MAR 19960008: NORTHEAST

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19960008

Focal Resources Ltd.

Assessment Report, Fort MacKay Property 1996

By: Dennis J. Nikols, P. Geo., et al.

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1. Summary

Focal Resources Ltd. began an active regional exploration program in the spring of 1994. This property was included in that study. The results of the work relating to this property are detailed in the body of the text and on the attached maps. The field work and sampling were designed to test the potential mineralization hypothesis developed from our regional remote sensing and geology study and analysis. We were unable to find any direct evidence or support for any of the hypotheses that lead us to explore in this area. No economic concentrations of metallic minerals were found. To date no geochemical anomalies, promising structures or other indications have been found. Parts of the property are covered by thick sequence of McMurray Oil Sand Formation, so further investigations of those areas will require drilling and or geophysics.

2. Introduction

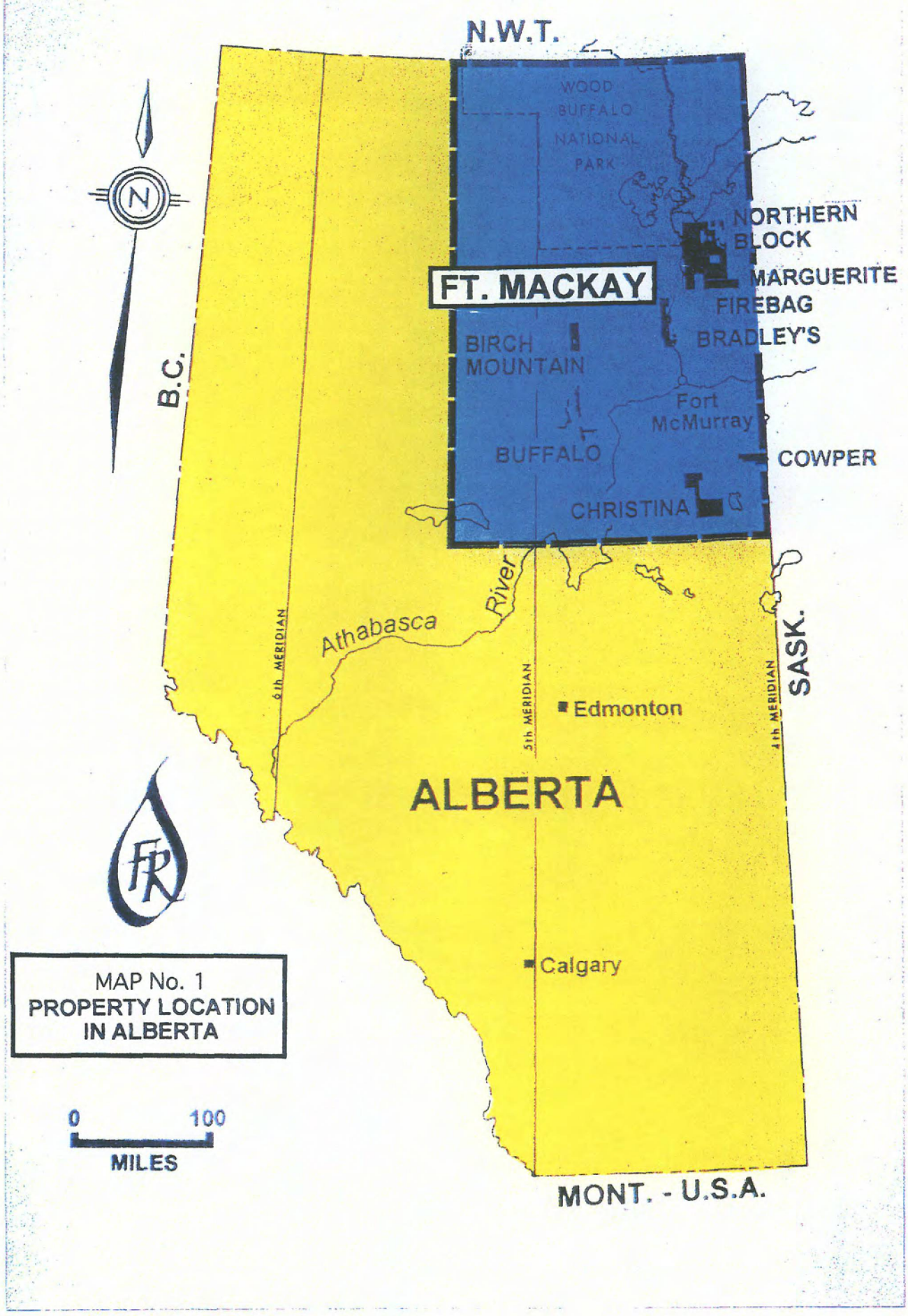
During the period June 1,1994 through October 30, 1994 the following activities were carried out either directly on this property or as indirect support of the work program.

The scope of work included:

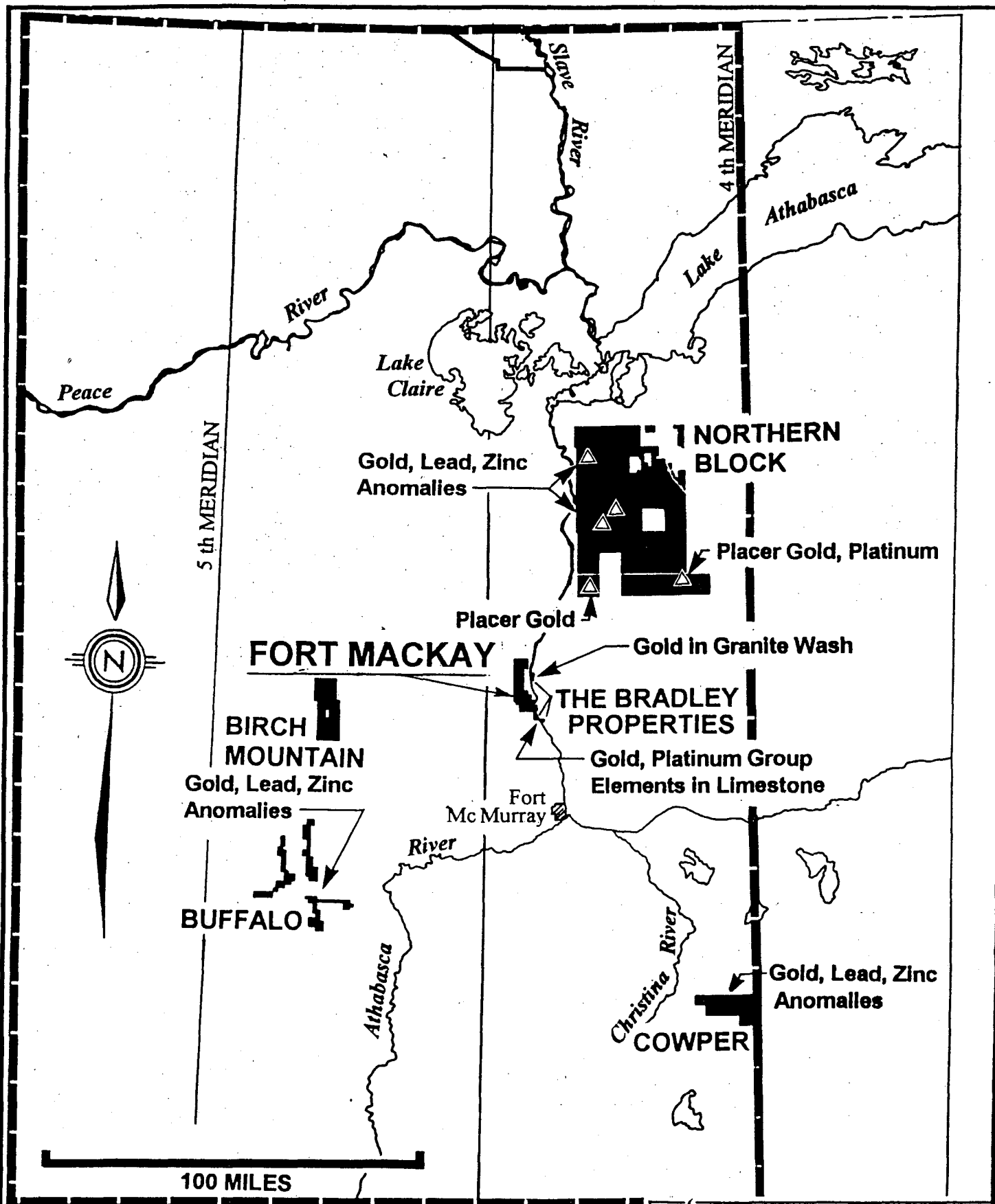
- Geological reconnaissance in the form of interpretation of conventional air photographs, and Landsat Satellite images (bands 5 & 6) visual inspections conducted from fixed wing aircraft and helicopters;
- bedrock sampling;
- measured geological sections of Devonian Formations;
- geological mapping;
- structure mapping; and
- geochemical sampling.

Figure 2—1 summarizes the geologic formations that underlay this area. Several working hypotheses were developed before our field work began and have been modified during the term of this project. The hypotheses being tested were:

— That waters migrating up—dip from deeper parts of the Alberta Basin can and will carry metallic ions in solution. That, if these waters can penetrate known aquatards between the basil aquifers and the top of the Devonian formations, cross-formational migration will occur. That, if this upward migration occurs it will mix with ion-rich waters that are migrating downward from the subcrop. That the ion-richness is a result of salt solution from the strata below the upper Devonian. That the upward migration, primarily from the Granite Wash, is dependent on aquatards in the overlying formations being breached by faulting or some other form of brecciation. This brecciation could be a result of salt solution forming collapsed structures. That the upward migrating waters will likely be rich in metallic cations, especially gold. These ions and those sourced from the dissolved salts will be precipitated or deposited if the oxygen-rich waters migrating upward contact an appropriate oxidation/reduction boundary. The McMurray Oil Sand Formation often contains sufficient hydrocarbons to qualify as a reducing horizon.



MAP No. 1
PROPERTY LOCATION
IN ALBERTA

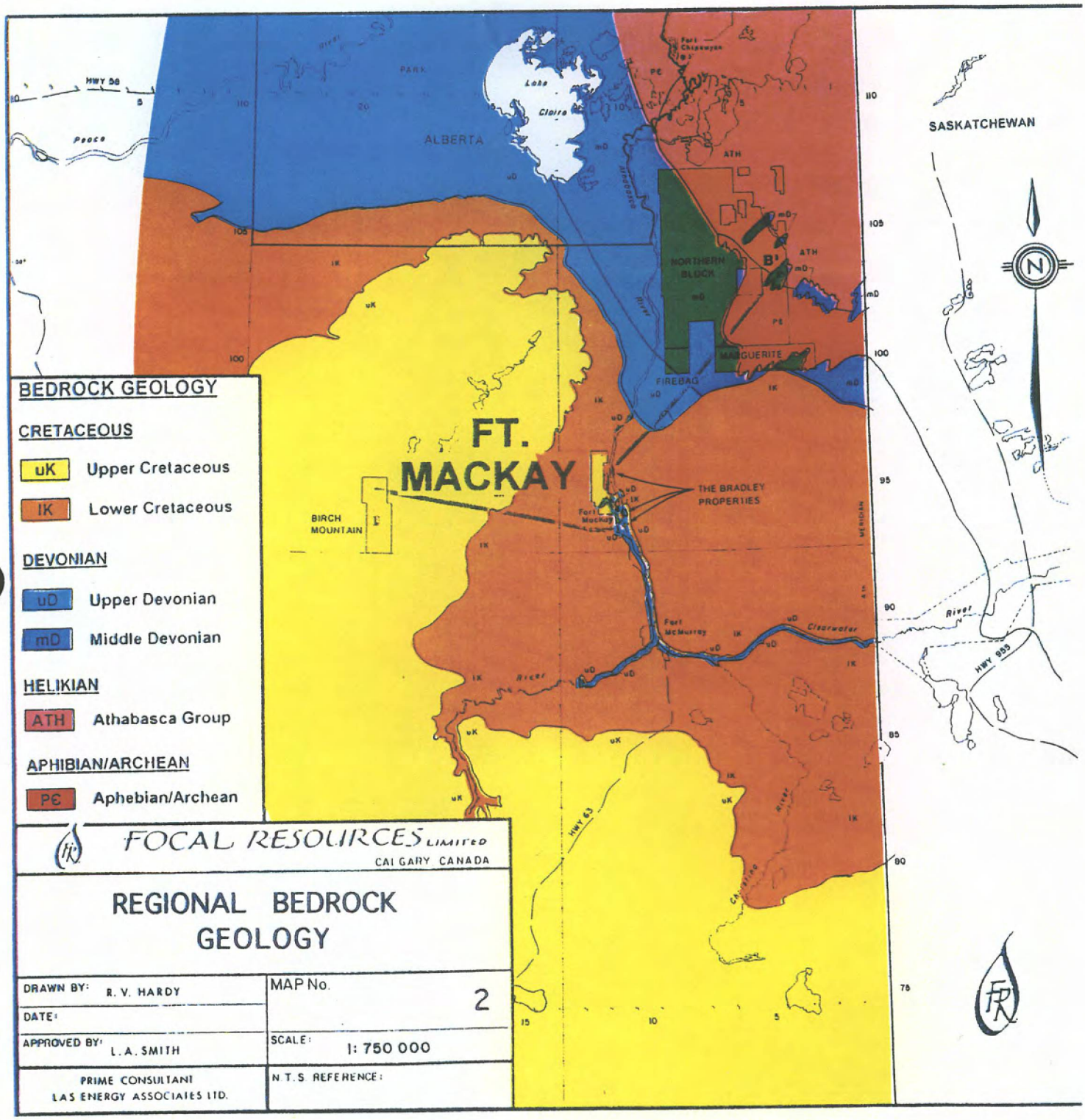


NORTHEAST ALBERTA

FOCAL RESOURCES LIMITED
CALGARY, CANADA

NORTHEAST LOCATION INSERT MAP

DRAWN BY:	MAP NO. 1a
DATE:	
APPROVED BY:	SCALE:
	NTS REFERENCE:



FOCAL RESOURCES LIMITED
CALGARY CANADA

REGIONAL BEDROCK GEOLOGY

DRAWN BY: R. V. HARDY	MAP No. 2
DATE:	
APPROVED BY: L. A. SMITH	SCALE: 1: 750 000
PRIME CONSULTANT LAS ENERGY ASSOCIATES LTD.	N.T.S. REFERENCE:

FOCAL RESOURCES
CALGARY, CANADA

REGIONAL PROPERTY GEOLOGY

DRAWN BY:	MAP No. 2a
DATE	
APPROVED BY	SCALE
PRIME CONSULTANT: LAS ENERGY ASSOCIATES LTD	N.T.S. REFERENCE

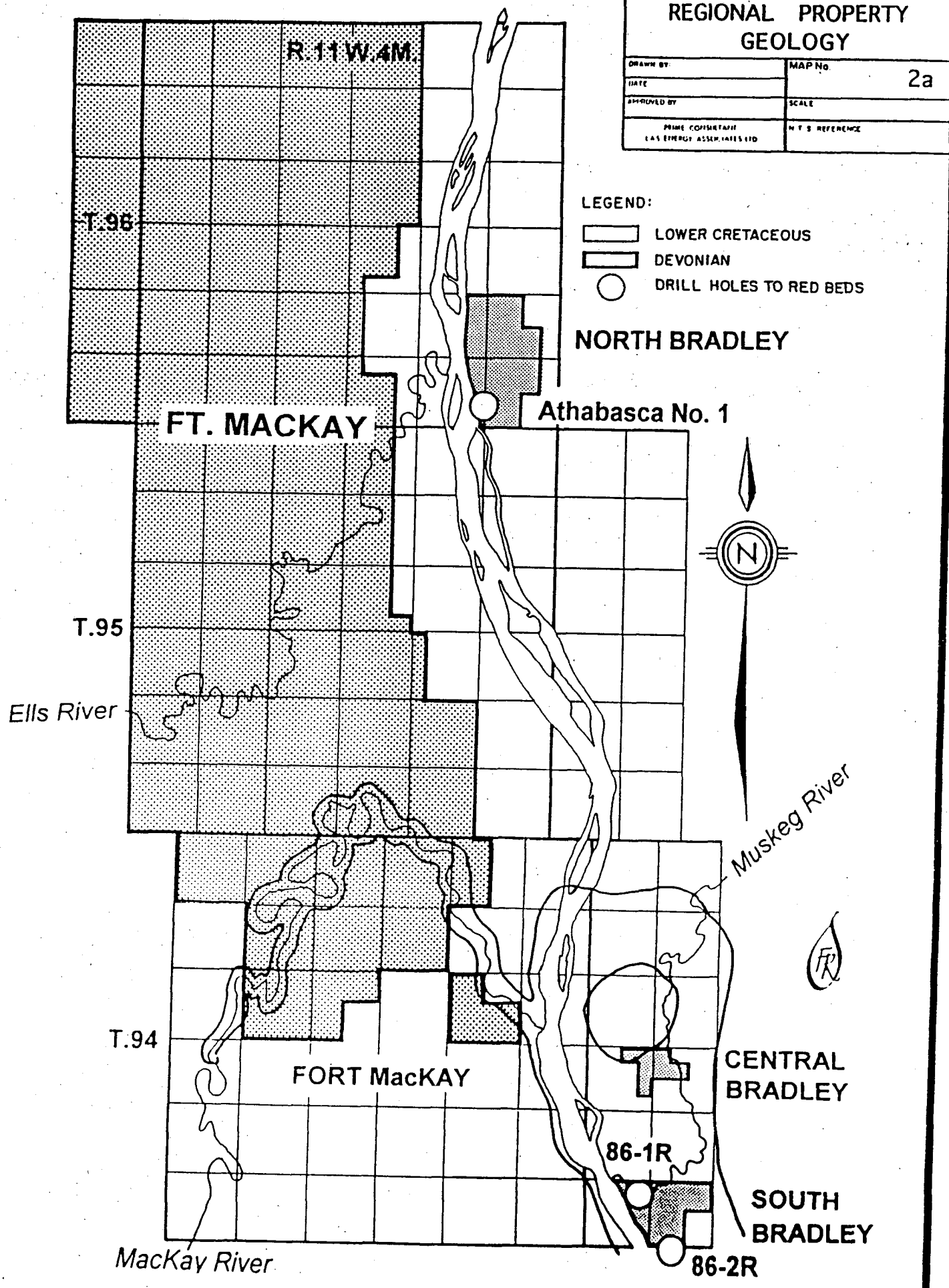
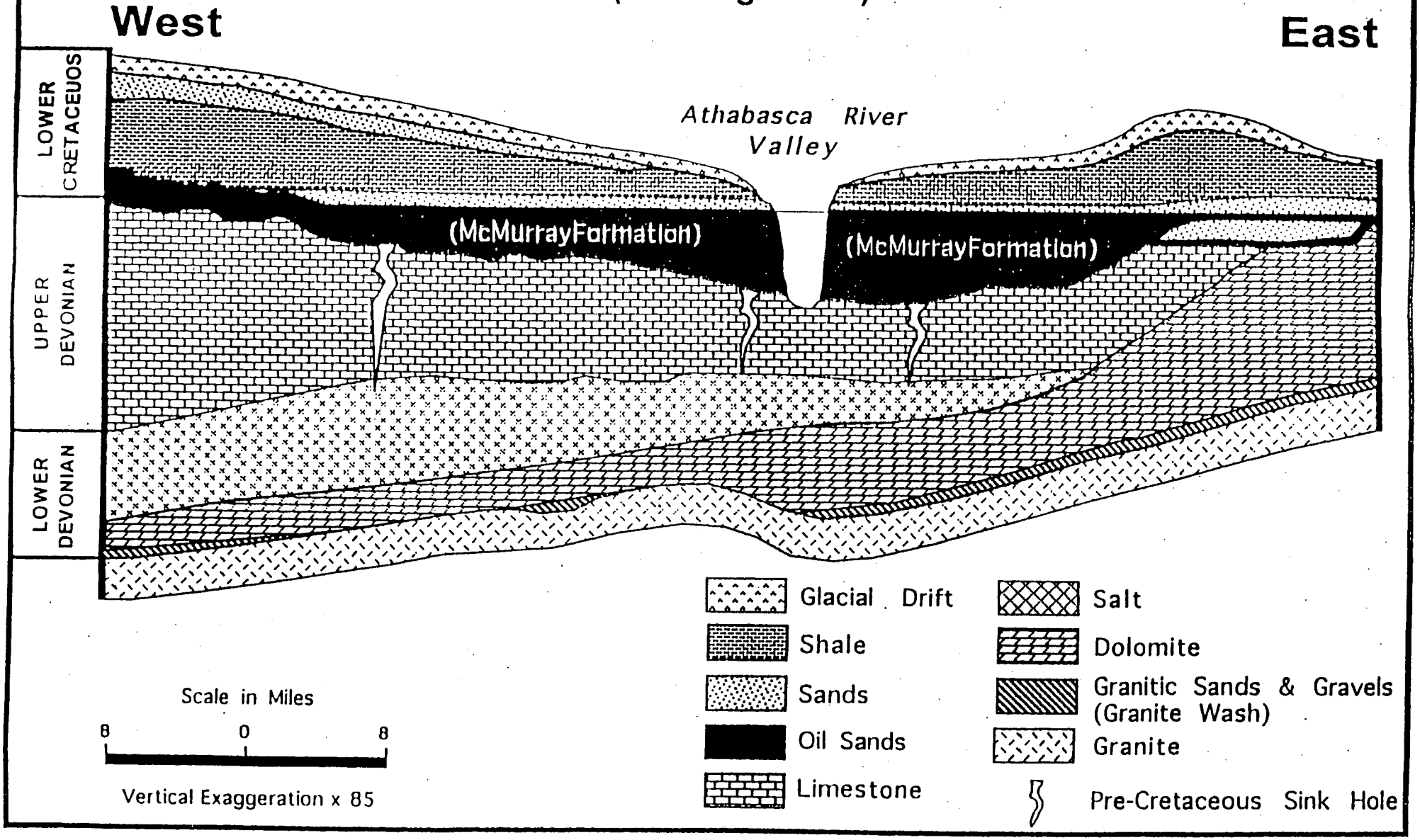


FIGURE 2-1

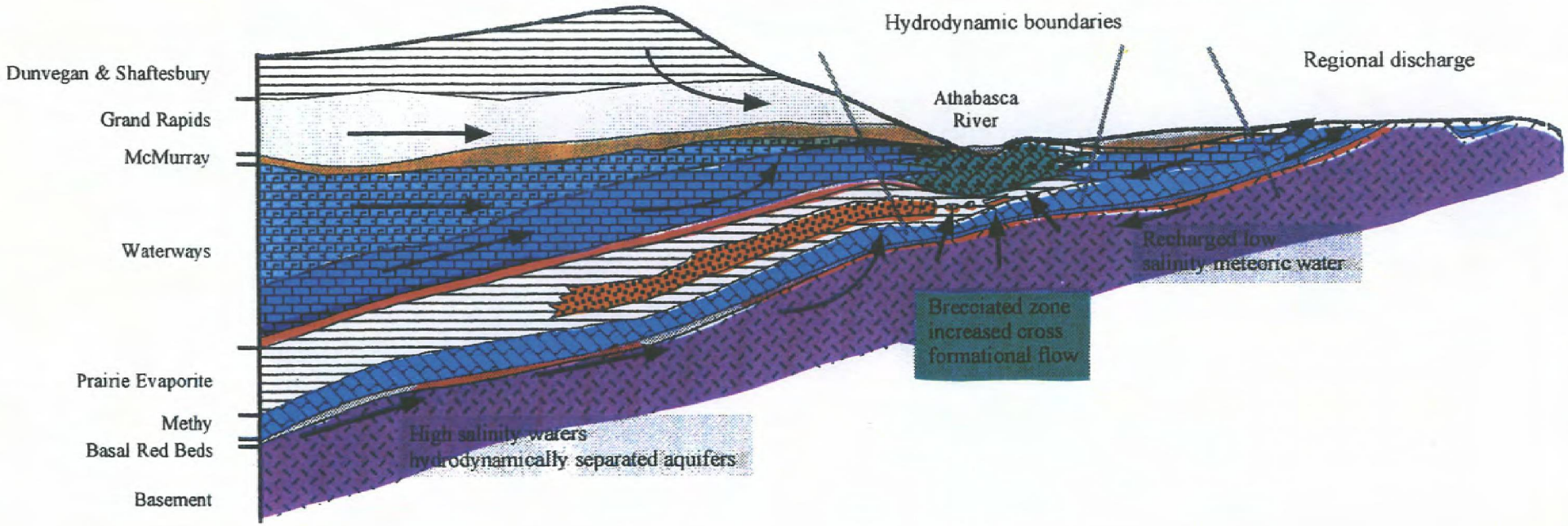
Summary of Regional Geology
(Looking North)



FOCAL'S
NORTHEAST ALBERTA GOLD PROJECT
ALBERTA

REGIONAL HYDRODYNAMIC MODEL

SW NE



Collapse Zone

Interpreted direction of groundwater flow

FOCAL RESOURCES LIMITED
CALGARY, CANADA

Regional Hydrodynamic Model
Hydrogeology adapted from work by Groundwater Solutions

DRAWN BY: M. Innes/R. Hardy	FIGURE 2-2
DATE: April 1995	
APPROVED BY:	SCALE: 1 : 2,000,000; VE 100X
	NTS REFERENCE: 84A, 84H, 74E, 74L

— That the Devonian limestone has been subjected to karst—forming conditions in pre-Cretaceous times (and possibly in post-Cretaceous times), forming sink holes and enlarged joint systems. That the dominant regional joint sets influence and may control the orientation of the karst features. That waters migrating up-dip from deeper parts of the Alberta Basin can and will carry metallic ions in solution. That, if these waters can penetrate known aquatards in the section between the basal aquifers and the top of the Devonian, cross-formational migration will occur. That, upward migrating waters will mix with ion—rich waters that are migrating downward from the subcrop. That the ion—richness is a result of salt solution from the section below the upper Devonian. That the upward migration, primarily from the Granite Wash, and other "red beds" , is dependent on aquatards in the overlying formations being breached by some form of brecciation. This brecciation could be a result of salt solution forming collapsed karst structures. The upward migrating waters will likely be rich in metallic cations, including gold. These ions and those sourced from the dissolved salts will be precipitated or deposited if the oxygen—rich waters migrating upward contact an appropriate oxidation/reduction boundary. The McMurray Formation often contains sufficient hydrocarbons to provide the material for a reducing environment. The karst—forming solutions may also migrate downward mixing with or adding to the solutions migrating down—dip into and dissolving the soluble salts. Hydrocarbons have leaked from the McMurray Formation into the underlying Devonian rocks primarily along these enlarged joints and sink hole openings. The oxidation/reduction interaction may not be a defined planar horizon such as the base of the McMurray but may be a wide zone covering many metres within the upper Devonian.

— That waters migrating up dip from deeper parts of the Alberta Basin can and will carry metallic ions in solution. That, if these waters can penetrate known aquatards in the section between the basil aquifers and the top of the Devonian, cross—formational migration will occur. That, if this upward migration occurs it will mix with ion—rich waters that are migrating downward from the subcrop. The ion—richness is a result of salt solution from the section below the upper Devonian. The upward migration, primarily from the Granite Wash, is dependent on aquatards in the overlying formations being breached by faulting. This faulting may or may not be implicated with salt—solution formed collapsed karst structures. The upward migrating waters will likely be rich in metallic cations, especially gold. These ions and those sourced from the dissolved

salts will be precipitated or deposited if the oxygen—rich waters migrating upward contact an appropriate oxidation/reduction boundary. The McMurray Formation often contains sufficient hydrocarbons to qualify as a reducing horizon.

— Variations on these themes include the potential for deposition in the basal McMurray Formation as well as the Devonian rocks, and that the process is on—going at this time.

Each of the methods employed were designed to produce information and data that would be useful in drawing conclusions related to the validity of the various hypotheses. The reasoning and appropriateness of these methods is discussed below. Figure 2—2 provides a visual representation of Focal's model. A summary of the data collected is found in Table 2—1. A summary of the cost by work element is found on Table 2—2

Table 2-1: Data Collected

Data Type	No. Of Units	Area Covered
Ground Water	7	Regional
Structure	NA	MacKay River
Geology	NA	MacKay River
Stream Sed.	4	MacKay River
Rock	109 samples	MacKay River
Biogeological	1	MacKay River

Table 2-2: Cost By Work Element

Element	Cost ($)
Assay & Laboratory*	8,892.54
Field	52,498.50
Consulting	5250.00
Administration	8229.91
Total	74,870.00

* Part of Focal Resources's Regional Geological/Hydrogeological Study.

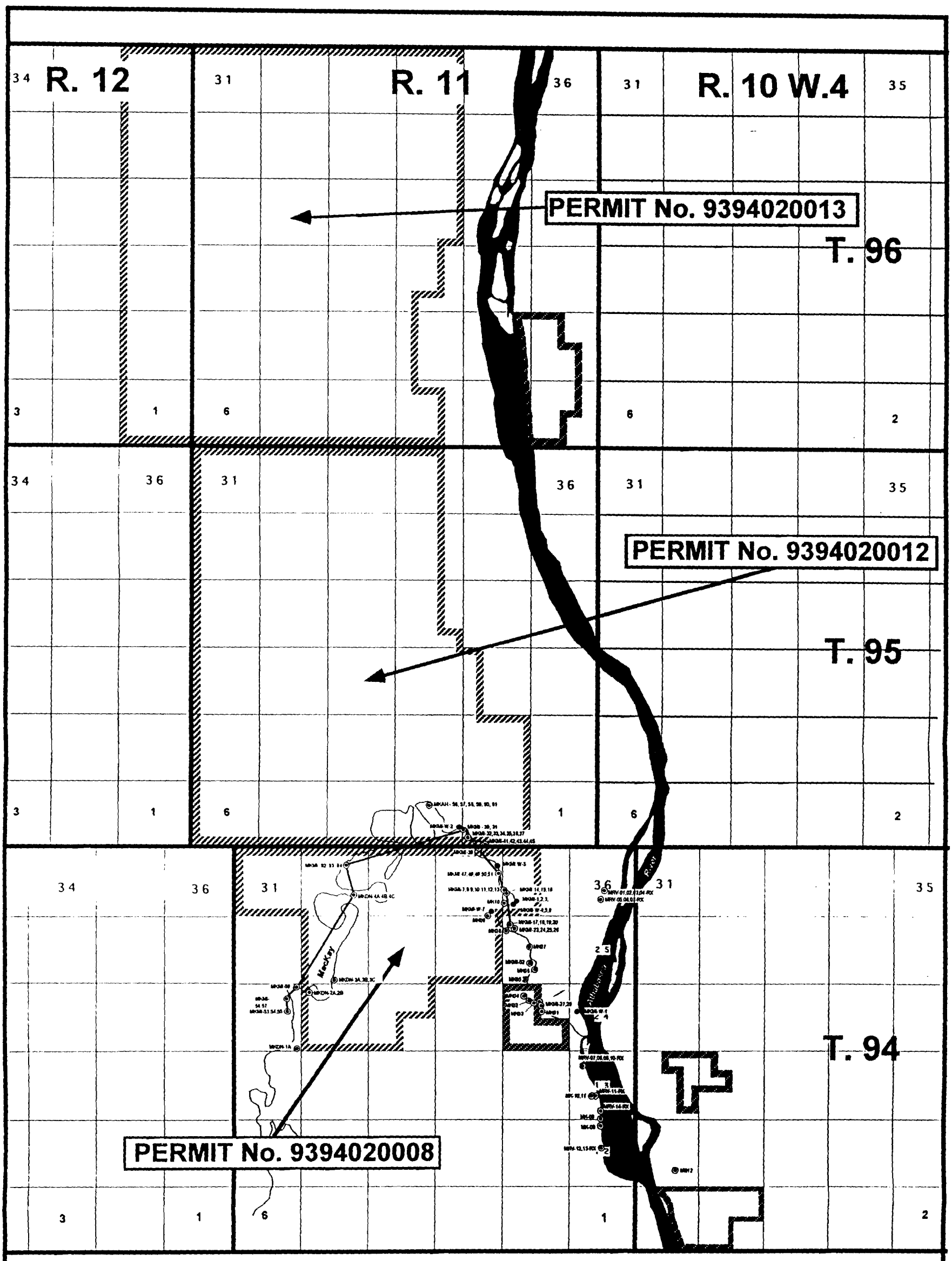
3. Location and Access

This property comprises the lands listed in Table 3—1. They are found within NTS maps: 74 E/04, 74 E/05, 84 H/08, 84 H/10. A map showing this property can be found in Figure 3—1. Map (s) showing the location of data points and or areas work on are attached.

Table 3—1: Location

LSD(s)	Section	Range	Township	Meridia
20; 21N, SW; 23SP, NWP; 27—29; 31—34; 35WP	4	11	94	W4
32L4, L5, L12, L13; 4—9; 10NW, L4—L7, L10, L15, L2, L7, L10, L15; 16—22; 27—34	4	11	96	W4
2-11; 14L4, L5, L12, L13; 15—21; 22W, L1L L2, L7, L10, L15; 27W, L2, L7, L10, L15; 28—33; 34SW, L2, L7, L10—L13	4	11	95	W4

Access to these lands was gained through pontoon—equipped helicopter, canoes and boats, all-terrain machines, and Provincial Highway 963.



0 1 2 3 4 5 6

MILES

FOCAL RESOURCES LIMITED

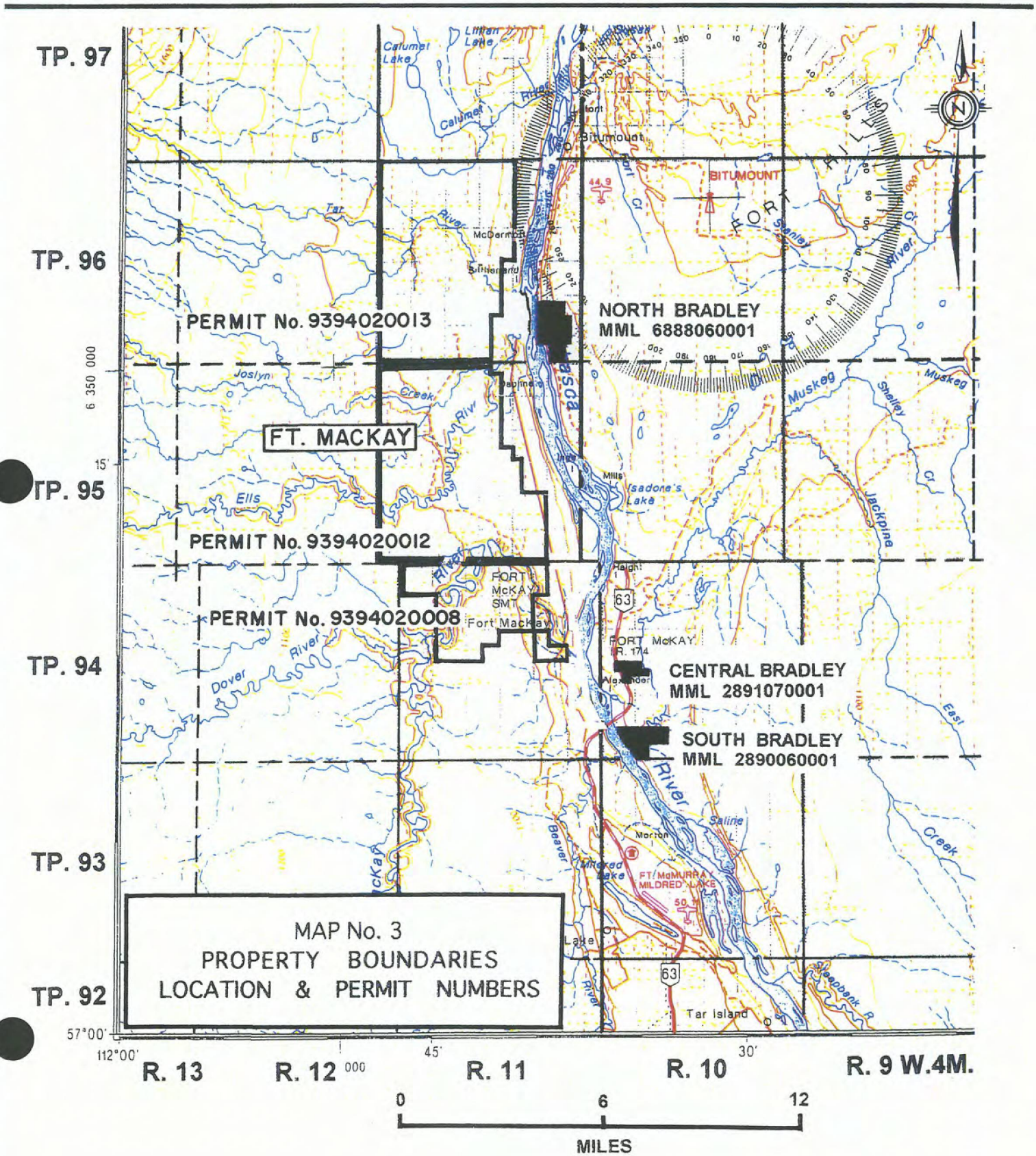
CALGARY, CANADA

FORT MACKAY PROPERTIES

ALBERTA

GENERAL GEOLOGY AND PROPERTY MAP

DRAWN BY:	*ATOMAC Creative Energies*	MAP NO.	4
DATE:	MARCH 15, 1996		
APPROVED BY:	DENNIS NIKOLS	NTS REFERENCE:	74 E/4, 74 E/5, 84 H/8, 84 H/10
SCALE:	1: 100 000 Approximately		


TP. 97
TP. 96
TP. 95
TP. 94
TP. 93
TP. 92
PERMIT No. 9394020013
PERMIT No. 9394020012
PERMIT No. 9394020008
NORTH BRADLEY
MML 6888060001
CENTRAL BRADLEY
MML 2891070001
SOUTH BRADLEY
MML 2890060001
FT. MACKAY
FORT McKAY
FORT McKAY R. 174
Fort MacKay
Bitumount
BITUMOUNT
Isadore's Lake
Mildred Lake
FT. McMURRAY
MILDRED LAKE
Tar Island
Lake
Calumet Lake
Lillian Lake
Joslyn Creek
Ells River
Dover River
Muskeg River
Muskeg Creek
Shelley Creek
Jackpine Creek
Saline Creek
Beaver Creek
Tar River
Steepbank R
East
63
MAP No. 3
PROPERTY BOUNDARIES
LOCATION & PERMIT NUMBERS
57°00'
112°00'
45'
30'
6 350 000
15'
R. 13
R. 12
R. 11
R. 10
R. 9 W.4M.
0
6
12
MILES

4. Permit Tabulation

Table 4—1: Permit numbers, permit holders, and person(s) reporting

Permit Number	Permit Holder	Report Submitted by
9394020008	Winslow Gold Corp. Northwind Ventures Ltd.	Focal Resources Ltd.
9394020013	Winslow Gold Corp. Northwind Ventures Ltd	Focal Resources Ltd
9394020012	Winslow Gold Corp. Northwind Ventures Ltd	Focal Resources Ltd

5. Work Performed

The following work was performed on, or in support of, work on this property. Table 5—1 provides a summary of efforts as well as statistical information.

Table 5-1: Work performed

Tasks	Dates	Statistics
Literature Review	April & May 1994	
Regional Geological Studies	May through November 1994	
Airphoto Analysis	May & July 1994	
Geological Mapping	June - October 1994	> 5 person months
Bedrock sampling	June - October 1994	109 Samples
Data Reduction and Analysis	November 1994	
Report Preparation	January1996	>3 person weeks
Stream Sediment	July - October 1994	4 samples

5.1 Description of Activities

5.1.1 Literature Review:

The literature review was conducted with two objectives in mind: first, to review the regional geological setting; and second, to compile all relevant information and data relating to the specific permit(s). Searches of public and private libraries were made by the author and library professionals at: the Alberta Research Council, Alberta Geological Survey, Geological Survey of Canada and University of Alberta. Copies of selected articles, book and maps were secured. Where possible information was summarized onto map overlays which were combined with airphoto, regional geophysical and other remote sensing interpretations. Section 8 contains a listing of these information and data sources.

5.1.2 Regional Geological Studies:

The permits discussed in this report form a small portion of the lands surveyed in the company's overall program for 1994. Positioning any specific permit in a regional geological framework is an essential step in the interpretation of any data collected from that permit. The development of this framework began with the literature review (section 5.1.1). The geological consultants assembled the information, interpreted and summarized it onto map overlays, developed an exploration and data collections strategy, implemented the appropriate field efforts, and interpreted the results of the field efforts within that framework.

5.1.3 Rock, Sediment and Water Sampling:

Sampling of rock, sediment and water was conducted along the MacKay River, because it provides access to some of the best exposures of both Devonian limestones and McMurray Formation in the area. These permits are located in an area considered to be favorable for metal deposition due to their proximity to the salt—solution edge and the existence of bitumen rich Cretaceous rocks overlying the Devonian. The probability of pathways for upwardly migrating fluids, and a strong reducing environment, was therefore identified. Stream sediments could contain concentrations of minerals indicating metal deposition.

The possibility that waters enriched in metallic ions could be migrating upward through conductive zones was also tested by taking a series of rock samples. It is known that the MacKay River receives inflow from regional streams as well as bank erosion, and would be the most likely repository for geochemical concentrations of metallic elements if any were reaching the near-surface.

Sediment samples were taken from the river shore, small boats and canoes. Water samples were taken from known or suspected springs along the river bank. The location and depth of samples were recorded. Sampling devices were designed and built by Dr. J. D. Campbell. Samples were placed in clean 1 L wide-mouth sample bottles.

The water samples were treated as follows:

Electrical conductivity and pH are measured on raw, un-filtered waters as close to the time of collection as possible. Samples are filtered through a 0.45 mm cellulose acetate filter housed in a 2.4 L barrel filter unit using a hand–pumped drive. Water is collected into 2, 125 ml polypropylene bottles. One is acidified to a pH <2 with a few drops of concentrated nitric acid, sealed and archived as filtered acidified water (FA). The other is sealed and marked as filtered un-acidified water (FUA). To allow for increased QA/QC flexibility, a second FA sample was commonly taken.

Gold, silver and platinum group elements (PGE's) are unstable in aqueous solutions in plastic containers. To preserve for these specific elements and to allow for lower detection limits, a pre-concentration technique following that of Hall (1986), was utilized. To one liter of acidified water, 250 mg of activated carbon is added and vigorously agitated. The unstable elements are adsorbed onto the activated carbon. This mixture has been shown to be stable for over 30 days. The water plus activated carbon mixture is then re-filtered through a 0.45 micrometer cellulose acetate filter to collect the activated carbon. The collected activated carbon is then analyzed for Au, Ag and PEG's.

The taking, handling and treatment of all water samples was done under the supervision of Ground Water Solutions Ltd. of Calgary. The analytical work was carried out by Elemental Research Inc. using the methods defined by Hall et al. (1986).

5.1.4 Geological and Structural Mapping:

Due the significant exposure of the Devonian strata and the Cretaceous McMurray Formation along the MacKay River, our geologists examined the rock in a systematic and detailed way. Two person teams, consisting of a geologist and student assistant made frequent stops at rock exposes along the river. At each location a description of the lithology, texture, and bedding were made. The jointing pattern was observed and measured along with the dip and strike of the formation. Representative samples were taken from the various lithologies exposed.

The results of the mapping can be seen on the geologic map and cross sections provided.

5.1.5 Data Reduction and Analysis:

Data was reviewed by qualified professionals and then entered into a computerized data base. Map displays and postings were produced. The data from this field work was reviewed and analyzed in the context of the regional studies carried out by our staff and consultants. Most of the rock samples were placed in storage and have not been analyzed.

The geology/structure map provides a number of interesting results. A careful examination of this map reveals:

1. The joint set throughout the area is highly consistent. Major joint sets are northeast/southwest, north/south and northwest/southeast. The predominate dip of joints is 90 degrees (variations from vertical appear to result from very local conditions and seldom vary more then 5 degrees). This joint set is consistent with outcrops found on the east side of the Athabasca River. This suggests that if the Athabasca River valley is not associated with a major structure in the basement; and that if any movement along that trend occurred, it did not rotate the Devonian rocks in any measurable way. No evidence of vertical displacement between the east and west shores of the river was noted. No evidence of movement along a fault, postulated by others to run roughly north and south along the Athabasca River, was found.

2. The dips and strikes of the Devonian rocks reveals a pattern consistent with salt solution collapse at depth. Outcrops seen along the MacKay River suggest a series of gentle undulations resembling tectonic folds (similar undulations have also been observed along the Athabasca, Muskeg and Clearwater Rivers). A closer examination of these undulations did not show any non—weathering—related increase in joint frequency across the zones. In fact, the average observed frequency of joints was one meter in all areas of limestone mapped by us. The pattern of bedding dips and strikes reveals a series of oval "structures". The undulations mentioned above are in fact large oval or elongated "dome like" structures that we believe are the result of salt collapse at depth. No evidence of tectonic structural movement was observed on or around this property. This does not mean that none, exists; it means that in the outcrops visited, none was observed.

3. The absence of increased joint frequency on the flanks of the troughs between the oval undulations, suggests that the deformation from a theoretical horizontal condition during deposition, was slow and developed over a long geologic time span. This does not mean that in the areas of deepest down-warp (the zones between undulations, which were always observed to be covered by glacial till or oil-sands) could not be opened, fractured or otherwise able to carry ascending fluids. We did not observe any direct evidence for or against this possibility and it remains a valid hypothesis.

4. With the exception of minor bionic pyrite (fossil replacement), we did not find any visible metallic mineralization. We did observe some limonite and iron staining of the limestone, a condition usually seen along joints that were always in contact with the overlying McMurray Formation. We believe that this alteration is produced by ground water seeping from the McMurray to the Devonian, and is not connected in any way to the working hypothesis noted above.

5. A few groundwater samples were collected from springs in the area, none of which indicated anomalous values of elements of interest. In fact, all of the samples collected were related to McMurray Formation slump failures along the river bank which were always associated with the troughs of the limestone undulations. The limestone, where outcropping, is invariably at the crest of these undulations. In the troughs, between undulations, the limestone lies below river level, where toe-support for the McMurray Formation is lost. Most of the bank failures are circular slump features, that appear to be caused by elevated pore pressures and the lack of toe—support.

6. As noted above, the limestone is generally not well jointed and not highly permeable, except where there are concentrations of fossils along stratragraphic horizons, called bioherms. In a number of locations, petroleum was observed to have leaked down the joint system and infiltrated the biohermal layers, coating the fossils. Such infiltration was not generally observed in horizons that were not fossil—rich and only in those horizons that had lithologic permeability.

7. Karst features were not observed in this mapping. We were unable to locate any sink holes, enlarged joint systems or cave structures. This is not to say that they do not exist, but only that none were located by direct or indirect evidence. The existence of karst features would provide a possible groundwater connection between the subsurface fluids and the upper Devonian rocks. The development of karsting is not directly related to fluid movement from depth is usually caused by the downward movement of surface or near—surface ground water. It was hypothesized that fracture systems could have been created during the salt collapse phase and that groundwater would find an easy path for karst development in these areas (see #3 above). This may still prove true; the low lying areas or troughs that were observed were all filled with McMurray Formation sediments which would obscure these features. Sink holes have been mapped to the northeast by Bayrock (1971-72) and enlarged joint systems and sink holes are reported by geologists at both oil sands mines (personal communications).

5.1.5 Report Preparation:

Reports and maps were prepared by our staff and consultants documenting all of our activities and results. This report is a summary of those efforts.

5.1.6 Stream Sediment Sampling:

The MacKay River offered a good sampling opportunity. Suitable sites were located and our staff geologists used a 6mm screen to remove coarse materials. The samples weighed about 40 kgs and were placed in large pails. Stream samples were taken to the University of Alberta Minerals Benefaction Laboratory and screened to +/_ 60 mesh. The minus 60 mesh fraction was placed on a shaking table by an experienced technician; each sample was separated into concentrate, middling and tails; the heavy mineral fraction made up most of the concentrate. Samples were subsequently examined under the light microscope and the concentrate was assayed for precious metals.

R. 11 W.4M.

R. 10 W.4M.

T. 95

T. 94

PERMIT No. 9394020012

PERMIT No. 9394020008

MKAH-56,57,58,59,60,61
MK-CHAN-1
MKMI-W-2
MKMI-30,31
MKMI-32,33,34,35,36,37
MKMI-38,39,40,42
MKMI-41,43,44,45
MKMI-W-3
MKMI-47,48,49,50,51
MKMI-7,8,9,10,11,12,13
MKMI-14,15,16
MKMI-W-6
MKMI-W-5
MKMI-W-4
MKMI-1,2,3,4,5,6
MKMI-62,63,64,65
MKMI-59,60,61
MKDN-4a,4b,4c
MK07
MKMI-W-7
MK06
MKMI-17,18,19,20,21,22
MK05
MK-25,26
MK-04
MKMI-52
MK-03
MK-02
MKMI-27,28
MK-01
MKMI-W-1
MRV-01,02,03,04-RX
MRV-05,06,07-RX
MKMI-58
MKMI-56,57
MKMI-53,54,55
MKDN-3a,3b,3c
MKDN-2a,2b
MK-DN-1a,b,c
MRV-08,09,10-RX
MK-10
MRV-11-RX
MK-11
MRV-14-RX
MK-09
MK-08
MRV-12,13-RX
MB12
River
MacKay
Athabasca
963
63
Central Bradley
South Bradley

0 1 2 3

MILES

LEGEND

- MKMI-W-7
- MK09
- 700 Structure Contour Top Devonian / after Carrigy 1959
- 328 m Spot Elevations of Surface
- Focal Interest Land
- Regional Cross Section
- 963 Highway and
- 63 Access Roads
- Other Focal Interest Land

FOCAL RESOURCES LIMITED
CALGARY, CANADA

FORT MACKAY PROPERTIES
ALBERTA
SAMPLE POINT LOCATION POSTING & GEOLOGY

DRAWN BY:	ATOMAC (ACE)	MAP NO.	MAP 5
DATE:	MARCH 30, 1996		
APPROVED BY:	DENNIS NIKOLS	NTS REFERENCE:	74 E/04, 74 E/05 84 H/08, 84 H/10
SCALE:	1: 10 000 Approximately		

5.1.7 Regional Ground Water Geochemistry:

Water chemistry data from deep formations was collected over a wide area in the vicinity of this and other properties of interest. Existing wells were sampled using the best available technology. The waters were treated and tested as described in section 5.1.3, above. Existing water observation wells drilled by the Alberta Research Council (ARC) and others, formed the bulk of those sampled. Additional samples were taken from water supply wells and gas well separators in areas not covered by the exiting piezometers, and the analysis of these data formed an important part of the overall evaluation of the mineral potential of these leases.

6. Conclusions and Recommendations

— No mineralisation or potential economic concentrations of metallic minerals were located on this property.
— A selection of the un-assayed rock samples taken to date should be assayed.
— High-resolution seismic lines should be run over areas that are now covered and may hold potential karst structures or enlarged joint systems.
— Three test holes should be drilled in the southeastern part of the property to test the potential of mineralization by rising fluids.
— If the results of the drilling are positive, mapping of the northern 2/3 of this property should be undertaken using suitable geophysical techniques.

7. Bibliography

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8. Author Information

This report was prepared by: D. Nikols, L.A. Smith, and M.B. Innes. The geological service work and results reported herein was carried out by or under the supervision of the preparation team.

Leslie A. Smith, B.Sc., P. Geol. is a registered geologist in Alberta and has over 20 years of experience in mining and petroleum geology and project management.

Dennis J. Nikols, B.Sc., P. Geo. is a registered geoscientist in British Columbia. He has 26 years of experience in mineral exploration and mining geology and the management of geoscience projects for industry and the Alberta Geological Survey.

Michele B. Innes, B.Sc., MBA, G.I.T., a recent graduate of the University of Saskatchewan was directly involved in the mapping, sampling, and data collection on this project.

Submitted by Dennis, J. Nikols, P. Geo. , April 2, 1996

9. Appendix

UTM_EAST	UTM_NORTH	TYPE	SAMPLE_ID
0.00	0.00	ROCK	MKAH-1
0.00	0.00	ROCK	MKAH-2
0.00	0.00	ROCK	MKAH-3
0.00	0.00	ROCK	MKAH-4
0.00	0.00	ROCK	MKAH-5
0.00	0.00	ROCK	MKAH-6
0.00	0.00	ROCK	MKAH-7
0.00	0.00	ROCK	MKAH-8
0.00	0.00	ROCK	MKAH-9
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454580.00	6336600.00	ROCK	MKMI-54
454580.00	6336600.00	ROCK	MKMI-55
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454820.00	6336890.00	ROCK	MKMI-61
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455720.00	6337060.00	ROCK	MKDN-3B
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456000.00	6339820.00	ROCK	MKMI-63
456000.00	6339820.00	ROCK	MKMI-64
456000.00	6339820.00	ROCK	MKMI-65
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456200.00	6339100.00	ROCK	MKDN-4B
456200.00	6339100.00	ROCK	MKDN-4C
457690.00	6341500.00	SEDIMENT	MacKay #2
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458010.00	6341260.00	ROCK	MKAH-61
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458970.00	6340480.00	ROCK	MKMI-33
458970.00	6340480.00	ROCK	MKMI-34
458970.00	6340480.00	ROCK	MKMI-35
458970.00	6340480.00	ROCK	MKMI-36
458970.00	6340480.00	ROCK	MKMI-37
459100.00	6340155.00	SEDIMENT	MacKay #1
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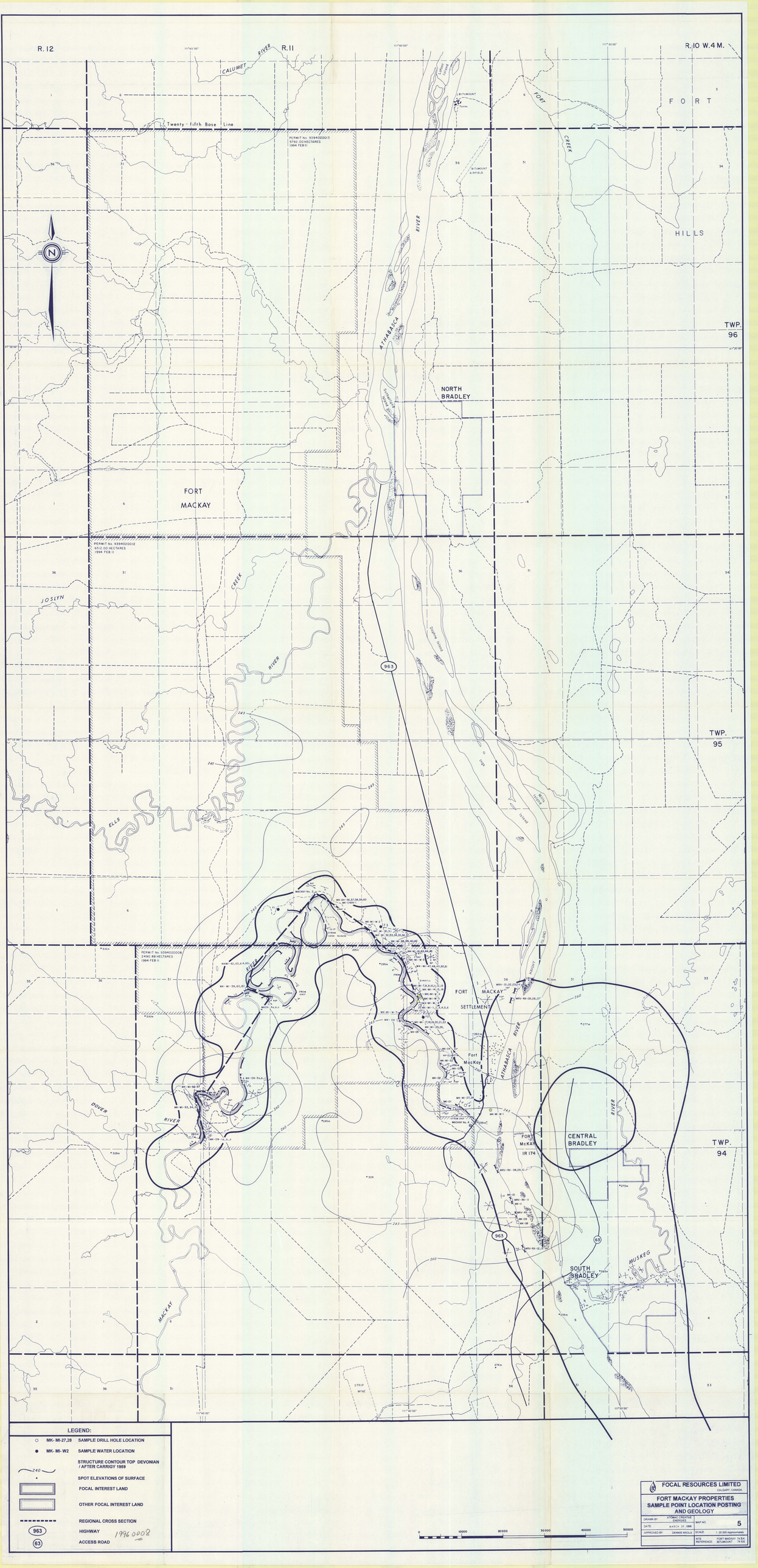
	FOCAL RESOURCES LIMITED	
	FORT MACKAY LANDS EXPENDITURES	
	AS OF JANUARY 31, 1996	
		Block 168
Code		Fort MacKay
1	Company labour	$ 6,163.63
2	Travel & vehicles	2,754.96
3	Contract Labour	2,074.19
10	Consulting Fees	22,180.30
15	Meals & Entertainment	211.55
90	Safety & Security	
100	Site access & prep.	62.13
105	Site clean-up	
110	Camp & catering	1,780.66
120	Communications	521.13
130	Surface land costs	-
140	Damage claims	-
160	Permits & licenses	-
170	Claim staking & recording	-
180	Line costs	
190	Surveying & photogrammetry	458.73
200	Assaying & testing	8,892.54
210	Studies - geological & mapping	4,951.13
211	Studies - geophysical	6.25
212	Studies - geochemical	9,128.67
213	Studies - geotechnical	
214	Studies - environ. & social	
220	Drilling - diamond	
221	Drilling - rotary	-
230	Trenches,pits, unground open	-
240	Logging services and materials	-
250	Fresh water and storage	-
255	Fuel, lubricants & utilities	29.24
260	Printing & reproduction	133.28
290	Drill bits & accessories	
300	Non-controllable material	747.39
310	Controllable equipment	1,585.43
411	Transportation - helicopters	4,050.77
412	Transportation - fixed wing aircraft	407.97
413	Transportation - vehicles	29.47
430	Move- in/out	16.09
420	Equipment rentals	445.47
900	Miscellaneous	10.06
950	Administrative costs (inhouse)	-
990	Overhead	8,228.96
	TOTAL	$ 74,870.00

LAS Associates

	Assay & Laboratory	$	8,892.54
	Field	$	52,498.50
	Consulting	$	5,250.00
	Administration	$	8,228.96
		$	74,870.00


R. 12
R. 11
R. 10 W. 4 M.
CALUMET RIVER
Twenty - fifth Base Line
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1994 FEB 11
BITUMOUNT
FORT CREEK
BITUMOUNT AIRFIELD
F O R T
HILLS
ATHABASCA RIVER
TWP. 96
NORTH BRADLEY
FORT MACKAY
PERMIT No. 9394020012
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1994 FEB 11
JOSLYN CREEK
963
TWP. 95
ELLS RIVER
PERMIT No. 9394020008
2490.88 HECTARES
1994 FEB 11
FORT MACKAY SETTLEMENT
Fort MacKay
FORT McKAY IR 174
CENTRAL BRADLEY
TWP. 94
DOVER RIVER
MACKAY RIVER
SOUTH BRADLEY
MUSKEG
STRIP MINE
LEGEND:
SAMPLE DRILL HOLE LOCATION
SAMPLE WATER LOCATION
STRUCTURE CONTOUR TOP DEVONIAN / AFTER CARRIGY 1959
SPOT ELEVATIONS OF SURFACE
FOCAL INTEREST LAND
OTHER FOCAL INTEREST LAND
REGIONAL CROSS SECTION
HIGHWAY
ACCESS ROAD
1996 0008
FOCAL RESOURCES LIMITED
CALGARY, CANADA
FORT MACKAY PROPERTIES
SAMPLE POINT LOCATION POSTING
AND GEOLOGY
DRAWN BY: ATOMIC CREATIVE SYSTEMS
MAP NO. 5
DATE: MARCH 31, 1996
APPROVED BY: DENNIS NICOLL
SCALE: 1: 20 000 approximately
NTS REFERENCE: FORT MACKAY 74 E/6
BITUMOUNT 74 D/8