

REPORT TO
REA PETRO CORPORATION
ON ASSESSMENT WORK
PERFORMED ON THE
MOLY CLAIM
NEAR ASHCROFT, B.C.
KAMLOOPS MINING DIVISION
BY
SHERWIN F. KELLY, P.ENG.

MAY 21, 1982

Report on
Assessment work
by
Magnetometer Survey

on the
Moly Claim
SW of Ashcroft
Kamloops Mining Division
B.C.
50° 39½' N, 121° 21' W

by
Sherwin F. Kelly, P.Eng.
Geophysicist & Geologist
May 21, 1982

to
Rea Petro Corporation
Vancouver, B.C.
Owner of the Claims
and the Operator

on Work Done
December 15-20, 1981

by
Pacific Northwest Geotech Ltd.
Kamloops, B.C.

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

10459

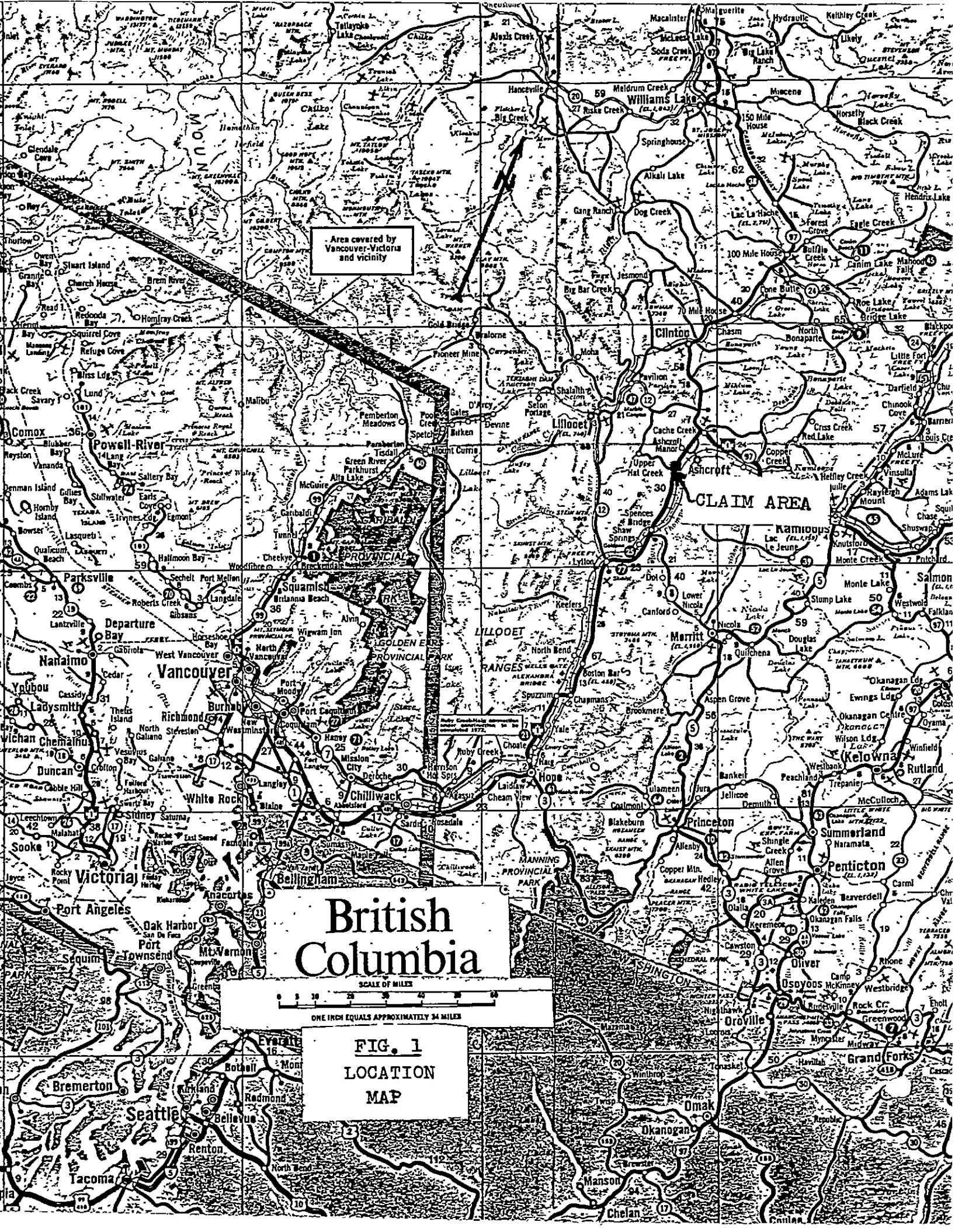
REPORT TO
REA PETRO CORPORATION
ON ASSESSMENT WORK
ON THE MOLY CLAIM

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MAPS

FIG. 1, LOCATION MAP.....facing p. 1
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Area covered by Vancouver-Victoria and vicinity

British Columbia

SCALE OF MILES
0 10 20 30 40 50 60
ONE INCH EQUALS APPROXIMATELY 34 MILES

FIG. 1
LOCATION
MAP

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REA PETRO CORPORATION
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MOLY CLAIM
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INTRODUCTION

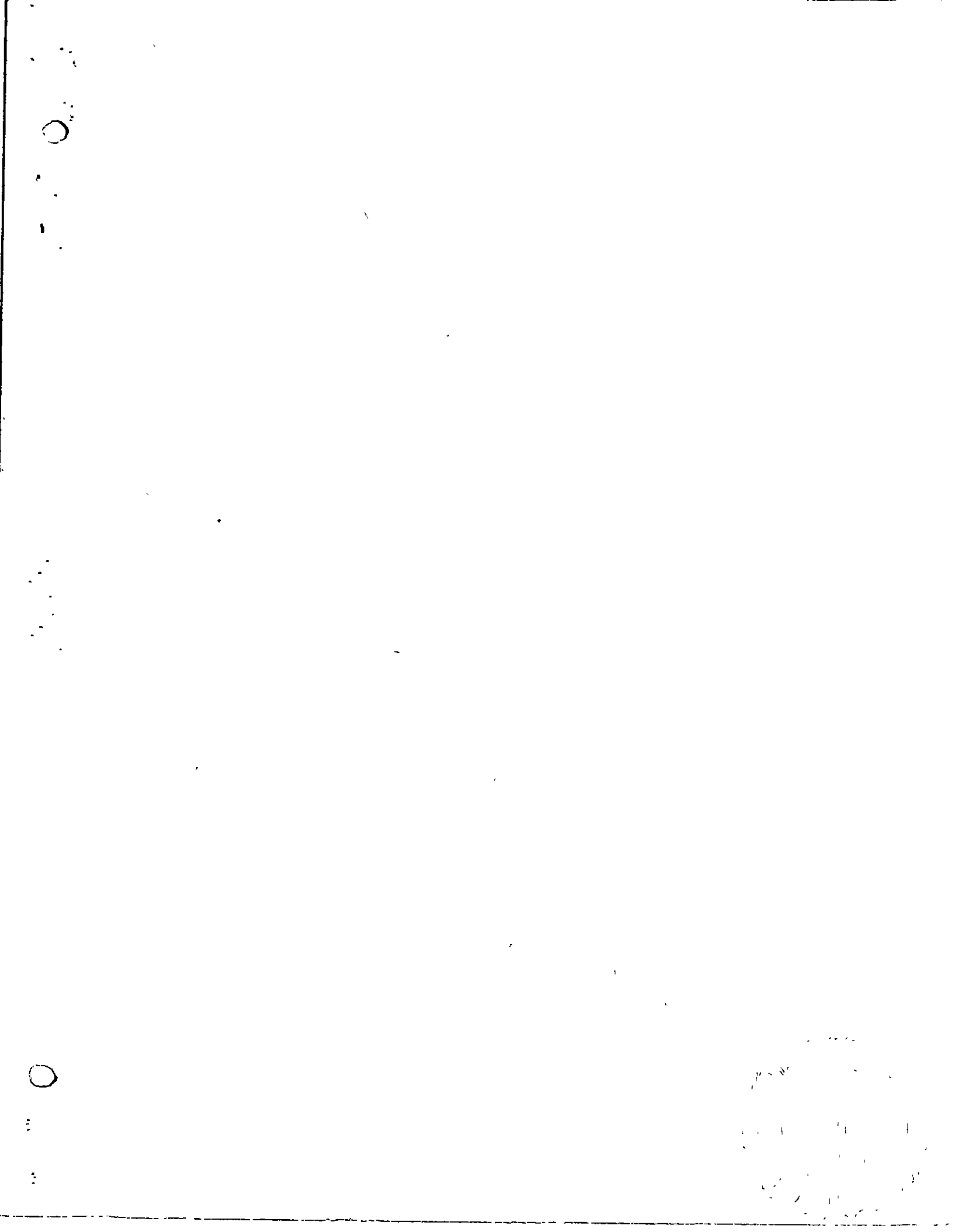
The assessment work reported herein was carried out in the field season of 1981 on the Moly claim of 9 units (3x3). The claim lies on the west flank of the northern portion of Red Hill, straddling the TransCanada Highway some 7 to 9 kilometres south of the right-angle turn-off to the east which leads from the Highway to Ashcroft. The work consisted of a magnetometer survey carried out by Pacific Northwest Geo Tech Ltd.

LOCATION AND ACCESS

The Moly claim lies in the southern portion of the NW $\frac{1}{4}$ of sheet 92-I/11 of the national Topographic System, the Ashcroft sheet at the scale of 1:50,000. The co-ordinates are roughly 121° 21' west longitude and 50° 39 $\frac{1}{2}$ ' north latitude. The town of Ashcroft lies about 10km to the NE. There is ready access to the claim area, as the TransCanada Highway runs NW-SE through the western portion of the claim. See the Location Map, Fig. 1, facing this page.

CLAIM

The Moly claim consists of 9 units in a square,



3x3. The legal corner post is at the SW corner, west of Highway 1, the TransCanada. A dirt road turns off to the west from Highway 1, about 8km south of the turn-off to Ashcroft, and winds southerly through the Moly claim and other claims held by Rea Petro in this area. A little over a kilometre from the Highway, the legal corner post of the Moly claim stands about 30m easterly from the road. The claim particulars are:-

<u>CLAIM</u>	<u>NO. OF UNITS</u>	<u>VALIDITY DATE</u>	<u>RECORD NO.</u>
MOLY	9 (3x3)	March 6, 1982	1730 (3)

The Moly claim was staked on February 7, 1979 by Larry W. Reaugh and recorded by him in the Kamloops office of the Kamloops Mining Division on March 6, 1979. An apparent contravention was noted with respect to a valid claim, RH 6. It lay south of the Moly claim which over-staked it by a couple of hundred meters; a further, northern jut some 500m wide, extends another hundred meters or so, into the central south portion of the Moly claim. The Index Map, Fig. 2, faces this page.

There is also a possible conflict of the western portion of the Moly claim with Lot 14, which probably carries the mineral rights as well as surface rights. A geochemical soil survey, not covered by this present report, however, indicated that an impressive area of strong soil copper and molybdenum anomalies lies immediately east of the east boundary of Lot 14. The anomalies are therefore in an area of the Moly claim apparently not subject to

questions of title to the mineral resources.

This Moly claim, plus Moly 2 and the ADD claims numbers 1, 2, 3, 4, 5, 6, 7, 8 and Fraction, were all grouped as the "Molly and ADD Group" by Grouping Notice No. 1825, filed in the office of the Kamloops Mining Division, in Kamloops, B.C., on April 28, 1981, and Supplementary Notice No. 1867, filed Sept. 22, 1981.

A "Statement of Exploration and Development" on the Moly claim, was filed in the Kamloops office of the Kamloops Mining Division, by G. D'Angelo of Kamloops as agent for Rea Petro Corp., on February 10, 1982. This Statement recorded an expenditure of \$2119.50 for a magnetometer survey, the work now being reported on.

GEOLOGICAL SETTING

This Moly claim, along with the other claim-holdings by Rea Petro in this area, lies in a band of the Cache Creek formation, of Permian age, some eight miles wide. This formation, possibly 20,000 feet thick, is prominently exposed between the Thompson River on the east and the Cornwall Hills on the west. Here it consists primarily of quartz-sericite schists, the metamorphic derivatives of greenstones, namely andesitic flows, tuffs and agglomerates. The schistosity has a northwesterly strike and southwesterly dip. These schists are cut by quartz-calcite veining which often carries copper mineralisation and pyrite. They are

also intruded by stocks, plugs and dikes of dioritic to quartz-dioritic composition, probably off-shoots from the huge Guichon batholith to the east and south east. Its northwestern tip lies only three miles east of the Moly claim.

The dioritic rocks of the Guichon batholith are both source rocks and host rocks, of the copper mineralisation which forms the orebodies of the various copper-molybdenum mining operations in the Highland Valley. The stocks and plugs of intrusive diorites, believed to be off-shoots of that Guichon batholith, are found as much as 8 to 10 miles west of its northwesterly tip. Some of them have been shown to be associated with copper, molybdenum and nickel mineralisation. In general, these stocks and plugs vary from $\frac{1}{4}$ to 2 miles in diameter. One such stock, an oval mass about $1\frac{1}{2}$ miles in length (NE-SW) lies across the central and southern part of Red Hill and, apparently underlies the southeastern portion of the Moly claim. There are some strong soil copper values across the mid-section of the claim, extending southeasterly to the southeast corner.

Although the principal bedrock of the area consists of quartz-sericite (and quartz-chlorite) schists derived from volcanic tuffs and flows, there are also sedimentary beds in the Cache Creek series, such as quartzites, cherts, argillites and limestones. Showings of magnesite (magnesium carbonate) and serpentine (magnesium silicate)

have been noted. Magnesite may be a sedimentary formation, or result from the alteration of serpentine. The latter usually forms as the result of hydrothermal metamorphic action on magnesium-bearing silicates in igneous rocks. To the northwest, in the Cornwall Hills, nickel mineralisation has been observed in serpentinised areas, associated with strong magnetic anomalies.

Geological, geochemical and geophysical evidence from work conducted in the area west of the Moly claim, indicates that there are fault systems cutting through the cache Creek formation and some of the intrusive stocks. The two principal systems have strikes approximately N-S and approximately NW-SE. There is copper-nickel mineralisation associated with some of them. Whether any such faults cut through the Moly claim area, is unknown at present.

The fundamental geological data given above, are derived from Geological Survey of Canada Memoir 262, "Ashcroft Map-Area, British Columbia", by S. Duffell and K.C. McTaggart, Ottawa, 1951. Further details were obtained from a report on a geochemical survey in the Cornwall Hills area, made by A.A. Burgoyne of Crest Laboratories to G. Krause and the report with which it is included, "Economic Geology of the West Half of the Ashcroft Map Area, British Columbia" by G.G. Krause, P. Geol., dated Sept. 15, 1970. The two reports and numerous maps are included in Assessment Report No. 2947, on public file with the British Columbia Gold Commissioner. Useful data were likewise

obtained from reports and maps covering geophysical and geochemical work in the area immediately west of the Moly claim, by Noranda Mines and Bethlehem Copper. I have also inspected some of the area myself.

PRIOR WORK

Important prior work on which data are available, was that carried out on the claims owned by G.G. Krause, which lay west of the Moly claim. The work for Krause, cited above, plus some later geophysical and geochemical work by Noranda Mines and by Bethelhem Copper, delineated several faults and showed copper-nickel soil anomalies to be associated with some of them. Copper-molybdenum soil anomalies were found generally near, or in association with dioritic intrusives. The soil sampling was done on a very wide spacing and did not provide a good basis for drilling. Some drill holes were nevertheless put down, finding indications of copper and of nickel, but not, apparently of economic grade at that time. In some cases, core recovery was very poor. This work was not done on the Moly claim and is noted only to call attention to the fact that some good indications of mineralisation in copper, molybdenum and nickel have been found in this vicinity.

On the Moly claim, there are some old rotary holes and some bulldozed trenches, now sloughed in, but no record is available as to when or by whom it was done nor of the results achieved. In November, 1979, Larry Reaugh had two trenches excavated in the vicinity of the SE corner of the

Moly claim. The work was applied to the Moly claim and to the Moly 2 claim, which here adjoins (and overlaps) the Moly. The trenches did not reach bedrock, however.

In the field season of 1980, a soil survey was made of the south two-thirds of the Moly claim, with samples analysed for copper, molybdenum, silver, zinc and nickel. The samples were taken in 1980 but not analysed until 1981. The grid lines were run east-west at 100m intervals. Samples were gathered at 25m intervals along the E-W grid lines, which were designated at the time, as Lines 0 to 10, going north from the south boundary of the claim. Those lines are now numbers 15+00N to 25+00N in the grid system of the overall survey of these Rea Petro holdings. A similar, but newly laid-out grid on the Moly claim was used for the magnetic survey, described in a section further on in this report. The map is in an envelope bound in back of this text.

The results of the copper analyses exhibit an impressive mass of strong copper anomalies occupying the area between Lines 21+00N and 25+00N and extending from the east side of the grid, west 700m to the BL 800E. From this area of strong anomalies, a "tail" of linear ones of moderate to high strength, continues along the east claim border, south to the south border of the claim, over a width of about 400m.

The contours of the high values are generally elongated N-S with strikes varying between N 25° E and N 20° W. Background is 45 ppm; peak values of 5 to 10 times background

are predominant, with occasional readings in the range of 1,000 ppm to 2,300 ppm being recorded. The latter are subject to some scepticism, as they might be due to surface contamination from old drilling or trenching operations. They might, on the other hand, be due to pockets of strong mineralisation at bedrock surface, beneath a very shallow, residual soil cover.

The generally northerly alignment of the oval copper anomaly contours, probably corresponds with the strike of the underlying quartz-sericite schists of the Cache Creek formation. If so, it is here slightly more northerly than it is west of the highway, possibly influenced by the intrusion of the Red Hill diorite stock. Mineralising solutions probably followed the foliation of the schists, but where the lineation of the copper contours is slightly northeast, it may represent mineralisation along fractures or in quartz-calcite veins, cutting the foliation at flat angles.

The contours of copper anomalies suggest that the "tail" extending N-S near the east border of the grid, marks a conduit of fractures, contacts or foliations through which the mineralising solutions moved out from the intrusive magma and, in the area of Lines 21+00N to 25+00N, spread out to form a network of veins, veinlets and disseminated mineralisation. The soil indications are still open to the south, the east and the north. West of the BL 800E,

copper readings are few, small and insignificant.

Molybdenum tends to follow the copper. Background is 1 ppm, with anomalous values 3 ppm or higher. In the area of high copper values, strong molybdenum anomalies appear on Lines 22+00N to 25+00N with peak readings of 8 to 17 times background, and even one, isolated one of 56 ppm. In general, the higher molybdenum readings are associated with the higher copper ones. South of Line 22+00N, there are few anomalous readings in molybdenum, but where they do occur it is generally with a copper anomaly.

West of the BL 800E, the molybdenum values, like the copper ones, show little of interest. There is an area, however, on Lines 23+00N and 24+00N, extending from the BL west for 350m, in which there is a collection of weakly anomalous readings, but without any copper anomalies. The inference is, that the molybdenum moved farther out into the host rock than did the copper, but the main concentrations occurred along with the strong copper ones.

Zinc is a highly mobile ion, with the result that strong values are ubiquitous. Background in this area is about 100 ppm, anomalous values thus being 300 ppm or higher. In the southern parts of the Moly claim, zinc values hardly reach threshold strengths. In the northern part, however, between the east border and the BL, numerous anomalous values were recorded, from 3 to 9 times background, on Lines 21+00N to 25+00N. They usually, but not invariably

coincide with the strong copper anomalies, although their area of distribution does correspond with the area of high copper values.

The background for silver is a little ambiguous, it could be 0.1 ppm or 0.2 ppm. With the lower figure, there are more scattered anomalies of 0.3 ppm, whereas with the higher figure most of the anomalies are located in the area of high copper, molybdenum and zinc values. The striking anomalies, of 0.6 to 4.1 ppm (i.e., 3 to 20 times the higher background figure) lie on Lines 22+00N to 24+00N, between the east border and the BL. Some occur with high and others with low zinc readings, but the more consistent association is with high copper values.

The pattern of the foregoing soil anomalies of copper, molybdenum, zinc and silver, strongly implies a nearby magmatic source from which all those metals arose, probably the intrusive stock of diorite which cuts across the south-east corner of the Moly claim. The pattern for nickel is quite different.

The nickel readings in the eastern quarter of the Moly claim block, show consistently lower values than those in the western portion. This results in a 30 ppm background in the eastern belt and a 60 ppm background in the broader western portion. Using 55 ppm as background to divide the two areas (the background value applicable in most of the balance of the Rea Petro holdings) produces a background contour (55 ppm) following a sinuous, north-south direction

about midway between the BL and the east border. West of it, there are only a few single readings even topping the threshold value of 110 ppm until the western third of the claim block is reached. There, an anomaly of 410 ppm appears on Line 15+00N, 275m west of the BL. It shows on only the one line and is open to the south, so can hardly be evaluated. The western area is largely featureless from there to the NW quarter of the area west of the BL. At the western ends of Lines 22+00N to 24+00N there are a couple of weak anomalies, with values from 165 ppm (three times background) to 200 ppm. One, 220m N-S by 175m E-W, lies about 450m west of the BL, across Lines 22+00N to 24+00N. Some 75 to 100 metres west of it, another anomaly lies across Lines 23+00 N and 24+00 N. Starting only 75m from the west edge of the survey grid, this one is still open to the west.

The pattern of nickel distribution strongly suggests that the origin of the nickel mineralising solutions was not the same as for the copper, molybdenum, etc. group. The anomalies themselves lie west of the Highway No. 1, 500m west of the BL, and the magmatic or hydrothermal origins may lie nearby or even farther west.

It should be noted, however, that the nickel anomalies recorded on the Moly claim, are too weak to be indicative of nickel mineralisation capable of supporting exploitation. They are probably due to small bodies of serpentine, such as have been noted as intrusives in various locations within the Rea Petro claims area. The magnetic survey did not extend

west of the BL, so did not cover these nickel anomalies.

The geochemical soil surveys are not the subject of this report, as they are not being submitted as assessment work. The results have nevertheless been discussed at some length, since they form a relevant background against which to judge the significance of the magnetic survey data. The geochemical results also assist in formulating a preliminary, economic assessment of the area.

MAGNETOMETER SURVEY

Prior geochemical samples had been gathered on a grid which covered the southern 2/3 of the Moly claim, for its entire width. The remnants of the old markings were hardly adequate to serve as reliable guidance for the magnetometer survey, so the area to be covered was laid out with a new grid. It encompassed the full, N-S length of the Moly claim, but only about its eastern half.

A N-S Base Line, BL 800E, Moly, was run north from the south boundary of the Moly claim, at a point 800m east of the legal corner post at the SW corner of the claim. The south boundary was designated Line 15+00N, to tie in with the main grid system which covers the rest of the Rea Petro claims in this area. From the boundary north, the lines were run at E-W at 100m intervals and numbered 16+00N, 17+00N, etc. to 30+00N at the north boundary. Stations were established at 100m intervals along these lines, numbered east from the BL. Magnetic readings were taken at 25m intervals along each line, the observation stations being numbered 0+25E, 0+50E, 0+75E, 1+00E, 1+25E, etc. to 7+00E at the east boundary.

The magnetic survey was confined to the area between the

BL and the east border, but extending to the north boundary of the claim. The magnetic study of the western portion of the claim was omitted, because it was found that the western part overlapped a Land Lot to which the mineral rights accrued.

The total lineage established on the eastern part of the Moly claim was 14.2 kilometres. The lineage covered by readings, however, was 15.7 kilometres. This additional amount was required to make a loop of readings on the BL (a continuous set of readings going north and then immediately south, along the BL) to determine what corrections needed to be made for diurnal variations in the magnetic field.

A highway and two power lines traverse portions of the survey area. The TransCanada Highway enters the grid from the west, occupying the interval on the BL between Line 16+00N and 25m north of it. This proved responsible for the anomalously low reading at that point. The highway leaves the grid in the interval between 25m and 75m east of the BL, on Line 15+00N, where it is signaled by an anomalously high reading. Keith D'Angelo reported that the readings were disturbed especially by passing traffic, at the stations close to the highway.

One of the power lines follows the highway along the eastern side of the roadway. The other branches off that one just south of the grid area and crosses Line 15+00N at 250m east of the BL. It continues northerly on a sinuous track to cross the BL about 25m south of Line 24+00N. It re-enters

the grid area across the BL at 25m south of Line 29+00N and leaves the grid a short distance east of the BL on Line 30+00N. There do not appear to be any disturbances in the readings which might be ascribed to that power line.

The instrument employed in the survey was a Unimag II portable proton magnetometer, Model G-846, manufactured and distributed by EG&G Canada, Exploration/Geometric Division, Downsview, Ontario. It is equipped with a detachable sensor and when used that way, has a sensitivity of ± 5 gammas. With the sensor on a separate staff, the sensitivity is ± 1 gamma. The lower sensitivity was adequate for this work and the instrument is more readily handled with the sensor attached, so that was the mode adopted. It reads the total strength of the earth's magnetic field.

The operators were Messrs Keith D'Angelo, Field Supervisor for Pacific Northwest Geo Tech Ltd., and Brian Cross, assistant.

The work was carried out between December 15 and December 20, 1981. The grid was established and a total of 628 magnetic observations was made.

A loop of readings was made along the Base Line, going north and then going back south to the base starting point, to determine the diurnal variation, which was negligible, and to set base values at each point of intersection between grid lines and BL. The determination of the base values at those intersections and the later check-in at each such point, as

the readings were taken along each line, showed a minimal diurnal variation, about of the order of the sensitivity of the instrument (5 gammas). It was therefor deemed unnecessary to make diurnal corrections.

The total intensity of the earth's magnetic field at this latitude is about 57,000 gammas. Most of the observations in this survey yielded values slightly higher than that figure, with some quite markedly stronger. Only one, 25m north of Line 16+00N, on the BL is lower, at 56,300. It is where the highway crosses the Base Line and is therefor believed to be influenced by that installation.

The 57,000 gamma value was chosen as base value, or "background" to use geochemical terminology, and the readings entered on the map, Fig. 3, are the gamma values in excess of the 57,000 figure. For some of the very high readings, the entry on the map shows the full value, e.g. 58,431, to emphasize the fact that it is over 1,000 gammas.

With the exception of a few readings of high order, the magnetic relief of the larger part of the claim area is relatively weak. It is characterised by contours elongated north-south, with values of the order of 300 to 700 gammas. Since most of the readings are otherwise in the 200 to 300 gamma range, these contours actually represent anomalies of the order of 100 to 500 gammas.

The elongation is strikingly similar to the shape of the anomalies revealed in the geochemical results for copper.

Not invariably, but in many cases the anomalies are coincident or are adjoining, or adjacent and parallel to each other. The long "tail" of copper anomalies, previously mentioned, which extends from the southeast corner of the claim, northerly to the heavy concentration of copper values along Lines 22+00N to 24+00N, is reflected in a similar alignment of magnetic (moderate) highs. The magnetic trend continues to the north end of the claim, to Line 30+00N, five lines beyond the terminus of the geochemical survey. On that northernmost line there are two groups of powerful magnetic highs, of over 58,000 gammas. One is at the NE corner of the claim and the other is from 150 to 225 metres west of the corner. There are no geochemical data available in this vicinity.

The magnetic highs in the north could be of considerable interest, in view of the somewhat similar highs showing at the west ends of Lines 24+00N, 25+00N, 26+00N and 27+00N, close to the BL. These highs are tangent, on the north, to a set of impressive copper anomalies on Line 22+00N, 23+00N and 24+00N, adjacent to the BL. On Line 25+00N there are no copper values of interest near the BL, but they do appear between 200m and 400m east of the BL on that line, immediately north of a small center of increased magnetic values on Line 24+00N.

Copper minerals are non-magnetic, so there must be an association between the copper minerals responsible for the

copper soil anomalies and the minerals responsible for the magnetic anomalies. The usual association would be with pyrrhotite or magnetite. Either or both could be associated with the probable copper mineral, chalcopyrite, in the mineralising solutions which presumably emanated from the intrusive stock lying off the south end of the Moly claim. This is particularly evident in the linear geochemical and magnetic anomalies extending north along and close to, the east claim boundary. The mineralising solutions from the intrusive, carrying both types of minerals, apparently followed northerly channels, possibly fractures, faults or shears, or possibly bedding contacts or foliations, for some distance before spreading out more widely into the host rock.

The association of copper with magnetic minerals is not invariable, one can also occur without the other. In this area, however, the evidence indicates that, where magnetic minerals are indicated, either by visual recognition or by magnetometer measurements, it is advisable to institute a search for copper-bearing mineralisation. For example, in the area between Lines 25+00N and 30+00N and extending north from the latter.

The strong magnetic anomalies at the west ends of Lines 24+00N to 27+00N differ from those on Line 30+00N, in the association of strong low readings with the high ones. This is a "dipole" effect, resulting from a magnetic body close to the surface with such short, vertical extent that the lines of force emanating from the lower pole and directed to the

pole at the surface, are so concentrated as to be able to reduce appreciably, the downward-directed lines of force of the earth's magnetic field. The indication is, of a near-surface magnetic body of short vertical extent; a "pocket" of magnetite or pyrrhotite. A high without a dipole low, would indicate a magnetic body of considerable vertical extent. The anomalies at the north boundary do not, so far, show as dipoles, but the readings are not extensive enough to form an opinion. There is no evidence, thus far, as to whether or not the distinction would be of any importance from the point of view of copper mineralisation.

The isolated high reading on Line 15+00N, at 0+75E, is where the highway was observed to cross that line; it is presumably due to a local disturbance associated with that structure.

The interpretation of the magnetic results was considerably facilitated by reviewing the geochemical data. The two sets of data indicate that there is here a zone of contact metasomatism and hydrothermal mineralisation, adjacent to a diorite stock. This stock lies across the southeast corner of the Moly claim and occupies a large area south of the claim. Feeders of mineralising solutions carried copper minerals and also magnetic minerals, northwards from the source and, some 700m to the north of the stock, these mineralising solutions spread east and west into the invaded sericitic and chloritic quartz schists of the Cache Creek formation. As far as these

studies go, the area of mineralisation is still open to the north and east and possibly the south.

The indications for the occurrence of exploitable deposits of copper and molybdenum, and possibly some silver, in this area are very good. Further work is warranted, and should take the form of continued geochemical analyses to the north, followed by an electrical survey of the eastern portion of the claim, to determine the areas of sulphide concentration. The evaluation then of all the results, geochemical, magnetic and electrical, should develop good targets for a drilling campaign to determine the potential value of the deposits.

WORK PROGRAM AND COSTS

Between December 15 and 20, 1981, Messrs. Keith D'Angelo and Brian Cross, of Pacific Northwest Geo Tech, Ltd. laid out a grid of 14.2km of line on the eastern portion of the Moly claim, measuring 1,500m N-S by 700m E-W. They took observations over a total length of 15.7km, the extra lineage being for a loop of readings to establish base values for measuring diurnal variation. The latter was negligible. The number of readings taken on the total strength of the earth's magnetic field, was 628. The costs were as follows.

Laying out and flagging the grid on the east portion of the Moly claim.....	\$1,570.00
Taking 628 magnetometer readings on the above grid.....	\$ 549.50
	<u>\$2,119.50</u>

The above sum was claimed in the filing assessment work on Feb. 10, 1982, by G. D'Angelo of Pacific Northwest Geotech

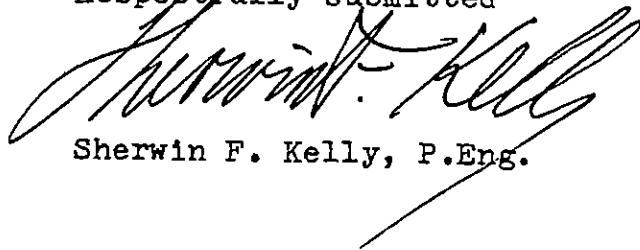
Ltd., for Rea Petro, in the office of the Gold Commissioner for the Kamloops Mining Division. A photocopy of the invoice to Rea Petro from Pacific Northwest Geotech, of December 28, 1981, is bound in back of the text.

Of the above sum, only one year's assessment work was claimed on each of the 9 units of the Moly claim, the balance being left as a credit for future use.

To the latter, must now be added the cost of this report, which was not included in the sum of \$2,119.50, but was noted to follow later.

Cost of this report, including transcribing, plotting, drafting and printing.....	\$ 715.00
Total for field work, noted above.....	<u>\$2,119.50</u>
Total cost of assessment work.....	\$2,834.50
Claimed.....	900.00
Balance, as credit.....	<u>\$1,934.50</u>

Respectfully submitted



Sherwin F. Kelly, P.Eng.

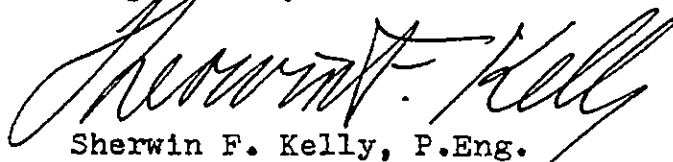
Box 277
Merritt, B.C.
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May 21, 1982

CERTIFICATE OF QUALIFICATIONS

I, Sherwin F. Kelly, P. Eng., residing in Merritt, B.C., certify that:-

- (1) I am a registered Professional Engineer in the Province of British Columbia.
- (2) I received the degree of Bachelor of Science in Mining Engineering from the University of Kansas in 1917. I pursued graduate studies in geology and mineralogy at the University of Kansas, University of Toronto, and the Universite de Paris (the Sorbonne) and Ecole des Mines in Paris. I received my instruction in geophysics from Prof. Conrad Schlumberger of the Ecole des Mines.
- (3) I have practised as a geophysicist and geologist in Europe, North Africa, North, Central and South America and the Caribbean, since 1920. My work has principally been as a consultant since 1936.
- (4) I am the author of the accompanying "Report to Rea Petro Corporation on Assessment Work Performed on the Moly Claim Near Ashcroft, B.C., Kamloops Mining Division", dated May 21, 1982.

Respectfully submitted


Sherwin F. Kelly, P.Eng.

P.O. Box 277
Merritt, B.C.
VOK 2B0
May 21, 1982

Pacific Northwest Geo Tech Ltd.
CONTRACT GEOCHEM AND GEOPHYSICAL WORK MINING EXPLORATION

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INVOICE 1981-6 REA PETRO DECEMBER 28th, 1981

MAGNETOMETER SURVEY ON MOLLY MINERAL CLAIM:

A grid was established over the East half of Rea Petros' Molly claim, an area of 700 meters by 1500 meters.

Starting at a point 800 meters east of the legal corner post of the Molly claim with a base line running due North for the entire 1500M of the claim. Mag readings were taken at 25 meter stations along the North-South base line and lines 0+00N to 15+00 N were established at 100 M intervals. Lines were flagged using blue nylon ribbon. Stations at 25 meter intervals were designated by blue and orange ribbon. Stations at 100 meter intervals are identified with Teflon Tyuck Tags, except on the base line where stations are tagged at 50 meter intervals.

Readings were taken at 25 M stations, closing the readings to the base line. To assure proper closure readings were taken at 25 meters along base line going north and repeated on same line going south on the same base line. Readings were also taken along the east boundary of the claim. A total of 628 readings were taken on the East half of the Molly claim.

Invoice Price to include field supplies, vehicle expense and magnetometer rental as well as the crews' living allowance and wages.

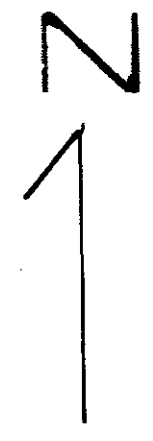
628 readings. 15.7 KM at \$135.00/ KM \$2,119.50

PLEASE PAY THIS AMOUNT \$2,119.50

APPROVED FOR CHARGE BY 
GERALD D'ANGELO,
President and Managing Director

CC: file

PAID
2/3/82
#EX 10



ADD 7

MOLY

Minaberniet Creek

1

MOLY 2

14+00N

11+00N

9+00N

BL 1

BL 800 E
Moly

1+00E

2+00E

3+00E

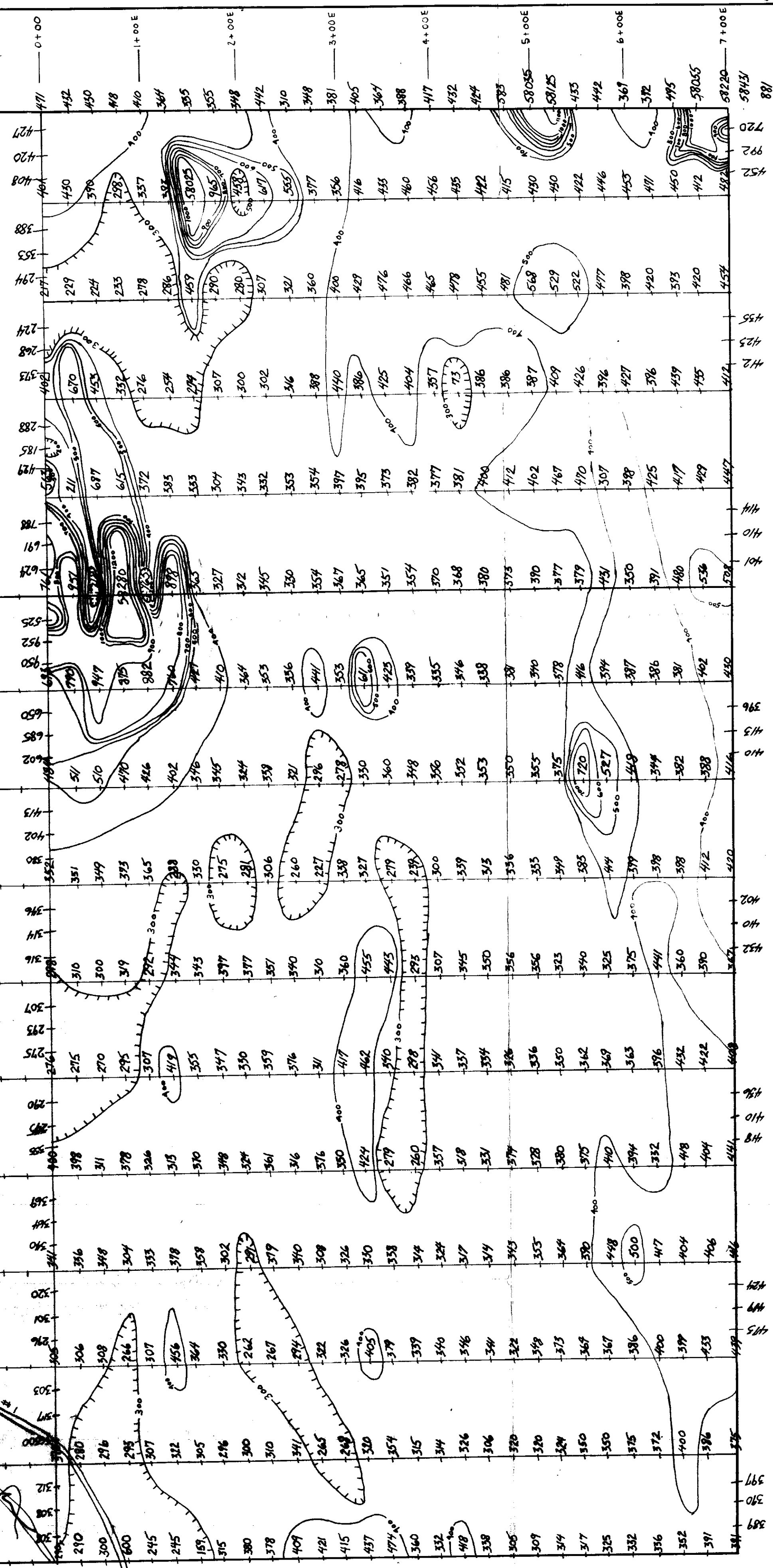
4+00E

5+00E

6+00E

7+00E

(Moly Geodesic Lines 0-10)

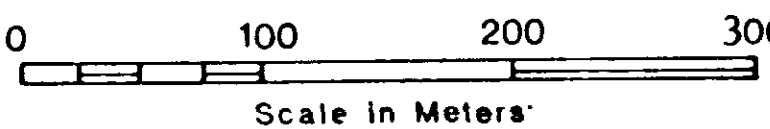


30+00N
27+00N
24+00N
21+00N
18+00N
15+00N

Pacific NW Geotech Ltd

Fig. 3
MAGNETOMETER SURVEY
MOLY CLAIM
REA PETRO CORP
KAMLOOPS B.C.

Background 5700 ± 5 Gammas



Roads
Streams

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

10,459

Data by Pacific NW Geotech Ltd
Drawn by E.King, Contoured by L.Trout
Scale 1:3125
Date: April, 1982
NTS 92 I II
Contour Interval: 100', Gammas
Survey Conducted by K. D'Angelo using E.G.I.G Portable
Unimag Model G-816 completed Dec. 20, 1981.

Pacific Northwest Geotech map
accompanying "Report to Rea Petro
Corp. on Assessment Work on the Moly
Claim" by Sherwin F. Kelly, P. Eng.
dated May 21, 1982.