

MAR 19950007: PEACE RIVER

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A Exploration Report On
Consolidated Carina Resources Corp.

&

Currie Rose Resources Ltd.

Carmon Lake Drilling

Permit #9393030125

Twp85 R18 S17 W5

Peace River, Alberta

December 31, 1993.

This report covers the 22,772.42 acres in Metallic and Industrial Mineral Permit #9393030125 held by Consolidated Carina Resources Corp. centred on 56° 22' north 116° 48' west in N.T.S. Sheet 84C/7.

By:
Paul A. Hawkins, P.Eng.
Paul A. Hawkins & Associates Ltd.
72 Strathlorne Cr. S.W.,
Calgary, Alberta
T3H 1M8

(403) 242-7745

Report #94-185-R1

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Executive Summary

Peace River Diamond Play

Consolidated Carina and Currie Rose acquired in the fall of 1993, Metallic Minerals Permits which overlap tar sands deposits currently being developed by Shell Canada Resources Ltd. Shell completed three delineation oil wells on their project in January of 1993. Carina \ Currie Rose obtained samples from the shallow part of these wells. The samples yielded anomalous kimberlitic indicators consisting of 60 pyrope garnets, 15 chrome diopsides and 7 uvarovites. Grain morphology indicates a nearby source.

The permits are located within the Peace River Arch, which is a broad area of cratonic uplift. Within the arch, Archean basement features overprint the Cretaceous age rocks and influenced the development of structural and sedimentary features. These structural features or faults are believed to be the pre-existing conduits for kimberlitic intrusion at the close of the Cretaceous. The permits were acquired on the basis of an integrated study of available airborne geophysics, geology, structural analysis, basement geochronology and field examination.

Carina \ Currie Rose's Peace River holdings represent an excellent land position covering several significant major fault structures with coincidental pipe type magnetic features and nearby anomalous kimberlitic indicator minerals. Most of the property area is road accessible and exploration costs are expected to be much lower than more remote locations. A multi-phase work program is recommended to explore this exciting diamond property in Northern Alberta.

1.0 Introduction

In late June 1992, Paul A. Hawkins & Associates Ltd. was commissioned by Mr. Rick Walker and Mr. Jim Zimmerman, Directors of Consolidated Carina Resources Corp., to analyze data associated with recent discoveries in the Lac De Gras Area, N.W.T. and other diamond plays in Saskatchewan and Alberta. This work (Hawkins, 1992) defined the Peace River Area as an area of interest based on its structural setting, cratonic position, geological setting, Industry activity and other economic factors.

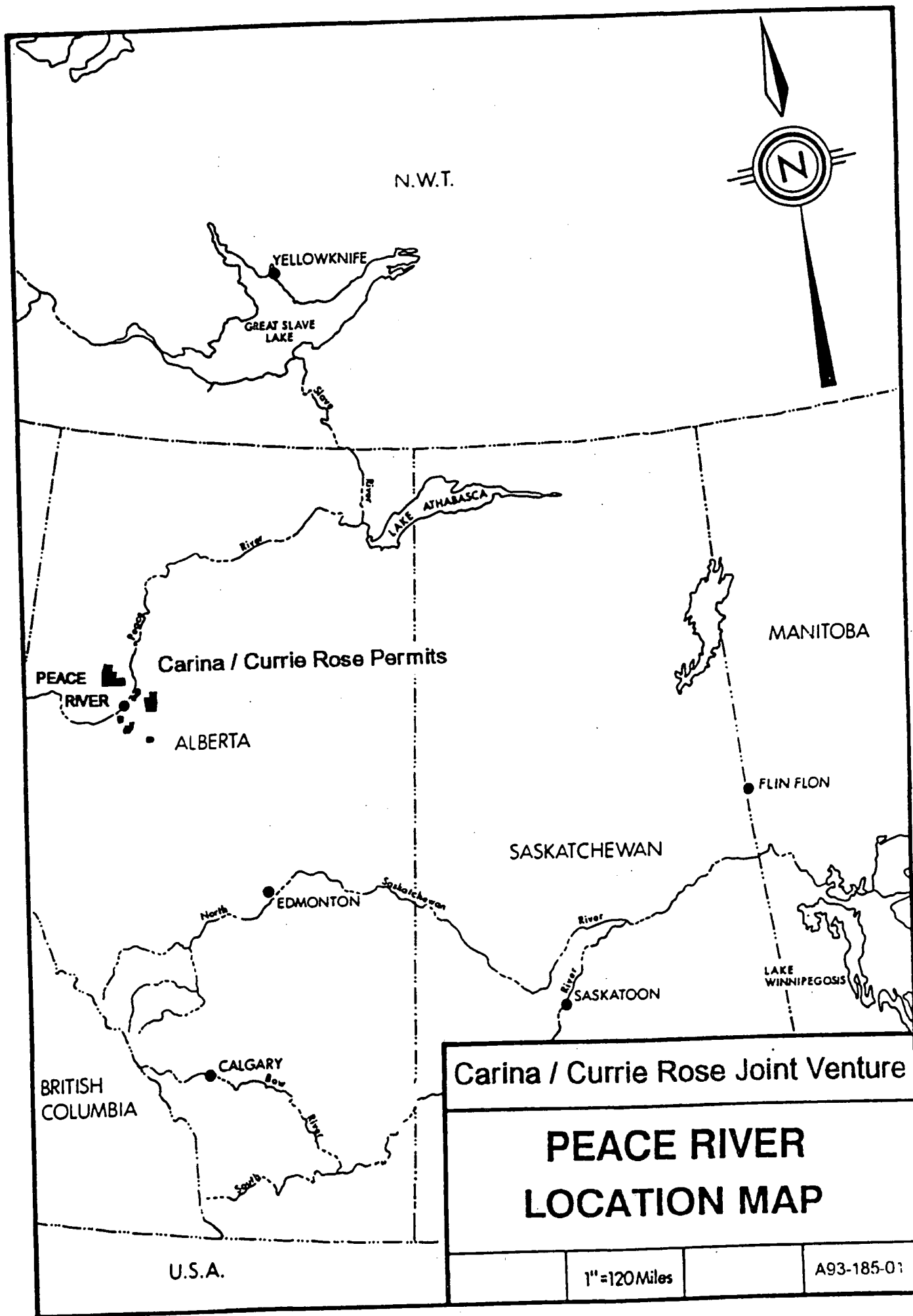
As a result of the above, recommendations were made to acquire 10 Metallic Minerals Permits in the Peace River Area. This staking was the first staking after the acquisition by Monopros of 1,600,000 acres in the Peace River area. Subsequently an additional 7 Metallic Minerals Permits were also acquired before the major staking rush in the fall of 1992. Currie Rose Resources Inc. acquired a 50% interest by funding 50% of the property acquisition costs and exploration expenses.

Shell Canada Resources Ltd. which holds overlapping oil rights to part of the Carina property, completed 3 delineation oil wells in January 1993 as part of their on going development of their Peace River Oil Sands Development. This report covers the sampling and laboratory analysis of 23 samples collected from two of the wells. Access was granted to the well sites by Shell Canada Resources Ltd. whose co-operation is gratefully acknowledged.

1.1 Location and Access

The Peace River Area is located 350 km. (220 miles) north of Edmonton in west central Alberta, as shown on Drawing A93-185-01. The permit area covered by this report is located 35 km. NE of the Town of Peace River in Twp85 R18 W5 within National Topographic System (N.T.S.) map sheet 84C/7.

The Peace River area is for the most part fairly level with an average elevation of 600 m. (2000 ft.). Elevations range from a low of 460 m. (1500 ft.) on the Peace River to 975 m. (3200 ft.) on the rounded hilltops to the south and northwest. The permit area itself is relatively flat and swampy with elevations ranging from 762 m. (2206 ft.) in the SE corner to 598 m. (1962 ft.) in the NW corner. Drainages to the NW with streams only cutting slightly into the generally swampy area.



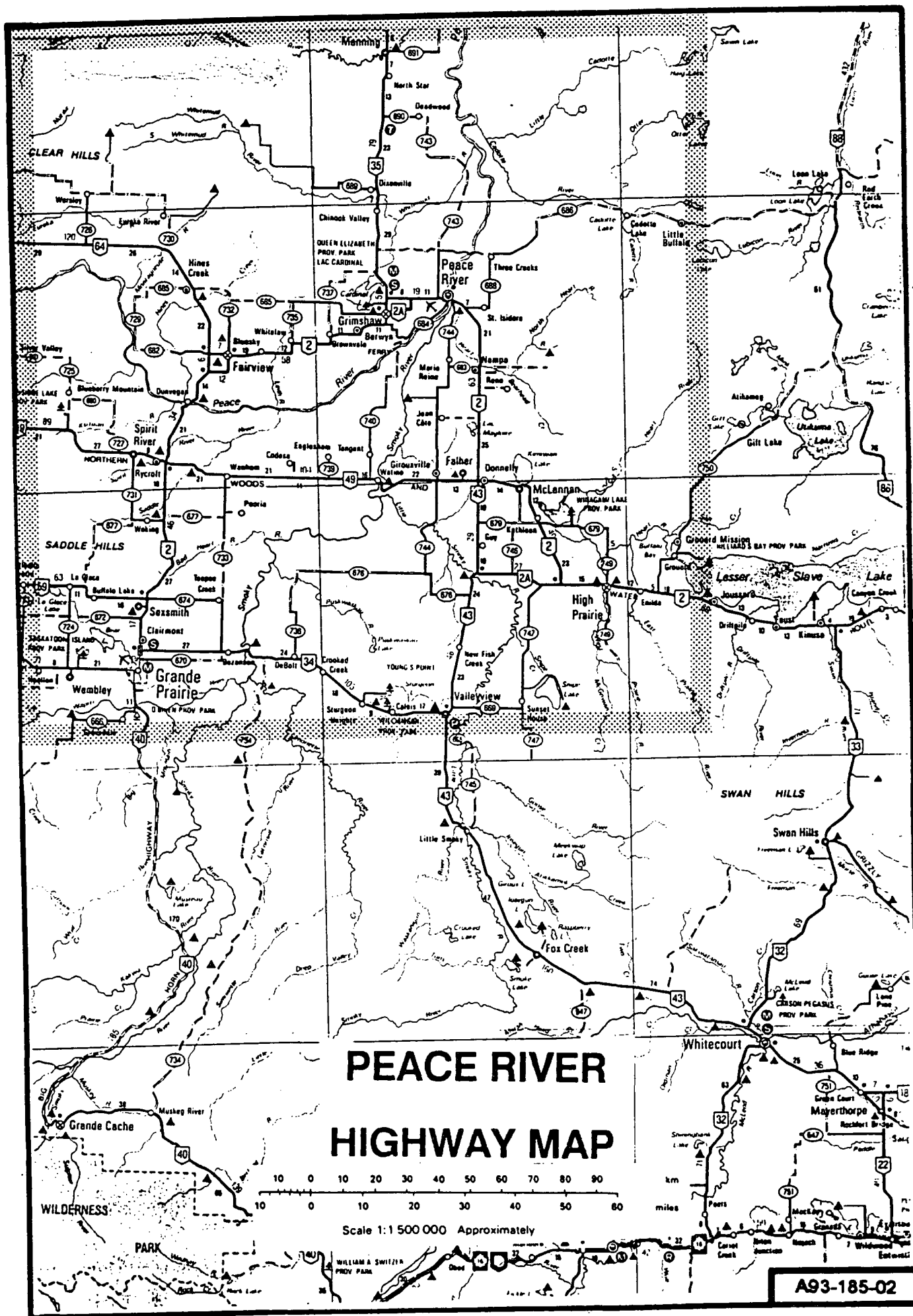
Streams, rivers, lakes and swamps are relatively numerous in the property area. The Peace and Smoky River Valleys are deeply incised into relatively flat prairies. Tributaries equally have deep valleys within a few kilometres of the river.

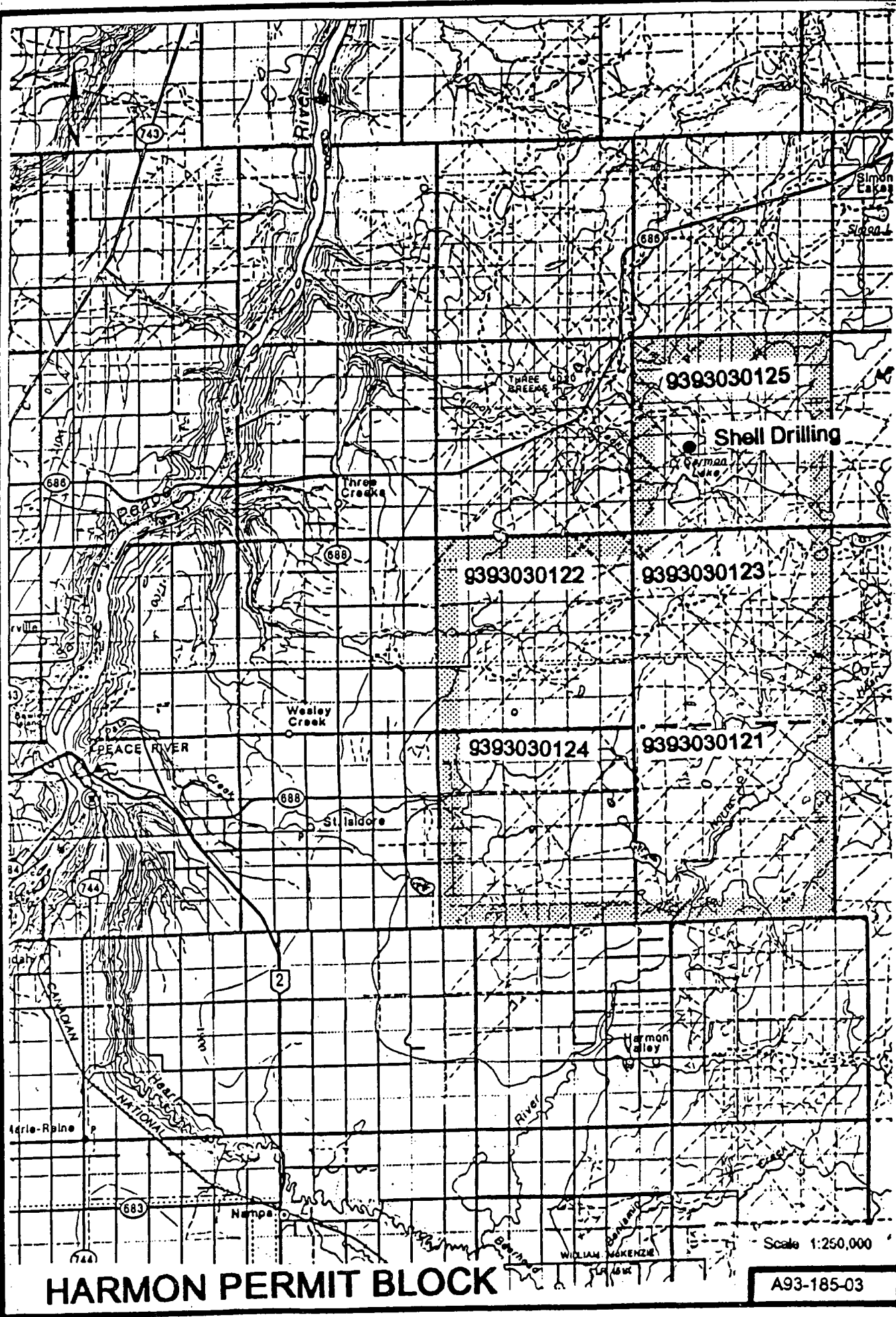
The Peace River area is accessible by several paved all weather highways from Edmonton as shown on Drawing A93-185-02. Peace River is also served by the Northern Alberta Resource Railway branch of the C.N.R. Daily jet service also connects Peace River with the south. The area is well serviced in the energy sectors by Alberta Power and Natural Gas Companies. The infrastructure developed in the area, partly as a result of the oil & gas developments in the Peace River Area, provides an excellent base for any future mineral development in the area.

A well developed road access network exists in the Peace River area. In most farming areas, concession roads have been developed on most section lines as shown on Drawing A93-185-03. In forested areas like the permit area, these concession roads are less extensively developed. The permit area is covered with many seismic lines and winter roads. All Terrain Vehicles (ATV) will provide year round access while several winter roads will provide further access for most parts of the permit area with a minimum of terrain disturbance. The access road to the Shell Peace River Oil Sands Plant and associated well sites will provide access into the western part of the permit area.

Peace River is the largest town north of Edmonton with a population of 6,580. The fertile Peace River Valley supports cattle and grain farming with adjacent areas producing significant values in petroleum and forestry (pulp and paper). Diaishowa Canada Ltd. recently completed a \$550 million Kraft pulp mill 16 km. north of Peace River. Several forest blocks nearby will be logged as feed for the mill and will provide additional access into forested areas.

The Peace River area has a mean annual rainfall of 475 mm. with an annual mean temperature of 1°C. Winters are cold with temperatures to -40°C while summers can be very hot with temperatures to +30°C. However on the whole they are generally cool when compared to Edmonton. The long daylight hours due to its northern location makeup for the cooler temperatures and the shorter growing season. Most areas of good fertile land has been cleared while some marginal lands are only now being cleared.





HARMON PERMIT BLOCK

Scale 1:250,000

A93-185-03

R9218W5

1.2 Licence Tabulation

Consolidated Carina Resources Corp. holds 17 Metallic Minerals Permits in the Peace River Area which total 156,416 hectares (391,040 acres) in 6 claim blocks. The location of permits and the permits covered by this report is shown on drawing A93-185-04. The permit on which the drilling was carried out is the northern most permit of the Harmon Block (#9393030125). These were the first permits acquired by Carina in August 1992. Although the permits were acquired in August 1992, the permits were not issued until March 1993 when the new regulations came into force. The details of the Harmon Block Permits are listed below.

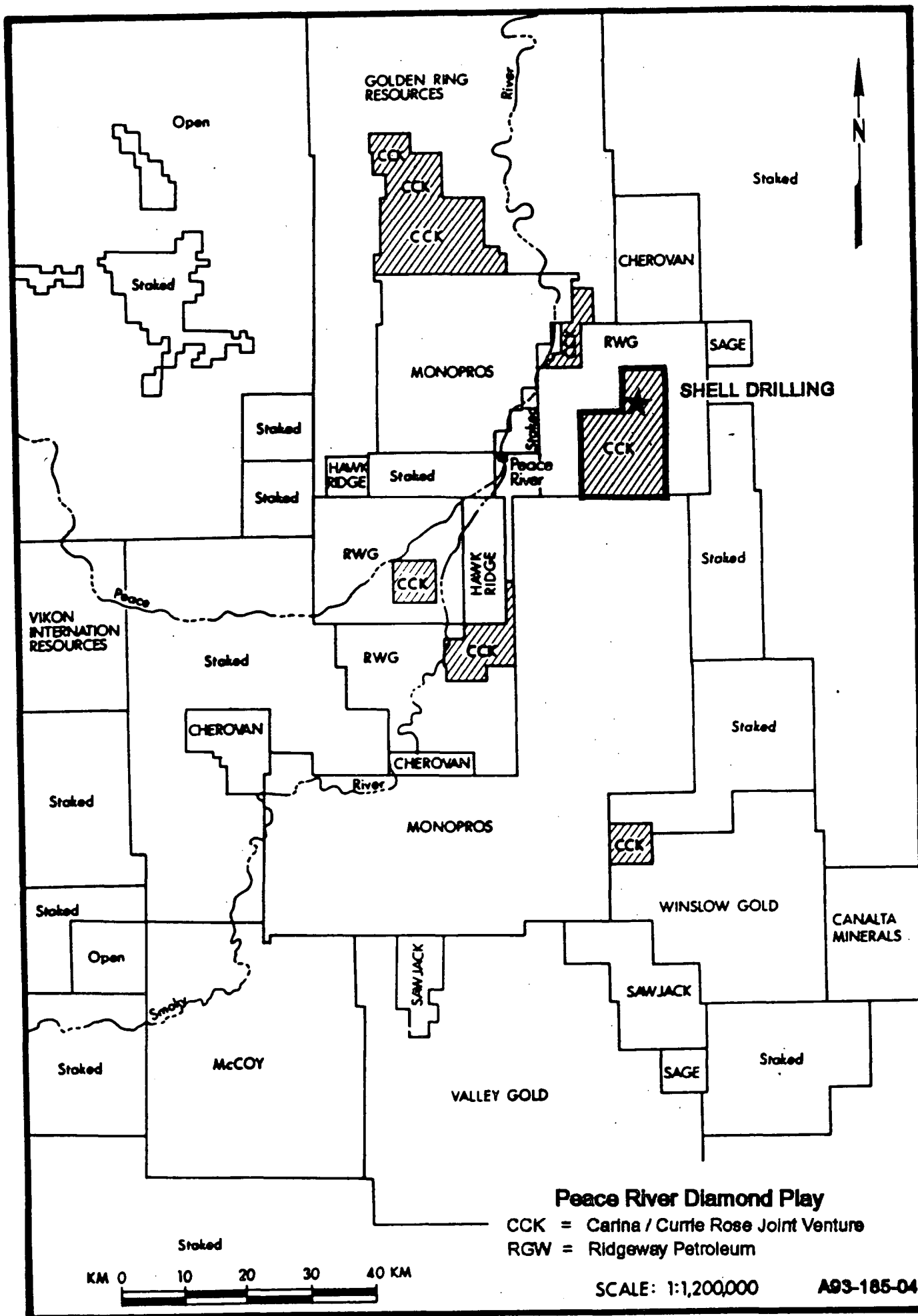
Table I

Harmon Permit Block

Permit #	Date	Location	Hectares
9393030121	12-MAR-93	Twp83 R18 W5	9,216.00
9393030122	12-MAR-93	Twp84 R19 W5	9,216.00
9393030123	12-MAR-93	Twp84 R18 W5	9,216.00
9393030124	12-MAR-93	Twp83 R19 W5	9,216.00
9393030125	12-MAR-93	Twp85 R18 W5	9,216.00

The Metallic and Industrial Minerals Regulation allows the deposition of metallic minerals (including diamonds) that are vested in or belonging to the Crown in right of Alberta by means of Metallic and Industrial Minerals Permits. Permits are acquired by paper staking. Permits can be no less than 16 hectares or more than 9,216 hectares. A township in Alberta is 9,216 hectares.

The previous regulations used to require a bond equal to the current assessment requirement. When this bonding requirement was ended by Ministerial Order in the summer of 1992, a staking rush ensued, with Carina / Currie Rose being one of the first groups to take advantage.



Under the new regulations a permit would have a term of ten years and require assessment work of \$5.00 per hectare for the first two years (\$2.50 per year), in the third and fourth years \$10.00 per hectare (\$5.00 per year), in the fifth and six years \$10.00 per hectare (\$5.00 per year), in the seventh and eighth years \$15.00 per hectare (\$7.50 per year) and in the ninth and tenth years \$15.00 per hectare (\$7.50 per year). A permit, when converted to lease, under the new regulations requires the same annual rental of \$3.50 per hectare but there is no assessment work requirement.

A compilation of surface rights holders within the project area is beyond the scope of this report.

Expenditure requirements to keep each of Carina / Currie Rose's permits in good standing through March 1995 are about \$46,080.00 or in total for all permits about \$800,000.00.

1.3 General Geology

The geology of the Peace River Arch area (PRA) has a significant part to play in the merit of the Peace River Diamond Play. The area rocks have undergone a complex history of accretion sedimentation, uplift and deformation.

The centre of attention in the Peace River Diamond Play coincides with the Peace River Arch, well known to the Oil & Gas Industry in Western Canada. The Peace River Arch is an area of uplift where the Phanerozoic cover rocks have been disturbed within the Western Canadian Basin which has given rise to accumulations of Oil & Gas in strata from Devonian to Cretaceous in age. The area of the PRA is defined for the purposes of this report as the area within the Devonian subcrop edge. The Arch's Devonian uplift developed several fault structures on its crest and flanks which are commonly filled with locally derived clastic sediments. These structures, which are very important for the developing of porosity for Oil & Gas, may also have been the later conduits for Kimberlitic intrusion in the Peace River area.

The underlying crystalline basement of Northern Alberta is made up of a series of Archean and Proterozoic tectonic domains as shown on Drawing A93-185-05. The tectonic history of the Western Canadian Craton is still not well understood but it appears that the Buffalo Head and Chinchaga Sub-cratons appear to have been underplated with Archean crust as a result of sub-duction during collision when the domains were accreted to the shield 2.0 billion years ago. Previous to that, the Buffalo Head sub-craton may have been part of the Slave before being faulted off by the Hay River Fault. The underplating of the Buffalo Head therefore provides for the deep cool kneel required for diamond preservation.

The underlying exposed bedrock strata in the PRA is almost all of Cretaceous age. Some strata of Tertiary age may occur in the project area but have not been mapped. The various shallow sandstone and shale formations present are chiefly exposed along the valleys of the major rivers and in outcrops along roads. A Table of Formations is provided in Table 2. Regional geology is shown on Drawing A93-185-06. The deeper formations are only exposed in drill cuttings or core from the large number of wells drilled in the area.

The shallow underlying bedrock exposed in the area consists of a sequence of Lower to Upper Cretaceous sandstones and shales. The following is a description of the exposed units in the PRA area (Green, 1972) in ascending order.

The Peace River Formation of Lower Cretaceous age outcrops in the Peace River valley. It is mainly composed of fine-grained quartzose sandstone (Cadotte member), dark grey silty shale (Harmon member), fine-grained glauconitic sandstone, silty interbeds in lower part (Notikewin member); shoreline complex. The Shaftesbury Formation of Upper and Lower Cretaceous age is composed of dark grey, fish-scale bearing shale, silty in upper part, numerous nodules and thin beds of concretionary ironstone, bentonite partings, lower part with thin silty and sandy intervals; marine. The Dunvegan Formation of Upper Cretaceous age consists of grey, fine-grained, feldspathic sandstone with hard calcareous beds, laminated siltstone and grey silty shale; deltaic to marine. The Kaskapau Formation of Upper Cretaceous age consists of dark grey silty shale, thin concretionary ironstone beds, interbedded in lower part with fine-grained quartzose sandstone and thin beds of ferruginous oolitic mudstone; marine. The Smoky Group of Upper Cretaceous age to the east of the Peace River is composed of dark grey shale and silty shale, nodules and thin beds of concretionary ironstone; marine.

The Peace River Area is also underlain by bituminous oil sands of the Bluesky-Bullhead Formation of Lower Cretaceous age. These oil sands are similar in nature to those at Fort McMurray except the Peace River Oil Sands occur at a much greater depth of 550 m.

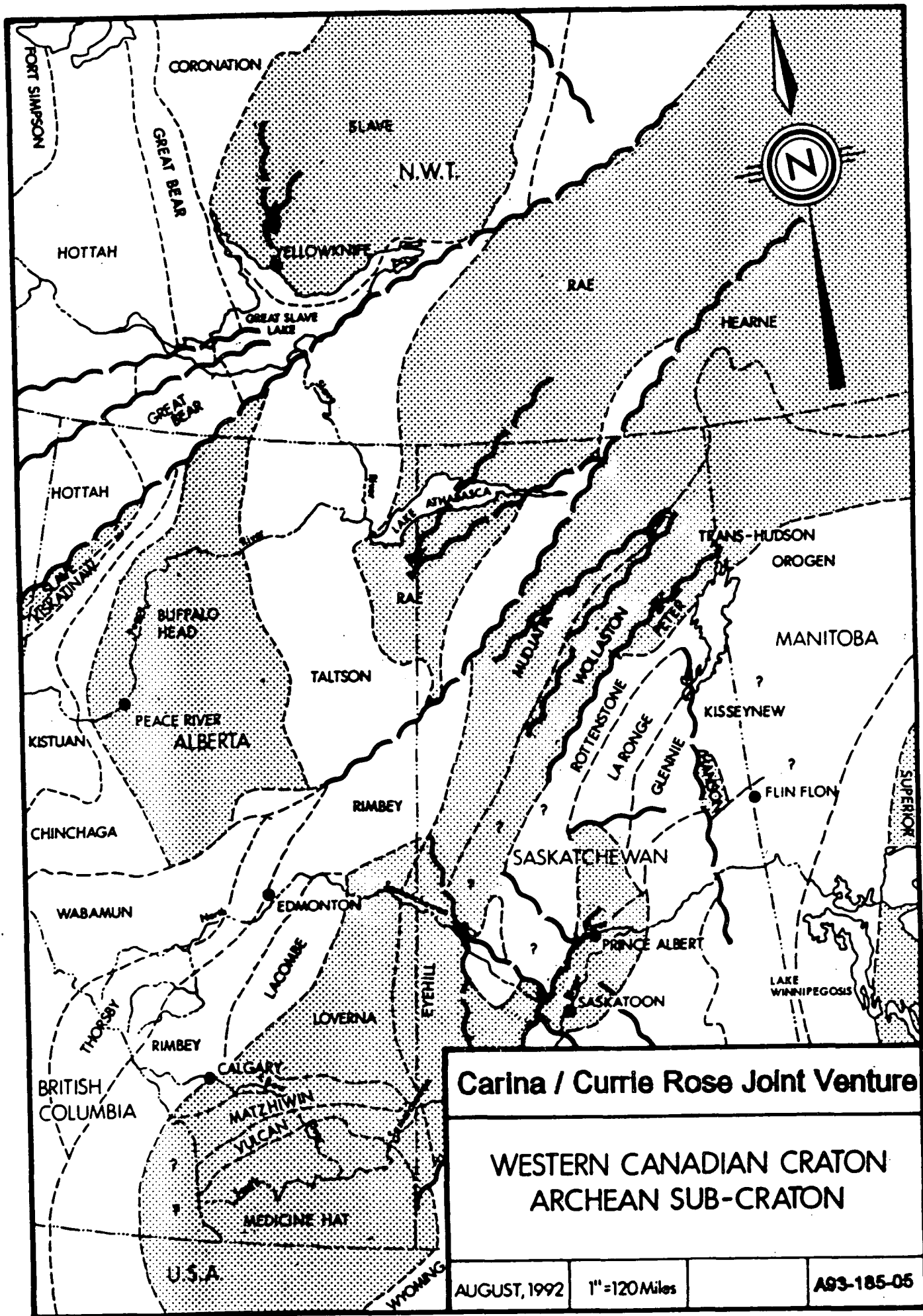


Table 1.

**Peace River Area
Table of Formations**

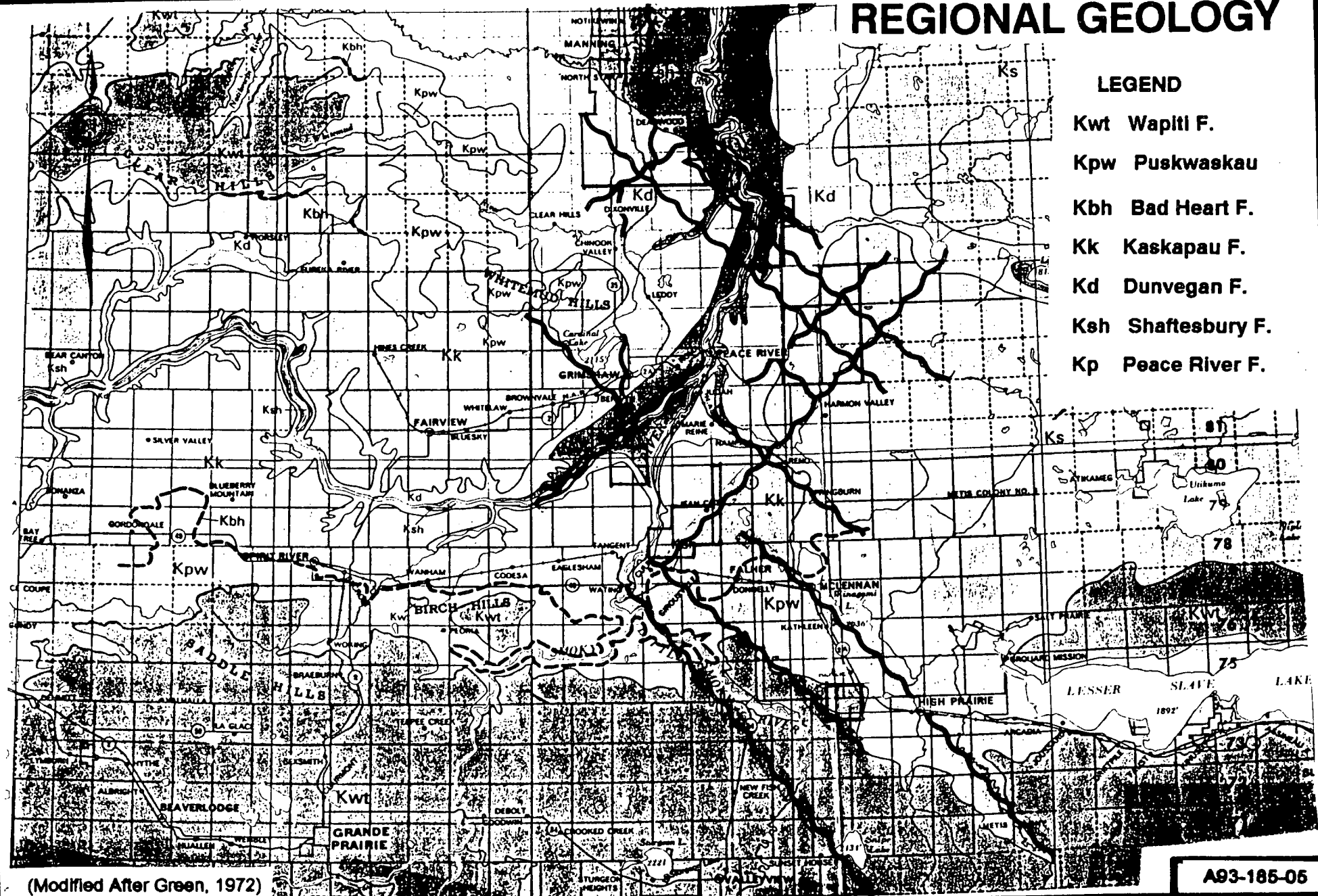
Age	Sym	Formation	Age	Member	Description
Pleistocene	Qsg			Overburden	Unconsolidated Sand & Gravel
Tertiary			65		
Cretaceous	Kwl	MONTANA GROUP ? Wapiti F			gray brown clays with massive SST, ironstone nodules, thin clay seams scattered coal beds, nonmarine
	Ks	SMOKY GROUP Smoky Group			dark gray shale and silty shale, ironstone partings and concretions
	Kpr	Paskwatsau F.		First White Spec Zone	
	IWS				
	Kbh	COLORADO GROUP ? Bad Heart F			brown SST, medium to fine grained, fossiliferous, marine
	Kk	Kaskapau F.			Shale, dark to black, thin bedded, some sandstone
	Kd	FORT ST. JOHN GROUP Dunvegan F			grey fine grained feldspathic SST, alternating SST/shale SST beds to 50ft., detrit to marine
	Ksh	Shattisbury F.		Upper Member	dark gray fish scale bearing shale,
	Kshu		100	Base of Fish Scales ??	numerous nodules with thin beds of Fe
	Kshl			Lower Member	silty and sandy shale
	Kp	Peace River F.		Paddy	massive SST fluvial deposits
	Kpc			Cadotte Member	quartzose SST, shale, conglomerate
	Kph			Harmon Member	dark gray silty shale
	Kpn			Notikewia Member	fine grained glauconitic SST
	Kar	Spirit River F.		Falher	sandstone, shale, coal
				Wilrich	Shale
	Blsc			Base of the Fish Scale??	
		MANVILLE/BULL HEAD GROUP Cadomin	106		conglomerate
		Gettling F.			SST, shale, oil sands
	Kb	Bluesky		Basal Cretaceous	sandstone, shale, oil sands

(modified after Green, 1972.)

REGIONAL GEOLOGY

LEGEND

- Kwt Wapiti F.
- Kpw Puskwaskau
- Kbh Bad Heart F.
- Kk Kaskapau F.
- Kd Dunvegan F.
- Ksh Shaftesbury F.
- Kp Peace River F.



A93-185-05

The structure of the Peace River area appears dominated by basement features. The superposition of modern drainage networks on the paleo-drainage network shows remarkable coincidence, suggesting an underlying structural control. Major structures appear oriented N-S, E-W and NE. Lesser structures appear oriented NW and NE.

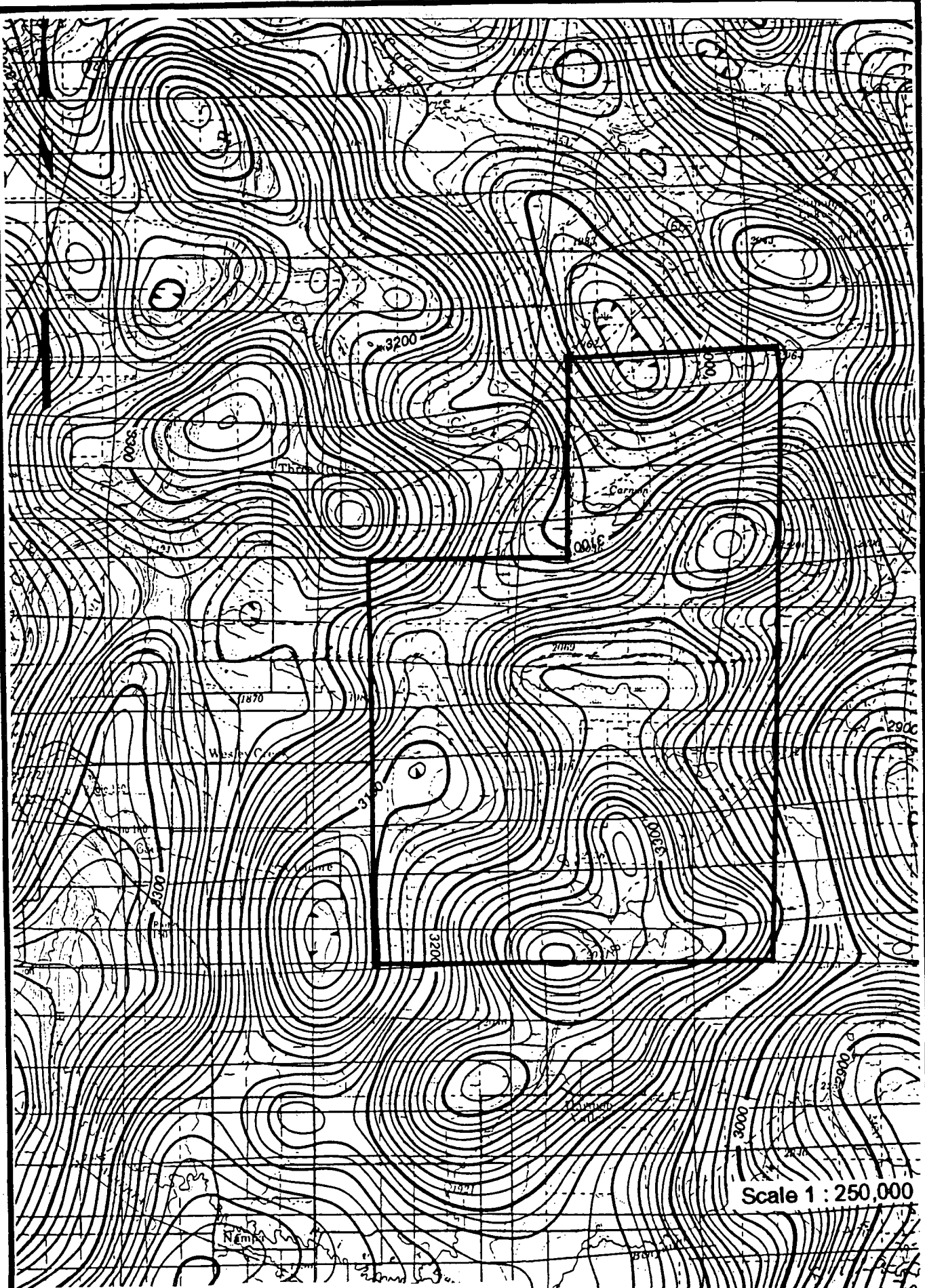
A mantle of varying thickness of superficial Pleistocene and recent deposits cover the project area. These deposits are thickest in buried old channels and in present day channels. Some stratified drift is evident but no detailed mapping has been undertaken. Reworked gravels are present along several old channel ways. Some of these channels may be of Tertiary age. Overburden ranges in thickness from very shallow (less than 1 m.) to in excess of 300 m. but averages perhaps 15 m in flat areas.

1.4 Aeromagnetics

The aeromagnetics for the property area (G.S.C., 1989) shown on Drawing A93-185-07 are dominated by a cluster of magnetic highs on the north side of the North Heart River which stretch from near Nampa NE to Carmon Lake.

The Carina \ Currie Rose Harmon Valley Permit block hosts six pronounced positive and two lessor anomalies as shown on Drawing A93-185-08. Similar anomalies also occur on adjacent ground held by Monopros since 1990. The area is underlain by an essentially flat lying sequence of Late Cretaceous sandstones and shales masked by recent unconsolidated sand, gravel and till. This strata and surficial deposits should show relatively low magnetic relief, however the magnetics show several high gradient magnetic features which cannot be explained by cultural features. These magnetic anomalies represent valid basement features and may be a reflection of intrusives (kimberlites).

The Harmon Valley Permit block is located 25 km. east of the town of Peace River. The block covers the NE extension of the North Heart River Fault and coincidental Harmon Swarm magnetic anomalies. Three excellent magnetic highs over 100 gammas occur with three lessor anomalies on the north side of the North Heart River Fault. The area is largely forest covered with some limited areas cleared for farming. The area is also covered with a number of seismic lines.

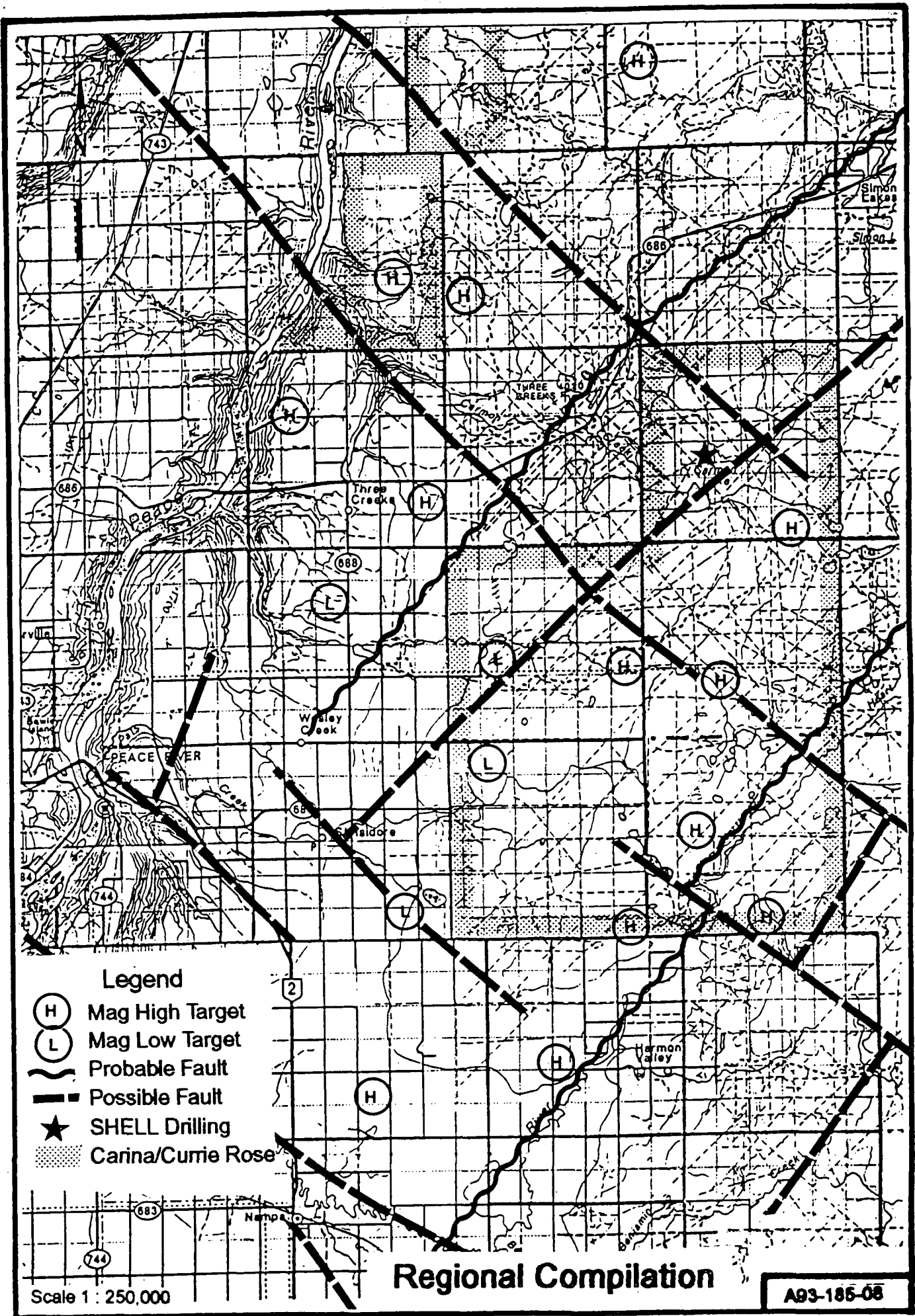


Scale 1 : 250,000

Harmon Valley Aeromagnetics

WILLIAMSON
(Modified After GSC, 1989b)

A93-185-07



- Legend**
- (H) Mag High Target
 - (L) Mag Low Target
 - ~ Probable Fault
 - - - Possible Fault
 - ★ SHELL Drilling
 - Carina/Curie Rose

Scale 1 : 250,000

Regional Compilation

A93-186-08

The 150 gamma Harmon Valley magnetic anomaly is located along the Harmon Valley Camp Road, 17 km. east of Highway #2 in a swampy forest covered area. There is no cultural activity in the anomaly area except for the gravel road. The circular anomaly occurs in a local cluster of three just off the North Heart River Fault and may be localized by NW trending cross linears. Monopros was active drilling along this fault linear to the SW near Nampa. The target area because of its proximity to the Monopros drilling activity and structural setting is considered a first priority area of interest.

The Heart anomaly area is located a further 6 km. due east beyond the end of the Harmon Valley Camp Road in a forested area. This 80 gamma anomaly appears to occur along the trace of the North Heart River Fault. Several dry oil wells occur within 1-3 km. of the anomaly but do not appear to have any direct correlation with the magnetic anomaly. It is not clear whether the presence of a dry hole should be considered a negative or positive indicator for the occurrence of a kimberlite intrusion. The major near term contribution of these wells is the data base they represent. This anomaly area because of winter road access and moderate amplitude is only considered a third priority area of interest.

The Harmon Camp anomaly area is located 3 km north of the Harmon Valley Park Campsite. The 100 gamma anomaly occurs in a swampy forested area. Similar to the Harmon Valley anomaly, this anomaly is one of the Harmon Swarm anomalies which occur along the north side of the North Heart River Fault. Like the other anomalies it may be localized by NW trending linears. No cultural activities are apparent in the anomaly area except for several nearby dry holes. Several seismic lines and winter roads exist in the anomaly area providing some limited access into the area. Care will have to be taken to avoid impacting the Harmon Valley Park Camp Site during any exploration in the area. Given the access into the anomaly area, the area is considered a second priority area of interest.

Two anomalies occur along a creek 20 km. east of Wesley Creek about 12 km. north of the Harmon Valley Park Camp Site. These 60 gamma anomalies occur along a power line and nearby winter road. The anomalies given their proximity to the power line and poor access are considered a third priority area of interest, -they are however, not written off. They still may be valid anomalies given their structural position in relation to NE and NW linears.

The Carmon anomaly area is located 5 km SWW of Carmon Lake in a forested area within the northern part of the permit block. The circular anomaly has an amplitude of 130 gammas and appears bracketed by NE and NW trending linears. It does not lie directly on the North Heart River Fault but on a possible NW offset of it. The anomaly occurs in a forested area near the Shell Peace River Oil Sand Pilot Plant. The anomaly is considered a second priority area of interest given its pipe-like geophysical signature and current poor access.

The anomalies are considered based on our experience elsewhere in the Peace River to be valid basement features which can only be reasonably explained by the presence of an anomalous geological feature such as a intrusive of perhaps kimberlitic affinity. The structural setting indicates recent reactivation of deep seated structures which could be the deep sourced structures along which the proposed kimberlites ascended to surface at the end of the Cretaceous.

2.0 Exploration History of Diamonds in Canada

Diamond exploration has in the past been a highly secretive business. Significant funds have been expended by a number of majors with little success. The lack of understanding of diamond exploration technology by the majors led them to explore prospects of little merit to advance stages without understanding the model or really having any positive results.

The development and dissemination of knowledge regarding diamond exploration and associated technology to distinguish between productive diamondiferous and barren diatremes has changed the diamond exploration field dramatically. This knowledge is no longer only possessed by De Beers and a few other individuals but more widely held. The practical application of this technology in exploration is only now being seen with the new discoveries in the N.W.T. and Saskatchewan.

Ten years ago the only well known diamond ore body model was the classical South African Model and associated mineral assemblage. Since then, the public domain knowledge has increased dramatically. Several scientific advances in the last decade have completely altered our understanding of models, age, origin and emplacement mechanism of diamonds. The discovery of the Argyle Mine in Australia demonstrated that related lamproites also are an important source of diamonds. The Argyle deposit has a significantly different geochemical signature than that of the South African Model and many of the established indicators used are not applicable to lamproites.

Diamond exploration in Canada up until recently was never really well documented. Diamond finds were equally poorly documented. The first two diamond finds in Canada were in glacial drift. The reported Peterborough diamond (33 carats) was found in a railway cut sometime before 1920 but was not of gem quality. The Javi diamond (0.225 carats) was found in Sheraton Township (Ontario) in 1971 on a esker.

Up until recently, the exploration that had taken place in Canada was largely confined to exposed Archean shield areas. Research into the make-up of the North America craton has shown much larger areas of Archean under the Phanerozoic cover of the prairies. These areas are now also considered prospective.

Dia Met also has been exploring diamondiferous lamproites near Golden B.C. just west of Banff National Park. One small 0.53 mm. diamond plus two other micro-diamonds have been recovered from the Jack Claim.

Saskatchewan has seen several periods of interest in diamonds. The first period of interest was in 1948 when a Flin Flon prospector reported the discovery of five diamonds and requested exclusive rights for diamond exploration for the entire province. A dispute occurred over the size of the concession. It is not clear whether the discovery area was in the concession area or elsewhere in the shield. The prospector had expressed interest in flying into a lake west of Cumberland House. The old approved concession does cover the current Fort a La Corne discoveries.

The first major staking rush occurred in June of 1961 after the staking of 30 claims near the Nesbit Forest Reserve by a former prison inmate who had taken a prospecting course while in prison. The former inmate claimed to have found two diamonds 0.64 cm. in size about 6 km. west of Prince Albert. The reported find attracted much attention but failed to produce any significant discoveries. This early activity is all in the same general vicinity of the later discoveries near Fort a La Corne.

Exploration has also been underway in Montana just south of the Alberta and Saskatchewan border. Recently this exploration has spilled over into Alberta and Saskatchewan. In this play, exploration interest is based on igneous activity of an alkalic association which includes swarms of kimberlites and lamproites which stretch from Arkansas north into Alberta along the Rocky Mountain Front. The Sweet Grass Intrusives form part of this group of alkaline type rocks.

The discovery of diamonds in Arkansas and in Colorado-Wyoming State Line District indicates the potential of the Rocky Mountain Front or Cordilleran Alkaline Province as a good place to search for diamonds due to the structural setting and association of alkaline intrusives with diamonds. Recent activity by Cameco and others on the eastern slopes is likely based on this association and newly available basement age dates. GSC/Private Sector Joint Venture Aeromagnetism may also be providing some information to guide recent staking by majors who form part of the joint venture.

Monopros and its predecessor companies have been active in Canada for many years. It is likely that they have completed heavy mineral sampling on a regional basis in most areas of Canada. They have heavy mineral sampling down to a fine art. Anomalous heavy mineral samples are known to occur in the Mackenzie Valley, in the southern Slave (Lac De Gras), Peace River Area and near the Montana border. Monopros progress at following up these anomalies has not been as fast as their competitors, as illustrated by their lack of early success at Sturgeon Lake, Fort A La Corne and Lac De Gras. This lack of speed likely creates a significant opportunity for an aggressive Junior to jump ahead and make a discovery.

2.1 Geology of Diamonds

Diamonds in commercial quantities are found in kimberlite pipes (including related lamproites) and associated alluvial deposits. Kimberlite pipes consist of ultrabasic intrusive lavas and xenoliths. These ultrabasic lavas originate from depths of in excess of 150 km, and are emplaced during explosive volcanism. Xenoliths in kimberlites and lamproites are fragments of wall rock adjacent to the intrusion that have broken off and have been incorporated into the lava as it works its way along fractures or cracks to the surface. Diamonds are believed to be formed at depth under extremes of temperature and pressure prior to the intrusion of the kimberlite. The diamonds are not genetically related to the lava melt. Not all kimberlites contain diamonds. Diamonds or diamond-bearing xenoliths are only transported to the surface by kimberlite lavas.

The kimberlite when it picks up fragments of wall rock at depth effectively samples deep crustal formations. If the sampled formations are within the diamond stability field, the kimberlite may successfully carry the diamonds to the surface if the pressure/temperature conditions of the lava melt remain within the diamond stability field during transport. The occurrence of diamonds at surface is also controlled by the diamond grade of the pre-existing diamond bearing host rock at depth, the transport efficiency in bringing it to the surface and diamond preservation during transport.

The occurrence of kimberlites appears largely confined to regions of continental crust that are archean cratons. A craton is part of the earth's crust that has attained relative stability and has undergone little deformation over the last 1.5GA (1.5 billion years ago). Craton includes both the exposed shield areas like the Canadian Shield and adjacent sedimentary platform areas covered with generally flat lying sediments and occasional minor volcanics. These platforms are covered extensions of the shield.

Cratons are the nuclei of all continents. Most present day continents are made up by more than one craton which usually have different ages of formation resulting in composite aged cratons. In Western Canada these sub-cratons were accreted to the shield area during Proterozoic collisions resulting from continental drift. These collisions involved juvenile magmatic arcs, extensively deformed and reworked passive margins and other Archean sub-cratonic areas.

Suture lines of these sub-cratonic areas can be traced through Phanerozoic cover sediments by discrete gravity and magnetic signatures. Much of the Western Canadian Shield is overlain by sedimentary rocks of the interior platform which largely obscured the cratonic make-up. Recent compilation of gravity, magnetic, age dating of oil well drill core and remote sensing data has started to better define the cratonic make-up of Western Canada. This has specific important applications in diamond exploration.

Diamond bearing kimberlites and lamproites occur primarily on Archean cratons where deep mantle roots or keels have not been subjected to pressure/temperatures in excess of the diamond stability field. Diamond preservation requires a relatively low density and low temperature mantle root. Off craton kimberlites, where roots have never existed or never were intersected or where they were eroded prior to kimberlite emplacement, will have low to nil diamond content.

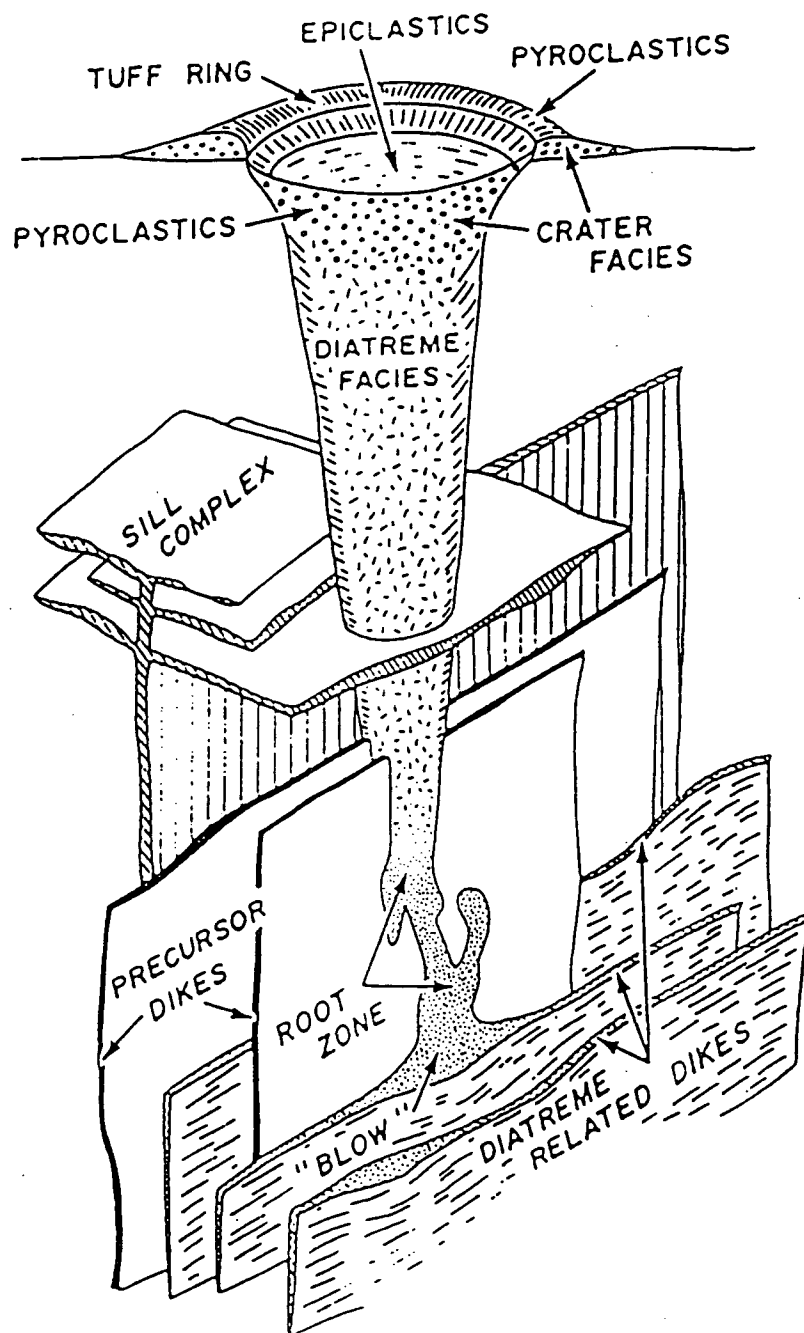
The age, thickness of craton and cratonic make-up of an area therefore has a major control on the occurrence of economic grades of diamonds in kimberlites located there.

Kimberlite pipes are vertical carrot-shaped intrusions as shown in Drawing A93-185-09. In this idealized kimberlite model, all facies rocks are shown, however individual kimberlites may be eroded or otherwise deformed. The pipes may also have multiple phases of intrusion and post-intrusive dikes. The pipes usually intrude along pre-existing zones of weakness and may be localized by structural intersections.

Typically kimberlites occur in clusters of 6 to 50 pipes which can cover an area of up to 50 km. in diameter. They have never been found in isolation. Pipes may or may not carry diamonds and of those that carry diamonds only a few will be economic, perhaps 1 in 30. Some clusters are totally barren, because of their tectonic position. Several clusters of pipes may occur within one craton. Diamonds in most kimberlites generally tend to be evenly distributed though the upper portion of a pipe. Distribution is less homogeneous at depth.

The determination of the value or grade of a kimberlite is complex. The value will vary according to the ratio of gem quality diamonds (high value) to other grades of stones (low value). Value is therefore a combination of grade, generally stated in carats per 100 tonnes, and average value per carat. Average South African and Siberian gem quality stones range in value from US\$50 to US\$120 per carat, while exceptional quality stones have been sold for over US\$25,000 per carat at auction. Industrial grade stones average about US\$1 per carat. Typical South African Mine grades range from 10 to several hundred carats per hundred tonnes with a range of gem content of 15 to 50%.

The kimberlite mineral assemblage consists of olivine, Mg-ilmenite (pico-ilmenite), chrome diopside, enstatite, titanium-poor phlogopite, spinels, perovskite, apatite, monticellite, calcite and serpentine. Hand specimens range from green to blue in colour and resemble concrete. Samples can be very soft. Diopside and garnets usually stand out in this nondescript rock. Classical kimberlite weathers to an ochre yellow to medium brown. The upper crater facies may resemble a sandstone and contain brecciated material. Microscopic mineral analysis is usually required to confirm the kimberlitic source of any sample.



Model of an idealised kimberlite magmatic system, illustrating the relationship between crater, diatreme, and hypabyssal facies rocks (not to scale). Hypabyssal facies rocks include sills, dykes, root zone and "blow".

(Reproduced from G.S.C. Open File # 2124.)

The particular mineral assemblages of kimberlites provide a heavy mineral signature in the secondary environment that can be used to locate kimberlites. Heavy mineral sampling of overburden relies on identifying stable to semi-stable indicator minerals. These minerals include pyrope garnets, spinels, picro-ilmenite and chrome diopside. These indicator minerals may also be used to assess the diamond potential of the source. Research has established criteria for comparing the chemical composition of these indicator minerals with inclusions within diamonds themselves from productive pipes and other standards. The identification of garnets and chromites of specific compositions is also an important diamond indicator. These indicators yield data to determine if the kimberlitic lava sampled diamond bearing units, how well diamonds were preserved during transport and how efficiently the diamonds were transported to the surface.

A significant portion of world diamond production comes from alluvial deposits derived from the erosion of kimberlite pipes. These deposits may form locally or at several hundreds of kilometres from their kimberlite source. Several alluvial diamonds have been found in Ontario and several in the Lac De Gras area by Dia Met. This lack of alluvial diamonds has always been a negative factor pointed to by several non-believers but this absence may be due to the lack of people looking.

2.2 Diamond Exploration Technology

Diamond exploration in Canada is still in the early stages of development. although Canadian mineral exploration expertise is world class in most commodities, it is only now starting on the learning curve for diamonds. With the several Canadian discoveries, information will be more widely disseminated, weakening De Beers edge in diamond exploration technology. Recent discoveries have widened the knowledge and experience of home grown geologists. The activity of juniors who are required to make more timely disclosure of their results, will put more of the exploration results in the public domain. This evolution of technology presents an opportunity to develop a strategy of applying state of the art practical exploration techniques in an integrated approach in reasonably accessible areas of prospective terrain previously unrecognized or under-explored.

Diamond-bearing kimberlites appear restricted to thick stable Archean cratons. The Principal reason for this restriction is the pressure temperature constraints of the diamond stability field where the diamondiferous rock at depth must remain relatively cool through time until transported to surface by a kimberlite or other related event. Archean shield areas represent just such cool thick crust areas. Crustal areas affected by hot igneous events such as the MacKenzie igneous event may cause prospective terrains like the northern Slave to be heated beyond the diamond stability field and to be without diamonds. The southern Slave with its MacKenzie dikes is still within the diamond stability because the dike intruded laterally, probably entirely within the brittle upper part of the crust, leaving the diamondiferous crustal roots preserved.

The evolution of the large scale tectonic picture now indicates that large areas of Western Canada covered by Phanerozoic Basin are of Archean age and therefore prospective for the occurrence of diamonds.

A classical diamond exploration program in Canada would focus on the collection of heavy minerals for the identification of the five indicator minerals (chromites, Hi-Cr garnets, ilmenite, Hi-Cr clinopyroxene and Lo-Cr clinopyroxene). Specific compositions of these minerals are known to occur only in kimberlites. Some pyrope garnets are considered direct indicators of diamondiferous kimberlites. These indicators would normally be traced in overburden to a bedrock source. It is, however, sometimes possible to evaluate the source before its discovery by the geochemistry of these indicator minerals. For this reason, heavy mineral sampling is the preferred exploration tool by Monopros and others. This procedure is a slow process.

In areas of glaciation, where ice direction is not well understood or where multiple till sheets exist, the exact location of the source of the indicator heavy minerals may not be found without additional work. Programs such as airborne geophysics, remote sensing, ground geophysics and drilling may help in locating the diamondiferous source.

In Canada with the long term activity of Monopros and their ongoing heavy mineral sampling program it is safe to assume that anywhere they are active, anomalous indicator minerals are present. Therefore if areas of similar geology exist nearby, that adjacent land may be of equal value. Monopros appears to be slow in acquiring land and may not have taken all the prospective ground. This was certainly true in the Fort A La Corne Play where they were originally only a minor player. This presents an opportunity in the Peace River area where Monopros has been active with no real competition, where a strategy of leaping ahead of Monopros could prove immensely rewarding.

3.0 Recent Activity in the Peace River Diamond Play

The Peace River Diamond Play surrounds the town of Peace River Alberta, which is 350 km. (220 miles) north of Edmonton. Monopros has been active in Northern Alberta since the mid 1980's and have held ground in the area since 1990 and has been carrying out an exploration program of airborne geophysics, heavy minerals sampling and drilling in areas near Nampa, Marie Reine, Mountain Lake and Fairview. Monopros has located a portable processing plant in Grande Prairie to process samples both from Peace River and Lac De Gras. Following past secrecy in all their activities, Monopros has released no results from these programs.

Monopros holdings in the Peace River area consist of two large blocks north and south of Peace River as previously shown on Drawing A93-185-04. The two blocks cover 650,000 hectares (1,600,000 acres). Monopros at the time of acquisition would have had to post a \$6,500,000.00 bond. This bonding requirement is no longer required, making land acquisition much easier. Monopros renewed all their permits in August 1993 for another two year term which requires additional \$6,500,000.00 work commitment beyond the previous \$6,500,000.00 already spent.

Monopros has been very quiet about their activity in this area. Monopros renewed all their permits in August 1993 for another two year term. They have apparently been conducting a regional overburden drilling program over their whole claim block as well as a more detailed shallow drill program tracing out an old channel near Nampa. Field reports indicate that Monopros have also been drilling closely spaced holes using rotary and core equipment along a NE trending structure near Nampa, about 22 km. SW of Peace River. Prior to August 1992 no other companies were active in this area, however shortly after our initial staking several other companies quickly followed. Ridgeway Petroleum, Hawk Ridge Mineral Enterprises, Sawjack Holdings, Cherovan Investments, Ultra Sonic Industrial Sciences (Christensen), TUL Petroleum (Stapleton) and Cromwell Resources (McCoy) acquired new ground in the Peace River Area.

Both TUL Petroleum and Ultrasonic Industrial Sciences have conducted regional heavy mineral sampling of their properties north west of the town of Peace River. TUL Petroleum has also conducted ground geophysics on one target in the Whitemud Hills Area. Several companies are planning airborne surveys on their blocks but none are known to be complete as of this date.

The age of the cover rocks in the Peace River area is such that if the kimberlites are of 100 million years or younger they should occur under the glacial drift. Some stratigraphic work on tuffs present in the area (Ritchie, 1957) suggests a possible age of 52 million years. The area has a similar structural arch setting to the Saskatchewan diamond plays but the kimberlites are likely exposed below shallow glacial deposits.

The property area was examined on August 11-15, 1992 by the writer, to examine areas of interest, assess overburden thickness, cultural features, area geology and to determine previous activity by Monopros. It was clearly evident that Monopros was keeping a tight lid on their activities. A drilling program was underway near Nampa, which is about 20 km. SE of Peace River. Drilling was progressing in a NE direction.

The regional analysis completed in August 1992 (Hawkins, 1992) for Consolidated Carina Resources Corp. identified 20 good magnetic anomalies on Monopros claims which could be associated with clusters or groups of pipes and a similar 24 unprotected anomalies in adjacent areas. The play area along with the target areas developed (Hawkins, 1992) is shown on Drawing A93-185-10.

As a result of field inspection and drilling activity rumours, we recommended and filed permit applications on August 13, 1992 to acquire five townships NE of Nampa along the Harmon Valley. The permits covered several coincidental magnetic highs along the NE trending structure Monopros was active on. After further data analysis an additional five permit applications were filed on August 19, 1992. to cover a number of magnetic highs north of Dixonville. Another six permits were applied for in the following week to cover other areas of interest around the Monopros claims. One final permit was applied for in December to cover a gap near Dixonville just before the large staking rush which took place in the later part of December 1992 in Alberta.

3.1 Nampa Area

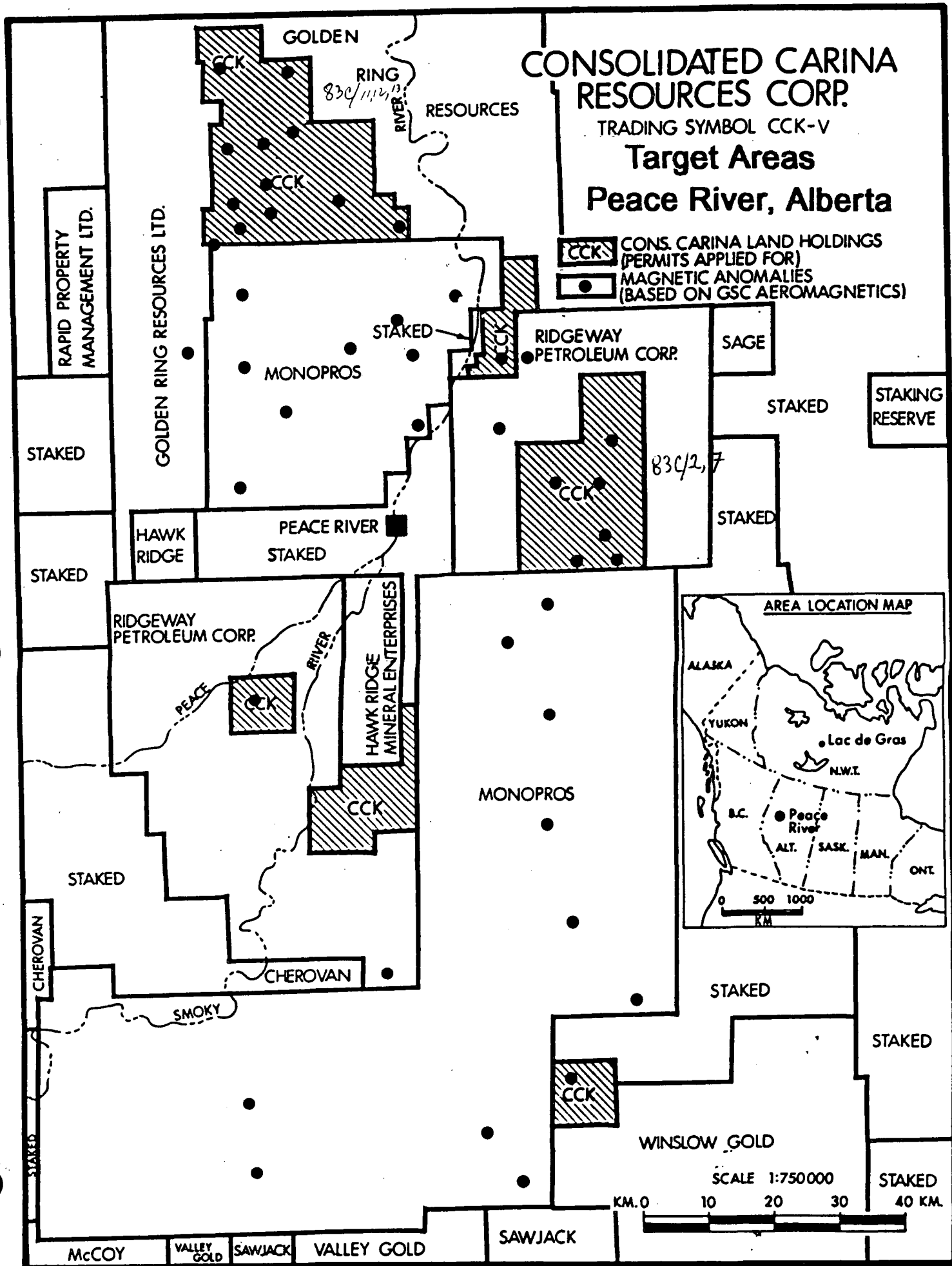
Scouting reports indicated that the Nampa area (20 km. SE of Peace River) was one of the areas where Monopros was active, carrying out a drill program. Several magnetic anomalies (Harmon Swarm) are present on previously flown aeromagnetics (GSC, 1989b) and occur along the North Heart River NE from Nampa. These 30-100 gamma anomalies are situated in a relatively flat farm land area with the only minor relief present due to incised stream channels. The Harmon Swarm of anomalies extends to the NE off the Monopros property. Based on the Monopros drilling activity, the NE extension of this trend was acquired for Carina on August 13, 1992.

CONSOLIDATED CARINA RESOURCES CORP.

TRADING SYMBOL CCK-V

Target Areas Peace River, Alberta

CCK CONS. CARINA LAND HOLDINGS
(PERMITS APPLIED FOR)
● MAGNETIC ANOMALIES
(BASED ON GSC AEROMAGNETICS)



The drainage pattern present in the area appears to be a reflection of underlying structure. The Heart River follows a SE trending structure, while the North Heart River follows a NE trending structure. The Harmon Swarm magnetic anomalies occur on the north side of the NE structure which appears to be a fault from oil well data.

The overburden thickness in the Nampa area varies from less than 5 m. to over 300 m. but likely averages 50 m. Some of the overburden north of the Heart River has been reworked by stream action and represents an old channel. The Peace River is 213 m. (700 ft.) vertically below the elevation of Nampa which suggests some of the bedrock channels could be very deep.

The Nampa area because of Monopros activity warrants close monitoring. The NE extension of the North Heart River fault on which Monopros is drilling represents a prime area of interest.

Based on well data, the Harmon area is underlain by the Dunvegan Formation, a sequence of alternating sandstones / shales and the Smoky Group shales. The area is cut on the south by a NE trending fault along the North Heart River and by several lesser NW trending linears. The NE structure may be the major structure along which the kimberlites intruded while the NW lesser structures localized the pipes location at fault intersection.

The permit block is also underlain at depth by the Peace River Oil Sands which occur within the Bluesky-Bullhead Formation of the Lower Cretaceous. The bitumen bearing zone occurs at a vertical depth of 550 m. (Shell, 1984). A small seasonal pilot plant is operated by Shell Canada Resources Limited in the northernmost permit of the block. The oil sand horizon would have been cut by any Upper Cretaceous kimberlite intrusive event and the kimberlite should therefore subcrop below the overburden. Data collected during the exploration, development and engineering of the project should aid in the exploration of the property for diamonds. It is entirely possible that Shell could have drilled through a diamondiferous kimberlite without knowing it, therefore close examination is required of all associated relevant data.

The Harmon Block area is one of the best top priority areas in the Peace River Diamond Play with its excellent magnetic signatures, structural setting and close proximity to the Monopros drilling activity.

3.2 Shell Peace River Heavy Oil Developments

Shell discovered the Peace River Oil Sands deposit while drilling for conventional oil and gas in the early 1950's. Subsequent drilling confirmed the widespread extent of the deposit (Shell, 1987). The bitumen occurs in the Peace River - Gething Sands at a vertical depth of 550 m. Shell and partners hold the Bluesky - Bullhead rights in 11 Oil Sands Leases (OSL's) totalling approximately 62,000 ha in the area. They also hold Petroleum and Natural rights down to the base of the Bluesky - Bullhead zone. The initial development area for the Shell project was within OSL 1 (7282080001) and OSL 24 (7285040024).

The first test of the deposit, named PRISP (Peace River Instu Pilot Project) was an experimental joint venture of AOSTRA (Alberta Oil Sands Technology and Research Authority), Shell, Shell Explorer Limited and Amoco Petroleum Canada Ltd. The test programs purpose was to provide basic data on the technical feasibility of bitumen recovery from the Peace River Oil Sands. The PRISP operation was a technical success and led to the development of the PREP (Peace River Expansion Project) which commenced operation in late 1986. The project cost \$200 million to built and is licensed to produce 1600m³/d or 10,000 barrels per day. The project is expected to have a 30 year operating life.

The project essentially involves the drilling of a series of inclined holes from a central point in a cell and using a pressure cycle steam drive process to recover 55% of the bitumen within the cell and adjacent areas. The project is likely marginally economic at current oil prices.

The delineation wells covered by this report are a further refinement of this project using horizontal wells to improve recovery and economics.

3.3 Sampling of Delineation Wells

The three delineation wells were drilled to define the Bullhead zone at vertical depth of 550 m. in preparation for the drilling of a Horizontal Well from nearby existing plant. Only two of the wells were sampled. The two sampled wells are:

Shell Cadotte 9-17-85-18 W5 or Hole "B"
Shell Cadotte 8-17-85-18 W5 or Hole "C"

The two sampled wells located 1500 m. north of Carmon Lake and just SW of the existing plant are shown on Drawing A93-185-11. The third well at Hole "A" was not sampled for budget reasons resulting from delays in drilling the first two holes at "B" and "C".

Rat holes for both holes were drilled by OK Rat Hole Drilling of Grande Prairie using a large truck mount auger drill with a 12 m. mast shown in Photo 1 & 2. The 20" surface conductive casing was set at between 40-50 ft. and the 18" well head casing was set at 65 ft. Both were cemented in place before the larger oil patch rig was positioned.

Samples were collected in 25 litre plastic pails every 1.2 m. (5 ft.) or less when different material was encountered. A total of 19 samples were collected from the two holes from the larger auger on a representative grab basis. With temperatures below -20° wet material froze quickly.

At Hole "B" six additional samples were collected from the Shale Shaker on the larger oil patch rig. Sample intervals for these samples were less precise given the transit times, rapid penetration and lost circulation. A standard benonite drilling mud was used as a drilling fluid for the hole.

The Rat hole for "B" was started on January 18 and completed the following day to a depth of 65 ft. The second hole was started on January 20 but a breakdown prevented it's completion until the following week. The Oil Patch rig commenced drilling at "B" on January 20th and had reached 300m by the following day. Several zones of lost circulation prevented full recovery of cutting from the shale shaker. Those zones of lost circulation are likely due to air filled gravel beds.

Samples were shipped to Saskatchewan Research Council In Saskatoon for Indicator Mineral Processing.

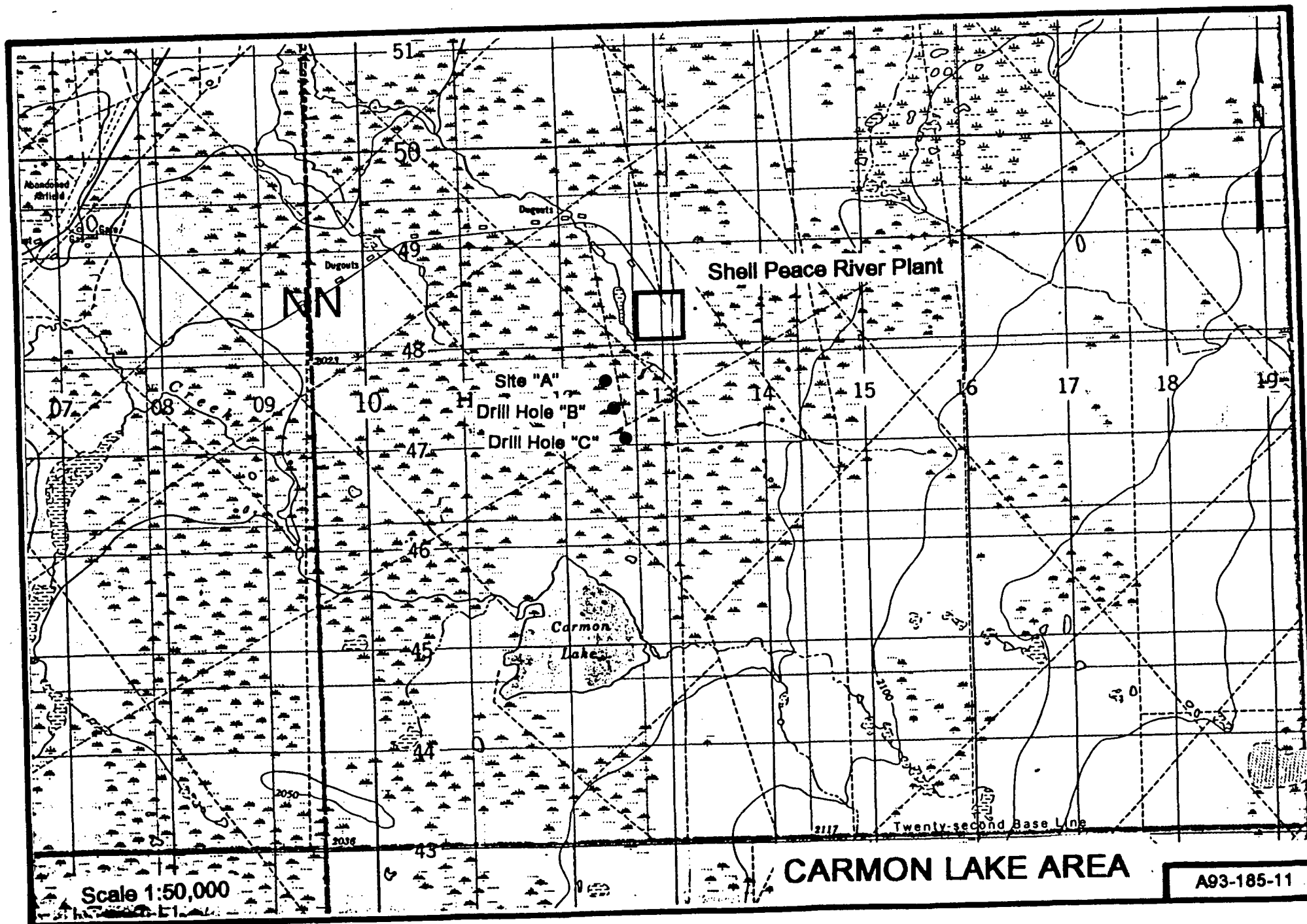




Photo 1. Carmon Lake Drill Site "B"



Photo 2. Rat Hole Drill Rig at Drill Site "C"

3.4 Sample Processing

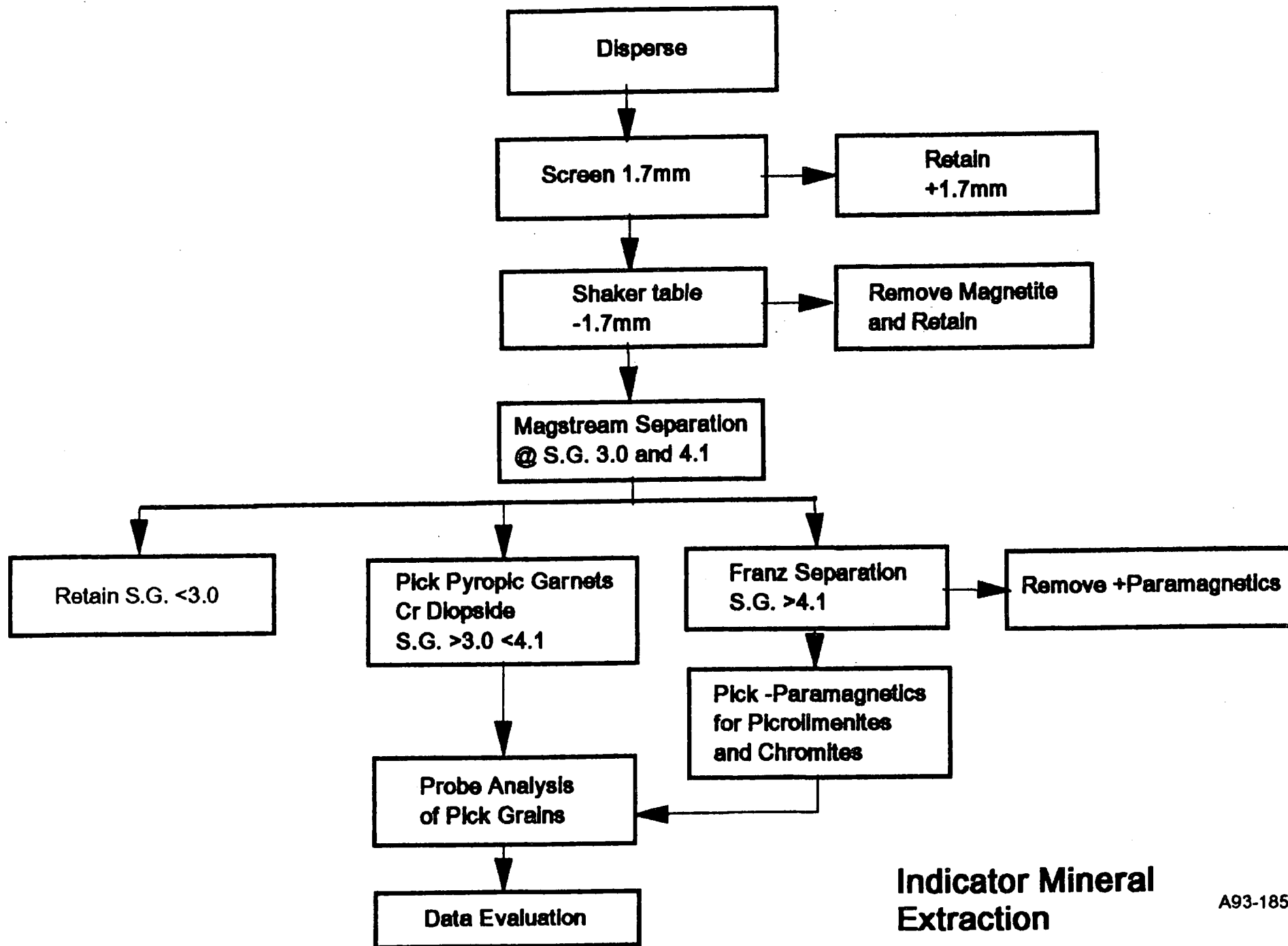
At the drill sites the samples were placed into sealed 25 litre plastic pails. No screening was attempted on site due to cold temperatures. During sample collection brief notes were taken on sample material, grain size, sorting and roundness. Samples were processed at the Saskatchewan Research Council (SRC) as per flow sheet shown on Drawing A93-185-12.

Upon arrival at SRC, samples were thawed and three composite samples prepared. Sample P1 was from the shallow portion of hole "B" while P2 was deeper portion below 12.2 m. Sample P3 was from hole "C". These composites were prepared as interim method of assessing the merit of completing full analysis on all samples and determining some sampling statistics. Two of three composite samples returned anomalous indicators and further specific intervals were then also processed.

Samples were processed at SRC following their standard process developed by SRC (Holsten, 1992) in co-operation with Dr. Vlad Sopuck from Cameco. Samples were disaggregated in a cement mixer with the aid of a sodium metaphosphate (calgon) solution. The disaggregated material was screened to 10 mesh to remove the >1.7 mm fraction which was washed and weighted. Samples contained a significant variation in coarse versus fine between samples. The -1.7 mm fraction was passed repeatedly over a shaker table to obtain a large pre-concentrate. The pre-concentrate was then passed through a Magstream™ Separator to obtain concentrates at S.G. <3.0, S.G. >3.0 <4.1 and S.G. >4.1. The middle fraction was picked for pyrope garnets and chrome diopsides. The heavies were passed through a Franz Separator and a strongly paramagnetic fraction was removed before picking for picro-ilmenites and chromites.

All selected grains were mounted in cylindrical epoxy mounts and polished using a diamond paste. Maps recorded the sample number and identification number of each grain.

Semi-quantitative chemical analyses of grains were carried out in the CANMET laboratories in Ottawa, using a JEOL 8900 electron microprobe operating at 20 kV and 40 Na using standard procedures. Full results are presented in Appendix I.



**Indicator Mineral
Extraction**

3.5 Drill Hole Geology

Drill Site "B" is located about 1 km. SE of the Shell Peace River plant in a large flat swampy area north of Carmon Lake. The area is covered with glacial till and lacustrine clays. Several old bedrock channels exist in the area but have not been fully mapped. Some of these channels may be of Tertiary or Pre-Tertiary in origin. The unconsolidated nature of the Cretaceous bedrock of the area makes the determination of the Quaternary boundary difficult. Drill Site "B" appears to lie on one such old channel while Drill Site "C" some 300 m. to the SE is on the margin of it.

Material recovered at Drill Site "B" started off in a till and gravel mixture. This mixture was likely material from nearby a burrow gravel pit trucked in to form the base of the well site lease. (This material although not processed was retained.) The first 5.2 m. (17 ft.) of the hole was coarse till, green to grey in colour and contained only one chrome diopside grain. The clasts were sub-angular of likely local origin. Between 5.2-12.1 m. (17 - 40 ft.) a sequence of sub-angular coarse gravel to fine sand to a sub-rounded medium channel gravel are present which contained only one pyrope and chrome diopside grain. Sample descriptions are provided in Table III. Surface conductive casing was set at 12.1 m. Between 12.1 and 18.3 m. a dark green varved clay was present which returned no indicator grains. The well casing was set at 18.3 m.

Shallow drilling with the Oil Patch Rig went very fast with no return or poor recovery until a depth of near 200m. Drilling fluids eventually built up a good clay cake over several zones of the air filled gravel beds in the old channel. Bedrock was likely reached somewhere near 270 m. The sequence above 270 m. likely consisted of a sequence of old channel deposits interlayered with till (clay). A better determination will be possible once the Shell Well Logs are available. Once return was present, good indicator minerals signatures were evident as shown in Table III. The increased angularity of clasts within the clay was noted with depth. It is not possible to pin down the exact depth of the source of the indicators within the hole due recovery problems and behaviour of the fluids down the hole. It is clear that over 70 indicator minerals were recovered from the bottom of an old channel.

**TABLE III
Carmon Lake Drilling**

Sample Number		Depth from (m.)	Depth to (m.)	Indicators	Sample Description
Hole "B"					
B1A	P1	0.0	3.0	*	Till, clay & gravel
B1B	P1	0.0	3.0	None	Till, clay & gravel
B2A	P1	3.0	5.2	1Ch	Till, clay & gravel, some coarse clasts
B2B	P1	5.2	6.1	None	Gravel
B3A	P1	6.1	7.3	1Ch	Gravel
B3B	P1	7.3	8.5	1G	Gravel, some 10cm. flat rounded clasts
B4A	P1	8.5	10.7	None	Fine Sand
B5A	P1	10.7	12.2	None	Gravel
B6A	P2	12.2	14.3	None	Till, Clay
B7A	P2	14.3	19.8	None	Till, Clay
B9	P2	20.0	?	None	Clay, sub-rounded to rounded clasts
B10	P2	?	212.0	4G,rr	Clay, sub-rounded to rounded clasts
B11	P2	212.0	232.0	1G,6G?,5Ch	Clay, sub-rounded to rounded clasts
B12	P2	232.0	252.0	22G,4Ch,1rr	Clay, sub-angular clasts
B13	P2	252.0	262.0	24G,3Ch	Clay
B14	P2	262.0	272.0	6G	Clay, sub-angular to angular clasts

Hole "C"

C1	P3	0.0	4.3	*	Till, clay with large clasts
C2	P3	4.3	5.8	*	Gravel, very large clasts, metal lost in hole
C3	P3	5.8	7.6	*	Gravel, medium grained
C4	P3	7.6	9.1	*	Gravel, some large clasts
C5	P3	9.1	11.0	*	Gravel, medium to fine grained, rounded
C6	P3	11.0	13.7	*	Gravel, medium grained, flowing
C7	P3	13.7	14.0	*	Gravel, some large clasts
C8	P3	14.0	14.6	1G	Gravel, medium to fine
C9	P3	14.6	15.2	*	Till, Black clay

Notes:

- * Sample Not Processed
- Ch Chrome Diopside
- G Pyrope Garnet
- rr Garnet with Reaction Rim
- ? Poor Recovery

Only samples B-12 and B-13 have significant quantities of indicator minerals, with samples B-11 and B-14 containing much lower quantities, and the remainder of the samples being distinctly poor in indicator minerals. The indicators themselves are angular to sub-angular in shape. A number of shards are also present which were not picked and included in the inventory. This would suggest that material at the bottom of the channel is derived from a nearby kimberlitic source within the drainage area of the old channel.

At Drill Site "C" a similar sequence of till and gravel occurred with the exception of coarser larger boulders. The surface conductive casing was set at 14.6 m. for this hole. Later drilling indicated this hole was at the margin of the channel intersected in Hole "B". Samples were only collected from the Rat Hole at this site. Between the composite (P3) and the sample (C8) processed from this hole 1 pyrope garnet and 1 chrome diopside were recovered.

3.6 Indicator Minerals

Preliminary sample processing of the three composite samples prepared from the original 24 samples intervals yielded prospective 5 pyrope garnets and 1 green (chrome diopside?) from sample P2 and 1 chrome diopside from P3. Numerous other opaque grains and some possible indicator grains were also present. All the prospective indicators were picked and additional possible grains of interest and opaque grains were added to obtain 10 grains from each composite sample for probing. The remaining opaque mineral grains were not selected for probing due to budget limitations.

Of the original 30 grains microprobed, 7 are undisputed garnets, 2 possible garnets, 1 chrome diopside, 12 hematite, 7 ilmenite and 1 quartz grain. Two of the garnets are grossular-uvarovites (Ca-Cr) that fall into the G-7 class (Dawson & Stephens, 1975), although they are significantly more calcic than the expected range. This extreme calcic nature may imply a higher probability for a metasedimentary origin rather than a kimberlitic origin. The other five garnets are G-9 chrome pyropes. Grain P2-2 is also a borderline G-9/G-10 garnet using Dawson and Stephens criteria but on the calcic or G-9 side of Gurney's $\text{CaO-Cr}_2\text{O}_3$ diagram. The two possible garnets (P2-5, P2-6) are enriched in SiO_2 , K_2O , and Na_2O relative to typical garnet compositions. P2-6 is closer to garnet composition and if it is a garnet, it should be called a G-4. Both grains may also be garnet-pyroxene solid solutions.

Grain P3-7 is classified as a C-5 chrome diopside. It should actually be called a chromian diopside because the Cr_2O_3 content is below 2%.

The opaques consisted of largely ilmenite and hematite. The ilmenite grains are not Mg-bearing to any degree, thus they are not Mg-ilmenite (picro-ilmenite) indicators. Based on the lack of success in finding any opaques of interest from the limited grains selected, further probing of opaques was deferred in the follow-up probe work.

Two types of green indicator minerals (uvarovite and chrome diopside) were present in the heavy mineral concentrate from samples. Uvarovite is a member of the garnet group and is a rare gemstone in its own right, reaching values of 25% that of diamonds. Chrome diopside is one of the basic kimberlitic indicators. Uvarovite have been reported to occur in South African kimberlites but can also have a metasedimentary origin. Both colour and grain morphology can be used to discriminate between these minerals. The uvarovitic garnets are deep emerald green and occur as rounded to sub-rounded anhedral grains, often with frosted or rimmed exteriors. The chrome diopsides are bright apple (almost lime) green and are often sub-hedral with some evidence of typical pyroxene 90° cleavage.

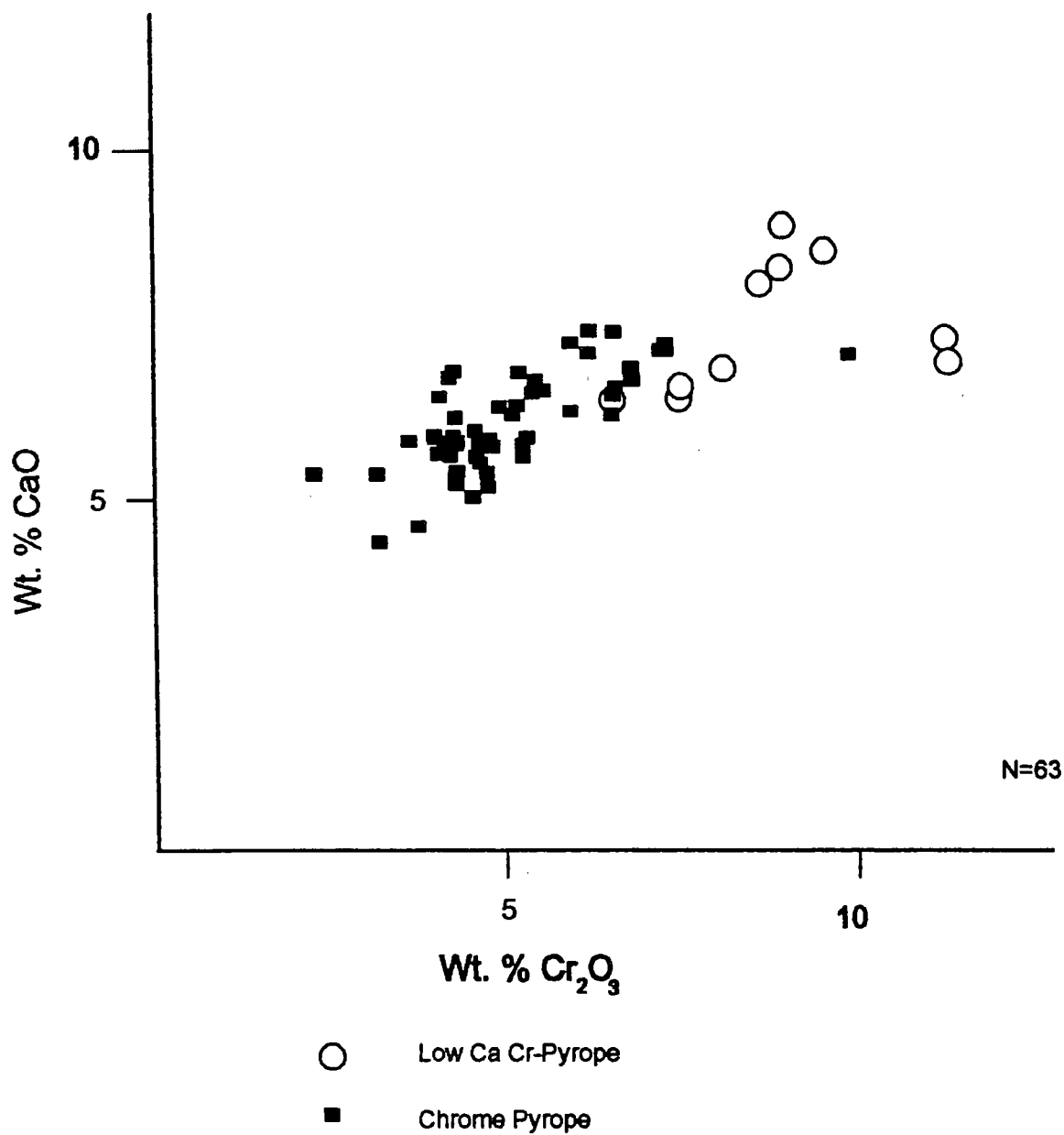
Results from the composites indicated the presence of G-9 garnets and chrome diopside which were considered good kimberlitic indicators. Further samples were processed and additional grains recovered. From these grains 79 prospective pyrope garnets, chrome diopsides and uvarovites were selected.

The $\text{CaO-Cr}_2\text{O}_3$ plot for all purple garnets recovered at Carmon Lake is shown in Figure A93-185-13. All grains fall on the G-9 side of the diagram. Five borderline G9/G10 are present, 1 in B-10, 2 in B12 and 2 in B14. Samples B12 to B14 returned 49 G-9 chrome pyropes, 3 in B-10, 18 in B-12, 23 in B-13, and 5 in B-14. Selected grains are shown in Photos 3. & 4. Several grains with reaction rims are present in B-10 and B-12. Photo 4. shows a reaction rim on a pyrope in the centre of the frame. Five green uvarovites were also recovered, 1 from B-12 and 4 from B-13. Note also the colour contrast between the emerald green uvarovite and the lighter chrome diopside. One titanium pyrope (B12-18) was recovered from B-12.

Sample B-11 to B-13 yielded 12 chrome diopsides of which only 3 were of the preferred composition (B11-1, B11-2, B12-23). The chrome diopsides appeared limited to the upper part of the anomalous interval within the hole. Several grains appeared to be clinopyroxene solid solutions.

Purple Garnets

Carina / Currie Rose Peace River



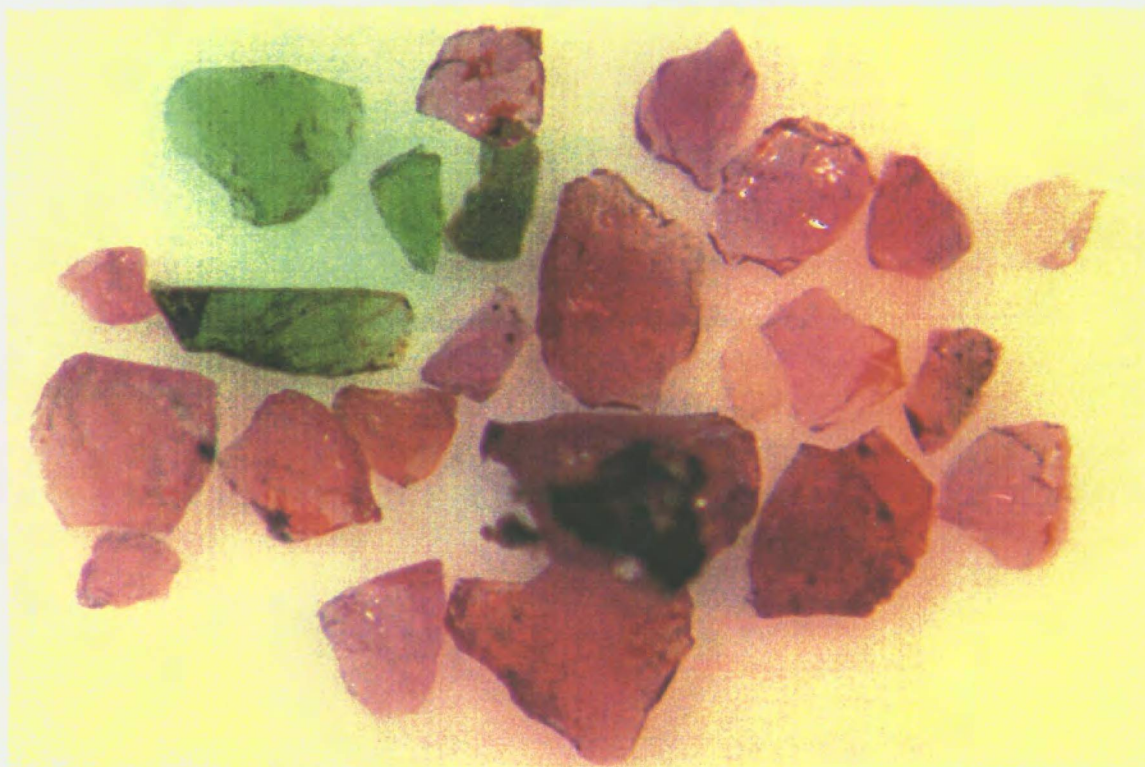


Photo 3. Sample B12 Indicator Minerals

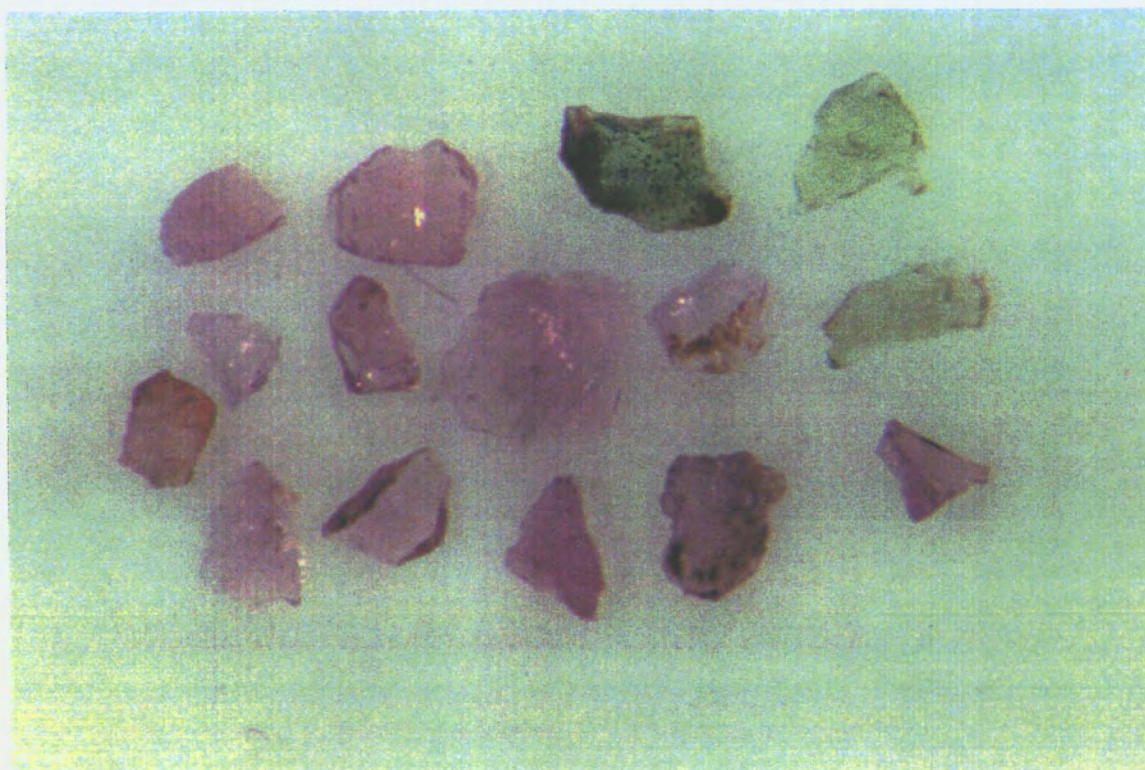


Photo 4. Sample B13 Indicator Minerals

The one sample processed at Drill Site "C" returned one borderline G-9/G-10 (C8-1). Previously a chrome diopside had also been recovered from the composite prepared from this hole. Further processing of the remaining samples from the hole may now be warranted.

3.7 Summary

Carina \ Currie Rose's six permit blocks cover 19 areas of interest in the Peace River Diamond Play and represent a solid land package in this developing play. The permits are located within the Peace River Arch (PRA), which is a broad area of cratonic uplift in North Central Alberta. Within the PRA, Archean basement features overprint the Cretaceous age rocks and influenced the development of structural and sedimentary features. These structural features or faults are believed to be the pre-existing conduits for kimberlitic intrusion at the close of the Cretaceous.

Drilling near Carmon Lake resulted in the recovery of 60 Pyrope garnets of which 8 are borderline G-9/G-10, 15 chrome diopsides, and 7 uvarovites. Interpretation of grain geochemistry shows that the grains are good kimberlitic indicators. The pyrope garnets fall into the garnet Lherzolite classification field, the most common type of mantle derived xenolith found in most kimberlites. The presence of several grains of chrome diopside and the occurrence of partially preserved kelyphitic rims on several garnets suggest a nearby source. These results appear to confirm the presence of unmapped kimberlitic intrusions in the Carmon Lake Area.

The discovery of kimberlitic indicator minerals near several aeromagnetic pipe-like features suggests that these features may be kimberlites. Channels like the one in which the indicator minerals occur tend to have steep gradients and narrow. Analysis of aerial photography suggests the channel may have its headwaters to the south of the Shell Plant near several aeromagnetic targets.

Monitoring of Monopros exploration activity in the Peace River area, indicates a centre of activity near Nampa, on the series of NE trending magnetic anomalies which extend into the Carina \ Currie Rose permits. Unconfirmed reports indicated that work was reaching an advanced drilling stage. Based on this activity and other industry rumours it appears that Monopros has made a discovery in the Peace River area. Following past secrecy in all their activities, Monopros has released no results from their programs.

Kimberlite pipes typically occur in clusters of six to fifty or more in number. An area may contain several clusters as seen in the Fort a La Corne Area in Saskatchewan. In the PRA interpretation of aeromagnetics indicates three possible clusters of anomalies, -a southern group near McLennan (including Triangle), the central Harmon Swarm and the northern group (covering Monopros northern block and Carina \ Currie Rose's Dixonville block).

In the Harmon Valley area, located about 25 km. SE of Peace River, several excellent groupings of magnetic anomalies occur along the North Heart River Fault which appear to form part of a cluster which Monopros is exploring near Nampa. The Hunting Creek area, located 40 km. SW along the same fault hosts another excellent anomaly within the same cluster. This structural trend is just south of the anomalous indicators found near Carmon Lake.

The Dixonville/North Star area located 65 km. NNE of the town of Peace River hosts another grouping of magnetic anomalies well located structurally just north of Monopros northern block.

These anomalies occur in close proximity to major basement structures which propagate through the thick sedimentary sequence of the PRA and appear localized by fault intersections. Any of these clusters could contain one or more economic pipes.

Carina \ Currie Rose's Peace River holdings represent an excellent land position covering several significant major fault structures with coincidental pipe type magnetic features. Most of the property area is road accessible and exploration costs are expected to be much lower than the Lac De Gras Area.

4.0 Conclusions

The Peace River Diamond Play represents a significant unpublicized diamond play of equal merit to other plays. Carina \ Currie Rose discovery of anomalous kimberlitic indicator minerals defines an area of interest where kimberlites likely occur within a 1-4 km. proximal area close to known aeromagnetic anomalies. The occurrence of the indicators in an apparent Pre-Tertiary buried channel suggests a relatively young age. Monopros close spaced drilling activity near Nampa suggests a similar situation. Monopros' renewal of all their permits confirms ongoing interest in the play and industry rumours of a diamond discovery add to the merit of the play.

The discovery of kimberlitic indicators in Peace River is a significant achievement. Although no billion dollar G-10 pyrope garnets have been found, the discovery of numerous kimberlitic indicators including preferred composition chrome diopsides and G-9 garnets are the basis for a credible diamond play which was until Carina's staking, unknown except to Monopros.

The acquisition of the 17 permits has put Carina / Currie Rose on the ground floor of another diamond play with all the right geology and correct tectonic setting. Given the properties accessibility, it will be possible to explore the property on a year round basis on more economical basis than remote areas. The Peace River area is a diamond play of significant merit which has been relatively unknown until recently and offers significant potential for the discovery of diamondiferous kimberlite pipes.

4.1 Recommendations

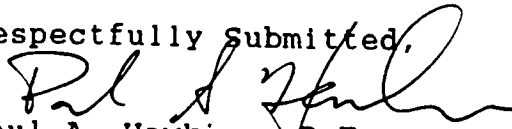
A multi-stage exploration program is proposed to examine the diamond potential of the permit areas and follow-up on anomalous indicator mineral geochemistry in the Shell Delineation wells. The initial phase of exploration will focus on the completion of a low level aeromagnetic survey over the Harmon Block, collection of regional heavy mineral stream sediment samples, data compilation and preliminary examination on the ground of aeromagnetic anomalies.

The initial phase of exploration is expected to confirm the widespread presence of diamond indicator minerals in the Peace River Area on the Carina \ Currie Rose blocks. Both airborne and ground geophysics will be used to examine high priority areas of interest. These surveys will serve as a guide for future geophysical surveys. The program will likely involve two months of field work, one month of compiling oil industry data (well log data, aeromagnetics and gravity) and cost about \$200,000.00 as shown in Appendix III.

The second phase of the program will focus on the flying of low level high resolution aeromagnetics over other permit areas outside of the Harmon Block. Ground geophysics will be used to define specific drill targets. Further Heavy Mineral sampling will also be used to prioritize anomalies for later drilling. A positive outcome will be required before proceeding to the third phase, consisting of good indicator minerals and pipe-like magnetic anomalies. This program will likely require three months to complete and cost \$200,000.00.

The third phase of exploration on the property will consist of a combination of overburden and rotary on selected targets. Further core drilling and bulk testing would also be required to fully assess any diamond discoveries made. This program will likely occur over a three to six month period and cost \$600,000.00.

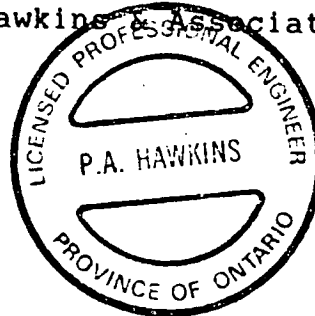
Respectfully Submitted,



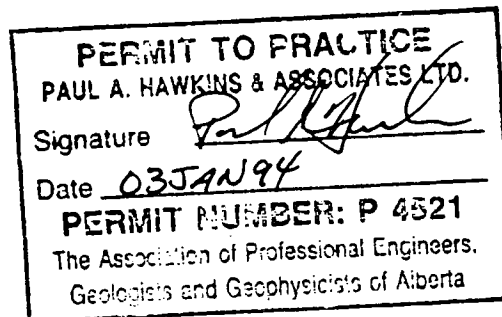
Paul A. Hawkins, P.Eng.

Principal

Paul A. Hawkins & Associates Ltd.



December 31, 1993.



References

- Cant, D.J., 1988
Regional Structure and development of the Peace
River Arch, Alberta: A Paleozoic failed-rift system?
Bulletin of Canadian Petroleum Geology, v.36,p.284-295
- Geological Survey of Canada, 1989a
Aeromagnetic total field, Winagami, Alberta; Geological
Survey of Canada, Map 7765G, Scale 1:250,000
- Geological Survey of Canada, 1989b
Aeromagnetic total field, Peace River, Alberta; Geological
Survey of Canada, Map 7773G, Scale 1:250,000
- Green, R., 1972
Geological Map of Alberta, Alberta Research Council,
Map No. 35, Scale 1:1,267,000
- Hawkins, P.A., 1992
The Diamond Potential of Western Canada, Summary Report
for Consolidated Carina Resources Corp., September 30,
1992, Report # 178-R1
- Holsten, A., 1992
Diamond Indicator Mineral Processing, Letter from Saskatchewan
Research Council, January 10, 1992, 5 pp.
- O'Connell, S.C., Dix, G.R. and Barclay, J.E., 1990
The origin, history, and regional structural development
of the Peace River Arch, Western Canada.
Bulletin of Canadian Petroleum Geology, V38A, p.4-24
- Ritchie, W.G., 1957
The Kneehills Tuff, M.Sc. Thesis, University of Alberta, 66pp.
- Shell Canada Resources Limited, 1984
Peace River Project, Application to the Alberta Energy
Resources Conservation Board, V1 - Technical Details

APPENDIX I

Sample Weights

Sample #	Sample Weight (Kg.)	+1.7 Weight (Kg.)	-1.7 Weight (Kg.)	MAG Weight (Grams)	MIDS Weight (Grams)	HEAVY Weight (Grams)	Pyrope Garnets	Chrome Diopsides	Others	Total Indicators
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Composite Samples

P1	37.45	6.94	30.41	24.49	23.93	18.17	0	0	10	10
P2							5	1	4	10
P3							0	1	9	10

Hole "B"

B1B	25.85	1.27	24.58	4.43	6.95	4.67	0	0		0
B2A	28.63	1.02	27.61	4.48	10.55	5.98	0	1		1
B2B	35.53	3.47	32.06	11.69	20.82	13.51	0	0		1
B3A	36.60	16.26	20.34	9.58	22.63	16.56	0	1		1
B3B	30.26	15.73	14.53	8.28	25.57	22.64	1	0		2
B4A	36.78	19.10	17.68	10.55	26.07	19.83	0	0		1
B5A	31.80	2.00	29.80	12.88	13.59	18.76				0
B6A	27.50	0.70	26.80	12.53	3.80	3.19				0
B7A	27.95	0.65	27.30	6.03	8.75	10.13				0
B9	30.80	0.45	30.35	15.12	20.52	25.40				0
B10	30.10	0.50	29.60	10.27	17.25	26.43	4			4
B11	26.05	0.30	25.75	8.03	4.28	7.89	6			6
B12	30.60	0.25	30.35	23.56	22.30	48.21	22	4		26
B13	31.10	0.00	31.10	4.70	8.06	9.37	24	3		27
B14	31.85	0.40	31.25	7.57	18.34	26.73	6			6

Hole "C"

C8	38.85	12.90	25.95	22.10	39.75	58.37	1			1
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APPENDIX II

Microprobe Results

Number	Grain	Class	Mineral	G1	G2	TiO2	Cr2O3	FeO	MgO	CaO	SiO2	Al2O3	Na2O	MnO	Total	ER
Sample	I.D.#					Wt. %	Wt. %	Wt. %	Wt. %	Wt. %	Wt. %	Wt. %	Wt. %	Wt. %	%	
Garnets																
"P2-2"	"12"	G	Low Ca Cr-Pyrop	G10	G12	0.041	11.278	6.686	20.796	7.387	41.781	14.350	0.000	0.364	102.693	G9 *
"B12-10"	"20"	G	Low Ca Cr-Pyrop	G10	G9	0.185	7.431	7.479	19.710	6.763	40.893	16.652	0.006	0.386	99.596	G9 *
"B12-15"	"25"	G	Low Ca Cr-Pyrop	G10	G9	0.095	8.622	8.397	17.894	8.193	39.815	16.090	0.012	0.471	99.677	G9 *
"B10-2"	"2"	G	Low Ca Cr-Pyrop	G10	G9	0.175	8.195	7.758	19.088	6.789	40.933	16.560	0.044	0.490	100.125	G9 *
"P2-10"	"20"	G	Low Ca Cr-Pyrop	G10	G11	0.057	9.534	7.856	18.350	8.681	41.346	15.621	0.000	0.453	101.898	G9 *
"P2-8"	"18"	G	Low Ca Cr-Pyrop	G10	G9	0.000	8.881	7.957	18.027	8.942	41.237	15.958	0.000	0.499	101.501	G9 *
"C8-1"	"79"	G	Low Ca Cr-Pyrop	G10	G9	0.020	6.368	6.986	20.107	6.484	41.197	17.907	0.000	0.407	99.535	G9 *
"P2-2R"	"31"	G	Low Ca Cr-Pyrop	G10	G12	0.039	11.305	6.686	20.036	6.905	40.807	13.885	0.000	0.375	100.083	G9 *
"B14-4"	"76"	G	Low Ca Cr-Pyrop	G10	G9	0.165	7.521	7.295	19.813	6.449	40.484	16.730	0.037	0.398	98.958	G9 *
"B12-18"	"28"	G	Titanium Pyrop	G1	G11	0.650	5.946	7.451	21.166	5.691	41.329	16.932	0.064	0.285	99.603	G11
"B12-20"	"30"	G	Chrome Pyrop	G9	G10	0.049	6.071	7.370	19.269	6.833	41.060	18.323	0.024	0.428	99.508	G9 *
"B13-15"	"51"	G	Chrome Pyrop	G9	G10	0.030	5.949	7.968	19.240	6.739	40.858	18.418	0.015	0.438	99.689	G9 *
"B13-13"	"49"	G	Chrome Pyrop	G9	G10	0.036	4.100	8.248	19.849	5.819	41.489	19.770	0.021	0.443	99.809	G9 *
"B13-19"	"55"	G	Chrome Pyrop	G9	G10	0.035	4.098	8.197	19.467	5.818	40.989	19.934	0.013	0.413	99.009	G9 *
"B13-32"	"68"	G	Chrome Pyrop	G9		0.202	5.063	8.414	19.890	5.763	41.121	18.766	0.036	0.457	99.780	G9
"B13-20"	"56"	G	Chrome Pyrop	G9		0.174	4.112	8.332	20.024	5.523	40.810	19.632	0.022	0.397	99.073	G9
"B13-21"	"57"	G	Chrome Pyrop	G9	G10	0.035	4.160	8.368	19.739	5.931	41.273	19.617	0.023	0.440	99.622	G9 *
"B13-34"	"70"	G	Chrome Pyrop	G9	G10	0.022	5.337	7.968	19.383	6.555	41.452	18.735	0.020	0.486	100.003	G9 *
"B14-5"	"77"	G	Chrome Pyrop	G9	G10	0.163	5.079	7.718	20.195	6.885	41.579	18.744	0.025	0.384	99.866	G9 *
"B14-3"	"75"	G	Chrome Pyrop	G9	G10	0.002	4.001	8.169	19.486	6.536	40.890	19.815	0.010	0.496	99.449	G9 *
"B14-2"	"74"	G	Chrome Pyrop	G9	G1	0.310	3.178	7.831	20.831	5.463	40.507	19.951	0.040	0.383	98.577	G9 *
"B14-1"	"73"	G	Chrome Pyrop	G9	G10	0.180	6.433	8.289	19.302	6.190	40.233	17.786	0.044	0.426	98.947	G9 *
"B13-36"	"72"	G	Chrome Pyrop	G9		0.129	4.927	8.408	19.670	5.841	41.455	19.192	0.021	0.487	100.192	G9
"B13-33"	"69"	G	Chrome Pyrop	G9	G10	0.009	5.128	8.000	19.481	6.423	41.090	19.053	0.000	0.462	99.698	G9 *
"B13-23"	"59"	G	Chrome Pyrop	G9	G10	0.039	5.934	7.613	19.446	6.328	41.261	18.399	0.035	0.461	99.541	G9 *
"B13-10"	"46"	G	Chrome Pyrop	G9	G10	0.027	3.944	8.451	20.033	5.925	40.755	19.634	0.000	0.458	99.279	G9 *
"B13-30"	"66"	G	Chrome Pyrop	G9	G10	0.037	4.059	8.336	19.637	5.782	41.116	19.786	0.018	0.447	99.270	
"B13-28"	"64"	G	Chrome Pyrop	G9	G10	0.014	4.054	8.417	19.783	5.902	40.925	19.817	0.014	0.427	99.379	
"B13-26"	"62"	G	Chrome Pyrop	G9	G10	0.029	5.076	8.059	19.533	6.344	41.247	19.234	0.012	0.461	100.036	
"B13-24"	"60"	G	Chrome Pyrop	G9	G10	0.038	4.260	8.030	19.899	5.917	41.230	19.630	0.000	0.466	99.504	G9 *
"B13-11"	"47"	G	Chrome Pyrop	G9	G10	0.021	4.332	7.944	19.878	5.917	41.475	19.805	0.008	0.506	99.899	G9 *
"B14-6"	"78"	G	Chrome Pyrop	G9		0.228	4.738	8.322	20.084	5.842	40.182	18.824	0.039	0.462	98.804	G9
"B13-9"	"45"	G	Chrome Pyrop	G9		0.242	4.197	8.579	19.943	5.473	40.482	19.246	0.041	0.436	98.701	G9
"B12-1"	"11"	G	Chrome Pyrop	G9	G10	0.019	2.292	9.251	19.517	5.485	41.821	21.325	0.008	0.946	100.687	G9 *
"B12-6"	"16"	G	Chrome Pyrop	G9		0.271	4.501	7.510	21.154	5.051	41.151	19.262	0.055	0.359	99.369	G9

Number	Grain	Class	Mineral	G1	G2	TiO2	Cr2O3	FeO	MgO	CaO	SiO2	Al2O3	Na2O	MnO	Total	ER
Sample	I.D.#					Wt. %	Wt. %	Wt. %	Wt. %	Wt. %	Wt. %	Wt. %	Wt. %	Wt. %	%	
"B12-5"	"15"	G	Chrome Pyrope	G9		0.128	4.353	7.626	20.741	5.332	41.390	19.507	0.018	0.365	99.514	G9
"B12-4"	"14"	G	Chrome Pyrope	G9	G10	0.058	7.030	8.111	19.274	7.132	41.094	17.310	0.025	0.434	100.544	G9 *
"B12-3"	"13"	G	Chrome Pyrope	G9	G10	0.162	6.533	7.915	19.637	6.586	41.178	17.694	0.035	0.419	100.225	G9 *
"B12-2"	"12"	G	Chrome Pyrope	G9	G10	0.004	5.439	8.261	19.048	6.740	41.717	18.893	0.011	0.493	100.642	G9 *
"B10-4"	"4"	G	Chrome Pyrope	G9		0.243	4.603	7.868	20.338	5.811	41.534	19.258	0.029	0.420	99.985	G9
"B12-8"	"18"	G	Chrome Pyrope	G9	G1	0.333	4.695	9.331	19.433	5.883	41.354	18.999	0.044	0.463	100.619	G9 *
"B10-3"	"3"	G	Chrome Pyrope	G9		0.252	4.811	7.821	20.417	5.709	41.682	18.952	0.035	0.422	100.162	G9
"B10-1"	"1"	G	Chrome Pyrope	G9		0.269	5.201	7.894	19.971	5.863	41.602	18.896	0.037	0.391	100.224	G9
"P2-7R"	"33"	G	Chrome Pyrope	G9	G10	0.177	3.278	7.305	22.051	4.456	42.257	20.311	0.000	0.283	101.118	G9 *
"P2-3R"	"32"	G	Chrome Pyrope	G9		0.261	4.657	7.838	21.341	4.864	42.482	19.295	0.000	0.365	101.103	G9
"P2-3"	"13"	G	Chrome Pyrope	G9	G1	0.268	4.738	7.595	22.299	5.205	42.254	19.587	0.000	0.347	102.293	G9
"B12-7"	"17"	G	Chrome Pyrope	G9	G10	0.022	3.550	8.051	20.410	5.685	41.790	20.488	0.013	0.498	100.510	G9
"B12-9"	"19"	G	Chrome Pyrope	G9	G10	0.037	4.879	8.603	19.247	6.381	41.404	19.269	0.000	0.439	100.333	G9 *
"B13-8"	"44"	G	Chrome Pyrope	G9	G10	0.000	4.563	7.995	19.598	6.065	40.751	19.616	0.008	0.465	99.105	G9 *
"B12-11"	"21"	G	Chrome Pyrope	G9	G10	0.142	5.572	8.415	19.315	6.610	41.172	18.446	0.052	0.455	100.241	G9 *
"B12-25"	"35"	G	Chrome Pyrope	G9	G10	0.031	6.123	8.620	18.328	7.403	40.387	17.986	0.009	0.481	99.440	G9 *
"B13-6"	"42"	G	Chrome Pyrope	G9	G1	0.287	4.310	8.013	20.466	5.255	40.988	19.251	0.053	0.417	99.075	G9 *
"B13-5"	"41"	G	Chrome Pyrope	G9		0.186	5.180	8.381	19.862	5.776	40.554	18.909	0.039	0.458	99.404	G9
"B13-2"	"38"	G	Chrome Pyrope	G9		0.164	3.656	7.437	20.472	5.889	41.206	19.651	0.015	0.340	98.890	G9
"B13-1"	"37"	G	Chrome Pyrope	G9	G10	0.020	3.987	8.129	19.372	5.842	41.427	19.840	0.013	0.410	99.099	G9 *
"B12-26"	"36"	G	Chrome Pyrope	G9	G10	0.067	7.223	8.231	18.766	7.243	40.815	17.327	0.000	0.390	100.139	G9 *
"B12-24"	"34"	G	Chrome Pyrope	G9	G10	0.112	6.389	6.806	20.060	6.863	40.677	17.771	0.000	0.329	99.072	G9 *
"B12-13"	"23"	G	Chrome Pyrope	G9	G10	0.039	6.163	8.703	18.390	7.233	40.471	17.981	0.005	0.471	99.561	G9 *
"P2-7"	"17"	G	Chrome Pyrope	G9	G1	0.183	3.277	7.028	22.967	4.632	43.244	20.656	0.000	0.293	102.280	G9
"B12-19"	"29"	G	Chrome Pyrope	G9	G10	0.081	6.564	8.557	18.243	7.398	41.042	17.802	0.000	0.509	100.268	G9
"B12-17"	"27"	G	Chrome Pyrope	G9	G10	0.101	7.103	8.392	18.712	7.142	40.487	17.148	0.016	0.456	99.634	*
"B12-16"	"26"	G	Chrome Pyrope	G9	G10	0.145	6.543	7.919	19.457	6.548	40.846	17.694	0.027	0.397	99.669	*
"B13-22"	"58"	G	Chrome Pyrope			0.203	4.163	8.635	19.900	5.518	40.698	19.638	0.041	0.444	99.299	

Number Grain Clas: Mineral G1 G2 TiO2 Cr2O3 FeO MgO CaO SiO2 Al2O3 Na2O MnO Total ER
Sample I.D.# Wt. % Wt. % Wt. % Wt. % Wt. % Wt. % Wt. % Wt. % Wt. % Wt. % %

Chrome Diopsides

"P3-7"	"27"	CPX	Chrome Diopsi	C-5		0.117	1.138	2.931	19.513	21.933	55.156	1.213	0.569	0.064	102.634		
"B11-4"	"8"	CPX	UN-CPX	?		0.073	8.857	8.639	17.353	8.308	40.038	15.990	0.000	0.438	99.783		*
"B12-22"	"32"	CPX	UN-CPX	C5		0.042	2.066	1.848	16.440	23.413	54.934	0.683	1.412	0.071	100.955		
"B12-14"	"24"	CPX	UN-CPX	C5		0.062	1.567	2.531	16.311	24.222	53.954	0.602	1.323	0.070	100.686		
"B11-5"	"9"	CPX	UN-CPX	C5		0.022	1.529	1.957	16.950	24.857	54.606	0.102	1.052	0.071	101.212		
"B11-6"	"10"	CPX	UN-CPX	C5		0.186	0.740	2.773	17.056	24.710	53.381	1.932	0.582	0.087	101.554		
"B13-14"	"50"	CPX	UN-CPX	C5		0.013	1.761	2.594	16.524	23.967	53.786	0.214	1.394	0.079	100.461		
"B13-7"	"43"	CPX	UN-CPX	C5		0.064	0.856	3.197	16.603	24.561	54.148	0.688	1.003	0.066	101.253		
"B13-17"	"53"	CPX	UN-CPX	C5		0.065	0.939	2.443	16.810	24.975	53.530	0.529	0.986	0.100	100.449		
"B12-23"	"33"	CPX	UN-CPX	C5		0.023	1.898	1.942	16.868	24.145	54.129	0.371	1.217	0.068	100.727		
"B11-2"	"6"	CPX	UN-CPX	C2		0.456	0.805	2.704	15.036	22.135	51.454	6.471	1.670	0.095	100.941		
"B11-3"	"7"	CPX	UN-CPX	C2		0.096	0.666	5.158	15.555	23.739	54.082	1.131	1.042	0.138	101.738		
"B12-21"	"31"	CPX	CPX-CD	C5		0.007	1.754	1.915	16.318	22.634	54.485	2.035	1.807	0.075	101.114	G9	*
"B11-1"	"5"	CPX	CPX-CD	C5	C2	0.367	0.999	2.623	15.215	22.147	51.806	6.017	1.457	0.066	100.586		*
"P2-6"	"16"	CPX	Amphibole			1.272	0.055	19.183	9.778	11.913	43.095	10.771	1.181	0.413	98.942		

Number	Grain	Class	Mineral	G1	G2	TiO2	Cr2O3	FeO	MgO	CaO	SiO2	Al2O3	Na2O	MnO	Total	ER
Sample	I.D.#					Wt. %	Wt. %	Wt. %	Wt. %	Wt. %	Wt. %	Wt. %	Wt. %	Wt. %	%	

Uvarovites

"P2-4"	"14"	G	Grossular-Uvarovite	G7		0.533	11.229	4.967	3.300	31.485	38.873	10.458	0.000	0.108	100.953	G9	*
"P2-1"	"11"	G	Grossular-Uvarovite	G7		0.515	10.944	5.122	3.303	31.489	38.459	10.541	0.000	0.167	100.540	G9	*
"P2-5"	"15"	?	Poss. uvarovite			0.047	1.912	2.825	22.264	10.891	49.169	8.285	2.708	0.019	98.826		
"B12-12"	"22"	G	Uvarovite	G11	G1	0.591	7.913	7.920	19.864	8.223	40.849	16.014	0.106	0.386	99.960	G9	*
"B13-12"	"48"	G	Uvarovite			0.179	9.111	8.096	17.484	8.395	40.227	15.692	0.013	0.488	99.737	G9	
"B13-25"	"81"	G	Uvarovite			0.061	10.076	8.262	19.564	7.495	40.966	14.756	0.010	0.328	99.568		
"B13-35"	"71"	G	Uvarovite			0.173	9.318	8.222	17.626	8.342	40.103	15.473	0.024	0.496	99.849	G9	
"B13-31"	"67"	G	Uvarovite			0.061	9.785	8.283	19.778	7.349	40.655	14.973	0.000	0.333	99.300	G9	*

Opaques, Unknown or Unclassified

"B13-29"	"65"	OP	UNKNOWN			0.076	22.819	25.182	16.076	0.000	0.023	33.492	0.012	0.248	98.356		
"P3-4"	"24"	OP	UNKNOWN			77.325	0.076	13.947	0.042	0.313	0.846	0.731	0.000	0.274	93.564		
"P1-2"	"2"	OP	UNKNOWN			0.122	0.052	83.570	0.019	0.038	0.158	0.091	0.000	0.122	84.172		
"B13-16"	"52"	OP	UNKNOWN			0.737	42.243	29.102	11.305	0.000	0.011	14.285	0.000	0.425	98.402		
"B13-3"	"39"	OP	UNKNOWN			0.218	34.688	33.833	12.733	0.000	0.037	16.299	0.010	0.341	98.548		
"B13-27"	"83"	OP	UNKNOWN			1.025	45.109	29.843	9.598	0.000	0.014	10.219	0.017	0.382	96.591		
"B13-18"	"54"	OP	UNKNOWN			0.873	40.650	26.181	11.989	0.000	0.021	18.378	0.000	0.392	98.814		
"P3-2"	"22"	OP	UNKNOWN			0.124	0.031	83.847	0.000	0.000	0.789	0.348	0.000	0.133	85.272		
"P1-1"	"1"	OP	UNKNOWN			0.020	0.124	85.607	0.000	0.000	0.014	0.121	0.022	0.004	85.938		
"P1-10"	"10"	OP	UNKNOWN			8.876	0.000	81.515	0.000	0.000	0.139	0.035	0.000	0.000	90.585		
"P3-6"	"26"	OP	Unknown			61.446	0.004	27.997	0.053	0.101	0.509	0.284	0.000	0.149	90.545		
"P3-10"	"30"	OP	Spinel-Mag			0.058	0.000	79.136	0.087	0.348	2.331	0.977	0.000	0.400	83.337		
"P3-8"	"28"	OP	Spinel-May			0.000	0.000	70.847	1.806	0.072	4.717	0.222	0.000	0.001	77.689		
"P2-9"	"19"	Q	Quartz			0.000	0.000	0.049	0.000	0.000	102.188	0.130	0.000	0.000	102.383		
"P3-3"	"23"	OP	Ilmenite			57.969	0.000	32.137	0.017	0.004	0.087	0.000	0.000	3.328	93.544		
"P1-4"	"4"	OP	Ilmenite			54.310	0.000	40.951	0.021	0.000	0.022	0.008	0.000	3.773	99.085		
"B13-4"	"40"	OP	Ilmenite			50.168	0.032	49.814	0.141	0.000	0.000	0.000	0.000	0.369	103.683		
"P1-9"	"9"	OP	Ilmenite			58.652	0.039	30.729	0.343	0.078	0.296	0.427	0.000	0.536	91.100		
"P3-5"	"25"	OP	Ilmenite			60.717	0.005	29.916	0.373	0.025	0.193	0.170	0.000	0.496	91.895		
"P1-6"	"6"	OP	Ilmenite			57.150	0.083	34.487	0.058	0.042	0.182	0.159	0.000	2.001	94.122		
"P1-7"	"7"	OP	Hematite			0.098	0.000	87.480	0.000	0.000	0.093	0.147	0.000	0.073	87.891		
"P3-1"	"21"	OP	Hematite			0.083	0.027	86.660	0.000	0.006	0.118	0.105	0.000	0.185	87.202		
"P1-3"	"3"	OP	Hematite			0.129	0.100	87.161	0.000	0.000	0.076	0.046	0.000	0.280	87.792		
"P1-8"	"8"	OP	Hematite			0.152	0.000	89.039	0.000	0.000	0.051	0.331	0.000	0.180	89.753		
"P1-5"	"5"	OP	Hematite			0.061	0.000	85.875	0.000	0.000	0.150	0.085	0.000	0.191	88.382		
"P3-9"	"29"	OP	Hematite			0.051	0.000	87.787	0.000	0.000	0.024	0.096	0.000	0.058	88.036		

APPENDIX III

Proposed Budget Peace River
Consolidated Carina \ Currie Rose

Cost Centre	Phase I Harmon Block Follow-up	Phase II Regional. Geophysics	Phase III Drilling
Professional Services			
Project Geologist	\$12,000.00	\$15,000.00	\$30,000.00
Field Assistant	\$7,500.00	\$6,000.00	\$10,000.00
Landman		\$1,800.00	\$6,000.00
Drafting	\$2,500.00	\$2,500.00	\$3,500.00
Word Processing	\$250.00	\$500.00	\$850.00
Reproduction	\$250.00	\$500.00	\$1,250.00
Computer	\$100.00	\$1,000.00	\$4,000.00
Travel Expenses			
Air Travel			\$3,000.00
Hotel	\$1,500.00	\$1,750.00	\$6,000.00
Meals	\$1,500.00	\$1,100.00	\$6,000.00
Fuel	\$1,200.00	\$1,000.00	\$4,200.00
Truck Rental	\$3,200.00	\$2,200.00	\$7,000.00
Telephone	\$400.00	\$300.00	\$600.00
Courier	\$500.00	\$500.00	\$250.00
Field Equipment and Supplies			
Indicator Mineral Processing	\$15,000.00	\$10,000.00	\$45,000.00
Chemical Analysis	\$4,000.00	\$4,000.00	\$15,000.00
Equipment Rental	\$5,000.00	\$5,000.00	\$3,450.00
Reproduction	\$1,500.00	\$750.00	\$1,200.00
Geophysical Equipment	\$3,000.00	\$3,000.00	
Maps and Airphotos	\$1,300.00	\$600.00	\$1,900.00
Field Supplies	\$1,000.00	\$500.00	\$1,250.00
Fuel	\$2,000.00	\$200.00	\$500.00
Permit & Licences	\$150.00	\$150.00	
Geophysical Program			
Linecutting	\$30,000.00	\$10,000.00	
Contract Geophysics	\$40,000.00	\$15,000.00	
Digital Data Acquisition	\$10,000.00	\$0.00	
Airborne Geophysics	\$50,000.00	\$100,000.00	
Interpretation	\$5,000.00	\$12,500.00	\$7,500.00
Permits and Licences	\$150.00	\$150.00	
Surface Access	\$1,000.00	\$4,000.00	\$1,000.00

Peace River Budget (Con't)

Cost Centre	Phase I	Phase II	Phase III
Drilling Program			
Mob-Demob			\$10,000.00
Freight			\$10,000.00
Permits & Licences			\$1,150.00
Drilling Footage Rate			\$310,000.00
Drilling Hourly Rate			\$20,000.00
Drilling Fluids			\$10,000.00
Hole Abandonment Cement Plugs			\$10,000.00
Equipment Lost in Hole			\$10,000.00
Sample Containers			\$8,000.00
Core Boxes			\$2,500.00
Lumber			\$1,500.00
Surface Leases			\$5,000.00
Site Preparation			\$20,000.00
Site Reclamation			\$10,000.00
Camp Rental			\$3,000.00
Radio Rental			\$2,000.00
Drill Hole Survey			\$7,400.00
Phase Totals	<u>\$200,000.00</u>	<u>\$200,000.00</u>	<u>\$600,000.00</u>
Total All Phases=			<u>\$1,000,000.00</u>

1994 Exploration Report On
Consolidated Carina Resources Corp.
&
Currie Rose Resources Ltd.
Peace River Diamond Project

Permit #

9393030121
9393030122
9393030123
9393030124
9393030125
9393030199
9393030282

Peace River, Alberta

March 12, 1995.

This report covers the 159,406.94 acres in Metallic and Industrial Mineral Permits held by Consolidated Carina Resources Corp. centred on 56° 22' north 116° 48' west in N.T.S. Sheet 84C and 83N.

By:
Paul A. Hawkins, P.Eng.
Paul A. Hawkins & Associates Ltd.
72 Strathlorne Cr. S.W.,
Calgary, Alberta
T3H 1M8

(403) 242-7745

Report #95-194

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Executive Summary

1992-1995 Exploration Program

This report documents work carried out on 7 of 17 metallic minerals permits held by Consolidated Carina Resources Corp. and Currie Rose Resources Ltd. in the Peace River Diamond Play between 1992 and March 1995.

The permits are located within the Peace River Arch, which is a broad area of cratonic uplift. Within the arch, Archean basement features overprint the Cretaceous age rocks and influenced the development of structural and sedimentary features. These structural features or faults are believed to be the pre-existing conduits for kimberlitic intrusion at the close of the Cretaceous. The permits were acquired on the basis of an integrated study of available airborne geophysics, geology, structural analysis, basement geochronology and field examination.

Work conducted consisted of: prospecting, geological mapping, sampling, analysis of satellite imagery (Landsat, TM and ERS-1), analysis of conventional aerial photography, examination of oil well data, examination of government maps and records, ground magnetometer surveys, and compilation and interpretation of data. Ground magnetics located two large deep magnetic anomalies and one small near surface anomaly. None of which were considered prime drill targets at this time. Structural lineament analysis defined a number of interesting areas where further work is warranted.

Drilling near Carmon Lake resulted in the recovery of 60 Pyrope garnets of which 8 are borderline G-9/G-10, 15 chrome diopsides, and 7 uvarovites. Interpretation of grain geochemistry shows that the grains are good kimberlitic indicators. The pyrope garnets fall into the garnet Lherzolite classification field, the most common type of mantle derived xenolith found in most kimberlites. The presence of several grains of chrome diopside and the occurrence of partially preserved kelyphitic rims on several garnets suggest a nearby source. These results appear to confirm the presence of unmapped kimberlitic intrusions in the Carmon Lake Area. Channels like the one in which the indicator minerals occur tend to have steep gradients and narrow. Analysis of aerial photography and ERS-1 radar data suggests the channel may have its headwaters to the SE of the Shell Plant near several aeromagnetic targets.

A multi-phase work program is recommended to explore the reduced permit areas and adjacent areas which have not been fully tested.

1.0 Introduction

In late June 1992, Paul A. Hawkins & Associates Ltd. was commissioned by Mr. Rick Walker and Mr. Jim Zimmerman, Directors of Consolidated Carina Resources Corp., to analyze data associated with recent discoveries in the Lac De Gras Area, N.W.T. and other diamond plays in Saskatchewan and Alberta. This work (Hawkins, 1992) defined the Peace River Arch (PRA) as an area of interest based on its structural setting, cratonic position, geological setting, Industry activity and other economic factors.

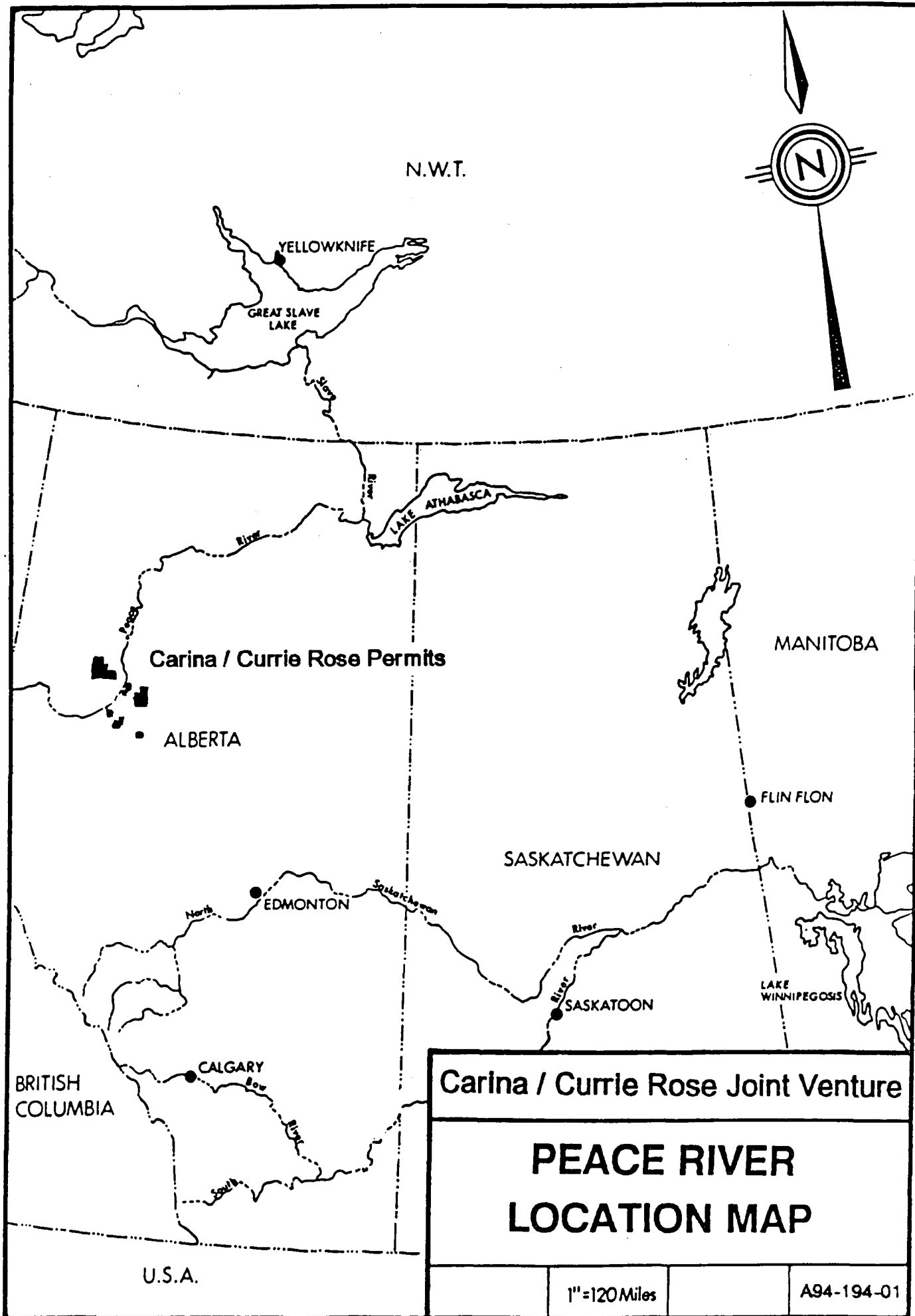
As a result of the above, recommendations were made to acquire 10 Metallic Minerals Permits in the Peace River Area. This staking was the first staking after the acquisition by Monopros of 1,600,000 acres in the Peace River area. Subsequently an additional 7 Metallic Minerals Permits were also acquired before the major staking rush in the fall of 1992. Currie Rose Resources Inc. acquired a 50% interest by funding 50% of the property acquisition costs and exploration expenses.

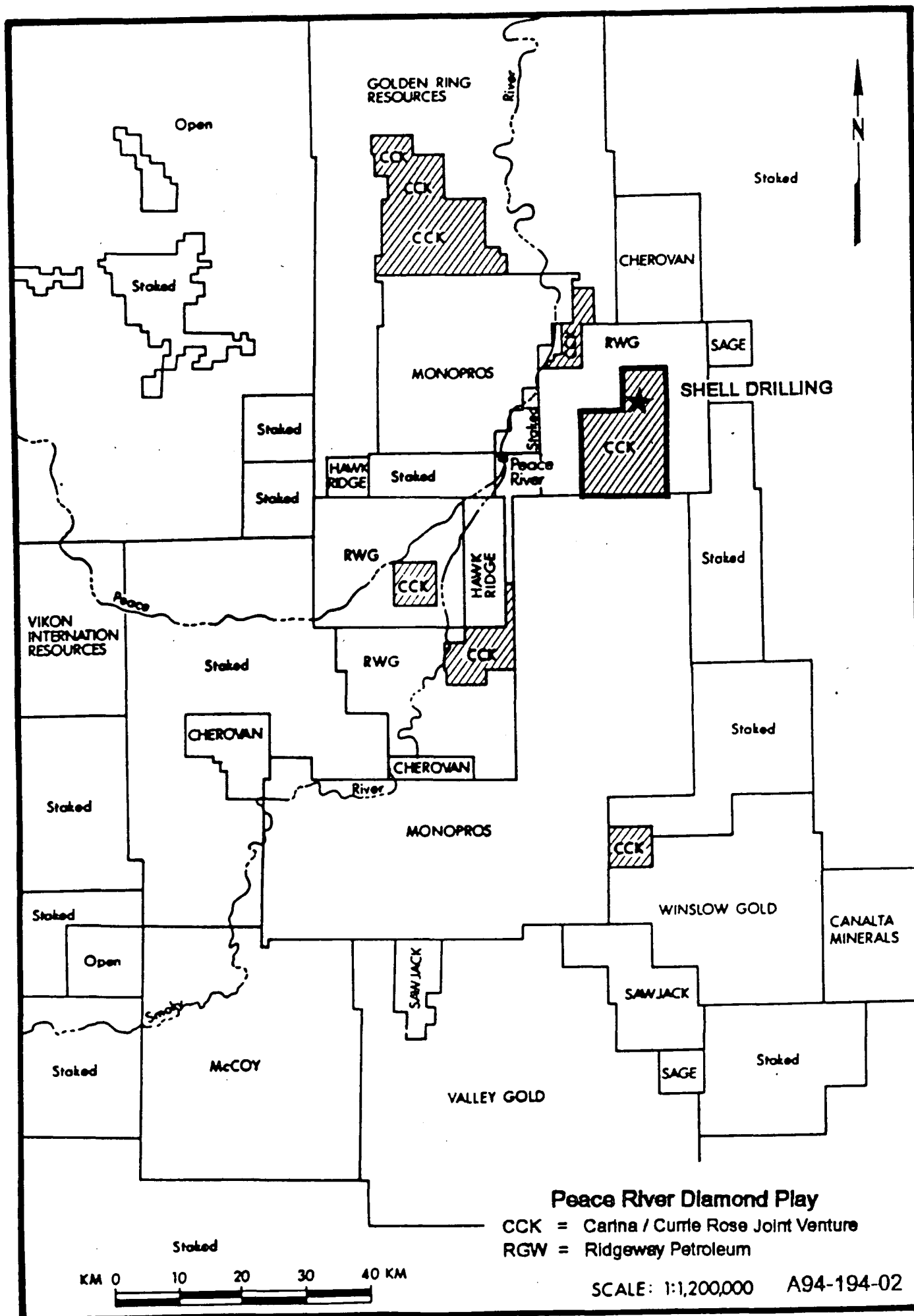
This report documents work carried out between August 1992 and March 1995 on 7 of 17 permits which will be retained into the second term excepting the sampling and laboratory analysis of 23 samples collected from two delineation wells drilled by Shell Canada Resources Ltd. as part of their on going development of their Peace River Oil Sands Development (Hawkins, 1993).

Work conducted between August 1992 and March 1995 consisted of: prospecting, geological mapping, sampling, analysis of satellite imagery (Landsat, TM and ERS-1), analysis of conventional aerial photography, examination of oil well data, examination of government maps and records, ground magnetometer surveys, and compilation and interpretation of data. A total of 8 trips were made into the Peace River property area during this time period.

1.1 Location and Access

The Peace River Area is located 350 km. (220 miles) north of Edmonton in west central Alberta, as shown on Drawing A94-194-01. The original study area during the early stages of exploration covers the area between longitudes 116° and 120°W and latitudes 55° and 57°N covering 4 National Topographic System (N.T.S.) map sheets 83M, 83N, 84C and 84D. The actual permits covered by this report (pre-reduction) are highlighted on Drawing A94-194-02.





The Peace River area is for the most part fairly level with an average elevation of 600 m. (2000 ft.). Elevations range from a low of 460 m. (1500 ft.) on the Peace River to 975 m. (3200 ft.) on the rounded hilltops to the south and northwest. Most of the permit areas are forest covered and relatively flat and swampy. Some areas are better drained and serve as pasture lands.

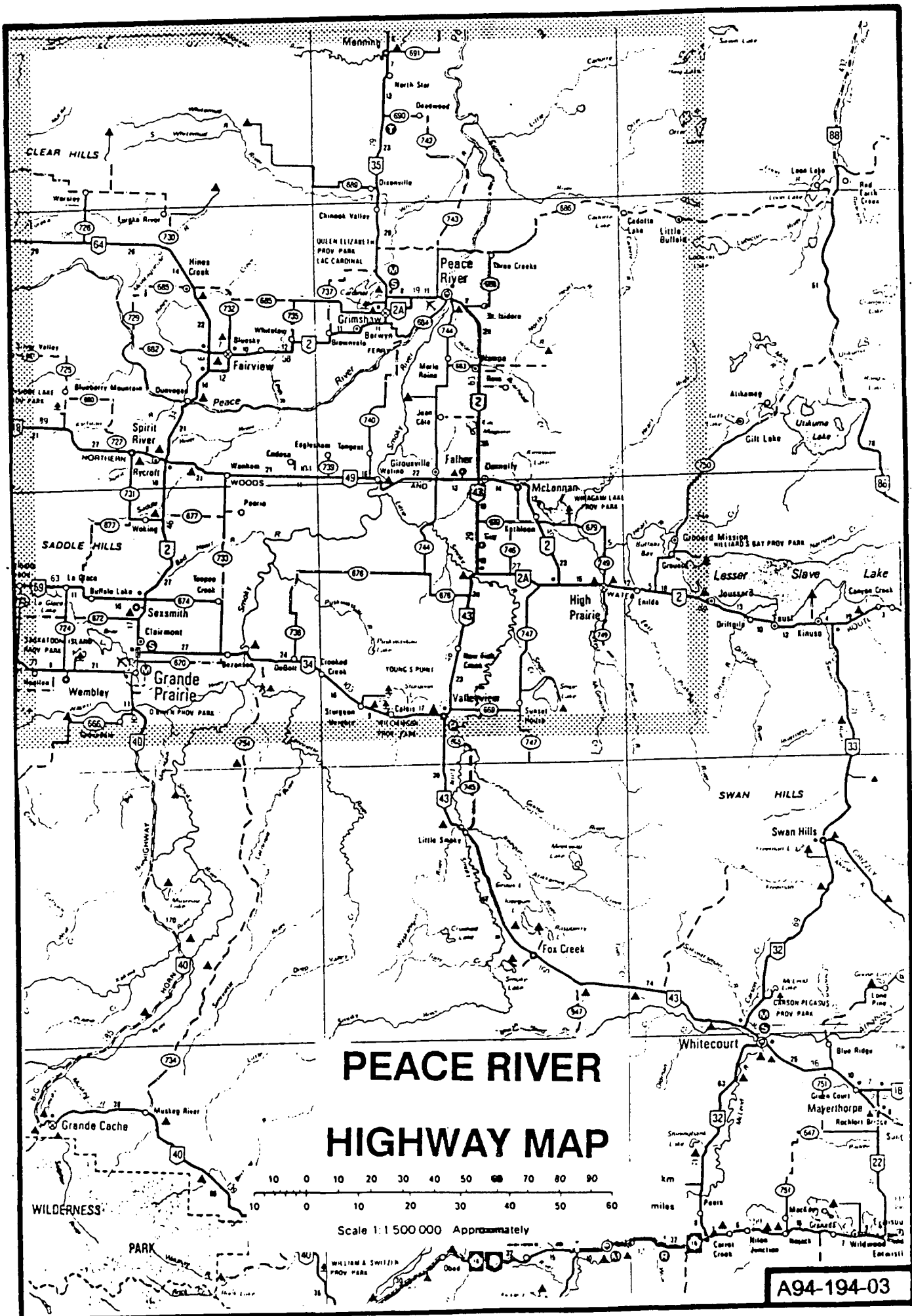
Streams, rivers, lakes and swamps are relatively numerous in the property area. The Peace and Smoky River Valleys are deeply incised into relatively flat prairies. Tributaries equally have deep valleys within a few kilometres of the river.

The Peace River area is accessible by several paved all weather highways from Edmonton as shown on Drawing A94-194-03. Peace River is also served by the Northern Alberta Resource Railway branch of the C.N.R. Daily jet service also connects Peace River with the south. The area is well serviced in the energy sectors by Alberta Power and Natural Gas Companies. The infrastructure developed in the area, partly as a result of the oil & gas developments in the Peace River Area, provides an excellent base for any future mineral development in the area.

A well developed road access network exists in the Peace River area. In most farming areas, concession roads have been developed on most section lines. In forested areas like the permit areas, these concession roads are less extensively developed. Active logging is ongoing in some permit areas providing further access. The permit areas are also covered with many seismic lines and winter roads. All Terrain Vehicles (ATV) will provide year round access while several winter roads will provide further access for most parts of the permit areas now currently road accessible with a minimum of terrain disturbance.

Peace River is the largest town north of Edmonton with a population of 6,580. The fertile Peace River Valley supports cattle, grain and oil seed farming with adjacent areas producing significant values in petroleum and forestry (pulp and paper). Diaishowa Canada Ltd. recently completed a \$550 million Kraft pulp mill 16 km. north of Peace River. Several forest blocks nearby will be logged as feed for the mill.

The Peace River area has a mean annual rainfall of 475 mm. with an annual mean temperature of 1°C. Winters are cold with temperatures to -40°C while summers can be very hot with temperatures to +30°C. However on the whole they are generally cool when compared to Edmonton. The long daylight hours due to its northern location makeup for the cooler temperatures and the shorter growing season. Most areas of good fertile land has been cleared while some marginal lands are only now being cleared.



PEACE RIVER HIGHWAY MAP

10 0 10 20 30 40 50 60 70 80 90
10 0 10 20 30 40 50 60
km miles

Scale 1:1 500 000 Approximately

R 25

450 000

R 24

45'

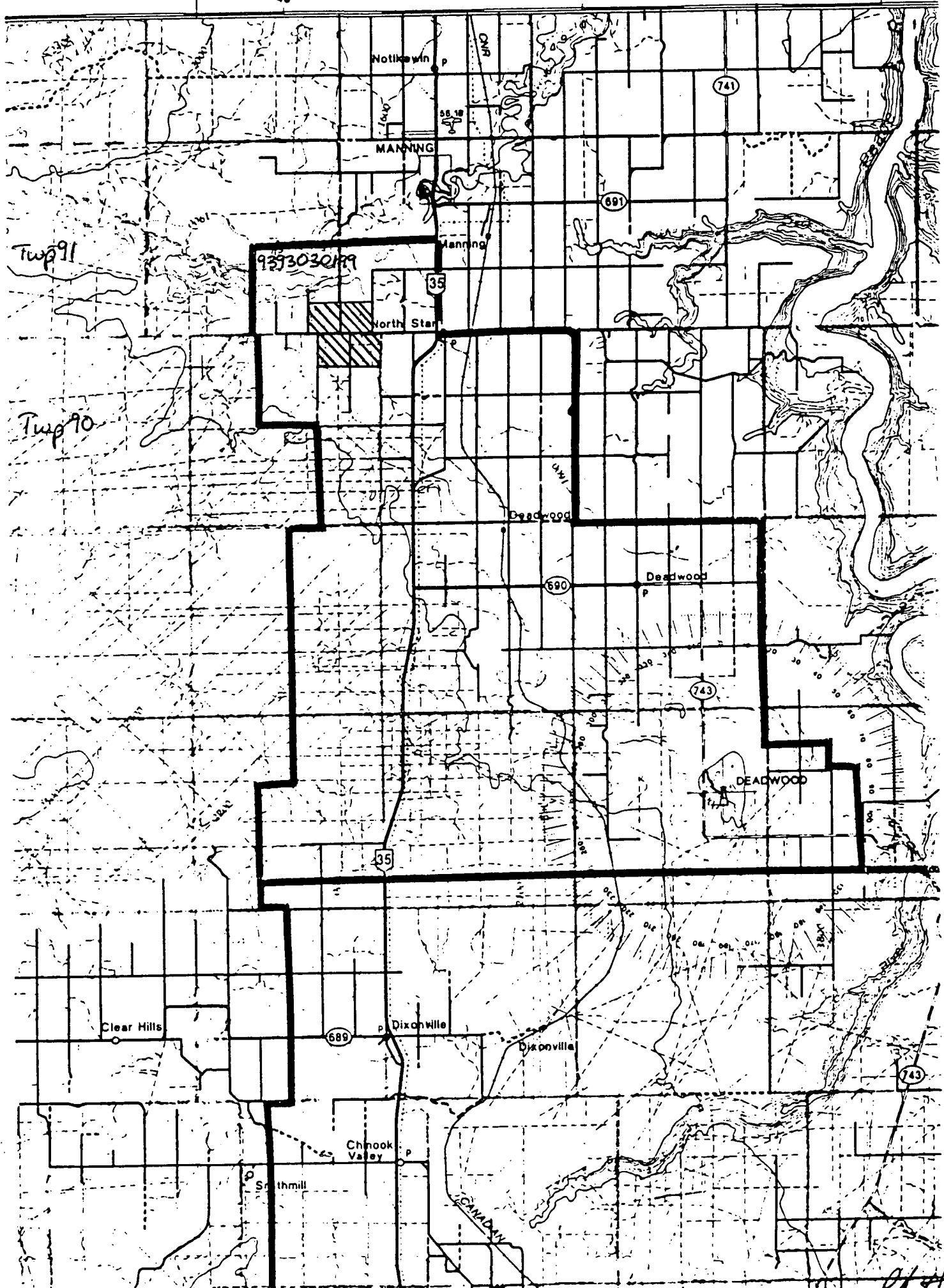
R 23

30'

R 22

R 21

15'



1.2 Licence Tabulation

Consolidated Carina Resources Corp. holds 17 Metallic Minerals Permits in the Peace River Area which total 156,416 hectares (391,040 acres) in 6 claim blocks. The location of original permits and the permits covered by this report is shown on drawing A94-194-02. Work completed between August 1992 and March 1995 allowed only the retention of portions of seven permits out of the original seventeen. Although the permits were acquired in August 1992, the permits were not issued until March 1993 when the new regulations came into force. The details of the Permits covered by this report and the amount of work done are listed below.

Table I

Carina / Currie Rose Permit Blocks

Permit #	Date	Location	Hectares	Work Done
9393030121	12-MAR-93	Twp83 R18 W5	9,216.00	\$ 5,769.54
9393030122	12-MAR-93	Twp84 R19 W5	9,216.00	\$ 3,286.23
9393030123	12-MAR-93	Twp84 R18 W5	9,216.00	\$ 2,690.81
9393030124	12-MAR-93	Twp83 R19 W5	9,216.00	\$ 8,031.33
9393030125	12-MAR-93	Twp85 R18 W5	9,216.00	\$11,974.89
9393030199	12-MAR-93	Twp90 R23 W5 S19-20 S29-32 Twp90 R24 W5 S21-28 S33-36 Twp91 R23 W5 S4-9 S16-18 Twp91 R24 W5 S1-3 S10-15	9,216.00	\$ 5,463.63
9393030282	12-MAR-93	Twp74 R19 W5 S13-36 Twp75 R18 W5 S6-7 Twp75 R19 W5 S8-12	9,216.00	\$ 1,565.85

20-MAR-95

The Metallic and Industrial Minerals Regulation allows the deposition of metallic minerals (including diamonds) that are vested in or belonging to the Crown in right of Alberta by means of Metallic and Industrial Minerals Permits. Permits are acquired by paper staking. Permits can be no less than 16 hectares or more than 9,216 hectares. A township in Alberta is 9,216 hectares.

The previous regulations used to require a bond equal to the current assessment requirement. When this bonding requirement was ended by Ministerial Order in the summer of 1992, a staking rush ensued, with Carina / Currie Rose being one of the first groups to take advantage.

Under the new regulations a permit would have a term of ten years and require assessment work of \$5.00 per hectare for the first two years (\$2.50 per year), in the third and fourth years \$10.00 per hectare (\$5.00 per year), in the fifth and six years \$10.00 per hectare (\$5.00 per year), in the seventh and eighth years \$15.00 per hectare (\$7.50 per year) and in the ninth and tenth years \$15.00 per hectare (\$7.50 per year). A permit, when converted to lease, under the new regulations requires the same annual rental of \$3.50 per hectare but there is no assessment work requirement.

A compilation of surface rights holders within the project area is beyond the scope of this report.

1.3 General Geology

The geology of the Peace River Arch area (PRA) has a significant part to play in the merit of the Peace River Diamond Play. The area rocks have undergone a complex history of accretion sedimentation, uplift and deformation.

The centre of attention in the Peace River Diamond Play coincides with the Peace River Arch, well known to the Oil & Gas Industry in Western Canada. The Peace River Arch is an area of uplift where the Phanerozoic cover rocks have been disturbed within the Western Canadian Basin which has given rise to accumulations of Oil & Gas in strata from Devonian to Cretaceous in age. The area of the PRA is defined for the purposes of this report as the area within the Devonian subcrop edge. The Arch's Devonian uplift developed several fault structures on its crest and flanks which are commonly filled with locally derived clastic sediments. These structures, which are very important for the developing of porosity for Oil & Gas, may also have been the later conduits for Kimberlitic intrusion in the Peace River area.

The underlying crystalline basement of Northern Alberta is made up of a series of Archean and Proterozoic tectonic domains. The tectonic history of the Western Canadian Craton is still not well understood but it appears that the Buffalo Head and Chinchaga Sub-cratons appear to have been underplated with Archean crust as a result of sub-duction during collision when the domains were accreted to the shield 2.0 billion years ago. Previous to that, the Buffalo Head sub-craton may have been part of the Slave before being faulted off by the Hay River Fault. The underplating of the Buffalo Head therefore provides for the deep cool keel required for diamond preservation.

The underlying exposed bedrock strata in the PRA is almost all of Cretaceous age. Some strata of Tertiary age may occur in the project area but have not been mapped. The various shallow sandstone and shale formations present are chiefly exposed along the valleys of the major rivers and in outcrops along roads. A Table of Formations is provided in Table 2. Regional geology is shown on Drawing A94-194-04. The deeper formations are only exposed in drill cuttings or core from the large number of wells drilled in the area.

The shallow underlying bedrock exposed in the area consists of a sequence of Lower to Upper Cretaceous sandstones and shales. The following is a description of the exposed units in the PRA area (Green, 1972) in ascending order.

The Peace River Formation of Lower Cretaceous age outcrops in the Peace River valley. It is composed of a clean friable sand with interbeds of Coal (Paddy member), fine-grained quartzose sandstone (Cadotte member), dark grey silty shale (Harmon member), fine-grained glauconitic sandstone, silty interbeds in lower part (Notikewin member); shoreline complex. The Shaftesbury Formation of Upper and Lower Cretaceous age is composed of dark grey, fish-scale bearing shale, silty in upper part, numerous nodules and thin beds of concretionary ironstone, bentonite partings, lower part with thin silty and sandy intervals; marine.

The Dunvegan Formation of Upper Cretaceous age consists of grey, fine-grained, feldspathic sandstone with hard calcareous beds, laminated siltstone and grey silty shale; deltaic to marine. The Kaskapau Formation of Upper Cretaceous age consists of dark grey silty shale, thin concretionary ironstone beds, interbedded in lower part with fine-grained quartzose sandstone and thin beds of ferruginous oolitic mudstone; marine. The Smoky Group of Upper Cretaceous age to the east of the Peace River is composed of dark grey shale and silty shale, nodules and thin beds of concretionary ironstone; marine.

The Peace River Area is also underlain by bituminous oil sands of the Bluesky-Bullhead Formation of Lower Cretaceous age. These oil sands are similar in nature to those at Fort McMurray except the Peace River Oil Sands occur at a much greater depth of 550 m.

Table 2.

Peace River Area
Table of Formations

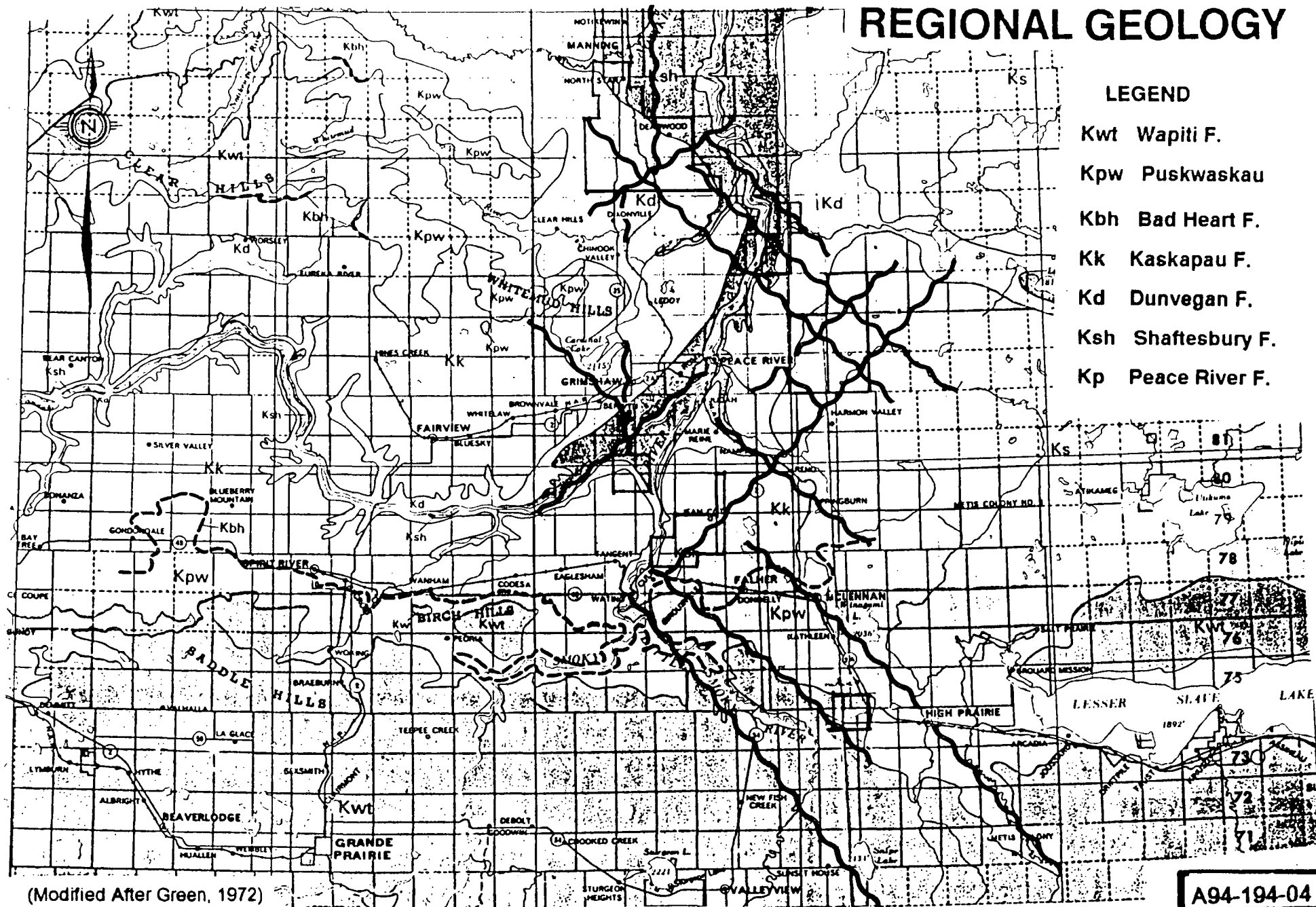
Age	Sym	Formation	Age	Member	Description
Pleistocene	Qsg			Overburden	Unconsolidated Sand & Gravel
Tertiary			65		
Cretaceous	Kwt	MONTANA GROUP ? Wapiti F			gray brown clays with massive SST, ironstone nodules, thin clay seams; scattered coal beds, nonmarine
	Ks	SMOKY GROUP Smoky Group			dark gray shale and silty shale, ironstone partings and concretions
	Kpw	Paskwaskau F.		First White Spec Zone	
	1WS				
	Kbh	COLORADO GROUP ? Bad Heart F			brown SST, medium to fine grained, fossiliferous, marine
	Kk	Kaskapau F.			Shale, dark to black, thin bedded, some sandstone
	Kd	FORT ST. JOHN GROUP Dunvegan F			gray fine grained feldspathic SST, alternating SST/shale SST beds to 50ft., detrital to marine
	Ksh	Shattlesbury F.		Upper Member	dark gray fish scale bearing shale,
	Kshu		100	Base of Fish Scales ??	numerous nodules with thin beds of Fe
	Kshl			Lower Member	silty and sandy shale
	Kp	Peace River F.		Paddy	massive SST
	Kpc			Cadotte Member	fluvial deposits
	Kph			Harmon Member	quartzose SST, shale, conglomerate
	Kpn			Notikewia Member	dark gray silty shale
	Ksr	Spirit River F.		Father	fine grained glauconitic SST
	Wisc			Wilrich	sandstone, shale, coal
				Base of the Fish Scale??	Shale
	Kb	MANNVILLE/BULL HEAD GROUP Cadomin Gething F. Bluesky	106	Basal Cretaceous	conglomerate SST, shale, oil sands sandstone, shale, oil sands

(modified after Green, 1972.)

REGIONAL GEOLOGY

LEGEND

- Kwt Wapiti F.
- Kpw Puskwaskau
- Kbh Bad Heart F.
- Kk Kaskapau F.
- Kd Dunvegan F.
- Ksh Shaftesbury F.
- Kp Peace River F.



(Modified After Green, 1972)

A94-194-04

The structure of the Peace River area appears dominated by basement features. The superposition of modern drainage networks on the paleo-drainage network shows remarkable coincidence, suggesting an underlying structural control. Major structures appear oriented N-S, NW and NE. Lesser structures appear oriented E-W and NE.

A mantle of varying thickness of superficial Pleistocene and recent deposits cover the project area. These deposits are thickest in buried old channels and in present day channels. Some stratified drift is evident but no detailed mapping has been undertaken. Reworked gravels are present along several old channel ways. Some of these channels may be of Tertiary age. Overburden ranges in thickness from very shallow (less than 1 m.) to in excess of 300 m. but averages perhaps 15 m in flat areas.

2.0 The Peace River Diamond Play

The Peace River Diamond Play surrounds the town of Peace River Alberta, which is 350 km. (220 miles) north of Edmonton. Monopros has been active in Northern Alberta since the mid 1980's, and has held ground in the area since 1990 and has been carrying out an exploration program of airborne geophysics, heavy minerals sampling and drilling in areas near Nampa, Marie Reine, Mountain Lake and Fairview (Hawkins, 1994). Monopros has located a portable processing plant in Grande Prairie to process samples both from Peace River and Lac De Gras. Following past secrecy in all their activities, Monopros has released no results from these programs.

Monopros holdings in the Peace River area consist of two large blocks north and south of Peace River as previously shown on Drawing A94-194-02. The two blocks cover 650,000 hectares (1,600,000 acres). Monopros at the time of acquisition would have had to post a \$6,500,000.00 bond. This bonding requirement is no longer required, making land acquisition much easier.

Monopros has been very quiet about their activity in this area. Monopros was believed to have renewed all their permits in August 1993 for another two year term. They have apparently been conducting a regional overburden drilling program over their whole claim block as well as a more detailed shallow drill program tracing out an old channel near Nampa. Field reports indicate that Monopros has also been drilling closely spaced holes using rotary and core equipment along a NE trending structure near Nampa, about 22 km. SW of Peace River. Prior to August 1992 no other companies were active in this area, however shortly after our initial staking several other companies quickly followed.

Field examination indicates, given the age of the cover rocks in the Peace River area, is such that if the kimberlites are of 100 million years or younger they should occur under the glacial drift. Some stratigraphic work on tuffs present in the area (Ritchie, 1957) suggests a possible age of 52 million years. The area has a similar structural arch setting to the Saskatchewan diamond plays but the kimberlites here are likely exposed below shallow glacial deposits.

The property area was examined on August 11-15, 1992 by the writer, to examine areas of interest, assess overburden thickness, cultural features, area geology and to determine previous activity by Monopros. It was clearly evident that Monopros was keeping a tight lid on their activities. Previously a drilling program had been underway near Nampa, which is about 20 km. SE of Peace River.

The regional analysis completed in August 1992 (Hawkins, 1992) for Consolidated Carina Resources Corp. identified 20 good magnetic anomalies on Monopros claims which could be associated with clusters or groups of pipes and a similar 24 unprotected anomalies in adjacent areas.

As a result of field inspection and drilling activity rumours, we recommended and filed permit applications on August 13, 1992 to acquire five townships NE of Nampa along the Harmon Valley. The permits covered several coincidental magnetic highs along the NE trending structure Monopros was active on. After further data analysis an additional five permit applications were filed on August 19, 1992. to cover a number of magnetic highs north of Dixonville. Another six permits were applied for in the following week to cover other areas of interest around the Monopros claims. One final permit was applied for in December to cover a gap near Dixonville just before the large staking rush which took place in the later part of December 1992 in Alberta.

Subsequent to the rush, many companies found themselves land rich but cash poor. Only a small number of these companies carried out field programs. Several companies (TUL Petroleum and Ultrasonic Industrial Sciences) conducted regional heavy mineral sampling of their properties north west of the town of Peace River. One company (TUL Petroleum) conducted ground geophysics on one target in the Whitemud Hills Area. Ridgeway Petroleum carried out an airborne survey over their block north and east of Peace River and is expected to drill several geophysical targets early in 1995.

The diamond play has therefore never been fully explored because of the lack of an announced discovery. Interest by other stake holders has waning with the lack of any significant positive results. In spite of this, Carina carried out between 1992 and 1995 a modest program of drill cutting sampling (Hawkins, 1993), regional studies (prospecting, mapping, image analysis) and ground geophysics.

2.1 Sampling of Delineation Wells at Shell Heavy Oil Plant

In January 1994 Shell Canada Resources drilled three delineation wells on overlapping Petroleum and Natural Gas leases to Carina's Metallic Minerals Permit #939303125 (Twp85 R18 W5). Shell had kindly consented to the sampling of the shallow parts of these wells. The three delineation wells were drilled to define the Bullhead zone at vertical depth of 550 m. in preparation for the drilling of a Horizontal Well from nearby existing heavy oil plant. Only two of the wells were sampled. The two sampled wells are:

Shell Cadotte 9-17-85-18 W5 or Hole "B"

Shell Cadotte 8-17-85-18 W5 or Hole "C"

The two sampled wells are located 1500 m. north of Carmon Lake and just SW of the existing plant. Rat holes for both holes were drilled by a large truck mounted auger drill with a 12 m. mast. The 20" surface conductive casing was set at between 40-50 ft. and the 18" well head casing was set at 65 ft. Both were cemented in place before the larger oil patch rig was positioned.

Samples were collected in 25 litre plastic pails every 1.2 m. (5 ft.) or less when different material was encountered. A total of 19 samples were collected from the two holes from the larger auger on a representative grab basis. With temperatures below -20° wet material froze quickly.

At Hole "B" six additional samples were collected from the Shale Shaker on the larger oil patch rig. Sample intervals for these samples were less precise given the transit times, rapid penetration and lost circulation. A standard bentonite drilling mud was used as a drilling fluid for the hole. Several zones of lost circulation prevented full recovery of cutting from the shale shaker. Those zones of lost circulation are likely due to air filled gravel beds.

Samples were shipped to Saskatchewan Research Council In Saskatoon for Indicator Mineral Processing. Upon arrival at SRC, samples were thawed and three composite samples prepared. Sample P1 was from the shallow portion of hole "B" while P2 was deeper portion below 12.2 m. Sample P3 was from hole "C". These composites were prepared as interim method of assessing the merit of completing full analysis on all samples and determining some sampling statistics. Two of three composite samples returned anomalous indicators and further specific intervals were then also processed.

Preliminary sample processing of the three composite samples prepared from the original 24 samples intervals yielded prospective 5 pyrope garnets and 1 green (chrome diopside?) from sample P2 and 1 chrome diopside from P3. Numerous other opaque grains and some possible indicator grains were also present. All the prospective indicators were picked and additional possible grains of interest and opaque grains were added to obtain 10 grains from each composite sample for probing. The remaining opaque mineral grains were not selected for probing due to budget limitations.

Of the original 30 grains microprobed, 7 are undisputed garnets, 2 possible garnets, 1 chrome diopside, 12 hematite, 7 ilmenite and 1 quartz grain. Two of the garnets are grossular-uvarovites (Ca-Cr) that fall into the G-7 class (Dawson & Stephens, 1975), although they are significantly more calcic than the expected range. This extreme calcic nature may imply a higher probability for a metasedimentary origin rather than a kimberlitic origin. The other five garnets are G-9 chrome pyropes. One grain is also a borderline G-9/G-10 garnet using Dawson and Stephens criteria but on the calcic or G-9 side of Gurney's $\text{CaO-Cr}_2\text{O}_3$ diagram. The two possible garnets are enriched in SiO_2 , K_2O , and Na_2O relative to typical garnet compositions. Both grains may be garnet-pyroxene solid solutions.

One grain was classified as a C-5 chrome diopside. It should actually be called a chromian diopside because the Cr_2O_3 content is below 2%.

The opaques consisted of largely ilmenite and hematite. The ilmenite grains are not Mg-bearing to any degree, thus they are not Mg-ilmenite (picro-ilmenites) indicators. Based on the lack of success in finding any opaques of interest from the limited grains selected, further probing of opaques was deferred in the follow-up probe work.

Two types of green indicator minerals (uvarovite and chrome diopside) were present in the heavy mineral concentrate from samples. Uvarovite is a member of the garnet group and is a rare gemstone in its own right, reaching values of 25% that of diamonds. Chrome diopside is one of the basic kimberlitic indicators. Uvarovite have been reported to occur in South African kimberlites but can also have a metasedimentary origin. Both colour and grain morphology can be used to discriminate between these minerals. The uvarovitic garnets are deep emerald green and occur as rounded to sub-rounded anhedral grains, often with frosted or rimmed exteriors. The chrome diopsides are bright apple (almost lime) green and are often sub-hedral with some evidence of typical pyroxene 90° cleavage.

Results from the composites indicated the presence of G-9 garnets and chrome diopside which were considered good kimberlitic indicators. Further samples were processed and additional grains recovered. From these grains 79 prospective pyrope garnets, chrome diopsides and uvarovites were selected.

The CaO-Cr₂O₃ plot for all purple garnets recovered at Carmon Lake is shown in Drawing A94-194-05. All grains fall on the G-9 side of the diagram. Five borderline G9/G10 are present. Several garnet grains with reaction rims are present. Five green uvarovites were also recovered. One titanium pyrope was also recovered from B-12.

Samples also yielded 12 chrome diopsides of which only 3 were of the preferred composition. The chrome diopsides appeared limited to the upper part of the anomalous interval within the hole. Several grains appeared to be clinopyroxene solid solutions.

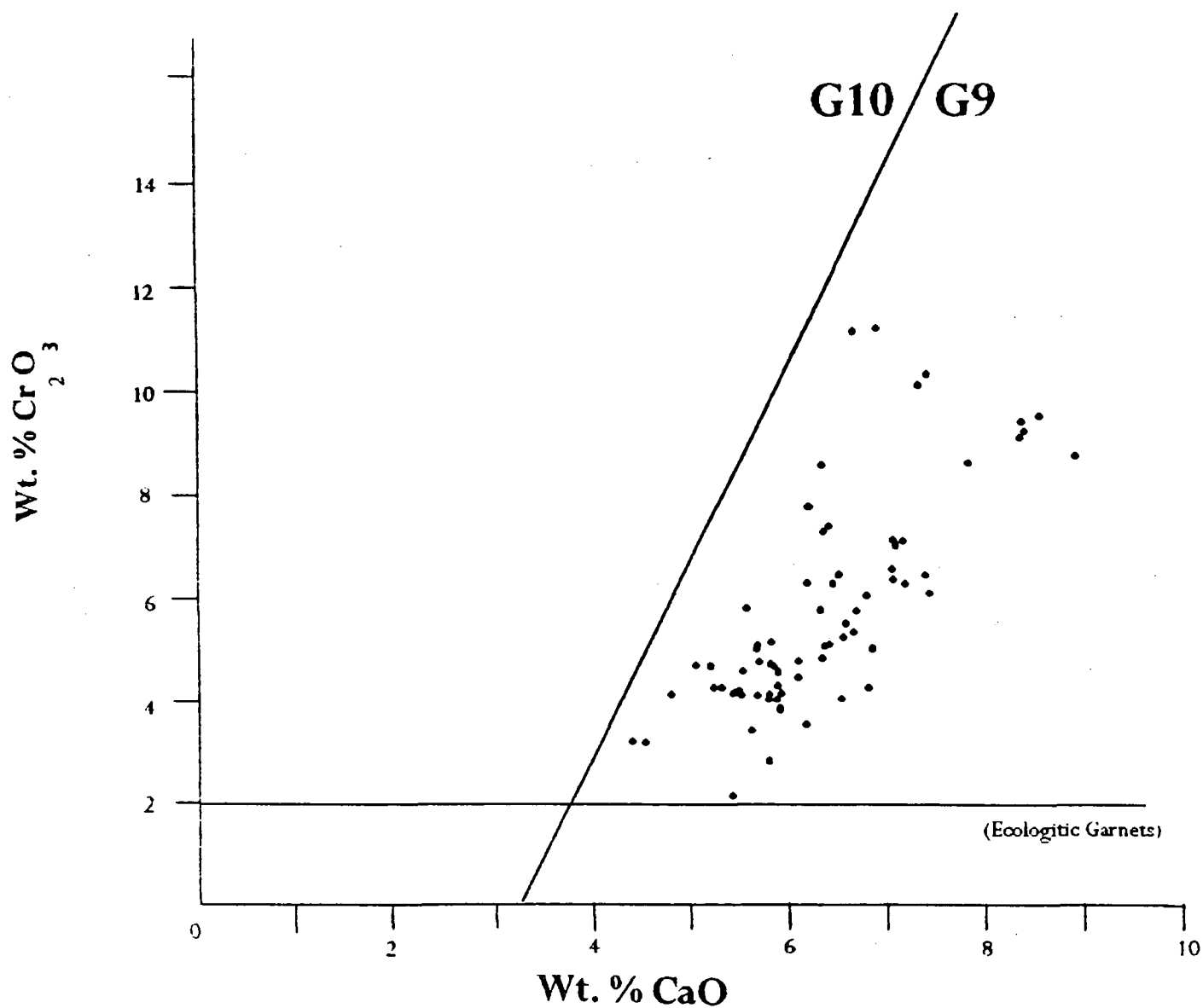
The one sample processed at Drill Site "C" returned one borderline G-9/G-10. Previously a chrome diopside had also been recovered from the composite prepared from this hole. Further processing of the remaining samples from the hole may now be warranted.

Drilling near Carmon Lake resulted in the recovery of 60 Pyrope garnets of which 8 are borderline G-9/G-10, 15 chrome diopsides, and 7 uvarovites. Interpretation of grain geochemistry shows that the grains are good kimberlitic indicators. The pyrope garnets fall into the garnet Lherzolite classification field, the most common type of mantle derived xenolith found in most kimberlites. The presence of several grains of chrome diopside and the occurrence of partially preserved kelyphitic rims on several garnets suggest a nearby source. These results appear to confirm the presence of unmapped kimberlitic intrusions in the Carmon Lake Area.

The discovery of kimberlitic indicator minerals near several aeromagnetic pipe-like features suggests that these features may be kimberlites. Channels like the one in which the indicator minerals occur tend to have steep gradients and narrow. Analysis of aerial photography suggests the channel may have its headwaters to the south of the Shell Plant near several aeromagnetic targets.

The discovery of kimberlitic indicators in Peace River is a significant achievement. Although no billion dollar G-10 pyrope garnets have been found, the discovery of numerous kimberlitic indicators including preferred composition chrome diopsides and G-9 garnets are the basis for a credible diamond play which was until Carina's staking, unknown except to Monopros.

Carina / Currie Rose Carmon Lake Drilling Purple Garnets



2.2 Landsat Imagery

In order to define the structural framework for the PRA several colour composites of Multi-Spectral Scanner (MSS) and Thematic Mapper (TM) scenes were examined. Later digital MSS data was acquired, processed using PCI EASI/PACE 5.2 software and interpreted. The principal MSS scene used for this study was acquired on 03-SEP-89 (WRS 046-021). Part of this scene is shown in *Photo 1*. We have undertaken similar structural studies in Saskatchewan and the N.W.T. for diamonds (Hawkins, 1990 & 1992).

The PRA region is covered with a mix of vegetation types and numerous cultural features making linear analysis not a simple task. It was possible with careful study to delineate regional and local structures. Several near circular vegetation, tonal or textural features were also outlined. Image analysis enabled the definition of the structural framework for the area and defined a number of areas of interest.

Although it was not expected to directly detect kimberlites, the principal aim of the image analysis was to define regional lineaments which could be deep seated structures through which kimberlites magna could intrude and reach surface. Our own exploration experience in the past (Hawkins, 1990 & 1992) indicates that the intersections of major structural features appear to localize the emplacement of kimberlite pipes. Once an area is selected, further image analysis can provide relatively inexpensive methodology of preliminary evaluation before further field work.

In the PRA area drainage patterns present today appear to be a reflection of underlying structures. The present course of the Peace River appears similar to previous courses through recent history. The present channel appears to have cut through previous buried channels of itself. The old channels were likely infilled during glaciation. Part of the course of the Peace River is controlled by deep seated old structures. The same is likely true for tributaries of the Peace River.

The PRA is dominated by NE, NW and N-S linears as shown in Drawing X94-194-7. Several lessor NW and NNW linears appear to offset or truncate NE trending linears. Image analysis focussed our principal attention early on: the area just north of Harmon Valley, the area north of Dixonville, Northstar, and Triangle.

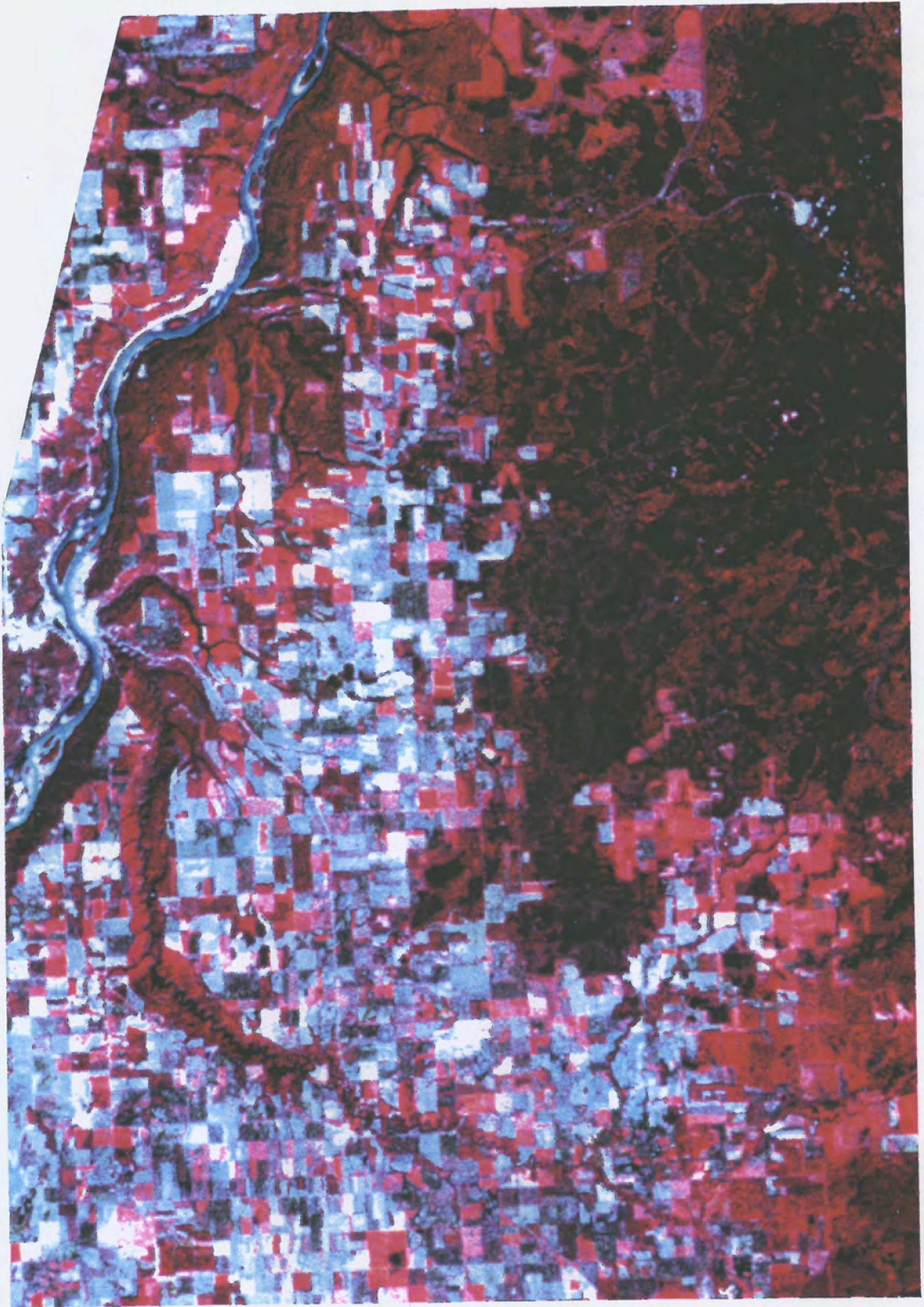


Photo 1.

Harmon Valley Area (Bands 1-2-4)
Scale 1:~~250~~0,000

Harmon Valley Area

The Harmon Valley area which is located about 25 km. east of the town of Peace River is dominated by the Heart River Drainage System. The Carina permits in this area shown on Drawing A94-194-06 adjoin blocks held by Monopros to the south. The area is marked by major NW and NE linears with lesser NE, NW, NNW and N-S linears. The NE orientation is the most pronounced. A N-S through going linear located near the Three Hills airstrip is visible on several Landsat scenes.

The area is relatively flat except for the incised river and creek valleys. The southern portion of the area is dominated cleared farmer's fields producing a patch work scene of pasture and canola while the northern portion which makes up Carina's Harmon block is largely forested. Some areas have been logged off and are currently regenerating. A number of seismic lines also cross the area. No uniform vegetation cover therefore exists.

The Harmon Valley area is underlain by Dunvegan Formation, a sequence of alternating sandstones / shales and the Smokey Group Shales. The North Heart River appears to partly follow a NE trending fault zone which also appears to be an old buried channel. The North Heart River Fault may be pre-Cretaceous in age. Several parallel NE linears are also present, one of which appears to be offset by a NW linear near the Harmon Valley campsite (Twp83R18W5S5). Clearly the NE orientation is the older of the two.

The intersection near the campsite and those further north on parallel or conjugate linears were deemed of interest given the exploration activities to the south on permits held by Monopros. These intersections of NE and NW structures may have localized the intrusion of kimberlites pipes.

The cause of the N-S linear is not so clear but it may be a major crustal feature. It is not a narrow linear feature but a relative broad linear feature which exists well to the north and south of the PRA. The feature appears to be present both as a vegetation change gradation and a textural feature. It is clear that the NE and perhaps the NW linears are a reflection of basement features which are likely faults which may have been reactivated over time a number of times, providing structures by which kimberlitic magmas could have reached surface.

Age 18W5

Simon
Lakes
Simon
Lakes

9393030125

Shell Drilling

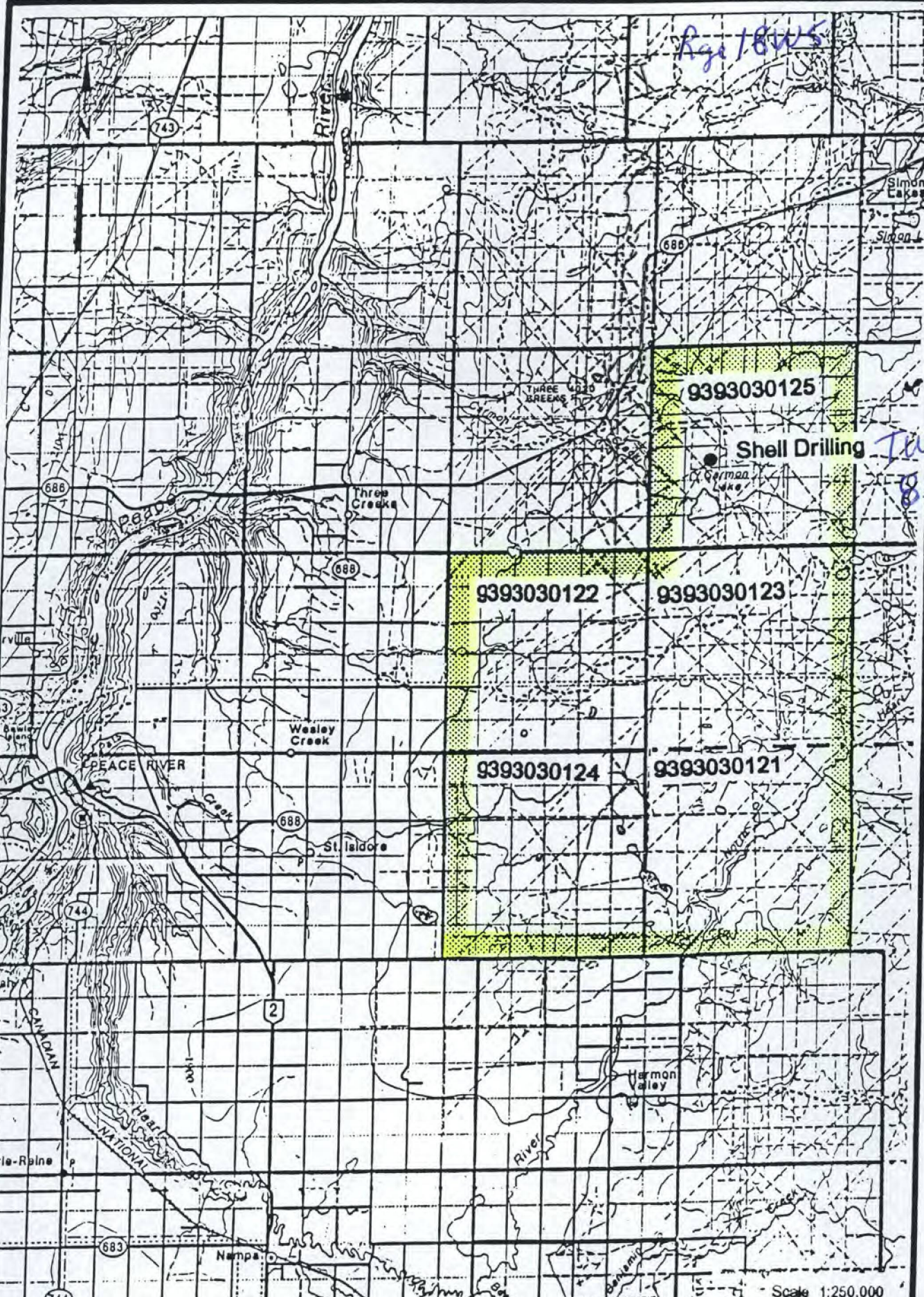
TWP
85

9393030122

9393030123

9393030124

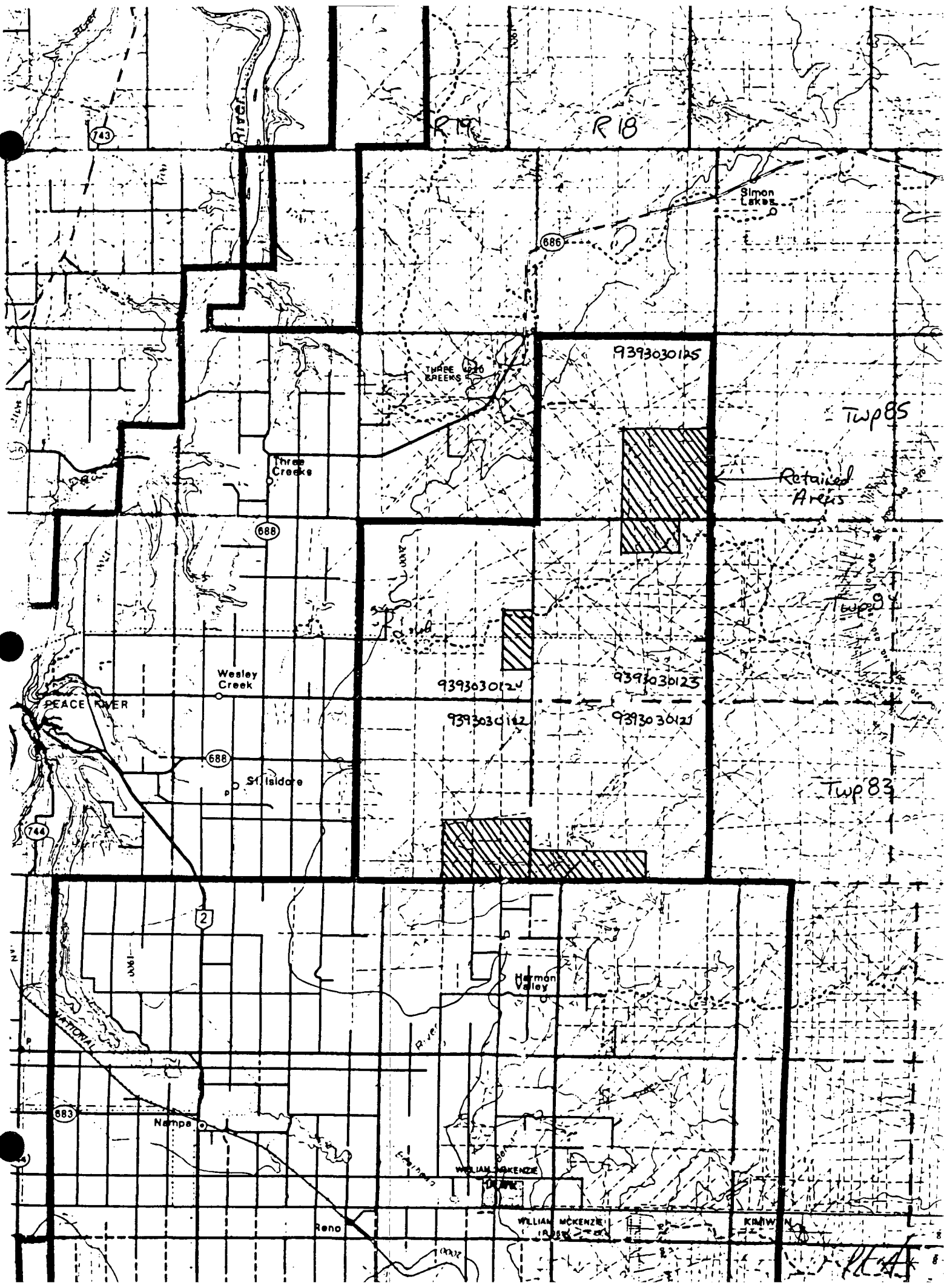
9393030121



HARMON PERMIT BLOCK

Scale 1:250,000

A94-194-06



R 18

R 18

Simon
Lakes

686

9393030125

THREE
CREEKS

Twp 85

Retained
Areas

688

Three
Creeks

Wesley
Creek

9393030124

9393030123

9393030122

9393030121

688

St. Isidore

Twp 83

2

Herman
Valley

583

Nampa

WILLIAM MCKENZIE

WILLIAM MCKENZIE

KRW

Reno

Dixonville to North Star

The Dixonville area is located 55 km. NNW of the town of Peace River and like the Harmon Valley area is covered with a mix of vegetation types and numerous cultural features. The Carina Permit blocks in this area adjoin blocks held by Monopros to the south. The SW half is largely poorly drained upland forest covered while the NE half is better drained cleared farm land. The area is dominated by N-S, NW and NE trending linears. Lessor NNE and E-W linears are also present. Of particular interest is area where N-S, NW, NE and NNE intersect forming an apex near North Star.

The area is a relatively flat upland with a number of creeks draining towards the NE and the Peace River. A number of small lakes dot the area and the SW corner is largely poorly drained forest. Numerous seismic lines are present in the forested areas. The CNR and Highway #35 transect the property.

The area is underlain by Dunvegan Formation sandstone\shale and in the NE corner by the Shaftesbury Formation shale. Several exposures of Dunvegan shale occur in road cuts along Highway #35. Overburden is relatively thin and ranges from 3 m. to 40 m. except near the Notikewin Creek where the old channel is over 200 m. deep. This old wide channel near Manning, represents the northern limit of the property and near the northern boundary of the PRA. The channel appears to be an old tributary channel to the Peace River cutting almost as deep as the Peace River.

An E-W linear along Buchanan Creek at the north end of the block just south of Manning appears to be cross-cutting to other linears. The linear may be related to basement faulting associated with the Hines Creek Graben. The linear appears to intersect the wide channel near Manning then swing to the WSW.

The principal area of interest based on Landsat Image analysis is the apex of several linears which intersect just west of Northstar. Here a NW linear which extends from the Harmon Valley area to intersect NE and NNE linears. This intersection appears to occur near the northern flank of the Hines Creek Graben. Like Harmon Valley, these linears likely represent deep penetrating basement faults which may have been reactivated over time a number of times, providing structures by which kimberlitic magmas could have reached surface.

Triangle

The Triangle area is located 88 km. SSE of Peace River and 20 km. of High Prairie near the intersection of Highway #2 and #49 as shown on Drawing A94-194-21. Our attention was first focussed on this area based on a circular magnetic anomaly present on GSC aeromagnetic (G.S.C., 1989a). The property adjoins Monopros permits to the west. The Triangle area is marked by minor NE and ENE linears adjacent to major NW and NE linears.

The area is relatively flat, divided between 70% forest (with some swampy areas) and 30% cleared farm land. Most fields appear to be hay or pasture. Maurice Lake occurs on the east boundary of the property and McLeans Creek traverses the centre of the property E-W. Some concession roads have been developed in the western end of the property.

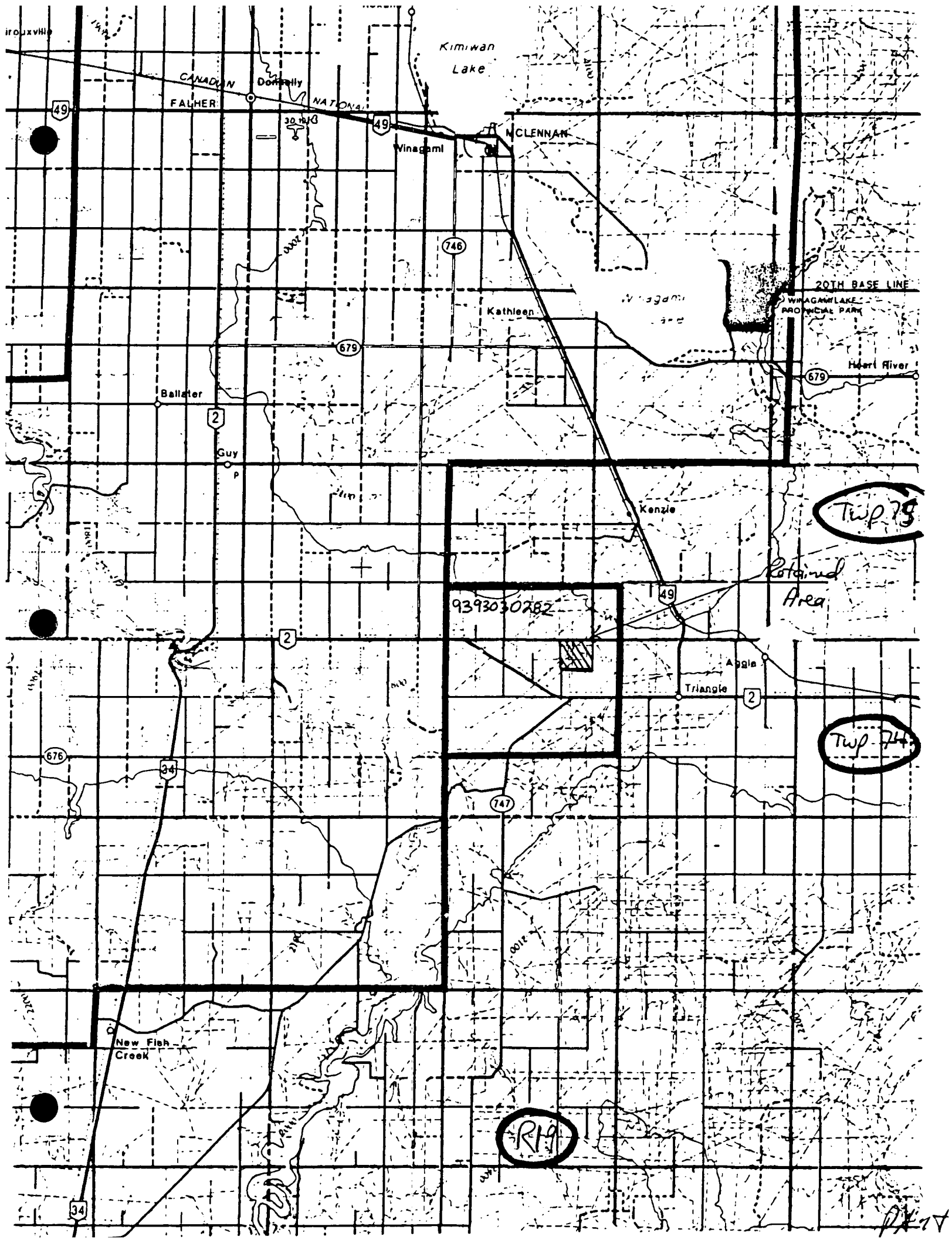
The NE and ENE linears appear as linear vegetation features which may be partly due to the presence of buried channels along McLeans Creek. The NW and NE linears appear as broad features likely representing deeper basement fault structures. Field examination indicates these linears are vegetation trends or topographic features which could be associated with underlying structure.

The property is underlain with Wapiti Formation (clays and sandstones) and the Paskwaskau Formation (shale). The property area is cut by a deep old buried channel which extends from High Prairie west into the current Smoky River area. A number of oil wells exist in the area with recent activity both to the south and northwest of the property.

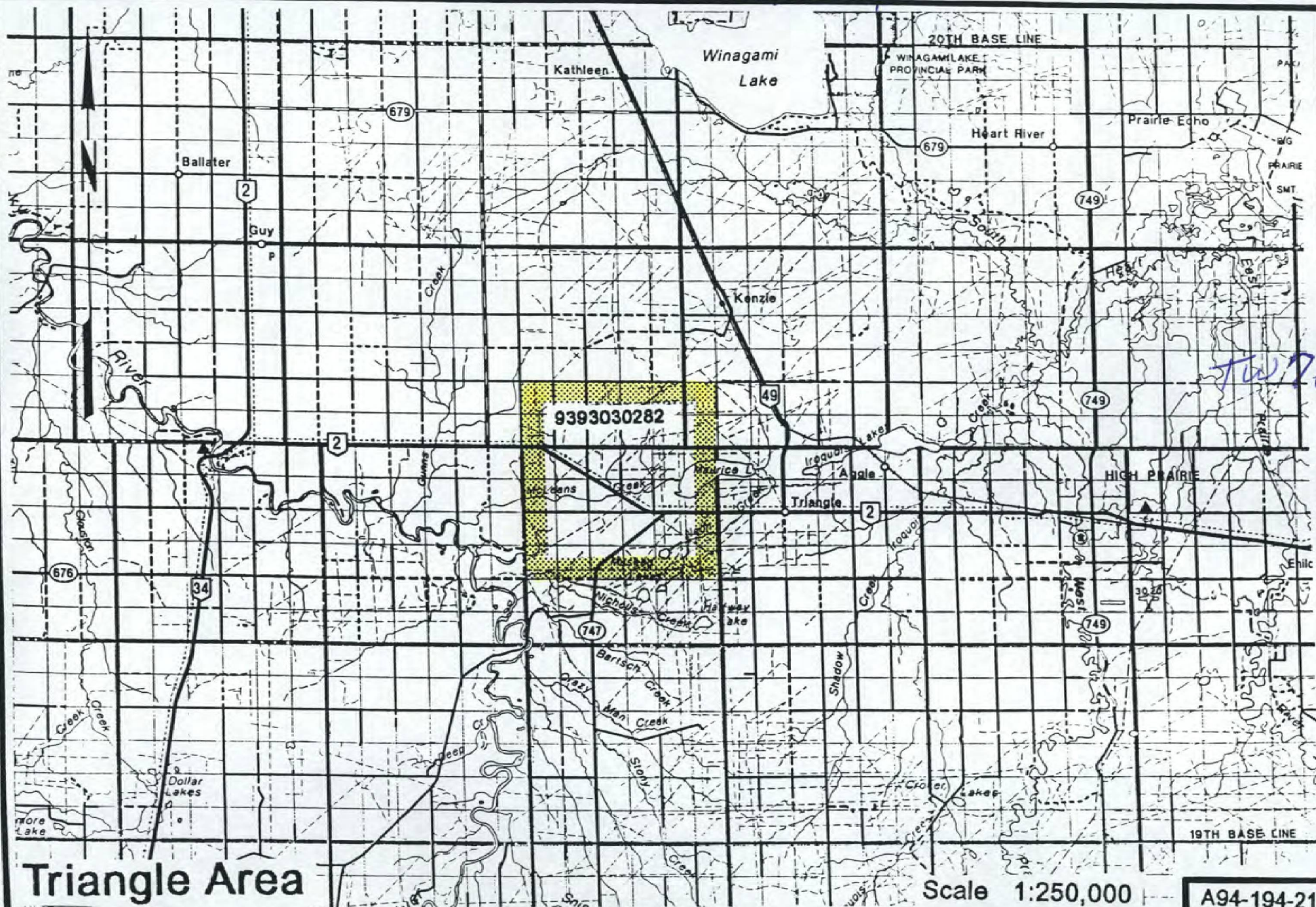
These linear features combined with the GSC aeromagnetics, proximity to Monopros holdings and adjacent major basement structures defined this as an area of interest.

2.3 ERS-1 Radar Imagery

Sampling of Shell delineation wells near Carmon Lake yielded kimberlitic indicator minerals from an old buried channel. These kimberlitic indicators which were likely derived from a nearby kimberlitic source (Hawkins, 1994). Several old buried channels are known in the Peace River map area (Fox et al, 1987) but are not well defined in the Harmon Block area. In order to define these buried channels and the smaller upper tributaries especially in the Harmon Block area, Synthetic Aperture Radar (SAR) satellite data was acquired for the area.



Rge 18W5



Triangle Area

Scale 1:250,000

A94-194-21

SAR data was acquired from the Earth Remote Sensing Satellite (ERS-1) launched by the European Space Agency. The selected scene was orbit 4788 Frame 1125 acquired on 15JUN92. Data was acquired as SAR georeferenced Fine Resolution (SGF) format on a 6250 bpi CCT tape which was later transcribed to an 8 mm. Exabyte tape for image analysis and processing using PCI EASI/PACE 5.2 software. The Image covers an area of about 100 x 100 km. in size with a pixel size of 12.5 x 12.5 m. The scene is shown in Drawing X94-194-08.

SAR data was selected on the basis of being able to provide data on the surface and near subsurface material. Image analysis of this data should help enable the definition of buried channels and more detailed structural information for the area.

SAR orbital imaging systems were primarily designed for monitoring changes in the earth's environment. These systems can provide high resolution imagery to study the details of surface processes and conditions (NASA, 1987). The ability to penetrate vegetation and ground cover to reveal geological and structural features, makes it applicable to diamond exploration. Our experience indicates the depth of penetration of SAR data is sufficient to define basement geological features from a semi-quantitative mineral exploration point of view.

Radar imagery is sensitive to surface morphologic indicators of tectonic and crustal activity; this is principally due to the strong dependence of radar backscatter on changes in surface roughness, slope or dielectric constant. SAR responds to changes as a result of varying moisture content and thus can define runoff flow paths. These flow paths may be existing channels (current stream channels), buried old channels or fault traces. Fault traces are sometimes marked by increased moisture due to water outflow along the fault structure from bedrock sources.

Analysis of ERS-1 radar imagery shows a network of buried paleo-channels in the Harmon Block area as shown on Drawing A94-194-09. The channels do not however completely follow the existing drainage network.

Within the Harmon Permit Block the major paleo-channels occur at a NE orientation while the smaller tributaries occur generally at a NW orientation. One NE paleo-channel is located just south of highway #686 and follows NE towards the Peace River. The exact course north of the property between Three Creeks airstrip and the Peace River remains to be determined. In the south a paleo-channel follows part of the present course of the North Heart River.

The main channels appear to occupy lines of weakness (fault lineaments) with the upper reaches of the channels controlled partly by drainage or local structure.



Paleo-Channels

Scale 1:250,000

A94-194-09

A drainage divide separates the five permits which make up the Harmon Permit block into a northern drainage channel which flows north into the Cadotte Creek area and a southern drainage channel which flows south into North Heart River. Both channels are filled in and likely fairly deep, perhaps to a maximum of 300 m. The North Heart River Channel appears to fairly wide along its course both near Harmon Camp and on ground held by Ridgeway Petroleum et al in Twp83R17W5.

The tributary channels appear much narrower but likely have high gradients like present day tributaries to the Peace River. The tributary channels faded out on SAR fairly quickly and are lost in background noise due to blankets of glacial drift and till. These channels are lost due to the speckle of the background making them more grainy than they should be. The speckle is a multiplicative noise caused by background irregularity reflections. When the signal to noise ratio is good the channels can be located, when it degrades the channels are lost. Areas such as flat drift covered or swampy areas are difficult to penetrate to any great depth and the reflection is lost.

The channels appear to be Pre-tertiary in age and in-filled with both glacial and fluvial glacial deposits. Their orientation suggests a clear correlation with the underlying bedrock structure. Image analysis confirms the general orientation of NE, NW, and NNE linears seen in MSS and TM imagery. Numerous winter roads, seismic lines and well sites are also clearly visible on ERS-1 imagery and can be screened out with ground truthing. The structural linears can be differentiated from paleo-channels by their non-sinuuous nature, through going nature, texture and tonal features.

The buried paleo-channel just south of the Shell Pilot Plant which was intersected by the delineation wells hosted multiple channel gravel intervals. The intersected channel flows NW past the plant into a north flowing paleo-drainage system. Some of these channel gravels were air filled zones. The indicators were present throughout the section but were clearly concentrated in a bedrock channel. The course of the channel suggests a possible upstream source for the indicator minerals in the SE corner of Twp85R18W5.

Several other adjacent NW flowing tributary paleo-channels are also apparent from analysis of ERS-1 imagery. These NW paleo-channels appear to flow into a previously defined channel (Borneuf, 1981) along Highway #686 which flows north to near Cadotte Creek. The flow beyond that point is not defined but is likely north into the Peace River.

The paleo-channel along Highway #686 is cross cut by the current drainage of Carmon Creek. After glaciation drainage appears to have not returned to the old Highway #686 channel but cut the new course of Carmon Creek. This change of course is not uncommon for the Peace River area given the complex glacial history of the area. The Peace River itself has relocated itself overtime when the area was covered with a mantle of glacial drift and channels filled in.

In the SE corner of the block the North Heart River channel appears relatively broad and flat (2-3 km. wide) with a narrow incised recent channel. Multiple till and channel gravels are likely also present along it's course. Several NW and SE tributaries are visible on ERS-1 imagery and coincide largely with current drainage.

Several channels are also present in the western margin of the property near St. Isidore and Wesley Creek and generally follow current drainage. Current drainage courses are slightly incised into the relative flat surrounding area which is covered with glacial drift.

Limited data prevents further analysis but clearly a complex history of sedimentation and erosion needs to be sorted out with the fluvial-glacial history to assist in the location of the kimberlitic indicators present in the buried channel gravels near Carmon Lake. Image analysis suggests a possible source for the indicator minerals to be in the SE corner of Twp85R18W5.

2.4 Conventional Aerial Photography

Aerial photography for the Harmon block was examined for possible circular and other vegetation features. This examination although not detailed was focussed on the two principal areas of interest near the Shell Pilot Plant and along the south boundary of the Block near the Harmon Campsite. Complete black & white airphoto coverage for the block was obtained at a scale of 1:40,000 from photography flown in July and August 1988. More recent photography flown in Sept 1993 was also obtained for the area around the Shell Pilot Plant at a similar scale.

Examination of the aerial photography showed many cultural activities, vegetation patterns and changes, drainage patterns, morphyry and some structural data.

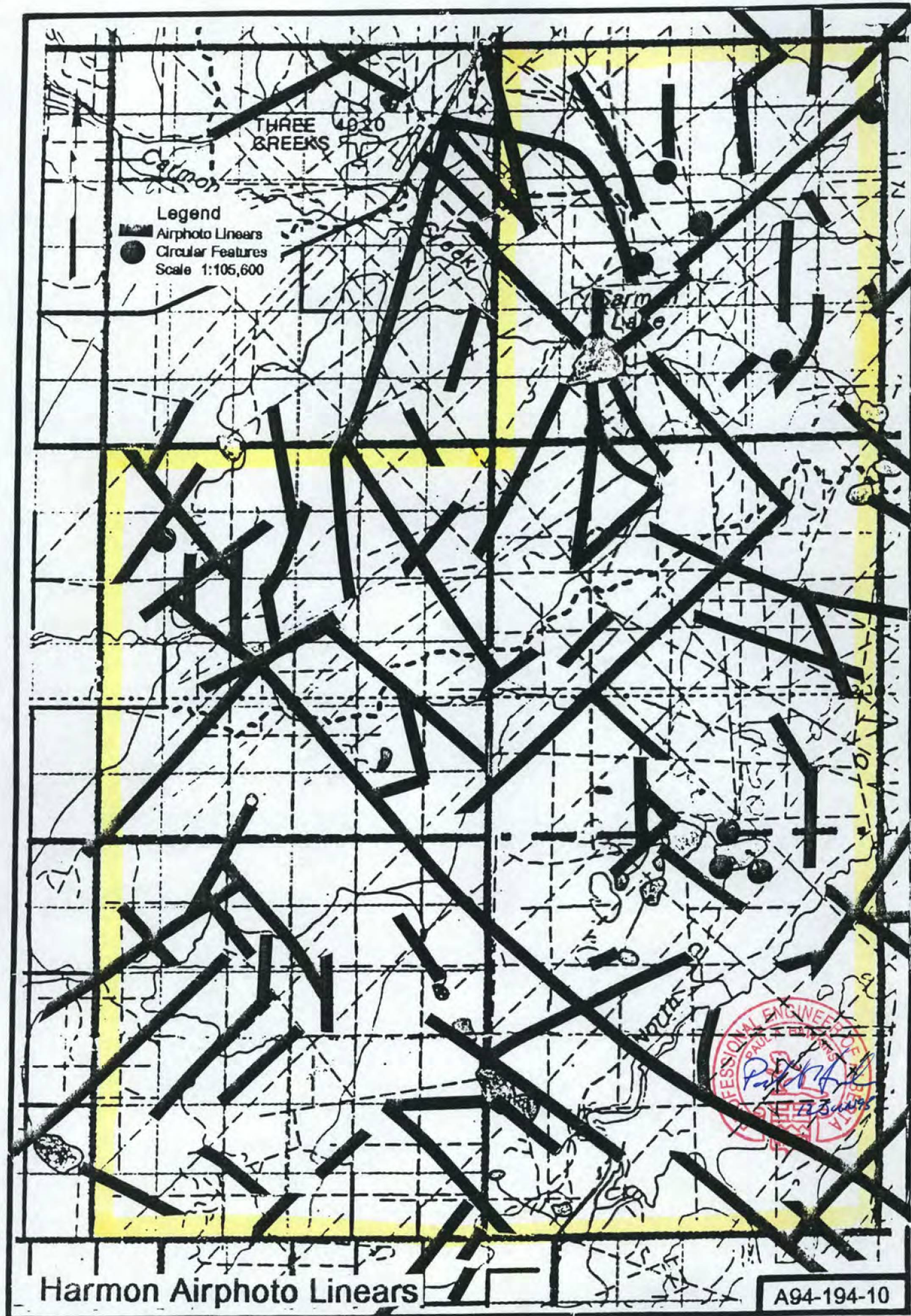
Numerous cut forest blocks were visible on aerial photography. These blocks were not known to previously exist as the area was believed to be uncleared forest. This explains some of the irregular textural nature of the images from MSS and ERS-1 data for the cut block areas which had previously been assumed to be uniform uncut areas. Numerous roads, seismic lines, well sites, pipelines and cleared pasture lands are also visible.

Vegetation patterns were indicative of both current and past drainage patterns. Several old drainage channels were visible to the east of the claim block. Several cut blocks are present in the centre of the block. Additional cut blocks are also present in the south associated with the Harmon Valley Grazing Reserve.

Structural data is also visible on aerial photography. Airphoto linears are shown on Drawing A94-194-10. The area is dominated by NW and NE linears with a lesser N-S set. The linears appear to represent changes in vegetation, new or old drainage patterns, topographic features, surface and sub-surface water conditions. All of these may have some relationship to underlying geology. The linears are similar to those present on MSS and ERS-1 imagery.

A number of circular features were also visible on aerial photography as shown on drawing A95-194-10. Most appear as positive topographic features which are likely kames or other glacial features. Several circular lakes were also noted but have not been investigated at this time.

Aerial photography shows that the area has not been untouched by man but has had extensive impacts during oil & gas exploration, forestry and farming activities. Data collected from aerial photography provided good information for determining previous cultural activities and existing access into the area for further exploration. Analysis of aerial photography has defined numerous linears which require further analysis and follow-up.



2.5 Summary of Structural Framework

Structural data collected from Landsat, ERS-1 imagery and conventional aerial photography show lineaments at NE, NW and N-S orientations with lesser orientations at E-W and NNE. These lineaments based on other geological data appear to be largely bonafide fault traces. The superposition of modern drainage networks on paleo-drainage networks shows remarkable coincidence, suggesting an underlying structural control. These features appear to be reflective of basement structures which appear to have propagated through the sedimentary cover of the PRA. This propagation of old structures to surface indicates that these structures have been repetitively active over time and are represented at surface by linear features.

The NE and NW orientations appear associated with the development of the PRA, whereas the N-S orientation appears as a very old major through going crustal feature. These structures are likely deep seated basement faults which propagate through the thick sedimentary sequence of the PRA. They likely represent pre-existing conduits for kimberlitic intrusions which could have reached surface at the close of the Cretaceous. These kimberlitic intrusions are usually localized near fault intersections. Several notable intersections occur near the Harmon Camp and Northstar. Data for the Harmon Block is compiled on Drawing X94-194-11.

3.0 Harmon Valley Area

The Harmon Valley area which is located about 25 km. east of the town of Peace River is dominated by the Heart River Drainage System. The Carina permits in this area adjoin blocks held by Monopros to the south. The area is relatively flat with about 50% under active farming and the remaining 50% poorly drained forest covered bush.

This area was selected as one of two area for ground magnetometer survey with good access. Carina and Currie Rose had elected not to complete the originally planned airborne magnetometer survey to define specific targets but to test two selected prime target magnetic highs from regional aeromagnetics (G.S.C., 1989b).

Road access along the southern boundary of the Harmon block is via good all weather gravel road from Highway #2. Access into the property is limited to several short roads to ranch sites. More extensive access into the property is possible by many cat tracks, winter roads and seismic lines present through the area. Several well sites are also present.

3.1 Ground Magnetics

In early October 1994 a 13.725 km. magnetometer survey was carried out on Permit #9393030121 & 9393030124 along the south boundary of the Harmon block. The program was conducted using EDA PPM300 & PPM400 Proton Procession Magnetometers. Readings were taken every 25m. along lines and data was collected recorded digitally. A base station magnetometer was located on located on site and used to correct for diurnal variation. Data was dumped nightly into an IBM PS/1 486SL25 Notebook computer. Field crews were based out of Travelers Motor Hotel in Peace River.

Surveying was conducted along available gravel roads initially. The main E-W road to Harmon Valley Campsite was used as a baseline. The intersection of the road with a N-S seismic line was used as an origin for the grid system. A Hip Chain and a 50 m. tape were used for distance control given the preliminary nature of the survey. No trees were cut down or flagging tape used during the survey.

The presence of power lines and culverts along and across roads caused some noise. As expected spikes were evident when directly under power lines. Other transient spikes were evident due to variation in local load factors with time, which are common in rural areas.

The presence of culverts also yields significant very localized anomalies producing high gradients which are usually easily identified. This high noise environment was considered acceptable with repeated passes or multiple readings. Other traverses in bush or farmers fields yielded cleaner data. Survey reproducibly was generally ± 1 gammas except in areas of high gradients associated with culverts or overhead power lines. Total field base level for the area averages 58900 gammas.

The targeted magnetic high is one of several on the north side of the North Heart River about 6.6 km. due north of Harmon Valley shown on Drawing A94-194-12. The regional magnetic high was suspected to be a response associated with a cluster of kimberlite pipes given the likely filtering effects during data processing and contouring of the high level GSC aeromagnetics.

The centre of the anomaly is located in Twp83 R19 S1SW W5 on property owned by Gary Hogbin. The airborne anomaly is about 160 gammas above a regional background of ± 100 gammas. There is a significant background variation in Total Field within the Buffalo Head Terraine segment of the PRA. Our aim in conducting the ground survey was to locate a 20-40 gamma circular magnetic anomaly about 1 km x 1 km. in size.

In order to assess the anomaly shown on Drawing A94-194-13 a total of 13.725 km. of magnetometer survey was carried out along access roads, seismic lines and on other lines through the bush or in farmers fields. Survey data is presented in Drawing X94-194-14 in the map appendix.

Results indicate that the large anomaly seen on GSC aeromagnetics is indeed present and likely represents a regional high with a source at depth of 2000m. This depth would put it in the basement rocks. Aeromagnetic survey shown on Drawing A94-194-13 may be compared with ground results shown on Drawing A94-194-15.

Several single station spikes appear associated with culverts, power lines or other cultural features like the Hogbin residence (L7+00W 3+50N). These single station spikes were not contoured.

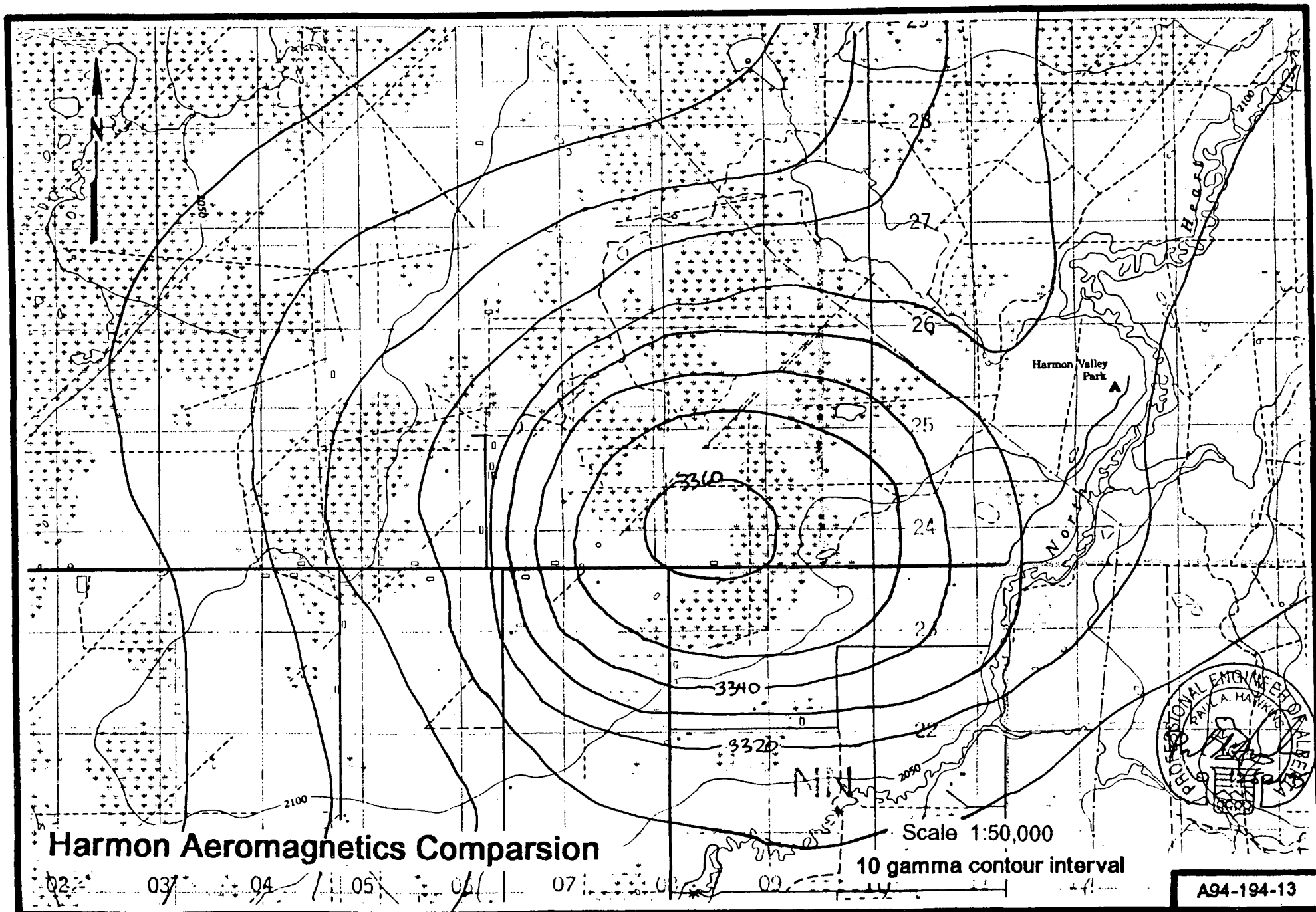
A broad weak 5 gamma high extends NW from near L0+00W 0+00N to L6+75W 6+00N. It is not clear whether this is a valid bedrock or overburden related feature. A NW trending airphoto linear occurs nearby but it is unclear if it is related. The airphoto linear appears to define a drainage contrast between better drained areas to the SW which are farmed and poorly drained swampy areas to the NE which are generally forested.

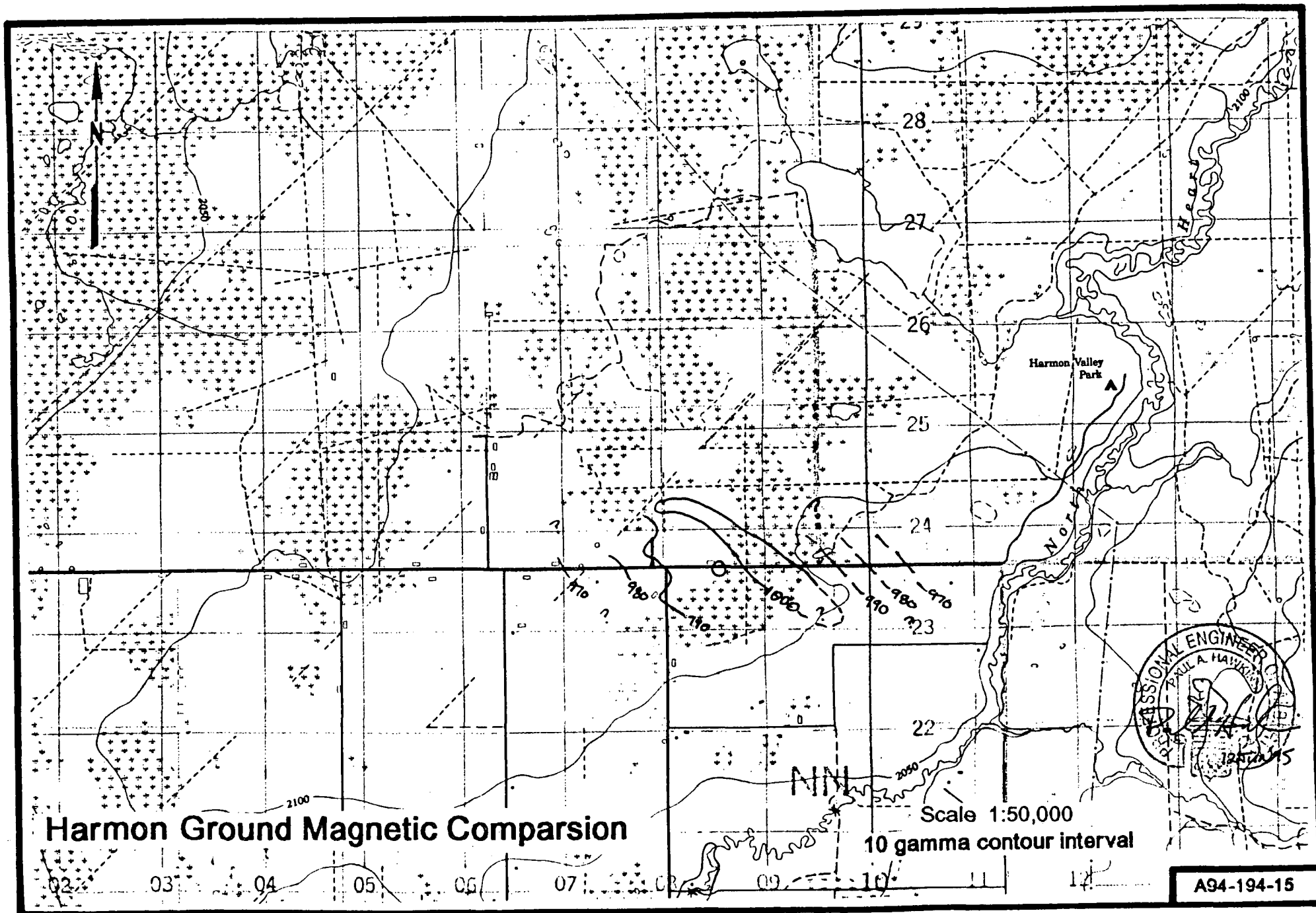
The only anomaly of any interest located occurs BL0+00 2+50W. The anomaly is a 10 gamma circular positive feature which may be a weak dipole. The anomaly is about 100 m. x 100 m. in size and fairly close to surface. The anomaly is centred right on the road. No known man-made activity can account for the anomaly. It is likely a bonafide bedrock feature. Its small size does not make it an attractive drill target at this time.

3.2 Oil Well Data

Two oil wells, Mobil Harmon Valley (both at Twp83 R19 S2 LSD02 W5) were drilled on the western flank of the magnetic high within the survey area. Several other wells were drilled in adjacent areas targeted both for the Peace River Oil Sands in the Gething Formation and Oil in Devonian reefs. The Devonian reefs in the area only contained salt water and as such most holes were considered dry.

Wells in the area are typically cased to at least 100 m. into the Dunvegan Formation. The first marker of interest picked up in the electric logs is the base of the fish scales (Bfsc) at 207 m. within the Shaftesbury Formation. The first formation pick-up in the logs is the Peace River Formation at 292 m. The Peace River Oil sands (Gething) are at a vertical depth of 600 m. here.





A94-194-15

Data from the Mobil wells indicates the holes were cased into the Dunvegan and intersected the Bfsc at a vertical depth of 207 m. Such a depth puts the target horizons relatively close to surface. The shallow stratigraphy of the area is not well known. The logs tend to show that there are at least three sub-units in the Dunvegan. Preliminary examination of the electric logs indicates further study will be required to compile the area's shallow stratigraphy. The cuttings for the wells were not examined at the ERCB Core Library however closer examination of the electric logs with available cuttings could assist in developing a better understanding of the shallow stratigraphy of the area.

3.3 Interpretation

Ground Magnetometer surveys completed over regional highs indicated that the magnetic anomaly appears to be a basement feature at a depth of 2000 m. One small dipole anomaly about 100 m. x 100 m. in area appears to be a near surface target but is not large enough to be of interest at this time.

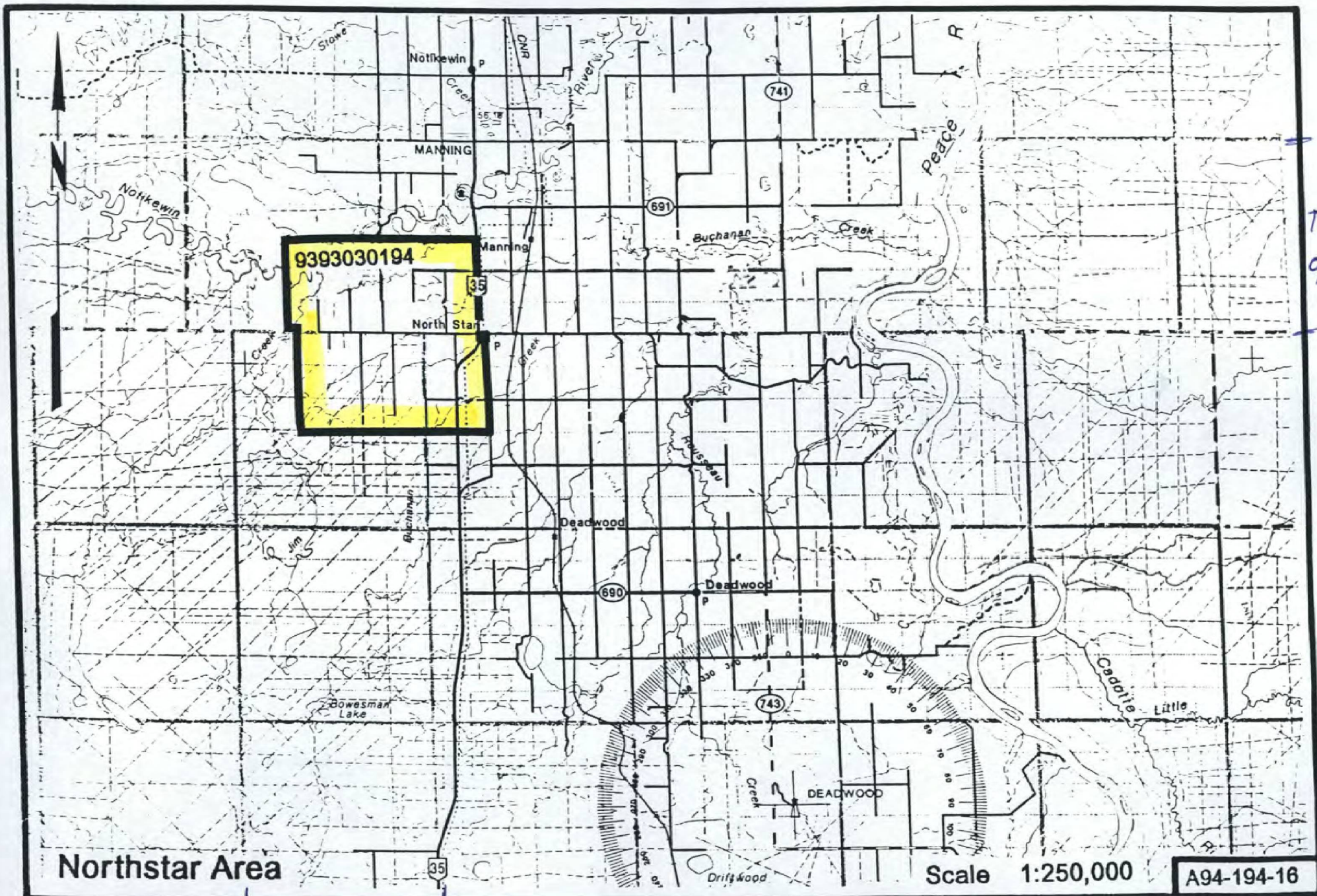
The presence of several NE trending deep penetrating structures which intersect a number of NW trending structures in the area of anomalous regional mineral sample sites (Hawkins, 1994) still makes the southern Harmon Block a prime area of interest.

4.0 Northstar

The Northstar are is located 75 km. NNE of the Town of Peace River just south of Manning as shown on Drawing A94-194-16. The North Star permit (#939303199) lies just on the northern margin of the PRA. The area is relatively flat with about 60% under active farming and the remaining 40% forest covered. The forest cover borders largely on Notikewin Creek Valley.

This area was selected as one of two areas for ground magnetometer survey with good access. Attention was originally drawn to the area because of a large 160 gamma circular anomaly just west of the village of North Star. Carina and Currie Rose had elected not to complete the originally planned airborne magnetometer survey to define specific targets but to test two selected prime target magnetic highs from regional aeromagnetics (G.S.C., 1989b).

Road access into the property area is excellent off Highway #35 with good all weather gravel roads on about half of section lines. In forested areas seismic lines are present. Some active logging is present to the west.



4.1 Ground Magnetics

In early October 1994 a 15.515 km. magnetometer survey was carried out on Permit #9393030199 to assess the airborne anomaly. The program was conducted using EDA PPM300 & PPM400 Proton Precession Magnetometers. Readings were taken every 25 m. along lines and data was collected recorded digitally. A base station magnetometer was located on site and used to correct for diurnal variation. Data was dumped nightly into an IBM 486SL25 Notebook computer. Field crews were based out of the Manning Motor Inn.

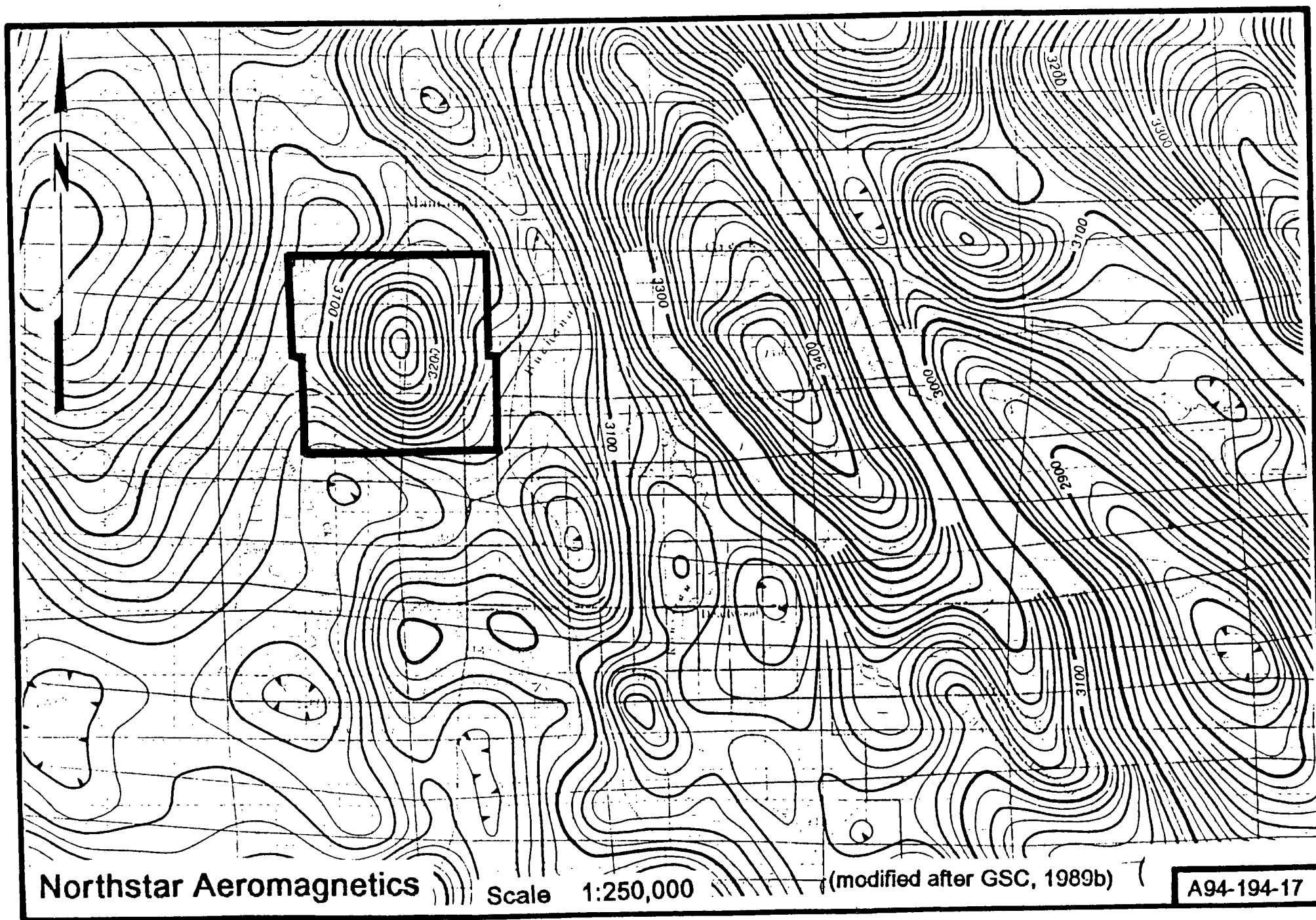
Surveying was conducted along available gravel roads initially. The main E-W road from North Star was used as a baseline. The intersection of the road with a N-S road near the centre of the anomaly 5 km. west of Highway #35 was used as an origin for the grid system. A 50m chain was used for distance control given the preliminary nature of the survey. No trees were cut down or flagging tape used during the survey.

The presence of power lines, pipelines, and culverts along and across roads caused some noise. As expected spikes were evident when directly under power lines. Other transient spikes were evident due to variation in local load factors with time, which are common in rural areas.

The presence of culverts also yields significant very localized anomalies producing high gradients which are usually easily identified. This high noise environment was considered acceptable with repeated passes or multiple readings. Other traverses in bush or farmers fields yielded cleaner data. Survey reproducibility was generally ± 1 gammas except in areas of high gradients associated with culverts or overhead power lines. Total field base level for the area averages 58900 gammas.

The targeted magnetic high is one of the most distinct anomalies in the PRA occurring about 5 km. due south of Manning shown on Drawing A94-194-17. The regional magnetic high was suspected to be a response associated with a cluster of kimberlite pipes given the likely filtering effects during data processing and contouring of the high level GSC aeromagnetics.

The centre of the anomaly is located in Twp92 R23 S6SW W5 on property owned by Don M. McCracken. The airborne anomaly is about 160 gammas above a regional background of ± 100 gammas. There is a significant background variation in Total Field within the Buffalo Head Terrain segment of the PRA. Our aim in conducting the ground survey was to locate a 20-40 gamma circular magnetic anomaly about 1 km x 1 km. in size.



In order to assess the anomaly shown on Drawing A94-194-18 a total of 15.515 km. of magnetometer survey was carried out along access roads, seismic lines and on other lines through the bush or in farmers fields. Survey data is presented in Drawing X94-194-19 in the map appendix.

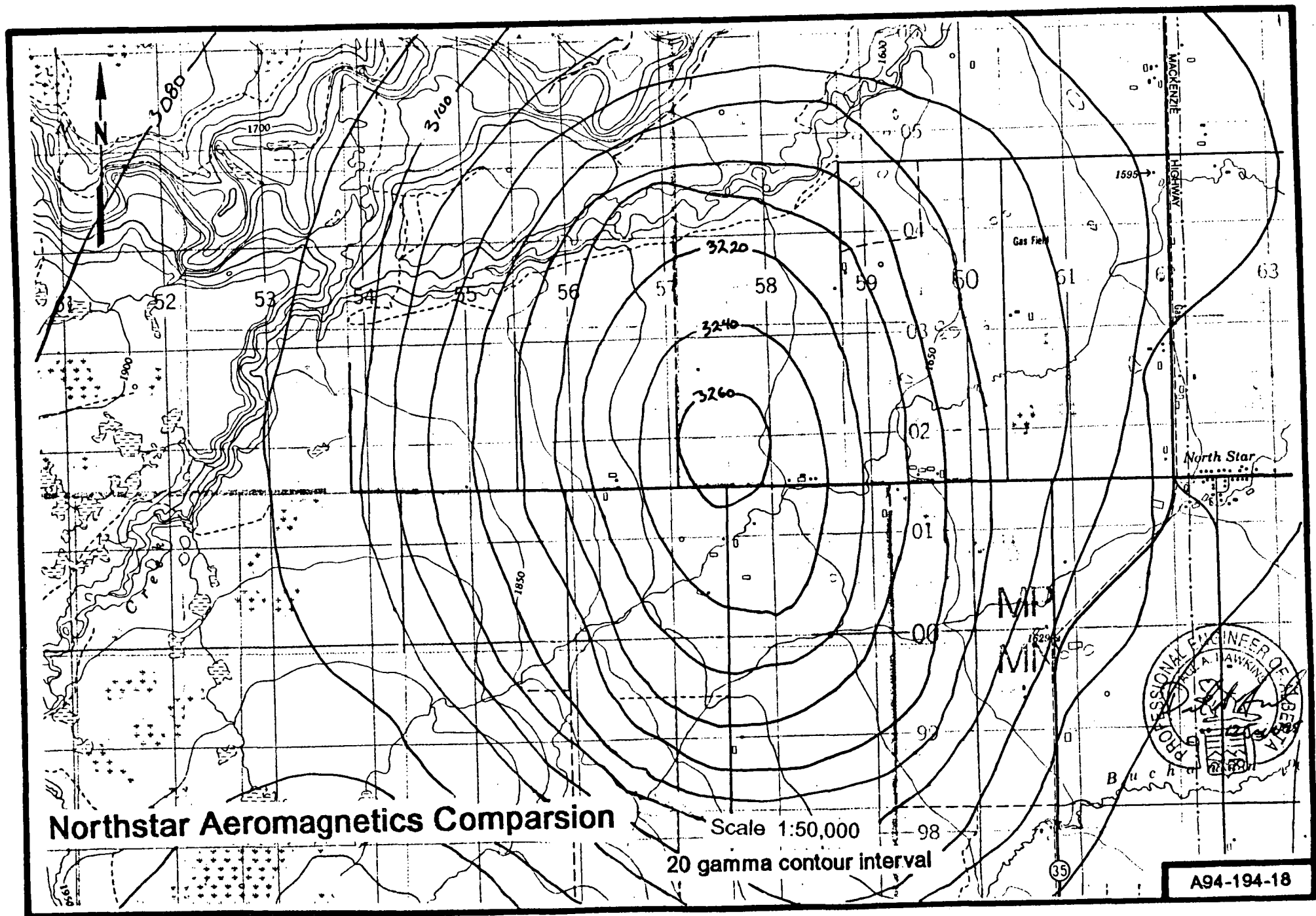
Results indicate that the large anomaly seen on GSC aeromagnetics is indeed present and likely represents a regional high with a source at depth of 2000m. This depth would put it in the basement rocks. Aeromagnetic survey shown on Drawing A94-194-18 may be compared with ground results shown on Drawing A94-194-20.

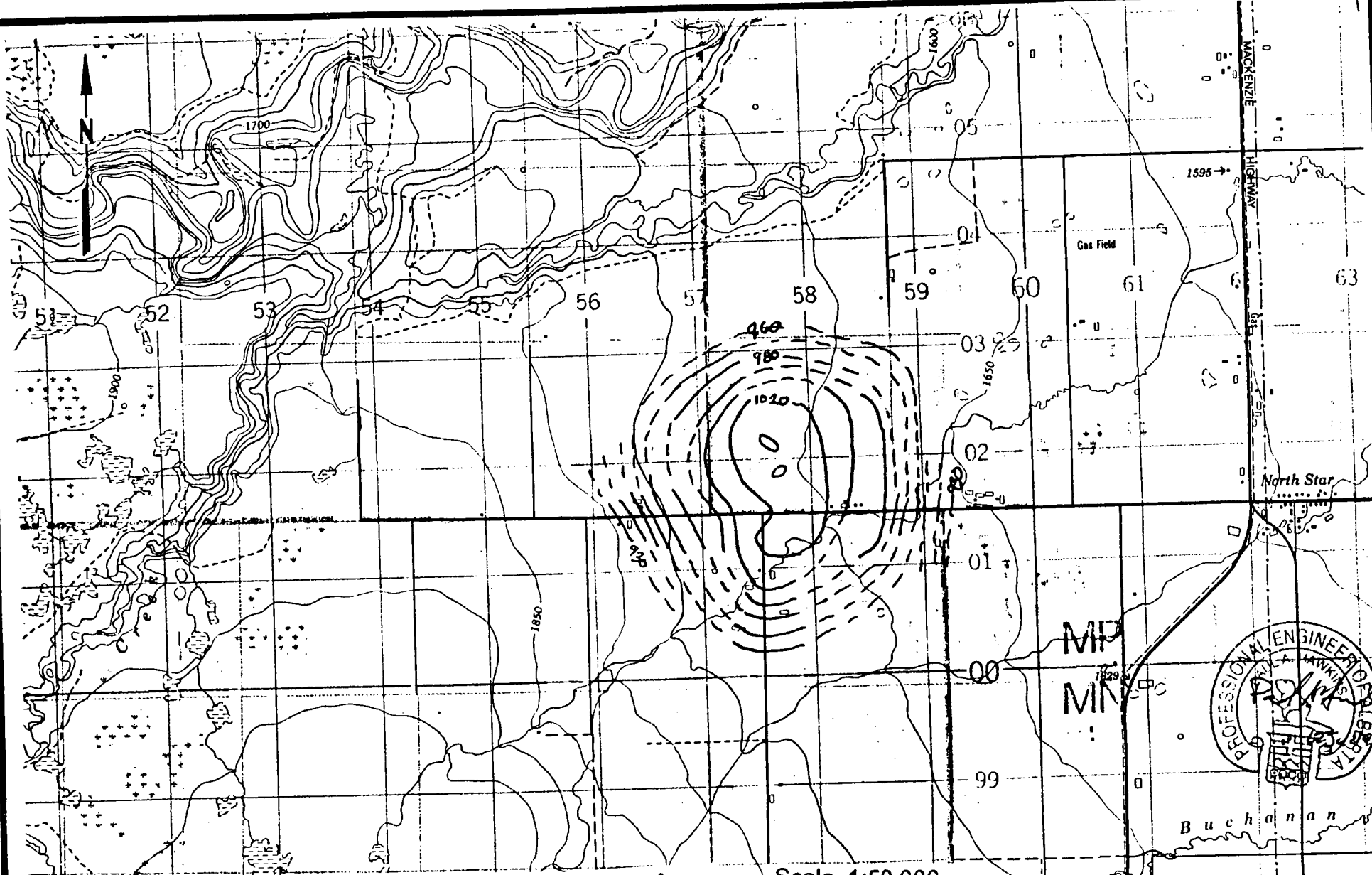
Several single station spikes appear associated with culverts, power lines or other cultural features like the residence at BL13+50E 0+00E. The single station spikes were not contoured but multiple station highs were retained.

4.2 Oil Well Data

In the North Star area several oil wells occur on the margin of the magnetic high. To the NE several sour gas wells are in production. Analysis of electric logs from adjacent wells suggest the sedimentary package in the North Star area is relatively undisturbed except for a shallow broken up zone north of the village of North Star.

The anomaly is likely underlain by Shaftesbury Formation but some Dunvegan may still be present. Most oil wells of the area are cased to between 150 and 300 m. because of shallow natural gas, thus preventing full analysis of shallow electric logs. The Bfsc is likely at a vertical depth of 180 m. with the Peace River Formation at 182 m. These elevations put the North Star area slightly lower in the section and put the target horizon closer to surface. The Precambrian basement likely occurs at vertical depth of 1980 m.





Northstar Ground Magnetics Comparison

Scale 1:50,000
10 gamma contour interval

A94-194-20

4.3 Interpretation

Analysis of ground magnetometer data from Northstar indicates now that the target is much deeper than previously thought, perhaps several thousand meters or more. This change of depth to target is based on a reassessment of the shoulder of the magnetic anomaly. The anomaly may be in fact a basement feature. Smaller more near surface features present at Northstar may be due to cultural features, glacial deposits or other valid small sources like pipes.

The sedimentary package in the Northstar area is relatively undisturbed except for a shallow broken up zone in nearby oil well (4.5km.) away. The Precambrian basement here occurs at a vertical depth of 1981 m.

Several major intersecting structures exist nearby which penetrate the sediments along reactivated faults. Some major relief exists in the basement but doesn't correlate with the magnetic feature. The anomaly appears to occur on the flank of a basement high near the Hines Creek Graben. This structural complexity is viewed as a positive factor.

Another major factor to be considered in assessing the potential of the area is the age of the kimberlite. The presence of kimberlitic indicator minerals near Carmon Lake suggests a relatively young age. If the pipes are older than 104 million years they will likely be too deep to test. On the other hand if they are young they will be present within shallow depths.

The presence of G-5 garnets and chrome diopsides to the SW of the Northstar area offers only limited encouragement as it is not uncommon to find such minerals in Peace River. The lack of a defined near surface geophysical target at Northstar suggests that any drilling at Northstar would be a shot in the dark at this time.

5.0 Summary

Ground geophysics near Harmon Valley and Northstar has failed to define any near surface drill targets but the presence of nearby kimberlitic indicator minerals remains. The regional GSC aeromagnetics appear to reflect basement features as opposed to near surface pipes. Further more extensive exploration work will be required to fully explore the Peace River Play.

Drilling near Carmon Lake resulted in the recovery of 60 Pyrope garnets of which 8 are borderline G-9/G-10, 15 chrome diopsides, and 7 uvarovites. Interpretation of grain geochemistry shows that the grains are good kimberlitic indicators. The pyrope garnets fall into the garnet Lherzolite classification field, the most common type of mantle derived xenolith found in most kimberlites. The presence of several grains of chrome diopside and the occurrence of partially preserved kelyphitic rims on several garnets suggest a nearby source. These results appear to confirm the presence of unmapped kimberlitic intrusions in the Carmon Lake Area.

The discovery of kimberlitic indicator minerals in buried channels suggests the source kimberlites may be nearby. Channels like the one in which the indicator minerals occur tend to have steep gradients and narrow. Analysis of aerial photography and ERS-1 radar data suggests the channel may have its headwaters to the SE of the Shell Plant near several aeromagnetic targets.

5.1 Conclusions

The Peace River Diamond Play represents a significant unpublicized diamond play of near equal merit to other plays. Carina \ Currie Rose discovery of anomalous kimberlitic indicator minerals defines an area of interest where kimberlites likely occur within a 1-4 km. proximal area. The occurrence of the indicators in an apparent Pre-Tertiary buried channel suggests a relatively young age.

The discovery of kimberlitic indicators in Peace River is a significant achievement. Although no billion dollar G-10 pyrope garnets have been found, the discovery of numerous kimberlitic indicators including preferred composition chrome diopsides and G-9 garnets are the basis for a credible diamond play which was until Carina's staking, unknown except to Monopros.

The retention of parts of 7 permits has kept Carina / Currie Rose on the ground floor of another diamond play with all the right geology and correct tectonic setting. Given the properties accessibility, it will be possible to explore the property on a year round basis on more economical basis than remote areas. The Peace River area is a diamond play of significant merit which has been relatively unexplored and offers significant potential for the discovery of diamondiferous kimberlite pipes.

5.2 Recommendations

A multi-stage exploration program is proposed to examine the diamond potential of the reduced permit areas and follow-up on anomalous indicator mineral geochemistry in the Shell Delineation wells. The initial phase of exploration will focus on the completion of a low level aeromagnetic survey over the Harmon Block, collection of regional heavy mineral stream sediment samples, data compilation and further examination on the ground of aeromagnetic anomalies.

The initial phase of exploration is expected to confirm the widespread presence of diamond indicator minerals in the Peace River Area on the Carina \ Currie Rose blocks. Both airborne and ground geophysics will be used to examine high priority areas of interest. These surveys will serve as a guide for future geophysical surveys. The program will likely involve two months of field work, one month of compiling oil industry data (well log data, aeromagnetics and gravity) and cost about \$200,000.00.

The second phase of the program will focus on the flying of low level high resolution aeromagnetics over other permit areas outside of the Harmon Block. Ground geophysics will be used to define specific drill targets. Further Heavy Mineral sampling will also be used to prioritize anomalies for later drilling. A positive outcome will be required before proceeding to the third phase, consisting of good indicator minerals and pipe-like magnetic anomalies. This program will likely require three months to complete and cost \$200,000.00.

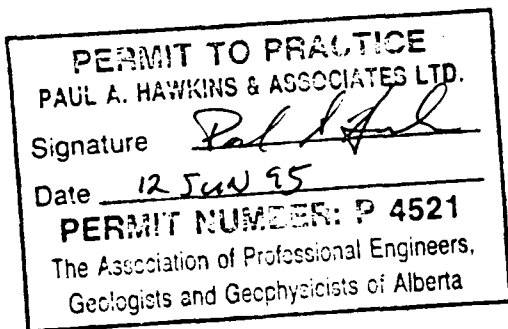
The third phase of exploration on the property will consist of a combination of overburden and rotary on selected targets. Further core drilling and bulk testing would also be required to fully assess any diamond discoveries made. This program will likely occur over a three to six month period and cost \$600,000.00.

Certification

I, Paul A. Hawkins, of [REDACTED], in the City of Calgary, Province of Alberta, hereby certify:

1. That I am a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
2. That I am the Principal of the firm of Paul A. Hawkins & Associates Ltd. which holds Permit #P4521 to practice Engineering in Alberta.
3. That I am a graduate of Queen's University with a Bachelor of Science degree in Geological Engineering.
4. That I have worked continually as a practicing geological engineer for the past 18 years.
5. That I do not have any direct or indirect interest in the property, nor do I beneficially own directly or indirectly, any securities of the Consolidated Carina Resources Corp. or any of its associates or affiliates.
6. That I have visited the property area on eight separate occasions between August 11, 1992 and October 13, 1994. and have prepared three other reports on the Diamond Potential of the Peace Area for three other unrelated Clients.
7. That I am familiar with the geology of diamonds and the area geology and mineral potential.
8. That I hereby consent to the publication of this report or parts thereof in a Statement of Material Facts or publication of this report in its entirety for the propose of raising funds to finance my recommendations.

Dated at Calgary, Alberta this 12th day of March, 1995



Paul A. Hawkins
Paul A. Hawkins, Eng.
Principal
Paul A. Hawkins & Associates Ltd.

References

- Cant, D.J., 1988
Regional Structure and development of the Peace River Arch, Alberta: A Paleozoic failed-rift system? Bulletin of Canadian Petroleum Geology, v.36,p.284-295
- Borneuf, D., 1981
Hydrogeological Map, Peace River, Alberta, NTS 84C, Earth Science Report 81-2, Alberta Research Council.
- Dawson, J.B. and Stevens, W.E., 1975
Statistical Classification of Garnets from Kimberlite and Associated Zenoliths; Journal of Geology, V.83, Pages 589-607
- Fox, J.C., Richardson, R.J.H., Gowan, R. and Sham, P.C., 1987
Surficial Geology of the Peace River High Level Area, Alberta, Alberta Research Council Map 205.
- Geological Survey of Canada, 1989a
Aeromagnetic total field, Winagami, Alberta; Geological Survey of Canada, Map 7765G, Scale 1:250,000
- Geological Survey of Canada, 1989b
Aeromagnetic total field, Peace River, Alberta; Geological Survey of Canada, Map 7773G, Scale 1:250,000
- Green, R., 1972
Geological Map of Alberta, Alberta Research Council, Map No. 35, Scale 1:1,267,000
- Hawkins, P.A., 1990
The Prince Albert Diamond Play, A Summary Report Prepared for Currie Rose Resources Inc., March 1990, Report #142
- Hawkins, P.A., 1992
The Diamond Potential of Western Canada, Summary Report for Consolidated Carina Resources Corp., September 30, 1992, Report # 178-R1
- Hawkins, P.A., 1993
A Exploration Report on Consolidated Carina Corp. & Currie Rose Resources Ltd. Carmon Lake Drilling, Twp85 R18 S17 W5, December 31, 1993, Report #93-185-R1
- Hawkins, P.A., 1994
Indicator Mineral Geochemistry in the Peace River Diamond Play, Calgary Mining Forum, Calgary Mineral Exploration Group, February 11, 1994.

- Holsten, A., 1992
Diamond Indicator Mineral Processing, Letter from Saskatchewan
Research Council, January 10, 1992, 5 pp.
- NASA, 1987
Earth Observing System SAR - Synthetic Aperture Radar
Instrument Panel Report, Vol. IIf.
- O'Connell, S.C., Dix, G.R. and Barclay, J.E., 1990
The origin, history, and regional structural development
of the Peace River Arch, Western Canada.
Bulletin of Canadian Petroleum Geology, V38A, p.4-24
- Ritchie, W.G., 1957
The Kneehills Tuff, M.Sc. Thesis, University of Alberta, 66pp.
- Shell Canada Resources Limited, 1984
Peace River Project, Application to the Alberta Energy
Resources Conservation Board, V1 - Technical Details

Consolidated Carina Resources Assessment Work Summary
Peace River Diamond Project

DUPLICATE

Permit #	Total Work	Area Retained Description	Area (HECTARES)	Required Work	Surplus
9393030121	\$5,769.54	Twp83R18W5 S3-6	1024.00	\$5,120.00	\$649.54
9393030122	\$8,031.33	Twp83R19W5 S1-3,10-12	1536.00	\$7,680.00	\$351.33
9393030123	\$2,690.81	Twp84R18W5 S34-35	512.00	\$2,560.00	\$130.81
9393030124	\$3,286.23	Twp84R19W5 S12-13	512.00	\$2,560.00	\$726.23
9393030125	\$11,974.89	Twp85R18W5 S1-3,10-15	2304.00	\$11,520.00	\$454.89
9393030196	\$465.86	Surrendered			
9393030195	\$465.86	Surrendered			
9393030198	\$465.86	Surrendered			
9393030194	\$465.86	Surrendered			
9393030197	\$465.86	Surrendered			
9393030199	\$5,463.63	Twp90 R24W5 S35-36 Twp91 R23W5 S-6 Twp91 R24W5 S-1	1024.00	\$5,120.00	\$343.63
9393030286	\$263.10	Surrendered			
9393030283	\$263.10	Surrendered			
9393030285	\$465.86	Surrendered			
9393030284	\$263.10	Surrendered			
9393030282	\$1,565.85	Twp74R19W5 S-35	256.00	\$1,280.00	\$285.85
9393030945	\$91.44	Surrendered			
Total=	\$42,458.19		7168.00	\$35,840.00	\$2,942.29
					07-Mar-95

PLA

Schedule "A"

1995 Assessment Filing

Consolidated Carina Resources Corp.

DUPLICATE

Permit #9393030121

Reduce permit area to 1024 hectares, retaining 4 sections only comprising:

Twp83R18W5 S3-6

applying \$5,120.00 with a \$ 649.54 excess.

Permit #9393030122

Reduce permit area to 1,536 hectares, retaining 6 sections only comprising:

Twp83R19W5 S1-3, 10-12

applying \$7680.00 with a \$ 351.33 excess.

Permit #9393030123

Reduce permit area to 512 hectares, retaining 2 sections only comprising:

Twp84R18W5 S34-36

applying \$2560.00 with a \$ 130.81 excess.

Permit #9393030124

Reduce permit area to 512 hectares, retaining 2 sections only comprising:

Twp84R19W5 S12-13

applying \$2560.00 with a \$ 726.23 excess.

Permit #9393030125

Reduce permit to 2,304 hectares, retaining 9 sections only comprising:

Twp85R18W5 S1-3, S10-15

applying \$11,520.00 with \$454.89 excess.

PKF

**Expenditure Statement
Consolidated Carlna / Currie Rose
Peace River Diamond Play**

Professional Services

**Applied
Expenditure**

Prospecting & Geological Mapping	\$5,000.00
Ground Geophysics	\$6,825.13
Drilling (Sampling)	\$10,077.11
Ground Follow-up	\$2,786.04
Drafting	\$1,203.25
Report Preparation	\$2,517.17

Field Expenses

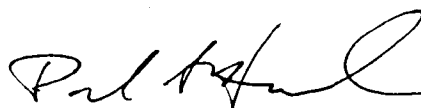
Travel	\$830.10
Subsistence	\$1,348.02
Field Supplies	\$275.62
Laboratory	\$3,070.09
Freight	\$218.98

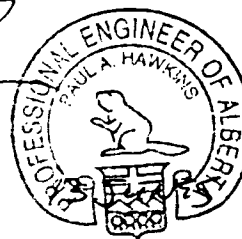
Data Acquisition & Reproduction

Maps & Airphotos	\$1,460.98
Digital Data	\$3,040.00
Computer	\$129.80

Total

\$38,782.29


Paul A. Hawkins, P.Eng.



CANADA

PROVINCE OF ALBERTA

TO WIT


AFFIDAVIT

I, Paul A. Hawkins of the City of Calgary in the Province of Alberta, MAKE OATH AND SAY:

1. THAT the contents of the Declaration Under Oath which is attached as Schedule A are true.

SWORN (or Affirmed) before me
at City of Calgary
in the Province of Alberta,
this 8, day of March 1995.


Paul A. Hawkins


HENRY VAN DEN HOVEN
Commissioner for Oaths
In and for the Province of Alberta
My Commission Expires May 21, 1996

Declaration Under Oath



Dated : March 7, 1995.

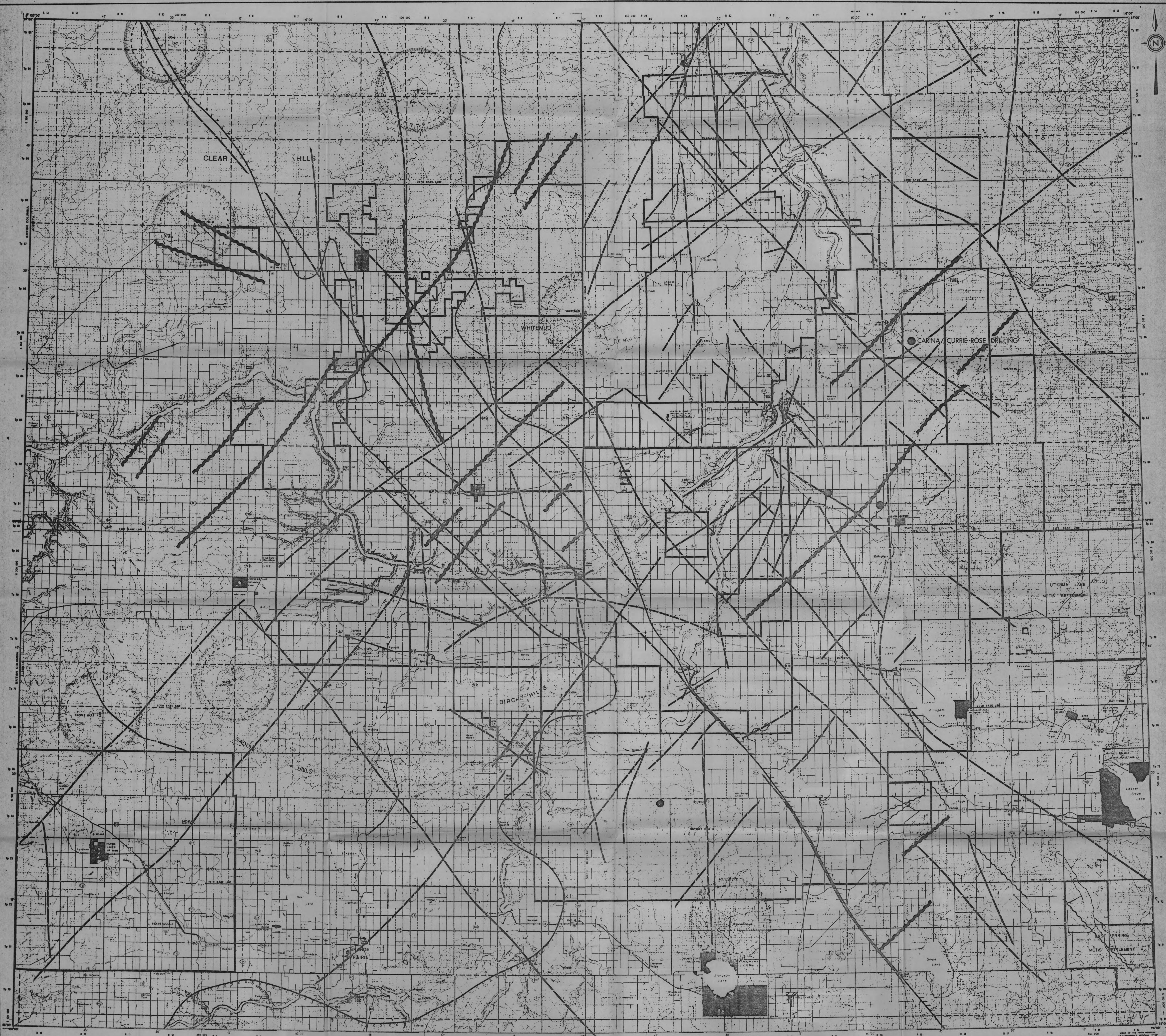
I, Paul A. Hawkins of The City of Calgary, in the Province of Alberta do hereby certify that the following expenditures were incurred in conducting assessment work on Metallic and Industrial Minerals Permits held by Consolidated Carina Resources Corp. under the terms of the Metallic and Industrial Minerals Regulation as outlined below:

Permit #	Expenditure
9393030121	\$ 5,769.54
9393030122	\$ 8,031.33
9393030123	\$ 2,690.81
9393030124	\$ 3,286.23
9393030125	\$11,974.89
9393030199	\$ 5,463.63
9393030282	\$ 1,565.85

I further Certify:

1. That I have personal and intimate knowledge of the above mentioned facts.
2. That these facts are true.


Paul A. Hawkins
HENRY VAN DEN HOVEN
Commissioner for Oaths
In and for the Province of Alberta
My Commission Expires May 21, 1996



LEGEND

- FAULT (MAJOR)
- FAULT (MINOR)
- LANDSAT LINEAR
- GEOPHYSICAL LINEAR
- SUB-CRATONIC BOUNDARY
- BUFFALO HEAD (199-232 Ga)
- CHINCHAGA (2.08-2.17 Ga)
- DRILLING ACTIVITY

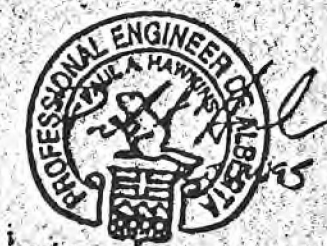


5 2.5 0 5 10 20 25
KILOMETERS

© Paul A. Hawkins & Associates Ltd.

PEACE RIVER ARCH DIAMOND PLAY
LINEAMENT COMPILATION

MAY 1993 1:250,000 83 MN 84 CD X94-194-07



Paul A. Hawkins & Associates Ltd.

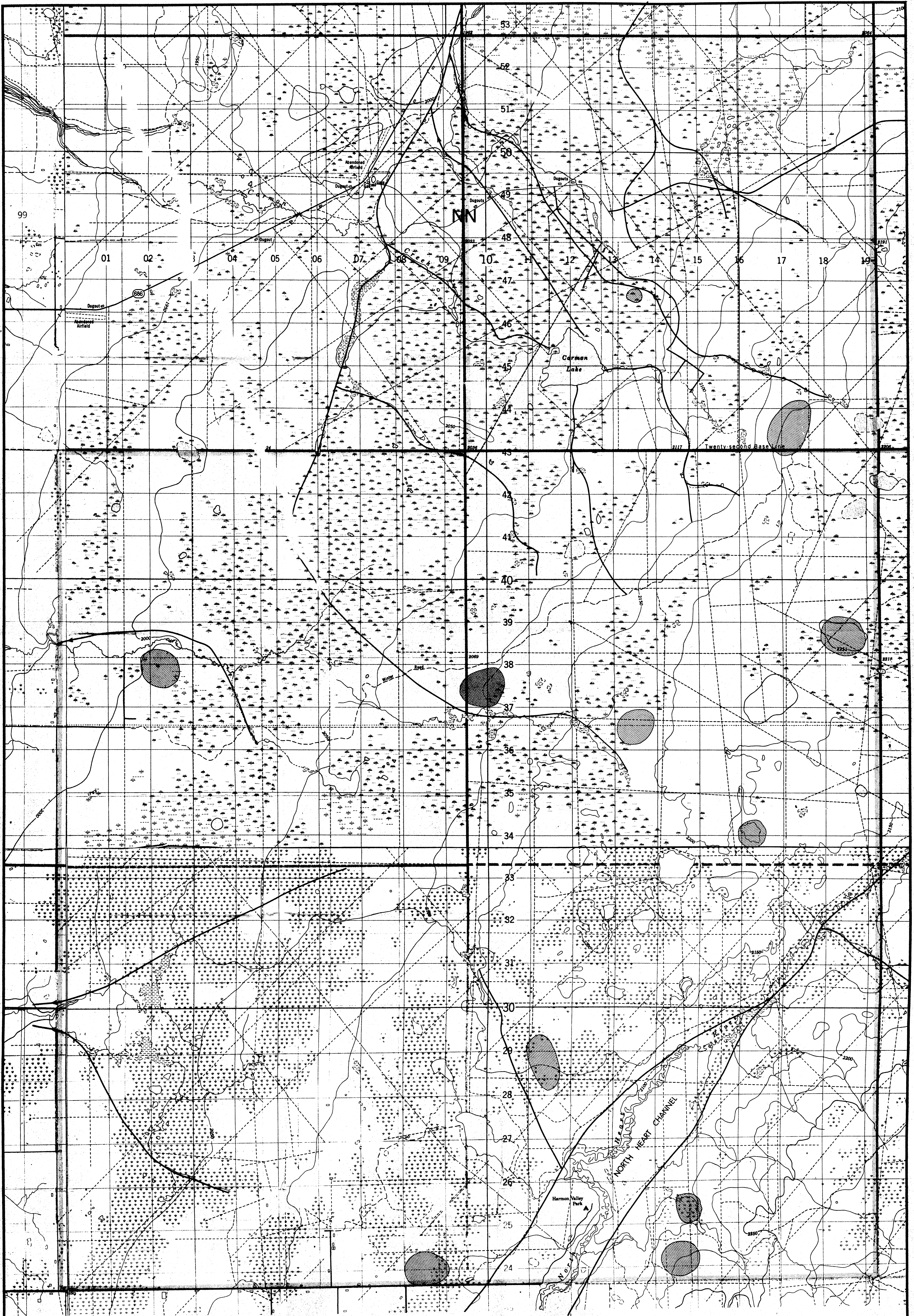
CARINA-CURRIE ROSE JOINT VENTURE
ERS-1 RADAR IMAGERY
HARMON BLOCK
PEACE RIVER ALBERTA

MAY, 1994

1:250,000

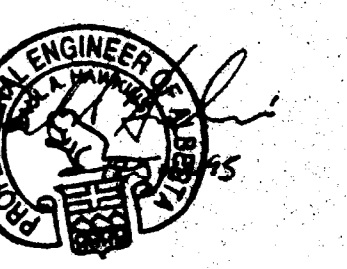
84C

X94-194-08



LEGEND

- ANOMALOUS AEROMAGNETICS (CIRCULAR FEATURES)
- BURIED CHANNELS
- ANOMALOUS TERRAIN FEATURES
- ANOMALOUS AEROMAGNETICS AND TERRAIN FEATURES



Paul A. Hawkins & Associates Ltd.

CARINA-CURRIE ROSE J.V.
HARMON BLOCK
DATA COMPILATION

PEACE RIVER ALBERTA
MAY 1994 1:25,000 84C 2&7 X99-194-11



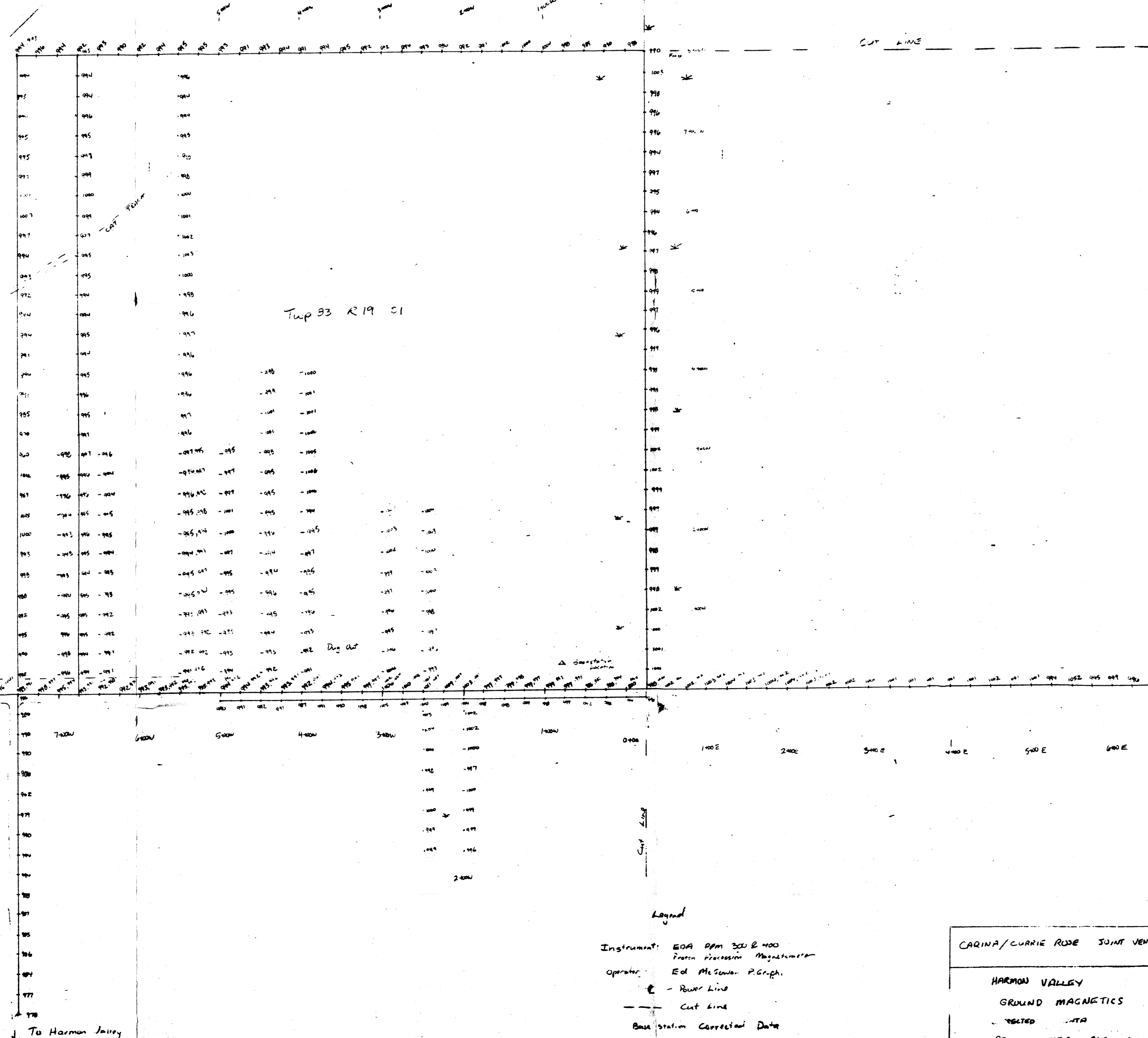
Twp 33 R 19 S 2

Twp 33 R 19 S 1

Twp 33 R 18 S 6

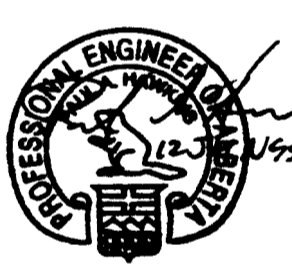
02/2-4-105

01/2-4-105



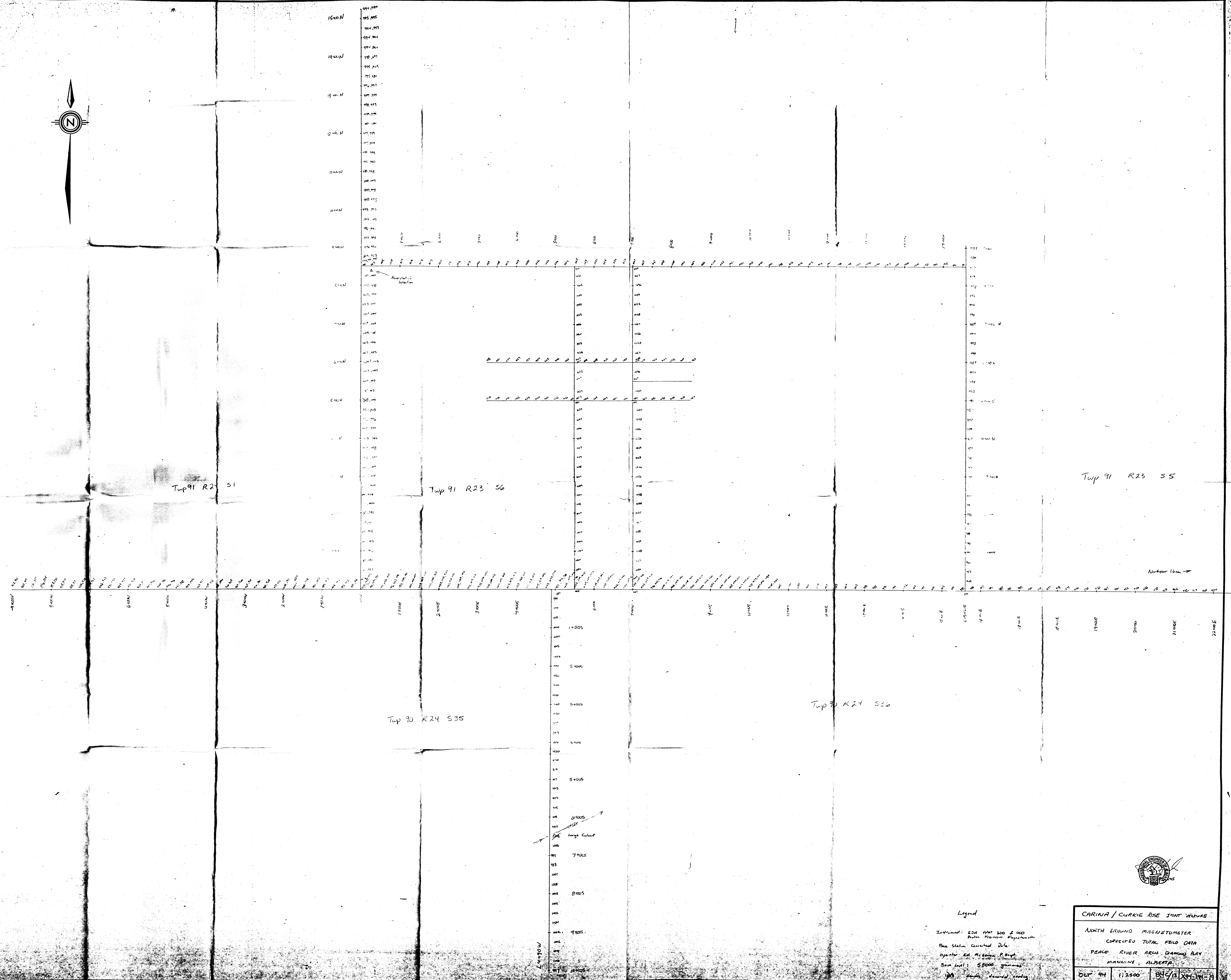
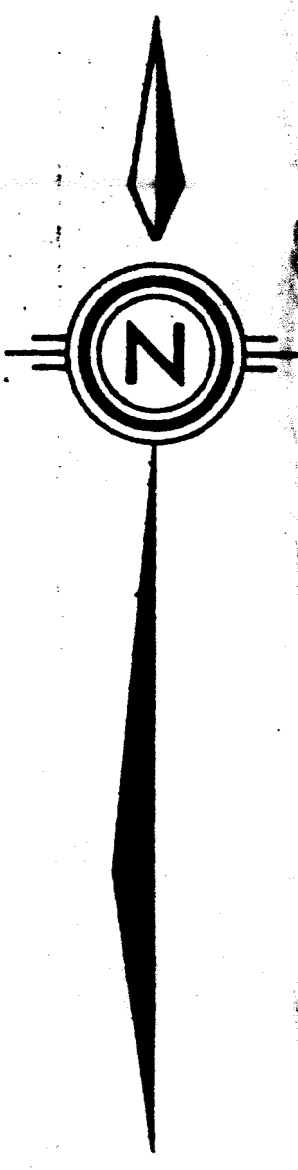
Legend
Instrument: EOR 800 200 2 400
Operator: Ed. McLean, P.O. Box
Base station: Corrected Data
Base line: 58000 gamma
Date: 10/24/54

CADINA/CURRIC RIDE SAINT VENANT
HARMON VALLEY
GROUND MAGNETICS
RE: 100% ALUMINUM
OCT 24 1954 1000 845/2



To Harmon Valley
Camp site

Drawing 100-100-10



Twp 91 R23 S5

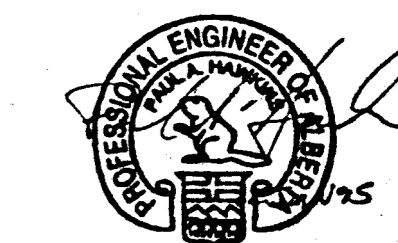
Twp 91 R2 S1

Twp 91 R23 S6

Twp 90 R24 S35

Twp 91 R24 S36

North arrow



Legend

Instrument: EDA 300 & 400
Proton Precision Magnetometer
Base Station: Corrected Data
Operator: Ed. McEwen P. Eng
Base Level: 5000 gamma
Data: Handwritten reading

CARINA / CURRIE ROSE JOINT VENTURE			
NORTH GROUND MAGNETOMETER			
CORRECTED TOTAL FIELD DATA			
PEACE RIVER ARCH DAMMAY RAY			
MANNING, ALBERTA			
OCT 94	112500	BHC/13	XCH-14-1