680440
09210

ELIZABETH MINE PROJECT

British Columbia

TARGET:

0.5 to 3 million tons, +0.5 oz/ton gold mesothermal vein.

LOCATION:

The property is 230 km. north of Vancouver and is accessible by road from Lillooet, 75 km. to the southeast.

PROPERTY STATUS:

The property is owned by two prospectors, Tom Illidge and David White.

EXPLORATION HISTORY:

The property was discovered in the '30's and optioned to Bralorne, who carried out underground exploration over a 10 year period. Bethlehem Copper optioned the ground in 1956 and 1957, followed by Prism Resources in 1980.

Following discovery of a high grade surface showing in 1989, the property was optioned to Blackdome Mining in 1990. Parts of the underground were rehabilitated and the trenching was extended.

GEOLOGY:

The claims are underlain by serpentinized ultramafic rocks which have been intruded by granodiorite. The ultramafics are probably part of the Permo-Triassic Bridge River Complex, while the granodiorite has been mapped as Eocene.

Gold-quartz veins are north-northeast trending, mainly within granodiorite. Best gold values appear to occur immediately adjacent to ultramafic rocks, where veins bend northward. Alteration haloes are narrow, consisting of quartz-carbonate-sericite.

EXPLORATION RESULTS:

In 1957, Bethlehem calculated a reserve of 1,430 tons grading 2.78 oz/ton gold in the West Vein. Surface sampling in 1990 by Blackdome produced an 82 ft. strike length grading 2.4 oz/ton gold over a 1.4 ft. average vein width.

This showing can be extrapolated down plunge to underground workings, 215 ft. below surface, where 92 ft. of the vein averaged 1.3 oz/ton gold over a 2.9 ft. width. Trenching

very late in the season showed the Main Vein beginning to develop ore grades to the east of previously known low grade exposures. Four other veins are known on the property.

EXPLORATION POTENTIAL:

The Elizabeth Mine property occurs in proximity to both the Bralorne and Blackdome properties. However, given that Elizabeth occurs in granitic rocks intruding ultramafics and it is characterized by quartz-sericite-carbonate alteration, it has all the earmarks of a mesothermal vein and therefore another Bralorne. In fact, the original showings at Bralorne were reportedly of similar size and extent to those on the Elizabeth property.

Thus, while it will be important to know the full extent of surface veins at Elizabeth with trenching program, it will be more important to drill the main structures to see how they behave at depth.

Blackdome vs. Bralorne

	Blackdome	Bralorne
Deposit type	Epithermal	Mesothermal
Size (tons)	330,000	8,000,000
Grade (opt)	0.67	0.5
Production (oz)	223,000	4,000,000
Vertical extent (ft)	500	6,500 (still open)
Host rock	Tertiary volc.	Mesozoic arc, ultramafic/oceanic
Alteration	Silica, K-spar, Clay, Sericite	Quartz, Sericite, Ankerite, Biotite

RECOMMENDED PROGRAM:

Additional trenching and a soil sampling survey are required to continue the surface evaluation of the property. However, in order to fully evaluate the potential to develop significant reserves, a drill test of the known high grade shoots is required.

PROPOSED BUDGET:

Trenching	$ 30,000
Soil Survey	20,000
Diamond drilling	120,000
Office support	10,000
Contingency	20,000
	$200,000

BLACKDOME MINING CORPORATION

1990 EXPLORATION SUMMARY OF THE

ELIZABETH CLAIM GROUP

PREPARED BY:

BART STRYHAS

CHIEF GEOLOGIST

BLACKDOME MINING CORP.

SEPTEMBER 1990

TABLE OF CONTENTS

ELIZABETH CLAIM GROUP

Introduction

The Elizabeth Claim Group consists of four Crown Granted mineral claims located at Latitude 51°, 02' N and Longitude 122°, 35' W, near the Bridge River Mining Camp in south-central British Columbia (figure 1). The property is 33 kilometers south-southwest of Blackdome.

The general geology consists of north-northeast striking quartz veins hosted within ultramafic ophiolites which have been intruded by a granodiorite body. The claim group was originally developed by Bralorne Mines from 1939 to 1949. Next, during 1956 and 1957 Bethlehem Copper optioned the property and did further development work. More recent work, consisting of sampling and data compilation was done by Prism Resources in 1980. A total of approximately 810 meters of cross-cut, 420 meters of drifting, 110 meters of raising and 790 meters of drilling have been completed on the property (figure 2). The current reserves as quoted by Bethlehem Copper in 1957 stand at 1430 tonnes grading 95.3 gpt Au (2.78 oz/sdt). These reserves are all contained within the West Vein and are quoted as uncut and undiluted. At least five other veins have been located from surface work and drilling.

Option Agreement

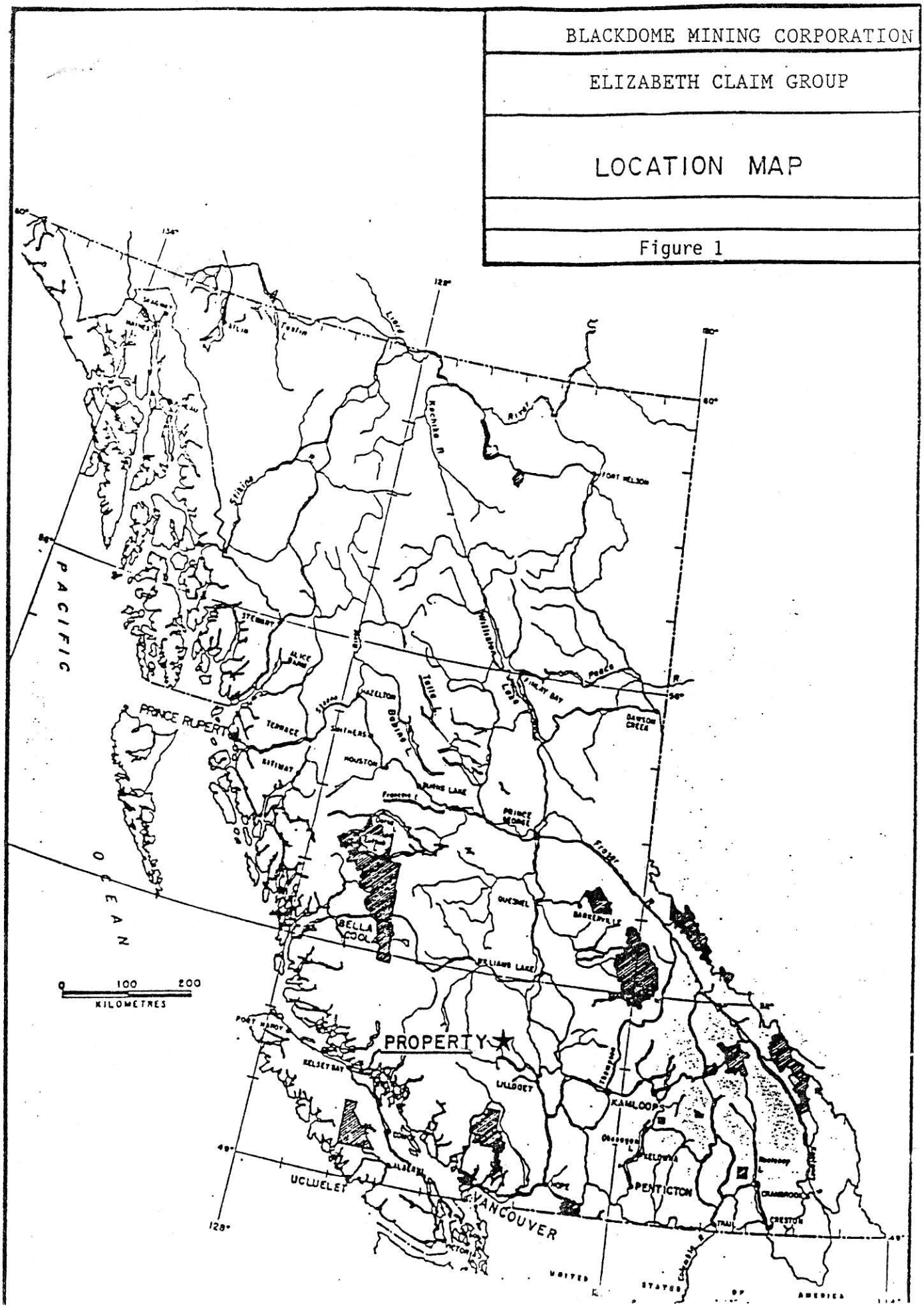
In June of 1990 Blackdome Mining Corporation finalized an Option Agreement for the Elizabeth Claims with Tom Illidge and David White, the current owners. Under the terms of the agreement Blackdome Mining Corporation will earn 100% right, title and interest in the claim group subject to a 4% Net Smelter Return to a maximum of $2 million and 2% Net Smelter Return thereafter by making the following aggregate payments and exploration expenditures:

BLACKDOME MINING CORPORATION

ELIZABETH CLAIM GROUP

LOCATION MAP

Figure 1



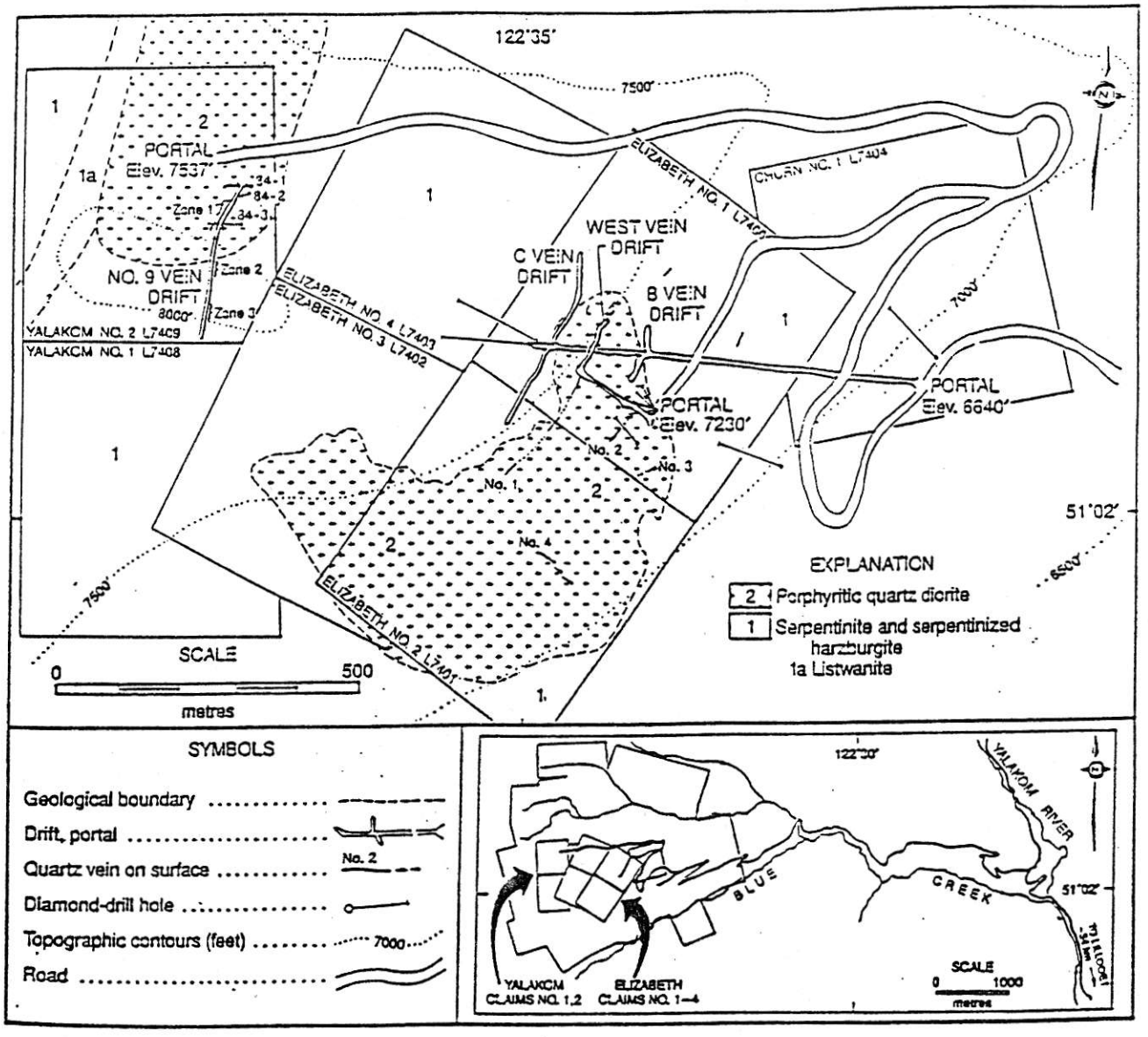

122°35'
7500'
PORTAL
Elev. 7537'
1a
34-1
84-2
Zone 1
34-3
NO. 9 VEIN
DRIFT
Zone 2
8000'
Zone 3
YALAKOM NO. 2 L7409
YALAKOM NO. 1 L7408
ELIZABETH NO. 4 L7403
ELIZABETH NO. 3 L7402
ELIZABETH NO. 1 L7401
CHURN NO. 1 L7404
WEST VEIN
DRIFT
C VEIN
DRIFT
B VEIN
DRIFT
PORTAL
Elev. 7230'
PORTAL
Elev. 6640'
7000'
No. 1
No. 2
No. 3
No. 4
51°02'
6500'
7500'
SCALE
0
500
metres
EXPLANATION
2 Porphyritic quartz diorite
1 Serpentinite and serpentinized harzburgite
1a Listwanite
SYMBOLS
Geological boundary
Drift, portal
Quartz vein on surface
Diamond-drill hole
Topographic contours (feet)
Road
122°30'
YALAKOM RIVER
BLUE
CREEK
51°02'
SCALE
0
1000
metres
YALAKOM
CLAIMS NO. 1,2
ELIZABETH
CLAIMS NO. 1–4

Figure 2

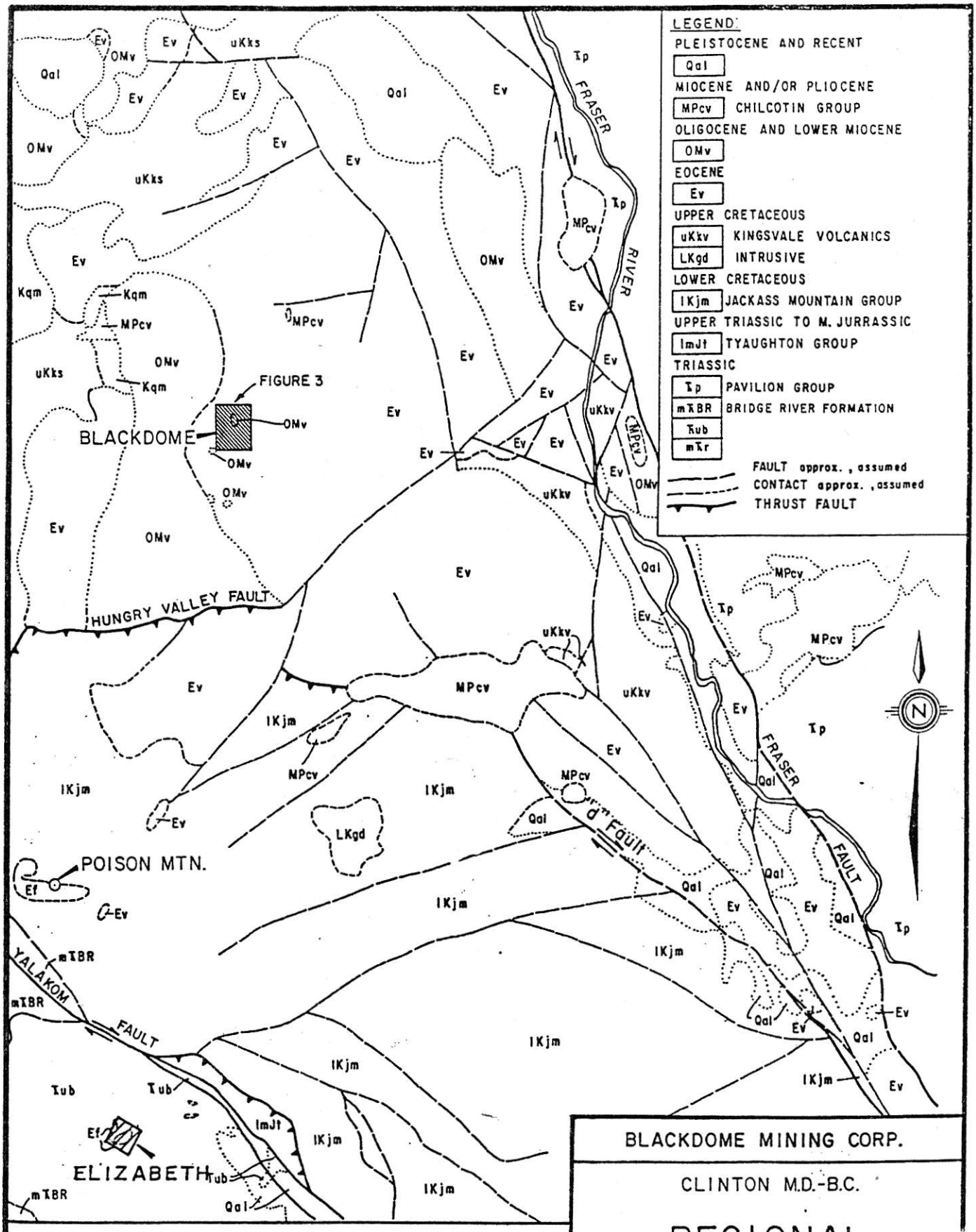
Completion Date	Payments	Expenditures
Dec. 31, 1990	$ 25,000	$ 100,000
Dec. 31, 1991	$ 50,000	$ 300,000
Dec.31, 1992	$ 85,000	$ 700,000
Dec. 31, 1993	$130,000	$1,500,000

From 1993 through 2003, the property is subject to payments of $50,000 per year with such payments to be set against future royalties to the extent that royalties exceed $50,000 per year. The financial commitments for 1990 have been met and are listed in Appendix A.

Regional Geology

The predominant rock formations in this area are: Mississippian-Triassic age Bridge River Complex consisting of chert, greenstone, argillite, limestone and melange; and Late Paleozoic-Triassic peridotite, harzbergite, dunite and serpentinites (figure 3). Tectonicly, all these rocks are located within the Omineca Mobile Belt; a Late Jurassic fold and thrust system. Most recently, granodiorite intrusives were emplaced during the Eocene and form small isolated bodies scattered throughout the area.

The major regional structures are the Yalakom Fault, located 4 km. to the northeast and the Relay Creek Fault, located 12 km. to the southwest of the property. These two structures both strike northwest and dip southwest. They originated as ductile thrust faults which were active during the Late Jurassic and subsequently have been reactivated as brittle strike-slip faults during the Late Tertiary. This latest faulting event is responsible for the veins and faults within the Elizabeth Claims. The right lateral movement along northwest striking faults has generated north-northeast striking faults and extension veins which host the gold mineralization. This structural fabric with


LEGEND
PLEISTOCENE AND RECENT
Qal
MIOCENE AND/OR PLIOCENE
MPcv CHILCOTIN GROUP
OLIGOCENE AND LOWER MIOCENE
OMv
EOCENE
Ev
UPPER CRETACEOUS
uKkv KINGSVALE VOLCANICS
LKgd INTRUSIVE
LOWER CRETACEOUS
IKjm JACKASS MOUNTAIN GROUP
UPPER TRIASSIC TO M. JURRASSIC
ImJt TYAUGHTON GROUP
TRIASSIC
Tp PAVILION GROUP
mTBR BRIDGE RIVER FORMATION
Tub
mTr
FAULT approx., assumed
CONTACT approx., assumed
THRUST FAULT
FRASER RIVER
FIGURE 3
BLACKDOME
HUNGRY VALLEY FAULT
POISON MTN.
YALAKOM FAULT
ELIZABETH
d Fault
FRASER FAULT
N
SCALE 1:250,000
Mi. 5 0 5
Km 5 0 5
BLACKDOME MINING CORP.
CLINTON M.D.-B.C.
REGIONAL GEOLOGY
DATE: APRIL, 1988
BY: D.R. /rwr
Figure 3
FROM TIPPER 1978 GSC OPEN FILE No. 534

gold mineralization is very similar to that seen at the Blackdome Mine 33 km. northeast.

Property Geology

The Elizabeth Claims are underlain by both the Triassic ultramafic suite and the Eocene granodiorites. The ultramafic rocks here consist primarily of hartzbergite and serpentinite. Within this country rock a crescent shaped body of granodiorite approximately 300 meters wide by 600 meters long has been emplaced (figure2). The granodiorite is medium grained, weakly porphyritic and contains numerous irregular shaped blocks of the hartzbergite, most of which are fully serpentinized. The competence contrast between these two rock types is an important factor in vein development. Nearly all the quartz veins are hosted by the granodiorite and where they cross serpentinite blocks the veins thin, splay or become gouge faults.

The Main and West veins are north-northeast striking parallel structures dipping steeply west. These appear to reflect the dominant structural fabric of the property. The Tommy and Allison veins are west-northwest striking and may represent structures which are semi-parallel to the regional structural fabric. Each of these veins will be described in detail. Exposure is limited to about 15% consisting mainly of granodiorite outcrops and augmented with trenches. Talus and glacial gravels have been excavated up to 10 meters thick and may be considerably thicker in places.

1990 Exploration Program

The 1990 exploration program consisted of four phases: first, re-establishment of good road access; second, rehabilitation of the upper and lower portals; third, surface trenching to increase exposure of the known veins; and fourth,

surveying, geologic mapping and sampling of all the accessible exposures of the veins.

The road work consisted of snow removal by bulldozer during April and May and culvert installation, ditching and grading during late May and June. This work was required to facilitate mobilization of heavy equipment, camp facilities, timber and future drill equipment.

Rehabilitation of the Upper Portal consisted of removing a minor amount caved material and replacement of ten timber sets at the portal entrance. Lower Portal rehabilitation involved removal of about 50 tons of caved material and installation of twelve timber sets to secure the entrance.

The surface trenching focused mainly on the West Vein to extend exposure northward from a currently exposed high grade gold zone. Trenching was also done to increase exposure of the Main, Tommy and Allison Veins. This work was conducted by using a bulldozer and a tracked backhoe.

Geologic work consisted of mapping and sampling of the Upper Workings, all existing surface vein exposures and the new exploration trenches. All sample locations were surveyed to a first order control mine grid.

1990 Exploration Results

The West vein has been traced along 260 meters of outcrop exposure and may extend 150 meters further north to an isolated outcropping of vein which is called the David vein (Map 1). Due to its anomalous gold values, this vein has attracted the majority of the work to date. The West vein texture ranges from a massive milky quartz vein containing minor sulfides to a diffuse stringer or stockwork breccia zone consisting of 30-80% quartz. The higher grade gold zones are associated with the massive milky quartz. The quartz vein is primarily hosted within the

granodiorite, but does follow along an apparent fault contact between granodiorite and serpentinite. Alteration is restricted to local silicification and bleaching adjacent to the vein. Where the structure cross-cuts the serpentinite a gouge fault 2-5 cm. wide with very little quartz is present.

Two known gold zones are present within the West Vein. The first zone is located at the northeast limit of exposure of the vein and has complete exposure on surface and 65 meters below on the 2165 level drift. Rock chip sampling at 1.5 meter intervals along 74 meters of surface exposure and 80 meters of drift has confirmed the presence of an apparently continuous gold mineralized zone. At the surface, vein samples along 25 meters of strike length average 82.1 g/t Au (64.6 g/t; cut at 137g/t) over a 0.44 meter average vein width (Map 1). Directly below, on the 2165 level, vein samples along 28 meters of strike length average 43 g/t Au (36.5 g/t cut) over a 0.9 meter vein width (Map 2). The vein here shows a variation in strike from due north at surface to azimuth 20° at the 2165 level; the dip is nearly vertical (Map 3).

The second gold zone within the West Vein is located at the southwest limit of outcrop exposure. Gold mineralization has been traced for 7 meters of strike length. Three rock chip samples taken here average 46 g/t over a vein width of 0.41 meters. The vein consists of massive milky quartz with limonite staining and is hosted by granodiorite.

The Main vein has been traced along 85 meters of surface exposure (Map 1). This vein strikes northeast and dips steeply west. At the northeast limit of exposure the vein is 1.0-2.0 meters wide consisting of massive milky quartz or zones of parallel quartz veins 0.2-0.5 meters wide. Rock chip sampling at this location has returned one high grade assay (23.6 g/t Au/ 1.0 meter) and several low grade assays. Within the 2165 cross-cut at 20 meters below this surface exposure, the Main vein consists of

three veins, each 1.0 meter wide within a 5 meter wide zone. No anomalous gold values were found here (Map 2). Previous workers have traced the Main vein to an outcrop about 200 meters further southwest from our mapped exposure. At this location they list an 8 oz/ton rock chip assay over a 0.12 meter width. This area was not field checked during the 1990 season but will be followed up with further work.

The Tommy vein was trenched along 50 meters of strike length (Map 1). This vein strikes east-northeast and has a vertical dip. The host rock is granodiorite with moderate alteration along the vein margins. The vein zone consists of a single vein 0.25-1.5 meters wide or two parallel veins 0.25-1.0 meter wide separated by altered granodiorite. A weak gouge fault is locally developed along the southern edge of the zone. The vein is composed of massive milky quartz containing minor sulfides and fuchsite seams. Rock chip sampling at 1.5 meter intervals along the entire strike length of this exposure yielded only low grade gold anomalies.

The Allison vein was exposed along 15 meters of strike length (Map 1). This structure strikes northwest and dips 35° southwest, it consists of two distinct zones. The hangingwall zone is a 0.5-1.0 meter wide quartz vein. The quartz is milky white and contains minor grey-black sulfides. The footwall zone is 1.0-2.0 meters wide consisting of intensely fractured and crushed fault rock with some gouge. Rock chip sampling at 2 meter intervals yielded only low grade gold anomalies.

In summary, the 1990 program has confirmed previous exploration work and has developed one new target area. Thorough sampling of the West Vein has defined a high grade gold zone which is 25 meters long and probably continuous for 65 meters vertical. The underground workings show that the ground conditions here are very good and mining this vein should not be a problem. The West Vein strike direction may be an important

factor in gold mineralization. Surface sampling all along the vein has shown that where the vein becomes oriented near north-south is where the gold zone occurs. The high grade outcrops at the southwest extent of the vein also show a more north-south strike direction. Within the Main Vein, no significant gold zones were found, although sporadic high grade values do indicate that it is carrying gold. The property wide mapping shows that there is a large variation in strike direction among the different veins. This should create zones of vein intersections. These intersection zones are commonly locations of higher fluid flow during mineralization and may well contain gold.

1991 Exploration Proposal

The 1991 exploration program should consist of grid survey, geochemistry, geophysics and trenching. A mine grid with north-south base line and east-west cross lines at 30 meter spacing will be completed over the entire claim block. This will require about 25,000 meters of line survey and should take two people about 20 days to complete. Next, a soil geochemistry program will be conducted. "C" horizon soil samples will be collected on a 30 meter by 10 meter grid spacing and assayed for gold, silver and arsenic. This phase should take two people about 20 days to complete. A ground base geophysics survey of Magnetometer and VLF will also be run on a 30 meter by 10 meter grid spacing. One person could complete this in about 14 days or the project could be contracted. An on site computer will be necessary for data collection.

The aim of the described work will be to try to delineate the orientation and location of known veins and also to find other veins which are not exposed. There appears to be a correlation between vein orientation and gold mineralization within the West Vein. Also, the different vein strike directions should define intersection zones which may carry gold. If

accurate subsurface mapping of the vein can be accomplished with geophysics then favorably oriented zones and intersection zones can be trenched, mapped and sampled.

Follow up work from 1990 consists of three targets. The first is anomalous outcrops located at the southwest extent of the West Vein which need to be trenched along strike to the north and south. The second is the West Vein area north of the 1990 trenching which needs further exposure. The third is located at the southwest extent of the Main Vein. The Bralorne "Surface Assay Plan" shows several outcrops on three different veins to have high gold values here. Trenching mapping and sampling is recommended for this area.

The proposed program should take about two months to complete. Technical staff will consist of three people; a geologist, surveyor and assistant. Trenching should be conducted with a large cat or a large tracked hoe. All the personal would be accommodated at the existing camp. Table 1 is a generalized exploration budget for the 1991 program.

Appendix A

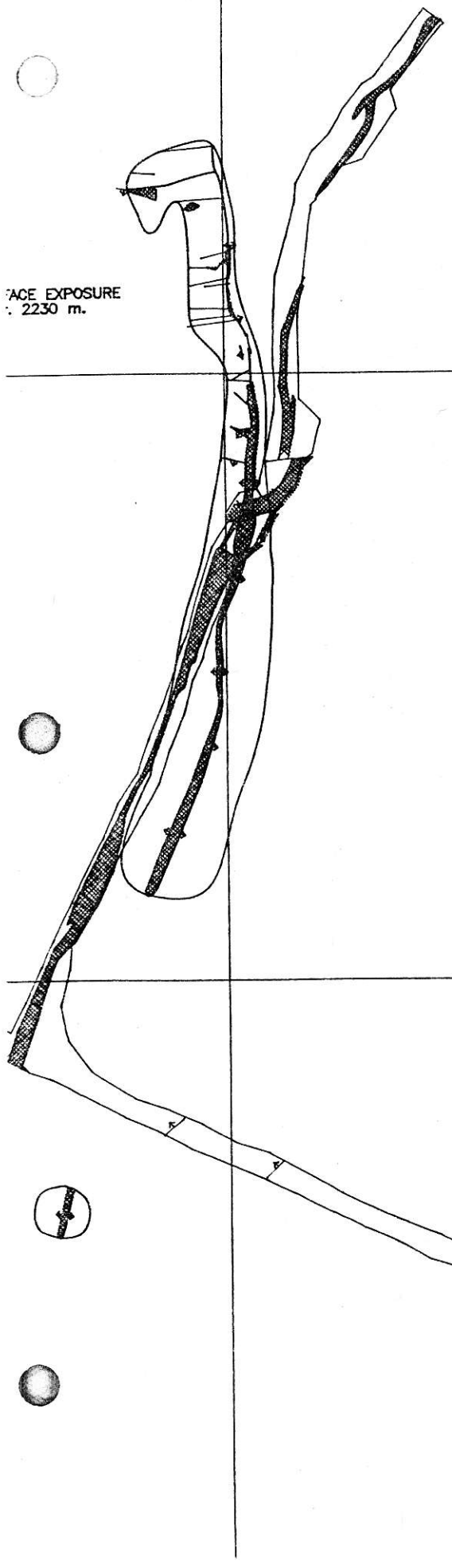
BLACKDOME MINING CORPORATION
ELIZABETH CLAIM EXPENSES
March to Sept 30, 1990

	INVOICE NUMBER	OPTION PAYMENTS	PORTAL REHAB	ROAD REPAIRS	SURVEY, MAP, SAMPLING	TRAVEL	TRENCHING	TOTAL EXPENSES
Minven head office		$25,000.00						$25,000.00
Illidge Drilling	33771	$10,720.46 → *						$10,720.46
Illidge Drilling	33772	$624.67 → *						$624.67
Illidge Drilling	33761		$1,491.99					$1,491.99
Illidge Drilling	33764		$10,284.00					$10,284.00
Illidge Drilling	33763		$1,437.43					$1,437.43
Illidge Drilling	33770		$1,500.00					$1,500.00
Illidge Drilling	33765		$2,096.23					$2,096.23
Illidge Drilling	33767		$974.04					$974.04
Illidge Drilling	33779		$146.25					$146.25
Illidge Drilling	33778		$243.75					$243.75
Illidge Drilling	33774		$400.00					$400.00
Illidge Drilling	33780		$2,043.15					$2,043.15
Blackdome warehouse dist			$628.54					$628.54
Illidge Drilling	33786		$10,249.91					$10,249.91
Illidge Drilling	33787		$608.14					$608.14
Illidge Drilling	33760			$1,026.02				$1,026.02
Illidge Drilling	33758			$7,782.50				$7,782.50
Illidge Drilling	33769			$2,499.00				$2,499.00
Illidge Drilling	33766			$395.50				$395.50
Illidge Drilling	33768			$3,940.00				$3,940.00
Illidge Drilling	33774			$715.00				$715.00
Illidge Drilling	33780			$3,061.00				$3,061.00
Illidge Drilling	33780				$376.30			$376.30
Min of Environment	C45150				$8.48			$8.48
Blackdome warehouse dist					$29.68			$29.68
Deakin Equipment	4967				$188.05			$188.05
Thiessen Equipment	16578				$954.00			$954.00
Deakin Equipment	4799				$376.87			$376.87
Deakin Equipment	5204				$47.70			$47.70
Cansel Survey Equip	36411				$69.06			$69.06
Neil Giesbrecht	20353				$1,767.13			$1,767.13
Nicholi Cartage	21134				$34.00			$34.00
Chemo Rent a car	July17				$1,355.16			$1,355.16
Chemo RV Sales & Serv	769				$209.22			$209.22
Illidge Drilling	33789				$136.40			$136.40
Lalonde geological	104				$7,050.27			$7,050.27
Acme Analytical Labs	90-2963				$52.50			$52.50
Deakin Equip - return	5615				($180.35)			($180.35)
Highland Helicopters	60841					$2,340.00		$2,340.00
Highland Helicopters	61143					$3,278.89		$3,278.89
Illidge Drilling	33762					$150.00		$150.00
Illidge Drilling	33759					$2,770.00		$2,770.00
Illidge Drilling	33770						$1,500.00	$1,500.00
Illidge Drilling	33775						$669.06	$669.06
Illidge Drilling	33776						$4,998.00	$4,998.00
Illidge Drilling	33773						$288.50	$288.50
Illidge Drilling	33782						$1,700.00	$1,700.00
Illidge Drilling	33781						$861.86	$861.86
Illidge Drilling	33784						$3,825.00	$3,825.00
Illidge Drilling	33788						$8,505.00	$8,505.00

27-Sep-90 by LW

BLACKDOME MINING CORPORATION
ELIZABETH CLAIM EXPENSES
March to Sept 30, 1990

	INVOICE NUMBER	OPTION PAYMENTS	PORTAL REHAB	ROAD REPAIRS	SURVEY, MAP, SAMPLING	TRAVEL	TRENCHING	TOTAL EXPENSES
Illidge Drilling	33792						$607.00	$607.00
N. Giesbrecht - Labor					$500.00			$500.00
Bart Stryhas - Labor					$4,550.00			$4,550.00
Cansel	36718				$111.30			$111.30
Assays - 350 @ $10					$3,500.00			$3,500.00
		$36,345.13	$32,103.43	$19,419.02	$21,135.77	$8,538.89	$22,954.42	$140,496.66

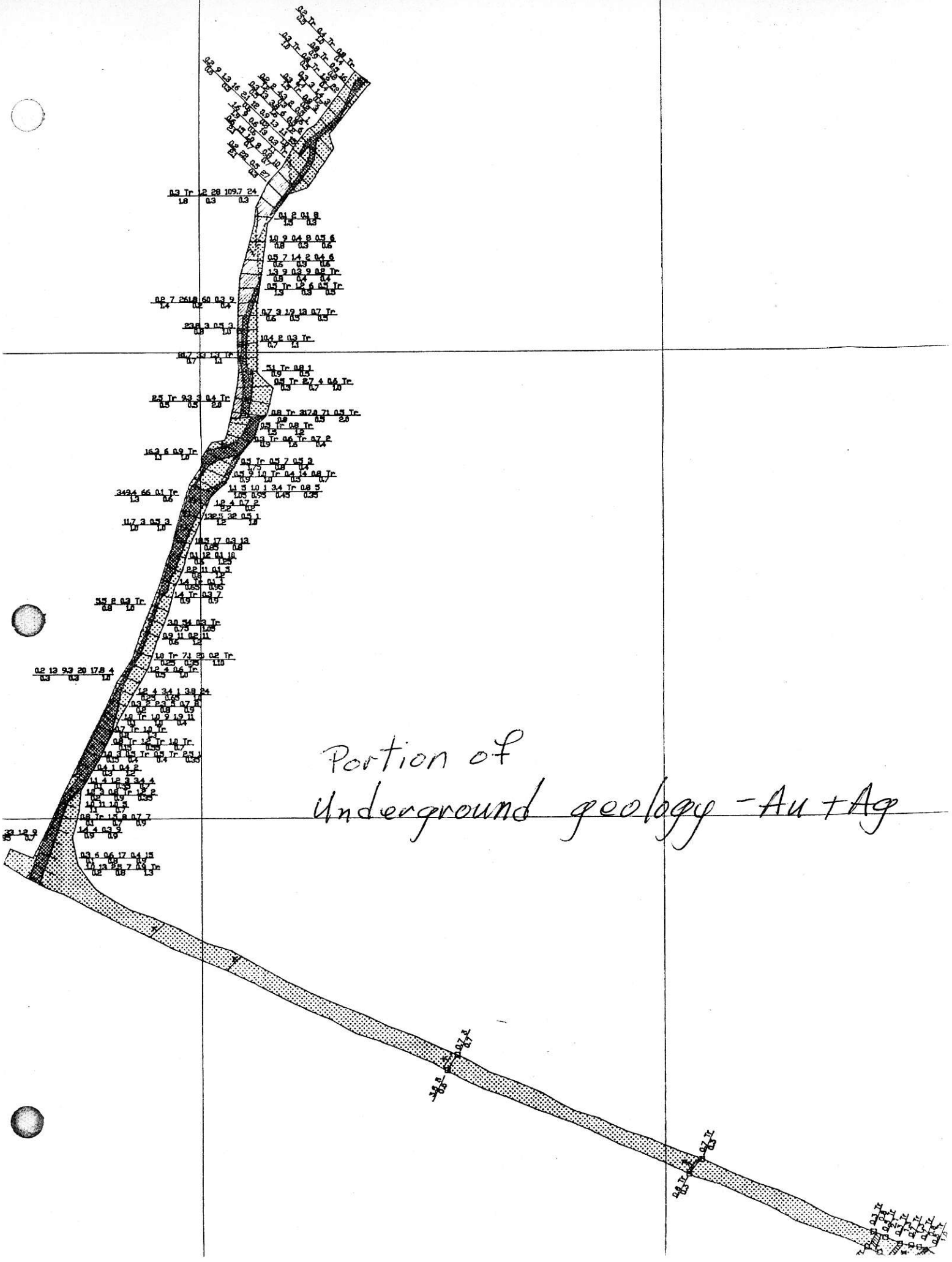


Geometry

Surface – Underground

surface elevation
= approx. 2230 m

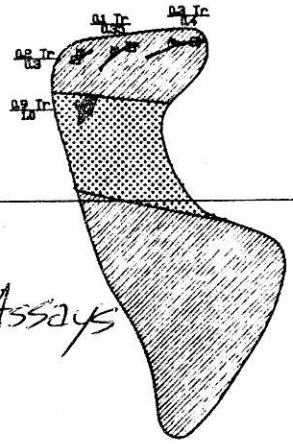
Portal elevation
= 2165 m

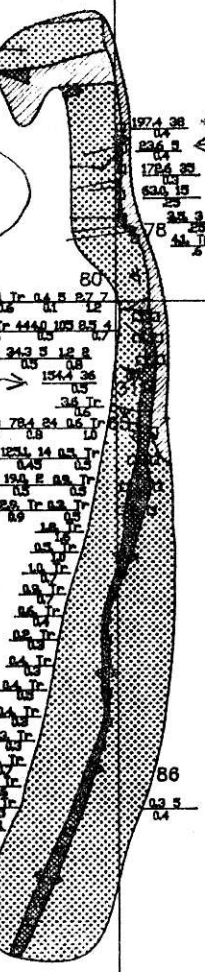


Portion of
Underground geology - Au + Ag

Au + Ag	Grams
widths	per meter

Portion of
Surface Geology
Gold and Silver Assays
Sept 19 1990.





444.0 105 8.5 4
0.5 0.7

34.3 5
0.5

154.4 36
.5

78.4 24
0.8

7.1 2 125.1 14
0.5 0.45

19.0 2
0.5

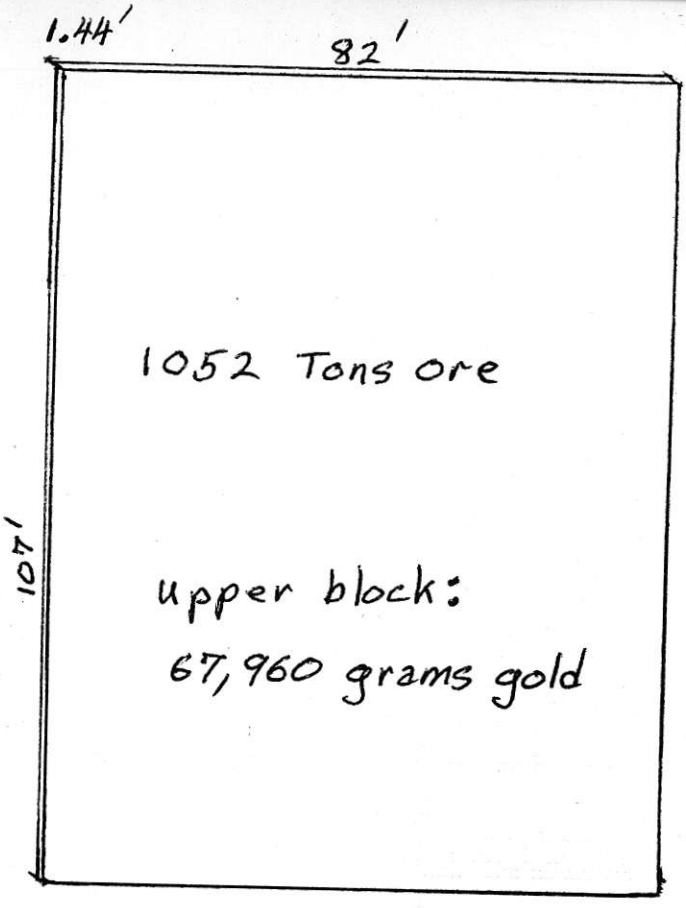
197.4 33
0.4

23.6 5
0.4

172.6 35
0.3

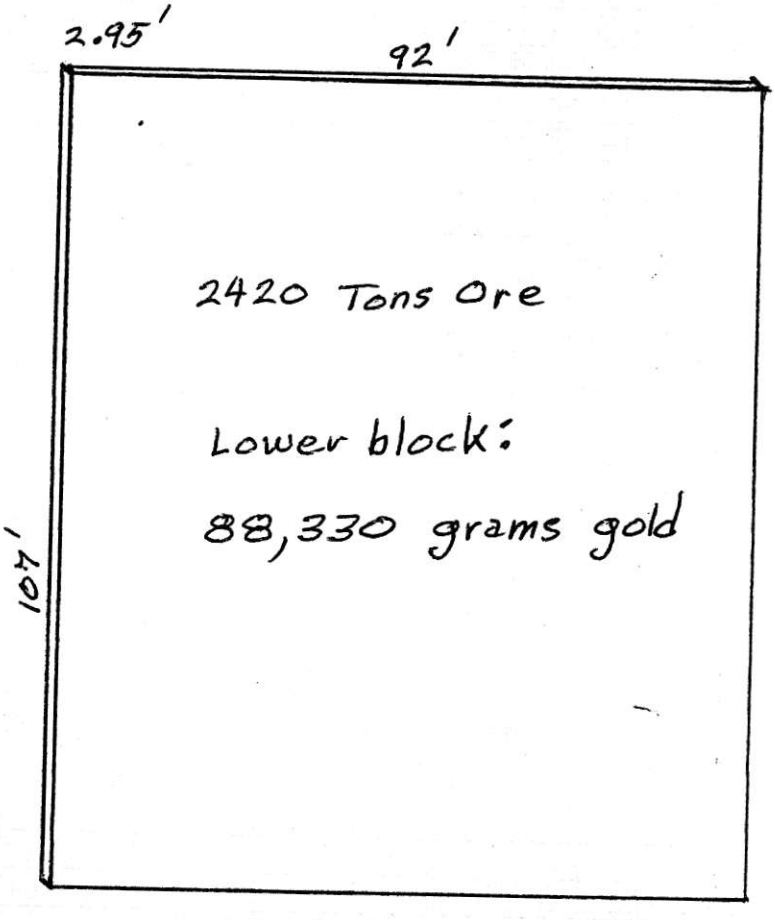
63.0 16
.25

Indicated Gold content in West Vein Ore Zone



$\left(\frac{82 \times 107 \times 1.44}{12}\right)(64.6)$
= 67,960 grams

assume: 12 cu. ft. quartz
= 1 T.



$\left(\frac{92 \times 107 \times 2.95}{12}\right)(36.5)$
= 88,330 grams

Total = 156,290 grams
= 5,582 ounces

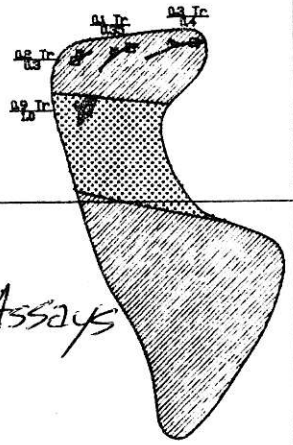
Indicated recovery from "Falcon" concentrator
= 90%
= 5,024 ounces

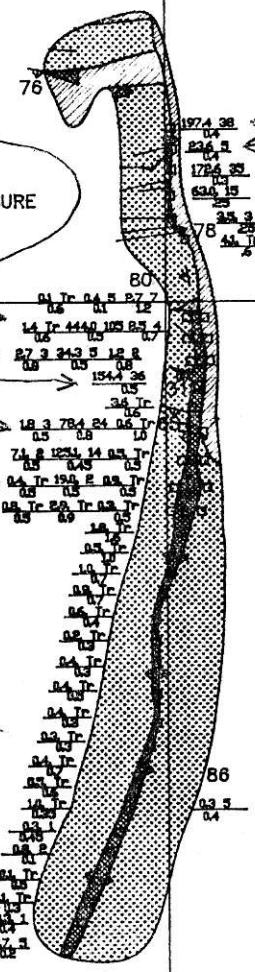
Indicated Value:

5024 @ $300 = $1,507,200
" " $350 = $1,758,400

Au + Ag | Grams / Ton
widths | meter

Portion of
Surface Geology
Gold and Silver Assays
Sept 19 1990





444.0 105 8.5 4
0.5 0.7

34.3 5
0.5

154.4 36
.5

78.4 24
0.8

7.1 2 125.1 14
0.5 0.45

19.0 2
0.5

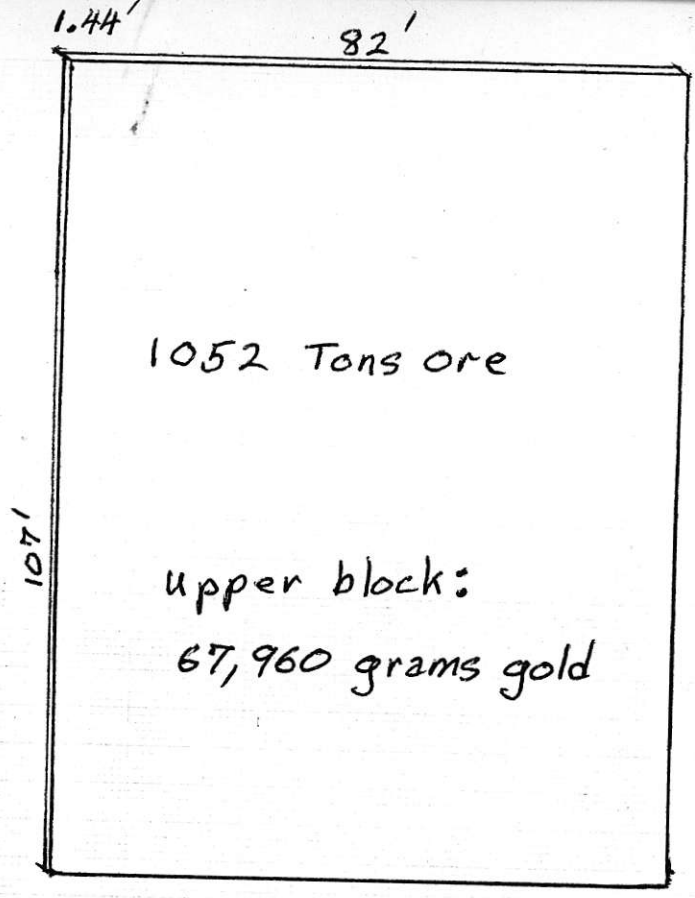
197.4 38
0.4

23.6 5
0.4

172.6 35
0.3

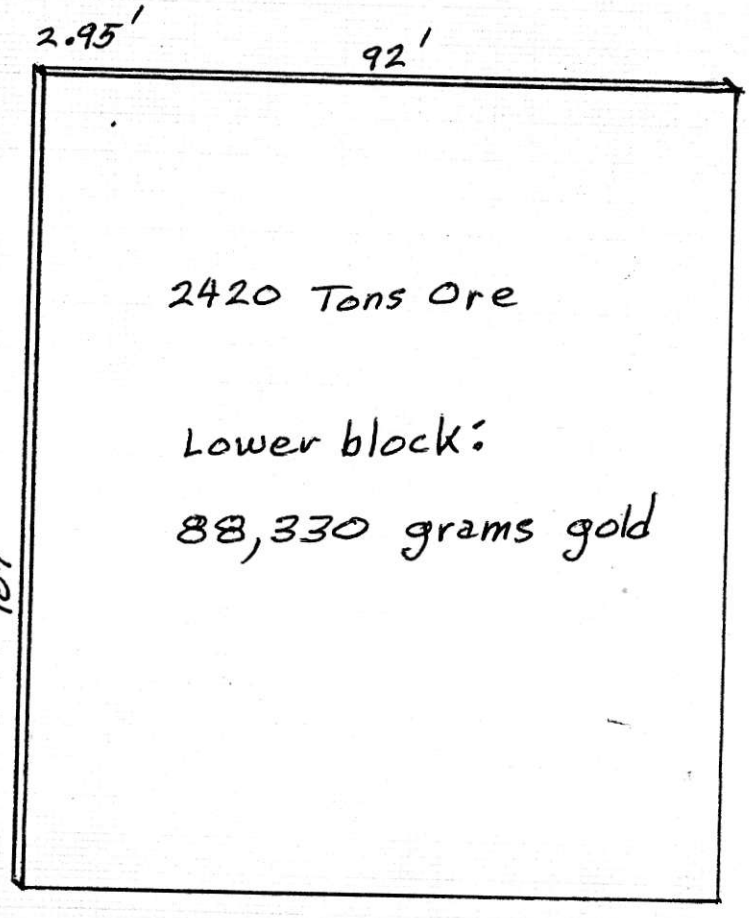
63.0 16
.25

Indicated Gold content in West Vein Ore Zone



$\left(\frac{82 \times 107 \times 1.44}{12}\right)(64.6)$
= 67,960 grams

assume: 12 cu.ft. quartz
= 1 T.



$\left(\frac{92 \times 107 \times 2.95}{12}\right)(36.5)$
= 88,330 grams

Total = 156,290 grams
= 5,582 ounces

Indicated recovery from "Falcon" concentrator
= 90%
= 5,024 ounces

Indicated Value:

5024 @ $300 = $1,507,200
" " $350 = $1,758,400