

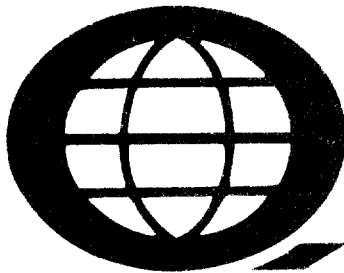


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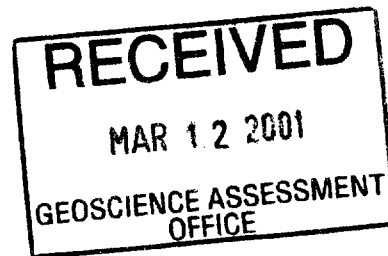
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Quantec Geoscience Inc. Geophysical Survey Assessment Report



Quantec



***Regarding the TRANSIENT ELECTROMAGNETIC
SURVEYS***

over the # 127 WILKIE TWP. PROPERTY,

Wilkie & Walker Twps.,

on behalf of , FALCONBRIDGE LTD.

Timmins, ON

QGI QGI QGI QGI QGI-QGI

S Coulson
C.E. Chiasson
D Eastcott
February 2001
Project QG-170



42A10NE2013 2.20975 WILKIE 010C

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1. INTRODUCTION

- **QGI Project No:** QG-170
- **Project Name:** # 127 Wilkie Twp.
- **Survey Period:** February 23rd to March 3rd, 2001
- **Survey Type:** Off-loop Transient EM
- **Client:** FALCONBRIDGE LTD.
- **Client Address**
P.O. Box 1140, Kidd Creek Mine Site
Timmins, ON
P4N 7H9
Canada
- **Representatives:** Warren Hughes, Dean Rogers
- **Objectives:**

To provide detailed resolution of location and transient electromagnetic signature, of anomalous zones located by airborne electromagnetic surveys.
- **Report Type:** Assessment

2. GENERAL SURVEY DETAILS

2.1 LOCATION

- **Township:** Wilkie & Walker Twps.
- **Province:** Ontario
- **Country:** Canada
- **Nearest Settlement:** Town of Matheson
- **NTS Map Reference #:** 42 A/10

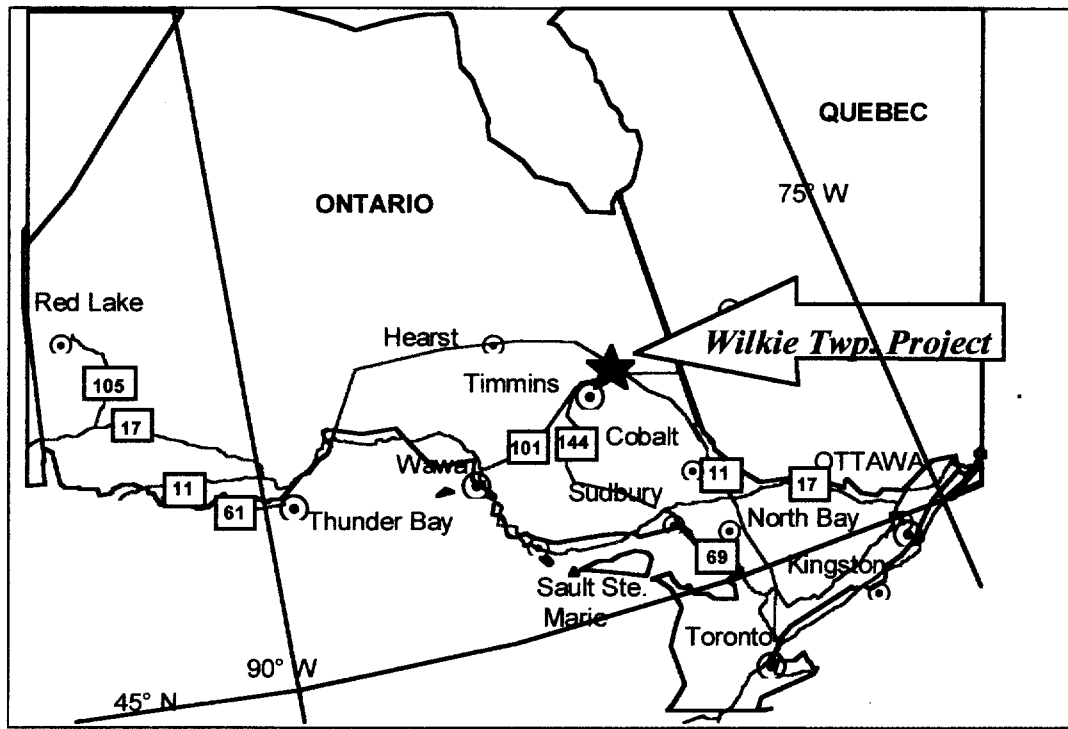


Figure 1: General Location of the Property.

2.2 ACCESS

- **Base of Operations:** Quantec offices, Porcupine, ON
- **Distance by Land to Property:** From the town of Matheson at the Hwy 11 intersection follow Hwy 101 East for 2.4 km to the CARR Rd.#1 Follow the Carr Road North 7.0 km to the start of the SHALLOW RIVER logging road. Follow the Shallow River logging road 10.4 km to a "T" intersection (400m past the Shallow River bridge. Take the left hand logging road 1.4 km to a flagged logging access road on the left hand side. Follow the access road (keeping always to left hand turns) for approximately. 2500 metres to the 1st trail on the left. TL 1300n is approximately 800 meters south of this point.
- **Mode of Access:** The grids were accessed by 4x4 truck on logging access roads and via snowmobile.

2.3 SURVEY GRIDS

- **Coordinate Reference System:** Local exploration grid (non UTM referenced)
- **Established:** immediately prior to survey execution
- **Line Direction:** 360 degrees TN
- **Line Separation:** 100 metres
- **Station Interval:** 20 metres
- **Method of Chaining:** Metric, slope distance

2.4 SURVEY CLAIMS

- **Claim Numbers Surveyed¹:** L790111, L758212, L758217, L758218
L758213, L1227506, L1227509, L758216
L1227508

¹ Note: UTM and Claim information taken from Digital Claim Basemap provided by Falconbridge (03/2001).

3. SURVEY WORK UNDERTAKEN

3.1 GENERALITIES

- **Survey Dates:** February 23rd to March 3rd 2002
- **Survey Period:** 9 days
- **Survey Days (read time):** 4 days
- **Survey Coverage:** 8.7 Line-km

3.2 PERSONNEL

- **Project Supervisor:** Sherwood Coulson, Timmins, ON
- **Project Manager:** Claude Chiasson, Bathurst, NB
- **Technicians** Jacques Frenette, Bathurst, NB

3.3 SURVEY SPECIFICATIONS

- **Configuration:** Off-loop profiling
- **Output Power Stage:** Low Power
- **Dimension:** 3 Component (X,Y and Z)
- **Total TEM Loops:** 1
- **Loop Size:** 1000 by 750 meters
- **Loop Location:** 9600E-10700E, 11200N-11950N
- **Line Interval:** 100 meters
- **Sampling Interval:** 20 meters

3.4 SURVEY COVERAGE

GRID	LINE	NORTHERN EXTENT	SOUTHERN EXTENT	TOTAL (m)
Wilkie	96E	11160	10400	760
Wilkie	97E	11160	10410	750
Wilkie	98E	11160	10400	760
Wilkie	99E	11160	10400	760
Wilkie	100E	11160	10400	760
Wilkie	101E	11160	10400	760
Wilkie	102E	11160	10400	760
Wilkie	103E	11160	10400	760
Wilkie	104E	11160	10510	650
Wilkie	105E	11160	10500	660
Wilkie	106E	11160	10500	660
Wilkie	107E	11160	10500	660
			TOTAL	8.700 km

Table I: TEM Survey Coverage

3.5 INSTRUMENTATION

- **Receiver:** Geonics Digital Protem, 3D-3 coil (200 m² effective area)
- **Transmitter:** Geonics EM-37(2.8 kW output)
- **Power Supply:** Geonics EM-37

3.6 PARAMETERS

Pulse repetition frequency:	30Hz
Gain:	4 – 5
Integration number:	15sec
Approximate Loop Size:	1000 X 750 meters
Current:	7.5 Amps
Turn-off times:	168 to 275 us
Gate positions	80-6136us (see Appendix C)
Synchronization mode:	Crystal

Table II: System Parameters for TEM Survey

- **Coil Conventions:** (see Appendix C)

COMPONENT	COIL ORIENTATION
Z	Positive Up
X	Positive away from the loop (SOUTH)
Y	Positive defined by right hand rule according to Z, X

Table III: Coil Conventions for TEM Survey.

- **Measured Parameters:** dB/dt, nV/m².
- **Data Reduction²:** nanoVolts/Ampere-metre²

3.7 MEASUREMENT ACCURACY AND REPEATABILITY

- **Number of Repeats per Station:** 1
- **Number of Repeats per Day:** all
- **Number of Repeats per Grid:** all
- **Average Repeatability:** 1-3% in early channels
- **Worst Repeatability:** 5%

3.8 DATA PRESENTATION

- **Profiles:** X,Y,Z components, and Total Field @ 1:5000 with variable vertical (profile) scales to best display data.

Profile Format	4-Axis (see Fig. 3)
# of Profiles:	48
Horizontal Map Scale:	1:5000
Vertical Profile Scales:	Varies to best display data for each component, loop and grid (see profiles in Appendix F)
Components Profiled:	3D survey: Total Field, ³ X, Y and Z

Table IV: Surface TEM Profile Specifications.

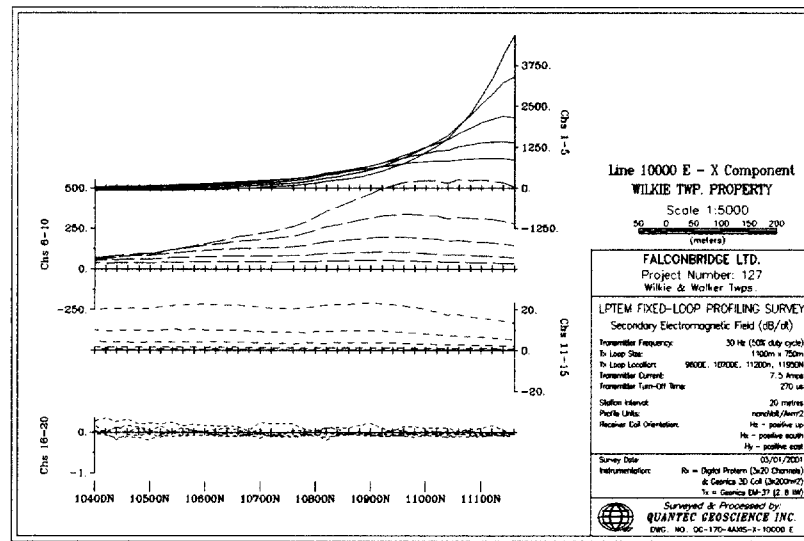


Figure 2: 4-Axis TEM Profile Format.

² Equivalent to Crone units of nanoTesla/second normalized to a unit current.

- **Plan maps:** contoured plan map of Ch 10 X Component @ 1:5000.

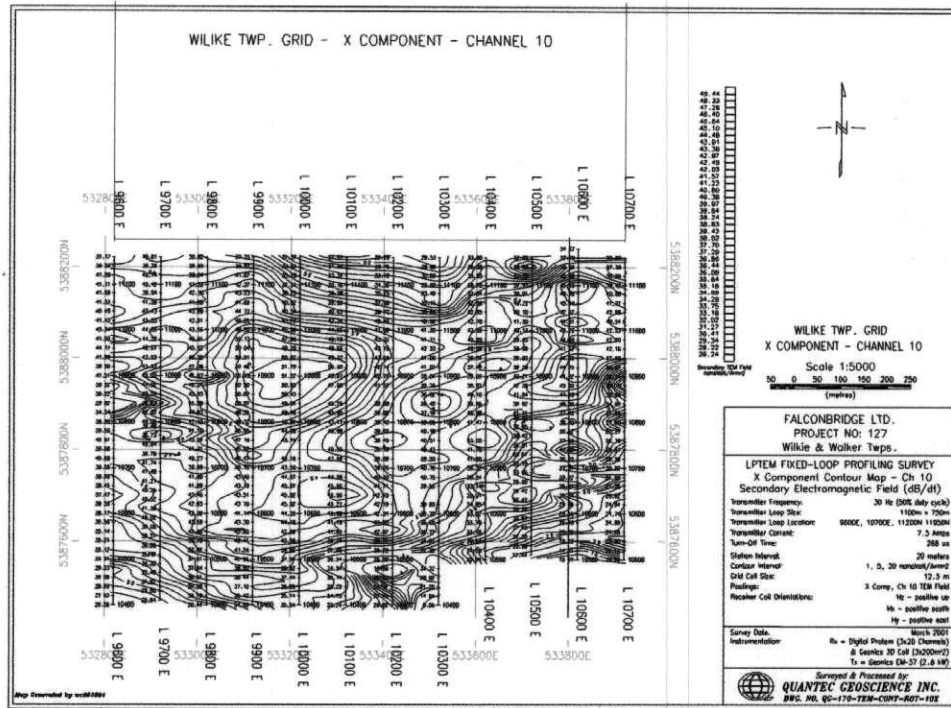


Figure 3: X Component Plan Map Format

- **Digital Data:** Daily raw files and processed data (Geosoft .XYZ format) on diskette.

a) raw data dump files, according to acquisition date (DDMMYY.RAW ie. 010299.raw)
Geonics Digital Protem format (refer to Protem manual)

b) reduced XYZ ASCII data files, according to line number and component
(i.e. l200sk.xyz where, k=component – Z, X, Y or T for Total Field).

Column 1: N-S Line/E-W Station number

Column 2: E-W Station/N-S Line number

Column 3: Primary pulse (millivolts)

Column 4: Channel 1 secondary rate of decay of TEM field (nanoVolt/ampere*m²)

Column 5: Channel 2



Column 23: Channel 20 secondary rate of decay of TEM field (nanoVolt/ampere m²)

$$^3 \text{ TF} = \text{SQRT} \{ (\text{dB}_X/\text{dt})^2 + (\text{dB}_Y/\text{dt})^2 + (\text{dB}_Z/\text{dt})^2 \}, \text{ using Quantec Geoparse}^{\text{TM}}$$

4. SURVEY RESULTS

The transient electromagnetic (TEM) surveys at the **Wilkie Twp. Property** were designed to detect and delineate conductors, relating to massive sulphides, to depths up to or exceeding 150-250 metres. The surface Fixed Loop TEM technique was chosen based on its deep penetration and rapid reconnaissance characteristics - with the Off-Loop technique selected for its ability to detect subvertical to moderate dipping conductor geometries. The results of the TEM survey over the Wilkie Twp. Property are outlined in the Anomaly Table below providing a line by interpretation and on the accompanying Interpretation Plan map.

The TEM survey indicates the Wilkie grid is covered by an extensive layer of conductive overburden creating a conductive halfspace environment. This is evident in the migration in time of the Hz cross overs and Hx peaks. The overburden layer appears to thin in the northeast and southern portions of the grid. However, two weak conductor horizons, Conductors A and B, are superimposed within the conductive halfspace response.

Conductor A strikes grid east-west from line 9700E at 10900N to line 10600E at 11100N. The conductor is best defined as a 12 channel response on line 9900E at 10900N. Due to the influence from the conductive halfspace, it is not possible to determine a depth or dip. Given the weak nature of the response, the source of the conductor may be related to thickening of the overburden or a weakly mineralized contact or structure.

Conductor B strikes grid east-west from line 9700E at 10600N to line 10100N at 10640N. It may continue northeast from line 10100N, however, the responses become poorly resolved. As with Conductor A, this conductor is generally 12 channels suggesting the response may be overburden related or a weakly mineralized contact or structure. Depth and dip estimates are not possible due the strong half-space influence.

LINE	STATION	# CHANNELS	DEPTH	QUALITY	COMMENTS
9700E	10600N	12	?	Weak	Strong halfspace influence. Weak conductor.
9700E	10900N	12	?	Weak	Strong halfspace influence. Weak conductor.
9700E	11100N	11	?	Weak	Possible weak near surface conductor.
9800E	10580N	12	?	Weak	Strong halfspace influence. Weak conductor.
9800E	10900N	12	?	Weak	Strong halfspace influence. Weak conductor.
9900E	10600N	12	?	Weak	Strong halfspace influence. Weak conductor.
9900E	10900N	12	?	Weak	Strong halfspace influence. Weak conductor.
10000E	10600N	12	?	Weak	Strong halfspace influence. Weak conductor.
10000E	10900N	12	?	Weak	Strong halfspace influence. Weak conductor.
10100E	10500N	14	?	Questionable	Maybe bedrock ridge.
10100E	10640N	12	?	Weak	Strong halfspace influence. Weak conductor.
10100E	10920N	12	?	Weak	Strong halfspace influence. Weak conductor.
10200E	10500N	14	?	Questionable	Maybe bedrock ridge i.e. thinning of OB.
10200E	10940N	12	?	Weak	Strong halfspace influence. Conductor weakening.
10300E	10480N	12	?	Questionable	Maybe bedrock ridge i.e. thinning of OB.
10300E	10960N	11	?	Weak	Strong halfspace influence.
10400E	10740N	12	?	Weak	Strong halfspace influence. Weak conductor.
10400E	10980N	12	?	Weak	Strong halfspace influence. Weak conductor.
10400E	11040N	11	?	Weak	Possible near surface weak conductor.
10500E	10660N	12	?	Weak	Possible near surface weak bedrock conductor.
10500E	10880N	11	?	Weak	Strong halfspace influence. Weak conductor.
10500E	11040N	11	?	Weak	Strong halfspace influence. Weak conductor.
10600E	10740N	12	?	Weak	Possible near surface conductor.
10600E	10900N	11	?	Weak	Strong halfspace influence. Weak conductor.
10600E	11100N	8	?	Weak	Possible near surface conductor.
10700E	10700N	11	?	Weak	Possible near surface conductor.
10700E	10780N	11	?	Weak	Possible near surface conductor.
10700E	10840N	12	?	Weak	Possible near surface conductor.
10700E	10980N	12	?	Weak	Strong halfspace influence. Weak conductor.

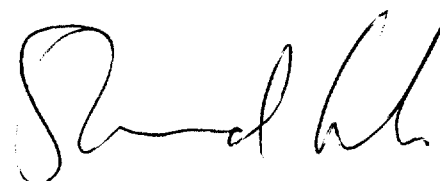
Table IV: Anomaly Table for TEM Survey.

5. CONCLUSIONS AND RECOMMENDATIONS

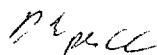
The TEM survey over the Wilkie Twp. Property was successful in delineating 2 conductor horizons within a moderate to strongly conductive halfspace. However, given the weak nature of the responses, the source of these conductors is interpreted as overburden related or weak mineralization. These responses are not typical of strongly conductive, copper rich, massive sulphide type mineralization but may be related to weak zinc rich mineralization.

These conductors are rated geophysical, low priority targets based on the survey objectives. The results should be correlated with other geophysical and geological information to determine their importance. Any further work should be based on geological importance only.

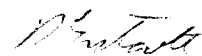
RESPECTFULLY SUBMITTED
QUANTEC GEOSCIENCE LTD.



S.T. Coulson
Senior Geophysicist, QGI



Claude Chaisson
Project Manager, QGI



David Eastcott
Technical Services

Porcupine, ON
March 2001

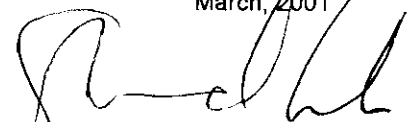
APPENDIX A

STATEMENT OF QUALIFICATIONS:

I, Sherwood T. Coulson, hereby declare that:

1. I am a consulting geophysicist with residence in Porcupine, Ontario and am presently employed in this capacity with Quantec Consulting Inc. of Porcupine, Ontario.
2. I am a graduate of Cambrian College, Sudbury, Ontario in 1974 with an Honours Diploma in Geophysical Engineering Technology.
3. I have practiced my profession in Europe and North America continuously since graduation.
4. I am a member of the Canadian Society of Exploration Geophysicists and the Prospectors and Developers Association.
5. I have no interest nor do I expect to receive any interest, direct or indirect, in the properties or securities of **Falconbridge Limited**.
6. I writer of the interpretive portion of this report. The statements made by me in this report represent my best opinion and judgment based on the information available to me at the time of the writing.

Porcupine, ON
March, 2001



S.T. Coulson, Dipl. Geoph.
Senior Geophysicist
Quantec Group

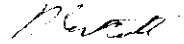
APPENDIX A

STATEMENT OF QUALIFICATIONS

I, David Eastcott, hereby declare that:

1. I am a geophysical technologist with residence in South Porcupine, Ontario and am presently employed in this capacity with Quantec Geoscience Ltd. of Waterdown, Ontario.
2. I have practiced my profession continuously since 1996, in Canada, the United States, Mexico and Mongolia.
3. I have no interest, nor do I expect to receive any interest in the properties or securities of **Falconbridge Limited**.
4. I am the editor of the logistics portion of this report; reviewed and assisted in the preparation of the final map products included. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of writing this report.

Porcupine
March, 2001



David Eastcott
Technical Services
Quantec Group

APPENDIX A

STATEMENT OF QUALIFICATIONS

I the undersigned, Claude E. Chiasson, residing at 125 Notre Dame Street, Bathurst, NB hereby declare that:

1. I am a 1974 graduate, Geological Technician, from *Sir Sanford Fleming College* of Applied Arts & Sciences, Lindsay, Ontario.
2. I have been continuously employed in the exploration field for the past 26 years throughout Canada and the United States (7 years).
3. I have extensive field experience supervising and carrying out ground magnetic, very low frequency electromagnetic (VLF-EM), frequency horizontal loop electromagnetic (HLEM), self-potential (SP), audio-magneto telluric (AMT), induced polarization (IP), surface & down-hole, time domain electromagnetic (TDEM) and gravimetrical geophysical methods.
4. I do not have, hold or expect any monetary or other interest in any mining claims or mining companies other than as a paid consultant for carrying out contracted geophysical surveys.
5. I have personal knowledge of the described property and geophysical surveys due to my position as an onsite field supervisor for the contracted survey.

Signed in Porcupine ON, the 4th day of March 2001

Claude E. Chiasson
Geological Technician

APPENDIX B

THEORETICAL BASIS AND SURVEY PROCEDURES

TEM SURFACE PROFILING

TEM profiling is conducted on lines either adjacent to (Off-Loop mode) or surrounded by (In-Loop mode) a large fixed rectangular transmit loop. Current is passed through the loop which following the Turn-Off, produces a primary magnetic field (H) both inside and outside (Figure 9). This primary field induces a vortex current pattern, which energizes conductors and which in turn create their own secondary magnetic field (B_s). The rate of change of the decaying secondary magnetic flux (dB_s/dt) is measured as the vertical (H_z), in-line horizontal (H_x) and/or cross line horizontal (H_y) vector components on surface using an air-core sensor coil. These measurements of the TEM decay (20 log-time slices) are taken during the "Off-Time", using a 30 cycle/sec, base repetition rate.

In keeping with the industry standard, the primary field is always considered positive up inside the loop and negative down outside. Similarly, for secondary EM fields, the receiver coil is oriented positive vertical up for the H_z component. The convention for In-Loop surveys, has the in-line component, H_x oriented either positive east (for grid EW lines) or north (for grid NS lines). The Off-Loop survey convention differs, with the receiver coil orientation for H_x pointing positive away from the transmit loop (for EW or NS lines). Finally, the sign convention in all cases, has the H_y component pointing positive orthogonal to the left of the H_x , according to the right-hand-rule.

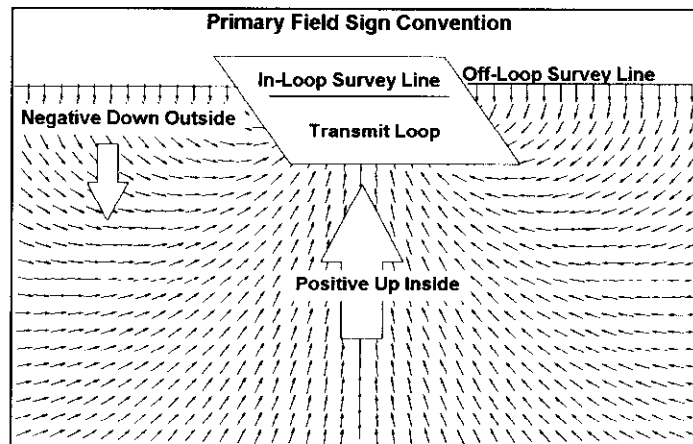


Figure 2: Primary field sign convention for TEM surveys.

At the end of each survey day, the stored data are transferred to a microcomputer where they corrected for the turn-off time, loop area, system gain and current, and converted from millivolts to nanoVolts per ampere meter squared or nanoVolts per meter squared. The data are then transferred to disk for storage and processing. Report quality field plots are generated on site, using a 24-pin printer in order to monitor the data characteristics and to provide a preliminary interpretation capability.

The following equations govern the transient EM response for buried plate-like conductive bodies¹

¹ From Geonics Limited, EM-37 TEM System Design Parameter, Mississauga, Ont., 1982.

Target Response to Transmitter Current Waveform:

$$emf = \frac{1}{\tau} e^{-t/\tau}$$

where: t = fixed time

e = exponential decay

τ = time constant of conductor

Equation 1: Conductor Response to the Transient EM Waveform

The time constant of the response is alternatively defined as the slope of the lin-log decay curve (Geonics) or, more exactly, as the time channel where the amplitude of the decay collapses to 37% (1/e) of its maximum value. Both τ and the analogous decay strength (ie., the number of anomalous channels above background), are commonly used as indicators of conductor quality. This relationship between decay-strength and the conductivity-thickness can easily be demonstrated in the following equation for a vertically dipping conductive sheet:

$$\tau = \frac{\sigma\mu t h}{\pi^2} \text{ for a thin plate}$$

where σ = conductivity of target

μ = magnetic susceptibility

t = thickness of plate

h = vertical extension of plate

Equation 2: Transient EM Decay Time Constant

thereby giving, for an infinite vertical sheet:

$$\sigma t = \frac{\pi^2}{\mu h} \tau \approx \tau / 0.31 \text{ mhos / metre (siemens)}$$

Equation 3 Conductivity Thickness

From these equations and relationships, it therefore becomes obvious of the common use of the anomaly strength of decay as a simple, rule-of thumb indicator of the relative conductivity-thickness product for TEM surveys.

In addition, the total secondary field is calculated using the three components (H_x , H_y and H_z) in the following formula

$$H_{tot} = \sqrt{H_x^2 + H_y^2 + H_z^2} \text{ nanoVolt / Am}^2.$$

Equation 4: Transient EM Total Secondary Field

APPENDIX D

OPERATOR COMMENTS

The regular access to the property via the Black river had to be abandoned due to the amount of slush and the inability to transport heavy loads on the river by skidoo. Two extra days were required to find access and pack a trail overland to the loop position location. Due to the large size of the loop and the conditions in the field, cutting of the loop location was required prior to laying of the loop wire. GPS was used to help position the loop corners:

Nad 27 zone 17

NW Corner	appx 9600E, 11950N	532820e, 5388996n
NE Corner	appx 10700E, 11950N	533934e, 5389010n
SE Corner	L 10700E, 11200N	533938e, 5388255n
SW Corner	L 9600E, 11200N	532847e, 5388232n

The grid appears to be the refurbishing of old grid lines. The line cutting was minimal in places and the chaining was very inconsistent. The following are the most obvious of errors. The receiver (data plot point) was always referenced to BL 10900n regardless of what the station picket indicated. Some obvious distance chaining (not labeling) discrepancies were fixed when possible in the field.

L 9700E chain position error, 10 metres between stns. 10780 to 10800N

L 10000E 20m chain error, no station 10460N, two 30m chain distance errors (fixed), tags not legible

L 10100E 20m chain error, no station 10440N

L 10500E chain position error, 10 metres between stns. 10800N to 10820N

APPENDIX E

INSTRUMENT SPECIFICATIONS

Digital Protem Ground Transient Electromagnetic System Technical Specifications

Receiver

Measured Quantity:	Time rate of decay of magnetic flux along 3 axes
Sensors:	
1. (L.F.):	Air-cored coil of bandwidth 60 kHz; 100 cm diameter
2. (H.F.):	Air-cored coil of bandwidth 850 kHz; 100 cm diameter
3. (3D-3):	Three orthogonal component sensor; simultaneous operation
4. (3D-1):	Three orthogonal component sensor; sequential operation
Time channels:	20 geometrically spaced time gates for each base frequency gives range from 6 μ sec to 800 msec.
Repetition Rate: (Base Frequency)	0.3 Hz, 0.75, 3, 7.4, 30, 75 or 285 Hz for 60 Hz power-line networks
Synchronization:	1) reference cable. 2) high stability (oven controlled) quartz crystals. (Switch selectable)
Integration time:	2, 4, 8, 15, 30, 60, 120, 240 sec.
Calibration:	Internal self calibration External Q coil calibration (optional)
Keyboards:	Two 3 x 4 matrix sealed key pads with positive tactile feedback
Gain:	Automatic or manual control
Dynamic Range:	23 bits (132 dB)
Display Quantity:	(1) Table of time rate of decay of magnetic flux (dB/dt) (2) Curve of rate of decay of magnetic flux (dB/dt) (3) Table of apparent resistivity (ρ_a) (4) Curve of apparent resistivity (ρ_a) (5) Profile of dB/dt (6) Real time noise monitor (7) Calibration curve (8) Data acquisition statistics (real time)
Storage:	Solid state memory with capacity for over 3000 data sets
Display:	8 lines by 40 character (240 x 64 dot) graphic LCD
Data Transfer:	Standard RS-232 communications port.
Processor:	CMOS 68HC000 8 MHz CPU

Receiver Battery: 12 volts rechargeable battery for 8 hours continuous operation. 6 hours in XTAL mode

Receiver Size: 34 x 38 x 27 cm

Receiver Weight: 15 kg

Operating Temp.: -40°C to +50°C

Transmitters:
(1) Geonics TEM47
(2) Geonics TEM57
(3) Geonics TEM37

GATE	285/237.5 Hz			75/62.5 Hz			30/25 Hz			GATE
1	6.000	6.813	1.625	32.00	35.25	6.500	80.00	88.13	16.25	1
2	7.625	8.688	2.125	38.50	42.75	8.500	96.25	106.9	21.25	2
3	9.750	11.13	2.750	47.00	52.5	11.00	117.5	131.3	27.5	3
4	12.50	14.19	3.375	58.00	64.75	13.50	145.0	161.9	33.75	4
5	15.88	18.07	4.375	71.5	80.25	17.50	178.8	200.6	43.75	5
6	20.25	23.06	5.625	89.00	100.3	22.50	222.5	250.6	56.25	6
7	25.88	29.44	7.125	111.5	125.8	28.50	278.8	314.4	71.25	7
8	33.00	37.56	9.125	140.0	158.3	36.50	350.0	395.6	91.25	8
9	42.13	47.94	11.63	176.5	199.8	46.50	441.3	499.4	116.3	9
10	53.75	61.13	14.75	223.0	252.5	59.00	557.5	631.3	147.5	10
11	68.50	77.94	18.88	282.0	319.8	75.50	705.0	799.4	188.8	11
12	87.38	99.38	24.00	357.5	405.5	96.00	893.8	1014	240.0	12
13	111.4	126.7	30.63	453.5	514.8	122.5	1134	1287	306.3	13
14	151.7**	166.4	29.38	576.0	654.3	156.5	1440	1636	391.3	14
15	181.1	206.0	49.88	732.5	832.3	199.5	1831	2081	498.8	15
16	231.0	262.8	62.63	932.0	1059	254.5	2330	2648	636.3	16
17	294.6	335.2	81.25	1187	1349	325.0	2966	3373	812.5	17
18	375.9	427.7	103.6	1512	1719	414.5	3779	4297	1036	18
19	479.5	545.6	132.1	1926	2190	528.5	4815	5475	1321	19
20	611.6	695.9	168.5	2455	2792	674.0	6136	6978	1685	20
21*	780.1			3129			7821			21*

Table V: Digital Protem Gate Locations

* End of Gate 20

** A Gap of 9.7 µsec exists between Gate 13 and Gate 14 in the micro-frequency range/

This Table applies to both synchronization modes regardless of which of TEM37, TEM47 and TEM57 transmitters is used, provided that correct Tx model is selected in Header (2.4).

Note: 7.5/6.25 and 0.75/0.625 Hz proportional to 75/62.5 Hz
3/2.5 and 0.3/0.25 Hz proportional to 30/25 Hz

EM-37 Transmitter Technical Specifications

Current Wave form:	bipolar square wave.
Repetition Rate:	3Hz, 7.5Hz or 30Hz in countries using 60Hz power line frequency; 2.5Hz, 6.25Hz or 25Hz in countries using 50Hz power line frequency; all six base frequencies are switch selectable.
Turn-off Time(t):	fast linear turn-off maximum of 450 μ sec. at 30 amps into a 300x600 meter loop. Decreases proportionally with current and the root of the loop area to a maximum of 20 μ sec. Actual value of t read on front panel meter.
Transmitter Loop:	any dimensions from 40x40 meters to 300x600 meters maximum at 30 amps. Larger dimensions at reduced current. Transmitter output voltage switch adjustable for smaller loops. Value of loop resistance read from front panel meter; resistance must be greater than 1 ohm on lowest setting to prevent overload.
Protection:	circuit breaker protection against input over voltage; instantaneous solid state protection against output short circuit; automatically resets on removal of short circuit. Input voltage output voltage and current indicated on front panel meter.
Output voltage:	24 to 160 volts (zero to peak) maximum
Output power:	2800 watt maximum
Motor generator:	5 HP Honda gasoline engine coupled to a 120 volt, three phase, 400 Hz alternator. Approximately 8 hours continuous operation from built-in fuel tank.

Component Dimensions and Weights

Transmitter Console :	20 by 42 by 32 cm, 20 kg
GPU:	44 by 32 by 21 cm, 65 kg

APPENDIX E

LIST OF MAPS

- **LPTM Profiles: Multi-Channel 4-Axis Profile Plots:** (time rate of decay of the secondary electromagnetic field, 3D: Total Field, X, Y and Z components, 1:5000 scale, nanoVolts per metre²)

LINE	DRAWING # (K=X,Y,Z and TF for Total Field)
L 9600 E	Qg-170-4AXIS-K-9600 E
L 9700E	Qg-170-4AXIS-K-9700 E
L 9800E	Qg-170-4AXIS-K-9800 E
L 9900E	Qg-170-4AXIS-K-9900 E
L 10000 E	Qg-170-4AXIS-K-10000 E
L 10100E	Qg-170-4AXIS-K-10100 E
L 10200 E	Qg-170-4AXIS-K-10200 E
L 10300 E	Qg-170-4AXIS-K-10300 E
L 10400 E	Qg-170-4AXIS-K-10400 E
L 10500 E	Qg-170-4AXIS-K-10500 E
L 10600 E	Qg-170-4AXIS-K-10600 E
L 10700E	Qg-170-4AXIS-K-10700 E
# Profiles	48

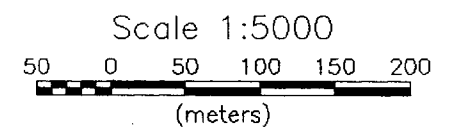
PLAN MAPS (1:5000 SCALE):

POSTED/CONTOURED TOTAL FIELD PLAN MAPS: QG-170-TEM-CONT-10X
-POSTED/CONTOURED TOTAL FIELD PLAN MAPS: QG-170-TEM-INT-ROT-10X

APPENDIX F

PLAN MAPS AND SECTIONS

Line 9600 E - Z Component
WILKIE TWP. PROPERTY



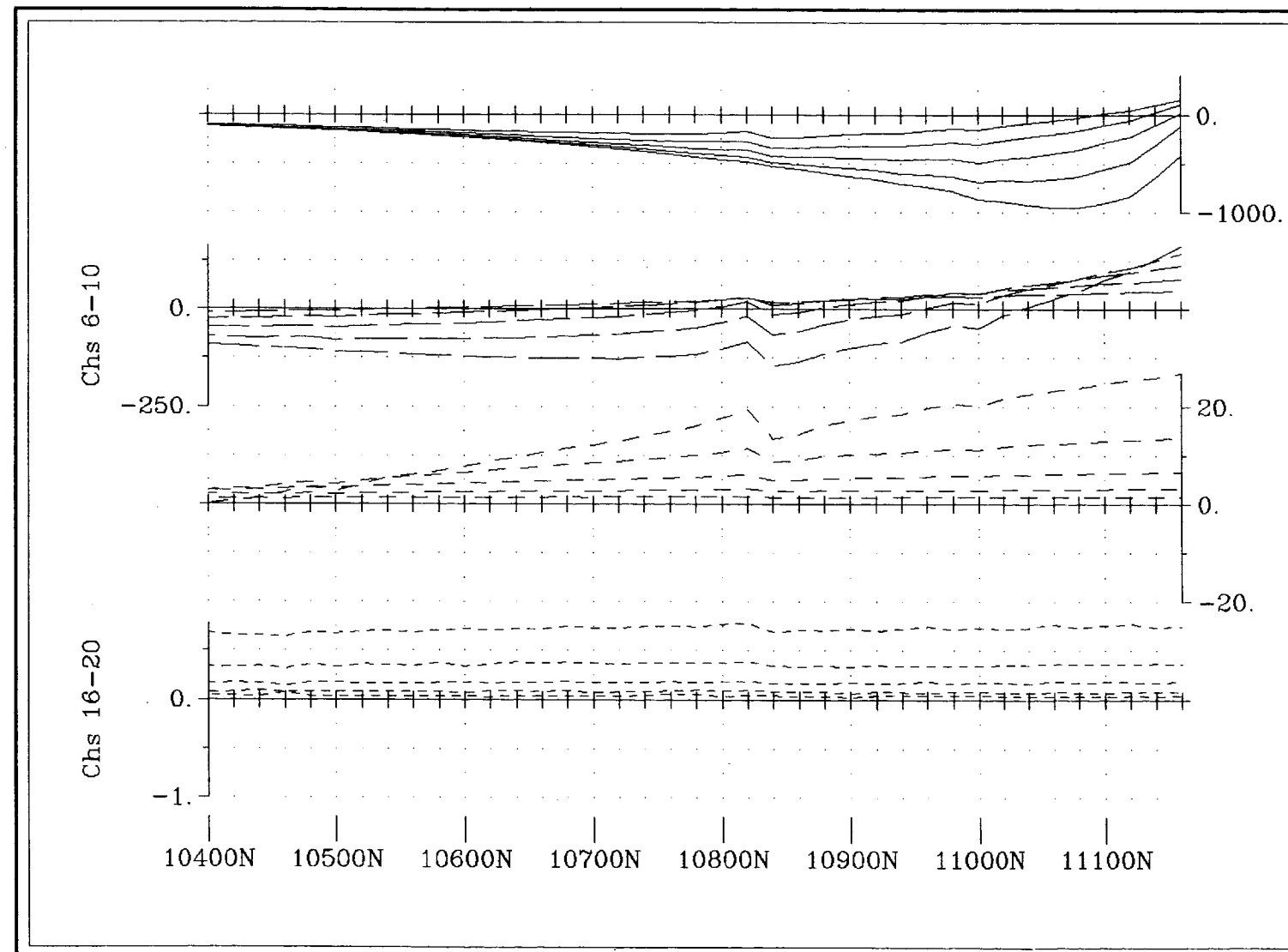
FALCONBRIDGE LTD.
 Project Number: 127
 Wilkie & Walker Twps.

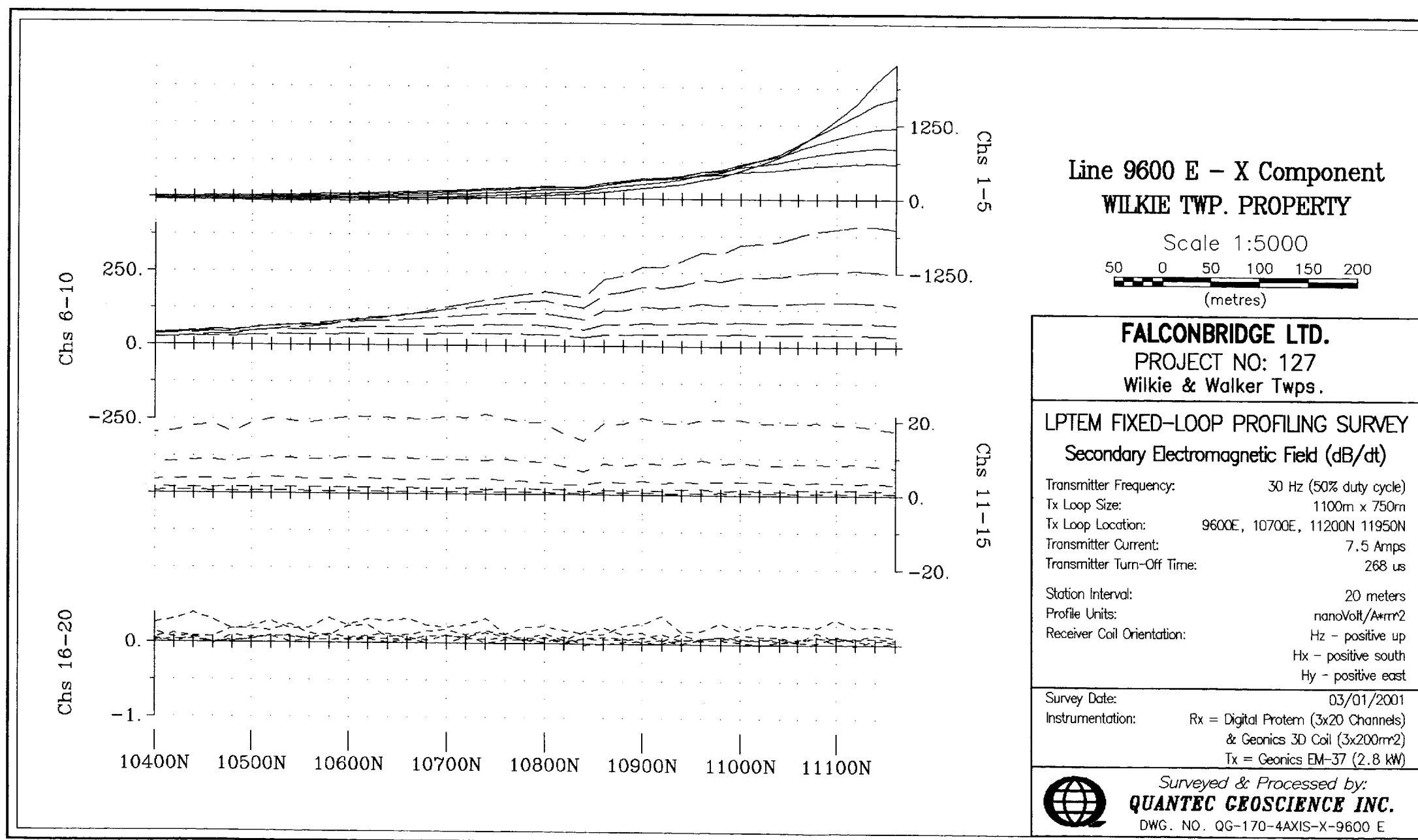
LPTM FIXED-LOOP PROFILING SURVEY
 Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)
 Tx Loop Size: 1100m x 750m
 Tx Loop Location: 9600E, 10700E, 11200N, 11950N
 Transmitter Current: 7.5 Amps
 Transmitter Turn-Off Time: 275 us
 Station Interval: 20 metres
 Profile Units: nanoVolt/A²m²
 Receiver Coil Orientation: Hz - positive up
 Hx - positive south
 Hy - positive east

Survey Date: 03/03/2001
 Instrumentation: Rx = Digital Protem (3x20 Channels)
 & Geonics 3D Coil (3x200m²)
 Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
 DWG. NO. QG-170-4AXIS-Z-9600 E





**Line 9600 E - X Component
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(metres)

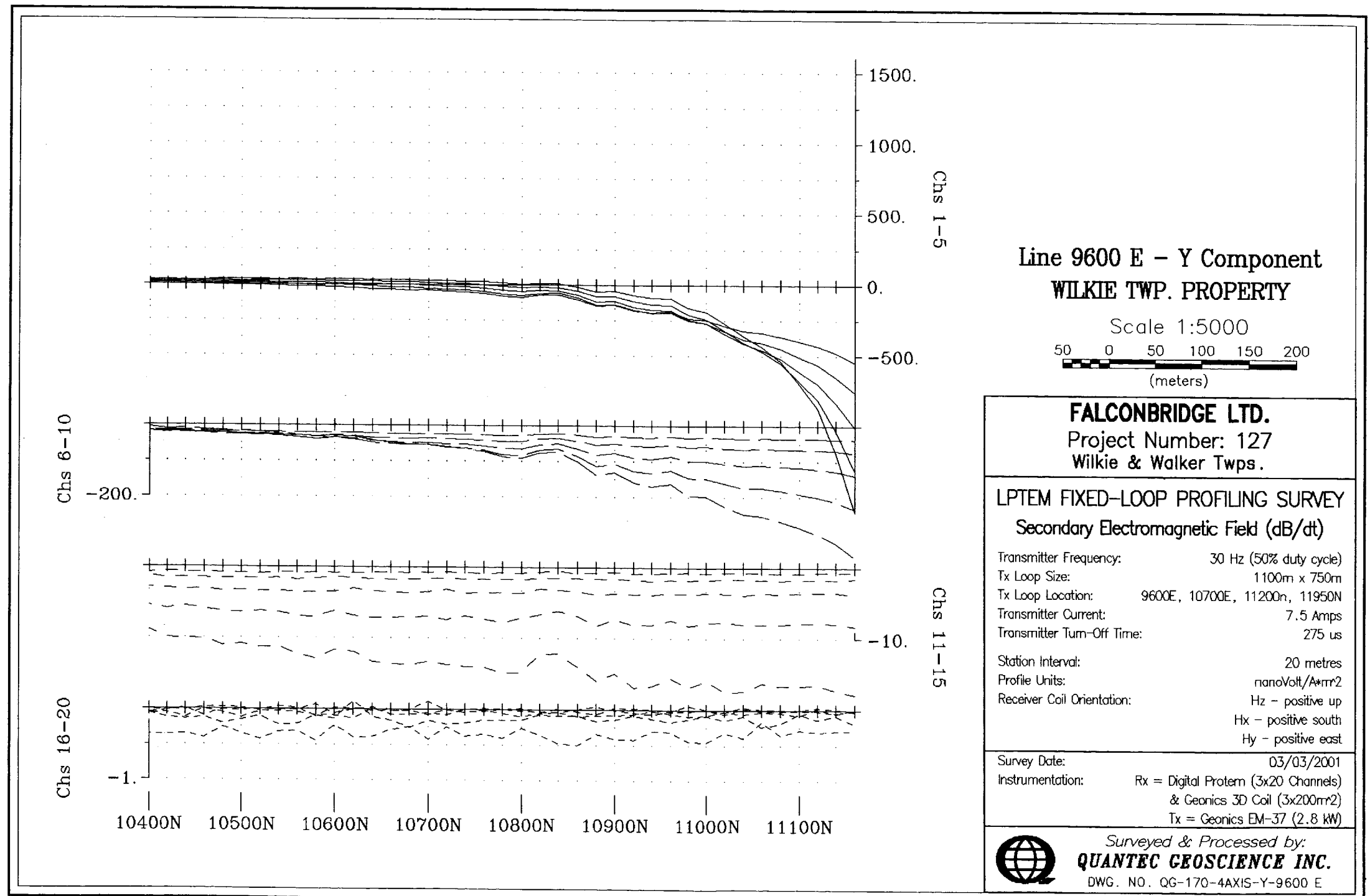
FALCONBRIDGE LTD.
PROJECT NO: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200N 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 268 us
Station Interval: 20 meters
Profile Units: nanoVolt/A²m²
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

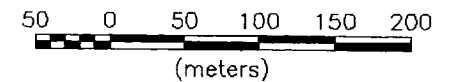
Survey Date: 03/01/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200m²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-X-9600 E



**Line 9600 E - Y Component
WILKIE TWP. PROPERTY**

Scale 1:5000



FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

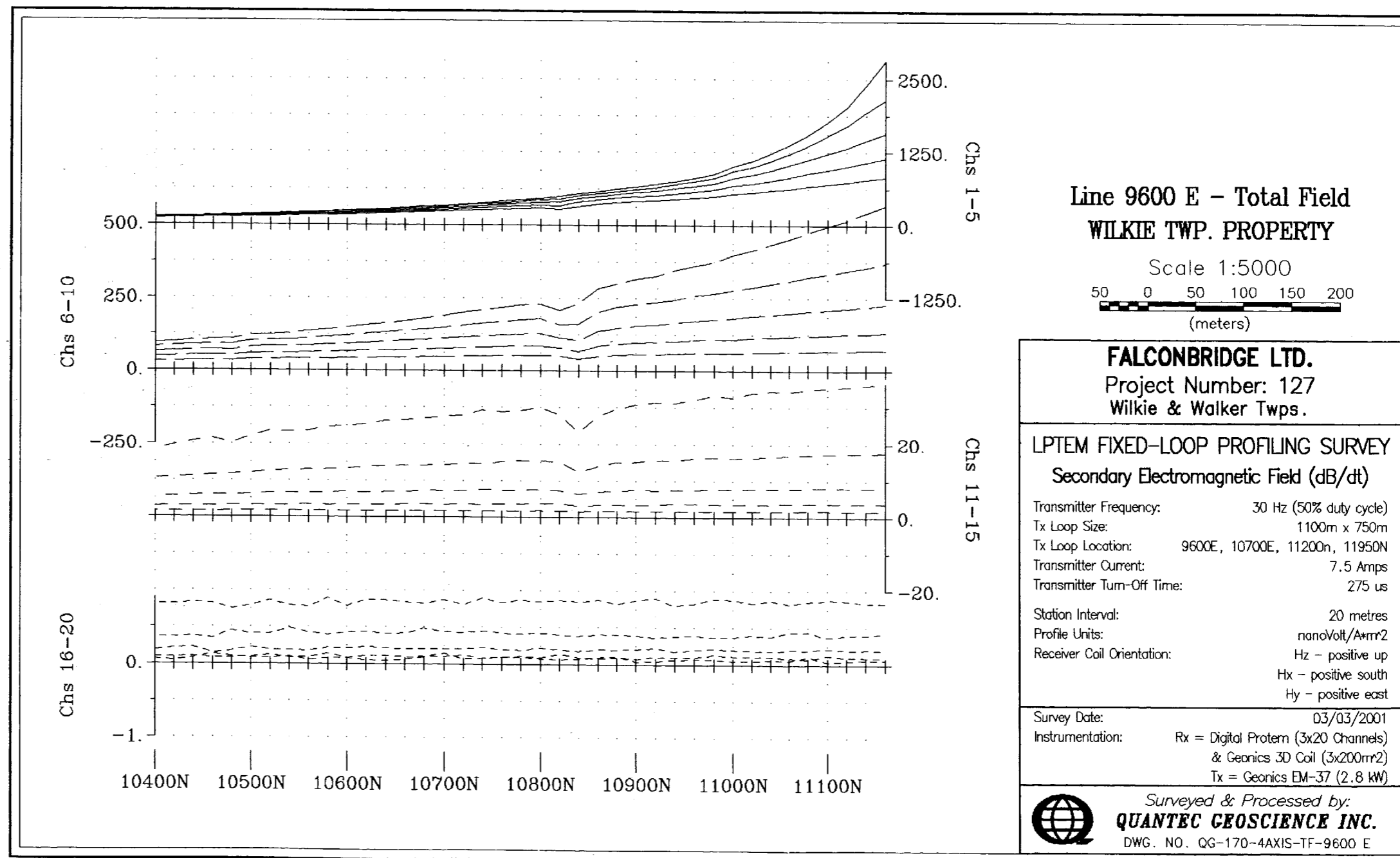
**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200n, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 275 us

Station Interval: 20 metres
Profile Units: nanoVolt/Amm²
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

Survey Date: 03/03/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200mm²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-Y-9600 E



**Line 9600 E - Total Field
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(meters)

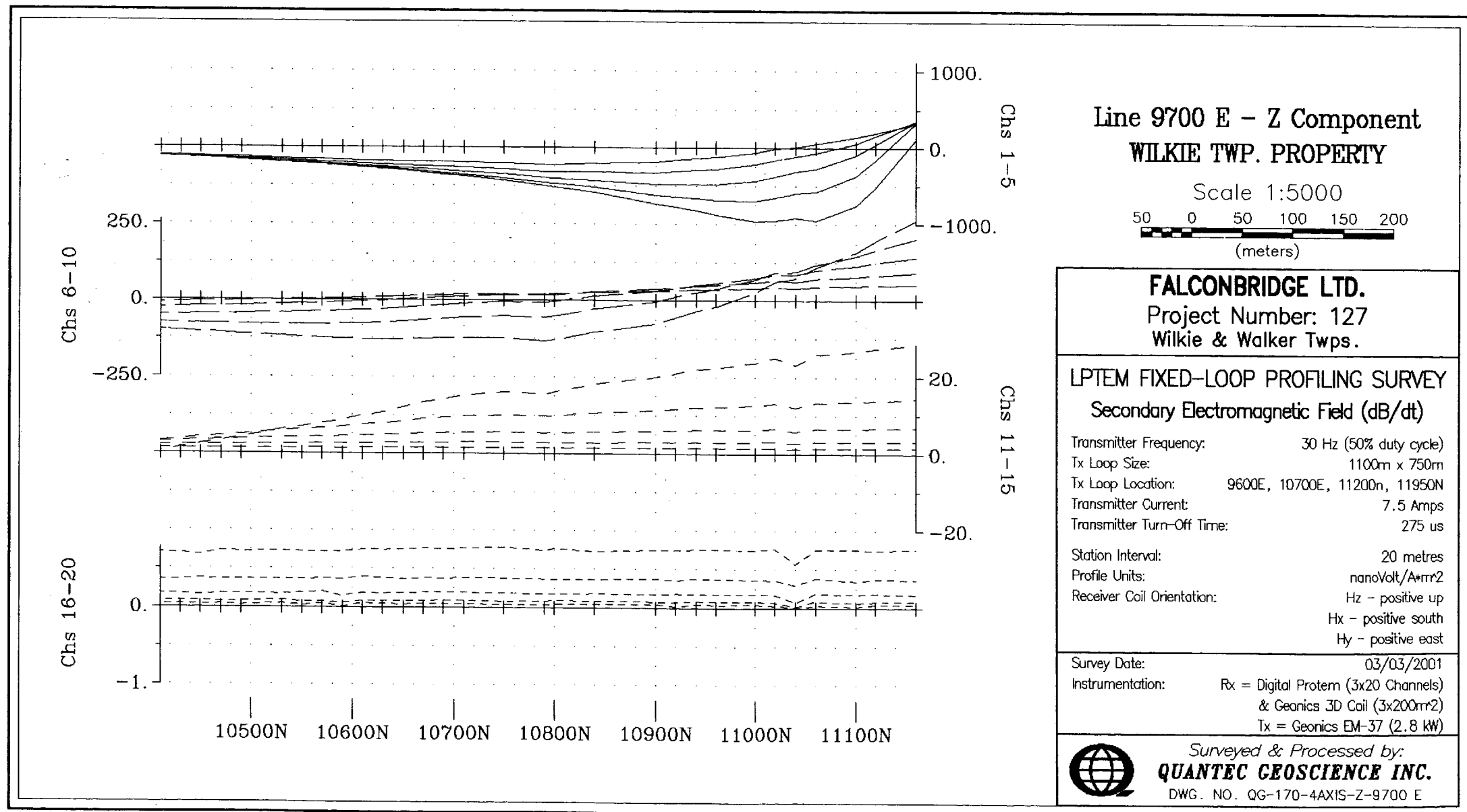
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200N, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 275 us
Station Interval: 20 metres
Profile Units: nanoVolt/A*mm²
Receiver Coil Orientation: Hx - positive up
Hy - positive south
Hz - positive east

Survey Date: 03/03/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200mm²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-TF-9600 E



**Line 9700 E - Z Component
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(meters)

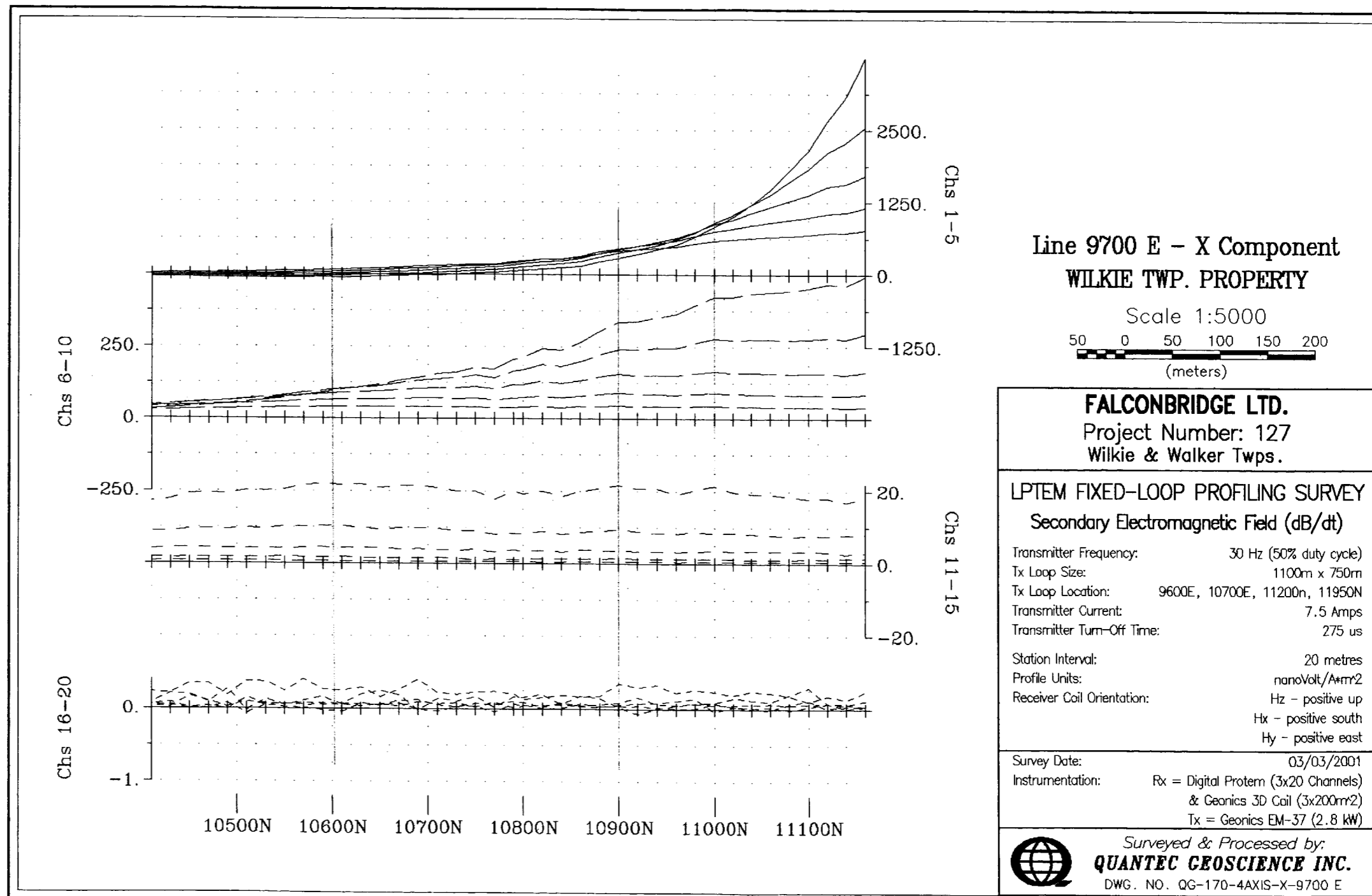
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200N, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 275 us
Station Interval: 20 metres
Profile Units: nanoVolt/Amm²
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

Survey Date: 03/03/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200mm²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-Z-9700 E



**Line 9700 E - X Component
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(meters)

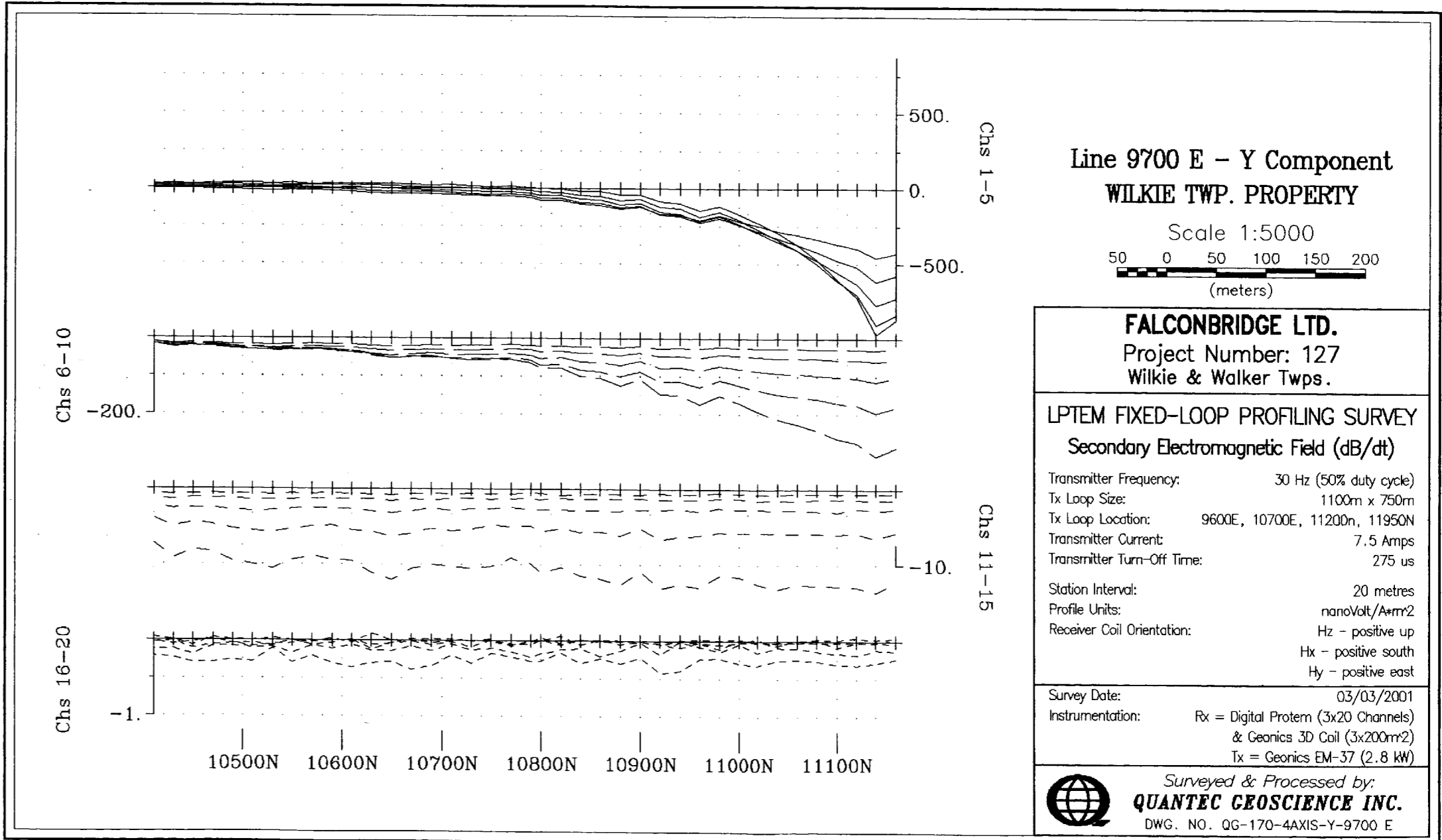
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200N, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 275 us
Station Interval: 20 metres
Profile Units: nanoVolt/A*m²
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

Survey Date: 03/03/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200m²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-X-9700 E



**Line 9700 E - Y Component
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(meters)

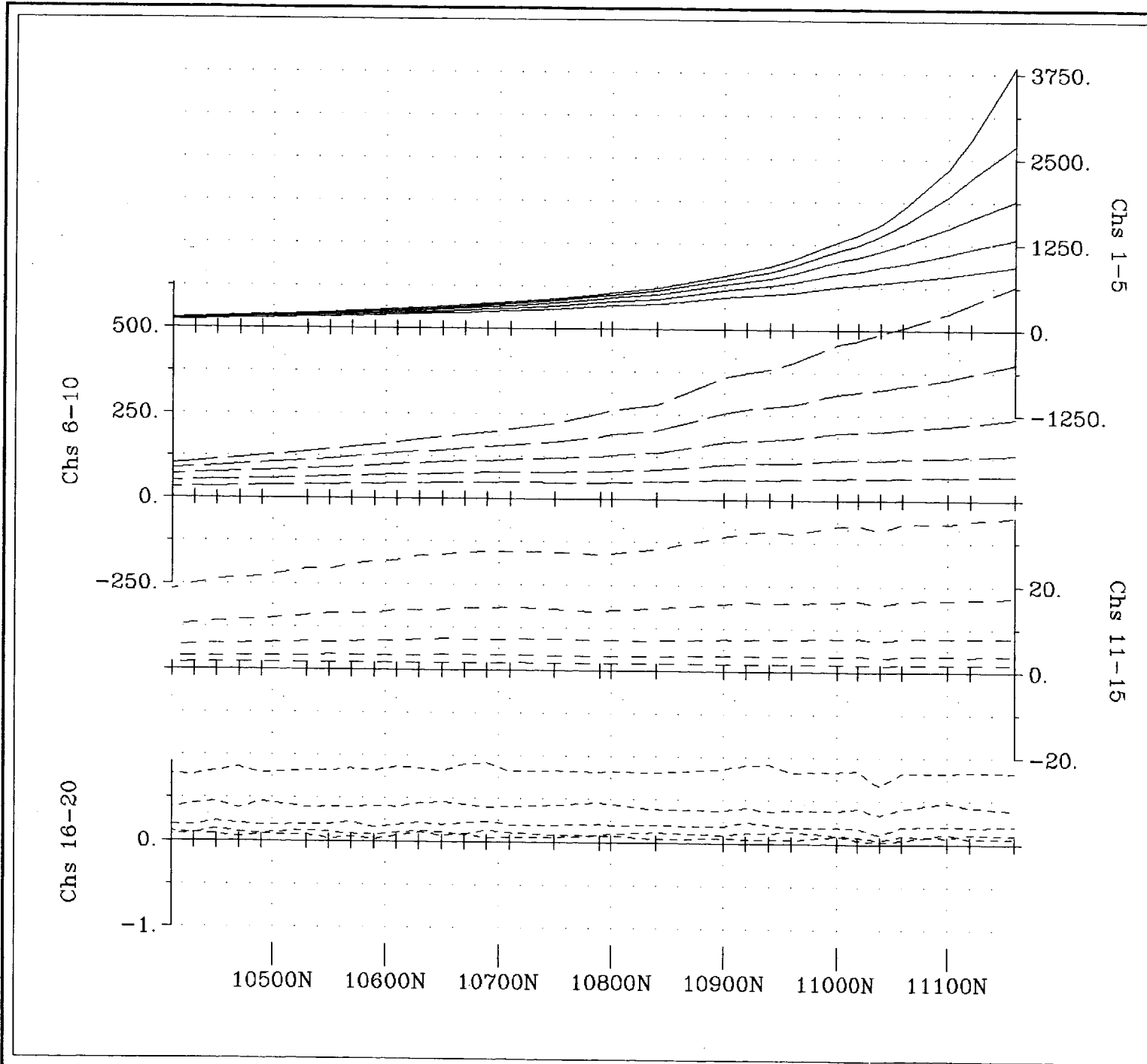
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200n, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 275 us
Station Interval: 20 metres
Profile Units: nanoVolt/A·m²
Receiver Coil Orientation: Hx - positive up
Hy - positive south
Hz - positive east

Survey Date: 03/03/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200m²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-Y-9700 E



**Line 9700 E - Total Field
WILKIE TWP. PROPERTY**

Scale 1:5000

 (meters)

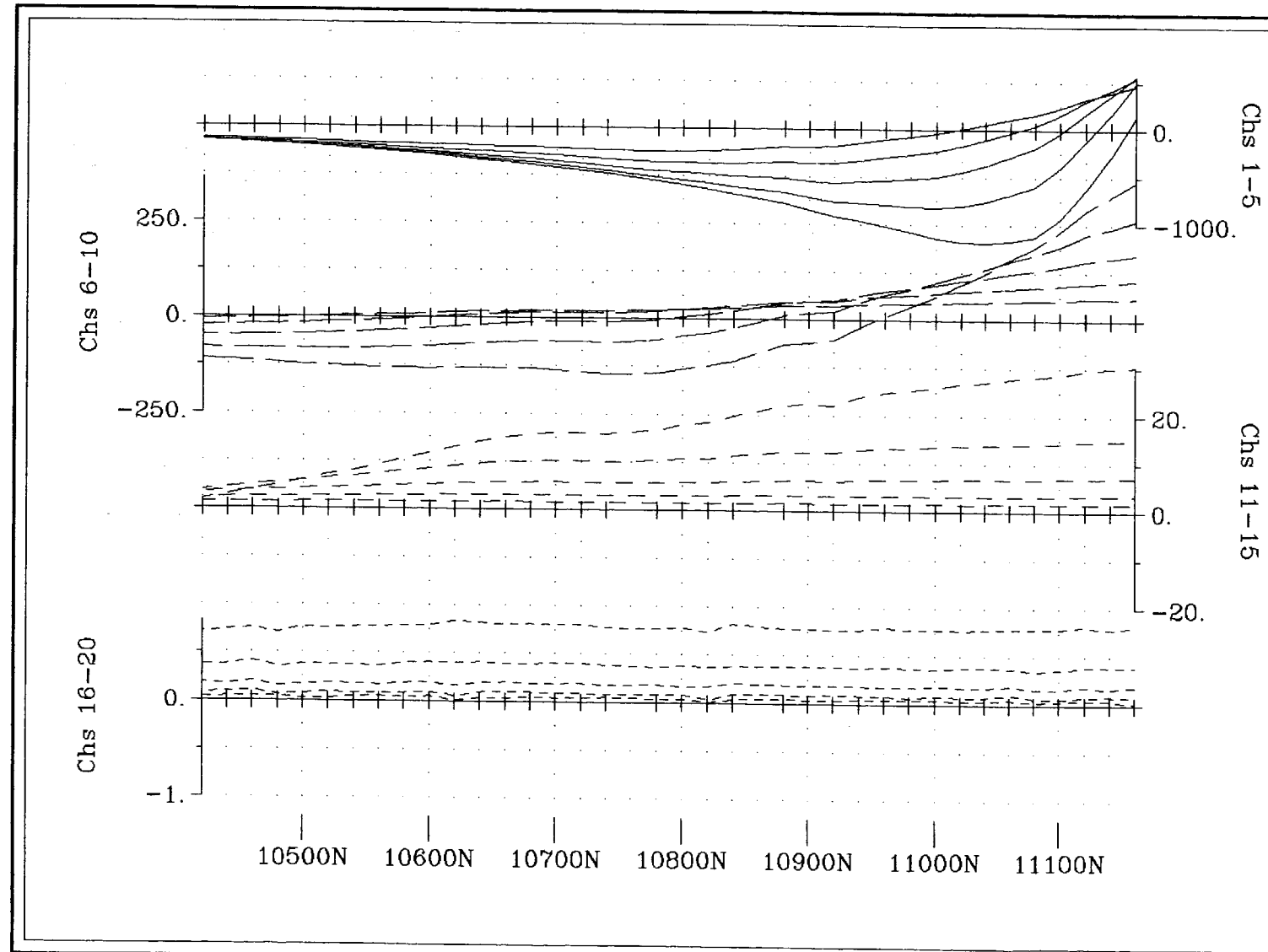
FALCONBRIDGE LTD.
 Project Number: 127
 Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
 Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
 Tx Loop Size: 1100m x 750m
 Tx Loop Location: 9600E, 10700E, 11200N, 11950N
 Transmitter Current: 7.5 Amps
 Transmitter Turn-Off Time: 275 us
 Station Interval: 20 metres
 Profile Units: nanoVolt/A*mm²
 Receiver Coil Orientation: Hz - positive up
 Hx - positive south
 Hy - positive east

Survey Date: 03/03/2001
 Instrumentation: Rx = Digital Protem (3x20 Channels)
 & Geonics 3D Coil (3x200m²)
 Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
 DWG. NO. QG-170-4AXIS-TF-9700 E



**Line 9800 E - Z Component
WILKIE TWP. PROPERTY**

Scale 1:5000

 (meters)

FALCONBRIDGE LTD.
 Project Number: 127
 Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
 Secondary Electromagnetic Field (dB/dt)**

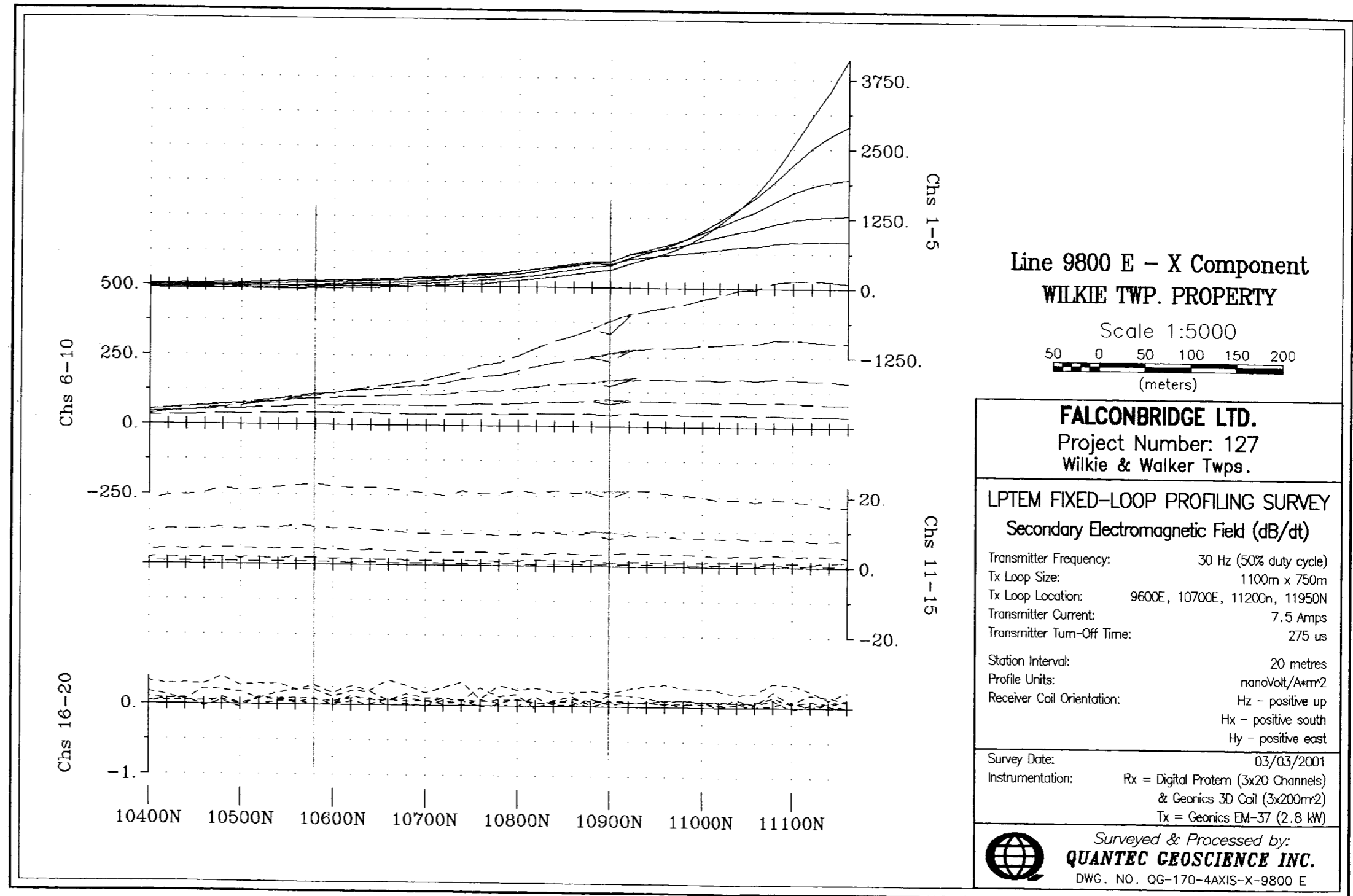
Transmitter Frequency: 30 Hz (50% duty cycle)
 Tx Loop Size: 1100m x 750m
 Tx Loop Location: 9600E, 10700E, 11200n, 11950N
 Transmitter Current: 7.5 Amps
 Transmitter Turn-Off Time: 275 us

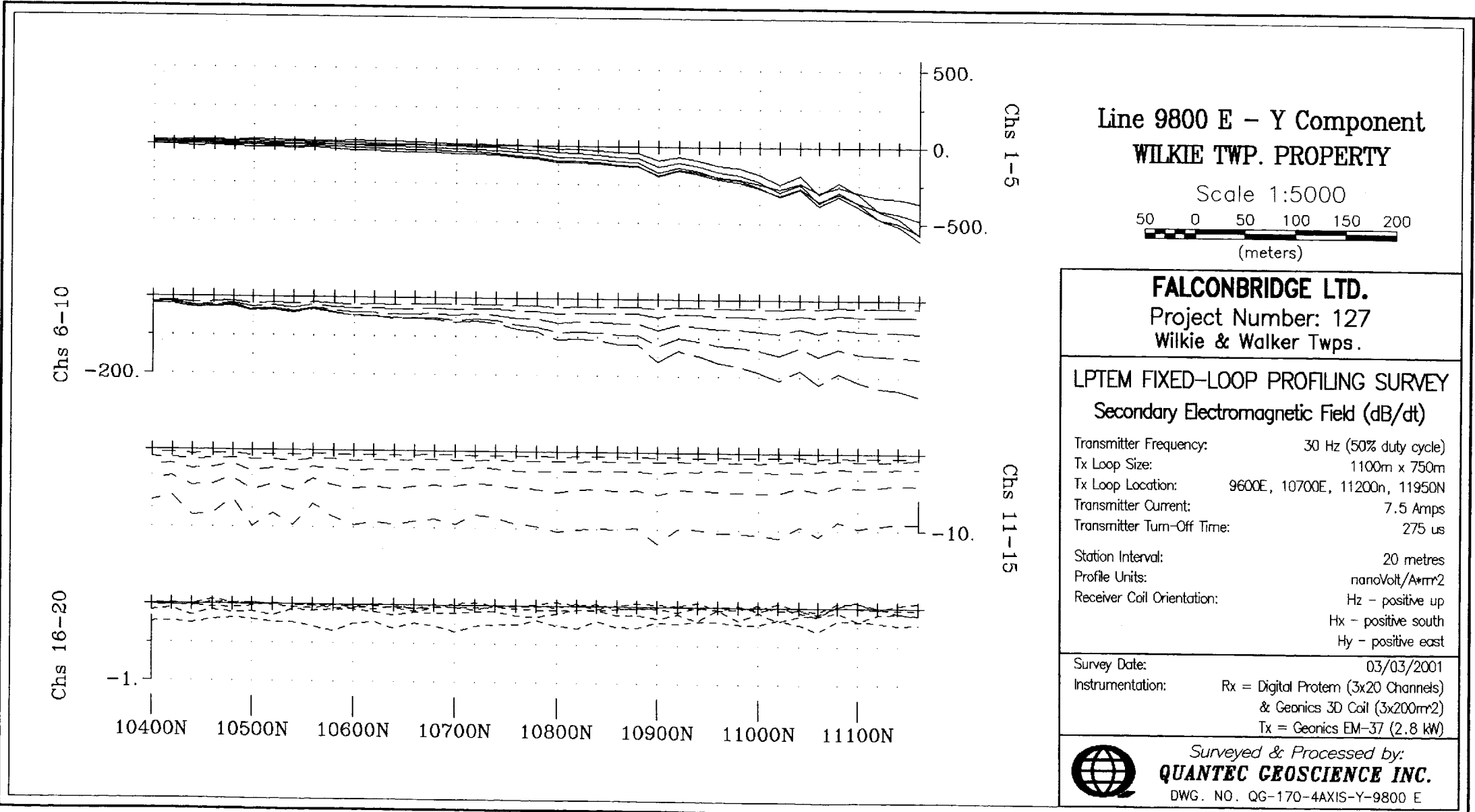
Station Interval: 20 metres
 Profile Units: nanoVolt/Amm²
 Receiver Coil Orientation: Hz - positive up
 Hx - positive south
 Hy - positive east

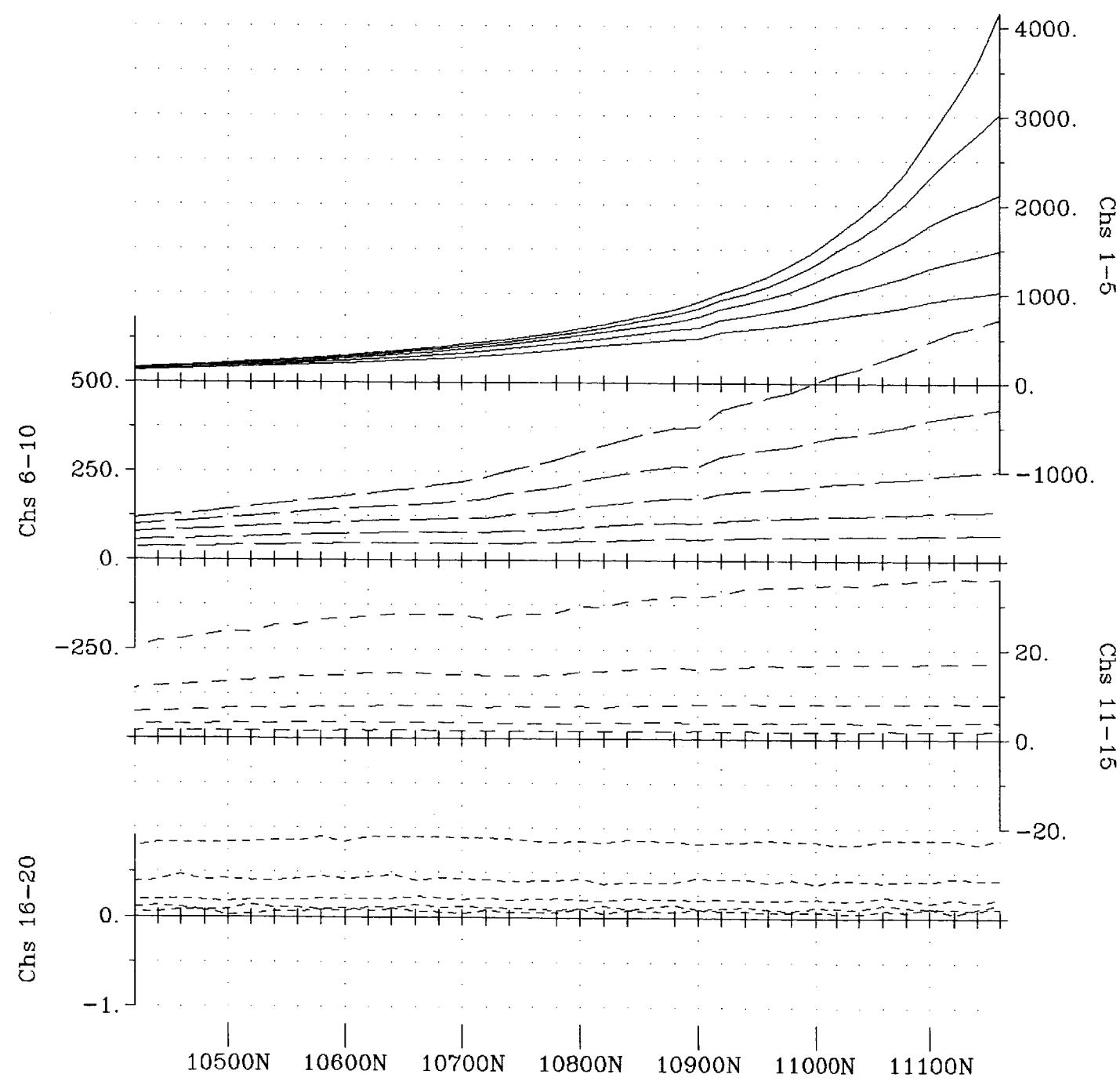
Survey Date: 03/03/2001
 Instrumentation: Rx = Digital Protem (3x20 Channels)
 & Geonics 3D Coil (3x200m²)
 Tx = Geonics EM-37 (2.8 kW)



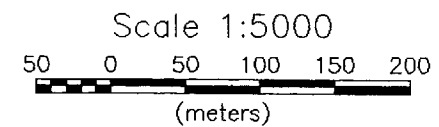
Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
 DWG. NO. QG-170-4AXIS-Z-9800 E







**Line 9800 E - Total Field
WILKIE TWP. PROPERTY**



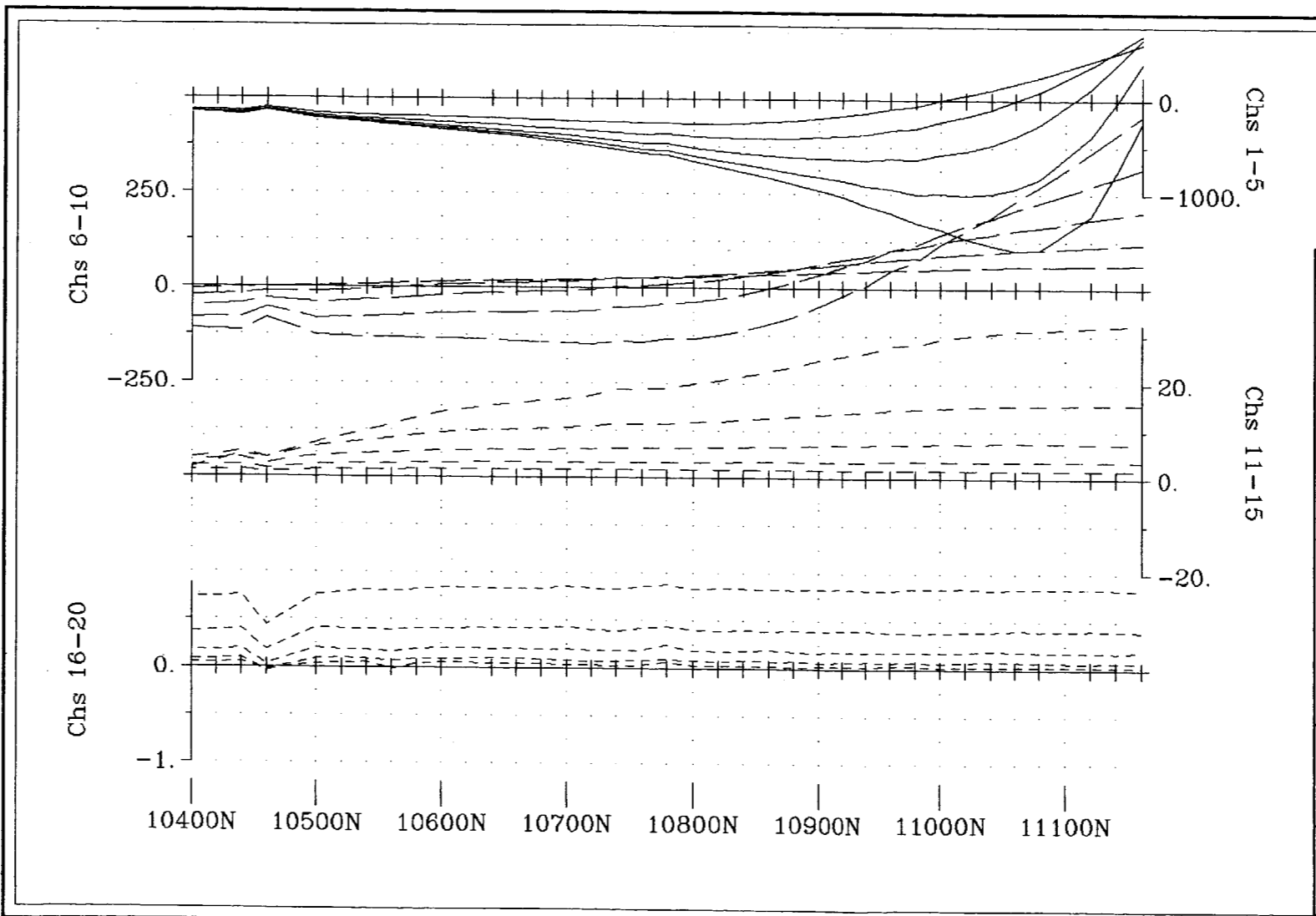
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
 Tx Loop Size: 1100m x 750m
 Tx Loop Location: 9600E, 10700E, 11200N, 11950N
 Transmitter Current: 7.5 Amps
 Transmitter Turn-Off Time: 275 us
 Station Interval: 20 metres
 Profile Units: nanoVolt/Amr2
 Receiver Coil Orientation: Hz - positive up
 Hx - positive south
 Hy - positive east

Survey Date: 03/03/2001
 Instrumentation: Rx = Digital Protem (3x20 Channels)
 & Geonics 3D Coil (3x200mr2)
 Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
 DWG. NO. QG-170-4AXIS-TF-9800 E



**Line 9900 E - Z Component
WILKIE TWP. PROPERTY**

Scale 1:5000

 (meters)

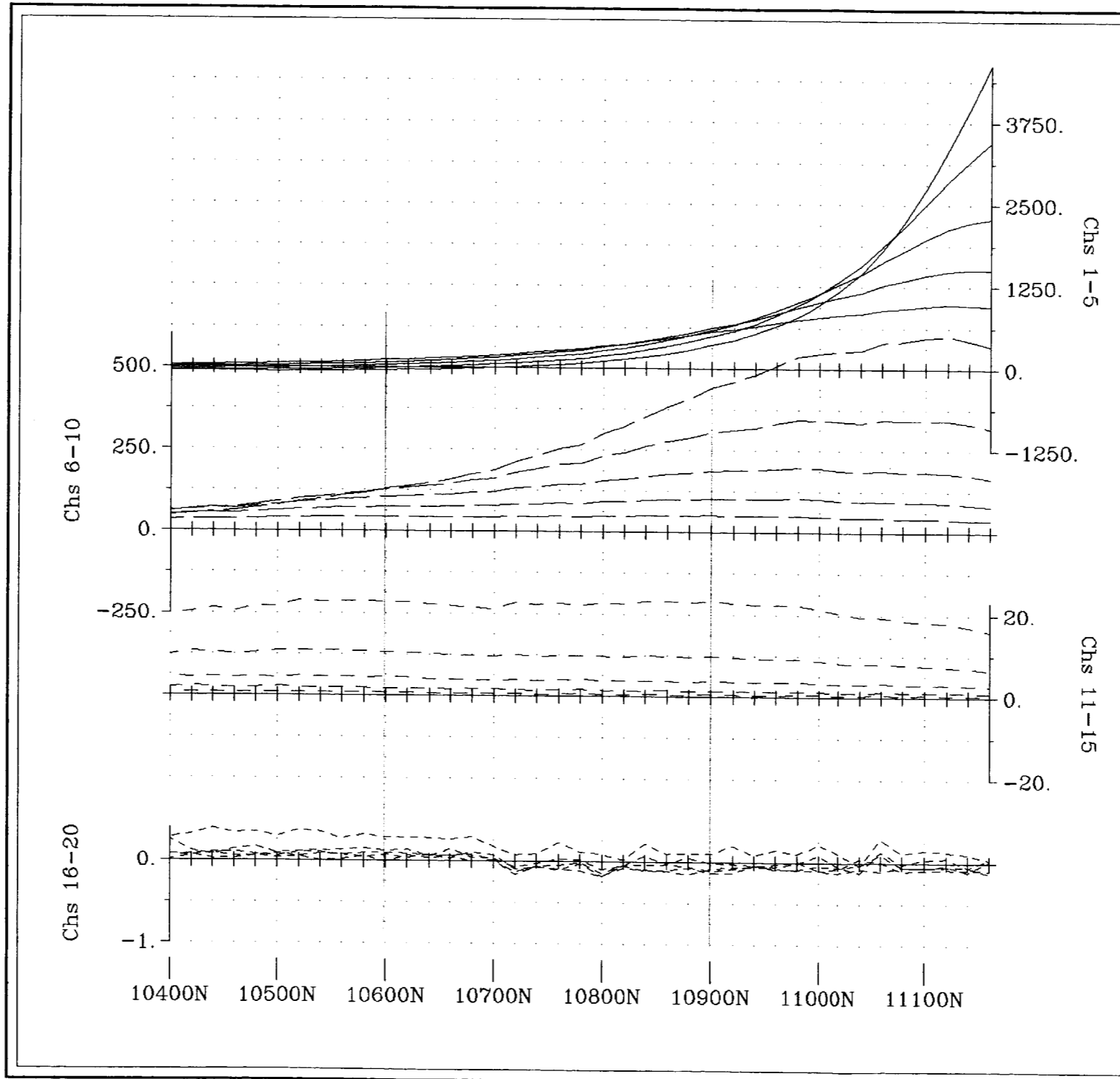
FALCONBRIDGE LTD.
 Project Number: 127
 Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
 Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
 Tx Loop Size: 1100m x 750m
 Tx Loop Location: 9600E, 10700E, 11200N, 11950N
 Transmitter Current: 7.5 Amps
 Transmitter Turn-Off Time: 270 us
 Station Interval: 20 metres
 Profile Units: nanoVolt/A²m²
 Receiver Coil Orientation: Hz - positive up
 Hx - positive south
 Hy - positive east

Survey Date: 03/01/2001
 Instrumentation: Rx = Digital Protem (3x20 Channels)
 & Geonics 3D Coil (3x200m²)
 Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
 DWG. NO. QG-170-4AXIS-Z-9900 E



**Line 9900 E - X Component
WILKIE TWP. PROPERTY**

Scale 1:5000

 (meters)

FALCONBRIDGE LTD.
 Project Number: 127
 Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
 Secondary Electromagnetic Field (dB/dt)**

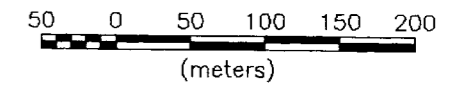
Transmitter Frequency: 30 Hz (50% duty cycle)
 Tx Loop Size: 1100m x 750m
 Tx Loop Location: 9600E, 10700E, 11200N, 11950N
 Transmitter Current: 7.5 Amps
 Transmitter Turn-Off Time: 270 us
 Station Interval: 20 metres
 Profile Units: nanoVolt/Amm²
 Receiver Coil Orientation: Hz - positive up
 Hx - positive south
 Hy - positive east

Survey Date: 03/01/2001
 Instrumentation: Rx = Digital Protem (3x20 Channels)
 & Geonics 3D Coil (3x200m²)
 Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
 DWG. NO. QG-170-4AXIS-X-9900 E

Line 9900 E - Y Component
WILKIE TWP. PROPERTY

Scale 1:5000



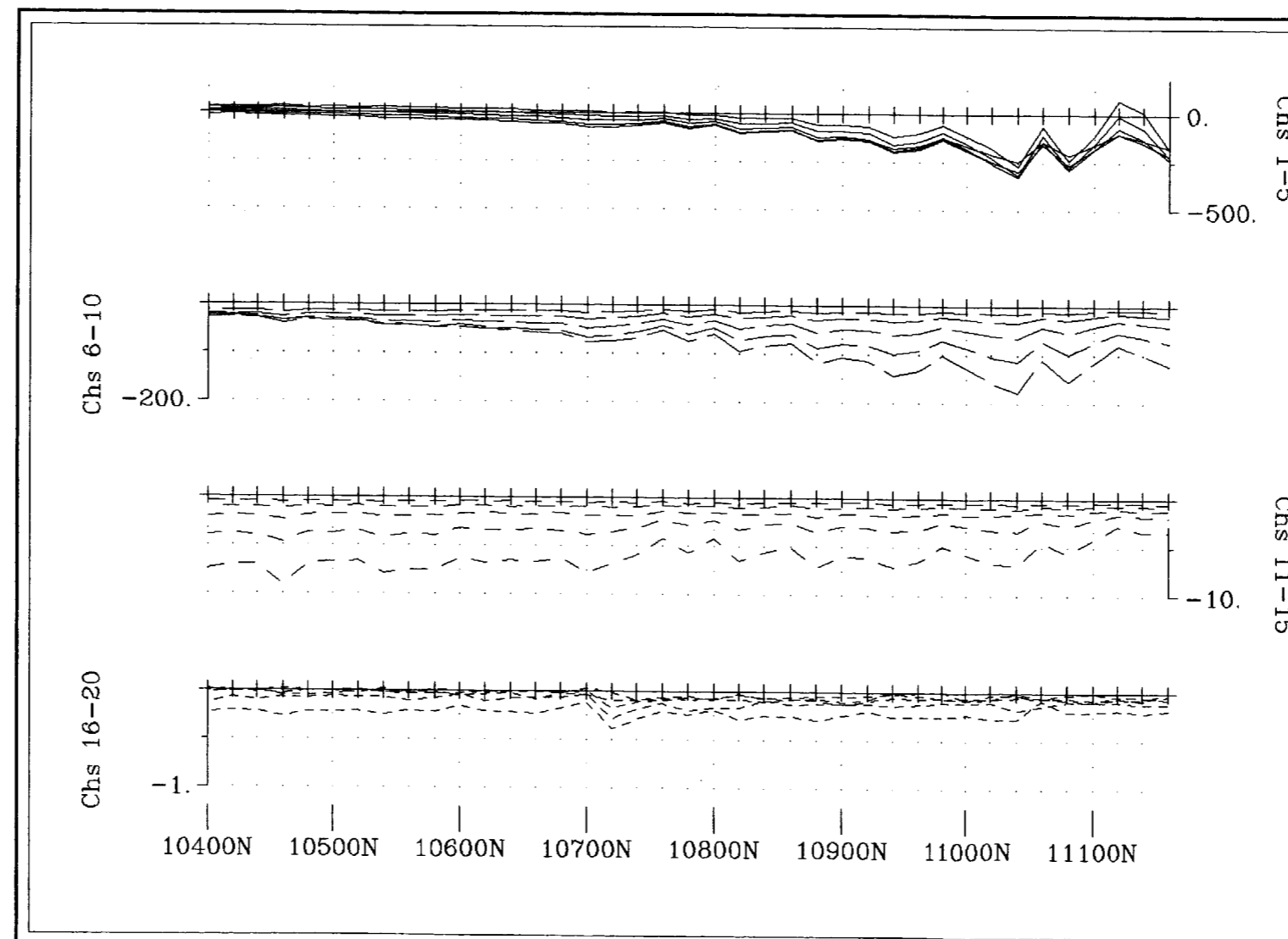
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

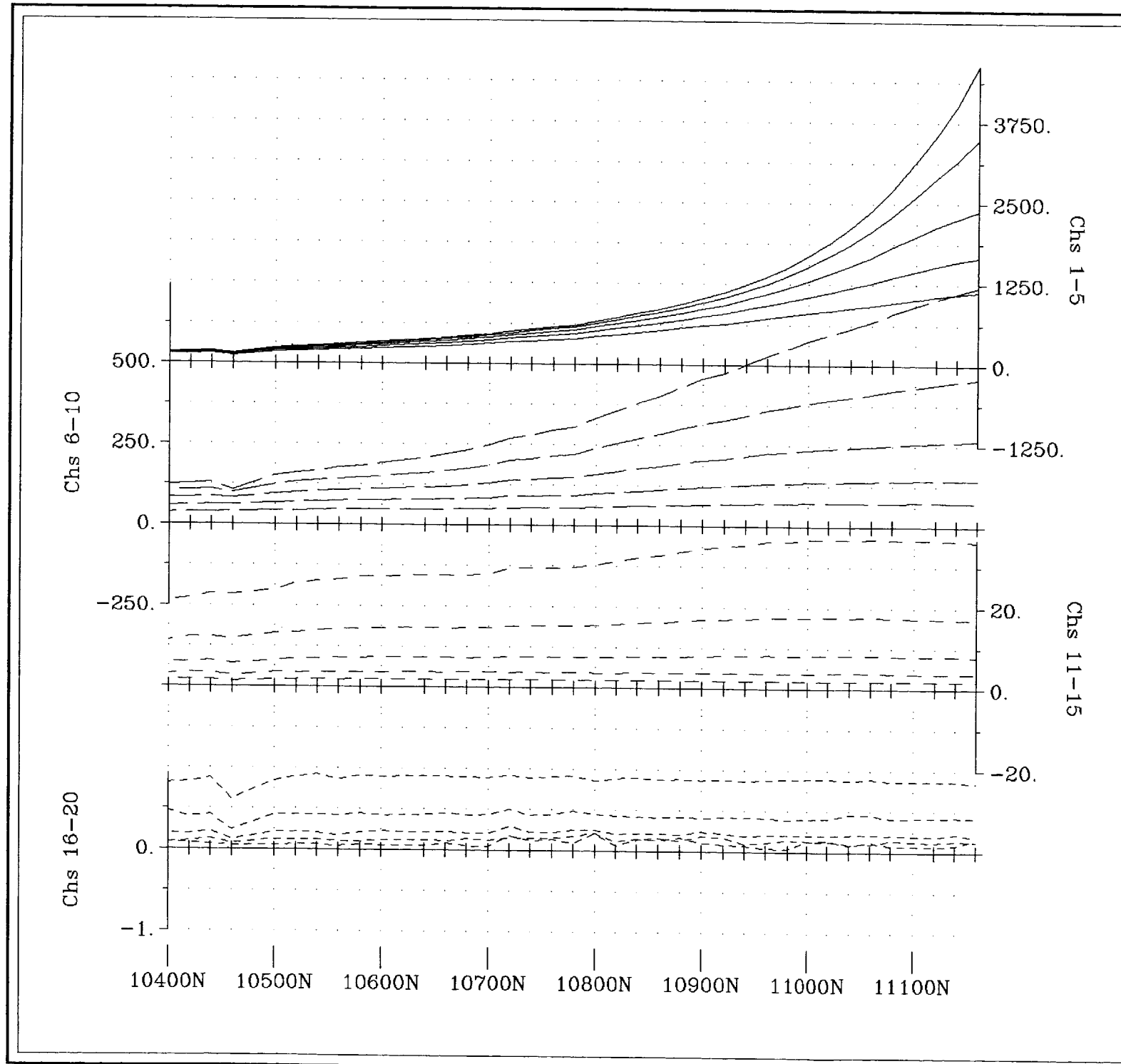
LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200n, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 270 us
Station Interval: 20 metres
Profile Units: nanoVolt/A²m²
Receiver Coil Orientation: Hx - positive up
Hy - positive south
Hz - positive east

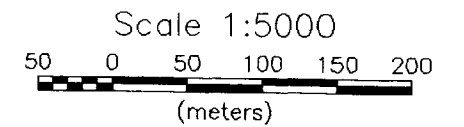
Survey Date: 03/01/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200m²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-Y-9900 E





**Line 9900 E - Total Field
WILKIE TWP. PROPERTY**



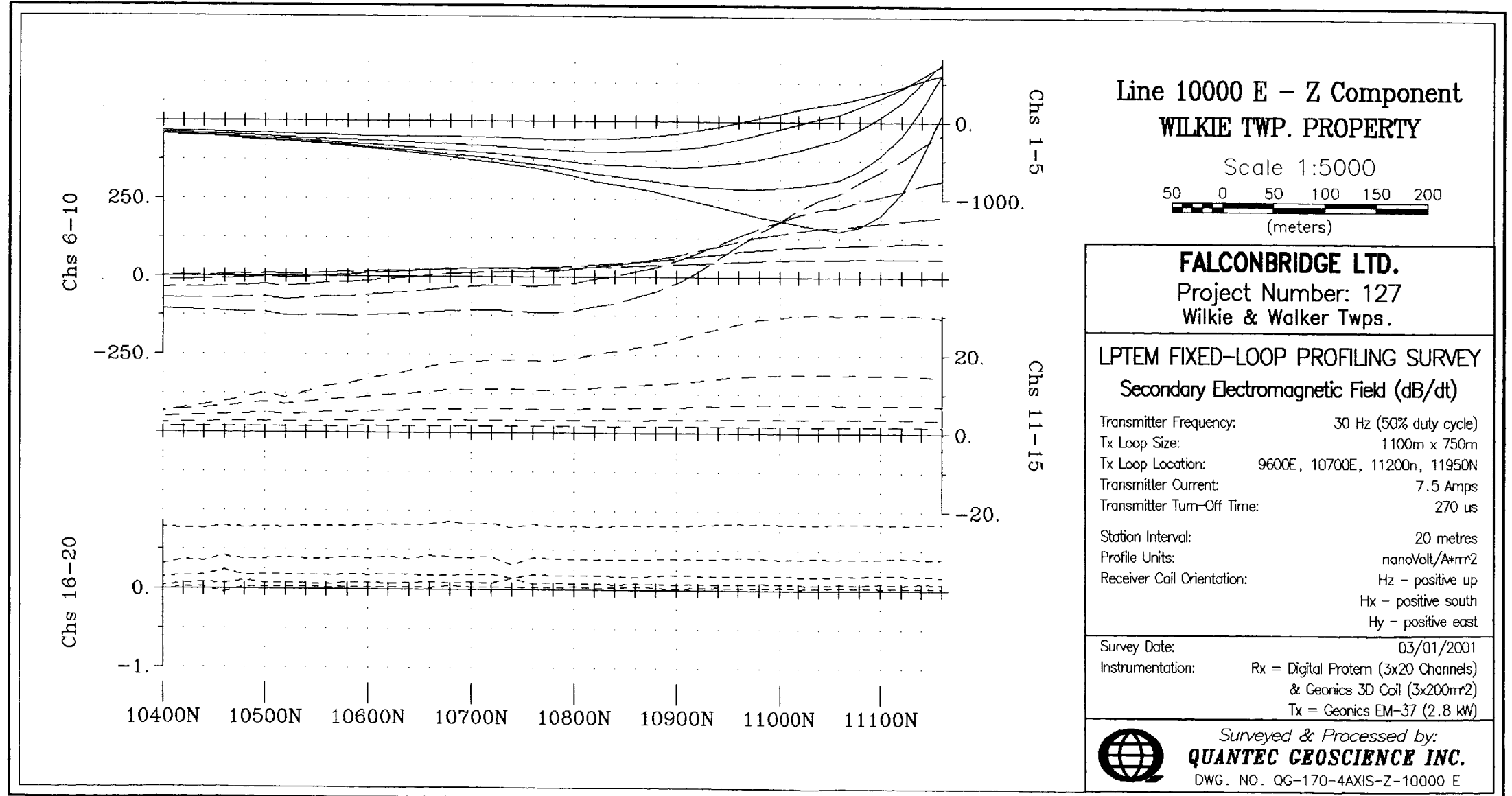
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

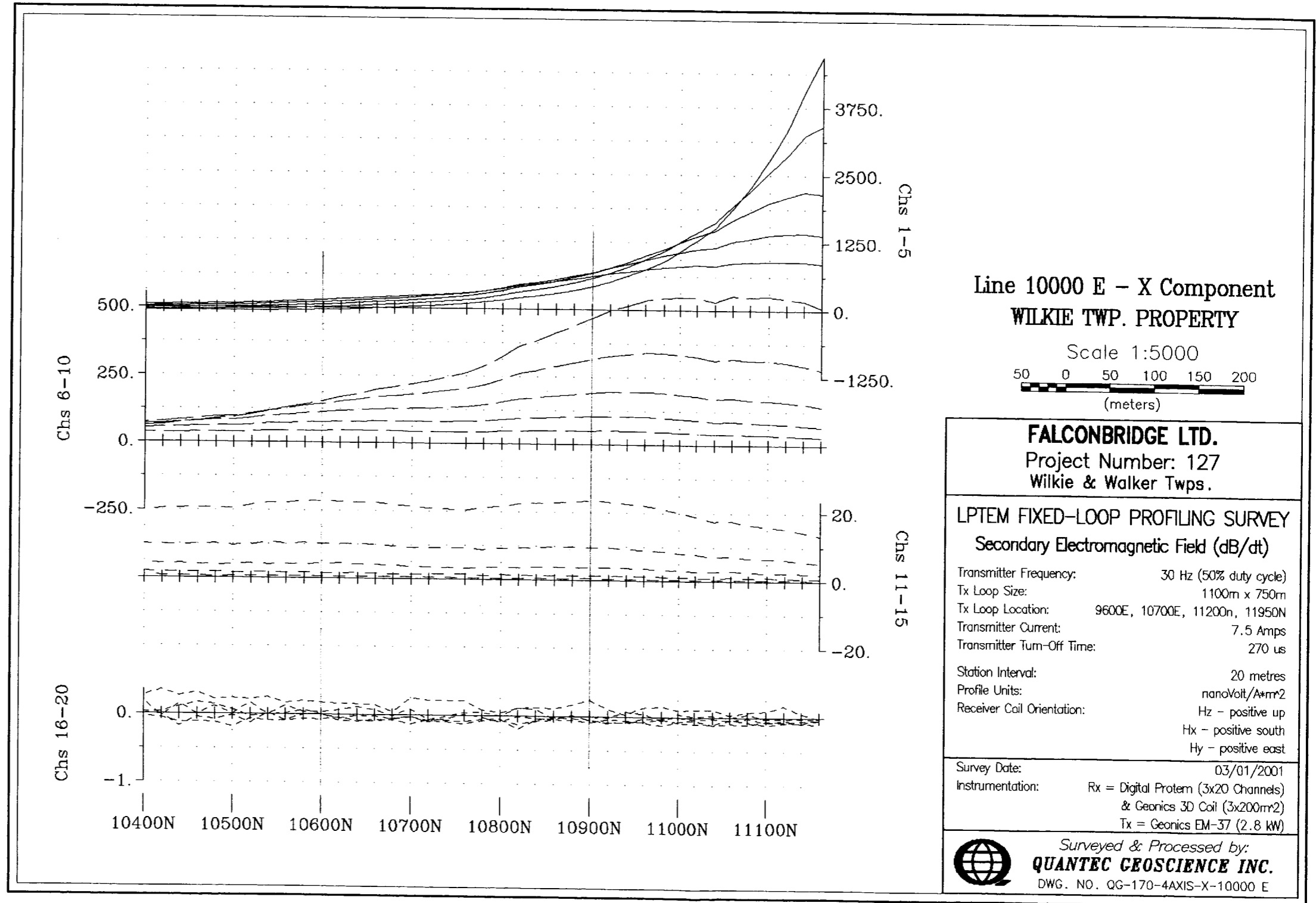
LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency:	30 Hz (50% duty cycle)
Tx Loop Size:	1100m x 750m
Tx Loop Location:	9600E, 10700E, 11200n, 11950N
Transmitter Current:	7.5 Amps
Transmitter Turn-Off Time:	270 us
Station Interval:	20 metres
Profile Units:	nanoVolt/A*mm ²
Receiver Coil Orientation:	Hx - positive up Hy - positive south Hz - positive east

Survey Date:	03/01/2001
Instrumentation:	Rx = Digital Protem (3x20 Channels) & Geonics 3D Coil (3x200mm ²) Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-TF-9900 E





**Line 10000 E - X Component
WILKIE TWP. PROPERTY**

Scale 1:5000
 50 0 50 100 150 200
 (meters)

FALCONBRIDGE LTD.
 Project Number: 127
 Wilkie & Walker Twps.

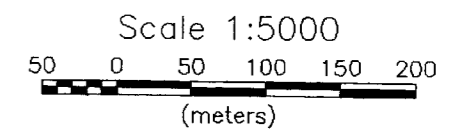
**LPTM FIXED-LOOP PROFILING SURVEY
 Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
 Tx Loop Size: 1100m x 750m
 Tx Loop Location: 9600E, 10700E, 11200N, 11950N
 Transmitter Current: 7.5 Amps
 Transmitter Turn-Off Time: 270 us
 Station Interval: 20 metres
 Profile Units: nanoVolt/Am²
 Receiver Coil Orientation: Hz - positive up
 Hx - positive south
 Hy - positive east

Survey Date: 03/01/2001
 Instrumentation: Rx = Digital Protem (3x20 Channels)
 & Geonics 3D Coil (3x200m²)
 Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
 DWG. NO. QG-170-4AXIS-X-10000 E

Line 10000 E - Y Component
WILKIE TWP. PROPERTY



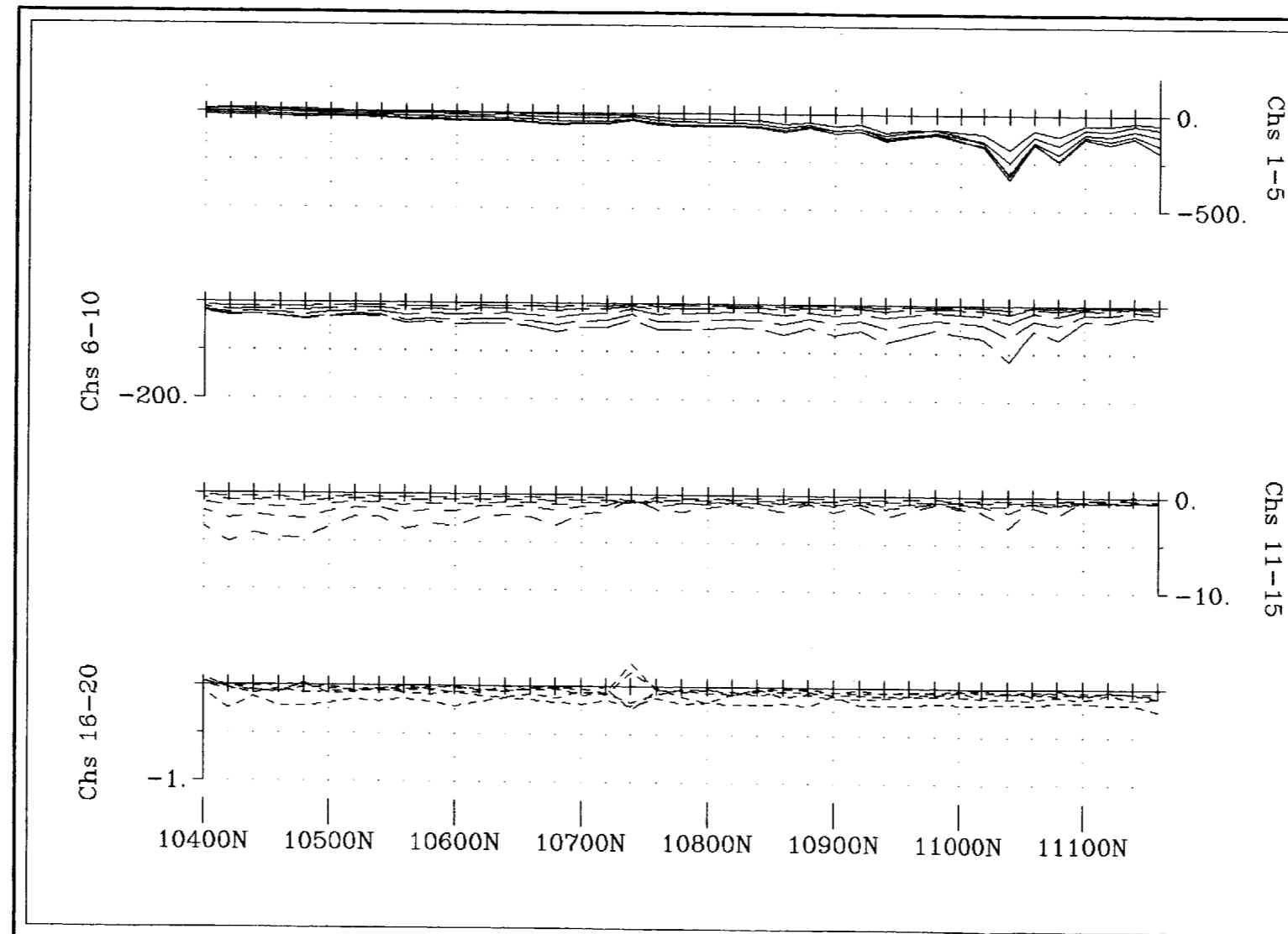
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

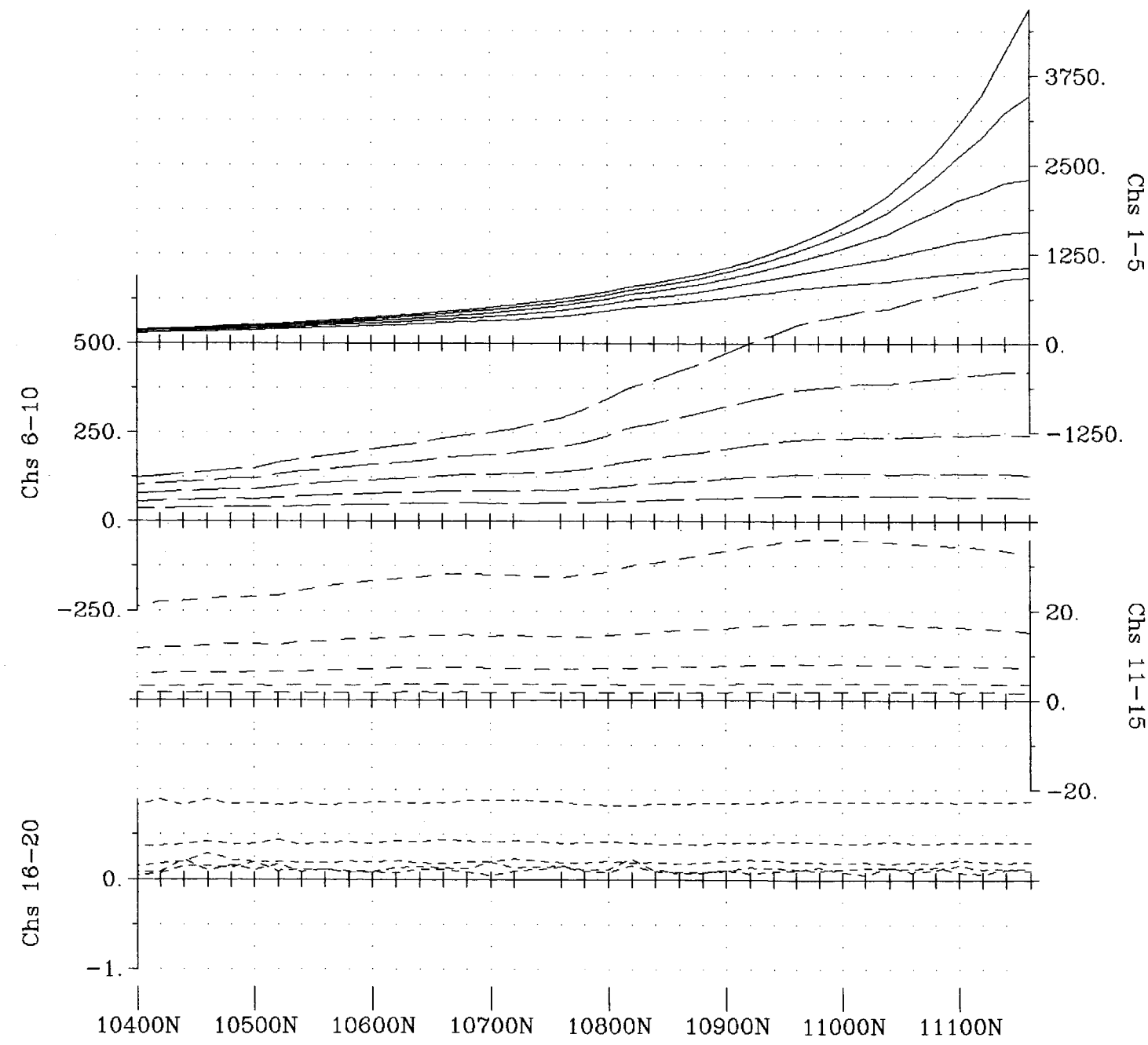
LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200n, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 270 us
Station Interval: 20 metres
Profile Units: nanoVolt/Amm²
Receiver Coil Orientation: Hx - positive up
Hy - positive south
Hz - positive east

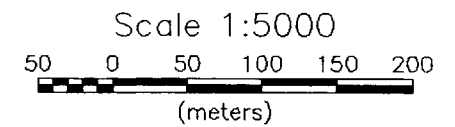
Survey Date: 03/01/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200mm²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-Y-10000 E





**Line 10000 E - Total Field
WILKIE TWP. PROPERTY**



FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

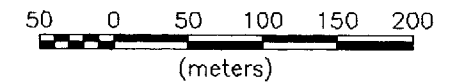
Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200N, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 270 us
Station Interval: 20 metres
Profile Units: nanoVolt/Am²
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

Survey Date: 03/01/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200m²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-TF-10000 E

Line 10100 E - Z Component
 WILKIE TWP. PROPERTY

Scale 1:5000



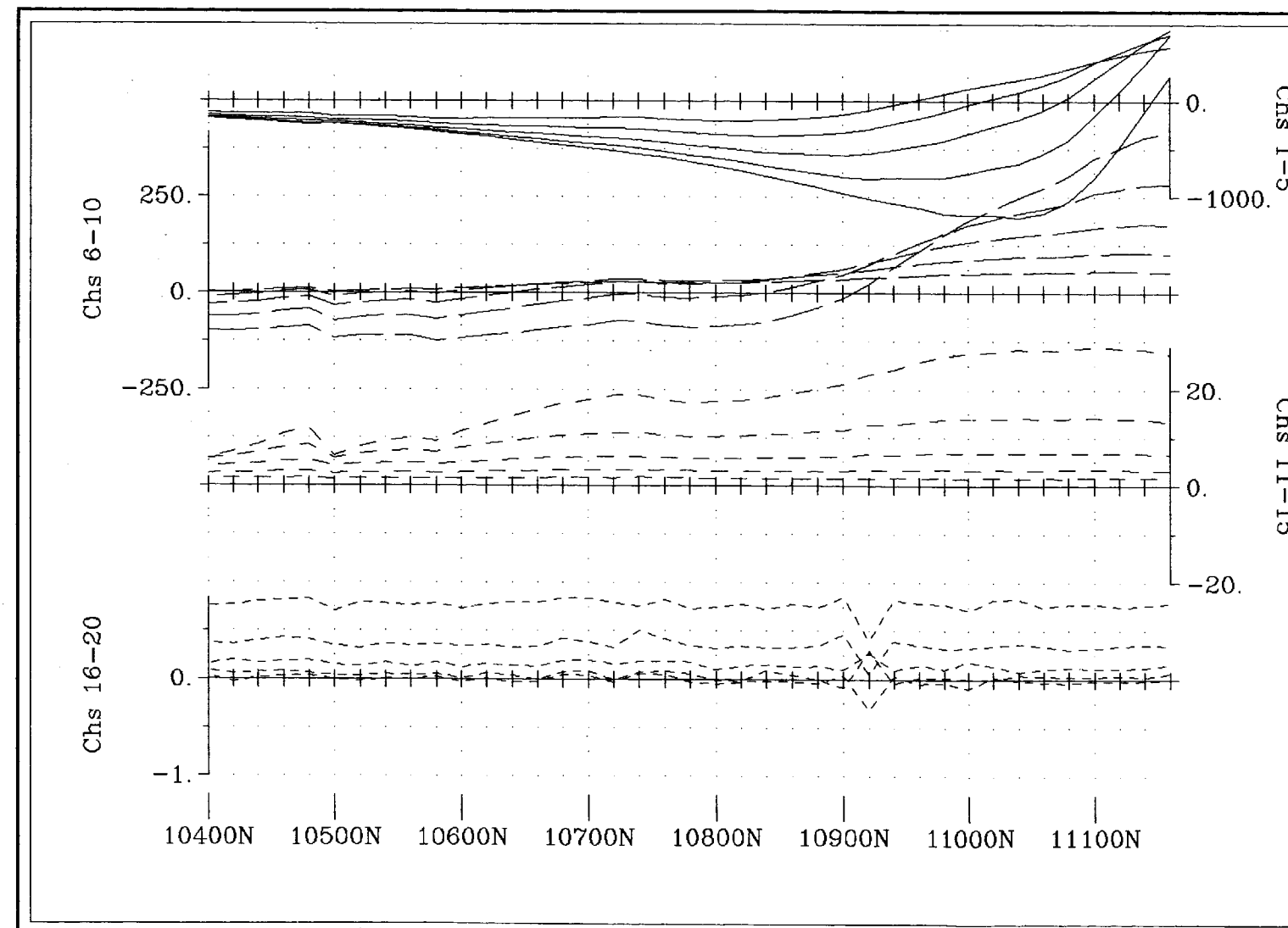
FALCONBRIDGE LTD.
 Project Number: 127
 Wilkie & Walker Twps.

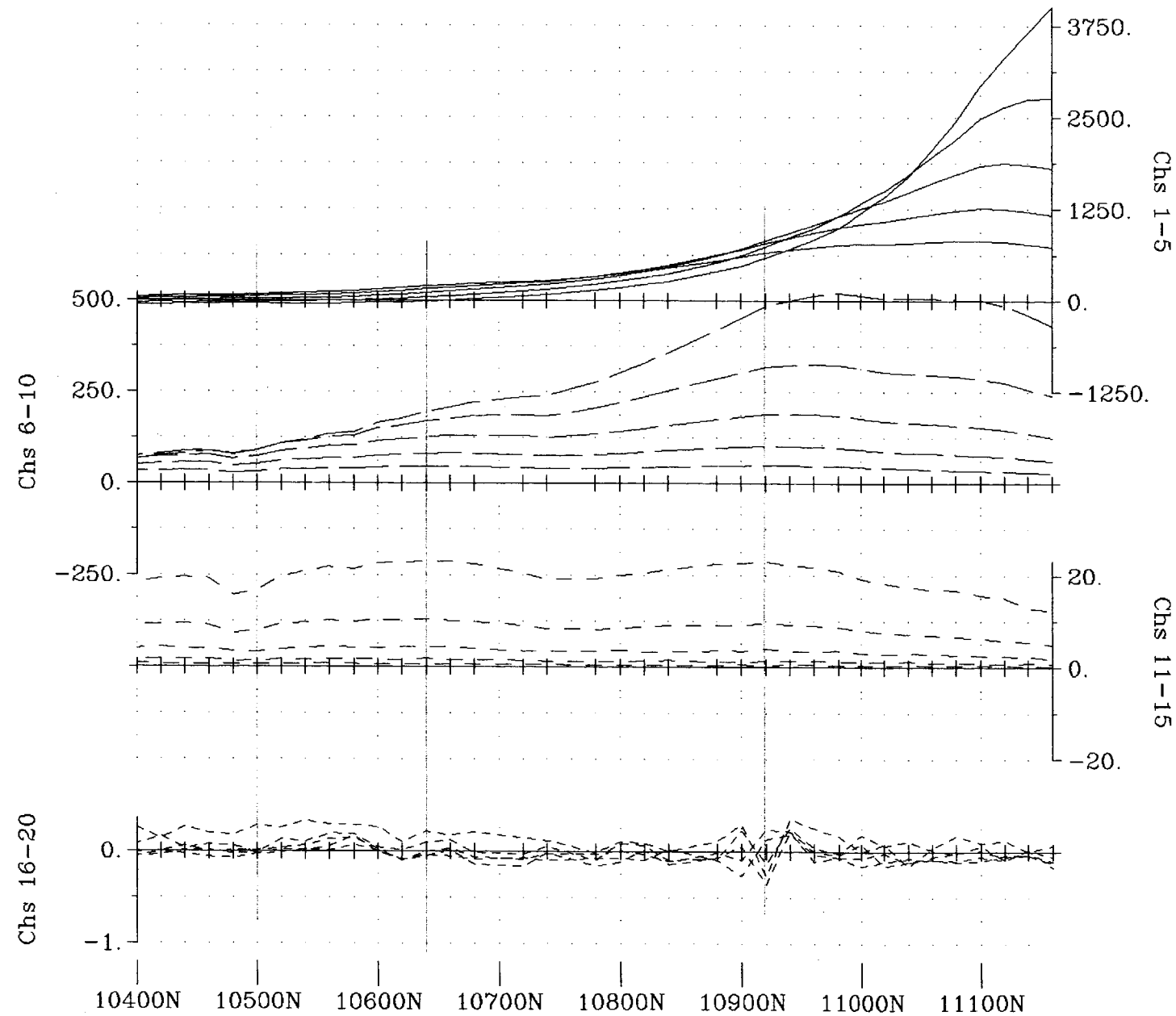
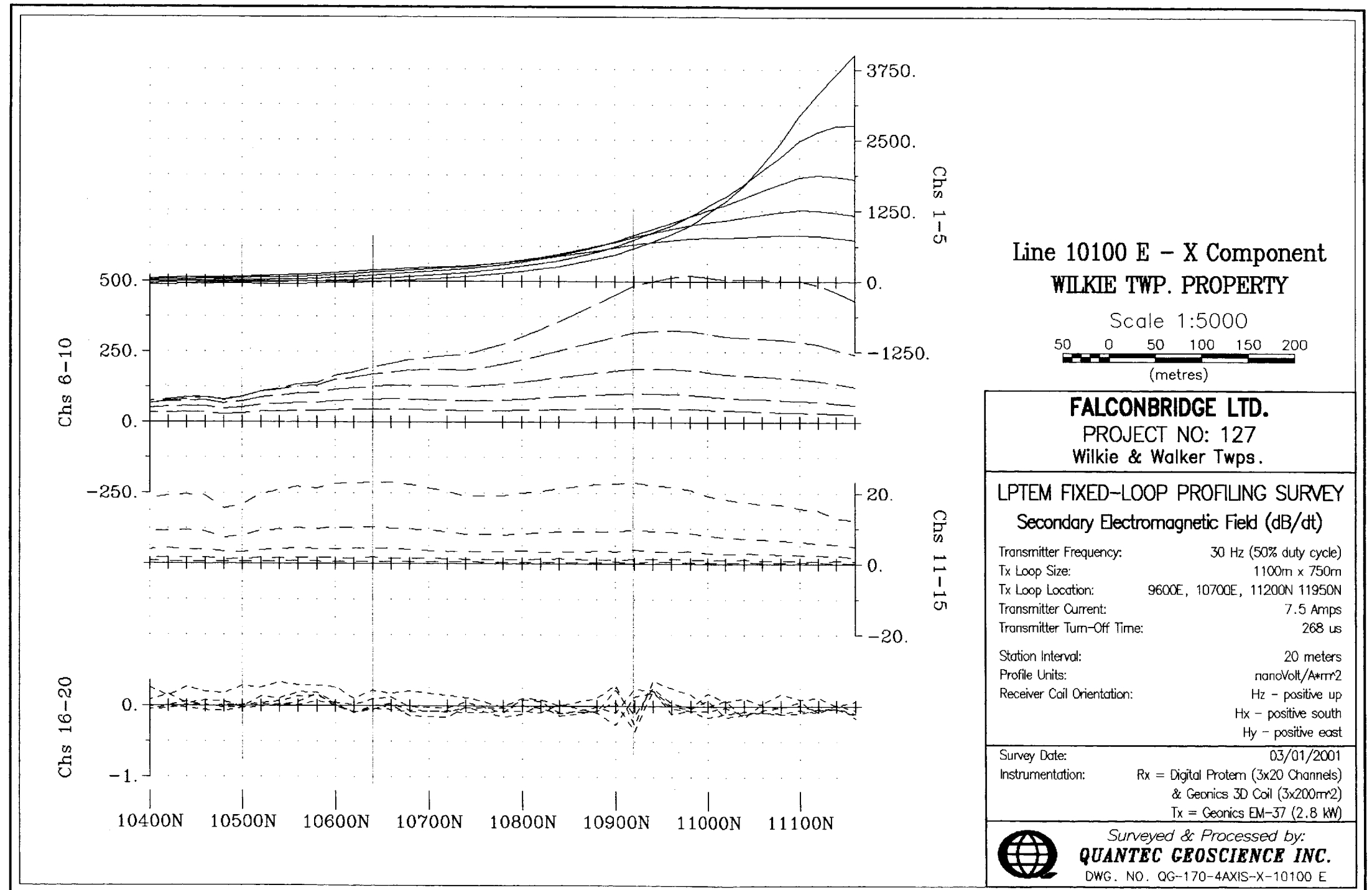
LPTM FIXED-LOOP PROFILING SURVEY
 Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency: 30 Hz (50% duty cycle)
 Tx Loop Size: 1100m x 750m
 Tx Loop Location: 9600E, 10700E, 11200n, 11950N
 Transmitter Current: 7.5 Amps
 Transmitter Turn-Off Time: 270 us
 Station Interval: 20 metres
 Profile Units: nanoVolt/A*m²
 Receiver Coil Orientation: Hz - positive up
 Hx - positive south
 Hy - positive east

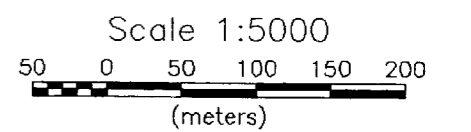
Survey Date: 03/01/2001
 Instrumentation: Rx = Digital Protem (3x20 Channels)
 & Geonics 3D Coil (3x200m²)
 Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
 DWG. NO. QG-170-4AXIS-Z-10100 E





Line 10100 E - Y Component
 WILKIE TWP. PROPERTY



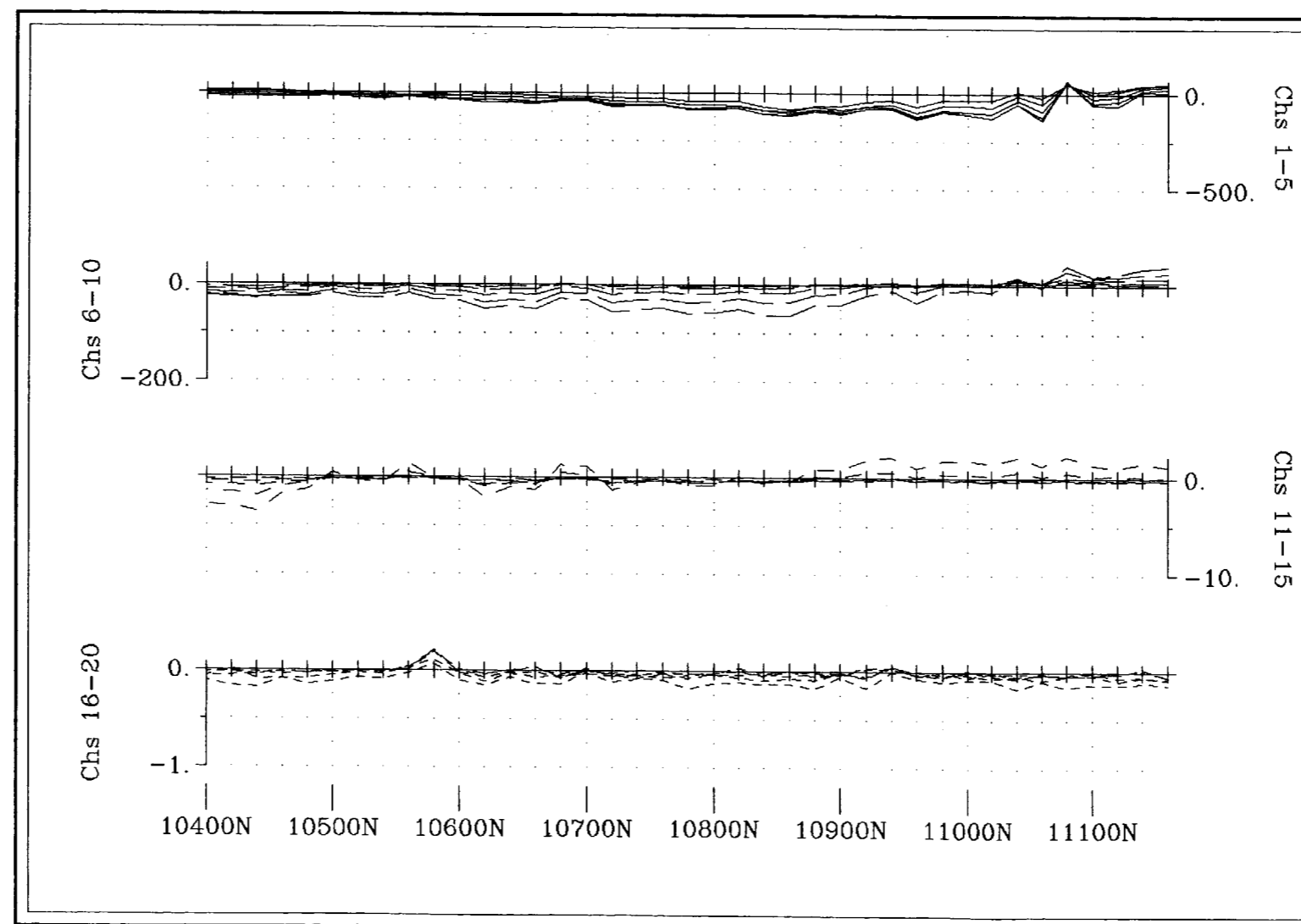
FALCONBRIDGE LTD.
 Project Number: 127
 Wilkie & Walker Twps.

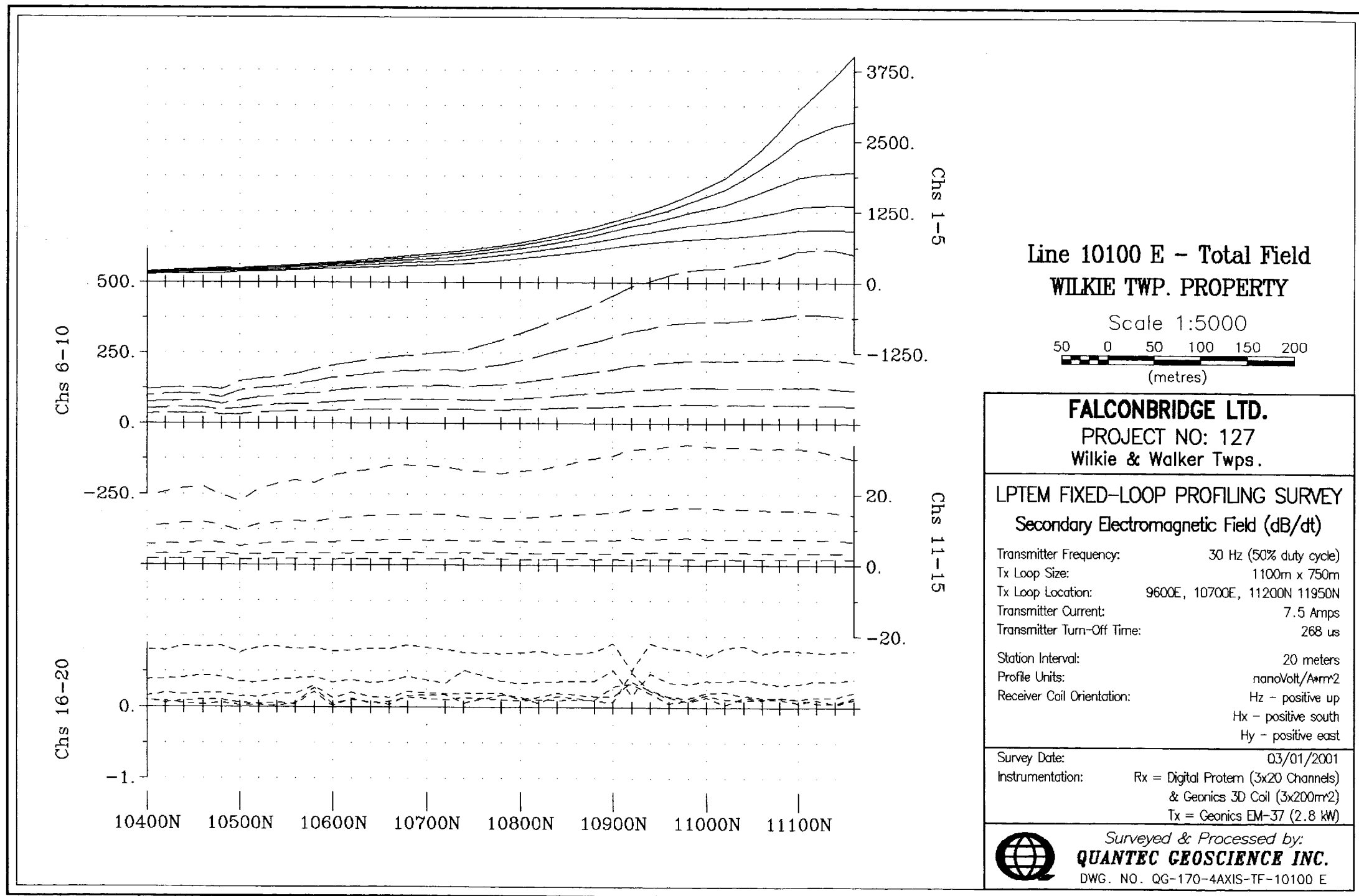
LPTM FIXED-LOOP PROFILING SURVEY
 Secondary Electromagnetic Field (dB/dt)

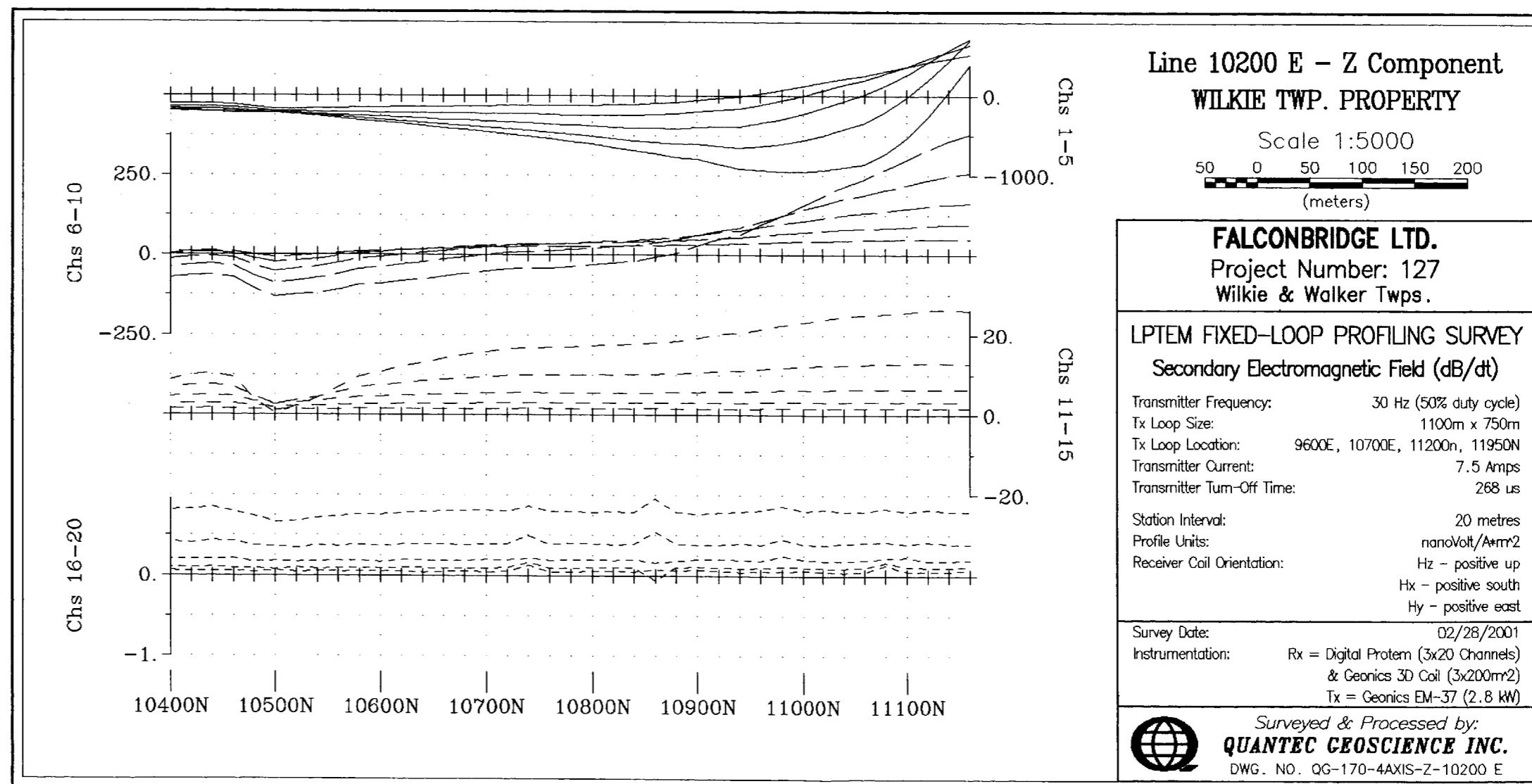
Transmitter Frequency: 30 Hz (50% duty cycle)
 Tx Loop Size: 1100m x 750m
 Tx Loop Location: 9600E, 10700E, 11200n, 11950N
 Transmitter Current: 7.5 Amps
 Transmitter Turn-Off Time: 270 us
 Station Interval: 20 metres
 Profile Units: nanoVolt/A*mm²
 Receiver Coil Orientation: Hz - positive up
 Hx - positive south
 Hy - positive east

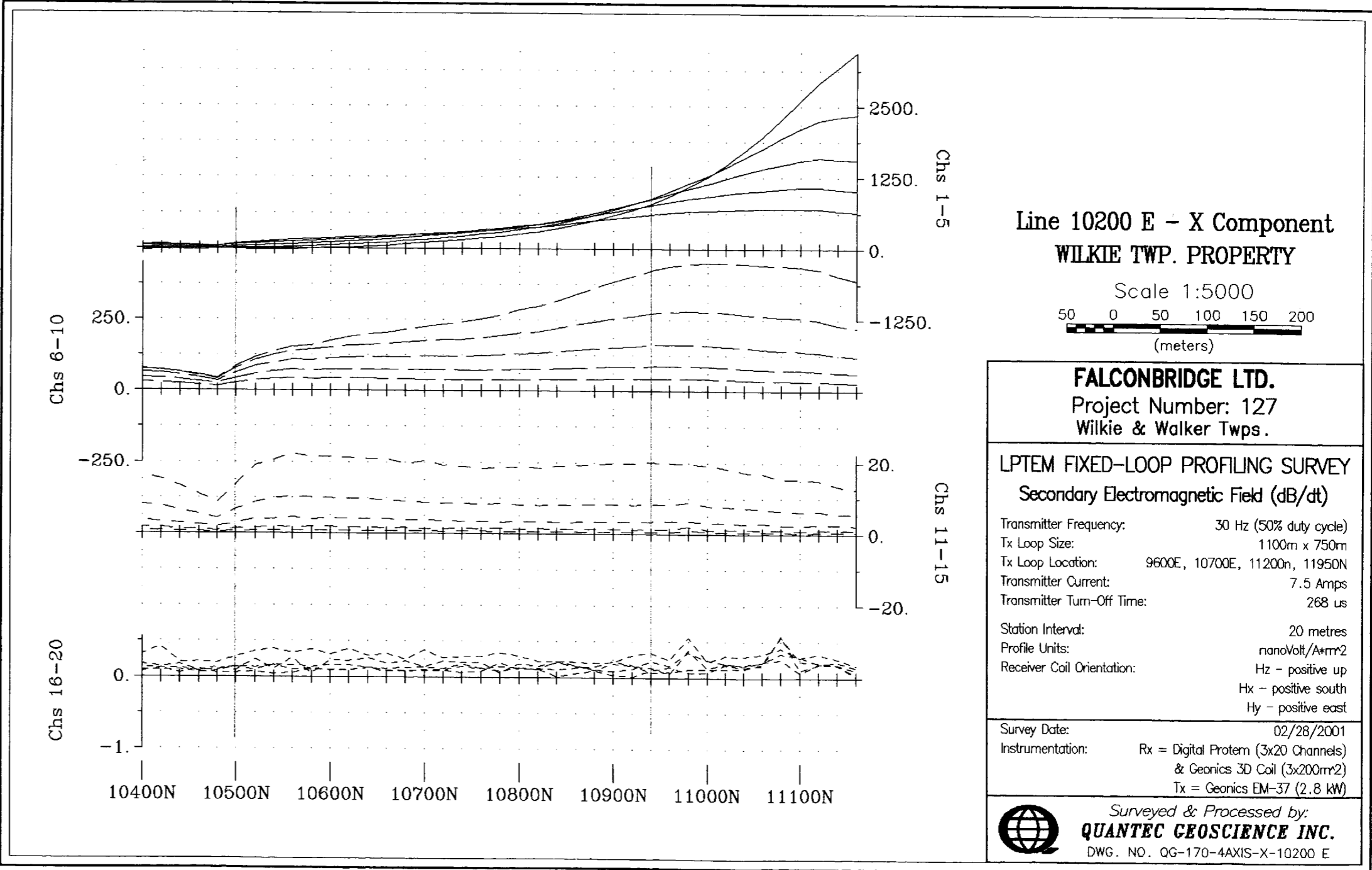
Survey Date: 03/01/2001
 Instrumentation: Rx = Digital Protem (3x20 Channels)
 & Geonics 3D Coil (3x200mm²)
 Tx = Geonics EM-37 (2.8 kW)

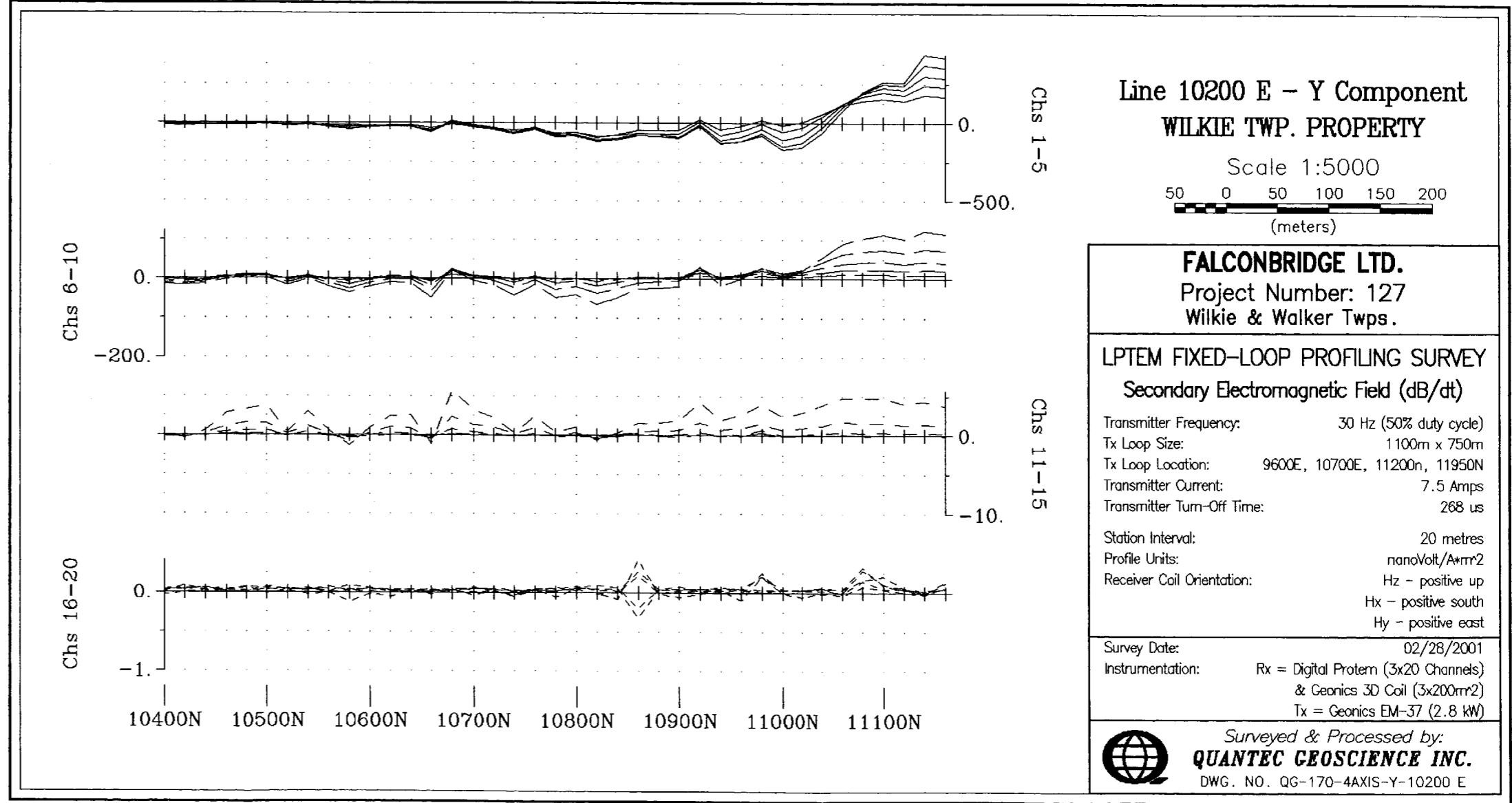
Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
 DWG. NO. QG-170-4AXIS-Y-10100 E











**Line 10200 E - Y Component
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(meters)

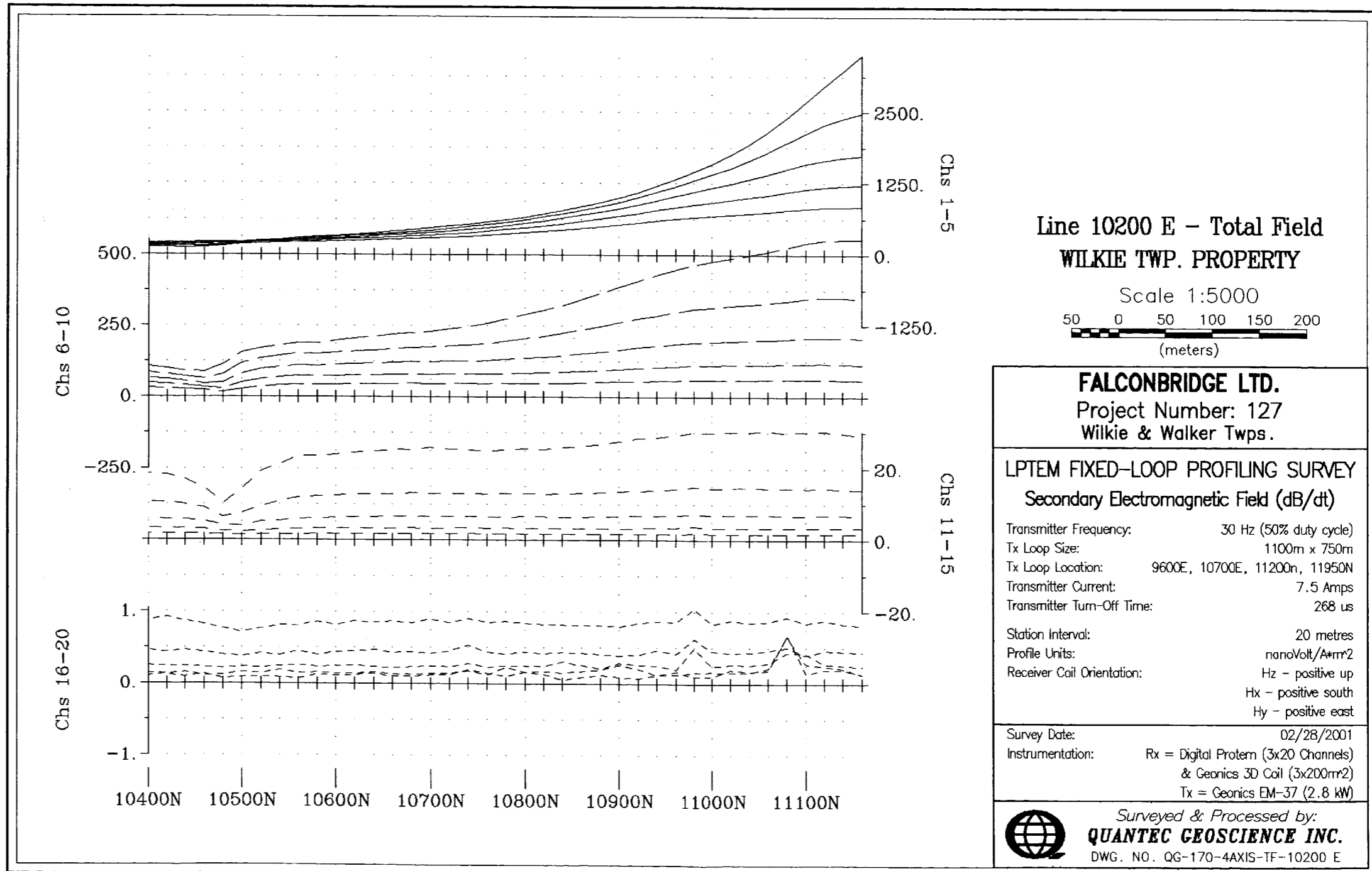
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200N, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 268 us
Station Interval: 20 metres
Profile Units: nanoVolt/A+m²
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

Survey Date: 02/28/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200m²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-Y-10200 E



**Line 10200 E - Total Field
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(meters)

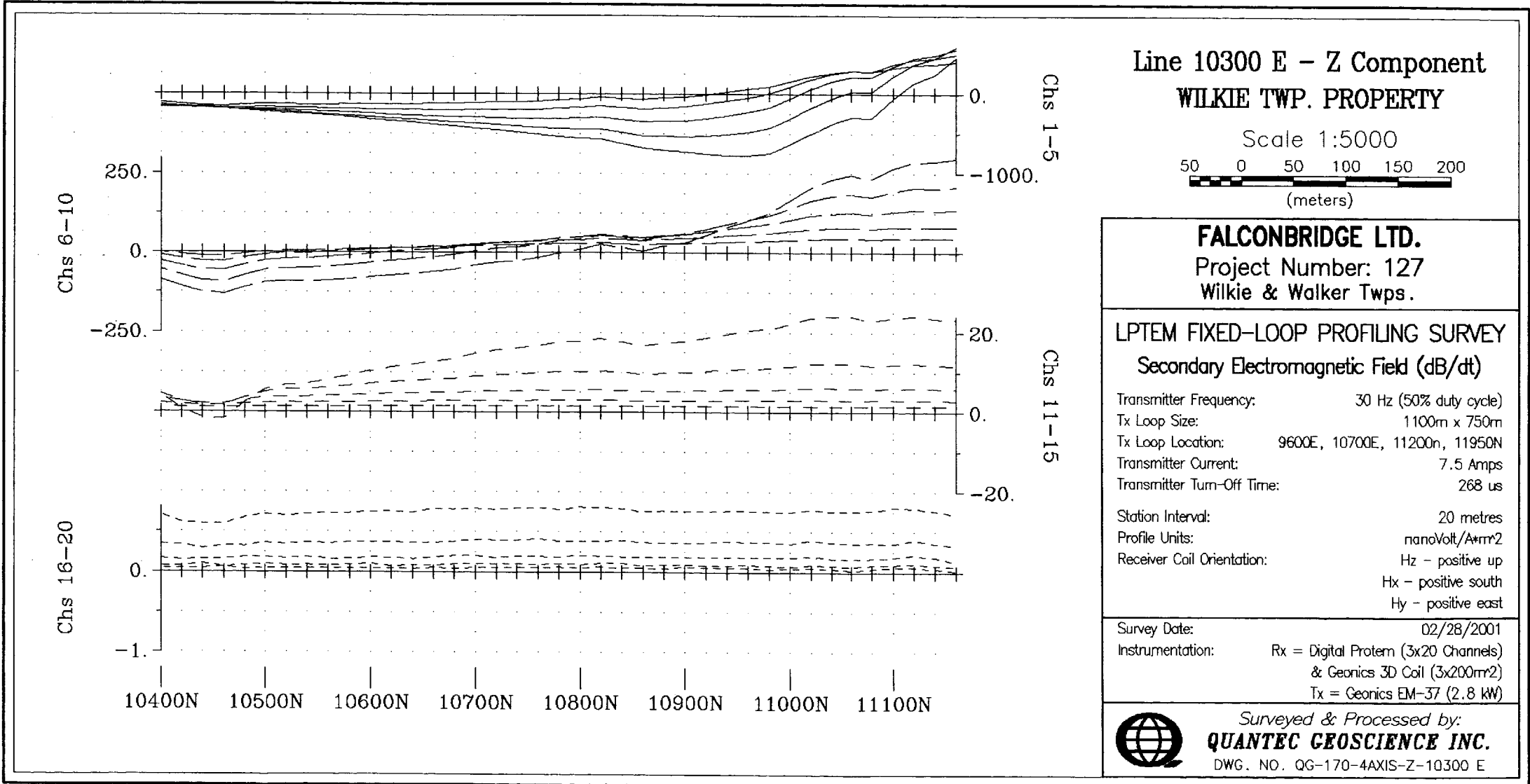
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

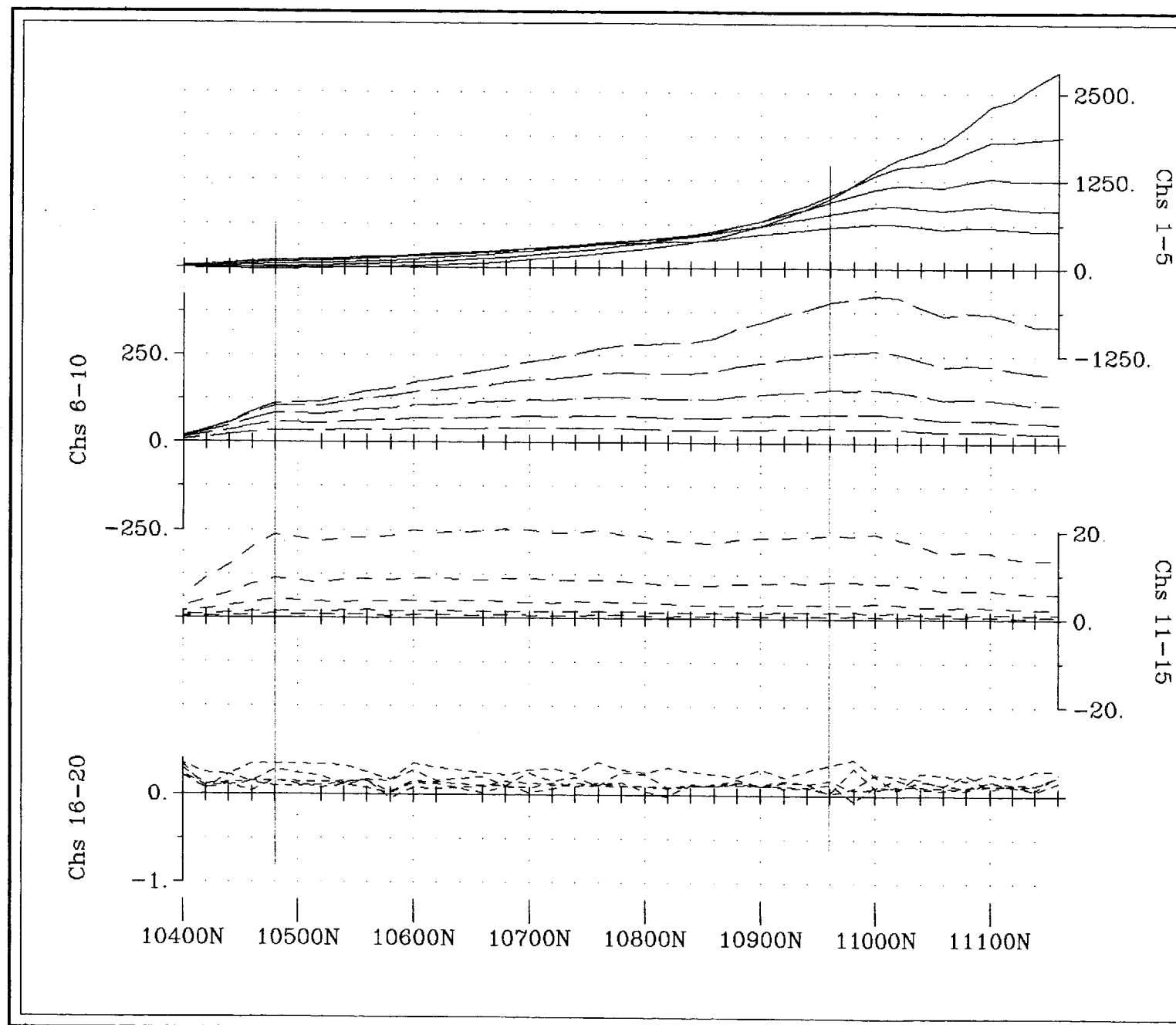
**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200n, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 268 us
Station Interval: 20 metres
Profile Units: nanoVolt/A*mm²
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

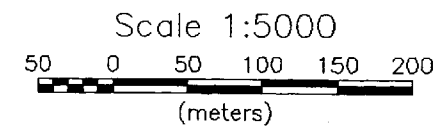
Survey Date: 02/28/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200mm²)
Tx = Geonics EM-37 (2.8 kW)

Survised & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-TF-10200 E





**Line 10300 E - X Component
WILKIE TWP. PROPERTY**



FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

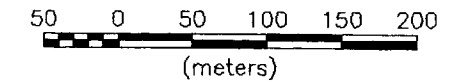
Transmitter Frequency: 30 Hz (50% duty cycle)
 Tx Loop Size: 1100m x 750m
 Tx Loop Location: 9600E, 10700E, 11200n, 11950N
 Transmitter Current: 7.5 Amps
 Transmitter Turn-Off Time: 268 us
 Station Interval: 20 metres
 Profile Units: nanoVolt/Amm²
 Receiver Coil Orientation: Hz - positive up
 Hx - positive south
 Hy - positive east

Survey Date: 02/28/2001
 Instrumentation: Rx = Digital Protem (3x20 Channels)
 & Geonics 3D Coil (3x200mm²)
 Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
 DWG. NO. QG-170-4AXIS-X-10300 E

Line 10300 E - Y Component
WILKIE TWP. PROPERTY

Scale 1:5000



FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)

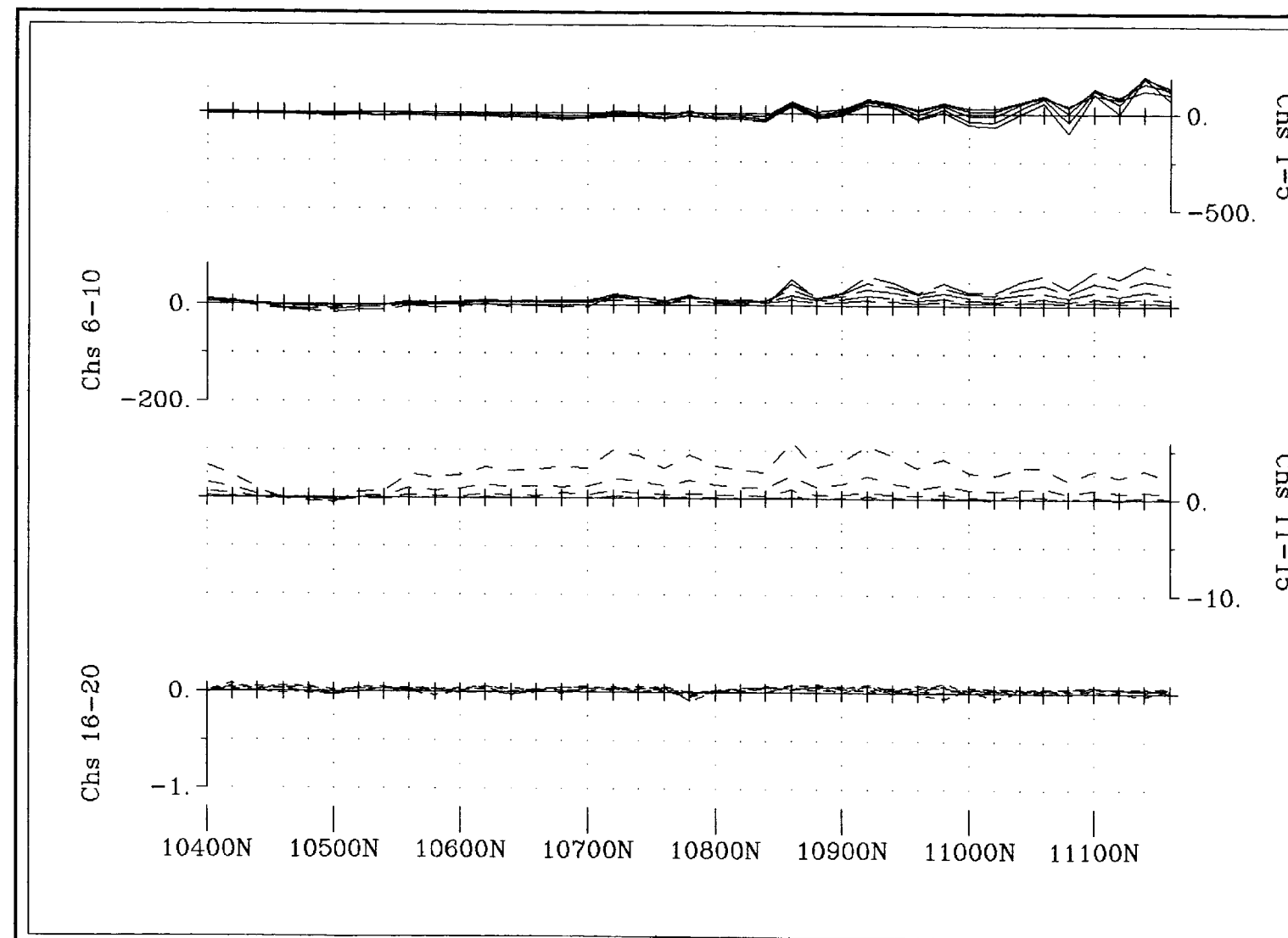
Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200n, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 268 us
Station Interval: 20 metres
Profile Units: nanoVolt/A*m²
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

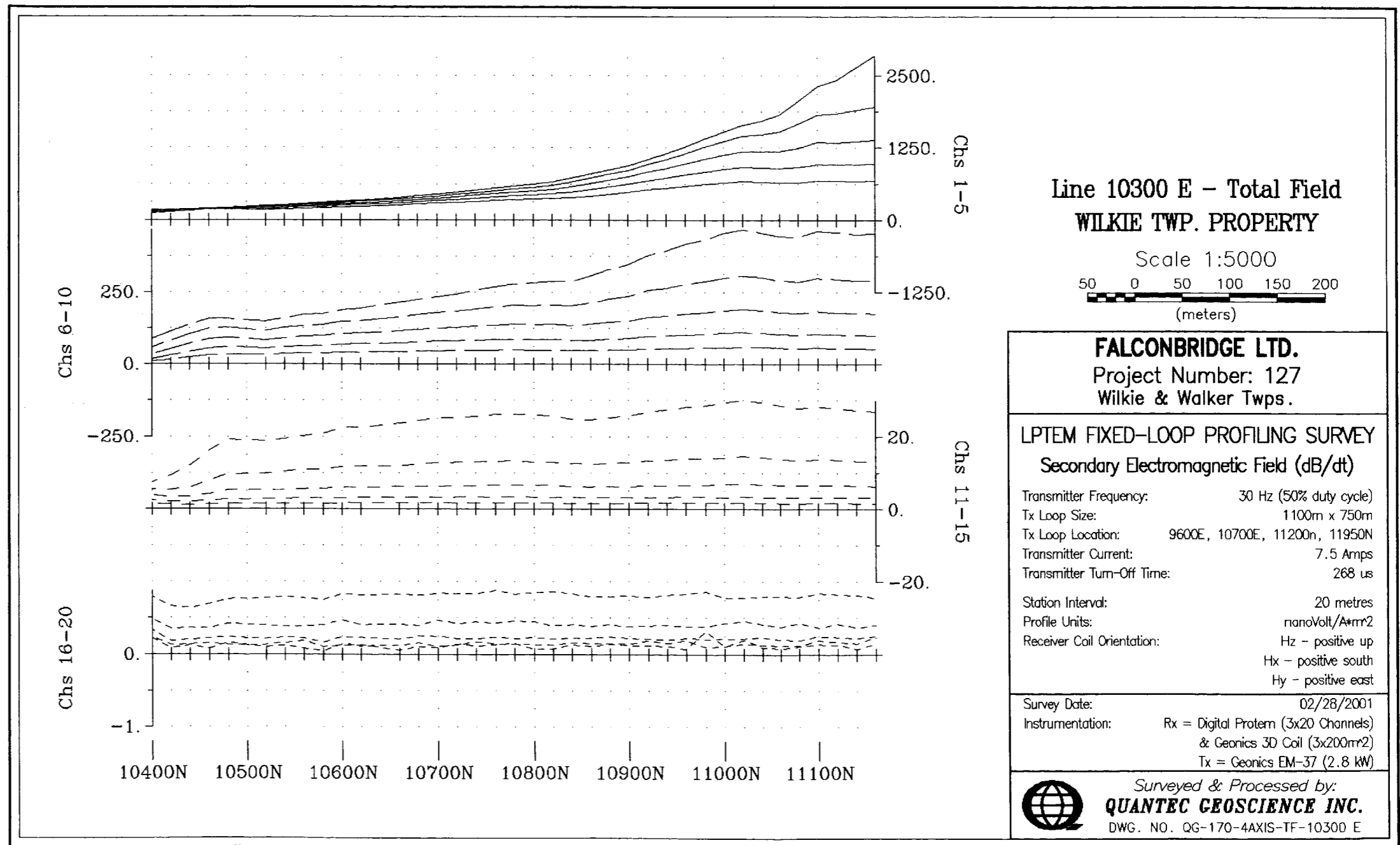
Survey Date: 02/28/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200m²)
Tx = Geonics EM-37 (2.8 kW)

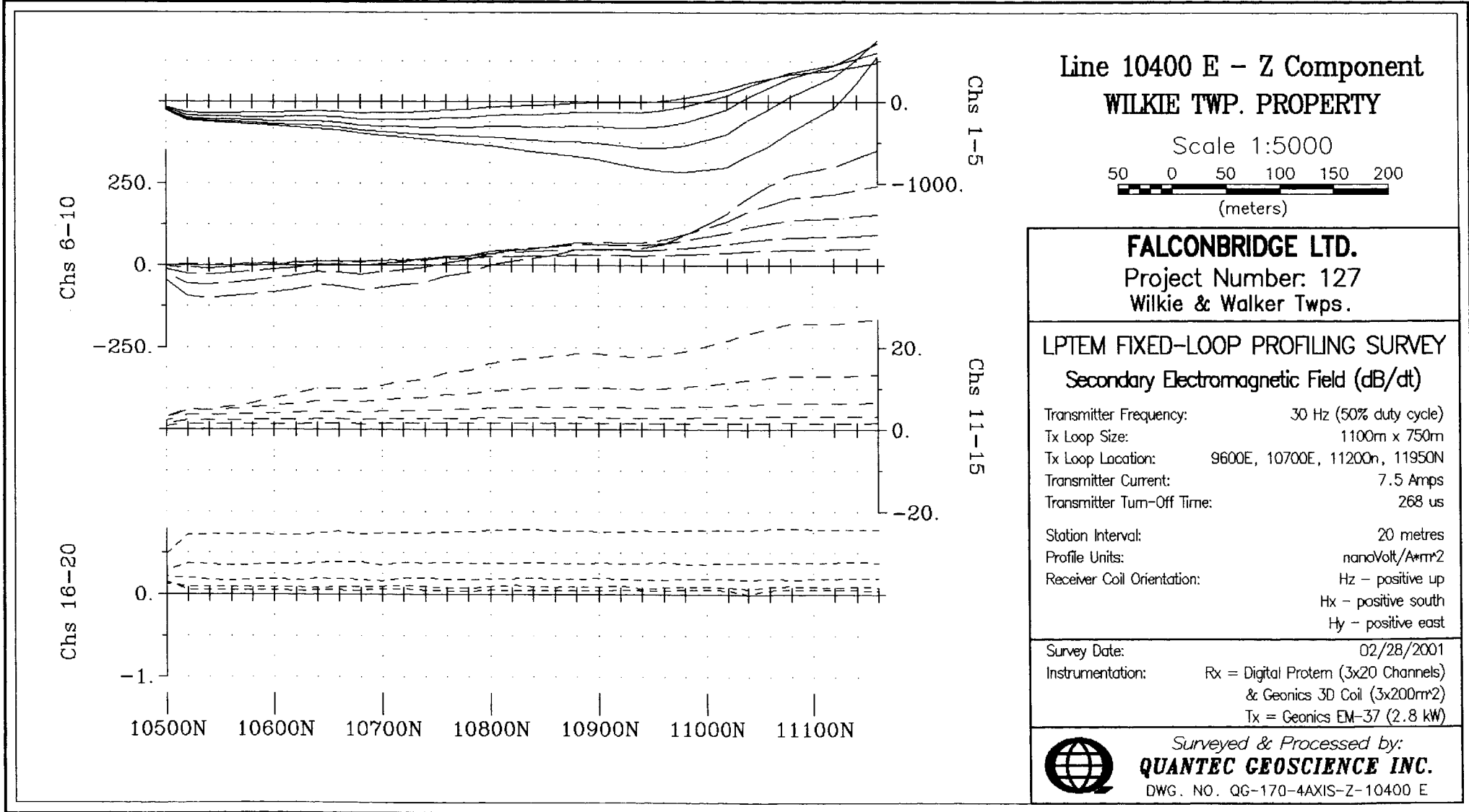


Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.

DWG. NO. QG-170-4AXIS-Y-10300 E







**Line 10400 E - Z Component
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(meters)

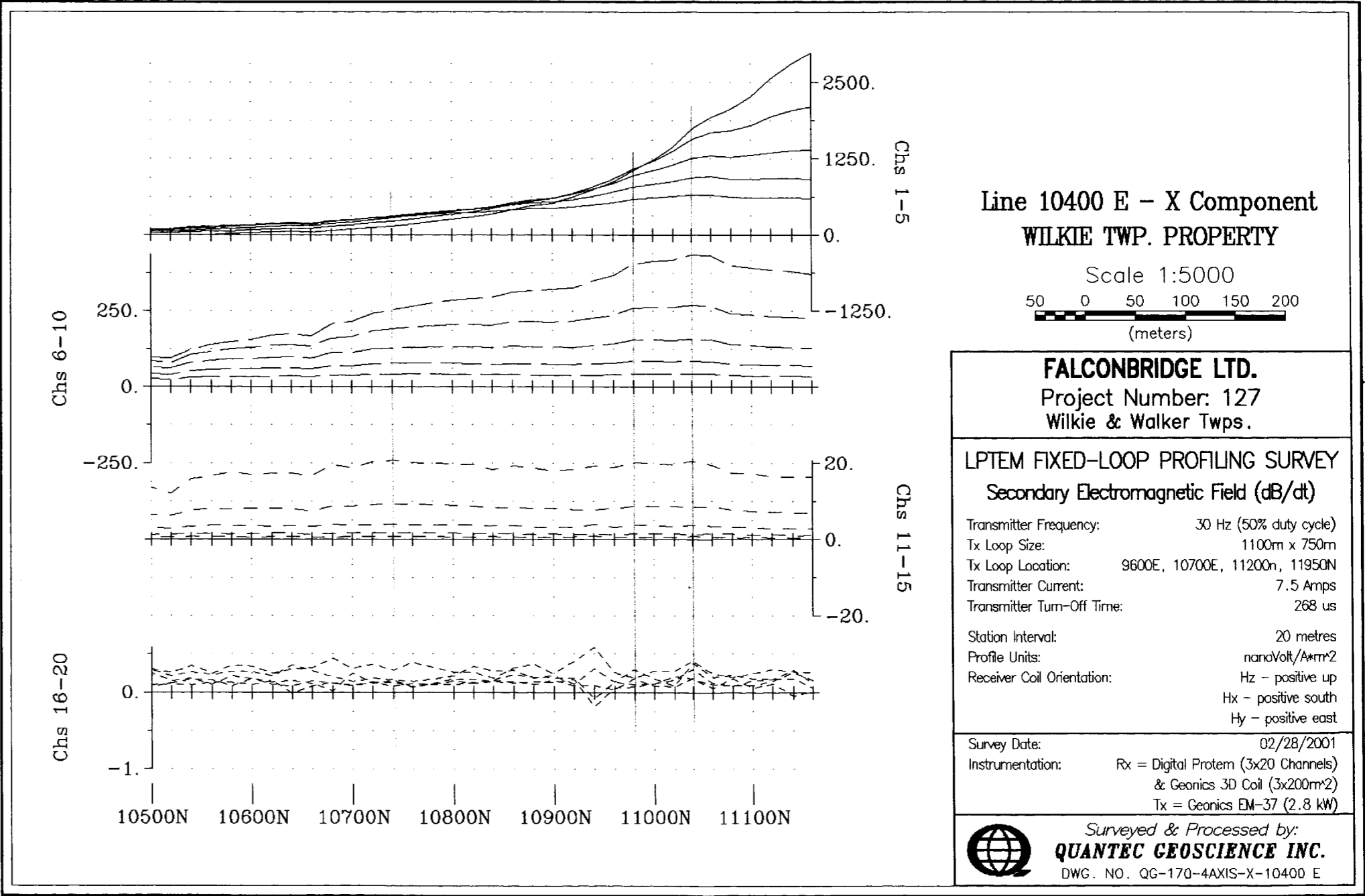
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200N, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 268 us
Station Interval: 20 metres
Profile Units: nanoVolt/A*²
Receiver Coil Orientation: Hx - positive up
Hy - positive south
Hz - positive east

Survey Date: 02/28/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200m²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-Z-10400 E



**Line 10400 E - X Component
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(meters)

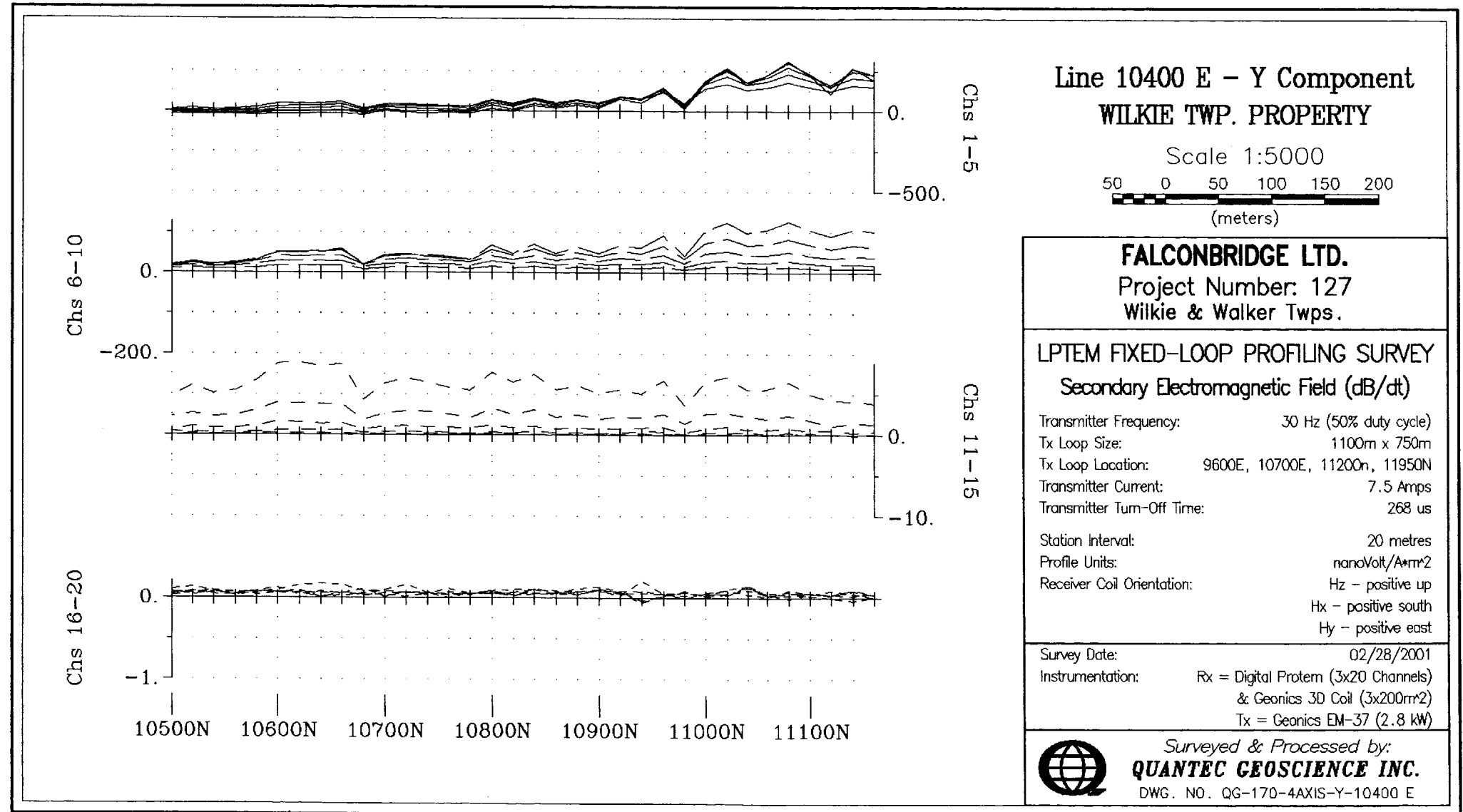
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200N, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 268 us
Station Interval: 20 metres
Profile Units: nanoVolt/A*mm²
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

Survey Date: 02/28/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200m²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-X-10400 E



**Line 10400 E - Y Component
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(meters)

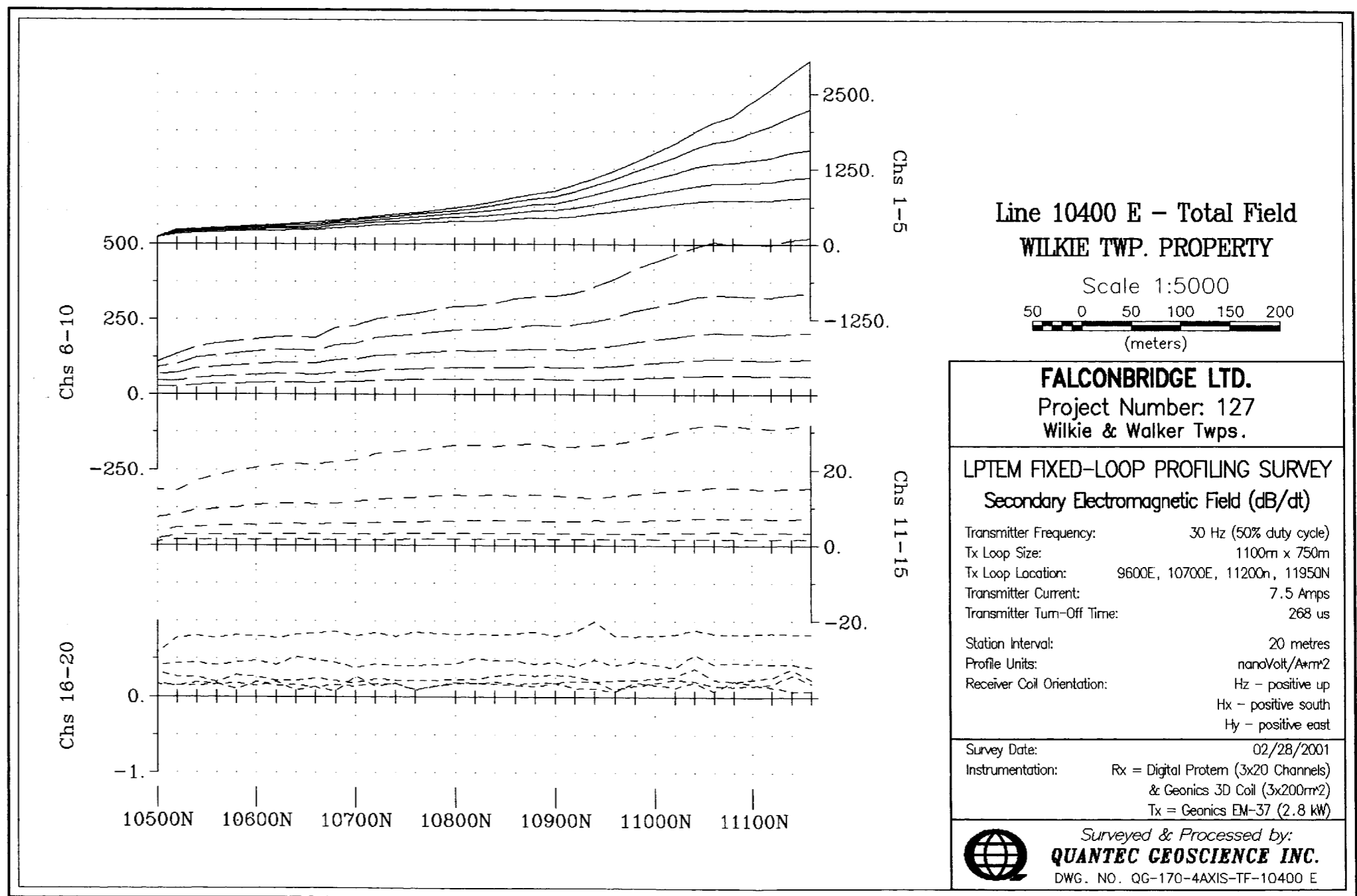
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200N, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 268 us
Station Interval: 20 metres
Profile Units: nanoVolt/A²m²
Receiver Coil Orientation: Hx - positive up
Hy - positive south
Hz - positive east

Survey Date: 02/28/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200m²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-Y-10400 E



**Line 10400 E - Total Field
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(meters)

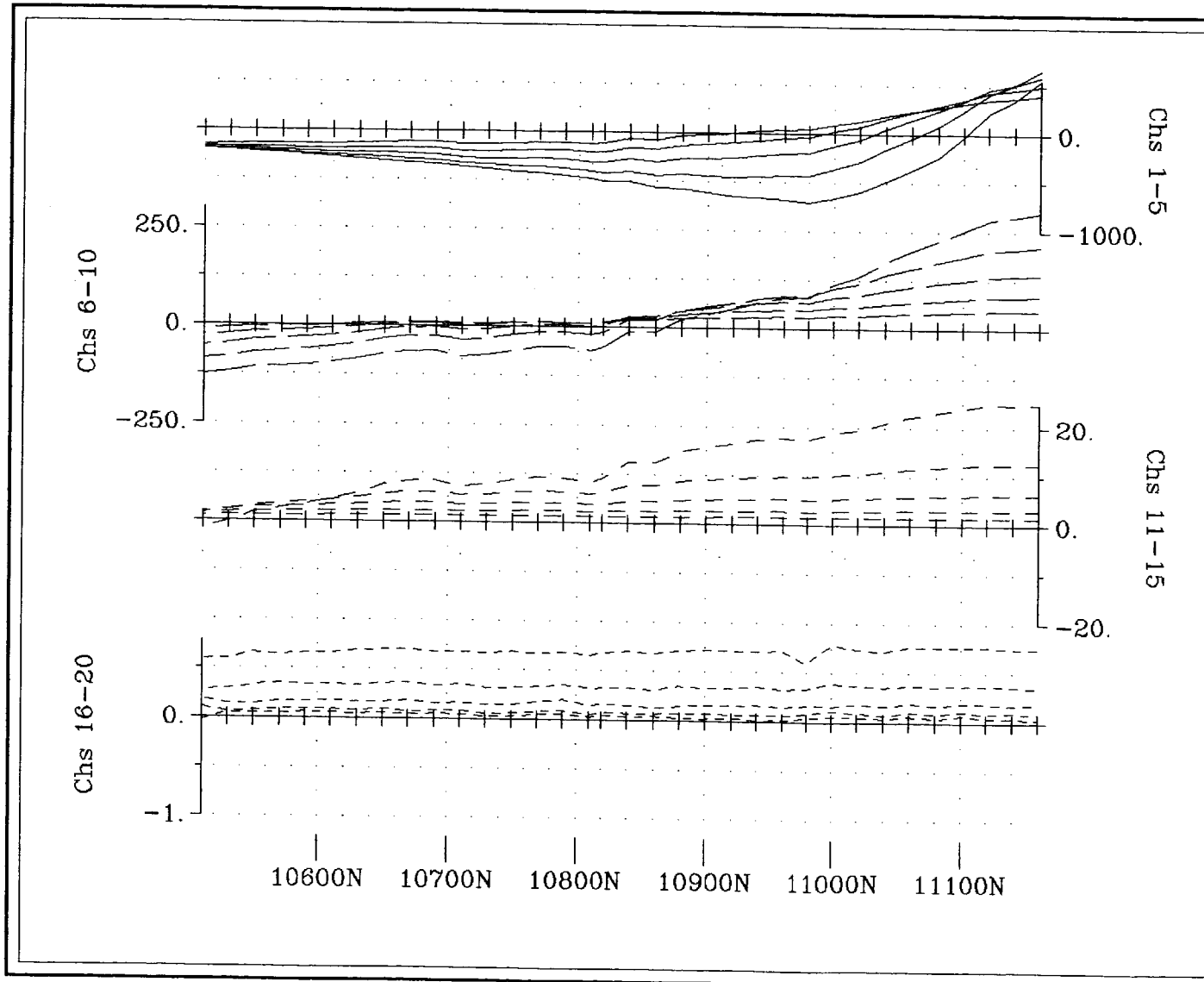
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

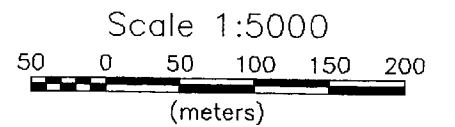
Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200N, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 268 us
Station Interval: 20 metres
Profile Units: nanoVolt/A*m²
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

Survey Date: 02/28/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200mm²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-TF-10400 E



**Line 10500 E - Z Component
WILKIE TWP. PROPERTY**



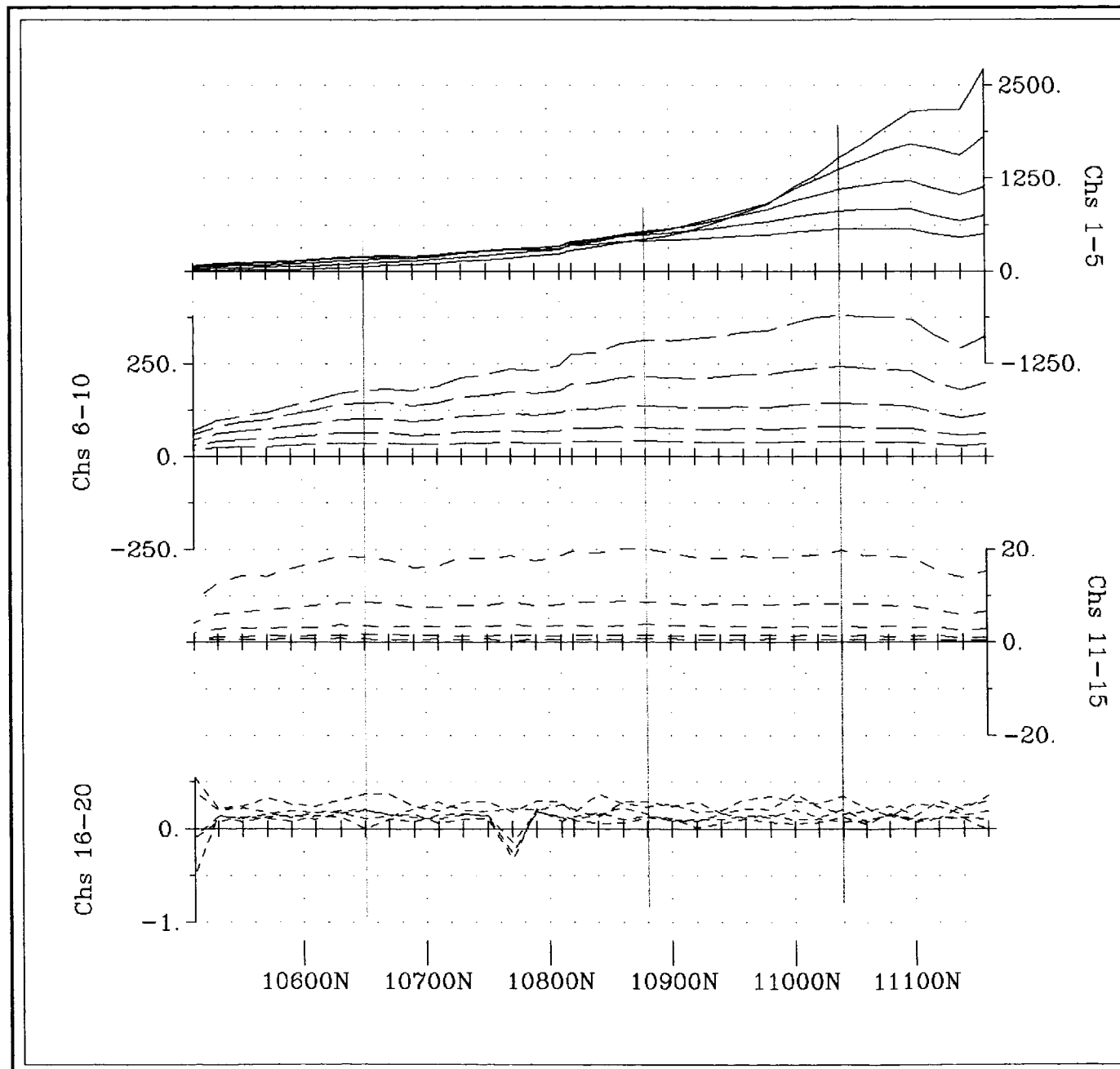
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

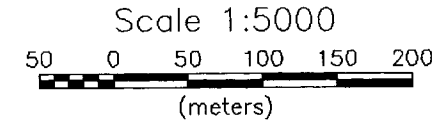
Transmitter Frequency: 30 Hz (50% duty cycle)
 Tx Loop Size: 1100m x 750m
 Tx Loop Location: 9600E, 10700E, 11200N, 11950N
 Transmitter Current: 7.5 Amps
 Transmitter Turn-Off Time: 268 us
 Station Interval: 20 metres
 Profile Units: nanoVolt/A*mm²
 Receiver Coil Orientation: Hz - positive up
 Hx - positive south
 Hy - positive east

Survey Date: 02/28/2001
 Instrumentation: Rx = Digital Protem (3x20 Channels)
 & Geonics 3D Coil (3x200mm²)
 Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
 DWG. NO. QG-170-4AXIS-Z-10500 E



**Line 10500 E - X Component
WILKIE TWP. PROPERTY**



FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

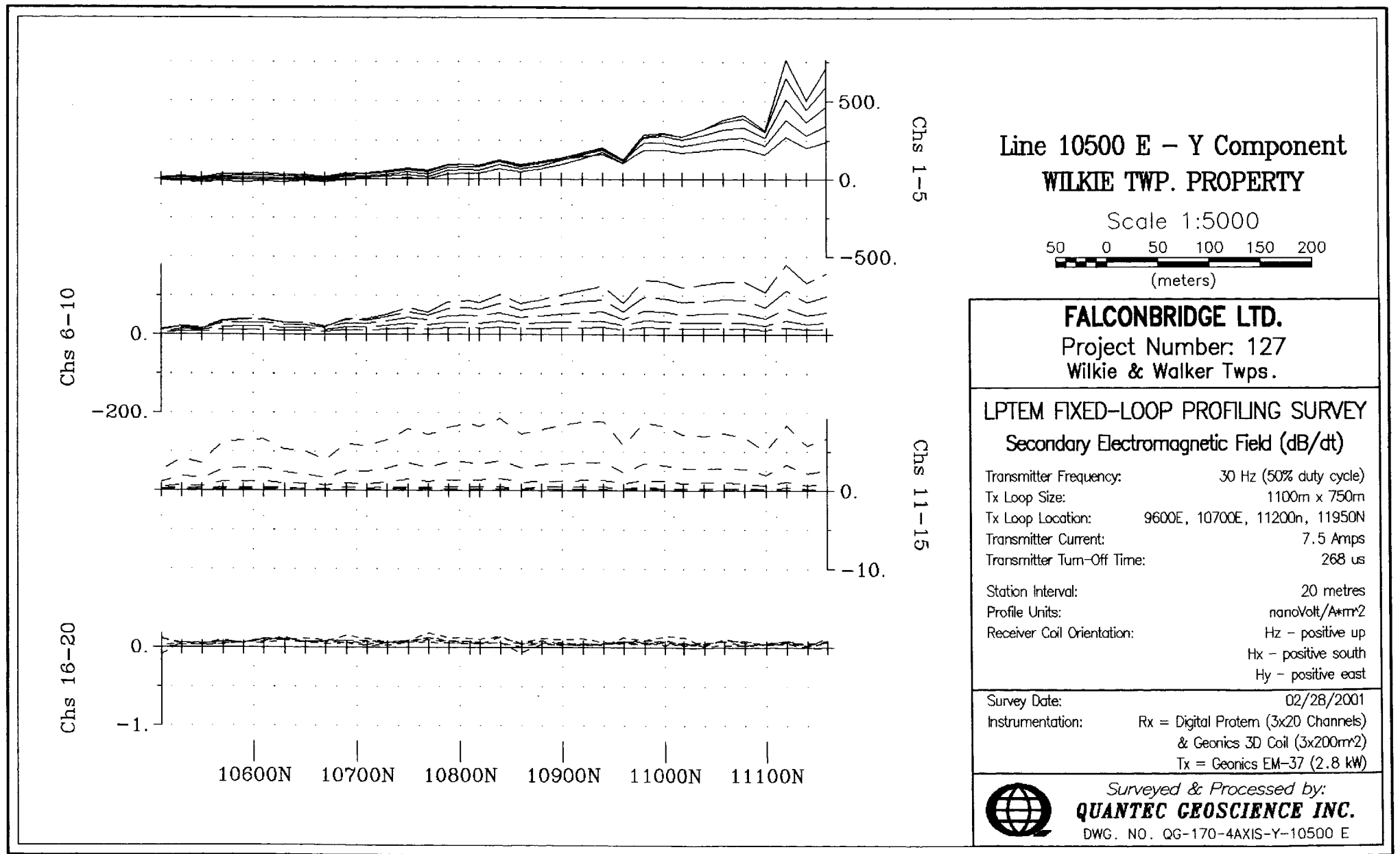
**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

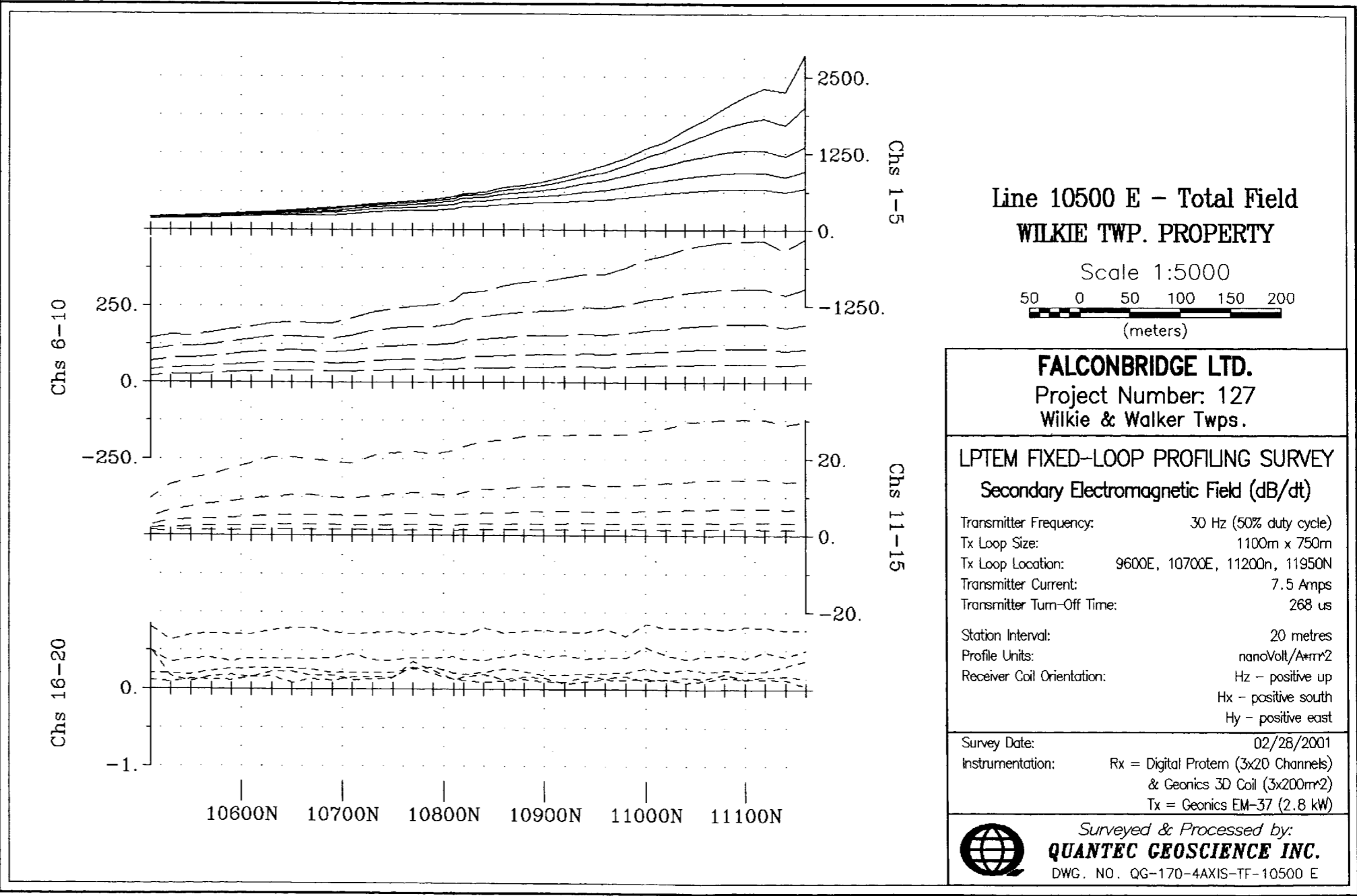
Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200n, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 268 us
Station Interval: 20 metres
Profile Units: nanoVolt/A*mr²
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

Survey Date: 02/28/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200m²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-X-10500 E







**Line 10500 E - Total Field
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(meters)

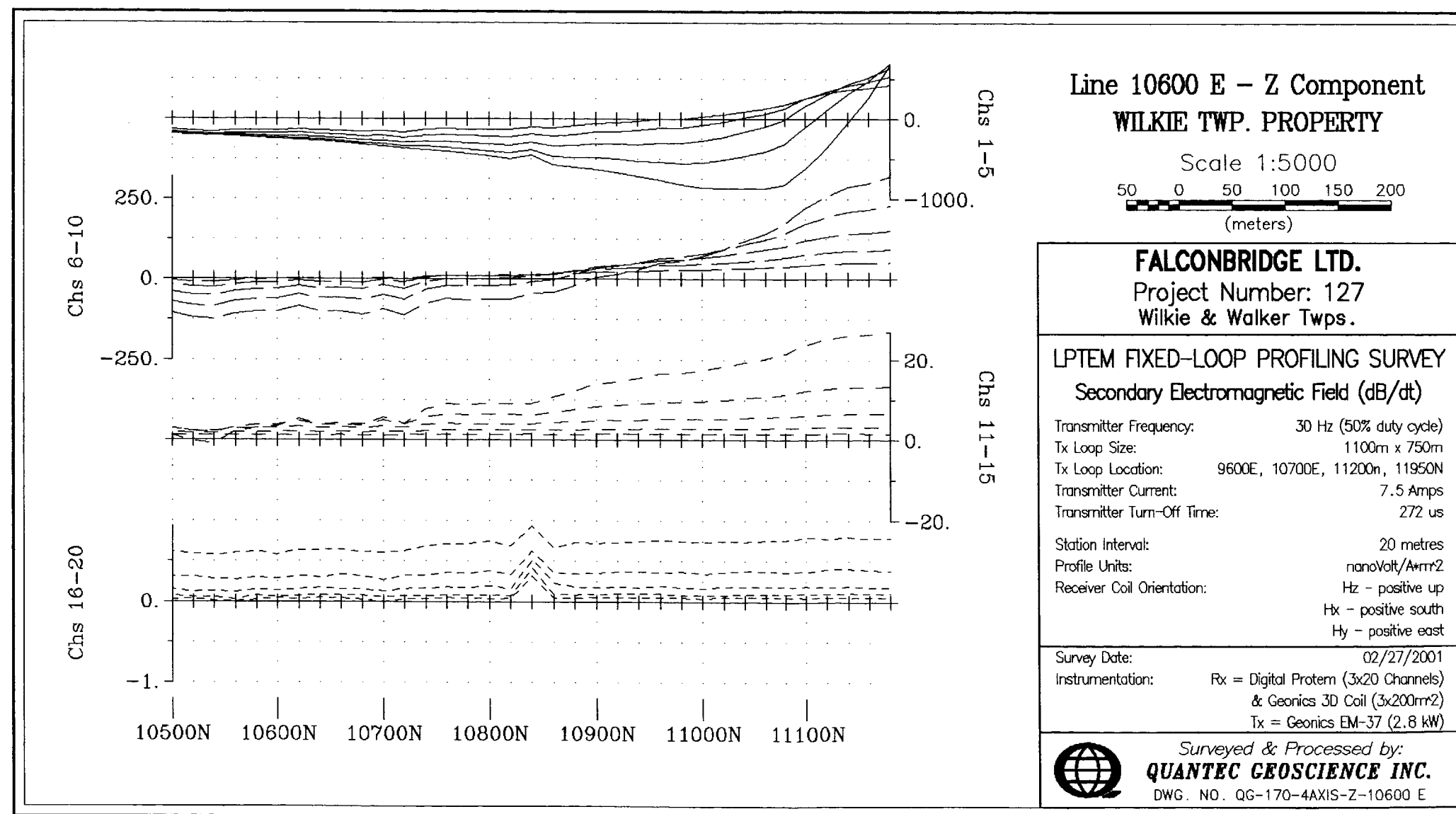
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200n, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 268 us
Station Interval: 20 metres
Profile Units: nanoVolt/A*mm²
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

Survey Date: 02/28/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200m²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-TF-10500 E



**Line 10600 E - Z Component
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(meters)

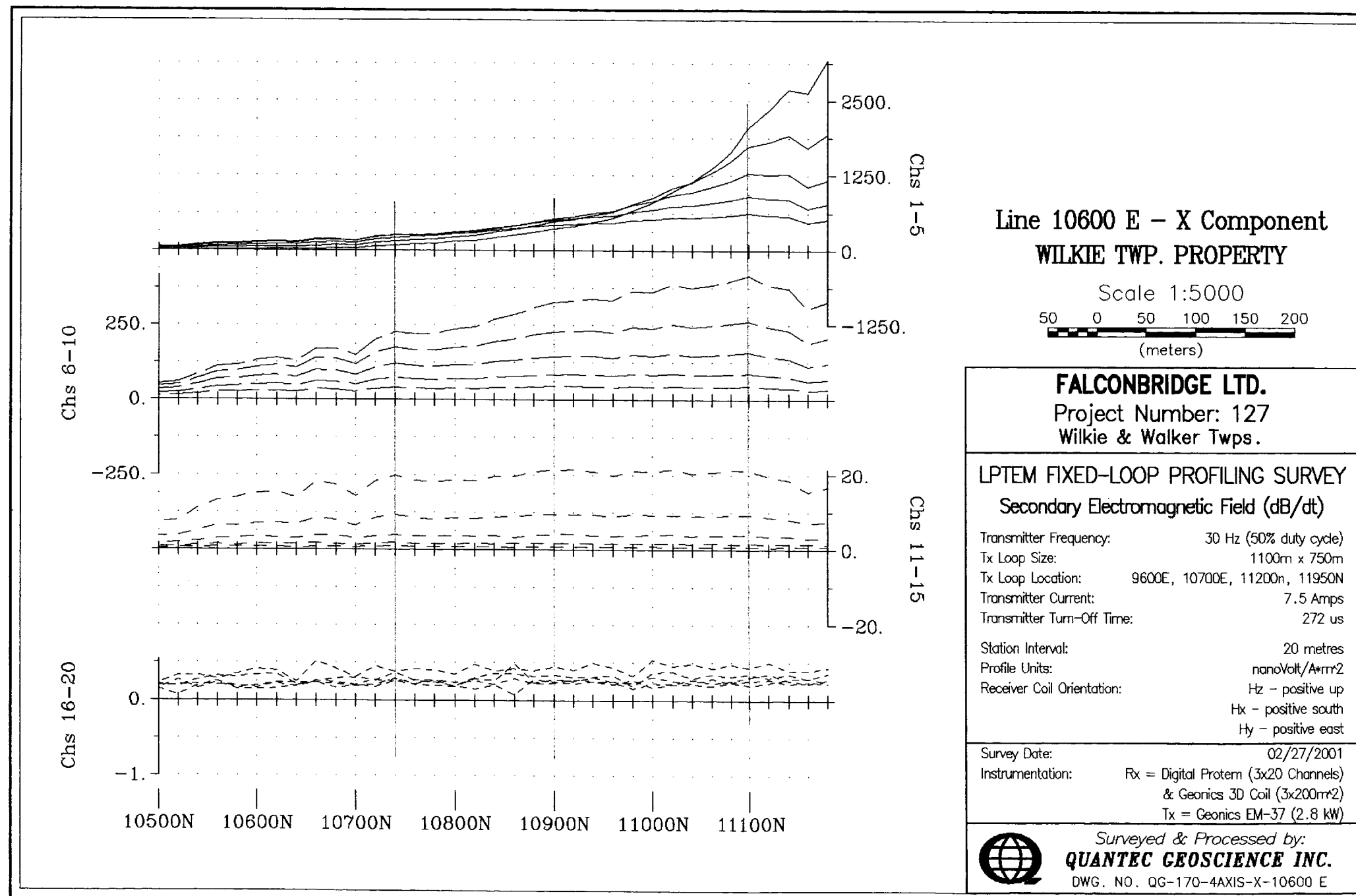
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

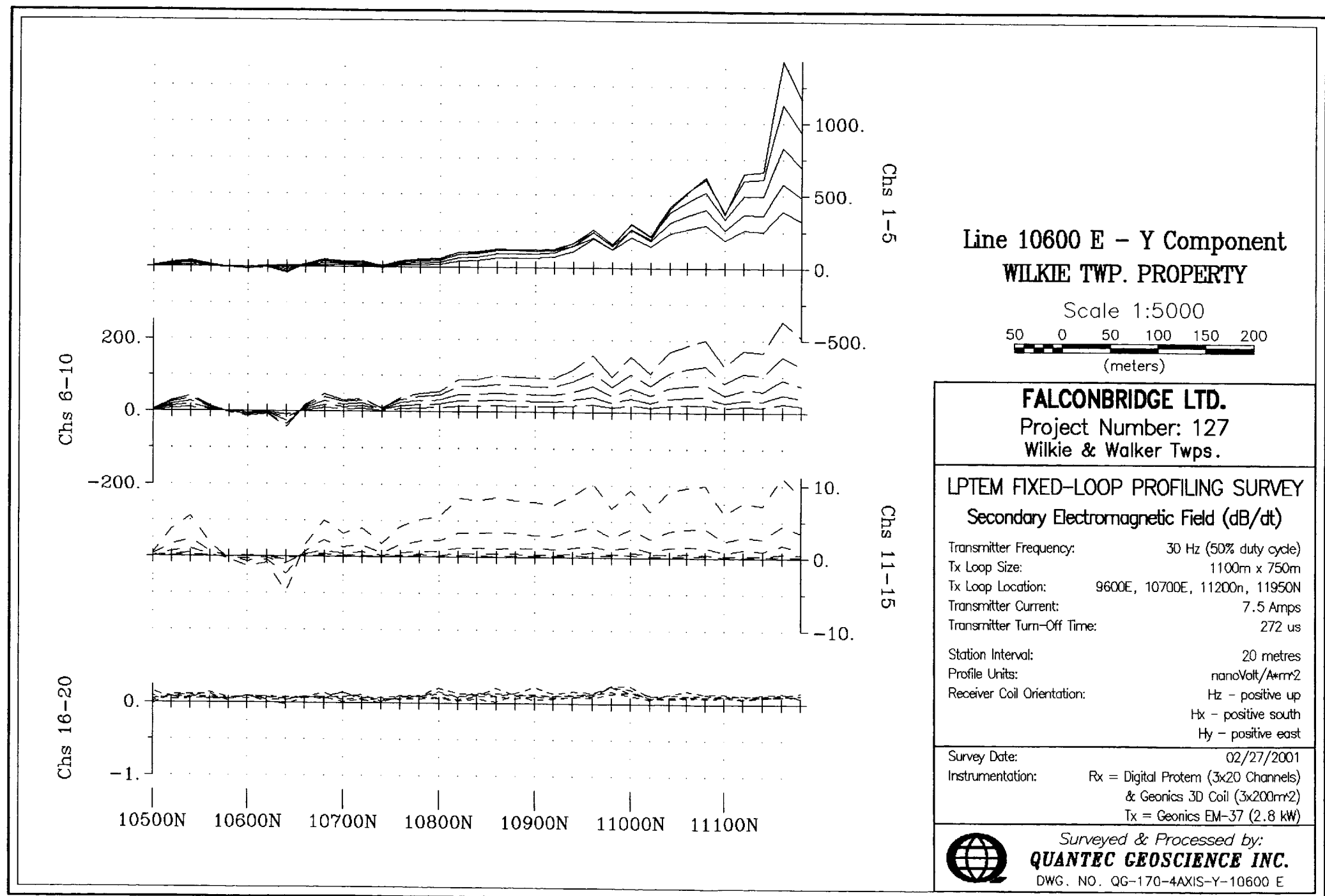
**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200n, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 272 us
Station Interval: 20 metres
Profile Units: nanoVolt/Amm²
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

Survey Date: 02/27/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200m²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-Z-10600 E





**Line 10600 E - Y Component
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(meters)

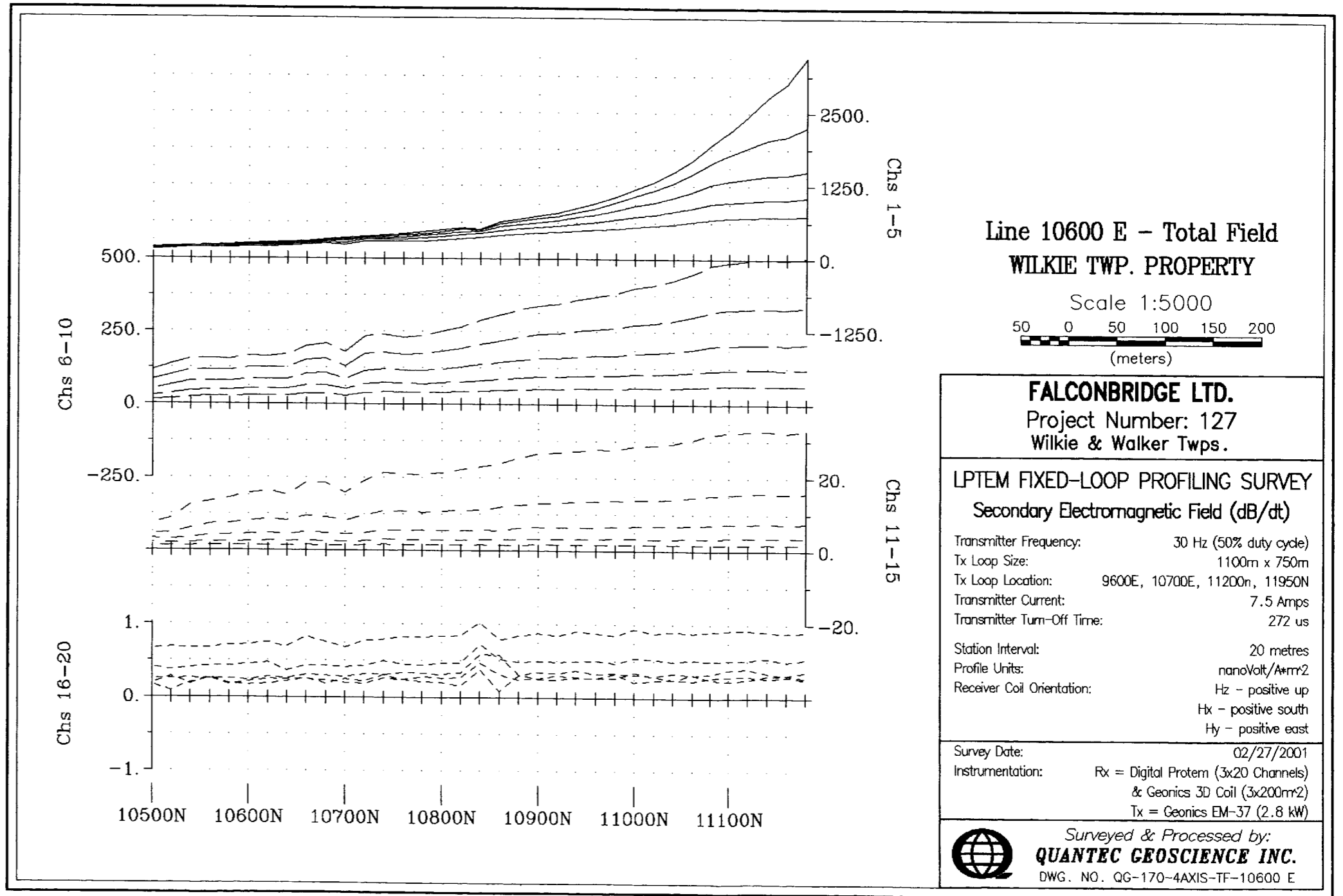
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200n, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 272 us
Station Interval: 20 metres
Profile Units: nanoVolt/Am²
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

Survey Date: 02/27/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200mm²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-Y-10600 E



**Line 10600 E - Total Field
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(meters)

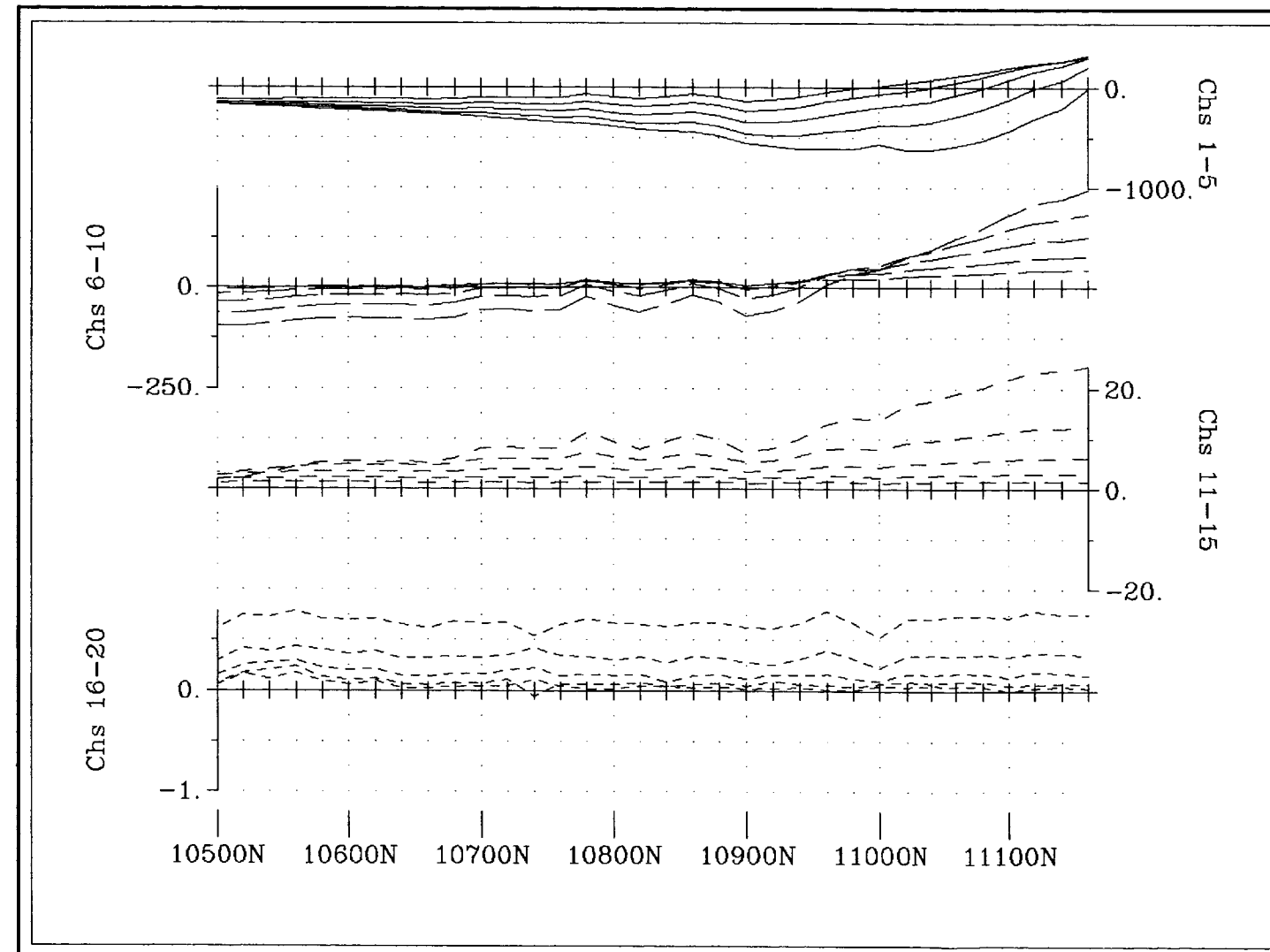
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

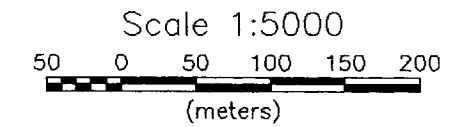
Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200n, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 272 us
Station Interval: 20 metres
Profile Units: nanoVolt/A*mm²
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

Survey Date: 02/27/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200m²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-TF-10600 E



**Line 10700 E - Z Component
WILKIE TWP. PROPERTY**



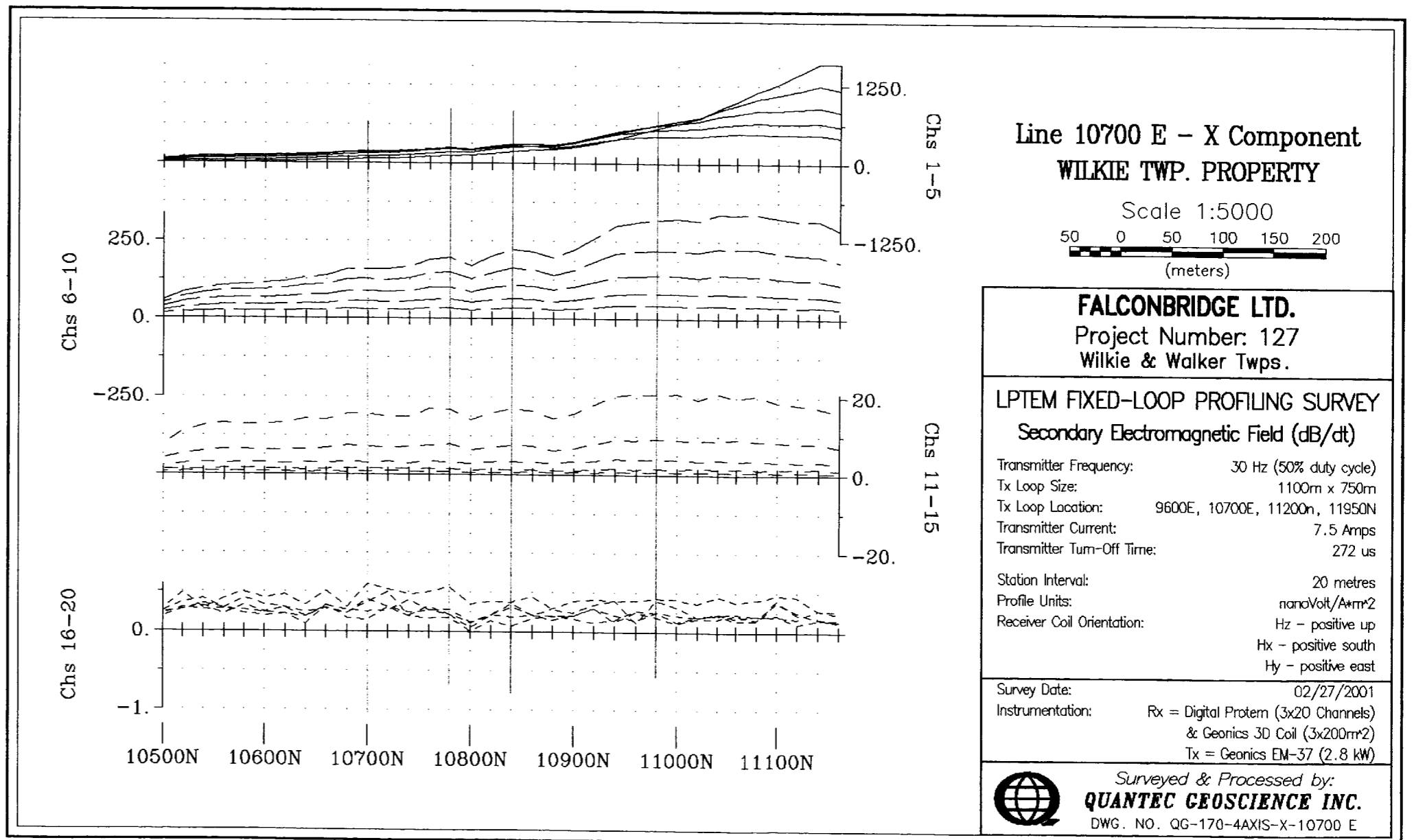
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
 Tx Loop Size: 1100m x 750m
 Tx Loop Location: 9600E, 10700E, 11200n, 11950N
 Transmitter Current: 7.5 Amps
 Transmitter Turn-Off Time: 272 us
 Station Interval: 20 metres
 Profile Units: nanoVolt/A*m²
 Receiver Coil Orientation: Hz - positive up
 Hx - positive south
 Hy - positive east

Survey Date: 02/27/2001
 Instrumentation: Rx = Digital Protem (3x20 Channels)
 & Geonics 3D Coil (3x200m²)
 Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
 DWG. NO. QG-170-4AXIS-Z-10700 E



**Line 10700 E - X Component
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(meters)

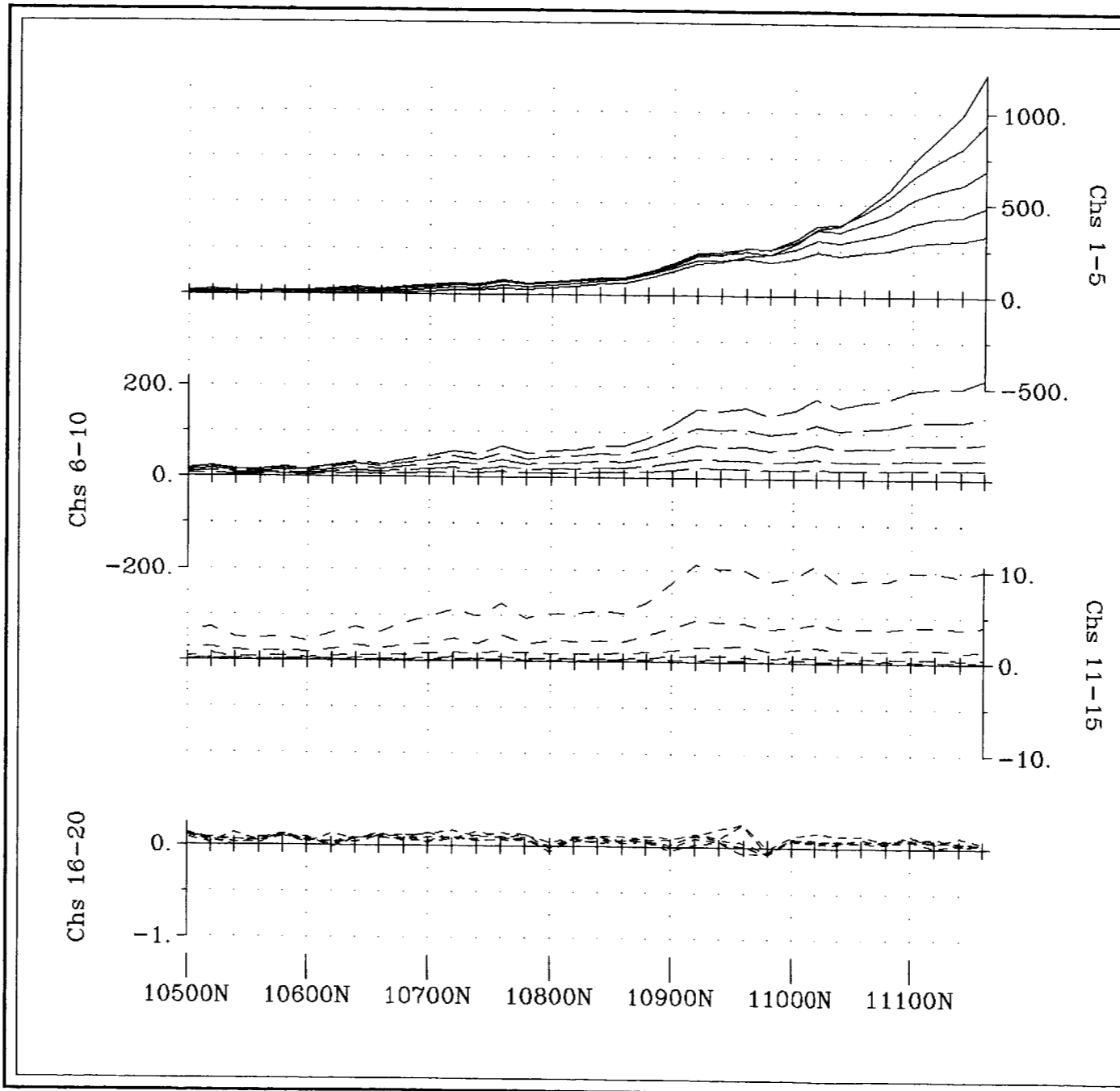
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

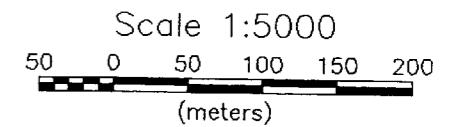
Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200N, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 272 us
Station Interval: 20 metres
Profile Units: nanoVolt/A* m^2
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

Survey Date: 02/27/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200 m^2)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-X-10700 E



**Line 10700 E - Y Component
WILKIE TWP. PROPERTY**



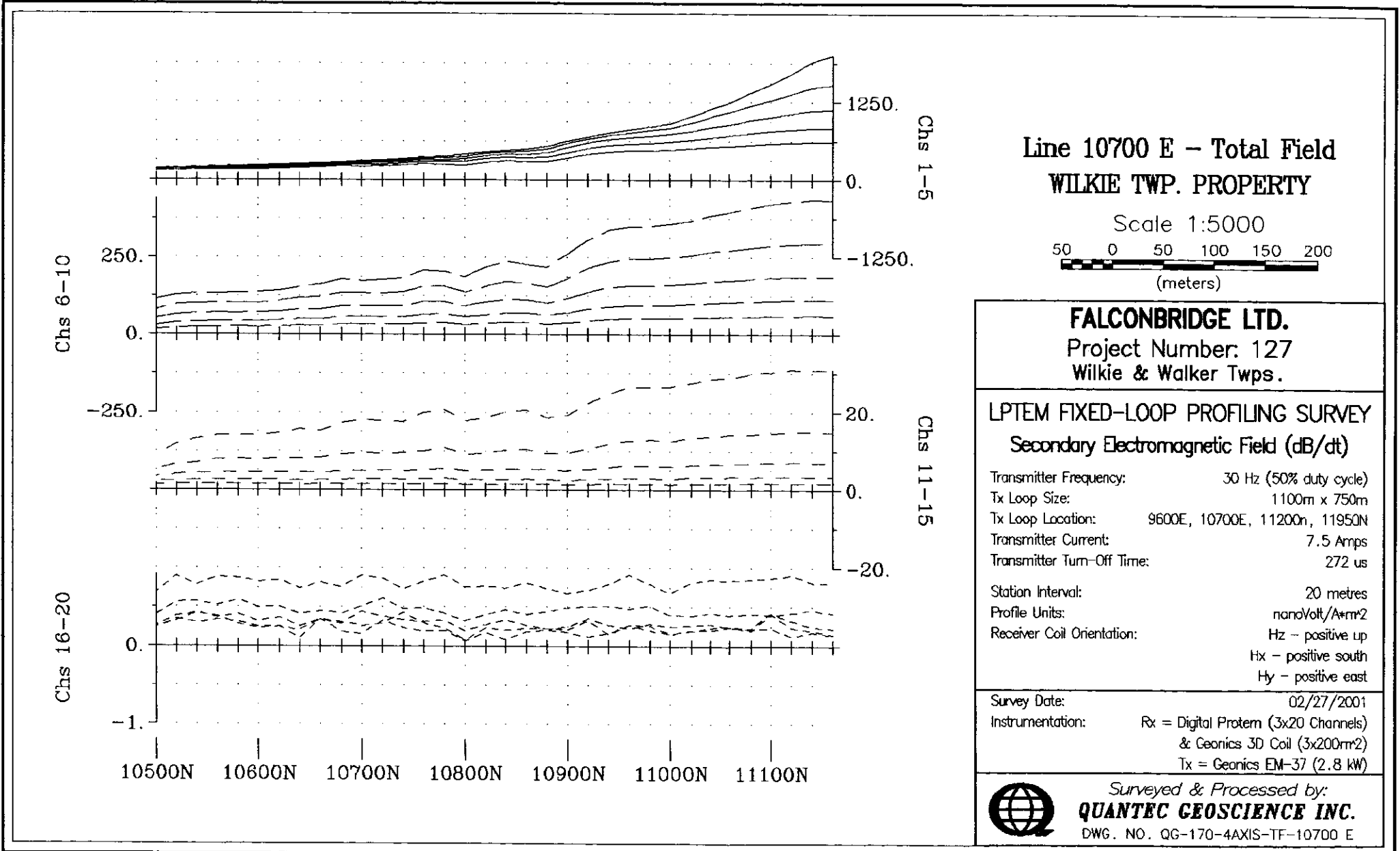
FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twp.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
 Tx Loop Size: 1100m x 750m
 Tx Loop Location: 9600E, 10700E, 11200N, 11950N
 Transmitter Current: 7.5 Amps
 Transmitter Turn-Off Time: 272 us
 Station Interval: 20 metres
 Profile Units: nanoVolt/A²m²
 Receiver Coil Orientation: Hz - positive up
 Hx - positive south
 Hy - positive east

Survey Date: 02/27/2001
 Instrumentation: Rx = Digital Protem (3x20 Channels)
 & Geonics 3D Coil (3x200m²)
 Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
 DWG. NO. QG-170-4AXIS-Y-10700 E



**Line 10700 E - Total Field
WILKIE TWP. PROPERTY**

Scale 1:5000
50 0 50 100 150 200
(meters)

FALCONBRIDGE LTD.
Project Number: 127
Wilkie & Walker Twps.

**LPTM FIXED-LOOP PROFILING SURVEY
Secondary Electromagnetic Field (dB/dt)**

Transmitter Frequency: 30 Hz (50% duty cycle)
Tx Loop Size: 1100m x 750m
Tx Loop Location: 9600E, 10700E, 11200n, 11950N
Transmitter Current: 7.5 Amps
Transmitter Turn-Off Time: 272 us
Station Interval: 20 metres
Profile Units: nanoVolt/A²m²
Receiver Coil Orientation: Hz - positive up
Hx - positive south
Hy - positive east

Survey Date: 02/27/2001
Instrumentation: Rx = Digital Protem (3x20 Channels)
& Geonics 3D Coil (3x200m²)
Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
DWG. NO. QG-170-4AXIS-TF-10700 E



Declaration of Assessment Work Performed on Mining Land

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction Number (office use)
W0180.00124
Assessment Files Research Imaging



42A10NE2013 2.20975 WILKIE

900

ubsection 65(2) and 66(3) of the Mining Act. Under section 8 of the Mining Act, assessment work and correspond with the mining land holder. Questions about this them Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury,

- Instructions: - For work performed on Crown Lands before recording a claim, use form 0240.
- Please type or print in ink.

1. Recorded holder(s) (Attach a list if necessary)

Table with 2 columns: Client Information and Contact Information. Rows include Falconbridge Limited and Echo Bay Mines Ltd.

2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

- Geotechnical: prospecting, surveys, assays and work under section 18 (regs) [checked]
Physical: drilling stripping, trenching and associated assays [unchecked]
Rehabilitation [unchecked]

Work Type: Line cutting TEM Geophysical Survey
Office Use: Commodity, Total \$ Value of Work Claimed 19,350
Dates Work Performed: 14/02/01 to 03/03/01
Township/Area: Wilkie & Walker Twps.
Mining Division: Harder Lake
Resident Geologist District: Kirkland Lake

- Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;
- provide proper notice to surface rights holders before starting work;
- complete and attach a Statement of Costs, form 0212;
- provide a map showing contiguous mining lands that are linked for assigning work;
- include two copies of your technical report.

3. Person or companies who prepared the technical report (Attach a list if necessary)

Table with 2 columns: Name/Address and Telephone/Fax Number. Rows include L'Unik Explorateur and Quantec Geoscience Inc. Includes 'RECEIVED' stamps and a signature.

4. Certification by Recorded Holder or Agent

I, Dean Rogers, do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent: [Signature] Date: March 9, 2001
Agent's Address: Falconbridge Ltd. (As above) Telephone Number: (705) 264-5200 (ext. 8211) Fax Number: (705) 267-8874

Revised

5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank Value of work to be distributed at a future date
1 L790111	1	\$3,456 <i>J.R.</i>	\$0	\$212 <i>J.R.</i>	\$3,244 <i>J.R.</i>
2 L1227508 <i>e</i>	3	\$2,764	\$1,200	\$1,564	\$0
3 L758212	1	\$2,764	\$0	\$0	\$2,764
4 L1227508 <i>e</i>	1	\$4,148	\$400	\$3,748	\$0
5 L1227508 <i>e</i>	2	\$692	\$800	\$0	\$0
6 L758217	1	\$2,764	\$0	\$2,764	\$0
7 L758216	1	\$2,764	\$0	\$0	\$2,764
8 L1236937 <i>e</i>	1	\$0	\$400	\$0	\$0
9 L1227513 <i>e</i>	4	\$0	\$1,800	\$0	\$0
10 L1189926	8	\$0	\$2,978	\$0	\$0
11 L1174840	2	\$0	\$800 <i>J.R.</i>	\$0	\$0
12 L1228655 <i>e</i>	5 <i>J.R.</i>	\$0	\$2,400 <i>J.R.</i>	\$0	\$0
Column Totals	59 <i>J.R.</i>	\$19,350	\$10,578 <i>J.R.</i>	\$9,086 <i>J.R.</i>	\$7,972 <i>J.R.</i>

I, Dean Rogers (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/98 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Record Holder or Agent Authorized in Writing: [Signature] Date: March 9, 2001 *J.R.*

6. Instruction for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- 3. Credits are to be cut back equally over all claims listed in this declaration; or
- 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only Received Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
	Approved for Recording by Mining Recorder (Signature)	

0841 (0097)

2. 20. 0. 7. 7.

RECEIVED
MAR 12 2001
GEOSCIENCE ASSESSMENT OFFICE

MAR 12 2001
GEOSCIENCE ASSESSMENT OFFICE



Statement of Costs for Assessment Credit

Transaction Number (office use) W0180.00124

Personal information collected on this form is obtained under the authority of subsection 6 (1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, this information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to a Provincial Mining Recorder, Ministry of Northern Development and Mines, 3rd Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Table with 4 columns: Work Type, Units of work, Cost Per Unit of work, Total Cost. Rows include Geologist (planning & grid location), Line Cutting, TEM Survey, Geophysicist (interpretation), Associated Costs (e.g. supplies, mobilization and demobilization), Geophysics Report Preparation Charge, Transportation Costs, Truck Rental & Gasoline, Food and Lodging Costs, and Total Value of Assessment Work \$19,350.00.

RECEIVED LARDER LAKE MINING DIVISION

MAR 9 2001

Handwritten number 1.30

Calculations of Filing Discounts:

- 1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK x 0.50 = Total \$ value of worked claimed.

Note:

- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

RECEIVED MAR 12 2001 GEOSCIENCE ASSESSMENT OFFICE

Certification verifying costs:

I, Dean Rogers, do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying

Declaration of Work form as, Project Geologist, I am authorized to make this certification.

Signature: [Handwritten Signature] Date: March 9, 2001

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (888) 415-9845
Fax: (877) 670-1555

April 19, 2001

FALCONBRIDGE LIMITED
SUITE 1200, 95 WELLINGTON STREET WEST
TORONTO, ONTARIO
M5J-2V4

Visit our website at:
www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

Dear Sir or Madam:

Submission Number: 2.20975

Status

Subject: Transaction Number(s): W0180.00124 Approval

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. **WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.**

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in **DUPLICATE** to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact LUCILLE JEROME by e-mail at lucille.jerome@ndm.gov.on.ca or by telephone at (705) 670-5858.

Yours sincerely,



ORIGINAL SIGNED BY
Lucille Jerome
Acting Supervisor, Geoscience Assessment Office
Mining Lands Section

Work Report Assessment Results

Submission Number: 2.20975

Date Correspondence Sent: April 19, 2001

Assessor: LUCILLE JEROME

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W0180.00124	790111	WILKIE, WALKER	Approval	April 18, 2001

Section:

14 Geophysical EM

Correspondence to:

Resident Geologist
Kirkland Lake, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):

Dean F. Rogers
TIMMINS, ONTARIO, CANADA

FALCONBRIDGE LIMITED
TORONTO, ONTARIO

ECHO BAY MINES LTD.
TIMMINS, ONTARIO



MINING LAND TENURE MAP

Date / Time of Issue Apr 19 2001 15:47h Eastern
TOWNSHIP / AREA WALKER PLAN G-3584
ADMINISTRATIVE DISTRICTS / DIVISIONS
Mining Division Larder Lake
Land Titles/Registry Division COCHRANE
Ministry of Natural Resources District COCHRANE

TOPOGRAPHIC

- Area Outside Boundary
- Flowline
- Contour Line
- Section Line
- City or Town Line
- Centre - Super Highway
- Street
- Mine Location
- Pipeline
- Road
- Trail
- Relief or Pipeline
- Hydroline
- Communication Line
- Intersecting
- Minerals (Fossil, Industrial, etc.)

LAND TENURE

- Freehold Patent
- Leasehold Patent
- Leasehold License
- Surface of Occupation
- Hydroline
- Communication Line
- Intersecting
- Minerals (Fossil, Industrial, etc.)

LAND TENURE WITHDRAWALS

- 1224 Area Withdrawal from Operation Mining Act Withdrawal Types
- W10 Other Withdrawal - gas, oil, coal, uranium, etc.
- W11 Other Withdrawal - gas, oil, coal, uranium, etc.
- W12 Other Withdrawal - gas, oil, coal, uranium, etc.
- W13 Other Withdrawal - gas, oil, coal, uranium, etc.
- W14 Other Withdrawal - gas, oil, coal, uranium, etc.
- W15 Other Withdrawal - gas, oil, coal, uranium, etc.
- W16 Other Withdrawal - gas, oil, coal, uranium, etc.

IMPORTANT NOTICES

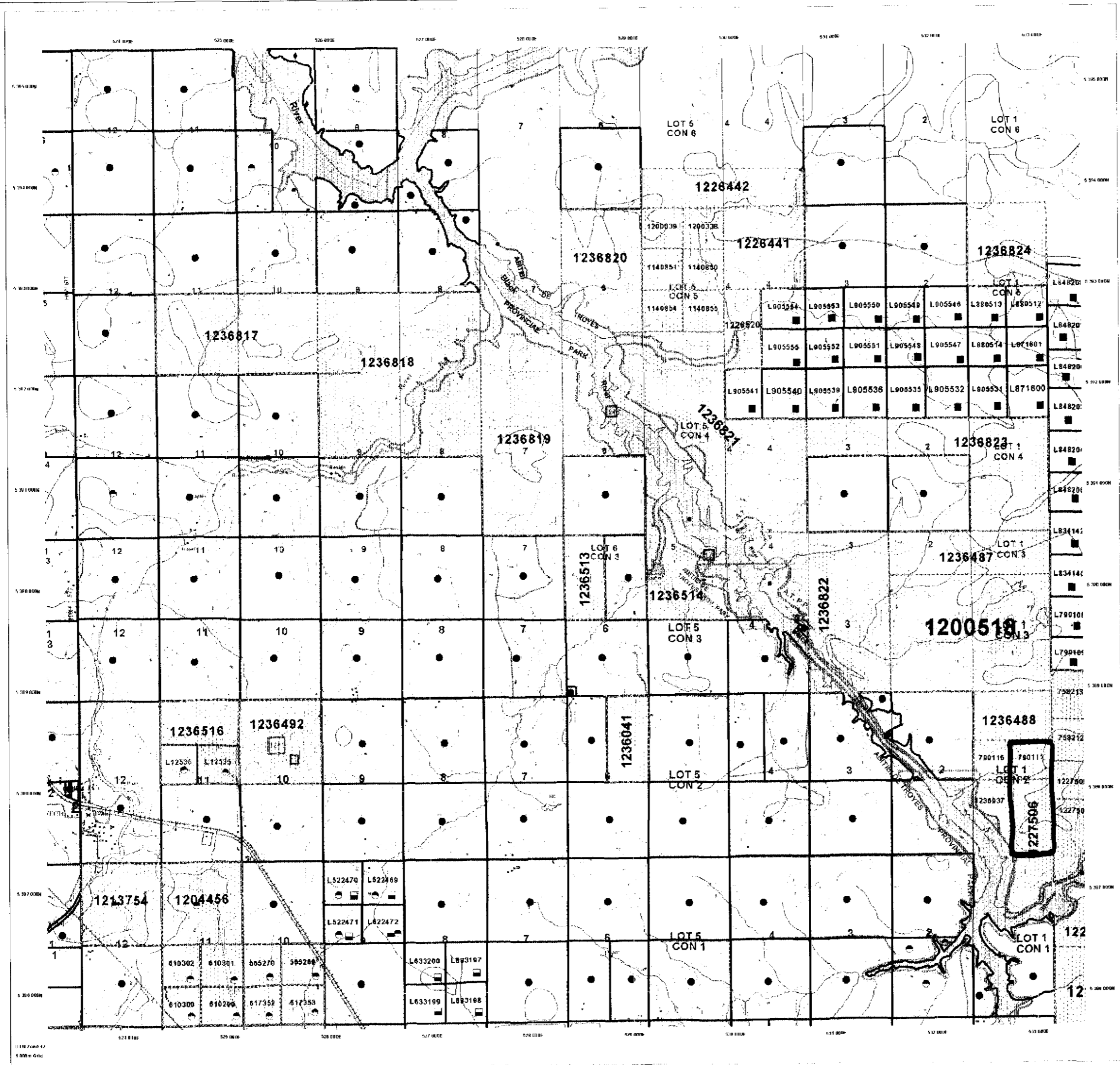
No

LAND TENURE WITHDRAWAL DESCRIPTIONS

Location	Date	Description
1130	When	Jan 1 2001
1170	When	Jan 1 2001
1223	When	Jan 1 2001
1279	When	Jan 1 2001

IMPORTANT NOTICES
PLEASE REFER TO THE LEGISLATION, REGULATIONS OR CONDITIONS THAT APPLY TO THE WITHDRAWAL.
Mining and mineral development activities

2.20975
EM



42A1ONE2013 2.20975 WILKIE 210

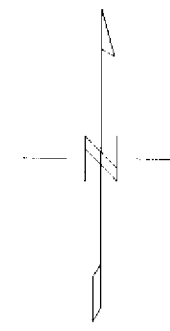
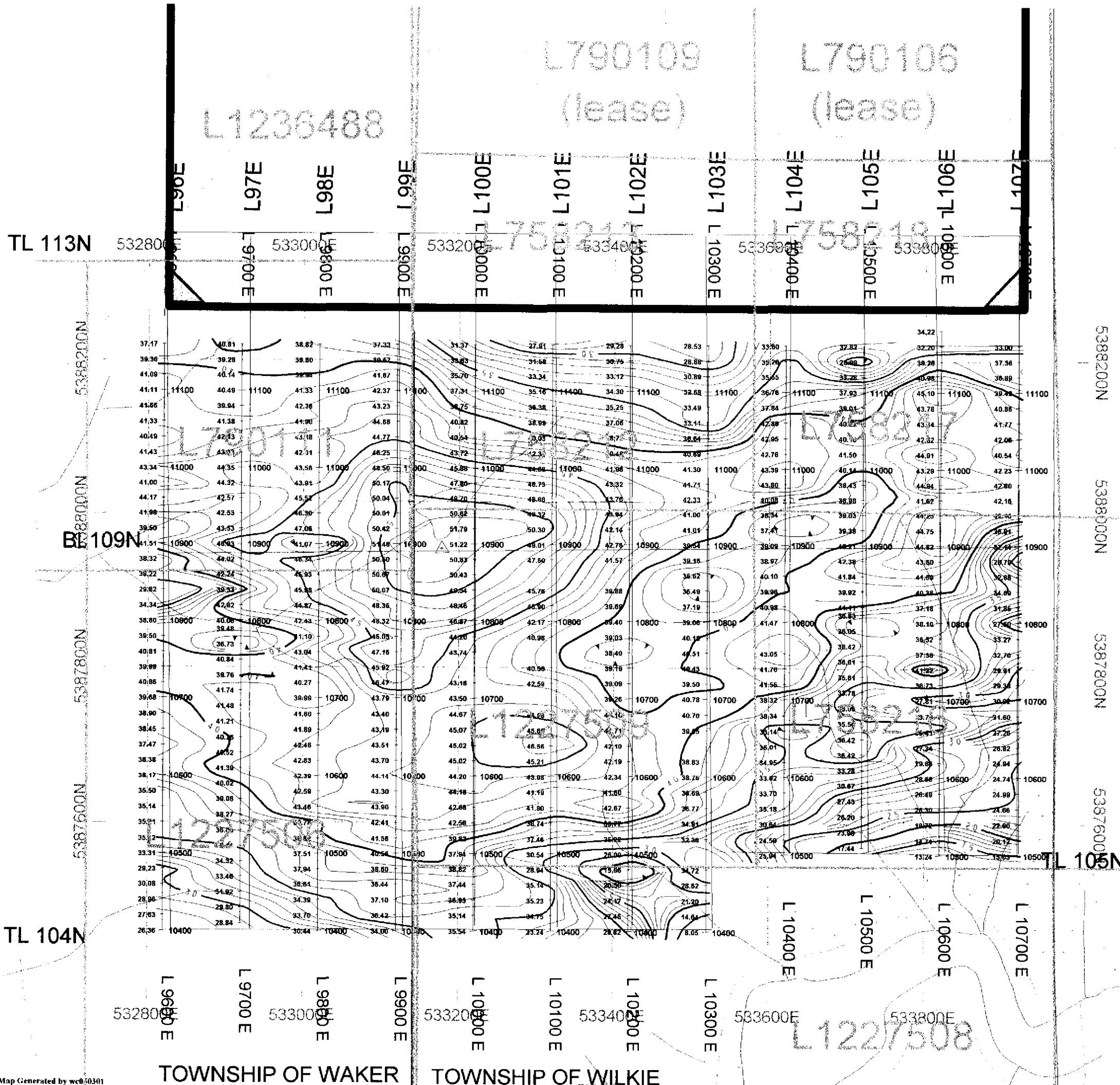


General Information and Limitations
This map is a summary of the information contained in the Mining Act and Regulations and is not intended to be used as a legal document. It is provided for informational purposes only. The information is derived from data supplied to the Ministry of Northern Development and Mines. The Ministry of Northern Development and Mines is not responsible for the accuracy of the information. For more information, please contact the Ministry of Northern Development and Mines.

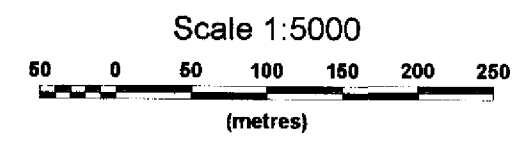
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WILIKE TWP. GRID - X COMPONENT - CHANNEL 10



WILIKE TWP. GRID X COMPONENT - CHANNEL 10



FALCONBRIDGE LTD.
PROJECT NO: 127
Wilkie & Walker Twps.

LPTM FIXED-LOOP PROFILING SURVEY
X Component Contour Map - Ch 10
Secondary Electromagnetic Field (dB/dt)

Transmitter Frequency:	30 Hz (50% duty cycle)
Transmitter Loop Size:	1100m x 750m
Transmitter Loop Location:	9600E, 10700E, 11200N 11950N
Transmitter Current:	7.5 Amps
Turn-Off Time:	268 us
Station Interval:	20 meters
Contour Interval:	1, 5, 20 nanoVolt/A*m ²
Grid Cell Size:	12.5 m
Postings:	X Comp, Ch 10 TEM Field
Receiver Coil Orientations:	Hx - positive up Hy - positive east

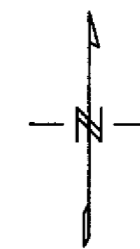
Survey Date: March 2001
 Instrumentation: Rx = Digital Protem (3x20 Channels)
 & Geonics 3D Coil (3x200m²)
 Tx = Geonics EM-37 (2.8 kW)



Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
 DWG. NO. QG-170-TEM-CONT-ROT-10X



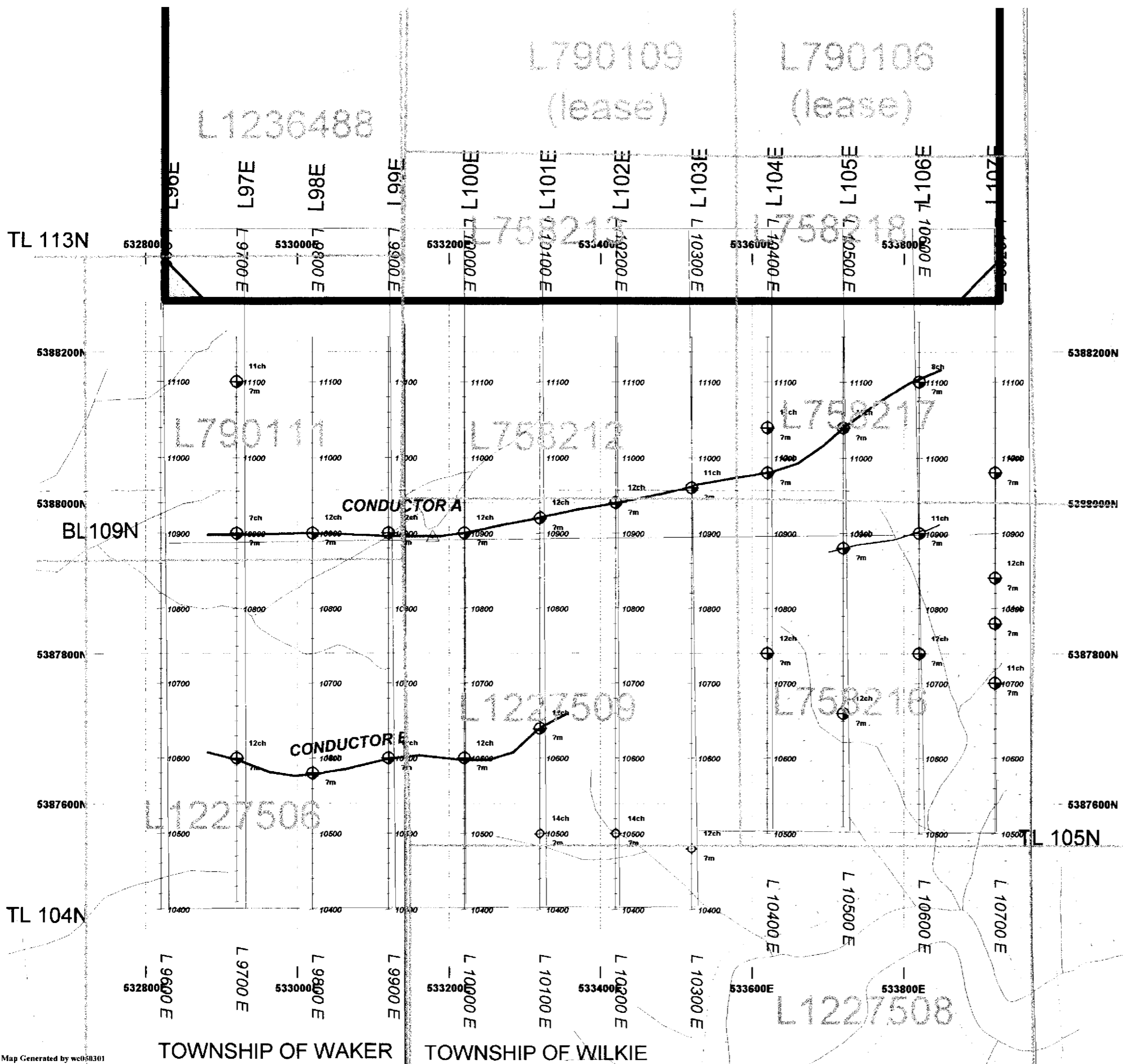
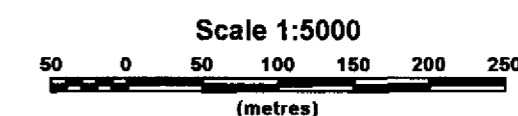
WILIKE TWP. GRID - X COMPONENT Ch 10 - INTERPRETATION



LEGEND

- VERY STRONG CONDUCTOR
(Subvertical, Flat-lying)
- STRONG CONDUCTOR
(Subvertical, Flat-lying)
- MODERATE CONDUCTOR
(Subvertical, Flat-lying)
- WEAK QUALITY CONDUCTOR
(Subvertical, Flat-lying)
- QUESTIONABLE CONDUCTOR
(Subvertical, Flat-lying)
- Number of Anomalous Channels Responding
Max-Min Extents (Subhorizontal Target Only)
Estimated Target Depth

Interpretation by: Quantec Geoscience - WC 06-03-01



FALCONBRIDGE LTD.
PROJECT NO: 127
Wilkie & Walker Twps.

Secondary Electromagnetic Field (dB/dt)
LPTM FIXED-LOOP PROFILING SURVEY
INTERPRETATION PLAN MAP

Transmitter Frequency: 30 Hz (50% duty cycle)
 Transmitter Loop Size: 1100m x 750m
 Transmitter Loop Location: 9600E, 10700E, 11200N 11950N
 Transmitter Current: 7.5 Amps
 Turn-Off Time: 268 us
 Station Interval: 20 meters
 Contour Interval: 1, 5, 20 nanoV/m²
 Grid Cell Size: 12.5 m (1x Hanning Smoothed)
 Postings: X Comp, Ch 10 TEM Field
 Receiver Coil Orientations:
 Hz - positive up
 Hx - positive south
 Hy - positive east

Date: March 2001
 Instrumentation: Rx = Digital Protem (3x20 Channels)
 & Geonics 3D Coil (3x200m²)
 Tx = Geonics EM-37 (2.8 kW)

Surveyed & Processed by:
QUANTEC GEOSCIENCE INC.
 DWG. NO. QG-170-TEM-INT-ROT-10X