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ALGO RESOURCES LTD.

GEOPHYSICAL REPORT
ON AN
INDUCED POLARIZATION SURVEY

OK 1 AND 2 CLAIMS KAMLOOPS MINING DIVISION Lat. 51°08' N, Long. 119°51"W, N.T.S. 82M/4W

AUTHOR: GLEN E. WHITE P.Eng.
DATE OF WORK: July 18 - August 25, 1987
DATE OF REPORT: September 21, 1987

SUB-PECCHDER RECEIVED

DEC 3 1 1987

GEOLOGICAL BRANCH ASSESSMENT REPORT

16,043

- WHITE GEOPHYSICAL INC.

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INTRODUCTION

During the period July 18, 1987, to August 25, 1987 a program of induced polarization surveying was conducted on the OK mineral claims by White Geophysical Inc. on behalf of ALGO RESOURCES LTD.

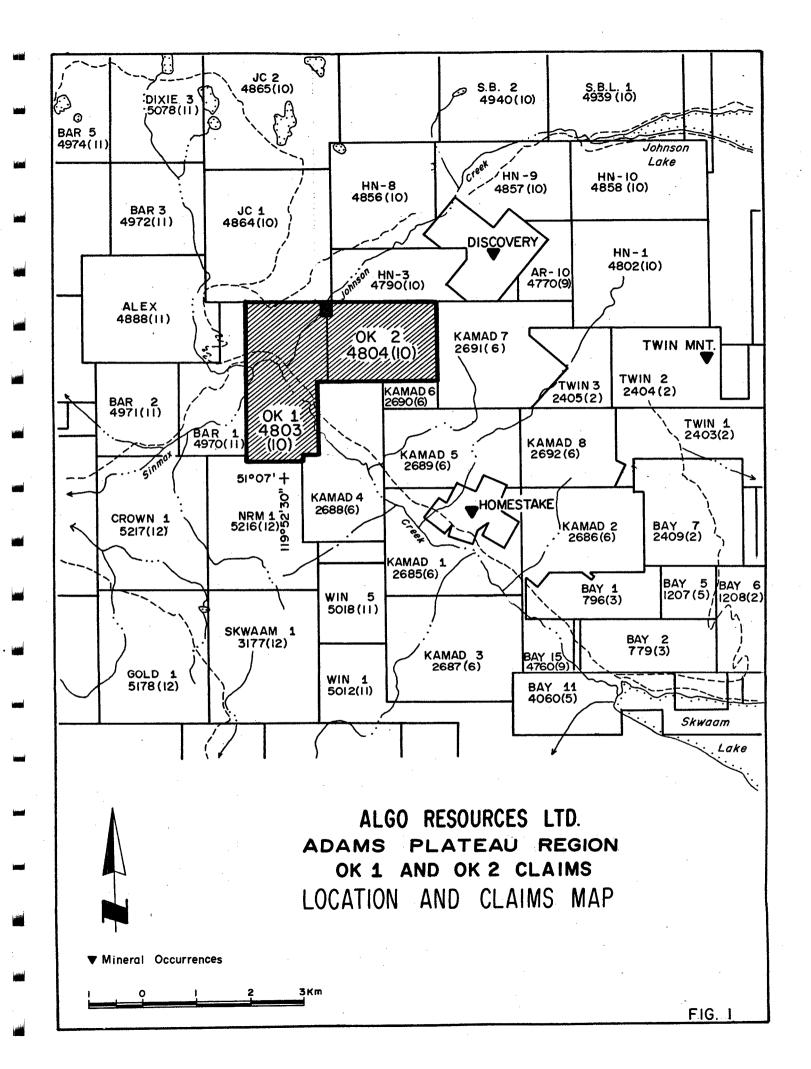
The purpose of the survey was to examine an area of strong pulse electromagnetic conductors and favorable geology where B. Furneaux, the companies geologist, had mapped a quartz feldspar porphyry containing pyrite and arsenopyrite.

PROPERTY

NAME	UNITS	RECORD #	DATE RECORDED
OK 1	18/6Sx3W	4803(10)	October 7, 1983
OK 2	12/3Sx4E	4804(10)	October 7, 1983

The OK property is under a joint venture exploration agreement between Algo Resources Limited and Rialto Silver Resources Ltd. The area covered by the two claims is a maximum of 750 hectares (1,853 acres); this will be reduced by overlap on existing claims.

The claims were examined in detail by Peter A. Christopher, Ph.D., P.Eng. and reported on in an October 12, 1984 report addressed to Algo Resources Limited and Rialto Silver Resources Ltd.



LOCATION AND ACCESS

The mineral claims are situated some 10 kilometers east of Skwaam Bay on Adams Lake, at the confluence of Sinmax and Johnson Creeks. See figure 1. The legal corner post is situated on the east side of Johnson Creek. Latitude 51,08'42" North; Longitude 119,51'53" West; N.T.S. 82M/4W.

Access is by two wheel vehicle over gravel roads to Skwaam Bay and by lower grade roadway up Johnson Creek.

REGIONAL GEOLOGY

The regional geology of the area is illustrated on figure 2 and is taken from Ministry of Energy, Mines and Petroleum Resources, Preliminary Map 56, 1984 by V. Preto et. el. The relationship of the OK claims with respect to the Rea Gold, Homestake and Twin Mountain showings is depicted.

This section of the Adams Plateau is underlain by a meta-morphosed assemblage of sedimentary and volcanic rocks of late Devonian to early Mississippian age that are dominated by a northwest trending tightly overturned syncline. Rea Gold is on its inverted northern limb and Homestake on its southern limb, (T. Hoy and F. Goutier).

The Rea Gold deposit is mapped in unit EBF, a thick sequence of intermediate to felsic volcanic and volcaniclastic rocks of which 60% is felsic volcanic rocks with some

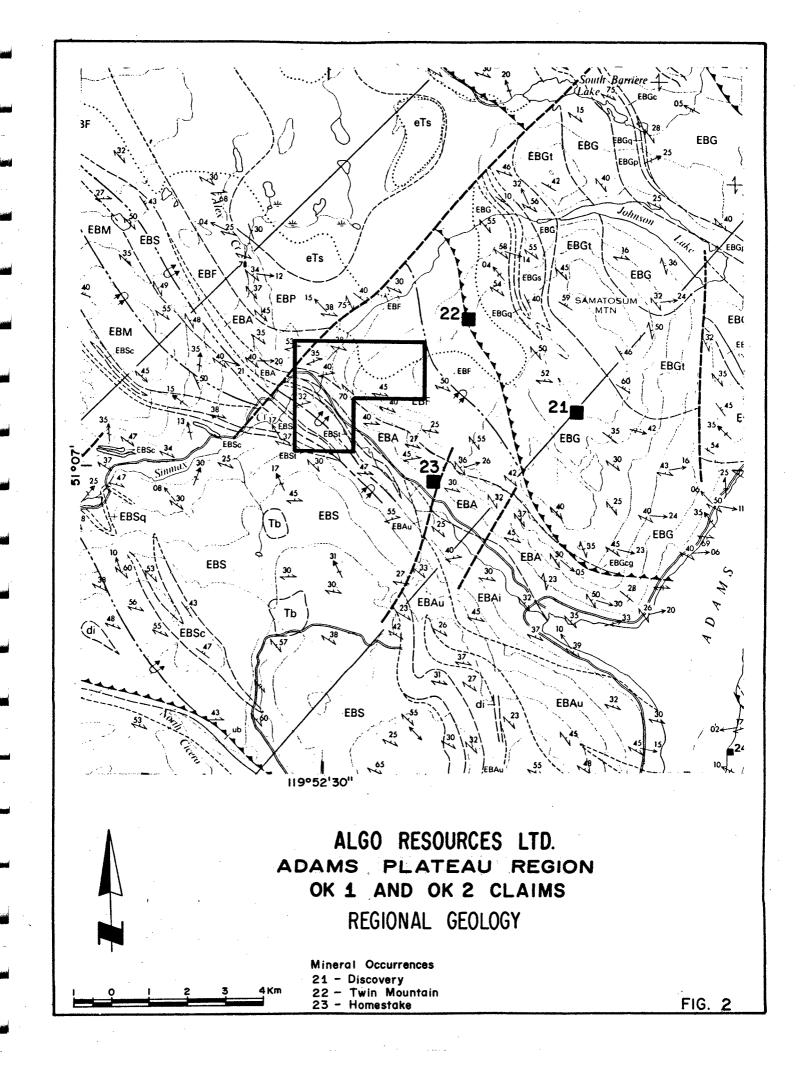
andesite, and 40% intercalated sedimentary rocks; (Gordon White 1985). The sedimentary sequence consisting of graphite and commonly finely laminated argillite, wacke, conglomerate, and chert form the base of this unit. Felsic volcanic rocks comprise the upper portion and consist of rhyolite breccia, agglomerate and tuff, andesite agglomerate and breccia, intercalated argillite, siltstone, wacke and some impure limestone. White notes that the rhyolite units are usually feldspar porphyritic with frequent flow breccia.

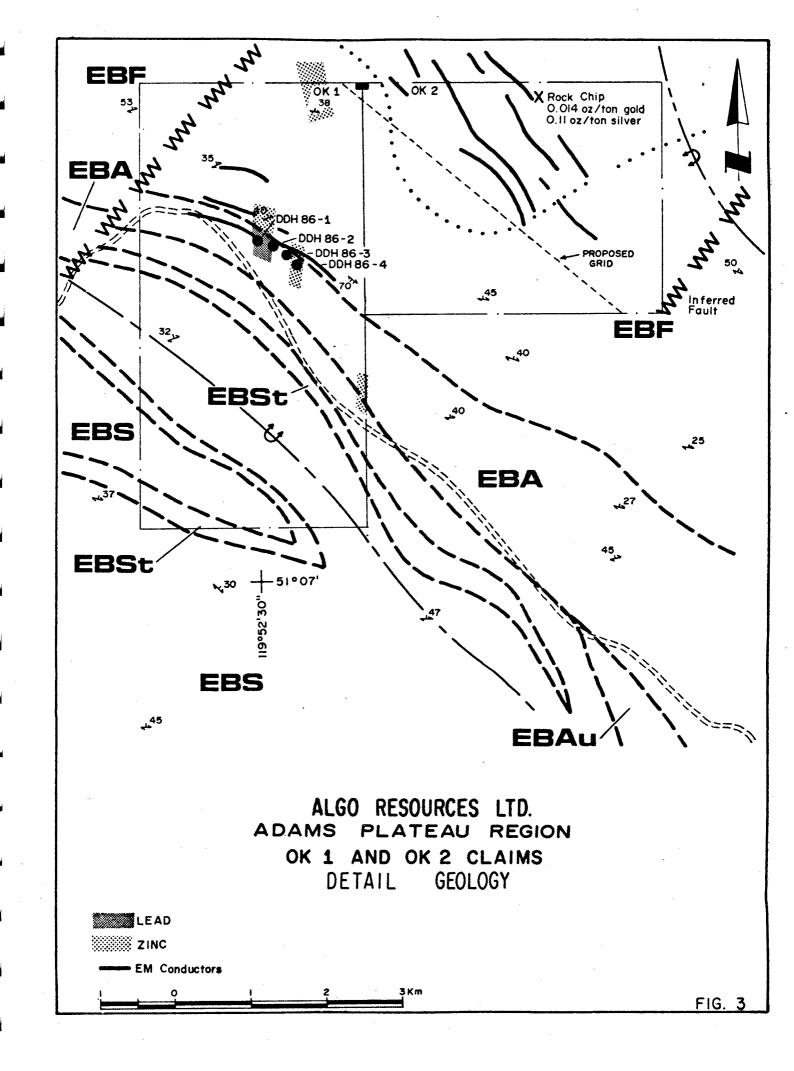
Unit EBA lies above unit EBF and is predominantly sericite quartz phyllites derived from felsic to intermediate volcanic rocks. This unit hosts the Homestake deposit.

Unit EBG is the oldest unit and forms the base beneath unit EBF. It consists largely of mafic volcanic lithologies, chiefly pillow lavas agglomerates, flows and basaltic to andesitic tuffs. The Pb-Zn-Ag Twin Mountain deposit is in this sequence.

PROPERTY GEOLOGY

Detail map, figure 3, indicates that the property is underlain largely by unit EBF which covers some 60% of the claims. Unit EBA forms a strip along Sinmax Creek with unit EBS occupying the southwest corner of the OK 1 claim. This unit consists of grey and green phyllitic sandstone and grit,





phyllite and quartzite; lesser amounts of limestone, dolostone and green chloritic phyllite to sericitic-quartz phyllite, (Map 56). P. Christopher notes that on the north side of Sinmax Creek, "a rusty yellow weathering unit that probably correlates with the Homestake Schist is visible from the main road". Hoy and Goutier, describe this unit as a sericite-quartz schist with abundant disseminated pyrite throughout. It is discernible by its fissile appearance and by its weathered coating of yellow ferric sulphate. It is the host and the footwall to the barite-sulphide lenses (Homestake deposit) and is interpreted to be a highly altered predominantly felsic tuff unit.

Preliminary prospecting by B. Furneaux, geologist, to locate grid lines and electromagnetic conductors (White Geophysical Inc. 1985) outlined a felsic feldspar porphyritic unit beside one of the conductors in the northeastern portion of the OK 2 claim. Pyrite and arsenopyrite were noted. The sample assayed 0.014 oz/ton gold and 0.11 oz/ton silver.

PREVIOUS WORK

Peter A. Christopher, Ph.D. P.Eng. conducted preliminary Geological, Geochemical and Geophysical surveys over easily accessible areas in September 1984 for a cursory examination.

White Geophysical Inc. conducted a pulse electromagnetic survey in the fall of 1985.

INDUCED POLARIZATION SURVEY

The survey was conducted utilizing a Huntec time domain system deployed in a pole - dipole configuration with an "a" spacing and traverse interval of 50 meters.

Detailing was conducted over selected lines with an "a" spacing and traverse interval of 25 meters and "a" = 50 meters n = 2 (separation). Some 42 kilometers of surveying were conducted.

DISCUSSION OF RESULTS

The survey grid on the Ok 2 claim was covered by the induced polarization survey with an "a" spacing of 50 meters and a separation of n=1. This area was the primary area of focus since it adjoins the Rea Gold claims near the original gold discovery in 1983, and it contains outcrops of quartz feldspar porphyry and quartz sericite schist.

Figure 4, an interpretation map, shows the outline of the quartz feldspar porphyry as mapped by the companies geologist Mr. B. Furneaux. Figures 5 and 6 illustrate the chargeability and apparent resistivity for the survey. Figures 7 and 8 are contour maps of deeper searching detail work with "a" 50

meters n = 2; maps 9 and 10 show the shallower separation of 25 meters n = 1. The data for all three separations is shown on detail profiles 11 to 16.

The survey located a strong chargeability anomaly which trends northnorthwesterly across the grid, Figure 5. Figure 4 shows this trend to be associated with several anomalous silver, lead and zinc geochemical values. The geochemical survey was conducted by Algo Resources Ltd. staff. The strongest chargeability anomalies and geochemical values follow a lithologic unit of slates and phyllites. The geological contact between the quartz feldspar porphyry and the slate-phyllite unit, follows the edge of the chargeability high particularly the northern edge. The southern border of the chargeability high is flanked by light colored sericitic phyllites and gives a more gradual chargeability gradient.

Detail chargeability maps Figures 7 and 9 indicate that the strongest responses are on the shallow "a" spacing 25 meters. This would indicate that the slate-phyllite unit contains narrow bands of possibly sulphide/graphite mineralization. Figure 4 shows that the pulse electromagnetic conductors from the 1985 survey follow this same horizon and may be caused by the same sulphide/graphite bands. However the strong conductor on line 17E at 16+75N is mapped as being underlain by quartz feldspar porphyry at the surface. The

detail induced polarization data from line 17E, Figure 12, suggests that the slate-phyllite unit may underlie the quartz feldspar unit. The quartz feldspar is thought to be the stratigraphic foot wall, thus this deep pulse electromagnetic and induced chargeability anomaly would make a good diamond drill target.

The property is covered by a varying layer of glacial till with a high clay content. This material makes geochemical prospecting difficult, which would account for the poorly defined soil anomalies.

The apparent resistivity data obtained from the induced polarization is also affected by the physical properties of the soil. Areas of water saturated clay will respond as apparent resistivity lows regardless of the underlaying rock type. The layering appearance of the chargeability and apparent resistivity data suggests a broad overburden cover and possibility a shallow dip with respect to the topography of the lithologic units.

A compilation of the data on Figure 4 suggests several areas that should be investigated by diamond drilling. The northern flank of the chargeability anomaly is a favorable geological contact and has scattered high geochemical values of lead, silver and zinc. This area also contains the deeply buried pulse electromagnetic anomaly on line 17E.

A broad geochemical silver anomaly with scattered moderately anomalous values of lead and zinc occurs within the northnorthwesterly trending chargeability high. This area and the southern flank of the anomalous chargeability trend should also be tested by diamond drilling.

CONCLUSION

An induced polarization survey was conducted over the eastern portion of the ALGO RESOURCES LTD. Property in the Adams Plateau area of British Columbia. The property adjoins the Rea Gold and Minova high grade silver discovery.

The induced polarization data was correlated with geochemical and geological data obtained by Algo Resources staff, and a 1985 pulse electromagnetic survey carried out on behalf of the company by White Geophysical Inc. The induced polarization chargeability data outlined a band of high values which trend northnorthwest across the survey grid. This band contains anomalous geochemical values of silver, lead and zinc. It is also flanked to the north by a quartz feldspar porphyry which in places appears to be altered to a quartz sericite schist similar to the rocks hosting the Rea Gold, Minova deposits. A strong pulse electromagnetic conductor occurs within this unit at a depth of some 100 meters.

RECOMMENDATIONS

It is recommended that the area along the northern flank of the high chargeability zone, the silver, lead and zinc anomalies in the center, and the southern flank be tested by diamond drilling as topography allows. The pulse electromagnetic conductor should be tested by a hole collared on line 17E and 17+25N and drilled southwestward along the line at an angle of -65 degrees for a length of 200 meters.

Respectively submitted,

Glen :

BIBLIOGRAPHY

Christopher, P.A., 1984, GEOLOGICAL, GEOCHEMICAL, GEOPHYSICAL REPORT OK 1 and 2 claims, October 12, 1984

Preto, V. A. and Schiarizza, P., MAP #56 GEOLOGY OF THE ADAMS PLATEAU-CLEARWATER AREA. 1984.

White, Gordon, HILTON MASSIVE SULPHIDE DISCOVERY REA GOLD, JOHNSON CREEK-ADAMS LAKE AREA, 1985.

Hoy, T. and Goutier F., REA GOLD (HILTON) AND HOMESTAKE VOLCANOGENIC SULPHIDE-BARITE DEPOSITS SOUTHEASTERN BRITISH COLUMBIA, B.C. Department of Energy and Petroleum Resources, Geological Fieldwork, 1985, Paper 1986-1.

Furneaux, B., DIAMOND DRILLING SUMMARY, February 9, 1986

deCarle, R.J., AIRBORNE ELECTROMAGNETIC SURVEY COVE ENERGY CORPORATION ADAMS PLATEAU AREA, BRITISH COLUMBIA FILE NO: 26 HON, October 1984.

White, Glen and Candy C., ALGO RESOURCES LTD. RIALTO SILVER RESOURCES LTD. GEOPHYSICAL REPORT ON A PULSE ELECTROMAGNETOMETER OK 1 AND OK2 CLAIMS, December 30/85.

COST BREAKDOWN

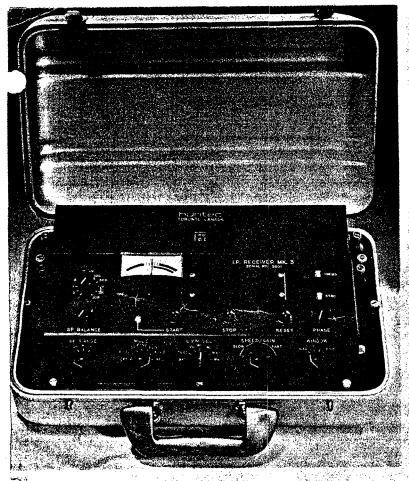
	PERSONAL	DATE	
	D. Hryrnic T. Langmead C. Parkinson H. France G. White P.Eng.	July 18 to August 25, 1987 July 18 to August 25, 1987 July 18 to August 25, 1987 July 18 to August 25, 1987 August 23, 1987	
per low	The survey was conducted on diam cost basis of \$1385 fos:		
	a) Personal \$765/dayb) Instruments \$285/dayc) Meals and accommodationsd) Vehicle all inclusive \$95		
1.	July 18 to August 25, 1987;	30 days @ \$1385\$42,935.00	
2.	Drafting and materials	\$1,150.00	
3.	Interpretation and reports	\$1,850.00	
		TOTAL\$45,935.00	

CERTIFICATE

- I, Glen E. White, with a business address of 11751 Bridgeport Road, Richmond B.C. do hereby certify that:
- 1) I am a consulting geophysicist registered with the Association of Professional Engineers of British Columbia since 1977.
- 2) I am an Associate Member of the Society of Exploration Geophysicists.
- 3) I hold a B. Sc. degree (1966) in geology and geophysics from the University of British Columbia.
- 4) I have been practising my profession as a geophysicist-geologist for over 20 years.
- 5) I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly in the properties or securities of Algo Resources Ltd.
- 6) I have based this report on a review of available Geological publications and exploration reports on the $\mathsf{OK}\ 1$ and $\mathsf{2}\ \mathsf{mineral}\ \mathsf{claims}$.
- 7) I consent to the use of this report in whole or in part by Algo Resources Ltd. for publication or any filing statement or Statement of Material Facts as long as the context of the report is not violated.

GLEN E. MITE B September 21, 1

WHITE GEOPHYSICAL INC.



- Adjustable timing cycle (optional).
- Automatic self potential buck out.
- Automatic signal acquisition for triggering.
- Direct digital read out of Vp and four M factors. (one M factor standard; 3 optional)
- No need to count number of cycles.
- ▶ Both Vp and M factors measured and stored in memory registers simultaneously.
- Mistriggering will not affect readings.
- Patented phase lock triggering loop enables operation in high noise areas with Vp levels down to 30 micro volts with 0.1 micro volt resolution.
- Rapid and accurate operation possible with low power transmitters.
 - Over 10 megohms input impedance.

Induced Polarization Receiver

DESCRIPTION

The Huntec MK III pulse type Induced Polarization (I.P.) Receiver achieves the maximum theoretical limit in time domain measurement technology.

The timing cycle is adjustable over a wide range of values by means of optional sub-panel controls and plug in program cards. These controls can be fitted after manufacture, if not acquired with original unit.

Once the receiver timing has been been set up to match the transmitter timing, signal acquisition is automatic, being accomplished by a patented phase locked loop. In effect, the triggering circuit is only responsive to the signal at the electrodes for a short interval preceeding and following the expected arrival time of the signal. This is referred to as the window. Should the expected signal not be received in this narrow time interval, that particular sample is ignored by the measuring circuit.

True integration of the V_P and V_s signals are accomplished by five sample and hold integrating registers. Each register stores the sum: $\sum_{i=1}^{N} \int V dt$. N is the number of cycles. There is no need to count cycles, since the reference for the digital voltmeter (DVM) is the content of the V_P memory register. When switched to M,

the DVM displays the ratio:

$$\sum_{1}^{N} \frac{\int V_s dt}{\int V_P dt}$$

The registers have a capacity of ten volts, and operation will automatically stop when the contents of any register reach this level. The DVM displays three digits, plus sign. The operator may stop the accumulation at any point should he be satisfied that sufficient accuracy has been ob-

tained (last digit of DVM not changing). He may Start integration again by pushing the start but - Points in the tentre of each time interval provide an approximaton, If extra high resolution is desired, a two tion to the shape of the LP, decay curve: position (speed/gain) control switch is provided

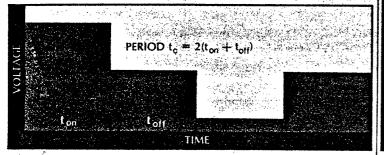
The absolute value of Ve may be easily obtained by multiplying the DVM Verdisplay by the scale factor of the input attenuator.

The three additional M factor registers are optional at time of purchase, or may be fitted at a later date.

Continuing research in I. P. interpretation theory, reveals that the shape of the I.P. decay curve may be diagnostic of the type of mineralization. The availability of these additional M factor readings over conventional instruments, enables the shape of the curve to be determined. No additional time is required other than writing down the DVM readings, since all measurements are made simultaneously.

Inductive effects may be determined by varying the delay time after turn off (optional).

TIMING



PLUG-IN CARD	PERIOD t _c , seconds Continuous Range of Adjustment (Sub panel control)
1 2 3 4 5 5	1.8 to 2.7 2.6 to 4.0 3.8 to 5.6 5.2 to 8.0 7.5 to 12.5 11.0 to 17.0

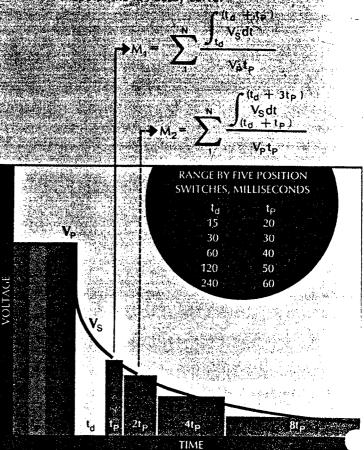
Standard instrument: any one specified (range. Additional cards optional.

ON/OFF RATIO

		S	UB PAI	NEL SW	тсн Р	OSITIO	N	
	1	2	3	4	5	. 6	7	8
a 1	2.94	2.88	2.82	2.76	2.71	2.65	2.60	2.55
ARD 5	2.50	2,45	2.41	2.36	2.32	2.28	2.24	2.20
Q 3	2.17	2.14	2.09	2.06	2.02	1.99	1.95	1.91
<u>U</u> 4	1.88	1.85	1.82	1.79	1.76	1.73	1.70	1.67
$\frac{Z}{C}$ 5	1.64	1.61	1.58	1.56	1.53	1.51	1.48	1.46
GO.	1.44	7.41	1.39	1.36	1,34	1.32	1.30	1.28
22.7	1.26	1.23	1,21	1.19	1.17	1,16	1.14	1.13
△ 8	1,11	1.09	1.08	1.06	1.04	1.03	1.01	1.00

The standard instrument is supplied with any one of the 64 possible ton/toff ratios. Additional decoding boards may be supplied at any time as extras. The sub-panel 8 position switch may be installed at time of purchase, or be fitted in our factory at a later date.

INDUCED POLARIZATION DECAY CURVE

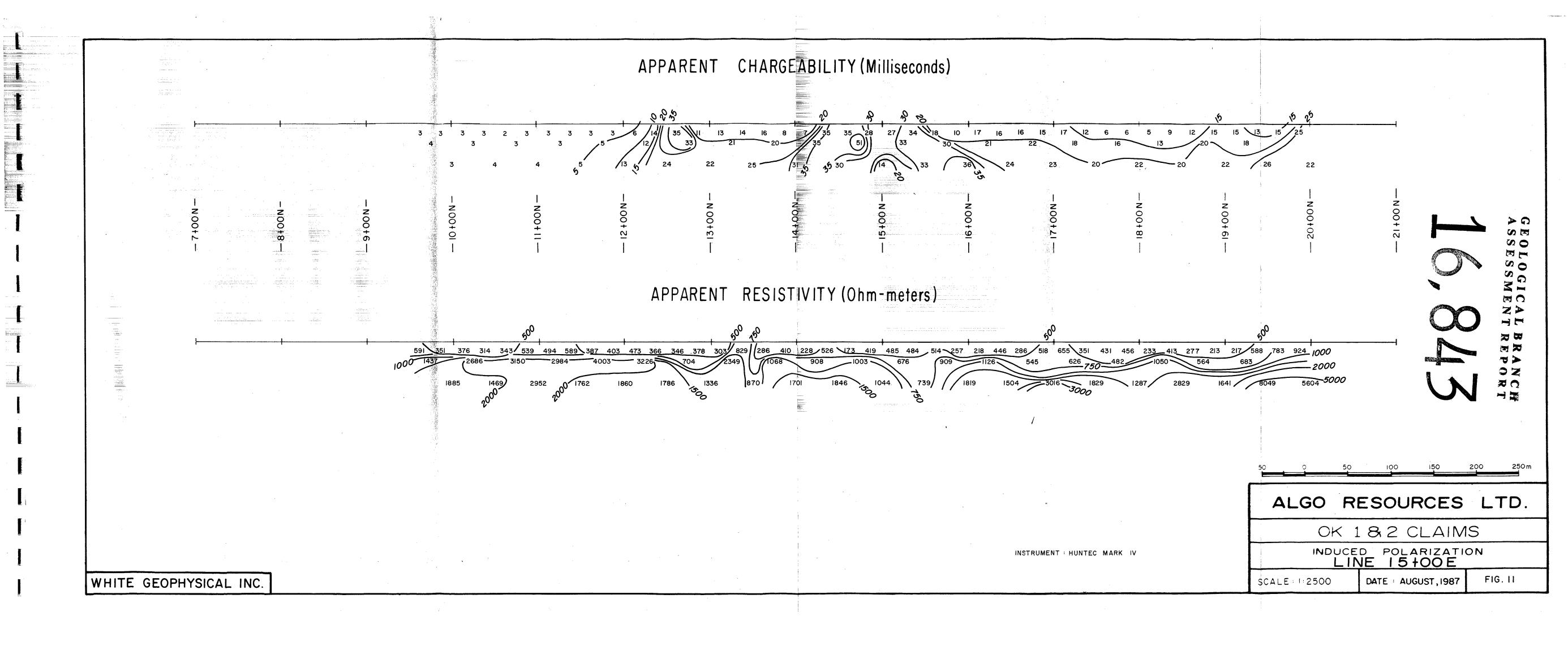


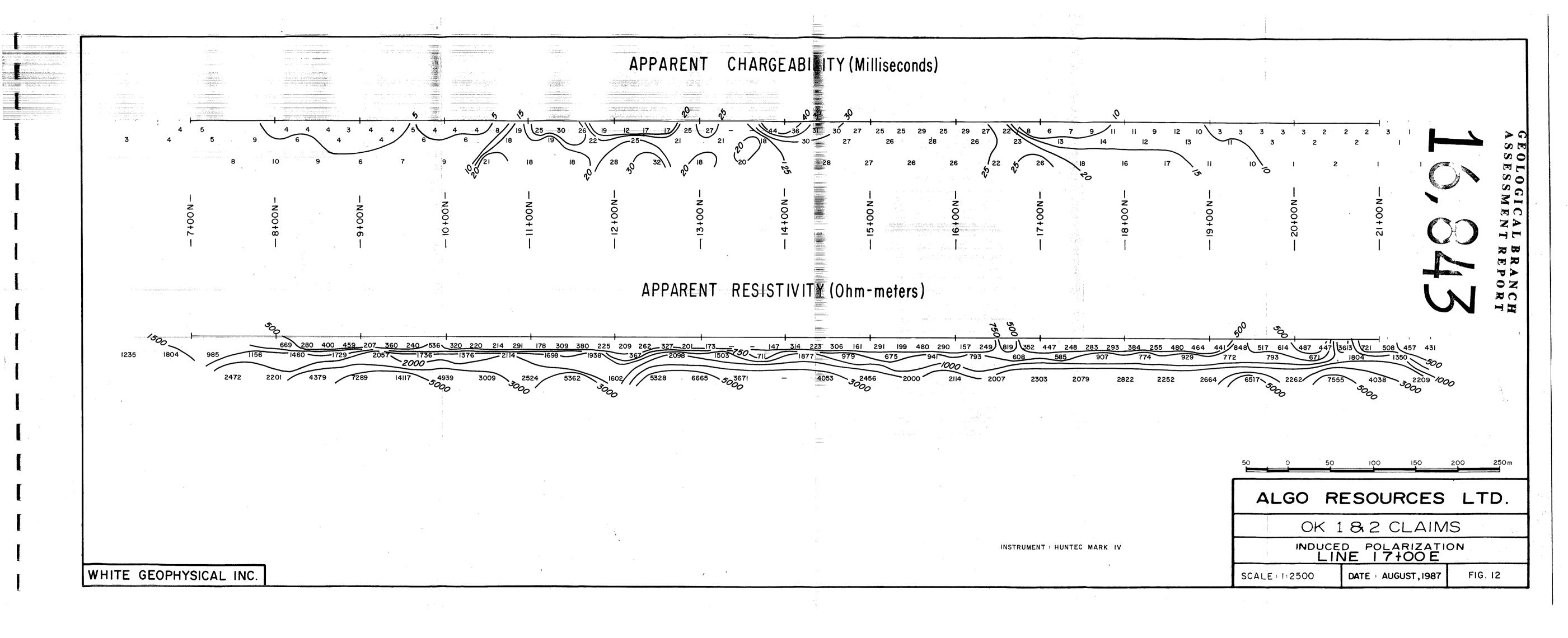
Two sub panel five position switches determine td and tp as shown in the table.

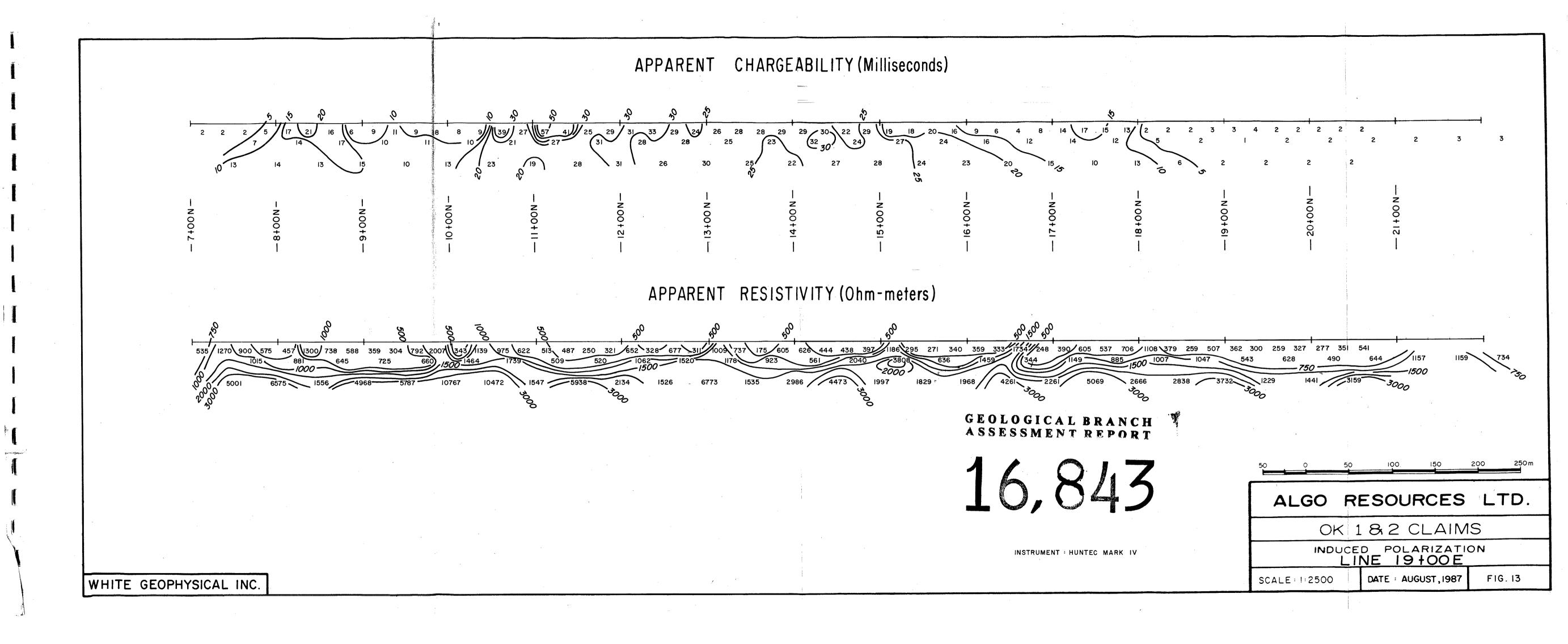
The standard set is supplied without these switches, but with any one of the above 25 combinations specified by the purchaser.

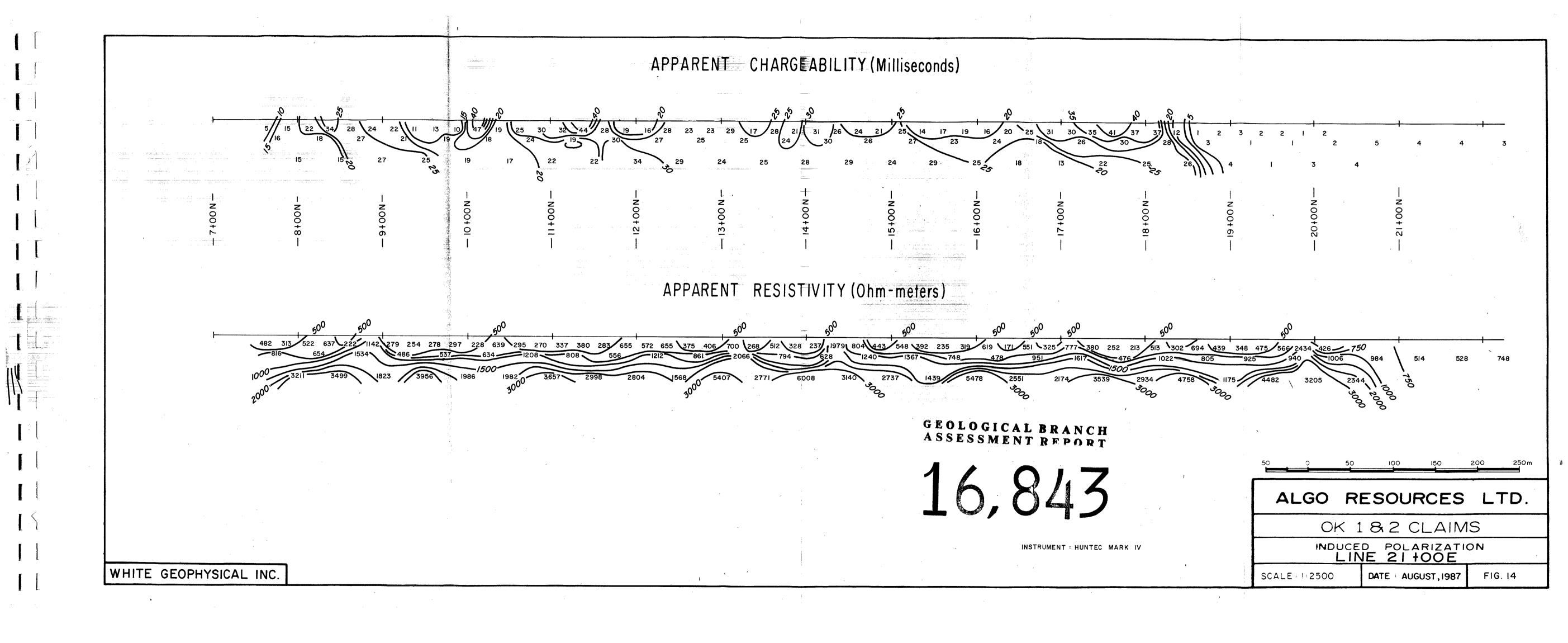
Either one or both switches may be installed at time of purchase as optional features, or be fitted at a later date in our factory it desired.

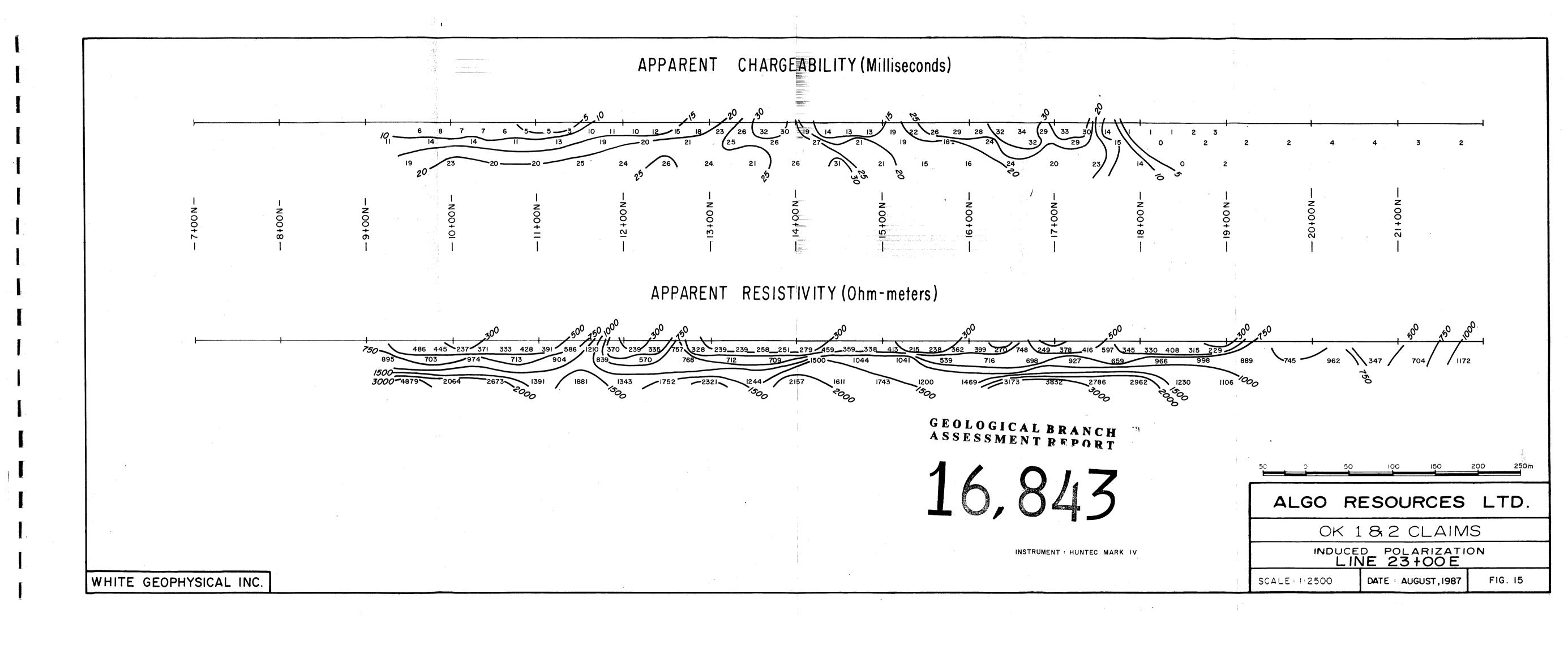
		The state of the s
	SPECIFICATION	s
	Sensiliv it y	Vp = 10-7 to 10-6 volts for low noise 1% resolution Vp = 10-6 to 10 volts for 0.1%
		resolution
		Total range 30 x 10-6 to 10 volts in 11 ranges
	Self Potential	Maximum ± 1 volt
	M factors	0.1% plus sign with speed/gain control at position 1.0 0.01% plus sign with speed/gain con- trol set at 0.1
The second second second	Batteries	Self contained battery pack recharge able Ni cads, nominal 12 volts four ampere-hour. Optional separate belt battery pack rechargeable Ni cads. Battery pack weight 4½ lbs.
	Power	
	Consumption	0.7 ampere at 12 volts
	Dimensions	16" x 9" x 5%"
	Weight	Without battery pack 12.5 lbs. (used with optional belt pack)
	Optional Accessories	Dual battery charger 110/220 volts, 50

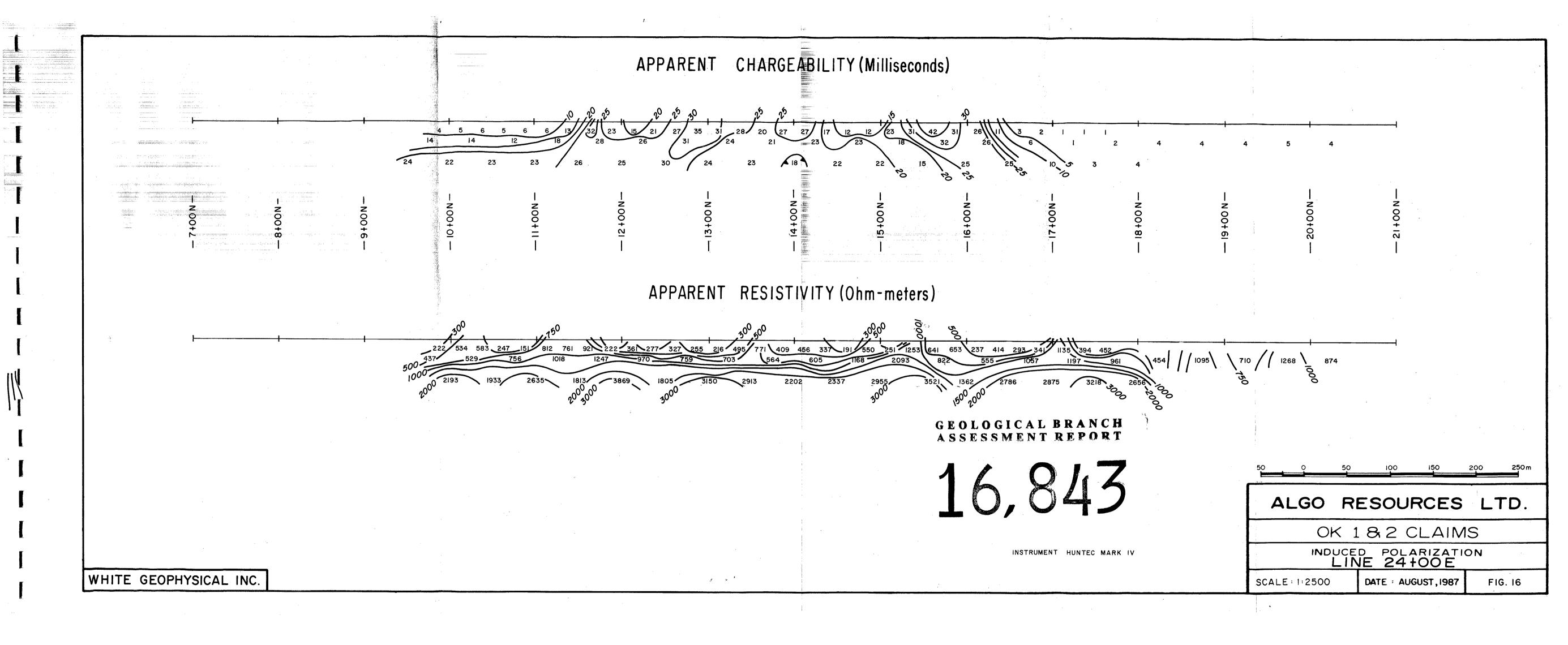


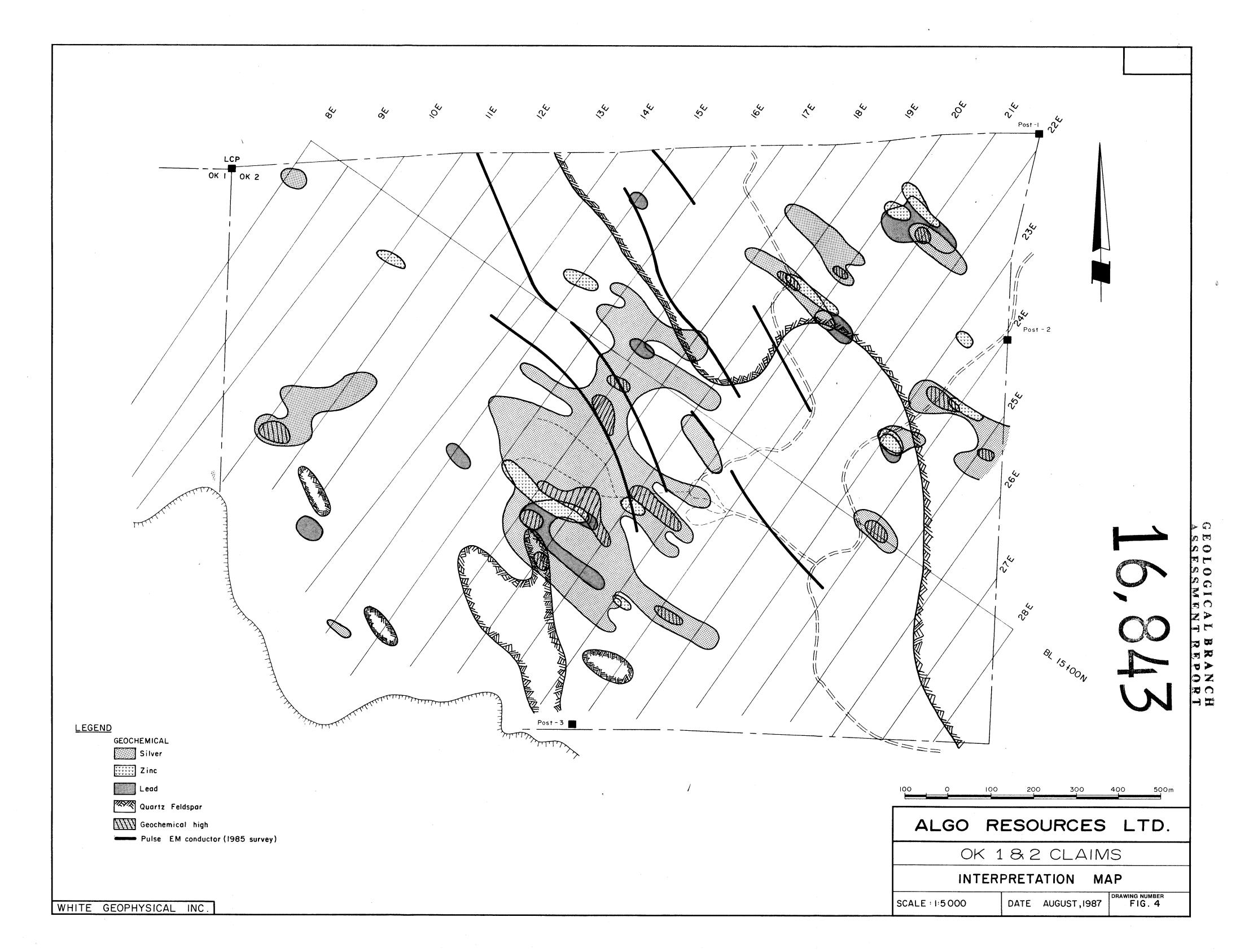


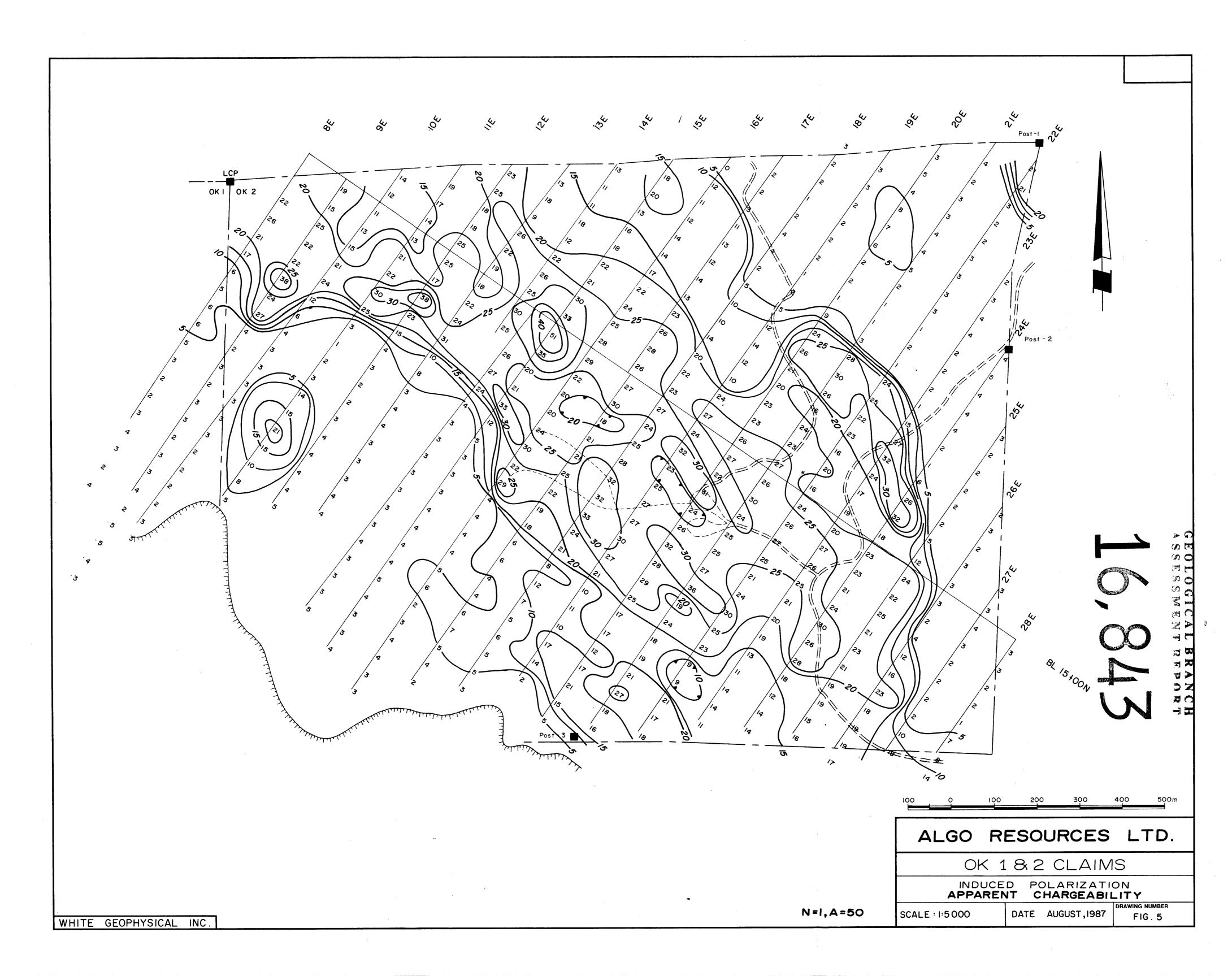


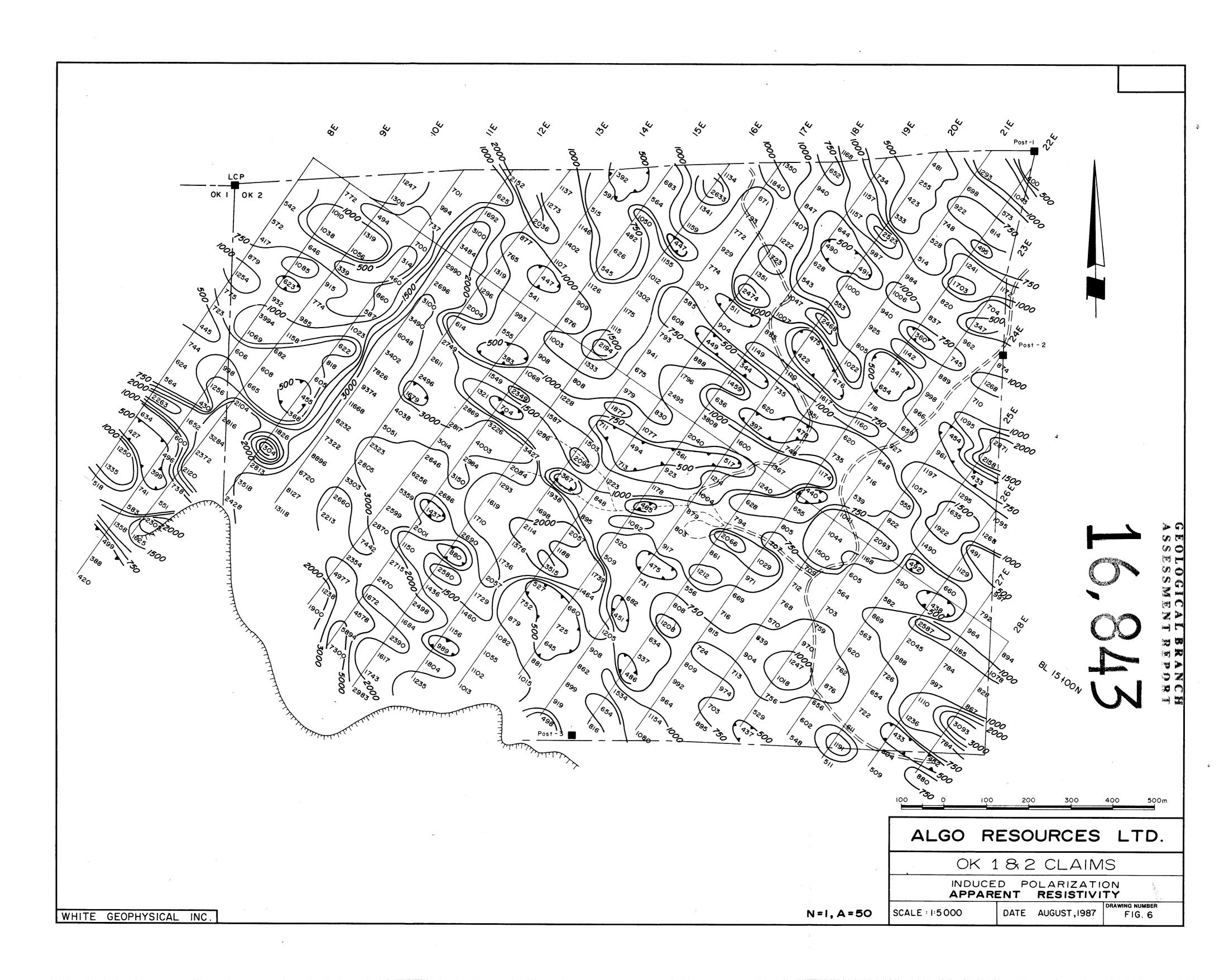


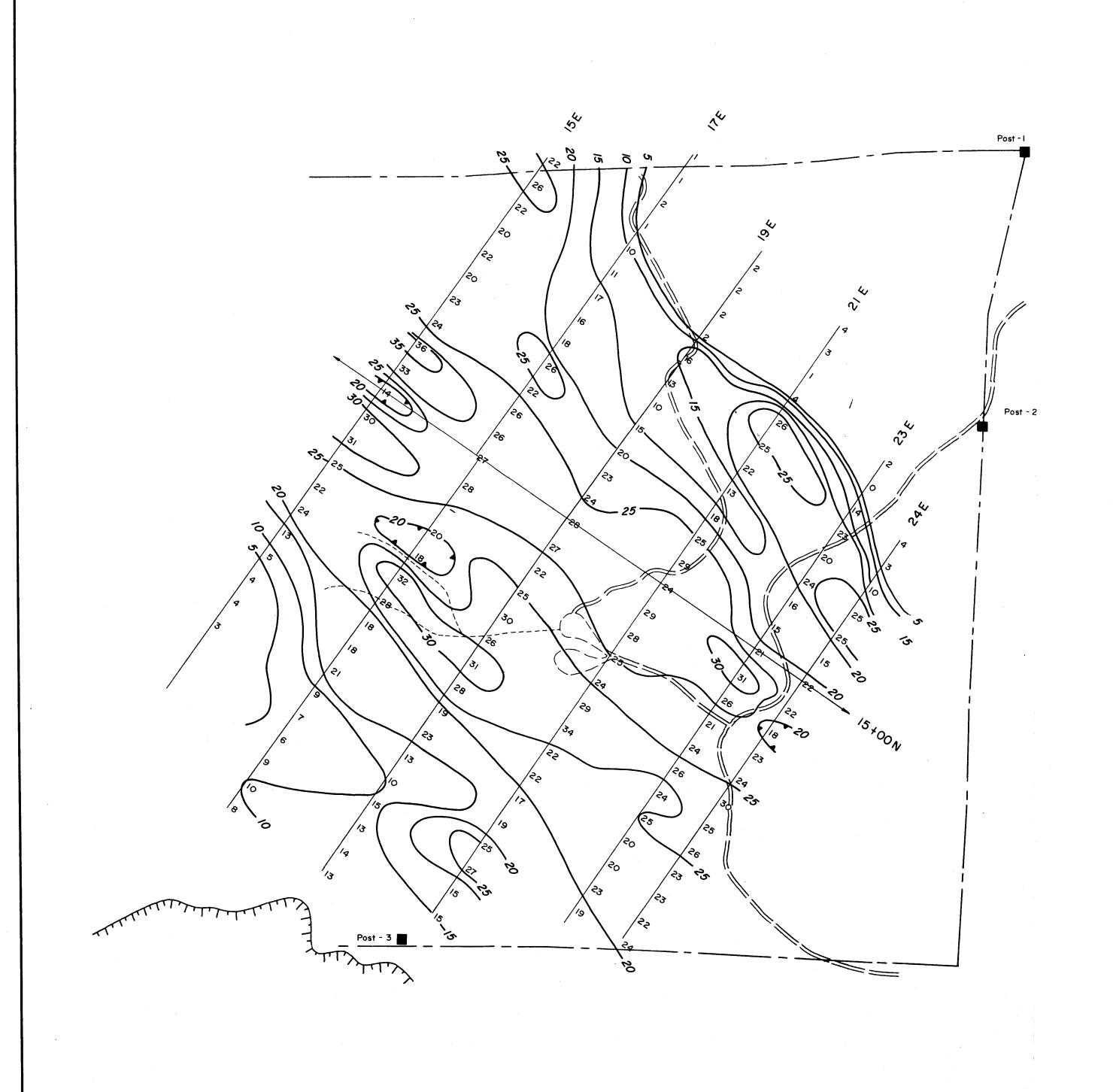












GEOLOGICAL BRANCH ASSESSMENT REPORT

16,843

100 0 100 200 300 400 500 m

ALGO RESOURCES LTD.

OK 182 CLAIMS

INDUCED POLARIZATION
APPARENT CHARGEABILITY

SCALE : 1:5000

DATE : AUGUST, 1987

PRAWING NUMBER FIG. 7

N=2, A=50

WHITE GEOPHYSICAL INC.

