REPORT ON THE

1984 DIAMOND DRILL PROGRAM

ALBION GROUP OF CROWN GRANTED CLAIMS

TRAIL CREEK MINING DIVISION

BRITISH COLUMBIA

FOR

PROMINENT RESOURCES CORPORATION

 $\mathbf{B}\mathbf{Y}$ 

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#### SUMMARY

The 1984 Diamond Drill Program on the Albion group of claims in the Trail Creek Mining Division, B.C. consisted of the drilling of nine holes with a total length of 412.7 m. The expenses incurred during this program did not deplete the original (Phase II budget of \$70,000, of Smith, (1983).

The Albion and the Dubrovnik vein systems were investigated by the drilling of five holes on the Albion and four holes on the Dubrovnik vein. The results of the drilling of the Albion vein did not enhance the values received from the drilling performed in 1962 and 1974. Results from the drilling of the Dubrovnik vein were encouraging with one intersection of 8.4 m with 0.22 oz Au and 3.39 oz Ag/ton.

A continuation of this Phase II program on the Dubrovnik vein on the Albion Fraction and Dubrovnik crown grants is recommended. The program should consist of a geophysical survey, trenching and diamond drilling for a total budget of \$36,425. Provision has also been made for the trenching of the soil geochemical anomaly situated in the southeast corner of the Dubrovnik crown grant, as originally recommended by Smith, (1983).

The Phase III program as described by Smith, (1983), is contingent upon the merits of the continued Phase II program. The Phase III program should consist of diamond drilling to determine the preliminary grade and tonnage on the most favourable zone or zones with a budget of \$150,000.

#### INTRODUCTION

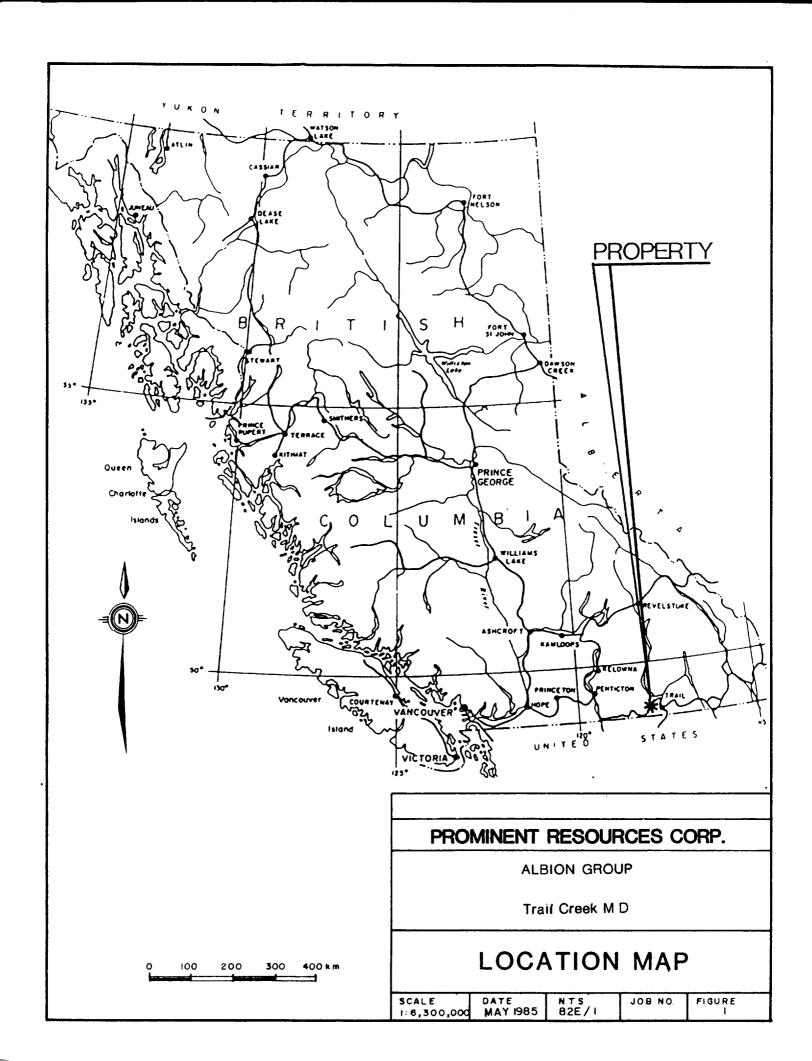
The authors were retained by Mr. Marshall Bertram, President of Prominent Resources Corporation to report on the 1984 Diamond Drill Program on the Albion group of crown granted claims, Trail Creek Mining Division, British Columbia. The 1984 Diamond Drill Program was based upon the recommendations of the report by Smith, (1983). supervised by L. Sookochoff, P.Eng, and F. Marshall Smith, P.Eng., in Vancouver and managed by one of the authors, H.S. Macfarlane, M.Sc., F.G.A.C.

#### LOCATION AND ACCESS

The Albion group of claims are situated on the south slope of Granville Mountain, approximately 35 km by road northwest of Trail, B.C., (fig. 1). Access to the claim group is obtained by taking the gravel road 1.5 km east of the Paulson bridge over McRae Creek, on Highway No. 3. Well maintained logging roads are present throughout the district together with old mine access roads and trials, maintained to four wheel drive standards on the claim group.

## PHYSIOGRAPHY AND VEGETATION

The property occurs in the Rossland Range of the Monashee Mountains, a physiographic division of the Columbia Mountains.



The terrain varies from gentle to steep with elevations of 1,490 m on the B.C. crown granted claim on the west side of the property and 1,725 m on the Albion No. 2 crown granted claim, giving a relief of 235 m.

The property is drained by Iron Creek and Big Sheep Creek to the east and McRae Creek to the west. There has been considerable past and recent clear cut logging of the area with the removal of pine and spruce. Second growth consists of deciduous softwoods and pine with undergrowth present in creek beds and near swamps.

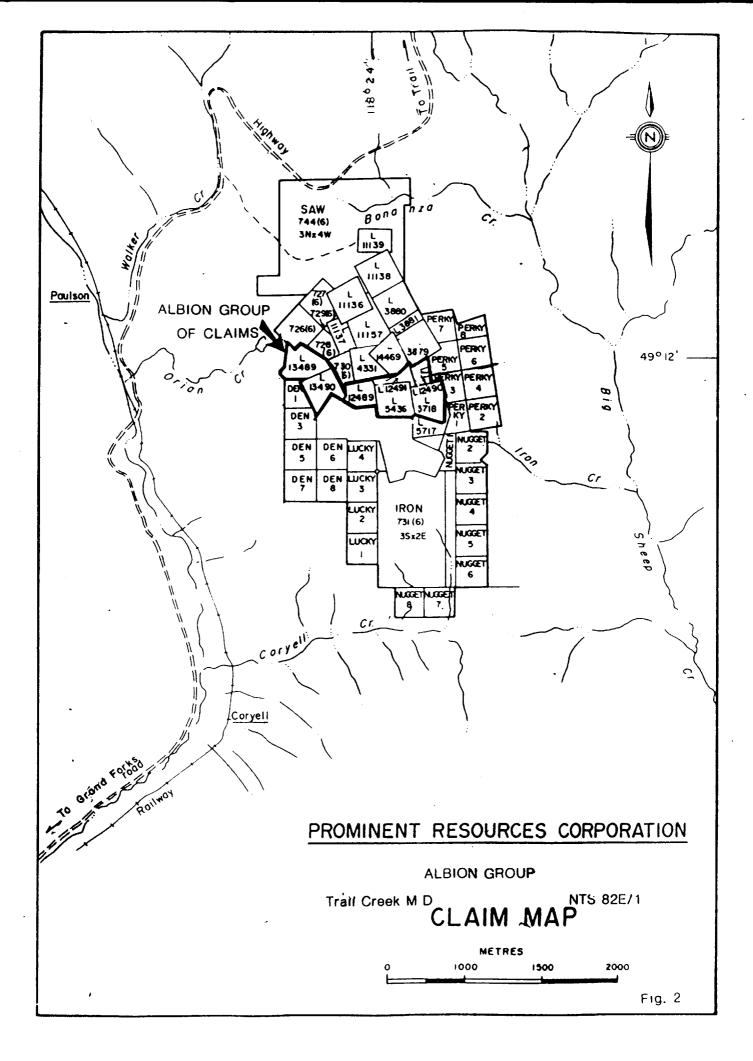
#### PROPERTY AND OWNERSHIP

The Albion group consists of seven crown granted claims as listed below:

Claim Name	Lot Number
Albion #2	L12489
Albion Fraction	L12491
B.C.	L13489
Bonanza	L5718
Dubrovnik	L5436
Duluth	L12490
U.S.	L13490

The Albion group is part of the Big Sheep Creek claim group, (fig 2), a contiguous claim group consisting of 72 crown grant, 2 post and metric claims as listed below:

	Record or
Name of Claim	Lot Number
Empire 1 - 5	726-30
Iron	731
Saw	744(6)
Glendale	444



	Record or
Name of Claim	Lot Number
Perky 1 - 8	411-418
Hans Fraction	419
Nugget 1 - 8	420-427
Lucky 1 - 5	428-432
Den 1 - 8	433-440
Hidden Hand	408
Berlin	L11157
Alice L	L4331
A & G Fraction	L14469
Inland Empire	L3880
Saginaw Fraction	L3881
Saginaw	L3879
Washington	L11138
Inland Fraction	L11156
New Bonanza	L5717
Independent	L11136
Albion #2	L12489
Albion Fraction	L12491
B.C.	L13489
Bonanza	L5718
Dubrovnik	L5436
Duluth	L12490
U.S.	L13490

The Albion group of claims are subject to an option to purchase agreement by Prominent Resources Corporation from Ralph J. Englund and Associates, dated August, 1983 and amended in April, 1984.

# HISTORY AND PREVIOUS WORK

The first claims located in this area in 1895 are thought to have been the Alice L. and the Berlin crown grants, following the original discovery of gold bearing ledges in the headwaters of Big Sheep Creek near Rossland, Kruchkowski, (1981). Mining appears to have commenced around the beginning of the century on

the Alice L. - Berlin vein and subsequently the Cascade - Bonanza vein, with extensive work on the Dubrovnik, Duluth, U.S. and Albion veins. Recorded production amounting to 208 tons containing 663 oz gold, 3,072 oz silver and 1,247 lbs copper was shipped from the Alice L. - Berlin vein during 1918-19. Intermittent production continued until 1938.

During 1962 the property was optioned by Northern Syndicate Limited and vein sampling and the diamond drilling of three holes was performed on the Albion vein. Extensive bulldozer trenching also appears to have been conducted at this time, Kruchkowski, (1981).

In 1974 diamond drilling was performed on the Albion vein and the Dubrovnik vein by I. Wiebe, a prospector from Grand Forks. Partial records are available for two diamond drill holes on the Albion vein and for two holes on the Dubrovnik vein, (pers. comm.).

Consolidated Boundary Exploration Ltd. optioned the property to Precambrian Shield Resources Ltd. in 1979. An exploration program consisting of surveying the drilling of eight diamond drill holes, GMP 1 and 2 on the Dubrovnik vein and GMP 3 and 4 on the Albion vein, and geochemical surveys over the Dubrovnik, Albion and Alice L. - Berlin veins. Results of this work were discouraging and the option was terminated.

In September, 1979, Consolidated Boundary Exploration Ltd. attempted the drilling of one diamond drill hole on the Albion vein but had to abandon it due to broken rods in the hole, Kruchkowski, (1981).

Subsequently the property was optioned to E. & B. Exploration Ltd. and a work program consisting of linecutting, geological

mapping, prospecting, soil sampling, geophysical surveys and trenching was performed in 1980, Kruchkowski, (1981). This option agreement was subsequently allowed to lapse.

Prominent Resources Corporation optioned the property in 1983 and commission a report by Smith, (1983), which recommended a three phase program, with Phase III contingent upon the merits of Phase I and II. Phase I consisted of the compilation of all data and an induced polarization - resistivity survey. This was performed by Geotronics Surveys Ltd., during late 1983, Mark, (1984). Geophysical surveys were carried out over five lines over a total distance of 880 m.

The Phase II program commenced in the summer of 1984 and to date a total of 412.7 m of diamond drilling in nine holes has been completed. Details of the program are supplied elsewhere in this report.

#### **GEOLOGY**

In his report Mr. Kruchkowski states:

# Regional Geology

"Sedimentary, volcanic and igneous rocks ranging in age from Carboniferous and/or Permian to Tertiary occur within the project area.

Coryell and Nelson plutonic rocks have intruded volcanic rocks of the Rossland formation and sedimentary rocks of the Mount Roberts formation. The Mount Roberts formation of possibly Carboniferous age outcrops along the slopes of McRae Creek. The formation consists of a lower member, comprised of mainly limestone, andesite and bedded tuff and an upper member consisting of argillite and massive argillaceous quartzite with minor interbedded lava flows, sills and bedded tuffs.

The Rossland formation of Jurassic age is exposed along the headwaters of Big Sheep Creek. The formation is composed of volcanic rock and minor intercalated sedimentary rocks divided into the Elise and Beaver Mountain groups. The Elise Mountain group consists mainly of lava flows of andesitic basaltic composition. Augite porphyry and minor bedded tuff and argillite units are present in this group. The Beaver Mountain group consists chiefly of dark green augite and augite feldspar porphyry flows, breccias, agglomerates and contemporaneous intrusives.

The Nelson intrusives of Cretaceous age have intruded both the Rossland and Mount Roberts formation. In the vicinity of the project area, the Nelson intrusive is a greenish grey, coarse to medium grained granodiorite. The texture is hypidiomorphic with hornblende more abundant than biotite.

The Coryell Batholith of Tertiary age has intruded the above rocks. The batholith is comprised of a complex of rocks varying in composition from syenite to granite and quartz monzonite, quartz bearing syenite being the dominant rock type. The rocks vary in grain size from coarse to fine with the dominant colour being pink or reddish. Porphyritic phases, where biotite is an abundant accessary mineral, are common. Fine grained porphyritic green dykes are numerous within and adjacent to the batholith."

# Local Geology

The predominant subcrop within the Albion group is Coryell Batholith with at least two predominent phases of the syenite based on grain size of feldspars. The coarse grained phase (unit 2 of Kruchkowski) occupies the central portion with the medium grained syenite (unit 3) to the north and south.

Mapping by Kruchkowski, (1981), is summarized in his report below:

"Mapping indicates that the Coryell intrusives are the most predominant rock types in the area. Most of the grid areas are underlain by a grey, coarse grained syenite that is homogeneous, non-foliated with a hypidiomorphic granular texture. Feldspar comprise 60 - 70 per cent of the rock type with hornblende 30 - 40 per cent. Alteration restricted to the fault zones and immediate vicinity consists of epidote in stringers and along joints and chlorite and clay in the crushed rock. Sericitic alteration of feldspar diminishes rapidly away from the fault in the wall rock zones. The unit appears to grade into a quartz diorite in a few locations.

The medium grained syenite unit shows a variable grain size ranging from fine to medium grained and occasionally exhibits weak foliation. The composition and colour is the same as the coarse grained unit but has hornblende phenocrysts up to 5 mm. It commonly contains fine to medium grained basic zenoliths. Alteration similar to that in the coarse grained unit is also restricted to areas of faulting.

The contact between the two units appears gradational as no evidence of alteration, contact metamorphism or faulting has been defined."

"A coarse grained, hornblende biotite rich syenite occurs rarely as discontinuous inclusions within the coarse grained syenite. The rocks are massive, with a hypidiomorphic granular texture and containing 20 - 30 per cent biotite, 30 - 40 per cent hornblende and 30 - 40 per cent feldspar.

Rare basic dykes consisting of 60 - 80 per cent hornblende and 20 - 40 per cent feldspar intrude both the medium and coarse grained syenites as well as the quartz veins. The dykes are fine grained discontinuous and contain pyrite up to 2 per cent and are generally less than 3 metres in width. The dykes occasionally carry feldspar phenocrysts up to 1 mm; sericite and chlorite alteration is common and contain calcite and/or quartz veinlets.

A series of north-south biotite-feldspar porphyry dykes are present along the west edge of the Mina Grid. The rocks contain 5 - 20 per cent biotite and 5 - 15 per cent feldspar phenocrysts up to 10 mm within an aphanitic to fine grained light green matrix.

Greenstone gneisses consisting of banded mafic to intermediate rocks were mapped on the U.S. crown grant. The gneisses vary from fine to medium grained and are generally hornblende rich rocks. Foliated in a north-south direction chlorite and epidote are common constituents giving the rock a greenish colour. These rocks may be Nelson intrusive rocks altered by intrusion of the Coryell."

"Quartz, usually fractured and brecciated often rusty, occurs as discontinuous lenses and stringers in north-south fissure zones. The lenses range from tens of millimeters to three metres (reported) and contain varying amounts of cubic pyrite crystals, pyrrhotite, galena, chalcopyrite, malachite, azurite and sphalerite. Significant gold and silver values may be associated with the sulphides."

#### 1984 DIAMOND DRILL PROGRAM

The 1984 Diamond Drill Program consisted of the drilling of nine holes on the Albion and the Dubrovnik veins. A total of 412.7 m of BQ core was drilled. This program was based on the recommendations of Smith, (1983), supervised by L. Sookochoff, P.Eng., and F. Marshall Smith, P.Eng., in Vancouver and managed by H.S. Macfarlane, M.Sc., F.G.A.C. from the 8th to 18th, August, 1984, with the able assistance of J. Robins.

The report by Smith, (1983), recommended Phase I induced polarization-resistivity survey to determine the optimum location of drill holes for Phase II. This geophysical survey was performed in late 1983 and delineated targets on the Albion vein. A total of five holes were drilled on the Albion vein and four holes on the Dubrovnik vein. The Dubrovnik vein was tested for gold mineralization below these area of known mineralization exposed within old pits, trenches and shafts.

A total of \$33,575 was depleted from the budget of \$70,000 as recommended by Smith, (1983) for the Phase II Diamond Drilling Program.

A summary of the drill holes and results is as follows:

# Albion Vein

DDH 84-1, (270°, - 60°) was drilled to test a resistivity anomaly delineated along the vein system to the south of some old stopes. A vein intersection was made in this drillhole, and values of 0.263 oz Au and 1.94 oz Ag/ton over 0.45 m were obtained.

DDH 84-2, (244°, - 45°) was collared from the 84-1 location and drilled to test the same resistivity anomaly to the south and to parallel a 1962 drill hole, (62-1) which was reported to have returned values of: 0.35 oz Au/ton over 1.06 m. A 0.07 m vein was intersected in this drillhole and values of 0.052 oz Au and 0.14 oz Ag/ton over 0.6 m were obtained.

DDH 84-3, (244°, - 60°) was drilled approximately 130 m southeast of 84-1 to investigate the Albion vein exposed within an open cut. Three veins with widths of 0.9 m, 0.13 m and 0.45 m were intersected in this drillhole. Only the 0.45 m intersection returned values of interest: 0.056 oz Au and 0.12 oz Ag/ton over 0.45 m.

DDH 84-4, (244°, - 45°) was collared approximately 10 m southeast of 84-3 to test the extension of the 84-3 Albion vein intersection and to test a 1974 (74-4) intersection with reported values 0.604 Au and 3.39 oz Ag/ton over 0.6 m. A 0.23 m vein intersection was made in this drillhole and returned a value of 0.03 oz Au and 0.07 oz Ag/ton over 0.38 m.

DDH 84-9, (- 90°), was collared at the same location as 84-1 and 2 to obtain information at depth on the expected east dipping Albion vein. A 0.2 m intersection of calcite, quartz and 10 per cent pyrite returned a value of 2,250 ppb Au.

## Dubrovnik Vein

DDH 84-5,  $(214^{\circ}, -60^{\circ})$ , was drilled from a position approximately 8 m east of the Dubrovnik vein. The hole was drilled to test the vein structure exposed within two shafts, at depth. Two veins with widths of 0.45 m and 0.6 m were intersected in this drill-hole. Only the latter intersection was of interest: 0.049 oz Au and 1.42 oz Aq/ton over 0.6 m.

DDH 84-6, (044°, - 45°), was collared approximately 20 m south of 84-5 to test the Dubrovnik vein exposed in a shaft. A 19 mm vein intersection was made in this drillhole. A 0.3 m sample across this intersection returned values of 0.02 oz/Au and 0.02 oz Ag/ton.

DDH 84-7, (115°, - 45°), was drilled from a position approximately 16 m west of 84-5 to test a vein exposed in a shaft indicated to trend northeasterly crossing the Dubrovnik vein system which trends northwesterly.

A 8.4 m vein intersection was obtained with the vein occurring adjacent to a syenite-greenstone contact. The average grade across 8.4 m is 0.22 oz Au and 3.39 oz Ag/ton. A value of 0.398 oz Au and 7.06 oz Ag/ton over 2.56 m was obtained from this intersection.

DDH 84-8, (115°, - 65°), was drilled from the same location as 84-7 to test the down dip extension of the 84-7 vein intersection. The vein was not intersected in this drill hole, possibly the result of a shallow east dip to the vein.

#### CONCLUSIONS

The 1984 Diamond Drill Program on the Albion group of claims should be continued. Results of the drilling to date are such that the concluding portion of the program should be directed towards the Dubrovnik vein on the Albion Fraction and the Dubrovnik crown grants. The characteristics and structure of the Dubrovnik vein must be determined as accurately as possible by trenching and a geophysical survey prior to the continuation of the drilling.

The soil gold anomaly in the southeast part of the Dubrovnik crown grant represents a significant interest target and should be investigated as part of this program.

#### RECOMMENDATIONS

A program of two phases should be continued on the Albion group of claims. The emphasis of this program should be directed towards the investigation of the Dubrovnik vein. The first phase, Phase II of Smith, (1983), should be performed prior to the second phase. Phase II, Phase III of Smith, (1983), is dependent upon the merits of Phase I.

Phase I consists of an induced polarization - resistivity survey to determine the plunge of the mineralization in the Dubrovnik vein. Trenching of this vein to test the grade and continuity, together with large diameter diamond drilling to investigate the structure at depth should be performed. The drilling of HQ size core is to be stressed, the BQ size used for the 1984 Diamond Drill Program returned only 27 per cent core recovery in the vein intersection of 84-4. Provision has been made for the trenching of the soil geochemical anomaly on the Dubrovnik crown grant.

Phase II is contingent upon favourable results from the diamond drilling in Phase I. This phase should consist of diamond drilling to determine the preliminary grade and tonnage on the most favourable zone or zones.

## COST ESTIMATES

PHASE I (Phase II of Smith,	PHASE I	(Phase	· II	of	Smith	, 1983)
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Diamond drilling, 100 m HQ @ \$80/m	\$ 8,000
Geophysical survey	12,000
Assays	2,500
Supervision and support costs	2,500
Trenching	8,000
Contingencies	3,425
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Total \$ 36,425

# PHASE II (Phase III of Smith, 1983)

Contingent upon favourable results from Phase I

Diamond drilling,	1,250 m HQ @ \$	\$80/m \$100,000
Assays		5,000
Supervision		10,000
Support costs		10,000
Contingencies		25,000
_		

\$150,000 Total

Total Phase I and II \$186,425

F. MARSHALL SMITH

H.S. Macfarlane, M.Sc., F.G.A.C.

shall Smith, P.Eng.

9th September, 1985

#### CERTIFICATE

I, H.S. Macfarlane, do hereby certify:

- 1. That I am a consulting geologist, resident in Vancouver, British Columbia.
- That I am a graduate in geology of the University of London (B.Sc. Honours, 1976) and of the University of Leicester (M.Sc., 1981).
- 3. That I am a Member of the Institution of Mining and Metallurgy, London, a Registered Chartered Engineer with the Engineering Council, London, and a Fellow of the Geological Association of Canada.
- 4. That I have practiced my profession as a geologist for the past nine years.
- 5. That the information, opinions and recommendations in the attached report are based on an examination of the property in August, 1984.
- 6. That I have no interest, direct or indirect, in the property herein described nor in the shares or securities of Prominent Resources Corporation, nor do I expect to receive any such interest.
- 7. That I hereby authorize the use of the above-mentioned report, or relevant and representative extracts therefrom, in any duly authorized Prospectus, Statement of Material Facts or other information releases.

H.S. Macfarlane, M.Sc., F.G.A.C.

Dated at Vancouver, British Columbia, this 9th day of September, 1985.

#### CERTIFICATE

- I, F. Marshall Smith, do hereby certify that:
- 1. I am a consulting geologist and geochemist with offices at Mayflower Drive, Richmond, British Columbia.
- 2. I am a graduate at the University of Toronto with a degree of B.Sc., Honours Geology.
- 3. I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.
- 4. I have practiced my profession continuously since 1967 primarily in the Cordillera of North America.
- 5. I have read the report by H.S. Macfarlane, M.Sc., F.G.A.C., and concur with all aspects of it. Mr. Macfarlane has worked with the undersigned since May 1983 and has consistently demonstrated his competence as a geologist and his maturity of judgement.
- 6. I have no interest, direct or indirect in the property herein described nor in the shares or securities of Prominent Resources Corporation, nor do I expect to receive any such interest.

F. Marshall Smith, P.ENGINE

Dated at Vancouver, British Columbia, this 9th day of September, 1985.

#### REFERENCES

- Kruchkowski, E.R., 1981. Report of Work, Granville Mountain Property, Grand Forks, Trail Creek M.D., British Columbia, for E. & B. Explorations Ltd., Calgary, Alberta
- Little, H.W., 1960. Nelson Map Area, West Half, B.C. Mem. 308, Geological Survey of Canada.
- Little, H.W., 1957. Kettle River 82F/East Half, B.C. Geological Survey of Canada
- Mark, D.G., 1984. Geophysical Report on an Induced Polarization-Resistivity Survey on the Granville Mountain Project, Christina Lake Area, Trail Creek M.D., British Columbia, for Prominent Resources Corporation.
- Smith, F.M., 1983. Report on the Albion Group of Crown Granted Claims, Trail Creek Mining Division, British Columbia, for Prominent Resources Corporation.

