MAR 19950015: STEEN RIVER

Received date: Sep 07, 1995

Public release date: Sep 08, 1996

TABLE I

TROYMIN RESOURCES

STEEN RIVER PROSPECT

ALBERTA

SUMMARY OF EXPENDITURES

High Resolution Aeromagnetic Survey	
Spectra Exploration Geoscience Corp.	$114,891.00
Excel Geophysics Inc.	5,000.00
Geochemical Survey	23,048.00
Geological Surveys	
[redacted]	400.00
Connemara Resource Ventures Ltd.	14,053.00
Apex Geoscience	229.00
TOTAL	**$157,621.00**

TABLE II

PERMIT NO.	TWP.	RGE.W5	ORIGINAL AREA (ha) 1 HA - 2.5 AC	REVISED AREA (ha) (as per Mar.3/95 letter)	SECTIONS TO BE DROPPED	NEW AREA (ha)
9393030614	119	21	9216	4608	All	NIL
9393030615	119	22	9216	4608	All	NIL
9393030616	119	23	9216	4608	All	NIL
9393030617	119,120, 121,122	24	6698.28	5930.28	All	NIL
9393030618	120	20	9216	9216	All	NIL
9393030619	120	21	9216	9216	1 to 30 & 36	1280
9393030620	120	22	9216	9216	1 to 31	1280
9393030621	120	23	9216	9216	All	NIL
9393030622	121	20	9216	9216	All	NIL
9393030623	121	21	9216	9216	1,12,13,24,25,36	7680
9393030624	121	22	9216	9216	6, 7	8704
9393030625	121	23	9216	9216	1-20,23,24,29-32	2560
9393030626	122	20	9216	9216	All	NIL
9393030627	122	21	9216	9216	1-3,10-15,22-36	3072
9393030628	122	22	9216	9216	25-36	6144
9393030629	122	23	9216	9216	3-11, 13-36	768
			144,938.28	130,346.28		31,488

19950015

STEEN RIVER PROSPECT

ALBERTA

Metallic and Industrial Mineral Permits

9393030614 to 9393030629

ASSESSEMENT WORK REPORT

SUBMITTED BY:

TROYMIN RESOURCES LTD.
#200, 622 - 5 AVENUE S.W.
CALGARY, ALBERTA T2P 0M6

September 1, 1995

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September 1, 1995

STEEN RIVER PROSPECT

NORTHWESTERN ALBERTA

GEOLOGICAL REPORT

SUBMITTED BY:

TROYMIN RESOURCES LTD.
#200, 622 - 5 AVENUE S.W.
CALGARY, ALBERTA T2P 0M6

September 1, 1995

STEEN RIVER PROSPECT, ALBERTA

REVIEW AND SUMMARY

Metallic and Industrial Mineral Permits 9393030614 to 9393030629 inclusive are located in Northwestern Alberta, approximately 100 km. WNW of the town of High Level and approximately 700 km from Edmonton. (Figure 1) Centrally located within the prospect area is the Steen River Structure (SRS) which is believed to be prospective for mineral resources.

The SRS has no surface expression, but was discovered during petroleum exploration drilling in the 1960's. Regionally, the SRS lies predominantly within the Great Bear magmatic arc basement terrain. It is located at the intersection of two major regional subsurface structural features, a northwest-southeast trending fault which separates the Great Bear basement terrain from the Hottah accreted terrain and the subsurface extension of the southwest-northeast trending Great Slave Lake shear zone (Figure 2).

The structure appears to consist of a central uplift surrounded by a rim syncline and an outer raised rim (Figure 3). The outer diameter of the SRS is approximately 25 km. The central block consists of basement upthrust 1,100 m above the regional level. The rim syncline is downthrust 200 to 600 m below regional levels, and the outer raised rim is upthrust 20 to 50 m. Thus, there is a relative throw of 1,700 m between the center and parts of the rim syncline (Figure 4).

Past geological studies on the SRS have led most observers to conclude that it is a meteorite impact origin structure, however, we believe there is evidence of significant volcanic activity which may or may not have been triggered by an impact.

Downhole well logs in the area show a sequence of middle and late Devonian carbonates, evaporites and shales which are truncated by the pre-Cretaceous unconformity which is normally found at the top of the Wabamun Formation. Overlying the Devonian are mid-Cretaceous marine shales and recent glacial sediments. The age of the SRS appears to be approximately 95 My, which may place the structural event after the commencement of deposition of the Cretaceous marine shales.

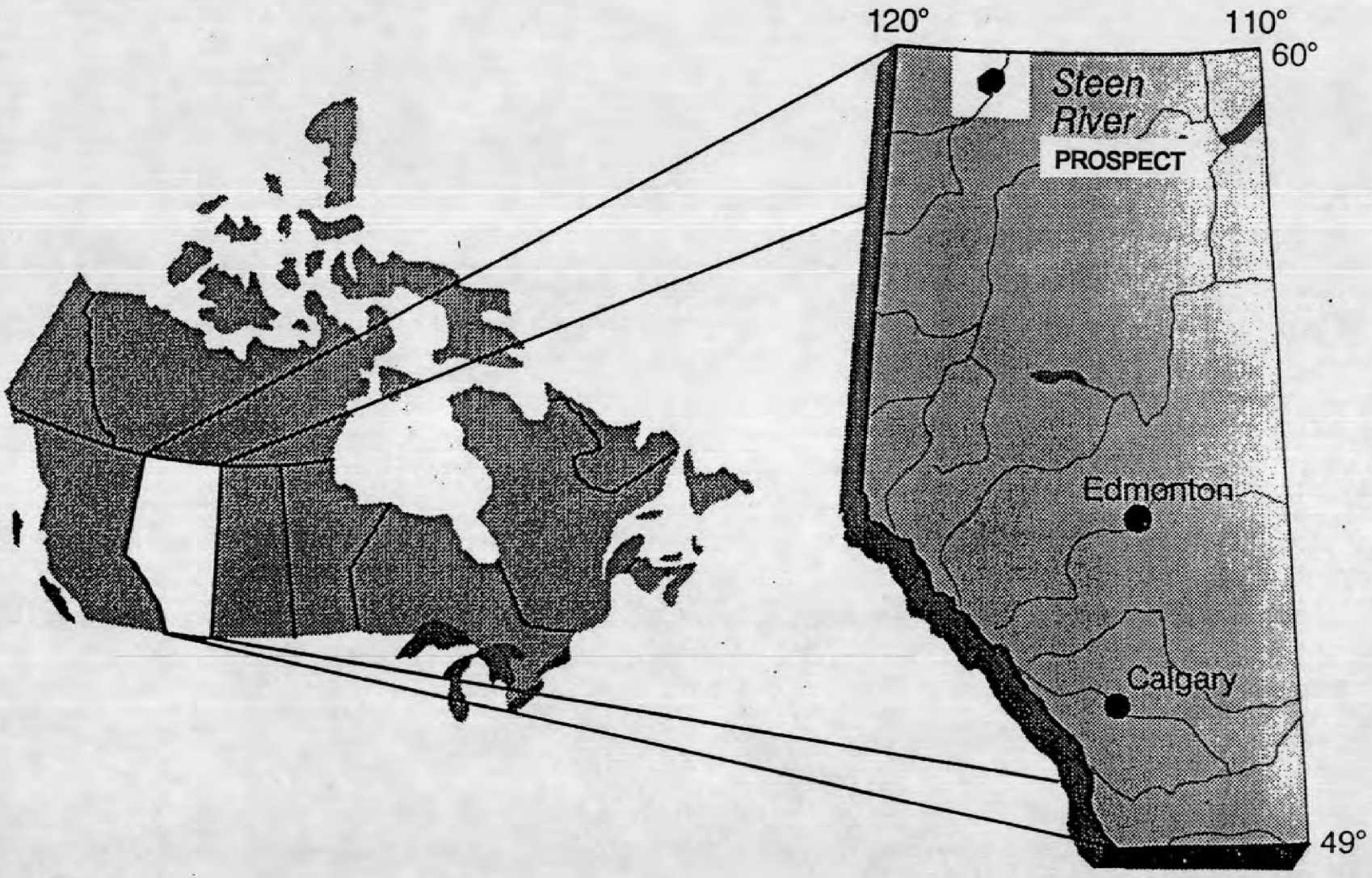
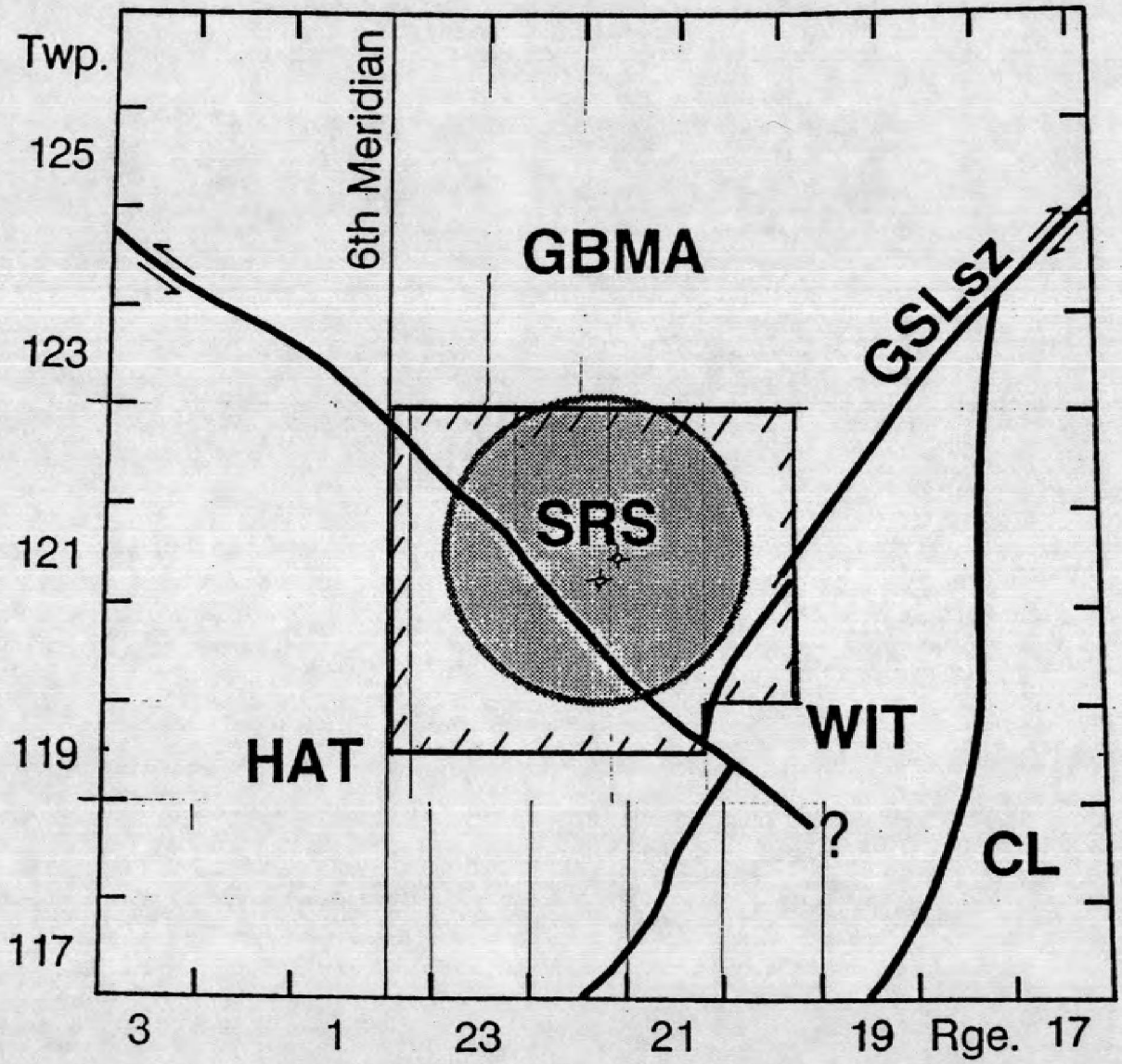


FIGURE 1



Steen River

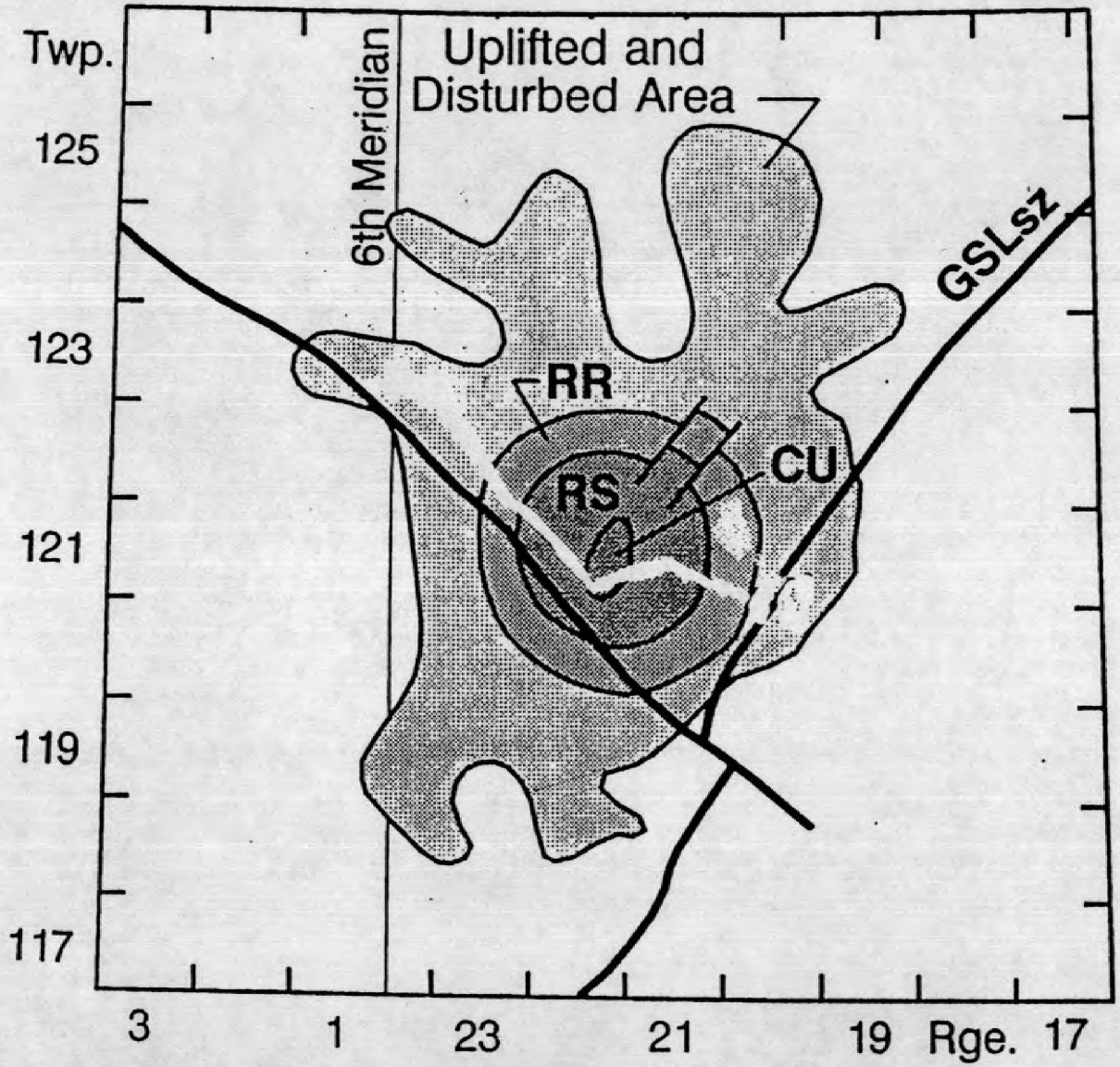
PROSPECT

GBMA	Great Bear Magmatic Arc
HAT	Hottah Accreted Terrain
WIT	Wilson Island Terrain
CL	Chinchaga Low
GSLsz	Great Slave Lake shear zone
SRS	Steen River Structure

SOURCE

Alberta Research Council

FIGURE 2



Steen River
PROSPECT
Main Tectonic Elements

RS Rim Syncline

CU Central Uplift

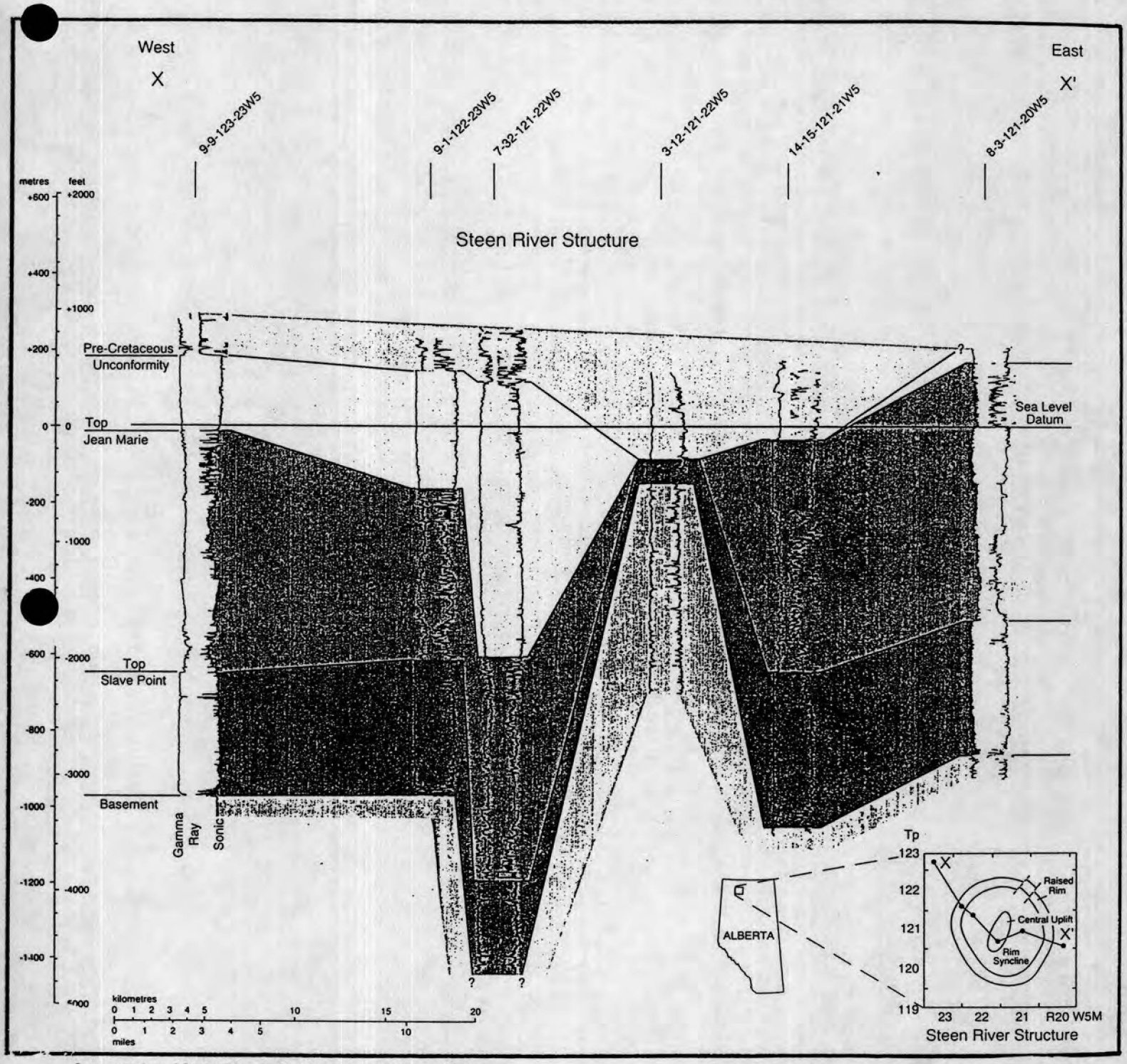
RR Raised Rim

GSLsz Great Slave Lake shear zone

SOURCE

Alberta Research Council

FIGURE 3



Cross section of Steen River Impact Structure, northern Alberta.

SOURCE: GEOLOGICAL ATLAS

FIGURE 4

RESOURCE POTENTIAL

The Steen River Prospect is located approximately 40 km. north of the Zama oil and gas fields and 20 km. west of the Dizzy oil field which is situated along the Great Slave Lake shear zone. There is an existing oil pool in the permitted area in sections 21 and 28, Twp 122, Rge 22, W5, which appears to be located on the indicated rim structure of the SRS.

A review of the well cuttings and core samples from two (2) key wells on the SRS, the IOE Steen 12-19-121-21 W5 and the Dome et al Steen 3-12-121-22 W5 (Appendix I) indicate that the structural complex at Steen River has been intruded by diatreme like structures of early Cretaceous age. Samples of chrome micas found in these well cuttings are interpreted to indicate the presence of ultramafic rocks. Stratigraphic evidence indicates a history of tectonic and volcanic activity similar to the Peace River arch area to the south where exploration drilling is rumored to have discovered kimberlites, a key diamond host rock. To the north diamond exploration activities in the Northwest Territories have confirmed the existence of diamondiferous kimberlite diatremes as far south as Yellowknife, while in the Fort a la Corne area in central Saskatchewan, one of the largest clusters of kimberlites in the world has been discovered. To date 41 kimberlites have been tested here and 80% are diamondiferous. Emplacement of these kimberlite bodies has been dated as a Middle Cretaceous event. At this time we believe the Steen River area may also have the potential to host diamondiferous diatremes.

Although the area has not been extensively evaluated for base metals a drilling program conducted by Gulf Minerals in the Steen River area in the 1970's reported anomalous concentrations of zinc, lead, copper and nickel from Devonian carbonates as well as Cretaceous black shales. The Great Slave Lake Shear Zone, (GSLSZ) which is evident in the southeast portion of the prospect area, appears to have been a conduit for deep seated mineralizing hydrothermal fluids concentrating along and near faults associated with this major crustal break. At Pine Point, N.W.T., approximately 200 km. northeast along the GSLSZ, Devonian age Presqu'ile dolomite hosts several economic lead-zinc deposits which may have formed during the late Cretaceous period. Given the evidence of significant volcanic and structural activity in the Steen River area at about the same time and several reported copper-zinc occurrences, we believe there is potential for the discovery of significant copper-lead-zinc deposits in the Devonian and Cretaceous strata which has been up thrust around and over the SRS.

An exploration program in the Caribou Mountains approximately 100 km. east of Steen River has reported numerous precious and/or base metal anomalies in stream sediment samples sourced from the Cretaceous Shaftsbury formation. Similar encouragement has been reported in the Birch Mountains approximately 300 km east of Steen River where geochemical studies of the Shaftsbury shale indicate a volcanogenic/hydrothermal source for possible economic deposits of gold and/or base metals in the area.

Drilling in the 1960's in the Clear Hills area 250 km south of Steen River defined a resource of 1.1 billion tons grading between 32% and 35% iron. The oolitic iron zones are hosted in Upper Cretaceous Bad Heart sandstone lens within the Smoky River dark marine shales. Recent metallurgical studies, including fire assays of a number of outcrop samples, have confirmed the presence of wide spread gold, silver and platinum mineralization in the iron bearing sandstone lens. Metallurgical and field research programs are currently underway in this exciting new mineral play.

A high resolution aeromagnetic survey has defined a number of distinct geophysical anomalies within and flanking the SRS which may be prospective for potentially diamondiferous diatremes or precious metal/base metal deposits. Troymin plans to follow-up these highly encouraging results with ground geophysics and geochemical sampling to further define drill targets prior to commencing an exploratory drilling program.

APPENDIX 1

P.I.X. LTD LSD-12 SEC-19 TWP-121 RGE- 21 W 5 MER ALTA
UNDEFINED 100/12-19-121-21-W5/00
IOE STEEN 12-19-121-21 CO-ORD - S2014 E0550 KB - 1160
SPUD - 12/08/63 SFC CSG - 8, 434 STATUS - ABAN GR - 1154
F/D - 12/16/63 INTER - PROD Z - FTD - 1695
COMP - PROD - CLASS - NEW-FIELD WILDCAT PBTD -
CORES- 1077-1094 CONV REC 70FT,1244-1252 CONV REC 80FT,1368-1383 CONV REC 20FT,
1484-1493 CONV REC 90FT,1620-1627 CONV REC 70FT,1670-1695 CONV REC 50FT,
497-598 SW REC FT,603-608 SW REC FT,614-630 SW REC FT,645-656 SW REC FT,
740-746 SW REC FT,811-837 SW REC FT,883-977 SW REC FT,985-991 SW REC FT,

FORMATION TOP SUBSEA DRILL-STEM TESTS
CRET 624 +536 1349- 1396 VO 60 REC 390FT MUD 60FT SALT WATER SBHP 732 FFP 274
TD 1695 -535

J.D. McCLEARY, VICE PRESIDENT

LOGS- SONIC,DENS,LL,IE
CARD 1 COPYRIGHT CANADA 36117

P.I.X. LTD LSD-12 SEC-19 TWP-121 RGE- 21 W 5 MER ALTA
UNDEFINED 100/12-19-121-21-W5/00
IOE STEEN 12-19-121-21 CO-ORD - S2014 E0550 KB - 1160

CORES- 999-1009 SW REC FT,1017-1025 SW REC FT,1032-1045 SW REC FT,1056-1063 SW REC FT,
1501-1501 SW REC FT,

END COPYRIGHT CANADA 36118

Lsd. 3 Sec. 12 Twp. 121 Rge. 22 W 5 Mer. LIC. APP. JAN 22/70

ALTA. **PETROLEUM INFORMATION EXCHANGE LTD.** * PIX DEL. MAR 30/70

DOME PETROLEUM		FTD. 3595' PRECAMBRIAN	CO-ORD. N993'-E1655'	K.B. 1152'
DOME ET AL STEEN 3-12		PBTD.	CORES 3174-3185 ✓	GR. 1141'
		I.P.	3564-3573 ✓	
SPUD. JAN 28/70	10 3/4-662-610		2 boxes	
R/R FEB 19/70			PERFS.	
COMP.				
STATUS D&A		NET PAY		
		PROD. Z.		

FORMATION	TOP	SUBSEA	TOP
VOLCANICS	800?	+352	
MID DEV CARB	1440	-1663?	-288 -511
PRECAMB	2015?	-863	
T.D.	3595	-2443	

NO DRILLSTEM TESTS RUN.

Samples could be a volcanic tuff / clayy micrite

Core Research Centre - 284-4561

Sample - 290 -3390' ea

SURV: MIDWEST SURVEYS CO.

LOGS DIL, BHCS, DENS

CONTRACTOR COMMONWEALTH #11

WELL COMPLETED

EST. T.D.— 4300' PRECAMBRIAN

RIGHTS CROWN

DIAMOND L[illegible]L RECORD

PROPERTY _____

HOLE No. Dome et al Stn 3-12
L & 3-12-121-22 WS

DIP TEST		
	Angle	
Footage	Reading	Corrected

Hole No. _____ Sheet No. _____ Lat. _____ Total Depth _____

Section _____ Dep. _____ Logged By _____

Date Begun _____ Bearing _____ Claim _____

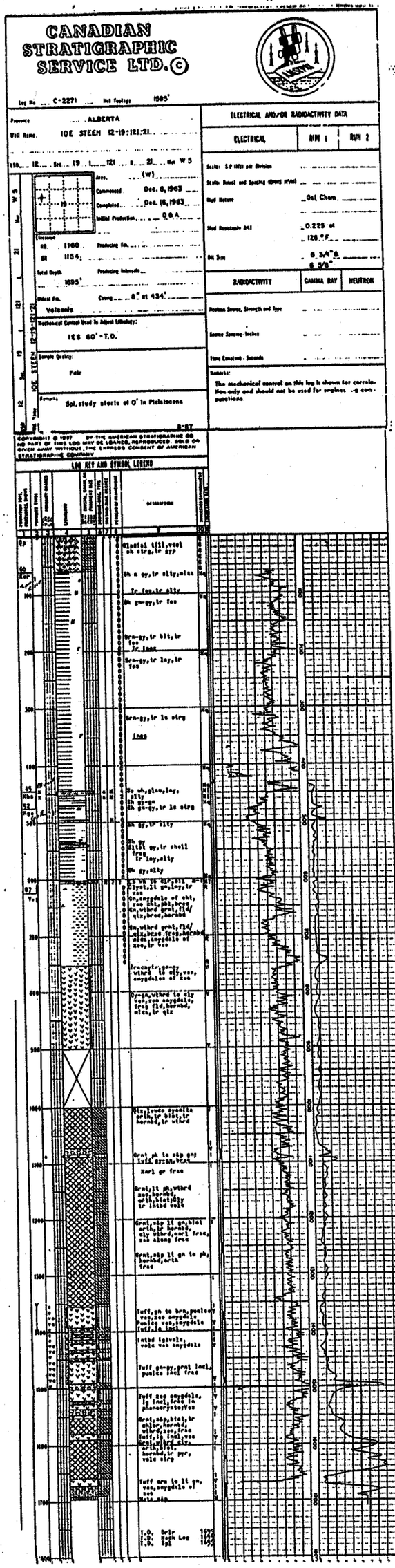
Date Finished _____ Elev. Collar _____ Core Size _____

Date Logged _____

Note: Computer changed to read top of diti @ 790'.

DEPTH FROM	DEPTH TO	RECOVERY	DESCRIPTION	SAMPLE No.	FROM	TO	WIDTH OF SAMPLE
780	~~790~~		Volcanics,				
			As 790-800 also pink quartz chips, v. rare chromica flakes.				
790	800		Grey green to white f.g. volcanics, v rare chrome-mica bright green flakes seen. Rare scattered 4/m chips w/light green (olivine?) stringers. Native copper.				
800	~~850~~ 840		Grey white limestone, dirty carbonates, chips included in finer grained s/p volcanics?				
850	940		Volcanics, no chrome mica. Andesitic?				
940	1030		Capilli tuff, buff grey, tridimite (?), rhyolitic				
1040	1430		Rhyolite, buff coloured, K spar, quartz, pumice(?) rare mafics, s/p. Compared 1400-1410 to 2560-70, they are very similar. This section could also be pE granite.				
1430	1540		Rhyol + limestone mixed fine grained equigranular + grey, s/p, carbonate rich				
1540	1570		Limestone, white chips in s/p medium grained sand				
1570	1740		Carbonate, buff brown + white				
1740	1950		Granite, medium grained, black biotite				

G. SALAZAR S. & ASSOCS. LTD.
INT. GEOL. CONSULTANTS



INFORMATION SUMMARY

SUMMARY OF ABBREVIATIONS
ELEV. 1160 KB

QUATERNARY		
Qp	Pleistocene	Spl Starts
LOWER CRETACEOUS		
Kor	Spirit River	60
Kbs	Bluesky	445
Kge	Gething	452
VOLCANIC		607

FOOTNOTES

1. From 607' to T.D. interbedded Cambrian plutonics and Cretaceous Volcanic.

DRILL STEM TESTS

#1 1349-1396
OP 60 MINS. SI 60/60 MINS. FP 145-260 SIP 780-760 HP 880-880 REC 390' MUD, 60' SW.

CORED INTERVALS

1077-1094
1244-1262
1368-1382
1484-1493
1620-1627
1670-1695

IOE STEEN 12-19-121-21
LSD 12-19-121-21-W 5
ALBERTA, CANADA
LOG NO. C-2271

CANADIAN STRATIGRAPHIC SERVICE LTD ©

Log No. C-2271 (CS) Net footage 830'

Province. ALBERTA

Well Name IOE STEEN 12-19-121-21

LSD. 12 Sec 19 T. 121 R. 21 Mer W 5

Area (W)

Commenced Dec. 8, 1963

Completed Dec. 16, 1963

Initial Production D & A

Elevation
KB 1160
GR 1154

Producing Fm

Total Depth
1695

Producing Intervals

Oldest Fm
Volcanic

Casing 8" at 434'

LSD 12 Sec 19 T 121 R 21 Mer W 5

Well Name IOE STEEN 12-19-121-21

DETAIL CORE STUDY

Sample Quality

Remarks

8-67

— INFORMATION SUMMARY —

SUMMARY OF ABBREVIATIONS
ELEV. 1160 KB

VOLCANIC

DRILL STEM TESTS

#1 1349-1396

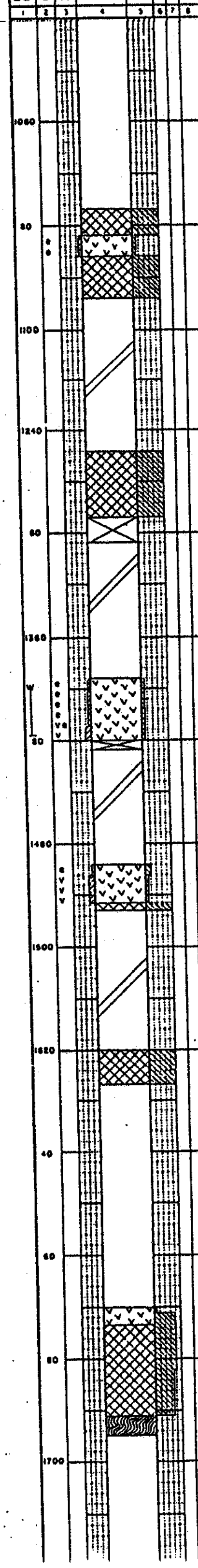
OP 60 MINS. SI 60/60 MINS. FP 145-260 SIP 780-780 HP 880-880 REC 390' MUD, 60' SW.

J.D. McCLEARY, VICE PRESIDENT

CORED INTERVALS NOT ADJUSTED TO MECHANICAL CONTROL

FORMATION TOPS, FOOTAGES, SHOWS	POROSITY TYPES	POROSITY GRADES	LITHOLOGY	CRYSTAL, GRAIN, OR FRAGMENT SIZE	ROUNDING	SORTING	PERCENT OF FRAMEWORK	DESCRIPTION
1	2	3	4	5	6	7	8	9

PERCENT OF: STROMATOPOROID — MASSIVE, TABULAR, BRANCHING; AMPHIPORA; CORAL; MISCELLANEOUS; PELLETS & OOLITES; INTRACLASTIC; CALC CLASTICS; SUGGESTED ENVIRONMENT; ENGINEERING DATA (columns 10–20)



1077-1094'
In Volcanic

Grnt,lt pk to s&p gn,holoxl,phenerite/euhd xl hornbd grth,tr zeo csd in micro-frac&amygdales,biot qtz,flow bnd parrallel to core,tr tuff incl
Tuff,lt gy-gn,brec frag,tr hornbd,fld,sh incl

Grnt,lt pk to lt gn tr micro-frac,fld,qtz, hornbd,biot,zeo tr in amygdales

1244-1262'
In Volcanic

Grnt holoxl,phenerite,Hypidiomorphic s&p to lt gn,tr frac,zeo in frac, tr rk powder,hornbd abnt showing micro-frac,flow bnd parallel to core

1368-1982'
In Volcanic

Tuff,lt gn to brn,pumice incl,flow bnd, tr welded tuff showing devitrification,ves, zeo amygdales fl/wh&pk zeo,tr brec, tr lg incl of qtz,fld&hornbd

Pumice,lt gn-brn,tuff intbd,zeo amygdales, tr brec,flow bnd,ves

1484-1499'
In Volcanic

Tuff lt gn-gy,grnt incl,tr melting around lg incl,phenocryst;Phenocryst frac
Pumice,gy,intbd/tuff,cht&zeo amygdales phenocryst in tuff,ves
Grnt,s&p,hypoxl,mnrl xl hi frac

1620-1627'
In Volcanic

Grnt s&p lt gn,hypoxl,qtz,fld,biot,hornbd flow bnd parallel to core&approx 60° to the side,frac fl/rk dust

1670-1695'
In Volcanic

Tuff crm,phenocryst of lg mat;Lt gn to bf,rk brec,composed of lg mat,rk dust,tuff,pt gl,amygdales,tr flokite
Grnt,s&p gn,hypoxl,Hypidiomorphic,qtz,fld, biot,hornbd,flow bnd parallel to core

Grnt,s&p gn,hypoxl,Hypidiomorphic,qtz hornbd, biot,fld,mnrl frac,tr vn of rk dust

Meta,holohyaline,allotriomorphic,spherulitic, frac/rk dust,flow bnd parallel&60° to core;Grnt tex

STEEN RIVER PROSPECT

NORTHWESTERN ALBERTA

GEOCHEMICAL EXPLORATION REPORT

SUBMITTED BY:

TROYMIN RESOURCES LTD.
#200, 622 - 5 AVENUE S.W.
CALGARY, ALBERTA T2P 0M6

September 1, 1995

REPORT
ON

STREAM SEDIMENT GEOCHEMICAL EXPLORATION

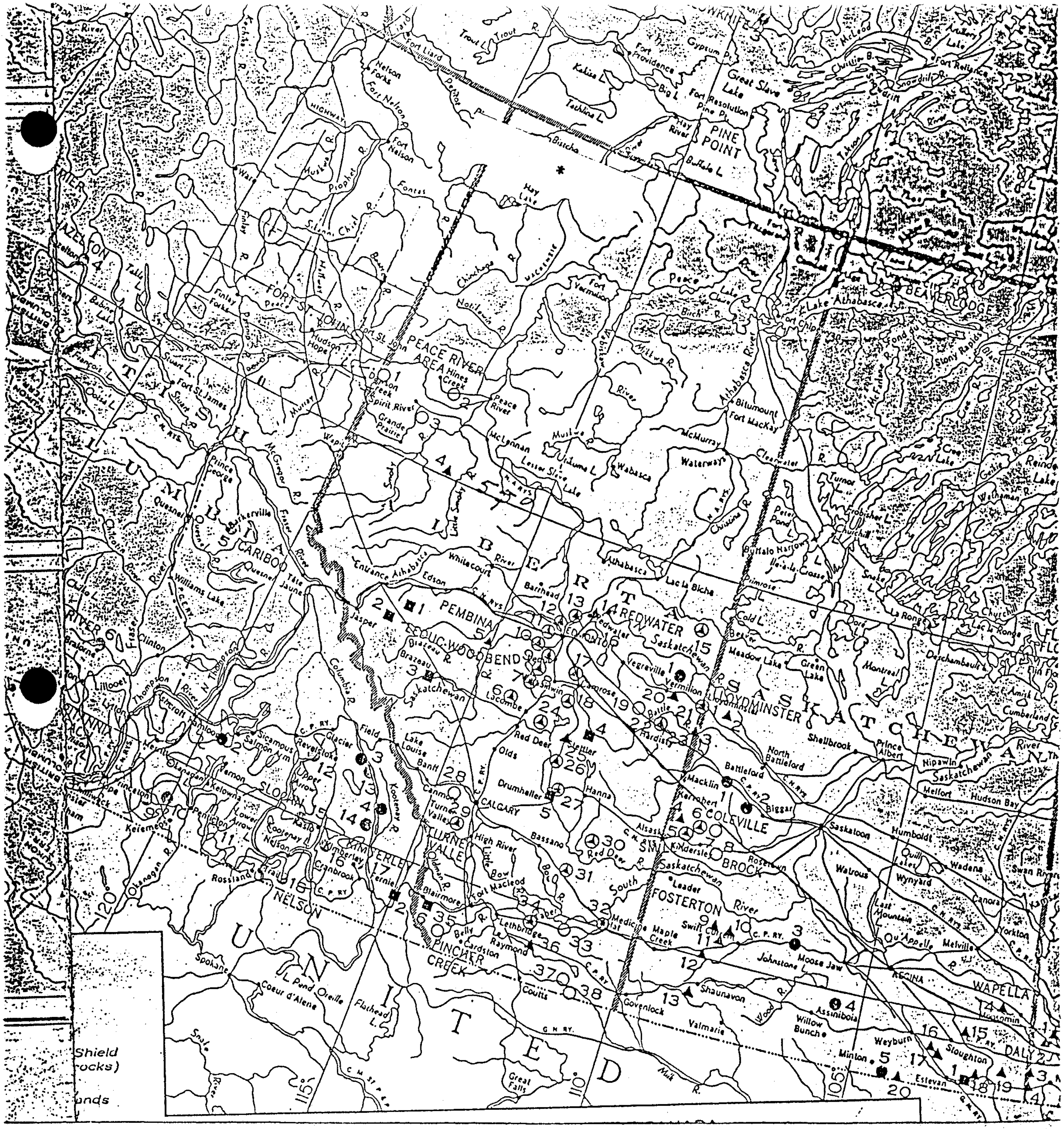
STEEN RIVER ALBERTA
84N
lat 59°30" long 117°30"

by

James M. L. Brown

September 1994

TABLE OF CONTENTS



* STEEN RIVER INDEX MAP

INTRODUCTION :

A stream sediment geochem program was carried out on mineral claims held by Troymin Resources Ltd. in the Steen River area of Alberta. The program was carried at the bequest of Troymin Resources Ltd.The samples were examined for diamond indicator minerals (pyrope garnets, chromite, chrome diopside, and ilmenites). A total of eight samples were taken. The program was carried from August 26 - September 6 1994

LOCATION AND ACCESS :

The property is located on map sheet 84 N (1:250000) and covers parts of 84 N /5,6,11,12 (1:50000) map sheets. The centre of the property is at UTM easting 462950 and northing of 6594600. (Lat 59° 30" long 117° 30") Alberta provincial trunk highway # 35 crosses the eastern portion of the property . The property is about 150 kms. by highway south of the NWT town of Hay River which is the nearest commercial centre. High Level Alberta lies some 300 kms to the south by road. The claims cover Twp 120 - Twp 122, Rges 20 to 23 W5M and also Twp 119, Rges 21 - 23 W5M. (15 TWPS IN TOTAL)

GEOLOGY

The area is low, flat ,swamp and muskeg covered and drained by the Steen River and Jackpot Creek. Outcrop is very rare , occurring in a few river banks, for the most part the area is covered by 10 metres of glacial fluvial and till deposits . The outcrop observed was grey muddy soft shale . Two pre glacial stream channels or buried eskers were found crossing the Steen River , these had a NW-SE trend. The Steen River and Jackpot Creek empty into the Hay River which flows north to Great Slave Lake.

A great deal of oil exploration has been carried out on the property and large number of seismic lines cover the property. Several oil wells have been drilled on the property and it was two of these wells which attracted an interest for

kimberlitic pipe possibilities. (IOE - STEEN R. 12-19 and DOME - STEEN R 3-12) The logs from these holes indicated volcanic rocks close to the surface - other well logs do not mention volcanic rocks and show the basement to be at approximately 4000 - 5000 ft. It was thought that the volcanic rocks may represent kimberlites as the age of the formations which contain the diatremes (volcanics) is late Cretaceous and younger .

METHOD:

If the diatremes are close enough the surface to be eroded then the streams would concentrate any indicator minerals (heavy minerals) in the sand bars and around rocks or boulders . A helicopter was used to scout for sample sites along the Steen River , its tributaries and also Jackpot Creek. Only seven useful sample sites were located , the balance of the creek and river beds were clay and mud. One other sample was taken of drill cuttings taken from the sump on IOE STEEN R 12-19.

The samples were washed and screened on site. A 5 to 10 kg sample of sand in the > 0.5 mm < 2.0 mm fraction was saved. This sample was then concentrated using a "Mansker" jig. The concentrate was washed further and then dried . The grains were then set in petrie dishes and each grain was observed using a binocular stereoscope , any anomalous grain was set aside and then compared to standard for each indicator mineral.

The following are the sample locations.

SAMPLE NUMBER	UTM EASTING	UTM NORTHING
IOE	465000	6598500
JACKPOT CR	492300	6616100
STN 12	462999	6581463
STN 13	473189	6589719
STN 14	482840	6601003
STN 15	467004	6599485
STN 16	478948	6597388
STN 17	458613	6588727

CONCLUSION:

No diamond indicator minerals were found. (see pocket for individual sample grain descriptions) The two oil wells indicate volcanic rocks some 600-800 feet at depth . The rocks overlying the volcanics and underlying the glacial till overburden is younger shale. Neither the glacier nor the rivers eroded any (kimberlitic) , volcanic rocks. Pyrite grains have been found and the grey to black shale is rusty where exposed in places along the river.

RECOMMENDATION:

There are lakes in the vicinity of each of the oil wells which encountered volcanics . The lakes may be the surface expression of a buried pipe.There are a large number of seismic lines and it is recommended that gravity and seismic geophysics in the area of the two holes and near the lakes be examined. Kimberlites have a unique seismic and gravity signature in sedimentary terranes.There is the remote possiblity that the black shales may be gold carrying and so the heavy minerals samples which contain more pyrite grains than normal should be geochemically analysed for gold.

STATEMENT OF QUALIFICATION

I, James M.L. Brown hereby certify that

1) I am a self employed exploration geologist residing at [redacted] Winnipeg Manitoba.

2) I received a Bachelor of Science degree from the University of Manitoba in 1961 and have been practising my profession as a geologist since that time.

3) I received considerable training and experience in conducting exploration surveys and the interpretation of the results while working for a major mining company.

Respectfully Submitted

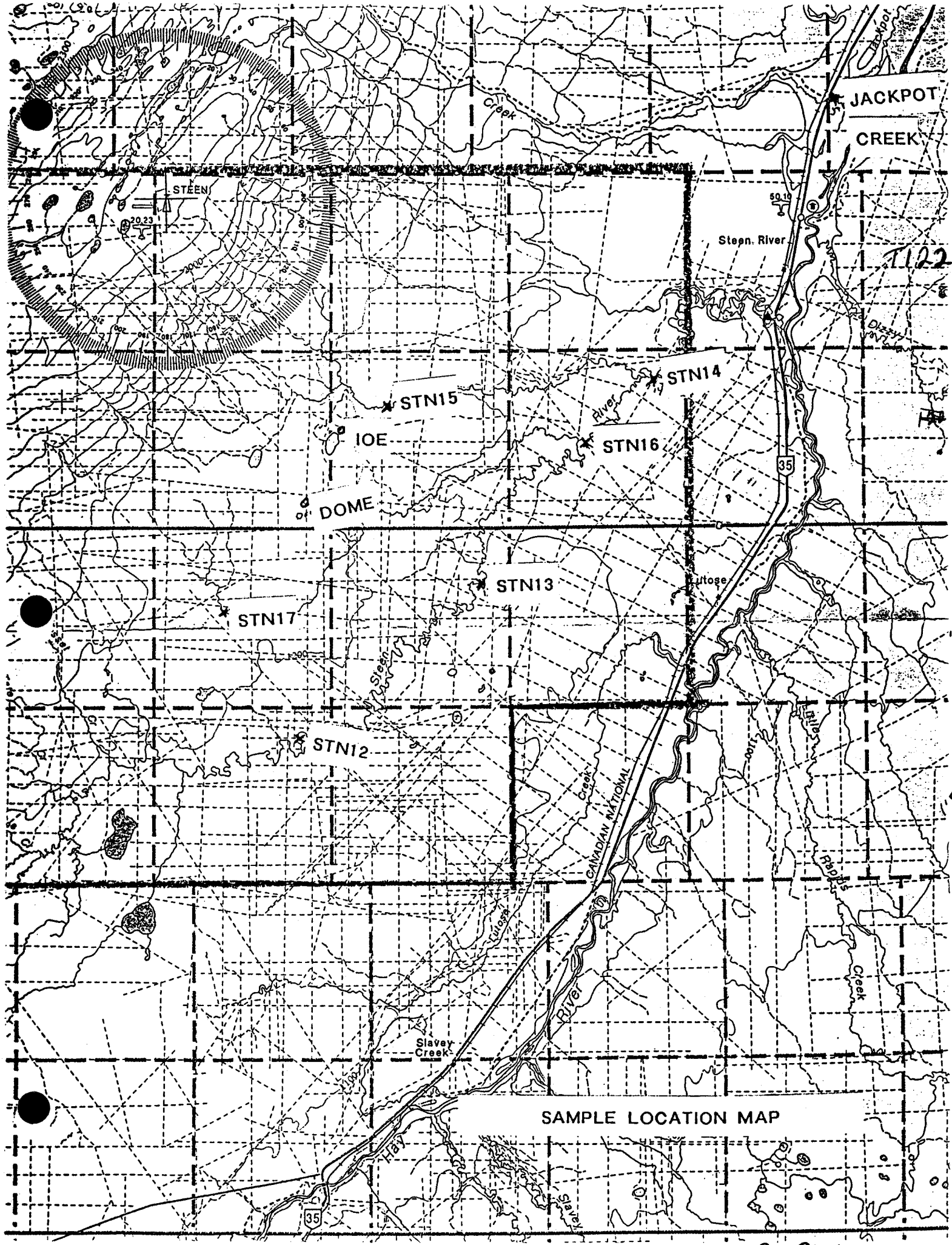
James M.L Brown

September 21 1994

[redacted]

SUMMARY OF EXPENDITURES
STEEN RIVER, ALBERTA

GEOLOGIST	
[redacted]	$3,000.00
	3,600.00
TRAVEL	
SURFACE	1,099.76
PLANE	634.97
MEALS and MOTEL	1,591.07
MISCELLANEOUS	226.67
HELICOPTER	12,761.00
LABORATORY ANALYSIS	134.75
TOTAL	23,048.22


JACKPOT
CREEK
STEEN
Steen River
T122
STN14
STN15
IOE
STN16
DOME
STN13
STN17
STN12
Slavey Creek
SAMPLE LOCATION MAP

Troymin
Steen R. Property.

Microscope Examination Sheet

SAMPLE	FRACTION	GARNET	ILMENITE	CHROMITE	DIOPSIDE	REMARKS
STN-17 (Beaver Lodge/dog)	jig conc. -2.0+0.5mm.	2 (non KI)	∅	∅	∅	4/9/94 RBB - small sample. - 2 non kimberlitic garnets (almandines) - a grain with malachite staining - a grain (v. fine) of azurite - a pyroxene/hornblende grain (all labelled misc.)
STN 13	jig conc. -2.0+0.5mm	13 (non KI)	∅	∅	∅	4/9/94 RBB - 13 grains of garnet show a range of colours but none kimberlitic. - Pyritic grains and precipitous pyrite on other grains are plentiful. Source may be shales and the iron content of the swamps. - Several sandstone grains with green minerals (possibly malachite?) - a minute speck of a blue (azurite?) mineral on smoky grey quartz - several rock fragments with garnets, granitics. - rare amethyst like quartz
STN 12	jig conc. -2.0+0.5mm	several non KI's picked	∅	∅	∅	4/9/94 RBB - 1 possible sphalerite(?) grain - a wide variety of pyrite grains and pyrite/iron coated grains. Several picked. - garnets present are pink to orange + red. (almandines to grossulars) none are kimberlitic indicators but a selection picked for the record. - a few fossilized plant/insect parts (labelled critters) - more granitic/pegmatitic sourcing grains present than previous 2 samples.

Microscope Examination Sheet

SAMPLE	FRACTION	GARNET	ILMENITE	CHROMITE	DIOPSIDE	REMARKS
IOE oil well drill site cuttings pit sample	jig conc. -2.0+0.5mm	several non-kimberlitic grains picked as reference.	⊘	⊘	⊘	5/9/94 RLB - many sulphide (pyrite) grains of questionable origin... possibly from the sandstone/shale/lmst or a volcanic source. Some of the pyrite is fine grained recrystalli. + occasionally fossilizi
Jackpot Creek Hwy Site. (J.P.C.)	jig conc. -2.0+0.5mm	11	⊘	⊘	2	5/9/94 RLB - 11 garnet grains picked. The pink/purple grain  is probably a quartz grain approaching amethyst in composit. If this were a garnet then it might be worth probing. - One clear spinel picked. - Two diopsides picked not definite chrome diopsides of kimberlit. origin. Probably high in chrome though. - Numerous pyritic grains of sedimentary origin. (see misc for examples)
STN 16	jig conc. -2.0+0.5mm	14 (non KI)	⊘	⊘	⊘	5/9/94 RLB - 14 non kimberlitic garnets picked for reference. - 10 grains of pyrite (most oxidized) picked for reference. - NB less sulphide grains than all previous samples. - a lot of clear quartz crystal grains - mostly rounded

Microscope Examination Sheet

SAMPLE	FRACTION	GARNET	ILMENITE	CHROMITE	DIOPSIDE	REMARKS
STN14	jig conc. -2.0+0.5mm	31 (none KI)	⊘	⊘	⊘	5/9/94 RBB. - a variety of garnets and sulphides. - sulphides (pyrite) appear to have formed in shales (long + thin) - (misc) selenite.
STN 15	jig conc. -2.0+0.5mm	several garnets of varying shades of pink through red. 2-3 may be approaching kimberlitic	⊘	⊘	⊘	5/9/94 RBB - much darker sample than other previous. - Significantly higher magnetite content. - Rock fragments are a mix of sediments and intrusives/metamorphics. The sediments appear to make up less than the intrusives (NB. any soft shales were washed out) - One grain which appears opaque but has translucent edge when light passed from beneath may be a saphire??

GEOCHEMICAL ANALYSIS

September 1, 1995

TO: Afranko Lucas Poliquin
FAX #: 604- 687-8122

FROM: Jack McCleary Troymin
FAX #:
PHONE #:

DATE: 04 JAN 1994
PAGES INCLUDING THIS PAGE: 3

TOPS 14850

Steen River

FAX Cover Sheet

Date: Jan 3 1994

To: Mr. Jack McLeary

Company/Department: Troymin Resources Ltd.

Telephone No:

Fax No: 403 262 8786

From: Jim Brown

Company/Department:

Telephone No:

Fax No:

Number of pages (including cover sheet): 2

Comments: Jack: These are the assays of the heavy mineral grains we found at Steen river. Note that the sample from IOE is about double the background for this area. I do not know what to recommend for follow up exploration. Ground geophysics and drilling would be expensive. Geoelectrochemical prospecting a new exploration method discovered by the Russians may be useful . It has been used to discover buried kimberlites and is also used for base metal and gold exploration. Whether it would detect something as deeply buried as IOE is not known. It is not expensive in relation to ground geophysics and then drilling.

ENERGY AND MINES | ASSAY REPORT | ANALYTICAL LABORATORY

Submitted by : James BROWN
Extraction :Fire assay
Method :FAAS

Date :Dec. 22, 1994
File :94190-A

Lab. No.	Sample No.	Detection Limit : 9 PPB Au	Sample Weight (grams)
942682	STN - 12	<9	128.0
942683	STN - 14	<9	92.0
942684	STN - 15	<9	167.5
942685	STN - 16	<9	34.2
942686	STN - 17	<9	7.4
942687	ICE	15	47.0
942688	JACKPOT	<9	56.0

[redacted]

LAB MANAGER
Dec 22/94

Steen R

Loring Laboratories Ltd.

629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 274-2777 Fax: 275-0541

Date: May 10, 1995

File # 37321

To: TROYMIN RESOURCES

ELEMENT SAMPLES	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
STN 12	2	10	< 3	61	< .3	8	3	199	1.22	3	< 5	< 2	5	21	0.4	< 2	< 2	14	0.53	0.037	17	167	0.36	157	0.02	5	0.46	0.03	0.11	<2
STN 13	13	30	18	135	0.3	24	7	234	3.00	30	7	< 2	7	45	1.8	< 2	< 2	43	1.16	0.057	17	102	0.75	122	0.01	17	0.93	0.02	0.20	<2
STN 15	2	7	5	39	< .3	10	5	170	1.38	5	< 5	< 2	6	41	< .2	< 2	< 2	15	1.58	0.046	19	148	0.70	296	0.03	7	0.52	0.04	0.12	<2
STN 16	9	20	10	89	< .3	15	6	188	2.19	17	< 5	< 2	6	28	0.6	< 2	< 2	27	0.80	0.064	16	170	0.49	113	0.01	10	0.64	0.02	0.14	<2
STN 17	2	16	19	92	< .3	15	5	128	2.08	8	< 5	< 2	5	56	0.5	< 2	< 2	34	0.92	0.053	16	107	0.35	132	<.01	16	1.30	0.02	0.20	<2
IOE	5	21	21	87	< .3	36	7	1192	2.63	12	< 5	< 2	6	316	1.0	< 2	< 2	47	10.45	0.041	15	78	4.14	201	0.01	24	1.56	0.03	0.29	<2
JACKPOT CREEK	3	12	8	54	< .3	13	3	194	1.26	5	< 5	< 2	4	29	0.4	< 2	3	18	3.22	0.033	14	130	1.45	75	0.02	5	0.43	0.03	0.11	<2

To: TROYMIN RESOURCES LTD.,
200, 622 - 5th Avenue S.W.,
Calgary, Alberta T2P 0M6

ATTN: Jack McCleary
cc: J. Brown - Winnipeg

File No. 37321
Date May 11, 1995
Samples

Steen

Certificate of Assay
LORING LABORATORIES LTD.

SAMPLE NO.	PPB GOLD
Geochemical Analysis	
[redacted]E	12
Jackpot Creek	5
Stn 12	7
Stn 13	32
Stn 15	7
Stn 16	96
Stn 17	8

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

[redacted]

Assayer

[redacted]jects retained one month.
[redacted]ulps retained one month
unless specific arrangements
are made in advance.

STEEN RIVER PROSPECT

NORTHWESTERN ALBERTA

HIGH RESOLUTION AEROMAGNETIC SURVEY

SUBMITTED BY:

TROYMIN RESOURCES LTD.
#200, 622 - 5 AVENUE S.W.
CALGARY, ALBERTA T2P 0M6

September 1, 1995

1. INTRODUCTION

Today's explorers are experiencing major advancements in the application of "High Resolution" aeromagnetics for hydrocarbon exploration. The term "High Resolution" refers to the ability of the data to resolve very low amplitude (nT) magnetic features originating from structures within the essentially non-magnetic sedimentary column, as well as the conventional high amplitude features from the crystalline basement.

The traditional application of aeromagnetics has focused on depth to "magnetic" basement and gross structural configuration of a particular basin or area. The technique is typically used as an exploration tool during initial stages of exploration and basin evaluation in areas where little other geological data exists.

Recent developments in the aeromagnetic survey collection and processing technologies have increased the sensitivity of the technique to the point where important features within the basin sedimentary sequence are detectable. These technological advances, when integrated together, have made an enormous improvement to the overall effectiveness of aeromagnetics, particularly in sedimentary basin evaluations. The combined affect of shock and temperature results in changes in the magnetic properties of crystalline rocks associated with meteorite impact structures. These changes have made the use of high resolution aeromagnetics a productive and cost-effective exploration tool to delineate structures in the Steen River Prospect area.

The Steen River survey covers an area of approximately 16,000 square kilometres. A total of 5,500 line kilometres were flown with a line spacing of 500 metres and tie-lines of 1,000 metres which was infilled to 250 metre line spacing and 500 metre tie-lines over the central prospect area, which hosts the Steen River Structure (SRS). Survey specifications and procedures, as well as a project cost summary are presented herein. The survey flight line configuration is illustrated in Map 1 and a Total Magnetic Intensity Contour Map is presented in Map 2.

2. AREA OF INTEREST

The Steen River survey covers from the north half of Township 119 to the south half of 123; and Ranges 20 through 23 W5 in northwest Alberta (See Figure 1). The SRS consisting of a circular basement feature, 25 km. in diameter with a central basement uplift surrounded by a rim syncline and an outer raised rim is located in the centre of the survey area. Over a thousand metres of Devonian carbonates, evaporites and shales are tectonically disturbed in addition to the basement rocks. Complex structures are associated with the disturbed zone and are characterized by normal faults forming horsts and grabens, overthrusting and inverted stratigraphy. The impact feature may also have been modified by post-impact structural movement and volcanic activity.

In this area undeveloped hydrocarbon reserves are trapped in Middle Devonian reef complexes that possess strong stratigraphic control with reservoir development and enhancement through syn-to-post depositional dolomitization of dense carbonates and fracture enhancement along structural systems. These systems are enhanced by the uplift associated around the perimeter of the impact structure.

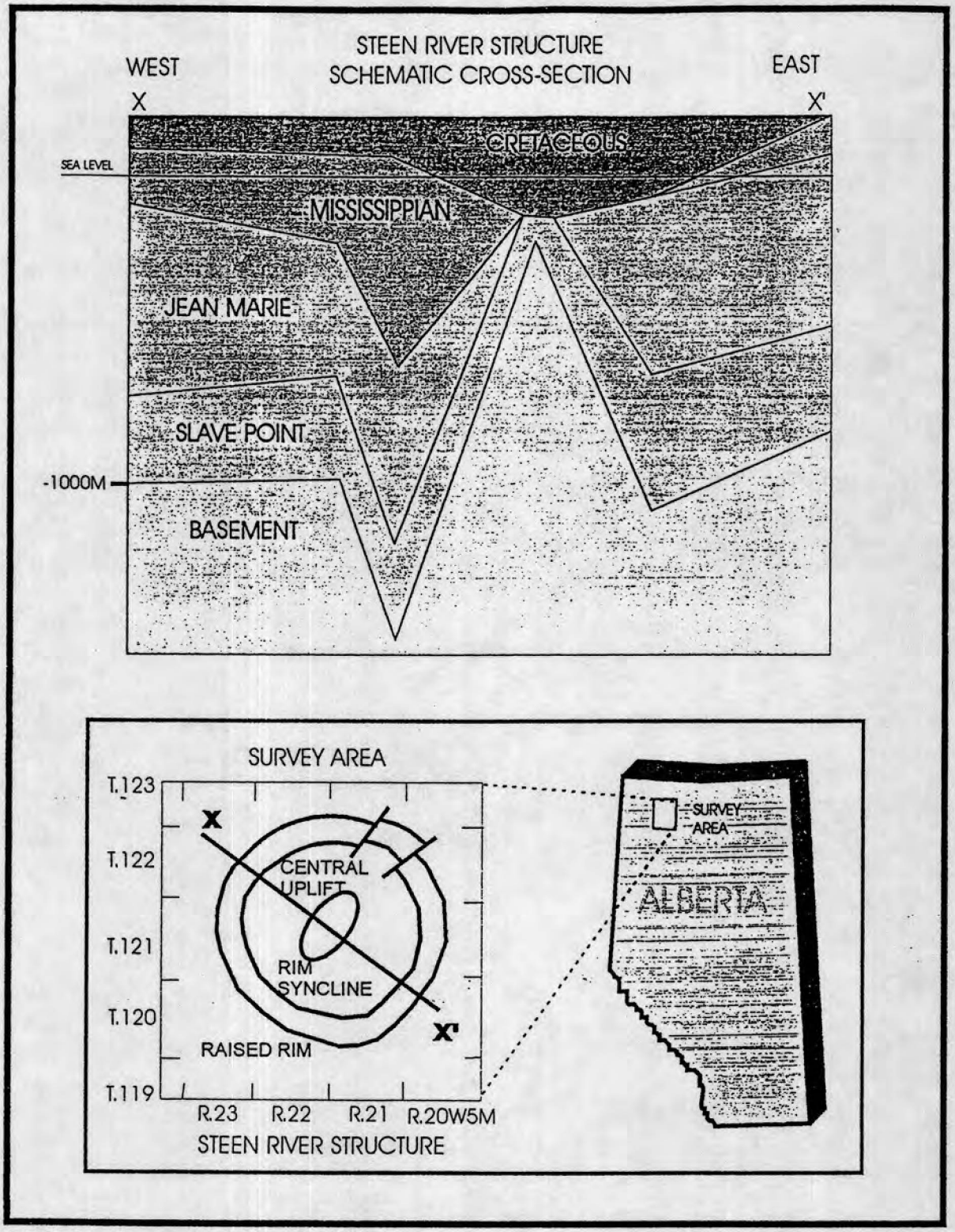


FIGURE 1

LOCATION AND GENERALIZED SCHEMATIC CROSS-SECTION THROUGH THE STEEN RIVER IMPACT STRUCTURE. (Modified after Fig.5.11, Geological Atlas of the Western Canada Sedimentary Basin.)

Unlike other classical reservoirs, astroblemes are unique dynamic mini-basins affecting the thermal and depositional regimes of the target rock. Generally complex craters of the magnitude of the Steen River Structure will have distinct central uplifts. Normally the central uplift is the most potentially productive area of any impact structure because it is the most intensely faulted and fractured. Typically, the central uplift may be replaced or augmented by a series of uplifts and depressions, giving the structure a multi-ring form and exhibiting a myriad of horst and graben features caused by subsidence of the central uplift and ring areas. Weathering and associated talus deposits can also enhance reservoir potential on the flanks of the central uplift as well as the rim. Numerous play concepts therefore exist within the Steen River Structure that may possibly have good hydrocarbon potential, as well as significant metallogenic potential.

3. SURVEY SPECIFICATIONS AND PROCEDURES

Survey Data Acquisition Contractor

- Sander Geophysics Limited, Kanata, Ontario, Canada

Survey Equipment

Airborne System:

Survey Aircraft: Beechcraft Queenaire 65B-80, Registration C-FWZG, twin-engine supercharged, fully modified for high-resolution aeromagnetic work. Fitted with the following equipment:

- Scintrex CS-2 (1993 model) non-oriented cesium vapour magnetometer; mounted on a 2.5m stinger.
- Aircraft system "Figure of merit" for entire system is approximately 1nT;
- Sander ABAT Airborne digital acquisition system;
- RMS AADC II 27 Term Magnetic Compensator (Sensitivity 0.00 1nt, Digital, Sampling rate 10/second, range 20,000 - 100,000 nT);
- NOVATEL 10 channel differential GPS navigation system;
- RMS digital chart recorder;
- Panasonic Video tracking camera;
- TRT, Honeywell or King Radar Altimeter (Resolution/Accuracy 0.5m calibrated to 1%);
- Sander Digitally recording barometric altimeters (Resolution/Accuracy 2m calibrated to +/- 4m).
- Sander Power Line Detector, Analog and Digital display (set at 60 Hz); and
- Aircraft and base stations equipped with VHF and HF radios for communications.

Ground Equipment

A base station magnetometer sensor will be established at the base station, set-up 2.5m above ground in a plastic non-magnetic tower, in a magnetically quiet area, away form power lines, roads, electrical equipment, and other metal objects.

- Magnetometer Sensor (Scintrex; base stations are identical to the airborne sensors);
- Recording system; Sander ACGM-1, Range 20,000 - 100,000, Sensitivity 0.001, Sampling rate 2/second, Digital (PC-based) recording;
- Trimble 4000 RL GPS Receiver. Base station is synchronized to the GPS time standard, the same accurate signal used for the airborne system; and
- Various computers (Pentium and 486, chart record print-out, printer; networked)

Technical Specifications

- Magnetometer Resolution - 0.001 nT
- Magnetometer Sensitivity - 0.005 nT
- Magnetometer Bandwidth - 2 hz
- Magnetometer Sampling - 10 per second
- Sensor noise level (total) - <0.02nT

Data to be Recorded

- High resolution magnetic data
- Differential GPS positioning data
- Compensation data
- Radar altimeter, barometric altimeter
- Video positioning data

Parameters

- Area "Steen River Impact Structure Townships, 16 Townships HRAM coverage, N59°20'30" - 59°42'00"; W117°16'30" - 117°58'00"
- Traverse-line spacing @ 500 m, flown east-west;
- Tie-line spacing @ 1,000 m, flown north-south;
- Sample interval - less than 10m;
- Survey height - "drape", 100m (+/- 20 m) metres above ground level, depending on terrain for safety factors;
- Navigation - differential GPS navigation system, less that 10m accuracy;

Parameters (continued)

- Reflights:

1) if any of the following channels are not recorded digitally: Time. TMF,X,Y and/or LONG/LAT, RA or Z, and time synchronized diurnal;
2) if the high frequency noise envelope on the aeromag recording exceeds 0.25nT for a continuous period of three minutes or more on a production line record;
3) if the deviation from the specified survey grid exceeds 15% of the nominal spacing for any production flight line portion for a distance of more than 12 kilometres, additional coverage must be provided to meet line spacing specifications. Furthermore, at no point shall traverse or control lines deviate by more than +/- 150 metres from the pre-plot line locations;
4) if the specified diurnal variation tolerance is exceeded;
5) if the true flight altitude level deviates by more than +/-10 metres from the norm drape level of the survey; and
6) if the absolute accuracy of the (post-processed) date positioning exceeds +/- five metres (two-dimensional) RMS for more than seven kilometres.

- Mobilize to the survey area (base will be High Level, Alberta) approximately first week of March, 1195. Set up base stations, commence surveying two days thereafter;
- Field tests to be performed prior to commencing data acquisition include:
    1) Lag Test - Tests the lag on the Geophysical instruments. The program uses a statistical comparison of high-pass filtered data from the same line flown in opposite directions;
    2) Bourget Test - also known as the "Cloverleaf Test", it serves to evaluate the error resulting from the change of angle between the magnetic field vector and the optical axis of the magnetometer sensor affixed to the aircraft. The aircraft flies over a reference point twice in opposite directions, on each of the four cardinal headings. The magnetometer readings over the reference pont are then corrected for diurnal variation and compared;
    3) Radar and Barometric Altimeter Tests;
    4) Verification of Base Stations - Base station magnetometer versus aircraft Magnetometer comparison and calibration; and
    5) Verification of Navigation System GPS tests.

4. PROJECT COST SUMMARY

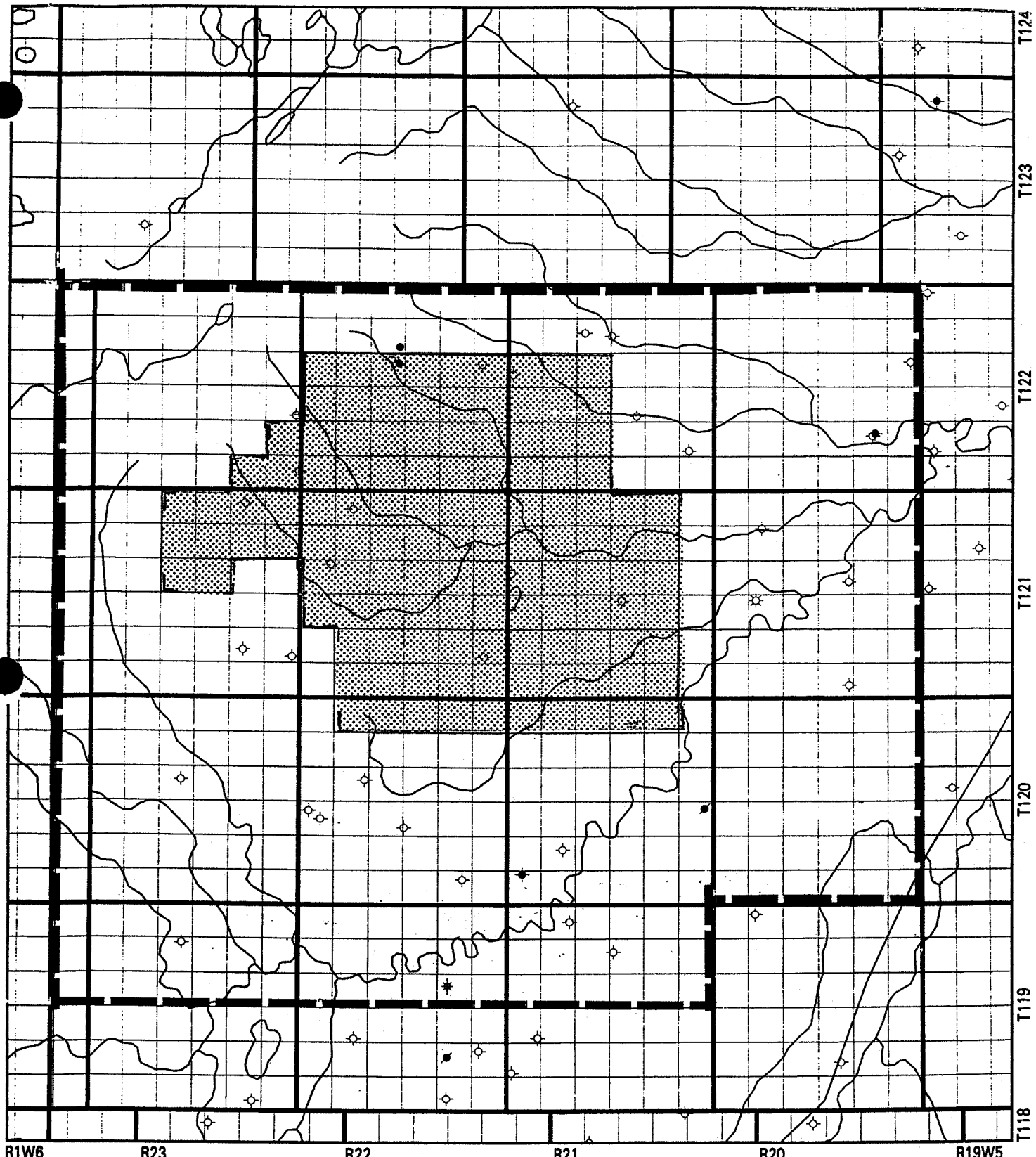
STEEN RIVER AEROMAGNETIC SURVEY AND INTERPRETATION

TR0YMIN RESOURCES LTD.

ACQUISITION COSTS	
Mobilization	$ 5,000.00
Data Acquisition, Processing and Map Production for a maximum of 5,500 line km	60,500.00
Quality Control/Field Inspection	2,000.00
INTERPRETATION COSTS	
Detailed Interpretation	23,375.00
MANAGEMENT COSTS	
Project Management/Consultancy	16,500.00
PROJECT COSTS	$107,375.00
PLUS 7% GST	$ 7,516.25
***TOTAL COSTS**	**$ 114,891.25**

*** in Canadian Dollars**

MAP I



Well Symbols	
Location	Drilling
Oil	Gas
Hvy Oil	Oil&Gas
Susp Oil	Susp Gas
Abnd Oil	Abnd Gas
Susp H Oil	Susp Oil&Gas
Abnd H Oil	Abnd Oil&Gas
Susp Undes	D & A
Service	Abnd Service
Injection	Gas Injection

No Well Postings Specified

PERMITS 939303614 TO 939303629

EXISTING LANDS

REVISED LANDS

Scale 1:250000

Kilometers 0 15

Miles 0 9

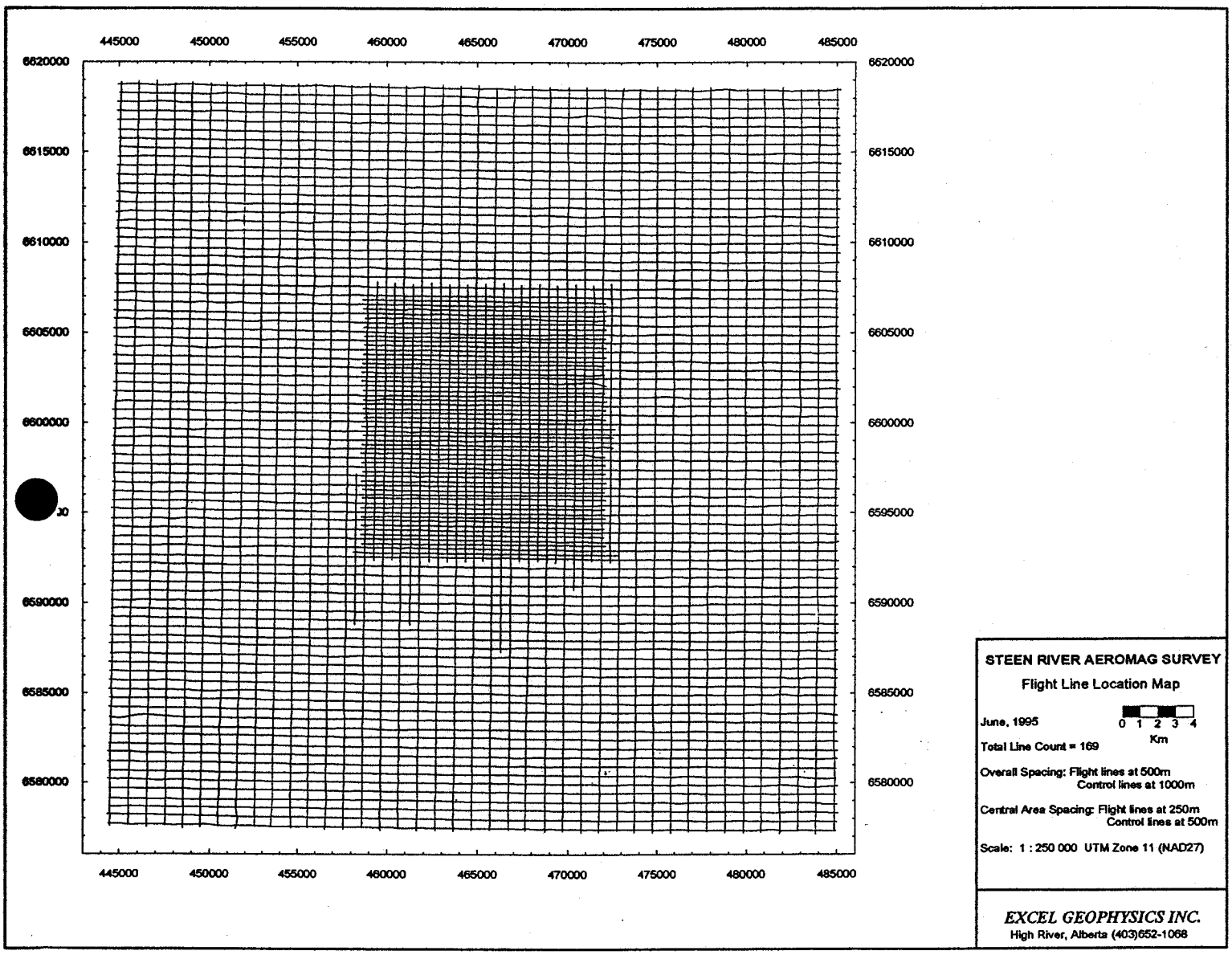
TROYMIN RESOURCES LTD.

Steen River Area

Author:

Date: **SEPTEMBER, 1995**

Licence Data to: November 4, 1994 / Production Data to: September 30, 1994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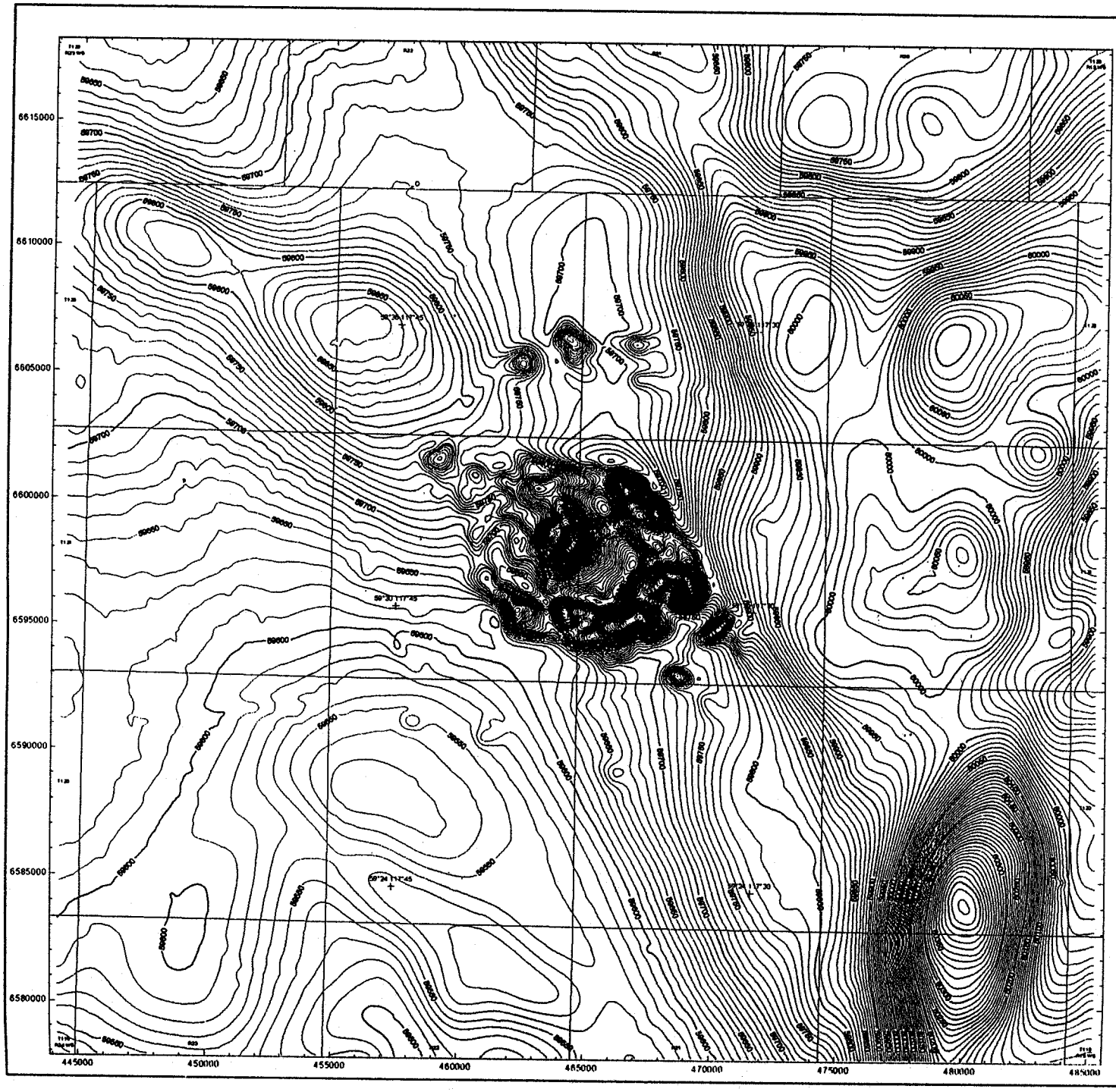
6585000
6580000
STEEN RIVER AEROMAG SURVEY
Flight Line Location Map
June, 1995
0 1 2 3 4
Km
Total Line Count = 169
Overall Spacing: Flight lines at 500m
Control lines at 1000m
Central Area Spacing: Flight lines at 250m
Control lines at 500m
Scale: 1 : 250 000 UTM Zone 11 (NAD27)
EXCEL GEOPHYSICS INC.
High River, Alberta (403)652-1068

MAP 1



MAP 2

STEEN RIVER
AEROMAGNETIC SURVEY

Contour of TMI
(Sander Grid)

Contour Interval 10 nT
Grid Interval 100 m
Scale 1:250,000 UTM Zone 11(NAD27) June, 1995

EXCEL GEOPHYSICS INC.
HIGH RIVER, ALBERTA (403) 652 1068