



52N04SE0003 63.4054 BALMER TWP

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REPORT ON GEOPHYSICAL RESULTS

REDCON - ABINO PROPERTIES

BALMER TWP. RED LAKE AREA

SUMMARY

Geophysical work has located three targets on the Redcon and Abino claims covered by this survey. The targets are believed to contain disseminated sulphides in favourable rocks and favourable structures for gold mineralization.

A minimum of \$10,000.00 is recommended to drill two of the targets and expose the third by stripping.

INTRODUCTION

As a result of self potential reconnaissance in the north-west part of Redcon in the summer of 1972, investigating aerial E.M. anomalies, a line grid was cut in the late winter of 1973. This entailed 3700 feet of base line running N88°W and twenty grid lines north and south at 200' intervals totalling some 54,000 feet. Two earlier reference lines with a combined length of 3300 feet are incorporated in the line grid.

The survey covers Redcon claims 20888 and 20892, plus parts of 20889 and 20893. It also covers Abino claim 1007 and parts of 1004 and 1000. Abino coverage consists of 18,400 feet of grid lines, or 34%.

The Ronka E.M. 16 survey covers the entire 54,000 feet; self potential surveying covered 29,650 feet of grid line plus 3500 feet of base line, and 5,850 feet of magnetometer checks were run.

GEOPHYSICAL RESULTS

The E.M. 16 survey fits well on the aerial intercepts, and indicates a series of parallel, linear conductors, swinging into what appears to be a fold at the western end. The original interpretation of this aerial anomaly #25 as caused by better conducting

"sedimentary" or tuffaceous beds within the volcanic flows appears to be supported by the ground survey. It should be remembered that this anomalous condition is part of a long (at least 3 miles) linear which forms a wide arc to the north over the Abalard, Leemac and Duchesne properties.

The self potential reconnaissance and recent survey, indicates a number of narrow, weak sulphide anomalies in the area of the aerial intercepts in the "south" #25 in Redcon claim 20892, and along the north boundary of Redcon claim 20893, closer to the "north" #25. These are interpreted as narrow, sulphide-bearing, lensey interbeds. There is no evidence of graphitic tuffs. The "south" #25 area appears to be deeply overburdened on the basis of the self potential and E.M. 16 results.

There is very little correlation between the stronger E.M. 16 linears and the self potential, except as noted above. I conclude that the stronger E.M. anomalies are not caused by sulphides or graphite. I understand that the V.H.E.M. check work related well with the E.M. 16, and can only conclude that the V.H.E.M. is, like the E.M. 16, capable of picking up better conducting rock types.

Five distinct self potential anomalies have been discovered, unrelated to the E.M. anomalies. These are referred by letter and will be discussed below. It is worthy to note, however, that the self potential reconnaissance in the summer of 1972 was carried out under much drier conditions than the recent surveying. This year, due to considerable rain, the water table has risen and this has inhibited the potentials, weakening the anomalous effects. It is doubtful, for instance, if anomaly "A" would have been recognized on the basis of this year's survey.

ANOMALY "A": Found by last year's reconnaissance, and detailed closely, this N.N.E. trending zone was stripped last summer to expose weak shearing in the volcanics at the contact of a wide, carbonated, porphyry dyke. The full width of the anomaly could not be exposed, but samples indicated only a trace of gold at the west contact and in the dyke. Sulphides consisted of very sparse fine pyrite. This anomaly had only 1/2 the strength of Anomaly "B".

ANOMALY "B": Found by last year's reconnaissance, and detailed closely, this N.N.E. trending zone lies just north of the small anomaly associated with the old C.M. & S. trenches, in which gold was reported. "B" now appears to be the "tail" of anomaly "C". The "peak" of the anomaly indicates fairly deep overburden. Magnetic effects are associated, suggesting some

disseminated pyrrhotite may be present. This anomaly has only $\frac{1}{2}$ the strength of Anomaly "C".

ANOMALY "C": Also found last year, and detailed to one peak for a few hundred feet, this east-west trending anomaly has a strike length of about 800 feet, at least. It is close to surface and could be exposed across strike by a gang of men with a case of dynamite (which is out of the question these days) or by bull-dozer.

One check magnetometer line shows excellent magnetic correlation, suggesting the disseminated sulphides causing the anomaly include pyrrhotite.

Structurally, the anomaly lies in the same band of resistant volcanics - amygdaloidal, pillowed andesite or basalt, with carbonate alteration - as anomalies "A" and "B", and appears to be linked to "B" giving an over-all strike length of 1900 feet. "C" closes off at the west end where the formations appear to swing in strike to the north-west as indicated by the filtered E.M. 16 contours.

This anomaly is the biggest, and possibly, the most interesting yet discovered in the surveyed area.

ANOMALY "D": Is indicated at the south end of line 0 + 00, and has not been followed up, as yet. It's location puts it on strike with and 2000 feet from the "Core Shack" anomaly to the south-east. At the moment, no conclusions can be reached, but the anomalous values do not relate closely with the E.M. suggesting that it is not caused by heavy sulphides.

ANOMALY "E": Is off the property, in Bateman Township, and was found by continuing through the bush beyond the cut lines 20W and 22W. An E.M. 16 anomaly lies to the south but there appears to be no correlation. At the moment, no conclusions can be reached, but there is a N.N.W. trending magnetic shown on the O.D.M. map of Bateman Township at this location.

One interesting feature arising from the self potential surveying is the broadening negative (anomalous) values to the west even in the widespread wet swamps. This appears to be related to the folding which, although the picture is not clear enough to establish fully, probably has a north-west, south-east axis. The increasing negative back-ground suggests either widespread disseminations of sulphides, or widespread "tonches" of graphite in the fold area. However, no distinct anomaly has been found related to the suspected fold.

High positive magnetics over a narrow width were found on Line 2E, 200 feet north of the base line and high negative readings on Line 4E, 400 feet north. At first, the strike of these two magnetics suggested a narrow diabase dyke, but the readings on Line 0, at 250 feet north suggest a normal strike. There is a possibility that the porphyry dyke in Anomaly "A" is associated with a fault and the magnetics are due to a faulted narrow iron formation. Certainly, magnetite is the cause of the high readings.

CONCLUSIONS

The geophysical surveying indicates no heavy sulphides in this area, unlike the "Core Shack" anomaly. The #25 aerial anomaly appears to be caused by good conducting formations - probably sedimentary or tuffaceous - with some narrow sulphide lenses.

The self potential anomalies "B" and "C" are believed to be caused by disseminated sulphides, and may be associated with fracturing or veining, or with porphyry dykes intruding the basic lavas. Anomaly "A" is known to contain sparse pyrite and be associated with a large porphyry dyke.

Our experience with the near-by "Core Shack" anomaly and the gold values found in earlier drilling, suggest that the contacts of the porphyry dykes are favourable for gold mineralization.

Anomalies "A" and "B" warrant drill hole investigation. The "C" anomaly, however, is not close to the road. The bush is very thick and a bull-dozer will be necessary to obtain access to this most promising anomaly, which will involve some 2000 feet. If a bull-dozer is obtained it will be possible to strip this anomaly in at least two places - at about 1280 W and around line 16W - and determine if drilling is warranted.

RECOMMENDATIONS

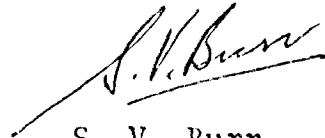
- (1) Bull-doze a road into and along the south side of Anomaly "C", and strip in two places as suggested above.
- (2) Drill across Anomalies "A" and "B" where indicated on the map.
- (3) Drill Anomaly "C", if warranted.

In the event that stripping on Anomaly "C" gives promising results, the Abalard ground to the north should be optioned and Anomaly "E" followed and investigated. Some self potential reconnaissance with possibly limited line cutting should be carried out in Anomaly "D" area.

ESTIMATED COSTS

Road to Anomaly "C" and stripping	-	\$350.00
1000 feet of drilling on "A" and "B"	-	9,000.00
Additional Surveying	-	<u>650.00</u>
		\$10,000.00

Respectfully submitted,



S. V. Burr
Consulting Geologist

SVB:rf

September 14, 1973



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REDCON GOLD MINES LIMITED
BALMER & BATEMAN TOWNSHIPS
RED LAKE
ONTARIO

Work Copy

June 11, 1979



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REDCON GOLD MINES LIMITED
BALMER & BATEMEN TOWNSHIPS
RED LAKE, ONTARIO

INTRODUCTION

The writer was commissioned by the management of Redcon Gold Mines Limited to review the exploration work carried out on a group of mining claims located in Balmer and Bateman Townships, Red Lake, Ontario and the following is an account of the results of this work. Geophysical plans and reports, along with diamond drill hole plans, drill sections and logs were supplied by the Company and the writer visited the property to examine drill core on May 25th and 26th, 1979, with David L. Sannes, a geologist from the Head Office of the Dickenson Group of Companies.

SUMMARY

This report describes the results of exploration work carried out on a group of contiguous mining claims some held outright and some held under option by Redcon Gold Mines Limited and located in Balmer and Bateman Townships, Ontario. The area of interest with respect to this report includes 23 claims covering an area of approximately 900 acres. The property is roughly three miles north of the Dickenson Mines Limited ore zone.

Geophysical surveys including electromagnetic using both the horizontal loop and EM-16, self potential and magnetic work using a proton magnetometer were carried out over some of the claims during the period 1972 to 1977. Several encouraging anomalous zones were indicated by this work, especially by the electromagnetic surveys. The area of the claims is almost entirely covered with fairly deep overburden possibly averaging 30 feet in thickness.

This condition precluded checking any of the anomalous zones from outcrops or even trenching so that the only logical approach to further investigating the geophysical results, was diamond drilling.

A program of diamond drilling got underway in early December 1978 and six holes totalling 2,915 feet of drilling were completed by January 27th, 1979. Holes R78-1 to R78-5 were all drilled to check electromagnetic conductors and in all cases, the conductors were found to be caused by variable amounts of sulphide mineralization consisting mostly of pyrite, minor pyrrhotite and traces of chalcopyrite. Graphite was also frequently noted associated with the pyrite especially where the host rock included beds of argillaceous tuffs. Hole R78-1 was lost in caving at 37 feet but hole R78-1A was drilled from the same set-up to penetrate the same target area.

A strong carbonate zone, white to greenish grey in colour and composed mostly of quartz and ankerite was cut in holes R78-1A, R78-2 and R78-3. Localized small specks of free gold were noted in this zone in holes R78-1A and R78-2 but not in hole R78-3. In the first two holes, the carbonate zone was noted to have a width of approximately 30 feet but numerous narrow veins and stringers of carbonate material on either side of the zone, make the actual limits of the carbonate structure quite arbitrary. Hole R78-3, located on strike and to the west of R78-1A and R78-2 cut rock formations quite similar to the first two holes and the presence of similar carbonate rocks in all three, suggests a strike length of at least 1,500 feet for this gold bearing formation.

On completion of Holes R78-4 and 5, which were drilled to the north and south respectively of the north of west striking carbonate zone, hole R78-6 was drilled vertical from a location between holes R78-1A and R78-2 to further check the gold bearing zone. This hole cut 16 feet of the quartz carbonate material with some localized fine specks of free gold. At this point, the drilling program was stopped while the geological data on hand was assessed.

Diamond drilling was resumed in the early part of April and continued until the 3rd of May when a further four holes were completed, all being drilled in the immediate area of the first two holes. These last four holes, numbered R79-7 to R79-10 inclusive, had a combined footage of 1,439 feet making a total for the ten holes of 4,354 feet.

The four holes cut the quartz-carbonate zone with localized fine specks of free gold similar to holes R78-1A, R78-2 and R78-6. All seven holes were confined to a strike length of 460 feet but the zone is open at both ends and hole R78-3 although it did not return any gold values, did establish the quartz-carbonate formation for a further 1,300 feet to the west.

The gold occurring in the quartz-carbonate material, appears to be mostly fine free gold because when the pulverized sample is screened, the material passing through the screen shows only low gold assays. Extensive sampling was done on the sulphide bearing formations but these zones were found to be non gold bearing as were quartz porphyry dikes or sills encountered in several of the drill holes.

The diamond drilling completed on this claims group to-date, has established the presence of a gold bearing quartz-carbonate zone, about 30 feet in width and extending for at least 1,500 feet in a north of west direction and open at both ends. The zone dips south at approximately 35 degrees. The gold in the seven holes that returned good values, was noted to occur as spotty fine specks and usually associated with secondary quartz.

The zone definitely warrants further investigation and diamond drilling is the most logical approach to explore this structure. The presence of graphite and much barren pyrite associated with some of the formations in the immediate area, precludes using geophysics to locate the better drilling targets along the strike of this quartz-carbonate zone. The writer believes however, that the overburden conditions on the property are sufficiently ideal to recommend the use of soil chemistry with the samples being taken to include the surface humus and gold analysis in parts per billion. This method could locate the parts of the zone that most warrant investigation by diamond drilling. A recommendation is made for 2,500 feet of diamond drilling in a first phase with a second phase of 3,000 feet should additional drilling prove justified following the initial results. The estimated cost of the above recommended work is as follows:

First Phase

Soil sampling including analysis	\$ 3,000.00	
Diamond drilling 2,500 feet @ \$16.00 per foot	40,000.00	
Assaying	2,500.00	
Supervision	<u>5,000.00</u>	\$50,500.00

Second Phase

Diamond drilling 3,000 feet @ \$16.00 per foot	\$48,000.00	
Assaying	2,500.00	
Supervision	<u>5,000.00</u>	<u>\$55,500.00</u>
Total for Phase One and Phase Two		\$106,000.00

PROPERTY, LOCATION AND ACCESS

Redcon Gold Mines Limited owns outright, forty three mining claims located in Balmer Township, Red Lake Area, Ontario. In addition it holds under option, four claims from Abino Gold Mines Limited, seven claims from Mid-North Engineering Services Limited and one claim known as the Beck claim. All the above mentioned claims are contiguous and are located largely in Balmer Township with a small portion of the ground in Batemen Township. The claims are further described as follows:

KRL-20888

20889

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Redcon Gold Mines Limited

KRL-20917	
20918	
20919	
KRL-22233	
22234	
22235	
22236	Redcon Gold Mines Limited
22237	
22238	
22239	
22240	
22241	
22242	
KRL-21550	
KRL-18034	
18035	Abino Gold Mines Limited
18037	
18039	
KRL-20332	
20333	
20334	
20335	Mid-North Engineering Services Limited
20336	
20338	
20339	
KRL-47858	Beck Claim Lease # 100506

All the above mentioned claims are contiguous, with the ground held under option by Redcon Gold Mines Limited located near the northwest corner of the Company's 43-claim block. This report is only concerned with a group of 23 claims which includes all the ground held under option by Redcon and 11 claims owned outright by the Company.

The property is readily accessible by automobile or truck as it is only about three miles north of Balmertown.

TOPOGRAPHY

The topography of the 23 claims discussed herein consist of low flat ground with little or no outcrop and covered by a dense growth of small second growth timber. There are no bodies of water

or streams on the property, but East Bay, a part of Red Lake is located about one mile to the west. The overburden is indicated by diamond drill hole records to be about 30 feet deep on the average and consists of boulders and gravel at the bottom with a layer of clay and sandy clay loam at surface.

GENERAL GEOLOGY

The general geology of the Red Lake Area is shown on Maps 49a and 49b, the Red Lake Sheets, West Half and East Half respectively. These two sheets were published by the Province of Ontario Department of Mines in 1940 on the scale of one inch to 1/2 mile and accompany Volume XLIX, Part II, Geology and Mineral Deposits of the Red Lake Area.

The Red Lake Area has been one of the main gold producing areas of Canada for the past 35 years. There was some interest in the region during the latter part of the 1920's but it was not until the increase in the price of gold in 1933-34 that the area received serious attention. Since that date, several substantial producers have been developed and numerous other encouraging prospects have been indicated.

The greenstone belt with which the gold deposits of the Red Lake Area are associated, forms a mass about 25 miles long and 15 miles wide at its widest point. The greenstone formations, which include both acid and basic type volcanics and sedimentary rocks of Keewatin age, are bounded on all sides by Algoman type granitic intrusives. Both dikes and sills of various intrusive rock types have been noted cutting the older Keewatin greenstones.

GEOLOGY OF PROPERTY

The area of the claims group discussed in this report is shown on Map No. 49b, Red Lake Area (East Half), to be underlain by Keewatin type greenstones. This sheet does not show any outcrop on the property.

The diamond drill core from the drilling completed on the ground, shows the underlying formations to consist largely of basic volcanics, mostly andesitic but with some basalt and dacite phases and to include both flows and fragmentals. There is a considerable amount of rock of sedimentary origin and these include water-lain tuffs which frequently contain considerable argillaceous material. The regional strike is 20 to 30 degrees north of west and the dip 35 degrees south. Quartz porphyry sills and dikes, varying from a few inches up to fifty feet or more in width and sometimes showing chilled contacts are quite common. Massive medium coarse green pyroxenite, mostly quite fresh looking, probably represents altered coarse andesitic flows or diorite intrusives.

Sulphide mineralization consisting of pyrite with minor pyrrhotite and traces of chalcopyrite is frequently associated with beds of argillaceous basic tuffs and forms what could be termed a bedded iron formation. Graphite is often present along with disseminated magnetite. A band about 150 feet wide was encountered in diamond drill hole R78-5 which band included much massive pyrite. Disseminated pyrite, mostly very fine and in some cases making up 3 to 5 percent of the rock, was noted in some of the other formations such as volcanic breccias and the quartz porphyries.

An important geological feature on this claims group, is a quartz-carbonate zone, indicated to extend for at least 1,500 feet and conform in strike with the enclosing formations. It consists of a massive vein 15 to 20 feet wide with numerous parallel veins and stringers from an inch or less in width up to several feet. The entire system forms a zone roughly fifty feet in width but with the actual limits difficult to establish.

This quartz-carbonate rock is made up largely of white to greenish grey coloured ankerite, well silicified and carrying numerous small stringers and veinlets of blue coloured quartz. Only minor scattered pyrite was noted in the quartz-carbonate material. In places the rock is quite green coloured and very similar to the green carbonates of the Kirkland Lake region. It is a typical chrome green and probably results from very minor amounts of chromium impurities in the ankerite.

An important economic feature of this quartz-carbonate zone, is the presence of some fine free gold. This gold, as noted todate, is extremely localized but was encountered in seven of eight holes that penetrated the zone. Most of the gold in the quartz-carbonate rock appears to be in a free coarse state as it can be removed from the assay sample by passing the pulverized rock through a 100-mesh screen. This results in assays up to two or three ounces per ton before screening but only from traces up to about 0.20 ounces per ton after screening and rejecting the material caught on the screen.

EXPLORATION WORK

The lack of rock exposures has precluded carrying out surface geological work on this property, however there has been

considerable geophysical work completed on the ground. The claims group was included in an area covered by an airborne input survey carried out by Questor Surveys Limited in 1972. That work showed a series of conductors extending along a north of west line of strike through the central part of the current group of 23 claims. An east-west conductor was also indicated in the central part of claim 20892 owned outright by Redcon Gold Mines Limited.

Following the aerial survey work, north-south picket lines were cut at 200 foot intervals to provide control for ground geophysical surveys in the central part of the present 23-claim group. Approximately 15 miles of lines were cut and chained. A variety of geophysical surveys were carried out and included a limited amount of Self Potential work, Electromagnetic surveys using the horizontal loop and on frequencies of both 600 and 2400 c.p.s., Electromagnetic using an EM-16 instrument and magnetic work using a Proton Magnetometer.

Some good conductivity was indicated by both Electromagnetic methods which conductors confirmed the aerial survey results. Anomalies indicated by the Proton Magnetometer work also showed good correlation with airborne and Electromagnetic results. The Proton Magnetometer correlation with the aerial anomaly in claim 20892 was much better than either of the ground Electromagnetic methods over that anomaly. The results of the Self Potential work were not as conclusive as those from the electromagnetic and magnetometer surveys.

A program of diamond drilling was undertaken by Redcon Gold Mines Limited in early December 1978 and was directed to testing

the conducting zone and magnetic anomalies in the central parts of Abino claim 18035 and Redcon claims 20888 and 20892. These were the best anomalies indicated by the geophysical work. Six holes were completed by January 27, 1979 when the program was halted to provide time to study the drill results. Of the six holes completed, two were drilled to check the conductor in the central part of claim 20888, one to check the conductor in claim 20892 and two in claim 18035. One of the holes in 18035 was drilled to check the conductor in the central part of the claim and on strike with the zone in the central part of 20888 and the other was drilled to check an EM-16 anomaly on the south boundary of claim 20332 and 20336 which adjoin 18035 on the north. The sixth hole number R78-6, was drilled vertical in the area of the anomaly in the central part of claim 20888 to further check a quartz-carbonate zone cut in the first two holes.

The five holes drilled to test the geophysical anomalies, all cut sulphide mineralization consisting mostly of pyrite with some pyrrhotite and frequently some associated graphite and magnetite. The presence of these minerals accounted for the anomalies indicated by the geophysical work. No gold values or other minerals of economic importance were found to be associated with the sulphide mineralization.

The first three holes drilled to pass through the conducting zones, all intersected a zone of quartz-carbonate rock on the foot-wall side of the sulphide mineralization. It was noted that this quartz-carbonate sometimes carried fine free gold in holes R78-1A and R78-2 but none was noted in hole R78-3 located about 1,300 feet

to the west and on strike. After testing the strongest anomalies, it was decided to drill a vertical hole between holes R78-1A and R78-2 to further check the gold bearing quartz-carbonate. This last hole, R78-6 also encountered gold in the quartz-carbonate vein system which proved the gold bearing structure for a length of 150 feet, open at both ends and also to be indicated by hole R78-3 to extend for a further 1,300 feet to the west.

The drilling was stopped on the completion of hole R78-6 but resumed early in April 1979 when four additional holes were drilled to check the quartz-carbonate zone. All holes were drilled north at -50 degrees on 115 foot centers with the first or hole R79-7 drilled from the same set-up as R78-6. These four holes, numbered R79- 7, R79-8, R79-9 and R79-10, all cut the quartz-carbonate zone with gold values reported in all four holes. The drilling program was stopped on May 3rd and the work todate has traced the gold bearing zone for a strike length of 460 feet. Gold values are unofficially reported in diamond drilling that was carried out on the Redcon Gold Mines Limited claims several years ago in an area about 2,500 feet to the east but the records from that drilling were not available to the writer.

CONCLUSIONS AND RECOMMENDATIONS

The strong conducting zones indicated on this claims group by the geophysical work, undoubtedly resulted largely from the presence of sulphide mineralization. No economic values have been noted associated with these sulphides, but the drilling to check the anomalies resulted in the discovery of what appears to be a fairly large gold bearing quartz-carbonate structure on the

property. To date, seven diamond drill holes located along a strike length of 460 feet have returned gold values from this zone. The gold appears to occur largely as fine specks in small localized patches in the part of the quartz-carbonate structure tested but this in turn might be a localized condition. The significant factor at this point, is that the quartz-carbonate zone could be quite extensive and it has been proven to be gold bearing.

It is the opinion of the writer that much more diamond drilling is warranted on this property. Because of the presence of pyrite, pyrrhotite and graphite in the immediate vicinity of the quartz-carbonate vein structure, geophysical work can be ruled out as an aid to locating the most favourable drill sites along the strike of the zone. The type and depth of overburden in the area however are sufficiently ideal to warrant the use of soil chemistry as a means of detecting the most favourable parts of the structure to test by diamond drilling. The existing picket lines at 200-foot intervals could be used and samples of the top soil or humus should be taken at fifty foot intervals and the gold values reported in parts per billion. Some of the samples should also be checked for arsenic. A recommendation is made for 2,500 feet of diamond drilling, with a second phase of 3,000 feet if considered warranted. The estimated cost of the above work is as follows:

FIRST PHASE

soil sampling including analysis	\$ 3,000.00	
Diamond drilling 2,500 feet @ \$16.00 per foot	40,000.00	
Assaying	2,500.00	
Supervision	<u>5,000.00</u>	\$50,500.00

(14)

Second Phase

Diamond drilling 3,000 feet @ \$16.00 per foot	\$48,000.00	
Assaying	2,500.00	
Supervision	<u>5,000.00</u>	<u>\$55,500.00</u>

The total estimated cost for Phase One and Phase Two \$106,000.00

Respectfully submitted,

James D. McCannell, P.Eng.,
Consulting Geologist

Toronto, Ontario
June 11, 1979

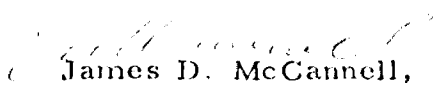


CERTIFICATE

I, James D. McCannell of the City of Toronto, Ontario,
do hereby declare:

1. That I am a Consulting Geologist and reside at 565 Avenue Road, Toronto, Ontario.
2. That I am a graduate geologist, having graduated from the University of Western Ontario in 1943 and have been practicing my profession as a geologist 34 years.
3. That I have no interest either directly or indirectly nor do I expect to receive any interest either directly or indirectly in the properties discussed in this report.
4. That I have no interest either directly or indirectly nor do I expect to receive any interest either directly or indirectly in the securities of Redcon Gold Mines Limited or any affiliate thereof.
5. That the information contained in the foregoing report is based on published reports and maps as well as on information in the Company's files and my visit to the property on May 23 and 24, 1979.

Dated at Toronto, Ontario this 11th day of June, 1979.


James D. McCannell,
Consulting Geologist

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REDCON GOL.



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Summary of Drill Results

To December, 1979

Hole No.	NOTABLE ASSAYS			oz. Au/ton	CARBONATE ZONE	
	Interval	Feet			Interval	Feet
R 78-1	25.5 - 27.0 357.0 - 361.0	1.5 4.0		0.33 0.45		
R 78-2	640.5 - 641.0	0.5	G	0.23	675.5 - 688.0	12.5
78 R 78 -3	None				358.9 - 408.0 (50% carbonate)	49.1
78 R 78 -4	None				None	
78 R 78 -5	None				None	
R 78-6	271.0 - 271.5	0.5	G	1.07	269.0 - 284.7	15.7
R 79-7	148.5 - 149.0	0.5	G	2.08	140.5 - 150.2	25.8
	149.0 - 149.5	0.5	G	0.21		
	158.5 - 159.0	0.5	G	0.37		
	159.0 - 159.5	0.5		0.83		
*R 79-8	32.0 - 33.0	1.0		0.14	119.7 - 148.0	28.3
	136.7 - 137.7	1.0		0.12		
	143.7 - 144.7	1.0		0.02		
	144.7 - 145.7	1.0		0.04		
	149.1 - 149.9	0.8		0.21		
	150.4 - 150.9	0.5	G	0.07		
	155.5 - 156.1	0.6	G	0.21		
*R 79-9	109.9 - 110.9	1.0		0.22	95.9 - 123.5	27.6
	120.6 - 121.2	0.6	G	0.04		
	121.1 - 122.6	1.4		0.16		
	127.5 - 127.9	0.4		0.30		
	127.9 - 128.9	1.0		0.04		
	148.0 - 148.9	0.9	G	0.22		
	158.7 - 159.3	0.6		0.41		
*R 79-10	155.2 - 156.2	1.0		0.17	84.3 - 104.9	20.6
	156.2 - 157.0	0.8		0.05		

4 copies:

1 - work copy - Jan 8/80
1 - HIM - Jan 8/80
1 - DIS - Jan 17/80

Hole No.	NOTABLE ASSAYS			oz. Au/ton	CARBONATE ZONE	
	Interval	Feet			Interval	Feet
R 79-11	188.0 - 189.0	1.0		0.04	189 - 214.5 also: 258 - 289 (25% carbonate)	25.5 31.0
	189.0 - 189.5	0.5		0.10		
	189.5 - 190.0	0.5	G	0.02		
	194.0 - 195.0	1.0		0.14		
	195.0 - 197.0	2.0		0.03		
	212.0 - 213.0	1.0		0.10		
	214.5 - 216.5	2.0		0.04		
	258.0 - 260.5	2.5		0.02		
	260.5 - 263.0	2.5		0.06		
	270.5 - 271.0	0.5		0.02		
	271.0 - 271.5	0.5	G	0.26		
	271.5 - 272.0	0.5		0.04		
	274.0 - 276.0	2.0		0.38		
R 79-12	117.5 - 119.5	2.0		0.02	131.5 - 232 (15% carbonate)	100.5
	119.5 - 121.5	2.0		0.06		
	177.0 - 179.0	2.0		0.10		
R 79-13	187.5 - 188.5	1.0		0.04	229.9 - 251.6	21.7
	234.0 - 234.5	0.5	G	0.04		
	251.0 - 251.7	0.7	G	0.26		
R 79-14	None				278.8 - 293.7	14.9
R 79-15	302.5 - 303.0	0.5	G	0.07	302.0 - 308.2	6.2
	303.0 - 303.5	0.5	G	1.14		
	303.5 - 304.0	0.5	G	0.38		
R 79-16	None				235.5 - 242.8	7.3
R 79-17	20.5 - 21.0	0.5	G Δ	0.67	113.8 - 123.6	9.8
	115.0 - 115.5	0.5	G	0.16		
R 79-18	47.7 - 52.7	5.0	G Δ	0.73	74.0 - 122.1	48.2
	57.0 - 58.0	1.0	G Δ	0.99		
	63.2 - 64.4	1.2	G Δ	0.42		
	73.8 - 74.2	0.4	G	0.14		
	78.7 - 80.0	1.3	G	0.23		
	114.2 - 115.2	1.0	G	0.49		
	124.0 - 124.8	0.8	G	0.30		
	127.1 - 127.6	0.5	G	0.46		
	137.5 - 138.0	0.5	G	0.12		
	142.0 - 142.4	0.4	G	0.34		
	145.2 - 146.2	1.0		0.12		
R 79-19	None				111.5 - 183.5	72.0
					and 199.3 - 205.4	6.1

Hole No.	NOTABLE ASSAYS			CARBONATE ZONE	
	Interval (ft)	Feet	oz. Au/ton	Interval	Feet
R 79-20	None			110.4 - 164.0 and 302.0 - 332.5	53.6 30.3
R 79-21	63.7 - 64.3 85.0 - 86.0 168.5 - 169.5 176.5 - 178.0	0.6 1.0 1.0 1.5	G Δ 0.79 0.04 G 0.87 0.04	183.0 - 189.0	6.0
			$\frac{0.10158}{9.5}$		
R 79-22	146.0 - 147.0	1.0	G 0.02	22.8 - 43.0 and 63.0 - 101.0	20.2 38.0
R 79-23	47.0 - 47.5 47.5 - 48.9 65.8 - 67.7 77.5 - 78.5	0.5 1.4 1.9 1.0	G? 0.08 G Δ 5.10 G Δ 0.53 0.06	None	
			$\frac{0.26244}{31.5}$		
R 79-24	89.0 - 89.5	0.5	G 0.02	None	
R 79-25	42.5 - 44.5	2.0	G 0.13	9.0 - 16.0	7.0
R 79-26	43.0 - 45.5 88.3 - 89.3	2.5 1.0	G 0.12 0.04	8.0 - 25.0	17.0
R 79-27	41.5 - 42.8 46.2 - 47.2 55.3 - 56.3 92.8 - 93.3 95.0 - 95.5	1.3 1.0 1.0 0.5 0.5	Δ 0.06 G Δ 0.33 G 0.26 Δ 0.06 Δ 0.06	133.3 - 144	10.74
			0.05/14.8 ft.		
R 79-28	96.0 - 98.5 154.6 - 155.1	2.5 0.5	G Δ 1.07 G 0.06	135.0 - 153.0 (35% carbonate)	18.0

* Assays are averages from two sets of assays from two different laboratories.

G Occurrence of visible gold.

▲ Pyrrhotite mineralized wallrock (shears & veins)

Pyrrhotite mineralized wallrock (shears & veins)						(metres)	(metres)
	(m)	(m)		oz. Au/t			
R 80-29	29.3 - 29.4 79.7 - 79.9	0.1 0.2 (0.66')	G G	Tr 0.02		69.91-83.30 (29.21-27.11)	(except 2.0m) 13.39 (43.9ft)
R 80-30	28.4- 29.3	0.9 (2.95')	G	0.88		25.11- 31.26 (83.33- 103.49) 33.35- 34.31 (69.02- 112.49)	6.15+1.06 (= 23.6 ft)
R 80-31	40.5 - 41.0	0.5 (1.64')	G	0.20		37.45- 45.52 (122.79-149.25)	8.07 (26.5 ft)
R 80-32	NONE					76.92- 82.95 (252.20- 271.97) 88.73- 92.20 (290.92- 302.30)	6.03 (19.8) 3.47 (11.4) 3.2
R 80-33	46.7 - 46.9 47.3 - 47.5 48.9 - 49.1	0.2 (0.66') 0.2 (0.66') 0.2 (0.66')	G G G	0.11 0.14 0.80	} $\frac{0.08\%}{2.4m}$ (7.87 ft)	37.65- 49.23 (123.44 - 161.41)	11.58 (38.0')
R 80-34	4.97- 4.2	0.23 (0.75')		0.06		(picic like)	46.67- 49.80 (158.02 - 163.29)
R 80-35	159.2 - 159.7 172.0 - 172.7 173.3 - 174.2 178.8 - 179.5 192.5 - 192.8	0.5 (1.64') 0.7 (2.30') 0.9 (2.95') 0.7 (2.30') 0.3 (0.98')	G G G G G	0.51 0.20 0.11 0.21 0.72	} $\frac{0.131}{2.2m}$ (7.2')	158.89- 179.72 (511.45- 589.63)	23.83 (78.2')
						} $\frac{0.0611}{7.8m}$ (24.61')	191.90- 199.47 (629.59- 654.43)

Notable Assays

hole #	Interval	(m) length		Au oz/t
80-36	29.2 - 29.4	0.2 (0.66')	G	2.18
	97.2 - 97.5	0.3 (0.98')	G	0.05
80-37	NONE			
80-38	83.6 - 85.4	1.8 (5.91')		0.07

Quartz veining & aspy in box.

(O₃)

Interval	m	ft.
21.53 - 31.50	3.97	13.02
33.68 - 52.57	18.89	61.96
57.47 - 60.73	3.26	10.70
65.72 - 67.78	2.06	6.76
69.15 - 71.59	2.44	8.01
79.80 - 93.50	13.70	44.95
97.32 - 99.78	2.46	8.07
	46.78	153.47
27.05 - 31.01	3.95	12.96
32.38 - 37.23	4.87	15.98
47.96 - 51.40	3.44	11.29
	10.26	33.66
140.80 - 143.45	2.65	8.69

1 - HIM

- Jan 8/80

LIS

Jan 18/80

R 79-9

		St	Assays		Avg	fix Avg
			1 st fl	2 nd fl		
109.9	110.9	1.0	.13	.30	.22	.22
110.9	111.6	0.7	Nil	.04	.02	.014
111.6	112.2	0.6	Nil	.04	.02	.012
			(Nil & Tr)			
114.1	115.1	1.0	.02	.01	.015	.015
			(Nil & Tr)			
120.6	121.2	0.6	.06	.01	.035	.021
121.2	122.6	1.4	.32	.005	.1625	.2275
			(Nil & Tr)			
127.5	127.9	0.4	.10	.50	.30	.12
127.9	128.9	1.0	—	.04	.04	.04
		19.0				.6695

$$\frac{0.04012}{12.7} = .0031575$$

$$\frac{.0352}{19.0} = .0018526$$

61d cor k-logged.

Red Lion Drill Hole Summary

Min. Summary VLF
& May 1973 & 1978

No.	Overburden ft.	Dip	Depth	Running Total	
1A	22 1/2	-45	37	37	
78- 1	20 1/2	-50	323	420	
2	40	-46	725 1/2	1145 1/2	
3	37	-50 1/2	571 1/2	1737	
4	15 1/2	-50 1/2	337	2074	
5	45 1/2	-50 1/2	427	2501	
6	32	-90	414 1/2	2915 1/2	
7	25 1/2	-50 1/2	533	3418 1/2	533
8	30	-50	303		836
9	12 1/2	-50	303		1139
78- 10	18	-50	300		1439
79- 11	31 1/2	-47	323		323
12	30 1/2	-49 1/2	323		646
13	14 1/2	-48 1/2	393		1039
14	25	-47 1/2	333		1372
15	25	-48 1/2	363		1735
16	7	-49 1/2	293		2028
17	11	-45	201		2229
18	9	-74	203		2432
19	13	-65	313		2745
20	14	-45 1/2	433		3178
21	12	-45 1/2	240		3386
22	8	-61	148		3534
23	12	-34 1/2	92		3626
24	10	-45	125		3751
25	9	-61 1/2	107		3858
26	8	-75	118		3976
27	11	-35 1/2	144		4120
79- 28	5	-70 1/2	176	8650	4296
80- 29	40 1/2	-50	333	8983	333
30	32	-50	273	9206	556
31	34	-50	303	9508	858
32	56	-50	358	9866	1216
33	35	-30	242	10108	1458
34	13	-50	123	10631	1981
35	39	-50 1/2	713	11344	2694
36	90	-50	383	11727	3077
37	45	-50	373	12100	3450
38	38	-50	513	12613	3963

2915 1/2

1439

4296

49431
3963
53394

3963
8562
12525

Predcon

Aug. 8/80



52N04SE0003 63.4054 BALMER TWP

040

Detail geophysics:

Mag readings complete, still to be plotted & interpreted.

Max - Min not yet started - probably next week.

Stripping - Outcrop is washed.

Original gold-bearing quartz vein has been identified. 46 grab samples of quartz assayed approx. 0.35 to 0.53 oz. Au/b. (report not on hand).

Quartz is 4" to 2" wide, striking E-W and dipping 70° to 90° S.

3 or 4 additional gta veins are seen. They run parallel, but are widely spaced. Only one was sampled (Quartz grab = 0.02 oz. Au).

Detail mapping of stripped area to be done immediately; followed by trenching.

Red can

Aug 8/80

(p. 2)

Drilling

29 30 & 31 completed total = 865'
(333')(232')(300')

32 stalled at 48' in boulders
will be reduced from BQ to AQ
and resumed early next week.

33 is spotted 50 m west of 31
and will be drilled before
moving rig to east end in
vicinity of stripping.

Results

29 - best assay 0.02 oz Au / 0.2 m (43.9 ft.)
CO₂ zone = 229.2 - 273.1
30 - assayed 1.32 oz Au over 4.3 ft. (93.1 - 97.4)
CO₂ zone = 82.3 - 102.5 (20.2')
 109.0 - 112.5 (3.5')

includes 6.6 ft. of
rebar (24.7 - 25.3')

It is suspected that the values
are concentrated in a single chlorite
shear at 93.3' and that the lower
samples were contaminated by native gold
which collected on the grinding plates
from the upper sample. This is being
checked at the lab.

31 - not yet logged.
CO₂ reported for 114' - 149' (34 1/2')
No. V. G. seen.

Sept. 8, 1980

Redden York to

Defail Geophysics:

Magnetic and Max-Min surveys results have been plotted on field maps.

Magnetics were contoured -- the pattern is one of small "spotty" dipoles with little obvious correlation from one to another. However, when compared with conductor axes as defined by the max min, there is a general trend of dipoles which relates to the conductors.

Structural Interpretation:

As indicated by these geophysical surveys, and subsequently shown by drilling, there is a (horizontal) sinistral displacement of approx. 250 m (820 ft) in the vicinity of drill hole #20. The faulting apparently trends roughly north-south; the dip of the fault plane is undetermined but is probably quite steep. Vertical component of the offset is not known, but may have significant bearing on the ultimate position of the carbonate zone.

● Stripped Area:

Outcrop exposed by stripping has been mapped at a scale of 1:100. A complex pattern of structural features is shown (shearing, veining, jointing, carbonate attitude).

The gold-bearing quartz veining is apparently the latest event exhibited here and as such, presents the simplest pattern. The veining and a set of related shear trends approx. 300° Az and dip vertically to steeply south. This veining does not seem to penetrate the carbonate at the east side; physical and chemical properties of the carbonate are probably responsible for this and no geo-relationship is inferred. Relative ages of the quartz and the north-south faulting is unknown.

Structural attitudes for many of the features exposed are still to be measured. After this is done a limited amount of trenching is planned.

Additional stripping of the area extending the exposure northward now seems desirable. This would expose a projected lithologic contact which has carried gold values in some of the drill holes. An extension might also be carried far enough to expose the east-west trending main carbonate mass.

Drilling:

Hole # 31: Carbonate zone: 122.8 - 149.2 (26.4 ft.)
 1 grain V.G. at 133.7 averaged 0.200 / 0.5 m (1.64 ft.)

Hole # 32: Drill string was reduced
 from BQ to AQ at 48 ft. and
 bedrock was collared at 56 ft.

Carbonate zone: 272.2 - 272.0 (19.8 ft.)
 & 270.9 - 272.3 11.4
 31.2 ft.

No V.G. noted - assays not yet in.

Hole # 33: (Written most in this series)
 Carbonate zone: 123.4 - 161.4 (38 ft.)
 V.G. at 4 points:

138.9	1 pinpoint
153.3	1 pinpoint
155.5	6 pinpoints
160.5 - 160.8	{ 1 grain 4mm & a 3mm patch of fine dust in gr. & 1 pinpoint.

Assays not yet in.

Hole # 34 - Drilled 50 m cut of #20 on
 east side of cut.

- Cut stratigraphy similar to that
 in hole #2 thereby confirming the
 northward displacement of that section.

- Narrow zones and breccias of carbonate -
 possibly unrelated to that unit traced from
 the west:

153.0 - 163.3 (10.3 ft.)

304.8 - 334.8 25-35% carb in breccia
 (30.0 ft.)

No govt found.

Sept 1980

(4)

Hole # 35 - Now drilling at approx 150 ft.
 - Spotted 550 ft. NE of, and in section with # 34. To cut that section of stratigraphy which has hosted the carbonate zone on the west side of the faulting.

Holes ~~# 36 & 37~~ are spotted 15 m west of # 17, 18 section. They are to be drilled from the same collar at 40° & 60° and should intersect the quartz-gold veining approx 10 m west of the nearest previous intersection.

1980 Drilling Summary:

Hole #	Depth	Running Total
29	333	333
30	223	556
31	302	858
32	358	1216
33	242	1458
34	523	1981

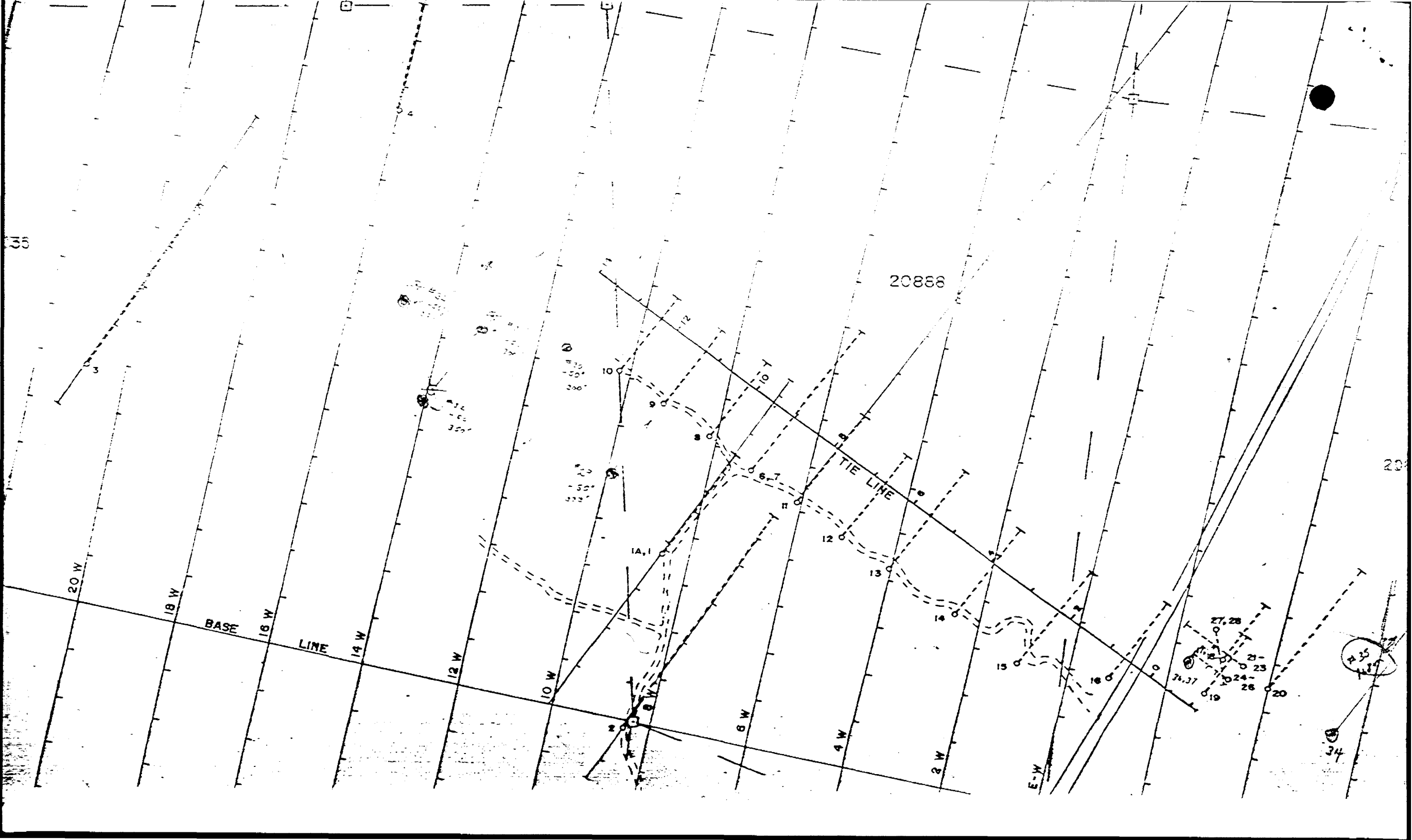
35 will be drilled to approx 550 ft.

36 & 37 will total approx 350 ft.

900
 1981
 2881' drilled & planned.

D. L. Jones

Sept. 8, 1980



EXPLORATION
NTS 52-N-4.

Re-logs



52N04SE0003 63.4054 BALMER TWP

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REDCON GOLD MINES LIMITEDRED LAKE AREA, ONTARIOFILE NOTEFEBRUARY 3, 1981E.S. BARNETT1. SUMMARY

During 1947, 1952, 1953, 1959 and 1972 a total of 76 diamond drill holes were completed on the Redcon property. These provide roughly 4 incomplete NE-SW cross-sections across the property. Thirty of these holes were relogged and partially resampled. The majority of the samples were from carbonate + quartz + chlorite + pyrite + pyrrhotite veins in basalt, similar in appearance to the gold bearing carbonate zone recently discovered in the northeast portion of the property. A total of 290 samples were analyzed for Au. The highest value was 4600 ppb Au (.13 oz/T) from a sample containing carbonate + quartz + sulfide veins in basalt. All other samples contained < 300 ppb Au.

2. INTRODUCTION

During 1947, 1952, 1953, 1959 and 1972 a total of 76 diamond drill holes were completed on the Redcon property. Much of the core from the 1952, 1953 and 1959 programs has survived more or less intact and provide roughly four incomplete NE-SW cross-sections across the property. Almost without exception, core containing visible sulfide mineralization exceeding 1% had been sampled. Recent drilling by Redcon in 1978, 1979 and 1980 has outlined a gold bearing carbonate + quartz + chlorite + pyrite zone in the northwest portion of the property.

The existing old core was relogged and to a limited degree resampled. Sampling was almost exclusively limited to unsplit core, in particular carbonate + quartz + chlorite + sulfide zones resembling those intersected in the recent Redcon drilling. This report deals only with the 30 holes constituting 4 incomplete NE-SW sections. An area of more intense drilling in the southwest corner of the property was re-examined by L.R. Bottomer and will be included in a separate report.

The primary objective of the program was to verify the lithologies as outlined in the old drill logs and to gain first hand knowledge of the geology of the property. In addition it was hoped that a second look at the core might reveal areas of gold mineralization either previously unrecognized or now of interest because of higher gold prices.

3. PROPERTY

The property consists of 43 patented claims, owned outright by Redcon, plus 12 adjoining optioned claims (Plate 2).

Claims numbers are:

Redcon	KRL 20888-919, 22233-242, 21550
Abino G.M. option	KRL 18034-039
Mid-North Engineering	
(Abaland) option	KRL 20332-339
Beck option	KRL 47858

The option of three additional Mid-North Engineering claims (KRL 20337, 21945-946, see Plate 2) is being arranged.

4. OWNERSHIP

Cominco and Dickenson each hold approximately 21% of Redcon Gold Mines Limited, with Dickenson having effective control.

The Abino and Mid-North optioned claims involve companies controlled by the Dickenson Group.

5. LOCATION

Lat. : 51°06'N Long. : 93°42' Elev.: 1200'

Balmer and Bateman Twp., Red Lake Mining Div., Ontario.

The property is 2 miles north of the Campbell and Dickenson Mines, and is crossed by an all-weather road. Red Lake is 100 miles by road from the Trans Canada Highway and 30 miles from the CNR (Griffiths iron mine). Scheduled air service is available from Dryden, Ontario and Winnipeg.

6. GEOLOGY

Most of the property is underlain by medium to dark green, fine grained, massive basalt, consisting essentially of actinolite, saussuritized plagioclase and chlorite. Locally the rocks are variolitic, amygduloidal and only rarely porphyritic. Only rarely are pillow selvages seen. Commonly, though not usually, the rock contains abundant (up to 20%) 1-2mm pinkish garnets. The distribution of the garnets is erratic but in general they are more common in the southern portion of the property. Though usually fine grained and massive, in places the rock is spotted or mottled, possibly due to metamorphism. In places the rocks are medium grained (1mm). Contacts between fine grained and medium grained sections are commonly gradational suggesting the coarser grained sections are parts of thick flows.

The basalts are commonly altered. Alteration consists of pervasive brownish biotite alteration, pale green calcite + sericite stockwork veinlets, carbonatization and silicification. In addition carbonate + quartz + chlorite zones are common. These resemble the carbonate unit being drill tested in the northwest portion of the property. The zones vary from what appear to be distinct veins to zones that appear to be a result of alteration of the country rock. Most carbonate zones are only 10's of centimetres wide and range up to a few metres.

The basalts are typically void of sulfides though in places 1-3% pyrite + pyrrhotite is found as stringers and disseminated. Most mineralization is associated with alteration or contained within veins.

Distinct pyroclastic rocks are uncommon. Those that are present are fine grained, thinly bedded, mafic tuffs which are commonly interbedded with felsic pyroclastic rocks and chemical sediments. In general they are compositionally similar to the basalts except they tend to have somewhat of a brownish tint, possibly due to minor quantities of biotite. Garnets are not preferentially enriched in the tuffs.

Intercalated within the mafic volcanic rocks are several narrow (usually 10m) felsic rock intervals. Thicker units occur in holes 29, 30, 34 and 45. For the most part, felsic volcanic and intrusive rocks are confined to holes in the southern portion and northern most extent of the area. The felsic rocks appear to be predominantly dacitic in composition with more felsic varieties being less common. The rocks typically have a fine grained, light to medium grey to pale green matrix, supporting variable though minor amounts (5%) of subhedral, commonly partially resorbed, feldspar phenocrysts and less frequently quartz phenocrysts. An exception to this is in hole 34. Here the rock contains up to 20% flattened quartz "shards" up to 3mm long

as well as rare, well rounded, pink and white clasts. Narrow chloritic wisps and bands are seen in the felsic rocks in the two most northerly holes (38, 40) and in hole 17. Exceptionally rarely minor sericitic wisps are seen. The felsic rocks typically contain trace or no visible sulfides. When present the sulfides are most frequently contained in cross-cutting quartz + carbonate veins. The contacts between the felsic rocks and surrounding volcanic rocks are knife-edge sharp or gradational over a very few centimetres.

Quartz porphyries are restricted to five holes (17, 19, 47, 56, 57) immediately north of the area containing felsic volcanic and intrusive rocks. Feldspar porphyries are found north and east of this. The quartz porphyries have a grey to greenish grey matrix which appears in places to be sericitic. Quartz phenocrysts typically comprise 5-10% of the rock though they range up to 20%. Most are 2-4mm but range up to 1cm. Grading from large and abundant to few and small from north to south is seen as is outward grading from the centre of unit. Feldspar phenocrysts are rare and if present are typically partially resorbed.

Feldspar porphyries are commonly mottled dark green and grey with partially resorbed feldspar phenocrysts. In places the matrix is pink, yellowish grey or brownish grey. Some of these may represent porphyritic phases of the felsic intrusive rocks described above. Feldspar phenocrysts constitute up to 60% of the rock though more typically 5-10%. Most phenocrysts are 1-2mm and seldom exceed 3mm. Most are subhedral and partially resorbed. Contacts vary from sharp to gradational. Rarely, the contacts are marked by veining and less frequently lit par lit contacts are seen. Quartz phenocrysts are usually absent. Most feldspar porphyries contain no visible sulfides. An exception to this was in hole 53. Here the rock contains 1% disseminated pyrite and trace quantities of arsenopyrite.

Mafic intrusives are essentially restricted to the northern and central areas of the surveyed area, a distribution similar to the feldspar porphyries. Gabbros predominate but diorites are also present. These rocks in the past were for the most part logged as lamprophyres. They are typically fine grained (1mm) to medium grained (1-3mm), mottled green and grey, and consist essentially of mafic crystals set in a plagioclase matrix. In places the rocks are porphyritic. Contacts vary from sharp to gradational. Most are less than a few metres wide. An exception to this is a 43 metre wide intrusive in hole 50. The downhole contact is gradational with basalt and may therefore be a coarse flow.

Ultramafic rocks are present in several holes. Some of these correspond to intervals previously logged as "chicken feed". The rock is commonly mottled pale green - dark green, magnetic and soft. Less frequently it is massive, dark green, hard and non-magnetic. Contacts are frequently gradational with basalts and are most readily distinguished by the change in hardness and magnetism.

Significant quantities of chemical sediments (chert, sulfides) were encountered in only a few holes and were usually found interbedded with pyroclastic material. Bedding varies from 1mm to 10cm. Cherts are usually dark grey or light grey and more rarely pink or green. Pyrite and pyrrhotite locally form massive bands up to about 10cm wide.

7. GEOCHEMISTRY

A total of 290 samples of split core were analyzed for Au by neutron activation at X-Ray Assay Ltd, 1885 Leslie Street, Don Mills, Ontario.

The majority of the samples collected were of carbonate + quartz + chlorite veins in basalt and altered basalt. Results are summarized in the following table.

/...

	<u>Carbonate+</u> <u>Quartz+</u> <u>Chlorite</u> <u>Veins</u>	<u>Altered</u> <u>Basalt</u>	<u>Chemical</u> <u>Sediments,</u> <u>Tuff</u>	<u>Ultramafics</u>	<u>White</u> <u>Quartz</u> <u>Veins</u>	<u>Felsic</u> <u>Intrusives,</u> <u>Feldspar</u> <u>Porphyry</u>
N	198	52	12	14	8	6
Range (ppb)	1-4600	1-66	1-150	1-6	1-280	1-27
\bar{X} (ppb)	34	9	21	1.6	49	8
(1 + 0)						
N-1	197					
Range (ppb)	1-210					
\bar{X} (ppb)	11					16

The only highly anomalous value, 4600 ppb Au (.13 oz/T) was from a 0.7 ft sample of basalt containing 25% carbonate + quartz veining with 3% pyrite + pyrrhotite. All other values were less than .01 oz/T.

8. CONCLUSIONS

In general the old drill logs were good, particularly those from the 1952 and 1953 programs. No significant zones of gold mineralization was overlooked during the original sampling with the possible exception of the 4700 ppb Au (.13 oz/T) obtained from a sample containing carbonate + quartz + sulfides veining in basalt.

Submitted by: E.S. Barnett
 E.S. Barnett
 Geologist
 Exploration, E.D.



52N04SE0003 63.4054 BALMER TWP

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REDCON GOLD MINES LIMITED
BALMER AND BATEMAN TOWNSHIPS PROPERTY
RED LAKE AREA, ONTARIO

FEBRUARY 27, 1981

HARPER CONSULTING SERVICES INC.

REDCON GOLD MINES LIMITED
BALMER AND BATEMAN TOWNSHIPS PROPERTY
RED LAKE AREA, ONTARIO

INTRODUCTION

This Report covers all status changes respecting the Red Lake Gold Property of Redcon Gold Mines Limited that have occurred since my Report dated April 23, 1974. The main changes during this period are the acquisition of more claims and the development of the Carbonate Zone into a prospect requiring a great deal of exploration, development, and evaluation work. The purpose of this Report is to update the exploration history of the property and to recommend a program for further exploration.

This Report is based on the following sources of information.

1. Various maps and reports of the Red Lake Area published by the Ontario Ministry of Natural Resources.
2. An aerial survey of the area completed in 1972 by Questor Surveys Ltd. on behalf of the Dickenson Group of Companies.
3. The Company files which contain all data on many thousands of feet of diamond drilling done on this property during the last 25 years.
4. Discussions with Mr. David L. Sannes, Geologist, Mid-North Engineering Services Ltd. who has been planning and supervising all aspects of the exploration of the Redcon property, including

consultations with geologists of Cominco Ltd., since December of 1978. Mr. Sannes is responsible for the development of the Carbonate Zone to its currently known dimensions.

5. I have been on this property but since it is heavily overburdened, a surface examination is of little practical use. I am familiar with the Red Lake Mining Camp having worked there intermittently during the past 20 years.

PROPERTY AND LOCATION

The Redcon Property consists of 55 patented mining claims located in the Red Lake Mining Division of Ontario.

The claims are numbered as follows.

KRL 18034, 18035, 18037 & 18039;
KRL 20332 to KRL 20336 inclusive;
KRL 20338, 20339;
KRL 20888 to KRL 20919 inclusive;
KRL 21550;
KRL 22233 to KRL 22242 inclusive; and
KRL 47858.

The total area of the property is approximately 2200 acres. The group lies in the northwest quarter of Balmer Township with some of the claims lying in Bateman Township, Red Lake Mining Division, Ontario.

ACCESS AND FACILITIES

Access to the property from the towns of Red Lake and Balmertown is via the new highway which leads north. This highway crosses the western portion of the claim group some three miles from Balmertown.

HISTORY AND DEVELOPMENT

The property has a long intermittent history due to the fact that its general geology is very similar to that of the nearby properties of Campbell Red Lake Mines Ltd. and Dickenson Mines Ltd.

During 1945, Cominco Ltd. drilled a series of X-Ray holes and located gold on claim KRL 20889. Subsequently the Redcon Company was formed and by 1959 some 43 holes totalling 27,370 feet had been drilled. This work outlined a small body of gold mineralization on claim KRL 20900. In 1959 and 1960 Rio Canadian Exploration Ltd. drilled 15 holes totalling 10,910 linear feet. This work was designed to supplement the cross-section drilling started in 1953 and thereby explored the favourable fold structures. The drill work had been preceded by some geophysical work in the form of IP and magnetic surveys.

In the Spring of 1972 Questor Surveys Ltd. carried

out airborne electromagnetic and magnetic surveys over a large part of the Red Lake Area including the Redcon property. Questor defined 4 anomalous areas on the Redcon property warranting follow-up ground work. The airborne survey was followed up with ground surveys including Self-Potential, Ronka EM 15, Ronka EM 16 and magnetometer surveys. During the summer of 1972, 7 holes totalling 2501 linear feet were completed. During the summer of 1973 detailed geophysical surveying was done over some of the airborne anomalies using a McPhar VHEM unit in the horizontal loop configuration.

There have been several significant exploration events affecting the status of the property since my Report of April 23, 1974. These events are listed as follows.

1. 12 patented claims have been added to the northwest corner of the property raising the total number of claims to 55.
2. Some 20,000 feet of core which had been drilled and logged in the 1940's and 1950's was recovered and re-logged by geologists employed by Cominco Ltd. This information has permitted a reinterpretation of the geology of the claims in the light of current geological knowledge of the general area.
3. In 1975 some of the northwest claims were surveyed with a EM 16 electromagnetic unit and a proton magnetometer on lines 200 feet apart. In 1980 all of

the claims were surveyed on lines 100 metres apart using a Max-Min horizontal loop electromagnetic unit with a 100 metre cable and readings every 50 metres. At the same time a proton magnetometer survey was made with readings every 25 metres. Certain anomalous areas were covered in greater line detail by both surveys.

4. A Geochemical survey consisting of the collection of humus soil samples followed by analysis for arsenic and gold was done over 180 of the 2200 acre property.
5. An area some 100 feet square overlying a gold discovery was stripped with a bulldozer, washed clean, and mapped in extreme detail.
6. A four phase drill program of 38 holes totalling 12,613 feet of drilling was completed. To date some 103 holes totalling about 53,482 linear feet have been completed.

The work since 1974 has resulted in the discovery of gold at one new location - claim 20889 some 1200 feet north of the Carbonate Zone. Also, drilling in the vicinity of a previously known gold occurrence has produced many gold bearing intersections which have extended the Carbonate Zone in length and depth. Finally, several new exploration targets have been defined.

GENERAL GEOLOGY

There are very few outcrops on the Redcon property and its general geology was interpreted many years ago on the basis of limited drill core information and geological projections from adjacent properties. Over the years much has been learned about the adjacent properties and much more data have been acquired on the Redcon property itself. Consequently, the geology of the property as it is understood today bears little resemblance to the original interpretation. However, there are still many large gaps in the geological picture of the Redcon property.

Basaltic lava flows are the predominant rock unit on the Redcon property. They are generally dark green in colour, medium grained, and sometimes show various flow structures such as variolites, amygdules, and pillow selvages. Alteration effects include brownish biotite, pale green calcite, sericite, stockwork veinlets, carbonatization and silicification. Sulphides are uncommon. Pyroclastic rocks are limited in volume and extent. They are usually thin bedded mafic tuffs and intercalated chemical sediments such as chert and sulphide. Interbedded with the mafic volcanics are a few horizons of felsic composition, mainly dacites.

Quartz porphyries and felspar porphyries have a restricted occurrence.

Gabbroic and ultramafic rocks occur mostly in the north and central sections of the property as do the quartz and felspar porphyries. Their genesis is uncertain: some may be truly intrusive while others are more likely to be the central portions of very thick flows.

Structurally, the Redcon property is underlain by a single very large fold structure and a number of its subsidiaries. It is not known if the fold is a syncline or an anticline and the overall definition of the structure is quite incomplete. The nose of the fold lies in the southeast section of the property and its axial plane in this area trends slightly north of west. As one moves westward along the axial plane, it gradually curves northward and where it passes out of the property in the northwestern section its trend is mostly to the north east. The axial plane seems to dip southwesterly. The south limb of the fold is better defined than the north limb. The former also dips southerly.

Very few facts are available concerning faulting and shearing. No major shear zone or fault structure, conformable to the axial plane of the major fold structure has been recognized. Several cross-faults, having a strike of slightly east of north, are recognized on the adjoining H.G. Young property. The throw on these cross-faults is east side north and one similar, if not identical, structure has been located on the Redcon property. This cross-fault (whose dip

is unknown) seems to offset the Carbonate Zone at its east end, with the apparent horizontal displacement amounting to about 1000 feet. Other known gold occurrences on the Redcon property may be offset by related fault structures.

ECONOMIC GEOLOGY

There are several exploration targets on the Redcon property and the more important of these are listed below.

1. Carbonate Zone

This is the largest and most attractive exploration target on the property. The zone strikes about N70W and dips southwest at 55 degrees. It is centrally located on claim KRI, 20888 and has a drilled off strike length of about 2200 feet. The zone is open in both directions along strike and down dip. The width of the Carbonate Zone varies widely with extremes of less than 6 feet to about 100 feet of core length. Core lengths approximate true widths. Most intersections show a core length of the order of 20 feet. Occasionally there are two separate carbonate horizons. Of the 35 holes drilled into the Carbonate Zone only 20% were blanks. Except for these holes, all other showed Visible Gold in one core location at least. Most of the holes had multiple showings of Visible Gold and one hole (R79-18) showed 10 separate Visible Gold occurrences.

So far diamond drilling has not established an ore shoot of obvious economic viability. If the Carbonate Zone passes through an area of structural deformation resulting from folding, shearing, or intrusion, an ore shoot might be produced at such a location. Therefore there is ample justification for drill testing the Carbonate Zone for its full, but as yet unknown, length.

The Carbonate Zone may continue along strike to the west on the Redcon property for about an additional 3000 feet. However, during this distance it must either pinch out or swing into a northeast direction to ultimately conform with the strike of the rocks in the East Bay area. This indicates the possibility of a major deformational change which might result in a change in the grade and distribution of the gold content of the Carbonate Zone. The western strike extension certainly warrants exploration to the limit of the Carbonate Zone.

At its eastern end, the Carbonate Zone butts up against a north-south trending cross-fault. The strike and dip of this fault can be defined accurately only by drilling a minimum of three holes and this should be done as soon as practical.

On the east side of the fault the probable extension of the Carbonate Zone has been located offset some 1000 feet to the north. This eastern extremity has been adequately explored by only 2 drill holes, both of which are located on

the same drill section line with one hole overlying the other.
The results of these holes follow.

<u>HOLE NO.</u>	<u>INTERVAL - Ft.</u>	<u>SAMPLE LENGTH Feet</u>	<u>VISIBLE GOLD</u>	<u>OZS. Au/Ton</u>
R80-35	522.2 - 523.8	1.6	G	0.51
	564.2 - 566.5	2.3	G	0.20
	568.4 - 571.4	3.0	G	0.11
	586.5 - 588.8	2.3	G	0.21
	631.4 - 632.4	1.0	G	0.72
R80-36	95.8 - 96.4	0.6	G	2.18
	318.8 - 319.8	1.0	G	0.05

Although the amount of cross-sectional drilling east of the fault is quite limited, the Carbonate Zone in holes 35 and 36 has so many characteristics of the Carbonate Zone west of the fault that there is every reason to believe that they are the same zone. If not, then there must be two Carbonate Zones each of which carries substantial coarse gold mineralization. Much more drilling is required east of holes 35 and 36 as part of the plan to trace the zone eastward. However, this is not a simple task as the area to the east has few outcrops and is suspected of containing many folds and faults.

In order to conform to the general fold pattern, the Carbonate Zone must slowly bend easterly, then north easterly and finally north westerly as it conforms with the nose of the

fold. Assuming that the Carbonate Zone continues, the deformation may have produced a change in gold content and distribution. However, the area under discussion also appears to be cut by several north-south trending cross-faults and, depending on the offsetting along these faults, it may require an abnormally high number of drill holes in order to trace the Carbonate Zone. This effort is warranted.

The drill pattern currently in use in tracing the Carbonate Zone is the only practical way of doing so and this pattern must be maintained when exploring the strike extensions. However, the assay results for this drill pattern may not be the best way of evaluating the gold content of the Carbonate Zone. A few of the actual drill hole results will help to illustrate the argument.

<u>HOLE NO.</u>	<u>INTERVAL - Ft.</u>	<u>SAMPLE LENGTH Feet</u>	<u>VISIBLE GOLD</u>	<u>OZS. Au/Ton</u>
R79-8	32.0 - 33.0	1.0	-	0.14
	136.7 - 137.7	1.0	-	0.12
	143.7 - 144.7	1.0	-	0.02
	144.7 - 145.7	1.0	-	0.04
	149.1 - 149.9	0.8	-	0.21
	150.4 - 150.9	0.5	G	0.07
	155.5 - 156.1	0.6	G	0.21

HOLE NO.	INTERVAL - Ft.	SAMPLE LENGTH Feet	VISIBLE GOLD	OZS. Au/Ton
R79-11	188.0 - 189.0	1.0	-	0.04
	189.0 - 189.5	0.5	-	0.10
	189.5 - 190.0	0.5	G	0.02

	194.0 - 195.0	1.0	-	0.14
	195.0 - 197.0	2.0	-	0.03

	212.0 - 213.0	1.0	-	0.10

	214.5 - 216.5	2.0	-	0.04

	258.0 - 260.5	2.5	-	0.02
	260.5 - 263.0	2.5	-	0.06

	270.5 - 271.0	0.5	-	0.02
R79-13	271.0 - 271.5	0.5	G	0.26
	271.5 - 272.0	0.5	-	0.04

	274.0 - 276.0	2.0		0.38

R79-15	187.5 - 188.5	1.0	-	0.04

	234.0 - 234.5	0.5	G	0.04
R79-18	-----			
	251.0 - 251.7	0.7	G	0.26

	302.5 - 303.0	0.5	G	0.07
R79-13	303.0 - 303.5	0.5	G	1.14
	303.5 - 304.0	0.5	G	0.38

R79-18	47.7 - 52.7	5.0	G	0.73

	57.0 - 58.0	1.0	G	0.99

R79-18	63.2 - 64.4	1.2	G	0.42

	73.8 - 74.2	0.4	G	0.14

HOLE NO.	INTERVAL - Ft.	SAMPLE LENGTH Feet	VISIBLE GOLD	OZS. Au/Ton
R79-18 (cont'd)	78.7 - 80.0	1.3		0.23
	114.2 - 115.2	1.0	G	0.49
	124.0 - 124.8	0.8	G	0.30
	127.1 - 127.6	0.5	G	0.46
	137.5 - 138.0	0.5	G	0.12
	142.0 - 142.4	0.4	G	0.34
	145.2 - 146.2	1.0	-	0.12
R80-30	93.2 - 96.1	2.9	G	0.49

The above holes are spread intermittently over a 1500 foot strike length of the Carbonate Zone. All visible gold sections were subjected to screen analysis and metallics were assayed separately. The unreported rock between the gold bearing sections was assayed and returned nil and trace values. From an examination of the above drill results one may be assured that averaging the assay results over the full width of the Carbonate Zone can produce some remarkable results of questionable reliability and of highly questionable reproducibility. To correlate from drill section to drill section is impossible.

Here is another insight into the erratic nature of the gold distribution in the Carbonate Zone. Eight drill hole intersections in 7 different holes where Visible Gold was observed returned the following results:

5 assays of Trace;
1 assay of 0.01 ounces/ton;
2 assays of 0.02 ounces/ton.

Some of the samples which returned Trace assays were screened for metallics and the metallic fraction assayed 0.01 ounces of gold per ton.

In spite of the apparent erratic nature of the gold distribution, the Carbonate Zone as currently known, is one of significant potential and promise. The fundamental facts are that the currently applied diamond drill pattern can trace and outline the Carbonate Zone but there is no assurance that it is accurately measuring the gold content of the Carbonate Zone. Some experimentation is required.

The relatively rich intersection obtained in drill hole 79-11 should be re-tested by the following holes located approximately as described below.

DDHA Collar: same as DDH R79-8
Bearing: N80E
Dip: -45 degrees
Length: 550 feet

DDHB Collar: same as DDH R79-13
Bearing: N10W
Dip: -45 degrees
Length: 550 feet

DDHC Collar: intersection of Tie Line and line
of strike of drill hole R79-11
Bearing: N/A
Dip: vertical
Length: 200 feet

If the 3 holes produce grades comparable on average with that of hole R79-11 then one may reasonably conclude that the current drill pattern produces as reliable results as can be obtained by diamond drilling. If the results differ widely, consideration must be given to devising an alternative drill plan for evaluation purposes.

A second method of testing the evaluation reliability of current drill data is to locate a spot where the Carbonate Zone can be exposed on surface. Drill 3 or 4 very short shallow drill holes through the Carbonate Zone on the current drill pattern. Then bulk sample the zone. Ideally the bulk samples would run to several tens of tons each. A comparison of the two sources of grade would be informative.

2. Claim KRL 20898

Drill holes P-1 and P-3 returned 0.40 ounces of gold across 1.0 feet and 0.19 ounces of gold across 3.1 feet respectively. Hole P-2 drilled above P-1 intersected no values. Hole P-4 drilled nearby at an odd angle located no values. The geophysical survey of the general area produced no response and no other work has been done on this showing since my Report of April 23, 1974. The zone fully warrants further investigation, especially by diamond drilling.

3. Claim KRL 20900

Nine drill holes have penetrated this zone. These drill holes indicate a strike length of 270 feet grading 0.27 ounces of gold across 4.0 feet. The drill results indicate

that the gold bearing zone has an east-west strike and that there is more than one gold bearing vein in this area. The most eastern hole - No. 23 - produced no gold values, although the vein was intersected. The most western hole intersected a narrow quartz vein in a lamprophyre dike which assayed 0.63 ounces of gold across 0.1 feet.

No work has been done on this zone in recent years. The geophysical surveys which covered the area in a general way, produced no unusual responses. It is likely that the zone is still open to the west since the western most drill holes returned gold values. The eastern extension of the zone is subject to a new geological concept as a result of the work on the Carbonate Zone. It is possible that the eastern limit of the zone is offset along a fault similar to the north-south fault that offsets the Carbonate Zone. A serious re-appraisal of this zone and its extension is well warranted.

Comment

The above 3 zones are the prime targets on the Redcon property and the bulk of the near term exploration program should be concentrated on them. The following exploration targets are less advanced, less understood, and less developed. The following targets warrant further investigation.

4. Geochemical Targets

The soil sample survey for arsenic and gold covered the general area underlain by the Carbonate Zone. There are a number of gold and arsenic anomalies but these do not correlate well with each other or with the Carbonate Zone.

Anomalies B and E can be correlated to the Carbonate Zone in a very crude fashion that may simply be coincidence. The best anomaly, anomaly 'A', lies to the north of the Carbonate Zone and warrants drill testing.

This particular technique of geochemical surveying for gold deposits is very slow and rather expensive. Unless the anomalies located to date produce some startling results further work of this nature is not recommended.

5. Carbonate Zone, East Bay Shore, KRL 18034

There is a large zone of carbonate outcropping on the shore of East Bay near the boundary of claims KRL 18034 and 18037. Except for one old hole drilled in 1942, there are no facts by which this zone can be appraised. Therefore it should be investigated by detailed geophysics, mapping, sampling, etc. and finally, if warranted, by diamond drilling.

A drill hole sunk in 1946 returned 0.05 ounces of gold across 2.5 feet of core in a quartz carbonate stringer carrying pyrite and arsenopyrite. This intersection lies under a swamp some 600 feet east of the zone of carbonate described above. This intersection should be followed up by a couple of drill

holes sometime after the general area has undergone geological appraisal.

6. KRL 20901

Diamond Drill Hole 72-3 returned 0.054 ounces of gold across 14 feet of core in a pyrite-pyrrhotite zone lying at the upper contact of a feldspar porphyry. The immediate area should be investigated geologically and, if warranted, diamond drilled.

7. New Discovery Claim 20889

Diamond Drill Hole R80-38 returned 0.07 ounces of gold across 5.9 feet of core in a flow breccia zone carrying abundant quartz and ankerite and minor amounts of arsenopyrite. The discovery hole lies west of the north-south fault and north of the Carbonate Zone. Further investigation of the area is recommended.

CONCLUSIONS AND RECOMMENDATIONS

1. The diamond drill development of the Carbonate Zone to the present dimensions can be regarded as a major step forward in the exploration of the Redcon property and further exploration of this zone along its strike extensions in both directions is warranted and recommended. This will require a drill program of substantial size and

cost. In addition, experimental studies involving diamond drilling and bulk samples are required to test the reliability and reproducibility of the exploration drill pattern as a procedure for evaluating the gold content of the Carbonate Zone. This is also a substantial undertaking.

2. The cross-fault which offsets the Carbonate Zone must be defined as to strike and dip. This will require a minimum of three drill holes and these should be drilled well away from the Carbonate Zone for within this horizon, secondary deformation might confuse the precise definition of the fault zone.
3. The small high grade zone on claim 20898 warrants further investigation geologically and by diamond drilling for this zone or its immediate environs might produce a vein system of economic grade and dimensions.
4. Similarly, the high grade zone on claim 20900 requires further geological study and diamond drill testing.
5. The remaining four targets listed under Economic Geology also warrant further investigation but are not prime targets. Their exploration should await the Company convenience respecting available personnel, seasonal considerations, etc. Each requires geological investigation which means that each would require all or some

of the following exploration techniques: geophysical surveying in detail, geological mapping, trenching and stripping, blasting, sampling and assaying which may or may not lead to a recommendation for diamond drill testing.

COST ESTIMATES

PHASE I

A. Carbonate Zone			
1. Westward Extension			
10 holes - 3000 ft. @ \$25.	\$ 75,000.		
2. Eastward Extension			
10 holes - 3000 ft. @ \$25.	75,000.		
3. Evaluation Drilling			
1200 ft. @ \$25.	30,000.		
4. Bulk Sampling	<u>10,000.</u>	\$190,000.	
B. Cross Fault Definition			
1000 ft. @ \$25.			25,000.
C. Claim KRL 20898			
Geological Investigation	\$ 3,000.		
Drill Testing			
1000 ft. @ \$25.	<u>25,000.</u>	28,000.	
D. Claim KRL 20900			
Geological Investigation	5,000.		
Drill Testing			
2000 ft. @ \$25.	<u>50,000.</u>	<u>55,000.</u>	
TOTAL	-		298,000.
Contingency Allowance			<u>42,000.</u>
TOTAL PHASE I			<u>\$340,000.</u>

PHASE II

A. Carbonate Zone			
1. Continued Westward Extension			
3000 ft. @ \$25.	\$ 75,000.		
2. Continued Eastward Extension			
3000 ft. @ \$25.	<u>75,000.</u>	\$150,000.	
B. Geochemical Survey Follow-up			
Geological Investigation	5,000.		
Drill Testing			
4000 ft. @ \$25.	<u>10,000.</u>	15,000.	
C. Carbonate Zone, East Bay - KRL 18034			
Geological Investigation	10,000.		
Drill Testing			
1000 ft. @ \$25.	<u>25,000.</u>	35,000.	
D. KRL 20901			
Geological Investigation	3,000.		
Drill Testing			
900 ft. @ \$25.	<u>22,500.</u>	<u>25,500.</u>	
TOTAL	-		225,500.
Contingency Allowance			<u>24,500.</u>
TOTAL PHASE II	-		\$ 250,000.

GRAND TOTAL - PHASES I and II - \$590,000.

The Phase I Cost Estimates are quite realistic for one can easily see the exploration program proceeding as far as the recommended expenditures permit without the requirement of a major directional change. Under the Phase II estimates much more freedom of choice must be given to those carrying out the work for the geological investigations may point to a re-direction of the funds tentatively earmarked for diamond drilling.

This Report is respectfully submitted.

Willowdale, Ontario
February 27, 1981

HARPER CONSULTING SERVICES INC.

H. G. Harper, P. Eng.
President.



CERTIFICATE

I, HUGH GRANT HARPER, of Metropolitan Toronto in the Province of Ontario, certify as follows with respect to my report on the Balmer and Bateman Townships Property of Redcon Gold Mines Limited, dated February 27, 1981.

1. For over twenty years I have been practising as an independent economic geologist, carrying on business as

H. Grant Harper, P.Eng.,
314 Hendon Avenue,
Willowdale, Ontario.

2. I graduated from the University of Toronto with the degree of B.A.Sc., 1950 and M.A.Sc., 1951 and have been engaged in my profession since that time. I am a Member of the Ontario Association of Professional Engineers registered in the Mining Branch, and a designated Consulting Engineer.
3. I have no interest, nor do I expect to receive any, either direct or indirect, in either the property or securities of Redcon Gold Mines Limited.
4. I have been on this property but since it is heavily overburdened, a surface examination is of little practical use. I am familiar with the Red Lake Mining Camp having worked there intermittently during the past 20 years.

February 27, 1981
WILLOWDALE, Ontario

H. Grant Harper, P.Eng.
Economic Geologist



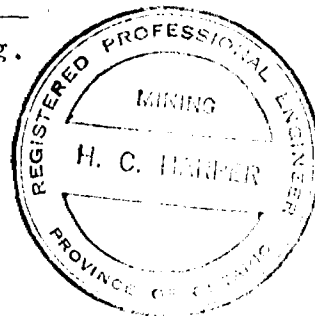
CONSENT

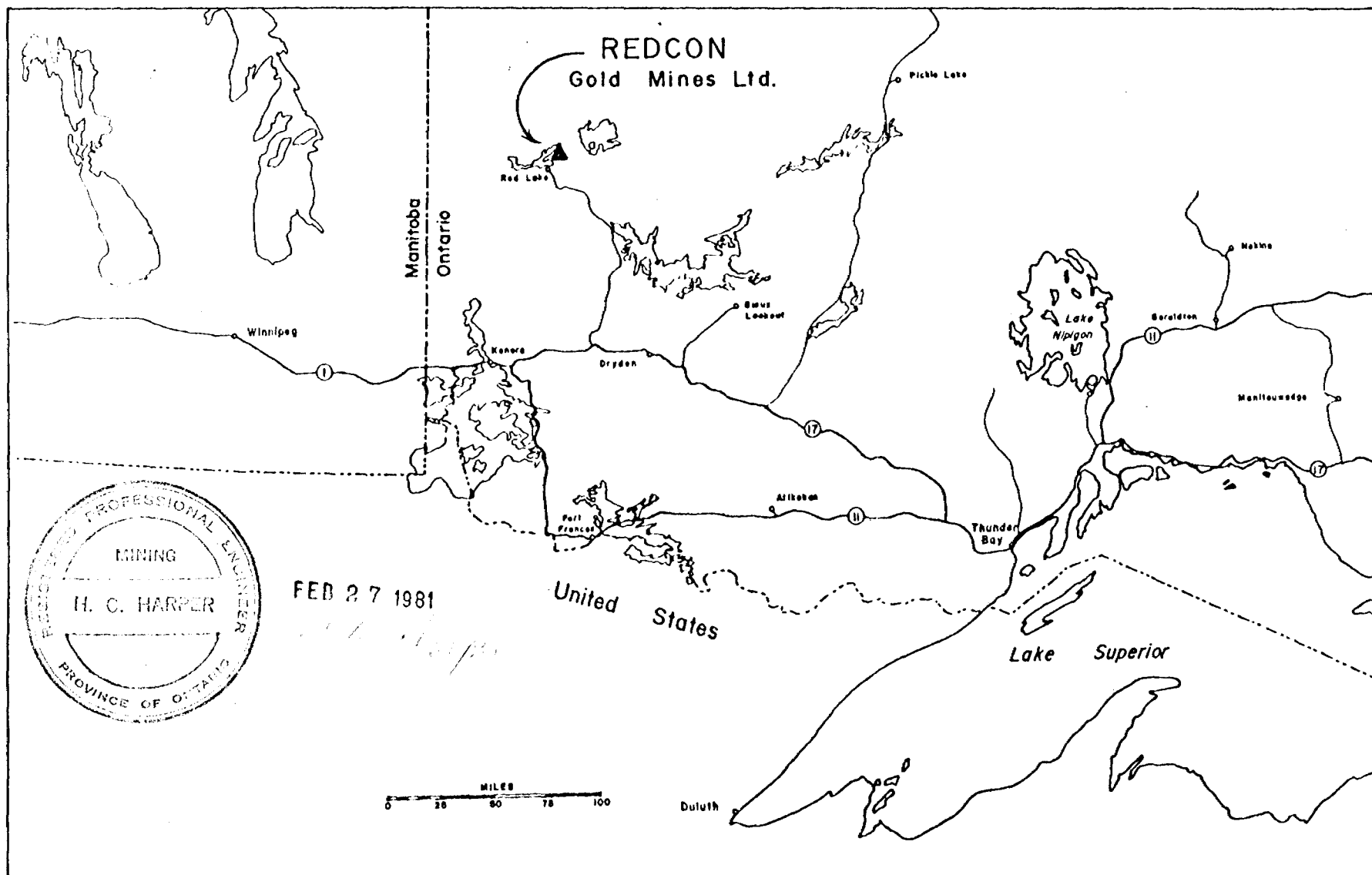
I, H. Grant Harper, P.Eng. of 314 Hendon Avenue, Willowdale, Ontario, author of the Report entitled Redcon Gold Mines Limited, Balmer and Bateman Townships Property, Ontario dated February 27, 1981, do hereby consent to the use of my Report in any Prospectus or Filing Statement of Redcon Gold Mines Limited filed with any properly authorized Canadian securities exchange or commission.

Dated this 27th day of February, 1981.

By: _____

H. Grant Harper, P.Eng.





H. GRANT HARPER, P.Eng., F.G.A.C.

314 HENDON AVENUE
WILLOWDALE, ONTARIO

M2M 1B2

(416) 225-7412

Associations: A.P.E.O.
G.A.C.
C.I.M.

Consulting Engineer
Exploration Geologist

October 14, 1981.

Dr. R. Bruce Graham,
c/o Ontario Securities Commission,
10 Wellesley St., E.,
Toronto.

re: Redcon Rights Offering

Dear Dr. Graham,

With respect to my report on the Balmer and Bateman Townships property of Redcon Gold Mines Limited dated February 27, 1981 may I add the following information.

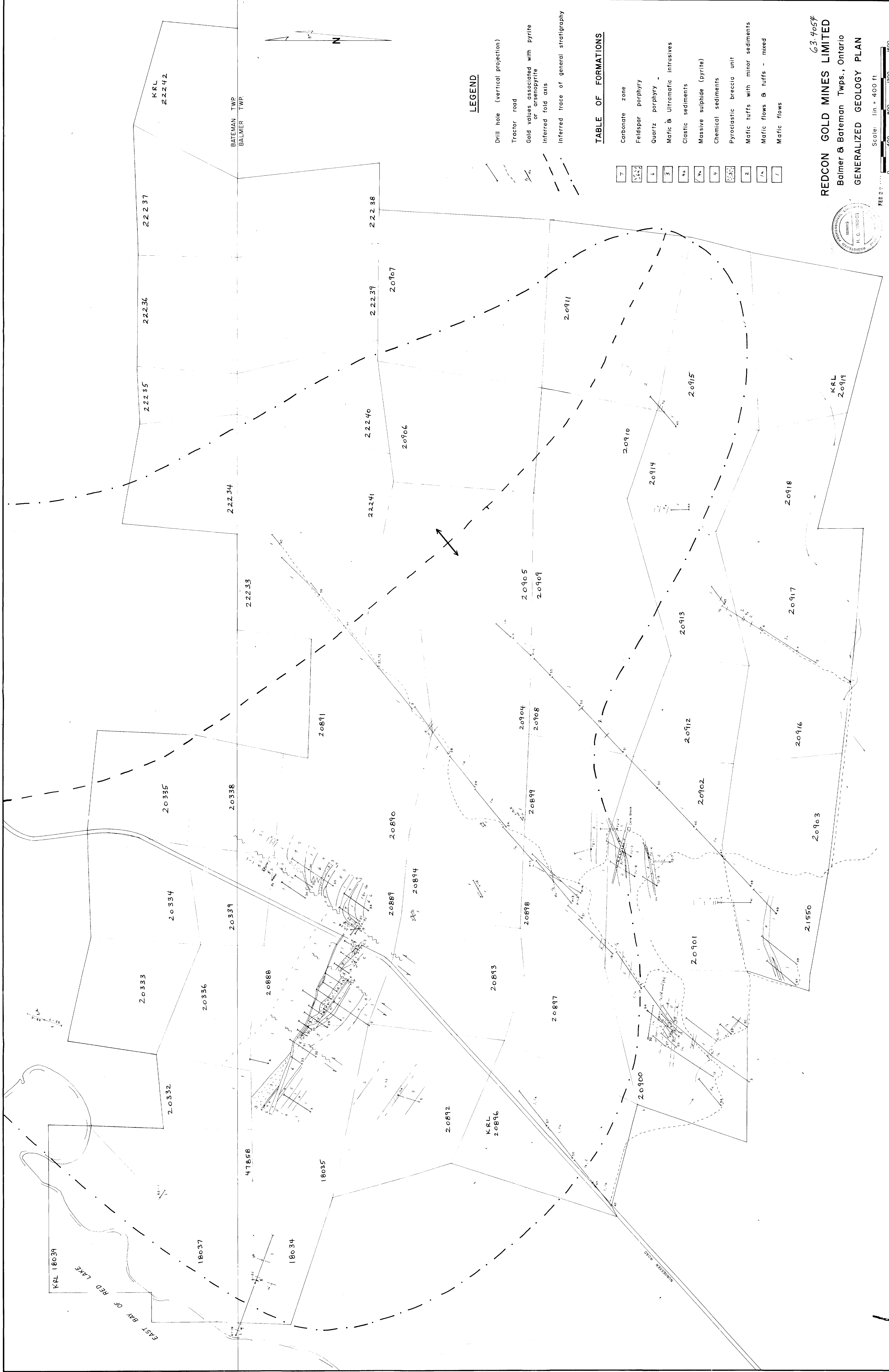
The 1"=400' map showing the location of DDH R79-18 as very near but west of the major cross fault is probably correct geologically.

As there is major disruption of the area near the fault it is reasonable that some uncertainties do exist concerning relative geological positions in this area. Generally speaking, the rock types cut by hole R79-18 and the position of the carbonate zone in the hole are consistent with conditions on the west side of the fault.

A new page 15 for my report is being forwarded to you and it contains the additional data you requested concerning the showing on claim KRL 20898.

Yours truly,






63.4054
REDCON GOLD MINES LIMITED
Balmer & Bateman Twps., Ontario
GENERALIZED GEOLOGY PLAN

FEB 27 1964

Scale: 1 in. = 400 ft.

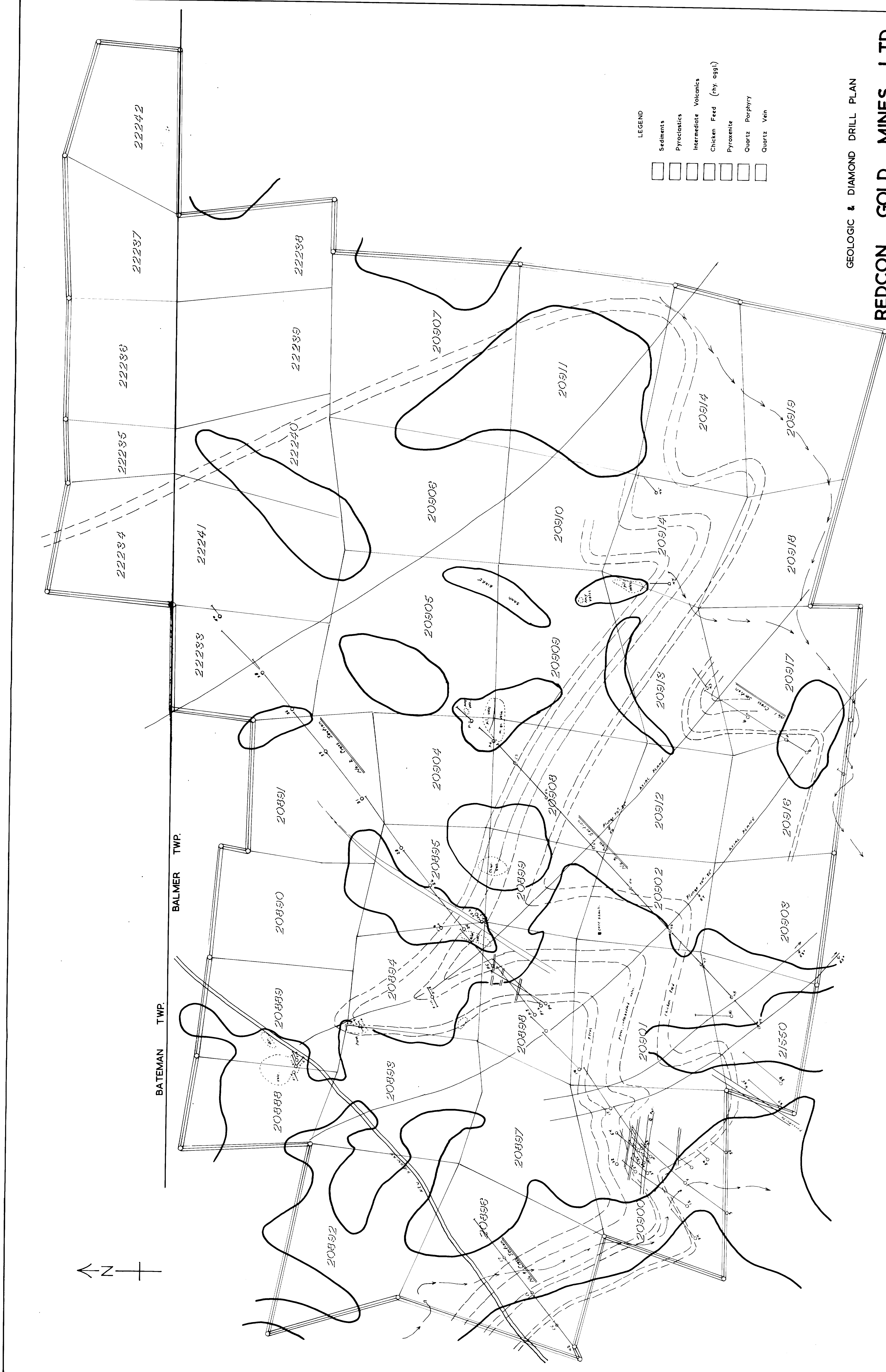


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February, 1981

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5290400003 63.4054 BALMER TWO

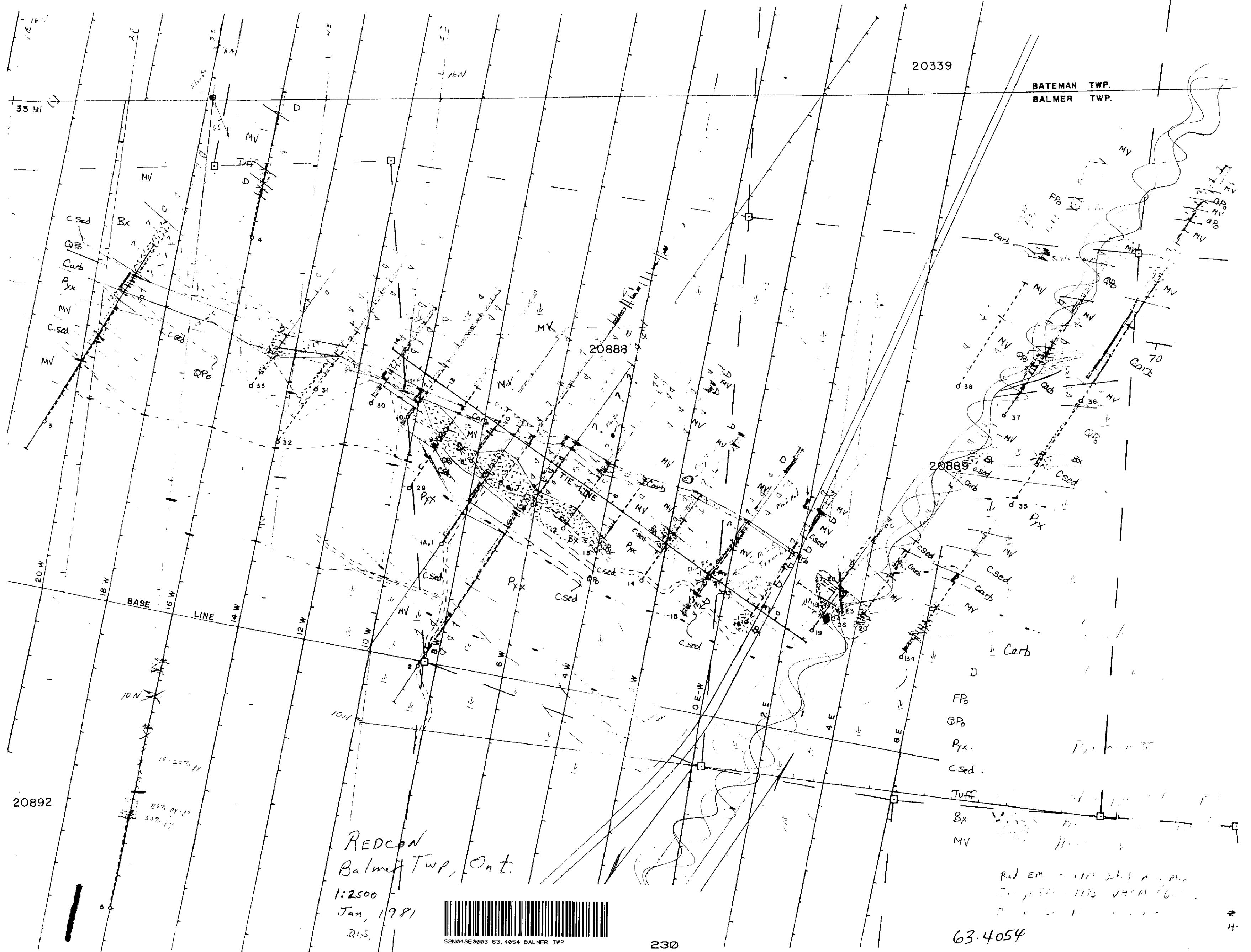


GEOLOGIC & DIAMOND DRILL PLAN

REDCON GOLD MINES LTD

BALMER & BATEMAN TWPS.





BATEMAN TWP.
BALMER TWP.

20339

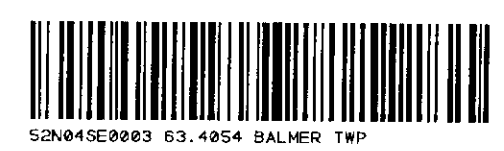
20888

20889

20892

REDCON
Balmer Twp, Ont.

1:2500
Jan, 1981
DLS.



230

63.4054

- D
- FPo
- GPo
- Pyx.
- Csed.
- Tuff
- Bx
- MV

RED EM - 1171 J.H. M. M. M.
C. J. EM - 1173 J.H. M. M. M.
P. C. EM - 1175 J.H. M. M. M.



REDCON GOLD MINES LIMITED
BALMER TWP., ONTARIO

63-4654
Added to file
Apr 1981

Northwest Sheet
NTS: 52 N/4
July 1981
D.L. Simoes



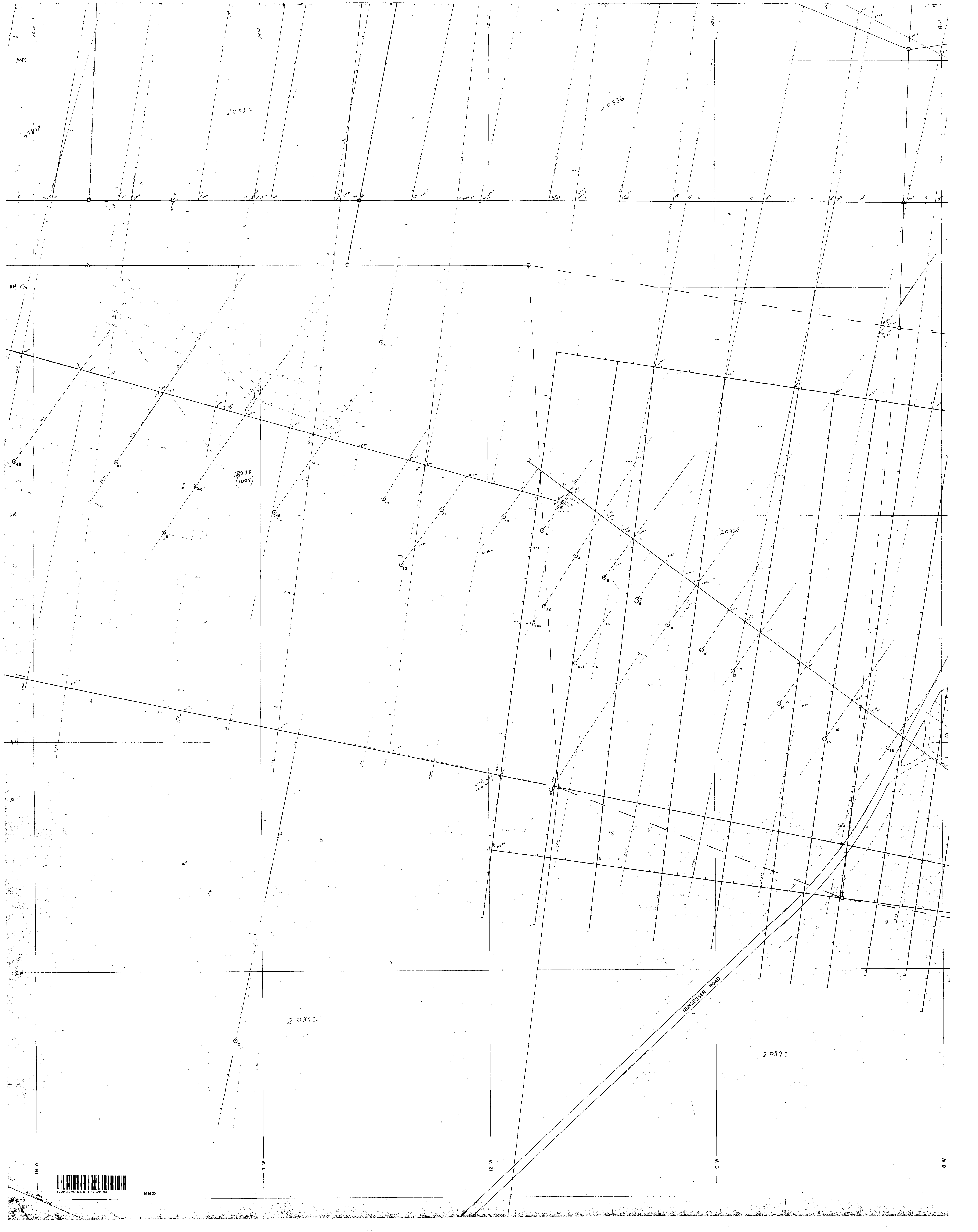
240

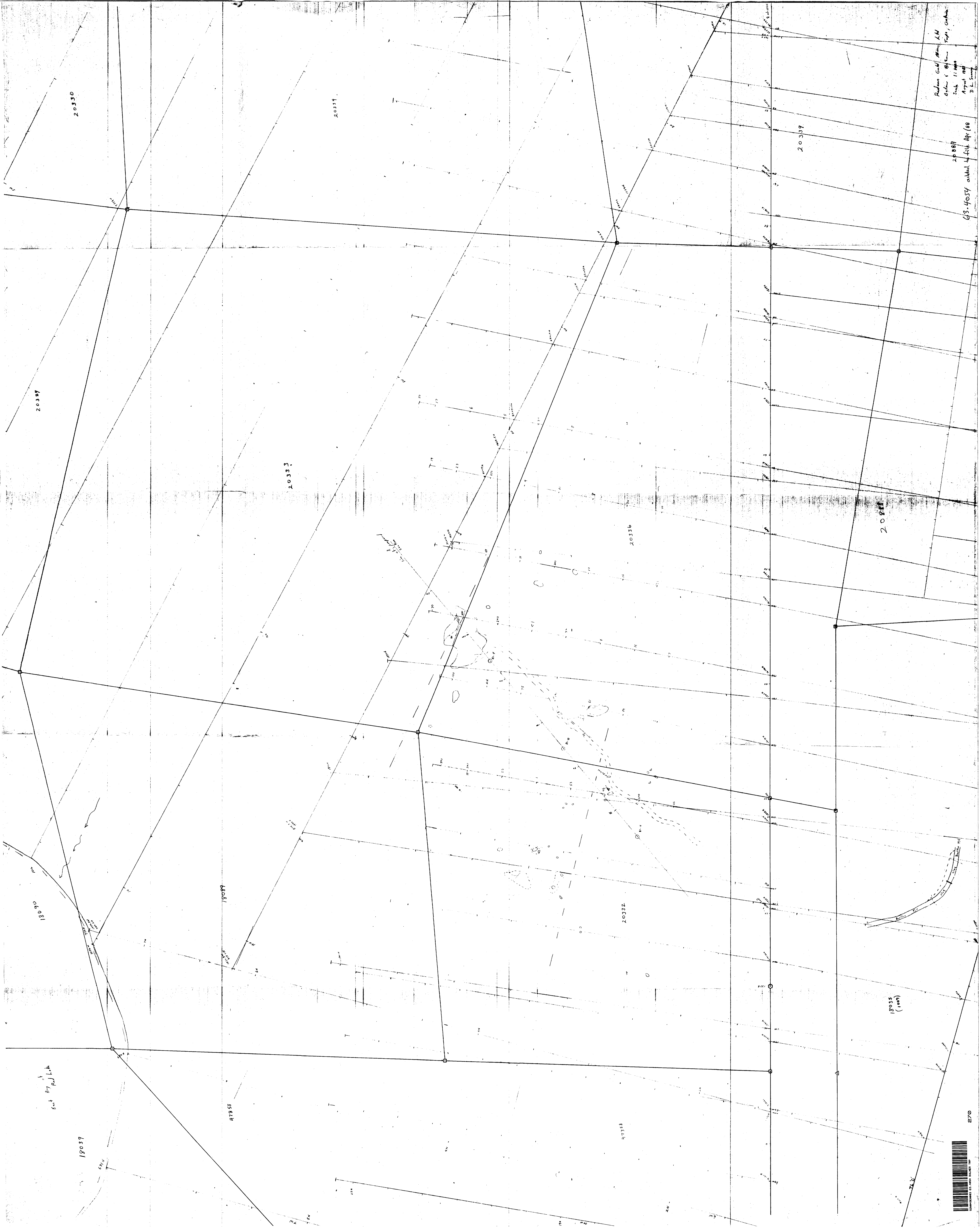


REDCON GOLD MINES LIMITED
BALMER TWP., ONTARIO

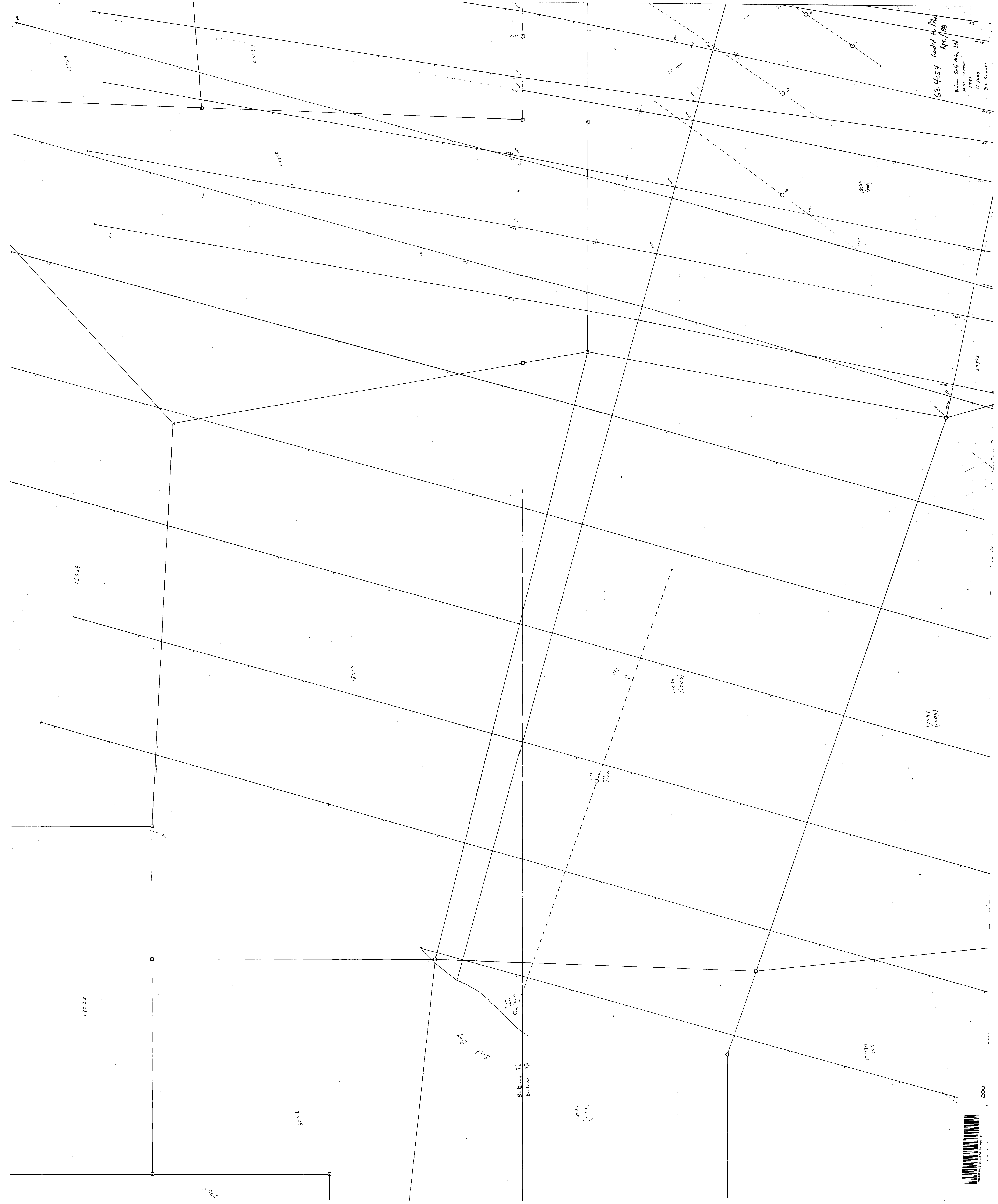
63.4654 Added to file Apr/88

Scale: 1:2500
November 1981
Southwest Sheet
NTS: 52 N/4





Refers to Map LH
Scale 1:1000
August 1968
20348
20345 added to file Apr 1968





290

A 082

A 082

A 082

A 082

A 082

A 082

A 082

A 082

A 082

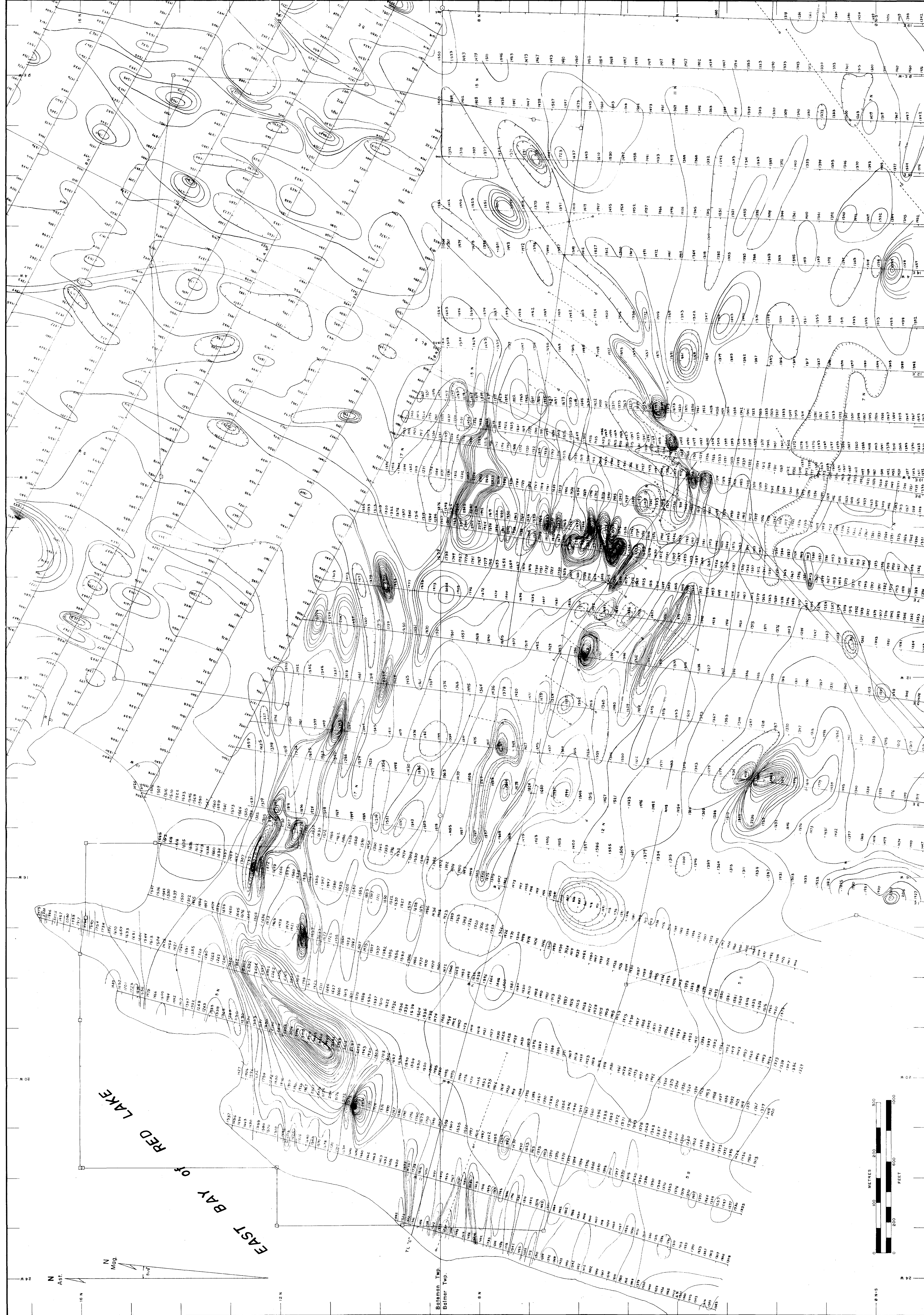
A 082

Pick lines not in of south survey, but in of
411 survey of 1871. 20000 ft. in 1000 ft.
Dull hole, but in 1000 ft. in 1000 ft.
(1953 survey, mostly in 1000 ft. in 1000 ft.)

D.H.S. 100

Redden (11.4 x 10.1)
1:500 (11.4 x 10.1)
South Zone 10.1/10.1
D.H.S. 100

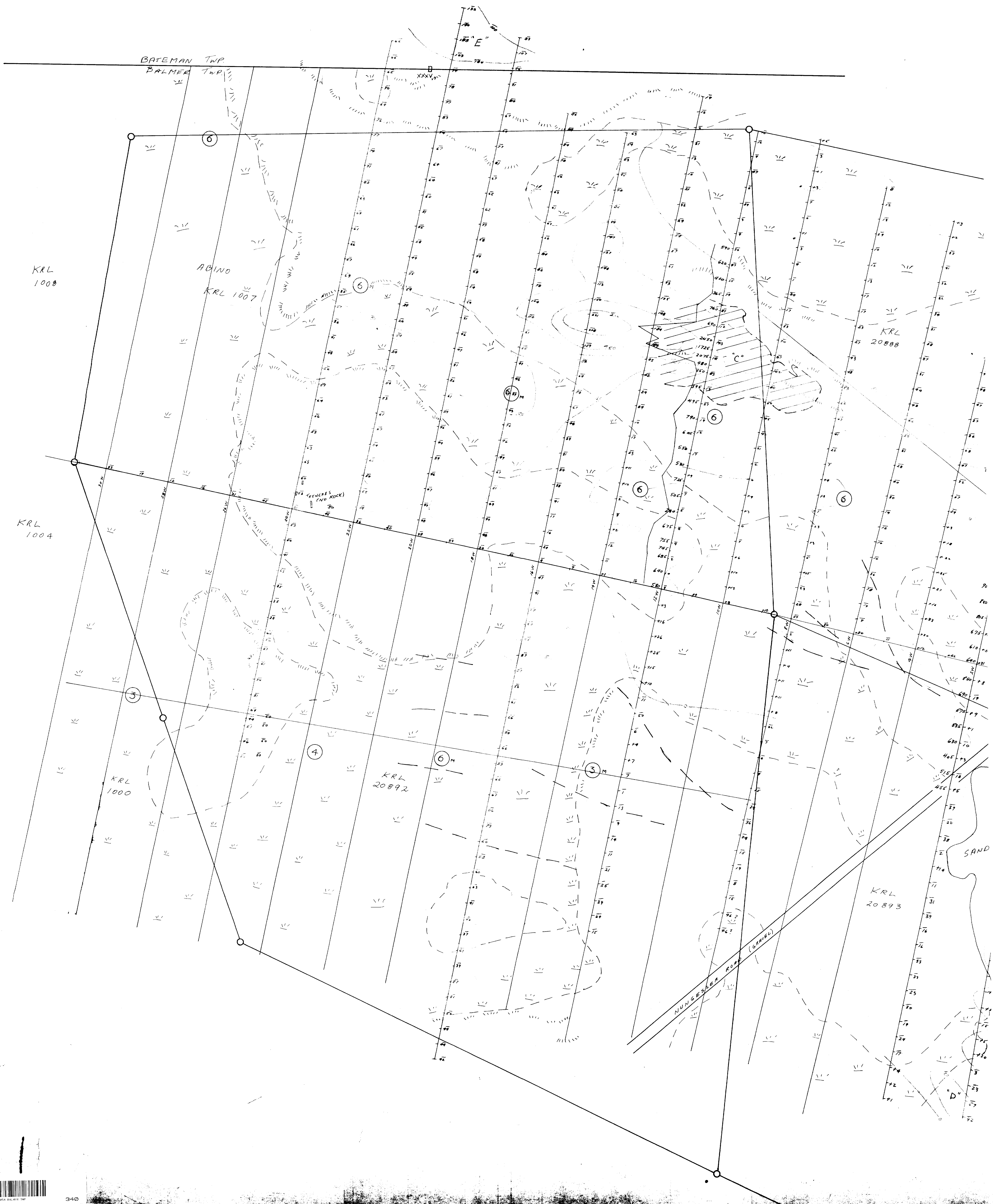
63.4054 Added to file
Apr/68



REDCON GOLD MINES LIMITED
BALMER TWP., ONTARIO

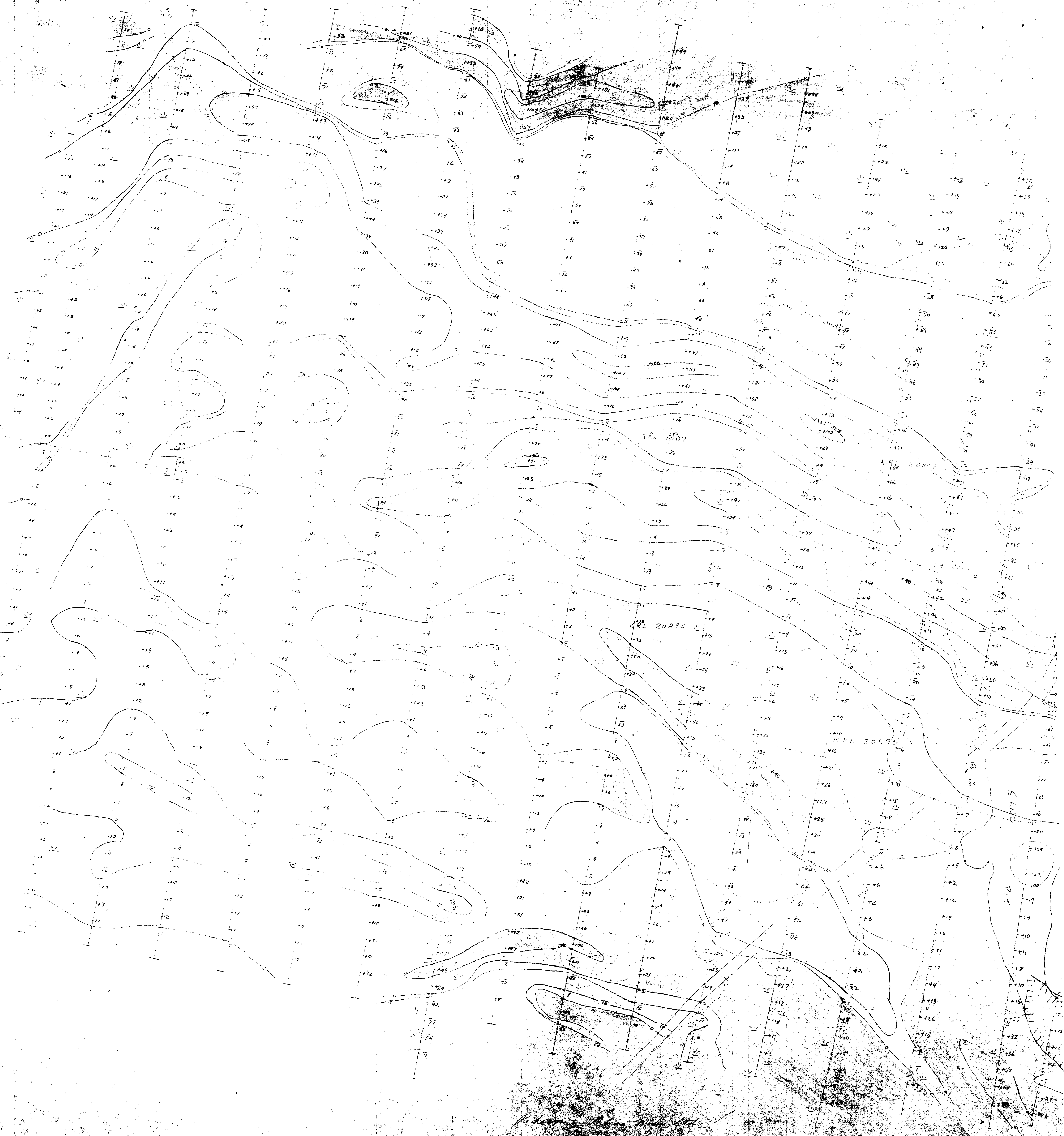
Total Field Magnetic

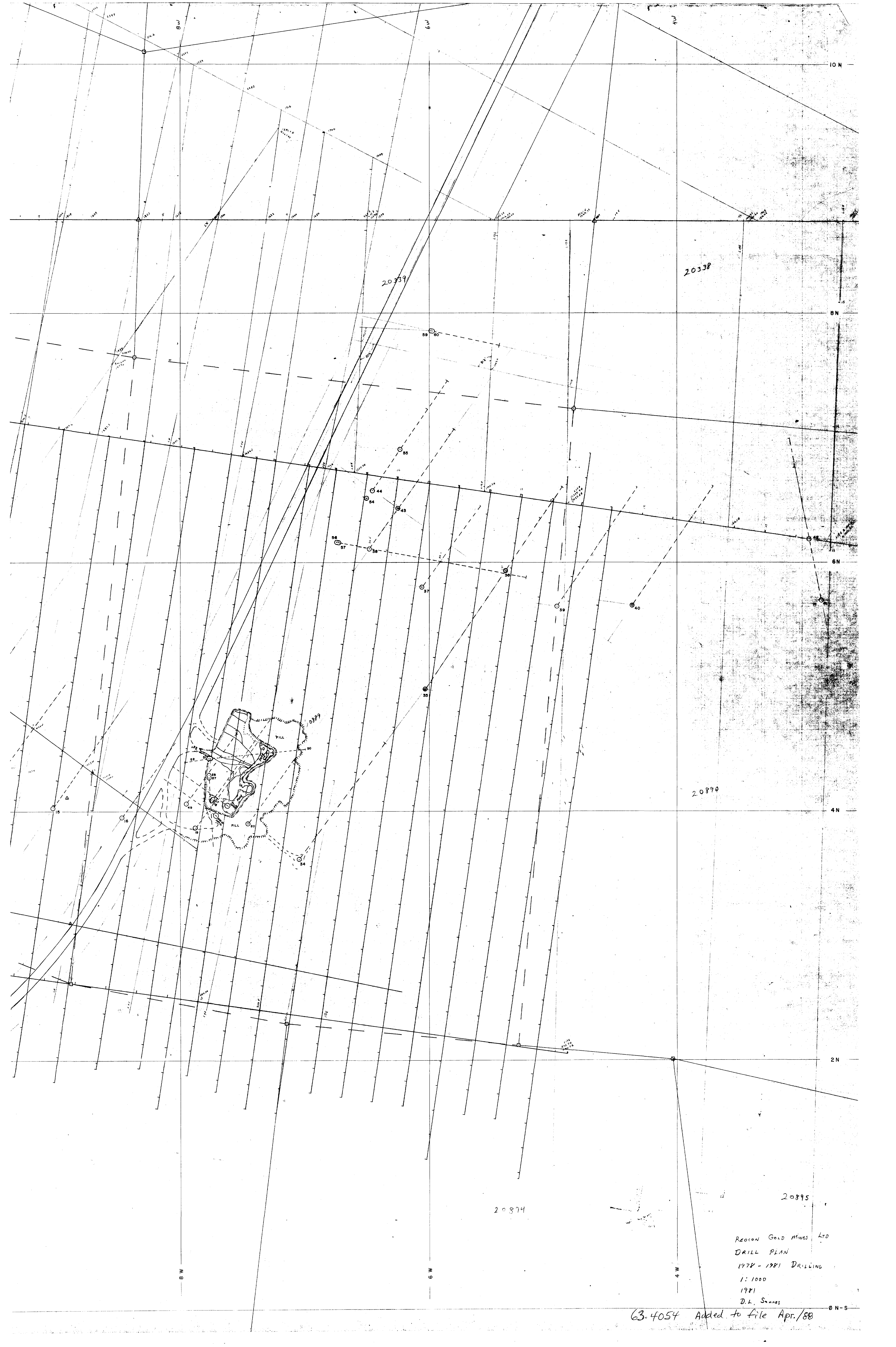
Northwest Sheet
Scale: 1:2500
July 1981
NTS: 52 N/4
D.L. Sammes





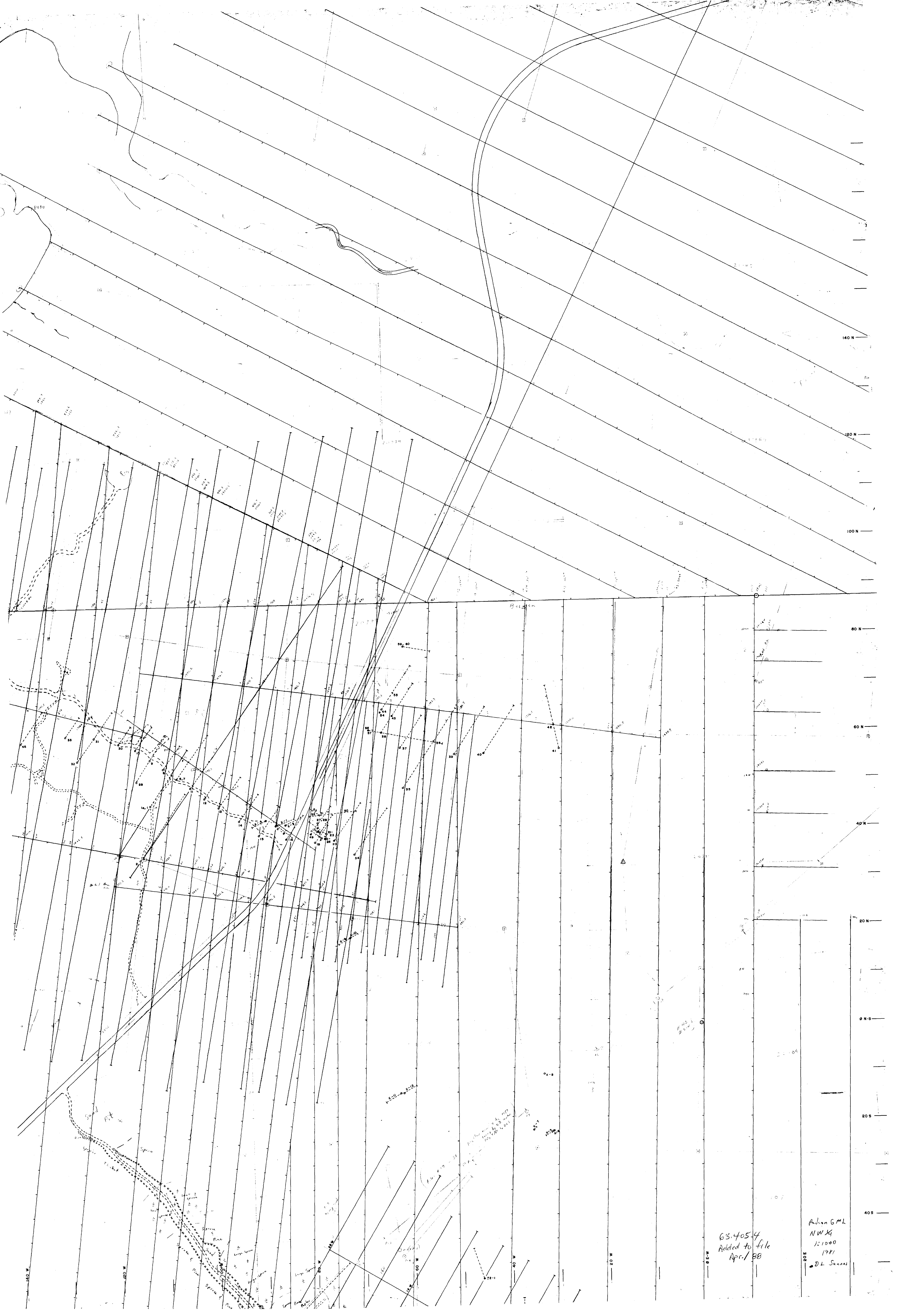
Redon - Abino Mines filed
J. M. 16. Profiles





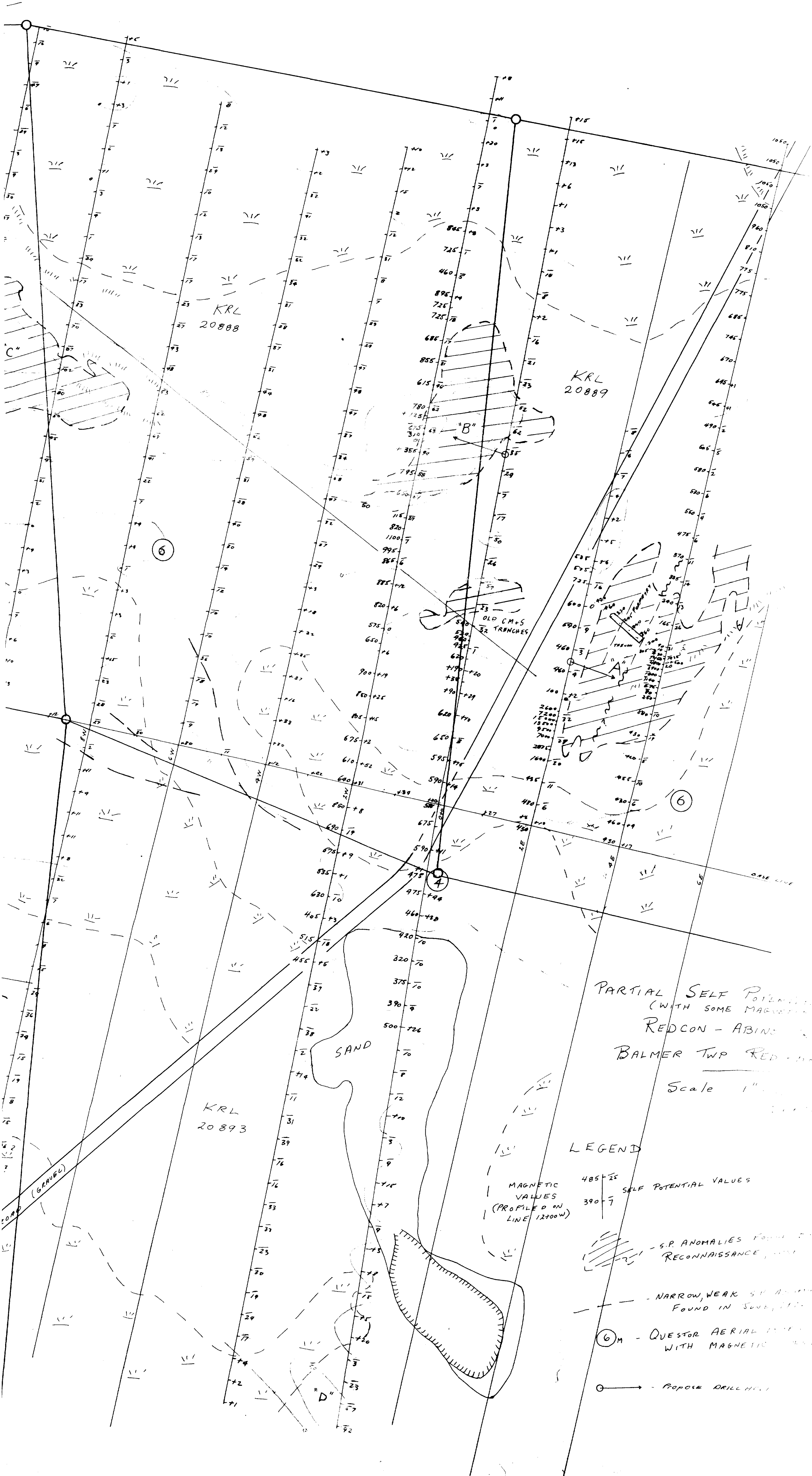
REOCAN GOLD MINES LTD
DRILL PLAN
1978-1981 DRILLING
1:1000
1981
D.L. Swann

63.4054 Added to file Apr./88



63-405-4
Added to file
Apr. 1988

Aukon GML
NW 1/4
1:1000
1981
DL Sanders



PARTIAL SELF POTENTIAL
(WITH SOME MAGNETIC VALUES)
REDCON - ABING
BALMER TWP RED

Scale 1" = 100'

LEGEND

MAGNETIC
VALUES
(PROFILED ON
LINE 12+00W)

485-25
390-7
SELF POTENTIAL VALUES

S.P. ANOMALIES FOUND IN
RECONNAISSANCE

NARROW, WEAK S.P. ANOMALIES
FOUND IN SURVEY

6M - QUESTOR AERIAL PHOTOGRAPH
WITH MAGNETIC ANOMALIES

PROPOSE DRILL HOLE

