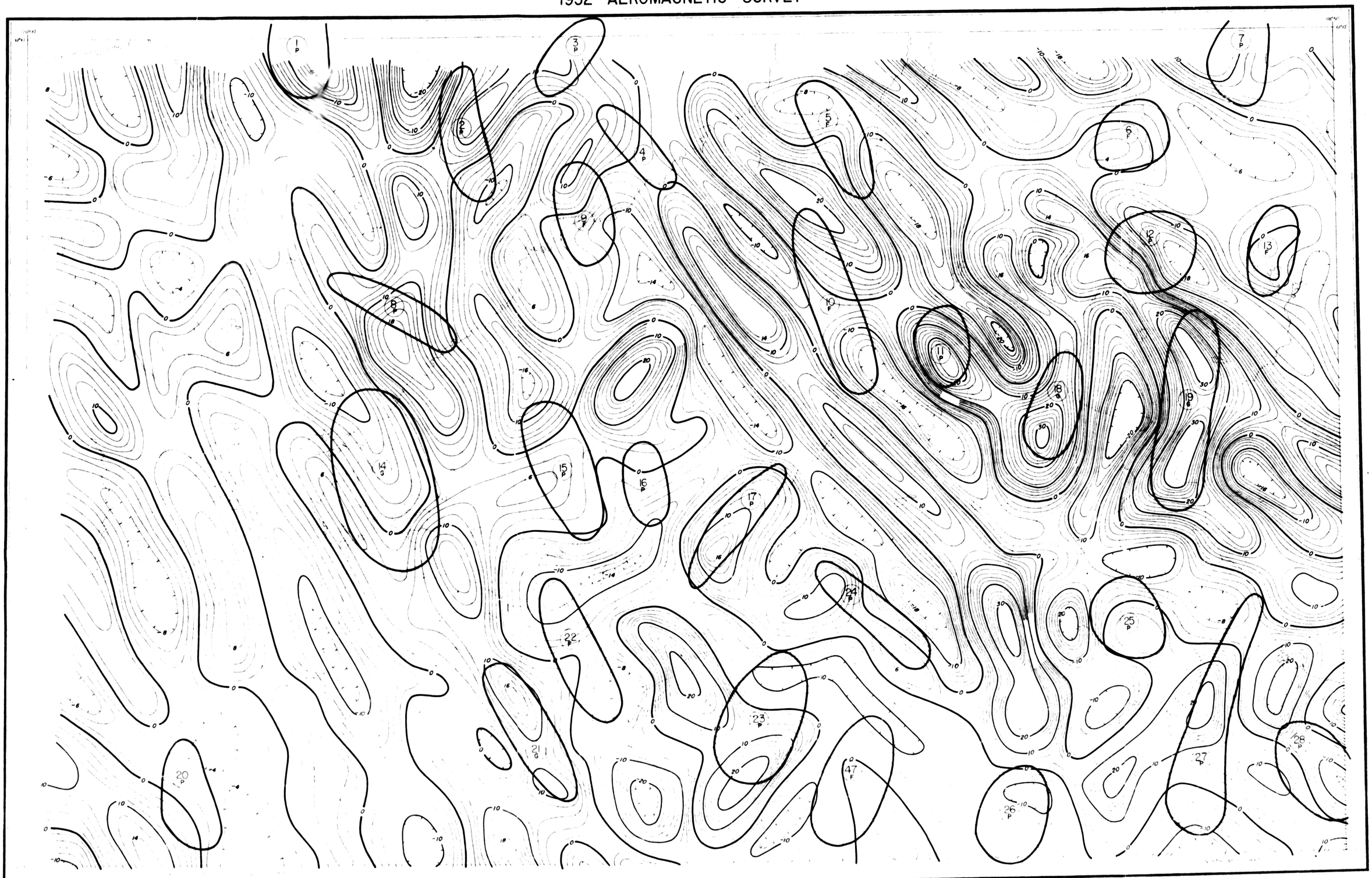
REPORT APRIL 15, 1953

PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY



SECOND VERTICAL DERIVATIVE MAP

CONTOUR INTERVAL 2×10^{-5} CGS

CALCULATED BY

GRAVITY METER EXPLORATION COMPANY

HOUSTON, TEXAS

REPRINT APRIL 13, 1953

SDE-7-V-7

GRAVITY METER EXPLORATION COMPANY
1221 ESPERSON BUILDING
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The basement map indicates that the basement surface is conspicuously flat over the major portion of the survey at a general level of -2000 feet. This flatness is disturbed primarily by a relatively rapid thickening of the sedimentary section in the south western corner of the survey where the basement depth deepens to -6000 feet. A secondary disturbance to the flattening is a synclinal axis trending northward near the eastern edge of the survey along which the basement deepens to -4000 feet.

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6 F	NW	10	None	Good	2200
7 P	NW	15	N S	None	2500
8 P	NW	10	WNW	None	2000
9 F	NW	15	N S	Fair	2000
10 P	NW	15	NW	Poor	2000
11 P	NW	10	N S	Fair	2400
12 P	NW	10	None	None	2600
13 F	NW	5	N S	Good	2400
14 G	NW	15	N S	None	2800
15 P	NW	10	NW	Poor	2200
16 P	NW	10	N S	Poor	2700
17 P	NW	5	NE	Fair	2800
18 G	NW	10	NNE	Fair	2600
19 G	NW	25	NNE	Fair	2600
20-P	NW	10	N-S	None	2500
21 G	NW	10	NW	Good	2800
22 F	NW	10	NW	Poor	2600
23 P	NW	10	NE	None	1900
24-P	NW	10	NW	Poor	2100
25 P	NW	5	None	Good	2100
26 P	NW	20	N-S	Poor	1800
27 P	NW	15	NNE	None	2200
28 P	NW	5	NW	None	2400
29 G	NE	10	NW	Fair	2000
30-F	NE	15	NW	Good	2400
31 G	NE	15	NW	Good	2500
32 F	NE	10	NW	Good	2400
33-P	NE	10	NW	None	4000
34-G	NE	25	N-S	None	2600
35 P	NE	5	NW	None	2000
36 P	NE	5	NW	Fair	2000
37 P	NE	5	NW	Poor	2300
38-F	NE	20	NW	Good	2500
39 G	NE	20	NE	Good	2300
40 G	NE	35	NW	Good	2200
41 F	NE	5	NE	Good	2900

* G - Good, F - Fair, P - Poor

** Basement Structural Contour Map

No. •	Location	Amplitude	Orientation	Derivative Correspondence	Basement Depth (Ft.)••
42	N		NE	None	2300
43	N		N	Good	2800
44	N		NW	Good	2900
	N		N	Fair	2600
46	N	10	NW	None	2400
47	N		S	None	2000
48	S		NW	Good	2100
4	S	15	N	Poor	2500
50	S		NW	Good	2500
	S	10	N	Good	2000
52 G	S	10	N S	Good	2200
53	S		N	None	2000
54	SW	5	NE	None	2000
	S	20	N	Good	2500
56 F	SW	5	NW	None	6000
57 G	S	10	N	Good	3900
58 F	SW	25	NW	Good	3800
59	S		NW	Good	2400
60 G	SW	20	NW	Good	3500
61	SW	10	N	Good	4700
62	SW	5	NW	None	4700
63	SW		NW	Good	2300
64 F	SW	10	NNE	Good	2600
65	SW		NW	Good	3300
66 P	SW		NNW	Fair	3000
67 G	SW	10	N S	Poor	2400
68 G	S	10	NE	Good	2800
69		17	N	Good	2800
70	SE	10	NW	Good	2600
71	SE	3	N	None	2100
72 P	SE	15	NW	Good	1100
73 P	S		NNE	Good	3000
74 F	SE	20	NE	Good	3500
75	SE	10	NNE	Poor	2400
76	SE	12	NE	Good	3500
77	S		N	Good	3000
78 P	SE	20	NW	Good	2500
79 P	SE	15	N	Poor	2500
80 P	SE	10	NW	Good	2700
81 P	SE		NE	None	1600
82 P	SE	5	N S	None	2000
83 P	SE	20	N	Good	3000
84 P	SE	35	NNW	Fair	2600
85 P	SE		NNW	Fair	3200
86 G	S	15	N S	Fair	3200

• G Good, F Fair, P Poor

•• Basement Structural Contour Map

No.*	Location	Amplitude	Orientation	Derivative Correspondence	Basement Depth (Ft.) **
87 [illegible]	S[illegible]	20	N S	Fair	2200
88 [illegible]	SE	14	NNE	Fair	3000
[illegible]	[illegible]	10	NNW	Good	3000

[illegible]AL

1* Good
2* Fair
1* Poor

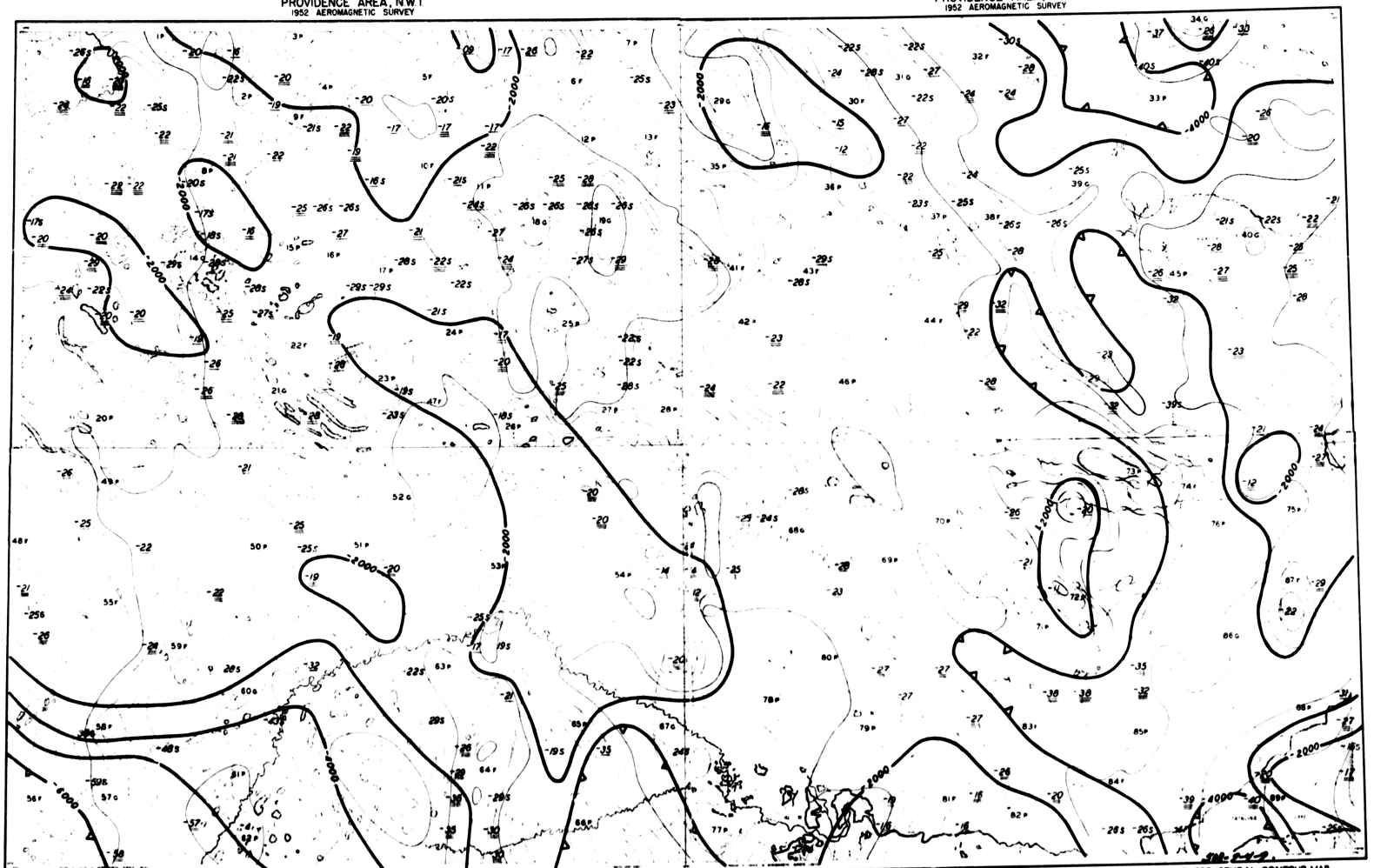
GRAVITY M[illegible]ORATING C[illegible]NY

BY: _____
Nelson S[illegible]oenland

NCSmm
Encs.

PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY

PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY



1 IN = 3 MI

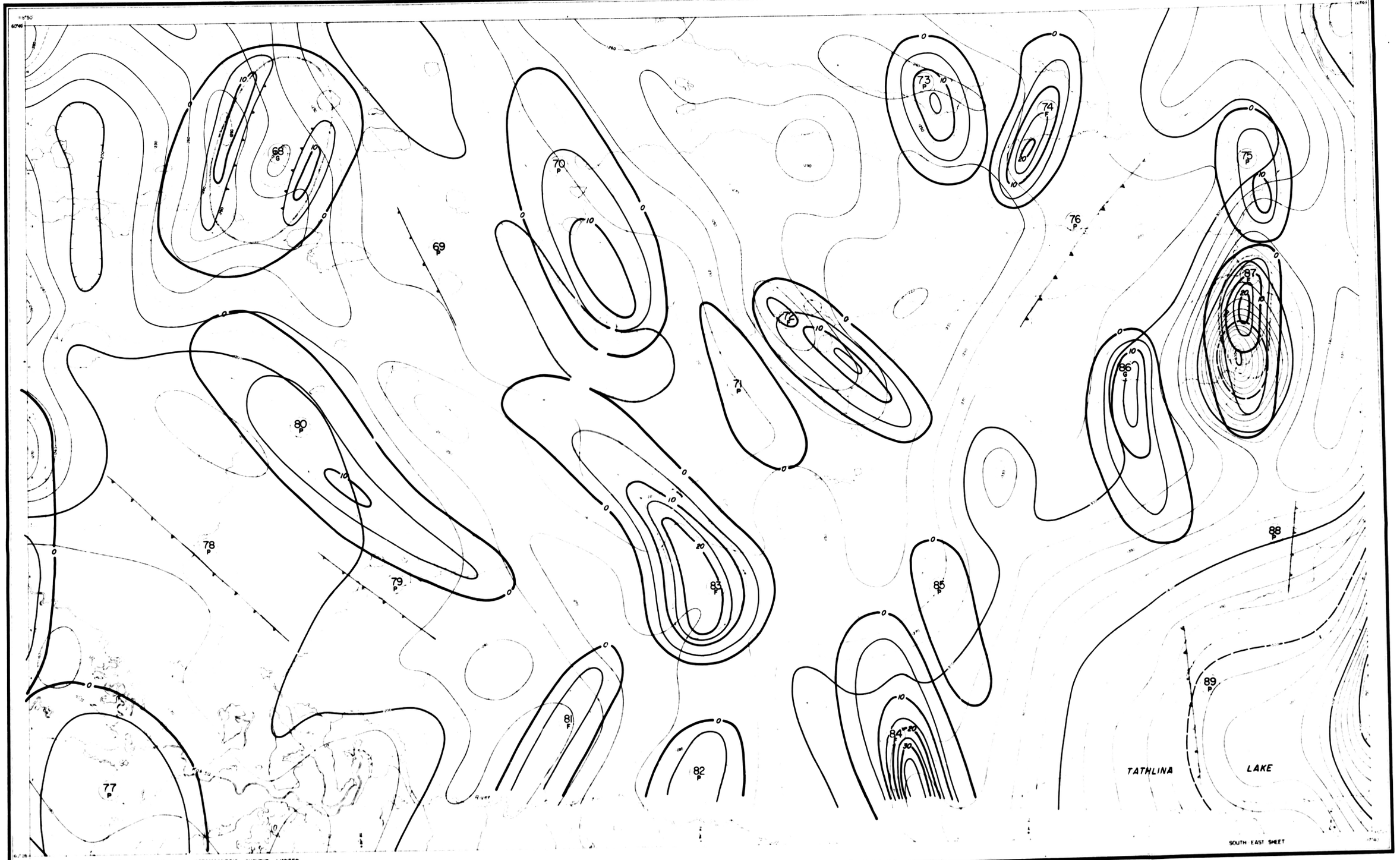
AREA OF POSSIBLE LOCAL BASEMENT RELIEF
G=GOOD F=FAIR P=POOR

FAULT

-24 DEPTH ESTIMATE (FT/100)
=GOOD =FAIR =POOR
S LOCAL BASEMENT RELIEF

BASEMENT STRUCTURAL CONTOUR MAP
INTERVAL 1000 FT. DATUM SEA LEVEL
DERIVED FROM MAGNETIC DEPTH ESTIMATES
BY
GRAVITY METER EXPLORATION COMPANY

PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY



Produced in Canada by AEROMAGNETIC SURVEYS LIMITED

SCALE
Inch to 1 Mile

RESIDUAL MAGNETIC ANOMALIES
CONTOUR INTERVAL 5 GAMMAS

LOCAL AREA OF INTEREST

FAULT

INTERPRETED BY
GRAVITY METER EXPLORATION COMPANY
HOUSTON, TEXAS
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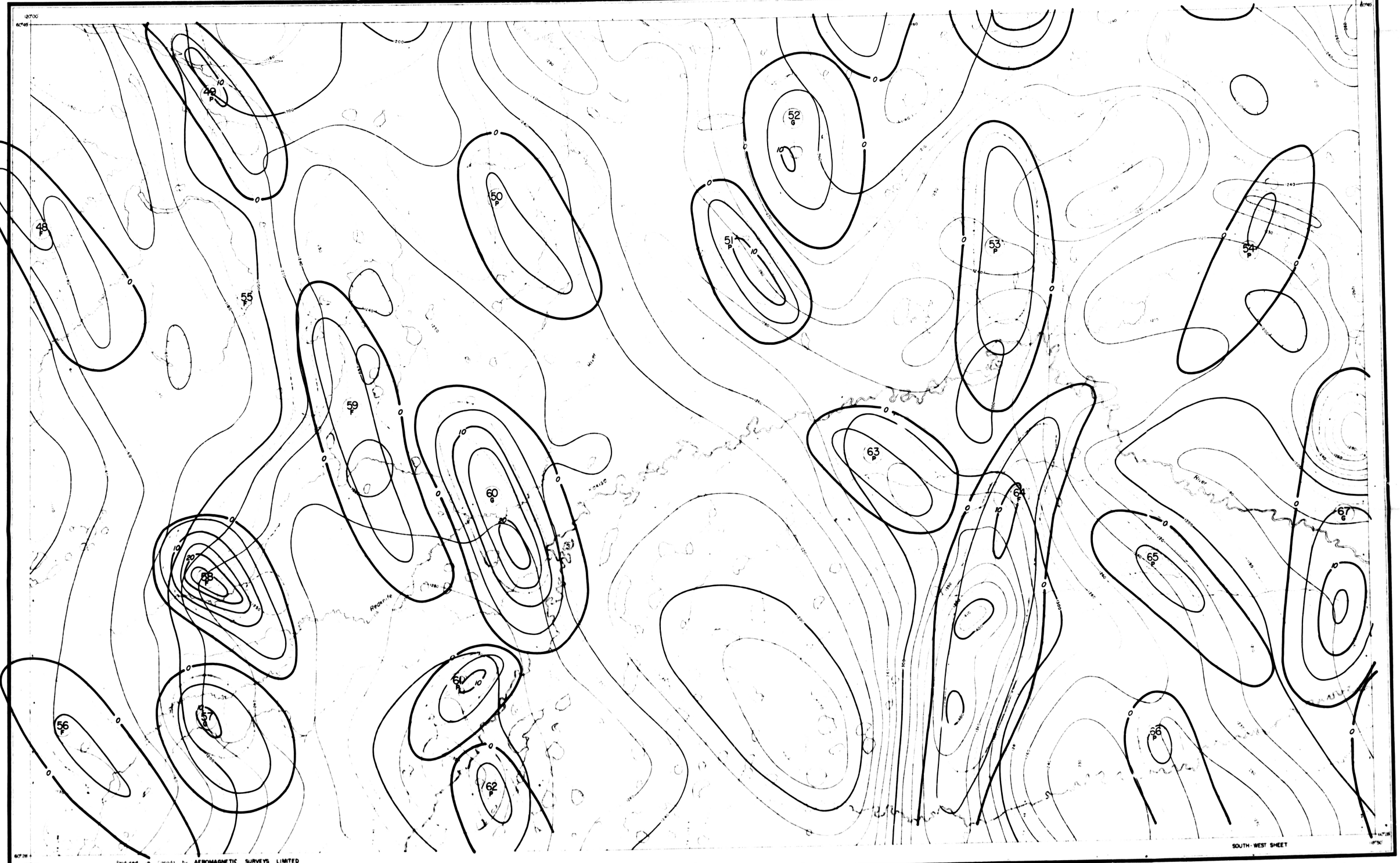
508-9-4-7.

PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY



MEAN FLIGHT LINE SPACING ..... 0 MILES
ALTITUDE ..... 2500 FEET ABOVE SEA LEVEL
500 GAMMA CONTOUR
100 GAMMA CONTOUR
20 GAMMA CONTOUR
10 GAMMA CONTOUR
MAGNETIC LOW
FLIGHT LINES

SCALE
MILES
STATUTE MILES

RESIDUAL MAGNETIC ANOMALIES
CONTOUR INTERVAL 5 GAMMAS

LOCAL AREA OF INTEREST

FAULT

INTERPRETED BY
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REPORT APR 13, 1953

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NORTH WEST | NORTH EAST
SOUTH WEST | SOUTH EAST

PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY

PRODUCED BY AEROMAGNETIC SURVEYS LIMITED

RESIDUAL MAGNETIC ANOMALIES
CONTOUR INTERVAL 5 GAMMAS

LOCAL AREA OF INTEREST

FAULT

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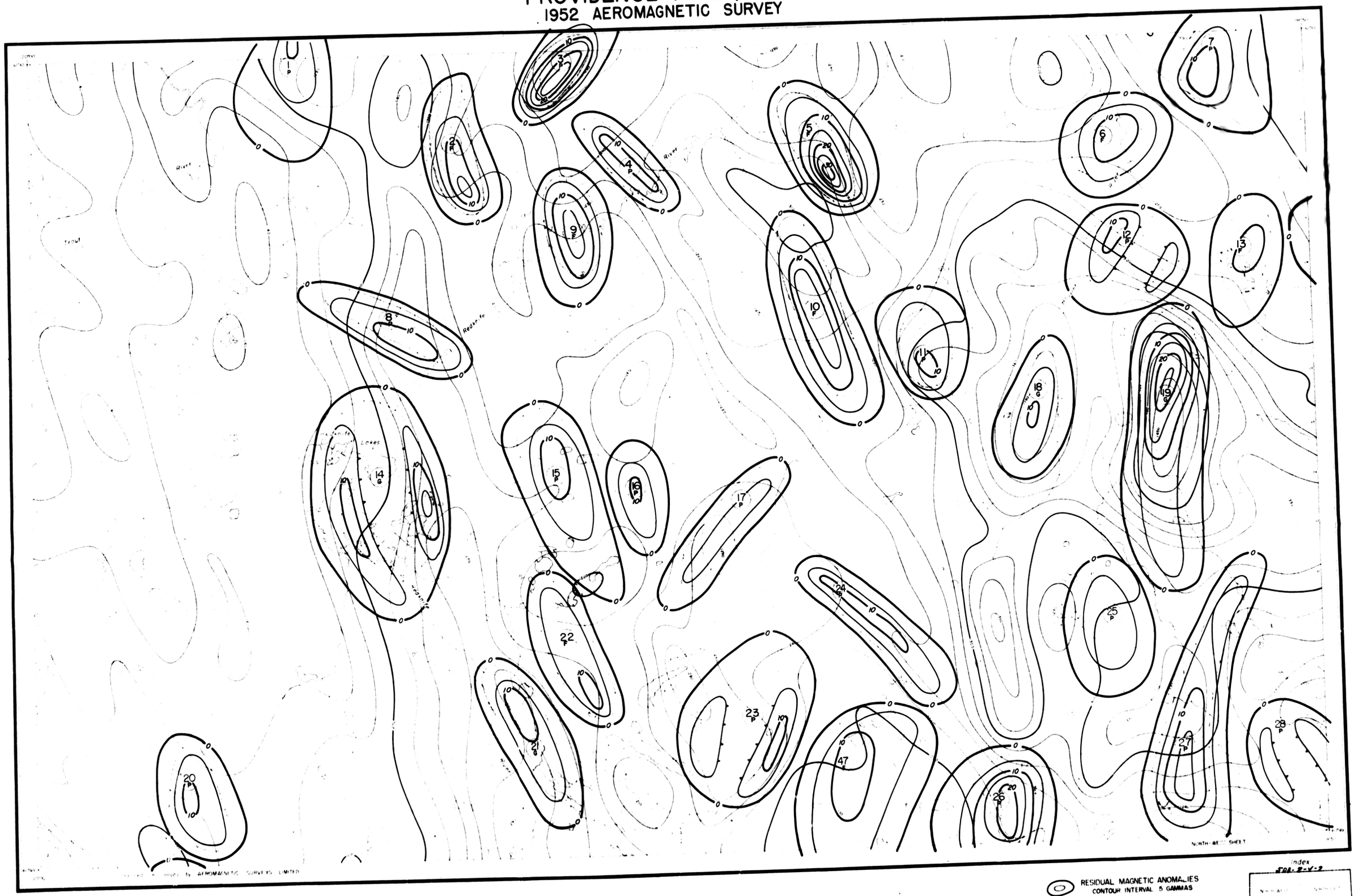
598-2-V-9

PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY



Flown by AERO MAGNETIC SURVEYS LIMITED

RESIDUAL MAGNETIC ANOMALIES
CONTOUR INTERVAL 5 GAMMAS

LOCAL AREA OF INTEREST

FAULT

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SOA: 2-V-2

PROVIDENCE AREA, N.W.T.
1952 AEROMAGNETIC SURVEY

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MEAN FLIGHT LINE SPACING ..... MILES
ALTITUDE ..... FEET ABOVE SEA LEVEL
500 GAMMA CONTOUR .....
100 GAMMA CONTOUR .....
20 GAMMA CONTOUR .....
10 GAMMA CONTOUR .....
MAGNETIC LOW .....
FLIGHT LINES .....

SCALE
1 inch to 1 Mile

SECOND VERTICAL DERIVATIVE MAP

CONTOUR INTERVAL 2×10^{-6} CGS

CALCULATED BY
GRAVITY METER EXPLORATION COMPANY
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REPORT APRIL 15, 1953

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NORTH-WEST	NORTH-EAST
SOUTH-WEST	SOUTH-EAST