

94M/11E
Geophysical Report

on the
Reconnaissance Gravity Survey
of Portions of the
Denis #1 to #20 Mineral Claims
(Fireside Project)

Situated at Mile 546
of the
Alaska Highway

Liard Mining Division
Northeastern British Columbia
N.T.S. 94M/11 (E½)

Latitude 59°40'N : Longitude 127°10'W

Field Work between June 14 and 18, 1973

on behalf of

TOURNIGAN MINING EXPLORATIONS LTD.
Vancouver, B.C.

June 25, 1973
Delta, B.C.

Report by:
D. R. Cochrane, P.Eng.

4483

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<p>Department of Mines and Petroleum Resources</p> <p>ASSESSMENT REPORT</p> <p>NO. 4483 MAP.....</p>



A-1. Introduction:

On June 15, 16 and 17, 1973, the author and Mr. W. Chase completed four lines of a gravity reconnaissance survey on portions of the Denis claims, situated near Fireside on the Alaska Highway in north eastern British Columbia. The purpose of the work was:

- (a) to test the westerly extension of a known barite vein system;
- and (b) to test a linear zone which is subparallel to the known barite vein system and which is characterized by geochemically anomalous lead values in soil samples.

The samples were collected by Dolmage Campbell field crew in 1971.

This report describes the general setting of the Denis claims, the field and data processing procedures used and discusses the results obtained.

A-2. Summary and Conclusions:


1. A gravity reconnaissance survey was conducted on portions of the Denis claims in June, 1973 by Cochrane Consultants Ltd. on behalf of Tournigan Mining Explorations Ltd.
2. A Scintrex CG-2 gravimeter was used in conjunction with a K & E transit and Nikon automatic level.
3. A total of 120 gravity stations were established along four northeasterly trending cross lines. Stations for the most part, were 25 feet apart.
4. Two gravity lines were run across a known barite vein system, and two gravity lines were placed on old (1971) geochemical lines, and cross a lead in soil geochemical anomaly.



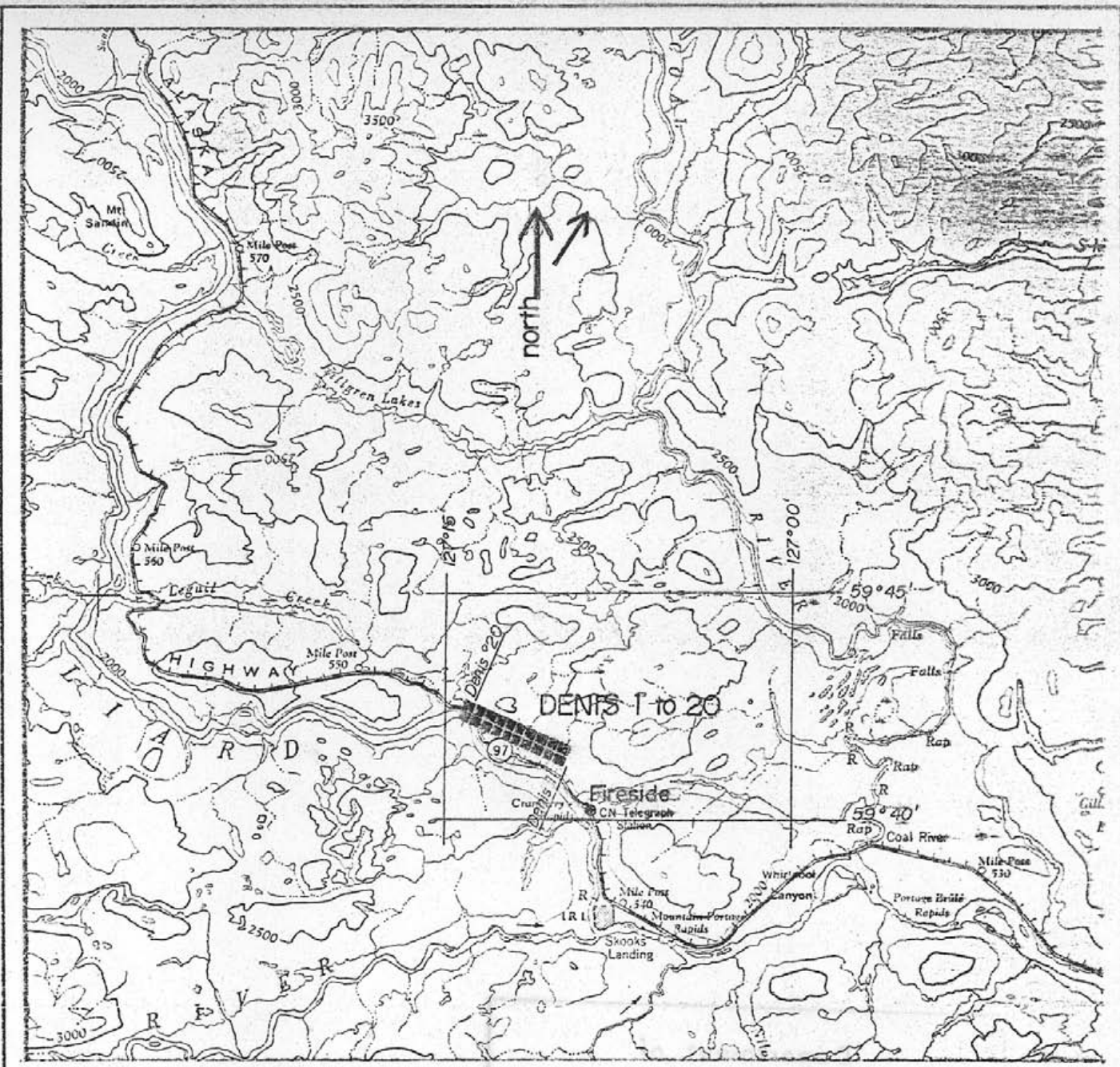
5. Line #1 (see Figure 2, Grid Layout) centred along trench #2 on the #1 vein zone, showed very little abnormality with respect to gravity.
6. Line #2, downhill and southwest of #1 trench is characterized by two gravity "bumps"; the most important occurs between 1+25 and 1+50N on line #2. The peak value is 0.40 milligals above the mean line gravity value.
7. Line #3 is situated about 2000 feet northeast of trench #1, and along geochemical line #3. A strong gravity peak of 0.69 milligals above the mean line value occurs at station 2+75S on line #3. The causative body appears to be near surface, and is apparently slightly less than 12.5 feet wide, and coincides with the uphill edge of the geochemical lead anomaly.
8. Line #4 lies some 3000 feet northeast of trench #1, along geochemical soil line #4. The highest gravity readings on the line occurred at the south end of the line and is 0.65 milligals above the mean average gravity value for the line. This peak lies between two geochemical sample positions from which 132 and 126 ppm Pb were obtained. The background lead value lies in the mid 20's.
9. Gravity anomalies occurring on the vein #1 barite showing area are of less amplitude than on lines 3 and 4. Bulldozer trenching across the peak gravity values on lines 3 and 4 are strongly recommended in addition to trenching "below" the #1 trench on gravity line #2.

June 25th, 1973
Delta, B.C.

Respectfully submitted,


D. R. Cochrane, P.Eng.



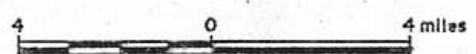


Tournigan Mining Explorations Ltd.
 Denis Property
 Fireside Area - Liard M.D. - B.C.

Location Map

N.T.S. 94 M Rabbit River

Scale: 1 to 250 000 or 1 inch equals approx. 4 miles



4483
 figure 1
 MI

Cochrane Consultants Limited
 4562 Delta Street - Delta B.C.

B-1. LOCATION and ACCESS:

The Denis #1 to #20 mineral claims are situated between Mile Post 544 and 547 of the Alaska Highway, and a few miles north of the Fireside Inn and Road Maintenance station at Mile 543 in north eastern British Columbia. Facile access to the showing area is provided by a cat road proceeding northerly from mile post 546, up hill for approximately ½ mile to the trenched area and at the final post of the Denis #13 and #14 claims.

The claims lie within the National Topographic System code reference rectangle 94M/11 (East half) and are located close to latitude 59°40'N and longitude 127°10'W (see Figure #1, Location Map.)

B-2. CLAIMS and OWNERSHIP:

The twenty (20) full sized located Denis mineral claims form a contiguous block, two claims wide and 10 claims long, and the central location line trends northwesterly. The property is located in the Liard Mining Division and claims are shown on B.C. Department of Mines Mineral Claims Maps #112M (see Figure 2, Claims Map.)

Title to the claims is held by option agreement by Tournigan Mining Explorations Ltd., head office 503-535 Thurlow Street, Vancouver, B.C.

The following table lists pertinent claims data:

<u>Claim Name</u>	<u>Tag No. (s)</u>	<u>Record No. (s)</u>	<u>Expiry Date*</u>
Denis #1-16(incl)		44971-44986 (incl.)	July 3, 1973
Denis #17-#20 (incl.)	200217-200220 (incl.)		May 14, 1974

*as of June 25, 1973



B-3. GENERAL SETTING:

The Denis claims lie within the Liard Plain physiographic region of Northeastern B.C. and southeastern Yukon. It is a gently rolling upland surface, varying in relief from just under 2000 feet to just over 3500 feet above sea level. The claims lie immediately north of the Liard River, and along a south to southwesterly slope which is heavily timbered with lodgepole pine and spruce and with considerable tag alder underbrush. Gabrielse (Geological Survey of Canada Map 46-1962, Rabbit River Sheet) has mapped the bedrock geology as a thick sequence of Cambrian (and older) shales. The sequence is thinly bedded and gently folded and a series of NW by W trending anticlines and synclines predominate in the Fireside area. Pleistocene ice covered this area of British Columbia and an extensive mantle of drift covers the vast majority of the bedrock sequence.

B-4. LOCAL GEOLOGY and MINERALIZATION:

The main area of economic interest uncovered thus far is a barite vein system exposed by a series of 10 bulldozer trenches and designated the #1 Vein Zone.

The three most westerly trenches (numbers 1, 2 and 3) expose the better section of massive barite and associated scattered blebs of galena and chalcopyrite.

The main vein system control appears to be a major steeply dipping, braided fault and breccia zone which varies in strike attitude from a true azimuth of 268° at trench #8 to 240° at trench #1.

In general, the barite veins pinch to the east, and widen to the west. The best mineralized zone occurs in the most westerly, (#1 trench) where the most southerly massive barite vein is 13 feet wide. A northern braided vein system



about 40 feet away from the south vein contains several steeply dipping barite veins and veinlets whose combined width is approximately 10 feet. In trench #2, about 100 feet east of #1, essentially four mineralized zones are present. The largest and most massive barite zone is somewhat braided and is six feet wide. One pure barite vein in trench #2 is 2.5 feet wide and breccia on the south side of the vein contains blebs of chalcopyrite stained with malachite.

The series of trenches east of #3 are for the most part slumped and only minor amounts of narrow vein barite specimens were observed on the bulldozer dumps.

The host rocks are a thinly bedded monotonous series of black to buff coloured siltstones. On the south side of trench #1, the series strikes 50° east of north and dips 80° southeasterly; and on the north side of the trench, the siltstones strike 100° (true azimuth) and dip 40° south.

A narrow, linear geochemical lead soil anomaly apparently commences 1200 feet north of #1 trench and has been traced easterly for 2800 feet. Overburden obscures all bedrock in this area and therefore the cause of the anomaly is unknown.

C-1. FIELD PROCEDURES:

A Scintrex CG-2 (serial number 196) gravimeter was used in conjunction with a K & E transit and Nikon automatic level on the Denis project. The initial elevations of base stations in the vein #1 area, and on lines #3 and #4 were established by an altimeter. Meter stations, spaced for the most part at 25-foot intervals along the four lines, consisted of numbered wooden pegs driven into the ground. The relative heights of each of the pegs was determined by a transit stadia method in steep terrain, and by bench mark leveling in gently rolling country. The elevations were determined to within 1/100th of a foot and the relative elevations are believed to be within 0.2 feet. Meter readings were observed and recorded at each of the surveyed stations and the operator recorded the following: station number, meter reading, time and the height of meter above the top of the peg. The gravimeter was "checked" into a base station once every hour so that drift corrections could be made.

C-2. DATA PROCESSING:

The observed meter reading was corrected for drift by a graphic-standard time versus base reading change method. The drift corrected meter value was then multiplied by the meter constant (in the case of CG-2 #196 $K = 0.10114$ milligals per division) to give the observed gravity value. A combined free air and bouger correction was then applied using a density of 2.5 algebraic sum of the observed gravity plus the elevation/bouger correction. (see gravity reduction sheets at the end of this report).

A latitude correction was applied to remove the effect of the increase of gravity from the equator to the poles. This correction (at latitude $59^{\circ} 40'$) is 0.000215 milligals per foot or 0.0215 milligals per 100 feet. The



latitude correction was applied only to lines 3 and 4, whose northing differed considerably from the northing of lines 2 and 3.

Calculations were completed using portable electronic calculators.

The theoretical gravity, from the formula for gravity on the International Ellipsoid for a point at sea level and at $59^{\circ}40'$ (close to the Denis group) is 981.90. Therefore a value of about 974 may be added to each of the plotted values to obtain an idea of the actual theoretical gravity value at each station.



D-1. DISCUSSION OF RESULTS: Line 1

This line extends 500 feet north and 500 feet south of a zero position established in the trench #2 area over the barite veining.

The relative gravity values on line #1 ranged from a low of 7.02 milligals to a high of 8.07 milligals. The average value is 7.55 milligals. There is an observable northward downdrift to the data, (see Figure #3) and no single value is obviously anomalously high. The gravity values within the trench area are only slightly "above" average in amplitude.

D-2. DISCUSSION OF RESULTS: Line 2

Line #2 lies west of line #1, and proceeds northerly from the access road, below the lip of the hill and showings for 550 feet.

The gravity values ranged in amplitude from a high of 7.10 to a low of 6.37 and the arithmetic mean is 6.70. Figure #4 shows the regional trend and two anomalously high areas are easily discernable. The most interesting occurs between 1+25 and 1+50 N on line two where a 7.07 and 7.10 set of values occur respectively.

The peak value is 0.40 m.g. above the average for Line #2 and occurs in an area which should represent the downhill extension of the barite vein system.

A second "bump" occurs at 5+00N where a single peak value of 6.97 is some 0.4 milligals above the regional line average. Both profiles are quite symmetrical suggesting a steep dipping causitive body.



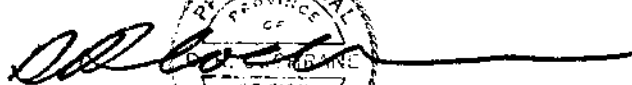
D-3. DISCUSSION OF RESULTS: Line 3

Gravity line #3 extends at an azimuth of 150° (true) from a point 1340 feet NNE from the intersection of the geochemical tie line and geochemical cross line #3. Gravity values ranged from a low of 12.42 to a high of 13.57 and the arithmetic mean is 12.88 milligals. A very distinct peak occurs at 2+75S on line #3 and this peak is 0.69 milligals and is the highest amplitude anomaly encountered. This causative body appears to be near surface and apparently dips northerly at a moderate angle and is somewhat less than the $1/2$ width (i.e. 12.5 feet) in width. This gravity anomaly lies on the uphill edge of the aforementioned geochemical lead soil anomaly.

D-4. DISCUSSION OF RESULTS: Line 4

Gravity line #4 was run at an azimuth of 330° and extends from a 0+00 position (at the intersection of the geochemical tie line, and geochemical cross line #4) for a distance of 250 feet north and 200 feet south. Gravity values ranged from a low of 12.32 to a high of 13.42 and the arithmetic mean is 12.77. One very impressive gravity peak is readily observable on the profile, and this occurs at 0.66 milligals above the arithmetic mean value for line 4. The peak to trough range of the "bump" is 0.90 milligals.

Respectfully submitted,


D. R. Cochrane, P.Eng.

June 25th, 1973
Delta, B.C.



APPENDIX I

Certificates

Name: COCHRANE, Donald Robert
Education: B.A.Sc. - U. of T., M.Sc. (Eng.) - Queens
Professional Associations: Professional Engineer of B.C., Ontario and Saskatchewan; Member of C.I.M.M., G.A.C., M.A.C., Geological Engineer
Experience: Engaged in the profession since 1969 while employed with Noranda Exploration Co. Ltd., Quebec Cartier Mines Ltd., and Meridian Exploration Syndicate.

Name: CHASE, William
Age: 22
Education: Grade 12 Diploma
Experience: Employed since September, 1970 and engaged in EM and IP surveying. Previous experience at the Anvil Mine, Y.T. Summer, 1970

Name: ROSSIER, Jean-Claude
Age: 27
Education: Secondary and Vocational School - Architectural Drafting Courses.
Experience: Since 1965 - General Drafting
Geophysical Drafting -Seigel Associates 1969-72
Employed with Cochrane Consultants since April, 1972

APPENDIX II

Assessment work Details

Property: Denis Group (Denis #1 to #20)
Mining Division: Liard
Sponsor: Tournigan Mining Explorations Ltd.
Location: Mile 546 of the Alaska Highway
Survey: Gravity with transit and leveling control
Field Man Days: June 15, 16 & 17
(2 men, 3 days = 6 man days)
Field personnel: W. Chase - meter operator
D. Cochrane - transit & level
Data Processing: Data reduction - D. Cochrane - June 21, 22
Data Reduction - J.C. Rossier- June 21, 22
Drafting: J.C. Rossier, June 20, 25, 26, 27
Report Preparation: D. R. Cochrane - June 23, 24
Number of Gravity
Stations: 120
Cost Breakdown: As per agreement between Tournigan
Mining Explorations Ltd. and Cochrane
Consultants Ltd.:
3 days gravity field work, including
data reduction and report \$2,000.00

June 27th, 1973
Delta, B.C.

D. R. Cochrane, P.Eng.
President,
Cochrane Consultants Ltd.

APPENDIX III

Instrument Specifications

Gravimeter: Scintrex CG-2 (Prospector)
 Serial #196

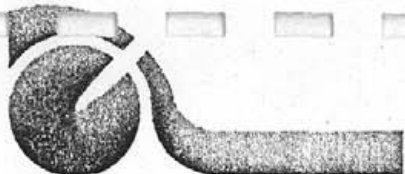
Range: 5000 mgals.
Fine Dial Range: 1000 Div. x Scale Constant
Reset Screw Range: 5000 mgals.
Fine Dial Constant: 0.09-0.11 mgal.
Fine Dial linearity: 1 in 1000
Accuracy: 0.1 Dial Division
Drift: Less than 0.1 mgals. per day
Level sensitivity: 40 sec. per m.m.
Temperature
 Coefficient: Less than .003 mgals. per hour per degree
 Centrigrade change externally applied.

Scale Constant (Serial #196): 0.10114 milligals/division

gravity reduction sheet

property FIRESIDE (Paris V) line "gravity" #2 density used 2.5
 field work date 16.6.73 meter operator W. CHASE transit operator DR. COCHRANE
 data process by DR. H.D. date 21/22.6.73 meter constant -10114 E/B constant -06216

STATION	EASTING	NORTHING	ELEVATION STATION	HI	ELEVATION READING	METAL RODding	DRIFT	E	LATITUDE CORR.	TERRAIN CORR.	DRIFT CORR. METER READ.	OBSERVED GRAVITY	CORRECTED GRAVITY
A			2050.00	.98	2050.98	497.6	-2.2	127.49			495.4	50.10	177.59
B			2032.67	1.65	2035.32	504.1	-2.1	126.52			502.7	50.84	177.36
C			2024.14	1.04	2025.18	517.6	-.5	125.93			507.1	51.29	177.22
D			2010.11	.86	2011.03	515.7	-.6	125.07			515.1	52.10	177.71
0+00			1977.77	.77	1978.74	521.7	-.6	124.21			521.1	52.70	176.91
0+25N			1996.86	.92	1997.78	523.6	-.7	124.18			522.5	52.85	177.03
0+50N			1977.28	.73	1998.01	522.0	-1.0	124.20			521.0	52.69	176.89
0+75N			1996.56	1.03	1997.59	522.2	-1.0	124.17			521.2	52.71	176.82
1+00N			1995.10	.77	1995.87	519.3	-1.1	124.06			518.2	52.41	176.47
1+25N			1989.06	.77	1989.85	521.0	-1.2	123.69			521.8	53.38	177.07
1+50N			1981.09	.64	1982.33	535.9	-1.2	123.22			532.7	53.83	177.10
1+75N			1976.75	1.00	1977.75	532.2	-1.3	122.94			530.9	53.70	176.64
2+00N			1975.71	.92	1974.93	534.5	-1.4	122.76			530.1	53.41	176.37
2+25N			1975.24	.81	1975.25	532.1	-1.5	122.82			524.6	53.07	176.89
2+50N			1980.25	.87	1980.76	530.6	-1.9	123.13			528.7	53.47	176.60
2+75N			1981.56	1.04	1982.40	530.7	-1.8	123.23			528.9	53.49	176.72
3+00N			1973.84	.85	1977.67	532.4	-3.0	123.06			527.4	53.54	176.60
3+25N			1977.90	.67	1977.21	531.0	-2.9	122.99			528.1	53.41	176.40
3+50N			1970.43	1.13	1971.06	536.9	-2.8	122.52			534.1	54.02	176.54
3+75N			1967.36	1.13	1963.47	540.8	-2.8	122.05			538.0	54.41	176.46
4+00N			1961.58	.90	1968.48	539.0	-2.7	122.36			536.3	54.24	176.60
4+25N			1971.45	.83	1972.73	535.8	-2.6	122.62			533.2	54.93	176.55
4+50N			1966.42	.95	1967.37	538.2	-2.6	122.79			535.6	54.17	176.46
4+75N			1968.38	.79	1968.67	537.5	-2.5	122.37			537.0	54.31	176.68
5+00N			1970.78	.53	1970.81	541.0	-2.5	122.51			538.5	54.46	176.97
5+25N			1972.62	.66	1973.23	537.3	-2.4	122.66			534.9	54.10	176.76
5+50N			1973.10	.54	1973.69	535.1	-2.3	122.68			532.8	53.89	176.57



Cochrane Consultants Limited
4882 Delta Street — Delta B.C.

gravity reduction sheet

property FIRESIDE (Dunisyo) line "gravity" # 3 density used 2.5
 field work date 16.6.73 meter operator L.S. CHASE transit operator DR. COCHRANE
 data process by J.R.R. date 21/22.6.73 meter constant .1014 E/B constant .06216

STATION	EASTING	NORTHING	ELEVATION STATION	HI	ELEVATION READING	METER READING	DRIFT	E	LATITUDE CORR.	TERRAIN CORR.	DRIFT CORR. METER READ.	OBSERVED GRAVITY	CORRECTED GRAVITY
0+00			2454.21	.53	2454.82	302.4	-.3	152.49	-.29		302.1	30.55	12.75
0+25S			2452.17	.44	2453.41	305.0	-.3	152.41	-.28		304.7	30.82	12.95
0+50S			2451.18	1.00	2452.88	304.1	-.4	152.57	-.28		303.7	30.72	12.81
0+75S			2450.00	.84	2450.84	302.4	-.5	152.88	-.27		305.9	30.74	12.92
1+00S			2447.18	.67	2448.65	304.3	-.5	152.11	-.27		308.9	31.24	13.08
1+25S			2445.10	.55	2445.65	312.1	-.6	151.92	-.26		311.5	31.50	13.16
1+50S			2442.26	.78	2443.4	311.4	-.7	151.76	-.26		310.7	31.42	12.92
1+75S			2437.80	.4	2437.14	315.2	-.8	151.44	-.25		311.4	31.80	12.97
2+00S			2433.53	.10	2433.63	317.7	-.7	151.18	-.25		316.8	32.04	12.97
2+25S			2428.06	.58	2428.64	322.2	-.9	150.87	-.24		321.3	32.50	13.13
2+50S			2426.06	.61	2426.67	324.7	-1.0	150.74	-.24		323.2	32.69	13.17
2+75S			2427.63	.90	2428.53	326.9	-1.2	150.86	-.23		325.7	32.94	13.57
3+00S			2424.12	.84	2425.32	323.1	-1.2	150.69	-.23		321.9	32.56	13.02
3+25S			2423.21	.73	2424.24	324.5	-1.4	150.61	-.22		323.1	32.68	13.07
3+50S			2422.64	.83	2423.52	322.5	-1.4	150.55	-.22		321.4	32.51	12.84
3+75S			2422.22	.67	2422.81	323.9	-1.9	150.51	-.21		322.4	32.61	12.91
4+00S			2422.31	.50	2422.81			150.50	-.21		325.1	32.88	13.17
4+25S			2422.67	.75	2423.42	323.2	-1.8	150.54	-.21		321.4	32.51	12.81
4+50S			2423.83	.94	2424.37	321.4	-1.7	150.60	-.20		319.7	32.33	12.73
4+75S			2424.63	.50	2425.13	322.7	-1.7	150.65	-.20		321.0	32.47	12.92
5+00S			2425.31	.75	2426.06	323.2	-1.6	150.70	-.19		321.6	32.53	13.04
5+50S			2423.10	.84	2424.49	321.0	-1.6	150.61	-.19		319.4	32.30	12.73
6+00S			2419.58	.78	2420.31	324.9	-1.9	150.35	-.18		323.4	32.71	12.88
6+50S			2416.45	.47	2417.47	328.5	-1.5	150.17	-.18		327.0	33.07	13.06
7+00S			2413.17	.49	2413.66	324.3	-1.4	149.93	-.17		327.9	32.66	12.92
7+50S			2412.65	.71	2413.36	326.1	-1.4	149.91	-.16		329.7	32.84	12.58
8+00S			2410.63	.33	2410.96	327.2	-1.3	149.77	-.16		325.9	32.96	12.57
8+63S			2406.29	.68	2406.97	331.2	-1.2	149.57	-.15		329.9	33.37	12.74
9+00S			2403.81	.76	2404.57	331.4	-1.2	149.37	-.14		330.2	33.40	12.63

Addendum
To The
Geophysical Report On The
Gravity Survey of Portions of
The Denis #1 to #20 Mineral Claims
(Fireside Project)

Gravity surveying was conducted with a Scintrex CGS-2 Prospector Model, and thus all values are relative and bear no direct relation to the absolute value of the earth's gravity field. In mineral exploration the difference (change) between juxtaposed values is the important parameter. The final corrected gravity value is mainly dependent on the adjustment of the meter at the start of the survey.

(a) On line #1, the corrected value for station 0+00 (see data reduction sheets) is tabulated as 177.61 relative milligals, and the plotted value is 17.61 (or $177.61 - 160.00 = 17.61$ milligals). The subtracted constant for all of line #1 is 160.00 m.g.

(b) On line #2, the recorded corrected gravity value at station 0+00 is 176.91 and the plotted value is 6.91 (or $176.91 - 170.00 = 6.91$). The subtracted constant for line #2 is 170.00 m.g.

(c) On line #3 and line #4 reduction sheets, a constant value of 170.00 m.g. was subtracted prior to entering the corrected gravity. The formula is:

corrected gravity = plotted gravity = obs. grav. + E -
lat. corr. - 170.00, or for line #3 we have:

plotted gravity = $30.55 + 152.49 - 0.29 - 170.00$
= 12.75 relative milligals


for 0+00, line #4 we have:

plotted gravity = $27.60 + 155.41 - 0.26 - 170.00$
= 12.75 relative milligals

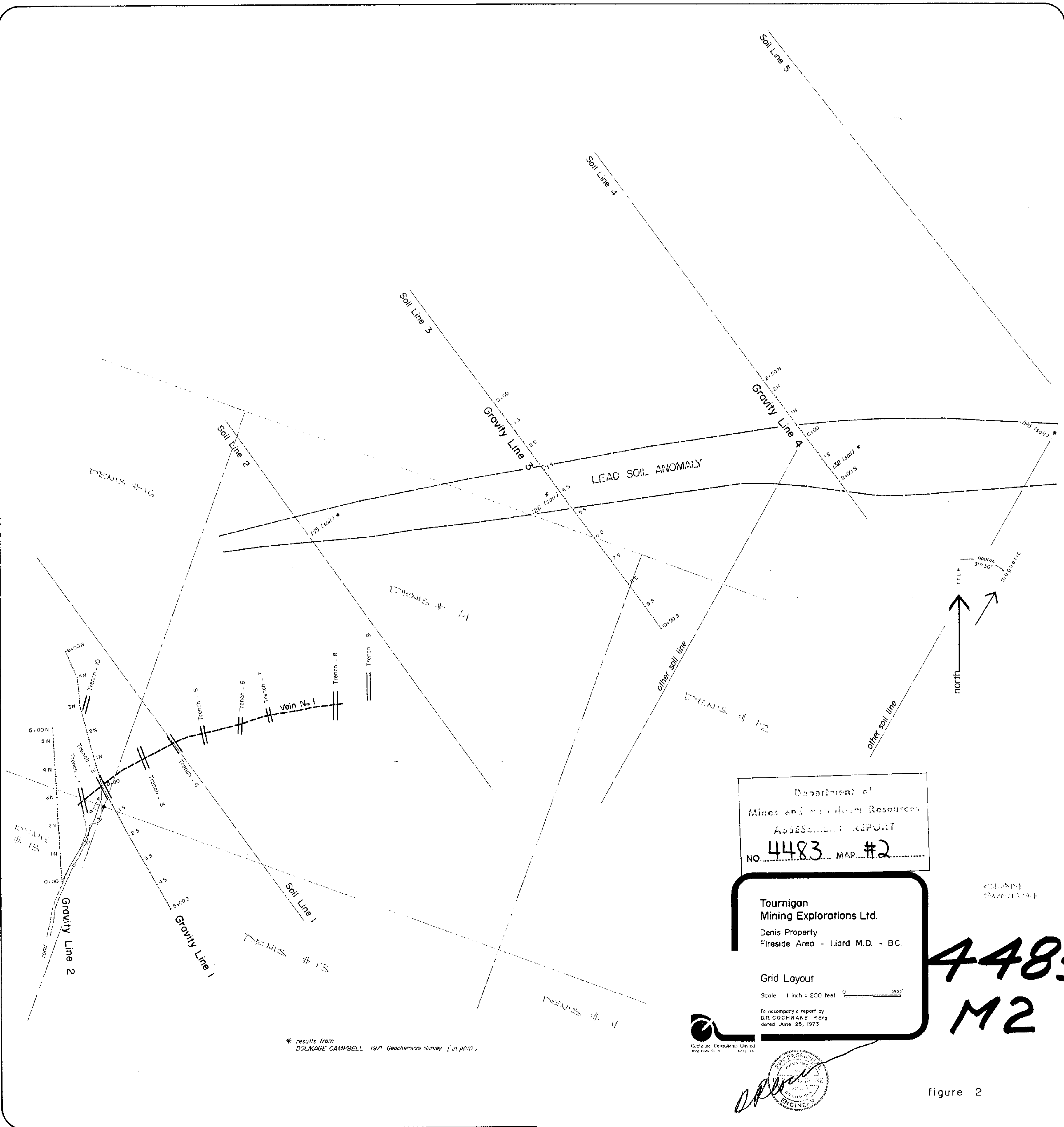
Department of
Mines and Geoscience Resources

ASSESSMENT REPORT

NO. 4483 MAP.....


D.R. Cochrane P. Eng.
August 22, 1973
Delta, B.C.

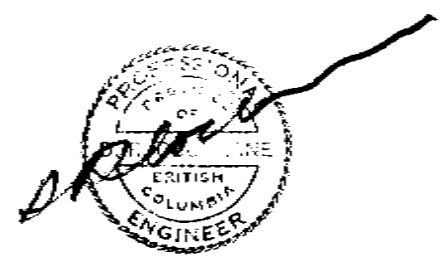
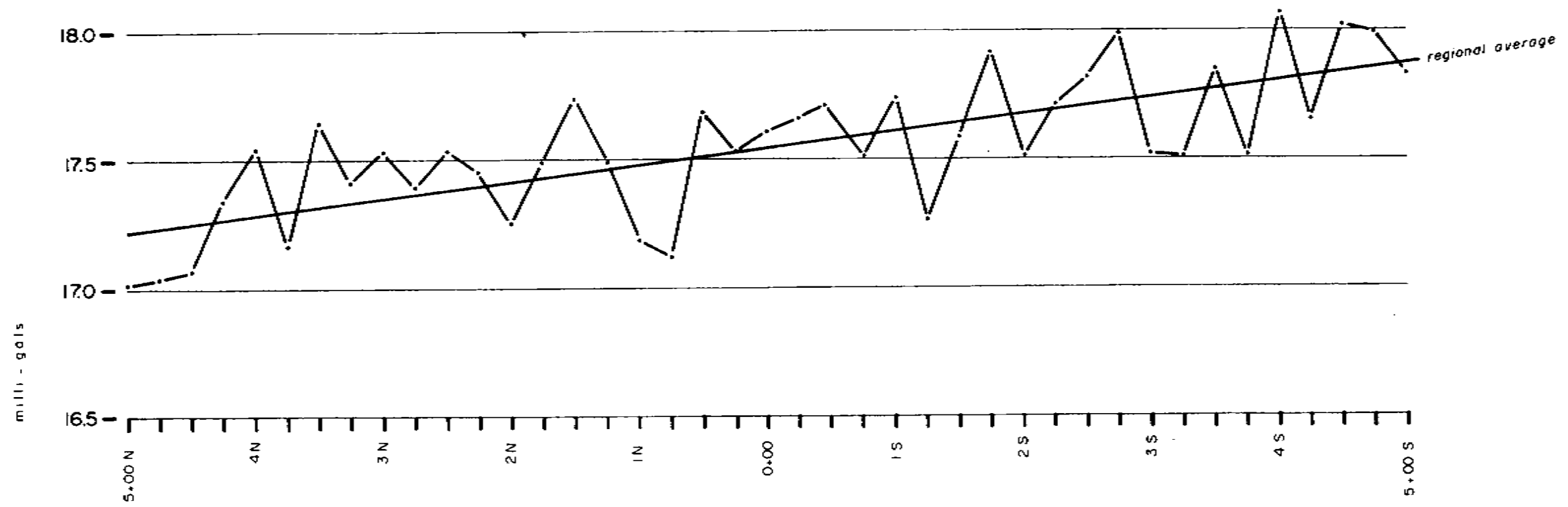




* results from DOLMAGE CAMPBELL 1971 Geochemical Survey (in pp.11)

figure 2

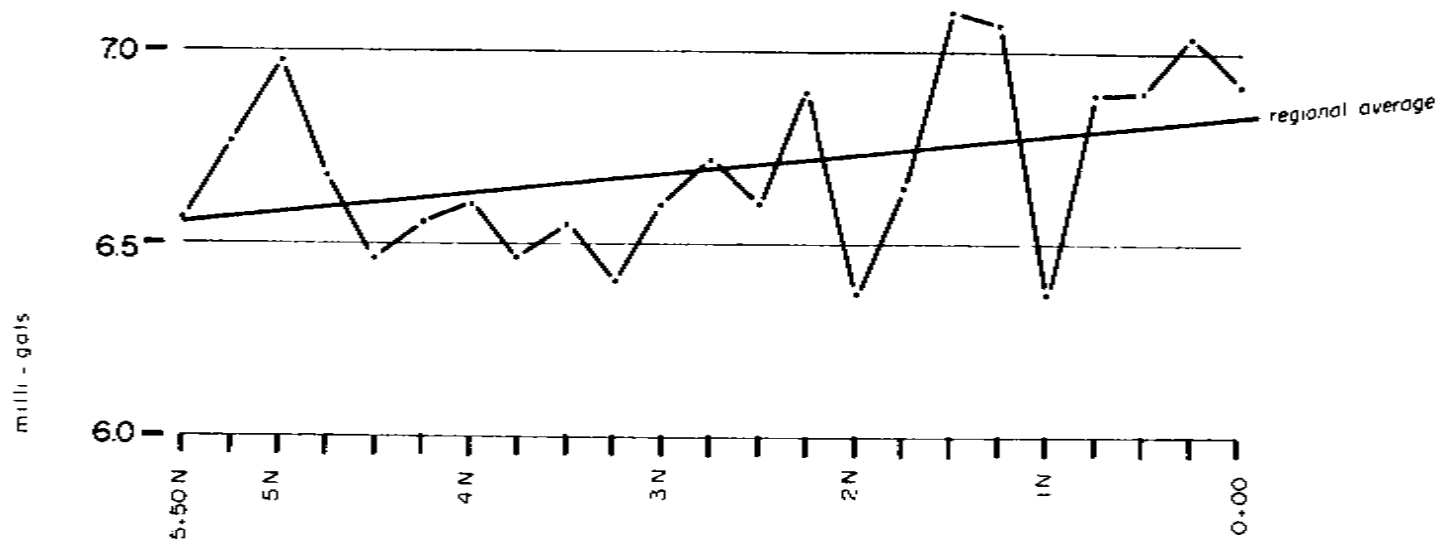
Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 4483 MAP #3



**Tournigan
 Mining Explorations Ltd.**
 Denis Property
 Fireside Area - Liard M.D. - B.C.
 Reconnaissance Survey
 Gravity Profile - Line I
 Horizontal Scale - 1 inch = 100 feet

To accompany a report by
 D. R. COCHRANE P. Eng.
 Dated June 25, 1973
 Cochran Consultants Limited
 440 - 10th Street - Vancouver, B.C.

figure 3



Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. **4483** MAP **#4**

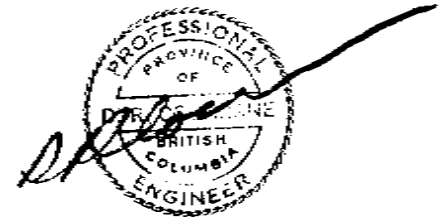
**Tournigan
 Mining Explorations Ltd.**
 Denis Property
 Fireside Area - Liard M.D. - B.C.
 Reconnaissance Survey
 Gravity Profile - Line 2

Horizontal Scale - 1 inch = 100 feet

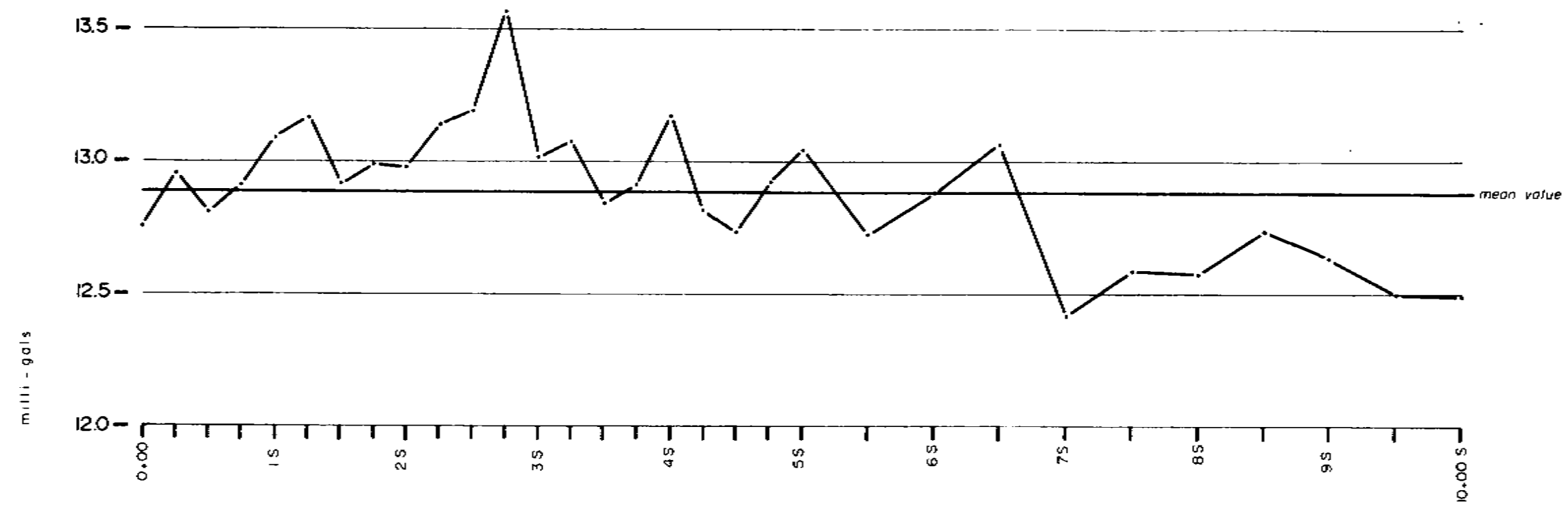
To accompany a report by
 D. R. COCHRANE P. Eng.
 Dated June 25, 1973

Cochrane Consultants Limited
 407, 409, 411, 413, 415, 417, 419, 421, 423, 425, 427, 429, 431, 433, 435, 437, 439, 441, 443, 445, 447, 449, 451, 453, 455, 457, 459, 461, 463, 465, 467, 469, 471, 473, 475, 477, 479, 481, 483, 485, 487, 489, 491, 493, 495, 497, 499, 501, 503, 505, 507, 509, 511, 513, 515, 517, 519, 521, 523, 525, 527, 529, 531, 533, 535, 537, 539, 541, 543, 545, 547, 549, 551, 553, 555, 557, 559, 561, 563, 565, 567, 569, 571, 573, 575, 577, 579, 581, 583, 585, 587, 589, 591, 593, 595, 597, 599, 601, 603, 605, 607, 609, 611, 613, 615, 617, 619, 621, 623, 625, 627, 629, 631, 633, 635, 637, 639, 641, 643, 645, 647, 649, 651, 653, 655, 657, 659, 661, 663, 665, 667, 669, 671, 673, 675, 677, 679, 681, 683, 685, 687, 689, 691, 693, 695, 697, 699, 701, 703, 705, 707, 709, 711, 713, 715, 717, 719, 721, 723, 725, 727, 729, 731, 733, 735, 737, 739, 741, 743, 745, 747, 749, 751, 753, 755, 757, 759, 761, 763, 765, 767, 769, 771, 773, 775, 777, 779, 781, 783, 785, 787, 789, 791, 793, 795, 797, 799, 801, 803, 805, 807, 809, 811, 813, 815, 817, 819, 821, 823, 825, 827, 829, 831, 833, 835, 837, 839, 841, 843, 845, 847, 849, 851, 853, 855, 857, 859, 861, 863, 865, 867, 869, 871, 873, 875, 877, 879, 881, 883, 885, 887, 889, 891, 893, 895, 897, 899, 901, 903, 905, 907, 909, 911, 913, 915, 917, 919, 921, 923, 925, 927, 929, 931, 933, 935, 937, 939, 941, 943, 945, 947, 949, 951, 953, 955, 957, 959, 961, 963, 965, 967, 969, 971, 973, 975, 977, 979, 981, 983, 985, 987, 989, 991, 993, 995, 997, 999

figure 4



Department of
 Mines and Geoscience Resources
 ASSESSMENT REPORT
 NO. 4483 MAP #5

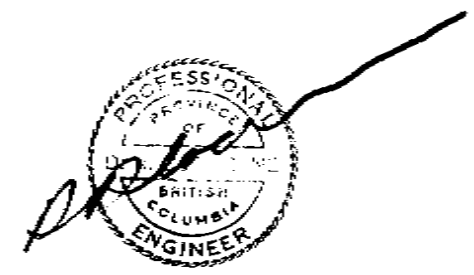


**Tournigan
 Mining Explorations Ltd.**
 Denis Property
 Fireside Area - Liard M.D. - B.C.
 Reconnaissance Survey
 Gravity Profile - Line 3

Horizontal Scale : 1 inch = 100 feet

To accompany a report by
 D R COCHRANE P.Eng.
 Dated June 25, 1973
 Cochrane Consultants Limited
 4800 Delta Street Delta B.C.

figure 5





Department of
 Mines and Technical Surveys
 Assessment Report
 NO. 4483 MAP #6

**Tournigan
 Mining Explorations Ltd.**

Denis Property
 Fireside Area - Liard M.D. - B.C.

Reconnaissance Survey
 Gravity Profile - Line 4

Horizontal Scale: 1 inch = 100 feet

To accompany a report by
 D. R. COCHRANE P. Eng.
 Dated June 25, 1973

Cochrane Consultants Limited
 4820 Oak Street - Delta B.C.

figure 6

