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PROSPECTUS  
March 17, 1983.

REPORT ON  
THE VERA, SOUTH RUSTY MOUNTAIN AND  
SILTSTONE MINERAL OCCURRENCES  
Mayo Mining District, Yukon Territory  
Longitude 133°44'W    Latitude 64°18'N  
for                    106 C5

PRISM RESOURCES LIMITED

by  
Dr. A.J. Sinclair, P.Eng.  
February 23, 1982

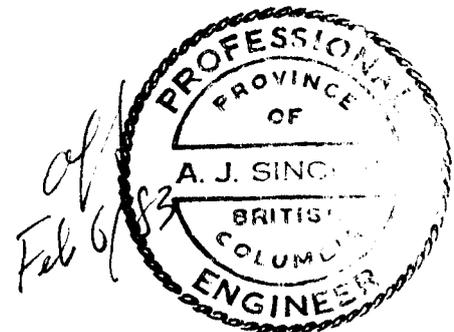
## SUMMARY AND CONCLUSIONS

- (1) The Vera group consists of 164 contiguous mineral claims centred on Rusty Mountain, Yukon about 12 km north of East Rackla River and 22 km northeast of the east end of Kathleen Lakes. Vera and South Rusty Mountain occurrences are within the Vera group. The Siltstone showing is on the Val group adjoining south of the Vera group. All Val and Vera claims are held in good standing by Prism Joint Venture 1977.
- (2) The Vera deposit was discovered in 1978 and has been explored actively since then by Prism Joint Venture 1977.
- (3) To the end of 1981, 79 surface diamond drill holes totalling 6,875 metres were drilled on the Vera deposit and an exploration adit totalling 719 metres was driven along the mineralized zone. Eleven underground diamond drill holes, totalling 545 metres, were drilled in 1981.
- (4) A narrow high grade zone of jarositic and limonitic material occurs as a core of the Vera deposit and is fringed by a less intensely fractured zone of lower grade material. Relict sulphide-rich pods occur sporadically along the length of the deposit.

- (5) Indicated global geological reserves of the East and West shoots are between 500,000 and 600,000 metric tonnes as determined by two independent methods of calculation. Estimates of average silver grade are 273 g/tonne and 293 g/tonne for geostatistical and manual section calculations respectively. A reduced tonnage appears minable at double the foregoing grade estimates.
- (6) Additional work is warranted and should include
- (i) metallurgical testing, (ii) demobilization of mining equipment used in driving the exploration adit, (iii) additional diamond drilling of the Vera structure, (iv) investigation of a structure on the south slope of Rusty Mountain that appears similar to the Vera main structure, and (v) surface investigation of soil geochemical anomalies near the Siltstone occurrence.
- (7) Cost to Prism Resources Limited of the recommended program is estimated to be \$159,000.

#### INTRODUCTION

Vera claims group consists of 164 contiguous claims whose record numbers and expiry dates are given below. Similar information for that part of Val group containing the Siltstone showing is also provided.



<u>Mining Division</u>	<u>Claims</u>	<u>Record No.</u>	<u>Expiry Date</u>
Mayo	Vera 1-164 incl.	YA 37382 -	
Yukon		YA 37545 incl.	Jan. 15, 1993
	Val 1-54 incl.	YA 30884 -	Variable from
		YA 30937 incl.	Jan. 19, 1993
	55-126 inc.	YA 37128 -	to Jan. 19,
		YA 37202 incl.	1993

The Vera claims group is in the Kathleen Lake area, Northern Yukon Territory between the east and north branches of the Rackla River (Figure 1) and is centred approximately at 133°44'W longitude and 64°18'N latitude. Val group is contiguous to the south and west of the Vera group.

The properties are accessible by helicopter from Mayo, a distance of about 135 kilometres southwest of the group. Alternatively, Kathleen Lake can be used as a float plane base from which the claims can be accessed or serviced by helicopter.

Physiography is not particularly rugged but unfortunately pronounced scarps and boulder fields occur locally and where associated spatially with mineral occurrences complicate exploration procedures, especially as regards the location of drill and/or trench sites.

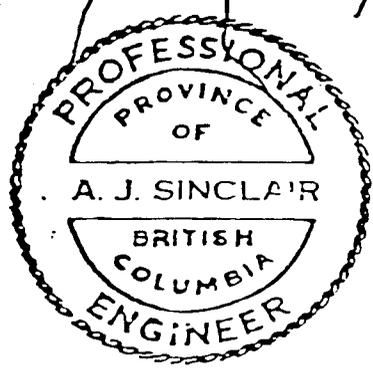
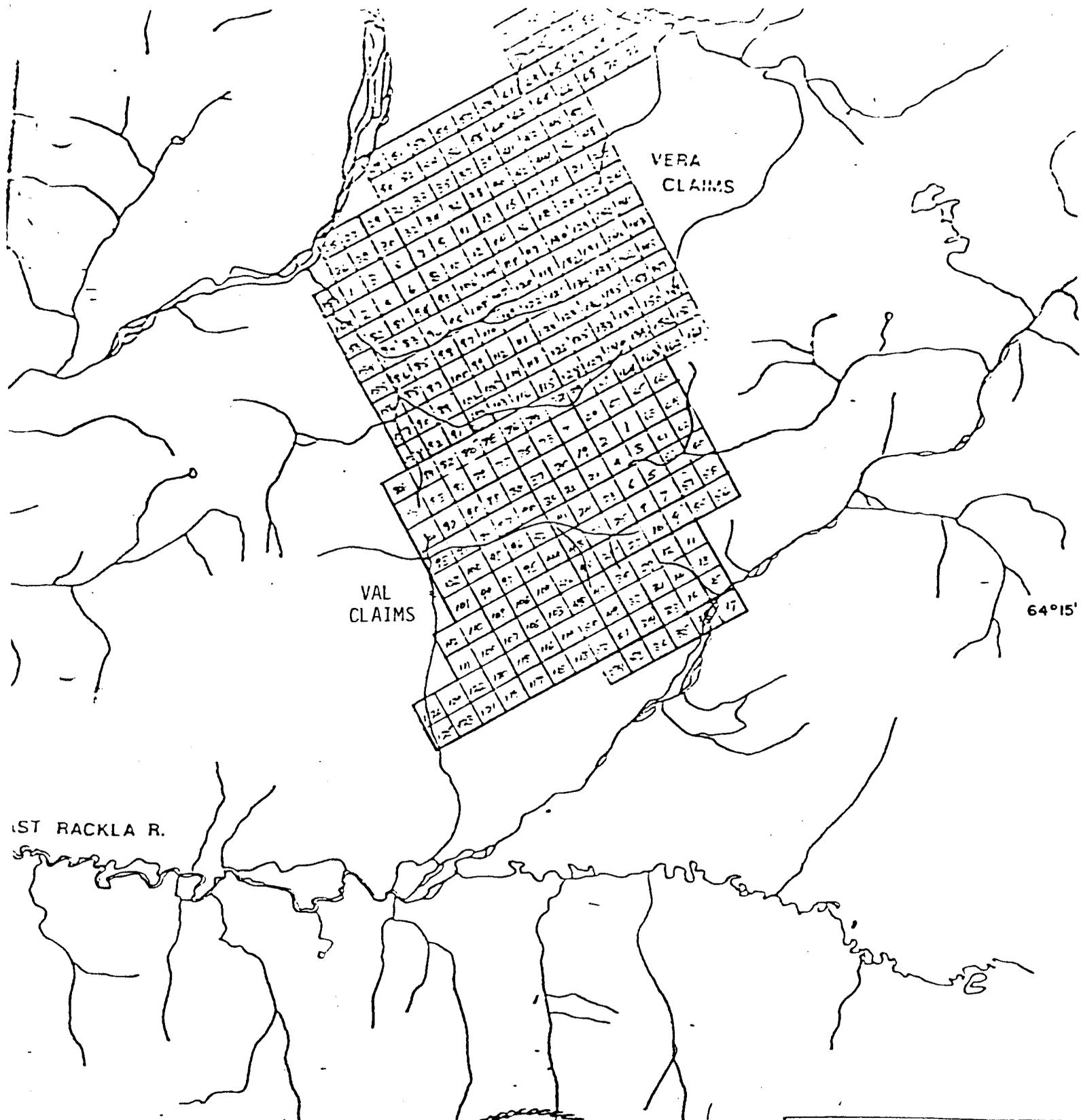
Vera and Val claims groups are part of a larger block of

claims owned by Prism Joint Venture 1977, 25.0% of which is owned by Prism Resources Limited. Other partners in the Joint Venture who own the remaining 75.0% are Asamera Inc., E & B Mines Ltd., Dome Petroleum Ltd. and Chieftain Minerals Ltd.

### GEOLOGY

Vera claims group and adjacent area are underlain by a sequence of Hadrynian rocks that are relatively undeformed but which are cut by numerous faults that lead to some difficulty in establishing local correlations. The lithological sequence established from regional work is, from youngest to oldest, as follows:

<u>Unit</u>	<u>Comment</u>
(4) Grey, medium-bedded, oolitic limestone	
(3) Green tuffaceous siltstone, argillite and shale	
(2) Black to brown shale and slate	May be laterally equivalent to unit 3 (above)
(1) Orange-weathering, grey stromatolitic dolomite	Host of Vera Ag-Pb deposits. May be laterally equivalent to grey to brown-weathering dolomitic siltstone.



*Feb 29 / 82*

PRISM RESOURCES LIMITED  
JOINT VENTURE 1977

CLAIM LOCATION  
MAYO MINING DISTRICT NTS 106C-5

SCALE  
0 1 2

Several Ag-Pb-An concentrations occur on the Vera claims within the orange-weathering stromatolitic dolomite; the principal mineral deposit is along an easterly trending, steeply dipping (70°-80° N) tabular zone of breccia and is known as the Vera deposit. Occurrences of Ag and Pb are known over a strike distance of more than 700 metres along this structure.

Primary mineralization in the Vera deposit is fracture-filling with dominant epigenetic minerals being galena, tetrahedrite, sphalerite, dolomite and pyrite, mostly relatively coarse-grained. The main structure can be construed as a relatively well defined fault and breccia zone that locally approaches simple vein form and in places appears to split. Much of the mineralized zone, where observed in an exploration adit at the 1,287 metre elevation, is oxidized extensively to limonitic and jarositic weathering products. Pods of galena-rich massive sulphides remain in a number of localities along the length of the Vera deposit.

#### EXPLORATION

Detailed exploration has been conducted on the Vera claims group since 1978, including geological mapping, geochemical sampling, limited geophysical testing, trenching, blasting, surveying and drilling. Early work was based on the recognition of surface showings of Ag-bearing galena along a pronounced east-trending fault zone. Subsequent

drilling has since proven the presence of a substantial Ag-Pb resource in two zones within this fault zone.

A preliminary exploratory diamond drilling program on the Vera deposit in 1979 totalled 1,682 metres in 27 holes. More exhaustive, systematic drilling in 1980 totalled 4,041 metres in 42 holes. Limited additional drilling 1981 (10 surface diamond drill holes totalling 1,152 metres) provided fill-in information where earlier intersections were sparse. Drill indicated global reserves for the combined East and West zones have been determined geostatistically and manually by the method of sections. Results depend on assumptions regarding continuity of the mineralized structure but indicate about 500,000 to 600,000 metric tonnes grading 273 and 293 g Ag/tonne for geostatistical and "section" reserves respectively. Information from the adit driven in 1981 shows the possibility of selective mining of a well-defined, high grade, tabular zone within the main Vera structure. Drill hole data and channel and muck samples from the drift indicate that average grade of this zone is double the above quoted grades for Ag although the tonnage is somewhat less than half the above quoted values.

A possible third ore shoot, within the Vera fault structure and indicated by sparse pre-1981 drilling, was

found to have substantially less tonnage potential than anticipated from pre-1981 drilling. During the 1981 field season the Vera deposit was investigated by a 719 metre drift that followed mineralized parts of the structure. Chip and channel samples taken across each new working face as the drift advanced indicate a narrow zone three metres wide with the wider mineralized zone forming the Vera deposit, that is substantially higher grade than calculated reserve grade of the wider zone. Furthermore, the underground work points to lateral continuity of the high grade tabular structure within both the East and West mineralized zones. Average grades over a minimum mining width of three metres are about 482 g Ag/tonne for the West Zone and 723 g Ag/tonne for the East Zone. Eleven underground diamond drill holes totalling 545 metres aided in defining limits to mineralization.

A longitudinal section of the mineralized zone is shown in Figure 2 and includes footwall of vein intersections in drill holes, true vein thicknesses and average Ag grades of intersections. Locations of the East and West Ag zones are outlined and the location of a possible but small unproven third such zone is indicated.

General descriptions of exploration results for 1979 to 1981 inclusive are given in assessment reports by D. Penner, listed in Reference.

The South Rusty Mountain showings, about 2 km southeast of Vera camp, consist of trains of quartz-ankerite boulders lying intermittently along a south-westerly trending depression on the south slope of Rusty Mountain. The boulders contain abundant goethitic and mangiferous weathering products and locally contain small amounts of tetrahedrite and chalcopryrite. Grab composite samples of boulders provide a wide range of Ag grades with some greater than 100 oz Ag/ton. About 500 m northeast of the northeastern end of the depression, across a gully and talus material and on strike with the depression, is another comparable boulder train associated with northeasterly trending fractures containing quartz and ankerite. The possibility of these various boulder trains representing a major mineralized structural zone somewhat comparable to the Vera deposit 2 km to the north is apparent. The South Rusty Mountain showings are spread along a total length of 600 metres.

The Siltstone showing, about 2 km south of the Vera claim group, is a northeasterly trending mineralized fracture system that was discovered in 1980. Galena-rich mineralization has been exposed sporadically along about 125 metres of trenching. In 1981 sixteen diamond drill holes totalling 1,627 metres, indicated on block of about 22,000 tons of reserves grading 26.7% Pb, 7.3% Zn and

30 oz Ag/ton over an average width of 2.04 metres. Soil geochemical work during 1981 indicates additional anomalous zones that warrant surface exploration.

#### RECOMMENDATIONS

The work recommended for Prism Joint Venture 1977 is divided into two phases. Phase I includes work on the Vera deposit that is essential to justify Phase II.

Preliminary grade and tonnage estimates provide a reasonably clear indication of expectations for individual shoots down dip and along strike from the Vera deposit as known at present. A summary of results to date given in an earlier section suggest that increases in grade (or recoverable grade) and/or tonnage of reserves could improve the viability of the Vera property as an economic producer. Future exploration should be directed towards drilling to extend tonnage and grade. Consequently, mining equipment on the property will be demobilized until surface exploration is completed. It is essential to establish silver recovery in the production of concentrates. Metallurgical testing of bulk samples taken during the 1981 field season should be completed as soon as possible.

Surface exploration of possible extensions of the Vera deposit should be directed towards testing the structure to depths more than 60 metres below the exploration adit, particularly

beneath the likely downward extensions of (i) the East, Shoot, and (ii) the West Shoot. The structure (Vera deposit) is persistent over a strike length of 600 metres and is still open at both east and west extensions where additional exploration drilling is warranted.

The South Rusty Mountain showings warrant detailed investigation because of the possibility that they represent a major mineralized structure comparable to the Vera deposit. Diamond drilling and trenching should be centred on the 100 metre-long topographic depression in which high grade Ag-bearing boulders have been found.

The Siltstone showing warrants further surface investigation by trenching of well defined soil geochemical anomalies identified during the 1981 season. Of particular interest is an area anomalous in Pb, Zn and Ag along the projected southwesterly extension of the Siltstone vein zone.

ESTIMATED EXPENDITURES

PHASE I

(1) Vera matallurgical testing		\$ 85,000
(2) Vera - demobilize mining equipment		85,000
(3) Prism management fee for - 10% of #1 & #2		17,000
(4) Vera caretaker's fee - January - May		5,000
(5) Property surface exploration: South Rusty Mountain and Siltstone showings		
(1) Salaries - field season	\$16,500	
- pre, post season	12,000	
(2) Mob. - Demob.	12,000	
(3) Supply flights - helicopter	10,450	
(4) Food and camp supplies	3,000	
(5) Geochem. and assay costs	12,500	
(6) Expediting (\$300/man - month)	1,800	
(7) Geophysical equipment rental	2,000	
(8) Trenching costs - fuel	1,200	
- operator	2,300	
(9) Management fee - 10%	7,375	<u>81,125</u>
Subtotal		\$273,125
Contingencies (approx. 12%)		<u>29,875</u>
TOTAL ESTIMATED EXPENDITURES - PHASE I		<u><u>\$303,000</u></u>



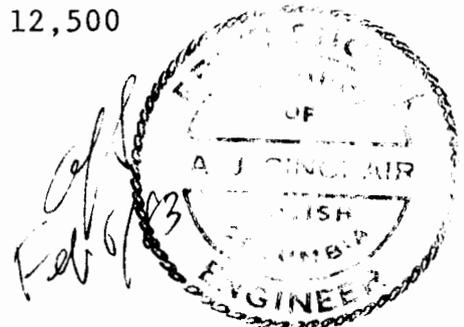
PHASE II

(1) Property surface exploration follow-up:  
South Rusty Mountain and Siltstone showings.

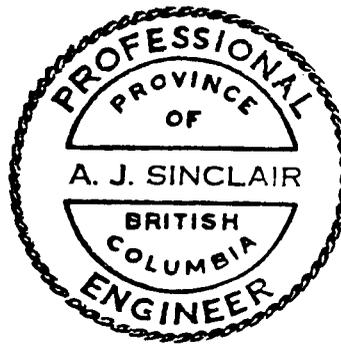
(1)	Direct drilling costs - 2,000' X \$25/foot	\$50,000	
(2)	Helicopter (Mob.-Demob., crew transport, moving drill, water line, fuel transport) - 60 hours	33,000	
(3)	Miscellaneous drill costs	2,000	
(4)	Prism wages	2,500	
(5)	Trenching costs (tractor, dynamite)	2,000	
(6)	Fuel (drill, tractor)	1,000	
(7)	Miscellaneous communications, food, expediting services	1,000	
(8)	Management fee - 10%	9,150	\$100,650

(2) Vera surface drilling

(1)	Drill contract- 9,000' X \$25/foot	\$225,000	
(2)	Drill - Mob.-Demob. - Kamloops - Mayo	20,000	
(3)	Fuel - f.o.b. - Mayo - 240 barrels	15,000	
(4)	Camp flights including fuel haulage and 80 flights return	40,000	
(5)	Camp costs - (not including wages)	13,500	
(6)	Prism wages - season	30,000	
	Penner-Lalonde, pre- post season	28,000	
(7)	Assay costs - 500 x \$25/sample	12,500	



(8)	Core boxes and supplies	\$15,000	
(9)	Mob.-Demob. to Mayo - Prism personnel	6,500	
(10)	Supervision, communications	15,000	
(11)	Expediting - \$300/man/month	5,400	
(12)	Airstrip and road improvement	5,000	
	Purchase 5 ton dump truck	60,000	
(13)	Prism Management Fee - 10%	46,850	\$ 575,300
	Subtotal		\$ 675,950
	Contingencies (approx. 12%)		81,050
	TOTAL ESTIMATED EXPENDITURES - PHASE II		\$ 757,000
	TOTAL PHASE I & PHASE II COSTS		\$1,060,000
	Prism Resources Limited's Portion (15%)		\$ 159,000



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Feb 23/82

REFERENCES

Penner, D.F., 1980, Assessment report for the Vera 1-164 mineral claims, Mayo Mining District (June 1, 1980 to September 20, 1980).

Filed in Mayo and Whitehorse, Y.T.

Penner, D.F., 1980, Assessment report for the Vera 1-164 mineral claims, Mayo Mining District (June 1, 1979 to August 8, 1979).

Filed in Mayo and Whitehorse, Y.T.

Penner, D.F., 1981, Assessment report for the Vera 1-164 mineral claims, Mayo Mining District (June 1, 1981 to October 4, 1981).

Filed in Mayo and Whitehorse, Y.T.

Ward, R., 1981, Prism (Vera) Project Joint Venture, 1981 underground exploration program. E & B Explorations Ltd., Calgary, Alberta.

REFERENCE

I, Alastair J. Sinclair, of 2972 W. 44th Avenue, Vancouver, B.C. certify the following:

I am a graduate of the University of Toronto with the following degrees:

B.A.Sc. Geological Engineering	1957
M.A.Sc. Economic Geology	1958

and, I am a graduate of the University of British Columbia with the following degree:

Ph.D. Economic Geology	1964
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I am a member of the Association of Professional Engineers in the Province of British Columbia.

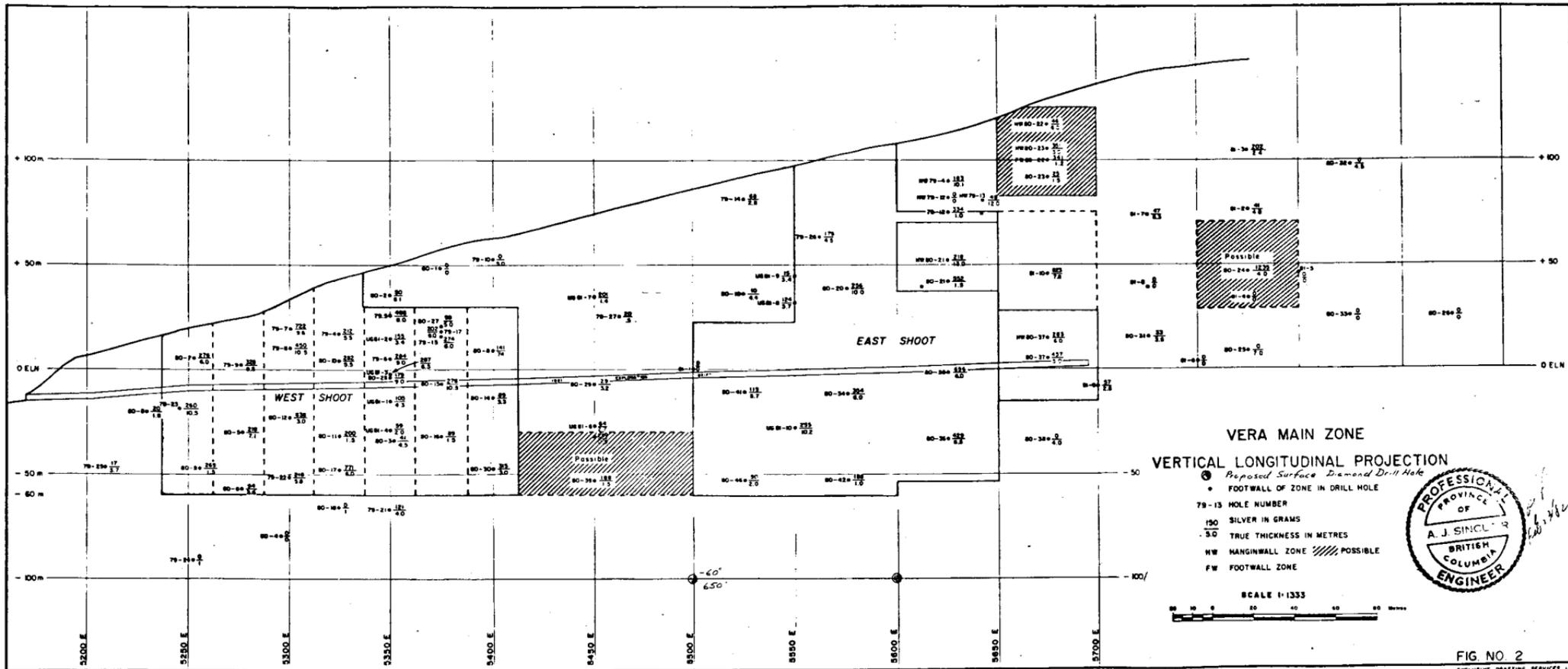
I have not directly or indirectly received nor do I expect to receive any interest, direct or indirect, in the properties of Prism Resources Limited or any affiliate, nor do I beneficially own, directly or indirectly, any securities of the Company or any affiliate.

I have practiced my profession since 1958.

My report dated February 23, 1982 is based on a visit to the Vera property in July 1978, mineralogical examination of specimens and drill core samples, supervision of a B.Sc. thesis on the geology of an area including the Vera property by D. Howe, and a preliminary geostatistical evaluation of ore reserves in the main Vera Fault structure jointly with G.H. Giroux, P.Eng.



*Alastair J. Sinclair, P.Eng.*  
Alastair J. Sinclair, P.Eng.  
February 23, 1982 *aj/s.*



VERA MAIN ZONE  
VERTICAL LONGITUDINAL PROJECTION

- ③ Proposed Surface Diamond Drill Hole
- FOOTWALL OF ZONE IN DRILL HOLE
- 79-13 HOLE NUMBER
- 150 SILVER IN GRAMS
- 5.0 TRUE THICKNESS IN METRES
- NW HANGINWALL ZONE
- FW FOOTWALL ZONE
- ////// POSSIBLE

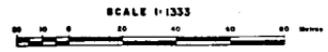
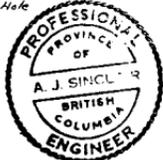


FIG NO 2  
EXCLUSIVE DRAFTING SERVICES LTD

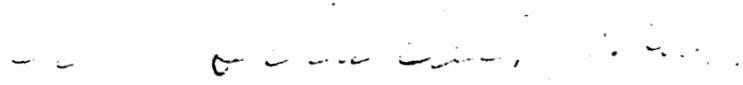
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② -60° 90c  
③ -60° 65c  
④ -60° 75c  
⑤ -60° 80c  
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ALASTAIR J. SINCLAIR, PH.D., P.ENG  
GEOLOGICAL ENGINEER  
2972 WEST 44TH AVENUE  
VANCOUVER, B.C. V6N 3K4

Mr. Angus MacDonald, Pres.,  
Prism Resources Ltd.,  
3rd Floor - 744 W. Hastings St.,  
Vancouver, B. C.

Dear Mr. MacDonald,

I have reviewed information pertaining to the completion of Phase I recommendations in my "Report on the Vera, South Rusty Mountain and Siltstone Mineral occurrences" dated Feb. 23, 1982. In particular, (1) demobilization of equipment on the Vera property has been effected, (2) metallurgical test results for mineralized material from the Vera deposit have been obtained and a detailed report is available, and (3) substantial surface trenching, sampling and assaying has been completed and indicates in part the likely extension of the Vera deposit about 700 feet west of the present portal. Consequently, Phase II recommendations in my above-mentioned report should now be undertaken.

  
\_\_\_\_\_  
A. J. Sinclair, P. Eng.  
Sinclair Consultants Ltd.

AJS/ats

Feb. 27, 1983