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ENGINEER'S REPORT  
ON THE

DUFFY CREEK PROJECT  
Kamloops Mining District  
British Columbia, Canada

F O R

PACKARD MINERALS LTD.  
CALGARY, ALBERTA

B Y

ACE PARKER MINES AND MINERALS CORPORATION LTD.  
"CONSULTING GROUP"

DATED

SEPTEMBER 13, 1981.

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## PREFACE

This report has been commissioned by Packard Minerals Ltd. and pertains to Exploration of the "Buck, Doe and Duffy" groups of mineral claims, which straddle the Trans Canada Highway between Kamloops and Savona, British Columbia.

Proposed exploration of this group of claims is known as the Duffy Creek Project but excludes all Crown Granted Mineral Claims contained within the current property boundary.

These contained Crown Granted Mineral Claims have at various times been mined for high grade copper ores (Copper King, et al Crown Grants), and of lesser importance magnetite iron (Glen Iron, et al), and minor Sodium Sulfate (Cedars Crown Grants). However, no mining of significance has been done on the Crown Granted Claims since the late 1930's.

Chester Millar's persistent work which led to the discovery of the adjacent Afton Ore Body in the early 1970's sparked a staking rush in the area of the Iron Mask Batholith. Subsequently various kinds of exploration was conducted by both individuals and companies on portions of the present property, but this work was largely piecemeal in nature and the results have never been integrated into a regional structural and metallogenic framework.

Thus the Duffy Creek Exploration project is primarily a program of geophysics and drilling designed to reassess the more important structures in areas of known mineralization - especially in overburden covered areas around the Cherry Creek Pluton which probably was the source of the rich copper ores at the Copper King Mine.

SYNOPSIS

The Duffy Creek Project consists of modern integrated exploration of approximately 4,000 hectares of land which generally straddles the Trans Canada Highway 25 kilometers west of Kamloops, British Columbia, and north-west of the Afton Mine and smelter.

This project consists of airborne and surface geophysical surveys, followed by a comprehensive geological/geophysical compilation and interpretation including the geophysical work that has been done on parts of the property by previous owners. Anomalous zones will be subsequently tested with a minimum of 8,500 lineal feet of diamond drilling. The estimated budget for the initial work is \$750,000, followed by a further expenditure of \$750,000 during 1982, if justified.

Copper was mined in the area from the 1890's and continued intermittently on a small scale until the discovery of the Afton Ore Body in 1971. The Afton deposit supports a mine and smelter and is reported to contain 30.84 million tons of copper ore, both primary sulphides and native copper which average 1.0% Cu and 0.017 oz. Au/ton at a mining cutoff of 0.25% copper.

In 1939 the Copper King Mine (located within but not forming part of this property), produced 108,140 lbs. copper, 360 ozs. gold, and 730 ozs. silver from 4,140 tons of ore. (Smelter returns of high grade ore mined during the earlier years of this mine are reported to have been 20% copper, 1 oz. gold and 6 ozs. silver per ton, with "lower grade ore" averaging 7.5% copper, 0.46 oz. gold, and 1 oz. silver per ton).

Mainly due to fragmented property ownership, the exploration performed during the 1960's and 1970's failed to form a comprehensive picture of subsurface geology and structure on land now included in the Duffy Creek project, especially in those parts covered by surficial deposits in the vicinity of Cherry and Duffy Creeks.

Geologically the property covers the Upper Triassic Nicola Group of Volcanics, which have been intruded in places by the Cherry Creek Pluton, and related rhyolite bodies. All of these rocks are in small parts overlain by recent volcanics and sediments of the Kamloops Group.

Adjacent to the property, the Afton ore body is contained in the Cherry Creek rock unit, but rocks of both the Nicola and Cherry Creek units are known hosts for copper mineralization in the area and underlie the current property. Most copper mineralization appears to be structurally controlled and associated with varying amounts of magnetite.

The most important potentially mineralized structures, including concealed portions of the Cherry Creek fault system, are considered to be very favorable exploration areas but for all intent and purposes remain unexplored at this time. The existence of untested and open induced polarization anomalies and float specimens of spectacular replacement-type copper ore found in these areas, further enhance the project.

INTRODUCTION

Property and Ownership

The property consists of the following 10 staked claims, 6 fractional claims, and 6 two (2) post claims, all of which are presently held in trust for Packard Minerals by three private parties. The attached Map (Dwg. #81-113-1) outlines the claims which are listed as follows:

<u>Claim Name</u>	<u>No Units</u>	<u>Government Record Number</u>
Buck #1	20	3523 (5)
Buck #2	20	3524 (5)
Buck #3	20	3798 (9)
Buck #4	18	3799 (9)
Buck #5	15	3800 (9)
Buck #6	12	3801 (9)
Buck #7	9	3802 (9)
Buck #1 fr.	1	3793 (9)
Buck #2 fr.	1	3794 (9)
Buck #3 fr.	1	3795 (9)
Buck #4 fr.	1	3811 (9)
Buck #5 fr.	1	3896 (9)
Buck #6 fr.	1	3797 (9)
Doe #1	1	3517 (5)
Doe #2	1	3518 (5)
Doe #3	1	3519 (5)
Doe #4	1	3520 (5)
Doe #5	1	3521 (5)
Doe #6	1	3522 (5)
Duffy #1	20	3734 (8)
Duffy #2	20	3735 (8)
Duffy #3	20	3736 (8)

Not included in the property are the Crown Granted mineral claims comprising the dormant Copper King, and Glen Iron Mines, and the Cedars Crown Granted mineral claim where Na SO<sub>4</sub> was extracted. Also excluded is the Maria staked claim (1 unit) in the western part of the property, leaving a net of approximately 3,500 hectares.

The surface ownership consists of four major land holdings with a number of scattered small holdings. However, access agreements for surface exploration purposes have been reached for the majority of the property.

Location and Access (50° 42'N Lat., 120° 36'W Long.)

The property generally straddles the Trans Canada Highway 25 kilometers west of Kamloops, British Columbia, and immediately north-west of the Afton Mine and smelter. Most parts of the property are easily accessible with 4 wheel drive vehicles via established roads and trails. Kamloops, British Columbia, is a mining and transportation center serviced by highways, railroads and scheduled aircraft.

History and Development

Mining for Copper and other minerals in the area south-west of Kamloops dates back to the 1890's and continued intermittently up to World War II. Twenty (20) or more prospects were explored, and some developed toward the production stage but generally with little success due to the lack of developed ore reserves.

Prior to the discovery of the Afton ore body (1970) the most successful mine operators were those around the Iron Mask Mine, which, together with some of the neighbouring properties, collectively produced 189,230 tons of ore with 1.37% Cu, 0.019 oz./ton Au and 0.076 oz./ton Ag according to available records.

All the above noted projects are generally located to the east and south of the present Afton Mine, with the exception of the dormant Copper King Mine and the Glen Iron Mine both of which are included within the boundaries of the current project.

Prior to 1939 the Copper King Mine and the Glen Iron Mine respectively produced 7,491 tons of ore yielding 0.16 oz/ton Au, 0.29 oz./ton Ag, and 2.61% Cu, and in addition to 16,000 tons of magnetite for flux.

During the early fifties exploration in the general area gained momentum, with several companies drilling their prospects, and with geophysical work introduced as well. This work revealed several targets which were never adequately tested with drill holes.

Until the 1970 discovery of the Afton Ore body, little or no work had been done further to the west in the vicinity of the Copper King and Glen Iron Mines. At that time the present property was staked by various parties with subsequent assessment work performed including shallow drilling on the Copper King Mine.

The bulk of the work was done by Torwest Resources Ltd. which performed I.P. and Mag surveys and subsequent random drilling mainly on the north-east side of the Trans Canada Highway on approximately  $\frac{1}{4}$  of the present property. This work apparently "failed" to reveal results considered sufficiently significant to justify continued exploration even though copper mineralization was encountered in some of the drill holes. Induced Polarization Surveys (I.P.) were also performed on several other properties without apparent success, and most of the properties were allowed to lapse.

I.P. surveys have been reported to be generally unsuccessful in defining the Afton Ore body as well, and are therefore probably not to be considered as a reliable individual exploration method in the immediate area.



GENERAL GEOLOGY AND STRUCTURE

Duffy Creek Project property covers a glaciated and arid portion of the Quesnel Trough which is composed at a succession of intercalated lower mesozoic volcanic and sedimentary strata which have been intruded by batholiths, stocks and small plutons - particularly the Cherry Creek Pluton which outcrops on both the north and south shores of Kamloops Lake.

Both regional and local geology must be regarded as complex, but aside from the recent pleistocene surficial deposits, which conceal many localized structural details, particularly along Cherry Creek Valley, all of the rocks in the area appear to have evolved from one pulsating plutonic / volcanic system. Thus the Cherry Creek Pluton probably represents a contemporaneous outlier or derivative of the larger Iron Mask Batholith. Both the Iron Mask and Wildhorse Batholiths intrusive bodies were, in turn, probably derived from the larger Nicola Batholith.

The intrusion of the Cherry Creek Pluton and the Iron Mask Batholith appears to be controlled by a deep seated zone of weakness which traverses diagonally across the Quesnel Trough in a north-west south-east direction. The south-west flank of this zone is marked at surface by discontinuous lineaments, small bodies of picrite basalt, and a string of airborne magnetic highs which run intermittently from the mouth of Cherry Creek in the north-west, south-east through the Afton Pit, and continue along strike south-east past the north side of Jocko and Edith Lakes.

Generally all of the rocks in the area have been subjected to repeated tectonic stress resulting in the formation of numerous faults and lineaments. North-west/south-east striking faults and lineaments, and north-south striking fractures appear to control most mineralization in the area. Theoretically the intersection of these systems along Cherry Creek Valley are the most favorable locations for mineral deposition.

The Cherry Creek Unit, once mapped as a volcanic, where exposed on the property consists of greenish grey, medium grained diorite, diorite porphyry, and monzonite characterized by their speckled appearance resulting from biotite plates. These rocks are often brecciated and contain irregular latite porphyry dykes. In mineralized areas these rocks exhibit epidotization and saussuritic alteration of an aphanitic ground mass.

The Triassic Nicola Group of volcanoclastic sedimentary rocks dominates the south-west portion of the property, and where exposed consists mostly of greyish green colored massive and bedded andesite and basalt lavas, tuffs, breccias, and intercalated flows, in conjunction with minor argillites, conglomerates and limestones. These rocks are well indurated, intensely epidotized and appear to be in fault contact with the Cherry Creek Unit - including the Cherry Creek Pluton along the Trans Canada Highway in the North Central part of the property. Several copper occurrences are known in this rock unit.

Tertiary volcanic and sedimentary rocks of the Kamloops Unit, including the Coldwater and Tranquille beds, unconformably overlie the Cherry Creek Unit in the eastern portion of the property and remain as small remnants which form low ridges adjacent to Duffy Creek. Kamloops rocks are in contact with one section of the Afton Ore Body immediately east of the property. These rocks cumulatively consist of a complex assemblage of relatively fresh, grey to reddish and often brecciated andesitic material and latite lavas, interbedded with grey to brown sandstones, siltstones, and minor conglomerate. No mineralization of economic significance is known in this rock unit.

All of the intrusions are potential mineralizers and the Cherry Creek Pluton hosts the relatively rich auriferous copper ores of the dormant Copper King Mine. Copper mineralization at the Copper King is associated with epidotization and K-feldspar enrichment which has rendered these rocks distinctly salmon-pink in color. The complex Cherry Creek unit is a known host for copper and lesser iron mineralization at the Afton Mine.

Small bodies of rhyolite which probably evolved from the Cherry Creek Pluton, outcrop on the north side of Kamloops Lake and contain minor copper mineralization. This material also occurs south-east of Duffy Creek near the British Columbia hydroelectric line and Beaton Lake where it forms low hillocks along Cherry Creek Valley. The Duffy Creek occurrence was once mapped entirely as part of the Kamloops Group, but appears to be a plug-like occurrence of rhyolitic material around which remnants of the Kamloops Group remain. Copper silicates are present in these rocks and football sized chunks of unique chalcopyrite rich replacement "ore" formed in brecciated limestone were found as float in this immediate area during 1981.

ECONOMIC GEOLOGY AND MINERAL DEPOSITS

Mineralization of direct and indirect economic significance on or adjoining the property consists of the following types:

- 1) Copper mineralization deposited as disseminations and in narrow fractures in the Cherry Creek intrusive rock unit, (medium grained diorite) at the Copper King. Chalcopyrite, bornite, and minor metallic Copper, which is directly associated with olivine, are the primary or hypogene minerals at the Copper King Mine and contain substantial gold values. This mineralization is associated with pervasive K-feldspar alteration and veinlets of magnetite. The copper sulphides generally appear to have been deposited after the magnetite and are structurally controlled by near-vertical, north-north-east striking fissures and fractures in the host rock. The Copper King Mine produced, according to Government records, an aggregate of 7,491 tons of ore which graded 2.61% Copper, 0.16 oz./ton Gold, and 0.29 oz./ton Silver.

Similar hypogene sulphides occur at the Afton Mine where a supergene zone of secondary sulphides is reported to a depth of 600 meters or more, and in which native copper is believed to be the dominant supergene metal. However, I find this conclusion questionable. Sooty chalcocite as disseminations and tiny veinlets is present in the supergene zone, along with extensive hematite which leaves the ground an earthy-textured, brick-red colour. This deposit is situated in the north-west end of a magnetic anomaly attributed to disseminated magnetite contained in the Iron Mask Batholith.

J.M. Carr and A.J. Reed report that the Afton deposit contains "30.84 x 10<sup>6</sup> tonnes grading 1.0 percent copper, 0.58 ppm gold and 4.19 ppm silver" within a planned pit 274 meters deep. The ore body is generally elongate in a north-west/south-east direction.

- 2) Copper mineralization contained in brecciated dolomitic limestone. Football-sized specimens of spectacular mineralization have been found in glacial till along the south side of Cherry Creek Valley immediately north of Beaton Lake. Mineralization consists of fine-grained chalcopyrite with lesser bornite and pyrite dominantly associated with calcite and minor fluorite. Small stringers of tetrahedrite occur in the limestone and platy green chlorite is the main form of alteration.

This type of mineralization is unique to the area and is believed to have formed in brecciated areas in the Nicola Group near Duffy Creek, now concealed by overburden.

- 3) Magnetite iron mineralization formed as random veinlets and large tabular bodies in the Cherry Creek Pluton. Two veins of massive magnetite up to 20 feet in width occur on the Glen Iron Property and strike south-east through the current property into the Copper King Crown Grants. This material appears to have generally preceded the copper mineralization in the area but contains inclusions and segregations of chalcopyrite and minor metallic copper. Torwest reported intersecting 20 feet of chalcopyrite associated with pyrite and magnetite northwest of the Copper King Mine and on the current property.

EXPLORATION PARAMETERS

Geology, Geochemistry and Geophysics

Effective exploration of the property will require the meticulous compilation and careful integration of all existing geochemical and geophysical data in conjunction with geological information from previous drilling. Considerable geochemical and incomplete geophysical data exist from previous property owners. An airborne electromagnetic and magnetic geophysical survey will best facilitate the compilation and provide a geophysical framework and specific geophysical models, provided that the survey includes the known mineral deposits of the area. Additional geological data will have to be obtained by subsequent new drilling.

Experience of exploration groups and mine operators in the area indicates that geochemistry is not the ultimate exploration tool because of the nature and thickness of overburden, and because some of the potential hosts for mineralization, such as the Nicola and Cherry Creek rock units are often capped by younger rocks which are historically barren of mineralization. Surficial deposits of glacial origin conceal approximately 80% of the property, further impeding both geochemical and geophysical surveys in some areas.

Most ground geophysical surveys conducted in the past have been individually inconclusive and incomplete, especially induced polarization surveys in detecting or defining mineralized zones on the property. Nevertheless, modern Elfast Turam electromagnetic surveys will detect semimassive sulphide mineralization if it reaches within three hundred meters of surface.

Elast Turam surveys conducted in conjunction with ground magnetic surveys are capable of unraveling the majority of sulphide-related geophysical puzzles present on the property - especially in areas of deep overburden and/or barren cap rock.

All technical data must truly be interpreted and not merely "described", and drilling will be required to provide the ultimate test of anomalous zones and subsurface geology.

FINANCIAL CONSIDERATIONS AND RISK

Mineral exploration is normally a risk business. However, exploration in certain areas is considerably less risky than in others for a variety of reasons. Especially important are the location, geological and structural environment, minerals present, and production history in the area. Financial rewards can be very substantial if the many components of the risk equation can be minimized through selective location, inovative design, and proper management of a project.

The Duffy Creek Project is located in one of the best known exploration areas in Western Canada. It shares common geology with the Afton and Copper King Mines but is believed to have better structure and the possibility of higher gold values, thus the possibility of larger and richer mineral deposits being present.

Subject mainly to fluctuating metal prices, a relatively small mineral deposit such as the adjacent Afton copper deposit probably represents a minimum net asset in the range of 100 to 150 million dollars to its owners. In view of the favorable geological environment and the value of money today, it is considered reasonable that a total of 3 million dollars (3%) be budgeted for exploration of the Duffy Creek Project in search of another Afton-sized deposit. This overall "Limit of Exploration Funds" can be altered according to the results of each step in Phase I of the recommended exploration program.

Modern air and ground geophysical surveys are available at relatively modest cost and can be used to correlate and extend previous exploration work which have shown the presence of anomalous zones. Successive steps of exploration, including drilling will further reduce risk or terminate the project.



CONCLUSIONS AND RECOMMENDATIONS

Favorable geologic conditions in conjunction with known gold and high grade copper mineralization associated with the Cherry Creek Pluton present several attractive exploration areas on the Duffy Creek project. There is no doubt that a new copper gold mine in the area would be a most attractive enterprise, the possibility of which justifies a larger than usual initial expenditure of low risk capital.

Although situated in a geologically complex area most mineralization, including that of the dormant Copper King Mine and the adjacent Afton deposit, appears to be structurally controlled. These deposits provide convenient geological and geophysical models for comprehensive exploration of previously unknown ore deposits in concealed areas never before tested with deep-penetrating geophysical surveys and drilling.

The highest grade Copper and Gold mineralization known in the entire area was extracted from the former Copper King Mine. Mineralization at the Copper King consists of disseminated and massive auriferous bornite, chalcopyrite, and minor metallic copper associated with veinlets of magnetite, all formed in salmon-colored (K-feldspar enriched) diorite. This mineralization appears to be structurally controlled and has never been explored at depth or along strike north or south under the Valley of Cherry Creek where a major open-ended I.P. anomaly exists. This anomaly and numerous other I.P. anomalies lie in the valley of Cherry Creek south-west of the Trans Canada Highway, and have never been tested by drilling.

All lands peripheral to the Cherry Creek Pluton and now partially covered by the Buck, Doe and Duffy Claims must be regarded as important exploration areas. At surface these areas consist primarily of Nicola Volcanics which have been broken by numerous faults, fractures and lineaments, thus preparing the ground for mineral deposition.

Relatively recent members of the Kamloops group overlie the Nicola Volcanics along the Cherry Creek fault in the eastern portion of the property where they lie up against the Cherry Creek Pluton. Exploration is more difficult in these areas, but not insurmountable due to sophisticated, deep-penetrating geophysical tools.

Rocks of both the Nicola and Cherry Creek groups, including the Cherry Creek Pluton, are probably comagmatic in nature, and are known hosts of copper mineralization. On the property, these rocks are 80% covered by either surficial deposits or historically-barren rocks of the Kamloops Group.

Structural studies and field evidence, including float specimens of rich copper mineralization, suggest that the area generally along the south-east side of Duffy Creek between Cherry Bluff and Beaton Lake represents one of the best exploration areas on the property. Brecciated zones formed along the Cherry Creek fault and at the intersection of this fault with north and north-east striking fracture zones, currently camouflaged by overburden and partially protected by cultivation, represent potential primary locuses for deep-seated copper mineralization that has probably evolved from the Cherry Creek Pluton. The mineralized zone at the Copper King Mine is probably an offshoot of one of these deposits situated in the valley of Cherry Creek.

Such mineralized zones may or may not come to surface and, undoubtedly, are not likely to be detected with geochemical surveys, but can probably be accurately detected with sophisticated geophysical tools, especially Elfast Turam apparatus employed in conjunction with precision magnetic equipment. The existing I.P. anomalies are not considered reliable as drill targets without verification by additional surveys.

Initially a combination E.M. and Magnetic airborne geophysical survey can provide a geophysical framework for the entire property and allow calibration and integration of existing Geophysical data with known mineral deposits in the area such as the Afton, Copper King, and Glen Iron deposits.

All existing geophysical data available from former property holders can be incorporated into the geophysical framework and thus assist in selecting priority areas in which specific targets can be defined by surface Turam geophysical surveys.

The most promising geophysical targets will justify initial testing by diamond and/or rotary drilling, subject to costs and drilling conditions at a particular site.

Logistics, surface access, and timing of all endeavors should present few problems and the following table outlines the nature and sequence of work recommended for this project during 1981/1982.

PHASE I

<u>ITEM</u>	<u>ESTIMATED 1981 COSTS (CAN \$)</u>	<u>PERCENTAGE COST</u>
1- Plans, specifications, logistics, and mobilization.	\$ 7,000.	(0.9)
2- Airborne geophysical survey, combination EM and magnetic (H.E.M.).	\$ 35,000.	(4.7)
3- Comprehensive geological and geophysical compilations and selection of priority areas for surface geophysical surveys (EM and Magnetic).	\$ 8,000.	(1.1)
4- Surface Elfast Electromagnetic and magnetic surveys: complete with engineering control (20 line miles at \$2,500 per line mile).	\$ 50,000.	(6.7)
5- Geological and geophysical interpretations and selection of drill targets.	\$ 16,000.	(2.1)
6- Acquisition and incorporation of additional mineral claims into the project if warranted and possible (option arrangements or joint ventures preferable).	\$50,000.	(6.7)
7- Testing of priority targets by diamond and/or rotary drilling, (N.Q. wireline drilling preferable, equivalent to 8,500 feet @\$40/foot overall direct drilling cost).	\$340,000.	(45.0)
8- Geologic control, freight and assaying of samples; including 1,000 samples @\$18 per sample.	\$ 28,000.	(3.7)
9- Project Management, supervision professional fees, and miscellaneous materials.	\$ 56,000.	(7.5)
10- Right of entry and damages to private property (surface): bond deposits and settlements	\$100,000.	(13.0)

11- Contingencies, inflation, ecological unknowns, and demobilization if required.	<u>\$ 60,000.</u>	<u>(8.0)</u>
Sub Total Phase I	<u>\$750,000.</u>	<u>(100%)</u>

(NOTE: Item #6 is subject to the decision of the Management of Packard Minerals Ltd. and if not exercised should be applied to phase II drilling costs).


Successful completion of Phase No. I tabulated above will justify continued work on the project, initially thereafter as follows:

<u>Item</u>	<u>ESTIMATED 1982 COSTS (CAN \$)</u>	<u>PERCENTAGE COST</u>
1- Diamond and/or percussion drilling complete with support services, supervision and assaying.  (equivalent to 10,000 lineal feet of wireline at \$50+ foot)	\$500,000.	(67.0)
2- Contingencies, et al, including surface access.	<u>\$250,000.</u>	<u>(33.0)</u>
Sub-Total Phase II	<u>\$750,000.</u>	<u>(100%)</u>
Total of Recommended Exploration Expenditures for 1981 and 1982	<u>\$1,500,000.</u>	

Dated at  
Calgary, Alberta  
This 13th day of  
September, 1981.

Respectfully Submitted,

ACE PARKER MINES AND MINERALS CORPORATION LTD.



Ace R. Parker, P. Eng.

CERTIFICATION

I, Ace R. Parker, of the City of Calgary, Alberta, certify and declare that:

- I am a Consulting Engineer, practicing with Ace Parker Mines and Minerals Corporation Ltd., #223, 513 - 8th Avenue S.W., Calgary, Alberta.
- I am a Bachelor of Science in Mining Engineering from the College of Earth Science and Mineral Industry -- University of Alaska, Fairbanks, Alaska (1962). I hold a Diploma in Mineralogy from the Mineral Science Institute, Chicago, Illinois, U.S.A. (1959).
- I am a member of the Association of Professional Engineers, Geologists, and Geophysicists of Alberta. I have been a member of the American Institute of Mining, Metallurgical and Petroleum Engineers since 1954.
- I have formally practiced the profession of mineral exploration and development for the past 19 years after working in the Mineral Industry since 1953. I have found several economic mineral deposits in North America.
- I have no direct interest in the property covered by this report but I am the beneficial owner of 300,000 shares of Packard Minerals Ltd.
- This Certification is part of the attached "Engineer's Report on the Duffy Creek Project, Kamloops Mining District," B.C. Canada, prepared for Packard Minerals Ltd. and dated this 13th day of September, 1981.
- The attached Property Map shows the location of the Mineral Claims which make up the project. These claims have been located in compliance with the British Columbia Mineral Act and cover "Crown Land" in the Province of British Columbia, according to public documentation and field evidence.
- This report is based on a comprehensive personal study of documents, maps, and reports - both public and private, relating to the area and the property described herein. I am personally familiar with the property.

CALGARY, ALBERTA  
September 13, 1981.

  
Ace R. Parker, P. Eng.

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