842038
Cataract
M518

CHEVRON STANDARD LIMITED

MINERALS STAFF

CANADA

MONTHLY PROJECT REPORT

PROJECT NAME	NUMBER	PERIOD COVERED
CATARACT	M518	July, August, 1982

CURRENT YEAR TOTAL BUDGET: CAN $ 276,000.
EXPENDITURES TO END OF PERIOD: CAN $ 133,000. ESTIMATE
PROJECTION TO YEAR END: 105 % OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

Program: Geological mapping, rock geochemical sampling, I.P., ground magnetics and diamond drilling.

Objective: To obtain preliminary indications of the potential of the system by intersecting a significant length of potential ore grade material.

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

Geological mapping: 1 km x 2 km area @ 1:5000; rock geochemical sampling: 120 samples @ Au, Ag Cu, Zn, Pb, Mo, Ba; I.P./ground mag: 8 km (now in progress); diamond drilling (1500 feet) to be started in late August early September.

Geological mapping identified bimodal volcanic pile in which the basal unit is andesitic. The volcanic pile becomes progressively more acidic upwards. Acidic intrusives (coeval with the volcanics) include quartz monzonite and aplite. Abundant pyrite occurs in fractures and veins throughout all rocks in the volcanic-intrusive complex. The intrusives of the complex form windows in two deeply eroded valleys. Only the upper 100 m of the intrusive is exposed by erosion. Traces of chalcopyrite and molybdenite occur in the intrusive of the eastern window. The eastern window area also includes a 30 m x 30 m breccia pipe featuring abundant silica and sericite as well as pyrite - a phyllic alteration assemblage. Samples of this material are in for assays with no results available to date. This material carries traces of Cu and Mo but could carry precious

metals. In the western window a 100 m by 15 m area of stockwork molybdenum mineralization is exposed along the shore of a lake. This mineralization occurs in the contact zone of a stock. Rock geochemical samples throughout the map area have been collected and results are available in the principal known gold area of the property where the resampling of a high grade area indicated by the owners returned only 152 ppb over 22 m. This compares with 4.6 oz/ton Au 4.06 oz/ton Ag over 25 m as reported by the owners. Our own sampling of the principal precious metal area indicates these metals are enriched in base metal veinlets and fractures. We feel that the very high assay for both Au and Ag obtained by the owners is a nugget effect created by the presence of native gold in association with a base metal veinlet. Our resampling of the 25 m section of high grade (actually 22 m) was done by breaking the 22 m interval into 22 sample intervals which were sampled separately. While we are naturally disappointed in the initial response of our gold sampling we do recognize the inherent strength of the system as indicated by widespread low grade gold - base metal association. We are highly encouraged with the moly showing in the western window of the intrusive. In that setting we are looking for block caveable ore grading in the 0.2% Mo range. It is a very fine showing indeed and surely merits the initial drilling. The showing that we have in that area is strong enough to be marginal to a significant molybdenum stockwork deposit.

WORK PROGRAM FOR NEXT PERIOD:

During the remainder of August and September we shall continue the type of mapping and rock sampling done in the eastern area and expand that to the western part of the property. Due to the steep terrain involved a major camp move will have to be made. Our drilling will be done from the western camp. The I.P. now in progress may indicate new areas of interest under the drift covered valley floor of the eastern part of the property.

CHANGES IN LAND STATUS:

NONE.

R. Bruaset
1982-08-13

CHEVRON STANDARD LIMITED

MINERALS STAFF

CANADA

MONTHLY PROJECT REPORT

PROJECT NAME	NUMBER	PERIOD COVERED
CATARACT	M518	August/September,1982

CURRENT YEAR TOTAL BUDGET: CAN $ 351,000. (I.H. & O.H.)
EXPENDITURES TO END OF PERIOD: CAN $ 178,000. ESTIMATE
PROJECTION TO YEAR END: 100 % OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

Program: Geological mapping, rock and soil geochemical sampling, I.P. ground mag, diamond drilling.

Objective: To obtain preliminary indications of the potential of the system by intersecting a significant length of potential ore grade material.

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

Please refer to attached geology plan(scale 1:50,000).

1. Resampling of a portion of the EAST ZONE (Au-Ag base metal association). Silver and base metal results are similar to original sampling by owners - Au results not available at report time.

2. Encouraging rock geochemical results for Au obtained in area underlain by basement rocks (schist) about 1/2 km NW of EAST ZONE. Values up to 1400 ppb for character sample and up to 185 ppb for a 1 m chip sample. Silt and soil geochemical sampling was done to detect down-slope dispersion from this mineralization and to indicate more substantial zones of precious metals in the largely drift covered area. The results of this sampling are unavailable at present. Similarity in structures exist between this new area and the EAST ZONE. On the Cataract property precious metals and Pb - Zn are closely associated in fractures that are related to major fault intersections.

3. Results from rock geochemical sampling of a small breccia pipe located in the rhyolite belt 1 km south of the central valley stock returned only trace Au and Mo in this very intense zone of phyllitic alteration.

4. The geological mapping of the Central Valley area has been completed. Basement rocks on which the Cataract volcanic complex was laid down are quartz diorite and schist of Cretaceous or older age. An acid to intermediate platform consisting of andesite flows and pyroclastics including rhyodacite and dacite is the basal member of the Cataract volcanic complex which is Tertiary (Miocene?) in age. The basal volcanics were intruded by granitic and aplitic rocks of quartz monzonite composition. Associated with this intensive activity was the deposition of rhyolite flows and pyroclastics. The bulk of the sulphide mineralization in the form of pyrite was deposited marginal to the intrusion in fractures related to fault intersections on the northern flanks of the volcanic complex. A similar intrusive-volcanic complex developed at Elton Lake. Although the Elton Lake system is also highly pyritic, concentrations of commercial minerals, such as molybdenite are more highly developed there. The level of erosion of the Elton Lake system is at, or within a few tens of feet of the top of the intrusion. The rocks are more leucocratic and more highly quartz veined at Elton Lake giving that porphyry system a much higher potential for molybdenum than the Central Valley system.

5. The I.P. survey of the Central Valley area yielded several anomalies that may warrant diamond drilling for precious metals. Such anomalies lie on the northern flanks of the stock. Anomalies over the Central Valley stock are most likely caused by pyrite.

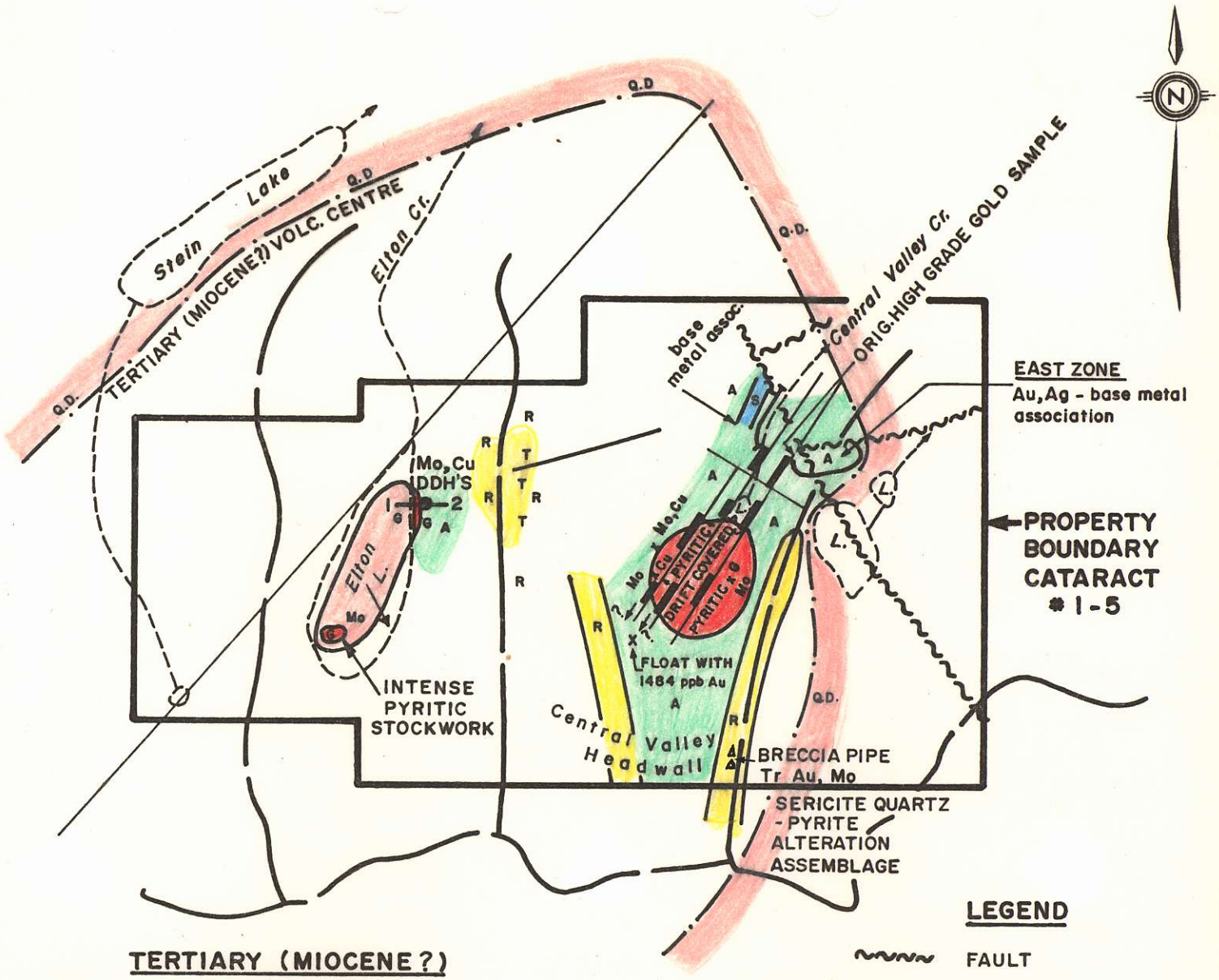
WORK PROGRAM FOR NEXT PERIOD

Diamond drilling is the next phase of the program. The drill is presently being set up at Elton Lake. The first hole will be to a depth of about 1000 feet on a west bearing at -50°. The hole will be collared in the hornfels zone of the stock where Mo W rock geochemical anomalies occur.

CHANGES IN LAND STATUS:

No new claims located.

R. Bruaset



TERTIARY (MIOCENE?)

- G — QUARTZ MONZONITE, GRANITE, APLITE, QUARTZ-FELDSPAR PORPHYRY (?)
- R — RHYOLITE FLOWS, PYROCLASTICS, BRECCIAS
- A — INTERMEDIATE AND ACID VOLCANICS. FLOWS, PYROCLASTICS

CRETACEOUS OR OLDER

- Q.D. — QUARTZ DIORITE
- S — SCHIST

LEGEND

- FAULT
- LINEAMENT
- T — TOURMALINE
- RECON. SOIL/SILT LINE
- 1982 I.P., MAG., S.P. GRID
- DDH'S — 1982 HOLES # 1, 2
- IP ANOMALY, OPEN, DEFINED
- MAJOR DIVIDE
- LAKE

0 1 2 3 km.

0 1 2 miles.

CATARACT PROJECT – GEOLOGY

M518

Sept. 10/82

CHEVRON STANDARD LIMITED
MINERALS STAFF
CANADA

MONTHLY PROJECT REPORT

PROJECT NAME	NUMBER	PERIOD COVERED
CATARACT	M518	September, October

CURRENT YEAR TOTAL BUDGET: CAN $ 351,000.
EXPENDITURES TO END OF PERIOD: CAN $ 285,000. (end of Oct.) ESTIMATE $314,000. to year end
PROJECTION TO YEAR END: 90 % OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

Program: Geological mapping, rock and soil geochemical sampling, IP, ground magnetics and diamond drill testing.

Objective: To obtain preliminary indications of the potential of the system by intersecting a significant length of potential ore grade material.

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

During a month period beginning in early September three diamond drill holes totalling 2263 feet were drilled on a stockwork molybdenum system at Elton Lake in the western part of the Cataract property. This drilling was suspended at the onset of winter conditions in early October. A 100 by 300 foot exposure of granitic rock hosting this type of mineralization occurs on the east shore of the lake. The deepest testing to date within the system is 980 feet below the surface in DDH 8201, an angle hole drilled at -70° and collared in the acid volcanic roof rocks of the small stock. This hole intersected hybrid intrusive in the western contact area of the stock after having gone through about 700 feet of granite containing a well developed quartz moly stockwork. The first 712 feet of bedrock in this hole averages 0.011% Mo and 0.04% Cu and the remainder averages 0.003% Mo and 0.02% Cu. Metals for which composite analysis have been carried out include Pb, Zn, Ag, Sn, F and W. Fluorine exhibits a slight increase in depth although the absolute values present are an order of magnitude lower than that expected in the quartz-sericite-pyrite alteration zone of Colorado stockwork molybdenum deposits. Sn, an important halo element for such deposit, exhibits a slight

increase with depth but values are again far below that characteristic of the classical stockwork molybdenum deposits. Even though the Mo grades are far below cut off grades for block caveable stockwork molybdenum deposits, we are encouraged by the alteration and the obvious presence of a strong structure in the form of persistent quartz veining with depth. It is felt that abandoning this option prior to some deep testing of the moly systems - minimum of 2000 feet - would be risky. The assay results from the 2nd and 3rd holes are not currently available. Both of these holes encountered stockwork molybdenum mineralization throughout of similar tenor to the 1st hole. In both cases the grade is becoming lower with depth reflecting an increased distance from the granite.

No new work has been done in the gold area of Central Valley. During the month we received the results of the 1982 soil geochemical survey. A strong Au-Ag soil anomaly was obtained over 350 meters of line with samples taken at 50 m interval. The anomaly lies downslope from the earlier indicated rock geochemical precidus and base metal anomalies which initially attracted our attention to the Cataract property. It is encouraging that Cu, Pb, Zn, Mo, W and Mn highs, or anomalies, all coincide with the high precious metal values in the soil. Gold values over 100 ppb are regarded as anomalous and several values are >10,000 ppb. This anomaly has a structural demarcation in the form of a fault on the north. This fault is also a structural demarcation for rock geochemical gold anomalies. Initially this season, we were disappointed in this area when we were unable to reasonably repeat the high gold values obtained by the owners. Since the soil geochemical survey was done and subsequent to a new look at the I.P. data we feel better about the gold potential. John Steele, geophysicist, is of the opinion that the nearby stock extend further to the north in the subsurface than is indicated by the mapping. This interpretation sheds new light on this gold area and indicates the need for some drill testing next season. Abandoning the option without a drill test would be risky and undesirable.

WORK PROGRAM FOR NEXT PERIOD:

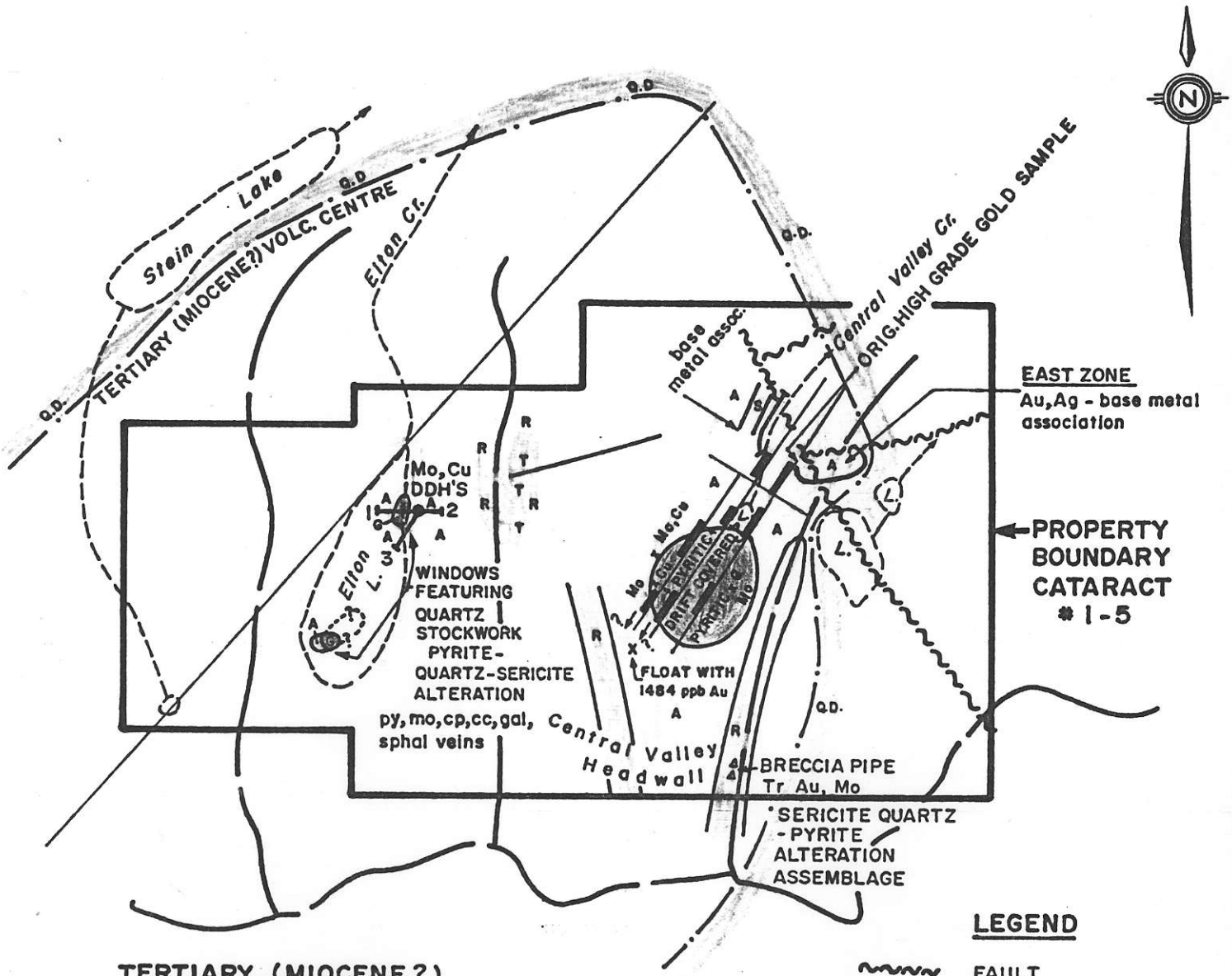
Assembling and analyzing data from the 1982 field season.

CHANGES IN LAND STATUS:

None.

R.B.

R. Bruaset



TERTIARY (MIOCENE?)

- G — QUARTZ MONZONITE, GRANITE, APLITE, QUARTZ-FELDSPAR PORPHYRY (?)
- R — RHYOLITE FLOWS, PYROCLASTICS, BRECCIAS
- A — INTERMEDIATE AND ACID VOLCANICS. FLOWS, PYROCLASTICS

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- RECON. SOIL/SILT LINE
- 1982 I.P., MAG., S.P. GRID
- DDH's — 1982 HOLES # 1, 2
- ? — IP ANOMALY. OPEN, DEFINED
- MAJOR DIVIDE
- LAKE

0 1 2 3 km.

0 1 2 miles.

CATARACT PROJECT – GEOLOGY

CHEVRON CANADA RESOURCES LIMITED

MINERALS STAFF

CANADA

MONTHLY PROJECT REPORT

PROJECT NAME	NUMBER	PERIOD COVERED
CATARACT	M518	July 1983

CURRENT YEAR TOTAL BUDGET: US $ 215,000.
EXPENDITURES TO END OF PERIOD: US $ 114,000. ESTIMATE
PROJECTION TO YEAR END: 100 % OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

(1) I.P., ground magnetics.

(2) Geological and geochemical evaluation of precious metal potential in caldera margin targets.

(3) Diamond drill testing.

The objective is to intersect potential economic grade and width of precious metals.

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

The I.P. survey was completed in July resulting in several new anomalies in drill target category. Broad pattern of magnetic relief was obtained between the 1982 survey lines. This pattern is crossed by E-W trending I.P. anomalies and in some cases coincident EM anomalies. The magnetic anomaly is likely caused by pyrrhotite. We are, however, finding an impressive amount of sphalerite associated with the pyrrhotite in places and we believe the sphalerite may have associated Au, Ag.

The first drilling is in the so-called East Zone where anomalous Au-Ag-Zn-Cu occurs in a zone of brecciation. DDH 8301 is directed at coincident I.P. and magnetic anomalies within the very much broader geochem anomalies. This hole is now at 300 m in a projected length of 366 m. So far, the hole has encountered sections of fine and coarse tuff, lapilli tuff and miscellaneous non-pyroclastic breccias, including a small breccia pipe (core length about 30 m). The entire hole has been mineralized with sphalerite, pyrrhotite, pyrite, galena and chalcopyrite, decreasing in that order in total abundance. The most abundant base metal sulphides occur in the breccias. Sphalerite occurs as disseminations in the breccia

Cataract (Cont'd)

fragments and in the matrix and as late fracture fillings. At least two periods of base metal mineralization are indicated. Sulphides are zoned with depth such that sphalerite, galena and chalcopyrite dominate in the upper portions of the hole. With depth, these give way to a mixture of sphalerite and iron sulphides and finally to predominant iron sulphides. Approximately 175 m in the upper portions of the hole is highly enriched in base metal sulphides. Surface sampling suggests a direct relationship between precious metals and base metals. Alteration types noted in the present hole include sericitization, silicification, garnetization and chloritization. DDH 8301 tends to confirm the presence of a strong sulphide system in the East Zone area. Geochemical results from outlying reconnaissance targets were obtained. Little work is warranted on the basis of these results.

WORK PROGRAM FOR NEXT PERIOD:

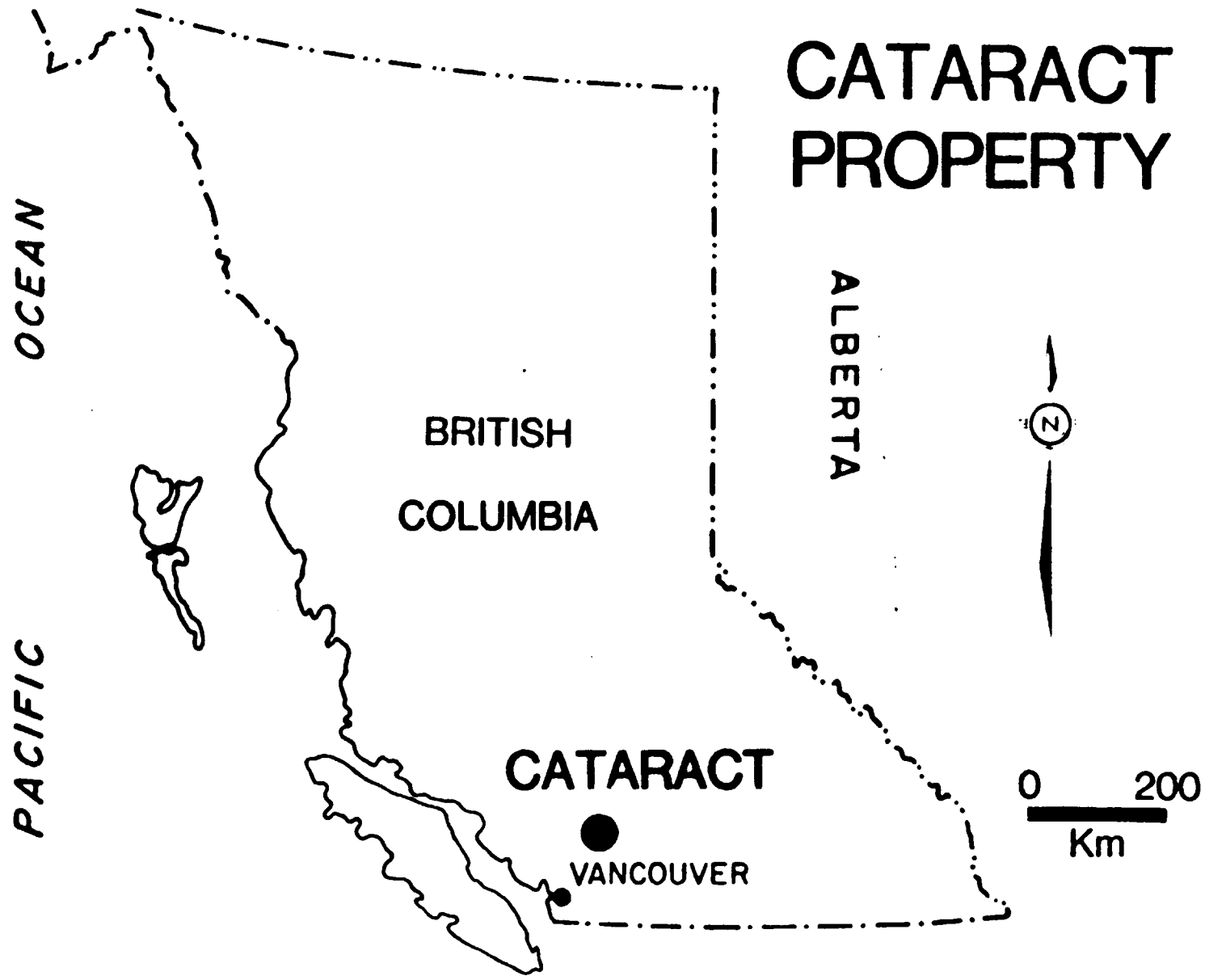
DDH 8302 will test a similar anomaly to that of the first hole at -45°. Subsequent holes will test a zone of base metal mineralization uncovered in this year's work about 200 m SW of the East Zone proper. Similarities in rock type and mineralization (high Pb, Zn, Cu, Ag (Au not available at report time) suggests this new zone is an extension of the East Zone which is largely talus covered between the two known mineralized areas.

The drilling is progressing well. We project the completion date for the drilling as about August 23rd. By that date we expect to be in the possession of the assays from the two first holes. Should the precious metal results be favourable, we might then wish to extend the contract. The cost of mobilizing a drill to the property round trip is about U.S. $18,000.

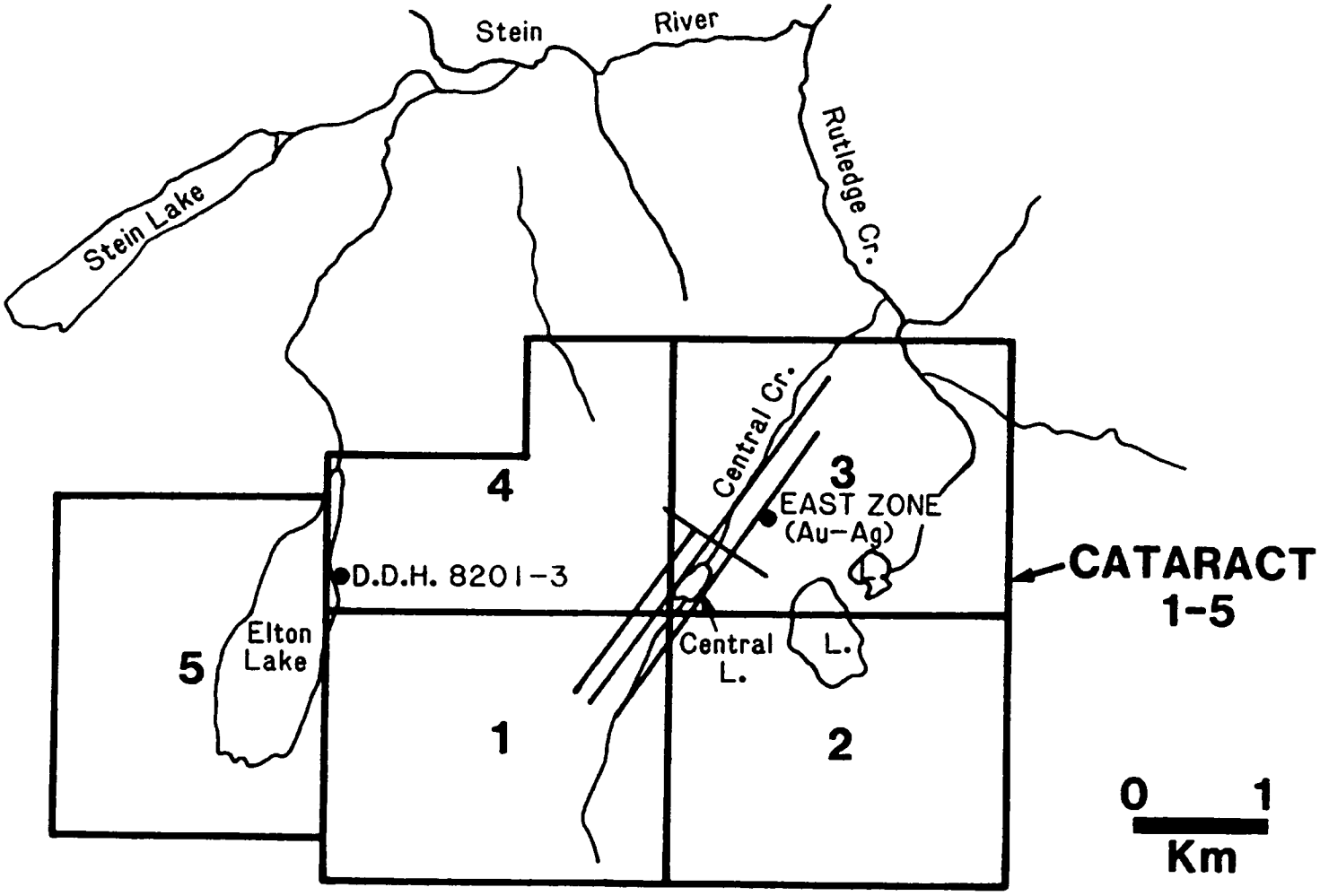
CHANGES IN LAND STATUS:

None.

R. U. Bruaset


CATARACT
PROPERTY
PACIFIC
OCEAN
BRITISH
COLUMBIA
ALBERTA
N
CATARACT
VANCOUVER
0
200
Km

CATARACT - CLAIM MAP



Memo - #41/83-157

ROUTING SLIP

TO- J. D. Mancuso

	IMMEDIATE ATTENTION		
			DESTROY
	APPROVE		HOLD
	COMMENT		RETURN
	HANDLE		ROUTE
	NOTE		TRACE
	PREPARE REPLY		
	SEE ME		
	FOR SIGNATURE		FILE

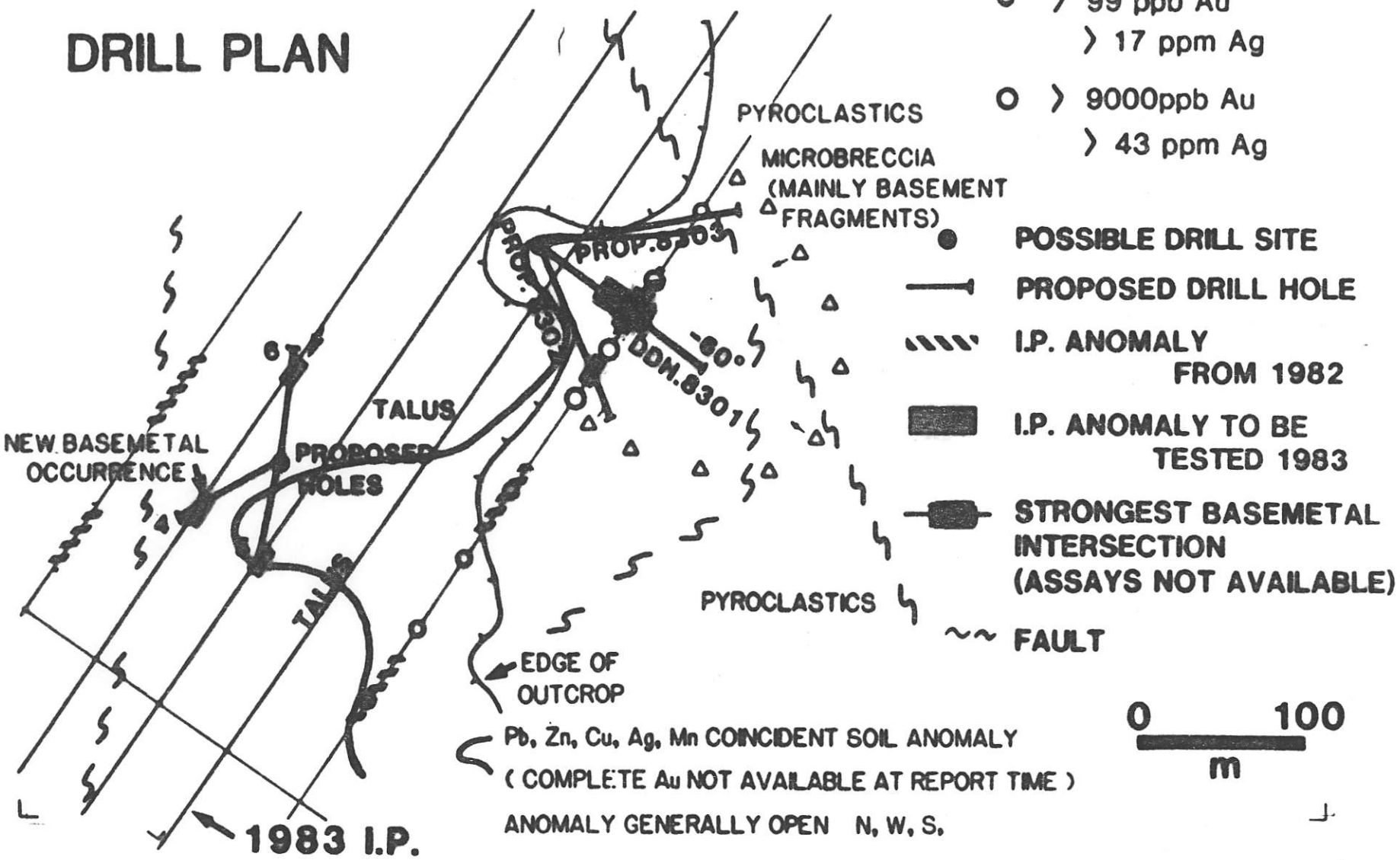
REMARKS - Omitted from July Monthly Report
Cataract - M518

FROM - Earl D. Dodson DATE - 1983-08-13

GO-24 - (4/70)

CATARACT EAST ZONE

DRILL PLAN



SOIL GEOCHEM

- ○) 99 ppb Au
) 17 ppm Ag
- ○) 9000ppb Au
) 43 ppm Ag

- ● POSSIBLE DRILL SITE
- —— PROPOSED DRILL HOLE
- ///// I.P. ANOMALY FROM 1982
- ▬ I.P. ANOMALY TO BE TESTED 1983
- —▬— STRONGEST BASEMETAL INTERSECTION (ASSAYS NOT AVAILABLE)
- ~~ FAULT

0 100
m

CHEVRON CANADA RESOURCES LIMITED

MINERALS STAFF

CANADA

MONTHLY PROJECT REPORT

PROJECT NAME	NUMBER	PERIOD COVERED
CATARACT	M518	August 1983

CURRENT YEAR TOTAL BUDGET: US $ 225,000.
EXPENDITURES TO END OF PERIOD: US $ 205,000. ESTIMATE
PROJECTION TO YEAR END: 100% OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

(1) I.P., ground magnetics.

(2) Geological and geochemical evaluation of precious metal potential in caldera margin targets.

(3) Diamond drill testing.

The objective is to intersect potential economic grade and width of precious metals.

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

The drilling program was completed at month-end with a total of 3285.5' drilled in six holes. We have received assay results on the first three holes and partial results on a fourth. A summary of the best intersections follows. A ten-foot sample of 0.11 oz/ton Au is the best intersection reported.

Summary of Best Intersections

Hole	Interval	Ag oz/ton	Au oz/ton
8301	75'-80'	1.63	0.026
	190'-195'	0.30	0.082
	250'-260'	0.27	0.029
8302	260'-270'	0.93	0.11
	270'-300'	0.40	0.02
8303	170'-180'	0.60	0.029
8304	90'-98'	1.66	No data

. . ./2

DDH 8304 confirmed the surface indications of a major NW trending fault structure in the drill target area.

It appears that the precious metals in the principal target, where multi-element rock geochemistry occurs, may be related to a large NE trending feldspar porphyry dyke of dioritic composition. This dyke does not have any known surface exposures in the area tested but is remarkably similar in composition to that of a composite stock of diorite exposed about 1 mile to the SW. Contact relations suggest the latter represent the latest intrusive event in the area. Dykes and sills of this material cut the rhyolite ring dykes. This intrusion was interpreted to represent a late event of resurgent activity following the caldera forming volcanism. Late intrusions tend to be associated with precious metal deposition and collapsed caldera environments in the San Juan volcanic field, among others. In order to follow-up on this concept, a reconnaissance geological and geochemical program in a area approximately 1 mile x 1 mile extending southward from the existing claims was completed. This particular area is favourable for precious metal deposition as indicated by the presence of strong through going faults, the diorite, the high stratigraphic level and an abundance of argillic altered rocks. Should the results of the surveys in the new area show promise, we might wish to conduct further target definition through a limited mapping program.

WORK PROGRAM FOR NEXT PERIOD:

Geological and geochemical sampling the GNOME claim situated in the Deadman River area near Kamloops in S.W. B. C. Gold has been indicated within an untested I.P. anomaly on this claim which adjoins a former gold producer in a road accessible location. This area has been subject recently to considerable staking activity as a company prepares to reopen the old mine for underground exploration.

CHANGES IN LAND STATUS:

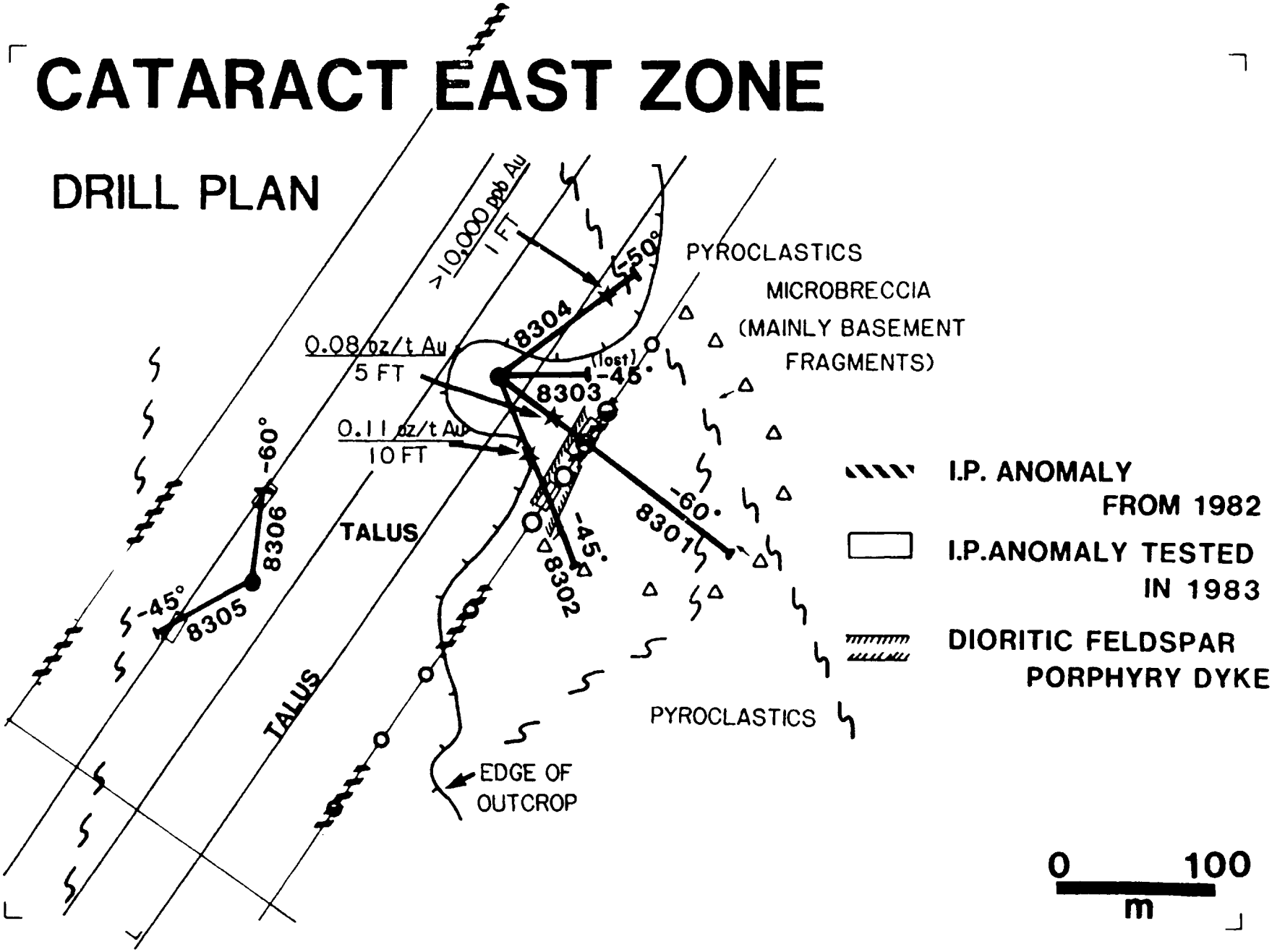
None.

Rayner Bruaset

R. U. BRUASET

CATARACT EAST ZONE

DRILL PLAN



CHEVRON CANADA RESOURCES LIMITED

MINERALS STAFF

CANADA

MONTHLY PROJECT REPORT

PROJECT NAME	NUMBER	PERIOD COVERED
CATARACT	M518	September 1983

CURRENT YEAR TOTAL BUDGET: US $ 225,000.
EXPENDITURES TO END OF PERIOD: US $ 205,000. ESTIMATE
PROJECTION TO YEAR END: 100 % OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

(1) I.P. ground magnetics.

(2) Geological and geochemical evaluation of precious metal potential in caldera margin targets.

(3) Diamond drill testing.

The objective is to intersect potential economic grade and width of precious metals.

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

All field work was completed as of the end of August and all drilling results have been received. A ten-foot sample assaying 0.11 oz/ton Au remains the best intersection to date. The project objective to intersect potential economic grade and width of precious metals was not reached.

About 40 analyses, generally 5-10 feet, range from .015 oz/ton to 0.11 oz/ton were obtained. These results are encouraging and could reflect close proximity to better grade mineralization perhaps along the S.W. strike of the structure. The results to date are inconclusive and further drilling is definitely needed.

The base and precious metal mineralization appears to be related to late dioritic intrusion and associated dykes. Our mapping indicates this intrusion postdates the suspected collapsed caldera event at the Cataract.

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Cataract (Cont'd)

Dykes correlating with the diorite cut the ring dyke complex. J. J. Rytuba, in a paper published in Arizona Geological Society Digest, Vol. XIV, 1981, indicates that calc-alkaline type calderas contain base and precious metal deposits which are typically much younger than the caldera forming volcanism and not generally related to them. The principal role of the caldera margin structures would be to channel hydrothermal fluids containing base and precious metals mobilized as a result of the late magmatic event. With this model in mind and the results obtained, it is clear that further testing is needed and hopefully a second season of drilling would yield the conclusive results required.

A program consisting of four 600 foot diamond drill holes drilled as per attached plan would cost about $125,000. U.S. This price tag would conclude a $16,500. Can. cash payment due on January 1, 1984. A decision to abandon the ground at the present level of testing would be risky and should be avoided if all possible.

I believe the Cataract represents a significant precious metal opportunity.

WORK PROGRAM FOR NEXT PERIOD:

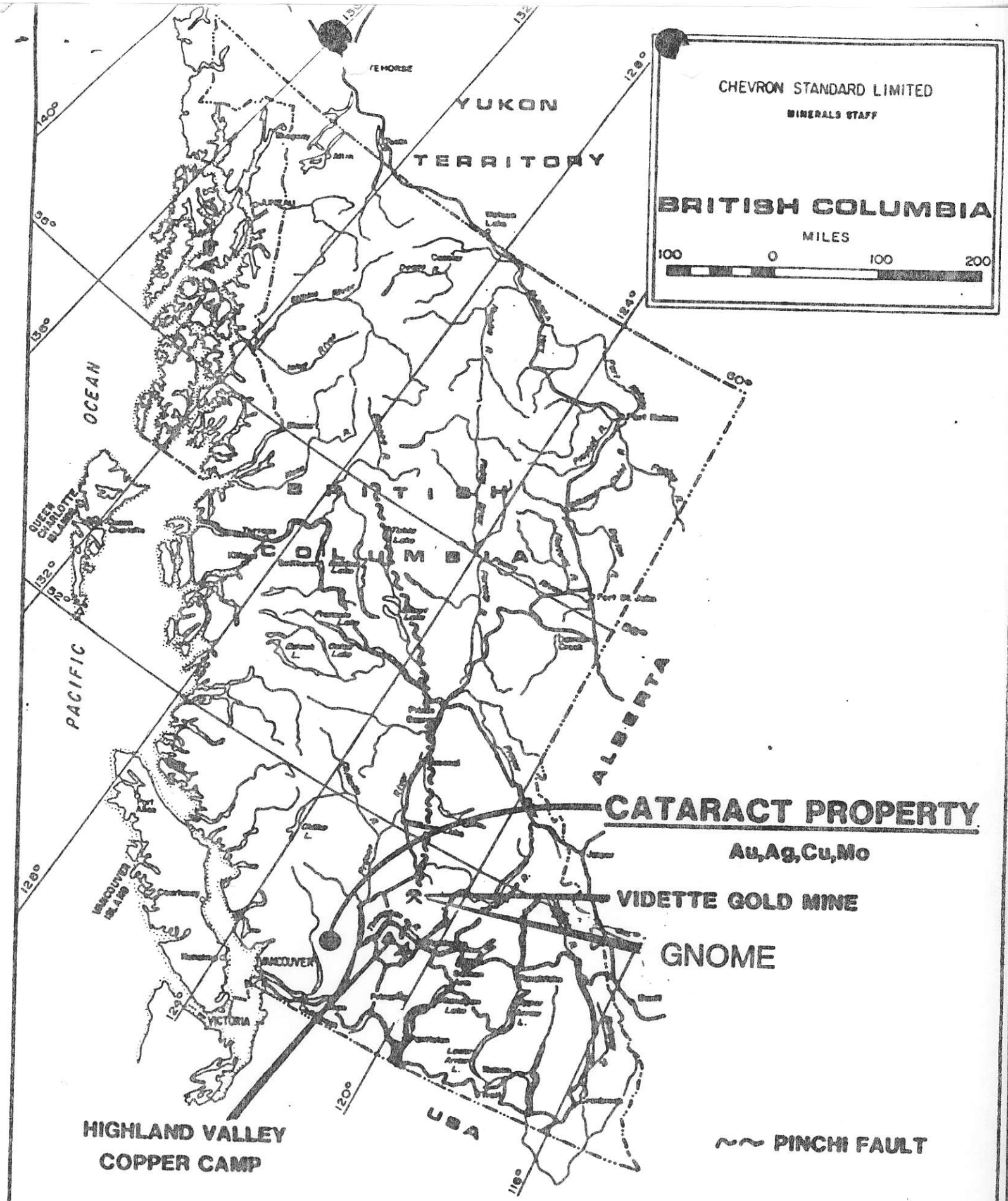
CHANGES IN LAND STATUS:

None.

R. U. BRUASET

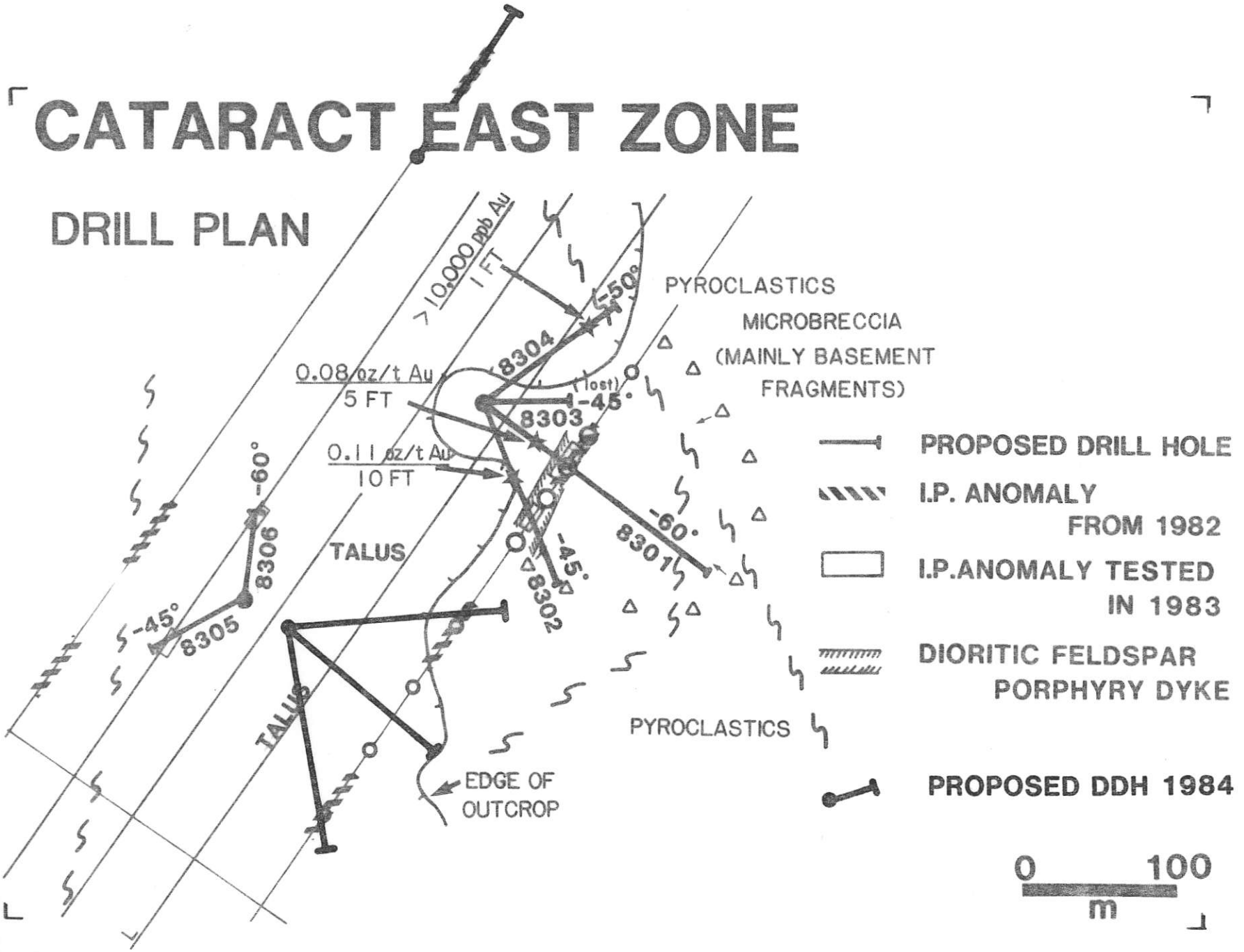
CATARACT

Hole	Intersection (ft)	Apparent Thickness (ft)	Au oz/ton	Ag oz/ton
8301	75-80	5	0.026	1.63
	95-100	5	0.015	0.70
	115-125	10	0.015	0.52
	135-140	5	0.020	0.39
	175-180	5	0.020	0.51
	190-195	5	0.082	0.30
	245-250	5	0.012	0.27
	250-260	10	0.029	0.27
	290-300	10	0.018	0.26
	320-325	5	0.012	0.32
	345-355	10	0.026	0.74
	360-365	5	0.015	0.33
	365-375	10	0.025	0.28
	560-565	5	0.023	0.50
	890-900	10	0.015	0.11
	960-980	20	0.012	0.29
	980-990	10	0.029	0.13
	1070-1080	10	0.012	0.082
	1180-1190	10	0.015	0.15
8202	40-50	10	0.012	0.67
	50-55	5	0.015	0.98
	260-270	10	0.11	0.93
	270-280	10	0.023	0.48
	290-300	10	0.029	0.45
8303	80-90	10	0.015	0.99
	100-110	10	0.015	1.15
	170-180	10	0.032	0.60
8304	11-13	2	0.015	1.84
	90-98	8	0.029	1.66
	265-275	10	0.020	0.34
	460-461	1	0.15	2.68
	509.5-510.5	1	0.016	1.05
8305	130-135	5	0.011	0.82
8306	195-200	5	0.031	1.34
	225-230	5	0.019	0.14


CHEVRON STANDARD LIMITED
MINERALS STAFF
BRITISH COLUMBIA
MILES
100 0 100 200
YUKON TERRITORY
BRITISH COLUMBIA
PACIFIC OCEAN
ALBERTA
USA
CATARACT PROPERTY
Au,Ag,Cu,Mo
VIDETTE GOLD MINE
GNOME
HIGHLAND VALLEY COPPER CAMP
~~ PINCHI FAULT

CATARACT EAST ZONE

DRILL PLAN



CHEVRON CANADA RESOURCES LIMITED

MINERALS STAFF

CANADA

MONTHLY PROJECT REPORT

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CATARACT	M518	November 1983

CURRENT YEAR TOTAL BUDGET: US $ 225,000.
EXPENDITURES TO END OF PERIOD: US $ 225,000. ESTIMATE
PROJECTION TO YEAR END: 100 % OF BUDGET

CURRENT YEAR PROGRAM AND OBJECTIVES:

Program: (1) I.P., ground magnetics (2) geological geochemical evaluation of precious metal potential in caldera margin targets (3) diamond drilling.

Objective: Potential economic grade and width of precious metals.

WORK PERFORMED DURING PERIOD AND SIGNIFICANT RESULTS/CONCLUSIONS:

A base metal bearing breccia with associated gold and silver, 55-75 m thick, was intersected in DDH 8301,02. This potential ore structure is strongly magnetic due to the intergrowth of pyrrhotite and magnetite with base and precious metals. A sizable ground magnetic anomaly occurs to the southwest on strike of this breccia. This extension is also anomalous by I.P. and multi-element soil geochemistry. Based on correlations from DDH 8302 to 03 and a three point solution, it appears that this breccia dips about 70° westnorthwesterly. The fact that the thickness of the breccia appears to be increasing in a southwesterly direction and the thickness of 0.1-grade gold also appears to be increasing in the same direction are encouraging features. The best intersection, namely 10 feet of 0.1 oz/ton gold in DDH 8302 occurs in the northern edge of the earlier noted ground magnetic anomaly which measures 100 m by 400 m. The size potential of this extension is sufficient to interest Chevron. A 300 m long by 25 m thick by 200 m deep deposit would contain 1 M oz of Au at a grade of 0.25 oz/ton. Similarly a deposit 300 m x 50 m x 300 m would contain 3 M oz. Some of the largest gold mines in similar tectonic setting in Colorado produced over 1 M oz. Examples occur in the Cripple Creek and Red Mountain Districts.

Cataract (Cont'd)

The breccia developed on a fine grained andesitic rock which we believe to be a dyke correlating with a nearby plug of similar composition. These intermediate rocks postdate the ring dykes associated with the Cataract caldra collapse. Their timing is a favourable feature in our collapsed caldera gold model. Apparently in the San Juan volcanic field of Colorado, precious metal deposits are associated with igneous events that postdate the local caldera collapse by several million years. It is believed that late intrusions convect meteoric hydrothermal solutions containing precious metals through structures resulting from caldera collapse depositing metals in them.

While the 1983 drilling program fell short of the objective, compelling technical basis exists for testing the breccia on strike. Obviously, it is a potential ore structure and the target is very well defined. A minimum program to test this extension would consist of three holes at -45° drilled as shown on the attached plan. The cost of the program would be about $175,000. With the data we now have, it would be risky to abandon the option without this additional testing.

WORK PROGRAM FOR NEXT PERIOD:

Report preparation.

CHANGES IN LAND STATUS:

None.

R. U. Bruaset