GEOLOGICAL, AND SOIL AND ROCK GEOCHEMICAL INVESTIGATION LAINEY 1-4 MINERAL CLAIMS LAWYERS CREEK-TOODOGGONE RIVER AREA, B.C.

OMINECA MINING DIVISION

NTS 94 E/6 W

LATITUDE 57°23' NORTH, LONGITUDE 127°19' WEST

Prepared for

DEEP SOUTH PETROLEUM INC.

ARCTEX ENGINEERING SERVICES

Locke B. Goldsmith, P.Eng.
Consulting Geologist

Paul Kallock
Geologist

October 20, 1985

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SUMMARY

The Lainey 1-4 mineral claims are located along the Toodoggone River in north-central British Columbia, approximately 280 km north of Smithers, B.C. Geological mapping and geochemical sampling were carried out on the Deep South Petroleum Inc. property during September 1985. Geological mapping indicates that propylitically altered porphyritic andesite of the Tuff Peak Formation of the Toodoggone Volcanics underlies the eastern part of the claim group. Soil geochemical grid sampling has revealed several areas of weakly anomalous gold and silver. Further exploration of the property should be delayed until such time as neighbouring exploration activity is successful, and until access costs are reduced by the completion of the haul road to the Lawyers deposit of Serem Ltd.

INTRODUCTION

The Lainey 1-4 mineral claims are located in north-central British Columbia approximately 280 km north of Smithers. The claims, which range in elevation from 1210 to 1620 metres (3969 to 5314 feet) are situated at the confluence of Lawyers Creek with the Toodoggone River, NTS Map Sheet 94 E/6 W, Omineca Mining Division. Co-ordinates which cross the claim include latitude 57°23' north, longitude 127°19' west.

As can be seen from the accompanying claim map, the Deep South Petroleum Inc. property consists of 61 units, less overlaps with adjacent claims. Particulars are as follows:

Name	*Number of Units*	*Record Number*
Lainey 1	20	6881(3)
Lainey 2	20	6882(3)
Lainey 3	12	6883(3)
Lainey 4	9	6884(3)

All claims were staked in March 1985.

Access to the property is best accomplished by aircraft from Smithers, B.C., 280 km to the south. During 1985 exploration, a fixed-wing aircraft was chartered from Smithers to the Sturdee Valley airstrip. From there a helicopter was used to establish a tent camp in the Lawyers Creek valley approximately 25 km to the northwest.

Historically the Toodoggone area has seen exploration for porphyry copper in the 1960's. Precious metal exploration was carried out in the late 1970's, with a resurgence in the 1980's. Exploration of the present-day Lainey claim was initially made by Kennco Exploration Ltd. in 1971 when they collected silt and soil samples (Assessment Reports #3316 and #3361).

Exploration at the Lainey claims during September 1985 has consisted of prospecting, geological mapping, and rock and soil geochemical sampling. Claim boundaries or legal aspects of the claim ownership were not investigated.

LAINEY 1-4 Mineral Claims

TOODOGGONE AREA, OMINECA MINING DIVISION, B.C., 94E/6W

ALASKA HIGHWAY
and approaches

Location Map

1 cm. = 76 Km.

DEEP SOUTH
Petroleum Inc.

REGISTERED PROFESSIONAL ENGINEER
L. B. GOLDSMITH
PROVINCE OF ONTARIO

PAUL KALLOCK GEOLOGIST

AND LOCKE B. GOLDSMITH, P. Eng., CONSULTING GEOLOGIST

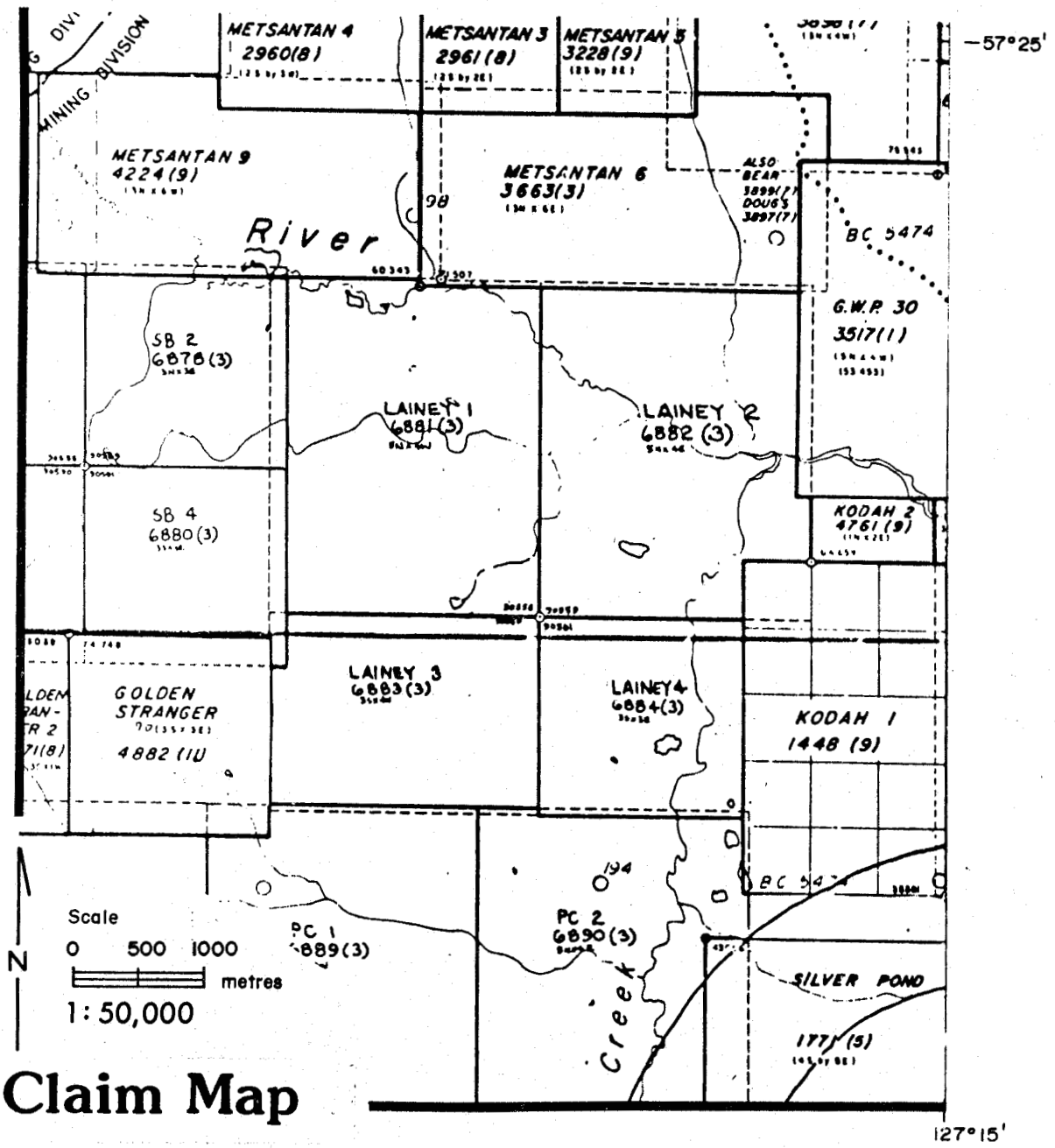
ARCTEX ENGINEERING SERVICES

OCTOBER 1985

DEEP SOUTH Petroleum Inc.

LAINEY 1-4 Mineral Claims

TOODOGGONE AREA, OMINECA MINING DIVISION, B.C., 94E/6W



Claim Map

PAUL KALLOCK GEOLOGIST

AND LOCKE B. GOLDSMITH, P.Eng., CONSULTING GEOLOGIST

REGISTERED PROFESSIONAL ENGINEER
L. B. GOLDSMITH
PROVINCE OF ONTARIO

ARCTEX ENGINEERING SERVICES OCTOBER 1985

GENERAL GEOLOGY

Active exploration for precious metals has been taking place in recent years in north-central British Columbia in what is known as the Toodoggone volcanics belt. These volcanics form a northwest-trending belt at least 90 km long and 15 km wide which is located approximately 300 km north of Smithers, B.C. The Toodoggone volcanics are thought to be Jurassic in age. They form a generally shallow-dipping stratigraphic assemblage of subaerial, intermediate, calc-alkaline to alkaline pyroclastic volcanics. Flows and airfall deposits of andesitic to dacitic composition are predominant. They are thought to have been deposited in an island-arc environment (Diakow, 1983).

Within the Toodoggone volcanics, silver and gold are known to occur in discordant quartz veins, grossly stratabound stockworks, and pervasive siliceous zones. The vein and stockwork occurrences have narrow alteration halos while concordant siliceous zones may exhibit extensive clay, alunite and barite alteration products.

GEOLOGY OF THE CLAIM AREA

Recent geological mapping by the British Columbia Ministry of Energy, Mines and Petroleum Resources by Diakow *et al.* (1985) depicts outcrop areas in the southwest and eastern parts of the Lainey claims as being composed of porphyritic volcanic flows of the Tuff Peak Formation of the Lower to Middle Jurassic Toodoggone volcanics.

Most of the Lainey claim group is covered by unconsolidated alluvial sediments and glacial till. Aerial reconnaissance over the broad valley of the Toodoggone River in the northern part of the claim indicates extensive areas overlain by gravel and glacial moraines. The lower reaches of the north- to south-trending Lawyers Creek have exposed numerous vertical outcrops in steep cliffs in the eastern part of the claim group.

Between September 10, 1985, and September 16, 1985, prospecting, geological mapping and rock and soil sampling were carried out on the Lainey claims. A geology map is included in the pocket of this report.

Most of the outcrops that were examined in the vicinity of Lawyers Creek are pink feldspar porphyritic andesite flows. The rock generally displays strong epidotizaiton and chloritization. Locally the flows are brecciated with subrounded andesitic clasts. Several areas have been intruded by felsic dykes such as 3350 E 1850 N, but they appear narrow or limited in strike length.

In the southwest corner of the Lainey claim group the prominent bluffs near 100 N 100 E appear to be horizontal flows of dark grey andesite. Five hundred metres to the east, outcrops of fragmental porphyritic andesite and tuff breccia are exposed in a creek bed.

Structurally the Toodoggone volcanics on the Lainey claim appear to be gently dipping. No folding was observed. In the canyon of Lawyers Creek, north of 1900 N 3400 E, strong jointing and possible faulting trends N45°W. Dip appears nearly vertical.

MINERALIZATION

Most of the porphyritic andesite in the eastern part of the Lainey claims contains abundant epidote and chlorite and traces to 2% disseminated pyrite. Locally, such as the canyon area of Lawyers Creek, argillic and siliceous alteration is strong. Limonite is pervasive and disseminated pyrite content increases to several percent.

In 1971 and 1972, Kennco Exploration Ltd. conducted silt and soil sampling in this limonite-stained area in conjunction with work on the adjoining Kodah claims. Jointing and fault structures and possibly felsic dykes with several percent disseminated pyrite each show a northwest-southeast trend. This trend may conform to anomalous zones that have been found on the Kodah claims (Assessment Reports #3316, #3361, #3836, #7703, and #9708).

SOIL GEOCHEMICAL SURVEY

Several north-south soil survey lines were established in the eastern part of the Lainey claim during the 1985 exploration season. Samples were collected with a narrow, elongate spade from the "B" soil horizon at 50-metre stations on line

spacings of 200 metres; 154 samples were analysed for gold, silver, and arsenic at Chemex Labs in Vancouver, B.C.

Gold

Gold values in soils of the eastern Lainey claims are generally quite low. Most samples contained less than 5 parts per billion (ppb). Scattered and isolated samples contain up to 175 ppb. However, as can be seen on the accompanying soil geochemical maps, several anomalous values in the northeast part of the grid display a northwest-southeast trend. Some of these samples, such as 3500 E 1850 N which contained 50 ppb gold also contain anomalous silver.

Silver

Most soil samples contained less than 0.4 ppm (parts per million) silver. As with gold, several high silver values of up to 3.9 ppm are scattered and isolated. However a concentration of anomalous soils containing between 0.6 and 3.2 ppm silver occur on the line 3600 E. Some are coincident with weakly anomalous gold.

Arsenic

Only a few soils contained more than 10 ppm arsenic. Occasional but not consistent occurrence with anomalous silver or gold is demonstrated. The highest value of 53 ppm arsenic was obtained on line 2800 E.

ROCK GEOCHEMICAL SURVEY

Five rock samples were collected from the Lainey claim. Their location is plotted on the geology map. Descriptions are included in the Appendix.

Most of the samples were collected from pyritiferous volcanics of the grid area. None of them returned anomalous metal values.

One sample was collected from andesitic volcanics in the southwest corner of the property. Although it did not visually contains sulphides or significant alter-

ation minerals, geochemical values of silver and gold are anomalous. It contained 6.5 ppm silver and 110 ppm gold. It is interesting to note that the adjoining Golden Stranger mineral claim is currently being explored and is reported to contain pyrite and amethyst.

CONCLUSIONS

Although most of the Lainey 1-4 mineral claims of Deep South Petroleum Inc. are covered by unconsolidated sediments of recent age, outcrops along Lawyers Creek and in the eastern part of the claim group appear to be composed of porphyritic andesite of the Tuff Peak Formation of the Lower to Middle Jurassic Toodoggone volcanics.

Several soil samples from this area returned anomalous values of gold of up to 110 ppb and anomalous values of silver up to 3.2 ppm. A few scattered rock chip samples from this area did not return significant precious metal values.

The eastern Lainey claims are underlain by rocks of the same formation that host mineralization at Moosehorn, Silver Pond, Cloud Creek, Cliff Creek and Duke's Ridge prospects (Diakow *et al.*, 1985).

A single rock sample from the southwest part of the claim returned anomalous silver and gold. It is located adjacent to the Golden Stranger claim which is also currently being explored.

RECOMMENDATIONS

The eastern part of the Lainey mineral claims is underlain by potentially favourable host rock. The area has returned some favourable soil values of gold and silver. Geological mapping and rock sampling have not revealed significant mineralization.

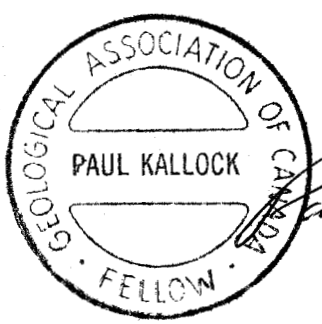
It is recommended that additional geological mapping, closer spaced soil sampling, and rock chip sampling be undertaken in the eastern part of the claim group. However, the present cost of transportation and logistics for exploring the Lainey claims is high. The property should be held without additional expenditure as long as possible prior to more exploration. The expected road construction to the Lawyers deposit of Serem would provide much cheaper access

to the Toodoggone area. Furthermore, as exploration on neighbouring prospects such as Moosehorn continues, targets on the Lainey property may emerge.

If evaluation of exploration results on surrounding properties does not suggest areas of interest on the Lainey claims, the property should be allowed to lapse at the end of the term covered by the assessment work filed with this report.

Respectfully submitted,

Locke B. Goldsmith, P.Eng.
Consulting Geologist



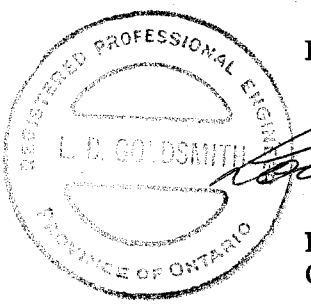
Paul Kallock
Geologist

Vancouver, B.C.
October 20, 1985

ENGINEER'S CERTIFICATE

LOCKE B. GOLDSMITH

1. I, Locke B. Goldsmith, am a Registered Professional Engineer in the Province of Ontario and the Northwest Territories, and a Registered Professional Geologist in the State of Oregon. My address is 301, 1855 Balsam Street, Vancouver, B.C.
2. I have a B.Sc. (Honours) degree in Geology from Michigan Technological University, a M.Sc. degree in Geology from the University of British Columbia, and have done postgraduate study in Geology at Michigan Tech and the University of Nevada. I am a graduate of the Haileybury School of Mines, and am a Certified Mining Technician. I am a Member of the Society of Economic Geologists, the AIME, and the Australasian Institute of Mining and Metallurgy, and a Fellow of the Geological Association of Canada.
3. I have been engaged in mining exploration for the past 26 years.
4. I have co-authored the report entitled, "Geological, and Soil and Rock Geochemical Investigation, Lainey 1-4 Mineral Claims, Lawyers Creek-Toodoggone River Area, B.C." dated October 20, 1985. The report is based upon fieldwork and research supervised by the author.
5. I have no ownership in the property, nor in the stocks of Deep South Petroleum Inc.
6. I consent to the use of this report in a prospectus, or in a statement of material facts related to the raising of funds.



Respectfully submitted,

Locke B. Goldsmith

Locke B. Goldsmith, P.Eng.
Consulting Geologist

Vancouver, B.C.

October 20, 1985

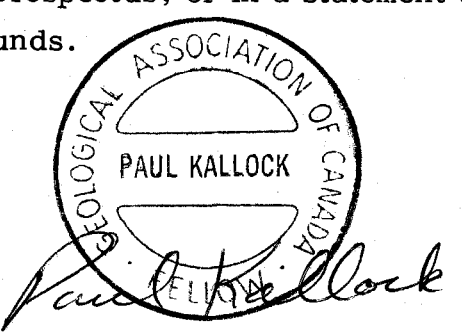
GEOLOGIST'S CERTIFICATE

PAUL KALLOCK

I, Paul Kallock, do state: that I am a geologist with Arctex Engineering Services, 301 - 1855 Balsam Street, Vancouver, B.C.

I Further State That:

1. I have a B.Sc. degree in Geology from Washington State University, 1970. I am a Fellow of the Geological Association of Canada.
2. I have engaged in mineral exploration since 1970, both for major mining and exploration companies and as an independent geologist.
3. I have co-authored the report entitled, "Geological, and Soil and Rock Geochemical Investigation, Lainey 1-4 Mineral Claims, Lawyers Creek-Toodoggone River Area, B.C." dated October 20, 1985. The report is based on my fieldwork carried out on the property, and on previously accumulated geologic data.
4. I have no direct or indirect interest in any manner in either the property or securities of Deep South Petroleum Inc., or its affiliates, nor do I anticipate to receive any such interest.
5. I consent to the use of this report in a prospectus, or in a statement of material facts related to the raising of funds.



Paul Kallock
Geologist

Vancouver, B.C.

October 20, 1985

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Carne, J.F. 1979. Geochemical Survey, Kodah Claims, Omineca Mining Division. Serem Ltd., Assessment Report #7703.

Carne, J.F. 1981. Rock Geochemistry on Kodah #1 Claim. Serem Ltd., Assessment Report #9708.

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Diakow, L.J., Panteleyev, A. and Schroeter, T.G. 1985. Geology of the Toodoggone River Area. NTS 94 E. B.C. Ministry of Energy, Mines and Petroleum Resources.

Eccles, L.K. 1982. Geological and Geochemical Report GWP 24, 29, 30, 34, and 42. Great Western Petroleum, Assessment Report #1005.

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Schroeter, T.G. 1982. Toodoggone River Area. *In:* Geological Fieldwork. B.C. Ministry of Energy, Mines and Petroleum Resources, Paper 1983-1, pp. 125-133.

COST STATEMENT, 1985 PROGRAMME

1.	Personnel		
	L.B. Goldsmith, ¼ June 5, ¾ June 7, ½ Oct. 19, total 1½ days @ $400/day	$ 600.00	
	N.C. Davidson, ¼ June 20 @ $400/day	100.00	
	P. Kallock, Sept. 10-16, ½ Oct. 16, Oct. 17, total 8½ days @ $320/day	2,720.00	
	I. Francis, Sept. 10-16, total 7 days @ $220/day	1,540.00	
		$4,960.00	$ 4,960.00
2.	Accommodation, Food, Supplies		
	Total cost of $668.60 ÷ 15.5 man days = $43.14/man/day		668.60
3.	Transportation		
	Vehicle, 2723 km @ $.30/km	$ 816.90	
	Gas	112.00	
	Helicopter	1,012.20	
	Fixed-wing aircraft	1,100.00	
		$3,041.10	3,041.10
4.	Analyses		
	5 rock samples cost	$ 71.25	
	154 soil samples cost	1,974.50	
	159 samples cost or $12.87/sample	$2,045.75	2,045.75
5.	Report - Drafting, typing, photocopying, materials		665.80
		TOTAL	$ 11,381.25

APPENDIX

ROCK SAMPLE DESCRIPTIONS

100 E 100 N	Random chip sample of purplish-brown fine-grained andesite which shows nearly horizontal fine-grained laminated interbeds. No visible sulphides or alteration products.
3250 E 1250 N	Select sample of moderately silicified porphyritic andesite showing strong limonite and 2% disseminated pyrite.
3350 E 1850 N	Grab sample of 2-metre wide "quartz eye" rhyolite dyke (?) with traces disseminated pyrite, strong limonite.
3350 E 2000 N	3-metre chip sample from very siliceous grey-white felsic volcanic with 3-5% disseminated pyrite.
3500 E 2400 N	Grab sample of pink feldspar porphyry andesite with strong epidote and 3-5% disseminated pyrite.

Gold F.A.-A.A. Combo Method ppb:

For low grade samples and geochemical materials, 10 gram samples are fused in litharge, carbonate and siliceous flux with the addition of 10 mg of Au-free Ag metal and cupelled. The silver bead is parted with dilute HNO3 and then treated with aqua regia. The salts are dissolved in dilute HCl and analyzed for Au on an atomic absorption spectrophotometer.

Detection limit: 5 ppb

Copper, Lead, Zinc, Silver ppm:

1.0 gm sample is digested with perchloric-nitric acid (HClO4-HNO3) for approximately 2 hours. The digested sample is cooled and made up to 25 mls with distilled water. The solution is mixed and solids are allowed to settle. Copper, lead, zinc and silver are determined by atomic absorption techniques. Silver and lead are corrected for background absorption.

Detection limit: Copper, Zinc - 1 ppm
Silver - 0.2 ppm
Lead - 2 ppm

Arsenic ppm:

A 1.0 gm sample is digested with a mixture of perchloric and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digest is acidified, reduced with KI and mixed. A portion of the reduced solution is converted to arsine with $NaBH_4$ and the arsenic content determined using flameless atomic absorption.

Detection limit: 1 ppm

Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 Brooksbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

Phone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : ARCTEX ENGINEERING

301 - 1855 BALSAM ST.
VANCOUVER, B.C.
V6K 3M3

29031 SR530 N.W.
STANWOOD, WA
98292

CERT. # : A8516720-001-A
INVOICE # : I8516720
DATE : 2-OCT-85
P.O. # : NONE
LAINEY PROJECT

ATTN: LOCKE GOLDSMITH cc: PAUL KALLCOK

Sample description	Prep code	Ag ppm Aqua R	As ppm	Au ppb FA+AA			
100E 100N	205	6.5	7	110	--	--	--
3250E 1250N	205	0.8	9	<5	--	--	--
3350E 1850N	205	0.2	3	<5	--	--	--
3350E 2000N	205	0.2	2	<5	--	--	--
3500E 2400N	205	0.2	10	<5	--	--	--

VOI rev. 4/85

Certified by Hart Bichler

Chemex Labs Ltd.

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TO : ARCTEX ENGINEERING

301 - 1855 BALSAM ST.
VANCOUVER, B.C.
V6K 3M3

29031 SR 530 NW
Stanwood, WA
98272

CERT. # : A8516719-001-A
INVOICE # : I8516719
DATE : 3-OCT-85
P.O. # : NONE
LAINEY PROJECT

ATTN: LOCKE GOLDSMITH cc: PAUL KALLOCK

Sample description	Prep code	Ag ppm Aqua R	AS ppm	Au ppb FA+AA			
L28E 8+00N	203	0.1	12	5	--	--	--
L28E 8+50N	203	0.2	53	<5	--	--	--
L28E 9+00N	203	0.2	6	<5	--	--	--
L28E 9+50N	203	0.8	6	5	--	--	--
L28E 10+00N	201	0.2	5	<5	--	--	--
L28E 10+50N	201	3.9	23	<5	--	--	--
L28E 11+00N	201	0.4	6	<5	--	--	--
L28E 11+50N	201	0.4	3	<5	--	--	--
L28E 12+00N	201	0.4	4	<5	--	--	--
L28E 12+50N	201	1.5	9	<5	--	--	--
L28E 13+00N	201	0.4	4	<5	--	--	--
L28E 13+50N	201	0.4	1	5	--	--	--
L28E 14+00N	203	0.3	3	<5	--	--	--
L28E 14+50N	201	0.2	5	<5	--	--	--
L28E 15+00N	203	0.3	5	20	--	--	--
L28E 15+50N	201	0.4	3	<5	--	--	--
L28E 16+00N	201	0.2	11	<5	--	--	--
L28E 16+50N	203	1.7	14	10	--	--	--
L28E 17+00N	203	0.2	5	<5	--	--	--
L28E 18+00N	201	0.4	5	<5	--	--	--
L28E 18+50N	201	0.2	5	<5	--	--	--
L28E 19+00N	201	0.1	4	<5	--	--	--
L28E 19+50N	201	0.2	3	<5	--	--	--
L28E 21+00N	201	0.3	5	<5	--	--	--
L28E 21+50N	201	0.3	3	<5	--	--	--
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L28E 24+00N	201	0.1	5	<5	--	--	--
L28E 24+50N	201	0.3	5	<5	--	--	--
L28E 25+50N	201	0.1	5	<5	--	--	--
L28E 26+00N	203	0.4	6	5	--	--	--
L28E 26+50N	203	0.2	6	<5	--	--	--
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L30E 0+50N	201	0.1	6	<5	--	--	--
L30E 1+00N	201	0.4	7	<5	--	--	--
L30E 1+50N	201	0.2	9	<5	--	--	--
L30E 2+00N	201	0.1	9	<5	--	--	--
L30E 2+50N	203	0.3	4	<5	--	--	--

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CERT. # : A8516719-002-A
INVOICE # : I8516719
DATE : 3-OCT-85
P.O. # : NONE
LAINEY PROJECT

ATTN: LOCKE GOLDSMITH CC: PAUL KALLOCK

Sample description	Prep code	Ag ppm Aqua R	AS ppm	Au ppb FA+AA			
L30E 3+00N	201	0.2	6	<5	--	--	--
L30E 3+50N	201	0.3	4	<5	--	--	--
L30E 4+00N	201	0.1	3	<5	--	--	--
L30E 4+50N	201	0.2	3	100	--	--	--
L30E 5+00N	201	0.2	11	<5	--	--	--
L30E 6+00N	203	0.1	4	<5	--	--	--
L30E 6+50N	201	0.2	7	<5	--	--	--
L30E 7+00N	201	0.2	4	<5	--	--	--
L30E 7+50N	201	0.3	4	<5	--	--	--
L30E 8+00N	201	0.2	9	<5	--	--	--
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L30E 9+00N	201	0.2	3	<5	--	--	--
L30E 10+00N	201	0.1	4	<5	--	--	--
L30E 10+50N	201	0.1	5	<5	--	--	--
L30E 11+00N	203	0.2	2	<5	--	--	--
L30E 11+50N	201	0.2	4	5	--	--	--
L30E 12+00N	201	0.1	5	<5	--	--	--
L30E 12+50N	201	0.4	4	<5	--	--	--
L30E 13+00N	201	0.2	5	<5	--	--	--
L30E 13+50N	201	0.2	1	<5	--	--	--
L30E 14+00N	201	0.1	3	25	--	--	--
L30E 14+50N	201	0.2	6	<5	--	--	--
L30E 15+50N	201	0.3	4	<5	--	--	--
L30E 16+00N	201	0.4	4	5	--	--	--
L30E 16+50N	201	0.4	7	15	--	--	--
L30E 17+00N	201	0.1	4	<5	--	--	--
L30E 17+50N	201	0.1	2	<5	--	--	--
L30E 18+00N	201	0.1	3	<5	--	--	--
L30E 18+50N	201	0.1	4	<5	--	--	--
L30E 19+00N	201	0.1	4	<5	--	--	--
L30E 19+50N	201	0.3	2	<5	--	--	--
L30E 20+00N	201	0.2	2	<5	--	--	--
L30E 20+50N	201	0.1	5	<5	--	--	--
L30E 21+00N	203	0.2	5	20	--	--	--
L30E 21+50N	201	0.2	3	5	--	--	--
L30E 22+00N	201	0.1	4	<5	--	--	--
L30E 22+50N	201	0.2	2	<5	--	--	--
L30E 23+00N	201	0.1	2	<5	--	--	--
L30E 23+50N	201	0.1	3	<5	--	--	--
L30E 24+00N	201	0.1	3	5	--	--	--

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Certified by Ian Buchler .....

Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 Brooksbank Ave.
North Vancouver, B.C.
Canada V7J 2C1

Phone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : ARCTEX ENGINEERING

301 - 1855 BALSAM ST.
VANCOUVER, B.C.
V6K 3M3

CERT. # : A8516719-003-A
INVOICE # : I8516719
DATE : 3-OCT-85
P.O. # : NONE
LAINEY PROJECT

ATTN: LOCKE GOLDSMITH CC: PAUL KALLOCK

Sample description	Prep code	Ag ppm Aqua R	AS ppm	Au ppb FA+AA			
L30E 24+50N	201	0.2	3	<5	--	--	--
L30E 25+00N	201	0.1	1	<5	--	--	--
L30E 25+50N	201	0.1	5	<5	--	--	--
L30E 26+00N	201	0.1	2	<5	--	--	--
L34E 5+00N	201	0.1	3	<5	--	--	--
L34E 5+50N	201	0.1	5	<5	--	--	--
L34E 6+00N	201	0.1	7	<5	--	--	--
L34E 6+50N	203	0.2	7	<5	--	--	--
L34E 7+00N	201	0.2	7	<5	--	--	--
L34E 7+50N	201	0.1	4	<5	--	--	--
L34E 8+00N	201	0.8	3	<5	--	--	--
L34E 8+50N	201	0.1	4	<5	--	--	--
L34E 9+00N	201	0.1	5	<5	--	--	--
L34E 9+50N	201	0.2	2	<5	--	--	--
L34E 10+00N	201	0.2	4	175	--	--	--
L34E 10+50N	201	0.3	6	5	--	--	--
L34E 11+00N	201	0.6	9	<5	--	--	--
L34E 11+50N	203	0.1	6	<5	--	--	--
L34E 12+00N	203	0.3	10	<5	--	--	--
L34E 12+50N	203	0.2	5	<5	--	--	--
L34E 13+00N	203	0.2	4	<5	--	--	--
L34E 13+50N	203	0.1	6	<5	--	--	--
L34E 14+00N	203	0.2	4	<5	--	--	--
L34E 14+50N	201	0.2	2	<5	--	--	--
L34E 15+00N	203	0.1	3	10	--	--	--
L34E 15+50N	203	0.5	4	20	--	--	--
L34E 16+00N	201	1.0	5	15	--	--	--
L34E 16+50N	203	0.1	5	<5	--	--	--
L34E 17+00N	203	0.1	5	<5	--	--	--
L34E 17+50N	203	0.2	3	<5	--	--	--
L34E 18+00N	203	0.2	4	5	--	--	--
L34E 18+50N	203	0.1	2	<5	--	--	--
L34E 19+00N	201	0.1	5	25	--	--	--
L34E 19+50N	203	0.3	3	15	--	--	--
L34E 20+00N	203	0.1	4	<5	--	--	--
L34E 20+50N	201	0.1	2	<5	--	--	--
L34E 21+00N	201	0.1	10	<5	--	--	--
L34E 21+50N	201	0.1	3	5	--	--	--
L34E 22+00N	201	0.2	2	<5	--	--	--
L34E 22+50N	203	0.1	4	5	--	--	--

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Certified by Hartt Bichler .....

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CERTIFICATE OF ANALYSIS

TO : ARCTEX ENGINEERING

301 - 1855 BALSAM ST.
VANCOUVER, B.C.
V6K 3M3

CERT. # : A8516719-004-A
INVOICE # : I8516719
DATE : 3-OCT-85
P.O. # : NONE
LAINEY PROJECT

ATTN: LOCKE GOLDSMITH CC: PAUL KALLOCK

Sample description	Prep code	Ag ppm Aqua R	AS ppm	Au ppb FA+AA			
L34E 23+00N	201	0.1	3	<5	--	--	--
L34E 23+50N	201	0.2	1	10	--	--	--
L34E 24+00N	201	0.1	1	<5	--	--	--
L34E 24+50N	201	0.1	3	<5	--	--	--
L34+50E 18+50N	201	0.1	4	<5	--	--	--
L35+00E 18+50N	201	0.6	19	50	--	--	--
L35+50E 18+50N	201	0.1	4	<5	--	--	--
36+00E 18+50N	203	0.5	2	<5	--	--	--
36+00E 19+00N	201	0.1	5	<5	--	--	--
36+00E 19+50N	203	0.7	1	5	--	--	--
36+00E 20+00N	203	0.2	6	<5	--	--	--
36+00E 20+50N	203	0.3	3	5	--	--	--
36+00E 21+00N	203	0.3	4	10	--	--	--
36+00E 21+50N	201	0.6	12	<5	--	--	--
36+00E 22+00N	201	1.0	6	<5	--	--	--
36+00E 22+50N	201	0.3	9	<5	--	--	--
36+00E 23+00N	201	0.2	6	10	--	--	--
36+00E 23+50N	203	0.6	5	15	--	--	--
36+00E 24+00N	201	0.3	2	15	--	--	--
36+00E 24+50N	203	3.2	10	<5	--	--	--
36+00E 25+00N	201	0.6	4	15	--	--	--
38+00E 19+00N	203	0.2	5	5	--	--	--
38+00E 19+50N	203	0.1	1	5	--	--	--
38+00E 20+00N	201	1.8	9	35	--	--	--
38+00E 20+50N	201	0.3	5	<5	--	--	--
38+00E 21+00N	201	0.2	3	<5	--	--	--
38+00E 21+50N	201	0.2	2	5	--	--	--
38+00E 22+00N	201	0.1	3	110	--	--	--
38+00E 22+50N	203	0.1	6	5	--	--	--
38+00E 23+00N	203	0.7	1	<5	--	--	--
38+00E 23+50N	201	0.4	1	<5	--	--	--
38+00E 24+00N	201	0.4	1	5	--	--	--
38+00E 24+50N	203	0.2	3	15	--	--	--
38+00E 25+00N	201	0.3	2	<5	--	--	--

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Certified by ..... Hart Bichler

Mineral Claims HORN 1-4 & AS 1-3

LAKES
GOLD OCCURRENCES
(ABC) LETTERS IN BRACKETS INDICATE VANCOUVER STOCK EXCHANGE TRADING SYMBOLS

SEREM INC. CLAIMS INCLUDE AGNICO – EAGLE MINES LTD. AND SUDBURY CONTACT MINES LTD.

DEEP SOUTH Petroleum Inc.

REGISTERED PROFESSIONAL ENGINEER PROVINCE OF ONTARIO

Mineral Claims LAINEY 1-4

1 0 1 3 Kilom
1 0 1 3

N

STAKED
GOLDEN RULE RESOURCES LTD. (GNU)
WESTERN HORIZONS RESOURCE LTD.
STAKED
LACANA MINING CORP.
KENNCO EXPLORATIONS WESTERN LTD.
NEWMONT EXPLORATION OF CANADA LTD.
GOLDEN RULE RESOURCES LTD. (GNU)
KIDD CREEK MINES LTD.
GOLDEN RULE RESOURCES LTD. (GNU)
KIDD CREEK MINES
KIDD CREEK MINES LTD.
GOLDEN RULE RESOURCES LTD. (GNU)
ENERGEX MINERALS LTD. (EQX)
LACANA MINING CORP.
GREAT WESTERN PETROLEUM CORP. (GWP)
SEREM INC.
STAKED
SEREM INC.
IMPERIAL METALS CORP. (IPM)
NEWMONT EXPLORATION OF CANADA LTD.
GREAT WESTERN PETROLEUM CORP.
IMPERIAL METALS CORP. (IPM)
ST. JOE CANADA INC.
GOLDEN RULE RESOURCES LTD.
GREAT WESTERN PETROLEUM CORP. (GWP)
LACANA MINING CORP.
SEREM INC.
SEREM INC.
KIDD CREEK MINES LTD.
BAKER GOLD MINE
DUPONT OF CANADA EXP'N LTD.
STAKED
STAKED
KIDD CREEK MINES LTD.
NEWMONT EXP'N OF CANADA LTD.
GOLDEN RESOUCES RULE LTD. (GNU)
LACANA MINING CORP.
KIDD CREEK MINES LTD.
NEWMONT EXPLORATION OF CANADA LTD.
SEREM INC.
INTERNATIONAL RESOURCES (ISR)
SHASTA
STAKED
COMIN LTD.
ASITKA RESOURCE CORP. (ATK)
SEREM INC.
GOLDEN RULE RESOURC LTD. (GNU)
PACIFIC RIDGE RESOURCES CORP. (PCF)
ARK ENERGY LTD. (ARK)
INCA RESOURCES INC. (IRI)
KENNCO WESTERN EXP'N LTD.
COMINCO LTD.
UNIVEX MINING CORP. LTD.

TOODOGGONE GOLD CAMP
Baker Gold Mine Area
British Columbia

TO ACCOMPANY REPORT BY

PAUL KALLOCK GEOLOGIST
AND LOCKE B. GOLDSMITH, P.Eng., CONSULTING GEOLOGIST

ARCTEX ENGINEERING SERVICES

OCTOBER 1985

LEGEND

RIVER, CREEK

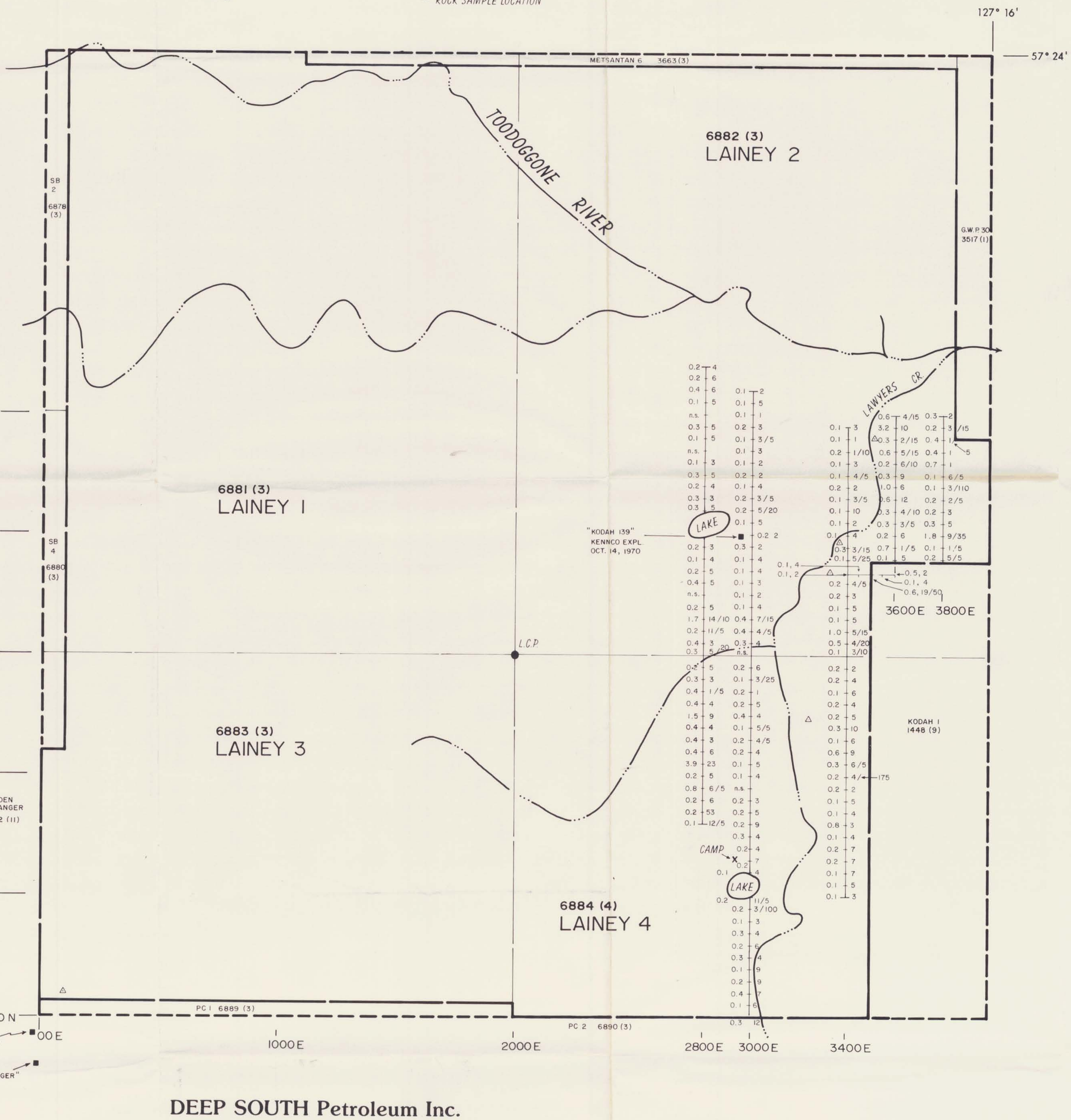
CLAIM BOUNDARIES

L.C.P.

SOIL SAMPLING LINE

□ LOCATED CLAIM POST

△ ROCK SAMPLE LOCATION



DEEP SOUTH Petroleum Inc.

LAINEY 1-4 Mineral Claims

TOODOGGONE AREA, OMINECA MINING DIVISION, B.C., 94E/6W

SOIL GEOCHEMISTRY

1 : 10,000

0 100 500 1000 METRES

TO ACCOMPANY REPORT BY

PAUL KALLOCK GEOLOGIST

AND LOCKE B. GOLDSMITH, P. Eng., CONSULTING GEOLOGIST

ARCTEX ENGINEERING SERVICES

OCTOBER 1985

N

P.P.M. Ag — P.P.M. As

0.2 / 4/15

P.P.B. Au

VALUES < 5 P.P.B. NOT SHOWN

ROCK GEOCHEMISTRY SHOWN ON GEOLOGY MAP.

LEGEND

RIVER, CREEK

CLAIM BOUNDARIES

L.C.P.

SOIL SAMPLING LINE

■ LOCATED CLAIM POST

Possible FAULT ZONE — vertical

BEDDING, showing attitude 25°

JOINTING, showing attitude 75°

127° 16'

57° 24'

METSANTAN 6 3663 (3)

TOODOGGONE RIVER

6882 (3)
LAINEY 2

Aerial reconnaissance indicates northwestern part of claim group is underlain by glacial and fluvial unconsolidated sediments.

SB 2 6878 (3)

G.W.P. 30 3517 (1)

R.S. 3500E 2400N
0.2 - 10 - <5

Pink feldspar porphyritic andesite; locally 3-5% disseminated pyrite.

LAWYERS CR.

2500 N

6881 (3)
LAINEY 1

Steep canyon walls, abundant limonite and disseminated pyrite in bleached porphyritic volcanics.

LAKE

"KODAH 139"
KENNCO EXPL
OCT. 14, 1970

2000 N

SB 4 6880 (3)

waterfall

R.S. 3350E 1850N
0.2 - 3 - <5

2 m. wide "quartz eye" rhyolite dyke, with 3-5% disseminated pyrite near fault zone.

R.S. 3350E 2000N
0.2 - 2 - <5

3600E 3800E

1500 N

L.C.P.

Porphyritic andesite, moderately siliceous, with strong limonite and 2% pyrite.

R.S. 3250E 1250N
0.8 - 9 - <5

Moderate epidote/chlorite-altered porphyritic andesite.

6883 (3)
LAINEY 3

KODAH 1 1448 (9)

1000 N

GOLDEN STRANGER 4882 (11)

Porphyritic andesite

CAMP

LAKE

500 N

Purplish brown fine-grained andesite with nearly horizontal fine-grained sedimentary interbeds.

R.S. 100E 100N
6.5 - 7 - 110

6884 (4)
LAINEY 4

Andesite tuff and tuff breccia

Porphyritic pink feldspar andesite with strong epidote and chlorite.

PC 1 6889 (3)

PC 2 6890 (3)

00 N

"XENOS"
LACANA MINING
AUG. 2, 1981

00 E

1000E

2000E

2800E

3000E

3400E

"GOLDEN STRANGER"
E. THOMPSON
OCT. 26, 1982

DEEP SOUTH Petroleum Inc.

LAINEY 1-4 Mineral Claims

TOODOGGONE AREA, OMINECA MINING DIVISION, B.C., 94E/6W

GEOLOGY MAP
showing ROCK GEOCHEMISTRY and sample locations
1:10,000

0 100 500 1000 METRES

TO ACCOMPANY REPORT BY

PAUL KALLOCK GEOLOGIST
AND LOCKE B. GOLDSMITH, P.Eng., CONSULTING GEOLOGIST

REGISTERED PROFESSIONAL ENGINEER — L.B. GOLDSMITH — PROVINCE OF ONTARIO

ARCTEX ENGINEERING SERVICES — OCTOBER 1985

LOWER TO MIDDLE JURASSIC

TOODOGGONE VOLCANICS

Tuff Peak Formation:
purple, grey and green augite, biotite, hornblende and plagioclase porphyry flows, some brecciation, minor sills and plugs, some crystal and lapilli tuff.

outcrop boundaries

N

Ag P.P.M. As P.P.M. Au P.P.B.

0.2 - 3 - <5

▲ ROCK SAMPLE LOCATION