

ARIS SUMMARY SHEET

District Geologist, Prince George

Off Confidential: 92.08.14

ASSESSMENT REPORT 21808

MINING DIVISION: Omineca

PROPERTY: Cat 18

LOCATION: LAT 56 02 00 LONG 125 19 00

UTM 10 6211996 355648

NTS 094C03W

CLAIM(S): Cat 18

OPERATOR(S): BP Res.

AUTHOR(S): Humphreys, N.

REPORT YEAR: 1991, 27 Pages

COMMODITIES

SEARCHED FOR: Gold, Copper

KEYWORDS: Triassic-Jurassic, Hogem Batholith, Takla Group, Lapilli tuffs  
Gabbros

WORK

DONE: Geochemical

SOIL 91 sample(s) ;ME

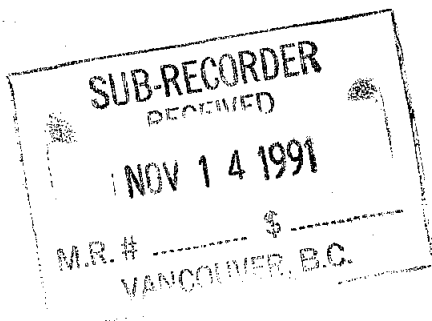
LOG NO	NOV 20 1991	RD.
ACTION:		
FILE NO:		

**ASSESSMENT REPORT on the  
GEOLOGY and SOIL GEOCHEMISTRY on the  
CAT 18 CLAIM**

**Osilinka River Area**

**OMINECA MINING DIVISION  
NTS 94C/3**

**Latitude 56°02' / Longitude 125°19'**



**BPVR 91-8**

**N. Humphreys  
November, 1991**

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**21,808**

## 1. SUMMARY

The CAT 18 claim is part of a larger claim block covering a porphyry copper-gold prospect in north-central British Columbia. Work on the claim consisted of semi-reconnaissance soil sampling and geological mapping.

The claim is underlain by Takla Group lapilli and ash tuffs cut by porphyritic dykes of pyroxene gabbro and hornblende diorite. One exposure of lapilli tuff has ankerite-silica alteration but overall the rocks are not significantly altered or mineralized.

A total of 91 soil samples were collected and analyzed for gold and 30 other elements. Weak, scattered copper and gold anomalies were outlined. Due to the glacio-fluvial nature of much of the overburden, the source of the metal may be some distance from the anomalous soils.

Due to the lack of encouragement from the mapping and sampling program, no further work is recommended for the claim.

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## 2. INTRODUCTION

The CAT 18 claim is part of a 240 unit claim block covering an alkalic porphyry copper-gold prospect in north-central B.C. The CAT 18 claim was staked to cover the possible extension of copper and gold soil anomalies found in the southeastern corner of the property in 1990. The work on CAT 18 consisted of semi-reconnaissance soil sampling and limited prospecting and geological mapping.

## 3. LOCATION and ACCESS

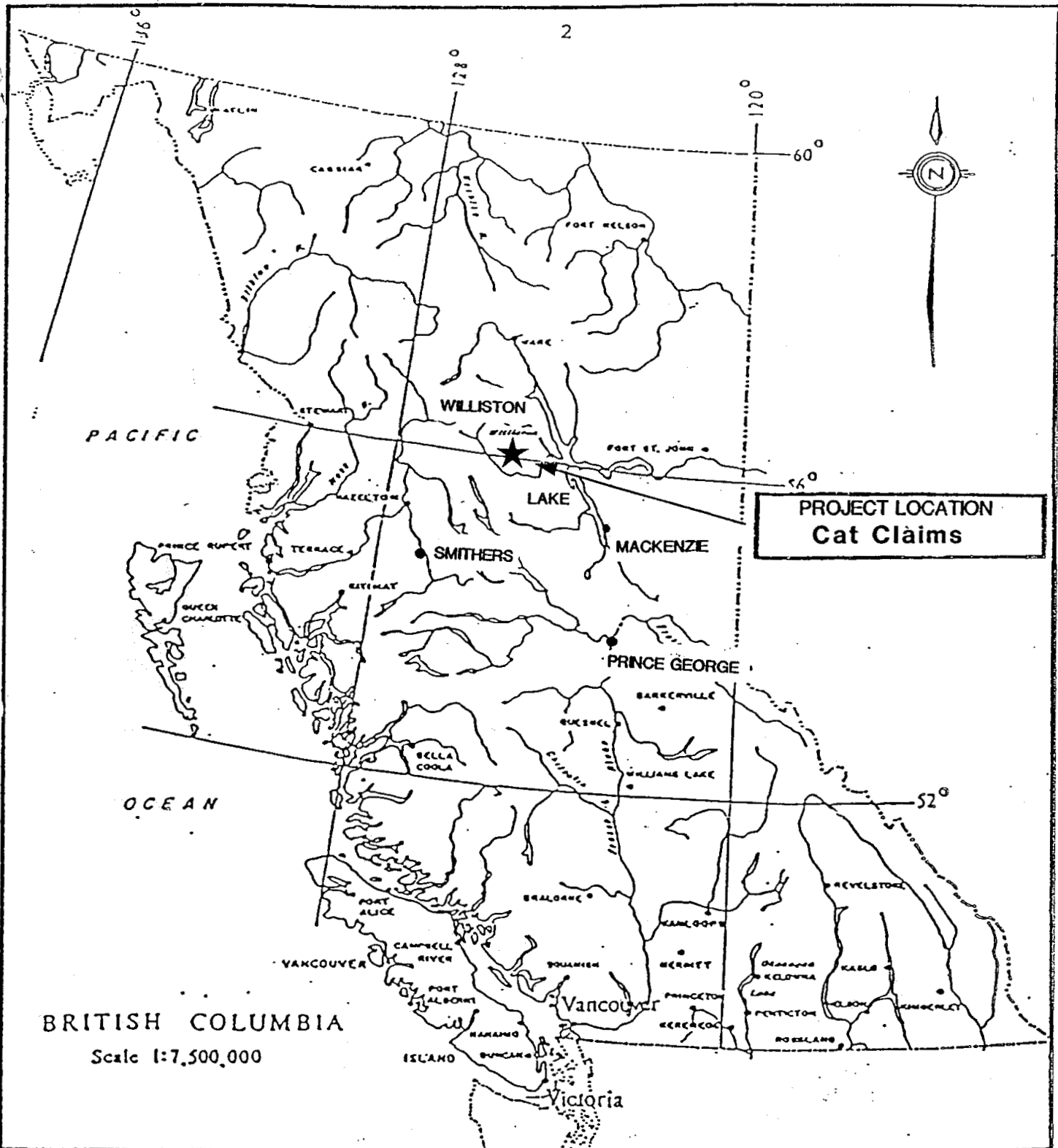
The property is located just north of the Osilinka River about 180 km north-northwest of Fort St. James, B.C. Access to the property is by way of a main line logging road that leaves Highway No. 97 near MacKenzie. Travelling time from the highway to the claims is about 3.5 hours.

## 4. TOPOGRAPHY and VEGETATION

The CAT 18 claim covers the gentle slopes that rise to the north of the Osilinka River. Elevations range from 920 m to 1100 m. Vegetation consists mainly of second growth pine trees in the south with more spruce and fir near the northern claim boundary.

## 5. CLAIM DATA

<u>Claim Name</u>	<u>Units</u>	<u>Record #</u>	<u>Staking/Anniversary Date</u>
CAT 18	8	12545	SEPT. 08, 1990



**BP** BP Resources Canada Limited  
MINING DIVISION

**Cat Property**

**Location map**

SCALE:	DRAWN BY:	FIG. 1
DATE:	DRAFTED BY:	
N.T.S. 94 C/3	PROJ.:	REPORT:





## 6. GEOLOGICAL SETTING

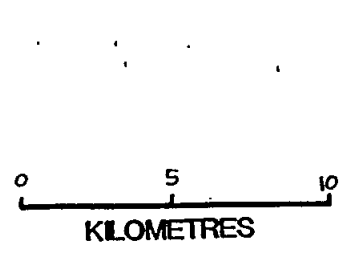
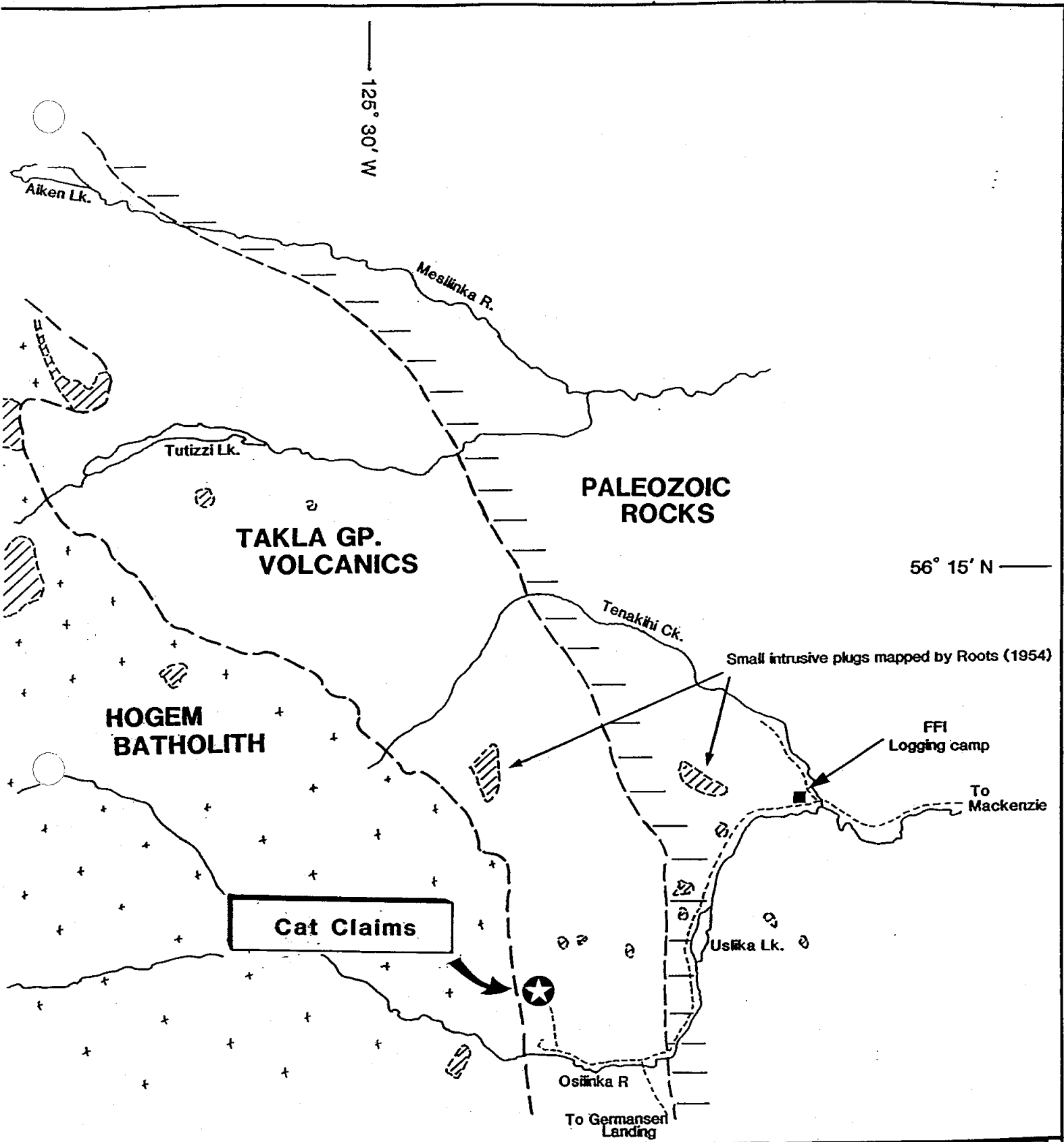
The CAT claims are located within the Quesnel Trough, a northwesterly trending, fault-bounded block of Lower Mesozoic volcanic and related rocks. These rocks are called the Takla Group in central B.C. and are primarily sub-alkaline to alkaline andesites and basalts of island arc affinity.


The claims straddle the contact between the Takla Group volcanic rocks and the eastern edge of the Hogem Batholith, a composite intrusion 170 km long and 40 km wide. Irregular plugs and dykes related to the batholith are common in the Takla Group volcanics.

## 7. EXPLORATION HISTORY

Most of the early work in the area was concentrated on gold and copper-bearing magnetite showings on top of Cat Mountain, about 4000 m northwest of the CAT 18 claim. In 1972, A. Gerun staked the BET 1 claim to cover the main showings. A limited amount of geological mapping and a small ground magnetitics survey were completed on the claim (Tegart, 1974).

BP Minerals Limited staked 28 claim units on Cat Mountain to cover the showings and nearby stream sediment anomalies. Between 1975 and 1979 BP did geological mapping, soil and rock geochemistry, airborne and ground geophysics, trenching and diamond drilling (Mustard, 1975, Bates, 1977; Bradley and Clark, 1980).



 <b>BP Resources Canada Limited</b> MINING DIVISION		
<b>Cat Property</b> <b>REGIONAL GEOLOGY</b> <b>&amp;</b> <b>ACCESS</b>		
SCALE: AS SHOWN	DRAWN BY:	FIG. 3
DATE:	REV.:	DRAFTED BY:

From 1989 to 1991 BP Resources Canada Limited and Lysander Gold Corporation explored the property with soil and rock geochemistry, ground and airborne magnetics, IP surveys, trenching and diamond drilling. Details of the geological and geochemical work are found in reports by Hoffman and Perkins, (1990); and Humphreys, (1991a) and (1991b).

## **8. 1991 EXPLORATION PROGRAM**

### **A) Geology (Fig. 4)**

Outcrop is sparse on the CAT 18 claim. The bedrock that was found indicates that the geology is similar to that found on the rest of the Cat property to the northwest.

The Takla Group volcanic rocks are mainly medium grey-green lapilli and ash tuffs. The fragments tend to be heterolithic in most exposures. The volcanics are variably magnetic and contain traces of disseminated pyrrhotite or pyrite. With the exception of one outcrop near the main road, the volcanics are unaltered. The altered outcrop displays moderately strong orange weathering ankerite and silica in patches or along fractures in tuffs. However, there is little sulphide in these rocks.

Two kinds of intrusions were found: a hornblende-plagioclase diorite porphyry and a pyroxene gabbro porphyry. The diorite is fine grained, strong to weakly porphyritic with up to 40% hornblende laths in a light grey groundmass. The pyroxene gabbro has 30% euhedral pyroxene phenocrysts to 5 mm in size in a medium grey, very fine grained

groundmass composed of plagioclase and pyroxene. The two intrusions appear to take the form of dykes cutting the volcanic rocks. Due to the paucity of outcrop, the extent of the dykes is not known.

None of the intrusions seen is significantly mineralized or altered. The pyroxene gabbro porphyry is located near the ankeritic tuff but there is no obvious link between the dyke and the alteration.

#### **B) Soil Geochemistry**

Three flagged east-west topofil and compass grid lines, spaced 200 m and 125 m apart, were established in the central part of the CAT 18 claim (Fig. 5). Samples were collected at 25 m intervals on the lines for a total of 91 samples. The overburden is dominated by glacio-fluvial deposits that thicken significantly towards the Osilinka River. Areas with more residual soils are present in the central and northern section of the claim. The thickness of overburden is generally <5 m to the north while it is likely tens of metres thick near the Osilinka River.

Approximately 500 g of material was collected at depths of 10 to 50 cm in sandy 'B' horizon soil and put into Kraft paper envelopes. The samples were shipped to Vancouver where they were oven dried, sieved to minus-80 mesh and analyzed for aqua regia leachable Au on a 10 g split and for a suite of 30 aqua regia leachable elements on a second 0.5 g split. All analyses were done at Acme Analytical Laboratories in

Vancouver, B.C. Analytical procedures are given in Appendix III and the results tabulated in Appendix IV.

The results for the elements of most interest, Au and Cu, are plotted on Figure 6. Due to the limited number of samples, a statistical analysis of the data was not done. Instead, contour values were selected from the results of the sampling on the main part of the Cat property done in 1989 to 1991. The contour values of 25 ppb and 120 ppm for Au and Cu respectively can be considered as high-lighting areas that are probably anomalous.

Anomalies are generally weak and of limited extent. The most interesting Au anomalies occur in the west-central parts of Lines 18C and 18B. The highest Au value from the survey, 820 ppb, is found here.

The copper soil anomalies display more linear northwest trends but they are also of limited extent.

Overall, the nature of the overburden makes interpretating the data and determining the source of the soil anomalies difficult. No showings were found in bedrock to account for the modest soil anomalies.

**9. CONCLUSIONS**

Although the sampling and mapping on the CAT 18 claim was of a reconnaissance nature, the results suggest there is little potential for a significant porphyry deposit on the claim. The bedrock is almost all fresh and very little sulphide mineralization or hydrothermal alteration is present. The soil anomalies are weak and limited in extent. No further work is recommended for the claim.

**10. REFERENCES**

- BATES, C.D.S., (1977): Drilling Report on the Cat Mineral Claims, BCDM Assessment Report No. 6516.
- BRADLEY, M.D., CLARK, W.R., (1980): An Assessment Report Detailing Physical Work, Geophysical Survey and Diamond Drilling in 1979 on the BET 1, CAT 1 and 2 Mineral Claims, BCDM Assessment Report No. 7999.
- HOFFMAN, S.J., PERKINS, D., (1990): Geology, Geochemistry, Geophysics and Drill Exploration Report on the Cat and Betty Claims. BCDM Assessment Report No. 19956.
- HUMPHREYS, N.D., (1991a): Assessment Report on the Linecutting and Soil Geochemistry on the CAT 3, 4, 5, 16 and 17 Claim, Osilinka River Area, BCDM Assessment Report No. 21351
- HUMPHREYS, N.D., (1991b): Assessment Report on the Linecutting and Soil Geochemistry on the CAT 2, 7, 8, 9, 10 and 12 Claims, Osilinka River Area, BCDM Assessment Report 21558.
- MUSTARD, D.K., (1975): Geological, Geochemical and Geophysical Report on the Cat Mineral Claim, BCDM Assessment Report No. 5897.
- TEGART, P., (1974): A Geological and Geophysical Report on the Bet Claim, BCDM Assessment Report No. 5290.

**APPENDIX I**

**STATEMENT OF QUALIFICATIONS**



## STATEMENT OF QUALIFICATIONS

I, Neil Humphreys of 3028 West 14th Avenue, in Vancouver in the province of British Columbia, do hereby state:

1. That I have received a B.Sc degree in geology from the University of Saskatchewan in 1976 and an M.Sc degree in mineral exploration from Queen's University in 1982.
2. That I have been active in mineral exploration since 1975 in Canada and the United States.
3. That I have been employed by major mining companies until 1988. From 1988 until the present I have been a consulting geologist directing exploration projects in British Columbia.
4. That I did the geological mapping and supervised the soil sampling program on the CAT 18 claim.

  
Neil Humphreys

**Vancouver, B.C.**  
**November, 1991**

**APPENDIX II**  
**STATEMENT OF COSTS**

**STATEMENT OF COSTS**

**CAT 18 CLAIM**

Soil Sample Analyses 91 samples @ \$8.92/sample	\$ 811.72
Shipping	50.00
Sample Collection by J.P. Loiselle 4 days @ \$95/day	380.00
Vehicle 2 days @ \$50/day	100.00
Accommodation 5 man-days @ \$50/day	250.00
Geological Mapping, Supervision	<u>275.00</u>
<b>Total</b>	<b>\$1,866.72</b>

**APPENDIX III**  
**ANALYTICAL PROCEDURES**



**ACME ANALYTICAL LABORATORIES LTD.**

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B.C., Canada V6A 1R6

Telephone: (604) 253-3158 Fax: (604) 253-1716

**SOIL PREP.** - Dry soil sample at 60 deg C, Sieve -80 mesh.

**ICP** - 0.5 g sample is digested with 3 ml 3-1-2  
HCL-HNO<sub>3</sub> H<sub>2</sub>O at 95 deg C for one hour and is  
diluted to 10 ml with water. This leach is  
partial for Mn, Fe, Sr, Ca, P, La, Cr, Mg, Ba,  
Ti, B, W and limited for Na, K, Al.

**GOLD** - 10 gram samples are ignited at 600 deg. C  
for four hours, digested with aqua regia at  
95 deg. C on the water bath for one hour, 50 ml  
aliquote is extracted into 10 ml of MIBK, analyzed  
by graphite furnace AA, detection limits is 1 ppb.

**APPENDIX IV**  
**SOIL SAMPLE RESULTS**



CAT 18 SOILS

## GEOCHEMICAL ANALYSIS CERTIFICATE

10150 - OSIL WA



BP Resources Canada Ltd. PROJECT LOC-10150 File # 91-2852 Page 1

700 - 890 W. Pender St., Vancouver BC V6B 4W3

SAMPLE#	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	Au* ppb
133392	1	67	2	187	.2	30	22	737	3.89	2	5	ND	1	82	1.1	2	2	82	1.12	.176	3	24	.62	64	.14	3	6.30	.02	.10	1	11.0
133393	1	130	3	33	.2	10	11	304	4.38	15	5	ND	3	49	.2	2	2	144	.59	.123	8	19	.40	40	.09	2	1.24	.02	.05	1	9.5
133394	1	74	2	75	.1	17	16	261	4.73	17	5	ND	1	50	.4	2	2	126	.49	.080	5	25	.50	77	.12	2	2.25	.02	.05	1	6.9
133395	1	154	2	46	.1	25	19	380	5.04	49	5	ND	2	74	.5	2	2	152	.56	.101	5	32	.77	99	.11	2	2.35	.02	.06	2	9.0
133396	1	112	3	48	.2	12	11	315	4.02	22	5	ND	3	52	.5	2	4	114	.47	.125	6	13	.53	73	.11	2	1.87	.03	.07	3	7.5
133397	1	71	2	36	.2	12	12	288	4.50	7	5	ND	2	54	.3	2	2	118	.48	.112	5	15	.40	119	.12	2	1.93	.03	.08	1	13.2
133398	1	74	2	37	.1	11	13	290	4.11	9	5	ND	2	60	.2	2	2	113	.53	.094	6	13	.42	105	.11	2	1.90	.03	.04	1	14.4
133399	1	100	2	43	.2	8	11	279	3.89	6	5	ND	2	50	.3	2	2	108	.46	.126	7	13	.31	76	.10	2	1.96	.03	.06	1	1.5
133400	1	37	3	83	.2	8	10	325	3.41	5	5	ND	3	46	.2	2	2	91	.42	.125	7	15	.31	52	.10	3	1.80	.02	.05	1	18.1
133401	1	67	2	30	.2	6	7	321	2.91	5	5	ND	4	77	.2	2	2	86	.85	.101	9	11	.38	88	.11	2	1.03	.05	.07	1	9.9
133402	1	77	2	34	.1	10	10	286	3.71	10	5	ND	2	62	.3	2	2	99	.62	.111	9	13	.40	75	.11	2	1.77	.03	.05	1	5.8
133403	1	74	2	39	.1	9	9	276	3.66	9	5	ND	3	55	.3	2	2	100	.44	.118	7	13	.38	78	.11	2	1.84	.03	.05	1	4.1
133404	1	76	2	34	.1	11	10	274	4.04	13	5	ND	2	51	.5	3	2	120	.45	.084	6	16	.33	77	.10	2	1.43	.03	.03	4	7.5
133405	1	31	2	58	.1	8	9	216	3.83	6	5	ND	1	42	.2	2	2	120	.42	.035	4	17	.23	39	.11	2	1.24	.02	.03	1	5.6
133406	1	104	3	61	.2	8	9	427	2.88	8	5	ND	1	92	.4	2	2	84	1.30	.101	8	12	.46	107	.08	3	1.39	.03	.07	1	5.6
133407	1	102	2	87	.1	38	18	333	4.91	29	5	ND	1	69	.5	2	2	137	.82	.038	6	32	.73	78	.15	3	2.90	.03	.05	1	10.9
133408	1	126	2	104	.2	50	23	813	4.88	14	5	ND	2	117	.8	2	2	116	1.23	.048	5	54	1.17	163	.15	5	4.70	.03	.13	3	1.8
133409	1	89	2	75	.1	17	15	487	4.98	6	5	ND	2	65	.5	2	2	119	.57	.080	4	25	.80	115	.14	2	2.49	.03	.12	1	8.7
133410	1	98	2	62	.1	32	16	525	4.24	8	5	ND	3	56	.3	2	2	111	.56	.082	7	45	1.10	130	.17	3	2.40	.03	.12	1	5.4
133411	1	46	2	47	.1	26	13	833	2.94	5	5	ND	1	58	.5	2	2	81	.66	.063	5	38	.86	94	.13	3	2.04	.03	.05	1	11.5
133412	1	58	3	57	.1	22	12	403	3.15	4	5	ND	2	50	.3	2	2	82	.47	.069	9	34	.65	87	.13	2	2.22	.03	.05	2	7.9
133413	1	53	2	56	.1	19	12	312	4.22	5	5	ND	2	43	.2	2	2	96	.39	.125	7	29	.48	72	.13	2	3.07	.02	.04	1	4.7
133414	1	77	2	50	.2	22	13	360	3.91	8	5	ND	3	47	.3	2	2	100	.39	.106	6	30	.60	83	.13	2	2.48	.02	.06	1	6.7
133415	1	57	2	47	.1	14	10	287	2.98	3	5	ND	1	53	.2	2	2	70	.51	.067	4	20	.49	83	.13	2	2.31	.02	.04	1	3.2
133416	1	74	2	55	.2	23	13	406	4.02	7	5	ND	2	51	.4	2	2	106	.54	.192	6	28	.56	80	.10	2	2.14	.03	.06	1	3.9
133417	1	121	2	33	.1	13	11	292	4.29	6	5	ND	2	50	.3	2	2	128	.55	.101	6	18	.50	89	.12	2	1.65	.03	.04	1	5.3
134225	1	269	3	91	.2	27	19	467	5.92	35	5	ND	5	52	1.1	2	2	170	.45	.214	6	39	.78	83	.12	2	3.96	.02	.05	4	4.8
134226	2	45	2	28	.1	3	5	223	3.33	7	5	ND	1	55	.2	2	2	109	.50	.029	4	11	.21	67	.10	2	.97	.02	.05	1	11.4
134227	1	47	4	34	.1	3	7	214	3.66	4	5	ND	2	43	.2	2	2	99	.39	.141	6	11	.23	50	.08	2	1.38	.02	.05	3	1.1
134228	1	54	3	33	.1	4	7	247	4.15	4	5	ND	2	43	.4	2	2	116	.38	.133	5	14	.23	53	.08	2	1.49	.02	.05	2	3.5
134229	1	49	2	39	.1	7	9	327	4.03	2	5	ND	2	46	.3	2	2	104	.39	.162	8	13	.28	62	.09	2	1.98	.02	.04	1	2.0
134230	1	43	3	56	.1	6	8	251	3.70	3	5	ND	3	42	.2	2	2	89	.36	.165	7	15	.28	87	.10	2	2.23	.02	.05	1	2.1
134231	1	139	3	54	.2	10	8	357	2.51	7	5	ND	3	97	.2	2	2	58	.87	.037	7	12	.59	124	.20	2	2.13	.05	.10	2	3.6
134232	1	85	5	126	.2	24	19	396	4.90	32	5	ND	1	53	.6	2	2	115	.67	.054	5	37	.68	88	.16	2	2.41	.02	.06	1	9.4
134233	1	195	2	167	.3	287	123	1611	7.55	2605	6	ND	1	55	1.9	2	2	96	1.40	.098	4	84	.80	64	.08	6	5.61	.01	.05	1	4.4
RE 134229	1	50	2	39	.1	4	9	324	3.87	5	5	ND	2	46	.2	2	2	99	.39	.157	7	13	.28	61	.09	2	1.95	.03	.03	2	3.6
134234	1	136	5	72	.2	136	19	466	3.83	356	5	ND	3	56	.6	2	2	85	.82	.039	11	28	.61	67	.12	4	2.18	.03	.06	1	4.3
STANDARD C/AU-S	19	63	36	142	7.3	72	32	1138	3.92	41	21	8	40	54	19.0	19	21	62	.50	.100	38	60	.98	185	.09	34	1.98	.07	.17	12	50.7
STANDARD C	19	59	39	132	7.3	70	34	1058	3.97	43	20	6	41	52	18.8	16	21	55	.48	.093	39	58	.88	177	.09	32	1.95	.06	.15	13	-

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AU AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: SOIL AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JUL 24 1991 DATE REPORT MAILED: July 29/91 SIGNED BY: [Signature] D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Received July 29/91

AA CAT 18  
SOILS

GEOCHEMICAL ANALYSIS CERTIFICATE

BP Resources Canada Ltd. PROJECT IOC-10150 File # 91-3078

700 890 W. Pender St., Vancouver BC V6B 4W5

AA

P. 002/002  
TO BP RESOURCES  
FROM ACME ANALYTICAL  
AUG-07-1991 10:29

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Tl	B	Al	Na	K	U	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
134365	1	106	4	73	1	11	11	432	3.38	30	5	ND	1	40	2	2	2	90	.55	.163	6	21	.46	55	10	2	2.03	.02	.05	1	4.1
134366	1	34	4	51	1	6	7	702	3.02	3	5	ND	1	30	2	2	2	80	.28	.160	4	13	.26	48	08	2	1.77	.02	.03	1	1.1
134367	1	36	6	64	1	7	9	428	3.26	4	5	ND	1	34	2	2	2	88	.35	.204	6	13	.23	54	08	2	1.55	.02	.05	1	2.2
134368	1	48	4	39	1	6	7	433	3.65	2	5	ND	1	38	2	2	2	109	.38	.110	5	14	.22	58	08	2	1.25	.02	.05	1	4.3
134369	1	76	5	43	1	6	8	294	3.78	3	5	ND	3	41	2	2	2	111	.34	.109	5	13	.29	63	10	2	1.80	.02	.05	1	820.0
134370	1	23	4	30	2	4	6	201	3.09	2	5	ND	1	33	2	2	2	83	.31	.132	5	12	.19	51	09	2	1.47	.02	.04	1	45.3
134371	1	48	4	27	1	6	7	277	2.92	2	5	ND	1	53	2	2	2	77	.54	.101	8	11	.34	79	10	2	1.36	.02	.05	1	16.7
134372	1	29	2	30	1	5	6	196	2.78	2	5	ND	1	37	2	2	2	75	.30	.112	5	11	.21	56	10	2	1.65	.02	.04	1	22.0
134373	1	29	4	33	1	5	6	237	3.67	2	5	ND	1	35	2	2	2	96	.32	.184	5	14	.20	46	08	2	1.75	.02	.04	1	14.5
134374	1	52	4	27	1	6	8	241	3.67	5	5	ND	2	39	2	2	2	101	.31	.102	5	14	.28	60	10	3	1.79	.02	.04	1	4.8
134375	1	44	2	33	1	6	8	397	3.51	5	5	ND	2	35	2	2	2	92	.32	.245	6	13	.25	53	09	2	1.98	.02	.04	1	1.0
134376	1	39	4	22	1	5	7	203	3.72	3	5	ND	1	37	2	2	2	112	.35	.101	6	13	.21	45	08	2	1.28	.02	.02	1	18.3
134377	2	137	7	48	1	12	18	250	5.35	27	5	ND	1	33	2	2	2	134	.34	.100	5	21	.33	59	11	2	2.00	.01	.04	1	13.5
134378	1	41	6	36	1	22	12	264	4.11	9	5	ND	1	33	2	2	2	102	.31	.047	5	26	.36	60	10	2	2.14	.02	.03	1	10.6
134379	1	24	5	28	1	6	8	369	3.42	5	5	ND	1	41	2	2	2	91	.38	.172	5	12	.23	65	08	2	1.76	.02	.04	1	1.4
134380	1	24	5	32	1	6	8	212	3.45	2	5	ND	1	36	2	2	2	91	.34	.165	5	13	.19	56	08	3	1.67	.02	.04	1	1.2
134381	1	54	4	27	1	8	8	236	3.35	3	5	ND	1	42	2	2	2	95	.39	.107	5	13	.26	61	08	2	1.27	.02	.04	1	1.8
134382	1	86	6	27	1	7	8	291	3.93	5	5	ND	1	36	2	2	2	118	.37	.156	5	16	.28	46	08	2	1.39	.02	.04	1	3.0
134383	1	70	5	28	1	6	8	278	3.07	3	5	ND	1	37	2	2	2	89	.37	.068	5	12	.27	50	08	2	1.10	.01	.05	1	1.5
134384	1	47	7	75	1	8	8	277	4.78	5	5	ND	1	32	2	2	2	117	.31	.279	5	19	.32	57	10	2	2.97	.02	.04	1	1.5
134385	1	95	2	27	1	7	9	273	3.75	6	5	ND	2	34	2	2	2	115	.36	.113	6	15	.27	41	08	2	1.29	.02	.03	1	2.6
134386	1	56	2	38	2	8	7	280	2.90	2	5	ND	3	35	5	2	2	82	.39	.145	6	13	.25	34	07	4	1.31	.02	.04	1	1.8
134387	1	71	6	26	1	6	7	229	3.05	6	5	ND	2	42	2	2	2	92	.42	.043	12	13	.29	45	08	2	1.12	.02	.04	1	8.6
134388	1	351	5	55	1	11	9	614	3.96	16	5	ND	1	104	3	2	2	112	2.05	.114	17	21	.37	97	04	7	1.26	.02	.05	1	5.4
134389	1	48	7	30	1	7	7	296	2.89	4	5	ND	1	35	2	2	2	91	.34	.066	4	12	.26	62	09	2	1.45	.02	.03	1	2.5
134390	1	142	6	45	1	26	14	380	4.55	21	5	ND	2	44	2	2	2	119	.44	.034	6	28	.63	129	17	3	2.39	.02	.05	1	2.2
RE 134387	1	73	3	26	1	6	7	236	3.13	6	5	ND	2	43	2	2	2	95	.44	.043	12	13	.30	47	09	2	1.16	.02	.04	1	8.6
134391	1	65	4	25	1	28	11	295	4.14	18	5	ND	1	48	2	2	2	106	.64	.036	7	29	.39	47	08	3	1.01	.02	.03	1	4.4
134392	1	32	5	59	1	13	11	305	4.36	10	5	ND	1	45	2	2	2	114	.58	.030	6	23	.41	88	11	3	1.69	.02	.04	1	31.9
134393	1	41	7	113	2	14	17	498	3.40	7	5	ND	1	48	2	2	2	79	.47	.262	6	23	.43	107	10	2	1.91	.02	.08	1	13.8
134394	1	89	6	71	1	16	12	344	4.11	9	5	ND	2	41	2	2	2	103	.40	.063	5	23	.50	67	13	3	1.72	.02	.05	1	8.4
134395	1	85	3	42	1	15	10	336	3.86	9	5	ND	1	34	2	2	2	108	.40	.172	5	24	.40	69	08	3	1.63	.02	.03	1	6.4
134396	1	57	5	193	3	38	24	1237	5.53	7	5	ND	1	47	2	2	2	129	.63	.052	4	58	1.29	96	10	4	4.19	.01	.07	1	4.2
134397	1	90	3	102	1	75	26	650	4.57	6	5	ND	1	40	2	2	2	110	.50	.063	4	70	1.23	84	18	2	2.90	.02	.06	1	1.0
134398	1	79	6	182	1	30	18	537	5.12	18	5	ND	1	53	2	2	2	127	.75	.059	4	42	.78	93	13	3	2.12	.02	.05	1	16.6
134399	1	56	6	51	1	13	11	336	4.14	8	5	ND	1	36	2	2	2	119	.35	.152	4	18	.34	71	10	2	1.68	.01	.04	1	71.1
STANDARD C/AU-S	18	57	38	127	6.7	68	33	1060	3.94	41	17	7	39	52	18.8	17	18	56	.48	.089	38	57	.86	172	09	32	1.85	.06	.15	13	50.4
STANDARD C	18	57	37	133	7.0	71	34	1046	3.98	42	18	6	39	52	18.6	15	19	56	.49	.092	39	59	.89	178	09	34	1.90	.06	.15	13	-

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR NG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: SOIL AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: JUL 31 1991 DATE REPORT MAILED: Aug 7/91 SIGNED BY: [Signature] D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS





AAL ANALYTICAL

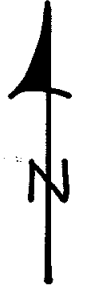


AAL ANALYTICAL

SAMPLE#	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	Tl %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
134235	1	62	2	176	.5	40	29	879	6.74	15	5	ND	1	20	.2	3	2	156	.40	.035	3	76	1.25	119	.04	5	4.04	.01	.06	1	46.4
134236	1	119	3	70	.3	64	16	510	4.25	33	5	ND	2	35	.2	2	2	89	.96	.047	10	54	.67	79	.03	7	2.60	.02	.06	1	47.0
134237	1	154	4	70	.1	20	14	297	4.49	58	5	ND	2	44	.2	2	2	107	.57	.109	6	26	.57	80	.12	2	3.26	.02	.04	1	34.3
134238	1	75	4	29	.1	9	8	255	4.01	14	5	ND	2	41	.2	2	2	118	.40	.089	6	17	.29	60	.08	2	1.28	.02	.03	1	8.3
134239	1	36	3	31	.1	8	7	224	3.55	7	5	ND	2	43	.2	2	2	95	.33	.126	6	17	.24	52	.09	2	1.73	.02	.04	1	7.1
134240	1	44	3	32	.1	12	9	292	3.44	45	5	ND	2	39	.2	2	2	86	.29	.114	5	18	.30	62	.10	2	2.24	.02	.03	1	5.2
134241	1	30	2	37	.1	11	9	241	3.89	69	5	ND	2	38	.2	2	2	100	.31	.094	6	22	.24	65	.09	2	1.78	.02	.04	1	7.6
134242	1	39	4	35	.1	13	9	237	3.28	19	5	ND	2	39	.2	2	2	89	.31	.057	6	19	.31	61	.11	2	1.61	.02	.04	1	2.9
134243	1	32	5	66	.3	16	13	540	4.98	18	5	ND	2	34	.2	2	2	124	.32	.133	6	33	.31	59	.11	2	1.53	.02	.04	1	9.6
134244	1	46	6	58	.1	10	8	240	3.91	6	5	ND	2	37	.2	2	2	100	.36	.216	6	20	.29	52	.09	2	2.63	.02	.04	1	31.3
134245	1	35	6	66	.2	6	8	207	3.68	3	5	ND	2	38	.2	2	2	102	.42	.181	7	15	.23	44	.07	2	1.40	.02	.04	1	9.5
134246	1	236	2	82	.3	32	20	1801	6.64	42	5	ND	3	67	.2	2	2	128	.95	.090	19	40	.67	162	.10	4	2.31	.03	.07	1	41.4
134247	1	90	5	107	.2	34	12	502	5.22	36	5	ND	1	57	.2	2	2	120	.89	.122	10	49	.72	79	.08	6	1.37	.02	.06	1	15.1
134248	1	123	3	72	.1	20	15	715	4.90	10	5	ND	2	76	.2	2	2	124	1.38	.095	11	30	.71	114	.11	9	1.42	.03	.10	1	56.2
134249	1	108	5	54	.1	20	14	508	4.11	10	5	ND	2	57	.2	2	2	102	.64	.072	9	28	.64	142	.12	3	1.82	.03	.07	1	9.0
134250	1	25	3	50	.3	11	8	333	3.12	5	5	ND	1	40	.2	2	2	83	.39	.066	4	19	.28	59	.10	2	1.62	.02	.05	1	3.6
134251	2	78	3	69	.1	17	14	320	4.21	8	5	ND	1	45	.2	2	2	89	.41	.121	5	25	.54	78	.13	2	2.75	.02	.07	1	5.4
134252	1	65	2	97	.2	15	12	307	5.03	14	5	ND	2	34	.2	2	2	131	.36	.240	5	27	.39	52	.10	3	2.49	.01	.04	1	7.5
134253	1	166	3	174	.3	49	17	1637	4.79	52	5	ND	3	61	.2	2	2	79	.79	.078	7	40	.58	139	.12	11	2.56	.03	.07	1	12.0
134254	1	52	5	101	.3	14	11	501	5.21	11	5	ND	2	33	.2	2	2	137	.39	.356	6	29	.38	59	.10	2	2.15	.02	.04	1	19.4
STANDARD C/AU-S	18	56	38	132	7.1	70	32	1039	3.97	42	18	7	38	53	18.5	16	18	54	.48	.091	37	58	.88	177	.09	34	1.89	.06	.15	13	53.4

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

21,808



CAT 4

CAT 17

MINK  $\nabla$

LOGGING CAT BLOCK

CAT 22

56° 02'

KRAIT I

DEN 12

CAT 18

3392	-3393	-3394	+3395	+3396	+3397	-3398	+3399	+3400	-3401	-3402	+3403	-3404	-3405	-3406	N.S.	3407	N.S.	N.S.	+3408	-3409	+3410	+3411	+3412	+3413	+3414	+3415	+3416	+3417	+3418	+3419	+3420	+3421	+3422	+3423	+3424	+3425	+3426	+3427	+3428	+3429	+3430	+3431	+3432	+3433	+3434	+3435	+3436	+3437	+3438	+3439	+3440	+3441	+3442	+3443	+3444	+3445	+3446	+3447	+3448	+3449	+3450	+3451	+3452	+3453	+3454	+3455	+3456	+3457	+3458	+3459	+3460	+3461	+3462	+3463	+3464	+3465	+3466	+3467	+3468	+3469	+3470	+3471	+3472	+3473	+3474	+3475	+3476	+3477	+3478	+3479	+3480	+3481	+3482	+3483	+3484	+3485	+3486	+3487	+3488	+3489	+3490	+3491	+3492	+3493	+3494	+3495	+3496	+3497
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LINE 18A  
LINE 18B  
LINE 18C

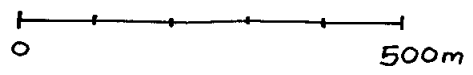
OSILINKA RIVER

NOTE: ALL SAMPLE NUMBERS BEGIN WITH 13  
N.S. - NO SAMPLE COLLECTED

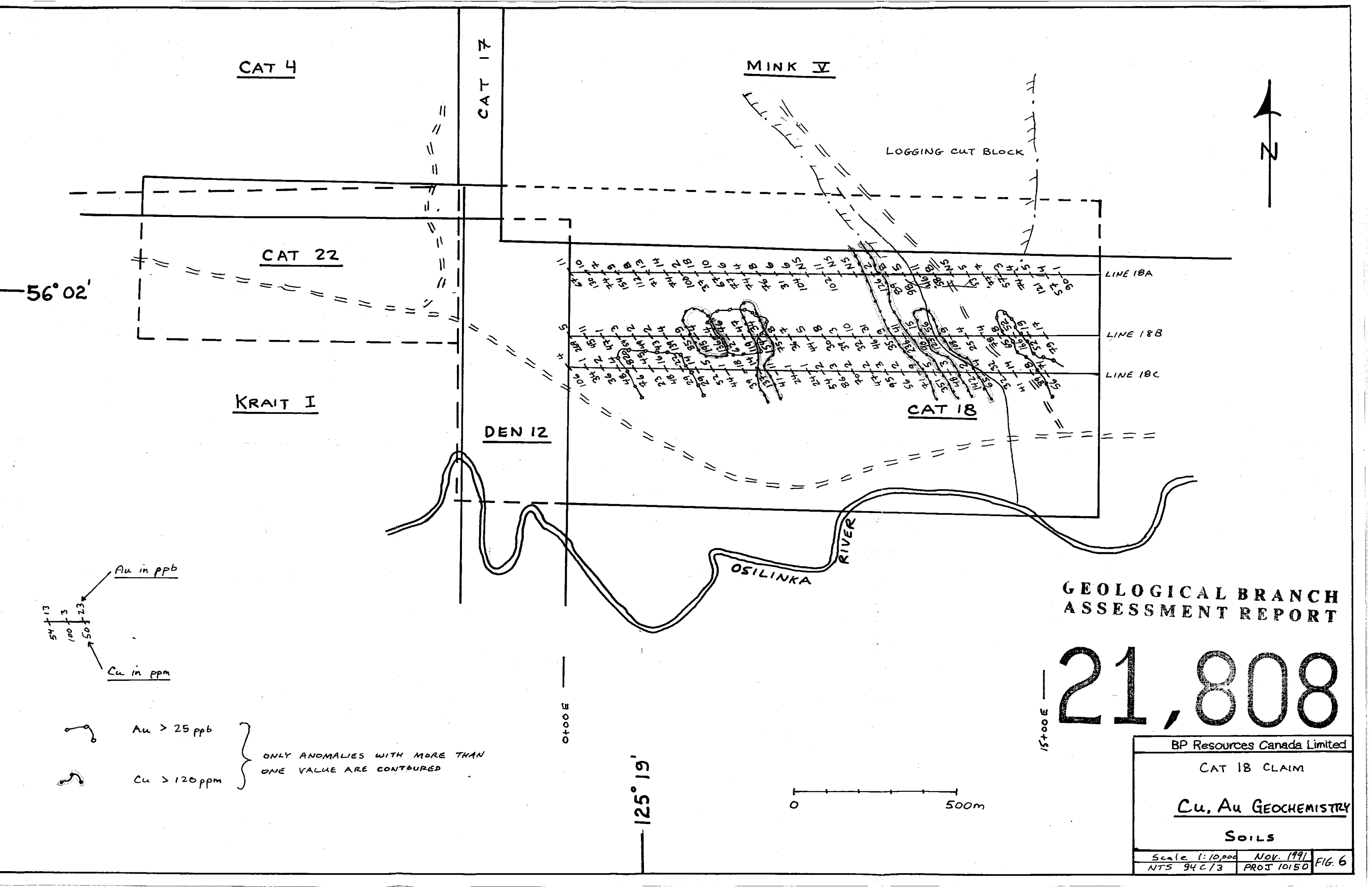
0+000 E

15+000 E

125° 19'



BP Resources Canada Limited		
CAT 18 CLAIM		
SOIL SAMPLE LOCATION MAP		
SCALE 1:10,000	NOV. 1991	Fig. 5
NTS 94C/3	PROJ 10150	



CAT 4

MINK V

CAT 17

LOGGING CUT BLOCK

CAT 22

56° 02'

LINE 18A

LINE 18B

LINE 18C

KRAIT I

CAT 18

DEN 12

OSILINKA RIVER

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

21,808

Au in ppb  
54 13  
100 3  
50 23  
Cu in ppm

Au > 25 ppb

Cu > 120 ppm

ONLY ANOMALIES WITH MORE THAN ONE VALUE ARE CONTOURED

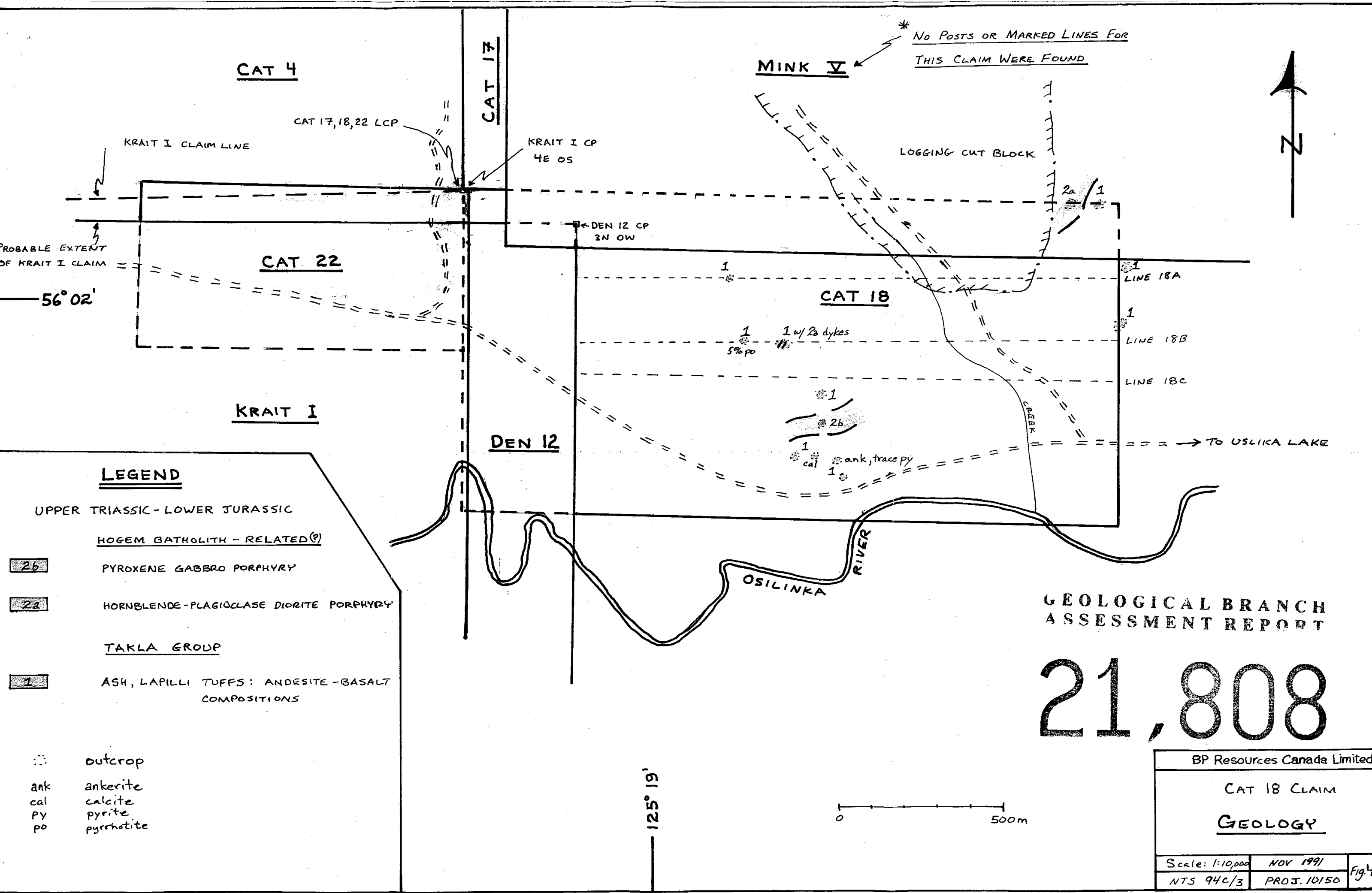
0000 E

125° 19'

0 500m

1500 E

BP Resources Canada Limited	
CAT 18 CLAIM	
Cu, Au GEOCHEMISTRY	
SOILS	
Scale 1:10,000	NOV. 1991
NTS 94C/3	PROJ 10150
FIG. 6	



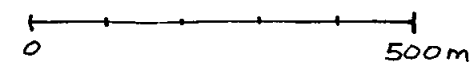
**LEGEND**

- UPPER TRIASSIC - LOWER JURASSIC
- HOGEM BATHOLITH - RELATED(?)
- 26** PYROXENE GABBRO PORPHYRY
- 22** HORNBLLENDE-PLAGIOCLASE DIORITE PORPHYRY
- TAKLA GROUP
- 1** ASH, LAPILLI TUFFS: ANDESITE-BASALT COMPOSITIONS

- outcrop
- ank ankerite
- cal calcite
- py pyrite
- po pyrrhotite

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**21,808**



BP Resources Canada Limited		
CAT 18 CLAIM		
<b>GEOLOGY</b>		
Scale: 1:10,000	NOV 1991	Fig. 4
NTS 94C/3	PROJ. 10150	