ARIS SUMMARY SHEET

District Geologist, Prince George   Off Confidential: 92.08.15

ASSESSMENT REPORT 21807   MINING DIVISION: Omineca

PROPERTY: Klaw
LOCATION: LAT 55 13 00 LONG 124 35 00
UTM 10 6119830 399263
NTS 093N01W 093N02E
CLAIM(S): Klaw 2-12,Norn
OPERATOR(S): BP Res. Canada
AUTHOR(S): Barrie, C.T.;Wong, R.H.
REPORT YEAR: 1991, 63 Pages
COMMODITIES
SEARCHED FOR: Copper,Gold
KEYWORDS: Triassic-Jurassic,Hogem Batholith,Takla Group,Tuffs
Alkalic plutons,Pyrite,Pyrrhotite,Chalcopyrite
WORK
DONE: Geological,Geophysical,Drilling,Physical,Geochemical
DIAD 121.9 m 1 hole(s);NQ
GEOL 3000.0 ha
Map(s) - 3; Scale(s) - 1:10 000,1:25 000
IPOL 20.6 km
Map(s) - 13; Scale(s) - 1:5000,1:10 000
LINE 24.5 km
SAMP 55 sample(s) ;ME
RELATED
REPORTS: 18282,18392,19582,20314,20865
MINFILE: 093N 104

ASSESSMENT REPORT of LINECUTTING, GEOLOGIC MAPPING, IP-RESISTIVITY SURVEYING and DIAMOND DRILLING

on the

KLAW 2 to 12 and NORN CLAIMS

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

Fort St. James Area, North Central, B.C.

OMINECA MINING DIVISION
NTS: 93N/1W, 2E, 7E

Latitude 55°13' North, / Longitude 124°35' West

Owner:
NORANDA EXPLORATION COMPANY LIMITED
1050 Davie Street
Vancouver, B.C.
V6E 1M4

Operator:
BP RESOURCES CANADA LIMITED
700 - 890 West Pender Street
Vancouver, B.C.
V6C 1K5

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GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,807

C. T. Barrie
J. B. Binns
E. R. Craigie
R. H. Wong

BPVR 91-5
November, 1991

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1. SUMMARY

The KLAW 2 to 12 and NORN claims, comprising 199 units, are located approximately 90 km north of Fort St. James in north-central B.C. The claims are owned by Noranda Exploration Company Limited and were explored under option in 1991 by BP Resources Canada Limited.

From early July to early August, 1991, BP carried out 24.5 line-kms of linecutting, 20.6 line-kms of IP-resistivity survey, geologic mapping and rock sampling, and diamond drilling comprising one drill hole of 121.9 m length.

The property is underlain by a number of phases of alkalic plutonic rocks which comprise the southeastern extremity of the Upper Triassic-Lower Jurassic Hogem Batholith. These intrusions cut co-magmatic alkalic to intermediate augite and plagioclase-phyric flows and tuffs of the Takla Group.

Widespread fracture-controlled propylitic alteration, accompanied by pyrite, pyrrhotite and rare chalcopyrite mineralization, is present in Takla Group rocks along the southern contact of the batholith. As well, narrow, structurally controlled, high-grade occurrences of chalcopyrite with locally enhanced gold values, are present within an alkali gabbro-diorite phase of the Hogem in the northeastern portion of the claims.

IP-resistivity surveys in the southern portion of the claims delineated a large chargeability anomaly trending east-west over 1200 m with a north-south width of approximately 500 m.

One drill hole tested the eastern periphery of this chargeability anomaly and intersected plagioclase porphyritic monzonite with 1-3% pyrite and 2-4% pyrrhotite. While copper values are low, a relatively high gold background of 10-40 ppb is evident.

To the west, the anomalous zone is largely overburden-covered and remains untested. The geophysical character of the anomaly changes westward and therefore warrants additional drill testing.

Selected samples of high-grade copper mineralization, intersected by Noranda's 1989 drilling on the KLAW 3, 8 and 9 claims, were submitted for Pt-Pd analysis with negative results.

A total of $36,800 has been applied as assessment and upon acceptance will maintain all claims to their due dates in 1993.

2. LOCATION and ACCESS

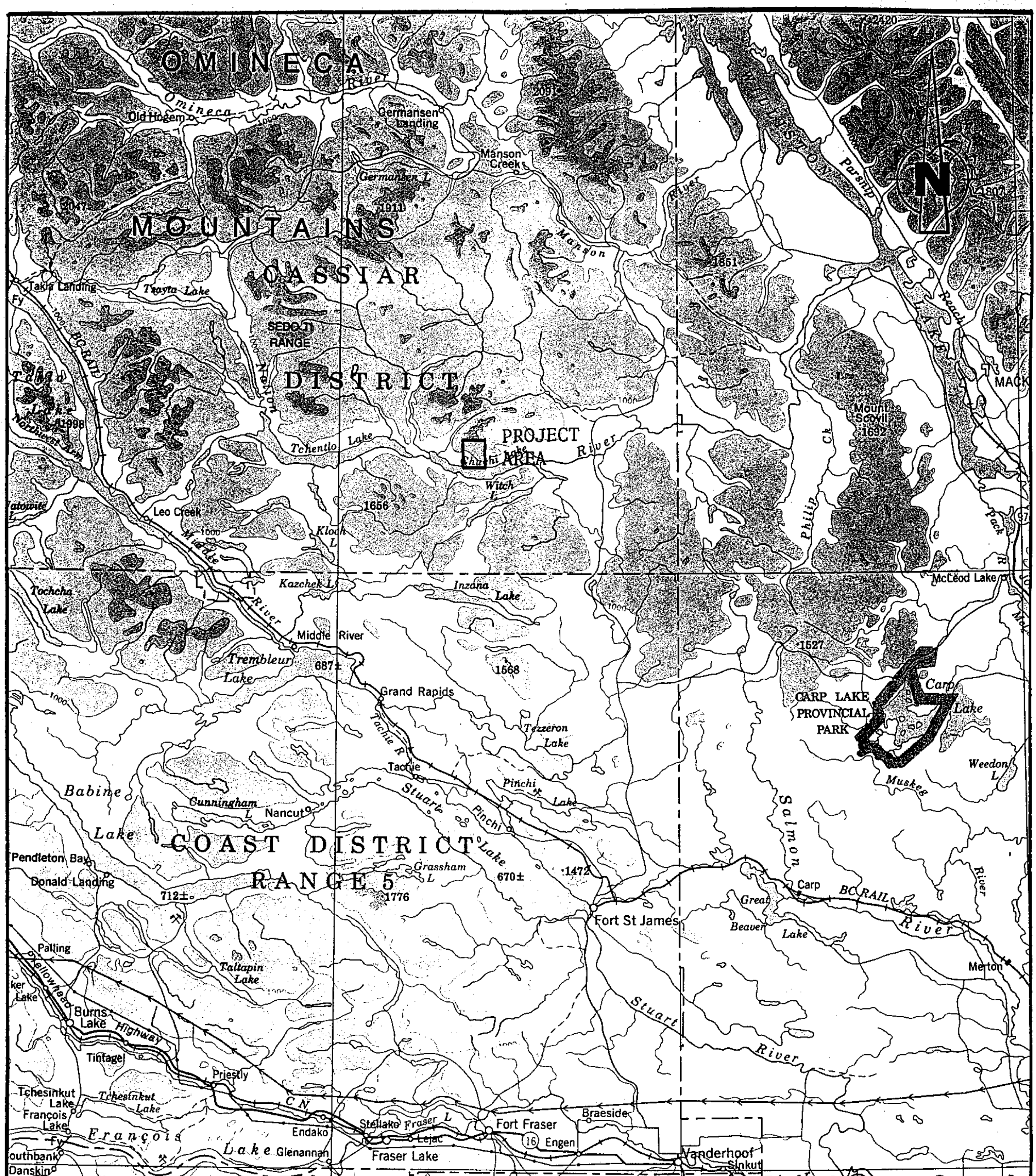
The KLAW 2 to 12 and NORN claims lie on the north side of Chuchi Lake approximately 90 km north of Fort St. James, B.C. (Fig. 1). The claim area is centred at 55°13' north latitude and 124°35' west longitude within NTS map-sheets 93N/1W, 2E, 7E.

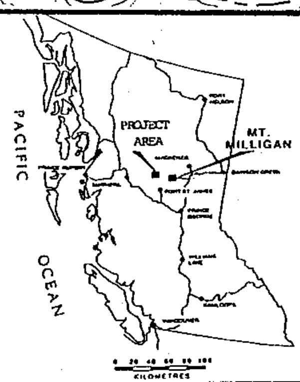
Access to the property is via secondary logging roads leading west from the Fort St. James - Germansen Landing all-weather gravel road. While the eastern and southwestern portions of the claim area have been logged and are road-accessible, the remainder of the property must be traversed on foot.

3. TOPOGRAPHY and VEGETATION

Within the claim area, relief is moderate with elevations rising from 870 m a.s.l. at Chuchi Lake to over 1800 m a.s.l. in the northwestern portion of the claims. The main streams drain southeasterly across the property.

Vegetation consists of pine, spruce and fir in timbered areas and black spruce, balsam and alder in marshy areas. Approximately 15% of the claim area was clear-cut in the late 1970's with subsequent reforestation.

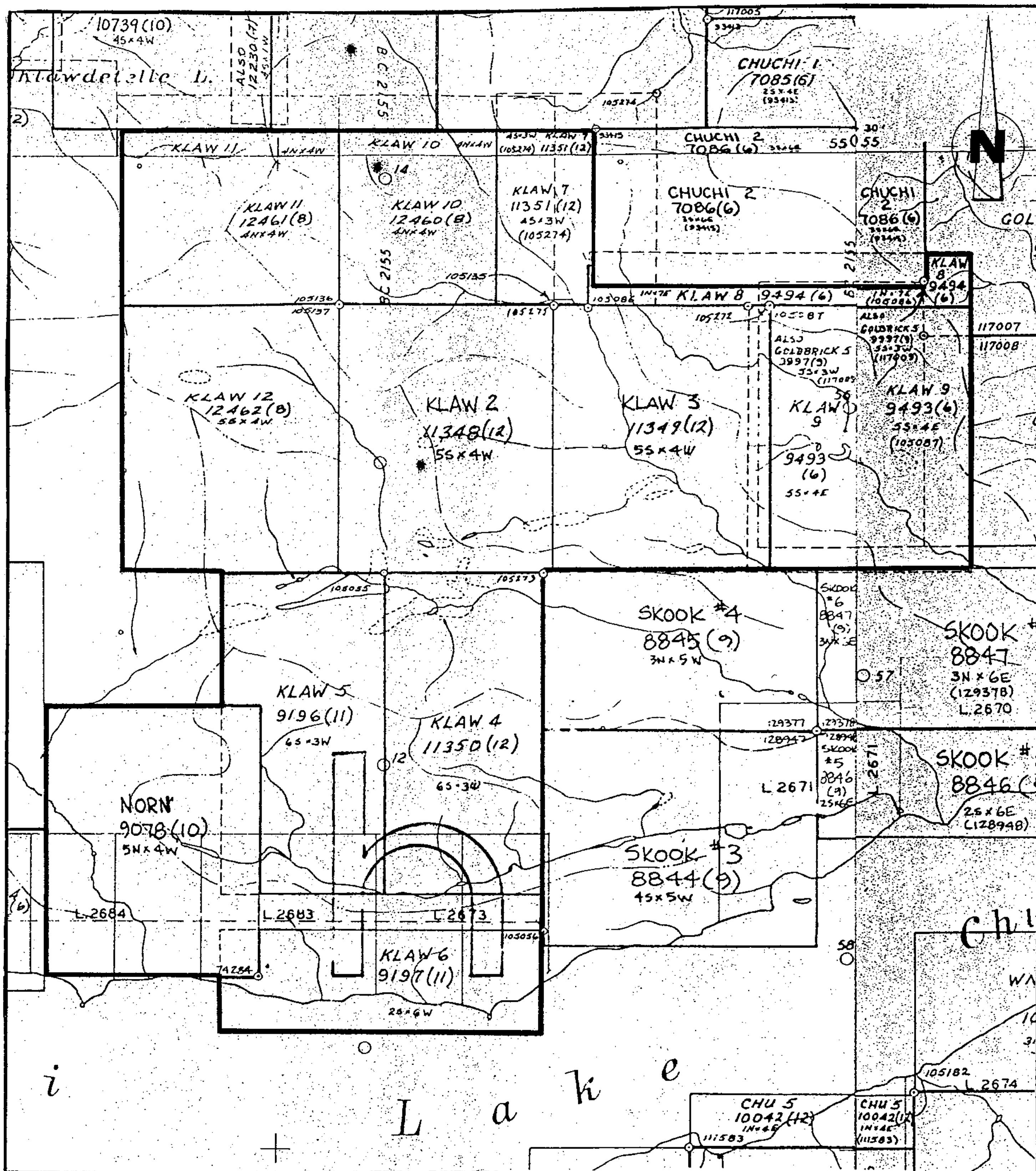




BP Resources Canada Limited
MINING DIVISION

LOCATION MAP
KLAW 2-12, NORN CLAIMS

SCALE: 1:500,000		DRAWN BY:	FIG.
DATE: 11/91	REV.:	DRAFTED BY:	1
N.T.S. 93N	PROJ.: 10159	REPORT: BPVR 91-5	



Scale 1 : 50 000

0 1 2 3 4 5

KILOMETRES

BP Resources Canada Limited

MINING DIVISION

CLAIM MAP
KLAW 2-12, NORN CLAIMS

SCALE: As shown		DRAWN BY:	FIG. 2
DATE: 11/91	REV.:	DRAFTED BY:	
N.T.S. 93N/1W, 2E, 7E	PROJ.: 10159	REPORT: BPVR	91-5

4. CLAIM DATA

The KLAW 2 to 12 and NORN claims, comprising 199 contiguous units, were staked from 1987-1990 and are wholly-owned by Noranda Exploration Company Limited (Fig. 2). Claim details are listed below.

CLAIM NAME	UNITS	RECORD NUMBER	CLAIM GROUP	CURRENT EXPIRY DATE*
KLAW 2	20	11348	KLAW 2	DEC. 03, 1993
KLAW 3	20	11349	KLAW 2	DEC. 03, 1993
KLAW 4	18	11350	KLAW 2	DEC. 02, 1993
KLAW 5	18	9196	KLAW 6	NOV. 25, 1993
KLAW 6	12	9197	KLAW 6	NOV. 25, 1993
KLAW 7	12	11351	KLAW 7	DEC. 04, 1993
KLAW 8	7	9494	KLAW 2	JUNE 28, 1993
KLAW 9	20	9493	KLAW 2	JUNE 28, 1993
KLAW 10	16	12460	KLAW 7	AUG. 17, 1993
KLAW 11	16	12461	KLAW 6	AUG. 21, 1993
KLAW 12	20	12462	KLAW 6	AUG. 21, 1993
NORN	20	9078	KLAW 6	OCT. 22, 1993

The KLAW 6 and 7 groups were registered on August 15, 1991, while the KLAW 2 group was registered on November 13, 1991.

*Pending approval of applied assessment.

5. HISTORY

Exploration for porphyry copper mineralization in the Chuchi Lake area began in the mid-1960's and continued into the early 1970's. This period of exploration included geological, geochemical and IP surveys by Hudson Bay Exploration and Development on the LSD claims located north of the present KLAW claims (A.R. # 3218, 3862, 3863). Geochemical and magnetometer surveys were conducted by Plateau Metals Ltd. on the POT-TOP claims located to the west (A.R. #3409, 3410). Noranda and Serem (A.R. #3720) conducted reconnaissance soil mapping in the present claim area and obtained high values for copper and molybdenum.

Renewed porphyry exploration was initiated in the mid-1980's by BP-Selco with geological and geochemical surveys on a number of properties in the Chuchi Lake-Mt. Milligan area. Discovery of the large Mt. Milligan porphyry copper-gold deposit by Continental Gold-BP in 1989 further stimulated exploration in the area.

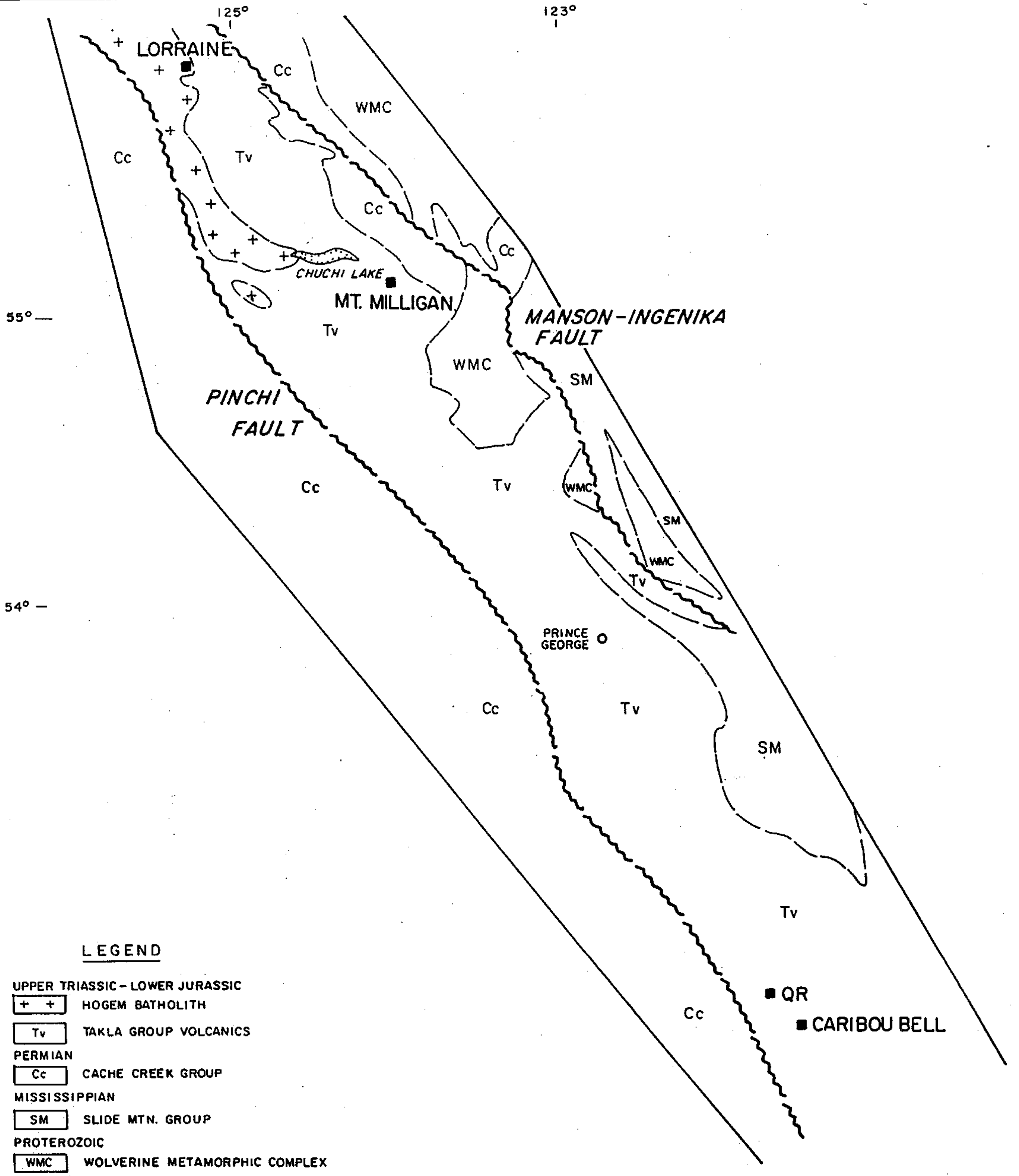
In 1989, Noranda completed property-wide soil geochemistry and geologic mapping in the present KLAW-NORN claim area. A large copper-in-soil geochemical anomaly was further investigated by 2962 m of diamond drilling in 29 holes on the KLAW 3, 8 and 9 claims.

In 1990, the KLAW-NORN claims were optioned from Noranda by BP Resources Canada Limited.

6. REGIONAL GEOLOGY

The area north of Chuchi Lake is located within the central Quesnel terrane, within the Intermontane Belt of the Canadian Cordillera. Rocks of the Quesnel terrane in this area are comprised of Upper Triassic - Lower Jurassic Takla Group sedimentary and volcanic rocks, and coeval and younger intrusive rocks including the Hogem Batholith. They are bound to the east by gneisses of the Wolverine Metamorphic Complex, and to the west by carbonates and siliciclastics of the Permian Cache Creek Group (Fig. 3). The Takla Group stratigraphy is broadly correlative with Nicola Group rocks in southern B.C. and Stuhini Group rocks in northern B.C. (Richards, 1976; Monger, 1977).

The Takla Group north of Chuchi Lake, informally named the Chuchi Lake Formation (Nelson et al., 1990) is comprised of intercalated volcanic and sedimentary rocks (see Fig. 4 in pocket). Basalts, andesites, and latites occur as augite porphyritic and/or plagioclase porphyritic flows and flow breccias with lesser tuffs. There are mappable units of vesicular flows and flow breccias, with amygdule filling of calcite, epidote and probably altered zeolites. These flows and flow breccias are gradational with maroon and grey agglomerates that contain fragments of monzonite/diorite, ash/ash-crystal tuff, siltstone, and black shale. The agglomerates have carbonate-rich fragments and a calcareous matrix locally. The sedimentary rocks are greywacke, siltstone, black shale and hornfelsed varieties of these rocks (argillite), all intercalated with ash and ash-crystal tuff beds locally. Macrofossils found in shales in the area provide a tentative age of 193-196 Ma (Pleinsbachian) for these rocks (Nelson, personal communication).



LEGEND

UPPER TRIASSIC - LOWER JURASSIC

+ +	HOGEM BATHOLITH
Tv	TAKLA GROUP VOLCANICS

PERMIAN

Cc	CACHE CREEK GROUP

MISSISSIPPIAN

SM	SLIDE MTN. GROUP

PROTEROZOIC

WMC	WOLVERINE METAMORPHIC COMPLEX

■ COPPER AND/OR GOLD PORPHYRY

BP Resources Canada Limited
MINING DIVISION

REGIONAL GEOLOGY NORTHERN QUESNEL TROUGH

SCALE: AS SHOWN		DRAWN BY: RW	FIG. 3
DATE: NOV. '91	REV.:	DRAFTED BY: Chong	
N.T.S.	PROJ.:	REPORT: BPVR	

CHONG

Intrusives rocks are: crowded plagioclase monzonite/diorite porphyry, and the Hogem Batholith Intrusive Suite. The plagioclase monzonite/diorite porphyry rocks are subdivided on the basis of the presence of significant (>2%) primary and/or deuteric magnetite content. The magnetite-rich variety, comprising the core of the Chuchi copper-gold system to the northwest, contains augite and biotite. Both plagioclase porphyries are believed to be hypabyssal, and genetically related to the plagioclase and augite porphyritic flows and breccias described above. The Hogem Batholith Intrusive Suite is generally hypidiomorphic granular, but also contains aplitic, pegmatitic and K-feldspar porphyritic varieties. It is subdivided on the basis of modal content into four groups: i) syenite, quartz syenite, alkali feldspar granite which cores the batholith in this area; ii) alkali gabbro - diorite, which underlies much of the central region of the map area; iii) K-feldspar monzonite, locally porphyritic, and surrounding the more syenitic core phase; and iv) monzodiorite, which surrounds, and may be a fractionated equivalent to the alkali gabbro-diorite.

Regionally the stratigraphy has 20° - 45° dips to the south. There are two notable exceptions: in the Chuchi deposit area to the northwest dips are 30° - 50° to the east and southeast, and in the central Skook area to the south dips are 20° - 30° to the east (Fig. 4, in pocket). The east-trending dips may be attributed to the emplacement of adjacent intrusions that postdate sediment deposition.

Faults generally follow creeks or other physiographic linear features (vegetation breaks) seen on airphotos. The sense of displacement is usually difficult to discern due to the discontinuous nature of the volcanic and sedimentary stratigraphy.

7. LINECUTTING

Linecutting on the KLAW claim groups took place from July 1 to 31, 1991 and was carried out by Exploration Services Incorporated of Port Moody, B.C.

Approximately 18.5 line-kms of grid was cut on the KLAW 4, 5, and 6 claims with six lines running north-south and spaced at 400 m intervals. The main road running along the north shore of Chuchi Lake served as the baseline for these grid lines.

Six line-kms of grid, with lines running east-west and spaced at 100 m intervals, was completed in the northern portion of the KLAW 7 claim. These lines comprised the southern portion of grid work carried out by BP Resources Canada Limited on their adjacent PHIL 13, 14 and CHUCHI 2 claims.

All lines were cut to IP standard with picketed stations every 25 m.

Figure 5 (in pocket) shows location and numbering of all grid lines at a scale of 1:25,000.

Total linecutting cost for 24.5 line-kms was $13,380.

8. PROPERTY GEOLOGY

A) Geology, Alteration and Mineralization

The KLAW claim groups are underlain by mildly alkalic intrusive rocks that form part of the southeastern extremity of the Hogem Batholith, and by mildly alkalic intermediate volcanic rocks of the Takla Group (Fig. 6, in pocket).

The intrusive rocks are comprised of hypidiomorphic granular syenite, quartz syenite, alkali feldspar granite and monzonite of the Hogem Batholith Intrusive Suite (described in Chapter 6) in the western third of the property; equigranular to plagioclase subporphyritic alkali gabbro, diorite, and monzonite in the north-central part; and hypabyssal plagioclase monzonite porphyry intercalated with volcanic rocks to the south. The gabbroic rocks are clinopyroxene - plagioclase cumulates, with interstitial plagioclase, K-feldspar and biotite. The cumulates are cut by metasomatic apophyses, dykes and veins of amphibolitized gabbro, comprised of varying amounts of hornblende, chlorite, magnetite, pyroxene, biotite, pyrite, and chalcopyrite. They may contain up to 10% magnetite, up to 10% chlorite (after biotite, clinopyroxene and plagioclase), and up to 5% pyrite and chalcopyrite. These rocks are described in more detail in Chapter 9.

The KLAW southwest grid is underlain by augite-phyric andesite and plagioclase-phyric porphyry flows and tuffs, "crowded" plagioclase monzonite porphyry rocks, and monzonites of the Hogem Batholith at its southeastern extremity. Massive, augite andesite porphyry flows are found in the southern part. They have 5-35% medium to coarse-grained augite phenocrysts in an aphanitic to fine-grained groundmass, and are non to slightly magnetic. They probably border on basaltic composition; staining for K-feldspar content indicates that they are not latitic. Plagioclase porphyritic andesite/latite with a trachytic texture is present adjacent and to the north of the augite-phyric rocks. The plagioclase andesite/latite rocks contain 30-60% medium-grained plagioclase phenocrysts, with subordinate, locally partly resorbed augite and hornblende in an aphanitic matrix. These rocks are apparently gradational with hypabyssal sills, defined by greater than 65% plagioclase content and less than 5% amygdules. The sills are medium-grained, non-magnetic, crowded plagioclase monzonite porphyry, texturally similar to the mineralized monzonite porphyry on the Chuchi property. The volcanic rocks may contain 5-15% amygdules that are locally infilled with calcite, epidote and garnet. In the northern part, the Hogem intrusive rocks are medium- and coarse-grained hornblende biotite monzonites that are slightly to moderately magnetic.

Significant physiographic linear features trending 90°-115° are present in the central part of the property. Jointing is predominantly north-south, subvertical; some joint sets are at 110°, subparallel to the physiographic linears. Greater than 10 millisecond chargeability anomalies correspond with one linear feature, where volcanic rocks have up to 2%, fracture-controlled pyrite + pyrrhotite, but no significant copper mineralization.

Significant alteration is found in augite porphyry rocks in the southern portion of the claims, and at the contact with Hogem monzonites to the north. Moderate propylitic alteration is principally fracture-controlled, and pervasive propylitic alteration is generally weak. Typical calcite-chlorite-epidote propylitic alteration along fractures and in amygdules has been effected by thermal metamorphism locally, with calcite + epidote ==> garnet. Fracture-controlled potassic alteration is slight to moderate and generally in the form of K-feldspar.

Mineralization is predominantly in the form of fracture-controlled pyrite and pyrrhotite; trace chalcopyrite was noted in three talus boulders. Pyrite and pyrrhotite occur up to 4% in Hogem monzonite to the northeast, and in augite andesite porphyry rocks, principally along fractures. In monzonites in the northwestern part of the map area, pyrite and pyrrhotite occur disseminated and along fractures in rocks with weak alteration. The roadside outcrops to the west of the grid have pyrite and pyrrhotite up to 2% in the augite andesite porphyry rocks. This area is located along a significant physiographic linear. Trace chalcopyrite is found at 78E/90N in propylitically-altered hornblende plagioclase porphyry (flow?) talus boulders; and at 74E/91N in calcite-epidote amydgules and fractures in talus boulders of plagioclase andesite/latite porphyry.

Two samples from the property and two samples from adjacent claims were selected for whole rock major and trace element geochemistry (Table I). They were analyzed by flux-fusion ICP and XRF by Actlabs, Toronto. Hornblende monzonites and diorites of the Hogem Batholith are characterized by relatively low SiO2, and high K2O, Ba and Rb

Table I: Whole Rock Geochemistry of Selected Sample from the KLAW Property

	CTB91-46 KLAWBAS	CTB91-49 KLAWMZ	CTB91-50 KLAWLTPR	CTB91-53 KLAWDIO
wt%				
SiO2	50.22	51.50	53.96	51.19
TiO2	0.64	0.81	0.79	0.88
Al2O3	13.54	16.75	19.89	15.26
Fe2O3	10.22	8.72	6.21	10.25
MgO	8.43	3.61	2.14	5.49
MnO	0.20	0.16	0.09	0.19
CaO	10.61	7.22	6.98	9.35
Na2O	2.61	3.33	3.51	2.93
K2O	1.70	4.22	4.58	3.06
P2O5	0.38	0.50	0.54	0.38
LOI	1.18	1.24	0.95	1.83
Total	99.73	98.06	99.63	100.79
ppm				
Zr	123	136	151	182
Hf	1.4	2.2	2.8	2.2
Th	1.6	2.2	2.5	2.3
U	0.6	1.3	1.0	1.2
Y	18	20	24	22
Rb	34	130	98	79
Cs	1.5	3.8	3.0	1.3
Sr	384	660	864	571
Ba	990	1570	1638	961
Sc	31	20	10	31
V	240	210	120	280
Cr	280	41	0	57
Ni	70	10	0	20
Co	39	24	16	33
Cu	110	100	100	95
La	6.0	10.3	13.6	9.6
Yb	1.38	2.00	2.36	1.96
Au (ppb)	0	0	0	4
As	20	3	2	2
Sb	1	1	1	1

CTB91-46: Aphyric basalt (pillowed), non-magnetic
CTB91-49: Biotite monzonite, coarse-grained, moderately magnetic
CTB91-50: Crowded plagioclase latite/monzonite porphyry, slightly magnetic
CTB91-53: Hornblende diorite, coarse-grained, slightly magneticcontents.

contents. Hornblende and augite-phyric basalt and latite flows also have relatively high K2O contents, and have borderline calc-alkalic/alkalic affinity.

B. Sampling of the Noranda Drill Core for Platinum, Palladium and Gold

Noranda's 1989 drill holes tested the porphyry Cu-Au potential of much of the intrusive rocks on the KLAW 3, 8 and 9 claims. The majority of intersections with anomalous Cu or Au values were from fault zones and/or quartz veins that cut the intrusive rocks. The best intersections are: DDH# 89-08, 94-97m @ 0.9% Cu, 66 ppb Au; DDH#89-12, 49-52m @ 0.9% Cu, 320 ppb Au; DDH#89-18, 62-68m @ 0.4% Cu, 150 ppb Au; DDH#89-25, 95-100m @ 0.7% Cu, 970 ppb Au. The mineralization does not appear to be typical of porphyry Cu-Au deposits.

However, the mineralization found by the Noranda drilling does have similarities to platinum - palladium - gold mineralization, related to deuteric and/or hydrothermal processes. The areas of Noranda drilling are principally underlain by a large (greater than 2 km by 2 km) subvolcanic alkali gabbro - diorite - monzonite intrusion, and lesser plagioclase porphyritic andesite/latite flows to the north (see Fig. 6, in pocket). Gabbroic rocks are cut by supersolidus(?) metasomatic dykes, veins and apophyses, comprised of varying amounts of hornblende, chlorite, magnetite, pyroxene, biotite, pyrite, and chalcopyrite. The alkali gabbros (clinopyroxene - plagioclase mesocumulates, with intercumulus plagioclase, K-feldspar and biotite) do not exhibit well-defined modal layering, so the potential for reef-type PGE mineralization was considered very low.

Cumulates and metasomatic rocks are cut by quartz±chalcopyrite±calcite veins from 0.2 cm to 4 cm thick. The Cu-rich veins are spatially associated with strong chlorite alteration and with the metasomatic rocks. They may represent the extremities of the metasomatic rocks, related to them by zone refining: a process of fluxing of potassic, silica-rich and/or vapor-rich fluids through the cumulates, which may occur prior to final crystallization of interstitial fluids. In this respect the Cu-rich veins are similar to the mineable copper- and palladium-rich stringer veins in the footwall of the Strathcona Ni-Cu deposit, Sudbury Igneous Complex, the Pd-Pt-Ni-Cu mineralization at Lac-des-Iles, Ontario; and the magnetite pipes of the Bushveld Complex.

A sampling program was designed to test for deuteric; hydrothermal Pt-Pd-Au mineralization in the alkali gabbro-diorite parts of the intrusive rocks. The highest grade Cu and Au intersections from Noranda's drill core were sampled preferentially, and several samples were taken of the amphibolitized gabbro with sulphides. In all, 17 samples were submitted to Acme Analytical Laboratories, Vancouver, B.C., for Cu, Ni, Pt, Pd, and Au analyses by aqua regia dissolution ICP. Brief descriptions along with drill hole numbers and intervals are given in Table II, with the results in Appendix III.

Despite Cu values up to 21,530 ppm and Au values up to 527 ppb, Pt and Pd values were uniformly low yielding less than 8 ppb and 16 ppb, respectively.

Table II

Sample Descriptions of KLAW Claims

Noranda Drill Core

Sample #	DDH	Intersection	Description
101075	89-09	80 - 81 m	Gabbro, medium-grained, moderate chlorite alteration, non-magnetic, cut by quartz-calcite-chalcopyrite veins in 1 m thick shear zone. 2% chalcopyrite in veins, 1% chalcopyrite and pyrite in gabbro.
101076	89-12	41 - 42 m	Gabbro, medium-grained, possible amoeboidal texture but partly masked by strong chlorite alteration, non-magnetic, 1% pyrite + chalcopyrite.
101077	89-12	49 - 52 m	Quartz-chalcopyrite (4%) vein and silica-flooded gabbro breccia, strong iron oxide along fractures along with malachite (1%), bornite (1%) and chalcocite (0.2%).

Table II - Cont'd.

Sample Descriptions of KLAW Claims

Sample #	DDH	Intersection	Description
101078	89-12	80.5 - 83 m	Melagabbro and quartz-chalcopyrite (2%) vein and breccia, moderate and strong chlorite alteration, moderate epidote along fractures.
101079	89-12	86 - 87 m	Quartz-chalcopyrite (4%) vein in amphibolitized gabbro, strong chlorite alteration, strongly magnetic, with interstitial chalcopyrite (2%) and pyrite.
101080	89-13	23 - 26 m	Gabbro, medium-grained, 2% biotite, and varitextured gabbro, with strong chlorite alteration, strongly magnetic,with 0.5% pyrite.

Table II Cont'd.

Sample #	DDH	Intersection	Description
101081	89-13	77 - 80 m	Gabbro, medium-grained, possible amoeboid texture partly masked by strong chlorite alteration, cut by 0.4 cm thick chalcopyrite (2%) calcite vein: HIGH GRADE.
101082	89-16	22 - 25 m	Gabbro, medium-grained, moderate chlorite alteration, strongly magnetic, with fractures with malachite (0.5%) and epidote.
101083	89-18	62 - 68 m	Gabbro, medium-grained, strong chlorite alteration, non-magnetic, cut by quartz-calcite-chalcopyrite (1%) vein with strong iron oxide staining.
101084	89-18	36 - 38 m	Gabbro, medium-grained, strong chlorite alteration, non-magnetic, cut by quartz-carbonate-pyrite-chalcopyrite (0.5%) veins.

Table II Cont'd.

Sample #	DDH	Intersection	Description
101085	89-13	93 - 97 m	Gabbro, medium-grained, and amphibolitized gabbro, strong chlorite alteration, strongly magnetic, with 0.5% pyrite.
101086	89-03	23.7 - 23.8 m	Quartz-chalcopyrite (7%) vein, open space filling or dissolution of calcite in open space, cutting amphibolitized gabbro, strong chlorite alteration, strongly magnetic: HIGH GRADE.
101087	89-25	95 - 100 m	Gabbro-diorite, medium-grained, 3% biotite, locally pegmatitic, and fault gouge, strong iron oxide staining, broken quartz-carbonate-chalcopyrite (3%) veins.
101088	89-26	33 - 36 m	Qtz-calcite-chalcopyrite (15%) vein 20 cm thick, cutting biotite monzo-diorite with moderate chlorite alter-ation, non-magnetic: HIGH GRADE.

Table II Cont'd.

Sample #	DDH	Intersection	Description
101089	89-26	54 - 57 m	Biotite diorite, medium-grained, slight epidote alteration along fractures, no sulphides.
101090	89-13	90 - 93 m	Amphibolitized gabbro, strong chlorite alteration, strongly magnetic, 3% chalcopyrite, 2% pyrite or pentlandite.
101091	89-13	93.1 - 93.2 m	Amphibolitized gabbro veinlet, strong chlorite alteration, strongly magnetic, 0.5% chalcopyrite, 0.5% pyrite, cutting medium-grained gabbro with slight chlorite alteration.

9. I.P.- RESISTIVITY SURVEY

A) Summary

A reconnaissance Induced Polarization-Resistivity survey has been carried out in two blocks on the KLAW claims. In the northeast three east-west lines at 100 m spacing were completed along and parallel to the claims boundary with the Chuchi block to the north. In the southeast 6 north-south lines at 400 m spacing were completed abutting the SKOOK claims to the east.

The surveys were completed in July and August, 1991 by Pacific Geophysical Limited of Vancouver.

The lines in the northeast have not produced any significant chargeability anomaly.

The lines in the southeast have yielded a single large east-west trending sulphide system which has been drill-tested on the most easterly line, L86+00E, where unaltered intrusive rocks with pyrite and pyrrhotite have been found which explains satisfactorily the geophysics anomaly. Other targets remain to be tested to the west if geological or geochemical vectors indicate that the source of the geophysical anomaly, which continues west from L86+00E, is more prospective to the west.

B) Introduction

Induced polarization-resistivity surveys totalling 20.6 line-kms have been carried out in two blocks on the KLAW project as part of an integrated mineral exploration program. The area is underlain by andesite/latite porphyry flows and flow breccias in the south, plagioclase monzonite porphyry rocks in the central part, and Hogem suite monzonites to the north. Fracture controlled and disseminated pyrite and pyrrhotite associated with moderate propylitic alteration is found in porphyry flows in the south and locally in Hogem monzonites to the north. Trace chalcopyrite has been found in volcanic talus boulders.

In the northeast block three east-west lines at 100 m spacing form the southerly boundary of the detailed I.P. coverage of the Chuchi block where the known porphyry style mineralization was being closed off to the south.

In the southeast block the objective was to outline any sulphide system which would have the potential to host a large, open-pittable "porphyry" style orebody. The line spacing and array geometry were a function of the minimum target dimensions and depth of burial.

The north-south lines start at Chuchi Lake, elevation 870 m terminating at 1200 m at 110+00N in moderate topography. In the northeast block the topography is severe on the south flank of Chuchi Mountain where elevations reach 1500 m.

C) Survey Specifications

The geophysical crew was provided and supervised by Pacific Geophysical Limited of Vancouver. The crew was led by a geophysicist - crew chief - receiver operator with a total complement of 6 men. Transport to and from the Noranda campsite on the KLAW 9 claim was by truck, provided by Pacific.

The Time-domain receiver was the BRGM designed and built model IP-6 distributed in Canada by EDA. This largely automated unit records up to 6 dipoles simultaneously integrating a 900 milliseconds window after a delay time of 120 milliseconds. The 2 second on 2 second off square wave bi-directional pulse train used as a signal is provided by a Phoenix IPT-1 transmitter (with 2 KW motor generator set). Motorola FM radios were used for communication. Chargeability was recorded in milliseconds and apparent resistivity, corrected for array geometry, was recorded as ohm metres. Stainless steel stakes were used as electrodes, both current and potential.

D) Field Procedure

The survey was carried out using the pole-dipole array with receiver dipole length ("a") being 50 m.

The local current electrode (C,) position was a function of road-access location:

1. Northeast block - to the East
2. Southeast block - to the South

With the six-man crew, n = 1-4 measurements were completed in a single pass. All wire laid out was retrieved and copper sulphate was not required on the electrodes.

E) Data Presentation

Chargeability and resistivity data are presented as pseudosection profiles (Figs. 9-11, 14-19, in pocket) showing:

Chargeability (Ma) in milliseconds

Apparent Resistivity (Pa) in ohm metres

"Metal Factor" $\left(\frac{Ma}{Pa} \times 1000\right)$

Each pseudosection includes the 10 point triangular filter value above the contoured n = 1-4 values.

The horizontal scale is 1:5000.

In map form (Figs. 7, 8, 12, 13, in pocket) are presented at 1:10,000 for both 10 point filtered chargeability and 10 point filtered apparent resistivity. For chargeability the contour interval is 2 milliseconds and for apparent resistivity it is logarithmic with 10 points per decade. Apparent resistivity data is not corrected for rough topography. This is not a problem in the southeast sectors but in the northeast sector a significant component of the short wavelength apparent resistivity "high" anomalies is generated by changes in topography.

F) Discussion of Results

Northeast Block:

There is no evidence of chargeable bedrock in the area covered. The zone of chargeable material has a sharp linear cut-off along a 290° direction just to the north of the lines discussed. This interpreted structure, which is an obvious topographic feature, is also visible on the apparent resistivity contour map.

Southeast Block:

The apparent resistivity map shows a roughly east-west contact, probably structural, at 85+00N with generally more resistant lithology to the north with the resistivities varying from ±500-2000 ohm.m. To the south the resistivity pattern changes and is dominated by a relatively conductive unit with a resistivity of 100-300 ohm.m likely to correspond to volcanic flows possibly with sedimentary intercalations. Resistive areas correlate with chargeability anomalies with a single chargeability system extending over 1200 m from 74+00E to 86+00E and at least 500 m from south to north. This system has been found in the east to correspond to unaltered intrusive with disseminated pyrite and pyrrhotite in a vertical diamond drill hole at 81+00N on L86+00E. The geophysical signature at this location indicates a chargeability of ± 50 milliseconds and an apparent resistivity of ± 500 ohm.m. This is the chargeability peak but the system extends over a kilometre to the west. The source of the anomaly drilled continues westward but changes in character with the chargeability resistivity relationship changing. On lines 86+00E, 82+00E and 78+00E the chargeability response correlates directly with resistivity of >500 ohm.m. but further west the anomalous zone lies within conductive material with a resistivity of ± 200 ohm.m.

The southern part of the zone, visible only on 74+00E and 78+00E, has a less consistent signature and is interpreted to consist of repeated, narrow chargeable zones rather than a single zone.

The other chargeability zone at 95+00N and 74+00E is narrow and probably dyke-related. Similarly the anomaly at 94+00N on 86+00E is much weaker with a chargeability of ± 20 milliseconds within an elevated background of ± 15 milliseconds.

G) Conclusions and Recommendations

Northeast Block:

No further geophysical work is warranted on this block.

Southeast Block:

The sulphide system has been tested at its eastern end with negative results. Since the geophysical character of the anomaly changes to the west there exists the possibility that further west the chargeability anomaly reflects economic sulphide mineralization. As a first step the strike length of the anomaly should be checked for outcrop to help determine the anomaly source further west.

The southern anomaly is closest to surface on 78+00E or 77+50E - 78+00E. This area and its strike extension in both directions should be checked for outcrop.

If drilling of the main anomaly is warranted then try to intersect a point about 100 m vertically below 81+50N on 74+00 taking into account available dip and strike information.

10. DIAMOND DRILLING

From July 28 to 30, 1991, Advanced Drilling Ltd. of Surrey, B.C., completed 121.9 m of NQ diamond drilling in one hole. Direct drilling costs, including apportioned mobilization and demobilization charges but not including assay costs, totalled $10,000.

Drill core was logged, split, sampled and stored at the old Noranda camp-site located in the south-central portion of the KLAW 9 claim.

Core was split and sampled continuously over 2 m intervals. The drill log and analytical results (30 element ICP and geochemical gold analyses conducted by Acme Analytical Laboratories in Vancouver, B.C.) are included in Appendix IV.

Drill hole KD 91-01, collared on line 86+00E at 81+05N, tested the eastern edge of a large east-west trending chargeability anomaly. The drill hole intersected generally unaltered, coarse-grained, plagioclase porphyritic monzonite with 1-3% pyrite and 2-4% pyrrhotite. Copper values were generally less than 100 ppm, while gold displayed a relatively high background between 10 and 40 ppb. The sulphide content of the intrusion adequately explains the chargeability anomaly in this area, however, the remainder of the anomaly which occurs in an overburden-covered area, is untested.

Figures 20, 21 and 22 (in pocket) are drill hole sections showing Cu (ppm) vs Au (ppb), lithology vs alteration, and lithology vs mineralization, respectively.

11. CONCLUSIONS and RECOMMENDATIONS

Geologic mapping and results of previous Noranda diamond drilling suggest that the central portion of the claim area is underlain by plutonic phases of the Hogem Batholith with probably little potential to host a Mt. Milligan-type porphyry deposit. Outboard of the batholith 4 km to the north is BP's Chuchi porphyry copper-gold system, hosted within altered sedimentary and volcanic rocks of the Takla Group and associated with a discrete, 600 m by 800 m monzonite stock. A similar distance south of this central 'axis' of the batholith and underlain at least partially by Takla Group rocks, is the large zone of anomalous chargeability in the southern portion of the KLAW claims. One drill hole this year tested the eastern extremity of this system and intersected sulphide-rich porphyritic monzonite with a relatively high gold background.

Additional drilling is recommended to further test the large chargeability anomaly, which along strike to the west, may be associated with a Takla Group-hosted porphyry sulphide system.

BIBLIOGRAPHY

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2. MONGER, J.W.H., 1977. The Triassic Takla Group in McConnell Creek Map Area, North Central, B.C., GSC Paper 76-29.

3. NELSON, J., BELLEFONTAINE, K., GREEN, G., MacLEAN, M., 1990. Regional Geologic Mapping near the Mount Milligan Copper-Gold Deposit (93K/16, 93N/1), in Geological Fieldwork 1990, Paper 1991-1.

APPENDIX I

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, C. Tucker Barrie, of 700 - 890 West Pender Street, Vancouver in the province of British Columbia, do hereby state:

1. That I have Doctor of Philosophy in Economic Geology from the University of Toronto, Ontario, where I graduated in 1990;

2. That I have been active in mineral exploration since 1980.

C. Tucker Barrie

November, 1991
Vancouver, B.C.

STATEMENT OF QUALIFICATIONS

I, John B. Binns, of the district of West Vancouver, in the province of British Columbia, do hereby certify:

1. I am a consultant geophysicist residing at 2370 Marine Drive, West Vancouver, B.C. V7V 1K8

2. I am a graduate of the University of Newcastle Upon Tyne, England with B.Sc. degree in Mining Engineering (1969).

3. I am a graduate of the Imperial College, University of London with an M.Sc. degree in Applied Geophysics (1981).

4. I am a licenced professional engineer in the province of Ontario.

5. I have been practising my profession for 22 years.

John B. Binns

November, 1991
Vancouver, B.C.

STATEMENT OF QUALIFICATIONS

1. I am a resident of the city of Brampton in the province of Ontario.

2. I am employed by BP Resources Canada Limited, as Senior Geologist, Exploration.

3. I am a graduate of the University of British Columbia, having received the degree of Bachelor of Science in 1969.

4. I have practised professionally in the field of mineral exploration since 1970.

E.R. Craigie

November, 1991
Vancouver, B.C.

STATEMENT OF QUALIFICATIONS

I, Russell H. Wong, of 700 - 890 West Pender Street, Vancouver, British Columbia, do hereby state:

1. That I am a graduate of the University of British Columbia, Vancouver, B.C., where I obtained a B.Sc., in Geology in 1975.

2. That I have been active in mineral exploration since 1973.

3. That I have practised my profession continuously as a staff geologist for BP Resources Canada Limited, since 1979.

Russell H. Wong
Project Geolgoist

November, 1991
Vancouver, B.C

APPENDIX II

STATEMENT OF COSTS

STATEMENT OF COSTS

1.	Linecutting:	
	24.5 line-kms @ $547/km	$13,401.00
2.	IP-Resistivity Survey:	
	20.6 line-kms @ $796/km	16,400.00
3.	Diamond Drilling:	
	- 121.9 m	10,000.00
	- 55 analyses for ICP+geochem Au @ $11	605.00
4.	Geologic Mapping and Sampling:	
	- Geologist for 7 days @ $220/day	1,540.00
	- 2 whole rock analyses @ $84	168.00
	- 17 core sample for Pt-Pd-Au @ $10/sample	170.00
	- Vehicle 5 days @ $40/day	200.00
	TOTAL	**$42,484.00**

APPENDIX III

ROCK SAMPLING ANALYTICAL RESULTS

ROCK SAMPLE DESCRIPTIONS

Sample No.	Sample Description
101027	Coarse grained augite andesite flow with 10% amygdules, weak-moderate calcite-epidote-garnet alteration
101028	Augite andesite porphyry, weak propylitic alteration
101029	Fine grained plagioclase-hornblende monzonite, mod. FeOx, propylitic alteration on fractures
101030	Plagioclase-hornblende monzonite, weak-mod. propylitic alteration, FeOx; 2% Py + pyrrhotite
101031	Plagioclase-hornblende monzonite, mod. propylitic alteration; 2-4% Py + pyrrhotite
101032	Plagioclase-hornblende monzonite, 2% Py + pyrrhotite
101033	Plagioclase-hornblende monzonite
101034	Augite porphyritic andesite, mod. propylitic alteration, mod. calcite-epidote-FeOx; 1-2% Py
101035	Augite andesite porphyry, non-magnetic; FeOx, mod. propylitic alteration, 2% Py
101036	Vesicular augite andesite porphyry flow weak-mod. propylitic alteration, calcite+epidote in amygdules
101037	Augite andesite porphyry, mod. propylitic alteration, FeOx + 1% Py along fractures
101038	Vuggy, amygdaloidal augite andesite porphyry, strong epidote-K-feldspar; 1% Py + pyrrhotite
101039	Amygdaloidal plagioclase porphyry, calcite+epidote amygdule fill; 1% Cpy

Sample No.	Sample Description
101040	Float or subcrop: Monzonite mod. propylitic alteration; trace Py + pyrrhotite
101041	Augite andesite porphyry, mod. propylitic alteration, mod. epidote, trace Cpy
101042	Plagioclase porphyritic andesite, trachytic texture; weakly amygaloidal, non-magnetic, weak propylitic alteration

FeOx = Iron oxide

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

BP Resources Canada Ltd. PROJECT LOC 10159 File # 91-3855

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
101027	1	124	7	85	.4	8	22	692	4.61	13	5	ND	1	86	.2	2	2	123	1.90	.093	3	6	1.64	274	.21	5	2.83	.23	.65	1	3
101028	1	133	4	70	.4	32	23	455	4.08	30	5	ND	1	116	.2	3	2	129	1.85	.123	6	38	1.65	292	.24	7	2.84	.19	.78	1	15
101029	3	108	8	35	.4	7	15	323	3.74	96	5	ND	1	72	.2	2	2	75	1.21	.097	5	7	.30	68	.24	5	1.44	.17	.23	1	5
101030	2	152	8	42	.3	7	15	400	3.74	17	5	ND	1	76	.2	2	2	76	1.35	.159	7	8	.58	95	.24	4	1.61	.14	.47	1	3
101031	1	182	4	26	.3	10	19	317	3.05	8	5	ND	1	84	.2	2	3	76	2.01	.128	8	9	.41	42	.23	4	1.83	.18	.14	1	5
101032	1	80	3	41	.2	8	19	464	4.50	9	5	ND	1	53	.2	2	2	140	1.36	.112	4	5	1.17	175	.39	2	2.02	.16	1.15	1	2
101033	3	110	10	28	.2	6	15	310	3.21	17	5	ND	1	168	.2	2	2	82	2.46	.115	4	6	.33	43	.25	7	2.73	.35	.16	1	4
101034	1	114	2	44	.2	13	19	465	4.14	2	5	ND	1	93	.2	2	2	99	1.41	.109	3	11	1.52	47	.22	4	2.02	.12	.12	1	1
101035	105	123	23	63	2.2	17	25	468	4.25	38	5	ND	1	72	.4	2	2	96	1.43	.096	4	11	1.04	76	.14	4	1.83	.09	.30	1	26
101036	3	656	3	29	.2	19	24	611	4.04	2	5	ND	1	264	.2	2	3	76	3.34	.113	2	12	.98	18	.24	4	2.14	.03	.04	1	2
101037	2	153	15	35	.4	12	16	375	2.61	19	5	ND	1	162	.2	2	3	81	2.74	.102	3	11	.63	73	.14	3	3.45	.25	.25	1	13
RE 101034	1	113	2	44	.3	12	18	463	4.17	2	5	ND	1	92	.2	2	2	99	1.42	.107	3	11	1.53	47	.23	4	2.03	.11	.12	1	1
101038	2	131	11	41	.3	16	20	407	3.82	5	5	ND	1	183	.2	2	3	97	3.43	.114	3	16	.95	88	.20	7	4.15	.34	.21	1	10
101039	1	3208	3	81	1.6	11	20	495	3.77	2	5	ND	1	390	.5	2	14	95	7.85	.115	2	15	.66	8	.23	9	2.68	.03	.04	2	8
101040	1	217	2	39	.3	17	23	376	4.17	2	5	ND	1	84	.2	2	3	153	1.12	.158	8	40	1.03	147	.31	3	2.07	.21	1.08	1	4
101041	1	38	2	73	.3	27	22	618	3.99	2	5	ND	1	111	.2	2	2	79	1.42	.172	5	82	1.72	44	.30	4	1.91	.04	.08	1	1
101042	1	152	4	61	.4	15	22	914	6.64	2	5	ND	1	145	.2	2	2	150	3.48	.184	7	37	1.88	41	.26	4	2.47	.09	.07	1	4
STANDARD C/AU-R	19	64	36	128	7.0	65	32	1013	3.87	37	16	8	38	52	19.0	16	19	57	.47	.083	36	56	.86	172	.08	31	1.84	.06	.13	11	460
STANDARD C	19	64	36	133	7.4	70	32	1044	3.98	41	18	7	39	53	18.6	15	18	58	.48	.091	38	58	.88	178	.09	32	1.89	.06	.15	12	-

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 AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. <u>Samples beginning 'RE' are duplicate samples.</u>

DATE RECEIVED: AUG 26 1991 **DATE REPORT MAILED:** Sept 3/91. **SIGNED BY**.......... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

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GEOCHEMICAL ANALYSIS CERTIFICATE

BP Resources Canada Ltd. PROJECT LOC-10200 FILE # 91-4617
700 - 890 W. Pender St., Vancouver BC V6B 4W3 Attn: C.T. BARRIE

SAMPLE#	Cu ppm	Ni ppm	Au** ppb	Pt** ppb	Pd** ppb
101075	9437	23	35	2	8
101076	3891	26	11	8	10
101077	6482	21	57	3	7
101078	2040	30	28	5	12
101079	5997	26	54	7	10
101080	699	32	10	1	15
101081	21530	33	527	1	3
101082	2035	69	6	1	11
101083	1772	28	65	7	14
101084	2183	41	18	1	7
101085	527	29	4	1	9
RE 101082	1751	64	1	1	8
101086	30692	30	91	1	6
101087	7193	41	114	1	5
101088	43691	19	330	1	7
101089	4783	14	54	1	5
101090	1351	29	5	1	16
101091	1999	44	16	3	13
STANDARD C/FA-10R	60	74	478	465	480

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 AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: CORE AU** PT** PD** BY FIRE ASSAY & ANALYSIS BY ICP/GRAPHITE FURNACE.
Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: SEP 19 1991 **DATE REPORT MAILED:** Sept 24/91

SIGNED BY.......... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

APPENDIX IV

DIAMOND DRILL HOLE KD91-01

- Drill Log
- Analytical Results

HOLE NO. KD91-01

DRILLING CO.	LOCATION SKETCH	DEPTH	TESTS DIP ANGLE	AZIMUTH		PROJECT: Klaw Project
Advanced Drilling Ltd.	-N-	COLLAR	-40°	360°	DATE STARTED: July 28, 1991	N.T.S.: 93N/2
					DATE COMPLETED: July 30, 1991	LOCATION:
					COLLAR ELEV.:	North side of Chuchi Lake
					NORTHING: 6116255	
					EASTING: 401850	
					AZIMUTH: 360°	
					DEPTH: 121.9	DATE LOGGED: July 30, 1991
HOLE TYPE DDH					CORE SIZE: NQ	LOGGED BY: E.R. Craigie

INTERVAL FROM	INTERVAL TO	ROCK TYPE (composition, colour, texture, grain size)	ALTERATION	MINERALIZATION	Fr/m	STRUCTURE (fractures, faults, folding, bedding, etc.) / REMARKS Mineralization, type, age relations
0	12.2m	Overburden				
12.2	121.9	Porphyritic monzonite. Unit is medium grey coloured. Contains coarse plagioclase phenocrysts (2mm - 8mm) and acicular hornblende phenos (4-8mm) in medium to fine grained groundmass. Phenos form 15 to 40% of rock, plag. is slightly more abundant than hblde. Groundmass consists of plag. and hblde and varies in size from med. to v. f. grained. Edges of most plag.	127.7 - 128.0 fine grained, pale greenish-grey to mottled greenish to light grey - weakly magnetic 5% po. and minor py. Bleaching, as FF alteration, and around qtz-calcite veins, is common but not extensive.	Py / D / 1-2% FF / 1% Po / D / 2-4% 44.0 - 44.1 moderately magnetic, po/ D / 4%		Rock is blocky from 12.2m - 48.0m. 37.3m 3cm wide qtz vein at 50° to c.a. 37.8 - 39.6 Fault zone. Light grey colour. Mostly clay gouge. Contains 2cm wide white qtz vein, subparallel to c.a. Rock is bleached for about 1m around vein, and weakly silicified. Plag. phenos are slightly greenish and soft - saussuritized. 50.2m 5cm wide vein of 80% calcite, minor qtz and black chlorite, 30° to c.a. Rock is bleached for 10cm on each side of vein, soft and calcareous.

HOLE NO. KD91-01

INTERVAL FROM	TO	ROCK TYPE (composition, colour, texture, grain size)	ALTERATION	MINERALIZATION	Fr/m	STRUCTURE (Fractures, faults, folding, bedding, etc.)	Mineralization, type, age, relations
		phenocrysts are "fuzzy" but plag. is hard and unaltered. Hblde phenos are fresh and unaltered. Unit in general is hard dense and unaltered. Minor black chlorite occurs as FF of hairline fractures & associated with blebby pyrite. Rare (< 1%), small (1mm) pink grains of K feldspar are present, sometimes along margins of plag. phenos, sometimes as isolated grains. Kspar looks primary rather than alteration. Hblde. and plag. phenos often show subparallel alignment but orientation to c.a. is highly variable. Rock is very weakly magnetic in some sections				46.3 3cm wide qtz vein. Rock is bleached for 30cm on each side of vein, and strongly brecciated. Bleached section contains 10-15% calcite. Vein oriented at 65° to c.a. 71.7m qtz vein at 70° to c.a.	

DRILL HOLE NO. KD91-01

HOLE NO. KD91-01

INTERVAL FROM	INTERVAL TO	ROCK TYPE (composition, colour, texture, grain size)	ALTERATION	MINERALIZATION	Fr/m	STRUCTURE (Fractures, faults, folding, bedding, etc.)	Mineralization, type, age, relations
		57.0-57.9, 59.0-59.5, 70.7-71.0 and 71.5-72.0. bleached altered, strongly brecciated sections of porphyry with qtz. vein fragments.				72.4 m 8 cm wide zone of bleaching with 0.5cm wide qtz vein in centre of zone at 70° to c.a. 80.2m narrow (1cm) qtz/calcite veinlets, 45° to c.a.	
		74.2-82.0 Very rubbley section. Rock is intensely fractured, has a pinkish colour, possibly weak k-spar.	V. weak diss. epidote as discrete small blebs, 1mm in size.	Py/D/5%		86.5m 2 narrow (5mm) qtz/calcite veinlets, 45° to c.a., a 6cm envelope around veins is bleached light biege-grey. 93.5-93.7 light grey colour, bleached around 1cm wide vein at 93.6 m. Vein is calcite/qtz, oriented at 60° to c.a.	
		108.8 and 111.8. Two dark greenish grey, v.f.g. fragments of volcanics (andesite). Fragments are about 3cm thick and 10cm long, aligned at 30° and 40° to c.a.				95.4-97.5 Fault zone. Strongly brecciated. Rock is bleached to light biege-grey. Contains several 2-3cm wide qtz/calcite veins 45° to 80° to c.a.	
		E.O.H. - 121.9 m					

DRILL HOLE NO. KD91-01

BP

DRILL LOG sample data

SAMPLE					CORE RECOVERY		VISUAL ESTIMATES (% ORE MINERALS)	ASSAY RESULTS						
NUMBER	FROM	TO	TOTAL METRES	M.S.	%	AMT. LOST								
104533	12.2	14.0	1.8m	0.1	78	.4								
534	14	16	2	0.1	85	.3								
535	16	18	2	0.2	60	.8								
536	18	20	2	0.1	55	.9								
537	20	22	2	0.1	70	.6								
538	22	24	2	0.0	75	.5								
539	24	26	2	0.1	80	.4								
540	26	28	2	0.2	90	.2								
541	28	30	2	0.3	85	.3								
542	30	32	2	0.0	90	.2								
543	32	34	2	0.1	85	.3								
544	34	36	2	0.4	75	.5								
545	36	38	2	0.3	95	.1								
546	38	40	2	0.1	70	.6								
547	40	42	2	0.1	80	.4								
548	42	44	2	0.2	85	.3								
549	44	46	2	0.2	85	.3								
550	46	48	2	0.1	80	.4								
551	48	50	2	0.1	80	.4								
552	50	52	2	0.0	65	.7								
553	52	54	2	0.0	80	.4								
554	54	56	2	0.1	70	.6								
555	56	58	2	0.0	60	.8								
556	58	60	2	0.1	55	.9								
557	60	62	2	0.3	60	.8								
558	62	64	2	0.2	60	.8								

DRILL HOLE NO. KD-91-01

DRILL LOG sample data

SAMPLE					CORE RECOVERY		VISUAL ESTIMATES (% ORE MINERALS)	ASSAY RESULTS						
NUMBER	FROM	TO	TOTAL METRES	M.S.	%	AMT. LOST								
104559	64	66		0.2	85	.3								
560	66	68		0.1	70	.6								
561	68	70		0.2	65	.7								
562	70	72		0.1	55	.9								
563	72	74		0.1	80	.4								
564	74	76		0.1	80	.4								
565	76	78		0.2	65	.7								
566	78	80		0.3	55	.9								
567	80	82		0.1	60	.8								
568	82	84		0.1	65	.7								
569	84	86		0.2	75	.5								
570	86	88		0.1	75	.5								
571	88	90		0.1	75	.5								
572	90	92		0.2	80	.4								
573	92	94		0.4	90	.2								
574	94	96		0.1	80	.4								
575	96	98		0.1	85	.3								
576	98	100		0.1	80	.4								
577	100	102		0.1	90	.2								
578	102	104		0.1	90	.2								
579	104	106		0.2	90	.2								
580	106	108		0.4	80	.4								
581	108	110		0.1	80	.4								
582	110	112		0.1	85	.3								
583	112	114		0.2	80	.4								
584	114	116		0.1	85	.3								

DRILL HOLE NO. KD-91-01


LEGEND
Intrusive Rocks
5. Hogem Batholith Intrusive Suite
a. Syenite, quartz syenite, alkali feldspar granite
b. Alkali gabbro - diorite
c. Potassium feldspar monzonite
d. Monzodiorite.
4. a. Plagioclase monzonite porphyry/subporphyry
b. Crowded plagioclase monzonite/diorite porphyry, with augite, biotite and magnetite.
Takla Group volcanic and Sedimentary Rocks
3. Greywacke, siltstone, black shale, with local ash and ash-crystal tuff beds
2. Agglomerate, maroon and gray, with fragments of monzonite/diorite, ash/ash-crystal tuff, siltstone, and black shale, carbonate-rich fragments and matrix locally.
1. Basalt, andesite, latite
a. Augite porphyry flows and flow breccias, lesser tuffs
b. Plagioclase porphyry flows and flow breccias
c. Vesicular flows and flow breccias
Geologic contact (known, assumed)
Fault (known, assumed)
Area of outcrop
Isolated outcrop
Linear
Bedding (inclined, vertical)
Jointing (inclined, vertical)
Foliation (inclined, vertical)
Mineral lineation (inclined, vertical)
Road
Creek
CHUCHI
CHUCHI Cu-Au
KLAW
ANOM
SKOOK
GR
CHUCHI FAREAST
WIT Pb-Zn-Ag
C H U C H I
L A K E
SCALE 1:25,000
0
1
2 KM.
GEOLOGICAL BRANCH
ASSESSMENT REPORT
21,807
BP Resources Canada Limited
MINING DIVISION
GEOLOGY OF THE CHUCHI LAKE NORTH AREA
SCALE: 1:25,000
DRAWN BY CTB
FIG. 4.
DATE: NOV. 1991
REV.:
DRAFTED BY: CTB/Chong
N.T.S. 93N
PROJ
REPORT: BPVR

GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,807

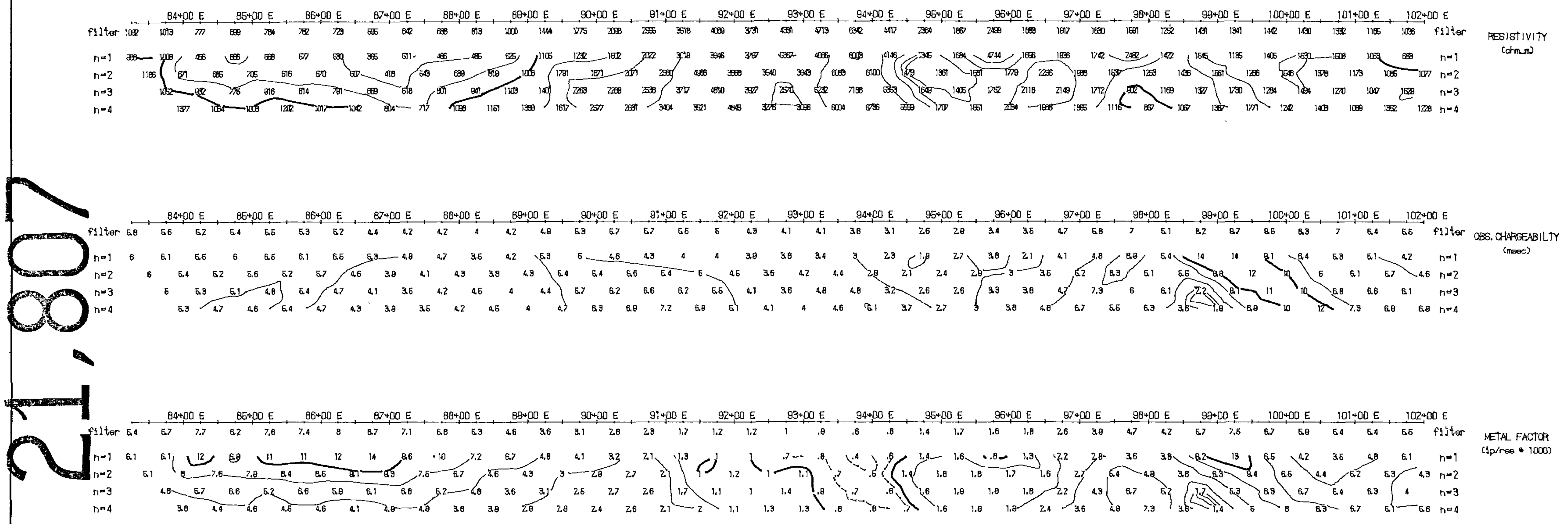


Fig. 9

GEOSOFT (TM) Software for the Earth Sciences, Toronto, Canada

Line 9900 N

Dipole-Pole Array

a = 50 m
n = 1,2,3,4
plot point

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument : EDA IP-6
Frequency : 2s ON / 2s OFF
Operator : JJ

INTERPRETATION

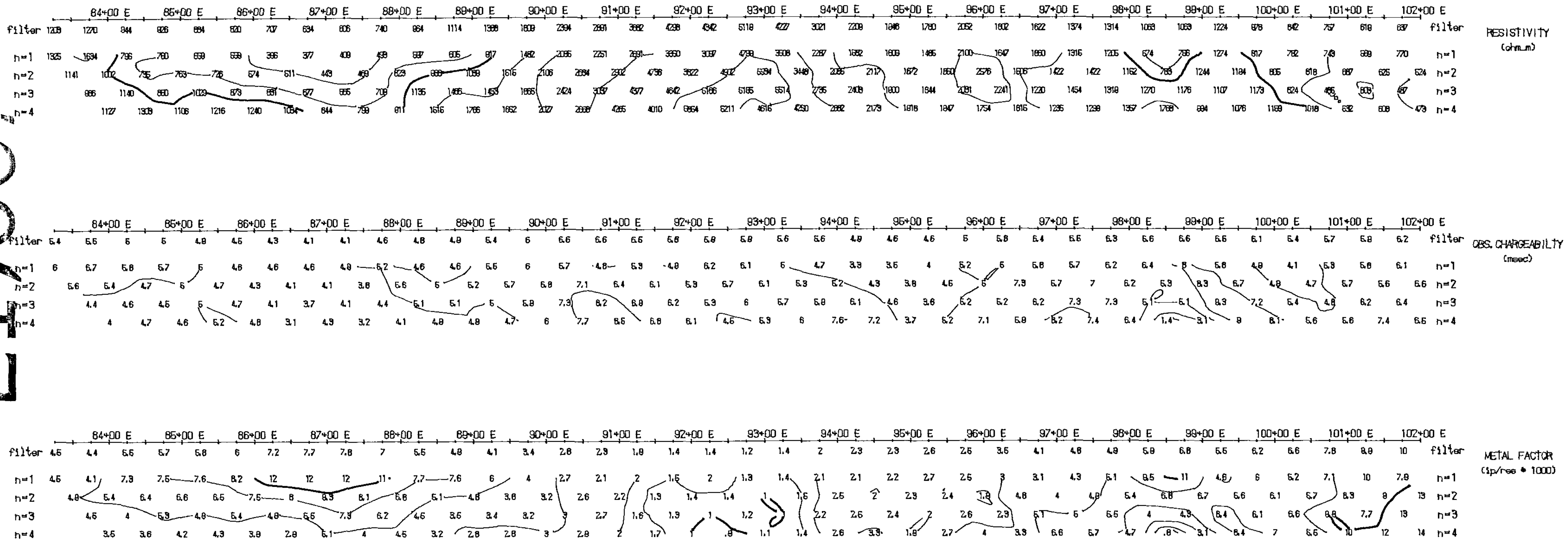
Strong increase in polarization
Moderate increase in polarization
Weak increase in polarization

BP RESOURCES CANADA LIMITED

INDUCED POLARIZATION SURVEY
Klaw Project
Omineca M.D., B.C.

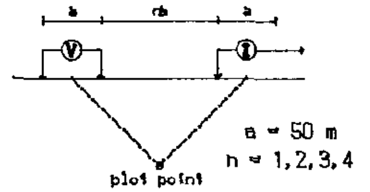
Date: July, 1991
Interpretation by:
NTS: 93N/1,2,7,8
Scale 1:5000

Pacific Geophysical



Line 10000 N

Dipole-Pole Array



a = 50 m
n = 1,2,3,4

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument : EDA IP-6
Frequency : 2s ON / 2s OFF
Operator : JJ

INTERPRETATION

Strong increase in polarization
Moderate increase in polarization
Weak increase in polarization

Fig. 10

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INDUCED POLARIZATION SURVEY
Klaw Project
Omineca M.D., B.C.

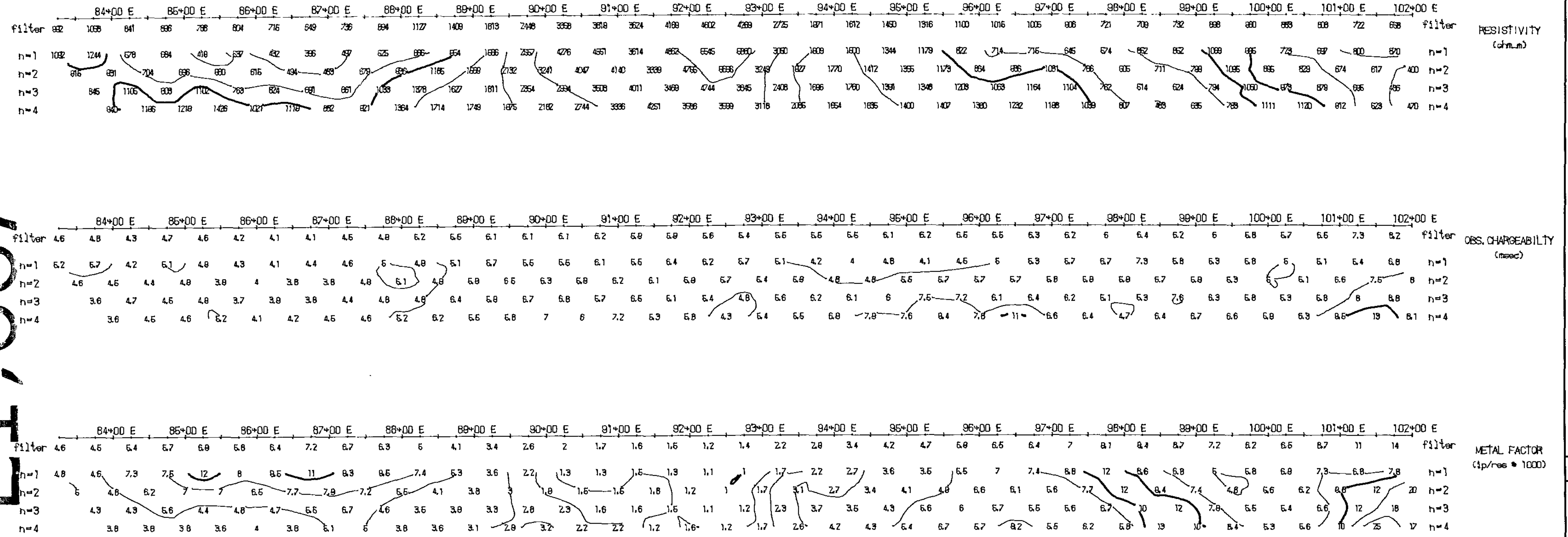
Date: July, 1991
Interpretation by:
NTS: 93N/1,2,7,8
Scale 1:5000

Pacific Geophysical

GEOSOFT (tm) Software for the Earth Sciences, Toronto, Canada

GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,807



Line 10100 N

Dipole-Pole Array

a = 50 m
n = 1, 2, 3, 4
plot point

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

Instrument : EDA IP-6
Frequency : 2s ON / 2s OFF
Operator : JJ

INTERPRETATION

Strong increase in polarization
Moderate increase in polarization
Weak increase in polarization

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INDUCED POLARIZATION SURVEY

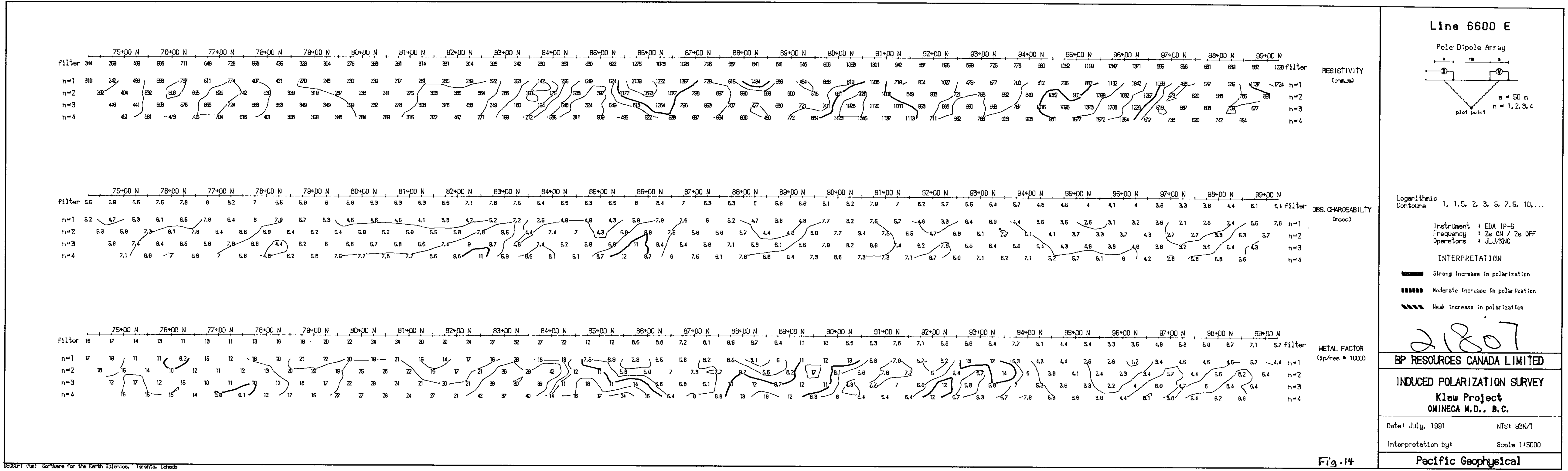
Klaw Project
Omineca M.D., B.C.

Date: July, 1991
Interpretation by:
NTS: 93N/1,2,7,8
Scale 1:5000

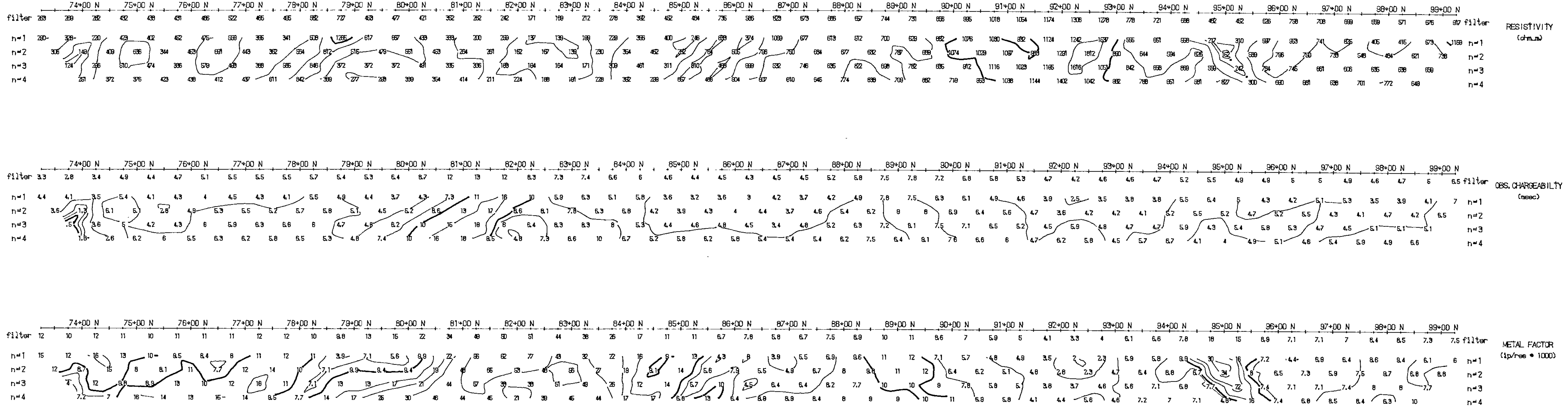
Pacific Geophysical

Fig. 11

GEOSOFT (TM) Software for the Earth Sciences, Toronto, Canada



Line 6600 E
Pole-Dipole Array
a = 50 m
n = 1,2,3,4
plot point
RESISTIVITY (ohm_m)
OBS. CHARGEABILITY (msec)
METAL FACTOR (ip/res * 1000)
Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...
Instrument : EDA IP-6
Frequency : 2s ON / 2s OFF
Operators : JLJ/KNC
INTERPRETATION
Strong increase in polarization
Moderate increase in polarization
Weak increase in polarization
21807
BP RESOURCES CANADA LIMITED
INDUCED POLARIZATION SURVEY
Klaw Project
OMINECA M.D., B.C.
Date: July, 1991
NTS: 93N/1
Interpretation by:
Scale 1:5000
Pacific Geophysical
Fig. 14
GEOSOFT (tm) Software for the Earth Sciences. Toronto, Canada



GEOSOFT (tm) Software for the Earth Sciences. Toronto, Canada

Fig. 15

Line 7000 E

Pole-Dipole Array

a = 50 m
n = 1,2,3,4
plot point

Logarithmic Contours : 1, 1.5, 2, 3, 5, 7.5, 10, ...

Instrument : EDA IP-6
Frequency : 2s ON / 2s OFF
Operators : JLJ/KNC

INTERPRETATION

Strong increase in polarization
Moderate increase in polarization
Weak increase in polarization

21807

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INDUCED POLARIZATION SURVEY
Klaw Project
OMINECA M.D., B.C.

Date: July, 1991 NTS: 93N/1

Interpretation by: Scale 1:5000

Pacific Geophysical

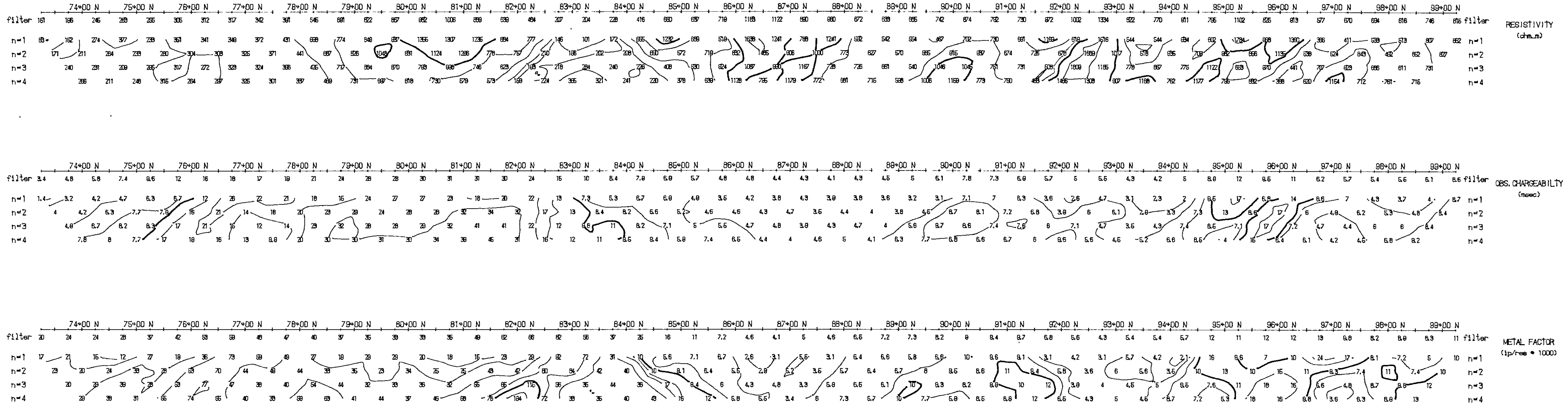
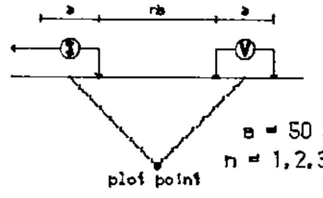


Fig. 16

Line 7400 E

Pole-Dipole Array



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument : EDA IP-6
Frequency : 2s ON / 2s OFF
Operators : JLJ/KNC

INTERPRETATION

Strong increase in polarization
Moderate increase in polarization
Weak increase in polarization

21807

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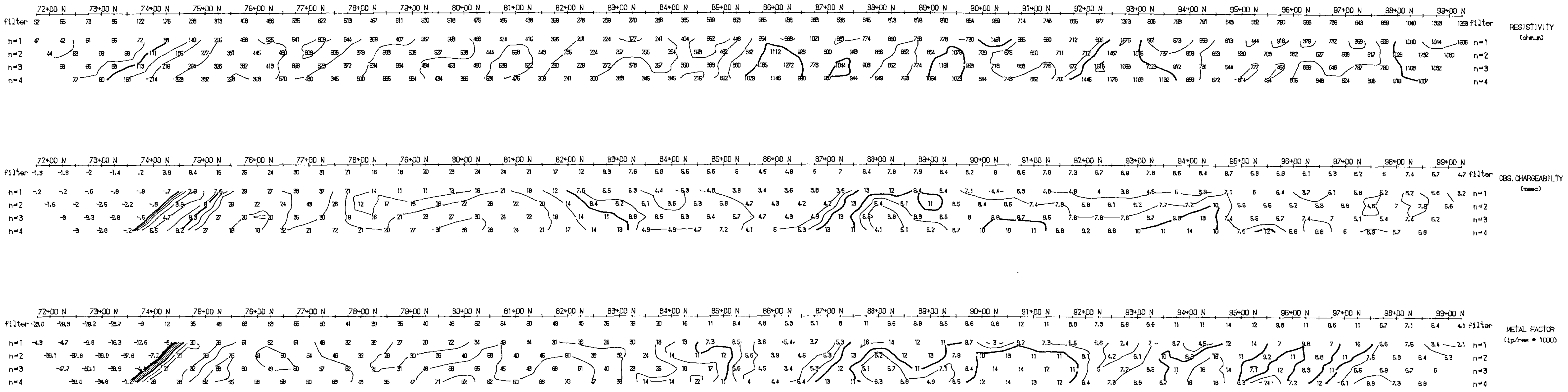
INDUCED POLARIZATION SURVEY
Klew Project
OMINEÇA M.D., B.C.

Date: July, 1991 NTS: 93N/1
Interpretation by: Scale 1:5000

Pacific Geophysical



GEOSOFT (TM) Software for the Earth Sciences, Toronto, Canada

Fig. 17

Line 7800 E

Pole-Dipole Array

a = 50 m
n = 1, 2, 3, 4

plot point

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

Instrument : EDA IP-6
Frequency : 2s ON / 2s OFF
Operators : JLJ/KNC

INTERPRETATION

Strong increase in polarization
Moderate increase in polarization
Weak increase in polarization

21807

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INDUCED POLARIZATION SURVEY

Klaw Project

OMINECA M.D., B.C.

Date: July, 1991 NTS: 93N/1

Interpretation by: Scale 1:5000

Pacific Geophysical

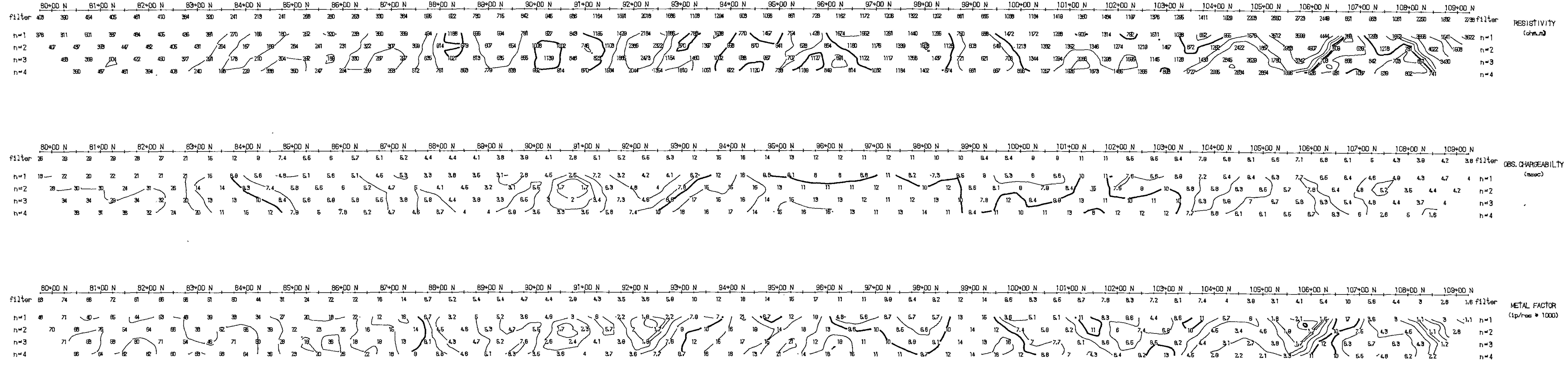
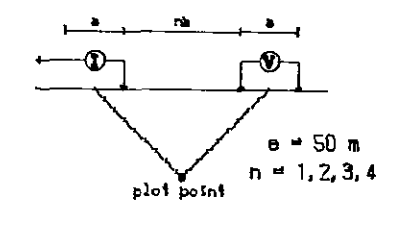


Fig. 18

GEOSOFT (TM) Software for the Earth Sciences, Toronto, Canada

Line 8200 E

Pole-Dipole Array



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

Instrument : EDA IP-6
Frequency : 2s ON / 2s OFF
Operator : JJ

INTERPRETATION

Strong increase in polarization

Moderate increase in polarization

Weak increase in polarization

21807

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INDUCED POLARIZATION SURVEY

Klaw Project

Omineca M.D., B.C.

Date: July, 1991
Interpretation by:

NTS: 93N/1,2,7,8
Scale 1:5000

Pacific Geophysical

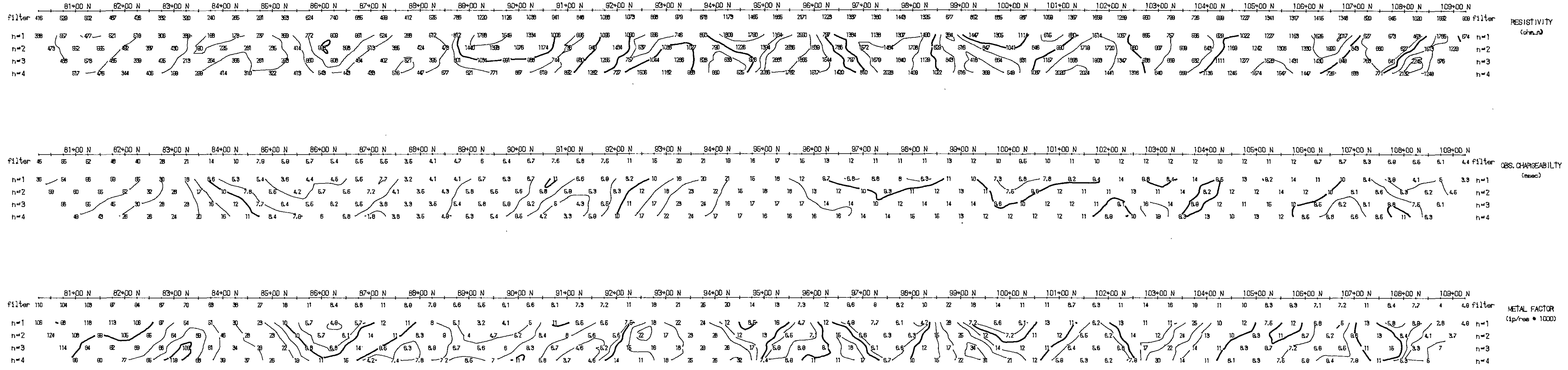


Fig. 19

GEOSOFT (tm) Software for the Earth Sciences. Toronto, Canada

Line 8600 E

Pole-Dipole Array

a = 50 m
n = 1, 2, 3, 4
plot point

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

Instrument : EDA IP-6
Frequency : 2s ON / 2s OFF
Operator : JJ

INTERPRETATION

Strong increase in polarization
Moderate increase in polarization
Weak increase in polarization

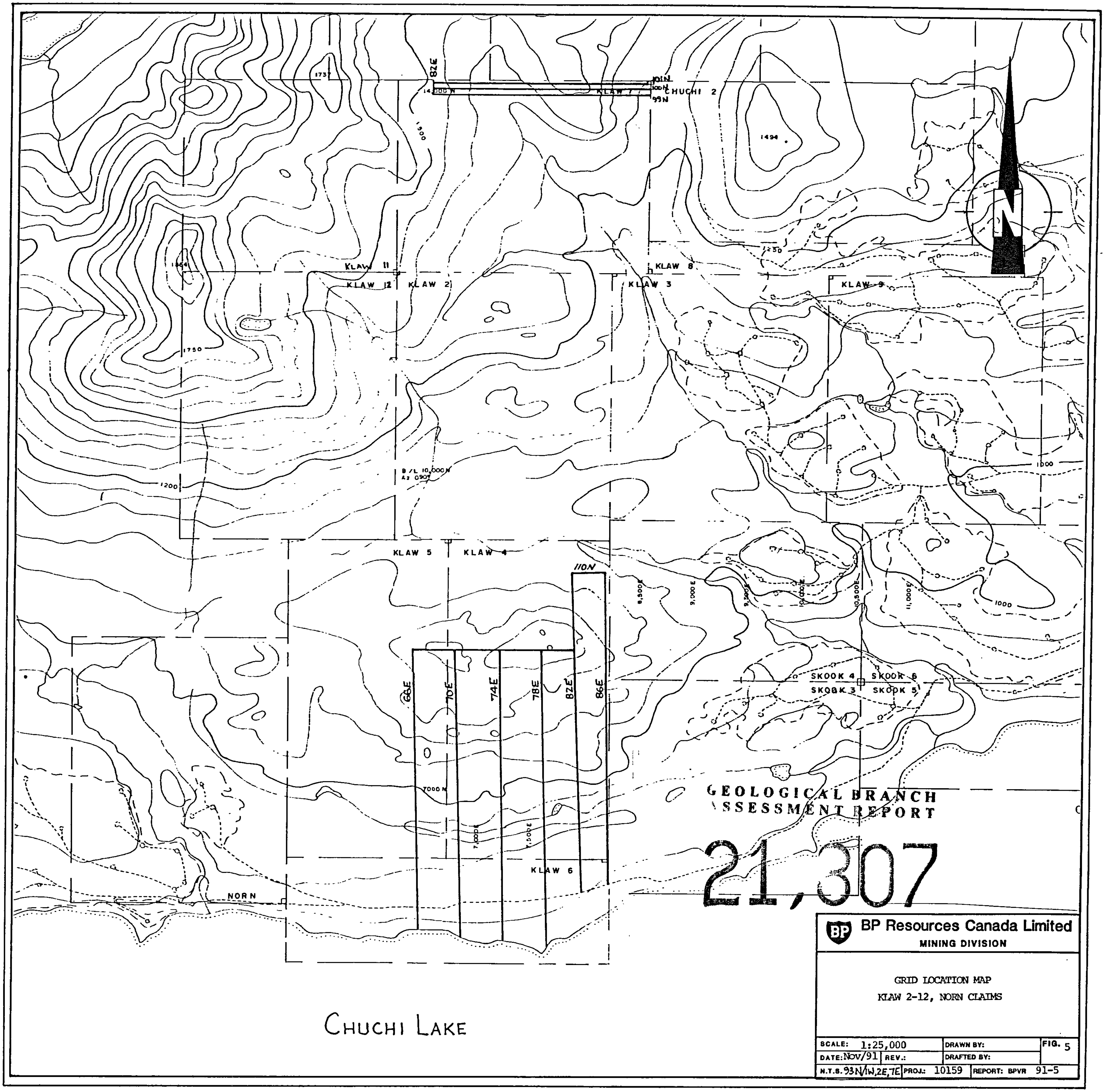
21807

BP RESOURCES CANADA LIMITED

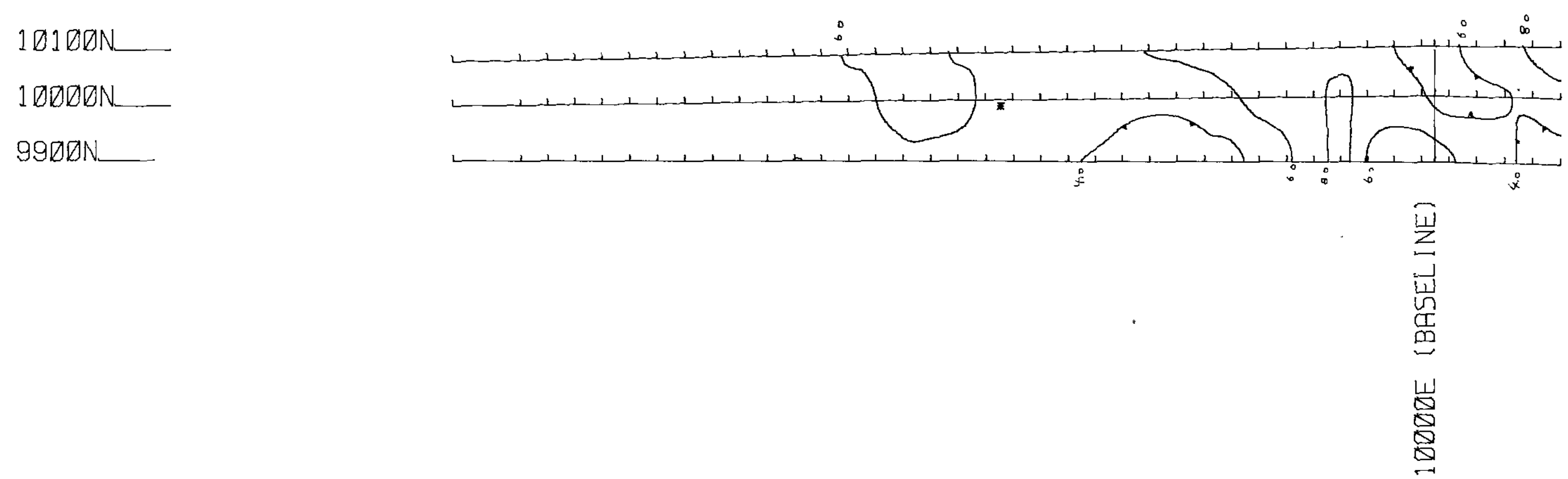
INDUCED POLARIZATION SURVEY
Klaw Project
Omineca M.D., B.C.

Date: July, 1991
Interpretation by:
NTS: 93N/1,2,7,8
Scale 1:5000

Pacific Geophysical



KLAW 7
CHUCHI 2
KLAW 11
KLAW 12
KLAW 2
KLAW 8
KLAW 3
KLAW 9
KLAW 5
KLAW 4
KLAW 6
NORN
SKOOK 4
SKOOK 6
SKOOK 3
SKOOK 5
110N
66E
70E
74E
78E
82E
86E
7000 N
B/L 10,000N
1750
1200
1250
1000
1494
CHUCHI LAKE
GEOLOGICAL BRANCH
ASSESSMENT REPORT
21,307
BP Resources Canada Limited
MINING DIVISION
GRID LOCATION MAP
KLAW 2-12, NORN CLAIMS
SCALE: 1:25,000
DRAWN BY:
FIG. 5
DATE: Nov/91
REV.:
DRAFTED BY:
N.T.S. 93N/1W,2E,7E
PROJ.: 10159
REPORT: BPVR 91-5



200m 100m 0m 200m 400m

GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,807

Fig. 7

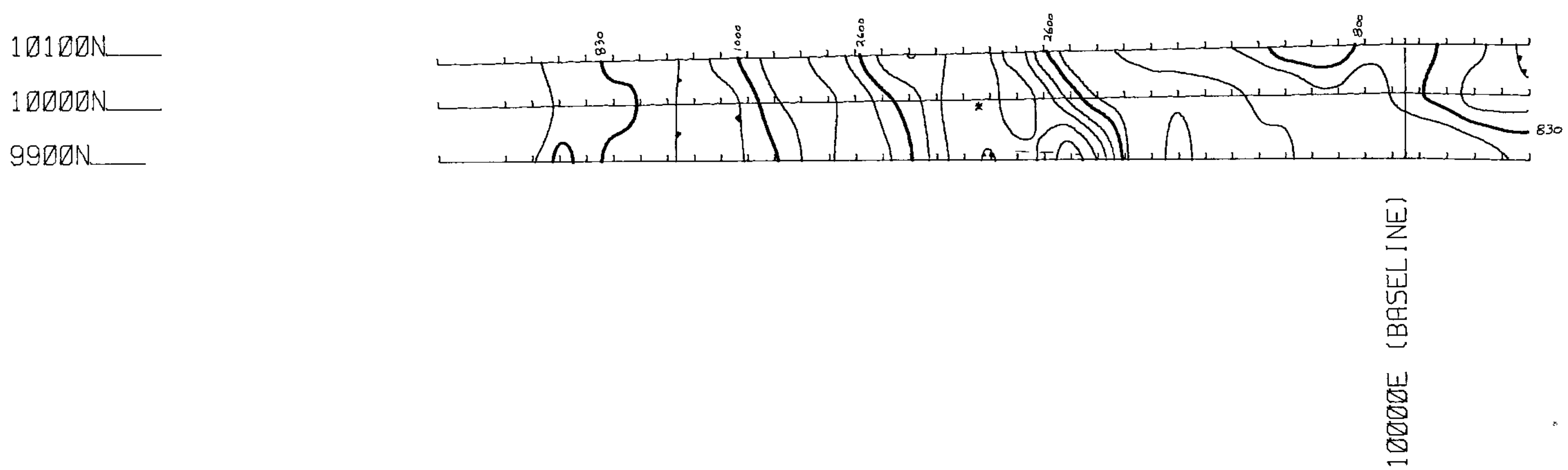
Instrument	: EDA IP6
Pole - Dipole Array, a=50 m, n=1-4	
Current Electrode to the East	
Contour Interval	: 2 msec
10 Point Filter	:

BP RESOURCES CANADA LTD.

INDUCED POLARIZATION SURVEY

KLAW PROJECT, OMINECA M.D., B.C.
BASELINE AZIMUTH : 0 Deg

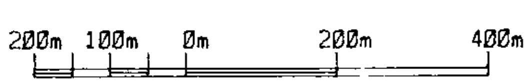
SCALE = 1 : 10000 DATE : July, 1991.
SURVEY BY : JLJ NTS : 93N/1
PLAN : MKLAWIP
Pacific Geophysical



GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,807

Fig. 8



Inetrument : EDA IP6
Pole - Dipole Array, a=50 m, n=1-4
Current Eleotrode to the Ebet

Logarithmio Contoure : 1.0, 1.5, 2.2, 2.6, 3.2, 3.8, 4.6, 5.6, 6.8, 8.3, 10.0, eto. Ohm-m

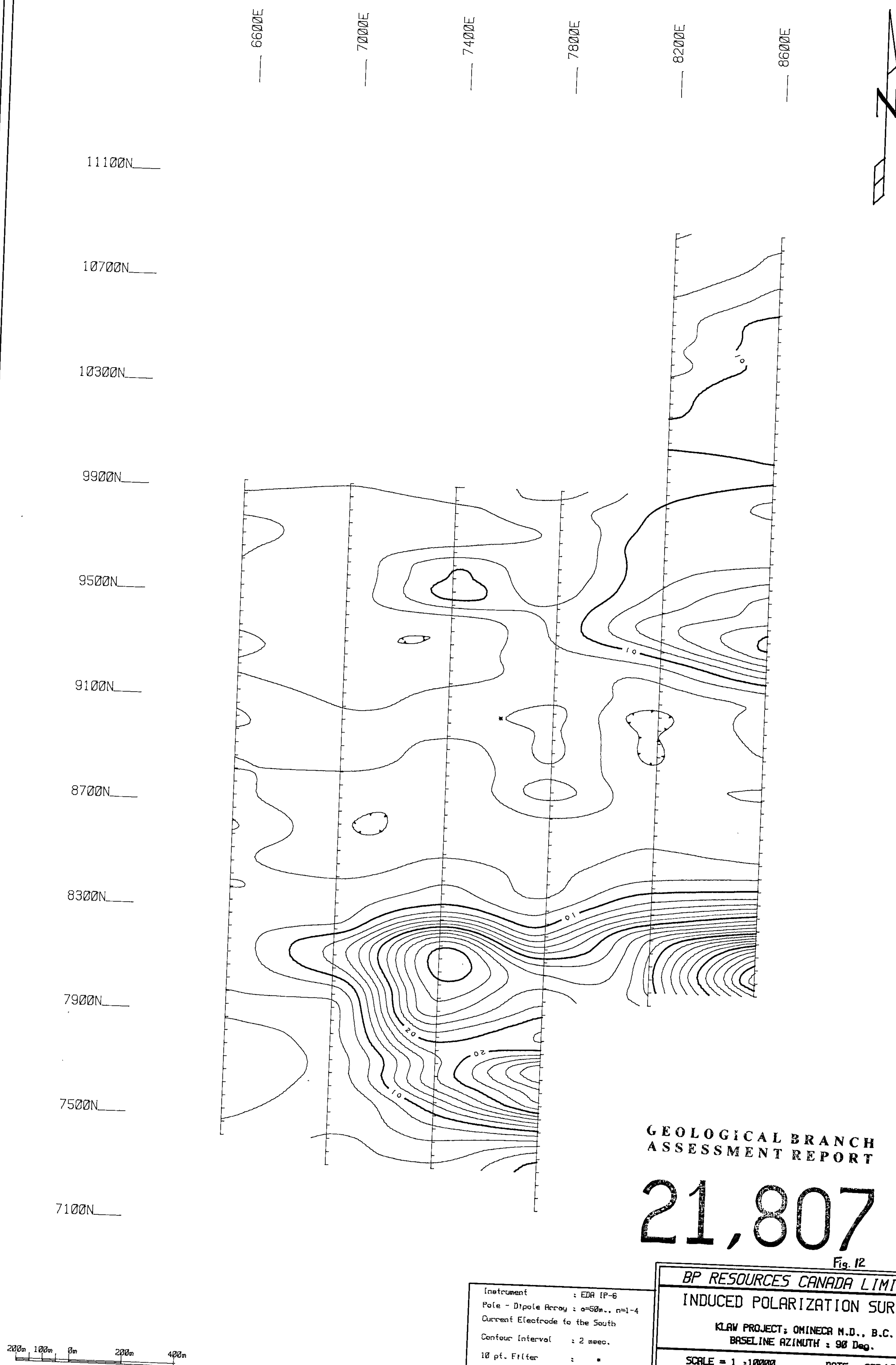
10 Point Filter : (pattern of dots)

BP RESOURCES CANADA LTD.

RESISTIVITY SURVEY

KLAW PROJECT, OMINECA M.D., B.C.
BASELINE AZIMUTH : 0 Deg.

SCALE = 1 : 10000 DATE : July, 1991.
SURVEY BY : JLJ NTS : 93N/1
FILE : MKLAWRES
Pacific Geophysical



GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,807

Fig. 12

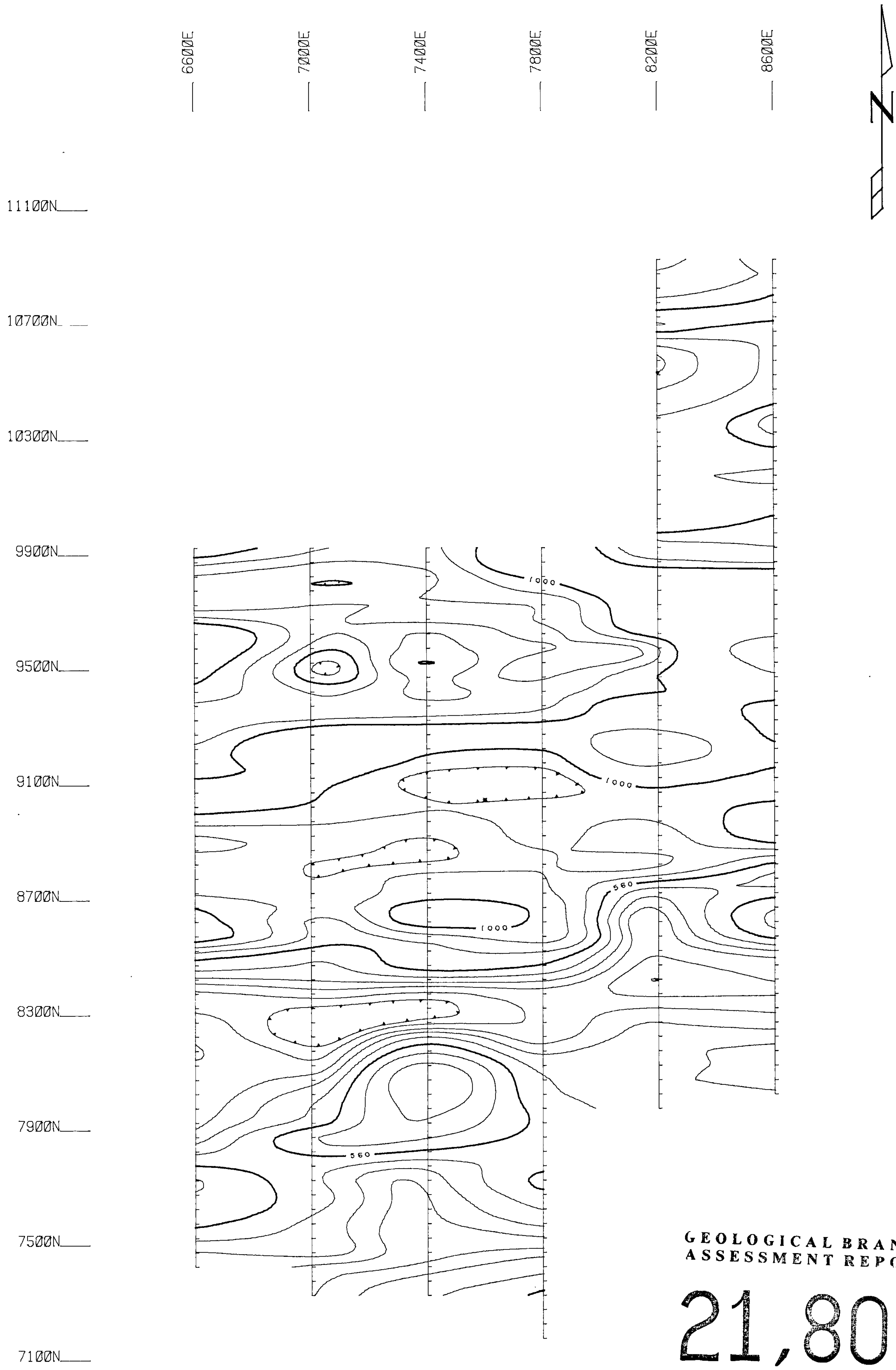
Instrument : EDA IP-6
Pole - Dipole Array : a=50m., n=1-4
Current Electrode to the South
Contour Interval : 2 msec.
10 pt. Filter :

BP RESOURCES CANADA LIMITED

INDUCED POLARIZATION SURVEY

KLAW PROJECT: OMINECA M.D., B.C.
BASELINE AZIMUTH : 90 Deg.

SCALE = 1 :10000 DATE : APR/JUL 1991
SURVEY BY : JLJ/KNC NTS : 93N/1
PLAN: MKLAWIP
Pacific Geophysical Ltd.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,807

Fig. 13

Instrument : EDA IP-6
Pole - Dipole Array : a=50m., n=1-4
Current Electrode to the South

Logarithmic Contours: 1.0, 1.5, 2.2, 2.6
3.2, 3.8, 4.6, 5.6, 6.8, 8.3, 10.0 Ohm-m.

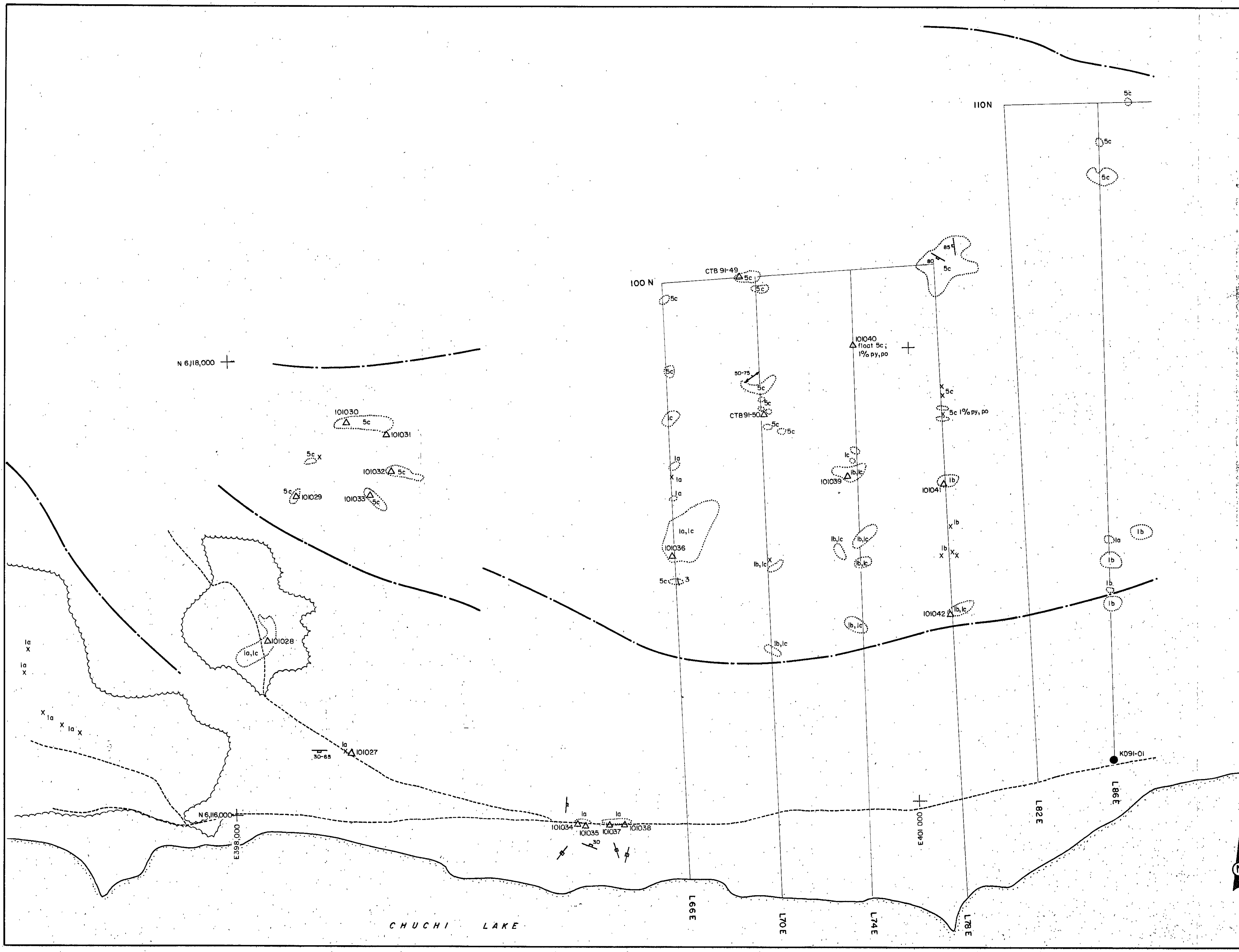
10 pt. Filter : *
* *
* * *
* * * *

BP RESOURCES CANADA LIMITED

RESISTIVITY SURVEY

KLAW PROJECT; OMINECA M.D., B.C.
BASELINE AZIMUTH : 90 Deg.

SCALE = 1 :10000 DATE : APR/JUL 1991
SURVEY BY : JLJ/KNC NTS : 93N/1
PLAN: MKLAWRS
Pacific Geophysical Ltd.



LEGEND

Intrusive Rocks

5. Hogem Batholith Intrusive Suite
   a. Syenite, quartz syenite, alkali feldspar granite
   b. Alkali gabbro - diorite
   c. Potassium feldspar monzonite
   d. Monzodiorite.

4. a. Plagioclase monzonite porphyry/subporphyry
   b. Crowded plagioclase monzonite/diorite porphyry, with augite, biotite and magnetite.

Takla Group volcanic and Sedimentary Rocks

3. Greywacke, siltstone, black shale, with local ash and ash-crystal tuff beds

2. Agglomerate, maroon and gray, with fragments of monzonite/diorite, ash/ash-crystal tuff, siltstone, and black shale, carbonate-rich fragments and matrix locally.

1. Basalt, andesite, latite
   a. Augite porphyry flows and flow breccias, lesser tuffs
   b. Plagioclase porphyry flows and flow breccias
   c. Vesicular flows and flow breccias

	Geologic contact (known, assumed)
	Fault (known, assumed)
	Area of outcrop
x	Isolated outcrop
	Linear
△ 101035	Rock chip location and sample number
● SK91-05	Diamond drill hole collar
50	Bedding (inclined, vertical)
50	Jointing (inclined, vertical)
50	Foliation (inclined, vertical)
38	Mineral lineation (inclined, vertical)
Hfls	Hornfels
	Road
	Scarp
	Creek
	Clearcut

GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,807

Scale 1 : 10 000

200 100 0 200 400
METRES

BP Resources Canada Limited
MINING DIVISION

KLAW 2-12, NORN CLAIMS

GEOLOGY and ROCK SAMPLE LOCATIONS

SCALE: 1: 10,000		DRAWN BY: CTB, DRB	FIG. 6
DATE: OCT. '91	REV.:	DRAFTED BY: Chong	
N.T.S. 93N-1W; 2E, 7E	PROJ. 10159	REPORT: BPVR 91-5	