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Work Report for the Spanish River Joint Venture

Exploration 2021

By Marshall Hall, P. Geo., M. Sc

Part 1 of 2

Work Submitted on Magna Mining's Claims

Submitted: Oct 2021

Contents

Summary

This report outlines the work completed on the Spanish River joint venture between Magna Mining (aka Ursa Major Minerals) and 2060014 Ontario Inc. Work completed involved ground geophysics by Crone Geophysics in February 2021 and mapping and sampling in the summer of 2021. It is submitted in two parts, the first covering work completed on Magna's ground and the second covering work completed on 2060014 Ontario Inc. ground. For Simplicity with invoicing the costs have been compiled into one total and applied based on percentage of work completed on each claim.

The objective of this work was to expand on known mineralization identified by a past VTEM survey and to further identify mineralization on surface around both the P-4 target and the Spanish River Copper Mine. All maps and co-ordinates shown are in NAD 83 zone 17.

The geophysics grid was established in conjunction with Brian Bengert of B-Field Geophysics. The grid was 5.3km in length and covered VTEM plates at the known Spanish River Deposit and P-4 target. Mapping around the deposit was completed by Brad Lazich of Laurentia Minerals in August of 2021 and involved 1 day of recon mapping around the deposit.

Results of the geophysics work was confirmation of known plates, establishment of new EM plates that are large and of low conductance, confirmed mineralization at the Spanish River Mine. Mapping has shown that mineralization extends beyond the known extents of the Spanish River Mine site.

Overall, the total cost of work being applied in this report is **$84,567.02** with a total of **$27,907.12** being applied to 2060014 Ontario Inc. claims and the remaining $56,659.90 applied to Magna Mining's claims.

1 PROPERTY DESCRIPTION AND LOCATION

1.1 Property Access

The Shakespeare Property is located in Shakespeare, Dunlop, Porter, Hyman, and Totten Townships, immediately north and East of Agnew Lake. The Property is approximately 70 km west-southwest of Sudbury, Ontario (Figure 1). The closest towns are Webbwood, which is 9 km southwest of the property, and Espanola, which is 11 km southeast. The Property is situated on N.T.S. 41I/5 near Latitude 46°21'00"N and Longitude 81°49'47"W.

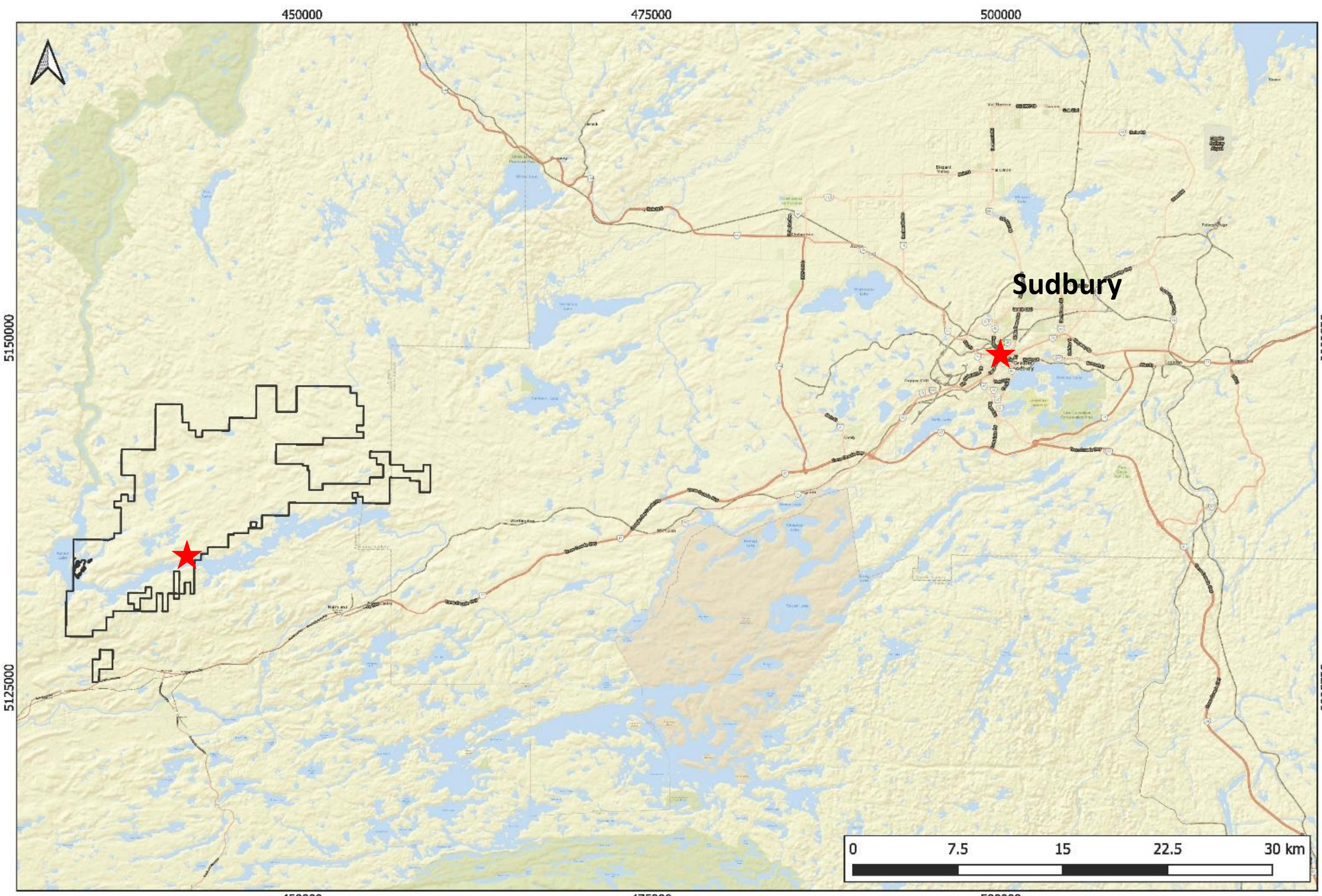

Figure 1: Location of the Shakespeare property in relation to Sudbury and Espanola

The Spanish River Mine is located on the north shore of Agnew Lake near Latitude 46°21'43.4"N 81°45'20.6"W (figure 02). The Spanish River Property is not accessible by land and must be accessed by boat. There are public boat launches along Agnew Lake or a boat can be rented from the Agnew Lake Lodge. There was historic production at the Spanish River Mine and there is an old boat landing that can be used for docking a boat. From here the mine can be accessed by using the old mine access trail.

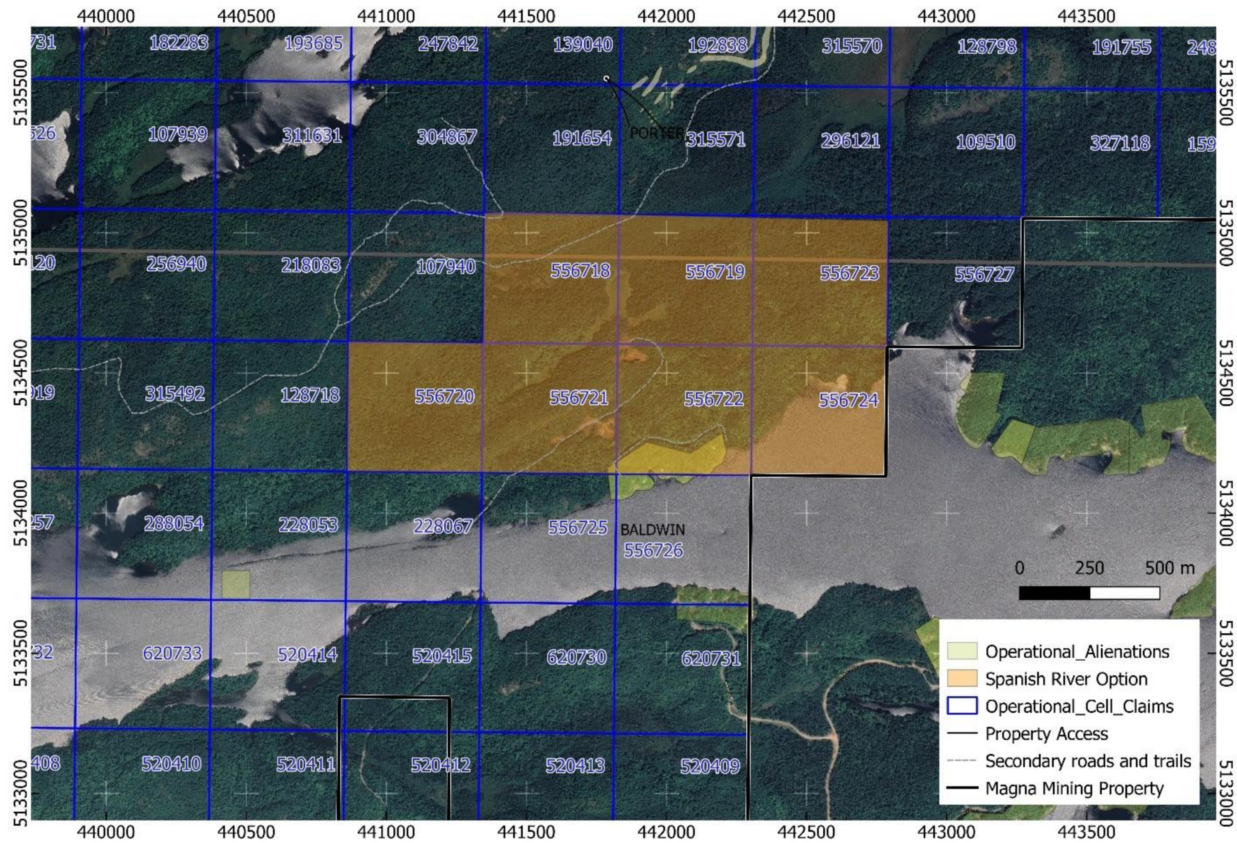

Figure 2: Map outlining the Spanish River claims as part of the larger Magna land package.

1.2 Climate

Climate is typical of temperate continental conditions with moderately long, cold winters and shorter, warm summers. Winter temperatures may drop below minus 20º C for extended periods and, in summer, maximum daily temperatures may exceed 25º C for extended periods. From December through March, daily mean temperatures typically are below 0º C. Precipitation is moderate. The wettest months are between May and October but rainfall is generally distributed evenly through the year. Estimated average annual precipitation is 899 mm with 657 mm falling as rain and the balance (242 mm water equivalent) as snow.

1.3 Physiography

The topography on the property is rugged with abrupt ridges and valleys. The elevation of land above sea level ranges from approximately 260 meters (852 ft +/-) (level of Agnew Lake) to a maximum of 330 meter (1082 ft +/-), on top of some of the highest quartzite hills in the area (averaging about 300 m above sea level). The average topographic relief is about 90 m and bedrock outcrops are common. Much of the general area is covered by timber resources which consist of second growth birch, poplar, oak, maple, jack pine and spruce.

The principal drainage channel is the Spanish River. The Spanish River and its tributaries drain the major part of the property. Part of the river near the property has been dammed for hydroelectric power generation and has resulted in the creation of Agnew Lake. Numerous private cottages and several commercial tourist operators are located on Agnew Lake.

1.4 Property Description

Work completed in this report was on ground split between 13 claims 100% owned by Magna and 7 claims currently owned by 2060014 Ontario. These seven claims Magna entered into a joint venture agreement on in November of 2020. Geophysics was completed over approximately 10km of line length and was completed in February of 2021. These claims are also under two exploration permits PR-20-000037, PR-20-000373, and PR-20-000374. These permits allow Magna Mining (aka Ursa Major Minerals) for line cutting, geophysics, surface trenching and drilling.

TENURE_NUM	TITLE_TYPE	TITLE_TY_1	TENURE_STA	TENURE_S_1	ISSUE_DATE	ANNIVERSAR	HOLDER
556725	SCMC	Single Cell Mining Claim	A	Active	2019-09-04	2022-09-04	(100) URSA MAJOR MINERALS INCORPORATED
109510	SCMC	Single Cell Mining Claim	A	Active	2018-04-10	2022-02-08	(100) URSA MAJOR MINERALS INCORPORATED
128798	SCMC	Single Cell Mining Claim	A	Active	2018-04-10	2022-02-08	(100) URSA MAJOR MINERALS INCORPORATED
128718	SCMC	Single Cell Mining Claim	A	Active	2018-04-10	2022-05-27	(100) URSA MAJOR MINERALS INCORPORATED
139040	SCMC	Single Cell Mining Claim	A	Active	2018-04-10	2022-05-27	(100) URSA MAJOR MINERALS INCORPORATED
556719	SCMC	Single Cell Mining Claim	A	Active	2019-09-04	2022-09-04	(100) 2060014 Ontario Inc.
556720	SCMC	Single Cell Mining Claim	A	Active	2019-09-04	2022-09-04	(100) 2060014 Ontario Inc.
556721	SCMC	Single Cell Mining Claim	A	Active	2019-09-04	2022-09-04	(100) 2060014 Ontario Inc.
556722	SCMC	Single Cell Mining Claim	A	Active	2019-09-04	2022-09-04	(100) 2060014 Ontario Inc.
556718	SCMC	Single Cell Mining Claim	A	Active	2019-09-04	2022-09-04	(100) 2060014 Ontario Inc.
191654	SCMC	Single Cell Mining Claim	A	Active	2018-04-10	2022-05-27	(100) URSA MAJOR MINERALS INCORPORATED
192838	SCMC	Single Cell Mining Claim	A	Active	2018-04-10	2022-05-27	(100) URSA MAJOR MINERALS INCORPORATED
228053	SCMC	Single Cell Mining Claim	A	Active	2018-04-10	2022-05-27	(100) URSA MAJOR MINERALS INCORPORATED
228067	SCMC	Single Cell Mining Claim	A	Active	2018-04-10	2022-05-27	(100) URSA MAJOR MINERALS INCORPORATED
239572	SCMC	Single Cell Mining Claim	A	Active	2018-04-10	2022-05-27	(100) URSA MAJOR MINERALS INCORPORATED
296121	SCMC	Single Cell Mining Claim	A	Active	2018-04-10	2022-02-08	(100) URSA MAJOR MINERALS INCORPORATED
315570	SCMC	Single Cell Mining Claim	A	Active	2018-04-10	2022-02-08	(100) URSA MAJOR MINERALS INCORPORATED
315571	SCMC	Single Cell Mining Claim	A	Active	2018-04-10	2022-05-27	(100) URSA MAJOR MINERALS INCORPORATED
520415	SCMC	Single Cell Mining Claim	A	Active	2018-05-02	2022-05-02	(100) URSA MAJOR MINERALS INCORPORATED

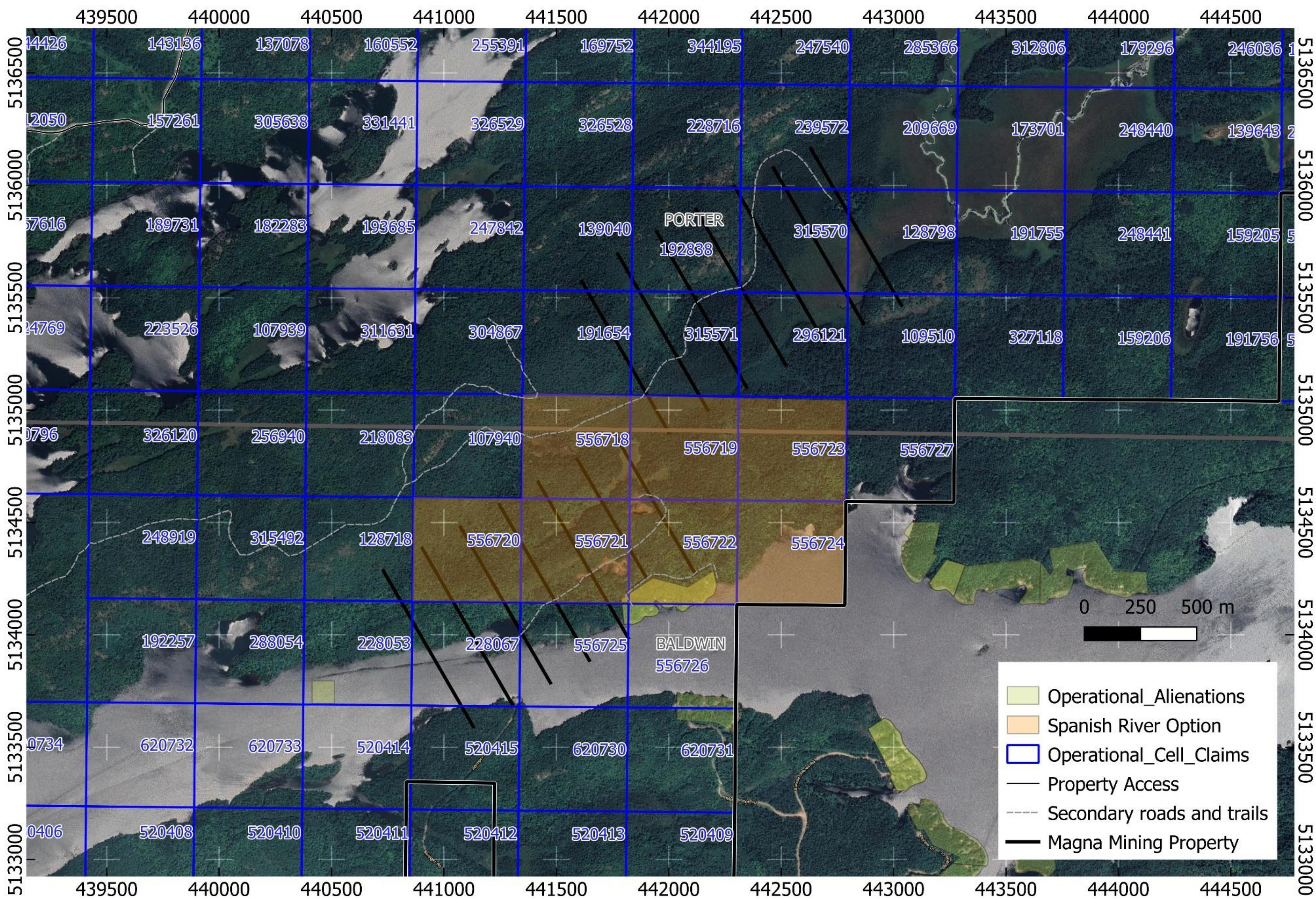

Figure 3: Map showing the location of geophysics grids, claims and the Spanish River Option.

2. Work History

In the assessment records there is little work recorded in the area. At the Spanish River Mine site there was historic production in the 1960's. The mine operated from an adit and ore was shipped across Agnew Lake and sent to Falconbridge's (now Glencore) smelter. Work in the area first started in the 1920's with trenching that was then followed up by several drill campaigns.

1929 – 10 holes totalling 1,726m

1957 – 19 holes totalling 2,200m

1963 – 7 holes totalling 1,200m

1965 - 7 holes totalling 1,073m

The above drilling was used to define a historic indicated resource of 1,094,328 tons @ 1.49% Cu. Production from the deposit was 146,316 tons milled from 1969-79 with 0.92% Cu recovered in 1969 and 1.65% recovered in 1970. Following the production in the 1970's the only work reported on the property is that of a bulk sample completed in the 1990's.

3 Geology

3.1 Regional Geology

The Dunlop-Shakespeare-Baldwin-Porter Township area is located along the southern margin of the Superior Province of the Canadian Shield and has had a prolonged evolutionary history involving the interaction between three structural provinces including the Superior, Southern and Grenville.

The bedrock underlying the area is dominated by rocks of Precambrian age, including Early Precambrian (Archean) felsic plutonic rocks of the Superior Province and by Middle Precambrian (Proterozoic) supracrustal rocks of the Huronian Supergroup of the Southern Province. These rocks have been cut by mafic intrusions of several ages including the East Bull Lake Suite, Nipissing Suite and Sudbury Breccia which is part of the Sudbury Igneous Complex.

The rocks of the Southern Province unconformably overly the Archean basement rocks. The Southern Province forms a discontinuous belt extending 750 miles (1,200 km) west from Quebec to central Minnesota along the southern margin of the Superior Province. The western portion of the Southern Province comprises a passive margin supracrustal sequence of the Marquette Range Supergroup, whereas in central Ontario the Southern Province is defined by the distribution of the Huronian Supergroup succession which is part of a basin forming rift margin. The Huronian Supergroup consists of a thick sequence (12,000 m) of clastic metasedimentary rocks. The Huronian rocks include sandstone, conglomerate, siltstone and greywacke, which were derived from the Archean granitoid terrains to the north.

Mafic to intermediate metavolcanics, including flows and pyroclastic rocks are intercalated with the metasedimentary units in the basal part of the Huronian Supergroup succession.

The East Bull Lake Suite is part of a major magmatic episode that occurred at 2480 – 2470 Ma in Central Ontario contemporaneous with rifting of the Archean Superior Province Protocontinent and the formation of the Huronian Rift Zone, now represented by the Southern Province. The intrusions typically occur near the boundary between the Archean Superior Province and the Early Proterozoic Southern Province, and 14 generally appear to have been emplaced as large sills. Magmatism is also manifested in the form of mafic dykes, and as bimodal continental flood basalt sequences (Huronian Volcanics). The most prominent intrusions of the East Bull Lake suite surrounding the project include the: East Bull Lake, Agnew, and May Township Intrusions. The Nipissing Suite was emplaced at roughly 2.2 Ma and forms a trend extending from Sault St. Marie through the Sudbury Region to the Cobalt and Gowganda Regions (Card 1976).

The intrusions are located predominantly within the Huronian Supergroup, but are also localized along the Archean- Proterozoic unconformity. The intrusions primarily consist of gabbros with lesser diabase and granophyre, which range in thickness from a few hundred meters to over a thousand meters and typically outcrop at the present erosional levels as open ring structures, ring dikes, cone sheets, dykes and undulatory sills (Hriskevich, 1952, 1968). The Nipissing Intrusions have traditionally been described as undulatory sheets consisting of a series of basins and arches connected by limbs (Hriskevitch, 1968). The basinal portions of the sills consist of quartz diabase overlain by Hypersthene gabbro, and are overlain by vari-textured gabbro with pegmatoidal patches. The arches consist of vari-textured gabbro overlain by quartz diorite, granodiorite, granophyre and aplitic granitoids.

The west limit of the Sudbury Igneous Complex is centered close to Sudbury and was emplaced at approximately 1.85 Ma. The Sudbury Igneous Complex occurs along the contact between the Superior and the Southern Province and consists of a thick composite mafic- felsic intrusion forming an elliptical ring having a major east-northeast trending axis that is 60 kilometres in length and a minor axis of 27 kilometres.

The present outcrop distribution of the Huronian Supergroup does not reflect the size and shape of the original depositional system, but has rather been determined by syn- and post-Huronian folding, faulting and erosion. The most prominent faulting is syndepositional normal faulting along the east-northeast trending Murray Fault system which is considered to have controlled the accumulation and preservation of most of the Huronian Supergroup in Central Ontario." Uranium-lead (U-Pb) age determinations on zircon from the gabbroic rocks hosting the Shakespeare deposit confirm that the host rocks of the Shakespeare deposit belong to the Nipissing Suite (Sutcliffe et al. 2002).

3.2 Property Geology

The area surrounding the Shakespeare property is predominantly underlain by units of the Huronian-aged Mississagi quartzite and gabbroic intrusions, which trend approximately north northeast and dip moderate to steeply north. In particular, the Mississagi quartzites dominate the north and south limit of the land package and are typically whitish, medium grained and uniform, with cross-bedding features providing way-up indicators.

The Shakespeare intrusion is a differentiated gabbroic intrusive sill that occurs predominantly in the south to central portion of the Shakespeare property and is between 300-500m wide, extending over a 14 km strike length. In cross-section, the intrusion has an arcuate profile in which the dip shallows with depth, from ~80° to 40° to the North. The gabbroic intrusive have been interpreted by the Ontario Geological Survey (OGS) (Card, 1976) as Nipissing Diabase, but others suggest that some may be part of the Agnew Intrusion, (Vogel, 1996) or even the Sudbury Igneous Complex. Subsequent radiometric dating has constrained the intrusion age to ~2217 Ma, 400 million years prior to the creation of the Sudbury Igneous Complex (Sutcliffe et al. 2002).

The intrusive sill is mainly dark-grey, fine grained and predominantly consists of gabbro. According to Sproule (et al. 2007), the intrusion can be subdivided into; 1) the Lower Group composed of unmineralized pyroxenite and gabbro and; 2) an Upper Group composed of mineralized melagabbro, quartz gabbro, and biotite quartz gabbro-diorite. The base of the Upper Group is the primary host for the sulphide mineralization in the Shakespeare complex. The presence of a chilled margin between the Upper and Lower Groups suggests that the Lower Group was partly crystallized as a second pulse of sulfur-saturated magma, (i.e., the Upper Group) entered the sill complex. Mineralized melagabbro dykes are also recorded intruding into the lower unmineralized gabbro/pyroxenite package of the Lower Group. This may represent feeder dykes to the overlying Upper Group or small injections of Upper Group material, cutting downward into the underlying Lower Group (Sproule et al. 2007; Dastil 2014). The entire intrusion has subsequently undergone greenschist facies metamorphism, likely associated with the regional Penokean orogeny (1900-1850 Ma) (Dastil 2014).

he north and south limits of the intrusion are bounded by the Mississagi quartzite. Inclusions, or entrained blocks of quartzite also occur locally within the overall limits of the intrusion, varying from near-zero to up to 30 vol.%. The contacts between the gabbro and the quartzites is locally sheared and altered. In places, the lower contact of the Shakespeare intrusion forms a visibly sharp, chilled contact with the adjacent rocks, while at several locations the contact appears evident as an irregular 5 to 15-meter-wide zone of admixture comprising melagabbro rocks and the underlying Nipissing Suite of gabbroic rocks. In some historic literature, this unit is referred to as the lower contact footwall zone.

The upper contact between the Shakespeare intrusion and the Mississauga quartzite is marked by ~5-10m wide, sharply defined rheomorphic breccia comprising a dark grey, aphanitic, fine grained matrix with sheared, elongate and partially melted blocks of quartzite. Although the breccia shares similarities with the 1850 Ma Sudbury breccia observed in target rocks surrounding the Sudbury impact structure (situated east of the Shakespeare intrusion), the high matrix to clast ratio and the elongated, contorted shape of some of the quartzite blocks is distinct from the Sudbury breccia. Instead, the rheomorphic breccia may represent a late injection of clast-laden diabase material into a shear zone active during the waning phases of the emplacement of the Shakespeare intrusion. Shear zones provide favorable conduits into which mafic intrusions can be injected. Furthermore, vein hosted and disseminated Cu-Co mineralization in a shear zone at Stumpy Bay (~1km South of the Shakespeare intrusion) may represent the hydrothermal remobilization of metals from the Shakespeare intrusion into proximal, still-active shear zones. Quartz-chalcopyrite veins are also observed adjacent to the rheomorphic breccia in the north side of the west pit. There are three main faults recorded in the vicinity of the Shakespeare intrusion, all of which appear to be splays of the Hunter Lake Fault. The strike of the faults is generally northeast-southwest and dip steeply. Several more northerly trending cross faults have also been identified.

Another major structure in the vicinity of the Shakespeare intrusion is the Porter Syncline. The main axis of the syncline is located north of the Shakespeare property and trends in a north-easterly direction. All rocks within the area including the mafic intrusions appear to have been folded into a series of tight to moderately open, upright, complex folds with axes trending roughly parallel to the above syncline. Mapping at the Shakespeare property, suggests that there may also be a major northeast trending anticline located on the Stumpy Bay joint venture lands to the south of the Shakespeare deposit, which trends parallel to the Porter syncline. The axis of the projected fold is just south of the Shakespeare deposit and the central part of the fold is defined by a prominent quartzite lens.

3.3 Deposit Geology and Mineralization

Mineralization at the Spanish River Mine is associated with silicification associated with regional structures cutting through metasedimentary rocks of the Huronian Supergroup. Most of the deposit is hosted in quartzites and conglomeritic units with wackestones typically being associated with lower grade mineralization.

Mineralization is typically chalcopyrite associated pyrite, marcasite and a handful of other lesser sulphides. Historic assays indicate that copper mineralization may reach up to 10% Cu, with elevated values in gold, silver, and cobalt.

4 2021 Exploration

4.1 Ground Geophysics

For a detailed outline of the ground geophysics please refer the report attached in the appendix of this report.

4.2 Summary of mapping report

Brad Lazich of Laurentia Minerals completed 6 days of work on the Spanish River Deposit including data compilation, mapping, and report writing. His work showed that mineralization at the Spanish River deposit is confined to silicification associated with regional structures. The mineralization and silicification typically occurs within conglomerates in the area. The findings also showed that there is potential for mineralization to extend beyond the known deposit and that additional mapping is required in the area for a better understanding of the deposit.

5 Recommendations

The ground geophysical survey has shown that there is a number of conductors in the area. These should be followed up with mapping and drilling at both Spanish River and P-4. The overall area is underexplored and there is strong potential for discovery.

6 References

Card, K.D., Palonen, P.A. 1976 Dunlop and Shakespeare townships, Sudbury District; Ontario Division of Mines, Map 2313, scale 1:31 680

Dasti I.R. 2014 The Geochemistry and Petrogenesis of the Ni-Cu-PGE Shakespeare Deposit, Ontario, Canada. M.Sc. Thesis, Department of Geology, Lakehead University, Ontario, Canada. 233p.

Hriskevich, M.E. 1952 Petrology of the Nipissing Diabase Sheet of the Cobalt Area of Ontario: Unpub. Ph.D. thesis, Princeton University, Princeton, New Jersey.

Hriskevich, M.E. 1968 Petrology of the Nipissing Diabase Sill of the Cobalt Area, Ontario, Canada; Geological Society of America Bulletin, v. 79, p. 1387-1404.

Sproule R.A., Sutcliffe R., Tracanelli H., Lesher C.M. 2007 Paleoproterozoic Ni-Cu-PGE Mineralization in the Shakespeare Intrusion: A New Style of Nippising Gabbro-Hosted Mineralization. Applied Earth Science, Transactions of the Institutions of Mining and Metallurgy: Section B. Vol. 116-4, pp 188-200

Sutcliffe, R., Tracanelli, H., Davis, D.W. 2002 Shakespeare intrusion, abstract volume for the 2002 Ontario Prospectors Association Meeting, Toronto.

Vogel, D.C. 1996. The geology and geochemistry of the Agnew intrusion: implications for the petrogenesis of early Huronian mafic igneous rocks in central Ontario, Canada; unpublished PhD thesis, University of Melbourne, v.1, 292p.

7 Qualifications

I, Marshall Hall of Castle Street, Massey, Ontario do certify that :

I graduated from Laurentian University with a B. Sc (hons) in 2014 and an M. Sc (Geology) in 2019.

I am a member of the Association of Professional Geoscientists of Ontario (APGO; #3052).

I am a licensed prospector with the Ontario Government.

I am a member of the Prospectors and Developers Association of Canada (PDAC)

Am employed by Magna Mining as their Exploration Manager and Project Geologist.

Nov 1, 2021

Marshall Hall
P. Geo., M. Sc.,
Exploration Manager
Magna Mining

8 Appendices

8.1 List of Expenditures

Item	Unit Cost	Units	Total Cost
In Kind Expenses			
Exploration Manager	$750	6	$4,500
Junior Geologist	$400	10	$4,000
Pickup Truck, gas, insurance	$500	10	$5,000
Invoiced Expenses			
Ground Geophysics (18 days)	See invoices for breakdown		$61,762.02
Snow Machine Rental	See Savage Rentals invoice		$3,390.00
Field Mapping	See Laurentian Geoscience Invoice		$5,375.00
Total Expenditures			**$84,567.02**

8.2 Distribution of Expenses

TENURE_NUM	TITLE_TYPE	TITLE_TY_1	HOLDER	Percentage of Expenditures	Credit Applied
556725	SCMC	Single Cell Mining Claim	(100) URSA MAJOR MINERALS INCORPORATED	5	4,228.35
109510	SCMC	Single Cell Mining Claim	(100) URSA MAJOR MINERALS INCORPORATED	5	4,228.35
128798	SCMC	Single Cell Mining Claim	(100) URSA MAJOR MINERALS INCORPORATED	3	2,537.01
128718	SCMC	Single Cell Mining Claim	(100) URSA MAJOR MINERALS INCORPORATED	1	845.6702
139040	SCMC	Single Cell Mining Claim	(100) URSA MAJOR MINERALS INCORPORATED	2	1,691.34
556719	**SCMC**	**Single Cell Mining Claim**	**(100) 2060014 Ontario Inc.**	**3**	**2,537.01**
556720	**SCMC**	**Single Cell Mining Claim**	**(100) 2060014 Ontario Inc.**	**10**	**8,456.70**
556721	**SCMC**	**Single Cell Mining Claim**	**(100) 2060014 Ontario Inc.**	**10**	**8,456.70**
556722	**SCMC**	**Single Cell Mining Claim**	**(100) 2060014 Ontario Inc.**	**5**	**4,228.35**
556718	**SCMC**	**Single Cell Mining Claim**	**(100) 2060014 Ontario Inc.**	**5**	**4,228.35**
191654	SCMC	Single Cell Mining Claim	(100) URSA MAJOR MINERALS INCORPORATED	3	2,537.01
192838	SCMC	Single Cell Mining Claim	(100) URSA MAJOR MINERALS INCORPORATED	8	6,765.36
228053	SCMC	Single Cell Mining Claim	(100) URSA MAJOR MINERALS INCORPORATED	2	1,691.34
228067	SCMC	Single Cell Mining Claim	(100) URSA MAJOR MINERALS INCORPORATED	10	8,456.70
239572	SCMC	Single Cell Mining Claim	(100) URSA MAJOR MINERALS INCORPORATED	5	4,228.35
296121	SCMC	Single Cell Mining Claim	(100) URSA MAJOR MINERALS INCORPORATED	5	4,228.35
315570	SCMC	Single Cell Mining Claim	(100) URSA MAJOR MINERALS INCORPORATED	7.5	6,342.53
315571	SCMC	Single Cell Mining Claim	(100) URSA MAJOR MINERALS INCORPORATED	7.5	6,342.53
520415	SCMC	Single Cell Mining Claim	(100) URSA MAJOR MINERALS INCORPORATED	3	2,537.01

Ursa Expenditure 56,659.90

Ontario Expenditure 27,907.12

8.3 Appendix A: Summary Report of Ground Geophysics (Crone Geophysics)

Crone Pulse-EM Survey

Magna Mining Inc
Shakespeare

Geophysical Survey & Logistics Report
February 2021

Conducted by:
Crone Geophysics & Exploration Ltd.

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INTRODUCTION

Crone Geophysics & Exploration Limited was contracted by Magna Mining Inc to conduct surface geophysical surveys on its Shakespeare property located near Sudbury, Ontario. This report summarizes the geophysical work carried out through February 2021.

Nineteen (19) surface lines utilizing three (3) transmitter loops were surveyed during this period. The appendices to this report contain page size plan maps, linear- and logarithmic-scale data profiles, and step response profiles.

A surface line and transmitter loop location map is presented in Figure 1.

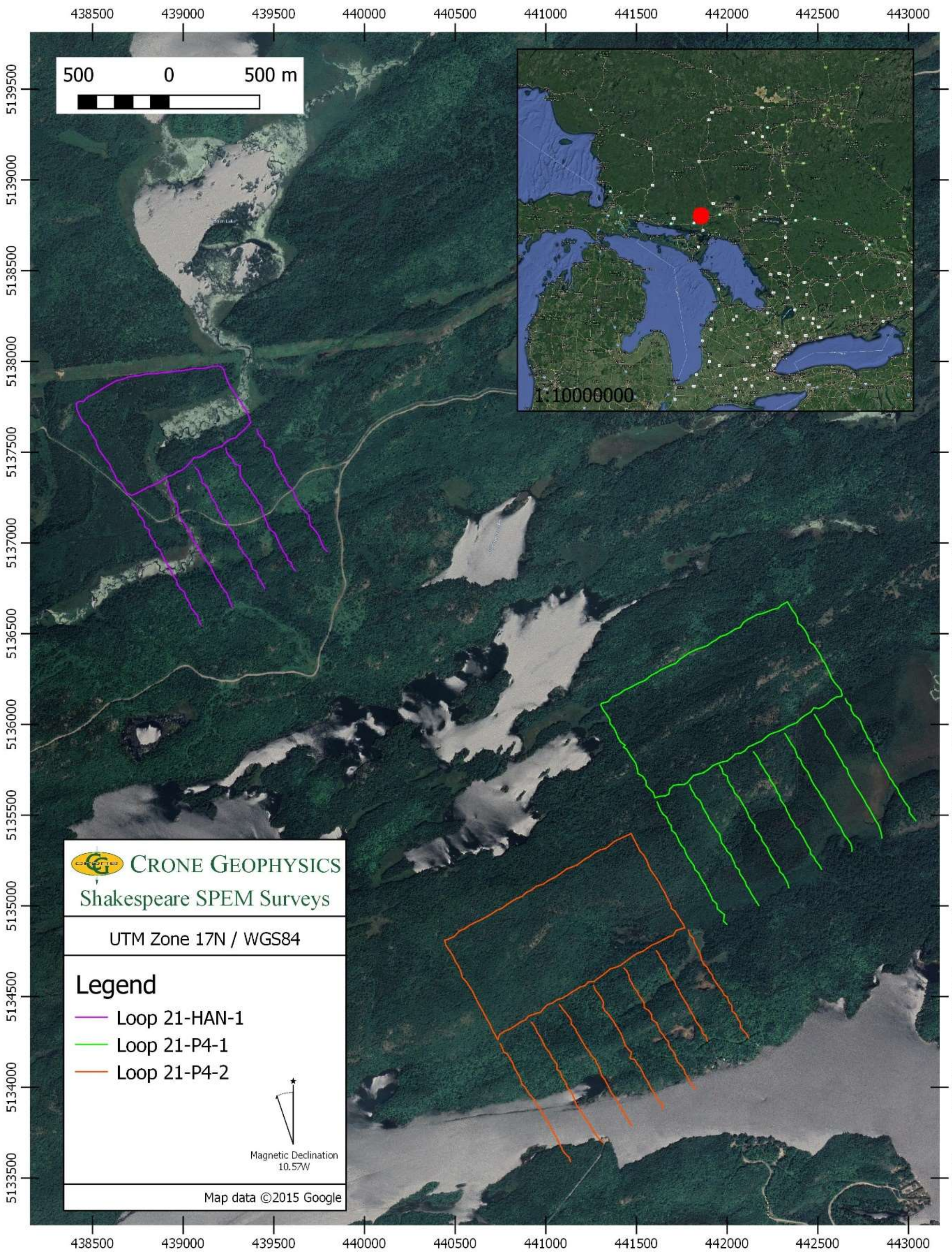


FIGURE 1: GENERAL TRANSMITTER LOOP AND SURVEY LINES MAP.

PERSONNEL

The personnel involved in this project during the reporting period include:

Survey Operator:	Scott Murray, Esteban Pineda
Data Processing:	Mark Hunter
Report:	Norman Shieh

EQUIPMENT

Pulse-EM Transmitter

- 4.8kW for up to 30 amps in single or 60 amps in dual modes
- Timebases: 8.33ms to 2000ms
- Ramp Settings: Fast Ramp, 0.5ms, 1.0ms or 1.5ms
- Powered by standard motor generator
- Current control and monitoring with optional loop damping
- Auto Shutdown and grounded case for safety

Pulse-EM CDR3 Receiver

- 24-Bit full waveform sampling
- 3-Component simultaneous acquisition
- High resolution rugged color LCD touchscreen
- Driven by Windows© programmable software
- Crone *Smartstacking* algorithm
- Sampling rate: 100K samples/second
- Next generation precision clock synchronization

Pulse-EM Surface Coil

- Ferrite cored antenna with preamplifier
- Bandwidth: 10kHz
- Effective coil area: 4000m^2
- Amplifier gain: 25
- Spirit levels for coil alignment
- Two 9-volt DC battery power supply

SURVEY METHODS

Crone Pulse-EM is a time domain electromagnetic method in which a precise pulse of current with a controlled linear shut off is transmitted through a large loop of wire on the ground and the rate of decay (dB/dt) of the induced secondary field is measured across a series of time windows during the off-time. The electromotive force (EMF) created by the sudden turn-off of the current induces eddy currents in nearby conductive material, generating a secondary electromagnetic field. When the primary field is terminated, this electromagnetic field will decay with time. The amplitude of the secondary field and the decay rate are dependent on the quality and size of the conductor.

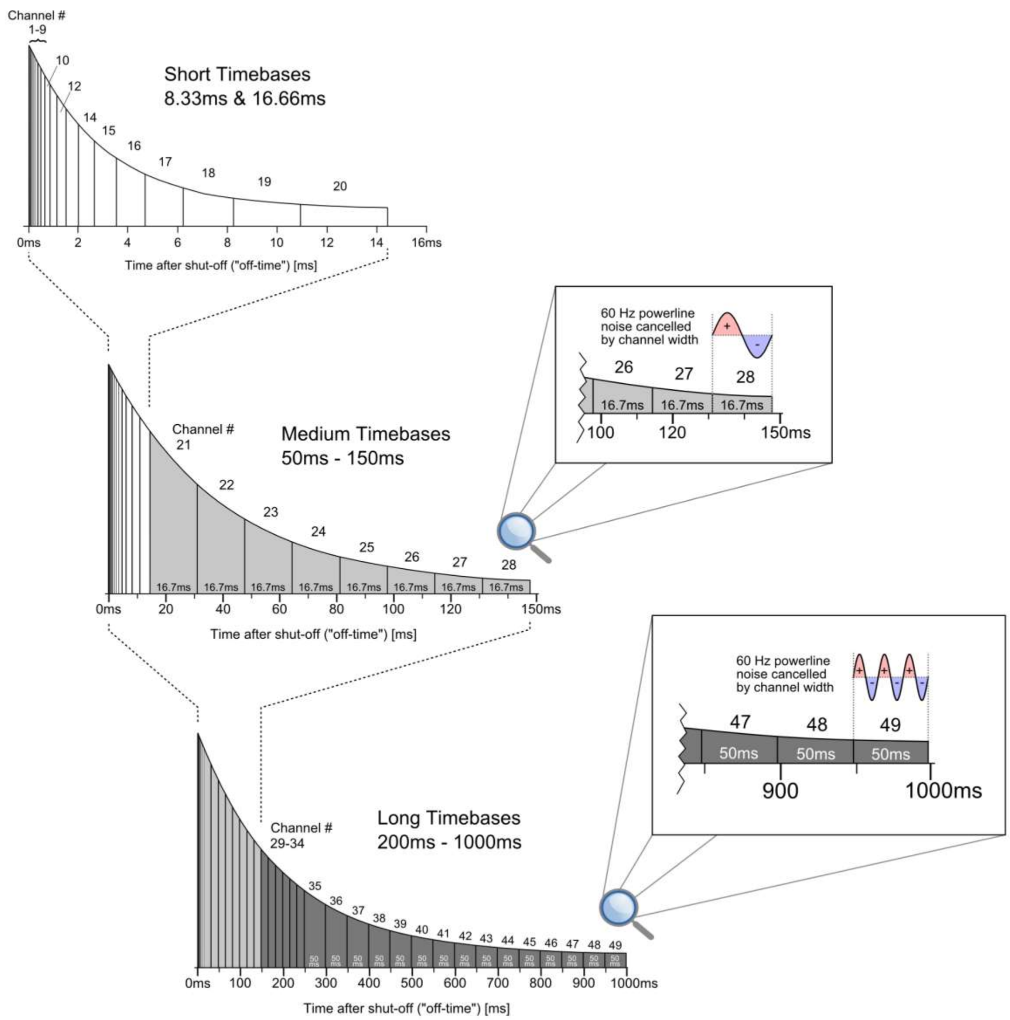


FIGURE 2: STANDARD CHANNEL CONFIGURATIONS.

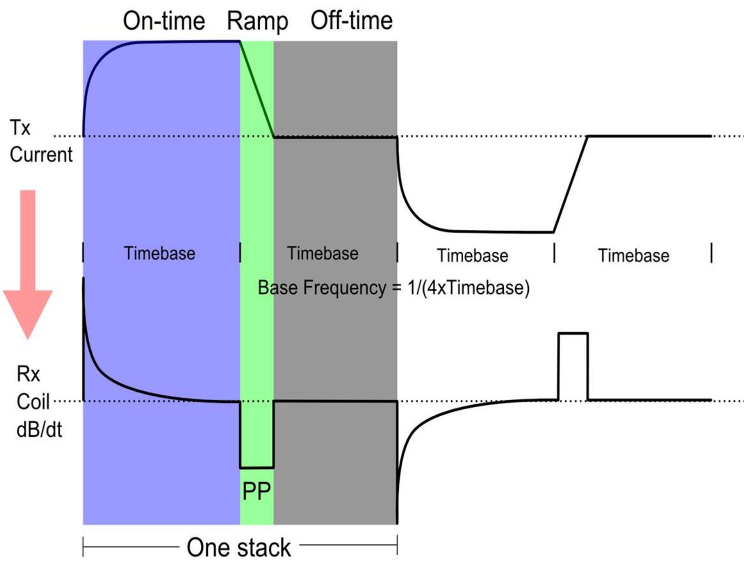


FIGURE 3: STANDARD CRONE PULSE-EM WAVEFORM.

In addition to measuring the standard Primary Pulse channel in the Tx shut-off ramp and the off-time channels, the Step Response was also calculated. Step Response requires accurate geometrical control in which the loop position and surface line geometries are accurately determined. Positional information was collected using a sub-meter capable GPS, and is provided in the UTM Zone 17N coordinate system utilizing the WGS84 datum. The Step Response is widely regarded as a very important tool in the search for high conductance massive sulphides.

The calculated Step Response values are binned into an S1 channel (from 0.5T to T, where T is the time base), an S2 channel (from 0.25T to 0.5T), an S3 channel (from 0.125T to 0.25T) and an S4 channel (from 0.0625T to 0.125T). The S1 channel is normalized to the theoretical primary field, while S2, S3 and S4 are normalized to S1. The S1 value is used to identify responses from highly conductive sources. In the absence of any conductors, the primary field should equal the theoretical field for a given component. In the case of generally resistive host rock and poor conductors, the S1 value will be very close or equal to the theoretical field for a given component.

DATA ACQUISITION PARAMETERS

TABLE 1: SURFACE SURVEY TRANSMITTER LOOP COVERAGE.

Tx Loop	Property / Target	Size (m)	Corner Coordinates UTM Zone 17N, WGS84
21-HAN-01	Shakespeare	1000 x 700	438428E, 5137780N 438690E, 5137271N 439358E, 5137647N 439211E, 5137968N
21-P4-01	Hunter Lake	1000 x 600	442331E, 5136674N 441307E, 5136115N 441601E, 5135595N 442634E, 5136160N
21-P4-02	Hunter Lake	1000 x 600	441469E, 5135397N 440443E, 5134810N 440734E, 5134261N 441765E, 5134878N

TABLE 2: SURFACE SURVEY COVERAGE

Line	Zone	Tx Loop	Time base (ms)	Off Time Channels	Ramp (ms)	Current (A)	Station From	Station To	Length (m)	Comp
0E	Shakespeare	21-HAN-01	16.66	20	1.5	20	0N	775N	775	XZ
200E	Shakespeare	21-HAN-01	16.66	20	1.5	20	0N	775N	775	XZ
400E	Shakespeare	21-HAN-01	16.66	20	1.5	20	0N	775N	775	XZ
600E	Shakespeare	21-HAN-01	16.66	20	1.5	20	0N	775N	775	XZ
800E	Shakespeare	21-HAN-01	16.66	20	1.5	20	0N	775N	775	XZ
0E	Hunter Lake	21-P4-01	16.66	20	1.5	15	0N	775N	775	XZ
200E	Hunter Lake	21-P4-01	16.66	20	1.5	15	0N	775N	775	XZ
400E	Hunter Lake	21-P4-01	16.66	20	1.5	15	0N	775N	775	XZ
600E	Hunter Lake	21-P4-01	16.66	20	1.5	15	0N	750N	750	XZ
800E	Hunter Lake	21-P4-01	16.66	20	1.5	15	0N	750N	750	XZ
1000E	Hunter Lake	21-P4-01	16.66	20	1.5	15	0N	775N	775	XZ
1200E	Hunter Lake	21-P4-01	16.66	20	1.5	15	0N	775N	775	XZ
0E	Hunter Lake	21-P4-02	16.66	20	1.5	15	0N	775N	775	XZ
200E	Hunter Lake	21-P4-02	16.66	20	1.5	15	0N	775N	775	XZ
400E	Hunter Lake	21-P4-02	16.66	20	1.5	15	0N	775N	775	XZ
600E	Hunter Lake	21-P4-02	16.66	20	1.5	15	0N	775N	775	XZ
800E	Hunter Lake	21-P4-02	16.66	20	1.5	15	0N	775N	775	XZ
1000E	Hunter Lake	21-P4-02	16.66	20	1.5	15	200N	775N	575	XZ
1200E	Hunter Lake	21-P4-02	16.66	20	1.5	15	100N	775N	675	XZ

TABLE 3: CHANNEL CONFIGURATION FOR THE 16.66MS TIMEBASE USING 20 CHANNELS.

Channel	Start (ms)	Finish (ms)	Channel	Start (ms)	Finish (ms)
PP	-0.200	-0.100			
1	0.050	0.060	**2**	0.060	0.080
3	0.080	0.110	**4**	0.110	0.150
5	0.150	0.200	**6**	0.200	0.270
7	0.270	0.360	**8**	0.360	0.480
9	0.480	0.640	**10**	0.640	0.850
11	0.850	1.130	**12**	1.130	1.500
13	1.500	1.990	**14**	1.990	2.640
15	2.640	3.510	**16**	3.510	4.660
17	4.660	6.190	**18**	6.190	8.220
19	8.220	10.920	**20**	10.920	14.400

PRODUCTION SUMMARY

TABLE 4: PRODUCTION SUMMARY.

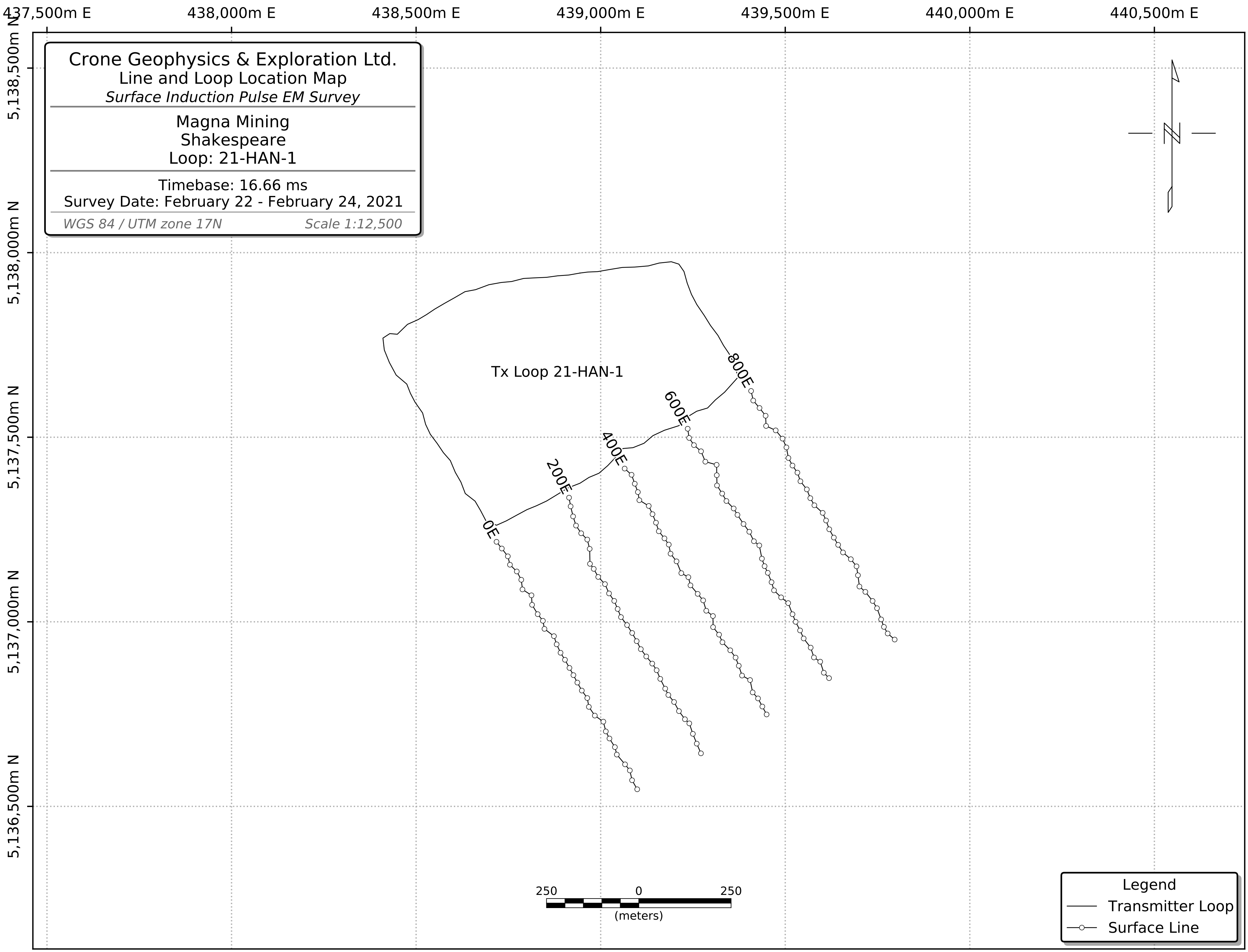
Date	Type of Day	Comments
02-Feb-21	MOB	MOB to Agnew Lake Lodge
03-Feb-21	Looping	MOB equipment to site, orientation and start looping P4-01
04-Feb-21	Looping	Continue looping P4-01 and dGPS
05-Feb-21	Survey	Finish looping P4-01 and start SPEM survey
06-Feb-21	Survey	SPEM survey 0E, 200E, 400E on P4-01
07-Feb-21	Survey	Finish SPEM survey 0E, 200E, 400E on P4-01
08-Feb-21	Survey	SPEM survey 1200E, 1000E on P4-01
09-Feb-21	Survey	Did some coil tests, cleared a path for snowmobiles and picked up equipment
10-Feb-21	Survey	Continue SPEM survey 1200E, 1000E on P4-01
11-Feb-21	Survey	Continue SPEM survey 600E, 800E, 1000E on P4-01
12-Feb-21	Survey	Continue SPEM survey 400E, 600E, 800E on P4-01
13-Feb-21	Survey	Finish SPEM survey 200E on P4-01, start laying next loop P4-02
14-Feb-21	Looping	Laying loop P4-02 and dGPS
15-Feb-21	Looping	Laying loop P4-02 and dGPS
16-Feb-21	Survey	Finish loop P4-02 and start SPEM survey 1200E and 1000E on P4-02
17-Feb-21	Survey	SPEM survey 600E, 800E, 1000E on P4-02
18-Feb-21	Survey	SPEM survey 200E, 400E, 600E, 800E on P4-02
19-Feb-21	Survey	SPEM survey 0E, 200E, 400E, 600E on P4-02
20-Feb-21	Survey	SPEM survey 0E, 400E on P4-02
21-Feb-21	Looping	Moved equipment to 21-HAN-01, laid loop and dGPS

22-Feb-21	Survey	SPEM survey 0E, 200E on 21-HAN-01
23-Feb-21	Survey	SPEM survey 200E, 400E, 600E on 21-HAN-01
24-Feb-21	Survey	SPEM survey 600E, 800E on 21-HAN-01
25-Feb-21	Looping	Pack up equipment and start picking up 21-HAN-01 and P4-02
26-Feb-21	DEMOB	Finish packing and DEMOB to Mississauga, Ontario

Respectfully submitted,

Norman Shieh, B.Sc.
Geophysical Operator
Crone Geophysics & Exploration Ltd.

APPENDIX 1: SURFACE SURVEY RESULTS


437,500m E
438,000m E
438,500m E
439,000m E
439,500m E
440,000m E
440,500m E
5,138,500m N
5,138,000m N
5,137,500m N
5,137,000m N
5,136,500m N
Crone Geophysics & Exploration Ltd.
Line and Loop Location Map
Surface Induction Pulse EM Survey
Magna Mining
Shakespeare
Loop: 21-HAN-1
Timebase: 16.66 ms
Survey Date: February 22 - February 24, 2021
WGS 84 / UTM zone 17N
Scale 1:12,500
Tx Loop 21-HAN-1
0E
200E
400E
600E
800E
250
0
250
(meters)
Legend
Transmitter Loop
Surface Line

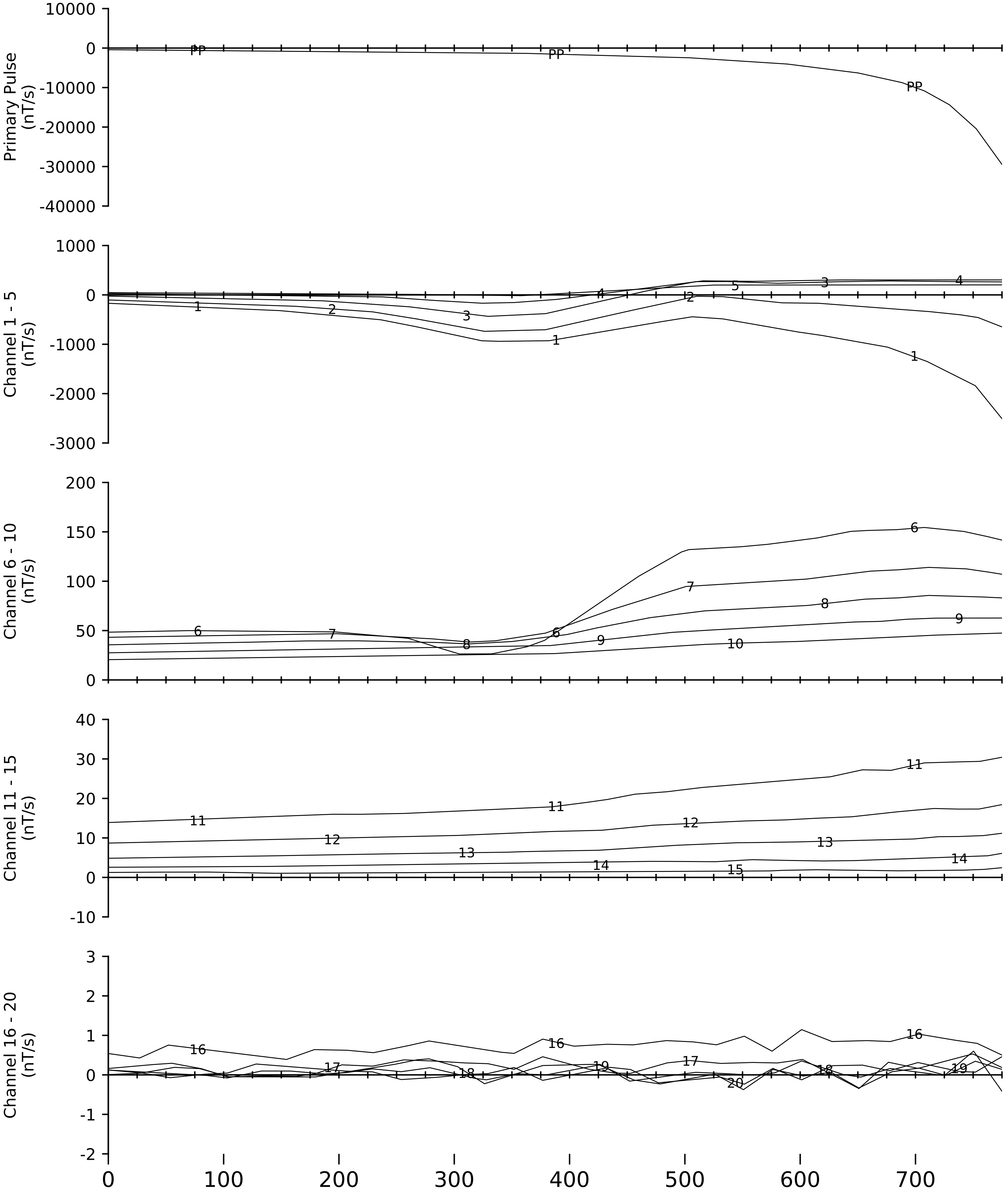
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A

Line: 0E
Loop: 21-HAN-1
Z Component

Magna Mining
Shakespeare
February 22, 2021



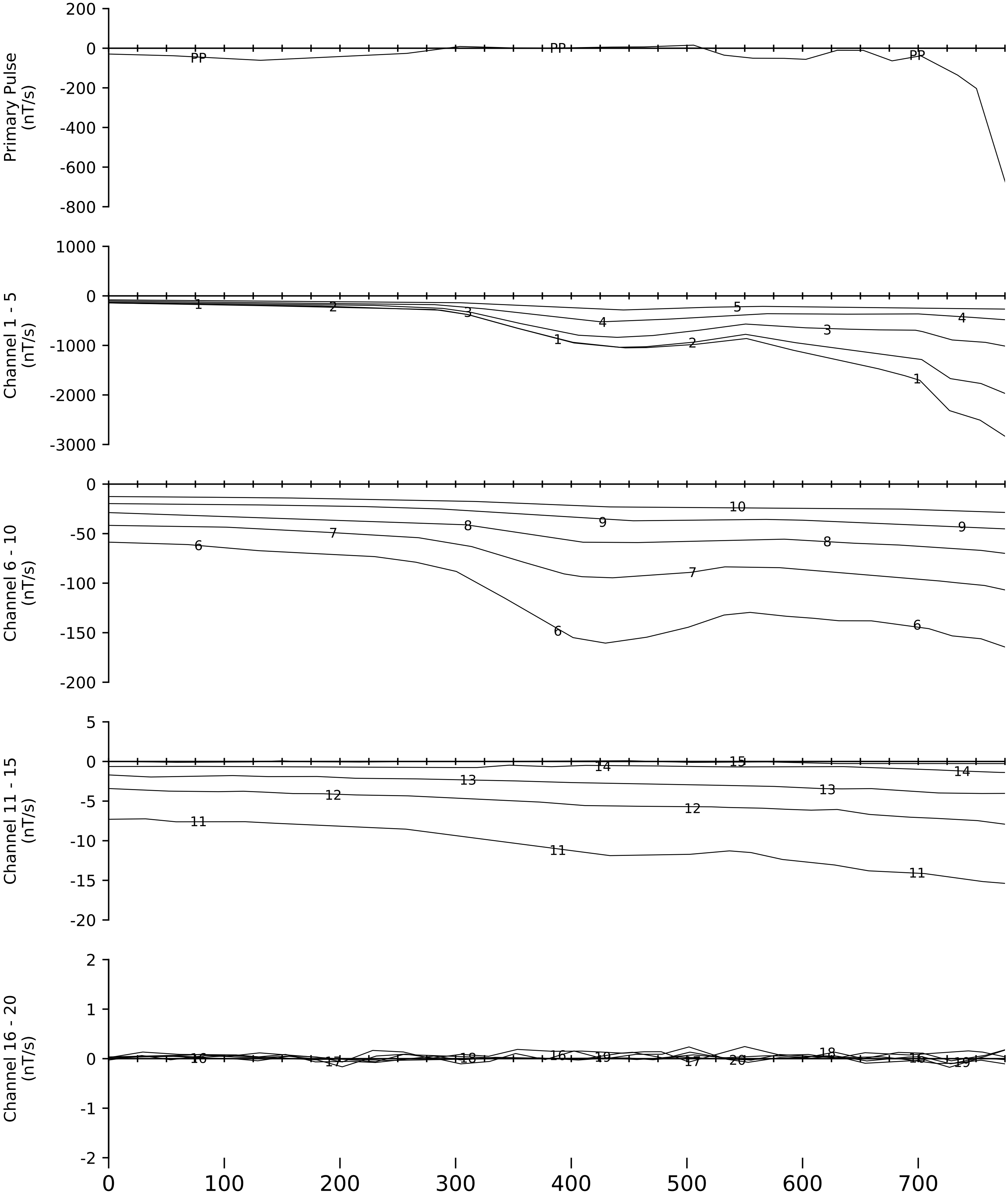
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A

Line: 0E
Loop: 21-HAN-1
X Component

Magna Mining
Shakespeare
February 22, 2021



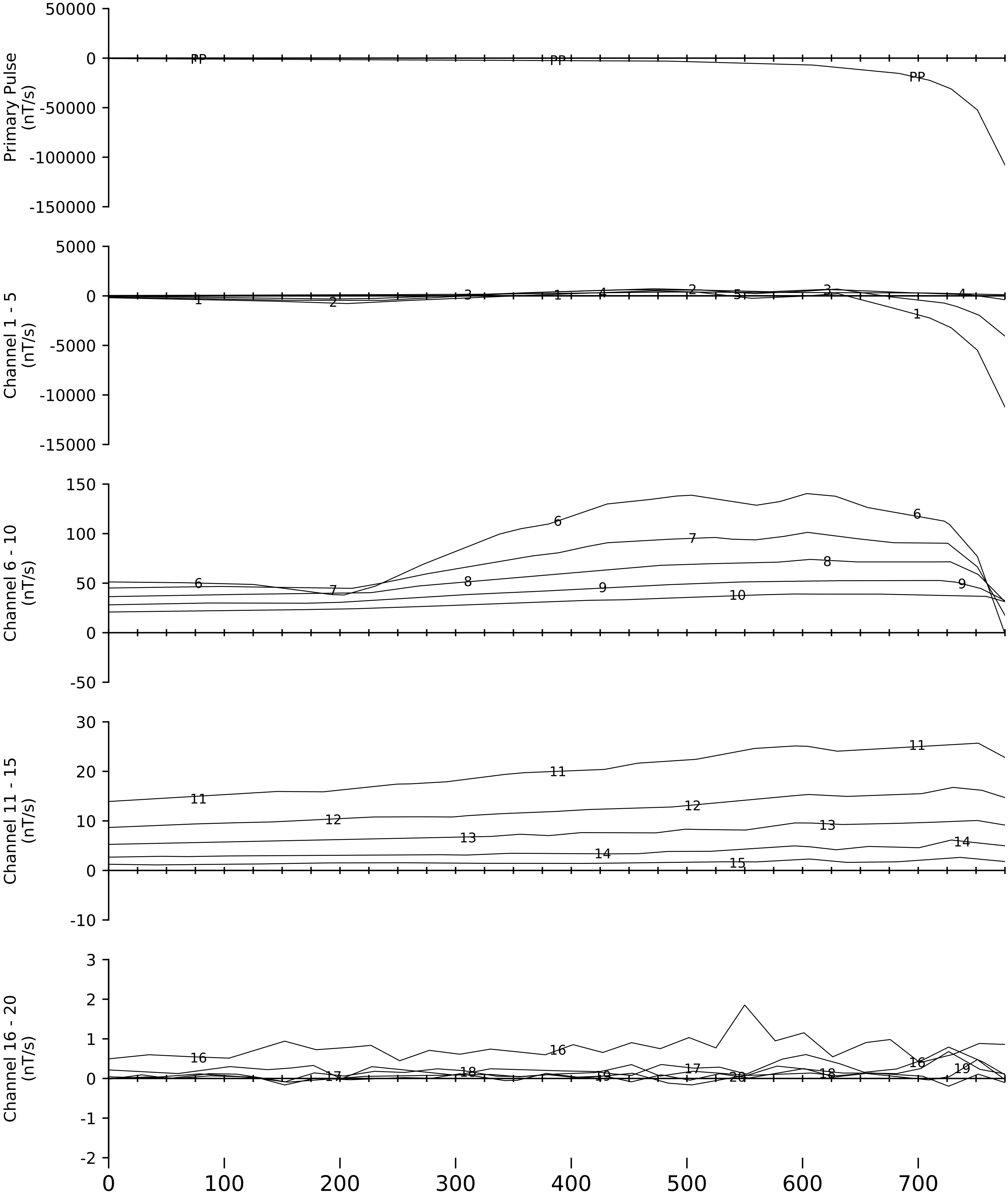
Crone Geophysics & Exploration Ltd.

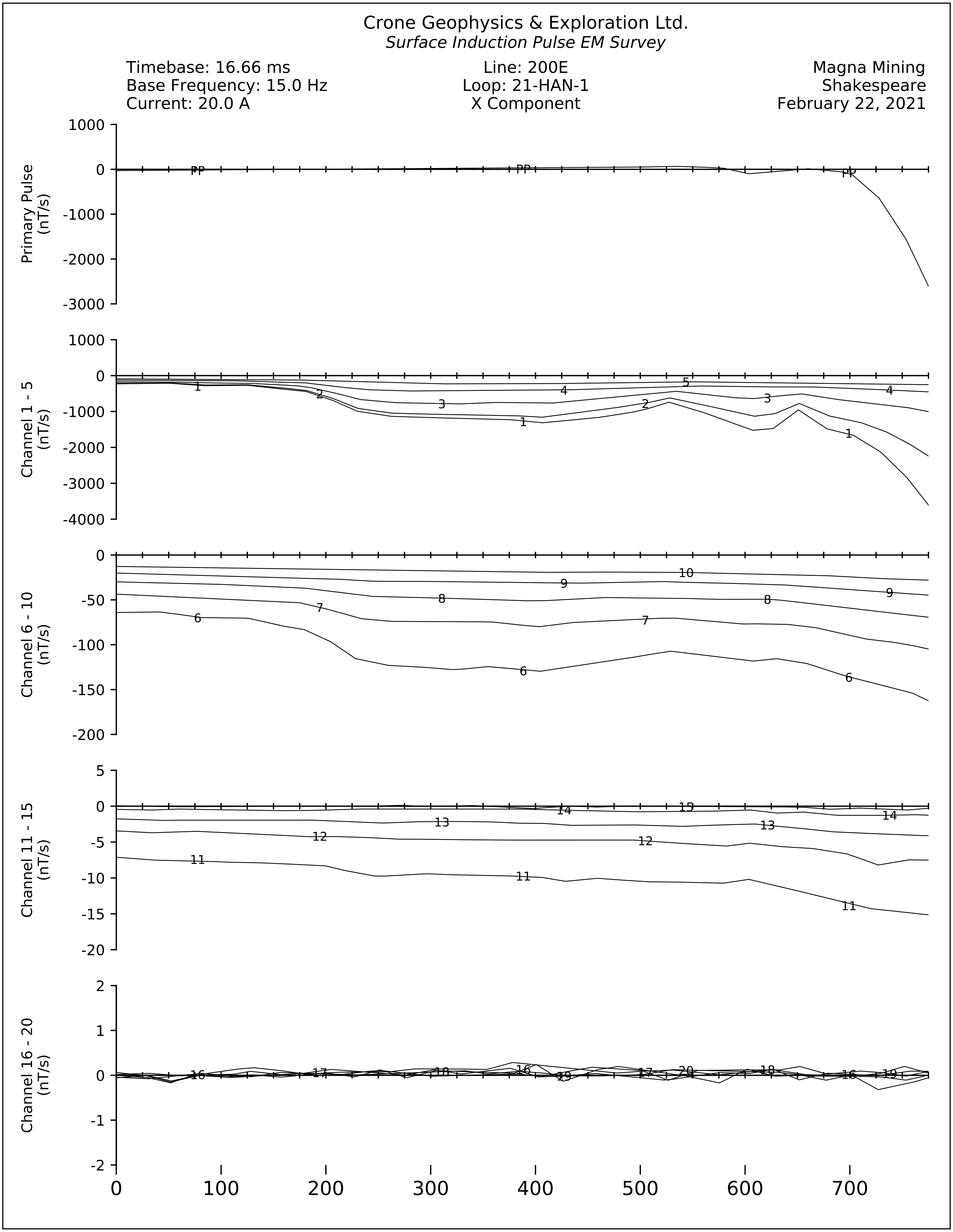
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A

Line: 200E
Loop: 21-HAN-1
Z Component

Magna Mining
Shakespeare
February 22, 2021





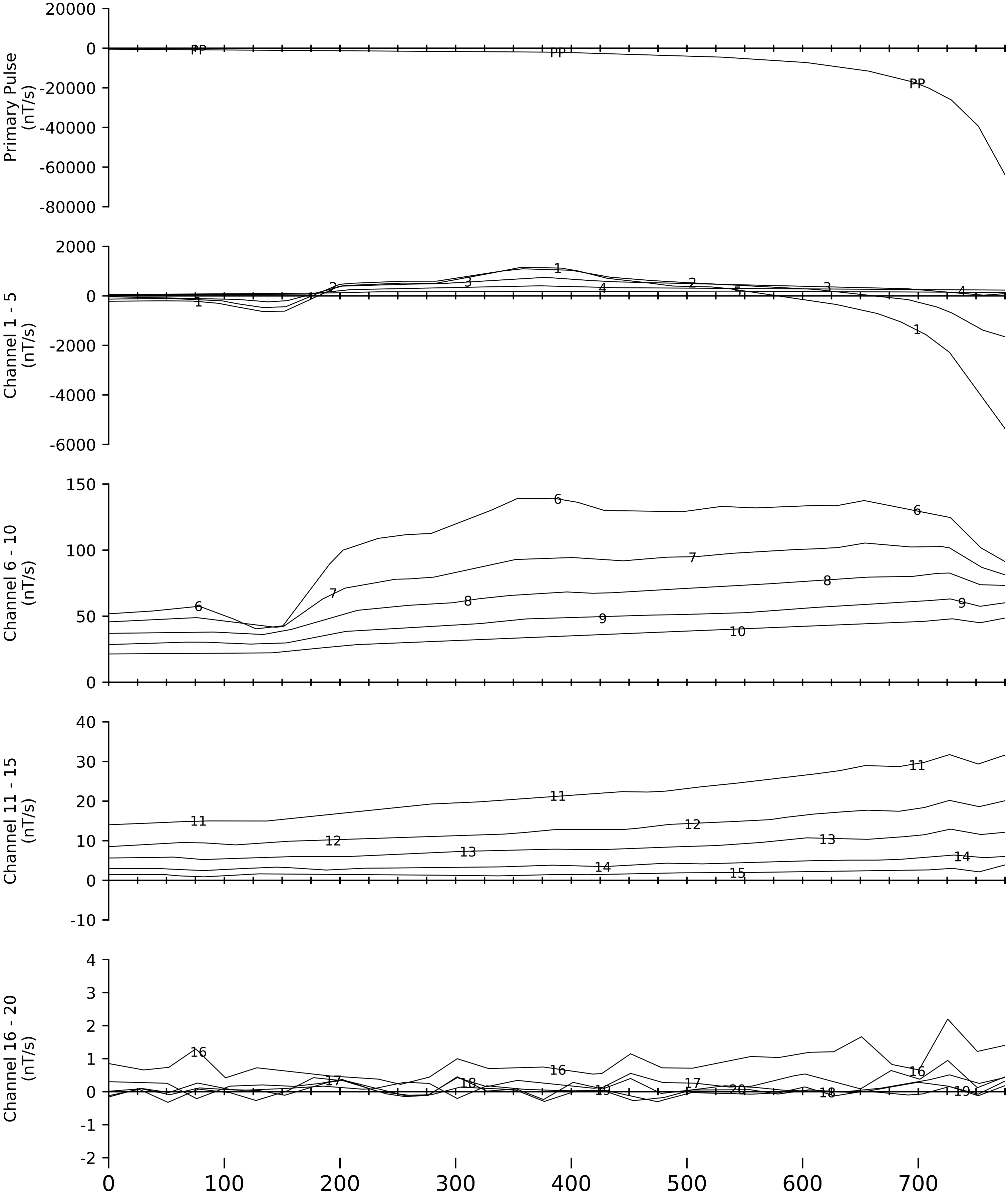
Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A
Line: 200E
Loop: 21-HAN-1
X Component
Magna Mining
Shakespeare
February 22, 2021
Primary Pulse (nT/s)
Channel 1 - 5 (nT/s)
Channel 6 - 10 (nT/s)
Channel 11 - 15 (nT/s)
Channel 16 - 20 (nT/s)
0
100
200
300
400
500
600
700

Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A

Line: 400E
Loop: 21-HAN-1
Z Component

Magna Mining
Shakespeare
February 23, 2021

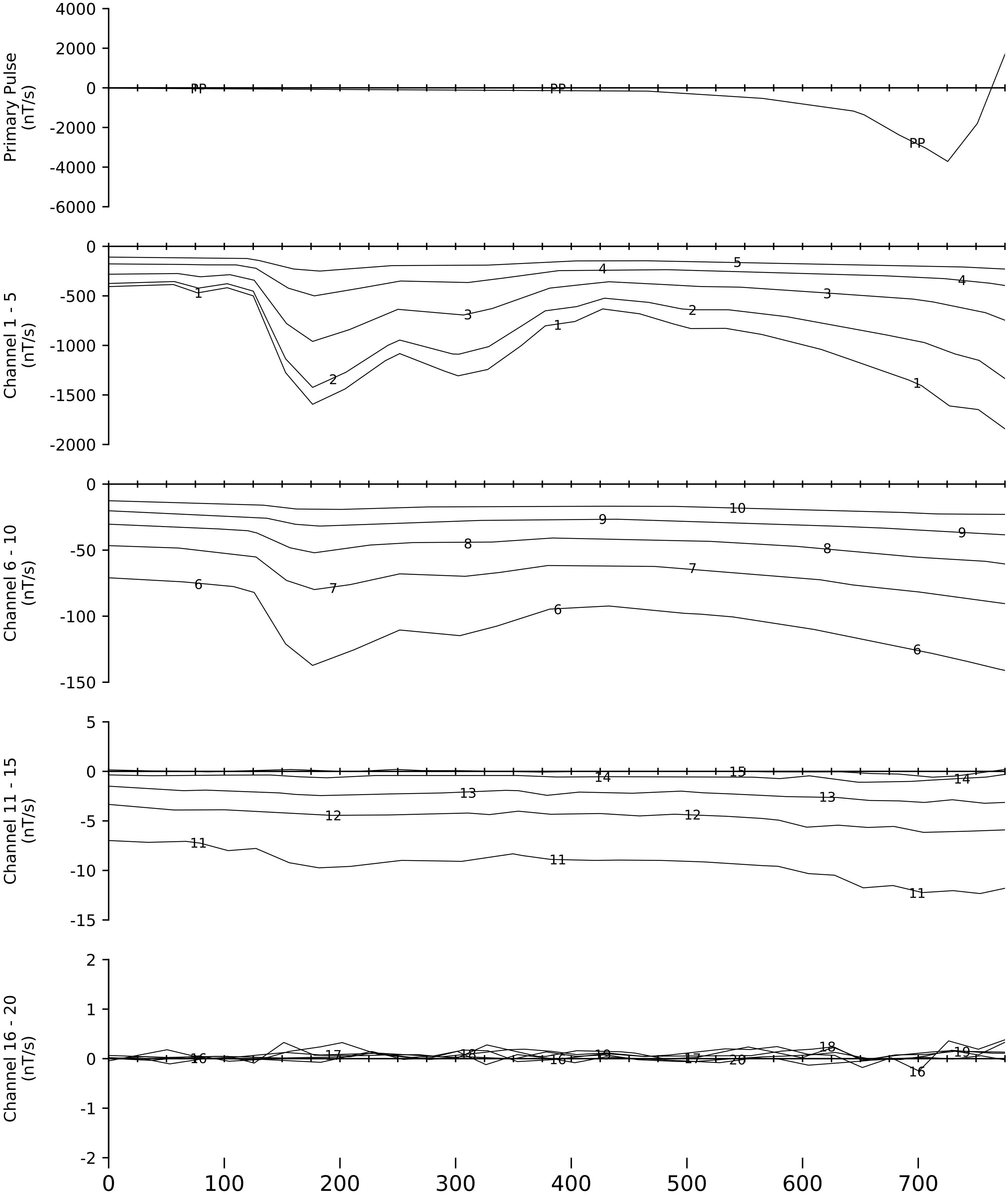


Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A

Line: 400E
Loop: 21-HAN-1
X Component

Magna Mining
Shakespeare
February 23, 2021



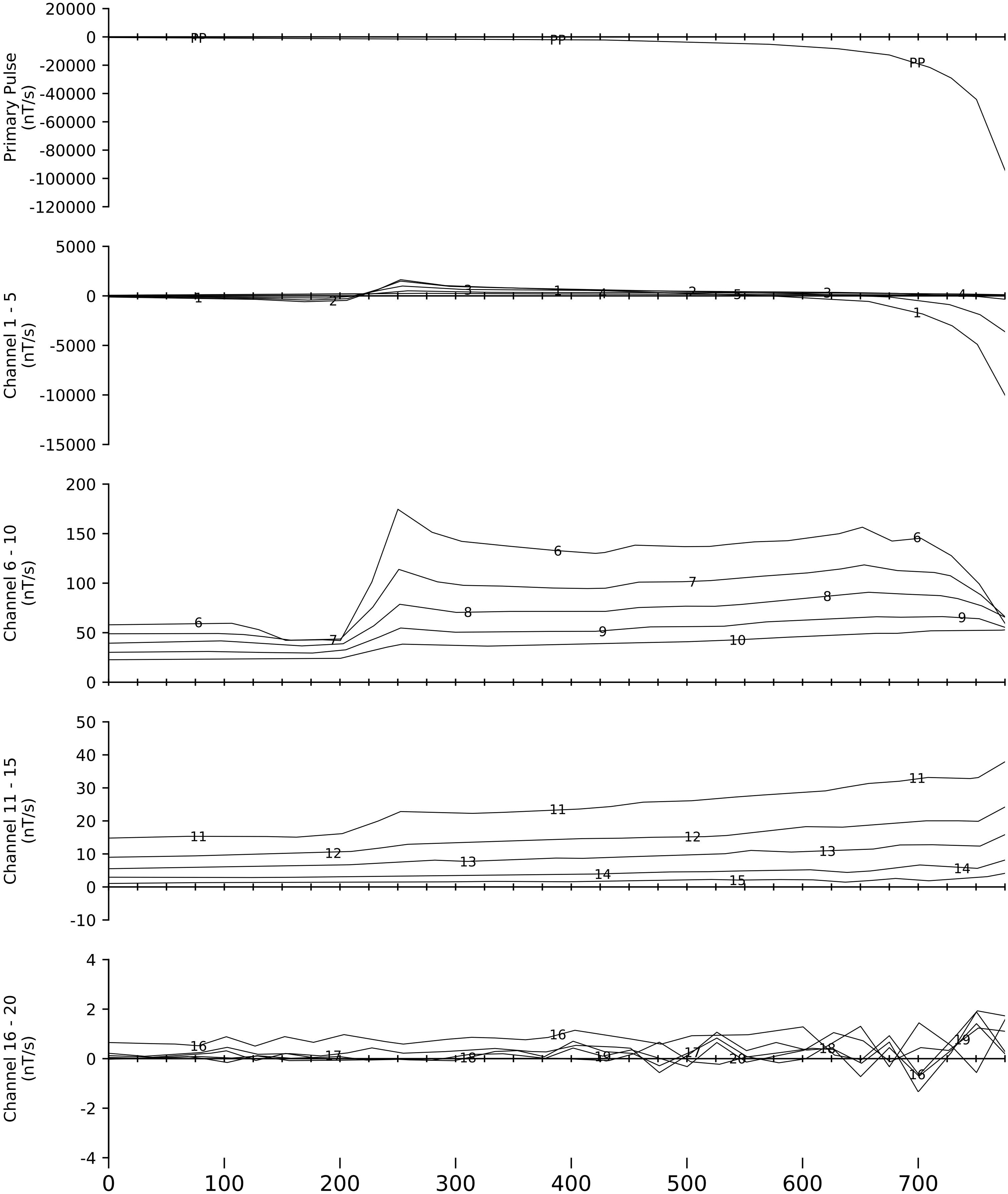
Crone Geophysics & Exploration Ltd.

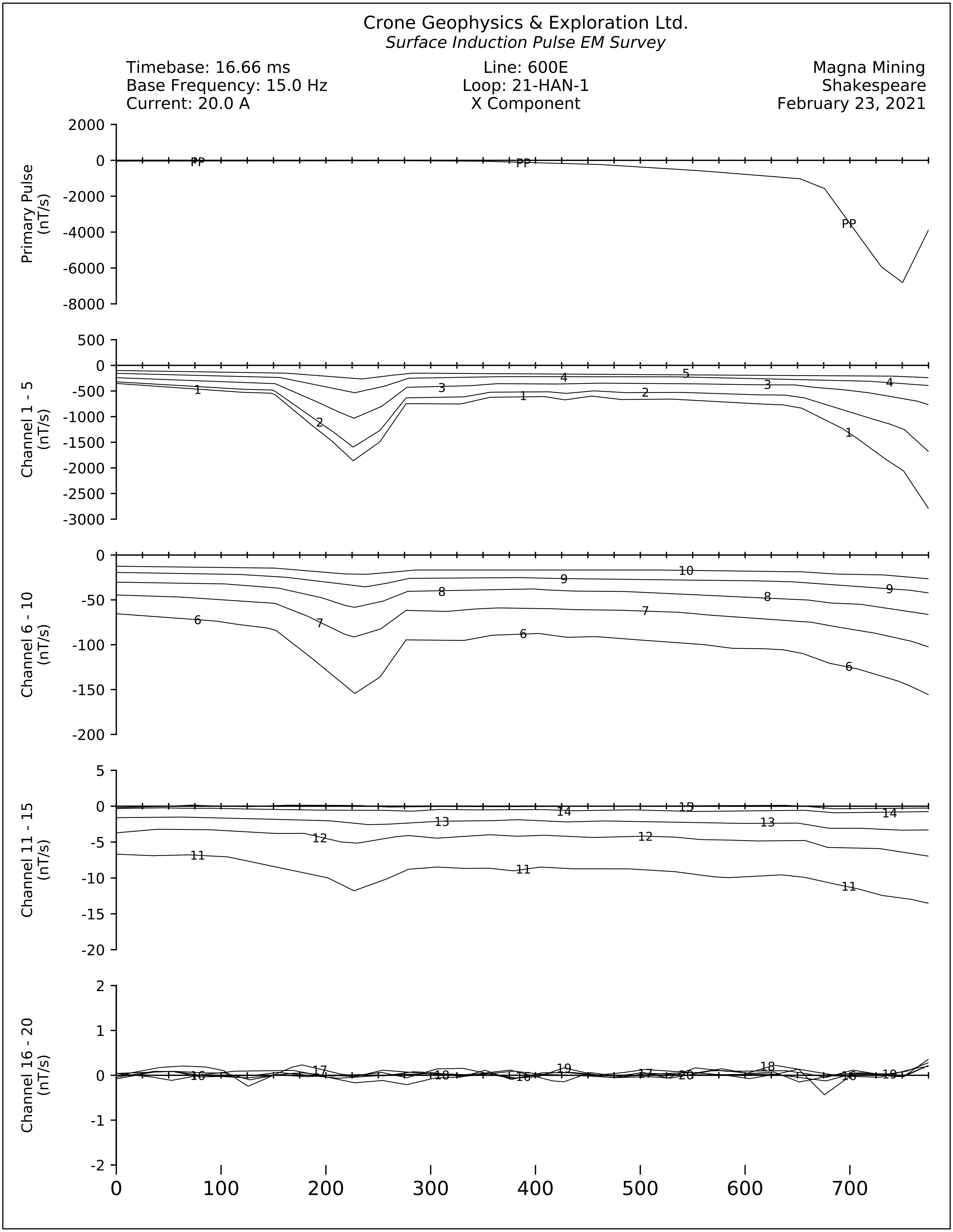
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A

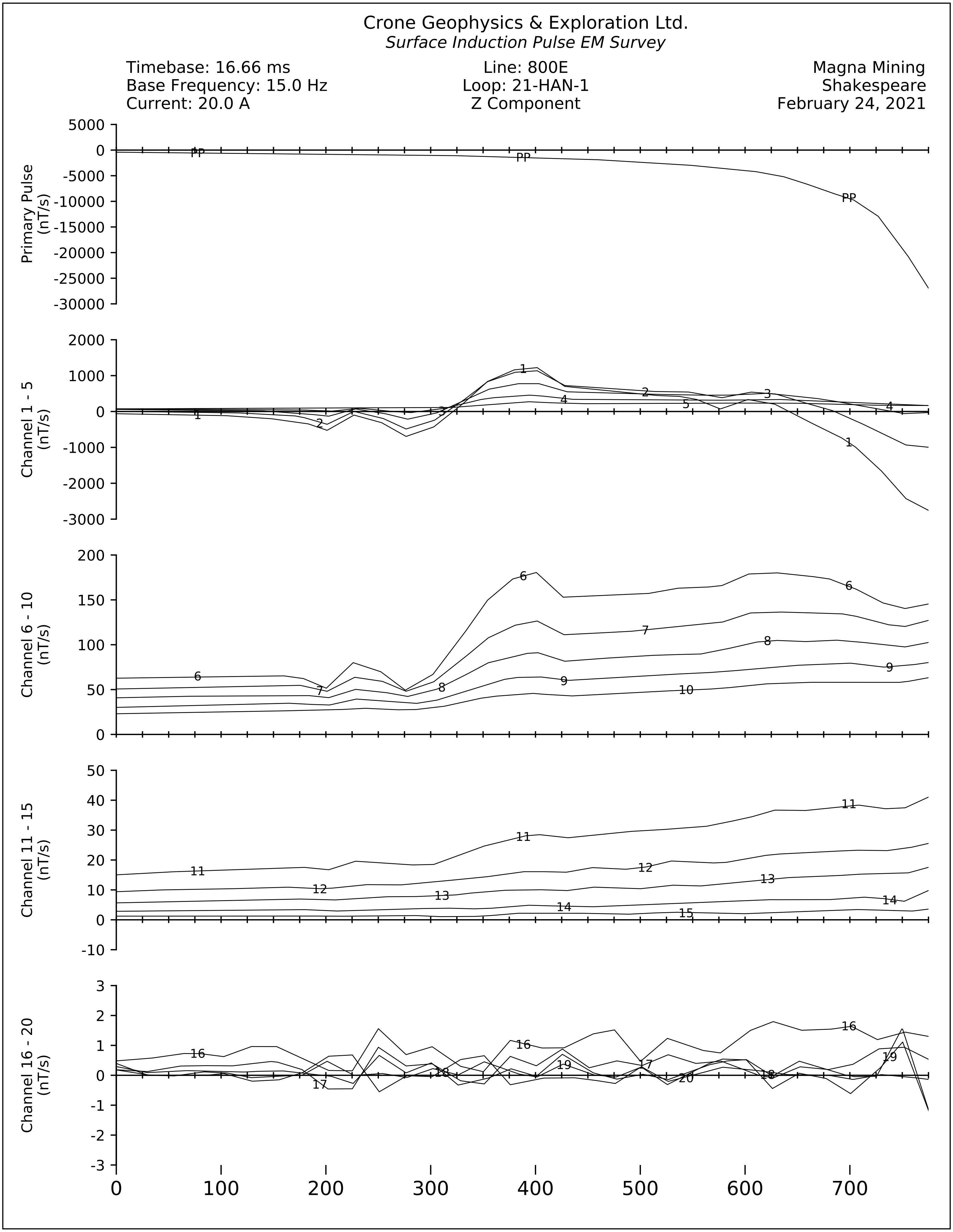
Line: 600E
Loop: 21-HAN-1
Z Component

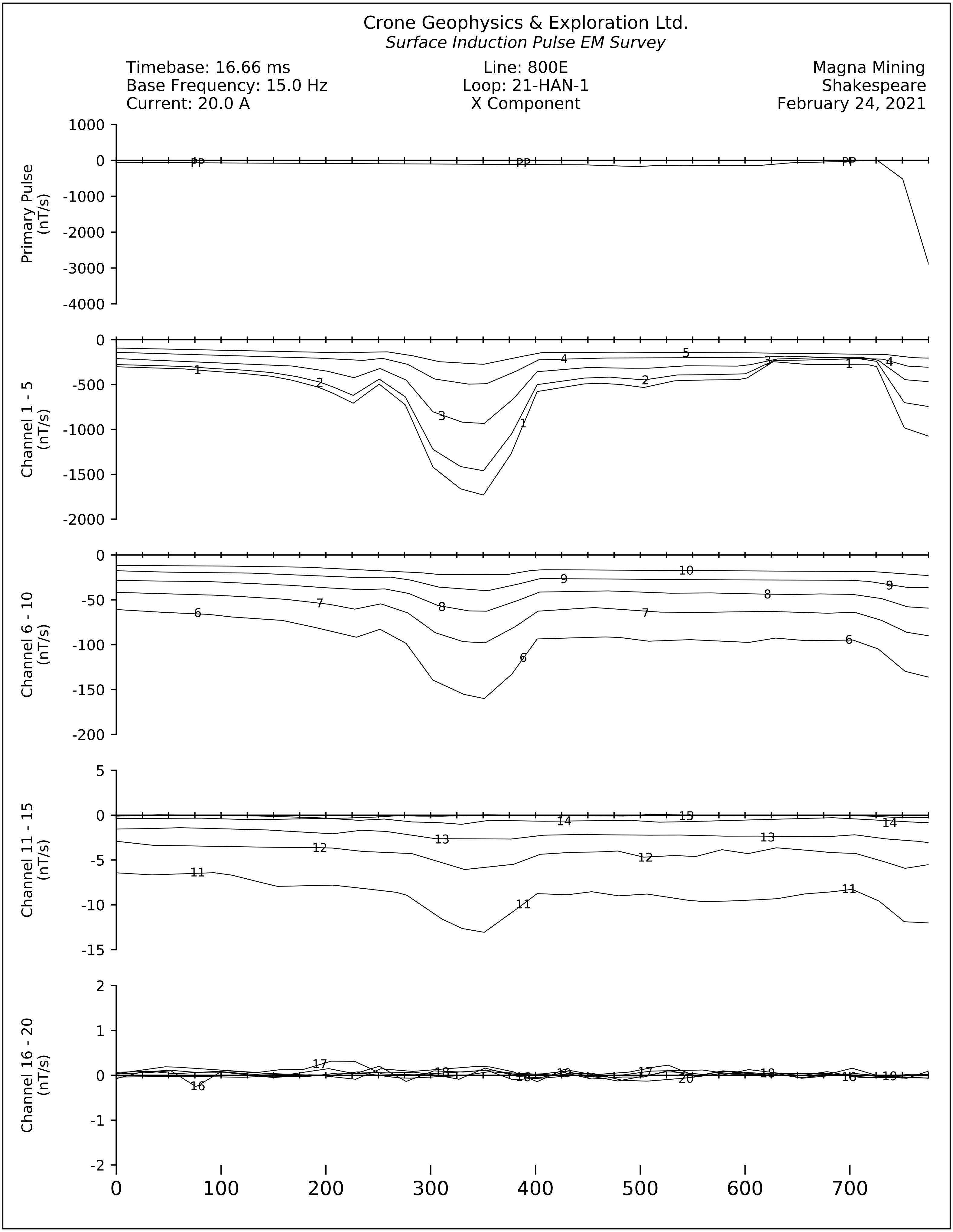
Magna Mining
Shakespeare
February 23, 2021



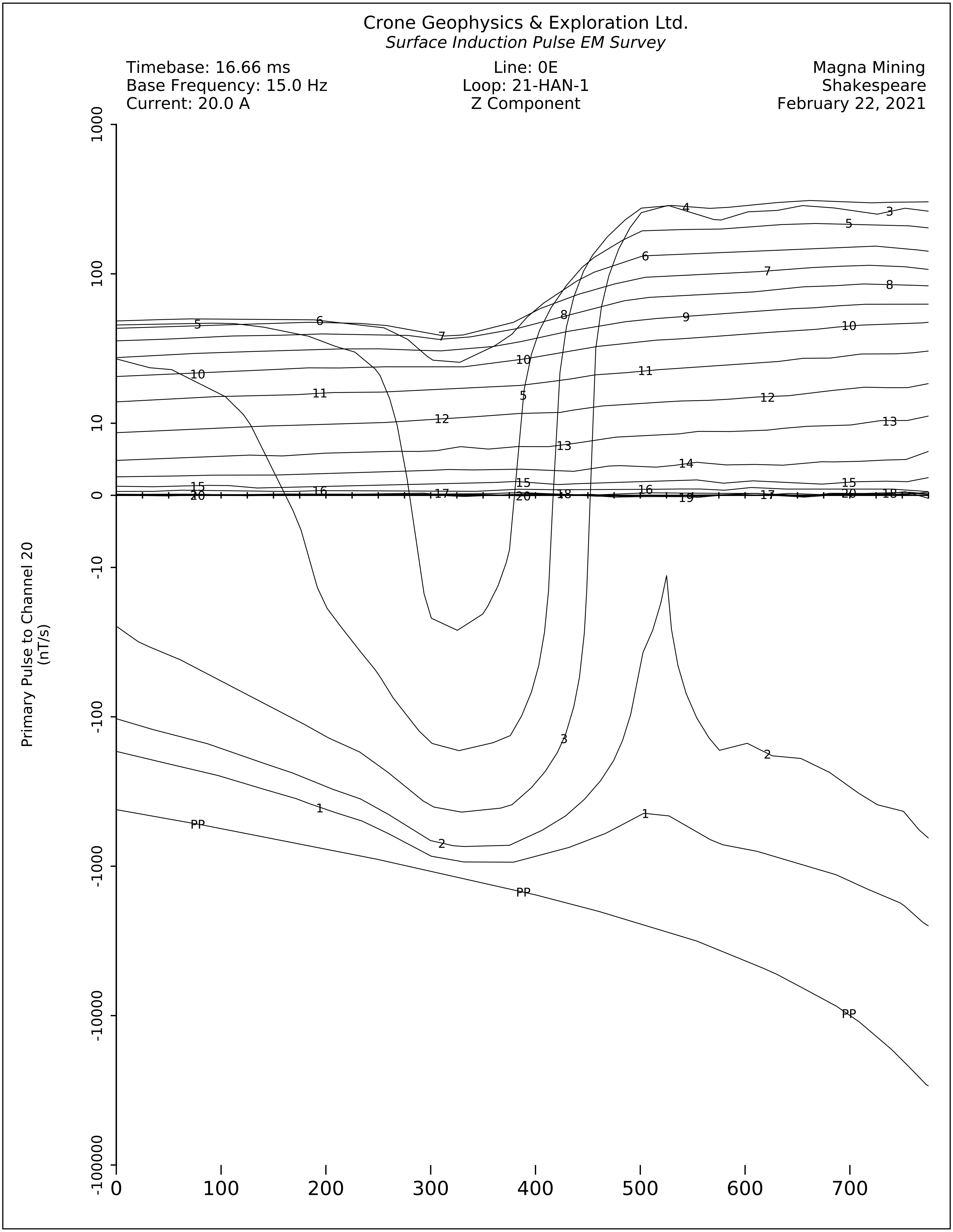


Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A
Line: 600E
Loop: 21-HAN-1
X Component
Magna Mining
Shakespeare
February 23, 2021
Primary Pulse (nT/s)
Channel 1 - 5 (nT/s)
Channel 6 - 10 (nT/s)
Channel 11 - 15 (nT/s)
Channel 16 - 20 (nT/s)
0
100
200
300
400
500
600
700

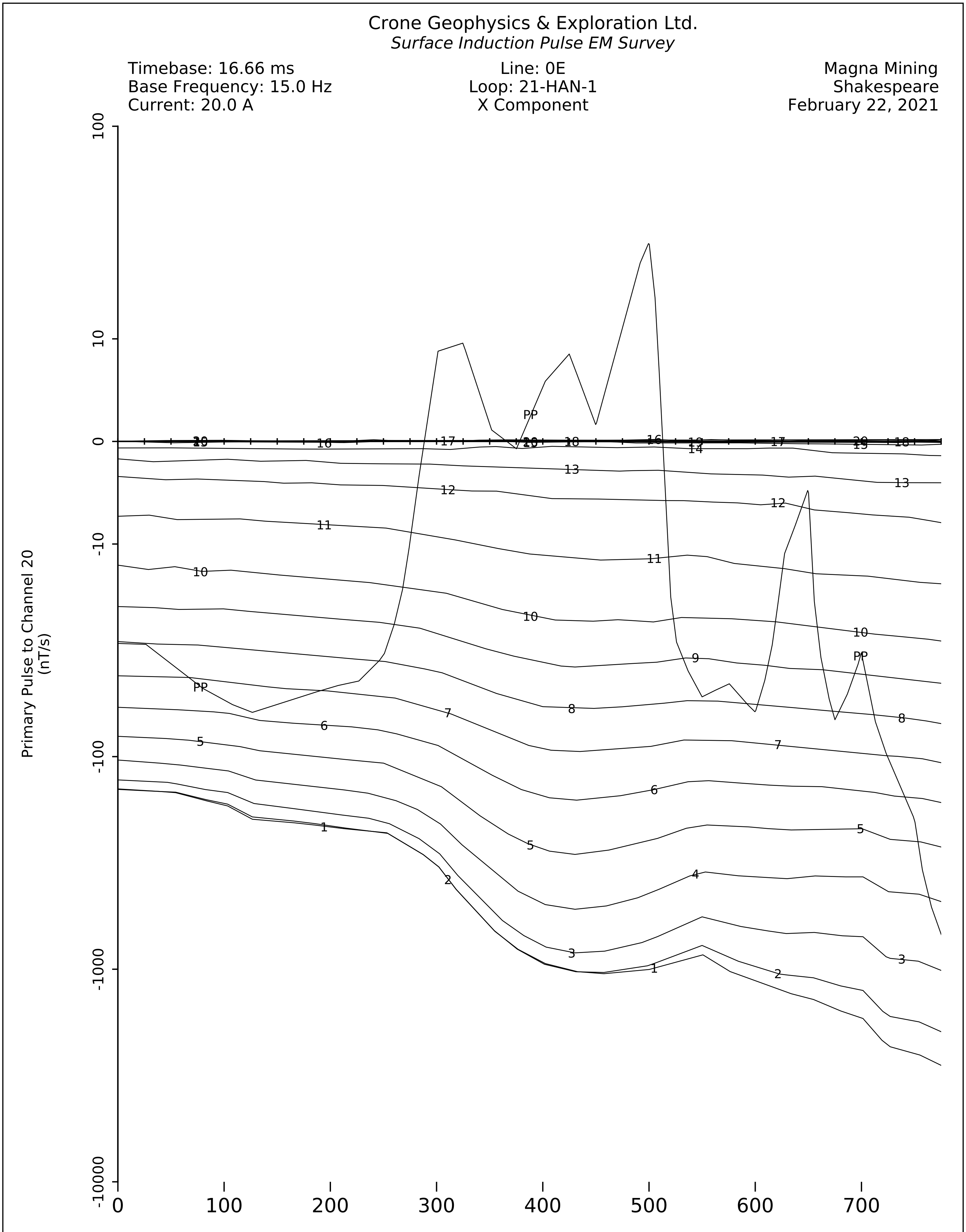

Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A
Line: 800E
Loop: 21-HAN-1
Z Component
Magna Mining
Shakespeare
February 24, 2021
Primary Pulse (nT/s)
Channel 1 - 5 (nT/s)
Channel 6 - 10 (nT/s)
Channel 11 - 15 (nT/s)
Channel 16 - 20 (nT/s)



Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A
Line: 800E
Loop: 21-HAN-1
X Component
Magna Mining
Shakespeare
February 24, 2021
Primary Pulse (nT/s)
Channel 1 - 5 (nT/s)
Channel 6 - 10 (nT/s)
Channel 11 - 15 (nT/s)
Channel 16 - 20 (nT/s)
PP
0
100
200
300
400
500
600
700



Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A
Line: 0E
Loop: 21-HAN-1
Z Component
Magna Mining
Shakespeare
February 22, 2021
Primary Pulse to Channel 20
(nT/s)
1000
100
10
0
-10
-100
-1000
-10000
-100000
0
100
200
300
400
500
600
700
PP
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20


Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A
Line: 0E
Loop: 21-HAN-1
X Component
Magna Mining
Shakespeare
February 22, 2021
Primary Pulse to Channel 20
(nT/s)
100
10
0
-10
-100
-1000
-10000
0
100
200
300
400
500
600
700
PP
1
2
3
4
5
6
7
8
9
10
11
12
13
14
16
17
18
19
20

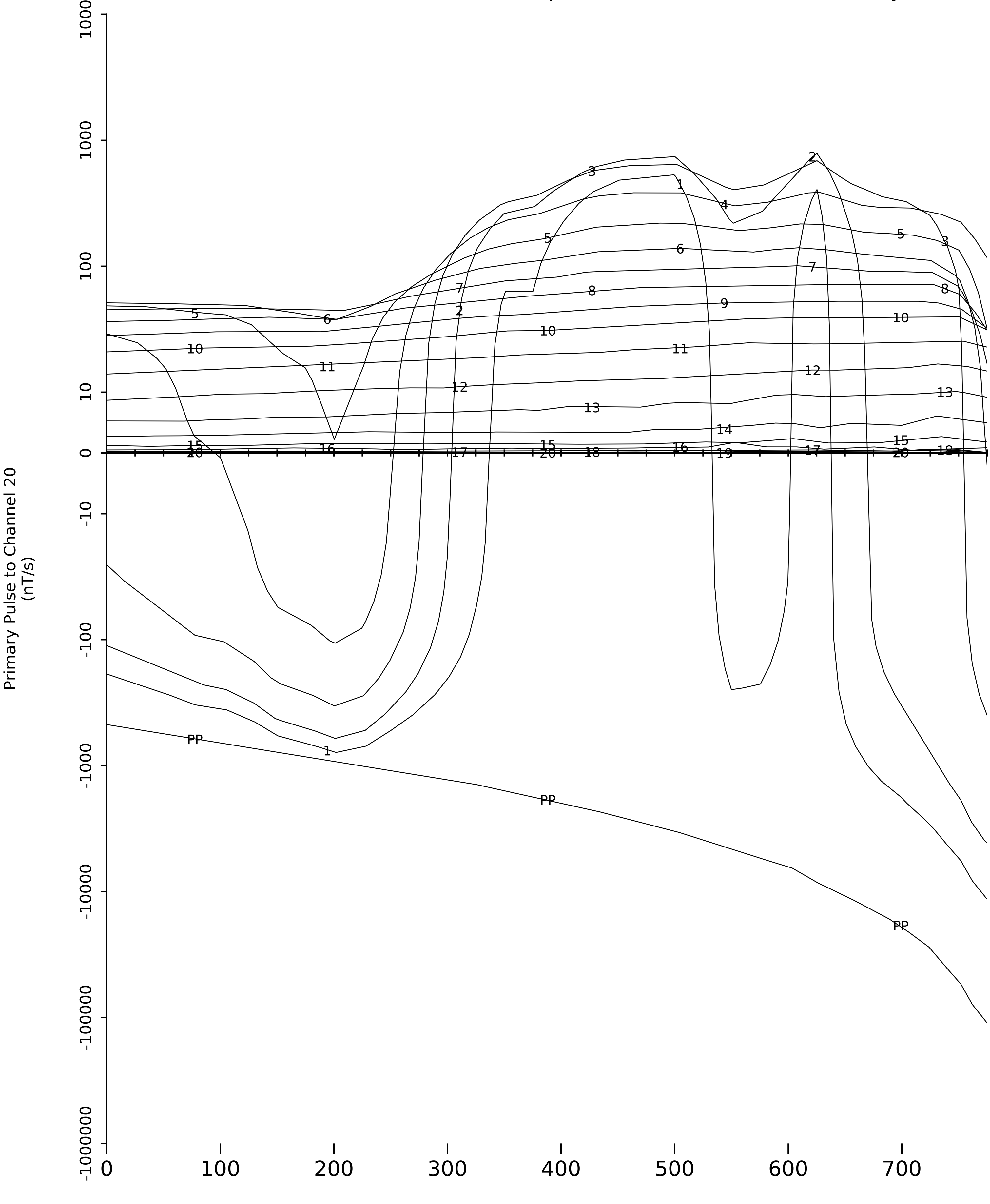
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A

Line: 200E
Loop: 21-HAN-1
Z Component

Magna Mining
Shakespeare
February 22, 2021



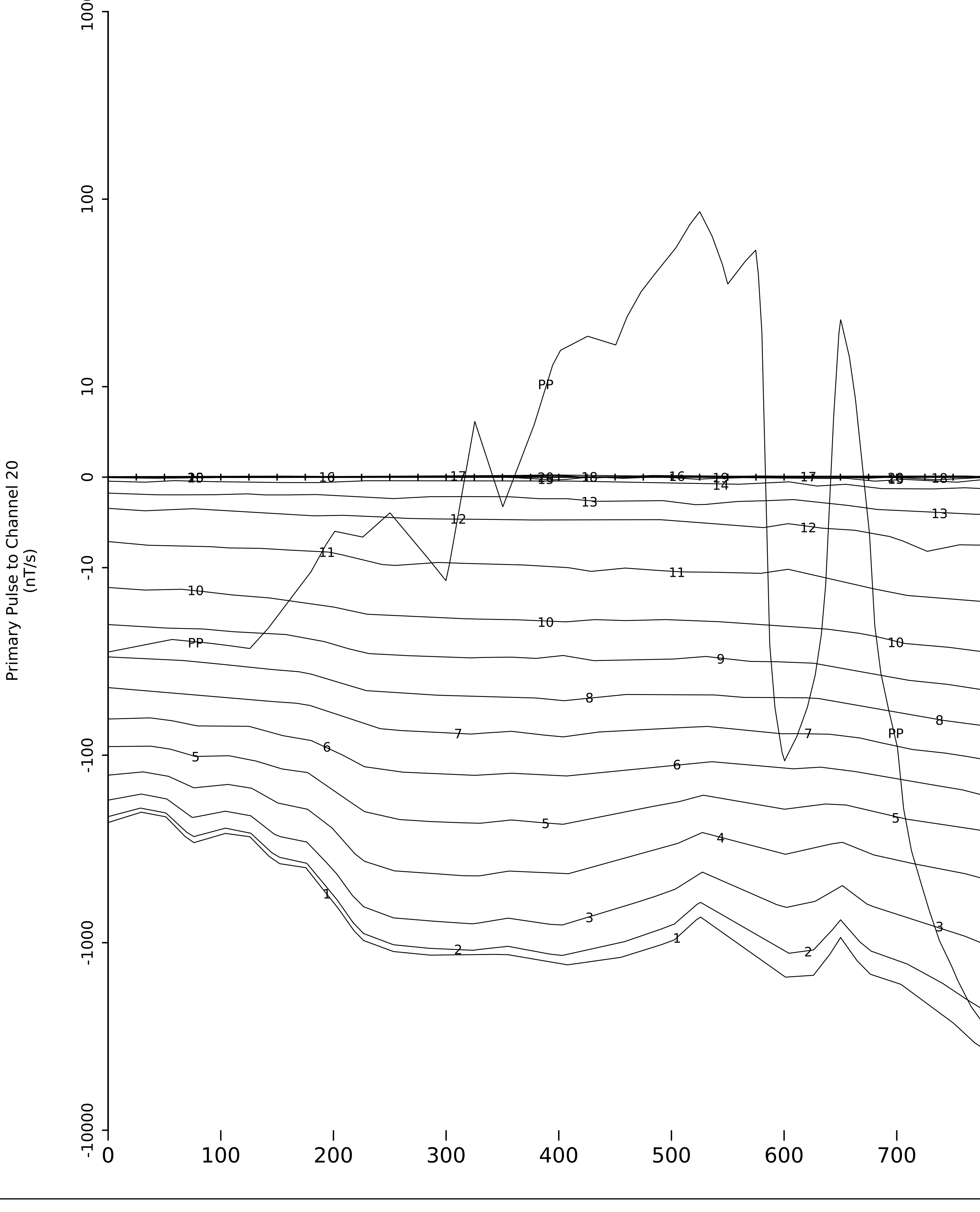
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A

Line: 200E
Loop: 21-HAN-1
X Component

Magna Mining
Shakespeare
February 22, 2021

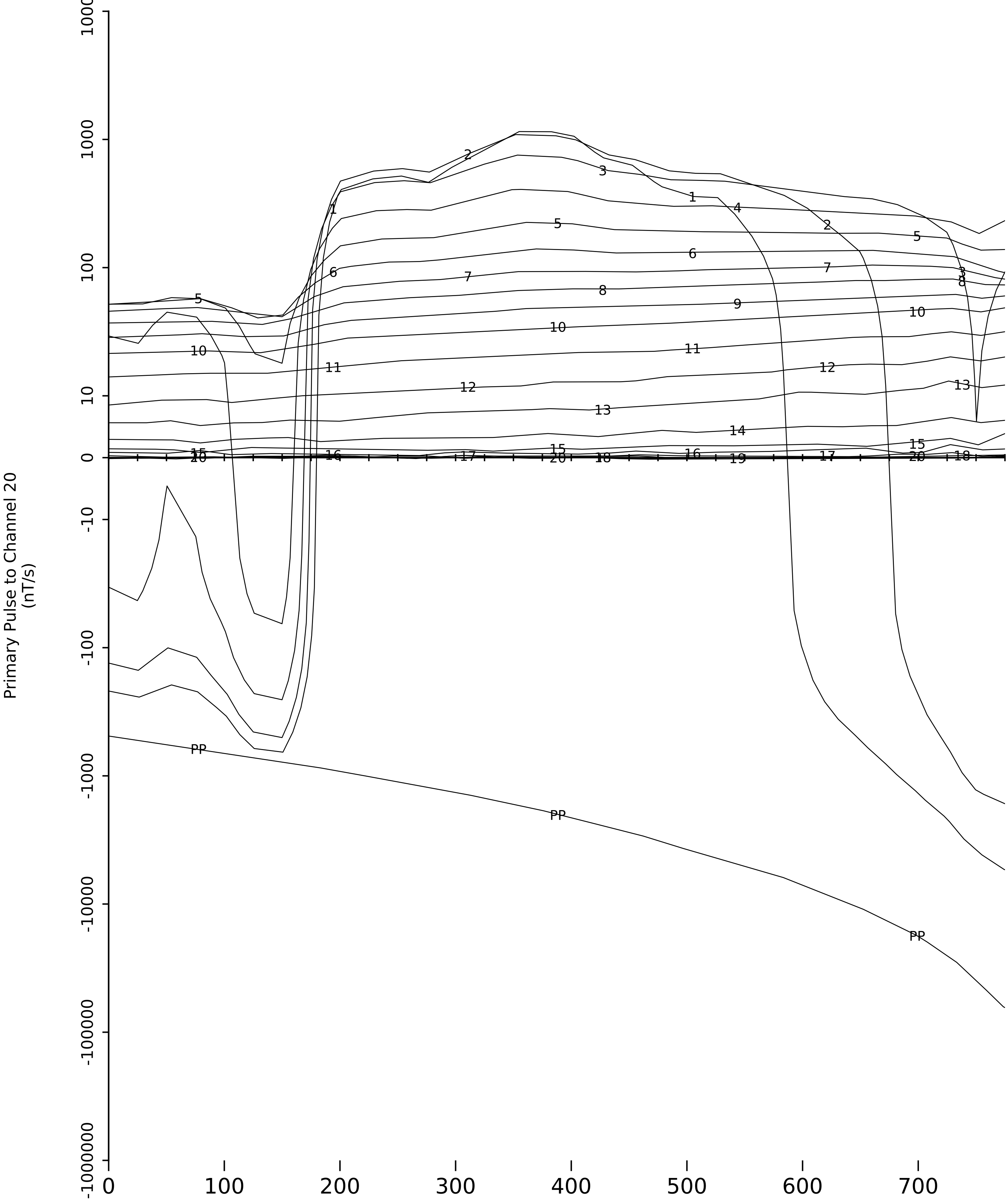


Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A

Line: 400E
Loop: 21-HAN-1
Z Component

Magna Mining
Shakespeare
February 23, 2021

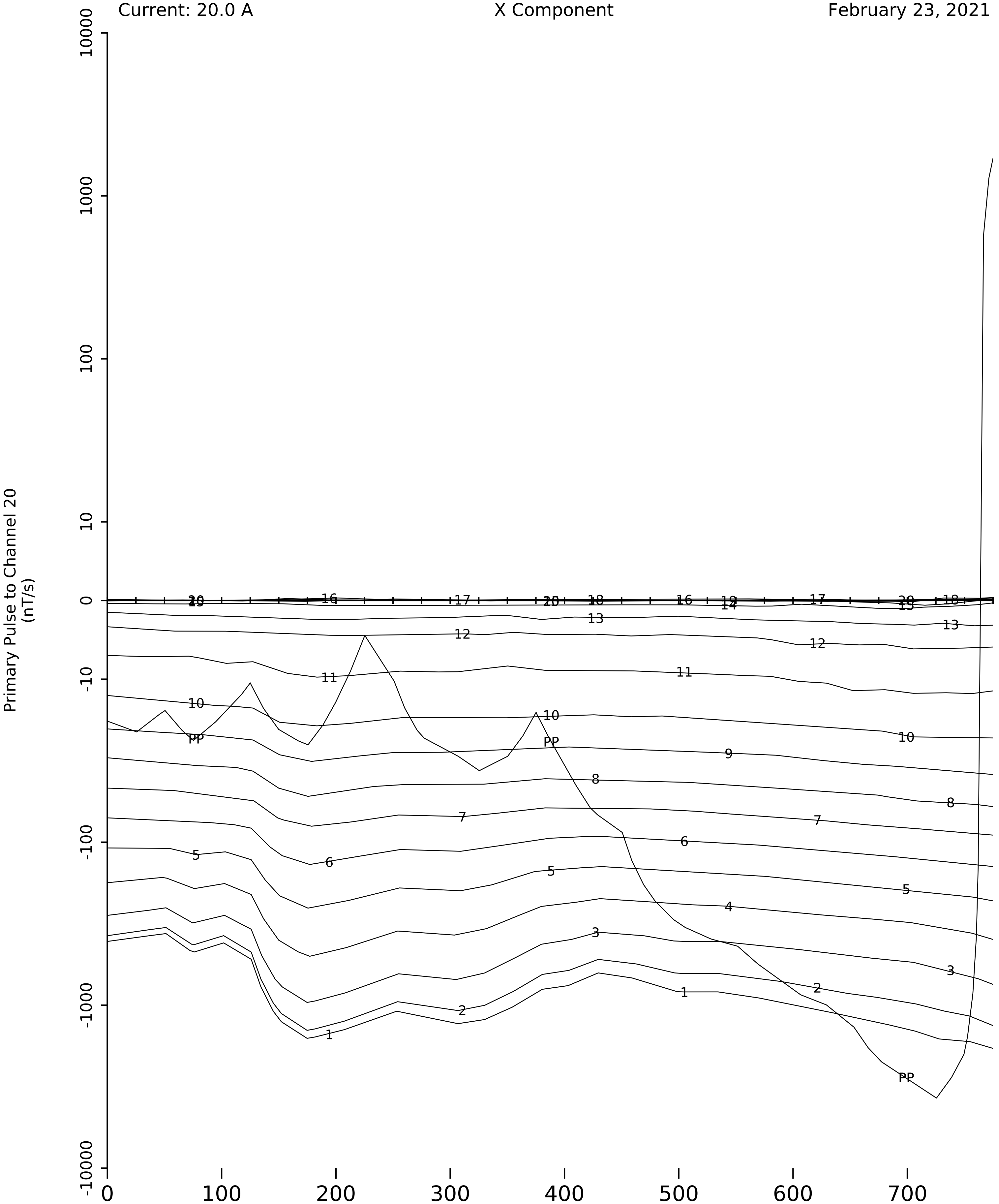


Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A

Line: 400E
Loop: 21-HAN-1
X Component

Magna Mining
Shakespeare
February 23, 2021

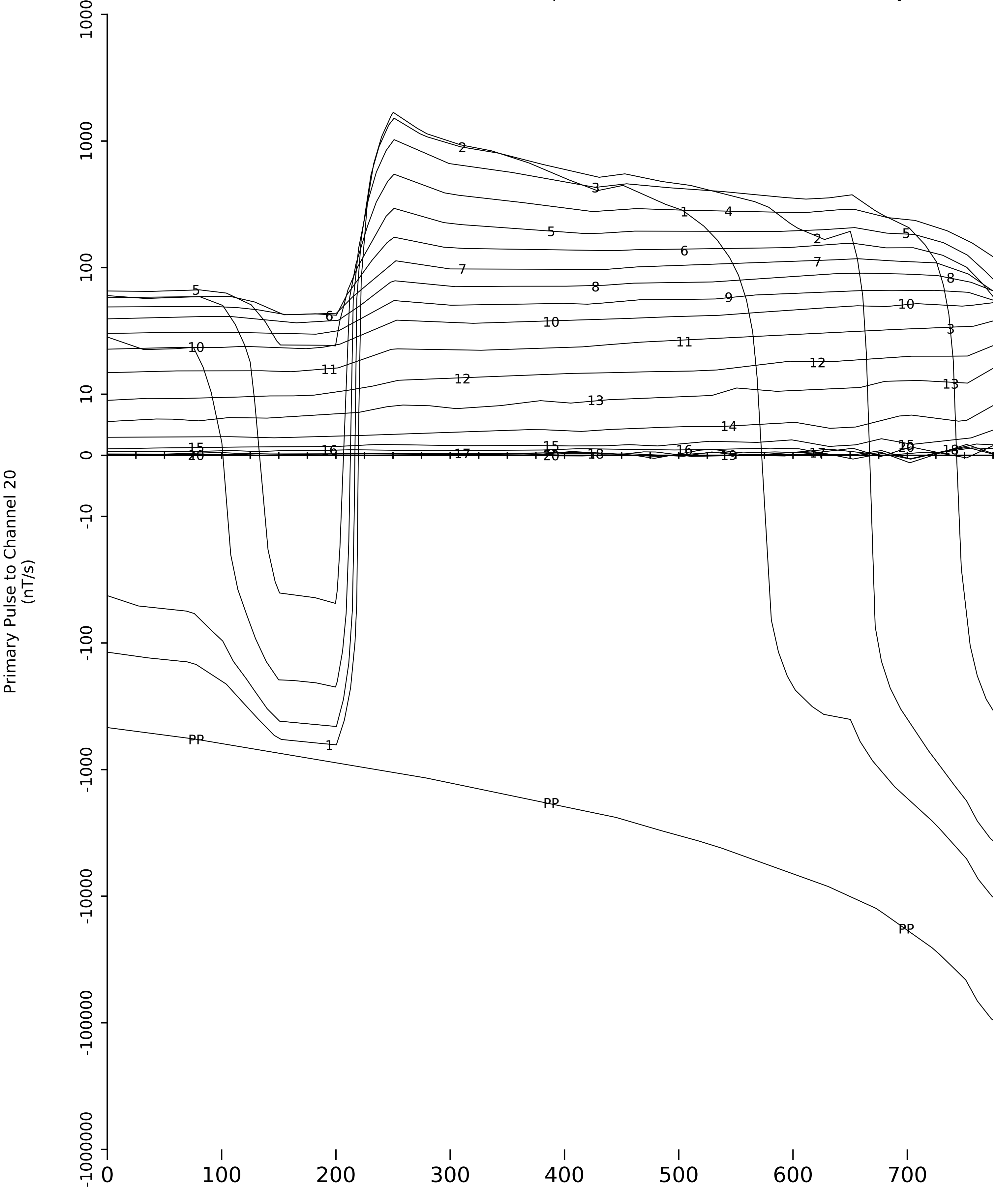


Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A

Line: 600E
Loop: 21-HAN-1
Z Component

Magna Mining
Shakespeare
February 23, 2021

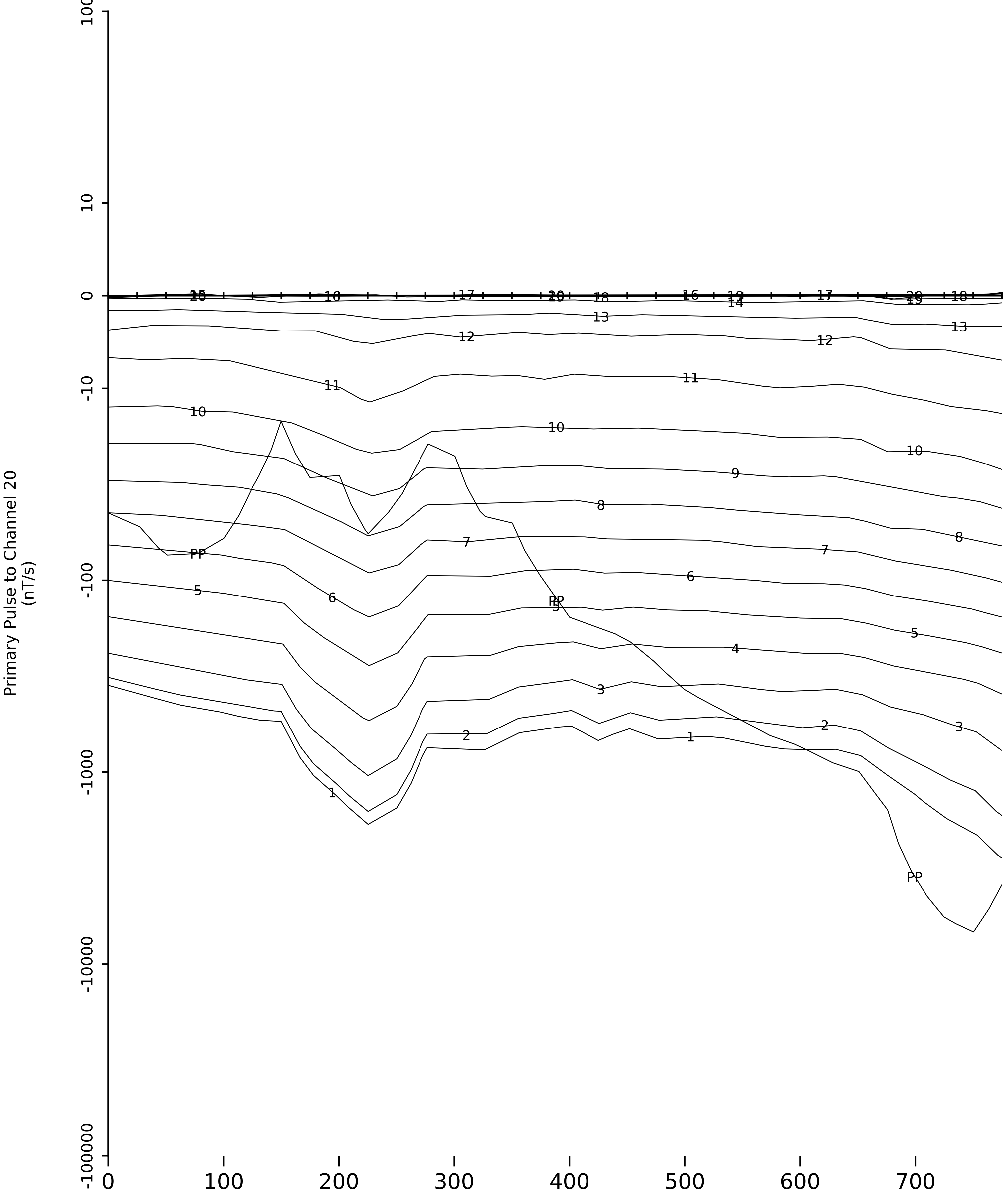


Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A

Line: 600E
Loop: 21-HAN-1
X Component

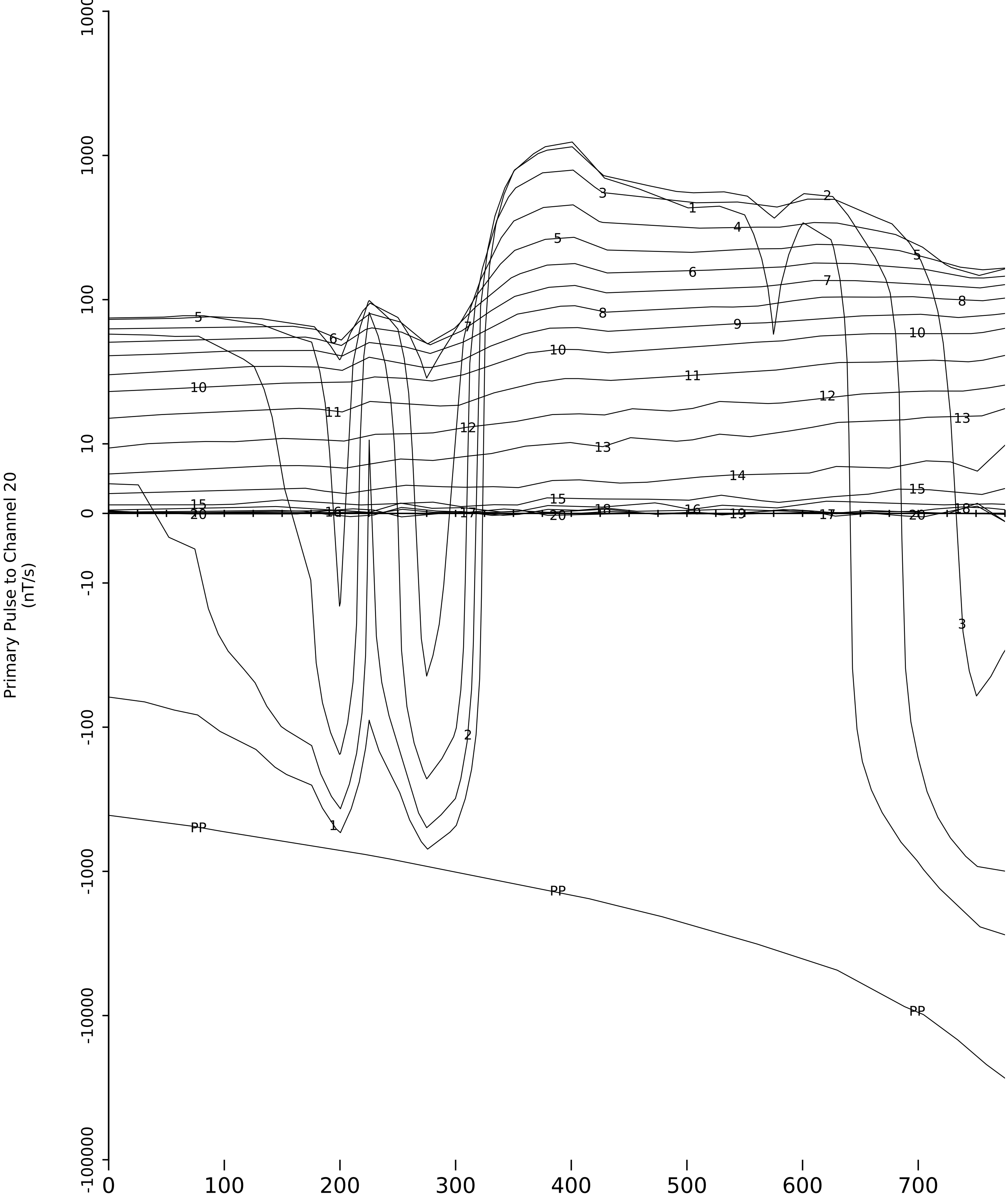
Magna Mining
Shakespeare
February 23, 2021



Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms	Line: 800E	Magna Mining
Base Frequency: 15.0 Hz	Loop: 21-HAN-1	Shakespeare
Current: 20.0 A	Z Component	February 24, 2021



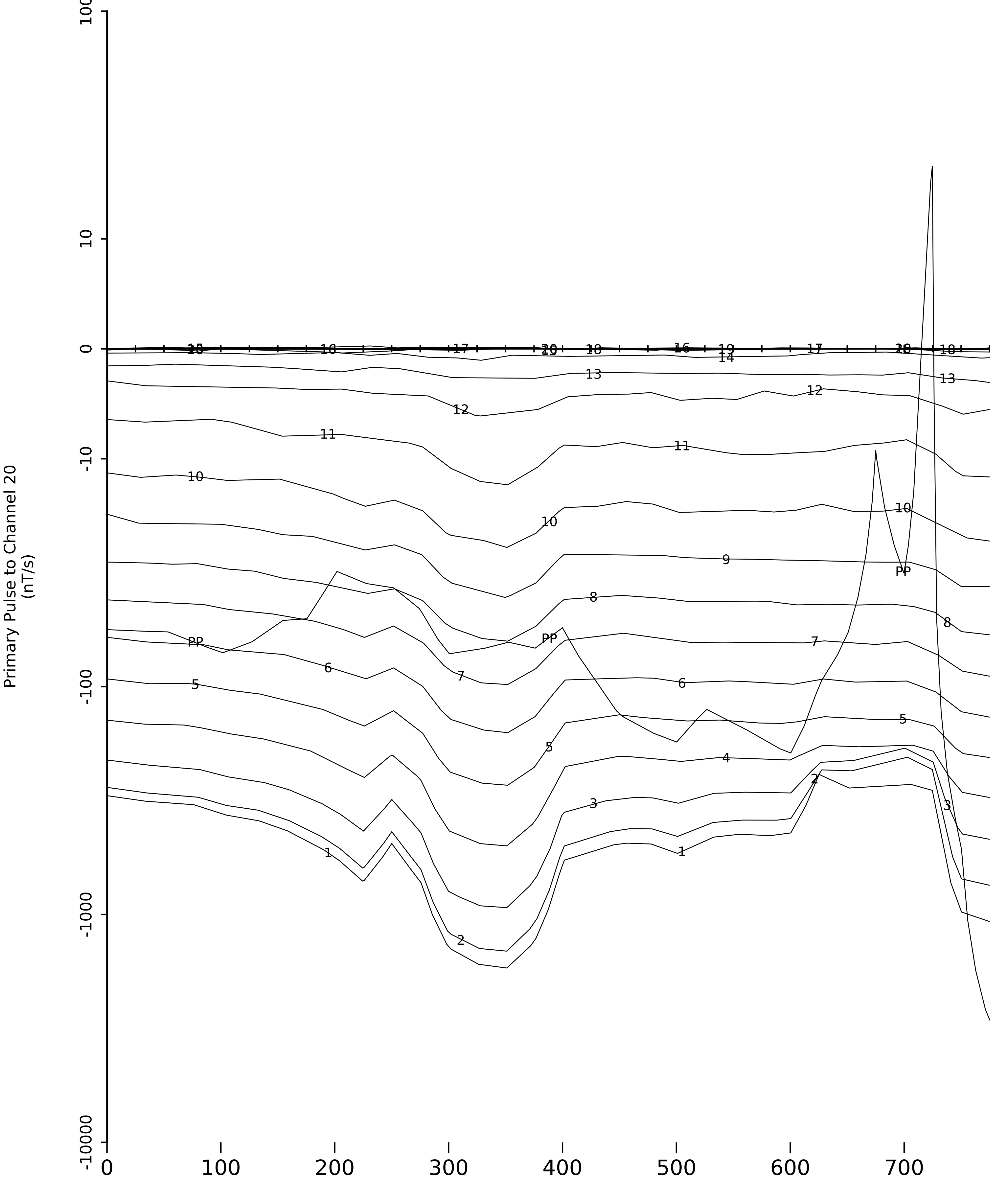
Crone Geophysics & Exploration Ltd.

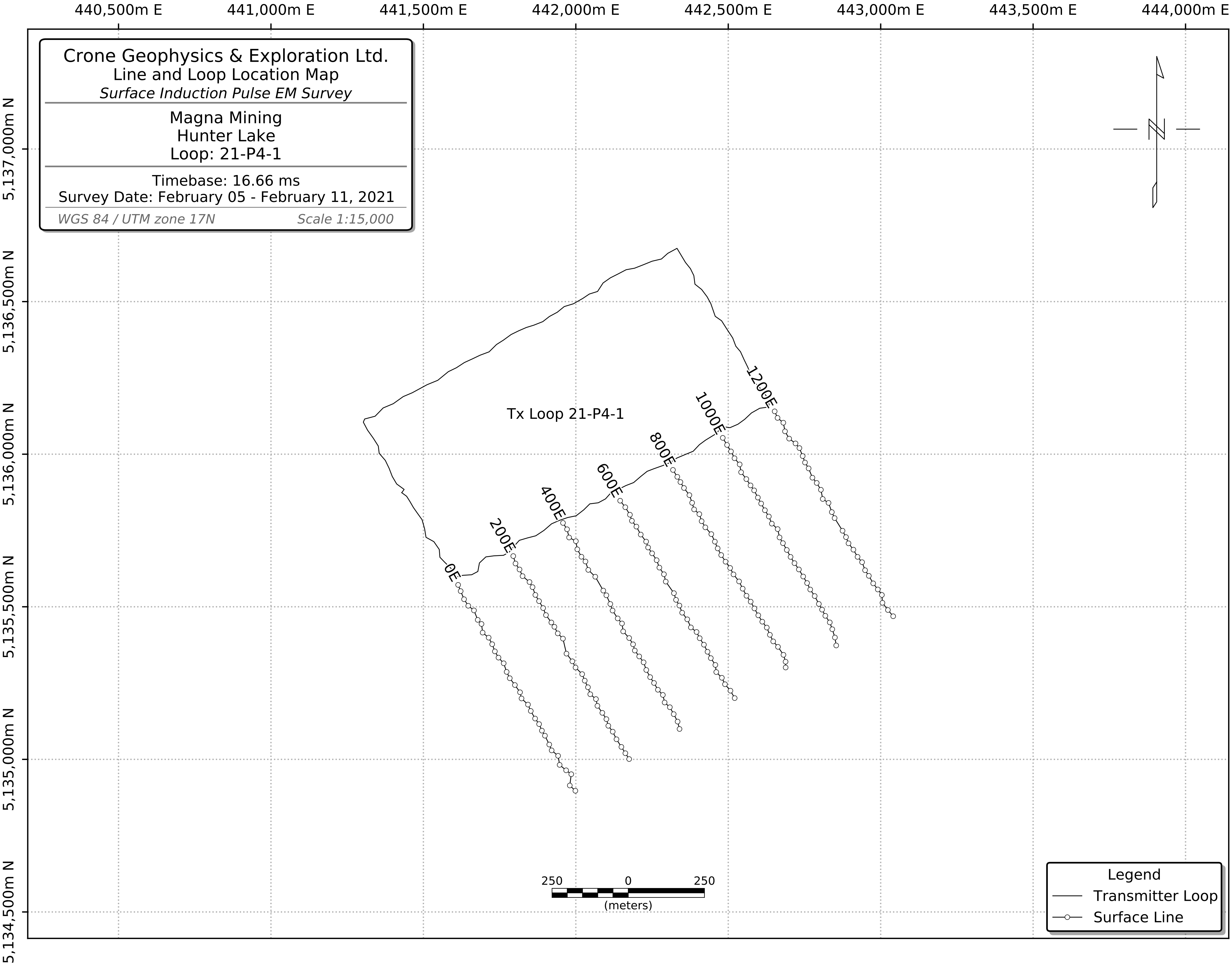
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 20.0 A

Line: 800E
Loop: 21-HAN-1
X Component

Magna Mining
Shakespeare
February 24, 2021



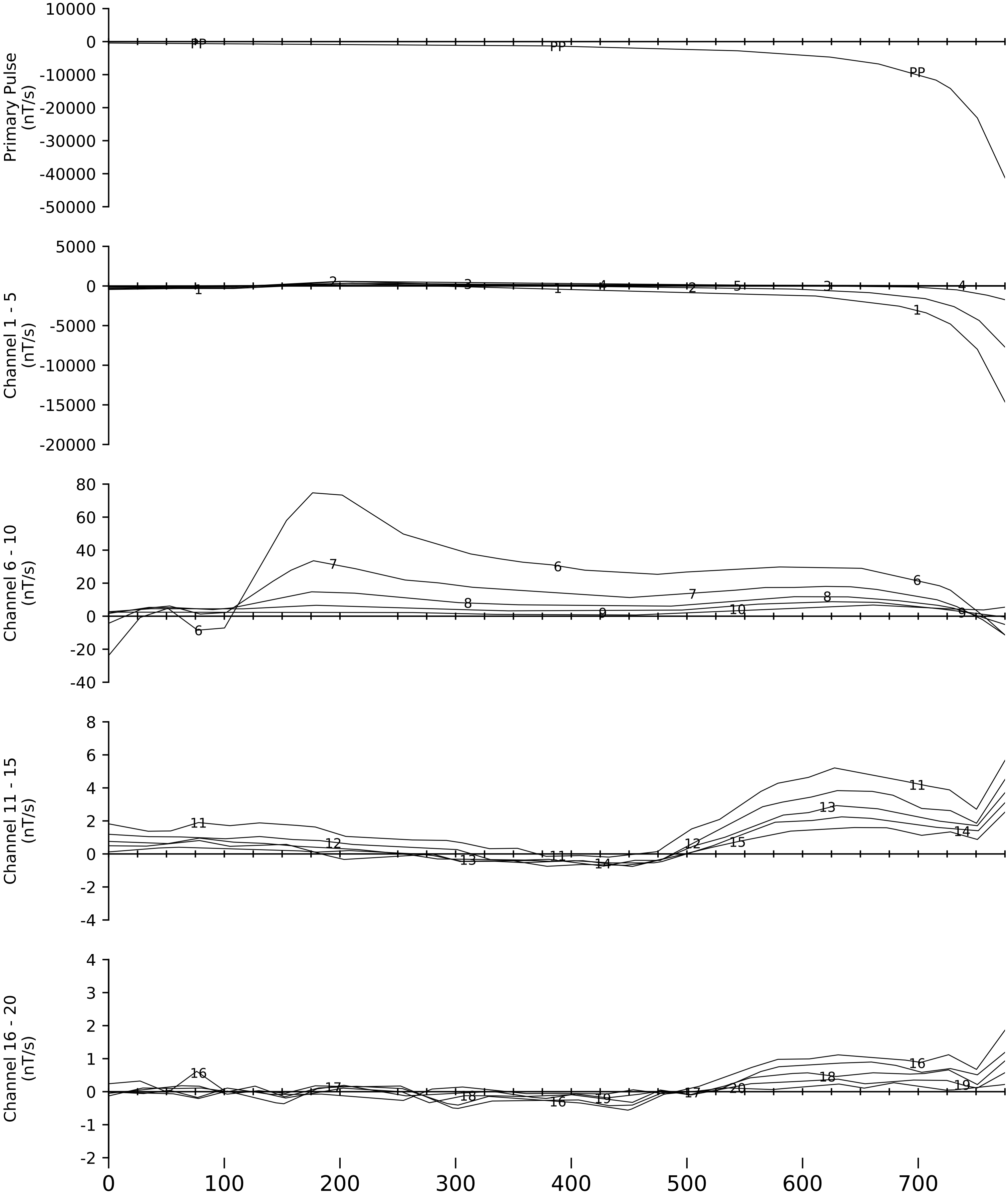

Crone Geophysics & Exploration Ltd.
Line and Loop Location Map
Surface Induction Pulse EM Survey
Magna Mining
Hunter Lake
Loop: 21-P4-1
Timebase: 16.66 ms
Survey Date: February 05 - February 11, 2021
WGS 84 / UTM zone 17N
Scale 1:15,000
440,500m E
441,000m E
441,500m E
442,000m E
442,500m E
443,000m E
443,500m E
444,000m E
5,137,000m N
5,136,500m N
5,136,000m N
5,135,500m N
5,135,000m N
5,134,500m N
Tx Loop 21-P4-1
0E
200E
400E
600E
800E
1000E
1200E
250
0
250
(meters)
Legend
Transmitter Loop
Surface Line

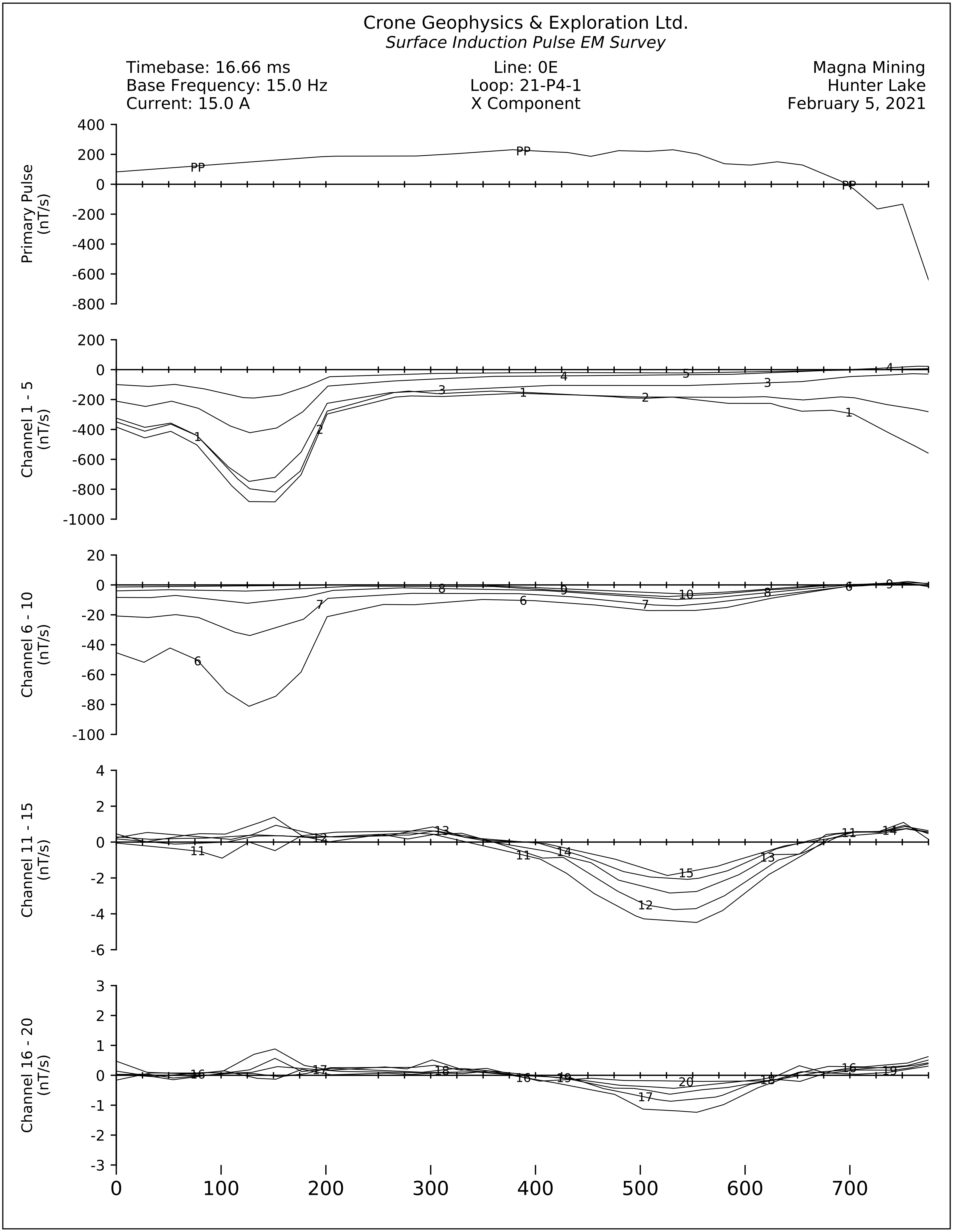
Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 0E
Loop: 21-P4-1
Z Component

Magna Mining
Hunter Lake
February 5, 2021




Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A
Line: 0E
Loop: 21-P4-1
X Component
Magna Mining
Hunter Lake
February 5, 2021
Primary Pulse (nT/s)
Channel 1 - 5 (nT/s)
Channel 6 - 10 (nT/s)
Channel 11 - 15 (nT/s)
Channel 16 - 20 (nT/s)
0
100
200
300
400
500
600
700

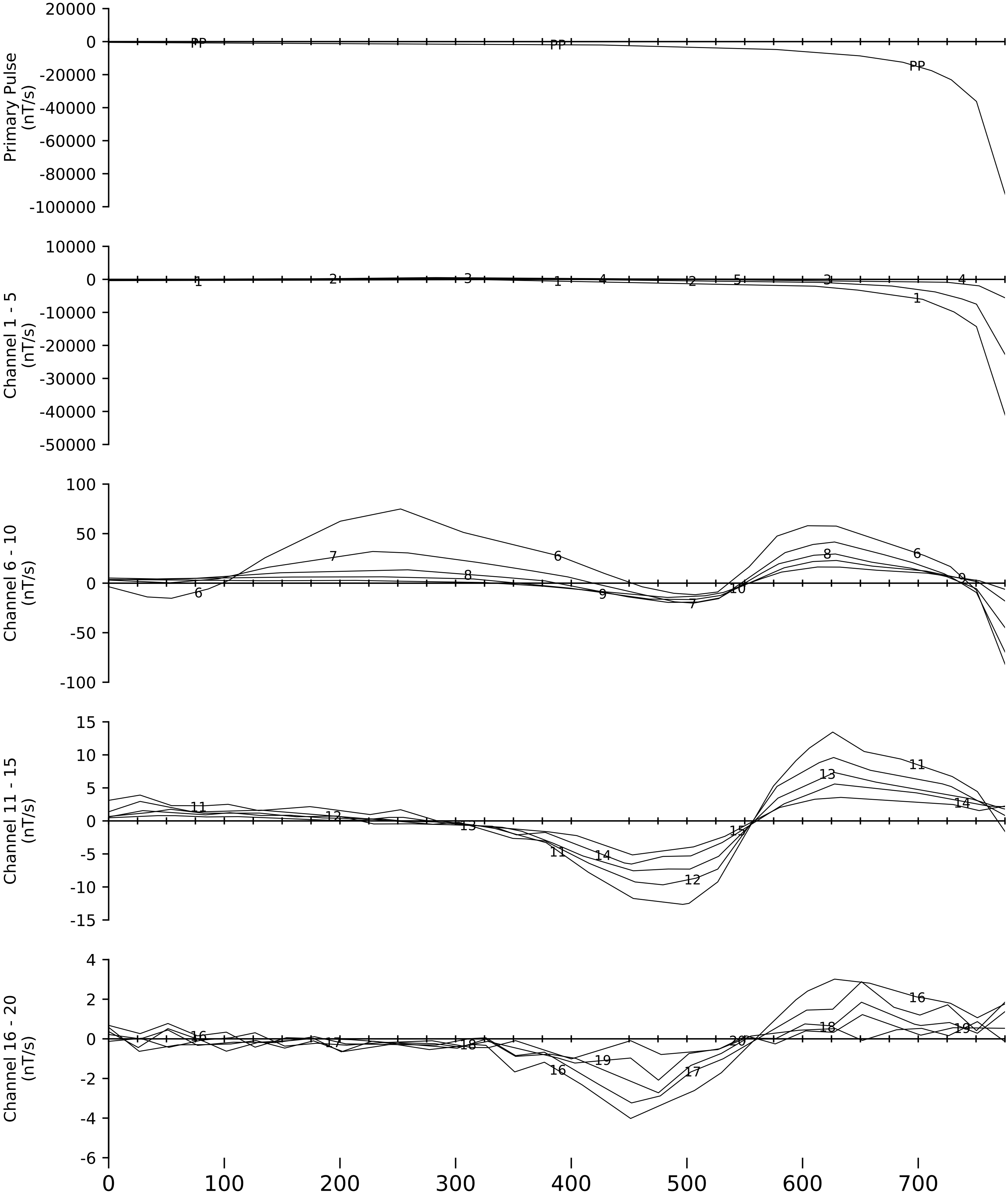
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 200E
Loop: 21-P4-1
Z Component

Magna Mining
Hunter Lake
February 6, 2021



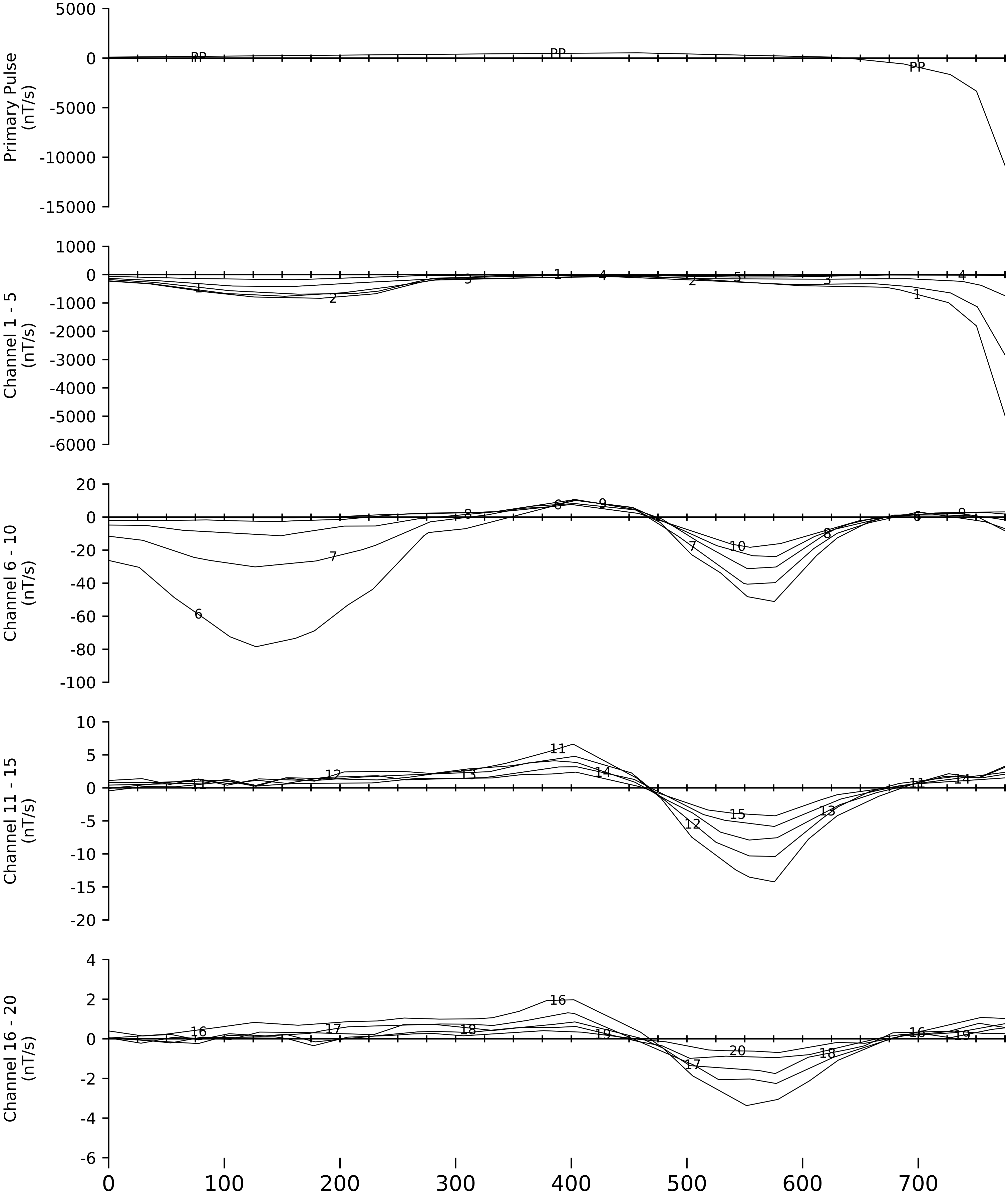
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 200E
Loop: 21-P4-1
X Component

Magna Mining
Hunter Lake
February 6, 2021

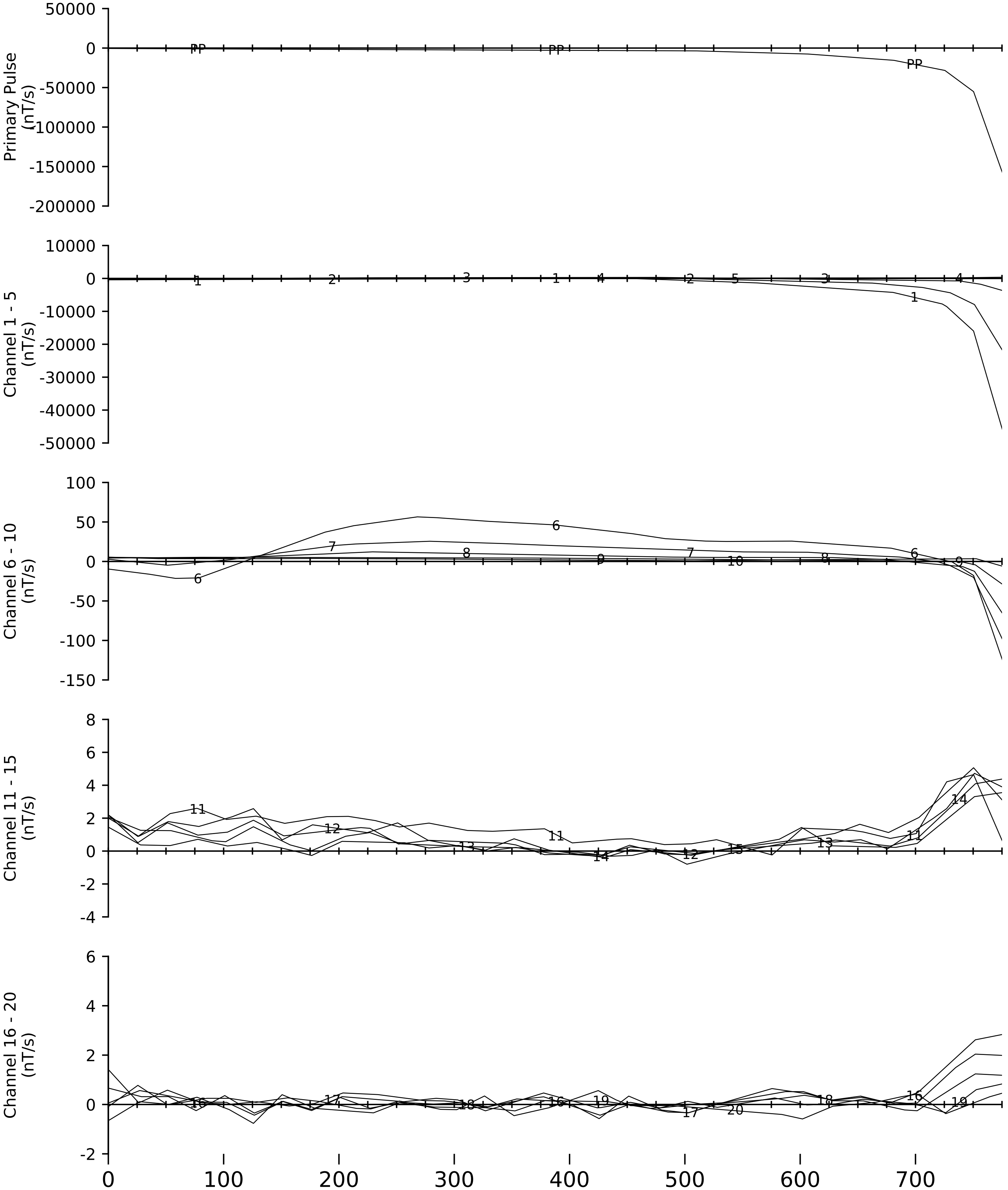


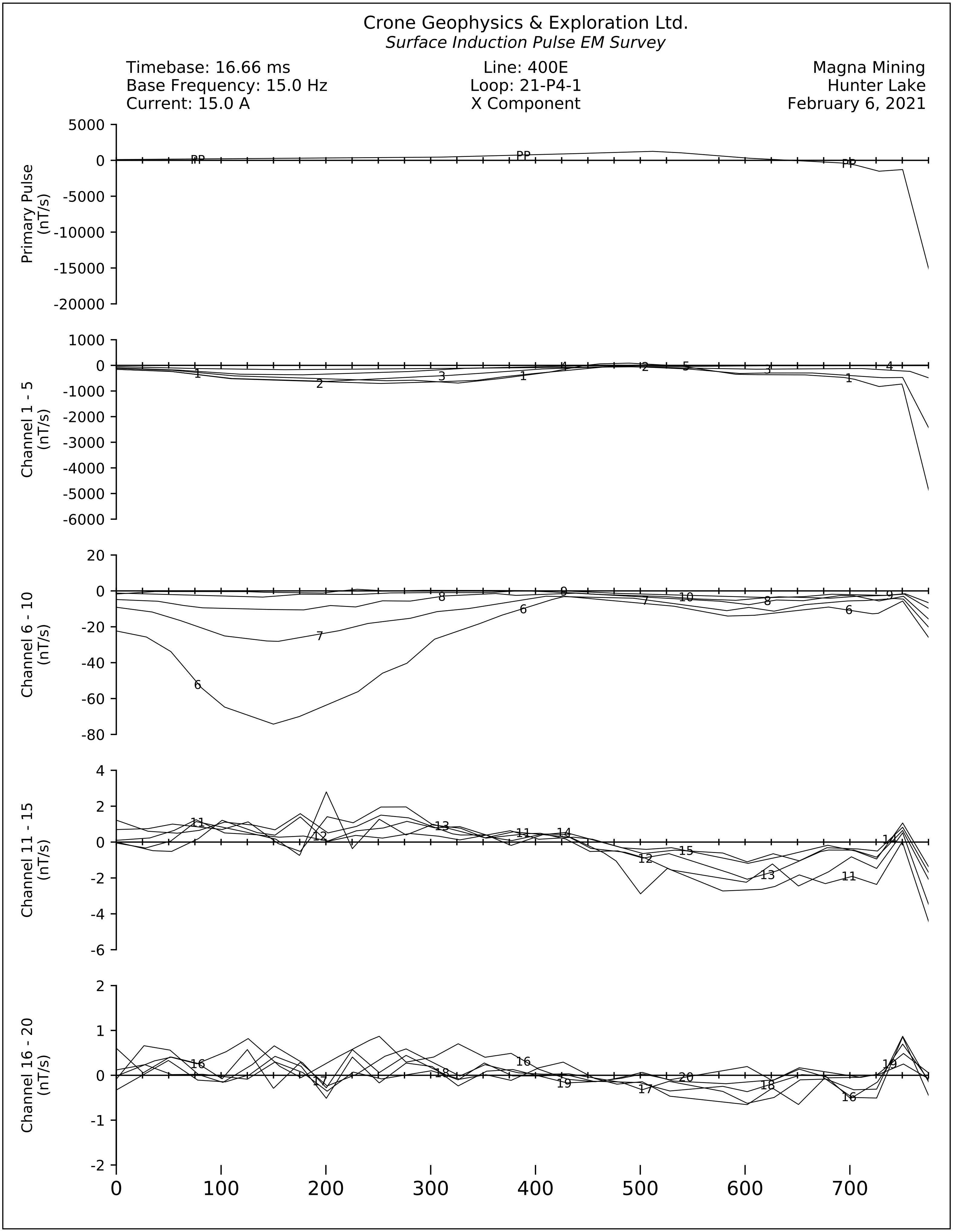
Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 400E
Loop: 21-P4-1
Z Component

Magna Mining
Hunter Lake
February 6, 2021





Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A
Line: 400E
Loop: 21-P4-1
X Component
Magna Mining
Hunter Lake
February 6, 2021
Primary Pulse (nT/s)
Channel 1 - 5 (nT/s)
Channel 6 - 10 (nT/s)
Channel 11 - 15 (nT/s)
Channel 16 - 20 (nT/s)
0
100
200
300
400
500
600
700

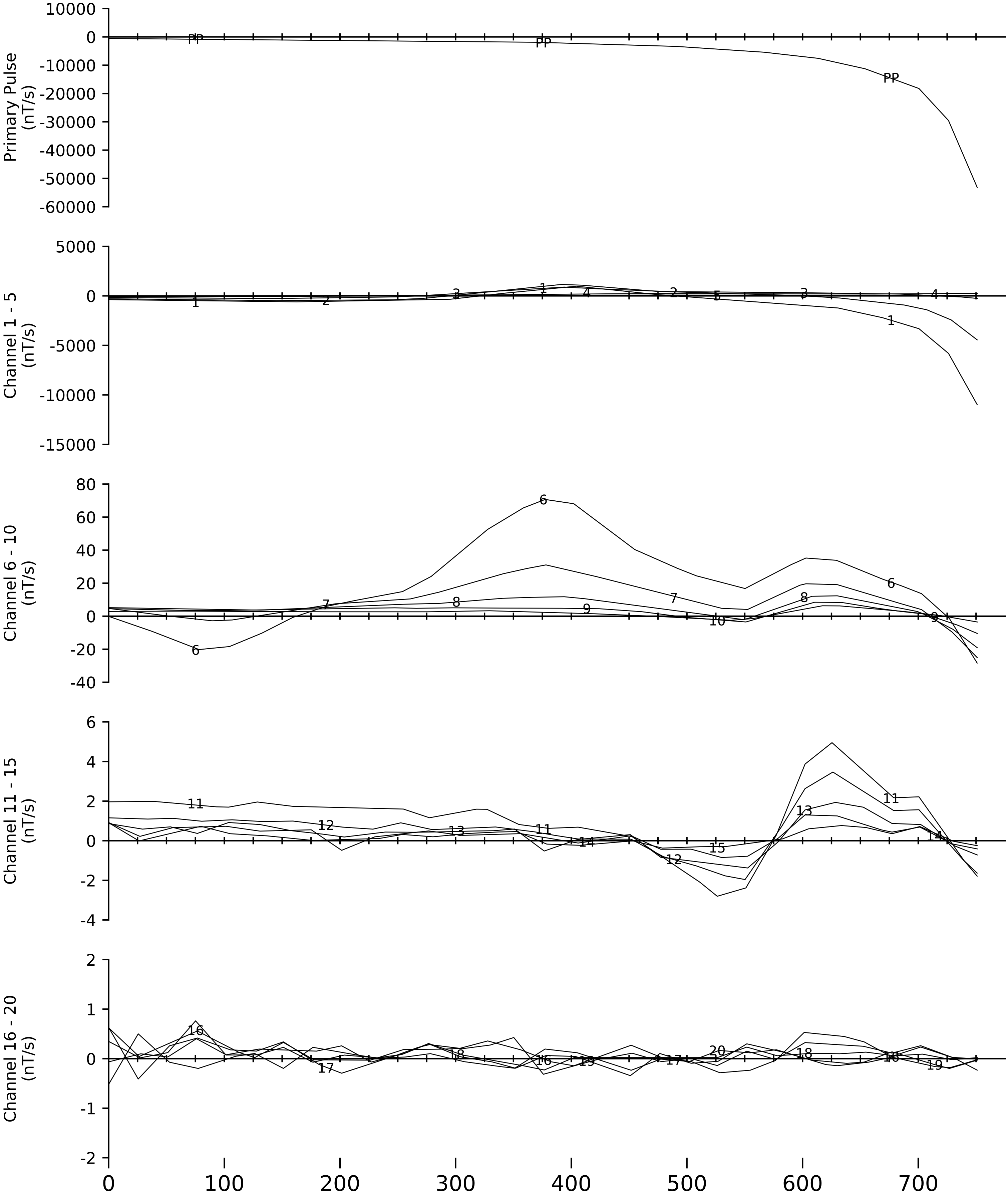
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 600E
Loop: 21-P4-1
Z Component

Magna Mining
Hunter Lake
February 11, 2021



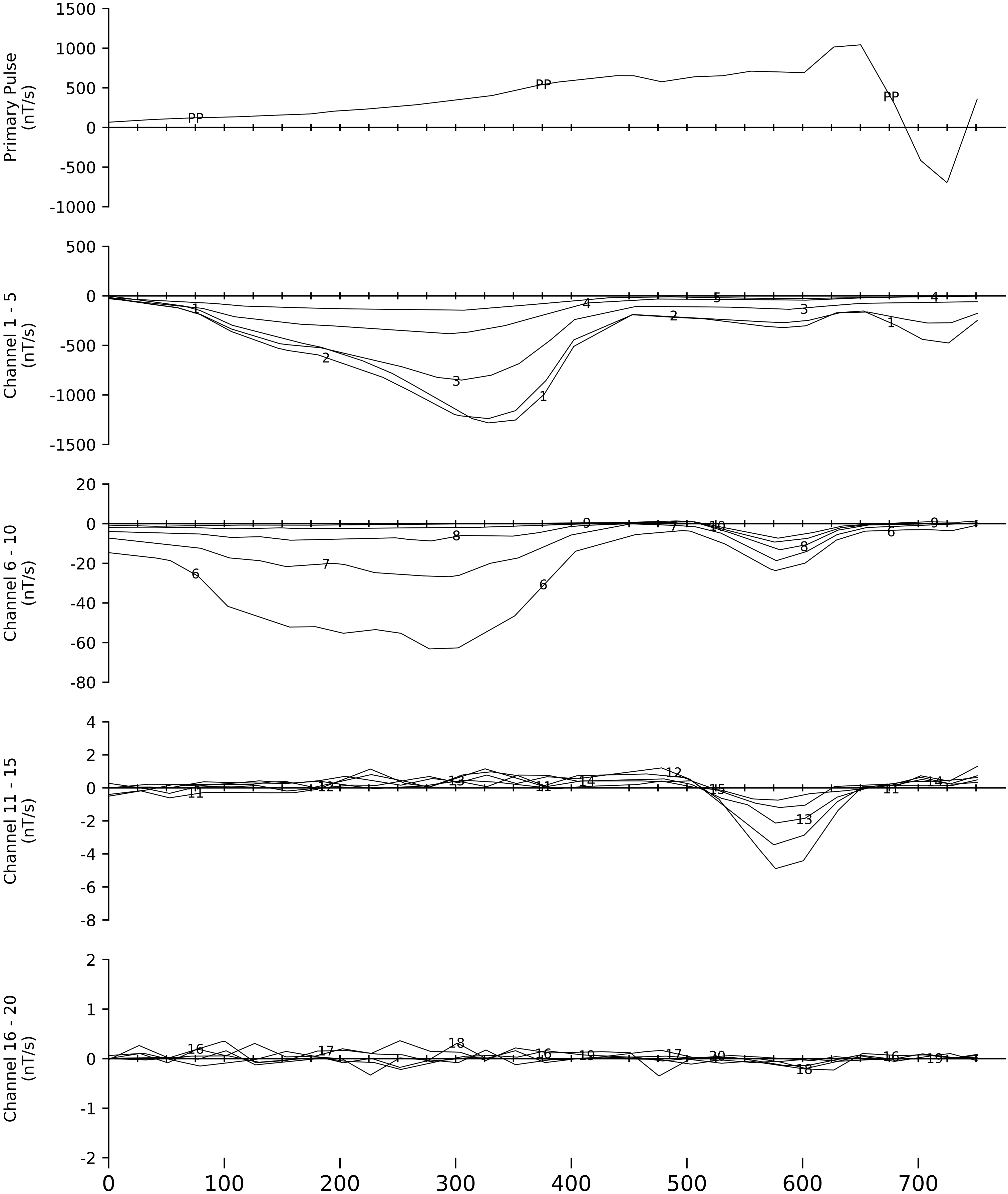
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 600E
Loop: 21-P4-1
X Component

Magna Mining
Hunter Lake
February 11, 2021



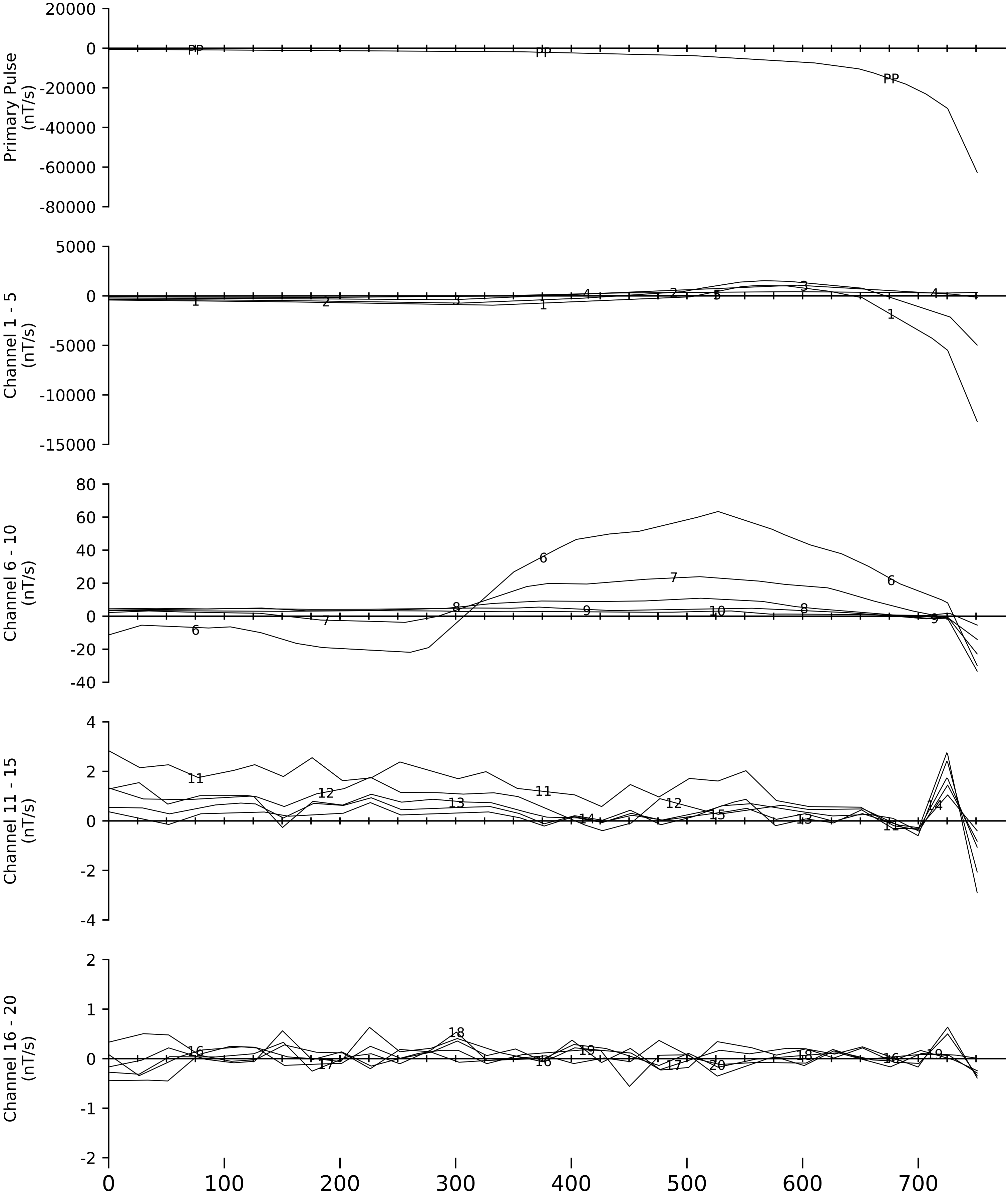
Crone Geophysics & Exploration Ltd.

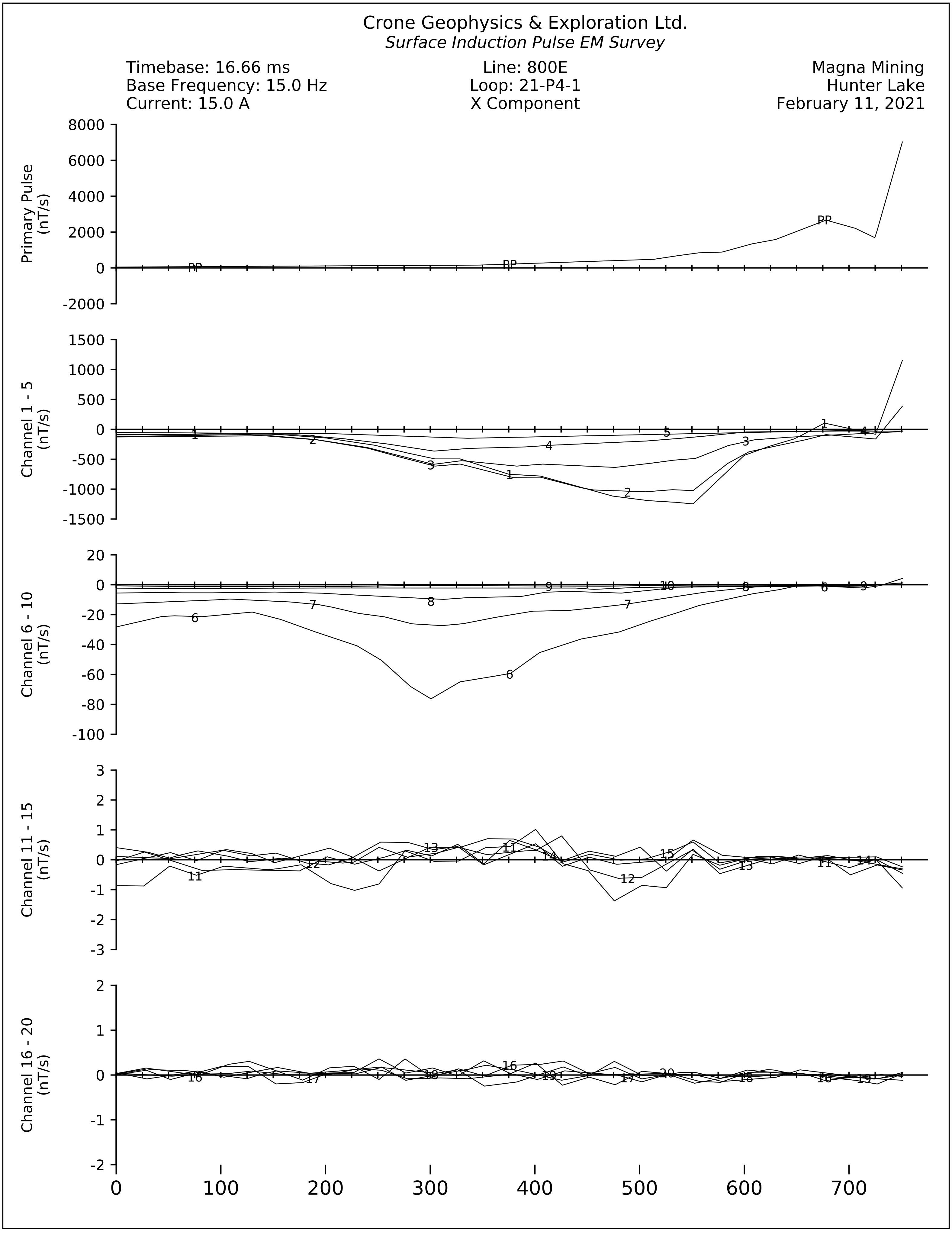
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 800E
Loop: 21-P4-1
Z Component

Magna Mining
Hunter Lake
February 11, 2021





Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A
Line: 800E
Loop: 21-P4-1
X Component
Magna Mining
Hunter Lake
February 11, 2021
Primary Pulse (nT/s)
Channel 1 - 5 (nT/s)
Channel 6 - 10 (nT/s)
Channel 11 - 15 (nT/s)
Channel 16 - 20 (nT/s)

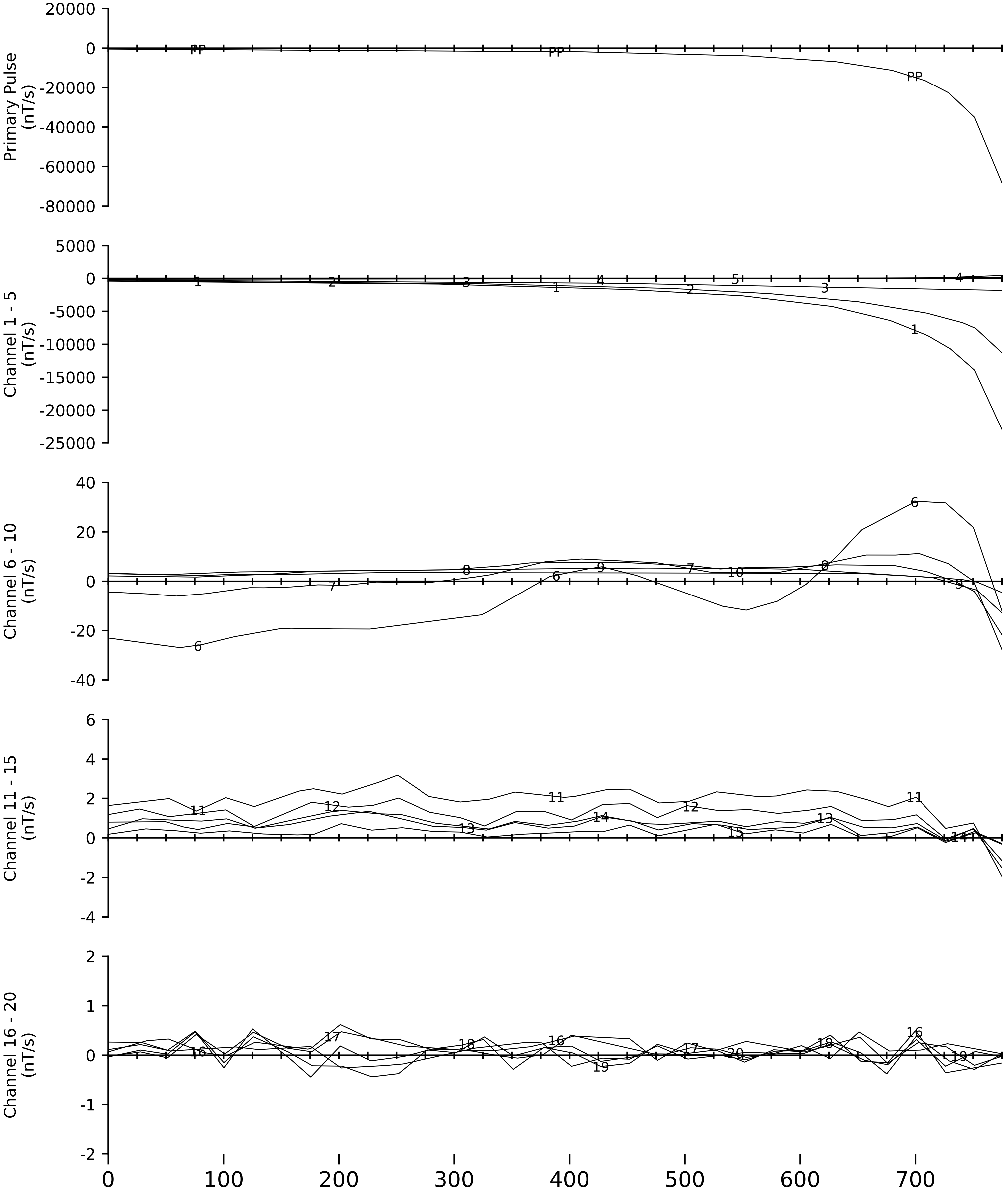
Crone Geophysics & Exploration Ltd.

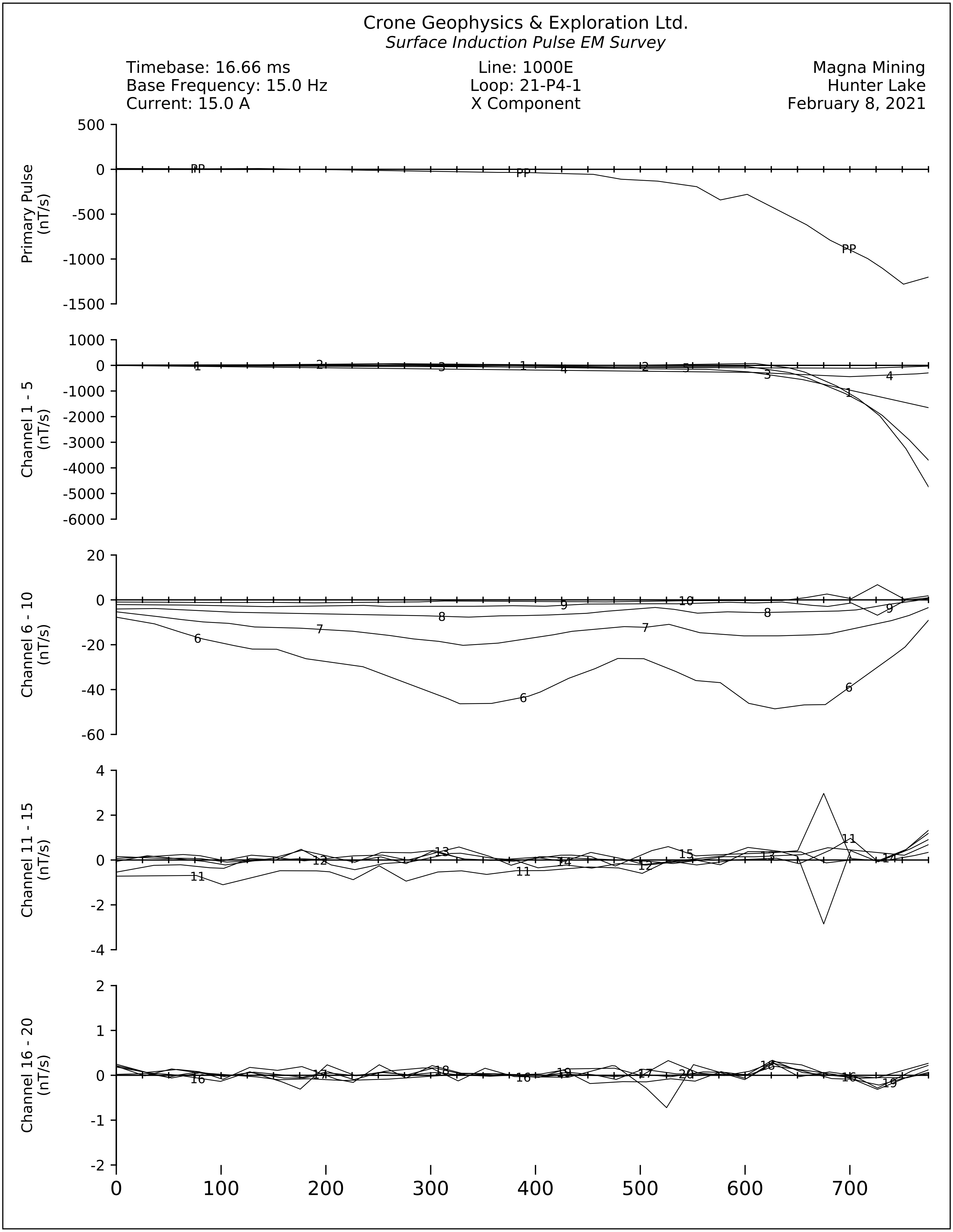
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 1000E
Loop: 21-P4-1
Z Component

Magna Mining
Hunter Lake
February 8, 2021





Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A
Line: 1000E
Loop: 21-P4-1
X Component
Magna Mining
Hunter Lake
February 8, 2021
Primary Pulse (nT/s)
Channel 1 - 5 (nT/s)
Channel 6 - 10 (nT/s)
Channel 11 - 15 (nT/s)
Channel 16 - 20 (nT/s)

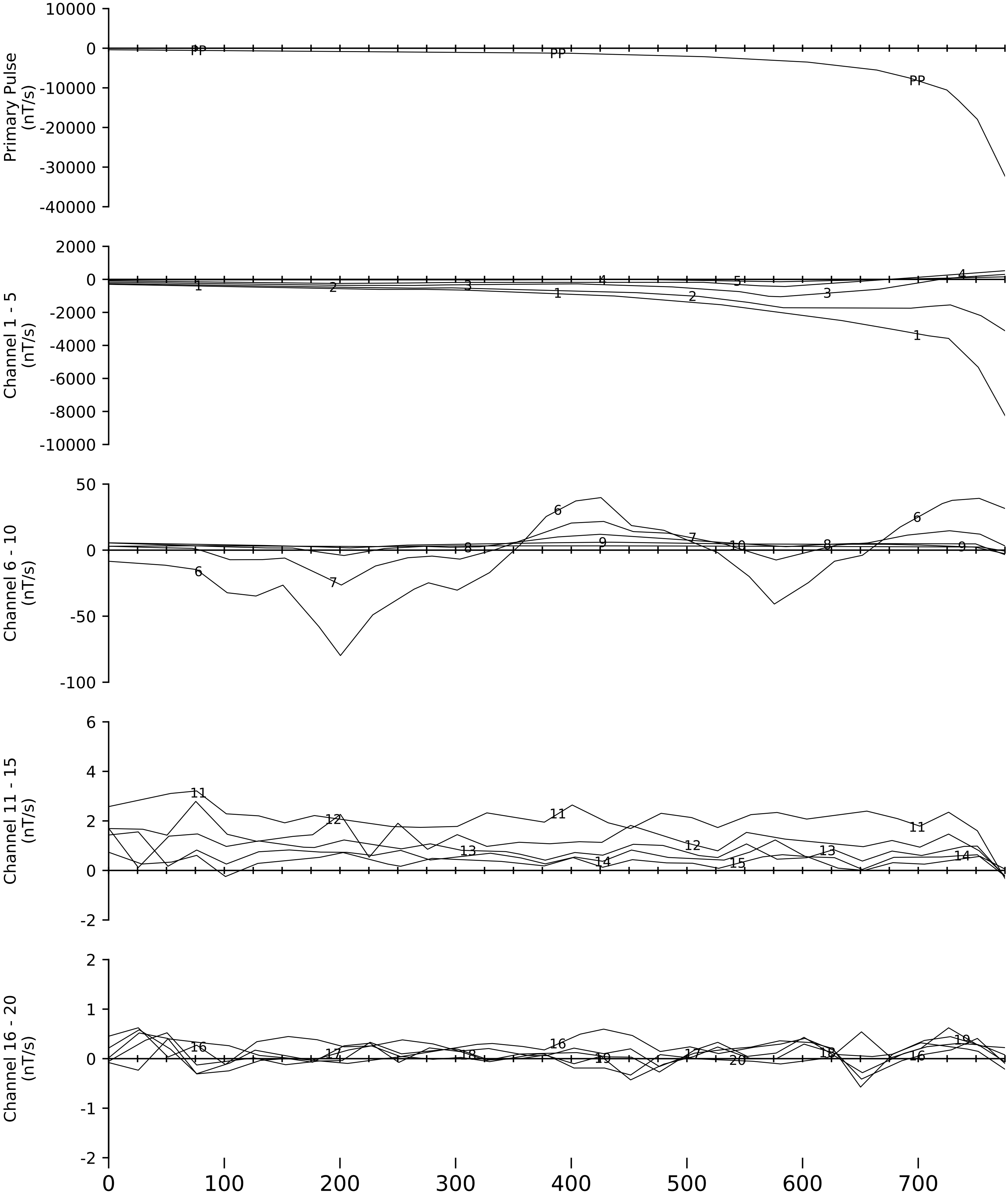
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 1200E
Loop: 21-P4-1
Z Component

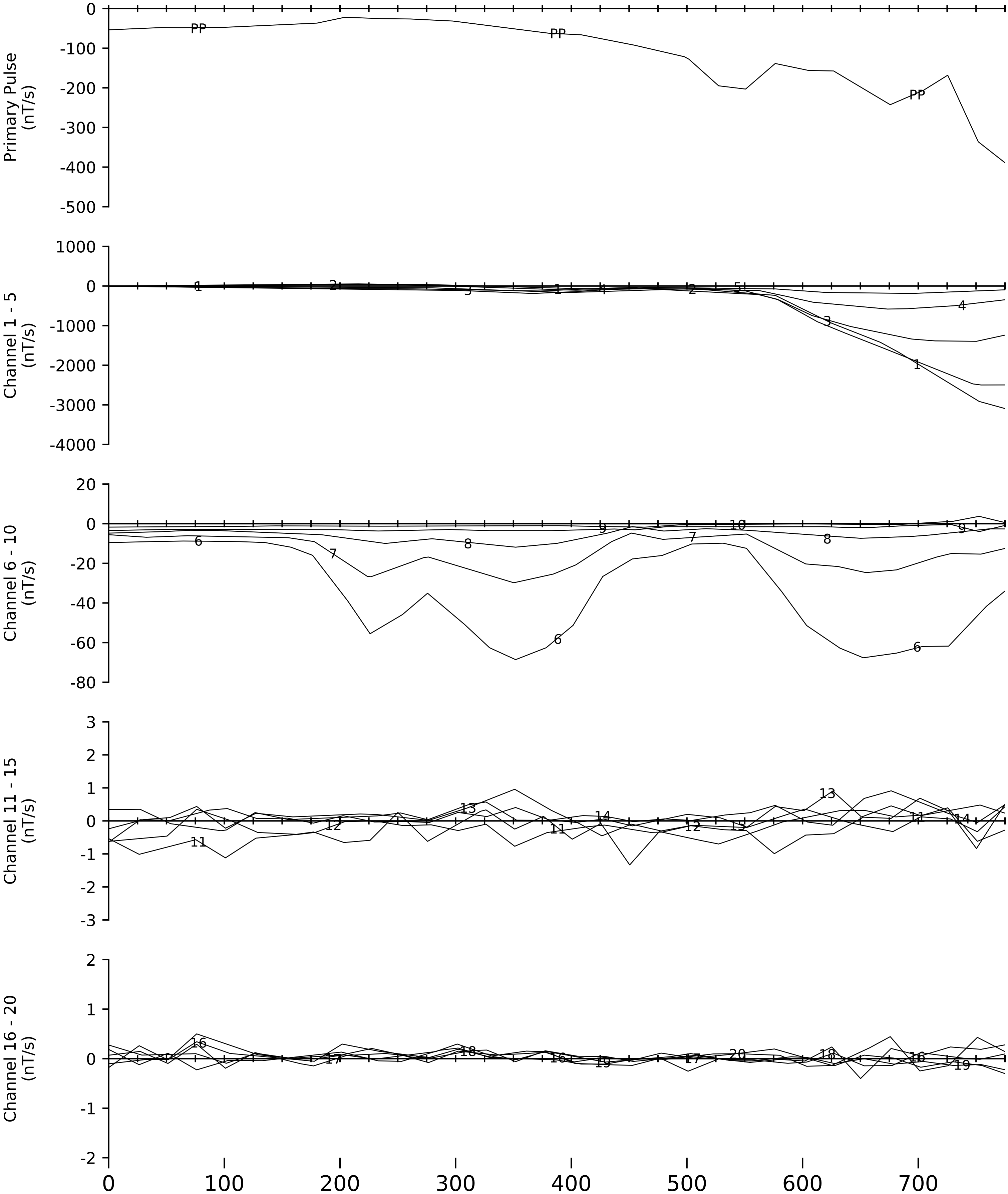
Magna Mining
Hunter Lake
February 8, 2021



Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms	Line: 1200E	Magna Mining
Base Frequency: 15.0 Hz	Loop: 21-P4-1	Hunter Lake
Current: 15.0 A	X Component	February 8, 2021



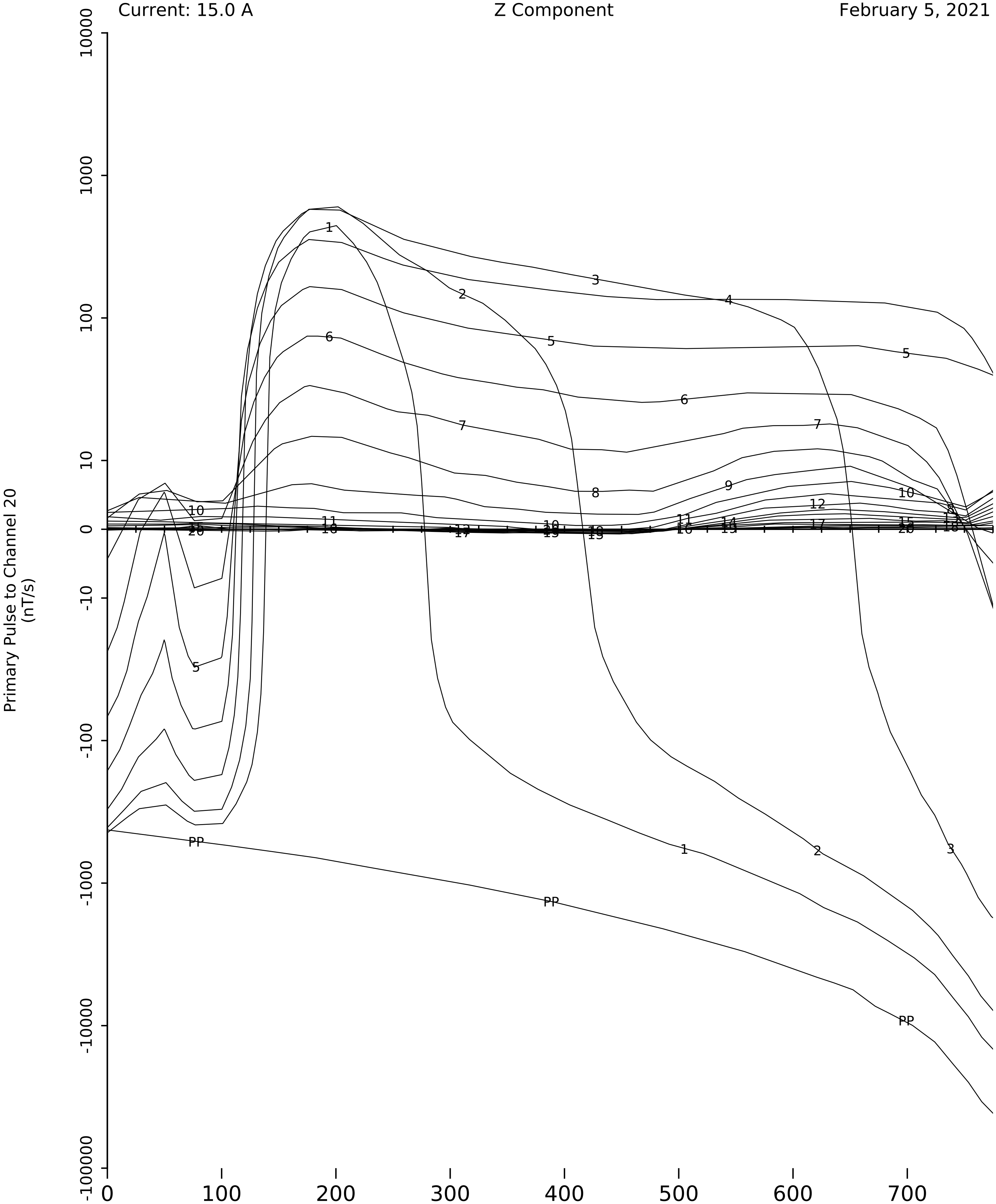
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 0E
Loop: 21-P4-1
Z Component

Magna Mining
Hunter Lake
February 5, 2021



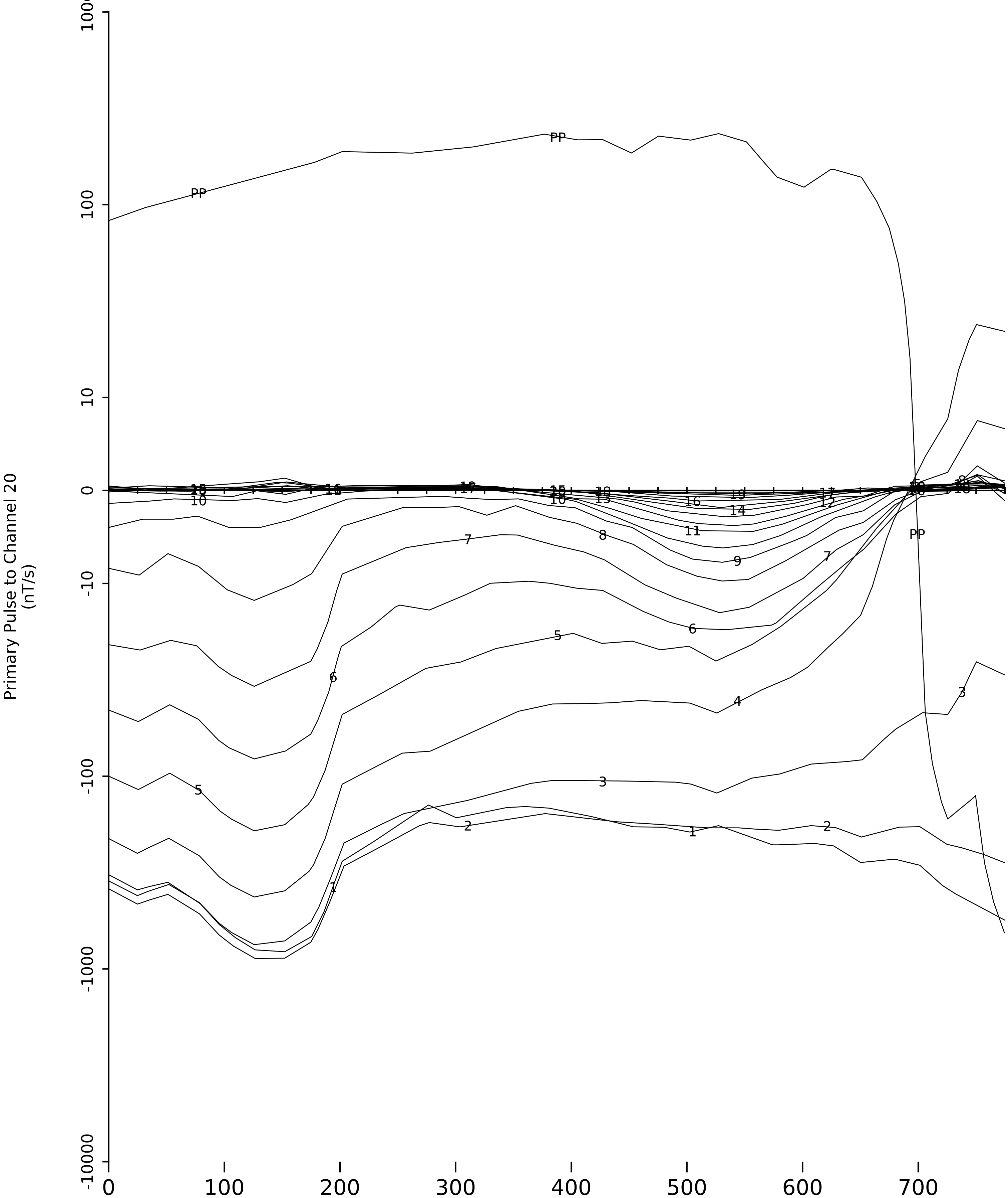
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 0E
Loop: 21-P4-1
X Component

Magna Mining
Hunter Lake
February 5, 2021



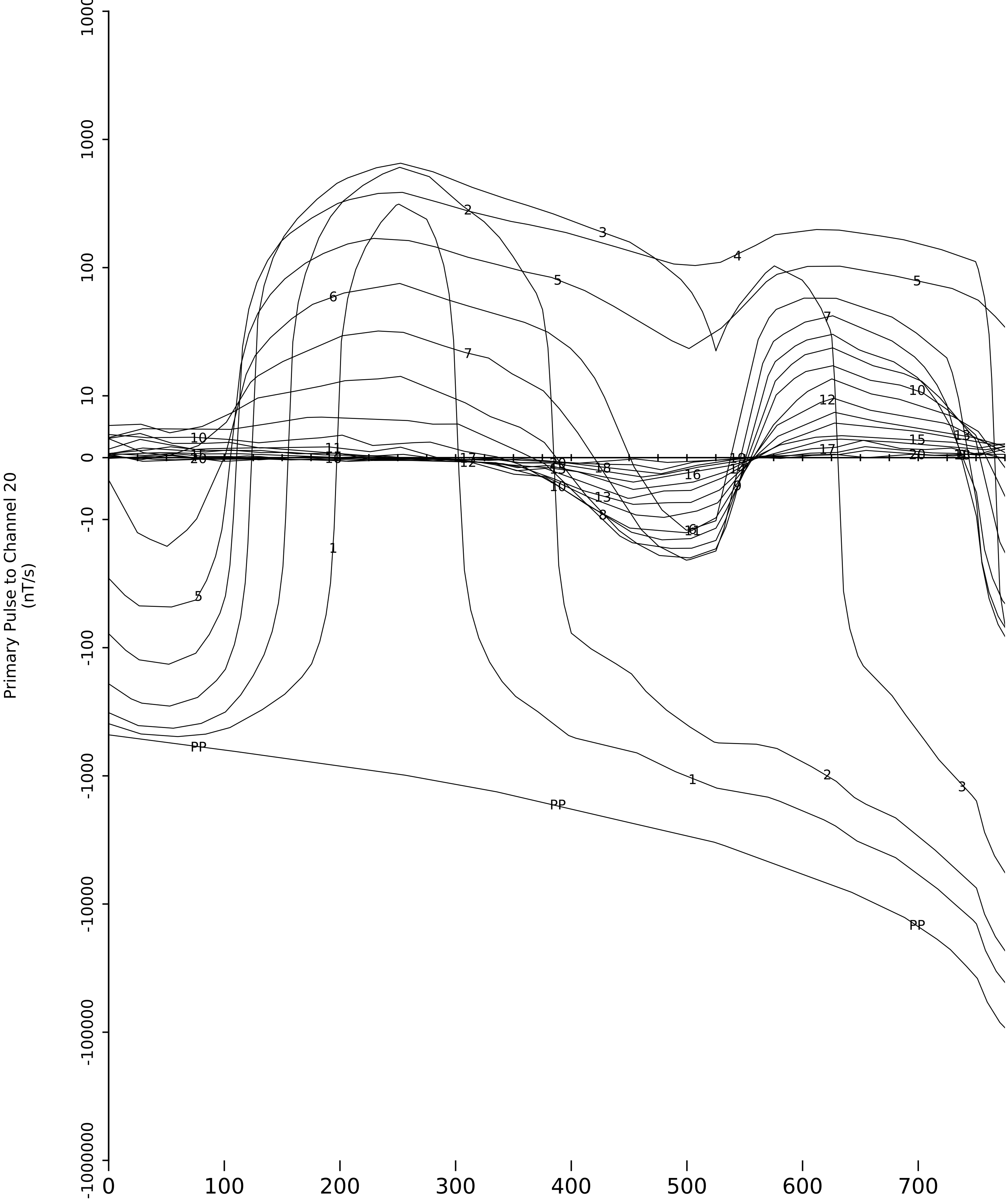
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 200E
Loop: 21-P4-1
Z Component

Magna Mining
Hunter Lake
February 6, 2021



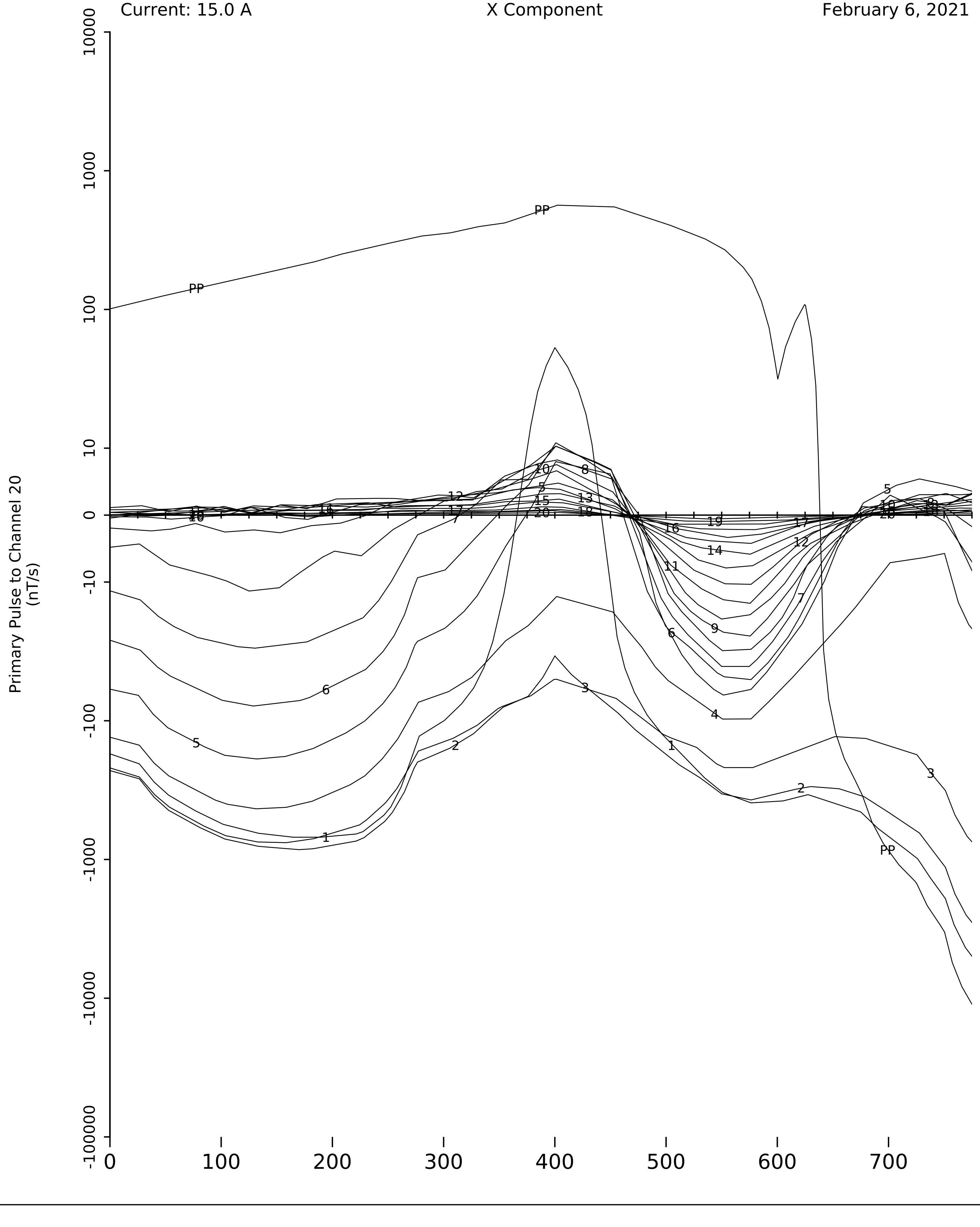
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 200E
Loop: 21-P4-1
X Component

Magna Mining
Hunter Lake
February 6, 2021



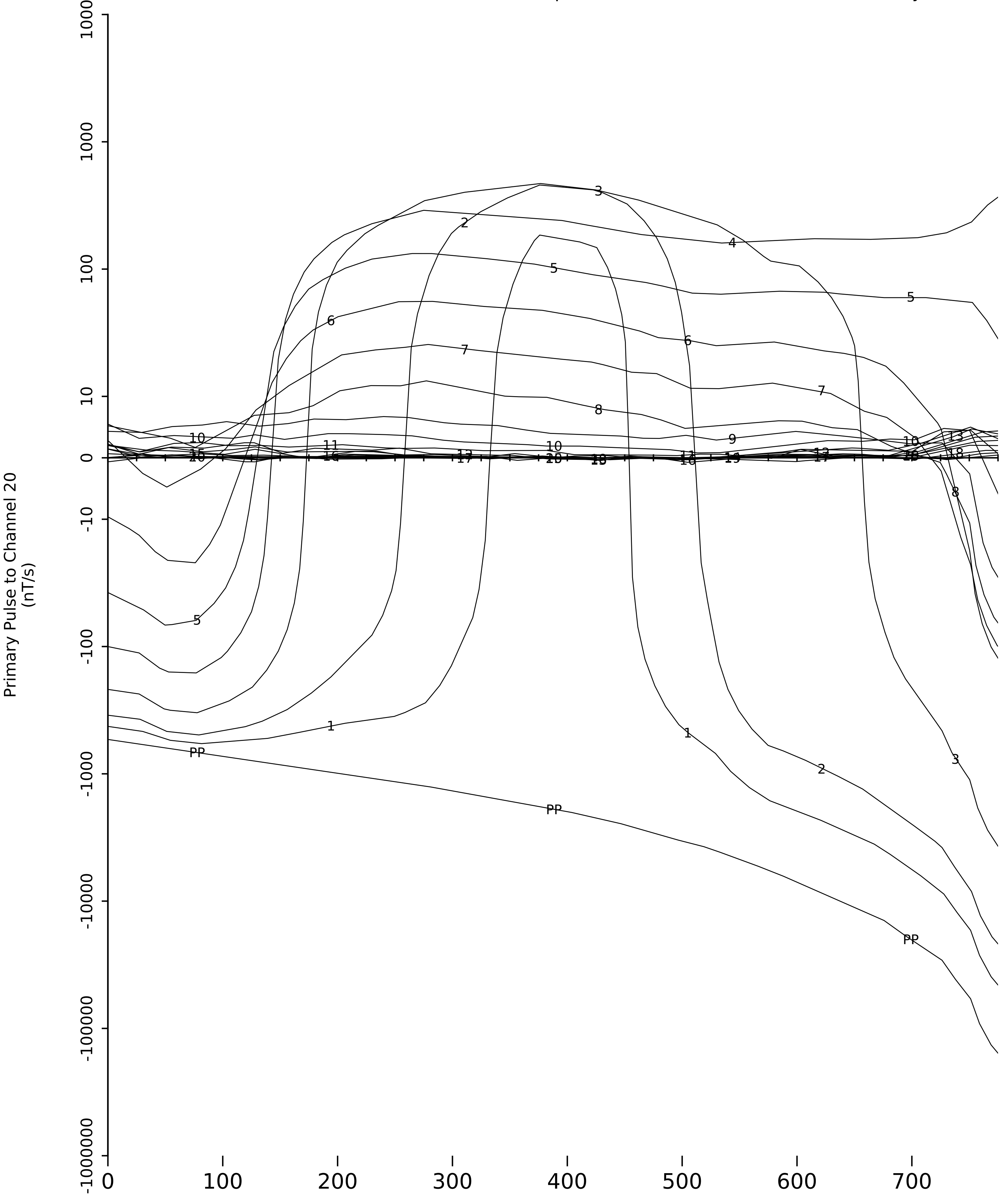
Crone Geophysics & Exploration Ltd.

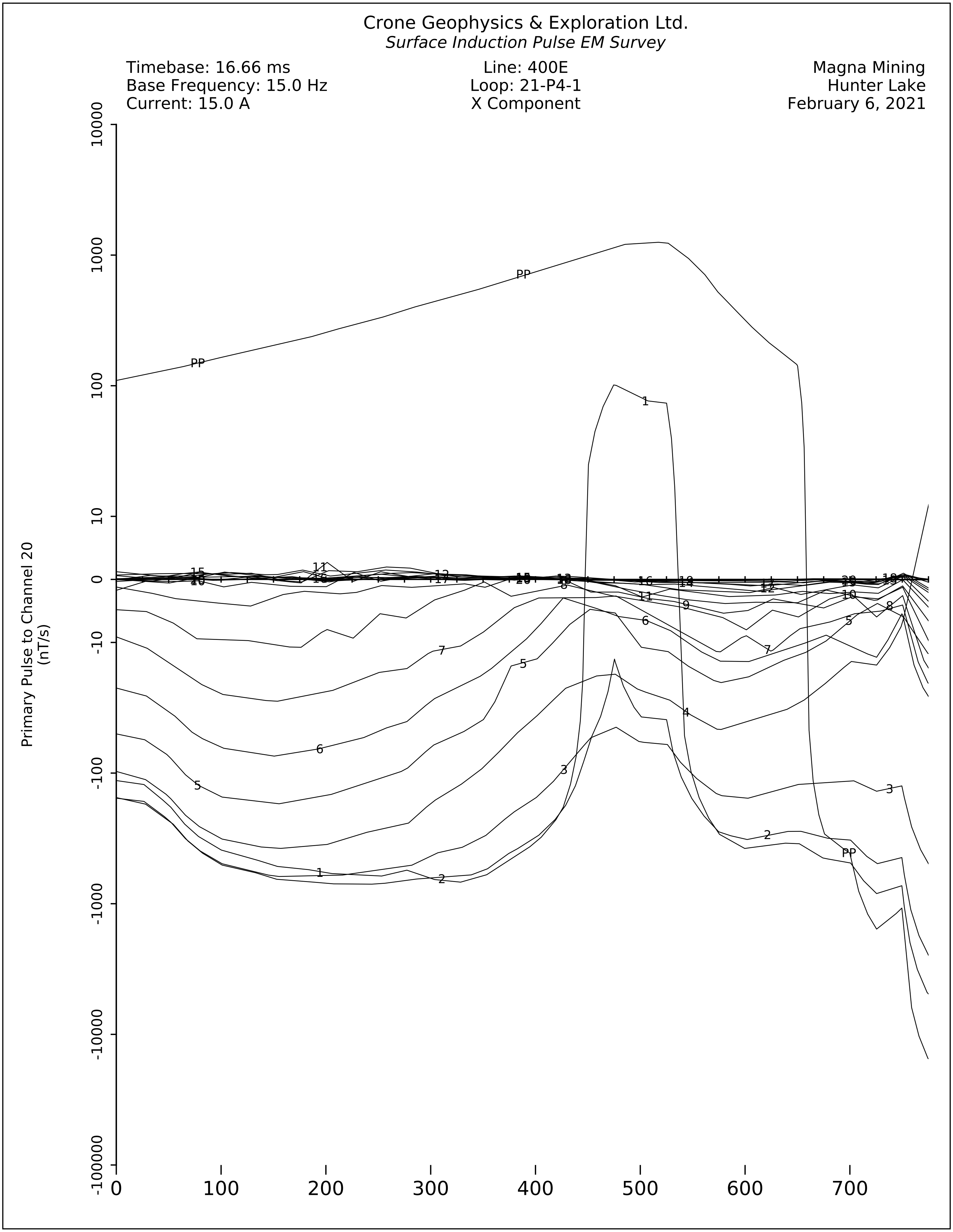
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 400E
Loop: 21-P4-1
Z Component

Magna Mining
Hunter Lake
February 6, 2021





Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A
Line: 400E
Loop: 21-P4-1
X Component
Magna Mining
Hunter Lake
February 6, 2021
Primary Pulse to Channel 20
(nT/s)
10000
1000
100
10
0
-10
-100
-1000
-10000
-100000
0
100
200
300
400
500
600
700

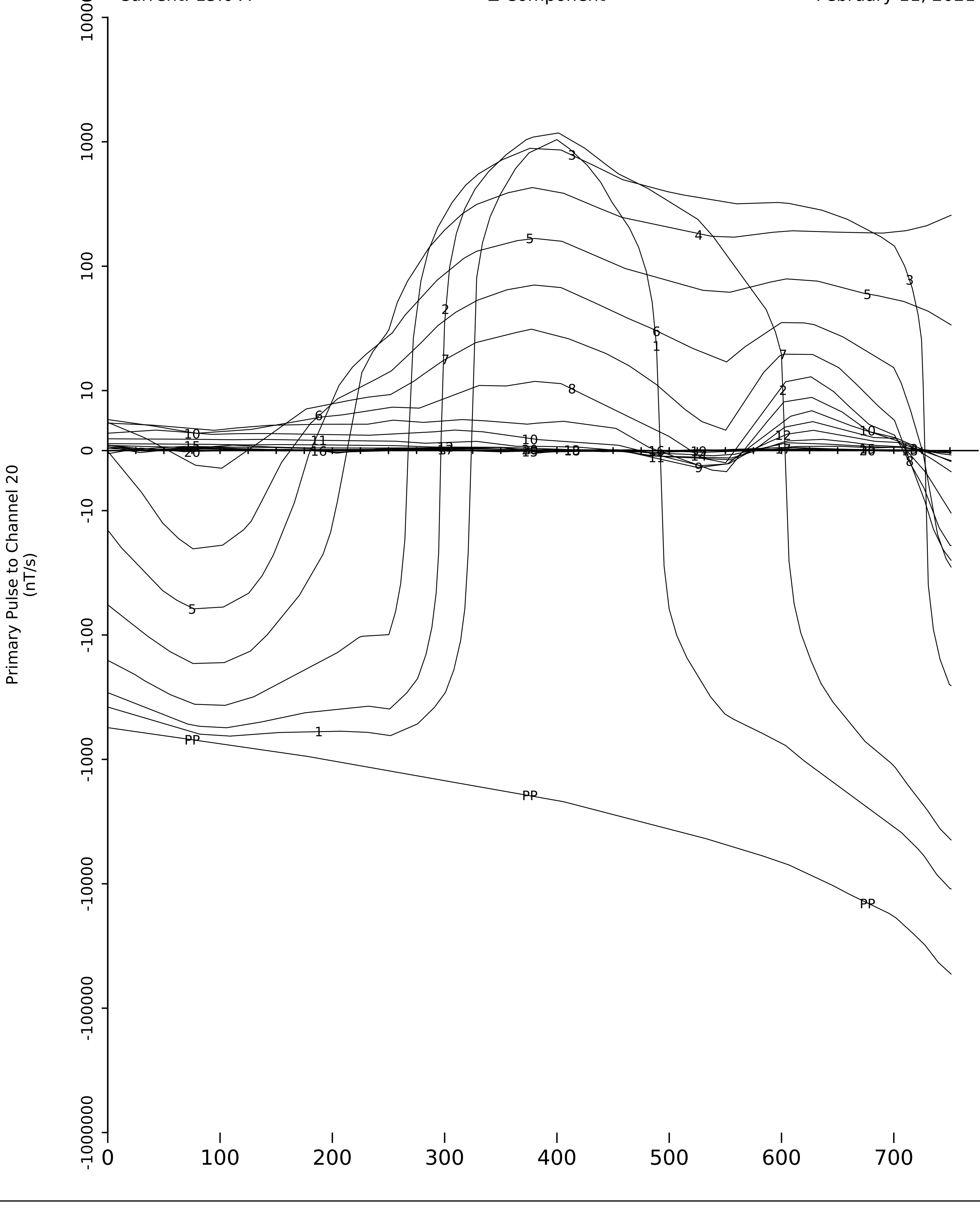
Crone Geophysics & Exploration Ltd.

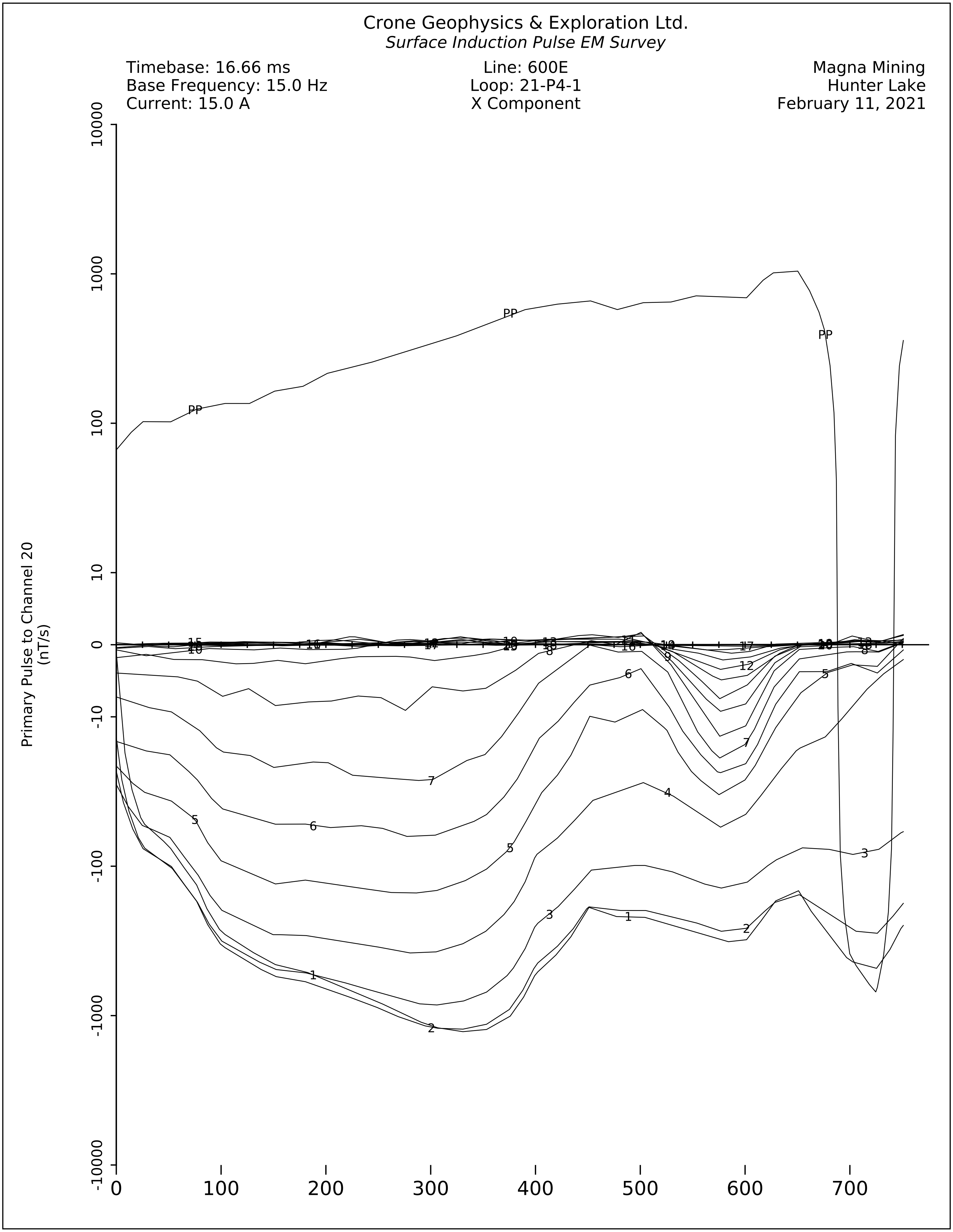
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 600E
Loop: 21-P4-1
Z Component

Magna Mining
Hunter Lake
February 11, 2021





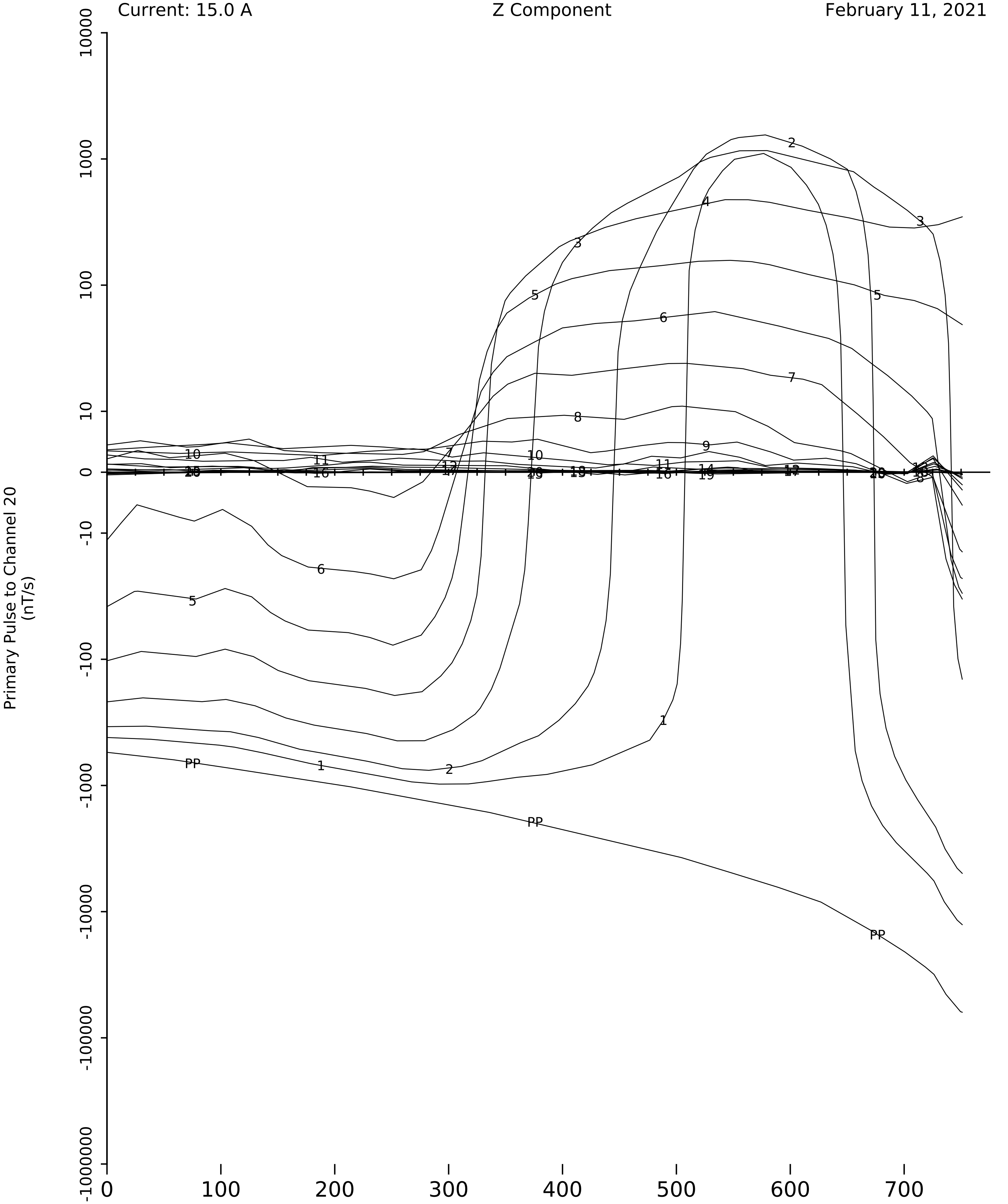
Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A
Line: 600E
Loop: 21-P4-1
X Component
Magna Mining
Hunter Lake
February 11, 2021
Primary Pulse to Channel 20
(nT/s)
10000
1000
100
10
0
-10
-100
-1000
-10000
0
100
200
300
400
500
600
700
PP

Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 800E
Loop: 21-P4-1
Z Component

Magna Mining
Hunter Lake
February 11, 2021

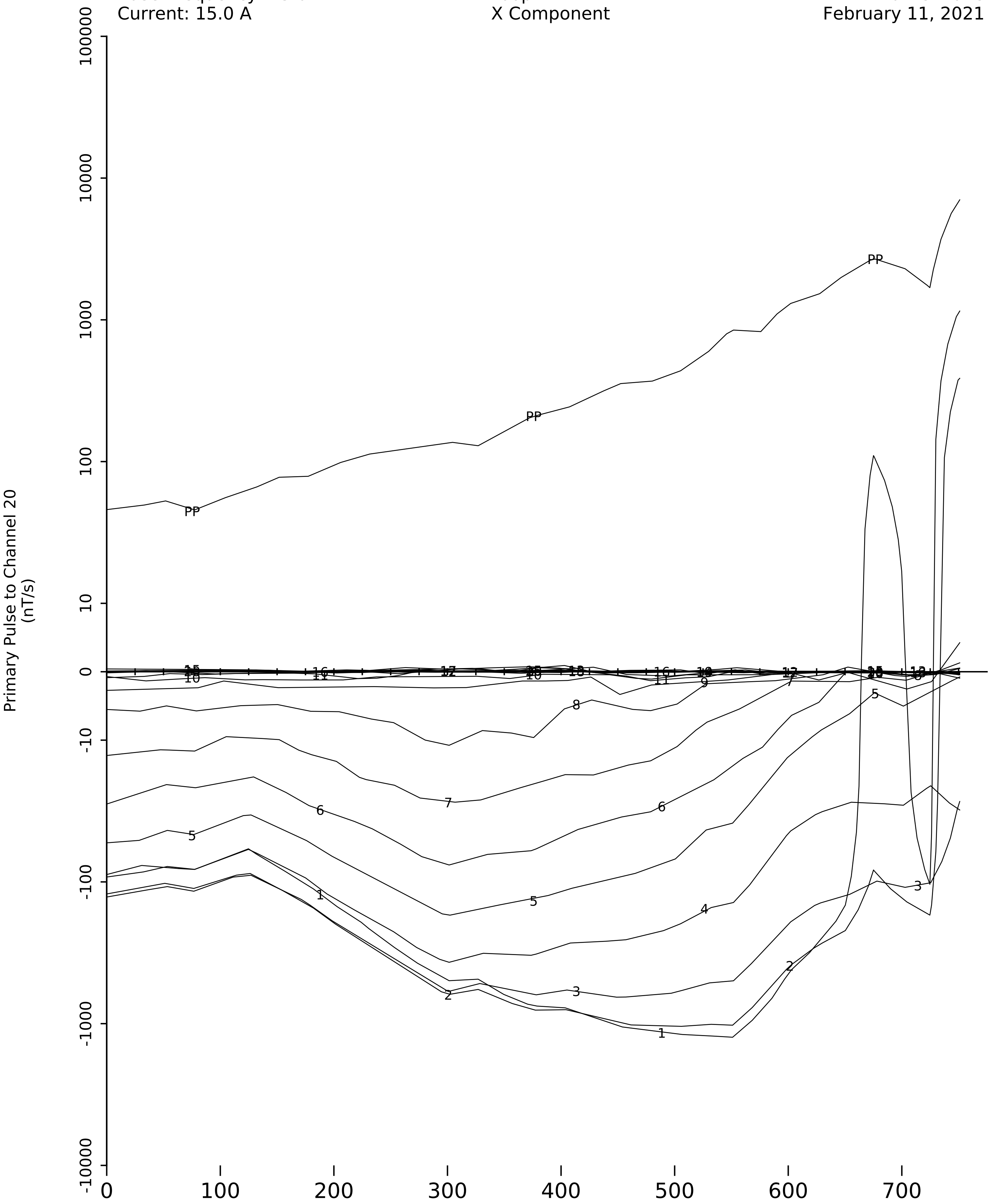


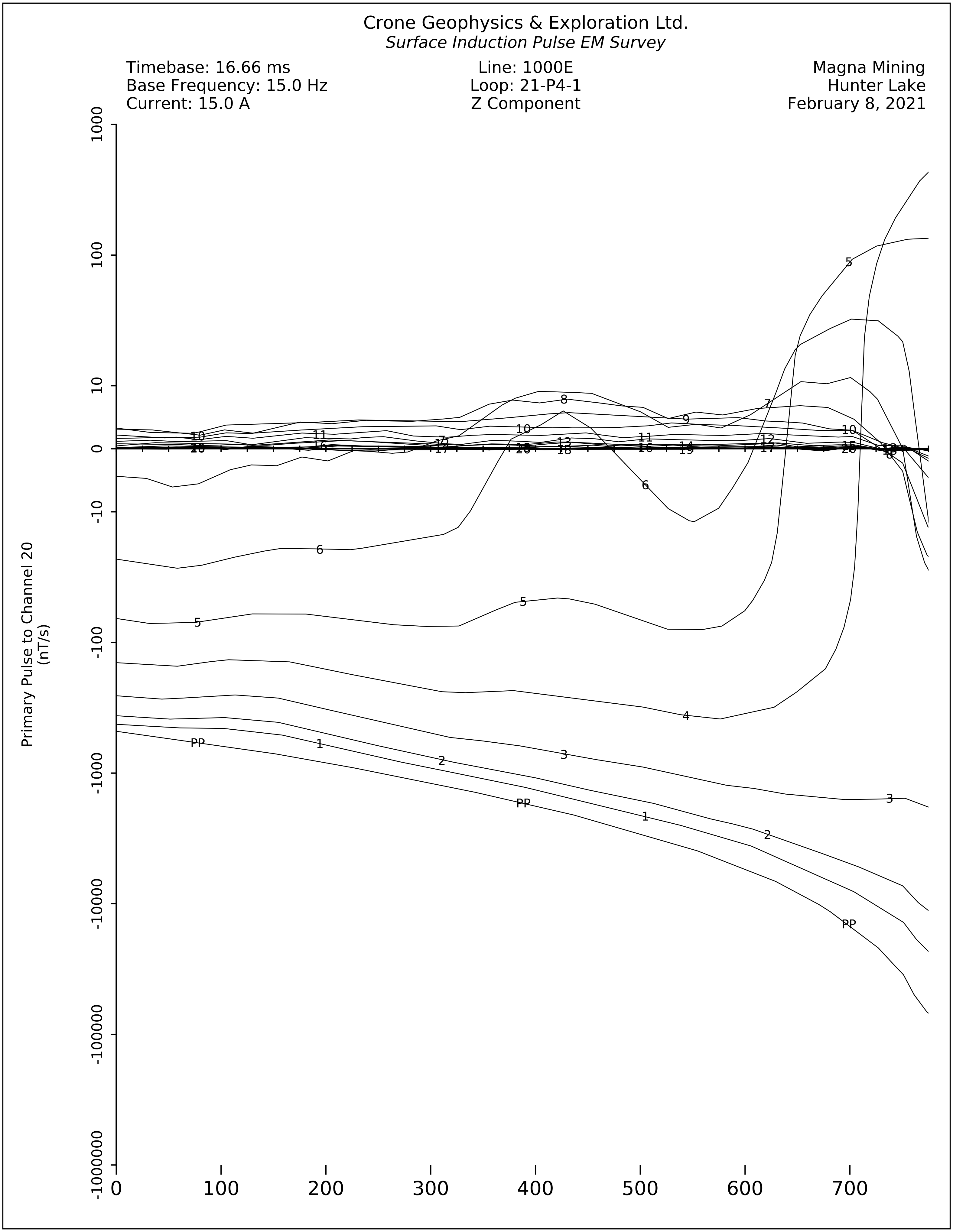
Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey

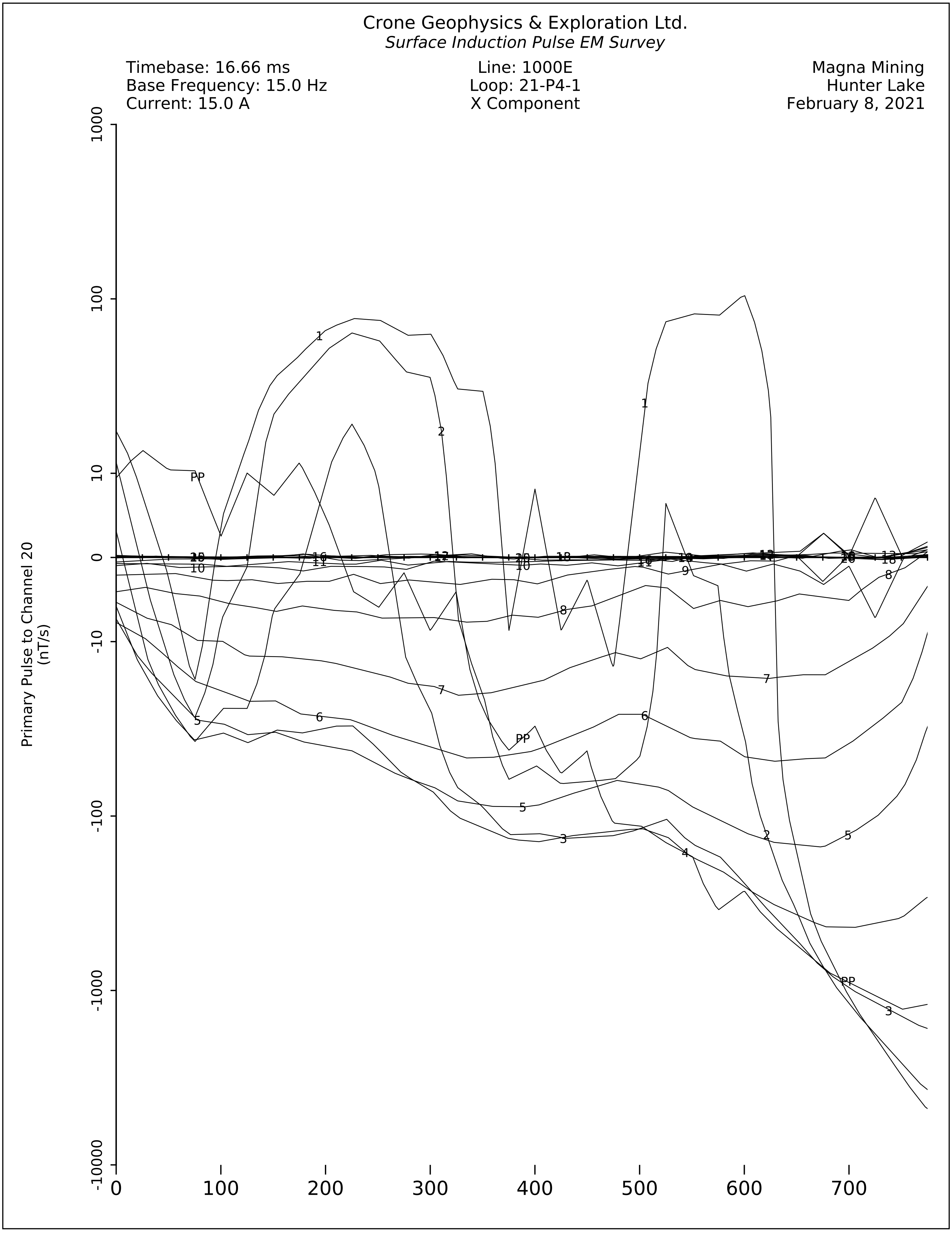
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 800E
Loop: 21-P4-1
X Component

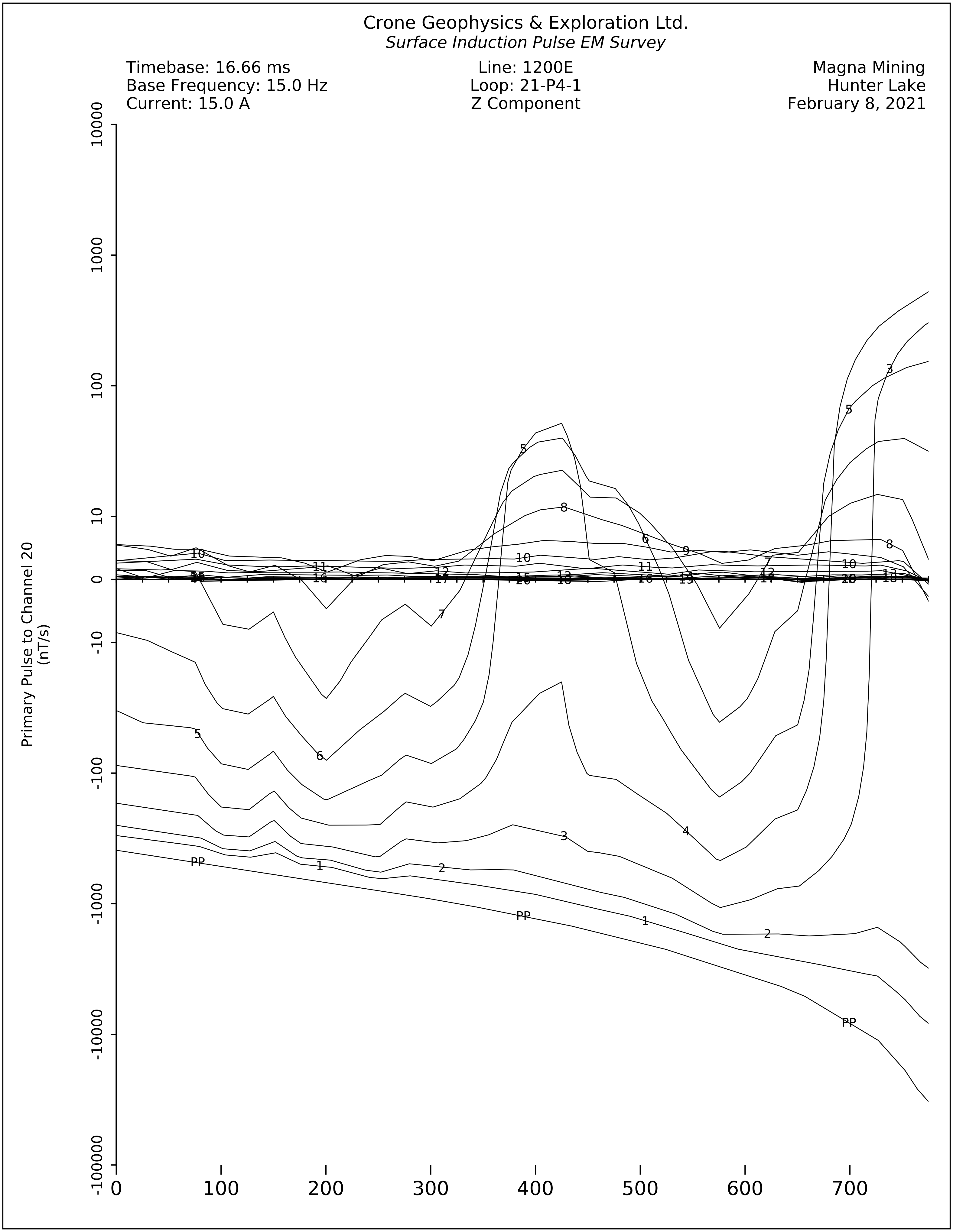
Magna Mining
Hunter Lake
February 11, 2021




Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A
Line: 1000E
Loop: 21-P4-1
Z Component
Magna Mining
Hunter Lake
February 8, 2021
Primary Pulse to Channel 20
(nT/s)
1000
100
10
0
-10
-100
-1000
-10000
-100000
-1000000
0
100
200
300
400
500
600
700



Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A
Line: 1000E
Loop: 21-P4-1
X Component
Magna Mining
Hunter Lake
February 8, 2021
Primary Pulse to Channel 20 (nT/s)
1000
100
10
0
-10
-100
-1000
-10000
0
100
200
300
400
500
600
700
PP
1
2
3
4
5
6
7
8
9
10



Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A
Line: 1200E
Loop: 21-P4-1
Z Component
Magna Mining
Hunter Lake
February 8, 2021
Primary Pulse to Channel 20
(nT/s)
10000
1000
100
10
0
-10
-100
-1000
-10000
-100000
0
100
200
300
400
500
600
700

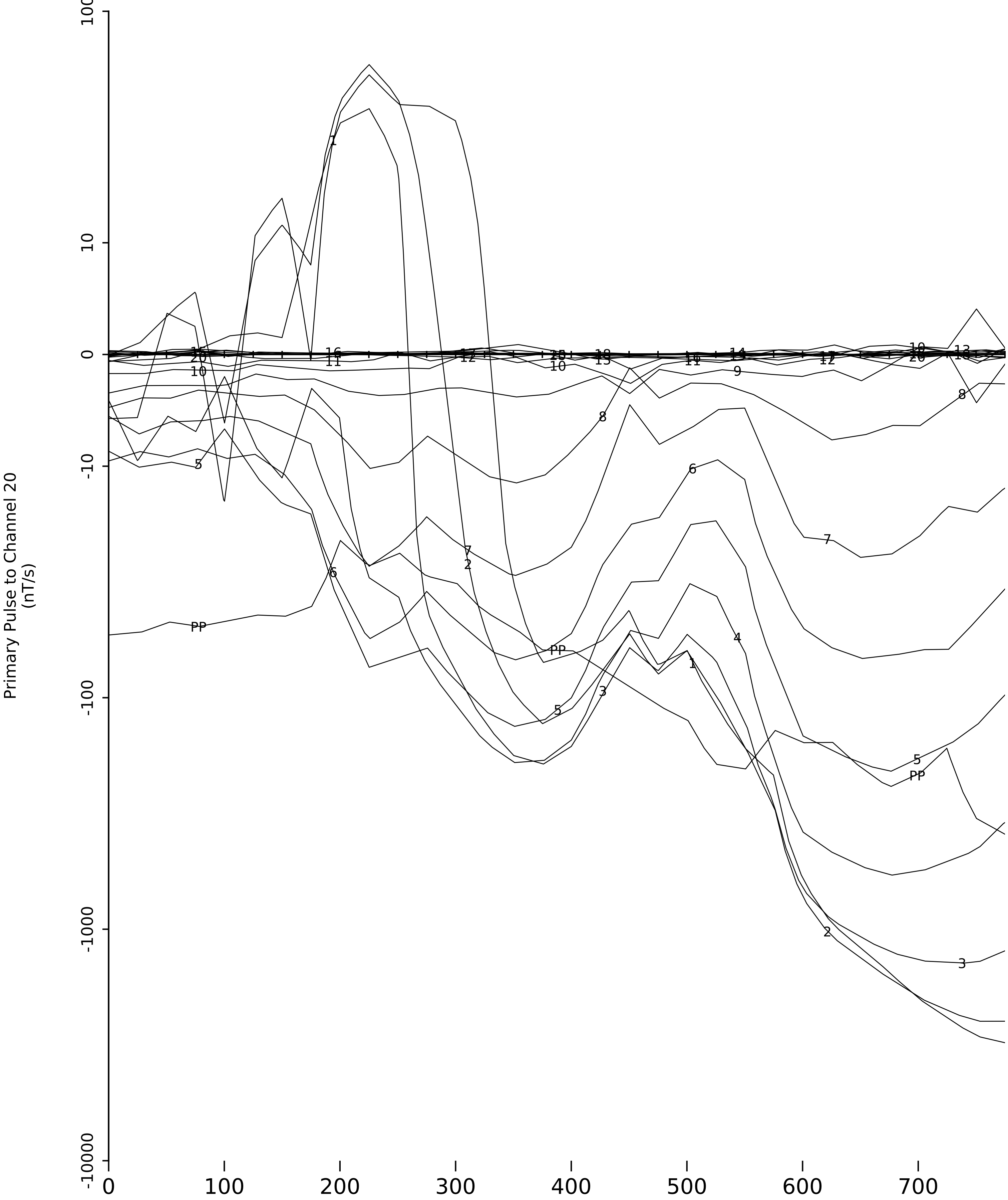
Crone Geophysics & Exploration Ltd.

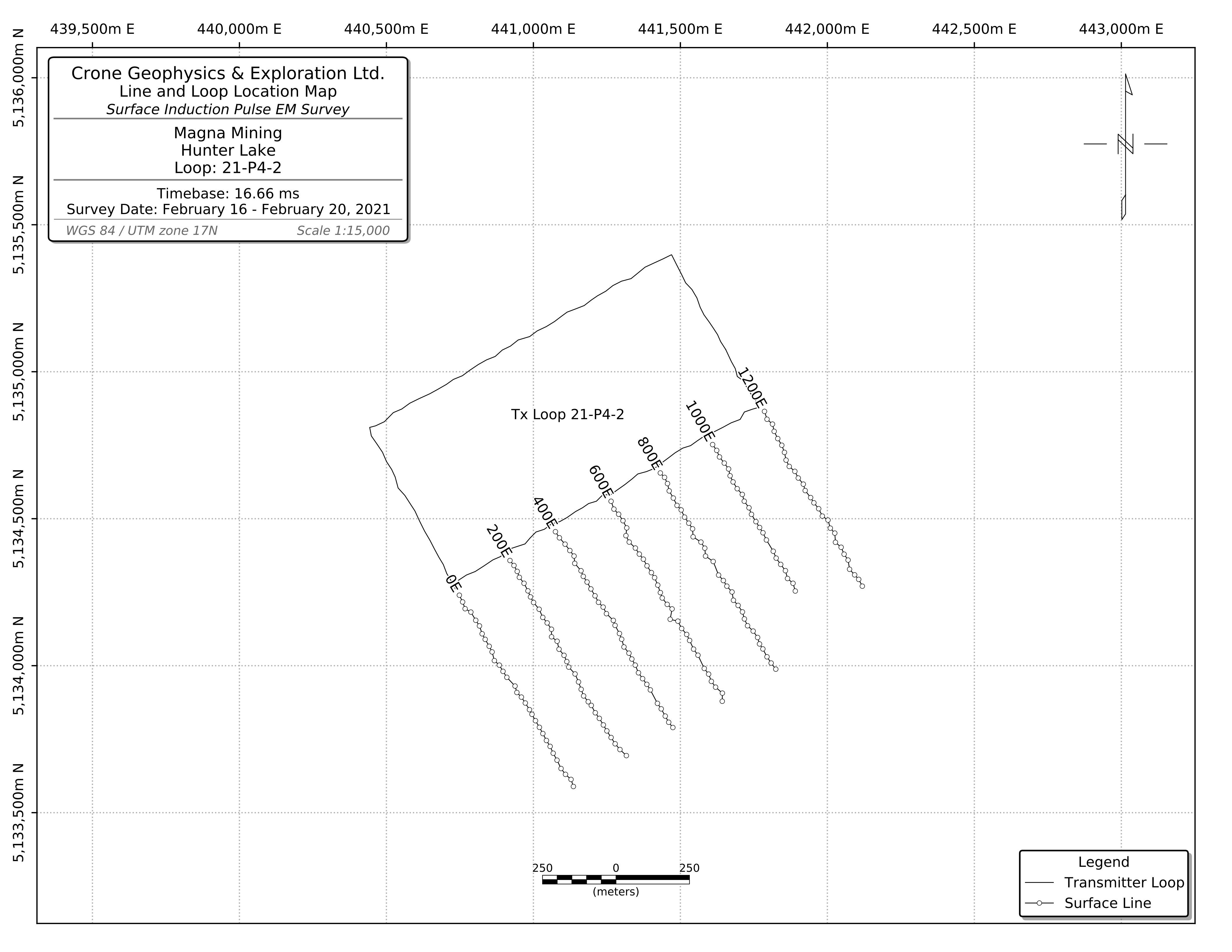
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

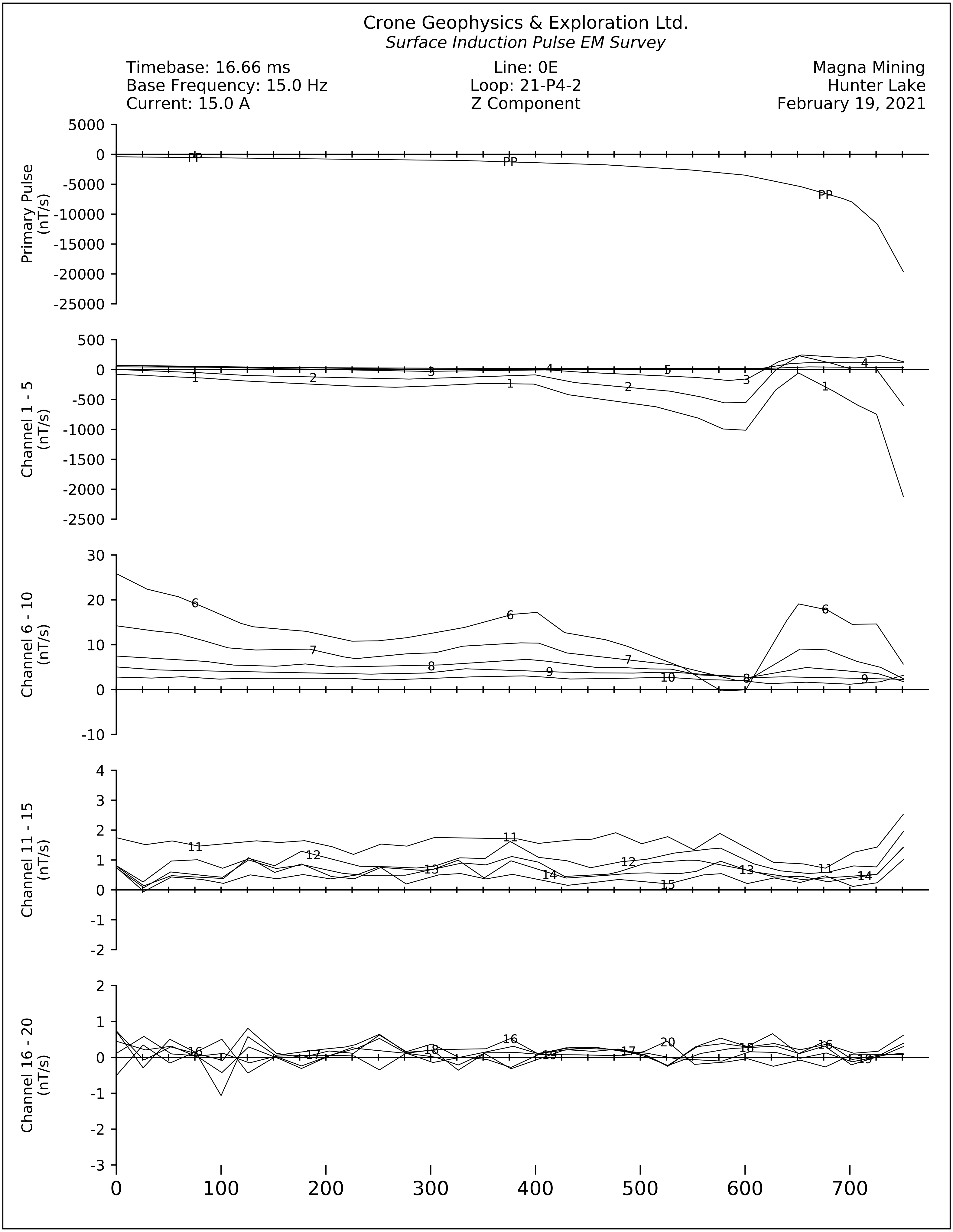
Line: 1200E
Loop: 21-P4-1
X Component

Magna Mining
Hunter Lake
February 8, 2021





Crone Geophysics & Exploration Ltd.
Line and Loop Location Map
Surface Induction Pulse EM Survey
Magna Mining
Hunter Lake
Loop: 21-P4-2
Timebase: 16.66 ms
Survey Date: February 16 - February 20, 2021
WGS 84 / UTM zone 17N
Scale 1:15,000
439,500m E
440,000m E
440,500m E
441,000m E
441,500m E
442,000m E
442,500m E
443,000m E
5,136,000m N
5,135,500m N
5,135,000m N
5,134,500m N
5,134,000m N
5,133,500m N
Tx Loop 21-P4-2
0E
200E
400E
600E
800E
1000E
1200E
250
0
250
(meters)
Legend
Transmitter Loop
Surface Line



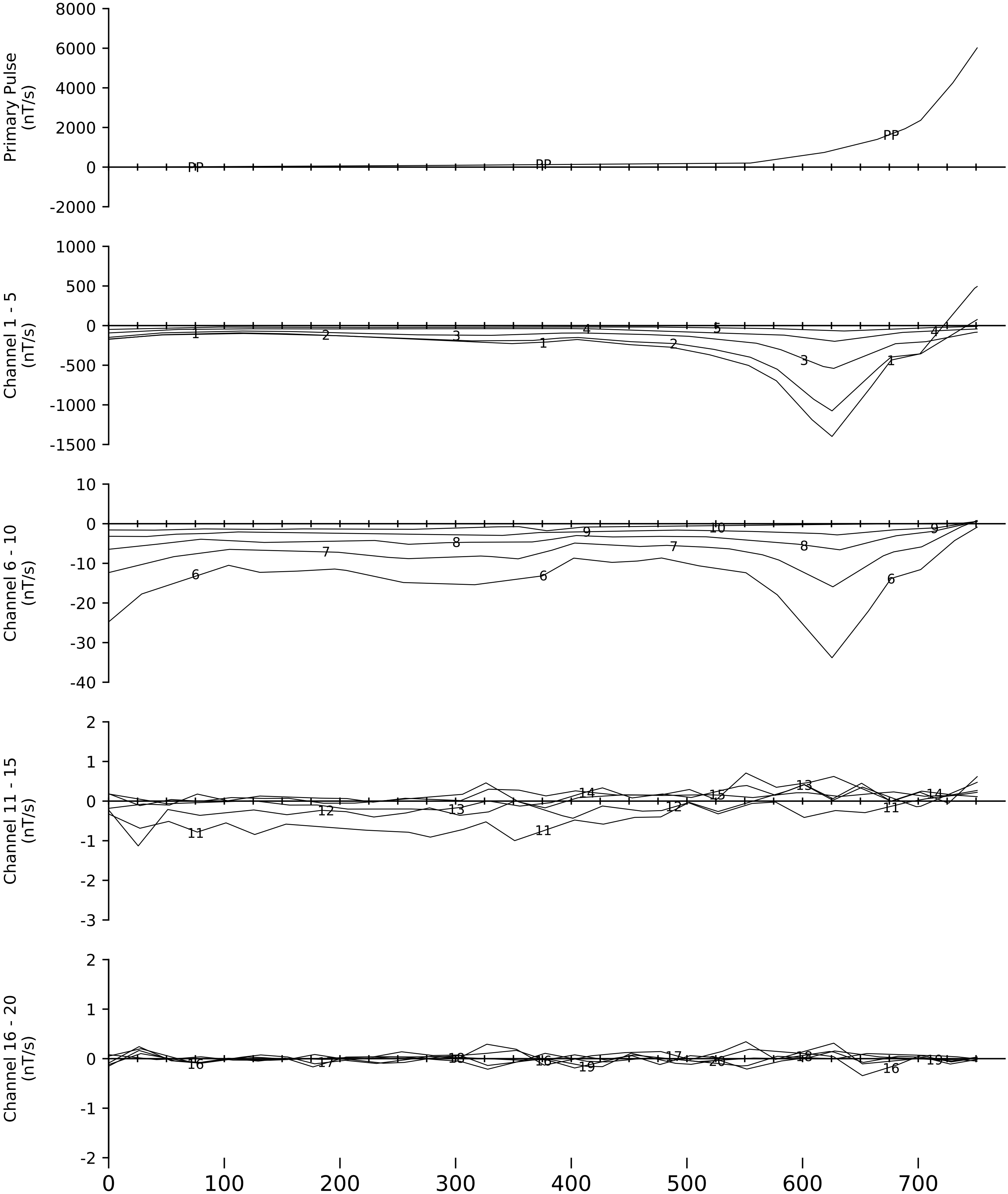
Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A
Line: 0E
Loop: 21-P4-2
Z Component
Magna Mining
Hunter Lake
February 19, 2021
Primary Pulse (nT/s)
Channel 1 - 5 (nT/s)
Channel 6 - 10 (nT/s)
Channel 11 - 15 (nT/s)
Channel 16 - 20 (nT/s)

Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 0E
Loop: 21-P4-2
X Component

Magna Mining
Hunter Lake
February 19, 2021



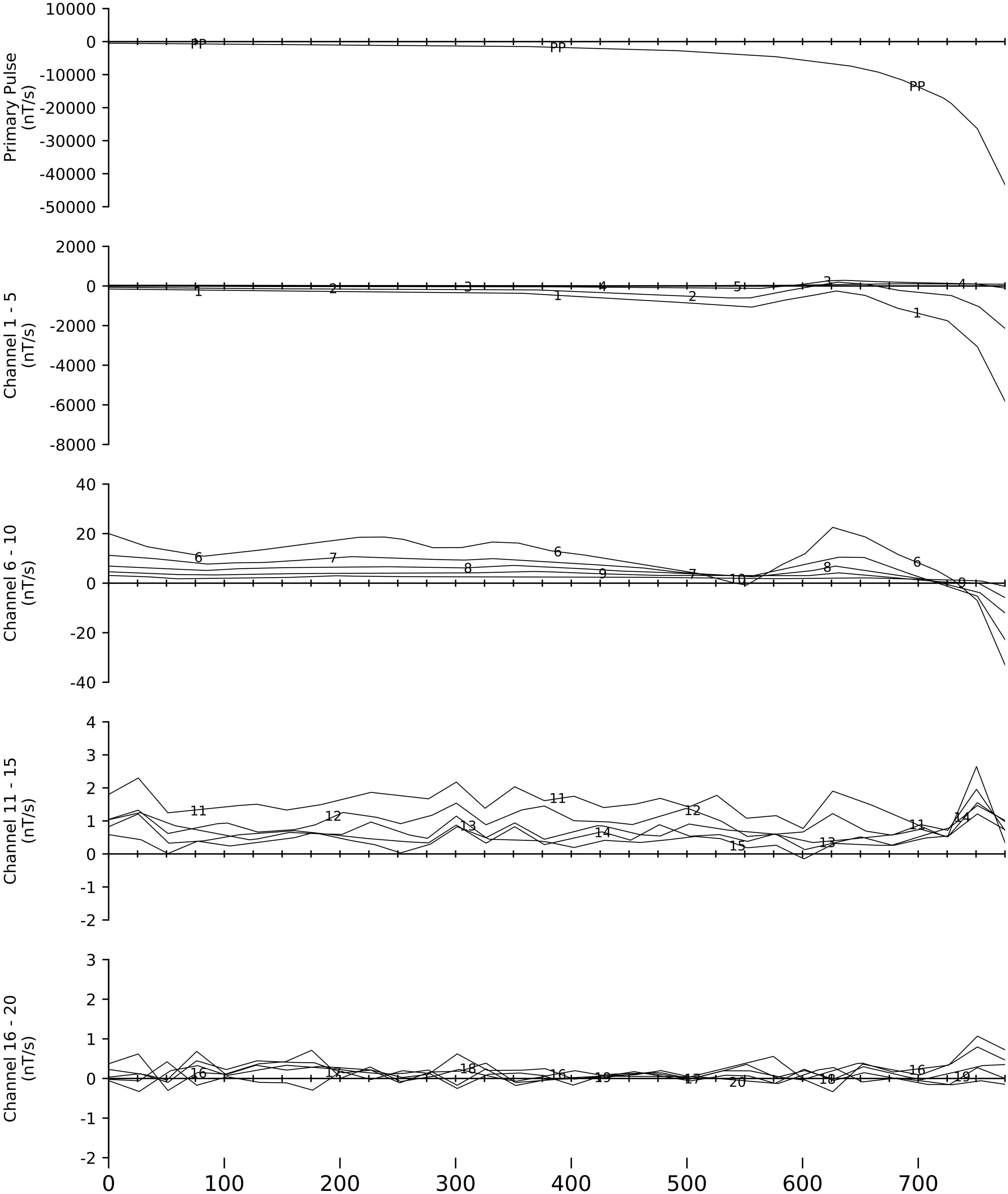
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 200E
Loop: 21-P4-2
Z Component

Magna Mining
Hunter Lake
February 18, 2021

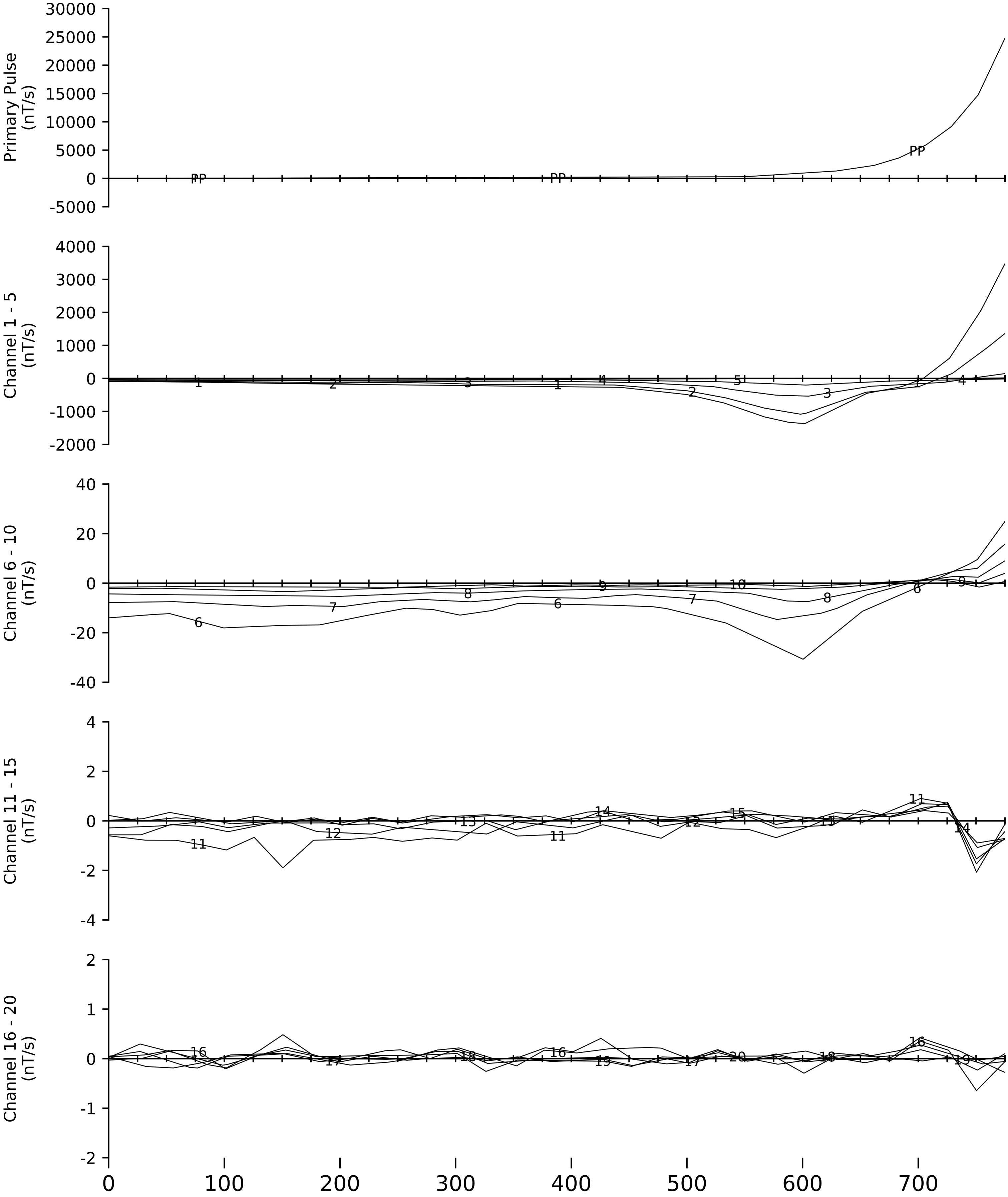


Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 200E
Loop: 21-P4-2
X Component

Magna Mining
Hunter Lake
February 18, 2021



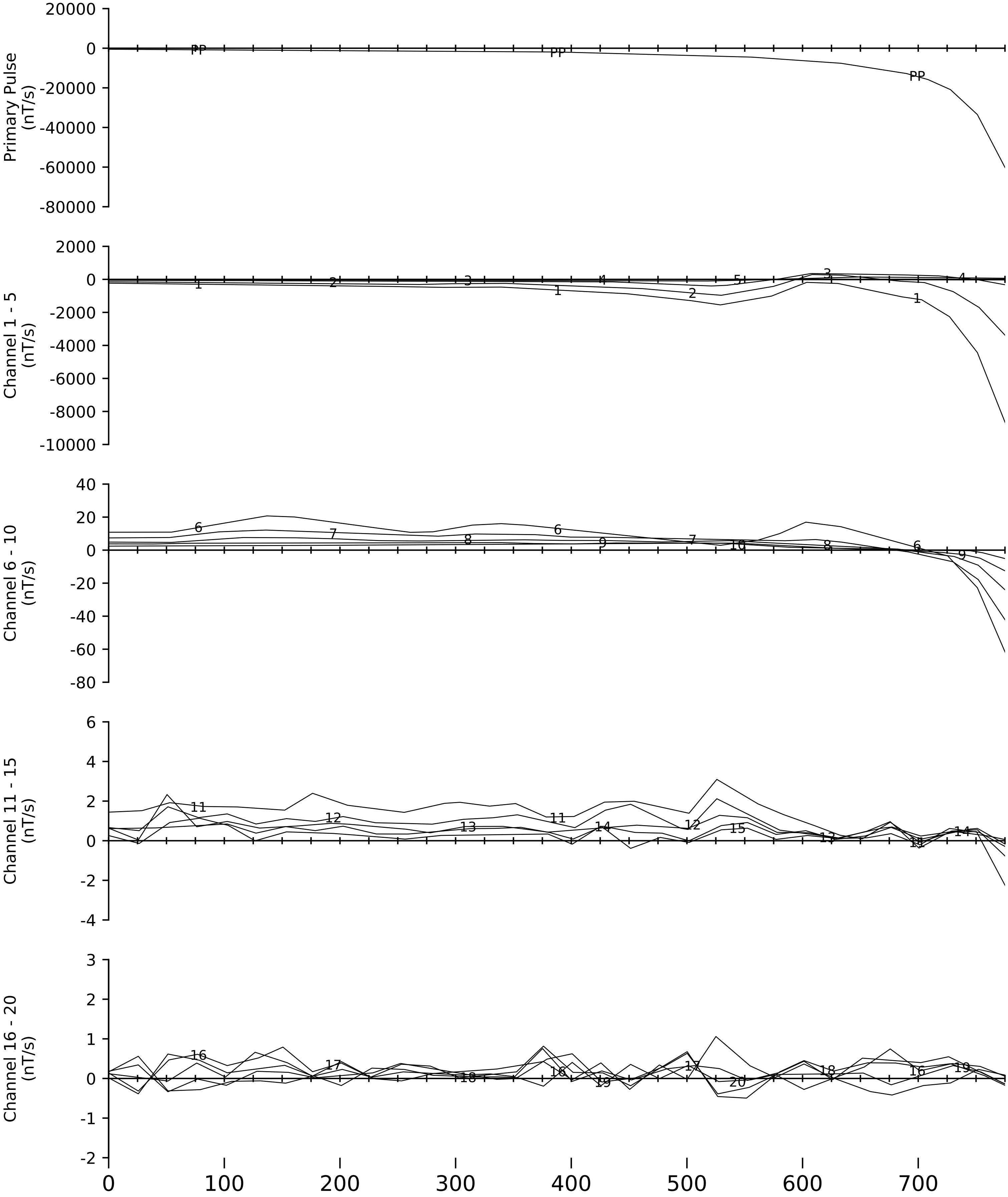
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 400E
Loop: 21-P4-2
Z Component

Magna Mining
Hunter Lake
February 20, 2021

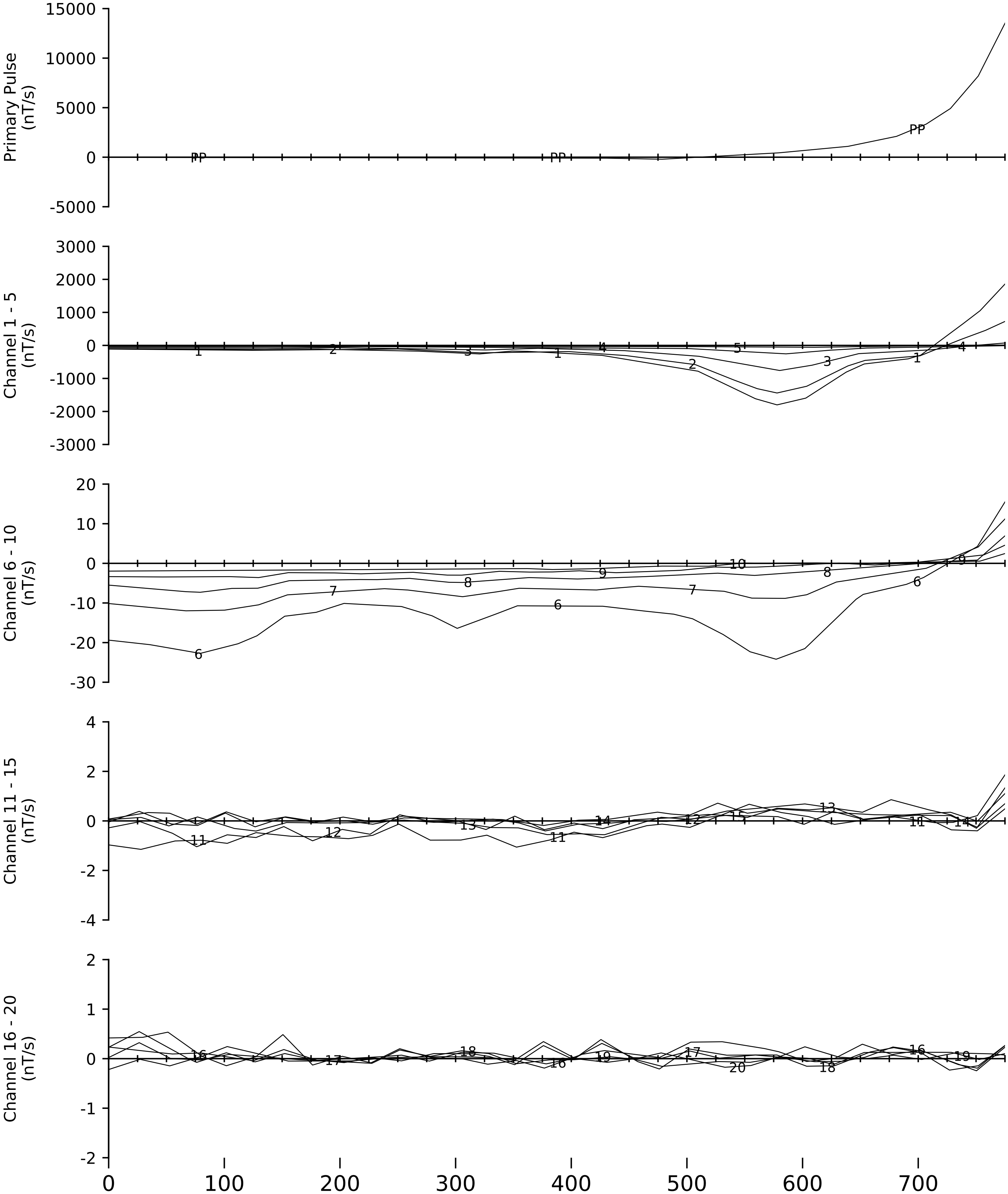


Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 400E
Loop: 21-P4-2
X Component

Magna Mining
Hunter Lake
February 20, 2021



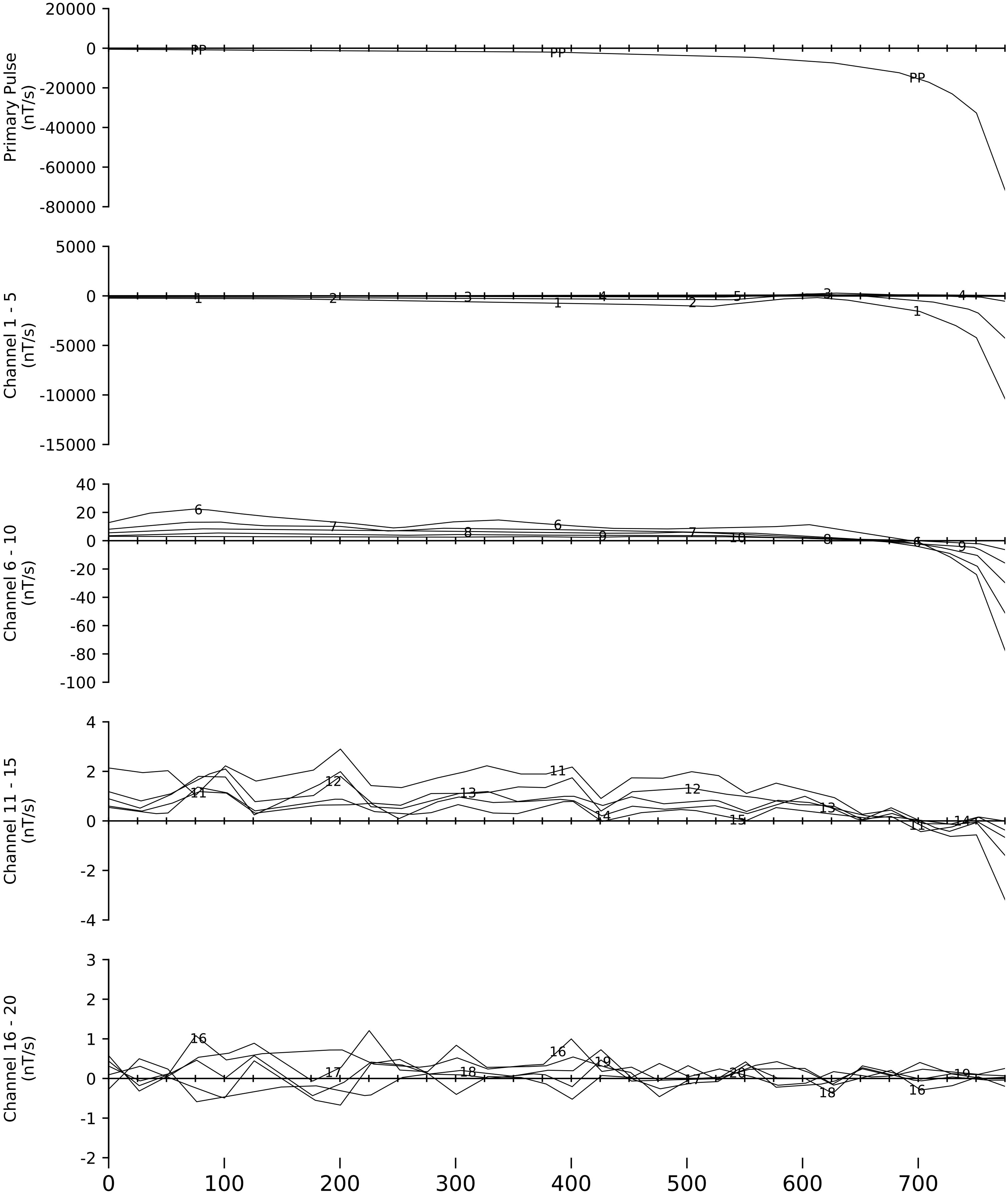
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 600E
Loop: 21-P4-2
Z Component

Magna Mining
Hunter Lake
February 17, 2021



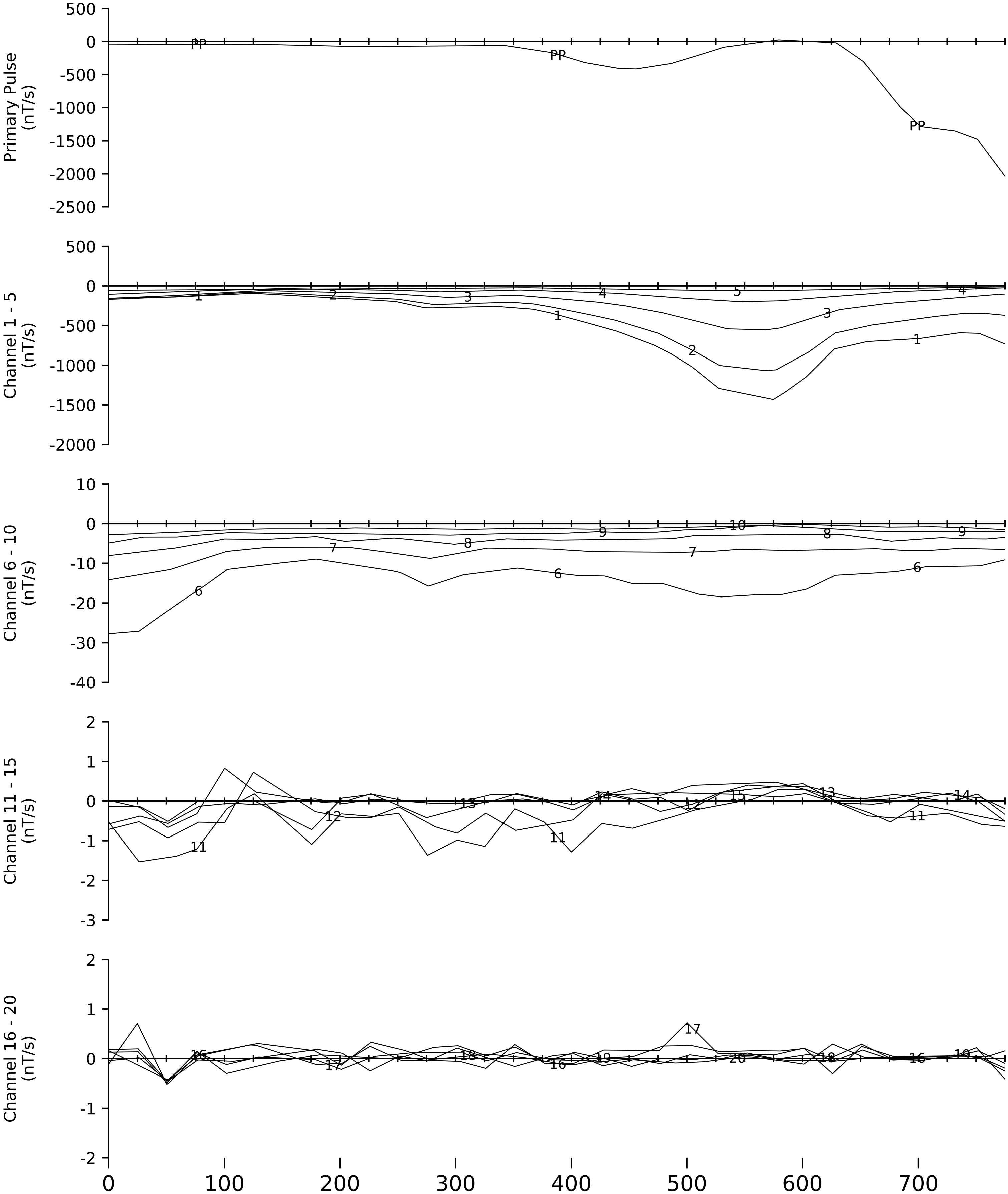
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 600E
Loop: 21-P4-2
X Component

Magna Mining
Hunter Lake
February 17, 2021



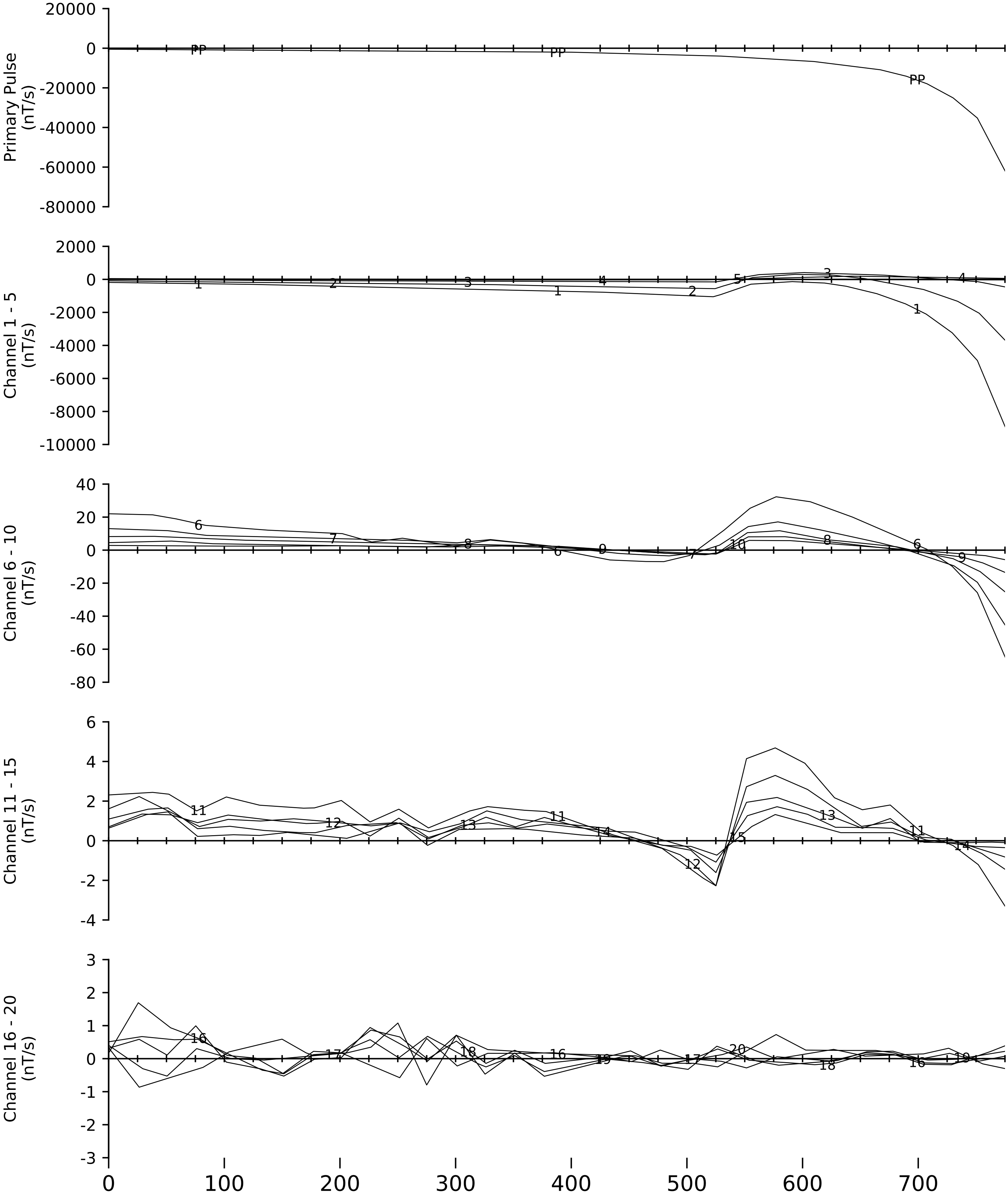
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 800E
Loop: 21-P4-2
Z Component

Magna Mining
Hunter Lake
February 17, 2021



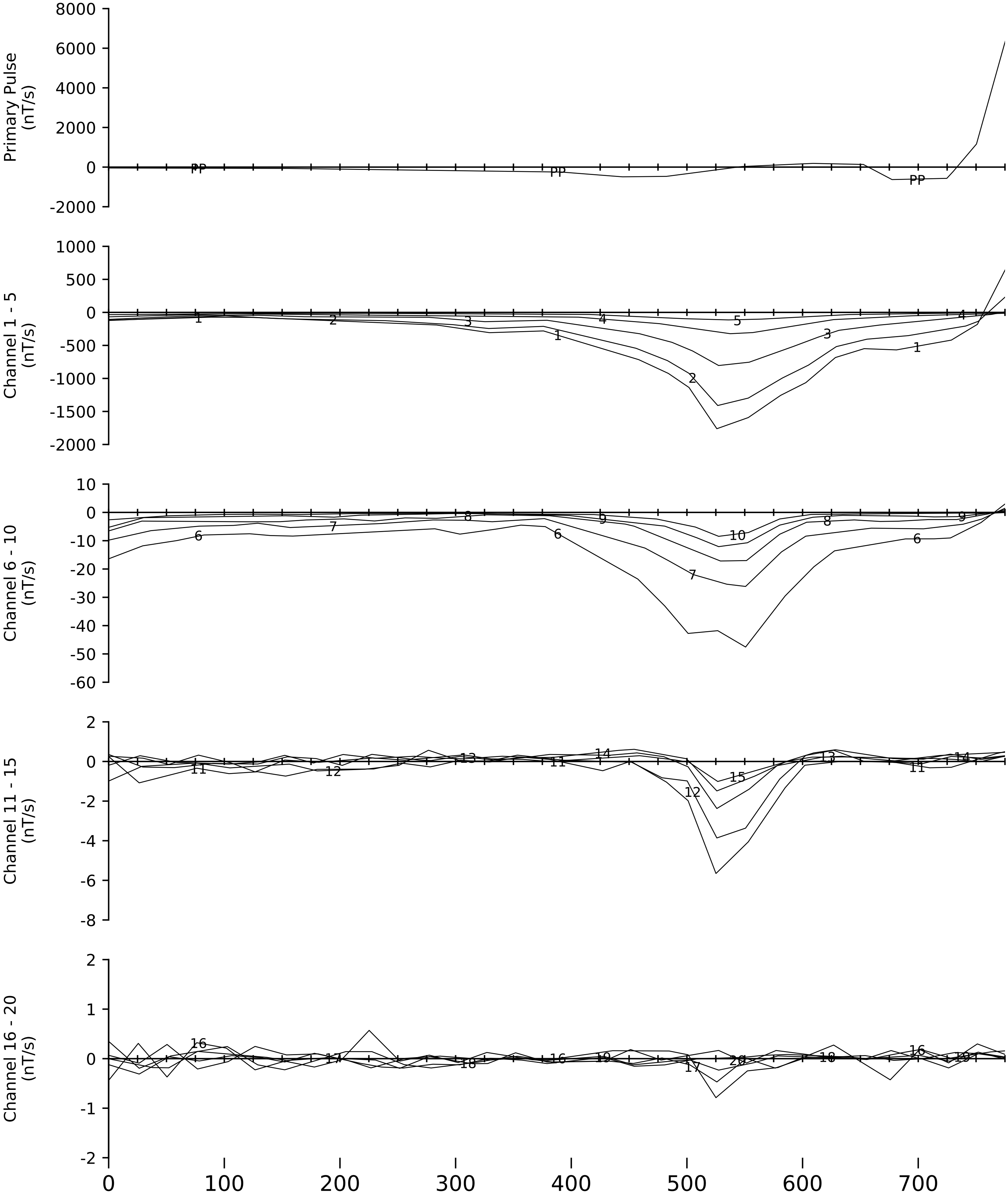
Crone Geophysics & Exploration Ltd.

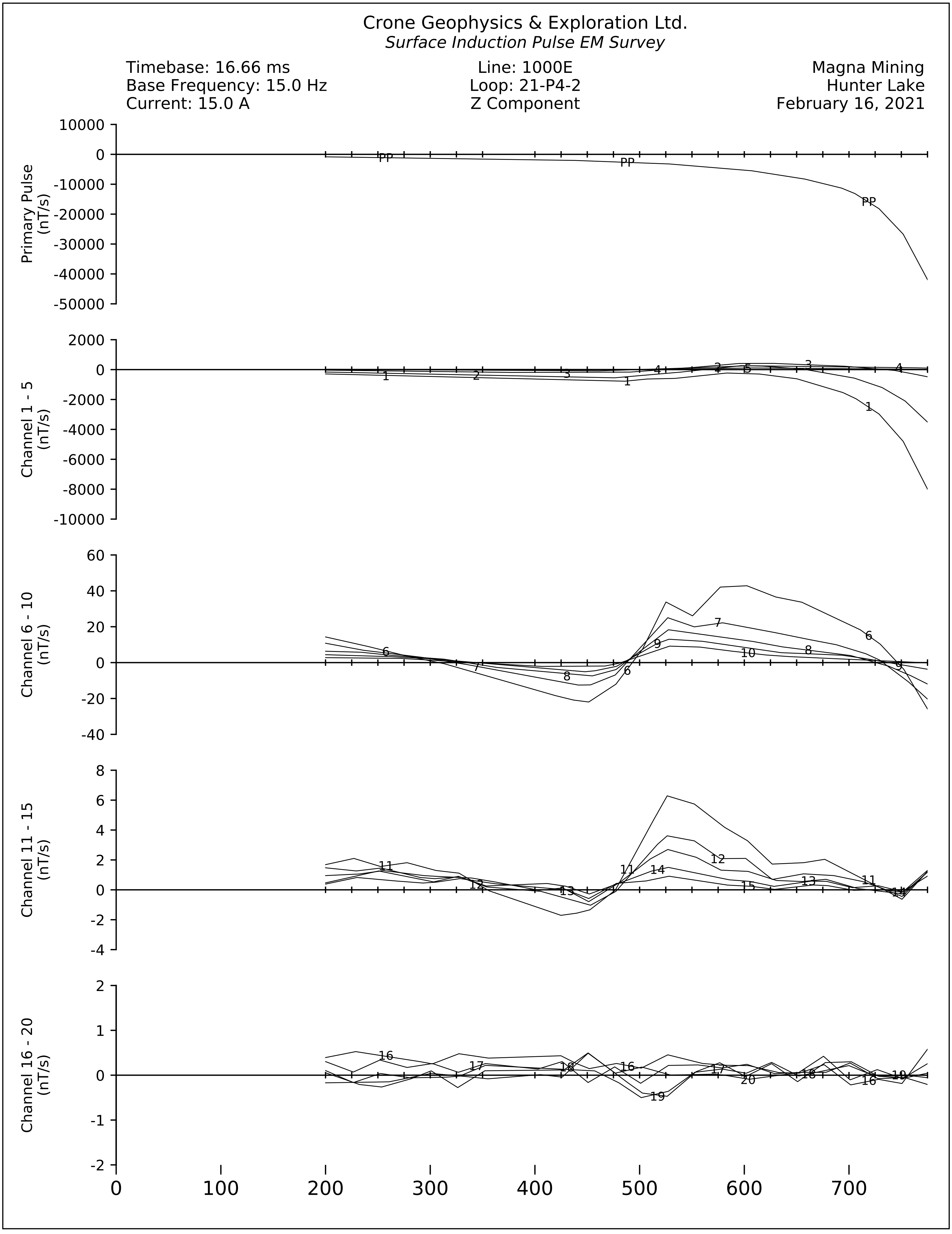
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

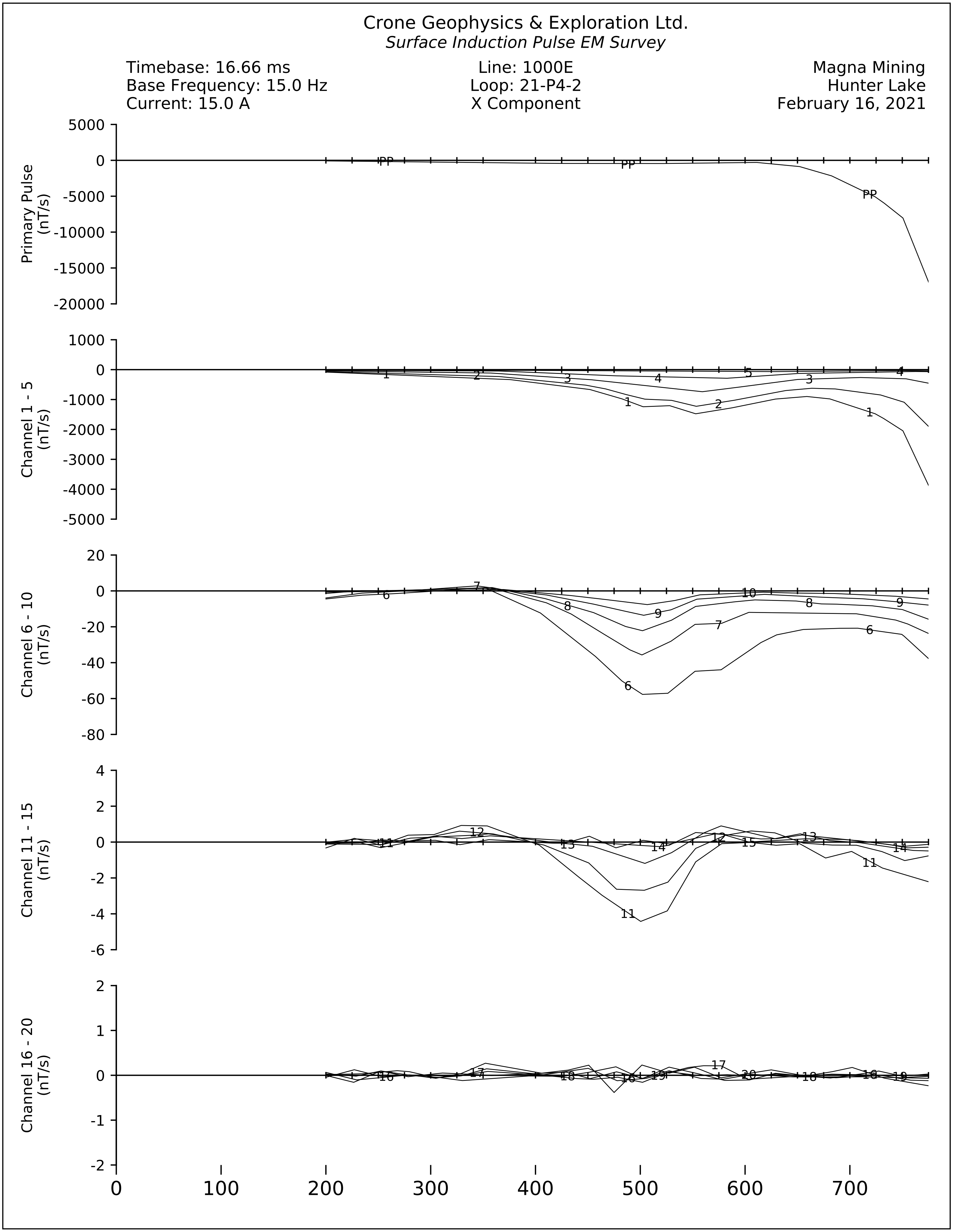
Line: 800E
Loop: 21-P4-2
X Component

Magna Mining
Hunter Lake
February 17, 2021





Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A
Line: 1000E
Loop: 21-P4-2
Z Component
Magna Mining
Hunter Lake
February 16, 2021
Primary Pulse (nT/s)
Channel 1 - 5 (nT/s)
Channel 6 - 10 (nT/s)
Channel 11 - 15 (nT/s)
Channel 16 - 20 (nT/s)
0
100
200
300
400
500
600
700


Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A
Line: 1000E
Loop: 21-P4-2
X Component
Magna Mining
Hunter Lake
February 16, 2021
Primary Pulse (nT/s)
Channel 1 - 5 (nT/s)
Channel 6 - 10 (nT/s)
Channel 11 - 15 (nT/s)
Channel 16 - 20 (nT/s)
0
100
200
300
400
500
600
700

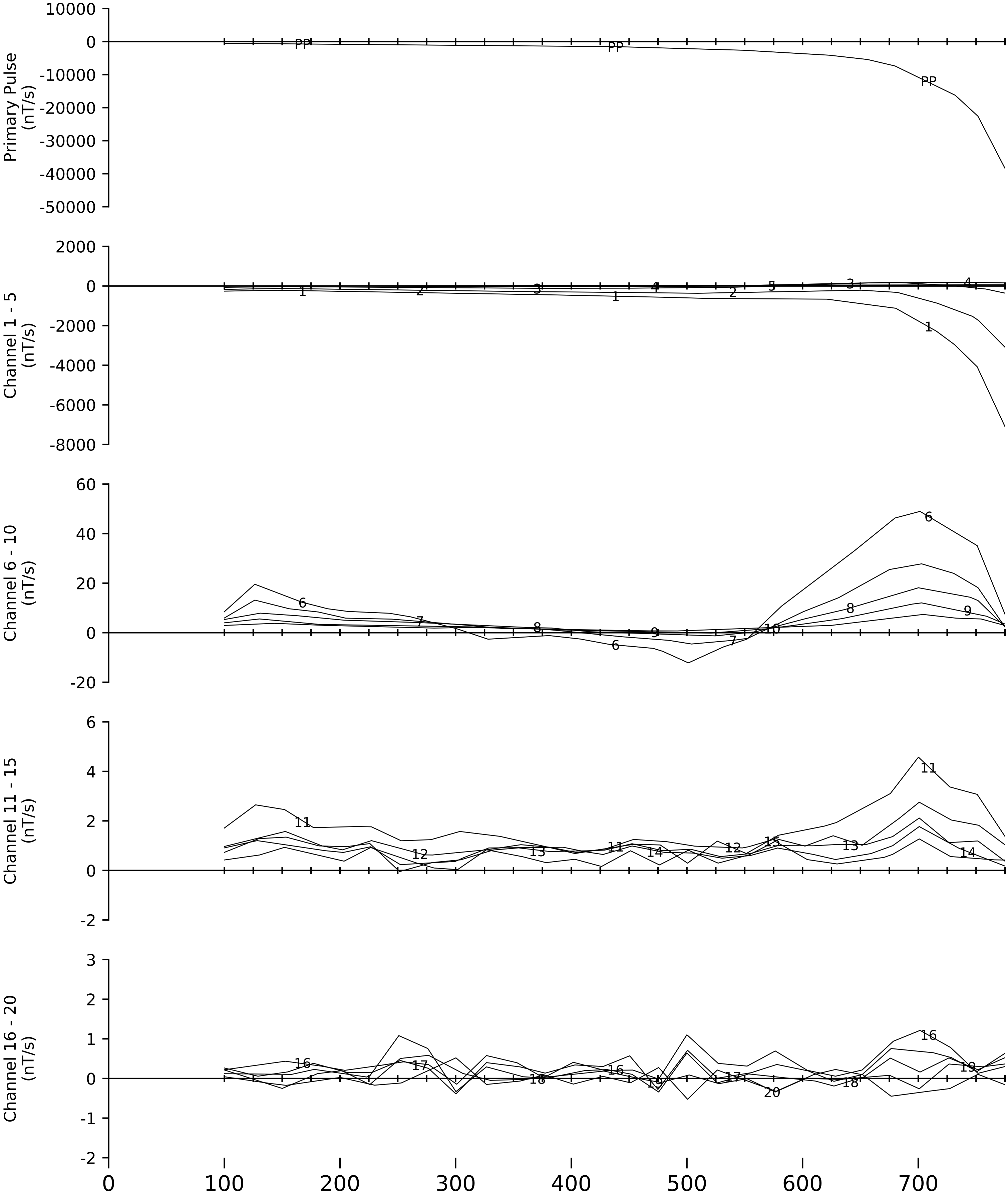
Crone Geophysics & Exploration Ltd.

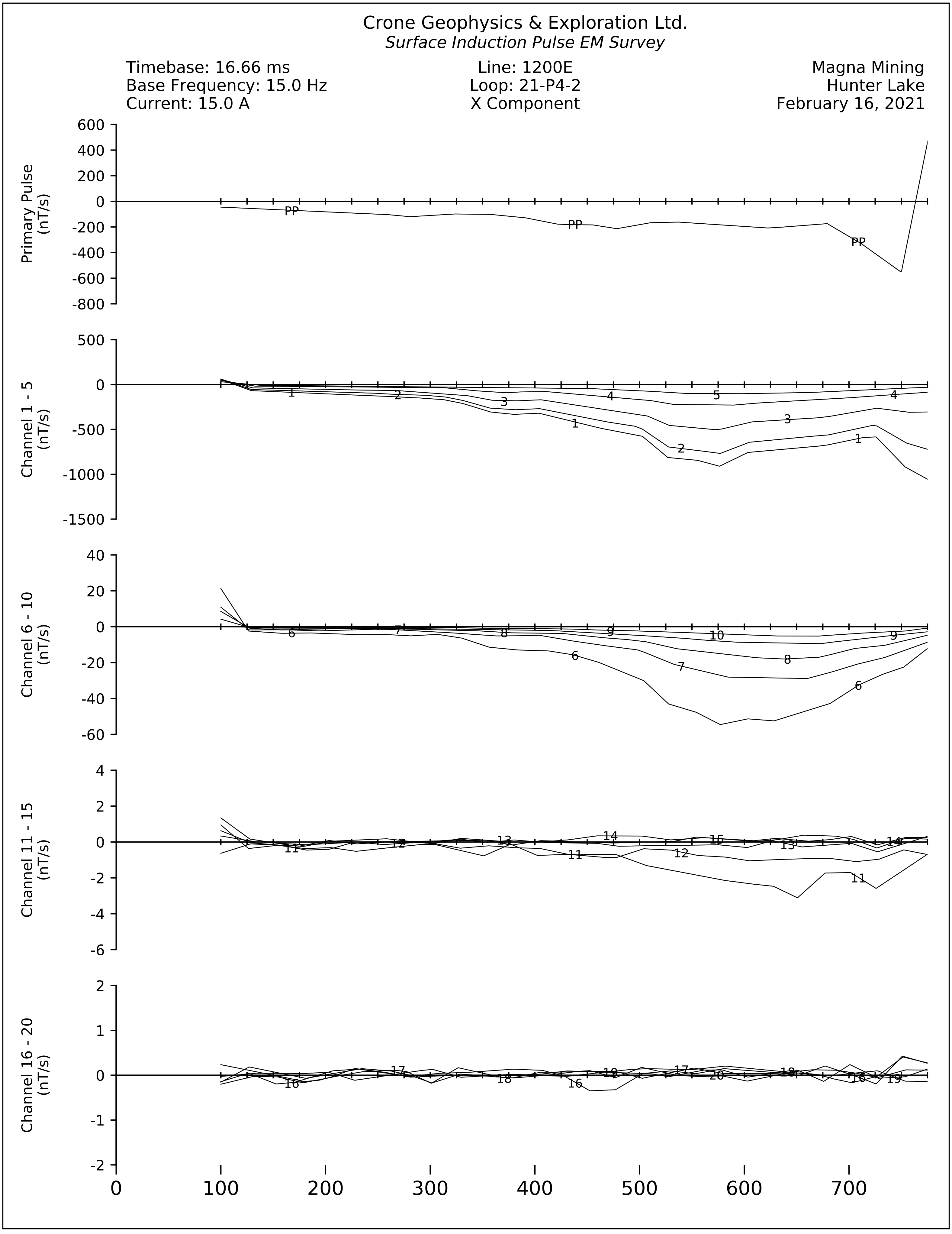
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 1200E
Loop: 21-P4-2
Z Component

Magna Mining
Hunter Lake
February 16, 2021





Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A
Line: 1200E
Loop: 21-P4-2
X Component
Magna Mining
Hunter Lake
February 16, 2021
Primary Pulse (nT/s)
Channel 1 - 5 (nT/s)
Channel 6 - 10 (nT/s)
Channel 11 - 15 (nT/s)
Channel 16 - 20 (nT/s)

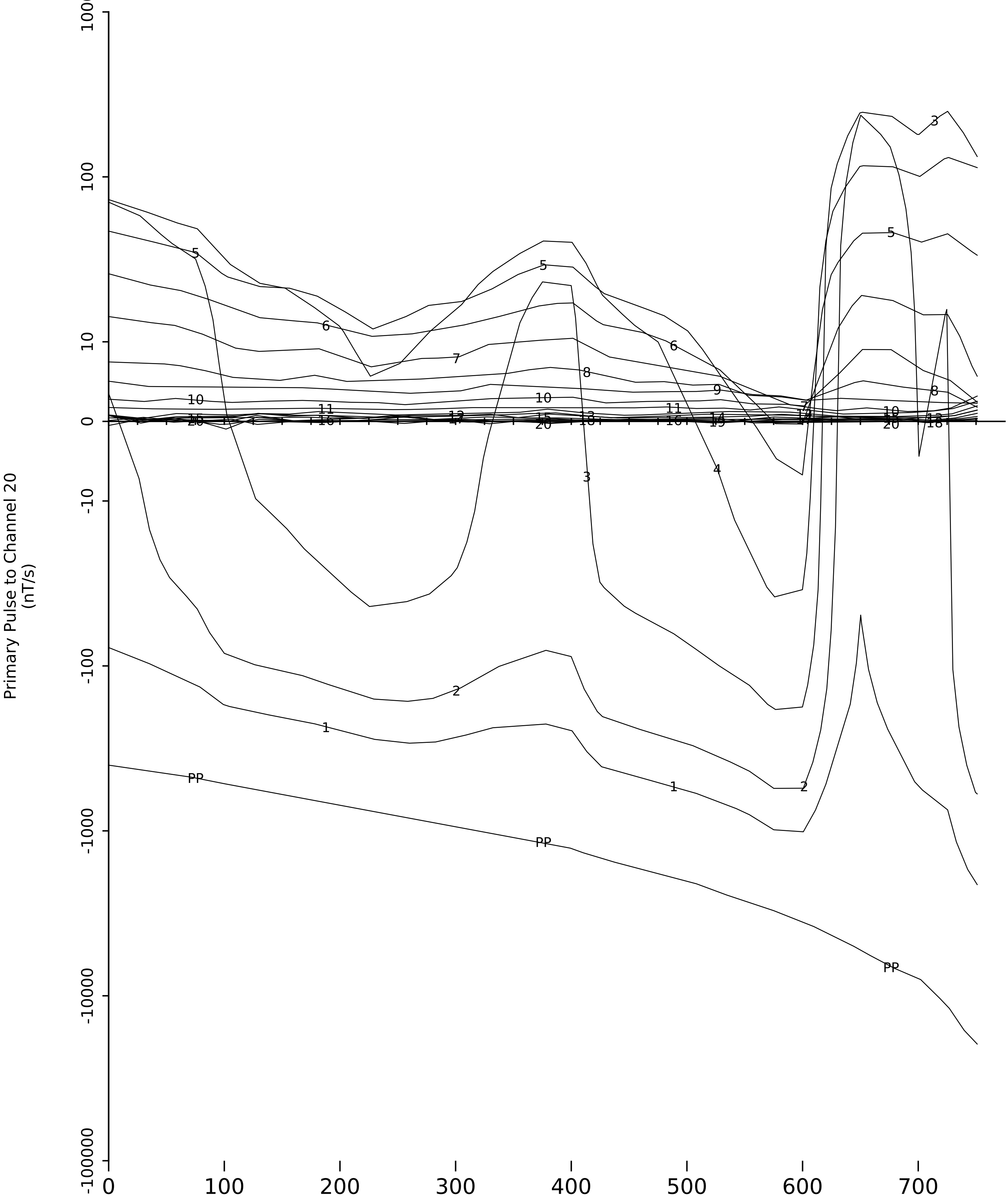
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 0E
Loop: 21-P4-2
Z Component

Magna Mining
Hunter Lake
February 19, 2021



Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

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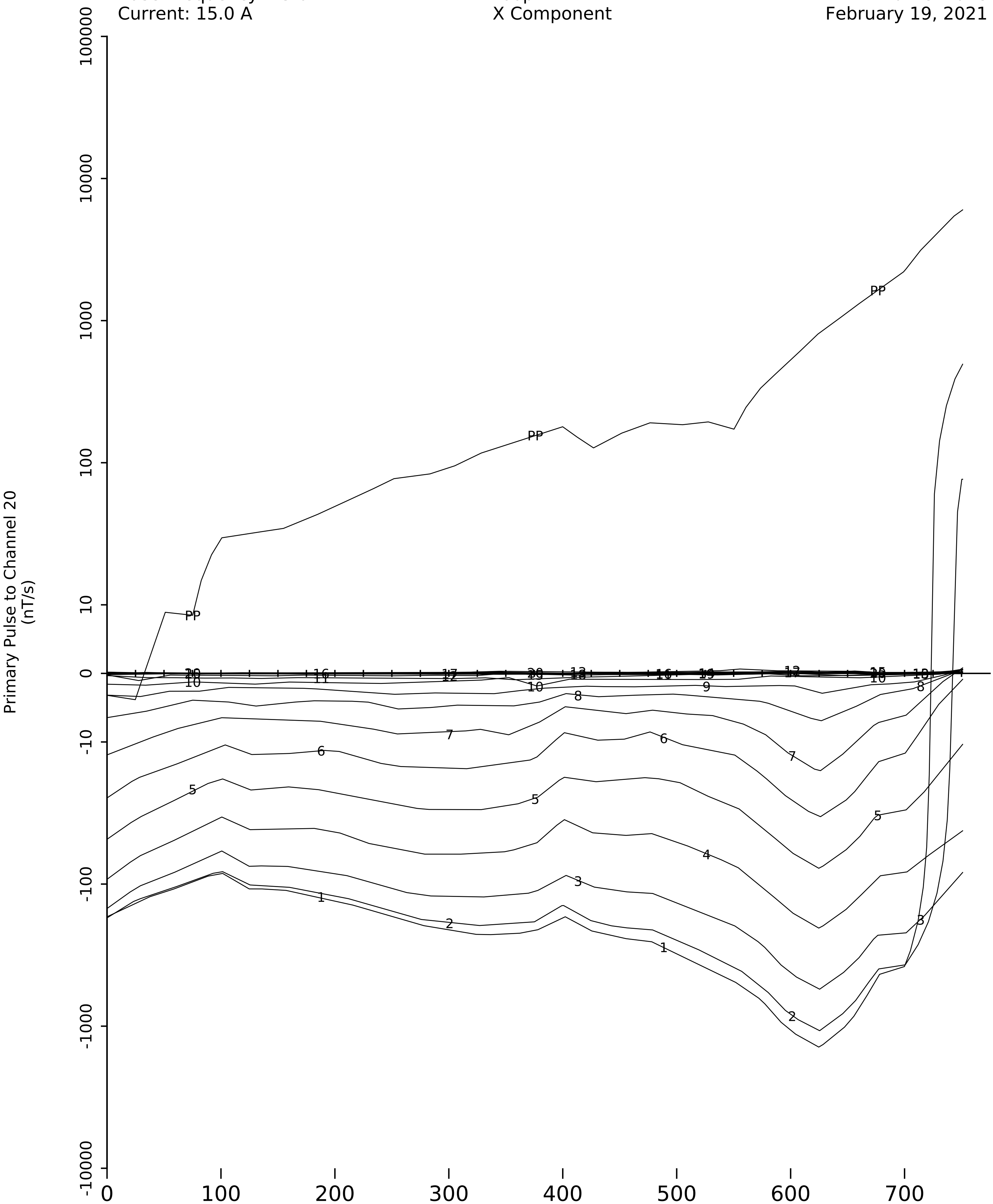
Current: 15.0 A

Line: 0E
Loop: 21-P4-2
X Component

Magna Mining
Hunter Lake
February 19, 2021



Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey

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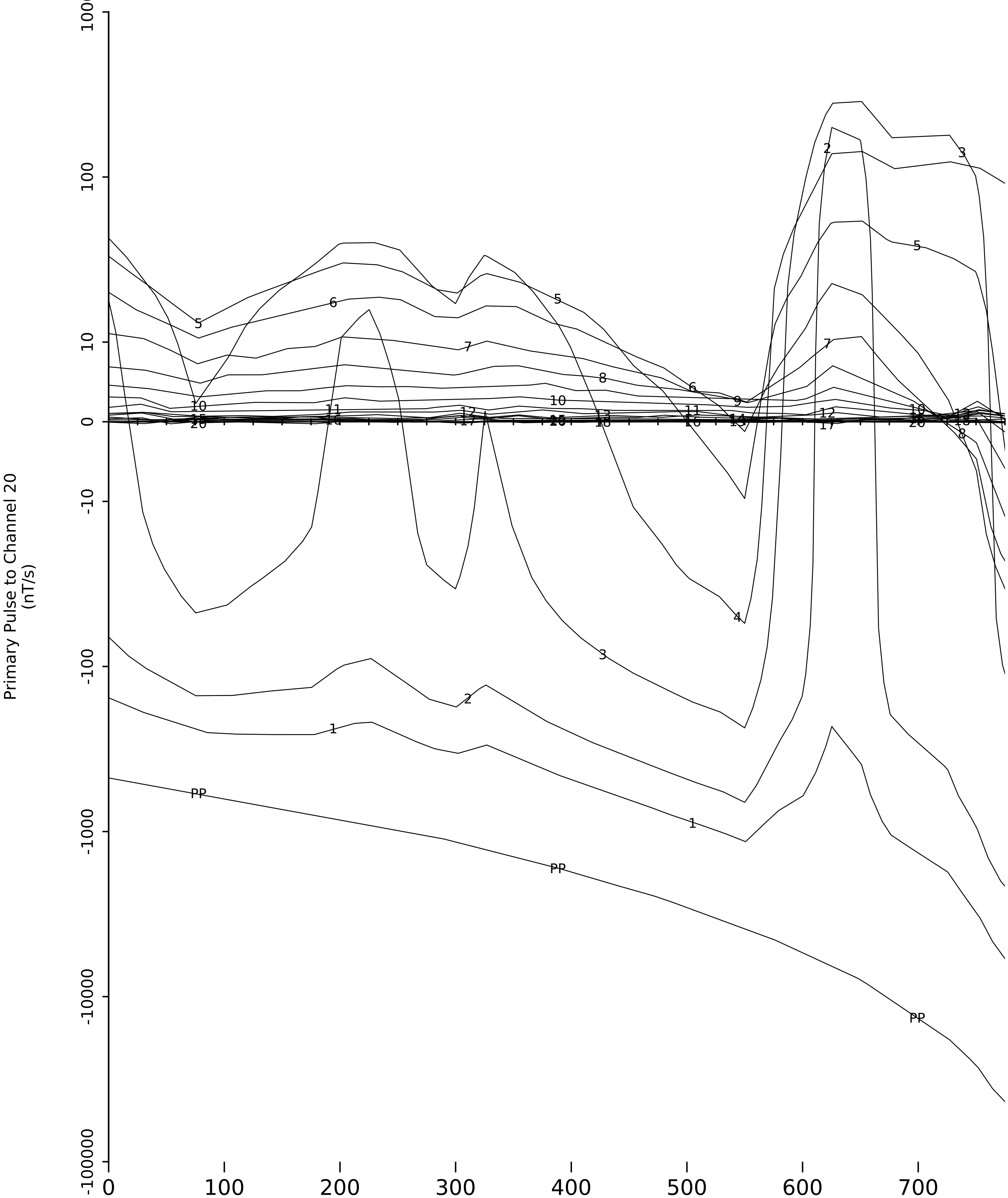
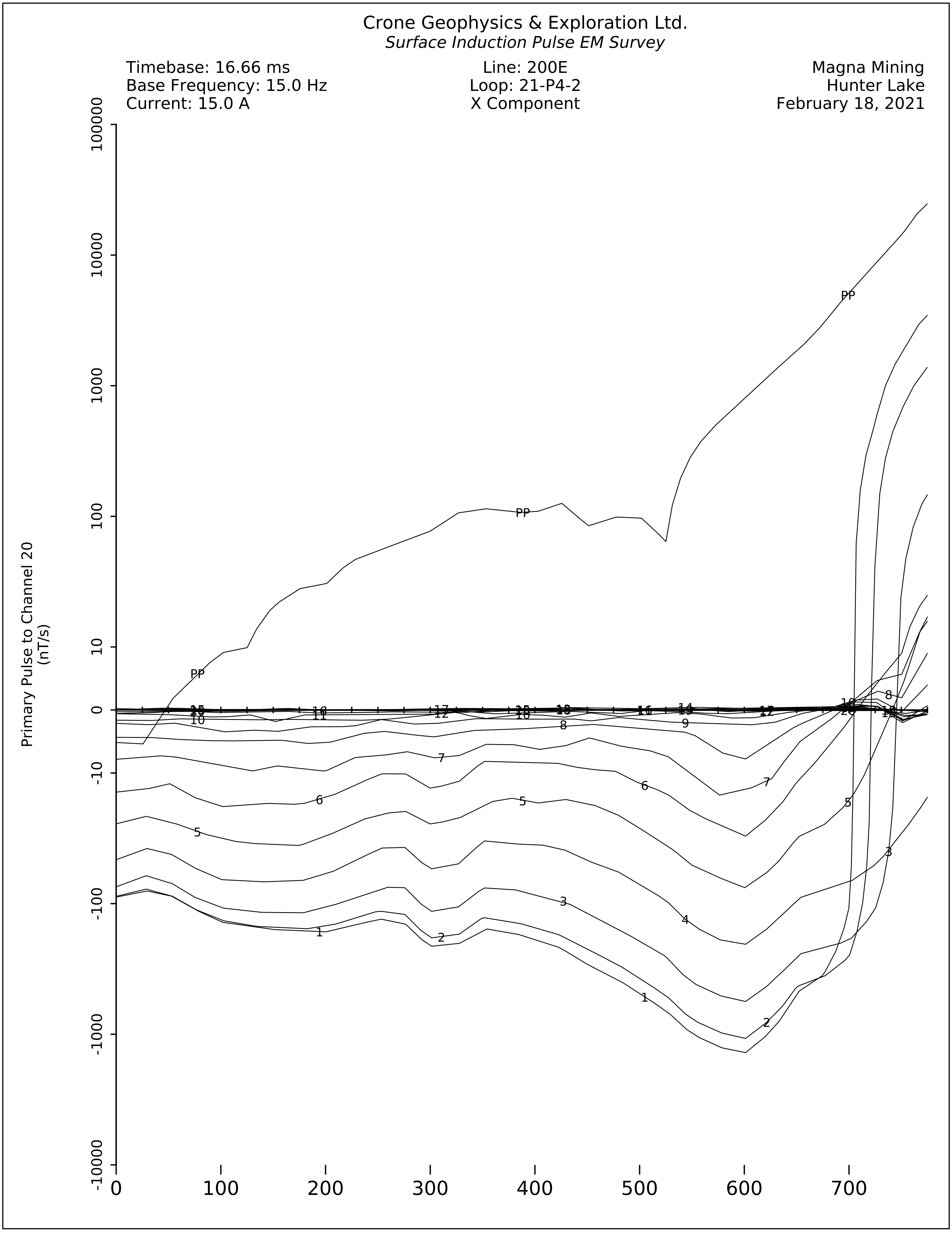
Line: 200E
Loop: 21-P4-2
Z Component

Magna Mining
Hunter Lake
February 18, 2021





Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A
Line: 200E
Loop: 21-P4-2
X Component
Magna Mining
Hunter Lake
February 18, 2021
Primary Pulse to Channel 20
(nT/s)
100000
10000
1000
100
10
0
-10
-100
-1000
-10000
0
100
200
300
400
500
600
700
PP
1
2
3
4
5
6
7
8
9
10
11
12
14
16
17
20

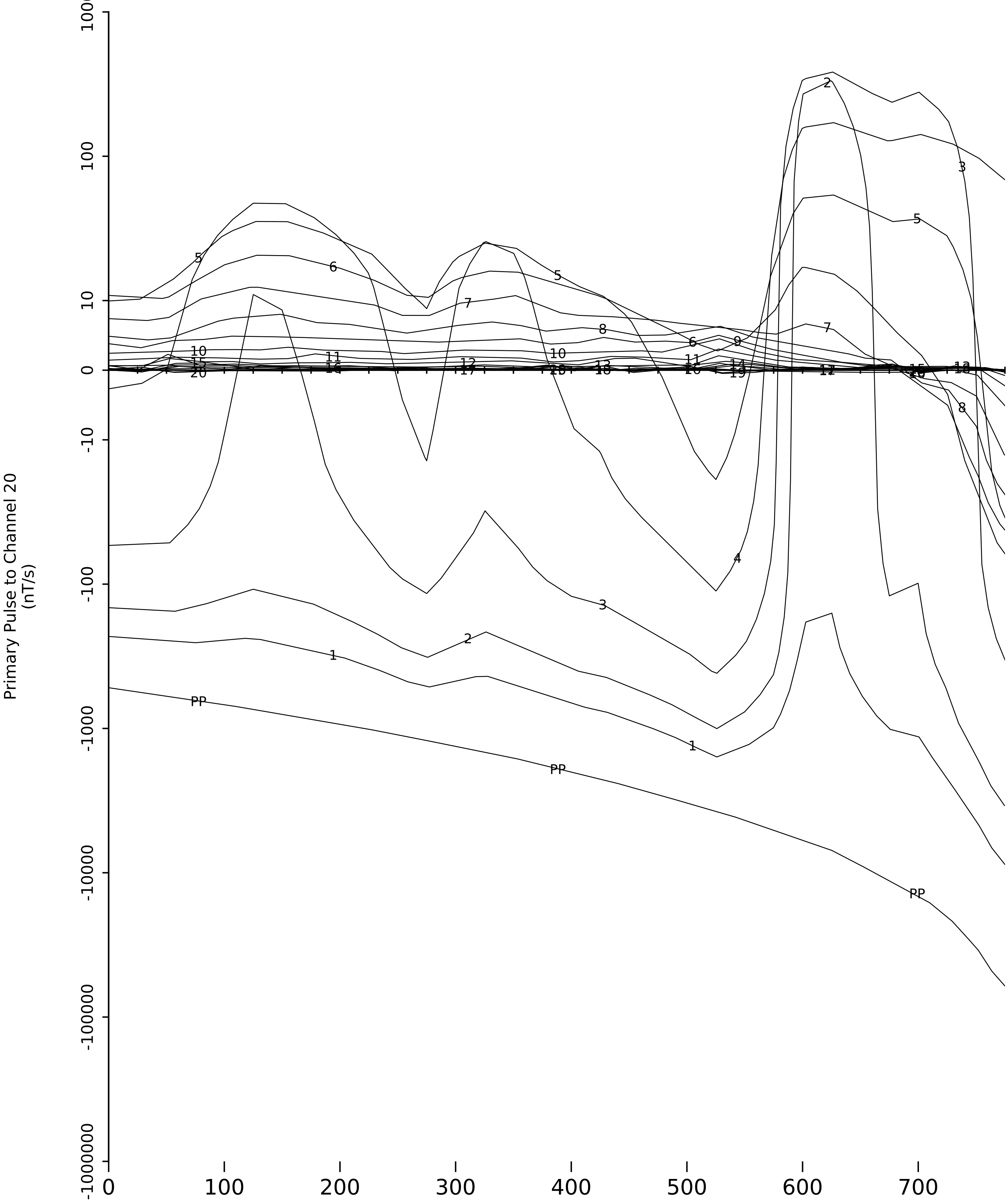
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 400E
Loop: 21-P4-2
Z Component

Magna Mining
Hunter Lake
February 20, 2021



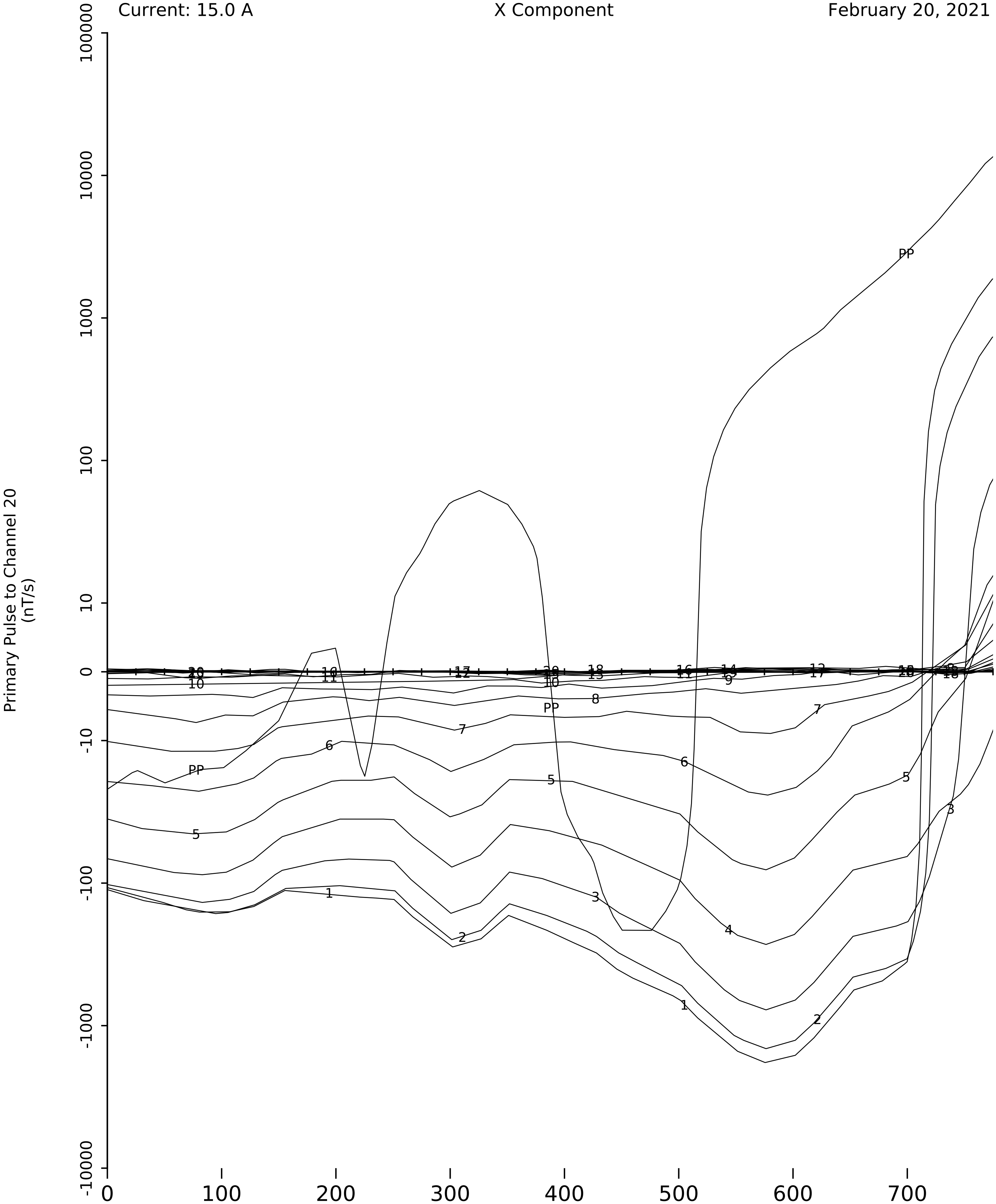
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 400E
Loop: 21-P4-2
X Component

Magna Mining
Hunter Lake
February 20, 2021



Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

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Current: 15.0 A

Line: 600E
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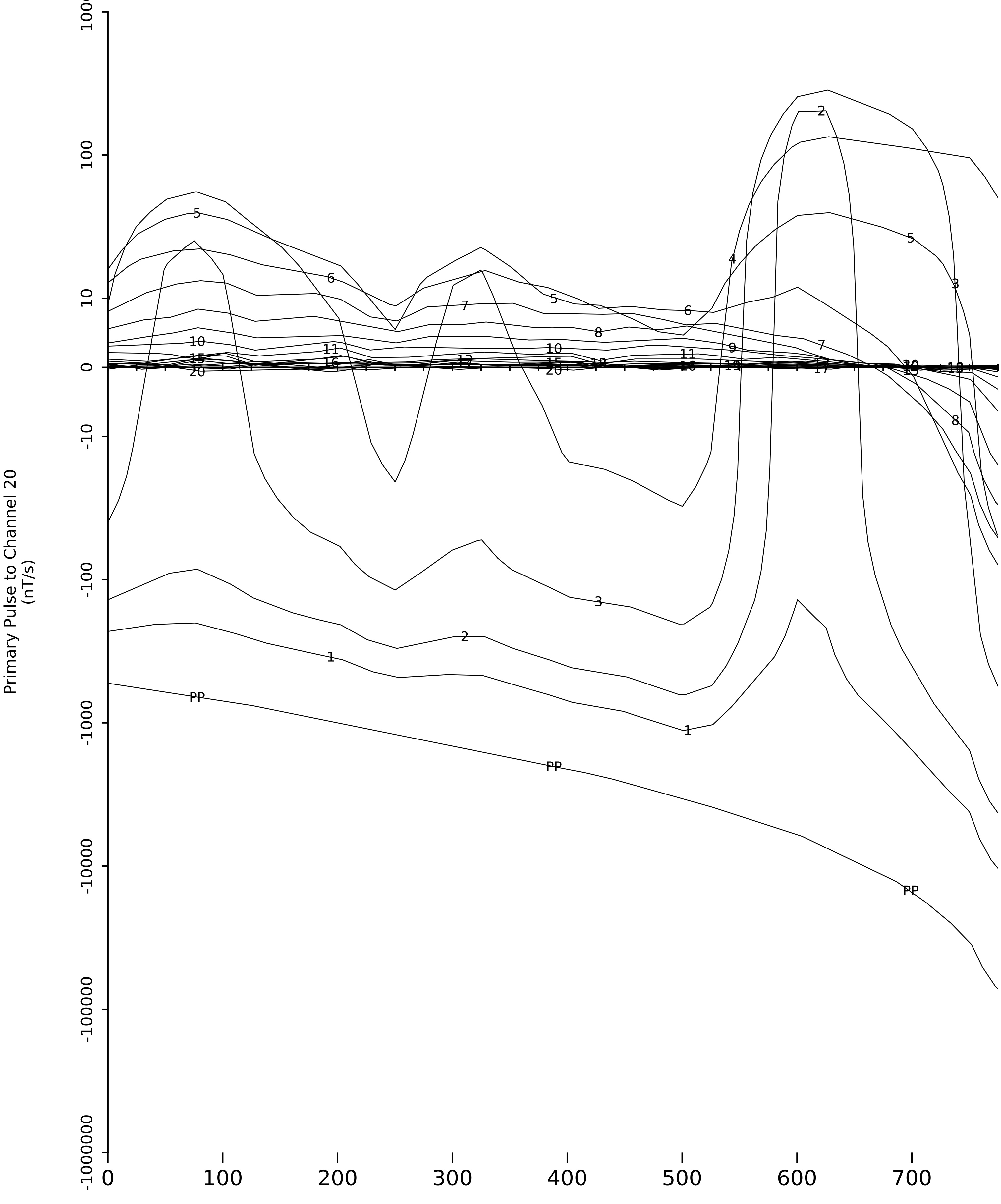
Magna Mining
Hunter Lake
February 17, 2021



Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

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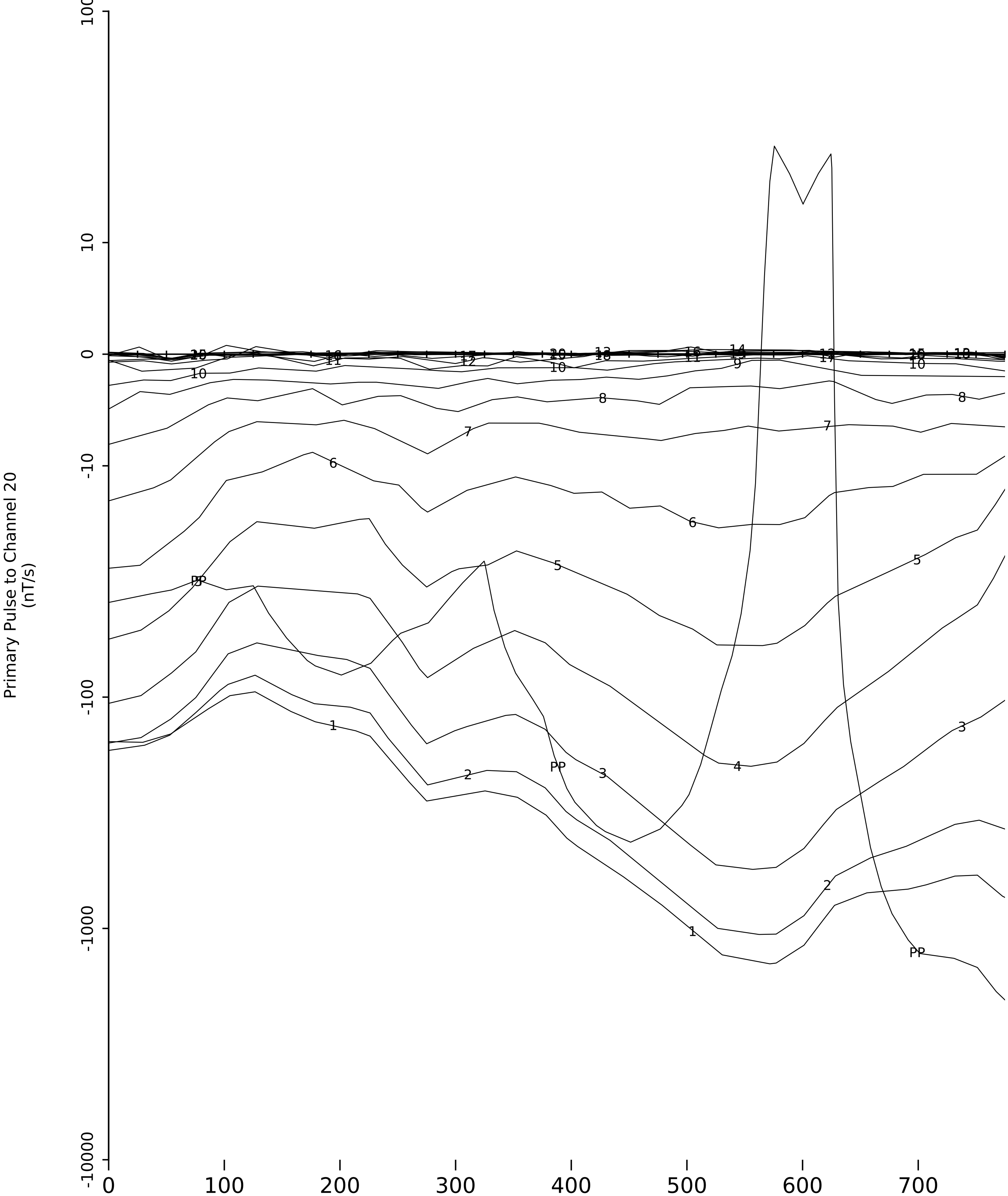
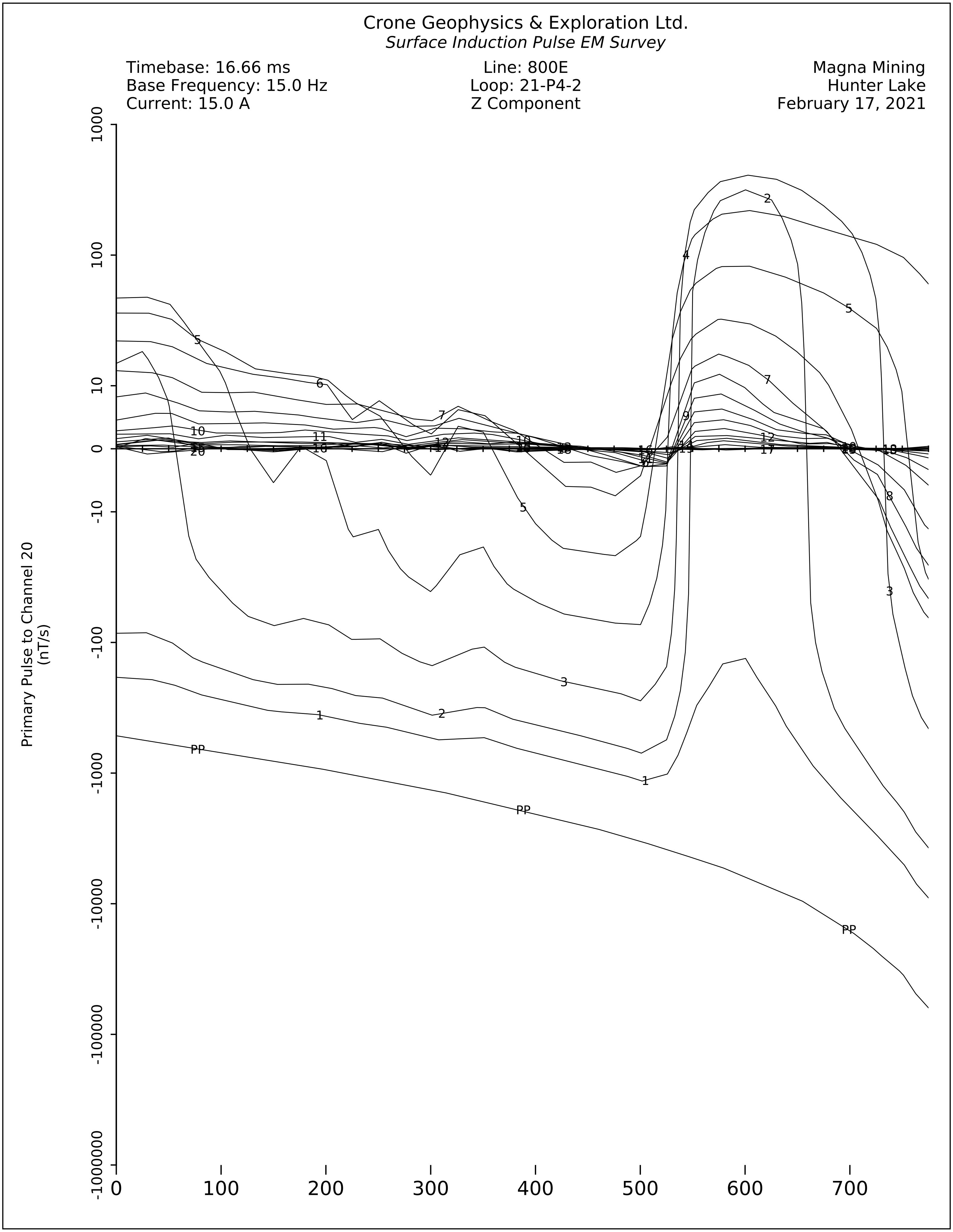
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 600E
Loop: 21-P4-2
X Component

Magna Mining
Hunter Lake
February 17, 2021




Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
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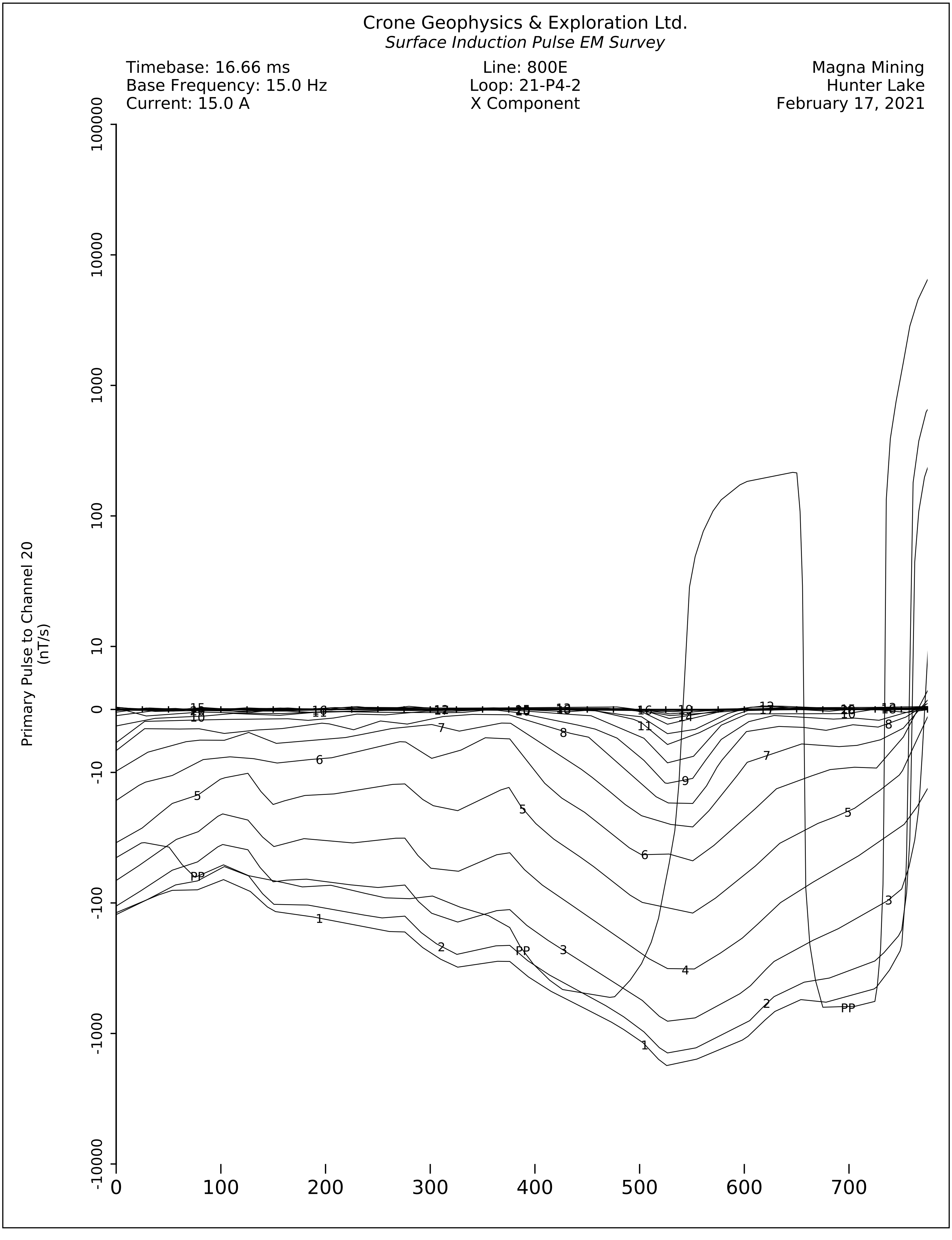
Base Frequency: 15.0 Hz
Current: 15.0 A
Line: 800E
Loop: 21-P4-2
Z Component
Magna Mining
Hunter Lake
February 17, 2021
Primary Pulse to Channel 20
(nT/s)
1000
100
10
0
-10
-100
-1000
-10000
-100000
-1000000
0
100
200
300
400
500
600
700
PP
1
2
3
4
5
6
7
8
9
10
11
12
16
17
18
20



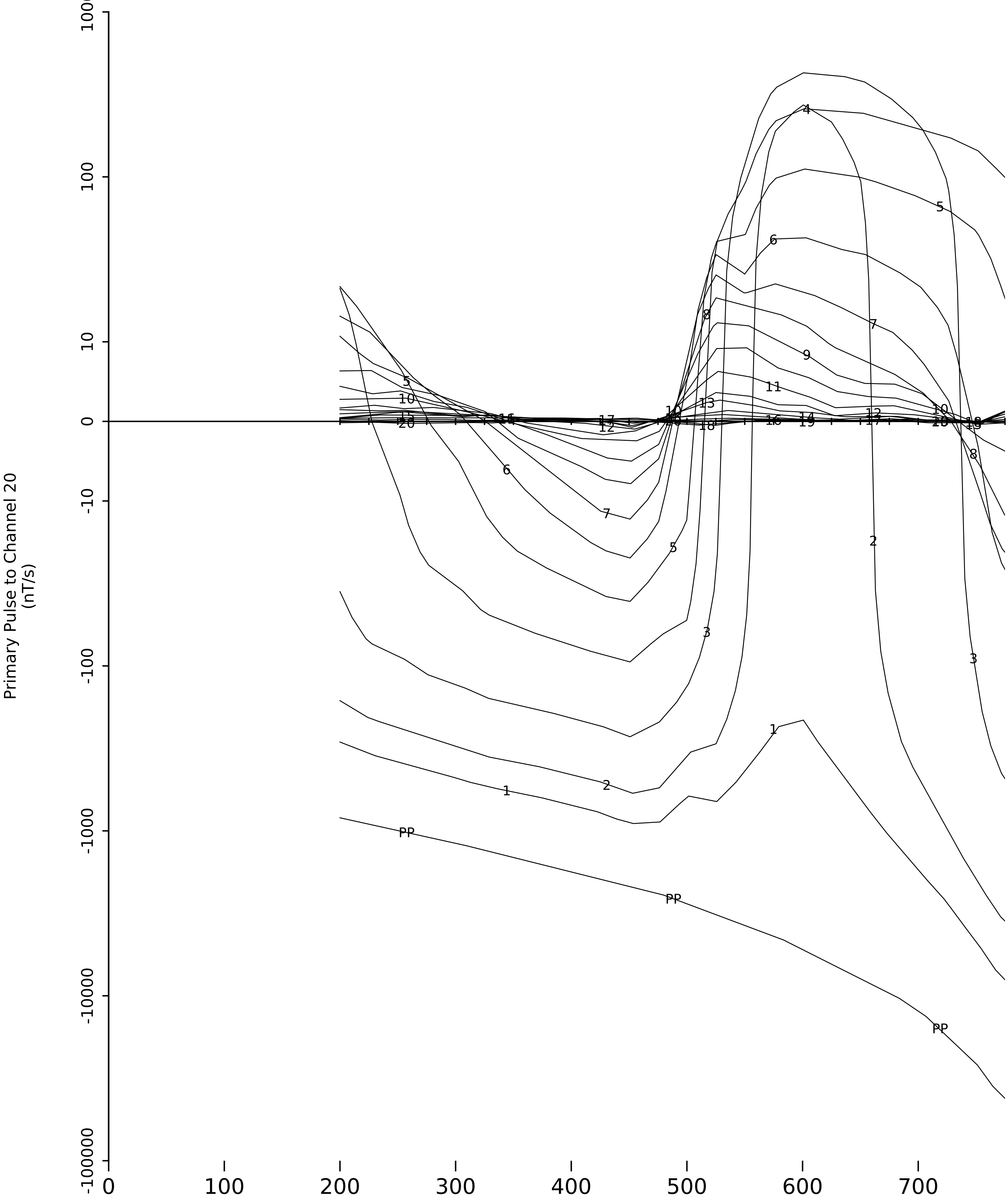
Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey
Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A
Line: 800E
Loop: 21-P4-2
X Component
Magna Mining
Hunter Lake
February 17, 2021
Primary Pulse to Channel 20
(nT/s)
100000
10000
1000
100
10
0
-10
-100
-1000
-10000
0
100
200
300
400
500
600
700

Crone Geophysics & Exploration Ltd.
Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 1000E
Loop: 21-P4-2
Z Component

Magna Mining
Hunter Lake
February 16, 2021



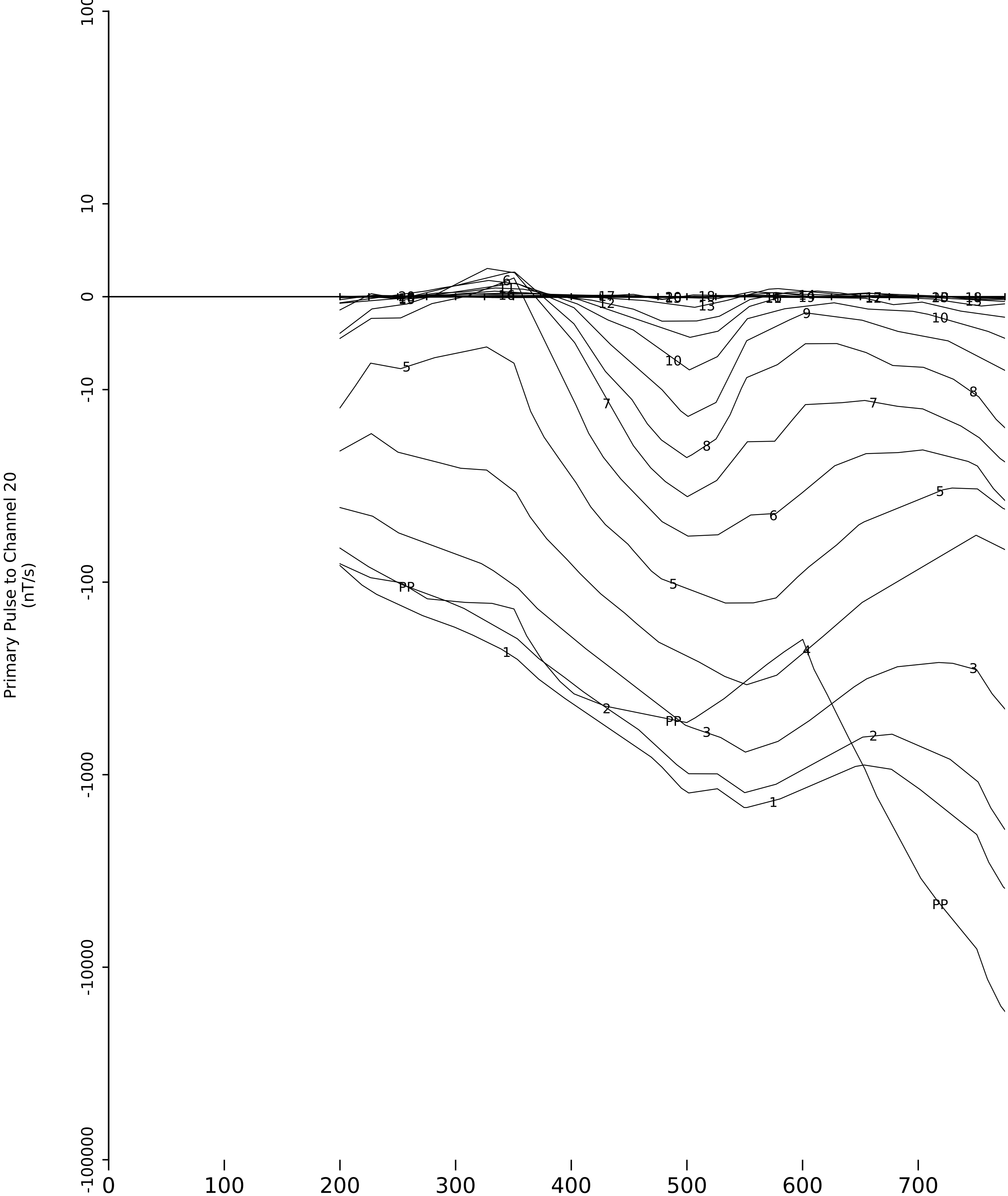
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 1000E
Loop: 21-P4-2
X Component

Magna Mining
Hunter Lake
February 16, 2021



Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

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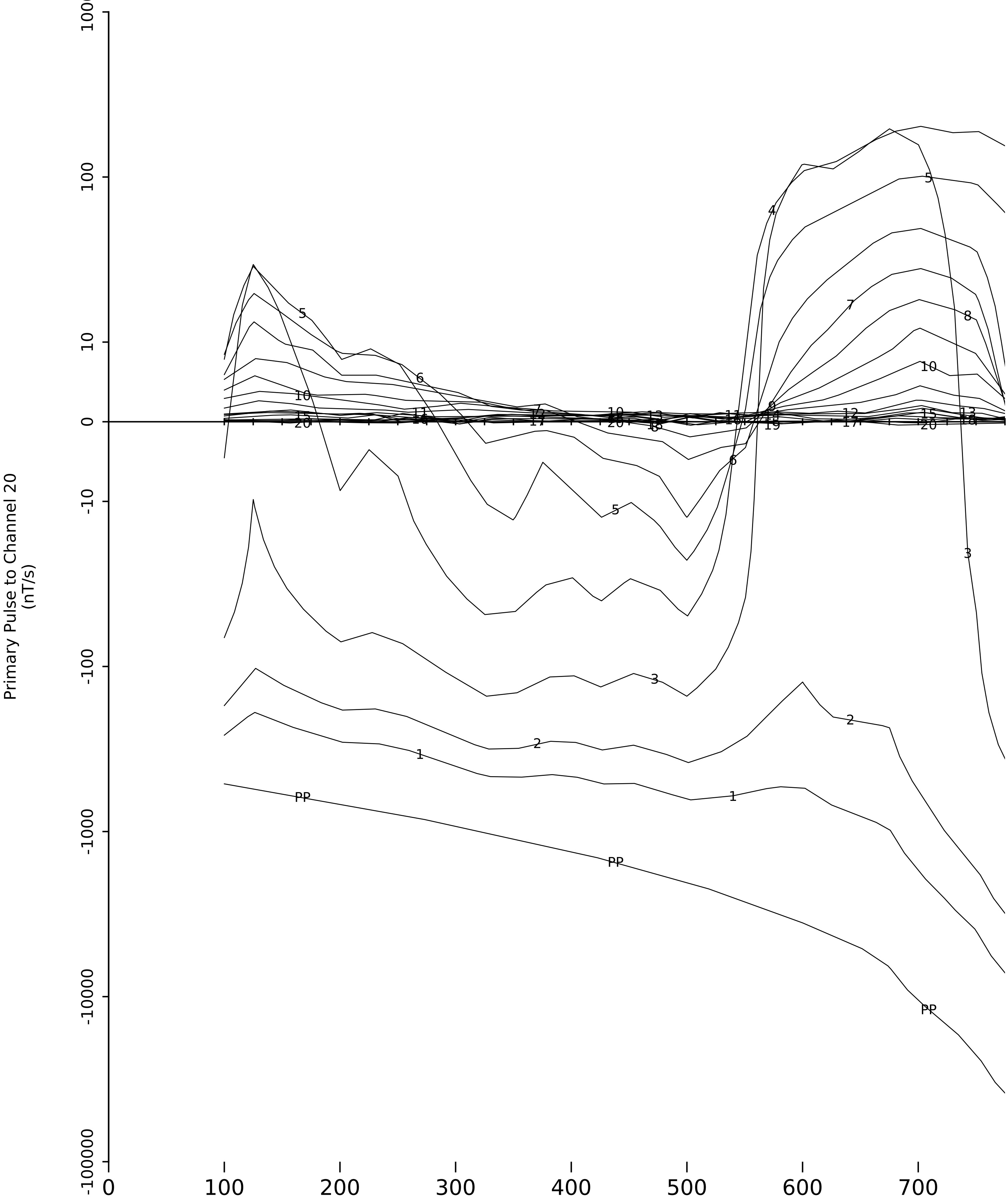
Current: 15.0 A

Line: 1200E
Loop: 21-P4-2
Z Component

Magna Mining
Hunter Lake
February 16, 2021



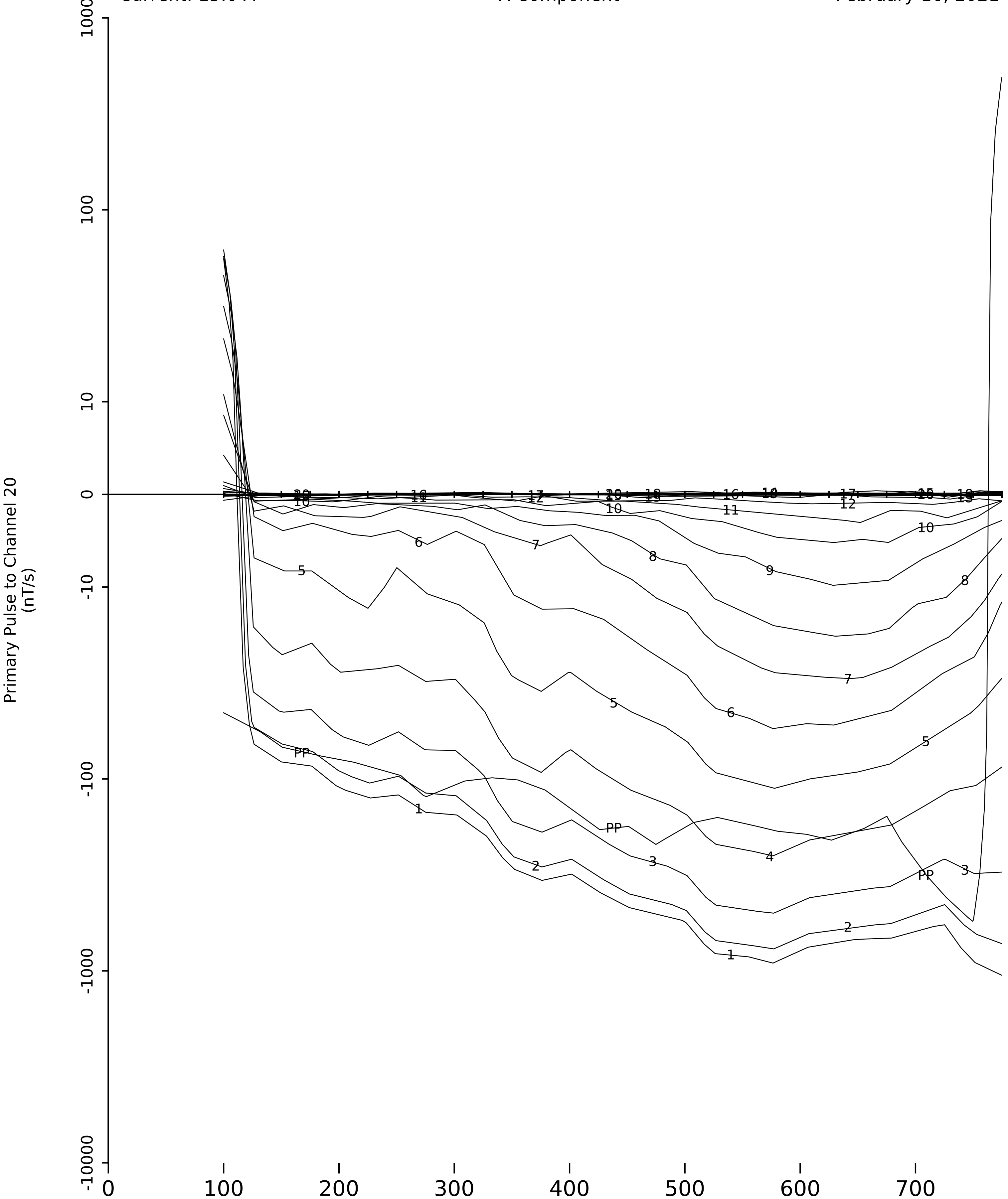
Crone Geophysics & Exploration Ltd.

Surface Induction Pulse EM Survey

Timebase: 16.66 ms
Base Frequency: 15.0 Hz
Current: 15.0 A

Line: 1200E
Loop: 21-P4-2
X Component

Magna Mining
Hunter Lake
February 16, 2021



8.4 Mapping Summary Report (Laurentia Minerals)

Spanish Copper Mapping, Interpretation and Targeting Report

For Magna Mining Inc.

Brad Lazich, P.Geo

July 9th, 2021

Introduction:

A six-day compilation, mapping, interpretation and targeting campaign was initiated for Magna Mining Inc. on July 2nd, 2021 on the northern portion of Baldwin township within the area of the Baldwin deposit. The objective of this work is to:

- Gain a better understanding on the Baldwin Deposit:
  - Nature of the mineralization
  - Controls on mineralization
  - Relationships to the local and regional geology
  - Upside potential along strike on surface
- Map the project area geology, specifically along the interpreted trend of mineralization as defined in the compilation.
- Target prospective areas and suggest recommended work programs.

The project area was accessed via boat from the Agnew Lake lodge to a barge landing area on the southeastern portion of the project area (Figure 1). Historical trail/roads in good condition exist from the barge landing to the Main Adit and the Main Pit. For the remainder of the project area, specifically the eastern half, there were no trails/roads that were found, except for on the southern shore for camp access.

Compilation for the project included information from several historical assessment/technical reports, GIS mapping, geology and geophysics files. Historical drilling data was not provided, nor used as part of the interpretation and targeting sections of this report.

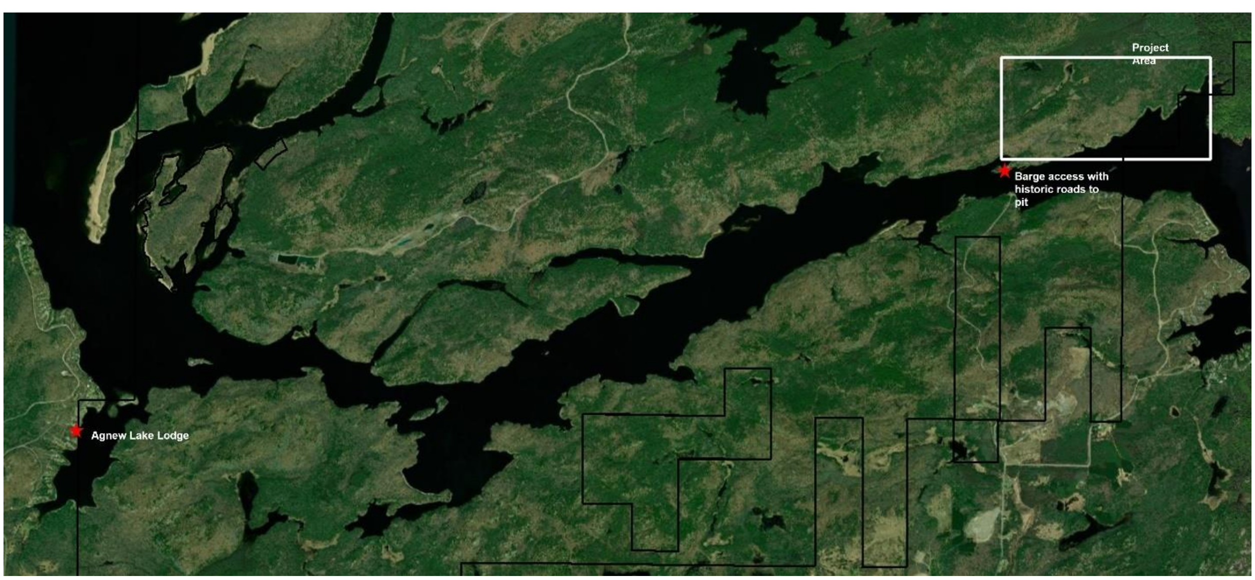


Figure 1 – Access to project area via Agnew Lake lodge. Access was gained at barge/boat access ramp on southeast point of mapping area.

Interpretation:

Historical:

Based on historical reports, the Baldwin Cu deposit first saw work in the 1920's (surface work and trenching on Cu showing in quartzite). Trenching was followed by several drill campaigns highlighted below:

- 10 holes – 1,726 meters – 1929 (main mineralized area)
- 19 holes – 2,200 meters – 1957 (main mineralized area)
- 7 holes – 1,200 meters – 1963 (main mineralized area)
- 7 holes – 1,073 meters – 1965

Drilling from 1929-1965 was used to define an indicated resource (historic) of 1,094,328 tons @ 1.49% Cu. The zone, based on drilling has been described as a vertical lens of Cu mineralization hosting an average width of 5.5m, strike extent of 365m and maximum depth of 152m. It has also been noted that drilling has cut off the deposit at depth towards the north where the greywacke has been interpreted to cut off the mineralization (Figure 2).

Production from the deposit came from Spanish River Mines Ltd. and saw approximately 146,316 tons milled from 1969-70 with 0.92%Cu recovered in 1969 and 1.65%Cu recovered in 1970. Recoveries were noted as excellent (98%). Accessory minerals, Au and Ag were recovered as well with Au being noted as trace and Ag averaging 0.04 oz/t.

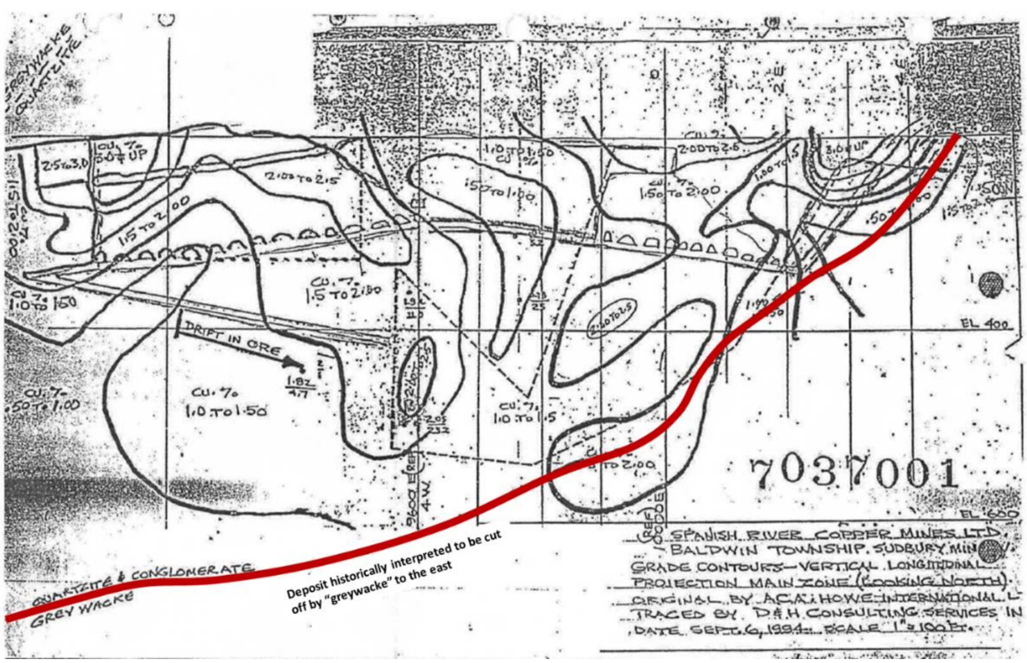


Figure 2 – Historical long section of deposit showing grade contouring and extent of deposit as depth being cut off by greywacke.

Figure 3 – Photo of Main Adit.

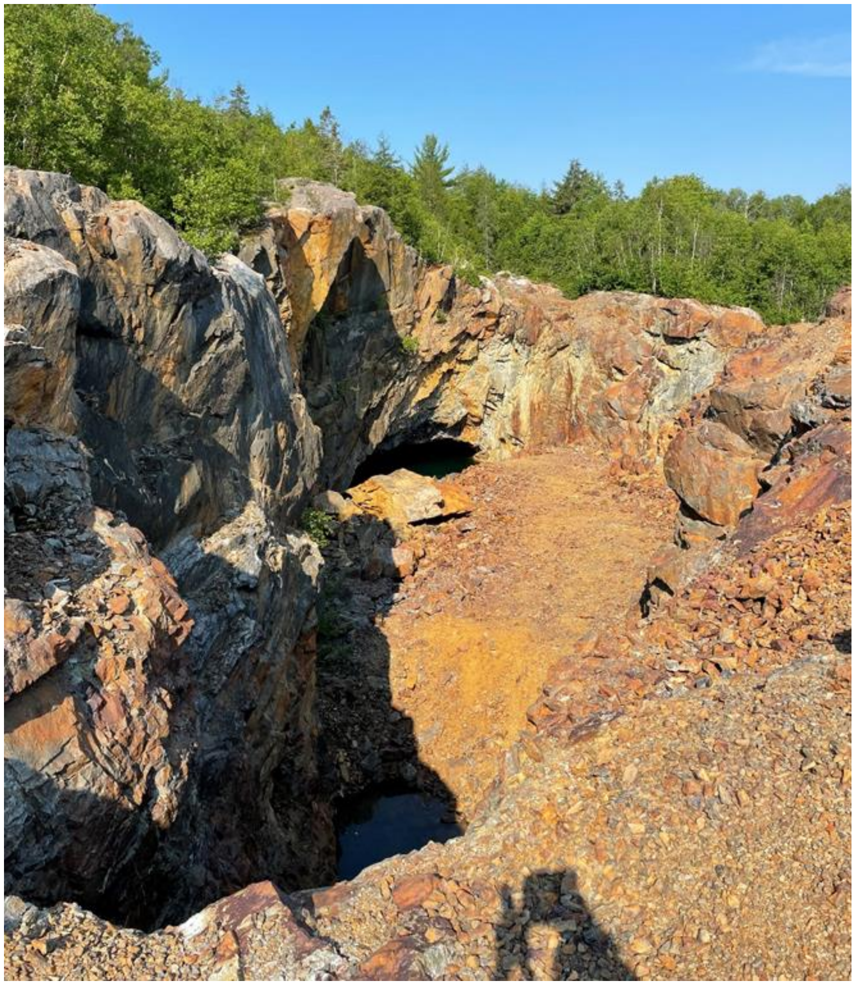


Figure 4 – Photo of main pit area looking west-southwest along strike of mineral zone.

Regional Geology:

The project area is located regionally at the boundary between the fine-to-medium grained, medium bedded arenites of the Mississagi formation (Hugh Lake group) and the older fine-to-medium bedded mudstones and sandstones of the McKim formation (Elliot Lake group). These two sedimentary formations are bound to the south by earlier mafic intrusive rocks of the East Bull Lake intrusion and felsic intrusive rocks of the Birch Lake granite suite, and to the north by the mafic intrusive rocks of the Nipissing Gabbro suite (Figure 5). There is an interpreted, large-scale thrust fault that trends NE-SW at the contacts between the Mississagi and McKim formations that is host to the Baldwin deposit and associated shearing described in the *Project Geology* section of this report.

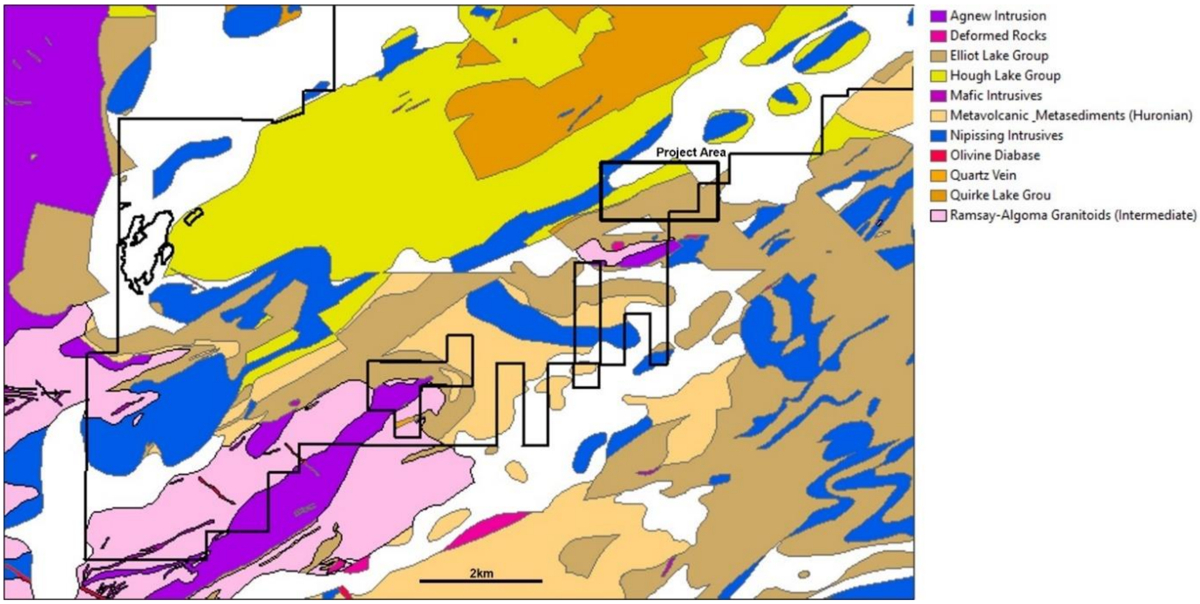


Figure 5 – Regional geology of southwestern portion of Magna land package. Including Project area of report.

Project Geology:

The project area was mapped at a scale of 1:10,000 with the objective of better understanding the lithological and structural controls on mineralization related to the Baldwin deposit for a strike extent of ~500m in both directions. The focus of the mapping was along the general contact of the Mississagi and McKim formations (Figure 6) where there is an interpreted regional fault zone that is the suggested host to the Baldwin deposit.

Mapping generally confirmed the government and previous mapping campaign interpretations that the fault zone is real and is hosted at the contact/unconformity between both sedimentary formations. An important finding during this campaign was that there is a narrow “band” of conglomerates at the unconformity between both formations. This polymictic conglomerate is part of the Bruce formation and was historically mapped from the southwest to the location of the Baldwin deposit where it was interpreted to pinch out. Mapping carried out during this campaign however, discovered outcrops of strongly-to-intensely sheared conglomerates growing in width and continuing to the northeast of the Baldwin deposit. It is interpreted, based on findings from this campaign, that the conglomerate unit plays an important role in helping control the structurally controlled mineralization at Baldwin.

Summary of findings and geology below:

- The historic Baldwin deposit is hosted in a strong shear zone controlled by a regional-scaled NE-SW trending thrust fault located dominantly within a thin polymictic conglomerate unit of the Bruce formation (Figure 9) situated at the unconformity between the Hugh Lake quartz-rich sandstones/arenites of the Mississagi Fm to the north and the Elliot Lake mudstones and sandstones of the McKim Fm to the south.
- The shear zone is ~10-75m wide throughout the project area, where seen on surface, is dominantly hosted in the conglomerate unit, and follows the strike orientation of the formation (NE-SW) and fault zone. The shear zone appears to narrow within the area of the deposit and widens to the northeast.
- Shearing and weaker mineralization and silicification continue to the north in the quartz-rich silicified sandstones, but generally stop at the south contact with the more coarse-grained, medium bedded sandstones (referred to as greywacke in historical reports).
- The conglomerate unit is interpreted to continue to the southwest and on strike of the deposit, but there was limited outcrop exposure within this area to confirm this interpretation.
- The interpreted mapping/compilation during this campaign suggests the shear zone and conglomerate unit are cut off by the Gabbro's to the southwest (projection of foliation measurements), but this was not confirmed during mapping due to limited outcrop exposure in this area. The Magnetics provided also suggest this might not be a valid interpretation (Figure 8).

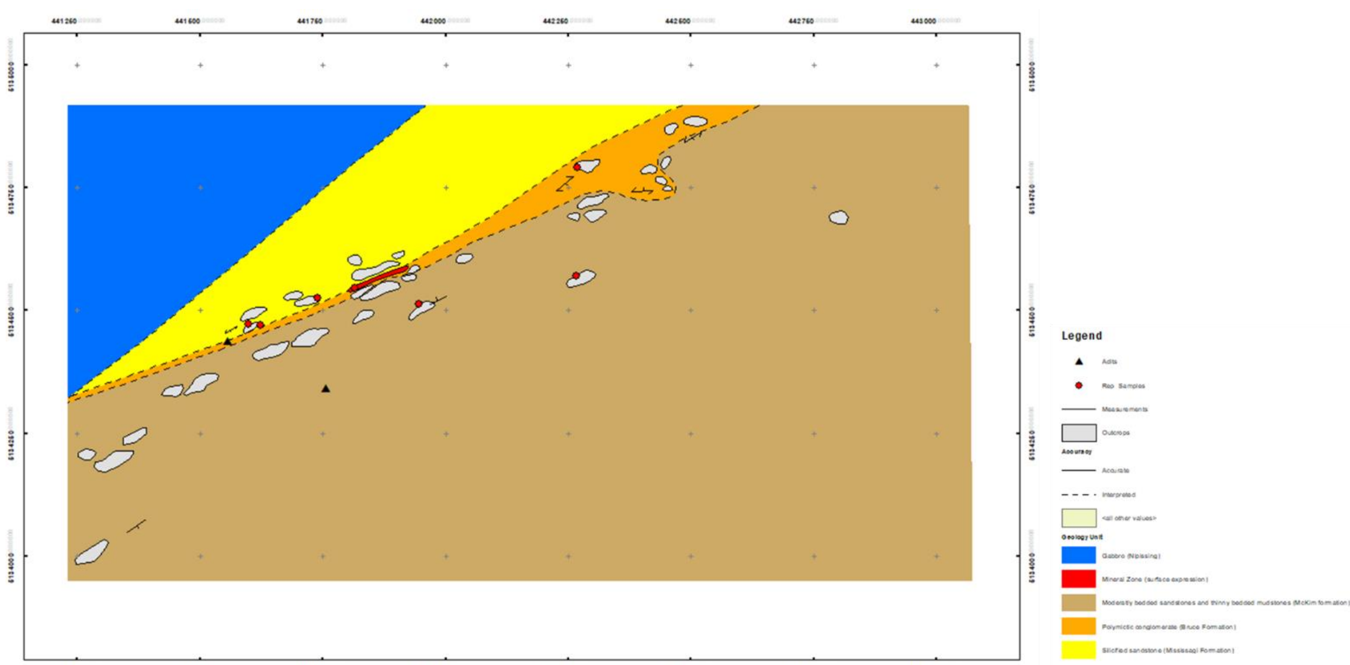


Figure 6 – Mapping of project area showing lithological interpretation, outcrops and surface expression of mineral zone.

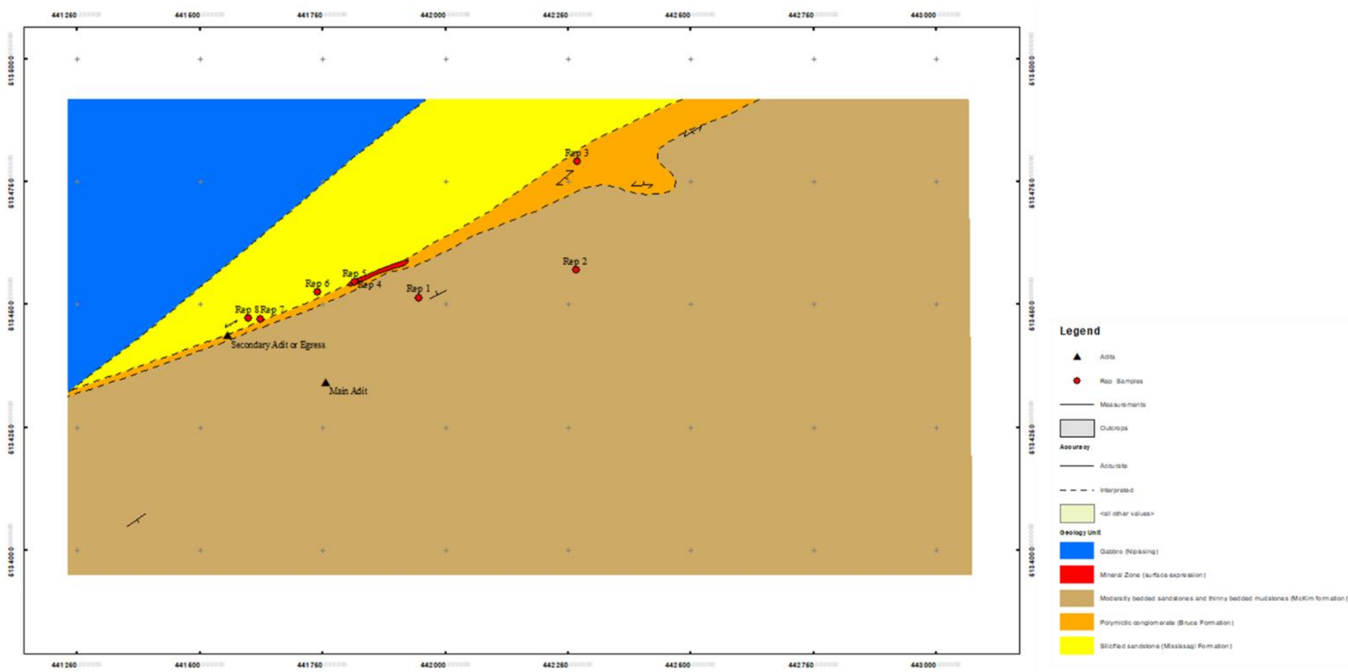


Figure 7 – Locations of historical adits and grab samples/reps.

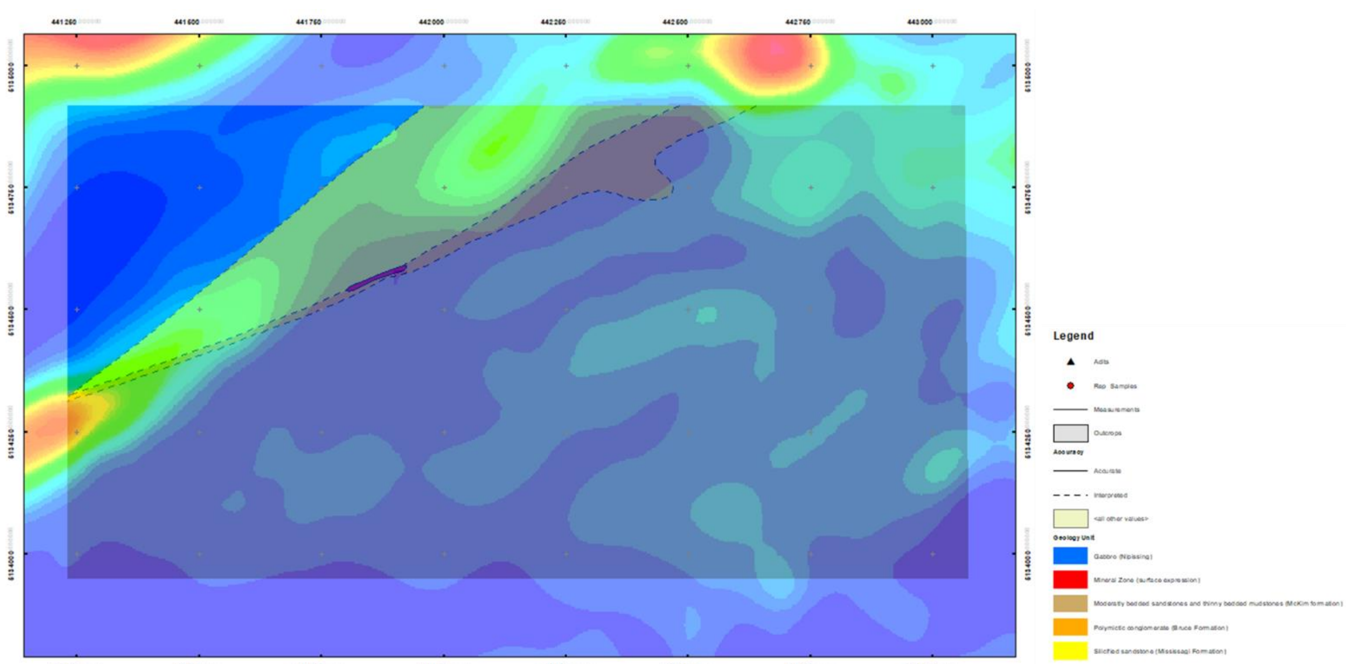


Figure 8 – Project area showing Magnetics overlayed on lithological interpretation.

Figure 9 – strongly sheared polymicitic conglomerate unit showing stretched and lineated clasts of mudstone and coarse-grained sandstone. (location of Rep 3).

Mineralization:

Mineralization at the Baldwin deposit and within the immediate area is characterized typically by three main styles:

- Shear hosted and shear-controlled veinlets of cpy +- py mineralization
- Quartz vein hosted patchy-to-semi-massive cpy mineralization within the shear zone
- Disseminated to fracture controlled cpy +- py mineralization within the silicified sandstones of the Mississagi formation adjacent to and north of the main shear zone (potentially the host to mineralized Rep samples 7 and 8)

Mineralization within the Baldwin deposit is dominantly cpy, but some minor py was noted during this campaign. In the historical literature there is reference made to Po mineralization as well.

The Baldwin deposit itself is dominantly hosted within the shear zone that is characterized by intense shearing with a strong foliation that is well defined within the conglomerates and that weakens out into the silicified quartz-rich sandstones to the north. There is abundant shear-parallel quartz veining within the shear zone that, based on observations from this campaign, appear to be the main control on high-grade Cu mineralization within the deposit (Rep 5). Weaker and more pervasive cpy mineralization appears to be controlled by the sheared conglomerates and silicified quartz-rich sandstones to the north.

Historical work suggests the deposit is cut off at depth and to the northeast by the greywacke (referred to as the Elliot Lake group sandstones and mudstones of the McKim formation in this report), however observations during this campaign suggest that the main controlling structure and units (specifically the polymictic conglomerate) continue pervasively on strike to the northeast of the deposit for a minimum distance of 500m (area of mapping) and potentially continue further along strike. Although the drilling within the Baldwin deposit suggests the deposit is cut off, the implications from this mapping campaign potentially suggest that the structure that hosts the mineralization is continuous and the mineralization can potentially form specific lenses or shoots along it. This opens the strike potential within the area.

The source of the sulphide mineralization along this fault/shear zone can only be interpreted, but it is this authors opinion that it is potentially sourced and remobilized from the older, underlying and strongly mineralized VMS-style volcanic rocks of the Salmay Lake complex to the south. Thus, the Baldwin deposit does not potentially fit a ubiquitous, genetic model of mineralization, but rather a prospective shear zone that appears to host robust, remobilized Cu-rich sulphide mineralization. Also, due to the remobilized nature of the sulphides, and even though only trace amounts were noted in historical development, the potential for auriferous pyrite and other Au-bearing mineral phases exists along the structure.

Rep ID	Easting	Northing	Description	Mineralized
Rep 1	441946	5134513	Thinly bedded, weakly foliated mudstone with a sugary appearance and strong mica alignment alonlg weakly sheared bedding planes	No
Rep 2	442266	5134570	Thinly to moderately bedded fg sandstone	No
Rep 3	442269	5134790	Strongly foliated polymictic conglomerate with 1-50cm clasts of cg sandstone and mudstone. Foliation @ 48/74. Clasts strongly lineated along foliation place. Figure 9.	No
Rep 4	441814	5134545	Intensely sheared conglomerate? Within mineral zone at southwestern flank of open pit. Unit hosts 1-2mm foliated sheets defining foliation with 1-5% cpy as diss and veinlets along foliation plane. Foliation at 62/74. Figure 11.	Yes
Rep 5	441815	5134545	Patchy to semi-massive cpy mineralization (5-35%) hosted in a massive quartz vein at north contact of sheared mineral zone and silicified sandstone. Figures 12 and 13.	Yes
Rep 6	441740	5134525	Cg, massive and quartz-rich silcified sandstone	No
Rep 7	441623	5134470	Moderately-strongly sheared unit with a more mafic-rich matrix (potentially conglomerate, but no visible clasts in outcrop). Unit hosts 1-5% cpy as diss and sheared controlled veinlets. Foliation @ 54/76. Figure 14.	Yes
Rep 8	441598	5134471	Similar to rep 7, but stronger silicification. 1-4% cpy.	Yes

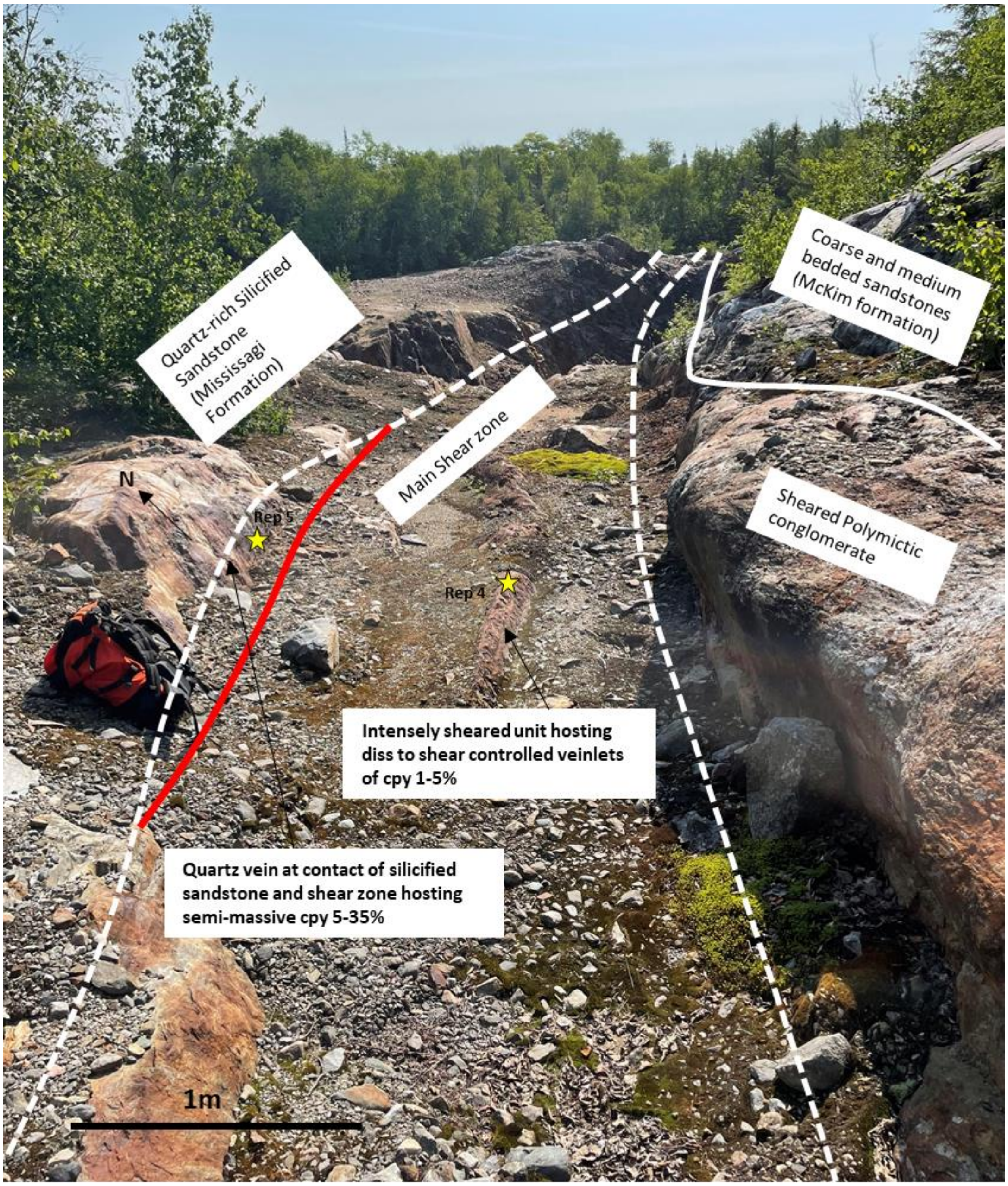


Figure 10 – Looking northeast along surface expression of Baldwin deposit (pit in background) showing nature of the zone being Dominantly hosted within the shear zone.

Figure 11 – Photo of the sheared conglomerate within the center of the mineralized zone. Unit is intensely sheared and host to 2-5% cpy as shear-controlled veinlets. (Rep 4 location)

Figure 12 – Photo of quartz vein hosting patchy to semi-massive cpy mineralization located at the contact of the sheared mineral zone and the weakly sheared silicified sandstones to the north. (Rep 5 location)

Figure 13 – Photo of Rep 5. Quartz vein hosted semi-massive cpy.

Figure 14 – Photo of Rep 7. Moderately sheared silicified sandstone or potentially conglomerate hosting 3-5% cpy as disseminations and irregular veinlets.

Targeting/Recommendations:

The mapping/project area is made up of three main areas (Figure 15): The interpreted footprint of the Baldwin deposit interpreted from historical reports, Target Area 1, and Target Area 2. Although the surface expression of the Baldwin deposit was confined to the area of the open pit (approximately 125m strike extent) the historical reporting on the deposits strike and dip extent, coupled with the location of the historical adits, suggest a total footprint of approximately 300-350m. Also, based on the limited literature on historical drilling, the location of the drill holes seems to be limited to the area of the deposit. This opens up potentially unexplored, discovery potential along strike in both directions of the footprint of the Baldwin deposit (Target areas 1 and 2), although it is recommended more work be completed to understand the exact extent of drilling and historical exploration.

- Target Area 1:
  - This area ranks highest in priority due to the presence of cpy mineralized sheared and silicified quartz-rich sandstone or conglomerate (rep samples 7 and 8) at the southwestern edge of the footprint of the Baldwin deposit.
  - It is also an area that historical interpretation and reporting has not mentioned the mineralization being cut-off geologically or structurally.
  - Additional compilation and confirmation will need to be pursued, but it is this authors belief, based on findings in this campaign, that this area has not seen any drilling or significant surface exploration.
  - The target area hosts little-to-no outcrop exposure and should be further evaluated with a series of trenches across the interpreted shear zone and/or a surface geophysical program within the area (IP) to understand if the shear zone and mineralization continues in this area.

- Target Area 2:
  - This area hosts more outcrop exposure, but still not a significant amount especially within the interpreted area of the projected mineralized shear zone.
  - Historical drilling and interpretation have suggested the mineral zone is cut off towards this area, but the presence of strongly sheared conglomerates suggests the shear/fault zone is continuous, healthy and robust within Target Area 2.
  - Although no mineralized conglomerate was discovered during mapping, the fact that that there is not a significant amount of outcrop exposure coupled with the relatively thin nature of the mineralized shear zone (focused at the contact of the sedimentary formations) opens a lot of opportunity for the discovery of additional remobilized lenses of Cu-rich sulphide mineralization within the area.
  - One or two potential trenches across this area would be beneficial to see if the strongest and centered portion of the shear zone can be discovered and utilized to continue to explore/vector along strike within the area. IP would be beneficial within the area as well.

IP (Induced Polarization) is the recommended geophysical survey type here due to the shear controlled and disseminated/veinlet type mineralization within the shear zone. It is also beneficial that the bounding package of sedimentary rocks to the south and north are not mineralized.

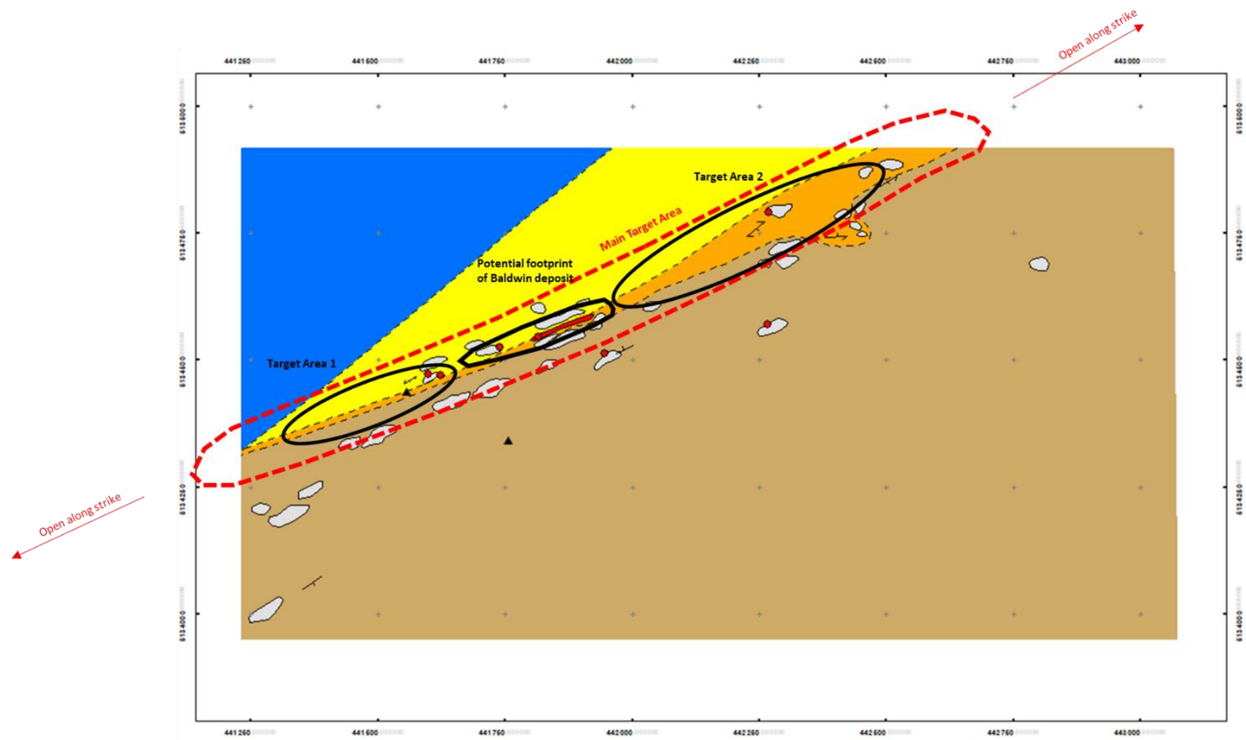


Figure 15 – Map area showing two main target areas to focus work programs into.