GRAVITY SURVEY AND INTERPRETATION IN THE SUE CLAIM GROUP, YUKON TERRITORY

for

CONWEST EXPLORATION COMPANY LIMITED
MacMILLAN JOINT VENTURE
February 18, 1976 - July 10, 1976

WHITEHORSE MINING DISTRICT

N.T.S. 105 L 10, 14, 15

135° 00' W Longitude

62° 48' N Latitude

FIELD SUPERVISION BY J. VAN MELSEN

Calgary, Alberta
August 24, 1976

J. E. Wyder, Ph.D., P.Eng.

090125

GRAVITY SURVEY

AND

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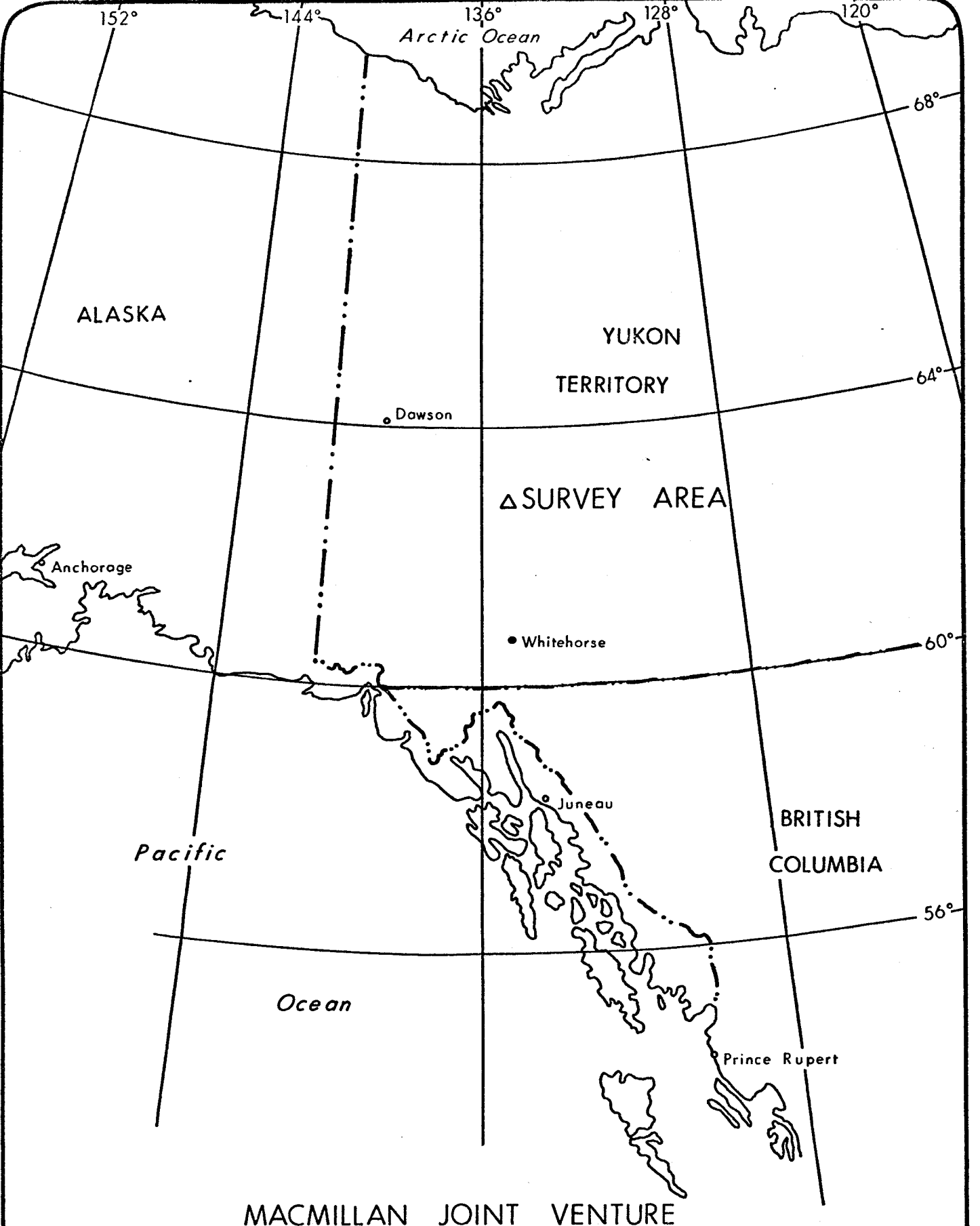

MACMILLAN JOINT VENTURE

LOCATION MAP

FIGURE I

KENTING EXPLORATION SERVICES LIMITED

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MAP LEGEND

DATA SHEETS (Scale 1"=400')

ELECTROMAGNETIC SURVEY

Geonics EM-17 Horizontal loop, 400' cable, Frequency 1600 Hz

Out-of-phase profile (scale 1"=40%).....

Quadrature profile (scale 1"=40%).....

MAGNETOMETER SURVEY

Scintrex MF-2 vertical field fluxgate magnetometer

Magnetic profile (scale 1"=500 gammas)....

GRAVITY SURVEY

World Wide Gravimeter

2.3 density profile for 1975 (scale 1"=1 milligal).....

2.6 density profile for 1976 (scale 1"=1 milligal).....

2.67 density profile (scale 1"=1 milligal).....

Topography profile (scale 1"=200 feet).....

NOTE: Readings on 1" = 400' sheets represent actual field measurements. For clarity of presentation base level of profiles varied from sheet to sheet to avoid overlap of profiles. Base level for 2.3 and 2.6 density profile is always 1 milligal higher than base level for 2.67 density profile.

COMPILATION SHEETS (Scale 1"=1000')

Electromagnetic zones: Stong.....

Weak.....

Magnetic profile (scale 1"=1250 gammas)...

Magnetic zones.....

Gravity profile (2.3 density, scale 1"=2.5 milligals for 1975) (2.6 density, scale 1"=1.0 milligals for 1976 anomalies, G-6 to G-17.....

First priority zone.....

Second priority zone.....

Third priority zone.....

INTRODUCTION

This report describes the results of a gravity survey and interpretation carried out between February and August, 1976. The field work was done between February and July 1976.

The claims were staked by Conwest Exploration Company Limited in the latter half of August 1974, and are currently held in trust by Conwest for the MacMillan Joint Venture (Conwest Exploration Company Limited and U.S. Steel Western Hemisphere Inc.).

The claims were located to cover geological formations believed to be similar to those at Vangorda Creek some 70 miles to the south-east.

The geophysical surveys completed to date were carried out in an effort to locate anomalies indicative of massive sulphide lead-zinc mineralization similar to the Anvil-Vangorda type, of sufficient size and concentration to warrant exploitation by open cut mining methods.

PROPERTY

The Sue claim group consisted originally of 1070 contiguous mineral claims staked between August 15 and August 28, 1974. A total of 955 claims of this original group remain and are described more fully below.

ORIGINAL CLAIM GROUP

Claim No.	Grant Number	Date Recorded	At
1- 748	80651 - 81398	September 11, 1974	Whitehorse
749- 848	90401 - 90500	September 11, 1974	Whitehorse
849- 850	96681 - 96682	September 3, 1974	Mayo
851- 870	90501 - 90520	September 11, 1974	Whitehorse
871,72,73,74	96685,86,83,84	September 3, 1974	Mayo
875- 896	90521 - 90542	September 11, 1974	Whitehorse
897- 898	96687 - 96688	September 3, 1974	Mayo
899- 1008	90543 - 90652	September 11, 1974	Whithorse
1009- 1010	96675 - 96676	September 3, 1974	Mayo
1011- 1040	90653 - 90682	September 11, 1974	Whitehorse
1041- 1044	96677 - 96680	September 3, 1974	Mayo
1045- 1070	90683 - 90708	September 11, 1974	Whitehorse

The above claims are all located on claim sheets 105 L 10, 14 and 15 and were transferred and registered in the name of Conwest Exploration Company Limited.

The following claims remain registered in the name of Conwest Exploration Company Limited.

"Sue"	1 - 48	48	316	1
	50	1	318	1
	52	1	320	1
	54	1	329 - 351	23
	56	1	355	1
	58 - 72	15	357	1
	83 - 96	14	359	1
	99	1	361	1
	101	1	363 - 582	220
	103	1	584 - 600	17

105	1	608 - 618	11
107	1	627 - 848	222
109 - 298	190	851 - 869	19
300	1	877 - 889	13
302	1	891	1
305	1	893	1
306	1	899 - 938	40
308	1	949 - 971	23
310	1	977 -1006	30
312	1	1013 -1039	27
314	1	1049 -1065	17
	284		671

TOTAL 955

LOCATION AND ACCESS

The Sue claim group lies north of the Pelly River and south of the MacMillan River just east of their junction, 146 miles due north of Whitehorse, Yukon Territory.

There is no all weather road access to the claims. A winter tractor road can be used from Pelly Crossing on the Klondike Highway, 156 miles north of Whitehorse, to freight supplies to the property during the period January to April, a distance of about 60 miles from the Highway. This winter road which was originally built in 1966 to Detour Lakes on the south side of the Pelly River, was extended in 1975 to the main base camp at Oz Lake in the north central part of the Sue claim group, a distance of 11½ miles, as shown on the Property Location Map.

Fixed wing aircraft access is possible by float or ski equipped planes from bases in Whitehorse or Mayo to Oz Lake, distances of 148 and 60 miles respectively.

Alternatively, a dirt strip at Detour Lakes is useable by light wheeled aircraft during the summer. This strip has not been maintained in recent years and is starting to grow in.

Helicopters can be charted from Mayo, or Ross River 105 miles south-east, and provide the best local access over the large claim group.

The nearest settlements are Mayo, Carmacks 66 miles south-west and Faro 70 miles south-east. The latter town was built in 1970 to support the large Anvil lead-zinc-silver mine and is connected by a new all-weather road to Carmacks on the Klondike Highway.

A potential hydro-electric site exists at Granite Canyon on the Pelly River about 35 air miles downstream from the property.

The area of the claim group is for the most part gently undulating and occupies a low saddle between the Pelly and MacMillan Rivers rising from about 1750' ASL at river level to a maximum of 2550' ASL on the highest peak. Local relief is mostly less than 500'. The hills and valleys are elongated westerly parallel to the regional strike and direction of glacial ice movement.

Vegetation consisting of spruce, pine, birch, poplar and alders covered the entire property although a major forest fire in 1970 destroyed most of it over the western two-thirds of the property. The dead timber is still mostly standing.

Other than Oz Lake, the largest on the property, most other lakes are small and drainge is poor.

GENERAL GEOLOGY

The Glenlyon map area (105 L) was mapped by R. B. Campbell in 1949-1954 and the results of his work were published as G.S.C. Memoir 352 in 1967.

The adjoining Tay River map area (105 K) which contains all the known deposits of lead-zinc of the type sought, was mapped by Roddick and Green in 1958-1960 and published as G.S.C. Map 13-1961. In 1967 and 1968, Templeton-Kluit undertook a more detailed study of the geology and mineral deposits of the Vangorda area, the results of which were published as G.S.C. Bulletin 208 in 1972.

The area of interest comprises a belt of Proterozoic and Paleozoic sediments and volcanics which follow the north-east side of the Pelly River, the latter marking the locus of a major transcurrent fault known as the Tintina Trench.

The Vangorda area is dominated locally by the Anvil Range Batholith which has domed the stratigraphy. This granite is not exposed in the MacMillan area. The favourable horizon is a series of probable Cambrian schists and phyllites which are locally strongly graphitic. These latter rocks have been observed on the Sue claim group in outcrop and earlier drilling, and closely resemble the host rocks at Vangorda and Anvil.

Reconnaissance of the Sue claims has indicated very little outcrop is present. Overburden, however, is not locally expected to exceed 100 feet except along the south side where high benches of glacial valley fill have been cut by the Pelly River.

Glaciation is presumed to have covered the entire claim group. Ice movement was west north-west as indicated by numerous drumlins.

PREVIOUS WORK

Apart from Campbell's mapping which suffered from lack of outcrop in the claim group area, the only previous known exploration of the area covered by the Sue claims was by Conwest in 1966-67. This previous work was initiated as a result of the discovery by the Dynasty-Cyprus joint venture of a major lead-zinc-silver deposit in the Vangorda Creek area, 60 miles to the south-east in 1965.

A total of 734 claims were staked and exploration included an airborne Mark IV Input electromagnetic and magnetometer survey, selected anomaly follow-up on the ground using EM and mag, and limited diamond drilling. The work suffered from a lack of understanding of the geological environment and geophysical character of the known deposits and failed to locate significant mineralization. It has since been concluded that the previous work served to enhance the possibilities of Vangorda type mineralization by confirming similar rock types in the vicinity of the Sue claim group.

Conwest Exploration Company Limited acquired by staking in August 1974 a total of 1070 contiguous mineral claims known as the Sue claim group, located approximately 145 miles north of Whitehorse, Yukon Territory. These claims which form the basis for the MacMillan Joint Venture in which U.S. Steel Western Hemisphere Inc. is the other participant, were located to cover geological formations believed favourable for the occurrence of lead-zinc-silver mineralization similar to that which occurs 60 to 80 miles south-east along strike in the Vangorda Creek area.

A major program of gridding and geophysical surveys was undertaken during the winter and spring of 1975 to commence an evaluation of the claims. Included in this work program were:

a) photogrammetric mapping for 1" = 1000; base maps;

b) an 11.5 mile extension of an existing winter tractor road to the base camp on the claim group;

c) 353 miles of bulldozer gridding including baselines;

d) 76 miles of hand cut grid;

e) chaining and picketing of all grid lines at 100 foot intervals;

f) 410.7 miles of magnetometer surveys;

g) 400.5 miles of electromagnetic surveys;

h) 33.6 miles of levelling and gravity surveys.

DESCRIPTION OF METHODS AND EQUIPMENT USED

The gravity survey team and equipment mobilized from Calgary, Alberta. The personnel flew to Whitehorse by a commerical airline and then chartered a fixed-wing aircraft from Whitehorse to the base tent camp at Oz Lake. Staple foods and all equipment other than gravimeters were shipped by truck so as to arrive in Whitehorse prior to the crew's arrival.

The crew was housed in an Arctic-insulated tent camp. Local travel was via motor toboggan and snowshoes.

The surveying for vertical control was done with the aid of automatic levels and theodolites. All gravity observations were done with LaCoste & Romberg gravity meters equipped with variable dampening and remote read-outs.

The data was initially reduced in the field using rock densities of 2.30 and 2.67 grams/cc. The reductions were done with the aid of a Wang 600 programmable calculator.

DISCUSSION OF RESULTS

The geologic target is massive sulphide mineralization of the Anvil-Vangorda type known to be closely associated with graphitic schist. Because the sulphides and graphite occur in an overlapping range of conductivities, their separation with electromagnetics has not been possible.

On that basis, the decision was made to cover the claim group as completely as possible with a gravity survey at 100 foot intervals along existing grid lines. Altogether 2950 stations were occupied at least once in the field during the 87 days that the crew was at the job site. Deep powder snow under a thin crust and a 2 - 4 week early spring break-up prevented a more complete survey from being done.

The data was processed initially at densities of 2.30 grams/cc and 2.67 grams/cc. The normal gravity corrections were done in addition to an in-field terrain correction to the "D" ring. Further terrain corrections were made, where necessary and/or feasible, in Calgary.

The general lack of knowledge of the thickness and type of Quaternary sediments made the calculated terrain corrections less accurate than is perhaps desirable for the processing density used. The problem is particularly compounded in the case of thick unconsolidated sediments because of the significant contrast between the processing densities (2.60 and 2.67) and the typical density (about 2.20 to 2.40) of typical unconsolidated glacier deposited sediments. The net result is an over-correction in areas of thick unconsolidated sediment accumulations. The strong negative residual Bouguer gravity values as seen on Figures 9D and 9G are thought to exemplify this problem.

All gravity was processed in the field at 2.30 and 2.67 grams/cc. The decision was made to reprocess the data at 2.60 grams/cc following the observation that the 2.30 density was much more sensitive to topographic changes in the survey than was the 2.67 density. The density of 2.60 was selected on the basis of the density profiles shown in Figures 2 and 3.

In order to provide continuity with previous gravity work done on the property, the Bouguer Gravity profiles (Figures 4A to I inclusive) were plotted using both the 2.67 and 2.60 densities in conjunction with the topographic profile. This information has also been provided to Conwest Exploration Company Limited in the form of punched computer cards.

Contoured Bouguer Gravity maps using densities 2.67 grams/cc and 2.60 grams/cc are presented in the map pocket as Figures 5A to 5I inclusive and 6A to 6I inclusive respectively. The Regional Bouguer Gravity profiles (density 2.60 grams/cc) are presented in Figures 7A to 7I inclusive. These profiles were presented in contour form in Figures 8A to 8I inclusive. The Residual Bouguer Gravity is presented in Figures 9A to 9I inclusive. Computer model studies for typical potential ore bodies are presented in Figure 10.

Data Processing

For projects similar to the MacMillan Joint Venture gravity survey, the data are most effectively presented if all measurements can be considered relative to one another in a visual form. In this way subtle anomalous zones can be more readily identified. Also, it is much easier to relate the gravity field to the known and/or suspected local geology.

The data processed in the field camp was reprocessed in Kenting's Calgary offices, checked for correctness and spurious results, and plotted in profile form. These profiles together with the density profiles shown in Figures 2 and 3 were used to select the second processing rock density of 2.60 grams/cc (the other density being 2.67 grams/cc so as to allow comparison with previous work).

The final Bouguer values were computer posted and simultaneously profile plotted with the topographic information onto stable mylar base maps. These maps form the reference grid for all other data maps in this report. Final contoured Bouguer Gravity maps were simultaneously hand posted and contoured on mylar base maps so as to minimize the time required to prepare the final report.

It was felt the most effective presentation of the gravity data would be to use a filter-type process to separate the broader anomalies associated with deep seated sources, from the sharper, narrower anomalies associated with near surface sources - hopefully including potential ore bodies. Separating the Bouguer Gravity values into "regional" and "residual" components ideally provides an opportunity to study the gravity field most closely associated with the geological structures being sought. The method has the weakness that it is highly subjective and as a result generally requires a high proportion of professional (human) input.

The Bouguer Gravity profiles were used as a basis of generating Regional Gravity profiles (Figures 7A to I inclusive). These profiles were then hand posted onto a mylar base map adjusted, where necessary, for continuity, and hand contoured to generate a contoured Regional Bouguer Gravity map (Figures 8A to I inclusive). The Regional Bouguer Gravity map was superimposed on the Bouguer Gravity map (Figures 6A to I inclusive) and by subtracting the Regional values from the Bouguer values the Residual Bouguer Gravity map was generated. The Residual map was prepared with the cross-contouring technique - that is the difference between contours that crossed one another on the two base maps, were calculated and then contoured.

One of the greatest difficulties associated with gravity filtering (Regional/Residual separation) techniques is the selection of data for presentation in the two maps. The separation is very subjective. For this reason the success of this approach relies very much on the experience and the understanding of the geologic model on the part of the interpreter. The safest, though often least satisfactory approach, to the problem is to use a very broad low relief regional gravity field (this is where computers are more efficient than humans). The result is generally a very complicated

residual map often with poor discrimination between anomalous zones.

In this interpretation a fairly complex Regional map that was only slightly smoothed was prepared in order to minimize the complexity and ambiguity of the Residual map. It must be kept in mind that the Regional/Residual maps are not unique and hence represent only one opinion as to the best separation.

With the preparation of a Regional and a Residual map, detailed comments on the profiles and Bouguer maps will not be made. Suffice to note on the profiles (Figures 4A to I inclusive) that with few exceptions the gravity data is internally consistent and hence justifies a comprehensive processing and interpretation. With the exception of single-point anomalies, large anomalies such as seen on Line 88 (Figure 4) were generally checked in the field to verify their existence.

The two contoured Bouguer Gravity maps (Figures 5 and 6A to I inclusive) generally agree with regards to trends and major anomalous zones. The maps were contoured independent of each other so as to provide a check on major features.

On the Bouguer maps there is a major break along much of Line 68 and a lesser break along Lines 59 and 60. These data were resurveyed in July 1976 and were deemed reliable. This suggests a significant change in rock type (density) would be expected in the region of these lines. In general the data is readily broken into a number of major trends (cells) which should reflect significant changes in lithology and/or depth to bedrock. The approximately east-west trend starting on the baseline at Line 86 and extending to the north end of Line 79 is probably largely associated with the presence of the MacMillan River Valley. This assumption is largely based on the trend being parallel to the river valley and the decreasing Bouguer Gravity values as one approaches the river valley.

A slight positive anomaly (about 0.7 milligals) located between Lines 72 and 68 and extending from Stations 20N to Stations 65N separates a gravity low (to the west) from a gravity high (to the east). The indicated anomaly is in a transition zone separating dense and/or near surface rocks to the east from less dense and/or more deeply buried rocks to the west. The indicated anomaly seems to be part of a more general roughly east-west trend (Stations 0 on Lines 69 to 76 inclusive to Stations 90+ on Lines 67 to 59 inclusive) separating to areas of differing rock types and/or differing thickness of surficial unconsolidated rock types.

The Regional Bouguer Gravity map (Figures 8A to I inclusive) was drawn so as to minimize the regional trends discussed in regards to the Bouguer Gravity map. The high gravity gradients at the north end and central extreme western edge of the grid show the effects caused by the presence of the MacMillan River Valley. The Regional map readily demonstrates the approximately 0.5 milligal difference between the north and south extremeties of the map area.

In general, there are more closures (areas enclosed by one or more

unbroken contour lines) than one might expect to see on a Regional map. However, all these closures are assumed to represent sources buried significantly deeper than the maximum 200 foot depth of interest. The use of such an intricate Regional contour map has resulted in a relatively clean, definitive Residual Bouguer map.

Interpretation

A total of 12 residual anomalies, labelled G-6 to G-17 inclusive, have been selected as meriting further consideration (Table I). The anomalies appear to be independent of any specific type of topographic features. With three (G-7, G-9, G-15) exceptions all anomalies are associated with an E.M. conductor (all E.M. and magnetic work was done by previous contractor).

Anomaly G-6 (Map Sheet 3)

This anomaly is located on Line 54 west between Stations 80 and 89 north. It has very little relief (less than 0.05 milligals) and is open ended to the east. It is considered a low to medium priority anomaly which could be extended and improved with a gravity survey to the east of Line 54. The anomaly is open eastward (all references to E. M. Mag anomalies and gravity anomalies G-1 to G-5 inclusive are to the MacMillan Joint Venture, Progress Report Number 1, Geophysical Surveys, by C. K. O'Connor and D. B. Sutherland.)

Anomaly G-7 (Map Sheet 3)

Located on 61 and 62W between Stations 96 and 100N, this anomaly is considered a low to medium priority target. If the causitive body is sheet-like it dips to the north.

Anomaly G-8 (Map Sheets 3 and 4)

The evidence for this anomaly exists primarily on a single line, 63 between Stations 48 and 56N. This fact leaves the anomaly open to suspect despite its moderate relief of 0.3 milligals plus. The anomaly strikes at an angle to suspected geologic strike. This is classified as a medium priority anomaly and should be detailed with one or two additional gravity profiles prior to any drilling.

Anomaly G-9 (Map Sheet 4)

This is a two part anomaly with moderate relief. It is one of three anomalies not directly located on or near to either an E. M. or a magnetic anomaly. It appears to be associated with two topographic highs (drumlins?) and as such may be associated with a bedrock high. It is considered a low priority anomaly. It cuts Lines 60 to 63 inclusive between Stations 45 and 12 N.

Anomaly G-10 (Map Sheet 5)

This anomaly is located on the side and base of a steep slope. It has a strong residual gravity (0.3+ milligals), is associated with a known E. M. conductor. It is open to the north. This is considered a high priority anomaly which should be further surveyed to the north before any drill investigation takes place. This is considered one of the best opportunities for locating a potential ore-body. The anomaly is located on Lines 68 to 70 north of Stations 80 north.

Anomaly G-11 (Map Sheet 5)

It is located on a hillside. It occurs entirely within E. M. anomaly 22. It has moderate relief (0.2+ milligals) and is considered a low to medium priority anomaly. The anomaly cuts Lines 68 to 70 inclusive between Stations 56 and 66 north.

Anomaly G-12 (Map Sheet 6)

This anomaly cuts the western end of E. M. Anomaly 74. It is open to the south. It is located on a hillside and is considered a low priority anomaly. It occurs mainly across stations on one traverse line. Line 72 between Stations 0 and 6N.

Anomaly G-13 (Map Sheet 5)

This appears to be a sidehill anomaly located on Lines 76 and 77 between Stations 68 and 74N. It may be associated with E. M. zone conductor 22. It is a low priority anomaly.

Anomaly G-14 (Map Sheet 6)

This is a single line anomaly located mainly between Lines 79 and 80 between Stations 68 and 75N. It has low to moderate relief (0.1+ milligals). It is considered a low priority anomaly because of its relationship to E. M. zone 22. It is a sidehill "bench" anomaly.

Anomaly G-15 (Map Sheet 6)

This is a low relief anomaly (0.1+ milligals) cutting three survey lines (79 to 81 inclusive). It is located between Stations 0 and 10N. It is considered a low priority anomaly.

Anomaly G-16 (Map Sheet 6)

This is essentially a high relief single line anomaly. It has 0.4 milligals plus of relief. It is located on Line 87 between Stations 36 and 42N. It crosses the moderate portion of E. M. conductor 83. It is considered a medium and possible high priority anomaly.

Anomaly G-17 (Map Sheet 6)

This is a high priority anomaly open to the west. It has high relief (0.5+

milligals) is narrow in relation to its potential strike length. It cuts Lines 86 to 88 inclusive between Stations 15 and 22N. It is almost totally contained in E. M. conductor 22. This anomaly could be drilled before any further gravity work is done to extend it in a western direction. It is considered the best potential ore body related anomaly of the 12 anomalies discussed in this report.

Negative Anomalies

The strike and long narrow features of most of these anomalies suggest they may be related to Eskers and/or drumlins. They do not (should not) have any important economic meaning at this time.

TABLE I

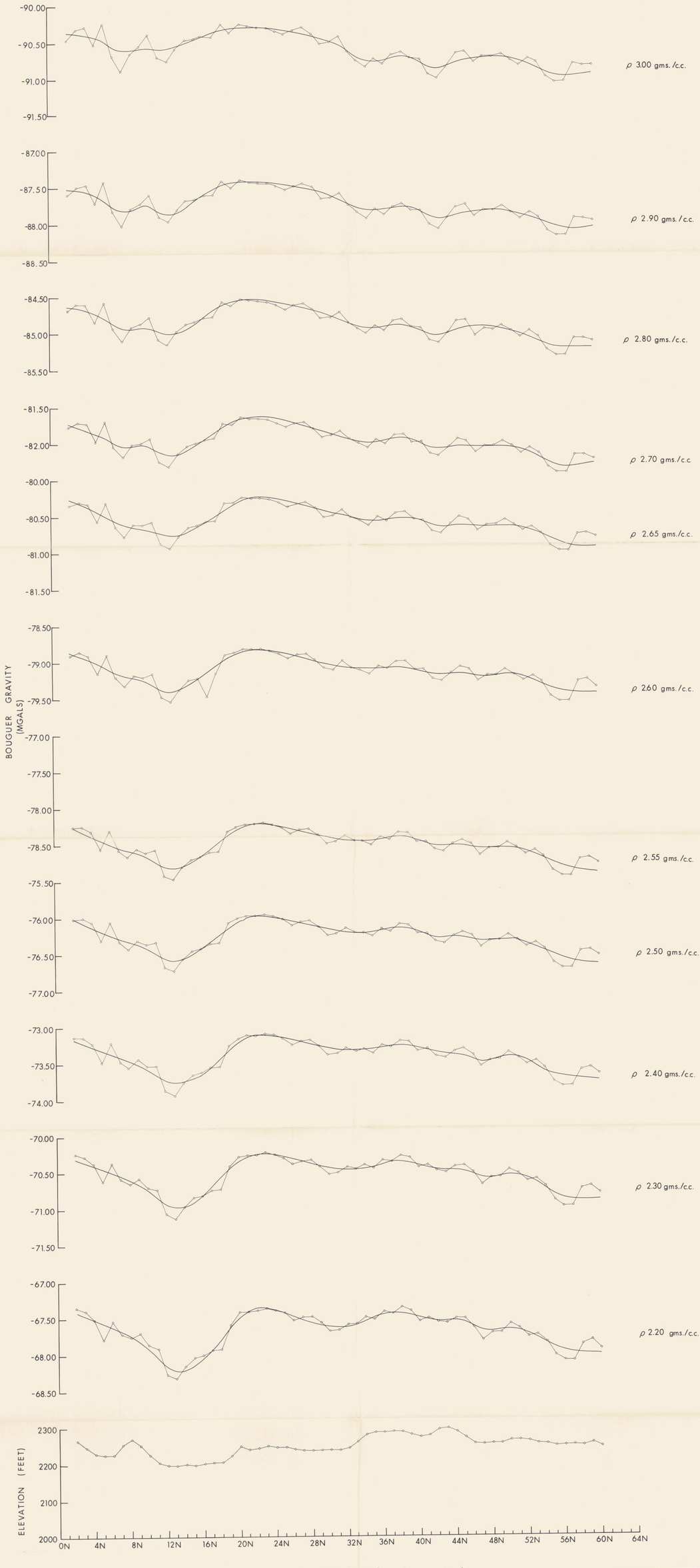
SUMMARY LIST OF GRAVITY ANOMALIES

Anomaly	Map Sheet 1" =1000'	Line	Stations	Rating	Estimated Strike Length	Estimated Width	Max. Relief Milligals	E.M. Conductor	Remarks
G-6	3	54	80 to 89N	Low to Medium	Difficult to estimate	Difficult to estimate	0.05	22	Open ended to east Situated on low land between hills
G-7	3	61 & 62	96 to 100N	Low to Medium	900'+	50'	0.1+	None	Thin overburden Suspicious of low anomaly relief Flat land Anomaly
G-8	3 & 4	63	48 to 56N	Medium	700'+	50' to 100'	0.3+	22	Flat land between lakes Needs to be checked with gravity survey grid
G-9	4	60 to 63	45 to 12N	Low	1500'+	50 to 300'+	0.2+	None	Complex anomaly Hill top anomaly in part Possible bedrock high
G-10	5	68 to 70	80N+	Medium	1500'+	?	0.3+	22 ?	Hillside anomaly Open to north
G-11	5	68 to 70	56 to 66N	Low to Medium	1500'+	50' to 200'+	0.2+	22	Hillside anomaly Possibly two anomalies
G-12	6	72	0 to 6N	High	Difficult to ascertain 300'+	Difficult to ascertain 300' ?	0.2+	74	Complex anomaly. Hillside anomaly. Opens south onto E.M. anomaly. Requires further gravity grid.
G-13	5	76 to 77	68 to 74N	Medium	1000'	150'	0.1+	22	Sidehill anomaly
G-14	5	79	68 to 75N	Medium	125'	50'	0.1+	22	Sidehill anomaly straddling small creek valley

TABLE I

SUMMARY LIST OF GRAVITY ANOMALIES

Anomaly	Map Sheet 1" =1000'	Line	Stations	Rating	Estimated Strike Length	Estimated Width	Max. Relief Milligals	E.M. Conductor	Remarks
G-15	6	79 to 81	0 to 10N	Low	1500'+	75'	0.1+	None	Situated on "flat bench"
G-16	6	87	36 to 42N	Medium to High	150'+	100' +	0.5+	22	Sidehill anomaly
G-17	6	86 to 88	15 to 22N	Strong-High	1500'+	50'	0.6+	22	Considered offering best potential for locating mineralization Open to west



MACMILLAN JOINT VENTURE

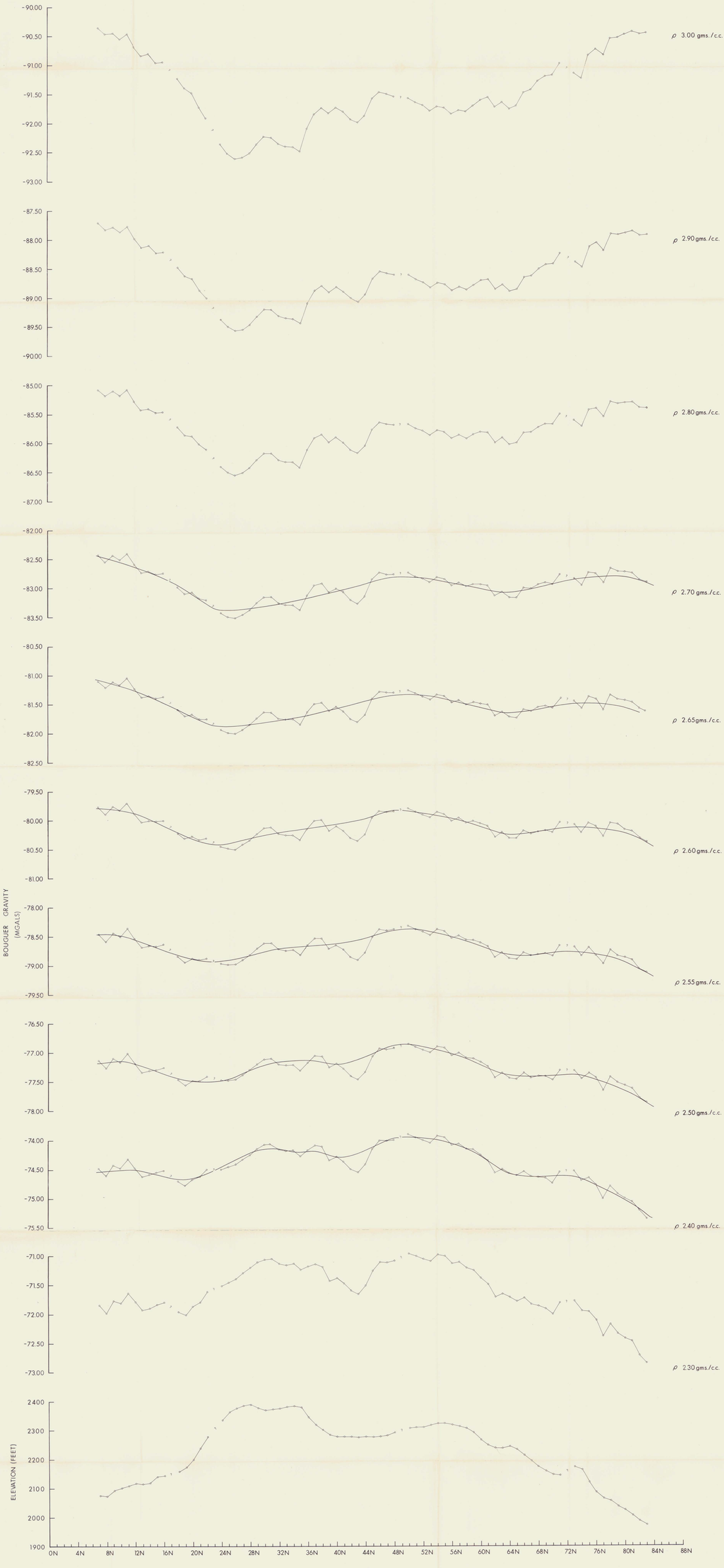
DENSITY PROFILES

LINE NO. 64 W

TO ACCOMPANY REPORT BY: J.E. WYDER Ph.D. P. Eng.

KENTING EXPLORATION SERVICES LIMITED CALGARY ALBERTA

SCALE: 1" = 400'	DATE: AUGUST 1976
JOB NO.: 2810	FIGURE NO.: 2
C.I.	DRAWN BY: S.S.



MACMILLAN JOINT VENTURE

DENSITY PROFILES
LINE NO. 75 W

TO ACCOMPANY REPORT BY: J.E. WYDER Ph.D. P.Eng.

KENTING EXPLORATION SERVICES LIMITED — CALGARY, ALBERTA

SCALE 1" = 400'	DATE: AUGUST, 1976
JOB NO.: 2810	FIGURE NO. 3
C.I.	DRAWN BY: D.N.

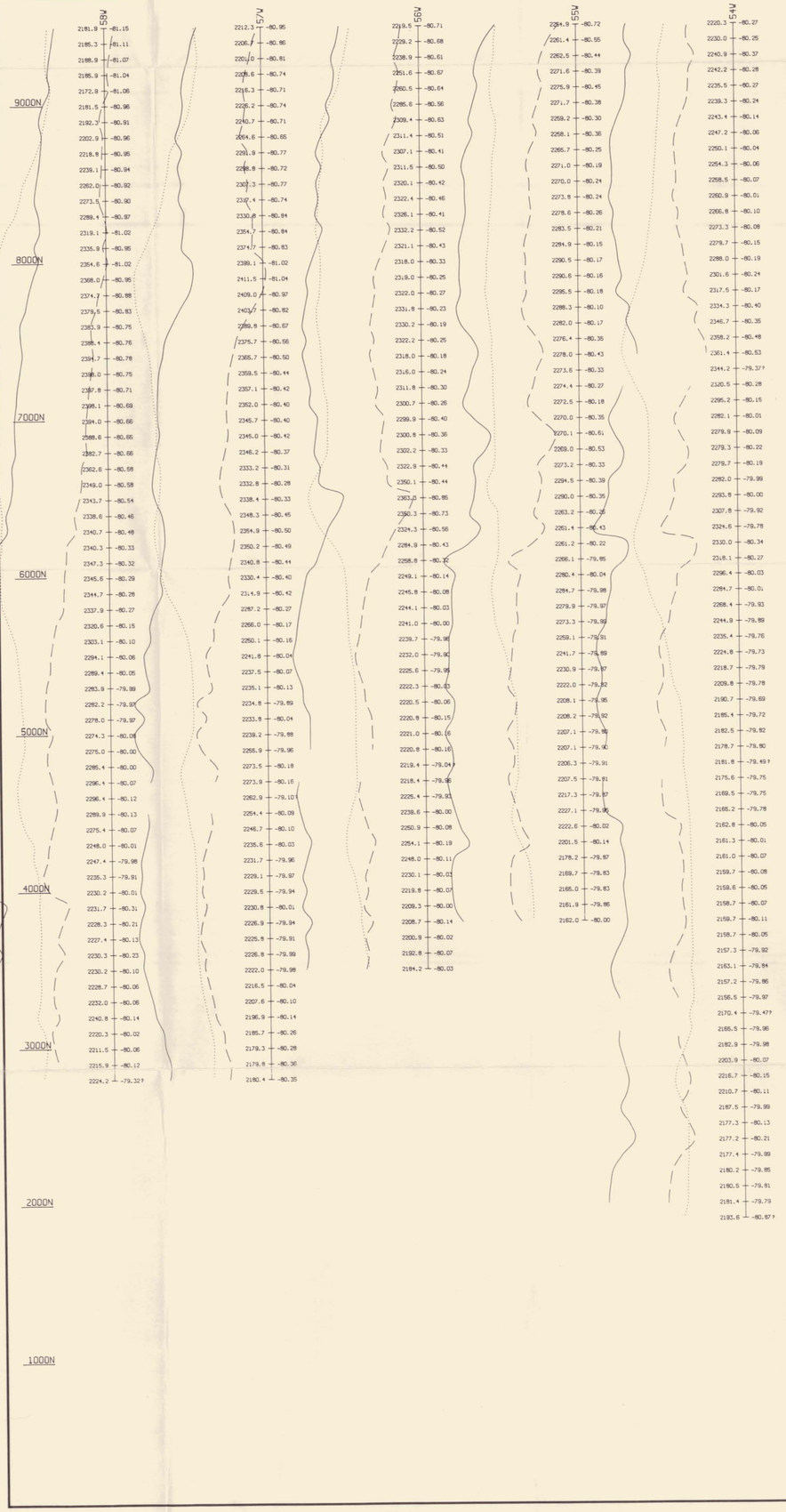


FIGURE 4A

GRAVITY SURVEY

18000N

17000N

16000N

15000N

14000N

13000N

12000N

11000N

10000N

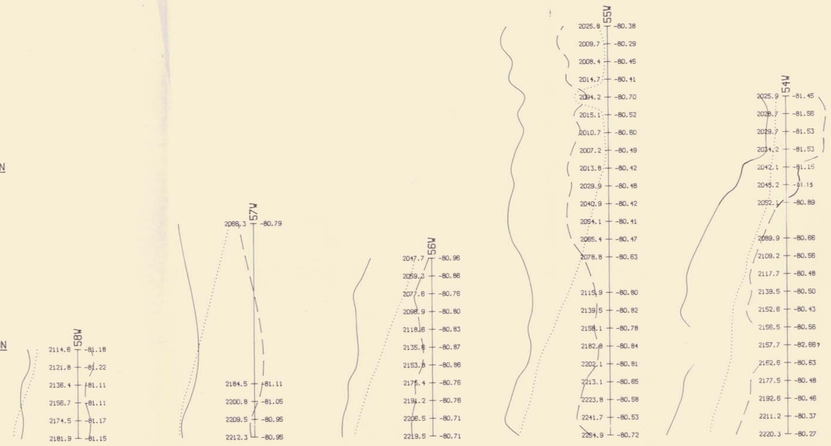


FIGURE 4B

GRAVITY SURVEY

MACMILLAN JOINT VENTURE

1 INCH = 400 FEET

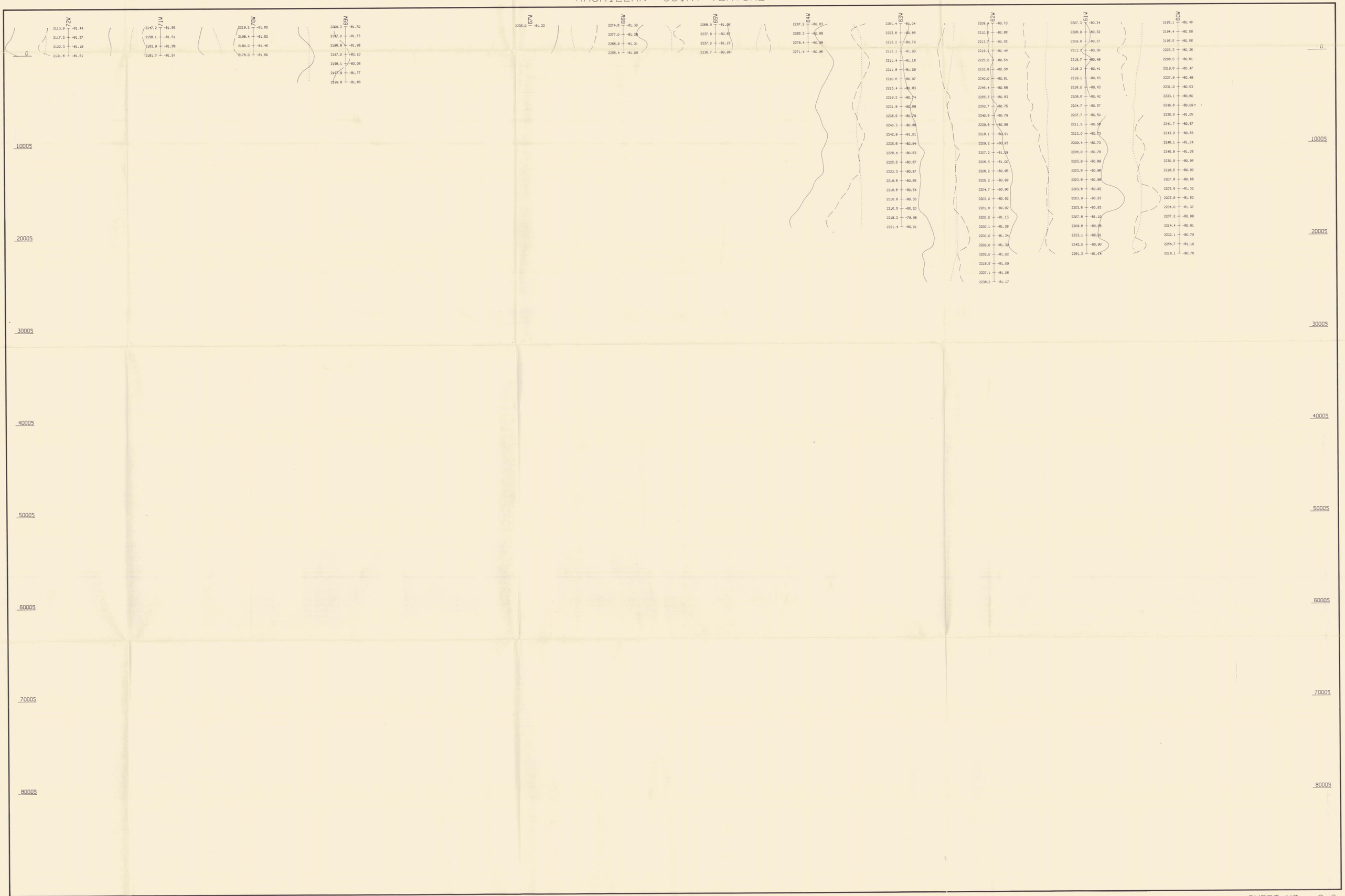


FIGURE 4C

GRAVITY SURVEY

SHEET NO. 6.2

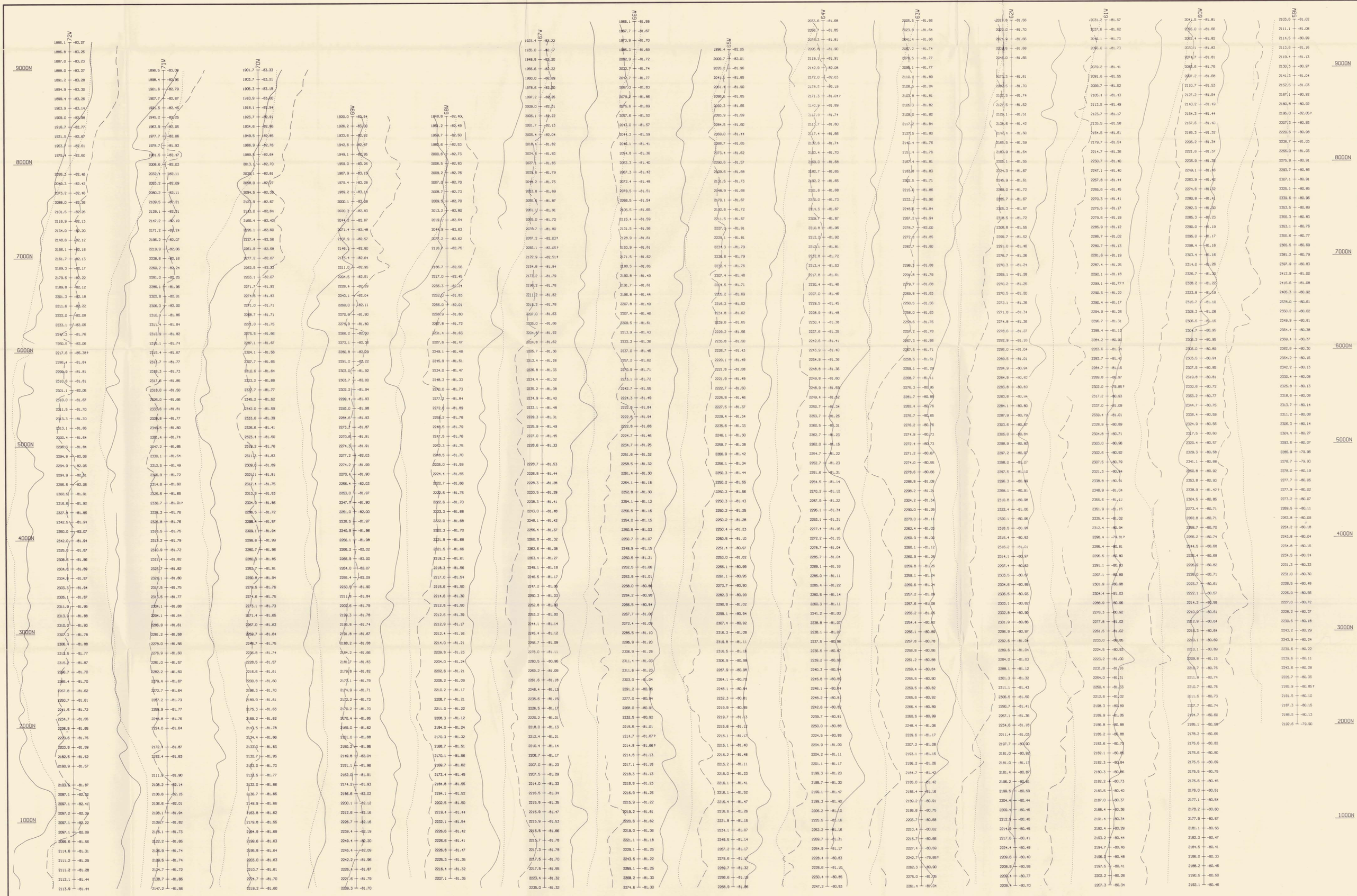


FIGURE 4D

GRAVITY SURVEY

SHEET NO. 6.3

MACMILLAN JØINT VENTURE

1 INCH = 400 FEET

18000N

17000N

16000N

15000N

14000N

13000N

12000N

11000N

10000N

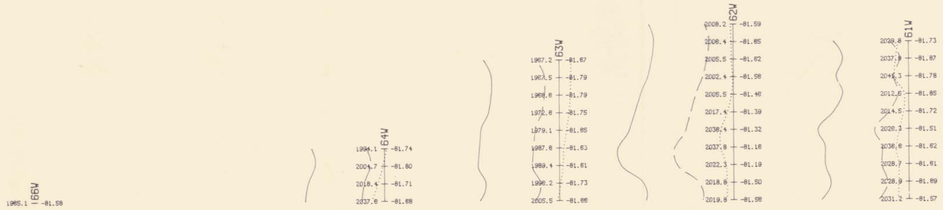


FIGURE 4E

GRAVITY SURVEY

SHEET NØ. 6.4

MACMILLAN JOINT VENTURE

1 INCH = 400 FEET

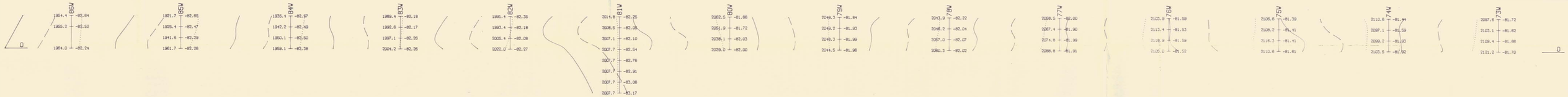


FIGURE 4F

GRAVITY SURVEY

SHEET NO. 7.2

MACMILLAN JOINT VENTURE

1 INCH = 400 FEET

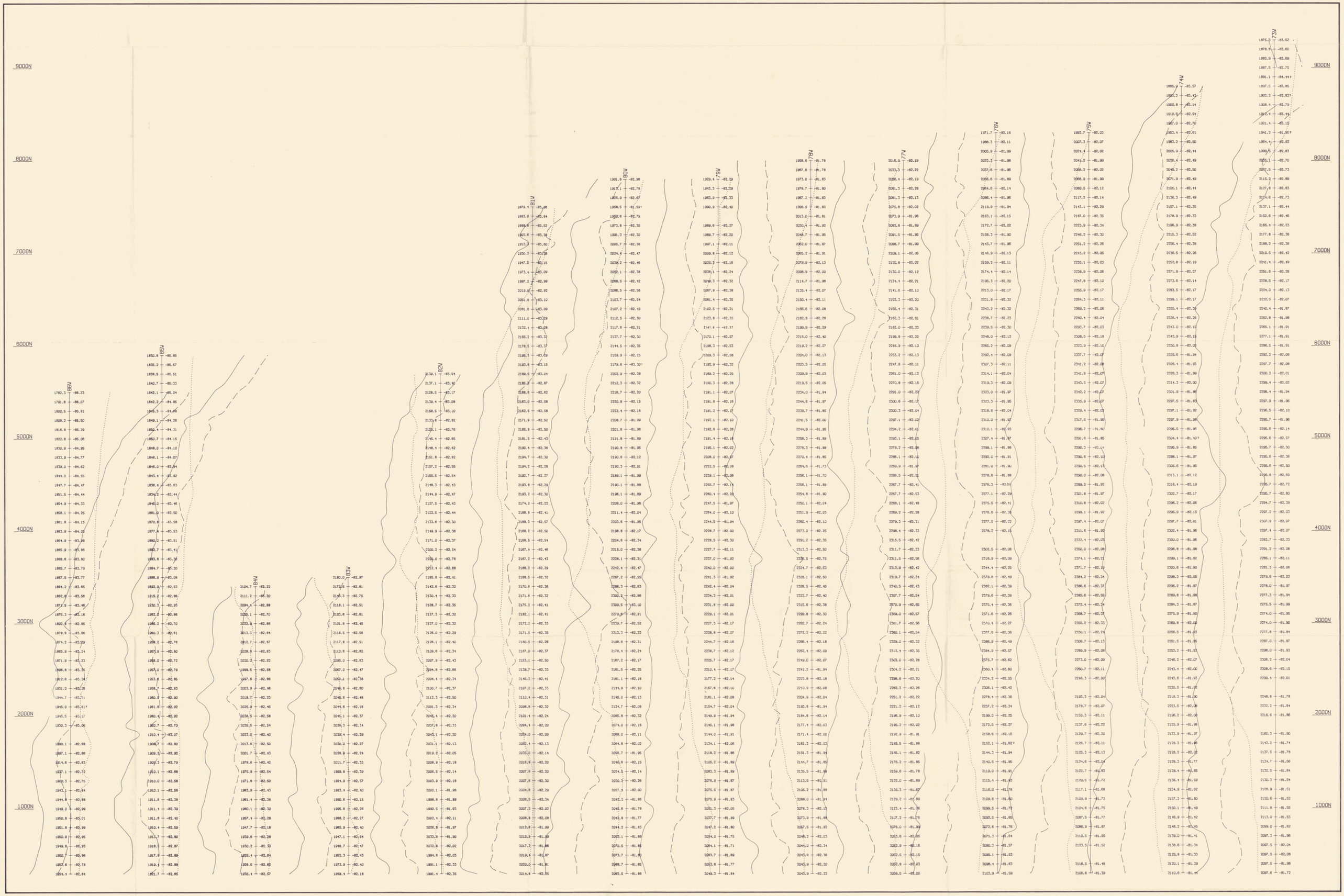
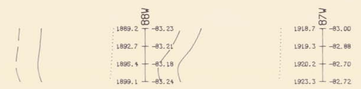


FIGURE 4G

GRAVITY SURVEY

SHEET NO. 7.3



0

1000S

2000S

3000S

4000S

5000S

6000S

7000S

8000S

9000N

8000N

7000N

6000N

5000N

4000N

3000N

2000N

1000N

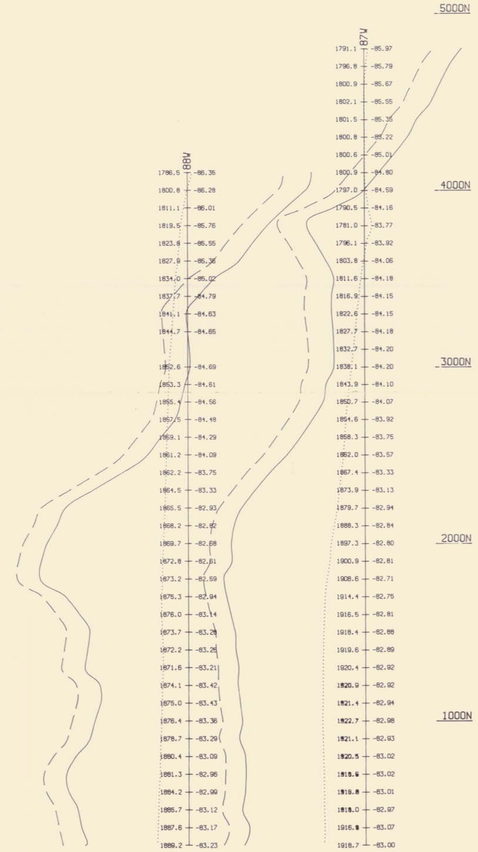


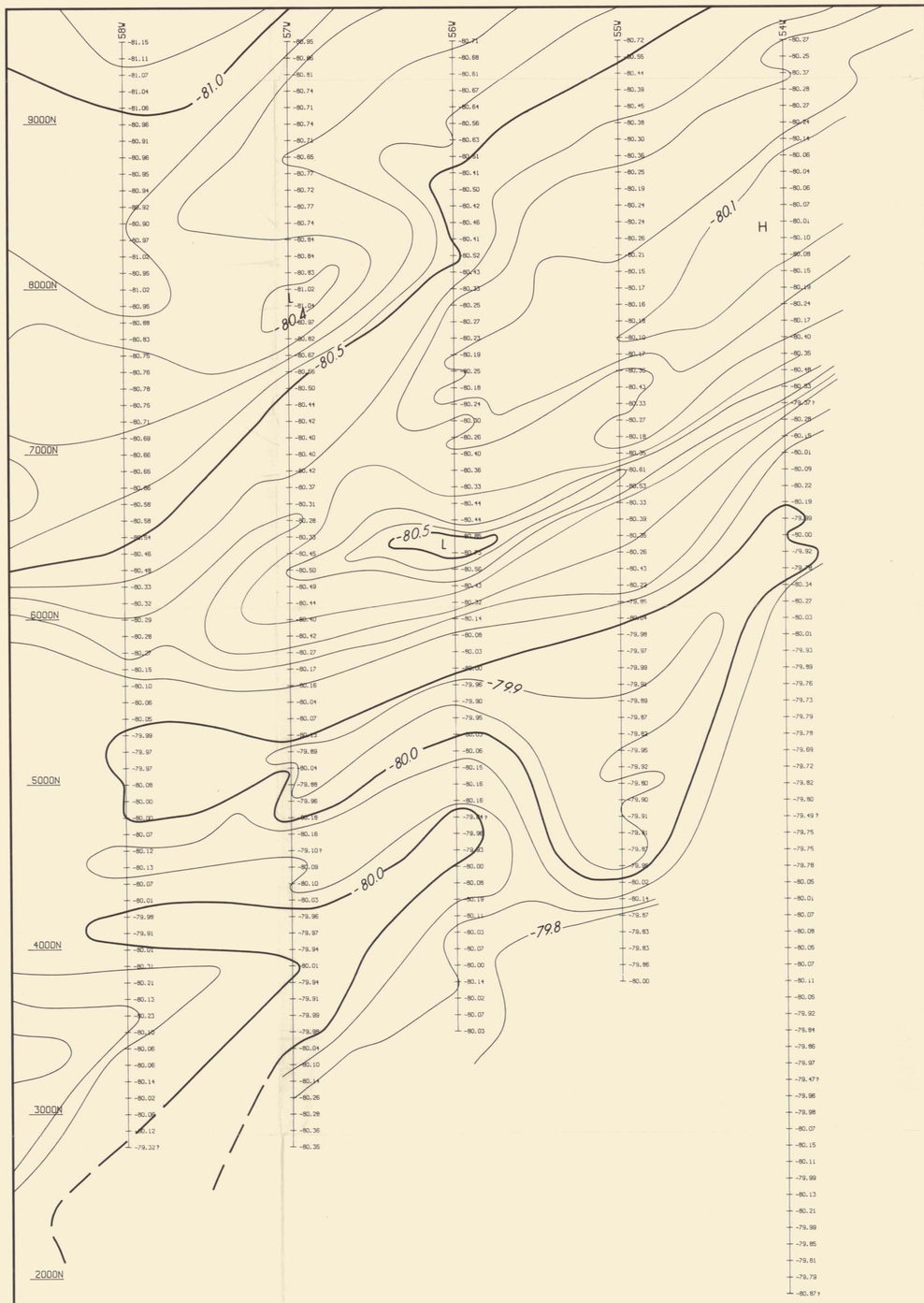
FIGURE 41

GRAVITY SURVEY

SHEET NO. 8.3

MACMILLAN JØINT VENTURE

1 INCH = 400 FEET



DENSITY: 2.67 GRAMS/CC
CONTOUR INTERVAL: 0.1 MILLIGALS

FIGURE 5A

GRAVITY SURVEY

SHEET NØ. 5.3

MACMILLAN JØINT VENTURE

1 INCH = 400 FEET

18000N

17000N

16000N

15000N

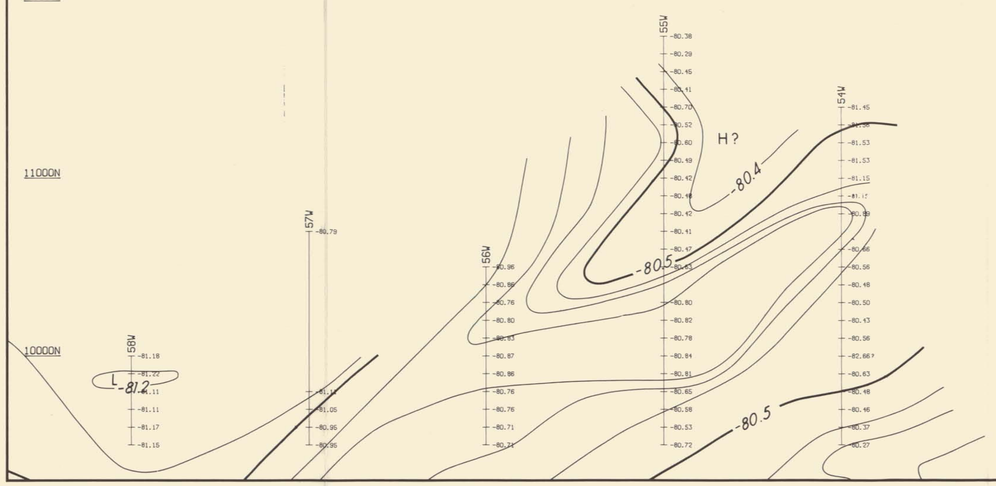
14000N

13000N

12000N

11000N

10000N



DENSITY: 2.67 GRAMS/CC
CONTOUR INTERVAL: 0.1 MILLIGALS

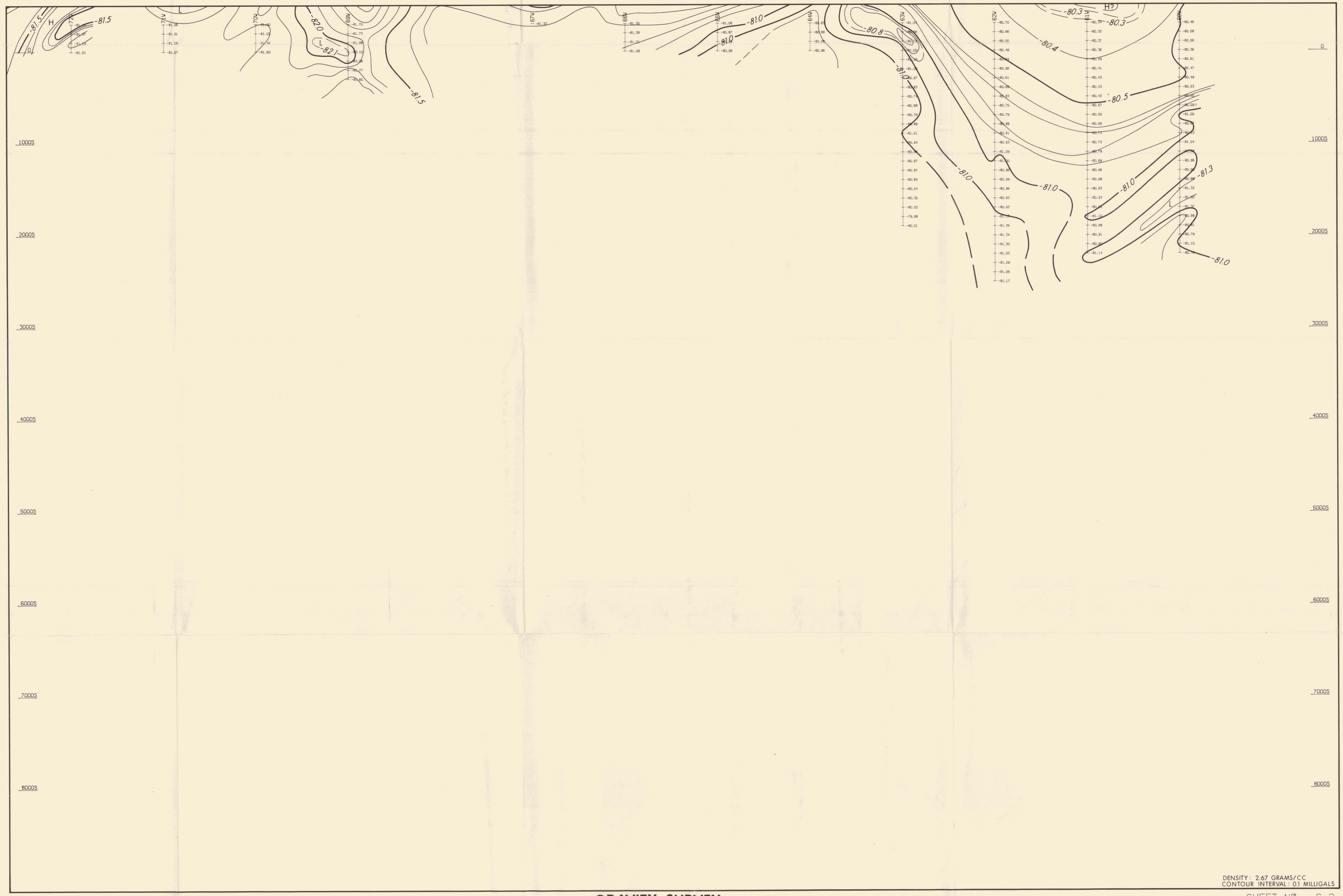
FIGURE 5B

GRAVITY SURVEY

SHEET NØ. 5.4

MACMILLAN JOINT VENTURE

1 INCH = 400 FEET



DENSITY: 2.67 GRAMS/CC
CONTOUR INTERVAL: 0.1 MILLIGALS

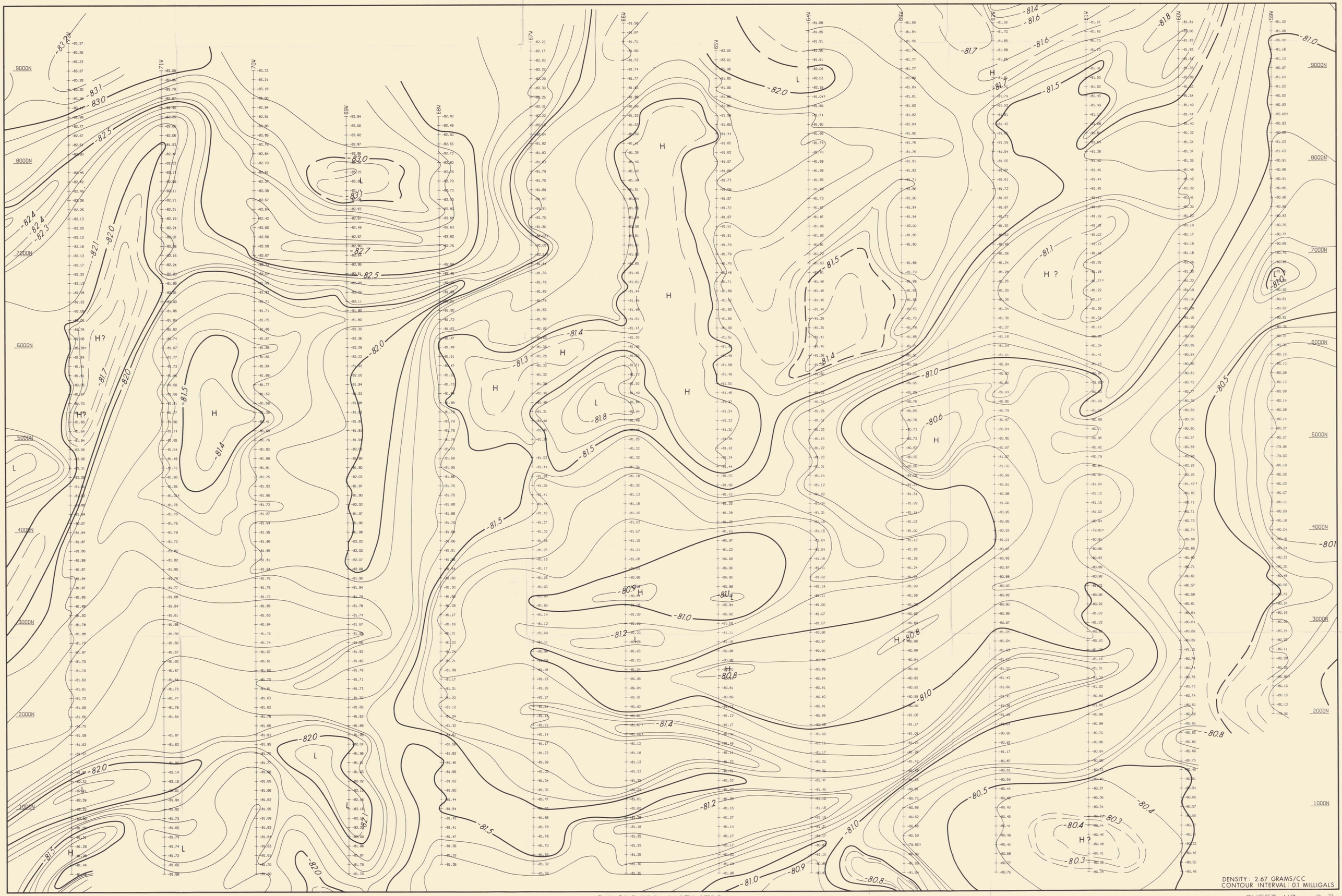
FIGURE 5C

GRAVITY SURVEY

SHEET NO. 6.2

MACMILLAN JOINT VENTURE

1 INCH = 400 FEET



DENSITY: 2.67 GRAMS/CC
CONTOUR INTERVAL: 01 MILLIGALS

FIGURE 5D

GRAVITY SURVEY

SHEET NO. 6.3

MACMILLAN JOINT VENTURE

1 INCH = 400 FEET

18000N

17000N

16000N

15000N

14000N

13000N

12000N

11000N

10000N

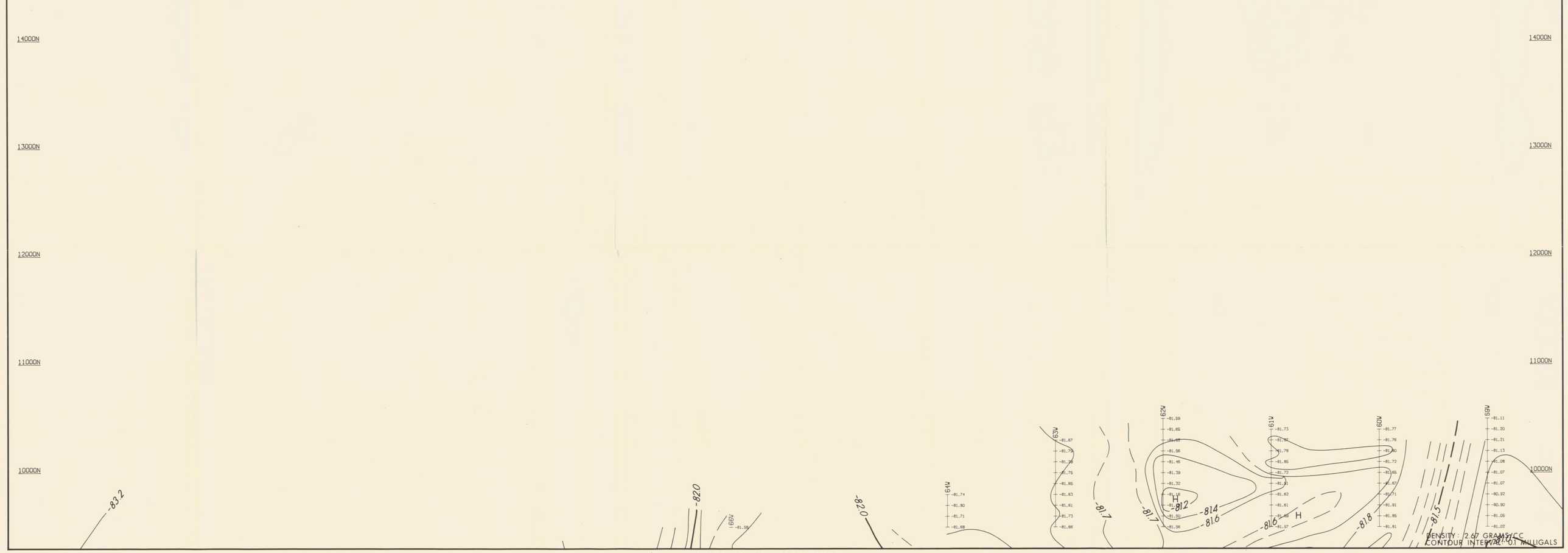


FIGURE 5E

GRAVITY SURVEY

SHEET NO. 6.4

MACMILLAN JØINT VENTURE

1 INCH = 400 FEET

DENSITY: 2.67 GRAMS/CC
CONTOUR INTERVAL: 0.1 MILLIGALS

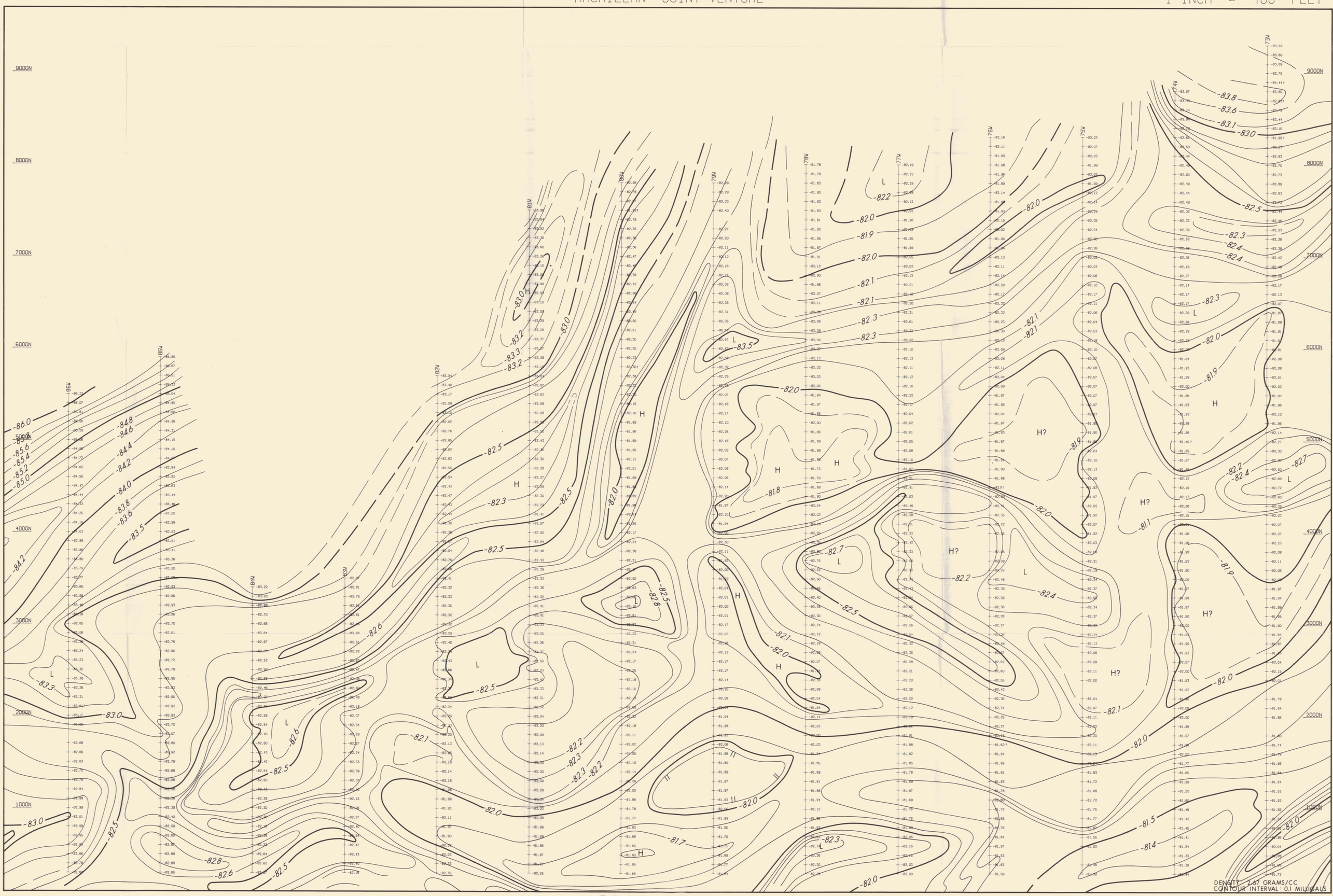
FIGURE 5F

GRAVITY SURVEY

SHEET NØ. 7.2

MACMILLAN JOINT VENTURE

1 INCH = 400 FEET



DENSITY 2.67 GRAMS/CC
CONTOUR INTERVAL: 0.1 MILLIGALS

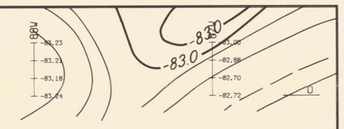
FIGURE 5G

GRAVITY SURVEY

SHEET NO. 7.3

MACMILLAN JOINT VENTURE

1 INCH = 400 FEET



0

1000S

2000S

3000S

4000S

5000S

6000S

7000S

8000S

DENSITY: 2.67 GRAMS/CC
CONTOUR INTERVAL: 0.1 MILLIGALS

FIGURE 5H

GRAVITY SURVEY

SHEET NO. 8.2

MACMILLAN JOINT VENTURE

1 INCH = 400 FEET

9000N

8000N

7000N

6000N

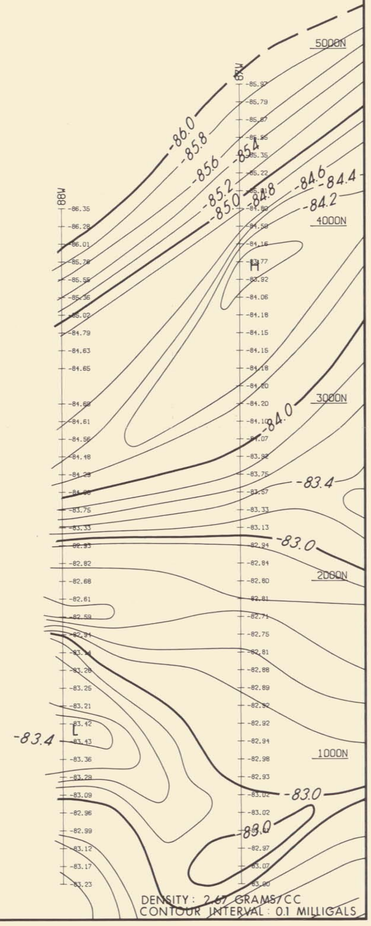
5000N

4000N

3000N

2000N

1000N

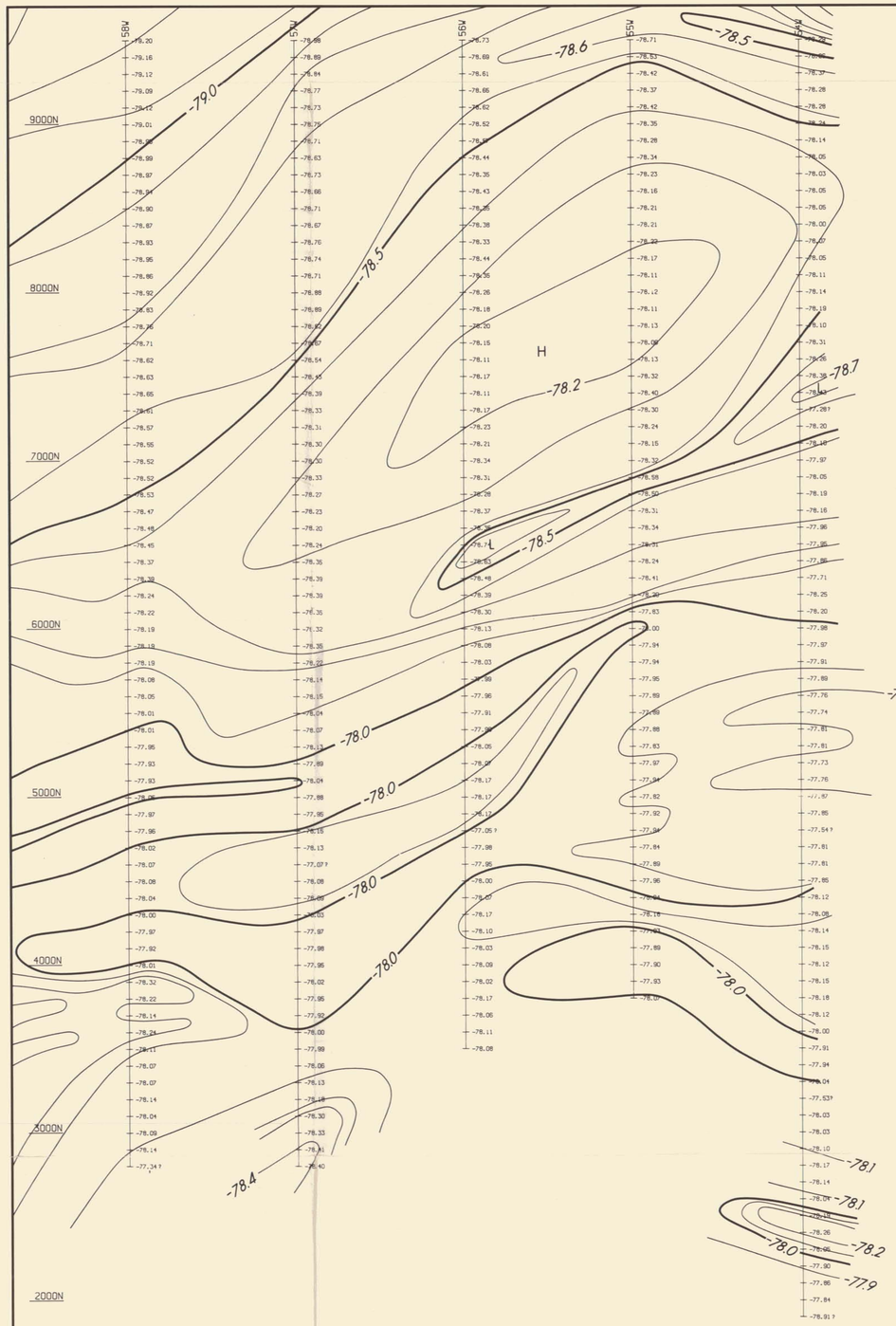


DENSITY: 2.67 GRAMS/CC
CONTOUR INTERVAL: 0.1 MILLIGALS

FIGURE 51

GRAVITY SURVEY

SHEET NO. 8.3



DENSITY: 2.60 GRAMS/CC
CONTOUR INTERVAL: 0.1 MILLIGALS

FIGURE 6A

GRAVITY SURVEY

SHEET NO. 5.3

MACMILLAN JØINT VENTURE

1 INCH = 400 FEET

18000N

17000N

16000N

15000N

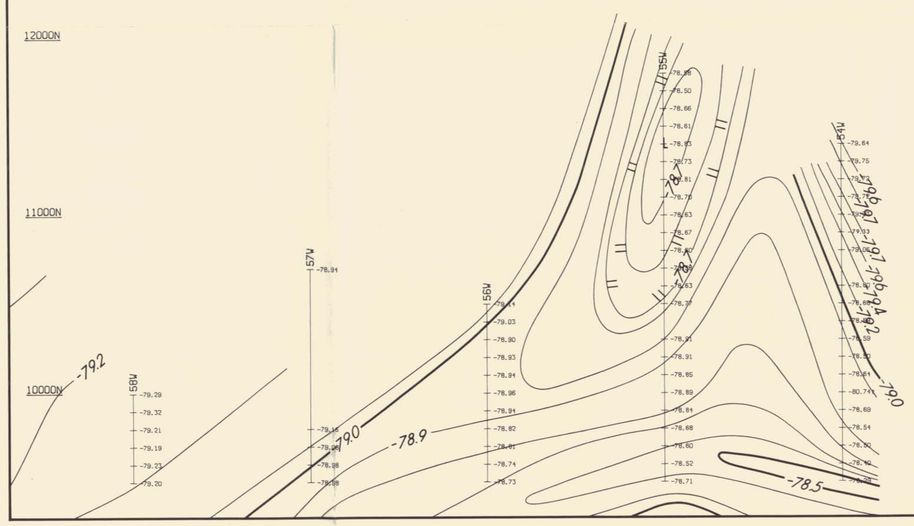
14000N

13000N

12000N

11000N

10000N



DENSITY: 2.60 GRAMS/CC
CONTOUR INTERVAL: 0.1 MILLIGALS

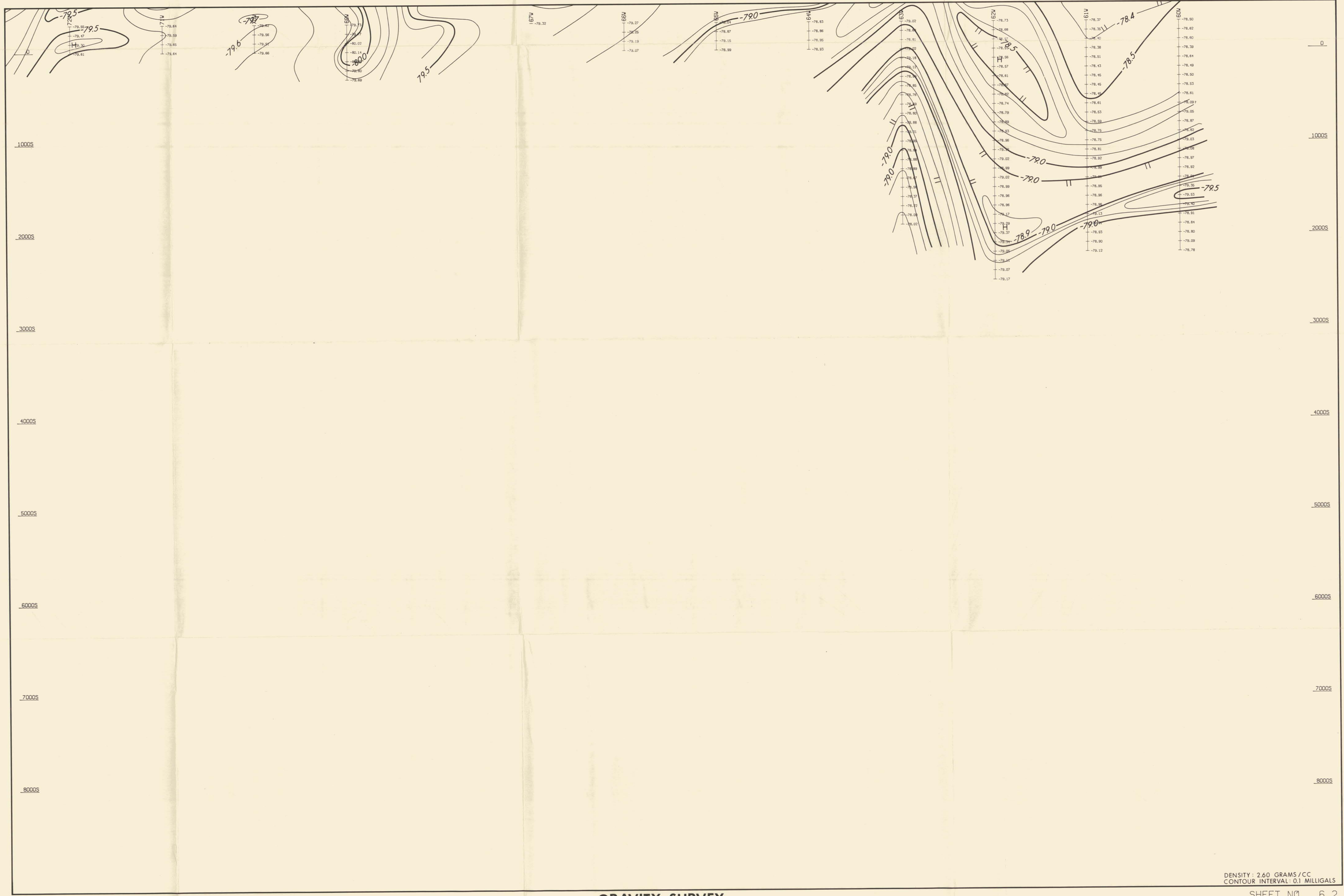
FIGURE 6B

GRAVITY SURVEY

SHEET NØ. 5.4

MACMILLAN JOINT VENTURE

1 INCH = 400 FEET



DENSITY: 2.60 GRAMS/CC
CONTOUR INTERVAL: 0.1 MILLIGALS

FIGURE 6C

GRAVITY SURVEY

SHEET NØ. 6.2

MACMILLAN JOINT VENTURE

1 INCH = 400 FEET

18000N

17000N

16000N

15000N

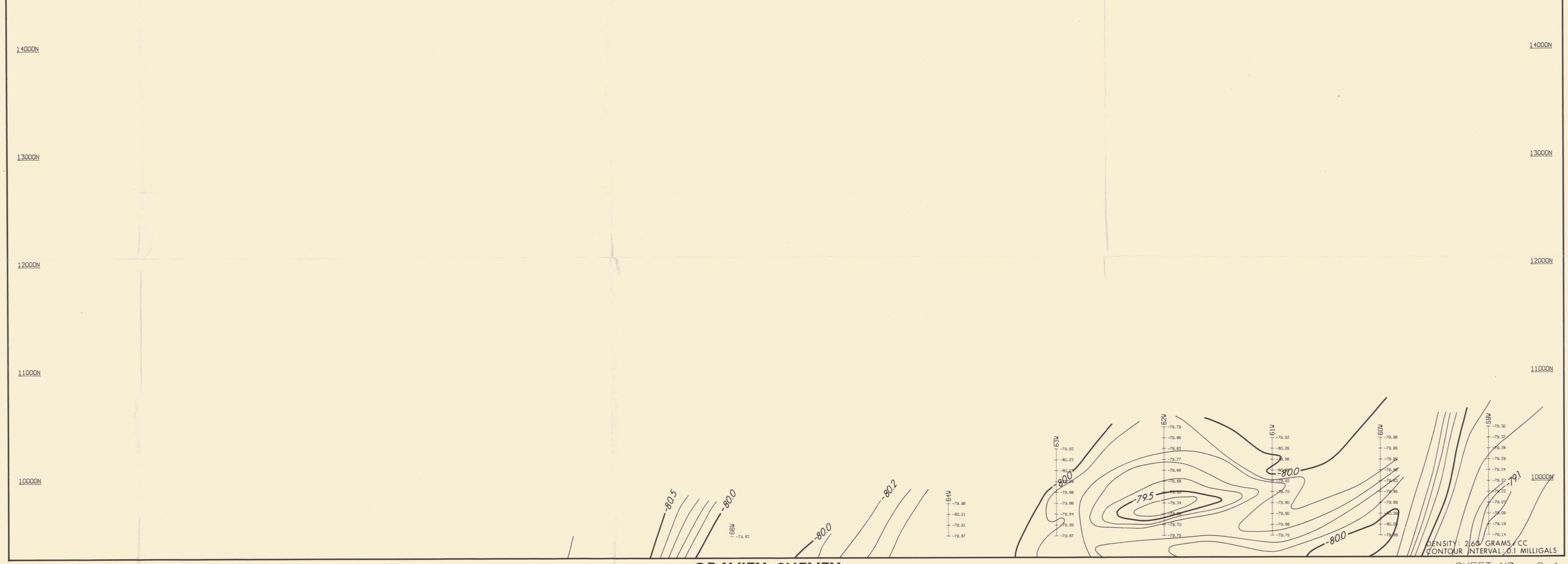
14000N

13000N

12000N

11000N

10000N



DENSITY: 2.60 GRAMS/CC
CONTOUR INTERVAL: 0.1 MILLIGALS

FIGURE 6E

GRAVITY SURVEY

SHEET NO. 6.4

MACMILLAN JOINT VENTURE

1 INCH = 400 FEET

DENSITY: 2.60 GRAMS/CC
CONTOUR INTERVAL: 0.1 MILLIGALS

FIGURE 6D

GRAVITY SURVEY

SHEET NO. 6.3

1 INCH = 400 FEET

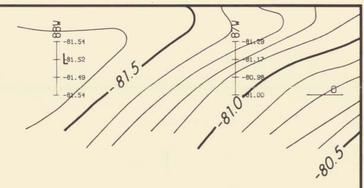
FIGURE 6F

GRAVITY SURVEY

SHEET NØ. 7.2

MACMILLAN JOINT VENTURE

1 INCH = 400 FEET



0

1000S

2000S

3000S

4000S

5000S

6000S

7000S

8000S

DENSITY: 2.60 GRAMS/CC
CONTOUR INTERVAL: 0.1 MILLIGALS

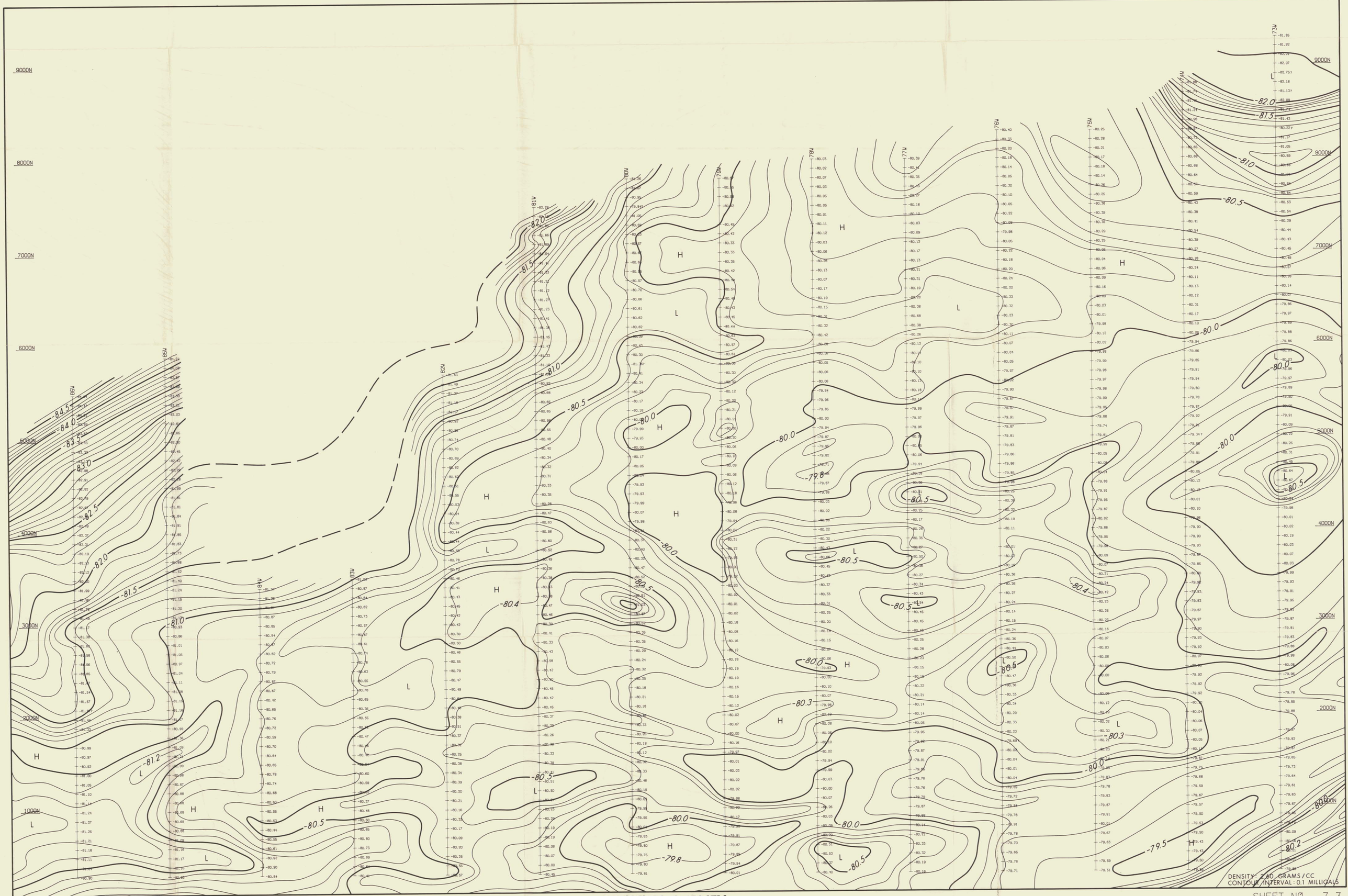
FIGURE 6H

GRAVITY SURVEY

SHEET NO. 8.2

MACMILLAN JOINT VENTURE

1 INCH = 400 FEET



DENSITY: 2.80 GRAMS/CC
CONTOUR INTERVAL: 0.1 MILLIGALS

FIGURE 6G

GRAVITY SURVEY

SHEET NO. 7.3

MACMILLAN JOINT VENTURE

1 INCH = 400 FEET

9000N

8000N

7000N

6000N

5000N

4000N

3000N

2000N

1000N

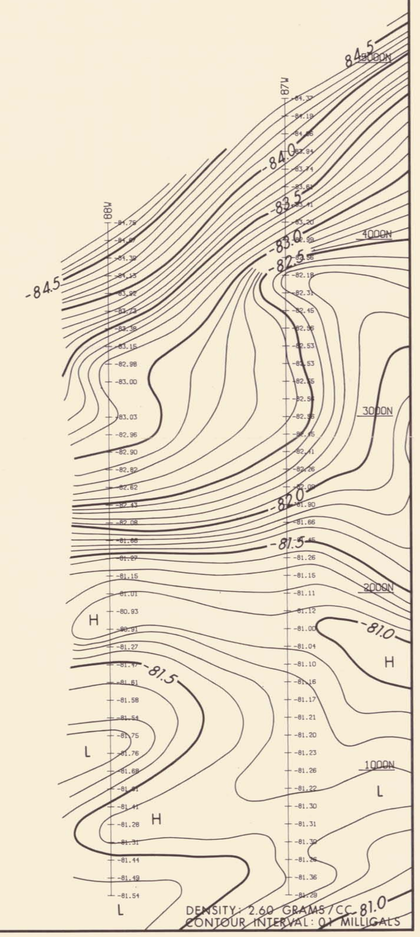
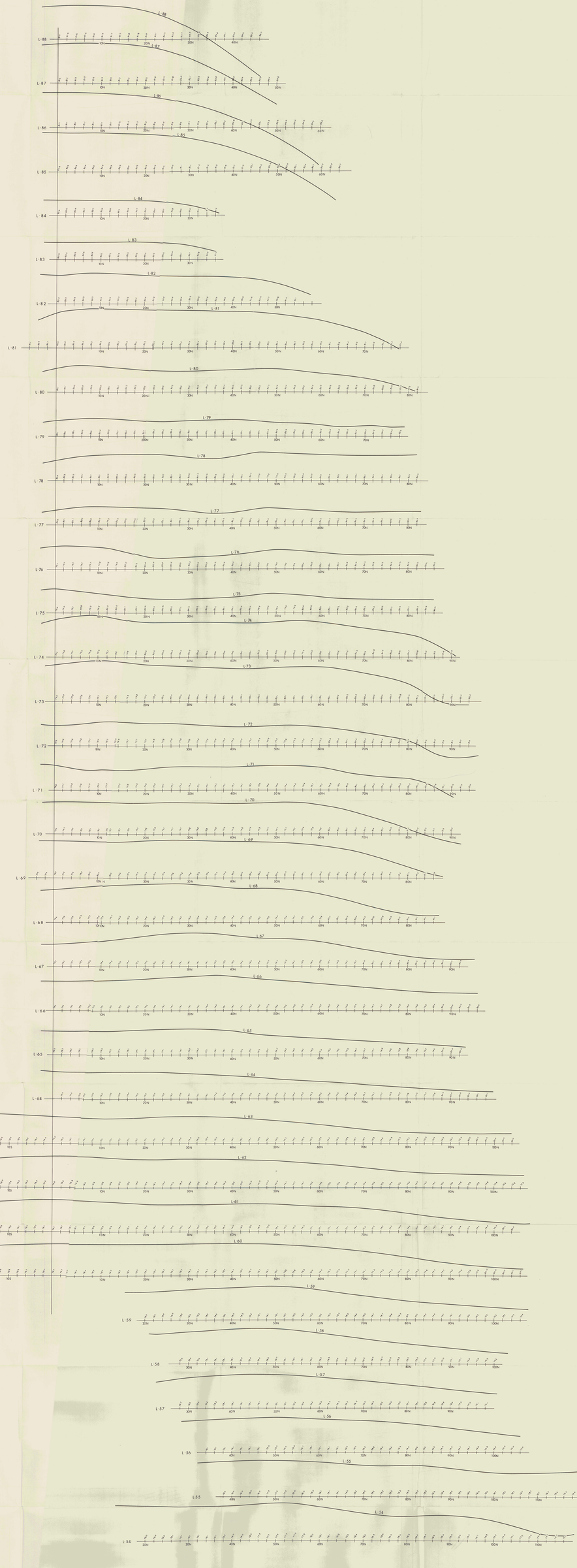


FIGURE 6I

GRAVITY SURVEY

SHEET NO. 8.3



MACMILLAN JOINT VENTURE

REGIONAL GRAVITY PROFILES

TO ACCOMPANY REPORT BY J.E. WYDER PH.D. P.Eng.

Kenting EARTH SCIENCES LIMITED CALGARY ALBERTA

SCALE 1" = 4000' DATE AUGUST 1976
CK. NO. 2892 DRAWN BY R.S.

DENSITY : 2.60 GRAMS / C.C.
CONTOUR INTERVAL: 0.1 MILLIGALS

FIGURE 8A

REGIONAL GRAVITY

SHEET NO 5.3

MACMILLAN JOINT VENTURE

1 INCH=400 FEET

DENSITY: 2.60 GRAMS/C.C.
CONTOUR INTERVAL: 0.1 MILLIGALS

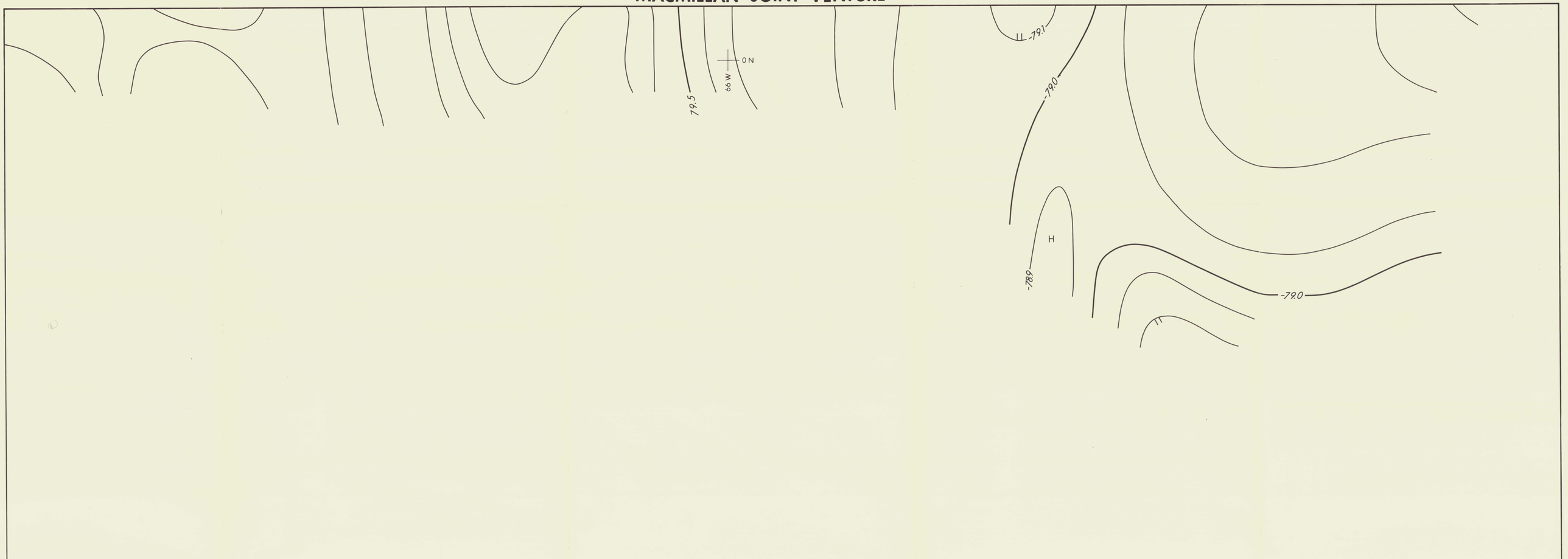
FIGURE 8B

REGIONAL GRAVITY

SHEET NO 5.4

MACMILLAN JOINT VENTURE

1 INCH=400 FEET



DENSITY : 2.60 GRAMS / C.C.
CONTOUR INTERVAL : 0.1 MILLIGALS

FIGURE 8C

REGIONAL GRAVITY

SHEET NO 6.2

MACMILLAN JOINT VENTURE

1 INCH=400 FEET

DENSITY: 2.60 GRAMS/C.C.
CONTOUR INTERVAL: 0.1 MILLIGALS

FIGURE 8D

REGIONAL GRAVITY

SHEET NO 6.3

MACMILLAN JOINT VENTURE

1 INCH = 400 FEET

DENSITY: 2.60 GRAMS / C.C.
CONTOUR INTERVAL: 0.1 MILLIGALS

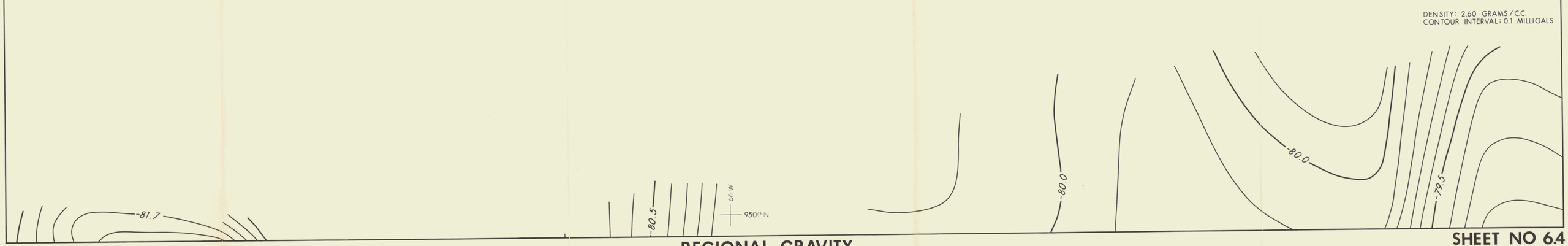
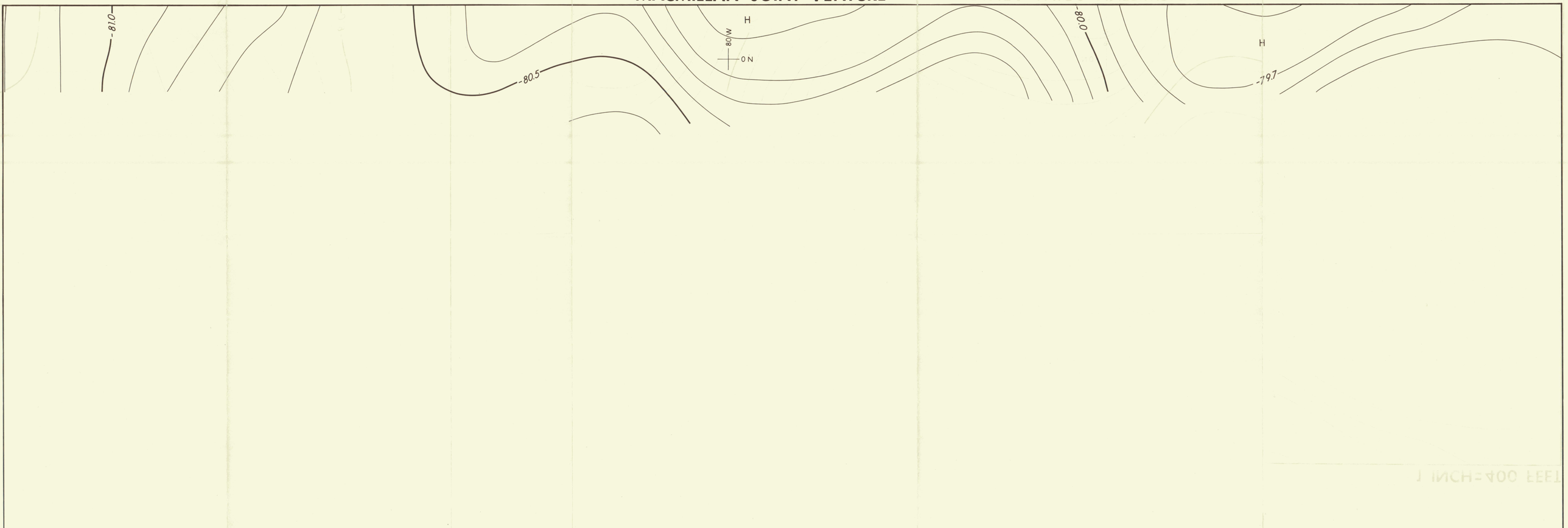


FIGURE 8E

REGIONAL GRAVITY

SHEET NO 6.4



DENSITY: 2.60 GRAMS/CC.
CONTOUR INTERVAL: 0.1 MILLIGALS

FIGURE 8F

REGIONAL GRAVITY

SHEET NO 7.2

FIGURE 8G

REGIONAL GRAVITY

SHEET NO 7.3

MACMILLAN JOINT VENTURE

1 INCH=400 FEET

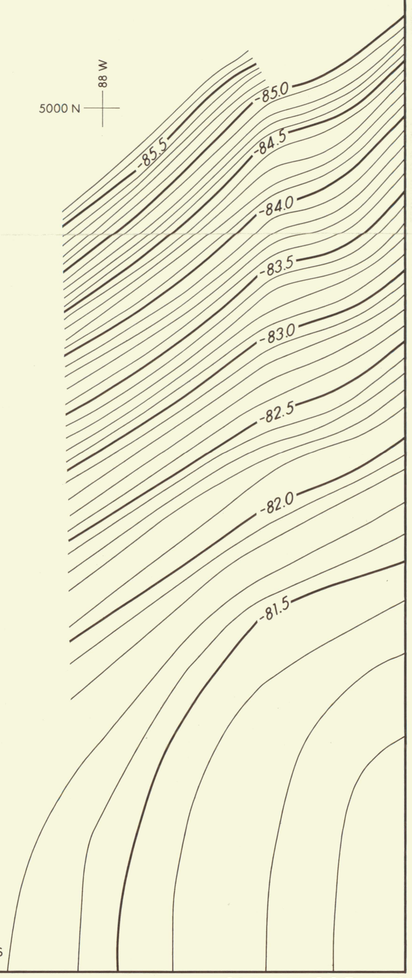
88 W
81.5
0 N

DENSITY: 2.60 GRAMS/CC.
CONTOUR INTERVAL: 0.1 MILLIGALS

FIGURE 8H

REGIONAL GRAVITY

SHEET NO 8.2



DENSITY: 2.60 GRAMS / C.C.
CONTOUR INTERVAL: 0.1 MILLIGALS

FIGURE 8I

REGIONAL GRAVITY

SHEET NO 8.3

MACMILLAN JOINT VENTURE

1 INCH=400 FEET

DENSITY : 2.60 GRAMS / C.C.
CONTOUR INTERVAL : 0.1 MILLIGALS

FIGURE 9A

RESIDUAL BOUGUER GRAVITY

SHEET NO 5.3

MACMILLAN JOINT VENTURE

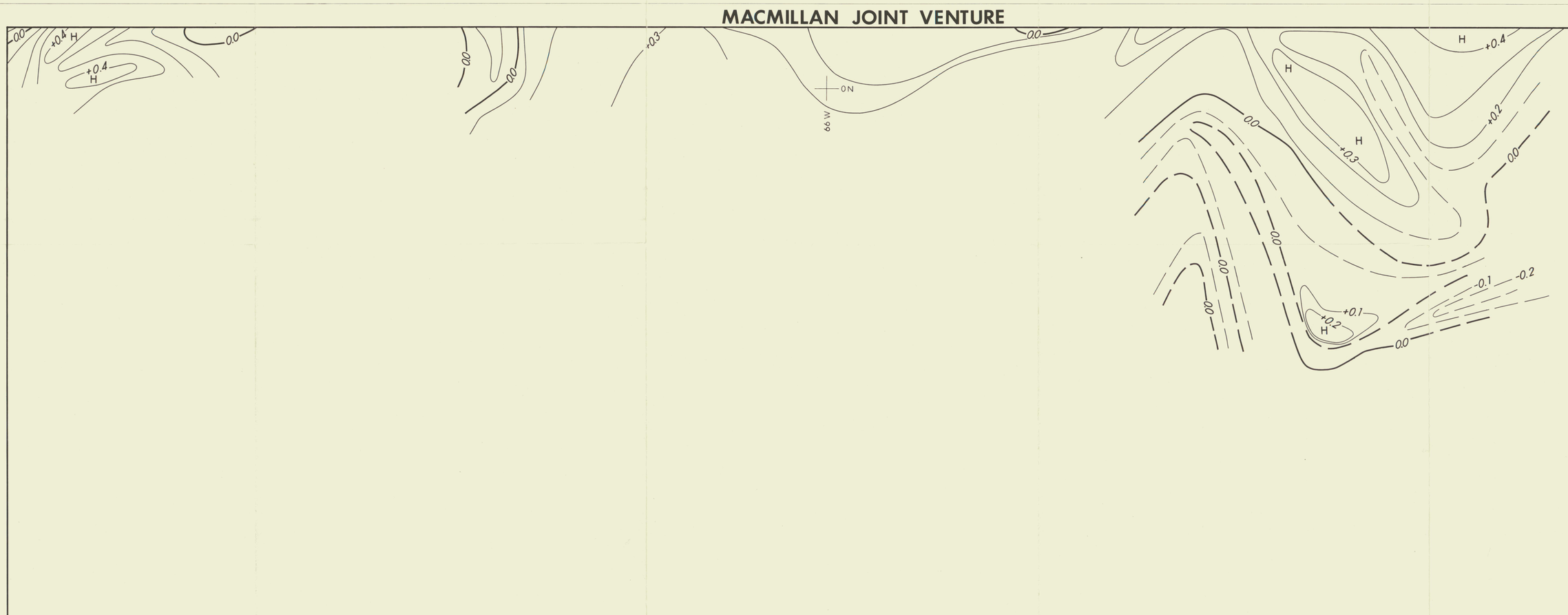
1 INCH=400 FEET

DENSITY: 2.60 GRAMS/C.C.
CONTOUR INTERVAL: 0.1 MILLIGALS

FIGURE 9B

RESIDUAL BOUGUER GRAVITY

SHEET NO 5.4



DENSITY : 2.60 GRAMS / C.C.
CONTOUR INTERVAL: 0.1 MILLIGALS

FIGURE 9C

RESIDUAL BOUGUER GRAVITY

SHEET NO 6.2

MACMILLAN JOINT VENTURE

1 INCH=400 FEET

FIGURE 9D

RESIDUAL BOUGUER GRAVITY

SHEET NO 6.3

MACMILLAN JOINT VENTURE

1 INCH=400 FEET

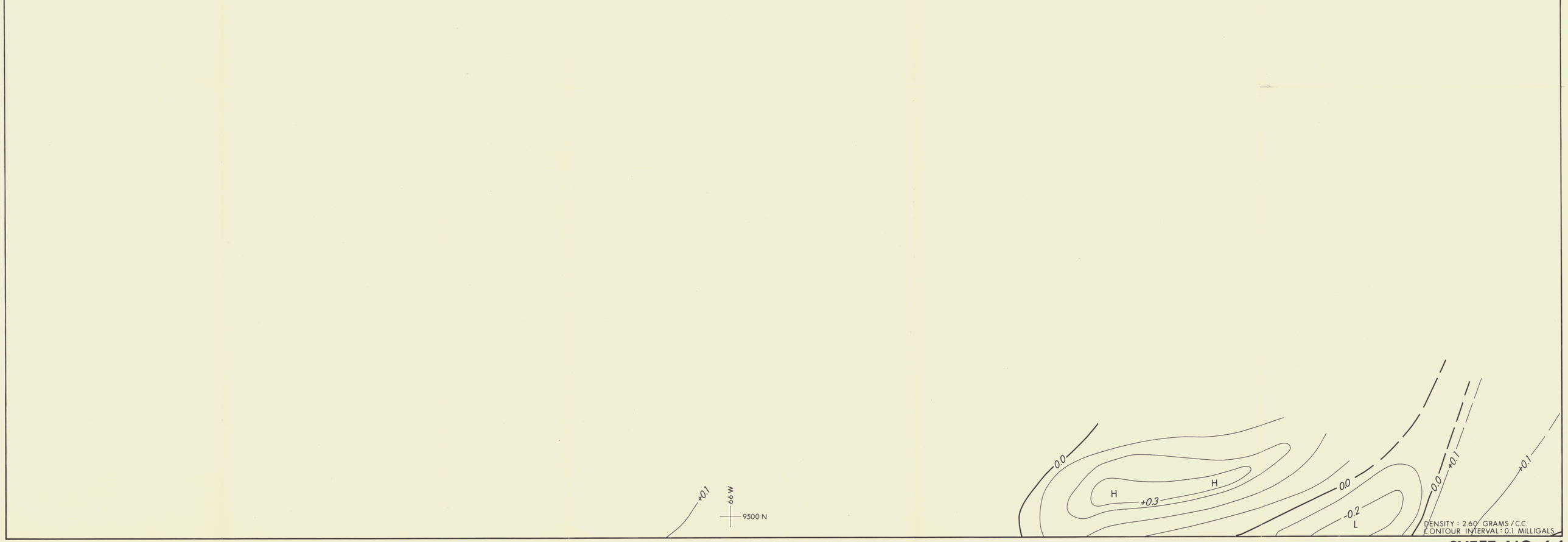


FIGURE 9E

RESIDUAL BOUGUER GRAVITY

SHEET NO 6.4

MACMILLAN JOINT VENTURE

1 INCH= 400 FEET

DENSITY : 2.60 GRAMS / C.C.
CONTOUR INTERVAL : 0.1 MILLIGALS

FIGURE 9F

RESIDUAL BOUGUER GRAVITY

SHEET NO 7.2

MACMILLAN JOINT VENTURE

1 INCH=400 FEET

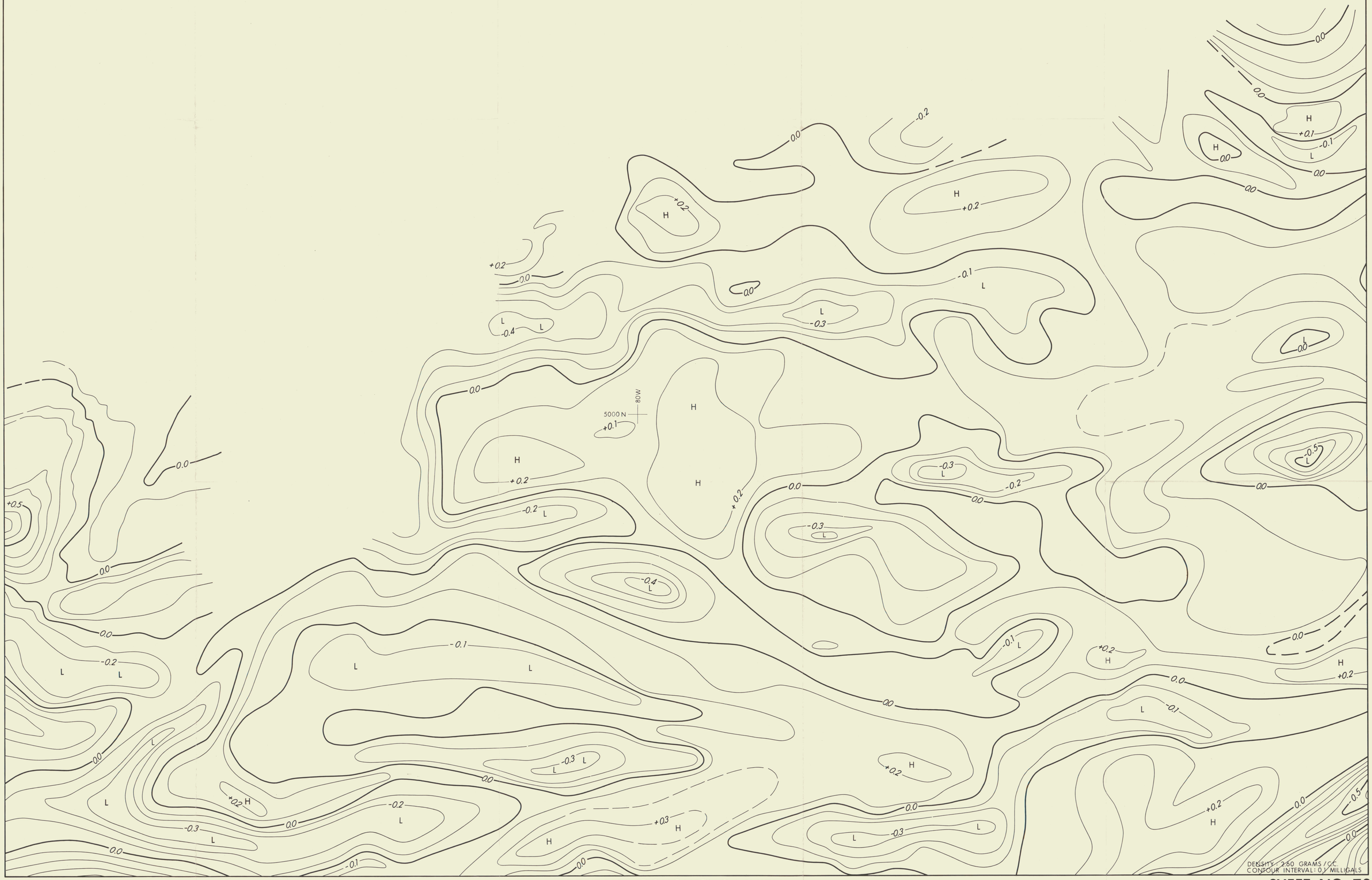


FIGURE 9G

RESIDUAL BOUGUER GRAVITY

SHEET NO 7.3

MACMILLAN JOINT VENTURE

1 INCH=400 FEET

DENSITY: 2.60 GRAMS/C.C.
CONTOUR INTERVAL: 0.1 MILLIGALS

FIGURE 9H

RESIDUAL BOUGUER GRAVITY

SHEET NO 8.2

MACMILLAN JOINT VENTURE

1 INCH=400 FEET

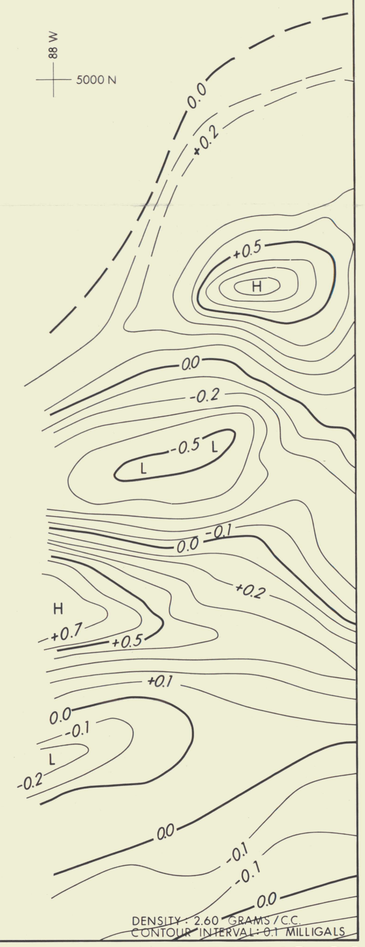


FIGURE 9I

RESIDUAL BOUGUER GRAVITY

SHEET NO 8.3

MACMILLAN JOINT VENTURE

1 in = 1/2 mile

105 L - 14

105 L - 15

105 L - 11

105 L - 10

MACMILLAN RIVER

LONE MTN

135° 00'

BASE LINE - S (N64°W)

BASE LINE-N (N64°W)

Station numbering North and South of South Base Line

Station numbering North and South of North Base Line

OZ LAKE BASE CAMP

SUE CLAIM GROUP

HAND CUT CROSS LINES

BULLDOZED CROSS LINES

PELLY RIVER

TOTE ROAD

62° 45'

8.1 8.2 8.3 7.1 7.2 7.3 7.4 6.1 6.2 6.3 6.4 6.5 5.1 5.2 5.3 5.4 5.5 4.2 4.3 4.4 3.2 3.3 3.4 2.2 2.3 2.4 1.3 1.4

1 2 3 4 5 6

LEGEND

Grid line & number ——— 40W

Gravity survey coverage ——— 1975 ——— 1976

1"=400' Sheets (28) & number 3·4

1"=1000' Sheets (6) & number 3

NOTE; Complete Grid Coverage with Magnetometer & Electromagnetic Surveys

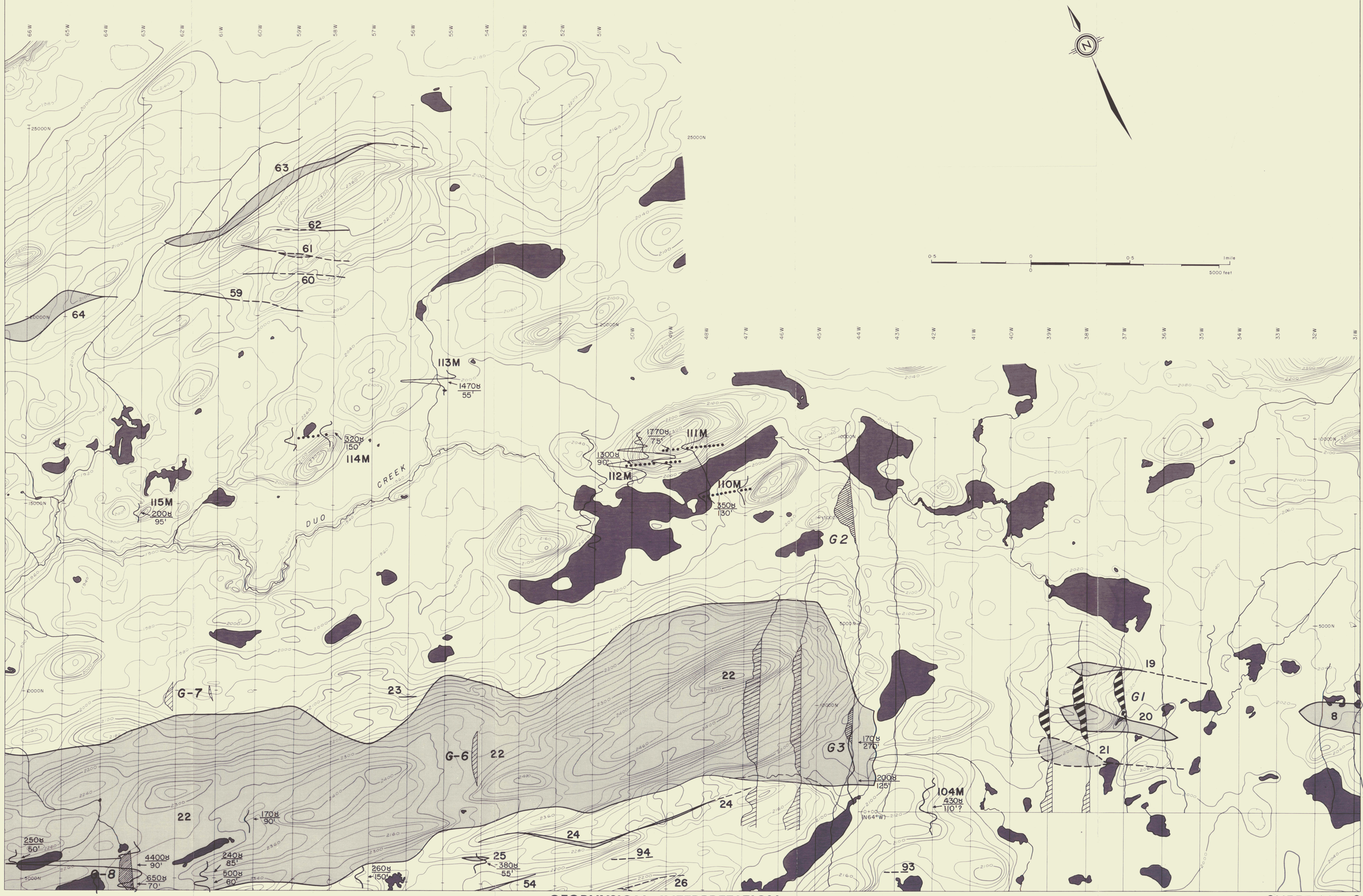
0.5 0 1 2 miles

GEOPHYSICAL SURVEY COVERAGE & INDEX MAP

FIGURE 10

MACMILLAN JOINT VENTURE

1 in = 1000 feet



GEOPHYSICAL INTERPRETATION

SHEET No 3

MACMILLAN JOINT VENTURE

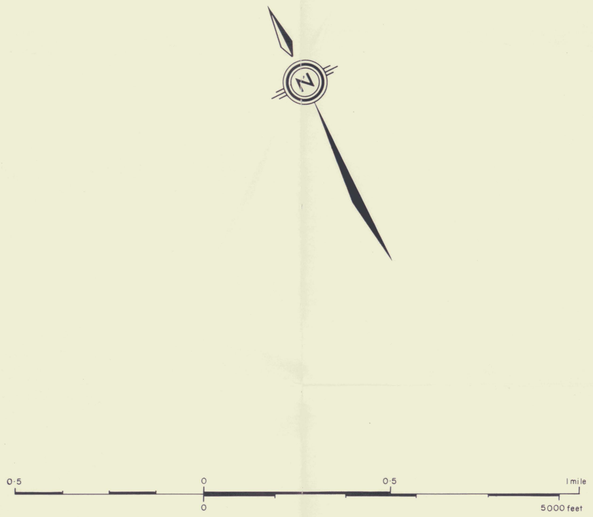
1 in = 1000 feet

GEOPHYSICAL INTERPRETATION

SHEET Nº 4

MACMILLAN JOINT VENTURE

1 in = 1000 feet



GEOPHYSICAL INTERPRETATION

SHEET No 5

MACMILLAN JOINT VENTURE

1 in = 1000 feet

MACMILLAN RIVER

G-16 G-17 G-15 G-12

22 22 22

250R 60'

600R 80'

400R 70'

800R 55' 128M

58 55 76 77 75 74

89 84 83 83 78

88 86 85 82

127M 900R 105'?

126M 650R 110'

400R 70' 1200R 70' 870R 100' 750R 115' 670R 110'

90

130M 1200R 150'

82 73

870R 95' 87 1280R 100' 800R 75' 860R ? 580R 110' 125M 460R 100'

1200R 65' 123M

700R 110' 124M

81 72

80 79 43

360R 70' 121M

120M 620R 50' 49

122M 350R 55'

240R 60' 119M

(N64°W)

5000S 10000S

96W 95W 94W 93W 92W 91W 90W 89W 88W 87W 86W 85W 84W 83W 82W 81W

80W 79W 78W 77W 76W 75W 74W 73W 72W 71W 70W 69W 68W 67W

N

0·5 0 0·5 1mile

0 5000 feet

GEOPHYSICAL INTERPRETATION

SHEET Nº 6