

# Mt. Calvary Resources Ltd.

1027 - 470 Granville Street, Vancouver, B.C. V6C 1V5 • Tel: (604) 687-1658

1985 EXPLORATION REPORT

ON THE

CPW GOLD PROSPECT  
SPANISH MOUNTAIN AREA

CARIBOO MINING DIVISION  
BRITISH COLUMBIA

NTS: 93 A/11W  
LATITUDE: 52° 36' N  
LONGITUDE: 121° 28' W

FIELD WORK DONE DURING THE PERIOD: JUNE 1 - OCTOBER 1, 1985

FIELD WORK SUPERVISED BY: J.A. McClintock, P.Eng.  
REPORT PREPARED BY: J.A. McClintock, P.Eng.

December 9, 1985

CLAIM: CPW (4541)

## TABLE OF CONTENTS

	<u>PAGE</u>
SUMMARY AND RECOMMENDATIONS	1
INTRODUCTION	2
LOCATION AND ACCESS	2
PHYSIOGRAPHY AND VEGETATION	3
CLAIM STATUS	3
LOCATION MAP	4
GOLD EXPLORATION TARGETS	5
1985 FIELD PROGRAM (PHASE I AND II)	6
GEOLOGICAL SETTING	9
PROPERTY GEOLOGY	9
LITHOLOGIC DESCRIPTIONS	10
STRUCTURAL SETTING	11
MINERALIZATION	12
MADRE ZONE	13
11, 12, 13 AND LE ZONES	15
M ZONE	16
140Z ZONE	16
CONCLUSIONS	17
SUMMARY OF 1985 TECK PHASE I AND II EXPENDITURES	18
PROPOSED 1985 PHASE III PROGRAM	19
BIBLIOGRAPHY	20
STATEMENT OF QUALIFICATION	21

## APPENDICES

APPENDIX A ..... ROTARY DRILL LOGS

## ILLUSTRATIONS

		<u>PAGE</u>
<u>TABLES</u>		
TABLE 1	ROTARY DRILL HOLE DATA	8
TABLE 2	ROTARY DRILL RESULTS	14
 <u>FIGURES</u>		
FIGURE 1	LOCATION MAP	4
FIGURE 2	CLAIM MAP	5
 <u>PLATES</u>		
		<u>IN REAR POCKETS</u>
PLATE 1	COMPILATION MAP	1:1000
PLATE 1a	GEOLOGY CPW CLAIM	1:1000
PLATE 2	CROSS SECTION FF'	1:200
PLATE 3	CROSS SECTION GG'	1:200
PLATE 4	CROSS SECTION HH'	1:200
PLATE 5	CROSS SECTION II'	1:200
PLATE 6	CROSS SECTION JJ'	1:200
PLATE 7	CROSS SECTION KK'	1:200
PLATE 8	CROSS SECTION LL'	1:200
PLATE 9	CROSS SECTION MM'	1:200
PLATE 10	CROSS SECTION NN'	1:200
PLATE 11	CROSS SECTION OO'	1:200
PLATE 12	CROSS SECTION PP'	1:200
PLATE 13	TRENCH GEOLOGY M-1, M-2, M-3, M-4, NORTH AND SOUTH	1:200
PLATE 14	TRENCH ASSAYS M-1, M-2, M-3, M-4, NORTH AND SOUTH	1:200
PLATE 15	TRENCH GEOLOGY M-5, AND M-6	1:200
PLATE 16	TRENCH ASSAYS M-5 AND M-6	1:200
PLATE 17	TRENCH GEOLOGY M, N, 8, 9 AND 10	1:200
PLATE 18	TRENCH ASSAYS M, N, 8, 9 AND 10	1:200
PLATE 19	TRENCH GEOLOGY M-7	1:200
PLATE 20	TRENCH ASSAYS M-7	1:200
PLATE 21	TRENCH GEOLOGY LE ZONE	1:200
PLATE 22	TRENCH ASSAYS LE ZONE	1:200
PLATE 23	TRENCH GEOLOGY G, H, 1, 11, 12 AND 13	1:200
PLATE 24	TRENCH ASSAYS G, H, 1, 11, 12 AND 13	1:200
PLATE 25	LONGITUDINAL SECTION AA'	1:1000

## SUMMARY AND RECOMMENDATIONS

The CPW Claim, lying 4 miles east-southeast of the village of Likely, B.C., was evaluated in 1985 by a comprehensive, two phase exploration program. During Phase I (March to June, 1985), 600 metres of backhoe trenching and 615 metres of rotary percussion drilling in 8 holes was completed at a cost of \$149,900. Prompted by highly encouraging results, a continued Phase II Program of 800 m of backhoe trenching and 2,165 metres of rotary percussion drilling in 29 holes was carried out at a cost of \$391,300.

Geological mapping shows the claims to be underlain by a thick succession of Triassic-Age inter-bedded phyllitic shale, siltstone and dolomitic quartzite which have been folded into a northwest trending anticline-syncline pair and intruded by younger feldspar porphyry dykes. Numerous faults and shear zones disrupt lithologic contacts in directions parallel and conjugate to the fold axis.

Gold mineralization is widespread and occurs in three interrelated forms, localized in and adjacent to fold-related fracture and shear zones. Gold is found in anastomosing vein systems in shale, as replacements of pyrite invariably associated with shaly siltstone, and in quartz veins in massive siltstone.

Trenching and drilling in 1985 was focused on 4 of the known auriferous quartz stockworks and replacements zones: Madre, LE-11-12-13, M, and 14oz zones. All 4 zones remain open along strike and to depth.

The 1985 programs have enhanced the CPW claim's potential for hosting an exciting and intriguing structural-strata controlled gold deposit. Continued aggressive exploration is warranted to accurately define grades and tonnages of the known auriferous zones. To this end, a 1985 Phase III program of diamond drilling is recommended. The principle objective of the Phase III program will be to continue with reserve definition by evaluating strike and down dip projections of the known gold zones. The anticipated cost of the Phase III program is \$307,300.

## INTRODUCTION

Mt. Calvery Resources Ltd., successfully completed a two phase exploration program on the CPW Gold Prospect during 1985. Combined total expenditures for the two phase program was \$391,300.

The Phase I program, consisting of 600 m of backhoe trenching and 655 m of rotary percussion drilling in 8 holes was undertaken during the period June 1 through July 15, 1985. The Phase I work was focussed in the vicinity of drill hole MR-7 which intersected gold mineralization assaying 0.20 oz/ton gold over 26 m. Results of the Phase I program demonstrated this zone, named the Madre, to be continuous to the northeast, southwest and to depth, with surface trench assays to 0.28 oz/ton gold over 13 m and drill intersections to 0.16 oz/ton gold over 11 m. In addition, several additional significant gold-bearing zones, the 12 and 14 Oz Zones, were discovered.

Prompted by the highly encouraging results of the Phase I work, a comprehensive Phase II program of 2,517 metres of rotary percussion drilling in 29 holes and 700 m of trenching was carried out during the period August 1st through September 30th. Phase II work was focussed on reserve definition of the Madre Zone and initial drill testing the 12 Zone and LE Zones. This program successfully upgraded the property by extending the still open Madre Zone to 150 m on strike and down-dip for 60 m, and tracing the LE, and newly discovered 11 and 13 Zones over a 90 m strike length. In addition, trenching established strike continuity of the 14 Oz and M Zones.

The encouraging results to date fully justify additional exploration to define reserves of potential economic gold mineralization.

## LOCATION AND ACCESS

The CPW Claim is located just west of Spanish Lake, approximately 4 miles east-southeast of the village of Likely, B.C. Approximate geographic coordinates are 52°36' North latitude, and 121°28' West longitude (see Figure 1).

The all-weather, Spanish Lake - Abbott Creek forestry-access road transects the northern portion of the claim and provides ready access from the village of Likely. Secondary logging roads off the main haul road have been up-graded and extended to provide access throughout the property.

#### PHYSIOGRAPHY AND VEGETATION

The CPW Claim lies on the north slope of the western ridge of Spanish Mountain. The terrain is moderate, elevations range from 3,000 feet a.s.l. at Spanish Creek to 4,300 feet a.s.l. along the southern boundary of the property. Side slopes seldom exceed 25°.

Much of the property has been clear-cut logged; however, the northeast and southwest corners of the property are covered by mature stands of fir, spruce, alder and cottonwood. The logged-off areas have been reforested, but are largely covered by a heavy growth of alder.

#### CLAIM STATUS (see Figure 2)

The four-unit CPW Claim was staked in October, 1982 and recorded November 1, 1982 (Record No. 4541) by D.E. Wallster, as agent for C.P. Wallster, trustee for the Mariner Joint Venture. On March 18, 1983, the CPW Claim was optioned to Whitecap Energy Inc.

Mt. Calvery Resources acquired the CPW Claim by an agreement with Whitecap Energy and the Mariner Joint Venture under a Letter of Agreement on August 2, 1984, and a formal agreement dated November 2, 1984. Mt. Calvery has the right to earn an 100% interest in the property, while Mariner and Whitecap may elect to participate as to 10% and 20% working interests respectively.

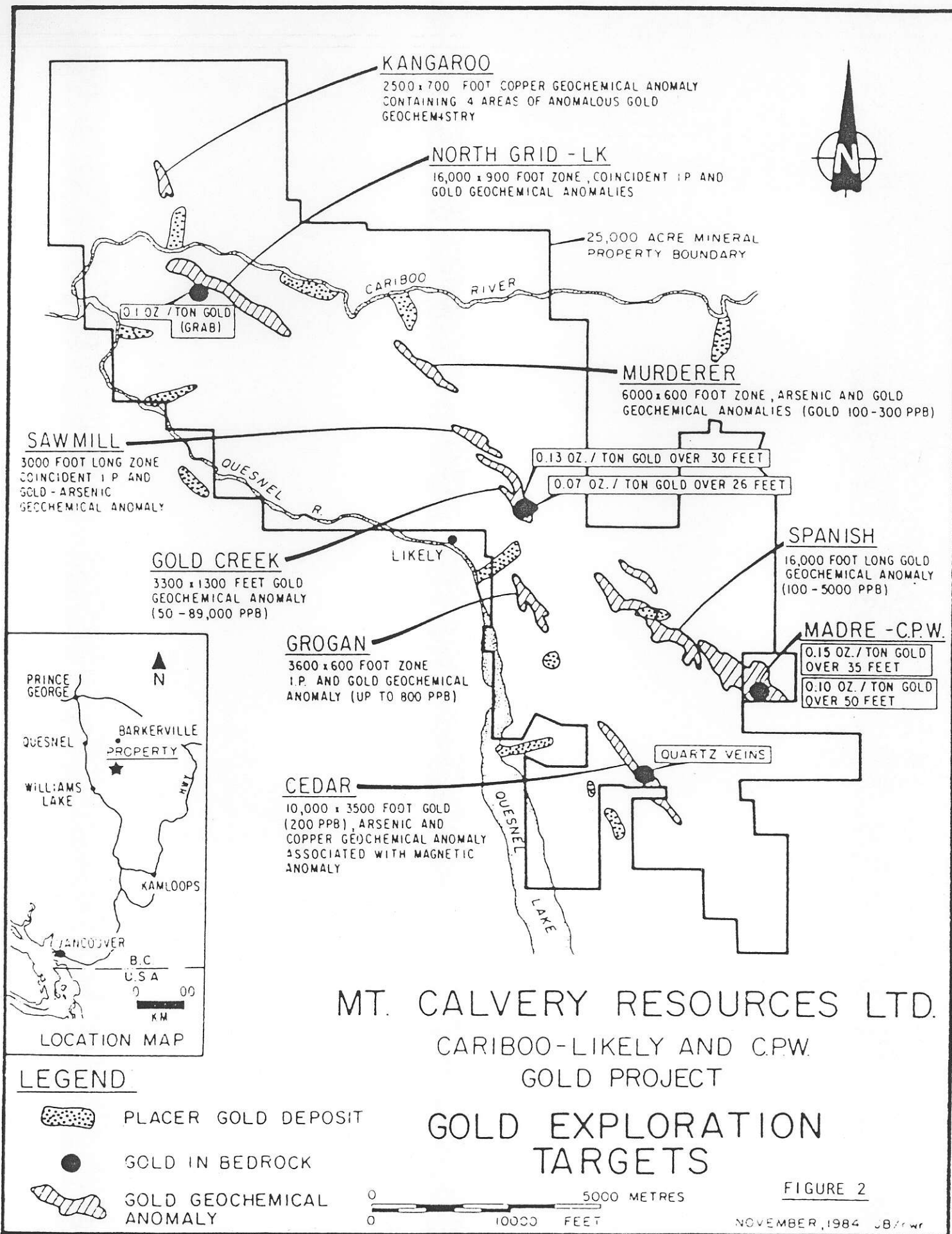
Mt. Calvery and Teck Corporation concluded a financing agreement on November 2, 1984, which allows Teck the option of funding Mt. Calvery's Cariboo-Likely Project, including the CPW Claim, through production, by the purchase of Mt. Calvery treasury shares. Since November 1984, the necessary funds to continue exploring the CPW Claim have been provided by Teck.



MT. CALVERY RES. LTD.  
CPW CLAIM  
LOCATION MAP

FEB ,1985

FIGURE 1





## 1985 FIELD PROGRAM

### Phase I Program

Gold mineralization was found on the CPW Claim in late July, 1984, during detailed prospecting of a large intense gold soil geochemical anomaly. A subsequent 1984 exploration program of trenching and drilling in the discovery zone obtained excellent results of gold mineralization with values up to 0.20 oz/ton over 26 m in drill hole MR-7.

Prompted by the highly encouraging results of the 1984 program, Teck Corporation funded a two phase, 1985 comprehensive exploration program undertaken on the CPW Claim. The initial Phase I program was targeted on the Madre Zone and focussed on delineating the gold mineralization discovered in drill hole MR-7 with a secondary goal of preliminary evaluating other known gold-mineralized zones on the CPW. The Phase I Program consisted of:

- 1) 600 m of (Cat 235) backhoe trenching on the Madre and LE Zones;
- 2) Cutting approximately 250 one-metre channel samples (5-7 kg each) from mineralized zones exposed by the above trenches;
- 3) Detailed geological mapping (1:200) of trenches and road cuts;
- 4) Rotary percussion (reverse circulation) drilling of 8 inclined holes from 8 sites totalling 655 metres, of which 7 were drilled on the Madre and 1 was drilled on the LE Zone. Chip samples were collected at one-metre intervals and analyzed for gold.

### Phase II Program

The Phase II Program was designed to explore the Madre Zone by grid drilling on strike to the northeast and southwest; testing the strike extensions of the LE Zone and evaluating several other zones outlined during the earlier exploration programs. To this end, Phase II consisted of:

- 1) Approximately 820 m of (Cat 225) backhoe trenching of several additional gold mineralized zones located parallel and adjacent to the Madre Zone;
- 2) Cutting approximately 550, one-metre channel samples (5-7 kg each) from the mineralized zones exposed by the above trenches;
- 3) Detailed geological mapping (1:200) of the trenches;
- 4) Rotary drilling (reverse circulation) of 29 inclined holes from 29 sites, totalling 2,521 metres. Chip samples were collected at 1 metre intervals and analyzed for gold.

Welcome North Mines Ltd., as Operator, initiated and conducted the Phase I and II exploration programs on the CPW Property as set out in Schedule "D" of the Teck-Mt. Calvery financing agreement.

TABLE 1 - ROTARY DRILL HOLE DATA

<u>Hole No.</u>	<u>Length Metre</u>	<u>Azimuth</u>	<u>Dip</u>	<u>Grid Location</u>	
				<u>South</u>	<u>East</u>
MR-11	107	120°	-60°	947	340
MR-12	76	120°	-60°	940	330
MR-13	76	120°	-60°	948	289
MR-14	76	120°	-60°	964	315
MR-15	76	120°	-60°	914	346
MR-16	77	120°	-60°	895	307
MR-17	77	120°	-60°	880	350
MR-18	77	120°	-60°	707	362
MR-19	76	120°	-60°	923	304
MR-20	77	120°	-60°	933	260
MR-21	80	120°	-60°	870	326
MR-22	92	120°	-60°	881	277
MR-23	92	120°	-60°	862	300
MR-24	76	120°	-60°	892	376
MR-25	107	120°	-60°	864	393
MR-26	107	120°	-60°	850	366
MR-27	107	120°	-60°	848	339
MR-28	107	120°	-60°	822	312
MR-29	107	120°	-60°	810	284
MR-30	123	120°	-60°	812	422
MR-31	107	120°	-60°	782	371
MR-32	142	120°	-60°	793	334
MR-33	110	120°	-60°	918	232
MR-34	77	120°	-60°	977	270
MR-35	92	120°	-60°	962	244
MR-36	77	120°	-60°	751	320
MR-37	77	120°	-60°	760	395
MR-38	60	120°	-60°	791	410
MR-39	77	120°	-60°	840	545
MR-40	77	120°	-60°	873	545
MR-41	77	120°	-60°	681	383
MR-42	77	120°	-60°	700	412
MR-43	77	120°	-60°	810	547
MR-44	77	120°	-60°	793	522
MR-45	77	120°	-60°	908	274
MR-46	61	120°	-60°	928	372
MR-47	30	120°	-60°	963	365

### GEOLOGICAL SETTING

The Cariboo-Quesnel Gold Belt lies within the Cariboo-Quesnel Trough, a 20 mile wide, northwest-trending, early Mesozoic volcanic-sedimentary belt of regional extent. To the west, the trough is fault-bounded by Cache Creek Terraine sediments and greenstones, and to the east by Omineca Terraine metamorphosed sediments. The trough is defined by an Upper Triassic Assemblage of calcareous argillites, sandstones and conglomerates overlain by a series of Jurassic basalt flows and breccias, with variable interbedded limestone, mudstone, greywacke and conglomerate and upper series of maroon-coloured basaltic flows and breccias. This entire sequence has been intruded by a series of stocks and sills of syenite and diorite.

### PROPERTY GEOLOGY

The Property is underlain by a northwest trending assemblage of intercalated sericite-chlorite phyllite, phyllitic siltstone, massive siltstone, and highly carbonate altered dolomitic quartzite of Triassic Age. Light grey altered quartz porphyry to dacite dykes cut the above lithologies in the southwest portion of the property. Structurally the above units have been folded into a major northwest trending anticline-syncline pair. Much of the property overlies the "S" limb of the anticline resulting in a predominant sheet dip of 30-35 degrees to the northeast with local dip reversals due to open parasitic folding. Numerous faults and shear zones parallel and conjugate to the major fold axes are present throughout the property and are important control to the gold mineralization. All sedimentary units have suffered low grade greenschist metamorphism with universal pyritization and carbonatization.

## LITHOLOGIC DESCRIPTIONS

Structural-stratigraphic mapping has outlined a thick succession of interbedded phyllitic shale, siltstone and dolomitic quartzite (Plate 1). Although there is an apparent lack of stratigraphic control, the succession appears to have a minimum thickness of over 150 metres. Thickness of individual members varies from 15 to over 60 metres.

The core of the northwest trending anticline consists of dark grey to black, variably sheared, graphitic, phyllitic shale and silty shale. This shale assemblage, unit SH, largely confined to the core of the anticline is considered to be the oldest unit on the property. Abundant fine grained pyrite <5 mm and oval shaped limonite after ankerite <1 cm are common throughout.

The shale sequence is conformably overlain by a pale orange weathering variably calcareous, laminated dark grey silty shale to shaly siltstone. Overall, the shaly siltstone, unit SST, is pyritic with euhedral crystal growth to one inch, but commonly has a lower graphite content.

Overlying the shaly siltstone is a pale orange weathering, massive to thick bedded, light to dark grey siltstone, unit ST. Since this is the most competent unit on the property, contacts with other less competent shaly members are usually sheared as a result of the northeast-southwest compression.

Locally, siltstone to quartzite horizons that are highly altered a light grey to white assemblage of silica, dolomite and fuchite, have been tentatively labelled "Altered Sediments" unit AS. These altered units have a granular quartzitic appearance and due to the high calcium-magnesium content, the original rock was probably a dolomitic quartzite. A future thin-section study will be required to properly classify all rock types and their alteration overprint.

Intrusive into the sedimentary rocks are narrow light grey, siliceous, quartz feldspar porphyry dikes and sills ranging from a few inches to over 20 feet thick. They appear to be most common in the southwestern portion of the claim. The age of the porphyries has not been determined, but it is assumed they are related to the Jurassic Age stocks seen elsewhere in the district. The porphyry dykes commonly contain minor fuchite, up to 5 percent subhedral pyrite and traces of galena. These dykes are cut by quartz veins containing gold mineralization.

All of the above sedimentary units indicate evidence of moderate to strong carbonization and pyritization. Ankerite occurs as oval shaped blebs up to 1/2 inch in diameter disseminated throughout the rock units, but is more prevalent in massive siltstone and the altered dolomitic quartzite. Overall, the ankerite varies from 10 to 25 percent by volume throughout the sedimentary sequence. Medium to coarse grained euhedral pyrite up to 1 inch in diameter is also common throughout all sedimentary units. Note gold mineralization is associated with a second generation of pyrite associated with silicification.

#### STRUCTURAL SETTING

The CPW Claim largely covers the east limb of a major northwest trending anticline. Bedding attitudes, when recognized, have an average strike of 130 degrees and variable dip of 30 to 60 degrees to the northeast. The variable dips are due to open parasitic folds along the back of "S" limb of the anticline. These folds have amplitudes of several tens of feet and wave lengths of 50 to 100 feet. The net effect of the sub-parallel topographic relief and unit sheet dips results in the present surface being a dip slope.

Economically important sets of conjugate shears, axial plane shears and sheared rock contacts also appear related to the stage of northeast-southwest compression. Axial plane shear zones trend at approximately 150° and are sub vertical. These zones have been recognized in the graphitic shale with widths of over 50 feet that contain graphitic shear planes, quartz veinlets and disseminated fine grained subhedral pyrite accompanied by anomalous gold content.

A conjugate set of fractures and shears has been recognized and is believed to be an important control for the gold mineralization. A set of quartz filled fractures and shears that trends at 035 degrees with a steep northeast dip contains coarse visible gold. A fracture set trending at 090 to 115 degrees has been identified, but its economic significance is presently unknown.

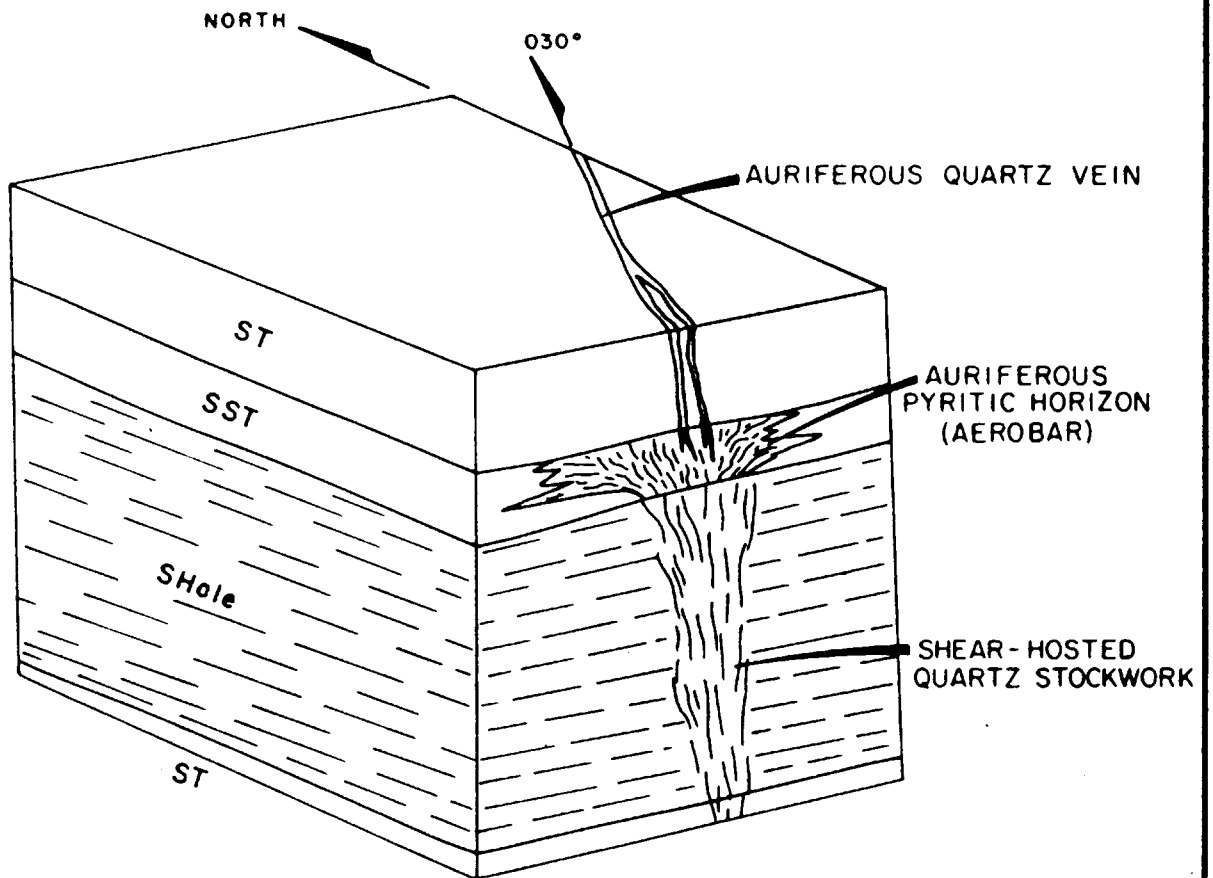
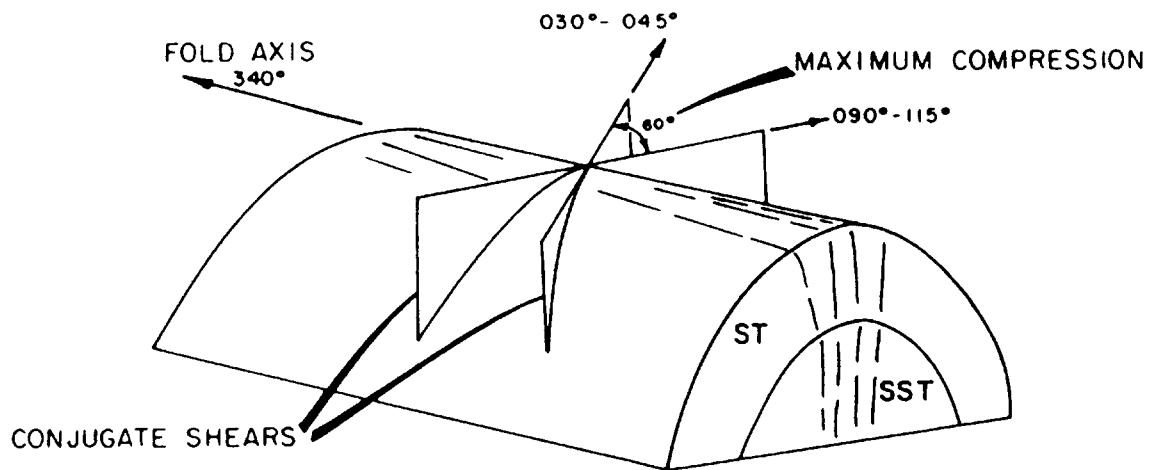
Late stage north to northeast sub vertical faults with grey clay gouge appear to displace rock unit boundaries, but post date the mineralizing event.

In short, the structural preparation of the layered sequence of shales and siltstones through folding, shearing and fracturing appears to have provided the network of channelways for the silica-gold mineralization.

#### MINERALIZATION

Gold-Bearing quartz veins were discovered on Spanish Mountain in the 1930's (possibly earlier) and were subsequently explored by the N.A. Timmins Corp., who, in the period to 1938, did extensive hand-trenching and drove several short adits and declines. In 1947, the veins were re-evaluated with a limited diamond drill program. From 1948 to 1982, with the exception of sporadic trenching and sluicing designed to evaluate the placer-gold potential, the area was not actively explored. Grid soil sampling in 1983 outlined large areas of the area as anomalous for gold. In late July, 1984, Mt. Calvery prospector, Dave Heino discovered free-gold within vuggy shales and siltstones while prospecting within the gold geochemical anomaly.

- a) In anastomosing quartz vein stockworks occupying north easterly trending, steeply dipping shear zones in graphitic shale;
- b) As residual particles in leached pyrite vugs invariably with silica in pyritic shaly siltstone. Beneath the zone of surface oxidation, gold occurs as coatings and fracture fillings in pyrite grains that are encapsulated in silica;
- c) As free gold associated with minor galena and pyrite in north easterly trending, steeply dipping, 2 cm to 1 m quartz veins in massive siltstone and intensely silicified and carbonate altered porphyry dykes.



MT. CALVERY RES. LTD.  
CPW CLAIM  
BLOCK DIAGRAM  
GOLD MINERALIZATION



The three forms of gold mineralization are thought to have been deposited by hydrothermal fluids localized in north easterly trending fracture and shear zones formed by compressional shearing during folding of the strata. Compressional stress caused the more competent massive siltstones and altered dykes to fail along a limited number of fractures, while wide zones of fracturing developed in the shale. The auriferous, hydrothermal fluids migrated up these structures forming discrete vein-fillings in the massive siltstone, but horsetailed into an anastomosing vein system on passing into the fractured shale. Ponding of the hydrothermal fluids occurred as the upwardly migrating solutions attempted to pass from the structurally more permeable shale into the overlying less permeable siltstone. As ponded fluids spread laterally through the pyritic shaly siltstone, gold was deposited as replacements of pyrite rims forming manto-like replacement zones beneath the less permeable siltstone.

The 1985 exploration focussed on evaluating both the manto-type and shear-hosted, stockwork zones which have potential for significant tonnages of near surface open pitable gold mineralization.

Of the seven known auriferous zones on the claim, four were explored during the 1985 program. These four zones are known as the Madre, 11-12-13 and LE, M, and 14oz zones. A description of each zone follows:

#### Madre Zone

This zone, which was the discovery zone, has been explored by 8 trenches, 2 diamond drill holes and 24 rotary holes (Plates 1-7, 13 & 14). Drilling and trenching shows the zone to consist of a north easterly trending, 50° dipping root zone of anastomosing quartz veins that upward spread-out into a 'mushroom' shaped manto beneath a cap rock of massive siltstone. The stockwork part of the zone has widths of between 10 and 20 metres, with the zone spreading out to over 30 metres in the upper manto part of the zone.

TABLE 2

MT. CALVERY RESOURCES LTD.

October 3, 1985

TABLE OF ROTARY PERCUSSION DRILL HOLES

MADRE GOLD ZONE - CPW PROPERTY

DRILL HOLE	INTERVAL (METRES)	LENGTH		GOLD ASSAY (OUNCES/TON)	DRILL HOLE	INTERVAL (METRES)	LENGTH		GOLD ASSAY (OUNCES/TON)
		(METRES)	(FEET)				(METRES)	(FEET)	
MR-4	11 to 22	11	36	0.05	MR-25	8 to 10	2	7	3.05
including	14 - 19	5	16	0.07		52 - 54	2	7	0.15
	32 - 35	3	10	0.05	MR-26	47 - 48	1	3	0.19
MR-5	23 - 30	7	23	0.06	MR-27	47 - 49	2	7	0.05
MR-6	42 - 51	9	30	0.05	MR-28	68 - 74	6	20	0.05
MR-7	8 - 14	6	20	0.05		79 - 82	3	10	0.12
	24 - 50	26	85	0.19	MR-29	76 - 78	2	7	0.04
including	39 - 43	4	13	0.49	MR-30	31 - 32	1	3	0.36
MR-8	8 - 12	4	13	0.04		63 - 71	8	26	0.05
	14 - 16	2	7	0.05	MR-31	57 - 74	17	56	0.06
	45 - 48	3	10	0.04		78 - 87	9	30	0.04
MR-9	2 - 24	22	72	0.06	MR-32	21 - 24	3	10	1.75
including	14 - 20	6	20	0.10	MR-33	9 - 14	5	16	0.05
MR-10	11 - 16	5	16	0.10		86 - 89	3	10	0.11
MR-11	4 - 25	21	69	0.10	MR-34	16 - 18	2	7	0.12
including	4 - 15	11	36	0.16		68 - 69	1	3	0.132
MR-12	5 - 14	9	30	0.11	MR-35	51 - 72	21	69	0.14
MR-13	10 - 13	3	10	0.07	including	51 - 60	9	30	0.27
	18 - 22	4	13	0.05	MR-36	72 - 77	5	16	0.08
MR-14	63 - 66	3	10	0.06	including	72 - 75	3	10	0.11
MR-15	12 - 25	13	43	0.12	MR-37	41 - 45	4	13	0.05
including	15 - 22	7	23	0.17	MR-38	2 - 15	13	43	0.06
MR-16	6 - 12	6	20	0.04		45 - 49	4	13	0.08
MR-17	28 - 30	2	7	0.11	MR-39	27 - 30	3	10	0.05
	39 - 43	4	13	0.08	MR-40	no significant intersections			
MR-18	2 - 14	12	39	0.10	MR-41	36 - 37	4	13	0.06
including	2 - 6	4	13	0.16		49 - 60	11	36	0.05
	58 - 66	8	26	0.05	including	49 - 53	4	13	0.06
MR-19	21 - 31	10	33	0.05	"	55 - 60	5	16	0.05
including	26 - 31	5	16	0.07	MR-42	22 - 27	5	16	0.06
MR-20	28 - 34	6	20	0.05		62 - 75	13	43	0.07
	45 - 59	14	46	0.33	including	69 - 75	6	20	0.10
including	48 - 58	10	33	0.45	MR-43	no significant intersections			
MR-21	9 - 10	1	3	0.30	MR-44	no significant intersections			
MR-22	18 - 29	11	36	0.04	MR-45	no significant intersections			
including	26 - 29	3	10	0.07	MR-46	33 - 35	2	7	0.07
MR-23	72 - 79	7	23	0.05	MR-47	no significant intersections			
MR-24	16 - 23	7	23	0.06					
	40 - 45	5	16	0.31					

The Madre Zone has been traced continuously over a distance of 150 metres. To the northeast the zone plunges beneath a massive siltstone cap rock and can be traced through to Section KK (Plate 7), beyond which the zone terminates against an intensely silicified and carbonate altered swarm of porphyry dykes and altered sedimentary rocks. On encountering the highly competent dykes, the Madre Zone dissipates into large auriferous quartz veins of the type categorized in this report as type (c) mineralization. The Madre Zone remains open to the southwest and to depth. Gold mineralization on strike with the Madre Zone has been observed on the Peso ground, a distance of 50 metres from the claim boundary, with the favourable shale and shaly siltstone units exposed for over 250 m south of the claim boundary.

To date, drilling and trenching results indicate the Madre Zone to have a probable reserve of nearly 400,000 tons grading 0.1 oz/ton gold, with the zone open on strike to the southwest and to depth. The ultimate potential reserve of the Madre Zone to a depth of 70 m and over a strike length of 350 m is believed to be in excess of 1 million tons grading 0.1 oz/ton gold. Confirming the dimensions of this zone will require a further 600 metres of drilling in approximately 8 holes.

#### 11, 12, 13 and LE Zones

The 11, 12, 13 and LE Zones are separate, but parallel zones lying on strike with the Madre Zone, northeast of the dyke swarm that terminates the Madre Zone. The five zones occur within a thick succession of shaly siltstone and minor siltstone and shale, and are well exposed in the LE trenches, Trench 12, and Trench 13. The stratigraphic relationship of this shaly siltstone and the shale-shaly siltstone hosting the Madre Zone is unclear and requires further study. Individual zones consist of anastomosing stockworks of quartz veins with replacement gold mineralization in pyritic shale beds between the veins.

Results from trench sampling and 13 drill holes show the individual zones to have average widths of 8 metres with grades ranging from 0.1 to 0.05 oz/ton gold (Plates 9 through 12). These zones have been traced for 90 m on strike and remain open to the northeast and to depth.

Fill-in drilling and drilling the on strike extensions of these zones will require an additional 750 metres of drilling in 10 holes.

#### M Zone

The M Zone was discovered during Phase II trenching. This zone which is exposed at the southeast end of Trench 10 and the northeast end of Trench M occurs in the shaly siltstones that hosts the 11, 12, 13 and LE Zones. Sampling of the trenches indicate gold grades in the order of 0.10 oz/ton over 5 metres. The zone, which is exposed by trenching over a strike length of 70 m is open in all directions. The potential strike length of M Zone is speculative, but is likely similar to the Madre Zone. Further trenching and drilling is required to define the strike and depth continuity of the zone.

#### 14oz Zone

The 14oz Zone was discovered while prospecting during the Phase I program. Subsequent Phase II trenching determined the zone to consist of gold-bearing veins of type (c) mineralization in an intensely silicified carbonate altered dyke swarm. The veins, which range between 5 cm and 1 m, locally have grades to 14.7 oz/ton gold. Although the veins are too small and erratic to constitute a viable exploration target, where they pass into more favourable host rocks to the northeast and southwest, a potential exists for stockwork and replacement gold mineralization. The southwest and northeast extensions of the 14oz Zone are untested, making the zone a priority target for future exploration. The vein system exposed in the 14oz Zone is comparable in gold grade and intensity to that which separates the Madre and LE-13-12-11 Zones.

Potential exists, therefore, for gold mineralization of similar grade and size to exist on strike of the 14oz Zone.

#### CONCLUSIONS

Exploration to date has successfully identified seven zones of structural-strata controlled gold mineralization that are potentially open pitable. All of the zones remain open on strike and to depth, and will require a substantial on-going exploration program of exploratory and grid-drilling to delineate grade and tonnage.

CPW PROPERTY  
(Revised October 16, 1985)  
SUMMARY OF 1985 PHASE I & II EXPENDITURES

<u>EXPLORATION FUNCTION</u>	<u>COSTS TO SEPT. 30/85</u>	<u>ESTIMATED COSTS FOR COMPLETION</u>	<u>ESTIMATED TOTAL COST</u>
Analyses - Assays & Geochem	36,069.09	10,384.65	46,453.74
Camp Maintenance	11,376.98		11,376.98
Consulting - Geological	4,961.11		4,961.11
Consulting - Metallurgical	3,619.50		3,619.50
Expediting	1,310.31	500.00	1,810.31
Drilling	59,961.71	41,700.00	101,661.71
Field Equipment	14,106.41	117.33	14,223.74
Maps, Printing & Drafting	5,668.96	1,852.14	7,521.10
Property Acq. & Option Payments	35,400.00	5,000.00	40,400.00
Property Maintenance	220.00	5,000.00	5,220.00
Salaries	55,246.60	18,500.00	73,746.60
Surveys - Geochemical	5,760.00		5,760.00
Transportation - Airlines	1,562.68	200.00	1,762.68
Transportation - Freight	3,413.09		3,413.09
Transportation - Vehicle	10,732.72	2,238.38	12,971.10
Trenching and Roads	21,060.37		21,060.37
Miscellaneous - Indirect	208.84		208.84
Project Management Fee	27,085.84	8,049.25	35,135.09
TOTAL	<u>297,764.21</u>	<u>93,541.75</u>	<u>391,305.96</u>

Prepared by: \_\_\_\_\_

J.A. McClintock, P.Eng.

For: MT. CALVERY RESOURCES LTD.

December 9, 1985

PROPOSED 1985 PHASE III PROGRAM - CPW CLAIM

The CPW property hosts structural-strata controlled gold mineralization warranting an aggressive Phase III exploration program. The earlier 1985 programs successfully advanced the exploration potential of the property from significant intersection of gold mineralization on surface and in drill holes to outlining areas with potential for tonnages in excess of 7 million tons grading in the 0.1 to 0.08 oz/ton gold range. Further grid and exploratory drilling will be focussed at expanding the drill indicated reserve in the Madre, Madre West and LE, 11 and 13 Zones and confirming the dimensions of the M, 14 Oz, A and E Zones.

The Phase III program of additional diamond drilling is proposed for an estimated expenditure of \$307,300. The above two month program would be initiated in November with anticipated completion in late December.

BIBLIOGRAPHY

1. R.B. Campbell, GSC OF 574, 1978, 1:125,000
2. C.T. Rees, GSC Paper 83-13, 1983, 1:56,000
3. M. David, Geostatistical Ore Reserve Estimation, 1979
4. L.C. Struick, GSC O.F. 920, 1982, 1:50,000
5. D.E. Wallster, Geochemical Assessment Report, 1984
6. R.F. Sheldrake, Report on Helicopter EM/MAG Survey, 1981



APPENDIX I

DRILL LOGS

STATEMENT OF QUALIFICATIONS

John A. McClintock

- 1) I am a geologist residing at 32841 Ashley Way, Clearbrook, British Columbia and am currently employed by Welcome North Mines Ltd., 1027 - 470 Granville Street, Vancouver, British Columbia.
- 2) I graduated from the University of British Columbia in 1973 with a B.Sc (Honours) degree in Geology and have practised my profession continuously since that time.
- 3) I supervised and directed the physical and rotary drilling field work carried out on the CPW Claim.
- 4) I am an active member in good standing of the Association of Professional Engineers of the Province of British Columbia.

Prepared by: John A. McClintock, P.Eng.

December 9, 1985