

83-#644 ~ #11539

11/84

A Report On

GEOLOGICAL AND GEOCHEMICAL EXPLORATION - 1983

on the

ED-KETTLE GROUP OF MINERAL CLAIMS

Comprising: Ed Mineral Claim, Record No. 3344

Kettle Mineral Claim, Record No. 3345

in the

GREENWOOD MINING DIVISION - BRITISH COLUMBIA

NTS 82E/1W

Latitude 49° 10'

Longitude 118° 30'

owned jointly by

KENERGY RESOURCE CORPORATION

and

SYNERGY INTERNATIONAL LTD.

operated by

KENERGY RESOURCE CORPORATION

by

J. S. Kermeen, M. Sc., P. Eng.
Consulting Geological Engineer
55 Whiteshield Crescent South
Kamloops, B. C. V2E 1P3

Report No. C83-21
October 31, 1983

GEOLOGICAL BRANCH
ASSESSMENT REPORT

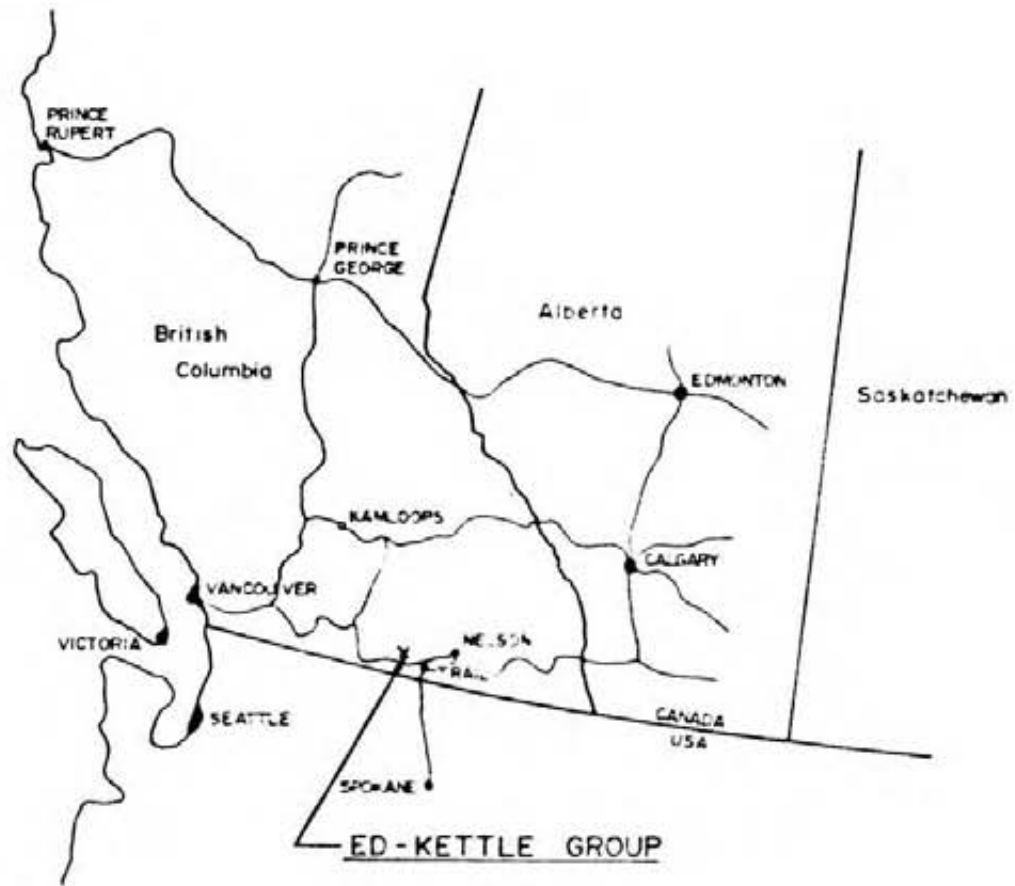
11,539

TABLE OF CONTENTS

	<u>Page</u>
Introduction	1
Mineral Dispositions and Ownership	2
Location Access Transportation Power	3
Physiography	4
History of the Ed-Kettle Group	5
District Geology and Mineralization	6
Summary of Work Done	
- Geological Mapping	9
- Geochemical Soil Sampling	9
Geology of the Ed-Kettle Group	
- Lithology	11
- Structure	12
- Mineralization	13
- Geochemical Results	13
Summary and Conclusions	15
Recommendations	16
List of References	17
Cost Statement	18
Certificate	19

List of Drawings

- C83-21 - 1. Location Map
2. Claim Map - 1:20000
3. Geological Map, Showing Reconnaissance
Geochemical Soil Sampling
4. Geochemical B-Soil Sampling -
Detail
5. Geochemical E-Soil Sampling -
Detail



U.S. KERRIEVEEN, CONSULTING GEOLOGICAL ENGINEER
 CLIENT: KENERGY RESOURCE CORPORATION
 PROJECT: PROPERTY ED-KETTLE GROUP
 TITLE

LOCATION MAP

DRAWN BY: J.S.K. DATE: 82 E/1,2 SCALE: 1:50,000
 CHECKED BY: M. BLISS DATE: 83-3-7
 PROJECT: GREENWOOD/PHOENIX B.C. DRAWING NO: CB3-21-1

INTRODUCTION

The ED and KETTLE mineral claims comprising 26 contiguous units located in the Greenwood Mining Division 15 kilometres north of Grand Forks, were recorded in November, 1982, by Mr. J. W. Carson of Grand Forks.

The claims were subsequently acquired jointly by Kenegy Resource Corporation and Synergy International Ltd.

In October of 1983, the writer carried out geological mapping in the section of the property considered to have the greatest economic potential; a limited amount of geochemical soil sampling was also performed under the writer's supervision.

This report records and interprets geological and geochemical data available to date on the Ed-Kettle Group.

MINERAL DISPOSITIONS AND OWNERSHIP

The Ed-Kettle Group consists of two adjacent mineral claims, comprising 26 contiguous units, which are listed below and are depicted on attached map C83-3-2.

<u>Claim Name</u>	<u>Registration No.</u>	<u>Date of Registration</u>	<u>Registered Owner as of February 11, 1983</u>
Ed	3344	November 26, 1982	John W. Carson
Kettle	3345	November 26, 1982	John W. Carson

The writer has been advised by Mr. E. G. Kennedy, President of Kenegy Resource Corporation that the Ed-Kettle Group is now owned jointly by:

Kenegy Resource Corporation,
Box 10108 - 1550 Stock Exchange Tower,
609 Granville Street,
Vancouver, B. C.
V7Y 1C6

and

Synergy International Ltd.,
1663 Venables Street,
Vancouver, B. C.
V5L 2H1

through agreements between Kenegy and the registered owners and between Kenegy and Synergy.

The staked ground covers 26 units which is equivalent to 650 hectares (1606 acres), however, due to overlap of pre-existing properties, the net area on the Ed-Kettle Group is approximately 494 hectares (1221 acres).

LOCATION ACCESS TRANSPORTATION POWER

The Ed-Kettle Group is located in south-central British Columbia at longitude 118° 30' and latitude 49° 10'; it is, respectively, 18 kilometres north of the international boundary, 15 kilometres north of Grand Forks, B.C., 16 kilometres northeast of Greenwood, B. C. and 11 kilometres northeast of the Phoenix Mine site.

Brown Creek, a tributary flowing into the Granby River from the West, roughly bisects the property.

An all-weather road, which connects with the B.C. No.3 highway at Grand Forks, passes along the east boundary of the property.

The Kettle Valley line of the Canadian Pacific Railway traverses the southern part of the group.

A number of trails suitable for four-wheel drive vehicles and/or snowmobiles cross parts of the property; no part of the ground is more than one hour on foot from the nearest vehicle trail.

The Ed-Kettle Group adjoins the following surveyed crown-granted mineral claims:

Shickshock : Lot 992
Sailorboy : Lot 1093
Strawberry : Lot 1765
Mono : Lot 2205

A major hydro power line, capable of supplying possible future mines in the area, passes within twelve kilometres of the property.

PHYSIOGRAPHY

The Greenwood-Phoenix area lies within the Monashee Mountains which form the southeastern extremity of the Interior Plateau of the Cordilleran Region of British Columbia. Mountains here tend to be rounded, with relatively gentle slopes and are separated by either the flat-bottomed valleys of major rivers or the V-shaped valleys of smaller tributary streams. Elevations within the map area range from 520 metres (1706 feet) above sea level at Grand Forks to 1836 metres (6023 feet) at the peak of Mount Roderick Dhu, immediately north of Jewel Lake. Flat-bottomed valleys have been cleared for agriculture. Most sloping areas are treed, for the most part with merchantable timber.

The Ed-Kettle Group straddles the valley of Brown Creek, a tributary of the Granby River flowing into it from the west. Along the east boundary of the group, rocky hills with some cliff faces rise steeply up to the west from the Granby River valley. Further west on the property, slopes flanking Brown Creek are more gentle, averaging about 20 percent. Elevations on the property vary from 620 to 960 metres above sea level.

The entire property is forested except for a few steep, rocky faces and a few man-made clearings.

HISTORY OF THE ED-KETTLE GROUP

The Ed-Kettle group lies within the Greenwood - Phoenix area which has been subjected to mineral exploration since the late 1800's. Major production of copper gold silver ore from the Phoenix Mine of the Granby Mining Company Limited was achieved from 1900 to 1919, and again from 1959 and 1978. In addition, significant production was attained from some 15 other deposits in the area.

Massive pyrite-pyrrhotite - magnetite, reportedly with significant gold values, was produced in the past from the adjoining Strawberry mineral claim.

Two short adits and a pit in bedrock were located on the Ed-Kettle Group.

The area now covered by the Ed-Kettle Group has been staked and re-staked a number of times over the past several decades. However, to the writer's knowledge, a comprehensive program of modern exploration has never been conducted on the ground.

DISTRICT GEOLOGY AND MINERALIZATION

East of a north-south fault lying along the Granby River north of Grand Forks, tightly folded metamorphic rocks of the Grand Forks group (paragneiss, schist, crystalline limestone, etc.) are exposed in an upthrown block.

West of this same fault stratified rocks ranging in age from Permian or older to Cretaceous predominate. They are a typical eugeosynclinal assemblage of volcanics (mainly andesitic) and sediments. They are all folded and metamorphosed to greenschist facies. Work in the vicinity of the Phoenix mine resulted in a subdivision of these rocks into an older (Permian?) sequence of bedded chert followed by a mixture of massive chert, argillite, greywacke and greenstone (andesitic flow) known as Knob Hill Formation. Unconformably overlying the Knob Hill formation Triassic sediments consisting of a lower sharpstone conglomerate (origin now questioned) and the Brooklyn Formation comprising primarily limestone, calcareous argillite, and minor shale and chert; locally these rocks are altered to skarn-like mineral assemblage. H.W. Little of the Geological Survey of Canada mapped the area in the 1950's and grouped all of these rocks together as the Anarchist Group.

Major intrusions took place in Cretaceous time starting with ultramafics, now largely altered to serpentine which occur in several tabular masses in the Greenwood-Phoenix Area; in a least one occurrence vestiges of pillows are reported suggesting that extrusive varieties of this same rock are also present. The main Cretaceous intrusions, however, are predominantly of granodiorite composition with smaller amounts of other intermediate to felsic members. A large mass of Nelson granodiorite lies a few kilometres to the north east of the Phoenix camp; smaller plugs ranging from a few metres to three kilometres in diameter intrude the older stratified rocks here and there throughout the area of interest.

Flat-lying to gently-tilted and relatively unmetamorphosed Tertiary sediments and volcanics unconformably overlie the Mesozoic and Paleozoic rocks of the area. They are subdivided into an older sedimentary sequence (arkose, dacite tuff, and conglomerate) termed the Kettle River Formation (Little) and a younger sequence of volcanics (andesite, trachyte and minor basalt) which have been termed the "Phoenix Volcanic Group" by Little in 1957 and later the "Marron Group" by others in the Geological Survey of Canada. West of a north-south line lying three kilometres west of Greenwood, Tertiary volcanics completely obscure all older rocks. Elsewhere throughout the area of interest, smaller remnant patches of Tertiary cover remain, notably at the Phoenix Mine and capping Thimble Mountain eight kilometres ENE of Phoenix.

The last major intrusive event emplaced the "Coryell Intrusions" consisting of syenite, monzonite, shonkinite, and granite. A large mass of this unit extends into the northeast quadrant of the map area; smaller plugs and dikes related to this mass are found throughout the area of interest. Little originally considered this unit to be older than the Tertiary volcanics but later interpretations indicate it intrudes them.

Known economic mineralization in the district can be divided into four types.

- (1) Disseminated chalcopyrite mineralization with significant gold and silver values occurring in Brooklyn crystalline limestone, calcareous argillites and skarns derived therefrom; the largest and the best example is the Old Ironsides ore body at Phoenix.
- (2) Gold, copper, silver deposits occurring in alteration zones adjacent to ultramafic (serpentinite) rocks exemplified by the old City of Paris mine now on the Grenoble Energy Ltd. property.

- (3) Gold and silver-bearing quartz veins often occurring at, or near the contacts between Nelson intrusives and Knob Hill greenstones and sediments; examples are the Jewel Lake deposits of Dentonia Resources and the Providence Mine.
- (4) The recent discovery by Kettle River Resources located one kilometre northwest of the Old Ironsides pit (Phoenix) may represent yet another deposit type. Interesting gold values occur in both stratiform lenses of near-massive sulphides (pyrite, pyrrhotite and minor chalcopyrite) and adjacent laminated cherty argillite with sulphide layers. Of 20 diamond drill holes completed to date, 12 intersected interesting gold values, the best of which assayed 0.193 ounces per ton over a core length of 46.9 feet.

The Greenwood-Phoenix area has many of the features considered favourable for gold mineralization in the Precambrian Superior province gold camps, ie:

- (1) A mafic volcanic assemblage (Knob Hill) followed by a sedimentary assemblage (Brooklyn).
- (2) Ultramafic intrusives (and probably also ultramafic flows, perhaps now largely removed by erosion).
- (3) Felsic intrusives: small masses of the feldspar porphyry intrusives are found throughout the area.
- (4) Major quartz-sericite alteration zones in intermediate pyroclastics.
- (5) Carbonate alteration zones in and adjacent to serpentized ultramafic rocks.
- (6) Both stratiform and vein type gold mineralization.

SUMMARY OF WORK DONEGeological Mapping

Prior reconnaissance traverses had indicated that the favourable supracrustal rocks occur in a one kilometre wide northeast-trending belt in eastern part of the property. Mapping was confined largely to this belt.

Control was provided by hip-chaining along compass lines making slope corrections where necessary. All work except observations on the adjoining Strawberry claim were tied to a pre-existing picketed baseline (3000E on the adjoining Rimacan Resources grid) and to the railway.

The railway grade offers excellent rock exposure and was mapped in detail from the tunnel to Rathmullen Creek.

The baseline (3000E) and crosslines at 3750N, 4377N and 4799N were mapped.

A considerable amount of the area of interest is overburden covered and to obtain a meaningful geological picture, it was necessary to project some features from adjoining properties. The property of Rimacan Resources adjoining to the south had been previously mapped in detail by the writer; the Strawberry mineral claim adjoining the north, and the Shickshock and Sailor Boy claims adjoining to the south were mapped as part of the current program on the Ed-Kettle Group.

The resulting coverage is roughly equivalent to traverses across the formational trend at intervals of 400 metres measured along the trend.

Geochemical Soil Sampling (see maps C83-21-3, 4&5)

With the exception of two samples from a pit, all soil samples were collected from the upper part of the B-horizon; all were analyzed for gold and zinc.

21 samples were collected at 50 metre intervals on line 3750N; an additional 48 samples were collected as detailed follow-up of anomalous gold analyses from this line.

In addition, three samples were collected from the vicinity of pyrite mineralization and alteration on line 4799N.

In all, 72 samples were collected. All analyses were performed by:

Kamloops Research & Assay Laboratory,
Kamloops, B. C.

Gold was determined by fire assay concentration followed by atomic absorption analysis.

Zinc was determined by HNO_3 digestion followed by atomic absorption analysis.

GEOLOGY OF THE ED-KETTLE GROUP
(see Map C83-3)

Lithology

Supracrustal rocks occupy an area measuring 1.0 km x 1.5 km in the southeast quadrant of the property. The remainder of the property is underlain by intrusive rocks which are younger than the supracrustals; the intrusive contact trends northeasterly through the property apparently transecting the bedding of the supracrustals at a low angle.

Rock types encountered on the property are described briefly below (numbers correspond with those on the map).

- (1) Andesite/dacite: typically fine-grained, medium grey green massive igneous; porphyritic phases are not uncommon; some highly altered members included in this unit are believed to be pyroclastics. Pyrite is very sparse in the unaltered varieties; altered varieties may include up to 3% pyrite and/or pyrrhotite.
- (2) Argillite: a fine-grained, dark grey to black, massive, thick-bedded, often cherty metasediment.
- (3) Chert: a hard, aphanitic, light to medium grey siliceous rock; in small outcrops it could be mistaken for quartz vein material; it is usually thick-bedded and massive but thin-bedded occurrences were also noted.
- (4) "Chert Breccia": this is a rock which has been previously mapped by others in the area a "sharpstone conglomerate". Typical occurrences display a high percentage of angular to sub-rounded fragments of pale greenish-grey to grey cherty-looking siliceous fragments in a matrix which in hand specimen appears to be andesitic. The absence of obvious layering and its general appearance suggest it has a volcanogenic (intrusive or extrusive breccia?) rather than sedimentary origin. In many exposures, the matrix appears to have been silicified, sericitized and epidotized; some occurrences have a high carbonate content. Pyrite may be present in disseminated grains and in veinlets constituting as much as 4% of the rock.

Thin section studies will be required to properly identify this rock.

5. Limestone: No major occurrences of limestone were observed on the Ed-Kettle property, however, since a thick sequence of crystalline limestone occurs "on strike" on the adjoining Rimacan Resources ground, it is possible that limestone occurs beneath surficial cover on this property.
6. "Quartzite-"sugary-textured": a distinctive fine-grained quartzite which under the hand lense has the appearance of granulated sugar; only one outcrop was observed on the Ed-Kettle Group on the railway grade at 2870E; similar rock was observed associated with massive pyrite/pyrrhotite south of this property.
7. Quartz-diorite, granodiorite: A medium-grained, equigranular, massive igneous rock composed of quartz 20%, plagioclase 60% and hornblende 20%; it is fresh-looking and consistent in characteristics from one outcrop to another.
- 8&9. Tertiary sediments (arkose) and volcanics (andesite/trachyte) unconformably overlies the above-described rocks about 1.5 km south of the property but were not observed on the Ed-Kettle claim.
10. Syenite: a coarse-grained porphyritic, buff to grey, brown-weathering igneous rock; it was observed intruding a variety of supracrustals and the older intrusives (Unit 7).
11. "Grey Dikes": grey-to-dun colored porphyritic, dike rocks were observed in a few locations.

Structure

Reliable attitudes in the stratified rocks are sparse. Outcrop patterns and correlation of contact exposures suggest that strikes vary between 030° and 050° ; dips are probably quite steep.

A strong fault striking 030° and dipping 45°SE was observed at the Strawberry workings. Another moderately strong fault, striking 017° and dipping 56°W , was observed in a mine adit near the railway tunnel.

Mineralization

In addition to the disseminated pyrite mentioned in the rock-type descriptions, massive pyrite, pyrrhotite, magnetite and some chalcopyrite were observed at the workings on the adjoining Strawberry claims. The mineralization is in altered dacitic volcanics lying between intruding granodiorite to the west and "chert breccia" to the east. B.C. Minister of Mines reports refer to gold assays ranging from 0.14 to 0.67 ounces per ton from this deposit. Two grab samples taken by the writer assayed as follows:

<u>Sample No.</u>		<u>Gold</u> (oz. per ton)	<u>Silver</u> (oz. per ton)
12040	Grab sample from Strawberry Dump	0.026	0.47
12041	Sample from mineralized fault- Strawberry workings	0.025	0.18

A sample of altered "chert breccia" containing an estimated five percent pyrite from the Ed-Kettle Group analysed as follows:

<u>Sample No.</u>	<u>Location</u>	<u>Geochemical Analysis</u>	
		<u>Gold</u>	<u>Silver</u>
12039	4799N 3057E	20 ppb	1.0 ppm

At 3750N and 2400E highly erratic compass readings coincident with abnormally reddish soil suggests the presence of a body of pyrrhotite and/or magnetite.

Geochemical Results (See Maps C83-21-3, 4&5)

Three B-soil samples taken from line 4799N in the vicinity of 4977N; 3050E did not yield anomalous results.

Twenty-one B-soil samples taken at intervals of 50 metre intervals on line 3750N yielded two highly anomalous gold analyses as follows:

		<u>Au (ppb)</u>
3750N	2300E	400
	2750E	375

The first appears to lie on the contact .

between syenite intruding granodiorite near the contact with supracrustals (red soil and compass deviations were noted in this area).

The second area has no outcrop; it appears to lie on strike with an area of anomalous gold in both humus and B-soil outlined on the Rimacan Resources ground 600 metres to the southwest.

Detailed follow-up on the original anomaly at 2300E (C83-21-4): the high gold reading was not repeated; the sample from 2310E is moderately anomalous (75 ppb); no anomalous readings were returned on parallel lines of samples.

Detailed follow-up at 2750 E. (C83-21-5): the high gold reading was confirmed (530 ppm vs 375 ppm); other follow-up samples range from high background (10 to 30 ppb) to weakly anomalous (65 ppb).

Only one zinc analyses is possibly anomalous (248 ppm at 3700E); the remainder range from 31 to 128 ppm which is probably background for the area (based on surveys on adjoining ground.)

SUMMARY AND CONCLUSIONS

The Ed-Kettle Group of Kenergy Resource Corporation and Synergy International Limited covers a contiguous block of 494 hectares located in the Greenwood Mining Division, 15 kilometres north of Grand Forks, B. C.

Altered sedimentary and volcanic rocks of probable paleozoic and/or cenozoic age occupy a northeasterly-trending belt, one kilometre wide in the southeast segment of the property; the remainder of the property is underlain chiefly by intrusive rocks of both Cretaceous (granodiorite) and Tertiary (syenite) age. The contact between intrusives and supracrustals trends ENE through the property transecting the stratigraphy at a low angle.

The supracrustal sequence is similar to that in the vicinity of significant gold and base metal occurrences elsewhere in the district. Specific evidence of mineralization on or near the Ed-Kettle Group includes:

(1) Massive sulphide (pyrite, pyrrhotite) with low but significant gold values on adjoining properties both northwest and southeast of the Ed-Kettle; the host in each case is volcanic rock near the contact with intruding granodiorite.

(2) Disseminated pyrite in part accompanied by intense alteration (quartz, sericite, chlorite epidote, calcite) in both "chert breccia" and dacite.

(3) Anomalous gold-in-soil anomalies at one, and possibly two locations on the single line of soil samples completed.

The area of supracrustals is considered to contain disseminated sulphides of syn-volcanic origin. Reworking of such mineralization has produced massive concentrations along the intrusive contact.

The property is worthy of further exploration for base and precious metals associated with either of the above types of mineralization.

RECOMMENDATIONS

- (1) Establish flagged and brushed cross-lines at 100 metre intervals throughout the area of supracrustal rocks and extending 200 metres into the intrusives.
- (2) Collect B-soil samples at 50 metre intervals along each line and analyse for gold and zinc.
- (3) Conduct a magnetometer survey with readings taken at 25 metre intervals on lines spaced 100 metres apart.
- (4) If co-incident magnetic and gold-in-soil anomalies occur, direct testing of anomalies by trenching and/or diamond drilling may be warranted.
- (5) If the above surveys fail to established drill targets perform test surveys with
 - (a) Maxmin horizontal loop EM
 - (b) Time domain induced polarization.Proceed with a survey of the supracrustal belt and adjacent intrusive with whichever method shows the most promise in the test survey.

LIST OF REFERENCES

- (1) British Columbia Ministry of Mines Reports for the years 1899 to 1906 inclusive and 1926.
- (2) Dawson, J.M.: "Report on the Sylvester K Property" (private report on the new gold discovery for Kettle River Resources, reprinted in a News Release dated November, 1982).
- (3) Little, H.W.: Geological Survey of Canada Map 6 - 1957, Kettle River (East Half) with marginal notes.

COST STATEMENTJ.S. Kermeen, M.Sc., P.Eng., Consulting Geological Engineer

Field Work Oct. 20-23/83:	4 days	
Supervision, plotting, report:	<u>6 days</u>	
	10 days @ \$350	\$3,500.00

Travel Expenses

Hotel and Meals		114.39
Automobile		75.00
Vehicle Rental		<u>20.00</u>
		\$3,709.39

F.W. Kermeen - Field Assistant

Assisting geologist and soil sampling

Field Work: Oct. 20-23/83:	4 days	
Nov. 7,8,9/83:	<u>3 days</u>	
	7 days @ \$100	700.00

Assays and Analyses

Kamloops Research and Assay Laboratory

3 gold and silver assays	\$ 37.50	
Sample prep and geochem	31.60	
21 soil prep & geochem	180.60	
48 soil prep and geochem	<u>412.80</u>	
	\$662.50	662.50

Drafting & Printing

P.J. Mason		150.00
Norman Wade		25.71

Miscellaneous

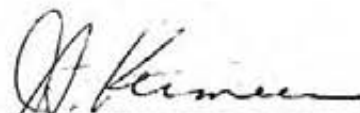
Greyhound		<u>12.20</u>
		\$5,259.80

CERTIFICATE

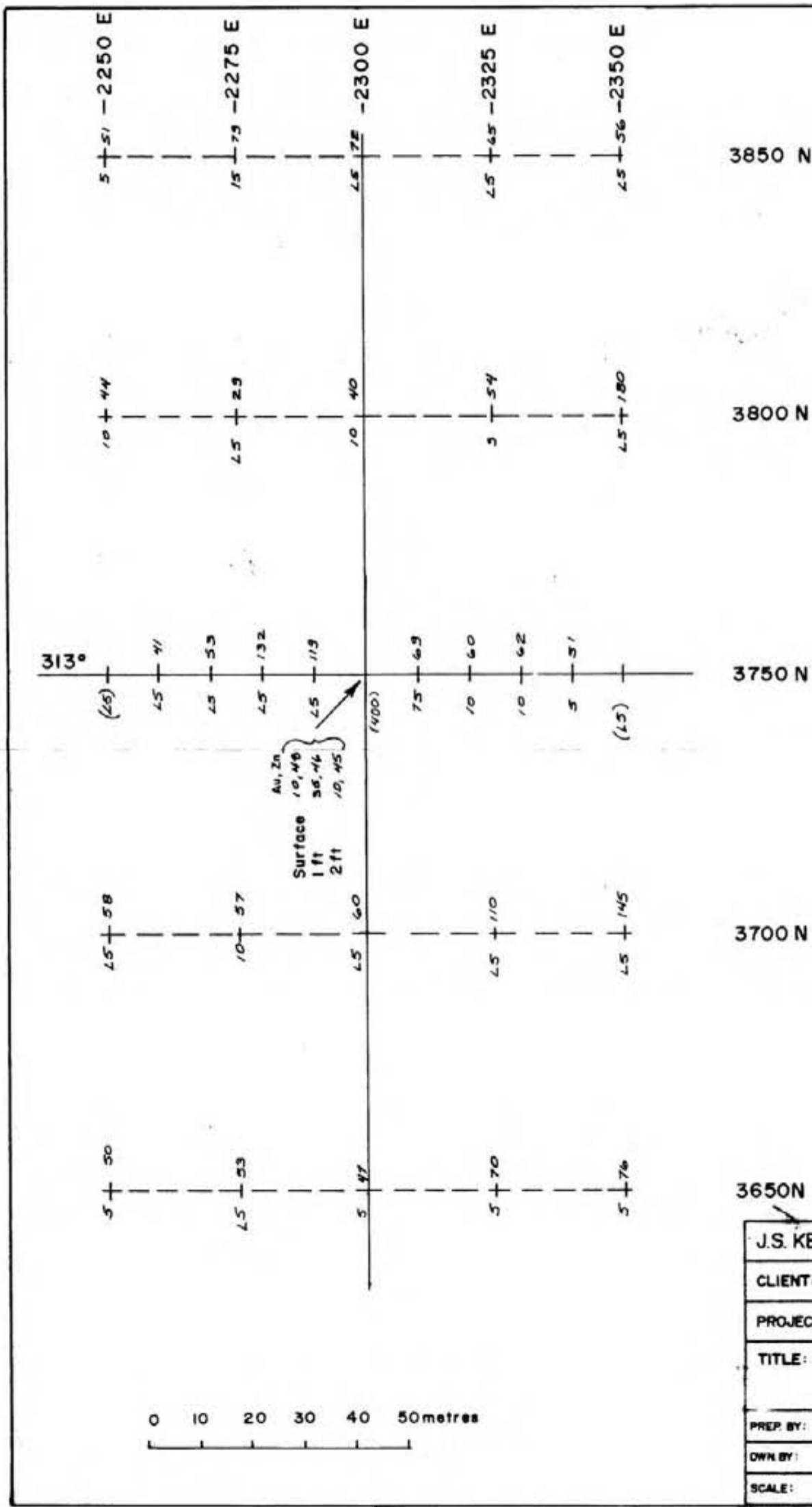
I, JAMES SEATON KERMEEN, do hereby certify:

- (1) That I am a Consulting Geological Engineer with offices at 55 Whiteshield Crescent South, Kamloops, British Columbia.
- (2) That I am a member in good standing of the Association of Professional Engineers of British Columbia and Saskatchewan.
- (3) That I am a graduate of the University of Saskatchewan from which I obtained the degrees of Bachelor of Science in Geological Engineering, 1951 and Master of Science in Geology, 1955.
- (4) That I have practice my profession continuously for 31 years.
- (5) That I personally supervised the work covered by the attached report entitled "Geological and Geochemical Exploration - 1983 - on the Ed-Kettle Group of Mineral Claims" and was present on the property on the dates indicated in the work summary of the said report.
- (6) That I have no interest, either directly or indirectly, in the property or securities covered by this report; nor do I expect to receive such interest.

Dated this 21 of November, 1983 in the City of Kamloops in the Province of British Columbia.

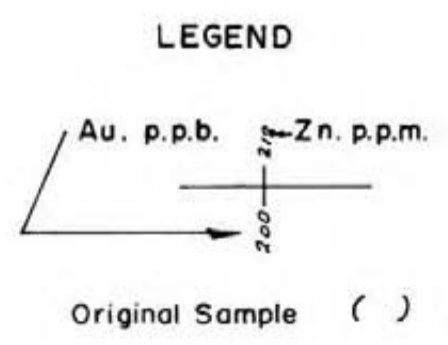


J. S. Kermeen, M. Sc., P. Eng.
Consulting Geological Engineer

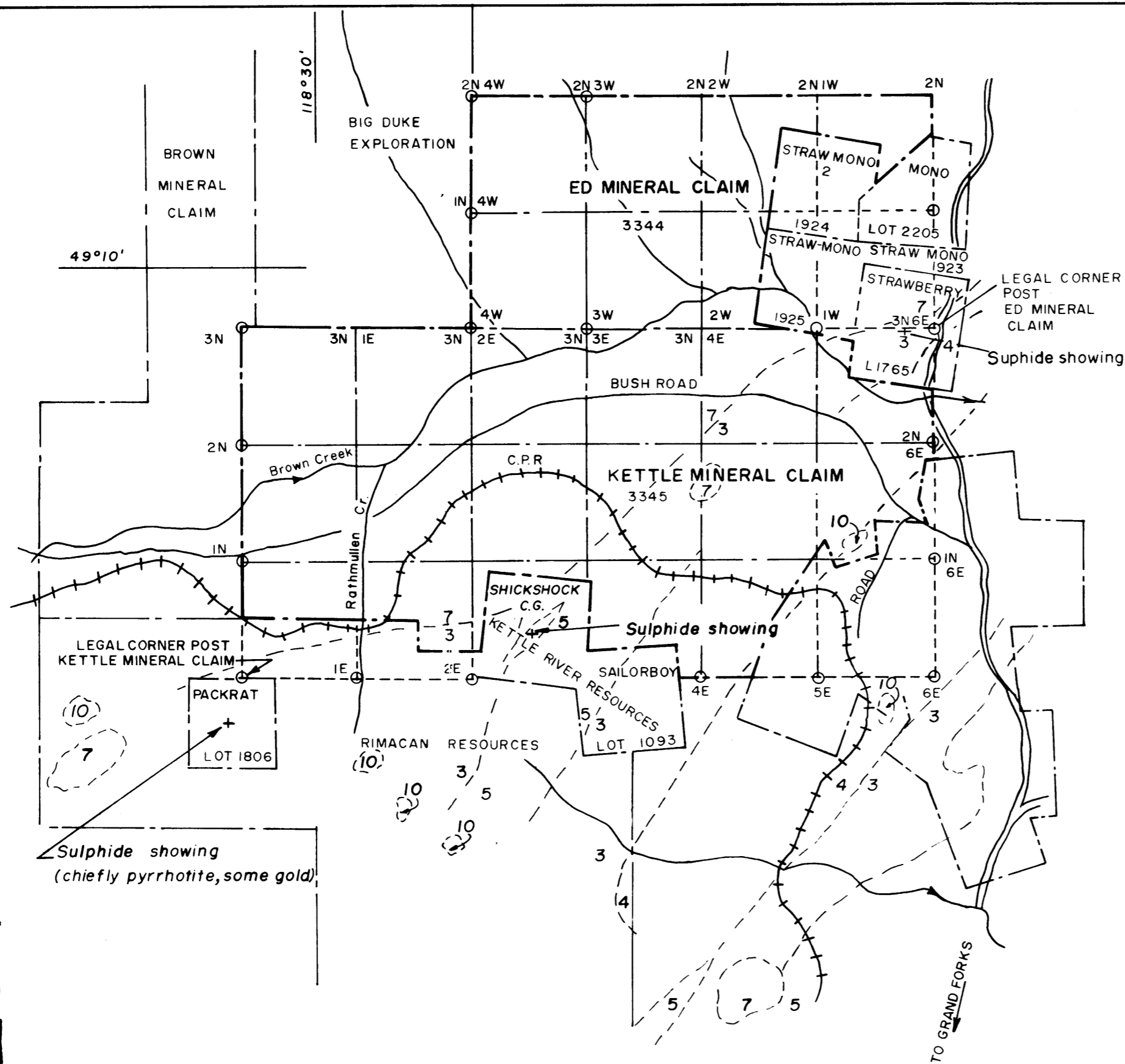


**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,539



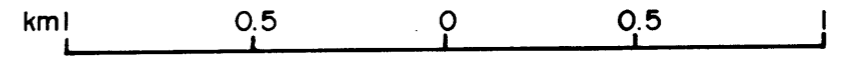
J.S. KERMEEN M.Sc., P.Eng. CONSULTING GEOLOGICAL ENGINEER		
CLIENT: KENERGY RESOURCES LTD.		
PROJECT/PROPERTY: ED-KETTLE GROUP		
TITLE: FOLLOW-UP GEOCHEMISTRY		
PREP BY: J.S.K.	NTS No:	DATE DWN: 83-11-18
DWN BY: P.J.M.	AREA: GRAND FORKS B.C.	DATE REVISED:
SCALE: 1:1000		DRAWING NO: C83-21-4



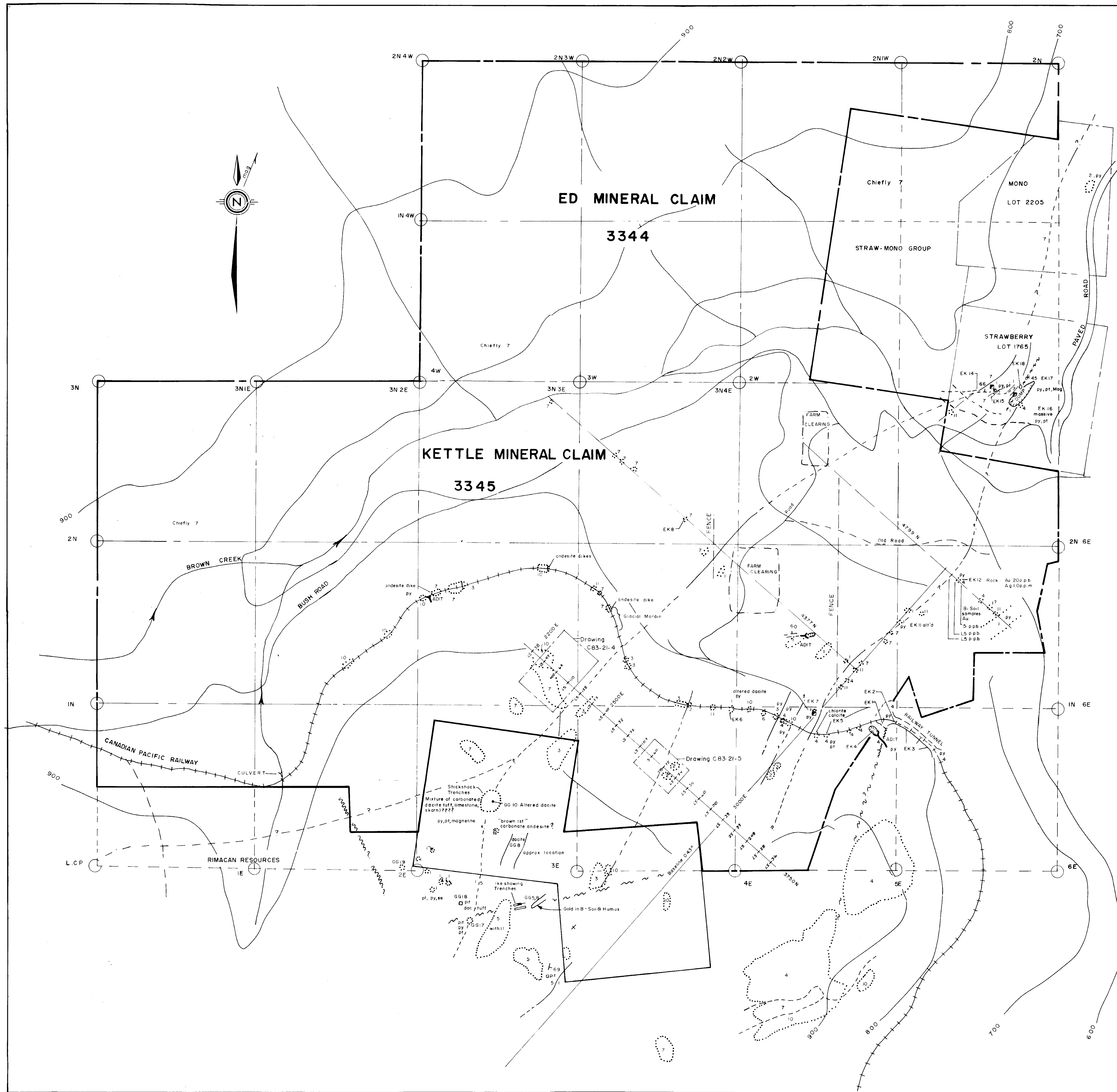
Sulphide showing
(chiefly pyrrhotite, some gold)

LEGEND

- TERTIARY**
- 10 Coryell intrusives: syenite etc.
- 9 Andesite, trachyte, minor basalt.
- 8 Kettle River Formation: arkose, dacite tuff, conglomerate.
- MESOZOIC**
- 7 Nelson intrusives: granodiorite, etc.
- 5 Brooklyn Formation: limestone and skarn.
- 4 Sharpstone conglomerate.
- PALEOZOIC**
- 3 Knob Hill Formation: andesite chert, etc.
- GEOLOGICAL CONTACT



J.S. KERMEEN <small>M.Sc., P.Eng.</small> CONSULTING GEOLOGICAL ENGINEER		
CLIENT: KENERGY RESOURCE CORPORATION		
PROJECT/PROPERTY: ED KETTLE GROUP		
TITLE: CLAIM MAP & LOCAL GEOLOGY		
PREP BY: J.S.K	NTS No: 82E/1,2	DATE DWN: 83-3-7
DWN BY: P.J.M.	AREA: GREENWOOD/ PHOENIX, B.C.	DATE REVISED:
SCALE: 1:20,000		DRAWING NO: C 83-21-2



GEOLOGICAL LEGEND

- 11 Grey dikes
 - 10 Syenite, porphyritic
 - 9 Andesite/trachyte
 - 8 Arkose
 - 7 Diabase, quartz monzonite, quartz diorite - Nelson
 - 6 "Quartzite", sugar-textured quartzite
 - 5 Limestone
 - 4 Chert Breccia (Sharpstone conglomerate?)
 - 3 Chert
 - 2 Argillite
 - 1 Andesite/dacite flows, some pyroclastics
- Coryell
 --- Marron Group (Phoenix)
 --- Kettle River Fmt
 --- Brooklyn Formation
 --- Knabhill Formation
- ✓ Strike and dip, bedding and flows
 --- Fault
 ● Rock specimen location
 S Syrite
 P Pyrrhotite
 --- Geological contacts known
 --- Geological contacts inferred
 ○ Outcrop
 Au p.p.b. Zn p.p.m. Sample Analysis
 --- Cut line
 --- Compass, chain, flagged line
 ■ Existing shaft or pit
 < Adit
 100m Contour Interval

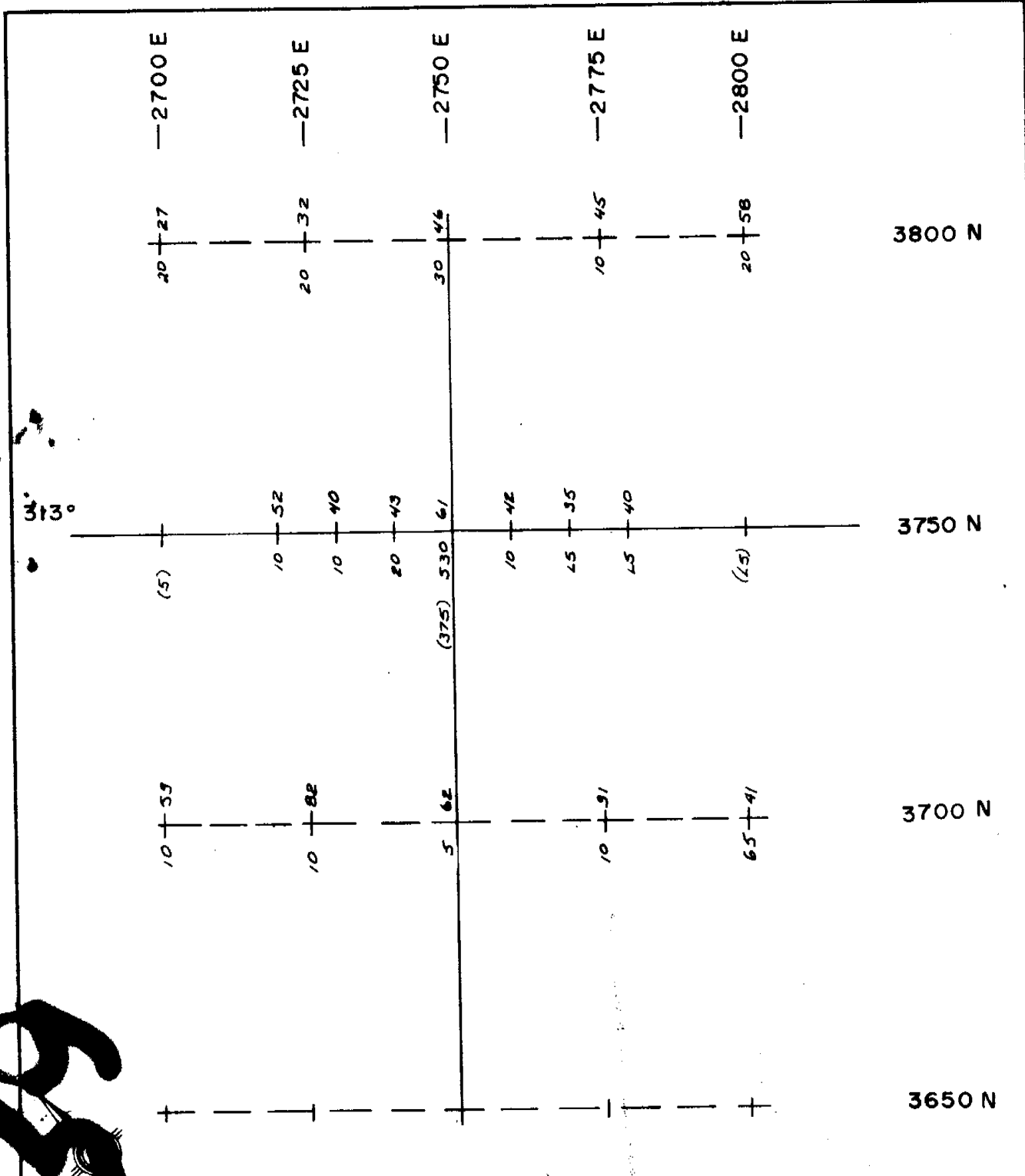
GEOLOGICAL BRANCH ASSESSMENT REPORT

11,539

J.S. KERMEEN CONSULTING GEOLOGICAL ENGINEER			
CLIENT: KENERGY RESOURCE CORP			
PROJECT/PROPERTY: ED KETTLE GROUP			
TITLE: GEOLOGICAL MAP INCLUDING RECONNAISSANCE GEOCHEMICAL SOIL READINGS (B-SOIL, GOLD and ZINC)			
PREP BY: J.S.K.	DATE: 82/1/17	DATE REVISED: 83/1/11	
DRAWN BY: P.J.M.	SCALE: 1:5000	AREA: GRAND FORKS B.C.	PROJECT NO: CB 32/13

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,539



0 10 20 30 40 50 metres

LEGEND

As. p.p.b. Zn. p.p.m.
 200 — 2/2
 ORIGINAL SAMPLE RESULTS SHOWN IN BRACKETS

J.S. KERMEEN <small>M.Sc., P.Eng.</small> CONSULTING GEOLOGICAL ENGINEER		
CLIENT: KENERGY RESOURCES LTD.		
PROJECT/PROPERTY: ED-KETTLE		
TITLE: FOLLOW-UP GEOCHEMISTRY		
PREP. BY: J.S.K	NTS No.:	DATE DWN: 83-11-18
OWN. BY: P.J.M.	AREA: GRAND FORKS, B.C.	DATE REVISED:
SCALE: 1:1000		DRAWING NO: C83-21-5